No.F.4(60)/2023-24/PWD-II/Roads/__1188-_1198 GOVERNMENT OF NCT OF DELHI **Public Works Department** (CD No. 057742583)

PWD Secretariat 3rd Level, MSO Building, New Delhi Dated 20 August, 2024

OFFICE MEMORANDUM

Sub: Streamlining the under taking of project works on behalf of Client Department by PWD- Reg.

1. The Public Works Department, Govt. of NCT of Delhi, has been undertaking out various infrastructure projects, Extra Ordinary Repair (EOR) works as well routine maintenance works on behalf of various Government Departments/ Organizations/ Undertakings functioning under GNCTD. Works are carried out after obtaining Administrative Approval and Expenditure Sanction (A/A & E/S) from the Competent Authority of the Client/Administrative Department, out of their allocated Budget. However, it has been noticed that the requisitions being submitted by Client Departments before the PWD suffer from various procedural infirmities, which disrupt the process of completion of works. Accordingly, the following instructions/guidelines are being issued for streamlining and better monitoring of works undertaken by PWD.

2. Activities broadly involved in Client Department works

2.1.Pre-construction Stage (Annexure – A)

- a) Finalization of scope
- b) Finalization of the architectural and structural drawings
- c) Identification of Hindrances
- d) Removal of encroachment from Site
- e) Valid approval from Forest Department for felling / transplantation of trees along with alternate space duly approved by the Forest Department
- f) Receiving of approvals from all concerned agencies
- g) Submission Detailed project estimate upon freezing the requirements and drawings by PWD to client Department
- h) Accordance of A/S and E/S along with appropriate Budget provision by Client Department
- i) Signing of MoU between PWD and Client department with the finalised scope

2.1. Construction Stage

- a) Execution of the Project
- b) Monthly visits of the Client department and PWD
- c) Reconciliation of project progress every quarter by Client department
- d) Any change in the architectural drawings found necessary during the execution of work due to any practical difficulty etc., is immediately brought to the notice of the Client and concerned Architect Unit/Consultant for approval

e) A Guard file shall be maintained at all work sites, containing copies of all inspection reports to-date. Site Order book, Record of tests, etc. are put up for entries and review to every inspecting officer. The inspecting officers of the rank of Superintending Engineer to mandatorily check the progress every month and not only confine themselves to review of progress, coordination and general matters, but also inspect the work from quality

f) The decision of the Superintending Engineer/Project Manager/Chief Project Manager/Chief Engineer regarding the quantum of reduction as well as justification thereof in respect of rates for sub-standard work that is decided is

final and would not be open to arbitration under clause 25 of the agreement. g) One month prior to completion of the project, the HoD of the client department

shall inspect the site and record the deficiencies in the project and convey the same to PWD for rectifications.

2.3.Completion Stage

a) Quality check by PWD

b) Quality check by Client Department

c) Water Supply, Sewerage and Electricity supply to be provided by the Client Department

d) Handing / Taking over of the Project

3. Requisition from Client Departments

The requisition of work from the Client Departments shall necessarily contain all their requirements in clear terms to be undertaken by the PWD. The requisitions shall be processed by PWD if the same is received from the HoD of the client department along with adequate available budget provision. It has been noticed that requisitions for carrying out Extra Ordinary Repair (EOR) works and other maintenance works are being forwarded by the sub-ordinate authorities of the Client Departments viz. HOS of Government Schools, Colleges/Institutions, Hospitals, SDMs/SRs, and by other subordinate offices/authorities without obtaining necessary approval from the Competent Authority of their Administrative Department, which is procedurally irregular. Further, multiple requisitions are also received in PWD from subordinate offices in the same financial year. Requisitions from Client Departments shall henceforth be processed by PWD only if the same are received from their Administrative Department HQ after compilation of all requisitions from Sub-ordinate Offices.

