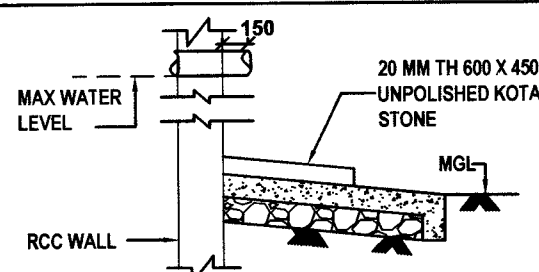
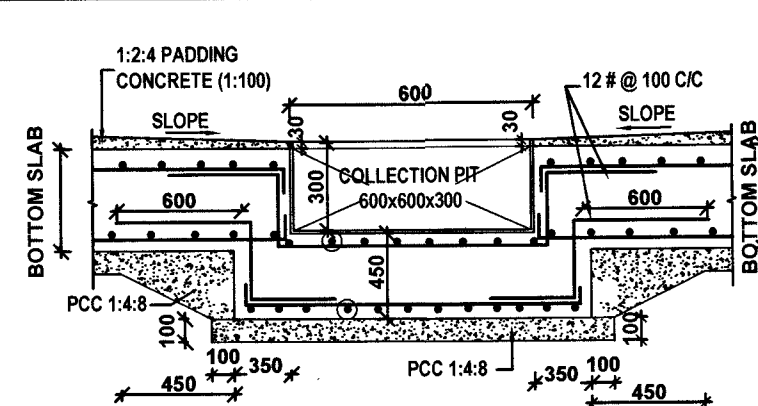


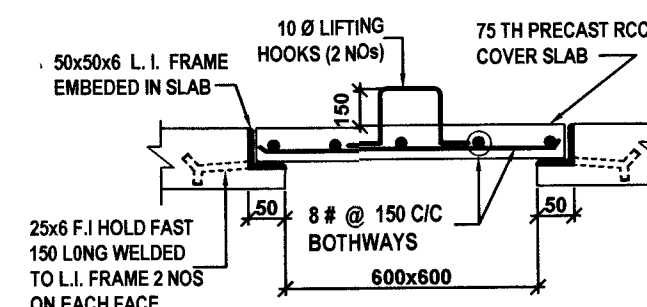
DETAIL OF PLINTH PROTECTION



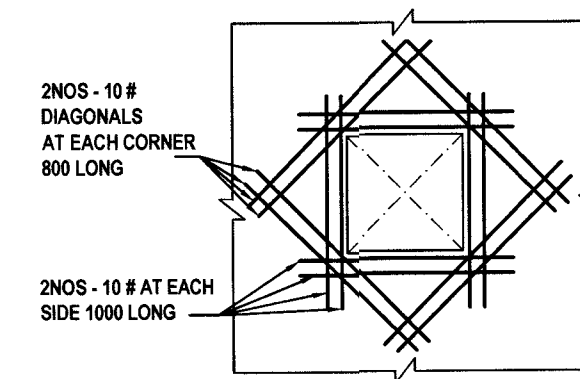
DETAIL OF OVER FLOW PIPE



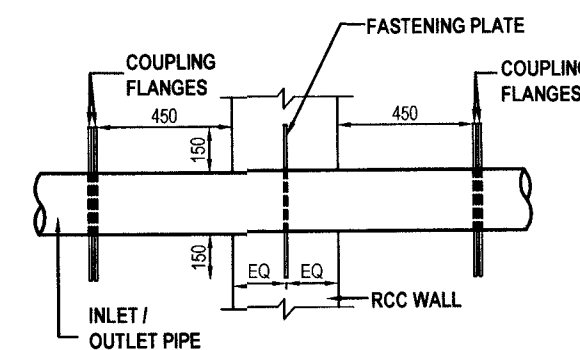
DETAIL OF SUMP  
(600x600x300)



