N.R. TYPE PLAN NO:- W-47

N.R.H.Q.E.PLAN NO. HQ/06/03-2012 | SHEET NO. 1

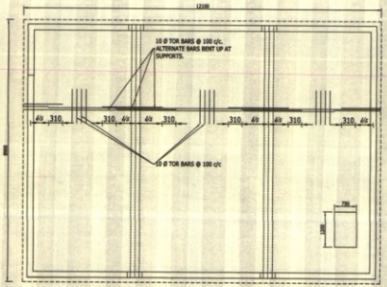
NOTES:-

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
2. ALL R.C.C WORK SHALL BE MIX CONCRETE M-20 AS PER IS: 456-2000 CODE OF OF PRACTICE FOR PLAIN AND REINFORCED CONCRETE.
3. CONCRETING SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS LAID DOWN IN IS: 456-2000.
4. PROPER CURING OF CONCRETE TO ACQUIRE HARDNESS, STRENGTH AND OTHER PROPERTIES, ESSENTIAL FOR SATISFACTORY SERVICE SHALL BE ENSURED.
5. ALL CONCRETE SHALL BE MECHANICALLY MIXED AND VIBRATED.
6. COVER TO REINFORCEMENT SHALL NO WHERE BE LESS THAN THAT SHOWN ON THE PLAN OR AS SPECIFIED IN IS: 456-2000.
7. HIGH YIELD STRENGTH COLD TWISTED DEFORMED BARS SHALL CONFORM TO IS : 1786-1985.
8. PARTICULAR CARE MUST BE TAKEN TO ENSURE THAT
   (i) NO SAG OCCURS IN THE REINFORCING BARS DURING CONSTRUCTION.
   (ii) STIRRUPS ARE EFFECTIVELY TIED WITH WIRE TO THE MAIN REINFORCING BARS.
9. THE NUMBER OF BARS SHALL BE DECIDED FROM THE SPACING MENTIONED ON THE DRAWING AND NOT BY COUNTING THE BARS.
10. ALL R.C.C. WORK MUST BE CARRIED OUT UNDER THE PERSONAL SUPERVISION OF SITE IN CHARGE.
11. TOR STEEL SHOULD BE USED.
12. 230 THICK BRICK WALL TO BE IN CEMENT MORTAR 1:6.
13. INLET AND OUTLET PIPE CAN BE PROVIDED ON ANY OF THE FOUR WALLS AS PER SITE CONDITION.
14. SEAL ALL EXISTING MAN HOLES.
15. RAISE HEIGHT OF THE TANK WITH CONCRETE OR BRICK WORK SO THAT TOP OF ROOF SLAB IS 1475mm ABOVE GROUND LEVEL. RAISING TO BE DONE IN BRICK WORK OR CONCRETE.
16. VIEWING WINDOW TO BE PROVIDED WITH CLEAR GLASS PANE OF TOUGHENED GLASS.
17. EXISTING UNDERGROUND TANKS WHICH DO NOT HAVE PROPER COVERS, INSPECTION WINDOWS AND INLET / OUTLET PIPES SHOULD BE MODIFIED AS SHOWN IN THE DRAWING AT 'B'. THE PURPOSE IS TO PROVIDE FACILITY FOR PROPER VISUAL INSPECTION AND PREVENT CONTAMINATION OF TREATED STORED WATER BY PROVIDING PROPER COVER AND ADEQUATELY RAISING THE TOP OF THE TANK ABOVE THE GROUND LEVEL.
18. THE GROUND LEVEL SHOULD BE AT LEAST 150mm BELOW THE TOP OF THE WALL OF THE TANK. AT EXISTING TANKS WHERE THIS MUCH GROUND CLEARANCE IS NOT THERE THE SURROUNDING GROUND SHOULD BE LOWERED TO PREVENT SURFACE RUN OFF FROM CONTAMINATING THE WATER. IF THIS IS NOT FEASIBLE THE EXISTING ROOF OF TANK MAY BE DISMANTLED TO RAISE THE TANK WALL TO 1475 mm AS SHOWN IN THE DRAWING FOR NEW TANK.

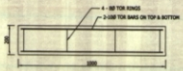
ALL CONCRETE MIX SHALL BE M-20 CONFORMING TO IS 456-2000

CLEAR COVER TO BE AS FOLLOWS:-

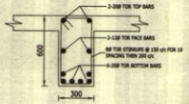
1. FOR BEAMS — 25 MINIMUM OR TWICE DIA OF BAR WHICHEVER IS MORE.
2. FOR SLABS — 20 MINIMUM OR TWICE DIA OF BAR WHICHEVER IS MORE.



