



# भारत हेवी इलेक्ट्रिकल्स लिमिटेड

( भारत सरकार का उपक्रम )

## BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

### TCN - 09

Ref: PSER:SCT:RKL-M1828:TCN-09

Date: 01-07-2017

Sub	Tender Change Notice (TCN) - 09.	
Job	Design, Engineering, Manufacturing, Supply, Erection, Testing, Commissioning, etc. of Raw water intake system including Cross Country GRP Pipeline for 1x250 MW unit at PP-II Expansion, NSPCL, Rourkela, Odisha.	
Ref	1.0	Tender no PSER:SCT:RKL-M1828:17.
	2.0	BHEL's NIT, vide reference no PSER:SCT:RKL-M1828:5666, Dated 27-04-2017.
	3.0	BHEL's TCN-01, vide reference no PSER:SCT:RKL-M1828:TCN-01, Dated 16-05-2017.
	4.0	BHEL's TCN-02, vide reference no PSER:SCT:RKL-M1828:TCN-02, Dated 23-05-2017.
	5.0	BHEL's TCN-03, vide reference no PSER:SCT:RKL-M1828:TCN-03, Dated 03-06-2017.
	6.0	BHEL's TCN-04, vide reference no PSER:SCT:RKL-M1828:TCN-04, Dated 13-06-2017.
	7.0	BHEL's TCN-05, vide reference no PSER:SCT:RKL-M1828:TCN-05, Dated 17-06-2017.
	8.0	BHEL's TCN-06, vide reference no PSER:SCT:RKL-M1828:TCN-06, Dated 19-06-2017.
	9.0	BHEL's TCN-07, vide reference no PSER:SCT:RKL-M1828:TCN-07, Dated 21-06-2017.
	10.0	BHEL's TCN-08, vide reference no PSER:SCT:RKL-M1828:TCN-08, Dated 27-06-2017.
	11.0	Other References, if any.

With reference to above, following points/documents, relevant to tender, may please be noted and complied with while submitting the offer.

1. Revised River Water Intake Piping Layout drawing is attached, superseding earlier version issued along with tender.
2. Revised 'No deviation certificate' is attached. Bidder to submit 'No deviation certificate' as per attached format only.
3. All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,  
for BHARAT HEAVY ELECTRICALS LTD

Sr. Engr (SCT)

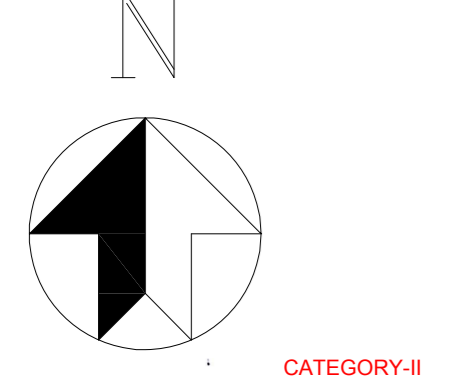
Encl: As Above.

पावर सेक्टर पूर्वी क्षेत्र ( मुख्यालय )

