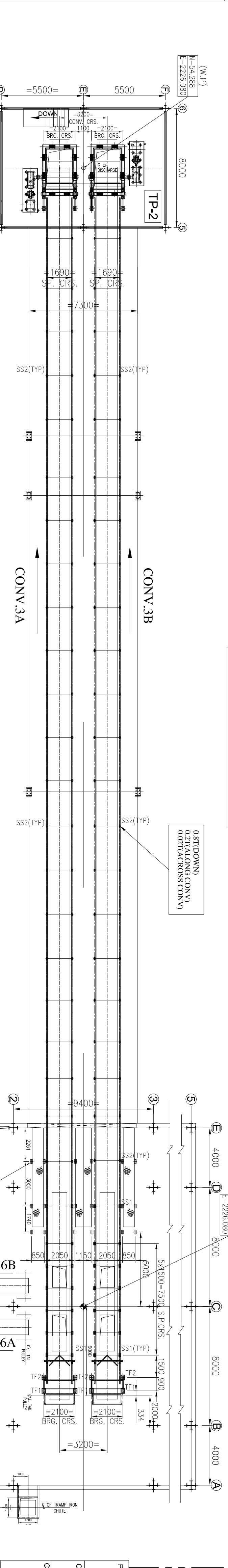
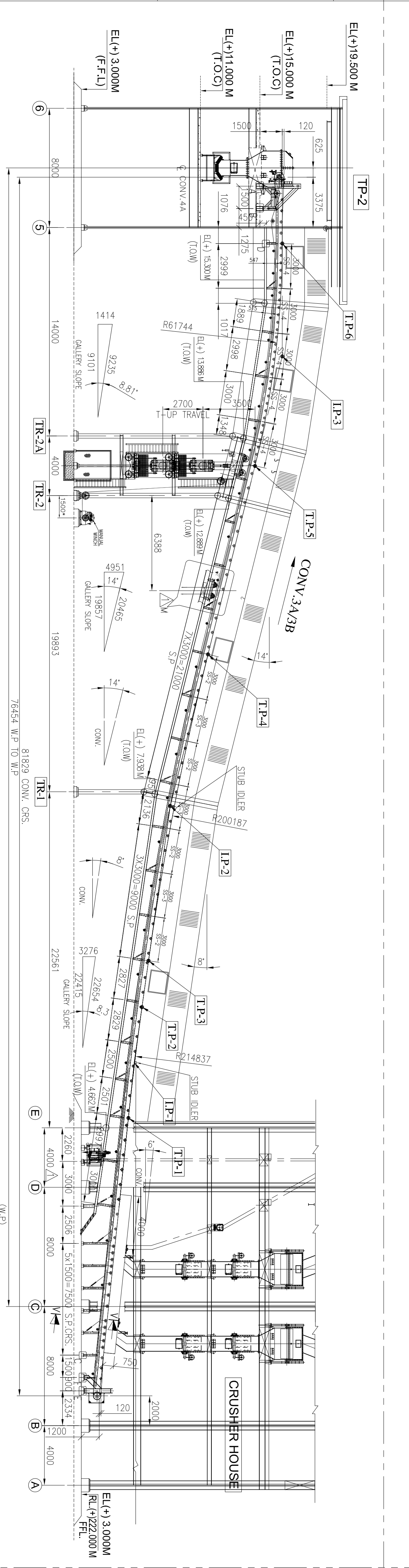
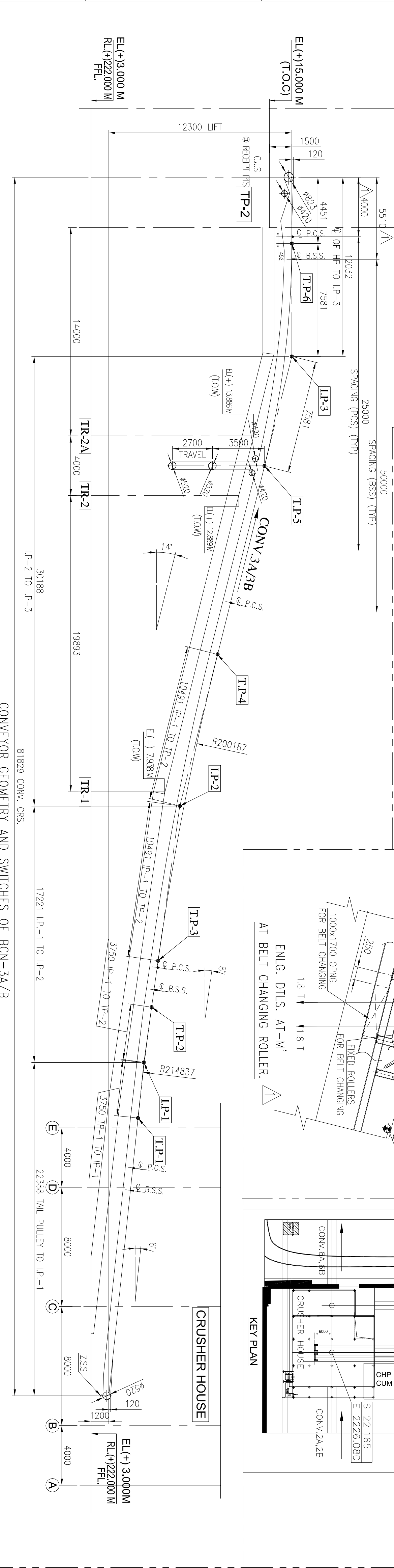
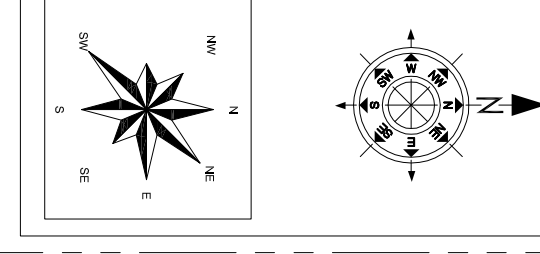
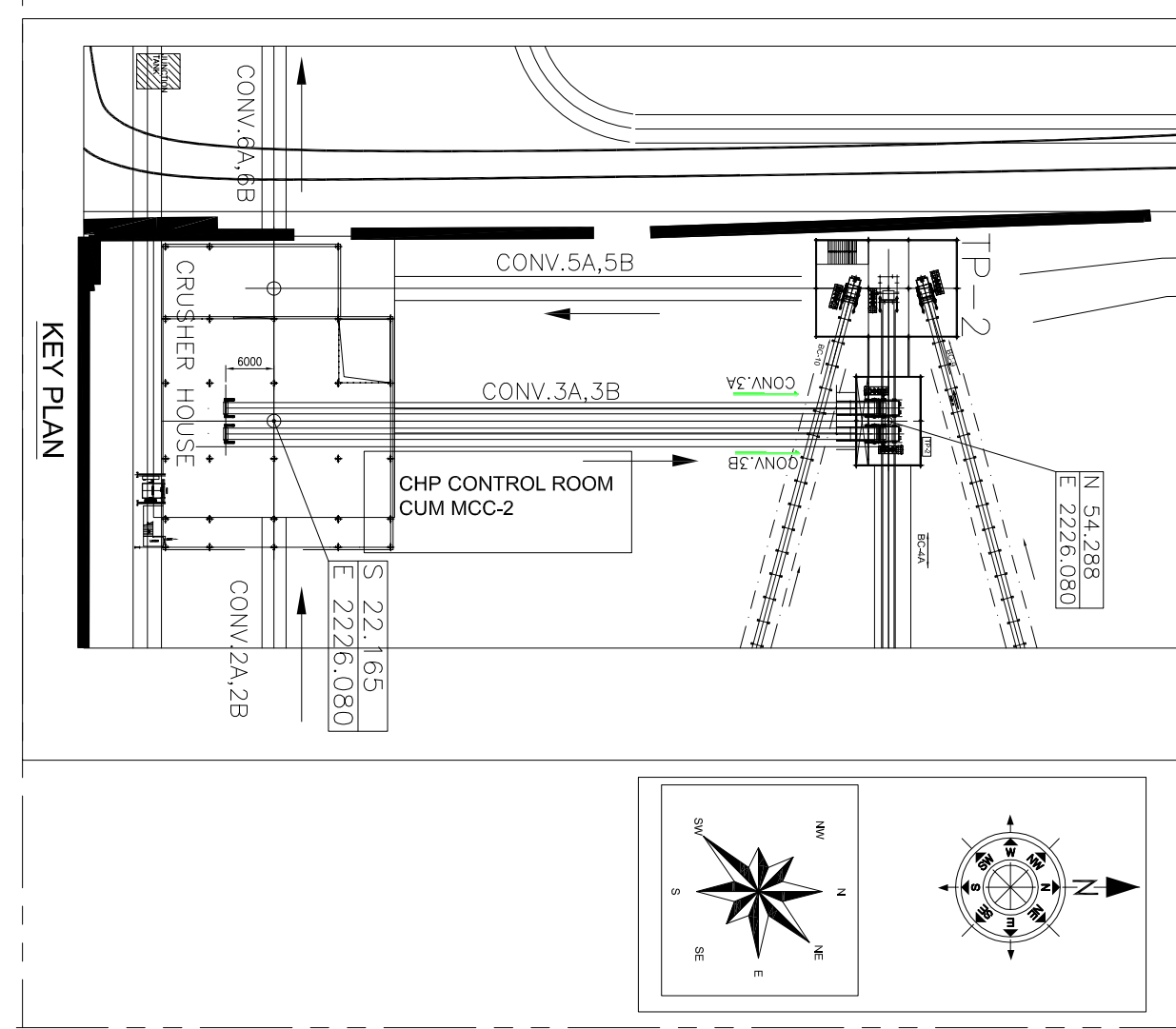
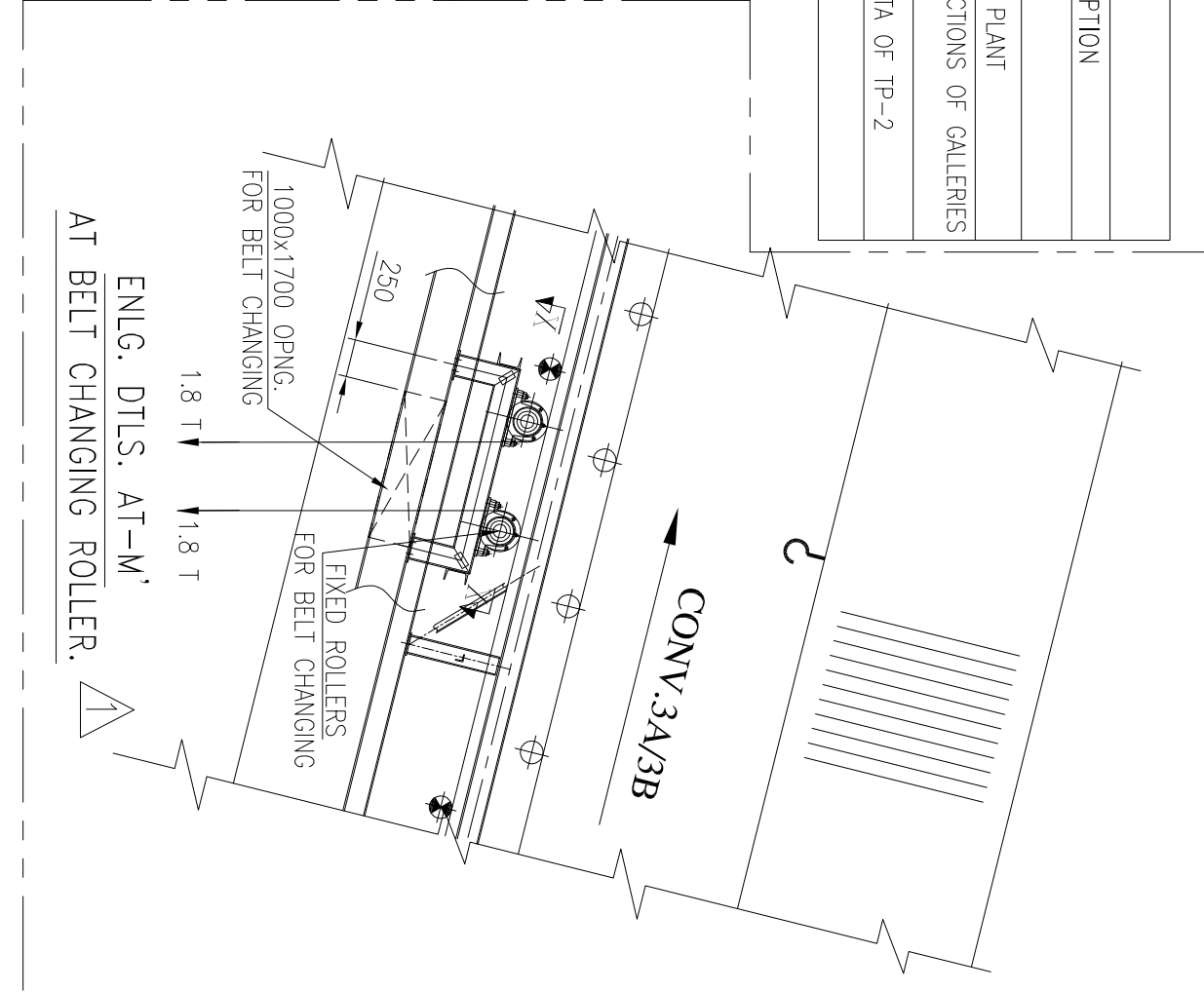


| CUSTOMER : NTPC SAIL Power Supply Company Pvt. Ltd. |                                                     |                                                                                                        |                                                                                                                                                                                            |                                                                                                             |
|-----------------------------------------------------|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| PROJECT : 1X250 MW Rourkela Power Project PP-II     |                                                     |                                                                                                        |                                                                                                                                                                                            |                                                                                                             |
| Sl. No.                                             | Comments zone                                       | MECON/NSPCL comments                                                                                   | BHEL Compliance/Clarifications Dtd.                                                                                                                                                        | Remarks                                                                                                     |
| Comments marked on the attached Drg.                |                                                     |                                                                                                        |                                                                                                                                                                                            |                                                                                                             |
