

■ = COLUMN 400MM X 400MM
 V-STEEL LOUVERD VENTILATORS OF SIZE
 600MM X 450MM

A.O.T = AXIS OF TRUSS

*TOTAL NO OF COMPLETE TRUSS-11 NOS.

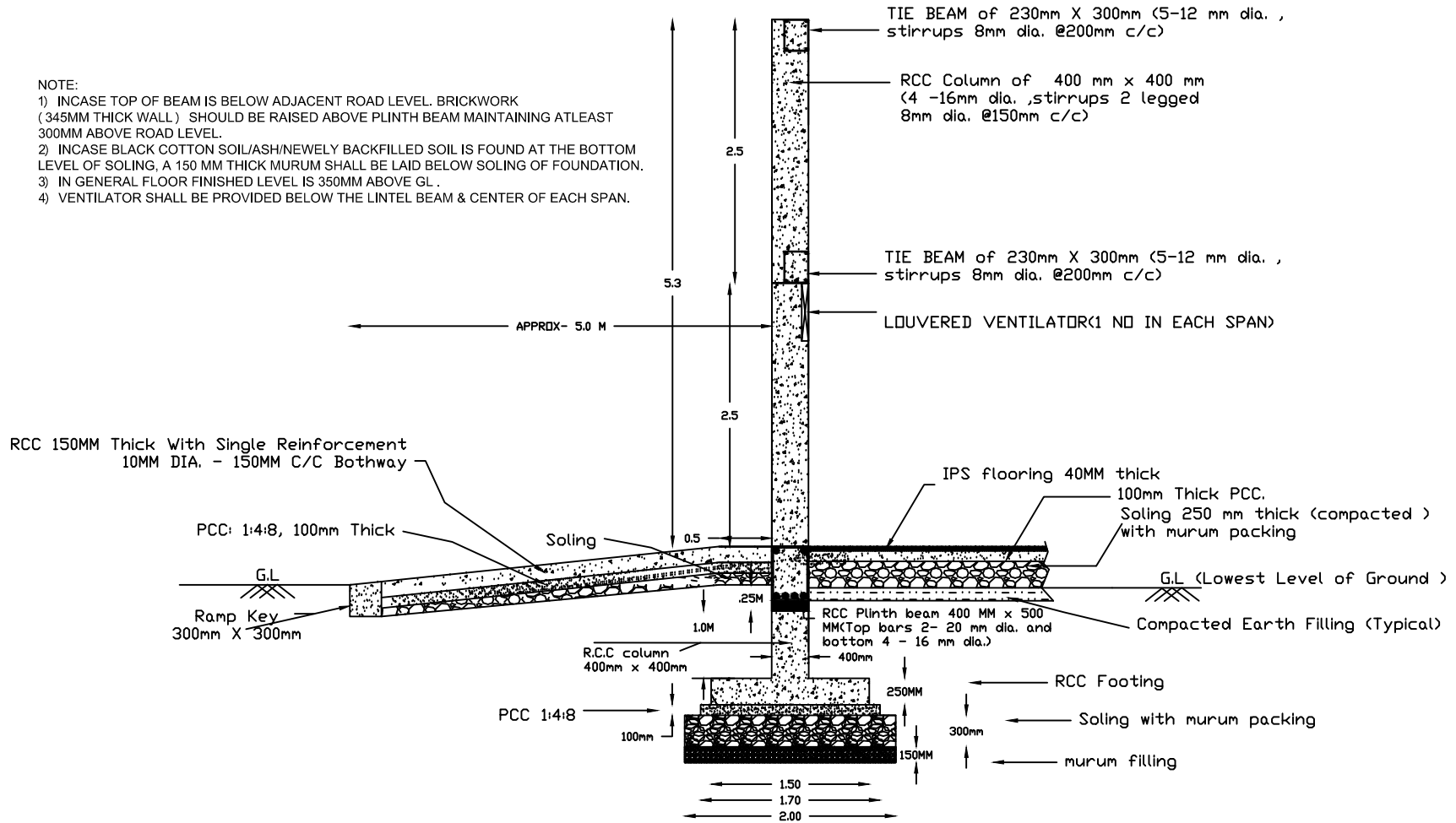
*HALLOW TRUSS WITHOUT VERTICAL & CROSS BRACING/STRUDS SHALL BE
 PROVIDED AT BOTH ENDS OF THE GABLE END.

DRG. NO.BHE/PW/CS-01

PLAN AT PLINTH LEVEL FOR CLOSED SHED (60M X 15M)

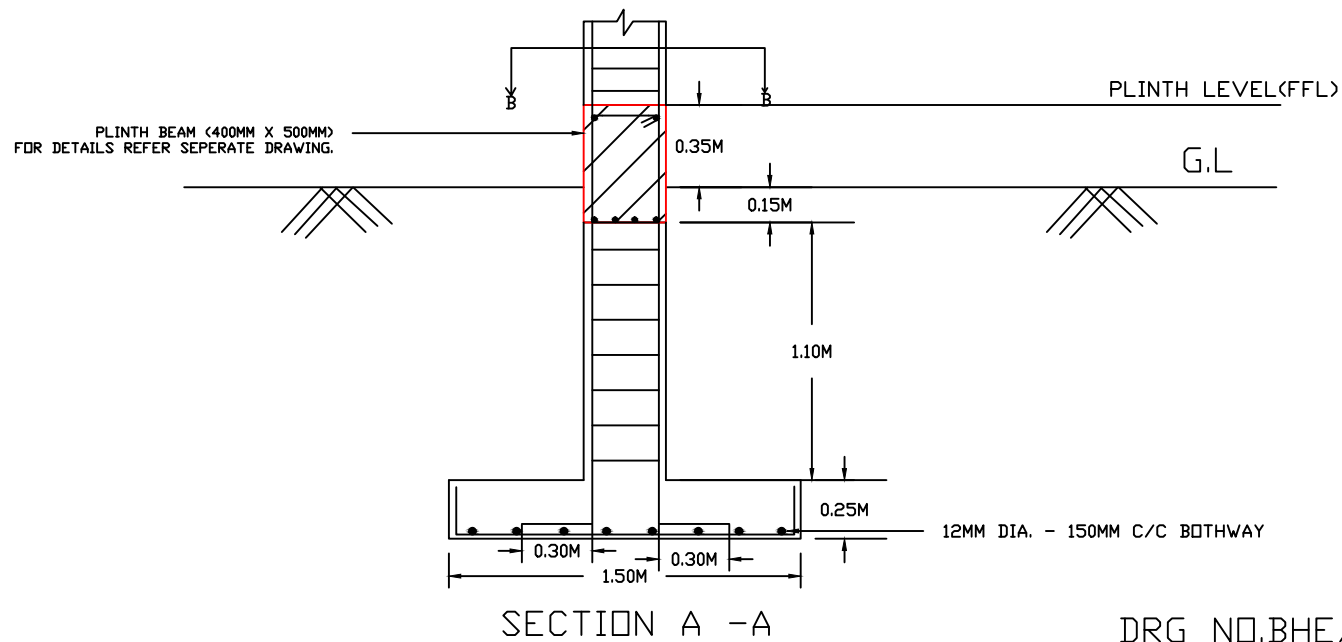
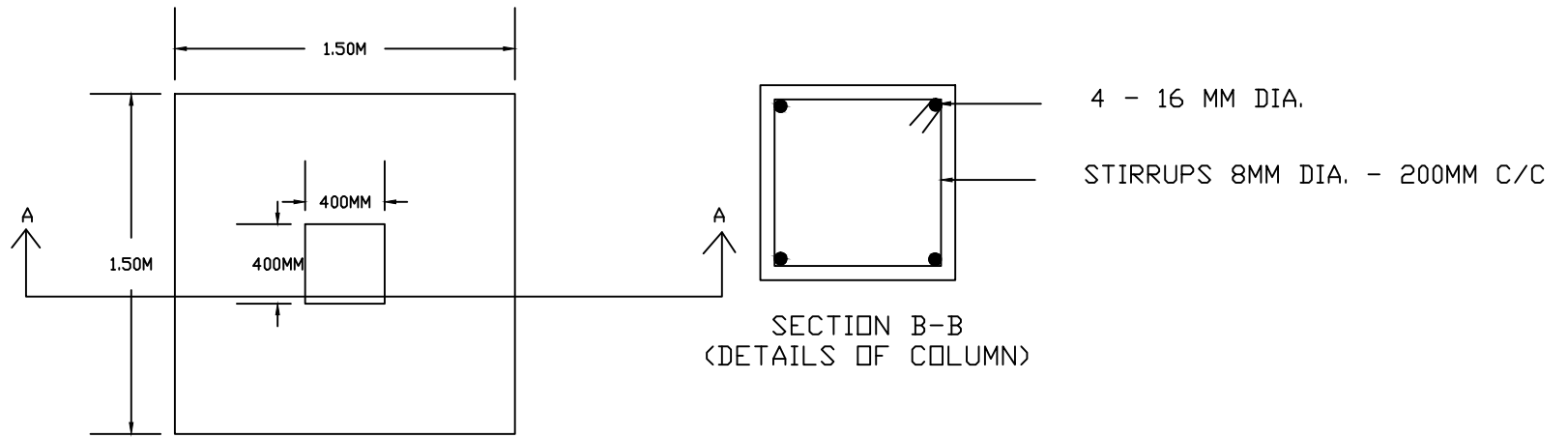
NOTE:

- 1) INCASE TOP OF BEAM IS BELOW ADJACENT ROAD LEVEL. BRICKWORK (345MM THICK WALL) SHOULD BE RAISED ABOVE PLINTH BEAM MAINTAINING ATLEAST 300MM ABOVE ROAD LEVEL.
- 2) INCASE BLACK COTTON SOIL/ASH/NEWELY BACKFILLED SOIL IS FOUND AT THE BOTTOM LEVEL OF SOLING, A 150 MM THICK MURUM SHALL BE LAID BELOW SOLING OF FOUNDATION.
- 3) IN GENERAL FLOOR FINISHED LEVEL IS 350MM ABOVE GL.
- 4) VENTILATOR SHALL BE PROVIDED BELOW THE LINTEL BEAM & CENTER OF EACH SPAN.



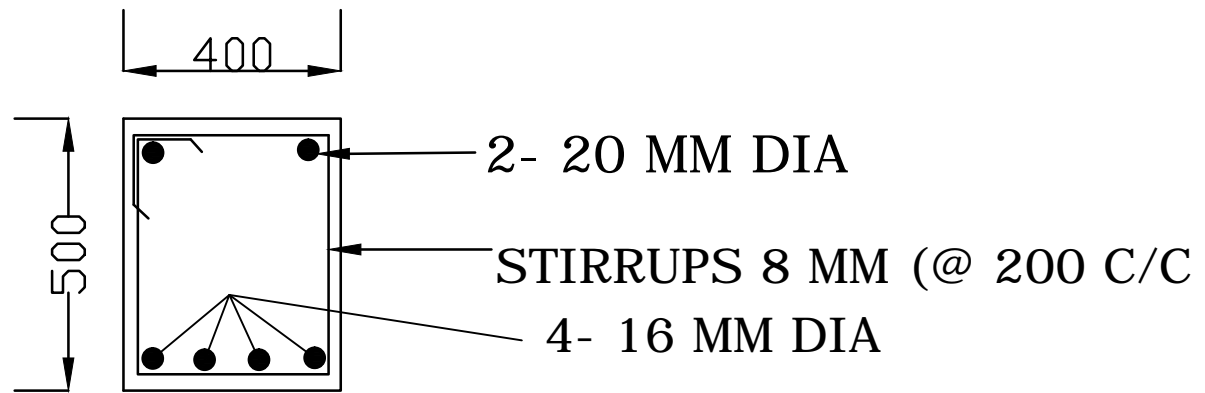
DRG. NO.:BHE/PW/CS-02

SECTIONAL DETAILS OF RCC FOOTING & COLUMN FOR CLOSED STORAGE SHED

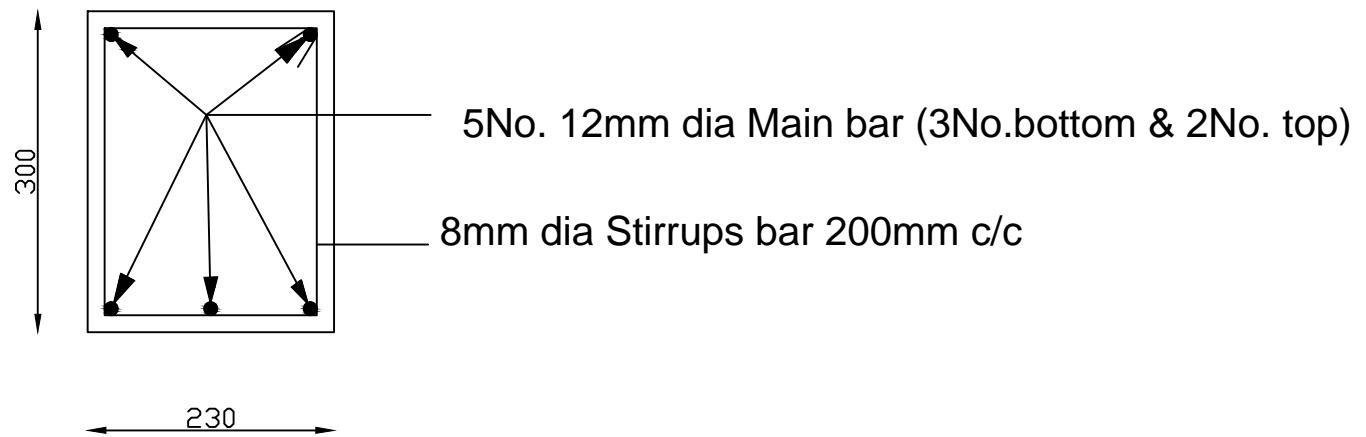


DRG NO. BHE/PW/CS-03

PLAN & RCC DETALIS OF FOOTINGS FOR CLOSED SHED

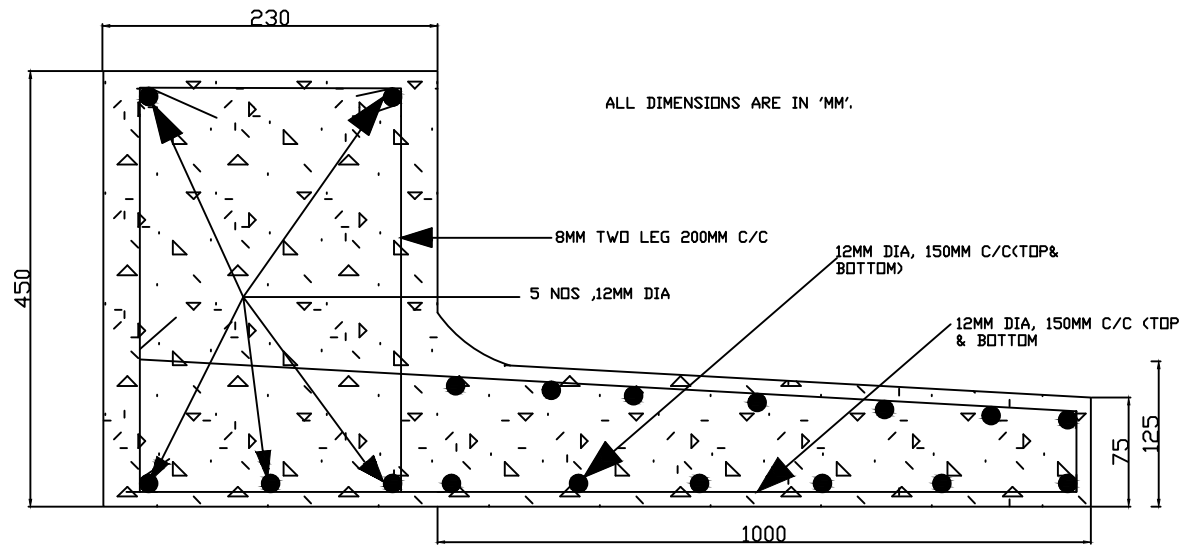


SECTION OF PLINTH BEAM
(400MMX500MM)