POWER SECTOR EASTERN REGION, DJ-9/1, SALT LAKE CITY, KOLKATA - 700 091

फैक्स/Fax : (033) 23211960

फोन/Phone : बोर्ड/EPABX : 2339 8000



**CATEGORY-I**

**APPROVED AS NOTED**

Prepared by: **V. N. Nagarwal** Date: **15.06.2017**

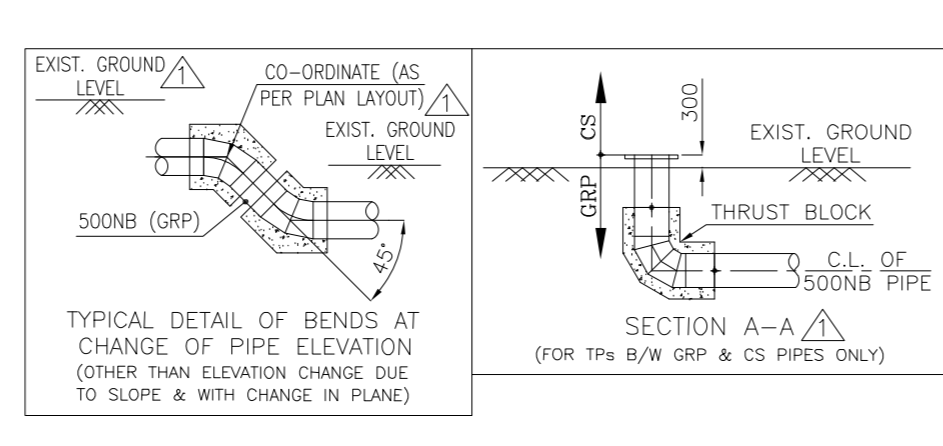
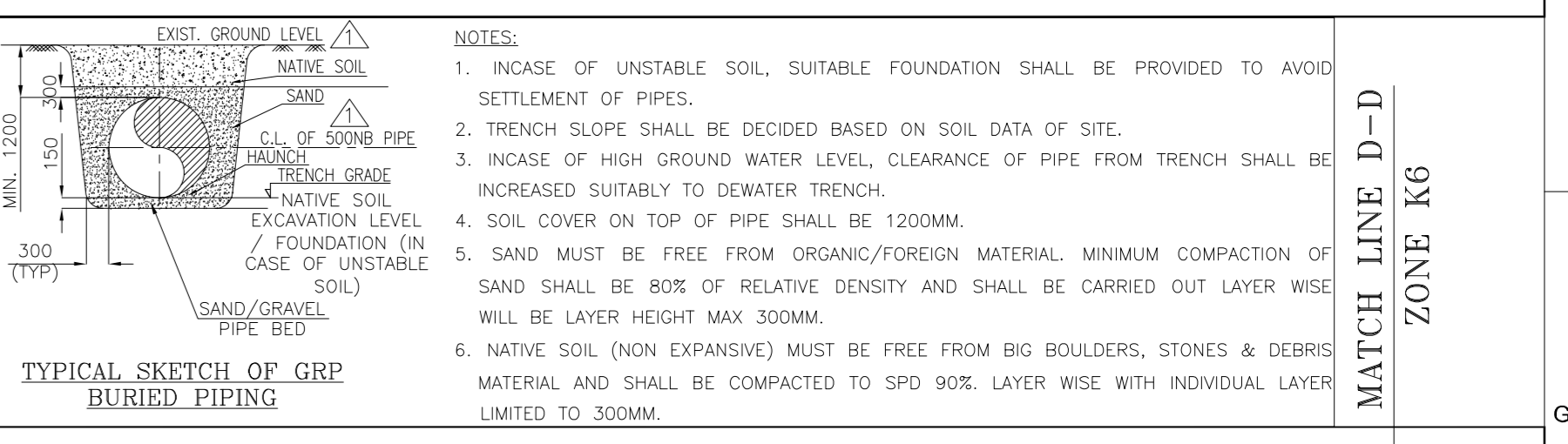
