

DISTRESSES IN THE PAVEMENTS
(BIOTECHNOLOGY COMPLEX TO MARRIED
SCHOLAR HOSTEL)



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Drainage problem

- Blockage of drain water path across section to the road.

- Due to this water stand on pavement.

Reason- At the time of pavement construction road sides were not clean.

Cure- Remove all the soil from pavement.

- Blockage of drain path longitudinally.

- Due to this water does not follow the design path.

Reason- Presence of spread soil on the pavement so rain water drag all the soil to the drain.

Cure- There should be regular cleaning of the road.



SHOULDER PROBLEM

Shoulder purpose-

- Emergency stopping.
- Parking.
- Emergency vehicle travel.

Width requirement(IRC:SP:84-2014)-

1.Paved width=1.5m

2.Earthen width=2m

- Cross slope of paved should be 2% for high rain region and 1.7% for low rain region and slope of unpaved shoulder should be 0.5% higher than that of paved shoulder.

Reason-soil deposited longitudinally to the edge of paved shoulder so there will be inefficient use of shoulder.

Treatment-remove the soil from the paved shoulder.



IMPROPER USAGE OF ROAD

Entry and exit to mixing plant site-

Reason-Loaded vehicle enter to road from site, due to less strength of unpaved shoulder start deteriorate.

Treatment-strengthen the unpaved shoulder also as per requirement of load of vehicles.

Overlay of soil on bituminous pavement-

Reason-heavy construction vehicle carry the soil with their tyres.

Treatment- there should be proper time to time cleaning of road after completion of such activity.



TRANSVERSE CRACKS



Settlement of subgrade layer on an approach to culvert drains and bridges

Reason :

Subgrade was not compacted well after the bridge was finished and backfilled.

Remedy: it should be removed completely and compact it well ,preferably transverse compaction.

IMPROPER CONNNECTION OF OLD AND NEW PAVEMENT



- Uncomfortable, poor riding quality.
- Water may be stagnated and leads to ravelling.
- To avoid this , old layer should be milled off and lay new pavement.

CORRUGATIONS

Cause :Due to lack of bond between asphalt & surface course mixes.

Due to braking and accelerating actions.



frost and heave of subgrade layer due to drainage problem.

Treatment : These have to be milled off and replaced with highly stable asphalt mix. And proper drainage facility

RAVELLING

Dislodgment of aggregate particles at the surface due to lack of sufficient cohesion within the mix .

Treatment :

apply fog seal or slurry seal or overlay with dense graded asphalt mix.



POTHOLES



Here potholes are developing due to ravelling, stripping and fatigue cracking.

Treatment :

These should be promptly patched with readymade cold mix or HMA ,depends on weather conditions.

ROUGH RIDING QUALITY

Reasons :

- Due to improper rolling.
- Due to spillage of bitumen from bitumen tanker.

Precautionary measures :

- Stop leakage from tanker.
- Quality control while rolling.



THANK YOU