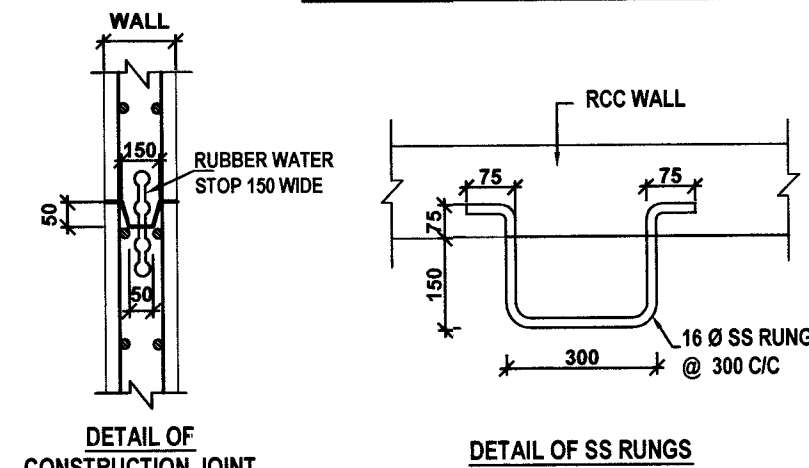
DETAIL OF MANHOLE COVER



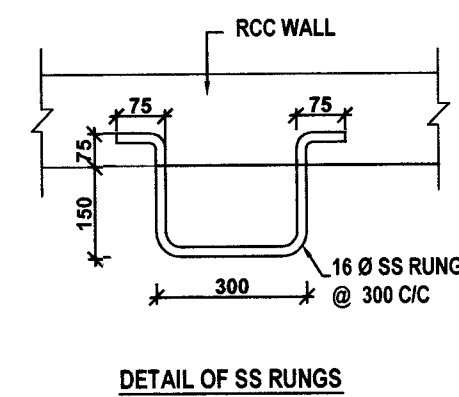
REINF. DETAIL AROUND  
MANHOLE / SPILL HOLE



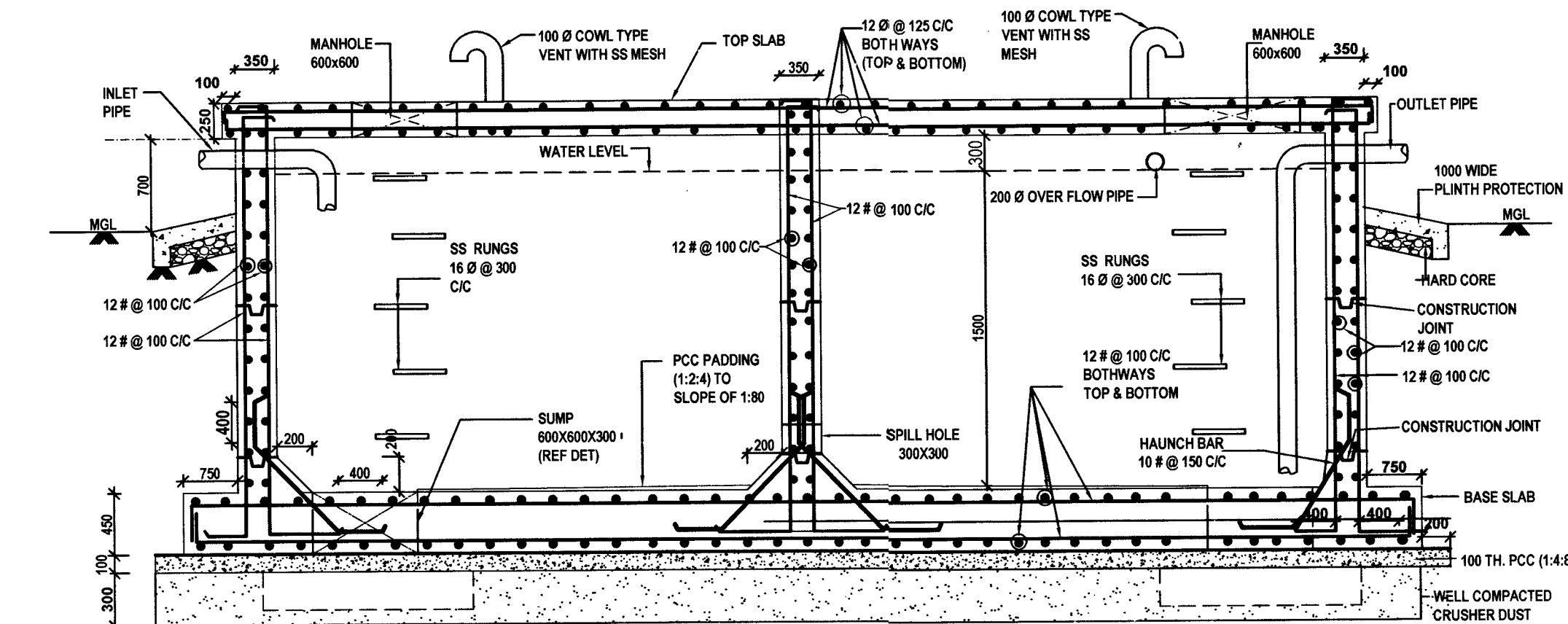
DETAIL OF CONNECTION PIPE  
(SUCTION / DELIVERY / OVERFLOW PIPES)