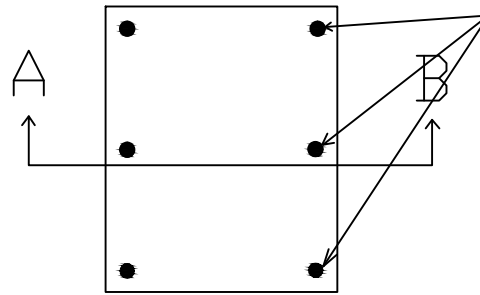
SECTION OF BEAM (230mm x 300mm)

DRG NO. BHE/PW/CS-05

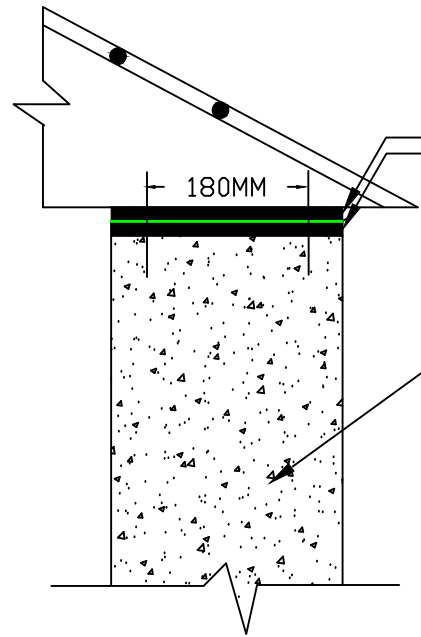


DRG NO,BHE/PW/CS-06

SECTION OF LINTEL & SUN SHED PROJECTION FOR CLOSED SHED ROLLING SHUTTER



MS FOUNDATION BOLTS 16MM Dia. - 4 NOS. AT CORNERS
AND 20MM Dia. - 2No. AT CENTRE.
TOTAL LENGTH OF BOLT - 450MM.