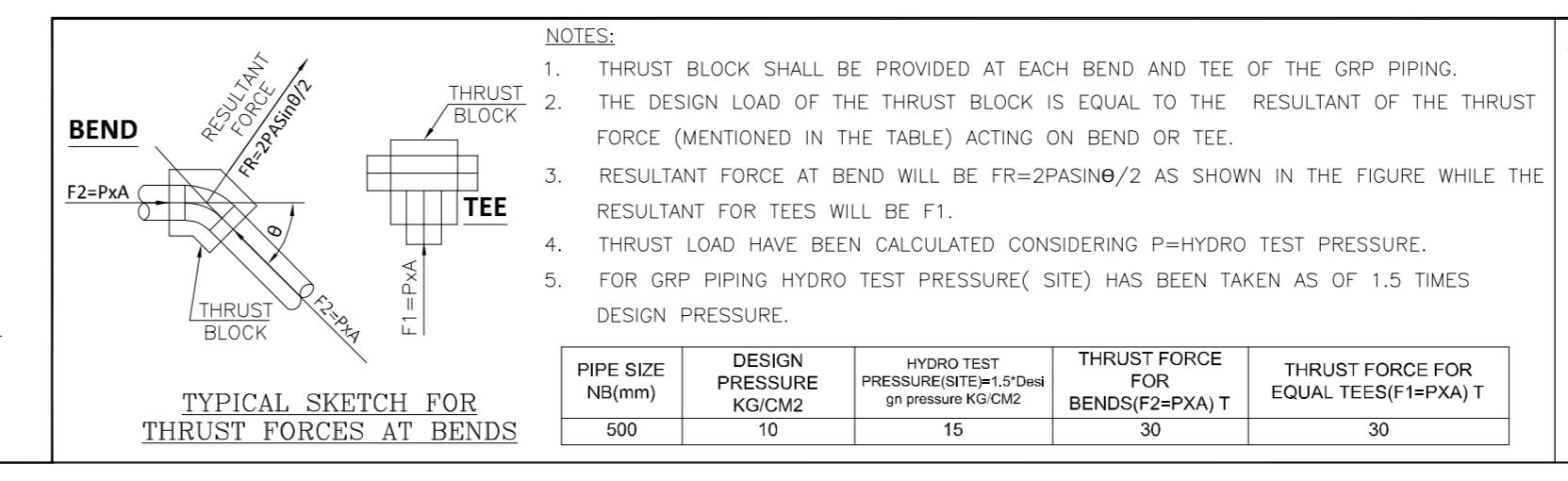
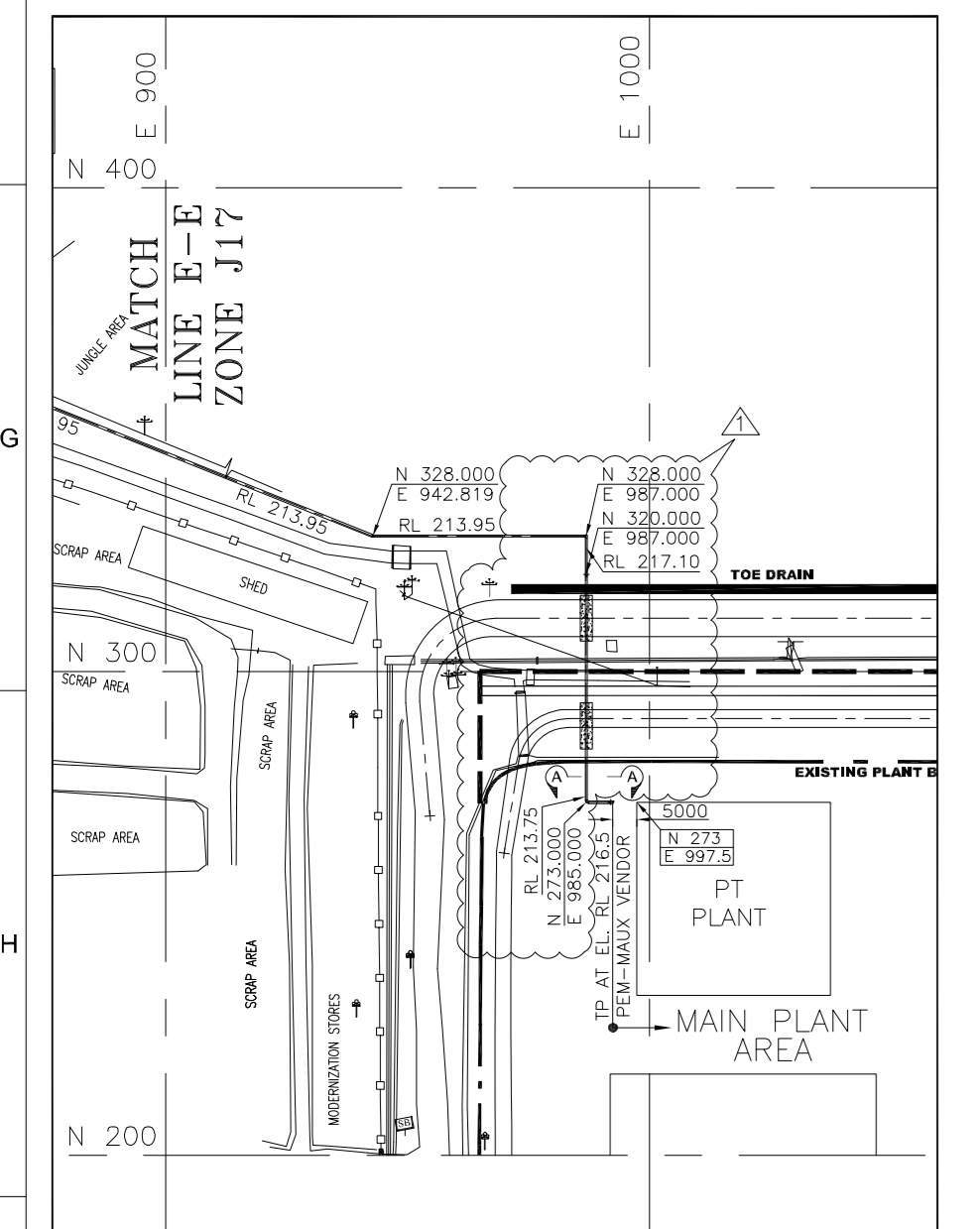
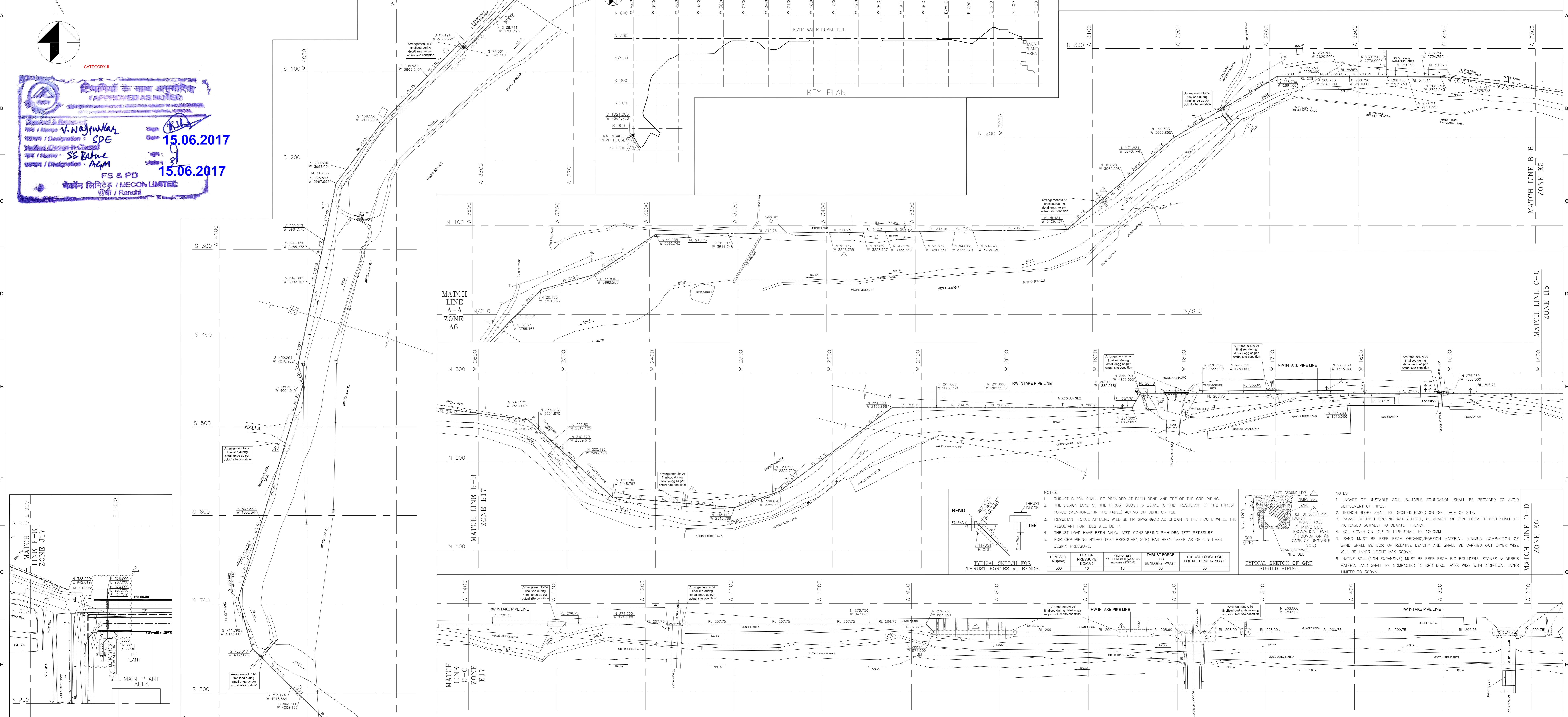
Checked by: **SS. Rastogi** Date: **15.06.2017**

