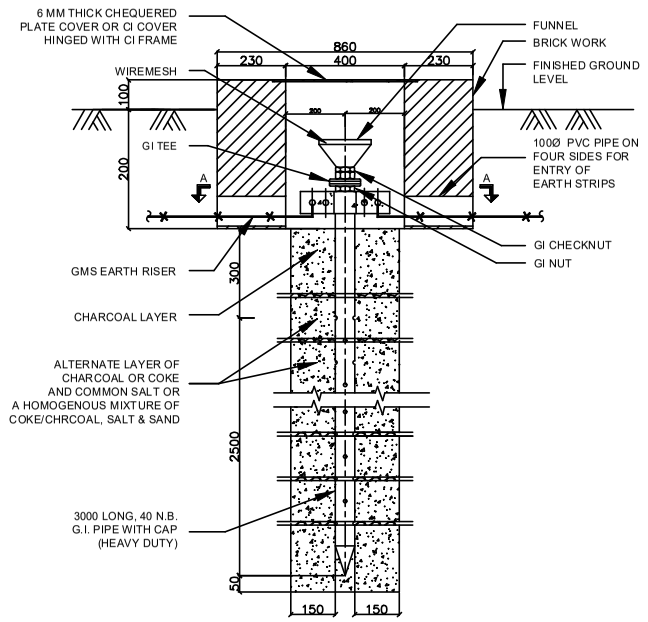
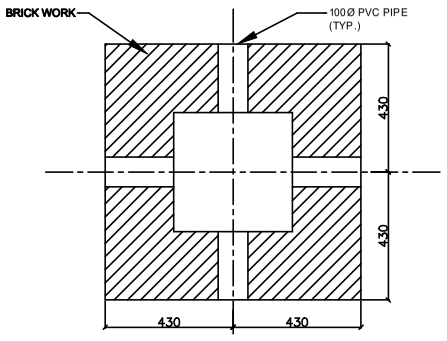
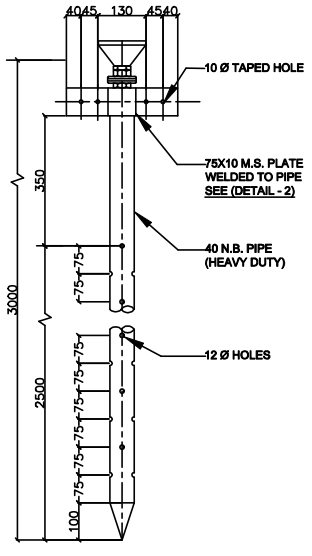


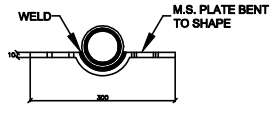
TYPICAL ARRANGEMENT OF
PIPE EARTHING ELECTRODE



SECTION : A-A



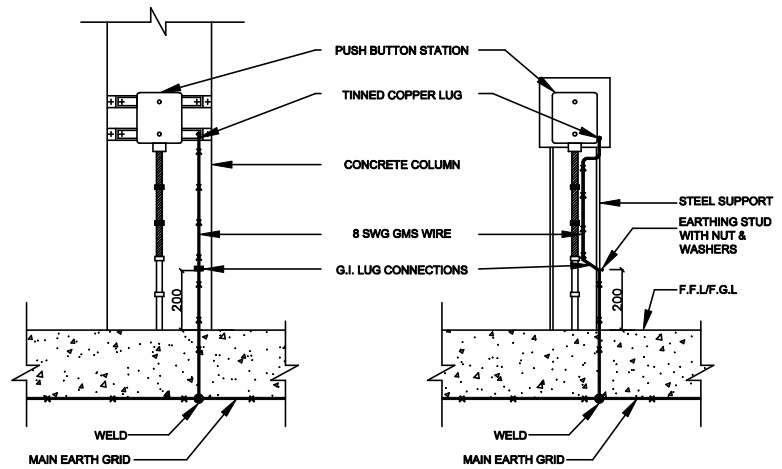
TYPICAL EARTH ELECTRODE
FOR EARTHING SYSTEM



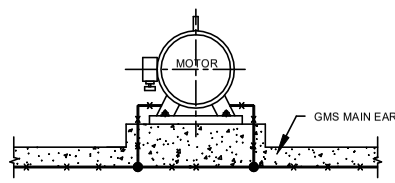
DETAIL-2

NOTE:

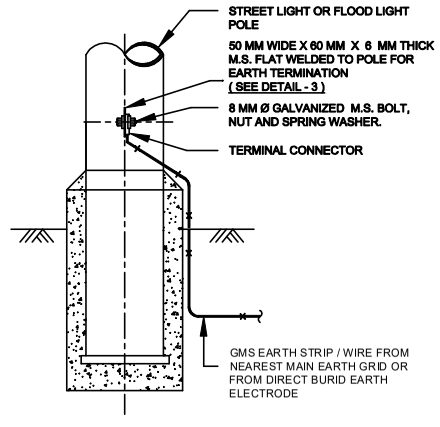
1. IN CASE OF PAVED AREAS, TOP OF PIT SHALL BE FLUSHED WITH F.FL, WHEREAS IN UNPAVED AREAS,TOP OF PIT SHALL BE PROJECTED 100MM ABOVE FGL.



