☎ 0177-2621401
e-mail :-pwd-hp-@ nic.in

HIMACHAL PRADESH
PUBLIC WORKS DEPARTMENT

No. PW-CTR-32-20/Tender Document/26- 24836-65 Dated:- 23/2/26

To

All the Chief Engineers
In HPPWD.

All the Superintending Engineer
In HP.PWD.

Subject:- Regarding Drainage Policy for HPPWD works.

I am directed to refer to Notification No.PWD(C)F(1)-1/2026(E-320141) dated 19th February, 2026 vide which Govt. has notified the Road Drainage Policy for the Public Works Department of Himachal Pradesh (copy enclosed).

You are, requested to look into the matter and adhere to the above instructions of the Govt. in order to avoid any issues at later stage.

Superintending Engineer(D-III)
HP PWD, Nirman Bhawan
Shimla-2

1.Copy is forwarded to the Pr. Secretary (PW) to the Govt. of H.P. w.r.t. notification referred to above, please

2. Copy to Executive Engineer (IT) for uploading of Govt. notification dated 19.02.2026.

Superintending Engineer(D-III)
HP PWD, Nirman Bhawan
Shimla-2

Government of Himachal Pradesh
Public Works Department.

No. PWD(C)F(1)-1/2026 (E-320141) Dated Shimla-2, the 19th February, 2026.

NOTIFICATION

The Governor of Himachal Pradesh is pleased to notify the Road Drainage Policy for the Public Works Department of Himachal Pradesh, as following:-

1. Background:

Himachal Pradesh is a predominantly mountainous State with complex terrain, fragile geological formations, steep gradients and high-intensity rainfall patterns. Roads serve as the backbone of mobility, enabling access to essential services such as markets, education, healthcare, administration and tourism. The Himachal Pradesh Public Works Department (HPPWD) is responsible for planning, constructing, and maintaining an extensive and geographically diverse road network that connects major population centres with remote rural settlements.

As of year 2025, HPPWD maintains approximately **40,000 kms** of road network comprising Major District Roads (MDRs), Other District Roads (ODRs), rural link roads and village roads. A substantial portion of this network evolved through community-driven connectivity initiatives, where roads were constructed on voluntarily gifted or contributed land without securing the full Right of Way (ROW). These early limitations continue to affect alignment selection, drain placement and long-term durability of the network.

Historically, benchmarking of construction cost on **per-kilometre basis** resulted in greater emphasis on establishing physical connectivity and constructing pavement layers and essential retaining structures. In practice, drainage planning and provision were often treated as secondary rather than being integrated as an essential design component. Incremental widening and surfacing of many existing roads over time further occurred without proportional upgrading of drainage capacity.

Field observations and post-monsoon assessments repeatedly demonstrate that **inadequate drainage provision is one of the primary causes of recurrent road deterioration** in the State. Drainage-related deficiencies manifest as:

- Pavement degradation caused by waterlogging and moisture retention.
- Cracking and failure of shoulders.
- Scouring and erosion.
- Undermining or collapse of retaining and breast walls.
- Frequent choking or siltation of pipe culverts.
- Triggering of slope failures and landslides, particularly in vulnerable stretches.
- In extreme cases, complete collapse or loss of road sections.

Challenges are compounded by the following recurring issues:

- Non-regular horizontal and vertical alignment due to limited land availability.
- Absence of catchwater drains in hillside sections.
- Narrow pipe culverts prone to blockage due to debris, garbage and sediment transport.
- Roadside encroachments obstructing natural or engineered drainage paths.

- Unregulated utility crossings affecting flow efficiency through drains and culverts.
- Domestic wastewater and roof runoff discharged directly into roadside drains.
- Labour shortages impacting timely cleaning and upkeep of drains.

Recent climatic trends have intensified these vulnerabilities. The State has witnessed a noticeable rise in **high-intensity, short-duration rainfall events**, including cloudburst-like occurrences, leading to sudden spikes in runoff volumes. Road drainage infrastructure—much of which was originally designed based on historic rainfall assumptions—has not kept pace with these changing hydrological realities. The monsoon seasons of **2023 and 2025** demonstrated this mismatch, causing widespread road damage. Preliminary assessments indicate that damage valued at **₹2400 crore in 2023** and **₹3000 crore in 2025** required restoration attributable to drainage failure or slope instability. In addition to disaster-driven events, significant annual expenditure continues to be incurred on recurring monsoon damage across multiple road categories.

