



:020-26133148
: 020-26052869

REGSDS / BY POST

Superintending Technical Examiner (SC)
PCDA (SC) Complex, No.1, Finance Road
Pune – 411 001

3220/424/ 02/Q/ADGTE

Oct 2018

Garrison Engineer
(Air Force)
Amla – 460 553 (MP)

SITE VISIT : CE(AF)NAG/AMLA-29 OF 2016-2017

1. Refer inspection conducted by STE team on 05 Sep 2018.
2. The copy of factual statement of the work is held on your record. The obsns on account of above mentioned 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 (AF) Nagpur
PIN – 900419
C/o 56 APO

CWE (AF) Nagpur
PIN – 900419
C/o 56 APO

(BY POST)
28, ED (AF) Station
Amla (MP) – 460 553

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

CA No	CE(AF)NAG/AMLA-29 OF 2016-17	Amount (in lakhs)	. 2556.90 lakhs	Location	Amla				
Name of Work	Reconstruction & Adtl Alternation of certain Sheds at 28 ED (AF) Stn, Amla								
(a)	Contractor		M/s RCC Infraventures Ltd.						
(b)	Date of Commencement		14 Mar 2017 (Phase-I) 15 May 2017 (Phase-II)						
(c)	Completion as per CA		13 May 2017(Phase-I) 14 Aug 2017 (Phase-II)						
(d)	Extended date of completion		13 May 2019 (Phase-I) 10 Jan 2018 (Phase-II)						
(e)	Actual date of Completion		-						
(f)	DV No & Date of final bill if paid		-						
(g)	Whether ADGTE visited project (if yes, date)		-						
(h)	Name of STE / TE		Name of MES Offrs Accompanying						
	Shri Satish Chander, IDSE, STE SC Pune Shri D Suresh Reddy, IDSE, SE(NF), TE Lt Col BhaskarRautela, TE Shri Manish Raj, IDSE, EE (SG), TE		Maj Sonal Rajput, GE (AF) Amla Shri RS Joshi, AGE B/R						
(k)	Inspection Summary :								
	No Inspection	Ist Check		2nd Check		3rd Check			
(i)	Date of Check	05 Sep 2018		-		-			
(ii)	Progress %	Actual	Target	Actual	Target	Actual	Target		
	48%	-	-	-	-	-	-		
(iii)	Obsn Nos Raised	Ist	18	2nd	-	3rd	-		
(iv)	Total Obsn Raised								
(v)		Minor	Maj	Adv	Minor	Maj	Adv		
		01	18	-	-	-	-		
(vi)	Obsn Split	B/R		E/M		B/R		E/M	
(vii)		18		-		-		-	
(viii)	Total Settled	-		-		-		-	
(ix)	Outstanding Obsn	18		-		-		-	
(x)	Outstanding Obsn (Check wise)	18		-		-		-	
(xi)		IRNR		-		IRNR		-	
(xii)	Net Outstanding Obsns					18			
(xiii)	Date of Expiry of DLP (where wk 100% completed)								

CA No : CE(AF)NAG/AMLA-29 OF 2016-2017
Name of Work : Reconstruction & Addl Alternation of certain Sheds at 28 ED (AF) Stn, Amla
Amount in lakhs : `2656.90 Lakhs

OBSNS ON ADM APPROVAL, PLG & TS

-NIL -

OBSERVATION ON CONTRACT & SITE DOCUMENT

-NIL -

OBSERVATION ON SITE INSPECTION (MAJOR)

1. **Obsn No 01 : Galvalume Sheet Roofing.** 0.55 mm thick TCT corrugated galvalume sheet roofing found used for roofing over the steel truss. Make Tata Blue scope and AZ-150 found marked on sheets. 0.5mm thick TCT plain galvalume sheet found used for side flashing. Make and grading not found marked on plain galvalume sheet. Please fwd PV & TC of roofing sheets.

