FIRST ANGLE PRJECTION

ALL DIMENSIONS ARE IN MM

DRAWING NO. 1100-104-PVC-W-202

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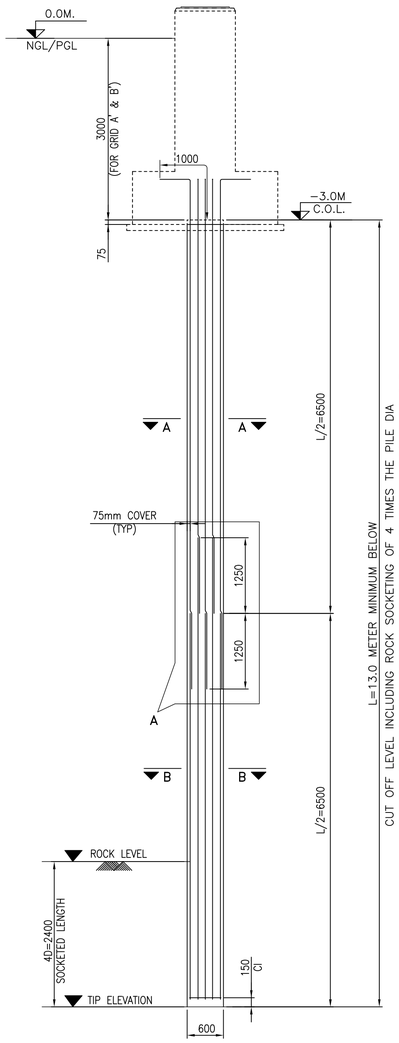
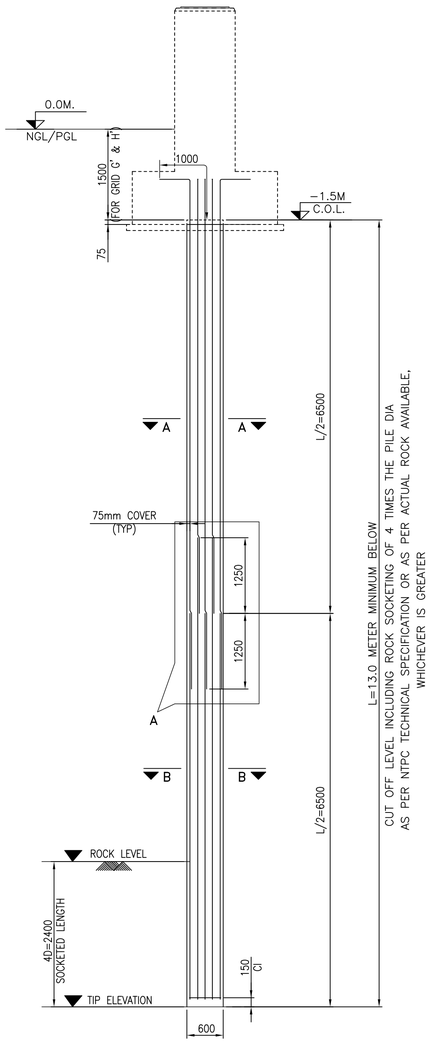


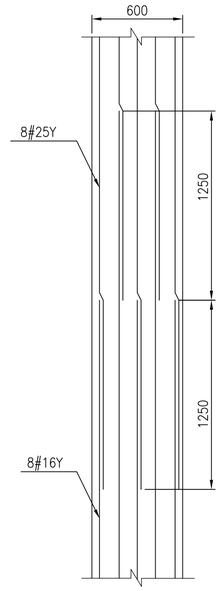
PILE REINFORCEMENT DETAILS
SCALE 1:50

JOB PILE REINFORCEMENT DETAILS
(FOR GRID A' & B')

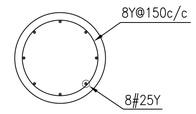


PILE REINFORCEMENT DETAILS
SCALE 1:50

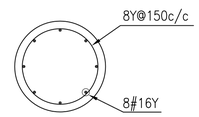
JOB PILE REINFORCEMENT DETAILS
(FOR GRID G' & H')



