



Government of Odisha (GOO)
Odisha State Roads Project

**Consultancy Services for
Road Sector Institutional Development**
Loan # 7577-IN

OPWD Manual

Odisha



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Oodishta



Abbreviation



**Abbreviation**

A/A	Administrative Approval
AC	Air Conditioner
ACR	Annual Confidential Report
AE	Assistant Engineer
AEE	Assistant Executive Engineer
AG	Accountant General
APIO	Assistant Public Information Officer
BIS	Bureau of Indian Standards
BLT	Build-Lease and Transfer
BOO	Build-Own and Operate
BOOT	Build-Own-Operator and Transfer
BOQ	Bill of Quantities
BOT	Build-Operate and Transfer
BPL	Below Poverty Line
CAD	Computer-Aided-Design
CAMP	Comprehensive Asset Management Plan
CBR	California Bearing Ratio
CE	Chief Engineer
CMB	Computerised Measurement Book
CPCB	Central Pollution Control Board
CPHEEO	Central Public Health and Environmental Engineering Organisation
CPIO	Chief Public Information Officer
CPWD	Central Public Works Department
CR	Confidential Report
CRSC	Central Road Safety Cell
CWC	Central Water Commission
DO	Divisional Officer
DPR	Detailed Project Report
DRC	Dispute Redressal Committee
ECI	Empowered Committee on Infrastructure
EE	Executive Engineer
EIA	Environmental Impact Assessment
EIC	Engineer-in-Chief
E-mail	Electronic Mail

**Road Sector Institutional Development, Odisha**

EMP	Environmental Management Plan
EOT	Extension of Time
EPC	Engineering, Procurement & Construction
EPF	Employees' Provident Fund
ESI	Employees' State Insurance
FIR	First Information Report
FMS	Financial Management System
GAAP	Governance and Accountable Action Plan
GIS	Geographical Information System
GOI	Government of India
GOO	Government of Odisha
Govt	Government
GPS	Global Positioning System
HLCA	High Level Clearance Authority
HOD	Head of the Department
HQ	Head Quarters
HRD	Human Resource Development
HRM	Human Resource Management
HT	High Tension
ICT	Information and Communication Technology
ID	Institutional Development
IIT	Indian Institute of Technology
IRC	Indian Roads Congress
IT	Information Technology
ITB	Instruction to Bidders
JE	Junior Engineer
LA	Land Acquisition
LAC	Land Acquisition Collector
LAN	Local Area Network
LOA	Letter of Acceptance
LT	Low Tension
M&E	Monitoring and Evaluation
MB	Measurement Book
MDR	Major District Road
MIS	Management Information System
MoEF	Ministry of Environment and Forests

**Road Sector Institutional Development, Odisha**

MoRT&H	Ministry of Road Transport and Highways
MOU	Memorandum of Understanding
MoUD	Ministry of Urban Development
MP	Member of Parliament
MR	Muster Roll
NABARD	National Bank for Agriculture & Rural Development
NABL	National Accreditation Board for testing & Calibration of Laboratories
NAC	Notified Area Council
NBC	National Building Code
NGO	Non-Governmental Organisation
NH	National Highway
NIT	National Institute of Technology
NIT	Notice Inviting Tender
O&M	Operation and Maintenance
OIDF	Odisha Infrastructure Development Fund
OMT	Operate-Maintain and Transfer
OPWD	Odisha Public Works Department
OSPCB	Odisha State Pollution Control Board
OSRP	Odisha State Road Project
OWD	Odisha Works Department
PAP	Personnel Assurance Programme
PHE	Public Health Engineering
PIO	Public Information Officer
PMGSY	Pradhan Mantri Gram Sadak Yojna
PMS	Pavement Management System
POL	Petrol, Oil & Lubricants
PPE	Personal Protective Equipment
PPP	Public Private Partnership
PPR	Preliminary Project Report
PRQI	Pavement Riding Quality improvement
PSIN	Personal Service Identification Number
PWD	Public Works Department
QA	Quality Assurance
QMP	Quality Management Plan
R&B	Roads and Buildings

**Road Sector Institutional Development, Odisha**

R&R	Resettlement and Rehabilitation
RCC	Reinforced Cement Concrete
RFP	Request For Proposal
RFQ	Request For Qualification
RMMS	Road Maintenance Management System
RMU	Road Maintenance Unit
ROB	Railway Over Bridge
ROW	Right of Way
RPDAC	Rehabilitation and Periphery Development Advisory Committee
RTI	Right to Information
SBD	Standard Bidding Document
SDE	Sub-Divisional Engineer
SDO	Sub Divisional Officer
SE	Superintending Engineer
SH	State Highway
SIA	Social Impact Assessment
SMB	Standard Measurement Book
SRS	Safe Road System
T&P	Tools and Plant
TOR	Terms of Reference
TS	Technical Sanction
VGf	Viability Gap Funding
VIP	Very Important Person
VVIP	Very, Very Important Person
WAN	Wide Area Network
WBM	Water Bound Macadam
WINGS	Web-based Information & Governance System
WMM	Wet Mix Macadam
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant



CHAPTER 1
INTRODUCTION



1 INTRODUCTION

1.1 General Background

Odisha Public Works Departments (OPWD) is one of the oldest Public Works Department (PWD) in the country. PWD in Odisha initially looked after all public works, whether irrigation, power, water supply, sanitation, roads or buildings. In the year 1976 the Department last revised its Code and thereafter need based changes were made by issuing amendments and by adding Annexures/ Appendices. No revision of code or preparation of manual was undertaken since then. There was urgent need to take up revision of code and preparation of manual incorporating all the changes made since last revision in 1976 and also to have some new provisions which are necessary to be added to facilitate better functioning taking into account the all-round changes in this field. While undertaking preparation of this manual an attempt has been made to provide the guidelines for the latest Departmental procedures incorporating required changes for execution of various OPWD projects.

In today's scenario engineering is a vast subject having innumerable activities. However, in this Manual we are limiting to the works which are undertaken by various Departments of Odisha entrusted with public works and is intended to serve as a self-explanatory handbook for carrying out the works efficiently with Government (Govt) approved rules and procedures.

1.2 Functions and Responsibilities of OPWD

The OPWD is the statutory authority for designing, planning, monitoring, constructing and undertaking maintenance of public works of the State Govt, such as Roads, Buildings, Bridges, Dams, Canals etc. irrespective of the source of funds for the same. The OPWD also takes up works on BOT, PPP and Turnkey basis with national and international support/funding. The various activities being undertaken by the organisation are:

- a. Planning, designing and construction, repair, maintenance and relief work of roads, bridges and buildings and other related structures funded by the State, GOI, any other source of funding;
- b. Execution of original, renewal and repair works of the National Highway (NH) network financed through MORT&H after levying agency charges at the rates agreed between Government of India (GOI) and the Government of Odisha (GOO);
- c. Construction of buildings, roads and bridges (R&B) as relief works in the event of floods, cyclones or other natural disasters;
- d. The emergency works assigned by the state Govt time to time;
- e. Effective project monitoring and Quality Assurance (QA);
- f. Ensuring with the help of civil administration and Police that no encroachment or structure, whether temporary or permanent is erected on the land and property under the control of OPWD. ~~This procedure shall be adopted till EEs are empowered with the provision of removal of encroachments as per GOO rules;~~



- g. Maintaining the Register of Assets comprising of land, buildings and properties belonging to the GOO and under the administration of OWD, Asset Management through IT/ICT;
- h. **Effective management of its human resources, imparting training to its Engineer and other officers for enhancing their capacities for improvement in operational efficiency and performance management;**
- i. Enhance the capacity of OPWD and where appropriate other GOO agencies concerned to carry out road and building infrastructure development;
- j. Road Development Programs under state plan, NABARD-RIDF Assistance, Road Improvement in KBK Districts, Rural Road under PMGSY, roads of Tourism and Mining Importance, Odisha State Road Projects (OSRP) under World Bank assistance, etc.;
- k. Updating Public Works Code preferably once in five years for compatibility with prevailing Govt orders and improved performance;
- l. Preparation of works budget and ensuring implementation thereof;
- m. Emphasis on Audit and Accounting Requirements;
- n. Ensure Safety in Construction;
- o. Ensure Social & Environment safeguards;
- p. Optimum use of PPP mode of implementation of projects;
- q. Improve Dispute Redressal Mechanism;
- r. To be equipped with Contract inviting documents & SBDs etc.;
- s. Updating HRD & Training Policies;
- t. Constant updating of construction Standards and Specifications;
- u. Restructuring of OPWD for capacity building including IT & MIS infrastructure and cadre development;
- v. Setting up IT & MIS infrastructure and maintaining them for transparent, prompt information work, expenditure control, HRM and in enhanced efficiency of the system, etc.; and

1.3 Definitions

Definitions and actions being taken by various heads of Departments/Institutions have been detailed out in Code itself which shall be main force and shall be operative for all such activities.



Annexure 1.1: List of Controlling Officers

1. Engineer-in-Chief, Civil, OWD
2. Engineer-in-Chief, Water Resources, DOWR
3. Engineer-in-Chief, Rural Works Department
4. [Engineer-in-Chief, Public Health Engineering, U&HDD](#)
5. Chief Engineer, Design Directorate, OWD
6. Chief Engineer, Buildings, OWD
7. Chief Engineer, Roads, OWD
8. Chief Engineer, World Bank Project, OWD
9. Chief Engineer, National Highways, OWD
10. Chief Engineer, e-Procurement, OWD
11. Chief Engineer, Research Development and Quality Promotion, OWD
12. Chief Architect, Architecture Wing, GOO
13. [Chief Engineer, Public Health Engineering \(Urban\), U&HDD](#)
14. [Chief Engineer, Rural Water Supply & Sanitation](#)
15. Chief Engineer, Minor Irrigation, DOWR



CHAPTER 2
ORGANISATION AND ESTABLISHMENT



2 ORGANISATION AND ESTABLISHMENT

2.1 Organisation

The OPWD is headed by various Secretaries in the Govt in charge of Works, Irrigation, Rural Development and Public Health Engineering (PHE). The engineering cadre under all these Departments is headed by Engineer-in-Chief (EIC)/Chief Engineer (CE) of respective organisation. They are responsible for getting the works done by the Department and are answerable to the Govt for its execution and completion. The heads of the Departments have the main role in preparing the budget of their Department and projecting requirement of funds to the finance and ensuring its availability for timely completion of assigned activities of the Govt.

Present set up of OPWD are the following:

- I. **Odisha Works Department (OWD);**
- II. **Department of Water Resources (DOWR);**
- III. **Rural Works Department (RWD);**
- IV. **Housing and Urban Development Department (H&UDD)**

All the above four Departments are headed by EIC/CE as per the approvals of the Govt and are delegated necessary powers by the Govt to perform the duties as per guidelines/rules issued by the Govt from time to time.

2.1.1 Creation of Additional Circles, Divisions, Sub-Divisions and other Implementation Models/Tie-ups

The work load of the Departments is subject to fluctuation, depending on budgetary allocation and receipts from various other heads/sources. Thus, the number of Circles, Divisions, and Sub-Divisions may require to be increased or decreased. To cope with this situation, a standing committee under the chairmanship of Administrative Secretary of concerned Department, Secretary Finance Department, EIC and Director (F&A) will discuss and finalise proposals for creation/abolition of the number of Circles, Divisions, Sub-Divisions etc. and get the same sanctioned from the competent authority.

The Govt may desire a more innovative and faster implementation of certain projects and some projects may require special skills. Accordingly, new implementation models may become necessary. For this purpose, the Departments may enter into Public Private Partnership (PPP) and/or may create special purpose vehicle (SPV), either on their own or in partnership. The Departments, where necessary, may create project implementation units (PIUs) for implementing certain projects. **High value concentrated projects may be entrusted to exclusive charge of senior officers like Chief Engineer/Superintending Engineer.**

Department shall put in place structures, arrangements, institutions to take up new responsibilities, keep abreast with advancement of knowledge, technological and management changes, and cope with emerging situations and challenges. The Department and other bodies listed in this chapter shall endeavour to have memorandum of understanding (MOU) with academic/research institutions,



etc. to create a platform for co-operation and partnership between the parties for defined objectives. Tie-ups with technical training institutes, industry and leading construction/consultancy firms for training and upgradation of skills of Departmental staff shall be encouraged. Sanction of the HoD shall be obtained as required.

In this world of technological change, it is necessary that the Departments are acquainted with the latest practices in the field. With this intention, the Departments may tie up with any foreign and/or domestic institute for support on technical, managerial and financial matters. Such arrangements may be project-specific or function-specific. The Departments shall, with the approval of the competent authority, also associate themselves with the national and international bodies of repute such as Indian Roads Congress (IRC), Indian Buildings Congress (IBC), International Association for Bridge and Structural Engineering (IABSE), Indian Water Works Associations (IWWA), Central Board of Irrigation and Power (CBIP), Central Water Commission (CWC), Central Pollution Control Board (CPCB), Central Ground Water Board (CGWB), **Central Public Health and Environmental Engineering Organisation (CPHEEO)**, **Central Road Research Institute (CRRI)**, etc. the Department shall also encourage innovations and new research. Regular seminars/workshops on topics of interest shall be held by each Department periodically.

There should be comprehensive plan for Research & Development, Training & HRD in respective field of Departments engaged in Public Works. Dedicated funds shall be made available for these activities.

2.1.2 Odisha Works Department

The OWD is headed by an EIC-cum-Secretary to the GOO, Works Department a 'EIC'; this position carries technical responsibility for the OWD and as 'Secretary' exercises Administrative control over the OWD. The EIC-cum-Secretary provides the vital link between the Govt and the OWD. There are two Additional Secretaries i.e. FA-cum-Additional Secretary and AFA-cum-Under Secretary and two Under Secretaries. Thus, the administrative office at Secretariat has five officers including EIC-cum-Secretary (Works) to deal with the Works at Govt level.

The field formation of Works Department has one EIC (Civil), seven CEs i.e. CE (DPIR), CE (Building), CE (NH), CE (Directorate of Designs), CE (World Bank Project), CE (RD&QP) and CE-cum-Chief Manager (Technical State Procurement Cell), CE also functions as MD, OBCC. Chief Architect as Head of the Department (HOD) of Architectural Wing of GOO.

In field, there are Seven R&B Circles, Three NH Circles, One Mechanical Circle, One Electrical Circle and One Public Health Circle where Superintending Engineer (SE) acts as HOD. He is responsible to the concerned CE for the Administration and General Professional Controls of the public works within their jurisdiction.

The key field post directly responsible for execution of work is of Executive Engineer (EE) who is in charge of a Division. There are 36 (R&B) Divisions, 15 NH Divisions for civil works in addition there are four General Electrical Division (GED) Divisions, four Mechanical Divisions and two General Public Health (GPH) Divisions within the State. Each Division has three to four subdivisions headed by Sub Divisional Officer (SDO) of the rank of Assistant Executive Engineer (AEE) or Assistant Engineer (AE). Each Sub-division has three to four Section Officers designated as Junior Engineer (JE) who are



involved in day to day activities in the field and submit the report as well as survey sheets/estimate for ongoing and future projects with reference to directions by the senior officers/Govt.

EIC-cum-Secretary (Works) has direct control of Additional Secretaries, Deputy Secretaries, EIC (Civil), CE (NH), Chief Architect and MD, OBCC shall report for various activities in the field and office of the works Department.

Odisha Works Department (OWD) – **Organization and functions** are the following:

Organization –

- a. OWD is headed by a position of EIC-cum-Secretary or EIC who reports to the Minister of Works. The EIC-cum-Secretary is physically located in the Secretariat Building and operates as the senior liaison officer between Govt and the OWD.
- b. At the OWD there are seven subordinate CEs who report to the EIC-cum-Secretary and EIC (Civil), each of whom is responsible for a different functional unit called a Wing. At any point of time the senior most EIC/CE shall holds the title of EIC (Civil)-cum-Secy and as such, is responsible for all the administrative functions of the OWD. This includes financial reporting and the personnel functions. Besides, under OWD another wing is working in the name of OBCC Ltd.
- c. For administrative purposes the Roads, NHs and Buildings Wings are subdivided into Circles which are headed by SEs. Each Circle in turn is subdivided into a number of Divisions that are headed by a position of EE The Head Office is responsible for overall coordination and monitoring activities, while execution of works is carried out by the EE at Divisional level. The OWD is controlled by seven heads of Wings in the organisation, each with a separate reporting responsibility to the EIC-cum-Secretary. There is no single professional, technical or managerial position in OWD which carries the single responsibility equivalent to that of a Chief Executive Officer (CEO) in an organisation. The co-ordination of the Wings is performed by the EIC-cum-Secretary.

Functions –

- d. Construction, repair and maintenance of buildings, roads, bridges and other related structures financed from the various state and capital budget allocations in Odisha.
- e. Execution of original, renewal and repair works on the NH network financed through MORT&H after levying agency charges at the rates agreed between GOI Construction of buildings/roads and bridges as relief work in the event of floods, cyclones or other natural disasters.
- f. Ensuring **with the help of civil administration and police that** no encroachment or structure, whether temporary or permanent is erected on the land and property under the control of OWD. ~~It is also responsible for removal of such encroachments as per GOO rules.~~
- g. Maintaining a register of land, buildings and properties belonging to the GOO and under the administration of OWD.



Responsibility and duties:

I. Office of the Engineer-in-Chief (Civil)

This is the HOD functioning under Works Department, GOO. There are ten field Circles consisting of seven Civil, one Public Health, one Electrical and one Mechanical. There are thirty six Civil Divisions, two General Public Health (GPH) Divisions, four General Electrical Divisions (GED) and four Mechanical Divisions are under the control of Circle Offices. Sub-Divisional Offices are functioning under the control of Divisional Offices and Section Offices functions under the control of Sub-divisions.

The EIC (Civil) is the head of the organisation to whom CEs i.e. CE (DPIR), CE (RD&QP), CE (Building), CE (WB), CE (Design) and CE (e-Procurement) report.

The CE is responsible for a functional unit called a 'wing'. The three wings are Roads, NHs, and Buildings have field units called circles, which are headed by the SEs, the location of the circles are fixed and notified by the Govt.

II. Circle Office

The Administrative unit of the Department is the circle under the control of a SE who is responsible to the CE for the administration and general professional control of public works within his circle. The SE has also powers for sanction of estimates and entering into contracts within the financial powers delegated to him. The SE shall be assisted by AEE and other officers/officials i.e. of Technical Branch, Quality Control, Financial Branch and Establishment Branch. Generally there is a Financial/Legal Assistant to assist him in financial and court matters.

III. Division Office

The main Executive unit of the Department is the Division and is under the control of an EE/ Divisional Officer (DO). He has control over the works of all the subdivisions under his jurisdiction. The EE is responsible for the proper execution of all works in his division controls/guides the SDOs in survey, investigation, designs, estimating of the works. He also has powers of sanctioning estimates and entering into contracts within the limits of delegated powers. As disbursing officer of the Department, all payments for works, supplies and services are made by the EE in the Division or through the Sub-divisions under him. The EE is required to render the prescribed monthly account to the office of Accountant General (AG). The Division Office shall also have three branches, viz. Technical, Accounts and Establishment. The Technical Branch shall be under an AE (Works), Accounts Branch under a Divisional Accountant from AG office and Establishment Branch under a Senior Superintendent. The AEE if posted in Division shall have control over the three branches and the branches submit all files to EE for through him for his orders. He also holds charge of the office in the absence of the EE in all matters except financial.

IV. Sub Division Office

The work of sections is controlled by a Sub-division headed by an AEE/AE, also called SDO who is vested with powers to sanction the estimates and enter into minor contract of procurement. The SDO also to guides subordinate officers in the matter of investigation and preparation of estimates,



and shall take all necessary steps to ensure that works are properly executed. He has to maintain and render accounts in prescribed formats and orders in force.

V. Section Office

The executive unit of the organisational set up is the section office is under the control of a JE/ Section Officer. His jurisdiction may be territorial or functional. He shall be in charge of daily wage labour force engaged on various departmental works and control the drivers and machineries working within his jurisdiction. He shall perform survey works and initiate estimate for original as well as maintenance works and shall be got approved from the competent authority before execution. The JE has to maintain the primary records of all transactions relating to works, supplies and services under his control and renders accounts to his superior authorities as per rules.

The administrative/technical organisation of OWD is:

1. Engineer-in-Chief (Civil) cum Secretary (Works), Secretariat, Bhubaneswar;
2. Engineer-in-Chief (Civil), Bhubaneswar;
3. Additional Secretary, Bhubaneswar;
4. Additional Secretary (I), Bhubaneswar;
5. Chief Engineer (Design Directorate), Bhubaneswar;
6. Chief Engineer (DPIR), Bhubaneswar;
7. Chief Engineer (Building), Bhubaneswar;
8. Chief Engineer (National Highways), Bhubaneswar;
9. Chief Engineer (World Bank Projects), Bhubaneswar;
10. Chief Engineer (RD&QP), Bhubaneswar;
11. Chief Engineer (e-Procurement), Bhubaneswar;
12. Chief Architect, Architecture Wing, Bhubaneswar; and
13. Managing Director (CE), Odisha Bridge Construction Corporation Ltd., Bhubaneswar.

2.1.3 Department of Water Resource (DoWR)

DoWR is headed by Principal Secretary (Water Resource). To achieve various objectives, the department is assisted by following seven organisations:

- i. Major & Medium Irrigation
- ii. Minor (flow) Irrigation
- iii. Ground Water Survey & Investigation
- iv. Command Area Development
- v. Odisha Lift Irrigation Corporation Ltd.
- vi. Water & Land Management Institute (WLMi)
- vii. Odisha Construction Corporation Ltd. (OCC)



The functions and responsibilities of DOWR are:

- a. Administration of various Navigation, Embankment and Drainage Act and Rules made there under.
- b. Water for irrigation and navigation canal, drainage embankments and water storage and all works connected therewith.
- c. Maintenance of Indian Waterways.
- d. Construction and maintenance of building required solely for the administration of canals and embankments of Major and Medium Irrigation.
- e. Flood control and river training works.
- f. All matters relating to civil construction and maintenance of Dam projects except Upper Indrāvati Hydro-electric Project upto the point of generation in coordination with Energy Department
- g. All matters relating to land acquisition (LA), land reclamation and resettlement in connection with the projects pertaining to the Department
- h. Command Area Development.
- i. Excavation, execution and maintenance of Minor Irrigation as defined by GOI from time to time and Tank Projects.
- j. Managing Lift Irrigation Corporation.
- k. Managing Odisha Pani Panchayats.
- l. Formulation of State Water Plan & State Water Policy.
- m. Implementation of Major & Medium Irrigation Projects and their operation & maintenance.
- n. Involving farmers in irrigation system operation & maintenance activities relating to Major and Medium irrigation projects.
- o. Interstate matters relating to rivers common to neighbouring States.
- p. Industrial water supply & collection of industrial water rate.
- q. Exploration and regulation of ground water including creating mass awareness for artificial recharge in view of depletion of resources.
- r. Water & Land Management Institute: This autonomous organisation was set up in 1996 to impart advanced training to officers and farmers associated with irrigated agriculture activities. Besides, this organisation is also involved in research and consultancy activities pertaining to land, water and crop management.
- s. Odisha Construction Corporation (OCC) Ltd.: The Corporation was established in the year 1962, under the Companies Act, 1956, this is fully owned GOO enterprise to undertake construction activities. Later, the activities of this Corporation are extended to the field of construction consultancy and IT services.



The administrative/technical organisation of DOWR is:

- 1 Engineer-in-Chief, Water Resources
- 2 Engineer-in-Chief, Planning & Design
- 3 Engineer-in-Chief-cum-Special Secretary, DoWR
- 4 Chief Engineer, Design Research & Quality Control
- 5 Chief Engineer, Dam Safety
- 6 Chief Engineer, Project Planning & Formulation
- 7 Chief Engineer, Odisha Water Planning Organisation
- 8 Chief Engineer, Water Services
- 9 Chief Engineer & Basin Manager, Lower Mahanadi Basin
- 10 Chief Engineer & Basin Manager, Upper Mahanadi Basin
- 11 Chief Engineer & Basin Manager, Baitarani, Subernarekha & Burhabalanga Basins
- 12 Chief Engineer, Upper Indravati Irrigation Project
- 13 Chief Engineer & Basin Manager, Rushikulya, Vansadhara, Nagavali Basins
- 14 Chief Engineer, Drainage
- 15 Chief Engineer & Basin Manager, Brahmani Left Basin
- 16 Chief Engineer & Basin Manager, Brahmani Right Basin
- 17 Chief Engineer, Lower Indra & Lower Suktel Irrigation Project
- 18 Chief Engineer, Kanupur Irrigation Project
- 19 Chief Engineer & Director, PMU, OIIAWMIP
- 20 Chief Construction Engineer, Lower Suktel Irrigation Project
- 21 Chief Construction Engineer, Potteru Irrigation Project
- 22 Chief Construction Engineer, Anandapur Barrage Irrigation Project
- 23 Chief Construction Engineer, Upper Kolab Project

2.1.4 Rural Works Department

The RWD in its present form consists of two organisations, (i) Rural Works (RW) and (ii) Rural Water Supply & Sanitation (RWS&S). The functions and responsibilities of RDD are:

- a. To improve road communication in rural areas of state, by ensuring complementarities with categories of roads under other Departments and institutions with a view to promoting economic growth, easy movement of goods and people, access to markets, social infrastructures etc.;
- b. Provide safe drinking water to rural habitations and schools;



- c. Promote sanitation in rural areas of the State
- d. To undertake Various programmes with NABARD assistance under RIDF, PMGSY, RLTA for KBK districts and Constituency Wise Allotment (CWA) are in implementation by the Department
- e. To looks after the maintenance and upkeep of public buildings in rural areas borne under the books of RDD.
- f. To manage Rural Water Supply & Sanitation organisation which implements rural drinking water supply programme by utilizing the outlay under Accelerated Rural Water Supply Programme (ARWSP), Special Central Assistance (SCA) under RLTA for KBK districts and Swajaldhara. It also implements rural sanitation programme under the centrally sponsored Total Sanitation Campaign (TSC). Besides implementing the schemes and programmes in general, both these organisations provide emergency support service during natural calamities.

Organisational set-up:

I. Rural Work

The RW organisation is headed by EIC (RW). The field is controlled by three CEs which has 10 (RW) Circles, one Electrical Circles and one Public Health Circle headed by SE who directly reports to the CE. In all 53 Divisions are functioning out of which 50 are RW divisions, one Mechanical, one Electrical and one Public Health divisions within the State. In all 169 Sub-divisions and 532 Sections are sanctioned and attached to these Divisions for executing works assigned to the Department

II. Rural Water Supply & Sanitation

In RWS&S organisation consists of two CEs i.e. CE, RWS&S and CE, Odisha State Water Sanitation & Mission (OSWSM). In addition, 6 Circles and 35 Divisions have been sanctioned by the Govt for the works assigned to this Department

The administrative/technical organisation of RDD is:

1. EIC, RW, Bhubaneswar
2. Chief Engineer, RW-I, Bhubaneswar
3. Chief Engineer; RW-II, Bhubaneswar
4. Chief Engineer, RW-III (Bridges), Bhubaneswar
5. Chief Engineer, RWS&S, Bhubaneswar
6. Chief Engineer, OSWSM, Bhubaneswar

2.1.5 Housing & Urban Development Department

The *Rural Water Supply & Sanitary (RWSS)* is under the administrative control of Housing and Urban Development (H&UD) Department of the GOO. Presently the *RWSS* is the service provider that plans, executes, operates & maintains the Urban Water supply and Sewerage systems of the state. After completion of major/mega water supply and sewerage projects, Odisha Water Supply & Sewerage Board (OWSSB) hand over them to *RWSS* for operation and maintenance (O&M).



The functions of RWSS broadly comprise of the following:

- a. Operation & Maintenance of Water Supply Systems consisting of Intake arrangement, Production wells, Rising Main Water Treatment Plant, Distribution System, Storage System & Pumping System in all Urban Local Bodies & census towns in the State to ensure supply of *required quantity of* potable drinking water. Water Supply to Paradeep NAC is provided by Paradeep Port Trust.
- b. Operation & Maintenance of Sewerage System.
- c. Maintenance of PH Installations of Public Institutions Govt Buildings (Residential & Non-Residential).
- d. Engineering supervision of water supply/sewerage projects taken up under State Plan/CSP/ Drought /Flood/ RLTAU/AUWSP/JNNURM /UIDSSMT/NRDWP /RIDF/other deposits to complete and commission them within stipulated time.
- e. Repair & maintenance of Tube Wells.
- f. Formulation of project proposals for obtaining funding from EAP/GOI.
- g. Collection of water & sewerage tariff/user charges
- h. *To extend technical support to all ULBs & PRIs.*

The *RWSS* is headed by EIC, Public Health Urban.

2.2 Duties, Responsibilities and Accountabilities of Officers

In this chapter, the terms 'Duty', 'Responsibility' and 'Accountability' will generally have the meanings given below:

Duty: means what an officer shall do or shall cause to be done, in the discharge of his official obligation.

Responsibility: means what an officer is answerable for, either solely or jointly with such other subordinates as are also concerned in the said works. This is basically taking care of duties

Accountability: In ethics of the governance, accountability is answerability, blame worthiness. This is acknowledgement of assumption of responsibility for actions, decision etc. Thus generally speaking an officer is accountable to all duties and responsibilities assigned to him.

The duties and responsibilities of the officers of the Department are given below. The Accountability flows from the responsibility however in some important functioning in the Department under various Chapters concerning specific function, the Accountability has been listed out separately as well.

The duties and responsibilities of various officers in regard to the subject matter dealt with in the chapter are given in detail. The officers shall also be responsible for carrying out of the duties and responsibilities assigned to the subordinate officers reporting to him in the office.

In addition, the following shall be considered as part of the duties of every officer of the Department:



- a. Every officer shall, if called upon by his superior officers, carry out as a temporary measure, in addition to his duties and responsibilities, those of another officer who is on leave or otherwise not available.
- b. If an officer has to be absent from his post on leave or for other reasons, he, or his superior officer shall make necessary arrangement, for the conduct of the work in the absence of the officer.
- c. Every officer shall take adequate care on the protection of Govt property entrusted to his charge.
- d. Every officer shall carry out such work as he may be called upon to do from time to time by the CE or any competent authority of the Govt.
- e. Every officer must safeguard the interest of the State particularly, in emergencies and unforeseen circumstances.
- f. Every officer shall co-operate with other officers of the Department and officers of other Departments wherever necessary for the proper conduct of Govt business.
- g. OPWD Officers in charge of works shall see that the provisions of the safety code and protection arrangements are strictly observed. Inspecting officers shall particularly take necessary action in this regard.
- h. All Engineers are responsible for ensuring the social impact and environment requirements incorporated in the Works Code and Manual.
- i. **Engineer in charge shall be responsible for enforcement of all terms and conditions in a contract under operation in his jurisdiction in order to ensure achievement of overall objective enshrined in the contract.**
- j. Engineering officers are responsible for ensuring safety management aspect in all the works of construction, repair and operations.
- k. In respect of structures under maintenance of the OPWD vulnerable portions shall be inspected and if any weakness is noticed steps shall be taken urgently to strengthen or replace the weak portions of the structure. CEs shall issue appropriate detailed instructions in this regard applicable to various types of structures like roads, buildings, bridges, under passes, flyovers and culverts etc.
- l. OPWD Officers shall see that sufficient environment protection arrangements are strictly observed in the office premises as well as at work sites. Inspecting officers shall take necessary action in this regard.
- m. Every officer shall guide and control the work of his subordinates and shall there be any disobedience, malingering, insolence, etc., it is open to the officer controlling him to initiate disciplinary proceedings against him after reporting the matter to the higher authority.

The charter of duties laid down here shall be understood in the context that in the case of officers while some duties may have a tangible character, there are other duties such as providing



leadership, possessing resourcefulness, managing conflict, etc. which cannot be adequately defined or measured, but which nevertheless is expected of them.

Since functions of each officers/official are to be defined for better growth of the organisation as such an attempt has been made to spell out functions and the responsibilities of each officers/officials. Now days it has felt necessary that in case nonperformance of duty one has to be made accountable as RTI Act is in force which is watchdog for every activity being carried out in the Department

2.2.1 Engineer-in-Chief (EIC)

The Govt after considering higher responsibilities assigned, have delegated enhanced powers to the post of EIC in the following Departments entrusted with Public Works:

- A. Odisha Works Department;
- B. Department of Water Resources; and
- C. Rural Development Department.
- D. Housing & Urban Development Department

The duties and responsibilities of EIC are elaborated as under:

- a. EIC is responsible to the Govt for the efficient administration and general professional control of public works of the Department
- b. He is the professional adviser to the Govt in all matters relating to his charge and other matters on which his advice may be sought.
- c. He will exercise full technical and supervisory control on the CEs and all other officers working under his control in the Department
- d. EIC, as far as possible, shall not involve himself in direct administration of contracts except as specially provided in directions issued by the Govt, so as to provide one appellate channel within the Department itself.
- e. EIC will get an annual plan of action prepared for the Department by February every year listing the targets of every unit including that at the level of CE. **The Action plan shall be based on actual outcome and user oriented performance parameters viz. Quality Index of Roads, Asset Value, Safety, Congestion Index and not merely have physical and financial targets.**
- f. EIC is also responsible for long range planning, co-ordination, capacity building, and introduction of emerging construction technology and management practices.
- g. He shall ensure optimum utilisation of the personnel in the organisation for meeting the objectives.
- h. EIC shall ensure the framing of Information Technology (IT) related applications appropriate to the needs of the Department, including but not limited to the following:
 - i. Computer-aided-Design (CAD) In the matter of design, drafting, analysis of rates and estimation, etc. ;
 - ii. e-monitoring of physical and financial progress of works;



- iii. Financial and accounts management system;
 - iv. Geographical Information System (GIS) in regard to the network of roads, buildings, bridges, drains, sewers, etc. as the case maybe;
 - v. Roads and Building database as a tool to planning, design and analysis;
 - vi. Personnel administration;
 - vii. Maintaining and regular up-dating of website;
 - viii. Oversee e-tendering (on-line tendering);
 - ix. Speedy trial and disposal of inquiry cases;
 - x. Overall quality management of works; and
 - xi. Oversee Asset management.
- i. EIC shall exercise concurrent control with the Audit Officer viz. AG, Odisha, over the duties of the officers of the Department in connection with the maintenance of accounts.
 - j. He will give all legitimate support to the Audit Officer in enforcing strict attention to the regulations concerning the disbursement of money, the custody of stores and the submission of accounts.
 - k. EIC shall prepare annually the portion of the budget estimates relating to the establishment (including training) and works of his Department
 - l. He will ensure that heavy expenditure in the last months of the financial year, for the sole purpose of avoiding lapse, is prevented.
 - m. He shall also ensure that money not likely to be needed during the year is promptly surrendered, so as to allow its appropriation for other purposes by the proper authority.
 - n. In case a commitment is made by the Govt beyond the budget, EIC shall seek additional funds by re- appropriation, supplementary grant or excess grant, as considered appropriate or advised by Finance Department
 - o. As soon as possible after the close of each year, EIC will arrange the preparation of Annual Administration Report of his Department, giving a brief and clear account of its operations. Significant milestones achieved, initiatives taken and lessons learnt should also be brought out.
 - p. He shall ensure that property returns are duly filed by the officers/staff, annual confidential reports (ACRs) are complete and up-to-date, and that pension cases do not remain pending inordinately.
 - q. EIC shall, in consultation with the CE, delegate power to the SE and EE posted in the Headquarters office to perform/dispose, at their own level, such functions/cases where no orders of the next higher authority are required. These delegations should be periodically looked into.
 - r. EIC shall have guidelines issued regarding functions to be performed at field level.



- s. He will clearly spell out guidelines to ensure availability of information which may be sought under RTI Act, 2005.
- t. EIC will monitor important project closely from delay, cost overrun and quality angle and take all remedial steps.
- u. EIC will prepare every month a list of unresolved issues and get them resolved with the help and intervention of the Administrative Secretary wherever required.
- v. He shall undertake review of various cadres of his Department every 5 years to ensure that the personnel don't stagnate bringing in efficiency and discontentment adversely affecting the work culture of the Department.
- w. He shall set physical as well as financial targets for all the units headed by CEs, Circles headed by SEs, Divisions headed by EEs and also the Project Implementation Units and Monitors the same periodically.

In addition to general duties & responsibilities of EIC listed out at para 2.2.1, some specific duties to the defined posts are as under:

I. EIC (Civil), Works

- a. He will remain in charge of establishment of all the employees in the office of the CE (OWD) Odisha and its sub-ordinate officers in addition to the assignment that would be allotted to him from time to time.
- b. General, Monitoring of matters relating to road, building and bridge works of OWD Wing.
- c. Annual Plan review of road and bridge works.
- d. All other matters not specifically entrusted to the CEs.
- e. He will remain in overall charge of entire OWD Wing.
- f. In the matter pertaining to Establishment, Tools and Plants, General and monitoring although the EIC (Civil) will be in overall charge of the OWD Wing, he will consult his colleagues i.e. the CEs concerned, before taking decision in the matter.
- g. He will hold regular monthly review meeting of all the PWD works under OWD Wing with concerned CEs and SEs and submit the report to the Govt by 15th instant of the succeeding month.
- h. Periodical updating of Schedule of Rates (SOR), plinth area rates and standard data book
- i. Shall ensure all inputs and infrastructure facilities to all offices of OWD in the state and their maintenance/provision of funds
- j. Vetting of environmental and social safeguards in all major projects
- k. To have vision for new works their locations and availability of sites so that funds could be arranged in near future by the Govt
- l. Upgradation of class of contractors based on their performances



II. Engineer-in-Chief, Water Resources, DoWR

- a. He is the technical advisor to the State Government in all matters relating to Water Resources Department in the State.
- b. He looks after the constructional activities of all major & medium irrigation projects.
- c. He is in charge of the flood control, CADA, Mechanical Wing, Mega Lift works, barrages and externally aided projects of the State.
- d. He looks after monitoring of works of Odisha Construction Corporation relating to Water Resources Department.
- e. He looks after the establishment and monitoring of all projects and activities of entire State relating to Water Resources Department.
- f. He is the member of all the Technical Committees of Govt. in DoWR.
- g. He is the Chairman/Member of Water Allocation Committee/State Water Resources Board & any other Committee of DoWR.
- h. Any other work assigned by the Government from time to time.

III. Engineer-in-Chief, Planning & Design, DoWR

- a. He looks after Minor Irrigation works, Lift Irrigation, Ground Water, Water Services, WALMI, Design & Research, Planning, Hydrometry, Dam Safety, Water Planning, Survey & Investigation & Quality Control works, Internal Vigilance, Data Archiving & Processing, Pani Panchayat, Biju Krushak Vikash Yojana of the State.
- b. He will assist Engineer-in-Chief, Water Resources for efficient management of Water Resources activities of works looked after by him such as Major & Medium Irrigation Projects, Flood Control, Mega Lift, Barrages, Externally Aided Projects, etc.
- c. He can advise Engineer-in-Chief, Water Resources or Government related to Establishment matters of the Establishments under his jurisdiction.
- d. He looks after monitoring activities of the works under his control.
- e. He is the member of all the Technical Committee of Govt. in Department of Water Resources.
- f. He is the Chairman/Member of Water Allocation Committee/State Water Resources Board and any other committee related to the Establishment or works under his jurisdiction.
- g. Any other work assigned by the Government from time to time.

IV. Engineer-in-Chief-cum-Special Secretary, DoWR

- a. He will assist the Government as the technical head for all water resource related works. He will be assisted by a Technical Wing consisting of Technical Officers at Government level. All the technical works of Engineer-in-Chief, Water Resources & Engineer-in-Chief, P&D shall be dealt by him at Govt. Level.



- b. He will be responsible for monitoring both physical & financial progress of all works related to Water Resources Department. He can inspect any of the works of the Department for proper execution and monitoring point of views. He can advise EICs/Field Officer and assist the Government for right person/Officer to be placed/posted to right place for effective functioning at field level to achieve physical & financial target.
- c. He will help in preparation of both short term and long term outlook/strategy for the Department. He will guide the Government on external funding at appropriate terms.
- d. He will assist the Government for inter-departmental and intradepartmental interactions in best interest of the Department.
- e. He will represent Government in all Technical Committees of DoWR in place/absence of Secretary of the Department.
- f. He will be a Member of State Level Tender Committee. He will assist Government in taking financial decisions related to works.
- g. Any other work assigned by the Government from time to time.

V. EIC (Works), Field Units, Rural Works

- a. GOI under PMGSY scheme shall decide to provide road connectivity to all villages up to 500/250 population as such the road network to be decided which is most economical and suits the requirement of the area
- b. Arrange funds from GOI
- c. Finalise the tenders as per GOI guidelines
- d. Update Quality control units and monitor link roads under execution
- e. Update GOI on monthly progress and targets achieved
- f. Dispute redressal for timely completion
- g. Upgradation of class of contractors based on their performances

VI. Engineer in Chief, P.H (Urban)

1. *He will remain in all charges of establishment of all the employees in the office of the E.I.C. P.H. (Urban), Odisha and his subordinate offices in addition to the assignment that would be allotted to him from time to time by Government.*
2. *He will delegate the authority and assign responsibility to the Chief Engineer(s) and others as appropriate, all consistent with OPWD Code.*
3. *General monitoring of matters relating to works of PHEO*
4. *Annual Plan Review*
5. *All other matters not specifically entrusted to Chief Engineer*
6. *He will establish and continually review systems. He will periodically on an established schedule, meet with S.E/ E.E.s to develop, improve and modify strategic goals, plans and objectives under intimation to Government.*



7. He will be responsible for liaison with Government of India, Government of Odisha and bilateral agencies as and when required.
8. He will control and supervise the works of Chief Engineers.
9. He will report to the Government about all the activities of the department and advise the Government on all matters relating to implementation of Public Works Organisations programs/policies.
10. He will give concurrence to transfer and purchase of equipment etc by Chief Engineers, PH.
11. He will ensure that the department is effective and efficient in carrying out legislative mandates, Government orders and other objectives and programs.

VII. Engineer in Chief, RWS&S (Rural Water Supply & Sanitation)

1. He will remain in all charges of establishment of all the employees in the office of the E.I.C. & Chief Engineer-I, RWSS, Odisha and his subordinate offices in addition to the assignment that would be allotted to him from time to time by Government.
2. He will delegate the authority and assign responsibility to the Chief Engineer(s) and others as appropriate, all consistent with OPWD Code.
3. General monitoring of matters relating to works of RWSS.
4. Annual Plan Review
5. All other matters not specifically entrusted to Chief Engineer
6. He will establish and continually review systems. He will periodically on an established schedule, meet with S.E/ E.E.s to develop, improve and modify strategic goals, plans and objects under intimation to Government.
7. He shall be responsible for liaison with Government of India, Government of Odisha and bilateral Agencies as when required.
8. He will control and supervise the works of Chief Engineers.
9. He will Report to Government about all the activities of the Department and to advise the Government on all matters relating to implementation to RWSS Organisations Programme/ Policies.
10. He will give concurrence during transfer of machines and purchases of equipment etc. by Chief Engineer, RWSS.
11. He is to ensure that the Department is effective and efficient in carrying out legislative mandates, Government Orders and other objectives and programme.

2.2.2 Chief Engineer (CE)

It shall be the responsibility of CE to ensure functioning of his wing efficiently where deliveries are time bound. His function will include the following:

- a. CE shall ensure that the policies of the Govt with regard to development programs are implemented in a timely manner.



- b. CE shall plan, organise and co-ordinate works consistent with budget allocations.
- c. CE shall be responsible for adopting proper strategies to achieve the objectives in respect of the domain assigned to him.
- d. CE shall assist the EIC in getting the budget estimates prepared pertaining to works under his charge. He will ensure optimal utilisation of budget allocation following the principles of financial propriety. He shall try to ensure that changes in the demand for funds are reflected properly in the revised budget estimates.
- e. CE shall ensure that the design, drawings, specifications and estimates approved by him are sound and realistic.
- f. In particular, he shall see that the estimates incorporate all the provisions necessary for successful execution and meaningful usage of the works in question.
- g. CE shall be responsible for monitoring of all IT related applications pertaining to his sphere of work and the introduction of the same in emerging design, construction and management practices.
- h. CE shall inspect the Circle Offices under his charge at least once a year. In addition, he will carry out inspection of the Divisional Offices or any other offices/branches as required.
- i. CE shall coordinate, evaluate, review and hold inspections in the required manner and frequency so that the field officers ensure timely completion of work with appropriate quality and method of execution.
- j. CE shall ensure that estimate of all works to be technically sanctioned are prepared by the officers concerned so that Technical Sanction (TS) can be issued well in time and their accounts finalised at the earliest.
- k. CE shall take appropriate steps to ensure that the field officers ensure efficient execution of works under his charge with proper quality.
- l. He will take special measures and carry out more inspections in respect of certain works of crucial importance as decided by the State Govt.
- m. CE shall hold periodic meetings, say monthly or as specified, in respect of Circles under his charge so as to bring about all-round improvement in respect of personnel matters, accounts and audit issues and timely completion of works.
- n. CE will exercise control over the duties of the officers of the Department in connection with the maintenance of the accounts, custody and disbursement of money, the custody of stores and timely submission of accounts to the AG.
- o. It will be his duty to administer the budget grant and to keep a close watch over the progress of expenditure, excess and savings and take remedial action wherever required.
- p. Whenever the expenditure on a work administratively approved is likely to exceed the approved limits, it is the responsibility of the CE to submit a revised estimate to the competent authority in time before excess expenditure is incurred.



- q. Whenever heavy damages are sustained by public works due to natural calamities like flood, rain, earthquake or accidents involving loss of life and/or Govt property etc., the CE should inspect the spot at the earliest opportunity and submit a detailed report to Govt.
- r. It will be duty of the CE to inspect at least 2 circles and 4 divisions in a year to see that prompt action is being taken at all levels for timely disposal of cases and correct and up-to-date maintenance of accounts and other records with reference to sanctions and allotments.
- s. He will specifically review serious irregularities, lapses and losses brought out by, the Stores Verification Party.
- t. The CE, while inspecting the works under execution should invariably record his observations in the Register of Inspections or issue inspection notes. ~~He shall make final inspection of important works after completion thereof but before the payment of the final bills.~~
- u. The general supervision and control of the assessment of revenue from works and from other sources on which the Department has control will vest with the CE, who will frame necessary estimates and watch carefully the progress of the realisation during the course of the year.
- v. **The CE shall have a specific role to play for environment as well as social safeguard needs of the major projects which required environment and social impact assessment. The detailed duties and responsibility shall be as given in respective sections of this Manual.**
- w. **He shall set physical as well as financial targets for all the units headed by CEs, Circles headed by SEs, Divisions headed by EEs and also the Project Implementation Units and Monitors the same periodically.**

In addition to general duties & responsibilities of CE listed out at para 2.2.2 above, some specific duties to the defined post are as under:

I. Chief Engineer (Directorate of Designs), OWD

- a. To prepare designs and drawings of the works on the requisitions placed on him or as directed by the CE's of OWD and CE's of other Department of GOO.
- b. To inspect the site for the proposed works and inspect the works under construction for preparation or modification of the designs **wherever considered necessary** as and when directed by the CE.
- c. To compile the general technical data and keep all the technical records of all designs and important works. **He will also get investigation work at site done through the officer of Design Directorate in respect of roads, bridges, rural roads & minor bridges, buildings or any other infrastructure projects.**
- d. To revise the specifications and manuals of works from time to time and bring them up-to-date to keep pace with the latest technical development being the member of such committee.



- e. To maintain the technical library of the Department also for purchase of new books/software he shall be delegated with necessary financial powers as per OGFR/ Delegation of Financial Rules, 1978 equal to that of HoD.
- f. The responsibility for all important structural designs under execution vests with the CE who shall exercise careful control over the work of the Designs Directorate and the technical sections.
- g. It is the duty of the CE to convey approval of designs and drawings, of all component parts of the works/projects for which he is required to give TS as a whole.
- h. The CE may delegate powers of approval to designs and drawings of such component parts of a project which in the total cost of which comes within the power of TS of the subordinate office.

II. Chief Engineer (DPIR), OWD

- a. Give approval of alignment of roads
- b. Accord TS to all road works under his control as per delegation of powers.
- c. Sanction investigation estimate for all road works as per delegation of powers
- d. To obtain approval of Govt for separate estimate for LA and shifting utility services, in case of project
- e. Submission of annual administration report to Govt
- f. Allocate the maintenance fund to each Division at the start of the every financial year based on RMMS.
- g. Shall ensure that DPR is prepared for all sanctioned projects.
- h. Giving sanction for arrangements related VVIP/VIP visits and Govt functions, as per delegation of powers.

III. Chief Engineer (Building), OWD

- a. Accord TS to all the building works under his control as per delegation of powers
- b. Submission of utilisation certificate to the Govt in the case of Centrally Sponsored Schemes.
- c. Submission of annual administration report of buildings to Govt
- d. To attend to the duties specifically assigned by the Govt from time to time.
- e. Shall be responsible for planning, monitoring and budgeting.
- f. Giving sanction for arrangements related VVIP/VIP visits and Govt functions, as per delegation of powers.

IV. Chief Engineer (National Highways), OWD

- a. Initiate actions to get the proposals included in the annual plan
- b. To initiate actions to get the proposals approved from MoRT&H



- c. To accord TS to works as per delegation of powers
- d. To allot funds under various heads to the divisions based on the allocation from MoRT&H
- e. Submit proposals to MoRT&H for declaration as NH.

V. Chief Engineer (World Bank Project), OWD

- a. He acts as chief authority of the projects that are executed under The World Bank project.
- b. CE (WB) is also at present dealing with the Road Sector Institutional Development (RSID) Project. This deals with advisory services for ID support to assist GOO to improve its road sector policy, institutional capacities and legal framework to align it with the changing work environment.
- c. Manage any specialised projects as per agreement.
- d. Assign duties to his subordinate officers to manage LA, Social Impacts, Quality Control, Environment, Safety and Service procurement as per requirements.
- e. Liaison with the external funding agencies for sanctions and payments.
- f. Finalise Bid Documents for the projects.

VI. Chief Engineer (RD&QP), OWD

- a. The Prime role of CE, RD&QP is "QA" of different Construction works in the State of Odisha.
- b. To attends 'Enquiry cases' in the field & submits his report to the Works Department as & when required. The field wing & field EEs shall move along with the inspecting team.
- c. Various research works on construction materials are also to be taken up in this laboratory as & when required.

VII. Chief Engineer (e-procurement), OWD

- a. He is responsible to the Government in the Works Department for the efficient administration of the State Procurement Cell. He will exercise full technical and supervisory control over all the Officers under him.
- b. He is the Application Administrator of the State for e-Procurement module.
- c. He will exercise control over the duties of the officers of the Department in connection with the e-Procurement module. He will prepare annually the portion of the budget estimate relating to establishment under his control. He shall create Nodal Officers for the respective organisations, transfer and blocking/unblocking of officers, validation of bidders and blocking/unblocking of bidders.
- d. He is the head of supervision of the full roll out of end-to-end e-Procurement of the State relating to e-Procurement. He will monitor and audit the online procurement activities (online log files) of procurement units.



- e. He will be Convener of the Blocking/Un-Blocking Committee constituted with the following members:

EIC (Civil) cum Chief Procurement Officer	-	Chairman
Engineer-in-Chief (DoWR)	-	Member
Concerned Chief Engineer	-	Member
SE, e-Procurement	-	Member
Sr. Manager (Finance), e-Procurement	-	Member
Officer Inviting Tender	-	Member
CE cum Chief Manager (Technical)	-	Convener

- f. He will be the convener and he will maintain all records for this purpose. The Committee shall meet not less than once in a month if required & shall consider the recommendation of the officer inviting tender for unblocking of portal registration in consistent with the O.M. issued by Government for the said purpose from time to time. The quorum of the meeting will be four.

VIII. Chief Architect, OWD

- a. He is the approving authority in respect of all architectural drawing of Govt. projects and he shall prepare architectural plans and designs for all types of new buildings/renovate existing structures as per the direction of Govt. He will work under the control of the Engineer-in-Chief, Civil. He will further assign duties to Senior Architect, Assistant Architects and Architectural Assistants as per the requirement of the job. **The Architects at all levels shall interact with Structural Engineers, Electrical Engineers and Engineers of Design Directorate of respective field units for conceptualisation as well as finalisation of Architectural Drawings.**
- b. Prepare plans for buildings and other works on the requisitions placed on him through CE or Heads of Department of OWD.
- c. Advise CE, Buildings, on selection of site and approval of master plans and layouts and approve Architectural concepts drawing of major projects.
- d. Distributing the work in his branch to various subordinate officers, giving guidance to them in the manner in which work has to be done and controlling their work.
- e. Issuing instructions and guidance to subordinates for the preparation of master plans, layouts, preparation of plans, sections, elevations and interior layout of building to suit the requirements, preparation of detailed drawings and specifications of various components of buildings.
- f. Finalising concept designs for various types of buildings commonly in use, also to revising existing type designs from time to time.
- g. Suggesting detailed specifications for items generally involved in building construction which are not included in the detailed standard specifications of the Department



- h. Inspection of major building works during execution, if requested and giving instructions to field officers regarding various features of the work under intimation to the concerned CE.
- i. Approving of utility service drawings for building utilities such as electrical, water supply, sewerage, fire, rainwater harvesting services etc.
- j. To attend duties specifically assigned by Govt from time to time.

IX. Managing Director (CE), OBCC

- a. To construct infrastructure get executed, improve work, develop administration management in Odisha and elsewhere all types of Bridges, buildings' and other constructions, installation, erections irrigation project channels and other structures, works and conveniences pertaining thereto.
- b. To buy, sell deal in cement, stone, iron and steel or use stone of all kinds and to under-take the manufacture of lime, cement, mortar, concrete, bricks, and building materials of all kinds.
- c. To collect as Agent of State Govt toll on vehicles for the use of the bridges, bridge works and approach roads to bridges which are entrusted to the Corporation by the State Govt.
- d. To purchase, take on lease or otherwise acquire by transfer any bridges owned by the State Govt for the purposes of construction maintenance, toll collection management or control.
- e. To invite quotation, enter into negotiations end contracts for the business of the company.
- f. To construct, maintain, lay down, carry out, work sell, let on hire and deal in all kinds of works, machinery, apparatus, conveniences, and things capable of being used in connection with any of the main objects of the Corporation.
- g. To acquire, establish, construct provide, maintain and administer factories townships, estates, railway, building, yards, walls, water, water reservoirs, channels, pumping installation. Purification plants, pipelines, garages, storages sheds and accommodation of all description connected with the main business of Corporations.
- h. To undertake work as civil engineers, mechanical engineers, electrical engineers, sanitary and water engineers, and plumbers, brass founders, metal workers, mechanists, smiths, and tool makers and to manufacture, buy sell, exchange, install, work, alter, improve, manipulate, otherwise deal prepare for market, import or export, let on hire all kinds of plant and machines wagons, rolling stock apparatus tolls, utensils, substances, material and things necessary and convenient for carrying on any of the main business which the corporation is authorised to carry on or which is usually dealt in by persons engaged in such business.
- i. To purchase, take on lease under concession or otherwise lands, buildings work, mines, minerals, deposits, mining rights, plantations, forests and any rights and privileges or interest therein and to explore, work, exercise, develop and to turn into account the same.
- j. Giving sanction for arrangements related VVIP/VIP visits and Govt functions, as per delegation of powers.



X. Chief Engineer, Design Research & Quality Control, DoWR

- a. Develop projects and project components using appropriate modern design concepts involving appropriate construction technology for conservation and use of water, flood control, drainage and distribution canal system for the benefit of the community all consistent with the approved project plan or as it may be modified by official action.
- b. Establish a system for peer review of designs of large structures.
- c. Furnishes feasibility and preliminary designs to CE, Project Planning and Formulation.
- d. Prepare designers operating criteria for all structures.
- e. Prepare input for O&M manuals and standing operating procedures for all large dams and other major structures.
- f. Ensure preparation of emergency action plans for safety of dams.
- g. Respond to requests for solutions to new and recurring hydraulic and hydrologic problems to designers and users.
- h. Undertake civil, mechanical and design of approved project and other components (including specific detailed design wherever necessary) using modern design concepts, capable of adopting new techniques and technology.
- i. Design drainage systems, canal works and canal roads, flood control systems for adopting compatible.
- j. Prepare working drawings for major structures to facilitate the execution, review and rectification of the defect and easy maintenance.
- k. Prepare detailed construction specifications and design reports for all works.
- l. Prepare detailed rules and regulations for dam safety assurance and associated rules for administering the standards stating measurable conditions of acceptability, agency monitoring and enforcement provisions, as the Govt is responsible to ensure the safety of dams for protection of its citizens.

XI. Chief Engineer, Dam Safety, DoWR

- a. Phase-I Investigation of Large Dams.
- b. Phase-II Investigation of distressed dams, pointed under Phase-I.
- c. Preparation of Annual Health status of Large Dams.
- d. Preparation of Data book of Large Dams.
- e. Hydrological Review of Large Dams.
- f. Structural Review of Large Dams.
- g. Preparation of Rule curves for reservoir operation of multi-purpose Dams.
- h. Preparation of O&M manual.
- i. Recommending allotment basing on the distress condition of the Dam.



- j. Preparation of Emergency Action Plan.
- k. Organise Inter State Dam Safety Sub-Committee.
- l. Organise Dam Safety Review Panel (DSRP).
- m. Organise Safety review once in 10 years by experts.
- n. Organise State Dam Safety Committee (SDSC).

XII. Chief Engineer, Project Planning & Formulation, DoWR

- a. Responsible for preparing feasibility and final reports with standards as well as formulation report;
- b. All major project investigations and investigations not assigned to Basin Managers;
- c. Preparing detailed time schedule for investigations, designs, construction and operation phases;
- d. Project planning and economic analysis;
- e. Project socio-economic analysis;
- f. Project environmental assessment;
- g. Environmental clearance, Forest clearance and R&R clearance;
- h. Soil classification study;
- i. Coordinating planning activities with Basin Managers and other CEs.

XIII. Chief Engineer, Drainage, DOWR

- a. Implementation of Master Plan for Drainage Development in Coastal Areas.
- b. Implementation of different drainage and other work under different schemes like, CRF/ NCCF, RIDF, FMP, State Plan, Non Plan, A.D.B.
- c. To carry out the Design & Planning, Approval of Estimates, Floating & Acceptance of Tender for execution of the work costing **4.00 Crore** & above. Monitoring of progress of work and repair & maintenance of existing projects.
- d. Maintenance of Naraj, Mahanadi & Birupa Barrage Project.
- e. Construction & maintenance of M.C.I.I. Project.
- f. To retrieve water logged areas of 1.91 Lakhs Hect. in coastal belt of Odisha.
- g. To control flood water in River Mahanadi, Kathajodi & Birupa during Flood through Naraj & Mahanadi Birupa Barrage & to provide water to Taladanda Canal, Kendrapara Canal & H.L.C. Range-I for Khariff & Rabi crop as per the requisition of authority providing the Irrigation.
- h. To provide Irrigation facilities to the tune of 5937 hector in MCII Project.



XIV. Chief Engineer, Minor Irrigation

- a. The CE liaisons with the Govt for arrangement of funds for taking up the activities of the organisation. He is also reporting the progress of the activities directly to Govt.
- b. The monitoring & supervision of the activities are being done by himself through the four territorial SEs. The design & planning of projects are being taken up in his office through SE, Designs.

XV. Chief Engineer, Rural Works, RWD

- a. To conform the correctness of the rural population connectivity and to decide the through roads for reducing the distance between the market and village
- b. To prepare core network maps and to conform its correctness before preparing/submitting the estimates to GOI for approval
- c. Ensure quality of execution and monitoring there of
- d. To finalise the hydraulic data/designs of minor bridges over small tributaries up to 30 meter span
- e. Finalisation of tenders and ensure time bound completions
- f. To provide community services such as community hall/Panchayat house.

XVI. Chief Engineer, RWS&S, RWD

- a. To improve the drinking water quality and to recommend treatment plants for funding through GOI fund
- b. Hydraulic ground water data and finalisation of location of hand pump/tube wells, storage tanks and piped water supply
- c. For better health condition of rural area and to provide proper sanitation for the villages

XVII. Chief Engineer, Public Health (Urban), OPHEO

1. *All matters relating to PHEO including deposit works and matters connected therewith like budget, Account etc.*
2. *He will oversee the work of PH wing, since EIC, PH(U) remains in overall charges of PH wing Organisation. He will consult with EIC, PH(U) in any matter pertaining to PH wing i.e. in the matter of planning, design, monitoring and implementation etc.*
3. *He will exercise full the technical and supervise control over all the officers under him.*
4. *He will exercise control over the duties of officers in connection with maintenance of accounts, custody and disbursement of money, the custody of stores and timely submission of accounts to the A.G. He shall also ensures that all contracts, vouchers, Muster Rolls work charged establishment bills work accounts, store accounts, Material at site Accounts and other documents required by the A.G. in connection with the Audit of the transaction of the Public Works Department and made available to him or the officers authorised by the latter.*



5. *He will prepare annually the portion of the Budget estimates relating to establishment and works under his control. It will be his duty to administer the grant and to keep close watch over the progress of expenditure against it with a view to see that no excess is permitted to occur and that if additional funds are necessary, application for the same is made. It will further be his duty to see that the grant is fully expended in so far as it is consistent with general Rules and Procedure. He will ensure the prevention of large expenditure in the last months of financial year. He will also be responsible for ensuring that provision which is not likely to be needed during the year is surrendered immediately so as to enable the competent Authority to appropriate it for other purposes and for timely submission of the budget estimates to the Government.*
6. *Whenever the expenditure on a work administratively approved is likely to exceed the approved limits, it is his duty to submit a revised estimate to competent authority in time before excess expenditure is incurred. Similarly in case of projects which have been approved by Government sub-head wise, he should submit revised project estimate if the subhead wise expenditure (sub-heads of administrative sanction) is likely to exceed by more than 10 percent of the original provision, irrespective of the fact whether the project estimates as a whole exceeds the prescribed limit of original estimate or not.*
7. *It is his duty to approve all designs and drawings of all component parts of the works of the projects for which he is required to give technical sanction as a whole. The Chief Engineer may delegate powers of approval to designs and drawings of such component parts of the project the total cost of which comes within the power of technical sanction of the subordinates officers.*
8. *Whenever heavy damages are sustained by Public Works due to natural calamities like flood, rain and earthquake or accidents involving loss of life and/ or Government property etc., he should inspect the spot at the earliest opportunity and submit a detailed report to Government.*
9. *While inspecting the works under execution he should invariably record his observations in the register of inspections maintained at the site of work for which the tender has been accepted by him or by EIC, PH (U) or by Government. He shall make final inspection or such works after completion thereof but before payment of final bills.*
10. *It will be the duty of Chief Engineer to inspect at least two Circle Offices and four Division Offices in a year with a view to see that prompt action is being taken at all levels for timely disposal of cases and correct and up to date maintenance of accounts and other records with reference to sanctions and allotments. He will specifically review serious irregularities, lapses and losses brought by any competent authority for the purpose.*
11. *Besides he will cause the Branch Officers working in his office to inspect the respective branches of his own office twice in a year. He should inspect his own office once in a year. Copies of notes of inspection by the Chief Engineer should be submitted to Government within a month of such inspection.*
12. *The general supervision and control of the assessment of revenue from works and from other sources on which the PHEO has control, with test with the Chief Engineer, who will frame*



necessary estimates and watch carefully the progress of the realisation during the course of year.

XVIII. Chief Engineer - II, RWSS

1. *All matters relating to RWSS including deposit works and matters connected therewith like budget, Account etc.*
2. *He will oversee the work of RWSS, since EIC. RWSS remains in overall charges of RWSS Organisation. He will consult with E.I.C. RWSS in any matter pertaining to RWSS i.e. in the matter of planning, design, monitoring and implementation etc.*
3. *He will exercise full the technical and supervise control over all the officers under him.*
4. *He will exercise control over the duties of officers in connection with maintenance of accounts, custody and disbursement of money, the custody of stores and timely submission of accounts to the A.G. He shall also ensures that all contracts, vouchers, Muster Rolls work charged establishment bills work accounts, store accounts, Material at site Accounts and other documents required by the A.G. in connection with the Audit of the transaction of the Public Works Department and made available to him or the officers authorised by the latter.*
5. *He will prepare annually the portion of the Budget estimates relating to establishment and works under his control. It will be his duty to administer the grant and to keep close watch over the progress of expenditure against it with a view to see that no excess is permitted to occur and that if additional funds are necessary, application for the same is made. It will further be his duty to see that the grant is fully expended in so far as it is consistent with general Rules and Procedure. He will ensure the prevention of large expenditure in the last months of financial year. He will also be responsible for ensuring that provision which is not likely to be needed during the year is surrendered immediately so as to enable the competent Authority to appropriate it for other purposes and for timely submission of the budget estimates to the Government.*
6. *Whenever the expenditure on a work administratively approved is likely to exceed the approved limits, it is his duty to submit a revised estimate to competent authority in time before excess expenditure is incurred. Similarly in case of projects which have been approved by Government sub-head wise, he should submit revised project estimate if the subhead wise expenditure (sub-heads of administrative sanction) is likely to exceed by more than 10 percent of the original provision, irrespective of the fact whether the project estimates as a whole exceeds the prescribed limit of original estimate or not.*
7. *It is his duty to approve all designs and drawings of all component parts of the works of the projects for which he is required to give technical sanction as a whole. The Chief Engineer may delegate powers of approval to designs and drawings of such component parts of the project the total cost of which comes within the power of technical sanction of the sub-ordinates officers.*
8. *Whenever heavy damages are sustained by Public Works due to natural calamities like flood, rain and earthquake or accidents involving loss of life and/ or Government property etc., he*



should inspect the spot at the earliest opportunity and submit a detailed report to Government.

- 9. While inspecting the works under execution he should invariably record his observations in the register of inspections maintained at the site of work for which the tender has been accepted by him or by EIC, RWSS or by Government. He shall make final inspection or such works after completion thereof but before payment of final bills.*
- 10. It will be the duty of Chief Engineer to inspect at least two Circle Offices and four Division Offices in a year with a view to see that prompt action is being taken at all levels for timely disposal of cases and correct and up to date maintenance of accounts and other records with reference to sanctions and allotments. He will specifically review serious irregularities, lapses and losses brought by any competent authority for the purpose.*
- 11. Besides he will cause the Branch Officers working in his office to inspect the respective branches of his own office twice in a year. He should inspect his own office once in a year. Copies of notes of inspection by the Chief Engineer should be submitted to Government within a month of such inspection.*
- 12. The general supervision and control of the assessment of revenue from works and from other sources on which the RWSS has control, with test with the Chief Engineer, who will frame necessary estimates and watch carefully the progress of the realisation during the course of year.*

2.2.3 Superintending Engineer (SE)

The SE shall be controlling a **Circle** and has to exercise Administrative and Technical control over the various Divisions under his jurisdiction in order to ensure efficient functioning. His responsibilities shall include:

- a. Issue of appropriate instructions with regard to investigation for new works included in budget/as per public demand agreed by Govt wherever necessary.
- b. Giving guidance in the matter of design to be followed for major works or works of a complicated nature.
- c. Obtain the DPR of original works from the EE and process the DPR within his powers and submit to the CE if exceeding his powers of sanction.
- d. Scrutinizing estimates and revised estimates, supplement estimate requiring sanctions of authorities higher than the EE and sanctioning them or seeking sanction thereof in accordance with the delegation of powers after verifying through site inspection the correctness and adequacy of the proposal.
- e. Periodically inspecting all important works and also the works, which require his guidance in the matter of execution; Inspections shall be purposeful and shall cover examination of quality, progress, difficulties in execution etc. To record the comments in the work site order book and circulate the inspection note to all concerned for follow up action
- f. Checking expenditure against budget grant as a controlling officer and taking timely steps to move for re-appropriations, surrender of funds or supplemental grant as may be necessary.



- g. Ensuring that sanctioned staff is made available in the various offices etc. under his jurisdiction by recruitment, promotion, and transfer or otherwise as per rules.
- h. Inspecting the Division offices under his jurisdiction annually with a view to ensure that the work of the Divisions is carried out efficiently.
- i. Controlling the matters connected with the establishment under his jurisdiction such as leave, transfers and postings, promotions, disciplinary action etc.
- j. Collecting, scrutinizing and coordinating all necessary information for the preparation of budget estimates of the circle under his jurisdiction.
- k. Giving technical advice or opinion on matters within his jurisdiction referred to him by Govt, other heads of Department etc.
- l. Directing relief and protection measures to be taken with the resources available under his jurisdiction in the event of unforeseen calamities like flood, fire, earthquake etc. In the event of such work being organised by other Departments, cooperating with such work to the extent necessary.
- m. He shall hold quarterly meeting with EEs under his control to review the progress of various works record and circulate the minutes and report to the CE
- n. Suggesting measures for improving the technical and administrative efficiency of the Department taking into account the technical development, which has taken place and other relevant matters.
- o. Monitoring the follow-up action for ensuring timely response of State Govt to an audit para, draft paras and there shall be a system for discussions with heads of Department, AG.
- p. Forward the cases to be placed before the Govt Pleader/Arbitration Committees with relevant proforma details and sufficient number of copies of notes etc. to the Govt.
- q. Responsible for the supervision and **overall superintendence on the** quality management of works. He shall inspect works from quality point with the help of one DEE/AEE (QA).
- r. To conduct an independent QA and technical audit of works
- s. To suggest remedial action required to rectify the defects mentioned in the Inspection Report of Quality Control Cell.
- t. To initiate action against contractors doing inferior quality works based on the report of the Quality Control team.
- u. To conduct technical audit in files in respect of all Divisions under the circle every year and also check the bills finalised during the last year.
- v. To review functioning of the field testing laboratories and suggest remedial measures for improving the standard of their performance.
- w. **SE shall inspect all works awarded by him and the officers senior to him before payment of final bill.**



- x. The SE shall have a specific role to play for environment as well as social safeguard needs of the major projects which required environment and social impact assessment. The detailed duties and responsibility shall be as given in respective sections of this Manual.
- y. He will help CE in fixing physical and financial targets of all units under his jurisdiction and monitor their progress.

In addition to general duties & responsibilities of SE listed out at para 2.2.3, some specific duties to the defined post are as under:

I. Superintending Engineer (Electrical)

- a. Assist the CE (Buildings) in all matters relating to Electrical works in Govt buildings.
- b. To inspect works and give advice and assistance on major installations.
- c. Issuing inspection notes immediately after inspection.
- d. Sanctioning of all estimates and awarded contract of all electrical works within the powers.
- e. Scrutinise and accord TS within his powers of sanction to the estimates.
- f. Overall control of the work of subordinate officers.
- g. Exercising overall control over the establishment of the electrical wing.
- h. Exercising administrative and financial powers delegated to him.
- i. Suggesting and implementing technical innovation in the execution of electrical works.
- j. Recommending SOR for different items of works involved for approval of CE every year.
- k. Examining the quality of different makes of electrical materials and preparing list of approved makes for use in electrical works for the guidance of subordinate officers.
- l. Recommending specification for materials and works involved in electrification works for approval by the CE.
- m. Issuing departmental approval for electrical materials.
- n. Issuing Electrical Contractor License/Registration (all categories) and fixing rules and regulations.
- o. Examining relevant documents and notes and issuing order on routine matters subject to any general or specific instruction of the CE.
- p. Examining relevant documents and notes and recommending actions in cases requiring CE's attention.
- q. To approve and finalise an electrical design and drawings.
- r. Conduct inspection for approval to workshops/factories where electrical panel, materials are manufactured.
- s. To implement energy conservation methods.
- t. To participate in all State level meeting where electrical matters are involved.



II. Superintending Engineer (Mechanical)

- a. He shall report to CE (DPIR) for the administration and general professional control of Mechanical Divisions/Sub-Divisions/Sections under his charge.
- b. He shall be responsible for short and long term planning with regard to the procurement, O&M of construction and earth-moving machinery, vehicles, trucks, road-maintenance vans, bridge-inspection equipment, bailey/temporary bridging units, mechanical rigs and other mechanical equipment.
- c. He shall ensure that preventive, periodic and daily maintenance works of all machinery and vehicles are carried out timely, properly and cost effectively.
- d. He shall judiciously fix/review from time to time:
 - i. The number of working hours or kilometres any item of machinery or vehicle is expected to run in a year/month
 - ii. Consumption norms of POL (Petrol, Oil & Lubricants) per hour/kilometre and running charges.
- e. He shall develop operating procedures to ensure that the said machinery or vehicles operate at the optimum level of efficiency and, in case of serious or recurrent slippages, conduct investigation as to the cause and take suitable curative, preventive or administrative action.
- f. He shall finalise documents for approval of Survey Reports of such machinery and equipment as has outlived its useful life and has gone beyond economical repairs, in order that the same can be condemned and disposed off as per the prescribed procedure.
- g. He shall develop the Operating Manual to ensure that central and regional workshops are managed efficiently and that proper records/procedures are maintained for efficient repairs/overhaul of machinery and vehicles with minimum downtime.
- h. He shall put in place proper Store Management System to ensure on time availability and spare management. He shall put into place systems and procedures to check and prevent pilferage of POL.
- i. He shall inspect the sites of work where departmental machinery, plants and rigs etc. have been deployed and see that the system of their operation and management is satisfactory, that requisite logbooks are being maintained and that all procedures for safety of machinery and personnel are being duly followed.
- j. He shall inspect each Divisional Office under his charge at least once a year to examine accounts, divisional books, inventory records, manufacture accounts, maintenance manuals, and office work in general, etc.
- k. In the course of his tours, he shall interact with the CE/SE/EE concerned of the civil wing and discuss problems of mutual concern. He shall ensure that co-ordination meetings called by the latter are properly attended, either by him or the concerned EE (Mechanical) depending on the circumstances and urgency.



- l. He shall submit, giving full justification and technical details, estimates for purchase of new machinery and vehicles to head office for sanction by the Govt.
- m. He shall sanction the estimates for repair and maintenance of machinery and vehicles received from various EE (Mechanical).
- n. In the case of PHE Department, SE shall approve the schedule of boring of tube wells submitted to him by EE (Mechanical) prepared by the latter after getting the demand from field EEs (Civil).
- o. He shall, in consultation with the EIC/CE concerned, work out the requirement and configuration of bailey/launchable temporary bridges and arrange their procurement. He shall further ensure that these units are kept duly serviced and in ready-to-use condition for any eventuality. He shall also develop a trained work force to commission the bridges in the shortest possible time.
- p. He shall send to the CE (DPIR) a monthly utilisation report of each item of machinery under his charge and in the case of under utilisation of major machinery, propose suitable corrective action.

III. Senior Architect, Architect Wing

He shall be responsible for the following:

- a. In absence of Chief Architect he shall perform the duties of Chief Architect except application of financial powers
- b. Direct the preparation of master plans, layouts, preparation of plans, sections, elevations interior layout of building to suit the requirements, preparation of detailed drawings and specifications of various components of buildings and approve Architectural concepts of drawings
- c. Scrutiny of plans, sections, elevations etc. of buildings
- d. Preparation of working drawings and detailed specifications for items generally involved in building construction, which are not included in the detailed standard specifications of the Department
- e. Working architectural designs of components, which are vulnerable.
- f. Inspection of building works during construction as per the direction of Chief Architect in co-ordination with the field engineers of OWD
- g. Assisting his senior officers in all matters entrusted to him
- h. Review/modification of service drawings for building utilities such as electrical, water supply, sewerage, fire, rainwater harvesting etc.
- i. In the event of workload of the Architectural Wing is difficult to be covered as per required work schedule, SA shall outsource service to competent private consultancy firms.



IV. Superintending Engineer (e-Procurement)

- a. He will exercise control over the duties of the officers of the Department in connection with the e-Procurement module testing; training to officers and bidders, manning helpdesk, online monitoring of published tender and necessary feedback to Departments/PSUs, suggestion to NIC for e-Procurement module upgradation, blocking and unblocking of bidders login ID.
- b. He will prepare annually the portion of the budget estimates relating to establishment under his control and monitor the expenditure and deal appropriately with the saving an excess. He will ensure the prevention of large expenditure in the last months of the financial year.
- c. He will assist the Chief Engineer-cum-Chief Manager (Technical) for supervision of the full roll out of end-to-end e-Procurement of the State relating to e-Procurement. He will assist the Chief Engineer-cum-Chief Manager (Technical) for monitoring and auditing the online procurement activities (online log files) of procurement units.

V. Superintending Engineer (e-Procurement) as Nodal Officer

- a. He is responsible to the Govt in the Administrative Department for the efficient implementation of e-Procurement.
- b. He will exercise control over the procurement officers of the Department in connection with the creation of Departmental user in the e-Procurement module, intradepartmental transfer of officers, training to officers and bidders, monitoring of published tender and necessary feedback to the State Procurement Cell for e-Procurement module upgradation.

2.2.4 Executive Engineer (EE)/Divisional Officer

The EE shall be responsible for the proper execution of all civil works under his charge and shall take timely action for the following:

- a. Ensure that the project reports are prepared and sanctioned in time.
- b. To inspect the sites during scrutiny of estimates for verification of the correctness of the estimates and adequacy of the provisions and give instructions wherever required.
- c. To prepare land acquisition documents and obtain possession of land required for the execution.
- d. Invite tenders as per rules and to make contract arrangements.
- e. To forecast and take steps to procure required materials, tools and plant for departmental work and for meeting departmental obligation in contract work.
- f. To provide adequate staff as per the operational needs of the Divisions to supervise/ manage the staff, so as to ensure that they carry out the duties adequately and in a professional manner
- g. To inspect works during execution and give instructions wherever required.
- h. To arrange periodical payments and watch expenditure.
- i. To deal with such other matters as may be found necessary for proper execution.



- j. To test check 10% of value of all works be executed within jurisdiction.
- k. To submit annual proposals for development or new construction, maintenance or repair works under his jurisdiction with all necessary information based on the Budget Manual
- l. To review progress of works in monthly meeting, record the minutes, which shall be forwarded to all subordinate officers & implementation/necessary action.
- m. To consolidate progress report of works in his Division and submit the report to SE before 15th of every month
- n. To inspect sites where poor soil conditions exists and decide the number, location and minimum depth of bore holes to be taken in case of pile foundations.
- o. To plan in accordance with the schedule of work and to fix the time frame for achieving the milestone of the project, in respect of contracts
- p. To approve materials, mix design, job mix formulae, etc.
- q. To check and submit the workable rate for the departmental execution
- r. To record the comments in the work order book and circulate the inspection note to all concerned for follow up action
- s. To keep on record & update from time to time the basic documents of Govt property i.e., land plans & land records including land given on lease to private parties or corporations and Govt level approved lease proposals.
- t. Responsible for taking proper measures to preserve and maintain all Government works within their jurisdiction. They should keep accurate plans of Government lands borne on Departmental registers. They should also see that their sub ordinates make themselves acquainted with the boundaries and **notify the District Collector under intimation to the Superintending Engineer.**
- u. To check the logbook of the equipment's, machineries, plants and vehicles.
- v. To report to the CE on old curiosities, relics, coins, minerals and any other item of archaeological importance found on excavation of any ancient masonry or other old work of interest be opened up, or any religious edifice or relic be involved in removal or destruction in the execution of a work
- w. To submit initial social assessment checklist along with all proposals for works to be reviewed by the social cell (preliminary project report).
- x. To obtain clearance from social cell for all categories of A and B where ever LA and displacement of people is involved, prior to execution of works.
- y. To facilitate preparation of LA Plan in co-ordination with Revenue Department
- z. To approve Social Impact Assessment (SIA) reports LA Plan and Rehabilitation and Resettlement Plan and submit to HQ for review by Social Cell under CE (R&B) along with detailed design report.



- aa. EE should ensure that no tendering of works is done before getting encumbrance free land for a project.
- bb. To propose the disposal of the plants and to conduct auction as per sanction received from competent authority
- cc. To inspect major buildings/structures periodically under his charge
- dd. To hire vehicles, if Department vehicles are not provided, with the approval of concerned CE
- ee. To issue permit for displaying boards on the Govt property as per rules & charging annual rent there of
- ff. He shall be responsible for the proper maintenance and upkeep of all structures under the maintenance charge of the Division. In particular, he shall see that:
 - i. The structures are carefully inspected or through his subordinates' particularly vulnerable portions thereof.
 - ii. Timely action is taken to carry out essential works to prevent deterioration.
 - iii. Regular maintenance works are carried out at the appropriate time.
 - iv. **In case of important structures like bridges in distress, use the services of specialized agencies for inspection, evaluation and rehabilitation. He will also ensure availability of require funds for this purpose.**
- gg. As the disbursing officer of the Department in regard to works, supplies and services under his charge, he has to exercise proper control over the expenditure on these items in accordance with the rules and orders in force and render proper accounts for the same to the office AG in the prescribed monthly dates.
- hh. He shall exercise administrative control over the entire establishment of his Division and regulate the establishment expenditure in accordance with rules and orders in force. He shall also conduct periodical inspections of the Subdivision offices under his control at least once in a year with a view to see that the administration of the subdivision is carried on properly in accordance with rules and/or special instructions.
 - ii. He shall exercise necessary vigilance in **reporting the encroachments under his jurisdiction to Police & Civil administration and pursue its checking/removal.**
- jj. He shall keep the District Collector informed about the progress of works and other activities of his Division and also give technical advice on matters connected with works if called upon. He shall keep the SE informed of the decision of the Collector in regard to matters concerning his Division.
- kk. In the case of EE controlling project and in other special cases, the control of some stores may vest with the EE. He shall then exercise all the controls required in the matter of procurement, stocking, issuing and accounting of stores as a DO under the control of stores.
- ll. He is responsible for the collection, remittance and accounting of Department



- mm. Revenue realisable through the Division. He has to maintain proper Division Cash Book statements and furnish quarterly statements to the AG. He shall exercise proper control to see that the dues to Govt are collected and remitted in time and leakages are prevented.
- nn. In case of emergencies such as serious natural calamities the EE shall liaison with the District Collector and other authorities in protecting the life and property under threat or damaged within the limit of his jurisdiction.
- oo. Ensure quality and environmental aspects of all works
- pp. Adopt the relevant quality control measures to ensure the desired quality of work.
- qq. Ensure proper quality of work as per specifications and for achieving designed life of the structure
- rr. Ensure that the MIS is regularly updated and forwarded to HRD Cell in the Chief Office on a monthly basis
- ss. Ensure that approved materials are used in the work.
- tt. Wherever necessary the EE shall approve the sources or Samples for respective materials.
- uu. Ensure that all mandatory tests have been performed at the stage of each running bill, before payments. EE shall verify and ensure availability of the required test equipment's for field tests as well as an updated copy of specifications and copies of accepted schedule at sites of works.
- vv. Prepare list of selected contractors for limited tender.
- ww. **The EE shall have a specific role to play for environment as well as social safeguard needs of the major projects which required environment and social impact assessment. The detailed duties and responsibility shall be as given in respective sections of this Code.**

In addition to general duties & responsibilities of EE listed out at para 2.2.4, some specific duties to the defined post are as under:

I. Executive Engineer, Electrical

- a. Preparation of specification of materials and items involved in electrification works
- b. Verifying the quality of different make of materials
- c. Assist the SE in conducting inspections.
- d. Assist/registration of contractors if required
- e. Inspection of electrical installations, and preparing inspection notes & updating SE in this regard.
- f. Sanctioning of all estimates and arranging all electrical works within the powers
- g. Issuing instructions for preparation of annual Indents for materials, Tools and Plants etc.
- h. Making payment to Electrical and Electronics works



- i. Arranging the issue of timely reminders on technical reference remaining un answered from subordinate officers
- j. Representing the Department in conferences and meetings concerning electrical works or those which the SE electrical is unable to be present and taking follow up action after informing the SE(Electrical)/CE
- k. Exercising overall technical and administrative control of the Sub Divisions(Electrical)
- l. Distributing the works in the office among the staff working under him and giving them timely instructions
- m. Taking initiative in suggesting technical improvements and energy conservation measures to SE, electrical
- n. Any other duties assigned to him by the senior officers.

II. Executive Engineer, Mechanical

- a. He is in-charge of the Mechanical Division, and is responsible to the SE (Mechanical) for the efficient, smooth and proper working of his Division/Sub-Divisions.
- b. He shall issue instructions regarding parking/safe storage of vehicles/machinery not currently in use and their maintenance and up-keeping of logbooks.
- c. He shall see that the machinery and vehicles under his charge operate at the prescribed level of efficiency and fuel consumption norms. As far as possible, idling and breakdown period of machinery shall be kept down to the minimum. He shall submit to the SE a monthly utilisation report of every piece of machinery under his charge and in the case of under utilisation of major machinery, propose suitable corrective action.
- d. He shall initiate estimates for purchase of new machinery and special repair/maintenance estimates of machinery for sanction of the competent authority. He shall also arrange materials like spare parts, tyres and tubes, batteries, POL and other miscellaneous store items for working of machinery and its repair and maintenance.
- e. He shall initiate proposals for condemnation of machinery and vehicles which have out-lived their economic life and have crossed the stage of economical repairs and, on receipt of sanction, arrange condemnation and disposal as per the prescribed Govt procedure.
- f. He shall prepare annually survey reports of surplus/obsolete spare parts and old/used/unserviceable parts for sanction by the competent authority, and on approval, arrange their condemnation and get auctioned as per prescribed procedure.
- g. He shall achieve co-ordination with concerned EE (Civil) regarding working, repair and maintenance of machinery deployed on works.
- h. He shall ensure that bills are raised for working of machinery and realised/adjusted regularly against works by all the Departments under Govt.



III. Deputy Architect, Architect Wing

- a. He shall be responsible for assisting the Senior Architect in the preparation of master plans, detailed architectural working drawings, specifications etc. with regard to any project assigned to him.
- b. Assisting the Senior Architect in the preparation of architectural designs of building projects and preparation of detailed working drawings.
- c. The scrutiny of architectural drawings keeping in view of the structural stability of various features/components.
- d. Working out designs of various components, which are vulnerable due to restricted size on account of architectural or other considerations.
- e. Guiding and controlling the work of subordinate staff.
- f. Assisting his superior officers in all matters entrusted to him.
- g. Checking of service drawings for building utilities such as electrical, water supply, sewerage, fire, rainwater harvesting etc.
- h. Assist Senior Officer in monitoring of works and scrutiny of architectural drawings.

IV. Manager (Administrator) cum Executive Engineer in Procurement Cell

- a. He will act as D.D.O. of the State Procurement Cell.
- b. He will ensure that the registers of IT-ICT, furniture and consumables are maintained up-to-date.
- c. He will undertake actions related to the administration of the State Procurement Cell's Human Resource activities.
- d. He will assist with organisation of training courses and workshops related to staff development.
- e. He will supervise module testing, training to officers and bidders, helpdesk, online monitoring of published tender, e-Procurement module upgradation, blocking and unblocking of bidders login ID.
- f. He will assist the SE (e-Procurement) and Chief Engineer-cum-Chief Manager (Technical) for supervision of the full rollout of end-to-end and monitoring and auditing of the online e-procurement activities.

2.2.5 Sub Divisional Officer (SDO)/DEE/AEE/AE

The SDO controlling a Subdivision is responsible for the proper execution of all works in the Subdivision. This shall include the followings:

- a. Forecasting the requirements of important materials to be supplied departmentally and make arrangements to procure them according to prescribed rules.
- b. Forecast requirements of various tools and plants for departmental execution.



- c. Check and approve setting out of works.
- d. Inspect and approve foundation levels especially for foundations of structures with open type foundations & ascertain that it meets the design requirements.
- e. Conduct soil tests and other tests wherever necessary as per general or special instructions.
- f. Personally supervise all works under his jurisdiction.
- g. Give suitable guidance to subordinates with regard to works under construction.
- h. Watch and take steps to see that progress as per schedule is maintained.
- i. Administer the contract to ensure that the terms and conditions are adhered to.
- j. To check/measure 100% concealed items of work and in addition check/measure 50% value of items of work which are not concealed.
- k. Obtain timely orders regarding deviations from and additions or deletions to the works as per sanctioned estimates if found necessary during execution and take follow up action by submission of Revised Estimate, Deviation Statement etc.
- l. Ensure before the start of the work, initial levels and details of material collection
- m. Ensure quality of works and compliance with environmental regulations
- n. Ensure compliance with the formalities of R&R policy and LA Act. Prepare all necessary social reports.
- o. Adopt the relevant Quality Control measures to ensure the desired quality of work.
- p. Ensure proper quality of work as per approved specifications and for achieving designed life of the structure
- q. Furnish details of mandatory tests verified by him along with running account bill.
- r. SDO should be present in all major RCC works.
- s. He shall also be responsible for conducting proper investigation and scrutinising plans and estimates for new works in accordance with general and special instructions in this regard. This shall include:
 - i. Giving suitable directions to subordinates regarding information to be collected and nature and extent of survey work to be done.
 - ii. Checking site surveys, levels, nature of soil, sub soil, result of borings and all field data.
 - iii. Verification of the correctness of plans and adequacy of provisions in estimates by site inspection.
- t. The SDO also be responsible for the proper maintenance of structures under his charge and this shall include:
 - i. Periodically inspecting all the building/structures, particularly the vulnerable parts in accordance with general or special instructions in this regard.



- ii. Initiating timely action for special repairs where these are needed to prevent deterioration of structures under maintenance.
- iii. Making arrangements for the execution of maintenance works according to predetermined timetable to suit the conditions.
- iv. **Get important structures in distress inspected by specialized agencies for evaluation and rehabilitation.**
- u. He shall be responsible for the administrative control of the subordinates in his Subdivision and this shall include the following:
 - i. See that subordinate staff and labourers are posted in the concerned Sections and if any vacancies exist, take action for the same being filled up while at the same time make interim arrangements for carrying on the work.
 - ii. Periodically examine the adequacy or excess otherwise of subordinate executive staff and labour and take action for posting additional staff or for transfer of surplus staff according to circumstances.
 - iii. Oversee the work of the subordinate staff and see that lapses in regard to proper discharge of duties by any such personnel are dealt with promptly according to rules.
 - iv. See that the subordinate staff and labour are paid their wages/salary promptly.
 - v. Periodically examine whether materials, Tools and Plants etc., under control of his subdivision are properly looked after and where necessary take steps to correct inadequacies.
- v. Maintaining accounts as per rules and rendering the required accounts to the EE and other authorities as per rules.
- w. To check and approve bench marks
- x. To consolidate and forward progress report in the prescribed form for budgeted works and for other works to the EE before 7th of every month
- y. To plan execution in accordance with the schedule of work and to fix the time frame of the project, in respect of contracts entered into by him
- z. To check the correctness of reinforcement bars placed before concreting works
- aa. To scrutinise and submit the workable rate for the entire work for departmental execution
- bb. To record the comments in the site inspection book and circulate the inspection note to all concerned for follow up action
- cc. To maintain and update periodically the basic documents of properties of Govt/Department i.e., land plans & land records including land given on lease to any agency or Corporations
- dd. To check periodically the log book of the equipment's, machineries, plants and vehicles



- ee. To prepare initial Social Assessment checklist and inventory of private and public properties on the land needed for the Department
- ff. To exercise the administrative control of stores.

In addition to general duties & responsibilities of SDO listed out at para 2.2.5, some specific duties to the defined post are as under:

I. Sub Divisional Officer, Electrical

- a. Checking estimates submitted by the JE
- b. Inspection and holding discussions with concerned officials before finalising the estimates.
- c. Inspecting works during execution, exercising quality control, check measuring works, scrutinising bills etc.
- d. Forwarding Bills for payments to the concerned Electrical/Buildings division.
- e. To check the arrangements of works related to VIP visits and governmental functions.
- f. To promptly act on the instructions received from senior officers from time to time
- g. To represent the Department in district level meetings and conferences concerning electrical matters and shall convey the achievement of the sub-division/division.

II. Sub Divisional Officer, Mechanical

- a. Testing and issuing fuel consumption certificates of vehicles.
- b. Preparation of estimates for repair and maintenance works for vehicles under his jurisdiction
- c. Supervision of works and scrutiny of bills for repairs and maintenance.
- d. Maintenance and repairs of mechanical equipment's of OWD like road rollers, compressors, tar boilers, hot mix plants, etc.
- e. Supervision of works for repair and maintenance of refrigerators, AC set etc.
- f. Recommendation for condemnation of vehicles/machineries based on the norms fixed by the Govt.
- g. Attending the Condemnation Board meetings
- h. Issuing of fitness certificate for road construction equipment's of the contractors brought at site for execution of contract works within his jurisdiction and verification of their hypothecation certificates in case of advance given for machinery by the Department.

III. Assistant Architect, Architectural Wing

- a. The preparation of detailed architectural working drawings and scrutiny of the drawings prepared by the Draughtsman.
- b. Preparation of specifications of special items based on instruction from Senior Architect or Deputy Architect.
- c. Assisting his senior officers in all matters entrusted to him.
- d. Scrutinising of the service drawings for building utilities such as electrical, water supply, sewage, fire safety, rain water harvesting etc.



IV. Dy. Manager (e-Procurement) in the rank of A.E.E/D.E.E.

- a. He will responsible of creation of Tender, creation of Corrigendum/Addendum/Cancellation of Tender, Opening of Bid, Evaluating Bid, Introduction, development and implementation e-procurement within the State, including the development and improvement of training and skills of stakeholders involved In the e-Procurement environment within the State.
- b. He will also be responsible for Module testing, training to officers and bidders, manning the helpdesk, online monitoring of published tender and necessary feedback to Departments/PSUs.
- c. He will assist the SE/EE (e-Procurement)/Chief Engineer-cum-Chief Manager (Technical) for supervision of the full rollout of end-to-end e-Procurement of the State relating to e-Procurement and monitoring and auditing of the online procurement activities.

2.2.6 AE/JE/Section Officer

An AE/JE posted in control of a Section is responsible for the proper execution of all works in his Section or under his charge. This shall include:

- a. While setting out works check whether the works proposed are well within the land under the ownership of Department
- b. Setting out works/checking the same to see that works are carried out according to approved plans.
- c. Forecasting and reporting the requirements of materials, tools and plant etc. required for works at early stage so that they could be arranged/shifted for supply in time.
- d. Taking and recording measurements and assisting in check measurements.
- e. Scrutinising contractor's bills and recording accounts of materials, if any, issued for works.
- f. Supervising the progress of works and taking steps to remove bottlenecks, if any.
- g. Ensuring, in the case of contract works, that all the conditions of contract are properly observed and taking appropriate action if any of these are violated.
- h. Keeping close watch of departmental works and taking necessary steps for ensuring the effective execution of all works.
- i. The upkeep and maintenance of structures under his charge.
- j. Survey, Investigation and collection of all field data necessary for construction of new works or alterations and additions to existing works or maintenance of existing structures which fall within his jurisdiction.
- k. Preparing preliminary as well as detailed estimates and reports for new works and maintenance works and ensuring its correctness and adequacy.
- l. Seeing that subordinate field staffs are posted in the required places and that these persons are well acquainted with their duties.
- m. Controlling and overseeing the work of subordinate staff.



- n. The safe custody and rendering proper account (as per rules) of cash, materials, scientific instruments, tools and plant etc. entrusted to him or which pass through the section accounts.
- o. Making arrangements for claiming and disbursing pay and allowances etc., for all subordinate staff and labourers' as per rules.
- p. Arranging urgent necessary action in case of an emergency to protect life and Govt property.
- q. Furnishing information required in so far as they relate to his Section, to answer interpellations in the Assembly, Parliament etc.
- r. Making on the spot enquiries and submitting reports on matters referred to the AE by superior officers.
- s. Making timely arrangements for disposal of unserviceable or surplus materials, tools and plant, scientific instruments etc.
- t. Preparing and, submitting valuation report of buildings and structures, as required.
- u. Adopting the relevant quality control measures to ensure that the quality of work is as per approved specifications so as to achieve designed life of the structure.
- v. Responsible for carrying out field-tests correctly and timely communication of test results to authorities.
- ~~w. Incorporate details of mandatory tests done with every running account bill~~
- x. To carry out investigation work.
- y. To obtain the opinions of the officers of the concerned Department in regard to choice of site and features required for the work excluding technical details
- z. To implement/communicate to the contractor in writing the instructions and orders issued through the work spot order book by the higher officers
- aa. To forward progress report in the prescribed form for all works on or before the third day of every month
- bb. To approve all foundations for which agreement is executed by the SDO
- cc. To plan execution in accordance with the schedule of work and to fix the time frame of the project, in respect of contracts entered into by him
- dd. To ensure taking possession of land for works after the disbursement of compensation and assistances as per the R&R policy of OPWD.
- ee. To handover the site to the contractor or the authorised agent as per terms of the agreement
- ff. To measure and record the reinforcement bars placed prior to casting concrete
- gg. To check the quality of works and to see that the specifications are properly followed
- hh. To comment on application for extension of time completion as requested by contractor



- ii. To submit the completion certificate along with drawings to the higher officers for approval
- jj. To take over the completed structure/work from the contractor after ensuring that all debris, balance materials, temporary construction etc., are removed and site cleaned up.
- kk. To hand over the completed works along with a set of completion drawings to the concerned officer of the other Department/agency
- ll. To prepare and submit the workable rate for the entire job for departmental execution
- mm. To arrange for removal/demolition of inferior quality work if contractor fails to do so and charging the expenses to the contractor.
- nn. To keep on record the basic documents of property right of the Govt/Department i.e., land plans & land records including land given on lease to private agencies or corporations and update it from time to time
- oo. To sign lease documents
- pp. To fix rent as per the guidelines prescribed and to furnish in the specified proforma as per delegation of powers.
- qq. To inspect all buildings/structures periodically under his charge
- rr. To check frequently the logbook written by the operator-in-charge of the equipment's/machinery
- ss. Responsible for the verification, receipt, custody and issue of the stock materials and maintenance of initial accounts of all store transactions
- tt. To accord TS for works within the powers of sanction of AE.
- uu. To check/measure all concealed item of work and a minimum 50% value of item of each work which are not concealed for works of TS power of AE. To verify all the measurement recorded by the contractor. AE is fully responsible for all the measurements recorded.
- vv. To help quality control team headed by EE/AEE (QC) for performing various field test.
- ww. To obtain quality certificate from EE (QC) before submitting work bill.
- xx. To prepare detailed programme of execution for projects in consultation with the contractor and ensure its achievements.

In addition to general duties & responsibilities of JE listed out at para 2.2.5, some specific duties to the defined post are as under:

I. Section Officer, Electrical

- a. Guiding and controlling of the work of the electrical staff attached to the section.
- b. Arranging rectification of defects reported to him by the field staff and restoring supply.
- c. Guiding in proper maintenance of installations and safety measures.
- d. Periodical testing of installations, noting the test readings and making timely action for rectification of defect, when the test readings are not within the safe limits.



- e. Preparing and giving instruction for the preparation of estimates for electrification works and verifying the adequacy in conformity with standards & norms.
- f. Inspecting works in progress and giving necessary instructions
- g. Arrangement of works related to VVIP visits and Govt functions.
- h. Taking measurements of all works and preparation of bills.
- i. Carrying out any and other duties that may be assigned to him by his superior officers.

II. Section Officer, Mechanical

- a. They shall prepare estimates for special repair and maintenance of the Govt machineries within the jurisdiction of the sub-division
- b. They shall be responsible for carrying out the repairs of the machineries to the best possible satisfaction and maintain the records of such repairs
- c. They shall maintain the records of fuel, stores having day to day maintenance machine spare parts and maintain the register of their issue. The monthly report in this respect shall be submitted to the sub-division.
- d. They shall maintain the attendance and leave records of the driver engaged on machinery within the sub-division and also visit sites to verifying their working condition
- e. They shall submit the report about the adequacy of machinery vis-à-vis the jobs to be carried out and in case of urgent requirement a detailed report needs to be submitted for arranging from other sub-divisions within the jurisdiction of division office
- f. They shall make entries of all the expenditure in Measurement Book (MB) and shall get them approved from the sub-division, so as to regularise the accounts

2.2.7 Divisional Accountant

The Divisional Accountant's main function shall be to assist the EE in exercising financial control over the transactions of the Division and in maintaining accounts of the transactions correctly in accordance with rules in force.

The Divisional Accountant is the head of Accounts Branch of the division office. His duties shall include:

- a. Proper distribution of work in Accounts Branch with the approval of EE.
- b. **Correct accounting, any financial irregularity, irregular payment, excess payment, audit compliance, scrutiny of all vouchers, audit angle, compliance with Code, contracts, diversion of fund etc.**
- c. Marking of papers received in the Accounts Branch to the concerned clerks in the section.
- d. Preparation of budget, annual plans, 5-year plan, making proposals for re appropriations etc. under instructions from the EE.
- e. Scrutiny of all papers involving or relating to financial transactions.



- f. Scrutinising contractor's bill and putting up observation if any, on financial aspects.
- g. Bringing to the notice of the EE, any clause not meeting with the contract agreement while passing the contract bills
- h. To keep in safe custody of agreements and power of attorney for works and to see that registers for the same are maintained. He shall also maintain register for bank guarantee and get proper bank revalidation of such guarantee by the contractor
- i. Putting up notes on matters dealt by him for orders of EE.
- j. Controlling the work of subordinates entrusted with the safe custody of cash, valuables and documents etc.
- k. Making arrangements for carrying out the work of the Accounts Branch by suitably distributing the work attended to by a clerk or other subordinate in case of earned leave etc.
- l. Ensuring prompt action on urgent financial matters
- m. Assist the EE in ensuring financial discipline particularly in incurring expenditure within the allotment.
- n. Carrying out any other duty assigned to him by the EE.
- o. When a Divisional Accountant is posted in major Stores, he shall, in addition to the above,
 - i. Assist the Stores Officer and Custodian of Stores by maintaining the proper accounts of transactions [where stores for T&P and materials charged to works are existing](#).
 - ii. Responsible for proper accounting and adjustments of firm invoices of maintenance of CSSA claims.
 - iii. Carrying out any other duties specially assigned to them by senior officers.

2.2.8 Ministerial Staff

I. Administrative Officer

He shall be under the direct control of EIC cum Secretary Works/EIC (Civil) and shall be responsible for all administrative matters in general. He shall also be responsible for the following:

- a. The establishment matters including transfer and posting of all non-gazetted ministerial staff of OPWD.
- b. To record opinion about members of the staff in their Confidential Reports (CRs), prepare the CRs of the Superintendents and Administrative Assistants and submit them direct to the EIC/CE.
- c. To sanction destruction of old records of the headquarters unit as laid down in the Manual of Office Procedure.
- d. To dispose of papers of routine nature.
- e. To address Govt on routine matters and to communicate with Govt on all matters on the lines of the EIC/CE's orders.



- f. To address the AG direct in all matters except in cases where the provisions of the concerned Acts or Rules there under require that the orders and instruments have to be signed by the CE himself.
- g. To organise and distribute work in the headquarters unit in respect of staff whom he is competent to appoint.
- h. To conduct fortnightly review of the "Register of Establishment Audit Objections" and to conduct monthly inspection of the "Register of Draft Para".
- i. To conduct administrative inspection of any offices in the OPWD and forward reports with review thereof to the respective CE.
- j. To sanction TA bills, for whom he is competent
- k. To sanction pension to all officers, whom he is competent to appoint.
- l. To sanction reimbursement of medical expenses subject to rules.
- m. To countersign TA bills of non-gazetted officers below the rank of Administrative Officer.
- n. To exercise the powers of the CE regarding temporary withdrawals from Provident Fund Deposits of subordinates in the Department
- o. To correspond with Public Service Commission, AG and other Heads of Department and Institutions in routine matters such as making interim correspondence, sending reminders, furnishing information etc.
- p. To exercise the powers in the matters of loans/advances in respect of Car, Motorcycle, Cycle or any purchase covered under rules.

II. Administrative Assistant

The Administrative Assistant shall assist the EIC (Civil)/CE/SE, in managing establishment matters. He is also responsible for:

- a. Guiding and controlling the work of all ministerial staff in the office to ensure that business rules/Manual of Office Procedure are properly observed.
- b. Reviewing the work of the section heads under his control to see that they carry out the work systematically and promptly.
- c. Ensuring prompt action being taken on important and urgent matters and where necessary bringing such cases personally to the notice of the CE/SE/Administrative Officer.
- d. Examining relevant documents and notes and issuing orders of purely routine matters subject to general or special instructions of CE/SE/Administrative Officer.
- e. Making temporary arrangements for carrying out the work on subordinate ministerial or Class IV officers who may be absent, on leave etc.
- f. Maintaining order and discipline in the office, in accordance with instructions of CE/SE/Administrative Officer.
- g. Seeing that registers, books, accounts etc. as per prescribed rules are maintained and kept up-to-date and to checking accuracy of postings at intervals.



- h. The safe custody of documents and other valuables entrusted to his care.
- i. Scrutinising files, notes etc. on matters requiring orders of higher authority and putting up such cases promptly with his own remarks.
- j. Yearly preparation of list for each categories of staff for transfers and postings according to transfer norms
- k. Preparing monthly list of vacant posts in each categories for filling up vacancies by promotion or by posting through PSC or posting through employment exchange
- l. Ensuring safe custody of office furniture and maintenance of accounts, thereof.
- m. Exercising supervisory control over the custodians of Computers, Printers, Furniture, stationery and other valuables in CEs Office and circle office.
- n. Carrying out any other duties specifically assigned to him by senior officers.

III. Administrative Assistant (Treasury)

He shall be responsible for:

- a. Ensuring timely preparation, encashment and disbursement of pay and allowances of all non-gazetted staff and auditing of salary bill/TA bills etc. prepared by gazetted officers for its encashment and disbursal in the CE's office.
- b. He shall be under the control of timely preparation, encashment and disbursement of contingent bills.
- c. To maintain proper accounts for all the transactions and submit monthly accounts to the AG.

IV. Senior Superintendents

Senior Superintendent shall be the Head of Establishment Branch in accordance with the procedure prescribed in the Manual of Office Procedure and shall assist in the administrative control of the ministerial staff working in that section. Their responsibility shall include:

- a. Safe custody of cheque books and preparing cheques on passed bills.
- b. Ensuring the safe custody of cash and other valuables and documents entrusted to their care by head of office, proper remittance of cash to the treasury, and maintenance of cashbook and other accounts in the proper form as per rules.
- c. The marking of the letters received in the Establishment Branch to the concerned clerks and ensuring that the letters are duly delivered to the clerks concerned.
- d. The scrutiny of the papers and files attended to by the clerks in their section.
- e. Putting up notes on matters requiring orders of superior authorities.
- f. The scrutiny of personal registers and such other register needed for the prompt business transactions of office.
- g. Receiving and putting up important references to AEE/EE/CE.



- h. Making alternate arrangements to distribute the works due to the temporary absence of a subordinate employee with the approval of head of office.
- i. Ensuring prompt action being taken on urgent matters.
- j. Ensuring the orderly arrangements of files, registers etc., by the clerks to enable any file being traced out without much difficulty.
- k. Periodically reviewing the old files and records with a view to close them as per rules laid down in the manual of office procedure.
- l. Controlling the work of Class IV staff.
- m. Carrying out any other duties specially assigned to them by senior officers.

V. Junior Superintendents

Junior Superintendent shall be the head of Establishment Branch, if there is no post of Senior Superintendent in an office. Their responsibilities as head of the Establishment Branch shall be the same as that of Senior Superintendent. Their duties shall also include:

- a. The scrutiny of personal registers and such other registers needed for the prompt business transactions of office.
- b. ~~Scrutinising contractor's bills. This shall include checking arithmetical calculation, checking MAS account, Works Abstract, Contractors' Ledger and Checking quantities with schedule provisions.~~
- c. Assisting the AEE/AE, in preparation of works budget, and establishment budget performance budget, revised budget and re-appropriation of funds.
- d. Bringing to the notice of the AEE/AE/EE, power of attorney document submitted by contractor relating to respective work.
- e. Maintenance of registers relating to MAS account, Survey Report, Work Abstract and contractors Ledger.
- f. Scrutinising survey reports.
- g. Overseeing the preparation of monthly accounts.
- h. Preparation of schedule of settlement with treasuries.
- i. Initiating action on audit notes of AG.
- j. Any other work entrusted by his senior officers.

VI. Head Clerk

Head Clerk shall function as head of Establishment Branch in office of EE, he shall be responsible for:

- a. The distribution and scrutiny of the work of each Clerk
- b. The scrutiny of bills and files attended to by the Clerks, submission of returns on the due dates, maintenance of accounts etc.



- c. Ensuring that cash deposits other than cash, and other valuables are kept in safe custody and the cash book and other records as prescribed in the rules are properly maintained.
- d. Disbursing salaries and allowances to the staff
- e. The Head Clerks shall also carry out any other work assigned to them by their senior officers.

A Head Clerk when posted in a Sub Division shall in addition to the above be responsible for:

- a. Receiving appeals/grievances and putting up to the AE (Works), if such an officer is posted or to the AEE.
- b. Safe custody of power of attorney/bank guarantee relating to a work and bringing to the notice of the AEE while passing bills.
- c. Preparing cheques on passed bills.
- d. Safe custody of furniture of sub division office.
- e. Assisting the AE (Works) and the AEE in maintaining order and discipline in office.
- f. Handing over cash and all other items in his custody on transfer as directed by the AEE.
- g. Assisting the AEE and AE (Works) in all matters entrusted to him.

VII. Upper Division Clerk & Lower Division Clerk

Clerks shall carry out the ministerial duties involved in the business transactions of the office. The actual scope of their work in any office will be decided by the head of the ministerial section with the approval of the head of office or subordinate officer entrusted with the responsibility. Clerks (UD clerks and LD Clerks) in the OPWD Office will also function as accountants if required. The responsibilities of clerks shall, include:

- a. Maintaining files and registers up-to-date.
 - b. Safe custody of registers, files, papers, documents, books or any other valuables entrusted to their care.
 - c. Putting up papers including correspondence files, connected files, notes etc., for orders of competent authority without delay.
 - d. Bringing to the notice of the senior officer matters that need special attention.
 - e. Taking prompt action on unanswered references by issue of timely reminders, putting up draft, Demi Official letters etc.
 - f. Carrying out the accounting work in the office such as checking bills, posting of accounts, maintaining various account registers, compiling returns etc.
 - g. Carrying out any other duties of a ministerial nature assigned to them by senior officers.
- Clerk when posted in a section office shall be responsible for:
- i. Maintaining inward and despatch registers.
 - ii. Putting up audit notes for passing bills within powers of the section officer.



- iii. Safe custody of agreements executed for works, deposits other than cash and imprest cash allotted to AE.
- iv. Safe custody of power of attorney/bank guarantee relating to a work and bringing to the notice of the AE while passing bills.
- v. Safe custody of cash received in section office and timely remittance to the treasury.
- vi. Keeping under lock & key, field books and MBs issued to the section office and maintaining movement register.
- vii. Disbursing salaries, allowance, advance etc. relating to the staff of section office.
- viii. Handing over files, registers, cash, service books and other valuable items in his custody while on transfer as per directions of the AE.
- ix. Preparing draft letters on all matters and putting up for approval of the AE.
- x. Posting entries in Service book and keeping the same.

VIII. Steno/Typist (PA)

- a. He shall perform the duty with the head of the office such as EIC, CE, SE and EE
- b. He shall keep all confidential correspondence in the safe custody
- c. He shall main the register of telephone calls in case of the field visit of the officer and assist him connecting the concerned person as per direction of the officer-in charge
- d. Verify all telephone/internet bills for timely payments
- e. He shall take short-hand dictation/notes for various urgent correspondence and get up date/follow-up action
- f. Maintain the computers, printers, stationary for the requirement officer-in-charge.
- g. Preparing the list of various meetings at Govt./Department level and their confirmation regarding the date and venue of meeting and updating officer-in-charge.

IX. Driver

Their duties will include:

- a. Drive the vehicles carefully within the prescribed speed limits observing all the traffic regulations.
- b. Keep the vehicles in road worthy condition. This will include washing and cleaning of vehicles.
- c. Check water levels in radiator and battery, oil level in crankcase, fuel level in fuel tank and tyre pressures every day before the vehicle is taken out.
- d. Once a fortnight check oil level in gearbox and brake fluid.
- e. Report any mechanical fault or damage immediately to controlling officer or the officer-in-charge. Attend to routine maintenance as prescribed such as topping up of oil, filling radiator, cleaning of oil and fuel filters, inflating tyres, applying grease where required, etc.



- f. When the vehicle is taken out for servicing point out any items needing special attention and be available at the servicing station or work-shop to see that servicing is done properly.
- g. When the vehicle is taken for maintenance or for special repairs, assist in the completion of the repairs or carry out such other jobs as are ordered to be done by the officer in charge of the vehicle.
- h. In case of accidents the driver shall report the matter to the nearest police station and the officer in charge of the vehicle and abide by instructions of the police in regard to further movement of the vehicle.
- i. Be in charge of the tools and spares of the vehicle entrusted to him.
- j. Keep account of materials like fuel, lubricating oil etc. entrusted to his care.
- k. Maintain log books as prescribed.
- l. Take order from the officer in charge of the vehicle with regard to trips to be made, passengers or materials to be carried etc.
- m. They will also carry out any other duties that may be specifically assigned to him by their senior officers.

X. Peon

- a. Maintain the hygienic condition of the rooms
- b. Deliver the files to the officer/official in-charge
- c. To call the drivers for duty as per the direction of the officer-in-charge
- d. To make water arrangement and tea for guest/officers attending the office of his duty.

XI. Caretakers or other staff under the control of Circuit House/Rest Houses, Dak-Bungalows etc.

Other staff in direct charge of Circuit House/Rest Houses and Dak-Bungalows etc. of the OPWD, by whatsoever designation they are called, shall attend to the following duties:

- a. Keep the rooms and premises in a clean and tidy condition. See that rooms are swept at least once every day and also keep the rooms and bathrooms cleaned immediately after the occupant vacates.
- b. See that the furniture provided in each room is kept in its proper place and kept daily dusted.
- c. See that the bath room and lavatory fittings in every room are functioning satisfactorily, and if any defect is noticed, set right the same locally if it can be arranged and if not report to the AE for urgent action.
- d. See that the electrical equipment's are kept in good order, fused bulbs replaced etc.
- e. In the case of rest houses not provided with running water, see that water required is made available in the bath rooms for occupants.



- f. See that bed linen, crockery, cutlery etc. are kept in clean and usable condition.
- g. Provide sufficient linen for the use of occupants of each room according to prescribed standards.
- h. Where gardens exist see that the garden is watered, trimmed and kept clear of rubbish.
- i. Maintain the occupation register and see that every occupant fills up the required columns on arrival and before leaving.
- j. Collect the rent due from the occupants and send the collections together with copy of the occupation register to the concerned officer once a month or as prescribed by the AE-in-charge.
- k. Where reservations are ordered by the Collector/EE see that the rooms are kept so reserved without being allowed to be occupied. In case there is no reservation by the Collector/EE the rooms are to be made available to guests on first come first serve basis with the prior approval of concerned AEE/AE. This however is subject to any other reservation made by the EE under the control of the bungalow.
- l. Where the rest house is provided with catering arrangements, arrange supply of good food as prescribed to the occupants at the approved SOR. This SOR shall also be exhibited in public.
- m. See that unnecessary fans, lights & ACs are switched off at the appropriate time and the use of water and electricity economically controlled without any inconvenience to occupants.
- n. They shall also carry out any other duties that may be specifically assigned to them by their senior officers.

2.3 Establishment

2.3.1 Technical Branch

The Technical branch in a PWD office shall be responsible for taking action on the following:

- a. Preparation and Approval of structural designs.
- b. Scrutiny of estimates, bids extra items, deviation items
- c. Issuing Administrative and TS for estimates as applicable
- d. Follow up action on LA
- e. Preparation of tender schedule submission of tenders to higher authorities.
- f. Scrutiny of tenders.
- g. Preparation of agreement documents.
- h. Monitoring of survey and field investigation data
- i. Scrutiny of bills – This shall include checking of issue of departmental materials, extra items, revised estimates, level calculations etc.



- j. Checking of initial and final level calculations.
- k. Processing of survey report – verification of rates.
- l. Scrutiny of estimate.
- m. Progress report and inspection notes of works.
- n. Monitoring of progress of works follow up action on inspect notes with reference to individual milestones including EOT
- o. Correspondence on all technical matters and works
- p. Maintaining Indent Register Scrutiny of consolidated indent if any.
- q. Any other work entrusted by the head of office.

2.3.2 Finance Branch

The Finance Branch shall be responsible for:

- a. Preparing monthly accounts and forwarding the same to the office of AG, Odisha.
- b. Making payment for passed bills in Divisional Office
- c. Preparation of works budget.
- d. Preparation of performance budget, revised budget and final budget.
- e. Preparation of schedule of settlement with treasuries and maintaining proper registers in Divisional office.
- f. Follow up action on audit notes of office of AG relating to works.
- g. Maintenance of audit files relating to works.
- h. Scrutiny of bills, timely preparation of final bills, maintaining final bill records and closing of work bills after audit.
- i. Maintenance of relevant registers such as MAS account, Survey Report, Cash Book, Work Abstract, Contractor's Ledger, deposit registers etc. as applicable.
- j. Processing of Survey reports.
- k. Correspondence on financial matters.
- l. Any other work entrusted by the Head of the Office.

2.3.3 Establishment Branch

Establishment Branch is responsible for the following.

- a. Transfers and postings of staff in CE's/EIC office only.
- b. All establishment matters including leave, salaries, medical reimbursement etc.
- c. Disbursing salary and allowances of staff.
- d. Scrutiny of TA Bills (as applicable).



- e. Preparation of establishment budget and revised budget.
- f. Sanctioning of pension and preparation of pension papers.
- g. Maintain the accounts regarding office contingency funds.
- h. Maintaining Service Books of employees in EIC, CE, SE and EE office.
- i. Registration of contractors, record there of
- j. Maintain all relevant registers.
- k. Maintenance of all files
- l. Follow up action on audit notes by office of the AG, Odisha.
- m. General correspondence on establishment matters.
- n. Maintain inward and dispatch registers
- o. Any other work entrusted by the Head of the Office.

2.3.4 Workshops

For all departmental requirements, Govt approved workshops may be approached. For major Projects, separate workshops may be established as part of the Project work at suitable places. These are generally of a temporary nature and the workshops may be closed after the project work is completed or retained in a reduced scale as a service workshop for the O&M of the completed project. The size of the workshop and staff pattern shall be dependent on character of the works to be undertaken.

2.3.5 Stores

There shall be stores for electrical materials and electronic hardware's attached to the concerned Electrical Division. These stores shall be under the administrative control of the respective EE. The actual custody of the stores shall be with the AEE/AE of the PWD who shall operate the stores and keep accounts of transactions. The procurement of stores shall be arranged by the CE (Buildings) as per the requirement submitted by the SE (Electrical).

2.4 Establishment Matters

2.4.1 Recruitment

Recruitment and Service rules of different categories are guided by respective service rules. [The Secretary of Administrative Department and the Engineer-in-Chief concerned shall take appropriate steps in consultation with Finance and P&C Department of the GOO to ensure regular recruitment to engineering and other services during each financial year, taking into account expansion of activities of the Department, retirement/attrition of officers and requirements of deputation and training. Cadre review shall be done every five years to ensure reasonable carrier progression/opportunities for officers at various levels.](#)

2.4.2 Promotion

Promotion is the advancement/career progression of an officer/official from one job level to a higher



one. Promotion shall be governed by Odisha Services Rules relevant to the cadre concerned. State Govt HOD shall initiate and the send the cases of promotion well in advance so as to facilitate the promotion order to be issued well before due date.

2.4.3 Confidential Reports (CRs)

“Instructions Regarding CRs” issued by Govt shall be strictly followed. The reporting shall appraise employee objectively. Wherever possible, well defined performance factors and criteria against which to assess, shall be prescribed and self-appraisal proforma developed for the purpose. The proforma for writing CR shall be revised and structured to suit the requirements of the concerned category of staff so as to bring out adequately the performance and relevant traits of the employee under report. These proforma shall be reviewed at least once in five years by the respective appointing authorities. The HOD shall ensure that the performance appraisals are completed in time and any adverse reports are conveyed to the officer/official within 90 days or in conformity with Govt instructions which are prevalent at the time of review.

2.4.4 Service Matters

As regards other service matters, Odisha Civil Service Rules along with instruction of Govt relating to these Rules shall apply.

Every State Govt employee shall be bound by “Employees Conduct Rules, 1966 and/or any other rules applicable in this regard. It is forbidden for a Govt servant acting on behalf of the Govt to issue a work order to, or sign a contract in favour of, or buy materials for Govt work from any person who is related to him or in whose activities he is privately interested. Unless the term ‘relation’ is specifically defined in the context of a particular matter, it shall mean the first blood relation of the employee or the spouse.

Every member of the Department must consider that his pay, for the time being, or as defined in any agreement, is his sole legal remuneration from the service, and that the receipt of any consideration, directly or indirectly, on account of any business or transaction (including arbitration work, etc.) is prohibited, unless specifically allowed by the State Govt. The employee shall have to inform about any financial receipt and/or acceptance of a work where some remuneration or honorarium is committed in future. **Any fee, honorarium to Govt employees shall be subject to OGFR.**

2.4.5 Human Resource Management (HRM) & Human Resource Development (HRD)

Consistent with the policy of the Govt, each Department shall take measures to improve the quality of human resources in the term of exploiting the employee’s potential, career advancement and developing the employee for the better performance and occupying senior positions.

There should be comprehensive plan for Research & Development, Training & HRD in respective field of Departments. Training strategy shall be planned to have induction level training for those newly recruited in the Department and also in-service training for the staff at all levels working in the Department. The training could be on job and external training. This shall include necessary strategy/guidelines for selection of training, trainees, resource persons, conduct of scientific training need analyses, curriculum development, development of training plans, dedicated budget requirement, training management strategy including need for a dedicated HRD Cell within every Engineering Departments engaged in public works. At least 3% of the annual administrative budget



shall be earmarked for training purposes and at least 50% of the staff at all levels shall be imparted training every year in the fields of requirement for the capacity building of the Department. The Engineering Departments should have a training organisation headed by a Chief Engineer to cater to the training needs of the Department. Apart from in-house training for some basic courses, the Department will tie up with Engineering Departments, State level academic institutions and national level bodies imparting training in respective field like Indian Academy of Highway Engineers (IAHE), Central Road Research Institute (CRRRI) and Administrative Staff College of India (ASCI) and other specialised body in respective fields for imparting training for their cadres. The HRD Policy implementation and the Training program as well as the indicative course content for induction level & in-service training for Odisha Works Department are given as **Appendix XIV** in the OPWD Manual. Other Department in charge of Public Works may use these details for customizing their training policy and program as per their needs.

Each Department shall put in place suitable measures to keep the personnel enthusiasm towards the job, and motivate for higher efficiency and productivity. Suitable incentives, awards or rewards shall be instituted as felt necessary by the Govt/Department for various categories of employees.

All Departments engaged in public works shall have well defined organisational structure where the role of every officer is clearly defined. The complete line of command right from Principal Secretary/Secretary/EIC cum Secretary to EIC to CE to SE to EE to DEE/AEE to AE/JE shall be clearly defined and each post in the organisation shall be optimally utilised. The organisational structure shall be reviewed and restructured at least every 5 years to cater to the changing needs of the Department.

All the Departments shall have well defined recruitment rules for all entry level post as well as promotional posts.

Postings and transfers shall be done in accordance with Government rules and instructions. As far as possible, the officers shall be rotated to work in different disciplines of the Department. The transfer policy should ensure the working efficiency of the Department as well as welfare of all segments of staff and officers both technical as well as general. The tendency on the part of the employees to approach political authority for transfers and postings should be discouraged, and in the case of any employee found doing so, the fact should be recorded in his personal file.

For skill development of construction workers suitable vocational programs and training shall be organised at Regional level. Engineering Department shall tie up if necessary with organisation who impart such skill development training.

The Human Resource Management System (HRMS) shall be made fully functional and all establishment functions of the Department, such as transfer, posting, nomination for training and other HRM functions shall be computerised.

2.4.6 Departmental Action

As regards departmental action, including suspension, removal or dismissal the “Civil Services Rules”, shall be applicable along with accompanying instructions. Duty amended time to time relating to these rules shall apply. The appointing authorities shall ensure that the charge sheets and decisions are not unnecessarily delayed. The tendency to issue charge sheets against the employees on the



verge of their retirement shall be strictly reviewed at two stages. Efforts should be made so that charge sheet is not issued during the last six months of the retirement of an individual, unless it pertains to the work and conduct of the employee during that period. In case the charge sheet against the employee for his conduct during the period earlier than the last six months of retirement becomes essential, reason for such an eventuality shall be provided and an enquiry conducted as to who delayed the disciplinary action and responsibility fixed for the such delays.

The service record of the employee shall, inter alia, also contain finger prints and passport size photograph (preferably digitized on the web) of the employee. A system shall be introduced to issue a unique personal service Identification number (PSIN) on first appointment, which shall be used in all service matters. To detect and weed out impersonation, especially in case of group D employees, the Heads of the Offices shall carry out surprise inspection for verification.

The complaints received against personnel of the Department should be looked into on urgent basis. All those complaints which come along with an affidavit, or contain any variable fact, or are required other wise to be examined, should be investigated in a minimum possible time. Complaint against an officer shall be normally enquired into only by the next higher officer.

A well-defined system for handling complains and their redressal shall be made fully functional. The complains could be for fraud/corruption/quality in all construction as well as maintenance activities of the Department and also HRM issues. The system shall maintain records of all complains received and shall monitor its status of the follow up. The implementation of the system shall be monitored by EIC of respective Engineering Department. The mechanism shall also include provision for follow up investigation of substantial complains by internal auditors or third party auditors to ensure independency and reliability of the system.

An officer not below the rank of EE in each unit of the Department headed by CE shall be assigned the job of handling of the complaint. The function of complain handling can be combined with other establishment function handle by the officer. The HoD of all Engineering Departments shall have an officer not below the rank of SE to monitor the complains and their redressal.

Computerised Complain Handling System (CHS) shall be made fully functional for all types of complain in each of the Engineering Department. The CHS shall have the facility of online lodging of complain. The complains received over telephone or through letters shall be posted on the CHS website and its monitoring recorded.

There shall be internal vigilance unit in each of the Engineering Department headed by Chief Vigilance Officer (CVO) to expedite the vigilance cases. The internal vigilance units shall have technical as well as general staff for handling the vigilance matters. The duties and responsibilities of CVO are given in Annexure 2.1 of the Manual.

Every attempt shall be made that on the date of retirement of an employee, all his retirement documents and retirement benefits are duly finalised, unless there are cogent, extenuating circumstances to justify the failure to do so. The co-operation of the employee is also essential as he shall submit all papers sufficiently in advance and get the no dues from various sections three month prior to date of retirement. He shall also get his provident fund statements tallied beforehand.



2.5 Work Charged Establishment

Work charged establishment will include such establishment as is employed upon the actual execution, as distinct from the general supervision, of a specific work or of sub-works of a specific project or upon the subordinate supervision of departmental labour, stores and machinery in connection with such a work or sub-works, when employees borne on the temporary establishment are employed on work of this nature, their pay should, for the time being, be charged direct to the work.

Work charged establishment falls under two broad categories (i) those who are engaged on general supervision of a specific work or of sub-works of specific project or upon the subordinate supervision of departmental labour, stores and machinery; (ii) establishment as is employed upon the actual execution of work, i.e. in doing certain specified items of works as distinct from general supervision of work.

In case of employees falling under category (i), whether brought on transfer from the regular establishment or recruited directly, for supervision in connection with a work, the pay and allowances should be charged direct to work and the cost should invariably be shown under a separate sub-head of the estimate of the work and accounted for accordingly in the works abstract. In regard to employees coming under category, (ii) the pay and allowances should be debited to the concerned item of work and the outturn thereof should invariably be worked out to see that the expenditure on the establishment is commensurate with the volume of work done.

Note: For the work charged establishment under category (i), provision should generally be made at 2% of the estimated cost excluding the Departmental charges except the Rural Engineering Works costing Rs. 1 lakh and below, the provision could be upto 3% of the estimated cost.

The CE, SE and DO may subject to such restrictions which the State Govt may impose, sanction the work charged subject to the provision under a separate sub-head of the sanctioned estimate. So far as employment of work-charged establishment for certain specified items of work is concerned (i.e. execution of work through departmental labour), the expenditure on the establishment should be correlated with the corresponding provision in the sanctioned estimate, and if there is no such provision in the sanctioned estimate it should be recasted with the approval of the competent authority be taken in order to see that the expenditure in within the sanctioned estimate.

2.6 Outsourcing

Services/activities may be outsourced as and when required, in part or completely, by the Departments, in accordance with the policy on the subject laid down by the State Government. These services may typically include cleaning of premises, horticulture work, housekeeping services, maintenance of buildings, operation and maintenance of waterworks, storm water network, sewerage network, transport services, information technology services provided the software application required to be developed or data entry services are clearly defined, secretarial services, courier services, highly technical and professional services, and billing services, etc. for a period of one year or for the period for which services are required. The Departments will, if required, move for additional provisions in their budget for outsourcing services/activities. Wherever contract for



services is awarded on the basis of transparent bidding process, no approval of Finance Department will be required. Department will fix the eligibility criteria for the above services/activities.

In case of outsourced services, the services of only those contractors shall be used whose antecedents are proper. **The Contractors who are awarded these works however shall be required to register themselves with the Labour Department within 15 days of award of work**, as onus is on the primary principal employer to ensure payment of employees' provident fund, employees' insurance, etc.

In case of in adequate in-house capacity the services of design, engineering surveyors, investigation & super vision may be outsourced to competent consultancy organization.

2.7 Employment of Medical Establishment

2.7.1 General

The requirements of the Department will, as a Rule, be met from the Civil Assistant Surgeon of the Medical Department of the State. Civil Assistant Surgeons will be allowed as part of the Public Works Establishment, and furnished with medicines at the public expenses wherever any large body of workmen is collected together. Sanction to their appointment must be obtained under the usual Rules regarding increases of establishment and applications for the services of individuals to fill sanctioned appointments will be made through SEs to the Director of Medical Services.

2.7.2 Pay and Allowances of Medical Establishment

Civil Assistant Surgeon employed in the Department is entitled to the pay he was drawing in the time-scale of pay of his class at the time of his transfer and to the usual annual increments which will be sanctioned by the Administrative Medical Officer. He will also be entitled to draw the special pay or compensatory allowance, if any, that may be attached to his new appointment.

2.7.3 Transfer of Civil Assistant Surgeons

On the transfer of a Civil Assistant Surgeon from civil employment for duty in the PWD, the following documents should be forwarded for custody to the officer under whom he is to be employed until he is transferred elsewhere:

- a. Service Register with the leave account and the leave sheet.
- b. Extract from the Orders of Transfer.
- c. Last Pay Certificate.
- d. Transfer CR.

2.7.4 Leave, Retirement and Resignations of Civil Assistant Surgeons

Application for leave, retirement or resignation, as well as casualty reports and invaliding papers, should be forwarded to the Administrative Medical Officer.

2.7.5 Removal of Civil Assistant Surgeons

Whenever it is thought desirable to remove a Civil Assistant Surgeon from the PWD, the reason for so doing should be reported confidentially to the Director of Medical Services who will take such



further action as may be considered necessary in accordance with the Rules regulating the procedure to be observed in such cases.

2.8 Police and other Guards

When marching or in camp on public duty, officers are allowed a guard for the protection of public property. Such guards are supplied without charge by the Police Department, and application for them should be made to the Superintendent of Police by the officer requiring them, unless he is an AE or Subordinate Engineer, when the application should be made by the EE. Such guards will not, however, be supplied unless the officer travelling is in charge of Govt money or valuable Govt property, or unless in disturbed areas.

In all cases, where, through the inability of the Police Department to supply a guard from the regular Police Force, special guards have to be entertained, the sanction of the State Govt will be necessary. Officers may, however, in urgent cases, entertain the guard in anticipation of sanction, reporting their action at once to higher authority. The services of such extra guards should be dispensed with directly when they are no longer required.

2.9 Employment of Labour Officers

In major projects or when a large labour strength of 500 or more is collected for the execution of any work, Labour Officers may be appointed, for the maintenance of harmonious relation between the Department and labour. The main function of the Labour Officer is to help in setting by conciliation and arbitration all disputes between administration and labour and between the contractors and labour. They are also charged with the function of ensuring fulfilment of statutory and other obligations by the Department towards contractors labour and for organisms welfare activities and securing provision of amenities for labour, Labour Officers when appointed shall be brought on deputation from Labour Department Provision shall be made in the estimate of projects or large work for a Labour Officer. **The Contractors shall abide by the provisions of the following labour laws:**

- a. Contract Labour (R&A) Act, 1970
- b. Child Labour (prohibition and regulation) Act, 1986
- c. Building & other construction workers (regulation of employment and condition of services) Act, 1996
- d. Workmen Compensation Act
- e. All other labour laws of Central/State Govt. enforced at the time of execution.

2.10 Senior Manager (Law), e-Procurement Cell

He is over all in charge of the Legal matters of the State Procurement Cell, Odisha. He will assist the CE cum Chief Manager (Tech), in all Legal matters. He will attend the Court and liaison with Standing Counsels, ASG and others in this regard.

He will scrutinise the Counter Affidavits and Affidavits filed by the State Procurement Cell, Odisha, etc., provide effective legal assistance in the e-Procurement process, preparation of legal opinion, studies, reports and correspondence, as required from time to time by various Departments. He will



provide appropriate legal advice on all matter related to Procurement Cell. He will supervise and oversee and review, drafting of major contracts and other legal document and negotiation.

He will advise in vigilance matters as referred to Legal Branch. He will be responsible for any other duty/task assigned by the Chief Manager (Tech), State Procurement Cell, Odisha.

2.11 Senior Manager (Finance), e-Procurement Cell

He is responsible for the financial matters of the State Procurement Cell, Odisha. He is a member of e-Procurement Committee and Blocking/Unblocking Committee.

He will assist in the selection of appropriate suppliers and contractors, to promote good procurement practice with due regard to sustainability, ethical purchasing standards and whole life costing. He will ensure that the budgetary provisions are utilised fully but not exceeded.

He will serve as internal control coordinator by drawing up, reviewing and assessing finance related procedures & policies. He will perform other duties related to financial matter as assigned to him by the Chief Engineer-cum-Chief Manager (Tech).

2.12 Senior Consultant (IT), e-Procurement Cell

He will be responsible for Monitoring & Supervision of the activities in e-Procurement Cell, interaction with NIC for software-related issues, providing status and progress report to all concerned authorities as and when required and training on Procurement processes, promoting the use of e-Procurement initiatives and managing Security issues.

2.13 Consultant (O&M), e-Procurement Cell

He will be responsible for providing training on e-Procurement System, helping in tender uploading and evaluation, managing staff and assigning specific duties, security maintenance, maintenance of Hardware and Networking equipment installed at the State Procurement Cell, managing the day-to-activities at the State Procurement Cell and ensure best practices are maximized.

2.14 Junior Programmer, e-Procurement Cell

He will be responsible for training the participants about the e-procurement application software, assisting senior officers, maintaining records to track participants' achievements and performance, complete register, maintain course and participants files and all other administrative duties associated with effective subject and course deliver. He will assist in the maintenance, servicing and repair of equipment, including hardware and software as appropriate. He will be also responsible for preparing, maintaining and monitoring the training/workspace environment. He will also maintain high level of housekeeping in the area and undertake any other duties, as required, appropriate to the grade of the post.



Annexure 2.1: Duties and Responsibilities of the Vigilance Officer

- (i) To see that the existing system of working and procedures and the respective department/offices are examined with a view to eliminating factors which provide opportunity for corruption or malpractices.
- (ii) To ensure that regular inspections are planned and carried out by inspecting officers and the inspection remarks received due and prompt attention with a aim of detecting failures in quality or speed work which would indicative procedural defects facilitating corruption or malpractices.
- (iii) To spot out officials or persons against whom reasonable ground for suspicion of corruption or malpractice exists and promptly to initiate and pursue all such cases;
- (iv) To keep watch over the speedy progress of departmental inquiries and observance of procedural requirements.
- (v) To see that all correspondence received from the Directorate of vigilance or irregularities in procedure are examined and remedies suggested here necessary;
- (vi) To see that returns and statements and other information required by the Directorate of vigilance are forwarded to the Director, Vigilance and time;
- (vii) To check the disposal of cases monthly with a view to ascertaining extent of delay in disposal of disciplinary cases and to suggest remedial measures and to this end take up one or two test cases at irregular intervals for causing a probe in to the cause for the delay in finalization of cases and to suggest remedial measures.
- (viii) In general to be vigilant over the activities and business in their respective departments or offices and take note of routine and chronic nature of defects in the functioning and to initiate remedial measures.



CHAPTER 3
WORKS



3 WORKS

3.1 Classification of Works

The classifications of works are done based on following parameters:

- a. Nature of work
- b. Source of funds
- c. Value of work
- d. Urgent and Emergent works

3.1a. The public works are of two classes based on the **nature of work** viz.:

- i. Original works
- ii. Repairs or maintenance and operations.

The operations under (ii) above include inspection of electrical installations by authorized officers.

i. Original Works

Broadly the works covered under 'Original Works' are the following:

1. All new constructions including extension and improvement (or addition and alteration) to the existing works.
2. Repairs to newly acquired or previously abandoned R&B.
3. The extension and improvement works which increases the efficiency of any system or its scope of function.
4. The new road works forming new assets, or the up gradation of existing assets, such as work of 2 laning, 4 laning or 6 laning, works of improvement and strengthening Bridges **large scale rehabilitation/renovation/upgradation of bridges, buildings and other major structures like dams, spillways, barrages, water works, sewerage systems etc. apart from addition/alteration to such assets are original works. Similarly, new water distribution networks, sewer networks, WTPs and WWTPs, Pumping Stations, Storage Reservoirs, Intake Structures, Production Bore Wells, Electrical Sub-stations, Distribution Grids, LT/HT/EHT constructions etc. either as components of a project or independently constructed including addition/alternation to such assets are among others also termed as original works.**
5. Replacement or remodeling of existing structure or works other than a road surface, road bridge, causeway, embankment ferry approach protective or training work in connection with a road, resulting into increase in the permanent value of the property, should be classed as "original work", the cost the portion replaced or remodeled (to be estimated if not known) should be credited to the estimate for "original works" and debited to "repairs".



6. In case of such replacement and remodeling of a road, road bridge, causeway, embankment, ferry approach, protection or training work in connection with a road which results into appreciable increase in the value of the property, the whole cost of replacement or remodeling as the case may be should be classified as 'original work'. The cost or value of the portion replaced, or remodeled should not be debited to "repairs" unlike in sub para [A](ii) above.

The capital value of any portion of an asset of capital nature which is abandoned or dismantled without replacement should be written off reducing the total capital value in accordance with the Rules in the General Financial Rules.

Where due to normal calamity, any damage has been caused to any Asset, which is not restored or partly restored, such loss will have to be written off, otherwise the capital cost of the facility will wrongly reflected in the proforma account. This however will not be necessary in case such damage is fully restored. This is the position in both cases where the work is already completed or in progress.

ii. Repairs and Maintenance Works

The term Repair and Maintenance primarily indicates operations undertaken to maintain the assets in a proper condition. It also includes maintenance and operation of all services related to the assets. The "Repairs" are further classified into four categories as follows:

1. Ordinary Repairs
 2. Special Repairs
 3. Repair due to natural disaster
 4. Operations
1. Ordinary repairs include:
 - i. Those which, as matter of regulation are carried out for the facility periodically and are usually of the same quantity.
 - ii. Those which are not done as a matter of regulation periodically but which is convenient to carry out, to the extent necessary, at the time of periodical repairs, and such occasional or petty repairs as may become necessary from time to time and which may have to be carried out between the times of periodical repairs.
 2. Special Repairs are works which are not periodical or frequent and include all operations required to maintain the work in a proper condition without increasing the efficiency or scope of the system.
 3. Repair due to natural disaster: Treatment of damages caused by floods, cyclones and other natural calamities. Such repairs are common to roads, embankment etc. however any other structure can also get damaged by the natural calamities for which emergent repair works are undertaken.
 4. Operation: In certain type of works operation of the facility are necessary. This work is also a maintenance activity and is required for Irrigation works, PHE works. Lift Irrigation works, power houses, etc.



3.1b. The Public works is classified in two categories based on **source of funds** viz:

- i. Budgeted works: These are works that are undertaken under an outlay that is provided wholly from financial estimates and accounts of the State of or Govt. of India that are passed by assembly or parliament respectively.
- ii. Deposit works: The outlay of these works either provided partly from Govt. grants to autonomous, semi-autonomous body or institutions and partly by non-Govt. sources.

3.1c. The works are also classified based on its **value of work**, viz:

- i. Major Works – Costing Rs.25 Lakh and above
- ii. Minor Works – Costing above Rs.5 Lakh but below Rs.25 Lakh
- iii. Petty Works – Costing up to Rs.5 Lakh.

Note: The financial limit for defining major/minor/petty works shall be revised every three years.

3.1d. The works is also be classified as; **Normal work, Emergent work & Urgent work.**

- i. Normal works: All works which are not emergent works or urgent works are normal works.
- ii. Emergent works: Emergent works are those which arise all of a sudden and are inescapable requiring immediate action. The situation in which such work may arise are, earthquake, floods, explosion, fire, sudden collapse of structure, terrorist attack, war etc.
- iii. The Urgent works are those which require fast start/completion with compressed time schedule which are to be taken on top priority at the instruction of competent authority.

3.2 Initiation of Original Works

For initiation of work to be taken up for execution there are four main stages:

- a. Administrative approval (A/A)
- b. Technical sanction (TS)
- c. Expenditure sanction
- d. Allotment of Funds.