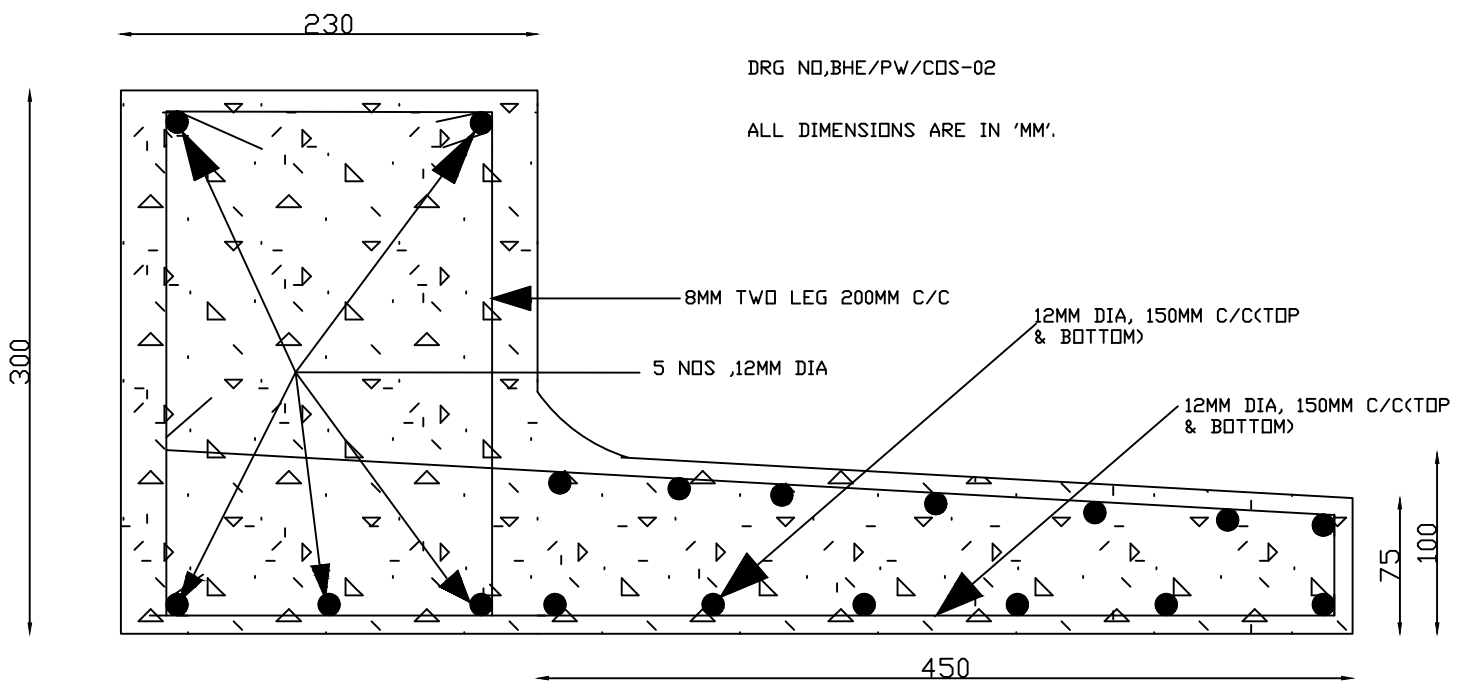
BASE PLATE 345MM X 345MM X 16MM THICK
BEARING PLATE 345MM X 345MM X 20MM THICK

RCC COLUMN 400MM X 400MM

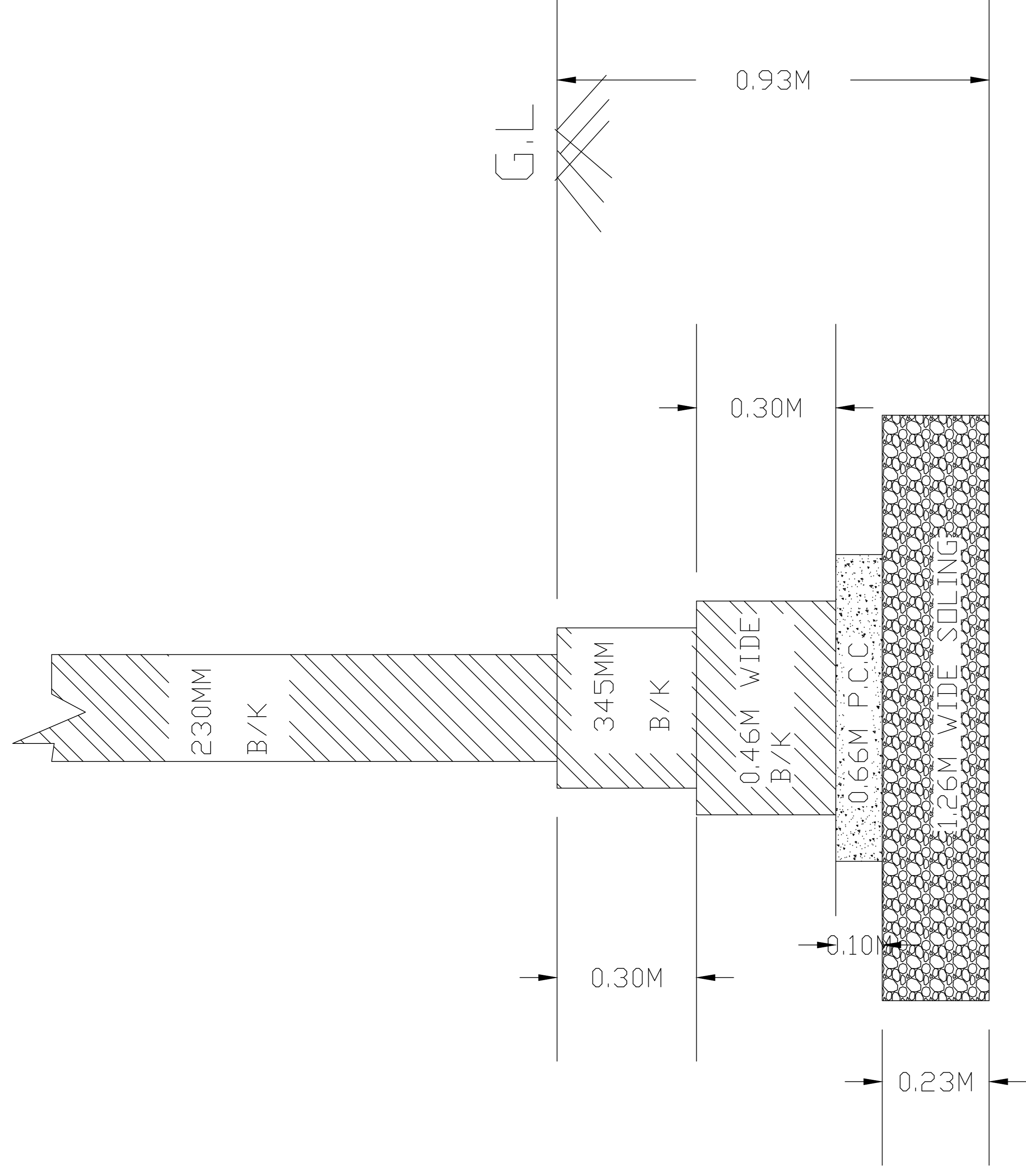
DRG.NO.BHE/PW/CS-07

SEC A - B

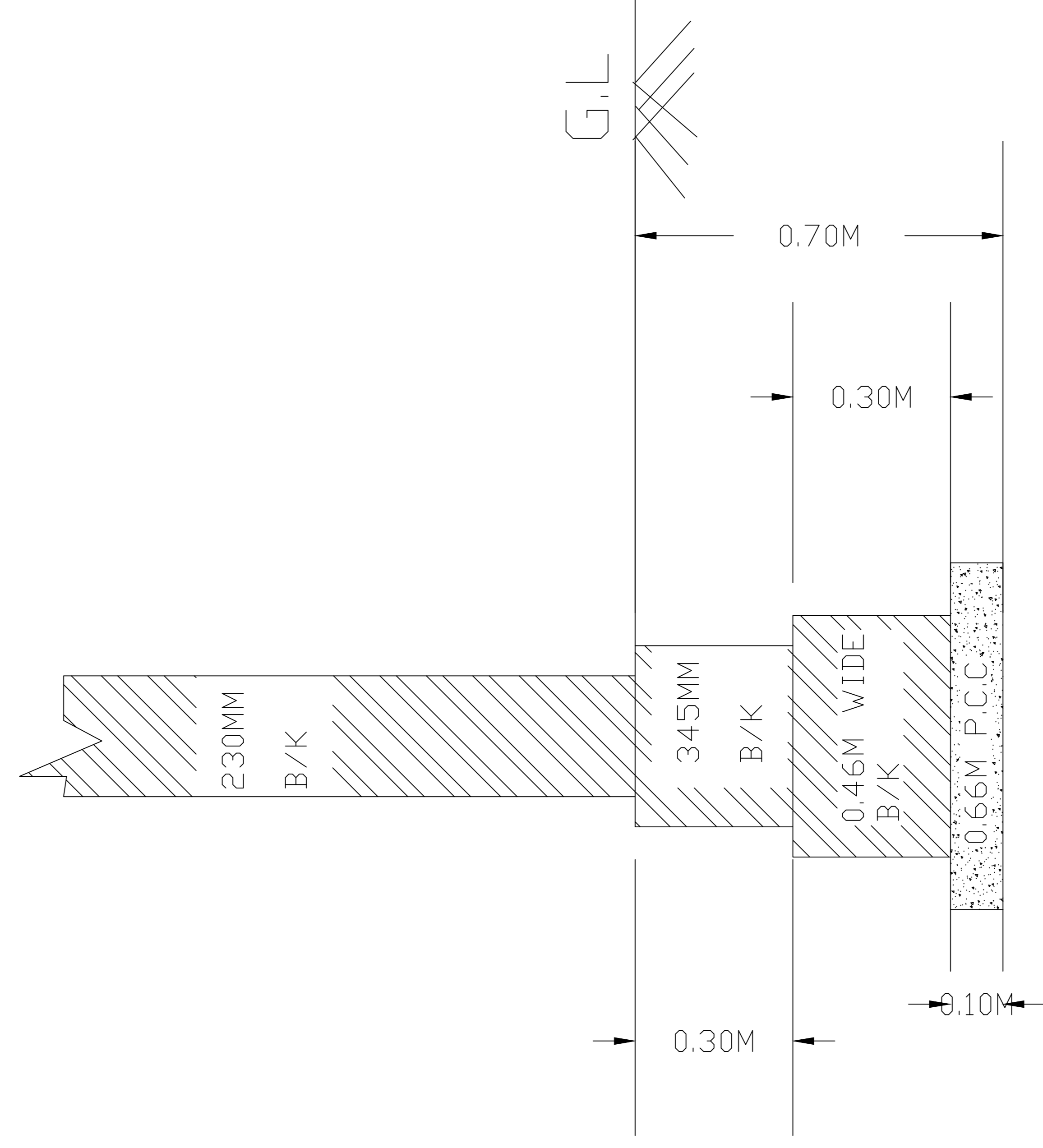
DETAILS OF BASE PLATE AT TRUSS LEVEL OF CLOSED STORAGE SHED



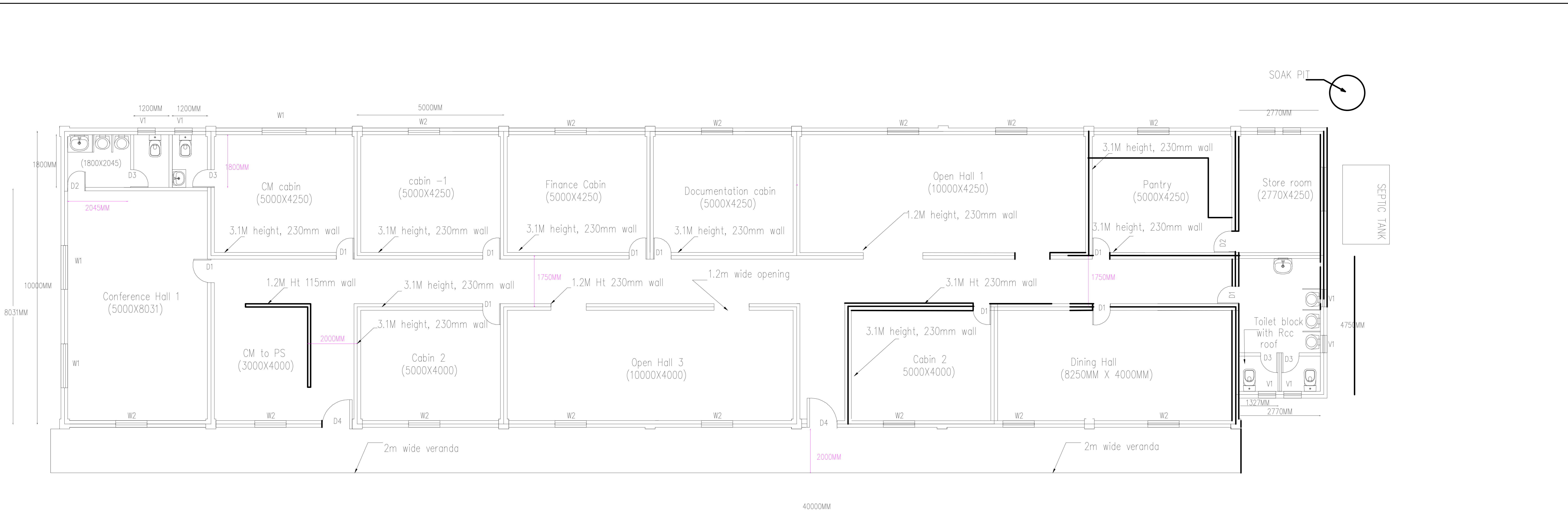
SECTION OF LINTEL & SUN SHED PROJECTION FOR CLOSED SHED



Internal wall Foundation details



Partition wall Foundation details



Layout of office building

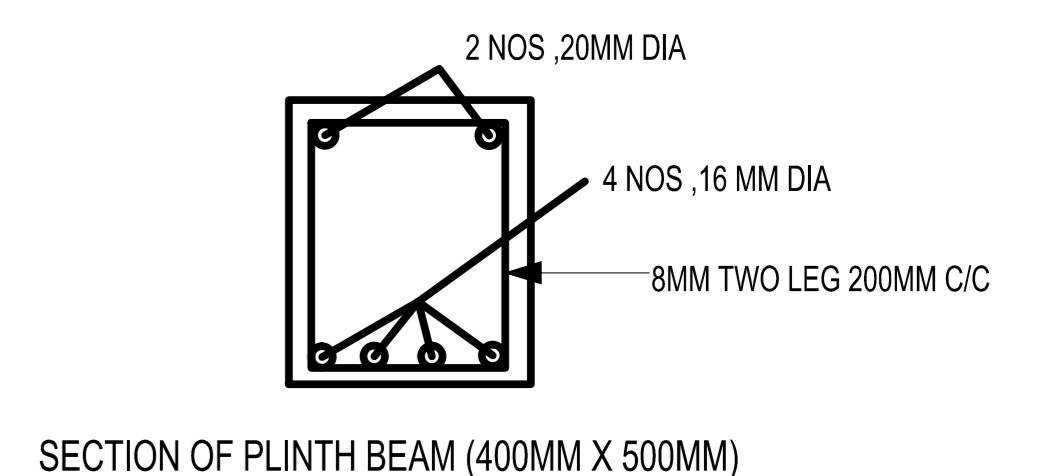
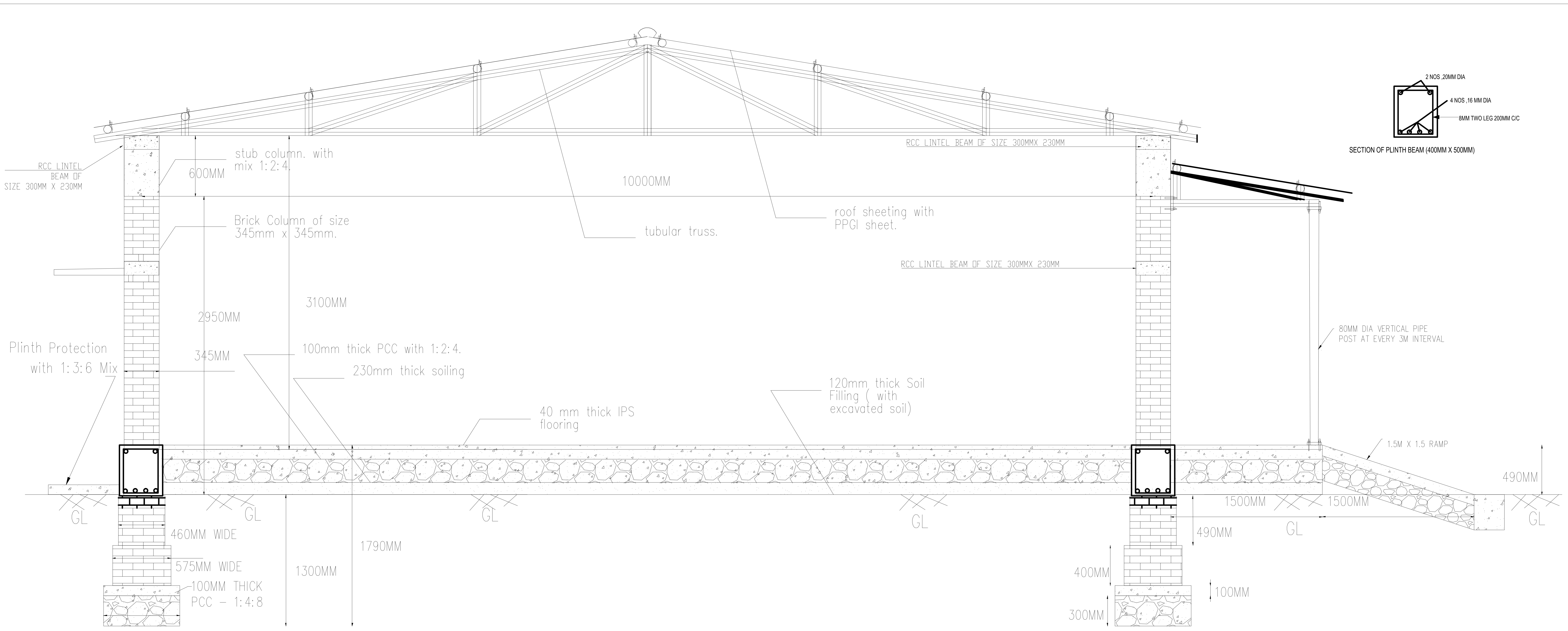
BHE/PW/OFFICE-01

Finishing Details											
Sl.No	Description	Ceramic Tile Flooring	IPS	OBD	White/Colour Wash	12mm plastering	18mm plastering	False Ceiling	Glazed Tile	Dodo	Skirting
1	CM Cabin	✓		✓		✓		✓			
2	Conference Hall 1,2	✓		✓		✓		✓			
3	Finance Cabin		✓	✓		✓		✓			
4	Documentation Cabin		✓	✓		✓		✓			
5	Cabin 1		✓	✓		✓		✓			
6	Cabin 2		✓	✓		✓		✓			
7	Veranda		✓	✓		✓		✓			
8	Toilet Block			✓		✓			✓	✓	✓
9	Pantry Block/Store room		✓	✓		✓			✓	✓	✓
10	Toilet in CM Cabin					✓			✓	✓	✓
11	Toilet block / Rest Room in Conference Hall					✓			✓	✓	✓
12	External Wall				✓		✓				

Door (D) , Window(W) and Ventilator(V) details.			
Sl.No	Notation	Type	Size
1	D1	Wooden Door	900mm x 2100mm
2	D2	Wooden Door	750mm x 2100mm
3	D3	PVC Door	600mm x 2100mm
4	D4	Steel Door	1200mm x 2100mm
5	W1	Steel Glazed Window	1350mm x 1200mm
6	W2	Aluminium Window	900mm x 1200mm
7	V1	Steel Louvered ventilator	600mm x 450mm

NOTE:
OFFSET BETWEEN THE BRICK COLUMN IN LONGER DIRECTION I.E 40 M SIDE IS 5M C/C. AND IN SHORTER SIDE IS 10M C/C

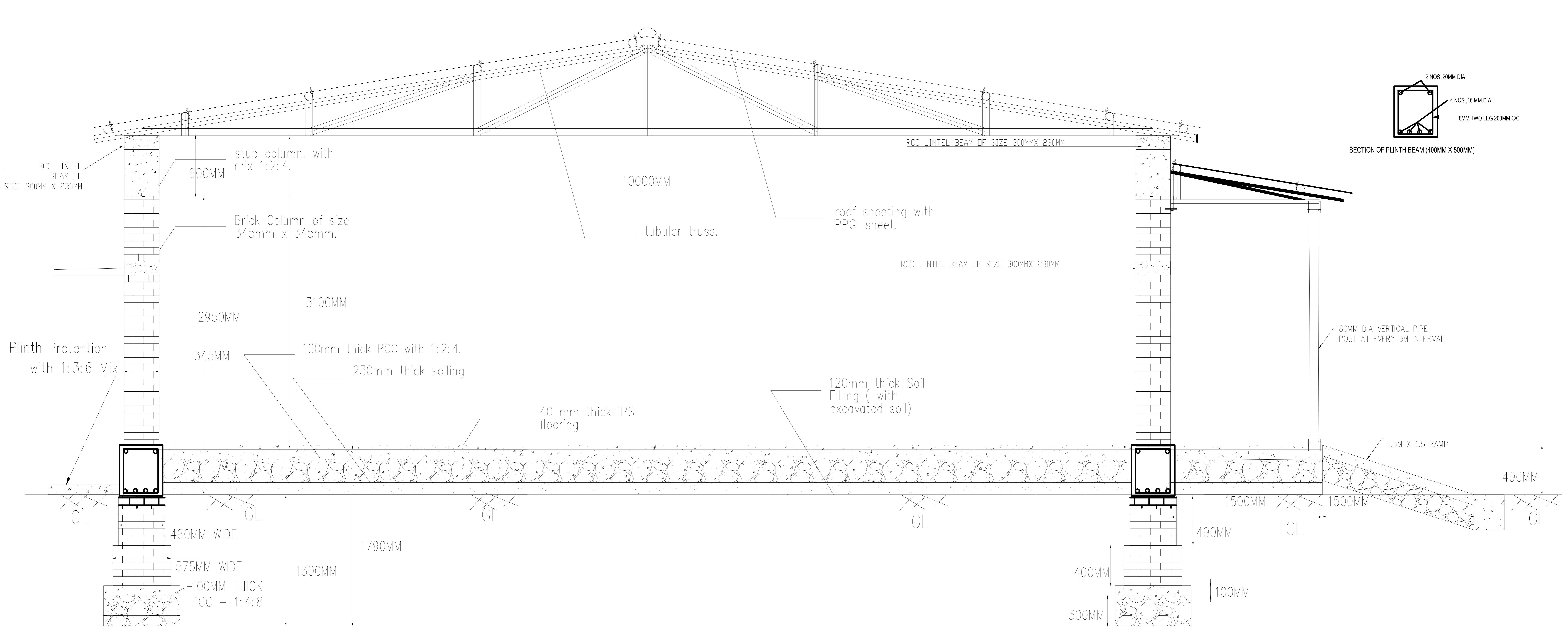
PROJECT	2X700 MWe NPCIL KAKRAPARA NUCLEAR PROJECT
TITLE	LAYOUT OF OFFICE BUILDING (40MX10M)
DRG NO	BHE/PW/OFFICE-01/04



- NOTE :
1. FOOTING SHALL BE STRIP FOOTING ALL ALONG THE ALL EXTERNAL AND INTERNAL WALLS.
 2. DETAILS FOR INTERNAL WALL FOOTING SHALL BE AVAILABLE IN DRG NO BHE/PW/OFFICE-01/03.
 3. SIZE OF THE BRICK COLUMN SHALL BE 345MMX345MM.
 4. FINISHING DETAILS AND DOOR , WINDOW AND VENTILATORS DETAILS SHALL BE REFERRED FROM DRG NO BHE/PW/OFFICE 01/01.
 5. SEPTIC TANK AND SOCK PIT FOR TOILET AND PANTRY BLOCK SHALL BE CONSTRUCTED NEAR TO THE PANTRY AND TOILET BLOCK. DETAILS FOR THE SAME IS AVAILABLE IN THE RESPECTIVE DRAWINGS.