| Document Title : GA & LOAD DATA OF CONV-3AB         |                                                     |                                                                                                        |                                                                                                                                                                                            |                                                                                                             |
| Document Number :IS-1-GA-708-101-M010, REV-2        |                                                     |                                                                                                        |                                                                                                                                                                                            |                                                                                                             |
| 1                                                   | SHEET-1                                             | pulley details (Shell Thk, lagging rubber hardness, Brg type, brg dia etc) to be indicated as per DBR. | Indicated                                                                                                                                                                                  | All the parameters are shown inline with the parameters shown in Cat-I drawing of GA & Load data of conv-9. |
| 2                                                   | SHEET-1                                             | Idler details ( Brg type,Brg dia etc) to be indicated as per DBR.                                      | All technical spec is provided                                                                                                                                                             |                                                                                                             |
| 3                                                   | SHEET-1                                             | Pull Chord switch shall be addressable type.                                                           | Complied. Details shall be furnished in the electrical drawing                                                                                                                             |                                                                                                             |
| 4                                                   | SHEET-1                                             | Scarper material shall be noted as per DBR.                                                            | Complied and incorporated                                                                                                                                                                  |                                                                                                             |
| 5                                                   | SHEET-1                                             | Stub idler to be added in the BOQ.                                                                     | Added                                                                                                                                                                                      |                                                                                                             |
| 6                                                   | SHEET-1                                             | Chue jamming detector to be considered.                                                                | Considered and provided                                                                                                                                                                    |                                                                                                             |
| 7                                                   | SHEET-1                                             | Cat ladder to be placed inside the take up tower.                                                      | Inorder to ensure better availability of walkway on the maintenance platform floors, we have provided ladder outside. We request Mecon to accept this proposal.                            |                                                                                                             |
| 8                                                   | ELEVATION SHEET-1                                   | platform upto 200 mm height from FFL to be made.                                                       | 6AB conveyor is starting from very close to 3AB conveyor. Hence the walkway plaform cannot be extended as it will occupy the maintenance space of tail end of 6AB.                         |                                                                                                             |
| 9                                                   | ELEVATION SHEET-1                                   | Beam for Hoist                                                                                         | Provided                                                                                                                                                                                   |                                                                                                             |
| 10                                                  | DETAIL OF VERTICAL GRAVITY TAKE UP SHEET-2          | E.HOIST & BEAM SHALL BE EXTENDED BEYOND THE TOWER.                                                     | E hoist provided                                                                                                                                                                           |                                                                                                             |
| 11                                                  | PLAN AT EL(+ )6.000M & EL(+ )9.500M (T.O.S) SHEET-2 | Cat ladder to be placed inside.                                                                        | Inorder to ensure better availability of walkway on the maintenance platform floors, we have provided ladder outside. We request Mecon to accept this proposal.Shown as per structural drg |                                                                                                             |
|                                                     |                                                     |                                                                                                        |                                                                                                                                                                                            |                                                                                                             |