Verified by: **AGM**

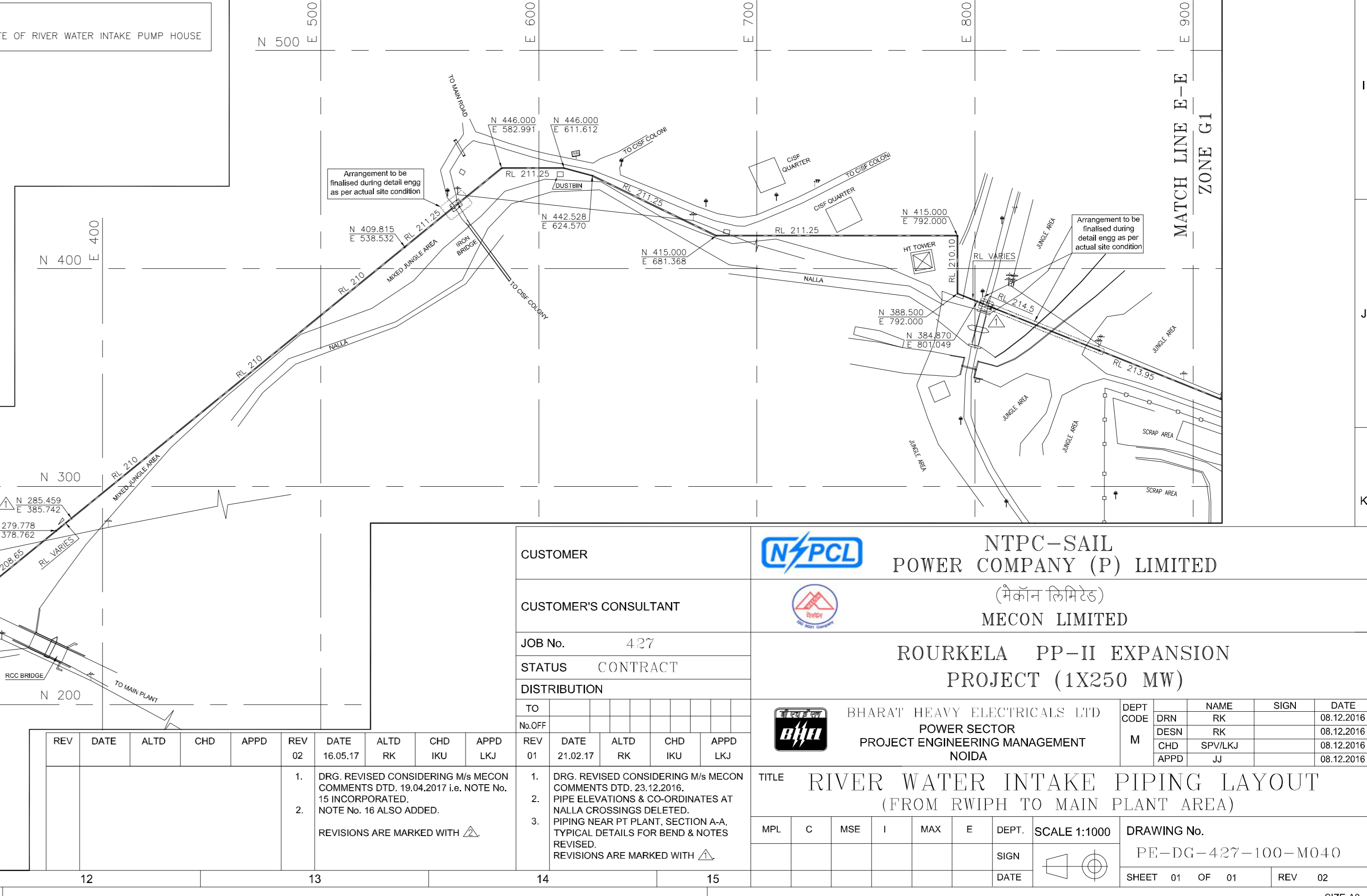
