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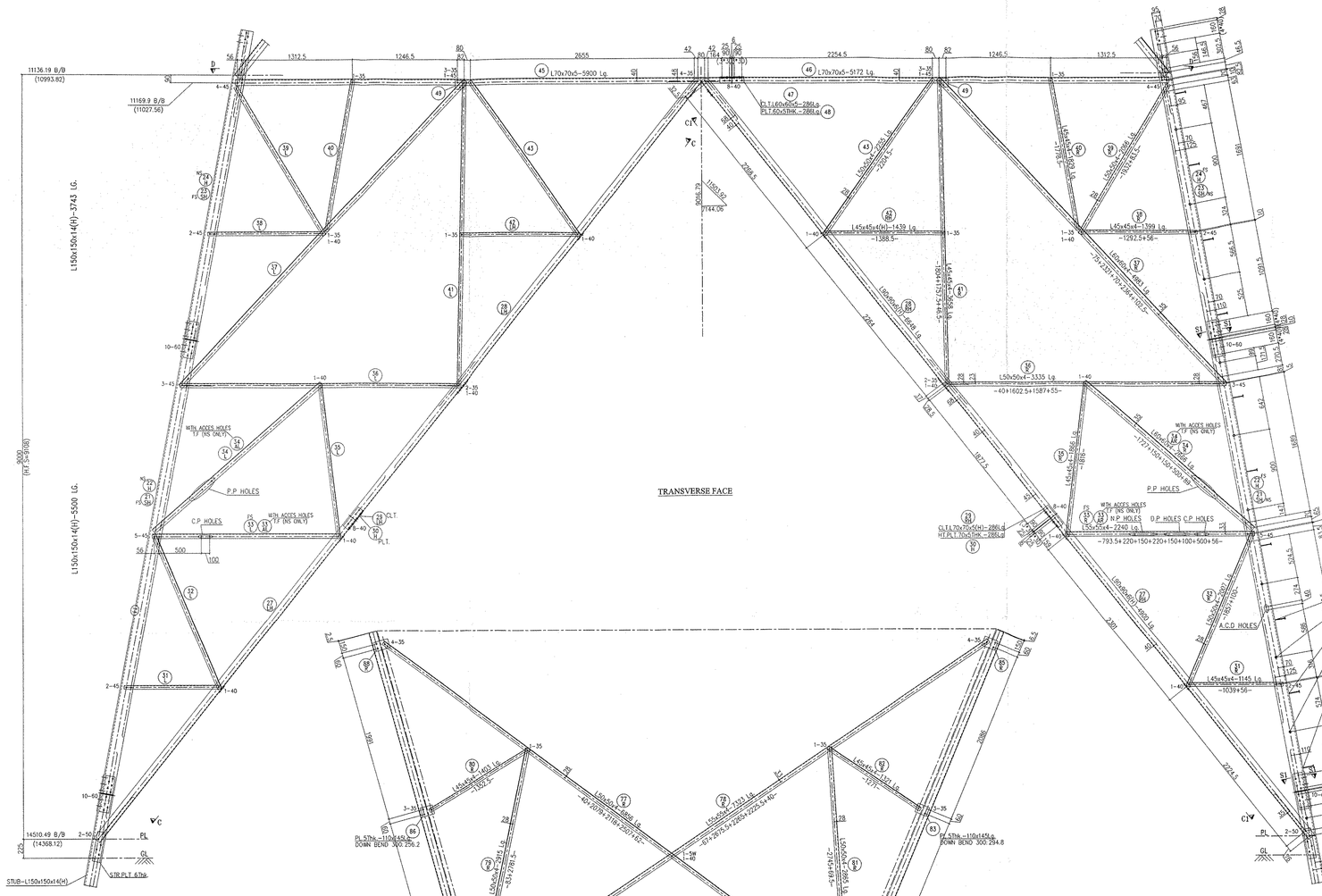
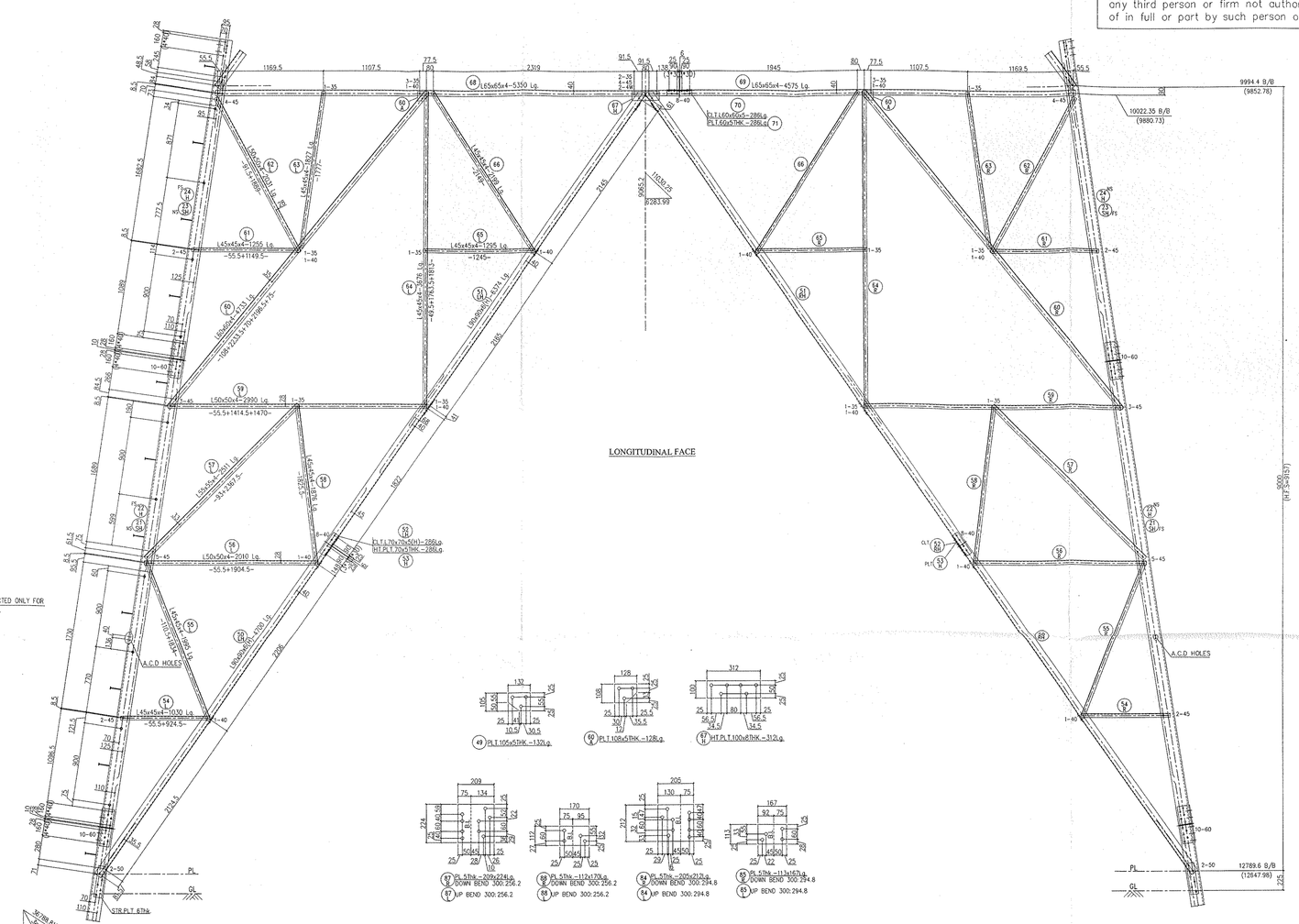