Climate variability, rapid roadside development, legacy alignment constraints and inadequate documentation of natural water paths during planning have collectively increased hydrological stress on the road infrastructure. Maintenance efforts remain largely reactive, with recurring expenditure on post-monsoon repair rather than preventive drainage management and lifecycle planning.

Given these climatic, technical, administrative and developmental realities, a structured, enforceable and context-specific approach to road drainage is essential. This policy has therefore been formulated to establish a uniform framework for drainage planning, design, execution, maintenance, monitoring and periodic review across the HPPWD network. Its overarching aim is to enhance resilience, reduce lifecycle maintenance costs, improve safety and secure reliable all-weather connectivity throughout the State.

2. Objectives:

The Road Drainage Policy aims to address systemic issues affecting road infrastructure in Himachal Pradesh by establishing a consistent and technically reliable framework for drainage planning, execution and maintenance. The key objectives of this policy are:

a) **To provide a uniform, enforceable framework for road drainage planning and design** applicable to all road categories maintained by HPPWD.
b) **To minimize monsoon-related road damage** by improving the handling of surface and subsurface water, thereby reducing slope failures, pavement deterioration, embankment erosion and weakening of supporting structures.
c) **To enhance the lifecycle performance and durability of roads** by integrating drainage as a core engineering element rather than an ancillary feature during road construction and maintenance.
d) **To ensure safe and uninterrupted road connectivity throughout the year,** reducing closures caused by waterlogging, debris accumulation, culvert choking or landslides triggered by poor drainage.
e) **To create drainage systems that are maintainable under current field realities, including labour scarcity, roadside habitation and restricted ROW,** by incorporating designs that allow site specific adjustments, mechanical cleaning and long-term serviceability.
f) **To establish clear accountability and regulatory authority** for preventing unauthorised discharge of domestic wastewater, roof runoff and commercial effluent into road drainage systems.

g) **To ensure efficient routing of culvert discharge and roadside drains to natural watercourses** subject to land availability, NOCs or negotiated corridor space, avoiding uncontrolled flow or road-edge seepage.

h) **To institutionalise drainage planning and maintenance mechanisms** supported by standardized checklists, inspection formats and maintenance protocols for continuous improvement.

i) **To reduce cumulative maintenance and restoration expenditure** by shifting focus from reactive repairs to preventive and planned drainage infrastructure management.

3. Existing Norms, Specifications and Current Practice:

Drainage planning in India in context of hill roads is governed by key technical references including:

- **IRC:SP:42 (Guidelines for Road Drainage).**
- **IRC:SP:48 (Hill Road Manual).**
- **IRC:SP:20 (Rural Roads Manual).**
- **MoRTH Specifications.**
- **MORD Specifications.**

These documents emphasize:

- Hydraulic design of drains based on runoff estimation including rainfall intensity, catchment area, runoff coefficients and discharge capacity.
- Use of U-shaped or rectangular lined drains in high-discharge, hilly or inhabited locations requiring durability and ease of cleaning.
- Subsurface drainage systems in stretches prone to seepage, waterlogging or spring activity.
- Catchwater drains above hill slopes to intercept natural runoff before it reaches the roadway.
- Cross drainage structures aligned with natural drainage channels, not at fixed spacing.

These standards form a comprehensive framework. However, these standards and guidelines are generally based on the assumption that complete Right of Way is available for making drainage arrangements; however, gaps exist between assumed and actual site conditions and between prescribed practices and field execution.

3.1 Current Practice and Resulting Issues:

While major cross-drainage structures generally perform adequately under normal conditions, the smaller drainage components like side drains, pipe culverts, outlets etc. are often inadequate, blocked or non-functional. These limitations stem from land constraints, settlement patterns, maintenance gaps, utility interference and lack of hydrological basis in design. Collectively, these factors contribute significantly to recurrent monsoon damage and reduced road service life.