- NOTES:-
1. ALL DIMENSIONS ARE IN MM & ANGLES ARE IN DEGREES.
  2. ELEVATIONS ARE REFERRED TO THE FINISHED FLOOR TO THE POWER HOUSE BUILDING AS EL. 0.00 M WHICH CORRESPONDS TO RL(+219.0 M. ABOVE MEAN SEA LEVEL.
  3. FINISH FLOOR LEVEL CORRESPONDS TO FFL OF TURBINE HALL BUILDING.
  4. PLANT LEVEL SHOWN IN THE DRAWING ARE 500MM ABOVE FFL. ALL OTHER LEVELS SHOWN ARE WRT PLANT LEVEL.
  5. GALLERY SUPPORTING TRUSSTLE TYPES AND TRUSSTLE LOCATIONS INDICATED IN THIS DRG.
  6. ARE TENTATIVE AND FINALLY THEY SHALL BE AS PER STRUCTURAL DRGS.
  7. CIVIL REQUIREMENT INDICATED TENTATIVE.
  8. CURB WALL BE PROVIDED AROUND ALL OPENINGS.
  9. INSPECTION DOOR SHALL BE LEAK PROOF.
  10. PLEASE REFER THIS DRG WITH SHEET 2 & 3 OF 3
  11. FOR SS-2 & SS-1 DETAILS REFER SHEET 3 OF 3

| LEGEND FOR CONVEYOR |                            |         |
|---------------------|----------------------------|---------|
| ⊕                   | CARRYING IDLER             | C.I     |
| ⊕                   | TRANSITION IDLER           | T.I     |
| ⊕                   | 2 ROLL RETURN IDLER        | R.I     |
| ⊕                   | FLAT RETURN IDLER          | F.R.I   |
| ⊕                   | IMPACT IDLER               | I.I     |
| ⊕                   | SELF CLEANING RETURN IDLER | S.C.I   |
| ⊕                   | CARRYING IDLER             | S.A.C.I |
| ⊕                   | DEFLECTOR ROLLER           | D.R     |
| ⊕                   | PULL CHORD SWITCH          | P.CS    |
| ⊕                   | BELT SWAY SWITCH           | B.SS    |
| ⊕                   | ZERO SPEED SWITCH          | Z.SS    |
| ⊕                   | WORKING POINT              | W.P     |
| ⊕                   | HEAD PULLEY                | H.P     |
| ⊕                   | TAIL PULLEY                | T.P     |
| ⊕                   | BEND PULLEY                | B.P     |

| REFERENCE DRAWINGS/DOCUMENTS |                                            |
|------------------------------|--------------------------------------------|
| DRG. NO.                     | DESCRIPTION                                |
| IS-0-PL-708-100-M001         | COAL FLOW DIAGRAM                          |
| IS-1-FL-708-100-M002         | LAYOUT OF COAL HANDLING PLANT              |
| IS-1-GA-708-100-M003         | TYPICAL GALLERY CROSS-SECTIONS OF GALERIES |
| IS-1-CA-708-104-M023         | MECHANICAL GA & LOAD DATA OF TP-2          |
| IS-1-GA-708-104-M030         | GA OF CRUSHER HOUSE                        |



|                                             |  | TECHNICAL SPECIFICATION                                                        |  | QTY FOR EACH MAKE |  |
|---------------------------------------------|--|--------------------------------------------------------------------------------|--|-------------------|--|
|                                             |  | BCN-3A/B                                                                       |  | -                 |  |
| CONVEYOR NO/EQUIPMENT NO.                   |  | 1000/1200                                                                      |  | -                 |  |
| RATED CAPACITY/DESIGN CAPACITY (TPH)        |  | 1400/35°                                                                       |  | -                 |  |
| BELT WIDTH (MM)/TROUGHING ANGLE             |  | 12.300                                                                         |  | -                 |  |
| VERTICAL LIFT (M)                           |  | 81.829 M                                                                       |  | -                 |  |
| HORIZONTAL CRS. (M)                         |  | 82.945 M                                                                       |  | -                 |  |
| PROFILE LENGTH (MM)                         |  | 180.576 M                                                                      |  | -                 |  |
| ENDLESS BELT LENGTH (CONSIDERING SAG) (MM)  |  | 2.8                                                                            |  | -                 |  |
| SPEED - NOMINAL (M/SEC.)                    |  | COAL                                                                           |  | -                 |  |
| MATERIAL                                    |  | 0.8                                                                            |  | -                 |  |
| BULK DENSITY FOR CONVEYOR SIZING (TON/CU.M) |  | 1.1                                                                            |  | -                 |  |
| FOR STRUCTURAL DESIGN (TON/CU.M)            |  | (-)20                                                                          |  | -                 |  |
