

GOVERNMENT OF ODISHA

WORKS DEPARTMENT

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OFFICE MEMORANDUM

No. 07584000092025 3523 /W, Bhubaneswar, Dated, 21/02/26

Government has been pleased to implement the following guidelines for the maintenance of SH/ MDR/ ODR roads under the Works Department for providing quality road network for safe, sustainable, and efficient transportation of goods and people across the State.

**Sub: Guidelines for Maintenance of SH/MDR/ODR of PWD Roads.**

**1. Introduction:**

The timely upkeep and maintenance of pavement surfaces provide numerous benefits for the preservation of road assets. Effective maintenance practices help reduce the rate of pavement deterioration, vehicle operating costs (VOC), accident rates, and pollution levels by minimizing fuel consumption on well-maintained roadways. Early detection of pavement distress and the prompt repair of roads at the initial stages can prevent or delay further deterioration. Therefore, the timely and appropriate maintenance of roads using sustainable and suitable materials and methods is crucial for preserving road assets and ensuring that the infrastructure continues to serve its intended purpose effectively. Realising the paramount need for maintaining the durability of such assets, this suggestive guideline on the inspection and maintenance of roads is framed.

**2. Objective:**

- i. To achieve the goal of zero complaints on account of maintenance, a foolproof maintenance mechanism has been developed. For this, it has been decided that all the sections of PWD roads must have an accountable maintenance agency. All sections of roads under the State PWD are to be covered under the development plan, DLP, or any maintenance contracts.
- ii. For stretches developed under any of the contracts having maintenance obligations, the contractor will be responsible for its maintenance during the defect liability period.
- iii. For stretches which are yet to be developed, the Performance Based Maintenance Contract PBMC for long-term maintenance contract and short-term maintenance contract (STMC) is to be adopted in line with the latest guidelines of MoRT&H, relevant IRC codes, and Odisha State Road Policy (OSRP,2025).

**3. Adoption of Innovative Methods for Maintenance of SH / MDR/ ODR :**

State PWD Odisha has decided to adopt the following broad guidelines/Action Plans for taking up effective Maintenance and repair of SHs/MDRs/ODRs through the Short-Term maintenance contract or Performance-based Maintenance contract in line with MoRT&H guidelines.

**i. Short Term Maintenance Contract (STMC)**

These will be undertaken where DPR has been completed / in advanced stages of

completion / not required, and development work is planned to be commenced after a year or so, with due consideration of the prospective appointed date for such projects; for avoidance of doubt, it is clarified that the duration of commencement shall also include the likely period of issuing appointed dates. Contract period shall be generally 01 (one) year. Contract period (maximum one year) should be kept in such a way that by the end of the existing contract, the new contract should be in place. If development work has been sanctioned and there is a delay in giving the appointed date, then in such cases, also short-term maintenance contract may also be undertaken; however, such contracts need to be foreclosed at the time of the appointed date. Multiple stretches may be combined under a single contract depending upon geographical proximity and operational convenience, so as to have a minimum length of about **25 km** or so. The division level officer and contractor shall carry out quantification of works as per the contract and based on time-stamped geo-tag images of items of works before and after work is done. This evidence shall be part of the bills submitted for payments.

ii. **Performance-Based Maintenance Contract (PBMC):**

Such a contract will be undertaken on those SH/MDR/ODR stretches where road condition is generally good and structurally sound, and no deficiencies exist, and either no further expansion has been planned in the next five years or seven years, development work is likely to start after 3 to 4 years. Implementation of PBMC shall be generally avoided in cases where the existing pavements are in moderate to severely distressed condition, necessitating a significant amount of initial rectification works; in all such cases, separate contracts for undertaking extensive rehabilitation of distressed sections of roads may be undertaken based on detailed investigation instead of PBMC. All SH/MDR/ODR stretches wherein implementation of one renewal layer would be and large suffice traffic worthiness of such sections, along with modest initial rehabilitation interventions, and where no capacity augmentations are required to be done shall also be covered under a Performance-based maintenance contract. Such contract will generally include one cycle of renewal layer; renewal layer may be implemented in phases in project length in a staggered timeline; however, entire length under contract shall have to be covered by renewal layer latest within second year of contract period which may be either 5 years, 7 years or more: for contract period of 7 years (and above, if any), two cycles over the section at the end of contract period: in all such cases adequate time lag obligations under defects liability Period (DLP) as per extant Government policy. Such a contract is to be done preferably for a length of **50 km**. If any single stretch is less than 50 km, then multiple stretches may be clubbed together.