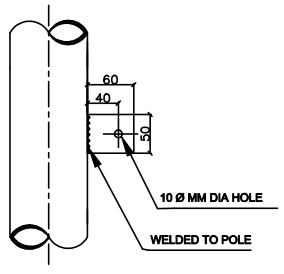
TYPICAL EARTH CONNECTION
FOR PUSH- BUTTON STATION



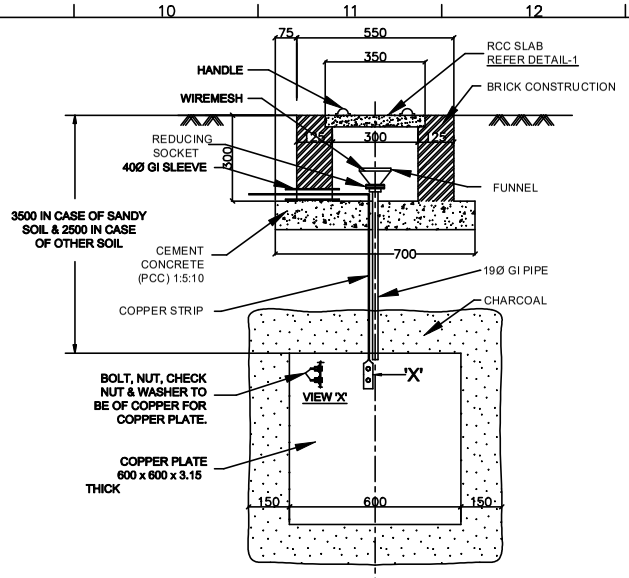
TYPICAL ARRANGEMENT FOR
EARTHING OF MOTOR



TYPICAL EARTH CONNECTION
FOR LIGHTING POLE



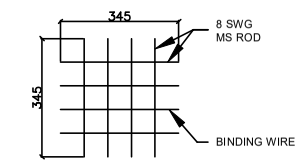
DETAIL - 3



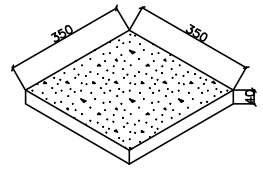
TYPICAL ARRANGEMENT OF
COPPER PLATE EARTHING

NOTE:

1. THE SIZE OF NUT,BOLT,CHECK NUT & WASHER WILL DEPEND UPON THE SIZE OF EARTH CONTINUITY STRIP



DETAIL OF
REINFORCMENT



1:2:4 CEMENT CONCRETE

DETAIL-1

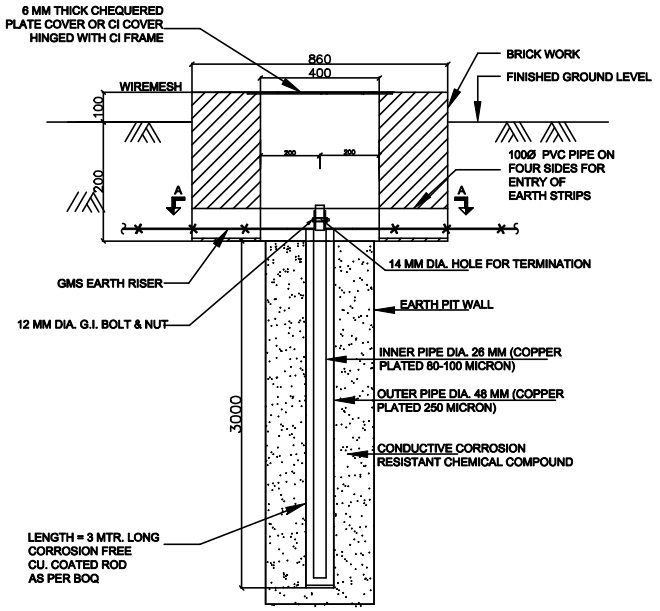
TYPICAL SIZE FOR EARTH CONDUCTOR

SR NO.	EQUIPMENT	CONDUCTOR SIZE
1.	HT PANEL	50 X 8 MM GI FLAT
2.	PMCC PANEL AND APFC PANELS.	50 X 8 MM GI FLAT
3.	TRANSFORMER BODY	50 X 8 MM GI FLAT
4.	MAIN EARTH GRID	50 X 8 MM GI FLAT
5.	TRANSFORMERS NEUTRAL	40 X 6 MM CU FLAT
6.	LADDER RACK AND CABLE TRAY AT SUITABLE POINTS	25 X 3 MM GI FLAT
7.	MOTORS	50 X 8 MM GI FLAT
8.	LOCAL PUSH BUTTON	8 SWG GI WIRE
9.	OUTDOOR STREET LIGHTING	8 SWG GI WIRE
10.	LIGHTING DISTRIBUTION BOARDS / SCREEN PANEL / TPN SOCKET	8 SWG GI WIRE