- NOTE FOR TUBULAR TRUSS WORK:
1. TENTATIVE TRUSS DETAILS FOR DESIGN CONSIDERATION.
 2. CLASS B - MEDIUM QUALITY PIPE SHALL ONLY BE USED.
 3. PURLING-65MM DIA.
 4. MAIN RAFTER-80MM DIA.
 5. VERTICAL POST - AT CENTER-80MM DIA.
 6. OTHER VERTICAL POST AND BRACING- 65-45MM DIA.
 7. VERTICAL POST FOR VARANDHA TRUSS - 65-80MM DIA.
 8. PROVISION SHALL BE MADE AVAILABLE FOR HOLDING OF FALSE CEILING AND OTHER ELECTRICAL FITTING ETC.

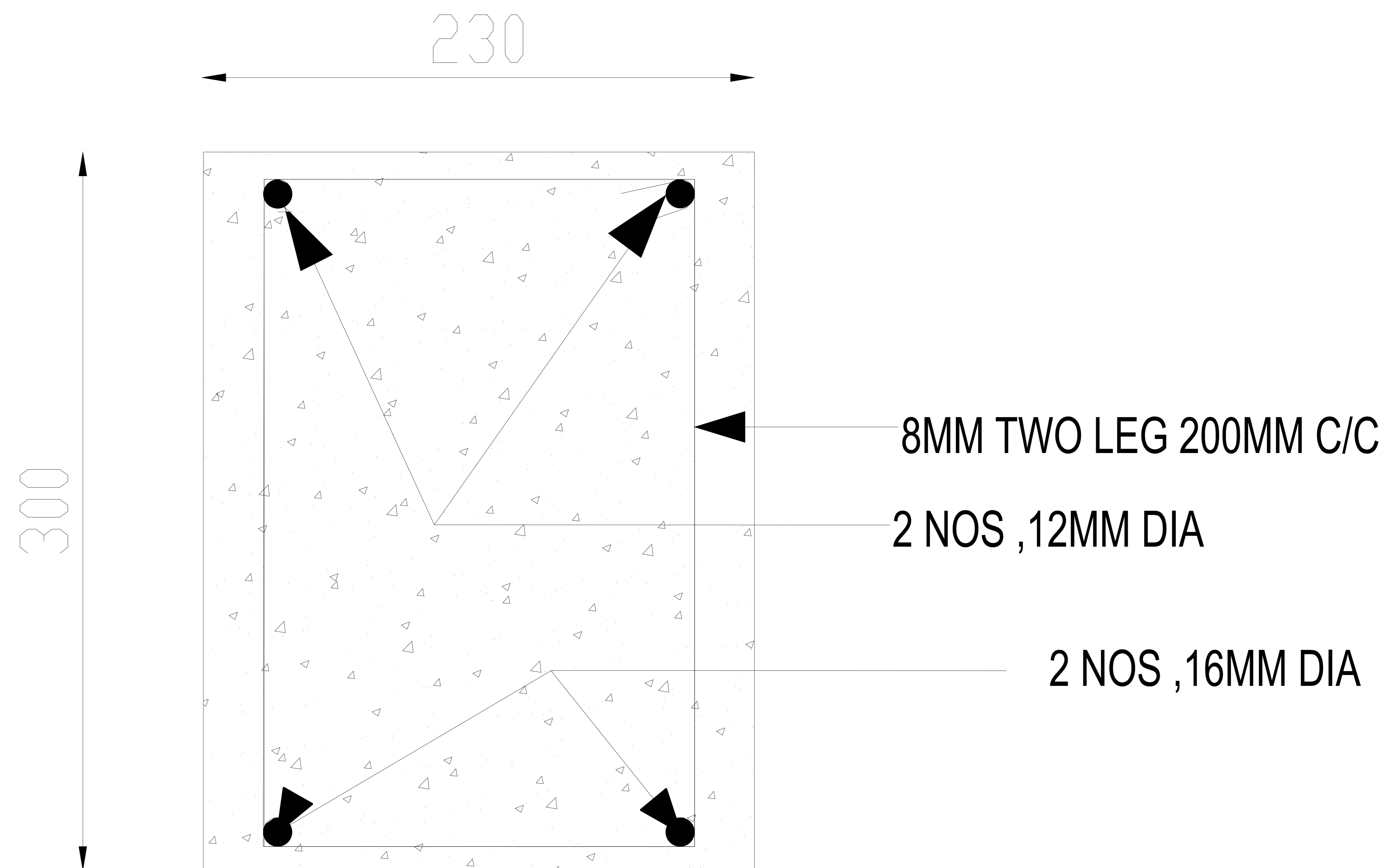
PROJECT	2X700 MWe NPCIL KAKRAPARA NUCLEAR PROJECT
TITLE	CROSS SECTIONAL VIEW OF SITE OFFICE
DRG NO	BHE/PW/OFFICE-02/04



- NOTE :
1. FOOTING SHALL BE STRIP FOOTING ALL ALONG THE ALL EXTERNAL AND INTERNAL WALLS.
 2. DETAILS FOR INTERNAL WALL FOOTING SHALL BE AVAILABLE IN DRG NO BHE/PW/OFFICE-01/03.
 3. SIZE OF THE BRICK COLUMN SHALL BE 345MMX345MM.
 4. FINISHING DETAILS AND DOOR , WINDOW AND VENTILATORS DETAILS SHALL BE REFERRED FROM DRG NO BHE/PW/OFFICE 01/01.
 5. SEPTIC TANK AND SOCK PIT FOR TOILET AND PANTRY BLOCK SHALL BE CONSTRUCTED NEAR TO THE PANTRY AND TOILET BLOCK. DETAILS FOR THE SAME IS AVAILABLE IN THE RESPECTIVE DRAWINGS.

- NOTE FOR TUBULAR TRUSS WORK:
1. TENTATIVE TRUSS DETAILS FOR DESIGN CONSIDERATION.
 2. CLASS B - MEDIUM QUALITY PIPE SHALL ONLY BE USED.
 3. PURLING-65MM DIA.
 4. MAIN RAFTER-80MM DIA.
 5. VERTICAL POST - AT CENTER-80MM DIA.
 6. OTHER VERTICAL POST AND BRACING- 65-45MM DIA.
 7. VERTICAL POST FOR VARANDHA TRUSS - 65-80MM DIA.
 8. PROVISION SHALL BE MADE AVAILABLE FOR HOLDING OF FALSE CEILING AND OTHER ELECTRICAL FITTING ETC.

PROJECT	2X700 MWe NPCIL KAKRAPARA NUCLEAR PROJECT
TITLE	CROSS SECTIONAL VIEW OF SITE OFFICE
DRG NO	BHE/PW/OFFICE-02/04



**SECTION OF TIE BEAM OVER THE TOILET BLOCK ROOF
(230MM X 300MM)**

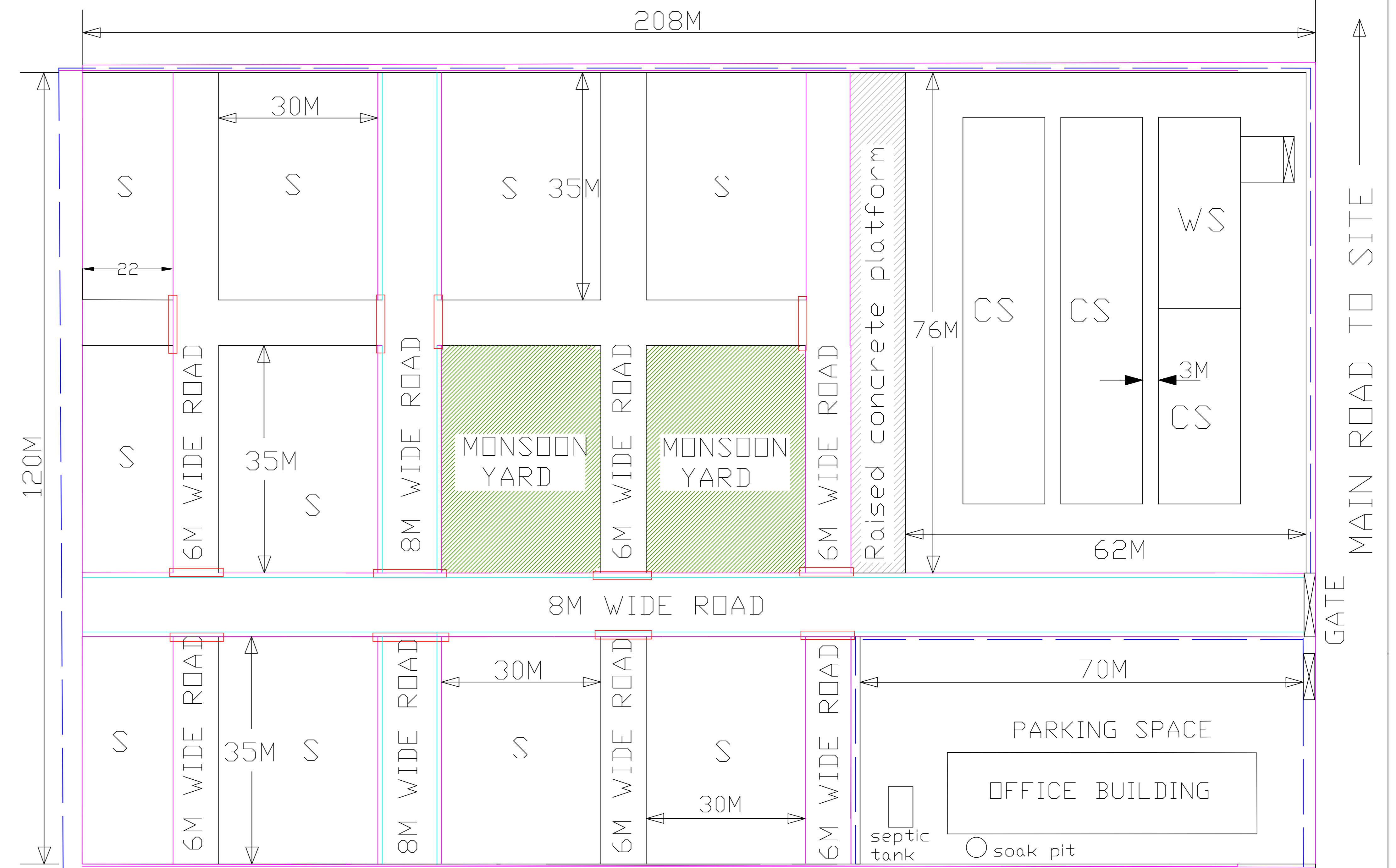
ALL DIMENSIONS ARE IN 'MM'.

DRWG NO. BHE/PW/OFFICE-04/04

NOTE :---

- 1) WIDTH OF THE STORAGE YARD IS 30M
- 2) TWO 8M ROADS & REMAINING 6M BRANCH ROADS
- 3) DRAINS SHALL BE PROVIDED ALONG THE SIDES OF BOTH 8M ROADS AND ALSO ALONG THE SIDES OF ONE 6M ROAD.
- 4) ROAD CROSSING CULVERT (RCC HUME PIPE) OVER THE DRAIN
- 5) MONSOON YARD (2100 SQM AREA TO BE DEVELOPED BY 200MM THICK COMPACTED HARD MURUM)
- 6) RAISED CONCRETE PLATFORM (8MX75M) AS SHOWN IN THE PLAN.
- 6) CONVENTIONAL OFFICE TO BE LOCATED SUITABLY INSIDE THE OPEN STORAGE YARD WITH PROPER DEVELOPMENT AS PER BOQ ITEMS.
- 7) PROPOSED CLOSED SHEDS SHALL BE LOCATED AS SHOWN INSIDE THE OPEN STORAGE YARD.

S - STORAGE YARD (30MX35M)
 CS - CLOSED SHED - 15MX60M
 WS - WORKSHOP (15MX30M) INSIDE CLOSED SHED



LAYOUT OF OPEN STORAGE YARD (25,000 SQM.)

THIS DRAWING IS PURELY INDICATIVE AND FOR GENERAL IDEA PURPOSE OF BIDDERS ONLY. HOWEVER REALISTIC LAYOUT INLINE WITH BOQ SHALL BE MADE BY SUCCESSFUL BIDDER AFTER LAND ALLOTMENT FROM CUSTOMER.