Drainage provision in most HPPWD roads is based on conventional patterns, field constraints and incremental development rather than hydraulic or terrain-based design. As a result, performance varies significantly across locations. The current practice and corresponding issues are summarised below:

a) Side Drain Design and Operation:

Current Practice:

- Predominant use of V-shaped drains, either lined or unlined, depending on cost and local conditions.
- Drain sizing is generally based on standard templates rather than runoff estimation or rainfall intensity.
- In stretches where the road runs through settlements on both sides, drains often do not have an engineered outlet to the valley side and instead continue along the roadway.

Issues:

- V-shaped drains frequently silt, block or get damaged, especially in hilly areas with debris movement.
- Where runoff cannot exit the corridor, water travels long distances along the carriageway, causing rutting, potholing, shoulder erosion and concentrated damage at points where drainage finally escapes.
- Parking of vehicles inside open drains further reduces hydraulic capacity and causes physical damage to lining and structure.
- On curvy alignment, water often flows out of the drains at curves due to centrifugal effects.

b) Cross-Drainage Structures:

Current Practice:

- Hume pipe culverts are commonly installed at standard interval spacing (~200–300 m), not based on local drainage alignment or hydrological need.
- In several road segments, particularly those passing through private or densely settled areas, the number of culverts is very few or sometimes entirely absent, either due to land constraints or lack of permissions.
- Larger waterways are typically crossed using slab culverts or small bridges.

Issues:

- Limited or absent CD structures result in over-dependence on side drains, which often cannot handle peak runoff.
- Small-diameter pipes choke easily due to silt, waste and soil slips, leading to overtopping and damage.
- Larger structures generally perform well; however, rare high-intensity events may carry boulders or tree trunks that cannot be economically accommodated in design.

c) Road Geometry Modifications in Settlements and Constrained Areas:

Current Practice:

- Road camber and longitudinal gradient are frequently flattened in built-up areas for ease of access, roadside parking, pedestrian convenience and frontage use.
- In several cases, the flattening is also dictated by limited land availability during construction, preventing ideal grade and cross-fall formation.

Issues:

- Reduced cross slope results in water stagnation, reverse slopes and reduced drainage directionality.

d) Land Availability and Discharge Constraints:

Current Practice:

- Many rural and link roads were developed on gifted or narrow land, limiting standard drainage width or alignment options.
- In some stretches, adjoining landowners do not permit valley-side discharge routing or drain outlets through their land.

Issues:

- Drains remain hydraulically incomplete, forcing runoff to continue within the road corridor.
- Abrupt or forced discharge points create erosion, slope instability and concentrated failures.

e) Utility Crossings and Service Penetrations:

It has been frequently observed that water pipes and other utilities are laid in the drains and crossed through Culverts causing blockages and maintenance issues.

f) Maintenance and Operational Constraints:

Current Practice:

- Manual cleaning remains the primary mode of maintenance, with limited mechanisation.
- Drains, culverts and catchpits lack cleaning-friendly geometry.

Issues:

- Labour shortages during monsoon season result in drains remaining partially or completely blocked, reducing effective capacity.
- Debris from hillside slopes frequently enters drains due to lack of retaining elements.

g) Community Behaviour and Unregulated Discharge:

Current Practice:

- Roof water, domestic greywater and sometimes waste materials are discharged directly into roadside drains.

Issues:

- Continuous flow creates wet and unhygienic conditions, vegetation growth and silting.
- Blockages from waste dumping reduce hydraulic performance.

h) Unpaved Shoulders:

Current Practice:

- In most of the road sections, particularly rural roads, shoulders remain unpaved or loosely compacted rather than stabilized.

Issues:

- Water infiltration into shoulders causes edge cracking, pavement weakening and shoulder drop-off.
- Runoff flows along the interface of pavement and unpaved shoulder, eroding layers and forming channels.
- During monsoon, unpaved shoulders contribute to mud and loose debris entering drains, worsening blockage.

i) Culvert Inlet and Outlet Channeling:

Current Practice:

- Inlets and outlets of culverts are often not protected or properly channelled to maintain smooth hydraulic entry and exit.
- Outlet drains downstream of culverts are frequently absent or inadequately formed.