DETAIL-A
SCALE 1:25



SECTION A-A
SCALE 1:25



SECTION B-B
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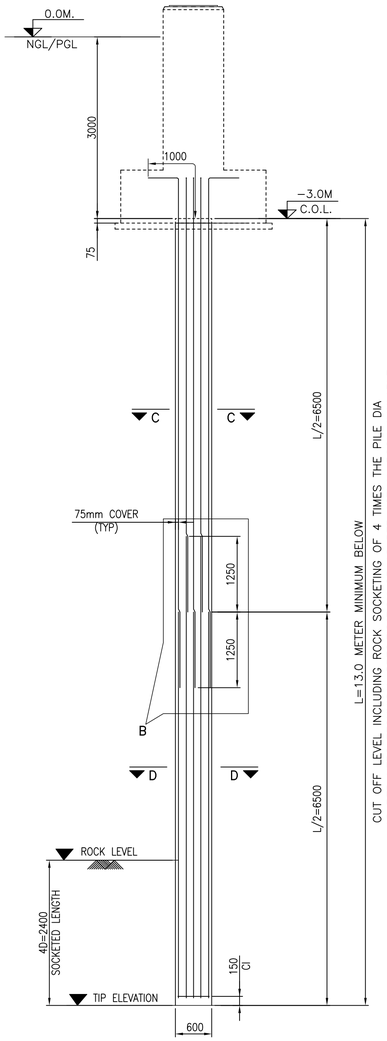
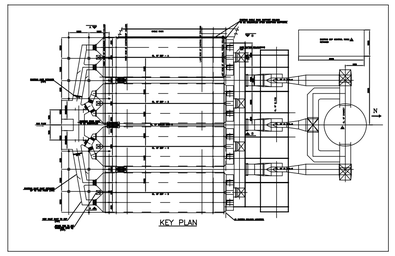
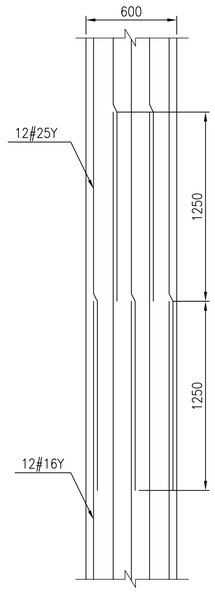


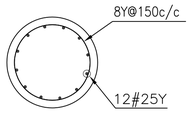
PILE REINFORCEMENT DETAILS
SCALE 1:50

INITIAL TEST PILE REINFORCEMENT DETAILS

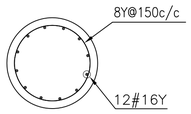




DETAIL-B
SCALE 1:25



SECTION C-C
SCALE 1:25



SECTION D-D
SCALE 1:25

NOTES

1. ALL THE DIMENSIONS ARE IN MILLIMETER AND LEVELS ARE IN METER UNLESS SPECIFIED OTHERWISE.
2. EL(±)0.000M AT POWER HOUSE REPRESENTS ELEVATION RL(+)276.0M ABOVE MSL.
3. DRAWINGS ARE NOT TO BE SCALED, ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
4. ALL DIMENSIONS TO BE CHECHKED ON SITE.
5. IN THE EVENT OF ANY DISCRIPANCIES OR DIFFERENCE BETWEEN ANY OF THE CIVIL DRAWINGS AND STRUCTURAL ENGINEERING DRAWINGS OR SITE CONDITIONS OR OTHERWISE, DRAWINGS OR ANY OTHER IMMEDIATE REF. SHOULD BE MADE TO THE DESIGN TEAM FOR CLARIFICATIONS PRIOR TO EXECUTION OF WORKS.
6. FOR THE SIZES OF STRUCTURAL MEMBERS OR OTHER TECHNICAL FEATURES REFER RELEVANT DRAWINGS SUPPLIED BY THE STRUCTURAL CONSULTANTS.
7. LEGEND:
   - FGL--------- FINISH GROUND LEVEL
   - FFL--------- FINISH FLOOR LEVEL
   - PCC-------- PLAIN CEMENT CONCRETE
   - C-------- COLUMN
   - F-------- FOOTING
   - CL-------- CENTER LINE
   - TYP-------- TYPICAL
   - T & B-------- TOP AND BOTTOM
   - C\C-------- CENTER TO CENTER
   - B\W-------- BOTH WAY
   - BOB-------- BOTTOM OF BASE PLATE
8. EXCAVATED EARTH TO BE BACKFILLED WITH COMPACTION IN LAYERS NOT MORE THAN 200 mm.
9. ALL EXCAVATION SHALL BE CARRIED OUT AS PER RELEVANT IS CODES & CONFIRMING TO THE SAFETY NORMS.
10. THE DESIGN IS BASED ON SOIL DATA AVAILABLE IN SPECIFICATION & MAY GET REVISED BASED ON ACTUAL SOIL INVESTIGATION REPORT.