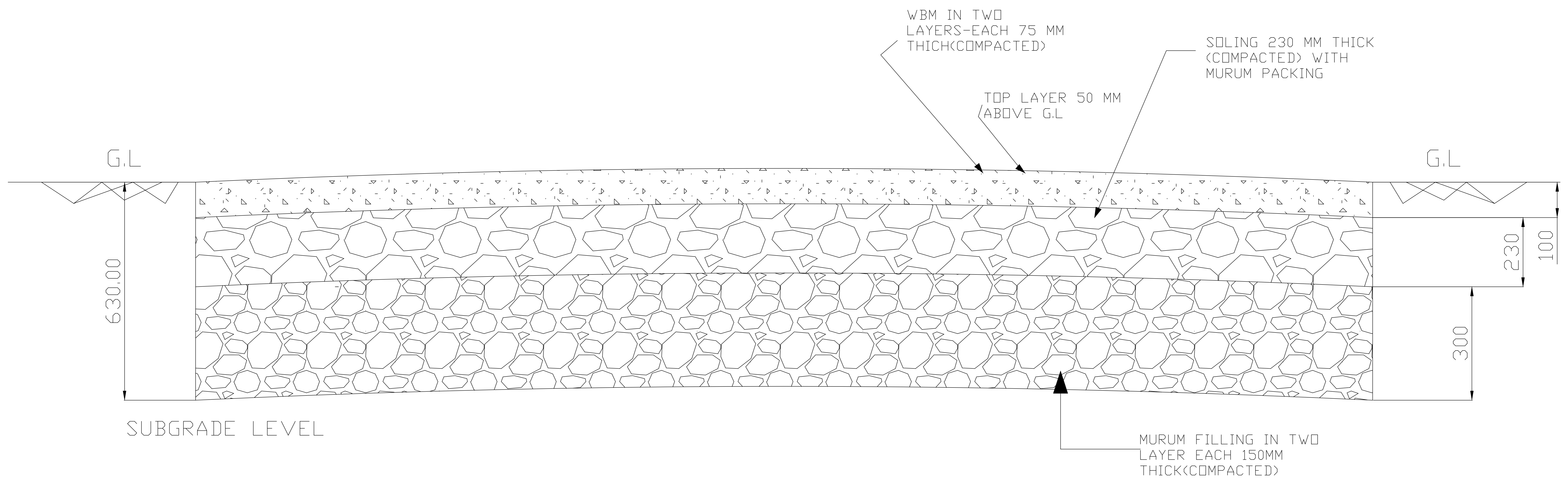
- THIS COLOUR SHOWS RAISED CONCRETE PLATFORM (8MX75M)
- THIS COLOUR SHOWS DRAIN
- THIS COLOUR SHOWS 8M WIDE ROAD
- THIS COLOUR SHOWS HARD SURFACING BY MURUM FOR MONSOON YARD (30MX35M)
- THIS COLOUR SHOWS CULVERT
- THIS COLOUR SHOWS FENCING

PROJECT:- 2X700 MWe NPCIL KAKRAPARA NUCLEAR PROJECT

TITLE :- LAYOUT FOR OPEN STORAGE YARD-25,000 SQM (TENTATIVE DRAWING)

DRG NO. :- BHE/PW/OY-01

OWNER :- **BHEL-PSWR NAGPUR**



SECTIONAL DETAILS OF 8/6 M WIDTH WBM ROAD

ALL DIMENSIONS ARE IN MM

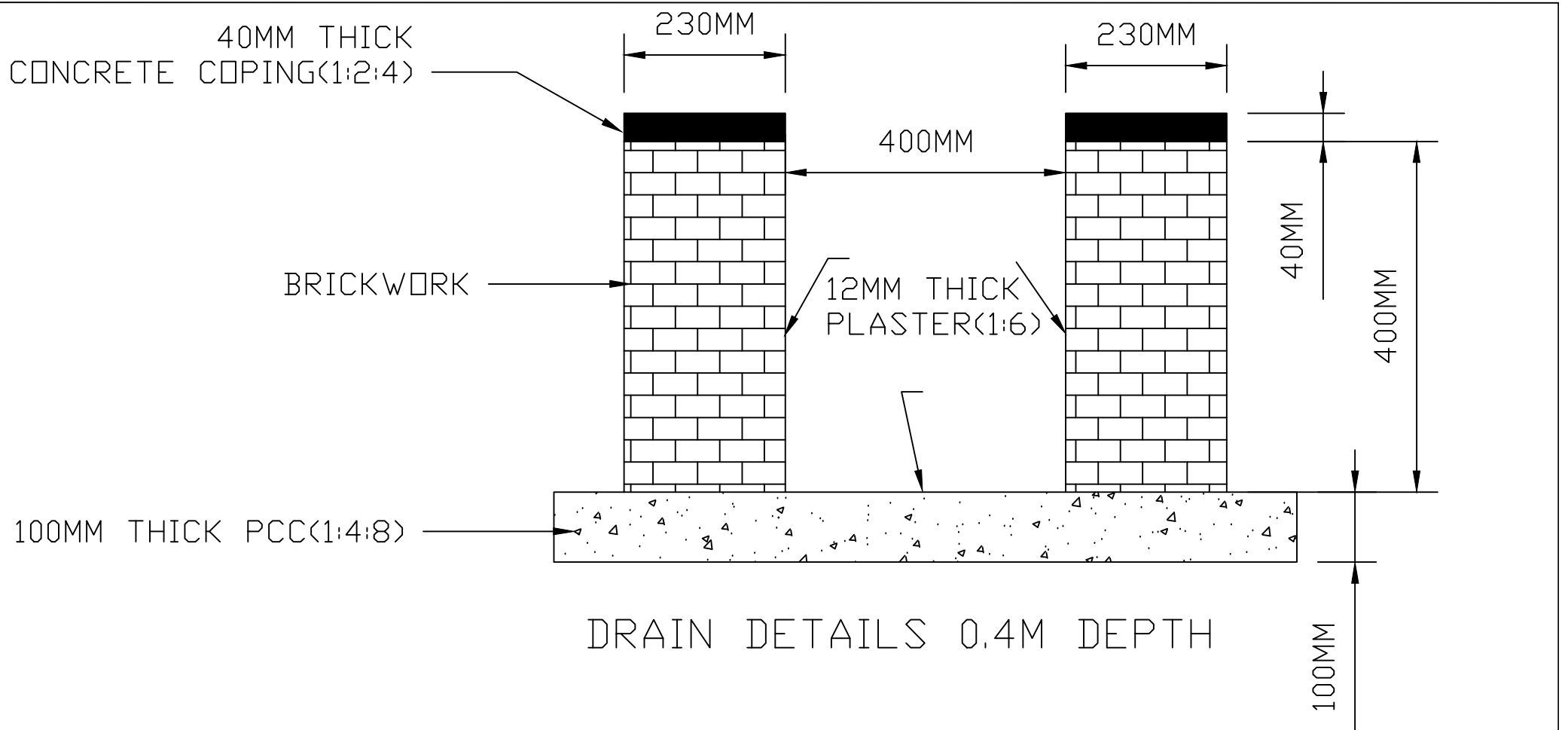
NOTE:

- 1)CAMBER SHALL BE MAINTAINED FROM THE SUBGRADE LEVEL
- 2)IN CASE SOFT/HARD ROCK MAT WITH SUBGRADE IS FOUND THAN 150MM THICK MURUM SHALL BE LAID INPLACE OF 300 MM THICK MURUM FILLING.