2. **Obsn No 02 : Steel Truss.**

(a) Following steel sections used for roof truss:-

- (i) AI 90 x 90 mm, SAIL
- (ii) AI 75 x 75 mm, SAIL
- (iii) AI 50 x 50 mm, SAIL
- (iv) 10 mm thick gusset plate, Make not found marked.
- (v) 16 mm thick base plate.
- (vi) 'Z' Section purlins [3 mm thick], make not found marked.

Fwd PV & TC of all steel sections.

(b) 12 mm dia tie rods used found rusted and needs to be re-painted. Please carryout painting & intimate cost.

(c) Welding found done on one side in lieu of two sides to the bracings connected to the gusset plate. Identify similar defects and carry out welding & confirm.

(d) Bolts & Nuts of make 'Pooja Forge', Non ISI marked found being provided. Please replace these bolts with ISI marked structural bolts & intimate cost.

(e) Confirm that steel truss welding has been inspected and tested as per Clause 8.2 of CA & fwd the test report.

3. **Obsn No 03 : Brick Masonry.**

(a) Fly ash bricks of size 230 x 110 x 70 mm found used for masonry of walls. Make not found marked. Raking of joints not found done properly at places. Please carryout raking at all places & intimate cost.

(b) In the existing sheds, [20 Nos] walls not found demolished and same were used. Height of the wall raised by 1.50 to 2.00 m. Walls are 230 mm thick but Gable walls of thickness 345 mm thick provided. In the new sheds [Nos 3, 7 & 8] wall thickness 345mm found provided. Please confirm that wall thickness is maintained as per CFEES approval as different wall thickness being catered for sheds. Fwd CFEES approval.

4. **Obsn No 04 : Cement Based Paint.** One coat of cement based paint found carried out over external walls. Paint is coming out in hand due to improper curing. Please remove old paint, redo cement paint, ensure proper curing and intimate total rectification cost.

5. **Obsn No 05 : Turbo Ventilator.** 600 mm turbo ventilator found provided over the galvalume sheet roofing. Make not marked on them. Fwd PV & TC.

6. **Obsn No 06 : Compressive Strength.** Compressive strength of RCC columns/ beams randomly checked using rebound hammer and the values recorded as 30, 21.5, 21.5, 20, 23.5, 23, 22, 28 N/sq mm for M25 design mix concrete. Strength found less at places. Please carryout NDT tests and core test from approved labs & fwd reports.

7. **Obsn No 07 : PCC Flooring.** 200 mm thick PCC flooring found carried out over PCC sub base having panel size 3.7 m x 3.1 m. Dummy joints found cut using diamond cutter having width 9 to 11 mm and depth 45 to 50 mm. Joints are filled using joint filler over backer rod having depth found 10 to 12 mm in lieu of minimum 15 mm. Please rectify defects & intimate cost.

8. **Obsn No 08 : RCC Bracket for Crane Gantry Girder.** In the 3 sheds [Nos 3, 7 & 8] RCC bracket being provided for provision of 5 ton crane. RCC frame found constructed [Shed No 7 & 8] but RCC bracket not casted monolithically with column/beam. Reinforcement is left and concreting is yet to be carried out. Monolithic casting of concrete is necessary in such cases to achieve desired strength.

Please take suitable strengthening measures while casting of RCC bracket. Ensure testing of RCC bracket before placing crane over it. Fwd reply through CE.

9. **Obsn No 09 : Platform (Shed No 3 , 7 & 8).**

(a) 3.2 m wide platform un-covered on front side and 5.0 m wide platform on back side in Shed No. 3 being catered in the work. Work yet to be started.

(b) In shed No. 7 & 8 moving space not found provided all around the bldg. 3.2 platform being catered in the work on front side. Work of platform yet to be started. Drainage being provided between building & toe wall of traverse at the rear. As per BPs, 2 m wide rear platform is required to be provided.