No work should normally be commenced or any liability thereon incurred until an A/A has been obtained, a properly prepared detailed estimate has been technically sanctioned and where necessary expenditure sanction has been accorded and allotment of funds made. **For major works requiring social impact and environment impact assessment study, these studies will be prerequisite to the A/A and eventual commencement of work.**

3.2.1 Administrative Approval (A/A)

The formal acceptance of the proposal, to execute a work, by competent authority is termed 'Administrative Approval (A/A)' of the work. In effect this is an order to the officers in charge of public works to execute certain specified works at a stated sum to meet the needs of the administrative Department While according A/A, the competent authority may specify the amount by sub-head of work or for the work as a whole depending upon the nature of work.



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No work can normally be commenced or any liability incurred except those of inescapable nature requiring immediate action, until an A/A has been obtained.

In the case of works owned by other Departments, the preparation of estimates shall only be undertaken after a written request regarding the same is received from the said Department. In the case of OWD owned works, detailed instructions for initiating a proposal shall be issued by Works Department at the State Govt. level. Normally, the actual preparation of an estimate shall be taken up only with the approval of the authority competent to accord TS or an authority senior to it.

- a. **A/A of Building Project:** The Department requisitioning the project will first approach the Chief Architect, GOO preparation of architectural drawings on the basis of scope decided by it. The client Department will designate one officer of the Department as nodal officer, who will liaison and hold discussion with Architecture unit and CE (Buildings) regarding detail requirement for which the project was conceived. The Architecture unit will make preliminary plans and hold discussion with the client Department before finalizing them for preliminary estimate purpose.
- b. **A/A of other Projects:** The principle governing the A/A for other projects such as Road, Bridges, Irrigation, water supply or sewerage system etc. is the same as those of building however the route of Chief Architect is not followed in these cases.

The case for A/A should be submitted to the client Department accompanied by (i) a preliminary plan and (ii) a preliminary estimate containing brief details of the work and its cost. The Preliminary estimate will have details like approximate time required to start the work after the accord of A/A, realistic time to complete the work and fund flow chart.

Before preparing estimate, AE/JE should visit the site and have all possible data which can affect the cost of work. The unit cost adopted in the preliminary estimate should be realistic and if possible, based on similar projects completed in the recent past. The said estimate will be framed under the authority of an officer of the PWD competent to accord TS and signed by an officer authorised in this behalf under his full name and date. The amount of departmental charges, if leviable, should be indicated in the estimate as separate figure from the amount of works outlay.

For all major works, it is the duty of the local Officer of the Department requiring the work to obtain the requisite A/A in two **or three** stages. An application for according 1st stage A/A for preparing Pre-feasibility study/Detail Project Report (DPR) should be submitted by the local Officer requiring the work to the authority competent to accord it. Expenditure towards preparation of this DPR will be met out of the lump provision made in the budget for survey and investigation.

In major projects requiring acquisition of land, shifting of services, tree cutting etc. as a pre-requisite to actual construction work, a 2nd stage A/A of competent authority shall be obtained for the cost of these items. After receipt of such approval, the land acquisition, shifting of services etc. shall be taken up. The A/A for 3rd stage for the main project work shall be obtained after 80% of Land Acquisition and services shifting work is completed under stage 2 sanction referred above. The same procedure shall be followed for inviting bids for PPP work.



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Other projects which do not involve land acquisition, shifting of services etc., 2nd stage A/A shall be obtained for the main work on a detailed estimate based on DPR.

Budget provision for minimum 15% of the project cost is required for according 2nd stage and 3rd stage administrative approval by Competent Authority. However for relaxation of this budget provision of 15% of project cost, approval of the Finance Department may be obtained on case to case basis.

- c. **A/A for Petty works:** Detailed plans and estimates may be prepared in the first instance if the work is not likely to cost more than Rs.2 lakhs for electrical and Rs.5 lakhs for other works and submitted to the authority competent to give A/A. After such approval, the competent authority should return the plans and estimate to the concerned officer, who is competent to accord TS for execution of work.
- d. **A/A to Revised Estimate:** The same procedure will also apply to the modifications of the proposal originally approved. The approval of revised estimate become necessary (i) when there is material deviations from the original proposals even though the cost of the same may possibly be covered by savings on other items within the subheads of the project upto 10 percent excess, (ii) where the detailed estimates, when prepared, exceed the amount administratively approved by more than 10 percent, (iii) In cases when it becomes apparent, during the execution of the work, that the amount administratively approved will be exceeded by more than 10 percent, owing to increase of rates or other causes.

In the case of modifications during construction revised A/A of competent authority must be obtained without awaiting for the preparation of a detailed supplementary or revised estimate.

The excess of 10 percent is meant to cover only the extra expenditure in the estimate during construction strictly according to approved plan and specifications and cannot be utilised for changing the scope of the estimate or plan.

- e. **Deviation from A/A:**
 - i. In cases where the amount of the accepted tender exceeds the amount of A/A by more than 10 percent normally revised A/A should be obtained. However, for reduction in cost there will be no need of revised Administrative Approval. In case of delay, permission for going ahead with award of work from the authority competent to record A/A should be obtained before commencement of work.
 - ii. In cases where the total value of a contract increases due to deviation in the course of execution and in consequence there of the amount of A/A is likely to exceed the prescribed limit of 10(ten) percent approval to the deviation statement can be accorded by the authority competent to accept the tender after the revised A/A is obtained. In case of delay, clearances from the authority competent to accord revised A/A to proceed with the work should be obtained.
- f. **A/A for Works of the Interest of General Public:** In the case of works in the interest of the general public e.g. communications, irrigation works/flood control works, PHE works, electrical works other than installations in buildings and miscellaneous improvements,



preliminary plans/designs and estimates should be submitted by the concerned public works officer to the competent authority for according A/A.

- g. **A/A for Additions and Alterations work:** If the expenditure for addition and alteration or change of scope would result in increase of the capital cost of the work to a figure which is beyond the competence of the authority who accorded original A/A, no authority is empowered to accord A/A for such change in scope except one who is competent to accord A/A for increased cost. The authority can thereafter convey approval for the increased total cost seeing the genuine requirement of the project.

In all cases, one copy of the A/A should be endorsed to the concerned Accounts Officer.

3.2.2 Technical Sanction (TS)

A TS to the estimate is a guarantee that the proposal is technically sound, and that the estimate is accurately prepared and are based on adequate data and appropriate specifications.

After receipt of A/A, detailed estimates are required to be prepared for TS. The procedure for preparing detailed estimate for obtaining TS has been given in section for preparation of estimate. For every work proposed to be carried out, except petty works & petty repairs for which a lump sum provision has been sanctioned, a proper detailed estimate must be prepared for the sanction of competent authority. This is known as TS to the estimate and unless otherwise provided, must be obtained before the execution of any work is commenced.

In the case of an original work, other than petty work, the counter Signature of the local HOD on behalf of whom execution is proposed, or of such other officer of lower status as may have been empowered to accord A/A to it, should be obtained to the plans and estimates in token of his acceptance of them, before TS to the latter is accorded. If subsequent to the grant of TS, material structural alterations are contemplated, the orders of the original sanctioning authority should be obtained, even though no additional expenditure may be involved by the alterations.

The powers of various authorities to accord TS have been given in Chapter 6 of this manual. TS amount should generally be limited to A/A amount however, an excess of 10% over A/A amount may be allowed without requiring Revised A/A.

A DO cannot take up the preparation of estimate until his departmental superiors, direct him to prepare the detailed plans and estimates necessary for the purpose of TS until funds for the work has been actually allotted by the competent authority.

The authority according TS to an estimate should retain a copy in his own office and the original should be recorded in the Divisional Office. The executive subordinates in charge of the work should also be furnished with copies of the sanctioned estimate.

A register for all technically sanction estimate should be maintained in sub division as well as Division office. A return of all technically sanctioned estimate above Rs 100 lac for projects and Rs 50 lac for non-project should be sent to AG, along with copy of estimates.

3.2.3 Expenditure Financial Sanction

Expenditure sanction is accorded by the Administrative Department to indicate that funds for the project/work have been provided, and liability can be incurred.



An order of appropriation or re-appropriation of funds shall operate as sanction to incur expenditure on minor works, and it shall not be necessary to issue any formal order conveying sanction to incur expenditure in such cases.

3.2.4 Allotment of Funds

Allotment of funds means provision of funds to meet the expenditure on specified works. The funds are provided either in the budget or by supplementary demands, re-appropriation and advances from contingency fund in urgent cases.

In case where lump sum provision is made (e.g. minor works, grants, repairs grant, tools and plants, suspense etc.) necessary funds are allotted by the controlling officers.

The fund allotment available for works in departmental budget of other Department may be placed at the disposal of the concerned unit of OWD, if the works included therein are proposed to be executed through the agency of OWD.

Where the budget provision has been admitted but A/A not received, expenditure should not be incurred until the A/A has been accorded by the competent authority. In exceptional cases, where it is considered necessary to go ahead with the execution of a project, specific authorisation of Govt. will be necessary before expenditure is incurred. Such cases will not be considered unless full details of the circumstances in which the A/A is being delayed and the reasons for going ahead with the work are furnished. The administrative Department concerned will be competent to issue such orders of authorisation only in respect of projects where the rough estimated cost is within their power of according A/A. In all cases of authorisation of this nature the CE should submit proposals for A/A within three months from the date of commencement of work.

In case of tender accepted below schedule of rate, the tender amount excluding centages shall be treated as sanctioned amount and allotment will be limited to that extent. Any deviation in scope of work affecting the agreement amount in such an agreement will be governed by relevant provisions of OPWD Code.

3.2.5 Appropriation and Re-appropriation

Appropriation means assignment to meet specified expenditure of funds included in a primary unit of appropriation. Re-appropriation means the transfer of funds from one unit of appropriation to another under such unit. It is a fundamental principle that no outlay on a work shall be incurred without funds having been allotted for it by appropriation or re-appropriation. In exceptional cases, where expenditure is authorised in anticipation of the allotment of funds or in excess of the funds allotted for the purpose, the authorisation must be followed by a formal allotment of funds to the extent required.

Allotment of funds is intended to cover all the charges including the liabilities of past years to be paid during the year or to be adjusted in the accounts of it. It is operative until the close of the financial year. Any unspent balance, lapses and is not available for utilisation in the following year, but Govt. will ordinarily endeavor to include any anticipated lapse in the demand for the following year. The financial year closes on 31st March and after that date all cash and stock transactions are treated as pertaining to the following year.



However, the Transfer Entry Book and the stock accounts should be kept open for transfer entries relating to rectification of errors and settlement of outstanding. These accounts should be closed on the 20th May or on such other date, as may be prescribed by the AG.

The powers to appropriate and re-appropriate funds to meet the expenditure on public works are vested with the EIC cum Secretary (Works)/EIC/CE.

3.3 Requisition for Execution of Works to PWD by Civil Officers

A civil officer of any Department may give their requirement to OWD for carrying out the work of new buildings, its electrical and other services, additions or alterations to existing buildings or any other works required for the use of that Department provided he is competent to give A/A to the estimate. The requirement should be discussed by the civil officer with the PWD DO before sending such requisition.

The DO will see if the officer requisitioning the work is competent to accord A/A for such work and prepare detail drawing and estimate. In case the officer is not competent he will be advised to get requisition approved by the competent authority. He can also continue with the exercise if his departmental superior wants him to do so.

The DO must in each case exercise his judgment on the demand made and in every case in which he thinks that he cannot recommend the execution of a work called for by the officer of the Department concerned he should explain his objections to the officer concerned and if he fails to convince him, should refer the matter for the orders of the, SE. At the same time he is responsible to ensure that such references are not made unnecessarily.

The actual execution of works, asked for by civil officers must in every case be dependent on the necessary funds being available.

3.3.1 Procedure for Original Petty Works Costing up to Rs.5 lakhs

For Original Petty Works costing up to Rs.5 lacs and for water supply, sanitary and electrical installation works costing up to Rs.1 lac following procedure shall be adopted:

- a. The requisition should be made by the officers competent to accord A/A for such work.
- b. The DO or his subordinate will give his opinion on the requisition and decide what work should be done or not. The work which in opinion of DO should not be done the fact should be explained to requisitioning officer by DO. For works which can be taken up, DO will have a discussion with the requisitioning officer and prepare a rough estimate of the probable cost and submit to the requisitioning authority.
- c. The acceptance by the competent civil officer of the rough estimate as referred to under item (ii) above, is the A/A which gives officer of the public work Department authority to execute the work. In case no fund is allotted for the work as per budget the approval of the SE shall be taken to charge the expenditure to repair.
- d. For new petty works of buildings (and additions or alterations to existing buildings required for use by any department), the local head of the concerned department may call upon the Divisional Officer, R&B department to prepare rough cost estimate, but the Divisional Officer



cannot be required, except by his departmental superior officers, to prepare the detailed drawings and estimates required for the purpose of technical sanction of projects, which he considers likely to cost a sum greater than that which can be administratively approved by the local officer-in-charge of the department concerned, or those, however small their probable cost, in the necessity of which he does not concur.

3.3.2 Procedure for Original Works Costing above Rs.5 lakhs

- a. The competent civil officer requiring the work should furnish the DO concerned with the particulars and reasons for which the work is required. The DO should see and explain to the requisitioning authority whether his plan will really suit the civil officer's requirement or not and finally decide on a suitable plan/proposal. He will then prepare an estimate showing the particulars as to the class of work which is proposed to be provided and show on what information his estimated cost is based.
- b. Normally, rough plans and estimates based on plinth area rate only will be prepared in the first instance. In the case of a work costing between Rs.1 lacs and Rs. 2 lacs for electrical works and Rs.5 lac and Rs.25 lakhs for other works, if funds are likely to be available within a reasonable period, detailed plans and estimates will be prepared in the first instance. In case of works likely to cost more than to Rs. 2 lakhs for electrical works and Rs.25 lakhs for other works detailed plans and estimates will not be prepared unless there is a likelihood of funds being available in the course of the year and the work is within the power of A/A of the requisitioning civil officer. Rough estimate should always be prepared with due regard to the prevailing SOR and price structure and with sufficient accuracy so as to ensure that actual expenditure may not exceed the prescribed limit. The cost should not be based on mere guess work but on such reliable data as may be available.
- c. The estimate will be sent to the administrative Department under the authority of PW officer who is competent to accord TS to the estimate.
- d. After according or obtaining A/A to the project, the civil officer will return the plan and estimate to the officer or the Department in charge of public works from whom they were received. If only rough plan and estimate have been prepared for the project, he will after ensuring actual provision of funds in the budget estimate of the year or obtaining promise of such provision of funds from competent authority, request the DO to proceed with the preparation of detailed plan and estimate for the project.
- e. The detailed plan and estimate when prepared along with the necessary report and specifications will be sent to the requisitioning civil officer for counter signature of the authority who accorded the A/A and return. The DO will then sanction the detailed estimate, if it is within his power of TS or otherwise he will submit it for TS to the SE, who will, should it exceed his power of TS, forward it to the CE for such sanction.
- f. For all original building works, the route of Chief Architect shall be followed as discussed in para 3.2.1 (a). Similarly, for all works where prefeasibility report is necessary the procedure for two stage sanction as discussed in para 3.2.1 (b) above shall be followed.



3.3.3 Procedure with Regard to Repair Works

Procedure to be followed in the case of repairs (which do not come under ordinary repairs) is as follows:

- a. The requisition will be made by the civil officer concerned.
- b. On receiving the requisition, the DO will first satisfy himself as to the propriety of the work and that there is sufficient provision in the budget grant under the proper head of repair and the funds have been duly allotted to him.
- c. The DO may then order the immediate execution of the work, without the preparation of detailed estimate, provided that the cost is not likely to exceed Rs. 50,000.

Should the budget grant under the particular sub-head is insufficient to meet the outlay; reference must be made to the SE for providing funds.

- a. When the approximate estimate exceeds Rs. 50,000 a detailed estimate must be framed and sanctioned by the authority competent to accord TS.
- b. In cases of repairs to electrical and public health installations in residential buildings the above procedure shall be followed when the cost of repairs exceeds Rs. 5,000.

3.3.4 Limitation of Sanction

It shall be ensured that no expenditure is incurred for any portion of work, alteration and purchase of materials of an individual work/project if total cost as a whole exceeds the delegated power of sanction of an officer.

3.4 Preparation of Estimates

3.4.1 General

Estimate represents expected cost of the work and is prepared on the basis of details of requirements of work. (i) A “preliminary estimate” or a rough cost estimate is prepared on the basis of basic details available regarding the said work. (ii) The detail estimate is based on the plans, specification and other details prepared for the work by assessment of quantities of various items of work and their rates.

The papers to be submitted with the estimates for a work will consist of a report including specifications of work and a statement of measurements of quantities, their rates and cost, special T&P and other costs involved, with an abstract showing the total estimated cost. In the case of a project estimate consisting of several works, the report may be a single document for all works and likewise the specifications, but details of measurements and abstracts may conveniently be prepared for each sub-work, supplemented by a general abstract.

In the case of estimates for ‘repairs’ or maintenance and operation only the specification and the detailed statement of measurements and quantities with the abstracts will ordinarily be required. The report should state in clear terms the objective of the execution of the works and explain any specific aspect which requires elucidation, including, where necessary, the reasons for the adoption of project design in preference to others.



3.4.2 Preliminary Estimate (PE)

Preliminary estimate is prepared on the basis of plinth area of building or length of road. Area of bridges/flyover worked out on the rate per unit area/length/number, based on similar works executed in the State considering suitable inflation factor or rise in the cost index since the completion of the said work or such other method adopted for calculation of the approximate cost involved in the proposal.

The preliminary estimate should be prepared on the basis of the preliminary drawings and details. This should appropriately indicate in the history sheet the items that are included or excluded in the estimate. Provisions as required, should be made in the preliminary estimate to be submitted to the competent authority for accord of A/A.

3.4.3 Preliminary Survey etc.

Where any preliminary survey, site/soil investigation, preparation of project reports including appointment of consultant and/or other essential preliminary steps connected with the schemes, is needed to be done before the preliminary estimate of the requisitioned work can be finalised, a separate estimate for such purpose(s) may be prepared, and sent to client Department for sanction. Where, however, such works are required to be carried out after the receipt of A/A and at the time of preparation of detailed estimate, necessary provision for this purpose may be made in the preliminary estimate.

3.4.4 Preliminary Data and Drawings

Whenever a requisition is received for a work, the same should be passed on to the concerned planning unit for preparation of preliminary drawings. The survey plan and site particulars and other site data shall be obtained from the concerned DO. The representatives of all the concerned disciplines shall be consulted for incorporating their requirements in the preliminary plans.

The preliminary plans and brief specifications shall be prepared according to the requirements for the work, and the approval of the client Department obtained for the same. The preliminary drawings should indicate sufficient details for preparation of preliminary estimate.

These plans and brief specifications should be forwarded to the concerned CE/SE/EE, for preparation of the preliminary estimate of the project.

3.4.5 Preparation and Forwarding of Preliminary Estimate

CE/SE or EE in charge for the major component shall be the nodal officer for forwarding the estimates up to the power of their TS. The SE in-charge of major discipline of work will send the consolidated estimate after obtaining input from all concerned units of various disciplines as well. For all major works only single estimate covering all aspects of work including services will be sent through concerned CE (Civil).

Provision for services like sanitary, water supply, drainage and electric installations etc., as applicable should be made on the basis of plinth area rates. Provisions for items for which plinth area rates are not available, shall be made on rough cost estimation basis and included in the estimate. Provisions for various services should be incorporated in consultation with the concerned disciplines.



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While forwarding the preliminary estimate to the client Department for accord of A/A, an indication shall be given in the history sheet that the cost and time of the project is liable for revision due to probable escalation in cost of construction apart from reasons such as change in scope, area, design and specifications etc. if so desired by the client at a later date. While sending the estimates it should be made clear to the client Department that execution of the works will depend upon the availability of funds.

Works for which sanctions are received after the month of November these should be ordinarily taken up for actual execution in the next financial year and the client Departments should be informed accordingly so that necessary budget etc. can be arranged by them for the Financial Year in which works are liable to be executed.

In respect of maintenance operations for buildings other than those in general pool, the concerned Departments should be requested to give a complete list of works required to be carried out and estimates given to them latest by the month of February, so that the same can be considered in the next budget.

A preliminary estimate should have a report consisting of History, Design, Scope, Rates, Cost, Time and proposed method of execution.

3.4.6 Provision for Contingencies its Utilisation & Other Provisions

In addition to the provision for all expenditure which can be foreseen for a work, a provision of contingency shall be kept as follows:

- a. Estimated cost upto Rs. 1 Crore 3%
- b. Estimated cost more than Rs.1 Crore and up to Rs.5 Crore 2%, subject to a minimum of Rs. 3 lac
- c. Estimated Cost more than Rs. 5 Crore 1% subject to a minimum of 10 Lac

An additional provision of 1 percent for quality control measures & 1% for safety measures may be made in the estimate. These provisions may be suitably enhanced or deleted depending on the type of project and requirement of funds for these purposes.

Other provisions which could be made in the estimate are:

- a. Agency/departmental charges as prescribed by the Govt.;
- b. Land development, boundary plantation and landscaping for new projects of buildings, roads, bridges, pumping stations, head-works, etc.;
- c. Services relocation, forest and other statutory clearances, compensatory afforestation, re-settlement and rehabilitation of project affected persons;
- d. Requirement of any instrumentation;
- e. Maintenance during project completion and handing-over operation;
- f. O&M for the specified number of years, depending on
- g. The nature/requirement of the project; and
- h. Supervision or other consultancy services, if applicable.



The provision of contingency should not be diverted to any new item of work or repair which is not provided in the estimate and cost of which exceeds Rs. 50,000. This contingency may however be utilised for watch and ward at site, if required to be provided by the Department. For these establishments, no provision should be made separately except in the case of annual maintenance estimate where provision is made for such establishment under a separate sub-head of the estimate.

3.4.7 Preparation of the Detailed Estimate

The preparation of detailed estimate and detailed drawings and designs should be taken up only after obtaining an assurance from the Department sponsoring the proposal, that the site is available, and without any encumbrances or is likely to be made available within a reasonable time.

On receipt of the A/A and confirmation about the availability of site, the concerned authority shall decide on the packages for the purpose of accord of TS. The SEs/EEs (P), Civil and Electrical, shall forward all relevant structural and service data based on the approved preliminary plans, for preparation of detailed working drawings and specifications for the work. On receipt of such drawings, the competent authority shall take up the preparation of the detailed estimate, and accord TS.

The detailed estimate should be complete and as comprehensive as possible, and should be supported by detailed drawings, preliminary structural drawings, preliminary lay-out drawings and specifications including GAD as applicable for the various components of work involved, etc., as applicable.

The detailed estimate should give broad details for each item of the work involved. Other details shall be covered by the accompanying detailed drawings and specifications. The detailed estimate should be based on the rates given in the SOR for those items of work covered by it, and by analyzed market rates for the remaining items.

The detailed estimate should invariably contain the following:

- a. Generally no items showing lump sum provision should be included in the estimate. If this is unavailable necessary details in support of the lump-sum provisions made in the estimate..
- b. Basis on which the rates have been provided, i.e. reference of the SOR or market rates.
- c. A brief note on the special construction difficulties, if any, which are likely to be encountered during the construction stage.
- d. A report, plans, specifications and a detailed statement of measurements, quantities and rates with an abstract showing the total estimated cost of each item. In the case of a project consisting of several works, the report may be a single document for all the works and likewise the specifications, but details of measurements and abstracts of costs may conveniently be prepared for each work, supplemented by a general abstract bringing out the total cost of the work.

3.4.8 Format for Estimate

The estimate for a project/work should be comprehensive, supported by necessary details and based on drawings and design, where necessary.



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The 'Report' of the estimate should be prepared in a lucid form, understandable by non-technical officers of the administrative Department or the client. It should be comprehensive enough under each sub-head as mentioned below.

- a. **History:** Particulars relating to the initiation of the proposal, and events leading to it, and its general purpose, including references to previous correspondence, documents and specifications, where necessary.
- b. **Design:** A description of the proposal, particularly with regard to its location and design, also with reference to standards and specifications, calculations and drawings, where necessary. In case of a revised estimate, a description of the original proposals and those finally adopted should be given.
- c. **Scope:** An explicit statement as to what the work is and what is not covered by the estimate. A reference may be made, if necessary, to the arrangements being for any portion(s) of the work which are not included in the estimates.
- d. **Rates:** Particulars as to how the rates have been arrived at, giving reference to the relevant standard SOR or market rates and also to the details accompanying the estimate, where necessary, with any special explanation connected therewith.
- e. **Cost:** Cost of the work, and in case of revision, a comparison with the amount originally provided under any previous administrative sanction or detailed estimate.
- f. **Method:** The method proposed for carrying out the work, whether by contract or daily labour, or any combination of these.
- g. **Establishment:** Details of any provision made in the estimate for work-charged establishment, when necessary.
- h. **Construction Plant:** Any special methods of construction to be adopted with reference to specifications, etc. and details of the provisions that have been made in the estimate for necessary construction plants and machineries, etc.
- i. **Land:** Provisions for details of land, when necessary.
- j. **Time:** The estimated time of completion from the date of receipt of A/A and E/S. indicating break up for pre-construction and construction stage activities.

Full reference should be given in respect of the concerned drawings accompanying the estimates in support of the details submitted therein.

On every estimate, whether submitted to CE or SE or sanction by the DO a certificate as given below should be recorded by him:

“Certified that Shri.....has reported that he has personally visited the spot and prepared the estimate using the sanctioned SOR/reasonable rates for non-schedule items and providing the economical and safe way of executing the work.”

3.4.9 Schedule of Rates (SOR)

To facilitate the preparation of estimates for works other than Road & Bridge works, as also to serve as a guide in settling rates in connection with contract agreements, a SOR for each kind of work



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commonly executed should be maintained up-to-date in the different areas of the state and annually approved by the Technical Committee. It should be prepared on the basis of the rates prevailing in each station and necessary analysis of the rates for each description of work and for the varying conditions thereof should, so far as practicable, be recorded. For Roads and Bridge works however MoRTH/MoRD data book/SoR shall be followed.

The SoR should be prepared on the basis of rates prevailing in the different areas of the State, or on the rates prevailing in the area as decided by Govt. as it is used for the important purpose of preparing estimates and also used as a guide in examining rates in contracts. Necessary analysis of the rates of each description of work and the varying conditions thereof should be given. The contractors profit and overhead charges shall be adopted at the rate of 7.5% each in analysis of rate of all items of work worked out under Odisha schedule of rate. This is over and above the cost of labour and materials and hire charges of heavy machinery. No extra cost for sundries and T&P shall be allowed in analysis of rates. This is applied for all engineering works including cost of pipes, fittings and specials.

To ensure uniformity in the SoR, specifications and other matters specified in the Code, there shall be a committee called the Technical Committee which will comprise the following, with EIC, OWD as the convener:

- a. EIC, RD, DOWR and PHE;
- b. One CE each from RD, DOWR and OPHEO, to be nominated by EIC of the Department;
- c. CE, OWD, in-charge of PWD Code;
- d. Senior Deputy Accountant General, ;
- e. Representative of State Finance Department;
- f. 2 Co-opted members, decided by three Engineers-in-Chief;
- g. Chief Architect in case of Building items; and
- h. SE, OWD, in-charge of schedule and specification cell as Member Secretary.

The Technical Committee should meet at such frequency as necessary, but at least twice a year, in the months of January and July. The responsibility of calling the meetings of this Committee is that of EIC of Works Department.

In working out the rates, the tender accepted for works during the twelve months preceding the date of preparation of estimate and the tendency of rates and prices to rise or fall should be taken into account. When the rates and prices are changing rapidly, the CE may issue orders at any time after obtaining approval from the authority finalizing the SoR that certain percentage should be added to or deducted from all the rates or from certain specified rates.

The rates entered in the estimates should generally agree with the scheduled rates, but where due to any reason, the latter is not available, market rates may be considered and reasonable rate worked out based on proper Analysis of rates for the item. Generally, no item showing lump sum provision be included in the estimate, the complete details should be worked out and shown in the estimate stage itself.



3.4.10 Estimates for Common Types of Projects

A. Buildings

The site of every building should, be settled before the designs and estimates are prepared. The land should be free from any encroachment. For Rules for selection of site for building see **Appendix I**.

In all cases, applicable bye-laws and local authorities must be consulted as to the suitability of the site. In the case of works which are intended to be carried out in the neighborhood of any cantonment or other military establishment the matter should be referred to the local military works officer for expressing his opinion from a military point of view, and then submitted to the Govt. for concurrence.

Power magazines and all buildings which, from their height or exposed situation, are likely to be struck by lightning should provide with lightning conductors, in accordance with such instructions as the State Govt. may issue.

1. A preliminary estimate of building should consist of the following:
 - a. A brief but complete history of the case, together with the references to any previous correspondence.
 - b. A layout plan of the proposed work, showing the north point and details of the soil in the foundation.
 - c. A report stating clearly the accommodation required and provided and giving a general specification of the proposed building.
 - d. Preliminary drawings, showing the size and disposition of the rooms, the purpose for which they are intended. In the case of the building intended for use as an office, the sitting arrangement should also be shown as approved by the office of Chief Architect.
 - e. An abstract of cost of the building based on the plinth area of the line plans, with due allowance for the cost of the land.
 - f. Provision of Services like Lift, Air conditioning, Fire protection, Internal Elect. Installations, Water supply, Sewage disposal and any other services are made in the cost estimate.
 - g. Provision should also include, site development, approach roads, boundary wall, gate, horticulture work etc. as required.
2. Detailed estimate of Building should consist of the following:
 - a. A full detailed report and estimate.
 - b. Detail design and drawing for foundation, preliminary structural design of all components like column, beam, RCC slab, roofing arrangement etc.
 - c. A site plan, showing the situation of the proposed building with reference to others, various feature in proximity to the intended site, the north point, the prevailing direction of the wind and all other matters capable of graphic delineation which may have influence on the selection of the site.



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- d. All floor plans of the buildings as approved by office of Chief Architect.
- e. Sections through the building of such number and in such directions as are necessary to exhibit the intended, form and dimensions of every part.
- f. Such elevation as are necessary.
- g. A drawing or drawings showing the general arrangement of the floor and roof and the distribution of the timbers, iron work etc. and such working drawings as well as the enable the officers responsible for the project to judge the details.

While forwarding the detailed estimate for TS, the following information should invariably be furnished.

- a. Necessary details in, support of the lump sum provision against cost of civil construction works made in the estimate.
- b. Basis on which the rates have been provided, that is name of the scheduled of rates of the locality, projects adopted.
- c. Prevailing average cost of site, of material e.g. brick, sand, cement, stone, aggregate, timber, steel etc. and labour i.e. Mason, carpenter and welder etc.
- d. A brief note of the special construction difficulties, if any, that is likely to be encountered during the project construction stage.

The estimate in respect of residential building should be sanctioned after the plans/designs both Structural and Architectural, which should be mostly according to the type designs, have been prepared in detail. Same would apply in case of medium sized non-residential buildings of the single or double storied types, the estimated cost of which including the services in Rs. 5 lakhs or below.

In case of large sized multistoried structures, detailed estimate should be got prepared and technically sanctioned as far as possible after all the buildings and architectural working drawings are finalised. This is important since in absence of such drawings no estimate can be accurately prepared either in respect of the quantities or in respect of the correct descriptions of items and adoption of appropriate rates. As regards structural drawings, it is emphasized that sanctions should be given on the basis of accurate designs and finalised sizes of all structural numbers so that during actual execution quantities of the work do not alter significantly.

The local body approval wherever required should be available before awarding the work.

B. Roads

Before the estimate for road project is prepared, preliminary investigation is to be carried out where necessary. The estimate for road project should, in addition to cost, bring out the following broad feature:

- a. Necessity of the work
- b. history, design, scope, rates, specification, expected volume of traffic, nature of soil etc.;
- c. In case of improvement of existing road, past history of works carried out, relevant detail to justify proposed work;



- d. Available ROW;
- e. CBR evaluation and pavement design;
- f. Road features and geometrics;
- g. Temporary diversion plan;
- h. Environment impact assessment;
- i. Material and resources, list of possible quarries;
- j. Construction Program;
- k. Detailed measurements and abstract of cost;
- l. Locality map (same as key map) – 1:2,50,000;
- m. Site plan (same as Index map) – 1:50,000;
- n. LA plan – 1:2000 to 1:8000 (depending on available maps);
- o. Plan and Longitudinal Section – 1:2,500 to Horizontal , 1:250 for vertical;
- p. Typical Cross-Section– 1:500; and
- q. Bridges – 1:75 to 1:150.

Note:

1. The above noted scale may be increased or decreased depending on the nature of the project.
2. Estimates for other works shall include the cost of all dwelling and inspection house intended to be built along with it for accommodation of sub-ordinates and others.
3. If any pipe line, drainage work, electrical poles, cables and telephone lines come in the way of new alignment; necessary provision for shifting the same should be made.
4. The estimate shall include list of quarries from which Road metal is proposed to be obtained.
5. For the purpose of estimate, the approved quarry lead is to be provided **with due diligence by the Engineer in charge. The contractors has to bear the risk of quarry identification with respect to quality and quantity of materials as per prescribed specification. The Department should not ask for details of quarries from the bidders.**

C. Bridges

The estimate for bridges should have the following details:

- a. A brief description existing mode of crossing;
- b. The kind and volume of traffic expected;
- c. Whether the stream has ever been bridged before, if yes, a description of the same should be given and if it failed the reasons?;
- d. The kind of bridge now proposed;



- e. Reasons for the waterway allowed;
- f. The clearance to be allowed;
- g. The drainage of the stream whether flat or hilly;
- h. Discharge in rainy and dry weather;
- i. Liability to sudden floods;
- j. Whether the stream is used for floating out timber and if so, how is the nature of bed and banks?;
- k. Whether the banks are liable to erosion?;
- l. Whether the stream is navigated and if so by what types of vessels?;
- m. The higher flood level, maximum and normal, and the nature of materials available within a reasonable distance.
- n. Sub soil investigation report;
- o. Environment Imp. Assessment report;
- p. Construction arrangement.

Whenever it is proposed to construct or modify a bridge, culvert, dam, diversion or other works, which might affect any railway line in the vicinity, the Railway, administration should be consulted in regard to the adequacy of the span arrangement and waterway etc. provided in the proposals. Where there is disagreement, the matter should be referred to the SE concerned for early redressal in consultation with the Railways.

In addition to the actual bridge plans, the following plans should accompany the estimate for a new bridge:

A plan of the stream for 1 to 5 km above and below the proposed crossing with connected cross section at every half of a kilometer (or oftener if necessary), a cross section of the stream at the proposed bridge site showing the general level of the country on either bank as well as that of road approaches.

D. Irrigation Projects (Canal)

All irrigation project estimates should follow DOWR guideline or CWC guidelines and contain the following:

1. A full report of the rainfall and depth of spring level in the tract affected the sources of existing irrigation, and the means of drainage proposed, if such are necessary. The opinion of local revenue officers should also be taken as to the desirability and, necessity of the project work, area proposed to be irrigated, cropping pattern, the fairness of the water rates proposed, and, the probability of the anticipated financial results being realised.
2. a. Objective and general description of the proposed works should follow including the sources from which water is to be drawn, the quantity of water available at different periods of the year and the quantity it is proposed to utilise, also the character of the



- sediment, brought down whether likely to fertilize or the reverse, the land area commanded, the average area usually cultivated and likely irrigable area, the lengths of main canals and distributaries, and in navigation be also contemplated, the length of the navigable portion.
- b. In case of Canal quantity of water allotted to each main canal and the area irrigable there from in a tabular form, the dimensions of the channels and the works on each being furnished.
 - c. The reasons for the adoption of the particular scheme recommended in preference to any other and a full account of the basis on which the alignments of channels and other portions of the designs have been projected with a careful analysis of any engineering questions involved.
 - d. The question of labour and the sources whence it is obtainable, and the probable effects of the operations on the existing rates.
 - e. The sources from where localities materials are obtainable and the facilities for manufacture with the probable rates; the results of any experiment on the quality of lime, the character of brick clay, etc.
 - f. The methodology proposed for carrying out the work and the establishment required.
 - g. In the case of projects for which Capital and Revenue Accounts will be kept the returns accepted from the works and the basis on which they are calculated.
3. The complete estimate for a project should include indirect as well as direct charges. The main headings are as follows:
- Direct Charges-
- i. Works
 - ii. Establishment including leave pensionary charges.
 - iii. Tools and plant.
- Indirect Charges-
- i. Capitalisation of abatement of land revenue on area occupied by works.
 - ii. Audit and accounts charges at the rate of 1%.

The items included under the head 'works' should be, classified under the prescribed main and subheads of account.

The provision for establishment and tools and plant should be made at such percentage as the State Govt. may fix from time to time.

E. Irrigation Reservoir Projects

Following details will be necessary to be part of the estimate for reservoir projects:

- a. the area of the tank and contents when full, the area of land commanded and irrigable;
- b. the length of the dam, its maximum height;



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- c. Materials of which it is proposed to constructed etc.;
- d. length of surplus weir or weirs, and the mode in which the water is to be let off for irrigation;
- e. available water supply;
- f. number of times the reservoir will probably fill during the year;
- g. rainfall and proportion flowing off the catchment character of soil and general slopes of the country, loss by evaporation and absorption, quality of the water etc.;
- h. the quantity of flood water for which provision must be made;
- i. The waterway of the escape weirs or sluices.

The results of any experiment bearing upon the strength, of the materials proposed for use in the dam should be dealt with, as also the silt content of the water and the probable effective life of the reservoir.

F. Town Water Supply Projects

Following details should accompany a town w/s estimates:

- a. the nature and quantity of the existing water supply should be given and the reasons necessitating augmentation of water supply;
- b. the possible sources of additional supply and the reasons for preferring the scheme submitted;
- c. the area and number of people, horses, cattle etc. to be supplied;
- d. the estimated daily supply of water in liters for each individual and for head of cattle;
- e. the quality of water; whether requiring filtration or not and whether religious objections are likely to be raised to the use of the water;
- f. An index map showing the lines of main and distributary piping and plans of all works, including filters, service reservoirs, settling tanks etc.;
- g. If pumping is contemplated the annual cost of working the pumps should be estimated. The mode of calculating dimensions of pipe etc. and the formulae used should form part of the detail.

The manual of practices on water supply service issued by the concerned Ministries should be adopted with reference to the norms prescribed by the Indian Standard Institution from time to time.

3.4.11 Estimate for 'Repairs' or 'Maintenance' and Operation

The Departments engaged in Public Works like OWD, RWD, DOWR & H&UDD shall define norms and yardsticks for maintenance of the structures under their charge. The repairs may be divided into following categories and estimate prepared separately for different categories of repair works:

- A. Ordinary Repairs
- B. Special Repairs



C. Repair due to natural disaster such as Flood Damage Repairs

D. Operations

A. Ordinary Repairs:

May be further subdivided into (i) Routine ordinary repair, (ii) Periodic repair, (iii) Petty work

i. Routine ordinary repair

They are such work of repair which, as matter of regulation are carried out periodically such as, the painting or white washing of a building or a new coating of metal on a road including pothole repairs, crack sealing, pavement edge and shoulder repair, clearance of side drains, maintenance of embankment, cross-drainage repair works, repair or replacement of road-side furniture and road signage, bridge and culvert repairs, vegetation control, clearance of litter and debris, leak detection and proper sealing in water supply pipelines, sewerage networks, repair of leaky sluice/gate valves, air valves, replacement of plumbing fixtures and fittings, regular repair of electrical control and switching system, replacement of manhole covers and sewerage and drainage networks etc.

To facilitate annual repair estimate for buildings standard MBs may be maintained in division office showing measurement of each kind of work which is renewed annually.

Routine maintenance should be given very high priorities in actual execution as this will help reducing the burden on periodic repairs and special repairs.

ii. Periodic Repairs

They are the works of repairs which are not done as a matter of regulation periodically but are necessary and convenient to be done at the time of periodical repairs; they may include plastering of wall, minor repair of wood work in building and for roads leveling the surface, path repairing, and providing black- topping by way of surface dressing or premix carpet or mixed seal surfacing. Also those repairs which are required to be carried out at regular intervals depending upon the life or requirement according to manufacturer's maintenance schedule in case of various civil, electrical, mechanical, electronics & communication, components of water supply projects/sewerage projects/drainage projects consisting of WTPs, WWTPs, pumping stations, sewer network along with appurtenant structures, water supply networks, reservoirs, intake structures, pumping machineries etc. come under this category.

iii. Petty Repair

Such occasional or petty repairs as may become necessary from time to time and which may have to be carried out between the times of periodical repairs.

B. Special Repairs:

i. **Roads:** They include (i) special repairs like pavement riding quality improvement (PRQI) including profile correction of required, (ii) special repair of bridges etc.

ii. **Buildings:** These cover major repair or replacement or remodeling of a portion of an existing structure or installation or other works due to major breakdowns, or deterioration, or periodic renewal, which do not result in a genuine increase in the value of the property such as re-roofing a building, replacing of beams, renewal of flooring etc.



- iii. **Irrigation:** This includes all operations required to maintain the work in a proper condition by using material of a more permanent or lasting nature without increasing the efficiency or scope of the system, e.g., plastering in place of painting, rough stone masonry in place of dry stone packing, revetment to tank bunds at sites of breaches and to margins of rivers at places; where they are eroded, grouting surface of the aprons and revetments, lengthening of aprons and revetments to protect erosion noticed in beds and margins of rivers, canals and channels.
- iv. **Public Health & RWSS Engineering:** This includes rehabilitation of all water supply, sewerage, drainage works. Rehabilitation includes repairs to all structural components affected by natural calamities including replacement, if required, to restore the system to its original capacity. *It also includes replacement of materials expired after its service life for longer use.*

C. Repair for damages due to Natural Disaster:

Treatment of damages caused by floods, cyclones and other natural calamities. Such repairs are common to roads, embankment etc. however any other structure can also get damaged by the natural calamities for which emergent repair works are undertaken.

D. Operation:

In certain type of works operation of the facility are necessary. This work is also a maintenance activity and is required for Irrigation works, PHE works. Lift Irrigation works, power houses, etc.

3.4.12 Management of Repair and Maintenance Activities

- a. It is the responsibility of the Engineer-in-Charge, to indicate which of the repairs and maintenance work should be done annually and which are to be executed at longer intervals. At the beginning of the financial year, a condition review of the assets is conducted to identify works of Special Repairs and requirement of funds projected to higher office.
- b. It is the responsibility of the SE to issue necessary instructions for proper maintenance and operation or execution of different types maintenance repair of operation works in his circle. Where similar types of work exist in different circle, the CE should issue necessary instruction to bring uniformity in the maintenance and operation of various of public works.
- c. The sanctioned amount of Special Repairs is permitted to be carried forward up to 5 years wherever considered necessary.

3.4.13 Estimate for Building Maintenance

To facilitate the preparation of estimates for periodical, repairs, a standard MB should be kept in the office of each DO, showing the detailed measurements of each kind of work which is usually subject to renewal in each work under his charge.

The annual expenditure on ordinary repairs to Govt. buildings (both residential and non-residential), exclusive of Municipal taxes, should be limited to a minimum of 2.5 % percent of the present cost of building derived based on prevailing Plinth Area Rate; when this limit has to be exceeded in any exceptional case the sanction of the SE should be obtained. Such sanctions should be given for



recorded reasons. As regards special repairs no limit has been fixed with reference to the cost of any building. These estimates however should be carefully scrutinised and sanctioned by the competent authority as occasions arise.

In the cases of buildings maintained by the Department in charge of public works in special cases occasional repairs not provided for in the annual repairs estimate, may be executed on requisition.

Where municipal or other taxes on public building are payable by Govt., provision for such taxes should be made in the annual repair estimate.

In the case of any building the cost of the ordinary annual repairs (excluding municipal taxes) which is less than Rs. 25,000 the SE may prescribe subject, to revision from time to time a lump sum limited to Rs. 25,000 (plus the amount of the municipal taxes if any payable by Govt.) for any building to cover the cost of maintenance and within this amount expenditure will be permissible without any detailed estimate being prepared. Such lump sum should be fixed after consideration of the cost of maintenance in the past. If in any working year the estimated cost of maintenance is more than the permissible limit given above or if the lump sum sanctioned by the SE is exceeded, a detailed estimate must be prepared in accordance with the ordinary rules and be sanctioned by competent authority.

3.4.14 Estimate for Maintenance of Roads

The maintenance of road is very important from public utility point of view and economic considerations, and constitutes high priority for the State. The basic policy parameters in this regard aim at:

- a. Providing safe and comfortable riding quality to users and preventing deterioration of road assets of the State (safety of bridges being the first consideration);
- b. Providing sufficient funds, preferably dedicated funds, for road maintenance including road safety measures;
- c. Establishing mechanism for distribution of funds between ordinary maintenance, bridge maintenance and periodic maintenance of pavement and special repairs;
- d. Using a rational Pavement Management System (PMS) for optimization of maintenance strategy, prioritization of maintenance program, judicious allotment of funds, effective execution of works, their monitoring and control; (a similar approach for Bridge Management System to be followed in respect of maintenance of bridges);
- e. Appropriate procedures of inspection, checks and technical audit; and
- f. Keeping history sheet of maintenance (like, health chart) of every road, kilometer- wise and year-wise, in a suitable format, as also of all bridges.

3.4.15 Work Program for Roads Maintenance

- a. The CE in-charge of roads shall, after the rains in October every year, get the entire road length inspected at the Divisional level for identification of stretches requiring treatment and the nature thereof, and prepare a draft work program. This will comprise all repair



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works (including special repair of bridges) other than ordinary repairs. The CE, in consultation with Engineer- in-Chief, shall take following action in this regard:

- i. devise suitable proper proforma(s) as will bring out complete information regarding the rehabilitation/improvement proposals of the roads including bridges & culverts; and
 - ii. Issue detailed instructions regarding the method of preparing the work program. The work program shall be prepared in a professional manner, based on site conditions.
- b. The work program so prepared at the Divisional level shall be test checked by the concerned SE and scrutinised by the CE designated for the purpose. CE concerned shall carry out random check of selected works in every Circle to know/assess the parameters used in preparing the work program.
 - c. The work program shall be discussed at the Headquarter level, taking into account the observations of the inspections carried out at different levels, and modified as required. This shall be submitted (preferably by Feb 15) to the State Govt., indicating inter se priorities. The Administrative Secretary shall also hold a meeting in this regard (especially in view of the availability of funds) and submit the program to the competent authority for approval.
 - d. After receipt of approval, the work program shall be put into operation within the minimum possible time. CE concerned will be responsible for its proper implementation. Any changes made at the time of implementation shall be brought (preferably by March) to the notice of the State Govt., detailing the reasons for the departure.
 - e. As regards ordinary repairs, the respective DOs shall draw up their program and obtain approval of the SEs before the closure of the previous financial year. The implementation of the program shall be continuously monitored at Circle and Headquarter levels.

3.4.16 Management of Maintenance Funds

- a. As soon as the allocation of repair grant is received, the SE should distribute it to the various Divisions in his circle separately under (i) repairs or maintenance, (ii) special repairs, (iii) operation, and (iv) emergent protection works (in case of flood embankments). The DO should attach a provision slip in the prescribed form to each estimate sanctioned by him or submitted for sanction. The distribution of funds to SDOs may be made based on the nature of estimates sanctioned in preceding three years.
- b. In respect of allotment for tools and plant, the SE should distribute the allotment to each DO under his circle separately for new supply and repairs and carriages. Provision slips should also be attached by the DO to tools and plant estimates.
- c. In no case the amount of estimates sanctioned at various levels shall exceed the amount of allotment placed at the disposal of a DO.
- d. Repairs estimates should provide for the removal of all rubbish which may have accumulated, filling in unsightly pits round the buildings, all work charged establishment employed specially on the work, watchmen sanctioned by competent authority for the care of vacant buildings, guarding works, working sluices etc. should be shown in the estimate under separate subheads.



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- e. The sanction to an ordinary repair estimate lapses on the last day of the working year. In case, inconvenience would arise in any exceptional case from the stoppage of the work on the fixed date, the repairs may be carried out up to completion. The expenditure after that date shall be treated as expenditure against a fresh repair estimate for the next working year.
- f. Estimates for special repairs remain current till the completion of the repairs in the same manner as estimates for original works.
- g. Except in case of buildings no scale has been prescribed for annual expenditure on maintenance of roads, flood embankments, dams, main canal and branches, distributaries and minors, pumping station, PHE work, lift irrigation works and electricity works etc. As the scale of annual expenditure in respect of the various type of public works will vary, ~~from work to work, the State Govt.~~ each department will fix the limit for all types of public works, for their routine maintenance & periodic repair ~~in consultation with the concerned CE.~~
- h. In case of urgency, the SE may authorize the commencement of periodical repairs in anticipation of the formal sanction to the estimate but in such cases an approximate sum must be fixed to the expenditure of which sanction is provisionally given and the DO will be responsible that the regular estimate is submitted at the earliest possible date.
- i. In the case of all descriptions of work, for the renewal of which any specific period of time has been fixed, the estimate for its repairs should show the date when such item of work was last executed.
- j. Except in the case of lump sum estimates for ordinary annual repairs, the annual expenditure on ordinary repairs to Govt. buildings (both residential and non-residential), exclusive of municipal taxes, should be limited to a 2.5 % percent of the cost worked out on the basis of prevailing plinth area rates; when this limit has to be exceeded in any exceptional case of the sanction of the SE should be obtained. Such sanction should not be accorded except for reasons to be specially recorded.
- k. As regards special repairs to buildings on limit has been fixed with reference to the capital cost of any building. Such estimates should be carefully scrutinised and sanctioned by the competent authority as occasion arises.
- l. In case of any building the cost of annual repair of which is less than Rs 25,000 (subject to revision from time to time) the SE may prescribe expenditure without preparation of estimate.
- m. In case of thatched buildings the limit of 2.5% may be relaxed provided, the annual expenditure on repair to such buildings does not exceed the average for the past five years.

3.4.17 Estimate for Additions and Alternations

Normally all cases of additions and alteration should be carried out after preparation of detailed drawings. While submitting estimates containing the proposals for additions and alterations, the fact that the concurrence of the client/occupant has been obtained should be stated explicitly.



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No work of addition/alteration which involves structural changes in the work, whether buildings or roads, shall be carried out except with the approval of concerned Planning Unit.

While submitting estimates for additions and alterations to the work owned by the Govt., capital cost thereof should invariably be furnished in the forwarding letter along with the following information:

- a. Complete justification for each item of additions and alterations desired by the requisitioning authority, with comment on the necessity or otherwise thereof.
- b. Whether such work has already been carried out in any other work/project?
- c. Whether acceptance of the proposal is likely to have repercussions?
- d. Whether the proposal has the approval of the competent authority?
- e. Information regarding availability of funds to finance the proposal.

Where a portion of the work is required to be demolished, the estimate should provide for the cost of dismantling. Credit for the value of dismantled materials should be given to the estimate. Report of the estimate should contain proposals for utilizing the useful materials obtained from the dismantled material, and for disposal of unserviceable items.

3.4.18 Estimate for Furniture

Estimates for interior decoration, furniture and furnishing shall be prepared based on client's requirements.

The cost of furniture in cases of OWD offices will be chargeable to the contingent grant of the office of CEs and SEs, Divisional and Sub-Divisional Offices as the case may be.

The Superintendent/Head-Clerk in the various offices, or the official so designated for the purpose, shall maintain the numerical account of the office furniture in their office. Annual physical verification shall be conducted by an independent officer at least of the level of AE or Section Officer, who shall record the required certificates.

The supply of and repairs to furniture for any of the Govt. Inspection Bungalows in charge of the OWD, Inspection Bungalows shall be carried out by the OWD. The first supply of such furniture should be charged to the estimate of the building for which the same is required.

The furniture in the Governor House specified and entitled officers' bungalows and residences and Guest Houses at stations outside Bhubaneswar will be provided and maintained by the OWD.

3.4.19 Estimate for Purchase of Buildings

In case of purchase of built up accommodation to house the offices of the State Govt., a separate estimate is required to be prepared after confirming the structural soundness of the building, and after a survey and valuation report of the EE is submitted.

The maintenance of such buildings will normally be carried out on the same plinth area rates/percentages basis as laid down in case of other State Govt. buildings.

3.4.20 Estimate for Petty Works

In case of new petty works, which do not come under ordinary repairs, a requisition for the same shall be obtained from the client Department.



On the requisition thus received, the DO, or an AE/JE empowered by him to act in such cases, will record his opinion as to what work should be done, and give on the face of the requisition a rough estimate in lump sum or otherwise of the probable cost of the work asked for.

3.4.21 Supplementary Estimate

Any development work in the project that is thought necessary while a work is in progress, and which is not fairly contingent on the proper execution of the work as first sanctioned, may be covered by a supplementary estimate. This estimate must be accompanied by a full report of the circumstances that render it necessary. The abstract must show the amount of the original estimate and the total of the sanction required including the supplementary amount.

3.4.22 Revised Estimate

When an excess beyond permissible variation over the sanctioned estimate is foreseen, and there is likely to be unavoidable delay in the preparation of a revised estimate, an immediate report of the circumstances should be made to the authority whose sanction will be ultimately required.

A revised estimate must be submitted when the sanctioned original work estimate is likely to be exceeded by more than 10% either due to the rates found insufficient to carry out the work or due to material development or deviations have necessitated revised A/A from or any other cause. On repairs estimates no revised sanction is permissible.

When there is likelihood of unavoidable delay in the preparation of a revised estimate, an immediate report should be made to the authority whose sanction would be ultimately required to the revised estimate.

When a revised estimate is submitted it must be accompanied by a statement comparing it with the latest existing sanction of the competent authority.

3.4.23 Utilisation of Completion Report as a Revised Estimate

When excess occur at such an advanced period in the construction of a work as to render the submission of a revised estimate purposeless, the excesses, if beyond the DO to pass may be explained in the completion report. But when excess of more than 10% is shown on a completion report it should be explained why a revised estimate was not submitted before the work was completed and the SE should report whether the probability of an excess occurring was reported to him during progress of the work on a work slip.

3.5 Contract

3.5.1 General

When two or more persons have a common intention communicated to each other to create some obligation between them, there is said to be an agreement. An agreement which is enforceable by law is a contract. All Contracts in India are to be within the framework of Indian Contract Act, 1872.

In Works Department, generally all major or minor works which cannot be done departmentally are done through contract. The contract should be executed either on the basis of tender or on award of work without calling tender. In either case orders of the competent authority is necessary before entering into any contract.



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The contract includes mere purchase of materials or stores but also covers **services like supervision and other technical consultancy and also** supply of any materials or articles which usually involves manufacture processing of excavation before it is ready for delivery, such as bricks, chips, metal etc., which may be procured by entering into contract for procurement of such materials.

Where materials or stores are not purchased on contract, they are governed by the financial rules in force. (Procurement Manual may be referred for details)

The public works officers empowered to sign contracts on behalf of Governor of Odisha will ordinarily sign, the contract in one of the standard forms indicated in **para 3.5.3** below. In case where the execution of certain work demands use of a form other than these standard forms for the contract, the same can be adopted with specific approval of Govt. in each case.

3.5.2 General Features of the Contract

- a. The terms of a contract must be precise and definite and there must be no room for ambiguity or misinterpretation therein.
- b. The terms of a contract once entered into should not be materially varied without the prior consent of the Govt.
- c. No contract involving an uncertain or indefinite liability or any condition of an unusual character should be entered into without the prior consent of the finance Department
- d. No contract may be entered into by Govt. servants who have not been empowered to do so. Contracts regarding which there are no definite rules or orders of Govt. as to conditions, forms etc. should be entered into only after obtaining the sanction of Govt. who will take necessary legal and financial advice in each case.
- e. Even in cases where a formal written contract is not made, no order for supplies etc. should be placed without at least a written agreement as to the price.
- f. Provision must be made in contracts for safeguarding Govt. property entrusted to a contractor.
- g. Provision should be made in every contract to enable Govt. to revoke it with due notice.
- h. A clause to the effect that the contractor shall be responsible for compensation to any of his workmen under the Workmen's Compensation Act should invariably be inserted in the agreement.

3.5.3 Types of Contract for Works

Following are the common types of Contract:

A. Item Rate Contract

In item rate tender, contractors are required to quote rates for Individual item of work on the basis of schedule of quantities. This form ensures detailed analysis of costs of every item by the contractor and as such is more scientific. Officers in charge of Works Department have to work out the schedule of quantities against each item of work and the contractors have to work out the rates against each item.



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In Item Rate Contract, the bid document only indicates the specifications and quantities of the item proposed for execution by the Department, and the contractor is expected to quote his rate normally based on his assessment of the market conditions and work out the total contract value. Reasonable variations in quantities can be allowed during execution in terms of the contract. The contractor is paid on the basis of measurement of works executed at the rates approved in the letter of acceptance (LOA). This type of contract is suitable for all types of major works like buildings, bridges, culverts, roads, sewer lines, irrigation works, and carries the least risk of uncertainty for the parties.

B. Percentage Rate Contract

In percentage rate contracts the schedule of quantities has estimated rate of each item and amount thereto. The Contractor has to quote percentage 'above' or 'below' the estimated cost, both in figures and words, in the prescribed format appended to the tender document.

Since, in case of percentage rate tenders only percentage quoted are to be considered, the Contractor should accurately fill in figures and words their quoted percentage so that, there is no discrepancy. If any discrepancy is found in the percentage quotes in words and figures, then the percentage quoted by the Contractor in words shall be taken as correct. If any discrepancy is found in the percentage quoted in percentage excess/less and total rate quoted by the Contractor than percentage will be taken as correct. The percentage quoted in the tender without mentioning excess or less and not supported with the corresponding amount will be treated as excess. Where the contractor has omitted to quote the rates either in figure and words, the Officer opening the tender should record the omission. ~~There may be provision for payment of incentive for completion of work before time stipulated in the contract. Such incentive shall be as per provision of Standard Bidding Document.~~

This type of contracts are suitable for small and routine types of original works for which estimates can be made based on available schedule of rates and all repair works.

Bills for percentage rate tenders shall be prepared at the estimated rates for individual items only and the percentage excess or less shall be added or subtracted from the gross amount of the bill.

This may not be applicable to the works funded by World Bank and other external agencies, in which case their guidelines shall be followed.

C. Lump sum Contract

In the lump sum contract, the contractor agrees to execute a complete work with all its contingencies in accordance with the drawings, designs and specifications for a fixed sum.

The contractor shall be paid from time to time as per the schedule specified in the contract or the full amount on completion of the work. The billing schedule shall commensurate with the actual work done, and the risk of front-loading strictly guarded against. A few other features of this system of contract are:

- i. This contract is eminently suitable for stereotype/repetitive residential buildings or other structures for which standard drawings are normally available. It is also suitable for bridge works, chimneys, bins/silos, overhead tanks, etc. whether on Department's design or that of



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the contractor. In the latter case, the Department shall spell out the requirements in detail to enable the contractor to prepare his designs and drawings accordingly, and submit them to the employer for check and approval before construction;

- ii. Detailed measurements of work done in a lump sum contract are not required to be recorded, except in respect of additions and omissions. No reference is made in the contract to the departmental estimate of the work, prevailing SOR or the quantities of work to be done. Payment of additions and omissions is regulated by prevailing SOR as agreed upon while approving the tender or the rates.

D. Contract for Carriage of Material

This is used for carriage of materials on long term basis and not meant for isolated carriage of materials.

E. Turnkey Contract (EPC Contract)

In this type of contract, the employer either directly or through a Consultant specifies the detailed project requirements and standards of performance for inviting bids. The contractor or the consortium submits an all-in-one turnkey bid, which is for the provision of the whole of the work including its survey and investigation, design, engineering, construction, supply and installation of equipment and commissioning. If required, maintenance for a limited period may also be entrusted to the same contractor. EPC (Engineering, Procurement and Construction) contract is essentially in the nature of a turnkey project. This type of contract saves on coordination works among planning, designing and execution teams of the project and is good for time bound completion of work if the work is assigned to competent agency.

The building projects costing more than Rs. 25 Cr are eligible for execution on turnkey basis. A technical committee in the chairmanship of EIC (Civil), Odisha, Bhubaneswar/CE (Building), Odisha, Bhubaneswar will be formed to consider all proposals before recommendation of turnkey projects for Govt. approval.

F. Consultancy Contract

Consultants are now being appointed by Engg. departments in-charge of public works for outsourced services. This is required to be done to supplement the capacity of the govt. departments. A detailed guidelines for engagement of consultants are given in annexure 3.2 of the OPWD manual. The Standard Bidding Documents for services shall be used for calling bids for appointment of consulting agency. The delegation of powers to sanction expenditure and approval of engagement of consultants are given in Annexure 6.1B item no. 9.

G. Contract for Procurement of Goods

This is a contract for Procurement of Goods for public purposes. A detailed guidelines for Procurement of Goods are given in annexure 3.3 of the OPWD manual. The Standard Bidding Documents for services shall be used for calling bids for Procurement of Goods. The delegation of powers to sanction expenditure and approval of engagement of consultant are given under item no. 10 of Annexure 6.1B.



H. Work order (without call of tenders)

This form (K-2) may normally be used for single works costing Rs. 50,000 and below to be executed without calling of tenders. The description of items should be strictly according to the SOR and the rates for various items of work should not exceed the rate entered in the SOR.

In emergent cases, requiring intensive employment of labour, if the interest of work so demands, contracts for work may be given without calling for tenders, provided departmental execution by engagement of labour on Muster Roll (MR) basis is not found practicable. The precise nature of emergency should be recorded by the DO in writing before dispensing with call of tender. Tenders may dispense with in the following cases:

- i. Cases of exceptional urgency like relief works, flood damage repairs, closure of breaches in embankments and roads etc. when it is not possible in the interest of speedy execution of works to award contracts even by short tender notice.
- ii. Other cases of exceptional urgency when award of contracts by invitation of tenders is likely to involve delays which will be against the public interest.
- iii. Cases where tenders have not been received in spite of two or more notices.
- iv. When rates offered by tenders are considered unduly high in comparison with the estimated rates.

The DOs shall furnish a monthly return to the SE by the 10th of each month indicating the works taken up without tender and the rates accepted by him. The S.E. will scrutinise the return to see that work orders have been issued only in emergent cases and the rates allowed are in order.

When it is decided to award works without calling for tender, in any of the circumstances stated in above, the following conditions shall be satisfied:

- i. The rates of execution for different items of work shall not in any case exceed the current SOR.
- ii. As far as possible, contract will be settled at rates lower than the current SOR.

Note: For the purpose of complying with this condition, the Engineer-in-charge should display a notice in the Notice Board of his office inviting quotations for the work question and allow at least 48 hours' time for receipt of quotations from the available contractors and job-workers. The lowest rates thus received should be accepted. In case there is problem in accepting the lowest quotation the same should be referred to the next higher authority for a decision.

- iii. Contract shall ordinarily be given to registered contractors of the OPWD, Persons not registered as contractors may be awarded contracts only when registered contractors are not available. In such cases steps should be taken to register them as Contractors of Works Department soon after the award of work.
- iv. Percentage rate forms of contract should be adopted in all cases and the quantity and the rate of each item specified in the contract.
- v. Specific provision shall be made in the contract for imposition of penalty upto 5 percent of the value of work in the event of failure to complete it within the stipulated time.



- vi. Contract for works estimated to cost less than Rs. 50,000 may be given out without invitation of open tenders at the discretion of the DOs to the best advantage of Govt. In the latter case, the rates allowed should not be in excess of the current SOR of the Department. He should also record reasons for not inviting tenders. For works costing up to Rs. 50,000 the time limit for completion should not ordinarily be more than one month. The time limit for work costing more than Rs. 50,000 or any emergent work should be suitably decided keeping urgency/emergency in view.
- vii. The advertisement charges relating to a particular work may be debited to 'work contingency. If the advertisement is for more than one work the expenditure on advertisement should be charged to 'office contingency'.
- viii. Normally, the estimate may be split up to bring particular portion of work within the powers delegated for awards of work without calling for tenders as per demand of the situation. In case where splitting up of work is in the public interest for smooth and expeditious execution of the work, the authority for such splitting up work costing upto Rs. 25 lakhs will be exercised by the CE and for works of more than Rs. 25 lakhs by the Administrative Department. SE can a split up plan work upto Rs. 5 lakhs while EE can a split up non-plan works upto Rs. 5 lakhs.
- ix. The sum total of all work orders issued against any particular estimate shall not exceed the financial limit up to which work may be awarded by a competent authority without calling for tenders.

Settlement of rates by calling for quotation is not be considered as competitive and award of works on the basis of such quotations is deemed as award of contracts without calling for tenders.

Financial powers of different officers of Works Department to award works without calling for tenders shall be as given under item no. 11 of **Annexure 6.1B**.

I. Contract for Supply of Materials

This form should normally be used for the purchase of such materials for which specifications and rates have been stipulated by the Department As indicated in the form the contractors are required to quote rates for supply of the required quantity of materials such as bricks, chips and metal etc.

The standard bidding document (SBD) for procurement of goods will be used for this purpose. For other details procurement manual may be referred.

3.5.4 Tender Documents (Notice Inviting Tender)

A. Preparatory works for approval of tender documents (NIT)

- i. Availability of clear, encumbrance free site;
- ii. Availability of funds;
- iii. In case building approval of building plans by local body wherever required;
- iv. Availability of structural drawings and
- v. Layout plan of services for building work.



Tenders for work should be invited only after a detailed estimate Showing quantities, rates and amounts of various items of works and also specifications to be adopted are prepared and sanctioned by competent, authority.

In case of urgent works where there is no time to prepare a complete estimate, rough quantities and rates for the main items of that part of the work for which tenders are proposed to be invited and which cover a major part of the cost of the work should be worked out and approval of the next superior authority obtained, before tenders are invited.

The tender documents should be as per Standard Bidding Document and should comprise of (1) the notice inviting tenders in the prescribed form, (2) the schedule of quantities of works, (3) a complete specifications of the work to be done, (4) a set of complete drawings and (5) the form of tenders be used along with a set of special conditions. The method of measurement, quarries, places where Departmental materials are available should be clearly indicated.

All notices calling for tenders should be in prescribed form and be serially numbered, a proper register being maintained for the purpose. Those should be only issued after the authority competent to accept the tender has approved the tender documents. The notice calling for tenders should be carefully prepared; the use of symbol 0/0 and 0/00 in the schedule of quantities accompanying the tender notice is prohibited the works per thousand and per hundred must be written.

The notice inviting tenders should stipulate reasonable time for completion of work. In case of an urgent work the period of completion may be certified by the authority competent to approve the notice inviting tenders, but in no case should the period be unreasonable.

The notice inviting tenders and all other connected papers are very important documents on which subsequent agreements are based. It is, therefore, necessary, that each page and the correction slips and other corrections and modifications made in the tender papers are signed by the competent authority, in token of approval so that all chances of tampering with documents are avoided. At least two persons should authenticate preparation of tender document with date and time stamp. One copy shall be kept as master copy prior to issue of tender notice.

The Officer approving the tender documents should see that there are no ambiguities in the tender papers. 'The officer inviting tenders will be responsible for seeing that all forms issued to tenderers whether printed or otherwise are clear, legible and as per-approved tender documents.

All tenderers should be asked to give a declaration about the names of their relatives employed in the particular Department in charge of execution of works along with their tenders.

B. Approval of Notice Inviting Tender

Before a work is given out on contract, the DO must have 'tender documents' i.e. Notice Inviting Tender (NIT) duly approved by the authority who is competent to accept the tender. The tender document should include:

- i. the notice inviting tender;
- ii. general information of the Project;
- iii. the standard form of tender to be used along with a set of special conditions;



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- iv. a complete set of drawings showing the general dimensions of the proposed work, and so far as necessary, details of the various parts;
- v. complete specifications of work to be done and of the materials to be used, unless reference can be made to some standard specifications;
- vi. a schedule of quantities of the various description of work.

If the amount of the tender is beyond the DO's power of acceptance, he should, before publicly inviting tenders, submit the tender documents to the SE for his approval together with a copy of the draft advertisement inviting tenders and the form in which tenders are to be submitted. If the amount of tender is likely to exceed the SE's power of acceptance, that officer should in a like manner, submit the tender documents to the CE for approval.

If the tender includes special condition(s) which is not within the CE's power of acceptance, prior approval of Govt. in the administrative Department must be obtained to the acceptance of such special condition(s).

Wherever, it is not possible to execute contract deeds on one or the other of the approved forms, the Law Department should be specifically consulted through the administrative Department. Similarly, Law Department should be consulted for addition, deletion or modification in the standard forms of contract.

At least two officers shall authenticate preparation of tender documents with date and time stamp on one copy to be kept in sealed cover as master copy prior to issue to tender notice.

C. Precautions while preparing Notice Inviting Tender

- i. In case of lump-sum tenders, the DO should ensure that the detailed drawings and specifications, duly authenticated by the competent authority, form part of the Notice Inviting Tender, and that the cost of various items forming part of the sanctioned estimate of the work is correctly assessed with reference to the relevant SOR, and in the case of non-schedule items, on the basis supported by detailed analysis thereof the duly sanctioned by the competent authority.
- ii. Authentication of all corrections: The NIT papers are very important documents, on which call of tenders and subsequent agreements with the contractors are based. It is, therefore, necessary that each page and the correction slips, as well as other corrections and modifications made in the NIT papers, are numbered and signed by the competent authority in token of approval so that chances of tampering with such documents are avoided. Mere approval on forwarding letters would not serve the purpose. All corrections in the NIT and all the pages of the NIT approved by the SE and CE should be attested by EE. The documents must be properly sealed to prevent any tampering.
- iii. All the pages/forms forming part of NIT, whether printed or otherwise, should be clear, legible and unambiguous. The schedule of quantities attached to the tender documents must also contain a column for the 'Amount' after the column for 'Rates'. Care should be taken in the preparation of the schedule of quantities that there is adequate space between the items to enable the contractor to quote the rates without being cramped for space. The contractor must calculate the amount of each item, and enter it in the column. The



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contractor must also add these amounts by sub-heads, and give a grand total in words and figures at the end of the schedule.

- iv. The NIT for all works for which tenders are invited on percentage rate basis should provide that the contractor should quote the percentage 'above' or 'below' to two places of decimal only.
- v. The time period for completion of work should be reasonably decided by NIT approving authority, keeping in view the quantum of work, requirement of user Department, geographical conditions of the site and other constraints.
- vi. The notice inviting tender should also stipulate minimum requirement of technical staff for the work. Requirement of technical staff should be decided by NIT approving authority.

D. Miscellaneous important points before Calling Tenders

- i. The advertisement charges relating exclusively to a particular work may be debited to the head 'works contingencies' of the concerned work; when such charges are common to several works the same may, be debited to 'office expenses'.
- ii. Unless otherwise authorized by competent authority no tender shall be invited and accepted for a work to which A/A and TS has not been accorded.

E. Pre-qualification/ Post-qualification for Tender

~~Single bid of two envelop one for technical qualification and another for financial bid shall be resorted for all works above Rs. 5 Cr. (Five Crores). For works below Rs. 5 Cr. tender will be call from the enlisted contractors of appropriate class. Works above Rs. 50 Cr shall be carried out through EPC. Prequalification of tender should be resorted to when cost of the works is more than Rs. 20 crores.~~

~~Tender for the works costing above Rs.100 lakhs and up to Rs 20 Cr should be invited in two envelope system one envelope containing technical bid and other containing financial bid, respective envelopes should clearly be super scribed as 'technical bid' and 'financial bid'.~~

~~For complete qualification process Procurement Manual for works may be referred.~~

3.5.5 Call of Tenders

A. General

Tenders should always be sealed and invited in the most open and public manner possible, whether by advertisement in the Odisha Gazette or local newspapers or by notice in English and in vernacular posted in public places. The bidders should have free access to the tender documents. The notice should in all cases state:

- i. The place where and the time when the tender documents can be seen and the blank forms of tenders obtained; and also the amount, if any, to be paid for such forms of tender.
- ii. The place where, and the date on which and the time up to which tenders are to be submitted and are to be opened.
- iii. The amount & mode of earnest money to accompany the tender and the amount and nature of the security deposit required in the case of the accepted tender.



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- iv. The authority with whom the acceptance of the tender will rest. His authority should always be reserved to reject any and or all of the tenders so received without assignment of any reason.

B. Invitation of Tenders

- i. Publication of tender notice as well as posting of bid documents for works above Rs.10 lac on the State Govt.'s Portal (www.Odisha.Gov.in) shall be mandatory. Pending availability of computers & communication links, the tender notices prepared on electronic form may be made available to the portal group off line through floppy disk or compact disk.
- ii. The EIC/CEs of the Department may monitor the publication of tenders on the State Portal on a weekly basis.
- iii. All the engineering department vis-à-vis offices from Division levels to office of CEs shall monitor the timely publication and posting of tenders on the State Portal through their nodal officers.
- iv. Tender shall be invited as well as opened by the officer competent to accept the same.
- v. Sale and receipt of tender shall be concurrent and coterminous.
- vi. The EEs shall keep the police informed about any threats to any official or contractor or possible interference during tendering process. Tendering process shall be cancelled on receipt of indication of cartelisation or tender fixing subject to valid proof of the same.

C. Eligibility Criteria and Conditions in Tender

- i. Intending purchasers are not required to produce any documents Viz. Copy of Registration, Valid VAT Clearance Certificate etc. at the time of purchase of tender documents which would be required for verification purpose in the latter stage. Furnishing of such documents may be made mandatory along with the tender documents otherwise his/her bid shall be declared as non-responsive and thus liable for rejection.
- ii. Cash receipt against purchase of tender paper shall be granted without mentioning the name of the purchases/supplier/contractor but with mention of the work for which purchase has been made.
- iii. The contractors are required to furnish evidence of ownership of principal machineries/equipment's for only those machineries/equipment's asked for in the tender documents.
- iv. In case the contractors executing several works he is required to furnish a time schedule for movement of equipment/machinery from one site to work site when work is to be executed.
- v. The contractor shall furnish ownership documents for those machineries which he is planning to deploy for the tendered work if these are not engaged or produce certificate from the EE under whom these are deployed at the time of tendering as to the period by which these machines are likely to be released from the present contract. Certificate from the EE shall not be more than 90 days old on the last date of receipt of tender. In case the contractor propose to engage machineries and equipment's as asked for in the tender document, owned or hired but deployed outside the State, he/she may be required to



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furnish additional 1% EMD/Bid security which will stand forfeited in case the contractor fails to mobilise the machineries with in stipulated time as per the tender document.

- vi. The contractor intending to hire/lease equipment's/machineries are required to furnish proof of ownership from the company/person providing equipment/machineries on hire/lease along with contracts/agreements/lease deed and duration of such contract.

D. Financial Limit for Publication of Tender in press & the Website of State Govt.

The notice inviting tender for works costing up to 2 Lac should be circulated among the local offices and need not be given to press. Tenders costing more than Rs. 2 lac and upto Rs.10 lac shall be published in two local Odia newspapers, above Rs.10 lac and upto Rs. 100 lac shall be published in one local English daily and two local Odia dailies out of which one should be leading Odia daily. Tender for works costing more than Rs. 100 lac shall be published in one English national newspaper in addition to one Odia daily. Besides above, tenders for works costing more than Rs.10 lac shall also be posted in the web-site of the State Government and subjected to e-tendering. Tenders where special skill of experience is required for execution of work or where the requisite material for execution is not locally available, the same may be published in the newspaper and posted in the web-site at the discretion of the CE/Engineer in-Chief.

E. Posting of Award of Work in Website of State Govt.

Award of tender for the works costing Rs.20 lac and above are to be posted on the web-site of State Govt. with information to Director, Printing, Stationary and Publication, Odisha Cuttack for publication in gazette.

F. Time between Publication of Notice and Receipt of Tender

- i. The time limit between issue of tender notice and sale, receipt ordinarily allowed shall be as given below. This period may however be varied at the discretion of the officer competent to accept the tender in case of urgency. The tender document should be kept ready prior to date of publication/issue of tender notice, so that it will be made available for sale immediately after publication in News Papers.
 - ii.
 - a. Minimum 10 days and maximum 21 days in case of works, the cost of which does not exceed Rs. 50 lakhs.
 - b. Minimum 15 days and maximum 28 days in case of works, the cost of which is more than Rs. 50 lakhs and upto Rs. 300 lakhs
 - c. Minimum 21 days and maximum 30 days in case of works, the cost of which is more than Rs.300 lakhs
 - d. In case of very large and complex projects, minimum 30 days but not more than 45 days.
- Note:** If more than the maximum prescribed time is allowed, the concerned authority will record the reason in writing.
- iii. If for any reasons tenders cannot be opened on the due date, intending bidders should be informed at the earliest opportunity about the new date and time for the opening of tenders.



- iv. Tender documents should be prepared and kept ready for sale to the contractors before the notice is actually sent to the press or is pasted in the notice board, and every contractor desiring to tender should be asked to make a written application. It is the responsibility of the officer inviting tenders to see that the tender documents are made available to the contractors as soon as the application is made with the cost of tender papers.

G. Scale of Charges for Tender Forms

- i. The following will be the scale of charges for tender forms to be sold to contractors
- | | |
|---|------------|
| a. Works costing upto Rs. 2 lac | Rs. 500 |
| b. Works costing over Rs. 2 lac
but below Rs. 10 lac | Rs. 1000 |
| c. Works costing over Rs. 10 lac
but below Rs. 100 lac | Rs. 5,000 |
| d. Works costing Rs. 100 lac & upto 10 Cr | Rs. 10,000 |
| e. Works costing Rs 10 Cr & up to Rs 100 Cr. | Rs. 25,000 |
| f. Works costing Rs 100 Cr and above | Rs. 50,000 |
- ii. Authority competent to accept tenders have got the discretion to add to the price of tender forms mentioned above towards additional cost of drawing to be supplied along with the tender documents depending on the labour actually involved for their preparation.
- iii. In case of re-tender of a work due to any reason, the tender forms will also be sold at above mentioned price.
- iv. Where a request is received from a contractor for the supply of a duplicate set of tender documents, the same may be supplied to him at full cost of the original copy to the time of issue of original papers if available. The copy to be supplied should be stamped duplicate so that it may not get mixed up with original tender documents.
- v. When it is not practicable to supply plans and drawings along with each set of tender documents to the contractors for the purpose of tendering, plans and drawings should be displayed on notice board in such a manner that they can be seen by the intending tenders without causing damage to the plans.
- a. All tender documents should be priced as indicated above and the price given on the body of tender documents should be kept in charge of the estimate in the Divisional Offices and the Sub-Divisional Clerk in the Sub-divisional Offices. In respect of Circle Offices and CE's Office the same should be kept with senior most Estimator and Drawing Superintendent respectively.
- b. All tender forms received should be entered in register of tenders received together with the number and date of letter advising despatch with which they are received.
- c. The Register should contain chronological record of the issue of the tender forms showing the name of the person to, whom it is issued, the number of forms issued and the amount received.



- d. The register of tender forms should be treated as a subsidiary cash book on its page should be numbered and certified.
- vi. a. With a view to avoid the possibility of tampering with the original tenders during the interval, they are in the office for the preparation of comparative statement the officer opening the tender should invariably date and initial all the documents, attest all corrections, number them in red ink and sign each page of the schedule accompanying the tender, he should also record in red ink at the end of each page the number of such corrections. The competent authority may reject a tender containing corrections and mutilation.
- b. Any ambiguities in the rates quoted by the tenders in words or figures, must be clearly indicated on each page of the schedule attached to the tender to, which it concerns.
- c. In case where the contractor has quoted rates in rupees and no paise is mentioned the word only should invariably be added by the officer opening the tenders, after the words rupees and the corrections: should be initially and suitable remarks added at the end.
- d. Where the contractors have omitted to quote the rates in figures or in words, the omissions should be recorded by the officer opening the tender or each page of schedule.
- e. It should be seen that the contractor quotes entire rates in words including paise to avoid chance of tempering and if the contractor fails to do so, the officer concerned should himself write the rates in words at the time of opening of the tenders.
- vii. The tenders should be encouraged to be present at the time of opening the tenders, Lump sum tenders should be read out to the tenders as far as possible. In the case of item rates tenders, the total amount as worked out by the different tenders may be read out if required by the tender's present. If required by the contractors or their representatives present the rates in respect of important items of work may be read out.
- viii. The Divisional Accountant should be present at the time of opening of tenders if he is in the office. If in any case this is not practicable, the reasons for his absence should be recorded under the dated initials of the officer opening the Divisional Accountant, should also see and sign in case he was absent from office on the prescribed date immediately he returns to duty.

H. Sealing of Bids and Tender Boxes (other than e-tendering)

- i. The tender boxes shall be so placed that the tenders are dropped in to such boxes without revealing to which box the tender was dropped. The SE of the Circle shall decide about the uniform size, unique number code and suitable colour schemes for the tender boxes pertaining to his office as well as for the Division offices under his jurisdiction stocks as well as seal in the boxes should be clearly visible.
- ii. In order to ensure that the envelopes are properly sealed, the contractors can seal them with superglue and also add tamper proof tapes as additional precaution.
- iii. Sealing of the tender boxes after closure of the delivery time may be carried out by tamperproof standard sealing tape.



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- iv. On the date of closure of the receipt of tender, the opening in boxes, through which the tenders are inserted, are to be sealed using tamper proof security sealing tapes. (The concerned Department shall procure standard sealing tapes with Govt. logo printed and supply to concerned offices).

The tender boxes should display unique identity of each box at the tender receipt locations and details of the tenders to be inserted in such box as well as the last date for the same so that there is no accidental or inadvertent mix up.

I. Receipt and Opening of Tender

- i. The tender documents will be sold to the intending purchaser/Contractor as the same time during selling days in the office of the Division, Sub-Divisions under the Division, concerned Circle, adjacent Divisions, Office of the concerned EIC/CE. Similarly, the tenders are required to be received from the tenders in the above offices during the same time on the days on submission. But opening of the Bids shall be carried out in the office of the officer inviting the tender who is also the tender accepting authority.
- ii. Contractors are not required to write their name on the outer cover containing the Bid documents. They are only required to write the name of the work and authority who has issued the tenders. The tender submitted in the wrong box shall not be taken in to consideration.
- iii. The tender shall be received and opened at the time and place indicated in the notice calling for tenders in the presence of such intending tenders or their authorized agents as they may choose to attend. All tenders received for the same work should be opened personally by the DO or other competent officer who has called for the tender or has been authorized to receive the tenders according to the tender notice. The officer opening the tenders should record total number of tenders received and opened by him in prescribed form called 'tender opening register'. For lump-sum tenders, he should also record percentage of lump-sum amount quoted by each tender against their name. For item rates however, only the list of tenders will be recorded. While opening of tenders at the division level, apart from bidders or their representative, the concerned EE, Divisional Accounts Officer/Divisional Accountant and the concerned Estimator are to be present.
- iv. The officer opening, tenders should invariably date and initial all corrections over writing and correction in the schedule of quantities. The officers should also date and initial all the pages of the schedule of quantities irrespective of whether they contain or do not, contain any correction, overwriting, etc. and all other pages containing additions by the contractor to the original tender papers. All present should initial in the tender opening register in token of their presence.

[The EE/Divisional Accounts Officer/Divisional Accountant and the concerned Estimator should initial in each page of the tender papers as token of their presence.]

- v. The officer concerned should mark all corrections and overwriting, and number them in red ink, the number of such corrections and over writings must be clearly mentioned at the end of each page of the schedule attached to the tender paper and properly attested with date.



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The correction and overwriting should be allotted separate numbers i.e., correction should start from c1, c2, c3, etc., and overwriting should similarly start separately from o1, o2, o3, etc. Ambiguities in rates quoted by tenders in words or figures must be clearly indicated on each page of the schedule attached to the tender concerned.

- vi. Where the contractors have omitted to quote the rates either in figure or in words, the omission should be recorded by the officer opening the tender on each page of the schedule. In the case of any discrepancy between the rates in figures and words, the rates quoted in words may be taken as correct.

J. Earnest Money

Where according to the notice calling for tenders, bidders are required to deposit earnest money the same shall be done as specified in SBD failing which the tender is liable to be rejected.

The amount of earnest money to be deposited should be according to the prescribed rules in force, and with reference to the estimated cost put to tender.

K. Comparative Statement

A complete comparative statement in the prescribed form of all tenders received in response to the notice should be drawn up in the office of the officer calling for tenders and the following instructions should be carefully noted.

- i. The officers opening the tenders should prepare a comparative statement of tenders received in the prescribed form and should sign the same. The tenders of their authorised agents present at the time of opening the tenders should also be asked to sign the statement.
- ii. Care should be taken in preparing and scrutinising the comparative statements of tenders to guard against arithmetical and other mistakes. Failure to do this, may result in the work being awarded to a contractor who has not given the lowest acceptable tender.
- iii. All special conditions and concessions/rebates in the tender should also be prominently shown in the comparative statement and their money value evaluated if possible and taken into consideration while awarding the work.
- iv. The detailed arrangements for proper check of tenders and preparation of comparative statements are left to the officer inviting the tender but such arrangements must provide:
 - a. That the persons entrusted with the work shall date and initial all papers the calculations of which they have checked and that all working sheets are preserved.
 - b. That the Divisional Accountant makes satisfactory and efficient arrangements for checking the computed tenders, he should also conduct personally a test check of computer and checked tenders sufficient to satisfy himself reasonably that the checking work has been properly done. He should also see that the comparative statement correctly incorporates the totals as checked in individual tenders. He should initial all items test checked by him.



- c. That if on check there are differences between the rates given by contractor in words and figures or in the amounts worked out by him the following procedure should be followed:
1. When there is difference between the rates in figures and in words, the rates which correspond to the amounts worked out by the contractor shall be taken as correct.
 2. When the amount of an item is not worked out by the contractor or it does not correspond with the rate written either in figures or words, then the rate quoted by the contractors in words shall be taken as correct.
 3. When the rate quoted by the contractors in figures and in words/tally's but the amount is not worked out correctly, the rates quoted the contractor shall be taken as correct and not the amount.
 4. In case of percentage rates both in amount as well as in percentage below or above the rates entered in the schedule. In such cases in the event of arithmetical error, committed in working out the amount by the contractor the tendered percentage and not the amount should be taken into account.
- v. That the officer inviting tenders himself makes a proper Scrutiny of the tenders and the statement.
- vi. That the officer inviting tender makes proper arrangements while computation is being made in his office.
- vii. All corrections should be carried out nearly and clearly endorsed for, attestation by the authority concerned.
- viii. The Divisional Accountant himself should not be called upon to do any of actual computing work of the intermediary verification of the Quotations or of the preparation of the comparative. His responsibilities extend to the final checking arrangements and himself doing a reasonable amount of test check. In fact an officer inviting tenders not below the rank of DO should be quite entitled to ask the Divisional Accountant to note: on the comparative statement that as far as he could ascertain from such test check as he had been able to carry out the statement is accurate. There is no objection for the employment of the Accounts Clerks as distinct from the Divisional Account on the computation if the work is large and the preparation of a comparative statement is urgent. It should however, be opened to the Divisional Accountant if he thought this the more satisfactory method of ensuring accurate check, to reserve or detail one or more of the Accounts clerks solely for him to satisfy himself that the check has been properly done.
- ix. It is essential that there be no hurrying of the work of computing tenders and of computation and an Account is entitled to claim that reasonable time should be allowed to him to satisfy himself that the check has been properly done.
- x. The Divisional Accountant should record the following certificate on the comparative statement;



“Certificate that I have personally conducted a test check of the computed and checked tenders including the three lowest tenders and have satisfied that the checking work has been properly done and the comparative statement correctly incorporates the total as checked on the individual tenders”.

Note: In case of tenders called for by the SDO the preparation and check of comparative statement should be done by the SDO himself with the help of Sub-divisional Clerk. Before signing agreement, the comparative statement should be test checked by the Divisional Accountant.

3.5.6 Acceptance of Tender

A. General

Normally, in selecting the tenders other conditions being equal, the lowest valid tender should be accepted. The financial status of the tenders, their capability, their classification, the security offered by them, their previous records of execution of works in the State and their dealings with the Department should be taken into consideration while accepting a tender. While this procedure should as a rule be observed in the case the acceptance of the lowest tender on a price basis alone in the case of tenders for electrical and mechanical stores and equipment may not always be safe. If the best value is to be obtained then the lowest valid tender should be accepted provided that all other things are equal. Due regard must therefore be given to the under mentioned other criteria in addition to the tendered price like, efficiency, running cost, durability of materials, reliability of guarantees, necessity for repairs and attention, saving in spare parts due to standardization, suitability for the purposes in view and technical qualifications and financial standing of the contractor.

If L1 bidder does not turn up for agreement after finalisation of the tender, then he shall be **issued show cause notice and in case he repeats the same within a year he will be** debarred from participation in bidding for three years and action will be taken to blacklist the contractor. In that case, the L2 bidder, if fulfills, other required criteria would be called for drawing agreement for execution of work subject to the condition that L2 bidder negotiates at par with the rate quoted by the L1 bidder otherwise the tender will be cancelled. In case a contractor is black listed, it will be widely publicized and intimated to all departments of Government and also to GOI agencies working in the state.

- a. No officer can accept any tender:
 - i. Which relates to a work not yet technically sanctioned except those covered under para 3.7.1 & para 6.1.3 of OPWD Code as exception.
 - ii. Which exceeds the amount technically sanctioned for the work by an amount greater than that he empowered to pass.
 - iii. Any provision which infringes any standard rule or order of higher authority (rules for the supply of articles for the public service etc.)
 - iv. Which involves an uncertain or indefinite liability or any condition of an unusual character.

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- v. Which exceeds the amount up to which he is empowered to accept the tender.
- vi. After the validity period, unless the period of validity has been extended by the parties concerned. The normal validity period stipulated in the contract is 90 days.

The reasons for accepting a tender which is not the lowest or for rejecting all tenders should be recorded on a separate sheet of paper and it should be attached to the comparative statement and removed before the case goes back to the office. This sheet should be kept in the custody of the accepting authority and should not be sent to the office and a true copy of this may be furnished to the Divisional Office for his personal custody. It may be shown to the Gazetted Officer of the Audit Department on inspection if he desires to see it.

Reasons should also be recorded for declaring any tender received as invalid.

- b. When a tender other than lowest is proposed to be accepted, action should be taken as follows:
 - i. If the tender proposed to be accepted is not more than 10 percent in excess of the lowest valid tender a report giving full reasons for rejection of each of the lower tenders should be made confidentially to the next higher authority. If no instructions to the contrary are received within three weeks from the date of report, the selected tender may be accepted.
 - ii. If the Officer is in doubt of his own judgment about the suitability of other lower valid tenders or in case other lower valid tender is in excess of 10 percent of the lowest valid tender, the CR giving reasons for proposing rejection of the lower tenders should be made along with all tenders received, valid or invalid to the following authorities for approval.

Approving authority if the selected tender exceeds lowest by:

Officer empowered to accept the tender	More than 10 percent but not more than 15 and also in cases of doubt within excess of 10 percent	More than 15 percent
SDO/AEE/DEE	DO/EE	SE (through DO/EE)
DO/EE	SE	CE (through SE)
SE	CE	Administrative Department

- iii. In cases in which the CE is the authority to accept the tender, the acceptance of a tender other than the lowest valid one will in all cases have to be reported to the administrative Department for information in cases falling under (i) above and approval in other cases.

All reports on the subject will be treated as confidential and the entire correspondence relating to each case of rejection of lowest tender should be preserved in the office of the authority accepting the tender and should be shown to the inspecting officer of the audit Department, if required.



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Tenderers should be made to clearly understand that the acceptance of their tender is entirely at the discretion of the office to whom the duty is entrusted and no tenderer can ask for the reason for rejection.

- c. A public works officer may accept a tender for a work up to the amount to which he is authorized under delegation of power provided that:
 - i. any provision in the tender does not infringe upon any standard rule or order of higher authority;
 - ii. no provision involves an uncertain or indefinite liabilities or any condition of an unusual character;
 - iii. There is no special conditions which are not in tender notice and which are unacceptable;
 - iv. Time is specified for completion of the work;
 - v. Specified amount of earnest money is deposited;
 - vi. Unduly low and unworkable rates are not quoted;
 - vii. Rates for different items are not rational;

In case of (i) & (iii), if the lowest tenderer is agreeable to delete any objectionable condition from this tender he may be permitted to do so and his tender then considered for acceptance.
- d. The acceptance of a single tender received in response to a tender call notice should have prior approval of the next higher authority;
- e. The validity period of any tender should not be not more than 90 days from the last date of submission of the tender. If delay in deciding the tender is unavoidable, the consent of the tenderer to keep the offer open for a further period which is absolutely necessary, should be obtained;
- f. After acceptance of the tender, all tenders including the rejected ones along with comparative statement should be sent to the Division office for execution of contract within 15 days from the date of the received of these paper in division office;
- g. The original accepted tender and the contract executed should remain in the custody of the divisional officer and certified copies should be given to all concern for reference;
- h. Before acceptance of the tender the successful bidder will be required to submit a work program and milestone basing on the financial achievement so as to complete the work within stipulated time and in case of failure on the part of the agency to achieve the milestones liquidated damage will be imposed as per contract conditions.

B. Procedure for Processing of Tenders:

- i. Tenders which are beyond the power of acceptance of the SDO or DO as the case may be should be submitted by the DO in sealed covers and addressed by same to the SE along with the DO's recommendations. The comparative statement accompanying tenders must be



submitted in duplicate. After the SE has given approval, one copy of the comparative statement will be retained in his office and the other copy along with the original tenders will be returned to the DO for preparing the draft agreement. Similarly in case of tenders which are beyond the power of acceptance of SE, the SE should submit the comparative statement in triplicate and the tender papers etc. to the CE in sealed cover with his recommendations and address it to him by name. The CE while communicating his approval should retain one copy of the comparative statement and return the remaining two comparative statements along with the tender papers to the SE. The SE will retain one copy of the comparative statement in his office and will return the other copy of the comparative statement along with the original tenders to the DO for preparing the draft agreements. The agreement should be ready for the signature of the contracting parties within 15 days from the date of receipt of approval of the contract documents. When submitting tenders to a higher authority for approval of acceptance, if any of the rates differ appreciably from those prevalent in the SOR, a note to this effect should be made in the comparative statement of tenders. The agreement should be signed on behalf of the Governor by an officer authorised by the Govt. A DO can also sign, on behalf of Governor, an agreement for a work the tender in respect of which has been accepted by a higher authority.

Note: 1. Certified copies of agreements for which tenders have been accepted by authorities higher than the DO must be submitted by DO to such higher authority and to the audit office without any delay and within 30 days from the date of acceptance through the authority who accepted tender.

2. The original comparative statement will be filed with agreement in the DO whereas the certified copies thereof will be retained in the office of the accepting authority.

- ii. When in response to a notice calling for tenders, only, a single tender is received the approval of the next higher authority should be obtained if the tender is otherwise in order and is acceptable.
- iii. If an officer inviting tender considers it necessary in the interest of Govt., to negotiate with a tenderer with a view to reduce the rates quoted or to withdraw special condition imposed by a tenderer, negotiations may be conducted by him or by an officer authorised by him in writing with the lowest tender only, if the tender value exceeds the estimated cost by more than 5%. If the quoted rate of the lowest bidder is within 5% excess of the estimated cost, there is no need for negotiation.
- iv. After tender for a work has been accepted, the fact of acceptance will be communicated to the contractor in the prescribed format.
- v. The contractor can sign his tender in any Indian script other than English, the amount of the tender or rate of percentage above or below offered by them should be written in the contractors' own handwriting in an Indian script preferably Odia. In the case of illiterate contractors, the amount of the tender should be attested by a witness. All corrections should be carried out neatly and clearly endorsed for attestation by the Officer opening the tender.



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- vi. When bonafide mistakes or omissions have to be corrected to remove ambiguities or indefiniteness in a contract, such corrections should be made with the approval of the competent authority who accepted the tender and this rectification should be done by an official order in which reasons for modifications should be fully set forth. In signing any modifications care should be taken to see that they are within the powers of the authority sanctioning them. If considered necessary, supplementary agreement should be executed on the basis of the order sanctioning the modifications.
- vii. The tender after acceptance becomes a contract and should be filed with care in Divisional office after entering in the agreement register and assigning the serial number. In case of tenders called for and accepted by the CE and SE the certified copies of contract documents should be retained in the respective offices, the original copies sent to the Divisional office for drawal of agreement.
- viii. Every leaf of the agreement should bear the signature of both the parties to the agreement.
- ix. Agreement should be prepared in the same handwriting and ink throughout. If an agreement is type-written, it may be done on the same machine and blank spaces are either filled in or a line drawn through such spaces to avoid interpolations.
- x. The power to extend the date of completion of works vests with competent authority as per delegation of power.
- xi. The power to waive any penalty levied will rest with the Administrative Department which will obtain concurrence of Finance Department before orders are issued.
- xii. If the rate quoted by the bidder is less than 15% of the tendered amount then such a bid shall be rejected and the tender shall be finalised basing on merits of rest bids. But if more than one bid is quoted at 14.99% (Decimals up to two numbers will be taken for all practical purposes) less than the estimated cost, the tender accepting authority will finalise the tender through a transparent lottery system, where all bidders/their authorized representatives, the concerned Executive Engineer and DAO will remain present.
- xiii. For acceptance of tenders for public works in cases where the tender premium exceed 10 percent following procedure shall be adopted:
 - (a) In respect of works costing Rs. 5.00 crore or more as per the current Schedule of Rates (SoR), prior concurrence of Finance Department shall be obtained by the Administrative Department before awarding the contract. While recommending such cases to the Finance Department, the tender committee as well as the Administrative Department should exercise due diligence and record specific justification for accepting the proposal.
 - (b) In respect of works costing above Rs. 1.00 crore but less than Rs. 5.00 crore as per the current SoR, approval of the Administrative Department should be obtained by the tender accepting authority before awarding the contract.
 - (c) In respect of works costing up to Rs. 1.00 crore, as per the current SoR, prior approval of the next higher authority should be obtained by the tender accepting authority before awarding the contract.



- (d) In case the estimate of the work was prepared on the basis of the old SoR, it should be revised on the basis of the current SoR for arriving at the notional revised estimated cost. The notional revised estimate should be compared with the tendered value in order to determine the tender premium and in case the tender premium exceeds 10% the procedure mentioned above should be followed before awarding the contract.

3.5.7 Withdrawal of Lowest Tender

- a. In case the 1st lowest bidder or even the next lowest bidder withdraw in series one by one, thereby facilitating a particular bidder for award, then they shall be penalised if adequate justification for such back out is not furnished. **A show cause notice to the tenderers who withdraw shall be issued and seen if the reply adequately explains the withdrawal of tender. In case this is repeated within a year, action may be taken for black listing of such contractors.**
- b. In case the reason for backing out of the 1st lowest bidder is justified then the offer of 2nd lowest bidder may be accepted provided that the 2nd lowest tender negotiates and agrees to work at the rates of 1st lowest bidder. However, approval from the next higher authority is mandatory for such cases.
- c. Similarly, if more than one of the lowest bidders starting from the 1st lowest in the series such as the 1st lowest and the 2nd lowest bidder withdraw, this should automatically stand cancelled unless for very special reasons to be recorded in writing. Approval of next higher authority is to be obtained prior to acceptance of the offer of other contractors quoting higher rates in the larger interest of getting the works done in time. In such cases the next higher authority should accept the tender only if the 3rd lowest bidder agrees to undertake the work at the rate quoted by the 1st lowest bidder. In case of some extreme urgency or other valid reasons the deviation from the lowest rates may be considered, but this should go to the 2nd higher level of authority in the hierarchy for acceptance. In such cases, prior detailed investigation of the circumstances and reasons thereof should be recorded in writing for accepting such tender at higher rates than the 1st lowest offer. However it should be ensured that the rates so accepted do not exceed current Schedule of Rate (SOR).

3.5.8 Award of Tenders

- a. The bidder whose bid has been accepted will be notified of the award by the Engineer-in-charge prior to expiration of the validity period by SMS, e-mail, fax etc. and confirmed by registered letter by post. This letter, called the "Letter of, Acceptance" will state the sum that the Engineer-in-charge will pay the Contractor in consideration of the execution, completion and maintenance of the Works by the contractor as prescribed by the contract called the "Contract Price".
- b. The notification of award will constitute the formation of the contract, subject only to the furnishing of a performance security and additional performance security in accordance with the provisions of the agreement.
- c. The contract will incorporate all agreements between the officer inviting the bid/Engineer-in-charge and the successful bidder. Within 15 days following the notification of award along



with the LOA, the successful bidder will sign the agreement and deliver it to the Engineer-in-charge.

- d. The other documents forming part of the contract are: (a) notice inviting bid, (b) all the documents including additional conditions, (c) specifications and drawings (if any) forming the bid as issued at the time of invitation of bid and its acceptance, (d) any other related correspondence and (e) required amount of performance security including additional performance security.

(Procurement Manual may be referred for further details)

3.5.9 e-Tendering

All tenders costing Rs. 10 lac and above has been decided to be hosted by e- procurement portal of Govt. of Odisha for increased efficiency, cost saving & improved transparency. The details guidelines and procedure are given in **Annexure 3.1** of OPWD Manual.

3.5.10 Concession to SC/ST and Differently Abled Contractors

- (a) Individual SC/ST Contractors who are registered in appropriate class may be allowed price preference and other concession as per following provisions:
- A price preference up to 5 % may be allowed in favour of individual SC/ST contractors. Such price preference shall be given in maximum of 3 tenders in a financial year for an individual SC/ST Contractors.
 - For this purpose, the lowest bid will be enhanced by 5% and compared with the tender amount of such SC/ST contractor. In case, the amount quoted by the SC/ST contractor is less than the figure so calculated, he will be awarded work at his quoted rates.
 - In all such cases, the above concessions shall be allowed for D, C & B Class Contractors only after proper verification of the individual contractor's claim of belonging to SC or ST community, as the case may be.
- (b) Individual differently abled Contractors registered in appropriate class may be allowed price preference and other concession as per following provisions:
- A price preference up to 5 % may be allowed in favour of C/D Class differently abled contractors. Such price preference shall be given in maximum of 3 tenders in a financial year for an individual differently abled Contractor.
 - For this purpose, the lowest bid will be enhanced by 5% and compared with the tender amount of such differently abled contractor. In case, the amount quoted by the differently abled contractor is less than the figure so calculated, he will be awarded work at his quoted rates.
 - In all such cases, the above concessions shall be allowed only after proper verification of the individual contractor's claim of being differently abled.

3.5.11 Concession to Graduate Engineer/Diploma holder Contractors

The individual contractors who are graduate or diploma holder in Engineering and registered in appropriate class shall be allowed to tender by depositing 50% of the earnest money for works up to



permissible limits of the license of the engineer contractor. This preference shall be given in maximum of 3 tenders in a financial year for an individual Engineer Contractor.

3.5.12 Execution of Contract

A. General

Before entering into a contract, all pros and cons should be considered and validity of contractual document should be ensured. Adequate care should also be taken to complete the agreement to be entered into with the contractor. A complete agreement consists of tender documents and also includes:

- i. letter of the contractor submitting the tender;
- ii. LOA of the tender;
- iii. letter of the DO communicating acceptance of the tender.

A register of contract/agreements pertaining to each year should be maintained in each Sub divisional and Divisional Office in the prescribed form. All agreements executed during a year will be assigned a number with reference to the year of execution in order of occurrence. Similar registers should be maintained in the Superintending and CE's office in respect of tenders accepted by them or any higher authority. The agreement number assigned to these contracts in the Divisional Office should be indicated against each item in this register. The register shall be reviewed by the SE during local inspection.

B. Security for Performance of Contracts

Security for the due fulfillment of a contract should invariably be taken consistent with the terms and conditions of contract.

The security may be taken in shape of N.S.C./Post Office Saving Bank Account/Post Office Time Deposit Account only towards E.M.D./initial security deposit/any other security deposit from the contract or supplier.

Contractors shall in each case be required to deposit one percent of the estimated cost of work tendered for as earnest money while offering tenders, and one percent as initial security at the time of acceptance of tender provided, however that the contractors having fixed security deposit as prescribed for the various classes of contractors, with the Registering Authorities either in cash or in the shape of interest bearing security shall be exempted from this requirement.

- Note:**
1. Before and after the acceptance of the tender the deposit earnest money and the security deposit received from a contractor, shall form part of security deposit, which can subsequently be recovered from the contractor's bills.
 2. Earnest money given by all the contractors except the three lowest tenders should be refunded within a week from the date of receipt of tenders. The earnest money given by the other two parties except the one whose tenders is accepted should also be refunded within 15 days of the acceptance of the tender.
 3. The security deposit is refundable after 6 months or such period as specified in the agreement from the date of satisfactory completion of the work provided that the



contractor's final bill has been paid. If however, there is inevitable delay in the payment of final bill of the contractor, the earnest money deposit and initial security deposit forming part of the security deposit may be refunded.

4. Security deposit should be refunded to the person or firm or company, who deposited the same. In the event of death or a person or dissolution of firm or company before refund of security deposit, payment should be made to the legal heirs or receivers after proper enquiry.
5. In case of interest bearing security obtained as deposits, a register should be opened with all details. Care should be taken to obtain payment of interest on the securities on due dates and adjust it towards the security of the contractor for the work.

C. Officers Empowered to Execute Contracts

No authority lower in rank than the officer in charge of a subdivision can accept any tender or enter into a contract for public works. The officers legally empowered to execute, on behalf of the Governor of Odisha, the different classes of deeds, contracts, and other instruments are detailed in **Appendix II**.

3.5.13 Splitting of Contract

Normally, the estimate may be split up to bring particular portion of work within the powers delegated for awards of work without calling for tenders as per demand of the situation.

In case public interest is served by splitting up a particular work, following are the provision:

- a. Depending on the necessity and urgency of execution of work of damaged R&B, the work may be split up to Rs 5 lac under plan scheme after approval of the concerned Superintending Engineering. For Non-plan works, the works may be split up to Rs. 5 lac after approval of the concerned Divisional Officer/Executive Engineer. *Chief Engineer can split up both plan and non-plan work upto Rs. 25 lac. The works above Rs. 25 lacs can be split up only with the approval of administrative department.*
- b. Any deviation from this instruction would be viewed seriously and disciplinary action would be taken against the delinquent.

When a work covered by one notice of tender is proposed to be divided amongst a number of contractors, a clause to that effect should be inserted in the notice inviting tenders as well as in the tender form. Care should be taken to see that portions of a work allotted to different contractors are of distinct nature and are sufficiently separated to avoid interference with supplies of materials and labour.

In such cases it is permissible to give out to different contractors a number of contract relating to different parts of the same work but tender for all such works have to be decided by the authority competent to accept the tender for the work as a whole.

3.5.14 Enforcement of Terms of Contract

Engineer and their subordinates are responsible that the terms of contracts are strictly enforced, and that no act is done tending to nullify or vitiate a contract. All contract deeds must be executed in



one of the standard forms. They may be modified to suit local requirements after approval of Govt. in the Administrative Department No uncertain or indefinite liability or any condition of an unusual character should be incorporated in the contract without the specific sanction of the Finance Department

- Note:**
1. For execution of work, supply of material or for securing due performance of contract, all agreements executed in between the contractor and the Public Works Officers shall be exempt from stamp duty.
 2. An agreement for hire of plant and machinery is not an instrument for execution of any work nor is it an instrument for the due performance of any contract, and as such is not exempted from stamp duty.

3.5.15 Management Meetings

- a. Either the Engineer (Which could be either departmental engineer or the engineer of the supervision consultant in case of supervision consultancy works) or the Contractor may require the other to attend a management meeting. The business of a management shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.
- b. The Engineer (Which could be either departmental engineer or the engineer of the supervision consultant in case of supervision consultancy works) shall record the business of management meetings and provide copies of his record to those attending the meeting and to the employer. The responsibility of the parties for actions to be taken is to be decided by the Engineer either at the management meeting or after the management meeting and intimated in writing to all who attended the meeting.

3.5.16 Time Control

- a. In order to facilitate effective time control following follow up actions should be taken after receipt of communication from accepting authority:
 - i. Normally, the order to commence work should be given within 15 days from the date of receipt of tender duly accepted in the Divisional Office, provided the contract agreement, complete in all respects, has been duly executed. In complex project however such time may be extended upto 45 days.
 - ii. The EE/Engineer-in-charge shall issue the LOA to the successful contractor. The issue of the LOA shall be treated as closure of the bid process and commencement of the contract.
 - iii. The successful bidder will be required to submit a work programme and milestone basing on the financial achievement within 15 days of issue of work order (which will form part of the contract), so as to complete the work within the stipulated time and in case of failure on the part of the agency to achieve the milestone liquidated damage will be imposed.
 - iv. If at any time it appears to the Engineer-in-charge that the actual progress of the work does not conform to the program to which consent has been given, the contractor shall



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produce, at the request of the Engineer-in-charge, a revised program showing the modifications to such program necessary to ensure completion of the works within the time of completion. If the contractor does not submit an updated program within this period, the Engineer-in-charge may withhold the amount of 1% of the contract value from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue program has been submitted.

- v. An update of the program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work including any change to the sequence of the activities.
- vi. The Engineer-in-charge's approval of the program shall not alter the contractors' obligations. The contractors may revise the program and submit it to the Engineer-in-charge again at any time. A revised program is to show the effect of variations and compensation Events.

b. Extension of Time

Application for extension of time for the completion of a work on the grounds of unavoidable hindrance or any other grounds shall be submitted by the contractor within 30 days of such hindrance. The DO shall authorize or recommend such extension of time as deemed necessary or proper, within 15 days of the receipt of such application. In cases where the sanction of the higher authority to the grant of extension of time is necessary, the DO should send his recommendation as expeditiously as possible. The higher authority should communicate his decision within 60 days from the date of receipt of recommendation in his office. If the orders of the competent authority are not received in time the DO may grant extension of time under intimation to the concerned authorities so that the contract might remain in force, but while communicating this extension of time, he must inform the contractor that extension is granted without prejudice to Govt.'s right to levy Compensation under relevant clause of the contract.

Power to grant extension is vested in the authority who is competent to accept the tender but such extension is limited to a period equivalent to **half the period** stipulated in the contract. If the extension is beyond this period, the approval of next higher authority will be necessary **Item no. 15 Annexure 6.1B** of Manual may please be referred.

c. Recording of Compensation Events (Hindrance Register)

- i. Whenever any event contributing to delay, whether on part of Department or on part of contractor, comes to the notice of the Engineer-in-charge, he should at once make a note of such event in the register kept at site, and immediately make a report to the EE within a week.
- ii. The EE shall review the compensation event at least once in a month.
- iii. The proforma for the Compensation Event Register should be standardized.
- iv. Following points should be kept in mind while entering in the compensation events Register:



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1. The entry of date of start of hindrance and date of removal of hindrance should be recorded accordingly on respective dates. Each hindrance should be authenticated by the EE and the Contractor.
2. The EE should work out the over-lapping period of hindrance, net period of hindrance and weightage of each hindrance within 7 days of removal of the cause of hindrance. For works outside headquarters, this should be done as and when he visits the site.
3. The items of work affected due to any hindrance should be clearly mentioned in the Hindrance Register by the AE, and the weightage should be allowed on this basis.
4. The hindrance should be recorded carefully in the compensation event Register after considering its effect on completion of work.
5. Review of compensation event register shall be compulsory in division office by EE and AAO at the time of payment of each Running Account Bill and final bill and certificate shall be recorded that all up to date hindrances on part of Department and contractor have been recorded in the register.
6. The net delay on part of Department or contractor shall be worked out after considering all the hindrances recorded in the register.
7. The SE should also review the Register whenever he visits the site of work.

d. Compensation for delay

The time allowed for completion of the work is essence of the contract. The date for commencement of the work starts from the stipulated date that is mentioned in the LOA to the contractor.

The compensation for non-completion of work in stipulated time (also termed as liquidated damages), at the rates specified therein in Standard Bidding Document (SBD), is a compensation which the contractor has to pay in case of default.

In case the contractor does not achieve a particular milestone as stipulated as per agreement, or as re-scheduled, the amount shown against that milestone shall be withheld in the interim payment of the contractor. However, if the contractor catches up with the progress of the work on the subsequent milestone(s), the withheld amount shall be released to him. In case the contractor fails to make up the delay in the subsequent milestone(s), the amount mentioned against each milestone missed shall also be withheld. No interest shall be payable on the withheld amount.

The total amount of liquidated damages shall not exceed the amount specified in the conditions of the contract. The maximum amount specified shall not be more than 10% (the percent) of the final contract price.

The recovery of liquidated damages should be effected after decision on extension of time has been obtained.

**3.5.17 Termination of Contract**

The termination of Contract can be done as per conditions given in the Standard Bidding Document.

3.5.18 Deviations in Contract (Extra/Substituted/Deviated Items)

Any increase/decrease of the quantities during execution from what is given in the schedule of quantities appended to the tender should be carefully investigated into by the DO with a view to determine the financial implication of such variation and position of lowest tender. If due to wide variations during execution the relative position of the lowest tender stands changed subsequently, the work should ordinarily be closed and the balance work executed under a separate contract following the usual procedure. However, the balance of work can be continued under the same contract with the specific approval of authority higher than the officer, who accepted the tender.

Rates for Deviation in Quantity of individual items within permissible limits shall be as per Contract Rates.

For deviation in quantities beyond permissible limits and those for Extra/Substituted item the contractor shall submit his rates along with proper rate analysis. The rates shall be derived as per provisions of the contract.

The prescribed overheads may be added over the analysed rates for deviation in quantities and extra/substituted items. These percentages cover the following charges:

- a. Office expenditure of the contractor.
- b. Storage of materials.
- c. Handling expenses and other incidental charges.

The overhead percentage does not include transport charges.

Any deviation from the Agreement with regard to the nature, specification, quantity and rates of items, requires the approval of the competent authority prior to payment (as per delegation of power).

3.5.19 Quality Control

Every work has to be properly supervised to ensure that it is carried out in accordance with the required specification. Effective supervision with approved QA plan should be there for all execution of work.

3.5.20 Sub Standard Work

If a work is found defective or not in accordance with specification, the Engineer-in-charge shall order its removal, reconstruction or rectification as deemed fit. The Contractor is bound to comply at his cost. In exceptional cases, where the situation of work is such that the removal, reconstruction or rectification cannot be done, the Engineer-in-Charge with the approval of the SE may accept the work at reduced rate provided such work do not affect safety of the structure.

3.5.21 Maintenance of Site Register during Execution

Following important register must be maintained at site:

- a. Site order book
- b. Inspection register



- c. Test Register
- d. Cement Register
- e. Hindrance register
- f. Any other register required for specific work

All above registers are to be printed in required proforma and pages certified before use.

A site order book containing pages duly machine numbered and in the prescribed form should be opened and kept with the officer-in-charge in respect of major works executed departmentally or through contractors in which all orders to the executive subordinates must be recorded and signed by the officer giving the order. Where an order is meant for the contractor, a copy should be promptly forwarded to him by the DO. Copies of all orders whether intended for subordinate officers or contractors must be promptly dispatched to the officer issuing the orders and his immediate superior.

The CE, while inspecting the works under execution should invariably record his observations in the Register of Inspections maintained at the site of work for which the tender has been accepted by him or by Govt. He shall make final inspection of such works after completion thereof but before the payment of the final bills.

All entries of site order book and the inspection register shall be made available on line to both contractors and Departmental officers concerned with the work.

The SE while inspecting the various works under execution should invariably record the results of his inspection in the Register of Inspections maintained at the site of works for which tenders have been accepted by him or by a superior authority. He shall make final inspection of such works after completion thereof but before payments of the final bill.

It will be the responsibility of the officer No action shall be taken unless & until the same is confirmed in writing.

receiving any verbal orders of his superior to get is Confirmed within 15 days.

In case of a senior supervising officer like SE and CE where it is not possible to issue written orders, such an order should be confirmed within 10 days.

The DO and SDO should invariably sign the site order books in token of their having read all the instructions issued by the various officers and replies made thereto.

Sectional Officers should also record their observations in the site order books if they find any defective work going on or contractors not complying with the terms of the contract.

Site order books should never be removed from the site of the works in any circumstances and should invariably be consulted at the time of making final payments to contractor.

On extensive works, where large labour force is collected, the importance of good hutting, water-supply and sanitary arrangements must be borne in mind and all reasonable precautions must be taken to maintain the health of the labour force and prevent or arrest the progress of epidemics.



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In case of works, executed through contractor it shall be the responsibility of the contractor to provide the above mentioned amenities and take the above mentioned precautions. It shall be the responsibility of the DO to ensure that such arrangements are made properly by the contractor.

The proforma for site order book and Inspection register are given below:

Site Order Book

Name of workDate of commencement.....period of completion.....

Sl. No.	Remarks of Inspecting Officer or Contractor	Action taken and by whom	Remarks
1	2	3	4

Inspection Register

Name of Work:-

Sl. No.	Date & Time	Officer name & designation	Observation	Signature	Reference of Site order book			Final Action
					Site order book page no.	Date	Sign. of AE/JE	
1	2	3	4	5	6	7	8	9

Test Register: This is for recording details of test conducted at site or laboratory with their result. Profoma may be suitably devised for different type tests.

Cement Register: This register is maintained for receipt and issue of Cement at Site the proforma is given below:

Date of receipt	Quantity received	Progressive total	Date of issue	Quantity issue	Item of work where used	Quantity returned at the end of the day	Total issue	Daily balance at Hand	Cont. initial	JE's initial	Remarks of AE/EE of periodic Check
1	2	3	4	5	6	7	8	9	10	11	12

Hindrance Register: Whenever any hindrance, whether on part of Department or on part of Contractor comes to the notice of AE, he should at once make a note of such hindrance in the register kept at site for that purpose. The entry for date of start of the hindrance and the date of its

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removal should be made on the respective dates of start & removal of the hindrances. The net delay on the part of Contractor or the Department should be worked out after considering all the hindrances recorded in this register. The register should be the basis apart from other documents for grant of extension of time. The proforma of hindrance register is given below:

Sl. No.	Nature of Hindrance	Items of works affected	Date of start of Hindrance	Date of removal of hindrance	Over lapping period if any	Net hindrance in days	Sign. of AE	Weightage of this hindrance	Net effective days of hindrance	Sign of EE	Remarks of Reviewing Officer
1	2	3	4	5	6	7	8	9	10	11	12

3.5.22 Completion Certificate

According to the relevant clause of contract a completion certificate is to be given by the Engineer-in-charge to a contractor on completion of the work. No final bill will be accepted from a contractor unless such a bill is supported by a completion certificate. Further, the date of the completion certificate will determine the date up to which a contractor can be held responsible for making good damages under relevant clauses of the agreement.

It has been observed that generally no certificate is given and only the date of completion is noted in the MB. Since this practice is not in conformity with the provision of clauses, of contract, a completion certificate should be recorded appropriately.

If, on inspection of the work by the Engineer-in-charge on receiving intimation from contractor, the work is not found satisfactorily complete, the contractor should be intimated of the defects etc. in writing, but no provisional completion certificate should be issued.

The date of completion of work is the date on which it is finished, and not the date on which the final measurements are recorded by the Engineer-in-charge or his subordinate. It will therefore, be necessary to enable the Audit/Accounts to satisfy itself that the work was completed within the time prescribed in the contract, to note the date of its actual completion both in the bill of the contractor as well as in the MB in which the last measurements are recorded.

If the contractor fails to remove the scaffolding, surplus material and rubbish, and does not clean up the site of rubbish and waste materials etc. it should be got removed at the cost of the contractor as laid down in the relevant clause of contract. The completion certificate should not be given till the site is cleared of all malba, rubbish, etc.

3.5.23 Subletting of Work

Permission to sublet or assign the contract to another party should be given to a contractor by the Engineer-in-Charge in deserving cases. ~~without prior reference to the authority who accepted the tender.~~



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The Engineer-in-Charge should keep the following points in view in case they decide to grant such permission as per the condition in SBD's/Procurement Manual.

- a. Sub-letting should be permitted only in exceptional cases and for recorded reasons as to why contractor himself cannot directly run the contract.
- b. In all cases, the Sublette should be a contractor of the same or higher capacity or class as the original contractor.
- c. Examining the terms and conditions of the agreement between the contractor and the Sublette in order to satisfy himself that the contractor is not subletting the work for earning a middle man's profit.
- d. It should be seen at the time of subletting that the Govt. will not be put to any loss on this account and that no risk is involved.
- e. Individuals holding general power of attorney cannot operate a contract awarded to a contractor.

3.5.24 Enlistment of Contractors

Rules regarding Enlistment and black listing of Contractors are given in **Appendix III**

3.5.25 Project with Supervision Consultant

In a contract where supervision of work is outsource the duties, responsibilities and delegation of power to the Independent Engineer will be as per Standard Bidding Document.

3.6 Acquisition of Land

3.6.1 General

Land Acquisition (LA), now-a-days, is a common phenomenon, when one goes to implement any development projects, which could be a project initiated by the Govt. or by a private party. To simplify the Land Acquisition process for the projects, the GOO has done categorization of projects in Industrial, Mining, Irrigation, National parks and Sanctuaries; Public Utility Projects like Roads Railways, Power Line and other projects are such an initiative. The Land Acquisition process and compensation packages differ from one type of projects to other type to certain extent.

The basic principle of Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 is applicable for any Land Acquisition for public purposes. The Odisha Resettlement and Rehabilitation (R&R) Policy-2006 is obligatory, to ensure the sustainable development through the participatory and transparent process.

In general, when the land is required for public purpose, the officers in charge of public works should in the first instance, consult the Collector of the district and obtain from him the fullest possible information like cost of the land per acre together with the value of buildings etc., situated on the property for which compensation will have to be paid. With the information thus obtained an estimate should be framed by the DO and submitted for sanction.

When sanction to an estimate framed as directed above has been obtained, the DO or other public works officer concerned should submit the matter to the competent Revenue Officer who will take



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the necessary preliminary action for the acquisition of the land under the Act. This should be ensured that necessary A/A and TS to the work has been accorded by the competent authority. The detailed procedure to be followed in this regard is laid down in the Act and executive instructions there under. The general procedure to be followed in connection with Land Acquisition is given in this Section in subsequent paragraphs.

After the preliminary arrangements prescribed in the preceding paragraphs have been carried out, land will be taken up for acquisition under the Act, either by the Collector or by the Special Officer placed at the disposal of the Departments in charge of public works and vested with the powers of a Collector under the Act.

3.6.2 Features of Land Acquisition Process

In all projects or works, undertaken by the PWD, unless the site is situated in the boundaries of existing available land, it involves acquisition of land (the land here includes the structures, residential, commercial or others). The land may belong to one or more of the following:

1. **Private Parties** (companies, individuals, etc.): Whenever land belonging to private parties is required for works, it may be first checked as to whether there is any special law for acquiring land for that work. If there is no such special law, land shall be acquired under the LA Act, 2013, as amended from time to time.
2. **State Government:** In the case of State Govt. land, acquisition is not called for as the Govt. cannot acquire its own property and the Act, 2013 is not applicable. In such a case, the land, with the consent of the owner Department, will be got transferred to the OWD.
3. **Government of India:** In case land belongs to the GOI and is required for a State Govt. project, then the appropriate Department/Ministry in the GOI may be approached through the State Govt. to transfer the land to the latter for its use. State Govt. is required to pay the market value of the land so transferred or such value as may be mutually settled between the two Govts.
4. **Land held for military purposes:** For getting army land transferred, the Ministry of Defence has laid down specific guidelines, which need to be followed if the land in question is army land.

No land whether: (a) within cantonment limits; or (b) forming part of an encamping ground; or (c) otherwise held for military purposes should be taken up or occupied for any purpose whatever either by contractors or any other person (official or non-official) acting under the orders of any Civil Department of the State, until the sanction of the GOI in the Ministry of Defence to the occupation or use of the land has first been obtained and communicated to the General Officer Commanding the Division or Independent Brigade. In all such cases the sanction of the GOI should be obtained by the General Officer Commanding the Division or Independent Brigade through the Quarter Master General. Application for such land when within cantonment limits should be made by the Officer in-charge of the public works to the cantonment, authority and by the letter to the superior military authority, but in the case of military encamping grounds, applications should be made to the General Officer



commanding the Division or Independent Brigade. The Military authorities will then take the necessary steps to obtain –

- i. The opinion of the State Govt. which should invariably be recorded on all applications; and
- ii. The sanction of the GOI to the occupation of the required land.

The foregoing procedure will also apply in cases where it is proposed to purchase or otherwise acquire permanently any building situated on military land for the use of a civil Department

5. **A public body of/with the state Govt. or the GOI:** When any land belonging to a public body is required for a State project, the land is simply resumed by the State Govt. if the transfer of land is originally by the State Govt. to that body was on the specific condition that land shall be returned if required for a public propose by the State Govt. In other cases, the land has to be got transferred by mutual consent or got acquired as in case of private lands.

3.6.3 Important Features of Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR Act, 2013).

Salient Features of the RFCTLARR Act, 2013, are as follows:

For private property holders, the acquisition of the land would be done under the aegis of the RFCTLARR Act 2013. The Act is applicable to all parts of India except to the State of Jammu and Kashmir. The section 24 of this Act provides that in cases where award is not published under LA Act, 1894 they will deem to have lapsed and proceeding under the RFCTLARR Act, 2013 shall be undertaken.

The Act, 2013 illustrates stage wise procedures of Land Acquisition. These stages are described as sections of the Act. According to the Act, where the appropriate Govt. is satisfied that for a public purpose any land is required, LA process is initiated. Some of the important sections of the RFCTLARR Act 2013 are mentioned below in brief with provisions therein:

Section 4: Whenever the Govt intends to acquire land for public Purpose, it should consult the concerned Panchayat, Municipality or Municipal Corporation as the case may be at Village level or Ward level in the affected area and carry out Social Impact Assessment study in consultation with them. A notification for this purpose shall be issued by the Govt.

Section 5: Govt to ensure that a public hearing is held in the affected area wherever Social Impact Assessment (SIA) is required to be done.

Section 7: The section provides for evaluation of SIA report by an Independent Multi-disciplinary Expert Group.

Section 10: The section has provision to ensure that no Irrigated, Multi-cropped land is acquired except in exceptional circumstances to safeguard 'Food Security'.

Section 11: Under this section preliminary notification with details of land intended to be acquired is issued in official gazette as well as newspapers.



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Section 12: The section authorizes the officers for preliminary survey of land and to do the following:

- a. to enter upon and survey and take levels of any land in such locality;
- b. to dig or bore into the sub-soil;
- c. to do all other acts necessary to ascertain whether the land is adapted for such purpose;
- d. to set out the boundaries of the land proposed to be taken and the intended line of the work (if any) proposed to be made thereon;
- e. to mark such levels, boundaries and line by placing marks and cutting trenches and where otherwise the survey cannot be completed and the levels taken and the boundaries and line marked, to cut down and clear away any part of any standing crop, fence or jungle;
- f. Provided that no person shall enter into any building or upon any enclosed court or garden attached to a dwelling house (unless with the consent of the occupier thereof) without previously giving such occupier at least seven days' notice in writing of his intention to do so.

Section 16: The Administrator of Rehabilitation and Resettlement to conduct survey and undertake survey of affected families within prescribed time limit.

Section 19: This section provides for Publication of declaration and summary of Rehabilitation and Resettlement scheme.

Section 20: The Land to be acquired to be marked out, measured and planned including marking of specific area.

Section 21: Collector shall publish the public notice on his website and convenient places on or near the land for interested persons indicating Governments intention to take possession of land.

Section 23: The collector to proceed to enquire into the objections (if any) and to make award.

Section 24: This section provides that in all cases where award is not published in the process under LA Act, 1894, the same will be deemed to have lapsed.

Section 25: The Collector to make an award within 12 months from the date of publication of declaration under section 19 and if no award is made within this period, the entire proceedings will be deemed to have lapsed.

Section 30: The Collector having determined the total compensation to be paid will impose a 'Solatium' amount equivalent to 100% of the compensation amount to arrive at the final award.

Section 31: The Collector shall pass Rehabilitation and Resettlement awards for each affected family in terms of the entitlements.

Section 38: The Collector shall take possession of land after ensuring that full payment of compensation as well as Rehabilitation and Resettlement entitlements are paid or tendered to the entitled persons within the period stipulated in this section.

Section 40: In cases of Urgency, whenever the Govt so directs, the Collector, though no award has been made, may on the expiration of 30 days from the publication of notice under section 21, take possession of land needed for public purpose.



Section 41: As far as possible, no acquisition of land shall be made in schedule areas (Tribal area). Where acquisition in such area takes place, it shall be done only as demonstrable last resort after fulfilling the condition given under this section.

3.6.4 Procedure for the Acquisition of Land for Public Works

A. Procedure as per RFCTLARR Act 2013

1. Land required for public purpose should be acquired as per the procedure laid down in the Act of 2013 and any specific executive instructions issued there under by the State Govt.
2. Transfer of Land under the possession of any Department of Govt. to be arranged by executive action and it is not necessary in such case to initiate proceedings under the Act.
3. As far as possible land should not be acquired by private negotiations as this may involve Govt. in unnecessary litigation regarding rights and title over the land and may also result in payment of higher rates. In cases when it is absolutely necessary to acquire land by negotiation, the DO should invariably obtain necessary information from the Collector and his opinion on the transaction should be sent along with the proposal. Sanction of State Govt. is necessary for the purpose of acquiring land by negotiations.
4. When it is intended to acquire land for a public purpose, the DO concerned should apply to the Collector of the District in which the land is situated clearly stating the reasons why it is considered desirable to acquire the land. No form has been prescribed for furnishing the requisition. In order to eliminate errors in and omissions from the requisitions the requisition should be framed carefully and always in consultation with the latest cadastral survey map and the maintained land record. The date after which possession of the land is required should be mentioned in the requisition. The requisition should contain a schedule of land proposed to be acquired. The schedule should indicate the name of the village, tehsil and district in which the land is situated. It should also indicate the survey number of each plot, total area of the plot as recorded in the record of rights, the extent (area) to be acquired out of each plot and the name of the persons or person in whose favour the land stands recorded in the maintained record of rights. In order to prepare the schedule of the lands correctly the requiring officer's employee specially authorized in this behalf, should avail the facilities available for collecting necessary information from the maintained record of rights. Where printed copies of cadastral maps are available for sale, the Requisitioning Officer should purchase required number of copies of such maps for use in connection with preparation of requisition, etc. If printed copies are not available for sale, he may avail facilities made available by the Collector to take out copies of such maps. Where land has not been cadastrally surveyed and no record of rights has been prepared, it will be sufficient if the Requiring Officer gives only the approximate area, boundaries of the land and names of the persons believed to be interested in it, for identification of the land. Where large area is required for projects a sketch map should be attached to the application. Copies of the maps should be available in DO's Office for inspection of the Public.
5. It is incumbent on the DO to endeavor to avoid buildings, particularly religious buildings, tombs, grave yards, communal land etc., the acquisitions of which will entail unnecessary expenditure to Govt. or annoyance to the public. If the objective can be attained by slight alteration of the alignment or site chosen in some other manner.

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6. In case, land is required for the construction of buildings, the DO should in the first instance obtain the approval of the site selection committee where it is necessary.
7. The DO is required to furnish the following important information and documents along with the requisition.
 - i. No possession certificate.
 - ii. Name of the Administrative Department i.e. the name of the Department from whose budget the cost of the acquisition will be financed.
 - iii. Requisite number of land plans based on the latest cadastral map.
 - iv. If any Gochar land is required to be taken up then, separate proposal to acquire land for its replacement should be simultaneously made.
 - v. A certificate to the effect that such Govt. land has been included in the proposed acquisition about which doubts of private rights have arisen.
 - vi. For the Land Plans prepared for roads, embankments, drainage channels, canal etc., there should be a separate plan for each Revenue Village and the plans should be numbered consecutively and shall be on the following, scale:

For Roads	For Buildings
330 feet for an inch or if a large scale is required 21 ¼ feet to an inch	82 ½ feet to an inch or if a large scale is required for congested area 42 ¼ to an inch

8. On receipt of the requisitions the collector is required to get preliminary investigation for determination of Social Impact Assessment done under Section 4 of the RFCTLARR Act, 2013 done conduct public hearing as per section 5, get appraisal of SIA done by expert group as per section 7 and issue notification under Section 11.
9. After the publication of the notification, the Collector will give public notice of the substance of the notification in the locality to enable the persons interested in the land to file objections, if any. The Collector while hearing the objections filed, will intimate the local officers of the Requiring Department who should represent the Department during hearing. On receipt of intimation of the issue of public notice the Requiring Officer may proceed to examine the land, survey, dig, bore and otherwise ascertain its suitability for the purpose for which it is required and should collect such information as will assist the Collector in framing an estimate of the probable cost of the land. The map or plan together with a memorandum, specifying generally the character of the land, (waste land, cultivated land, etc.) the number and character of buildings, trees, etc. standing the land, should be sent to the Collector for preparation of an estimate of the cost of acquisition and draft declaration. For this purpose the Requiring Officer may obtain from the Collector, information from the settlement records to ascertain the rates of rent class and tenants, etc. if necessary. No work should however, be commenced by the DO during the preliminary investigation till the land has been authorized over or unless the approval in writing of the local revenue has been obtained.



10. In case of extreme urgency recourse can be taken to the provision of Section 40 of the RFCTLARR Act, 2013. Where it is intended to adopt the emergency procedure. As this special procedure has the effect of depriving the persons interested in the land of a statutory right to contest the propriety of acquisition/the DO concerned should furnish full reasons justifying the proposal so as to enable the Collector to certify that there is no objection to the acquisition based on general or specific grounds. He should also furnish particulars of the land, etc. to the Collector to avoid delay in the procedure.
11. The DO should bear in mind that lands required for different projects cannot form the subject matter of one proceeding. Therefore, lands required for each projecting each revenue village shall form the subject of one proceeding and for each proceeding there must be a separate requisition.
12. Since no field enquiry and verification of record is ordinarily done by the LA Officer, the DO is required to verify the records properly before sending requisition to the Collector to avoid delay.
13.
 - a. In case when the emergency procedure is applied, the DO should within a fortnight from the date of publication place funds towards the cost of acquisition with the LA Authority.
 - b. When the emergency clause is not applied, the estimated cost of the land as sanctioned by the competent authority must be paid within three months from the date of issue of the order.
 - c. If funds are not deposited, as above, the LA Officer is at liberty to recommend the case to be dropped. Hence, there should be no delay in depositing the money.
 - d. Payment must be made separately for each case and not together for a group of cases.
14. Land notified for acquisition can be withdrawn from acquisition if possession has not been taken. Even where possession has been taken, such portion of the land under acquisition which is not required for the purpose for which it is acquired, may be restored at any stage provided the persons interested in the land agree to this course. The Requiring Officer should therefore promptly apply to the Collector for withdrawal of land from acquisition/restoration of land taken over, when he finds acquisition of some portion on in full not necessary for the purpose.

In case land is required for a temporary period not exceeding three years the usual procedure for temporary acquisition should be followed. A plan of the land, of which temporary occupation as desired should be furnished by the DO to the Collector with a request to furnish an estimate of cost of occupation. The Collector will furnish an estimate with endorsement that there is no specific or general objection to the occupation of the land.
15. The DO is prohibited from starting any work on the land unless physical possession has been made over by the LA Authority at the site. He should abstain himself from taking advance possession and wherever taking advance possession seems imperative, permission of Revenue department should be obtained before taking any such possession.



16. Since no work can be started till the LA proceedings are complete and the land handed over, the DO should watch the progress of the proceedings at every stage and keep a close liaison with the LA Authority.

B. Consent Award

To make the LA process simpler, the Consent Award Rules 2009 can be referred as most useful process. Acquisition of land under this rule shorten the time of acquisition and avoid litigation matters related to rate of land as the consent of land holders is involved. {Refer the notification no. 31248 – (R&REH)-66/2010-R&D.M, 5th August, 2010, Revenue and Disaster Management department, 2010, published by The Gazette (Extraordinary).

C. Possession of Land

- a. It is the duty of the concerned officer to take over the possession of the land. It shall be prudent to do the videography of the act of taking over possession. A press release shall be also issued through the local DPRO regarding the possession of the land.
- b. The Divisional Officer, immediately after taking over the land, shall get it mutated in favour of the department and get the entry made in Jamabandi also.
- c. The Divisional Officer shall preserve unimpaired the title to all land in his occupation and keep it free from encroachment. The officer in-charge shall be responsible and accountable for the land in their charge together with any structures on the land.

D. Court Cases: The Divisional Officer shall arrange to attend to any court case regarding land acquisition. If he is not impleaded as party, he shall request the court for doing so. He shall bring the fact of such court case to the notice of Superintending Engineer and the Chief Engineer concerned, who shall monitor such cases periodically.

E. Acquisition of Land under Externally Aided Projects: The funding agencies may require different guidelines to be followed when the projects are taken up with the financial help from them. Such guidelines, if different from the above, may be followed only after the approval of the Chief Minister and the Finance Department.

F. Rehabilitation of Project affected Persons: In the case of irrigation projects where large areas of land or whole villages are likely to be submerged under a proposed reservoir, or in the case of major projects requiring acquisition of land on a large scale, village population gets displaced. Such 'Project Affected Persons' are required to be rehabilitated at another place effectively, with due consideration to the genuine concerns of the affected persons. For this, necessary provisions shall be made in the project estimates.

G. Supervision: Land acquisition cases shall be monitored at every level. HoD shall review them once a quarter and Chief Engineer on a monthly basis. A consolidated report on the prescribed proforma shall be sent to the State Government every quarter. The Superintending Engineers shall also review the position of cases in their Circles and ensure that land acquisition does not take more than 6 months from the date of sanction of the estimate and more than three months from the receipt of LOC for payment of compensation.



3.6.5 Role of OPWD Officers in Land Acquisition

The State Govt. has notified different Land Acquisition Authority (LAA) for different districts and/or Department it may also appoint a special officer to work as LAA for acquisition of specific land for a specific project. In case there is any ambiguity, the Deputy Commissioner of the district should be approached for knowing about the particular officer who will work as LAC for acquiring the land.

Though LA is primarily the duty of the LAA, the role of the acquiring department becomes very crucial as the LAA usually has some other substantive charge which may keep him busy or he may have many other cases of LA and he may not be able to keep track of every case. The DO of the OPWD, therefore, should pursue the case at different stages. If the land to be acquired falls in a number of Divisions, the EIC/CE/SE will make one or more DOs responsible for the same.

The DO, in the first instance, shall get a copy of the revenue record of the land to be acquired and ascertain the quantum of land to be acquired by site survey and its rate. The responsibility of ascertaining correct requirement of land is entirely on the DO therefore, as far as possible, the DO should inspect the site himself. In rare cases, he can allocate this work to Sub-Divisional Engineer, in which case, the DO will do a part survey. As regards the rate of the land, the DO shall ascertain the floor rate, the collector's rate prescribed for registration in that area and the market rate as determined by the designated committee (constituted by the State Govt. from time to time) in the past regarding some land acquired in that area or nearby area and send an estimate for the acquisition of the land. Simultaneously, he shall start preparing draft of SIA & notification to be issued under RFCTLARR Act, 2013 for acquiring the said land and try to get the same vetted from LAA also.

While sending the estimate for LA, the designated DO(s) shall send the following documents:

- a. Plans showing the land proposed to be acquired;
- b. Schedule showing particulars of land i.e. location, surroundings, approaches, etc.;
- c. Land schedule from the Revenue Authority;
- d. Trees, wells, bores, structures, etc. if any on the land;
- e. Type of land;
- f. Floor rate and collector rate for registration in respect of land (care shall be taken against an isolated, freak or manipulated instance of sale of land at unusually high rate becoming the basis of determination of rates for the proposed acquisition); and
- g. Approximate value of the structures.

When sanction to an estimate, framed as above, has been obtained, the DO will refer the matter to the LAC and get the notification issued under section 11 of RFCTLARR Act, 2013 from the competent authority/officer so authorized. The necessity of acquisition should be brought out convincingly. Efforts shall be made by the DO to get the land notified as soon as possible after the sanction of the estimate. In case he is unable to do so, he shall immediately report the difficulties to his seniors as well as to the Deputy Commissioner of the district concerned and take their help in resolving difficulties.



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Though it becomes the duty of the LAA to acquire the land under RFCTLARR Act, 2013 but interest on the part of the DO shall be helpful in expediting the matter. He can assist the revenue staff attached to LAC in surveying and to do joint measurements, preferably in presence of land owners.

The DO shall assist the LAA in issuing the notice for inviting objections etc.

The DO or the officer/officials so designated by him shall participate in the proceedings under sections 4 to 38 of the Act, 2013 and assist the revenue authorities in the valuation of land and any structures over it. The right to appear and produce evidence regarding compensation shall be vigilantly exercised. They shall also make arrangement for the payment of award through the Land Collector, demarcate the land at site and take over possession.

Acquisition in case of urgency under section 40 shall be done only in case of real necessity, which shall be fully explained to the Govt. when submitting the proposal.

3.6.6 Procedure for Valuation

A. Compensation for Land

Land surveys for payment of compensation will be done on the basis of updated official records and ground level situation. The land records will be updated relating to title, land classification and the current use of land for ensuring adequate cost compensation and allotment of land to the land losers. The normal LA process determines the compensation norms based on any one of the three procedures: (i) Average Stamp Registration Rate for Past Five Years; (ii) Circle Rates and (iii) Crop Productivity Rates. These are explained below.

Average Stamp Registration Rate: The land rate based on the sale deed of a plot is collected from the office of the Registrar. For each project affected village, these records will be collected, based on which an average rate of sale of land will be worked out.

Circle Rates: The Circle rates, both for agricultural and non-agricultural land, representing the market value of land as per Circle Rate Method will be collected from the office of the Registrar for all project-affected villages.

Replacement Cost based on Crop Productivity: To find out the market value of land by crop productivity method, the following sources of data will be used: (i) Report on Socio-Economic Review of; (ii) Taluka/Tehsil wise production of different crops for last five years; and (iii) the standard production and yield of crops (kg per hectare).

