

Office of the Engineer —in-Chief (R&B), SR & CRN, Errummanzil, Hyderabad

# Memo. NO. 21614/ Works/DCE(R)/EE(R)/DEE4/2016, Dt. 14-07-2016

- Sub: (R&B) Dept.- Execution of works- Construction of sub grade, GSB & WMM– Instructions issued- Reg
- Ref:- 1)This office Circular Memo No. 21614Works/DCE(R)/EE(R)/DEE4/2015-16, Dt. 22-03-2016.

2) This office Circular Memo No: 21614/EE(R)/DEE4/AEE2/2014, Dated: 21-06-2014.

The attention of all the Superintending Engineers/Executive Engineers(R&B) dealing with State Roads are hereby once again invited to the circulars issued vide reference cited regarding execution of subgrade, GSB and WMM systematically as per MoRTH specifications.

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No. of complaints are being received regarding i) Poor compaction in subgrade, 2)usage of Tunnel Muck in GSB/WMM items of the works and 3) execution of WMM without using Pugmil/Wet Mix Plant. Hence once again circular instructions are communicated as below.

#### Sub Grade:

It is informed that circular instructions were issued vide reference 1<sup>st</sup> cited, stating that the performance of a pavement depends on the quality of its Sub grade & Sub base layers. As the foundation for the pavement, sub grade will play key role in mitigating the detrimental effects of the climate and the static and dynamic stresses generated by the traffic. The sub grade, the layer of soil on which the pavement is built provides support to the pavement system. It is crucial to develop a sub grade with specified CBR value. Further it was also instructed to build a suitable sub grade and properly drained sub base is vital for constructing an effective & long lasting pavement system.

### **Granular Sub Base :**

All the Superintending Engineers/Executive Engineers(R&B) are hereby instructed not to use Tunnel Muck in GSB/WMM items of the works which is against the specifications of agreement. The physical parameters and Gradation of GSB as per Morth Specifications Table 400-1(5<sup>th</sup> revision) and either Grade-VI/Grade-V. As per MoRTH Specification (5<sup>th</sup> revision) the material shall be free from organic or other deleterious constituents and shall conform to the grading given in Table 400-1. Grading V and Grading VI shall only be used as a sub-base-cum-drainage layer.

## Wet Mix Macadam:

In the circular issued vide reference 2nd cited, It is informed to all the concerned that MORTH specifies use of certain machinery in the construction activities of Roads and Bridges. Usage of the machinery improves the qualities and durability of the road. Also MORTH specifications are part of the agreements. Hence it is imperative that the specified machinery is used in the construction activities.

It is clearly mentioned regarding usage of Pugmill in WMM construction and also to insist the machinery as stipulated/ specified in the specifications of agreement. As per MoRTH specification (5<sup>th</sup> Revision) spreading of mix and compacting is to be done as per clause No.406.3.4 & 406.3.5 respectively.

Therefore, the Superintending Engineers/Executive Engineers dealing with State Roads are requested to ensure that a stable sub grade of specified CBR is built before taking up the construction of upper layers like Sub Base and Base layers.

Any lapse in this regard will be viewed seriously

For Engineer-in-Chief (R&B)

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- All the Superintending Engineers /Executive Engineers (R&B)
- Copy to the Deputy Engineer-in-Chief (R&B)Admn., and Q.C for uploading the circular in the R&B Department web site.
- Copy to the Executive Engineer(R&B) Roads& Executive Engineer(R&B) CRN for information.
  Copy to all DEST
- Copy to all DEE's of State Roads& CRN O/o Engineer-In-Chief (R&B) SR & CRN Hyderabad for further action.
- Copy to Deputy Chief Engineer (R&B) State Roads ., O/o Engineer-In-Chief (R&B) for information