Different platform widths are being considered for different sheds. Please fwd details of platforms for all sheds bringing about discrepancy, if any, as per CA and as on ground. Fwd recommendations of CFEES and route your reply through CE.

10. **Obsn No 10 : Traverse.**

(a) Refilling of earth & repair being done to the existing traverses. 13 traverses found catered in the work. Earth found filled in some of the traverses and not compacted properly. Earth found caved in at places due to improper compaction. Please rectify defects & ensure proper compaction of embankment using suitable roller. Intimate cost.

(b) RR Masonry found provided in repairing the walls of traverses around the explosive storage buildings. PCC bond stones used. Sufficient weep holes not provided in the toe wall. 6 Nos weep holes provided in the 3 m x 2 m wall. At places no weep holes found provided in the wall. Identify similar defects and provide sufficient weep holes as per CA specifications & intimate cost.

(c) It has been observed that Addn/Altn is being carried out to 20 existing sheds but only 08 traverses are being considered for repairs. Please confirm that all other traverses are in good condition and, are satisfying all parameters as per relevant STEC pamphlet and CFEES recommendations.

11. **Obsn No 11 : External Services.**

(a) External services works not started on ground. Only Drainage found constructed at few places. Please commence all pending external services.

(b) Existing roads found damaged due to movement of trucks. Please carryout repairs & confirm.

12. **Obsn No 12 : Stacking of Materials.** Reinforcement bars found stacked on the soil and found rusted. Please stack all materials properly on dunnage and intimate cost. Accept a penal recovery of `5,000/- for this lapse.

13. **Obsn No 13 : CFEES Report.**

(a) CFEES report not found attached with factual statement. Please fwd the same.

(b) Confirm that all CFEES recommendations are incorporated in the contract. Fwd your reply through CE.

14. **Obsn No 14 : Site Documents.**

(a) Steel. Steel register not maintained properly, independent test not carried out batch wise. One test for each size tested independently.

(b) Test on Bricks. Only compressive strength carried out. Carryout other tests as per CA & confirm.

(c) Site Order. Compliance not recorded for any site order.

(d) ATT. ATT Register not produced & not found on file.

(e) Hindrance Register not produced.

(f) Some of the important site documents not maintained properly and observed that concerted efforts not put in maintaining them. Please update all the site documents and confirm. Fwd the reply through CWE.

15. **Obsn No 15 : ITI Qualified Skilled Persons.** List of ITI qualified skilled persons deployed at site not found attached with the factual statement. Please fwd the list along with their monthly payment details for our perusal.

16. **Obsn No 16 : Site Engineer.** Following Site Engineer found at site :-

S. No	Name	Qualification	Experience
(a)	Arvind Prasad	Diploma Civil Engineer	20 Years
(b)	Banke Bihari Sharma	B Tech	05 Years
(c)	Vishnu Kumar	B Tech	06 Years
(d)	Md. Abeed	B Tech	05 Years
(e)	Charanjeet Singh	Diploma	05 Years
(f)	RM Singh	Diploma	30 Years

Fwd the documents in respect of qualification with experience details of all Site Engineers & their payment details for our perusal.

17. **Obsn No 17 : Slow Progress of Work.** Progress of work is slow and is behind planned schedule. Progress as on 31 Aug 2018 of various phases is as given below:-

Phase	Shed Nos.	Progress	
		Planned	Actual
I	Preparatory Works	100%	100%
IIA	3,7,8 (New Construction)	100%	62%
IIB	37,42,63,69	100%	100%
III	02, 09, 38, 77	100%	100%
IV	25, 27, 11, 71	100%	45%. Shed 11 & 71 yet to be handed over by users
V	4 sheds	Date of commencement : June 2018	Sheds yet to be handed over by users.
VI	4 sheds	Date of commencement : Nov 2018	Sheds yet to be handed over.
VII	Traverses: 2, 3, 5, 7, 8, 11, 42, 46, 47, 48, 53, 63, 77.	100% PDC – 13 Mar 2018	95%

(a) The overall progress of work as on date is 48%.The overall period of completion was 24 months and original contract PDC is going to expire on 13 Mar 2019. Please forward the specific reasons for the delay and action taken to expedite the completion of work.