| LUMP SIZE (MM)                              |  | 15%                                                                            |  | -                 |  |
| MOISTURE CONTENT                            |  | AMBIENT (MAX. 50°)                                                             |  | -                 |  |
| MATERIAL TEMP.                              |  | N/A                                                                            |  | HD                |  |
| TYPE                                        |  | 630/4                                                                          |  | -                 |  |
| RATING                                      |  | 6                                                                              |  | -                 |  |
| TOP COVER THICKNESS (MM)                    |  | 3                                                                              |  | -                 |  |
| BOTTOM COVER THICKNESS (MM)                 |  | 11=69.78/12=30.50, 11=8.53, 12=30.50, 13=28.19/14=27.99, 13=38.06/14=37.86     |  | -                 |  |
| BELT TENSION (kN)                           |  | VULCANIZED                                                                     |  | -                 |  |
| TYPE OF JOINT                               |  | TFC 12. PH5. TEMP RES. - CLASS-E                                               |  | 1 No.             |  |
| POWER RATING(KW)/RPM/FRAME SIZE             |  | 132                                                                            |  | APRD MAKE         |  |
| SUPPLY VOLTAGE / DUTY                       |  | 415V, 3PHASE, 50Hz                                                             |  | -                 |  |
| TYPE                                        |  | BCEV HELICAL                                                                   |  | 1 No.             |  |
| MODEL NO                                    |  | CQC-280 FAN COOLED                                                             |  | -                 |  |
| HOLD BACK                                   |  | YES                                                                            |  | -                 |  |
| RATIO                                       |  | 22.4:1                                                                         |  | -                 |  |
| MECHANICAL/THERMAL RATING KW                |  | 189kW/3000kW                                                                   |  | -                 |  |
| BRAKE TYPE                                  |  | M                                                                              |  | -                 |  |
| TYPE/SIZE                                   |  | HFD-9                                                                          |  | -                 |  |
| RATING KW                                   |  | 172kW                                                                          |  | -                 |  |
| TYPE/SIZE                                   |  | FCG-7                                                                          |  | 1 No.             |  |
| LOW SPEED RATING KW/100 rpm                 |  | 390                                                                            |  | -                 |  |
| TAKE UP TYPE                                |  | VGTU                                                                           |  | -                 |  |
| TRAVEL (MM)                                 |  | 2700                                                                           |  | -                 |  |
| COUNTER WEIGHT-EFFECTIVE (IN TON)           |  | 5.4T                                                                           |  | -                 |  |
| DRIVE TYPE                                  |  | TAILORED                                                                       |  | -                 |  |
| PULLEYS (IS:8531)                           |  | DIAMETER MM/NOS.                                                               |  | -                 |  |
| LAGGING THK.MM                              |  | -                                                                              |  | -                 |  |
| ALL OTHER PULLEYS                           |  | 10 MM PLAIN NATURAL RUBBER 55A                                                 |  | -                 |  |
| 3 ROLL 10° TRANSITION IDLERS                |  | Ø152.4 ERW .S.41THK. BRG NO.-6206                                              |  | 2 Nos.            |  |