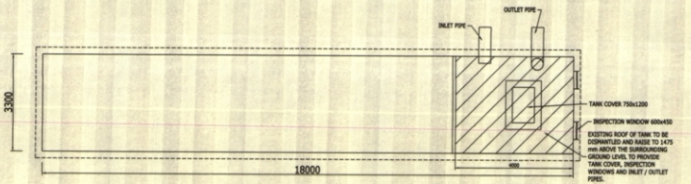
R.C.C. DETAILS OF SLAB



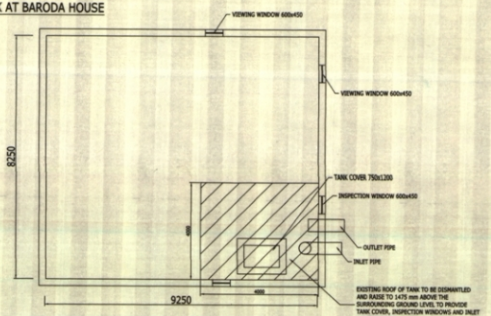
R.C.C. DETAILS OF BED BLOCK



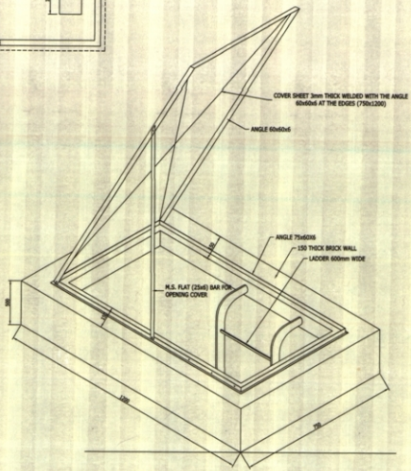
R.C.C. DETAILS OF BEAM



FOR EXISTING RECTANGULAR TANK AT BARODA HOUSE

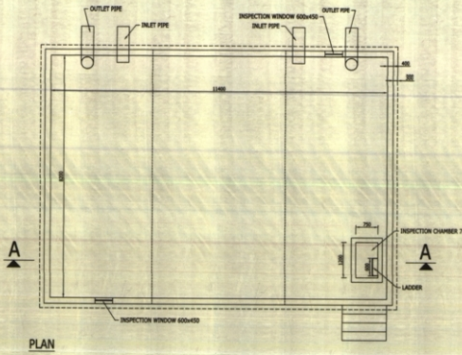


FOR EXISTING SQUARE TANK AT STATE ENTRY ROAD



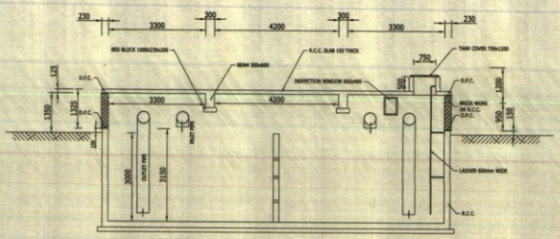
DETAIL OF TANK COVER 750x1200

(B) TYPICAL ALTERATIONS TO THE EXISTING UNDERGROUND TANKS TO PROVIDE TANK COVER, INSPECTION WINDOWS AND INLET / OUTLET AND TO PREVENT CONTAMINATION OF THE STORED TREATED WATER FROM INGRESS OF SURFACE WATER FROM THE SURROUNDING GROUND.



PLAN

(A) FOR NEW TANK



SECTION AT A-A

SND	DATE	DESCRIPTIONS	INITIALS
REVISION			

CE/HQ — (ALOK VERMA) — 03.02.2012

CE/P&D — (N.K.SINHA) — 27.3.12

DY.CE/P&D — (G.S.PATHAK) — 02/04/12

XEN/W — (P.K.VERMA)

AXEN/P&D — (O.P.DESHWAL) — 2.4.12

NORTHERN RAILWAY

STANDARD DRAWING FOR NEW UNDERGROUND TANKS AND IMPROVING EXISTING UNDER GROUND TANKS WITH CAPACITY 225 K.L. TO PROVIDE A PROPER INSPECTION CHAMBER, INSPECTION WINDOW AND INLET & OUTLET PIPE, ETC. (RECTANGULAR)

DRAWN: (THUNDON C.P.) — SECTION: (BISHAL CHANDRA) — SSO/DSN: (SANJEEV KUMAR)

SCALE : 1:100, 1:50 & 1:25

H.Q. CASE NO. 104-W/0/PT.III/Policy/Underground Plan

CALCULATION FILE:

N.R.DIVL. PLAN NO.

N.R.H.Q.E. PLAN NO. HQ/06/03-2012 | SHEET NO. 1/