(b) It is observed that no action has been taken to enhance Job PDC from CFA which has already expired. Please take requisite action and ensure that the Job PDC is enhanced before granting any extension of time to the contractor.

(c) Please identify the problem areas in execution of work and take remedial actions to expedite the progress of the work.

(d) Since progress of the work is very slow, please intimate why requisite action as per E-in-C's Branch policy letter No. 16/2014 issued vide letter No A/37696/OSDPL/POL/E2(PPC) dated 13 Aug 2014 which states that,

“ Contracts having period of completion more than twelve months shall have performance evaluation meetings at intervals of every six months from the date of commencement indicated in work order No. 01. These shall be held at the work site on a date fixed well in advance to ensure presence of all concerned. These meetings shall be attended by the Accepting Officer, CWE, GE,AGE, representatives of CE's office [E8, E2 (Design), E6, E2 (Plg) and E4], contractor and the PMG. The present progress of wk and reasons for any delay shall be analysed and time-bound action plan to remove any encumbrances/bottlenecks will be discussed in detail. In case extension of time is contractually and circumstantially due, it shall be deliberated upon.”

Fwd your reply through AO.

18. **Obsn No 18 : PVs & TCs.** Fwd the PVs & TCs of all materials.

(Satish Chander, IDSE)
STE SC Pune

MINOR OBSERVATION

CA No : CE(AF)NAG/AMLA-29 OF 2016-2017
Name of Work : Reconstruction & Addl Alternation of certain Sheds at 28 ED (AF)
Stn, Amla
Amount in lakhs : `2656.90 Lakhs

1. **PVC Pipes**. 160 mm dia PVC pipes of make "Kissan", ISI marked found provided for storm water disposal. PVC brackets holding pipes found broken at places. Identify similar defects & rectify them.

(Satish Chander, IDSE)
STE SC Pune

IMPORTANT OBSERVATION

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1. **Obsn No 08 : RCC Bracket for Crane Gantry Girder.**

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3. **Obsn No 10 : Traverse.**

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(c) It has been observed that Addn/Altn is being carried out to 20 existing sheds but only 08 traverses are being considered for repairs. Please confirm that all other traverses are in good condition and are satisfying all parameters as per relevant STEC pamphlet and CFEES recommendations.

4. **Obsn No 13 : CFEEES Report.**

- (a) CFEEES report not found attached with factual statement. Please fwd the same.
- (b) Confirm that all CFEEES recommendations are incorporated in the contract. Fwd your reply through CE.

5. **Obsn No 17 : Slow Progress of Work.**

Progress of work is slow and is behind planned schedule. Progress as on 31 Aug 2018 of various phases is as given below:-

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Fwd your reply through AO.

(Satish Chander, IDSE)
STE SC Pune



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Superintending Technical Examiner (SC)
PCDA (SC) Complex, No.1, Finance Road
Pune – 411 001

3220/424/ 02/Q/ADGTE

Sep 2018

Addl Dte Gen Tech Examination
Quartermaster General's Branch
Integrated HQ of MOD (Army)
Kashmir House, Rajaji Marg
DHQ PO, New Delhi - 110011

SITE VISIT : CE (AF)NAG/AMLA-29 OF 2016-2017
RECONSTRUCTION & ADDL ALTERNATION OF CERTAIN SHEDS
AT 28 ED (AF) STN, AMLA

1. Refer inspection of above work by STE team on 05-06 Sep 2018 at AF Station, Amla.
2. The following are fwd herewith for your perusal/approval and early return please :-
 - (a) Draft Observations.
 - (b) Draft Minor Observations.
 - (c) Draft Important Observations.
 - (d) Draft DO to CE.

Encls : As above

(Satish Chander, IDSE)
STE SC, Pune