Development plan if necessitated in such stretches, may be initiated before expiry of the PBMC, and the existing PBMC may be foreclosed at the time of the appointed date.

For stretches being considered for the award of PBMC just after completion of DLP of any development project, it shall be mandatorily ensured that all structures and pavements are in serviceable conditions as per contract provisions. Accordingly, all executing agency and circle level officers of State PWD shall ensure that all necessary rectification works (if any) are fully completed under all such projects before completion of DLP of PBMC and taking over of the project section.

Stretches requiring significant strengthening or adding new facilities may be avoided under PBMC, and a separate contract may be done after proper survey and investigations.

For any avoidance of doubt, if the cost of Initial rectification is more than 25% of Periodic maintenance works, or the DBM layer is required in excess of 10% of the project length, or the Concrete panel replacement requirement is more than 10% then the PBMC contract may be avoided, and rather other improvement contracts like strengthening may be carried out.

A detailed SOP has been prepared regarding the preparation of the estimate and implementation of performance-based maintenance works, and is attached at **Annexure-I**

#### **4. Implementation of Maintenance Plan:**

- i. It may be ensured that all the SH/MDR/ODR stretches in the State are either covered under development work, DLP or any of the above maintenance contracts. All maintenance contracts of developed stretches should be initiated well before the closure of the DLP period so that just after DLP, one maintenance contract is ready and the stretch is not left unattended.
- ii. In general, the entire contract maintenance requirement shall be prepared well in advance between October to December of the preceding year. Based on the requirement projected by the field-level officers, the Administrative Department may convey the sanction ceiling for the particular category of maintenance contract based on the recommended project list submitted by the Engineer-in-Chief (Civil-cum-Roads). Estimates may be prepared in parallel and submitted to the Administrative Department by the Engineer-in-Chief (Civil-cum-Roads)/ the concerned Chief Engineer (Roads) as per their competency for approval. Estimates must be accompanied with Maps, bar charts, lane configuration, condition of the road, DLP status, future development plans, etc. The entire sanctioning process should be completed by the end of the preceding financial year. Bids for maintenance contracts may be simultaneously invited after the technical approval of the estimates, and contracts should be desirably awarded so that maintenance interventions of an urgent nature can be completed before the onset of monsoon and damages during the monsoon period can be minimized.
- iii. All concerned Chief Engineer (Roads) of the State PWD in consultation with the concerned circle /division level officers of the State PWD, shall prepare the single Abstract Particular Estimate (APE), consisting of the many selected stretches as per the field condition on which STMC/PBMC as applicable works are required to be taken up. This APE for the succeeding financial year shall be submitted to the Government through EIC (Civil-cum-Roads) with due recommendation by December every year as per the attached format (APE).
- iv. The Administrative Department will convey the sanction ceiling under STMC/PBMC along with the approved APE based on the recommended list submitted by the EIC (Civil-cum-Roads) after reviewing the proposals with the EIC/ concerned CE/ circle level /division level officers of the State PWD. The Administrative department shall convey the approval to the EIC (Civil-cum-Roads), freezing the PBMC/STMC project proposals.
- v. After approval of APE, the Administrative Department/ EIC (Civil-cum-Roads)/CEs, as per the delegation of power vide OPWD code, will issue Administrative Approval for the APE of STMC/PBMC works. Based on the Administrative Approval of PBMC/STMC projects, the technical sanction shall be accorded as per the competency of EIC/CEs/CCEs/SEs along with the technical note for each of the individual STMC/PBMC works for execution of the work in the field.
- vi. Format for a single Abstract estimate is enclosed in **Annexure-II**

#### **5. Annual Budget for Maintenance:**

By

implementation of the above guidelines, the Administrative Department will allocate the budget for maintenance of PWD roads through PBMC/STMC contracts within the budgetary allocation.