To arrive at the yield/productivity of land, the productivity for last five years on the crop production will be collected from various revenue offices. The data so collected will be used for calculating three sets of productivity rate per square meter for highly/medium/low productivity of land, depending on whether irrigated, partly irrigated or un-irrigated.

The average market rate of different crops available with by the Agriculture Production Market Committee (APMC) will be used. The actual productivity value of crops in reference periods is calculated by multiplying the actual crop production and the average market price. The average productivity value is to be derived by taking the average of all crops over a period of last five years. The market value is calculated as 20 times the average productivity.

**B. Compensation for Structures**

The value of the residential houses, buildings and other immovable properties required for the project will be determined at the relevant Basic Schedule of Rate (B.S.R.) without depreciation. Compensation for properties belonging to the community (including places of worship) will be provided to enable construction of the same at the new place. Relocation and construction of common properties will be done through the local self-governing bodies in accordance with the modalities determined by such bodies to ensure correct use of the compensation amount. Under the project, relocation of community structures will be done in consultation with the local communities which have been managing these properties.

C. Compensation for Tress

Compensation for trees will also be based on their market value in case of timber bearing trees and replacement cost in case of fruit bearing trees as per the rates decided by the LA Authority/District Compensate Advisory Committee in consultation with Department of Agriculture, Forest, Horticulture, Sericulture etc. as the case may be. Compensation of trees will be paid before taking possession of the land/properties.

3.6.7 Transfer of Acquired Properties

The acquired land and properties will vest completely with the project owner/OWD. However, PAPs will be allowed to take away the construction material that could be salvaged from their houses and shops etc. and no deduction will be made on this account. A notice will be issued to all the affected to take away the materials so salvaged within the prescribed time of the demolition of their structure. If this is not removed, then the project owner will dispose-off the same without giving any further notice.

PAPs receiving compensation for trees will be allowed to take away timber of their acquired trees for their domestic use. Trees standing on Govt. land will be disposed-off by open auction by the Revenue Department/Forest Department

3.6.8 The Resettlement and Rehabilitation Policy, 2006 (ORRP, 2006)

GOO has formulated a state level R&R Policy 2006, covering all sectors including the linear projects like roads. The policy has emphasized that LA process will follow LA Act 1894, which provides compensation at market rate. The policy identifies the nature and characteristics of displacement associated with each developmental activity. Accordingly, the policy grouped these developmental projects into four types and 'Road Development/Improvement' falls under type D in 'linear' and urban project category. Basic features of the state R&R policy related to the road improvements are:

- a. It applies to all those projects where land under LA Act 1894 is required.
- b. "Cut-off date" for the purpose of compensation is the date of issue of notification of 4(1) notification.
- c. Approval and oversight of Resettlement Action Plan implementation will be done through RPDAC (Rehabilitation and Periphery Development Advisory Committee).
- d. Provision of resettlement site or cash in lieu thereof for physically displaced families.
- e. Other allowances common to all displaced families.



The policy is unique as it provides scope for additional project specific R&R benefits to the affected community (section 11 of the policy).

3.7 Execution of Works

3.7.1 Commencement of Works

Following are the pre-requisite for commencement of work:

- a. Encroachment/encumbrance free site;
- b. Administrative Approval;
- c. Technical Sanction; and
- d. Award of work by Competent Authority.

No work should normally be commenced or any liability incurred until an A/A has been obtained, a properly prepared detail estimate based on proper detail design is technically sanctioned, allotment of funds made and encroachment free site is given certifying the ownership of land by responsible civil officer.

A sanction becomes operative only when funds are appropriated to meet it or re-appropriated. Expenditure should not be incurred in anticipation of sanction to the re-appropriation.

No work should be commenced on land which has not been duly made over by a responsible civil officer.

Exceptions to the above fundamental Rules are –

- a. Works of which specific orders are received from Govt. for commencement prior to issue of A/A and/or allotment of funds.
- b. Works, such as breaches in embankments or storm- damage to structures or roads etc. where immediate action is essential. Some emergent works are listed in subsequent para of this section.
- c. In exceptional cases where it is desirable to commence work on a project which has been approved before the detailed estimate for the whole of project has been prepared.

In all such cases written order of superior authority to carry out a work or incur liability should be conveyed in writing. On receipt of such written orders or in cases of emergency, the officer may proceed to carry out the necessary work 'on his own responsibility', subject to the condition that he immediately intimates both the Account General, and the Govt. through proper channel that he is incurring an unauthorized liability and states approximately the amount of the liability which he is likely to incur. In such cases, the CE should see the necessary A/A or TS to the estimate, as the case may be, is accorded by the competent authority within three months from the date of commencement of work.

Verbal orders for commencement of work are undesirable as being liable to misinterpretation, but in cases where such orders are given those should be confirmed. **No action shall be taken unless & until the same is confirmed in writing.**

The onus to confirm the verbal order lies with the authority who has given such orders.



When an officer decides to incur expenditure on the verbal request of another officer, the responsibility for the expenditure is squarely placed on the officer incurring it and he should make a prompt report about the liability incurred to his own superior officer with full explanation establishing the urgency of the case. The authority receiving the report refers the matter promptly for the orders of the competent authority.

3.7.2 Sequence of Event for Execution of Work

The AE is the first responsible engineering officer at the site of any construction work like buildings, bridge, roads, etc., who looks after day to day working of the project. The efforts taken & effective supervision on his part have direct relation to the quality of work. He shall therefore get conversant with various aspects of execution of work, to discharge the duties efficiently. The AE can depute one or more JEs to a work site for the effective supervision and proper quality control.

1. **Handing Over Site:** The AE will hand over the site to the contractor as specified in section of contract management.
2. **Study of Concerned Documents by the Contractor:** The relevant valid drawings should be studied and understood properly by the contractor. The tender document and specification of items must be clearly understood. The provision in the contract document and schedule should be studied with reference to time limit, escalation, defect liability, progress schedule & quantities and rates mentioned. The specifications relevant to the schedule of items should be refreshed. The site may be finalised and desired location of site office, storage sheds, batching plant, casting yard, labour camp etc. fixed. Source of construction material like sand, aggregates, cement and steel etc. also to be identified. A detailed work program should be drawn on the basis of availability of plant, material manpower etc. for the smooth progress of work.
3. **Site office & documents at site:** The contractor should set up site office and erect permanent board at the site displaying the details of the work including estimate cost, contract amount, period of contract, scheduled date of completion of work, name of contractor etc. The following details should be available in the site office at all times:
 - i. **Drawings:** All drawings like plan, elevation, layout plan, sections, alignment plan etc. should be maintained in site office. Such plans are required for daily reference and during the inspection of higher officers. These drawings should be properly preserved. Such drawings should bear the signatures of officers approving such drawings, to avoid use of any other drawing. Outdated or superseded drawings should be clearly marked as such and removed from the site. Also all drawings in CD may be kept at the office.
 - ii. **Estimate & Tender:** Copy of the technically sanctioned estimate should be kept in site office under custody of AE for correct reference. Similarly, the contract copy containing all documents shall be kept at site for study and guidance.
 - iii. **Other Registers:** Some other registers are also required to be maintained like site order book, Test registers, hindrance register, Inspection register and any other register specific to work.

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4. **Safe construction practices:** Public safety as well as safety of the workforce is of utmost importance. In case of buildings the provisions of Part 7 of National Building Code 2005 shall apply. For roads and bridges refer IRC SP 55 shall be followed.
5. **Environmental considerations:** For all construction activities, provisions of environmental requirements in the code and manual shall be followed. All necessary clearances at the local, state and national levels should be obtained prior to the start of work.
6. **Quality Assurance of works:** For all construction activities the provisions of QA in the manual and code shall be followed.
7. **Layout of the Work:** After having cleared the site, permanent benchmarks should be fixed, guide reference pillars fixed at site during the location survey. The layout should be done correctly to true lines, dimensions and locations as per approved drawings. The junction pillars beyond layout area should be erected, marked, painted and maintained throughout for reference. It should be cross checked for right angles, diagonals etc. The AE should approve all layouts.
8. **Excavation for road work and drain and approval of foundation:** All excavation should be done as per specification. The AE should approve all excavations.
9. **Excavation for structures:** Excavation for structures should consist of the removal of material for the construction of foundations for buildings, bridges, culverts, retaining walls, headwalls, cut off walls, pipe culverts and other similar structures, in accordance with the requirements of these specifications and the lines and dimensions shown on the drawings or as indicated by the AE.
10. **Dewatering and protection:** Normally, open foundations shall be laid dry. Where water is met with in excavation due to stream flow, seepage, springs, rain or other reasons, the Contractor should take adequate measures to keep the foundation trenches dry when so required and to protect the green concrete/masonry against damage by erosion or sudden rising of water level.
11. **Preparation of foundation:** The bottom of the foundation should be leveled both longitudinally and transversely or stepped as directed by the AE. If, during inspection, it is found that the contractor has over excavated the foundation in excess by what is shown in the drawings, he should not be allowed to refill this with earth but, the additional excavation shall be got filled up by concrete or masonry of such proportions as decided by the EE. No extra cost is payable to the contractor on this account. When rock or other hard strata is encountered, it should be freed of all soft and loose material, cleaned and cut to a firm surface either level and stepped as directed by the AE.
12. **Formwork:** The concrete acquires exact shape of the mould in which it is placed. For good concrete work, shuttering, centering and concreting operations are three important things. It is therefore important that principle of sound design, erection of the shuttering is strictly followed. Any negligence on this count may lead to mishaps resulting in loss of human life and public money. Formwork proposed to be employed by contractor should be obtained, examined and approved by the AE



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- 13. Scaffolding:** Scaffolding is the responsibility of contractors, but the departmental officer must ensure that the scaffolding provided is adequate and properly fixed together and strengthened so that workmen and others using them can carry on work safely.
- 14. Shuttering and Centering Work:** The EE may require the contractor to use screw jacks or hardwood wedges to take up any settlement in staging or centering either before or during the placing of the concrete. All staging and false work should be built on foundations of sufficient strength to carry the load without appreciable deformation.
- 15. Materials:** All materials like cement, steel, brick, coarse and fine aggregates, water to be used for concrete should be tested and approved beforehand. Quarries inspected and approved before bringing materials at site.
- 16. Supply of Materials for Road Work:** Aggregate supply required for any roadwork should be from an approved quarry/source. The materials should be stacked as per specification.
- 17. Job Mix Formula/Mix Designs:** The contractor should submit the job mixing formula/mix design before the commencement of work. While establishing the job mix formula, the contractor should ensure that it is based on a correct and truly representative sample of the materials that will actually be used in the work and that the mixture and its different ingredients satisfy the physical and strength requirements. Approval of the job mix formula should be based on independent testing by the Engineer for which the contractor shall furnish samples of all ingredients.
- 18. Concreting:**
- i. The mixing proportion shall be achieved correctly by using weigh batching or volumetric method (for small works only).
 - ii. Concrete should be thoroughly mixed and then immediately transported and placed without segregation and before the initial setting time. Retarding chemicals can be used for delaying the initial set, if required.
 - iii. Concrete should be well compacted, immediately on placing with vibrators. Over or under compaction should be avoided. Care should be taken where reinforcement is heavy in narrow sections. The finished surface should be re trowelled after initial set to avoid surface cracks.
 - iv. The curing must begin after the final set but not later than 24 Hrs. The date of concreting shall be written by paint on column/beam faces, after removal of shuttering for easy reference. Curing should continue for 14 days. When maintaining of proper curing is difficult, curing compounds should be used. To conserve water, fine sprayers shall be used for curing the sides & bottoms.
 - v. At least three cubes should be taken from the working mix prescribed for day's concreting and their record shall be maintained. These cubes should be tested in the laboratory on due dates and proper cognizance of results should be taken. In case of abnormal results the fact should be immediately brought to notice of the superior officers.



19. Removal of Shuttering Centering: Normally, side shuttering of column, beam faces is removed after 24 Hours. However, the centering should be removed only after the prescribed period. While removing centering, care should be taken to avoid injuries to the labourers or staff working there. Particular care should be taken while removing shuttering below cantilever slab/beams etc. Unless sufficient counter weight for the cantilever portion is developed the centering should not be removed. If proper sequence of removal of props is not followed, the beam or truss may collapse due to wrong support pattern.

20. Road Machinery: As a matter of policy modern machineries should be used for all public works and the same should be encouraged. Mechanisation of all construction is not only necessary for speedy construction but also for overall economy and for achieving the desired quality of the finished job. In road works, starting from grubbing or site clearance, the road construction machinery can be deployed at all stages of construction till completion of the project.

3.7.3 Scope of Sanction

Approval to an estimate should be strictly limited to the precise objects which the estimate is intended to provide. Any anticipated/actual saving on any estimate for a definite project should not be used to carry out additional work not contemplated in the original project or fairly contingent upon its actual execution.

Saving due to the abandonment of a substantial section of any approved project are not to be considered as available for work on other Sections without further approval of that authority.

3.7.4 Lapse of Sanction

The approval or sanction to an estimate for any public work, other than annual repairs will, unless such work has commenced, cease to operate after a period of 5 years from the date on which it was accorded. When an abandoned work is required to be taken up again, fresh approval will be necessary, but in case of work, the execution of which was deferred, the work can be restarted on receipt of instructions from the competent authority without fresh A/A within 5 years from the date of its original approval, provided that the estimate does not otherwise require revised sanction on account of increase in rates or modification of the original proposal or design.

- a. In the case of a work which has commenced, is required to be abandoned or its further execution is deferred by an order of the competent authority, then the contract should be terminated with due notice without loss of any time and the accounts for that work be closed.
- b. The works abandoned should be properly reported to audit to watch that further expenditure on these abandoned works is not incurred without proper authority.

3.7.5 Addition/Alteration during Execution

No material alteration in sanctioned and also standard designs which have been approved by a higher authority should be made by a DO without the approval of such authority. If any alteration of importance involving additional expense is found necessary, a revised or supplementary estimate should be submitted for sanction. However in unavoidable cases where any delay is likely to cause



inconvenience, an immediate report of the circumstances must be made to the superior authority and dealt with as the case may require.

In works, the estimates for which have been sanctioned by a competent authority no addition or alteration likely to cause an excess which does not fall within the powers of sanction of that authority should be permitted without the previous approval of a higher authority.

Where important structural alternations are contemplated, though not necessarily involving an increased outlay, the orders of the original sanctioning authority should be obtained. A revised estimate should be submitted for TS and A/A should the alterations involve any substantial change in the cost of the work.

When work on any new building is about to be commenced or any alternation, addition or repairing executed to any building, due prior intimation of at least 15 days of such intention to local head of the Department occupying the building should be given.

3.7.6 Safety and Convenience of Public

- a. All operations are carried on in such a manner as to interfere as little as possible with the traffic or ordinary pursuits of the people.
- b. Temporary diversions with proper roads and bridges should, when necessary, be provided.
- c. Particular attention should be paid to the provision of adequate lighting of all obstructions to public roads and passages.
- d. The occupation of land, when practicable is so timed as not to lead to the destruction of standing crops. Brick kilns etc. should not be erected so close to the inhabited part of any town or cantonment as to be a nuisance.
- e. Except under orders of the State Govt. no religious edifice should be destroyed or injured in the execution of works without the full and free consent of the persons interested in it, or without the concurrence of principal civil authority on the spot.
- f. On no account any church, chapel, mosque, temple, tomb or any other building devoted to religious use, should be occupied as a dwelling house or for any other purpose, without the consent of the persons interested and the sanction of the Collector of the district. No building or monument of historical or archaeological interest or the lands attached there to should be used as residence or for any other purpose without the special approval of Govt.

All interruptions of large works in progress should be immediately reported to the SE, the cause and probable duration of such interruptions being duly explained.

All unusual losses in the manufacture of materials must, on their occurrence, be reported to the SE.

3.7.7 Accident Report

DOs should promptly report to the CE and also to the SE the occurrence of all serious and important accident or damage to any asset borne on the books of the Department, or to any historical or archaeological monuments whether in charge of the Department or not DO and other subordinates in charge of works should furnish immediate information to the officer-in-charge of the nearest Police Station.



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The CE on receipt of such reports should immediately transmit the same to Govt. with his comments, if any. A detailed report should also be submitted by him within a reasonable period after causing a Department enquiry into the accidents or damages.

Any loss of cash, stores etc., caused by embezzlement or otherwise when discovered should be immediately reported to the SE as well as to the AG. Petty cases involving losses not exceeding Rs. 500 each need not be reported to the Account General unless there are in any case important features which merit detailed investigation and consideration.

3.7.8 Employment of Female Labour/Child Labour

The employment of female, labours on works in the neighbourhood of soldier's barracks or jail should be avoided as far as possible. No person under the age of 14 years should be employed on works carried out departmentally. In case of works given out on contract, a condition to this effect should be prescribed in the contract.

Temporary accommodation for work-charged employees stationed at the site of work may be provided subject to the specific provisions in the estimate of work.

In carrying out public works departmentally or through the agency of contractors local labour should as far as possible be utilised and various Labour Acts and Regulations there under in force should be followed. **In cases where works are done through contract, the Divisional Officer should exercise oversight on the Contractor to comply with all labour laws including safety to workers.**

The SE may if he deems it necessary direct the DO to suspend the commencement or progress of any work due to administrative or technical reasons.

3.7.9 Co-ordination of Works

A. Pre-construction Stage

The co-ordination upto the stage of preparation of detailed estimate/NIT for execution of a project/work shall be done by the concerned SE/EE/Architect handling the project. The preparation of lay out, preliminary and detailed working drawings of buildings shall be done by the Senior Architect/Chief Architect in consultation with the client Department as well as with the SE (Planning), civil and electrical, after obtaining their proposals and requirements. For this purpose, the SE/EE/Architect shall send advance copies of the drawings to all the concerned officers involved in the project and call for their comments. The detailed working drawings shall be finalised after taking into account such comments into consideration, and after further mutual discussions as may be necessary.

These drawings shall be sufficiently detailed to enable the field officers to relate it with the schedule of items for execution of work without any ambiguity or lack of clarity.

In case of works where architectural input is not required, such as road work, the EE (Planning) in Circle/SE (Planning) in Zone shall co-ordinate the work upto the NIT stage.

B. Construction Stage

The co-ordination during the construction stage shall be done by the concerned SE (Civil) or by the Nodal Officer so appointed by the CE. He shall hold regular co-ordination meetings with the



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concerned officers of the various disciplines to review the progress of the work, and to sort out hindrances or bottlenecks wherever these occur. He shall also invite the client's representative from concerned Department to participate in the co-ordination meetings for regular appraisal of progress of work, appreciation of client's needs and desire, and to sort out inter-departmental issues, if any. He shall issue regular minutes of such meetings to all concerned.

The EEs, Civil and Electrical, shall work in close co-ordination to ensure that all the preceding activities involving work of other disciplines are completed well in time before the subsequent activities as per the program of work are taken up.

Any change from the provisions in relevant drawings that becomes necessary during the execution of work due to any practical difficulty etc., shall be brought to the notice of the concerned officers and their concert obtained.

3.7.10 Local Bodies

In all cases, where the OPWD has to depend upon the local Municipal and other authorities for the provision of external services, viz. roads, drains, water supply mains, sewerage, electric mains, etc. there should be proper co-ordination between the OPWD Officers concerned with the project and Municipal and other authorities. To avoid any infringement of building and health bye-laws of local Municipal Committee/Corporation, the building plans should be prepared by Architects keeping in view the provisions and requirements of these bye-laws.

The Architect shall pursue with the Local Bodies in close co-ordination with the EE (Civil) for obtaining the necessary clearances/approvals.

On commencement of work, the local bodies should also be moved simultaneously for provision of ancillary services. Provision for such external services, wherever required to be provided for by the Department should invariably be made in the main project estimate.

3.7.11 Horticulture/Landscaping Works

When the building work has sufficiently advanced, the concerned section dealing with Horticulture/Landscaping should initiate action for such works.

3.7.12 Completion of Works

The administrative Department shall be kept informed at regular intervals about the stages of progress of work so that observations of the concerned department, if any, could be responded to before the work is completed. Monthly Progress Report shall be submitted by the DO to all concerned.

On completion of the work, the administrative department should be intimated of the same and formal handing over arranged in writing. Reasonable advance intimation of completion of the work should be given to the concerned department to enable them to make arrangements for taking over.

As built drawings, completion plans of the project, including all services, should be prepared and submitted along with the completion report showing the expenditure incurred on the project.

The Completion Report should be prepared from the Works Registers indicating the expenditure incurred till the date of completion and passing the excess, if any, as it may be within the competence of OPWD Officers.



The EE in charge of the work should maintain a register called "Consolidated Register of Works" so as to exhibit the total cost of the project including all components. For this purpose, the concerned Divisional units, on completion of their portion of the work will intimate the audited figures of expenditure to the building Division through a Completion Report, and get the excess, if any, passed. The overall responsibility for obtaining the revised A/A and expenditure sanction for the project as a whole, wherever required, will rest with the EE (Civil).

Subsequent to the computerization of accounts and Progress Monitoring System developed by the NIC in co-ordination with OPWD, the actual expenditure figures from the Monthly Accounts that are entered and are being uploaded every month by the individual Divisional units to the Central Server. The Server automatically consolidates the actual expenditure figures of the various Divisional units TS wise under the respective A/As of the works. The EE (Civil) shall, therefore, watch the expenditure figures from the website for taking action as above.

3.7.13 Works of Emergent Nature

Various works of emergent nature can be classified as a) Emergent Work b) Urgent Work.

A. Emergent Works

Emergent works are those kinds of works which arise all of sudden and are inescapable requiring immediate action that cannot brook any delay. Emergent works may be taken up by OPWD under following situations:

- i. Earth quakes
- ii. Blizzards
- iii. Hurricanes/lightening
- iv. Tornados
- v. Tsunami waves
- vi. Floods
- vii. Explosions/Arson
- viii. Fire
- ix. War
- x. Sudden collapse of building, bridge
- xi. Terrorist attack
- xii. Mass strike affecting civic services such as water, sewer and power supply
- xiii. Ceremonial functions at the time of death of Ministers, VVIPs etc.
- xiv. Spread of epidemic
- xv. Works required to maintain law and order in abnormal situations
- xvi. Any work declared emergent by CE in case the interest of work so demands

In case of emergency, the work may be executed in absence of any or all of the above mentioned prerequisites. On such aforesaid situations or on receipt of such written order of the CE in case any



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work declared emergent by him, the EE/AE shall proceed to carry out the necessary work, and shall immediately intimate the AO concerned that he is incurring such a liability, stating therein the approximate amount of liability that he is likely to incur. The EE/AE should obtain the A/A and expenditure sanction and accord of TS of the competent authority to regularize the liability as early as possible.

B. Urgent Works

The urgent works need not to be treated at par with the works to be taken up under emergency situations. Urgent works may be defined as those kinds of works which requires fast start/completion within compressed time schedule and are to be taken up on top most priority at the instructions of competent authority. Under such situation availability of funds needs to be ensured before taking up execution of works.

Urgent works can be taken up at specific request of user Department with prior in principle approval of OWD officers competent to approve the work order to be issued to take up such works if work is to be executed through work order. CE shall be final authority to approve the execution of urgent works.

The financial powers under emergency and urgent situation should be exercised with great caution after watching the financial Interest of Govt.

3.7.14 Advances to Contractors

With regard to Advances to contractors it should be as per the provisions of SBD and latest Regulations/Orders of Finance Department shall be followed.

3.7.15 Sanitation on Extensive Works

On extensive works, where large labour force is deployed, the provision of good labour huts, water-supply and sanitary must be made and all reasonable precautions be taken to maintain the health of the labour force and prevent epidemics.

The contractors shall have the responsibility to provide the above mentioned amenities and take precautions. The DO shall ensure that such arrangements are made by the contractor.

3.7.16 Information to be given to the Survey Department

- a. To enable the Survey department to keep up-to-date information regarding additions or alterations or to works and all new public works such as dams, main and reservoirs, power houses barrages, weirs, canals cross drainage works, roads, railways, bridges and extra high tension (HT) trunk branch lines for transmission of the electrical energy should be supplied to them.
- b. When any such public work has been constructed or Section has been opened, a copy of the index or record map, on whatever scale available (not less than 1 cm. to 0.50 Km;) provided it is from original surveys and not a mere eye sketch made on tracings from the Survey of India maps, should be sent to the Survey of India Calcutta, and that department will take steps to have it utilised by its own draftsman Index plans of canals, large irrigation channels, main lines of road, extra HT trunk and lines for transmission of electrical energy should be sent to the department.



- c. To ensure the material supplied being suitable for the purpose the Survey department, the topography adjoining the alignment, as village sites, tri-junction boundary pillars, other, permanent objects the crossing of roads and streams, should be accurately shown, it should be, stated on the map supplied if the information is derived from actual surveyor or otherwise.
- d. The Survey department should be requested to treat the index of record maps with every care and to return them as early as possible to the officers from whom they have been received.

3.7.17 Departmental Execution of Work

The rules regarding execution of works departmentally are given in **Appendix IV**.

3.8 Execution of Works by Civil Officers

3.8.1 General

Save in where the Govt. may assign the construction and maintenance of buildings and other public works to the department is using or requiring them, the execution of all the works of construction or repair required for Govt. department should be entrusted to Public Works department.

3.8.2 Public Works Executed by Civil Officers Acting as Public Works Disbursers

Works relating to buildings or roads, or irrigation etc. not costing over Rs 25,000 may be with mutual understanding between the department in-charge of public works and the Departments concerned be executed by the latter on behalf of the former, the charges will be debitable to the public works grants. In actual practice the system may be confined mainly to ordinary and special repairs in remote areas where there is inadequacy of the public works staff and it is advantageous to both the Departments. The expenditure when incurred on account of ordinary or special repairs on each building, road etc. should be limited to the amount authorized by the department in charge of public works and the annual statement of the amounts so spent should be sent by the head of the civil department to public works division concerned in order to enable the latter to keep a check on the amount and also to see that repairs to buildings or roads or irrigation works etc. are carried out periodically and are not neglected for years together.

Any wing of a Public Works department may take up works relating to other wings for facility of execution such as canal-bridges on road crossings etc. In such cases the executing Division should obtain plan designs and estimates duly countersigned from the concerned Division and execute the work on receipt of necessary funds in advance.

While entrusting such work, care should take to see that the department has engineering personnel under their control.

3.9 Deposit Works

The term deposit work is applied to works which are not budgeted works and the fund is met out of Govt. grants to autonomous body, institutions other than administrative ministry or is financed fully or partly by non-Govt. sources.



3.9.1 Procedures to Undertake Deposit Works

- a. The Officers of the OPWD have been delegated powers to undertake deposit works are same as their power for technical sanction. No deposit work should be undertaken without the prior approval of the competent authority.
- b. Before acceptance of any deposit by the EE, it is essential that an estimate should be sent to the Client department/Body/Institution after fully ascertaining all necessary site details, technical feasibility, topographical details, ownership of land etc. In case any preliminary works like soil testing, site survey/contour survey etc., which are required to be done before hand, a requisite estimate may be sent to the client and after deposits is received to cover such investigations cost thereafter the work be taken up.
- c. The departments in charge of public works may at the discretion of the State Govt., be called upon execute works for which the outlay is provided wholly or in part from-
 - i. Funds of a public nature but not included in the financial estimates and accounts of the State Govt.; and
 - ii. Contributions from the public. Such works are termed deposit works. These works may be on behalf of another State, corporation, municipality, Red Cross Society, welfare organisation or any other legal entity, etc.
- d. Tenders for deposit works shall be invited for and on behalf of the principal the entity concerned.
- e. Prior to undertaking the preparation of the estimate, cost of its preparation shall be got deposited from the client. **The DPR shall be prepared only after amount is deposited based on rough cost estimate. Tender for the work will be issued after handing over of encumbrance free land/site by the concerned authority on behalf of which deposit is to be undertaken.** Before the work is taken in hand, a written approval to the design and estimate must be obtained from the authority depositing or administering the funds. Levy of departmental charges in the estimates shall be in accordance with the policy laid down by the State Government from time to time, but the Government may grant full or part exemption. The administrative approval and technical sanction shall be governed by the relevant provisions.
- f. The funds shall be realised before any liability is incurred on account of the work. No interest shall be allowed on sums deposited as private contributions for works. In case where the receipt of money is assured, one-third of the estimated cost may be got deposited in advance. Thereafter, the expenditure incurred may be got reimbursed through monthly bills with rendering of monthly accounts on the progress of works. The one-third deposit obtained as the first installment shall be retained for adjustment in the last portion of the estimated expenditure. Where delays are experienced in obtaining funds, and where expenditure has to be incurred out of one third reserve to keep the works going, the matter should be brought to the notice of SE/CE promptly for taking up the matter with client department It should be understood that no expenditure shall be incurred by any PWD out of its own grants/funds and vice versa. For petty or short duration works, full funds should



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be realised in advance. In the case of works which are financed by private persons, it shall be proper to get 100% deposit.

- g. In case of a State Govt. undertaking or a State University or any such body, the amount may be taken in such installments and by such dates as decided by the administrative Department of that body. The administrative department, while giving such concurrence, shall note that it was undertaking to provide the funds itself in case of any shortfall.
- h. In cases where the department undertakes to design and construct a work wholly from sources alluded to in paragraph 3.9.1 (c) above like, town hall or reservoir for a municipality or a school or hospital for which funds have been raised by subscription, the following rules will be observed:
 - i. The design and estimate will, in the first instance, be drawn up in consultation with the party or parties depositing or administering the funds and must be submitted for the approval of such higher local departmental authority as the extent of the estimate would require in the case of an ordinary public work.
 - ii. Prior to the work being taken in hand, a written approval to the estimate and design, **MOU** must be drawn with the authority depositing or administering the funds, and an acknowledgment procured to the effect, that in undertaking the work the Department does not accept responsibility for unavoidable and reasonable excess, such as would be caused by a rise in the price of labour or materials, by authorized alterations in design, loss by fire or theft, or by any other factors which could not be foreseen at the time when the estimate was prepared. Any alteration in design must be similarly dealt with.
 - iii. Where the work is of large magnitude, or there are any special circumstances which seem to render such a course desirable, an agreement (MOU) should be drawn up under legal advice between the parties.
 - iv. The necessary funds for the execution of the work must be realised and paid into the Govt. treasury either in a lump sum or in such installments and by such dates as the State Govt. may decide in each case. Utilisation of Govt. money for such deposit work will not be permitted and in a case where the money is paid by installments for incurring expenditure in excess of deposit and classifying that as minus (-) deposit is a serious financial irregularity. Govt. will not be responsible for, any increase in cost or damage to the incomplete work, caused by a temporary stoppage of the work pending receipt of further installments.
 - v. It will be the duty of the officer in charge of the work to bring at once to the notice of his superiors and of local body or individuals any anticipated excess over estimate as well as to provide the fullest information in connection with the progress of expenditure, so that no responsibility may be attached to Govt., in the event of the work having to be stopped for want of funds.
 - vi. All anticipated excess owing to the tender having been received at rates higher than provided in the estimate should be at once brought by the Engineer-in-Charge to the notice of the party concerned for accepting the excess and arranging enhanced funds



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accordingly. The executing officer shall also inform the client about any significant increase happening in the construction cost due to any reasons. The client can, however, seek any details in this regard.

- vii. The authority under whose orders a deposit work is undertaken should satisfy itself that the extent, to which Govt. is responsible in regard to the execution of the work, is thoroughly understood by both the parties for whom the work is to be taken up and by the executing officers to whom the work is to be entrusted.
- viii. It must be clearly understood that contributions/deposits on account of one work can in no circumstances, be utilised in meeting outlay on account of another work the contributions/deposits for which may be in arrears.
- ix. Where a work is to be carried out partly from funds in the estimates of the Department and partly from funds provided by some other entity, the contribution will be considered as a lump sum in addition to the Govt. grant, and the work shall be executed strictly in accordance with the procedure laid down for normal Govt.-works. The contribution can be taken in installments also.
- x. The client shall be clearly told that no advance of Govt. money will be permitted and in case where the money is paid by installments, the PWD will not be responsible for any increase in cost, or damage to the incomplete work caused by temporary stoppage of the work pending receipt of further installments. Deposits received from one Department should not be diverted to works of the other. However, the CE concerned may allow temporary use of funds in special circumstances in respect of State Departments, undertakings or other State entities.
- xi. It shall be the duty of the Engineer-in-Charge of the work to bring, as soon as possible, to the notice of the superiors and the party concerned, any anticipated excess over the estimate, and also to provide full information in connection with the progress of work as well as expenditure so that no responsibility may attach to the Department in the event of work having to be stopped for want of funds.
- xii. Authorities undertaking such works shall satisfy themselves that the extent to which Govt. is responsible in regard to the execution of the work is thoroughly understood both by the party for whom the work is to be constructed and by the executive officer to whom the construction is to be entrusted. The cost of any escalation/litigation/arbitration is always required to be borne by the client, and no liability shall devolve on the State Govt.

3.9.2 Realisation of Deposits

- a. Whenever a deposit work is to be undertaken, the deposit should be realised before any liability is incurred on the work. 1% of the anticipated project cost should be realised before preparation of preliminary estimates. In addition to the outlay on the work in the preliminary estimate, departmental charges at such percentages as are prescribed by the Govt. of from time to time shall also be realised in advance. No interest will be allowed on sums deposited from any source, including private contributions.

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- b. In the case of deposit works of autonomous bodies which are financed entirely from Govt. grants, and/or from whom receipt of deposits is assured, 33-1/3% of the estimated cost of the work may be got deposited in advance. Thereafter, the expenditure incurred may be got reimbursed through monthly bills simultaneously with rendering of monthly accounts on the progress of work. The deposit of 33-1/3% obtained as the first installment should be retained for adjustment against the last portion of the estimated expenditure.
- c. To enable the client to provide additional funds in time whenever the expenditure is anticipated to exceed the preliminary estimate figure, a revised preliminary estimate should be submitted to the client well in time during the execution of work.
- d. Where a client has defaulted in making the required deposit, and where the outstanding amount exceeds Rs.10 lakhs, or where the works outlay is predominantly for purchase of capital equipment's and machineries, the entire deposit including departmental charges should be realised in advance.
- e. The client is to be clearly made to understand that the OPWD does not bind itself to complete the work within the amount of the estimated cost and that they should agree to pay for the excess expenditure that may occur. An acknowledgement of this clear understanding shall be obtained from the client before the deposit work is taken in hand.
- f. The EE should ensure that at any time during the progress of the work, the expenditure is not more than the deposits received for the work. Where the EE is doubtful about the timely receipt of deposits, he should notify the client that if further deposit is not received, the work would be stopped, and any contractual liability arising out of such stoppage of work will be borne by the client. He should also bring this to the notice of his higher officers for taking up the matter with the client.
- g. While submitting preliminary estimates for deposit works for obtaining A/A and expenditure sanction, a copy of the terms and conditions under which the works would be taken up by OPWD should also be enclosed.
- h. It is incumbent on the part of the Civil Division to transfer to the concerned Electrical Division a part of the deposit in requisite proportion as required.

3.9.3 Completion of Work

When a work is completed, the DO should forward a completion certificate together with completion plans, plans of all services, inventories of fittings etc., to the authority on whose behalf the work is executed. The acknowledgement of that authority should be obtained and recorded.

3.9.4 Expenditure Statement

In order to enable the non-Govt. bodies depositing funds for execution. of works to be aware of the progress of expenditure a statement of expenditure should be supplied by the DO concerned to the depositors every quarter in the form detailed below when the expenditure is within the contributions/deposits received and every month when an excess over/the contribution/deposit is anticipated until the accounts are finalised. An annual statement of expenditure may be furnished to the non-Govt. bodies through the AG. It is necessary to settle account of each deposit work separately and expeditiously.

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Statement showing the expenditure incurred by the DO.....Division to the end of on contribution/deposit works.

Sl. No.	Name of work	Amount	Amount	Expenditure	During Percentage Charge	Expenditure upon the end of work	Percentage charge	Unspent balance at the end of expenditure
1	2	3	4	5	6	7	8	9

Memo No..... Date.....

Copy forwarded to for information through the Accountant General.

Signature.....

Designation.....

3.9.5 Maintenance of Structures not Constructed by OPWD

The OPWD should normally decline to undertake as deposit work the maintenance of buildings that were not originally constructed by OPWD, and maintenance of mechanical/electrical equipment that were not originally procured and installed by OPWD. Maintenance of such works and installations may, however, be undertaken if it is in the interest of State Government to do so, e.g. when the Body or Institution is financed largely from State Government grants and defects in construction or maintenance might lead to demand for further financial assistance from the Government, or where the concerned works are Government works. *In all such cases where maintenance of a building not constructed by OPWD is undertaken, the same should be done after onetime estimate of upgradation of the building to the requisite standard is sanctioned and upgradation work undertaken by OPWD.*

3.10 Disposal of Estimate

3.10.1 Office of Record for Estimates

Whenever any estimate is submitted for sanction to superior authority, it should be submitted in duplicate. After the estimate is sanctioned, the authority sanctioning the estimate should retain one authenticated copy in his office after entering it in the prescribed register of sanctioned estimates. The other copy of the estimate authenticated should be returned to the DO who shall keep a record thereof in the prescribed register. Copies of sanctioned estimates should also be supplied to the executive subordinates in, charge of the work.

3.11 Supplementary and Revised Estimates

3.11.1 Supplementary Estimates

Any development of a project considered necessary while a work is in progress, which is not fairly contingent on the proper execution of the work as first sanctioned, must be recovered by a supplementary estimate, accompanied by a full report or the circumstance which render it



necessary. The abstract must show the amount of the original estimate and the total of the sanction required including the supplementary amount.

Note: Application for sanction of supplementary estimate should also embody in itself the total amount of the original estimate as well as the supplementary estimate for which sanction has been sought.

3.11.2 Revised Estimates

- i. A revised estimate must be submitted when the sanctioned estimate is likely to be exceeded by more than 10 percent in respect of all the works, either from the rates being found insufficient or when material developments or deviations have necessitated revised A/A from or any cause whatever except as mentioned above.
- ii. When there is a likelihood of unavoidable delay in the preparation of a revised estimate, an immediate report should be made to the respective sanctioning authority whose sanction for A/A and TS would ultimately be required to the revised estimate.
- iii. When a revised estimate is submitted it must be accompanied by a statement comparing it with the latest existing sanction of the competent authority with reasons of changes and a report showing the progress made to date.

3.11.3 Utilisation of Completion Report as a Revised Estimate

When excess occur at such an advanced period in the construction of a work as to render the submission of a revised estimate purposeless, the excesses, if beyond the DO to pass may be explained in the completion report. But when excesses of more than 10percent shown on a completion report should be explained why a revised estimate was not submitted before the work was completed and the SE should report whether the probability of an excess occurring was reported to him on a work slip.

3.12 Completion Reports, Certificates and Plans

3.12.1 General

- a. A consolidate completion statement (in form No. 156 of Schedule XLV) should be prepared monthly of all completed works other than those referred in clause (b), the actual expenditure on which is in excess of the sanctioned estimate by an amount greater than that which the DO is empowered to pass. This statement should show for each work or group of works the estimated amount, the outlay and the excess. In cases in which the completion statement is utilised instead of revised estimate sufficient details must be given, if the excess is more than 10percent to satisfy the authority whose sanction is necessary.
- b. A detailed completion report) need only be prepared in respect of works on which the outlay has been recorded by subheads-
 - i. When, if the work was sanctioned by higher authority, the total estimate has been exceeded by more than 15 percent; and
 - ii. When, if the work was sanctioned by the DO, the total estimate has been exceeded by an amount greater than that which he is empowered to pass. This report should give a



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comparison and an explanation of difference between the quantity, rate and cost of the work executed and those entered in the estimate and should mention the names of the engineers and subordinates by whom the, work was supervised.

Note: In respect of important component parts of any work, the SE, if he so desires, may require intermediate completion report.

3.12.2 Works Executed on Behalf of Other Departments

On completion of an original work executed on behalf of another department, a completion certificate should be forwarded by the DO to the Civil authority concerned, who should after signing in the space provided for the purpose return it to be DO. After the certificate is received back from the civil authority a copy thereof should be sent to audit. In the case of repairs, the SDO should submit, a completion certificate to the officer of the Department immediately interested in the work who should, after endorsing it with the remark that the work is in 'good' order or otherwise, forward it to his departmental superior (if he is not himself the officer competent to sign the certificate). The latter officer should then transmit it to the DO for disposal. The completion certificate in the case of petty works and repairs will be endorsed on the requisition and no separate certificate is then required.

3.12.3 Taking over of Completed Project

- a. Civil officers are required to fill up, and sign all authorised forms of requisition, completion report or other certificate of execution that may be required by the DO in consequence of the execution of any work on their application or order.
- b. The countersignature of a civil officer merely implies, in the case of an original work that the work has been completed and taken over and in the case of repairs that the building or work, generally is in proper order and involves no further responsibility. If the countersigning officer is not satisfied with the work and wishes to make any remark, he can do so, over his signature. But he should bear in mind that in making remarks, which are unnecessary or irrelevant, he may occasion trouble and delay.

3.12.4 Record Drawings and Plans

Record drawings, showing the work as actually constructed, should be completed as the work proceeds by, the officer in immediate charge of every new work or alterations of on existing work, for approval and record by the DO. Completion plans, consisting of copies of the record plans of the more important works and alterations should, if required to, elucidate the report or if otherwise so directed by the SE is prepared in the Divisional Office to accompany the completion report.

- Notes :**
1. During the progress of any work, if the officer-in-charge of a work is transferred, then the completion plan for the completed portion should be prepared and a reference of the same should be made in the handing-over report.
 2. Record drawings of important municipal works constructed by a Division should be supplied to the Municipality concerned.
 3. Record drawings of buildings and other structures should consist of a site plan, ground plan, elevation and one or two Sections as may be necessary to illustrate the work,



preferably on one sheet. Any other details required for a particular type of structure should also be given.

3.12.5 Office of Record

- a. On the completion of any work in respect of which a completion report or statement is required under such report or statement should be forwarded by the DO to the Audit Officer who should after verification of the figures transmit it to the SE. If the SE is himself empowered to deal with the excess, he will dispose of the completion report or statement, otherwise he should submit it to the CE who in his turn will submit it to the Administrative Department in-charge of public works, if he is not empowered to deal with the excess. After disposal by the authority concerned it should be returned to the Divisional Office, which is the office of final record for all completion reports. Sanctions passing the excess should be communicated to audit by the authorities concerned. Completion plans, if any, should not be sent to the audit office but should be forwarded direct to the SE who should attach them to the completion report on its receipt.
- b. Completion certificates which should not be submitted to audit, should ordinarily be retained in the Divisional Office. But in the event of unfavourable remarks having been recorded on such a certificate by any civil officer, it should be submitted for orders of the SE with the explanation of the DO and an account of any action he may have taken.

Note: For all completed works, the verified expenditure should be noted in the register of sanctioned estimates.



Annexure 3.1: Guidelines/Procedure to be followed in e-Procurement in Government of Odisha

(Reference Para 3.5.9 of Manual)

1. This consists of the procedural requirement of e-procurement and shall be made part of the Detailed Tender Call Notice or instruction to Bidder for all “works” tenders hosted in the portal.
2. The e-procurement portal of the Government of Odisha is “<https://tenderOdisha.gov.in>”.
3. Use of valid Digital Signature Certificate of appropriate class (Class II or Class III issued from a registered certifying Authority (CA) as stipulated by Controller of Certifying Authorities (CCA). Government of India such as n-Code, Sify, TCS, MTNL, e-Mudhra etc. a mandatory for all users.
4. The DSC issued to the Department users is valid for the period of two years only. All the department users are responsible to revalidate their DSC prior to expiry.
5. For all purpose the server time displayed in the e-procurement portal shall be the time to be followed by all the users.
6. Government after careful consideration has decided to host all tenders costing 10 lakhs or above in the e-procurement portal. This will be applicable across all Engineering Departments such as Works Department, Department of Water Resources, Rural Development and Housing and Urban Development Department, Government of Odisha also welcomes hosting of tenders by any other departments, authority, corporations, local bodies etc. of the State with prior approval from Information Technology Department.
7. The e-procurement shall be operated complaint to relevant of OGFR/OPWD Code/Accounts Code/Government statues including any amendments brought from time to time to suit to the requirement of the best national practice.
8. Registration in the e-procurement portal is without levy of any charges but Government reserves the right to levy charges for such value added services in future.
9. Contractors not registered with Govt. of Odisha, can participate in the e-procurement after necessary enrolment in the portal but have to subsequently register themselves with the appropriate registering authority of the State Govt. before award of the works as per prevalent registration norms of the State.
10. For the role management “Department” is the Administrative Department, Organisation or wing is the Chief Engineer or highest tender accepting authority or equivalent officer under the Administrative Department, Circle is the Superintending Engineer or equivalent officer, Division is the Executive Engineer or equivalent officer and Sub-Division is the Assistant Engineer or equivalent officer.
11. The e-procurement software assigns roles for operation of the module for specific function. The terminologies used in the Portal and their respective functions in the software are as follows.

11.1 Application Administrator (NIC and State Procurement Cell)

- i. Master Management
- ii. Nodal Officer Creation



- iii. Report Generation
 - iv. Transfer of officer's login ID
 - v. Blocking and unblocking of officer's and bidder's login ID
- 11.2 Nodal Officer (At organisation level not below the Superintending Engineer or equivalent rank)**
- i. Creation of Users
 - ii. Role Assignment
 - iii. Report Generation
 - iv. Transfers of Officer's login ID
 - v. Blocking and unblocking of officer's and bidder's login ID
- 11.3 Procurement Officer-Publisher (Officer having Tender inviting power at any level)**
- i. Publishing Tender
 - ii. Publishing of Corrigendum/addendum/cancellation of Tender
 - iii. Bid Clarification
 - iv. Uploading of pre-bid minutes
 - v. Report generation
- 11.4 Procurement Officer-Administrator: (generally Sub-ordinate officer to officer inviting the tender)**
- i. Creation of Tender
 - ii. Creation of corrigendum/addendum/cancellation of Tender
 - iii. Report generation
- 11.5 Procurement Officer - Opener (generally sub-ordinate officer to Officer inviting the tender)**
- i. Opening of bid
- 11.6 Procurement Officer - Evaluator (generally sub-ordinate officer to Officer inviting the tender)**
- i. Evaluating Bid
- 11.7 Procurement Officer - Auditor (Procurement Officer - Publisher and/or Accounts Officer/Finance Officer)**
- i. To take up auditing

12. Notice Inviting Bids (NIB) or Invitation for BID (IFB):

- 12.1 The Notice Inviting Bids (NIB) and Bid documents etc., shall be in the standard formats as applicable to conventional Bids and will be finalised/approved by the officers competent as in the case of conventional Bids.



- 12.2 The officer competent to publish NIB in case of conventional Bids will host the NIB in the portal. Simultaneously, a notification should also be published in the newspapers, as per existing rules preferably, in the following format, to effect economy:

Government of Odisha “e” Procurement Notice

Bid Identification No. :.....

1. Name of the work:
2. Estimated cost: Rs.
3. Period of completion:
4. Date and Time of availability of bid document in the portal
5. Last date/Time for receipt of bids in the portal:
6. Name and address of the Officer Inviting Bid:

Further details can be seen from the e-procurement portal

<https://tendersodisha.gov.in>.

- 12.3 The tender documents published by the Tender Inviting Officer (Procurement officer Publisher) in the website <https://tendersOdisha.gov.in> will appear in the “Latest Active Tender”. The Bidders/Guest Users can download the Bid documents after the due date and time of sale. The publication of the tender will be for specific period of time till the last date of submission of bids as mentioned in the ‘Notice Inviting Bid’ after which the same will be removed from the list of Latest Active tenders.

13. Issue of Addenda/Corrigenda/Cancellation Notice:

- 13.1 The Procurement Officer Publisher (Officer inviting tender) shall publish any addendum/corrigendum/cancellation of tender in the website <https://tendersOdisha.gov.in> notice board and through paper publication and such notice shall form part of the bidding documents.
- 13.2 The system generates a mail to those bidders who have already uploaded their tenders and those bidders if they wish, can modify their tender. The bidders are required to watch the web site till last day and time of bid submission for any addendum/corrigendum/cancellation thereof. Tender inviting authority is not responsible of communication failure of system generated mail.

14. Creation and publishing of bid:

- 14.1 All the volumes/documents shall be uploaded in the portal by the tender creating officer (Procurement Officer Administrator) and published by the officer inviting tender (Procurement Officer Publisher) using their DSCs in appropriate format so that the document is not tempered with.
- 14.2 The tender document comprise of the notice inviting tender, bid document/SBD, drawings in .pdf format and schedule of quantities/BoQ in .xls format to be uploaded by the Officer Inviting Tender.



14.3 Procurement Officer Administrator creates tender by filling up the following forms:

- i. Basic Details
- ii. Cover Content: The Procurement Officer Administrator should briefly describe the name and type of documents to be uploaded by the bidder in the following format:
 - (a) For single cover/packet
 - (b) For Two cover/Packet
- iii. Tender Document: The Procurement Officer Administrator should upload the NIT in .pdf format.
- iv. Work Item Details
- v. Fee Details: The Procurement Officer Administrator should mention the cost of the tender paper and EMD amount as laid down in DTCN/SBD.
- vi. Critical Dates: The Procurement Officer Administrator should mention the critical dates of tender such as, publishing date, document download start date & end date, seek clarification start date & end date (optional), bid submission start date as per DTCN/SBD.
- vii. Bid Opener Selection: The Procurement Officer Creator can select two/three/four bid openers for a particular bid. If required, the bid openers can also be selected within an organisation from other procurement units (Circles/Divisions).
- viii. Work Item Documents: The Procurement Officer Administrator should upload the digitally signed tender document (SBD/DTCN) or any other additional document/drawing in .pdf format and bill of quantities in .xls format.
- ix. Publishing of Tender: The Procurement Officer Publisher shall publish the tender using his/her DSC after detail scrutiny of the fields created and documents uploaded by the Procurement Officer Administrator. Procurement Officer Administrator can publish tender for multiple procurement units using multiple DSCs procured for each post separately. After being relieved from the additional charges he has to surrender the additional DSCs to the nodal officer of the concerned organisation.

15. Participation in Bid

15.1 Portal Registration: The Contractor/Bidder intending to participate in the bid is required to register in the Portal using his/her active personal/official e-mail ID as his/her Login ID and attach his/her valid Digital signature certificate (DSC) to his/her unique Login ID. He/She has to submit the relevant information as asked for about the Firm/Contractor. The portal registration of the bidder/firm is to be authenticated by State Procurement Cell after verification of original valid certificates/documents such as (i) PAN and (ii) Registration certificated (RC)/VAT Clearance Certificate (for procurement of Goods) of the concerned bidder. The time period of validity is at par with validity of RC/VAT clearance. Any change of information by the bidder is to be re-authenticated by the State Procurement Cell. After successful authentication bidder can participate in the online bidding process. [All the](#)



bidder/firm should authenticate their portal registration with State Procurement Cell, Odisha and upload the certificate/documents such as PAN & RC/VAT clearance certificate without which procurement officer should not entertain their bid.

- 15.1.1 Bidders participating through Joint Venture shall declare the authorized signatory through Memorandum of Understanding duly registered and enroll in the portal in the name and style of the Joint Venture Company. It is mandatory that the DSC issued in the name of the authorized signatory is used in the portal.
- 15.1.2 Any third party/company/person under a service contract for operation of e-procurement system in the State or his/their subsidiaries or their parent companies shall be ineligible to participate in the procurement processes that are undertaken through the e-procurement system irrespective of who operates the system.
- 15.2 Logging to the portal: The Contractor/Bidder is required to type his/her login ID and password. The system will again ask to select the DSC and confirm it with the password of DSC as a second stage authentication. For each login, a user's DSC will be validated against its date of validity and also against the Certificate Revocation List (CRL) of respective CAs stored in system database. The system checks the unique Login ID, password and DSC combination and authenticates the login process for use of portal.
- 15.3 Downloading of Bid: The bidder can download the tender of his choice and save it in his system to undertake necessary preparatory work offline and upload the completed tender at his convenience before the closing date and time of submission.
- 15.4 Clarification on Bid: The bidder may ask question online in the e-procurement portal using his/her DSC; provided the questions are raised within the period of seeking clarification as mentioned in tender call notice/Bid. The Officer inviting the bid/Procurement Officer-Publisher will clarify queries related to the tender.
- 15.5 Preparation of bid:
 - 15.5.1 The bids may consist of general arrangements drawings or typical or any other drawings relevant to the work for which bid has been invited. Bidder may download these drawings and take out the print for detailed study and preparation of his bid. Any other drawings and documents pertaining to the works available with the officer inviting the Bid will be open for inspection by the bidders.
 - 15.5.2 The Bidder shall go through the Bid carefully and list the documents those are asked for submission. He shall prepare all documents including cost of Bid Document, Bid Security, Declaration form, price bid etc. and store in the system.
- 15.6 Payment of EMD/Bid security and cost of bid documents:
 - 15.6.1 The Bidder shall furnish, as part of his Bid, a Bid security for the amount mentioned under NIT/Contract Data. The Bidder shall scan all the written/printed pages of the bid security and up load the same in portable document format (PDF) to the system in designated place of the technical BID. Furnishing scanned copy of



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such document is mandatory otherwise his/her bid shall be declared as non-responsive and liable for rejection.

- 15.6.2 The EMD or Bid Security payable along with the bid is 1% of the estimated contract value (ECV) or as mentioned in the bid document. The validity period of the EMD or Bid security shall be as mentioned in the bid document. Any bid not accompanied by an acceptable Bid Security and not secured as indicated in the bid document shall be rejected as non-responsive. The bid security shall be retained till such time the successful bidder furnishes Initial Security Deposit (ISD) or Performance security acceptable to the Officer inviting the Bid. Failure of the successful Bidder to comply with the requirements shall constitute sufficient grounds for cancellation of the award and forfeiture of the Bid Security. The Bid security in the form of FD/BG shall be from a Nationalised Bank valid for a period of 45 days beyond the validity of the bid. Bid security in other form is acceptable if the bid documents provides for it.
- 15.6.3 The fixed Deposit/Bank Guarantee or any other form as mentioned in detailed tender call notice in respect of Earnest Money Deposit/Bid Security and the Bank Draft in respect of cost of Bid are to be scanned and up loaded in portable document format (PDF) along with the bid.
- 15.6.4 The tender accepting authority will verify the originals of all the scanned documents of the successful lowest bidder only within 5 days of the opening of the tender. In the eventuality of failure on the part of lowest successful bidder to produce the original documents, he will be debarred in future from participating in tender for 3 years and will be black listed by the competent authority. In such a situation, successful L-2 bidder will be required to produce the original documents for consideration of his tender at the negotiated rate equal to L-1 bidder.
- 15.6.5 Contractor exempted from payment of EMD will be able to participate in the tender directly by uploading documentary evidences towards his eligibility for such exemption.
- 15.6.6 Government of Odisha has been actively considering integrating e-payment gateway in the portal for payment of Cost of Bid and Bid Security/Earnest Money Deposit. The process of using e-payment gateway shall be issued separately after it is established.

16. Submission of Bid:

- 16.1 The bidder shall carefully go through the tender and prepare the required documents. The Bid shall have a Technical Bid and a Financial Bid. The Technical Bid generally consists of cost of Bid documents, EMD/Bid Security, VAT, PAN/TIN, Registration Certificate, Affidavits, Profits Loss statement, Joint venture agreement. List of similar nature works, work in hand, list of machineries and any other information required by OIT. The Financial Bid shall consist of the Bill of Quantities (BOQ) and any other price related information/undertaking including rebates.



- 16.2 The bidders are to submit original BoQ (in .xls format) uploaded by Procurement Officer Publisher (officer inviting tender) after entering the relevant fields without any alteration/deletion/modification. Multiple BoQ submission by bidder shall lead to cancellation of bid. In case of item rate tender, bidders shall fill in their rates other than zero value in specified cells without keeping it blank. In percentage rate tender, the bidder quoting zero percentage is valid and will be taken at par with the estimated rate of the work put to tender.
- 16.3 The Bidder shall upload the scanned copy/copies of document in support of eligibility criteria and qualification information in prescribed format in Portable Document Format (.pdf) to the portal in the designated locations of Technical Bid.
- 16.4 The bidder shall write his name in space provided in the specified location in the Protected Bill of Quantities (BOQ) published by the Officer Inviting Tender. The bidder shall type rates in figure only in the rate column of respective item(s) without leaving any blank cell in the rate column in case of item rate tender and type percentage excess or less up to two decimal place only in case of percentage rate tender.
- 16.5 The bidder shall log on to the portal with his/her DSC and move to the desired tender for uploading the documents in appropriate place one by one simultaneously checking the documents
- 16.5.1 Bids cannot be submitted after due date of time. The bids once submitted cannot be viewed, retrieved or corrected. The Bidder should ensure correctness of the bid prior to uploading and take print out of the system generated summary of submission to confirm successful uploading of bid. The bids cannot be opened even by the OIT or the Procurement Officer-Publisher/Opener before the due date of time of opening.
- 16.5.2 Each process in the e-procurement is time stamped and the system can detect the time of log in of each user including the Bidder.
- 16.5.3 The Bidder should ensure clarity/legibility of the document uploaded by him to the portal.
- 16.5.4 The system shall require all the mandatory forms and fields filled up by the contractor during the process of submission of the bid/tender.
- 16.5.5 The bidder should check the system generated confirmation statement on the status of the submission.
- 16.5.6 The bidder should upload sufficiently ahead of bid closure time to avoid traffic rush and failure in the network.
- 16.5.7 The Tender inviting Officer is not responsible for any failure, malfunction, or breakdown of the electronic system used during the e-procurement process.
- 16.5.8 The bidder is required to upload documents related to his eligibility criteria and qualification information and Bill of Quantities duly filled in. It is not necessary for the part of the Bidder to upload the drawings and other Bid documents (after



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signing) while uploading his bid. It is assumed that the bidder has referred all the drawing and documents uploaded by the Officer Inviting the Bid.

16.5.9 The bidder will not be able to submit his bid after expiry of the date and time of submission of Bid (server time). The date and time of bid submission shall remain unaltered even if the specified date for the submission of bids declared as a holiday for the Officer inviting the Bid.

16.6 Signing of bid: The 'online bidder' shall digitally sign on all statements, documents, certificate, uploaded by him, owning responsibility for their correctness/authenticity as per IT Act 2000. If any of the information furnished by the bidder is found to be false/fabricated/bogus, his EMD/Bid security shall stand forfeited and the bidder is liable to be blacklisted.

17. Security of Bid Submission:

17.1 All bid uploaded by the Bidder to the portal will be encrypted.

17.2 The encrypted Bid can only be decrypted/opened by the authorized openers on or after the due date and time.

18. Resubmission and withdrawal of Bids:

18.1 Resubmission of bid by the bidders for any number of times before the final date and time of submission is allowed.

18.2 Resubmission of bid shall require uploading of all documents including price bid afresh.

18.3 If the bidder fails to submit his modified bids within the pre-defined time of receipt, the system shall consider only the last bid submitted.

18.5 The bidder should avoid submission of bid at the last moment to avoid system failure or malfunction of internet or traffic jam or power failure etc.

18.6 The Bidder can withdraw his bid before the closure date and time of receipt of the bid by uploading scanned copy of a letter addressing to the Procurement officer-Publisher (Officer Inviting Tender) citing reasons for withdrawal. The system shall not allow any withdrawal after expiry of the closure time of the bid.

19. Opening of the Bid:

19.1 Bid opening date and time is specified during tender creation or can be extended through corrigendum. Bids cannot be opened before the specified date and time.

19.2 All bid openers have to log on to the portal to decrypt the bid submitted by the bidders.

19.3 The bidders and guest users can view the summary of opening of bids from any system. Contractors are not required to be present during the bid opening at the opening location if they so desire.

19.4 In the event of the specified date of bid opening being declared a holiday for the Officer inviting the Bid, the Bids will be opened at the appointed time on the next working day.

19.5 Combined bid security for more than one work is not acceptable.



- 19.6 The electronically submitted bids may be permitted to be opened by the predefined Bid opening Officer from their new location if they are transferred after the issue of Notice Inviting Bid and before bid opening. Further action on bid documents shall be taken by the new incumbent of the post.
- 19.7 In case of non-responsive tender, the officer inviting the tender should complete the e-procurement process by uploading the official letter for cancelled/re-tender.

20. Evaluation of Bids:

- 20.1 All the opened bids shall be down loaded and printed for taking up evaluation. The officer authorized to open the tender shall sign and number on each page of the documents downloaded and furnish a certificate that “the documents as available in the portal containing ...nos. of pages”.
- 20.2 The bidder may be asked in writing/online (in their registered e-mail IDs) to clarify on the uploaded documents provided in the technical bid, if necessary with respect to any doubt or illegible document. The Officer Inviting Tender may ask for any other document of historical nature during Technical evaluation of the tender. Provided in all such cases, furnishing of any document in no way alters the Bidder’s price bid. Non-submission of legible documents may render the bid non-responsive. The officer inviting bid may reserve the right to accept any additional document.
- 20.3 The bidders will respond in not more than 7 days of issue of the clarification letter, failing which the bid of the bidder will be evaluated on its own merit.
- 20.4 Technical evaluation of all bids shall be carried out as per information furnished by Bidders.
- 20.5 The procurement Officer-Evaluators; will evaluate bids and finalise list of responsive bidders.
- 20.6 The financial bids of the technically responsive bidders shall be opened on the due date of opening. The procurement Officer-Openers shall log on to the system in sequence and open the financial bids.
- 20.6.1 The Financial Bid will be opened on the notified date and time in the presence of bidders or their authorized representative who wish to be present.
- 20.6.2 At the time of opening of “Financial Bid”, bidders whose technical bids were found responsive will be opened.
- 20.6.3 The responsive bidders name, bid price, item wise rates, total amount of each item in case of item rate tender and percentage above or less in case of percentage rate will be announced.
- 20.6.4 Procurement Officer-Opener shall sign on each page of the downloaded BOQ and the Comparative Statement and furnish a certificate to that respect.
- 20.6.5 Bidder can witness principal activities and view the documents/summary reports for that particular work by logging on to the portal with his DSC from anywhere.



20.6.6 The system provides an option to Procurement officer Publisher for reconsidering the rejected bid with the approval of concerned Chief engineer/head of the department.

21. Negotiation of bids:

For examination, evaluation and comparison of bids, the officer inviting the bid may, at his discretion, ask the lowest bidder for clarification of his rates including reduction of rate on negotiation and breakdown of unit rates.

22. Notification of Award and Signing of Agreement:

22.1 The Employer/Engineer-in-charge shall notify acceptance of the work prior to expiry of the validity period by cable, telex or facsimile or e-mail confirmed by registered letter. This Letter of Acceptance will state the sum that the Engineer-in-charge will pay the contractor in consideration of the execution and completion of the works by the contractor as prescribed by the contract and the amount of Performance Security and additional Performance security required to be furnished. The issue of the letter of acceptance shall be treated as closure of the Bid process and commencement of the contract.

22.2 The Contractor after furnishing the required acceptable performance security and additional performance security, 'Letter to Proceed' or "Work Order" shall be issued by the Engineer-in-charge with copy thereof to the Procurement Officer-Publisher. The Procurement Officer-Publisher shall upload the summary and declare the process as complete.

22.3 If the L-1 does not turn up for agreement after finalisation of tender, then he shall be debarred from participation in bidding for 3 years and action will be taken to blacklist the contractor. Besides the consortium/JV/firm where such an agency/firm already happens to be or is going to be a partner/member/proprietor, he/they shall neither be allowed for participation in bidding for next 3 years nor his/their application will be considered for registration and action will be taken to blacklist him/them. In that case, the L-2 bidder, if fulfills other required criteria, will be called for drawing agreement for execution of work subject to condition that the L-2 bidder agrees to reduce his/their rates at par with the rates quoted by the L-1 bidder, otherwise the tender will be cancelled and recalled.

23. Blocking of portal registration

23.1 If the registration certificate of a contractor is cancelled/suspended by the registering authority/blacklisted by competent authority his portal registration will be blocked automatically on receipt of the information to that effect.

23.2 The portal registration blocked on the ground mentioned in the above para 23.1 shall be unblocked automatically on receipt of revocation order of cancellation/suspension/blacklisting from the competent authority.

23.3 The officer inviting tender shall make due inquiry and issue show cause notice to the concerned contractor who in turn shall furnish his reply, if any, within a fortnight from the date of issue of show cause notice. Thereafter the Officer Inviting Tender is required to issue an intimation to the defaulting bidder about his unsatisfactory reply and recommend

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to the Chief Manager (Tech.) for blocking of portal registration within 10 days of intimation to the defaulting bidder regarding his unsatisfactory reply with intimation to the Registering Authority and concerned Chief Engineer/Heads of Office if any of the following provisions are violated.

23.3.1 Fails to furnish original Technical I Financial (Tender Paper Cost, EMO/Bid Security) instruments before the designated officer within the stipulated date and time.

23.3.2 Backs out from the bid on any day after the last date of receipt of tender till expiry of the bid validity period.

23.3.3 Fails to execute the agreement within the stipulated date.

23.3.4 If any of the information furnished by the bidder is found to be false/fabricated/bogus.

Accordingly the Officer Inviting Tender shall recommend to the Chief Manager (Tech.), State Procurement Cell, Odisha for blocking of portal registration of bidder and simultaneously action shall also be initiated by OFFICER INVITING TENDER for blacklisting as per Appendix- III of OPWD Manual.

24. Guidelines for unblocking of portal registration:**24.1 UNBLOCKING OF PORTAL REGISTRATION:**

Unblocking of portal registration of a contractor shall be done by a Committee consisting of the following members:

EIC (Civil)-cum-CPO	-	Chairman
Engineer-in-Chief (WR)	-	Member
Concerned Chief Engineer	-	Member
Sr. Manager (Finance), SPC	-	Member
Officer Inviting Tender	-	Member
Chief Manager (Technical), SPC-		Convener

24.2 The Chief Manager (Tech), State Procurement Cell will be the convener and he will maintain all records for this purpose. The Committee shall meet not less than once in a month if required & shall consider the recommendation of the officer inviting tender for unblocking of portal registration. The quorum of the meeting will be four.

24.3 The minimum period of blocking of Portal Registration shall in no case be less than 90 days. After blocking of Portal Registration, the Contractor whose Portal Registration has been blocked may file application to the concerned. officer inviting tender showing sufficient ground for unblocking of his portal registration along with a Treasury Challan showing deposit of Rs. 10,000- (Rupees ten thousand) only (non - refundable) under the head of accounts '0059 - Public Works' as processing fees. The officer inviting tender shall forward the application filed by the contractor to the Chief Manager (Tech), State Procurement Cell.



- 24.4 On receipt of recommendation from the concerned Chief Engineer along with the copy of Challan as mentioned above, the Chief Manager (Tech) being the member Convener of the Committee shall place the case before the Committee for examination and taking a decision in this regard. After examination the Committee may recommend for unblocking of the portal registration of said contractor if the Committee is satisfied that the fault committed by the contractor is either unintentional or done for the first time.
- 24.5 After scrutiny by the State Procurement Cell if it is found that the portal registration of a contractor has been blocked for the 2nd time, the Chief Manager (Tech), SPC may not consider his case to be placed before the Committee and may advise the concerned officer inviting tender to issue show cause notice to the contractor asking him to explain as to why his portal registration shall not remain blocked. On receipt of show cause reply from the contractor the officer inviting tender shall examine the same & if considered proper he may report to the Chief Manager (Tech), SPC along with his views furnishing the copy of the show cause reply for placement of the same before the Committee for taking a decision in respect of blocking/unblocking. If the Committee found that the contractor is in habit of committing such fault again and again intentionally the committee may advise the concerned officer inviting tender to initiate proceeding for blacklisting as per the existing rule.



Annexure 3.2: Guidelines for Engagement of Consultants

(Para 3.5.5 (v) of Code & 3.5.3 of Manual)

Consultants are now being engaged by the State Government and its various agencies to provide a wide range of services to supplement the capacity of the employers. Pending revision of Orissa General Financial Rules on the lines of General Financial Rules – 2005, there is a need to lay down the fundamental principles regarding engagement of consultant(s) applicable to all Administrative Departments, Heads of Departments and Heads of Offices. These instructions are to be followed in conjunction with the guidelines contained in the “Manual of Policies and Procedure for Employment of Consultants” issued by the Department of Expenditure, Ministry of Finance and available in the website of the Ministry of Finance (www.finmin.nic.in). However, engagement of Consultants for Externally Aided Projects funded by loan or grant from bilateral/ multilateral donor agencies like IBRD, IDA, ADB, DFID, JICA etc. would be guided by the procurement procedure envisaged in the respective loan/ credit agreement.

2. Identification of Work/ Services required to be performed by Consultants

Engagement of consultants may be resorted to in situation requiring services for which requisite expertise and manpower is not available within the organization.

3. Authority competent to hire Consultants

The Administrative Department and Heads of Department may hire professionals, consultancy firms or consultants (referred to as consultant hereinafter) for a specific job, which is well defined in terms of content and time frame for its completion or outsource certain services.

4. Powers to sanction expenditure and approved engagement of Consultants

Administrative Departments and Heads of Departments, are hereby authorized to approve engagement of consultants and sanction expenditure on engagement of consultants in each case subject to the financial limits indicate below:

Administrative Departments	Rs. 200.00 lac/ 300 lac
Heads of Department	Rs. 50.00 Lac/ 100 lac
(EIC/ CE)	Rs. - / 20 Lac
SE/ EE	Rs. - / 10 lac

The Administrative Department and Heads of Departments may enter into contracts for consultancy assignments within the aforesaid financial limits without reference to finance Department. However, sanction of expenditure for consultancy services shall be subject to availability of budget provision.

5. Estimating reasonable expenditure

The competent authority proposing to engage consultant(s) should estimate reasonable expenditure for the same by ascertaining the prevalent market conditions and consulting other Organizations/ Departments/ PSUs engaged in similar activities and ensure that available budget provision is adequate for the purpose.



6. Identification of likely sources

- (i) Where the estimated cost of the work or service is up to Rupees Ten lakhs, preparation of a long list of consultants may be done on the basis of formal or informal enquiries from other Administrative Department, Heads of Departments, Heads of offices or Organization involved in similar activities, Chambers of Commerce & Industry, Association of consultancy firms etc.
- (ii) Where the estimated cost of the work or service is above Rupees Ten lakhs, in addition to (i) above, an enquiry for seeking 'Expression of Interest' from consultants should be published through a brief advertisement in at least one national daily, one local daily and the details be made available in the web site of competent authority. The web site address should be indicated in the advertisement. Enquiry for seeking Expression of Interest include in brief, the broad scope of work or service, inputs/ support/ materials/ data to be provided by them, eligibility and the pre-qualification criteria to be met by the consultant(s) and consultant's past experience in similar work or service. Adequate time should be allowed for getting responses from interested consultants.

7. Short listing of Consultants

On the basis of responses received from the interested parties as per the above paragraph, consultants the requirements should be short listed for further consideration. The number of short listed consultants should not be less than three.

8. Preparation of Terms of Reference (ToR)

The ToR should include:

- (i) Precise statement of objectives of the consultancy assignment;
- (ii) Outline of the tasks to be carried out;
- (iii) Schedule for completion of tasks;
- (iv) The support of inputs/ materials/ data to be provided by the competent authority to facilitate the consultancy.
- (v) The final outputs in quantifiable/ comprehensible terms that will be required of the consultants;

9. Preparation and Issue of Request for Proposal (RFP)

RFP is the document to be used by the competent authority for obtaining offers from the consultants for the required work/ service. The RFP should be issued to the shortlisted consultants to seek their technical and financial proposals. The RFP should contain:

- (i) A letter of Invitation
- (ii) Information to Consultants regarding the procedure for submission of proposal
- (iii) Terms of Reference (ToR)
- (iv) Eligibility and pre-qualification criteria in case the same has not been ascertained through Enquiry and Expression of Interest.



- (v) List of key position/ resource persons whose CV and experience would be evaluated
- (vi) Bid evaluation criteria and selection procedure
- (vii) Standard formats for technical and financial proposal
- (viii) Proposal contract terms
- (ix) Procedure proposed to be followed for mid-term review of the progress of the work and review of the final draft report.

The Standard Bid Document for Services shall be followed:

10. Receipt and opening of proposals

Proposals should ordinarily be asked for from consultants in ‘Two – bid’ system with technical and financial bids sealed separately. The bidder should put these two sealed envelopes in a bigger envelope duly sealed and submit the same to the competent authority by the specified date and time at the specified place. On receipt, the technical proposals should be opened first by the competent authority at the specified date, time and place.

11. Evaluation of Technical & Commercial Bids

Technical & commercial bids are to be analysed and evaluated by the committee constituted under Rule 12 (3) of the Delegation of Financial Power Rules to identify the bids, which are technically & commercially qualified. However, suitable domain experts may be included in the Committee to render assistance in evaluation of the bids. This committee shall record in detail the reasons for acceptance or rejection of the bids analysed and evaluated by it.

12. Evaluation of Financial Bids of the technically qualified bidders

The competent authority shall open the financial bids of only those bidder who have been declared technically qualified by the Committee as per the provisions of the foregoing paragraph for further analysis or evaluation and ranking and selecting the successful bidder for placement of the consultancy contract. The task of evaluation and ranking may be carried out by the Committee referred to in para 11 above.

13. Negotiations and Award of Contract

- 13.1 Negotiations are not an essential part of the selection process. In many cases, however, it is felt necessary to conduct negotiations with the selected consultant. Negotiations shall include discussions of the ToR, the methodology, staffing, Government/ Department’s inputs, and special conditions of the contract. These discussions shall not substantially alter and original ToR or the terms of the contract, lest the quality of the final product, its cost, and the relevance of the initial evaluation be affected. The final ToR and the agreed methodology shall be incorporated in “Description of Services”, which shall form part of the contract.
- 13.2 Financial negotiations shall only be carried out if due to negotiation as mentioned in para 13.1 above, there is any change in scope of work which has any financial bearing on the final prices or if the costs/ cost elements quoted are not found to be reasonable. In such negotiations, the selected firm may also be asked to justify and demonstrate that the prices



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proposed in the contract are not out of line with the rates being charged by the consultants for other similar assignments. However, in no case such financial negotiation should result in increase in the financial cost as originally quoted by the consultant and on which basis the consultant has been called for the negotiations.

- 13.3 If the negotiations with the selected consultant fail, the employer shall cancel the bidding procedure and re-invite the bids.

14. Late Bids

Late bids i.e. bids received after the specified date and time of receipt, should not be considered.

15. Consultancy by nomination

Under some special circumstances, it may become necessary to select a particular consultant where adequate justification is available for such single – source selection in the context of the overall interest of the Department. Full justification for single source selection should be recorded in the file and approval of next higher authority be obtained before resorting to such single – source selection.

16. Monitoring the Contract

The competent authority employing the Consultant should be involved throughout in the conduct of consultancy continuously monitoring the performance of the consultant(s) so that the output of the consultancy is in line with their objectives.

(Issued vide Govt of Odisha, Finance Department OM No. 42280/F/Codes-27/11 dated 26.09.2011)



Annexure 3.3: Guidelines for Procurement of Goods

(Refer OPWD Code Para 3.5.5 (vi) & OPWD Manual para. 3.5.3 G)

Sub: Guidelines for Procurement of Goods.

There is a need for review of the existing policy of the State Government relating to procurement of goods contained in Rule 96 of Orissa General Financial Rules (OGFR) and Appendix-6 thereof so as to make the procurement process efficient, economic, objective and transparent. Government of India in the meanwhile have revamped their procurement system on these lines which are contained in the General Financial Rules (GFR) 2005 and the “Manual on Policies and Procedure for Purchase of Goods” issued by the Department of Expenditure, Ministry of Finance and available in the website of the Ministry of Finance (www.finmin.nic.in). Pending revision of Orissa General Financial Rules, the State Government have, therefore, decided to lay down the following instructions regarding procurement of goods for use in the public service.

1. These instructions are to be followed in conjunction with the provisions of “Manual on Policies and Procedure for Purchase of Goods” issued by the Department of Expenditure, Ministry of Finance and available in the website of the Ministry of Finance (www.finmin.nic.in). However, procurement of goods for Externally Aided Projects funded by loan or grant from bilateral/ multilateral donor agencies like IBRD, IDA, ADB, DFID, JICA etc. would be guided by the procurement procedures envisaged in the respective loan/ credit agreement.
2. **Definition of Goods:** The term 'goods' used in this Office Memorandum includes all articles, materials, commodities, livestock, furniture, fixtures, raw materials, spare parts, instruments, machinery, equipment, industrial plant etc. purchased or otherwise acquired for the use of Government but excludes books, publications, periodicals, etc. for a library.
3. **Fundamental principles of public buying:** Every authority delegated with the financial powers of procuring goods in public interest shall have the responsibility and accountability to bring efficiency, economy, transparency in matters relating to public procurement and for fair and equitable treatment of suppliers and promotion of competition in public procurement.

The procedure to be followed in making public procurement must conform to the following yardsticks:-

- (i) the specifications in terms of quality, type etc, as also quantity of goods to be procured, should be clearly spelt out keeping in view the specific needs of the procuring organisations. The specifications so worked out should meet the basic needs of the organisation without including superfluous and non-essential features, which may result in unwarranted expenditure. Care should also be taken to avoid purchasing quantities in excess of requirement to avoid inventory carrying costs;
- (ii) offers should be invited following a fair, transparent and reasonable procedure;
- (iii) the procuring authority should be satisfied that the selected offer adequately meets the requirement in all respects;
- (iv) the procuring authority should satisfy itself that the price of the selected offer is reasonable and consistent with the quality required;

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- (v) at each stage of procurement the concerned procuring authority must place on record, in precise terms, the considerations which weighed with it while taking the procurement decision.
- (vi) Purchases must be made in accordance with the definite requirements of the public service. Periodical indents should be prepared and the goods/ articles as needed as per the Procurement Plan obtained by means of such indents. Simultaneously, care should be taken not to make unnecessary purchase of goods much in advance of actual requirements, if such purchase is likely to be unprofitable to Government, coupled with unwarranted inventory carrying cost. Where sales, consumption or usage limits of goods have been laid down by competent authority, the officer ordering a supply should also certify on the purchase order that the prescribed scales or limits are not exceeded.

- 4. Authorities Competent to Purchase Goods:** The following authorities competent to sanction contingent expenditure and execute contracts and sanction purchases may undertake procurement of goods within the financial limits prescribed below and in accordance with the instructions contained hereinafter.

	Authority	Power to execute contracts and sanction purchases	Power to sanction contingent expenditure
1.	Administrative Department	Full Power	Full Power
2.	Head of Department (EIC/ CE)	Rs. 500/ 1000 lakh in each case	Rs. 10/ 20 lakh in each case (recurring) Rs. 50/ 100 lakh in each case (non-recurring)
3.	SE	-	Rs. 5.00 lakh in each case (Recurring) Rs. 2500 lakh in each case (non-Recurring)
4.	EE	-	Rs. 1 lakh in each case (Recurring) Rs. 2.00 lakh in each case (non-Recurring)

- 5. Procurement through rate contract system:** In respect of goods for which rate contract has been entered into by the Director of Export Promotion and Marketing, purchases of such goods; by all Departments of Government, Quasi-Government agency and State owned corporations should be only from sources with whom such rate contracts have been entered into, by placing order in accordance with the procedure outlined for the purpose by Industries Department.

6. Registration of Suppliers with Departments requiring Bulk supply of goods:

Administrative Departments requiring bulk supply of goods may prepare and maintain item wise list of eligible and capable suppliers. Such approved suppliers will be known as 'Registered Supplier'.

- (i) Other Administrative Departments/Heads of Departments/Agencies may utilise these lists as and when necessary. Such registered suppliers are also prima facie eligible for consideration



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for procurement of goods through Limited Tender Enquiry. Further, they are ordinarily exempted from furnishing bid security along with their bids. If necessary, a Head of Department, with the approval of Government, may also prepare and maintain list(s) of registered suppliers of goods which are specifically required by that Head of Department.

- (ii) Credentials, manufacturing capability, quality control systems, past performance, after-sales service facilities, financial background etc. of the supplier (s) should be carefully verified before registration.
- (iii) The supplier (s) will be registered for a fixed period (between 1 to 3 years) depending on the nature of the goods. At the end of this period, the registered supplier (s) willing to continue with registration are to apply afresh for renewal of registration. New supplier (s) may also be considered for registration at any time, provided they fulfil all the required conditions.
- (iv) Performance and conduct of every registered supplier is to be watched by the concerned Department. The registered supplier(s) are liable to be removed from the list of approved suppliers, if they fail to abide by the terms and conditions of the registration or fail to supply the goods on time or supply substandard goods or make any false declaration to any Government agency or for any ground which, in the opinion of the Government, is not in public interest.
- (v) Directorate General of Supplies & Disposal, Ministry of Commerce, Government of India, New Delhi also prepares and maintain item-wise lists of registered suppliers for various types of common user items. Relevant details in this regard are available in DGS&D's website (<http://dgsnd.gov.in>). If necessary, a Department may also utilize such lists (as prepared by DGS&D).

7. Purchase of goods without quotation:

- (i) Purchase of goods up to the value of Rs. 15,000/- (Rupees fifteen thousand only) on each occasion may be made without inviting quotations or bids on the basis of a certificate to be recorded by the competent authority in the following format.

"I,....., am personally satisfied that these goods purchased are of the requisite quality and specification and have been purchased from a reliable supplier at a reasonable price."

- (ii) The Central Purchase Organisation and State Purchase Organisation, viz. DGS&D and Directorate of Export Promotion & Marketing of the State conclude rate contracts with the registered suppliers, for goods and items of standard types, which are identified as common user items and are needed on recurring basis by various Departments and Offices of the Central and State Government respectively. Procurement of goods from DGS&D and EPM rate contract holder shall be made without calling for tender.
- (iii) In case a competent authority desires to procure directly the DGS&D rate contracted goods from suppliers, the prices to be paid for such goods shall not exceed those stipulated in the rate contract and the other salient terms and conditions of the purchase should be in line with those specified in the rate contract. The competent authority shall make its own arrangement for inspection and testing of such goods, where required.



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8. Procurement of goods through Local Purchase Committee: Purchase of goods costing above Rs. 15,000/- (Rupees fifteen thousand only) and up to Rs.1,00,000/- (Rupees one lakh only) on each occasion may be made on the recommendations of a duly constituted Local Purchase Committee consisting of three members of appropriate levels as decided by the Authorities Competent to Purchase Goods. The committee will survey the market to ascertain the reasonableness of rate, quality and specifications and identify the appropriate supplier for the required goods. Before recommending placement of the purchase order, the members of the committee will jointly record a certificate as under.

"Certified that we, members of the Local Purchase Committee are jointly and individually satisfied that the goods recommended for purchase are of the requisite specification and quality, priced at the prevailing market rate and the supplier recommended is reliable and competent to supply the goods in question."

9. Purchase from exclusive list : List of goods and services reserved for exclusive purchase from Micro & Small Enterprises (MSEs) located within the State of Odisha will be prepared from time-to-time and notified by the Directorate of Export Promotion & Marketing in terms of relevant provisions of Odisha MSME Development Policy. The Government Departments and Agencies under their control will have to procure their requirement of these items exclusively from such registered local MSEs with ISO/ ISI/ EPM certification for the items, by inviting quotations through Limited Tender Enquiry in terms of the relevant provisions of Odisha MSME Development Policy, 2009.

10. Splitting up of demand: A demand for goods should not be unnecessarily divided into small quantities to make piecemeal purchases to avoid the necessity of obtaining the sanction of higher authority required with reference to the estimated value of the total demand.

11. Purchase of goods by obtaining bids: Except in cases covered under paragraphs 5, 7, & 8 of this Office Memorandum, Departments shall procure goods under the powers referred to in paragraph 4 above by following the standard method of obtaining bids through:

- (i) Advertised Tender Enquiry (ATE),
- (ii) Limited Tender Enquiry (LTE), and
- (iii) Single Tender Enquiry (STE).

12. Advertised Tender Enquiry:

- (i) Subject to exceptions incorporated under Paragraph 13 (for Limited Tender Enquiry) and 17 (for Single Tender Enquiry) invitation to tenders by advertisement should be used for procurement of goods of estimated value Rs. 5 lakh (Rupees five lakh) and above. A brief advertisement for such purchase should be given in at least in one local and one National newspaper having wide circulation asking for the offers by specified date and time etc and details made available in the website of the competent authority.
- (ii) If the Department has its own website it should also publish all its advertised tender enquiries on the website. It should also give its website address in the advertisements in the newspaper.
- (iii) Hardcopies of the bidding documents should be prepared for sale as per normal practice. In



addition, if feasible, the Department should also post the complete bidding document in its website and permit prospective bidders to make use of the document downloaded from the website. If such a downloaded bidding document is priced, there should be clear instructions for the bidder to pay the amount by demand draft etc. along with the bid.

- (iv) Where the Department feels that the goods of the required quality, specifications etc, may not be available in the country and it is also necessary to look for suitable competitive offers from abroad, the Department may send copies of the tender notice to the Indian embassies abroad as well as to the foreign embassies in India through an appropriate forwarding letter. The selection of the embassies will depend on the possibility of availability of the required goods in such countries.
- (v) Sufficient time should be allowed for obtaining the bids. Ordinarily, the minimum time to be allowed for submission of bids should be three weeks from the date of publication of the tender notice or availability of the bidding document for sale, whichever is later. Where the department also contemplates obtaining bids from abroad, the minimum period should be kept as four weeks for both domestic and foreign bidders.

13. Limited Tender Enquiry:

- (i) This method may be adopted when estimated value of the goods to be procured is less than Rs. 5 lakh (Rupees five lakh). Copies of the bidding document should be sent directly by speed post/ registered post/ courier/ e-mail to the registered/ approved firms selected for this purpose from the list prepared in terms of the provisions of paragraph 6 and 9 above. The number of supplier firms to be approached for such Limited Tender Enquiry should be more than three. Wherever necessary, efforts should be made to identify a higher number of approved suppliers to obtain more responsive bids on competitive basis.
- (ii) Sufficient time should be allowed for submission of bids in Limited Tender Enquiry cases.
- (iii) Purchase through Limited Tender Enquiry may be adopted even where the estimated value of the procurement is Rs. 5 lakh (Rupees five lakh) and above, in the following circumstances.
 - (a) The competent authority in the Department/ agency certifies that the demand is urgent and any additional expenditure involved by not procuring through advertised tender enquiry is justified in view of urgency. The Department/ agency should also put on record the nature of the urgency and reasons why the procurement could not be anticipated.
 - (b) There are sufficient reasons, to be recorded in writing by the competent authority, indicating that it will not be in public interest to procure the goods through advertised tender enquiry.
 - (c) The sources of supply are definitely known and possibility of fresh source(s) beyond those being tapped, is remote.
- (iv) Wherever felt necessary (for example – number of approved suppliers is not sufficient and all the established sources of supply are not definitely known), Advertised Tender Enquiry may be issued, even if the estimated value of procurement is less than Rs. 5 lakh (Rupees five lakh) only.



14. Two bid system: For purchasing high value plant, machinery etc. of a complex and technical nature, bids may be obtained in two parts as under:

- (i) Technical bid consisting of all technical details along with commercial terms and conditions; and
- (ii) Financial bid indicating item-wise price for the items mentioned in the technical bid.

The technical bid and the financial bid should be sealed by the bidder in separate covers duly superscribed and both these sealed covers are to be put in a bigger cover which should also be sealed and duly superscribed. The technical bids are to be opened by the purchasing competent authority at the first instance and evaluated by a competent committee or authority. At the second stage financial bids of only the technically acceptable offers should be opened for further evaluation and ranking before awarding the contract.

15. Late Bids: In the case of advertised tender enquiry or limited tender enquiry, late bids (i.e., bids received after the specified date and time for receipt of bids) should not be considered.

16. Number of Responsive Bids/ Lack of Competition: Sometimes, against advertised/ limited tender cases, the Department may not receive sufficient number of bids and/ or after analysing the bids, ends up with one responsive bid.

In such situations, the Department is first to check whether, while floating/issuing the enquiry, all necessary requirements and formalities like standard conditions, industry friendly specification, wide publicity, sufficient time for bidding, etc. were fulfilled.

If not, fresh enquiry is to be issued after rectifying the deficiencies. However, if after scrutiny it is found that all such aspects were fully taken care of and in spite of that the purchaser ends up with only one responsive bid, contract may be placed on that bidder provided the quoted price is reasonable.

Approval of Government or next higher authority may be obtained for acceptance of the single responsive bid.

17. Single Tender Enquiry: Procurement from a single source may be resorted to in the following circumstances:

- (i) It is in the knowledge of the user department that only a particular firm is the manufacturer of the required goods.
- (ii) In a case of emergency, the required goods are necessarily to be purchased from a particular source and the reason for such decision is to be recorded and approval of Government or next higher authority obtained.
- (iii) For standardisation of machinery or spare parts to be compatible to the existing sets of equipment (on the advice of a competent technical expert and approved by the Government or next higher authority), the required item is to be purchased only from a selected firm.

Note: Proprietary Article Certificate in line with the following form is to be provided by the competent authority before procuring the goods from a single source.



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- (i) The indented goods are manufactured by M/s.....
 - (ii) No other make or model is acceptable for the following reasons.....
 - (iii) Concurrence of Finance Wing to the proposal is available vide.....
 - (iv) Approval of the competent authority is available vide.....
-
-

(Signature with date and designation of the procuring officer)

18. Quotation received from Dealers/ Agents for items not manufactured by them: When a firm send quotation for an item manufactured by some different company, the firm is also required to attach in its quotation that manufacturer’s authorisation certificate and also manufacturer’s confirmation of extending the required warranty for that product (in addition to the tenderers’ confirmation to required warranty). If the firm is an authorized agent/ dealer of that manufacturer, certified documentary evidence to this effect is to be attached along with the quotation. This is necessary to ensure quotation from a responsible party offering genuine product, also backed by warranty obligation from the concerned manufacturer.

19. Contents of Bidding Document: All the terms, conditions, stipulations and information to be incorporated in the bidding document are to be shown in the appropriate chapters. The structure of a sample format for this purpose is indicated below:

Chapter – 1: Instructions to Bidders.

Chapter – 2: Conditions of Contract.

Chapter – 3: Schedule of Requirements.

Chapter – 4: Specifications and allied Technical Details.

Chapter – 5: Price Schedule *(to be utilised by the bidders for quoting their prices)*.

Chapter – 6: Contract Form.

Standard Bidding Document (SBD) for Goods shall be used for this purpose.

20. Maintenance Contract: Depending on the cost and nature of the goods to be purchased, it may be necessary to enter into maintenance contract(s) of suitable period either with the supplier of the goods or with any other competent firm, not necessarily the supplier of the subject goods.

It must be kept in mind that the ordered goods/ items are maintained free of charge by the supplier during its warranty period or such other extended periods as the contract terms may provide and the paid maintenance should commence only thereafter.

21. Bid Security: To safeguard against a bidder’s withdrawing or altering its bid during the bid validity period in the case of advertised or limited tender enquiry, bid security (also known as earnest money) is to be obtained from the bidders except those who are exempted from paying bid security. Amount of bid security should generally be between two percent to five percent of the



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estimated value of the goods to be procured. The exact amount of bid security, as determined by the Department is to be indicated in the bidding documents. The bid security may be obtained in the form of account payee demand draft, fixed deposit receipt, banker's cheque, bank guarantee from any of the commercial banks in an acceptable form etc, safeguarding the purchaser's interest in all respects. The bid security is normally to remain valid for a period of forty-five days beyond the final bid validity period. The Model Bank Guarantee Format for furnishing EMD is at Annexure-I.

- (i) Bid securities of the unsuccessful bidders should be returned to them at the earliest after expiry of the final bid validity period and latest by the 30th day after the award of the contract.
- (ii) The local MSEs registered with respective DICs, Khadi, Village, Cottage & Handicraft Industries, OSIC and NSIC shall pay 25% of the prescribed security deposit while participating in tenders of Govt. Departments and Agencies under its control.

22. Performance Security:

- (i) To ensure due performance of the contract, performance security is to be obtained from the successful bidder awarded the contract. Performance security should be for an amount of five to ten per cent of the value of the contract. Performance security may be furnished in the form of an account payee demand draft, fixed deposit receipt from a commercial bank, bank guarantee from a commercial bank in an acceptable form etc safeguarding the purchaser's interest in all respects. The Model Bank Guarantee Format for Performance Security is at Annexure-II.
- (ii) Performance security should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including warranty obligations. In case of a contract of competitively small value and/ or for simpler stores, Department may decide to scale down the performance security by a suitable amount during the warranty period. If the department decides in this line, then suitable stipulation to this effect is to be incorporated in the bidding document itself.
- (iii) Bid security should be refunded to the successful bidder on receipt of performance security.

23. (1) Advance payment to supplier: Ordinarily, payments for services rendered or supplies made should be released only after the services have been rendered or supplies made. However, it may become necessary to make advance payments in the following types of cases:

- (i) Advance payment demanded by firms holding maintenance contracts for servicing of Air-conditioners, computers, other costly equipment, etc.
- (ii) Advance payment demanded by firms against fabrication contracts, turn-key contracts etc.
- (iii) 100% advance payment for procurement of arms and ammunitions from Ordnance Factories.
- (iv) Other security related procurement made by Home Department.

Such advance payments should not exceed the following limits except in case of procurement of arms and ammunitions from Ordnance Factories:

- (i) Thirty per cent of the contract value to private firms;
- (ii) Forty per cent of the contract value to a State or Central Government agency or a Public Sector Undertaking; or
- (iii) In case of maintenance contract, the amount should not exceed the amount payable for six months under the contract.



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In exceptional cases, Administrative Departments may relax the ceilings mentioned above with prior concurrence of the Finance Department. While making any advance payment as above, adequate safeguards in the form of bank guarantee etc. should be obtained from the firm. However, bank guarantee need not be insisted upon in case of procurement of arms and ammunitions from Ordnance Factories. The Model Agreement for Supply of goods and Bank Guarantee Format for Advance Payment are at Annexure-III and Annexure-IV respectively. Further, such advance payments should be generally interest bearing, suitable percentages for which are to be decided on case-to-case basis.

(2) Part payment to suppliers: Depending on the terms of delivery incorporated in a contract, part payment to the supplier may be released after it despatches the goods from its premises in terms of the contract.

24. Transparency, competition, fairness and elimination of arbitrariness in the procurement process: All government purchases should be made in a transparent, competitive and fair manner, to secure best value for money. This will also enable the prospective bidders to formulate and send their competitive bids with confidence. Some of the measures for ensuring the above are as follows:

(i) The text of the bidding document should be self-contained and comprehensive without any ambiguity. All essential information, which a bidder needs for sending responsive bid, should be clearly spelt out in the bidding document in simple language. This will also enable the prospective bidders to formulate and send their competitive bids with confidence. The bidding document should *inter alia* include:

(a) the criteria for eligibility and qualification to be met by the bidders.

(The eligibility criteria should take care of the supplier's eligibility to receive such Government contract. The qualification criteria should take care of supplier's past performance, experience, technical competence and production capacity of the subject goods, financial strength to handle the contract successfully etc.);

(b) eligibility criteria for goods indicating any legal restrictions or conditions about the origin of goods etc which may required to be met by the successful bidder;

(c) the procedure as well as date, time and place for sending the bids;

(d) date, time and place for public opening of bids;

(e) terms of delivery;

(f) special terms affecting performance, if any.

(g) Criteria for determining responsiveness of bids, criteria as well as factors to be taken into account for evaluating the bids on a common platform and the criteria for awarding the contract to the responsive lowest bidder should be clearly indicated in the bidding documents.

(h) Suitable provision for settlement of disputes, if any, emanating from the resultant contract, should be kept in the bidding document.

(i) Suitable provisions for enabling a bidder to question the bidding conditions, bidding process and/ or rejection of its bid.



- (j) Suitable clause mentioning that the resultant contract will be interpreted under Indian Laws.

(ii) Some important aspects to be kept in mind while making public purchase are:

- (a) The specifications of the required goods should be clearly stated without any ambiguity so that the prospective bidders can send meaningful bids. In order to attract sufficient number of bidders, the specification should be broad based to the extent feasible. Efforts should also be made to use standard specifications which are widely known to the industry. The specification of the required goods to be purchased should be precise. The essential technical functions required to be performed by the goods are to be indicated without including superfluous and non-essential features, which may result in unwarranted expenditure. While inviting competitive bids (i.e., other than Single Tender enquiry), brand name and/ or model number should not be mentioned in the specification and in case the same is unavoidable due to some specific reason, such brand name/ model number should be qualified with “or equivalent”. Standard specifications, which are widely known to the industry, should be utilized to the maximum extent possible. Mandatory/ statutory regulations, if any, applicable for the goods in question should also be indicated.
- (b) The bidders should be given reasonable time for sending their bids.
- (c) The bids should be opened in public and authorised representatives of the bidders should be permitted to attend the bid opening.
- (d) Late bids are not be considered.
- (e) Pre-bid conference: In case of turn-key contract (s) or contract (s) of special nature for procurement of sophisticated and costly equipment, a suitable provision is to be kept in the bidding documents for a pre-bid conference for clarifying issues and clearing doubts, if any, about the specifications and other allied technical details of the plant, equipment and machinery projected in the bidding document. The date, time and place of pre-bid conference should be indicated in the bidding document. This date should be sufficiently ahead of bid opening date.
- (f) Bids should be evaluated in terms of the conditions already incorporated by the Department in the bidding documents, which were issued/ sold to the bidders. No new condition, which was not incorporated in the bidding documents should be brought in for evaluation of the bids. Similarly, no condition, already incorporated in the bidding document should be ignored during the bid evaluation process. Determination of a bid's responsiveness should be based on the contents of the bid itself without recourse to extrinsic evidence.
- (g) Bidders should not be permitted to alter or modify their bids after expiry of the deadline for receipt of bids.
- (h) Negotiation with bidders after bid opening must be severely discouraged. However, in exceptional circumstances where price negotiation is necessary due to some unavoidable circumstances, the same may be resorted to only with the lowest evaluated responsive bidder.



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- (i) If a special situation arises, where the lowest evaluated responsive bidder is not in a position to supply the full quantity required, the remaining quantity, as far as possible, be ordered on the next higher responsive bidder (s) at the rate offered by the lowest evaluated responsive bidder, after obtaining specific approval from the competent authority on the specific recommendation of the respective purchase committee.
- (j) The name of the successful bidder(s) receiving the contract should be mentioned in the Department's notice board and/or its bulletin and/or its website.

25. Efficiency, Economy and Accountability in Public Procurement System:

Public procurement procedure is also to ensure efficiency, economy and accountability in the system. To achieve the same, the following key areas should be addressed:

- (i) The Departments should ensure placement of contract within the original validity of the bids. Extension of bid validity must be discouraged and resorted to only in exceptional circumstances.
- (ii) To ensure achieve placement of contract within the original offer validity period, the required offer validity period (which must not be too long) for processing the case should be decided in the planning stage and the same is to be incorporated in the bidding document.
- (iii) Further, to avoid delay in procurement process, appropriate time frame for each stage of procurement (from bid opening to placement of contract) should be prescribed by the Department. Such a timeframe will also make the concerned purchase officials more alert.
- (iv) The State Purchase Organisation (e.g., Directorate of Export Promotion & Marketing) should bring into the rate contract system more and more common user items which are frequently needed in bulk by various Government departments. The State Purchase Organisation should also ensure that the rate contracts remain available without any break.

26. Buy-Back Offer: When it is decided to replace an existing old item(s) with a new/better version, the Department may trade the existing old item while purchasing the new one by issuing suitable bidding document for this purpose. The condition of the old item, its location and the mode of its handing over to the successful bidder are also to be incorporated in the bidding document. Further, the bidder should be asked to quote the prices for the item (to be offered by them) with rebate for the old item and also, without any rebate (in case they do not want to lift the old item). This will enable the Department either to trade or not to trade the old item while purchasing the new one.

27. E-Procurement:

- (i) Government may from time-to-time, prescribe adoption of e-procurement for different stages of procurement and different types of procurement, and to the extent thereof, the procedure prescribed herein, shall be deemed to be modified for substituting written communication by e-communication in a manner that improves competition, efficiency and transparency without affecting the sanctity, security and recording of such communication and the information contained therein.
- (ii) Government shall create one or more websites for posting all matters which are required to be brought to the attention of the public in accordance with prescribed procurement procedure viz.



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tender enquiries, corrigenda thereon and details of bid awards etc. The website(s) will provide an electronic platform for e-invitation, e-bidding and e-payment for all stages and types of procurement as well as an interface with all stakeholders. It will provide all services such as registration of vendors, accessing details of procurement made, tenders awarded, tenders advertised etc. It will function as an IT-enabled exchange linking the various Government agencies in need of procurement of goods and services on the one hand and the vendors/ service providers and the e-procurement service providers on the other. Operational Guidelines would be issued in this regard as soon as the Portal is ready to function.

28. These instructions shall be deemed to be a part of Orissa General Financial Rules & Delegation of Financial Power Rules.

[Issues vide Govt. of Odisha, Finance Department OM No. 4939/F. Code – 27/2011 dt 13.02.2012)



CHAPTER 4
PUBLIC BUILDING



4 PUBLIC BUILDINGS

4.1 General Rules

All residential or non-residential buildings of the Govt. are the public buildings. General Rules governing the Public Buildings are given below:

- a. Every Govt. Department should have a Register of Buildings. The copy of the register should be in soft copy (i.e. digital form) as well the Department engaged in public works should ensure that there is an officer/official in-charge of every building under his charge and the name and designation of the officer/official are clearly mentioned in the register. In case of buildings not owned by the Department engaged in the public works but maintained by it, there will be two officers/officials responsible, one designated by the Department owning the building and other by the concerned DO/EE.
- b. The Department engaged in the public works should, in addition, maintain the register of those buildings which are not owned by the Department, but are on its books for maintenance purpose. The register will contain all buildings including those which might be maintained by the Departments concerned temporarily. Engineers-in-Chief will issue detailed instructions in this regard.
- c. Ordinarily public buildings meant for one purpose should not be used for another purpose without the specific permission of the Divisional Officer/Executive Engineer.
- d. Insurance of Govt. is not to be effected except in case of especially valuable property liable to special risk, in the latter case sanction of Govt. should be taken.
- e. In every public building, properly designed fire detection system is required meeting the latest norms of fire Department and requirement of National Building Code. Fire alarm, internal water sprinkler systems and fire hydrants are required to be connected to water storage reservoirs of adequate capacity. In addition, supply of fire buckets and portable fire extinguishers together with other appurtenances such as stands, brackets etc., where these are not provided at the time of original construction, as well as all renewals of and repairs to the fire buckets and extinguishers shall be made by the heads of offices in occupation of the building.
- f. The cost of the provision of permanent fire detection, fire alarm and fire protection systems are chargeable to capital cost for which budget provision should be made. The cost of portable and renewable fire extinguisher equipment are chargeable to office expenses of the office concerned and the department in charge of public works should not charge any departmental charges for the professional or technical advice in such cases. If however, the work is executed through the department in charge of public works, the usual departmental charges shall be levied.
- g. The maintenance of all the public buildings of Govt. shall be carried out through Department engaged in the public works.



- h. The DO of the department engaged in the public works should designate e some technical officer of his establishment answerable for the general condition and proper maintenance of each of the buildings under his jurisdiction.
- i. To ensure quality and uniformity in construction and maintenance of public buildings, R&B department should update the existing specifications for construction and Maintenance Manual. **They should be revised and updated every five years.**
- j. The renovation of private buildings taken on rent by Govt. should preferably be done with the approval of the owner and at his cost.
- k. Normal maintenance should be done as per the conditions of Rent Agreement. However, where the expenditure is beyond norms or the money is required to be spent on private buildings, the estimates should be brought before a Committee of Ministers constituted by the Chief Minister (this committee will have Finance Minister and Minister in-charge of R&B department as members among others) and the expenditure will be done as per the decision of this Committee. In case of an emergency, the Minister in-charge of R&B Department will take decision pending ratification by the Committee.
- l. As regards the facilities to be provided for the Governor and the Chief Minister, the orders of the latter shall be considered final and there will not be any need to go through the Committee as mentioned in para (k) above.
- m. If it becomes necessary to provide additional facilities at the camp offices/residences of officers attached to the Chief Minister, the matter should be considered in the same way as provided in para (k) above.
- n. The department engaged in the public works should frame a schedule of norms for the purpose of renovation/maintenance/furnishing and get it approved from the competent authority. The norms should be revised periodically, at least once in a year. The list of dignitaries to be covered by these norms should be prepared.

4.2 Fixtures and Furniture

4.2.1 Fixtures

Every public building should be provided with necessary fixtures, the expenditure being charged direct to works subject to the provision in the estimate. All public buildings are required to be inspected by AE/JE at least twice in a year to see that the fixtures are in satisfactory working condition. The periodical repair of these fixtures should be carried out by the DO concerned and debited to the repair estimate of the building. All petty repairs of fixtures and replacement of broken glass in doors and windows in non-residential buildings required in the intervals between the periodical repairs should be carried out by the department occupying the building and the expenditure met out of the office expenses of that department

4.2.2 Furniture for Residences of High Officials

Furniture provided at the residences of the dignitaries should be properly accounted for. To avoid any embarrassment, proper inventory of the furniture and other movable items such as invertors,



refrigerators, etc. should be made along with their digital photographs and the EIC should issue instructions fixing up clear responsibility in this regard.

The furnishing of residences of high officials should be handled with the utmost sensitivity it deserves. There are norms prescribed for incurring such expenditure. The issue acquires further sensitivity as the expenditure may have to be incurred on the buildings which are not owned by the State Govt. and some of these may be on rent.

CE/SE shall accord sanction for furniture as per provision for circuit house/Dak-bungalows on the scales laid down/availability of funds. The EE in-Charge can sanction estimates for annual repairs etc.

4.2.3 Furniture in the Residence of Governor

- a. The administration of the furniture grant of the official residence of the Governor of Odisha including the up-keep of a stock list and the purchase, repair and maintenance of furniture shall be conducted by the Secretary to the Governor or the officer authorized by him under the rules issued by the GOI in the Home department He shall furnish the AG, Odisha, with an annual certificate of verification on or before 31st July each year in the form given below. During the second and the fourth years of the incumbency of the Governor, and at least once in every three years the certificate of verification should be countersigned by a gazette officer of the department in charge of the public works (R&B), in token of his joint responsibility for the actual verification.
- b. The EE, Roads and Building Division, will be in charge of the furniture supplied to the residences of the Governor and will be responsible for keeping proper accounts of the furniture. He will furnish to the Audit Officer an annual certificate of verification of furniture in the residences of Governor on or before 31st July each year.
- c. **Form of Certificate of Verification:**

Certified that the furniture in Raj Bhawan at..... has been inspected and checked with the stock lists maintained. I am satisfied (i) that all new supplies up-to-date have been correctly brought on to the stock lists, (ii) that the stock lists are correct in all respects, (iii) that the articles in stock agree with the stock list, (iv) that the sale proceeds have been properly accounted for, and (v) that sanction of competent authority exists for writing of all articles struck off the lists.

4.2.4 Furniture in the Residences of Cabinet Minister, Ministers of State, Deputy Minister, Speaker and Deputy Speaker etc.

Furniture shall be supplied to the residence of Cabinet Ministers, Ministers of State, Deputy Minister, Speaker and Deputy Speaker at Govt. cost on the scale fixed by a general or special order. Except when otherwise ordered, the cost of such furniture and the cost of its maintenance should be met from the grant under the Works Department who will be responsible for furnishing the residences of Cabinet Ministers, Ministers of State, Deputy Minister, Speaker and Deputy Speaker etc. The visitor's waiting room and guest room, office room and the staff room at the residences should also be furnished appropriately. The Personal Assistants of Cabinet Ministers, Ministers of State, Deputy Ministers, Speaker and Deputy Speaker etc. will acknowledge receipt of furniture and maintain a list of all the furniture supplied in a register in the form prescribed, for stocks accounts.



The furniture should be verified once a year by the Personal Assistant and the SDO in charge of furniture jointly and a certificate of verification as prescribed below recorded in the register and submitted to audit by the Division concerned duly signed by the Personal Assistant and counter signed by the SDO. The furniture should also be verified when there is a change of incumbency of the persons using the residence. On change of Personal Assistant the relieving Personal Assistant shall take over the charge of the furniture along with the register from the relieved Personal Assistant as an item of charge. A list of furniture handed over and taken over should be prepared in triplicate and signed both by the incoming and outgoing Personal Assistants, a copy thereof being sent to the SDO in charge of furniture. Any loss or breakage noticed at the time of verification shall be brought to the notice of Govt. in the Works Department Cabinet Ministers, Minister of State, Deputy Ministers, Speaker and Deputy Speaker will generally be responsible for loss or breakage other than that caused by normal wear and tear.

Cabinet Minister, Ministers of State, Deputy Ministers, Speaker and Deputy Speaker may send their requisitions for furniture to the Works Department who will arrange to supply the furniture.

The new supplies will only be made after the estimate is administratively approved and provision made in the budget. In regard to repairs and replacement of furniture, the cost will be met from the repair grant of the buildings. The cost of new supply of furniture will be debited to "283-Housing-Govt. residential buildings Furnishings", and cost of repairs and replacement to 283- Housing, Govt., residential buildings- Furnishing- Repairs, No item should, however, be replaced unless a survey report is prepared and approved by the competent authority.

When any article supplied is sold or condemned under orders of competent authority, the fact should be noted in the register and in the case of transfer from the residence of a Cabinet Minister or Minister of State or Deputy Minister or Speaker or Deputy Speaker to the residence of other Cabinet Minister or Minister of State or Deputy Minister or Speaker or Deputy Speaker, the article will be written off from the list of the former and entered as a fresh item, in the list of the latter. A permanent transfer of furniture etc., which has the effect of varying the scale of supply for each Cabinet Minister or Minister of State or Deputy Minister or Speaker or Deputy Speaker should be made with the approval of the Department in charge of the Minister's establishment. Condemnation and transfer of furniture should also be made with the approval of the Department in charge of the Minister's establishment, but the condemnation certificate should be given by the Works Department in respect of the furniture supplied to the residence of the Cabinet Ministers, Ministers of State, Deputy Ministers, Speaker and Deputy Speaker.

The care of all the articles provided at Govt. expense to the residence of the Cabinet Ministers, Minister of State, Deputy Minister. Speaker and Deputy Speaker and the responsibility for their repair and renewal will rest with the Division concerned under Works Department Old and unserviceable article may be sold by public auction after it is duly condemned by a competent authority and the sale proceeds credited to the treasury by the Division concerned.

4.2.5 Proforma for Verification Certificate of Furniture

Certified that the furniture in the residence of the Cabinet Minister/Minister of State/Deputy Minister/Speaker/Deputy Speaker..... at..... has been inspected and checked with the stock lists maintained. I am satisfied (i) that all new supplies up-to-date have been correctly



brought on to the stock lists, (ii) that stock lists are correct in all respects, (iii) that the articles in stock agree with the stock lists, (iv) that the sale proceeds have been properly accounted for, and (v) that sanction of competent authority exists for writing off all articles stock lists.

On vacation of the building by the Cabinet Minister/Minister of State/Deputy Minister/Speaker/Deputy Speaker, etc. the Personal Assistants in charge should handover the furniture to the SDO concerned.

4.3 Purchase and Sale of Govt. Buildings

4.3.1 Purchase of Buildings

Building required to be purchased for public purposes should always be done with the approval of the Govt. Proposal for such purchase should be accompanied by a survey and valuation report from the DO of PWD concerned along with a valuation report of the land from the Collector of the districts.

The DO under the administrative control of the CE (R&B) should furnish such report in respect of buildings proposed to be purchased by a non-engineering Department

4.3.2 Sale and Dismantlement of Buildings

- a. No building shall be sold unless it has been previously ascertained that it is not required by any other Department of the Govt. The procedure (including fixation of reserve price, auction, etc.) to be followed for disposal of Govt. buildings which are declared surplus shall be as laid down by the Govt.
- b. No building shall normally be dismantled unless it is in a dangerous condition or is beyond economic repairs or it is necessary to vacate the site for an important public purpose, such as construction of another building, structure or road etc.
- c. A purely temporary structure, of which the life is not more than two years may, after its having served the purpose for which it was erected, be sold or dismantled under the sanction of the DO. If the structure is to be sold without land, the DO will fix the reserve price, taking into consideration the condition of the structure and other local circumstances, obtain the approval of the SE thereto, and sell it by open auction, tender/quotation. He will be competent to accept the highest bid at or more than the reserve price. Discretion to accept bids below the reserve price shall vest with the SE.

4.4 Hiring of Office Accommodation

4.4.1 General

- a. When it is necessary to hire a separate building for the accommodation of office of Divisional Officer, the amount of rent to be paid by Govt. will be fixed by the Superintending Engineer up to a maximum of Rs. 9,000 per month, any higher rent being fixed by the competent authority as per delegation of powers.
- b. In the case of building hired for a SDO the rent to be paid will be fixed by the Superintending Engineer up to maximum of Rs. 3,000 per month, any higher rent being fixed by the competent authority as per delegation of powers.



- c. When a Sectional Officer is necessarily accommodated in the Sectional Officer's residence (not being a Government building), the Sectional Officer may, under the sanction of the Superintending Engineer, be allowed a fair proportion of the rent actually paid for the house he occupies upto a maximum of Rs. 1,200 per month based on the plinth area of space used for office purpose.
- d. In all cases of Hiring of accommodation hiring committee shall be constituted as follows:

Hired Office	Hiring Committee	Hiring Committee Constituted by
JEs Office/Office cum Residence and Sub-Div. office	EE, AE and Divisional Accountant	EE
Divisional Office	SE, EE and Accounts Officer	SE
Office of SE and CE	CE, SE and Accounts Officer	CE

- e. For Hiring of accommodation broad guidelines of carpet area excluding passages, storage space, verandahs, toilets etc. shall be taken as follows:
- HODs between 25 to 30sqm.
 - Other Class I Officers between 20 to 25sqm.
 - Other Gazatted Officers between 15 to 20sqm.
 - Head Ministerial Officer between 5 to 6sqm.
 - Stenographer, Assistant, Clerk, Auditor between 4 to 5sqm.
 - Typist, Record Keeper, Diarist etc. 3 to 4sqm.

The overall suitability of the office accommodation for specific purpose shall be certified by the Hiring Committee keeping in view the general availability of required premises at suitable location convenient for establishing the office.

- f. The rent should be determined on the basis of calculation of fair rent to be determined by the Hiring Committee. The rent should be first determined by two methods (a) According to the recognised principle of valuation i.e. on the basis of present value of the property (b) According to prevailing market rent. The Hiring Committee should determine fair rent in between rent based on present valuation and the market rent as per their best judgment.
- g. For hiring of accommodation for other non- engineering Department, same principles should be followed.
- h. Accommodation may be hired by the SE for storage facilities on the same principles contained in paragraphs above.
- i. In exceptional cases where accommodation is to be hired both for the residence of officer and the office, the officer sharing the accommodation will occupy as much area only as is surplus to office accommodation but not in excess of what is appropriate to his status according to the prescribed standards subject to a variation up to 5 per cent and pay rent



on plinth area basis or at the rate of 10 percent of Govt. servant's monthly emoluments whichever is higher subject to a maximum of 50 percent of the total rent of the building. In such cases, prior permission of the SE should be obtained.

- j. The Municipal Tax or Union Tax assessed on the annual value of the buildings in which office accommodation is provided or on the land appertaining to them should be treated as separate from the rent. At the time of hire of the building it should be decided who will pay such tax on the building. In case, where Govt. is to pay the tax, the Govt.'s share of tax will be proportionate to the rent payable by Govt.

4.4.2 Principles to be followed for Hiring out Accommodations for Public Purposes

Subject to provisions under Rule 157 of OGFR, the accommodation should be hired only for public purposes and will be subject to the following conditions:

- a. No accommodation may be hired under these powers in places outside.
- b. Certificate of non-availability of Govt. accommodation should be obtained from the concerned departmental authorities who are in charge of Govt. buildings available in the locality. In the case of accommodation sought at New Capital, the certificate should be obtained from the Director of Estates.
- c. A certificate of fairness of rent shall be given by an officer not below the rank of AE in accordance with the principles prescribed by Govt. from time to time.
- d. The rent fixed for the building taken on hire should not exceed the fair rent as certified by the Hiring Committee as mentioned above. But under special circumstances the Administrative Department and Heads of department may sanction up to ten per cent in excess over the fair rent certified.
- e. Where the accommodation is hired exclusively for office, the area of accommodation should not exceed what is admissible by more than 10 per cent for the purpose of, admissibility of office accommodation, the scales indicated in para 4.4.1 (e) above should be observed in respect of carpet area entitlements.
- f. Accommodation for other categories of staff could be made on the above analogy but necessary allowance to a reasonable extent may be made for special requirement, if any e.g., Court work record room etc. The authorities sanctioning hiring of office accommodation should record a certificate in the sanction order to the effect that the carpet area of the building taken on hire is in accordance with these instructions. Other important guidelines are as follow:
 - i. Private accommodation should normally be hired for office purpose only. Where, however, such accommodation on the proper scale and according to requirement of the office concerned is not available or where special circumstances exist, accommodation may be hired for office-cum-residence purposes other than exclusively residence purposes, the residential portion shall be allotted to the incumbent of a specific post and thereafter it shall be incumbent on the Govt. servant holding the post and also his successors in that post to occupy the residential portion until alternative accommodation is secured for office alone.



Only such accommodation as is surplus to office requirements may be set apart as residential accommodation and in allotting it to the incumbent of any post, it should be ensured that the residential accommodation is not in excess of what is appropriate to the status of the post according to the scales prescribed subject to a variation upto 10 percent.

- ii. Out-house, if any, which forms a part of accommodation hired should be utilised for storage of stationery, forms, old records or any other appropriate purposes. Where this is not possible these should be let out to members of Class IV staff.
- iii. The standard rent for the residential portion of accommodation should be determined on the plinth area basis or at the rate of ten per cent of Govt. servant's monthly pay, whichever is higher subject to a maximum of 50 per cent of the total rent of the house.
- iv. Accommodation shall not be hired for a period exceeding five years at a time.
- v. Quotations should be invited for hiring buildings by giving adequate publicity.
- vi. Instructions in General Financial Rules not inconsistent with these provisions should be followed.
- vii. Under special and unavoidable circumstances, accommodation for official uses up to 50 sqm. may be hired under the orders of SE without constituting a Hiring Committee.

4.4.3 Procedure for Fixation of Fair Rent of Private Buildings on Hire

- a. Whenever a request for fixation of fair rent of a private building, proposed to be hired for Govt. purpose, is received by a Divisional or SDO from the head of office, he should request the Requisitioning Officer to furnish particulars of the building in the proforma prescribed along with a detailed plan with section and elevation. The plan should also show the portion of the building proposed to be taken on hire, Part A of the proforma should be filed in by the Requisitioning Officer and Part B by the owner of the building.
- b. In determining the fair rent, the capital cost of the building at the time of taking on hire and the depreciated value at the time of hiring has to be taken into account, for this purpose buildings have been classified on the basis of designs specifications and materials used as follows:

Class I – Pucca walls in lime or cement mortar with R.C. roof covering or pucca walls with terraced roof cover joints either R.C. settle or teak wood and which should be of good workmanship, durable materials and in good and regular repair.

Class II –

- i. Pucca walls build in lime or cement mortar roof having A.C. sheets Raniganj tiles with good workmanship, good materials and kept in good repair.
- ii. Buildings classified under Class I above but not kept in good repairs.
- iii. Kucha pucca walls included roof having C.I., sheets A.C. sheets thatched or tiled roof with good workmanship, good materials and kept in good repairs.



Class III –

- i. Buildings of temporary nature such as those with Kucha bricks, mud, walls, wattle and daub and/or with A.C. Sheets walling etc.
- ii. Building classified under Class II (a) and which are not kept in good repairs.
- c. The percentage of depreciation for the above categories of buildings should be as below:

Categories of Buildings	Rate of depreciation per annum
Class – I	1.5 percent
Class – II (a)	2.0 percent
Class – II (b)	3.0 percent
Class – II (c)	5.0 percent
Class – III (a)	5.0 percent
Class – III (b)	10.0 percent

- d. For the purpose of calculation of fair rent, the following factors should be taken into account keeping in view the percentage of depreciation as mentioned above.
 - i. Capital cost of the building either or current plinth are rate or on the actual cost including installations.
 - ii. Cost of land on which the building stands on the basis of sale statistics of preceding three years to be ascertained from Registration Office.
 - iii. Depreciated value of the building.
 - iv. Municipal or other local taxes of services nature.
- e. By including the cost of the land the renewal value of a building would naturally be more than the fair rate on the basis of the cost of the building only. If buildings that are located on large plots of land are rented and Govt does not need such large area of vacant land, the Govt. will have to pay heavy rent for such building without any commensurate benefit. In such cases, while calculating the fair rent of building to be hired, we should account for that area of land which the Govt needs or the area determined based on the local bye laws for permissible ground coverage whichever is lower.
- f. The DO or SDO should verify the particulars with the plan and if he considers it necessary he should inspect the building. He should then calculate the fair rent the fill in Part 'C' of the proforma and return into the Requisitioning Officer within the fortnight of the receipt of the requisition duly filled in.
- g. The fair rent will be calculated at 8 percent of the capital cost of the building determined under rule 4 excluding the municipal or other local taxes or services nature which will be paid as per actuals.
- h. The prevailing rent in the locality will should also be determined by enquiry from the tenants in the area occupying similar accommodation, preferably building those occupied by Govt



Department, PSUs or some standard private firms. Effort should be made to collect some supporting document like copy of lease deeds etc. for this purpose.

Proforma I parts A, B, and C gives details for calculation of fair rent

Proforma II and III gives the format for issue of rent reasonability certificate

The fair rent once calculated will remain in force for a period of 3/5 years from the date of sanction.



Proforma I

Information Required for Fixation of Fair Rent of a Building

Part A

(to be filled in by the requiring office)

1. a. HOD/Administrative Department requiring the building.
b. Purpose for which building is required
c. Is the entire building or portion thereof is to be hired?
d. Is the entire land within the premises of the building or a portion thereof is to be hired.
2. a. Floor area prescribed if any, for the accommodation of office as per rules (with authority)?
b. Floor area of the building proposed to be hired.
c. If the floor area of the building in question is in excess of requirement the reasons for each extra accommodation is required may please be mentioned and in such a case authority for hiring extra floor are is to be quoted?
d. Does the authority agree to pay extra rent due to increase in capital cost of the building, by using the special fittings as mentioned, under item 6 of Part 'B' in lieu of ordinary fittings ?
e. Are the amenities provided in the building, suited to your requirement or the same are in excess over/less than requirement?

Signature and Designation of the Requisitioning Officer

N.B.: The plan furnished by the owner should be verified and countersigned in token of acceptance by the Department authority requisitioning the house and enclosed to this proforma.

Part B

(To be filled in by the Owner of the buildings)	Calculation by the Assessing Officer
(1)	(2)

1. Name of the owner -
2. a. Location of the building
b. Plinth area of the ground floor
c. Plinth area of 1st floor
d. Plinth area of other floors
e. Plinth area of portion
3. Date of completion of the building
4. Expenditure actually incurred –
 - a. For building portion
 - b. For electrical installations
 - c. For sanitary & Water supply installation

Total



5. Land –
 - a. Area of land covered by the building and its compound
 - b. Total area of the entire plot
 - c. Cost of the land as actually paid for
6. Special fittings & ornamental works, if any
 - a. Mosaic flooring (area)
 - b. Window grills (area)
 - c. Cement based painting (area)
 - d. Distempering (area)
 - e. Colored flooring (area)
 - f. Description of special fittings to doors and window, if any
 - g. Description of the special electrical and public health fittings, if any
 - h. Others, if any
7. Municipal taxes actually assessed (Supported with, documents) –
 - a. Holding tax
 - b. Latrine tax
 - c. Light tax
8. If the building was previously hired please mention –
 - a. Name of the office which hired the building
 - b. Rent paid by them for the purpose
 - c. Fair rent assessed for the same
 - d. Authority in support of the amount

Date.....

Signature of the Owner with full address

Date.....

Signature of the assessing authority

Certificate

Certified that the information has given from items 1 to 6 are true and correct and I undertake to refund any excess payment made to me on the basis of the dates furnished if it is subsequently found that the dates are not correct.

Date.....

Signature of the Owner

N.B.: Detailed plan with section and elevation, showing therein the portion proposed to be given on hire should invariably be furnished along with the above information.



Part - C

(Calculation of fair rent in the Division/Sub-division Office)

1. Capital cost and per Part 'B' excluding municipal taxes, depreciation, if any –
Net capital cost Rs.....
2. Eight percent of the net capital cost is the fair rent per annum.
3. Add – Municipal tax per annum (Support by documents)
4. Sum total of Sl. (II & III) is the fair rent payable per annum
5. Fair rent per month [Divide the cost as at (iv) by twelve]

Sub-Assistant Engineer

Subdivision/Section

Checked and found correct

Estimator

Sub-divisional Officer/Divisional Officer

- Note:**
1. The statement of calculation of depreciation should be attached to Part 'C'
 2. The assessing officer must furnish a certificate in support of the valuation of land to the effect that the cost of land is based on the records of the Registration Office as well as from local enquiries.



Proforma-II

Model format for issue of Rent Reasonableness Certificate if rent according to the prevailing market rent is less than that as per recognised principles of valuation.

1. Certified that reasonable/fair rent of Premises with description as.....Owned by..... proposed to be hired by/already under tenancy of (name of the hiring Department has been assessed as per guidelines given in OPWD Code the rent as effect from..... works out to Rs.....(in words.....) per sqm. Per month of built up area the monthly rent will be Rs.....(in words.....)
2. The rent as indicated above is inclusive of (i) Surplus usable land in the campus surplus.....Sqm. approx. to be utilised exclusively by the Hiring Department for parking purposes etc. (ii) Regular repairs and maintenance of the premises; (iii) Municipal Tax (House/Property Tax), but exclusive of Water and Electricity charges payable to body which shall be borne by the Hiring Department
3. The Municipal Tax component included in the rent as indicated above is..... (in words.....) per month. (It will be for the Hiring Committee to settle the terms of payment of the rent to the owner with or without Municipal Tax).
4. The fair rent determined by the Hiring Committee is Rs..... (in words.....) per sqm. per month of built up area. The monthly rent will be Rs..... (in words.....) and shall be valid for 3/5* years from date of hiring of premises.

*** Relevant number of years is to be retained.**



Proforma- III

Model format for issue of Rent Reasonableness Certificate if rent according to the prevailing market rent is more than as per recognised principles of valuation.

1. Certified that reasonable/fair rent of the premises with description as..... owned by and proposed to be hired by/already under tenancy of has been

(Name of the hiring Department)

assessed as per guidelines of OPWD Code and the rent as effective from.....works out to as under:-

- i. **According to the recognised principle of valuation** (i.e. on the basis of the present value of the property) Rs.....(in words.....) per sqm. per month of built up area. The monthly rent will be Rs.....(in words.....).
 - ii. According to the prevailing market rent Rs.....(in words) per sqm. per month of built up area. The monthly rent will be Rs.....(in words.....)
2. Both the figures of rent as indicated above are inclusive of (i) Surplus usable land measuring..... sqm. approx. in the campus to be utilised exclusively by the Hiring Department for parking purposes etc. (ii) Regular repairs and maintenance of the premises; (iii) Municipal Tax (House/Property Tax), but exclusive of water and Electricity charges payable to local body which shall be borne by the Hiring department.
3. The Municipal Tax component included in the rents as indicated above is Rs..... (in words.....) per month. (It shall be for the Hiring Department to settle the terms of payment of the rent to the owner with or without Municipal Tax).
4. As municipal tax component of the rent has already been spelt out above, no request shall be entertained by Hiring Committee for re-assessment of rent on account of subsequent increase or decrease in municipal tax, if any. It shall accordingly be for the hiring Department to settle it right in the beginning by a mutual agreement as to how such subsequent increase or decrease in municipal tax, if any, shall be dealt with.
5. The fair rent determined by the Hiring Committee is Rs.....(in words.....) per sqm per month of built up area. The monthly rent will be Rs.....(in words.....) and shall be valid for 3/5* years from date of hiring of the premises.

*** Relevant number of years is to be retained.**



4.5 Renting of Public Buildings

The DO in charge of buildings should ensure that the public buildings which are not in use and also not likely to be used for public purpose in near future are let out. The tenants need not necessarily be officers of the department to which the building is assigned. They may be officers of other Department or private persons. Residential accommodation, thus let, should generally be let out from month to month basis. A long term lease in the prescribed forms may be given with the sanction of the CE in case of non-residential buildings and with that of the SE in the case of residential buildings. A clause in the agreement should always be added, to enable the DO to terminate the lease at short notice in case the building is required by Govt.

In cases where the responsibility of allotment of buildings borne on the books of DO rest with an authority other than DO, the allotting authority should send intimation to the DO concerned to enable him to send rent rolls for the recovery of the rent.

In case where buildings are allotted to private persons, the allotting authority should indicate the terms of allotment to the Divisional Officer so as to enable him to enter into necessary agreement and recover the rent in advance.

Public buildings let to private individuals should not be altered or enlarged at Government expense to suit the tenant and persons occupying public buildings on rent are prohibited from making any alteration even at their own expense, except with the express concurrence of the Divisional Officer in-charge of the building. The fact of any, additions or alterations being made by the tenant, confers no right of ownership on him, nor can the fact of the occupancy having made additions or alterations at his own expense be considered as giving him any claim to a set off against or diminution of rent. These conditions should be entered in the agreement or lease. Where additions and alterations of capital nature have been made to any of the, buildings occupied by private individuals by any special order of competent authority, immediate steps should be taken to revise the rent payable, by the private individual. Otherwise as usual it should be revised on the expiry of five years from the -date of last revision.

No public building in the charge of the Departments in-charge of public works may be occupied as a private residence except under the orders of the SE.

Government buildings specifically meant for commercial purposes may be leased on tender basis (such as for running of restaurants etc.) In case the highest acceptable tender is less than the market rent of the building, the approval of the Superintending Engineer should be obtained.

Notes: i. In case of buildings, for which special Rules have been framed by the Government, this rule, does not apply.

- ii. The concerned Divisional Office may temporarily lease out areas earmarked in the project for location of marketing centres with the condition that such temporary lease is likely to be terminated as and when the same is otherwise required for the object.

On no account any church; chapel, mosque, temple, tomb or any other building devoted to religious use, should be occupied as a dwelling house or for any other purpose; without the consent of the persons interested and the sanction of the Collector of the District. No building or monument of historical or archaeological interests or the lands attached thereto should be used as, residence or for any other purpose without the special approval of Government.



When any public building is, under proper authority, let to a private person, company, club, association, Organisation or local body rent should be determined at the rates prevailing in the locality for similar accommodation owned by private persons but without the special orders of Government the rent charged should not be less than the standard rent calculated in the manner prescribed for Government servants in the Odisha Service Code. Where there is no privately owned building or house in the area comparable to Government owned building the rent of the Government building occupied by private parties should be determined with reference to the standard rent of the building, subject to the condition that the rent recoverable from a private party should not be less than the rent calculated in the manner prescribed in Rule 110 of Odisha Service Code. For this purpose (a) the actual cost of the building and the cost or value of the special services and installations such as sanitary, water-supply and electrical installation etc. are to be included in the capital cost, (b), the cost of the buildings shall include the cost of land and departmental charges in force at the time of calculation of rent; (c) further addition for maintenance and repairs and for municipal and other taxes should be made at the rate indicated below:

- i. Two per cent of the cost of the building and four and half percent of the cost of the electric, sanitary and water-supply installation on account of ordinary and special maintenance and repairs, and
- ii. Municipal and other taxes such as latrine, lighting and holding taxes as per actuals. Besides the above, the private parties occupying Government buildings will have to pay charges for electricity and for consumption of water at the rates as decided by Government from time to time.

When any residential building belonging to the State Govt. is occupied by a private individual without the special permission of the Govt. rent should be recovered in advance but without the special permission of the Govt. the rent charged should not be less than the standard rent calculated in the prescribed manner.

4.6 Taxes on Public Building

- a. Municipal Taxes on Govt. buildings, other than residences are payable by the Department occupying them and are debitable to that departmental charges which are levied as payment for service tenders, e.g. quantity of water or electric- current supplied are paid by the occupant.
- b. By the provisions of Section 131 of the Municipal Act of 1950 the latrine tax, the water tax, the lighting tax and the drainage tax are assessed on the annual value of the holding, and by the provisions of Section 141 are payable by the owner. The tenant shall pay municipal and other taxes payable by Govt. in respect of the residence, not being in the nature of property tax. Recovery of such taxes will be made in accordance with the principles as may be decided by Govt. from time to time.
- c. Municipal rates and taxes leviable on residences of the Governor will be paid by Govt. and debited to "Maintenance and Repairs".
- d. No tax is leviable on buildings in cantonments. The case of military buildings in municipal areas is covered by Army Regulations India.



- e. The responsibility for the acceptance of the assessment of Govt. building rests with the DO in charge of the building, if the building is not borne on the books of the Department in charge of, public - works, the responsibility rests with the departmental officer concerned. If the assessment appears unduly high, proceedings should be taken to obtain redressal under the ordinary municipal law and recourse should only be had to the special provisions of Act XI of 188.1 when amicable (possibly arbitrary) settlement with the local authority has failed, in cases where the property to be assessed is from its nature such as not to admit of the application of the ordinary principles in assessing the payment thereon of any particular tax, e.g., when the assessment is on the letting, value and the property is of such a nature that it is difficult to conceive of its being let and impossible to form any estimate of the rent that would be obtained for it if the Govt. offered to let it.
- f. In case in which a lump sum is paid for a number, of buildings in a municipality, the taxes in respect of buildings occupied by a commercial Department should be debited to that Department, while those which pertain to buildings occupied by more than one non-commercial civil Department should be charged to "265- Other Administrative Services- Rent, Rates and Taxes".
- g. Payment of taxes by Govt. Departments to local funds may be made, in cash or by book transfer as may be decided by the AG, in consultation." with the State Govt.
- h. In cases in which the amount of tax payable to the municipality in respect of a building has to be borne partly by the Govt. officer occupying the building and partly by Govt., the tax will, be paid in full by Govt. in the first instance and the amount payable by the officer will be recovered from him by Govt.

4.7 Sanitary, Water Supply and Electrical Installations in Public Buildings

All works and repairs connected with internal sanitary, water supply and electrical installation to Govt. buildings executed through the agency of Works department should be carried out by the Public Health, and Electricity Wing of CE (Building) respectively.

Notes:

1. The CE, PHE is in charge of the external sanitary and water supply system.
2. The CEs other than the CE (Building) taking up construction of new buildings for use either for residential) or non-residential purposes or for other purposes in project area should make necessary arrangements both for external and internal services to the buildings, in respect of sanitary and water supply installation and internal installation in respect of electricity.
3. For the construction and maintenance off electric supply system including service connections, the responsibility lies with the State Electricity Board.

4.8 Inspection of Public Buildings

The following procedure should be followed with regard to the inspection of all buildings borne on the books of department in charge of public works:



- a. Each JE/Sectional Officer should maintain a register of inspection of building in the prescribed form for all the buildings in his charge.
- b. The JE/Sectional Officer should inspect each and every building in his charge once in every six months. He should record the results of his inspection in the register and promptly bring to the notice of the SDO, any defect of a serious nature in any particular building. He should also inspect each residential building immediately after it is vacated in order to see that the quarters have been, handed over in good condition.
- c. The SDO will similarly inspect each building in his charge once a year and Record the results of his inspection in the register. He will take steps to rectify the defects brought to his notice by the JE/Sectional Officer well as those discovered by him during the course of his inspection. SDO will also bring to the notice of DO concerned, any serious defect in buildings requiring his special attention.
- d. The DO will inspect all the buildings where serious defects have been brought to his notice and. also other important public buildings once a year and make sure that adequate steps have been taken to remedy the defects. The DO should bring to the notice of the. SE, cases where he has reasons to doubt the structural soundness of any building and the latter will take such action as he considers necessary.
- e. The SE should furnish to the CE a complete report in the month of February every year, to the effect that all the buildings in the charge of his Circle have been duly inspected by the respective officers as prescribed above and suitable measures taken to preserve them in good condition. He should also bring to notice any specific cases of buildings which he consider structurally unsound and unsafe.
- f. The officers responsible for public health, and electrical installations should sincerely inspect the installations according to the times schedule fixed above and furnish reports to their respective superior officers.

4.9 Residences for Government Officials

4.9.1 General

- a. A number of Departments provide residences to their officers/officials. The norms regarding built-up area and specifications of such residences will be determined by the Works Department and got approved from the Govt. The norms should be revised periodically. The department concerned shall ensure that the departmental houses are constructed by them as per these approved norms. The plinth area rates, scales of Electrical fittings and scales water supply and sanitary fittings in various types of residential accommodation are given in **Annexure 4.1, 4.2 and 4.3** respectively.
- b. The Department shall have rules regarding allotment of houses. It shall be seen that, as far as possible, houses do not lie vacant, but if such a situation arises, procedure laid in para (l) will be followed.
- c. The unauthorised occupation of houses shall be viewed very seriously. The Supreme Court has also ordered that the State shall not allow anybody to stay in the house without proper authorisation. The competent authority shall give notice for the vacation of the houses



immediately after the officer/official becomes an unauthorized entity (after making allowance for the grace/concession period) due to transfer or retirement or change of posting or any other reason and take necessary steps to get the house vacated at the earliest. The case under relevant Act shall be filed immediately on completion of two months of unauthorised use unless the occupant has been allowed by the competent authority to over-stay. The officer in-charge of the Department owning the house should immediately write to his HOD to recover penal rent from the defaulter as per rules.

- d. To weed out sub-letting of Govt. houses, the allotment authorities should have periodic and surprise checks conducted. In case of detection of such an instance, not only the house should be got vacated and penal rent levied and collected, the officer/official should also be proceeded against departmentally.
- e. The officers/officials occupying Govt. buildings can be of great assistance in averting the imminent danger to a building because they being on the spot are in a better position to notice and report any sign of impending failure, e.g., a crack in a wall or sinking of floor or sagging of roof which may become manifest between the period of inspections by PWD officers/other concerned. It, therefore, becomes the responsibility of all officers/officials occupying Govt. buildings to bring to the notice of PWD officers/other concerned immediately any unusual defect or signal or mark of distress so that timely action may be taken to attend to the defects.
- f. The rent shall be recovered from the occupants of the buildings by the competent authorities as per the rules in force. Notwithstanding any other provision, intimation of allotment of a house by the designated authority or the House Allotment Committee shall be sent by it to the controlling office of the employee concerned, which will be responsible for recovering the rent from the pay bills of the said employee. The Finance Department shall issue instructions in this regard from time to time and examine revising the same every five years or whenever there is a general pay revision.
- g. Out-houses, if any, should be utilised for storage of stationery, old records or any other appropriate purpose. Where this is not possible, these should be let out to members of, Group D establishment and rent recovered from them under the rules in force.
- h. The subletting for residential purpose of buildings hired as offices will require the approval of Govt. and consent of Finance Department, and any recovery of rent for portions sublet will be made by the Head of the Office concerned and credited to the revenue HOD concerned.
- i. Public buildings let out to private individuals shall not be altered or enlarged at Govt. expense to suit the needs of the tenant. Persons occupying public buildings on rent are prohibited from making any alterations, even at their own expense, except with the express concurrence of the DO and also the authority competent to approve the plans. The fact of any additions or alterations being made by the tenant confers no right of ownership on him nor can the fact of the occupant having made additions or alterations at his own expense be considered as giving him any claim to a set off against or diminution of rent. These conditions shall be entered in the agreement or lease.



- j. Govt. servants occupying Govt. buildings as residences are strictly prohibited from making any kind of additions or alterations therein whether structural, sanitary or electrical, without the express permission of the DO and also the authority competent to approve the plans.
- k. Every officer occupying a Govt. residence is expected to leave it in a fit state for occupation by his successor. Except for natural wear and tear to be made good at Govt. cost, other damages, which can be proved to be due to carelessness on the part of the licensee, shall be recovered from him. Towards this end, the officer in-charge of the building shall arrange to have each residential building inspected immediately after it is vacated.
- l. Whenever a residence cannot be allotted to the incumbent of the post to which it is attached or to a Govt. servant of the class for which it was constructed, it may be let out to a Govt. servant not holding the particular post or not belonging to that class subject to such conditions that may be determined by the Govt.

4.9.2 Lease of Building for Residence

The Govt official of administrative Department and of Public Works Department before recommending any new construction, purchase of a constructed building should always consider whether the requisite accommodation cannot more conveniently and economically be provided by taking an existing building on lease for such terms and conditions as may be appropriate. Lease in all cases can, however, be entered into only with the express sanction of the State Govt. The present and future incumbents for whom accommodation is leased should pay as rent:

- a. The sum payable to the lessor;
- b. When repairs are executed by Govt the estimated annual charges for repair and maintenance;
- c. If Govt. are liable to pay municipal taxes, the amount of such taxes;
- d. Subject to the maximum of 10 per cent of the emoluments of the occupant or such lower percentage thereof as may be fixed by the State Govt in respect of cases where Govt provide accommodation. He should also pay such municipal taxes which by local rule or custom are levied on the occupant in addition to the rent payable to the Govt.