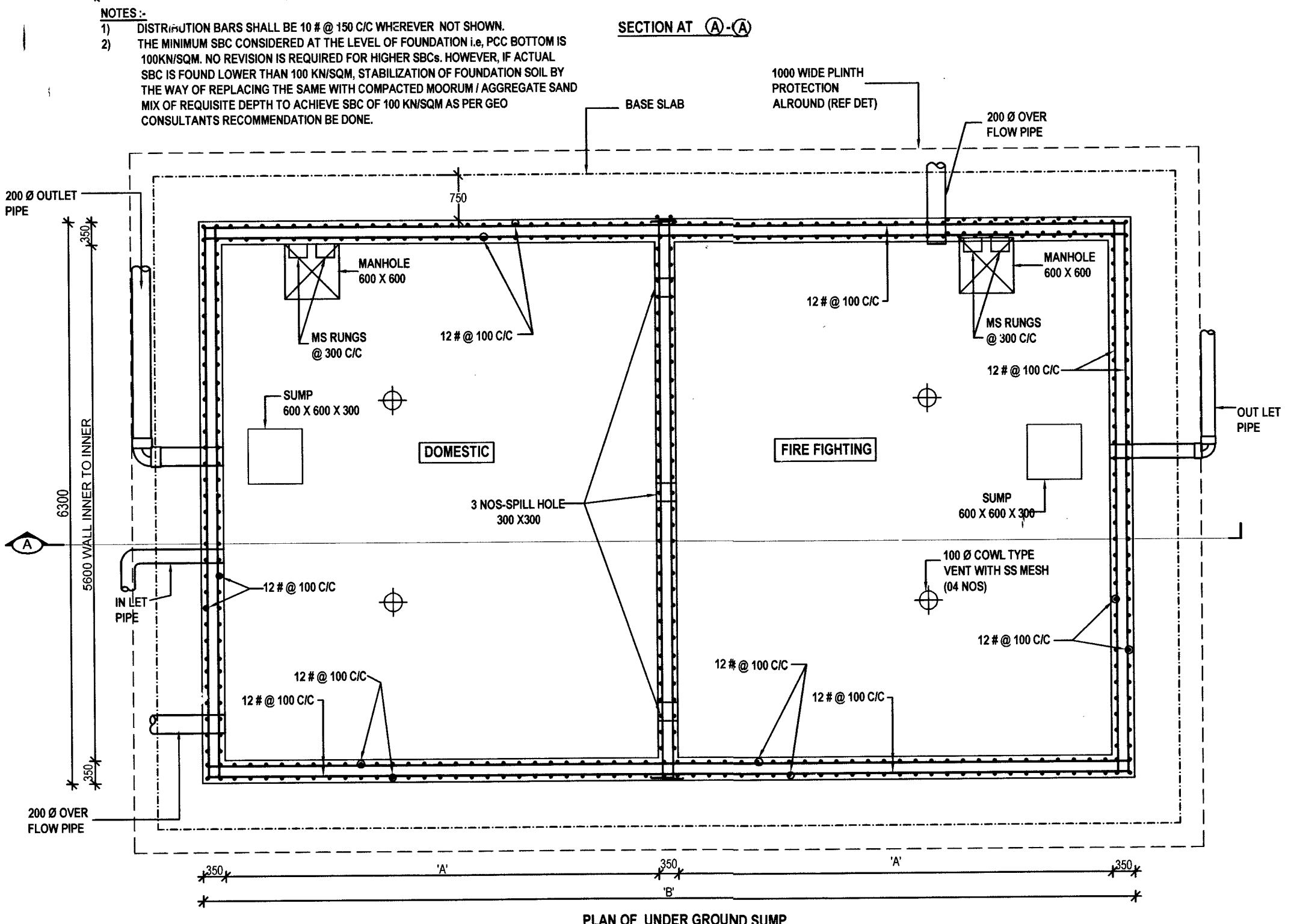
DETAIL OF  
CONSTRUCTION JOINT



DETAIL OF SS RUNGS



SECTION AT A-A



PLAN OF UNDER GROUND SUMP

- NOTES:-
- 1) DISTRIBUTION BARS SHALL BE 10 # @ 150 C/C WHEREVER NOT SHOWN.
  - 2) THE MINIMUM SBC CONSIDERED AT THE LEVEL OF FOUNDATION I.e. PCC BOTTOM IS 100KN/SQM. NO REVISION IS REQUIRED FOR HIGHER SBCs. HOWEVER, IF ACTUAL SBC IS FOUND LOWER THAN 100 KN/SQM, STABILIZATION OF FOUNDATION SOIL BY THE WAY OF REPLACING THE SAME WITH COMPACTED MOORUM / AGGREGATE SAND MIX OF REQUISITE DEPTH TO ACHIEVE SBC OF 100 KN/SQM AS PER GEO CONSULTANTS RECOMMENDATION BE DONE.