**PROJECT: 2 x 700 MWe NPCIL KAKRAPARA
NUCLEAR PROJECT**

TITLE: SECTION OF 8/6 M WIDTH WBM ROAD

DRG. NO. : BHE/PW/OY- 02

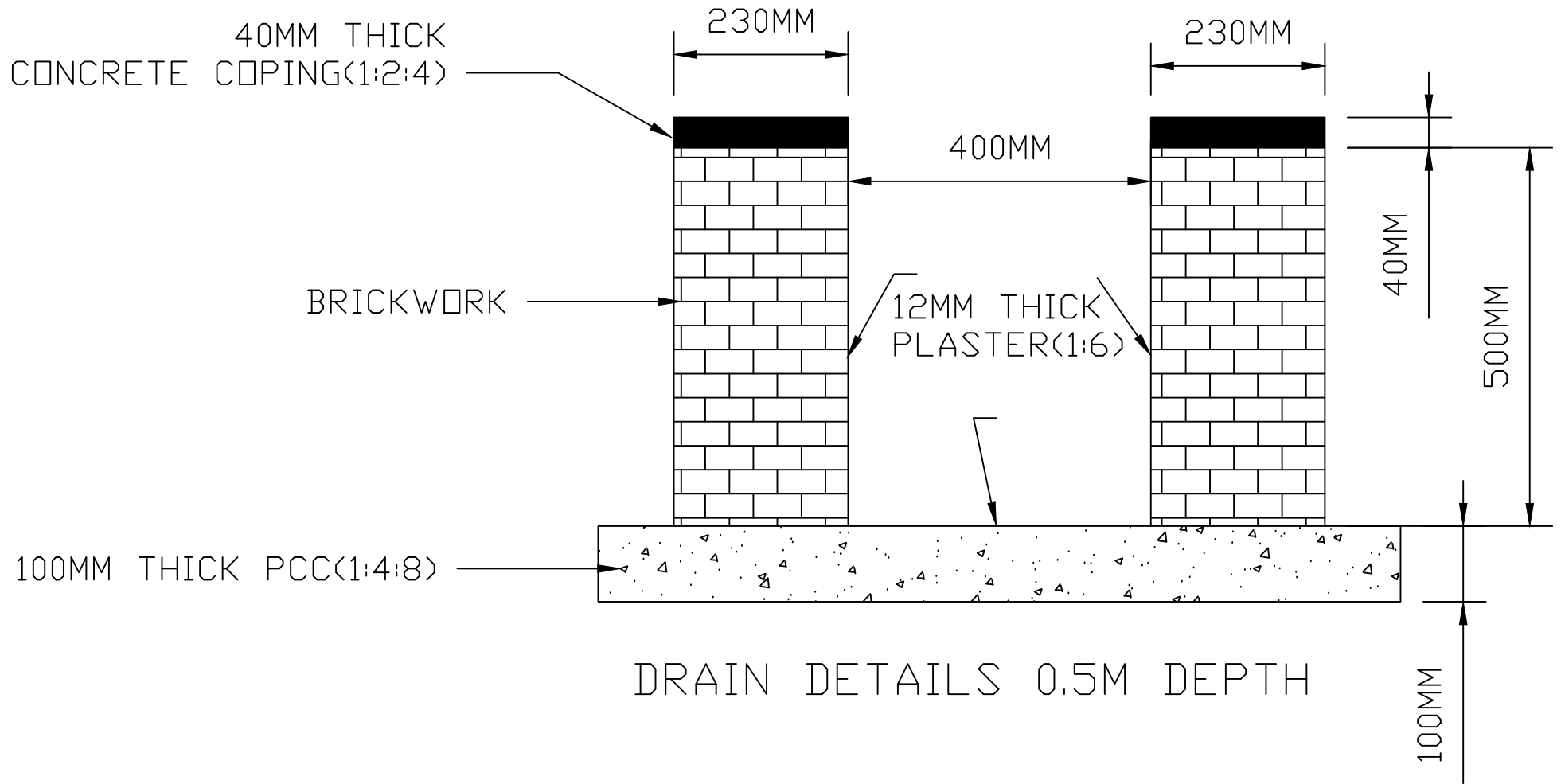


DETAILS OF .4M DEPTH DRAIN

PROJECT: 2 X 700 MWe NPCIL KAKRAPARA NUCLEAR PROJECT

TITLE: DETAILS OF 0.4M DEPTH DRAIN

DRG. NO. BHE/PW/OY- 03



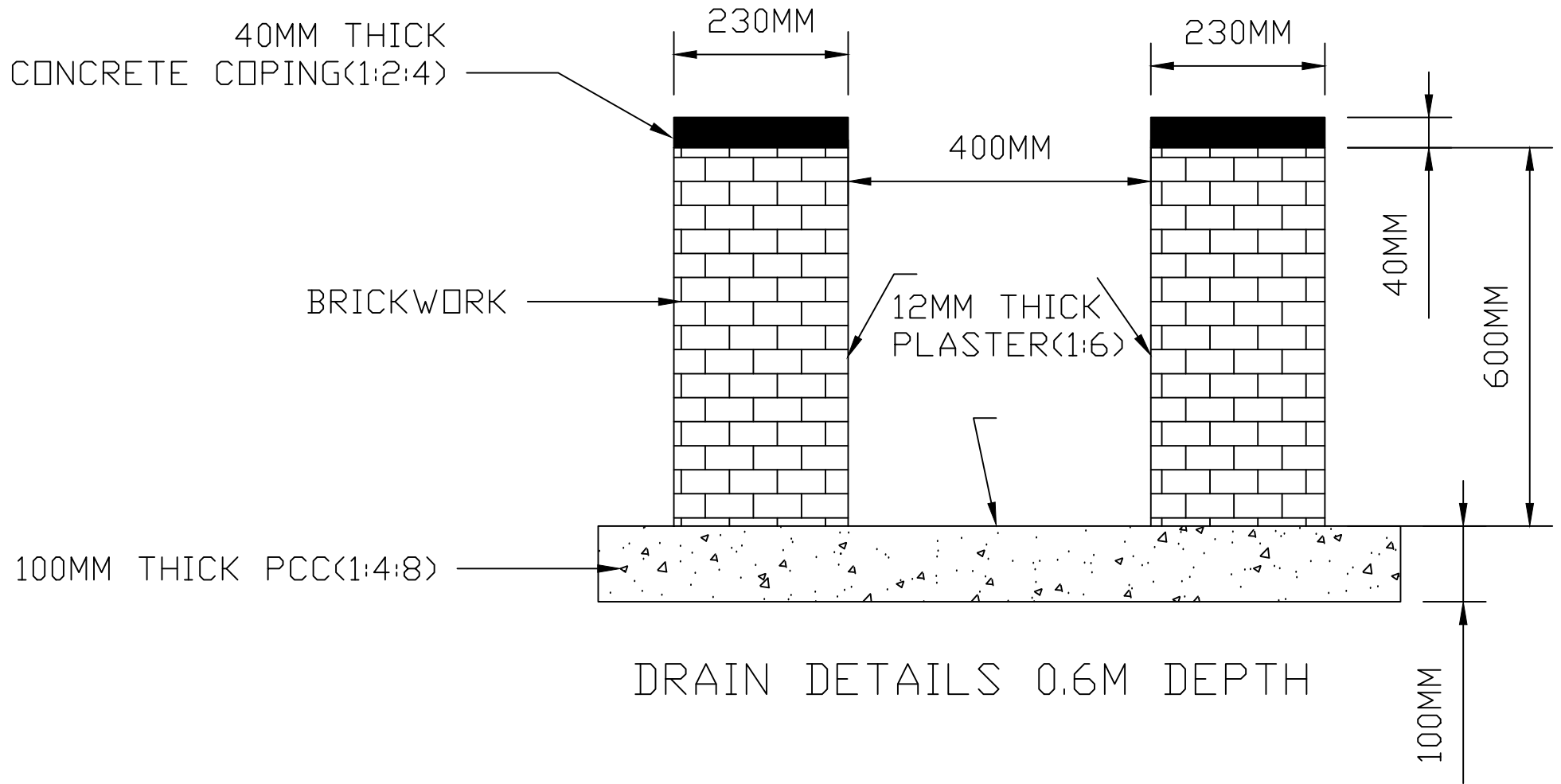
DRAIN DETAILS 0.5M DEPTH

DETAILS OF 0.5M DEPTH DRAIN

PROJECT: 2 X 700 MWe NPCIL KAKRAPARA NUCLEAR PROJECT

TITLE: DETAILS OF 0.5M DEPTH DRAIN

DRG. NO. BHE/PW/OY- 04



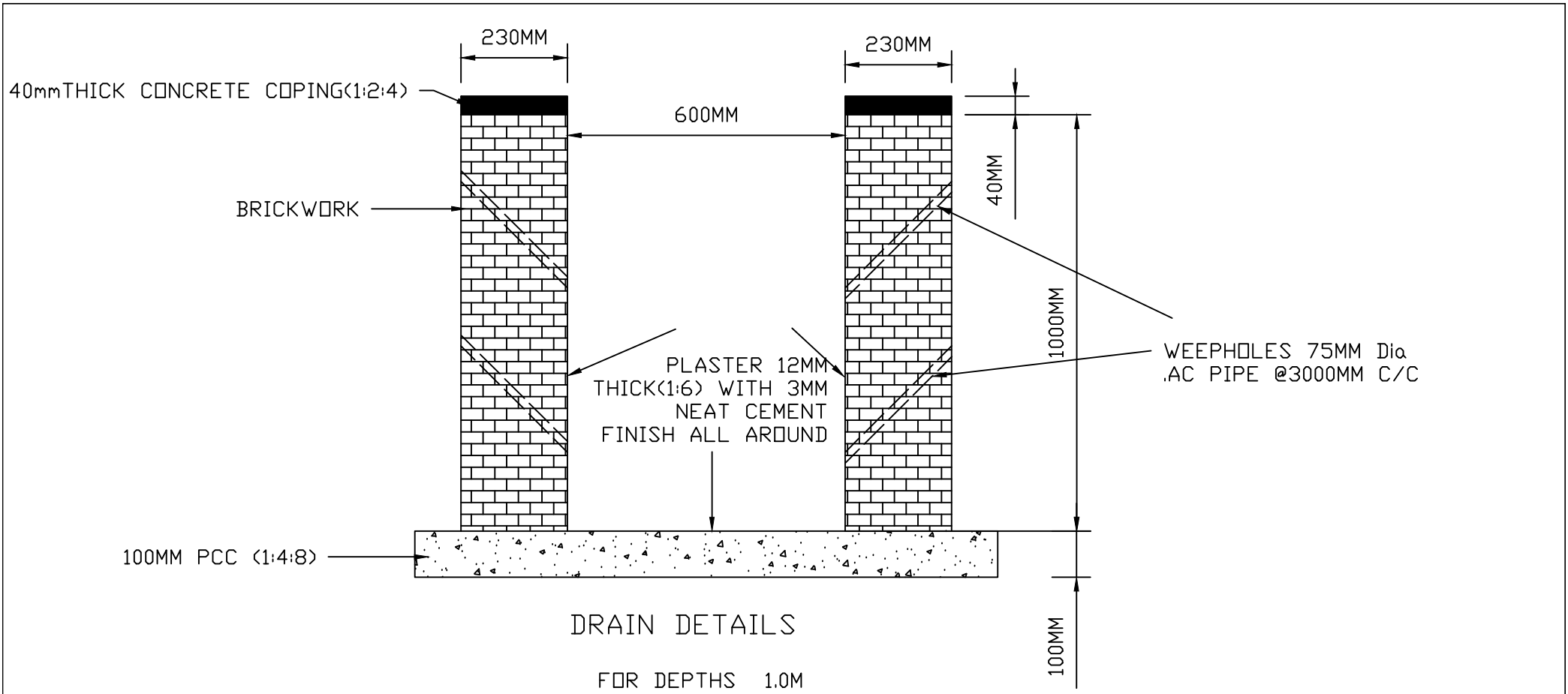
DRAIN DETAILS 0.6M DEPTH

PROJECT: 2 X 700 MWe NPCIL KAKRAPARA NUCLEAR PROJECT

TITLE: DETAILS OF 0.6M DEPTH DRAIN

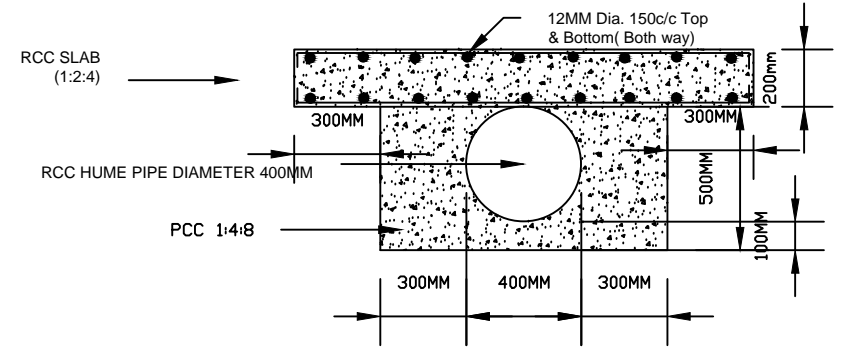
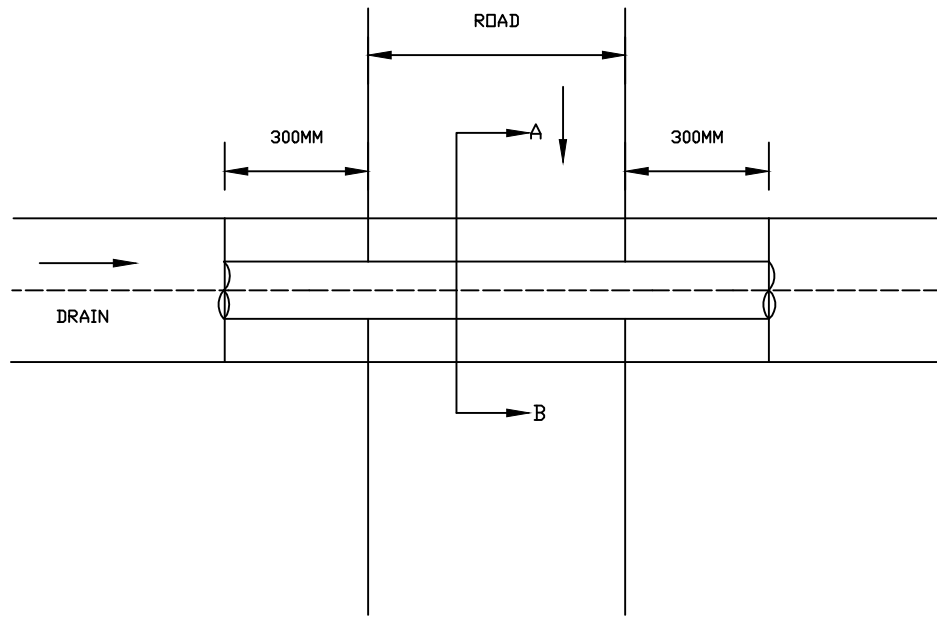
DRG. NO. BHE/PW/OY- 05

DETAILS OF 0.6M DEPTH DRAIN




**DETAILS OF 1.0M DEPTH WITH
600MM WIDE DRAIN**

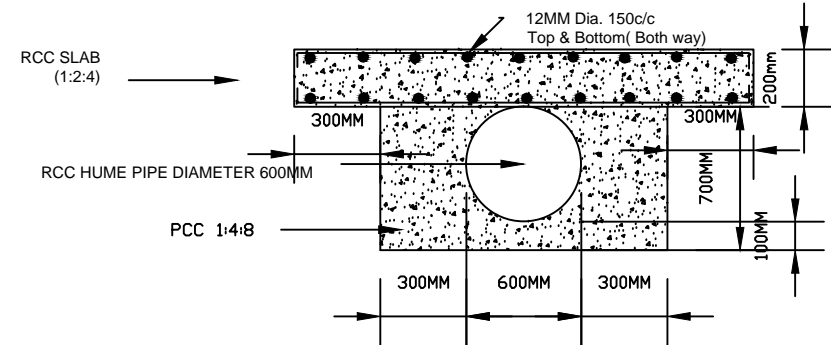
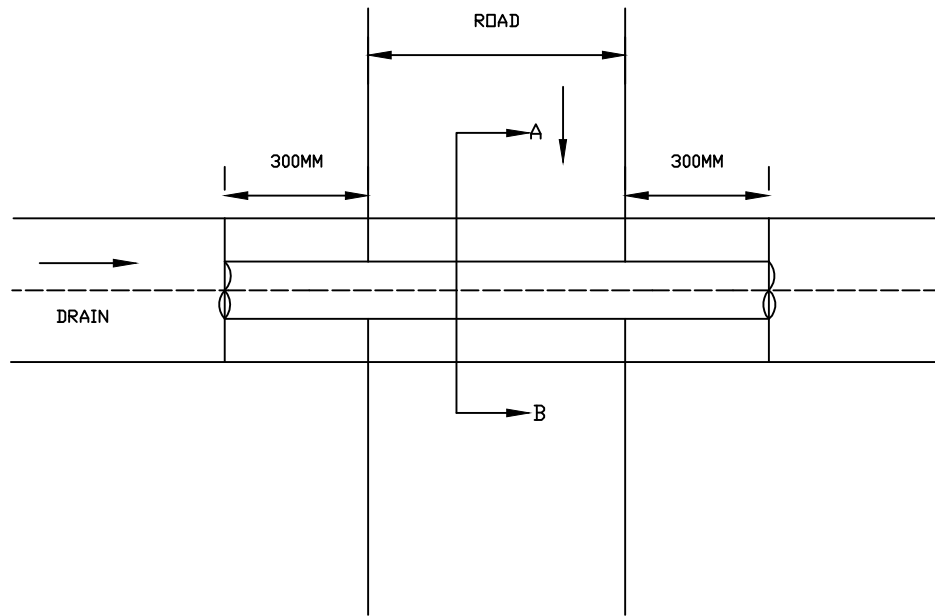
PROJECT: 2 X 700 MWe NPCIL KAKRAPARA NUCLEAR PROJECT
TITLE: 1.0 M DEPTH DRAIN
DRG. NO. : BHE/PW/OY-08



CULVERT DETAILS ON SECTION A - B

CULVERT DETAILS FOR 400MM DIA, RCC HUME PIPE

PROJECT:-	2 X 700 MWe NPCIL KAKRAPARA
TITLE :-	CULVERT DETAILS FOR 400 MM DIA, RCC HUME PIPE
DRG NO. :-	BHE/PW/OY-09
OWNER :-	 BHEL-PSWR NAGPUR



CULVERT DETAILS ON SECTION 'A - B'

CULVERT DETAILS FOR 600 MM DIA, RCC HUME PIPE

PROJECT:- 2X700 MWe NPCIL KAKRAPARA

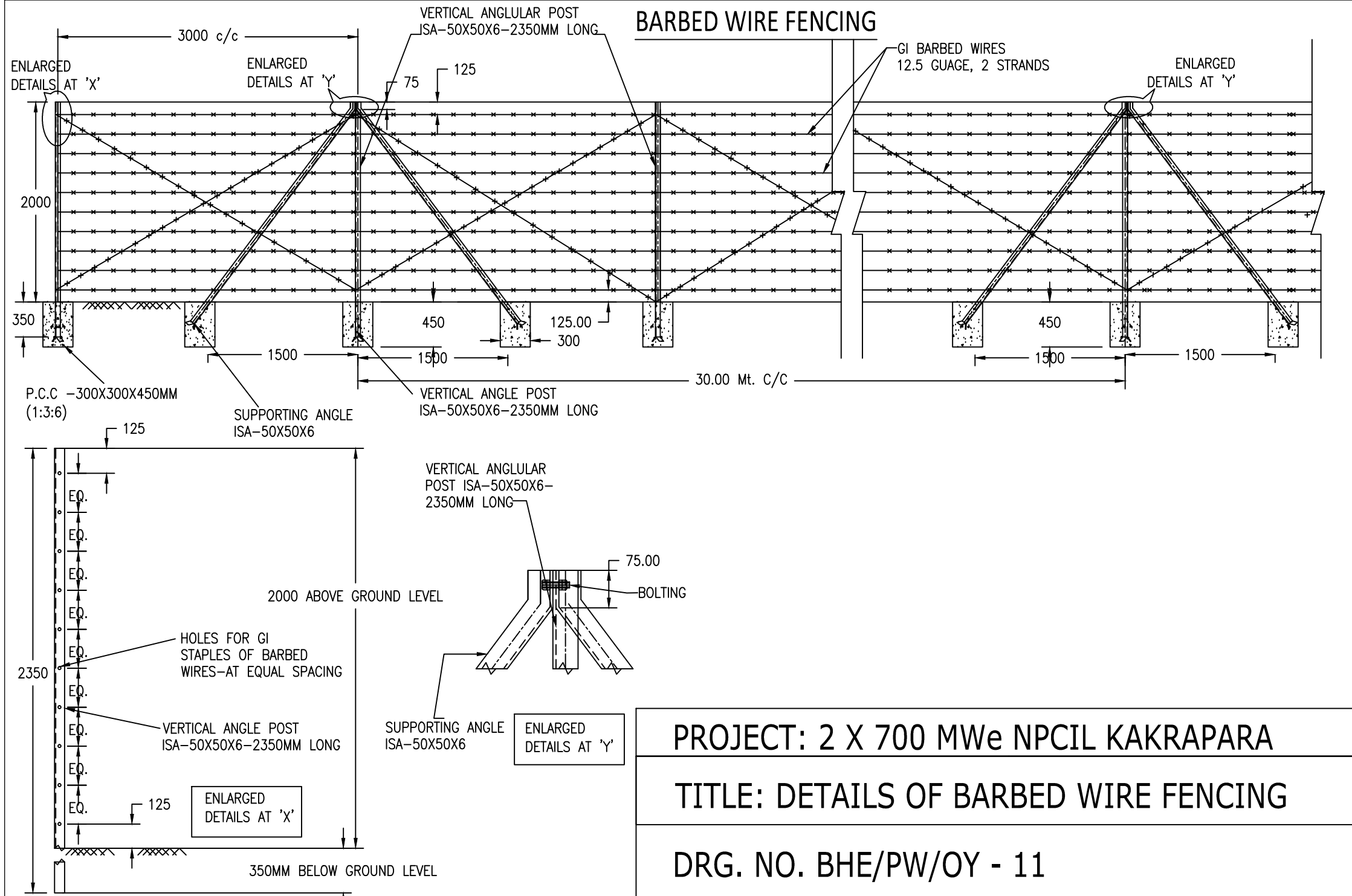
TITLE :- CULVERT DETAILS FOR 600 MM DIA, RCC HUME PIPE