Leases should ordinarily provide that the lessor will execute all structural repairs before the building is occupied and will carry out such additions, alterations and repairs as are necessary to render the buildings habitable and suitable for the purpose for which it is required. In the event of any addition or alteration to the building being made subsequent to the signing of the lease at the request of the occupant and at Govt expense, the consent of the owner must first be obtained in writing unless the work is considered by the State Govt to be essential for sanitary reasons and a written undertaking from the Govt servant who requires the addition or alteration is taken to the effect that he will pay increased rent for such additions and alterations as under the following rules:

- a. If the lessor agrees to take over the work done on the expiry of the lease and to pay to Govt the original cost, of the work, less an allowance for deterioration, which should be fixed before the work is done, the occupant will be required to pay the following additional charges:



- i. six percent on the capital cost of the additional work
 - ii. the percent or amount fixed for deterioration
 - iii. the annual estimated charges for maintenance and repairs of the additional work (if repairs are executed by Govt).
- b. If the landlord refuses to accept any liability for additional work, the rent payable by the occupant will be increased by a sum sufficient to cover during the period of the lease:
- i. the capital sum expended including interest at six per cent.
 - ii. the annual estimated charges for maintenance and repairs of the additional work.

The amount to be recovered monthly from the tenant should be fixed when the work is completed and should be distributed equally throughout the remaining period of the lease.

In case of (i) the capital cost will be held to be the total expenditure less half the amount which will be recovered on account of deterioration.

In case of (ii) the interest will be calculated on the amount of the outlay.

Capital expenditure under Sub-clause (ii) of Clause (b) should only be incurred when absolutely necessary, and capital expenditure under either Sub-clauses should not ordinarily be incurred which will raise the rent of the leased building to an amount in excess of 10 percent of the average emoluments, if any, of the class of official who will usually occupy the buildings.

4.9.3 Provision of Residence

All proposals to construct or purchase a residential building for a Govt servant should be accompanied by a provisional rent statement in the prescribed form.

Similarly, in submitting proposals for the leasing of a residence, full information will be given regarding:

- a. The sum payable to the lessor;
- b. Whether all repairs will be executed by him, and if not;
- c. The estimated annual charge for maintenance and repairs if they are to be executed by Govt;
- d. The amount of municipal taxes when payable by Govt;
- e. The standard rent of the residence as calculated;
- f. The average emoluments of the officer for whom the residence is proposed and the maximum rent recoverable from him.

The Rules regulating that provision of residences for Govt official are laid down in the Fundamental Rules 45, 45-A and 45-C and in the Supplementary Rules there under in respect of officers of All India Services and in Rules 104 to 115 of the Service Code in respect of all other Govt servants under the administrative control of the State Govt.

Govt Buildings intended for occupation as residences by Govt officials and others will be divided into two classes.



Class I – Building which will ordinarily be occupied by Govt servants liable to pay the full standard rent subject to the limit of a prescribed maximum percentage of their emoluments.

Class II – Buildings from which the recovery of full standard rent is not expected that is, buildings which will ordinarily be occupied by Govt servants who are entitled to rent free accommodation or at reduced rate of rents under the Fundamental Rule 45-A (v) or Rule 112 (i) and of the Service Code.

The fact that a building of Class-I is occasionally occupied by a tenant who is entitled to rent free accommodation or at reduced rates will not justify its removal from Class-I to Class-II and vice versa; a building in Class-II should not be transferred to Class-I whenever it is occupied by a tenant who may be required to pay rent. Building should be transferred from one class to the other only when there is a permanent change in the conditions under which they will ordinarily be rented. Transfers should be made only under, the orders the State Govt and should have effect in all cases from the commencement of a financial year.

In the case of houses purchased by Govt, the capital cost will be the price actually paid for the property together with the amount of the works outlay incurred by Govt in altering, restoring or improving the building. When there is no record of the actual price, paid by Govt for any building, its present value should, be estimated by the DO of the Division and approved by the SE and this estimate should be taken as the capital cost.

When a building is occupied partly as a residence and partly as an office for which no rent is paid, the capital value of the portion occupied as a residence should be separately estimated, for the purpose of assessment of rent. The cost of maintenance of the residential portion should also be separately estimated and accounted for.

When (a) separate office accommodation is provided for the occupant and (b) the use of part of his residence for office or business purposes is optional, no deduction from the rent is permissible on this account.

Renewals of a buildings or of its subsidiary works such as out houses, drains, culverts etc. or new construction such as retaining walls, necessitated by the occurrence of fire, flood earthquake, abnormal storm or other calamity will be chargeable to the capital cost, but on completion, the State Govt will decide what amount should be written/off the original capital cost. When a portion of a building is required to be dismantled to make room for alterations or additions, the capital value of the dismantled portion should be dealt with appropriately.

When a building is rendered uninhabitable by reason of extensive repairs being in progress, the DO will declare the building unfit for occupation. The present tenant shall vacate the building immediately. For petty or ordinary annual repairs such course is not warranted

When a public functionary, not entitled to rent- free quarters, occupies a portion of his public office as for dwelling purpose, the DO, or officer in charge of collection of rent shall be authorized to claim rent calculated appropriately.

4.9.4 Procedure for Applications for Reduction of Rent

All application for sanctions to reduce the rents of Govt buildings occupied as residences below the amounts which should be charged under the foregoing rules must be accompanied by a tubular form in which should be shown the under mentioned particulars:



- a. Value of building and site.
- b. Average annual charges for maintenance,
 - i. Special, and
 - ii. Ordinary
- c. Rent assessed according to rules.
- d. Proportion of total area occupied by office (if any).
- e. Deduction on account of office rent (if any).
- f. Rent that would be payable by occupant.
- g. Rent that is proposed.
- h. Average emoluments of the occupant.
- i. Market rate for similar accommodation in the same station (to be given as far as practicable).
- j. Average rent chargeable under these rules for other Govt buildings with as nearly as may be, similar accommodation (to be given as far as practicable).

In all cases in which it is proposed to exempt an officer from the payment of rent, the under mentioned particulars should invariably accompany the application:

- a. Actual or estimated value of the house and site.
- b. Rent chargeable under the rules.
- c. Emoluments of the official recommended for the grant of free quarters.
- d. Date from which it is proposed to grant the privilege of free quarters.
- e. Specific grounds on which the concession is recommended.

4.9.5 Periodical Review of Concessions

Head of the concerned Department and the CE shall review as and when situation arises in the concession for free accommodation granted or the accommodation provided at reduced rates and recommend to the Govt withdrawal of the concession if justified. Allowing rent free occupation of Govt to Public Officers and others on the conditions of repairing them at occupants cost is prohibited.

A tenant, who is in receipt of pension from Govt, should be treated as a private individual for the purpose of these rules. But if he desires to make payments by deductions from his pension, recoveries from him may be made through the. Treasury Officer or other disbursing Officer' concerned, on the pensioner's furnishing the DO with a written request authorizing such deduction. This authority should be transmitted to the Treasury or Disbursing Officer with the first demand.

If a Govt servant vacates his quarters before the last day of a month, owing to his departure on transfer, leave or retirement, he must forthwith report the date of vacating the quarters to the DO. The demand for rent for the broken period should be made at once in order that the amount may be



entered, in the last pay certificate in the case of officers transferred within the same audit circle or proceeding on leave in India. In cases in which an office is paid up to the day of making over charge, i.e., when retiring, proceeding to another audit circle or taking leave out of India, the Treasury Officer should take steps, to see that the rent for broken period is deducted from the officer's last pay bill.

Except as provided otherwise pending orders on a representation against the DO's assessment, the amount assessed must be paid by the tenants on demand. Should the representation prove successful, the excess amount charged should be adjusted as soon as orders are issued, by a reduction in the assessment of subsequent month, or if this is not practicable or convenient, by an actual repayment.

4.10 Inspection Bungalows

The Rules for accommodation of Inspection bungalows of Works and other engineering Department of Govt of Odisha are given in **Appendix V**.

**Annexure 4.1: Admissible Outlay for Residential Buildings**

(Reference 4.9.1(a) & 6.2.1A of Manual)

The Plinth area of different types of buildings which would be constructed in the State and the monetary ceiling for each type of Residential Building would be as mentioned below

Sl. No.	Type of Quarters	Plinth areas in Sft.	Civil (in Rs.)	Electrical (in Rs.)	PH (in Rs.)	Total (in Rs.)
1	2	3	4	5	6	7
1.	B type D/S...	2522	3918560	459800	441730	4820090
2.	C type T/S...	1855	2942995	345591	331757	3620343
3.	C type D/S...	1853	2879098	337828	324553	3541479
4.	C type S/S...	1778	2836905	333014	319694	3489613
5.	CR type T/S...	1249	1981563	232692	223377	2437632
6.	CR type D/S...	1261	1959278	229898	220864	2410040
7.	CR type S/S with court yard	1205	2022649	225693	216665	2465007
8.	CR type Rural with court yard	1205	2022649	225693	216665	2465007
9.	D type T/S	982	1455874	181984	174704	1812562
10.	D type D/S	982	1412597	176576	169512	1758685
11.	D type S/S, with court yard	900	1357437	151217	145176	1653830
12.	D type Rural with Court yard	900	1357437	151217	145176	1653830
13.	E type T/S	655	845805	99735	95745	1041285
14.	E type D/S	655	823927	97160	93273	1014360
15.	E type S/S with Court yard	600	824784	91360	87706	1003850
16.	E type Rural with Court yard	600	824784	91360	87706	1003850
17.	F type T/S	424	547514	64561	61979	674053
18.	F type D/S	424	533354	62894	60369	656617
19.	P type S/S with Court yard	366	502618	55730	53500	611848
20.	F type Rural with Court yard	366	502618	55730	53500	611848

(The cost is worked out based on CPWD Plinth Area Rates enhanced by latest approved cost Index of Bhubaneswar for Jan 2013)



Annexure 4.2: Scales of Electrical Fittings to Government Residential Buildings

(Reference 4.9.1(a) & 6.2.1A of Manual)

Sl. No.	Designation	Wiring	Light	Fans	Power Plug	Ordinary Plug	Remarks
1	2	3	4	5	6	7	8
1.	Residences of the Ministers, Speaker of the Odisha Legislative Assembly and Chief Justice and Judges of the High Court.	Concealed in drawing and dining room otherwise at C.T.S	To be provided as per accommodation available		Special light fittings in drawing, dining and ante-rooms.		
2.	Senior Officers residences, member Board of Revenue, secretaries to Govt. Deputy Secretary to Govt. and Heads of Department District Magistrate	Ditto	40 10 2		One each living room		
3.	Senior Officers residence Under – Secretaries and other first class officers including Addl. District Magistrate and Sub-divisional Officer	Ditto	25		6 2 6		
4.	Junior Officer residences Class I and other Officers	CTS	25		4 1 4		
5.	Senior Non- gazette staff or gazette staff	CTS	15		3 1 3		
6.	Non- gazette staff	CTS	12		2 1 3		
7.	Non- gazette staff	CTS	8		1 1 2		
8.	Non – gazette staff	CTS	8		- 1 2		
9.	All clerical staff	CTS	8		- 1 2		
10.	Skilled men	CTS	8		1 2 2		
11.	Class IV Govt. servant, Peons, orderliness, unskilled	CTS	8		---		

Wiring may be on casing cad capping or on cleats, if the building is not a State owned one.



Annexure 4.3: Scales of Water Supply and Sanitary Installation Fittings in Different Types of Residential Buildings in Bhubaneswar, Odisha

(Reference 4.9.1(a) & 6.2.1A of Manual)

Sl. No.	Types of Quarters	No. of Bath Rooms	Indian Water Closet	European Water Closet	Anglo-Indian Water Closet	Wash and Basin	Sink Plan	Glass Shelf	Draining							
									Mirror	Towel Rail	Board for Sink	Showers	Taps	Plastic Screen	Soap Holder	Bath-tube 6' long
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1.	MLA quarters	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
2.	Type VIII Chief Minister's residence	2	1	1	1	3	2	2	-	1	1	5	-	-	-	-
3.	Type VIII (fan type)	3	3	2	-	4	1	3	2	4	4	4	-	1	-	1
4.	Type VIII Senior Gazetted Officer quarters	3	3	2	-	4	1	3	4	4	2	3	-	3	4	-
5.	Type VIII old Bungalow	3	3	1	-	3	1	3	-	3	4	-	-	8	3	3
6.	Type VIII double storied	3	2	3	-	4	1	3	-	3	3	2	-	6	2	9
7.	Type VII single storied	2	3	-	-	2	1	2	-	3	4	2	-	8	2	4
8.	Type VII double storied	2	3	1	-	2	1	2	2	2	2	3	-	-	-	-
9.	Type VI – C	2	2	-	-	1	-	-	1	1	2	2	-	-	-	-
10.	Type VI double storied	2	2	1	-	1	-	-	1	1	-	1	-	-	-	-
11.	Type VI – B	2	2	-	-	1	-	-	1	1	-	1	-	-	-	-
12.	Type VI (revised)	2	3	-	-	1	-	-	1	1	-	1	-	-	-	-
13.	Type VI/2 previously occupied by – C.M.	2	2	1	-	2	-	-	1	1	-	2	-	-	-	-
14.	Type V – C in Unit – III	1	1	-	-	1	-	-	2	2	-	2	-	2	2	1
15.	Type V in Unit-I and Unit II	1	1	-	-	1	-	-	-	-	-	-	-	-	-	-
16.	Type IV-A in Unit I	1	1	-	-	1	-	-	-	-	-	-	-	-	-	-
17.	Type IV in Unit II (Twing)	1	1	-	-	1	-	-	-	-	-	-	-	-	-	-
18.	Type IV in Unit-II	1	1	-	-	1	-	-	-	-	-	-	-	-	-	-
19.	Type IV-B in Unit I and Unit III	1	1	-	-	1	-	-	-	-	-	-	-	-	-	-



CHAPTER 5
MISCELLANEOUS RULES



5 MISCELLANEOUS RULES

5.1 Initial Records of Accounts

5.1.1 General

Expenditure on the construction or maintenance of a work may be divided broadly into two classes, viz. (i) Cash, (ii) Material. In addition to the main charges, there are other charges affecting the cost of work. To account for all these charges affecting the cost of work, separate accounts are maintained in Sub-division/Divisional Offices for recording, (i) the cost of individual work, and, (ii) the transactions of individual Contractors/Suppliers.

All these are known as works accounts.

Cash charges of works consist of (i) Payment of wages to labourers and members of the work-charged establishment of their wages, and (ii) Payments to contractors and others for work done or other services rendered. The cost of materials procured specially for work is charged to the accounts of works by transfer credit to the "Material Purchase Settlement Suspense Account". The payments to suppliers are governed by the same rules as payments to contractors for work done.

The accounts of manufacture operations and non-Govt. works are maintained in the same manner as for Govt. works.

The payments to the work charged staff are made monthly in the same manner as it is made to the regular staff but on a different bill from CPWA 29, and are charged direct to the work on which the labour is actually employed.

The payments to contractors and others for the work done or other services rendered are made on the basis of measurements recorded in the MB. Subsidiary instructions regarding maintenance of the MBs including Standard MBs and review of MBs are contained in subsequent paragraphs.

5.1.2 Initial Record of Accounts

The initial records of accounts of works are as follows:

- a. The Muster Roll including Casual Labour Roll
- b. The Measurement Book
- c. The Log Book of Machinery (if applicable)

For works done by daily labour, the MR will show the work done and the amount payable on this account. For the piece-work and for contract work generally the MB will form the basis of account. From the log books of machinery (in case of departmental execution of work or part of a work) the extract of the log book will indicate the hire charges debitable to the account of the concerned work.

5.1.3 Muster Roll (MR)

I. General

The MR Forms (Schedule form no. 132) constitute the initial record of the labour employed each day on a work. For work done by daily labour the sub-divisional staff deputed for the work will prepare a MR.



II. Muster Roll Rules and Procedures

- a. MRs are used for daily labourers and workmen.
- b. A MR is generally issued for a specified period not exceeding a month at a time and for specific items of work.
- c. i. Blank forms of MRs must be numbered, registered, and initialed by the DO, or SDO, if he is Disbursing Officer and maintains his own cash book before they are issued. He should maintain a register of MR forms that are issued and obtain in the prescribed form acknowledgment from the subordinates to whom they are issued. No form may be destroyed except under proper sanction from SE.
ii. At the time of issue a serial No. will be assigned to each MR Form and the name of work noted under the dated initials of the Disbursing Officer. The inner sheets will also similarly be initialed by the Disbursing Officer and assigned numbers corresponding to the outer sheet. Each sheet shall however bear in addition Roman numbers. Thus the first inner sheet of MR No. 8 will be (8) (i) the second 8 (ii) and so on.
iii. The signature with designation of the official to whom MRs are issued should be taken against the entry of issue in the Register or reference to the acknowledgment quoted therein.
iv. Payments may only be authorised on valid forms authenticated by the Disbursing Officer and voucher No's and date should be noted in the Register against the entries of issue of the forms as soon as the payments are accounted for in cash book. The Divisional Accountant or Sub- Divisional Clerk in the case of Sub- divisions, where the SDO is the disbursing Officer, should verify the voucher numbers and initial in Col.8 of the Register in token of verification. In the case of a Register maintained in the Sub- division, the Divisional Accountant should test check at least 10 percent of the entries at the time of inspection of the Sub- division to ensure that the Register is being properly maintained. MR lost or destroyed can only be written off under orders of the SE to whom a full report explaining the circumstances of loss or destruction should be sent as soon as detected.
v. The Register of MR for the Divisional and Sub Divisional Office shall be kept in the custody of the Divisional Accountant and Sub- divisional Clerk respectively but the Disbursing Officer will be responsible that these rules are observed.
- d. The MR will remain valid during the month for which they are issued. If any form is not brought into use during the month it must be returned to the office of issue for the immediate re- issue under a fresh number. Some of the MR Forms issued to stations remote from headquarters will however remain valid for maximum three months from the date of issue. Name of work will not be entered on them.
- e. These are intended for use in the case of emergency, but no sooner they are brought into use then a report shall be made to the DO concerned giving details of labour and the work on which used.
- f. One or more MRs can be given for each work but these should never be prepared in duplicate. It is also permissible to keep on a MR for labourer and workmen employed upon



several small works in cases in which the total unpaid wages may conveniently be recorded as relating only to the largest work in the group.

- g. The employment of labourers and workmen on a MR should be planned in advance and request for the issue of the MR indicating the number of labours and workmen in different categories proposed to be employed submitted accordingly. The number of persons to be employed should be kept to the minimum and it has to be seen by the Sectional Officer/JE in charge that their out- put is commensurate with the expenditure incurred on their wages.

The rates to be paid to such labourers and workmen will be the wages as prescribed in the relevant SOR commensurate with minimum fair wages.

- h. The Sectional Officer/JE in charge of the work should mark the attendance in the MR daily. A working day consists, of 8 hours. A labourer working for less than 8 hours but not less than half a day is allowed attendance which should be taken twice in a day, once at the commencement of work in the morning and one after recess say about 4 hours later. The attendance of the labourer at the beginning of the day should be indicated by a short slanting line and if the same labourer is also present in the afternoon another short line should be drawn in the opposite direction so as to form a cross.

A cross against a labour indicates his full day's attendance. A slanting short line indicates his presence in the morning and a slanting line in the opposite direction indicated his presence in the afternoon. No mark should be made in the morning against a labourer who is absent and if the same labour is absent in the afternoon also he should be marked absent by the letter "A".

- i. The SDO/DO should conduct surprise checks occasionally to ensure that the labourers as indicated in the daily labour reports and MRs are actually employed and their out- put is commensurate with the expenditure incurred on them.
- j. While marking attendance in the MR, father's name of the labourers and workmen and their addresses should invariably be mentioned. In the case of workers having no permanent residence, the locality of their labour camp or village where they normally reside should be indicated.
- k. The daily attendance and absence of labourers and fines if any inflicted on them should be recorded daily in Part I of the MR in such a way as-
- i. To facilitate the correct calculation of the net wages of each person for the period of payment.
 - ii. To render it difficult to tamper with or to make unauthorised addition to or alteration in the entries once made; and
 - iii. To facilitate the correct classification of the cost of labour, by works and sub- heads of work where necessary.
- l. The labourers and workmen employed on MR should be paid, either on weekly or fortnightly basis and separate rolls should be prepared for each fortnight. The SDO may supervise payment when the total amount of wages in the MR exceeds **Rs. 5,000/-**.



m. It should be ensured that the payment to the MR workers is made within 7 days of closing of the MR in respect of the Sub- divisions located at the Divisional Headquarters. In case of the Sup- divisions outside Divisional Headquarters payment must be made within 15 days of closing of the MR.

n. The thumb impressions of the labourers taken in the MR in acknowledgment of receipt of wages should be neat and well-marked. Persons in charge of taking thumb impressions should therefore be held personally responsible for taking neat marks as lack of care in taking clear thumb impressions in MRs sometimes results in misappropriation of money.

After close of the MR, the Section Officer/JE in charge of the work should complete all formalities regarding making entries in the MB, work out cost of work done at the SOR etc. and submit the MR to the SDO within two days. The Sub-divisional office clerk should take one day to check the MR arithmetically and one day should be taken by the SDO to exercise his check.

At the close of the MR the following Certificate should be recorded under dated signature of the Section Officer/Junior Officer or the other Officer authorised to make payment. Such certificate should also be recorded in the daily labour reports.

‘Certified that the workers mentioned in the MRs were actually employed by me on Govt. work and they were actually paid on my identification in my presence’.

o. If any wages remain unpaid, details thereof should be recorded in Part II of the MR (and then transfer to the Register of unpaid wages) before the memorandum at the foot of the MR is completed by the person who makes payment.

p. Wages remaining unpaid for 3 months should be reported to the DO who will decide in each case whether the liability, as an amount available for payment, should continue to be borne in the accounts of the work concerned.

q. In part III of the MR, measurement of the work done by the labourers and workmen employed under MR should be recorded, where such work is susceptible of measurement. If the work is not susceptible of measurement, a remark to the effect should be recorded.

r. In exceptional cases of urgency, such as closing of breaches, flood and cyclone damage repairs, silt clearance on road, rock slips or other urgent maintenance and repairs where large number of casual labourers are employed for short period, payments may be made on a casual labour Form No. 22 in which the names of labourers need not be given. In such cases payment should be made by the officer not below the rank of a SDO.

Where, in exceptional cases labour is employed on Form 22 or through a labour contract that should be paid according to the number of labourers supplied by him at the rate mutually agreed use of MR or MB is not permissible.

These rates should include the contractor’s commission charges. The daily labour report in such cases should be submitted daily to the higher officers, as in case of the MRs, to enable the latter to keep a check on the expenditure and to deal with the contractor’s claim when received. To avoid disputes with the contractors, they should be asked to sign the daily labourer reports in token of their acceptance and correctness.



- s. The SE may sanction the write off of-
- i. A blank form of MR which may be missing or torn or have become useless for any reason.
 - ii. MR on which attendance of labourer has been entered but no payment has been made. Care should, however, be taken to prevent the payments of lost MRs, should they subsequently be presented for payment.
 - iii. If a MR is lost for whatever reasons the matter should be reported to the DO, who shall seek write off sanction from SE.
- t. Loss of paid MR should however be treated in the same manner as in the case of loss of MB.
- u. In the event of a current or completed MR being lost, payment to the labour engaged thereon cannot be made without the orders of the DO. A report should be sent to him explaining the circumstances under which the completed MR was lost. The payment of such MR should be made on the register of arrears Form Part II of MR after verification of facts with the daily labour reports and completion of Part III of the MR. The fact that this form has been adopted as a consequence of original MR having been lost and payment has been authorised with necessary Govt. order should be noted on the form.
- v. Paid MRs which should be submitted to the Divisional Office with the Sub- divisional accounts should be checked under the supervision of the Divisional Accountant who will see that the relevant rules have been observed. The check of MRs with reference to the entries in the MBs will be done to the extent of at least 50 percent in the Sub- division/Division office where ever payments are made. Arithmetical recheck should be made in the Division Office in not less than 25 percent of the MRs, before they are finally recorded in the Divisional Office. A MR should be checked with the daily reports and MBs when received in the Divisional Office.
- w. The object of a daily labour reports are twofold. Firstly to keep the DO or SDO informed of the progress made with different works in his Sub- division being executed at a distance, when It may be days before he is able to personally visit the work site. The daily labour report apprises him of the number of men actually employed on the work and the approximate amount of work executed. Secondly he would be able to exercise some check over the number of men supposed to be employed on the work when he visits the work site and checks the number of men actually at site and compares the results with daily reports for the work/works
- x. A labour report should be prepared for each work each day in duplicate, the original being retained by the sub-divisional official, in charge and the duplicate being sent to the SDO or the DO as may be directed.
- Note:** In the most of MRs combining the names of 15 persons or less, the preparation and submission of labour reports may be dispensed with.
- y. Where work is carried out departmentally labour reports may be used and should be submitted either daily or weekly in the prescribed form as may be directed by the DO. These reports show the number of each class employed on each work or subhead. Discrepancies



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between labour reports and MRs should be investigated as soon as they are received in the Divisional Office-

- i. The MR is to be written up first in the morning, when the labourers come for work. The daily report is then to be prepared by the sub-divisional official in charge on return to this office in duplicate. Corrections found necessary can be intimated in the next daily report sent to the Divisional Office.
- ii. Hence the daily report to be of any value should be submitted daily and punctually, and dispatched at the earliest.
- iii. The daily reports after scrutiny by the DO should be handed over to the Divisional Accountant for check with the nominal MR, when that document is received for payment.

III. Register of Muster Roll Forms

Date of issue	Sl. No. of Muster Roll (outer sheet)	No. of (inner sheet)	Name of Work	Dated initials of Issuing Officer	Signature or reference to acknowledgment of Issuing Officer and his designation	Voucher No. and Date	Dated initials of Divisional Accountant or Sub-Divisional Clerk	Remarks (Date of return of unused forms and Nos. assigned on reissue should be noted in this column)
1	2	3	4	5	6	7	8	9

IV. Important Points for Scrutiny of Muster Roll

- a. Name of work and the period for which Nominal MR issued.
- b. Daily attendance checked by the Sectional Officer in charge and test checked by higher officers.
- c. Details of works done. If susceptible of measurement indicate profit and loss as compared to estimated cost on the body of Nominal MR.
- d. Unpaid wages column filled in when required.
- e. Daily labour reports duly signed by Sectional Officer are received in the Subdivision regularly.
- f. Prompt closing and payment.
- g. 50 percent check of MR with reference to the entries in the MB has been done in cases where payments are to be made in Division Office.
- h. Separate MRs are prepared for each period of payment MRs are not prepared in duplicate.
- i. No attempt has been made to temper with the original entries.



5.1.4 Measurement Books (MBs)

I. Introduction

The MB must be looked upon as a very important record, since it is the basis of all accounts of quantities, whether of works done by daily labour employed departmentally or by the piece work, by contractor or of materials received, which have to be counted or measured. The description of work must be lucid so as to admit of an easy identification of check.

Detailed measurements may be dispensed with in the case of periodical repairs when the quantities are recorded in the Standard MBs. Detailed measurements may be dispensed with in connection with works done on Lump sum contract, if an officer not below the rank of SDO certifies in the bill that by a rough measurement, he has satisfied himself that the value of work done is not less than a specified amount in conformity with the contract agreement and that, with the exception of authorized additions and alterations, the work has been done according to the prescribed specifications. Detailed measurements must invariably be taken in respect of additions and alterations.

The payment made to contractor for all works done otherwise than by daily labour and supplies received or the services carried out should be made as per measurements recorded in the MB in Form 23. The pages of each MB are to be machine numbered. These are to be maintained very carefully and accurately as they form the basis of payment/accounts and they may have to be produced as evidence in a court of law, if and when required. All measurements should be neatly taken down with indelible ink in a Measure Book issued for the purpose and nowhere else.

For works costing Rs. 15 lacs and above, the conventional MBs may be replaced with a bound volume of computerized measurements.

JE/AE/SOs are responsible for the safe custody of MBs. The Register of MBs shall be maintained in Division as well as subdivision office to watch the movement of MBs.

II. Measurement Books Register

All the MBs belonging to a Division should be numbered serially and entered in a Register maintained in form CPWA 92 in the Divisional Office showing the serial number of each book, the name of the Sub-Division to which it is issued, the date of issue and the date of its return to the Divisional Office and date of review in the Division office so that its eventual return to the Divisional Office may be watched. A similar register should be maintained in the Sub-Divisional Office showing the names of AE/JE to whom the MBs are issued. SDOs are responsible for the safe custody of all MBs in their charge. Completed MBs should be returned within a month from the date of completion and books no longer in use should be returned within 15 days after lapse of two years from the date of issue to the Divisional Office where they should be preserved with the same care as is bestowed on Cashbooks and other important accounts records.

No MB shall remain in use for a period longer than two years. On expiry of two years period it must be returned for final record. But, if any book is then found to contain a large number of blank pages, it may be reissued by the DO recording the fact in the Register of MB.



III. Measurement Books: Handing Over

When an AE or JE in charge of the work or stores is transferred he should hand over the MBs issued to him to his successor and these should be shown as received back from him and re-issued to the relieving Officer. The transfer should also be recorded in the MB after the last entry in each book under dated signature of the relieving Officer and relieved Officer.

IV. Movement of Measurement of Books

MBs should be sent only by Registered Post or through Special Messenger.

V. Recording of Measurements

Each set of measurements to be recorded in the manner given below:

- a. In the case of bills for works done:
 - i. Full name of work as given in the agreement/estimate.
 - ii. Location of work.
 - iii. Name of contractor.
 - iv. Number and date of agreement.
 - v. Date of written order to commence work.
 - vi. Date of actual completion of work.
 - vii. Date of recording measurements.
 - viii. Reference to previous measurements.
- b. In the case of bills for supply of materials:
 - i. Name of supplier.
 - ii. Number and date of supply order/agreement.
 - iii. Purpose of supply in one of the following forms as applicable to the case:
 - a. Stock (for all supplies for stock purpose).
 - b. "Purchase" for direct issue to the work (full name of the work as given in the estimate shall be mentioned).
 - c. "Purchase" for (full name of work as given in estimate) for issue to contractor.....
On.....:
 - iv. Date of written order to commence the supply.
 - v. Date of actual supply.
 - vi. Date of recording measurements.
- c. At the end dated initial of the person making the measurement should be recorded. A suitable abstract should then be prepared showing measurements for works done, against



the total quantities of each distinct item of work relating to each sanctioned sub-head. The MBs meant for this purpose contain pages in singleton. Details of quantities, rate and amount of each item for every bill are entered in this MB in a tabular form.

- d. For recording measurements and also for preparing abstract, the agreement item number both in words as well as in figure, should be given neatly along with description of the item in full or in abbreviated form.
- e. In case of extra/substituted item of work that is not covered in the agreement, the full nomenclature shall be reproduced in the MB and the bill form.
- f. The full nomenclature of the items shall be adopted in preparing abstract of final bill in the MB and also in the bill form for final bills.
- g. If the measurements are taken in connection with a running contract, a reference to the last set of measurements, if any, should be given.
- h. If the entire job or contract has been completed, the date of completion should be duly recorded. If the measurements taken are the first set of measurements, or the first and final measurements, this fact should be suitably noted against the entries in the MB.
- i. If the measurements taken are the first set of measurements on running accounts, this fact should be suitably noted against the entries in the MB.
- j. All measurements should be recorded neatly in indelible ink.
- k. The signature of the contractor or his authorised representative should be obtained in the MB for each set of measurements.
- l. For making corrections in measurements no entry shall be erased or overwritten. If a mistake is made, it should be corrected by crossing out the incorrect words or figures and inserting the correct works or figures. The correction thus made shall be initialed and dated by the officer recording/checking measurements.
- m. When any measurements are cancelled or disallowed these must be endorsed by the dated initials of the Officer ordering the cancellation or by a reference to his orders, initialed by the Officer who made the measurements, reasons for cancellation are in any case recorded.
- n. Nomenclature of the items should be recorded in the MB strictly in accordance with work done at site.
- o. The pages of the MBs should be machine numbered. Entries should be recorded continuously and no blank page left or torn out. Any pages or space if left out blank inadvertently should be cancelled by diagonal lines, the cancellation being attested and dated.
- p. All items of work in a project irrespective of their cost shall be measured and recorded by the JE in-charge of the work. It is however, open to the AE or the EE to record measurements for any particular item of work himself.
- q. The person recording the measurements should record a dated certificate "Measured by me" over his full signature in the MB.



- r. No measurements need be recorded for petty purchases made through permanent imprest accounts. It is adequate in such cases that the JE or the AE makes an endorsement on the original and duplicate copies of the cash vouchers/bills of the suppliers regarding verification of the same, and the page number of the Material at Site (MAS) register in which he has taken the material(s).
- s. The material(s) may be issued for the work(s) from the MAS register as usual. Abstract of vouchers can be drawn in the MBs for continuity of record keeping.

VI. Notice to the Contractor for Recording Measurements

All measurements shall be recorded jointly by staff of Engineer in Charge and the contractor.

The contract conditions provide that before taking any measurement of any work, the Engineer-in-Charge or any other official deputed by him shall give proper notice to the contractor. If the contractor fails to attend after such notice or fails to countersign or fails to record objection within a week from the date of measurement, then the measurements recorded in his absence by the Engineer-in-Charge or by the authorised official shall be deemed to have been accepted by the contractor.

The idea is to bind the contractor to file objection, if any, on his side to the measurement recorded by the Departmental Officers within a definite period so as to avoid any disputes later on.

VII. Preparation of Bill in MBs

- a. On completion of the abstract, the MB should be submitted to the SDO, who after carrying out his test check should enter the word "Check and bill" with his dated initials. The Sub-Divisional Clerk should then check the calculation of quantities in the abstract and then place the MB and the bill before the SDO who, after comparing the two, should sign the bill and the MB at the end of the abstract.
- b. From the MB all quantities should be clearly traceable into the documents on which payments are made. When a bill is prepared for a work or for supplies, every page containing the detailed measurements must be invariably scored out by a diagonal red ink line. When the payment is made, an endorsement must be made in red ink, on the abstract of measurements, giving a reference to the number and date of the voucher of payment.
- c. Any corrections to calculations or rates made in the Sub-Divisional or Divisional Office should be made in red ink and brought to the notice of the SDO or the DO, as the case may be and of the person recording the original measurements. In case of final bills, the payment should be deferred until the corrections have been accepted by the person making the measurements.
- d. When work which is susceptible of measurement is carried out by daily rated labour, similar plan should be adopted, the quantities of work done as shown on the MR being compared with the entries in the MB before payment is authorised.

5.1.5 Test Checking of Measurements

I. General

The AE must satisfy himself before passing a bill for payment, or before submitting it to the DO for payment, that the work or supply billed for has actually been carried out/completed in accordance



with the terms and conditions of the contract. He should personally inspect all work of any magnitude before authorising payments.

- a. All items of work in a project irrespective of their cost shall be measured and recorded by the JE in-charge of the work. It is however open to the AE to record measurements for any particular item of work himself. In case of absence of JE, the AE may be asked to record measurements.
- b. The Officer accepting the tender for any work may stipulate and require the AE to record measurements himself or exercise 100% check on the measurements recorded by his subordinate for any item including those, which, owing to their situation, cannot subsequently be checked measured or which have very high unit rates or which in the opinion of the Officer are important.

II. Measurements Guidelines for Important items

Important works, within meaning of the above, include items which owing to the situation cannot be subsequently checked or which have very high unit rates. For guidance, these items are classified generally as below:

Items of work which owing to their situation cannot be subsequently checked:

- a. All work below ground level such as Concrete, Masonry, Steel work etc. in foundation.
- b. Fabricated Steel work in columns, beams, etc. which are encased either in masonry or concrete, reinforcement in RCC/RB work.
- c. Wood work, Iron work etc. hidden by ceilings, wall paneling or floor boarding's.
- d. Bitumen painting of roofs under mud phuska and tiles paving or under terrace concrete.
- e. Water proofing compounds used in gauging cement.
- f. Lines of pipes buried in floor or masonry in Internal sanitary, water supply or drainage installations.
- g. Earthing installation, cable laying etc.
- h. Foundation of structures

Items of works which are considered to have very high unit rates:-

- a. RCC Work.
- b. Items in sunkashlar stone or marble work, plain sunk or moulded in walls, columns, arches or domes.
- c. Stone or marble work in wall lining. All steel cladding, structural glazing etc.
- d. All wood work in Chowkhats, frames or trusses in Indian or Burmah Teakwood. (Should be as per technical drawings/specification)
- e. All joinery work in shutters, trellis works, miscellaneous wood work etc. whether in Indian Teak or Burma Teakwood. (Should be as per technical drawings/specification)
- f. All brass, oxidised brass or other similar costly fittings of doors, windows etc. where payable separately. (Should be as per technical drawings/specification)



- g. All major equipment's like AC, lifts, Generator sets, Sub-station equipment's, fireworks, any other items desired by Engineer-in-charge.

III. Test Check by Sub-divisional Officer/Assistant Engineer

- a. In case of works at headquarters of the Sub-Division, AE should test check at least 50% of the value of the measurements recorded by his JE before any running/final bill is paid.
- b. In case of works outside headquarters of the Sub-Division, the AE should check measure up to **30%** of the value of work done before preparing final bills or before making payment of alternate running/final bills.
- c. While test checking the works of repetitive type, the AE should test check 100% of all items of at least one unit, taken at random, besides test checking isolated and individual items in other units to bring the total extent of check measurement to the desired limit of 50% of value of work done.
- d. Besides the mandatory test check of RCC and hidden items of work, the test check of measurements by AE shall also include not less than 50% of the plumbing work for sanitary and water supply wherever applicable.
- e. In the case of works outside the headquarters of the Sub-Division costing up to **20%** of his tender acceptance power, check measurements by the AE need not be insisted upon. He will, however, have to accept general responsibility for the correctness of the bill as a whole.
- f. Regarding Road and Bridge works direction contained in specification for Road and Bridge work Ministry of Road and Transport may be followed.

IV. Test Check by the Executive Engineer

The EE should test check **5%** of the measurements recorded by his subordinates **for all works awarded by him and officers senior to him** at least every alternate bill for works at his headquarter, and at least every third bill for works outside his headquarter. Measurements selected by EE should be independent of measurements test checked by AE. However this will not apply to items, the measurement of which is checked 100% by AE. In respect of works costing up to 20% of his tender acceptance power at places outside the headquarter of the division, and in case of works costing up to 10% of his tender acceptance power at the headquarter of the division, the EE may, at his discretion, authorise payment without any test check by him. He will, however, have to accept general responsibility for the correctness of the bill as a whole.

V. Test Check of RCC and Plumbing Works

- a. Test check of the EE shall also include at least 10% test check of the measurements of RCC items so as to ensure structural safety of building and other structures.
- b. Besides the mandatory test check of RCC and hidden items of work, the test check of measurements by the EE shall also include not less than 10% of the plumbing work for sanitary and water supply.



VI. Test Check in Road Works

In case of road work involving supplying and laying of sub-base and base course material:

- a. The stacks, for measurement shall be uniformly distributed along the road. The collection of stone metal shall be completed for the entire work, or for complete length of 1 km, or as directed by the Engineer-in-Charge, and measured before the work of laying and consolidation is taken up in hand.
- b. The AE shall test check not less than 50%, and the EE, not less than 10% of the supply of materials in each length of 1 km before the work of laying is started.

VII. Record of Test Check

- a. Test checks are to be attested
- b. The individual items checked should be clearly shown in the MB, and the result recorded by the officer concerned. The items thus checked should be attested by the dated initials of the checking Officer.
- c. A collective record of all the check carried out from time to time will be prepared in each MB in the following tabular form:
 - i. Date of check.
 - ii. Page recording measurements subject to test check.
 - iii. Value of measurements checked.
 - iv. Result of the check exercised.
 - v. Dated initials and designation of the checking officer.
- d. The result will be indicated by the word "Satisfactory" or "Unsatisfactory" as judged at the time on merits of each case. Unsatisfactory result will be communicated to JE or both the JE and AE.

5.1.6 Measurements for Earth Leveling Work

I. Level Books

In case of leveling operations and earthwork, measurements are required to be recorded in Level Books in addition to MBs. The Level Books should be numbered, accounted for and handled like MBs.

II. Preparatory Works

Before starting the earth work, the following steps should be taken:

- a. Original ground levels should be recorded in the Level Book in the presence of the contractor or his authorised representative, and should be signed by him and the Departmental Officer who records the levels. All the local mounds and depressions should be indicated clearly in the drawing and the field Level Book, and should be checked by the AE/EE before the leveling work is started.



- b. A suitable baseline should be fixed with permanent masonry pillars at distances not exceeding 150 meters to provide a permanent reference line for facilitating check work. The base line(s) should be entered in the Level Book with co-ordinates. These baselines should be maintained till the final payment for the work has been made.
- c. While recording the levels, it should be ensured that the circuit is closed by taking final levels of the starting point or any other point, the R.L. of which was previously determined.
- d. Plans showing initial levels, location of bench marks and reduced levels, should be prepared and signed by both the parties and attached to the agreement before commencement of the work.

III. Test Check of the Levels

- a. The AE should exercise test check at least to the extent of 50%, and the EE at least to the extent of 10%.
- b. The test check of the levels should be carried out independently by each officer, and the readings should be recorded in the prescribed Level Book in red ink against the old levels which should be neatly scored out wherever necessary. If the test check carried out reveals serious mistakes in the original levels, these should be re-taken and re-checked.
- c. The test check carried out by an Officer should be as representative as possible for the entire work.
- d. On completion of work, the levels should again be recorded in the Level Book and the contractor's signatures obtained. These levels should also be test checked by the AE/EE to the same extent as above within one month of the date of completion of the earth work, and according to the procedure as laid down in the case of initial levels as indicated above.
- e. The formation levels as per final execution of the work should be compared with the proposed formation levels and the work got rectified within permissible tolerance.

IV. Payment for Leveling Work

- a. Every alternate running bill and the final bill should be paid on the basis of levels.
- b. Intermediate payments can, however, be made on the basis of borrow pit measurements. The EE should take care that the quantities thus assessed are not in any case more than the actual work done.

V. Large Scale Leveling Work

- a. In case of large scale leveling work involving both cutting and filling, an accurate site plan should be prepared before the work is commenced. The portions requiring cutting and filling shall then be divided into squares and corresponding squares into filling, which are complementary to the squares in cutting given the same number.
- b. A table may be written upon the plan showing leads involved between the various complementary squares. This would form a lead chart for the work to be done.
- c. Before the work of leveling is commenced, the lead chart shall be checked by the AE in the presence of the contractor or his authorised representative, and his signatures obtained on



the same. This should form an integral part of the contract and should be duly signed by both the integral parties before commencement of the work.

5.1.7 Computerised Measurement Books (CMBs)

I. Application and format of the CMB

- a. In works of estimated cost put to tender of Rs. 15 lakh and above, with the approval of EE, the conventional MBs may be replaced by a bound volume of computerised measurements to be furnished by the contractor, with pages duly machine numbered and with an MB number given by the Division Office. The pages of these MBs should be of A-4 size. All these MBs belonging to a Division shall be serially numbered, and a record of these CMBs shall be maintained in a separate Register in Form CPWA 92.
- b. The same format as in existing MBs shall be used for the CMBs. The measurements shall be carried forward from the previous recorded measurements as per the existing procedure.

II. Mode of Measurements

- a. The measurements shall be recorded and entered in computerised format in the first instance by the contractor, and a hard copy shall be submitted to the Department. All entries shall be made exactly as per the existing procedure.
- b. These measurements shall then be 100% checked by the JE. If JE is not available, the AE shall perform 100% check of the measurements. The contractor shall incorporate all such changes or corrections, as may be done during these checks, to his draft computerised measurements, and submit to the Department the corrected computerised measurements in the form of a book, duly hard bound in on the lines of the conventional MBs now in use, and with its pages machine numbered.
- c. The AE and the EE shall test check these computerised measurements as per the existing instructions. This book shall be treated as a CMB.
- d. The JE, AE and the EE shall record the necessary certificates for their checks and test checks as per the existing procedure in this CMB.
- e. The CMB shall be allotted a serial number as per the Register of CMBs.
- f. The CMB given by the contractor, duly bound, with its pages machine numbered, shall have no cutting or over-writing.
- g. It is the responsibility of the JE or the AE as the case may be to ensure that the checks and test checks done by them in the initial draft measurements are correctly incorporated in the CMB before they record their certificates.
- h. In case of any error, the CMB shall be cancelled, and the contractor shall re-submit a fresh CMB. This should be done before the corresponding computerised bill is submitted to the Division for payment.
- i. The contractor shall submit as many copies of CMBs as may be required, and as are specified in the NIT/contract, for the purpose of reference and record in the various offices of the Department.



- j. The contractor shall submit his running and final bills in a computerised form in the same format as the existing conventional bills, with all the pages machine numbered, and hard bound, and with all the entries made as per the existing procedure.
- k. The contractor shall submit as many copies of the computerised bills as may be required for the purpose of reference and record in the various offices of the Department
- l. The bill shall be carried forward from the previous running account bill as per the existing procedure.
- m. These computerised bills shall be processed by offices for payment as per the existing procedure.

5.1.8 Review of Measurement Books

I. General

- a. The MBs are required to be reviewed by Divisional Accountant under the supervision of EE. The AEs are required to submit the MBs in use in the Sub-Divisions to the Divisional Office, from time to time, so that at least once a year the entries recorded in each of the Books are subjected to a percentage check. The DO should ensure that this annual review is conducted regularly every year.
- b. The review by the Divisional Accountant shall be in the following respects:
 - i. Compare the books in use with part I of the Register of MBs maintained in CPWA Form 92, and to note necessary corrections in the Register.
 - ii. See that no original sheet is torn out of a MB, or any entry erased or disfigured, and that the corrections made therein are initialed.
 - iii. Test check the accuracy of calculations, and to ensure that the instructions regarding writing of MBs, recording of measurements, and their test check are being followed properly.
 - iv. On receipt of the MBs in the Divisional Office, the EE should indicate in column 2 of the "Review Notes" in each MB as to which of the calculations are to be test checked by the Divisional Accountant. The extent of this check will be determined by the EE having regard to the result of the last review, and should cover complete set of measurements.
 - v. Payments based on the entries reviewed should be traced into various accounts and verified. Similarly, supplies or issue of materials should be traced into the various accounts, contractor's ledger, etc. and verified.

II. Discrepancies

The defects, discrepancies, etc. noticed should be communicated to the AE concerned and summarised in the following form in the MB that has been test audited:



Review Notes by Divisional Accountant

Pages reviewed generally	Calculations selected by the Divisional Officer for re-check		Defects and discrepancies noticed	Dated initials of	
	Pages	Dated initials		Divisional Accountant	Divisional Officer
1	2	3	4	5	6

The MB completed and returned for record during the year should also be similarly examined prior to their final record in the Divisional Office.

III. Loss of Measurement Books

When a MB is lost, an FIR should be lodged with the police.

An immediate report of the facts of the case together with an explanation of all parties concerned responsible for the loss should also be made promptly to the CE, who is empowered to sanction the write off of the lost MBs (Proforma in Annexure 5.1). In case of theft or loss of a blank MB, the SE shall be the competent authority to write off the loss. It is also necessary that the measurements in the lost MB should be re-constructed at the earliest. **In all cases of loss of M.B. the probability of foul play and complicity of department officers be examined and disciplinary action taken wherever necessary.**

5.1.9 Standard Measurement Books (SMBs)

I. General

The SMBs are maintained to record the measurements of permanent standing in a building, and are required to be brought up to date from year to year on the basis of additions, etc. that are made to the building during a year. These are used for preparing the repairs estimates and contractors' bills for such repairs so as to avoid taking detailed measurements on each occasion.

II. Preparation of Standard Measurement Books (SMBs)

- The SMBs are maintained to record the measurement of permanent standing in a building and are required to be brought up to date from year to year on the basis of additions etc. That are made to the building during a year. There are used to preparing maintenance & repair estimate measurement at every occasion.
- The SMBs shall be prepared by the concerned Construction Division after completion of the work. All the SMBs should be on Form CPWA 23-A, and should contain pages in singleton. They should be numbered in an alphabetical series so as to be readily distinguishable from those assigned to ordinary MBs. These will be accounted for in the same manner as ordinary MBs in a register in Form No CPWA 92 (Part II).
- The SMBs should be written carefully and correctly and legibly in ink. These should be certified as correct by the EE.



- d. The SMBs should either be written by the AE himself or a JE under his orders. Each set of measurements taken by the JE should, however, be fully checked by the AE, after which it should be reviewed by the EE. He should declare in writing in the Book itself as finally approved by him for the purposes of preparing annual repair estimates and contractors' bills for the work done. Until this is done, the Book will not be assigned a number, and will not be entered in the Register of SMBs.
- e. The SMBs shall be brought up to date under the supervision of the AE with reference to the work concerned within one month of closing of the accounts of the estimate thereof. All corrections shall be attested by the AE, and approved by the EE.
- f. The SMB's can also be in the CMB form, and shall fully correspond with the final computerised measurements for various items as recorded in the CMB used during the construction stage.

III. Test Check of SMBs by Executive Engineer

The EE shall check the compilation of SMBs from time to time by personally examining each book at least once a year. To this end, the program of work should ordinarily be as follows:

- a. Soon after close of the year, the AE concerned shall arrange for a personal examination of these books with a view to satisfying himself that they have been brought up to date with reference to the additions, alterations or special repairs carried out in the works during the preceding year, and ensuring their submission for the inspection of the DO.
- b. On receipt in the Divisional Office, the Books will be compared with the Register of SMBs in order to ensure that all the Books have been submitted for inspection. These shall then be subjected to such scrutiny as the DO may direct.
- c. A record of the results of the scrutiny referred to above should invariably be retained and produced, if required, during the inspection of SE/Audit/Accounts Officer.
- d. A report should be made to the SE, with copy endorsed to the concerned Accounts Officer, certifying in clear terms:

That all the SMBs of the Division have been inspected by the EE. That the entries made therein have not been tampered with, that all corrections due to additions or alterations to the work concerned have been carried out, and, that the Books are reliable with up to date records.

- e. When a payment is based on Standard Measurements, the following certificate should invariably be recorded on the bill, the AE preparing, examining or verifying it in his own handwriting:

"Certified that the whole of the work billed for herein has been actually done, and that no portion thereof has been previously billed for in any shape."

5.1.10 Important Points for Scrutiny of Measurement Books

- a. Certificate as to the number of pages the MB contains exist.
- b. Correct issue to subordinate.



- c. Date of first entry and last entry.
- d. Proper indexing.
- e. Name of work, location of works, agreement or supply order no. Authority, date of measurement, description of the work measured, fully narrated. Date of commencement and completion correctly noted.
- f. Measurement in indelible ink.
- g. Corrections attested.
- h. Cancellation of measurement has been duly attested and suitably explained.
- i. Overwriting and erasure and prohibited and substituted by fresh ones.
- j. Dated signature after each set of measurement.
- k. Check measurement item checked and initialed. "Whether the check measurement is up to the prescribed percentage.
- l. Contractor's acceptance of measurement without claim obtained.
- m. Check measurement preforms filled in.
- n. After receipt back from Division Office SDO to verify the correction made and report, discrepancies if any found.
- o. Blank pages are not left. If inadvertently left the reasons thereof has been recorded and countersigned by the SDO.
- p. Reference to cash book voucher number and date in which the last payment was made has been indicated in the abstract page of the particular payment.
- q. Reference to last set of measurements recorded has been indicated by the Officer taking the measurements.
- r. Pay order duly signed and dated.
- s. Thumb marks have been duly attested.
- t. Contractor's signature in any other language is translated into English.
- u. Memorandum of payment (Abstract of payment) properly completed.
- v. Dated initial of the checking clerk recorded.

5.1.11 Important points of Scrutiny of Bills

1. The bills are in proper form and are submitted in duplicate/triplicate and are signed by the proper person or his duly authorized agent. The signature should be verified with reference to signature in the agreement or tender or to other documents in this regard to see that the bill is submitted by the person competent to do so.
2. Name of work, name of contractor or supplies. References to agreement or supply order number, serial number of bill, reference to previous payment are indicated.



3. Item of work, unit and rates as per supply order or agreement are indicated.
4. Value of work since previous bill correctly worked out.
5. Advance payment and secured advance correctly worked out.
6. Details of recoveries noted.
7. Material statement showing up-to-date issues, consumptions, recoveries in enclosed, in case of issue of departmental materials to works.
8. Part I, II and III and full particular as per the prescribed forms and all columns of memorandum of payment correctly filled in.
9. Pass order for Gross and pay order for cheque amount only is given.
10. In respect of payment on supplier's bill proper classification recorded on the body of the bill where necessary with reference to purchase register item to facilitate quick adjustment.
11. Certificate of verification of materials and the head of account to which the cost is debitable has been recorded on the body of the bill.
12. Name of the work is in accordance with sanctioned estimate.
13. Pay order expressed in words and figures.
14. The sum total of all the items in the bill works up to total.
15. Total amount of bill correctly expressed in words and figures.
16. (a) Quantities and amount as entered in the measurement book agree with the quantities and amount exhibited in the bill.
(b) At least 50 percent of the entries in the M.B. have been checked by the SDO arithmetically in case where bills are sent to Divisional Officer for check and payment.
(c) Necessary certificate in support of payment of sales tax has been furnished along with Bill.
17. (a) Detailed measurements scored out by a diagonal red ink line after a bill is prepared for a work of supplies made.
(b) Reference to voucher number and date made in red ink on the abstract of measurement after the payment is made.
18. Actual measurements for the advance payment made, taken at the earliest opportunity and lump sum payment made in shape of advance adjusted against these measurements.
19. (a) Indenture in form 31 executed for the secured advances given to the contractor for the imperishable materials brought to site.
(b) Bank guarantee/Insurance guarantee or other securities required if any furnished.
(c) Advance adjusted as the materials are used in construction and the items of work in which they are used are billed for on the basis of actual measurements.
(d) Adequate safeguard has been taken to prevent loss of Govt. money.



20. (a) Extra item of work and extension of time sanctioned by Competent Authority.

(b) Reasons for delay in taking measurements and for scrutiny of bills explained.

5.2 Custody of Cash

5.2.1 General

Public money in the Department should be kept in strong treasure chest security installed in the office chambers of DO or SDO of OPWD and secured by two locks of different patterns. Key of one lock should be kept in the personal custody DO or the SDO and key of the other lock with the cashier the chest should be opened in the presence of both the custodians.

The duplicate keys of Divisional chest should be placed in separate sealed cover and lodged with different officers of higher rank or with the Treasury Chest/relevant branch of the accredited bank. A duplicate key register should be maintained and once a year, in the month of April the keys should be sent for, examination and returned under fresh seal, note being made in the register that they have been found correct.

The DO should count the cash in the hands of cashier at least once a month. The result of such counting should be recorded in the form of a note in the cash book showing the date of examination and the amount (in words) found.

5.3 Cashiers

Cashier will be entrusted with the custody of cash. Cashiers may be appointed whenever in the opinion of the Administrative Department/Administrator concerned, the cash transaction of a Division are sufficiently extensive to require it. Where a post of cashier for a Division is not specifically sanctioned, one of the Upper Division Clerks working in a Divisional Office may be kept in charge of the cash.

One cashier may make cash payments of one or more subdivision, as per the arrangement found suitable and practicable.

For transit of cash above Rs. 1 Lac armed security guard shall be arranged to safe guard Govt. money. For transit of cash less than Rs. 1 Lac other suitable security arrangement should be made.

The accounts function of the Engineering Department shall be fully computerised. The software like integrated Financial Management System (IFMS) and Works Accounts Management Information System (WAMIS) use for online budget distribution, work expenditure, e-receipts, booking of expenditure, preparation of monthly accounts and account at the end of financial year in March shall be fully computerised. Electronic payment to Contractor and staff shall be made fully operational in all Engineering Departments engaged in public works.

5.4 Stores

5.4.1 General

The stores of the Department in charge of Public Works are divided into the following classes:

- a. Tools and Plants
- b. Materials charged direct to works
- c. Surveying & Mathematical Instrument



Stock has been abolished in OWD and other Engineering Department.

OPWD should computerize management of Stores including their receipts, issue and balances.

Following are general instruction for management of Stores:

- a. The Divisional officer is overall responsible for ensuring that proper arrangements are made throughout his Division for arrangement of **space, godown for storage and safe custody** of stores consistent with their value. Depending on the importance of the store, SDO or JE will be put in charge of the store. **Necessary watch & ward arrangements shall be made for all categories of stores.**
- b. He should see that proper storage accommodation is provided for different types. He must take proper precaution to prevent the loss of stores by fire, accident, theft or deterioration.
- c. He must take care to keep all the tools and plant in good condition.
- d. The DOs should see that the stores procured earlier are used first so that deterioration can be avoided. Special care should be taken to prevent deterioration of cement bags.
- e. The DO should review the stores position periodically and take steps to dispose of surplus stores by transfer or sale, as the case may be.
- f. Depending on the importance of stores SDO or JE will be put in-charge of Stores.
- g. JE will be directly responsible for receipt, issue and safe custody of Stores.
- h. A Store Keeper may be appointed to assist JE when work of Store management so warrants.
- i. JEs and AEs, Store-keepers and other subordinates of the Department, whether appointed permanently or temporarily or borne on work charged establishment and entrusted with the custody of stores or holding charge thereof, must furnish security, the amount being regulated according to the provisions in OPWD Code, except in cases where they are regulated by any general or special orders of the State Govt. The SE will regulate the realisation of security according to the prescribed rules.
- j. Articles required for any work ordered by the Department, a contractor should not be allowed to take direct delivery of the same from the firm.
- k. Apart from Tools and Plants for Road and Bridge works, 'Tools and Plant' also include furniture and other fixtures like air coolers, air conditioners, water coolers, etc. provided by the Department-in-charge of public works by charging the cost thereof direct to the work if they fall under the category of special T&P contemplated in Para, 7.3.1. (b) of Central Public Works Accounts Code.
- l. **Appendix VII** may be seen for rules for fixation of hire charges for machinery and vehicles.

5.4.2 Acquisition of Stores including Tools and Plant

I. General

- a. Procurement of Stores should be in most economical manner in accordance with definite requirement of works
- b. Stores should be purchased well in advance for the actual requirement.



- c. When Stores are procured, through DGS&D, GOI the indenting officer must not enter into direct correspondence with the supplier.
- d. Purchase of Stores which are not borne on DGS&D contract may be done locally as per delegation of powers

II. Procedure for Purchase of Materials

For the procedure for direct purchase of materials, Procurement Manual for Goods shall be referred.

III. Purchase through DGS&D by OPWD

- a. The DGS&D is the Central Purchase Organisation of the GOI and is required to conclude rate contracts with the registered suppliers for goods and items of standard types which are identified as common user items and are needed on recurring basis by various State Govt. Departments DGS&D furnishes and updates all the relevant details of rate contracts in its website. The Department shall follow these rate contracts to maximum extent possible as detailed below:
- b. In PWD, EEs may be authorised as Direct Demanding Officers by the DGS&D. The EEs in that case should invariably take steps to get their names included as Direct Demanding Officers, for which they should take up the matter, wherever required, through their SEs. Items for which a rate contract exists, the order may be placed direct with the concerned firm, provided the name of the indenting officer is included by the DGS&D in the list of Direct Demanding Officers. The list of such items is revised from time to time by the DGS&D, and such items are indicated in the booklet issued by them every 6 months, titled "List of stores on rate/running contracts".
- c. The indenter should ensure that necessary financial sanction of the competent authority exists before the demand is placed on the DGS&D. No indent would be complied with unless it is accompanied by a certificate over the signatures of the indenter to the effect that:
 - i. The expenditure involved in the indent including the estimated cost of freight and the departmental charges has received the sanction of the competent authority.
 - ii. Funds are available to meet the expenditure under the proper head in the sanctioned budget allotment of the indenting department/office.
 - iii. The indenting officer should, make provision for the funds required in the budget of the financial year depending upon the delivery period of the stores as per the contract and subsequent amendments, if any.
- d. In case supplies are delayed beyond the period stipulated by the indenter, it would not be necessary for the DGS&D to have the availability of funds re-certified from the indenter, and so long as the indent is not cancelled they shall assume that funds are being provided from time to time to cover the cost of stores. They will, however, keep the indenter informed of the prospects of supply from time to time to enable the indenter to carry forward the funds accordingly.
- e. In case of supplies ordered against DGS&D rate contracts or indented through them, inspection of the supplies received is to be made by the respective Inspection Wing of OPWD.



The Inspection Wing's certificates are furnished by the supplier to the consignee, who after having recorded the required certificates about receipt of the goods in good condition, sends specific number of copies back to them and to the Controller/Deputy Controller of Accounts (Supply) as indicated by them.

IV. Purchase of Tools and Plants/Machinery

a. Ordinary Tools and Plants

Ordinary tools and plant required for the general use of the Division costing Rs 10,000 and above shall be purchased or manufactured against sanctioned estimate. Estimates are not required for purchasing T&P of less than Rs 10,000. The powers of officers to sanction estimates for purchase, manufacture and repairs of Tools and Plant are, the same as their powers to technically sanction estimates. Before sanctioning the estimate for Tools and Plant, it should be ensured that necessary budget allotment exists under the "Tools and Plant" head.

Purchase of motor cars, trucks, jeeps and other plant and machinery will be regulated by special orders of the Govt.

b. Special Tools and Plant

Cost of special tools and plant needed for a specific work would be included in the estimate for the work concerned, or they should be covered by a specific estimate and specific sanction.

c. Indent for Plants & Machinery on DGS&D

When indenting for plant and machinery etc., the indenting Departments should take a decision as to the quantity of spares to be purchased along with the main equipment, and also to place an indent for them on the DGS&D. The indenting officer should also specify whether any of the following guarantees is required to be obtained from the supplier of the equipment's:

- i. A guarantee from the supplier of the equipment that he will supply spare parts if and when required on an agreed basis for an agreed period. The agreed basis should be an agreed discount on the published catalogue prices.
- ii. A warranty to the effect that before going out of production for the spare parts, he will give adequate advance notice to the purchaser of the equipment so that the order may be placed for long term requirements in one lot.
- iii. If possible, a warranty to the effect that the supplier of the original equipment will make available the blue prints of drawings etc. of the spares if and when required in connection with the main equipment.
- iv. In the indent for spare parts, reference to the number and date of the contract for the main equipment and any guarantee/warranty incorporated therein should be quoted by the indenting officers.
- v. The indenting Department should endeavour to adopt Indian Standard Specifications wherever available, and where such specifications are not available, they should permit



relaxation in indigenous production, which should be consistent with the requirement of safety, security and end use of the stores.

- vi. Machinery and equipment which is not indigenously manufactured, or for manufacture of which certain parts are required to be imported from abroad, may be arranged against specific quota of foreign exchange for the purpose from "Soft Currency" or "Hard Currency" countries.

Note:

1. Furniture along with cycle required for office use by peon/manager or for use by the officers of the Department in charge of Public Works will not form part of tools and plant. They will be chargeable to office expenses and their purchase is regulated by the normal rules laid down in the General Financial Rules and other directions issued by the Govt. from time to time.
2. Furniture required for Inspection Bungalows or residences to be furnished by the Department will, however form part of the register of Tools and Plants and are chargeable to 'Furnishings'.
3. Concerned head of office is responsible for maintaining the register for tools and plant brought on transfer from the Divisional office for use in his office.
4. The proposal for reserve stock limit shall be furnished at the beginning of each financial year supported by details such as actual receipts and issues under sub-head of stock during the preceding one year, in keeping with the requirements for the current year with reference to work load etc.

5.4.3 Payment for the Supplies

I. General

All the stores that are received are verified, and measurements and details thereof are to be recorded in MB if the purchase is for specific work and in the Goods Receipt Sheet if the purchase is for stock. Payments are to be made by the EE on the basis of the entries recorded in the MB or Goods Receipt sheet as the case may be, according to the terms of the payment as finalised in the supply order.

II. Payments against Rate Contract Orders and Insurance Charges

In respect of the supplies received against the orders/indents placed against/through the DGS&D rate contracts, the payments are made on the basis of inspection certificates issued by the Inspection Wing of the DGS&D, and Receipt Certificate recorded thereon by the consignees. After the payment is made to the suppliers by the Controller/Deputy Controller of Accounts (Supply), the office sends the bills and the inspection notes (duly verified by the consignee) to the concerned Pay and Accounts Officer of the consignee (DO), who in turn issues cheques for the payment to the Controller/Deputy Controller of Accounts (Supply), prepares PAO adjustment memo for the payment so made, and sends the same to the consignee concerned. The consignee adjusts the memo through transfer entry in the monthly accounts, crediting the amount to the remittance head and debiting to the work concerned.



III. Payment for Steel and Iron

For steel, advance payments shall be made only to main producers, i.e. TISCO, IISCO, RINL and SAIL. Advance payment as per their standard terms of payment, inclusive of OCTROI, bending bundling charges may be made for procurement of steel from the stockyard of the Steel Authority of India Limited or any other main producer before the supplier issues the necessary delivery order. Sales tax/VAT, where payable, shall be paid extra.

IV. Payment for Cement

For DGS&D rate contract supplies, 98% payment is made on production of proof of dispatch by railway, i.e. railway receipt, and balance 2% after receipt of the consignment in good condition by the consignee. Payment without consignee's receipt certificate is permissible if the latter is not received within two months from the date of dispatch. In case of local deliveries, 100% payment is made on production of consignee's receipt certificate.

V. Non-receipt/Shortage of Stores

The consignee should watch the actual receipt of the stores and report non-receipt or shortages or rejections to the paying authority without loss of time, and in any case within 30 days of receipt of proof of dispatch/arrival of stores at destination.

VI. Advance Payments for Purchase of Stores

The CEs, SEs and EEs may be authorised to make advance payments up to 90% to the firms for supply of stores up to the limit of their respective powers of acceptance of tenders subject to the following terms and conditions:

- a. Advance payment shall be made only in cases where it is considered absolutely necessary
- b. The amount of advance payment against contract shall be made on the basis of a valid expenditure sanction issued with the concurrence of the competent authority
- c. The payment shall be made only against the dispatch documents. Pre- inspection of the stores ordered should be ensured before making advance payment
- d. Where advance payment is made, transit insurance must be obtained from the supplier and the advance must be against Guarantee of equal amount from a Scheduled Bank acceptable to the Department
- e. A second advance shall not be drawn for making advance payment to the firm/supplier unless the earlier advance, if any, made to the same firm/supplier has been adjusted
- f. The amount of advance shall be drawn on a simple receipt, and debited to the suspense account "Contractors other Transactions/Advance payments" in the works abstract of stock or work concerned
- g. The advance payment in cases not covered by the above conditions shall be made with the approval of the EIC (Civil).

5.4.4 Insurance

I. General

- a. The Govt. properties, both movable and immovable are not normally required to be insured. No subordinate authority, therefore, shall undertake any liability or incur any expenditure in connection with the insurance of such property. In special cases prior consent of the



Department of Finance may be taken in the case of immovable property, and EIC (Civil) in the case of movable property.

- b. In cases where it is decided to insure properties or goods under the direct or indirect control of the State Govt, the procedure as laid down by the Finance from time to time should be followed.
- c. The EIC (Civil) shall have full powers in the case of insurance of movable property. The CEs, however, empowered to incur expenditure on the insurance of materials and equipment received on loan or as aid from Foreign Govts or International or other Organisations, if according to the terms of the contract or agreement, insurance of such materials or equipment is necessary. Materials purchased ex-factory should be necessarily insured.

II. Inland Transit Insurance

In cases of consignment of stores in general, dispatch on F.O.R. station of dispatch basis, and in the case of fragile stores in particular, where the suppliers do not accept DGS&D's transit insurance clause and the stores cannot be booked by the Railway under a clear Railway receipt at Railway risk, and if the indenter/consignee wants the stores to be insured against loss or damage in transit, the supplier should be asked to do so sufficiently in advance by a registered letter under advice to the DGS&D, who will make necessary provision in the contract by means of an amendment, if the acceptance of tender has already been issued.

Payment of extra charges on account of such insurance will be made by the concerned Controller/Deputy Controller of Accounts (Supply)/Department of finance. If the indenter/consignee does not follow this procedure, he will make himself liable to bear the entire loss on account of the losses/breakages in transit. On the other hand, the suppliers will be responsible for the entire loss on account of losses/breakages in transit, if any, if they fail to insure the stores, notwithstanding the instructions received by them in this regard. Whenever occasion arises for making provisions for the payment of insurance charges in the relevant accepted tender, the DGS&D should stipulate for information of the suppliers that claims for insurance charges should be shown as a separate item in their bills, duly supported by the insurance receipts and submitted to the concerned Controller/Deputy Controller of Accounts (Supply) for payment. In other cases, where the price quoted by the supplier includes the element of cost of transit insurance, the DGS&D will place contracts containing necessary provision for insurance of the stores during transit.

In cases of F.O.R. station of dispatch contracts, where the suppliers have not accepted the DGS&D's standard clause of transit insurance, the consignee will be responsible to:

- a. Lodge claims for loss or damage to stores in transit with the carrier Railway and directly pursue the claims with the carriers;
- b. Inform the supplier, Controller/Deputy Controller of Accounts (Supply)/Insurance Company about the loss or damage;
- c. To report the cases of dispute to the Purchase Officer for either pursuing the matter with the Railway/higher authority or for suggesting write off; and
- d. Write off the amounts that could not be recovered either from the supplier or the carrier Railway in accordance with the procedure laid down in the Departmental Regulations.



In the case of both FOR station of dispatch and FOR destination contracts, where the suppliers accept the DGS&D's standard transit insurance clause, the consignee will merely file the claims with the carrier and report the fact to the suppliers. Thereafter it will be the responsibility of the suppliers to pursue the claims with the carrier and settle the matter.

The inland transit insurance, whenever required by the indentors/consignees, should invariably be arranged with a nationalised Insurance Corporation/Company of India.

In case of loss or damage to stores in transit where the stores have been insured by the supplier against such risks, he will take up the matter with the insurer and recover the loss from them. The indentor will be responsible for payment of stores actually received by the consignee.

Where the suppliers arrange transit insurance, they should notify the consignee in writing when forwarding the dispatch documents, such as Inspection Notes, Railway Receipt etc., about the limit within which the claims for shortage/damages in transit should be filed, to enable the consignee to do so within such period. It is the responsibility of the indentor/consignee to prefer the claims within the specified period wherever suppliers notify them that transit insurance cover will be valid only up to a particular period failing which their claims are likely to be ignored.

5.4.5 Losses or Damages

I. Booking of Stores

Definite and clear instructions are required to be given in the indent/order with regard to mode of dispatch and consignee's address, which are very necessary for correct and intact delivery of the stores. To avoid losses and damages to the stores in transit, the following information should be as detailed as possible as not to leave any loophole for any dispute or misinterpretation at a later stage:

- a. Consignee's postal and e-mail address.
- b. Station of dispatch (Railway region should be clearly indicated).
- c. Whether to be booked by Goods train, Passenger train, Quick Transport Service of Railway, where available.
- d. Whether to be booked at owner's risk or Railway risk.
- e. Whether it should be covered by transit risk insurance.

In cases where there is only one set of rates for carriage of goods by rail, and there are no alternative owner's risk rates, such charges are treated as freight charges. If enhanced risk is to be covered, additional expenditure for booking shall be incurred as per delegated powers.

Air lifting of stores should be resorted to only in rare cases of extreme urgency in consultation with the Department of Finance.

II. Taking Delivery of Consignment

The consignee is responsible for verifying at the time of taking delivery from the Railway authorities that the stores have been received intact without loss or damages. When stores are dispatched in full wagonloads, the consignee should verify that the seals of the wagon are intact. If the seals are found tampered with or broken, delivery should be taken in the presence of responsible Railway



officials. If there is evidence of loss or damages, necessary certificates to that effect should be obtained from the appropriate Railway officials before taking delivery. The loss or damage should in every case be promptly reported to the suppliers, Purchase Officer who places the order, as well as the Pay and Accounts Officer (Supply)/Department of Finance responsible for payment for the stores, as otherwise the consignee will be deemed to have accepted the stores. In any event, the consignee should not give a receipt certificate to the supplier before checking and verifying the stores. Railway receipts for consignment of materials should be endorsed in favour of the Stores Keeper or JE or any other responsible officer of the Department, who should personally take delivery of Govt. stores, and hand them over to the carriage contractor.

Where due to any practical difficulties, it is not possible to deploy any departmental officer for keeping a watch on the arrival of consignment and to take delivery thereof after completing formalities, and it is intended to endorse the Railway Receipts in the name of the carriage or cartage contractor, a condition for obtaining an additional security in the shape of bank guarantee should be stipulated in the tenders for carriage of materials. The amount of the security in the shape of bank guarantee should be 10% of the contract amount, and this will be in addition to the normal cash security deposit recoverable from the contractor's bill as per usual terms of agreement. This condition will apply to all annual carriage contracts and can also be applied even for such contracts that may extend over a long period but less than a year.

Specimen draft conditions should incorporate in tender documents for such works should be suitably made. This may be adopted with suitable changes, if required, to suit local conditions.

While endorsing the Railway Receipts in favour of cartage contractor in such a contract where requisite bank guarantee has been received, the under-noted form of endorsement may be adopted, and the consignee should suffix his dated signature over his stamp showing designation, etc.:

"Please hand over the material to Shri.....whose signature is attested below".

III. Responsibility for Loss in Transit

- a. Whenever the losses or damages occur in transit, the responsibility for the same varies according to the circumstances of each case and the terms of contract. In the case of contracts stipulating delivery F.O.R. station of destination, the supplier is liable for any loss or damage that may occur in transit, and to make good the same by replacement free of charge at destination, or accept deduction from his bill for the quantity lost or damaged in transit.
- b. In cases, however, where the suppliers do not agree to take responsibility for loss or damage in transit, the goods pass to the name of the consignee as soon as the same are accepted by the Railway Administration for carriage, the Railway acting as a bailee. Thereafter, the supplier is ordinarily not responsible for any loss or damage to goods that may occur enroute, if he has been able to book the goods in a rail-worthy condition under a clear receipt without any adverse remarks as to the condition of the goods or the packing.
- c. The goods are to be dispatched by clear RR only. However, in cases where the goods are dispatched under a "Said to contain" receipt, the supplier shall be fully responsible for loss in



transit. The consignee should incorporate a certificate on the receipt certificate, in the Inspection Certificate or firm's invoice on the following lines:

"Consignment(s) was/were dispatched under clear/said to contain Railway Receipts at Railway/Owner's risk".

- d. For shortages/damages in respect of consignments dispatched under clear Railway Receipt at Railway risk, the suppliers will not be responsible. The consignee will take up the matter with the carrying Railway for direct settlement. If the claims are rejected by the carrier, the indenter/consignee will have to bear the loss. The concerned Pay and Accounts Officer will make full payment for the quantity dispatched.
- e. Full details in respect of deficiencies and breakages, etc. which are clearly attributable to the carriers should be shown the Receipt Certificate of Form DGS&D 84, and the consignee should prefer a formal claim against the carrier for the loss or damages. The Pay and Accounts Officer (Supply) shall send a copy of the consignee's report to the Purchase Officer. No deduction will be made on this account from the suppliers' bill if the stores are booked against clear R/R., and the suppliers are not responsible for breakages/losses in transit.
- f. For shortages/damages in consignment dispatched either under said to contain Railway Receipt or at owner's risk, the Pay and Accounts Officers will make necessary recoveries on the basis of remarks incorporated by the consignees on the Receipt Certificate.
- g. In doubtful cases, in which it is not possible to fix the responsibility definitely on the supplier or the carrier, the deficiency, breakage etc. together with the amount recoverable, should be indicated in the Receipt Certificate to enable the Pay and Accounts Officer (Supply) to make necessary recoveries. If it is found later on that the supplier is not responsible, a refund will be made to him and the consignee asked to write off the amount.
- h. The bill for the recovery of compensation in case of losses or damages in transit in the case of contracts placed on F.O.R. station of dispatch basis, should in all cases, where the carrier has been found responsible, be prepared against the carrier by the consignee and not by Purchase Officer. Any compensation recovered from the Railway will be credited to Govt. if it is held that supplier is not liable to loss or damage. If the supplier is held liable and the value is recovered from him, any amount recovered from the Railway will be paid to the supplier.
- i. In cases where breakages, losses are frequent in respect of consignments dispatched by a particular firm, the Inspection Wing will investigate the same and furnish the report to the DGS&D concerned, who will take further action on the merits of each case.
- j. Claims on the Railway should be made by the consignee within 6 months of the receipt of the stores at destination, or otherwise it will be time-barred under the Railway Act. Once a claim is made within 6 months on the Railway Administration, a case against the Railway may be filed in the Railway Claims Tribunal. Where it is decided to pursue a claim in spite of its rejection by the local Railway authorities, the Ministry of Law may be consulted and furnished with full statement of facts expeditiously for their advice.



5.4.6 Receipt of Stores

- a. All the materials that are received should be examined, counted or measured when delivery is taken.
- b. In the case of Tools and Plant, the items should be brought on Form no. CPWA 13 with complete details. For items of Plant and Machinery, detailed History Sheets in prescribed form should be completed forthwith and recorded carefully especially items like AC plant, substation equipment, DG Sets, Lifts and pump set, etc.
- c. Whenever petrol/diesel etc. is required to be drawn, the JE/AE/EE, who has been authorised to fill the coupon, will fill the same in triplicate. Two copies of the coupon will be given to the petrol pump dealer, who after issuing the material will return one copy to the paying authority along with the bill. Coupon Books (duly numbered) will be obtained from the authorised petrol pump dealer and kept in safe custody.
- d. All stores of sundry nature, particularly sanitary fittings, electrical fittings, and spares etc., should be allotted an alphabetical and numerical number according to the standards and sizes available, and the same should be indicated accordingly in the registers and on racks where these are kept. Similarly stocks of pipes and steel of different kinds and sizes should also be allotted a distinguishing alphabetical and numerical number to facilitate maintenance of accounts.

5.4.7 Safe Custody of Stores

- a. The EE is responsible to ensure that proper arrangements are made throughout the Division for the safe custody of stores, and for their protection from deterioration and fire. Round the clock security shall be provided in the form of Chowkidars or security guards.
- b. The stores will be under the strict supervision and vigilance of a JE, who will be particularly responsible for the safe custody of stores. At the end of each day, the locks of the stores should be properly sealed by the Storekeeper in the presence of Chowkidar, and entered in the register. At the time of change of duty, proper handing over/taking over should be done by signing the register. The Storekeeper should seal the locks carefully when he closes the godown at the end of the day and examine the seal before opening the godown next time, to see that the seal has not been tampered with. If he finds that the seal has been tampered with in his absence, he should at once bring this fact to the notice of the higher authorities for reporting the matter to the Police. In the absence of the Storekeeper, the JE will discharge such functions.
- c. On the occurrence of any loss, action against the person concerned with the upkeep of stores should be taken promptly so as to avoid delay in obtaining evidence against persons responsible for the loss.

5.4.8 Issue of Stores

- a. Materials should be issued on receipt of indent on specific Form No. CPWA 7. The indent book for drawing materials should be kept in the safe custody in the office of the AE. The indents shall be signed by the JE/AE for transaction within Division, and also by the EE for inter-Division transactions.



- b. A register to keep a watch on the issue of materials for works with reference to quantities specified in the agreements should be maintained by the AE in the form prescribed in CPWA 35 to avoid excessive issue of materials to contractors and to keep a watch over the issues.
- c. The EE should arrange to get the indent examined to see that the indented quantities are roughly correct. For detailed check of the quantities issued, it is the responsibility of the AE to ensure that the materials are not issued in excess of the quantities actually required.
- d. The indents are to be handed over to the contractor or his authorised representative to receive the stores from Stores of the Division.

5.4.9 Disposal of Surplus Stores

I. Loss of Stores

- a. All losses of stock should be immediately reported to the next higher authority as well as to the Audit Officer and the Accounts Officer even when such loss has been made good by the party responsible for it. Petty cases involving losses need not be reported to the Audit Officer/Accounts Officer unless there are some important features which need detailed investigation and consideration. The losses on stock should be immediately investigated and steps taken to obtain the sanction of the competent authority for their write off, if necessary.
- b. An immediate report of the loss of stores must also be lodged to the Police for lodging FIR.
- c. In the case of serious losses, the DO should hold a departmental enquiry and record the evidence and his findings thereon, including findings as regards the responsibility and culpability of the persons concerned.
- d. The write off of the losses by competent authority will be subject to the following:
 - i. In case FIR has been lodged 'no trace' report is available.
 - ii. The loss does not disclose defect of system
 - iii. There has not been any serious negligence on part of any individual officer.

II. Sale of Stores

- a. No public stores should be sold to a private person/body. If, however, sale is made to such private person/body, additional charges on account of supervision and contingencies at 10% should be realised on the value of the stock including storage charges. These additional charges may, however, be waived by the officer empowered to sanction the sale in the case of surplus stock which in his opinion would be otherwise unsalable.
- b. For sale to private persons, the issues shall be made at market rates. The recovery in all such cases should be made in cash in advance.
- c. Stock materials when sold to other Departments or public undertakings, 10 percent supervision charges should be realised, in addition to the value of stock including storage charges in all cases. The supervision charges may, however, be waived by the SE, in special circumstances.



Note:

1. For issue of materials from one division to another Division under any wing of Public Works in the state; no Supervision Charge are leviable.
2. For sale of tools, plant and machinery to other Departments and Public undertakings etc., supervision charges are leviable.

III. Surplus and Unserviceable Stores

- a. At the end of each financial year lists of surplus stores, if any, should be prepared by the Divisions of the respective wing and circulated to all the Divisions under the particular CE and to all the SEs of other branches of public works in the State.
- b. It will be the duty of the DOs and the SEs to see that all the articles shown in the surplus lists of the several Divisions circulated are used to the best advantage of Govt. as early as possible, in the Divisions under their control.
- c. If any of the surplus stores cannot be utilised by issue to other Divisions or otherwise within a period of one year from the date of dispatch of the surplus, the DO concerned should take action immediately to have the articles sold by public auction or/by calling for tenders with the sanction of competent authority.

IV. Unserviceable Stores

- a. When stores (including tools and plant) of any kind become unserviceable, a report thereof must be made in the survey report thereof in form CPWA 18 should be made at once on discovery of the fact as it is desirable to avoid keeping worthless materials on stock. In the report proper explanations must be given, and the period during which the articles have been in store or in use should be stated along with the cause of deterioration.
- b. In case of survey report of Stores beyond CEs power the certificate that the store is unserviceable should be recorded by the SE after inspection of the Stores. For survey report within CEs competence such certificate should be recorded by EE concerned. Similarly, for these within SEs power the certificate should be recorded by SDO concerned.

V. Expeditious disposal of Obsolete/Surplus/Unserviceable Stores/T&P Items

In order to ensure that the obsolete/surplus/unserviceable stores/T&P items fetch good returns, it is essential that:

- a. Such stores/T&P items have got survey reported by the competent authority at the earliest as soon as they reach that condition,
- b. Proper protection is given to them till their removal by the purchaser, and
- c. The time lag between the declaration and actual disposal of stores/T&P items is minimised.

It is, therefore, incumbent on the JE/AE holding such obsolete/surplus/unserviceable stores/T&P items to initiate the process of preparing the survey reports of such items and forwarding the same to the EE for obtaining the approval of the competent authority. Valuable storage space should not be wasted on unnecessarily holding such useless items.

Rules for disposal of surplus and unserviceable stores are given in **Annexure 5.2**.



5.4.10 Mathematical Instruments

Every EE shall keep an up-to-date list of surveying and mathematical instruments in his Division and will review the list once a year. The EE will spare the instruments available with him for use in the other divisions to the extent possible.

All new instruments required for the Departments in charge of public works, which have been provided for in a sanctioned estimate, should be obtained by inviting competitive Quotations from reputed firms dealing with such instruments. The instruments shall be purchased after comparing the quality, cost and the terms and conditions for supply.

5.4.11 Rules regarding Hiring of T & P

Rules regarding hiring of T & P belonging to the Works and other Engineering department are given in **Appendix VII**.

5.4.12 Storage, Transport and Use of Explosives

Instruction regarding storage transport and use of explosives are given in **Appendix VIII**.

5.4.13 Condemnation of Vehicle

Rules for condemnation of departmental vehicles and their disposal are given in **Appendix IX**.

5.5 Transfer of Charge

Subject to any specific instructions in the transfer orders, an officer must not delay making over charge after the arrival of the relieving officer; nor must he, without a medical certificate or the permission of the immediate superior officer, leave the station before the arrival of the successor. In a case where relieving officer has not joined, he shall leave the charge not later than six working days of the receipt of orders, unless there are some specific orders otherwise. In case the officer/official does not leave the charge in this period, he shall be deemed to have been relieved and no pay thereafter can be given to the officer/official on that post.

The relieving officer shall take up the expenditure of cash and stores from and for the first day of the accounting month during which the relieving took place, and submit the next monthly accounts in the same manner as if he has been in charge during the whole month, but the relieved officer remains responsible that proper explanation is forthcoming for transactions during his incumbency.

The relieving officer shall bring to the notice within a reasonable period any deficiency or defect in works or stores taken over from his predecessor, otherwise he will be held responsible for the same. Reasonable period will be two months from the date of taking over of charge of the Sub-Division/Section. In the case of Divisional Officers, the charge of bank guarantees/any other financial instrument is also crucial and any shortcoming in this regard or any other account must be reported at the earliest, not later than two months of taking over the charge.

In the case of any sudden casualty occurring or any urgent necessity arising for an officer to quit the Division, Subdivision or work to which he is posted, the next senior officer of the Department present will take charge. When the person who has taken charge is not a gazette Govt. servant, he must at once report the circumstances to his nearest departmental superior and obtain orders as to the cash in hand if any.



A register of incumbents of charges shall be kept in each office. The Divisional Office shall keep the incumbency register of its own office and also of the Sub-Divisions under it. The headquarters shall maintain incumbency registers of the Ministers in-charge, Administrative Secretaries, Engineers-in-Chief, Chief Engineers and all Class I posts sanctioned at headquarters.

I. Divisional Officers and Sub-divisional Officer

In the case of Divisional/Sub-Divisional officers, the relieved officer, besides handing over cash and store balances, shall give the relieving officer a list and memorandum showing the works in hand and the orders remaining to be complied with and of such matters as particularly require his attention, with full explanation of any peculiarity of circumstances, or apprehended difficulties. He shall furnish the relieving officer with a complete statement of all unadjusted claims, with the reasons for not having been adjusted in due course, and a report as to any complication likely to arise owing to their non-adjustment. The handing over notes will contain details of arbitration matters and the stand/defense of the department. The relieving officer should promptly bring out anything objectionable or irregular that may come officially to his notice. The relieving officer can also seek information from the relieved officer in the above mentioned cases. However, he shall not make any alibi due to non-receipt of such information.

A copy of this note, together with the following documents, should be forwarded the same day to the SE in the case of Divisional charges or to the DO in the case of Sub-divisional charges:

- a. Transfer report used should be in standard pro-forma.
- b. Receipt of stock, tools, and plant and other stores under the immediate charges of the relieved officer, Forms A and B Prescribed hereunder being used for Divisional and Sub-divisional charges respectively.
- c. A detailed report on the state of survey instruments. In the case of transfer of Divisional charges, this report should be in respect of instruments at headquarters only.
- d. The receipts of cash and stores balances should be prepared, by the relieved officer, but the relieving officer should note any inaccuracy therein so that the SE or the DO as the case may be, may pass such orders in respect of any deficient article as may be necessary. A copy of the receipts may be given to the relieved officer if desired by him.

FORM A

Received in transfer from former Divisional Officer Division, the stores in his personal charge as detailed in the annexed list.

The balance returns of stock and tools and plant in charge of all Sub-divisional Officers for the half year ending Respectively are on record and the Divisional stock returns have been prepared up to the end of

(Station and date)

Reliving Divisional Officer

..... Division.



FORM B

Received in transfer from former officer in charge Subdivision, the stock and tools and plant which have been in his personal custody, as detailed in the last balance return and accounts of receipts and issues to date. The returns for the year ended The half year ending and for the month of for the whole Subdivision have been submitted to the Divisional Officer and the account of daily receipts and issues for the current month has been written up-to-date.

(Station and date)

Relieving Sub-divisional Officer

.....Sub-divisional

The relieving officer should then, unless otherwise ordered, proceed with the relieved officer to inspect the records, cash, stores, works and materials at site of works, in charge of subordinates, but in the case of the transfer of a Divisional charge, the relieved officer should accompany the relieving officer in the inspection of the outstations only when so directed by the SE. The relieving officer should examine the accounts, count the cash, inspect the stores, and count, weigh and measure certain selected articles, in order to test the accuracy of the returns, and should minutely examine the works in progress as to their quality and as to their accordance with the sanctioned plans and estimates. He should also record his opinion as to the correctness of the accounts of materials at site.

The relieved officer should further give the relieving officer a list and memorandum showing all the works in hand and the orders remaining to be complied with and of such matters as particularly require his attention, with full explanation of any peculiarity of circumstances or apprehended difficulties. He should also furnish the relieving officer with a complete statement of all unadjusted claims, with the reasons for their not having been adjusted in due course and report as to complication likely to arise owing to their non-adjustment.

The relieving officer, in reporting that the transfer has been completed, should bring to notice anything irregular or objectionable in the conduct of business that may have come officially to his notice. In the case of the transfer of a Divisional charge, he should describe the state of the records, cash, stores and works mentioning what outstations he has yet to inspect and when he proposes to visit each.

The relieving DO should mention specially in his transfer report whether the accounts may be considered fairly to represent the progress of the works

In the case of the transfer of a Divisional charge the report of completion of transfer should, except in special case of any disagreement between the relieved and relieving officers a reference should be made to the SE. The fact of taking over charge should immediately be reported as soon as the transfer is completed to the SE and to the Audit Office.

The transfer of a Divisional, Sub-divisional or Sectional charge should be scrutinised in detail in the Division Office. If the report reveals any discrepancy in the accounts of stock, tools and plant etc., expeditious steps should be taken to see right the accounts within a month of receipt of the charge report. In case of deficiency or defects in stores, tools and plant or works the matter to comply with



the relieved officer immediately and if he fails to comply with the requirements within a fortnight, the matter should be brought to the notice of the SE for orders

The transfer report of a Sub-divisional charge should, on receipt by the DO, be scrutinised by him, any remarks necessary being entered in the column provided for that purpose. The report should then be forwarded to the SE, who after passing such orders as may be necessary, should return it to the DO for record, in the Divisional Office.

In the case of a Divisional charge becoming vacant by the death or sudden departure of the officer in charge, the succeeding officer should take action as above prescribed and assume charge forwarding to the SE or DO as the case may be, the receipts of which would otherwise be given to the relieved officer

On receipt of the joining report from the relieving officer if the order under orders of transfer fails or refuses to handover charge within the prescribed period, the relieving officer should report the matter to his immediate superior officer who should investigate into the matter immediately and arrange for transfer of charge if he is satisfied that there is no sufficient reason for delaying the handing over or the charge. In such cases the transfer report of charge should be countersigned by the superior officer and a copy thereof sent to the relieved officer for necessary action. If the handing over is delayed for reasons beyond the control of the relieved officer, extension of time as considered necessary should be applied for to the competent authority.

Note: For transfer of charges of the concerned units the following periods should ordinarily be considered reasonable

Divisional Charge – 2 days.

Sub-divisional Charge – 5 days.

Sectional Charge – 3 days.

When in any Subdivision or Section, important works are in progress or the period of transfer of charge may be extended under the orders of SE.

II. Other Officers

In the case of transfer of charges other than Divisions and Subdivisions, the DO should issue instructions as to the works to be jointly inspected by the relieved and relieving officers.

Note: In all cases of transfer of charges of sub-divisions and sections, detailed list of the competent parts of heavy plant and machinery should always be included with the transfer papers and, if for any reason, it is not possible to verify these lists at the time of actual transfer these papers should be verified immediately afterwards by the relieving who in case of any individual delay, will be held responsible for the deficiency.

5.6 Recording of Plans and Drawings

- i. Following plans and drawings in digital form shall be maintained in Divisional office, Circle office and CE's Office:
 - a. Copies of all standard plans of buildings, tunnels, reservoirs, dams etc.



- b. "As built drawings" including Sections and elevations of every building under his charge, as actually constructed. The boundaries of the grounds attached to any buildings should be distinctly shown.
- c. Plans and profiles of roads under the jurisdiction mentioning the locations of quarries, if any.
- d. As built Structural drawings of major and minor bridges, VUP, PUP, ROB and CD works.
- e. Complete plan of all-drainage works classed as such under Canal Act.
- f. Longitudinal Sections of All main and branch canals and their distributaries including river training works.
- g. A map showing the alignments of all main and branch canals their distributaries.
- h. Detailed layout of substation, Plants and Equipment installed with completion plans, wiring layout, etc.
- i. Plan of equipment-
 - (a) Assembly
 - (b) Details
 - (c) Wiring diagrams
- j. Extra high tension transmission lines-
 - (a) Completion plan
 - (b) Detailed designs
- k. High tension transmission line-
 - (a) Route plan Specification should also be mentioned in these documents.
 - (b) Line designs
- l. Sub-station layout
- m. Local distribution-
 - (a) Layout plans
 - (b) Line designs
- n. Plans of railway crossing (for Electrical Branch)
- o. Plans of Electrical Branch (head works including river training and protective Works.)
- p. Longitudinal Section of tunnel including adits.
- q. A map showing the alignment of tunnel and adits.
- r. 'As Built' layout plans and component drawings of water distribution networks, sewer networks, pumping mains, water treatment plants, wastewater treatment plants, elevated service reservoirs, pumping stations, intake structures, sewer appurtenant structures, urban drainage structures including cross drainage works, all electro-



mechanical components of the water supply, sewerage and drainage projects along with operation and maintenance manuals for each and every component of the works/projects.

- s. Plans and elevation of power house.
- ii. For Works Sanctioned by SE following record plans to be maintained:
In Circle Offices the following record plans should be maintained:
 - a. One copy of the record plan of every dam including its appurtenant works and canal head works including all river training and protective works.
 - b. One copy of the record plan of every masonry work on a main or branch canal and of every other masonry work costing more than Rs. 10,000.
 - c. One copy of the longitudinal section of every canal, distributary, drainage, power or navigation channel.
 - d. Maps of district and civil stations in the State: concerned linear maps of the principal lines of roads in the State.
 - e. Copies of all standard plans of buildings.
 - f. Copies of plans of all important bridges.
 - g. Copies of plans of all important buildings.
- iii. For works sanctioned by CE following record plan to be maintained:
 - a. One copy of the record plan of every dam including its appurtenant works and canal head works.
 - b. One copy of the record plan of every important masonry work on a main or branch canal.
 - c. One copy of the longitudinal Section of every main and branch canal, power and navigation channel.
 - d. Maps of districts and civil stations in the State.
 - e. Copies of all standard plans of buildings.
 - f. Copies of all important bridges.
 - g. Copies of all important-building
 - h. [Approved/sanctioned copies of DPRs of all water supply, sewerage and drainage projects along with detailed drawings and designs of each components.](#)

Note: Plans mentioned in items 'h' to 's' under paragraph (i) should also be kept on record in the Chief Engineer's and Superintending Engineer's offices and those mentioned in items 'g' to 'n' ibid should be kept in the Electrical Subdivision.

All record plans must be kept up-to-date and it will be the duty of the Divisional Officer to forward completion plans of all additions and alterations to the Superintending Engineer for correction of the



Circle Office copies. Similarly, the Superintending Engineer is responsible that such plans are forwarded to the Chief Engineer's office for correction of the record plans maintained there.

5.7 Destruction of Records

- a. Rules dealing with classification and destruction of correspondence and other records have been prescribed in the Odisha Records Manual, 1964.
- b. The rules relating to the destruction of officials records connected with accounts in general are contained in **Appendix X** of the OPWD Manual.



Annexure 5.1: Proforma for Write off of Last Measurement Book

(Refer para 5.1.4 of Code & 5.1.8 III of Manual)

1. Serial number of the MB
2. To whom issued
3. The date on which the M.B. was lost
4. Details of FIR lodged with the police
5. From whose custody it was lost?
6. Detailed circumstances leading to its loss
7. What efforts were made to trace the M.B.?
8. By whom the last measurements were recorded?
9. Whether the measurements have been checked upto the required %age by the Superior Officer as required under the rules? If not, why?
10. If any register is maintained to watch the movement of the M.B.?
11. Whether the M.B. contained the details of any work for which payment has not been made or all the works have been finalised?
12. Whether any audit objection or contractor's dispute relating to the M.B. is pending, and if so, nature thereof, and how it is proposed to settle up?
13. Whether work is susceptible of measurement again? If not, what is the basis on which the AE proposes to make final payment for the outstanding bills?
14. Whether the EE is satisfied that by writing of fresh measurements on the basis of other subsidiary records, if any, the Government will not be put to any loss, and there will be no dispute from any quarter? If not, what steps be suggested to safeguard against any such shortcoming?
15. Details of disciplinary action taken against the persons responsible for the loss
16. Details of remedial measures taken to avoid recurrence of such cases
17. Any other remarks

Executive Engineer
Divisional Department



Annexure 5.2: Rules for Sanction of Surplus and Unserviceable Stores

(Ref 5.4.12 of Code & 5.2.9 V of Manual)

These rules shall be observed by the departmental officers while conducting departmental auctions for disposal of surplus and unserviceable stores which are not required by the Department Before any material is put to public auction sanction of the appropriate authority should be obtained in the form of a Survey report.

Rule –

1. Wide publicity shall be given in all cases of auction of surplus and unserviceable stores, the reserve price of which exceeds Rs. 500. In case of stores, the reserve price of which exceed Rs. 500 but not more than Rs. 2,500 advertisement should be inserted 30 days ahead of the date fixed for auction sale in the Gazette, and also be published in one local newspaper (daily) through the Home (Public Relation) Department or through such other agency as may be prescribed by Govt. on two consecutive issues when the reserve price of the stores is more than Rs. 2,500 such advertisement should be published in one Odia and one English newspaper (daily) having wide circulation on two consecutive issues.

Note: In case of stores the reserve price of which does not exceed Rs. 500 the auction sale notice should be sent, 15 days ahead of the scheduled date of auction to all Local Officers for displaying the same on their notice boards. Besides local publicity is to be given by beat of drums.

2. Auction notices should invariably be endorsed to Subdivisions for prominent display on the notice boards and also at a prominent place at the site of auction. Copies of auction notices should also be sent to important district office of the locality for pasting them on the Notice Board.
3. Auction notices should clearly indicate the value and brief description of materials proposed to be disposed off by auction, place and time of inspection of the stores by intending bidders, conditions of auction earnest money to be deposited and the time, date and place fixed for auction. It is also necessary to draw a set of detailed conditions depending on the materials proposed to be disposed off and also the locality in which the same is stored so that bidders may not prefer any claim due to misunderstanding or incorrect wording provided in the contract documents. Detailed conditions of auction sale should be approved by the authority competent to accept the Bid before the auction sale notice is issued.

Inspection –

4. The materials to be auctioned should be properly store and stacked to enable proper inspection by the prospective bidders excepting when the sale is on “as is where is basis”.

Bidding –

5. Any person who desires to bid in an auction is required to register his name with the officer issuing the same notice at least one day before the date of the auction and deposit the required amount of auction money as indicated in the sale notice which is usually at the rate



of 5% (five percent) of the reserve price. This deposit will be returned on application to the unsuccessful bidders after the close of the auction. (Substituted by Works Department No. 24(650 Dt. 1.10.1993)

6. No person shall be allowed to bid an auction on behalf of another person unless he holds a written Authority from such other person or such person is present at the auction.

Supervision –

7. Auction shall be conducted in the presence of the S.D.O. The Sectional Officer under whose supervision material has remained under custody will render all possible help in connection with the auction. He should also be present at the time of Auction. In case of auction of stores the reserve price of which is more than Rs. 2,500 the auction will be supervised by the DO concerned. If the value of stores exceeds Rs. 10,000 it should, be supervised by the SE concerned.

Deposit of bid money Rule –

8. At the fall of the hammer the highest bidder will be required to deposit in cash an amount which together with the deposit of 15% (five percent) made by him earlier under Rule-(5) will amount to 12% of the bid money, as earnest money deposit. The Supervising Officer shall have the discretion to demand more than 25% of the bid money up to the full amount of the bid if considered necessary by him. Balance of the value shall be paid by the buyer to the DO or his representative after acceptance of the bid within the time limits prescribed below:
 - i. In case of bid which do not exceed Rs. 500 within 24 hours of the receipt of the notice of acceptance of the bid.
 - ii. In case of bid which exceeds Rs. 500 within 7 days of receipt of acceptance of the bid.
 - iii. Extension of time for a further period of fifteen days for the deposit of balance money, if applied for may be granted by the Officer competent to accept the bid.
9. In case of bidder's failure to deposit earnest money as demanded under Rule 8 with the fall of hammer, the caution money of 1 percent deposited by the bidder under Rule 5 shall stand forfeited. Similarly failure to deposit the balance amount of bid money within the prescribed time will entail forfeiture of the earnest money-deposited by the bidder under Rule 8. In these cases the materials, should be re-auctioned. The names of the defaulting bidders shall be intimated to the CE's office for circulation to other Divisions so that such bidders are debarred from bidding in future.

Acceptance of Bid –

10. The acceptance of the bid by the competent authority must be conveyed in writing to the bidders as far as possible within 5 days from the date of auction. In case the bid is to be accepted by the SE or CE it shall be conveyed within 10 or 15 days respectively.
11. The competent authority vested with powers to accept bids, under Rule 18 reserve the right not accept the highest or all bid. The bid can be rejected without assigning any reason to the bidder concerned but the accepting authority must record in writing his reasons for not accepting the same.



Removal of auctioned material –

12. As far as possible auctioned material must be removed by the bidder within 7 days from the date of depositing the full value of bid. The time for removal may be suitably extended by the authority competent to accept the bids taking into consideration, the bulk of materials to be removed.
13. As soon as the full amount of bid money is paid by the buyer he would acquire his lien on auctioned store etc. and it will be his responsibility to look after such stores at his own expense and the Department will not be responsible for any damage done by the way of pilferage, or any other unforeseen calamity and no claim on this account shall be entertained.
14. The materials will be removed from the site in the presence of the bidder himself or agent duly authorised by him in writing, on his behalf.

Record of Bids –

15. The Officers who supervises the conduct of auction will maintain in his own handwriting a complete record of all bids offered by different bidders.
16. The scroll of bids will indicate the full description of the materials, reserve price, site date and time of auction and will be signed by the supervising officer and at least two witness at the conclusion of the auction.
17. The bid sheet in duplicate should be signed simultaneously by the purchaser and supervising officer. The Supervising Officer should send an immediate report about the auction to the next higher authority.

Power to accept Bids –

18. i. The following powers shall be exercised by the Public Works Officers in accepting the bid amount provided that the highest bid Amount is not below the reserve price fixed.

Monetary limit of the reserve price	The authority competent to accept the bid
Up to Rs. 50,000	Divisional Officer
Above Rs. 50,000 But below Rs. 2,00,000	Superintending Engineer
Above Rs. 2,00,000	Chief Engineer

- ii. When the bid amount is not less than 90 percent of the reserve/up set price the authorities competent to accept the bids would be as follows-

Monetary limit of the reserve price	The authority competent to accept the bid
Up to Rs. 50,000	Superintending Engineer
Above Rs. 50,000 But below Rs. 2,00,000	Chief Engineer
Rs. 2,00,000 and above	Govt. in Administrative Department with Concurrence of Finance



iii. When the bid amount is less than 90 percent of the reserve price the authority empowered to confirm the bid under Rule 18 (ii) may, if he considers necessary, reject the highest bid and direct the officer conducting the auction to call for sealed tenders. If the highest tendered amount is equal to or higher/than the bid money, the materials may be sold to the highest tenderer. In case the highest offer, received by sealed tender is less than the bid money, the reserve price should be revised with the approval of the next higher authority and stores disposed off by public auction or call of sealed tenders. In case of stores where the reserve price as 500 or less, the SE will exercise full powers to accept the bid in all cases.

19. The DO concerned shall personally fix the reserve price of the articles proposed to be auctioned as indicated in the survey report. It should be fixed on the basis of book value of the articles minus depreciation plus 10 percent towards supervision charges. If the book value of particular items of stores is not available, the corresponding market price should be the basis to determine the book value from which depreciation will be deducted and Supervision charges will be added to arrive at the reserve price. In case of unserviceable stores, the salvage value should be the reserve price for auction.

Note: The "book value" means the value at which such materials are sold in the market [See paras 2.1.1 (28) and 7.2-35 of C.P.W.A. Code]. When the present book value cannot be determined with reference to the market price, the book value as entered in the Register may form the basis for determining reserve price.

20. In case of disposal of surplus stores in Project Stores Division prior approval of the CE should be obtained before taking steps for the disposal of surplus stores by public auction.

[Based on G.O. Works Department letter No. Codes, AP- 29/74- 7804, dated 31.3-1975 and No. 10247, dated 24.4.1975]

Bid list for auction	(To be prepared in	
Sale Survey report	duplicate by Carbon process).	
Sanctioned in.....		
Order No.....		
Date.....		
Name of the Subdivision		
Name of the Division		
Place of auctioned.....		
Date and time of auction.....		
Particulars of stores	Weight and quality	Reserve price
Put to auction		



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Name and Address of The bidders	Amount of auction money deposited under Rule 5	Amount of bids 1 st , 2 nd , 3 rd , 4 th , 5 th and so on	Signature of the bidders
---------------------------------	--	--	--------------------------

The highest bid of Shri..... for an amount of (Rupees.....) is accepted/recommended for acceptance.

Signature and Designation of the Officer holding the Auction

To

The Governor of

Sir,

I/We have read the notice for auction sale of..... stores to be conducted byat..... on..... and the conditions of the sale.

A sum of Rs.....(Rupees.....) is hereby tendered in cash as auction money.

In the event of my/our bid being accepted I/We do hereby undertake to deposit earnest money as demanded immediately after the close of the auction.

On acceptance of the bid I/We do hereby undertake to pay the balance of the final bid money within (i) 24 hours of the receipt of notice of acceptance of bid of the amount is Rs. 500 and below (ii) within seven days of the receipt of notice of acceptance of bid if the amount is more than Rs. 500.

In the event of my/our not depositing the balance of the final bid money within the time prescribed I/We do hereby agree that Govt shall, without prejudice to any other right or remedy, be at liberty to forfeit the earnest money absolutely.

Signature.....

Date.....

Address of the intending bidder

Conditions of Sale:

1. No person shall be allowed to bid on behalf of another person unless he holds written authority from such other person or such person is present at the auction.
2. The officer holding the auction shall fix the amount at which the auction shall be started and the lowest amount by which the bid shall advance.
3. The officer-holding the auction shall have the power to close the auction at any bid



4. After closure, all bidders taking part in the auction or such of them as may be required by the officer holding the auction, shall sign or make thumb impression on the bid list.
5. Any bid accepted by competent authority shall be binding on the bidder. The competent authority shall not be bound to accept the highest or any bid.
6. No contract shall be complete until the competent authority has passed an order accepting the bid and the bidder shall have no right to work under the contract until such order is passed.
7. As far as possible auctioned material must be removed by the bidder within 7 days from the date of acceptance of the bid. Extension of time applied for, however, may be granted by the authority competent to accept the bid. The material will however be removed after payment of the bid money in full.
8. As soon as the full amount of the bid money is paid by the buyer he would acquire his lien on the auctioned stores, and it will be his responsibility to look after such stores at his own expense and the Govt. will not be responsible for any damage done by way of pilferage and any other unforeseen calamities and no claim on this account should-be entertained.
9. The materials shall be removed from the site in the presence of the bidder, himself or his authorised agent. In case the materials are not lifted within the prescribed period ground rent at the rate of 1 percent of the bid amount for each day of delay will be charged. In the event of the ground rent recoverable from the purchaser exceeding the sale price deposited, the purchaser will cease to have any lien of the auctioned stores. The amount deposited towards sale price will be adjusted towards the ground rent and the stores will remain the absolute property of Govt.

(Add special conditions of any)

I accept the bid of.....(Rupees) as per the bid list.

For and on behalf of the Governor

Signature of the competent authority

(Name and designation)



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DRAFT

Auction Sale Notice

GOVERNMENT OF ODISHA

.....Department

.....Division

1. Notice is hereby given that the materials as specified below will be sold by public auction “As is where is basis” in the premises ofon..... at
.....
2. Intending bidders may in spite the materials atwithin office working hours one week before the date of auction.
3. Intending bidders are required to register their names with the officer issuing the call notice at least one day before the date of auction to obtain the letter of offer and condition of sale.
4. Intending bidders are required to deposit Rs. as caution money to participate in the auction. The highest bidder will be required to pay in cash art amount which together with caution money will work out to 25 percent of bid money as earnest money. Higher percentages are to be paid if demanded by the officer supervising the auction. The balance amount of bid money is to be paid within such time as has been specified in the letter of offer. Failure to deposit the required amount of caution money and the balance amount of bid money will entail forfeiture of caution money and earnest money respectively.
5. The accepting authority of the bid reserves the right to accept or reject the highest or any bid without assigning any reason whatsoever.
6. Description of materials.

Name and Designation of Authority

Issuing the Sale Notice



CHAPTER 6

**POWERS OF SANCTION OF GOVT. AND OFFICERS
OF DEPARTMENT IN CHARGE OF PUBLIC WORKS**



6 POWERS OF SANCTION OF GOVERNMENT & OFFICERS OF DEPARTMENT IN CHARGE OF PUBLIC WORKS

6.1 General

6.1.1 Fundamental Conditions

The Government of Odisha exercises, by virtue of the provisions of the Constitution of India, full powers of sanction with regard to Odisha State Public Works expenditure (other than that incurred in connection with the residences of the Governor) and has invested the authorities subordinate to it with powers in respect of that expenditure by means of rules-and delegations which, except in regard to certain Establishments and connected matters, are detailed in this Chapter.

Note: The rules in connection with the expenditure on the residence of the Governor will be found in **Appendix XI** to OPWD Manual.

The essential conditions, as detailed in Para 3.7.1 pertaining to commencement of execution of any public works, should be fulfilled before taking up the works.

Note: In case of exigencies of public service, the Government may authorise commencement of work in anticipation of administrative approval if there is un-avoidable delay in according administrative approval to a particular case; but in such an eventuality, administrative approval should be accorded within three months from the date of issue of such authorisation.

6.1.2 Commencement of Works in Anticipation of Detailed Estimates of the Complete Project

Ordinarily, work on a project should commence only after technical sanction to the detailed estimate of the project is accorded by a competent authority. In a major project when it is not immediately possible to prepare detailed designs and estimates for all the component parts of the entire project, the Technical Sanctioning authority competent to accord technical sanction to the whole project may permit commencement of works on component parts of the project, subject to the following conditions:

- a. That the component parts in question can be appropriately commenced without affecting or being affected by any other part of the project technically, financially or otherwise.
- b. In the administrative approval for the project as a whole, there must be a clear and specific amount corresponding to the work of component part in question.
- c. The detailed estimates are approved by the authority competent to accord technical sanction to the project estimate as a whole.
- d. The amount of detailed estimate of the component part must not exceed the amount of the component part included in the administrative approval by more than 10 percent, provided further' that where the administrative approval indicates provision by sub-heads, then the



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Technical Sanctioning authority competent to accord sanction to the estimate of the project as a whole should see that the amount of detailed estimate sanctioned against individual sub-head is not likely to exceed the total administratively approved amount by more than 15 percent.

- e. The authority competent to accord technical sanction to the project estimate as a whole is satisfied, before according approval or sanction, as the case may be, that the amount of the technical sanction for the whole project is not-likely to exceed the amount of the administrative approval by more than 10 percent.
- f. **All requirements of Social Impact Management and Environmental safeguard are fulfilled.**

Notes: The detailed estimate sanctioned for a component part of the project will be treated as an independent work in the accounts for all purposes.

This rule does not apply to estimates for parts of a building project unless preliminary estimates for administrative approval indicate separate components specifically.

To obviate delay in commencing work on a detailed estimate for a complete project which has been prepared and submitted for technical sanction, but which requires minor amendments in the design or estimate, the Technical sanctioning authority should adopt any of the following courses -

- a. Amend the design or estimates in his own office and sanction it, or
- b. Sanction the parts of estimates which are approved, subject to conditions (a)& (d) of paragraph 6.1.3 and call for amended detailed estimates for the other portion of the project.

Technical Sanction Memorandum (TS Memo) should indicate the up-to-date amount of estimates sanctioned and the amount available under the sub-head for sanction and a copy of the memo should be endorsed to P&AO.

Note: Every detailed estimate shall be accompanied by a provision slip indicating the up-to-date amount of estimates sanctioned and the amount available under the sub-head for sanction.

6.1.3 Projects to which Sanction of GOI is Required

Project falling under the following categories should be referred to the Government of India for sanction or advice:

- i. Projects to be financed from Central funds, e.g., projects relating to National Highways or financed from Central Road Fund.
- ii. Projects, big or small, which affect the interests of other State Governments.
- iii. Projects, which are attended with more than ordinary engineering difficulties, e.g., dock and harbour improvements.
- iv. Projects, where the Government of India specifically required consultation, clearance or sanction.



6.2 Powers of Govt. in the Administrative Departments, Heads of Departments and other Civil Officers

6.2.1 Administrative Approval

A. General

Administrative approval for construction or purchase of residences for the State Government Employees shall be subject to the conditions that the scales of accommodation do not exceed the norms of entitlement specified by the Government of Odisha.

Revised administrative approval shall be applied for in cases where the detailed estimate for a residential building exceeds the amount administratively approved by 10 percent or where, owing to modification in the original proposals or actual cost incurred during the execution of the work, the amount exceeds by 10 percent of the originally approved amount.

In case of an official residence, whether newly constructed, purchased or hired, electrical fittings and sanitary fittings on the scale approved by Govt. may be supplied and maintained by Govt. Additional fittings may be provided and maintained by the tenant with the approval of the officer in charge of maintenance of the building.

No authority is entitled to accord administrative approval to an estimate for additions and alterations to a residential building if the effect of the expenditure contemplated would be to increase the capital cost of the building to a figure beyond that to which the authority is competent to accord administrative approval in the case of new residential buildings.

Notes: The norms of permissible plinth areas for residential buildings, scale of electrical and sanitary fittings shall be followed as given in **Annexure 4.1, 4.2 & 4.3** of Manual chapter IV.

B. Delegation of Powers for According Administrative Approval to Departments of Governments in Charge of Public Works.

Powers to accord A/A to various types of projects by Works, Water Resources, Energy, Rural Development, Housing & Urban Development Departments are given in **table I of Annexure 6.1A of manual.**

The powers to accord A/A by the Heads of Departments other than the Member, Board of Revenue, RDC PCCF, DG and IG of Police other than those under Works, Water Resources, Energy, RD and Housing & Urban Development Departments in each case are given in **table II Annexure 6.1A of manual.**

The powers to accord A/A by the Member, Board of Revenue, RDC PCCF, DG and IG of Police and Collector are given in **table III Annexure 6.1A of manual.**

C. Detailed procedure for Appraisal and Approval of Schemes/Revised Cost Estimate

Systematic appraisal and approval of new schemes or a new service where the scope of existing scheme is proposed to be substantially altered and cost estimate is to be revised are given in **Annexure 6.2** of manual.



6.2.2 Inaugural Ceremonies

In case of foundation stone or opening/inauguration ceremonies, the expenditure should be restricted to the basic minimum. Expenditure should be charged to the contingencies of the work against a proper estimate sanctioned by the competent authority. The dignitaries as per requirements of protocol and Government instructions shall be invited and treated with due courtesy. In holding these ceremonies, help and co-operation of District Administration, Police, Public Relations Department and local administration shall be duly enlisted. **However, total expenditure on these ceremonies should be restricted to Rs. 20,000 for works costing upto Rs. 1 Crores and upto Rs. 1 Lac for works costing above Rs. 1 Crores as per item 1(o) of Annexure 6.1B of Manual.**

6.2.3 Departmental Charges for Deposit Works

In respect of contribution & deposit work to be executed on behalf of other Govt., non-Govt. bodies and individuals etc. on turnkey basis, proportionate charges shall be levied @ 10% towards establishment charges.

In case the PSUs and other agencies wish to entrust only some components of the project execution to the state Govt. departments in charge of public works, the percentage proportionate charges will be levied as follows:

Components of Works	Percentage rate of Establishment Charges
(1)	(2)
Preparation of Preliminary sketched	½%
Preparation of detailed working drawings	1%
Preparation of preliminary estimates	½%
Preparation of detailed estimates/scrutiny of estimates/scrutiny of bills/approval of plan	1%
Execution	6%
Total	10%

6.3 Powers of Officers of the Departments in-Charge of Public Works

6.3.1 Powers to Accord Administrative Approval (These powers are required to be reviewed periodically once in every five years)

The Chief Engineers and the officer subordinate to them will accord administrative approval as given in **Annexure 6.1B item 1.**

6.3.2 Power to Accord Technical Sanction

The Powers to accord technical sanction to detailed estimates for works are exclusive of charges for general establishment, tools & plant and contingency and are given in **Annexure 6.1B item 2 of manual.**



6.3.3 Power to Pass Excess over Technical Sanction

- a. A revised estimate must be prepared when the sanction estimate is likely to be exceeded by more than 10 percent except in cases provided in Note (1) below.
- b. The powers of officers-in-charge of public works to accord technical sanction to revised estimates are the same as their power to accord sanction to original estimates.
- c. A public works officer may pass excess over estimates provided that the excess is not more than 10 percent of the amount sanctioned and the total amount of the sanctioned estimate plus such excess does not exceed the amount upto which he is entitled to accord sanction to an original estimate.

Note:

1. No officer of public, work under various Departments of Government is entitled to pass any excess over a revised estimate sanctioned by an authority higher than him.
2. When excess occurs at such an advanced period in the construction of a works so as to render the submission of a revised estimate purposeless and the completion report is utilised as the revised estimate then, the Superintending Engineer may pass the completion report, if the total expenditure in question is not greater than that what he is empowered to sanction in case of revised estimate under sub-para (ii) above. When it is beyond the powers of the Superintending Engineer to pass the excess as shown in the completion report, the same shall be submitted to the Chief Engineer, who in his turn will submit it to Govt., if he is not empowered to deal with the excess.

6.3.4 Purchase, Manufacture and Repairs of Stores

A. General

The stores of the Departments in charge of public works are divided into the following classes, viz. (i) tools and plant, (ii) materials charged direct to works. The Divisional Officer is responsible that proper arrangements are made throughout his Division for the custody of stores and protection thereof from deterioration fire etc. Unless there are orders to the contrary, the officer in charge of a Sub-division is responsible for the correctness of accounts relating to the stores belonging to it.

B. Power to Sanction Estimates for Purchase of Stores, Tools and Plant etc.

Powers of the public works officers to sanction estimate for purchase of stock, tools and plants, manufacture and repairs of tools and plants are given under **item no 3 a & 3 b of Annexure 6.1B of manual.**

C. Purchase of Stores

The powers of public works officers to purchase or manufacture stores shall be the same as that of their powers for sanctioning estimates for purchase etc. under para 6.3.4 (B) above subject to the following conditions.

- a. In the case of purchase of stores, the provisions of the rules for the supply of articles for public service should be strictly followed.



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Ordinarily materials should be purchased only for works in progress and no reserve of stock should be kept except with the specific sanction and upto monetary limit to be prescribed by Government for each year. If such a reserve has been sanctioned, the public works officers are authorised to purchase upto the power delegated to them, subject to the condition that the purchase and issue of stock should be so regulated that the stock in hand at any time does not exceed the sanction limit.

- b. Indents for stores for which rate/running contracts exist, be placed on the Director General of Supplies and Disposals by the officers declared as Direct Demanding Officer. The procurement of steel and cement should invariably be made through the appropriate authority if any Government of India irrespective of the value of orders. In case of materials for which the State Purchasing Organisation (Director, Export Promotion and Marketing) has entered into rate contract, the requiring Divisions should place indents on the manufacturers or their supply agencies (See also Appendix VI for purchase of materials).
- c. Purchase of jeeps, station-wagons and other vehicles for transport of-officers and staff should have prior approval of the Administrative Department and also the concurrence of the Finance Department.
- d. Purchase of machinery like trucks, dumpers and road roller by executing department should be discouraged except where particular difficulties are faced in select areas. Contractors are expected to own them or hire/lease them from private sector sources.
- e. Purchase of and repairs to office furniture including office cycles are governed by normal financial rules applicable to other Civil Departments. In case of repairs to motor vehicles and other machinery, it should be seen in all cases that these have not gone beyond economic repairs. The "scales prescribed by Govt. is regard to repairs of motor vehicles should be observed.
- f. If any of the stores cannot be procured in the manner indicated above, the requirements of the Division should be met by local purchase. In all cases, where local purchase is resorted to quotations or tenders as the case may be, should be invited from manufacturers, authorised distributors and recognised dealers so get the materials at competitive.
- g. When a public works officer carries out work for any of the local bodies, the said rules shall apply, except when the local body specialty desires to have the stores purchased otherwise, and the Government have accorded approval thereto.
- h. Rush expenditure on the purchase of stores at the close of the financial year should be avoided. The indents on the Director General of Supplies and Disposals should be placed by the indenting authorities upto the 1st of February every year as there is little likelihood of supplies being materialised and payment being made within the financial year, if the indents are placed after that date.
- i. In case of extreme urgency, local purchase of stock, borne on Director General of Supplies and Disposals rate/running contract or covered by State Purchasing Organisation like Export Promotion Marketing (EPM) circulars, may be purchased by the Direct Demanding Officer at market rate, provided that total purchase is limited to Rs. 2 lac per item per annum. A record of all such purchases should be kept and progressive total struck to watch the annual limit.



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- j. Purchase of materials other than those indicated in sub-para (b) above costing **Rs. 7 Crore (in respect of department where there is no post of EIC)** and above Res. 10 Crores (where there is post of EIC) at a time would require the approval of the Administrative Department (See para 6.3.15 of OPWD Code).
- k. The purchase orders should not be split up with a view to avoid obtaining approval of a higher authority.
- l. In all cases, orders should be placed by the Divisional Purchase Officer after approval of the tender or quotation for the materials by the competent authority.
- m. A register of purchase orders should be maintained so as to watch the number .of order placed for various materials during the financial year and materials received against each order.

6.3.5 Write Off/Disposal of Stores Etc.

The Powers are exercised by officers of the departments in charge of public works in relation to sale, disposal and write of stores and cash are given under **item 4a to 4j of Annexure 6.1B of manual**.

6.3.6 Sale or Dismantlement or Write off of Public Buildings

No public building which is not purely a temporary structure should be sold or dismantled without the previous sanction of Government in the Administrative Department, if its book value exceeds Rs. 2 Lakhs.

Note:

1. Unless it is ascertained from the collector of the District that any building is not required by any other Department of the Government of India or any other public undertaking; no building should be sold.
2. No building should be demolished unless if is in a dangerous condition and beyond economical repairs. If it is decided by the Chief Engineer that a building is in a dangerous condition the same may be demolished departmentally after the order of write off is issued by the competent authority. Materials obtained after dismantlement may be taken to stock for use on other work or disposed off otherwise.
3. Sale of building along with land would require the concurrence Finance and Revenue Departments.

The following procedure should be observed for disposal of Government building without land:

- a. Sale or dismantlement or write off should be sanctioned by the competent authority.
- b. After the sale or write off is sanctioned by the competent authority a copy of the sanction will be endorsed to the Chief Engineer, who will in all cases, fix the reserve price in accordance with principles laid down in **Chapter IV para 4.4.3 of the Manual** for valuation of buildings for the purpose of fair rent taking into consideration, the life and condition of the buildings subject to the minimum as under:



- i. Six percent of the value of the building portion on the basis of current cost of replacement thereof, plus.
- ii. Twenty-five per cent of the value of electrical and water supply installations on the basis of their current cost of replacement.
- c. The Divisional Officer in charge, will then dispose of the building either by call of tender or by public auction giving wide publicity to ensure keen competition.
- d. The authorities competent to accept the highest bid/tender at or exceeding the reserve price received in the auction/tender and their financial power in this regard are described in **Annexure 6.1B item 5(a) manual.**

Acceptance of bid/tender in respect of which only single tender is received, the powers of various public works officers are given in **Annexure 6.1B item 5(b) of manual.**

Purely temporary structures erected during the construction of works may on completion of the work or when the purpose for which they were erected has been served, be sold or dismantled under the sanction of the Divisional Officer. If the structure is proposed to be sold without land, the Divisional Officer may fix the reserve price taking into consideration of the condition of the structure and other local conditions subject to the minimum as under:

- a. Six per cent of the value of the building portion on the basis of current cost of replacement thereof; plus
- b. Twenty five per cent of the value of the Electrical and Water supply installations on the basis of their-current cost of replacements. If the Divisional Officer, after due consideration, purpose to fix a reserve price lower than the above, he will obtain the prior approval of the Superintending Engineer. He will, then, put the structure to auction after due publicity to ensure keen competition. He will be competent-to accept the highest bid at or exceeding the reserve price. The discretion to accept bids below the reserve price shall be exercised by the Superintending Engineer.

The Powers in relation to sanction of survey report for sale, dismantlement and write off of public buildings borne in the books of Departments in charge of public works are given in **Annexure 6.1B item 6 of manual.**

During construction, works like railway lines, water works roads, bridges, temporary buildings, etc., are taken up for the execution of the main project. These works may be abandoned after completion of the project under the sanction of the Chief Engineer and the materials obtained after dismantlement may be disposed off in the manner indicate din Sub-para, (v) above. Works like embankment, Irrigation canals, bridges, etc. which has been maintained for several years, can only be abandoned after obtaining specific orders of Government.

Sale or transfer of land of building from one Department of Govt. to another will be regulated by the provisions of paragraphs 280 to 284 of Odisha General Financial Rules Vol. I.

6.3.7 Alterations in Designs and Specifications

An officer of the Department in charge of public works can sanction alterations in designs and specifications provided such alterations do not materially affect the size or scope of the project and



provided they do not result in an increase in cost beyond the limit of his powers to deal with excess over the estimate.

In cases where the estimates and designs have been technically approved by a higher authority, prior approval of that authority should be obtained before such alterations. But in case of trifling alterations during construction, the Divisional Officer can sanction the same under intimation to the all sanctioning authority.

6.3.8 Acceptance of Tenders

A public works officer may accept a tender for a work upto the amount to which he is authorized to accord technical sanction to estimates provided that **and procedure as prescribed in procurement manual has been fulfilled and also that** any provision in the tender does not infringe any standard rule or order of a higher authority and that no provision involves an uncertain or in definite liabilities or any condition of an unusual character (see also para 3.5.6 of Manual). The tender finalisation power of Administrative department and PWD officers are given in **Annexure 6.1B item no. 7, 8, 9 & 10 of Manual.**

Note:

1. The Department/Wings where there is post of Engineer-in-Chief tenders for works above Rs. 10.00 crores should be referred to the Administrative Department who will refer it to a Committee the Administrative Department, Secretary of the Finance Department of the consisting of Secretary of the Law Department and Chief Engineer concerned. The Financial Adviser of Assistant Financial Adviser of the Department will act as member Secretary of the committee, Secretary of the Finance Department and Secretary of Law Department may send their representative not below the rank of Deputy Secretary of the respective Departments, if they so desires. In case the members of the Committee comes to a unanimous decision. Such recommendation of the Committee should be communicated to the Chief Engineer after obtaining orders of the Govt. in Administrative Department. In case the members express divergent views of any point, final decision in the Administrative Department be taken after obtaining orders, of Government.
2. The Departments/Wings where there is no Engineer-in-Chief, tenders for works above Rs. 7.00 crores should be referred to the Administrative Department for finalisation of tender as per procedure mentioned in Note I.
3. Finalisation of tender for the works above Rs. 4.00 crores and upto Rs. 7.00 crores will be done at the level of Chief Engineer through a tender committee constituted with concerned Chief Engineer as Chairman. Superintending Engineer of the same office and Superintending Engineer of concerned circle as members and Financial Advisor/AFA/Accounts Officer of the same office as Member Secretary. Similarly, finalisation of tender for the works above Rs. 7.00 crores and upto Rs. 10.00 crores will be done at the level of Engineer-in-chief through a tender committee constituted with Engineer-in-chief as Chairman concerned Chief Engineer as member and Financial Advisor/AFA/Accounts Officer of the same office as member Secretary. In case of divergent views of tender committee, final decision will be taken by next higher authority. For this purpose Engineer-in-chief will be treated as next higher



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authority of Chief Engineer, where there is no post of E.I.C. the matter will be referred to the Administrative Department.

4. Sub-divisional Officers, Divisional Officers, Superintending Engineers and the Chief Engineer can accept tenders, although the rates quoted are 25 per cent above the estimated rates on any individual item, subject to the condition that the excess so allowed on the whole does not go beyond the value determined on the basis of the current Schedule rates by 15%²[when the tendered rate exceeds 25 per cent on any individual item as compared to the estimated rate of 15% of the value determined on the basis of current Schedule of Rates, the approval of the next higher authority should be obtained before acceptance of the tender.] In case of item-rate contract, the accepting authority shall stipulate a condition that the quantities in respect of the items for which the quoted rates are more than 25% of the estimated rates are not allowed to be varied by more than 5%. In case in exceeds limit, approval of the next higher authority should be obtained.
5. When the amount of a tender exceeds the amount of administrative approval by more than **(10 ten percent)** the tender accepting authority should obtain revised administrative approval or clearance from the authority competent to accord administrative approval before acceptance of the tender.]

In case of tender for repair works, if the lowest tendered amount is more than 20% of the sanctioned amount, approval of the. Chief Engineer should be obtained prior to acceptance of the tender.
6. If doubt arise about competency to sanction a special condition, the matter must be referred to the Administrative Department for orders.
7. The power of acceptance of tender carries with it the power to execute an agreement on behalf of the Governor.

A Divisional Officer can also execute an agreement on behalf of; the Governor even if the tender has been accepted by any higher authority.

6.3.9 Irregular Acceptance of Tender

A Public Works Officer may accept a tender for work up to the amount to which he is authorised to accord technical sanction provided the tender amount is within 10% in excess over the corresponding estimate cost and all other conditions are satisfied within the para meter of the codal provisions. *Where the tender value exceeds by more than 10% of the approved estimated cost, the tender up to 15% above the estimated cost may be accepted with the approval of the next higher authority. For tenders beyond 15% of the estimated cost, approval of Finance Department shall be obtained before acceptance of tender.*

6.3.10 Sanction of Payment for Extra Item Substituted Item Extra Quantities and other Items to Contracts

Extra items of work are those which are not covered under the original agreement for the execution of a work and consist of new and/or substituted items.

- a. New items of work are items which are completely new and are in addition to the items in the contract. These are known as extra and additional items.



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- b. Substituted items are those items which substitute the existing ones or are taken up in lieu of those already provided for in the contract.
- c. Extra quantities are those executed in excess of the quantities mentioned against each item in the agreement.
- d. In case of non-schedule items the rates shall be approved by next higher authority based on prevailing market rates.
- e. Deviation statement, where necessary, should be submitted to the competent authority for approval.

The public works officers will exercise the powers for sanctioning rates for extra/substituted items and for approving deviations in quantities in respect of a contract as given in **Annexure 6.1B item no. 12.**

6.4 Miscellaneous Powers

6.4.1 Write Off of Irrecoverable Revenue

For Write off of irrecoverable revenue powers of PW officers are given in **Annexure 6.1B item 13.**

6.4.2 Sale of Dead and Fallen Trees

The powers are exercised by the officers of Department in charge of public works for sale and disposal of dead or fallen trees or branches thereof coming **along the alignment** of roads, canals etc. **within ROW** are given in **Annexure 6.1B item 14.** **For felling of living trees permission of Forest Department shall be necessary.**

6.4.3 Propaganda, Publicity and Demonstration or Exhibition

The Chief Engineer may sanction expenditure not exceeding Rs. 1,00,000/- annually, provided that in case where such propaganda, publicity and demonstration or exhibition relate to project, provision for the same should exist in the project estimate (including contingencies), administratively approved by the competent authority.

6.4.4 Lease Agreement for Tea Stalls/computer kiosks or Other Shops on Department Land

- a. The Superintending Engineer can let out departmental buildings on a monthly rental basis for canteen or store catering to the needs of the departmental staff, subject to the following conditions:
 - i. that the lessee shall vacate at a month's notice;
 - ii. that the period of lease does not exceed a year at a time; and
 - iii. that the lessee shall not make any additional or alteration to the existing buildings so let out.
- b. The Superintending Engineer can also sanction lease of departmental land on annual rental basis for the above purpose subject to the conditions mentioned under (a) I above and that the lessee shall not raise any structure of a permanent nature on the land. A deed of



agreement shall be prepared for the purpose in consultation with the Government Pleader concerned, if there is no approved from.

Note: The Divisional Officer can enter into agreement for the above mentioned, purposes with previous sanction of the Superintending Engineer in each case.

6.4.5 Lease of Sairats

The public works officers can approve lease of grass, fruit and fishery in the departmental land, trees, tank respectively, or in the irrigation and embankment works subject to the conditions that the same is leased out on auction after following the rules and procedures laid down in **Appendix XII of Manual and permission of Forest Department taken.**



Annexure 6.1A: Delegation of Power to Public Works Departments

Table I		
Powers to accord Administrative Approval to various types of projects by Works, Water Resources, Energy, Rural Development, Housing & Urban Development Departments		Remarks
Particulars	Amount in Rs. (existing/ proposed)	Refer OPWD Code para 6.2.3 & Manual para 6.2.1 (B) FD OM No. 22393/F dated 06.08.2012 and 13863 dated 08.04.2013
1. Non-residential buildings	15/ 30 Crores	
2. Residential buildings and residence-cum-office buildings	10/ 20 Crores	
3. a. Communication Irrigation and Public Health & Electricity	25/ 50 Crores	
b. Flood control, Drainages, Anti-water logging and anti-sea erosion.	15/ 30 Crores	
4. Sanitary & Water Supply installations:		
a. Residential buildings	1/ 2 Crores	
b. Non-residential buildings	2/ 4 Crores	
5. Electrical installation:		
a. Residential buildings	1/ 2 Crores	
b. Non-residential building	2/ 4 Crores	
6. Circuit House, Inspection Bungalows, Rest sheds & office cum residential buildings	7/ 14 Crores	
7. Other item, if any	1/ 2 Crores	
<p>Note:</p> <ol style="list-style-type: none"> The power to accord administrative approval in respect of 'Flood Control', 'Drainage', 'anti-sea Erosion Project' shall be exercised only after obtaining approval of the schemes from the competent authority. The Community Development, Panchayati Raj (Community Development) Department and Tribal & Rural Welfare Department will exercise special powers of according administrative approval under the delegation of Powers promulgated by Govt. in Finance Department from time to time. 		



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The powers to accord Administrative Approval by the Heads of Departments other than the Member, Board of Revenue, RDC PCCF, DG and IG of Police other than those under Works, Water Resources, Energy, RD and Housing & Urban Development Departments		Remarks
Particulars	Amount in Rs. (existing/proposed)	Refer OPWD Code para 6.2.4 & Manual para 6.2.1 (B)
1. Residential buildings	3/6 Crores	FD OM No. 22393/F dated 06.08.2012 and 13863 dated 08.04.2013
2. Non-residential buildings	5/10 Crores	
3. Circuit House, Inspection Bungalows, Rest sheds & Office-cum-residential buildings	1.5/3 Crores	
4. Sanitary and Water supply installations:		
a. Non-residential	50 Lakhs/1 Crores	
b. Residential	20/40 Lakhs	
5. Electrical installations:		
a. Non-residential	50 Lakhs/1 Crore	
b. Residential	20/40 Lakhs	
6. Rural Water Supply	1/2 Crore	
7. Communication including Culverts	2.5/5 Crores	
8. Other Items	20/40 Lakhs	



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Powers of Member, Board of Revenue, RDC PCCF, DG and IG of Police and Collector	Remarks		
	Refer OPWD Code para 6.2.4 & Manual para 6.2.1 (B) FD OM No. 22393/F dated 06.08.2012 and 13863 dated 08.04.2013		
Particulars	Amount in Rs. (existing/proposed)		
	Member, Board of Revenue/ PCCF/DG & IG of Police	RDC	Collector
1. Residential buildings	5/10 Crores	3/6 Crores	2/4 Crores
2. Non-residential buildings	7.5/15 Crores	5/10 Crores	2/4 Crores
3. Circuit House, Inspection Bungalows, Rest sheds & Office-cum-residential buildings	3/6 Crores	2/4 Crores	1/2 Crore
4. Sanitary and Water supply installations:			
a. Non-residential	75 Lakhs/ 1.5 Crores	50 Lakhs/1 Crore	20/40 Lakhs
b. Residential	50 Lakhs/ 1 Crore	20/40 Lakhs	10/20 Lakhs
5. Electrical installations:			
a. Non-residential	75 Lakhs/ 1.5 Crore	50 Lakhs/ 1 Crore	20/40 Lakhs
b. Residential	50 Lakhs/ 1 Crore	20/40 Lakhs	10/20 Lakhs
6. Rural Water Supply	2/4 Crores	1/2 Crore	50 Lakhs/ 1 Crore
7. Communication	5/10 Crores	3/6 Crores	2/4 Crores

Power of administrative Departments other than the Revenue, Works, Water Resources, Energy, Rural Development, Housing & Urban Development and Scheduled Tribe and Scheduled Caste Development Departments to accord A/A are double the financial limits indicated for HoDs above.

Notes:

1. Monetary limits for buildings include Sanitary, Water-Supply and electrical installations.
2. In all cases, the power should be exercised after obtaining technical advice of competent engineering personnel.
3. The powers of HoDs of engineering organisations under the Works, Rural Development Department, Water Resources, Energy and Housing & Urban Development Department shall



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be governed by the provisions of the OPWD Code and special or general orders issues by the Govt. from time to time.

4. In respect of residential buildings, circuit houses, inspection bungalows and sanitary water supply and electrical installations, where type plans and monetary limits have been prescribed with concurrence of the Finance Department, further concurrence of the finance Department will not be necessary for according A/A irrespective of monetary limits.
5. It shall be the responsibility of the Works Department to revise type plans consequent to revision in design or SoR from time to time and inform the Departments of Govt. and subordinate offices of the changes in the type plans and monetary limits.
6. A group of works forming one project shall be considered as one work for the purpose of according A/A.
7. Cases where revision of estimate requires revised A/A beyond the monetary limits prescribed in favour of HoDs/Administrative Departments as the case shall be referred to the Administrative Department/Finance Department for approval/concurrence.
8. The enhanced delegation of financial power as mentioned above would be exercised by the concerned authorities with the following stipulations:
 - i. In case of HoDs, the **power** shall be exercised by the head of the Department with concurrence of the Accounts Officer/Financial Advisor-cum-Chief Accounts Officer. In case of Administrative Deptts., the power shall be exercised by the concerned Secretaries of the Departments with concurrence of FA or AFA in the absence of FA in the Department.
 - ii. The A/A can be accorded by the competent authority only when there is budget provision of minimum 15% of the project cost. Tenders for these works can only be processed when there is budget provision of minimum 15% of the project cost.
 - iii. While making budget provision for the new projects, it must be ensured that adequate provision has been made for the on-going projects to ensure completion of the projects in time and funds required for completion of projects identified under Zero based investment review are fully provided within the available ceiling communicated by Finance/P&C Department.
 - iv. While preparing estimate for works, the current SoR shall be taken into account. The estimate shall have to be countersigned by the authority competent to accord TS as per Para-6.3.2 of the OPWD Code. Litigation free land is available for execution of the project and has been acquired.
 - v. Selection of Executing Authority has been finalised.
 - vi. Plan and estimate for the project has been prepared by the Executing Authority and approved by the Technical Authority and adequate fund is available for completion of project in scheduled time period (Notification No. 701/F dated 06.01.2004).



Annexure 6.2B: Delegation of Power to Public Works Officers

Particulars	Designation of Officer	Extent of Power (in Lac Rupees)			Remark
		Existing	Proposed		
1. Accord of Administrative Approval					Refer para 6.3.1 of OPWD Code & Manual WD OM No. 6762 dated 26.06.2013
a. Building (Non-Residential)	EIC	600	1000		
	CE	400	600		
	SE	-	20		
	EE/DO	-	5		
b. Building (Residential)	EIC	400	600		
	CE	300	400		
	SE	-	20		
	EE/DO	-	5		
c. Irrigation Works	EIC	1000	1500		
	CE	600	1000		
	SE	15	30		
	EE/DO	-	5		
d. Communication	EIC	1000	1500		
	CE	600	1000		
	SE	15	30		
	EE/DO	-	5		
e. Flood Control, Drainage	EIC	1000	1500		
	CE	600	1000		
	SE	5	10		
	EE/DO	-	2		
f. Public Health Works	EIC	600	1000		
	CE	400	600		
	SE	15	30		
	EE/DO	-	5		
g. Electrical Works	EIC	600	1000		
	CE	400	600		
	SE	15	30		
	EE/DO	-	5		
h. Deposit and Contribution Works	EIC	Full Powers	Full Powers		
	CE	Full Powers	Full Powers		
	SE	20	400		
	EE/DO	0.5	100		



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Particulars	Designation of Officer	Extent of Power (in Lac Rupees)			Remark
		Existing	Proposed		
i. Sanitary and Water Supply to Non-residential Buildings	EIC	60	90		
	CE	40	60		
	SE	10	15		
	EE/DO	-	-		
j. Sanitary and Water Supply to Residential Buildings	EIC	20	30		
	CE	15	25		
	SE	5	10		
	EE/DO	-	-		
k. Electrical Installation to Non-residential Buildings	EIC	60	90		
	CE	40	60		
	SE	10	15		
	EE/DO	-	-		
l. Electrical Installation to Residential Buildings	EIC	20	30		
	CE	15	25		
	SE	5	10		
	EE/DO	-	-		
m. Rural Water Supply Works	EIC	600	1000		
	CE	400	600		
	SE	15	30		
	EE/DO	-	5		
n. Other Items	EIC	20	30		
	CE	15	25		
	SE	-	-		
	EE/DO	-	-		
o. Inaugural Ceremonies	Work above 1 Cr	-	1		Refer para 6.2.5 of OPWD Code & para 6.2.2 of Manual
	Work upto 1 Cr	-	0.2		

Notes:

1. The enhanced powers in respect of 'Communication' and 'Public Health' works shall be subject to the restriction that, this may be exercised in respect of works which form part of the approved programme in the Capital Budget. The power to accord administrative approval in respect of 'Flood Control', 'Drainage', 'anti-sea Erosion Project' shall be exercised only after obtaining approval of the schemes from the competent authority.
2. In case of works which are classified as debitable to Revenue head, the financial powers should be limited to 50 per cent of the above.
3. In respect of residential buildings the enhanced powers will be subject to the condition that the building will conform to the standard type designs approved by Government.