#### **6. Performance Evaluation and Technical Audit:**

An adequate number of inspections and Quality Control Checks shall be conducted by field officers as per the relevant IRC codes, PBMC/ STMC contracts and MoRT&H guidelines.

#### **7. Supervision & Monitoring:**

The defects are to be captured on a developed Software/Mobile App, for monitoring of timelines, generation of penalties, and submission of ATRs by the contractor for closing of the defects.

8. These guidelines shall be strictly adhered to for the Maintenance of SH/MDR/ODR of PWD Roads. It is advised that the standard bidding documents with the latest amendments & extant guidelines issued from time to time by MoRT&H shall be followed for the PBMC and STMC contract. Further, it is impressed upon that amendments issued in the OGFR & DFPR by the Finance Department and OPWD Code shall be duly followed.

By order of the Governor

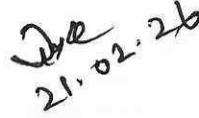


Principal Secretary to Government

Memo No. 3524 /W, dated 21/02/26

Copy along with soft copy forwarded to Gazette Cell, Commerce and Transport (Commerce) Department, Bhubaneswar for information and necessary action.

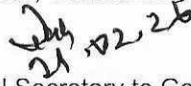
They are requested to publish the OM in the extraordinary issue of the Gazette and supply 20 (twenty) copies to this Department.



EIC-cum-Special Secretary to Government

Memo No. 3525 /W, dated 21/02/26

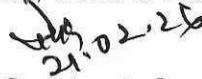
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EIC-cum-Special Secretary to Government

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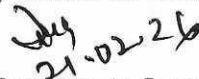
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EIC-cum-Special Secretary to Government

Memo No. 3527 /W, dated 21/02/26

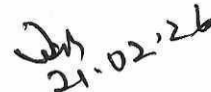
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EIC-cum-Special Secretary to Government

Memo No. 3528 /W, dated 21/02/26

Copy forwarded to the Sr. P.S. to the Development Commissioner-cum-Additional Chief Secretary, Odisha for kind information of DC-cum-ACS, Odisha.



EIC-cum-Special Secretary to Government

Memo No. 3529 /W, dated 21/02/26

Copy forwarded to the P.S. to the Additional Chief Secretary, Home Department/ the P.S. to the Additional Chief Secretary, Forest, Environment and Climate Change Department/ P.S. to the Additional Chief Secretary, Parliamentary Affairs Department /P.S. to the Additional Chief Secretary, Industries Department for kind information of ACS, Home Department/ ACS, Forest, Environment and Climate Change Department/ACS, Parliamentary Affairs Department/ ACS, Industries Department.

*Jhu*  
21.02.26

EIC-cum-Special Secretary to Government

Memo No. 3530 /W, dated 21/02/26

Copy forwarded to the P.S. to the Principal Secretary to Govt., Finance/ Law/ C&T(T)/ Works / RD/ H & UD / PR & DW/Energy Department for kind information of the Principal Secretary, Finance/ Law/ C&T(T)/ Works / RD/ H & UD / PR & DW Energy Department respectively.

*Jhu*  
21.02.26

EIC-cum-Special Secretary to Government

Memo No. 3531 /W, dated 21/02/26

Copy forwarded to all Departments for information and necessary action.

*Jhu*  
21.02.26

EIC-cum-Special Secretary to Government

Memo No. 3532 /W, dated 21/02/26

Copy forwarded to all Collectors & DMs for information and necessary action.

*Jhu*  
21.02.26

EIC-cum-Special Secretary to Government

Memo No. 3533 /W, dated 21/02/26

Copy forwarded to all Engineer-in-Chiefs / Chief Engineers/ CCEs/ SEs of Works Department for information and necessary action.

