

File-30

राष्ट्रीय राजधानी क्षेत्र दिल्ली सरकार  
लोक निर्माण विभाग



कार्यालय मुख्य अभियंता  
उत्तरी अंचल (एम.) लोक निर्माण विभाग,  
दिल्ली सरकार, पाँचवा तल, एम.एस.ओ. भवन,  
इन्द्रप्रस्थ एस्टेट, नई दिल्ली - 110002

GOVT. OF NCT OF DELHI  
PUBLIC WORKS DEPARTMENT

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दिनांक:- 6/05/2016

### Inspection Report of Chief Engineer, North Zone.

The following works have been inspected by the undersigned on dated 03.05.2016 alongwith Superintending Engineer, Senior Architect, Executive Engineer and concerned AEs & JEs :

- (A) C/o Old Age Home at Ashok Vihar.  
Agency : M/s Manish Buildwell  
Executive Engineer : NW Bldg.-1

#### Observations :

The work in general is being carried out in most unprofessional way without any consideration to the contract provisions or specification. The quality of supervision in this work is also very poor. It seems that work is being carried out as per the ease of the contractor.

1. No site office has been constructed for supervision, shed for labour and cement godown for which agency has been directed for making proper arrangement within 10 days.
2. Although the columns have been constructed upto 1<sup>st</sup> floor level, the drawings for electrical services are not available. EE (E) to ensure that the drawings are available before taking up the 1<sup>st</sup> floor slab to avoid cutting of beam / column / slab at later date.
3. Sanitary / water supply plan be prepared and submitted to the agency before the construction of 1<sup>st</sup> floor slab is taken up.
4. It is seen that stair steps at first landing have been constructed with brick work, which may be dismantled and may be reconstructed with cement concrete.
5. Lots of Honey combing in RCC work could be seen, which have not yet been attended and earth is being filled up in plinth beams.
6. Thickness of 1<sup>st</sup> landing slab found 185 mm and 190 mm instead of 200 mm. Similarly depth of first landing beam is from 530 mm to 540 mm instead of 550 mm
7. The extra reinforcement in the junction of 1<sup>st</sup> landing and 2<sup>nd</sup> flight in stair case has not been provided altogether and the landing has been casted this in *dangering* the structure.
8. The earth excavation has been done in whole building portion about 3-4 m deep for foundation work. It is seen that the filling of loose earth are being done without watering and compaction. On digging of earth, loose earth with clods could be seen. This will lead to settlement of foundation at later dates.

For this type of serious lapse in supervision by field officers. Therefore, SE should call the explanation of concerned Junior Engineer, Assistant Engineer and Executive Engineer and fix-up the responsibility and send the proposal alongwith his recommendation. Similarly Executive Engineer may be directed to take suitable action against the contractors for executing such type of defective works. Appropriate remedial measures should be taken to avoid such type of lapses in future.



(B) Name of work : Re-carpeting and Repair of Major Roads in DTU Campus, Bawana Road, Delhi.  
Agency : M/s KCC Buildcon Pvt. Ltd.  
Executive Engineer :- NW Bldg.-2

**Observations :**

From the visual inspection itself it can be seen that the quality of DBC layer being laid is of very poor quality . Lots of voids can be seen. This is because of the poor grading of materials. There is grossly inadequate quantity of fines in the DBC mix. The quantity of bitumen is also inadequate.

1. The thickness of layer was checked at few locations and was found to be 55 mm, 30 mm, 35 mm, 33 mm & 26 mm at different locations against the required thickness of 40 mm. Thus the DBC layer thickness is inadequate and sub-standard.
2. The surface of road before laying tack coat is not cleaned properly. Lots of dust can be seen on the surface. The emulsion for tack coat are being brought at site in loose drums. The hot mix plant from where the mix is brought at site was also inspected. From the final mix of aggregate being fed to the heating drums, sample of materials was collected and sieve analysis was done, the result of the sieve analysis is as below :

**Grading of stone aggregate**

Total weight of sample aggregate – 6.06 kg

S.No.	Sieve size	Weight retain	%passing
1	19 mm	0 kg	100%
2	13.2mm	0 kg	100%
3	9.50mm	1.14 kg	81.19%
4	4.75mm	4.46 kg	7.59%
5	2.36mm	0.420 kg	0.66%
6	2.36 passing	40 gm.	

Thus from the sieve analysis, it could be seen that the grading of the DBC layer mix of poor quality. Little fines are being used resulting in poor density of DBC layer. Agency is saving materials and bitumen by producing bad quality of work.

From above it can be seen that no proper site supervision is done by the field engineers. No testing are being done as per the terms and conditions of contract / specification and they have allowed the contractor to carry out the sub standard work as per their choice and putting the government at loss. Therefore, SE should thoroughly check the thickness density, grading of materials and bitumen content personally at equal interval and take immediate remedial measures in this regard. No further work should be allowed until and unless proper mechanism is put in place for quality work. This is a clear case of lapse in supervision by field officers. Therefore, SE should call the explanation of concerned Junior Engineer, Assistant Engineer and Executive Engineer and fix-up the responsibility and send the proposal alongwith his recommendation. Similarly Executive Engineer may be directed to take suitable action against the contractors for executing such type of defective works. Appropriate remedial measures should be taken to avoid such type of lapses in future.

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Chief Engineer (North)  
PWD (GNCTD)

Copy to:-

- 1 Pr. Chief Engineer (Maint.), PWD (GNCTD), New Delhi for information please.
- 2 SE (North-West), PWD, Punjabi Bagh, New Delhi for necessary action.
- 3 EE, NW B-1, SU Block, Pitum Pura, New Delhi for necessary action.
- 4 EE, NW B-2, DTU Bawana College, New Delhi for necessary action.

*de*   
Chief Engineer (North)