Issues:

- Inlet blockage from debris and sediment results in reduced capacity and overtopping.
- Poor outlet channeling causes uncontrolled discharge leading to scour, erosion gullies and slope failures.

j) Catch Water Drains and Subsurface Drains:

Current Practice:

- Catch water drains are generally not provided or provided only in isolated cases, in roads constructed and maintained by HPPWD.
- Subsurface drainage measures are rarely included in pavement or slope designs.

Issues:

- In the absence of catch water drains, surface runoff flows along natural slopes and infiltrates into adjoining soil layers. This leads to saturation, reduction in shear strength, and progressive instability of slopes, ultimately resulting in slope slips and landslides.
- In areas with high groundwater levels or continuous seepage, absence of subsurface drainage systems leads to persistent moisture accumulation beneath pavement layers. This result in repeated pavement distress, rutting, potholing, weakening of the granular sub-base and base layers, and increased maintenance requirements.

4. Proposed Engineering and Regulatory Measures:

The following measures shall be incorporated in all new construction works taken up by the Himachal Pradesh Public Works Department (HPPWD) and shall be progressively implemented on existing roads in a systematic, phase-wise manner as mentioned in Para 5.2 herein under.

4.1 Roadside Drains:

- Roadside drains shall be **hydraulically designed** based on rainfall intensity, catchment area, alignment length, discharge requirement, expected debris load and site-specific terrain characteristics as per relevant codes and guidelines. Additionally, Standard designs and templates for U-shaped Drains based on terrain category, road width, road category, spacing of cross-drainage structure etc. shall be prepared and issued separately by the Department.

- In the intervening period and in absence of project specific design data, **U-shaped drains** with tentative salient design features of road side drains as mentioned under clause 6.5.2.1 of Rural road manual (IRC:SP:20-2002) shall be adopted.
- **Drains in habitation zones shall normally be covered** for reasons of pedestrian safety, public health and local aesthetics. Standard templates and design for these covering incorporating anti-theft measures shall also be prepared and issued separately by the Department.
- On uncovered stretches, raised kerbs with periodic inlet openings shall be provided to ensure safe traffic edge definition and water entry. In such stretches, reflectors at appropriate spacing will be installed to enhance night time visibility and traffic safety.
- Where the available width is inadequate for an open drain, a **covered structural drain** capable of supporting vehicular and pedestrian load shall be installed.
- U-shape drains at gradient transition points, road bifurcations or where multiple flows converge shall be fitted with appropriate gratings to ensure interception of runoff and prevent bypassing of flow into shoulders or onto carriageway.
- The internal width and depth of all roadside drains shall preferably be sufficient to **allow mechanical cleaning**, keeping in view the scarcity of manual labour and the need for recurring desilting in hilly terrain.
- A **toe wall of minimum 60 cm height** shall be provided on the hill side as an integral part of the roadside drain to prevent slope erosion, as specified in Clause 2.4.2(b) of the Hill Road Manual (IRC:SP:48-2023). The height shall be increased wherever required based on site-specific slope conditions. Pre-cast section for such toe walls to ensure quality and speed of execution shall be preferred.

4.2 Culverts and Cross-Drainage Structures:

- For new projects, **box culverts** shall be default option in place of pipe culverts due to their improved flow capacity, reduced tendency to choke and ease of mechanical cleaning. The Box Culverts shall preferably be prefabricated. The use of pipe culvert will only be permitted in low discharge zone with adequate justification and certification by concerned Executive Engineer.
- In addition to the above, wherever site conditions indicate heavy silt, muck or debris movement during seasonal rainfall or where other site-specific considerations so warrant, the **provision of causeways** is recommended as an effective cross-drainage solution. Such causeways shall be planned as an integral part of the drainage strategy, based on site assessment and anticipated flow behaviour and shall be appropriately recorded and certified by the concerned Executive Engineer.
- On existing roads, Pipe culverts that demonstrate repeated choking, inadequate capacity or performance issues shall be systematically replaced with box culverts.
- All **cross-drainage structures shall be provided based on natural drainage alignment, hydrological parameters and terrain morphology** rather than fixed chainage spacing.
- For Minor Cross Drainage structures (other than bridges) located at critical points, the section shall be designed for 200% of the Design Discharge to ensure hydrological resilience. Implementation shall be contingent upon site feasibility and necessity.
- **Larger inlet catchpits of square or rectangular configuration** shall be constructed upstream of culverts to trap debris and allow mechanical removal to improve maintainability and reduce blockages during monsoon.This shall also be done for existing pipe culverts in phased manner.
- **Drainage deficient stretches** where Cross drainage structures are insufficient shall be identified and additional structures shall be constructed.