4. Scope of Work

It has been observed that the requisitions submitted by the Client Departments for carrying out EOR and other works are not accompanied by the "Scope of the Work" defined in clear terms, which often results in dispute between Client Department and PWD at the time of obtaining "Completion Certificate" after completion of work. Hence for all the requisitions should be accompanied by the Scope of Work mentioned in clear terms, which should include (but not limited to) the following provisions, wherever applicable:

a) Scope of work

b) Floor plans for building etc. and geometry for other works etc.

c) Elevations/Sections/Perspectives

d) Area and/or Length statements as applicable

- e) Specifications in detail for each structure/building and its services to be included in the DPR
- f) requirement of various finishing items
- g) required of additional scope if envisaged
- h) Splitting of project in phases required
- i) Specific electrical appliances like centralized AC, etc.
- j) Comprehensive maintenance of the asset etc.
- k) If the scope of work involves requirement is of the nature that :
 - Client resolves for a particular technology.
 - Client requires specific Architectural and Engineering designs with specific functional requirement
 - Client requires the assistance of a private consultant,

Then an enabling estimate may be submitted as per client requirement for carrying out preconstruction activities wherever required for conceptual planning purpose to assess the precise requirement of the scope of work.

The Scope of work must be authenticated by the Client Department HQ conveying the name and designation of the Nodal officer of the Client Department for co-ordination and monitoring of progress of the work and for certifying completion of work according to the pre-defined scope of the work.

Preparation of Architectural Designs 5.

- The concept design, preliminary drawings and specifications based on detailed requirements of the work, in consultation with the client, is prepared before framing i. of the PE. PWD may prepare these drawings either through their in-house architect or through a specialized agency as per the requirement of the client department. The final drawings shall be communicated to PWD upon the approval of the HoD of the client Department. Only after finalization of architectural designs by the Client department, the process of estimating the work shall commence in PWD.
- If there is a considerable time lapse between the finalized drawings and the accordance of A/S and E/S, the drawings may have to be revised to suit the present conditions of the site and scope of work and the additional cost, if any, shall be borne by the client department.
- PWD shall solely be responsible for preparation of drawings which are in accordance with the prevalent statutory approvals of MCD, DUAC, Fire etc,.

Initiation of Estimates

The following details are required from the Client department to enable Preliminary Project Planning (both Engineering and Architecture) for preparation of the PE or PPR or DPR:

- Document showing ownership of land duly certified by the client that the (i) same would be able to be handed over to the contractor upon award of work free from all encumbrances and encroachments
- Boundary of the plot(s) either constructed or demarcated and free from (ii) dispute.
- Topographical Map of the site. (iii)

Geotechnical Data (which includes a study of foundation system of (iv) structures including private structures - in the vicinity and is as per codal provisions for the proposed structures).

Sources of the Bulk Services required as well as approved waste dumps (v)

for waste disposal.

Mandatory (e.g. fire, lift, EI, WS and SI etc.) as well as optional (HVAC, (vi) STP, RO, UPS, DG, SPV, Solar water heating etc.) services for each building/structure required by the client and found feasible.

Approval from Forest Department of felling/ transplantation/ compensatory (vii) afforestation of trees shall be responsibility of the Client Department. The client department shall also ensure suitable alternate land for complying

with the Forest Department's conditions of tree removal

Removal of Hindrances such as (but not limited to) utility services, High (viii) tension vires etc., are to be detailed in the preliminary planning and shifting of these utilities to be completed before the commencement of the

main project

If there is a considerable time lapse between the accordance of A/S and (ix) E/S and the commencement of work due to encroachments, nonavailability of land or delay in receiving permissions, the estimates may have to be revised to factor in the escalation due to the change in prevailing rates. However, PWD shall not be entitled to award the work without the explicit approvals are received and the site has been handed over to PWD without an encumbrance.

Detailed Project Report 7.