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Particulars	Designation of Officer	Extent of Power (in Lac Rupees)			Remark
		Existing	Proposed		
2. Accord of Technical Sanction					Refer para 6.3.2 of OPWD Code & Manual WD OM No. 6762 dated 26.06.2013 These powers are exclusive of charges for general establishment and T & P & Contingency
a. Original Works	EIC	Full Powers	Full Powers		
	CE	Full Powers	Full Powers		
	SE				
	Roads, Bridges & Buildings	400	400		
	Irrigation, Flood Control, Drainage, storage reservoir, drinking water supply	400	400		
	PHE	200	200		
	GED	200	200		
	EE/DO				
	Roads, Bridges & Buildings	100	100		
	Irrigation, Flood Control, Drainage, storage, reservoir, drinking water supply	100	100		
	PHE	50	50		
	GED	50	50		
b. Repair Works	EIC	Full Powers	Full Powers		
	CE	Full Powers	Full Powers		
	SE	Full Powers	400		
	EE/DO	100	100		
	AEE/DEE/SDO (Ordinary Repair)	0.3	2		

Notes:

1. The powers indicated above will be exercised by the public works officers of the concerned branch of public works (Civil, Electrical and Public Health).
2. Any group of works which forms one project, shall be considered as one work and the necessity of obtaining sanction of higher authorities cannot be dispensed with for the fact that the cost of each component work in the project is within the sanctioning power of the sub-ordinate authorities (In this connection para 6.1.3 may be seen).



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Particulars	Designation of Officer	Extent of Power (in Lac Rupees)			Remark
		Existing	Proposed		
3. Powers to Sanction Estimate for Purchase of Stores, Tools and Plants					
a. Tools and Plant (New Supply)	Adm. Department	Full Powers	Full Powers		Refer para 6.3.5 of OPWD Code & para 6.3.4 (B) of Manual
	EIC	-	50		
	CE	10	25		
	SE	2.5	10		
	EE/DO	0.1	5		
b. Tools and Plant (Repair & Carriage)	Adm. Department	-	-		
	EIC	-	Full Powers		
	CE	Full Powers	Full Powers		
	SE	1	5		
	EE/DO	0.2	2		

Notes:

1. Except in a case of purchase or manufacture not exceeding Rs. 10,000 for which estimates may not be required. Stores including tools and plant can only be purchased or manufactured against the sanctioned estimates.
2. In case of tools and plant, the sanctioned estimates will lapse at the close of the financial year to which the estimates relate.
3. Orders in case of tools and plant, place against the sanctioned estimates, but the same not being received before the end of the financial year, fresh estimates, subject to the budget provision, should again be prepared.
4. The estimates sanctioned under tools and plant i.e. 'new supply' and 'repairs and carriage' should be limited to the budget provision.
5. A provision-slip should be attached to each estimate showing the budget provision upto the date of sanction and the balance amount available. The same procedure shall also be followed in case of special tools and plant.
6. When it is proposed to purchaser materials directly chargeable to work, there should be a specific provision on the original estimate for the value and quantity of materials.
7. Estimates should not be split up to avoid obtaining sanction from a higher authority.
8. Subject to the estimate available with the concerned items specified thereon Departmental Mechanical Engineers shall exercise the powers under para 6.3.5.



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Particulars	Designation of Officer	Extent of Power (in Lac Rupees)			Remark
		Existing	Proposed		
4. Write off/Disposal of Stores					Refer para 6.3.7 of OPWD Code & para 6.3.5 of Manual
a. Loss due to depreciation	Adm. Department	Full Powers	Full Powers		
	EIC	-	2		
	CE	0.2	1		
	SE	0.1	0.4		
	EE/DO	Nil	0.1		
b. Loss Stores due to theft, fraud or negligence	Adm. Department	0.2	Full Power		
	EIC	-	1		
	CE	0.1	0.5		
	SE	0.01	0.25		
	EE/DO	0.001	0.05		
c. Loss Stores not due to theft, fraud or negligence	Adm. Department	0.5	Full Power		
	EIC	-	1		
	CE	0.1	0.5		
	SE	0.01	0.25		
	EE/DO	0.001	0.05		
d. Loss cash both due to or not due to theft, fraud or negligence	Adm. Department	0.04	1		
	EIC	-	0.5		
	CE	0.02	0.25		
	SE	Nil	0.1		
	EE/DO	Nil	-		
e. Issue of orders declaring stores other than those referred under (a), (b), (c) & (d) above surplus or unserviceable, the original value of article estimated if not known	Adm. Department	Full Powers	Full Powers		
	EIC	-	Full Powers		
	CE	0.5	20		
	SE	0.25	5		
	EE/DO	0.01* *not more than 0.05 in a year	1		
f. Issue of orders	Adm.	Full Powers	Full Powers		



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Particulars	Designation of Officer	Extent of Power (in Lac Rupees)			Remark
		Existing	Proposed		
for disposal of stores, declared by competent authority to be surplus or unserviceable	Department				
	EIC	-	Full Powers		
	CE	2	20		
	SE	0.4	5		
	EE/DO	0.05* *not more than 0.25 in a year	1		
g. Sale to private persons at full value plus 10 percent (unless waived by SE in respect of surplus stock which in his opinion would otherwise be unsalable) provided the sale do no cause inconvenience to public service.	Adm. Department	Full Powers	Full Powers		
	EIC	-	Full Powers		
	CE	0.2	5		
	SE	0.1	1		
	EE/DO	0.02	0.1		
h. Write off from the returns of tools and plant for which full value has been recovered	EE/DO	Full Power	Full Power		
i. Write off from the returns of tools and plant for which part value has been recovered	Adm. Department	Full Powers	-		
	EIC	-	Full Powers		
	CE	0.05	1		
	SE	0.01	0.2		
	EE/DO	0.002	0.05		
j. Adjustment of losses on manufacture account	CE	-	Full Power		
	SE	Full Powers	15% of estimated rate of outturn		
	EE/DO	10% of estimated rate of outturn	10% of estimated rate of outturn		



Particulars	Designation of Officer	Extent of Power (in Lac Rupees)			Remark
		Existing	Proposed		
Notes:					
<ol style="list-style-type: none"> Loss under (a) above may be due to <ol style="list-style-type: none"> normal fluctuation in market price, wear and tear, lack of foresight in regulating purchase and (iv) negligence after purchase. Power under clauses (b)(i) and (ii) above will be exercised in- respect of actual losses of stores as opposed to losses of stock due to depreciation. Losses under (b)(ii) may be due to an act of nature, and other calamities or accidents such as fire enemy action, obsolescence etc. The officer should himself verify the articles mentioned in the survey report and record facts in the sanction order, before sanctioning any survey report under clause (c). When it is not within the power of the Chief Engineer, he should himself furnish a certificate with his recommendation to the Administrative Department. The authority issuing orders clause (d) should, after the disposal of stores of which value accounts are kept, determine and intimate to Audit the net amount to be written off to the final head (to be specified) as 'Loss on stock', To take action under clause (a) above, see also paragraph 7.2.22 of C.P.W.A. Code. The recovery in all such cases should be made in cash in advance. Full value or book value means the cost on acquisition In respect of clause (f), the recovery may be in full, either by depreciation due to constant use of tools and plant or by cash on account of loss. Where part recovery has been made by depreciation or when recovery has been made partly by depreciation and partly by cash, clause (g) may be referred to 					
5. Procedure for disposal of Govt. building without land					Refer para 6.3.9 (iv) of OPWD Code & para 6.3.6 of Manual
a. Authority competent to accept the highest bid/ tender at or exceeding the reserve price received in the auction	EIC	-	Full Powers		
	CE	Exceeding 2	50		
	SE	0.5 to 2	20		
	EE/DO	Upto 0.5	5		
Note:					
<ol style="list-style-type: none"> The power is based on the current cost of replacement of the building. The decision to accept bid/tender below reserve price shall be exercised by next higher authority competent to accept the bid/tender in respect of buildings exceeding Rs.50 lakhs, the Chief Engineer should refer the matter to Government for a decision with the concurrence of the Finance Department. 					



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Particulars	Designation of Officer	Extent of Power (in Lac Rupees)			Remark
		Existing	Proposed		
b. Acceptance of bid/tender in respect of which only single tender is received	EIC	-	Full Powers		Refer para 6.3.9 (v) of OPWD Code & para 6.3.6 of Manual
	CE	1	10		
	SE	0.5	5		
	EE/DO	0.1	1		

Note:

1. With reference to the current cost of replacement, the reserve price for such materials should be fixed by the Divisional officer and approved by the Superintending Engineer.
2. The Divisional Officer shall accept the highest bid/tender at or exceeding the reserve price. The description to accept the bid or tender below the reserve price shall be exercised by the Superintending Engineer.
3. In case of emergency, buildings instead being dispose of by call of tenders may be dismantled departmentally with the prior sanction of the Administrative Department. The-materials obtained after dismantlement should be recorded in the Measurement Book and taken to stock. If the materials are not required for department use, the same may be disposed off in the manner indicated above

6. Sanction of Survey Report for sale dismantling & write off of public buildings

Powers to sanction Survey report for sale dismantling and write off of public buildings	Govt.	Above 0.5	Full Power		Refer para 6.3.11 of OPWD Code & 6.3.6 of Manual Note: Powers is for book value & not depreciated value
	EIC	-	20		
	CE	0.5	10		
	SE	0.2	5		

Notes:

1. For purpose of determining the sanctioning authority the book value of individual building and not all the buildings decided for sale of dismantlement or write off should be taken, where several buildings are situated in a compound.
2. When it is proposed to sell or dismantle a portion of the buildings, the value of the entire building and not a portion shall be taken for the purpose of determining the authority competent to sanction it.

7. Acceptance of Lowest tender (with or without negotiation)

	CE (with approval of Govt.)	Full Power	Full Power		Refer para 6.3.15 of OPWD Code & para 6.3.8 of Manual
	CE (With approval of EIC)	1000	1000		



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Particulars	Designation of Officer	Extent of Power (in Lac Rupees)			Remark
		Existing	Proposed		
	CE(Under his own authority)	700	700		
	SE	400	400		
	EE	100	100		
	AEE/DEE/SDO	-	3		
8. Acceptance of Single Tender (With or Without negotiation)					
	CE (With Approval of Govt.)		Full Powers		Refer para 6.3.15 of OPWD Code & para 6.3.8 of Manual
	CE (With approval of EIC)		700		
	CE (Under his own authority)		400		
	SE		100		
	EE		3		
	AEE/DEE/SDO		-		
9. Powers to sanction expenditure and approve engagement of Consultants					
	Administrative Department	200	300		Refer para 3.5.5 (v) of Code & 3.5.3 F of Manual
	Head of Department (EIC/ CE)	50	100		
	SE	-	20		
	EE	-	10		
10. Authorities Competent to Purchase Goods					
Authority	Power to execute Contracts and sanction purchases	Power to sanction contingent expenditure	Proposed		Remark
Administrative Department	Full Power	Full Power			Refer para 3.5.5 (vi) of Code & 3.5.3 G of Manual
Head of Department (EIC/ CE)	Rs. 500/ 1000 lakh in each case	Rs. 10/ 20 lakh in each case (recurring) Rs. 50/ 100 lakh in each case (non-recurring)			



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Particulars	Designation of Officer	Extent of Power (in Lac Rupees)			Remark
		Existing	Proposed		
SE	-	-	Rs. 5 lakh in each case (recurring) Rs. 25 lakh in each case (non-recurring)		
EE	-	-	Rs. 1 lakh in each case (recurring) Rs. 2 lakh in each case (non-recurring)		
11. Award of Work without call of Tender (Work order or k2) for urgent and emergent works like natural disaster (the amount indicated is the value of each K-2 contract)					
	CE (With Approval of Govt.)		Full Power		Refer para 3.5.3 (H) of OPWD Manual
	CE (With approval of EIC)		10 (Annual limit 500)		
	CE(Under his own authority)	0.5	5 (Annual limit 350)		
	SE	0.15	2 (Annual limit 100)		
	EE (with approval of SE)	0.1	0.5 (Annual limit 25)		
Note: Chief Engineer can split of both non-plan and plan work up to Rs. 25 lacs. SE can split of plan work upto Rs. 5 lacs, and he can split of non-plan work upto Rs. 5 lacs.					
12. Sanction of Extra/substituted item and deviation in quantities of the agreement items					Refer para 6.3.17 of OPWD Code & para 6.3.10 of Manual
	EIC	-			
	CE	Full Powers Subject to net value these items do not exceed 10% of the value of the contract	Full Power		



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Particulars	Designation of Officer	Extent of Power (in Lac Rupees)			Remark
		Existing	Proposed		
	SE	Full Powers subject to net value these items do not exceed 10% of the value of the contract or Rs. 50,000 whichever is less	10% of the Contract value or 10% of power to accord technical sanction whichever is lower		
	EE/DO	Power till net value these items do not exceed 5% of the value of the contract or Rs. 10,000 whichever is less	10% of the Contract value or 2% of power to accord technical sanction whichever is lower (The SE shall form a Committee for approval of rate for non-schedule items)		
	AEE/DEE/SDO	Powers till net items do not exceed 5% of the value of the contract accepted by him or Rs. 250 whichever is less	--		
13. Write off of irrecoverable revenue					Refer Para 6.4.1 of OPWD Code & Manual
	EIC/CE	0.05	1		
	SE	0.02	0.25		



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Particulars	Designation of Officer	Extent of Power (in Lac Rupees)			Remark
		Existing	Proposed		
14. Sale of dead and Fallen trees					Refer Para 6.4.2 of OPWD Code & Manual
	SE	Full Power	Full Powers any girth, any no. of trees		
	EE/DO	Rs. 500	Full Power upto 10 trees girth up to 122 cm		
	AEE/DEE/SDO	Rs. 250	Full Power upto 3 trees girth upto 122		
15. Extension of time (EOT)					Refer Para 3.5.32 Note (1) of OPWD Code & para 3.5.16 (b) of Manual
	EIC	All officers are empowered to grant EOT for contract accepted by them up to a period equivalent to the stipulated period, beyond which next higher authority	All officers are empowered to grant EOT for contract accepted by them upto a period equivalent to half the stipulated period, beyond which next higher authority		
	CE				
	SE				
	EE				



Annexure 6.3: Systematic Appraisal and Approval of new Schemes or new Services under Non-Plan and State plan Schemes and where the Scope of an Existing Scheme is Proposed to be Substantially Altered and/or Cost Estimate of Projects/Schemes are to be Revised

(Reference para 6.2.1 (c) of Manual)

Systematic appraisal and approval of new schemes or a new service where the scope of an existing scheme is proposed to be substantially altered and cost estimate of projects/schemes to be revised was under consideration of the State Government for some time past in line with the Standing Finance Committee (SFC) and Expenditure Finance Committee (EFC) of Government of India. After careful consideration, it has been decided to prescribe the detailed procedure for appraisal and approval of schemes/Revised Cost estimate as mentioned hereunder.

1. Authority for appraisal of new scheme or a new service, or where the scope of an existing scheme is proposed to be substantially altered:

- i. New scheme or a new service, or where the scope of an existing scheme is proposed to be substantially altered shall be subject to appraisal at different level depending upon the financial estimated outlay of the scheme as indicated below.

Sl. No.	Financial Limit	Appraisal Forum
1	Upto Rs. 5.00 crore under State Plan	Concerned Administrative Department in consultation with the Financial Advisor of the Administrative Department.
	Above Rs. 5.00 crore and upto Rs. 25.00 crore under State Plan	Standing Finance Committee of the Administrative Department under the Chairmanship of Secretary concerned with Financial Advisor as Member-Convenor, Special Secretary/Additional Secretary/Joint Secretary in-charge of the scheme concerned In the Department, concerned Heads of Department, representative of Finance Department, Planning & Coordination Department and representative of related Department, if required.
	(a) All Non-Plan schemes irrespective of the cost (b) State Plan Schemes costing more than Rs. 25.00 crore	Expenditure Finance Committee (EFC) headed by Secretary, Finance and consisting of Secretary and Financial Advisor of the Administrative Department, concerned Heads of Department, Special Secretary/Additional Secretary, Planning & Coordination Department, representative of line Department not below the rank of Additional Secretary and Special Secretary/Additional Secretary/Joint Secretary/Deputy Secretary of Finance Department in-charge of Resources/Expenditure Control Branch, Financial Advisor of the Administrative Department will be Member-Convenor



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- ii. Decision whether the scope of the scheme has not been substantially altered, is to be taken by the Secretary of the Administrative Department in consultation with the Financial Advisor of the concerned Administrative Department. However, to facilitate a decision on uniform basis, as far as possible, the following changes shall be deemed to constitute alteration in the scope of a scheme and which may be taken into account while taking such a decision.
 - a. Any change that may lead to a change in the objectives of an approved scheme (which includes any material change in its physical scope).
 - b. Any change in the programmes through which the objectives of an approved scheme are to be achieved.
 - c. Any change in the pattern of resources including funds.
- iii. The relevant detailed information for appraisal by the appropriate forum as indicated above would be furnished in the format at Annexure.

2. Authority for approval of the new scheme or new service or substantial alteration of the existing scheme.

- i. The authority competent to accord approval/sanction of the new scheme or new service or substantial alteration of the existing scheme would be as indicated below:

Sl. No.	Schemes/Service Outlay	Authority competent to accord sanction/approve the outlay of the new schemes/services outlay/alteration of the existing scheme	Remark
1	(a) Upto Rs.100 crore in case of Non-Plan	Minister in-charge of the Administrative Department	Prior concurrence of P&C Department and Finance Department is deemed to have been taken at the time of appraisal and further separate concurrence is not necessary.
	(b) Upto Rs.100 crore under State Plan schemes		
	(a) Above Rs. 100 crore and upto Rs.250 crore in case of Non-Plan	Chief Minister	Prior concurrence of P&C Department and Finance Department is deemed to have been taken at the appraisal stage and further separate concurrence is not necessary
	(b) Above Rs.100 crore and upto Rs.250 crore in case of State Plan schemes		
	(a) Above Rs.250 crore in case of Non-Plan	Cabinet	Prior concurrence of P&C Department and Finance Department is deemed to have been taken at the appraisal stage and further separate concurrence is not necessary.
	(b) Above Rs.250 crore in case of State Plan schemes		



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- ii. Approval/sanction of the schemes/services includes design, delivery mechanism, financial outlay and all other relevant parameters for monitoring and evaluation.
- iii. Irrespective of the recommendations of the Appraisal Forum, specific approval/concurrence of Finance Department for creation of new posts is mandatory.
- iv. The cost ceilings specified in para-2(i) and sub-para (i) above will be calculated for the projected cost for a period of five years.

3. Appraisal and approval of the revised cost estimates of the projects/schemes

- i. The Revised Cost Estimates (RCE) of the projects/ schemes, both new which have gone through appraisal forum as well as on-going projects/schemes which have not passed through appraisal forum shall have to be appraised and approved in the following manner:
 - a. Projects/schemes with original outlay up to Rs 25.00 Crores under State Plan schemes arising due to change in statutory levies, exchange rate variations and price escalation within the approved project time cycle and the cases involving further cost increase upto 20% of the original cost (excluding the change statutory levies, exchange rate variations and price escalation within the approved project time cycle) is to be appraised by the Standing Finance Committee (SFC) of the Administrative Department and approved by the Minister-in-Charge of the concerned Administrative Department.
 - b. RCE cases Projects/schemes indicated above (upto Rs 25.00 crores under State Plan schemes), involving increase of more than 20% after excluding the increase due to change in statutory levies, exchange rate variations and price escalations within the approved project time cycle will require appraisal by Expenditure Finance Committee (EFC) headed by Secretary, Finance Department and approval by the Chief Minister.
- ii. RCE cases Projects/schemes with original out-lay exceeding Rs 25.00 crores and upto Rs. 250.00 crore in case of State Plan schemes and all Non-Plan schemes costing upto Rs. 100.00 crore arising due to change in statutory levies, exchange rate variations and price escalations within the approved project time cycle as well as the cases involving further cost increase (excluding the changes due to statutory levies, exchange rate variations and price escalation within the approved project time cycle) will require appraisal by Expenditure Finance Committee headed by Secretary, Finance Department and approval of the Chief Minister.
- iii. RCE cases of the projects/schemes with original outlay of above Rs.250.00 crore under State Plan and above Rs.100.00 under Non-Plan schemes arising due to changes in statutory levies, exchange rate variations, price escalation within the approved project time cycle as well as the cases involving further cost increase (excluding the change due to statutory levies, exchange rate variations and price escalation within the approved project time cycle) shall require appraisal at the level of the Expenditure Finance Committee and approval by the Cabinet.

4. Procedure for appraisal by Standing Finance Committee/Expenditure Finance Committee

The Administrative Department shall prepare Standing Finance Committee/Expenditure Finance Committee Memorandum in the format attached with this annexure appended to this Office



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Memorandum. The Secretary of the Administrative Department shall approve the Memorandum after which the Administrative Department shall circulate the same to Finance Department, Planning & Coordination Department and other Departments whose functional jurisdiction as per the Rules of Business is likely to be affected. In case of beneficiary oriented Social Sector Schemes. SC & ST Development Department and Women & Child Development Department shall be consulted. The consulting Departments on receipt of copy of the Memorandum shall within 2 weeks' time furnish their responses. In case no reference is received within 2 weeks the Administrative Department shall issue a reminder to the consulting Departments insisting for their response within further 7 days' time. After conclusion of such period the Chairman of the Committee shall fix up a date for the meeting. **In the absence of clear cut 2+1 week prior notice, the memorandum shall not be taken into consideration for appraisal.**

5. On receipt of comments from the consulting Departments, the Administrative Department will prepare a statement showing the observations of the consulting Department and response of the Administrative Department to each such observation. The statement will be circulated along with the notice for convening the meeting. At least three clear days will be allowed between the issue of notice for the meeting and the scheduled date of the meeting.
6. **Procedure for approval of new scheme or a new service, or where the scope of an existing scheme is proposed to be substantially altered after appraisal:**

After appraisal of the new schemes or a new service or where the scope of an existing scheme is proposed to be substantially altered and cost estimate of projects/schemes to be revised. The concerned Administrative Department will take the approval of the Competent Authority as indicated in Paragraph-3 and 4 above keeping in view the provisions of Rules of Business and internal delegation made within the Department.

7. Schemes funded under RIDF, Externally Aided Project, AIBP, Finance Commission grants etc. are not required to be placed for appraisal and/or approval as these are governed by separate appraisal and approval mechanisms. It is the new scheme/service or programme as a whole which needs appraisal and approval but not the different item/component of work thereunder, which is to be sanctioned/approved by the competent authority as per the Delegation of Financial Power Rules and extant codal Provisions! Rules and Regulations. As such the individual items of work like- construction of buildings. Roads and Bridges, Irrigation canals etc. under different plans and programmes so appraised and approved are not required to be appraised and approved again.
8. After the schemes have been appraised and approved, the Administrative Department concerned should furnish a Memorandum in Form-I to Finance Department (Both for Non-Plan and State Plan) and for State Plan schemes to Planning & Coordination Department containing the relevant information relating to the new scheme or new service or where the scope of an existing scheme is proposed to be substantially altered for enabling the Finance Department and Planning & Coordination Department to take appropriate follow up action. Cost of the scheme appraised/approved will normally remain valid for and limited to 5 years unless otherwise specifically stipulated at the appraisal/approval stage.



9. These instructions shall be deemed to be a part of Odisha General Financial Rules & Delegation of Financial Power Rules and the relevant provisions thereof would stand modified/revised accordingly. The financial limits stipulated In Paragraph-2, 3 and 4 above will automatically stand revised as and when the Delegation of Financial Power Rules are amended from time to time.
10. This has been concurred-in by the Planning & Coordination Department vide their UOR No. 284/PL-I, dt. 17.11.2012.

FORMAT FOR SFC/EFC MEMORANDUM

(Reference Para 4 of Annexure 6.2)

1. Project Identification

- 1.1 Title of the project/scheme:
- 1.2 Name of the sponsoring agency (Department/Autonomous Body/PSU):
- 1.3 Proposed duration of the project
- 1.4 Total cost of the project over the proposed duration

2. Project Status

- 2.1 Please indicate which category the project belongs to:
 - (a) Continuing scheme from past Plan periods and included in current Plan period.
 - (b) New Plan Scheme proposed in the current Plan period/New Plan scheme not included in the current Plan period
 - (c) Revised Cost Estimate (RCE) proposal
- 2.2 If project pertains to category 2.1 (a), please summarise the benefits already accrued and expenditure already incurred along with an independent evaluation of the past performance of the project scheme.

3. Justification for the Project

- 3.1 The justifications for taking up/continuing the project or scheme may be provided.
- 3.2 The alternatives that have been considered before firming up the design of the project may be stated. (This should also include alternate modes of project delivery, e.g. outsourcing PPP etc. that have been considered).
- 3.3 Please state whether the project proposal has objectives and which overlap with projects/schemes being implemented by the same or another agency (Department/Government Agency). In cases of overlap, please state why the project scheme needs to be considered as a separate standalone effort.

4. Project Objectives and Targets

- 4.1 The objectives of the project may be mentioned. These objectives should flow from the project justification.



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- 4.2 The expected date of project/scheme completion may be stated. This should be realistic and supported with a chart indicating timelines for the important activities, with a critical path analysis, identifying the main constraints.
- 4.3 The specific targets proposed to be achieved of the project scheme may be mentioned. These targets should be necessary measurable. These should also be monitor-able, against baseline data. The baseline may be indicated.

5. Project Design

- 5.1 Briefly explain the project Design. This should include all components of the project.
- 5.2 In case the project or scheme is location specific, please state the basis for election of such location.
- 5.3 If the project involves creation/modification of structural and engineering assets or change in land use plans, disaster management concerns as brought out in OM No. 37(4)/PF-III2003 dated 19-06-2009 of Plan Finance-II Division, Department of Expenditure, Ministry of Finance available in the web-site of Ministry of Finance should be assessed. A self-certification in this regard may be enclosed with the SFC/EFC memo.
- 5.4 In case of beneficiary oriented project/scheme, the mechanism for identification of the beneficiary and the linkage of beneficiary identification with UID numbers/National Population Register/Photo Identity Card may be indicated as advised in O.M. No. 1 (3)/PF-1112001 dated 09.08.2010 of Plan Finance-II Division, Department of Expenditure, Ministry of Finance available in the web-site of Ministry of Finance.
- 5.5 Wherever possible, the mode of delivery should involve the Panchayati Raj Institutions and Urban Local Bodies. Where this is intended, the preparedness and the ability of the Panchayats for executing the project may be indicated. If exceptions are to be made, the reasons may be explained.
- 5.6 In case the project involves land acquisition or environmental clearances, the specific requirements and the status in this regard may be indicated.
- 5.7 The legacy arrangements after the scheduled project duration may be mentioned. In case the project creates assets, arrangements for their maintenance and upkeep may be stated. (For example the project assets may be taken over and maintained by the State Government/PRIs; ULBs).
- 5.8 Whether the guidelines of Bureau of Energy Efficiency and other related guidelines for energy efficient buildings etc. have been considered I complied with.
- 5.9 Whether the project is secured against natural/man-made disasters like floods, cyclones, earthquakes, tsunamis etc.

6. Project/Scheme Cost

- 6.1 Please provide the project cost estimate for its scheduled duration along with a break-up of year-wise, component-wise expenses segregated into non-recurring and recurring expenses. It may also be indicated whether land is needed, if so whether which agency is



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providing for it, and in case the cost of land is to be booked to the project, whether it has been included in the estimates.

- 6.2 Estimated expenditure on project administration (including expenses on consultants, etc.) may be separately indicated.
- 6.3 The basis of these cost estimates along with the reference dates for normative costing may be provided. The firmness of the estimate may be indicated along with the cost components that can vary the factors that could cause the variation and the extent of the expected variation.
- 6.4 In case the project/scheme involves payout of subsidy, the year wise expected outgo, up to the last year of payout, may be indicated.
- 6.5 In case the project/scheme intends to create capital assets, employ specialised manpower or involves other activities that necessitate a Recurring Cost of Capital Expenditure (RCCE) (e.g., maintenance and upkeep costs of assets, salary costs of manpower, etc.) over the lifetime of the asset, such expenditures, on an annual basis, may be indicated in the project proposal.
- 6.6 It may also be stated whether the agency which would be assigned this legacy responsibility has been consulted and has agreed to bear the continuing recurring expenditure (e.g., the PRIs/ULBs may need to incur the maintenance and upkeep costs of assets created under Plan schemes).
- 6.7 The cost towards salary/fees emoluments of the project human resources as being proposed should be indicated (procedure for seeking approval of the human resource requirements is however detailed at para-7 below).
- 6.8 The component of the costs mentioned at 6.1-6.7, that will be shared by the State Government/PRIs/ULBs may be indicated.
- 6.9 In the event of fund transfer being made to PRIs/Urban local bodies or other organisations, "grants for creation of capital assets" may be indicated separately.

7. Project Human Resources

- 7.1 Please indicate whether the nodal officer directly in charge of the project has been identified. Details about his status, past experience in executing similar projects and balance tenure left for steering the project may also be mentioned.
- 7.2 In case posts (permanent or temporary) are intended to be created, such proposal may be sent on file to Finance Department separately. Such proposals may be sent only after the overall project proposal is recommended by the appropriate appraisal body (SFC, EFC, etc.). However, posts can be created only after approval/concurrence of Finance Department is obtained.
- 7.3 In case outsourcing of services or hiring of consultants is intended, brief details of the same may be indicated. It may also be certified that the relevant O GFR provisions will be followed which engaging the agency! consultant



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- 7.4 In case additional manpower requirement, please indicate the phased requirement over the project timeline {Le. year-wise break- up of the manpower requirement}.

8. Project Financing

- 8.1 The source of financing for the project may be indicated. In case of project already included in the FYP, the specific earmarking may be mentioned. In case of any deviations from this quantum, the sponsoring agency may indicate how the gap will be addressed.
- 8.2 The availability of funds in the budget at the present year and the requirements projected may be mentioned. In case of any deviations, please indicate how the gap will be addressed.
- 8.3 If external sources are intended, the sponsoring agency may indicate whether such funds have been tied up. In case firm commitment is not available, alternate plans for arranging funds may be indicated.
- 8.4 Whether the funding requirements have been fully tied up with Planning Commission may be indicated.

9. Project Viability

- 9.1 In case of projects which have identified stream of financial returns, the financial internal rate of return may be calculated. The hurdle rate is considered at 12%.
- 9.2 In case of projects where financial returns are not readily quantifiable (typically social development projects), the economic rate of return may be estimated.

10. Project Implementation, Monitoring and Evaluation

- 10.1 The administrative structure for implementing the project may be stated: In case new structures/entities etc. is by and large to be avoided. In case new structures are intended to be created for administering the scheme, the details of such structures and specific justification for the same may be provided. Such new structure should be proposed only if it is/has been established after proposed additional work.
- 10.2 A flow chart for the intended fund flow mechanism may be indicated. Funds flow for all schemes/projects should ordinarily be through the Government Departments/PSUs/PRIs/ULBs.
- 10.3 The monitoring framework for the project/scheme may be indicated. The arrangements for audit of the project may also be stated.
- 10.4 Measurable parameters for evaluation of impact and outcome with reference to the scheme objective should be indicated.
- 10.5 Period of evaluation such as mid-term/concurrent post project etc. and method of evaluation viz. in-house/third party will also be provided.

11. Project/Scheme Sensitivities

- 11.1 Any foreseeable constraints/uncertainties which can affect the technical design, costing and implementation of the project may be indicated.



11.2 The likely impact of these constraints/uncertainties on the project parameters may be stated. In particular, the sensitivity of the project cost, project schedule and project viability towards the possible constraints/uncertainties may be mentioned.

12. Project Period

12.1 The expected date of project completion may be stated. This should be realistic and supported with PERT chart of the important activities, with a critical path analysis, identifying the main constraints.

12.2 The project closure date should be also indicated beyond which further government support/disbursal of funds will not be required.

12.3 A time line for the project deliverables (i.e. measurable deliverables phased year-wise) may be included.

13. RCE Proposals

13.1 Details of physical progress achieved and expenditure incurred and commitment made so far may be given.

13.2 Date of latest approved, revised and proposed completion schedule of the project along with time overrun and reasons thereof may be elaborated. Revised cost as propose may be given.

13.3 Reasons of increase in cost may be given in the following manner

- (a) Price Escalation
- (b) Foreign Exchange variation
- (c) Statutory levies
- (d) Change in Scope
- (e) Addition/deletion
- (f) Under-estimation
- (g) Others (to be specified)

13.4 The underlying justification for increases in cost due to various factors may be explained.

13.5 Effect of revision in capital cost estimates on cost of production and profitability/viability with reference to earlier approved capital cost of the project.

13.6 Evaluation Reports by in-house/external agencies, Audit Reports etc. on the outcome of the projects, if any, should be brought out in the Memorandum.

13.7 Report of Departmentally related Standing Committee, if any, to fix the responsibility for cost and time overrun along with action taken report on its recommendations may be appended with the memo.



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Form-I

MEMORANDUM FOR PROPOSALS INVOLVING EXPENDITURE ON NEW SERVICE OR NEW INSTRUMENT OF SERVICE

Government of Odisha

Department of

MEMORANDUM

1. Statement of proposal

- a) Title of the proposal/scheme.
- b) Description of the proposal/scheme and its objects.
- c) Justification for the proposal/scheme and what alternatives have been considered.
- d) Description of the manner in which the proposal/scheme is proposed to be implemented including mention of agency through which the
- e) Scheme will be executed. Schedule of programme and target date of completion.

2. Financial implications of the proposal:

- a) Nature of the scheme (Plan- State/Central or Centrally sponsored – or Non- Plan.)
- b) Total outlay (recurring and non-recurring separately), its broad details and its year-wise phasing.
- c) (i) Plan allocation, in a Plan scheme; and
(ii) Budget provision in the current financial year;
if no Budget provision exists, how is the expenditure proposed to be met?
- a) Component of grant, loan and subsidy, if any, in the total outlay involved and their proposed terms.
- b) Number of posts, their pay scales and the basis adopted for staffing (Statement attached).
- c) Broad details of construction works, their justification and basis of estimates (Statement attached).
- d) Requirement of stores and equipment together with justification and cost (Statement attached).
- e) Achievement I return expected and other economic implications, if any.

3. a) Comments, if any, of the Planning & Coordination Department (for Plan Schemes only).

- b) Comments, if any, of other Departments which may have been consulted.
- c) Whether Appraisal made by SFC/EFC and approval by the competent Authority.

4. Supplementary information, if any.

5. Points on which decision/sanctions are required.

Secretary to the Government

Department of.....



C H A P T E R 7
S A F E T Y M A N A G E M E N T



7 Safety Management

7.1 Safety Management

7.1.1 General

The Construction and Maintenance/Operation works could be hazardous unless proper safety management plan is in place and its implementation is ensured right from the planning and design stage to its implementation and operation. Various legislation like, Construction Workers Act, Workmen Compensation Act, Industrial Dispute Act cannot be taken care of without having proper safety management. The safety in construction and maintenance has many facets but it broadly relates to safety of structure, safety of workers, safety of users of the facility, safety of public in general and fire safety. This can be achieved only through a system approach by assigning duties and responsibilities to different staff of the Department. The successful implementation of safety management also depends upon commitment from all persons working in the Department including planning/design consultants, contractors, and concessionaire etc. the implementation of SRS, backed by a management system is intended to result in a safe road network.

In general safety in Public Works can be ensured by:

- a. Placing the health and safety of all people ahead of the provisions of service.
- b. Adequately training staff in the safe performance of job and in the basic areas of accident prevention.
- c. Following all specific rules of the Department consistent with PWD's health and safety objectives.
- d. Taking corrective action for every incident with the potential to cause harm, whether such harm eventuates or not, and also in the case of every accident.
- e. Insisting on arrangements for the safe use, handling, storage and transport of equipment and substances.
- f. Insisting on adequate facilities and protective clothing & equipment to protect the health and safety of all employees.

7.1.2 Safe Road System (SRS)

In line with road sector policy adopted by the State, Safe Road System (SRS) shall be adopted, which is evolved admitting the fact that human body is too fragile and not able to tolerate the impact at all. In the new safety system approach, the road and vehicles are designed in such a way that it will forgive even if the road user commits a mistake. The road safety engineering interventions through all road side features shall be designed and installed giving special care and attention to Vulnerable Road Users. Moreover, all traffic control devices shall be forgiving type, implying that even if they are hit by mistake, these would absorb the impact energy to reduce the severity of crash and in this line the IRC codes and manuals are also being revised. Though a civil work contract for roads has been prepared and arranged based on earlier edition of IRC code, and if it is found that latest revision has much merits on safety aspects, then invariably the latest revision shall be **applicable**. **In addition, the Govt should pursue all-encompassing policy and implementation programmes through**



its concerned departments to improve the road user behaviour with the coordination of all other stakeholders of road safety.

One of the key objectives of OPWD is to have a Safe Road System (SRS) in the State. The SRS with its management is based on the Plan-Do-Check-Act (PDCA) methodology, which is a cyclical approach requiring strong leadership and commitment from top management. The rate, extent and timescale of this continual improvement process are determined by the OPWD in the light of economic and other circumstances. The stepwise processes are described below.

A. Step 1: Plan

- i. Identify the impacts the PWD can have through SRS, and map that impact across interested parties, and determine the organisational scope of an SRS, with reference to the identified needs throughout the state's network
- ii. Establish leadership commitment, adopting a long-term vision to eliminate death and serious injury in road accidents, to be achieved by incremental SRS targets, and the strategy to realise these shall be providing capacity and resources to establish, implement, maintain and continually improve the SRS by adopting safe system approach.
- iii. Determine risks and opportunities to eliminate through assessment of current road crash situation, wherever possible using measurable SRS objectives.

B. Step 2: Do

Implement and operate the SRS management and ensure that sufficient capacity is provided for the delivery of the key system functions.

C. Step 3: Check

Monitor and evaluate SRS performance, conduct internal audits and periodic reviews of the SRS management to identify opportunities for continual improvement, for achieving higher SRS results and for necessary changes in the SRS strategy and targets.

D. Step 4: Act

Improve the SRS management on a continual basis following review of SRS performance against SRS objectives and targets. SRS management system shall evaluate performance, deficiencies and nonconformities, which will suggest corrective action and opportunities for preventive action aimed at reducing the incidence and risk of death and serious injuries in road traffic crashes.

7.1.3 Coordination

Road safety has peculiar aspects as multiple agencies are involved and responsibilities are widely dispersed. A successful SRS management is based equally on coordination horizontally across different organisation (whether in different locations, or responsible for different functions) and interested parties (whether public or private organisations), and vertically within each part of the organisation. Different aspect requiring Coordination, Cooperation and Collaboration (3-Cs) among different Departments and agencies are given below:

- a. Odisha Works Department(OWD) and other Road/Highway Agencies (e.g. NHAI, Municipal Corporation, etc.), which are responsible for road construction and maintenance in the



State;

- b. Motor Vehicles Department/Licensing Authority which are responsible for issuing of driving licenses, motor vehicle registration and certificate of vehicle fitness;
- c. Police Department which is responsible for regulating traffic, enforcing laws and educating people and prosecution in case of **violations**/accidents;
- d. Town Planning Department/Development Authority which are responsible for land use planning; and
- e. Health Department which is responsible for management of emergency care/trauma care through established trauma centers.
- f. GA Department which has to deal with encroachment on ROW of the road.
- g. U&HDD under which all municipalities and PRD comes who give vending rights in the road area.
- h. Other Department responsible for laying utilities like power cable, water supply lines, sewer lines etc.

It is essential that activities of all of these agencies, involved **directly or indirectly** in road safety **aspects**, are coordinated. In order to implement the program relating to road safety and to continuously monitor and study road safety situation, the State Government Departments need to comprehensively organise and monitor road safety issues, like: (i) **road safety** education of the people; (ii) enforcement of rules, regulations and traffic discipline including control on overloading; (iii) policy on issue of driving licenses **as well as vehicle registration**; (iv) recruitment and training procedures of drivers and conductors of public transport/commercial vehicles and their working hours/conditions; and (v) road-worthiness of vehicles.

All these above issues shall be coordinated under an overarching GOO body/entity instituted with adequate powers. Their decision after availing necessary technical input from domain experts of respective department and agencies shall be binding and final. This will be also applicable in district and Panchayat level where the task undertaken by any Departments interfering with the road environment is likely to affect road safety.

7.1.4 Accountability

The engineering aspects of the road through planning, design, implementation and maintenance of roads are to be dealt by the PWD, wherein the engineers of Works Department will be held responsible for any defects in engineering measures in road stretch of their jurisdiction. While the part related to road infrastructure and its management will be addressed by OPWD, other areas like trauma care, driver and vehicle licensing, awareness creation and **road users'** behavioural aspects shall be attended through training, education and enforcement expected to be carried out by respective Departments. Being the custodian of roads, engineers of OPWD shall take the initiative to inform the state/district administration and respective stakeholder Departments for their compliance and action to enhance overall road safety situation.

The accountability and power of the coordination body/entity established by Government (i.e. GOO) for road safety will be mentioned in its formation with a view that various road safety actions



(through a structured Road Safety Action Plan) can be well coordinated among various stakeholder Departments.

7.1.5 Specific Role in Construction

Road safety is an important feature during initial planning for construction of a road. Following measures during planning & construction can contribute to road safety immensely.

- a. Safety conscious planning of new road network.
- b. Incorporation of safety feature in the design of new roads.
- c. Improvement of safety aspects of existing roads to avoid future problem.
- d. Improvement of hazardous locations (or black spots) on the network.

The **Transport Department** as road operator of the State roads (except those links, which are under concession) must insist that the standards and regulations for safe operation of road network under their jurisdiction are to be complied in letter and spirit, **and it shall be done in consensus with the Works Department**. If necessary, the Department may demand additional **resources in terms of capacity and funds** for safe operation **of the roads, and** that should be in writing and available in public domain. These additional demands regarding safety and traffic management issues, **may also** include the type of vehicles that can ply, axle load limit, limit on the vehicle height and width to be imposed due to any deficiency in roads and/or bridges, etc. Also, the speed limits are to be imposed due to geometric deficiencies and abutting land uses.

Additional safety equipment may be required for ensuring complete safety **(to meet SRS targets)**, such as barriers for traffic and worker safety, channelizing devices for traffic guidance, and signs (having sizes and colours based on the **standards and** traffic environment). **Some of the special arrangements in construction zones are,**

- a. Defining a set of working hours for work zones, like 24 hours or 12 hours on busy roads (depending on the level of technology used in the **execution** of work);
- b. Maximum length of detours, and minimum requirements for determining if a bypass is needed; and
- c. Requirements for the roadway that will be used for detour (including design and pavement standards and capacity requirements to ensure that safety is not compromised).

Before **starting** the road **construction** works, the road operator in coordination with the contactor/concessionaire (for PPP projects), must inform the public and residents living around the construction zone, about duration and possible time of road closure. Police and emergency services should also be fully engaged in understanding where and how a work zone is being implemented, along with the type of work being done and any detour, etc. that are planned.

The Department can demand that the contractor (or whoever requires a work zone to implement their work, such as road widening, road resurfacing, the laying of cables, pipes, utilities, etc.), should design and implement a safe work zone and use all necessary means to ensure safety for workers and road users, while maintaining sufficient traffic capacity. The Department may ask the contractor to take on the responsibility for informing the general public and surrounding community on



important information such as the work zone location and duration, the access issues, possible detours and other means of travelling through the area.

A variety of methods should be considered to inform the general public and surrounding community, including media (radio, TV, newspaper, websites) or through public gatherings or hearings. The permission of the Department must be obtained for any intervention along the roadway, including issues related to access management. Thus, the road operator will order the contractor to design and implement a safe work zone. The Department can request that the supervisor should pay particular attention to a work zone that is particularly complex, demonstrates clear risks, or **if the location** has a history of accidents or incidents.

Different parties and players in road construction and maintenance activities include i) Road Authority ii) Road Operator iii) Project Director/Engineer In-charge iv) Designer v) Road Safety Auditor vi) Concessionaire in PPP projects vii) Contractor viii) Supervision Consultant/Independent/Resident Engineer ix) Local Police x) Road User and xi) General Public/Communities. The roles and responsibilities described in IRC SP: 55 shall be applicable for all these players.

7.1.6 Safety Engineering Aspects for Roads

In order to tackle safety problems effectively through engineering interventions, it is necessary to apply measures at various stages in the development of road network. By incorporating good design principles from the start, it is possible to avoid many problems, for example, widening through roads at T-junctions to permit protected turns. Furthermore, incorporation of safety features (e.g. channelisation or pedestrian guardrails) during the design and construction phases can usually be undertaken at much lower cost and can make the road environment more 'forgiving', when a driver makes an error.

Even where the opportunities to intervene at the planning and design stages have not been taken, it may still be possible (although more expensive) to anticipate future problems and to improve existing roads by the introduction of safety measures, such as those required for speed management and others for operational control.

It must be appreciated and understood that missing of safety engineering interventions at planning and design stage would be very costly and also time consuming, compared to providing them at the design stage. In this context, the expertise/services of traffic engineer, transport planner and/or safety expert are to be availed for effective road geometric designs, and further the meticulous standalone design stage safety audit.

7.1.7 Road Safety Audit

Road Safety Engineering is a systematic data-led process for implementing road design and traffic management to effectively prevent and reduce road accidents. Road safety audit is a systematic method of checking the safety aspects of new road projects/schemes before they are built, and therefore, road safety audit is an accident prevention technique. In the project development stages, the safety audit shall be carried out in feasibility, preliminary design and detailed design stages. The process of road safety audit shall also include construction audit and commissioning (pre-opening) audit. The total process involves initiating audit, provision of project brief, undertaking audit, responding to audit and finalising actions based on audit recommendations for modifications in



design and BOQs. Various aspects are to be considered when undertaking audits and the following check list (IRC SP 88 for road safety manual) can be used.

1. Planning
2. Cross section
3. Alignment
4. Roadside communities
5. Junctions: General
6. Junctions: Additional check for roundabout
7. Junctions: Additional check for signal controlled junction
8. Special road users
9. Signs, markings and lightings, and
10. Roadside hazard

Road safety audit of new major highway projects and major works of rehabilitation and improvement should be done in order to reduce the risk of accidents and if they occur, to minimise their severity and cost. The task of road safety audit should be entrusted to an independent team comprising persons with knowledge and experience of road standards, engineering principles, safety management and accident investigation. The auditor will evaluate the project/scheme from safety angle, analyse the past accident records, and will carry out audit by "drive, ride, and walk" through the project/scheme and also by interacting with the users.

While undertaking road safety audit, relevant IRC publication shall be adhered. The IRC 67 For traffic signs, IRC 35 for pavement markings and IRC SP 41 for junction design and IRC SP 87 and IRC SP 84 and IRC SP 73 for design of projects taken up under PPP or non –PPP respectively for 6-lane, 4-lane and 2-lane schemes. Invariably the latest revision of IRC shall be referred. In addition, IRC SP 44 for Highway safety code also shall be complied.

7.1.8 Road Safety Assessment for Existing Roads

For the proper management of road safety, a reliable accident database is required. The best available source of accident data is the Police Department The accident form, while fulfilling the requirements of prosecution and court procedures, should also give summary information about the nature of accident, its location, possible causes with actual features of the road at the accident location. Based on this data, sites prone to accidents (black spots) shall be identified and prioritized for treatment. Factors contributing to accidents at the selected black spots shall then be analysed in detail, and appropriate counter-measures considered. Regular audit or assessment of existing roads enables hazard to be identified before an accident occur and to remedy those situations that are causing accidents.

Improvement of Black spots

Often there is insufficient fund available to cover routine and periodic maintenance, and therefore, road safety and related matters are usually low on the list of priorities. This is true, despite the fact



that road safety improvements is cost effective with very high savings (due to reduced accidents), which is many times the cost of countermeasures implemented. Hence the improvement of known hazards should form part of every road authority's annual program.

Drivers are often presented with misleading information or no advance warning, inadequate sight distance. The pedestrian facility may be absent, and as a result, accidents may occur because of a driver's inability to cope with the particular combination of circumstances and environment presented to them. By identifying and eliminating these features, which make the sites hazardous, engineers can improve road safety.

Apart from black spot improvement, which is single site program, other accident reduction programs such as mass action, route action and areas action shall also be taken up by OPWD according to the availability of funds.

7.1.9 Construction Stage Safety

During construction operations, the basic need is a safe environment both for workers and road users. The guiding principles, **as detailed in IRC SP: 55** are the following:

- a. Road users to be given adequate warning of the danger ahead with ample time for them to take appropriate action or manoeuvre; and all closures/diversions/detours to be notified well in advance;
- b. Providing safe and clearly marked buffer and work zones;
- c. Providing measures to guide and regulate traffic, and control driver behavior;
- d. Providing temporary diversions or secondary detours with proper transition lengths;
- e. Proper maintenance of construction zones and diversion roadways, especially keeping them dust free to avoid the danger of poor visibility resulting from clouds of dust;
- f. Providing adequate and visible road signs, markings and advance warnings;
- g. Safe parking of construction equipment, and its visibility with red flags/lights/reflectors; and
- h. **Adequate and safe arrangement for formwork, shuttering and centering, in case of culverts and bridges works.**

Where the contractor is responsible for these measures, the Engineer-in-Charge shall ensure that the contractor furnishes, erects and maintains the barricades and traffic signs and makes adequate arrangements for diversions, lighting, equipment and flagmen as would be required. IRC Publication No. IRC: SP: 55 may be referred.

The accident rate in construction zone including R&B is much higher than what is generally believed. Construction workers are exposed to a wide variety of hazards. Such situations can also endanger the safety of public at large. Safety management of works zones is, therefore, of paramount importance. Various **existing** legislations require strict compliance of safety management such as, the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996; Industrial Disputes Act, 1947; Workmen Compensation Act, 1923 and other Labour Acts, besides provisions of the Indian Penal Code. IRC SP 55 shall be the binding document for guidelines for work zone safety and traffic management **for road construction**.



7.1.10 Pre-Opening Stage Safety Audit

Upon completion of the construction of road, the project is audited, just prior to the road is opened to traffic. The objective of the pre-opening audit is to ensure that the finished construction addressed the safety concerns of the earlier audits and to check for any hazardous condition that was not apparent at the previous stages. It is also useful in spotting mistakes in the signing and marking.

7.1.11 Technical Resource through Road Safety Cell

Under the EIC (Civil)/CE (Roads & Investigation) a Cell may be equipped with safety engineering expertise. The Cell is mainly to coordinate the road safety activities of the OPWD including undertaking of road safety audits at various stages, identification of black spots, and improvement of the accident sites in a phased manner and interdepartmental co-operation, coordination and collaboration with all stakeholders of road safety.

The following road safety activities shall be the prime responsibility of the Cell for safety engineering of the Department, for which the accident data shall be obtained from Police Department from time to time:

- a. Prioritized black spot Improvement program
- b. Road Safety Audit of the existing roads
- c. Mass Action schemes
- d. Engineering measures for vulnerable road users
- e. Audit of new project roads
- f. Training on safety engineering at district level
- g. Interdepartmental coordination, corporation and collaboration
- h. Accident analysis and preparation of annual accident report
- i. Implementation and review of Road Safety Action Plan
- j. Development of Road Safety Strategy and Program for the Department.

7.1.12 Road Safety in Divisions

The road safety activity of OPWD divisions shall be carried out by the EE assisted by his staff under the guidance of the CRSC. They shall also support the District Road Safety Wing under the control of District Collector.

The DOs (i.e. EEs) shall report all road accidents in their jurisdiction to CRSC, propose safety engineering measure for such location, identify accident black spots, design and prioritize the schemes and implement/improve safety under overall supervision of CRSC. The EEs will also coordinate the road safety activities of the OPWD at district level, such as prevention and eviction of encroachments on road, action to make the roads safe by timely maintenance and interdepartmental coordination with all stakeholders of road safety. The EE shall review and monitor the progress of road safety works of concerned divisions and report will be submitted to EIC (Civil) on a monthly basis through CRSC.



The SE shall be entrusted with monitoring of schemes prepared by Central Road Safety Cell (CRSC) and eventually the implementation progresses at divisional level. Further, the SE shall be responsible for preparing annual budget for exclusive road safety schemes and shall be prepared in consultation all EEs in his jurisdiction. In addition SE will monitor the budget included for road safety features in road and civil works and its effective dispensation.

7.1.13 Monitoring & Evaluation

The PWD shall conduct internal audits at planned intervals to provide information on whether the SRS management system conforms to the PWD's strategy, and also to ensure that SRS is effectively being implemented and maintained. The monitoring and evaluation (M&E) shall be based on crash data collected.

The PWD shall:

- a. Plan, establish, implement and maintain an audit program, including the frequency, methods, responsibilities, planning requirements and reporting. The audit program(s) shall take into consideration the importance of the processes concerned and the results of previous audits;
- b. Define the audit criteria and scope for each audit;
- c. Select auditors and conduct audits to ensure objectivity and the impartiality of the audit process;
- d. Ensure that the results of the audits are reported to relevant management;
- e. Retain documented information as evidence of the implementation of the audit programme and the audit results.

7.1.14 Periodic Review

Top management of GOO/OWD and other road executing Departments shall review the SRS management at intervals, to ensure its continuing suitability, adequacy and effectiveness in achieving the established SRS objectives and targets. The management review shall include consideration of:

- a. The status of action from previous management reviews;
- b. Changes in external and internal issues that are relevant to the SRS management system;
- c. Information on the SRS performance, including trends in
 - i. Non-conformities and corrective actions, and
 - ii. Monitoring, measurement analysis and evaluation of results, including the extent to which crash reduction objectives and targets have been met.
- d. Opportunities for continual improvement, including consideration of new technologies;
- e. Relevant communications(s) from interested parties, including complaints; and
- f. Road traffic crash and other road traffic incident investigation report.

The outputs of the management review shall include decisions related to continual improvement



opportunities for achieving SRS results.

7.1.15 Non-conformity and Corrective Action

When nonconformity with the requirements of the SRS management occurs, the OPWD shall:

- a. React to the non-conformity, and as applicable,
 - i. Take action to control, and correct it, and
 - ii. Deal with the consequences;
- b. Evaluate the need for action to eliminate the causes of the non-conformity, in order that it does not recur or occur elsewhere, by
 - i. Reviewing the non-conformity,
 - ii. Determining the causes of the non-conformity, and
 - iii. Determining if similar non-conformities exist, or could potentially occur.
- c. Implement any action needed;
- d. Review the effectiveness of any corrective action taken;
- e. Make changes to the SRS management system, if necessary.

Corrective actions shall be appropriate to the effects of the non-conformities encountered. OPWD shall retain documented information as evidence of:

- a. The nature of the non-conformities and any subsequent actions taken, and
- b. The results of any corrective action.

7.1.16 Continual Improvement

Continuous effort will be made to see that safe road management system improves based on experience gained and new technology available.

7.1.17 Building and Structural Safety

Structural safety shall be observed during construction and maintenance stages. National Building Code (NBC) of India, 2005 and other applicable safety codes shall be referred. Provision for safety at the construction stage of building shall cover the following:

- a. Foundation safety, which requires proper geo-technical investigations, determination of position, depth and size of underground structures, such as water pipes, mains, sewer lines, cables or other services in the vicinity to prevent accidents and damage to these utilities, appropriate choice of foundation and its adequate design to prevent sinking and differential settlement; and protective works like benching, shoring, timbering or other measures to avoid falls or collapse of side walls.
- b. Structural safety during normal conditions requires appropriate choice of materials taking into account the usage, location, climate and the requirements of durability, proper design by a qualified structural engineer in accordance with codal requirements, proper detailing; and sound construction with emphasis on quality.



- c. Structural safety during critical conditions, such as earthquakes, severe storms, heavy rains, floods. This requires that the structure is planned, designed and built to withstand the forces of these phenomena.
- d. Safety of temporary structures includes platforms, scaffolding, centering, shuttering, etc. It is required that the temporary structures are properly designed for dead loads as well as all superimposed loads. The vertical props shall rest on firm, unyielding ground/foundation. Removal of props and centering and shuttering shall be in proper sequence and at stipulated time, as per the requirements of structural behavior and strength.
- e. The AE under the control of buildings/structures shall inspect all buildings/structures twice a year and record certificate to the effect that the building/structure is not unsafe for use.
- f. All buildings/structures under his control are required to be inspected once a year by the AEE to ensure that the building/structure are safe for use.
- g. In case of electrical and other installations the AE (Electrical) shall inspect the buildings/structures under his control twice a year and record certificates to the effect that electrical and other installations are safe for use. The AEE (Electrical) shall also inspect the same once a year to that effect.
- h. The occupants and user Departments of public buildings shall be responsible for raising any safety concern to guard against any mishap.
- i. The growth of plants in the buildings affecting structural safety shall be promptly dealt with.
- j. In the event of any deficiencies found in the building/structure necessary report shall be made to higher authorities and immediate steps taken to get the same inspected by the EE and further action taken to rectify the defects.
- k. The EE shall also inspect important buildings/structures once a year. He shall bring to the notice of his SE, cases where he has reasons to doubt the structural soundness of any building/structure the latter will take prompt action, as he considers necessary.

7.1.18 Electrical Safety

Electric shock may result in body injury or death due to electrocution. Its incidence can be quite high in construction works because of the tendency with regard the wiring to be of temporary nature. Some of the most common unsafe practices which shall be guarded against are:

- a. Inserting bare wires in sockets instead of using plug tops;
- b. Exposed extension boards without on-off switches;
- c. Loose connections;
- d. Non-use of earth-leakage-circuit-breakers;
- e. Disengaging a person in contact with a live circuit without self-insulation from earth or without switching off the mains;
- f. Poorly maintained and poorly insulated portable equipment;
- g. Long, dangling cables from the place of supply to the place of use;



- h. Use of undersize cables;
- i. Working on energized circuits without sufficient precautions;
- j. Non-provision of temporary lightning arrestors for high rise buildings;
- k. Deployment of un-qualified/un-skilled electricians;
- l. Poor preventive maintenance;
- m. Improper earthing of electrical equipment;
- n. Overloading of circuits due to replacement with higher load rating equipment or rewinding of motors, etc.;
- o. All wiring and lightning arrestor shall have proper earthing;
- p. Safety aspect while working below or near overhead lines shall be properly taken care; and
- q. Care shall be taken for proper fixing of overhead electric fixtures.

7.1.19 Public Safety

Public safety shall be improved by observing requisite safeguards like the following:

- a. Display of safety signs, caution signals and boards;
- b. Design and construction of windows, parapets, railings, etc. to concentrate on safety aspects in the matter of height, strength of elements and size of openings
- c. Wells, cut-outs, tanks, pools, accessible roofs etc. to have protective railings/parapets around them;
- d. Avoiding/minimizing storage of materials on public roads or public places;
- e. Preventive measures against damage to adjoining property because of deep excavations;
- f. Provision of barricading and curtains against fall of construction materials;
- g. In the case of driven piles, safeguarding adjacent structures and service lines against the effect of vibrations;
- h. Preventing unauthorised and direct access to construction sites;
- i. Adequate warning signs near danger zones like HT lines, deep excavations, blasting areas, etc.;
- j. Keeping the manholes covered; providing immediate replacement of covers in case of loss or damage;
- k. Proper fencing of dangerous pits/excavations;
- l. Preventing access to water, sewage and sludge containing structures.

7.1.20 Safety Features for Water Supply and Sanitation Works

For works of water supply and sanitation, the following special safety measures, other than those which are common to all public works, shall be taken.



- a. Manholes should be of adequate size. No manhole should be left uncovered after inspection;
- b. Before entering the sewer at a particular manhole, covers of adjacent manholes should be removed at least two hours before entry;
- c. The sewer-men should be trained to avoid the dangers of falls, drowning, asphyxiation and gas poisoning. They should be required to use gumboots, gloves, gasmasks, which should be kept in ready stock. It would further be desirable to provide them bunny suits to avoid contact with contaminated water. To avoid syncope and other harmful effects of poisonous gases and deficiency of oxygen, the workers should carry light respiratory equipment. Oxygen cylinders with breathing apparatus should be available at easy locations;
- d. All open tanks should be provided with guardrails. Narrow walkways or steps and spiral staircases should not be adopted; better and safer options should be preferred;
- e. Honeycomb grating should be provided on open channels to avoid accidental falls;
- f. Adequate lighting within and around the plant should be provided;
- g. Smoking or carrying open flames in and around digesters should be prohibited;
- h. Covered tanks, wet wells, pits or sewers should be well ventilated. Before entering, they should be kept open for sufficient time or force-ventilated. Entry should be permitted after testing against the presence of hazardous/poisonous gases;
- i. First aid kits and fire extinguishers of the appropriate type in good operating condition should be available readily at hand. The staff should be trained in their use;
- j. Adequate toilet and bathing facilities should be provided to the operating staff and sewer-men. The staff should be required to use antiseptics for washing and bathing. The employees should be medically examined every two years;
- k. Wherever necessary, precautionary boards/danger boards/signboards should be displayed/installed, drawing attention to the danger spots;
- l. Drinking water to have the prescribed kind and potency of disinfectant;
- m. Proper safety measures should be taken against terrorist action and sabotage in the case of water works;
- n. Periodic cleaning of water supply tanks to be done; and
- o. Desludging of septic tanks to be done at prescribed interval
- p. Safety kits with proper Gas Mask and aprons will be used while operating Gas chlorinators. Adequate steps such as construction of vat with filling of water should be constructed nearby installation points. Adequate training should be imparted to operators of Gas Chlorinator.*
- q. Spreading of rubber mat in pumping station is required to avoid any sort of electrocution.*



7.1.21 Fire Safety

All work places shall satisfy basic requirements which contribute to safety of life from fire, smoke, fumes and panic arising from these or similar causes. Guidelines of NBC of India, 2005 (with latest revision) shall be followed. Important principles are laid down in the following:

- a. Building plans shall conform to prevailing by laws and good practice, and shall be got approved from the authority concerned including Fire Department;
- b. Actual use of the building shall conform to the intended use;
- c. Air-conditioning and mechanical ventilating systems shall be installed and maintained so as to minimise the danger of spread of fire, smoke or fumes;
- d. All requirements of electrical installations from the point of view of fire safety shall be met;
- e. Use of combustible finishes on walls and ceilings shall be avoided;
- f. All buildings, depending on their requirements with regard to importance and occupancy, shall be protected by firefighting equipment like fire extinguishers, wet riser, down-comer, automatic sprinkler installation, high/medium velocity water spray, foam and gaseous or dry powder system;
- g. A satisfactory supply of water for the purpose of firefighting shall always be available in the form of underground/terrace level storage tank having specified capacity, with arrangements for replenishment;
- h. In case of high-rise buildings (height above 15 m), their special requirements for fire safety shall be followed, which may include provision of fire detection, fire alarm system, lightning protection, fire lifts of required height, fire control room, public address system, first-aid equipment, compartmentalisation, etc.;
- i. All exit requirements shall be followed including (i) capacities of exits and their location/arrangement (ii) obstruction-free exits (iii) exits to be clearly visible and the route to reach the exits to be clearly marked with all signs properly illuminated;
- j. Temporary structures, erections, etc. shall be subjected to check for safety against fire; and
- k. Providing proper access of fire tenders to the site, especially in high risk areas.

7.1.22 Workers' Safety

Safety of workers can be enhanced by: (a) avoiding unsafe conditions; (b) avoiding unsafe acts; (c) avoiding unsafe electrical practices; (d) providing Personal Protective Equipment (PPE); (e) altering the risky processes with possible and affordable safe alternatives; (f) safety education and training.

Unsafe conditions like the following shall be strictly avoided:

- a. Inadequate or missing guards of moving machines;
- b. Improper storage of inflammable and combustible materials;
- c. Non-erection of caution boards and danger signs at wanted locations of trenches or face of excavation;



- d. Storage of excavated material close to the edges;
- e. Inadequate fire warning and firefighting system;
- f. Improper illumination;
- g. Unsafe methods and processes while performing various tasks;
- h. Protrusion of steel rods, pipes and other objects;
- i. Improper working platforms, poorly erected scaffolding without firm base, and inadequate lateral ties and bracing;
- j. Inadequate timbering/shoring of excavations or unfenced excavations;
- k. Quicksand conditions;
- l. Sudden lowering of water table;
- m. Openings, cut-outs, stair-wells, lift wells, etc. without or inadequate handrails and toe boards around them;(n) Improper and unsafe access to work areas;
- n. Keeping loose materials at elevated places;
- o. Faulty electrical connections and cabling;
- p. Defective cranes and lifting tackles;
- q. Poor housekeeping; and
- r. Missing covers over the opening of water/sewage storage tanks

7.1.23 Personal Protective Equipment (PPE)

PPE like helmets, gloves, safety belts, tarring outfit, gumboots, protective goggles, aprons, hand shields, gas masks, face masks, etc. depending on the trade, must be used to eliminate injury or reduce its severity. Providing PPE is the obligation of the contractor. PPE should always be of good quality and comfortable to wear. One should keep in mind that the workers have to do physical work with all these protective equipment on his body. **The Departmental officer/the Engineer needs to monitor the compliance.**



CHAPTER 8
ENVIRONMENTAL AND SOCIAL SAFEGUARD



8 ENVIRONMENTAL AND SOCIAL SAFEGUARD

8.1 Environmental Safeguard

8.1.1 General

This part of the chapter describes various environmental issues associated with the works being carried out by OPWD and provides details of the management measures that should be administered by Environmental and Social Management Unit in the office of EIC (Civil).

8.1.2 Introduction

The objective of good environmental management is to mitigate negative environmental impacts of construction activities and related works, thereby, enhancing the positive environmental impacts by ensuring compliance with all applicable National, State and Local Environmental legislations. OPWD is committed to mitigate environmental degradation and to promote the integration of the environmental concerns in development of projects. The deteriorating environment in cities are causing concern everywhere and affecting every individual. It is again cities where the construction activities are maximum. The construction activities are unavoidable for a developing country like ours therefore we need to strike a balance and evolve processes which disturbs the environment the least.

Construction waste is a menace to the environment particularly in cities. The initial step in a construction waste reduction strategy is good planning. Designing product in standard sizes. In our endeavour to protect environment we should encourage recycling of usable construction material i.e. fly ash etc. Some construction materials can be recycled directly into the same product; others can be reconstituted in to usable products. This will keep material out of the land fill and help protect environment. As an example recycling of material for bituminous pavements is now an established practice. Similarly in major cities installation of plants for recycling of construction material is in vogue. The OPWD is committed to protect environment and increase adoption of these practices in future.

8.1.3 Factors causing Environmental Impact

The various factors which cause environmental impact include land, its topography, geology, land use, soil type, drainage pattern, ecological sensitive areas etc. Our Policies program and practices need to be such that we embark on sustainable development with environment protection. The environments issued to be considered in various stages of the project are delineated here.

A. Land

Land disturbance, removal of vegetation, topography (reshaping of topography, **soil erosion etc.** during project execution make the soil vulnerable to erosion and generate dust and waste materials. While preparing estimate for seeking A/A Concerned OPWD authority shall ensure that the mitigation measures are included in the planning and design stage for effective implementation during the project execution. These include:



- i. Road side plantation and compensatory afforestation.
- ii. Soil erosion plan, preservation of top soil by ensuring least disturbance to natural drainage system.
- iii. Ensuring that surface is reinstated free of encumbrances.
- iv. Minimise waste including debris and scarified asphalt from construction and reuse of waste material wherever possible.
- v. Proper disposal of solid waste in consultation as per applicable regulations which includes (i) construction or demolition waste management (ii) Municipal waste – biodegradable and recyclable (iii) hazardous waste (iv) e-waste.
- vi. Put general litter and waste into special purpose bins or remove to specified designated area to ensure its containment.

B. Air

In the infrastructure projects the sources of the air pollution include, but not limited to, the following:

- i. Site clearance, transportation of men and materials, construction of temporary accommodations, stock yards, installation of construction plants during the pre-construction stage,
- ii. Operation of construction plants such as hot mix plant, concrete batching plant, crusher and Wet Mix Macadam (WMM) plant,
- iii. Excavation of foundation, roadway and borrow areas,
- iv. Operation of machinery, vehicles and DG sets
- v. Construction of roadway, buildings and bridges,
- vi. Stock piles of materials, and
- vii. Fugitive dust emissions from unpaved road during construction phase

“National Ambient Air Quality Standards” stipulate the limits of ambient air pollution levels. Some of the measures for the prevention and mitigation of the air pollution due to undertaking the project are:

- i. Mitigation measures during construction by reducing emission during loading, unloading, transportation and storage of construction materials.
- ii. Project location or preferred alignment and design are to be selected judiciously.
- iii. Green belt development.
- iv. Air pollution control equipment shall be fitted for the machinery, plants and vehicles.
- v. Periodical maintenance and servicing of the pollution control equipment and the machinery, plant and vehicles shall be ensured.
- vi. Bare minimum tree cutting, and planting of more trees.



- vii. Watering of the access roads, approach roads and road under construction.
- viii. Transportation sand and earth in truck covered by tarpal.
- ix. Limiting the extent of disturbed areas and also to restore the same.
- x. Dust mitigation on crushers, quarries and road construction site.
- xi. Provide DG sets with appropriate height of stack (Chimney) based on capacity of DG sets as per CPCB guideline.

C. Water

Source of the water pollution and impacts on the water environment include the following apart from others:

- i. Loss of existing water resources at project site.
- ii. Discharge to nearby water streams of sediment laden runoff from the project.
- iii. Pollution of water sources from the oil spills, disposal of bituminous materials, stockyard of diesel, engine oil, chemicals, bitumen, emulsion etc.,
- iv. Disposal of wastewater generated from the temporary living facilities at construction site,
- v. Wastewater generated from the operation of plants, cleaning of machinery and equipment, Wash water from the workshop and washing bay.
- vi. Use of open area by construction workers for toilet.
- vii. Improper disposal of solid and hazardous wastes.
- viii. Measures for the prevention and mitigation of the water pollution Controlling the generation of sediment, oil and grease, excess nutrients, organic matter, litter, debris and any form of waste from the construction and disallowing these substances into the nearby waterways, storm water systems or underground water tables. Such materials shall be captured before they reach drains and waterways by following methods:
 - a. Cover stockpiles or spray water to suppress dust,
 - b. Store all chemicals, fuels and other hazardous liquids and solids waste on concrete floor within a bounded and covered area away from waterways,
 - c. Dispose of empty drums,
 - d. Water quality management e.g. using sandbags to filter water and remove sediment and control litter;
 - e. Protect drainage lines with sediment basins and silt fences,
 - f. Construction of proper sanitation facilities for the disposal of the wastewater generated from the kitchen and toilets.
 - g. Construction of proper wastewater treatment facilities for the wastewater generated from the workshops, concrete batching plants, hot mix plants and WMM plants. Such treatment plants shall be considered while planning major infrastructure projects and the treated water shall be recycled and reused for gardening or irrigation.



- h. Rainwater harvesting shall be done as per Clause 5.5.12 of Part 9 Section I of NBC and the collected water shall be used for gardening, flushing, firefighting or washing purposes.

- i. Toilet facilities with septic tank followed by soak pit.

D. Noise and Vibration

The major cause of noise pollution in the infrastructure projects is from vehicles, machinery, equipment, construction plants, construction works and vehicles plying on the road.

Some of the noise control measures for the reduction of the noise from the project are as follows:

- i. Use of quiet equipment, machinery, plant and vehicles available in the market
- ii. Proper maintenance of equipment, machinery, plant and vehicles
- iii. Installation of machinery with correct foundations to reduce the vibration
- iv. Providing noise attenuation screens, wherever required
- v. Proper planning of the working hours (noise generating activities scheduled for the middle of the day)
- vi. Allow DG sets fitted with Acoustic Enclosure as per Noise Control Regulations

E. Flora and Fauna

Construction of road, bridges, buildings and other structures may impact flora and fauna. The degree of the impact varies based on the location, scope and size of the project. Some of the impacts that occur are:

- i. Cutting of trees
- ii. Damage to the aquatic life
- iii. Damage to the fauna
- iv. Damage to/Impact on eco-sensitive areas like national parks, wild life sanctuaries, Reserve/protected forests, Biosphere Reserves, mangroves, wetlands etc.

Some of the common mitigation measures are:

- i. Saving the trees as far as possible during design and finalization of alignment
- ii. The reduction of disturbance to the aquatic life.
- iii. Providing proper animal crossings, water crossings, fencing and traffic control measures
- iv. Planting tree saplings and saving existing tree during construction works by providing temporary protective barrier around trees, and not placing equipment or excavate within 2 meters of a tree.

8.1.4 Environment Regulations (National, State and Local)

National Acts and Rules administered by the Ministry of Environment, Forests Climate Change (MoEFCC), other National legislation that are relevant and State Acts and Rules, relevant to OPWD activities are listed hereunder.



I. National Level Acts

The following National Legislations are in force in Odisha:

1. The Environmental (Protection) Act, 1986 and the EIA Notification, 2006
2. The Water and Air (Prevention and Control of Pollution) Act, 1974
3. The Public Liability Insurance Act, 1991
4. National Environment Tribunal Act, 1995
5. The National Environment Appellate Authority Act, 1997
6. The Forest (Conservation) Act, 1980
7. The Wildlife(Protection) Act, 1972
8. The Biological Diversity Act, 2002
9. Coastal Regulation Zone (CRZ) and Regulating Activities in the CRZ
10. The Motor Vehicles Act, 1988
11. The Ancient Monuments and Archaeological Sites and Remains Act, 1958
12. The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996
13. The Air (Prevention and control of Pollution) Act, 1981
14. Noise Pollution (Regulation and Control) Rules 2000
15. Fly Ash Notification, 2007
16. Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008
17. Batteries (Management and Handling) Rules, 2001
18. Municipal Solid Waste (Management & Handling) Rules, 2000
19. Other regulation as applicable

II. Other National Legislations to be followed

In addition to the above detailed legislations, the rules and conditions of the following Acts/Legislations have to be followed:

1. Explosives Act, 1884 and Explosive Rules, 1983
2. Petroleum Act, 1934 and Petroleum Rules, 2002
3. The Mines and Minerals (Regulations and Development) Act, 1957 and rules there under

III. State level Legislation and other Acts

Some of the additional legislations, which are to be followed in the state of Odisha, are as follows:

1. The Odisha Preservation of Private Forest (Amendment) Act,1963
2. The Odisha River Pollution Prevention Act, 1954



3. The Odisha Forest Produce (Control of Trade) Act
4. The Odisha Forest (Amendment) Act, 1990
5. The Ancient Monuments Preservation (Amendment) Act, 2002

In the specific condition of the various OPWD activities, the provisions of Odisha State level legislations should be kept in mind for their relevance in the context of each works/projects that are being proposed for implementation.

8.1.5 Implementing Organisations

A. Ministry of Environment, Forests Climate Change (MoEFCC)

MoEF is the nodal agency in the administrative structure of the Central Govt, for co-ordination and overseeing the implementation of environmental and forestry programmes.

MoEFCC has set up regional offices. These offices are responsible for collection and furnishing of information relating to EIA of projects, pollution control measures, methodology and status, legal and enforcement measures and environmental protection in special conservation areas such as national parks, sanctuaries, wetlands, and mangroves.

B. Central Pollution Control Board (CPCB)

CPCB is a statutory authority attached to the MoEF and located in New Delhi. The main functions include the following:

- i. Advise the Central Govt on any matter concerning prevention and control of water and air pollution,
- ii. Plan and execute a nation-wide programme for the prevention, control or abatement of water and air pollution;
- iii. Co-ordinate the activities of the State Board and resolve disputes among them;
- iv. Provide technical assistance and guidance to the State Boards;
- v. Plan and organise training of persons engaged in programme on the prevention, control or abatement of water and air pollution;
- vi. Organise through mass media, a comprehensive mass awareness programme on the prevention, control or abatement of water and air pollution;
- vii. Collect, compile and publish technical and statistical data relating to water and air pollution;
- viii. Lay down, modify or annul emissions and air/water quality standards,
- ix. Prepare Manuals, Codes and guidelines, and
- x. Disseminate information.

C. Odisha State Pollution Control Board (OSPCB)

Working under the Forest and Environment Department, GOO, OSPCB is entrusted with the implementation of the Water Act, Water Cess Act, Air Act, Public Liability Insurance Act, Environment (Protection) Act and various rules and notification under the same. OSPCB has its head



office at Bhubaneswar, regional offices at Angul, Balasore, Berhampur, Cuttack, Rayagada, Rourkela, Sambalpur and Keonjhar.

D. State Department of Forest and Environment

In relation to environmental matters, this State Department performs the function similar to the MoEF at the state level. MoEF has delegated certain functions to the State.

The Forest and Environment Department in the State operates through a number of departmental formations and autonomous bodies. The field formations under the Forestry set up are organised under Forest, Wildlife and Kendu leaf wings. Organisations such as State Pollution Control Board, Chilika Development Authority and Regional Plant Resource Centre function under the Environment Wing of the Department

E. Odisha State Forest Department

The Odisha State Forest Department is responsible for the protection and managing the notified forests and associated wildlife within the state. The Department is headed by a Principal Chief Conservator of Forests, and is supported by Chief Conservator of Forests responsible for its various functions. For general administration there are Forest Circles headed by Conservators, under their jurisdiction forest Divisions controlled by Divisional Forest Officers. Each Division is further sub divided by basic units - Forest Ranges manned by Forest Rangers reporting to the Divisional Forest Officers.

F. Environmental and Other Related Clearances

Various environmental, labour and other departmental permissions may be required for the OPWD activities prior to implementation. An indicative list of clearances and the responsible Department/board are included in the following table.

Sl. No.	Clearance	Department/Board
1.	Environmental Clearance	MOEFCC /State Department of Forest and Environment/State Pollution Control Board
2.	Forest Clearance	Central/State Forest Department
3.	Consent For Establishment and Consent for Operate of Construction Plants	OSPCB
4.	Permission for withdrawal of ground water from the regulatory zones	Central Ground Water Board/Authority
5.	Permission for taking surface water	Irrigation Department
6.	Labour licence	State Labour Department
7.	License for Setting up of Diesel Pumps	Department of Explosives
8.	Registration of Workers	Odisha-State Construction Workers Welfare Board



Sl. No.	Clearance	Department/Board
9.	Permission for opening of new quarries for aggregates	Department of Mining and Geology
10.	PUC Certificate for Vehicles and Machinery	Road Transport Department
11.	Permission for setting up of labour camps	Local Health Departments and Local Body
12.	Wildlife Clearance	State Board of Wildlife/National Board of Wildlife and Hon'ble Supreme Court of India as applicable
13.	CRZ Clearance (if road is in CRZ and/or crossing back waters)	MOEFCC / CRZ Authority

Based on the works/projects being done, OPWD needs to ensure that the necessary clearances are obtained prior to implementation and the clearance conditions are complied with during implementation. **The Superintending Engineer concerned will be responsible for the same.**

8.1.6 Regular Works/Projects – Standard EMP

In the regular works/projects of the OPWD, the environmental issues need to be properly and effectively managed. In principle OPWD needs to ensure the following in all its regular works/projects:

- a. Avoid or minimise tree cutting as far as possible; if tree cutting is unavoidable, make plans for compensatory plantation,
- b. Protect the state eco-sensitive areas such as national parks, wildlife sanctuaries, reserve forests and coastal zones,
- c. Reduce litter, sediment and pollutants entering waterways and the land,
- d. Reduce noise, vibration and air emissions,
- e. Minimise waste and dispose of it appropriately,
- f. Use resources efficiently and reduce energy and material consumption,
- g. Provide the safety of workers, road users and those in the neighbourhood,
- h. Provide safe, clean and hygiene labour camps, if these are required,
- i. Keep people affected by the construction activities regularly informed.

To operationalise these activities, a standard EMP as per **Annexure 8.1** shall form a part of the OPWD standard bid documents/contract agreements and shall be adhered to by the contractor who executes the work. The standard EMP applies to the activities in construction site and ancillary activities such as the transportation of materials, sourcing of material and borrows areas.

To demonstrate compliance with the standard EMP periodic progress reports, file notes, audit reports, photographs, and minutes of meetings or video shall be maintained by the Contractor for perusal by the OPWD.



8.1.7 Conducting Environmental Impact Assessment (EIA) and Preparing Environmental Management Plan (EMP)

The MoEF, GOI in their notification in 2006 and subsequent amendments have listed out various projects which require Environment Impact Assessment (EIA). Some of the project which are relevant to works normally carried out by various Engineering Department of GOO are listed below:

- i. **Highway Projects – EIA Notification dated 14th September 2006 and amended on August 22, 2013, The Notification States:**
Category-A: i) New National Highway, ii) Expansion of National Highways greater than 100 km, involving additional right of way greater than 40 m. Along existing alignment and 60 m along bypasses and realignments
Category-B: (i) All New State Highway Projects ii) State Highway expansion projects in hilly terrain (above 1,000m AMSL) and or ecologically sensitive area”
- ii. **Building & Construction Projects for $\geq 20,000$ sqm**
- iii. **Township & Area Development Projects – covering are of ≥ 50 Hectare and or built up area $\geq 1,50,000$ sqm**
- iv. **River Valley Projects for more ≥ 25 MW hydroelectric supply and $\leq 10,000$ Hectare of cultural command area**
- v. **All projects of Common Hazardous Waste Treatment Plant, Municipal Solid Waste Management Facility, and Effluent Treatment Plant etc.**

The EIA shall be progressively done for all major projects including PPP projects undertaken by various Engineering Departments engaged in public works of GOO.

As per the requirements of MoEF or funding agency - such as the World Bank or Asian Development Bank, EIAs shall be conducted and EMPs shall be prepared in certain projects due to the possible impacts on eco-sensitive areas or due to the large scale environmental impacts across the state.

A. The objective of EIA is to foresee the potential environmental problems that would arise out of a proposed development and address them in the project's planning and design stage.

The stages in a typical EIA shall be as follows:

Screening	Screening is done to see whether a project requires environmental clearance as per the statutory notifications.
Scoping	Scoping is a process of detailing the Terms of Reference (TOR) of EIA.
Baseline Data Collection	Baseline data describes the existing environmental status of the identified study area. The site-specific primary data shall be monitored for the identified parameters and supplemented by secondary data if available.
Impact Prediction	Impact prediction is a way of 'mapping' the environmental consequences of the significant aspects of the project and its alternatives.



Assessment of Alternatives, Delineation of Mitigation Measures and Environmental Impact Assessment Report	Possible alternatives shall be identified and environmental attributes compared. Alternatives shall cover both project location and process technologies. Alternatives shall then be ranked for selection of the best environmental option for optimum economic benefits to the community at large. Once alternatives have been reviewed, a mitigation plan shall be drawn up for the selected option and is supplemented with an EMP with details of monitoring for the implementation. An EIA report shall provide clear information to the decision-maker on the different environmental scenarios without the project, with the project and with project alternatives. Uncertainties shall be clearly reflected in the EIA report.
Public Hearing	Law requires that the public must be informed and consulted on a proposed development after the completion of EIA report.
Decision Making	Decision- making process involve consultation between the project proponent (assisted by a consultant) and the impact assessment authority (assisted by an expert group if necessary)
Monitoring of the Clearance Conditions	Monitoring shall be done during both construction and operation phases of a project.

Being specialised in nature, Conducting EIAs and preparing EMPs shall be done by external consultants on behalf of the OPWD. Taking into account the particular context of these works/projects, the OPWD shall prepare TOR for conducting the EIAs and preparing the EMPs by referring to the EIA Notification 2006.

A guideline for preparation of ToR for hiring external Consultant to carry out EIA is given as **Annexure 8.4**.

B. EMP shall have following contents:

- i. “Management measures” comprising of table of preventive, mitigation and compensation measures for all identified significant impacts at the pre-construction, construction and operational stages of the project;
- ii. Safety management plans for high-risk events or events with potential for significant environmental damage such as fires, fuel spills or explosions.

For preparing the EMP, Guidance as per **Annexure 8.2** shall be followed. On the advice of the Consultant OPWD officers shall determine whether additional BOQ items are necessary to achieve good environmental performance and accordingly include in the bid/contract document.

Supervision of project-specific EMP implementation can be carried out by the OPWD or given to Supervision Consultants (SC) based on the OPWD capacity and the scale of the project. The contractor has to prepare his schedule for the physical implementation of the project-specific EMP and take periodic consent of the supervision authority as stipulated in the project-specific EMP. OPWD has to ensure that the contractor obtains the necessary environmental clearances and also



adheres to the project-specific EMP requirements through the pre-construction and construction stages. After the construction stage is completed, the project-specific EMP will include activities during the operational phase.

8.1.8 Procedure for Tree Cutting/Removal for Construction Project

The requirement of cutting or removal of trees for making land free from obstruction in many times unavoidable. A brief procedure followed by OWD for approval of removal/cutting of trees is given below:

- a. The EE in charge of the project identifies trees which are required to be cut/removed for the project and enters their details in a pro-forma given in **Annexure 8.3**.
- b. He marks at site the trees coming in the alignment or site of the project.
- c. A Committee of members from OWD, Forest & Revenue Departments jointly inspects and verifies the list prepared by the EE & signs the details in the pro-forma.
- d. The details of trees so finalised after joint inspection is then forwarded to the Forest Department for approval.
- e. The competent authority in Forest department then approves the proposal generally with condition of compensatory plantation.

8.1.9 Duties and Responsibilities

- a. **All cases of EIA shall be monitored by an Environment & Social Management Cell headed by SE in the Office of the EIC of respective Departments.**
- b. For the projects, requiring EIA, concerned SE shall include cost for engaging Consultants to carry out EIA studies and obtaining statutory approvals from the Authorities as well as the cost of implementations thereof and submit the proposal to CE.
- c. CE shall examine the proposal of SE and recommend to EIC for approval of the proposal.
- d. On receipt of A/A, technical sanctioning authority shall accord separate T.S to the estimate and approve NIT to call bids for engaging Consultant.
- e. Concerned EE shall invite the bids for appointment of Consultant and forward the bids with his recommendations to the Authority competent to accept the bid. Procedures for invitations and acceptance of bids shall be as provided in Procurement Manual.
- f. EEs shall coordinate the activities of the Consultants for timely study, preparation of Reports and to obtain approvals from the statutory authorities.
- g. Consultants' reports shall be examined by SE and forward to CE with hid comments for acceptance.
- h. EE shall be responsible to ensure implementation of EI mitigation activities.
- i. SE shall review every month the progress of implementation of EI measures and shall take corrective actions wherever required.
- j. CE shall review quarterly the actions being taken at site for the implementation of EI measures.



8.2 Social Impact Management

8.2.1 General

This part of the chapter describes various Social issues associated with the works being carried out by OPWD and other engineering Departments engaged in public works. This provides details of the management measures that shall be administered by Environmental and Social Management Unit in the office of EIC (Civil). The National Rehabilitation & Resettlement Plan (NRRP) 2007 and Odisha Rehabilitation & Resettlement Plan (ORRP) 2006 and **Right to Fair Compensation and Transparency in Land acquisition, Rehabilitation and Resettlement Act, 2013** shall be the key guide in dealing with displaced persons affected by a project.

8.2.2 Definition

Social impact can be defined as the consequences to the people of any proposed action that changes the way they live, work, relate to one another, organise themselves or function as individual or member of the society. SIA is a methodology to study the social effect of infrastructure project and other development interventions.

8.2.3 Social Impact Assessment (SIA)

Social impacts of development projects will have both positive and negative effects on individuals, households and the local community in particular and the society in general. Social impacts of development projects vary depending on the size and type of projects settings and the characteristics of the community and environment affected. These may include potential changes to population, lifestyle, cultural traditions, community dynamics, and quality of life and well-being. Involuntary displacement induced by development projects has extreme social impacts, which in many cases warrant detailed and specific study leading to resettlement. Displacements of protected tribes and SC/ST community people shall be dealt carefully.

OPWD recognises the need to assess the potential social impacts of the projects and is committed towards responsible management of the same. The guidelines of Procedure for Acquisition of Land for Public Works (given in the section for LA under Chapter 3) have been developed to assist OPWD Officers in the management of social issues in planning and execution of its project. The purpose of these guidelines is to:

- a. Demonstrate and explain the process used in OPWD to manage and protect the social values
- b. Provide guidance to OPWD in managing social issues throughout the life cycle of the project
- c. Ensure transparency, predictability and accountability in its confirmation of social considerations.

These guidelines are applicable to all OPWD projects and programmes related to the planning, design, construction and maintenance of road and buildings.

8.2.4 Social Issues and Counter Measures

Rehabilitation of roads as such may not cause significant adverse impacts but their upgrading (which involves widening of existing roads, construction of new roads/bypasses, realignments and junction improvement etc.) would entail acquisition of land and structures as well as adverse impacts on



other assets, causing disruption of livelihood. Besides, it is likely that some Common Property Resources such as religious structures, passenger shelters, at bus stops; hand pumps etc. may also be adversely affected.

Close examination of the social impacts of a project during the planning phase can enable such impacts to be avoided or minimised and suitable counter measures included in the project design. The extent of SIA necessary for the project will depend upon the type and size of the project and the size of the nature and scale of the potential impacts. The salient features are:

Issues	Measures	When to Address		
		P	D	C
Acquisition of land and assets resulting in families being displaced or loss of livelihood causing discomfort.	Conduct SIA of affected community (ies) - access to houses, business, and farmlands affected and consider options for relocation, improvement, compensation. We should seek free prior and informed consent from the affected people	P	D	
	Assess facilities (Govt made or traditional) affected e.g., bus stop, playfield, water points, ponds, religious structure	P	D	
	Develop time bound R&R action plan	P	D	
	Take advantage of Govt scheme			
	Minimise disruption to social economic interaction	P	D	C
	Dovetailing lifelong support program & earning opportunity			
	Maximise potential benefit of development project	P	D	C
Severance of access roads to private or community properties,	Access roads are retained or approved Safe access to sub roads provided		D	C
Destruction of social and cultural sites which have sentimental attachment or historical significance to the local community	Conduct survey of sites of social or cultural significance	P	D	
	Design project to minimise impact on sites of social/cultural significance		D	C
	Ensure construction works are managed to minimise/avoid impacts on identified sites		D	C
	Development of cultural heritage sites for promoting tourism enhancement measures		D	C



Issues	Measures	When to Address		
			D	C
Loss of well-being and amenity from construction activities, prolonged delays to construction or lack of information provided	Construction planning to manage and minimise identified impacts		D	C
	Grievance redressal system & complain handling system at village level, district level & state level	P	D	C
	Public meetings, information bulletins etc. to keep community informed of construction program and identify and address any issues arising			
	Efficient construction practices		D	C

P – Planning Stage, D – Design, C – Construction.

8.2.5 Social Screening and Scoping Process (Categorisation)

At project investigation stage an exercise shall be carried out to categorise the project in any of the following three categories:

S-1: Those projects which will affect 200 PAPs or more or if PAPs are physically displaced and will require a detailed SIA Report that would include a Resettlement Action Plan. These documents are to be submitted for approval by concerned EE and clearance by the Social Cell and the authority concerned for administrative/TS.

S-2: Those projects in which no PAP is physically displaced or less than 200 PAPs are affected. In this case a Social Management Plan is required that would include an abbreviated resettlement plan

S-3: Those projects which will not affect any households at all.

All clearances for TSs would be accorded by social cell for all S-1 and S-2 categories after field verification/audit of compliance with PWD R&R policy. Projects of Category-S-2 will require the same process and procedures of Category-S-1 but does not require administrative sanction. Odisha R&R policy 2006 is applicable to all project affected and entitled persons/families and establishments or institutions irrespective of the number of persons or families affected or displaced.

The definition of different categories of PAPs for ADB/WB projects shall be as per their guidelines.

8.2.6 Activities Comprising Social Impact Assessment

SIA comprises most of the following activities, it;

- a. identifies interested and affected peoples;
- b. facilitates and coordinates the participation of stakeholders;
- c. documents and analyses the local historical setting of the planned intervention so as to be able to interpret responses to the intervention, and to assess cumulative impacts;
- d. collects baseline data (social profiling) to allow evaluation and audit of the impact assessment process and the planned intervention itself;



- e. gives a rich picture of the local cultural context, and develops an understanding of local community values, particularly how they relate to the planned intervention;
- f. identifies and describes the activities which are likely to cause impacts (scoping);
- g. predicts (or analyses) likely impacts and how different stakeholders are likely to respond;
- h. assists evaluating and selecting alternatives (including a no development option);
- i. assists in site selection;
- j. recommends mitigation measures;
- k. assists in the valuation process and provides suggestions about compensation (non-financial as well as financial);
- l. describes potential conflicts between stakeholders and advises on resolution processes;
- m. develops coping strategies for dealing with residual or non-mitigatable impacts;
- n. contributes to skill development and capacity building in the community;
- o. advises on appropriate institutional and coordination arrangements for all parties;
- p. assists in devising and implementing monitoring and management programs.

8.2.7 Key Elements of SIA Process

A. Scoping

Scoping identifies the type of the social impacts that are likely to be expected. Scoping is largely conceptual process and shall be undertaken by the SIA task force with assistance from discussions with interested parties. Special care shall be taken in dealing with SIA involving loss of livelihood, loss of asset, collective impact on group or community.

B. Profiling

Profiling, sometimes considered to be part of the scoping process, involves gathering information about the community in the pre-impact state. The likely impact of other development projects in the proximity of the current development and any cumulative impacts should be considered.

C. Public Consultation and Participation

The SIA task force would use a variety of community involvement strategies such as public meeting and community workshops to hold public discussion of the type and nature of development in the analysis of specific development alternatives.

D. Mitigation, Monitoring and Management

The SIA task force by its involvement in the implementation planning of the development shall make concrete suggestions that will mitigate impacts and maximise the potential benefits according to the development.

8.2.8 Audit

Audit refers a review of the whole procedure of SIA, as it was applied to the specific project. For important projects audit should be got done at mid-term and end-term. Financial audit will also be required to ensure achievements.



8.2.9 Engagement of Consultants

For project in S1 category external consultant shall be engaged for preparation of SIA. Engagement of external consultants can also be done for conducting Audits. Services of local NGOs can also be hired for implementation of Resettlement Action Plan and for facilitating in LA Plan.

8.2.10 Rehabilitation & Resettlement

The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013 (RFCTLARR Act 2013), Provides the procedure and manner of Rehabilitation & Resettlement. The Act provides for the following appointment of Administration for every Project.

(2). State Govt. shall appoint commissioner for Rehabilitation and Resettlement of affected families.

(3). Rehabilitation/Resettlement committee at Project level for Projects requiring LA of 100 acres and more to monitor & Review the implementation of R&R.

The Act 2013 also provides for establishment of state monitoring committee for monitoring R&R and establishment of LA & R&R authority for settlement of R&R disputes.

8.2.11 Duties and Responsibilities of OPWD Officers

- a. For the projects, requiring SIA, concerned SE shall include cost for engaging Consultants to carry out SIA studies and obtaining statutory approvals from the Authorities as well as the cost of implementations thereof and submit the proposal to CE.
- b. CE shall examine the proposal of SE and recommend to EIC for approval of the proposal.
- c. On receipt of A/A, Technical Sanctioning authority shall accord separate TS to the estimate and approve NIT to call bids for engaging Consultant.
- d. Concerned EE shall invite the bids for appointment of Consultant and forward the bids with his recommendations to the Authority competent to accept the bid. Procedures for invitations and acceptance of bids shall be as provided in Procurement Manual.
- e. EEs shall coordinate the activities of the Consultants for timely study, preparation of Reports and to obtain approvals from the statutory authorities.
- f. Consultants' reports shall be examined by SE and forwarded to CE with his comments for acceptance.
- g. EE along with the Consultant shall attend the public hearing, wherever necessary.
- h. EE shall be responsible to ensure implementation of S1 mitigation measures.
- i. For implementation of S1 measures concerned EE shall initiate timely actions before actual project works start so that progress of projects does not suffer.
- j. SE shall review every month the progress of implementation of S1 measures and shall take corrective actions wherever required.
- k. CE shall review quarterly the actions being taken at site of the implementation of S1 measures.



Annexure 8.1: Standard EMP for Projects/Works

(Reference para 8.1.15 of code & 8.1.6 of Manual)

Sl. No.	Environmental Issue	Management Measures
1	Initial Joint Field Verification for modifying contract documents	<p>The OWD and the Contractor will carry out joint field verification to ascertain the possibility to saving trees, environmental and community resources.</p> <p>The verification exercise should assess the need for additional protection measures or changes in design/scale/nature of protection measures including the efficacy of enhancement measures suggested in the EMP. Proper documentation and justifications/reasons shall be maintained in all such cases where deviation from the original EMP is proposed.</p>
2	Relocation of Community Utilities & Common Property Resources.	<p>All community utilities and properties i.e., water supply lines, sewer lines, bank buildings, health centers, schools, health clinics and veterinary hospitals will be relocated before construction starts, on any section of the project corridor. The PWD will relocate these properties in consultation and written agreement with the agency/owner/community. The schools and health centers will be constructed as per the relevant state norms.</p> <p>All other community property resources within the corridor of impact such as hand pumps, ponds, grazing lands etc. will be relocated.</p> <p>The relocation sites for these schools will be identified in accordance with the choice of the community. Environmental considerations with suitable/required actions including health and hygiene aspects will be kept in mind while relocating all community utilities and resources.</p> <p>All religious property resources such as shrines, temples and mosques within the project zone will be relocated.</p> <p>Sites for the relocation of these religious structures will be identified in accordance with the choice of the community. The NGO and OWD in consultation with local people will finalise design of these temples. As far as possible, the architectural elements of the structure should be conserved/reflected/translated into the design of new structures.</p>



Sl. No.	Environmental Issue	Management Measures
		The entire process (i.e. selection of relocation sites and designs) will be under supervision of the OWD. The relocation will be completed before the construction starts in these sites.
3	Cultural properties	<p>The contractor shall take necessary care to ensure no impact on cultural properties such as (i) historic sites and remains, (ii) places of worship including temples, mosques, churches and shrines, (iii) graveyards and monuments and other important structures as identified during the design.</p> <p>As per design, if there are works that impact these cultural properties, the contractor shall execute the works in close co-ordination with the OWD and the local community.</p>
FLORA & FAUNA		
1	Preservation of Trees	<p>All efforts will be made to preserve trees including evaluation of minor design adjustments/alternatives (as applicable) to save trees. Specific attention will be given for protecting giant trees, green tunnels and locally important trees (religiously important etc.).</p> <p>Tree cutting is to proceed only after all the legal requirements including attaining of In-principle and Formal Clearances from the Forest Dept./DoEF/MoEF are completed and subsequently a written order is issued to the Contractor.</p> <p>Particular species declared as 'protected' by the State's Forest Dept. in the private land will be felled only after due clearance from the Forest Dept. is obtained.</p> <p>In the event of design changes, additional assessments including the possibility to save trees shall be made. Stacking, transport and storage of the wood will be done as per the relevant norms.</p> <p>Systematic corridor level documentation for the trees cut and those saved will be maintained by the OWD. The contractor will adhere to the separate OWD Guidance on landscaping and tree species.</p>
2	Compensatory Plantation	The contractor will undertake compensatory plantation for every tree cut. The plantation will be at least 10 trees planted for every tree cut.



Sl. No.	Environmental Issue	Management Measures
		<p>The contractor will do the plantation along the ROW wherever feasible.</p> <p>The contractor will maintain the plantation till they handover the project site to OWD.</p> <p>The OWD will inspect regularly the survival rate of the plants and compliance to agreed plans.</p>
3	Clearing and Grubbing	<p>Vegetation will be removed from the construction zone before commencement of construction. All works will be carried out such that the damage or disruption to flora other than those identified for cutting is minimal.</p> <p>Only ground cover/shrubs that impinge directly on the permanent works or necessary temporary works will be removed with prior approval from the OWD.</p> <p>The contractor, under any circumstances will not cut or damage trees. Trees identified under the project will be cut only after receiving clearance from the Forest Dept./DoEF/MoEF (as applicable) and after the receipt of OWD's written permission in this regard.</p> <p>Vegetation only with girth of over 30 cm will be considered as trees and shall be compensated, in the event of OWD's instruction to undertake tree cutting.</p>
4	Fauna and wildlife	<p>The contractor shall ensure that none of its workers adversely affect any fauna or wildlife. Hunting will be strictly prohibited.</p>
BORROW AREAS & QUARRIES		
1	Borrow Areas	<p>Finalising borrow areas for borrowing earth and all logistic arrangements as well as compliance to environmental requirements, as applicable, will be the sole responsibility of the contractor.</p> <p>The Contractor will not start borrowing earth from select borrow area until the formal agreement is signed between land owner and contractor and a copy is submitted to the OWD.</p> <p>Locations finalised by the contractor shall be reported to the OWD and who will in turn report to OWD. Format for reporting will be as per the Reporting Format for Borrow Area and will include a reference map. Planning of haul roads for accessing borrow materials will be undertaken</p>



Sl. No.	Environmental Issue	Management Measures
		<p>during this stage. The haul roads shall be routed to avoid agricultural areas as far as possible and will use the existing village roads wherever available.</p> <p>In addition to testing for the quality of borrow materials, the OWD will be required to inspect every borrow area location prior to approval (follow criteria for evaluation of borrow areas).</p> <p>Contractor shall adhere to the separate Guidelines on Borrow area management.</p>
2	Quarrying	<p>Contractor shall acquire material only from approved and licensed quarries. If contractor intends to develop a new quarry, then all the approvals and licenses must be obtained prior to withdrawing material from the quarry. Contractor shall adhere to the separate Guidelines on quarry management.</p>
CONSTRUCTION CAMP		
1	Arrangements for Temporary Land Requirement	<p>The contractor as per prevalent rules will carry out negotiations with the landowners for obtaining their consent for temporary use of lands for construction sites/hot mix plants/traffic detours/borrow areas etc. The OWD will be required to ensure that the clearing up of the site prior to handing over to the owner (after construction or completion of the activity) is included in the contract.</p>
2	Crushers, hot-mix plants and Batching Plants Location	<p>Hot mix plants and batching plants will be sited sufficiently away from settlements and agricultural operations or any commercial establishments. Such plants will be located at least 150 m away from the nearest village/settlement preferably in the downwind direction.</p> <p>The Contractor shall submit a detailed lay-out plan for all such sites and approval of OWD shall be necessary prior to their establishment.</p> <p>Arrangements to control dust pollution through provision of wind screens, sprinklers, and dust encapsulation will have to be provided at all such sites.</p> <p>Specifications of crushers, hot mix plants and batching plants will comply with the requirements of the relevant current emission control legislations and Consent/NOC for all such plants shall be submitted to the OWD.</p>



Sl. No.	Environmental Issue	Management Measures
		The Contractor shall not initiate plant/s operation till the required legal clearances are obtained and submitted.
3	Other Construction Vehicles, Equipment and Machinery	<p>All vehicles, equipment and machinery to be procured for construction will confirm to the relevant Bureau of India Standard (BIS) norms. The discharge standards promulgated under the Environment Protection Act, 1986 will be strictly adhered to.</p> <p>Noise limits for construction equipment to be procured such as compactors, rollers, front loaders concrete mixers, cranes (moveable), shall be as specified in the Environment (Protection) Rules, 1986.</p> <p>The Contractor shall maintain a record of PUC for all vehicles and machinery used during the contract period.</p>
4	Arrangement for Construction Water	<p>The contractor will use ground water as a source of water for the construction and will set up the own bore well facility for construction work.</p> <p>Contractor can use the ponds, which are not in use by community or identified to fill up for the project, but in that case, before using any pond water contractor will obtain written consent from the owner and submit to OWD.</p> <p>To avoid disruption/disturbance to other water users, the contractor will extract water from fixed locations and consult the OWD before finalising the locations.</p> <p>The Contractor will provide a list of locations and type of sources from where water for construction will be used.</p> <p>The contractor will not be allowed to pump from any irrigation canal and surface water bodies used by community.</p> <p>The contractor will need to comply with the requirements of the State Ground Water Department and seek their approval for doing so and submit copies of the permission to OWD prior to initiating the works. Contractor will arrange adequate supply and storage of water for the whole construction period at his own costs. The Contractor will submit a list of source/s from where water will be used for the project to OWD. The contractor will take all precaution to minimise the wastage of water in the construction process/operation.</p>



Sl. No.	Environmental Issue	Management Measures
5	Potable water for labour	<p>The Contractor will also provide potable water facilities within the precincts of every workplace in an accessible place, as per standards set by the Building and other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996.</p> <p>The contractor will also guarantee the supply of sufficient quantity of potable water (as per IS) in every workplace/ labor camp site at suitable and easily accessible places and regular maintenance of such facilities.</p>
CONSTRUCTION WASTES		
1	Generation of Debris from dismantling structures and road surface	<p>Debris generated due to the dismantling of the existing road will be suitably reused in the proposed construction, subject to the suitability of the materials and approval of the OWD as follows:</p> <p>The sub grade of the existing pavement shall be used as embankment fill material.</p> <p>The existing base and sub-base material shall be recycled as sub-base of the haul road or access roads.</p> <p>The existing bitumen surface may be utilised for the paving of cross roads, access roads and paving works in construction sites and campus, temporary traffic diversions, haulage routes etc.</p> <p>The contractor will suitably dispose of unutilised debris materials either through filling up of borrow areas located in wasteland or at pre-designated disposal locations, subject to the approval of the OWD.</p> <p>At locations identified for disposal of residual bituminous wastes, the disposal will be carried out over a 60 mm thick layer of rammed clay so as to eliminate the possibility of leaching of wastes into the ground water. The contractor will ensure that the surface area of such disposal pits is covered with a layer of soil.</p> <p>All arrangements for transportation during construction including provision, maintenance, dismantling and clearing debris, will be considered incidental to the work and will be planned and implemented by the contractor as approved and directed by the OWD.</p>



Sl. No.	Environmental Issue	Management Measures
		<p>The pre-designed disposal locations will be a part of Comprehensive Solid Waste Management Plan to be prepared by Contractor in consultation and with approval of OWD.</p> <p>Debris generated from pile driving or other construction activities shall be disposed such that it does not flow into the surface water bodies or form mud puddles in the area.</p> <p>The contractor shall identify dumping sites. The identified locations will be reported to the OWD. These locations will be checked on site and accordingly approved by OWD prior to any disposal of waste materials.</p>
2	Other Construction Wastes Disposal	<p>The pre-identified disposal locations will be a part of Waste Disposal to be prepared by the Contractor in consultation and with approval of OWD. Location of disposal sites will be finalised prior to completion of the earthworks on any particular section of the road.</p> <p>The OWD will approve these disposal sites after conducting a joint inspection on the site with the Contractor.</p> <p>Contractor will ensure that any spoils of material unsuitable for embankment fill will not be disposed off near any water course, agricultural land, and natural habitat like grass lands or pastures. Such spoils from excavation can be used to reclaim borrow pits and low-lying areas located in barren lands along the project corridors (is so desired by the owner/community). All waste materials will be completely disposed and the site will be fully cleaned and certified by OWD before handing over.</p> <p>The contractor at its cost shall resolve any claim, arising out of waste disposal or any non-compliance that may arise on account of lack of action on his part.</p>
SOIL & DRAINAGE		
1	Stripping, stocking and preservation of top soil	<p>The top soil from all areas of cutting and all areas to be permanently covered will be stripped to a specified depth of 150 mm and stored in stockpiles. A portion of the temporarily acquired area and/or Right of Way will be earmarked for storing topsoil. The locations for stock piling will be pre-identified in consultation and with</p>



Sl. No.	Environmental Issue	Management Measures
		<p>approval of OWD. The following precautionary measures will be taken to preserve them till they are used:</p> <ul style="list-style-type: none"> a) Stockpile will be designed such that the slope does not exceed 1:2 (vertical to horizontal), and height of the pile is restricted to 2 m. To retain soil and to allow percolation of water, the edges of the pile will be protected by silt fencing. b) Stockpiles will not be surcharged or otherwise loaded and multiple handling will be kept to a minimum to ensure that no compaction will occur. The stockpiles shall be covered with gunny bags or vegetation. c) It will be ensured by the contractor that the top soil will not be unnecessarily trafficked either before stripping or when in stockpiles. Such stockpiled topsoil will be utilised for - <ul style="list-style-type: none"> i. Covering all disturbed areas including borrow areas (not those in barren areas) ii. Top dressing of the road embankment and fill slopes iii. Filling up of tree pits, in the median and iv. In the agricultural fields of farmers, acquired temporarily. Residual topsoil, if there is any will be utilised for the plantation at median and side of the main carriageway.
2	Landslides	<p>Along landslide prone areas in hilly terrain, the slopes need to be stabilised. As drainage is most critical at these locations, proper drainage needs to be constructed at these locations.</p>
3	Drainage and Flood Control	<p>Contractor will ensure that no construction materials like earth, stone, ash or appendage disposed off so as not to block the flow of water of any water course and cross drainage channels.</p> <p>Contractor will take all necessary measures to prevent the blockage of water flow. In addition to the design requirements, the contractor will take all required measures as directed by the OWD to prevent temporary or permanent flooding of the site or any adjacent area.</p>



Sl. No.	Environmental Issue	Management Measures
		Proper drainage should be arranged in the construction camps.
WATER BODIES & WATER POLLUTION		
1	Siltation of Water Bodies and Degradation of Water Quality	<p>The Contractor will not excavate beds of any stream/canals/any other water body for borrowing earth for embankment construction.</p> <p>Contractor will construct silt fencing at the base of the embankment construction for the entire perimeter of any water body (including wells) adjacent to the ROW and around the stockpiles at the construction sites close to water bodies. The fencing will be provided prior to commencement of earthwork and continue till the stabilisation of the embankment slopes, on the particular sub-section of the road.</p> <p>The contractor will also put up sedimentation cum grease traps at the outer mouth of the drains located in truck lay bays and bus bays which are ultimately entering into any surface water bodies/water channels with a fall exceeding 1.5 m.</p> <p>Contractor will ensure that construction materials containing fine particles are stored in an enclosure such that sediment-laden water does not drain into nearby water course.</p>
2	Water Pollution from Construction Wastes, Fuel & Lubricants	<p>The Contractor will take all precautionary measures to prevent the wastewater generated during construction from entering into streams, water bodies or the irrigation system. Contractor will avoid construction works close to the streams or water bodies during monsoon.</p> <p>All waste arising from the project is to be disposed off in the manner that is acceptable to the Odisha State Pollution Board.</p> <p>The OWD will certify that all liquid wastes disposed off from the sites meet the discharge standards.</p> <p>The contractor will ensure that all construction vehicle parking location, fuel/lubricants storage sites, vehicle, machinery and equipment maintenance and refueling sites will be located at least 500 m from rivers and irrigation canal/ponds.</p>



Sl. No.	Environmental Issue	Management Measures
		<p>A minimum distance of any sewage or toilet facility will be 200m from the water course.</p> <p>All location and lay-out plans of such sites will be submitted by the Contractor prior to their establishment and will be approved by the OWD.</p> <p>Contractor will ensure that all vehicle/machinery and equipment operation, maintenance and refueling will be carried out in such a fashion that spillage of fuels and lubricants does not contaminate the ground. Oil interceptors will be provided for vehicle parking, wash down and refueling areas as per the design provided. In all, fuel storage and refueling areas, if located on agricultural land or areas supporting vegetation, the top soil will be stripped, stockpiled and returned after cessation of such storage.</p> <p>Contractor will arrange for collection, storing and disposal of oily wastes to the pre-identified disposal sites (list to be submitted to OWD) and approved by the OWD. All spills and collected petroleum products will be disposed off in accordance with MoEF and state PCB guidelines.</p> <p>OWD will certify that all arrangements comply with the guidelines of PCB/MoEF or any other relevant laws.</p>
AIR POLLUTION		
1	Dust Pollution	<p>All vehicles delivering materials to the site shall be adequately covered.</p> <p>The contractor will take every precaution to reduce the level of dust emissions from crushers/hot mix plants/batching plant/WMM plant, construction sites involving earthwork by sprinkling of water, encapsulation of dust source and by erection of screen/barriers.</p> <p>The contractor shall obtain the necessary consent-to-establish and consent-to-operate for all its plants from the Odisha State Pollution Board.</p> <p>All the plants will be sited at least 150m in the downwind direction from the nearest human settlement. The contractor will provide necessary monitoring reports to confirm that all plants conform to relevant dust emission control legislation. The suspended particulate matter value at a distance of 40m from a unit located in a cluster</p>



Sl. No.	Environmental Issue	Management Measures
		<p>should be less than 500 g/m³. The contractor shall conduct pollution monitoring at periodic intervals.</p> <p>Dust screening vegetation will be planted on the edge of the ROW for all existing roadside crushers. Hot mix plant will be fitted with dust extraction units.</p>
2	Air Emission from Construction Vehicles, Equipment and Machineries	<p>Contractor will ensure that all vehicles, equipment and machinery used for construction are regularly maintained and confirm that pollution emission levels comply with the relevant requirements of PCB. The Contractor will submit PUC certificates for all vehicles/equipment/machinery used for the project. Monitoring results will also be submitted to OWD as per the monitoring plan.</p>
NOISE		
1	Noise Pollution: Noise from Vehicles, Plants and Equipment	<p>The Contractor will confirm the following:</p> <p>All plants and equipment used in construction shall strictly conform to the MoEF/CPCB noise standards. All vehicles and equipment used in construction will be fitted with exhaust silencers.</p> <p>Servicing of all construction vehicles and machinery will be done regularly and during routine servicing operations, the effectiveness of exhaust silencers will be checked and if found defective will be replaced.</p> <p>Limits for construction equipment used in the project such as compactors, rollers, front loaders, concrete mixers, cranes (moveable), vibrators and saws shall be, as specified in the Environment (Protection) rules, 1986.</p> <p>Maintenance of vehicles, equipment and machinery shall be regular and up to the satisfaction of the PWD to keep noise levels at the minimum.</p> <p>At the construction sites within 150 m of the nearest habitation, noisy construction work such as crushing, concrete mixing, batching will be stopped during the night time between 9.00 pm to 6.00 am.</p> <p>No noisy construction activities will be done around educational institutes/health centers (silence zones) up to a distance of 100 m from the sensitive receptors i.e., school, health centers and hospital.</p>



Sl. No.	Environmental Issue	Management Measures
		<p>Contractor will provide noise barriers (Design of Noise Barrier Provided) to the suggested locations of select schools/health centers. List of locations for noise barriers is given in specific EMP.</p> <p>Monitoring shall be carried out at the construction sites as per the monitoring schedule and results will be submitted to OWD. OWD will be required to inspect regularly to ensure the compliance of EMP.</p> <p>Workers in the vicinity of loud noise, and workers working with or in crushing, compaction or concrete mixing operations shall be provided necessary PPE such as ear plugs and ear muffs.</p>
TRANSPORTING MATERIALS		
1	Transporting Construction Materials and Haul Road Management	<p>Contractor will maintain all roads (existing or built for the project), which are used for transporting construction materials, equipment and machineries. All vehicles delivering fine materials to the site will be covered to avoid spillage of materials.</p> <p>All existing highways and roads used by vehicles of the contractor or any of his sub-contractor or suppliers of materials and similarly roads, which are part of the works, will be kept clear of all dust/mud or other extraneous materials dropped by such vehicles.</p> <p>Contractor will arrange for regular water sprinkling as necessary for dust suppression of all such roads and surfaces.</p> <p>The unloading of materials at construction sites in/close to settlements will be restricted to daytime only.</p>
TRAFFIC MANAGEMENT		
1	Accessibility	<p>The contractor will provide safe and convenient passage for vehicles, pedestrians and livestock to and from roadsides and property accesses connecting the project road, providing temporary connecting road.</p> <p>The contractor will also ensure that the existing accesses will not be undertaken without providing adequate provisions and to the prior approval of OWD.</p> <p>The contractor will take care that the cross roads are constructed in such a sequence that construction work</p>



Sl. No.	Environmental Issue	Management Measures
		over the adjacent cross roads are taken up one after one so that traffic movement in any given area not get affected much.
2	Planning for Traffic Diversions and Detours	<p>Temporary diversions will be constructed with the approval of the OWD.</p> <p>Detailed Traffic Control Plans will be prepared and submitted to the OWD for approval, five days prior to commencement of works on any section of road. The traffic control plans shall contain details of temporary diversions, traffic safety arrangements for construction under traffic, details of traffic arrangement after cessation of work each day, safety measures undertaken for transport of hazardous materials and arrangement of flagmen.</p> <p>The contractor will provide specific measures for safety of pedestrians and workers at night as a part of traffic control plans. The contractor will ensure that the diversion/detour is always maintained in running condition, particularly during the monsoon to avoid disruption to traffic flow.</p> <p>The contractor will also inform local community of changes to traffic routes, conditions and pedestrian access arrangements with assistance from OWD. The temporary traffic detours will be kept free of dust by sprinkling of water three times a day and as required under specific conditions (depending on weather conditions, construction in the settlement areas and volume of traffic).</p>
3	Traffic and Safety, Informatory Signs and Hoardings	<p>The contractor will take all necessary measures for the safety of traffic during construction and provide, erect and maintain such barricades, including signs, markings, flags, lights and flagmen as proposed in the Traffic Control Plan/Drawings and as required by the OWD for the information and protection of traffic approaching or passing through the section of any existing cross roads.</p> <p>The contractor will ensure that all signs, barricades, pavement markings are provided as per the MoRTH specifications. Before taking up of construction on any section of the existing lanes of the highway, a Traffic</p>



Sl. No.	Environmental Issue	Management Measures
		<p>Control Plan will be devised and implemented to the satisfaction of the OWD.</p> <p>The contractor will provide, erect and maintain informatory/safety signs, hoardings written in English and local language, wherever required or as suggested by the OWD.</p>
LABOUR		
1	Labor Requirements	<p>The contractor preferably will use unskilled labor drawn from local communities to give the maximum benefit to the local community.</p>
2	Personal Safety Measures for	<p>Contractor will provide:</p> <ul style="list-style-type: none"> a) Protective footwear and protective goggles to all workers employed on mixing asphalt materials, cement, and lime mortars, concrete etc. b) Welder's protective eye-shields to workers who are engaged in welding works c) Protective goggles and clothing to workers engaged in Factories Act, 1948 stone breaking activities and workers will be seated at sufficiently safe intervals d) Earplugs to workers exposed to loud noise, and workers working in crushing, compaction, or concrete mixing operation. e) High visibility overalls particularly when working along the ROW. f) Hard hats/helmets when working with materials at heights or working inside trenches. <p>Adequate safety measures for workers during handling of materials at site are taken up.</p> <p>The contractor will comply with all regulations regarding safe scaffolding, ladders, working platforms, gangway, stairwells, excavations, trenches and safe means of entry and egress.</p> <p>The contractor will comply with all the precautions as required for ensuring the safety of the workmen as per the International Labor Organisation (ILO) Convention No. 62 as far as those are applicable to this contract.</p>



Sl. No.	Environmental Issue	Management Measures
		<p>The contractor will make sure that during the construction work all relevant provisions of the Factories Act, 1948 and the Building and other Construction Workers (regulation of Employment and Conditions of Services) Act, 1996 are adhered to.</p> <p>The contractor will not employ any person below the age of 14 years for any work and no woman will be employed on the work of painting with products containing lead in any form.</p> <p>The contractor will also ensure that no paint containing lead or lead products is used except in the form of paste or readymade paint.</p> <p>Contractor will provide facemasks for use to the workers when paint is applied in the form of spray or a surface having lead paint dry is rubbed and scrapped.</p> <p>The Contractor will mark 'hard hat' and 'no smoking' and other 'high risk' areas and enforce non-compliance of use of PPE with zero tolerance. These will be reflected in the Construction Safety Plan to be prepared by the Contractor during mobilisation and will be approved by OPWD.</p>
3	First Aid	<p>The contractor will arrange for:</p> <ul style="list-style-type: none">a) A readily available first aid unit including an adequate supply of sterilised dressing materials and appliances as per the Factories Rules in every work zoneb) Availability of suitable transport at all times to take injured or sick person(s) to the nearest hospitalc) Equipment and trained nursing staff at construction camp.
MISCELLANEOUS		
1	Risk Force Majeure	<p>The contractor will take all reasonable precautions to prevent danger to the workers and public from fire, flood etc. resulting due to construction activities.</p> <p>The contractor will make required arrangements so that in case of any mishap all necessary steps can be taken for prompt first aid treatment. Construction Safety Plan prepared by the Contractor will identify necessary actions in the event of an emergency.</p>



**Annexure 8.2: Guidance for Preparing Management Measures
where Project-Specific EMP is Required**

(Reference para 8.1.19 of Code & 8.1.7 (b) of Manual)

Sl. No.	Environmental Issue	Management Measures
1	Land Acquisition	<p>The acquisition of land and private properties will be carried out in accordance with the Resettlement Action Plan (RAP) and entitlement framework for the project.</p> <p>OWD has to ascertain that any additional environmental impacts resulting from acquisition of land shall be addressed and integrated into the EMP and other relevant documents.</p>
2	EMP preparation for Resettlement Sites	<p>All Resettlement & Rehabilitation (R&R) activities will be undertaken in accordance with the applicable National and Odisha State Resettlement and Rehabilitation Policy. It will be ensured that all R&R activities including environmental management plan preparation are completed before the construction activity starts, on any section of ROW of existing road and/or proposed new bypasses.</p> <p>EMPs for the Resettlement Site will be prepared in consultation with the concerned community. Plans will include specific actions in relation to health, hygiene and plantation.</p>
3	Preservation of Trees	<p>All efforts will be made to preserve trees including evaluation of minor design adjustments/alternatives (as applicable) to save trees. Specific attention will be given for protecting giant trees, green tunnels and locally important trees (religiously important etc.).</p> <p>Tree cutting is to proceed only after all the legal requirements including attaining of In-principle and Formal Clearances from the Forest Dept./DoEF/MoEF are completed and subsequently a written order is issued to the Contractor.</p> <p>Particular species declared as 'protected' by the State's Forest Dept. in the private land will be felled only after due clearance from the Forest Dept. is obtained.</p> <p>In the event of design changes, additional assessments including the possibility to save trees shall be made.</p>



Sl. No.	Environmental Issue	Management Measures
		<p>Stacking, transport and storage of the wood will be done as per the relevant norms.</p> <p>Systematic corridor level documentation for the trees cut and those saved will be maintained by the OWD.</p>
4	Relocation of Community Utilities and Common Property Resources	<p>All community utilities and properties i.e., water supply lines, sewer lines, bank buildings, health centers, schools, health clinics and veterinary hospitals will be relocated before construction starts, on any section of the project corridor. The OWD will relocate these properties in consultation and written agreement with the agency/owner/community. The schools and health centers will be constructed as per the relevant state norms.</p> <p>All other community property resources within the corridor of impact such as hand pumps, ponds, grazing lands etc. will be relocated.</p> <p>The relocation sites for these schools will be identified in accordance with the choice of the community.</p> <p>Environmental considerations with suitable/required actions including health and hygiene aspects will be kept in mind while relocating all community utilities and resources.</p>
5	Relocation of affected Cultural and Religious Properties	<p>All religious property resources such as shrines, temples and mosques within the project zone will be relocated.</p> <p>Sites for the relocation of these religious structures will be identified in accordance with the choice of the community. The NGO and PWD in consultation with local people will finalise design of these temples. As far as possible, the architectural elements of the structure should be conserved/reflected/translated into the design of new structures.</p> <p>The entire process (i.e. selection of relocation sites and designs) will be under supervision of Environmental Expert of OWD. The relocation will be completed before the construction starts in these sites.</p>
6	Joint Field Verification to assess the need to modify the contract documents	<p>The Environmental Expert of OWD and the Contractor will carry out joint field verification to ascertain the possibility to saving trees, environmental and community resources.</p>



Sl. No.	Environmental Issue	Management Measures
		<p>The verification exercise should assess the need for additional protection measures or changes in design/scale/nature of protection measures including the efficacy of enhancement measures suggested in the EMP. Proper documentation and justifications/reasons shall be maintained in all such cases where deviation from the original EMP is proposed.</p>
7	<p>Assessment of Impacts due to Changes/Revisions/Additions due to PS.P.6 in the Project Work</p>	<p>The Environmental Expert of OWD will assess impacts and revise/modify the EMP and other required sections of the project document/s in the event of changes/revisions (including addition or deletion) in the project's scope of work.</p>
8	<p>Crushers, hot-mix plants and Batching Plants Location</p>	<p>Hot mix plants and batching plants will be sited sufficiently away from settlements and agricultural operations or any commercial establishments. Such plants will be located at least 150 m away from the nearest village/settlement preferably in the downwind direction.</p> <p>The Contractor shall submit a detailed lay-out plan for all such sites and approval of Environmental Expert of OWD shall be necessary prior to their establishment.</p> <p>Arrangements to control dust pollution through provision of wind screens, sprinklers, and dust encapsulation will have to be provided at all such sites.</p> <p>Specifications of crushers, hot mix plants and batching plants will comply with the requirements of the relevant current emission control legislations and Consent/NOC for all such plants shall be submitted to the OWD.</p> <p>The Contractor shall not initiate plant/s operation till the required legal clearances are obtained and submitted.</p>
9	<p>Other Construction Vehicles, Equipment and Machinery</p>	<p>All vehicles, equipment and machinery to be procured for construction will confirm to the relevant Bureau of India Standard (BIS) norms. The discharge standards promulgated under the Environment Protection Act, 1986 will be strictly adhered to.</p> <p>Noise limits for construction equipment to be procured such as compactors, rollers, front loaders concrete mixers, cranes (moveable), vibrators and saws will not</p>



Sl. No.	Environmental Issue	Management Measures
		<p>exceed the limit specified in the Environment (Protection) Rules, 1986.</p> <p>The Contractor shall maintain a record of PUC for all vehicles and machinery used during the contract period.</p>
10	Borrow Areas	<p>Finalising borrow areas for borrowing earth and all logistic arrangements as well as compliance to environmental requirements, as applicable, will be the sole responsibility of the contractor.</p> <p>The Contractor will not start borrowing earth from select borrow area until the formal agreement is signed between land owner and contractor and a copy is submitted to the OWD.</p> <p>Locations finalised by the contractor shall be reported to the Environmental Expert of OWD. Format for reporting will be as per the Reporting Format for Borrow Area and will include a reference map.</p> <p>Planning of haul roads for accessing borrow materials will be undertaken during this stage. The haul roads shall be routed to avoid agricultural areas as far as possible (in case such a land is disturbed, the Contractor will rehabilitate it as per Borrow Area Rehabilitation Guidelines) and will use the existing village roads wherever available.</p> <p>In addition to testing for the quality of borrow materials by OWD, the environmental personnel will be required to inspect every borrow area location prior to approval (follow criteria for evaluation of borrow areas).</p>
11	Fly Ash	<p>Contractor will work out proper haulage network for transportation of fly ash from plant to project site. If any village road is identified for transportation of fly ash, the road will be improved before starting the transport work.</p> <p>The haul road will avoid using agricultural land (in case such a land is disturbed, the Contractor will rehabilitate it as per Borrow Area Rehabilitation Guidelines) and try to use the existing road network of the area wherever possible.</p>



Sl. No.	Environmental Issue	Management Measures
		<p>The contractor will consult the Environmental Expert of OWD before finalising the haulage network and also take necessary approval from the expert and OWD.</p>
12	Quarry	<p>Contractor will finalise the quarry for procurement of construction materials after assessment of the availability of sufficient materials and other logistic arrangements.</p> <p>In case the contractor decides to use quarries other than recommended by DPR consultants, then it will be selected based on the suitability of the materials.</p> <p>The contractor will procure necessary permission for procurement of materials from Mining Department, District Administration and State Pollution Control Board and shall submit a copy of the approval and the rehabilitation plan to the OWD and Environmental Expert.</p> <p>Contractor will also work out haul road network and report to Environmental Expert of OWD who in turn report to OWD before approval.</p>
13	Arrangement for Construction Water	<p>The contractor will use ground water as a source of water for the construction and will set up the own bore well facility for construction work.</p> <p>Contractor can use the ponds, which are not in use by community or identified to fill up for the project, but in that case, before using any pond water contractor will obtain written consent from the owner and submit then to OWD.</p> <p>To avoid disruption/disturbance to other water users, the contractor will extract water from fixed locations and consult the Environmental Expert of OWD before finalising the locations.</p> <p>The Contractor will provide a list of locations and type of sources from where water for construction will be used.</p> <p>The contractor will not be allowed to pump from any irrigation canal and surface water bodies used by community.</p> <p>The contractor will need to comply with the requirements of the State Ground Water Department</p>



Sl. No.	Environmental Issue	Management Measures
		and seek their approval for doing so and submit copies of the permission to SC and OWD.
14	Labor Requirements	The contractor preferably will use unskilled labor drawn from local communities to give the maximum benefit to the local community.
15	Construction Camp Locations – Selection, Design and Lay-out	<p>Siting of the construction camps will be as per the guidelines below. Locations identified by the contractor will report as per format given.</p> <p>Construction camps will not be proposed within 500 m from the nearest settlements to avoid conflicts and stress over the infrastructure facilities with the local community.</p> <p>Location for stockyards for construction materials will be identified at least 200 m from water courses.</p> <p>The waste disposal and sewage system for the camp will be designed, built and operated such that no odor is generated.</p> <p>Unless otherwise arranged by the local sanitary authority, arrangements for disposal of night soils (human excreta) suitably approved by the local medical health or municipal authorities or as directed by Environmental Expert of OWD will have to be provided by the contractor.</p>
16	Arrangements for Temporary Land Requirement	<p>The contractor as per prevalent rules will carry out negotiations with the landowners for obtaining their consent for temporary use of lands for construction sites/hot mix plants/traffic detours/borrow areas etc.</p> <p>The Environmental Expert of OWD will be required to ensure that the clearing up of site prior to handing over to the owner (after construction or its completion) is included in the contract.</p>
17	Orientation of Implementing Agency and Contractors	The OWD shall organise orientation sessions and regular training sessions during all stages of the project. This shall include on-site training (general as well as in the specific context of a sub-project). These sessions shall involve all field level implementation staff of OWD and Environmental Experts.



Sl. No.	Environmental Issue	Management Measures
CONSTRUCTION STAGE		
1	Clearing and Grubbing	<p>Vegetation will be removed from the construction zone before commencement of construction. All works will be carried out such that the damage or disruption to flora other than those identified for cutting is minimal.</p> <p>Only ground cover/shrubs that impinge directly on the permanent works or necessary temporary works will be removed with prior approval from the Environmental Expert of OWD.</p> <p>The contractor, under any circumstances will not cut or damage trees. Trees identified under the project will be cut only after receiving clearance from the Forest Dept./DoEF/MoEF (as applicable) and after the receipt of OWD's written permission in this regard.</p> <p>Vegetation only with girth of over 30 cm will be considered as trees and shall be compensated, in the event of OWD's instruction to undertake tree cutting.</p>
2	Generation of Debris from Dismantling structures and road surface	<p>Debris generated due to the dismantling of the existing road will be suitably reused in the proposed construction, subject to the suitability of the materials and approval of OWD as follows:</p> <p>The sub grade of the existing pavement shall be used as embankment fill material.</p> <p>The existing base and sub-base material shall be recycled as sub-base of the haul road or access roads</p> <p>The existing bitumen surface may be utilised for the paving of cross roads, access roads and paving works in construction sites and campus, temporary traffic diversions, haulage routes etc.</p> <p>The contractor will suitably dispose of unutilised debris materials either through filling up of borrow areas located in wasteland or at pre-designated disposal locations, subject to the approval of the Environmental Expert of OWD.</p> <p>At locations identified for disposal of residual bituminous wastes, the disposal will be carried out over a 60 mm thick layer of rammed clay so as to eliminate the possibility of leaching of wastes into the ground</p>



Sl. No.	Environmental Issue	Management Measures
		<p>water. The contractor will ensure that the surface area of such disposal pits is covered with a layer of soil.</p> <p>All arrangements for transportation during construction including provision, maintenance, dismantling and clearing debris, will be considered incidental to the work and will be planned and implemented by the contractor as approved and directed by the Environmental Expert of OWD.</p> <p>The pre-designed disposal locations will be a part of Comprehensive Solid Waste Management Plan to be prepared by Contractor in consultation and with approval of Environmental Expert of OWD.</p> <p>Debris generated from pile driving or other construction activities shall be disposed such that it does not flow into the surface water bodies or form mud puddles in the area.</p> <p>The contractor shall identify dumping sites. The identified locations will be reported to the Environmental Expert of OWD. These locations will be checked on site and accordingly approved by Environmental Expert of OWD prior to any disposal of waste materials.</p>
3	Other Construction Wastes Disposal including Fly Ash	<p>The pre-identified disposal locations will be a part of Comprehensive Waste Disposal Solid Waste Management Plan to be prepared by the Contractor in consultation and with approval of Environmental Expert of OWD. Location of disposal sites will be finalised prior to completion of the earthworks on any particular section of the road.</p> <p>The Environmental Expert of OWD will approve these disposal sites after conducting a joint inspection on the site with the Contractor.</p> <p>Contractor will ensure that any spoils of material unsuitable for embankment fill will not be disposed off near any water course, agricultural land, and natural habitat like grass lands or pastures. Such spoils from excavation can be used to reclaim borrow pits and low-lying areas located in barren lands along the project corridors (is so desired by the owner/community).</p>



Sl. No.	Environmental Issue	Management Measures
		<p>No fly ash will be disposed in any disposal site. Contractor will take care of residual fly ash, if any that remains after construction work. Either this will be returned to the source or used in construction of embankment elsewhere with proper protection measures. OWD will keep strict vigil on this aspect. Non-bituminous wastes other than fly ash may be dumped in borrow pits (preferably located in barren lands) covered with a layer of the soil. No new disposal site shall be created as part of the project, except with prior approval of the Environmental Expert of OWD. All waste materials will be completely disposed and the site will be fully cleaned and certified by Environmental Expert of OWD before handing over.</p> <p>The contractor at its cost shall resolve any claim, arising out of waste disposal or any non-compliance that may arise on account of lack of action on his part.</p>
4	Stripping, stocking and preservation of top soil	<p>The top soil from all areas of cutting and all areas to be permanently covered will be stripped to a specified depth of 150 mm and stored in stockpiles. A portion of the temporarily acquired area and/or Right of Way will be earmarked for storing topsoil. The locations for stock piling will be pre-identified in consultation and with approval of Environmental Expert of SC/Environment Cell of PWD. The following precautionary measures will be taken to preserve them till they are used:</p> <ul style="list-style-type: none">a) Stockpile will be designed such that the slope does not exceed 1:2 (vertical to horizontal), and height of the pile is restricted to 2 m. To retain soil and to allow percolation of water, the edges of the pile will be protected by silt fencing.b) Stockpiles will not be surcharged or otherwise loaded and multiple handling will be kept to a minimum to ensure that no compaction will occur. The stockpiles shall be covered with gunny bags or vegetation.c) It will be ensured by the contractor that the top soil will not be unnecessarily trafficked either before stripping or when in stockpiles.