- **Rigid or semi-rigid, non-bituminous pavement surfacing** such as **Concrete Pavements or Interlocking Concrete block pavement** shall be considered **when conventional drainage principles are rendered infeasible** due to site constraints. In such cases, small cross drains with suitably designed grating shall be constructed at regular interval to facilitate removal of surface runoff and longitudinal profile of the road shall be designed to ensure uniform distribution of surface runoff into these drains.

4.3 Paved Shoulders:

- Wherever necessary, particularly on steep gradients, in stretches prone to regular erosion and in habitation areas, **shoulders shall be paved or appropriately stabilized** to prevent erosion, reduce sediment ingress into roadside drains, limit water ingress into pavement layers and enhance edge support.
- The choice of shoulder treatment— bituminous layer, concreting, interlocking blocks, stone/brick kharanaja etc. —shall be decided by Executive Engineer based on local context and requirement and budget availability.
- This practice shall be taken up in phase wise manner prioritizing major habitation areas, identified vulnerable road stretches.
- During construction of roadside drains, whether on new or existing roads, the unpaved portion of the carriageway adjoining the drain shall mandatorily be paved or concretized as part of the drain construction.
- Use of appropriate admixtures for rapid strength gain is recommended for minimizing damage from vehicles.

4.4 Upstream and Downstream Channelization of Cross-Drainage Flow:

- All culverts and major runoff interception structures shall include properly **engineered upstream and downstream flow channels** designed to guide flows smoothly into and out of the structure.
- The design shall incorporate **slope protection, energy dissipation arrangements, scour protection, lining and toe protection etc.** where required as per codal guidelines. The provision shall be included in DPRs for all new projects.
- Existing locations with recurrent sliding, slope erosion or gully formation shall be identified and rectified in a phased manner based on assigned priority.
- Where private, forest or institutional land is involved, **NOCs shall be obtained prior to execution.**

4.5 Catch-Water Drains:

- In hilly terrain, especially where the roadway is in known **sliding and seepage zones, catch-water drains** shall be constructed at appropriate levels above the carriageway to intercept hill runoff before it reaches the road shoulder or roadside drains. These shall be designed following the guidance contained in the Hill Road Manual and other applicable standards to ensure that intercepted water is conveyed safely to natural drainage channels, cross-drain locations or engineered outlets.
- The provision of catch-water drains shall be prioritized in locations where recurring slope failures, silt movement and soil slips have previously affected road safety or serviceability.

4.6 Subsurface Drainage:

- Subsurface drainage shall be provided in **spring zones, seepage stretches, low-lying areas, waterlogged pockets and sections with repeated pavement deterioration** attributable to trapped moisture. **French drains, perforated pipe systems or porous media trenches etc.** shall be deployed based on engineering assessment and codal

guidance. These systems shall function independently of surface drains and shall reduce distress associated with high groundwater levels or continuous seepage.

4.7 Maintenance and Cleaning Protocols:

- Pre-monsoon and post-monsoon cleaning of drainage structures shall be carried out every year and recorded.
- Wherever the drain geometry supports it, **mechanical desilting** shall be adopted to reduce dependency on manual labour.
- Removed silt or debris shall be disposed at designated locations rather than being dumped along shoulders, slopes or drainage routes.
- Industry level consultation will be taken up by mechanical wing of HPPWD for development /procurement of customized tools for enabling mechanized cleaning without causing damage to the drain structure itself.