Upon finalization of drawings, a detailed project report containing cost estimation, etc. shall be communicated to the client department which shall contain:

Brief description of the Project (i)

The obligations on the part of the client department, PWD, and the (ii) contractor with specified time limits for smooth execution of work

Architectural, Structural and MEP services specifications along with (iii)

special conditions for execution of these jobs

In addition to the structures and their mandatory services (e.g. Internal (iv) Electrification, Fire Services, Lifts, Water Supply, Sewerage etc where applicable) the list of optional services desired by the client

Cost Estimate on simple Plinth Area or length basis where possible and (v) detailed basis for others etc. is duly enhanced by applicable cost index or by adopting any other appropriate method as decided by NIT approving authority in case cost index is not applicable including provision for cost of design development by contractor and risk devolving on the contractor

Provision is made separately for post completion operational cost (for 5 (vi) years or higher as agreed with client) and maintenance cost (beyond free maintenance period and up to 5 years or higher as agreed with client) as

per the client's requirement

Shifting of utilities and other approvals (vii)

and electricity supply connections cost and Water, sewerage (viii) responsibilities

List of approved makes and models for components (ix)

- Tentative time frame for completion, post completion operation and (x) maintenance
- List of three or more suitable agencies (proof check agencies) or (xi) parameters for the selection of the proof check agencies, tasked with checking and approving the design submitted by the contractor from engineering and architectural aspects
- Payment schedules to the contractor along with the progress of the work (xii)
- Procedure and time frame for approval of implications of changes in (xiii) scope of work requisitioned by the client as compared to that indicated in the sanctioned PPR/DPR

Accordance of Administrative approval and Expenditure Sanction (A/A & 8. E/S)

Upon finalization of designs and DPR, the client department shall convey to PWD the A/S and E/S along with appropriate Budget provision. The budget required for client department projects shall be part of the client departments budget and PWD may only be authorized to take up the work. For works which are to be executed through a contractor, they shall be put to tender and the remaining works like payment to other departments for shifting of utilities and payments to other departments for statutory approvals shall be deposited directly to the departments/agencies concerned.

Budget Provisions 9.

- It has been noticed that requisitions are submitted by the Client Departments and i. necessary Administrative Approvals and Expenditure Sanctions (A/A & E/S) are accorded without availability of sufficient budget provisions and without prioritization of works out of the budget available for the Client Department during the given financial year. New projects are to be requisitioned to PWD by the client department only after detailing out the requirement for regular maintenance and minor repairs of exiting assets if there is single head of account.
- The payments for the execution of work shall strictly be made by a payment schedule which shall be communicated to the client department in advance and shall also be a mandatory part of DPR.
- The budget may be released to PWD only by a Letter of Authorization and all requirements for committed liabilities and ongoing works shall be communicated by PWD to the client department by January 31st, of every year to allow the client department to plan their budget well in advance.
- Non-availability of sufficient budget not only delays the progress schedule of the work but also poses potential cost implications in the form of escalation in cost, initiation of arbitration, etc. Henceforth, all new projects of client departments may be sanctioned within the budget held with the client department and the Head of account is also operated by the client department.
- Reconciliation of Budget every quarter shall mandatorily be carried out by the client department and E-in-C, PWD and the deficiencies be addressed immediately. No new projects shall be taken up if the reconciliation of previous quarter budget is not completed. The findings of the reconciliation meetings as specified below may be sent for the perusal of the administrative secretary of the client department and PWD.

S.No	Quarter specified	Financial reconciliation	Project progress monitoring		
1.	Q1 (Apr – June)	Last week of June	First week of Apr First week of Jul		
2	Q2 (Jul –Sept)	Last week of Sept			
3	Q3 (Oct – Dec)	Last week of Dec	First week of Oct		
4	Q4 (Jan- March)	Last week of March	First week of Jan		

Monitoring 10.

The timely completion of projects along with satisfactory quality of projects depends on the monitoring of the project by both the client department and PWD. A quarterly inspection of all projects in the jurisdiction of the superintended engineer may be drawn up and be submitted to E-in-C Office. Joint inspections along with client department shall be mandatory for the successful implementation of the project. The project progress reconciliation as mentioned in the above table shall scrupulously be followed.

Quality Assurance 11.

The Engineer-in-Charge shall be responsible for the overall quality of work. The works shall be inspected frequently by various officers concerned with the work to ensure that the work in general is being carried out according to quality,

design, drawing, and specifications.

The Superintending Engineer shall check and sign compliance of the quality assurance plan for the original/ major work costing above Rs. 10 crores before every alternate running account bill. The Superintending Engineer is not absolved of his/her responsibilities to ensure that the quality assurance plan is compiled within every work under his/her charge. It is his/her responsibility to locate the lapses or deficiency and take suitable action if the quality assurance plan is not implemented in spirit and action by the field officers.