Sl. No.	Environmental Issue	Management Measures
		<p>Such stockpiled topsoil will be utilised for -</p> <ul style="list-style-type: none">a) covering all disturbed areas including borrow areas (not those in barren areas)b) top dressing of the road embankment and fill slopesc) filling up of tree pits, in the median andd) in the agricultural fields of farmers, acquired temporarily. <p>Residual topsoil, if there is any will be utilised for the plantation at median and side of the main carriageway.</p>
5	Accessibility	<p>The contractor will provide safe and convenient passage for vehicles, pedestrians and livestock to and from roadsides and property accesses connecting the project road, providing temporary connecting road.</p> <p>The contractor will also ensure that the existing accesses will not be undertaken without providing adequate provisions and to the prior satisfaction of Environmental Expert of OWD.</p> <p>The contractor will take care that the cross roads are constructed in such a sequence that construction work over the adjacent cross roads are taken up one after one so that traffic movement in any given area not get affected much.</p>
6	Planning for Traffic Diversions and Detours	<p>Temporary diversions will be constructed with the approval of OWD and its Environmental Expert.</p> <p>Detailed Traffic Control Plans will be prepared and submitted to the Environmental Expert of OWD for approval, five days prior to commencement of works on any section of road.</p> <p>The traffic control plans shall contain details of temporary diversions, traffic safety arrangements for construction under traffic, details of traffic arrangement after cessation of work each day, safety measures undertaken for transport of hazardous materials and arrangement of flagmen.</p> <p>The Contractor will provide specific measures for safety of pedestrians and workers at night as a part of traffic control plans. The Contractor will ensure that the diversion/detour is always maintained in running</p>



Sl. No.	Environmental Issue	Management Measures
		<p>condition, particularly during the monsoon to avoid disruption to traffic flow.</p> <p>The contractor will also inform local community of changes to traffic routes, conditions and pedestrian access arrangements with assistance from OWD. The temporary traffic detours will be kept free of dust by sprinkling of water three times a day and as required under specific conditions (depending on weather conditions, construction in the settlement areas and volume of traffic).</p>
7	Earth from Borrow Areas for Construction	<p>No borrow area will be opened without permission of the Environmental Expert of OWD. The location, shape and size of the designated borrow areas will be as approved by the Environmental Expert of OWD and in accordance to the IRC recommended practice for borrow pits for road embankments (IRC 10: 1961). The borrowing operations will be carried out as specified in the guidelines for sitting and operation of borrow areas.</p> <p>The unpaved surfaces used for the haulage of borrow materials, if passing through the settlement areas or habitations; will be maintained dust free by the contractor. Sprinkling of water will be carried out twice a day to control dust along such roads during their period of use.</p> <p>During dry seasons (winter and summer) frequency of water sprinkling will be increased in the settlement areas and Environmental Expert of OWD will decide the numbers of sprinkling depending on the local requirements.</p> <p>Contractor will rehabilitate the borrow areas as soon as borrowing is over from a particular borrow area in accordance with the Guidelines for Redevelopment of Borrow Areas or as suggested by Environmental Expert of OWD.</p>
8	Fly Ash	<p>Contractor will ensure that they will strictly follow the specification given in IRC: SP: 58 for fly ash embankment construction. Further, Contractor will also ensure that -</p> <p>Fly ash will be transported in covered dump truck to the project site and is directly dumped on the embankment.</p>



Sl. No.	Environmental Issue	Management Measures
		<p>This will not be stockpiled at project site.</p> <p>Weathered (at least not freshly generated) fly ash will be collected from the fly ash pond to reduce the possibility of water contamination due to leaching of heavy metals.</p> <p>Fly ash surface will be graded and sloped at the end of each working day to provide drainage and to prevent the ponding of water or the formation of run-off channel.</p> <p>The side slope will be properly benched and covered with soil and later vegetation will be grown to prevent the erosion.</p> <p>Run-off from the fly ash embankment/stockpile will be collected and discharged into proper drainage system.</p> <p>Further handling, if any will be restricted within ROW. During such handling and also after placing on embankment, if the fly ash surface is dries up completely, contractor will arrange for frequent sprinkling of water for dust suppression. Otherwise, surface of the fly ash will be covered with tarpaulin or polyethylene sheets or other suitable material.</p> <p>The fly ash will be placed on an aggregate drainage blanket to prevent water from rising into the fly ash by way of capillary action. Contractor will ensure that fly ash layer is separated from the drainage blanket by an appropriate filter fabric/sand blanket of adequate thickness over full width of embankment as capillary cut-off.</p> <p>Environmental Expert of OWD will be required to inspect and report regularly to ensure the compliance in this regard.</p>
9	Quarry Operations	<p>The contractor shall obtain materials for quarries only after consent of the Department of Mining and District Administration.</p> <p>The contractor will develop a Comprehensive Quarry Redevelopment plan, as per the Mining Rules of the state and submit a copy to OWD prior to opening of the quarry site.</p>



Sl. No.	Environmental Issue	Management Measures
		<p>The quarry operations will be undertaken within the rules and regulations in force.</p>
10	<p>Transporting Construction Materials and Haul Road Management</p>	<p>Contractor will maintain all roads (existing or built for the project), which are used for transporting construction materials, equipment and machineries as précised. All vehicles delivering fine materials to the site will be covered to avoid spillage of materials.</p> <p>All existing highways and roads used by vehicles of the contractor or any of his sub-contractor or suppliers of materials and similarly roads, which are part of the works, will be kept clear of all dust/mud or other extraneous materials dropped by such vehicles.</p> <p>Contractor will arrange for regular water sprinkling as necessary for dust suppression of all such roads and surfaces.</p> <p>The unloading of materials at construction sites in/close to settlements will be restricted to daytime only.</p>
11	<p>Construction Water</p>	<p>Contractor will arrange adequate supply and storage of water for the whole construction period at his own costs. The Contractor will submit a list of source/s from where water will be used for the project to OWD.</p> <p>The contractor will source the requirement of water preferentially from ground water but with prior permission from the Ground Water Board. A copy of the permission will be submitted to OWD prior to initiation of construction.</p> <p>The contractor will take all precaution to minimise the wastage of water in the construction process/operation.</p>
12	<p>River Training and Disruption to Other users of Water</p>	<p>While working across or close to any perennial water bodies, contractor will not obstruct/prevent the flow of water.</p> <p>Construction over and close to the non-perennial streams shall be undertaken in the dry season. If construction work is expected to disrupt users of community water bodies, notice shall be served well in advance to the affected community.</p> <p>The contractor will serve notice to the downstream users well in advance to divert the flow of water of any</p>



Sl. No.	Environmental Issue	Management Measures
		<p>surface water body. Wherever excavation for diverting water flow will take place, contractor will ensure that the slopes are not steeper than 1:2 (vertical: horizontal) otherwise proper slope protection measures will be taken as approved by the Environmental Expert of OWD.</p> <p>The contractor will take prior approval of the Department of Water Resources or OWD for any such activity. The OWD will ensure that contractor has served the notice to the downstream users of water well in advance.</p>
13	Drainage and Flood Control	<p>Contractor will ensure that no construction materials like earth, stone, ash or appendage disposed off so as not to block the flow of water of any water course and cross drainage channels.</p> <p>Contractor will take all necessary measures to prevent the blockage of water flow. In addition to the design requirements, the contractor will take all required measures as directed by the Environmental Expert of OWD to prevent temporary or permanent flooding of the site or any adjacent area.</p>
14	Siltation of Water Bodies And Degradation of Water Quality	<p>The Contractor will not excavate beds of any stream/canals/any other water body for borrowing earth for embankment construction.</p> <p>Contractor will construct silt fencing at the base of the embankment construction for the entire perimeter of any water body (including wells) adjacent to the ROW and around the stockpiles at the construction sites close to water bodies. The fencing will be provided prior to commencement of earthwork and continue till the stabilisation of the embankment slopes, on the particular sub-section of the road.</p> <p>The contractor will also put up sedimentation cum grease traps at the outer mouth of the drains located in truck lay byes and bus bays which are ultimately entering into any surface water bodies/water channels with a fall exceeding 1.5 m.</p> <p>Contractor will ensure that construction materials containing fine particles are stored in an enclosure such</p>



Sl. No.	Environmental Issue	Management Measures
		that sediment-laden water does not drain into nearby water course.
15	Slope Protection and Control of Soil Erosion	<p>The contractor will take slope protection measures as per design, or as directed by the Environmental Expert of OWD to control soil erosion and sedimentation through use of dykes, sedimentation chambers, basins, fibber mats, mulches, grasses, slope, drains and other devices.</p> <p>All temporary sedimentation, pollution control works and maintenance thereof will be deemed as incidental to the earth work or other items of work and as such as no separate payment will be made for them.</p> <p>Contractor will ensure the following aspects:</p> <p>During construction activities on road embankment, the side slopes of all cut and fill areas will be graded and covered with stone pitching, grass and shrub as per design specifications.</p> <p>Turfing works will be taken up as soon as possible provided the season is favorable for the establishment of grass sods. Other measures of slope stabilisation will include mulching netting and seeding of batters and drains immediately on completion of earthworks.</p> <p>In borrow pits, the depth shall be so regulated that the sides of the excavation will have a slope not steeper than 1 vertical to 2 horizontal, from the edge of the final section of the bank.</p> <p>Along sections abutting water bodies, stone pitching as per design specification will protect slopes.</p>
16	Water Pollution from Construction Wastes	<p>The Contractor will take all precautionary measures to prevent the wastewater generated during construction from entering into streams, water bodies or the irrigation system. Contractor will avoid construction works close to the streams or water bodies during monsoon.</p> <p>All waste arising from the project is to be disposed off in the manner that is acceptable to the State Pollution Control Board or as directed by Environmental Expert of OWD.</p>



Sl. No.	Environmental Issue	Management Measures
		<p>The Environmental Expert of OWD will certify that all liquid wastes disposed off from the sites meet the discharge standards.</p>
17	Water Pollution from Fuel and Lubricants	<p>The contractor will ensure that all construction vehicle parking location, fuel/lubricants storage sites, vehicle, machinery and equipment maintenance and refueling sites will be located at least 500 m from rivers and irrigation canal/ponds.</p> <p>All location and lay-out plans of such sites will be submitted by the Contractor prior to their establishment and will be approved by the Environmental Expert of OWD and OWD.</p> <p>Contractor will ensure that all vehicle/machinery and equipment operation, maintenance and refueling will be carried out in such a fashion that spillage of fuels and lubricants does not contaminate the ground. Oil interceptors will be provided for vehicle parking, wash down and refueling areas as per the design provided. In all, fuel storage and refueling areas, if located on agricultural land or areas supporting vegetation, the top soil will be stripped, stockpiled and returned after cessation of such storage.</p> <p>Contractor will arrange for collection, storing and disposal of oily wastes to the pre-identified disposal sites (list to be submitted to OWD) and approved by the Environmental Expert of SC/Environment Cell of PWD. All spills and collected petroleum products will be disposed off in accordance with MoEF and state PCB guidelines.</p> <p>Environmental Expert of OWD will certify that all arrangements comply with the guidelines of PCB/MoEF or any other relevant laws.</p>
18	Dust Pollution	<p>The contractor will take every precaution to reduce the level of dust from crushers/hot mix plants, construction sites involving earthwork by sprinkling of water, encapsulation of dust source and by erection of screen/barriers.</p>



Sl. No.	Environmental Issue	Management Measures
		<p>All the plants will be sited at least 150 m in the downwind direction from the nearest human settlement.</p> <p>The contractor will provide necessary certificates to confirm that all crushers used in construction conform to relevant dust emission control legislation.</p> <p>The suspended particulate matter value at a distance of 40m from a unit located in a cluster should be less than 500 g/m³. The pollution monitoring is to be conducted as per the monitoring plan.</p> <p>Alternatively, only crushers licensed by the PCB shall be used. Required certificates and consents shall be submitted by the Contractor in such a case.</p> <p>Dust screening vegetation will be planted on the edge of the RoW for all existing roadside crushers. Hot mix plant will be fitted with dust extraction units.</p>
19	Emission from Construction Vehicles, Equipment and Machineries	<p>Contractor will ensure that all vehicles, equipment and machinery used for construction are regularly maintained and confirm that pollution emission levels comply with the relevant requirements of PCB. The Contractor will submit PUC certificates for all vehicles/equipment/machinery used for the project. Monitoring results will also be submitted to OWD as per the monitoring plan.</p>
20	Noise Pollution: Noise from Vehicles, Plants and Equipment	<p>The Contractor will confirm the following:</p> <p>All plants and equipment used in construction shall strictly conform to the MoEF/CPCB noise standards. All vehicles and equipment used in construction will be fitted with exhaust silencers.</p> <p>Servicing of all construction vehicles and machinery will be done regularly and during routine servicing operations, the effectiveness of exhaust silencers will be checked and if found defective will be replaced. Limits for construction equipment used in the project such as compactors, rollers, front loaders, concrete mixers, cranes (moveable), vibrators and saws shall not exceed the unit, as specified in the Environment (Protection) rules, 1986.</p>



Sl. No.	Environmental Issue	Management Measures
		<p>Maintenance of vehicles, equipment and machinery shall be regular and up to the satisfaction of the Environmental Expert of SC/Environment Cell of PWD to keep noise levels at the minimum.</p> <p>At the construction sites within 150 m of the nearest habitation, noisy construction work such as crushing, concrete mixing, batching will be stopped during the night time between 9.00 pm to 6.00 am.</p> <p>No noisy construction activities will be permitted around educational institutes/health centers (silence zones) up to a distance of 100 m from the sensitive receptors i.e., school, health centers and hospitals between 9.00 am to 6.0 pm.</p> <p>Contractor will provide noise barriers (Design of Noise Barrier Provided) to the suggested locations of select schools/health centers. List of locations for noise barriers is given in specific EMP.</p> <p>Monitoring shall be carried out at the construction sites as per the monitoring schedule and results will be submitted to OWD. Environmental Expert of OWD will be required to inspect regularly to ensure the compliance of EMP.</p>
21	Personal Safety Measures for Labour	<p>Contractor will provide:</p> <p>Protective footwear and protective goggles to all workers employed on mixing asphalt materials, cement, and lime mortars, concrete etc.</p> <p>Welder's protective eye-shields to workers who are engaged in welding works</p> <p>Protective goggles and clothing to workers engaged in Factories Act, 1948 stone breaking activities and workers will be seated at sufficiently safe intervals</p> <p>Earplugs to workers exposed to loud noise, and workers working in crushing, compaction, or concrete mixing operation.</p> <p>Adequate safety measures for workers during handling of materials at site are taken up.</p> <p>The contractor will comply with all regulations regarding safe scaffolding, ladders, working platforms, gangway,</p>



Sl. No.	Environmental Issue	Management Measures
		<p>stairwells, excavations, trenches and safe means of entry and egress.</p> <p>The contractor will comply with all the precautions as required for ensuring the safety of the workmen as per the International Labor Organisation (ILO) Convention No. 62 as far as those are applicable to this contract.</p> <p>The contractor will make sure that during the construction work all relevant provisions of the Factories Act, 1948 and the Building and other Construction Workers (regulation of Employment and Conditions of Services) Act, 1996 are adhered to.</p> <p>The contractor will not employ any person below the age of 14 years for any work and no woman will be employed on the work of painting with products containing lead in any form.</p> <p>The contractor will also ensure that no paint containing lead or lead products is used except in the form of paste or readymade paint.</p> <p>Contractor will provide facemasks for use to the workers when paint is applied in the form of spray or a surface having lead paint dry is rubbed and scrapped.</p> <p>The Contractor will mark 'hard hat' and 'no smoking' and other 'high risk' areas and enforce non-compliance of use of PPE with zero tolerance. These will be reflected in the Construction Safety Plan to be prepared by the Contractor during mobilisation and will be approved by OWD.</p>
22	Traffic and Safety	<p>The contractor will take all necessary measures for the safety of traffic during construction and provide, erect and maintain such barricades, including signs, markings, flags, lights and flagmen as proposed in the Traffic Control Plan/Drawings and as required by the Environmental Expert of OWD for the information and protection of traffic approaching or passing through the section of any existing cross roads.</p> <p>The contractor will ensure that all signs, barricades, pavement markings are provided as per the MoRTH specifications. Before taking up of construction on any section of the existing lanes of the highway, a Traffic</p>



Sl. No.	Environmental Issue	Management Measures
		Control Plan will be devised and implemented to the satisfaction of the Environmental Expert OWD.
23	Risk from Electrical Equipment(s)	<p>The Contractor will take all required precautions to prevent danger from electrical equipment and ensure that -</p> <p>No material will be so stacked or placed as to cause danger or inconvenience to any person or the public.</p> <p>All necessary fencing and lights will be provided to protect the public in construction zones.</p> <p>All machines to be used in the construction will conform to the relevant Indian Standards (IS) codes, will be free from patent defect, will be kept in good working order, will be regularly inspected and properly maintained as per IS provision and to the satisfaction of the Environmental Expert of OWD.</p>
24	Risk Force Measure	<p>The contractor will take all reasonable precautions to prevent danger to the workers and public from fire, flood etc. resulting due to construction activities.</p> <p>The contractor will make required arrangements so that in case of any mishap all necessary steps can be taken for prompt first aid treatment. Construction Safety Plan prepared by the Contractor will identify necessary actions in the event of an emergency.</p>
25	First Aid	<p>The contractor will arrange for:</p> <ol style="list-style-type: none"> A readily available first aid unit including an adequate supply of sterilised dressing materials and appliances as per the Factories Rules in every work zone Availability of suitable transport at all times to take injured or sick person(s) to the nearest hospital Equipment and trained nursing staff at construction camp.
26	Informatory Signs and Hoardings	The contractor will provide, erect and maintain informatory/safety signs, hoardings written in English and local language, wherever required or as suggested by the Environmental Expert of OWD.



Sl. No.	Environmental Issue	Management Measures
27	Road side Plantation Strategy	<p>The contractor will do the plantation at median and/or turfing at embankment slopes as per the tree plantation strategy prepared for the project.</p> <p>The contractor will maintain the plantation till they handover the project site to OWD.</p> <p>The Environmental Expert of OWD will inspect regularly the survival rate of the plants and compliance of tree plantation guidelines.</p>
28	Flora and Chance found Fauna	<p>The contractor will take reasonable precaution to prevent his workmen or any other persons from removing and damaging any flora (plant/vegetation) and fauna (animal) including fishing in any water body and hunting of any animal.</p> <p>If any wild animal is found near the construction site at any point of time, the contractor will immediately upon discovery thereof acquaint the Environmental Expert of OWD and carry out the OWD's instructions for dealing with the same.</p> <p>The Environmental Expert of OWD will report to the nearby forest office (range office or divisional office) and will take appropriate steps/measures, if required in consultation with the forest officials.</p>
29	Chance Found Archaeological Property	<p>All fossils, coins, articles of value of antiquity, structures and other remains or things of geological or archaeological interest discovered on the site shall be the property of the Govt and shall be dealt with as per provisions of the relevant legislation.</p> <p>The contractor will take reasonable precautions to prevent his workmen or any other persons from removing and damaging any such article or thing. He will, immediately upon discovery thereof and before removal acquaint the Environmental Expert of OWD of such discovery and carry out the OWD's instructions for dealing with the same, waiting which all work shall be stopped.</p> <p>The OWD will seek direction from the Archaeological Survey of India (ASI) before instructing the Contractor to recommence the work in the site.</p>



Sl. No.	Environmental Issue	Management Measures
30	Labour camp management – Accommodation	<p>Contractor will follow all relevant provisions of the Factories Act, 1948 and the Building and the other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 for construction and maintenance of labour camp.</p> <p>The location, layout and basic facility provision of each labour camp will be submitted to OWD prior to their construction.</p> <p>The construction will commence only upon the written approval of the Environmental Expert of OWD.</p> <p>The contractor will maintain necessary living accommodation and ancillary facilities in functional and hygienic manner and as approved by the OWD.</p>
31	Labour camp management - Potable Water	<p>The Contractor will construct and maintain all labour accommodation in such a fashion that uncontaminated water is available for drinking, cooking and washing.</p> <p>The Contractor will also provide potable water facilities within the precincts of every workplace in an accessible place, as per standards set by the Building and other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996.</p> <p>The contractor will also guarantee the following:</p> <ol style="list-style-type: none">Supply of sufficient quantity of potable water (as per IS) in every workplace/labor camp site at suitable and easily accessible places and regular maintenance of such facilities.If any water storage tank is provided that will be kept such that the bottom of the tank at least 1mt. from the surrounding ground level.If water is drawn from any existing well, which is within 30mt. proximity of any toilet, drain or other source of pollution, the well will be disinfected before water is used for drinking.All such wells will be entirely covered and provided with a trap door, which will be dust proof and waterproof.A reliable pump will be fitted to each covered well. The trap door will be kept locked and opened only



Sl. No.	Environmental Issue	Management Measures
		<p>for cleaning or inspection, which will be done at least once in a month.</p> <p>f) Testing of water will be done every month as per parameters prescribed in IS 10500:2012.</p> <p>Environmental Expert of OWD will be required to inspect the labour camp once in a week to ensure the compliance of the EMP.</p>
32	Labour camp management - Sanitation and Sewage System	<p>The contractor will ensure that -</p> <p>the sewage system for the camp are designed, built and operated in such a fashion that no health hazards occurs and no pollution to the air, ground water or adjacent water courses take place</p> <p>separate toilets/bathrooms, wherever required, screened from those from men (marked in vernacular) are to be provided for women</p> <p>adequate water supply is to be provided in all toilets and urinals</p> <p>all toilets in workplaces are with dry-earth system (receptacles) which are to be cleaned and kept in a strict sanitary condition</p> <p>Night soil is to be disposed off by putting layer of it at the bottom of a permanent tank prepared for the purpose and covered with 15 cm. layer of waste or refuse and then covered with a layer of earth for a fortnight.</p>
33	Labour camp management - Waste Disposal	<p>The contractor will provide garbage bins in the camps and ensure that these are regularly emptied and disposed off in a hygienic manner as per the Comprehensive Solid Waste Management Plan approved by the Environmental Expert of OWD.</p> <p>Unless otherwise arranged by local sanitary authority, arrangements for disposal of night soils (human excreta) suitably approved by the local medical health or municipal authorities or as directed by Environmental Expert of OWD will have to be provided by the contractor.</p>
34	Clean-up Operations, Restoration and Rehabilitation	<p>Contractor will prepare site restoration plans, which will be approved by the Environmental Expert of OWD. The</p>



Sl. No.	Environmental Issue	Management Measures
		<p>clean-up and restoration operations are to be implemented by the contractor prior to demobilisation. The contractor will clear all temporary structures; dispose all garbage, night soils and POL waste as per Comprehensive Waste Management Plan and as approved by OWD.</p> <p>All disposal pits or trenches will be filled in and effectively sealed off. Residual topsoil, if any will be distributed on adjoining/proximate barren land or areas identified by Environmental Expert of OWD in a layer of thickness of 75 mm-150 mm.</p> <p>All construction zones including river-beds, culverts, road-side areas, camps, hot mix plant sites, crushers, batching plant sites and any other area used/affected by the project will be left clean and tidy, at the contractor's expense, to the entire satisfaction to the Environmental Expert of OWD.</p>
OPERATIONAL STAGE		
1	Monitoring Operation Performance	<p>The OWD will monitor the operational performance of the various mitigation/enhancement measures carried out as a part of the project.</p> <p>The indicators selected for monitoring include the survival rate of trees; utility of enhancement provision for relocated temples, schools and other relocated structures; status of rehabilitation of borrow areas; and utility of noise barriers.</p>
2	Maintenance of Drainage	<p>OWD will ensure that all drains (side drains, median drain and all cross drainages) are periodically cleared especially before monsoon season to facilitate the quick passage of rainwater and avoid flooding.</p> <p>OWD will ensure that all the sediment and oil and grease traps set up at the water bodies are cleared once in every three months.</p>
3	Pollution Monitoring	<p>The periodic monitoring of the ambient air quality, noise level, water (both ground and surface water) quality, soil pollution/contamination in the selected locations as suggested in pollution monitoring plan will be</p>



Sl. No.	Environmental Issue	Management Measures
		responsibility of OWD. OWD will appoint PCB approved pollution monitoring agency for this purpose.
4	Atmospheric Pollution	Ambient air concentrations of various pollutants shall be monitored as envisaged in the pollution-monitoring plan. Roadside tree plantation will be maintained.
5	Noise Pollution	Noise pollution will be monitored as per monitoring plan at sensitive locations. Noise control programs are to be enforced strictly. Monitoring the effectiveness of the pollution attenuation barriers, if there is any, will be taken up thrice in the operation period.
6	Soil Erosion and Monitoring of Borrow Areas	Visual monitoring and inspection of soil erosion at borrow areas, quarries (if closed and rehabilitated), embankments and other places expected to be affected, will be carried out once in every three months as suggested in monitoring plan.
7	Changes in Land Use Pattern	PWD shall take initiative and act as facilitator to prepare an action plan for balanced regional development in consultation with Local Development Authority and State Govt to control the ribbon development along the project road including new bypasses. A land use regulation control, if applicable need to be adopted. A land use-zoning map may be developed, under which up to a particular distance from the ROW of the alignment especially in new bypass stretches, no development will be allowed. Necessary hoardings will be erected indicating the availability of ROW and legal charges for encroachment of ROW. Budgetary provisions are to be made to control the ribbon development along project road.



**Annexure 8.3: Proforma for details of Trees for Cutting
Enumeration of trees of (Project Name.....)**

(Reference 8.1.8 of Manual)

OWD Division

Tehsil

OWD Subdivision

Dist.

Sl. No.	Name of the area	Khata No.	Plot No.	Kissam	Trees Sl. No.	Name of the Species	RHS	LHS	Approximate in		Nature of Tree		Remarks
									Girth in	Height M	Normal	Defective	
1	2	3	4	5	6	7	8	9	10	11	12	13	14



Annexure 8.4: Guidelines for preparation of Terms of Reference (TOR) for Environmental Impact Assessment of Highway Projects

(Reference 8.1.18 of Code & 8.1.7A of manual)

Objective

Terms of Reference (TOR) for preparation of Environmental Impact Assessment (EIA) and Environmental Management Plan for Highway Projects as per the EIA Notification, 2006 and subsequent amendments has been devised to improve the quality of the reports and facilitate the decision making transparent and easy. TOR will help the project proponents and consultants to prepare report with relevant project specific data, which are informative, compact and easy to comprehend. TOR for Highway Projects is expected to cover all environmental related features.

General Information

Developments of Highway Projects are generally intended to improve the economic and social welfare of the people. At the same time it may also create adverse impacts on the surrounding environment. People and properties may be in the direct path of Road Works are effected. The Environmental impacts of highway projects include damage to sensitive eco-systems, soil erosion, changes to drainage pattern and thereby ground water, interference with animal and plant life, loss of productive agricultural lands, resettlement of people, disruption of local economic activities, demographic changes, accelerated urbanisation and increase in air pollution. Highway development and operation should, therefore, be planned with careful consideration of their environmental impacts. To minimize these adverse effects that may be created by the Highway development projects the techniques of Environmental Impact Assessment (EIA) become necessary. Identification and assessment of potential environmental impacts should be an integral part of the project cycle. It should commence early in the planning process to enable a full consideration of alternatives, and to avoid later delays and complications. Highway authorities should have a clearly designated staff member with overall responsibility for environmental matters and knowledge of environmental laws and regulations.

As per this EIA notification 2006, projects or activities included as Category 'A' in the Schedule shall require prior Environmental clearance from the MOEFCC on the recommendations of an Expert Appraisal Committee. All projects or activities included, as Category 'B' in the Schedule will require prior environmental clearance from the State/Union territory Environment Impact Assessment Authority

The highway projects are included in item no: 7 (f) of schedule of MOEFCC notification 2006 with following categorization:



Project Activity	A Category	B Category	General Condition
Highways	i. New National Highway, ii. Expansion of National Highways greater than 100 km, involving additional right of way greater than 40 m. Along existing alignment and 60 m along bypasses and realignments	i. All New State Highway Projects ii. State Highway expansion projects in hilly terrain (above 1,000m AMSL) and or ecologically sensitive area”	Any project or activity specified in Category ‘B’ will be treated as Category A, if located in whole or in part within 10 km from the boundary of: <ol style="list-style-type: none"> Protected Areas notified under the Wild Life (Protection) Act-72, Critically Polluted areas as notified by the Central Pollution Control Board from time to time, Notified Eco-sensitive areas, Inter-State boundaries & international boundaries

The EIA-EMP report should be based on generic structure given in Appendix III to the EIA notification 2006 for the project or its expansion/modernisation. The EIA report should incorporate the page numbers of various chapters, sections and sub-sections, tables, appendices, drawings and figures etc., with titles shall be clearly indicated under the heading contents:

1.0 Introduction

This chapter should cover the following:

- Purpose of the project, brief description of the project, project name, nature, size, its importance to the region and the country
- Profile of the project proponent, name and contact address with e-mail, organisational chart, project consultants etc., should be mentioned clearly
- Land description- village, tehsil, district, state and extent of the land must be mentioned clearly
- Whether the project attracts the provisions of General Conditions as per EIA notification 2006. If so, applicability to the project should be discussed
- The proponent should confirm that the project meets all the central/state/local environmental regulations and standards applicable for coal washeries and allied activities
- Any litigation(s) pending against the proposed project and/or any directions or orders passed by any court of law/any statutory authority against the project is to be detailed out
- In case of expansion/modernisation of the project, the environmental compliance status for the existing project should be explained



- National standards and codes of practice of Indian Roads Congress (IRC) and MoRT&H particular to environmental issues, which are relevant to the proposed project should be furnished

2.0 Project Description

2.1 Broader details of the project, location and alignment

- Relevance of the project in light of the existing development plans of the region/state/nation
- Project coverage, master plan, phasing and scope
- Description of alternatives considered to avoid the ethnic minorities and indigenous people living in the proposed rights-of-way
- Procedures and criteria adopted for selection of the alignment of right of way and alternative alignments considered
- Overall suitability of the identified alignment and the proposed activity in light of the existing Environmental Acts and deviations, if any
- Description of road alignment, broad geology, topography, connectivity, demographic aspects, socio, cultural and economic aspects, villages, settlements
- Details of land acquisition, rehabilitation of communities/villages present status
- Technologies involved for design, construction, equipment and operation
- Resources, manpower, time frame etc., required for project implementation
- Estimated cost of development of the project, environmental cost, funding agencies, whether governmental or on the basis of BOT etc.

Essential Maps to be provided with TOR

- Highway alignment plan with the help of latest available cloud free satellite imagery of project alignment in 1:25,000 scale, and surrounding area covering 10 Km distance on either side of the proposed right of way showing the details of (i) Protected Areas notified under the Wild Life (Protection) Act, 1972, (ii) Critically polluted areas as notified by the Central Pollution Control Board from time to time, (iii) Notified Eco-sensitive areas, (iv) Inter-state boundaries and international boundaries
- Alignment plan, with details such as nature of terrain (plain, rolling, hilly), details of villages, tehsils, districts and states, latitude and longitude for important locations falling on the alignment shall be submitted
- A map derived from the recent satellite imagery covering aerial distance of 15 Km from the proposed alignment delineating environmental sensitive areas as specified in Form I of EIA notification dated 14th Sep 2006
- Land use map of the study area to 1: 25,000 scale based on recent satellite imagery of the study area delineating the crop lands (both single and double crop), agricultural plantations, fallow lands, waste lands, water bodies, built-up areas, forest area and other surface features such as railway tracks, ports, airports, roads, and major industries etc.



- Area drainage map covering 500 meters on either side of proposed right of way shall be clearly indicated. In case of any proposed diversion of nallah/canal/river either during the construction phase or operational phase, it shall also be shown in the map
- Detailed ground surveyed map in 1:2000 scale showing the existing features falling within the right of way namely trees, structures including archeological & religious, monuments etc.

2.2 Activities for Site Preparation

- If the proposed route is passing through low lying areas, details of fill materials and initial and final levels after filling above MSL, should be provided
- If the proposed route involves stripping, the details of the area to be stripped, locations, volume and quantity of earth to be removed, type of soil and proposal for utilisation of removed top soil with location of dump site to be provided
- If the proposed route involves cutting of earth, the details of area to be cut, depth of cut, locations, soil type, volume and quantity of earth and other materials to be removed with location of dump site to be provided
- If the proposed route is passing through any hilly area, and avalanche area the details to be provided
- If the proposed route involves tunneling, the details of the tunnel and locations of tunneling with geological structural fraction should be provided
- In case the road passes through a flood plain of the river, the details of micro drainage, flood passages and information on flood periodicity in the area should be provided
- If the proposed project involves any land reclamation, details to be provided for the activity for which land to be reclaimed and the area of land to be reclaimed
- If the proposed route involves any migratory path of animals, details about fauna, habitat and period of the year in which activity take place, should be provided
- Is there a possibility that the construction of roads will cause impacts such as destruction of forest, poaching, reduction in wetland areas, if so, details are to be provided
- If there will be any change in the drainage pattern after the proposed activity, details of changes to be furnished
- If the proposed route is passing through a city or town, with houses and human habitation on the either side of the road, the necessity for provision of service ducts to be studied

If the project attracts the provisions of CRZ Notification:

- In case the proposed route falls totally or partially in CRZ area, indicate the category of the area and also show under what provision this activity is permitted
- CRZ maps indicating the High Tide Level (HTL), Low Tide Level (LTL), demarcated by one of the seven authorized agencies and the project lay out superimposed on the map shall be submitted on 1:5000 scale map. This map shall be recommended by the state/union territory CZM authority



- If the proposed project involves extraction of sand, leveling or digging of sandy stretches within 500 meters of high tide line, the area of stretches to be given
- If the project involves cutting/disturbance of mangroves, details about the area, species existing health status shall be given
- If any sand to be removed from sand dunes details to be given
- If the proposed project involves any dredging, details to be given
- Information should be furnished if any likely ingress of saline water into groundwater due to the proposed project

3.0 Analysis of alternatives (Technology & Sites)

In case, the scoping exercise results in need for alternatives this chapter shall include:

- Description of various alternatives like locations or technologies studied
- Description of each alternative
- Summary of adverse impacts of each alternative
- Selection of alternative

4.0 Description of the Environment

Study area

As a primary requirement of EIA process, the proponent should collect primary baseline data in the right of way as well as the area falling within 500 meters on the either side of the right of way and secondary data should be collected within 15 kms aerial distance as specifically mentioned at column 9(iii) of Form I of EIA Notification 2006. The study areas mentioned in this document should be considered for guidance purpose only. The exact study area for different environmental attributes (water, air, noise, soil etc) is to be submitted considering the proposed project activity and location, with proper reasoning, for review and approval by the expert appraisal committee. Monitoring should be done as per CPCB guidelines.

TOR should contain details of secondary data, the source of secondary data, meteorological data from nearest station of IMD along with wind roses and proposed monitoring locations should be marked on the study map. Similarly the proposed locations of monitoring stations of water, air, soil, noise etc. shall be shown on the study area map. One season monitoring data excluding monsoon should be collected. Period/date of data collection should be clearly indicated.

4.1 Land Environment

- Data of the proposed land and its availability should be ascertained from local authorities, revenue records etc.
- Description of the existing situation of the land along the alignment. Study of the land use pattern, habitation, cropping pattern, forest area, environmentally sensitive places, mangroves, notified industrial areas, sand dunes, nature of the terrain (plain, rolling, hilly), sea, river, lake etc. by employing remote sensing techniques followed by ground trothing and also through secondary data sources



- Details of villages, tehsil, districts and states, elevation above mean sea level & latitude and longitude of important locations from where the alignment will be passing
- Data on erosion potential, and natural drainage should be provided
- Geology: rock types, history of any volcanic activity, seismicity, landslides and associated hazards
- Soil – soil cover, physical and chemical properties

In case of expansion/modernisation of the existing road, the following additional information shall be provided

Road factors: (i) Land width (ii) Geometrics – curvature, gradient, and pavement width etc.

(iii) structural condition of road and road structures

Traffic factors: Traffic volume- vehicles per day/traffic composition/average speed of travel/Presence of road intersection – nos./km and access control

4.2 Air Environment

- Climate and meteorology (max and min temperature, relative humidity, rainfall, frequency of tropical cyclone and snow fall); the nearest IMD meteorological station from which climatological data have been obtained to be indicated
- Wind rose (Wind direction and speed, 24 hourly data)
- Air quality monitoring data in respect of **PM2.5 and PM10**, SO₂, NO_x, and CO. Monitoring should cover one full season except monsoon. Frequency and methodology adopted should be as per CPCB guidelines
- Monitoring stations are to be located based on dominating wind direction, habitations, notified sanctuaries and terrain features in the study area. The locations of monitoring stations should be clearly specified

4.3. Water Environment

- Determine the sensitivity of the study zone and identify the main potential impacts, working from basic data on the drainage basin and watersheds, nature and frequency of flooding, water quality, water use, fauna species and habitats. Assess likely modification of baseline conditions arising from the project activity
- Details of springs, lakes, reservoirs within 500 meters of the proposed road right of way
- List the distance of the proposed alignment to the existing major water bodies used as drinking water in the downstream side of the alignment
- Fix-up the locations of representative monitoring stations along the proposed project road for surface and ground water resources and document them
- Samples should be collected for both surface and ground water and examined for physico-chemical, heavy metal and bacteriological parameters



- Delineation of water sheds and water drainage pattern in the study area using the topographical maps and the impacts of the proposed highways in changes the water course etc. for examining the drainage patterns especially during monsoon season and during floods

4.4. Noise Environment

- Identify project activities during construction and operation phases, which will affect the noise levels and the potential for increased noise resulting from this project. Discuss the effect of noise levels on nearby habitation during the construction and operational phases of the proposed highway. Identify noise reduction measures and traffic management strategies to be deployed for reducing the negative impacts if any
- Select the locations of monitoring stations along the alignment of the project covering sensitive locations such as residential, hospitals, schools, sanctuaries etc. Monitoring should be done for 24 hrs at each location

4.5. Biological Environment

- Details on secondary data on the existing flora and fauna in the study area, carried out by an university/institution under the relevant discipline (such as BSI, ZSI, WII, etc) shall be included in the list of flora and fauna along with classification as per Schedule given in the Wild Life Protection Act, 1972 (for fauna) and in the Red Book Data (flora) and a statement clearly specifying whether the study area forms a part of an ecologically sensitive area or migratory corridor of any endangered fauna
- If the proposed project site involves any breeding or nesting ground, details about the name of the aquatic organism, type of habitat and period of year in which activity takes place should be provided
- If the proposed route requires cutting of trees, then the information should be provided for number of trees to be cut, their species and whether it also involved any protected or endangered species
- Quantitative estimation of forest and non-forest flora
- Assessment of fauna and avi- fauna indicating endangered and endemic species with respect to schedule of the wild life protection act
- Location of national parks, sanctuary, and biosphere reserve, tiger reserve, elephant reserve and wildlife migratory routes with in aerial distance of 15 km either side of proposed alignment
- Information on dependence of local people on minor forest products

4.6. Socio Economic and Health Environment

- Details of the properties, houses, businesses etc. activities likely to be effected by land acquisition and their financial loses annually.
- Data covering the vulnerable groups or persons including women, children, elderly, people below the poverty line, indigenous people and notified settlements



- Identification of historical and archeological sites
- Data on diseases in the locality and existing health care facilities
- Data on demography including traditional skills and sources of livelihood along the proposed site

5.0 Anticipated Impacts and Mitigation Measures

This chapter shall describe the likely impact of the project on each of the environmental component, methods adopted for assessing the impact such as model studies, empirical methods, reference to existing similar situations, reference to previous studies, details of mitigation, methods proposed to reduce adverse effects of the project and reference to the models along with the inputs used should be mentioned. Mitigation measures should be proposed as required during the construction stage as well as the operation stage of the project for all the identified impacts.

5.1 Land Environment

Anticipated Impacts:

- The road itself – land requirement, removal of vegetation, fragmentation of natural habitat, removal of buildings and severance of form land causes, direct impacts. The most immediate and obvious effect of road development on soil is the elimination of the productive capacity of soil covered by the roads
- Impact of the project construction leading to soil contamination, soil erosion, destabilisation of slopes, side- tipping of spoils material, loss of properties, loss of fertile lands and diversion of natural surface water flows are to be studied in detail
- Assess whether there is a possibility that the proposed project will adversely affect road traffic in the surrounding areas (e.g. by causing increases in traffic congestion and traffic accidents)
- Indicate whether the proposed project will cause impediment to the movement of inhabitants
- Impacts on the local area developments and integration with local master plan

Mitigation Measures:

- The extent of environmental impacts in construction, operation and post operation is largely determined during planning and route or site selection. Early consultation and determination of alternatives can substantially prevent and reduce the potential environmental impacts of these projects
- While selecting new road alignments attention must be paid to avoid areas prone to landslides, soil erosion, fertile agricultural lands and environmental sensitive areas.
- Before finalizing the alignment erosion potential of each alternative should be carefully examined and the one involving least disturbance to the natural ground should be preferred
- Balancing filling and cutting requirements through alignment choice to reduce the need for borrow pits and to minimize excess spoil material generation is to be examined



- Drainage improvement requirements to minimize water logging and flooding due to disturbance of the natural drainage pattern are to be examined
- Afforestation plan to compensate for the cutting of the trees during the proposed road construction activity
- List the mitigative measures to address the impediments to the movement of Inhabitants

5.2 Air Environment

Anticipated Impacts:

- The immediate surroundings may have a greater impact. The existing surrounding features such as habitation, hospitals, schools, notified sanctuaries etc. up to 500 meters and impact on them shall be addressed separately
- Impact during construction activities due to generation of fugitive dust from crusher units, air emissions from hot mix plants and vehicles used for transportation of materials
- Prediction of impact on ambient air quality using appropriate mathematical model, description of model, input requirement and reference of derivation, distribution of major pollutants and presentation in tabular form for easy interpretation shall be carried out

Mitigation measures:

- Selecting road alignment, which avoids passing close to housing, schools and work places; providing sufficient capacity to avoid traffic congestion, even with projected increase in traffic flow
- Planting tall leafy vegetation between roads and human settlements
- Water sprinkling and transporting construction materials with tarpaulin coverage during the construction stage. Purchasing road metal from the crushing units, which are consented to operate by SPCB
- Crusher and hot mix units, if used on site, should be equipped with requisite air pollution equipment to meet the prescribed standard of MOEFCC and SPCBc
- Integration with the local government awareness campaign programmes on good practices of vehicle maintenance etc. to reduce the air emissions
- Environmental specifications for contractors should cover the required safeguards during the design and construction stage

5.3 Water Environment

Anticipated Impacts:

- Impact on surface water flow modifications can contribute to flooding, soil erosion, channel modification and siltation of streams
- Road drainage and excavation can lower the water table in surrounding areas while embankments and structures can raise water table by restricting flow. The potential effects include deterioration of vegetation, increased susceptibility to erosion loss of water for drinking as well as agriculture use



- Impact on water quality degradation (surface & ground water) can take place due to sedimentation, changes in biological activity in streams and on their banks
- Impact due to discharge of wastewater generation from the temporary project offices and temporary construction workers housing area
- Indicate whether there is a possibility of soil runoff from the bare lands resulting from earth moving activities such as cutting and filling will cause water quality degradation in downstream water courses or water bodies

Mitigation Measures:

- Avoiding alignments which are susceptible to erosion, such as those crossing steep slopes
- Minimizing the number of water crossings wherever possible
- Leaving buffer zones of undisturbed vegetation (with increased in proportion to slope) between road sites and bodies of water
- Mitigation measures such as providing adequate drainage modifications, settling basins, paving, infiltration ditches etc. is to be examined
- Adequate sanitation facilities and hygiene at construction workers colony should be provided
- Safe measures for temporary storage of fuels
- Environmental specifications for contractors should cover the required safeguards during the design and construction stage

5.4 Noise Environment

Anticipated Impacts:

- Noise levels may increase during construction activity, due to operation of various machines and equipment
- Noise levels may increase during operation of the highway due to increased traffic activities Prediction of noise levels should be done by using mathematical modeling at different representative locations
- Impact of vibrations during blasting activity, if any

Mitigation Measures:

- Development of bypass roads to avoid road alignment through noise sensitive areas
- Adoption of proper surface design and maintenance
- Provision of noise barriers. Specifications for installation of noise protection devices clearly indicating the location, design and material, and also provide for future maintenance requirements
- Prediction model outputs justify the selection of type of the noise barrier and thickness of the noise barrier etc.



- Planting tall leafy and dense vegetation between roads and noise sensitive areas
- Interaction with the local government and vehicular manufacturers to conduct awareness campaign programmes on good practices of vehicle maintenance etc. to reduce the noise emissions
- Environmental specifications for contractors should cover the required safeguards during the design and construction stage

5.5 Biological Environment

Anticipated Impacts:

- Loss of wildlife habitat and biodiversity due to change in land use
- Fragmentation of wildlife habitat and territories
- Changes in water quality, soil profile, noise, light and air pollution, which may affect the nature and character of habitats
- Pressure on habitats wildlife as a result of increased access provided by roads
- Loss of forest resources, economically important plants, medicinal plants and threat to rare, endemic and endangered species

Mitigation Measures:

- Identification of sensitive natural environments in the early planning stage so that alternative routes, changes in width of the road can be examined
- Possibility of twin new road corridors with previously established transport rights– of-way, such as railway lines
- Provision of animal crossings in identified areas
- Compensate the loss of forest coverage by compensatory plantation programme
- Development of green belt along the alignment
- Regeneration and conservation of flora and fauna including rare plants of economic importance, medicinal plants and wildlife species
- Institutional arrangements for implementation and monitoring of various mitigating measures
- Environmental specifications for contractors should cover management of work forces (control of poaching and fire wood collection), machinery (speed, noise, and traffic), and prevention of erosion and contamination during construction

5.6 Socio-economic and Health Environment

Anticipated Impacts:

- Analysis of positive and negative impacts on the present status of livelihood
- Displacement of human settlement from proposed site. Impact on livelihood and loss of properties
- Impact on community resources



- Impact on historical and archeological sites
- Impact on the existing travel areas due to faster traffic, access controls and median barriers
- Impact due to accelerated urbanisation

Mitigation Measures:

- Rehabilitation plan for land outies, homestead outies, and for displaced persons. Institutional arrangement for effective implementation and periodical review through project implementation to be incorporated
- Criteria and method of calculation of compensation for loss of land and crops. Mechanism for providing effective guidance in financial planning to effected people.
- Training to local people for employing them in the proposed project
- Employment opportunity and access to other amenities such as primary education and health care facilities for local people
- Integration with the local master plan to prevent conflict of interest.
- Stipulation of environmental specifications for contractors

5.7. Solid Waste Management

- Waste generated during construction may impact soil, agriculture and water quality
- Waste generated from workers' camps may impact sanitation, water quality and agriculture
- Oil spillage/leakage from machines and vehicles may contaminate earth
- Proper environmental specifications to be stipulated in the contract

6.0 Environmental Monitoring Programme

- Summary matrix of environmental monitoring, for all phases of the project viz. construction and operation
- Technical aspects of monitoring for achieving effectiveness in mitigation measures
- Requirement of monitoring facilities and methods adopted
- Frequency, location, parameters of monitoring
- Compilation and analysis of data and reporting system
- Procurement schedules and budgets in detail
- Training requirements

7.0 Additional Studies

Specific condition	Study required
Scoping Stage	<ul style="list-style-type: none">• Studies directed by the Expert Appraisal Committee while deciding the TOR for the project
Public consultation	<ul style="list-style-type: none">• Public hearing with the issues raised by the public and the response of the project proponent in tabular form should be prepared



Specific condition	Study required
Natural resource conservation and optimization	<ul style="list-style-type: none"> Plan of action for conservation of natural resources by utilisation of fly ash, steel melting shops' slag and other metallurgical industries solid nonhazardous waste
R & R action plans	<ul style="list-style-type: none"> Detailed R&R plan with data on the existing socio-economic status of the population in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternative livelihood concerns/employment and rehabilitation of the displaced people, civil and housing amenities being offered, etc. and the schedule of the implementation of the project specific R&R Plan. Details of budget provisions (capital & recurring) for the project specific R&R Plan
Accident prevention and Road Safety Management System	<ul style="list-style-type: none"> Examine road design standards, safety equipment specifications and training to ensure that design details take account of safety concerns Identification of accident prone areas and avoidance/mitigation Identification of habitat fragmentation and traffic accident of wildlife and mitigation measures should be furnished Provision of speed breakers, safety signals, service lanes and foot paths should be examined at appropriate locations throughout the proposed road to avoid the accidents Accident data and geographic distribution should be reviewed and analyzed to predict and identify trends – in case of expansion of the existing highways Preparation of traffic management plan Laws, regulations and enforcement related to speed, alcohol and vehicle safety should be reviewed Institutional frame work for monitoring of road safety Post-accident emergency assistance and medical care to accident victims

8.0 Project benefits

It should bring out details of benefits by way of:

- Improvements in the physical infrastructure and road access
- Improvement in social services by quicker and safe transport mode
- Employment potential –skilled; semi-skilled and unskilled labour both during construction and operational phases of the project with specific attention to employment potential of local population as well as necessity for imparting any specialised skills to them to be eligible for such employment in the project
- Reduction in traffic congestion through city/town/and other locations



- Development of tourism
- Reduced pollution, vehicle maintenance, fuel saving due to better quality of roads
- Over all development in economy and improved life style

9.0 Environmental cost benefit analysis

If recommended by the Expert Appraisal Committee at the scoping stage, this chapter shall include the Environmental Cost Benefit Analysis of the project.

10.0 Environment Management Plan (EMP)

- Administrative and technical set up for the management of environment, clearly defining the roles and responsibilities of persons/party handling various functions
- Summary matrix of EMP and budget provision for EMP, during pre-construction, construction and operation stage
- Summary matrix of Environmental monitoring, during construction and operation stage
- Institutional arrangements proposed with other organisations/Govt. authorities for effective implementation of environmental measures proposed in the EIA
- Safeguards/mechanism to continue the assumptions/field conditions made in the EIA, for arriving the site suitability

11.0 Summary & Conclusion (Summary EIA)

Summary EIA shall be a summary of the full EIA report condensed to ten A-4 size pages at the maximum. It should necessarily cover in brief the chapters of the full EIA report: Introduction, project description, description of the environment, anticipated environmental impacts & mitigation measures, additional studies, environmental monitoring programme, project benefits, environmental management plan and disclosure of consultants engaged

12.0 Disclosure of consultants engaged

This chapter shall include the names of the consultants engaged with their brief resume and nature of consultancy rendered.

Enclosures

Feasibility report/Form I/Photos of project site, impact areas/Summary of project details

Summary of project details

S. No.	Description	Quantity
1	Length of new alignment proposed (kilometers)	
2	Width of the new alignment (meters)	
3	Length of existing alignment proposed to be strengthened/widened (kilometers)	



S. No.	Description	Quantity
4	Width of the existing alignment (meters)	
5	Width of the existing alignment after widening (meters)	
6	Total length of the alignment (kilometers)	
7	Number of bridges Major Minor	
8	Length of bridges (meters) Width of bridges (meters)	
9	Number of culverts	
10	Length of culverts (meters)	
11	Number and distance (meters) between underpasses	
12	Number of intersections	
13	Length of intersections (meters)	
14	Number of railway crossings	
15	Length of railway crossings (meters)	
16	Number of villages through which alignment passes	
17	Population of the villages through which alignment passes	

Details of National parks etc. within 15 Km radius from the highway

S. No.	Item	Name	Aerial distance (km) and reference point on the highway alignment
1	National park		
2	Marine park		
3	Sanctuary/tiger reserve Elephant reserve/ Turtle nesting ground		
4	Core zone of biosphere reserve		
5	Reserved forest		
6	Wildlife habitat		
7	Habitat of endangered/exotic species		
8	Coral reef		
9	Mangroves		
10	Lakes/reservoirs/dams		
11	Breeding site		
12	Nesting site		



CHAPTER 9
ASSETS MANAGEMENT



9 ASSETS MANAGEMENT

9.1 General

Assets mean **movable assets like assets acquired for IT, furniture etc. and** permanent assets under the administrative control of OPWD. These include assets like lands, roads, buildings, rest house, etc. which are under the administrative control and charge of OPWD. Maintenance of all the assets is as important as creation of new assets, warranting adequate provision for proper upkeep. Currently backlog of maintenance activities has caused excessive deterioration of some of the structures. The maintenance activities should be properly planned and implemented periodically. For this all the assets have to be recorded in registers and regular inspection and verification carried out. Various important assets requiring management and maintenance include the following:

- a. Land (owned by OPWD in the ROW of a road, land appurtenant to building, workshop or office, nursery, water works, sewage treatment plants, or land otherwise owned by the OPWD);
- b. Roads including grade separators, bridges, road furniture, water supply lines, sewer lines, storm water drain, canals, embankment and other structures in the ROW;
- c. Buildings, pump houses, cross-drainage works, inspection bungalows, water works, sewage/storm water treatment plants and other such structures, etc.
- d. Moveable assets like tools and Plant, Instruments, Equipment and Machinery etc.

9.2 Asset Inventories

Each Division is required to maintain complete and up-to-date inventories of all the assets under its jurisdiction for effective management of the assets. The record shall include up to date condition of the assets and details of maintenance carried out in the past. This part of detail shall be updated every year. These records should be kept in hard as well as soft copy. Typically, the records should include following inventories:

- a. Inventory of land with reference to available land records and maps, these are basic records of property right of Govt;
- b. Inventory of roads, drains, canals, distributaries, water supply lines, sewer/storm water line;
- c. Register of buildings, sub stations and services;
- d. Register of bridges, Flyovers, underpasses, ROB, culverts etc.;
- e. Register of inlet stations, water treatment plants, sewage treatment plants, pumping and booster stations, water tanks and reservoirs, outfalls and other structures appurtenant thereto;
- f. Register of dams, weir, head-works, regulators, canals, distributaries, siphons, outlets, aqueducts, pump houses, pumps, workshops, silt excluders/ejectors and other related structures;
- g. Register of flow of rivers by plain tabling and remote sensing etc.



OPWD shall notify one Division in every District to be the custodian of all records pertaining to the District. If a particular work pertains to two or more districts, the EIC shall order the records to be kept in **all the Districts to which the work pertains.**

9.3 Land Management

9.3.1 General

Land Management is the most important activity of Asset Management. The land plans and land records are the basic documents of property right of the Govt.

EE/DO are required to maintain record of all asset with in his jurisdiction in suitable form in which particulars of the lands vested with it will be entered. In the case of highways, drains, etc. proper land and strip plans should be prepared. These records should be reviewed and revised every three years.

The boundaries of the land should be demarcated and secured by a wall, fence or pucca boundary pillars, as considered necessary.

As and when Department acquires fresh lands for any purpose (or gets land by voluntary donation), it should get the mutation of the land in revenue records done in its favour and simultaneously include it in the inventory.

In case Department land is given on lease to other Department, corporation or a private party, such records shall be maintained in Lease Register along with copies of lease agreement etc.

9.3.2 Annual Check of Land Boundaries

During the month of September/October of every year EE shall arrange an annual check of the boundaries of land in his charge with a view to detect any unauthorised encroachment and prepare a report regarding the same and forward the same to the SE **as well as police and revenue authorities for its removal.**

9.3.3 Action against Encroachments

The encroachments generally occur on appurtenant land of Govt. buildings or adjoining the roads and bridges. As soon as an encroachment is discovered, **the EE shall intimate the same to police and revenue authorities for removal of the same under Odisha prevention of land encroachment provisions.** The laxity on the part of staff, who allowed such encroachment to go un-checked, shall be enquired into on urgent basis and action taken against the officials found responsible. Status report of the encroachment and actions taken of its removal should be reported to the CE through the SE.

9.3.4 Auction of Usufructs

The fruit bearing trees and other trees on Govt land should be protected properly. Every year auction should be done for sale of usufructs. The money realised is to be credited to revenue of the Department

9.3.5 Surplus Land

Surplus land in the jurisdiction of Department may be kept in reserve for future needs of the Department or, with the approval of the State Govt, given on annual lease for cultivation or



commercial use or transferred to other Departments after objective evaluation. Where land is given an annual lease to private parties there should be express condition stating the right of the Govt for taking over the same for public use as and when required.

9.4 Management of Roads

9.4.1 Land in Road ROW

The boundary pillars shall be fixed all along the alignment of roads at suitable intervals. Cost of new pillars or replacement of lost ones shall be charged to maintenance funds for roads.

Department shall maintain authentic land plans (certified by the revenue Department) for the roads under its charge. Such plan should clearly show the ROW, measurements of road widths, distances between boundary marks and sufficient measurements from permanent and fixed points to enable the location of boundary marks in case they have been displaced or tampered with.

9.4.2 Prevention of Unauthorised Occupation

Nobody should occupy any highway/road land by way of putting up temporary awning, tent or pandal, storing or depositing goods, making excavations, laying pipe lines or cables, erecting poles for electric or telephones lines, or other manner, without the written permission of the DO and without depositing fee as may be prescribed by Govt from time to time. Any application received in this regard shall be decided within 15 days by the concerned DO.

The permission so granted should clearly specify the date up to which the person is authorised to occupy the highway land, the purpose of occupation and the exact portion permitted to be occupied, along with supporting plan or sketch, if necessary. It shall also be accompanied by an undertaking that the cost of removal and shifting of the said structures and utilities, if required by the PWD, shall be borne by the person or authority to which the said permission is granted. The said person or authority shall produce the permit for inspection whenever called upon to do so by any highway official and shall, on the expiry of the permit, release the land occupied by him after restoring it to its original state.

9.4.3 Boundary Stone

OPWD lays down the limits of building and control lines to be observed in the case of all roads in the state roads. Standard Boundary stone as per IRC 25-1967, should be provided in both boundaries of the road so as to identify encroachment if any. The purpose is (i) to ensure safety and convenience of traffic and welfare of public; (ii) check ribbon development and haphazard growth; and (iii) meet future needs of widening and up-gradation of the roads.

EEs of Department should perform the duties in this regard and informatory boards in prescribed language should be fixed prominently along these roads. To establish violations if any, they will demarcate on land plans the existence of all structures along the roads as on the applicable date and supplement the same with videography to the extent possible. Funds requirement in this purpose can be charged to maintenance grant. Action taken and progress made by the EEs in this regard should periodically reviewed by the SE and CE.

9.4.4 Providing Public Utilities and Drains

No person shall construct or install any pole, pillar, advertisement tower, bill board, transformer, cable, pipe, drain, sewer, canal, railway line, tramway, telephone boxes, repeater stations, street,



path or passage of any kind on highway land or across, under or over any highway without the prior permission in writing of the concerned DO. The DO will grant the permission with the approval after ensuring public interest. The permission shall be subject to such conditions as may be prescribed.

The person intending to obtain such permission will make an application stating therein the purpose and period of occupancy of highway land, location and part of the highway to be occupied, method of execution of work, period of construction and method of restoration of such part of highway. The applicant will give an undertaking that if land is required by the highway controlling authority, he will remove or shift the said structures and utilities at his own cost and within the specified time prescribed. The applicant will also authorise the Department to take any required action regarding removing or shifting of the structures/utilities at the cost of the applicant.

The concerned CE, on the recommendations of EE and SE will consider the application and on being satisfied that the location of the utility in question is suitable vis-a-vis available highway land, he may accord written permission subject to the payment of fees and charges as may be prescribed and further subject to conditions regarding (i) protection of highway from damage (ii) safety of traffic against obstruction and (iii) repair/restoration of highway if any damage is caused. The permission shall be further subject to the condition that in case land is required by the highway authority, the applicant shall shift the service(s) expeditiously at his own cost. In case the service owner fails to shift/remove the service within a reasonable time, on a notice being served by the DO, the Department shall be free to enter and remove the service at the cost of the service owner, and any consequent damage shall be the responsibility of the service owner.

Where permission is sought by other Govt Departments/Boards/Corporations for laying of utilities, such as sewer lines, water supply lines, telephone lines, electric poles or lines, etc., an agreement shall be drawn with the organisation concerned that in case the highway authority requires the occupied land, the utilities shall be shifted at the cost of owner of the utilities. In that case, the permission may be granted by the CE for location of utilities at the farthest end of the ROW.

9.4.5 Opening in the Central Verge

On divided highways, median openings should generally be limited to intersections with public roads, and not permitted for individual business needs. Where intersections happen to be far apart, additional median openings may be provided at intervals of not more than two kilometers for U-turns, diversion of traffic or for maintenance purposes. Unauthorised median cuts shall be closed as soon as they come to notice and suitable action taken against the person/agency responsible for the offence initiated including lodging an FIR with the police.

9.4.6 Location of Petrol Pumps

Location and layout of petrol pumps shall be regulated by IRC Publication IRC: 12 "Guidelines for Access, Location and Lay-out of Roadside Fuel Stations and Service Stations". For providing access through public land, a lease agreement in the prescribed form shall be entered into with the sanction of the competent authority. In case of NHs, guidelines and instructions of the MORT&H, GOI, shall apply.

9.4.7 Location of Bus Stands

Bus Stands should be located beyond the carriage way with sufficient set back from the building line prescribed for the road so as to permit space for a service road. A minimum of 30 meter distance



from the center of the road shall be maintained. Access to the bus stand should normally be limited to one point of the road. Additional lane at the bus stops should always be provided so that traffic on the main carriage way moves uninterrupted.

9.4.8 Roadside Advertisements

The roads have become important and attractive means of advertisement. Permission of the Roadside advertisement **within ROW** shall be granted by the concerned SE on the recommendation of EE based on the guidelines of IRC publication "IRC: 46: Policy of Road side Advertisement". If the conditions imposed in the permission are violated, AE in-charge shall issue show cause notice to the owner and ask for the violation to be remedied immediately. If the owner fails to do so within a reasonable time, the AE shall, by notice, have the structure removed and take police help if needed. SDO and the DO shall also exercise control and vigilance in this behalf, and take the help of district administration where required. Whenever advertisement rights are with Municipal Corporation like in city limits the EE shall ensure that advertisement boards conform to IRC guidelines referred above.

In the case of NHs advertisement boards shall not be erected without the sanction of MORT&H.

For all other roads in the state, the authorities under the control of the road can permit display of advertisement boards after collecting prescribed fees, which shall be remitted directly to specified head of account. Any displays within the ROW shall be permitted only by the Highway authority who is the EE, PWD, who, while granting such permit, shall be careful to see that following are not allowed.

- a. At or within 100 meters of any road junction.
- b. Where the planting of such boards is likely to obstruct the vision of the Driver.
- c. At hairpin bends of curves, approaches of bridges.
- d. Near prestigious buildings, hospitals, educational institutions etc.
- e. Within 50 meters of any of the signboard erected.
- f. In such a manner as may obstruct the vision or distract the attention of the driver of a vehicle on the road.
- g. To mar the aesthetic appearance of this background especially in localities which are predominantly residential or where the national scenery is likely to be spoiled by such display.

The EE may permit with approval of the competent authority. The display of advertisements in the typical formats on the railings fences and bus bays built under private sector participation after levying the prescribed fees/rent, which shall be deposited to specified fund. This agreement shall be renewed annually or a new agreement executed. The EE has the power to order removal of all unauthorised display of advertisements and other encroachments.

Wherever advertisement rights are with municipal corporations like, within city limits, the DOs in whose jurisdiction the road falls and the municipal engineer have the responsibility of ensuring that the advertisements are as per specified guidelines and do not become a traffic hazard.



9.4.9 Removal of Obstructions

All obstruction due to accidents, vehicle breakdown, spillage of goods, inundation of road, landslide, failure of a structure, blockage of road etc. should be **got** removed as soon as possible. EE/DO should adopt appropriate means to remove obstruction in an urgent manner. He should take police help, medical assistance and intervention of district administration wherever required.

9.4.10 Traffic Census and Axle Load Survey

Traffic census on major roads at critical locations, as designated by the CE, should be normally carried out once a year. Census may be done manually, but in case of heavily trafficked sections, particularly the sections for tolling on PPP (Public Private Participation) mode, smart automatic traffic counters may be used.

Axle load survey shall be done at strategic locations as decided by the CE to build a reliable data base for pavement design and appropriate investment decisions.

9.4.11 Overloading

As over-loading causes severe damage to the road structure resulting in poor riding quality, safety hazards, reduced life of pavement, higher demand for maintenance and huge pressure on limited financial resources, EE/DO shall **cooperate with Transport Department** to evolve mechanism to enforce axle load restrictions notified by the Govt. Weigh bridges shall be installed where necessary for this purpose **till GOO prescribes procedure to deal with this problem**. Inter-agency coordination of various Departments, especially Transport and Police, shall be effected with clear assignment of responsibilities for effective enforcement and generation of awareness among transport operators.

9.4.12 Cutting Roads/Overhead Crossing

For any work involving the opening of the OPWD roads, the road cutting protocol shall be followed. It shall be unlawful for any person or authority or agency intending to construct, place, maintain or carry any cable, wire, pipe, drain, sewer, channel of any kind through, across, along, under, in or over any OPWD road to make an excavation/Crossing in or disturb the surface of any OPWD road without written permission from the EE, whose decision shall be final and binding.

Application for permit for road cutting shall be submitted to the EE who after examining the urgency the EE shall convey the permission. Upon receipt of the said permission, the person or authority or agency intending to dig the road, shall execute an agreement with the EE for carrying out the work.

9.5 Management of Buildings

9.5.1 General

The AEE/AE, in-charge of the jurisdiction should maintain correct layout plans of the area with position of roads, buildings, gardens, water supply, electric O/H lines, sewer and w/s lines etc. Similarly the detailed building plan of the individual building showing plan elevation and section shall also be maintained for record and reference purpose. For any new work in an existing building, as built drawings should be furnished along with the proposal. All buildings should be kept well maintained. Maintenance includes white washing, coloring, painting, repairs to doors, windows, roofs, sanitary and water supply fittings, structural repairs, internal roads, fencing, compound wall



etc. However, expenditure towards day to day cleaning, sweeping, watch and ward, gardening, payment of rent, water and electricity charges, taxes and tariffs etc. shall be borne by the user Department

9.5.2 Miscellaneous Provisions Related to Buildings

All major public buildings and Govt quarters will have provision for waste disposal. Solid wastes will be disposed in an incinerator. Non-biodegradable waste materials should be, segregated and suitably disposed.

Public buildings should be provided with sufficient urinals and latrines, as per norms and shall be properly maintained. Their location must be clearly exhibited with name boards.

Electrical installations such as lifts, escalators, AC etc. shall be periodically inspected and maintenance arranged as per specification of the manufacturer. Backup electric power shall be provided for such installations with staff posted for operation.

9.5.3 Furniture

The responsibility for providing furniture in any public building should be that of the occupying Department. However, at the time of original construction PWD may provide for furniture in the estimate for approval and undertake the work. The furniture should thereafter be handed over to the administrative Department for their caretaking and upkeep. In the case of Office buildings, Rest Houses, Tourist Bungalows under the Control of PWD, the supply of furniture cutlery, crockery, linen etc., shall be done by the PWD and the same shall be charged to the estimate for the construction of the building and subsequently maintained through the maintenance grant.

9.5.4 Fire Fighting Systems

The occupying Department should render all assistance for renewals and repairs of the portable fire-fighting equipment, if any, as per the requirement of the Fire Department. The maintenance of firefighting provisions of high rise building and other important buildings equipped with wet riser/down comer system, sprinkler system, mechanical ventilation system etc., the maintenance will be the responsibility of the PWD.

9.5.5 Advertisement/Display Boards

All display boards in Govt property shall comply with the provisions of National Building Code. All advertisement/display boards utilizing Govt/PWD building, land and compound wall will require permit from the concerned EE, buildings, which will collect the prescribed fees and remit it directly to the appropriate head/fund.

9.5.6 Register of Buildings

This is a very important register to be maintained in each Buildings Division of the PWD showing therein inventory of all the buildings under its charge, constructed, purchased or acquired by the Govt irrespective of the manner in which the Govt funds are allotted for such procurement. The register shall be in the form given in **Annexure 9.1**. It shows year of construction, cost, use of building, occupant, maintenance cost etc. The number allotted to such buildings in the Register of buildings is displayed prominently in front face on each building. All Govt buildings shall have a name display board and list of all offices housed there in.



Whenever a new building is completed, the maintenance of which is to be attended by the Building Division, details regarding the building should be added to the register. Disposal of any building or part by dismantling or sale will be recorded in the building register. Transfer of control of any building or part of the building from other Divisions or Departments etc. should be incorporated in the Building Register. Alterations or additions of substantial nature in such buildings will also be noted. Similarly, if the extent of land surrounding a building is increased or decreased by acquisition, transfer or otherwise, the fact should be noted in the register. The intention is that the register will give full and up-to-date information about the buildings under the maintenance charge of every building division. Possession Certificate showing property rights of the land/building will be obtained from concerned authorities and maintained in proper order.

9.5.7 Inventory of Fitting and Fixtures of the Buildings

An inventory of all the fixtures in each building viz. electrical fixtures, like fans, lights, geysers, AC or Civil fixtures like mirrors, basins, taps, flushing cisterns etc. and furniture if provided should be maintained building wise. In case of non-residential buildings such inventory of fixtures is to be got signed from the representative of the user Department, at the time of first occupation. Thereafter the user Department is responsible for their safety. In case of residential buildings the inventory is to be got signed from each new occupant and checked by the AE concerned when the residence is being vacated. Any shortfall is to be made good by the occupant.

9.5.8 Water Supply and Sewerage Asset Management System

All water and wastewater systems are assets, some are buried assets and some that are visible. These are the physical components of the system and include: pipe, valves, tanks, pumps, wells, hydrants, treatment facilities, and other components that make the system functional. The assets that make a water or wastewater system, generally lose value over time as the system ages and deteriorates. Along with this deterioration, it may be more difficult to deliver the type of service that the utility's customers want. Costs of operation and maintenance will increase as the assets age. Then, the utilities may be faced with excessive costs that it can no longer afford leaving the system financially unviable. Hence these assets are to be managed in a professional manner using the latest GIS systems and MIS

The intent of water or wastewater asset management is to ensure the long-term sustainability of these utilities. The responsibility lies with the utility manager/Divisional Officer to decide when to repair, replace, or rehabilitate particular assets and develop a long-term funding strategy so that the utility to deliver the required level of service perpetually.

The OPWDs in charge of assets relating to water supply and sewerage/sanitation shall prepare a Comprehensive Asset Management Plan (CAMP) document Division wise and through a committee with EIC/CE as Chairman review from time to time the CAMP, preferably every three years, to check if the methodology used in core components have significantly changed over the time necessitating a revision. The components of the CAMP and their details are given below:

A. Asset Inventory

The approach to develop initial inventory will depend on:

- a. determining the operating agency manning/owning the system at the time of major construction periods and interviewing the in-charge to collect all information possible on the type and location of assets;



- b. examining all '**As built**' or important engineering drawings available for the system;
- c. visual observation of above-ground or visual objects, viz. hydrants, pumps, manholes, treatment works etc.;
- d. interviewing community residents who may have lived in the area of activity and who can provide useful information on the assets; and
- e. estimating buried assets using above-ground assets as a guide, (e.g. using manholes to estimate locations, size, and type of pipe between the manholes; using isolation valve locations to estimate buried water pipe locations).

The assets are to be provided with locational details by preparing the maps termed 'mapping' in short, using GIS and shall be linked to the asset inventory database.

The next step shall be to determine the condition of the assets which can either be done by gathering information from local people or by using CCTV or leak detection technology. The condition shall be ranked suitably to establish the vulnerability and evolve a suitable approach for maintenance.

The remaining life and value of the assets are required to be assessed to develop a maintenance schedule with cost provision for funding.

The asset inventory shall be organised at the division level by using any of the following options;

1. Commercially available software for asset inventory;
2. Generic database software; and
3. Spreadsheet software etc.

However, the best option shall be a specifically designed asset management software programme, which can provide a considerable flexibility in terms of use and already contain asset inventory data. The concerned Superintending Engineer in consultation with the Chief Engineer shall take steps to ensure procurement/development of asset inventory software with required training facility to use the software.

B. Benchmarking the Level of Service (BLOS)

The BLOS defines the way the water supply or wastewater system is expected to perform on a long term basis. Since all systems must operate within the policy regulations and requirements of the state or nation, the benchmarking shall conform in all respect to minimum water quality and wastewater quality requirements at the service level. The benchmark level however, may grow upward due to addition of asset components such as source, distribution pipelines, pumping systems and enhanced treatment capacity etc. Therefore, the enhanced capacity needs to be regulated and declared at regular intervals. The divisional officer concerned shall prepare the document relating to BLOS, which after due approval by the Chief Engineer shall be kept or distributed for public information with relation to that particular asset.

Similarly, the maximum level of LOS also needs to be defined which cannot be higher than the maximum capability of the asset. This is necessary as a system cannot include something within a LOS which the system is not capable of doing. For example, installing a fire hydrant in a village water scheme having 50 mm dia pipelines, where the system is incapable of providing the fire flow.



A range of service i.e. within the benchmark and maximum level with various items included within its LOS shall be documented by the Divisional Officer with approval from the EIC/CE in order to communicate the intent to public, measure the performance and determine critical assets. Active involvement of public shall be considered while developing the LOS.

C. Critical Assets

Criticality of the asset in a system is determined by two possibilities. 1. The likelihood of the asset to fail and 2. The consequence of such failure if the asset does fail. The Divisional Officer shall list all such assets in a system which are likely to fail taking into account its age, condition within the internal and external environment, failure history, historical knowledge, general experience with the asset e.g. a particular type of pump and finally the knowledge of how the asset is likely to fail.

In terms of the consequence of failure, it is important to consider all of the possible costs of failure. The costs include: cost of repair, social cost associated with the loss of the asset, repair/replacement costs related to collateral damage caused by the failure, legal costs related to additional damage caused by the failure, environmental costs created by the failure, and any other associated costs or asset losses. The consequence of failure can be high if any of these costs are significant or if there are several of these costs that will occur simultaneously with a failure, e.g. failure of chlorine dosing pump.

The criticality shall be assessed by the Divisional officer by employing ranking table etc. while assessing the criticality, it should be noted that the condition of criticality changes over time like the cost of repair may go up, community grows, new lanes/bye-lanes are added and therefore, a periodical review, preferably in every three years should be conducted.

D. Life-Cycle Costing

There are several components of developing a lifecycle strategy for asset management plans. The Life-cycle components include:

- a. Asset Planning
- b. Asset Creation/Acquisition/Design
- c. Financial Management
- d. Asset Operation and Maintenance
- e. Asset Condition and Performance Monitoring
- f. Asset Rehabilitation/Renewal
- g. Asset Disposal
- h. Asset Audit and Review

However to make the process simpler at the beginning, the following components may be considered to deal with the assets over time:

- a. Operate & maintain existing assets including critical assets,
- b. Repair the assets as they fail,



- c. Rehabilitate the assets and
- d. Replace the assets.

The above four components are closely related to each other. Standardised general, alternative and emergency operation procedures and corrective, preventive and reliability-centred maintenance procedures are to be prepared by the Superintending Engineer and with due approval of the Chief Engineer and shall be used at the Divisional level.

A replacement schedule should be developed which include all recurring and non-recurring items within the life-cycle period or at least 20 years.

E. Long-term Funding Strategy

The final factor in the asset management strategy is determining the best manner in which to fund the operation and maintenance, repair, rehabilitation, and replacement of assets. There are several sources of funding available to a system, so it is important to evaluate the item needing funding and the various options.

Basically funds are available from two sources. One is the revenue generated by the system and the other is the non-system funds i.e. State/Central grants or loans. The system revenue funds shall be derived from the tariff structure. A sustainable and long service providing asset will need a robust rate structure that supports all O&M activities. It may be necessary to have independent tariff structures for the assets in consonance with the State or Central tariff policy, if any. A central planning on rate structure for asset operation and maintenance may be evolved which will be acceptable to the public requiring the service.

9.6 Maintenance of Assets

Maintenance of assets is an important function of asset management. Three broad methods for maintenance of assets should be followed by EE/DO within his jurisdiction:

- a. Input-based Maintenance;
- b. Performance-based Maintenance;
- c. Toll-based Maintenance.

Model standard contract on performance based maintenance of IRC, Model toll based maintenance contract of planning commission and Standard Bidding Documents for normal contract maintenance shall be used for this purpose. The annual maintenance plan shall be based on Asset Management System (AMS).

9.6.1 Input-based Maintenance

EE/DO will evolve the method of mix of departmental labour and contract work for maintenance, wherein, most of the items of ordinary/routine maintenance (which are not susceptible to accurate measurements) are done by permanent Department labour in Department, and only some, like painting of kilometer stones and sign boards in case of road works, are contracted out. In certain cases such as maintenance of roads, mobile maintenance vans may be used to improve quality and reduce response time. For buildings day to day maintenance are generally come under this.



9.6.2 Performance-based Maintenance

EE/DO with permission/approval of SE/CE can go for the maintenance by contract where all of the maintenance works, whether ordinary/routine repairs or special repairs are contracted out and payment are made on the basis of prescribed performance norms. To encourage contractors to invest in suitable machinery/equipment and to efficiently carry out the operations, contracts could preferably be for a larger value and for longer tenures up to 3 years. These maintenance contracts could follow a pre-qualification procedure and should have a performance guarantee requirement. Bid documents should clearly spell out all aspects of maintenance and requirements, such as:

- a. Various activities or BOQ items;
- b. Specifications to be followed;
- c. System of quoting rates e.g. lump sum per km per month for routine maintenance; unit rate per km for periodic renewal; unit rate per ton of bituminous mix for profile correction, etc.;
- d. Contractor's field set-up;
- e. Contingent liabilities such as patrolling; management of traffic, provision and maintenance of diversions and safety measures and environment management during construction/maintenance operations;
- f. Expected service levels and permitted tolerances;
- g. Method/arrangement of recovery or detection of defect;
- h. Response time for rectification of defect or distress;
- i. Frequency and level of intervention;
- j. Procedures of inspection, testing, measurement and payment; and
- k. Penalties for sub-standard or delayed performance or non-compliance, etc.

In performance based maintenance system, monthly payment for maintenance work and services is made to the contractor at the approved contract rates if he has complied, during the month in question, meeting the service levels stipulated in the contract. If the service levels are not met, payment may be withheld or reduced appropriately for that particular month. The system of reducing the rates for incomplete or less than the satisfactory performance must not be allowed. The withheld or reduced payments may be carried over to the next month on compliance being shown subsequently but no further beyond. **For all works of maintenance to be done through contract shall be as per SBDs for works or services as the case may be. For detailed procedure Procurement Manual shall be followed.**

9.6.3 Toll-based Maintenance

This method may be adopted by for roads carrying heavy volume of traffic so as to attract private capital or some other facilities such as parking spaces, bus stands, etc. Scope of work and level of maintenance are defined, toll rates are fixed (with penalties for non-performance or sub-standard performance), period for initial improvement of the road/other facility to the specified standard and period of concession or share of toll revenue are also laid down, and the work is allotted to the



entrepreneur offering maximum payment to the Govt. Decision of levying toll is an issue, decision of which should be taken at Govt level.

9.7 Road Maintenance

9.7.1 Maintenance Planning

The annual maintenance plan for the next financial year should be prepared by the EE and forwarded to the CE before end of November. CE shall finalise the actual fund requirement based on output from Road Maintenance Management System (RMMS) and this will be transmitted to the Finance Department before 31st December every year. CE will allocate the maintenance fund to each Division at the start of every financial year.

The EE will arrange and execute the maintenance work based on fund allocation as regular maintenance contract or as Fixed Term Maintenance Contract. To enable this, the AE will prepare detailed maintenance estimate of the identified roads. The specifications for maintenance should be as per specifications for road and bridge works of MORT&H and will apply to all items of road maintenance works as required to be carried out under the contract or as directed by the EE. The works should be carried out in conformity with the relevant specifications to the required level, grade and lines using approved materials. The works should be carried out using light duty machinery or manual means provided the quality of the end product does not suffer. In execution of maintenance works, a reference is made to the IRC publications Manual for Construction and Supervision of Bituminous works and Code of Practice for Maintenance for Bituminous Surfaces of Highways, IRC82 for guidance and compliance wherever applicable. Wherever the specification is not clear, good engineering practice shall be adopted in the construction to the satisfaction of the EE.

9.7.2 Schedule of Maintenance Operations

Maintenance of roads involves several operations some of which can be done during rainy season and others which can be done only in dry weather. All bituminous works should be carried out only during dry weather. A timetable for the various operations in the different roads under each section shall be drawn out and adhered to by the AEE/AE.

9.7.3 Important Points to be Attended

This includes thorough repairs, clearing jungle, clearing drains and culverts etc. The side drains shall be cleared off all jungle growth and obstructions and graded so as to have proper slope. All overhanging jungle growth, which may obstruct traffic or vision, shall be cut along with such repairs. All unauthorised advertisement boards, banners and arches across and along the roads shall be removed. In the case of masonry works, if any jungle growth is observed, the same shall be rooted out. The site or work spot shall be cleared by the contractor after construction by removing waste material like aggregate wastes, dust, timber woods, ashes etc. and disposed according to the environmental guide lines.

9.7.4 Maintenance of Shoulders

This is an important part of maintenance activity and shall be done as relevant provision of MORT&H (Section 3003). Exposed earth berms above the level of road surface shall be restored to original profile so as to facilitate easy access and drainage.



9.7.5 Maintenance of Traffic Signs

Maintenance of traffic signs (both cautionary and directional) and road marking including painting of bridges and culverts parapet, kerbs, Kilometer stones, Boundary stones and guard stones are part of maintenance activity. Road signs (other than enameled/Reflective signs) shall be painted legibly once a year. All these works shall be done as per the section 800 of MORT&H Specifications for Road and Bridge Works.

9.7.6 Kilometer Stones

Kilometer stone and 5th Kilometer Stones as per type designs and colour scheme shall be planted on all the roads as per IRC 8. For 200-meter stones IRC 26 shall be followed. They shall be placed clear of the shoulders of the road so as not to obstruct traffic but should be in such a position as to be clearly visible. They should be maintained clean and legible all the time. The provision of kilometer stones and 200 meter stones, wherever absent, should be taken up as part of renewal coating or special repairs.

9.7.7 Boundary Stone

The boundary stone shall be the responsibility of the AEs and wherever absent shall be brought to the notice of the higher officers and installed them immediately without waiting for any renewal work or special repairs.

9.7.8 Erosion Control and Environment Protection

Maintenance activity should always include necessary precautions for the control of erosion and leaching. In case of roads and bridges, erosion control shall be done by turfing or seeding and mulching as per clause 306, 307 and 308 of Standard Specification for Roads and Bridges of MORT&H.

9.7.9 Road Maintenance Unit (RMU)

In each Division, the RMU under the DO/EE should have the responsibility of maintaining a register of all assets with periodical updating. This may be obtained from the respective AE, who shall maintain current records of all the roads and culverts under his charge in the proforma given in **Annexure 9.2A & 9.2B**. Wherever necessary the RMU shall undertake regular monitoring surveys and the reports submitted to the DO and forward to the Central RMU. The EE shall prioritize the roads for maintenance for next financial year in his Division before the end of each calendar year. The RMU cell in the EIC office shall collect the road maintenance requirement for the entire State from respective divisions and the proposal for total fund requirements shall be incorporated in the annual budget as a planned item.

9.8 Maintenance of Bridges

9.8.1 General

Bridges are vital links in the highway network and if a bridge goes out of commission for any reason, the resultant disruption of traffic seriously affects the capacity and efficiency of the network. Highway structures, both old and new have to be maintained in a traffic-worthy condition to facilitate uninterrupted flow of traffic. For this, regular and systematic inspection of the structures



shall be made by responsible officers to find out defects or deterioration of the various parts and urgent action taken to remedy the defects. In this respect IRC SP 35: "Guidelines for Inspection and Maintenance of Bridges" should be followed.

9.8.2 Maintenance of Record of Bridges

For recording maintenance of bridges, the respective AE shall maintain a bridge register. The records in the form of registers given in **Annexure 9.3A & 9.3B** for all the bridges under his charge shall be kept updated. The report shall be submitted to the Division office and the EE shall forward the same along with his recommendation to the higher authorities. However, for each bridge, there shall be two reports:

1. Original Bridge Report
2. Inspection Report

9.8.3 Repair and Rehabilitation of Bridges

All bridges are to be kept in good condition and their rehabilitation and strengthening needs shall be attended to as and when they arise. It is now well recognised that bridges not only require systematic maintenance but also strengthening or rehabilitation during their service life. IRC: SP-40 "Guidelines on Techniques for Strengthening and Rehabilitation of Bridges" provides guidance on basic approach to repair and rehabilitation, identification, assessment and diagnosis of distress, repair materials and repair and strengthening techniques to be adopted in respect of concrete bridges. These guidelines may be followed while undertaking rehabilitation or strengthening of concrete bridges.

9.9 Maintenance of Buildings

This relates to the buildings which are either constructed by Department out of public funds for its own use or for use of other Govt Departments. This also includes, rest houses, or those buildings which are entrusted by Govt to the Department for maintenance.

Responsibility of maintenance of buildings constructed by PWD as deposit works will be of the owner. In a special case, maintenance of such buildings may be undertaken by PWD as a deposit work.

Non-engineering maintenance like, dusting, sweeping, washing, scavenging, up-keep of hygiene, disposal of waste material and garbage, etc. shall be the liability of the user Department. The said Department shall also be responsible for maintenance of furniture and equipment.

It has to be appreciated that neglect of maintenance affects life of the structure and services besides causing dissatisfaction and unsafe conditions. Maintenance must therefore receive the same concerted attention as original construction and should follow a rigorous schedule of planning, budgeting, monitoring, inspection and quality control. SE should hold quarterly review meetings to ensure that maintenance activities are evenly spread and that there are no undesirable arrears. In no case should building maintenance be relegated towards the concluding month (s) of the financial year.

Programme of maintenance should be preceded by detailed inspection. Inspection should be done preferably in the company of responsible person of the user Department as he is expected to be in the best position to highlight any problem of maintenance or to list out the items requiring



attention. The inter-se priority between various requirements should be determined on the following criteria:

- a. Safety aspects including drainage and termite attack if any, should be given the upper-most priority;
- b. Functional aspects like, cracked floor, broken glass-panes, defective services; and
- c. Routine maintenance, such as white-washing, painting etc.

Various maintenance operations should be properly sequenced and coordinated to avoid unnecessary disruption, inconvenience and repetitive visits. Underlying cause of a problem should be first tackled before undertaking repairs. For example, seepage of roof may be due to one or more of factors like, defective slope, infiltration of water, choked pipe, leaking faucet, porous surface, opening out of joints, development of cracks, etc. Having identified the root of the problem, appropriate remedial measures should be taken.

Annual repairs of public buildings should be taken in hand as soon as possible. However, repairs of court buildings should be done on holidays or when the courts are closed for vacation, in consultation with the judicial officer in-charge. Similarly, repairs of educational buildings should be undertaken when the institution is on vacation.

9.10 Maintenance of Canal & Drainages System

The design sections of canals and their distribution system as well as of the drains, including their banks and outer slopes, shall be maintained to avoid reduction in carrying capacity. No plantation should be allowed on canal/drain sections, banks etc. Greater control shall be exercised before and after the monsoons.

The drainage system should be maintained for effective functioning. Beds of streams, canals, drains should be kept free of obstructions, like weeds, garbage and encroachments. To ensure that no obstruction results in injury to land, public health or public inconvenience, action to prohibit and remove such obstruction should be promptly taken.

9.11 Maintenance of Dams & Allied Structures

Dams, galleries and allied structures, should be inspected from time to time and carefully examined for any cracks, settlement, leakages, etc. Suitable remedial measures as warranted should be taken forthwith.

Frequent inspection of reservoir area is essential, especially when there are heavy rains in the catchment area. Stability of slopes should be constantly watched against the possibility of movements, subsidence and impending failure.

Spillways and spillway gates should be kept under regular surveillance. In the case of anticipated floods and heavy releases from the reservoir, suitable flood warnings should be conveyed to all concerned. After the floods, the crest, visible parts of walls, surface of spillways etc. should be inspected, while the submerged part of spillways and apron should be examined with the help of divers and under-water television cameras to ascertain the nature and extent of any damage. Immediate notice of damage or tendency of surface erosion shall be taken and reported to competent authority for requisition remedial action.



Inspection and maintenance of gates, hoisting mechanism and electric control should be carried out once a month when the water is below the crest. Designer's criteria and maintenance manual shall be duly observed.

In this regard Guidelines as laid down by BIS and Ministry of Water Resources (GOI) shall be followed.

9.12 Maintenance of Head works, Barrages and Weirs

Maintenance of head works, barrages, weirs involves civil maintenance of structures and mechanical and electrical maintenance of gates and regulators, all of which should promptly attended to. Special inspection should be carried out before and after the floods.

The catchment area and the reservoir area should be notified. The maximum reservoir area should be marked and no encroachment in this area allowed. Conservancy measures should be adopted in the catchment area, including construction of check dams, preventing de-forestation, etc. Hydrological data of catchment area should be collected on regular basis, analysed and also shared with adjoining States.

No unauthorised mining should be permitted within stipulated distances, up-stream and down-stream of the structure. Excessive deposit of silt up-stream of the gates, and rusting or pitting of steel parts/components should be carefully watched, prevented and remedied.

9.13 Maintenance of Drinking Water Supply Schemes

Scheme of supply of drinking water has the prime objective of providing safe and potable water in adequate quantity. The water cannot be wasted and has to be conserved. To safeguard against any mischief or sabotage, premises of waterworks, tube wells, boosting stations and pumping stations etc. needs fool proof security & protection.

Important points of Maintenance Policy are the following:

- a. Regular cleaning of raw and clear water storage tanks and other allied structures;
- b. Scrapping, stacking, washing and replenishment of filter media; filtration rate to be as per specification;
- c. Regular checking of bacteriological and chemical quality of water at the source, head works and the consumer end;
- d. Regular disinfection of water and ensuring sufficient residual chlorine at the tail end;
- e. Proper upkeep of open spaces in water works area;
- f. Regular survey of household connections to prevent contamination of water;
- g. Preventive maintenance coupled with immediate repair to machinery, electrical equipment and structures;
- h. Checking and preventing unauthorised/illegal water connections;
- i. Avoiding/plugging wastage of water through public stand-posts, consumer connections, leakages in the main/distribution pipe lines;



- j. Automation and monitoring of the system and optimal use of chemical with application of supervisory control and data acquisition (SCADA).*
- k. To attain maximum efficiency regular checking of pump sets and control panel and other electrical and mechanical accessories will be done under preventive maintenance.*
- l. Energy efficiency measures such as replacement of old pump sets, control panel, capacitor bank, circuit breakers etc are to be taken up.*
- m. Anti-corrosive and aluminums paints are to be used for corrosion prone structures and electrical substations.*
- n. The water treatment plant (WTP), storage reservoirs, and chemical houses are to be duly checked and repaired once in 3 years.*

9.14 Maintenance of Sewerage & Storm Water Drainage

Main objective of a sewerage and storm water drainage scheme is to carry sewage, sullage and storm water to prevent nuisance, damage, disease and inundation, etc. to the designated area.

Important points of Maintenance Policy are the following:

- a. Preventive maintenance of plant and machinery for desired efficiency as per the maintenance schedule;
- b. Avoiding overflow of sewage from manholes and maintenance of manholes;
- c. Regular desilting of sewers and collecting tanks;
- d. Treatment of sewage to the norms prescribed by Central/State Pollution Control Board;
- e. Preventing entry of solid waste and road/street sweepings into sewerage/storm water drainage system;
- f. Preventing entry of storm water into sanitary sewers;
- g. Checking and preventing of unauthorised/illegal connections;
- h. Regular checking of prescribed parameters of treated effluent for conformity to norms;
- i. Taking preventive steps before onset of monsoon season to avoid over-flooding;
- j. Arranging additional pumps and generator sets to take care of rain water during rains;
- k. Safe disposal of gas generated in the sewers to avoid foul smell in the area; and
- l. Upkeep of lawns and open spaces within the plant areas.

9.15 Repair and Maintenance of Vehicle, Tools & Plant etc.

9.15.1 Repairs and Maintenance

It is essential that all assets be properly maintained so that they can efficiently function whenever required. The maintenance work may be divided into three broad categories, viz.-

- a. Preventive maintenance
- b. Periodical overhauls
- c. Special repairs

Every repair/replacement shall be duly noted in the logbook and the history book.



9.15.2 Preventive Maintenance

This consists of carrying out certain item of maintenance as a regular feature so as to reduce the wear and tear of assets. The custodian shall maintain all instruments and equipment accurately and in working condition.

In the case of tools and plants and Department vehicles, regular lubrication, periodical cleaning of oil and fuel filters, tightening of loose joints, etc. shall normally be done by the operating crew when the equipment is in operation. When the equipment is laid off, certain preventive maintenance items may still have to be done occasionally and this shall be arranged through any other suitable approved agency.

Checking and correcting contacts in electrical system and works of a similar nature can be considered as preventive maintenance.

Such preventive maintenance items shall be properly listed out for each equipment and charts of the same written in Malayalam or the language known to the operator and kept with the equipment and displayed whenever it is in operation.

The cost of preventive maintenance works for the above items should be included in the general maintenance estimate for the division concerned. The EE shall arrange such works immediately.

9.16 Computerisation of Asset Management

The OWD is in process of developing Odisha Road Asset Management System (ORAMS). The System is proposed to include the following components:

- a. Road Information System (RIS)
- b. Bridge Information System (BIS) and Bridge Management System (BMS)
- c. Pavement Management System (PMS)
- d. Routine Maintenance Management System (RMMS)
- e. Right of Way Features Information Management System (RWFIMS)
- f. Traffic Information System (TIS)

This is being established to computerise all information of Road and other assets on its alignment along with maintenance programs for their proper upkeep. In this system, geographical locations of roads are defined in a Geographical Information System (GIS) collected through GPS survey on all state roads (SH, MDR, ODR).

Similar GIS based management of other assets located across the state like, canals, drains, pipelines, sewers needs to be planned for proper asset management. This will require mapping the entire network, node-wise, thereby enabling strategic planning, up-gradation and maintenance.



Annexure 9.1: Building Register

(Para 8.5.6 of Manual)

Brief particulars of buildings and land						Nature of Construction						No. of electrified points				Water Supply							
Sl. No.	Name of Building	Location & Sy No.	Land extent	No. of stories	Plinth area GF	I Floor	II Floor	III Floor	Total	Walls	Roof	Floor	Lights	Fans	Plug Points	Power Plugs	Wash basin	Closets and other fittings	Years of construction	Value	Maintenance grant and sanction No. and Date	Remarks (here enter reference to alterations and addition)	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	



Annexure 9.2A: Inventory of Culverts

(Para 8.7.9 of Manual)

Structure Details							Superstructure in m		Substructure		Foundation		Wing wall		Railing		Parapet		Wearing Course			Average Elevation of the Road above MSL (using GPS)
Structure number	Chainage	Type	Nos.	Width, m	Height, m	Depth of Slab in mm	Type	Material	Type	Material	Type	Material	Type	Material	Type	Material	Type	Material	Type	Thickness, mm	Carriageway Width, m	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
													PC-Pipe Culvert			BC-Box Culvert			SC-Slab Culvert			



Annexure 9.3B: Condition of Culverts

(Para 8.7.9 of Manual)

Structure number	Chainage	Superstructure		Wearing Course				Substructure		Foundation		Parapet		Desilting		Deweeding		Miscellaneous												
		Pothole Area in m2	Reinforced Area Exposedm2	Cracked Area in m2	Asphalt Edge Drops	Cracks in m2	Potholes m2	Average Depth of Potholes mm	Average Patch area in m2	Plastering area, m2	Masonry Construction in m3	Pointing Area in m2	Plastering Area, m2	Masonry Construction in m3	Pointing Area in m2	Plastering Area, m2	Masonry Construction in m3	Pointing Area in m2	u/s Desilting in m3	d/s Desilting in m3	u/s Deweeding in m3	d/s Deweeding in m3	Dismantling CC in m3	Dismantling of masonry in m3	Laying of CC in m2	Laying of Skin Reinforcement in m2	Painting in m2	Fixing Guard tones, nos	Black filling Slopes using Earth, m3	Slope Protection Using Turfing for high embankments, m2
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31



Annexure 9.4A: Bridge Register

(Para 8.8.2 of Manual)

Structure						Superstructure			Substructure		Foundation		Wing wall		Railing		Parapet		Wearing Course			Average Elevation of the Bridge above MSL (using GPS)	
Structure number	Chainage	River Name	Number of Spans	Clear Span in m	Length of Bridge, m	Type	Material	Thickness	Type of Abutment	Type of Pier	Type	Material	Type	Material	Type	Material	Type	Material	Type	Thickness, mm	Carriageway Width, m		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	



Annexure 9.5B: Condition of Bridge

(Para 8.8.2 of Manual)

Structure number	Chainage	Superstructure			Wearing Course			Substructure			Foundation			Parapet			Desilting		Deweeding		Miscellaneous										
		Pothole Area in m2	Reinforced Area Exposed, m2	Cracked Area in m2	Asphalt Edge Drops	Cracks in m2	Potholes m2	Average Depth of Potholes, mm	Average Patch area in m2	Plastering area, m2	Masonry Construction, in m3	Pointing Area in m2	Plastering Area, m2	Masonry Construction in m3	Pointing Area in m2	Plastering Area, m2	Masonry Construction, in m3	Pointing Area in m2	u/s Desilting in m3	d/s Desilting in m3	u/s Deweeding in m3	d/s Deweeding in m3	Dismantling CC in m3	Dismantling of masonry in m3	Laying of CC in m2	Laying of Skin Reinforcement in m2	Painting in m2	Fixing Guard Stones, nos	Black filling Slopes using Earth, m3	Slope Protection Using Turfing for high embankments, m2	Number of lighting to be improved
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32



CHAPTER 10

QUALITY MANAGEMENT



10 QUALITY MANAGEMENT

10.1 General

The term Quality is the totality of needs that are expected from the desired product. It encompasses aspects such as:

- a. Conformity with the specified requirements like quality of materials, sources, characteristics;
- b. Conformity with the specified specifications in respect of strength of materials and products, durability performance tests etc.;
- c. Acceptable appearances of the executed works; uniformity to the specified geometrics etc.;
- d. Functionality;
- e. **Quality Management in works & services include quality in all related activities leading to final product like, planning, designing, survey & investigation, preparation of feasibility report, DPRs, bid documents, data collection etc. to meet the requirement of a project.**

The decisions regarding quality of a completed facility is made during design and planning stages. Quality control during construction consists largely of ensuring conformance of the design and planning decisions.

10.2 Quality Management system

Quality management system (QMS) provides structure including documentation and process which enables the delivery of products and services to be controlled and managed to meet the specified requirements consistently. **It is a management technique used to communicate with employees and consultants/contractors, what is required to produce desired quality of product and services. The QMS comprise of the following:**

- a. Employer's Quality Policy contained in "QA Manual" **to meet the requirement of a project;**
- b. Expected quality of the Contractor/supplier' product or service to meet Department's needs as documented in "Quality Management Plan (QMP)" **specific to the project;**
- c. Supervision consultants Quality Policy **with regard to achieving the employer's quality need;**
- d. Internal inspection and audit system of quality to **ensure compliance of quality management plan.**

10.3 Quality Assurance (QA)

QA is a planned and systematic activities implemented in a quality system that quality requirement of a product or service will be fulfilled. QA activity is the organised methodology of evaluating the overall project on a regular basis, from inception to completion, in order to:

- a. To ensure that all the factors affecting adequacy of design, specifications, materials, workmanship, construction techniques etc. have been taken care of and final products/services satisfy the required quality;



- b. To provide documentary evidence of tests of material, other checks and procedure to show that all specified requirements have been met with;
- c. To ensure progressively improved and uniform quality of finished work; and
- d. Availability of adequately manned and equipped agency for overseeing the quality aspects.

In order to achieve above, the Engineer in charge should make sure that the provision are in built in the contract for a system of continuous check on quality by the field staff and the contractor for ensuring quality of work, availability of adequately manned and equipped agency for overseeing the quality. A periodical appraisal of quality should be recorded by AE in charge of work/project.

10.4 Scale of Quality Assurance

The process involves significant manpower, infrastructure and cost. High level of controls and checks though may be essential for major works, but too much of it may not be necessary for minor works. The scale of QA will therefore depend upon specific work. (IRC:SP:11-1986 Hand book of quality control of roads and runway may also be referred)

Scale of QA to be adopted therefore, will depend on type and cost of work and could be divided into 4 categories:

- Q-1Class for very small works like village Roads or low cost structures
- Q-2Class for medium level work like MDRs or medium cost structures
- Q-3Class for important works and works in areas with problematic weather conditions such as: Roads and Structures in coastal areas, High Altitudes and High Rainfall areas, SHs, NHs.
- Q-4Class for very major works like Express ways, elevated Highways, Tunnels, major Bridges, interchanges, High Rise Buildings and works in areas needing high level of precautions- such as works in high water table areas, over reclaimed land and works in poor subsoil conditions.

While classes Q-1 and Q-2 fall under Nominal QA, classes Q-3 and Q-4 are categorised as High class and Extra High Class QA.

Aspects requiring control of quality on the project include the following:

- a. Project Preparation
- b. Design and Drawing
- c. Contractual Aspects
- d. Construction Activity
- e. Materials Procurements
- f. Production of items and sub-items like pavement mixes, concrete, Bitumen etc.
- g. Workmanship



Activities that cover these aspects are as follows:

- a. Project Preparation
 - i. Adequacy and reliability of data and the source of data
 - ii. Surveys
 - iii. Alternatives considered
 - iv. Review before finalisation
 - v. Finalisation of scheme
- b. Design and Drawing
 - i. Finalisation of specifications
 - ii. Design basis report
 - iii. Detailed Design and cross checking
 - iv. Review of constructability and availability of construction expertise
 - v. Provision for facility
 - vi. Selection of suitable contractor
 - vii. Preparation of contract Documents
 - viii. Quality of base material, process control of manufactured material, Quality control tests and workmanship

Difference in the four classes of QA is broadly explained in following paras. These descriptions are very general and provide a broad concept for the level of controls expected, in the 4 classes of QA.

10.4.1 Nominal Quality Assurance

Classes Q-1 and Q-2 of QA are categorised as Nominal QA classes with class Q-2 have comparatively higher control/check and verifications in various operations. The main differences in these two classes are as follows:

	Q-1	Q-2
Project preparation	Data collection and verification by local staff only.	Independent checking and review through a separate unit of department.
Topographic survey and instruments	Random checks by local staff and surveying done manually using 20 seconds the odolite, dumpy level, plane table etc.	100% check by independent staff and accurate instruments like 1 second the odolite auto level etc. are used
Design and Drawings	Can be based on typical designs with subsequent modifications to cover variations later and	Can be based on typical Design but checking by internal or external agency based on type



	Q-1	Q-2
	verification to be done by separate independent unit of Department.	and class of work.
Selection of Contractors and Construction	Selection from approved list of contractors with contractor's planning approved by Department and supervision and Quality check by Contractor's staff.	In this class quality check is backed by consultant team, contractor's planning is approved by project management consultant and for execution of works departmental representative has to be informed.
Earth work and pavement for Road works	Hand broken aggregates, in pavement, compaction by static Road Roller and laying by manual method are acceptable.	In Q-2 class use of crushed stone aggregates compaction by vibratory rollers and laying by premixing and mechanical paver are preferred.

For important and major works High Class of QA Q-3 and Q-4 only are allowed and Nominal class Q-1 and Q-2 are not acceptable. For structures Q-1 class of QA is not allowed and Q-2 class is the minimum level of QA.

10.4.2 High Level of Quality Assurance

In the high and extra high class of QA categorised as Q-3 and Q-4, controls exercised in all activities of the project are much stringent. Besides the controls exercised in Q-1 and Q-2 classes, controls exercised in the High Class of QA are briefly as follows:

In the Q-3, Q-4 Class Data Collection is through specialised agencies cross-checked by the Department and certification is done by external agency. For survey electronic distance measuring equipment and auto levels are a must and computer aided drafting is recommended. For Design and Drawings project specific designs are done by external expert agencies and in Q-4 class an additional requirement is checking and review by a proof consultant of high qualification and experience.

Selection of contractors is only through prequalification the criteria for selection being qualification, expertise and experience available in the field relevant for the project. Complete contract documents, specifications, codes and drawings etc. as finalised and approved have to be available at site and for quality checks an independent agency is employed. Mix designs are done and approved before using them for construction and where possible trials are conducted and got approved prior to the process of laying. Machinery and equipment used for construction are of approved specifications.

Regarding workmanship while in Q-1 and Q-2 class skilled and semiskilled workers are employed with periodic supervision by departmental staff, skilled workers with specialised training are insisted in Q-3 and Q-4 category.



In Q-3 and Q-4 category of QA contractor is to submit and get approved a QA manual defining all activities with minimum two levels of controls. Each of the controlling authority to have their own QA manual covering their responsibilities. There should be three level controls for specialised/ innovative item as also for major works requiring Q-4 level of QA.

10.5 Quality Assurance Manual

QA Manual is the base document outlining policy, procedures, responsibilities, compliance, acceptance criteria and documentation and generally covers the following:

- a. Identifications of all parties involved in QA;
- b. Internal QA of each party;
- c. Levels of cross-check/verification including system of inspection & audit, wherever applicable;
- d. Organisation, responsibilities reporting channel of QA;
- e. Criteria for acceptance/rejection with identification of authorities for such decisions;
- f. Inspection at the time of physical completion of work;
- g. Inspection at end of defects liability period;
- h. Items to be covered in Maintenance Manual; and
- i. Formats for documentation.

10.6 Quality Management Plan (QMP)

10.6.1 Features of Quality Management Plan

A QMP is a contract or project specific plan, Engineer-in-Charge should ensure that QMP in tender document have following minimum features:

- a. Tender document for all the works costing more than Rs. 5 crores should specify the QMP for that work.
- b. Number of required tests and frequency of testing.
- c. The minimum Machinery and other T&P required at site by the contractor.
- d. The Field laboratory is required to be set up.

10.6.2 QMP to be submitted by the Contractor

EE must ensure that the contractor executing a work costing more than Rs. 5 Crores submit:

- a. Site management structure and responsibility of each individual;
- b. Appropriate general procedures;
- c. Specific work procedures;
- d. Quality plans for important items, listing quality requirements;
- e. Inspection of tests conducted.



10.6.3 QMP to Works of Which Design is the Responsibility of the Contractor

Where design relating to contractor, designed items are required appropriate procedures will be written, which covers the following:

- a. Preliminary drawings;
- b. Basic data, its sources, responsibility of supply and methods of verification;
- c. Design approach, applicable codes, design specifications;
- d. Method of analysis, calculation, checking and internal approvals;
- e. Final drawings;
- f. Proof checking and approval by external authority, if any.

10.6.4 Duties of Engineer-in-Charge for QA of Material

Engineer-in-Charge must take care in respect of QA of materials in following aspects:

- a. Testing of materials for source approval;
- b. Inspection and certification of materials on receipt;
- c. Testing of materials going into the construction;
- d. Maintaining test records;
- e. Assessment and analysis;
- f. Test frequencies and calibration schedules;
- g. Storage and issue of materials;
- h. Inventory.

10.7 Responsibility for Quality Assurance

10.7.1 Responsibility of Departmental Officers

The departmental responsibility for ensuring proper quality of work as per approved specifications rests with the construction team of EE, AE and JE. **The EE as per contract being legal entity responsible for quality check and administering the contract but the SE shall be responsible overall superintendence and management of Quality System and Procedures for the works under his charge.** The CE should periodically review and monitor the QA System. To carry out inspection in a regular and systematic manner to achieve the desired workmanship at various stages of work, employer shall devise an appropriate system to cover following activities:

- a. Request forms for inspection;
- b. Inspection proformas;
- c. Levels of authority for inspection;
- d. Inspection procedures (preliminary, periodic and on completion);
- e. Check lists to systematize the inspections; and
- f. Records of inspection.



10.7.2 Implementation

The implementation of QA in the field will require close co-operation among the three agencies, namely (a) field engineers (b) the construction agency, and (c) the QA team under CE (QA). However, ultimate responsibility of quality of work, rests with the field Engineers only.

10.8 In the project where supervision is out sourced, the role and responsibility of Independent Engineer with regard to quality management will be as per Standard Bidding Document.

10.9 Functions and Responsibilities of CE in charge of Quality Promotion

As second tier monitoring of quality control, CE (QP) is required to carry out periodical inspection of projects costing more than Rs. 5 Crore on selective basis to monitor quality of the works being executed. He is assisted by a SE (QA) and EE (QA) to carry out the responsibilities.

It is necessary to issue circulars and instructions specifying number of works to be inspected by QA division every month. CE (QP) may also with approval of EIC-cum-Secretary stipulate that the final bill will be paid only after a satisfactory quality certificate by QA division.

In addition to carry out Quality Audit other major functions assigned to CE (QP) are as under:

- a. To carry out inspection of works costing more than Rs. 5 Crore from the QA angle on selective basis. The unit will check and comment on the QA system in place. In selecting works for inspection, their uniqueness, complexities and special characteristics, if any, should be kept in view. For effective QA, all major works should be inspected during the progress of the work at various stages at least once during the progress of major important items of work including various stages of progress of major bridges and high rise buildings.
- b. To provide guidance in setting up laboratories at various stations/work sites.
- c. To review the performance of new materials and techniques introduced in the Department from time to time on the basis of the field inspections.
- d. To inspect any work, or carry out investigations and enquiries with regard to quality related aspects assigned by the Engineer in Chief (Civil)/Secretary works/CVO.
- e. To submit quarterly reports in brief to the Engineer in Chief (Civil) covering list of major works inspected and observations regarding defects/deficiencies etc.
- f. To deal with policy issues pertaining to Total Quality Management System for the OWD as a whole.
- g. To issue guidelines/instructions to ensure uniformity, consistency and reliability in implementation of QA systems and procedures in the OWD.
- h. To review the existing tolerance limits, and to lay down the tolerance limits in respect of finished items for which such limits are not specified in the relevant OWD specifications. Such tolerance limits will be fixed on the basis of the accumulated experience in various works.
- i. **Apart from routine checks** to inspect any work, or carry out investigations and enquiries with regard to quality related aspects assigned by the Engineer in Chief of **respective OPWD/Secretary of the administrative department/CVO (declared by the administrative department)**.



10.10 Field Laboratories

The Field Testing Laboratories and OWD Testing Laboratories should be utilised in exercising control of quality. The SE should from time to time review the functioning of these Field Testing Laboratories, and suggest ways and means of improving the standard of their performance, in consultation with the CE (QP) unit if necessary.

In all major works costing more than Rs. 5 Crores, the contractor must establish complete field testing laboratory, including all equipment necessary for conducting test on materials and mixes to check the quality as stipulated in specification and arrange all the relevant Codes and Standards should be specified in the tender documents. The contractor will also arrange for more equipment, Codes, and Standards, if they are needed during the execution of the work. The contractor will also provide the minimum staff, as specified, for QA. He should also provide for a temporary building, of the specified size and specifications, at the allotted space at site, for housing the testing laboratory.

10.11 Outside/Independent Testing Facilities

Extensive testing of the materials used for construction is a pre-requisite for attaining high quality of the work. This requires specialised tests, physical, chemical, ultrasonic, x-ray and various other types of tests which cannot possibly be carried out in a site laboratory. These tests also require specialised personnel who regularly deal in such testing. Therefore, the need arises for carrying out the tests in outside laboratories. These laboratories may be in the Govt sector, Semi Govt or Private sector and Engineering Colleges but they must have accreditation from National Accreditation Board for testing & Calibration of Laboratories (NABL). The outside private laboratories should be short-listed at the level of EIC.

However, EE may allow testing of materials in any Govt Lab/Public Undertaking Lab/IIT or NIT Lab/ Govt Engineering college without prior approval of SE provided these Labs have all necessary facility to carry out the required tests and have accreditation from NABL.

Quality testing laboratories for routine check of water samples in town and rural water supply:

Laboratory should be setup in each division headquarters to be headed by a chemist to monitor the water quality of each ULB & Rural PWS scheme. Routine sampling, testing and dissemination of information on test results by the laboratory should be made available to respective Engineering head. The field officer will take appropriate action based on the information.

10.12 Quality Control

The observation techniques and activities used to fulfill requirement of quality is quality control. Quality Control is a sub – set activity to implement QA. It comprises of structured activities like the following:

- a. Quality control of incoming materials;
- b. Monitoring of production processes;
- c. Inspection and Testing;
- d. Identification of causes of unsatisfactory performance and their elimination.



10.12.1 Quality Control of Incoming Materials

All materials whether: (i) natural such as earth, stone; (ii) processed such as WBM, WMM etc.; (iii) manufactured such as bricks, cement, steel, pipes, machinery, fittings; and (iv) designed such as concrete, BM etc. to be used in the work, should be approved by the Engineer-in-charge with the assistance of AE/JE.

Visual inspection of the incoming materials is necessary and many defective materials can be identified at the initial stage. Material Inspection Register should be maintained at site. Materials found unacceptable must be removed from the site and their use is strictly prohibited.

Laboratory Tests is carried out in accordance with the prescribed procedures regarding sampling, frequency and method of testing. The results of tests should be systematically recorded.

While specifying different makes of manufactured items, care should be taken that they are of the same quality in terms of manufacture, finish, texture, weight, performance, durability etc.

Samples should be approved beforehand and kept at site office for comparison during construction. Manufacturer's certificate will be insisted upon wherever possible, but samples should still be drawn and tested independently to ensure quality.

BIS marked items should be preferred. Normally, genuine BIS marked items may be accepted without further testing. But if large quantities of such items are to be used, it is desirable to test samples drawn at random. Samples should be drawn in the presence of the contractor, as far as possible, and be representative for the materials to be tested. Sample bags/containers should be given suitable identification numbers, sample locations, date of sampling etc. A register will be maintained for the purpose.

10.12.2 Monitoring and Production Processes

Process control at the level of EE/AE involves appropriate control of all the ingredients involved in production of a processed material such as concrete, bituminous mix, WMM etc. it will embrace right quality of materials, type of equipment, blending, mixing, producing, transportation and laying/depositing at site of work so that desired specifications are achieved. Engineer-in-charge will ensure that method of processing is proper so that finished product meets all the required standards and specifications.

10.12.3 Inspection and Testing

A. Performance Tests

These tests are in the nature of load tests on piles, beams, bridges; compaction tests on earth fills; permeability tests on concrete; hydraulic tests on water supply/sewerage/drainage pipes; surface unevenness tests on roads/runways; mandrel and water tightness tests on cables and ducts, etc. They shall be done with thoroughness to give confidence of quality. After carrying out of tests, the Engineer-in-charge shall: (i) review the failure; (ii) decide the course of action about materials/samples failing in tests; and (iii) ensure that no failed material is used in the work.

B. Supervision and Checking

Construction activities should be started only after materials to be used have been tested and found satisfactory. Next activity should be taken up only when the preceding activity is satisfactorily



completed. For every item of work, checks to be exercised should be listed out so that nothing of importance is left out.

The JE and AE/Sub Divisional Engineer are directly responsible for quality of works. However, EE will see that the prescribed procedures are being followed and he shall test check the work to the prescribed limit both with regard to measurements and quality. The EE is responsible for the quality standard of critical items.

C. Quality Testing Laboratories for routine checkup of water samples in Rural water supply

Laboratory should be set up in each Division Head Quarters to be headed by a Chemist to monitor the water quality of each Rural PWS Scheme. Routine sampling, Testing and dissemination of information on Test of Results by the Chemist should be made available to respective Head of Engineer in Charge. Basing on the results the field officers will take appropriate action.

10.13 Quality Audit

Quality Audit is a check by independent expert personnel who are not directly responsible for the work being audited. It should be carried out by the QP cell under CE (QP). Para 9.7 of this chapter may be seen for the function and responsibilities of the Audit team. The expert auditors will visit the selected works periodically for few days to verify and report on:

- a. Implementation of QA Manual;
- b. Extent of control exercised by the contractor and the employer/supervision consultant;
- c. Compliance with specifications and provisions of contract;
- d. Findings of critical analysis of test results, deficiencies observed and suggestions for improvements; and
- e. Re auditing of compliance actions.

The CE in charge of a project will decide getting the 3rd party quality audit done if necessary the decision will be taken keeping in view the size and importance of the project in view. **Serious irregularities in the quality notice at any level shall be referred to vigilance of the Department and/or Departmental officer as the case may be.**



CHAPTER 11

DISPUTE REDRESSAL, ARBITRATION AND RTI



11 DISPUTE REDRESSAL, ARBITRATION & RTI

11.1 Dispute Redressal

11.1.1 Dispute

Dispute means an assertion of a right or claim by one party and its denial or repudiation by the other party, whether expressed or implied and whether by words or by conduct. Claim is not a dispute unless it is denied by the other party.

It is the policy of OPWD to engage its energies towards successful completion of the project rather than being involved in contentious and fruitless pursuits. Generally, a Govt Department would not like to enter into any litigation for redressal of a dispute. The disputes are always detrimental to the smooth performance of the contract therefore departmental officials handling the contract should thoroughly understand the various clauses of the contract and their implications, recognise rights and obligations of the parties, and administer the contract in a reasonable and businesslike manner. It is also imperative to handle correspondence with the contractor very carefully and give no opportunity to unscrupulous contractors to make avoidable claims.

It is however necessary that the Engineer-in-Charge of the work and other senior officers make efforts to ensure that all genuine issues of the contractor are resolved in time without any fear or favour.

All contracts apart from arbitration should provide for Dispute Redressal Committee (DRC) to address the issues and to facilitate early decisions thereon. The EIC-cum-Secretary/EIC shall approve constitution of such committee as per guidelines given in para 10.1.6.

11.1.2 Disputes and Stages of the Project

The disputes in a contract may arise at different stages of the project. Three such important stages of a project are, tender stage, pre-construction stage and construction stage. At all these three stages, the officials concerned should consciously avoid actions/situations likely to result in disputes, but without showing laxity in discharging their duties and responsibilities as provided in the contract.

To avoid disputes relating to tender stage, the tender documents shall be clear, unequivocal and complete, and consistent with one another. There should be no contradiction in various provisions of the contract. Specifications which may have more than one interpretation or prescribing materials which are not easily available should be avoided. Conflict between actual physical conditions and those promised or implied should be obviated with due diligence. Any complain received should be dealt with on priority and the complainant informed at the earliest but not later than 15 days from the date of receipt of complain. The tendering process should not get affected for such disposal of complain. Tender accepting authority should give proper time for tendering as well as completion, commensurate with the nature of work and its complexity. Questions raised during pre-bid conference should be answered by responsible and competent persons and proceedings duly recorded and issued and should form part of contract. The procedure of allotment of work shall be clearly defined in the tender document and there should be no deviation from that.



To avoid pre-construction stage disputes, the Engineer-in-Charge should take timely and effective steps to discharge the obligations cast on the employer such as availability of site, cutting of trees, shifting of utilities, removal of encroachments, availability of design, etc. It is also important that necessary clearances (forest, environmental) are obtained well in time, preferably before award of work.

Disputes at construction stage can be largely reduced if the parties to the contract understand their respective obligations carefully and apply their efforts towards the welfare of the project and its timely completion.

Effective communication between the parties during the construction phase is essential. This is best achieved by frequent discussions, backed by regular project meetings. Correspondence shall record discussions and agreements and supplementary information. Action taken report shall be reviewed in the subsequent meeting(s) till compliance.

11.1.3 Dispute Redressal

All disputes or differences of any kind whatsoever in connection with or arising out of the contract or the execution of work or its maintenance, whether before its commencement or during the progress or after termination, abandonment or breach of the contract should be settled in accordance with the dispute redressal system laid down in the contract.

As a deterrent to the contractors to go into fictitious claims, it should be laid down in the agreement that while invoking arbitration, the claimant should deposit with the Engineer-in-Charge a claim fee @ 5% of claim amount or as prescribed in tender document. On termination of the arbitration proceedings, this fee may be adjusted against the cost, if any, awarded by the arbitrator (or arbitral tribunal) against the claimant party and the balance remaining after such adjustment, and in the absence of such cost being awarded, the whole of the sum will be refunded within one month of the date of the award.

11.1.4 Disputes of Consultancy Services

To avoid disputes in consultancy assignments, the employer's objectives and requirements and output expected should be clearly specified in the TOR.

11.1.5 Disputes of Foreign-Aided or Centrally Funded Projects

For foreign-aided or centrally funded projects, dispute redressal system maybe in accordance with special requirements/stipulations, if any, of the aid-giving or funding agency. Such arrangements should be got approved from the Govt beforehand and be clearly spelt out in the contract.

In case the funding agency does not insist on a special dispute resolution mechanism, the dispute resolution system of the Department shall be adopted.

11.1.6 Projects with Supervision Consultancy

In the project where supervision is outsourced, the role and responsibility of Independent Engineer with regard to dispute Redressal will be as per Standard Bidding Document.

11.1.7 Monthly Management Meetings

To guard against avoidable disputes arising out at a later date, there should be monthly management meetings during execution of the work which shall be convened by the EE and



attended by authorised representative of the contractor. All issues should be discussed, resolved and properly recorded and signed by both parties and preserved to be used when any dispute arise at a later date.

11.2 Arbitration

11.2.1 General Provisions Regarding Arbitration

Law Governing Arbitration: Arbitration proceedings, whether relating to works or consultancy services, should be conducted in accordance with the Arbitration and Conciliation Act, 1996, as amended from time to time.

Settlement during Arbitration Proceedings: As per section 30 of the above Act, the arbitral tribunal, with the agreement of the parties, may at any time during the arbitration proceedings use mediation, conciliation or any other procedure to encourage settlement. If the parties reach a settlement, arbitral tribunal will terminate the arbitration proceedings, and if requested by the parties and not objected to by the tribunal, record the settlement in the form of an arbitral award on agreed terms.

The fee payable to the members of the arbitration tribunals or to the arbitrators or to the members of the Committee/Tribunals as referred to above, will be regulated by instructions of Odisha Govt issued from time to time. The parties i.e. the State Govt and the contractor/consultant must agree to the fee structure through a written agreement.

11.2.2 Application for Appointment of Arbitrator

- a. A standard application form seeking appointment of arbitrator has been evolved. Contractors or seeking arbitration should apply in this Form as shown in Annexure-I. The arbitration clause can be invoked by the Engineer-in-charge as well by applying to the CE for appointment of the Arbitrator
- b. The application form, duly filled in, should be submitted by the contractor to the CE, with two copies thereof to the concerned EE. All the three copies of the application form should be accompanied by a statement of claims in the matter indicated in the application form.
- c. The arbitration clause can be invoked by the Engineer-in-charge as well by applying to the CE for appointment of the Arbitrator. He should apply for arbitration as and when the dispute arises and should not wait till the end. He should also stick to the time schedule mentioned in the arbitration clause of the agreement.
- d. The party invoking arbitration clause should give information enough to justify existence of dispute. For this purpose, the party has to give details about the demand having been made and its refusal by the other party. It is held by Courts of Law that a "dispute" implies an assertion of right by one party and repudiation thereof by the other. Existence of a dispute is a condition precedent to arbitration. If there is no existence of dispute there cannot be any right to demand arbitration.
- e. In view of the above, before appointing arbitrator, the CEs should ensure that existence of dispute(s) has been established. For this purpose the party invoking arbitration clause should be asked to produce documentary evidence of its claims having been duly lodged with the



other party and refusal by the other party to accede to them or no response by other party within stipulated time

11.2.3 Preparation for Arbitration Cases

The following steps should be taken by the DOs with a view to properly defend the Arbitration cases:

- a. As soon as a contractor applies for arbitration, the EE should prepare a detailed history sheet containing the data regarding estimates, designs and drawings, NIT, agreements, extra and substituted items, reduction statements, EOT/notices issued and send a copy to his SE.
- b. List out important letters in respect of the issues that are raised by the contractor, or the important notices by the contractor, or the important notices issued to the contractor, and place these originals in a separate file. In the routine file, true copies of these documents may be placed.
- c. Keep original agreements, plans, designs including the calculations for these if available, details of measurements and analysis of rates attached to the technically sanctioned estimates, all the MBs connected with the work, Cash Book, Site Order Book, Cement Register in safe custody of the EE along with originals listed in para (ii).
- d. The MBs should be closed.
- e. All the files connected with the work should be properly page-numbered, stitched and sealed, and kept by the EE along with the above records.
- f. If there are important situations or circumstances which are not available on the file, but are only known to the Executive Staff, their signed statements regarding the factual information should be obtained and kept on record, as after a lapse of time they may not be available for personal discussions, or they may be unable to recall past events.
- g. The EE may call the Executive Staff in-charge of the work from their new stations for any information that he may need to collect by personal discussions, but only under orders from the SE concerned.

If the work has been completed, the final bill should be prepared as early as possible, and in any case before the disputes are referred to arbitration. The SE/EE should ensure that the bills are finalised immediately, if not already done.

The EE shall inform the authority with whom Extra/Substituted/Deviations/RR items are pending about the arbitration case with a request to approve the items immediately. The concerned authority shall ensure that all such pending items are finalised before CSF is submitted.

A detailed note on the facts of the case dealing with each and every item of the claims and/or counter claims should be prepared by the EE, along with reference to various relevant documents supporting the Govt case or negotiating the contractor's claim(s).

11.2.4 Processing of Contractor's Application

The EE shall send one copy of the application of contractor direct to the CE with the under-noted information, without waiting for a reference from the CE, within 15 days from the date of receipt of the contractor's application in his office, with a copy to SE. The SE should send his report to CE immediately including:



- a. An attested copy of relevant arbitration clause.
- b. A note regarding verification of the factual data furnished by the contractor in the application form.
- c. Brief comments on each claim of the contractor. While giving such comments, the admissibility of the claims in the light of arbitration clause and Limitation Act, should be kept in view and commented upon.
- d. Statement of counter claims of the Department, if any. However, if counter claims are not readily enlisted or available, comments on contractor's claims should not be delayed.

11.2.5 Legal Cell in EIC Office

All engineering department engaged in public works shall have legal cell comprising of competent law officers and contract specialist well versed with various types of contract. The departmental officers or the engineer in case of super vision consultancy project shall provide brief and assistance in dealing with the arbitration and court cases of the department.

11.2.6 Appointment of Arbitrator

- a. The standard form of appointment letter at **Annexure 11.1** is to be used for appointing an Arbitrator.
- b. In those cases where the amount of the claim is less than Rs. 1,00,000 (Rupees One lakh), para 2 of the standard form should be deleted. (Para 2 states that the Arbitrator shall give reasons for the award if the amount of claims in dispute is Rs. one lakh or above).
- c. The person thus appointed shall be the sole Arbitrator, and his award shall be final and binding on all parties to the contract, unless it is set aside by the Court.
- d. Whenever a notice for appointment of an Arbitrator is received from a contractor in terms of relevant clause of contract, the CE should process the case so as to appoint an Arbitrator within 30 days from the receipt of such a notice. The time limit of 30 days for appointment of Arbitrator should be strictly adhered to.
- e. The authority of an appointed Arbitrator does not become revocable except with the order of the Court. It shall not be revocable by the death of any party or parties to the contract.
- f. The draft letter for appointment of a new Arbitrator due to transfer or vacation of office by the old Arbitrator shall be as per **Annexure 11.2**.

11.2.7 Action Subsequent to Appointment of Arbitrator

When the Arbitrator enters into reference and writes to the parties to the contract to file the statement of facts and counter statement of facts before him, the EE should take prompt action to prepare the defense, duly supported by adequate documentary evidence and witnesses, and arrange for its submission to the SE and the Departmental Counsel, as may be necessary and get their approval, and send to the Arbitrator by the date and within the time specified by him.



The EE should deal with submission of counter statement with utmost urgency and priority. Taking into account the various difficulties in filing the counter statement, it has been decided that the EE should submit the counter statement of facts normally within two month and in exceptional cases within three months from the date of receipt of the statement of the facts.

The EEs should invariably follow this time limit. However, in cases where they foresee some unavoidable delay in adhering to the time limit, they should explain the position to the Arbitrator under intimation to the other party and obtain EOT before the expiry of the stipulated date.

11.2.8 Engagement of Lawyers other than Departmental Counsel

- a. Where the Counsel of the Department is not available and/or where it is considered desirable to avail of the services of a local lawyer to conduct a case on behalf of the Department or assist the Departmental Counsel, fees may be paid at the rates approved by the State in which the cases are conducted. In such cases, approval of the CE/EIC as the case may be, should be obtained before engaging such lawyer.
- b. Where the fees are in excess of the approved rates of charges laid down by the State Administration, prior approval of the Govt should be obtained.
- c. In the case of EEs at stations where Senior/Junior Counsel is also stationed, the EEs should not engage Private Lawyer/Standing Govt Counsel locally, except in case where the Senior Counsel/Junior Counsel is not available due to unforeseen circumstances, and the case cannot be adjourned.
- d. However, the mere fact that the Counsel has not been able to come should not ordinarily call for adjournment of whole case. In such circumstances, the Arbitrator may hear the EE on the claims involving technical and physical points. For hearing on legal issues, the Arbitrator may, if he is satisfied that hearing the Govt Counsel is necessary, adjourn the case only to hear him on that or those issues. The EE may also, where the nature of the claim warrants the presence of the Govt Counsel, seek adjournment, if necessary, in writing.

11.2.9 Default of a Party

If the claimant fails to communicate his statement of facts in accordance with the time determined by the Arbitrator without showing sufficient cause, the Arbitrator may terminate the proceedings. If the respondent fails to communicate his counter statement of facts within the time determined by the Arbitrator, the Arbitrator may continue the proceedings without treating the failure in itself as an admission of allegations by the claimant. In case a party fails to appear at hearing or fails to produce documentary evidence, the Arbitrator may continue the proceedings and make the award on the basis of evidence before him.

11.2.10 Issue of Award

Whenever an award is made by an Arbitrator appointed otherwise than through a Court, and if under the award some money is payable to the Govt by the contractor, the Contractor should first supply to the Arbitrator stamped paper of appropriate value as may be asked for by the Arbitrator according to amount of the award as per the rules of the State where the award is likely to be made by the Arbitrator, and request the Arbitrator to write the award on the stamped paper (non-judicial) so supplied to him.



As per the provision in the arbitration clause, in all cases where the total amount of all the claims in dispute is Rupees One lakh and above, the Arbitrator shall have to give the reasons for the award.

11.2.11 Filing of Award

After the award is published by the Arbitrator or Tribunal procedures shall be as follow:

- a. EE shall examine if the award is acceptable to the Govt and send his recommendations to the SE.
- b. SE shall get the award and views of EE examined by the legal counsel to decide whether to accept the award and send his recommendations to the CE **who in turn will send his comment to the Secretary of the Department.**
- c. To accept the award or to challenge it **a committee headed by Secretary with members from Finance and Law will decide the matter.**
- d. Immediately the decision is taken by CE to accept the award, a communication shall be issued to the contractor in the form given in **Annexure 11.3**, intimating the fact of such acceptance, and offer payment in terms of the award if the contractor communicates acceptance of the award within the specified time. Payment so made would bar the contractor from suing again in respect of the same dispute.
- e. The payment should be made to the contractor after obtaining an undertaking from the contractor for acceptance of the award in full and final settlement. The undertaking is to be obtained from the contractor on stamp paper as per specified form given in **Annexure 11.4**.
- f. An Arbitration award shall not be discharged by the death of any party thereto either as respect to the deceased or any other party, but shall in such event be enforceable by or against the legal representative of the deceased.
- g. EE shall make payment to the contractor in terms of the award within a period of 30 days from the receipt of acceptance of award.
- h. The payments made towards arbitration awards shall be charged to the work.

11.2.12 Acceptance/Challenge of Award

- a. The EIC/CE has been delegated powers for acceptance/Challenge of arbitration awards.
- b. i. When, in the opinion of EIC/CE the award is just and reasonable and there are no grounds to challenge, the case need not be referred to the Counsel for their advice. However if considered necessary, CE can refer the matter to the Counsel of OPWD/Department before accepting/recommending for acceptance of the award.
ii. Where, in the opinion of EIC/CE, there are good grounds available to challenge the award (whole or part of the award), Department of Law should be consulted by the competent authority before taking a decision.
- c. As per provisions contained in section 34(3) of Arbitration Act 1996, an application for challenging the award may not be made after 3 months have elapsed from the date of receipt of award or, if a request had been made under Section 33, from the date on which



such request had been disposed off by the Arbitrator. Provided that if the Court is satisfied that the Applicant was prevented by sufficient cause from making application within the said period of 3 months, it may entertain the application within a period of 30 days, but not thereafter. In view of this specific provision of Section 34(3) of the Arbitration Act, the following Time Schedule will be strictly followed:

Sl. No.	Authority to accept/challenge the award	By EE to SE	By SE to CE	Action by CE
1	CE	30 days from the date of receipt of award or from the date of disposal of application filed u/s 33 of Arbitration Act.	10 days. The SE shall offer his specific comments about acceptance or challenging award against each claim.	The CE will take decision about accepting or challenging the award within 30 days after receipt of case from SE
2	EIC (Civil)	15 days from the date of receipt of award or from the date of disposal of application filed u/s 33 of Arbitration Act.	5 days. The SE shall offer his specific comments about acceptance or challenging award against each claim.	The CE will submit the case to EIC (Civil) within 10 days of receipt from SE with his specific comments about accepting/challenging award against each claim.

Note: Assuming that it takes about a month in the EIC/CE office to take decision, even then the EE will have at least 15 days to prepare grounds and file application in the competent court, if the decision is to challenge the award.

- d. The EE should make payment to the contractor in terms of the award within a period of 30 days from the receipt of acceptance of award from the competent authority, and intimate the actual date of payment of award to the contractor.
- e. The payments made towards arbitration awards shall be charged to the work.
- f. In all arbitration cases where awards of the Arbitrator go against the Department (whether by upholding the claims of the contractors or by rejecting the counter claims of the Department), detailed reasons and lapses, if any, on the part of concerned officials due to which the awards have gone against the Department, should be gone into in detail by the CE concerned. The CE should send his recommendations to the EIC (Civil) on the issue of fixing of responsibility and for taking action against the officers, wherever necessary.
- g. The CEs will keep statistics of all such cases for the information of Govt whenever required.



- h. The arbitration award means the total award including the interest awarded by the Arbitrator. The amount of such interest is to be worked out upto the date specified in the award. Therefore, the amount of the interest has to be taken into consideration while deciding the authority competent to accept the award. However, in case no fixed date is specified in the award and the interest is to be paid upto the date of actual payment of award amount to the contractor, the likely date of such payment may be taken into consideration. There may be a situation that after acceptance of the award by the competent authority, the actual payment to the contractor gets delayed beyond the anticipated date due to some unavoidable circumstances, and the amount of interest increases to an extent that the total amount of award exceeds the power of acceptance of the authority that accepted the award. In such cases, the payment may be made to the contractor as early as possible, and the case may be submitted to the authority competent to accept the increased amount of award for ex-post facto approval.

11.2.13 Setting Aside of the Award

The question of challenging the arbitral award in a Court of law should be considered very carefully. Under section 34 of Arbitration and Conciliation Act, 1996, there are very few grounds available to challenge the arbitral award as follows:

- a. The party making the application furnishes proof that:
- i. a party was under some incapacity, or
 - ii. the arbitration agreement is not valid under the law to which the parties have subjected it or, failing any indication thereon, under the law for the time being in force, or
 - iii. the party making the application was not given proper notice of the appointment of an Arbitrator or of the arbitral proceedings or was otherwise unable to present his case, or
 - iv. the arbitration award deals with a dispute not contemplated by or not falling within the terms of submission to arbitration, or it contains decision on matters beyond the scope of submission to arbitration, provided that, if the decision on matters submitted to arbitration can be separated from those not submitted, only the part of the arbitral award which contains decisions on matters not submitted to arbitration may be set aside, or
 - v. the composition of the arbitral tribunal or arbitral procedure was not in accordance with the agreement of the parties, unless such agreement was in conflict with a provision of this Part from which the parties cannot derogate, or failing such agreement, was not in accordance with this Part.
- b. The Court finds that:
- i. the subject matter of the dispute is not capable of settlement by the arbitrator under the law for the time being in force, or
 - ii. the arbitration award is in conflict with the public policy of GOO.



An application for setting aside an arbitration award may not be made after 3 months have elapsed from the date on which the party making that application had received that arbitral award or from the date on which his application for correction in or interpretation of arbitration award in terms of Section 33 of the Arbitration and Conciliation Act, 1996 was disposed off by the Arbitral Tribunal/Arbitrator. Under Section 33, a party can make an application for correction or interpretation within 30 days of receipt of the arbitration award.

If the award is found to be in order from all aspects, it need not and should not be challenged. In cases, where, in the opinion of authority competent to accept/challenge the award, there are good grounds available to challenge the award (whole or part), Ministry of Law should be consulted.

The following documents may be sent invariably with all awards:

- a. Contract agreement in original.
- b. Award of the Arbitrator.
- c. Legal opinion of State Govt Counsel/Local Legal Department of OWD.
- d. A statement in the proforma is given below:

Proforma

Claim Wise Statement of Arbitration Award for the Work

1. Claim no.
2. Brief description of claim/counter claim as justified by the arbitrator.
3. Amount of claim.
4. Amount of award.
5. EE's recommendations.
6. SE's recommendations.
7. CE's recommendations.

11.2.14 Award Amount not to be Deposited in Court

Liability to pay further interest does not cease even if award amount is deposited in court. Therefore in case of challenge to the award, the award amount should not be deposited in the court unless otherwise directed by the court.

11.2.15 Period of Limitation

- a. It is a term of the contract in the relevant arbitration clause that if the contractor does not make any demand for arbitration in respect of any claim (s) in writing within 120 days of receiving of intimation from the Govt that the bill is ready for payment, the claim of the contractor (s) will be deemed to have been waived and absolutely barred from the liabilities under the contract in respect of these claims.
- b. In spite of the above specific provision in the arbitration clause, the CE should not withhold appointment of Arbitrator on the ground that the request was received after the expiry of



the specified period mentioned in the relevant arbitration clause of the agreement, but should appoint the Arbitrator clarifying in the letter of appointment of the Arbitrator that the reference is without prejudice to the defence that may be raised by the Govt regarding the tenability of the claim on all necessary and available grounds including those of limitation, and the parties to the agreement will be free to raise the question of limitation before the Arbitrator.

- c. While examining the request for arbitration from a contractor or supplier or any claim in a litigation case, the EE should examine whether the claim of the contractor is time barred, in accordance with the provisions of the Limitation Act, 1908 or 1963 as the case may be. This point should be taken into consideration in preparing the defence.
- d. The question as to whether any dispute has become time barred will itself be a dispute which can only be settled by arbitration. The stage of reference is not concerned with the question whether the claim of the party to the arbitration agreement is barred by the Law of Limitation and that question falls within the province of the Arbitrator to whom the dispute is referred. The reference of the disputes, even though seemingly time barred, would therefore be made to the Arbitrator. The parties would be free to agitate the question of time bar before the Arbitrator, who would no doubt consider this point and give his award. However, it can be clarified in the letter of appointment of the Arbitrator that the reference is without prejudice to the defence that may be raised by the State Govt regarding the tenability of the claim on all necessary and available grounds including those in limitation.
- e. An appeal before the Division Bench is to be filed within thirty days of pronouncement of judgment by the High Court. If for any reason a delay occurs, the Court has to be approached for condonation of delay in filing the appeal, and the Department has to explain the day-to-day delay to the satisfaction of the Court. Every care should, therefore, be taken in handling such arbitration/court cases, and it should be ensured that timely and prompt action is taken within the period of limitation.

11.2.16 Court Cases

- a. Before any action is taken in a court of law against some party for amounts due to the Govt, a reliable report of its financial standing should be obtained, and simultaneously the expenditure likely to be incurred to recover this amount should be carefully estimated so that unnecessary expenditure on litigation may be avoided where there is no reasonable chance of recovering the judgment debts from the party concerned.
- b. Although it is the primary responsibility of the Departmental Counsel or Govt Counsel at the particular station where the case has jurisdiction to see to the proper defence of the case, it is equally the responsibility of superior officer of the Department to keep a constant watch over the progress of these cases and see that all such cases, at every stage, are processed properly so that the cases do not go against the Govt interests by default, resulting in financial loss, etc. to the Govt.
- c. The SE should, therefore, see that all such cases are reported to the CE as soon as a suit against Govt is threatened by any aggrieved party, or the Department itself intends to file a suit against a contractor or third party. The first report from the SE about such cases should



give a brief description of the case, and the steps that are being taken or have been taken for the proper defence or prosecution of the suit. Thereafter, monthly reports on each such case should be sent to the CE detailing the progress of the case and further action taken or to be taken for its defence or its successful prosecution.

- d. To enable him to discharge properly the responsibility that has been placed upon him in the matter of defence of court cases, the SE should observe the following:
 - i. The EEs of the Division concerned will be primarily responsible for handling and defending the court cases. He will collect all the relevant records and compile it for the benefit of the Counsel.
 - ii. The SE should also give adequate and timely instructions to the EE to ensure that case is defended properly and handled expeditiously.
 - iii. If it is considered necessary to obtain the advice of higher authorities at any stage, the SE should refer the matter immediately to the CE concerned for advice, either personal or in writing, according to the needs of the occasion.
 - iv. In order that the SE keeps himself fully conversant with the progress of each case, he should obtain regular reports from the EE about the progress of the case from time to time. He will send monthly reports to the CE. All defence statements to be filed by the EE should be approved by the SE and the Counsel before the statement is filed.
- e. In all court cases concerning the Department which the EEs have to defend with the assistance of Govt Advocates/Counsels, the EEs concerned should intimate the complete postal address and telephone numbers (both offices and residence) to the Advocates/Counsels, so that any information/developments relating to the case is intimated to them straight away.

11.2.17 Judgment in Court Cases

- a. The progress of the cases in the Court should be watched by the EE who is in charge of the cases as well as by the Office of the CE concerned on the basis of the monthly reports. It shall be the responsibility of the EE to send a report to the CE direct within 48 hours after the court has delivered a judgment that is adverse to the Govt with copies to the SE and the EIC (Civil) for information.
- b. It shall also be his responsibility to apply for and furnish with minimum delay a copy of the judgment and all other relevant papers, his own comments and the opinion of the Counsel conducting the case, on the advisability of filing an appeal/revision petition to enable the Govt to come to a decision whether an appeal/revision should be filed or not. There should be no delay in communication between the EE and the local Counsel and personal contact by telephone, etc. should be maintained with him.
- c. On receipt of the relevant papers from the EE, the SE should send his own comments to the CE. The CE should examine the matter on receipt of the EE's report, and should consider the advisability of the filing an appeal/revision petition in the light of the comments of the SE. Thereafter, the CE should forward his proposals to the EIC (Civil) to enable them to seek the advice of the Department of Law.



- d. The proposal should be made well in advance of the last date of filing an appeal, and it should be complete in every respect, i.e. copy of the judgment (if such copy has not been received, a verbatim report of the same), and all other relevant papers should accompany the proposal.

11.2.18 Legal Charges on Civil Suits

The costs and expenses incurred on civil suits in connection with the execution of State Govt works may be divided into three categories given below:

- a. The amount of the claim for which a decree is given.
- b. The amount of incidental costs incurred by the executing Department in connection with a work financed from its own departmental heads of expenditure, e.g. when the OPWD carried out a work chargeable to the Public Works Heads of Expenditure, and
- c. The amount of incidental costs incurred by the executing Department in connection with a work financed from a different head of expenditure, for instance when the PWD executes a work, the cost of which is debitable to the head of account other than the Public Works Expenditure.

The decretal amount of the claim vide item (i) above should be debited in all cases to the works concerned, and the charges referred to in item (ii) above to the sub-head "Establishment Contingencies" of the executing Department. As regards item (iii), the amount should generally be borne by the Department on whose behalf the work is undertaken on the ground that the action of the executing Department was as agent and taken in the interests of the work.

11.2.19 Miscellaneous

- a. In order to enable the EEs to put up proper defence of the case, it is necessary that as and when the EEs hand over charge of the Division, or transfer arbitration cases/works, they should, unless all the facts and arguments are already explained in the written counter statement of facts, prepare and place on record a self-contained note giving all the facts of the case and detailed comments on the claims.
- b. In order to enable speedy disposal of cases, the EEs should not ask for adjournment to the extent possible.
- c. The EE should always maintain a separate file so far as the disputes that have cropped up on the work during the progress of the work. In case of his transfer or relinquishing charge due to any reason, he should leave a self-contained note on the file at the time of his handing over charge, giving full background of all the disputes that have cropped up during the time of his incumbency, various developments thereon and the orders passed with due reference to the connected files. This should form a necessary and essential feature of all the handing over notes. Suitable method and procedure should be devised in the Divisional Office by which such files are carefully preserved and become available at a later stage to the EE who is required to defend the case.
- d. The transferred EEs should make a comprehensive note about the pending claims of all the contractors for works in progress or completed in their time, except those where counter



statements of facts have already been prepared. The note should indicate the admissibility or otherwise of each claim and the orders of competent authority. The note along with attested true copies of important letters mentioned therein should be handed over to their successors/other Divisions.

- e. It should be made a rule in the Divisional Office that all the drawings issued with the NIT, and those subsequently followed for execution of works are properly preserved and kept along with the contract documents. It should be ensured by the EE that suitable and adequate arrangements are made in his Division regarding preservation of all important documents, registers etc. Besides others, a list of all such records should be prepared and kept handy so that correct position of each case may be known to the EE who is required to conduct the case, to enable him to do soon proper lines.
- f. The arbitration cases should not be considered as legacy of old and defunct Divisions handed over to subsequent EEs. These should, on the other hand, be given due importance and dealt with on priority basis at all stages till these are finally disposed off.
- g. One of the important documents for defence in an arbitration case is the agreement. It is essential that a copy of the SE's orders conveying his decision on recovery of compensation and copies of sanctioned extra, substituted and deviated items and sanctions to EOT, etc. are attached to the original agreement so that these are readily available during the hearings of the arbitration case. It would be better if these papers are got signed by the contractor as far as possible, so that any claim on these issues can be refuted before the Arbitrator.
- h. Before a dispute is put to arbitration, the Department should know its exact position with regard to each item of the claims under dispute. It is very necessary that a very close and thorough study of the relevant documents is made and the case prepared accordingly.
- i. All correspondence between the EE and his SE/CE regarding appointment of Arbitrator, or on award, and subsequent court cases, if any, should be through D.O. letters, and should be sent through special messenger in the same station.
- j. The EE should send a quarterly report to SE (ending March, June, September and December) of pending Arbitration cases in the proforma given in annexure IV by 7th April, 7th July, 7th Oct and 7th Jan every year. The SE who will compile and send similar report for his circle by 15th April, 15th July, 15th Oct and 15th Dec respectively to the CE. These reports will be reviewed by the SE and the CE for early finalisation of the arbitration cases.

11.2.20 Jurisdiction of Courts

The Court of the place from where the letter of award of work has been issued shall have the jurisdiction to decide any dispute arising out of or in respect of the contract.

11.3 Right to Information (RTI)

11.3.1 Introduction

Right to Information (RTI) Act 2005 is an instrument to provide right to information for citizens to secure access to information under the control of public authorities in order to promote transparency and accountability in working of every public authority.



11.3.2 Public Authorities

A "public authority" is any authority or body or institution of Govt established or constituted by or under the Constitution; or by any other law made by the Parliament or a State Legislature; or by notification issued or order made by the Central Govt or a State Govt Bodies owned, controlled or substantially financed by the Central Govt or a State Govt and NGOs substantially financed by the Central Govt or a State Govt also fall within the definition of public authority. The financing of the body or the NGO by the Govt may be direct or indirect.

OPWD is a Public authority as per definition of RTI Act.

11.3.3 What is Information

Information is not an abstract concept under the RTI Act. It is conceived as being contained in any material including records, documents, memos, e-mails, opinions, advices, press releases, circulars, orders, logbooks, contracts, reports, papers, samples, models, data material held in any electronic form. It also includes information relating to any private body which can be accessed by the public authority under any law for the time being in force.