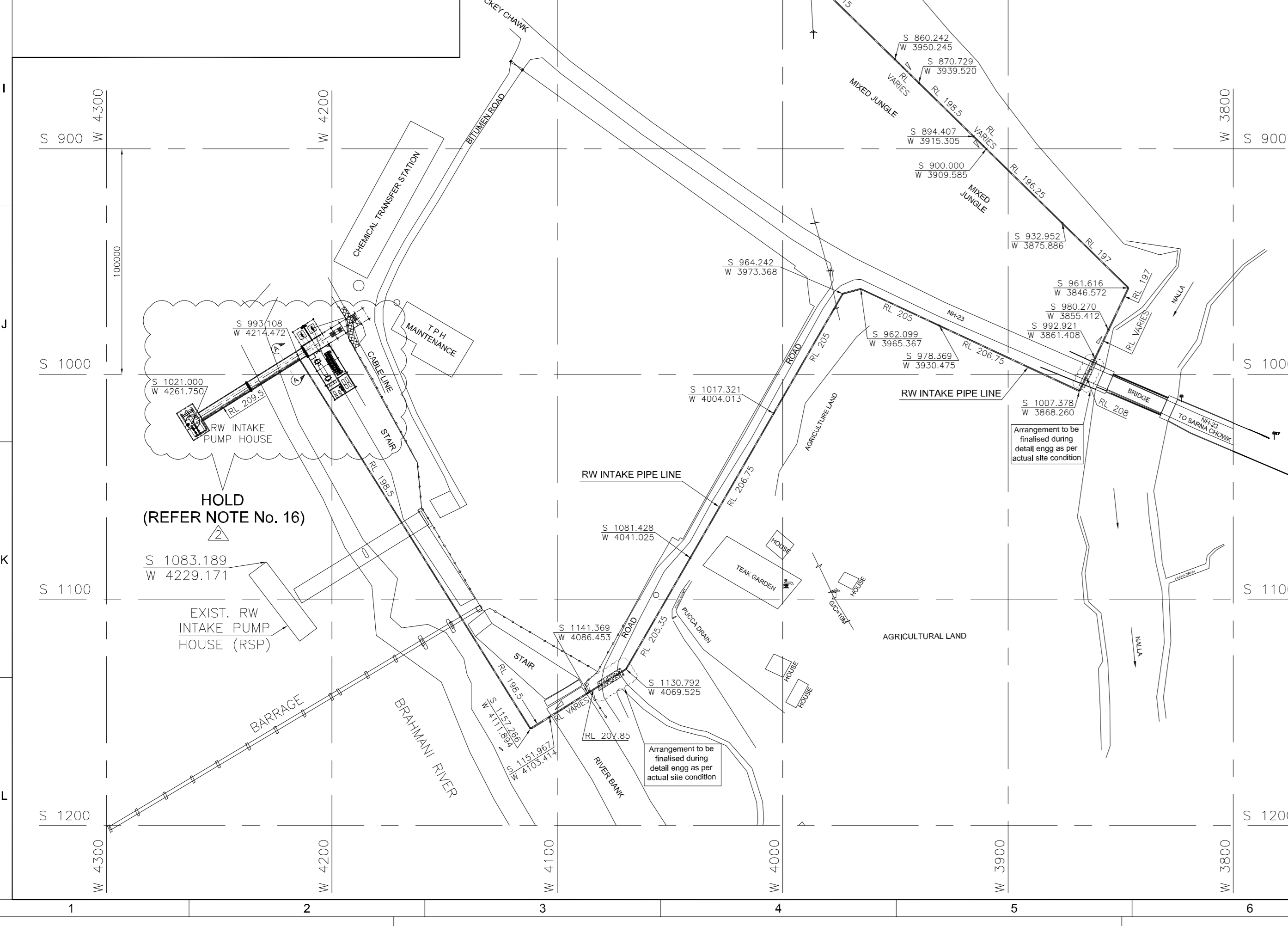
**FS & PD**