| 3 ROLL 20° TRANSITION IDLERS                |  | Ø152.4 ERW .S.41THK. BRG NO.-6206                                              |  | 2 Nos.            |  |
| 3 ROLL 35° CARRYING IDLERS                  |  | Ø152.4 ERW .S.41THK. BRG NO.-6206                                              |  | 66 Nos.           |  |
| 3 ROLL 35° IMPACT IDLERS                    |  | Ø152.4 ERW .S.41THK. BRG NO.-6206, OD Ø 205                                    |  | 13 Nos.           |  |
| 3 ROLL 35° SELF ALIGNING CARRYING IDLERS    |  | Ø152.4 ERW .S.41THK. BRG NO.-6206                                              |  | 5 Nos.            |  |
| SUB IDLER                                   |  | Ø152.4 ERW .S.41THK. BRG NO.-6206                                              |  | 2 Nos.            |  |
| 2 ROLL RETURN IDLER                         |  | Ø152.4 ERW .S.41THK. BRG NO.-6206                                              |  | 21 Nos.           |  |
| 2 ROLL SELF ALIGNING RETURN IDLER           |  | Ø152.4 ERW .S.41THK. BRG NO.-6206                                              |  | 3 Nos.            |  |
| 2 ROLL SELF CLEANING RETURN IDLER           |  | Ø152.4 ERW .S.41THK. BRG NO.-6206                                              |  | 3 Nos.            |  |
| DEFLECTOR ROLLER                            |  | Ø219x6MM THK. MS PLATE. 65MM SHAF-T                                            |  | 1 No.             |  |
| BELT CHANGING ROLLER                        |  | Ø152.4 ERW .S.41THK. BRG NO.-6206                                              |  | 2 Nos.            |  |
| INTERNAL SCRAPPER TYPE                      |  | V-PILOUGH TYPE PU BLADE                                                        |  | 1 No.             |  |
| EXTERNAL SCRAPER TYPE                       |  | TORON AWM TYPE PU MULTIBLADE                                                   |  | 1 No.             |  |
| SPRING BLADE WITH TUNGSTEN CARBIDE TIP      |  | 3.15MM THK. MS THROUGH-OUT                                                     |  | 1 No.             |  |
| DECK PLATE                                  |  | 3.15MM THK. MS THROUGH-OUT                                                     |  | 1 LOT.            |  |
| HEAD FRAME TAIL FRAME & BEND FRAME          |  | ROLLED SECTION/FAB STRUCT IS-2062                                              |  | 1 EACH            |  |
| STRINGER                                    |  | ROLLED SECTION/FAB STRUCT IS-2062                                              |  | 1 EACH            |  |
| SHORT SUPPORT                               |  | ISM-150 (IS-2062)                                                              |  | 1 LOT             |  |
| DISCHARGE CHUTE                             |  | ISM-125 (IS-2062)                                                              |  | 1 LOT             |  |
| PULL CHORD SWITCH /LOCATION                 |  | 20mm thk ISMB/SHUTTERD on sliding zone & 10mm thk MS plate on non sliding zone |  | 1 LOT             |  |
| BELT SWAY SWITCH/LOCATION                   |  | 25 M SPACING                                                                   |  | 4 PAIRS.          |  |
| ZERO SPEED SWITCH/LOCATION                  |  | 50 M SPACING                                                                   |  | 3 PAIRS.          |  |
| SAFETY SWITCHES                             |  | ONE FOR EACH CONVEYOR MOUNTED AT TAIL PULLEY                                   |  | 1 NO.             |  |
| CHUTE BLOCK SWITCH/LOCATION                 |  | 1 LOT                                                                          |  | 1 LOT             |  |

|                                                        |  |                                                             |  |                |  |
|--------------------------------------------------------|--|-------------------------------------------------------------|--|----------------|--|
| OWNER: <b>MECON LIMITED</b>                            |  | PROJECT: <b>ROURKELA PP-II EXPANSION PROJECT (IX250 MW)</b> |  | DATE: 22-12-16 |  |
| CONSULTANT: <b>MECON LIMITED</b>                       |  | PROJECT: <b>NTPC-SAIL POWER COMPANY PVT. LTD.</b>           |  | DATE: 22-12-16 |  |
| TITLE: <b>GA &amp; LOAD DATA OF BCN-3AB (1400 B.W)</b> |  | PROJECT: <b>ROURKELA PP-II EXPANSION PROJECT (IX250 MW)</b> |  | DATE: 22-12-16 |  |
| BHEL JOB NO. <b>IS-1-GA-708-101-M010</b>               |  | PROJECT: <b>ROURKELA PP-II EXPANSION PROJECT (IX250 MW)</b> |  | DATE: 22-12-16 |  |
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