11.3.4 Right to Information under the Act

A citizen has a right to seek such information from a public authority which is held by the public authority or which is held under its control. This right includes inspection of work, documents and records; taking notes, extracts or certified copies of documents or records; and taking certified samples of material held by the public authority or held under the control of the public authority. The Act gives the citizens a RTI at par with the MP and the Members of State Legislatures. According to the Act, the information which cannot be denied to the Parliament or a State Legislature, shall not be denied to any person. A citizen has a right to obtain an information in the form of diskettes, floppies, tapes, video cassettes or in any other electronic mode or through print-outs provided such information is already stored in a computer or in any other device from which the information may be transferred to diskettes etc.

The RTI Act has over-riding effect vis-a-vis other laws in as much as the provisions of the RTI Act would have effect notwithstanding anything inconsistent therewith contained in the Official Secrets Act, 1923, and any other law for the time being in force or in any instrument having effect by virtue of any law other than the RTI Act.

11.3.5 Suo moto Declaration of Information

Every public authority should provide as much information suo motu to the public through various means of communications so that the public have minimum resort to the use of the Act to obtain information. Internet being one of the most effective means of communications, the information may be posted on the website for following sixteen categories of information:

- a. the particulars of its organisation, functions and duties;
- b. the powers and duties of its officers and employees;
- c. the procedure followed in the decision making process, including channels of supervision and accountability;



- d. the norms set by it for the discharge of its functions;
- e. the rules, regulations, instructions, manuals and records, held by it or under its control or used by its employees for discharging its functions;
- f. a statement of the categories of documents that are held by it or under its control;
- g. the particulars of any arrangement that exists for consultation with, or representation by, the members of the public in relation to the formulation of its policy or implementation thereof;
- h. a statement of the boards, councils, committees and other bodies consisting of one or more persons constituted as its part or for the purpose of its advice, and as to whether meetings of those boards, councils, committees and other bodies are open to the public, or the minutes of such meetings are accessible for public;
- i. directory of its officers and employees;
- j. the monthly remuneration received by each of its officers and employees, including the system of compensation as provided in its regulations;
- k. the budget allocated to each of its agency, indicating the particulars of all plans, proposed expenditures and reports on disbursements made;
- l. the manner of execution of subsidy programs, including the amounts allocated and the details of beneficiaries of such programs;
- m. particulars of recipients of concessions, permits or authorisations granted by it;
- n. details in respect of the information, available to or held by it, reduced in an electronic form;
- o. the particulars of facilities available to citizens for obtaining information, including the working hours of a library or reading room, if maintained for public use;
- p. the names, designations and other particulars of the Public Information Officers (PIOs);
- q. Besides the categories of information enumerated above, the Govt may prescribe other categories of information to be published by any public authority. It need be stressed that publication of the information as referred to above is not optional. It is a statutory" requirement which every public authority is bound to meet.

The OPWD is obliged to update such information every year. It is advisable that, as far as possible, the information should be updated as and when any development takes place.

11.3.6 Information Exempt from Disclosure

Sub-section (1) of section 8 and section 9 of the Act enumerate the types of information which is exempt from disclosure. Sub-section (2) of section 8, however, provides that information exempted under sub-section (1) or exempted under the Official Secrets Act, 1923 can be disclosed if public interest in disclosure overweighs the harm to the protected interest. Further, sub-section (3) of section 8 provides that information exempt from disclosure under sub-section (1), except as provided in clauses (a), (c) and (i) thereof, would cease to be exempted after 20 years from the date of occurrence of the related event etc. However, the following types of information would continue to be exempt and there would be no obligation, even after lapse of 20 years, to give any citizen-



- a. information disclosure of which would prejudicially affect the sovereignty and integrity of India, the security, strategic, scientific or economic interest of the State, relation with foreign state or lead to incitement of an offence;
- b. information the disclosure of which would cause a breach of privilege of Parliament or State Legislature; or
- c. cabinet papers including records of deliberations of the Council of Ministers, Secretaries and other Officers subject to the conditions given in proviso to clause (i) of sub-section(1) of Section 8 of the Act.

11.3.7 Designating Public Information Officers and First Appellate Authority

OPWD shall designate a PIO in the office of EIC cum Secretary, to whom all the applications under RTI Act shall be addressed. The office of PIO shall have adequate secretarial support. The Department shall also designate the First Appellate Authority and publish the details thereof along with the details of the PIO. The Assistant Public Information Officers (APIOs) are appointed to receive the applications or appeals under the Act for forwarding the same to the Central PIO or the first Appellate Authority or the Central Information Commission.

Each office from divisional level onwards to the level of EIC cum Secretary each identified that the independent unit for RTI and each of them have APIO, PIO and first appellate authority in the unit itself as per approved guidelines of Govt. of Odisha.

11.3.8 Duties of Public Information Officers (PIOs)

- a. PIO shall receive the requests/applications from the persons seeking information and shall render reasonable assistance to persons seeking such information;
- b. PIO shall forward the copies of requests to the heads of concerned office of OPWD with copies endorsed to CE and SE within 5 days of receipt of application/requests for furnishing the information, duly supported by copies of documents. The applicant shall be informed accordingly;
- c. The concerned head of office shall act promptly and furnish the information to PIO with copies endorsed to CE/SE within 15 days of receipt of the requests.
- d. PIO shall examine the information received and provide the information to the Applicants within 30 days of receipt of the requests on payment of prescribed fees or reject the request.

11.3.9 Contents and Format of RTI Application

An applicant making request for information is not required to give any reason for requesting the information or any other personal details except those that may be necessary for contacting him. Also, the Act or the Rules do not prescribe any format of application for seeking information. Therefore, the applicant should not be asked to give justification for seeking information or to give details of his job etc. or to submit application in any particular form.

11.3.10 Fee and other Charges for Application

An applicant, along with his application, is required to pay a sum of Rs.10/- as application fee in cash or by way of a demand draft or a banker's cheque or an Indian Postal Order payable to the Accounts



Officer of the public authority. The applicant may also have to pay additional fee, as prescribed by the RTI (Regulation of Fee and Cost) Rules, 2005 for supply of information as given below:

- a. rupees two (Rs. 2/-) for each page (in A-4 or A-3 size paper) created or copied;
- b. actual charge or cost price of a copy in larger size paper;
- c. actual cost or price for samples or models;
- d. for inspection of records, no fee for the first hour; and a fee of rupees five (Rs.5/-) for each subsequent hour (or fraction thereof);
- e. for information provided in diskette or floppy rupees fifty (Rs.50/-) per diskette or floppy; and
- f. for information provided in printed form at the price fixed for such publication or rupees two per page of photocopy for extracts from the publication.

An applicant can make payment of fee in cash or by demand draft or banker's cheque or Indian Postal Order payable to the Accounts Officer of the public authority. The public authority should ensure that payment by any of the above modes is not denied or the applicant is not compelled to draw in the name of any officer other than the Accounts Officer. If any public authority does not have any Accounts Officer, an officer may be designated as such for the purpose of receiving fee under the RTI Act or rules made thereunder.

If the applicant belongs to Below Poverty Line (BPL) category, he is not required to pay any fee. However, he should submit a proof in support of his claim to belong to the BPL. The application not accompanied by the prescribed fee of RS.10/- or proof of the applicant's belonging to BPL, as the case may be, shall not be a valid application under the Act and, therefore, does not entitle the applicant to get information.

11.3.11 Invalid Applications

Soon after receiving the application, the PIO should check whether the applicant has made the payment of application fee of Rs. 10 or whether the applicant is a person belonging to a BPL family. If application is not accompanied by the prescribed fee or the BPL Certificate, it cannot be treated as a valid application under the RTI Act and may be ignored.

11.3.12 Transfer of Application

If the subject matter of the application concerns any other Department, it should be transferred to that Department. If only a part of the application concerns the other Department, a copy of the application may be sent to that Department, clearly specifying the part which relates to them. While transferring the application or sending a copy thereof, the Department should be informed that the application fee has been received. The applicant should also be informed about the transfer of his application and the particulars of the Department to whom the application or a copy thereof has been sent.

Transfer of application or part thereof, as the case may be, should be made as soon as possible and in any case within five days from the date of receipt of the application. If a PIO transfers an application after five days from the receipt of the application, he would be responsible for delay in



disposing of the application to the extent of number of days which he takes in transferring the application beyond 5 days. The PIO of the Department to whom the application is transferred, should not refuse acceptance of transfer of the application on the ground that it was not transferred to him within 5 days.

Time period of five days for transfer of the application applies only when the application is transferred from one Department to another and not for transfer from one PIO to another in the same Department

11.3.13 Supply of Information

The information sought by an applicant should either be supplied to him or his application should be rejected within the time prescribed by the Act. If additional fee need be charged from the applicant, communication in this regard should be sent to him within the time limit prescribed for sending information. If the applicant does not receive information or decision about rejection of request or communication about payment of additional fee within the specified time, he can make an appeal to the First Appellate Authority. Appeal can also be made if the applicant is aggrieved by the decision of the PIO regarding supply of information or the quantum of fee decided by the PIO.

The answering PIO should check whether the information sought or a part thereof is exempt from disclosure under section 8 or Section 9 of the Act. Request in respect of the part of the application which is so exempt may be rejected and rest of the information should be provided immediately or after receipt of additional fees, as the case may be.

The information to the applicant should ordinarily be provided in the form in which it is sought. However, if the supply of information sought in a particular form would disproportionately divert the resources of the public authority or may cause harm to the safety or preservation of the records, supply of information in that form may be denied.

Only such information is required to be supplied under the Act which already exists and is held by the public authority or held under the control of the public authority. It is not required under the Act to create information; or to interpret information; or to solve the problems raised by the applicants; or to furnish replies to hypothetical questions.

11.3.14 Rejection of Request for Information

Where a request for information is rejected, the Central PIO should communicate to the person making the request-

- a. the reasons for such rejection;
- b. the period within which an appeal against such rejection may be preferred; and
- c. the particulars of the authority to whom an appeal can be made.

11.3.15 Requirement for Additional Fee

If additional fee is required to be paid by the applicant as provided in the RTI (Regulation of Fee and Cost) Rules, 2005, the PIO should inform the applicant:

- a. the details of further fees required to be paid;
- b. the calculations made to arrive at the amount of fees asked for;



- c. the fact that the applicant has a right to make appeal about the amount of fees so demanded;
- d. the particulars of the authority to whom such an appeal can be made; and
- e. the time limit within which the appeal can be made.

11.3.16 Extra Time for Additional Fee

Where the applicant is asked to pay additional fee, the period intervening between the dispatch of the intimation about payment of fee and the payment of fee by the applicant shall be excluded for the purpose of calculating the period of reply.

11.3.17 Supply of Part Information by Severance

Where a request is received for access to information which is exempt from disclosure but a part of which is not exempt and such part can be severed in such a way that the severed part does not contain exempt information then, access to that part of the information/record may be provided to the applicant. Where access is granted to a part of the record in such a way, the PIO should inform the applicant that the information asked for is exempt from disclosure and that only part of the record is being provided, after severance, which is not exempt from disclosure. While doing so, he should give the reasons for the decision, including any findings on any material question of fact, referring to the material on which those findings were based. The PIO should take the approval of appropriate authority before supply of information in such a case and should inform the name and designation of the person giving the decision to the applicant also.

11.3.18 Time Period for Supply of Information

The PIO should supply the information within 30 days of the receipt of the request. Where the information sought for concerns the life or liberty of a person, the same should be provided within 48 hours of the receipt of the request. If request for information is received through the APIO, the information may be provided within 35 days of receipt of application by the APIO in normal course and 48 hours plus 5 days in case the information sought concerns the life or liberty of a person. In case of an application transferred from other, reply should be provided by the PIO within 30 days of the receipt of the application by PWD in normal course and within 48 hours in case the information sought concerns the life or liberty of a person.

11.3.19 Failure to Supply Information in Prescribed Time

If the PIO fails to give decision on the request for information within the prescribed period, He shall be deemed to have refused the request. It is pertinent to note that if the Department fails to comply with the specified time limit, the information to the concerned applicant would have to be provided free of charge.

11.3.20 Transfer of Applications

If an application is made to PIO of OPWD requesting for information, which is held by another Department; or the subject matter of which is more closely connected with the functions of another Department, the PIO of OPWD shall transfer the application or relevant part of it to that Department within five days from the receipt of the application



11.3.21 Third Party Information

Third party in relation to the Act means a person other than the citizen who has made request for information. Any Department other than the OPWD to whom the request has been made shall also be included in the definition of third party.

It may be noted that information including commercial confidence, trade secrets or intellectual property, the disclosure of which would harm the competitive position of a third party, is exempt from disclosure. Section 8(1)(d) requires that such information should not be disclosed unless the competent authority is satisfied that larger public interest warrants the disclosure of such information.

If an applicant seeks any information which relates to or has been supplied by a third party and that third party has treated that information as confidential, the PIO should consider whether the information should be disclosed or not. The guiding principle in such cases should be that except in the case of trade or commercial secrets protected by law, disclosure may be allowed if the public interest in disclosure outweighs in importance any possible harm or injury to the interests of such third party.

However, procedure as given below should be followed before disclosing such information. It may be noted that this procedure need to be followed only when the third part has treated the information as confidential.

If the PIO intends to disclose the information, he should within five days from the receipt of the application, give a written notice to the third party that the information has been sought by the applicant under the RTI Act and that he intends to disclose the information. He should request the third party to make a submission in writing or orally, regarding whether the information should be disclosed. The third party should be given a time of ten days, from the date of receipt of the notice by him, to make representation against the proposed disclosure, if any.

The PIO should make a decision regarding disclosure of the information keeping in view the submission of the third party. Such a decision should be taken within forty days from the receipt of the request for information. After taking the decision, the PIO should give a notice of his decision to the third party in writing. The notice given to the third party should include a statement that the third party is entitled to prefer an appeal under section 19 against the decision. He should request the third party to make a submission in writing or orally, regarding whether the information should be disclosed. The third party should be given a time of ten days, from the date of receipt of the notice by him, to make representation against the proposed disclosure, if any.

The third party can prefer an appeal to the First Appellate Authority against the decision made by the PIO within thirty days from the date of the receipt of notice. If not satisfied with the decision of the First Appellate Authority, the third party can prefer the second appeal to the Central Information Commission.

If an appeal has been filed by the third party against the decision of the PIO to disclose the third party information, the information should not be disclosed till the appeal is decided.



11.3.22 Management of Record by OPWD

Proper management of records is of utmost importance for effective implementation of the provisions of the Act. The OPWD should, therefore, maintain all its records properly. It should ensure that the records are duly catalogued and indexed in such a manner and form that it may facilitate the RTI.

The OPWD should computerise all its records which are appropriate to be computerised. Records so computerised should be connected through a network on different systems so that access to such records is facilitated.

11.3.23 Appeals and Complaints

Act contains provision of two appeals. The first appeal lies within the Department itself which is made to an officer designated as the First Appellate Authority by the Department. The First Appellate Authority happens to be an officer senior in rank to the PIO. The second appellate authority is the Information Commission.

If an applicant is not supplied information within the prescribed time limit, or is not satisfied with the information furnished to him, he may prefer an appeal to the first appellate authority who is an officer senior in rank to the PIO. Such an appeal can be made within a period of 30 days from the date on which time limit for supply of information expires or the decision of the PIO is received. The appellate authority of the PWD is expected to dispose of the appeal within a period of thirty days or in exceptional cases within 45 days of the receipt of the appeal. If the first appellate authority fails to pass an order on the appeal within the prescribed period or, if the appellate is not satisfied with the order of the first appellate authority, he may prefer a second appeal with the Information Commission within ninety days from the date on which the decision should have been made by the first appellate authority or was actually received by the appellant.

If any person is unable to submit a request to a PIO either by reason that such an officer has not been appointed by the concerned public authority; or the Assistant Central PIO has refused to accept his or her application or appeal for forwarding the same to the PIO or the appellate authority, as the case may be; or he has been refused access to any information requested by him under the RTI Act; or he has not been given a response to a request for information within the time limit specified in the Act; or he has been required to pay an amount of fee which he considers unreasonable; or he believes that he has been given incomplete, misleading or false information, he can make a complaint to the Information Commission.

The first appeal may be made within 30 days from the date of expiry of the prescribed period or from the receipt of communication from the PIO. If the First Appellate Authority is satisfied that the appellant was prevented by sufficient cause from filing the appeal, the appeal may be admitted after 30 days also.

11.3.24 Disposal of Appeal

Deciding appeals under the RTI Act is a quasi-judicial function. It is, therefore, necessary that the appellate authority should see to it that the justice is not only done but it should also appear to have been done. In order to do so, the order passed by the appellate authority should be a speaking order giving justification for the decision arrived at.



11.3.25 Time Limit for Disposal of Appeal

The appeal should be disposed off within 30 days of receipt of the appeal. In exception cases, the Appellate Authority may take 45 days for its disposal. However, in cases where disposal of appeal takes more than 30 days, the Appellate Authority should record in writing the reasons for such delay.

If an appellate authority comes to a conclusion that the appellant should be supplied information in addition to what has been supplied to him by the CPIO, he may either (i) pass an order directing the CPIO to give such information to the appellant; or (ii) he himself may give information to the appellant while disposing off the appeal. In the first case the appellate authority should ensure that the information ordered by him to be supplied is supplied to the appellant immediately. It would, however, be better if the appellate authority chooses the second course of action and he himself furnishes the information along with the order passed by him in the matter.

If, in any case, the CPIO does not implement the order passed by the appellate authority and the appellate authority feels that intervention of higher authority is required to get his order implemented, he should bring the matter to the notice of the officer in OPWD competent to take action against the CPIO. Such competent officer shall take necessary action so as to ensure implementation of the provisions of the RTI Act.

The second appeal lies with the Central Information Commission. The Central Information Commission (Appeal Procedure) Rules, 2005 govern the procedure for deciding appeals by the Commission.

11.3.26 Compliance with the Orders of the Information Commission

While deciding an appeal, the Information Commission may require the OPWD to take such steps as may be necessary to secure compliance with the provisions of the Act. In this regard the Commission may pass an order to provide information to an applicant in a particular form; appoint a PIO; publish certain information or categories of information; make necessary changes to its practices in relation to the maintenance, management and destruction of records; enhance the provision of training for its official.

The Commission has power to pass orders requiring a public authority to compensate the complainant for any loss or other detriment suffered by him. It also has power to impose penalty on the PIO as provided in the Act. It may be noted that penalty is imposed on the PIO which is to be paid by him. However, the compensation, ordered by the Commission to be paid to an applicant would have to be paid by the public authority.

The decisions of the Commission are binding. The public authority should ensure that the orders passed by the Commission are implemented. If any public authority is of the view that an order of the Commission is not in consonance with the provisions of the Act, it may approach the High Court by way of a Writ Petition.

11.3.27 Imposition of Penalty

As pointed out above, an applicant under the Act has a right to appeal to the Information Commission and also to make complaint to the Commission. Where the Information Commission at the time of deciding any complaint or appeal is of the opinion that the PIO has without any



reasonable cause, refused to receive an application for information or has not furnished information within the time specified or denied the request for information or knowingly given incorrect, incomplete or misleading information or destroyed information which was the subject of the request or obstructed in any manner in furnishing the information, it shall impose a penalty of two hundred and fifty (250) rupees each day till application is received or information is furnished subject to the condition that the total amount of such penalty shall not exceed twenty-five thousand (25000) rupees. The PIO shall, however, be given a reasonable opportunity of being heard before any penalty is imposed on him. The burden of proving that he acted reasonably and diligently and in case of denial of a request that such denial was justified shall be on the Central PIO.

11.3.28 Disciplinary Action against PIO

Where the Information Commission at the time of deciding any complaint or appeal is of the opinion that the PIO has without any reasonable cause and persistently failed to receive an application for information or has not furnished information within the time specified or denied the request for information or knowingly given incorrect, incomplete or misleading information or destroyed information which was the subject of the request or obstructed in any manner in furnishing the information, it may recommend for disciplinary action against the PIO.

11.3.29 Protection for Work done in Good Faith

Section 21 of the Act provides that no suit, prosecution or other legal proceeding shall lie against any person for anything which is in good faith done or intended to be done under the Act or any rule made thereunder. A PIO should, however, note that it would be his responsibility to prove that his action was in good faith.



Annexure 11.1: Standard Form of Letter of Appointment of Arbitrator

ODISHA WORKS DEPARTMENT

(Reference Para 11.2.4 (iii)b of OPWD Code and Para 11.2.5(a) of OPWD Manual)

No. _____ Dated, the20.....

Subject: In the matter of arbitration between and Union of India, regarding the work
.....Agreement no.

Whereas.....has/have written to me vide his/their letter no..... dated..... that certain disputes have arisen between the above noted parties in respect of the above noted work. I,, Chief Engineer, CPWD by powers conferred on me under Clause 25 of the said Agreement hereby appoint Shri Arbitrator, Ministry of Urban Development, New Delhi as Sole Arbitrator to decide and make his award regarding the claims/disputes by the contractor, if any, as shown in the statements enclosed subject always, however, to their admissibility under clause 25 of the aforesaid agreement.

**The amount of the claim(s) in dispute being Rs.1,00,000/-* or above Rs.1,00,000/- the Arbitrator shall give reasons for the award.

CHIEF ENGINEER

[*Score out what is not applicable

Note: **This para is to be omitted in cases where the amount of claim(s) is less than Rs.1,00,000]

To

1. Shri.....

Arbitrator

2. M/s Contractor, with reference to his/their letter no. dated

Copy to:

1. Shri SE, Circle, OWD,with reference to letter no.....dated.....

2. Shri Executive Engineer,Division, OWD with reference to his letter no.
..... dated

Arrangements may please be made to defend the case effectively. Legal assistance of the Counsel/SE (P) may be obtained where necessary.

SE/EE should ensure that the bills of the contractors are finalised immediately, if not already done.

CHIEF ENGINEER



Annexure 11.2: Draft Letter of Appointment of Substitute Arbitrator due to Transfer or Vacation of Office by the Arbitrator

ODISHA PUBLIC WORKS DEPARTMENT

(Para 11.2.4 (iii) (e) of OPWD Code and Para 11.2.5 (e) of OPWD Manual)

No.....

Dated, the 20.....

Subject: In the matter of arbitration between:

..... Claimant

vs

..... Respondent

Arbitration case no..... of

Whereas Shri..... was appointed Sole Arbitrator by letter no. dated in the above matter, and whereas the aforesaid Arbitrator has been transferred/vacated his office on, I,, Chief Engineer (Zone) in exercise of my powers under clause 25 of the contract appoint Shri..... as the Sole Arbitrator to determine the disputes referred to the aforesaid arbitrator in accordance with the said clause 25. Shri..... may start the proceedings from the stage at which the aforesaid Arbitrator left off.

**The amount of the claim in dispute being Rs.1,00,000/- and above, the arbitrator shall give reasons for the award in respect of each claim/dispute.

Chief Engineer

Copy to:

1. Shri.....with the request to transfer the records of the case to Shri..... at the earliest.
2. Shri..... with the request to take over the records of the case from Shri.....at the earliest.

Note: **This para is to be omitted in cases where the amount of claim(s) is less than Rs.1,00,000/-



Annexure 11.3: Award of Arbitration

(Reference Para 11.2.6 (v) of OPWD Code and Para 11.2.10 (d) of OPWD Manual)

To

.....

.....

Subject: Award dated..... made by SriArbitrator in regards to the disputes arising out of agreement no.....and referred to arbitration vide no.....

Dear Sir,

With reference to the awards mentioned above, I am to say that the Governor of Odisha has decided to accept the said award provided you accept the same as final and binding. Please intimate that you agree to accept payment of the sum award in full and final settlement of all your claims forming the subject matter of the reference to arbitration in the above care.

Your Faithfully
Executive Engineer
and

for on behalf of Governor of Odisha



Annexure 11.4: Specimen Form of Undertaking to be obtained from the Contractor on Stamped Paper for Acceptance of Award

[Reference para11.2.6 (v) of OPWD Code and Para 11.2.10 (e) of OPWD Manual]

- (i) WHEREAS the Union of India, represented by(EE) operating the contract No. with M/S (Name of the contractor to be indicated) for execution of the work (Detail of work to be indicated, i.e., name of work and agreement No.).

WHEREAS certain disputes had arisen in the execution of the said contract –

WHEREAS the parties decided to go for arbitration, the demand for arbitration having been made by (indicate contractor/Government);

WHEREAS the Director General (Works)/Additional Director General/Chief Engineer

(delete whichever is not applicable; in the case of ADG/CE, indicate the Region/Zone), under his powers as vested in clause 25 of the agreement had appointed Shri as Arbitrator;

WHEREAS the said Arbitrator had given his award dated....., and had awarded a sum of Rs in figures and words) in favour of the contractor in arbitration case No.; and

WHEREAS the Union of India have decided to accept the said award,

- (ii) It is hereby agreed upon and accepted by both the parties to the above-mentioned contract that the said award in its entirety is final and binding as regards to all the disputes referred to the Arbitrator by them and an amount of Rs. (in figures and words) given in the award in favour of the contractor will be paid by the Union of India in full and final settlement of the amounts due to the contractor under the said contract.

Signature of Contractor

Signature of Executive Engineer

For and on behalf of the President of India

Witnesses:

- 1.
- 2.
- 3.



CHAPTER 12

PUBLIC PRIVATE PARTNERSHIP

4.



12 PUBLIC PRIVATE PARTNERSHIP (PPP)

12.1 General

12.1.1 Definition

PPP means an agreement between a Govt/Statutory entity/Govt owned entity on one side and private sector entity on the other, for the provision of public assets and/or services, through investment to be made and/or management undertaken by the Private Sector entity for a specified period of time where there is well-defined risk between the Private Sector entity & public entity.

12.1.2 Policy Objective

Development of infrastructure projects by PPP aims at reducing the burden on the state resources by tapping not only the finances but also the innovativeness, management skills and more efficient delivery system of the private sector. The PPP approach is best suited for the infrastructure sector as it supplements scarce public resources, creates a more competitive environment and helps to improve efficiency and reduce costs. The key objective of this policy is to:

1. Leverage State and Central Govt funds, support private investment and to create a conducive environment so as to utilise the efficiencies, innovativeness and flexibility of the private sector to provide better infrastructure and service at an optimal cost.
2. Setting up of a transparent, consistent, efficient administrative mechanism to create a level playing field for all participants and protect interest of all stakeholders.
3. To prepare a shelf of projects to be offered for PPP and take them forward with assistance of the owner Departments through a transparent selection process.
4. Putting in place an effective and efficient institutional mechanism for speedy clearance of the projects.
5. Provide necessary risk sharing framework in the project structure so as to assign risks to the entity most suited to manage them.
6. Create a robust dispute redressal mechanism/regulatory framework for PPP projects.
7. To provide the required Viability Gap Funding (VGF) where the essential projects are intrinsically unviable.
8. To create "Odisha Infrastructure Development Fund (OIDF)" to facilitate implementation of the objectives of the Policy.

12.1.3 Infrastructure Sectors

The infrastructure projects covered under "Odisha PPP Policy- 2007" are listed below, the list may be modified from time to time:

1. Roads, Bridges and Bypass
2. Ports and Harbours
3. Airports, Airstrips and Heliports



4. Inland container depots and logistics hubs.
5. Industrial parks, Theme Parks like Information Technology (IT)/Bio-Technology Parks, Knowledge Parks, Special Economic Zones and Townships.
6. Water supply, Treatment and Distribution.
7. Power Generation, Transmission and Distribution Systems
8. Solid waste Management
9. Sewerage & Drainage
10. Inland water Transport
11. Tourism and related infrastructure
12. Healthcare Facilities
13. Education
14. Trade fair, convention, exhibition, cultural centers
15. Urban infrastructure including entertainment and recreational facilities
16. Urban Transportation Systems/Improvement of Public Transport Facilities including construction of state of art bus-stands.
17. Railway & related projects
18. Agriculture Production and Marketing
19. Any other sector/facility as may be included by the Govt.

12.1.4 Modes of PPP

There are various models of private participation in public projects. For the projects of OWD following models can be adopted:

- a. **User Fee based Build - Operate and Transfer (BOT) model:** In this model the Concessionaire undertakes design, construction, financing, O&M of a given infrastructure facility for a fixed term of concession period. During the said period Concessionaire is allowed to charge the users fee, rental etc., as incorporated in the Concession agreement, to recover the investment, operating and maintenance expenses together with a reasonable rate of return and finally transfer the facility as per modality prescribed. There are several variants in this category are Build Transfer Operate (BTO), Build Operate Rehabilitate Transfer (BORT) etc.
- b. **Annuity based BOT model:** In projects not amenable for sizeable recovery through user charges this model of annuity based BOT system is followed. In this, the Concessionaire gets return only in the shape of 'yearly or half yearly annuity' during the concession period. The right to toll revenue belongs to the Govt Bidders quote demanded annuity bids for the pre-determined concession period. The project is offered to the bidder quoting lowest annuity rate. Other variants in this category are Modified Annuity Mode, Toll plus Annuity Mode.
- c. **Build-Own and Operate (BOO) model:** In this model, the Concessionaire is authorised to design, finance, own ,operate and maintain an infrastructure or development facility and



Concessionaire is allowed to recover its total investment, operating and maintenance costs plus a reasonable return by collecting tolls, fee, rental or other charges from the facility users. In this, the Concessionaire who owns the assets of the facility may assign its O&M to a facility operator.

- d. **Build- Own-Operate and Transfer (BOOT) model:** This model is similar to BOO model except that at the end of the fixed term, the facility is transferred back to the Govt agency.
- e. **Operate-Maintain and Transfer (OMT) model:** This model is usually used for effective operation of an existing facility like highway, water supply distribution system, irrigation channel etc. The object of this system is to maximise the life of public assets, provide quality service and reduce the burden of maintenance cost on the public exchequer.

12.2 Institutional Arrangement

12.2.1 State Level

For an effective and efficient institutional mechanism GOO have constituted following committee and empowered group:

- a. **High Level Clearance Authority (HLCA):** The High level Clearance Authority under the chairmanship of Chief Minister takes decision of all infrastructure projects having investment of over Rs. 500 crores to be undertaken through PPP model. Special Secretary, PPP is the member- convener of HLCA.
- b. **Empowered Committee on Infrastructure (ECI):** ECI consisting of group of Secretaries under the chairmanship of the Chief Secretary, GOO, is constituted for facilitating infrastructure development in the State. Special Secretary, PPP is the member- convener of ECI. It is the nodal agency to co-ordinate all efforts of the State Govt regarding development of infrastructure sectors, involving private participation and funding from various sources. Besides other functions main functions of ECI are:
 - i. To prioritize, approve shelf of projects, sanction, authorise expenditure for PPP projects.
 - ii. To adopt, adapt and develop Model Concession Agreements for various sectors.
 - iii. To recommend projects for VGF.
 - iv. Manage the "OIDF" proposed to be created to facilitate infrastructure development, to recommend projects along with amount required from the fund to meet the objectives of this Policy.
 - v. To deliberate and recommend to HLCA the final bids for approval of the projects above Rs. 500 Crores.
 - vi. To deliberate and recommend to HLCA any special grants and concessions.
 - vii. To coordinate the efforts of other Departments for the furtherance of the objectives of this Policy.
 - viii. To inspect, visit, review and monitor any PPP Projects regarding its implementation, execution, operation and management.



- ix. To recommend en-action of special legislation for formation of appropriate regulatory mechanism/robust grievance redressal mechanism as may be required for the project.
- x. To sanction PPP Projects and approval of Concession Agreements for projects with investments upto Rs.500 Crores.

12.2.2 PPP Cell and the Technical Secretariat

The ECI is to be assisted by a PPP Cell in the P&C Department in undertaking the functions specified under this policy under the direct supervision of Chief Secretary. The PPP Cell is to be assisted by a Technical Secretariat. The fund requirements for furthering the objectives of the Policy through the PPP cell will be initially met through budgetary support.

12.2.3 Functions of the PPP Cell and Technical Secretariat

The Functions of the PPP Cell and its Technical Secretariat would include:

- a. To identify, conceptualise and create a shelf of projects in consultation with the owner Department/agency and recommend approval of such projects for PPP from time to time to the ECI.
- b. To assist different Govt Departments/agencies in preparing prefeasibility reports by itself or through consultants.
- c. To assist the respective Departments/agencies for preparing DPRs
- d. To appoint/select consultants to take the projects upto selection of developer stage in consultation with the concerned Department
- e. To help respective Departments/agencies to conduct the bidding process for appointment of developers.
- f. To interact with the Planning Commission, GOI and other funding agencies like World Bank for obtaining approval under VGF and any other fund created for such purpose.
- g. To recommend the requirement of multilateral/bilateral funding for furthering the objectives of the Policy.
- h. To act as the nodal agency for capacity building for PPP in the state.
- i. To further this function it shall conduct/recommend exposure visits and training programs on PPP.
- j. To recommend appropriate regulatory mechanism/robust grievance redressal mechanism as per requirement of the project.
- k. To recommend requirements from the PPP Fund for development of projects, gap funding and for any other requirement for furthering the objectives of this Policy. Formulation and recommendation of any legislation if required for creation, administration and monitoring of the Fund.
- l. To develop internal evaluation guidelines by PPP Cell in consultation with the respective Departments/agencies to evaluate and assess the projects whether the projects are to be funded by the State Govt through multilateral/bilateral funding and/or implemented with Private Sector participation.



12.2.4 Department Level

OWD and other line Departments shall setup a PPP Cell headed by concerned EIC and supported by SE with 2 EEs & 4 AEs to scrutinise the project technically.

12.3 Project Identification and Approval Process

12.3.1 Project Identification/Conceptualisation

As part of project development activity the head of OWD and line Departments, with the help of PPP cell under them undertake studies and investigations to evaluate the project from various prospective. They will prioritize projects based on demand and supply gaps, inter linkages and any other relevant parameters and create a project shelf.

12.3.2 Preparation of Preliminary Feasibility Report

State Govt Departments/Agencies with assistance of the Technical Secretariat will prepare the Preliminary Feasibility Report for the identified projects. The preliminary feasibility report should establish the need for the project, broad level project cost estimation and indicative commercial viability of the proposed project including preliminary engineering studies if any.

12.3.3 Approval of Projects for Development under PPP Mode

On receipt of the preliminary feasibility report from the State Govt Department/Agency by the ECI through PPP Cell, the ECI will review the proposal based on its merit, grant its in-principle approval or suggest modifications/changes to the proposal. Projects with investment beyond Rs. 500 Crores will be recommended to HLCA for its approval.

12.3.4 Stages of the Procurement Process

After identifying the projects to be undertaken through PPP model, EIC/CEs in co-ordination with the Department's PPP Cell will undertake following analysis:

- a. Economic Analysis;
- b. Financial Analysis;
- c. Affordability Analysis; and
- d. Bankability analysis.

The PPP Cell of OWD and other line Departments after careful deliberations will finalise preliminary report for the approval of competent authority to and then will appoint following consultants:

- a. Technical Consultant;
- b. Financial Consultant; and
- c. Legal Consultant.

These Consultants will carry out studies and finalise the feasibility report. DPR shall then be prepared detailing design, estimate, construction details, specifications, O&M details either departmentally or through Private Consultant. Decision in this regard shall be taken by competent authority. Feasibility Report along with DPR will then be submitted by head of the line department to ECI and HLCA for final decision.



12.3.5 Bid Document

PPP Cell of the OPWD with the advice and in consultation with the competent authority will finalise the bid documents. Standard bid documents, developed by Planning Commission, GOI may be followed with due modifications needed for the particular project and requirement of the State Govt.

The bid document will comprise of Request for Qualification (RFQ) documents for prequalification of the agencies and Request for Proposal (RFP) document for submission of bid proper. These documents shall be got approved from the State Law and Finance Department in case model document of GOI is not available for the same.

The evaluation criteria for pre-qualification on Technical and Financial parameters will be as per Procurement Manual SBD of OPWD.

RFQ document will comprise of:

- a. Brief description of the project ,tentative cost, scope of project development details in brief;
- b. Technical parameters and criteria for pre-qualification;
- c. Financial parameters and criteria for pre-qualification; and
- d. Legal parameters and criteria for pre-qualification.

RFP document shall comprise of:

- a. Instructions to bidders (ITB);
- b. Minimum Design and Performance Standards and Specifications;
- c. Draft Agreement;
- d. Form of Bid;
- e. Forms of Performance Securities and other forms;
- f. Revenue potentiality in brief and critical elements determining the financial viability of the project; and
- g. Other documents as may be necessary.

ITB shall specify rules of bidding and shall be comprehensive and fair to all the bidders.

12.3.6 Inviting Bids and Selection of Concessionaire

Bid document, duly finalised by PPP Cell of OPWD and approved by concerned EIC, will be sent to the concerned EE for inviting bids. Notice inviting bids to pre-qualify shall be published in the press and also be posted on website.

Head of the line Department will constitute “Bid Opening and Scrutiny Committee” comprising of at least following members:

1. CE – Chairman
2. Concerned SE/EE or officer of equivalent rank - member



3. Nominated officer from Finance Department
4. AO of EIC/or head of line Department

The Committee will scrutinise and evaluate the applications and finalise the recommendations for pre-qualification. Committee's recommendations will be put up to PPP Cell through CE and EIC. PPP Cell after examination will finalise the recommendation of Pre-qualification and obtain the approval of the competent authority.

12.3.7 Financial Close

Financial close is the date of completing financial agreements whereby the Concessionaire has the access to the funds/financial assistance committed in the financial documents/agreements. Copies of these agreements are to be supplied to the Govt. All conditions precedent, unless such condition has been waived shall be fulfilled on or before financial close. It signifies the start of concession period termed as "Appointed Date".

12.4 Independent Consultant

12.4.1 Appointment of Independent Consultant

In all PPP model Independent Consultant is appointed for day to day implementation of agreement provisions. The methodology of appointment, terms and conditions, role and responsibilities of the Independent consultant shall be clearly laid down in the agreement. The Independent Consultant shall be available during the (i) development phase (ii) construction phase and (iii) O&M phase. He shall discharge all the functions enjoined upon him under the agreement.

12.4.2 Monitoring of Construction

During the construction period, the work will be inspected and monitored by the Concessionaire and the Independent Consultant in the manner specified in the agreement, regarding the physical progress and conformance to standards and specifications. Upon recommendation by the Independent Consultant and the line department by notice require the Concessionaire to suspend works if they pose threat to safety and, if required, remedy any unsafe or defective work of which the cost will be borne by him if he is found in breach; if otherwise, it will be borne by the department.

12.5 Change of Scope

12.5.1 Procedure

To cover the contingency of modification of works and services, provision will be made in the agreement for change of scope. The procedure for issue of notice to the Concessionaire for change of scope, the information to be furnished by him in response, determination of cost and time for implementation, the component of cost to be absorbed by him and that to be borne by the Department, method of payment of the cost of change to him in respect of his share etc. shall be clearly laid down in the agreement. However, the need of such changes shall be kept to the absolute minimum by due advance diligence in order to avoid disputes and claims.

12.5.2 Award of Work for Change in Scope

The Department may, after giving the prescribed notice to the Concessionaire and considering his reply thereto, award such works and services to any person on the basis of open competitive



bidding, provided the Concessionaire has the option to match the first ranked bids in terms of the selection criteria.

12.5.3 Reduction in Scope

If there is reduction in the scope of the work or the Concessionaire fails to complete any work, the Department may require him to pay such percentage of the cost as saved by him as specified in the agreement.

12.6 Operation and Maintenance

During the operation period, the Concessionaire will operate and maintain the project facility in accordance with the agreement either himself or through the O&M contractor as per provision of the agreement, applicable laws, applicable permits and conform to good industry practice. Maintenance requirements to meet the desired level of service shall be set down in the schedule to the agreement. The Concessionaire shall prepare the required documents like Maintenance Manual, Safety Manual and the Maintenance Programme, which shall be reviewed and approved by the Independent Consultant. Failure to meet the maintenance and safety requirements shall entitle the department to recover damages as stipulated in the agreement and to terminate the agreement.

12.7 Completion Certificate

12.7.1 Methodology for Issue

The agreement will lay down the methodology for issue of Completion Certificate. Usually, the authority to issue completion certificate is with the Independent Consultant but it shall be with the prior approval of the Department Independent Engineer shall give certificate after due checking and successful completion of all tests.

12.7.2 Damages for Delay

Usually, the PPP agreements provide for issue of Provisional Certificate. This certificate will be issued if there are only some minor incomplete works of such a nature as do not stand against the safe and reliable commercial use of the project. Such a provisional certificate shall have appended with it a Punch List of outstanding items, jointly signed by the Independent Consultant, Department's representative and the Concessionaire, clearly stipulating the time for their completion. The Department shall ensure that all such incomplete works are duly completed. For any delay other than for reasons attributable to the State Govt or force majeure, the State Govt shall be entitled to recover from the Concessionaire damages for each day of delay at the stipulated rates, until all items are satisfactory and complete. Subject to payment of such damages, the time of completion of the Punch List items may be suitably enlarged. Failure by the Concessionaire to complete the Punch List items even by the extended time shall entitle the Department to take action as specified in the agreement.

12.8 Project Handover and Defects Liability

Upon the expiry of the concession period, the Concessionaire will hand over the vacant and peaceful possession of the project assets and project site to the EE. The handing over process will be initiated at least 12 months before the actual date of expiry of concession period. Independent Consultant



and the Concessionaire will carry out a joint inspection and prepare a list of works/jobs/additions/alterations required to bring the project to the required level of service before the project handover.

12.9 Termination

If a party commits a default as specified in the agreement, the other party is entitled to cause termination of the agreement by following the procedure prescribed. Termination payment to the Concessionaire, rights and obligations of the parties, option of substitution and its acceptance, divestment of right and interest by the Concessionaire etc. will be as laid down in the concession agreement.

12.10 Steering Committee

Head of Administrative department may constitute an empowered committee called Steering Committee (or by any other name) to review the progress of the work at periodical intervals and give directions in the matter.

The Committee will comprise of EIC, CE and concerned SE. The Committee shall be authorised to take decisions on policy matters, determine extension of any concession period and consider any issues or disputes which may be referred to it. The committee will periodically report (at least once in 3 months) the progress and highlights of the project to ECI and HLCA.

12.11 Dispute Resolution

The agreement shall clearly provide the methodology for Resolutions of Disputes arising out of the same. Usually, the agreement provides that in the first instance, the dispute will be referred to the Independent Consultant, who will mediate and assist the parties in arriving at an amicable settlement. If mediation is not successful, the dispute will be referred to the Steering Committee and Chairman of the Board of Directors of the Concessionaire company firm may be asked to join. Failing resolution, the dispute will be decided by arbitration as provided in the agreement, subject to the Arbitration and Conciliation Act, 1996.

12.12 Training and Capacity Building

All Engineers upto the level of Superintending Engineer shall be imparted training in some reputed training centre on PPP models and its Contract Agreement with Concessionaire. The duration of such training shall be 1 week for Superintending Engineer and 2 weeks for EE/AE/JE. In house training facility in the meanwhile developed to ensure all field Engineers are trained on the subject.



CHAPTER 13

IT AND MIS



13 INFORMATION TECHNOLOGY & MANAGEMENT INFORMATION SYSTEM

13.1 Information Technology (IT)

13.1.1 General

It has been decided by OWD, GOO to improve upon the existing system of IT & MIS services consistent with IT Policy of State of Odisha as contained in the following Notification and Rules.

- a. The IT Act 2000 (Gazette Notification No. 21 of 2000 dt 09-06-2006)
- b. GOO, ICT Policy 2004
- c. District Information Services Council (D/SC) Rules 2006 No. 1480/IT-TTC-48/05 (pt) dt 03-06-2006
- d. The Draft ICT Policy 2012 is under preparation by a Committee headed by Commissioner-cum-Secretary to Govt Department of IT, as notified vide No. 2908/IT/IT-VI-41/2011 dt 14-11-12
- e. In addition a study has been undertaken by GOO for “Strategy Formulation and Implementation of IT-ICT-MIS Architecture, Facilities & Capacities”. Its recommendations are also likely have a bearing on final IT Policy of GOO.

Consistent with the aforesaid Documents, GOO will implement a comprehensive and viable IT & MIS Strategy to finalise the software and hardware for computerisation and networking using other communication infrastructure in engineering department engaged in public works in relation to integration and inter-linking of all offices of such department to implement the IT-ICT way of efficient working in a phased manner. This will require review of training needs, change management, working process improvements, creation of IT Sections within OWD and other engineering department doing public works with skilled manpower resources for management of IT-MIS systems.

13.1.2 Objectives

- a. Inexpensive access to Information
- b. Transparency in governance practice
- c. Door step delivery of host of services
- d. Increased employment
- e. High export turnover and economic growth

13.1.3 Organisation

The use of IT/MIS will greatly influence the working environment of the entire organisation. The systems and processes will have an impact of technology on all the personnel within the Department and those who have an interaction with the Department As the IT/MIS systems and processes are



driven by the operational functions of the Organisation, the use of IT & MIS processes will be broad-based to implement the functional needs of all the operational and support Departments of OWD as well.

SE (IT) will supervise the IT Cell in the engineering Department engaged in Public Works under the control of head of the department with the assistance of other officers and supporting staff/consultants.

The IT Cell will be the nodal agency within the Department for all IT/MIS initiatives and will also provide the implementation level support for the respective IT/MIS systems. The SE (IT) as the nodal officer of IT Cell, will provide all technical support and functional contact as well as guidance point for IT Cells in all districts.

13.1.4 Functions

The IT Cell will perform the following functions:

- a. Leveraging the tools of IT to promote productivity, communication, transparency, knowledge management and informed decision making in all wings; thus contributing to an image of a proactive, efficient and customer-caring department of the State Govt.
- b. Steering the formulation of a dynamic IT strategy and program for the department and direction, monitoring, controlling and implementation of the upgradation.
- c. Directing the acquisition of appropriate technology platforms, software applications, GIS systems, video and teleconferencing systems, LANs, WANs, and other resources related to the program, including their upkeep, maintenance, expansion, upgradation and renewal.
- d. Sourcing the IT related human resources of the department through in-house sources, to the extent available and through human resource outsourcing as required.
- e. Directing IT training and skill upgradation in coordination with the respective wings with a view to creating and maintaining adequate human resources in IT in the department.
- f. Be responsible for data/information integrity and security, back up, disaster recovery, redundancies, prevention of unauthorised access and implementation of appropriate access protocols and policies.
- g. Instituting a web portal management board for overseeing the functioning of the OPWD web portal.
- h. Evangelizing the process of organisational transformation, promoting and imbibing best of class systems and procedures in the department.

13.2 Management Information Systems

13.2.1 Current Status & Future Plans

- a. E-procurement system to be followed in a comprehensive manner though it is already in operation phase in various offices. This system enables the contractors to get registered to the system. This system facilitates departmental authorities to upload the tender document to the system and float tenders online through their digital signature. These tender



documents are downloaded by the contractors and the responses along with required documents are uploaded to the system through their digital signature. The responses and the documents uploaded by the contractors are made available to the panel at the stipulated time. The system also captures basic details of the contractors and creates a contractors' data base.

- b. IFMS (Integrated Financial Management System) through 'Online Budget Interface' module, the administrative Department can allot funds to their respective controlling officers. The controlling officers further distribute the allotted funds to the Drawing & Disbursing Officers (DDOs). Various types of reports relating to budget distribution and expenditure of the allotted funds are available to help administrative department & controlling officers to take informed decisions.
- c. Works and Accounting Management System (WAMIS) for OWD is to be implemented in totality in all OWD offices. At present the OWD is using 'Accounts Management System' module of WAMIS for managing all accounts related information in the form of monthly account report, schedule of work report, MPWA reports etc. The system however have the capability of managing all works related activities of the department Involved in public works. The system should be upgraded to be integrated with other software like e-NIRMAN (already in use) and proposed Contractors' Data Management System (CDMS) so that the system can capture relevant data and do the complete function.
- d. OSWAS i.e. Odisha State Works Flow Automation System is being followed at the State Secretariat. This should be implemented in all OWD offices and offices of the other Departments engaged in public works.
- e. SWAN i.e. State Wide Area Network is being followed in connecting districts and sub district offices with state headquarters. This shall be implemented in all OWD offices and offices of the other such departments.
- f. HRMS i.e. Human Resources Management System is being selectively used. This shall be implemented in all OWD offices.
- g. e-NIRMAN is web based project monitoring system under implementation in OWD. This needs to be fully implemented in all offices.
- h. ORAMS (Odisha Road Asset Management System) is getting implemented in OWD. This needs to be fully implemented in Departments dealing with road assets.
- i. OWD has implemented e-dispatch at several places so far. This shall be implemented in all OWD Offices.
- j. All Technical/Non-Technical staff in offices of EIC, CE, SE and EE shall be given proper training to enable them to use various IT Systems and enable all activities to be performed in e-Mode.
- k. Accounting procedure, contractor ledger and contract data base shall be interlinked through proper IT system.
- l. Modern versions of architectural design and 3D analysis shall be used in architectural wing.



- m. Following IT & MIS requirements shall be ascertained and facilities provided in a phased manner:
 - i. Domain Specific Software Requirements
 - ii. Hardware Requirements
 - iii. E-enablement of Services and Data Security
 - iv. Future Plans of the Department including Five Year Plans
 - v. Formulation of Project Monitoring and Quality Control approach

13.2.2 Master Data Depository

In a separate consultancy project for strategy formulation and implementation of IT-ICT-MIS structure for OWD, it is identified that there are four base level entities of the department whose data base would constitute Master Data Depository to be used for various programs already developed or to be developed for the Department. These data base are:

1. HR data base;
2. Works data base;
3. Asset data base; and
4. Contractors' data base.

HR Data Base: This will act as a master data base of all information pertaining to human resource and establishment of the department.

Works Data Base: This is a master data base of all the information pertaining to the works already executed, getting executed or projected to the executed.

Asset Data Base: This acts as a master data base of all the information pertaining to various types of assets of the department.

Contractors' Data Base: This acts as a master data base of all the information pertaining to the contractors and various contracts executed or being executed by each of them.

13.2.3 Integrated Computerised Management Information System

The integrated computerised MIS shall be established which shall streamline and improve efficiency of the existing organisation and facilitate better planning and management of the Department resources through decisions that emerge from timely flow of information at all decision making levels.

- a. Comprehensive data capturing through distributed data acquisition at the Divisional/Sub-Divisional level shall be achieved.
- b. Dissemination of processed information to all categories of users shall be ensured.
- c. The offices and field units shall be provided with access to the MIS for updating the data on respective programs and generation of report as per their requirement.
- d. The responsibility for data storage and its security shall be with the IT Cell of respective Department.



More applications covering different aspects of OWD and other such departments working like, Road Maintenance Management System, Geographic Information System, Traffic Information System, Quality Control System, Road Safety System, Accident Information System, Human Resource Management System, Document Management System, Land Acquisition and Rehabilitation and Resettlement System, Litigation Management System, Building Asset Management System, Internal Asset Management System, Contractor Database Management System shall be developed and adopted in a phased manner.

13.2.4 Odisha Road Asset Management System (O-RAM)

The OWD is in Process of developing Odisha Road Asset Management System (ORAM) for the state Road network. The ORAM when completely operational will improve technical capabilities, skills and management capabilities of OWD and other agencies associated with road management and maintenance. Geographical Information System is the basic platform for all spatial features of road asset. The system is proposed to have the following component:

- a. GIS based Road Information System (RIS)
- b. GIS based Bridge Information System (BIS)
- c. Pavement Management System (PMS)
- d. Routine Maintenance Management System (RMMS)
- e. Right of Way Features Information Management System(RWFIMS)
- f. Traffic Information System (TIS)

13.2.5 Geographical Information System (GIS)

GIS is a computerised mapping system capable of capturing, storing, analysing and displaying geographically referred data on a map. An example of this could be the mapping of all roads in Odisha State including, bridges, junctions, culverts and other objects of interest. GIS is also a tool for planning preliminary alignment of road network to improve connectivity in an area, and assist in further planning, O&M. The GIS Unit shall ensure the following:

- a. Integrate geographical database with GPS Co-ordinates including regular update
- b. Prepare and provide digital map updates for local GIS Units
- c. Provide large size map printout to Circles, Divisions and Sale divisions
- d. Maintenance of the geographical database, collection of field verification data for incorporating in database.
- e. Inform Central Policy Unit about changes in road network for reclassification
- f. Carry out GIS training for new Staff of GIS Units.

13.2.6 Road Maintenance Management System (RMMS)

RMMS is a method of controlling resources to accomplish a pre-determined level of service through planning, budgeting, scheduling reporting and evaluation. Planning consists of defining maintenance activities, compiling a road inventory and condition survey details, establishing priorities,



establishing quality, quality performance standards and compiling cost data. This system is being developed under a separate consultancy service.

OWD shall have a central RMMS Cell supported by local RMMS Units at Division level. The various functions of RMMS shall be as follows:

- a. Develop annual road maintenance program that meets the needs of the road user;
- b. Develop strategies to enable the level of service required by the road user to be achieved;
- c. Support the preparation of an adequate annual road maintenance budget;
- d. Annual upkeep of the Standard Schedules of Rates and data;
- e. Ensure adequate spread of funding allocation to ensure preservation of roads, bridges and related infrastructure and safety of the road user;
- f. Identify emergency works required to existing roads, bridges and related infrastructure items to make them safe and keep the road traffic worthy;
- g. Making recommendations for minor road improvements and upgrading that may preserve the assets, reduce maintenance costs, improve traffic flow, improve road safety, reduce flooding etc.;
- h. Preparation of monthly maintenance reports;
- i. Preparation of reports regarding maintenance needs of the network and effectiveness and adequacy of the maintenance budget.

13.2.7 Data Security

Following are the responsibility of Departments with regard to data security:

- a. Each Department shall build an inventory of IT assets and ensure both physical and environmental security.
- b. All IT applications that are inducted for Departmental use with citizen interface shall take precaution of testing and scanning for vulnerabilities both prior to large rollout and at periodical intervals.
- c. Access to information shall be managed according to level of confidentiality.
- d. To identify levels for digital signature certificate and monitor its use.
- e. Proper management of e-waste generated.

Each Engineering Department engage in public work shall have a Nodal Officer in the rank of SE who will ensure the effective implementation of the following:

- a. Safety Instruction for use of online communication;
- b. Securing wireless access point/router;



- c. Security guidelines for standalone computers and computers connected with network – physical security, antivirus, backup, storage of secret/confidential data, system administration, operating system, network devices, information classification etc.;
- d. Cyber security audit of the website at least once in a year through STQC, GOI or an agency empanelled with CERT-In.

To address common security issues of all Engineering Departments there shall be a Committee consisting of Nodal Officers of various Engineering Department with CE cum Chief Technical, OWD as the Chairman.

13.2.8 IT-MIS Strategy Formulation and Implementation

The formulation and implementation of IT-MIS strategies in OWD shall be consistent with “Report on Strategy Formulation and Implementation of IT-ICT-MIS Architecture, Facilities Capacity Building for OWD” and “ICT Policy 2012” under preparation by a Committee headed by Secretary to GOO, Department of IT, broadly aiming at the following objectives:

- a. Create advanced technical knowhow for better and more cost effective road maintenance and management.
- b. Facilitate getting instant status of the progress of projects; maintenance works etc. for effective control at various levels.
- c. Effective control and easy management of Highways Projects.
- d. Achieve paperless office management and implementation of e-governance in the Department
- e. Develop forecasting of future needs of resources, materials and funds for the efficient operation of the road and bridge works, which will take care of planning needs.
- f. Reduce the time and travel cost for OWD Management to review the works.
- g. Enhance utilisation of the funds from state, center and various external agencies through proper FMS.
- h. Facilitate GIS based on-line mapping and other management information as decision support for highway project like traffic management, bye pass and fly over designs with the traffic data and financial progress of the work etc.
- i. Improve transparency and RTI for the public.
- j. A comprehensive IT-MIS strategy so evolved shall be implemented accordingly.



CHAPTER 14
BUDGET, ACCOUNTS AND AUDIT



14 BUDGET, ACCOUNTS AND AUDIT

14.1 Budget

14.1.1 General

Budget is annual financial statement of all transaction of the Govt. including estimated receipts and expenditure occurring during the year in which the statement is prepared.

OPWD handles considerable amount of allocated fund from the budget of GOO. Hence, realistic preparation of budget for OPWD works and monitoring thereof is essential for ensuring timely execution of works and effective financial control.

There are two main heads of expenditure:

- a. Voted expenditure – This is subject to the vote of Legislative.
- b. Charged expenditure – This does not require vote of the legislature and is called charged etc. upon consolidated fund of state. All expenditure made for court decrees etc. are the charged expenditure.

14.1.2 Preparation of Budget for OPWD

- a. **Revised Estimate (RE)** – The Revised Estimate for current year of the probable expenditures under each head of the ongoing projects are estimated after midterm review in the month of September of that year.

The Revised Estimate should allow for any additional appropriations that have been sanctioned after the Budget was passed or advances obtained from the Contingency Fund.

The Revised estimate is always prepared for the current year along with the Budget estimate of ensuing year. Following details are required to be incorporated in the Revised Estimate & Budget Estimate of the works under OPWD.

- i. Name and Location of the work
 - ii. Estimated cost of the work
 - iii. Expenditure incurred up to March of the previous year
 - iv. Budget estimate for current year
 - v. Expenditure incurred in first 4 month of the year.
 - vi. Revised requirement during current year.
 - vii. Detail reasons for variation between (iv) & (vi)
 - viii. Total of (iii) & (vi)
 - ix. Requirement of ensuing year
 - x. Present stage of the work and target date of completion.
- b. **Budget Estimate** – The Budget Estimate for ensuing year is prepared with revise estimate of current year as detailed above. All works in progress and new works are covered under this.



14.1.3 Forms for Budget Estimate

There are Standard printed forms for preparation of Budget estimate. Forms under 'Public Works', 'Hirakud', 'Irrigation' and 'Electricity' are supplied between 15th June and 15th July every year under arrangement made by the Works Department and Irrigation and Power Department respectively.

14.1.4 Account Heads

The detailed heads printed in the form are those prescribed by the Finance Department and Budget provision should be made against the heads concerned. The budget estimates of works will have works under 'Plan' and 'Non-plan' shown separately. Other than works, the budget will include establishment budget under its various sub heads.

14.1.5 Rules for Preparation of Public Works Budget Estimates

- a. Budget Estimates and Revised Estimates of revenue and expenditure are prepared in the prescribed forms.
- b. All Drawing & Disbursing officers of the Department will furnish the EICs with the actual figures for establishment charges duly recorded in the prescribed forms (**Annexure 14.1**), not later than 20th August for preparation of estimates.
- c. EEs shall prepare the estimates of expected expenditures for the works, repairs, tools & plant, suspense (stock) and establishment charges under their charge and forward to the concerned SE in the prescribed form (**Annexure 14.2**). After due scrutiny SEs shall consolidate the estimates and forward to CE/EIC. The EICs in coordination with CEs and SEs shall compile and consolidate total budget estimate in quadruplicate and forward copies to the EIC cum Secretary, Finance Department and two copies to the AG by 25th October.
- d. The AG will forward the Major Head estimates after check, simultaneously to the Finance Department and Administrative Department not later than the 1st November.
- e. The Works Department shall arrange for the printing of the Budget estimates, so as to be ready for the discussion in the Assembly.

14.1.6 Duties and Responsibilities of OPWD Officers

Budget preparation:

- a. **Executive Engineer**
 - i. EEs will compile by 7th of every month expenditure statement of all budgeted works indicating budgeted amount allocated, percentage progress and amount spent etc. and forward the same to the respective SEs.
 - ii. EEs will carry out midterm review of budget by 15th September every year, compiling the expenditure incurred so far, assessing further fund required in the current year for the works in progress, assessing the fund requirements for the ongoing works and new works (Planned and non-planned) and submit to SE the demand in the form of Revised Budget of current year and Budget of next year.



b. Superintending Engineer

SEs shall hold discussions with the EEs to finalise the budget demands and compile the detailed schedules of Revised Estimate of current year and Budget Estimates of next year under the heads of works, repairs, tools & plants, suspense (stock) and establishment charges and forward to the CE/EIC by 30th September every year.

c. Chief Engineer

- i. CEs are responsible to compile the details/schedules of new works, requisitioned by all the Departments/Ministries of Govt of NH projects etc. for incorporating in the budget proposals.
- ii. CEs should compile the budget proposals received from all the SEs of the zone and forward the same to EIC with recommendations.

d. Engineer in Chief

EICs in coordination with CEs and SEs shall compile and consolidate total budget estimate in quadruplicate and forward copies to EIC cum Secretary, Finance Department and AG by 25th October.

14.1.7 Budget Monitoring and Control

a. Executive Engineers are responsible:

- i. to intimate all the SDOs of the budget allocations
- ii. to constantly monitor the progress and expenditures of the budgeted works to ensure that budget allocations are fully spent
- iii. to carry out proper assessment of progress of the works and fund requirement
- iv. to ensure that expenditures do not exceed the allocated budget fund. If excess expenditure is anticipated then request for re-appropriation is submitted to SE promptly
- v. to anticipate savings in the grant or allotment and intimate to SE and CE immediately

b. Superintending Engineers shall be responsible:

- i. to regularly monitor the expenditures incurred on the works on monthly basis
- ii. to hold quarterly review meeting with all EEs on the progress and expenditures of the works
- iii. to submit the proposals of re-appropriation to CE/EIC

14.1.8 Procedures for New Schemes/Projects

- a. No outlay for new schemes should be proposed unless land is actually made available and requirements of the scheme have been finalised by the concerned Administrative Department/Ministry.
- b. Concerned Administrative Department will send the proposal of new schemes/projects with supporting documents to the concerned CE of OPWD by 31st July every year.



- c. On receipt of proposals the concerned CE will scrutinise the proposal and shall send to EIC cum Secretary by 31st August every year.
- d. EIC cum Secretary will compile the proposals received from all the CEs and put up to “Works Priority Board” with his recommendations by 30th September of every year.
- e. “Works Priority Board” will comprise of EIC cum Secretary as Chairman, Concerned CE/EIC, representatives of concerned Department/Ministry proposing the works and Finance Officer of the PWD Ministry.
- f. “Works Priority Board” will meet by the 15th October. The recommendations of the Board will form the basis for preparing the Annual Plan proposals/Budget Estimates of the next Financial Year.

14.1.9 Savings, Excesses and Supplementary Demands

CE/SE/EE shall keep watch on the expenditure so that as soon as it becomes clear that the funds are likely to be in excess or in short, action can be taken to surrender the savings or to obtain sanction for re-appropriation or a Supplementary Grant.

In order to maintain proper control over the expenditure, every DO shall maintain a record of liabilities and commitments incurred against the budget allotments in Liability Registers Form, wherein progressive accounts of all outstanding liabilities should be indicated. The Liability Register facilitates preparation of correct estimates of expenditure

14.1.10 Savings

All anticipated savings in a budget grant or allotment, noticed by the DO shall be surrendered by intimating to SE immediately without waiting till the end of the year. No savings are to be held in reserve for meeting possible excesses in future.

14.1.11 Supplementary Demands

The Supplementary demands may arise due to one or more of the following causes:

- a. Preparation of annual estimates some months before the commencement of the financial year.
- b. Fluctuating nature of the services.
- c. Change(s) of policy or insufficient allowance for factors leading to the growth of expenditure.
- d. Other unforeseen causes, and
- e. Expenditure upon some New Service not contemplated in the Budget of the year.

When savings are not available or re-appropriation is not possible, concerned SE shall submit an application for Supplementary grant through CE/EIC to EIC cum Secretary and concerned Head of Administrative Department/Finance as soon as contingency arises with full facts leading to demand. Supplementary Demands for Grants are presented at every session of the Legislative Assembly by the Finance Department, if so decided by them.



14.1.12 Distribution of Grants

- a. After the budget grants are approved by the Legislature, the Administrative Department distributes the sanctioned funds, where necessary, among the concerned Heads of Departments or controlling and disbursing officers as required according to their demands.
- b. In OPWD EIC cum Secretary shall distribute the sanctioned budgeted fund to concerned EIC (Civil), CEs, SEs and EEs.
- c. The distribution of budget provision by/to the HOD/subordinate offices shall be informed to the Pay and Accounts Officers for check against allocation.
- d. EIC as Heads of Department shall maintain consolidated Zone-wise and grant-wise records, i.e. Major Head, Minor Head, Sub-Head-wise, of the expenditure in Form no. GFR 12. The final reconciliation of expenditure for the purposes of actual vis-a-vis unit of appropriations as compiled by the concerned PAO, would be effected between figures of the EIC and the PAO.

14.1.13 Appropriation and Re-appropriation of Accounts

Appropriation is the amount authorised by the Assembly under the Appropriation Act for expenditure from consolidated fund as provided in the Budget under relevant Demands for Grants.

14.1.14 Appropriation Account

- a. The Appropriation Account compares the total grants (original, supplementary etc.) made by the Assembly for any particular purpose with the actual expenditure incurred on that purpose.
- b. The sub-heads in respect of which reason for variations both savings and excesses shall be as follows:
 - i. If the variation, both savings and excesses, in a sub-head exceeds Rs. 50 lakhs
 - ii. If the variation in a sub-head does not exceed Rs. 50 lakhs
- c. Where the variation is an excess
All cases in which the excess exceeds 10% of the total sanctioned provision or Rs. 5 lakhs, whichever is higher.
- d. Where the variation is a saving
All cases in which the saving exceeds 10% of the original provision, or Rs. 5 lakhs, whichever is higher
Only such sub-heads as involve an excess of over Rs. One lakh each may be picked up. If, however, there is no individual sub-head involving an excess of over Rs. One lakh, sub-heads which mainly account for the overall excess may be included.

14.1.15 Re-Appropriation

Due to variation in actual expenditure compared to budgeted fund transfer of fund from one primary unit of appropriation to another such unit may become necessary then such a transfer is



termed "Re-appropriation". The re-appropriation of funds are made only when it is known or anticipated that the appropriated funds to a unit will not be utilised in full and saving can be effected in the appropriation for the said unit.

14.1.16 Restrictions on Appropriations/Re-Appropriations

Funds shall not be appropriated or re-appropriated in the following cases:

- a. To meet the expenditure which has not been sanctioned by the competent authority?
- b. To meet votable expenditure if the fund provided is for charged expenditure and vice-versa.
- c. Funds of Charged expenditure of one grant, or appropriation to another grant or appropriation.
- d. To meet expenditure on a new service not contemplated in the budget.
- e. From "Plan" schemes to "Non-Plan" schemes.
- f. For any work, which has not received A/A and expenditure sanction?
- g. From or to the "Suspense Head" relating to Public Works.
- h. If the appropriated amount exceeds the amount approved or sanctioned for that work by the permissible limit of excess.
- i. From the primary unit "Major Head" to any other unit without the previous consent of the Finance Department

14.1.17 Authority to Approve Re-Appropriation

In OPWD, EIC cum Secretary shall be the authority to approve Re-appropriation. Procedure to prepare and process the proposal of Re-appropriation shall be similar to Para 6.1.6. Prior consent of the Finance shall be required to approve Re-appropriation for a new work costing Rs. 10 lakhs or above, but less than Rs. 25 lakhs. Any work not provided for in the budget which will cost Rs. 25 lakhs or more should not be undertaken without obtaining the specific approval of Legislature, or an advance from the Contingency Fund.

The transfer or re-allocation funds between different schemes, provision for which is made in the same primary unit of appropriation, does not constitute re-appropriation, and for such a transfer of re-allocation as such the concurrence of the Finance is not necessary

Re-appropriation within revenue head in the budget between Major works/Minor works, Tools and Plants etc. is permissible.

Re-appropriation can be authorised at any time before, but not after the expiry of the financial year relates. All such order must be communicated to the Accounts Officer/Audit Officer concerned before the 31st of March of the year.

14.1.18 Computerisation of Budget Allotment System

Through online budget interface of IFMS the administrative Department can allot funds to their controlling officers (COs). The COs can further distribute funds to the DDOs.



The main features of this module are the followings:

- a. Electronic distribution/redistribution/re-appropriation without manual intervention
- b. Availability of real time data of DDO and treasure level
- c. Possibility of excess expenditure eliminated
- d. Paradigm shift from Letter of Credit (LoC)
- e. Work expenditure book against proper head
- f. Ensures expenditure within budget provision
- g. The controlling officers can surrender redistribute and re-appropriate funds as per requirements
- h. Various types of reports are generated to take decisions by Administrative Departments and their COs.

14.1.19 Guidelines for Utilisation of Budget

Guidelines for utilisation of provisions made for different works under plan schemes of Works, Rural Development, Housing & Urban Development and Water Resources Department and construction of buildings are given in **Annexure 14.3**.

14.2 Accounting Procedure

14.2.1 General

Fundamental principles of accounting are to ensure accuracy, and to maintain regularity. Account-keeping has to be clear and free from ambiguity. Records and receipts of expenditure are to be maintained in proper Registers/Books, etc. No account is complete and correct unless basic documents are managed well organised and readily available. An elaborate organisational procedure is, therefore, necessary to be in place to take care of this aspect in OPWD.

(1) Consolidated Fund

The Central and State Govts have separate consolidated fund of India and of the State respectively. The consolidated fund comprise of:

- a. Revenues of the Govt
- b. Loans raised by the Govt
- c. Loans and Ways and Means advance
- d. Money received by Govt in repayment of loan

Expenditure of the State Govt authorised by legislation is met from this fund subject to provision of funds authorised by competent authority fixing the limit.

(2) Public Accounts

Govt has separate account entitled public accounts of a State. Public Moneys received by or on behalf of the Govt are accounted for in this account. Disbursements from this account are made in accordance with set rules.



(3) Contingency Fund

This is the fund at the disposal of Governor of state to enable advance to be made by him for meeting unforeseen expenditure pending authorisation of such expenditure by State Legislature.

(4) General Outlines of the System of Accounts

Receipts: All receipts on behalf of the state Govt are paid into a treasury or the bank.

Receipts: Receipts realised in any Department or realised on their behalf are paid into treasury merely as receipts with respect to that Department Detailed accounts of such receipts are kept by the departmental officers concerned.

Payments: Payments are made either at the treasury or the bank. In cases where departmental officers are authorised to withdraw lump sums from treasury like PWD, the accounts are maintained by the departmental officers concerned.

14.2.2 Accounts in Public Works Department

(1) Expenditure on Public Works

Following principle is to be followed in classification of works expenditure and posting of transactions:

- a. Expenditure relating to construction of Govts. Non-residential buildings for administrative or office purposes.
Posting under Major Head 2059
- b. Expenditure on construction of buildings for purely functional purpose
Expenditure on Govt residential buildings
Posting under – 2216 – major head
- c. Expenditure on Roads and Bridges (being in the nature communication)
Posting under – 3054 – Roads and Bridges
- d. Expenditure on acquisition of land
Posting –
In case of specific work under relevant functional major/minor head
In case of acquisition for general purpose – 2059 Major head

(2) Suspense Head of Account

In some cases receipts and payments cannot be posted into final head of account due to lack of information as to their nature etc. Such transactions are held temporarily under suspense head of account. When any amount is kept under suspense head in the book, the AG may call for detailed particulars from DDOs. Examples of such cases are:

- a. Some vouchers not received;
- b. Vouchers do not indicate proper major, minor sub-heads of account;



- c. Credit Challans in support of receipts like GPF, HBA, MCA Advance do not show clear details;
- d. Challans for receipts does not mention in whose account the credit has to be accounted for.

(3) Cash Account

The following procedures should be followed to account the cash transactions in the Cash Book:

- a. The cash book should be maintained in CPWA Form I by all OPWD Officers authorised to receive money as well as by those entrusted with disbursement out of cash received by them on transfer from divisional cash chest or cash obtained by cheque drawn on bank/treasury.
- b. The cash book should be balanced on closing the cash accounts of the month.
- c.
 - i. The cash should be counted whenever a balance is struck or at convenient intervals.
 - ii. The details of actual cash found at the monthly counting should be recorded in the form of a note.
 - iii. A certificate of reconciliation of book balance with the actual one should be recorded before the closing entries of the month.
- d. Any incorrect balance be rectified by making the necessary receipt or payment entry "To cash found surplus in chest under P.W. Deposits" or 'by cash found deficit in chest under Miscellaneous P.W. Advances' as the case may be.

(4) Maintenance of cash book and Rectification of Errors

- a. An entry once made in the cash book should in no circumstances be erased.
- b. If the mistake is detected before the copy of the Cash book has been submitted to the DO, the mistake should be corrected by drawing pen through the incorrect entry and inserting the correct one in red ink between the lines.
- c. The disbursing officer should initial every such correction.
- d. When the mistake is detected too late for correction, an intimation of necessary correction should be sent at once to the DO accompanied by a proposed transfer entry, if necessary.
- e. The same principles should be observed in correcting errors notice in the divisional Cash Book.
- f. If a cheque is cancelled its amount should be shown by a special write back entry as a minus figure on the payment side in the Bank or Treasury column by mentioning counter references against original entry.
- g. No line should be left blank in the cash book. If any spaces on a page remain blank and other page of the same folio is written up completely, a diagonal line should be drawn to cancel the blank space so that it may not be possible for any further entries.
- h. Interpolation of entries must be avoided. In case it becomes necessary for any entry in between the lines the disbursing officer should attest such additions by his dated initial.



- i. The actual balance of cash in the chest is counted on the last working day of the each month. Where this is not possible the cash balance may be counted on the first working day of the following month before any payment is made on that date.
- j. A statement of details of the actual balance is prepared in a form known as Cash Balance Report. A certificate of the count of cash specifying both in words and figures the actual cash balance exclusive of imprests and temporary advances is recorded below the closing entries of the month. This certificate is signed by the disbursing officer who should invariably date his signature.
- k. Just below this certificate of count of cash in cash book the cash balance analysis at the end of the month should be detailed thus in a note

Cash in Chest Rs.....

Imprest with Sri X Rs.....

Temporary Advances with Sri Y Rs.....

Total cash balance Rs.....

Rupees (in words) Rs.....

(5) Irregularities of Common Occurrence

- a. Blank space-left in the cash book.
- b. Incorrect entries in the cash book not promptly deleted.
- c. Cash book not checked by the disbursing officer.
- d. Overwriting and interpolation in the cash book not initialled.
- e. Initials incorrectly dated.
- f. Receipts and payments not entered in the cash book on the actual data and strictly in order of occurrence.
- g. Details of balance not given.

(6) Imprest Account

- a. An account of imprest cash should be kept in duplicate by the imprest holder in proper form.
- b. The account should be rendered to the officer from whom the imprest is held in time to enable him to examine and incorporate the account in his Cash Book before it is closed for the month.
- c. If any item in an imprest account appears to the officer to be open to objection, that item may be entered in his Cash Book as 'Item awaiting adjustment in the Imprest account of under 'Miscellaneous P.W. Advance' to be watched under the head until either the objection is removed or the amount is made good by the imprest holder.



(7) Working Directions

- a. The sum with which the account is opened should be entered at once in red ink in column 'Total', the date and No. of the remittances etc. should be entered in the prescribed column.
- b. The disbursements from the imprest should be entered daily as they are made clearly and in full details.
- c. The account should be closed and balanced from time to time as found necessary. But it should be closed at least once every month, a few days before the due date the monthly closing of the cash book.
- d. The account should be supported by vouchers.
- e. The sums received from time to time in recoupment of the imprest should be entered in prescribed column in the same way as the fixed amount with which the account was first opened.
- f. The account should contain no entries of receipts other than the opening entry of fixed imprest and subsequent recoupment of expenditure nor any entries on expenditure other than those paid from the imprest.
- g. Fullest possible particulars should be given in column marked for the purpose e.g. name of work, name of contractor or other person to whom the amount is paid, whether the amount paid is recoverable etc.

(8) Temporary Advance Account

The amount remitted to a subordinate officer for repayment in number of specific payments is treated as a 'Temporary Advance'. This is accounted for in a prescribed form in the same way as an imprest. The account of Temporary Advance should be closed as soon as possible. This rule also applies to cash taken out of the chest by the disbursing officer himself to make payments at some other location.

(9) Cheque Books

- a. Cheque Drawing and Disbursing officers of OPWD (CDDO) will send their annual requisition to their respective Pay and Accounts Offices for issue of Cheque Books.
- b. The concerned P&A Officer, after examining the requirements furnished by the CDDOs, will consolidate Division wise requirement for onward transmission to the accredited Bank for delivering the Cheque Books directly to the CDDOs.
- c. Stock Register of Cheque Books in CAM Form 1 shall be maintained by Divisional Office.

(10) Monthly Settlement

- a. The DO shall arrange to have a monthly settlement with the Bank early in the month.
- b. The DO shall have the passbook written up in respect of cheques issued during the previous month and shall get it verified from the Bank who would note down the dates of encashment against each cheque.



After verification the Bank shall furnish the DO with a certificate of total issues as given below:

I hereby certify that the total issues made from Treasury on cheques drawn against the account of Mr..... Officer in charge Division during20..... amounted to Rs (in words). The certificate of agreement should be recorded in the pass book over the signature of the DO.

(11) Miscellaneous PW Advances

This is a suspense head which records the following transactions usually met in PW divisions:

- a. Sales on credit
- b. Expenditure incurred on deposit works in excess of deposits received
- c. Losses, retrenchments, errors etc.
- d. Other items for which classification is not available

Items in the 'Miscellaneous PW Advances' are clear by actual recovery or transfer entry.

Errors:

- i. Any error that may be discovered in the Register of Receipts or issues or in the Monthly Abstract before the accounts for the month are out the incorrect figures or other entries and writing the correct ones above them. Such corrections should be attested by dated initials.
- ii. Mistakes noticed subsequently should be corrected with a format transfer entry.
- iii. Clerical errors in value account should be dealt with generally in accordance with the above directions.
- iv. Correction of errors discovered after the accounts of the month are closed should be made when permissible, (a) by means of value (without quantities) in stock accounts of the current month when no change is to be made in the head of account, (b) by transfer entries in other cases.
- v. Other corrections in stock account may be necessary in the following cases:
 - a. When quantities are found surplus or short either as the result of stock taking or otherwise.
 - b. When issue rates are to be raised or lowered.
 - c. When stores of any description become unserviceable.
 - d. These corrections should be effected in the following manner.
 - e. Both in quantity and value account all additions to quantities should be treated as receipts and reduction therein-as issues, a suitable remark being made in for entries in prescribed form.
 - f. In case of materials to be declared unserviceable no adjustment should be made until receipt of orders of competent authority on a survey report in specified form.



- g. The net surplus or deficit resulting from the periodical revision of rates should be adjusted by making suitable entries without any correction in quantities.
- h. No correction should be made in accounts in respect of stores declared to be in excess of requirement. Such stores should continue to be borne in the stock account until transferred elsewhere or otherwise disposed' of) in the ordinary course.

(12) Values Found Surplus or Deficit

The value of stores found surplus should be credited as a revenue receipt or a receipt on capital account, as the case may be.

The value of deficit should not be debited to final heads but kept under 'Miscellaneous P.W. Advances', pending recovery or adjustment. When the loss is declared irrecoverable and its write off ordered, a transfer entry should be prepared to clear the head 'Misc. P.W. Advances' and debit to the works for which the stores were collected specially if the accounts are still open or the general head 'Loss in Stock', under one or more major heads.

(13) Transfer Entries in P.W. Accounts

Transfer entries are intended to transfer an item of receipt or charge from accounts of a work in progress or of a regular head, of account to the accounts of another work or head of account in the following conditions:

- a. In order to correct an error of classification in the original accounts.
- b. In order to adjust by debit or credit to the proper head of account (or work), an item outstanding in a suspense account or under a debit or deposit head.
- c. In order to bring to account certain classes of transactions which do not pass, through the cash or stock account e.g.
 - i. For credit to 'purchases' on account of materials received for works from sources other than work.
 - ii. For credit to revenue heads on account of revenue not received in cash.
 - iii. For credit to Public Works Deposits on account of balances due to contractors on closed accounts.
 - iv. For original debits or credits to Remittance heads based-on transactions not appearing in cash or stock account.
 - v. For credit, to the heads concerned of the several percentages leviable under the rules.
 - vi. In order to respond to a remittance transaction advised by the AG or direct by the Division or Department concerned if the corresponding debit or credit to the remittance head has not appeared in accounts.
 - vii. In order to stop recording transaction from the account of a work in progress of in the following situations:
 - a. Items which have ceased to be debitable to the estimate for the work, and
 - b. Suspense charges which can no longer be kept within the accounts of the work: Such transfer entries are necessary either when the accounts of any (contractor or the



work, itself are to be closed or when recoveries are to be made, have become due, e.g. by the transfer of stores to any other work or account.

(14) Transfer Entry Order (TEO) shall be Regulated as under:

- a. Transfer entry order may be initiated by SDO.
- b. The DO should see that the no transfer entry is made unless admissible under rules.
- c. All T.E. orders should set forth explanation to establish the correctness and necessity of the entry.
- d. All transfer entries should be registered in the T.E. Book maintained in the divisional office.
- e. No transfer should be made from one sub head to another, in the accounts of a work except on authority of a normal T.E. order prepared as prescribed under rules and approved by the DO.

14.2.3 Accounts of Works

I. Initial Records

The initial records of the accounts of work are:

- a. The MR (See Chapter 5 of Manual for Detailed write up)
- b. The MB (See Chapter 5 of Manual for Detailed write up)

All initial accounts and vouchers connected with charges relating to works must invariably specify:

- a. the full name of the work as given in estimate;
- b. the name of the component part (or 'sub head') of it, if separate accounts are kept for the several, component parts.
- c. the charges (if any) which are of the nature of recoverable payments and the names of the contractors or others from whom recoverable.

Expenditure on the construction or maintenance of a work may be divided broadly into two classes viz. (1) Cash and (2) Stock Charges. Those charges should be recorded in the cash and stock account respectively.

In addition to charges falling under the main; classes, there are other transactions affecting the cost of work for example, there may be charges incurred in other divisions, Departments or Govt.

Separate accounts have to be maintained in sub- divisional and divisional offices for recording (i) the cost of individual work and (ii) the transactions of individual contractors. These are known as Works Accounts.

In recording the cost of an individual work in the accounts no attempt should be made to include in the cost any charges for general services like Establishment and Tools and Plants, the entire cost of which should be adjusted in the general accounts under the prescribed head of classification.

The Cost of special establishment employed in the acquisition of land taken up for a work, when chargeable to the accounts of the works concerned should be treated as a part of the works expenditure.



II. Works Abstract

Works Abstract is prepared in the Divisional Office. It should be posted day by-day from the cash book and the connected bills of contractors and suppliers, cash refunds and readjustments of final charges posted as minus entries.

At the end of the month stock and adjustment transactions should be added, write back of final charges being posted as minus entries. The closing balances of contractor's accounts should be detailed so as to prove the correctness of up-to-date totals under the suspense heads

- a. Contractors – advance payment
- b. Contractors - secured advances and
- c. Contractors - other transactions which should open with the balance as per the ledger account of contractors in respect of that particular estimate/work.

The closing balances arrived at under the suspense head 'labourers' in each case should be agreed with the connected record of unpaid wages and its correctness should be got ensured.

The work Abstract should then be posted where all necessary completing entries will be made in respect of the direct charges and adjustments made checked and closed under the supervision of the Divisional Accountant, who should ensure the correctness of the posting of entries of the works abstract and also of the closing balance of the contractors account and its agreement with the ledger.

The posting of stock and adjustment transactions may also be done as above.

When finally completed in all respects all the Works Abstract of a month should be examined by the DO and any explanations necessary called from the SDO.

The monthly examination of the Works Abstract is an important part of the duty of the DO and must not be omitted. He must initial (and date) thus is token of the performance of his duty.

III. Register of Works

Forms of Registers of Works and their Preparation:

- a. Register of work, is the permanent and collective record of the expenditure incurred in the division, during a year, on each work. This record is maintained in the Divisional Office, in a specified Form.
- b. In respect of petty works, no record is necessary beyond the 'Petty works Requisition and Account form', which is self-explanatory.

The Registers of Works are posted monthly from Works Abstract. Only the figure of expenditure against entry 'A' will be posted in the register of works. The Contractor Ledger CPWA - 43, will take care of all the suspense heads including additional charges for material and labourers. A separate folio or set of folios of Form CPWA 40 should be assigned to each Estimate. The transaction relating to each Schedule Docket should be posted separately and an abstract for the entire work should be prepared on a separate folio or set of folios for comparing the cost of the work and with the provision in the estimate. The following directions should receive special attention:



- a. The Register of Works is not a classified account of works; for facility of reference it should be supplied with an index which should be sub-divided under the prescribed heads of account.
- b. The sanctioned amount of estimate should be entered in respect of each work. When supplementary estimates are sanctioned, the additional amount sanctioned should be entered below the corresponding amounts of the original estimate.
- c. Original estimate should then be closed and the revised estimate should be entered on a fresh folio, prominently marked "Revised Estimate" in red ink, and a reference to the folio on which the original estimate is to be found should be entered thereon.
- d. In the case of works for which specific appropriation are sanctioned individually, the amount of appropriation for the year should be noted in the register at the top of the page, any additions or deductions made during the year being noted in the same place.

IV. Examination by Divisional Officer

Before the date of submission of the monthly accounts to the Accounts Officer, the posting of the 'Registers of Works should be completed and the registers should then be laid before the DO for review. The monthly account of each work on which there has been expenditure during the month should be initialed (and dated) by the DO in the column set apart for the purpose, in token of his having examined the entries. Actual, as well as, probable excesses, whether in the total cost of a work or in the rate of cost should receive special attention and works slips in Form CPWA 39 should be prepared and submitted to the SE, when necessary.

V. Contractors Ledger

All transactions with contractors in connection with contracts or jobs undertaken by them, whether relating to the execution of works or to the supply of materials for work or stock, should be kept in the Contractors Ledger, CPWA form 4, to be in Division Office. Separate folio or set of folio should be reserved for all the transactions with each contractor for whom a personal account is maintained.

A personal account should be opened in the ledger for every contractor, whether or not a formal contract has been entered into with him, unless the work or supply entrusted to him is not important and no payment is made to him except on a First and Final bill, CPWA form 24 on completion. If only materials are issued to the contractor or any payments are made on his behalf, a ledger account must be opened. Security deposits of contractors should not be included in their personal accounts in Ledger.

VI. Balancing and Reconciliation

The ledger accounts should be closed and balanced monthly. The closing balance of each personal account should be detailed so as to show, in respect of each separate work or account (Stock or Purchases), the amount outstanding, if any, under each of the three Suspense accounts:

- a. Advance Payments,
- b. Secured Advances, and
- c. Other Transactions



With a quotation, in each case, of the last Running Account Bill and of all the vouchers supporting unadjusted outstanding under "Other Transactions" not incorporated in the last Running Account Bill. In the case of Running Account Bills, these balances can easily be ascertained from the Memorandum of Payments as indicated in the table below and it will be found convenient in practice to make a note of the outstanding balances of each bill, in the ledger when posting the bill, so that at the end of the month the closing balance of the ledger account may be verified with the net result of the details already recorded:

Class of Balance Serial Number of entry in Memorandum of Payments on class of Balance in the Running Account (Form 26)

1. Advance Payments.....
 2. Secured Advances.....
 3. Other Transactions.....
- d. The Divisional Accountant should ensure the correctness of the Contractors Ledger and also further see that there is no indication of a transaction pertaining to a running account having been settled on a form of bill not permitted to be used for the purpose.

VII. Register of Deposits

The deposit transactions of the PWD are of two kinds:

- a. Public Works Deposits.
- b. Interest Bearing Securities.

Deposits of the first kind consist of the following items which are passed through the head of Account, "P.W. Deposits."

- a. Cash deposits of subordinates as security.
- b. Cash deposits of contractors as security.
- c. Deposits for works to be done.
- d. Sums due to the contractors on closed accounts.
- e. Miscellaneous deposits.

A record of all these transactions is maintained in the Divisional Office in a register in the same form as the suspense register (CPWA Form (67). This register is called the "Register of Deposits."

The account of interest bearing securities is maintained in a register called the "Register of Securities."

VIII. Compilation of Monthly Accounts

- a. Monthly Account should be prepared in CPWA Form 80.
- b. The account with all supporting registers, schedules vouchers, etc. should be presented to the DO and after his approval the account should, be submitted to the A.G.
- c. Monthly account is an abstract of the entire receipts and disbursements of the month as worked out in the Abstract book.



- d. It shows the opening and closing cash balances.
- e. On the back of the form are recorded.
 - i. a memorandum of miscellaneous cash receipts paid into treasuries.
 - ii. a certificate in respect of closing cash balances of the subordinate disbursing officers.
- f. The entries in the account should be divided into three groups:
 - i. Revenue entries - as taken from the Register of Revenue realised.
 - ii. Expenditure entries - posted from the classified Abstract of Expenditure.
 - iii. Other Heads - Both receipts and disbursements are posted from the schedule of Deposits, Takavi works, Adjusting Account with Railways, Defense etc. Remittances, Miscellaneous heads of Accounts and transactions adjusted under the head "Cash Settlement Suspense Account".
- g. The entries posted under several heads in the monthly account should be checked with corresponding entries in the Abstract Book.
- h. The totals of the columns for receipts and disbursement must agree and if there is any difference due to cash being in transit between two disbursing officers, its amount should be included in the closing balance and the certificate of cash balance should be amplified to explain the account and steps taken to adjust the difference.
- i. Monthly Account shall be supported by the documents specified in Para 22.4.15 of CPWA Code.

IX. Abstract Book

Before the actual compilation of various schedules, schedule dockets etc. is undertaken the Abstract Book (CPWA Form 81) may be written up from:

- a. Original Cash Book
- b. Summaries of Stock Receipts and Indents
- c. Transfer Entry Books

X. Accounts for March

In connection with the accounts for March the following points should receive special attention:

- a. The entry of the closing cash balance should be supported by-
 - i. The original cash balance Report (CPWA Form 5) of all disbursing officers including the DO.
 - ii. A certificate of the DO to the effect that he has obtained on or after -31st March and retained in his office an acknowledgment from the officer or subordinate concerned in respect of each item of imprest or temporary advance shown in the Cash Balance Report of the Division for 31st March.

Note: The Original Cash Balance Report of subordinate disbursing officers should be initialed by the DO before transmission to the A.G.



- b. To Part II of the Schedule of Monthly settlement with treasuries Form 51 subjoined a statement in the form given below in respect of the cheques drawn to meet payments of works.

Sl. No.	Particular	No. of Cheques issued	Amount
1.		For the whole month	
2.		During the last five working days of the month	

- c. The schedule of credits/debits to the head settlement account with Railways/Post/Defence. {CPWA Form 77A) Interstate Suspense Account should invariably be sent to the A.G. in time so as to facilitate adjustment in respect of the financial year concerned.
- d. The schedule of deposits CPWA Form 79 should be accompanied by the Account of Interest bearing Securities. CPWA Form 86.

XI. Responsibility of the Divisional Account in Compiling the Accounts

Following are the Duties of Divisional accounts:

- Scrutinise cash and stock accounts of the entire division as also all transfer transactions before they are incorporated in connected registers, schedules and Monthly Account.
- Examine all claims included in bills presented direct at the treasury by DO and the account of the money Obtained on these bills.
- Examine account returns of SDOs as laid down in CPWD Code.
- Exercise check day-to-day in regard to (i) the transactions recorded direct in the cash and stock account of the Divisional office (ii) bills and vouchers of subdivision which are submitted to this DO for approval before payment.
- Affix his dated initial after the last entry in the divisional cash book/stock account in token of check.
- See that every order or sanction affecting expenditure to be accounted for the Monthly Account is noted at once in a suitable register.
- See that expenditure which is within the competence of the DO to sanction or regularise is not incurred under the orders of subordinate disbursing officer without his knowledge.
- After check enface with the work 'checked' over the dated initial on every voucher.
- Sign Monthly Account and all the schedules etc. accompanying it.
- See that without orders of competent authority the gross expenditure authorised is not exceeded or surplus receipts realised are not utilised towards additional expenditure.
- Watch the receipts, with a view to bring to the notice of the DO and obtain orders on all marked deviation from the provisions for such credit in the estimate of works.
- See that savings due to abandonment of parts of a work as evidenced by the quantities of the work or otherwise are not utilised towards unauthorised expenditure.



XII. Computerisation of Accounts

The OWD and other PWDs of GOO use the Accounts Management System (AMS) module of WAMIS (Works & Account Management System). The system was developed to computerise all the activities related to PWDs. The AMS module has the following functionalities:

- a. Add, Edit, Delete master data of accounts
- b. Add, Edit, Delete opening balances for various account schedules
- c. Add, Edit various transactions for vouchers, cash receipts, cash transfers, transfer entry order, temporary advances
- d. Show, export the functionalities for various accounts schedule
- e. Produce all types of accounting reports like, cash book report, monthly account report, schedule of work report, MPWA report, CSSA report etc.

14.3 Audit and Inspection

14.3.1 AG/Director of Audit Inspection

The Director of Audit/AG, under whose jurisdiction a Division or Sub-Division is located, checks the monthly accounts. He arranges for the Test Audit and local inspection of the initial accounts of the Divisional and Sub-Divisional offices in order to verify the accuracy of the figures with reference to the original records, and ensure proper upkeep of the registers and records on the basis of which the accounts have been prepared and submitted to the Zonal PAO.

The Principal Director of Audit, conducts local inspection of Divisions rendering accounts to the Pay and Accounts Offices.

14.3.2 Inspection Reports

The results of the Audit are communicated through Inspection Report, which is drawn in three parts as below:

Part I - It includes:

- a. Introduction.
- b. Outstanding objections from previous reports. (in this part, all old outstanding objections are reproduced in full, every alternate year along with upto date position.
- c. Schedule of persistent irregularities.

Part II - Contains two sections "A" & "B". Section "A" includes all important irregularities, i.e. irregularities involving recoveries, questions of violation of principles, losses, etc. Section "B" contains irregularities, though not major, which the Audit wants to bring to the notice of higher authorities.

Part III - is a Test Audit Note containing minor irregularities to which a schedule is attached to show the items settled on the spot. The procedural irregularities in respect of which the DO has given assurances for following the correct procedure in future are also noted in this Schedule.



14.3.3 Removal of Objections

Once a transaction has been challenged by the Audit and entered in one or the other documents referred to in the CPWA Code, the responsibility for having the objection removed and their prompt settlement will primarily devolve upon the DO. An audit objection is usually removed by obtaining the requisite sanction, by making the necessary recovery, by correcting or completing the relevant account or voucher, or by furnishing the necessary documents or information, or by otherwise securing compliance with the provisions of a specified Rule.

Audit Inspection Reports should be promptly dealt with by the DOs at the initial stage so that the contingency of reporting of any point or para to the Public Accounts Committee does not arise due to the neglect or delay in reply. The following procedure is suggested for disposal of the Inspection Reports.

14.3.4 Procedure in Divisional Office

The Inspecting Officer issues rough Audit Notes to the Division for verification of the factual accuracy of the objections taken by him during the course of inspection. The draft Inspection Report is discussed with the EE by the Inspecting Officer before submitting the same to the AG/Principal Dir. of Audit to explain his viewpoint, especially in the case of objection contained in Part II of the Report. The EE should avail of this opportunity and should record his remarks against each para in specific and unambiguous terms, thereby either accepting or refuting the factual accuracy of the objections/points that are raised by the Audit.

Audit Inspection Reports should be promptly dealt with by the DOs at the initial stage so that the contingency of reporting of any point or para to the Public Accounts Committee does not arise due to the neglect or delay in reply.

A Control Register should be maintained in the Divisional Office in the form given at Appendix 47, so as to keep watch on the disposal of the Inspection Reports. The following instructions should be followed:

- a. A separate page should be set apart for noting down the position of each Inspection Report.
- b. The Register should be closed every month with an abstract.
- c. The Register should be reviewed by the EE every month. While submitting the Register, the Divisional Accountant should record a certificate that reminders, wherever due, have been issued to the AE/SE/CE.

14.3.5 Settlement of Outstanding Objections

In the intimation memo about the inspection, the Inspecting Officer mentions that the EE should keep ready the replies to the outstanding paras in the pending Inspection Reports, along with the relevant records for personal discussion with the Inspecting Officer for settlement of as many objections as possible. The old Inspection Reports should be discussed with the Inspecting Officer personally and results of such discussions should be recorded. This should not be left to the Divisional Accountant or other subordinates, as it would retard the chances of effecting settlement of the old outstanding objections. The objective should be to settle as many cases as possible.



The EE should take up the discussions relating to the items brought by the Inspecting Officer from the very start of the inspection. It is not advisable to postpone it to the far end of the inspection, because very little time is left for holding any constructive, effective, and useful discussions, and achieving the desired results of settling the objections on the spot. The records that are required for production to the Inspection Party in connection with the old paras should be collected in advance, and kept ready duly referenced and flagged. This will save a lot of time and irritation to the Audit Party.

14.3.6 Control Register

A Control Register should be maintained in the Divisional Office in the form given at Appendix 47, so as to keep watch on the disposal of the Inspection Reports. The following instructions should be followed:

- a. A separate page should be set apart for noting down the position of each Inspection Report.
- b. The Register should be closed every month with an abstract.
- c. The Register should be reviewed by the EE every month. While submitting the Register, the Divisional Accountant should record a certificate that reminders, wherever due, have been issued to the AE/SE/CE.
- d. The following procedure should be followed with regard to indicating and calculating the number of paras/sub-paras of the Inspection Reports in Register:
 - i. The number of sub-paras in each para should be shown against the serial number of paras of the Report. A para having sub-para should be treated as one sub-para. Thus, it should show the number of items that require action.
 - ii. Any sub-para dropped subsequently, should be distinctly exhibited, and the balance of their totals worked out.
 - iii. An abstract showing the position of sub-paras outstanding from time to time should be kept in the files of inspection reports as well.
- e. The position of the sub-paras outstanding from time to time, as worked out in the Divisional Office Control Register, should be reconciled with a similar Control Register maintained in the Audit Office. The items or objections recommended by the Inspecting Officer to the AG/Principal Dir. of Audit for being dropped should not be mistaken by the DO as actually dropped. These continue to be outstanding in the Audit Office Control Register till the recommendations of the Inspecting Officer are accepted. The actual position of the outstanding paras should be watched by the EE from subsequent rejoinders received from the AG/Director of Audit.

The disposal of Audit Notes and Test Audit Notes should be watched through a Progress Register, which should be maintained in the same manner as laid down for the Control Register.

14.3.7 Procedure in Circle Office

The Audit Office sends an advance copy of the Inspection Report to the SE, with specific mention of important items concerning serious irregularities and lapses requiring special attention and prompt



action. The SE should take necessary steps to obtain the final settlement of the items. Where required, he should himself take up the items of the report with the higher authorities. He should keep the AG/Principal Dir. of Audit fully informed in respect of cases regarding which reports have been sent to CE/EIC. While transmitting replies to the Audit on the original Inspection Reports as well as Rejoinders, the SE should examine the explanation offered against each para by the EE and express his independent opinion. Where the para envisages completion of the Divisional/Sub-Divisional records and submission of certain documents/records to the Audit, the SE should ensure that the needful is done by the EE with the least possible delay.



Annexure 14.1: Revised Estimate/ Budget Estimates for Establishment

(Reference Para 14.1.5 (b) of Manual)

Sl. No.	Name of incumbent with Designation & Group	Period	Scale of Pay	Size of pay+GP+ D.A +HRA+OA	Pay + Grade Pay		D.A		HRA		OA		Revised estimate for the year 20--20				Revised estimate for the year 20--20				Remarks
					Actual for 4 months	Probable for 8 months	Actual for 4 months	Probable for 8 months	Actual for 4 months	Probable for 8 months	Actual for 4 months	Probable for 8 months	Pay	DA	HRA	OA	Pay	DA	HRA	OA	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22



Annexure 14.2: Revised Estimate/ Budget Estimate for Works

(Reference Para 14.1.5 (c) of Manual)

General abstract by Minor Heads, Sub-Heads and Primary Units	Actuals			Sanctioned Budget Estimate, current year	Actuals		Revised Estimate for current year			Revised Estimate for next year			Explanatory Remarks
	20.../20...	20.../20...	20.../20...		First 4 month of last year	First 4 month of current year	Proposed by Controlling Officer	Subsequent modification by the Accountant General	Passed by Government	Proposed by Controlling Officer	Subsequent modification by the Accountant General	Passed by Government	
1	2	3	4	5	6	7	8	9	10	11	12	13	14



Annexure 14.3: Guidelines for Utilisation of Provisions made for Different Works under Plan Schemes of Works, Rural Development, Housing & Urban Development and Water Resources Department and Construction of Buildings

(Reference Para 14.1.19 of Manual)

In the Budget Estimates for 2012-13, the detailed list of works under Plan schemes of Works, Rural Development, Housing & Urban Development and Water Resources Department has been dropped from the detailed Demand for Grants of these Departments. Instructions were issued by Finance Department to provide the work-wise Budget Provision under plan schemes as an Annexure to Chapter-II of Outcome Budget of the respective Departments, Provision of funds for construction of buildings has also been made in the Demand for Grants of the User Departments. The guidelines outlined below should be followed for execution of works under the Plan schemes and construction work of buildings by the respective Departments.

1. Works under Plan schemes -

1.1 Allocation of funds for execution of works should be broadly based on the financial outlay indicated in the Outcome Budget. The distribution should be made through the works expenditure module of IFMS. Reallocation of financial outlay indicated in the Outcome Budget may be made in keeping with the progress of work during the course of the financial year. While incurring expenditure for on-going works and new works, the following discipline should be observed:

- a. **On-going Works** – The expenditure for on-going works is to be made in accordance with the cost estimate for which A/A has been accorded. When the expenditure is likely to exceed the cost estimate for which A/A has been accorded, the Officer entrusted with the execution of work should obtain approval of the competent authority as envisaged in Para 3.2.8- read with 6.3.16, 6.3.17, 6.3.18 of OPWD Code.
- b. **New Works** – New works should be taken up in accordance with the provisions of Para 3.7.1 of OPWD Code Volume – I. Fulfilment of necessary pre-conditions like availability of budget provision, A/A and TS should be ensured.

2. Building Works – Provision for building construction works has been made in the Demand for Grants of the requisitioning Departments in accordance with the instructions issued in Finance Department OM No. 3178/F, dated 27.1.2002.

2.1 **Distribution of budgetary allocation through IFMS** – The budgetary allocation for the building construction works should be placed by the grant controlling authority i.e. Secretary of the Administrative Department at the disposal of the CE, Buildings, the CE, Rural Works-II and CE, PH (Urban) as the case may be through the works expenditure module of iOMTS. The grant controlling authority should simultaneously indicate the work-wise allocation for on-going and new works under the functional Major Heads for residential and non-residential buildings to be CE concerned.



- 2.2 **Allocation for on-going works** – For the on-going buildings works allotment should be released in accordance with the cost estimate for which A/A has been given. The estimates and A/A order should be revised so as to indicate the source of appropriation or the works from the Demand for Grants for the User Departments.
- 2.3 **Allocation for new works** – At the time of release of budgetary allocation, in case of new building construction works, it should be ensured that land is available for construction of building, site has been handed over to the executing agency, A/A is accorded and plan estimates & design are approved.
- 2.4 **Responsibility for spending the Budget Provision** – The ultimate responsibility for spending the budgetary allocation for building construction works rests with the respective grant controlling authorities. They should periodically review the progress of the work jointly with the concerned CEs. The CE concerned should also cause a periodic review of the physical progress of the work and provide necessary feedback for further requirement of funds is any to the grant controlling authority.
3. **Building Works executed through IDCO/OSPH&WC/OTDC etc.** – However, there would be no change in the modality for flow of funds for building works executed through IDCO/OSPH&WC/OTDC etc. by user Departments regulated by the Accounting Procedure framed in consultation with Works Department and AG (A&E), Odisha in accordance with the provisions of Rule 140 of OGFR-Vol-I.



APPENDICES

**Appendix I – Rules for Selection of Sites for Buildings**

(Refer Para 3.4.15 of Code & 3.4.10 (A) of manual)

A. Rules for Selection of Sites for Buildings Cost of which is Rs. 50000/5 Lacs or More

1. The DO should unless instructed to the contrary take steps to have site selected as soon as requisition is received from a competent authority for an approximate estimate for a building project.
2. On receipt of A/A to a project for which a site has not yet been selected, the DO, shall at once ask the District Magistrate to convene a Site finalisation Committee and as soon as the site is selected, he will work for an estimate, including cost the acquisition of land if necessary and submit it with draft declaration through the usual channel, to the authority competent to sanction it. The amount of this estimate should be subsequently incorporated in the detailed estimate for the project.
3. The selection of sites for building shall ordinarily be made by a committee composed of -
The District Magistrate as President and other suitable Members as decided by the President.

If the proposed site is within a Municipality or controlled area the Chairman of the Municipality or President of the station committee shall be a member Ex-officio and a representative of the planning authority if any, working in that area shall be a member.

If outlying stations members, on their own responsibility depute a Subordinate Gazetted Officer, to represent them.

If for any reason any member of the committee cannot attend on the date fixed, his opinion may be taken separately, the plans and proceedings being sent to him for the purpose by the District Officer.

This Committee will be assembled by the District Officer at the request of, the, DO.

4. The DO will prepare a plan of the site selected, embodying such information may be necessary in each case e.g., if the site is on land liable to be flooded the highest flood level should be shown with reference to the general level of the site. He will forward this plan with the proceedings of the committee, after both have been countersigned by the members, to the SE of the circle.
He will be responsible for any action required under paragraphs 80 and 81 and will place before the site committee the opinion received from the Defence Department.
5. The SE of the Circle concerned if he agrees with the conclusion of the committee, both as regards the site and arrangement of the buildings shall countersign the paper and forward them to the HOD concerned for counter signature and transmission to the Revenue Commissioner for signature and return to the DO.
6. If the members of the committee are unable to agree or if, the SE differs from their conclusion he will, in the event of failing to come to an agreement with the president of the



committee, submit the case to the Board of-Revenue for decision, attaching his-note to the proceedings of the committee. After deciding the case so referred, the Board of Revenue will communicate their decision to the SE and to the President of the Site Committee, forwarding the plans as approved to the SE for disposal by the HOD. Whether possible, the SE should discuss the matter personally with the President before forwarding the case to the Board of. Revenue.

7. In cases where the views of the department differ from those of the local authorities, the matter should be referred for the decision of Govt.
8. In the case of important buildings, the Govt desire that heads of departments will before countersigning the plan, sent it to the Director of Health Service and the CE for opinion.
9. Two plans are required –
 - a. A block plan 1:500 if this is to large 1:1000 showing the relative position of buildings, wells, etc., included in the project as well as all existing buildings, etc., in the same compound.
 - b. An index plan 1:2,500 or 1:5000 showing the site and its surrounding on North South, East and West.

B. Rules for Selection of Sites for Buildings cost of which is less than Rs. 50000/500,000

1.
 - a. The selection of a site for proposed building-must be dealt with as soon as a demand is received for an estimate from an officer authorised to call for it.
 - b. When a rough estimate is called for, a general report regarding the proposed site will be given which will accompany the estimate when it is Sent up for A/A.
2. As soon as a demand for an estimate as in Paragraph 1 (a) of A/A to an estimate "sent under paragraph 1(b) is received, the DO shall in consultation with the District Magistrate and the local head of the, department concerned select a site for the proposed building and make out the usual plans.

If the building is in the compound of an existing Govt building, a block plan only will be required. This must show the whole compound and all the buildings existing of proposed within it.

In cases where land has to be acquired, the DO will at once apply to the District Magistrate, for an estimated draft declaration for the land.

In outlying stations the District Magistrate, DO and the local head of the dept. concerned may delegate their subordinates to represent them.

3. The DO will be responsible that the site selected is suitable.

In case the DO has any doubt as to he suitability of the proposed on sanitary grounds he should consult the Chief District Medical Officer.
4. If the site selected is no land already in charge of the PWD, the site plan will be signed by the SE of the circle before the estimate is sent up for TS.



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When the land is in charge of the department concerned, the signature of the head of that department on the plan will be necessary.

5. In cases where there is a difference of opinion regarding the suitability of a site among the officers referred to in rule 2, the matter will be referred by the SE concerned to the Board of Revenue whose decision shall be final.
6. When the site is within a Municipality or Controlled Area, the signature of the Chairman of Municipality or of the president of the local committee, will be necessary before TS as given.

- Note:**
1. It is desirable that when sites for "important buildings are being selected, the Chief Architect should be present at the site selection committee meeting.
 2. The DO concerned and a representative of the Administrative Dept. for which land is to be acquired should make, preliminary selection of one of more sites in order of preference for consideration by the site selection Committee and not leave it to the Committee to find site.

**Appendix II – Execution of Contracts by Various Officers**

(Para 3.5.25 of Code para 3.5.12C of Manual)

Officer legally empowered to execute on behalf of the Governor the different classes of deeds contracts and other instruments.

“A” In case of the Works, Irrigation & Power and Housing & Urban Development Department (subject to any limit fixed by the Department orders).

1. All instruments relating to purchase, supply and conveyance or carriage of materials, stores machinery, etc., sale or purchase of electrical energy. By Secretaries to Govt in works Department, Department of Water Resource, & Housing Urban Development Department and CE, Chief Construction Engineer, Additional CE, SEs, DOs, SDO of Electrical Inspectors working under the respective Department.
2. All instruments relating to the execution of works of all kinds connected with buildings, roads, canals, river control, land drainage, reservoirs, dock and harbours and embankments, power station (all types of prime movers) transmission and distribution lines including substation and electrical installation in building and also instrument relating to the construction of water works, sewerage work, the erection of machinery and the working of coal mines.
3. Bonds of auctioneers, contractors and security bonds for the due performance and completion of works.
4. Security for the due performance of their duties by servants of the Govt whom the officers specified have power to appoint.
5. Leases for grazing cattle on canal banks or roads side for fishing in canals and tanks or reservoirs, for the cultivation of land under the Irrigation Department, leases of water for Irrigation and other purposes and leases of waterpower and instruments relating to the sale of grass, trees of other produce on road side or in plantation.

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- | | |
|---|--|
| 6. Leases of houses, land or other immovable property, provided that the rent reserved shall not exceed Rs. 5,000 per month. | By the concerned CE, Additional CEs, SE, DO under thy works, Irrigation & Power and Housing & Urban Development Department |
| 7. All Instruments connected with the recoverance of property given as security. | By the concerned CE, Chief Construction Engineers, Additional CE, SEs, DOs of the Works, Department of Water Resources, Irrigation and Power, Housing & Urban Developments Department. |
| 8. Agreements, for the recovery of fines on account of draft wood or other timber passing in to a canal or other timber passing in to a canal except all fines realizable by Irrigation Officers under the Canals Act for offences committed in canals. | |
| 9. Instruments connected with the collection or farming of tolls at bridges or ferries or other means of communications. | |
| 10. Agreement relating to the loan of tools and plant to contractors and others | By the connected DOs under the Works, Irrigation & Power, Housing & Urban Development Departments. |
| 11. Agreements for sewer connections with Govt Sewerage system. | By S.E's under the Housing & Urban Development Department. |
| 12. All deeds instruments relating to any matter other than those specified in items I to II. | By Secretaries or Joint Secretaries to Govt in the Works, Irrigation & Power Housing & Urban Development Departments. |



Appendix III: PWD Contractor's Registration Rules, 2013

(Reference 3.5.24 of Manual)

Rule 1: These rules shall be known as the "P.W.D. Contractor's Registration Rules". These rules will apply to all the wings of P.W.D. under the administrative control of Government of Orissa in the Works Department, [RDD](#), [DOWR](#), [OPHEO](#).

Rule 2: The bidders registered under the other State Government/ MES/Railways/CPWD in equivalent [Category](#) may participate in the tender work in the State. But, successful bidder has to register under the State PWD before signing of the agreement.

Note: The Chief Engineer or any officer having the powers of a Chief Engineer [are free](#) to invite tenders for specially important or big works from contractors already registered in the highest class in the C.P.W.D. or in any State Public Works Department, Military Engineering service, any of the Indian Railways or Major Public Body like Calcutta, Bombay and Delhi Corporations or in Port Commissioners, from reputed Engineering firms of the country engaged in construction work.

Rule 3: For the purpose of Registration, the Contractors shall be classified as follows and award of any work to any individual contractor, [for which the estimated cost put to tender](#) exceeds the amount noted against the class to which he belongs [is prohibited](#) except with the prior approval of the C.E.

The tenders should be invariably invited for the work whose estimated cost is Rs. [50,000/-](#) and above.

	Contractors		Amount
(i)	Super Class	...	Unlimited
(ii)	Special Class	...	Not exceeding Rs.8/ 15 Cr
(iii)	'A'Class	...	Not exceeding Rs.3/ 5 Cr
(iv)	'B'Class	...	Not exceeding Rs. 1/ 1.5 Cr
(v)	'C'Class	...	Not exceeding Rs. 20/ 40 lac
(vi)	'D' Class	...	Not exceeding Rs. 10/ 20 lac

Rule 4: Registrations of Contractors falling in 'Super Class' 'Special Class' and 'A' Class will be done, by a Committee consisting of the following officers :

(i) Engineer-in-Chief (Civil (OWD)), (ii) Chief Engineer, Delta and Flood Control, (iii) Engineer-in-Chief, P.H. (Urban), (iv) Chief Electrical Inspector, (v) Chief Engineer, Minor Irrigation, (VII) Chief Engineer(Roads), National Highways, (vii) Chief Engineer, Buildings, (IX) Chief Engineer, Rural Works-I.

The Engineer-in-Chief (Civil) OWD will be the convenor and Chairman of the Committee and he will maintain all records for this purpose. The Committee will meet not less than once in a



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period of 3 months and consider all applications for registration and up-gradation to the above three classes received, during the preceding months. Quorum for the meeting of the Officers will be the Chairman and any 4 members.

- (a) Any person desirous of being registered as a Contractor under these rules for the first time and Contractor seeking promotion to a higher class other than Super, Special and 'A' Class shall make an application to the authority named below in respect of the class under which registration is applied for in Form 'A' appended here to be accompanied by a Treasury Challan showing payment of requisite fee as indicated below.

Application for registration in Super, Special and 'A' Class together with Treasury Challan shall be made to the Engineer-in-Chief (Civil) OWD who is the Chairman of the Committee.

	Class of Contractor	Registering Authority	Registration Fee
(i)	Super Class	Committee of C.Es. with EIC (OWD) as Chairman	Rs. 2.00/5.00 Lac
(ii)	Special Class	-do-	Rs. 60,000/ 1.5 lac
(iii)	'A' Class	-do-	Rs. 30,000/ 1 lac
(iv)	'B' Class	SEs and 2 SEs (one of the SE shall be from different unit)	Rs. 12,000/ 50,000
(v)	'C' Class	SE and 2 EEs (one of the EE from different unit)	Rs. 6,000/ 25,000
(vi)	'D' Class	-do-	Rs. 3,000/ 10,000

Note: I: Contractors registered in Super Class, Special Class and 'A', Class shall be entitled to tender for work under any wing or department of the State Govt. except the Contractor registered exclusively for Electrical works.

II: Contractors of 'B' Class and below registered in any one wing shall be entitled to tender for works under any other wing excepting Electrical works. Similarly, contractors of Electrical wings will be entitled to tender for Electrical works only in any other wing.

III: Graduate Engineers and Diploma holders should be entitled to be enlisted as 'A' Class and 'B' Class contractors respectively without making any deposit. The registration fees for them will be 50% (fifty percent) of the normal rates.

IV: Chief Engineers means Chief Engineer or any other Engineers to whom the State Govt. have delegated powers and functions of a Chief Engineer.

- (b) The application for registration will be submitted by the applicant along with Treasury Challan showing that the registration fees of the required amount has been deposited in the Treasury under the head of account "059-Public Works", The Registration Fees deposited are non-refundable except, when the applicant is not registered in which case the fees



deposited shall be refunded by the authority empowered to make such registration. In case of registration in Super Class, Special Class, and 'A' Class refund shall be made by the Engineers-in-Chief (Civil) OWD.

- (c) The existing contractors shall deposit the differential amount towards registration fees within two months from the date of this notification.

Rule 5: **(1)** For enlistment/upgradation as "Super Class" one should fulfill the following conditions.

He should be in possession of valid "Special Class" registration or Registration certificate of similar/equivalent class of other state P.W.D., C.P.W.D., Major ports, Railway, Central or any State Government undertakings/enterprises and should have executed works worth of Rs. 2/5.00 Cr or more in a financial year which at least one work worth of Rs. 50 lac/1.5 Cr or more in a single contract during last 5 years.

Registering Authority may relax the above financial criteria provided the applicants for "Super Class" possess the following machineries including other Tools and Plant.

(i) Vibratory Roller	...	Two numbers
(ii) 45 to 60 MT Capacity H.M. Plant	...	One numbers
(iii) 8 to 10 M.T. Capacity power Road Roller	...	Two numbers
(iv) Tipper	...	Five numbers
(v) Proclaim	...	One numbers
(vi) J.C.B.	...	One numbers
(vii) Crane	...	One numbers
(viii) Batching and weighting Machine	...	One numbers
(ix) Needle vibrator	...	Five numbers
(x) Plate vibrator	...	Two numbers
(xi) Concrete mixer	...	Three numbers
(xii) Compressor	...	Two numbers
(xiii) Dozer	...	One numbers

(2) Eligibility for enlistment/upgradation for "Special Class"

For enlistment/upgradation the "Special Class" one should fulfill the following conditions:

- (a) He should be in possession of valid "A" class Registration certificate under State P.W.D. or Registration of similar/equivalent rank in other state O.P.W.D., C.P.W.D., Railway, Major ports, central and State Government undertakings/enterprises etc. and should have executed works of minimum Rs. 50 lac/1.5 Cr. in a financial year and at least one work worth of Rs. 10/50 lac in a single contract during last 5 years.

- (b) A contractor already registered as "B" class may also be eligible for the purpose, if he



has executed works of Rs. 75 lac/2.00 Cr. or more in a financial year having one work/contract of Rs. 10/50 lac or more during last 5 years.

Registering Authority may relax the above financial criteria provided the applicant for "Super Class" possesses the following machineries including other minor Tools and Plant.

(i)	Needle vibrator	...	Three numbers
(ii)	Concrete Mixer	...	Two numbers
(iii)	Plate vibrator	...	Two numbers
(iv)	8 to 10 M.T. Capacity power Road Roller	...	One number
(v)	Vibrator Roller	...	One number
(vi)	Truck/Dumper/Tipper	...	Two number
(vii)	Mini hot mix Plant	...	One number
(viii)	Compressor	...	One numbers
(ix)	Dozer	...	One numbers

(3) Eligibility for enlistment/upgradation to "A" Class (general category)

For enlistment/upgradation to 'A' class one should fulfill the following conditions:

- He should be in possession of valid Registration certificate of either in 'B' class or 'C' class.
- He should have executed works of more than Rs. 10/50 lac in a financial year and having one work costing of Rs. 3/15 lac or more in single contract during last 5 years.

or

He should have executed work of more than Rs. 15/75 lac in a financial year having one work of Rs. 2/10 lac in a single contract. Registering Authority may relax the above financial criteria provided possesses Tools and Plant like Vibrator, Concrete Mixer, Road Roller of 10 M.T. Capacity (One number each) including other Tools and Plant.

Note : (i) List of machineries submitted by the applicant along with his application for enlistment/upgradation to 'A' class, "Special Class" and "Super Class" in case of non-production of bills/invoices/vouchers etc. or any other documents in support of their ownership should be certified by a Chartered Accountant or by an officer not below the rank of Executive Engineer.

(ii) Nothing fetters the discretion of the Chief Engineer or any Officer having the power of the Chief Engineer to prescribe certain special conditions while inviting tender for special nature of work urgent nature of works, works requiring special skill and superior quality irrespective of the value of tender. On such occasion, the concerned Chief



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Engineer will be the authority to impose special condition indicating requirement of machineries, yearly turnover and execution of similar nature of work for the specified amount at his own discretion irrespective of the value of tender invited.

(iii) Before grant of a certificate of registration in Form B appended hereto, the registering authority may make such enquiries as he considers necessary with regard to the suitability of the applicant his technical ability or any other relevant matter. All certificates shall be serially numbered under each class and in the case of C or D Class prefixed with the name of the Circle.

Rule 6: The applicants desirous of enrolling themselves registered as contractors should deposit the amounts indicated below in shape of Post Office Savings Bank Account/National Savings Certificate/Post Office Time Deposit Account and **Kishan Vikash Patra** duly pledged in favour of the registering authority.

Class of Contractors		Amount
(i)	Super Class	- Rs. 10 lac / 25 lac
(ii)	Special Class	- Rs. 2 lac / 5 lac
(iii)	'A' Class	- Rs. 80,000/ 2 lac
(iv)	'B' Class	- Rs. 40,000/ 1 lac
(v)	'C' Class	- Rs. 20,000/ 50,000
(vi)	'D' Class	- Rs. 20,000/ 50,000

In case of 'Super Class', 'Special Class' and 'A' Class Contractors, the deposit referred at above shall be made in favour of the Engineer-in- Chief (Civil) **OWD**.

The existing contractors shall deposit the differential amount towards the above initial deposit within two months from the date of **issue of this enlistment rules**.

Those contractors who have already deposited need not deposit such differential amount towards the aforesaid initial security deposit.

Rule 7: Any person desirous of being registered as a 'Super Class' or 'Special Class' Contractor or 'A' Class Contractor under these rules for the first time **on any contractor seeking promotion to Special Class, or 'A' Class**, shall satisfy the registering authority that he has under his employment the minimum technical staff as prescribed below:

Super Class – 2 Graduate Engineer and 4 Diploma holder and have satisfactorily completed 3 works of 4.5 Cr each or 2 works of 6 Cr each or 1 work of 8 Cr in last 5 years.

Special Class - One Graduate Engineer and Two Diploma Holders **belonging to the State of Orissa and have satisfactorily completed 3 works 1.5 Cr each or 2 works of 2 Cr each or 1 work of 3 Cr in last 5 years.**



"A" Class - One Graduate Engineer or two Diploma Holders to the State of Orissa and have satisfactorily completed 3 works of 50 lac each or 2 works of 75 lac each or 1 work of 1 Cr in last 5 years.

The Contractor shall pay to the Engineering personnel monthly emoluments which shall not be less than the emoluments of the personnel of equivalent qualification employed under the State Government of Orissa. The Chief Engineer, Roads, Orissa, may however, assist the contractor with names of such unemployed Graduate Engineers and. Diploma Holders, if such help is sought for by the Contractor.

Notes : On the basis of the old record a Contractor cannot be refused registration for all times to come requirements under Rule 7 whether fulfill or not has not been considered - Rejection of the petitioners application on the letter of the Chief Engineer is held not sustainable in Law.

Rule 8: Certificates of registration shall remain valid for, a period of three years from the date of commencement of the financial year during which they are granted and may be renewed thereafter for further, three yearly periods.

Rule 9: Every registered contractor who wishes to renew his Certificate of registration shall apply to the registering authority not less than one/two month before the expiry date of the certificate in Form 'C' accompanied with the Treasury Challan showing deposit of the following Fees and performance reported in Form G (copy enclosed) :

Class of Contractors		Amount
(i)	Super Class	- Rs. 50000/1.5 lac
(ii)	Special Class	- Rs. 20,000/50,000
(iii)	'A' Class	- Rs. 10,000/ 25,000
(iv)	'B' Class	- Rs. 5,000/ 15,000
(v)	'C' Class	- Rs. 2000/5,000
(vi)	'D' Class	- Rs. 1000/2,500

Renewal may be granted by endorsement on the certificate of registration. But if it is found from the performance report that the performance of the contractor is not satisfactory, the registering authority will enquire into the matter and if after such enquiry the authority is convinced that his performance is not satisfactory, action as prescribed under Rule 11 of these Rules shall be taken against the contractor.

The registering authority shall not renew the certificate of registration of 'A' Class, Special Class and Super Class contractor if they have not employed Technical Staff as prescribed in Rule 7.

Rule 10: Failure to apply for renewal in time will render the contractor liable to a penalty equal to the renewal fee for the first three months of default or part thereof. Thereafter the amount of penalty will be equal to the renewal fee for every month of default.



Rule 11(a) The Divisional Officers, should report to the Registering Authority if in their opinion any contractor is incompetent, dishonest, or his performance is unsatisfactory, has contravened any, provisions of the Labour Regulations and Rules persistently or has misbehaved with the Department while executing any work or has otherwise, forfeited his right to continue as a registered contractor.

On receipt of such a report from the Divisional Officer or any other officer-in-charge of Public Works, the Registering Authority may suspend or cancel the certificate of registration after due enquiry if -

(i) The contractor has to execute a contract or has executed unsatisfactorily or is proved to be responsible for constructional defects revealed even before the expiry of twelve months from the completion of the work;

(ii) Has no longer adequate equipment, technical personnel or financial resources:

(iii) Has intentionally violated any important conditions of the contract;

(iv) If declared or is in the process of being declared, bankrupt or insolvent;

(v) Has persistently violated the provisions of Labour Regulations and Rules;

(vi) Is guilty of misconduct in connection with execution of Government works or of such conduct as is calculated to impede or results in impeding the progress of Government works;

(vii) Has failed to clear Government dues outstanding within a period of six months from the date of passing of the Final Bill;

(viii) Has failed to employ technical staff as per Rule 7;

(ix) Has persistently quoted unrealistic rates while tendering for works.

(b) Before taking a decision to cancel the registration certificate of a contractor, the registering Authority may, if he considers necessary, issue a notice to a contractor asking him to explain his actions as to why his registration should not be cancelled.

Rule 12: Every Registering Authority shall maintain the following registers:

(i) Register of applications for registration in Form D;

(ii) Register of certificate for registration in Form E;

(iii) Register of applications for renewal in Form E.

Besides, for every application or registration a separate file shall be opened in which shall be recorded all papers relating to matters arising out of these rules.

Rule 13: No registered Contractor shall be eligible for renewal of certificate of registration unless he has validly tendered for or executed any work during the following periods counted from the date of expiry of the term of the certificate-



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	Not validly tendered during the years	Not executed Work during the years
(1)	(2)	(3)
(1) Special-and A Class	3/2	8/5
(2) B Class	5/3	5/3
(3) C and D Class	2	3/2

The contractors already enlisted in Class B, C and D, before coming into force of these rules. Should be deemed to have been registered under rules, but those who have been enlisted in Class "A" and desire to be upgraded to special Class should furnish fresh applications to the appropriate authority. Contractors already enlisted in 'A' Class by the Chief Engineer and Additional Chief-Engineer before promulgation of P.W.D. Contractors Registration Rules, 2013 would continue as such till the certificate of registration of becomes due for renewal Once renewal becomes due the should apply afresh to the Committee for registration as 'A' Class contractors under the new rules.

Rule 14: In Tender Call Notice (N.I.T.) Contractors shall be asked to furnish report in the following proforma duly certified by the Executive Engineers under whom he has executed works in order to judge their past performance.

Performance Record of Contractors:

- | | |
|-----------------------------|---------------------------------|
| 1. Name of the Contractor : | 2. Registration No. and Date : |
| 3. Class of Contractor : | 4. Licencing Authority : |
| 5. Licence valid upto : | 6. Detailed of works executed : |

Sl. No.	Job under execution	Agreement amount	Date of commencement	Stipulated date of completion	Where work is progressing as per programme	Reasons for delay if any
1	2	3	4	5	6	7

- Whether the contractor has requisite machineries and personnel deployed (details of machinery and personnel deployed) :
- Whether the quality of construction is satisfactory :
- Whether he has capability to make good the loss time :



10. Whether the Contractor has abandoned any work in the past three years, if yes, the details thereof:

11. Whether the Contractor has entered in to any litigation in the past if yes, the details thereof:

Name of the Certifying Officer
with Official Seal

Signature of Contractor

**FORM - A****Application for Registration of a Contractor/ Upgradation to a Higher Class**

The applicants desire to enroll themselves as contractors and also for the purpose of upgradations to higher class should furnish necessary information in the enclosed proforma.

1. Name of the Applicant, qualification, if any
2. Permanent Address –
(Should include telephone No. Fax No. and E-mail (ID))
3. The class in which registration is now prayed for
4. The class in which already registered and when?
5. In case of registered Contractor, the list of works done by him indicating the details of each work should be furnished with a certificate of the Engineer-in-Charge under whom he worked. The contractor has to furnish the list of works done by him during the last three years in the enclosed format.
6. Whether agreement for any work was rescind by the concerned Authority (during last 5 years)? If so, reasons, in detail.
7. Whether any work was abandoned by the contractor (during last 5 years)? If so, reasons in detail.
8. A copy of the Treasury Challan in which the prescribed fee has been deposited in the Treasury has been attached. (Yes/No)
9. List of tools, plants, machinery and vehicles which the firm owns.
10. The names and qualifications of the partners of the applicant. In case of partnership firm, the copy of the partnership deed to be furnished.
11. Whether the applicant has tendered for any work/works under any Engineering Deptt./ Organisation of the State Govt. during the last three years.
12. Technical and financial standing for the category concerned as required under rule 6.
13. Whether the applicant has registered himself as a contractor under any other name.
14. Whether three copies of passport size photograph of the applicant duly attested have been enclosed. (Yes/No)

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Sl. No.	Department/ Organisation	Name of the work	Estimated cost	Agreement Amount (Rupees in Lakhs)	Agreement No.	Scheduled date of commencement as per agreement
1	2	3	4	5	6	7

Actual date of commencement	Scheduled date of completion as per agreement	Actual date of completion	Whether the work is completed in time	Cause of delay, if any	Litigation, if any	Remarks Comments of Engineer in charge with signature
8	9	10	11	12	13	14

Counter Signature of
the Employer (s)

Signature of the Contractor



FORM - B

Certificate of Registration

Office of the

Order No

Date

..... is hereby registered as Class contractor according to the revised classification prescribed under Rule 3 of the P.W.D. Contractor Registration Rules, 1967.

2.He has deposited, the fixed security, as prescribed under Rule 13 of the said rules with the He is, therefore entitled to tender and take up works without depositing earnest money or initial security deposit.

He has not deposited the fixed security as prescribed under the rules. He is to deposit earnest money and initial security deposit while tendering or taking up works as laid down under the rules. He will, however, be exempted and an intimation to that effect will be given if he makes such fixed deposit.

3. Attested Photos of Shri..... is affixed.

4. Specimen Signature is attested Registering Authority.

*(Strike out whichever is not applicable)

Chief Engineer/

Superintending Engineer

Executive Engineer

**FORM-C****Application of Contractor for Renewal of registration, in P.W.D.****(To be applied one month before the date of expiry of the registration)**

1. Name of the Contractor
2. Class in which registered and the authority
3. Date of registration
4. Date of application for renewal
5. Amount of fees paid with Treasury Challan as prescribed under Rule 8.
6. If the applicant has validly tendered for any. work during the period.
7. If the contractor has obtained work order during the period in respect of his class as per Rule 14.
8. If the Contractor has executed any work during the period in respect of his class as noted under Rule 14.
9. Attested true copies of up-to-date Income Tax and Sales Tax Clearance Certificate, of appropriate authority to be attached and the original certificate to be Produced to the Registering Authority at the time of renewal.

Signature of applicant

FORM D**Register of applications received for Registration Promotion as Contractors**

Sl. No.	Name of the applicant with address	Date of receipt of the applicant	Purpose of the application	Fees paid	Order passed	Remarks
1	2	3	4	5	6	7



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FORM E

Register of Certificates of Registration issued under Rule - 13

Sl. No.	Name of the Contractors with address	Registration certificate No. and date	Class in which registered	Period of which registration certificate issued (from.....to)	Date of cancellation	Remarks
1	2	3	4	5	6	7

FORM F

Register of applications for Renewal of Registration of Contractors

Sl. No.	Name of applicant with address	Date of receipt of application	Amount of fees paid	Order passed	Remarks
1	2	3	4	5	6

FORM G

Performance Report of Contractor

Sl. No.	Name of the work for which tender paper allowed to be purchased	Cost of work	Date of purchase of tender document	Signature of E.E. or his representative	Date of receipt of tender	Valid or not	Reference of work order and agreement if approved	If any legal/para legal case initiated by court Dept	Remarks E.E. on performance
1	2	3	4	5	6	7	8	9	10

**Rule 15: Provisions for Blacklisting Contractors**

- A)** The Chief Engineer of a department may blacklist a contractor with the approval of concerned Administrative Department on the following grounds:
- (a) Misbehavior/threatening of departmental and supervisory officers during execution of work/tendering process.
 - (b) Involvement in any sort of tender fixing.
 - (c) Constant non-achievement of milestones on insufficient and imaginary grounds and non-adherence to quality specifications despite being pointed out.
 - (d) Persistent and intentional violation of important conditions of contract.
 - (e) Security consideration of the State i.e. any action that jeopardizes the security of the State.
 - (f) Submission of false/ fabricated/ forged documents for consideration of a tender.

The Divisional Officer shall report to the Chief Engineer, if in his opinion any of the above wrong has/have been committed by any contractor. On receipt of such a report from the Divisional Officer the Chief Engineer shall make due enquiry and if considered necessary, issue show cause notice to the concerned contractor who in turn shall furnish his reply, if any, within a fortnight from the date of receipt of the show cause notice. Thereafter, if the Chief Engineer is satisfied that there is sufficient ground, he shall blacklist the concerned contractor with the approval of the Administrative Department. After issue of the order of blacklisting of the said contractor the Chief Engineer shall intimate to all Chief Engineers of other Administrative Departments, the Registering Authority and Department Information Technology for publication in web-site of State Government.

- B)** The registration certificate of blacklisted contractor shall remain automatically suspended while allowing him to complete all his ongoing work(s) unless otherwise rescinded by the competent authority on grounds of breach of conditions of agreement.
- C)** The name(s) of partners and allied concerns of the blacklisted contractors shall also be communicated to all concerned. Care shall be taken to see that the contractor blacklisted and his partners do not transact any business with Govt. under a different name or title.
- D)** Once the blacklisting order is issued it shall not be revoked ordinarily unless -
- (i) On review in later date, the Chief Engineer is of the opinion that there is sufficient justification to revoke the order of blacklisting,
- or
- (ii) In respect of the same offence, the accused has been honorably acquitted by a court of law.



The concerned Chief Engineer will obtain order from the concerned Administrative Department before revoking the order of blacklisting. The order of revocation shall also be communicated to all concerned.

- E)** The Chief Engineers and Administrative Department shall maintain a list of blacklisted contractor. Updated list of blacklisted contractors shall be communicated to all concerned by the Chief Engineers on a quarterly basis.
- F)** Checklist as per Annexure I shall be furnished by the concerned Chief Engineer for blacklisting the contractor.
- G)** Checklist as per Annexure II shall be furnished by the concerned Chief Engineer for revoking blacklisting order.

Explanation: (i) Action taken under this Rule shall be in addition to any action taken under Rule 11 of PWD Contractor's Registration Rules 2003. On revocation of order of blacklisting, registration certificate of the contractor shall valid automatically, if not otherwise become invalid which shall be recorded in the registration certificate by the revoking authority.

(ii) The ground mentioned above for blacklisting of contractor shall be deemed to be deleted from the grounds for cancellation/ suspension of registration certificate under Rule 11(a) of PWD Contractor's Registration Rules.



Annexure - I

CHECKLIST FOR BLACKLISTING OF CONTRACTORS

1. Name and address of contractors
2. Class of contractor and registration number
3. Status (individual, partner, company)
4. Validity of Registration certificate
5. Registering-Authority
6. Name and address of Divisional Officer who initiated the proposal for blacklisting
7. Specific ground/reasons of blacklisting
8. Detailed report of the Officer recommending for blacklisting
9. Date of number of the correspondence, if any made with the contractor on above ground (copy to be enclosed)
10. Date of receipt of reply to above notices (copy to be enclosed)
11. Date and number of show cause notice issued (copy to be enclosed)
12. Date of receipt of reply to show cause notice (copy to be enclosed)
13. Comments of the Superintending Engineer/Next Higher Officer on the reporting/Recommending Officer.
14. Views of Chief Engineer concerned who finally recommended the Government for blacklisting the contractor.



Annexure - II

CHECKLIST FOR REVOKING BLACKLISTING OF CONTRACTORS

1. Name and address of blacklisted contractor
2. Name of the authority passing the order of the blacklisting (here enclose the copy of blacklisting order)
3. Date of receipt of application of the contractor for revocation of blacklisting order with name and address
4. Name and address of receiving authority
5. Reasons for revocation mentioned in the application
6. Recommendation of the Executive Engineer/Superintending Engineer/Chief Engineer or any other Officer (Department wise)
7. Specific ground of recommending the revocation of blacklisting order
8. Report on performance of the contractor in the ongoing works which were executed by him/them during/after the period of blacklisting
9. Performance report of the contractor during relevant period in connection execution of works under any Central Government/ other State Government/ Central/State Public Undertakings etc.

**Appendix IV: Departmental Execution of Work**

(Reference para 3.7.17 of Manual)

The powers of according permission for execution of works departmentally shall be as follows:

Sl. No.	Estimated Cost of the Works	Authority Competent to accord permission
1.	Works costing upto Rs. 20.00 lakhs	Superintending Engineer
2.	Works costing above Rs. 20.00 lakhs upto Rs. 50.00 lakhs	Chief Engineer Concerned
3.	Works costing above Rs. 50.00 lakhs upto Rs. 100.00 lakhs	EIC
4.	Works costing more than Rs. 100.00 lakhs	Administrative Department

(i) A list of cases of departmental execution of work shall be furnished quarterly by the engineers to the next higher authority and Works Department shall take up a review at the end of each financial year on the reports received from the CE to safeguard the aim and objective of the revised procedure and the economic aspects.

(ii) There shall be a Committee, of SEs in each district to be constituted by Works Department consisting of one S.E. each from OWD, OPHEd and DOWR having their jurisdiction over that district. The Committee shall at the beginning of each financial year review the local rates of labour of different categories conveyance and materials like stone products, brick, wood materials and etc., which are not ordinarily available in the stock of the Division but are required to be procured for use on work to be executed departmentally by calling for tender or quotation, as the case may be, for a fair assessment and approval of reasonable rates.

(iii) The estimate for the works to be executed departmentally shall be prepared on a realistic basis as per the sanctioned Schedule of Rates/rates fixed by the Committee of S.E.s. referred to in Para (ii) above which shall be technically sanctioned and administratively approved by the competent authority under the relevant codal provision before taking up actual execution.

(iv) The EE, AE and Sectional Officer may make cash payment for petty purchase of materials other than those available in the Store for execution of departmental works to meet the urgent and emergent needs.

Executive Engineer	Assistant Engineer Rs.	Sectional Officer Rs.
Rs. 1,000/5,000*	500/2,000*	100/500*

**Proposed Amount*

For payment to labourers engaged on N.M.R./piece rate and petty local purchase of materials not readily available in departmental stores on obtaining local quotations.



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Note: Steps would be taken to purchase materials chargeable direct to work as per requirement for use on departmentally execution on tender or quotation the prescribed manner. Only petty purchases shall be made to meet emergent needs.

- (v) Unemployed Graduate Engineers and Diploma Holders of the State shall be engaged in supervision survey investigation etc., of departmental execution of works under the direction of departmental Engineers and their pay and allowances shall be provided for in the estimates in each case.



Appendix V: Rules for Occupation of Inspection Bungalows of Departments in Charge of Public Works

(Reference Para 4.10 of Manual)

1. Short title:

- a. These rules may be called the "Rules for Occupation of Inspection Bungalow in-charge of PWD."
- b. These shall come into force at once.

2. Definition : In these rules unless the context otherwise requires -

- a. "**Inspection Bungalow**" means a Bungalow primarily meant for occupation of inspecting officers of. PWD and includes a Rest-shed under management of an officer in Charge of Public Works.
- b. "Competent Authority" with reference to any Bungalow means:
 - i. The DO, if respect of 1. Bs/Rest on of the concerned.
 - ii. The SE in respect of the following Inspection Bungalows:
 - Puri
 - Gopalpur
 - Bhubaneswar
 - Berhampur
- c. 'Day' means 24 hours between 7 A.M. of a date and 7 A.M> of the next date.

3. Purpose of Inspection Bungalows: Inspection Bungalows/Rest sheds are maintained with the primary object of providing accommodation to officers in charge of Public Works while supervising work and travelling on duty. They have prior right to occupy these Bungalows.

Note: Officers below the rank of SDOs are not entitled to occupy these Bungalows without the written permission of the DO in each case.

4. Exclusive occupation by Governor - The Governor and the Chief Minister of Odisha have the exclusive right of occupation of LB. On receipt of notice of exclusive occupation of either the Governor or the Chief Minister, the competent Authority shall cancel reservation, if any, made for the corresponding period in favour of another person and inform him forthwith of the fact.

5. a. Other persons entitled to occupy Bungalow: Other Gazetted Officers of State Govt, Govt Pleader, Public Prosecutors, Other Law Officers of Govt, Members of Parliament, Members of Legislative Assembly of State in the Indian Union or Union Territories, Commissioner of Income Tax, Odisha Post Master General, Odisha, General Manager. Telecommunication, Odisha, Circle, Bhubaneswar, Divisional Manager, South Eastern Railway, Chairman, Paradeep Port Trust, Chief Administrate of Dandakaranya Project, Deputy Director General, N.C.C., Odisha, joint Secretaries and Officers equivalent of higher rank in the GOI, AG, Odisha,



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Collector of Excise and Customs, While touring within the State on official duties, Chairman and Vice-Chairman of Panchayat Samities,. While touring, within their areas, officers and section officers of the office of AG, Odisha and other persons travelling on duty, as may be decided by Govt from time to time, are entitled to occupy I.Bs free of rent, subject-to these rules.

Notes: 1. Chief Justice & Judge of Odisha High Court, Lokpal, Ministers of the State Govt, Advocate General, Chairman and Members of Odisha Public Service. Commission, Vice Chancellors of the Universities and State Guests are also entitled to occupy the Inspection Bungalows on rent free basis.

2. Whenever alternative facilities are available at a station for officers of other Department, they may not ordinarily be allowed to occupy Bungalows and rest sheds maintained by the Department in charge of public works.

b. Officers of State Govt and Gazetted Officers of GOI other than those mentioned in Rule-5(a) above, may be provided accommodation on rent free basis on payment of only service and electric charges subject to availability of accommodation and prior claims of persons enumerated in rule 4 and 5(a).