The specific Performa with regard to maintaining quality control and the inspection to be carried out is attached at Annexure-B. Monthly quality control inspections carried out in each of the projects shall be communicated to the client

department.

12. The provision of Works Manual, etc. as may be applicable shall scrupulously be followed in the execution of works.

> (Shashanka Ala, IAS) Special Secretary, PWD

To

Pr. Secretary to Hon'ble L.G., Delhi

- Addl. Secretary to Chief Minister, Govt. of NCT of Delhi
- 3. Secretary to Hon'ble Minister (PWD), Govt. of NCT of Delhi

4. Secretaries to all Ministers, Govt. of NCT of Delhi

 All Addl. Chief Secretaries/Pr. Secretaries/Secretaries/HODs, Govt. of NCT of Delhi

S.O. to Chief Secretary, Govt. Of NCT of Delhi

- 7. All HODs, Local Bodies/Public Undertakings/Autonomous Bodies/Universities/Institutions/Commissions/Boards, Govt. Of NCT of Delhi
- 8. The Engineer in Chief PWD, 12th Floor, MSO Building, New Delhi
- 9. All Chief Engineers of the PWD, GNCTD, MSO Building , New Delhi

10. All SE/EE/ through Chief Engineers (PWD), GNCTD

11. System Analyst, PWD with the request to upload the OM on the website of PWD under relevant section.

DETIALS OF PRE-CONSTRUCTION ACTIVITIES

The following Activities are involved in Pre-construction stage:

- (A) Incase A/A &E/S based on Detailed Project Report (DPR) after approval of enabling estimate, then following pre construction activities shall be followed.
 - (i) Requisition from the client.
 - (ii) Preparation of enabling estimate for preparation and submission of detailed Project Report (DPR) to client for accord of A/A & E/S. The enabling estimate should be prepared after consultation with the client to assess and appreciate their requirements.
 - (iii) The enabling estimate should give Rough Cost based on probable plinth areas requested by client and should incorporate estimated expenditure to be incurred on the following activities:-
 - (a) Site survey,
 - (b) Soil investigation
 - (c) Appointment of Architectural consultant, if required
 - (d) Appointment of Structural consultant, if required
 - (e) Appointment of E&M consultant, if required
 - (f) Other essential preliminary steps connected with preparation of detailed project reports.
 - (g) Model of the project, if required
 - (h) Assessment of services such as water supply, electricity, drainage and sewerage etc.
 - (i) Obtaining statutory approval from local bodies / local authorities
 - (iv) Submission of enabling estimate to the client
 - (v) Approval of enabling estimate by the client.
 - (vi) Appointment of consultant for site survey, soil investigation, obtaining local body approvals, architectural, structural and E&M services, wherever required.
 - (vii) Discussion with the client to assess and appreciate their requirements, incorporation of the same and preparation of the detailed architectural plans and specifications.
 - (viii) Approval of the detail architectural plans by the client.
 - (ix) Preparation of detailed working drawings including all architectural detailing.
 - (x) Submission of the plans to the Local Bodies / ASI / Fire Department /Civil Aviation Authority / EIA Clearance from Environment and Forest Department for their approval, if required.
 - (xi) Preparation of Structural drawings.
 - (xii) Preparation of services drawings

