



: 020-26133148

: 020-26052869

**REGD SDS / BY POST**

Superintending Technical Examiner (SC)

PCDA (SC) Complex, No.1, Finance Road

Pune – 411 001

1223/162/ 02/Q/ADGTE

Jul 2018

Garrison Engineer

(MH & RH) Kirkee

PIN – 900 462

C/o 56 APO

**SITE VISIT : CEPZ/KKE-54 OF 2016-2017**

1. Refer inspection conducted by STE team on 18-20 Jun 2018.
2. The copy of factual statement of the work is held on your record. The obsns on account of a/m visit are enclosed as Appendix 'A'. The obsns apply to the entire work except where otherwise specially mentioned. No action for price adjustment/deviation has been initiated till date of insp.
3. Please take suitable action to get the defective work rectified as mentioned on factual notes/obsns and ensure compliance. If, however, the defects are not rectifiable and the defective work as executed is technically acceptable to you, please forward the details of overpayments invoiced for such defective work accepted.
4. Please ref to E-in-C's Branch letter No 41000/E4 dated 14 Oct 1981 and take necessary further action to ensure that the defects are not allowed in the current works in your area and remedial actions are taken. This should be taken in other cases also including financial recovery.
5. Please furnish your specific replies to obsns within 06 weeks failing which the matter may have to be reported to Higher Authorities. In this connection please ref to Sec 23 of Manual of Contracts, 2007.

(Satish Chander, IDSE)

STE SC, Pune

Encls : As above

**Copy to :-**

HQ ADGTE, New Delhi .. For info alongwith copy of obsns.

HQ CE Pune Zone  
Pune – 411 001

CWE Kirkee  
PIN – 900 462  
C/o 56 APO

Stn HQ  
Kirkee – 411 003

1. For info & necessary action. Obsn may please be replied incl conditions.

2. Please refer to Sec 23 of Manual of Contracts, 2007 and issue suitable instruction to all other GEs under you with a view to prevent acceptance of similar defective work in those divisions where such defects are suspected to be occurring. Financial recoveries as applicable may be effected in similar works also.

3. Systematic corrective measures be instituted in all units of your AOR (Area of Responsibility).

**SUPERINTENDING TECHNICAL EXAMINER**  
**(SOUTHERN COMMAND) PUNE**  
**NO. 01 FINANCE ROAD, PCDA (SC) COMPLEX, PUNE - 411 001**

**TECHNICAL EXAMINATION OF CONTRACTS / WORKS / FINAL BILLS**

<b>CA No</b>	CEPZ/KKE-54 of 2016-2017	<b>Amount (in lakhs)</b>	. 2828.28 lakhs	<b>Location</b>	Kirkee	
<b>Name of Work</b>	Provision of OTM accn at MH Kirkee					
(a)	<b>Contractor</b>			M/s KR Traders		
(b)	<b>Date of Commencement</b>			03 Feb 2017 (Phase-I)		
(c)	<b>Completion as per CA</b>			02 Aug 2017 (Phase-I) (02 Feb 2019) (Phase-II)		
(d)	<b>Extended date of completion</b>			-		
(e)	<b>Actual date of Completion</b>			-		
(f)	<b>DV No &amp; Date of final bill if paid</b>			-		
(g)	<b>Whether ADGTE visited project (if yes, date)</b>			-		
(h)	<b>Name of STE / TE</b>			<b>Name of MES Offrs Accompanying</b>		
	Shri Satish Chander, IDSE, STE SC Pune Shri D Suresh Reddy, IDSE, SE(NF), TE Lt Col Bhaskar Rautela, TE Shri Manish Raj, IEDSE, TE			Shri NV Subba Raju, EE, GE Shri SV Singh, AE (Civ) AGE B/R Shri SS Patwardhan, AGE E/M		
(k)	<b>Inspection Summary :</b>					
	<b>No Inspection</b>	<b>Ist Check</b>		<b>2nd Check</b>		<b>3rd Check</b>
(i)	<b>Date of Check</b>	18-20 Jun 2017		-		-
(ii)	<b>Progress %</b>	<b>Actual</b>	<b>Target</b>	<b>Actual</b>	<b>Target</b>	<b>Actual</b> <b>Target</b>
		50%	-	91%	-	-   -
(iii)	<b>Obsn Nos Raised</b>	<b>Ist</b>	<b>24</b>	<b>2nd</b>	<b>-</b>	<b>3rd</b> <b>-</b>
(iv)	<b>Total Obsn Raised</b>					
(v)		<b>Minor</b>	<b>Maj</b>	<b>Adv</b>	<b>Minor</b>	<b>Maj</b> <b>Adv</b>
		-	24	-	-	-   -   -
(vi)	<b>Obsn Split</b>	<b>B/R</b>	<b>E/M</b>	<b>B/R</b>	<b>E/M</b>	<b>B/R</b> <b>E/M</b>
(vii)		24	-	-	-	-   -
(viii)	<b>Total Settled</b>	24	-	-	-	-   -
(ix)	<b>Outstanding Obsn</b>	24	-	-	-	-   -
(x)	<b>Outstanding Obsn (Check wise)</b>	24	-	-	-	-   -
(xi)		<b>IRNR</b>	-	<b>IRNR</b>	-	<b>IRNR</b>
(xii)	<b>Net Outstanding Obsns</b>					
(xiii)	<b>Date of Expiry of DLP (where wk 100% completed)</b>					

