

CIRCULAR

CIDCO/EE(QC)/2017/1034

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Sub- Observations recorded during various visits to sites.

EE (QC) division visits various sites as part of their work of undertaking Quality, Quantity and contract audit. Some of the observations recorded are as under.

1. Contractors all risk policy (Car policy).

- a) In the letter of acceptance and as per GCC clause no.23.3, it is clearly mentioned that policy should include a cross liability clause such that insurance shall apply to contractor and to employers as separately insured. The cross liability clause is not seen in CAR policies taken out by various agencies for their works. Cross liability clause should be incorporated in CAR policy and be strictly implemented by all engineers.

- b) For high value contract amounts CAR policies are taken out on co sharing basis by insurance companies and GIF generally in ratio of 60:40.

However an Noc from GIF (Government Insurance Fund) is a must for taking out co sharing insurance policy. Many of the CAR policies although are taken out on co sharing basis do not have an NOC from GIF.

2. Weepholes in storm water drain (S.W.D).

- a) It is generally seen that weepholes in wall of SWD are not provided as per spacing mentioned in drawing. The spacing of weepholes in wall should be strictly followed as mentioned in the drawing.
- b) The thickness of the plastic pipe provided in the weephole should be adequate so as to withstand weight of concrete poured. In many cases it is seen that, plastic pipe provided in weepholes get damaged necessitating breakage of excess concrete in the hole and remaking of the hole.
- c) Vertical Reinforcement in wall of SWD should be placed as given in drawing i.e either at centre of wall or on the side of the wall as given in drawing. Sufficient cover blocks should be provided to maintain the position of vertical reinforcement.

- 3
- a) FBEC reinforcement- It is observed that FBEC reinforcement at site is not stacked properly. There has to be a clear distance of atleast 300mm between reinforcement and the ground. FBEC reinforcement should be properly covered with thick plastic sheet and be properly protected from Rain, sunlight etc
 - b) It is observed that when FBEC reinforcement is bent especially during making of stirrups sometimes at the corners the coating comes out, it has to be redone with a brush. Manufacturers supply the coating in liquid form for such situations.
4. Binding wire- It is observed that quality of binding wire is not up to the mark. It is not of proper gauge and not of G.I. This result in rusting of this wire. Binding wire when used to tie the reinforcement should be facing inwards when tied so that it goes in to the main mass of concrete and should not be jutting outside. The binding wire when jutting outwards, water seeps in monsoon and causes corrosion of reinforcement.

It is seen that nails and wires are used to tie the shuttering, are not removed after deshuttering and cause corrosion to the reinforcement. Also Bolt holes of shuttering should be filled with epoxy mortar.

5. Heavy duty storm water drain provided for plot entries- The length of the heavy duty drain for movement of vehicle should be kept 4.5 m to 5 m so that when heavy vehicle ply over then the adjoining light duty drain does not get damaged.

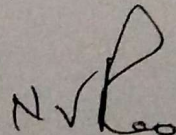
After 1st stage of road is built it is observed that, there is a gap of approx 100 mm between asphalt surface and top of heavy duty drain. This gap is kept for 2nd stage of road i.e asphalt layers. When vehicle ply over the heavy duty drain it get damaged. To prevent damage to heavy duty drain at edge during 1st stage of road itself, asphalt should be laid for a width of 400 mm in slope near edge of heavy duty drain so that edge does not get damaged.

6. During 1st stage of road construction item of kerbstone should be executed so that the section of road gets clearly defined and light duty drains are protected from damage as movement of vehicles over them is not possible.
7. During visit to sewer line works it is observed that, in 1st stage of road construction height of manhole is kept raised above road level by approx 100-150mm to take care of asphalt layers during 2nd stage of road construction. However after 1st stage of road construction manhole covers and frame get damaged when vehicles move over them.

The top level of manhole cover should be kept flush with top layer of asphalt in 1st stage of road construction.

During 2nd stage of road construction manhole can be raised to take care of asphalt layers of 2nd stage of road construction. It is also seen that profile of manholes is not properly maintained when built with blocks. Manholes should be built with good quality bricks as they can be broken to fit to the profile at time of construction. Also it is seen that in many places benching of manholes by concrete is not done because connection done to manholes from plots are at made at Invert level of manholes. The connection should be done such that Invert Level of incoming pipe is kept above benching of manholes.

8.
 - a) Bank guarantee- It is observed in some cases bank guarantee submitted towards contract deposit is not for entire completion period. As per GCC clause 10.1.1 it is very clear that the B.G should cover entire completion period.
 - b) FDR submitted for contract deposit- As per ^{G.C.C} clause 10.1.2 FDR submitted should be taken as 5% less below the market value on day of acceptance or at their face value whichever is less. It is observed that engineers accept F.D.R at face value which is incorrect.
9. It is observed that deductions made as per circular no.CIDCO/SE(HQ) /99 dtd 06.06.2016 towards delay in submission of quarry permit, insurances, vehicle, lab etc are being made as miscellaneous deposit in the bills. Deductions made should be made as penalty (non refundable) in the bills.
10. 15% of all testing should be done at CIDCO lab and in reconciliation statement of tests it should be clearly shown as test conducted in CIDCO lab. Also it is observed that in some works where lab is not necessary as per bid condition, 100% testing is not done at CIDCO lab or CIDCO approved lab.
11. In garden works it is seen that internal SWD system is not present as a result of which water accumulates in monsoon. Also in pathways constructed in garden adequate number of Pipes are not provided for cross drainage of water.


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CC to SE(HQ), CE(NM), CE(NMIA), CE(SP)
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✓ SE(D)