## NOTES:-

1. CONTRACTOR TO CHECK AND VERIFY ALL THE DIMENSIONS BEFORE EXECUTION OF THE WORK.
  2. ALL DIMENSIONS ARE GIVEN IN MILLI METRES, UNLESS OTHERWISE SPECIFIED.
  3. FIGURED DIMENSIONS SHALL BE FOLLOWED.
  4. ALL DRAWINGS OF ARCHITECTURAL, STRUCTURAL ELECTRICAL AND SANITARY PLUMBING ETC, FORMING PART OF THE CONTRACT SHALL READ IN CONJUNCTION WITH EACH OTHER.
  5. HIGH STRENGTH DEFORMED STEEL CORROSION RESISTANT BARS PRODUCED BY THE TMT PROCESS OF GRADE Fe-500 HAVING ELONGATION NOT LESS THAN 18% AND CONFORMING TO OTHER REQUIREMENTS OF IS-1786 : 1985 BE USED FOR THE REINFORCEMENT.
  6. THE GRADE OF CONCRETE FOR ALL RCC WORKS SHALL BE M-30 DESIGN MIX AS PER IS-456-2000.
- CRITERIA FOR DESIGN MIX :-**
- a) DEGREE OF QUALITY CONTROL : GOOD
  - b) EXPOSURE : SEVERE
  - c) SLUMP : CONCRETE WORKS 50-100
7. RCC WALL OF SUMP SHALL BE CAST MONOLITHIC WITH BASE SLAB.
  8. NUMBER OF CONSTRUCTION JOINTS SHOULD NOT BE MORE THAN THREE IN THE RCC WALL OF SUMP.
  9. STEEL PROPS AND OTHER SHUTTERING MATERIAL SHALL BE PROVIDED AS PER E-4-C'S B/NEW DELHI POLICY LETTER No.901371 D & C / THURS / E2 DES -3, DATED 09 NOV 2006.
  10. PROVISION OF NEG. IS-456-2000 IS-1786-1985, IS-383, IS - 3370 - 2009 (PART - 1 & 2), OR ANY OTHER RELEVANT IS SHALL BE FOLLOWED.
  11. ALL WIS PIPES DULY TREATED SHALL BE PLACED IN POSITION BEFORE PLACING OF CONCRETE. UNDER NO CIRCUMSTANCES, CONCRETE ONCE CASTED SHALL BE BROKEN FOR INSERTION OF PIPES.
  12. 10 MM + 5 MM TH. PLASTER WITH TEPCEOTE EXTERNAL AND INTERNAL IN TWO LAYERS IN CM (1:2).
  13. LAPS TO REINFORCEMENT SHALL BE SO STAGGERED THAT NOT MORE THAN 1/3 OF BARS ARE LAPPED AT A PARTICULAR LEVEL/SECTION. THE MINIMUM LAP/ANCHORAGE/DEVELOPMENT LENGTH OF BARS WHERE NOT INDICATED IN THE DRGS. SHALL BE 60 TIMES OF THE BAR DIA.
  14. THE SITING OF THE SUMP SHALL BE DONE TAKING INTO CONSIDERATION THE STIPULATIONS OF CLAUSE - 4 OF IS - 3370(PART-1) OF 2009. THE DESIGN AND SPECIFICATIONS DO NOT ACCOUNT FOR.
    - a) SUMP LOCATED IN WATER LOGGED AREAS FILLS AND DEEP CUTS.
    - b) FOM. STRATA CONSISTING OF FAULTS WHICH MAY LEAD TO SUBSIDENCE / SETTLEMENTS IN EXCESS OF THOSE PERMITTED BY IS-1904 OF 1965.
    - c) SOILS CONTAINING INJURIOUS MATERIALS FOR WHICH NECESSARY MODIFICATION TO SPECIFICATION WILL BE REQUIRED IN TERMS OF CLAUSE 4.2(L) OF IS - 3370(PART-1).