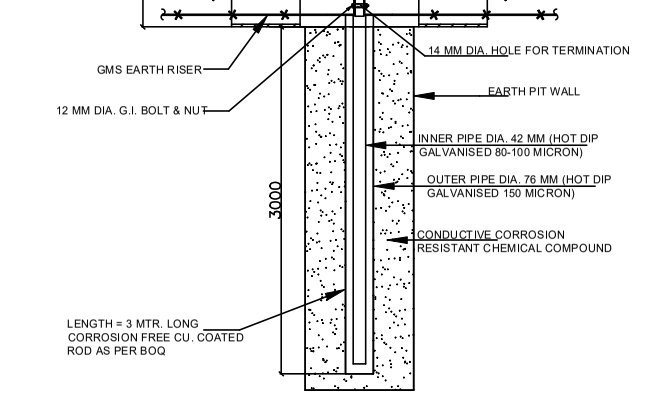
NOTES:

1. THE EARTHING SYSTEM SHALL GENERLLY CONFORM TO IS : 3043.
2. THE EARTH GRID SHALL BE CONNECTED WITH 3000 MM. LONG G.I. PIPE ELECTRODE AS SHOWN IN THE DRAWING.
3. ALL THE UNDER GROUND EARTHING CONNECTIONS SHALL BE DONE BY ELECTRIC ARC WELDING.
4. ALL UNDERGROUND WELDING JOINTS SHALL BE COATED WITH TWO COAT OF ANTICORROSIVE BLACK PAINT.
5. GALVANIZING OF EACH ELECTRODES, FLATS, WIRES, STRIPS, HARDWARES ETC. SHALL BE DONE BY HOT DIP GALVANIZING METHOD & THE AMOUNT OF GALVANIZING SHALL BE MIN. 610gm / SQ. Mtr.
6. ALL RISERS SHALL BE BROUGHT 300mm. ABOVE FGL.
7. ALL ELECTRICAL DEVICE / INSTRUMENT / PUSH BUTTON STATIONS ETC. SHALL BE EFFECTIVELY EARTHED WHETHER SPECIFICALLY SHOWN OR NOT.
8. EARTH GRID CONDUCTOR SHALL BE LAID 500 MM BELOW FINISHED GROUND LEVEL.
9. ELECTRICAL EARTH PIT SHALL NOT BE USED FOR EARTHING OF INSTRUMENTATION EQUIPMENT.
10. THE EARTH ELECTRODE SYSTEM SHALL BE DESIGNED TO GIVE A COMBINED RESISTANCE VALUE OF NOT GREATER THAN 1.0 OHM.
11. ALL ELECTRICAL EQUIPMENTS SHALL BE CONNECTED TO THE EARTH GRID AT TWO SEPARATE AND DISTINCT GROUND CONNECTIONS OF SIZES SPECIFIED IN TABLE. HOWEVER, LIGHTING FIXTURES SHALL BE EARTHED AT ONE POINT ONLY BY LOOP-IN, LOOP-OUT METHOD.
12. THE FENCING SHALL BE AT A DISTANCE OF NOT LESS THAN 1.525 METRE ON ALL SIDES OF THE SUBSTATION (POLE STRUCTURE AND TRANSFORMER PLINTHS, AS APPLICABLE) TO ENSURE FREE MOVEMENT ALL ROUND.
13. FENCING SHALL BE EARTHED PROPERLY COVERING ALL ROWS ON ALL SIDES.
14. ALL DIMENSIONS ARE IN MM.

CHEMICAL EARTHING



FOR NEUTRAL EARTHING
(HT PANEL, TRANSFORMER, ETC)
TYPICAL ARRANGEMENT
OF PIPE IN PIPE TYPE EARTHING ELECTRODE
FOR CHEMICAL EARTHING (COPPER)



FOR BODY EARTHING
(FOR TRANSFORMER, LT PANEL AND ALL OTHER EQUIP)
TYPICAL ARRANGEMENT
OF PIPE IN PIPE TYPE EARTHING ELECTRODE
FOR CHEMICAL EARTHING

REV.	DATE	DESCRIPTION	REV. BY	CHK. BY
R0	11.05.2026	TENDER PURPOSE ONLY	APP	APP

PROJECT:
STORM WATER PUMPING STATION AT FALAKNUMA OF AMC

CLIENT:
AHMEDABAD MUNICIPAL CORPORATION, AHMEDABAD

CONSULTANTS:
multi media consultants pvt. ltd.
401, Shivalik Shilp, Iskcon Cross Road, S.G. Highway, Ahmedabad - 380 054.

ASSOCIATE CONSULTANTS:
SAPIENT TECHNO CONSULTANTS
701, Rembrandt, Opp. Associated Petrol Pump, C.G.Road, Ellisbridge, Ahmedabad-380 006

TITLE:
TYPICAL EARTHING DETAIL

DRAWN BY	: BJK	DESIGNED BY	: APP
CHECKED BY	: APP	PROJ. NO.	:
SCALE	: NTS	DRG. NO.	: STC/AMC/SWPS/F/E-11
DATE	: 11.05.2026	REVISION :	: R0