CA No : CEPZ/KKE-54 of 2016-2017  
Name of Work : Provision of OTM accn at MH Kirkee  
Amount in lakhs : ` 2828.28 Lakhs

---

**OBSNS ON ADM APPROVAL, PLG & TS**

-NIL -

**OBSERVATION ON CONTRACT & SITE DOCUMENT**

-NIL -

**OBSERVATION ON SITE INSPECTION (MAJOR)**

**(COOK HOUSE & DINING HALL)**

1. **Obsn No 01 : Crumple Section (CH & DH).** Beam sizes are different at crumple section and one beam is found tapered with 25 cm deeper at one end and flush at other end in main dining hall and look shabby. Beam depths at crumple section should have been made same. Please rectify defect to have proper geometry at the crumple section.

2. **Obsn No 02 : Fly Ash Bricks Masonry.**

(a) Fly ash bricks found used in wall masonry. Joints found wider and not filled up properly as voids observed at places.

(b) Brick bats found filled, in lieu of PCC at the junction of wall and soffit of beam and voids observed.

Please identify similar defects and rectify them. Intimate cost.

3. **Obsn No 03 : RCC.**

Honey combing observed at places especially at junction of two lifts of concrete. Concrete found casted for 2.1 mtr in lieu of 1.2 m at a time. Placing concrete from a height of 2.1 m will lead to segregation

Avoid placing concrete for 2.1 m height at a time. Please identify similar defects at other places and rectify them. Intimate cost. Accept a penal recovery of ` 5,000/- for poor workmanship.

4. **Obsn No 04 : Window Cill.** 22 to 24 mm thick Kota stone found used for window cill, whereas 18-20 mm granite for Messes & Officers Accn and 22-25 mm mirror polished kota stone for other buildings specified in CA. No bearing found provided at either ends. Stone flushed from both sides of wall and rounding not done. Please replace the stones having adequate bearing on either ends as per clause 5.20 of CA specifications & intimate cost.



5. **Obsn No 05 : Drainage.** PCC blocks found used for drainage walls. Joints found wider varying from 15 to 25 mm and not filled properly. Edges of blocks found broken. Please remove broken PCC blocks from site and rectify defects. Intimate cost.

### **SM BARRACKS**

6. **Obsn No 06 : Steel Windows.** Box type moulded window of make 'NCL & SECCOLOR Ltd' found provided. Sliding type hinges provided. Glass door and wire mesh door shutters found made in single frame alongwith MS grill in between. Gaps found around the frame and not filled properly at places.

Please fill the gaps around the frame & intimate cost.