  15. ALL PIPES AND FITMENTS WHICH ARE REQUIRED TO BE EMBEDDED IN RCC SHALL BE PLACED IN POSITION BEFORE CONCRETING OF THE MEMBERS (CUTTING OF HOLES, CHASES ARE OPENING IN CONCRETE AFTER CASTING IS NOT PERMITTED). IN CASE REINFORCEMENT INTERFERES WITH THE LOCATION OF THE PIPE/FITMENT (LESS THAN 0.5 SQ.M), THE REINFORCEMENT SHALL NOT BE CUT BUT BENT TO SUITABLY TO ACCOMMODATE THE PIPE/FITMENT. THE BITUMINOUS PAINT OVER CI PIPES AND FITURES SHOULD BE REMOVED BY BURNING BEFORE EMBEDDING IN CONCRETE. EXPOSED SURFACES OF CI PIPES/FITURES WILL HOWEVER BE REPAINTED WITH APPROVED BITUMINOUS PAINT WHICH SHOULD BE OF PORTABLE QUALITY.
  16. THE SUMP SHALL BE KEPT FILLED UP WITH WATER TILL THE TANK IS PUT TO REGULAR USE TO AVOID CRACKING OF CONCRETE DUE TO SHRINKAGE/TEMP. EFFECTS.
  17. FI CLAMP FOR FORKING PIPES SHALL BE PROVIDED AT ALL PIPE JOINTS AND C/C SHALL NOT BE EXCEEDING 1200 CC.
  18. POSITION OF IN LET / OUT LET PIPES SHALL BE PROVIDED AS PER ENGINEER IN CHARGE AT SITE AS PER SITE CONDITIONS.
  19. EXTERNAL SURFACES OF THE PLASTER SURFACES COVERED WITH TWO COATS OF CEMENT PAINT WITH ONE COAT OF PRIMER.
  20. THE FOLLOWING CONCRETE CLEAR COVER SHALL BE FOLLOWED.
    - a) FOR TOP SLAB = 45 MM
    - b) FOR TOP BEAMS = 45 MM
    - c) FOR BASE SLAB = 50 MM
    - d) FOR RCC WALL = 45 MM
  21. THE SUMP SHALL BE TESTED FOR WATER TIGHTNESS AT FULL SUPPLY LEVEL AS DESCRIBED IN CLAUSE 12.1.1 AND 12.1.2 OF IS 3370 (PART 1 - 2019). IN ADDITIONAL TO THE ROOF OF SUMP SHOULD BE TESTED IN ACCORDANCE WITH CLAUSE 12.1.3 OF IS 3370 PART 1 - 2019.
  22. INLET AND OUTLET PIPES SHOULD BE ADEQUATELY SUPPORTED FROM NEAR BY WALL IN THE FORM OF STRONG & STABLE BRACKETS EMBEDDED IN WALL.
  23. IT IS ASSUMED THAT THE SOIL BEARING CAPACITY IS 10 T/SQ(MIN) AT FOUNDATION LEVEL AND SOIL IS NON EXPANSIVE TYPE.
  24. THE EARTH FOR BACK FILLING SHOULD HAVE BETTER DRAINAGE PROPERTY (i.e. A LOWER ABSORPTION INDEX) (PREFERABLY SANDY SOIL).
  25. SUMP FLOOR SHALL BE PROVIDED WITH A SLOPE OF 1:80 FOR WASH OUT PURPOSE. ROOF SLAB SHALL HAVE TWO-WAY SLOPE OF 1:80, ALONG LENGTH AT CENTER LINE.
  26. INTERNAL FACES OF SUMP IN CONTACT WITH WATER SHALL BE PLASTERED WITH CM 1:3 MIXED WITH AN APPROVED WATER PROOFING COMPOUND IN PROPORTION AS PER THE RECOMMENDATION OF THE MANUFACTURER (15 MM TH).

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