

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 CHECKED ON SITE.
5. IN THE EVENT OF ANY DISCREPANCIES 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

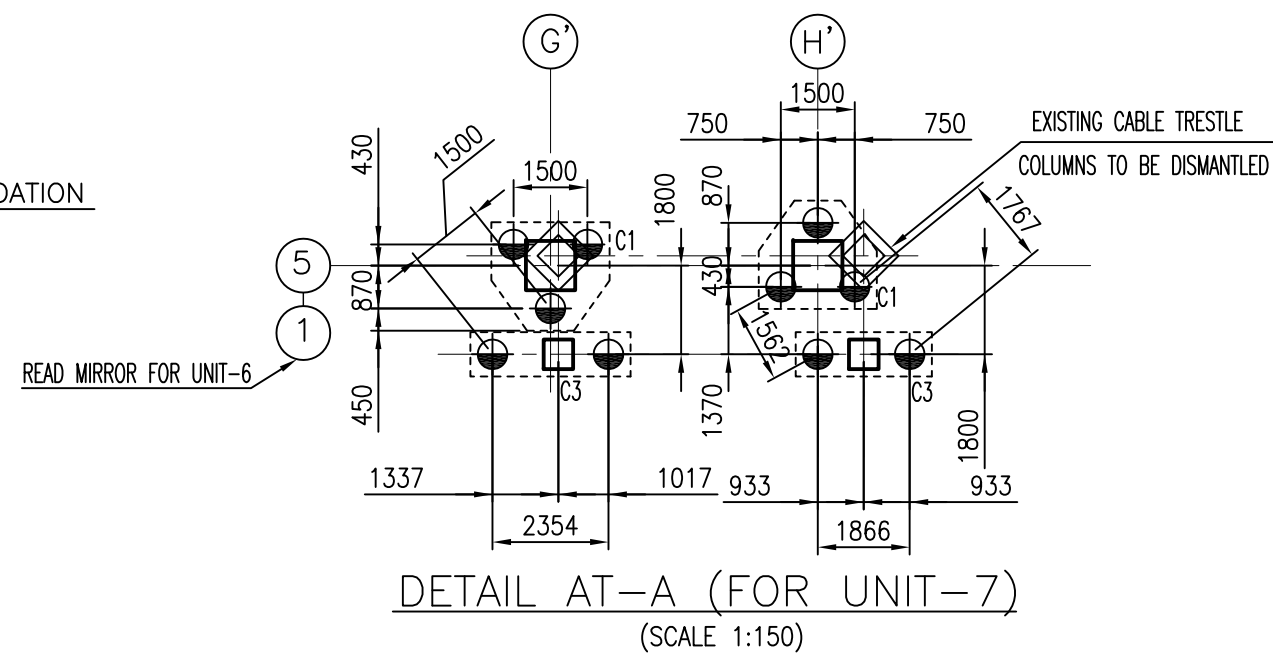
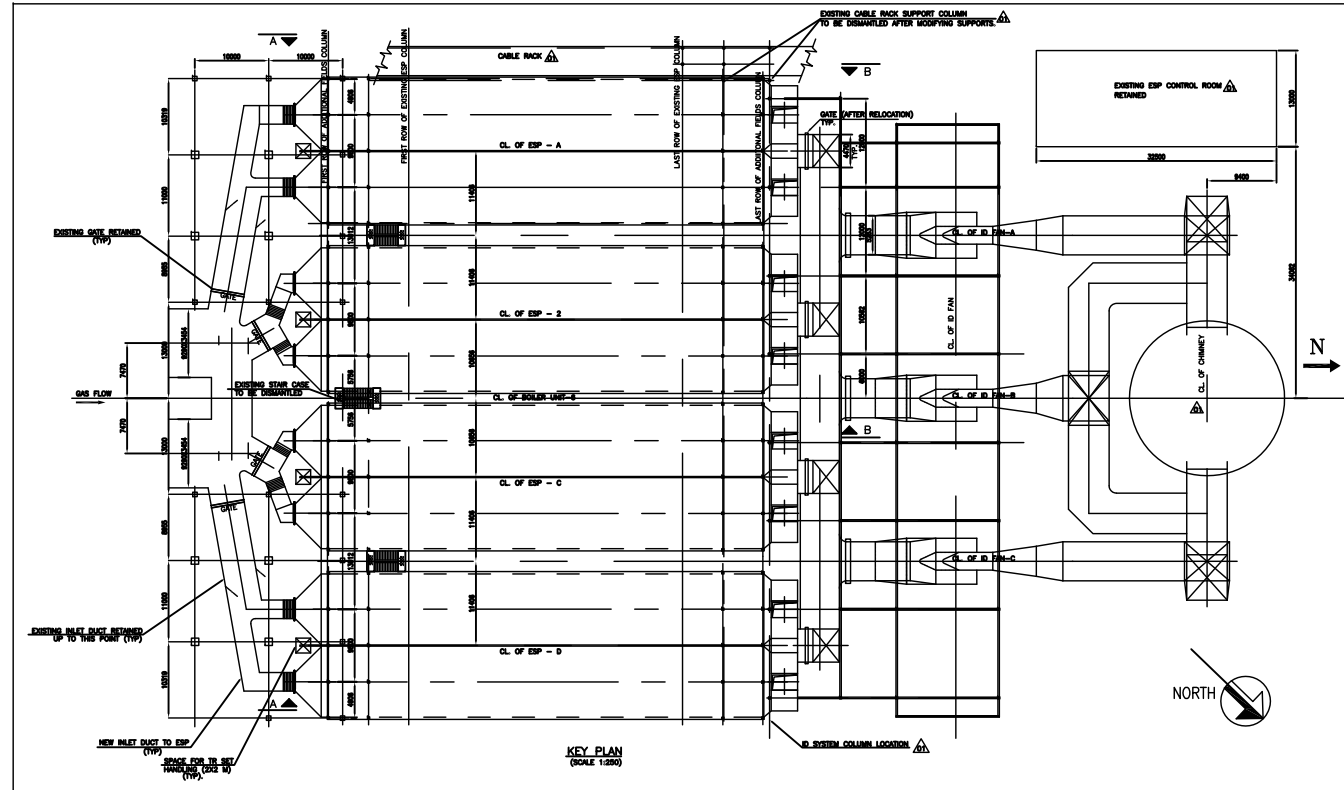
1. FOOTING..... 75MM.-BOTTOM
50MM.-SIDE
2. COLUMNS..... 40MM.
3. PILE..... 75MM.
4. PILE CAP..... 75MM.-BOTTOM
50MM.-SIDE & TOP
5. BEAM..... 25MM.