7. **Obsn No 07 : Mosquito Wire Cloth.** SS wire cloth found used with 0.2 mm dia in lieu of 0.36 mm dia having 1.4 mm aperture. Please identify defective places & replace wire cloth as per CA specifications & intimate cost.

8. **Obsn No 08 : Plaster.**

(a) **Internal Plaster.** 15 mm thick internal plaster found provided. Cracks observed at junction of dissimilar materials. Grooves found provided. Chicken wire mesh found provided at junctions. Size of mesh 0.15 mm in lieu of 0.63 mm dia and apertures 25 mm x 30 mm in lieu of 10 x 10 mm. Please use chicken wire meshes as per CA specifications in the balance work and recover for deviation from contract.

(b) **External Plaster.** 15 mm thick external plaster found provided. It is rough finished and undulations observed at places, where as smooth and even plaster is specified in CA.

Please identify defective places and rectify. Intimate cost.

9. **Obsn No 09 : Crumple Joint.** Crumple joint found filled with plaster and cracks developed over the plastered surface. Please identify similar defective places and rectify them & intimate cost.

10. **Obsn No 10 : Roof Treatment.** APP Membrane of make STP found provided using torching application. Membrane not stucked properly at places. Primer not found applied properly as checked.

Please identify similar defective places and rectify them & Intimate cost.

11. **Obsn No 11 : Steel Locker.** Steel locker 2100 x 600 x 600 mm with leg size 300 mm found lying in the shed & kept over tiled surface. Thickness found 0.82 mm to 0.85 mm in lieu of 1.0 mm. Please identify defective lockers and replace them as per CA specifications & intimate cost.

### **MNS OFFICERS BUILDING**

12. **Obsn No 12 : Reinforcement.** Stirrups not provided at places. Hooks not bend in 135°. Rings not tied properly at places. Reinforced bars found rusted at places and no cement slurry found used.

Please rectify defects and intimate cost. Accept penal recovery of ` 5,000/- for this lapse.

13. **Obsn No 13 : Filling Under Floor.** Excavated soil mixed with large size boulders found used for filling under floors and compaction not done properly. Please remove boulders from soil mix and ensure adequate compaction of soil to obtain desired dry density. Intimate cost.

14. **Obsn No 14 : Seepage.** Seepage found from RCC slab as checked at site. Please identify similar defective places and rectify them by carrying out grouting & confirm that no seepage exists after rectification. Intimate cost.

15. **Obsn No 15 : Compressive Strength.** RCC columns and beams have been tested randomly for compressive strength using STANLEY REBOUND HAMMER. Following values of compressive strengths observed on random checking of columns and beams :-

13.5, 15, 17.5, 30, 26.5, 18.5, 21.5, 19, 27, 22.5, 16.5, 27.5, 19.5, 37, 24.5 N/mm<sup>2</sup>  
Strength is less as per acceptance criterion specified in IS 456 2000.

You are advised to get the core cut & test from Govt. Engg College / Govt Approved Lab / SEMT & fwd test result through AO.

### **SINGLE OFFICERS ACCN**

16. **Obsn No 16 : Lintel Band.** Lintel beams not found casted over the openings. No bars found left for lintel beam. Lintel bands not found provided where no openings are there. Please rectify the lapses as per CA provisions and intimate cost. Please accept a penal recovery of ` 5,000/- for this lapse.

### **GENERAL POINTS**

17. **Obsn No 17 : Batching Plant.** Automatic batching plant of make 'M/s Schwing Statter', 30 Cum/Hr capacity found installed at site. Fly ash found being used in the plant. Fwd batching report as the same is not attached with factual notes. It is observed that percentage of fly ash exceeded. Fwd acceptance criteria.

18. **Obsn No 18 : Fly Ash.**

(a) Found procured from 'Enuilro Build Mate Pvt Ltd', Lonikand, Tal-Haveli, Dist-Pune and stored in silos. Please confirm that fly ash is conforming to Grade - I of IS 3812 & fwd supporting document along with test certificates.

(b) Independent test certificate not produced. Please fwd independent test certificate carried out on fly ash.