4.8 Valley-Side Drainage and Rights-of-Way Enforcement:

- Natural drainage toward the valley side shall not be impeded. No physical, legal or informal obstruction shall be permitted to block or interfere with the discharge of normal road runoff from road edges on valley side, discharge from culverts or roadside drains. Any such **obstruction or encroachment shall be treated as a violation under the Roadside Infrastructure Protection Act** and shall attract penalties, including removal and recovery of restoration cost. The Department shall take up the matter with the Government for necessary amendments to the Act, Rules and/or Guidelines, as may be required to give effect to this provision.
- Where discharge accumulates excessively at a single point due to earlier road geometry, **necessary and feasible profile correction** shall be carried out to distribute runoff more uniformly.
- In cases where adequate space exists but landowners obstruct construction, modification or functioning of roadside drainage or discharge pathways, the Department may **withhold tarring/ periodic renewal/ resealing or resurfacing works** in the affected section until compliance is achieved and recorded.

4.9 Protection of Drainage Infrastructure from Misuse:

- The discharge of domestic wastewater, roof water, sewage or solid waste into roadside drains is prohibited under the existing provisions of the Himachal Pradesh Road Infrastructure Protection Act and shall be strictly enforced.

- Further, parking of vehicles inside drains or in a manner which obstructs the flow of water, placement of material or construction activity causing obstruction shall also be included as a prohibited activity liable for immediate action. The Department shall take up the matter with the Government for necessary amendments to the Act, Rules, and/or Guidelines, as may be required to give effect to this provision.

5. Implementation, Monitoring and Compliance Framework:

This policy shall apply mandatorily to all new road construction and major rehabilitation/upgradation projects undertaken by HPPWD from the date of notification. For existing roads, implementation shall be undertaken in a phased manner, prioritizing stretches with high vulnerability, high usage and repeated monsoon-related failures.

5.1 Design and Documentation Requirements:

- Drainage design shall form an integral part of all DPRs and tender documents rather than being treated as an ancillary item.
- Hydrological assessment, design justification, right-of-way availability, drainage outlet feasibility mapping and type design selection shall be documented at planning stage.
- Use of the **Drainage Checklists to be developed by Department** shall be mandatory at planning and DPR preparation stage for all road categories.

5.2 Phased Implementation in existing Roads:

Priority Level	Road Category	Scope and Rationale
Priority I	**All Major District Roads (MDRs)**	These roads form the primary backbone of mobility within Districts and experience higher traffic volumes, economic dependence and public service usage. Drainage improvement in this category shall be taken up on priority to reduce annual monsoon-related damage and ensure year-round connectivity.
Priority II	**Identified drainage pain points and densely inhabited stretches along rural roads**	This includes settlements, roadside markets, chronic waterlogging locations, sliding zones, areas with inadequate outlets or stretches with repeated maintenance demand due to drainage failures.
Priority III	**Remaining road network**	Link roads and non-critical stretches shall be taken up progressively after completion or substantial progress of Priority I and II corridors.

- Drainage Checklist shall also be developed by the Department for existing roads for identifying drainage deficient stretches, pain points including sliding zones, scour regions, unplanned concentrated outfall points, faulty road geometrics etc.

5.3 Creation of separate head of Account:

- For new road works, the cost of drainage interventions shall be included as an integral part of the Detailed Project Report (DPR) and sanctioned along with the main work.
- For existing roads, requiring drainage improvement works, a **separate budgetary head under Major Head *5054 – Roads and Bridges* titled "Road Drainage"** is proposed to be created. This will enable systematic planning, execution and monitoring of dedicated drainage interventions independent of routine maintenance or new construction allocations.
- The works undertaken under this head shall be monitored separately and progress shall be **reviewed as a distinct agenda item** during departmental review meetings at Division, Circle and Zone levels, as well as in State-level performance review forums.
- The learnings, performance outcomes and field observations from works executed under this head shall be systematically documented, reviewed and incorporated to the policy during periodic reviews as mentioned in Para 6 herein under, ensuring that the policy remains responsive to field conditions and continuous improvement principles.