*Jhu*  
21.02.26

EIC-cum-Special Secretary to Government

Memo No. 3534 /W, dated 21/02/26

Copy forwarded to the Regional Officer, NHAI, Odisha, Bhubaneswar/RO , MoRT&H, Odisha, Bhubaneswar for information and necessary action.

*Jhu*  
21.02.26

EIC-cum-Special Secretary to Government

Memo No. 3535 /W, dated 21/02/26

Copy forwarded to the Vice Chairman, Bhubaneswar Development Authority/  
Commissioner, Bhubaneswar Municipal Corporation/ Commissioner, Cuttack Municipal Corporation  
for information and necessary action.

*Handwritten signature and date:*  
21.02.26

EIC-cum-Special Secretary to Government

**Sub: SOP for preparation of estimate and implementation of performance-based maintenance works.**

1. Broad framework of Performance-Based Maintenance Contracts (PBMC) document.

Implementation of PBMC shall be generally avoided in cases where the existing pavements are in moderate to severely distressed condition, necessitating a significant amount of initial rectification works; in all such cases, separate contracts for undertaking extensive rehabilitation of distressed sections of roads may be undertaken based on detailed investigation instead of PBMC. The maintenance and repair under PBMC has been categorised in three groups:

i. Initial rectification (IR)

(ii) Periodic Maintenance (PM) and

(iii) Routine Maintenance (RM)

(a) Initial rectification works: Such works shall be undertaken at the initial stage within 6 months of the appointed date of PBMC so as to make the section traffic worthy. The following items may be considered under initial rectification works under PBMC:

(i) For flexible pavement: Repair to bituminous carriage way wherever required to bring the specified service level for the damage for potholes, ruts, cracks, edge cracking etc..

(ii) For rigid pavement: Repair of localized failed areas of PQC, Full depth repair of PQC slab, Sealing of crack/porous concrete, Repair of Joint Grooves, Repair Involving Removal of Old Joint Sealant and Sealing with Fresh Sealant, Repair of transverse joints, Repair of longitudinal cracks through Cross-stitching/Stapling, Repair of honey combed and spalled concrete surface, Improvement of Pavement Surface texture through Diamond Grinding/Grooving etc.

(iii) Repair to the shoulders

(iv) Jungle clearance on shoulders, medians, and embankment slopes

(v) Repair and cleaning of cross drainage works, including culverts and minor bridges, and side drains

(vi) Providing mandatory road signs as per the site condition, km stones, including minor repair for existing road signs and km stones.

(vii) Providing road markings as per the requirement

(viii) Repair and painting of median/curves/railing/parapet

(ix) Missing crash barriers

(x) Repair/replacement of expansion joints if required

(xi) Cleaning and greasing of bearings

(xii) Any other item required to bring the carriage way/structure in a serviceable condition.

Care has to be taken to keep the quantities under IR to be minimum, which may be essential for bringing the carriageway up to service level. No major work like construction of new bridges/culverts, flyovers /underpasses, service roads, pavement reconstruction of length more than one km, or continuous crash barriers at new locations. Items identified under initial rectification should be such that it must get executed within six months of the start date of the work.

If the cost of IR is more than 25% cost of the PM works or the DBM requirement is more than 10% of the project length, then instead of PBMC, normal strengthening/improvement work may be carried out separately after due survey and investigation.

**Note for IR for PQC works:**

(1) This will generally include repair of cracks, spalls, joint sealed effects, corner racks, levelling, potholes, polished surface, faulting in cracks and joints, heal and bump, blow up or buckling, drop off, pumping, and ponding. Estimate for such defects may be included in the IR if slab condition becomes poor and very poor with distress rating of 4 and 5 as defined in clause 4.6 and 4.7 of IRC SP 83-2018. However, it may be seen that panel replacement should not be more than 10% of the total panel area of the entire project section.

(ii) If there is a requirement of substantial panel replacement (>10%) of the entire project section, then a separate contract other than PBMC may be done, specifically suited for cement concrete pavement. Generally, rectification of defects with a degree of severity ranging from 0 to 3 (degree of severity as defined in Table 4.5 of IRC SP: 83-2018 Table 4.5) are to be considered as scope of routine maintenance itself.