DRG NO. :- BHE/PW/OY-10

OWNER :- BHEL-PSWR NAGPUR



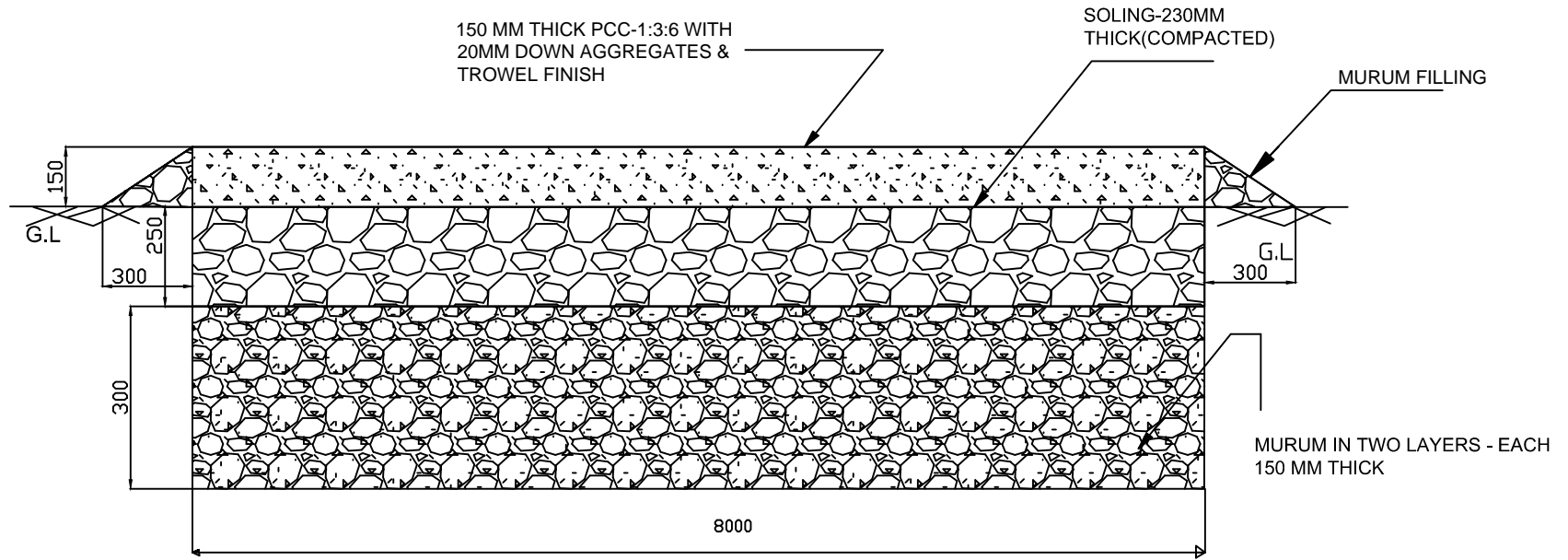
BARBED WIRE FENCING



PROJECT: 2 X 700 MWe NPCIL KAKRAPARA

TITLE: DETAILS OF BARBED WIRE FENCING

DRG. NO. BHE/PW/OY - 11



* ALL DIMENSION ARE IN 'MM'.
 * DRAWING is NOT IN SCALE.

RAISED CONCRETE PLATFORM (8M X 75M)


NOTE:

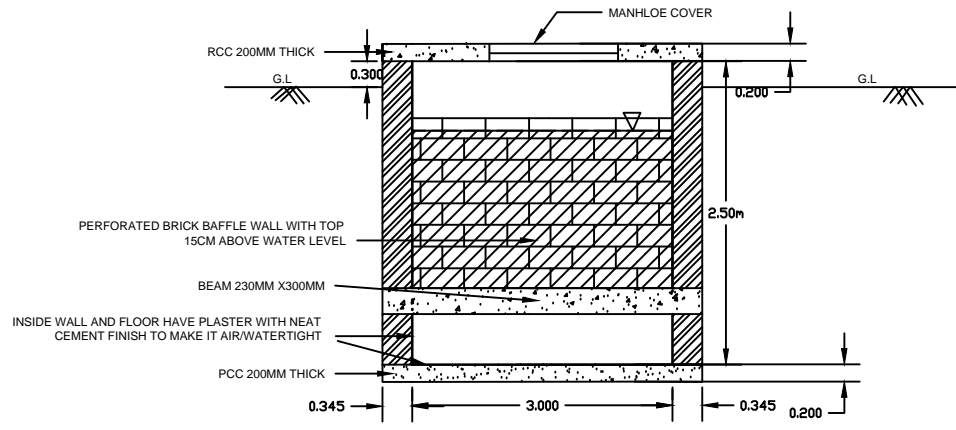
- 1)MILD CAMBER SHALL BE PROVIDED TO DRAIN THE WATER
- 2)IN CASE SOFT/HARD ROCK MAT WITH SUBGRADE/BELOW SOLING LEVEL IS FOUND THEN 150MM THICH MURUM SHALL BE LAID IN PLACE OF 300 MM THICK MURUM FILLING.

PROJECT :- 2 X 700 MWe STG NPCIL KAKRAPARA NUCLEAR PROJECT

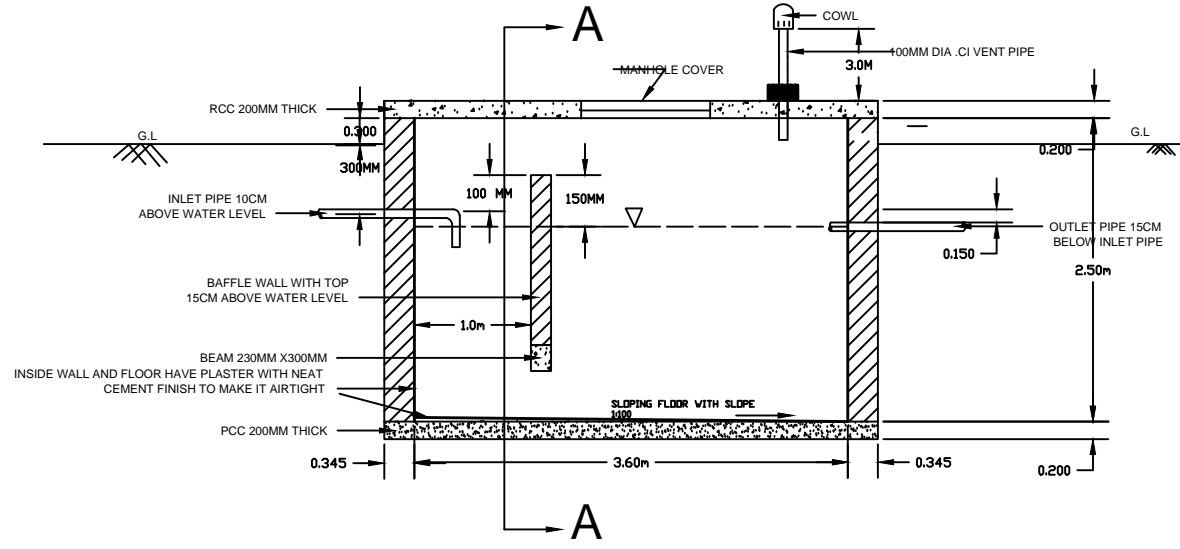
TITLE :- RAISED CONCRETE PLATFORM, (8M X 75M)

DRG NO. :- BHE/PW/CP-01

OWNER :-  BHEL-PSWR NAGPUR




SECTION A-A

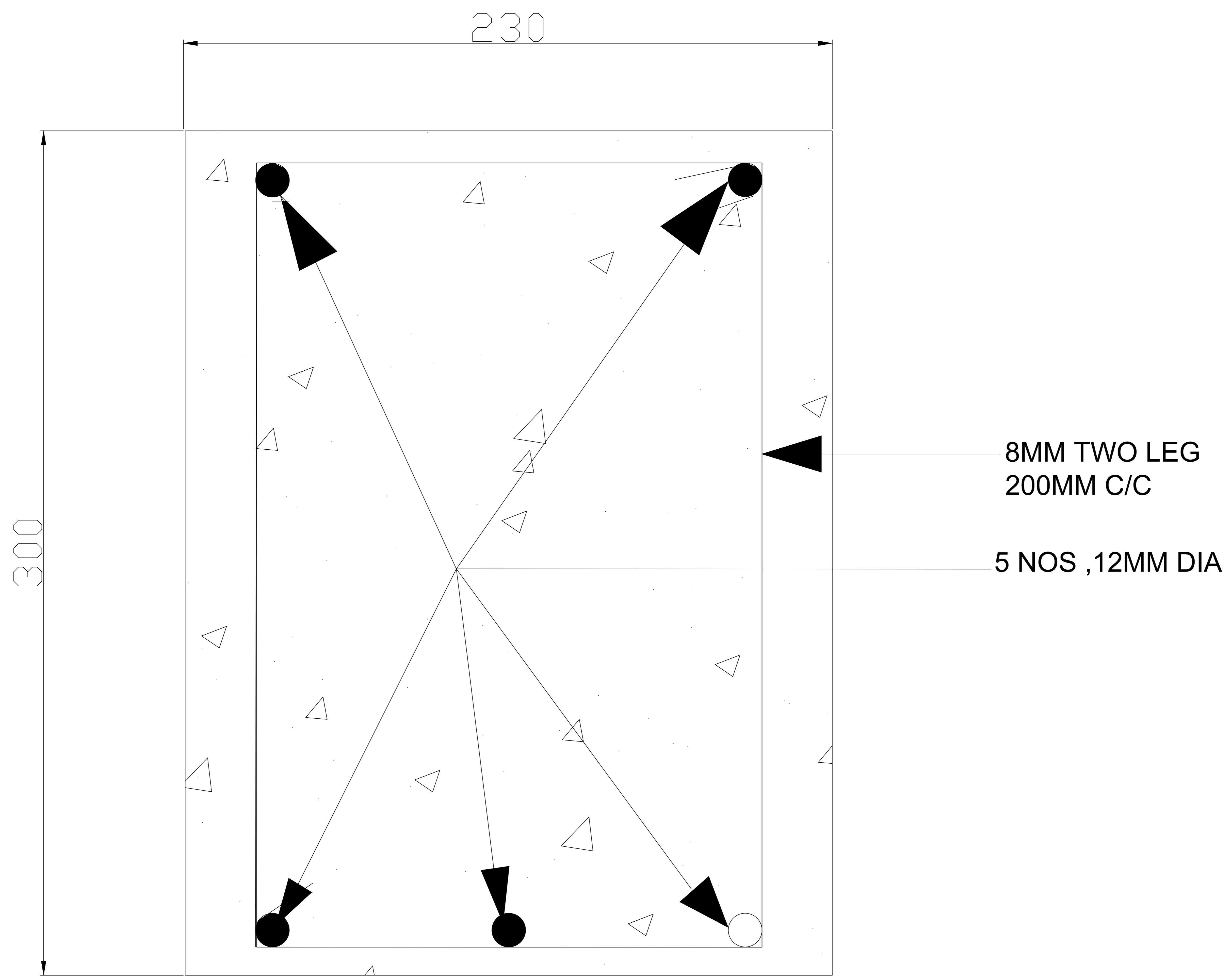


SEPTIC TANK SECTION

NOTE : F.B 30-50CM ABOVE LIQUID LEVEL

DETAILS OF SEPTIC TANK SECTION

PROJECT	- 2X700 MWe NPCIL KAKRAPARA
TITLE	-: DETAILS OF SEPTIC TANK & SECTION
DRG NO.	-: BHE/PW/ST-SP-01
OWNER	-:  BHEL-PSWR NAGPUR



SECTION OF BAFFLE BEAM (230MM X 300MM)

ALL DIMENSIONS ARE IN 'MM'.