5.4 Ensuring land availability for drainage provisions:

- In many rural areas, jeepable or earthen village roads are initially constructed by local bodies or communities and later transferred to HPPWD for improvement, upgradation or maintenance. Similarly, new rural roads are taken up only on public request and subject to availability of free land, as per existing policies. In such cases, it shall be mandatory that natural drainage paths, proposed locations of roadside drains and cross-drainage structures are identified at the planning stage and documented through a Panchayat Resolution. This resolution shall clearly state that existing/proposed drainage channels and valley-side flow shall not be obstructed by adjoining landowners at present or in future. Along with land gift deeds and NOCs, this resolution shall form part of the project checklist item and a precondition for grant of Administrative Approval & Expenditure Sanction (A/A&E/S).
- Where upstream or downstream channelization, catch water drains or any other drainage-related works require use of private or forest land, such works may be executed by HPPWD, provided that necessary No Objection Certificates (NOCs) from the affected private landowners and/or competent forest authorities are obtained. The Department shall take up with the government, the framework, process and mode for issuing NOCs by the Forest Department for this purpose.

5.5 Enforcement and Community Compliance:

- The process for undertaking necessary amendments to the Road Infrastructure Protection Act, including specifying fines, penalties, restoration charges, powers for enforcement and the procedure for issuing challans, shall be initiated by the department to ensure legal backing for implementation of this policy and taken up with the Government.
- Appropriate measures for compliance enforcement—including developing a challaning system based on reports submitted through public inputs, mobile applications or geo-tagged photographic evidence—shall also be initiated by the Department.
- Enforcement may be supported through periodic joint inspections with panchayat/local body representatives at Division and Sub-division level.
- Awareness measures shall be undertaken to promote public cooperation and discourage misuse or vandalism of drainage assets.
- HPPWD shall coordinate with Urban Local Bodies, PRI institutions and public representatives to ensure community cooperation and long-term behavioural change.

6. Documentation, Knowledge Sharing, and Policy Review:

- Engineering interventions taken to rectify identified drainage pain points shall be properly documented, including details of design, execution and site conditions. Follow-up monitoring of the performance of such interventions shall also be recorded as part of the asset history.
- Successful solutions, innovations and locally effective techniques shall be periodically compiled and shared through the Departmental website or advisories to enable wider adoption and continuous improvement across divisions.
- Technical Committee chaired by the **Engineer-in-Chief, HPPWD**, shall review the implementation outcomes and field learnings and shall undertake a comprehensive review and amendment of this policy every **three years** or earlier, if warranted by operational necessities.

7. Policy Applicability and Design Flexibility (Disclaimer):

- This policy defines minimum standards and broad guidelines to be followed for drainage planning, design, construction and maintenance. Detailed design shall comply with the relevant codes, manuals and technical specifications to the extent possible under prevailing site conditions.
- Where technical, hydrological, geological or site-specific constraints require deviation or justify the adoption of alternative or more advanced engineering solutions, such proposals may be considered with documented technical justification.

8. Conclusion:

This policy establishes a unified and technically guided framework for planning, constructing, upgrading and maintaining drainage systems across the HPPWD road network. By standardising practices and adopting hydrology-based design principles, the Department aims to reduce monsoon-related road damage, improve network resilience and enhance public safety and serviceability. The measures outlined in this document, along with phased implementation, monitoring mechanisms and enforcement provisions, are expected to address long-standing drainage deficiencies systematically and sustainably.

The successful implementation of this policy will require coordinated effort across field units, supporting Departments and community stakeholders. With consistent application, progressive upgrading of existing roads and engineering flexibility where required, the policy is expected to significantly extend pavement life, reduce annual maintenance liabilities and contribute to a safer and more reliable road infrastructure across the State.

By Order

(Devesh Kumar)
Principal Secretary (PW) to the
Government of Himachal Pradesh

Endst. No. PWD(C)F(1)-1/2026 (E-320141) Dated Shimla-2, the 19th February, 2026.

Copy to:-

1. All Administrative Secretaries, Government of Himachal Pradesh.
2. All DCs in the State of Himachal Pradesh.
3. The Engineer-in-Chief, HP PWD, Shimla-2 w.r.t. his letter No.PW-CTR-32-20-Gen. Inst/2025-19166 dated 20.12.2025 for necessary action.

(Surjeet Singh Rathore)
Additional Secretary (PW) to the
Government of Himachal Pradesh
☎ 0177-2620159