REINFORCED CONCRETE WORK

(A) CONCRETE:

1. ALL R.C.C.WORK SHALL CONFORM TO LATEST IS : 456 : 2000
2. U.N.O. GRADE OF CONCRETE SHALL BE
   I) PCC – M7.5
   II) OTHER RCC WORK – M25

(B) REINFORCEMENT STEEL:

1. ALL REINFORCEMENT STEEL ARE Fe 500

(C) COVER TO MAIN REINFORCEMENT:

U.N.O. CLEAR COVER TO REINFORCEMENT INCLUDING STIRUPS SHALL BE AS FOLLOWS

1. FOOTING.....	75MM.–BOTTOM 50MM.–SIDE
2. COLUMNS.....	40MM.
3. PILE.....	75MM.
4. PILE CAP.....	75MM.–BOTTOM 50MM.–SIDE & TOP
5. BEAM.....	25MM.

(D) LAP LENGTH OR DEVELOPMENT LENGTH FOR REINFORCEMENT BARS SHALL BE AS FOLLOWS.

I) FOR REINFORCED BARS = 50 x DIA OF BAR
NOT MORE THAN 50% BARS SHALL BE SPLICED AT A SECTION.
(LOCATION OF SPLICE SHALL BE APPROVED BY SITE ENGINEER)

ENGINEERING REFERENCE DRAWING:

1100–104–PVM–V–116–REV–003	FOUNDATION PLAN AND LOADING DETAILS OF ESP

PRECAUTIONARY NOTE:

1) THE INITIAL PILE LOAD TEST SHALL BE CONDUCTED AT PILE CUT OFF LEVEL.
2) IF THE WATER TABLE IS ABOVE CUT OFF LEVEL THE TEST PIT SHALL BE KEPT DRY THROUGHOUT THE TEST PERIOD BY SUITABLE DE–WATERING METHOD.
3) THE INITIAL PILE LOAD TEST SHALL BE CONDUCTED WITH TEST LOAD UPTO 2.5 TIMES THE ESTIMATED PILE CAPACITY.

FOR INITIAL TEST PILE LOCATION REFER DRAWING NO.1100–104–PVC–U–004

FOR JOB PILE LAYOUT REFER DRAWING NO.1100–104–PVC–W–017

CONSTRUCTION NOTE:

ALL CARE SHOULD BE TAKEN DURING EXECUTION OF NEW PILE TO AVOID ANY DAMAGE TO THE EXISTING ESP PILE FOUNDATIONS.

PILE SIZE	PILE CAPACITY COMPRESSION IN (KN)	PILE CAPACITY TENSION IN (KN)	PILE CAPACITY SHEAR IN (KN)	PILE CUT OFF LEVEL
600MM DIA (CAST–INSITU PILE)	900	300	60	–3.0M FOR GRID A' & B' –1.5M FOR GRID G' & H'

PILE LENGTH WILL BE 13.0M FROM PILE CUT OFF LEVEL AS PER NTPC TECHNICAL SPECIFICATION

RMSG(CIVIL), BHOPAL/SSBG–BHEL	
THIS DRAWING MARKED(✓) IS RELEASED FOR	
☑ COMMENTS/APPROVAL	
☐ PLANNING/INFORMATION	
☐ CONSTRUCTION	
STAMP ALL PREVIOUS REVISION AS SUPERSEDED	
ISSUED BY	
NAME	G.S.SACHDEV/M. PRAKASH
SIGNATURE	Sd/–
DATE	24.12.2014

NTPC DRAWING NO. 1100–104–PVC–W–202

PROJECT: SINGRAULI STPP, STAGE–II (2X500MW)
RENOVATION AND RETROFITTING OF ELECTROSTATIC PRECIPITATOR PACKAGE

CLIENT: NTPC LIMITED

BHARAT HEAVY ELECTRICALS LTD
UNIT BOILER AUXILIARIES PLANT.
RANIPET–632 406

JOB NO. ***
STATUS CONTRACT
ORG./REF. NO. (INTERNAL)
PRINT SCALE IN METRE 0 2 4 6 8 10 20 30 40 50

RMSG – BHOPAL
BHEL's DESIGN CONSULTANTS

AXIS CONSULTANTS (INDIA) PVT.LTD.
704,A–1,7th Floor,Rupa Solitaire,
Millennium Business Park,
Mahape, Navi Mumbai–400710
www.axisconsultants.co.in

DEPT CODE		NAME	SIGN	DATE
C	DRN	KAR	–Sd–	20.12.2014
	DESN	DUS	–Sd–	15.12.2014
	CHD	VBP	–Sd–	20.12.2014
	APPD	PPS	–Sd–	24.12.2014

TITLE: RCC DETAILS OF JOB PILES & INITIAL TEST PILE OF NEW ESP FOUNDATION FOR SINGRAULI STAGE–II (UNIT–6 & 7)

M.P.L. MAX. DEPT. SCALE 1:150 SIGN DATE

DRAWING NO. RMSG–C–202

SHEET 1 OF 1 REV. 0

REV.	DATE	ALTD	CHD	APPD