PROJECT:- 2X700 MWe NPCIL KAKRAPARA

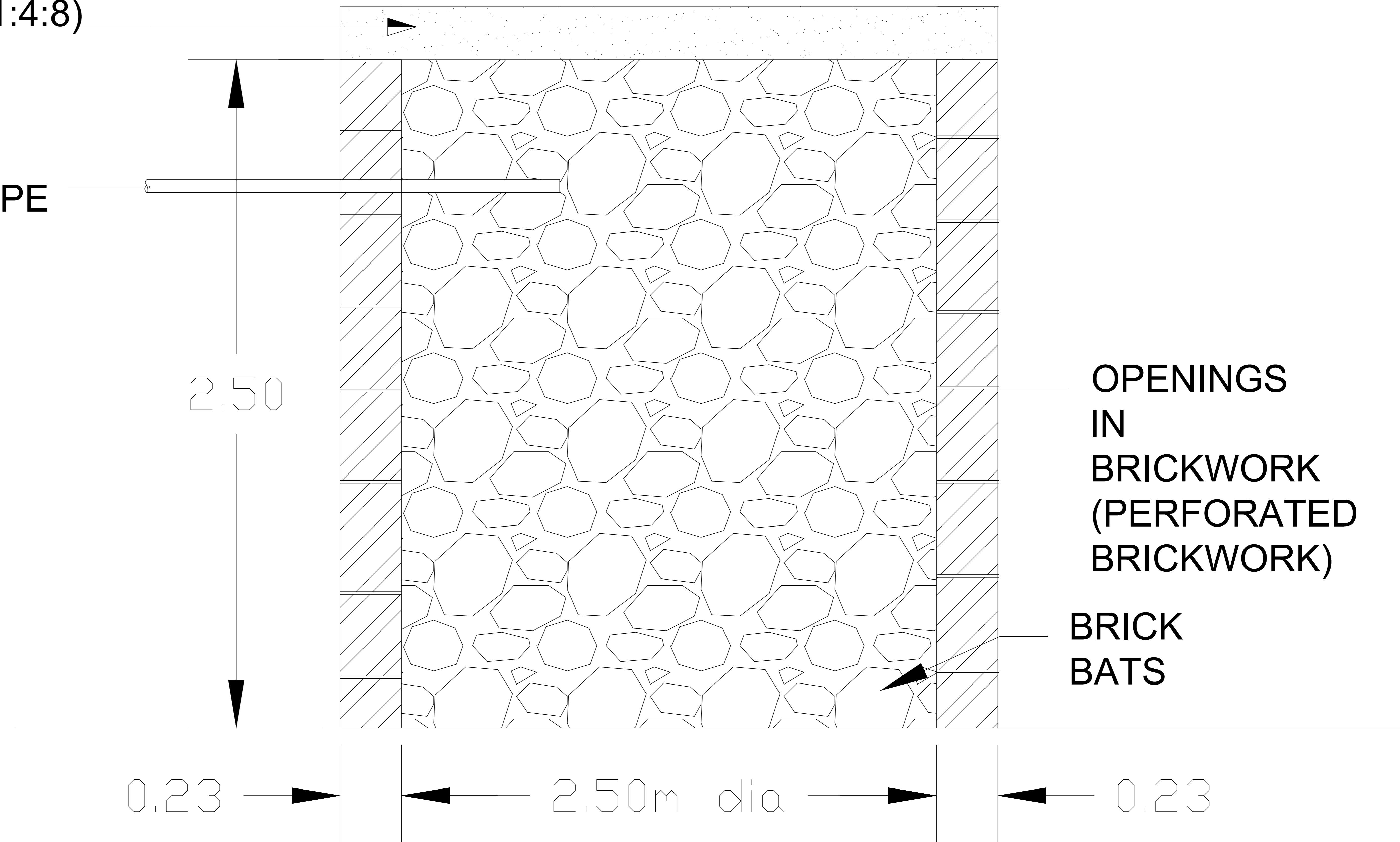
TITLE :- SECTION OF BAFFLE BEAM
(230MMX300MM)

DRG NO. :- BHE/PW/ST-SP-02

OWNER :-  BHEL-PSWR
NAGPUR

PCC COVER 100MM THICK(1:4:8)

INLET 20CM BELOW OUTLET PIPE
OF SEPTIC TANK



DETAILS OF SOAK PIT

PROJECT:- 2X700 MWe NPCIL KAKRAPARA NUCLEAR PROJECT

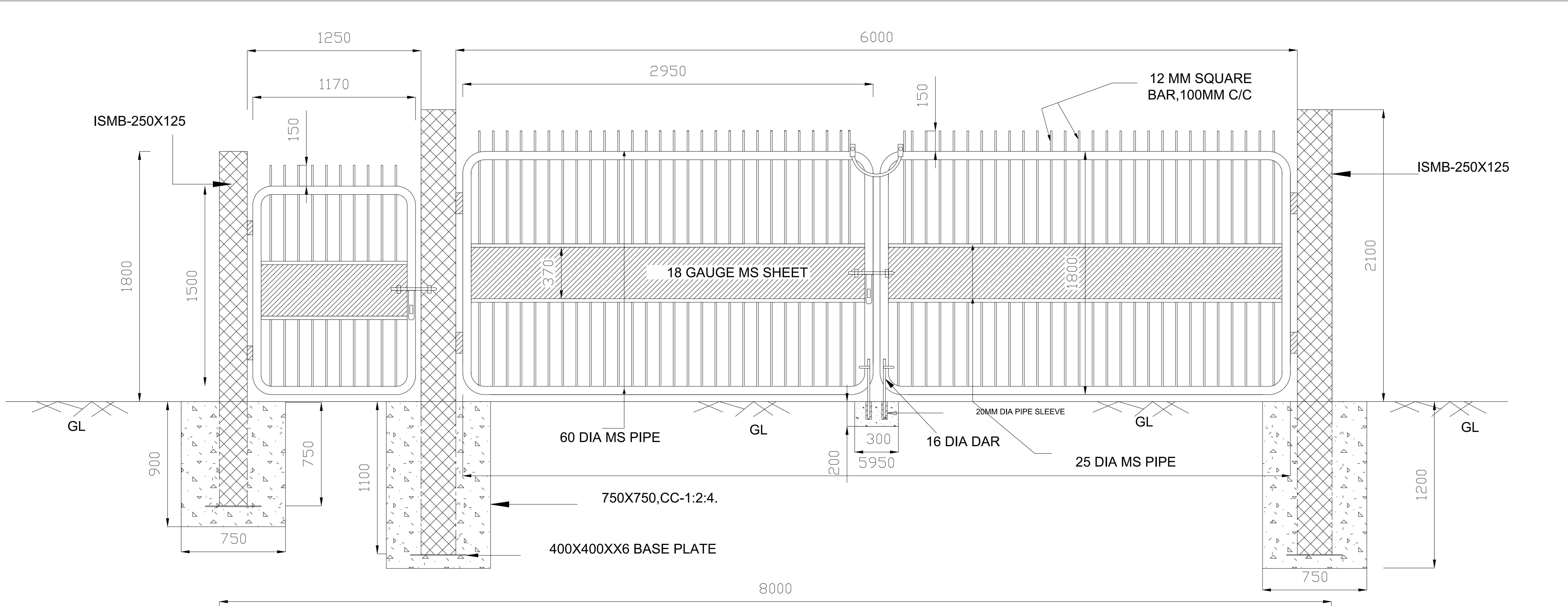
TITLE :- DETAILS OF SOAK PIT

DRG NO. :- BHE/PW/ST-SP-03

OWNER :-




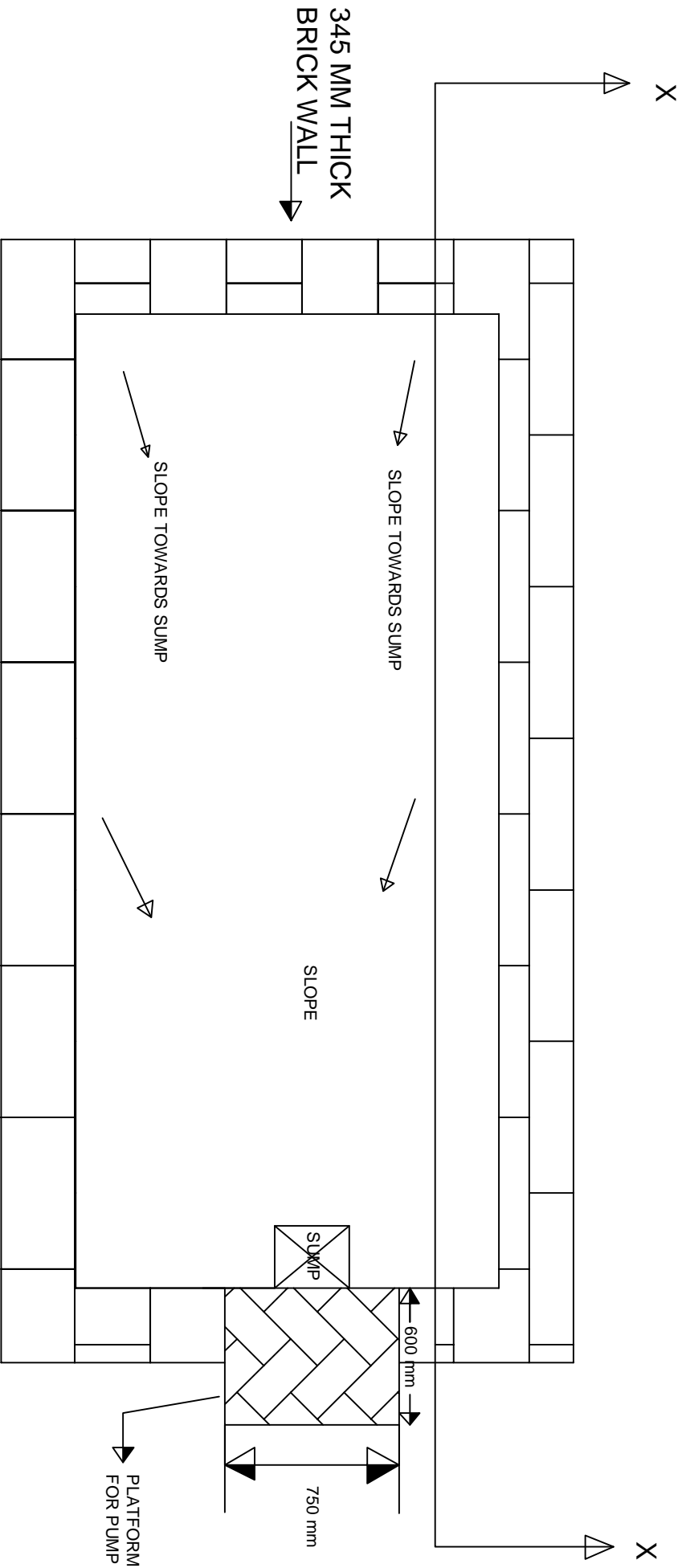
BHEL-PSWR
NAGPUR



- NOTE:
- 1) ALL DIMENSIONS ARE IN 'MM'.
 - 2) CONCRETE FOR POST FOUNDATION-CC-1:2:4.
 - 3) PANEL: 2950 X 1800.
 - 4) GAP BETWEEN EARTH TO PANAL - 100MM.
 - 5) TOTAL WEIGHT OF GATE - 750 KG (APPROX)

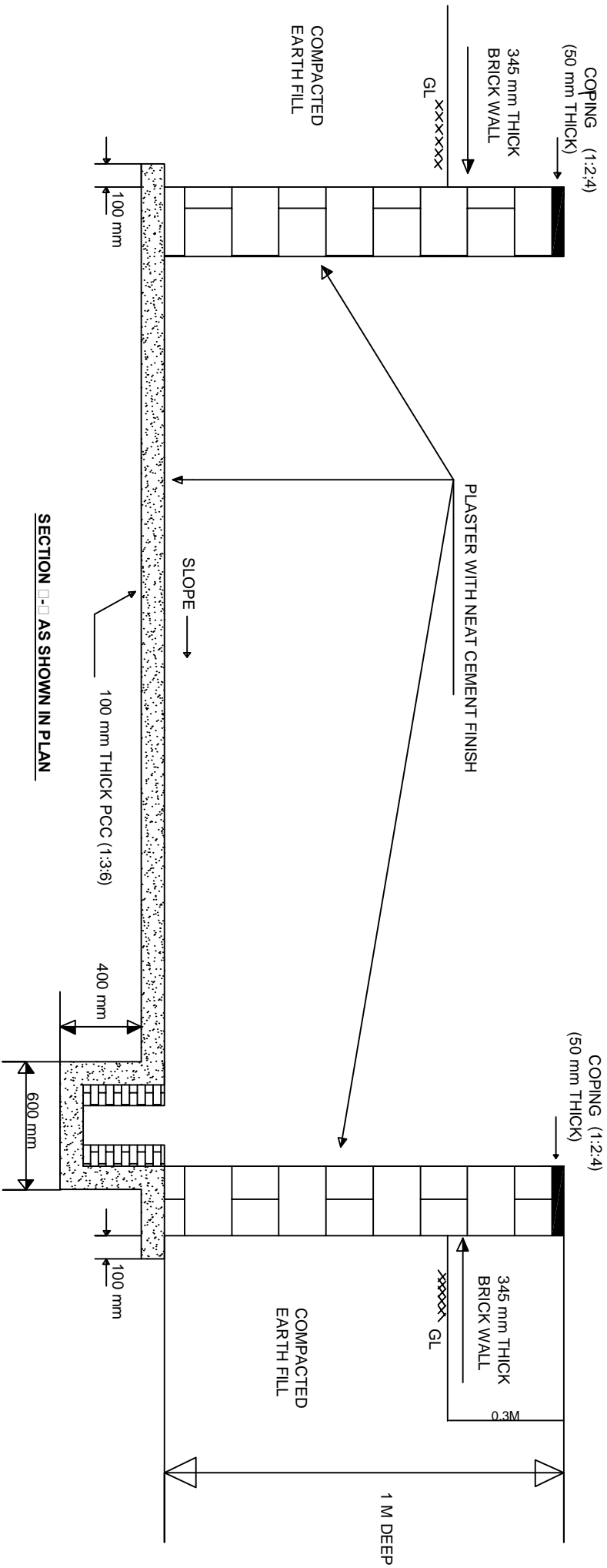
PROPOSED MS PIPE GATE

PROJECT:-	2 X 700 MWe NPCIL KAKRAPARA NUCLEAR PROJECT
TITLE :-	PROPOSED MS PIPE GATE
DRG NO. :-	BHE/PW/GATE
OWNER :-	 BHEL-PSWR NAGPUR



WATER TANK (4 M X 3M (IN TO IN) AND 1 M DEEP)

BHARAT HEAVY ELECTRICALS LIMITED	
TITLE	PLAN OF WATER TANK
PROJECT	2X700 MWe NPCIL KAKARAPARA
DRAWING NO.	BHE/PW/WT/01



PCC, BRICKWORK AND PLASTERING ITEMS TO BE PAID UNDER RELEVANT ITEMS IN BOQ

BHARAT HEAVY ELECTRICALS LIMITED	
TITLE	SECTIONAL DETAILS OF WATER TANK
PROJECT	2X700 MW@ NPCIL KAKARAPARA
DRAWING NO.	BHE/PW/WT/02