**भारत लिमिटेड / MECON LIMITED**

**राँची / Ranchi**



- NOTES:-**
- ALL DIMENSIONS ARE IN METRES UNLESS STATED OTHERWISE.
  - PIPE ELEVATIONS ARE W.R.T CENTRE LINE OF PIPE UNLESS OTHERWISE NOTED.
  - DESIGN PARAMETERS AND MATERIALS OF CONSTRUCTION SHALL BE AS PER RFP OF RIVER WATER INTAKE SYSTEM (PE-DG-427-172-N002) / STANDARD TECHNICAL SPECIFICATION OF GRP PIPING.
  - ROUTING OF PIPE IS INDICATIVE AND CAN BE CHANGED BASED ON ACTUAL CONDITION OR IN ORDER TO MEET THE TECHNICAL REQUIREMENTS.
  - BURIED GRP PIPE SHALL BE LAID WITH MINIMUM EARTH COVER OF 1.2M. THRUST BLOCKS SHALL BE PROVIDED SUITABLY AT EACH BEND/TEE FOR BURIED GRP PIPING TO TAKE CARE OF PRESSURE THRUST. THRUST BLOCKS SHALL BE DESIGNED SUITABLY BASED ON TYPICAL SKETCH FOR THRUST FORCES AT BENDS.
  - FOR TYPICAL TRENCH DETAILS, REFER TYPICAL SKETCH OF GRP BURIED PIPING.
  - ANY/POSSIBLE ROAD CROSSING WILL BE BY OPEN CUT & FILL METHOD OR BY PIPE PUSHING AS PER REQUIREMENT/APPROVAL OF CONCERNED AUTHORITIES (E. MHA/PMO/R&D ETC.).
  - FOR RIVERS/WATERWAYS/CANALS, THE PIPELINE CROSSING SHALL BE THROUGH OVER GROUND BRIDGES WITH PROVISION FOR WALKWAY FOR PIPE MAINTENANCE.
  - ROAD CROSSING/ALLAH CROSSING ARRANGEMENTS ARE INDICATIVE ONLY. ARRANGEMENT TO BE FINALIZED DURING DETAIL ENG AS PER ACTUAL SITE CONDITION.
  - ISOLATION VALVES SHALL BE PROVIDED AT AROUND EVERY 2KM. VALVES PITS SHALL BE CONSTRUCTED FOR ALL ISOLATION VALVES AND PIPE DRAINAGE FACILITY SHALL ALSO BE PROVIDED AT SUCH LOCATIONS IN ADDITION TO DRAINAGE VALVES AT LOWEST POINTS AS FAR AS POSSIBLE.
  - MIN. 200MM SIZE VALVES WITH DRAINAGE PIPELINE AT LOWEST POINT OF EACH SECTION OF THE PIPELINE BASED ON LEVELS AND SLOPE SHALL BE PROVIDED FOR DRAINAGE ARRANGEMENT.
  - 50 MM SIZE VENT VALVES SHALL BE SUITABLY LOCATED AT SITE AS PER REQUIREMENT. ANCHORING FOR ALL GRP PIPES TO BE DONE AT ALL VENT LOCATIONS.
  - INSTALLATION OF ARMS TO BE CONSIDERED AT DISTANCE OF APPROX. 150M TO 200M AT HIGHEST POINT OF PIPE ELEVATION AND AS PER TRANSCIENT (SURGE) ANALYSIS OF SYSTEM.
  - NO PIPE ROUTE IS TO COME OUTSIDE BOUNDARY OF CONCERNED AUTHORITY.
  - COORDINATES OF RW INTAKE P/H IS INDICATIVE ONLY. SAME SHALL BE FINALIZED BY RISE AFTER FINALIZATION OF TENDER FOR THIS PACKAGE & BASED ON HYDRO-DYNAMIC ANALYSIS.
  - CLEARANCE OF PIPE ROUTE, COMING OUTSIDE THE PLANT BOUNDARY OF NTPCL SHALL BE OBTAINED BY M/S BHEL FROM CONCERNED AUTHORITY BEFORE EXECUTION (AS PER CONTRACT CLAUSE NO. 01 AT WORK ORDER). RIVER WATER PUMPING SYSTEM, PRE-TREATMENT PLANT & DISINFECTION PLANT (AS PER CONTRACT CLAUSE NO. 01 AT WORK ORDER).