6. **Accommodation in the Bungalows to the non-entitled persons** - Accommodation in the Inspection Bungalows and Rest sheds is not usually available for the general public but they may occupy the Bungalows provided accommodation is not required by the persons entitled to occupy them.

Explanation - General public means and includes all other persons than those specified in rule 4 and 5 of this rule.

7. **Person suffering from infections or contagious disease, not entitled to occupy the Inspection Bungalows:** No person suffering from infections or contagious disease may occupy any Bungalow.

8. **Control and reservation of accommodation:** (a) (i) Control of accommodation in the Inspection Bungalows/Rest sheds rests with the DO in charge of Bungalows except Puri, Gopalpur, Bhubaneswar and Berhampur for which the SE concerned is the authority for reserving accommodation. Persons requiring accommodation are advised to obtain reservation in advance from the DO or the SE concerned as the case may be Proof of reservation is indicated by production of the DO/SE's orders, a copy of which is also pasted on the Bungalow Notice Board.

(ii) Ordinarily one suit of rooms will be reserved for each visitor.

(b) (i) Officer of the Department-in-charge of Public Works have priority of reservation and occupation, at all time of Inspection Bungalows/Rest-sheds and thereafter reservation of accommodation for Gazetted Officers of other Departments of Govt and for other entitled persons shall ordinarily be made in priority of receipt of request and if received at the same time, in seniority of rank.

Exception: Ministers and other High Officials will have priority in the matter of occupation and are entitled to .occupy two suits.

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- (ii) The SE/DO authorised to reserve accommodation has the right to cancel the reservation without assigning any reason. He should, however and intimation to the Officer concerned by telegram at the earliest opportunity.
9. **Right of occupation** - Any person occupying more than one room, whether reserved or not is required to vacate the other rooms if required by any entitled person.
10. **No. of persons permissible for occupation of a Bungalow:** Parties of more than five persons are not allowed to occupy a Bungalow without the previous permission of the DO or the SE as the case may be. Such permission will only be given when the whole Bungalow can be reserved for the party.
11. **Circumstance under which reservation once made can be cancelled:** (i) When reservation of accommodation has not been made, preference of occupation is to be given to Officers of the Departments in charge of Public Works, on duty, then to the senior ranking gazetted Officer of other Department of Govt and then to other entitled persons. All entitled persons shall have preference over Members of the general public.
- (ii) Whenever an Inspection Bungalow/Rest-shed is occupied without reservation, it shall be vacated when asked for on the above preference, within six hours as between officers of Govt and as between other entitled persons, and within three hours for members of the general public in favour of entitled persons. Exercise of this preference should be made with caution and consideration and not between 6 P.M. and 7 A.M.
- (iii) Any member of the general public who has not obtained reservation of accommodation in an Inspection Bungalow/Rest-shed will be required to vacate after 24 hours' notice by and in favour of any other member of the general public who has obtained reservation.
- (iv) Any person who occupies a suit in a Bungalow when reserved for any other person shall subject to Rules 3 to 5, vacate immediately, if accommodation is required by the Officer or person who has a reservation order.
12. **Period of stay:** No Officer of Govt other than Officer charge of Public Works on duty shall occupy a Bungalow/Rest-shed for a period exceeding ten days and in case of other persons for more than 7 days, without permission from the SE. An Officer of the Department in charge of Public Works may occupy a Bungalow up to a period, not exceeding fifteen days when on duty. Where a Bungalow is required for occupation for a period exceeding fifteen days orders of Govt are required. No private person is allowed to LB. for a period more than seven days.
13. **Manner of use of Inspection Bungalow:** (a) Inspection Bungalows, and their verandahs or compounds are not meant to be used as Court, Kutcheries, or for any purpose involving the gathering of tenants, etc. If for any special reason a Govt Officer requires to do so, permission, in writing must first be obtained either from the SE or from the DO concerned.
- (b) Convening or holding any political conferences or meetings within the Presents of any Inspection Bungalow is prohibited.
14. **Visitor's book:** A visitor's book is kept in each Bungalow. Every person is required to enter his name and designation legibly together with the date and time of arrival immediately on arrival. The date and time of departure should be given at the time of departure under his signature.

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15. **Rate of Rent:** (a)(i) Rent shall be charged for occupation of the following Inspection Bungalows at the rate of Rs. 12 per suite per day or fraction thereof exceeding 3 hours to the member of the general public. (1) Puri, (2) Bhubaneswar, (3) Konark, (4) Barkul, (5) Berharhpur, (6) Gopalpur, (7) Cuttack, (8) Angul, (9) Balangir, (10) Bhawanipatna, (11) Sambalpur, (12) Bhadrak. In respect of other Inspection Bungalows/Rest-sheds rent is payable at the rate of Rs.10 per day, or fraction thereof exceeding three hours by the members of the general public.

(ii) In both the above cases rent at half the above rates will be payable for a stay not exceeding three hours.

(iii) When two persons share a room the rate of rent should be half of the prescribed rent.

Note: 1. For the purpose of calculation, a day shall be taken as a period of 24 hours commencing from 7 A.M. of a date to 7 A.M. of next day and fraction beyond that, over 3 hours shall be taken as one complete day and under .3 hours as half a day.

2. When a Govt servant entitled, to occupy an Inspection Bungalow/Rest-shed free of rent when on duty occupies a suite, of rooms in the inspection Bungalow/Rest shed, while not on duty, he should pay rent at half the rates payable by general public for such occupation. If the period of stay exceeds ten days, rent should be paid at full rates.

3. The ex-legislatures of the Odisha Legislative Assembly and the Ex-M.Ps. of Odisha should pay rent at half the rates payable by general public for occupation in I.Bs/Rest sheds of the P.W.D, If the period of stay exceeds 10 (TEN) days rent, should be paid at full rates, applicable to general public for such occupation.

(b) An entitled person while on duty is not required to pay Bungalow rent for self, his wife and children below twelve years of age; if they accompany him. If the entitled person is not on duty, the rent for self, his wife and children (above twelve years) shall be recovered as per note (2) of sub rule (a).

16. **Rate of Electric charges** - Where Bungalows are fitted with electric lights and fans the main switch thereof will be in charges of Choukidar. The occupants desirous of using electricity will inform the Choukidar as soon as they occupy the Bungalow. The .rent for consumption of correct will be as follows.

(i) From the 15th March to the 15th November at the rate of Rs. 1.50 per day of twenty four hours or part of a day in excess of three hours.

(ii) From the 16th November to the 14th March, Rs. 0.75 per day for twenty four hours or for part of a day in excess of three hours.

(iii) If the period of stay does not exceed three hours, then half of the above will be charged. At the time of leaving the Bungalow, the Choukidar will switch off the electric supply to the suit of rooms occupied by the visitor.

(iv) Whenever Air Coolers are fixed to any suite in an Inspection Bungalow additional service charges at the rate of Rs. 5 per day for non-entitled persons and Rs. 2.50 for entitled persons is payable in addition.

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17. **Rate of service charges:** All persons occupying the Inspection Bungalows/Rest-sheds are required to keep the Bungalow and the crockery, utensil, etc., clean and if they have no servants With them for so arranging, the Bungalow Choukidar should be paid Rs. 0.50 per day of fraction thereof for doing the work.
18. **Fee for pitching tents in the compound of the Bungalow and use of garage:** (a) All persons whether occupying a Bungalow/Rest-shed or not but using the compound for pitching, tents shall be subject to the Bungalow rules. Priority of use of kitchens, out-houses and utensils shall rest with the occupants of the Bungalow.
- (b) All non-entitled persons occupying the Bungalow/Rest-shed and also using the compound for pitching tents shall pay a free of Rs. 5 for every period of 24 hours or part thereof in addition to the Bungalow rent payable by them.
- (c) A fee of Rs. 5 per day or fraction thereof will be charged from non-entitled persons for garaging a car in the absence of the owner.
19. **Recovery of rent for non-occupation:** Persons who do not intend to occupy accommodation reserved for them in an Inspection Bungalow/Rest-shed are liable to pay charges at the rate of Rs. 1 per day, unless, the reservation is cancelled by intimation in writing to the reserving authority 24 hours in advance. In case of private persons full rent shall be charged and recovered.
20. **Manner of payment of rent, service charges, etc.:** (a) Rent recoverable under Rule 14 should be paid to the Choukidar in advance immediately on Arrival failing which occupation of the Bungalow shall be refused. Payment of rent in advance may be made day to day or in a lump sum for the entire, period, of occupation noted in the Visitor's book under rule-14. If in case the Bungalow is vacated earlier voluntarily or otherwise the amount paid in excess of the rent due for the period of actual occupation shall be refunded by the Choukidar and on such refund the Bungalow should be vacated immediately.
- (b) Rent payable by entitled Govt servants occupying Inspection Bungalow/Rest shed when not on duty should be paid to the Choukidar at the rates prescribed in Rule 15 be).
- (c) If the occupant vacates Bungalow/Rest-shed temporarily but leaves any room locked he should be charged rent for this period as if he was in occupation.
- (d) All charges paid to Chowkidar on account of Bungalow rent; electric charges or for replacement of breakages or loss must be clearly recorded in the Visitor's Book before departure. A complaint book is also maintained for recording all complaints of occupants. Any laxity on the part of the Chowkidar or Watcher may be noted in the said book.
21. **Valuation of articles:** A list showing the Valuation of each article in each Bungalow is on view. The recorded price of any article damaged, broken or lost by the occupant or his servants should be at the rates shown in the list to the Bungalow Choukidar or Watcher and recorded the Visitor's Book.
22. **Responsibility for loss to occupant's property:** Govt accept no responsibility for loss or damage to any property of the occupants of Bungalows or Rest sheds.
23. **List of Bungalows and Rest-shed:** A list of Inspection Bungalows and Rest-shed is given in the Annexure.



Appendix VI: Instructions to Regulate Appointment and Conditions of Service of the Odisha Work Charged Employees

1. **Short title, date of commencement and scope:** (i) These instructions may be called the Odisha Work-Charged Employees (Appointment and Conditions of Service), instructions, 1974.
(ii) These instructions shall come into force on such date as may be notified by Govt in the Official Gazette.
(iii) These instructions shall be applicable to those employees whose pay and allowances are debitable to the concerned item of work for which they are employed:
Provided that these instructions shall not be applicable to those employees borne on a regular establishment notwithstanding the fact that their Pay and allowances are charged to the item of work for which they are employed for the time being.
Provided further that these Instructions shall not operate to the disadvantage of any workman who is covered by any Labour Laws or terms of any award, agreement or contract of service and in such event the relevant provisions of such Labour Laws or terms of any award, agreement or contract of service shall be applicable to him.
2. **Definitions :** In these Instructions unless there is anything repugnant in the subject or context-
 - (a) **"Appointing authority"** means -
 - (i) the authority who appointed a work-charged employee before the commencement of these Instructions, or
 - (ii) the authority not below the rank, of EE who is in-charge of execution of the work, or
 - (iii) such other authority as may be notified from time to time by the Govt.
 - (b) **"Approved Service"** means continuous service including authorised leave.
 - (c) **"Chief Engineer"** means a Chief Engineer under the control of any of the Department mentioned in item (g) below.
 - (d) **"Employer"** in case of a work-charged establishment which is treated as in industry for the purpose of Industrial Disputes Act, 1947 means such authority as prescribed by the State Govt or where no authority is prescribed, the Head of the Department concerned.
 - (e) **"Employee"** means work-charged employee.
 - (f) **"Establishment"** means works-charged establishment.
 - (g) **"Executive Engineer"** means an Executive Engineer, under the administrative control of Works Department or Department of Water Resources, Odisha Public Health Engg Organisation, Rural Development Department or Housing and Urban Development Department.
 - (h) **"Government"** means, the State Government of Odisha.
 - (i) **"Head of Department"** means the Government servants mentioned in Appendix - 3 of Odisha Service Code.

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- (j) **"Pay"** means an amount drawn monthly by an employee for the post held by him, in the work-charged establishment and exclude dearness allowance and other temporary additions to the emoluments granted by Government from time to time.
- (k) **"Post"** means a work-charged post.
- (l) **"Prescribed qualification"** for recruitment to any work charged post shall be the same qualifications as prescribed for a corresponding post in the regular establishment. Where there is no corresponding post in the regular establishment, the qualification will be prescribed by the appointing authority.
- (m) **"Skilled employee"** are those employed in posts notified as "Skilled" from time to time by Government.
- (n) **"Sub Divisional Officer"** means a Sub Divisional Officer under the administrative control of any Department mentioned in items (g) above.
- (o) **"Superintending Engineer"** means a Superintending Engineer under, the administrative control of any Department mentioned in item (g) above.
- (p) **"Unskilled Employees"** are employees other than those notified as "Skilled".
- (q) **"Work-charged Establishment"** means an establishment where the pay and allowances of the employees are charged to the item of work which they are employed.
3. **Tenure and condition of appointment:** (1) Work charged Establishment shall consist of employees of two categories, namely (i) those employed for actual execution of work and (ii) those for general supervision of a specific work or of sub-works of a specific project or subordinate supervision of departmental labour, stores and machinery in connection with such work or sub-work. When employees borne on regular establishment are employed on work of this nature, their pay and allowances should be charged direct to the work. If the entertainment of work-charged establishment is contemplated for supervision in connection with any work, the cost should be invariable shown as a separate sub-head of the estimate for that work Pay and allowances of those employed for the actual execution of work should be debited to the concerned item of work.
- (2) The employment of a person appointed under the work charged establishment for a particular work will cease on completion of the work of it can be terminated earlier at any time without assigning any reason.
- (3) The whole of a work-charged employee is at the disposal of Govt and no overtime allowance can be claimed on any account.
4. (i) No person below 18 years and above 28 years of age shall be appointed to the work-charged posts. Provided that in case of Scheduled Castes and Scheduled Tribes the upper age limit shall be 33 years subject to relaxation in exceptional cases by the appointing authority.
- Note:** Of the vacancies 16 percent is reserved for Scheduled Castes and 24 per cent for Scheduled Tribes subject to the conditions that they satisfy the minimum standard of suitability for appointment to the posts.

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- (ii) Retrenched and skilled employees may be given preference for appointment by the appointment authority.
 - (iii) No person shall be appointed either directly or by promotion to a post if he does not possess the qualification and experience required for the post prescribed by the appointing authority.
 - (iv) No persons shall be appointed to a post without a Medical Certificate of fitness from a Medical Officer of the State Govt not below the rank of Civil Assistant Surgeon.
 - (v) The Appointing Authority shall satisfy himself as to the character and antecedents of the persons appointed to the work- charged establishment.
5. **Pay & Increment:** (i) All employees shall be appointed on the minimum of the scale of prescribed for the post.

Provided that in the case of skilled or experienced employees, who was drawing pay at a rate higher than the minimum on the date of appointment under any Govt, Semi-Govt or Public Sector Undertaking or Corporation, the HOD may fix the initial pay of the employee at a higher stage in the time scale by allowing advance increments upto two in the maximum;

Provided further that when the HOD is satisfied that more than two such advance increments are justified he shall obtain prior sanction of Govt in the Administrative Department.

- (ii) Increment in the time scale of pay shall be drawn subject to satisfactory service.
 - (iii) Service in any post carrying higher scale of pay and leave other than extraordinary leave will count for increment in the post held by the incumbent.
6. **Leave and Leave Salary:** (i) Any leave as admissible under these instructions may be granted by the appointing authority.
- (ii) Leave cannot be claimed as a matter of right. When exigencies of public service so require discretion to refuse or revoke such leave is reserved to the Appointing Authority.
 - (iii) Subject to the approval of the SDO a person belonging to the work-charged establishment may avail of casual leave upto a maximum of 10 days in a calendar year. The DO may in his discretion grant special casual leave to an employee up to a maximum of 5 days in a calendar year. Casual leave can be combined with special casual leave of Gazetted public holidays or off days as admissible but the total period of absence of an employee on casual leave, special casual leave, holidays and off days shall not exceed days at a time.
 - (iv) Leave may not be granted to a member of such establishment without production of a Medical Certificate signed by a Medical Practitioner with qualification not less than that of a Civil Assistant Surgeon of the State Govt. It must be certified therein that the applicant is unfit for duty on account of ill health and the period for which leave is recommended must be definitely stated.
 - (v) Leave may be granted to one month for each year of approved .service under Govt, subject to a maximum of three months at any one time. Provided that no leave may be granted unless the applicant has rendered approved service under Govt for at least three years continuously.



- (vi) Leave salary shall be equal to half the pay drawn at the time of taking leave, provided that in the case of a person to whom the Workmen's Compensation Act, 1932 applies the amount of leave salary payable under this clause shall be reduced by the amount of compensation payable under Section 4(1) D of the said Act.
- (vii) Before returning to duty the employee shall be required to produce a Medical Certificate, signed by a Medical Practitioner with qualification not less than that of a Civil Assistant Surgeon of the State Govt stating that he is fit to return to duty.
- (viii) Maternity leave may be granted to women employees upto a maximum of 6 weeks provided that leave salary for the period of maternity leave shall be at the rate equal to half the pay last drawn at the time of proceeding an such leave.
- (ix) The sanctioning authority may not insist on production of Medical Certificate in the case of casual leave, special casual leave or maternity leave.
7. **Holidays:** (i) All employees are eligible for one day off on full pay in a week either on Sunday or on any other day in that week to be reckoned from Monday. They will also be eligible to avail of Second Saturday of each month, subject to the condition that the Officer-in- charge of the work makes subject to the condition that the Officer-in- Charge of the work makes roster arrangement for smooth implementation of the work during this holiday and the ceiling fixed for the plan and non-plan projects do not go up because of an employee availing this holiday. They will further be eligible to avail of gazetted holidays not exceeding fifteen days in a calendar year as declared by the Govt of Odisha every year
- | | |
|------------------------------------|-------------|
| 1. Makarsankranti | - One Day |
| 2. Republic Days | - One Day |
| 3. Siva Ratri | - One Day |
| 4. Muharam | - One Day |
| 5. Holi | - One Day |
| 6. Ganesh Puja | - One Day |
| 7. Biswakarma Puja | - One Day |
| 8. Durga Puja and Dasahara | - Four Days |
| 9. Mahatma Gandhi's Birthday | - One Day |
| 10. Kumar Purnima | - One Day |
| 11. Diwali | - One Day |
| 12. 15th August (Independence day) | - One Day |
- (ii) The work-charged employees may avail of either the first day of May (May Day) or Prathamastami as Optional Holiday.
- (iii) They may also avail of Local Holidays declared by the Revenue Divisional Commissioner concerned.

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8. **Savings:** Employees, whose conditions of service, leave, etc. are regulated by specific enactments like the Industrial Disputes Act or Factories Act shall be governed by the relevant provisions of those Acts. Paragraphs 6 and 7 of those instructions will be applicable only to those employees, who are not covered under specific enactments.
9. **Travelling allowances:** Travelling allowance may be granted to an employee who is transferred in the exigencies of public service. Such allowance shall be limited to actual, travelling expenses, the amount of which shall be determined by the appointing authority, but in no case such actual travelling expenses shall exceed the amount admissible under the Odisha T.A. Rules.
10. **Advances:** The employees may be allowed bicycle and festival advances by the appointing authority at his discretion who will also determine the terms and conditions of such advances according to individual circumstances but in no case such terms and conditions shall be more liberal than those prescribed for temporary Govt servants.
11. **Contribution to Provident Fund:** All employees covered under the Employees Provident Fund Scheme shall contribute regular to the Employees Provident Fund after completing one year of service. Such of the employees who are not covered by the Employee's Provident Fund Scheme shall contribute regularly to the Contributory provident Fund after completion of one year of service.
12. **Maintenance of Service Rolls:** Service Rolls of the employees shall be maintained in the forms as will be prescribed.
13. **Medical Aid:** Free medical aid shall be given to all employees who may also be given reimbursement of the cost of medicines to the extent to be determined by the Appointing Authority in individual cases.
14. **Retirement :** The work - charged employees shall ordinarily be retained in service upto the age of 60 years:

Provided that the work-charged employees can be required by the appointing authority in public growth to retire at any time before attaining the age of 60 years on one month's notice or one month's Pay in lieu thereof.
15. **Gratuity:** The employees shall be allowed gratuity at the rate of half a month's pay for every completed year of service subject to the maximum of 15 month's pay on retirement invalidation except where it is caused by intemperance and death while in service subject to the condition that this concession shall be allowed only to those employees who have rendered continuous service for a minimum period of 10 years. Pay for this purpose shall be the pay last drawn:

Provided that employees whose service conditions are governed by special enactments or labour laws would be entitled to gratuity as provided under such special enactments or laws and not under the above instructions.
16. **Misconduct:** The acts and omissions mentioned below by an Employee shall constitute misconduct and shall punishable under these instructions :
 - (1) Willful in subordination or disobedience either individually or in combination With another or others to any lawful order of a superior.

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- (2) Striking work or inciting others to strike work with another or others in contravention of any law or any rule having the force of law.
- (3) Stay-in strike
- (4) Adoption of slow tacts or abetment or instigation thereof.
- (5) Theft, fraud or dishonesty in connection with the establishment's work or property or property of the employees.
- (6) Taking or giving bribe or an illegal gratification whatsoever including corrupt practices.
- (7) Habitual late attendance
- (8) Habitual breach of any standing orders or any other rules of the establishment
- (9) Negligence or neglect of daily; malingering or sleeping during duty hours.
- (10) Sabotage, or willful damage to or causing loss of the establishment's goods or property or any irresponsible action resulting in damage to any goods or property of the establishment.
- (11) Drunkenness, disorderly, insolent or indecent behavior or any acts subversive of discipline, on the premises of the establishment or at the place of employment or in course of performance of duty.
- (12) Conviction by a Court of law for a criminal offence involving violence or moral turpitude.
- (13) Loitering, during duty hours
- (14) Unauthorised absence from the place of duty
- (15) Acceptance of gifts or presentation exceeding Rs. 20 in value from others exceeding close relations of the family without permission of the head of office.
- (16) Borrowing money from subordinate employees
- (17) Unauthorised use or unauthorised occupation of the Govt quarters or land
- (18) Gambling within the establishment's premises
- (19) Quarrelling and fighting in the establishment's premises
- (20) Smoking in non-smoking areas of the establishment's premises
- (21) Furnishing false information regarding one's name, father's, name, age, qualification, previous service, address, etc. at the time of employment and in the course of normal work.
- (22) Failure to carry out work in accordance with the instructions given by the officers of the establishment or through delegated authorities.
- (23) Hiding away or attempting to hide away any articles or materials, of the establishment.
- (24) Failure to report at once to his superior any defect which the employee may notice in any equipment connected with his work.

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- (25) Refusal to accept charge-sheet, order or any other official Communication issued by a competent authority.
- (26) 'Gherao', 'Dharana', hunger strike, protest, fast and, work to Rule
- (27) Mass casual leave or earned leave.
- (28) Approaching Govt and any higher authority without permission of the appointing authority in connection with the terms of his employment, non-employment, transfer, promotion, denotation or disciplinary action.
- (29) Association with or being a member of any political or communal party or organisation or subscribing in aid of or assisting in any other manner any Political or communal movement or activity.
- (30) Canvassing or interfering or participating otherwise than by voting in election to Parliament, Legislative Assembly or Local Authorities in which he has a right to vote.
- (31) Except with the previous sanction of the head of office, owing wholly or in part, conducting or participating in editing or managing of any newspaper, periodical or publication, radio broadcasts or contributing any article or writing any letter to any newspaper or periodical;
Provided that no such sanction shall be necessary if such contribution to any newspaper or periodical is on a purely literary, artistic or scientific subject and of occasional character.
- (32) Engaging directly or indirectly in any trade or business or undertaking and employment with the exception of honorary work of, a social or charitable nature or occasional work of literary, artistic or scientific character.
- (33) Acquiring or disposing if any immovable property by lease, mortgage, purchase, sale, gifts or otherwise either in his own name or in he any member of his family or a benamidar without the previous sanction of the HOD when any such transaction is conducted otherwise than through a regular or reputed dealer.
- (34) Entering into any transaction by way of purchase, sale or otherwise concerning any property exceeding in value of Rs. 200 otherwise than through a reputed dealer, without prior permission of the head of office.
- (35) Failure to furnish true and complete declaration of assets in accordance, with prescribed instructions.
- (36) Misuse or careless use of amenities provided for him by the establishment to facilitate discharge of his duties.
- (37) Willful absence from duty after expiry of leaved.
- (38) Any other act or omission, which in the opinion of the appointing authority, offends against the norms of decency, normality, discipline or loyalty to the Union or the State Govt.
- (39) Furnishing false information in the application for post on the basis of which he is appointed.
- (40) Joining a lightning strike or acting in furtherance of such a strike.

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17. **Penalties** - (1) The following penalties may be imposed by the appointing authority on an employee for misconduct as defined in Paragraph 16:

- (i) Fine,
- (ii) Censure,
- (iii) Withholding of increments or promotion,
- (iv) Recovery from pay of the whole or part of any pecuniary loss caused to Govt by negligence or breach of orders.
- (v) Suspension,
- (vi) Reduction to a lower service, grade or post or to a lower time-scale or to a lower in a time-scale.
- (vii) Compulsory retirement,
- (viii) Removal from service which shall ordinary di qualification for future employment.
- (ix) Dismissal from service which shall ordinarily be disqualification for future employment.

(2) When the appointing authority is satisfied that there is prima facie evidence or any allegation detailed in paragraph 16 of these instructions against a work-charged employee he shall frame charge of such allegation against the delinquent and shall communicate a copy thereof together with; the copies of the documents, if any, on which the charging for the explanations in writing of the delinquent within a period of not less than 15 days from the date of receipt of such charge.

After due consideration of such explanation as the delinquent may offer the appointing authority may, if he finds the: delinquent guilty of the charge, come to a tentative decision as to the punishment to be imposed on the delinquent and shall issue notice to the delinquent to show cause within a period of not less than 15 days from the date of receipt of such notice as to why the tentative decision shall not be made absolute. After careful consideration of the cause shown, if any by the delinquent, the appointing authority shall take the final decision in the matter of punishment to be imposed on the delinquent.

Provided that if any oral evidence is required to be taken the same shall be taken in presence of the delinquent.

(3) The Services of an employee may also be terminated by the appointing authority in the following cases:

- (a) On his attending superannuation,
- (b) For continuous absence on grounds of ill health for one year or more,
- (c) On an employee being declared medically unfit.

(4) The services of an employee appointed as a substitute against a suspensioner leave vacancy may be terminated at any time during such period by giving 7 days' notice or 7 days' pay in lieu thereof, irrespective of whether the principal employee has or has not returned to duty:



Provided that no such notice or pay in lieu of such notice shall be given when an appointment of a substitute is for a specific period and is terminated in terms of orders of appointment or on the expiry of the specific period of appointment, as the case may be.

(5) The services of employees who are governed by special enactments are liable to be 'terminated' otherwise than by way of punishment, as provided in such enactment in addition to the special sub-paras (1, 2 & 3) above.

Notes: Paragraph 17 - read with section 110-A of Motor Vehicles Act, 1939 - The disciplinary authority adopted an untenable procedure by absolving themselves of the duty to hold an inquiry - Nature of inquiry would vary from case to case depending on the facts and circumstances. The allegation in the facts and circumstances could only be established by adducing evidence, either oral or documentary, in the enquiry - No such attempt was made hence determination of petitioners liability is contrary to law and principles of natural justice - Order of disciplinary authority quashed.

18. **Appeal:** (i) No appeal shall lie against any order made by the appointing authority imposing the penalty of fine or censure.

(ii) Appeal against orders imposing penalties other than those of fine and censure shall lie before the authority next higher to the appointing authority and the decision of such authority shall be final.



Appendix VII: Rules Regulating the Hiring of Tools Plants and Machinery in Public Works Department

(Reference 5.4.11 of Manual)

1. The following rules shall govern the hire of tools plant and machinery to contractors, Govt Department, Local Bodies, etc.

Notes:

- i. The following rules shall govern the hire of tools plant and machinery to contractors, Govt Department, Local Bodies, etc.
 - ii. The term plant and machinery includes motor vehicles, tractors, Earth moving equipment's, road rollers, tramlines, centrifugal Pump, pulsometers, gear driving pumps, hand or power cranes, pile drivers, single acting steam pile hammers and there equipment's, trucks, locomotives and all types of wagons, compressors boring tools Rock drills, Stone, Crusher, Botching Plants, Concrete mixers, Petrol engines, Mortar mills, Concrete buckers, ifumpers, will drilling machine sheep foot Rollers, sand blast antifit, welding machine, Electric light plant, cable way, etc. and any other item classified as such by the Mechanical Engineer in charge.
2. Tools should not be hired out except in special circumstances as they are subject to very heavy wear and tear and can be easily obtained from the local market.
 3. Plant and machinery are acquired primarily for Departmental work and when it can be hired out to contractors only when they are not required for Department work and when the same are required for bona fide use in Govt work entrusted to them.
 4. Plant and machinery can be let out to other Department, local bodies, private bodies and other Govt only when it can be done without detriment to work of PWD. In such cases hire charges will be leviable as indicated in Rule 28.
 5. In addition to the hire charged payment under these, the hire should pay the following incidental charges:
 - a. All charges incidental to the delivery of tools, plant and machinery at the stores, such as handling and packing at the stores;
 - b. Charges if any, for re-erecting the tools, plant and machinery at the stores, on return; and
 - c. The Cost of replacing the missing or broken parts of the tools, plant and machinery hired on or carrying out repairs necessitated by any specific damage thereto.
 6. Plant and machinery will be handed over to the hirer only at the place where they are stored by the Department and on completion of the work, they should be returned by the hirer at his own cost, at the same place or any nearer place as decided by the DO. In no case, the Department will undertake to convey the plant and machinery from the Department Stores to the place where the hirer wants them for use.

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7. In case of electrical equipment hired out, it should be the responsibility of the hirer to make all arrangements for the supply of power to the equipment and observance of all rules and regulations issued by Govt from time to time.
8. The hirer shall be responsible for the safe custody of plant and machinery and shall return them in the condition in which they have been taken over from the Department except the normal wear and tear. The hirer shall also be responsible for all the damages caused to the said plant and machinery so long it was under his custody including the loss or damage in transit until the same is taken over by the Department. The hirer shall be required to take insurance for third party risks where necessary. The liability of the hirer on account of loss or damage shall be determined by the DOs. In case of any dispute the decision of the SE, concerned shall be final, conclusive and binding on both the parties.
9. The hirer shall deposit 2 percent of the capital cost of the plant and machinery in favour of the DO or such sum as may be prescribed by the S.E. (but not less than 2 percent) towards security deposit in shape of N.D.C., N.P.C. etc., or in any other form as approved by Govt from time to time.
10. a. The plant and machinery hired should be inspected at the end of each working season or at shorter intervals according to circumstances by the DO or his authorised representative, to ensure that they are taken proper care of. The hirer shall provide all facilities for the detailed inspection of the plant and machinery and he shall ensure compliance to all the instructions issued by the Inspecting Officer.
 - b. The interval between, such inspections shall in no case exceed sixth months. The DO also sees that plant and machinery are returned without any avoidable delay.
 - c. The hirer shall arrange for periodical servicing and washing of the plant and machinery, as would be indicated in each case. In case of machinery use for concreting works, the hirer shall arrange to get the same cleaned and washed at the close of each operation.
11. The hire charges payable under these rules should be recovered in advance except in cases of contractor entrusted with the execution of works under contract, the recovery may be affected from the running bills.
12. a. In all cases, the period of hire shall count from the date of plant and machinery leaves the stores to the date they are returned thereto even through the same may not have been working for any cause whatsoever except for major break down to be certified by the EE not arising on account of negligence of the party hiring the machine. The hirer should immediately intimate in writing to the DO about the break down and the DO or his authorised representative will inspect the plant or machinery immediately and record the fact in log book.
 - b. The hirer shall arrange the programme of work according to the availability of the plant and machinery and no claims whatsoever will be entertained from him for delay in the supply of machinery and equipment by the Department No compensation shall be paid to the party hiring the plant, etc. for any break down and failure of any machine given on hire.
13. The hire charges shall be fixed so as to cover ownership cost of equipment, operating expenses and the cost of supervision.



Note: Ownership cost includes (a) depreciation and (b) interest charges per annum on the value of machinery. Operating expenses includes (a) Element or repairs charges. (b) Operating and maintenance labour, (c) petrol oil, lubricants (POL) and other consumable and (d) Sundry items, if any.

14. The calculation of hire charges on the above principles is indicated below:

- i. Ownership cost: (a) Depreciation: 50 percent of capital cost of the equipment divided by 40 percent of the life and 40 percent of the cost divided by the remaining 60 percent of the life (10 percent of the cost is earmarked towards salvage value. In case of nonrated equipment's, depreciation at the prescribed percentage of the capital cost will be calculated).

Note:

1. Capital cost includes (a) acquisition cost including freight clearance charges, custom duty and incidental Charges, but excluding cost of initial spares purchased along with machinery (b) Transportation cost to be site of work (c) erection cost of equipment, (d) the cost of auxiliary equipment purchased new or second hand. In case of equipment, procured second hand the cost includes (a) transfers cost, (b) cost of dismantling at the earlier project. (c) transportation charges, (d) cost of re- erections, (e) cost of over hauls and repairs carried out after it is purchased, but before it is put to use, plus the cost of additional equipment's.
 2. If additions or improvement are made to increase the utility or efficiency of the equipment, the Capital cost may be increased by the amount for such modifications.
 3. Depreciation on account of machinery and equipment is to be credited to the depreciation reserve account where such reserve is created.
- ii. Interest charges – Interest on the cost of Machine per annum at the current rate approved by Govt divided by the minimum life either in number of years or number of hours, the machine is expected to work during a year.
 - iii. Operation cost:
 - a. Repair charge – Cost of total repair charges during the life time divided by estimated life hours. In case of plant and machinery where prescribed percentage of the capital cost is to be taken towards repair charges, the same should be adopted for determining repair charges.
 - b. O&M labour – Yearly expenses on labour divided by minimum number of hours the machine is expected to work during a year.
 - c. P.O.L. Cost of annual consumption divided by minimum number of hours the machine is expected to work during the year.
 - d. Sundry item – Cost of annual consumption divided by minimum number of hours the machine is expected to work during the year.
 - iv. Supervision charges – This may be levied at 10 percent of the total charges per hour or per day as the case may be.

**Note:**

1. If the equipment is a tyred equipment, the hourly depreciation of tyres is to be calculated by dividing the cost by the estimated life in hours. Further repair charges of tyres are to be fixed at 15 percent of the depreciation. The hourly cost of depreciation and repair charges of tyres and tubes will be recovered in addition to ownership and operating cost.
2. Quantity and value account of spares purchased for a group of similar machinery etc. have to be maintained to watch receipt and utilisation. Similar account may also be maintained in respect of tyres and repairs expenditure thereon.

Example: Calculation of hire charges of a machine costing Rs. 1,00,000 with an estimated life of 10,000 hours and the repair charges during the life time being 100 percent, O&M labour Rs.2,000 per annum, cost of petrol oil and lubricants Rs.4,000/- per annum, Sundry Rs.400/- per annum and interest charge at 6 percent annum.

i. Ownership Cost

- a. Depreciation per hour $50,000/4000 + 40,000/6000 = \text{Rs.}12.50 + 6.66 = \text{Rs.}19.16$
- b. Interest charges per hours $100,000 \times 6/100 \times 2000 = \text{Rs.} 300$

ii. Operational cost –**a. Repairs cost – Repairs charges**

Per hour during life time $100.00/10.00 = \text{Rs.} 10.00$

b. O&M

Labour (say Rs. 2000 per annum $2000/2000 = \text{Rs.} 1.00$)

c. P.O.L. (say Rs. 4000 per annum) $4000/2000 = \text{Rs.} 2.00$ **d. Sundry (say Rs. 400 per annum) $400/2000 = \text{Rs.} 0.20$** **iii. Supervision charges 10, percent of Rs. 35.36 $\text{Rs.}35.36/3.54 \times 38.90$**

15. i. Ordinarily the working period of a plant and machine may be taken as ten months in a year, the remaining two months being earmarked for necessary overhauling and repairs (a) The monthly hire charges may accordingly to reckoned as $1/10^{\text{th}}$ of annual hire (b) and the hire charges per day at $1/20^{\text{th}}$ of monthly rate, (c) and the hourly rate at $1/7^{\text{th}}$ of daily hire charge,
 - ii. In cases where the estimated life of a plant and machine has been expressed in number of hours and the hire charges have been calculated on hourly basis ab-initio (a) the daily working is limited to a shift 8 hours subject to overall 200 working hours in a month – five days in a month being availed of a holidays on account of Sundays (b) The working period less than four hours and up- to four hours may be considered as shift and more than four hours and up to eight hours, as a full shift work. The minimum hours to be charges in respect of hire on daily basis, weekly basis, monthly basis and yearly basis are 8 hours, 48 hours, 200 hours and 2000 hours, respectively.
16. Working life of machinery and equipment is given in **Annexure I**

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17. In cases where it is not convenient to recover the running charges and cost of services, of operation staff separately, the same should be included in the calculation of hire charges.
18. The hire rated should be reviewed and revised at least once in two years in keeping with the latest borrowing rate of Govt and the average maintenance charges of each class of machinery currently incurred.
19. A log book and a history sheet in the prescribed form should be maintained for each individual plant and machinery for keeping a complete record of the hours of daily work and the details of the periodic maintenance as is, necessary for the plant and machinery. The entries thus made shall be attested by the party hiring. In case of any dispute between the Departmental supervisor and the hirer in the matters connected thereof the decision of the DO shall be final conclusive and binding on the hirer.

An extract of the log book in duplicate should be furnished by the subordinate on the 5th of every succeeding month to the SDOs for assessing and recovering the current amount of hire charges from the party concerned. The SDO after necessary scrutiny of log book extract should take steps for recovering correct amount of hire charges at the prescribed rate.
20. Ordinarily no plant and machinery shall work for more than 8 hours a day inclusive of recess. In case of an urgent work, however, the DO may at his discretion, allow the plant and machinery to work for more than the normal period of working hours. For working out hire charges for over-time, a period of half an hour and above will be treated as one hour and a period of less than half an hour will be ignored.
21. In case where the hirer is required to bear the running charges separately, fuel of approved type firewood, kerosene oil, etc. shall be arranged by the hirer. Failure to use the approved type of fuel would make the hirer liable for any damage that may be caused to the plant and machinery.
22. The hirer shall give the DO, a requisition in writing applying for hire or plant and machinery and shall sign the agreement in prescribed form.
23. The hirer shall maintained check and control reports in the prescribed form which shall be produced when needed by the DO his authorised representative during the period of inspection.
24. The plant and machinery, once issued shall not be returned by the hirer on account of lack of arrangement of labour and materials on the part of the hirer. The same will be returned only when, in the opinion of the DO the work or part of the work for which the same was issued is complete.
25. Cost of plant and machinery lost or rendered unfit due to mishandling shall be made good to Govt. Cost of repairing any damage to such plant and machinery due to rough use or careless handling shall be to the hires account. Such amounts, if not paid in, case, shall be recovered along with hire charges from the dues that may be due or become due to the hirer for Govt or out of fixed deposit securities that may be pledged with Govt or under Public Recovery Act, 1962.
26. Hire of Small Tools In case of urgency small tools may be hired to a contractor/piece worker provided such tools and required for less than a week. In such case hire charges should be charged at the rate of 4 percent of the original cost of the tools for the entire period.

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27. Hire of Departmental Vehicles – Shall be as per rules of OPWD.
28. Hire of plant and machinery for private use – When plant and machinery are let out on hire to private parties or contractor for use on works other than Govt works, the rate charged shall be 125 percent or the hire rate charged for such plant or machinery.

ANNEXURE – I**Working Life of Machines on Roads and Building Projects**

Sl. No.	Name of Machine	Working life in hours
1	2	3
1.	Road Rollers (Britania-Road Marshal) 8-10 Tons capacity equipment	18,000
2.	Truck mounted water tankers of 4500 lit. capacity	1,00,000
3.	Tractor (40-50 HP)	12,000
4.	Air compressors 815 C.F.M.	10,000
5.	Air compressors 210 C.F.M.	
6.	Tandem Road Rollers 4-6 Tons Capacity	18,000
7.	Trucks up to 5 Tons Capacity	1,50,000
	Trucks above 5 Tones Capacity.	2,00,000
8.	Diesel driven pumping set 5 H.P.	10,000
9.	Bitumen Boilers 250/300 Gallon (Directly charged capacity to works)	
10.	Diesel generating set 15 K.W.	12,000
11.	Ordinary vibrator (Impression)	8,000
12.	Diesel driven pumping set 10 H.P. and above	12,000
13.	Diesel winches 3-5 Tons capacity	15,000
14.	Concrete Mixers 10/7 Cft.	8,000
15.	Stone crusher 400 mm X 225 mm size, 10/12 Tons/hr. capacity.	10,000
16.	Granulator 300 mm X 175 mm size, 4/5 tones per Hr. capacity.	
17.	Diamond core drilling machine -	12,000
18.	Road Rollers (Agrind Moore) 8-10 Tons.	18,000
19.	Tractor Dozer, Rubber- Tured 140 H.P. and above	12,000
20.	Motor-Grader,3.6 m and above	15,000

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Sl. No.	Name of Machine	Working life in hours
1	2	3
21.	Grab dredging crane, Diesel operated (3/4 ctd. And 1 ½ cyd.)	15,000
22.	Mobile Crane (5 tons)	
	Mobile Crane (10 tons and above)	
23.	Motorised scraper 9-13 cyd.	12,000
24.	Towed scraper 9- 12 cyd.	15,000
25.	Pusher (crawler tractor) 108 HP	12,000
26.	Soil Stabilisers 4" to 7 ft. tons our capacity	12,000
27.	Bituminous Hot Mix Plant, 25 tons hour capacity	15,000
28.	Paver Finisher, 100 ton/hr. capacity	15,000
29.	Chip spreaders capable of spreading 3/8" to 3/4" size chips.	15,000
30.	Bitumen Pressure Distributors (1000 Gallons)	15,000
31.	Rear Dumpers 9/11 cyd.	10,000
32.	Bitumen mixers 8 – 10 Tons Cap	10,000
33.	Mechanical brooms	10,005
34.	Pile driving equipment	15,000

**Appendix VIII: Instruction regarding Storage, Transport and Use of Explosives**

(Reference Para 5.4.12 of Manual)

1. The rules to regulate the possession, sale, etc. of explosives are laid down in the Explosives, Rules 1940, published by the GOI, Department of Labour, with their notification No. M, 1217 (1), dated the 30th November 1940.
2. Four ordinary blasting purposes only Gunpowder, Gelnite, Gelatin, Detonators, Detonating Fuse and Safety Fuse may be kept in a licensed magazine built for the purpose, in conformity with the Explosive Rules, 1940.
3. The purpose and use of high explosives other than the Nitro compounds commonly used for blasting purposes require the prior Sanction of the CE.
4. Explosive should always be stored in a 'Licensed' magazine (licensed under Explosive Rules, 1940). An explosives magazine is an isolated building comprising of a main room and lobby of at least 5' (152 cm) wide and detonator room (specimen plan of which is given in detail in the Explosive Manual which is a GOI, (priced publication). The DO desiring to store explosives should submit, in the first instance, the following documents, the Chief Inspector of Explosives in India, Nagpur through the Zonal inspectorate of explosives under the Department of Explosives, GOI.
 - (a) An application in form 'C' showing therein the kinds and quantities of explosives, duly filled in and signed;
 - (b) A signed statement in form 'D' (distance form);
 - (c) Six copies each of site and construction plan of the magazine drawn to scale, in ink on thick durable paper preferably in ferro paper. Site plan should show the position of the magazine relating to all the 'protected work' described in form 'D' construction plan should show all the details given in the specification.
 - (d) A treasury receipt in original should also be enclosed showing a credit under the Central Head of account "XXI-Misc. Department receipt under Explosives Act Other Collections", the amount of which will be intimated to him by the Explosives Department on receipt of the Application form 'C' from him.
5.
 - (a) The dimensions of the magazine should be so kept as to provide a floor space of 2 sq. metres per thousand Kg. of explosives and the floor of the magazine should be plastered smooth with cement, a magazine building should be constructed of brick masonry.
 - (b) The Nitro-compound, Gunpowder, Detonating Fuse and Safety Fuse may be stored in the same room. But Safety Fuse should normally be stored in a "recess", separately built in the lobby as shown in the 'type' plan. The detonators should be stored always in a separate room or annexe, exclusively meant for them. Detonators should never be stored along with other explosives. The detonator annexe masonry wall should not be less than 60 cm. wide masonry wall and 152 cm. of air space intervenes between any detonator annexe and the main magazine room and there should not be any direct communication with or a doorway leading to the main magazine or lobby.

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- (c) Precaution caps and safety carriages should not be stored in a High Explosives magazine, Caps may be kept in a proper place as per Arms Rules.
6. (a) Where explosives have, to be kept away from the main magazine, portable magazines of approved type (approved by Chief Inspector of Explosives) shall be installed, as detailed below.
- (b) Portable Magazines - For carrying out site work such as blasting in connection with some project work. Explosives Department has approved use of portable steel magazines fabricated by some manufacturers, viz. M/s. Industrial Explosives Ltd., Nagpur and M/s. Narendra and Co., Dehradun of capacity not exceeding 225 Kg. of nitro-compound explosives or 2,500 Nos. electric detonators under the following conditions:
- (i) The duration of licence for these portable magazines will not, normally, exceed 6 months at any one place.
 - (ii) The land around magazines upto 15m should be surrounded by barbed wire fencing.
 - (iii) The magazines should be protected from weather by a shade of tarpaulin or any other suitable material.
 - (iv) The magazine should be kept under guard 'day and night' and in accordance with the directions of the District Authority.
 - (v) The portable magazine must not be shifted from one place, to another without 'Written prior' approval of the C.I.E.

Use of Explosives

A licence to possess explosives does not authorise use of explosives for carrying out blasting. A licence in form 'N' of the Explosive Rules is to be obtained from the District Authority for carrying out blasting at the site in question. A separate licence in form "N' is required to be obtained for each location of blasting. It should also be noted that possession of a licence in form 'N' does not authorise possession of explosive unless a separate licence for the purpose is obtained.

Transport of Explosives

- (1) Explosives cannot be transported, even in small quantities, in any private car, taxi, jeep, lorry bus or any other mechanically propelled vehicle is not of a type approved by the C.I.E.
- (2) Up to 1,000 Kgs. of explosives can be carried in a non-mechanically propelled vehicle, like animal draws cart under the escort.
- (3) Mechanically propelled vehicle for transport of explosives should conform to the specification to be supplied by the Explosives Department and finally approved by them.
- (4) Transport of small quantity of explosives in specially approved transport boxes are sometimes allowed by the C.I.E. subject to some stipulated conditions, for which C.I.E. in India should be contracted.
- (5) Under no condition should explosives left unused at the close of each day be left in the explosives van or transport boxes (specially approved by the C.I.E.). All unused explosives should be brought back at the close of each day to the licensed magazine and kept there. Normally blasting operations should not be carried out at places beyond 30-40 Kms. of a



storage magazine from which supplies of explosives are drawn each day. In case one wishes to operate over a wider area it is advisable that they should have a central magazine of adequate capacity and a number of field magazines (portable magazines) scattered over the area which serves the area lying within 30-40 Kms. around it. It is also advisable to provide explosives van-which should be built on jeep chasis for carrying explosives from central magazine to the field magazines. It should, however, be noted that transport of detonators, along with any other explosives in the same van is strictly prohibited.

(6) A licence in form 'G' of the Explosives Rules, 1940 for the transport of explosives from one area to another even in the same district should be obtained from the concerned District Authority by submitting a simple application giving therein the name of the place from and to which explosives are to be transported together with a fee of Rs. 5.

(7) Every consignment of explosives transported under a licence in form 'G' has to be covered by a form 'H' pass issued by the holder of the transport licence as detailed in the Explosives manual.

The quantity of explosives to be stored in a portable magazine must not exceed the prescribed explosives limit of the portable magazine.

7. (a) Registers for main or portable magazines will be maintained by the S.D.O. or P.W.D. Subordinate in charge showing

1. the stock in hand of explosives;
2. the amount issued and the date of issue;
3. the name of the contractor or workmen to whom the explosives has been issue and the work for which the same is issued.
4. the balance in hand after each issue to be recorded. Each transaction will be initialed and dated by the S.D.O. or the subordinate in charge. Entries in the register must be made daily immediately after each transaction.

(b) Any explosives not used during the day's work shall be returned to the magazine or portable magazine by the officer-in-charge before leaving the work.

8. Before issuing any explosives the S.D.O. or P.W.D. subordinate in-charge of the work shall, if the locality of the operation is within easy distance, satisfy himself personally or by a reliable agent (short firer) of the number of holes, the depth of each hole and the number and quantity of explosives actually necessary, record the same and limit the supply accordingly. For distant localities, the number of holes proposed to be made must be ascertained and supplies made accordingly. Number of holes per blasting should be restricted as per condition 4 of the 'N' from licence (licence for carrying out blasting) granted by the District Authority.

9. The maximum quantities of explosive issue at one time will be regulated as follows according to the distance of the place of work from the magazine:

- (a) Within a radius of 8 kilometers for one day's use
- (b) Within a radius of 8 kilometers for two day's use



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- (c) Beyond 8 Kms. for one week's use
 - (d) Over 32 Kms. for such period as may be allowed the E. E. subject to a maximum of one month's consumption.
10. (a) The locks of the magazines and detonator annexe and also of the portable magazines mentioned in Rule 6 shall be such that they cannot be opened by the same key.
- (b) The keys must never leave the custody of the S.D.O. or P.W.D. subordinate in charges who must be present to unlock and lock the doors when any explosives are issued or returned.
- (c) The duplicate keys must remain locked up in the divisional safe and must only be removed therefrom when the original keys is lost or for any other good reason within the approval of the E. E. When the original key of a block is lost the existing lock should immediately be replaced by a new lock.
11. In case where it is necessary to ensure contractors with explosives they must possess of magazines licensed under the Explosives Rules, 1940 and keep a register in the form mentioned in Rule 7 and so report at the close of each operation the number of charges exploded, the number unexploded, if any, and to carry in writing that they have no balance, in hand. Before being entrusted with explosive contractors will be required to sign a declaration to the effect that they will give a full and true account of the explosives issued to them and the quantity used, the number of charges exploded, the number unexploded and the balance in hand at the close of each particular, operation and that they will render themselves liable to punishment, unless such balance is returned to the P.W.D. subordinate in charge immediately after the close of each operation. They must also be made to understand the explosive are allowed to be kept only by persons duly licensed to possess them and that unless they hold a licence and comply with the conditions thereof they render themselves liable to criminal prosecution.
12. (a) The EE, will personally inspect and check the register mentioned in Rules 7 and 11 above are frequent intervals; these inspections being as far as possible in the nature of surprise checks. Any irregularities found are to be immediately reported to the S.E.
- (b) SEs will also bring to notice any irregularities and make suggestions for their prevention or removal.
- (c) be made by the EE-
- (i) For magazine at Divisional and Sub-divisional headquarters stations once every six months.
 - (ii) For explosives kept in portable magazines, vide
- Rules 6 and 7-Every time he inspects a work in progress on which explosives are being used.
13. Explosives and register of explosives should be always open to inspection by the District Magistrate and the Superintendent of Police and Officers of Explosives Department, GOI, and other officers authorised under Rule 106 of the Explosives Rule, 1940.
14. A copy of the general rules to be observed in magazine is given in Annexure 1.
15. A copy of the precautions to be taken in using explosives is given in Annexure 2.



ANNEXURE - 1

General rules to be observed in Explosives Magazines

1. The magazines must be at all times kept scrupulously clean.
2. No unauthorised person is at any time, to be admitted into the magazines.
3. The licenses of person in charge of the magazine are to take care that the magazine is well and securely locked.
4. The magazine is on no account to be opened during or on the approach of, a thunderstorm, and no person should remain in the vicinity of the magazine during such storm.
5. Magazine shoes without nails must be kept at all times in the magazine and a wood tub or cement trough, about one foot high and eighteen inches in diameter, filled with water is to be fixed near the entrance doors of the magazine.
6. Any one wearing shoes, on entering the magazine, must put on the magazine shoes provided for the purpose, and be careful:
 - (a) not to put their feet on the clean floor unless they have on the magazine shoes;
 - (b) not to allow the magazine shoes to touch the ground outside the clean floor; and
 - (c) not to allow any dirt or grit to fall on the clean floor.
7. Anyone with bare feet will, before entering the magazine dip his feet in the water kept in the water pit or cement trough provided at the entrance of the magazine and then step direct from the tub over the barrier on the clean floor inside the magazine building.
8. A brush or broom is to be kept in the lobby of the magazine for cleaning out the magazine on each occasion it is opened for the receipt, delivery or inspection of explosives.
9. Neither lights nor smoking are to be allowed inside or near the magazine.
10. No person, having any matches or article or iron on him is to be allowed to enter the magazine.
11. Oiled cotton rags and waster and any articles liable to spontaneous ignition must not be taken into the magazine.
12. No tools or implements other than those of copper, brass, gunmetal or wood are to be allowed inside the magazine. Tools must, only be used with great gentleness and care.
13. Boxes of explosives are not to be thrown down or dragged, along the floor and should be stacked on wooden trestles. Where there were white ants, the legs of the trestles should rest in shallow copper, lead or brass containing D.D.T. Benzene, Hexa Chloride or Creosote.
14. Empty boxes or any loose packing materials are not to be kept in the magazine.
15. The following are to be hung up in the lobby of the magazines:
 - (a) A copy of these rules
 - (b) A copy of the licence
 - (c) Certificate showing the last date of testing of the lightning conductors.



ANNEXURE -2

Precautions to be taken in using Explosive

I. The short firer

- (a) Any person in charge of shot firing, hereafter mentioned as the authorised short firer, shall show to the owner or manager of the working that he understands the rules herewith laid down and the authorised short firer shall be held responsible for any accident that may occur.
- (b) He shall be authorised in writing by the owner or manager of the working.

II. Short preparing room (Priming station)

In the case of quarries or prospects only:

- (a) If charges are not prepared by a special short prepare then, the authorised shot firer shall himself prepare them.
- (b) The fittings of fuse to detonators and detonators to cartridges shall be done in small clean room also called priming station constructed of aluminum or cement asbestos sheets in which no other persons than the special short papers referred to or authorised shot firers shall be allowed. This priming station shall not be located within 60 metres from the blasting site or within 15 metres of any track, road or powers cable. Man limit should not exceed 4 at any one time.
- (c) There should be no unwarranted accumulation of explosives in this station.
- (d) Priming station shall be kept locked when unattended.
- (e) The special short preparer shall show to the owner or manager of the working that he understands his duties and the rule herewith laid down, and he shall be duly authorised in writing by the owner or manager.

III. Transport of explosives to the priming station

- (a) Transport of explosives from the magazine to the priming station shall not be done, except, in day light and in the original wooden packing case. The quantity of explosives transported at and one time to the site of blasting shall not exceed the actual quantity required for use for one round of shots. The explosives shall be transported to the site of blasting not more than 15 minutes before commencement of charging of the holes.
- (b) Explosives shall be transported from the magazine to the priming station or the site of blasting as head load by human agency or animal back properly manned.
- (c) Cartridges shall not be carried from the magazine to the short preparing room in the same receptacles as the detonators separate carrying receptacles for each type of explosives shall be provided. A receptacle shall consist of a secure case, canister or bag.
- (d) In the quarries not more than 2.5 Kg. of explosives shall be served from the short preparing room to each authorised shot fired.

**IV. Short preparing**

- (a) Sawdust shall be cleared from the inside of the detonator; this can be done by tapping the open end gently. No hard substance or metallic rods or wire shall be inserted into the detonator.
- (b) The safety fuse shall be cut squarely across and after insetting in the detonator it shall be fixed by means of the nippers only.
- (c) The explosive cartridge shall be opened at one end and a suitable hole for receiving the detonator shall be made with a copper, wooden or bone, pricker. The detonator shall be inserted into this hole so that the detonator is completely encased in the blasting cartridge and so secured that in loading no tension will be brought on the wire or on fuse at the point of entry into the detonator.
- (d) The safety fuse just above the detonator shall be securely tied in position in the cartridge.
- (e) Only waterproof fuse shall be used in wet or dam holes.
- (f) If there is water present or if the borehole be damp, the junction of the fuse and detonator shall be made water tight by means of a stiff bituminous compound.

V. Charging the hole

- (a) Bore holes shall be of such a size that cartridge can easily pass down them. All debris shall be cleared from inside a borehole before cartridges are inserted.
- (b) Boreholes shall be charged by or under the direct supervision of an authorised shot fired.
- (c) Only wooden tamping rods or wooden taping rods provided with a smooth copper head on non-sparking alloy shall be need in charging holes. The tamping rods shall not be a pointed but shall be cylindrical throughout.
- (d) One cartridge at a time shall be inserted and gently pressed home with the tamping rod.
- (e) No smoking or steam locomotive shall be allowed near the place where short firing is being carried out during the time allotted to loading and short firing.

VI. Warning to be given before firing a blast

Immediately before firing a blast due warning shall be given by whistle, bugle or gong and the authorised shot firer shall see that all persons occupied at work on other groups of holes in the vicinity have retired to safety.

VII. Firing a blast

In the case were shots are fired by safety fuse the safety fuses of the charged holes shall be lighted by the authorised shot fired in the case where shots are fixed electrically -

- (a) The exploder shall not be connected to the shot firing table until the warning above has been given and all persons have retired to safety.
- (b) The authorised shot firer himself only connect the exploder to the short firing table, and fire the blast.



- (c) He shall, if he requires to leave the exploder, whether during or after a blast disconnect the exploder from the short firing table and removable it to a place of safety.

N.B. - All the conditions of. 'N' from license should be rigidly followed while blasting.

VIII. Inspection after the blast

- (a) After the blast the unauthorised short firer shall carefully inspect work and satisfy himself that all charged holes have been explode.
- (b) In case of misfire, no one shall approach for at least half an hour when firing electrically, when the authorised short fire shall first examine the same and at once work a red cross over the hole thus.

IX. Procedure in case of misfire

- (a) No person shall disturb/rack out a hole that has once been charged on attempt to withdraw charge either before firing or after a misfire or deepen or tamper with holes or sockets left after blasting.
- (b) When a misfire occurs a portion of the tamping may be sludged out with compressed air and water or water only under pressure, but no kind of tool shall be used for this purpose and the hole shall thereafter be reprimed and fired or alternatively and preferably.
- (c) A new hole be drilled not less than 12 inches from misfired hole and care shall be taken that the new hole is drilled in such a direction that there is no danger of touching the unexploded charge. This new hole shall be bored in the presence of the authorised short firer and fired.
- (d) The authorised short firer shall be present during operations undertaken for the removal of debris liable to contain unexploded explosive near the misfired hole. A careful search amongst the debris shall be made for cartridges and detonators.

X. Report on misfired holes

- (a) The authorised short firer shall at once report to the officer or manager cases of misfire, the cause of same and what steps were taken in connection therewith.
- (b) If a misfire has been found to be due to defective, fuse, detonators or explosive, special notice shall be sent to the office so that the whole quantity or box from, which the defective articles were taken, can be inspected.

XI. Notification of misfires to oncoming shot firer

In the case of quarries, before leaving his work the authorised short firer shall inform the authorised shot firer of the next shift relieving him of any case of misfire and shall point out/marked the position of the Red Cross denoting same, also stating what action, if any, he has taken in the matter.

Explosives Do's and Don'ts, Instructions and Warnings for Consumers - Transporting, Storing Handling and Using Gunpowder, High Explosives and Detonators prevention of Accidents in the use of Explosives



The prevention of accidents in the use of explosives is a result of careful planning and observance of the best known practices. The explosives user must remember that he is dealing with a powerful force and that various devices and methods have been developed to assist him in directing the force. He should realise that this force, if misdirected, may either kill or injure both him and his fellow workers and also property may be damaged.

Warning

All explosives are dangerous and must be handled and used with care either by or under the direction of competent experienced persons. It is the responsibility of all persons who handle explosives to know and to follow all approved safety procedures.

It is obviously impossible to include warnings for approved methods for every conceivable situation. A list of suggestion to aid in avoiding the more common causes of accidents is set forth here.

Definitions

1. The term 'Explosives' as used herein includes any or all the explosives listed in the list of Authorised Explosives, published by the Chief Inspector of Explosives in India, from time to time, in the Gazette of India.
2. The term 'detonator' used herein means both plain and electric detonator.
3. The term 'primer' as used herein means and a cartridge of explosive in combination with a plain or electric detonator.

A. Transport of Explosives

Do's: Do obey all Union, State, Union Territory and local laws and regulation.

Dont's: Don't transport any other material with explosives packages.

Do's: Do see that any mechanically propelled vehicle used in transporting explosives has been approved by the Explosives Department.

Dont's: Don't allow smoking or unauthorised or unnecessary persons in the vehicle.

Do's: Do load and unload explosives very carefully. Never throw or drop explosive packages from vehicle.

Dont's: Don't conduct any operation of loading, unloading and handling of explosives between sunset and sunrise.

Do's: Do see that detonators of any kind (ordinary or electric) are not transported in the same vehicle with any other kind of explosives.

Dont's: Don't drive the containing explosive through populated and built up areas markets, etc. without specific sanction of the competent authority and never park it near such places.

Do's: Do see that repairs to a vehicle are not undertaken with explosives therein.

Do's: Do see the explosives packages not in open carts are covered with tarpaulin.

Dont's: Don't refuel the vehicle with the load of explosive in.



B. Storage of Explosives

Do's: Do store explosives in accordance with Union, State, Union Territory or Local Laws and regulations.

Do store explosives in a Magazine hence under the Explosives Rules.

Dont's: Don't smoke or have matches, or any source of fire or flame in or near the magazine.

Don't allow grass, brush, weeds or empty boxes to accumulate within 25 feet of the magazine.

Do's: Do see that the different kinds of explosives in the magazine are stored strictly in accordance with the condition of licence. Never keep detonators with any other explosives.

Dont's: Don't use the tools and implements made of iron or sparking materials for opening the explosives cases.

Do's: Do see that deteriorated or date expired explosives are not disturbed or used. The Manufacturer or the Explosives Department should be consulted without losing any time for their disposal.

Dont's: Don't open explosives in the magazine. Don't open magazine between sunset and sunrise.

Do's: Do see that primed or misfired cartridges are not kept in the magazine. The misfired explosives should be destroyed on the same day by an experienced blaster operating the blasting.

Dont's: Don't keep magazine unguarded at any time. Don't allow children, intoxicated or unauthorised person in or near the magazine.

Do's: Do enter all receipts and issues of explosives in the stock register but never keep the stock register inside the magazine.

Dont's: Don't stock explosives packages haphazardly on floor. Keep old stock separately and use it first and take care in stocking nitro compound explosives so that marks can always be read without moving any package.

Do's: Do keep the Magazine interior and floor always clean, neat and tidy and free from dirt.

Dont's: Don't issue fresh stock until old stock is exhausted.

C. Use of Explosive

Do's: Do replace or close the cover of explosives case or package after using.

Dont's: Don't use iron, steel or other sparking metal tools to open explosives cases.

Do's: Do follow all mining regulations if that place of use comes under Mines Act.

Dont's: Don't smoke or have matches or any source of fire or flame when explosives are being handled or used.

Don't carry explosives in the pockets of your clothing or elsewhere on your person.

Don't insert anything but fuse in, the open end of a plain detonator.

Don't tamper with, or attempt to remove or investigate the contents of plain or electric detonator or try to pull the wires out of an electric detonator or safety fuse from a plain detonator.



Don't allow children or intoxicated unauthorised or unnecessary persons to be present where explosives are being handed or used.

Don't handle, use or be near explosives during the approach or progress of any electrical storm. Retire to a place of safety.

Don't use explosives or accessory equipment that obviously deteriorated or damaged.

Don't try to soften handed explosives cartridges by heating over fire by rolling them on ground or hard surface.

Don't break an explosive cartridge.

D. Preparation of the Primer

Do's: Do make up primers in accordance with proved and established methods. Make sure that the detonator shall is completely encased in the cartridge and so secured that is loading no tension will be placed on the wire of fuse at point of entry into the detonator. When side priming a heavy wall or heavy weight cartridge, wrap adhesive tape around the hole punched in the cartridge so that the detonator, cannot come out.

Don't's: Don't make op primers in a magazine, or near excessive quantities of explosive, or in excess of immediate needs,

Don't force a detonator into cartridges. Insert the detonator into a hole made in the cartridge with a punch (non-ferrous alloy) suitable for the purpose.

E. Before and After Firing

Do's: - Take all action carefully.

Don't's: Don't fire a blast without a positive signal from the person in charge, who has made certain that all surplus explosives are in safe place, that all person and vehicles are at a safe distance or under sufficient cover, and that adequate warning has been given.

Don't return to the area of any blast until the smoke and fumes from the blast have been dissipated.

Don't attempt to investigate a misfire too soon. Follow recognised rules and regulations or if no rules and regulations are in effect wait at least 30 minutes.

Don't drill, bore or pick out charge of explosive that has misfired. Misfires should be handled only by or under the direction of a competent and experienced person.

F. Disposal of Explosives

Do's: Do dispose of or destroy explosives in strict accordance with approved methods. Consult the manufacturer or the department of explosives, for the disposal of the same.

Don't's: Don't leave explosives empty cartridges, boxes liners other material used in the packing of explosive lying around where children or unauthorised persons or livestock can get at them.

Don't allow any wood paper or any other materials employed in packing explosives to be burnt in a stove, fire place, or other confined space or to be used for any purpose. Such materials should be destroyed by burning at an isolated location out of doors and no person should be within 100 feet from the place of burning.



Appendix IX: Rules for Condemnation of Departmental Motor Vehicles and their Disposal

(Reference Para 5.4.13 of Manual)

1. The question of condemnation of motor vehicles in the Govt offices is to be taken up only when the vehicles have outlived their utility or are not fit for economic repair.
2. The authorities competent to order condemnation are as follows:
 - (i) **Secretary to Govt** - In respect of vehicles in the Secretariat and in the subordinate or attached offices not under a head of Department.
 - (ii) **Heads of Departments** In respect of vehicles in the Office of Head of Departments in the subordinate offices.
3. The power should be exercised in respect of following types of vehicles provided they have completed the minimum, life period as well as the kilometers run as indicated below:

Sl. No.	Type of Vehicles	Minimum life	Minimum Kilometer run
1	2	3	4
1.	Cars, Jeeps, Station Wagons, Pick – up Vans	10 years	2,00,000 Kms.
2.	Departmental Trucks (other than T.M.B. and Leyland Vehicles)	8 years	2,50,000 Kms.
3.	Departmental Trucks (T.M.B. Vehicles)	10 years	3,50,000 Kms.
4.	Departmental Trucks (Leyland Vehicles)	10 years	4,00,000 Kms.

Where the conditions specified in this rule are not satisfied, the matter should be referred to Finance Department.

4. Before condemning a vehicle the Officer-in-charge of the vehicle should furnish the following information as far as possible to the Motor Vehicle Inspector any other technical officer of the department nor below the rank of Class-II having degree in Mechanical Engineering and with their recommendation submit the proposal for condemnation to the Secretary to Govt or the HOD concerned, as the case may be -
 - (i) Number and type of the vehicle
 - (ii) Year of purchase
 - (iii) Cost price
 - (iv) Period of Service rendered
 - (v) Kilometers run
 - (vi) Amount spent on repairs and the Kilometers run during the last three years.
 - (vii) Whether engine was overhauled or replaced and if so, when

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- (viii) Whether there was any major damage to the vehicle and if so, when
 - (ix) Present condition of the vehicle.
5. The competent authority as mentioned in Rule 2, after consideration of the recommendations should fix the approximate reserved price of the vehicle in case it is condemned.
 6. After final orders are passed by the competent authority for condemnation of the vehicle, publicity is to be given at least in two newspapers of the State not less than one month before the actual date of auction. Provisions should be made in the advertisement for inspection of the vehicle by the intending bidders at least one week prior to the date of auction. The bidding is to be conducted by a Class I officer to be authorised by the competent authority, in each case.
 7. (a) On completion of the auction bid is to be confirmed by the officer conducting the auction, in respect of all vehicles the bid does not fall below the price fixed, by the competent authority where the bid amount is less than the price fixed, the HOD or Secretary to Govt, as the case may be may confirm the bid at his discretion within 15 days from the date of auction.
(b) The officer who conducts the auction shall record complete information in his own hand about all bids, offered.
 8. (a) The highest bidder should deposit earnest money not less than 25% of the total bid amount on the spot and pay the balance within a period not exceeding 15 days from the date, he is intimated that his bid has been confirmed. The acceptance of the bid by the competent authority must be conveyed in writing to the bidder. If the bidder does not make full payment of the bid amount within the specified time, the earnest money deposited by him will be forfeited and the vehicle sold by fresh auction. The vehicle should be made over to the bidder only after full payment is made. The sale proceeds shall be deposited into the Treasury under the appropriate head of account of the concerned department.
(b) The auctioned, vehicle must be removed from the site by the bidder within 7 days from the date of depositing the full value of the bid money. But it will be the responsibility of the bidder to look after the vehicle at his own expense and the Department will not be responsible for any damage done by way of pilferage or otherwise and no claim on this account shall be entertained.
(c) In case the vehicle is not lifted within the prescribed time limit, ground rent at the rate of 10% of the bid amount for each day of delay will be charged. In case the ground rent exceeds the sale price deposited, the purchaser will cease to have any right on the auctioned vehicle. The amount deposited towards sale price will be adjusted towards the ground rent and the vehicle will become the absolute property of Govt and disposed off by fresh auction.
 9. It should be made clear in the notice while advertising the sale of vehicles by auction that the competent authority reserves the right not to accept the highest or any bid without assigning any reason therefor.
 10. In all cases where it is considered necessary to purchase a new vehicle in place of the old one, all such proposals should lie submitted to the competent authority only after condemnation of the old vehicle is decided upon. The new vehicle, if sanctioned, shall not be purchased until the old vehicle is disposed off and the sale proceeds are credited into Govt Treasury.



Appendix X: Rules for Destruction of Accounts records including Correspondences

(In Public Works Offices and Officers Subordinate thereto)

(Reference 5.7.1 © of Code & 5.7 of Manual)

Subject to any general or special orders that may be issued by the Govt from time to time those contained in O.G.F.R., no Govt records connected with accounts including correspondences thereto shall be destroyed except in accordance with provision detailed below:

1. The following shall on no account be destroyed.
 - (i) Records connected with expenditure on projects, schemes, or works not completed.
 - (ii) Orders and sanctions of a permanent character until revised.
 - (iii) Records connected with accounts which have not been finally settled.
 - (iv) Records pertaining to matters, which are either under arbitration or pending in a Court of Law until 3 years after final, judgment.
 - (v) Records which are known to be required in connection with the settlement of outstanding objections are not destroyed until the objections thereon are settled.
2. Before the destruction of any record, a list of records proposed to be destroyed should be sent in duplicate by the head of the office to the next higher authority for his approval. Further a list of such records pertaining to accounts audited by the Accountant-General should be forwarded to him for his concurrence in their destruction before the records are destroyed.
3. The following shall be preserved for not less than the period specified against them.

Record to be Permanently Retained

1. Administration Reports (one copy for each year to be retained)
2. Award Statements
3. Budget estimates (one copy for each year to be retained)
4. Capital and Revenue Accounts
5. Circular of Departmental Officers and the Accountant General
6. Closure of canals and correspondence thereto
7. Correspondence and other papers (such as estimates, plans, reports, specifications, construction details etc.) connected with projects.
8. Estimates for original works
9. Finance Accounts-One printed copy of each year
10. Important Government order



11. Lead Register
12. Measurement Books - Standard
13. Metrological reports
14. Register of buildings, bridges, culverts, irrigation, tanks, dam, etc.
15. Register of sanction to estimates
16. Register of Plan
17. Register of measurement books
18. Rain gauge Register and Flood discharge Register
19. Register of securities
20. Register of incumbencies
21. Register of destruction of office records
22. Standard estimates and type designs
23. Register of land

Records to be Periodically Destroyed Description of Records

		Period of preservation in terms of years
1.	Abstract of stock Receipt/Issue	-
2.	Accident to life and property by injury, fire etc.	-
3.	Account correspondence regarding refund of deposit	-
4.	Account correspondence with Sub Divisional Officers	-
5.	Account of receipts and issue of T & P	-
6.	Account Returns-Miscellaneous	-
7.	Advice of transfer credits/debit and acceptance thereof	-
8.	Advice slip	-
9.	A.G.'s Inspection Report	-
10.	A.G.'s objection statement on salary and Travelling Allowance	-
11.	A.G.'s report of dates of dispatch and receipt of monthly accounts, etc. of E.E's	-
12.	Annual certificate of balance	-
13.	Annual Report on the works and conduct of Divisional Accountant	-
14.	Annual return of tools and plants	-

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		Period of preservation in terms of years
15.	Annual Inspection Reports of Treasury Building by the E.E.	- 2
16.	Annual list of T & P available for transfer	- 2
17.	Application for reappropriation of Budget grant	- 2
18.	Application for letter of credit	- 1
19.	Application for tenders	- 1
20.	Application for sanction to the closing canals	- 2
21.	Assessment files	- 10
22.	Auction lists with correspondence	- 3
23.	Audit slip accompanying bills sent for payment	- 10
24.	Office copies of Audit Notes	- 1
25.	Bin Card (F-8)	- 5
26.	Bond and Agreement	- 3 years after finalisation of Contractor's account
27.	Accounts of Receipts, Issue and Balance of materials compared with estimated requirements	- 3
28.	Cash Book of Division and Sub-divisions	- 20
29.	Cash Abstract Book	- 10
30.	Casual Labour Roll	- 10
31.	Certificate of calculation of fair rent	- 2
32.	Physical Balance Certificate	- 10
33.	Certificate of fairness of Municipal Tax	- 2
34.	Claim Book	- One year after payment of claim
35.	Comparative statement of tender	- 5
36.	Completion reports and certificate for original works	- 10
37.	Completion reports and certificate for repairs and petty works	- 5
38.	Consolidated Treasury Receipt	- 10
39.	Contractor's ledger	- 10
40.	Contract papers	- 5
		(after payment of final bills)

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		Period of preservation in terms of years
41.	Correspondence on loss or theft of Government cash/stores	- 3 (After completion of Proceedings)
42.	Count certificates of stock and T. & P.	- 5
43.	Count certificate of materials at site of works	- 5
44.	Classified abstract of expenditure	- 10
45.	Correspondence relating to advance to contractors and staff	- (after the advance is fully recovered)
46.	Correspondence relating to Land Acquisition	- 5
47.	Correspondence relating to famine works after accounts are adjusted	- 5
48.	Correspondence relating to Ferries	- 5
49.	Correspondence regarding purchases and acquisition of land	- 5
50.	Correspondence relating to arrears of wages of labourers etc.	- 5
51.	Demand statement for realisation of water taxes	- 5
52.	Divisional Officer's report on scrutiny of Accounts	- 5
53.	Estimate for special repairs	- 3
54.	Estimate for ordinary repairs	- 1
55.	Estimate for Tools and Plants	- 5
56.	Executive Engineers circular (Accounts Branch)	- 5
57.	Extra items statement not provided for in the tender	- 5
58.	Field Book	- To be destroyed under the orders of the S.E.
59.	First and final bill	- 10
60.	Final and Running Bill	- 10
61.	Form of sending cheques	- 1
62.	Goods received sheet (F & A)	- 10
63.	Goods or deals (Routine)	- 10
64.	Hand Receipt	- 10
65.	Hand Receipt for tools and Plant lent to contractors	- (One year after finalisation of accounts)
66.	Half yearly balance return of stock (F – 11)	- 5

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		Period of preservation in terms of years
67.	Half yearly Register of Stock (F – 12)	- 5
68.	Imprest Cash Accounts	- 10
69.	Indent for stationery, Forms, official publications	- 2
70.	Indent ordering to supply articles to Sub-division	- 5
71.	Indent for stores	- 10
72.	Indenture for secured advances	- 10
73.	Inspection note on works	- 3
74.	Inspection report of E.E. and Divisional Accountant	- 5
75.	Inspection report of S.E.	- 5
76.	Lease of land, building etc.	- One year after the period of lease expiry
77.	Letter for submission of monthly accounts	- 1
78.	Letter for submission of acquaintance roll for work charge establishment	- 1
79.	Level Book	- Not to be destroyed Without permission of S.E.
80.	List of monthly Sub-divisional Accounts	- 10
81.	List of accounts submitted to audit	- 10
82.	Log Books	- 5
83.	Memorandum of Review of Register etc.	- 5
84.	Memorandum of PWD receipts and charges	- 10
85.	Memorandum forwarding to previous letters etc.	- 1
86.	Monthly progress report of all works	- 5
87.	Monthly return of Revenue realised	- 10
88.	Monthly list of completed works	- 2
89.	Monthly return of discharge of canals	- 10
90.	Muster Roll	- 10
91.	Measurement Books	- May be destroyed after ten years from the date of final record in the Divisional Office
92.	Note Book	- 10

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		Period of preservation in terms of years
93.	Notice calling for tender	- 5
94.	Notices of closing canals	- 5
95.	Office copies of objection item statements	- 3
96.	Office copies of monthly accounts	- 10
97.	Outturn statement of manufacture	- 10
98.	Office Order Books	- 1
99.	Pay bill of work charged Estt.	- 10
100.	Personal security Bond	- One year after discharges of liability
101.	Post card form of information to gazatted officers regarding proposed recovery of rent and other charges from them for a particular month	- 1
102.	Petty works requisition account	- 5
103.	P.W. Cheques (counter foil)	- 5
104.	Prices stores ledger	- 10
105.	Register of _____ = Bills	- 10
106.	Registers of allotments for repairs and petty new works	- 3
107.	Registers of indents for stores etc.	- 10
108.	Registers of daily cash balance found in the cash chest	- 3
109.	Register of security received and disposal thereof	- 12
110.	Register of appropriation	- 3
111.	Register of rent-Buildings	- 3
112.	Register of Revenue	- 10
113.	Register showing recovery of hire charges etc. of the T. and P. lent to contractors	- 5
114.	Register of stock (Receipt/issue)	- 5
115.	Register of T. and P.	- 5
116.	Register of Manufacture	- 10
117.	Register of Bin Card	- 5
118.	Register of works (Major and Minor)	- 10
119.	Register of Adjustments	- 10
120.	Register of transfer awaited for the year	- 5
121.	Register of sanctions to fixed charges	- 5

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		Period of preservation in terms of years
122.	Register of Miscellaneous Sanctions	- 5
123.	Register of Divisional Accountant's audit objections	- 5
124.	Register of interest bearing securities	- 10
125.	Register of contracts	- 10
126.	Register of Muster Rolls	- 10
127.	Register of Rain fall	- To be preserved until the returns have been printed and received elsewhere
128.	Register of tender received	- 5
129.	Register of unpaid wages,	- 5
130.	Remission of Revenue	- 5
131.	Receipt books (counter foil)	- 3
132.	Requisition for cheque & receipt books	- 2
133.	Register to refund – of revenue	- 5
134.	Register of review of measurement books	- 3
135.	Register of receipts, issue and Balances of materials at site compared with estimated requirements	- 5
136.	Register of clearance of suspense head materials	- 10
137.	Reports of Sub Divisional Officer Transfer	- 5
138.	Reports of Sectional Officer Transfer	- 5
139.	Reports of Transfer of E.E.	- 5
140.	Reports of the state of accounts	- 1
141.	Report on verification of stores/unused materials/ unserviceable stores	- 10
142.	Return of surplus stores	- 5
143.	Return of major and minor works Repair and T. & P.	- 3
144.	Road metal rate books	- 10
145.	Register of purchase	- 5
146.	Register of M.W.A.	- 5
147.	Register of deposit	- 5
148.	Register of purchase orders (prescribed in W. and T. Department Letter No. 8984, dated 29.2.1968)	- 5
149.	Sale accounts and survey reports	- 5

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		Period of preservation in terms of years
150.	Sanction to the execution of works, sanction to sale, purchase and demolition of permanent assets	- 5
151.	Sectional Officer's monthly progress report	- 1
152.	Schedule of deposit	- 10
153.	Schedule of purpose	- 10
154.	Schedule of Miscellaneous Work Advances	- 10
155.	Schedule of works expenditure	- 10
156.	Schedule of monthly settlement with Treasury	- 10
157.	Schedule dockets	- 10
158.	Schedule dockets for percentage recoveries	- 10
159.	Schedule of deposit works	- 10
160.	Schedule to Takavi works	- 10
161.	Schedule of Rates	- 10
162.	Statement of showing works for which estimate have been sanctioned but which have not been put in hand	- 5
163.	Statement of work in progress not provided for in the Budget	- 2
164.	Schedule of Debit to stock	- 10
165.	Stock Account	- 10
166.	Schedule of debit and credit to miscellaneous head of account	- 10
167.	Schedule of remittances	- 10
168.	Statement showing the materials avail for transfer	- 5
169.	Statement of receipt and issues and balances of Road metals	- 5
170.	Statement showing the materials transferred to stock from the works	- 10
171.	Statement showing the expenditure incurred on minor works	- 3
172.	Statement of tents recoverable from pay bill	- 5
173.	Statement showing excess over estimates and allotments, etc.	- 5
174.	Transfer entry order book	- 10
175.	Transfer report of relief of a Divisional Accountant	- 3
176.	Treasury Remittance Book	- 3



		Period of preservation in terms of years
177. Visitors Book	-	3
178. Work Slip	-	3
179. Work Abstract	-	10
180. Form of sending cheques for payment to contractor	-	10



Appendix XI: Odisha Raj Bhavan

(Para 6.1.1 of Code & Manual)

The Governor of Odisha has two official residences, Namely Raj Bhavans at Bhubaneswar and Puri which are governed by the following rules-

1. The term "official residences" includes the staff quarters and other buildings appurtenant thereto and gardens thereof. A list 'of buildings which form part of the Governor's official residences in Odisha, is given in the Annexure - A
2. The Secretary to the Governor will obtain and communicate to all concerned the Governor's sanction to re-appropriation of funds - between the different sub-heads in respect of the official residences of the Governor. Distribution of funds to individual works within the same sub-head and re-appropriation of funds between different Works within the same sub-head will be made by Secretary of the Governor.
3. Raj Bhavans at Bhubaneswar and Puri will be under the executive charge of the respective EEs of the Works Department (Civil, Electrical and Public Health Divisions) under the CE (R&B) and the executive charge of the respective EE of the Housing and Urban Development Department in respect of external Public Health Works and Sanitary installations under the CE, Public Health, but the gardens will be in direct charge of the Secretary to the Governor. The EE will be disbursing officer in respect of works in their charge. The Secretary to the Governor will be the Drawing and disbursing officer in respect of the gardens and for payment of Municipal Taxes of Raj Bhavan and connected buildings.
4. For the purposes of the budget, the DOs concerned will be the estimating officers except in respect of the Raj Bhavan Gardens. The Secretary to the Governor will be the Controlling Officer and Works Department will be the Administrative Department. The charges will be classified under the Major- Head [Demand No. 7283-Housing-charged (c) Govt Residential Buildings as indicated below:
 - (a) In charge of Civil Officers - Expenditure relating to the Raj Bhavan gardens
 - (b) In charge of Public Works Officers Expenditure relating to Buildings, Taxes and Electricity. Internal Water-supply and Sanitary Installations.
5. The following procedure should be followed in connection with the original works:
 - (a) On receipt of requisition from the Secretary to the Governor the EE concerned should submit through the P.W.D. Officer, who is competent to give TS, necessary plans and estimates to the Secretary to the Governor. The latter will accord A/A after obtaining the concurrence of the Finance Department and the approval of the Governor and allot funds out of the sanctioned budget grants, and communicate the same to the, EE concerned, who will, execute the works make payments for them and report to the Accountant-General.
 - (b) No work shall ordinarily be taken up or any liability incurred unless an estimate has been sanctioned and necessary funds have been allotted by the Secretary to the Governor. If in

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any case, whether on grounds of urgency or otherwise, it is considered necessary that a work should be taken up in anticipation of the A/A and allotment of funds. The EE shall take up the work, provided necessary funds are available for the purpose and that the written approval of the Finance Minister through the Finance Department has been obtained for taking up the work in anticipation of preliminaries. The EE should take steps to see that necessary A/A and TS to estimate are accorded within 3 months from the date of start of the work.

6. In the case of special or annual repairs, where formal A/A is not necessary the estimates should be submitted by the respective EEs through the P.W.D. Officers competent to give TS to the Secretary to the Governor for his counter signature in token of his approval and return with allotment of necessary, funds.
7. No authority will accord TS to an estimate in excess of the amounts administratively approved for the work either in the first instance when sanctioning the detailed estimate or subsequently when dealing with a revised estimate. Whenever any excess is anticipated on a work either as a result of any change in specification or quotation of higher rates by the contractor or any other factor, the EE concerned should immediately report the matter to the Secretary to the Governor and obtain the necessary additional funds from him. No liability should be incurred without first obtaining funds or an assurance from the Secretary to the Governor to the effect that funds are available and will be allotted. The EEs should give the earliest possible intimation to the Secretary to the Governor of all anticipated saving so that the amounts may be utilised on other works. Any excess over the maximum monetary limit will require the sanction of the president (vide rule or above), the EE concerned will be responsible to ensure that there is no excess over the allotment placed at his disposal.
8. A completion report should be prepared by the EE concerned in respect of each work as soon as it is completed and sent to the Secretary to the Governor with copy to Audit office.
9. As required under Rule 87 of the Budget Manual. A progress report showing the allotment and expenditure with necessary details in regard to each work in his charge should be prepared every month by the EE concerned and submitted to the Secretary to the Governor by 15th of the following month verification and acceptance of actuals will be the responsibility of the Secretary to the Governor who will also be responsible for furnishing necessary explanation for variations in the Appropriation Accounts.
10. No departmental charges on account of establishment and tools-and plant will be levied on original works and repairs in respect of the Governor's official residences and appurtenances executed by the respective EEs.
11. In the second week of April every year, the EEs concerned will send to the Secretary to the Governor the annual maintenance and repair estimates and a statement showing the funds required by them for expenditure during the year. This statement should include amounts required for completion of any work in progress from the previous financial year, liabilities, if any, carried from the previous year, amounts of the annual repair estimates to be executed during the year and amounts of any special repair work or original work, requisitioned by the Secretary to the Governor or considered necessary from the technical point of view. On receipt



of the statement, the Secretary to the Governor will obtain the Governor's orders for the distribution of grants for the year.

12. The following charges in connections with provision and maintenance of tennis courts in Raj Bhavans will be met from the grant under the sub-head "Buildings":

- i. Construction of the court and the building of retaining walls, where necessary.
- ii. Surfacing of the court with bajri, grass, cement, etc. and its repair.
- iii. Provision of posts and wire netting for the purpose of enclosing the court, and fixed posted, for suspending law-tennis nets.
- iv. Provision of fixtures and appurtenances for hanging screens.

Expenditure connected with the provision of screens and nets, will be met from the Governors contract Allowances.

13. Buildings Occupied by the Secretariat Staff of the Governor

- (i) The procedure indicated in the preceding section will be followed in respect of the buildings occupied by the Secretariat staff of the Governor at Bhubaneswar and Puri which are attached to Raj Bhavans, Bhubaneswar and Puri, but do not actually form appurtenance thereof, with the exception that unlike the official residences, there is no fixed monetary limit.
- (ii) A list of buildings which are treated as buildings occupied by the Secretariat staff of the Governor, Odisha, is given in the Annexure-B.



ANNEXURE – A

Buildings which form part of Governor's official residences in Odisha

I. At Bhubaneswar –

- (i) Raj Bhavan including the Guest Wings
- (ii) Guest Annexe
- (iii) Gate Office, Reception Office, Garages, Truck Garage, Garage, Workshop, Tent and Furniture Godown, Garage Godown.
- (iv) Raj Bhavan Compound wall and gates Two ADC's quarters (4R-1 and 4R-2)

II. At Puri-

- (i) Raj Bhavan
- (ii) Annexe
- (iii) Raj Bhavan Power House Two A.D.C's residence (Staff Houses Nos.7&8).

**ANNEXURE – B**

Building which are treated as building occupied by the Secretariat staff of the Governor, Odisha

I. At Bhubaneswar -

1. Administrative Block
2. Residence of the Secretary to the Governor
3. Dispensary
4. Medical Office quarters
5. 4R quarter No. 3
6. Dormitory
7. Main and Special Guard Barracks
8. Dhobi Khana and IR quarter attached to Dhobi Khana including compound wall of Dhobi Khana
9. 3R quarters No. 1 to 13
10. 3RJB quarters No. 1 to 17
11. IVR quarters No. 1 to 2
12. 2RA quarters No. 1 to 45
13. 2RA (Revised) quarters No. 1 to 2
14. 2Ra (Revised) quarters No. 1 to 7
15. IIR (Old type) quarters No. 1 to 8
16. IR quarters No. 1 to 34
17. IR quarters (Order lines) No. 1 to 8
18. IR (Old type) quarters No. 1 to 6

II. At Puri –

1. Secretary to Governor's residence (Staff House No. 1)
2. Sargent Major's quarters (Staff House No. 2)
3. R.W.D. Overseer's quarter (Staff House No. 3)
4. USG/ASG's residence (Staff House No. 4)
5. Guest wing of USG/ASG's residence (Staff House No. 5)
6. Doctor's quarter (Staff House No. 6)
7. PAS. Quarter (near Ram Krishana Mission Library) Staff quarter No. 1
8. Sub-Inspector's quarter (Staff quarter No. 2)
9. Two old press buildings-in the compound of Secretary to the Governor's residence converted into staff quarters No. 3 and 4.



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10. 2nd Assistant's quarter (Staff quarter No. 5)
11. 3rd Assistant's quarter (Staff quarter No. 6)
12. Post master's quarter (Staff quarter No. 7)
13. Garage Supervisor's quarter (Staff quarter No. 8)
14. Staff quarters No. 9 to 25 viz., Dafadar's quarters House Bearer's quarters, House Khalasi quarters, Tend Tindal's quarters, Dhobi's quarter, two roomed quarters near Officers Club (3 blocks), one roomed quarters near Officers club (3 blocks) Ayah's quarters, Power Housing Driver's quarters and Stables quarters (four blocks).
15. Barracks (used by single persons) staff Barracks Nos. 1 to 7 viz. Police Barracks near Officer's Club. Police Barrack near the main gate, Garage Block Barrack, Electric Mistry's Barracks and Sweepers Barracks.
16. Office Block.

**Appendix XII: Procedure for Lease of Sairats**

(Reference Para 6.4.5 of Code & Manual)

1. Each SDO shall maintain a Register of Sairats (Such as fruits bearing trees, the place where fishery rights can be let, where grass can be sold and any other source of regular miscellaneous revenue) in his jurisdiction duly classified according to the nature of the sairats in the prescribed form (Enclosed).
2. The control of all such revenue, including the collection of it shall remain with the officer-in-charge of the Subdivision acting under the instruction of the DO.
3. The rights in fruit trees, in fishery, in cutting grass, etc. shall usually be disposed off annually by public auction well in advance of the working season, 15 days previous notice of the date and place of auction being publicly given. The terms of lease should be available for inspection by the intending bidders. In leases where the average annual income of the proceedings 3 years of a particular Sairat exceeds Rs. 2,500/25,000 auction sale notice shall be published in two issues of a widely circulated locality daily. In other cases, the auction sale may be advertised by causing the notice of sale to be exhibited on the notice boards of the important offices of the locality and by beat of drums.

The proposal for reserve price shall be initiated by the DO at ten percent over and above the average income of Sairat for the preceding three years or for any shorter period for which information is available. In the absence of any such information, the DO shall suggest a reasonable amount taking the local conditions into consideration, to the SE, who shall determine the reserve price. The reserve price thus determined shall form the basis for deciding the authority to conduct a particular sale under Rule 6. In all cases the reserve price should be fixed by an authority higher than the Officer competent to conduct the auction.

4. Any Person, who desires to bid in the auction, is required to register his name with the officer issuing the auction notice at least one day before the date of the auction and deposit the required amount as earnest money. As soon as the earnest money is deposited a copy of the approved condition of sale duly signed by the DO should be issued to the intending bidder and his acknowledgment obtained. The earnest money shall be fixed at 5% of the reserve price. The SE is competent to fix a lower or higher amount in special cases after recording his reason for the same. These deposits shall be returned on application to the unsuccessful bidder after the close of the auction.
5. No person shall be allowed to bid in an auction on behalf of any other person unless he holds a power of attorney from such other person or such other person is present at the auction.
6. (i) Auction shall be conducted by the SDO if the Sairat is worth Rs. 1,000/5,000 and should be confirmed by DO.
(ii) Sairats above Rs. 5,000 and upto Rs. 50,000 may be auctioned by the DO to be confirmed by the SE.
(iii) Sairats worth Rs. 50,000 and above should be auctioned by the SE to be confirmed by the CE.

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(iv) While recommending any bid the auctioning authority should indicate in the antecedents and solvency of the bidder.

Notes: Clause 6 - Auction of Sairat – Sairat worth of Rs, 50,000 and above is to be auctioned by SE-EE has no power to conduct the auction.

7. At the fall of the hammer the highest bidder shall deposit in cash an amount which together with the earnest money will cover 25% of the bid money. If he fails to deposit the amount the earnest money deposited by him shall be forfeit by the auctioning authority and the offer of the next highest bidder shall be considered provided the bid is acceptable otherwise. If the next highest offer is not acceptable, steps should be taken to reduce the Sairats.
8. The balance of the amount shall be deposited by the bidder on receipt of a intimation from the officer conducting the auction that his bid has been accepted, within the time limits prescribed below:
 - (i) where the bid amount does not exceed Rs. 5,000 within 7 days of the receipt of the notice of acceptance of the bid.
 - (ii) where the bid amount exceeds Rs. 5,000 within 7 days of the receipt of the acceptance of the bid.
 - (iii) the office confirming the bid shall have the discretion to fix suitable installments, not exceeding four, for Payment of bid money whenever the amount of bid money exceeds Rs. 25,000. The first installment shall be payable within seven days from the date of intimation of acceptance of the bid.
9. On confirmation of the sale by the competent authority, the successful bidder should deposit the amount as per Rule 8 and execute necessary agreement (Duly stamped) in the prescribed form within a week. Failure to deposit the whole amount of bid money or the first installment of bid money when so linked will entail forfeiture of earnest money at the disposal of auctioning authority. Similarly, if the successful bidder fails to execute the agreement within the time fixed amount of deposits at the disposal of auctioning authority shall stand forfeited and auction should be conducted afresh.
10. In case of default in the payment of the second and subsequent installment on the dates fixed a notice should be served on the lessee by the DO intimating the lessee that he is liable to pay interest on the amount of arrear at 12 percent per annum and if the arrear installment together with the interest due is not paid within 30 days of the receipt of the notice, the lease shall stand terminated and auction should be conducted afresh.

The amount of security (25 per cent) should then be adjusted towards the arrear installment plus interest and the balance including consequential loss, if any, on-account of reauction of sairat shall be recovered from the lessee under the Odisha Public Demand Recovery Act of 1962.
11. The acceptance of the bid must be conveyed in writing by registered post with A.D. to bidder as far as possible within. 15 days from the date of auction.
12. It is not incumbent on the confirming authority to outright accept the highest bid. The bid can be rejected without assigning any reason to the bidder concerned. But the Officer, confirming the auction must record in writing his reasons for not accepting the same.

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13. The Officer conducting the auction shall maintain in his own hand a complete record of bids of all bids offered by different bidders. The bid register will indicate the full description of the sairat, reserve price, site, date and time of auction. The bid register should be signed simultaneously by the highest bidder and the Officer conducting the auction.
14. As soon as possible after the auction, the Competent Officer, who is required to confirm the bid.
15. In case of bids below the reserve price the authority competent to accept the bid may accept bids up to 20 per cent below the reserve price. When the bid amount falls short by more than 20 per cent auction should be conducted afresh. If there is no improvement in the subsequent auction, orders of Govt in the Administrative Department should be obtained before confirming the sale.
16. No lease should be given for a period exceeding one season/3 seasons without prior approval of Govt in the Administrative Department.
17. Each DO shall maintain a consolidated register of Sairats under his Division and furnish an extract thereof to the CE through the SE by the end of June each year. In case there are no Sairat, a nil return should be sent.

A consolidated return for all the Divisions should be sent by the CE to Govt each year by the end of July. The return should be sent in the form prescribed for the Register of Sairat S.D.

ANNUAL LEASE REGISTER OF SAIRATS

Sl. No.	Nature of Sairats	Location	Annual average of income of preceding 3 years	Preserve price last auction	Date	Date of present auction	Amount of the auction	Name of the lease	Period of lease	Date and number of lease deed	Receipt, No. and date with which the amount, was deposited	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13

Notice for licensing Grazing Area, Fishery and Usufruct of Trees, etc.

Notice is hereby given that the right of..... in the sources described in the annexed schedule, in the annexed schedule for a period..... from will be sold in public auction by the at..... on the day of at O' clock subject to the conditions hereinafter set forth.

Divisional Officer

Signature of Sub Divisional Officer

Name of the Division/Sub Division



Conditions of Sale

1. Any person or body intending to bid must deposit a sum of Rs..... as earnest money with the auctioning officer on the working day immediately preceding the date of sale, such of the persons as have not complied with this conditions will not be permitted to bid at the auction.
2. No one will be allowed to bid for another person unless he holds a power of attorney from him and produces the same for the inspection of the selling officer when demanded by him.
3. The sale will ordinarily be knocked down in favour of the highest bidder but the right is reserved to the officer confirming the sale to reject any bid without assigning any reason therefor.
4. The earnest money deposited by unsuccessful bidders will be .returned to them at the close of the sale and that of the successful bidder will be treated in the manner laid down in clause 7 below.
5. The Sale will not be considered as completed unless it is confirmed by the authority who reserves the right to refuse to confirm the sale without assigning any reasons therefor and an agreement executed.
6. The successful bidder will not be permitted to do any act under the lease until the sale is confirmed by the competent authority and until, conditions 7 & 8 below are fulfilled.
7. Immediately at the fall of hammer the successful bidder shall deposit on the spot a sum equal to 25 per cent of the bid amount (Including the earnest money already deposited),
8. The successful bidder shall within one week of the date of receipt of the order of confirmation by the competent authority pay the balance amount of 75 per cent if the bid-amount does not exceed Rs. 500/5,000 and within fourteen days if the same .exceeds Rs: 500/5,000 and execute at his own cost an agreement (Duly stamped) in the prescribes form within a week from the date of deposit of the bid amount. The payment of bid amount in installment is not ordinarily permissible unless otherwise ordered by the confirming authority.
9. (a) Failure to deposit 25 per cent of bid amount (including earnest money) after the bid is accepted would entail forfeiture of earnest money.
(b) Failure to deposit the balance amount of bid money or the first installment of the bid money when so fixed will entail forfeiture of earnest money of 25 per cent at the disposal of auctioning authority-
(c) Similarly, failure to enter into agreement after deposit of the balance of 75 per cent of the bid amount would entail forfeiture of the entire deposit at the disposal of auctioning authority.
10. The confirming authority may at his discretion fix suitable installments not exceeding four for the payment of total bid amount in case when the bid amount exceeds Rs. 2,500. The first installment shall be payable within seven days from the date of receipt of intimation of the acceptance of the bid & and the second and third installments are payable on the dates fixed. The security deposit of 25 per cent will be adjusted towards the last installment. Interest of 9/12 per cent annul shall be payable in the event of failure to pay the installment on the dates annum.



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11. The lease will stand terminated if the arrear installment along with interest due is not paid within thirty days from the due dates.
12. The auctioning authority has power to reduction the Sairat after termination of the lease and recovers the consequential loss, in addition to the arrear and interest due up to the date of reduction under the Public Demand Recovery Act.
13. The conditions mentioned above are intended solely for the benefit of the GOO with a view to safeguard their interest and so and omission on the part of the Officers acting on behalf of the Govt to enforce them strictly and any indulgence or concession that may be granted to the lessee with or without notice shall not affect the rights of the Govt to enforce them. The conditions against the lessee and shall not afford the lessee a right to plead such omissions indulgence or concession as a bar to any action that may be brought by the Govt in respect thereof.

Form of License for Fruit Bearing Tree

THIS DEED of License made theday of.....between the Governor of Odisha (Hereinafter called the licensor) of the one part and Shri son of..... residence of village/ town.....Rs.....Dist..... (hereinafter called 'the licensee' of the other part:

Whereas the public auction held on at the licensee's bid of Rs..... for right to gather and sell the fruits of the fruit- bearing trees at in the district of(the details of which have been specified in the schedule appended hereto) has been accepted by the licensor.

Now this Deed witnesses as follows

1. (a) That the licensee has paid the full amount of bid after the bid was over/or has deposited Rs..... as part payment of the bid amount and agreed to pay the balance of the dues in installments as follows:

Due date of payment	Amount in rupees.
---------------------	-------------------

(b) the Licensee shall have the right to collect and enjoy the fruits for the period fromto.

2. That if any amount either on account of the above bid money or any penalty or interest falls due from him the licensor shall have the power to recover the same under the Odisha Public Demands Recovery Act, 1962 as arrears of land revenue.

3. (a) That the payment of bid money in installment should be made on or before the due date fixed. Interest at the rate of 9%/12% per annum shall be payable in the event of failure to pay the installment on the due date

(b) The licensee shall pay the arrear installment along with interest thereon within 30 days from the due date of the installment. In the event of nonpayment the license shall stand cancelled and re-auction shall be conducted.

Consequential loss if any, on account of such re-auction to the arrear and interest due therein up to the date of re-sale shall be recovered from the licensee under the Odisha Public Demand Recovery Act, 1962 as arrears of land revenue.



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- (c) The security deposit amounting to 25 per cent of the bid money (including earnest money of 5%) made at the fall of the hammer may be adjusted towards the last installment, unless the licensee has defaulted in the payment of the installments or is guilty of break of any conditions.
- 4. The DO shall have the power on behalf of the licensor to re-enter and take possession of the whole or a portion of fruit bearing trees as is considered necessary in the public interest before the expiry of the term of the license and he shall not claim granted to him for the said occupation.
- 5. That he shall protect the boundary demarcation stone or post or any other electric, telegraphic or telephonic post that might be in the land on which the fruit bearing trees have been grown.
- 6. That he shall protect the fruit bearing trees as well as the lands on which the trees stand from any illegal encroachment.
- 7. That the licensee shall not be entitled to cut down the branches or of trees or tree nor shall he take the timber of any fallen or dead trees without the previous permission of the DO in writing.
- 8. That the licensee shall not sublet his right except with the previous permission in writing of DO
- 9. That the licensee shall not use the fruits and the trees in any manner which will cause any inconvenience to the public using the roads or the land on which the trees stand.
- 10. That the licensee shall have no claim for remission or refund of the bid money for destruction of fruits by natural calamity except on the grounds specified in clause 4 above.
- 11. That on breach of any of the conditions 5,6,7,8 and 9 mentioned above by the licensee or any of his servants or representatives, the Divisional Officer shall have the right to revoke the agreement and reject the license forthwith and to take possession, and at his desertion to impose a penalty as he may deem proper.
- 12. That the licensor reserves to himself the right to cancel the license at any time if it is considered necessary in the interest of Govt and a refund of bid money may be claimed by the licensee for the unexpired period of license in proportion to total paid for the whole year, provided that the cancellation is not caused by infringement of conditions of the license by the licensee. In the event of such a cancellation, the licensee has no right to claim any compensation for the loss of his profit or otherwise.

IN WITNESS WHEREOF the DO acting for and for behalf of the Governor of Odisha and..... the licensee have hereunto set their hands the..... date of 20 first above written.

Witnesses

Signature of licensor on behalf, of the
Governor of Odisha

- 1.
- 2.

Witnesses

Signature of Licensee

- 1.
- 2.

Particular

Schedule
Location

**Form of Licensing for Fishery Rights**

THIS LICENCE made this the.....day of..... 20..... between the Governor of Odisha (hereinafter called 'the licensor' (on the one part and son of..... aged years, caste profession..... residing in village P.S.in the district of..... (hereinafter called the licensee) of the other part;

AND WHEREAS the licensee at the public auction held on has offered a bid of Rs..... for the fishery rights in the river/tank/canal/or Nainjori/weir/stream (the details of which have been specified in the schedule appended hereto), which has been accepted by the licensor;

NOW, THEREFORE, in consideration of the payment of a sum of Rs..... payable by the licensee and in consideration of the covenants and terms mentioned in this deed the licensor hereby permits the licensee to fish in the aforesaid for the period from..... to on the terms and conditions specified below namely:

1. That he has deposited the full amount of bid immediately after the bid was over/or has deposited Rs..... as part payment of the bid amount and agrees to pay the balance of the premium in Amount in rupees.
2. That if any amount either on account of the above fees including interest if any penalty if imposed on the licensee by licensor remains unpaid by the licensee, the DO of the district of(hereinafter called the DO) shall have the power to recover the same from him under the Odisha Public Demands Recovery Act, 1962.

(That he shall remain bound to pay the stipulated amount of bid money till the right of enjoyment of the fisher) is resettled with him or any other person).

3. (a) That the payment of bid money in installment should be made on or before the due date fixed. Interest at the rate of 12% per annum shall be payable in the event of failure to pay the installment on the due date.

(b) That the licensee shall pay the arrear installment along with interest thereon within 30 days from the due date of the installment. In the event of nonpayment, the license shall stand cancelled and reduction shall be conducted.

Consequential loss if any, on account of such re-auction in addition to the arrear and interest thereon due up to the date of resale shall be recovered from the licensee under the Odisha Public Demand Recovery Act, 1962.

(c) That the security deposit amounting to 25% of the bid money (including earnest money of 5%) made at the fall of the hammer will be adjusted towards the last installment, unless the license has defaulted in the payment of the installments.

4. That he shall the embankment of the river/tank/wier/canal or Nainjori from destruction or encroachment and shall repair the same this own cost and shall see that the water is not in any way spoiled.
5. That the licensee shall not use stake nets or cross dams of any description.



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- 6. That the license shall not use draw nets within 100 feet of masonry works or injure masonry pitching or earth work in any way.
- 7. That the licensee shall not cause obstruction to navigation in any way.
- 8. That the licensor does not guarantee to supply water below the weir at any time of the year.
- 9. That he shall not act in a manner which will cause any inconvenience to the public in using the water, for bathing, drinking or such other purposes as may be decided by the DO.
- 10. That the licensee shall have no claim for remission or refund of the bid money for failure of rainfall or usual closure of canal/river/tank/Nainjori/wier/stream.
- 11. That on breach of any of the conditions above mentioned by the licensee or any of his agents/servants, the DO shall have the right after giving at least a week’s notice in writing to cancel this license, to reject the licensee forthwith to repenter and take Khas possession and to forfeit the whole or such parts of the bid money already paid or to impose any penalty as he may deem proper and also to resettle the fishery with anybody else as he may think proper.
- 12. That the licensor reserves to himself the right to cancel license at any time if it is considered necessary in the interest of Govt and a refund of bid money may be claimed by the licensee for the unexpired period of the license in proportion to total rent paid for the whole year, provided that the cancellation is not caused by the infringement of conditions of the license by the licensee. In the event of such a cancellation the licensee has no right to claim any compensation for the loss of his profit of otherwise

IN WITNESSES WHEREOF the DO acting on behalf of the Governor of Odisha and..... the licensee has hereunto set their hands the..... day and year respectively mentioned under the signatures.

Witness

- 1.
- 2.

Signature of the

Witness

On behalf of the Governor of Odisha

- 1.
- 2.

Signature of Licensee



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SCHEDULE

Form of License for Ferry Ghat

This license made on..... day of20..... between the DO of the Division in the district ofrepresenting the Governor of Odisha (hereinafter called the licensor) of the one part and Shri..... son of.....aged.....year.....caste.....profession residing in village...../town..... /P.S.etc., in the district of (hereinafter called the licensee) of the other part.

Whereas the licensee at public auction held on.....at has offered a bid of Rs..... for the license of the ferry ghat at..... P.S..... in the district of..... as the which has been accepted by the licensor and has deposited the full amount/or part of the bid with the lessor;

Now, therefore, in consideration of a sum of Rs.....payable by the licensee and in consideration of the covenants and terms mentioned in the deed the licensor hereby grants to the licensee above named ferry ghat for a period of year fromto.....on the terms and conditions specified below, namely:

- 1. The licensee has paid the full amount of the bid/part of the bid amount after bid was over and shall pay Rs..... towards the balance of the bid money in installment as follows
Due Date of payment Amount of rupees
2. The licensee shall provide all the boats and ply them at the said ghat for hire either personally or/and through agents.
3. The licensee shall collect tolls according to the schedule of rates appended hereto or as may be direct by the DO of the district..... (hereinafter called the DO)
4. The licensee shall engage adequate number of boats and boatmen so as to ferry men, goods, and animals at regular intervals for 5 A.M. to 8 P.M. every day.
5. The boats shall be maintained by the licensee in perfect good condition.
6. The licensee shall abide by the direction of the DO or his authorised Officer issued from time to time in regard to matter not specifically provided for herein.
7. (a) That the payment of bid money in installment should be made on or before the due date fixed. Interest at the rate of 12% per annum shall be payable in the event of failure to pay the installment on the due date.
(b) That the licensee shall pay the arrear installment along with interest thereon within 30 days from the due date of the installment. In the event of non- payment the license shall stand terminated and re-auction shall be conducted. Consequential loss, if any, on account of such re-auction in addition to the arrear and interest due up to the date of resale shall be recovered from the licensee under the Odisha Public Demand Recovery Act, 1962.
(c) That the security deposit amounting to 25 percent of the bid money (including earnest money of 5 percent) made at the fall of hammer will be adjusted towards the last installment unless the licensee had defaulted in the payment of installments.



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8. That for contravention of any of the conditions mentioned above the licensor shall be competent to impose a suitable penalty of the district of from time to time and to cancel the license and take such further steps as would necessary and. consistent with the convenience of the public.
9. That the licensor reserves to himself the right to cancel the license at the time if it is considered necessary in the interest of Govt and a refund of bid money may be claimed by the licensee for the unexpired period of the license in production to total paid for the whole year provided that the cancellation is not caused by the infringement of conditions of the license by the licensee. In the event of such a cancellation has no right to claim any compensation for the loss of his profit or otherwise.

In witness whereof the parties hereto has signed this on the dates respectively mentioned under their signatures.

Signature of.....

On behalf of the Governor of Odisha

Witness

1.

2.

Witness

The Licensee

1.

2.



Appendix XIII: Procedure in Respect of Litigation involving the State Government

A

1. Whenever a notice under Section 80 of the C.P.C. is received by the concerned Officer, he should forward all relevant papers with a statement of facts along with the opinion of the local Govt Pleader to the Advocate General. The Advocate-General will indicate the line of defense both on question of fact and law and return the same to the officer. Thereafter, the reply will be drafted and issued by the Govt Pleader in accordance with the indications given by the Advocate-General.
2. When summons in a suit is received, the concerned Govt Pleader will draft the written statement in accordance with the line of defence indicated by the Advocate-General as mentioned above. If there has been any change of events of minor character in between the Section 80 Notice and the preparation of the written statement, then he can prepare the pleading with suitable modification. In case of major change of events where he thinks that the line of defence requires a change, he should refer the case again to the Advocate General, who will suggest the line of defence, in the light of such change. Thereafter the Govt Pleader will draft the pleading and send it the Legal Remembrances for formal approval. It is hereby made perfectly clear that by giving formal approval, the Legal Remembrance does not take the responsibility of settling the pleading. The sole responsibility of drafting the pleading in accordance with the line of defence indicated by the Advocate-General will rest on the Govt Pleader. In case of amendment of written statement of minor and formal character, the same may be effected by him but cases requiring major change should only be done in consultation with the Advocate-General.
3. Similarly in the case of drafting the plaints, the relevant papers with the opinion of the Govt Pleader should be forwarded to the Advocate-General, who will indicate the line of action. Thereafter the Govt Pleader will draft plaint in accordance with the suggestion and send it to the Legal Remembrancer for formal approval which will never mean that the Legal Remembrancer takes the responsibility in settling the plaint. The responsibility of drafting the plaint in accordance with the Advocate-General's suggestion will rest on the Govt Pleader. The amendment of plaint will be done in the same manner as in the case of amendment of written statements mentioned above.
4. Proposal for preferring civil appeals should be sent by the District Magistrate which his own views and with the opinion of the Govt Pleader to the Advocate General. The Advocate-General shall forward the case with his opinion to Govt. The decision of Govt will be communicated to the appropriate level for necessary action.
5. In cases of criminal appeal or revision, the proposal shall be forwarded, by the District Magistrate with the opinion of the Public Prosecutor to the Advocate-General, who after examining the case, will convey his opinion to the Govt. The decision of the Govt will be communicated to the appropriate level for taking necessary action.



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6. In suits of the value of Rs. 20,000 and above the pleading will be settled by the Advocate-General. The pleadings will be sent to the Legal Remembrancer for formal approval which; as aforesaid, will never mean any responsibility for the correctness of the stand taken therein.
7. The functions of the Advocate-General as mentioned above may be discharged by him or he may cause it to be done under his guidance through the other Law Officers such as Govt Advocate and the Standing Counsels.
8. The Assistant Govt Pleaders and the Special Public Prosecutors may indicate proposals for preferring appeals or revisions in respect of cases conducted by them, but they will move through District Magistrate of the district. The Assistant Govt Pleaders may discharge the same functions as the Govt Pleader of the district in respect of pleadings and Section 80 notices arising within the respective Subdivisions. In those cases; the District Magistrate shall, if he considers the case to be exceptionally important and complicated, obtain the opinion of the Govt Pleader before forwarding the matter to the Advocate-General.
9. The District-Magistrate will keep the Revenue Divisional Commissioner informed regarding the correspondence with the Advocate-General and in important matters also the Board of Revenue when the District Magistrate so things fit.

[Law Department Circular No. 7599 (86) L.R., dated the 2nd August 1967 addressed to all Department of Govt and all Heads of Department.]



B

Extracts from the Odisha Law Officer's Rules, 1971

PART I - General

1. These rules may be called "The Odisha Law Officer's Rules, 1971."
2. They shall extend to the whole of the State of Odisha.
3. They shall apply to the following Law Officer, namely :
 - (a) Government Pleader and Public Prosecutor.
 - (b) Associate Lawyer, Special Counsel, Junior Counsel and State Defence Counsel.

PART II Duties of Law Officers

1. **Duties of Law Officers.** It is the duty of a Law Officer :
 - (a) to appear on behalf of Govt it and suit, appeal or other civil proceedings; and to appear in any suit or civil proceedings; and to appear in any suit or civil proceeding which involves interest of the Govt wherein any Govt Officer or any other persons is a party, when so direct by the Legal Remembrancer;
 - (b) to advise the Govt, the Board of Revenue, the Heads of Departments, the District Collectors and other District Officers, not only in respect of any proceedings, whether civil or criminal, which he has to conduct on behalf of the Govt or on behalf of any Govt Officer, but also on all legal matters concerning Govt business of any kind, which, may be referred to him;
 - (c) to receive processes issued by a Civil Court against the State Govt
 - (d) to conduct the prosecution in every trial before the Court of Section. For that purpose he shall, at the earliest, examine the record and site that any defect, such as the omission to summon a necessary witness if possible, remedied before the date fixed for trial in the Court of Session;
 - (e) to appear for the prosecution at the hearing before the Session Court of any appeal against and conviction or application for revision of a sentence, or order (not be in lone of discharge or acquittal) against which no appeal lies, when notice of such appeal is given, to the Officer appointed by the State Govt under Section 422 of the Code of Criminal Procedure 1898 or when he is directed by the Sessions Judge or the District Magistrate to so appear;
 - (f) when so required by the Legal Remembrancer; to conduct prosecution in any trial before a Magistrate;
 - (g) to defend Officers against criminal prosecutions, when so directed by the Legal Remembrancer;
 - (h) to appear, when so directed by a District Judge, in support of an order imposing a fine on or directing the arrest of a witness under the provisions of the Code of Civil Procedure, 1908 and appealed against to the District Court;

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- (i) to appear, when so directed by any Court in any proceeding under Section 476 or 478 of the Code of Criminal Procedure, 1898;
- (j) to appear, when so directed by the District Collector, in applications made under Section 10 of the Guardians and Award Act, 1890;
- (k) to advise Govt as to the expediency of appealing against any adverse judgment or order of the Court in a case in which he had appeared;
- (l) to appear in inquiries into applications by parties to sue in form a pauper is or to prefer pauper appeals.
- (m) to report to the District Collector the result of civil suits, appeals and other civil proceedings conducted by him in any Court;
- (n) in criminal cases, where the accused person is a Govt servant, to intimate the Head, of the Department to whom the said Govt servant is subordinate about the final order passed by the Court immediately after the said order is passed;
- (o) to assist the Advocate General or the Govt Advocate or the Standing Counsel in the High Court whenever required by any of them in respect of any case which he has conducted in the lower Court;
- (p) to appear on behalf of the State Govt in all revenue cases and in appeals arising therefrom;
- (q) to perform on behalf State Govt such duties of a legal character as they may be directed to perform by State Govt;
- (r) to ensure that there is no delay on his part either in giving opinions on matters referred to him or in sending to the State Govt or to any officer of the State Govt the drafts of pleading and counter affidavits prepared by him for approval.
- (s) to submit statements and returns as required under the rules for the time being in force;
- (t) to maintain registers and accounts as required under the rules for the time being in force;
- (u) to take back from the Court all exhibits filed on behalf of Govt and forward the same to the Collector or other Officer concerned;
- (v) to prepare and revise tenders conveyances, leases security and indemnity bonds contracts, etc. for the several departments of the State Govt and to draw up plaint written statements, memorandum of appeal, petitions and affidavits in civil suits and appeals in which the Govt is concerned;
- (w) to appear in appeals preferred against Municipal Assessment of Govt buildings in cases referred to the Court by the Collector under Section 18 of the Land Acquisition Act, 1894;
- (x) to give advice on the notices under Section 10 of the Code of Civil Procedure, 1908;
- (y) to maintain accounts of all receipts and disbursements in connection with his duties in the form of daybook, with such subsidiary ledgers as would make it possible to ascertain without difficulty the whole of the charges connected which each case.



2. Limitations of the Office:

- (a) a Law Officer shall not hold any brief against Govt, or advise, appear or act in any case against Govt or give advice to private parties in cases in which he is likely to be called upon to advise Govt or any Govt Officer;
- (b) act or appear on behalf of a plaintiff in any suit in which the plaintiff has applied for permission to use in forma pauperis until application for permission to sue in forma pauperis has been decided by the Court;
- (c) undertake the defence of any person or appear against the Govt in any criminal proceeding except in the cases outside his jurisdiction where the Legal Remembrancer may grant him permission to appear against Govt on the specific condition that the work relating to the Govt cases in the Courts, in the district which may be jurisdiction does not suffer;
- (d) appear for the defence in cases in which he might have accepted briefs prior to his appointment unless permission is obtained from the Collector;
- (e) accept any engagement or free from private parties in which he appears on behalf of the Govt;
- (f) communicate directly or indirectly to any documents or information which, has come to his possession in the course of his duties, unless permission is obtained from the Legal Remembrancer.

3. Duties of Associate Lawyers: An Associate Lawyer shall conduct such cases and perform such duties only as are entrusted to him by a Law Officer.



Appendix XIV: OWD HRD Policy Implementation & Training Programs

(Refer Para 2.4.12 of Code & 2.4.5 of Manual)

OWD HRD POLICY IMPLEMENTATION

- **Establishment of an HRD & Training Cell for Management & Monitoring:** The management & monitoring of the 'HRD Policy' shall be done by the HRD & Training Cell headed by a Chief Engineer in the office of Engineer-in-Chief. The Chief Engineer will be supported by team of officers, both within the Cell as well as at the Circle/Division levels.

Training Needs Analysis, in a systematic manner, shall be conducted once a year by the Training Cell with or without the assistance from external professionals. Circle heads and CE's will communicate the training needs of the staff in their respective units to the Training Cell before 31st of December each year.

The identified Training needs would be prioritized as under and would be addressed accordingly:

Priority-A	Essential short-term (within one year)
Priority-B	Essential long-term (within two years)
Priority-C	Desirable short-term (within three years)
Priority-D	Non – essential

The key responsibilities of the HRD & Training Cell shall be as follows:

- **Design Course Templates** (with or without associating external professionals) for *Induction training, Personal Skills training like Management Development Programmes, Basic Information Technology*, etc. for bringing about uniformity across OWD.
- Prepare an 'event calendar' based on the various HRD strategies described above. Specifically, a 'Training calendar' containing programme title, learning objectives, target participants, broad course contents, duration/dates, batch size, venue, programme coordinator etc. will be issued by March 1st of preceding year and placed on OWD website, and also communicated electronically to heads of all units up-to the level of Executive Engineer.
- Arrange the delivery of training envisaged under HR policy for career growth. The selection of participants for such courses shall be based on seniority/those who are in the promotion zone. It will be based on requirements (type of training verses succession planning) in the H.R. Policy of the Department.
- Manage nomination of participants for the training and other events, following a systematic process of information dissemination, initiating and completing nomination process well in advance through designated competent authorities, to ensure that:
 - o To ensure that staff are nominated to training in areas which are relevant to their current/future responsibilities (and tasks) or specifically related to the identified personal "developmental" needs.

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- To encourage equal opportunities to all staff irrespective of cadre, caste and gender.
- To achieve the target of 'Fifteen-training-days' per employee per training year (average).
- **Coverage Target:** OWD shall endeavour to provide a minimum of 15 days 'need based' training to at least 50% of staff in a training year to start with and this percentage shall increase progressively in subsequent years depending on the requirement.
- **HRD Budget:** A minimum of 3% of OWD Annual Administrative Budget shall be provided initially, progressively increasing to a level of 5 % over the next five years.
- **Resource Selection Criteria:** All efforts should be made to maximize the use and development of OWD's internal resources. To create an internal pool of resource persons, it is suggested to conduct "Training of Trainers" programmes for staff interested in training/coaching function apart from their core responsibility. The programme must include topics like principles of adult Learning, Presentation Skills, Communication Skills, etc.

To supplement the internal resources, there will be need for engagement of external Agencies/Institutions and Resource Persons, on the following basis.

- **Agency/Institution**

The selection of agency/institution should broadly be based on the, experience in managing similar type of training, quality and quantity of resource persons, location of the institution, past training history, financial status, fee structure, infrastructure, facilities available etc. HRD & Training Cell will call for empanelment of such institutes and review the list every four years.

- **Resource Persons**

The broad parameters to be employed in identification of resource persons shall include educational background, experience in the core area, total years of experience, types of programmes delivered, organizations served/being served as a resource person, level of participants trained, present location, training equipment (audio-visuals) used, familiarity with specific training methodologies, professional fees, project works carried out (if any), details of publications (if any) etc. HRD & Training Cell will call for empanelment of such resource persons and review the list every alternate year.

- **Monitoring and Evaluation:** The objective of evaluation will be to 'improve', building on present strengths and removing shortcomings for further improvement so as to measure the impact on job behaviour. Evaluation shall be done at three levels.
 - **Pre-event evaluation** aimed at detecting and re-focusing the programme-design before the commencement of the programme to make it most suited for the participants. Programme provider shall review the design, content etc. in the light of the feedback obtained from the participants.
 - **Programme evaluation** through participant feedback at the end of the programme, in the prescribed format covering course objectives, resource persons' performance,



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programme material, plus logistics, for undertaking modifications/improvements in future programmes.

The feedback data will serve as a basis for payment of the Resource Persons as well as Implementing Agencies and will be archived for future use.

- **Impact Assessment:** by measuring the change in job behaviour of the employee based on the learning from the programme, using pre-defined indicators.
- **Knowledge Sharing:** Participants will submit a written report on 'lessons learnt' to the HRD & Training Cell, through their reporting officers, with-in one week of returning from the programme. Besides submitting a report staff shall be required to share the salient features of their learning with their colleagues by way of a short duration presentation. HRD & Training Cell and the Circle level Training Officer will provide necessary assistance in organizing the presentation session.
- **Training Database:** Training database will be maintained and managed both at the Head Quarter level and at Circle level. Training code directory, listing out codes for various training courses/programmes shall be evolved, maintained and circulated by the Training Cell. The information related to training activities shall be maintained as a part of HRMIS.
- **Training Academy:** HRD function executed by OWD's HRD & training Cell must be undertaken both internally and externally till the time OWD is able to develop an 'Engineers Academy' with permanent management positions to oversee day-to-day running of such an Academy. In the interim, the action plan must be to enter into understanding with external institutes to deliver 'need based' programmes. [e.g. MoU's can be signed with Xavier Institute of Management (Bhubaneswar), Indian Academy of Highway Engineers (NOIDA), and National Institute of Construction Management and Research (Pune), to name a few].
- **Deviations:** Engineer-in-Chief Cum Secretary shall have the power to relax or waive off any of the guidelines in the HRD Policy, in deserving cases. The reasons/justifications shall be recorded.
- **HRD Policy review:** The HRD Policy shall be reviewed every five years, by a committee approved by Engineer-in-Chief cum Secretary, consisting of Engineer-in-Chief (Civil) as the chairperson, one CE, CE (HRD & Training Cell), one field SE, SE-Administration and Executive Engineer (HRD & Training Cell), to keep it in line with the latest trends in the area of Training & Development. The HRD Policy approved by Engineer-in-Chief cum Secretary shall be circulated as well as disseminated using OWD Web page.

Engineer-in-Chief reserves the right to modify, cancel, add or amend any of the provisions in the HRD Policy, at any time. Engineer-in-Chief cum Secretary may also review/issue administrative guidelines from time to time regulating the HRD Policy.

INDUCTION LEVEL TRAINING

At the entry level, the AE's and AEE's have to be given a comprehensive orientation course on various responsibilities/duties expected in the organization. Induction training is a type of training given as an initial preparation upon taking up a post. Induction training is part of an organisation's



knowledge management process and is intended to enable the new starter to become a useful, integrated member of the team, rather than being "thrown in at the deep end" without understanding how to do their job, or how their role fits in with the rest of the team at OWD. These programs can play a critical role in the organization in terms of performance, attitudes and organizational commitment. The course content for induction training is given below:

Induction Training Course Content

Indicative Course Content (inclusive of lectures, group discussions, skill practice sessions, laboratory training site visits and evaluation)

- Part A : Orientation
 - OWD Mission, Vision and Goals
 - OWD organisation structure and management
 - Public administration
 - Establishment and their service conditions
 - Accounts and financial matters
 - Audit and accounts
 - Labour laws
 - Minimum Wages Act
- Part B : Technical skills - Roads and Highways
 - State Road Policy
 - Built-Operate-Transfer Policy
 - Road Surveying Techniques, Formation of Lay outs and Alignments
 - Land Acquisition Rules and Methodology of Land Acquisition for Road Construction.
 - Layout Criteria and Laws for Public Utility Services viz. Level Crossings, Religious Structures, Historical Monuments, Petrol Pump, Flyovers, Road Safety Aspects
 - Pavement and Cross Drainage Designing: Identification of Soil Types and Determination of Bearing Capacity of Soils; Sub-grade/Sub-base strengthening materials in salt-infested and water-logged areas for road construction; Damage prevention; specifications for road construction in coastal areas;
 - Pavement Designing: Traffic census methods; Determination of standard axle loads and passenger car units for flexible pavement design and layer equivalencies of various non-bituminous and bituminous courses.
 - Deflection techniques and their use in overlay designs
 - Guidelines for flood assessment and preventive measures
 - Culvert designing and drainage development system

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- Evaluation of construction materials: Bricks/OBBB, Stone metal, Sand/filling materials, Blending material/Screening material, Bituminous materials including emulsions and cutbacks, Bitumen modifiers including polymers and rubbers, Cement, Lime, Geo-synthetic Materials, Steel Bars, Industrial Wastes
- Estimate Preparation and sanction process: Preparation of schedule of rate, Estimation preparation, General requirement for sanction of works, Budgetary Planning, Administrative approval and Technical sanction of Works; Tender Process for road construction work
- Construction Management: Material management techniques, Inventory Control and Work planning for road construction; Road construction machines and plants
- Earthwork: Determination of borrow area and principles of cartage of earth; methodology and measurement techniques; earthwork equipment
- Construction of granular sub base and base courses: WBM and WMM; Construction of bituminous levelling course like lean bituminous macadam; Construction of bituminous base courses BUSG, BM and DBM
- Design of bituminous mixes: Construction of painted surface with single or two-coat surface dressing with special reference to design procedure for surface dressing; Construction of mix seal surfacing; Construction of semi-dense asphaltic concrete, dense asphaltic concrete, full depth asphaltic concrete, hot-mix-hot laid bituminous paving materials; Construction of Traffic Intersection and Bridge decks with Mastic Asphalt
- Pavement Maintenance and Management System: Pavement evaluation techniques and norms; repair of pavements and damage control measure for potholes, cracking, depressions, rutting, slippage/creep of the surface; Rehabilitation of pavement by pavement recycling
- Part C : Technical skills - Bridge construction and management
 - Criteria for site selection of bridges
 - Elements of bridge design
 - Bridge construction stages and management
 - Rules for Toll collection and levies on bridges
 - Construction and maintenance of pontoon bridges and road bridge ferries
- Part D : Technical skills -Building construction and management
 - Criteria for site selection
 - Design systems for single and Multi storied buildings
 - Special Building Design: Green building designs; Earthquake resistant building designs and Preventive measures for damage in existing structures
 - Construction Requirements for RCC and RB work, Steel Structures, Brick Work, Wood Work, Painting and Varnishing, Floorings, Kitchen fixtures, General Installations,

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Maintenance of Buildings, Fire prevention measures in Multi-storied buildings, Electrification of buildings, Rehabilitation & repair of heritage buildings/structures using new techniques

- Dismantling of old structures, process and precautions
- Part E : Technical skills –Quality Tests
 - Destructive & Non Destructive Testing Methods
 - Field test for Road: GSB gradation; GSB Compaction (Sand replacement); aggregate crushing value, impact value; Binder quality; bitumen content
 - Field test for Buildings: Slump test; concrete mix density; water cement ratio
 - Lab test for Road: Sand content in soil; liquid limit; plastic limit; CBR Index
 - Lab test for Buildings: aggregate crushing value, impact value; water quality; Steel Tensile test; Concrete cube test (7 & 28 days)
- Part F : Technical skills –Information Technology
 - Operating MS Office including MS Word, MS PowerPoint and MS Excel
 - Using internet explorer, sending e-mails and carry out electronic data transfer.
- Part G : Technical skills –topographical surveys, using total station equipment, satellite imagery, remote sensing

IN-SERVICE TRAINING**Function/Task Related Training**

‘Demand-based’ training development and planning are matched with the *expectations* represented by the ‘Related Training Titles’. These titles best pronounce the subjects on which training is to be provided, and are presented in the **Table - 1** given below. This listing represents the comprehensive requirements of OPWD for their current and immediate future needs.

Table – 1: Training Titles

Sl. No.	Key Functional Areas and Tasks	Related Training Titles
1	Policy and Planning Prepare Strategic Plans (Master Plan: Roads, Master Plan: Buildings)	• Transportation Master planning for Road network in State, District and Cities
		• Master planning for Green Buildings: Concept
		• Understanding Transport Economics
		• Planning, design and operational concepts of Highways
		• Construction of roads - planning, norms,



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Sl. No.	Key Functional Areas and Tasks	Related Training Titles
		and institutional issues
		<ul style="list-style-type: none"> Understanding corridor management concepts
		<ul style="list-style-type: none"> Urban roads: special needs and characteristics
		<ul style="list-style-type: none"> Concept of Asset management
	<ul style="list-style-type: none"> Identify funding mechanism 	<ul style="list-style-type: none"> Tolling as a financial option and understanding Toll operations
		<ul style="list-style-type: none"> Cost benefit analysis (CBA) of road projects
	Promote and Implement Public/Private Sector Participation	<ul style="list-style-type: none"> Public private partnerships (PPP) in the roads sector
	Budgeting Process (Preparation, Control and Outcome) <ul style="list-style-type: none"> Prepare annual budget Carry out prioritization of investments Carry out phasing of investments 	<ul style="list-style-type: none"> How to prepare budgets based on Odisha Govt. guidelines and Monitoring of Departmental revenue
	Define Policy and implement systems	
	<ul style="list-style-type: none"> Prepare 'Quality of Work' policy 	<ul style="list-style-type: none"> Understanding elements and Developing OWD Quality Policy
	<ul style="list-style-type: none"> Prepare asset maintenance plan and strategy (Roads, Buildings) 	<ul style="list-style-type: none"> How to prepare an Asset Maintenance plan
2	Project Preparation	
	Carry out Field surveys	
	<ul style="list-style-type: none"> Conduct traffic survey 	<ul style="list-style-type: none"> How to carry out Axle load survey, Origin Destination (OD) Survey
	<ul style="list-style-type: none"> Prepare road/bridge inventory & condition report 	<ul style="list-style-type: none"> How to carry out Road inspection
		<ul style="list-style-type: none"> How to carry out Bridge inspection
		<ul style="list-style-type: none"> Rehabilitation and strengthening of bridges, bridge management system (BMS).
	<ul style="list-style-type: none"> Carry out soil investigation 	<ul style="list-style-type: none"> Soil and Geo-technical investigations for road projects
		<ul style="list-style-type: none"> Landslide investigations – Soil, Geotechnical



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Sl. No.	Key Functional Areas and Tasks	Related Training Titles
	<ul style="list-style-type: none"> Conduct hydrology study 	<ul style="list-style-type: none"> Importance of hydrology for sustainable roads
	<ul style="list-style-type: none"> Carry out topography survey 	<ul style="list-style-type: none"> How to carry out topographical surveys using total station equipment
	<ul style="list-style-type: none"> Conduct deflection test for pavement evaluation (in case of existing roads) (Task OUTSOURCED) 	<ul style="list-style-type: none"> Different types of deflection test for pavements
	Prepare Geometric design	<ul style="list-style-type: none"> Geometric design of roads of different categories – national/international practices
	Prepare Pavement design	<ul style="list-style-type: none"> How to design flexible pavements (IRC37:2012)
		<ul style="list-style-type: none"> How to design Rigid pavements
		<ul style="list-style-type: none"> How to design Road Foundations
	Prepare design and final drawings of structures <ul style="list-style-type: none"> Bridge design, Culvert design 	<ul style="list-style-type: none"> Design of interchanges
		<ul style="list-style-type: none"> Bridge standards - design of bridge foundations, substructures, superstructures and how to design culverts
	<ul style="list-style-type: none"> Drainage design 	<ul style="list-style-type: none"> Road drainage design for sustainable roads
	<ul style="list-style-type: none"> Retaining structures in case of high embankments 	<ul style="list-style-type: none"> Soil reinforcement structures – design and construction
	Prepare Traffic management plan	<ul style="list-style-type: none"> How to prepare a Traffic Management Plan
		<ul style="list-style-type: none"> Understanding and application of Traffic Engineering design concepts
	Mark out the right of way <ul style="list-style-type: none"> Prepare Right of Way – encroachment and land acquisition strategy 	<ul style="list-style-type: none"> Land acquisition and resettlement and rehabilitation policies for roads
	Prepare architectural plans and drawings	<ul style="list-style-type: none"> Design of Green Buildings for Hospitals and Schools
	<ul style="list-style-type: none"> Conduct bearing capacity soil test 	<ul style="list-style-type: none"> How to conduct soil bearing capacity test
	Prepare Building design – Multi-storeyed (seismic zone consideration)	<ul style="list-style-type: none"> High Rise Buildings - Planning, Construction & Maintenance



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Sl. No.	Key Functional Areas and Tasks	Related Training Titles
	Prepare BoQ <ul style="list-style-type: none"> Define Activities Match/Prepare Specifications Prepare Estimates 	Specifications for road and bridge works, Elements of Standard Data Book (MORTH)
		How to prepare 'Feasibility reports (FR)' and 'Detailed project reports (DPRs)' for road/building projects.
	Knowledge of updated codes (e.g. NCB, IRC, BIS)	<ul style="list-style-type: none"> Features of Road legislation National Building Code of India 2005
3	Environmental and Social Management	
	Conduct impact assessments studies <ul style="list-style-type: none"> social impact assessment environmental impact assessment 	<ul style="list-style-type: none"> Understanding social impact assessment (SIA) Understanding environmental impact assessment (EIA)
	Prepare rehab resettlement plan (R/R)	<ul style="list-style-type: none"> How to prepare a 'rehab resettlement plan'
	Prepare environment management plan (EMP)	<ul style="list-style-type: none"> How to prepare an 'Environment management plan'.
4	Procurement Management	
	Implement FIDIC guidelines	<ul style="list-style-type: none"> Contract administration and procurement procedures- FIDIC conditions
	Implement BOT/PPP Contracts	<ul style="list-style-type: none"> Types of Contract.
	Implement NCB/State Government tendering procedure (Based on OWD Code)	<ul style="list-style-type: none"> Understanding EPC models, case studies.
	Implement e-procurement procedure	<ul style="list-style-type: none"> Good Procurement Practices - e-procurement procedure model
5	Project Management	
	Prepare Work Program Allocate Staff & Define responsibilities	<ul style="list-style-type: none"> Understanding Project management concepts
	Review, Prepare Report of Physical & Financial Progress	<ul style="list-style-type: none"> How to monitor and report physical & financial progress
6	Construction supervision	<ul style="list-style-type: none">
	Review contractor's construction Management Plan	<ul style="list-style-type: none"> Understanding requirements of Construction Supervision (Project Implementation)



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Sl. No.	Key Functional Areas and Tasks	Related Training Titles
	Quality monitoring of Works	<ul style="list-style-type: none"> Non Destructive Testing Methods for Materials & Structures
	Conduct Material Tests	<ul style="list-style-type: none"> Quality control tests in field and laboratories
7	Contract Management	
	Monitor Work Program and Time <ul style="list-style-type: none"> Monitor & Exercise Cost Control Assess & Justify Variations (extra/substitute items), award extension of time Manage Dispute Resolution and Arbitration 	<ul style="list-style-type: none"> Understanding Contract Management Process
8	Quality Management	
	<ul style="list-style-type: none"> Implement Quality Assurance Monitor & Exercise Quality Control Carry out Quality Audit 	<ul style="list-style-type: none"> Quality Assurance Systems and TQM for Highway/Building Projects Managing Project Quality
9	Safety Management <ul style="list-style-type: none"> Prepare safety plan and implement during Construction Implement safety plan during Operations Implement safety plan during Maintenance 	<ul style="list-style-type: none"> Planning Road Safety norms, designing for road safety and elements of road safety audit
10	Financial Management & System implementation	
	Manage financial instruments and Tax aspects	<ul style="list-style-type: none"> Understanding commercial banking operations for contract management Understanding statutory require under IT Act (TDS) and Service Tax.
	Implement Financial MIS – iOTMS and WAMIS	<ul style="list-style-type: none"> Understanding Financial MIS – IOTMS and WAMIS
	Apply OWD code	<ul style="list-style-type: none"> How to apply the revised OWD Code
	Prepare Accounts	<ul style="list-style-type: none"> Financial Accounting and Management in OPWD



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Sl. No.	Key Functional Areas and Tasks	Related Training Titles
	Prepare Accounts Audit replies	<ul style="list-style-type: none"> Financial Audit and responses
11	Maintenance	
	Prepare Periodic / Routine / special Maintenance plan <ul style="list-style-type: none"> Identify and assess pavement distress 	<ul style="list-style-type: none"> Maintenance of roads/pavements Maintenance Management System for Highways/Road, pavement evaluation techniques, HDM-4.
	Carry out condition survey of Bldgs. and prepare Bldg maintenance plan	<ul style="list-style-type: none"> Modern Techniques in Structural Conservation of Heritage Buildings Leakages and Water Proofing Treatment in Buildings
12	Other Tasks	
	Prepare Disaster Readiness Plan	<ul style="list-style-type: none"> Disaster Management in Highway Sector and retrofitting
	Prepare and Manage Documentation (MPR, APR, Utilization Certificate, etc.)	<ul style="list-style-type: none"> How to set up an effective Documentation filing system
	Carry out Performance appraisal	
	Plan and Manage Training	<ul style="list-style-type: none"> Understanding Human Resource Development and Training
	Manage Asset Records	<ul style="list-style-type: none"> How to enter asset data, generate reports and manage asset e-register
	Respond to Right to Information (RTI) act	<ul style="list-style-type: none"> How to prepare response to requests under Right to Information act
13	Information Technology	
	Apply Computer applications – M S Office, Web etc. ,	<ul style="list-style-type: none"> How to operate MS Office including MS Word and MS Excel, internet explorer, send e-mails and carry out electronic data transfer
	Apply Computer applications –MX Roads,	<ul style="list-style-type: none"> How to operate MX Roads software
	STAAD PRO,	<ul style="list-style-type: none"> How to operate STAAD PRO software
	Auto CAD	<ul style="list-style-type: none"> How to operate Auto CAD software
	Apply GIS application for planning	<ul style="list-style-type: none"> How to use GIS and GPS in road sector
	Apply Project Management Software – MS Project, Primavera,	<ul style="list-style-type: none"> How to use Primavera/MS Project software for project management

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Sl. No.	Key Functional Areas and Tasks	Related Training Titles
14	Human Resource Management	
	<ul style="list-style-type: none">• Apply Monitoring skills• Implement Decision-making• Apply Motivational tools• Apply Written and Oral Communication skills	<ul style="list-style-type: none">• Executive Management Development Programme Training• Understanding Leadership and Management
	<ul style="list-style-type: none">• Apply HR Management skills	<ul style="list-style-type: none">• How to apply Human Resource Management Skills

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