- (xiii) Approval of plans by the Local Bodies
- (xiv) Preparation of DPR including detailed cost estimate for buildings and all services (civil, electrical and mechanical)
- (xv) Submission of DPR along with detailed cost estimate to client for accord of A/A & E/S
- (xvi) Receipt of A/A & E/S from the client.
- (xvii) Preparation of NIT and call of tenders.
- (xviii) Selection of contractors from the pre-qualification applications wherever applicable.
- (xix) Receipt / opening of tenders
- (xx) Decision of tender and award of work.
- (B) In case of typed design construction and available approved architectural drawings, then following pre construction activities shall be followed:-
 - (i) Preparations of detailed cost estimates for buildings and all services (civil, electrical and mechanical) based on available architectural drawings, soil data details, structural drawings, service drawings / details, etc.
 - (ii) Receipt of A/A & E/S from the client.
 - (iii) Submission of the plans to the Local Bodies / ASI / Fire Department / Civil Aviation Authority / EIA Clearance from Environment and Forest Department for their approval, if required.
 - (iv) Approval of plans by the Local Bodies, if required.
 - (v) Preparation of NIT and call of tenders.
 - (vi) Selection of contractors from the pre-qualification applications wherever applicable.
 - (vii) Receipt / opening of tenders
 - (viii) Decision of tender and award of work.
- (C) In case Administrative Ministry / Department is asking for Rough cost Estimate based on plinth area rates and preliminary plans for depositing money with CPWD or for any other reason, then following pre construction activities shall be followed:-
 - (i) Requisition from the client.
 - (ii) Preparation of site /soil data and assessment of feasibility of services such as water supply, electricity, drainage and sewerage etc.
 - (iii) Discussions with the client to assess and appreciate their requirements, incorporation of the same and preparation of preliminary plans.
 - (iv) Approval of preliminary plans by the client.
 - (v) Preparation of Rough Cost estimate.
 - (vi) Deposition of fund with CPWD by the client.
 - (vii) Preparation of architectural drawings and review with client and modification of drawings, if required.
 - (viii) Preparation and submission of the plans to the Local Bodies for their approval.
 - (ix) Approval of plant by the Local Bodies.

- (x) Preparation of Structural drawings.
- (xi) Preparation of services drawings
- (xii) Preparation of detailed working drawings.
- (xiii) Preparation of DPR including detailed cost estimate for buildings and all services (civil, electrical and mechanical)
- (xiv) Submission of DPR along with detailed cost estimate to client for accord of A/A & E/S
- (xv) Receipt of A/A & E/S from the client.
- (xvi) Preparation of NIT and call of tenders.
- (xvii) Selection of contractors from the pre-qualification applications wherever applicable.
- (xviii) Receipt / opening of tenders
- (xix) Decision of tender and award of work.

PROFORMA FOR QUALITY CONTROL INSPECTION BY CIRCLE OFFICE QA TEAM

PART - I

1. General

- 1.1 Name of work.
- 1.2 Division and Sub-Division.
- 1.3 Inspecting officer.
- 1.4 Assisted by.
- 1.5 Date of present inspection.
- 1.6 Referenc-e to memos of previous Inspection.

2. Particulars of work

- 2.1 Estimated cost put to tender.
- 2.2 Tendered amount.
- 2.3 Agreement no.
- 2.4 Name of contractor.
- 2.5 Registration class of contractor.
- 2.6 Date of start of work.
- 2.7 Due date of completion.
- 2.8. % age progress of work at the time of inspection

3. Routine Quality Control

- 3.1 Quality control aids.
 - 3.1.1 Is field staff equipped with:
 - (a) Copy of agreement with relevant specifications (detailed as well as special).
 - (b) Copy of preliminary estimate, detailed estimate and measurements.
 - (c) Upto date architectural as well as structural drawings.
 - (d) Testing facilities with the help of necessary field instruments/equipments (List of equipments available at site including level, theodolite, etc. may be given).
- 4. Observations on compliance of Quality Control system after intensive inspection under following sub- heads:
 - 4.1 Earthwork.
 - 4.2 Concrete work.
 - 4.3 R.C.C. work.
 - 4.4 Brick work.