(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 SPICED AT A SECTION.
(LOCATION OF SPICE SHALL BE APPROVED BY SITE ENGINEER)

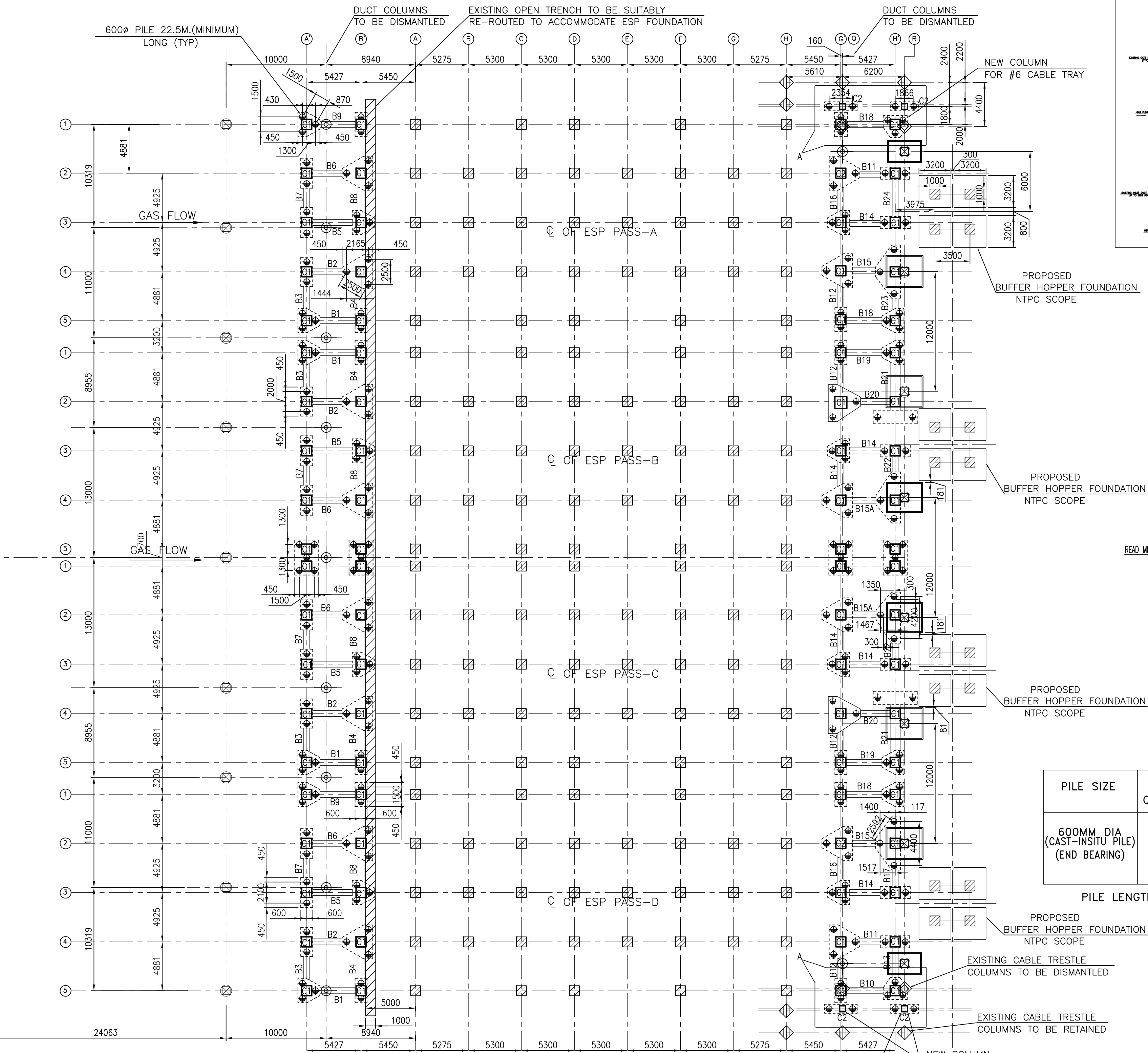
ENGINEERING REFERENCE DRAWING:

1100-104-PVM-V-116-REV-03	FOUNDATION PLAN AND LOADING DETAILS OF ESP
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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) (END BEARING)	900	300	60	-3.0M FOR GRID A' & B' -1.5M FOR GRID G' & H'

PILE LENGTH WILL BE 13.0 M FROM PILE CUT OFF LEVEL



- EXISTING ESP COLUMNS
- NEW ESP COLUMNS
- EXISTING DUCT COLUMNS TO BE RETAINED)
- EXISTING DUCT COLUMNS TO BE DISMANTLED)
- JOB PILE FOR NEW ESP COLUMN
- EXISTING CABLE TRESTLE COLUMNS TO BE RETAINED)
- EXISTING CABLE TRESTLE COLUMNS TO BE DISMANTLED

PILE LAYOUT OF NEW ESP FOUNDATION FOR (STAGE-II) UNIT-6&7

(SCALE 1:250)
TOTAL NO OF JOB PILES-212 (FOR ONE UNIT)

BEFORE STARTING THE PILE FOUNDATION OF NEW CABLE SUPPORT COLUMN,VERIFY THE FOUNDATION SIZE OF EXISTING CABLE GALLERY SUPPORT (TO BE RETAINED) & ENSURE THAT NEW PILE DOES NOT FOUL WITH EXISTING FOUNDATION

FOR OTHER DETAILS OF FOUNDATION SYSTEM, PLEASE REFER THE FOLLOWING DRAWINGS WITH NTPC DRG NOS. AS BELOW:

1100-104-PVC-W-202	RCC Details of Job Piles and initial Test Piles of new ESP foundations for Singrauli Stage-II (Unit 6 & 7)
1100-104-PVC-W-203	Pile cap layout of new ESP foundations for Singrauli Stage-II (Unit 6 & 7)
1100-104-PVC-W-204	RCC details of New ESP Foundations for Singrauli Stage-II (Unit 6 & 7)-Pilecap and Pedestal details-1
1100-104-PVC-W-205	RCC details of New ESP Foundations for Singrauli Stage-II (Unit 6 & 7)-Pilecap and Pedestal details-2
1100-104-PVC-W-206	Beam Layout of New ESP Foundation for Singrauli Stage-II (Unit 6 & 7)-Tie Beams for Foundations
1100-104-PVC-W-207	Tie Beam RCC Details of New ESP Foundation for Singrauli Stage-II (Unit 6 & 7)

RMSG(CIVIL), BHOPAL/SSBG-BHEL

THIS DRAWING MARKED(✓) IS RELEASED FOR

☒ COMMENTS/APPROVAL

☐ PLANNING/INFORMATION

☐ CONSTRUCTION

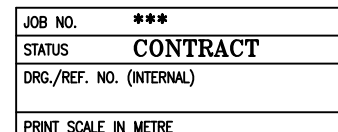
STAMP ALL PREVIOUS REVISION AS SUPERSEDED

ISSUED BY

NAME G. S. SACHDEVA/M. PRAKASH

SIGNATURE Sd/-

DATE 24.12.2014



NTPC DRG. 1100-104-PVC-W-017

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-632 408

RMSG - BHOPAL
BHEL'S DESIGN CONSULTANTS

AXIS CONSULTANTS (I) PVT LTD
PLOT-A-27th Floor, 2nd Stage, 2nd Floor,
MIDC, New, Mumbai-400070
www.axisconsultants.co.in

REVISIONS

NO. 1

DATE 24.12.2014

SCALE 1:150

VENDOR DRAWING NO. RMSG-C-017

SHEET 1 OF 1

REV. 1

PILE LAYOUT OF NEW ESP FOUNDATIONS FOR SINGRAULI STAGE-II (UNIT-6&7)

M.P.L. MAX. SEPT. SCALE 1:150

SIGN DATE

VENDOR DRAWING NO. RMSG-C-017

SHEET 1 OF 1

REV. 1