**CUSTOMER** NTPC-SAIL POWER COMPANY (P) LIMITED

**CUSTOMER'S CONSULTANT** MECON LIMITED

**PROJECT** ROURKELA PP-II EXPANSION PROJECT (1X250 MW)

**JOB No.** 427

**STATUS** CONTRACT

**DISTRIBUTION**

TO	DATE	BY	REVISION
...	...	...	...

**REVISIONS**

REV	DATE	ALTD	CHD	APPRO	DATE	ALTD	CHD	APPRO
1	16.05.17	...	...	...	21.02.17	...	...	...

**SCALE** 1:1000

**DRAWING No.** PE-DG-427-100-M040

**SHEET** 01 OF 01

COMPUTER FILE NAME: PT-DG-427-100-M040

**FORMAT FOR NO DEVIATION CERTIFICATE**  
**(To be submitted in the bidder's letter head)**

BHARAT HEAVY ELECTRICALS LIMITED,  
Power Sector - Eastern Region,  
Plot no 9/1, DJ Block, Sector – II, Salt Lake City,  
Kolkata – 700 091

Sub	No Deviation Certificate.	
Job	Design, Engineering, Manufacturing, Supply, Erection, Testing, Commissioning, etc. of Raw water intake system including Cross Country GRP Pipeline for 1x250 MW unit at PP-II Expansion, NSPCL, Rourkela, Odisha.	
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	11.0	BHEL's TCN-09, vide reference no PSER:SCT:RKL-M1828:TCN-09, Dated 01-07-2017.
	12.0	All other pertinent issues till date.

Dear Sirs,

With reference to above, this is to confirm that as per tender conditions, we have visited site before submission of our offer and noted the job content & site conditions etc. We also confirm that we have not changed/ modified the tender documents as appeared in the website/ issued by you and in case of such observance at any stage, it shall be treated as null and void.

We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT. We hereby confirm our unqualified acceptance to all terms & conditions, unqualified compliance to technical specification, integrity pact (if applicable) and acceptance to reverse auctioning process.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null & void.

We confirm to have submitted/uploaded offer/documents in accordance with tender instructions with acceptance of the terms & conditions of the tender by us and as per aforesaid references.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorized  
representative of the bidder)

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय)

POWER SECTOR EASTERN REGION DJ-9/1, SECTOR-II, SALTLAKE CITY, KOLKATA - 700 091

फैक्स/Fax : (033) 23211960 फोन/Phone : बोर्ड/EPABX : 033-2339 8000