19. **Obsn No 19 : RCC Pipes.** RCC pipes 30 cm dia found lying on ground. Make ISI mark and grading not marked on it. Ends of some pipes found broken. Please remove unapproved materials from site and use the approved ISI marked pipes.

20. **Obsn No 20 : Pressed Steel Chowkat.** 1.25 mm thick MS pressed steel chowkat found used. Frames found hollow sounding due to improper filling with PCC. Please rectify defects and intimate cost.
21. **Obsn No 21 : Site Documents.**
- (a) **ATT.** Chemical Chloroguard 20% EC procured 165 drums 20 Ltr each. ATT register not produced. Independent testing report not produced. Authorised applicator details not produced.
  - (b) **Site Order Book.** Compliance of site orders not endorsed.
  - (c) **Works Diary.** CE visited two times and no endorsement made and the visits are inadequate as per Quality manual.
  - (d) Level register found maintained and level sheet not produced. Levels not entered in MB.
22. **Obsn No 22 : ITI Qualified Tradesmen.** The numbers of ITI qualified tradesmen employed at site found not adequate as per CA clause at Ser Page No 130. The respective CA clause stipulates that the number of ITI/NICMAR/NAC qualified tradesmen shall not be less than 25% of total skilled/semi-skilled tradesmen required in each trade. Please give reasons for such deviation from CA & fwd your comments through AO along with minus DO on this account.
23. **Obsn No 23 : Site Engineers.** Please fwd details of Site Engineers alongwith details & educational qualification as the same are not attached with factual note.
24. **Obsn No 24 : Hindrances.** Hindrance register maintained. Only 4 hindrances entered. 31 buildings out of 74 buildings are yet to be demolished as per CA. Confirm that there are no further hindrances to progress the work. Please explain reasons for delay and take suitable measures to complete the entire scope of work at the earliest.

(Satish Chander, IDSE)  
STE SC Pune

**MINOR OBSERVATION**

CA No : CEPZ/KKE-54 of 2016-2017  
Name of Work : Provision of OTM accn at MH Kirkee  
Amount in lakhs : ` 2828.28 Lakhs

---

**-NIL-**

(Satish Chander, IDSE)  
STE SC Pune



**IMPORTANT OBSERVATION**

CA No : CEPZ/KKE-54 of 2016-2017  
Name of Work : Provision of OTM accn at MH Kirkee  
Amount in lakhs : ` 2828.28 Lakhs

---

1. **Obsn No 14 : Seepage.** Seepage found from RCC slab as checked at site. Please identify similar defective places and rectify them by carrying out grouting & confirm that no seepage exists after rectification. Intimate cost.

2. **Obsn No 15 : Compressive Strength.** RCC columns and beams have been tested randomly for compressive strength using STANLEY REBOUND HAMMER. Following values of compressive strengths observed on random checking of columns and beams :-

13.5, 15, 17.5, 30, 26.5, 18.5, 21.5, 19, 27, 22.5, 16.5, 27.5, 19.5, 37, 24.5 N/mm<sup>2</sup>  
Strength is less as per acceptance criterion specified in IS 456 2000.

You are advised to get the core cut & test from Govt. Engg College / Govt Approved Lab / SEMT & fwd test result through AO.

3. **Obsn No 22 : ITI Qualified Tradesmen.** The numbers of ITI qualified tradesmen employed at site found not adequate as per CA clause at Ser Page No 130. The respective CA clause stipulates that the number of ITI/NICMAR/NAC qualified tradesmen shall not be less than 25% of total skilled/semi-skilled tradesmen required in each trade. Please give reasons for such deviation from CA & fwd your comments through AO along with minus DO on this account.

4. **Obsn No 24 : Hindrances.** Hindrance register maintained. Only 4 hindrances entered. 31 buildings out of 74 buildings are yet to be demolished as per CA. Confirm that there are no further hindrances to progress the work. Please explain reasons for delay and take suitable measures to complete the entire scope of work at the earliest.

(Satish Chander, IDSE)  
STE SC Pune