- 4.5 Stone work.
- 4.6 Steel work.
- 4.7 Flooring (including marble work, if any).
- 4.8 Roofing.
- 4.9 Finishing.
- 4.10 Miscellaneous.
- 4.11 Services, etc.
- 5. Quality and Testing of materials/Products
 - 5.1 Comment on:
 - 5.1.1 Testing facilities available with the Department at site.
 - 5.1.2 Testing facilities arranged with other Department/institution.
 - 5.1.3 Testing facilities further required to be arranged.
 - 5.2 Testing
 - 5.2.1 Are all mandatory tests being carried out at the frequency mentioned in CPWD Specifications?
 - 5.2.2 No. of tests failed and approximate quantity rejected.
 - 5.2.3 General observations on tests, viz. erratic results, consistently low or high results etc.
 - 5.2.4 Follow up action taken on unsatisfactory results, with lapses in prompt follow up action.
 - 5.2.5 Samples tested by Assistant Engineer (P) and their results (Samples should invariably be taken where material/product at site does not appear to conform to the latest test results.
 - 5.3 Is material/product of make borne on approved list of Department/ISI?
 - 5.3.1 Are tests carried out on materials/products (covered under 5.3) found satisfactory?
- Comments on adequacy of resources employed by the contractor at site for timely completion of work.

PART - II TECHNICAL AUDIT

- General details of work.
 - 1.1 A/A & E/S amount for the work and corresponding provision available for this work in the sanction.
 - 1.2 Amount of detailed estimate.
 - 1.3 Item rate/percentage rate/lump sum tender.
 - 1.4 No. of tenders received and tendered amount (call of tender).
 - 1.5 Authority accepting the tender.
 - 1.6 Is the detailed estimate technically sanctioned on the basis of complete set of architectural and structural drawings?

- 2. Deviation from plan/drawings.
 - 2.1 Deviations, if any.
 - 2.2 Reasons for deviation, financial implication and sanction of competent authority.
- Deviation in quantities of items.
 - 3.1 Reasons for deviations.
 - 3.2 Sanction of competent authority for the deviation.
- Extra and substituted items.
 - 4.1 Amount of items sanctioned so far.
 - 4.2 Sanction of competent authority.
 - 4.3 Any minus extra item paid? Detail the reasons.
- Issue of materials.
 - 5.1 The theoretical consumption commensurate with the work executed and quantity lying at site.
 - 5.2 Check recovery memo from the last running bill/final bill and short recovery made, if any.
 - 5.3 Any material not stipulated issued?
 - 5.3.1 Sanction/approval of competent authority for such issue.
 - 5.3.2 Approval of rate under three rate formula.
- 6. Payment to contractor.
 - 6.1 Amount of last bill paid to the contractor.
 - 6.2 Normal frequency of payment.
 - 6.3 Test check of measurements by Assistant Engineer/Executive Engineer.
 - 6.4 Part rates paid/justification for the same.
 - 6.5 Advances to contractor.
 - 6.5.1 Checking up of secured advance, if any, with reference to materials lying at site.
 - 6.5.2 Reasonableness of advance for un measured work.
 - 6.5.3 Hypothecation of documents and safe custody of materials for which advances have been given.

PART - III PROGRESS MONITORING

- System adopted at site for monitoring progress.
- 2. Percentages progress achieved vis-a-vis time given for completion.
 - 2.1 Steps taken to accelerate progress when shortfall is noticed.
- 3. Any extension of time required?
- 4. Co-ordination amongst various agencies involved in execution of work.
- 5. Constraints noticed in smooth progress of work and directions if any, received from Executive Engineer/Superintending Engineer/Chief Engineer to overcome them.

PART - IV RECOMMENDATION

- 1. Give specific recommendations for immediate attention of Superintending Engineer on:
 - 1.1 Improving quality control on specific items.
 - 1.2 Comments on items lagging behind for want of drawings, materials, decision etc.

To

SE

[Assistant Engineer (QA)]

PART - V DIRECTION OF SE ON THE REPORT

- 1. EE to improve quality of following items.
- 2. EE to issue notice to contractor for rectification of following defects at
- 3. EE to improve slow progress.
- 4. Directions, if any, for solving deadlocks/problems at site.
- 5. Further follow up action by AE(QA) on next inspection.

To

AE (QA)

[Superintending Engineer]

Annexure - VI Quarterly Statement Of Works

SI. No.	Name of work	Est. cost (in lakhs) Rs.	Tender cost (in lakhs) Rs.	%age above / below estimat- ed cost		Agency	Date of commen- cement	Stipulated date of completion	Physical progress of work	Name of Engineer incharge with add- ress	Remarks
1	2	3	4	5	6	7	8	9	10	11	12
											7