(iii) Distresses with a degree of severity of 5 (like wide cracks with spalling and/or scaling) exceeding 50% area and/or faulting exceeding 12 mm or broken slabs exhibiting rocking effect may be considered for slab replacement.

(b) Periodic Maintenance: PM shall be considered for the entire project length. However, phasing of the sections for PM may be planned if required, as per the site. Works under periodic maintenance shall include the following:

(1) Profile correction course with WMM/DBM/BC

(ii) Patch work with DBM/BC as required

(iii) Prime coat /tack coat as per the requirement

(iv) 40mm BC

(v) Patchwork of shoulders and road markings

(vi) Installation of road signs/studs.

(vii) Wearing coat over the Cross drainage works, if required

(viii) Replacement Bearings/expansion joints in structures

Note: In case of flexible pavement, provision of DBM should be avoided as far as possible and may be restricted up to 5% of the total length.

PM for PQC works: In case of cement concrete pavement, an overlay may be considered either as a partially bonded overlay or a fully bonded overlay subject to fulfillment of overlay requirements as per para 11.6 of IRC: SP:83-2018. Further, if the road condition is such that even after PM works, the roughness cannot be brought lower than 2400mm/Km for PQC, then extensive rehabilitation of such

roads may be explored based on detailed investigation and project report and such roads should not be taken up under PBMC.

(c) Routine Maintenance (RM): Under Routine maintenance contractor has to carry out all necessary works to keep the road in an appropriate service level condition as defined in the document. This is a fixed lump-sum payment to be made to the contract per month in lieu of the work executed by the contractor under RM. For estimation purposes, Rs. 5.13 lakhs per km per year may be considered for two two-lane with paved shoulders for FY 2025-26 and the same may be escalated for every succeeding financial year. For other carriageway configurations following multiplication factors should be taken into consideration for estimate purposes as under:

Lane Configuration		Multiplication factor
Two lane without shoulder		0.9
Single lane	Without paved shoulder	0.56
	Paved shoulder	0.625
Intermediate lane	Without paved shoulder	0.68
	Paved shoulder	0.75
Four lane with a divided carriageway	Without paved shoulder	1.53
	Paved shoulder	1.7
Four lane with divided carriageway and service road on either side.	Without paved shoulder	2
	Paved shoulder	2.2
Six lane with divided carriageway	Without paved shoulder	2.23
	Paved shoulder	2.7
Six lanes with a divided carriageway and a service road on either side.	Without paved shoulder	3
	Paved shoulder	3.2

2. Emergency Works: In the PBMC document, provision has also been made for carrying out emergency nature of works required during floods/earthquakes, unforeseen events etc., for temporary restoration of the traffic. Quantities may be executed for temporary restoration as per site requirements.

Payment to the contractor shall be made as per the actual quantity executed by them. Concerned SEs/CCEs/CEs may also add any other item under provisional sums which may be required in their geographical locations and rates may also be provided in the document accordingly.

3. Preparation of Estimates: Estimates may be prepared either by Field Officers (SEs/CCEs). All field officers are required to do the necessary due diligence while preparing the estimates and are required to deploy NSV for preparing the cost estimates.

The rates as available in the latest applicable SOR issued by the State PWD shall be used. In case rates of some items are not available, rates as discovered in the past tenders or actual market rates may be adopted. However, such items may be reported to the officer concerned responsible for updating the SOR so that the same may be added in the SOR subsequently.

Due care should be taken so as to plan the procurement timeline to correspond with the availability of the maximum working season for initial rectification works, after deployment of the contractor.

Annexure-II

**Format for Abstract Particular Estimate**

Name of Circle/Division	Name
Length available with the Division	---
Length under construction	---
Length under DLP	---
Length under maintenance	---
Remaining Length	---
Length proposed to be covered under STMC	---
Length proposed to be covered under PBMC	---

SH/ MDR/ ODR No	Terrain	Stretch Name/ chainage	Lane configuration	Broad Scope of works	Length	Amount	Time period of completion	Name of Division	Phasing of Expenditure

62

		Total							
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