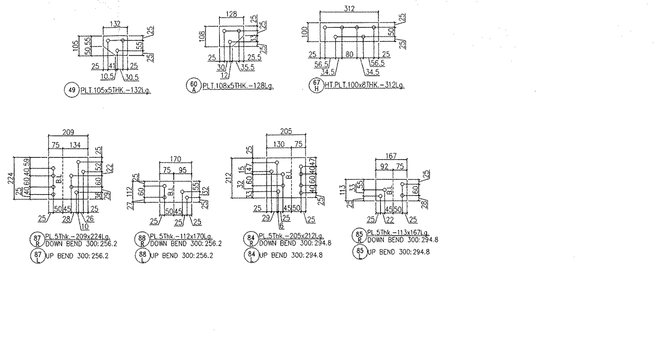
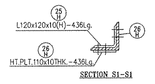
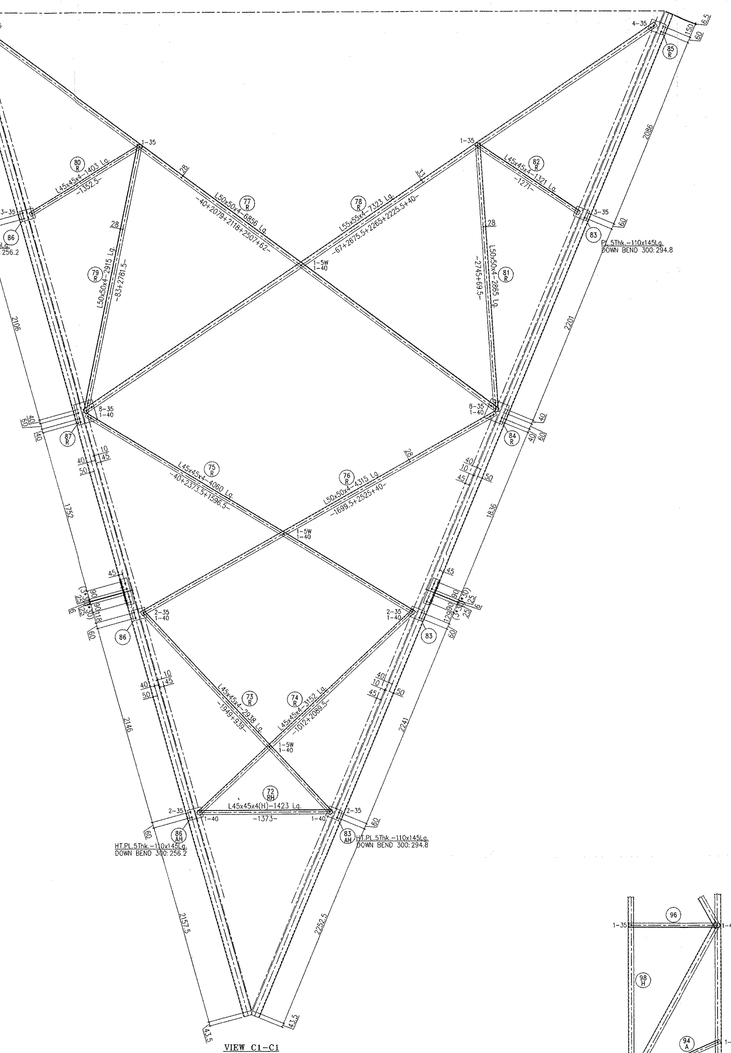
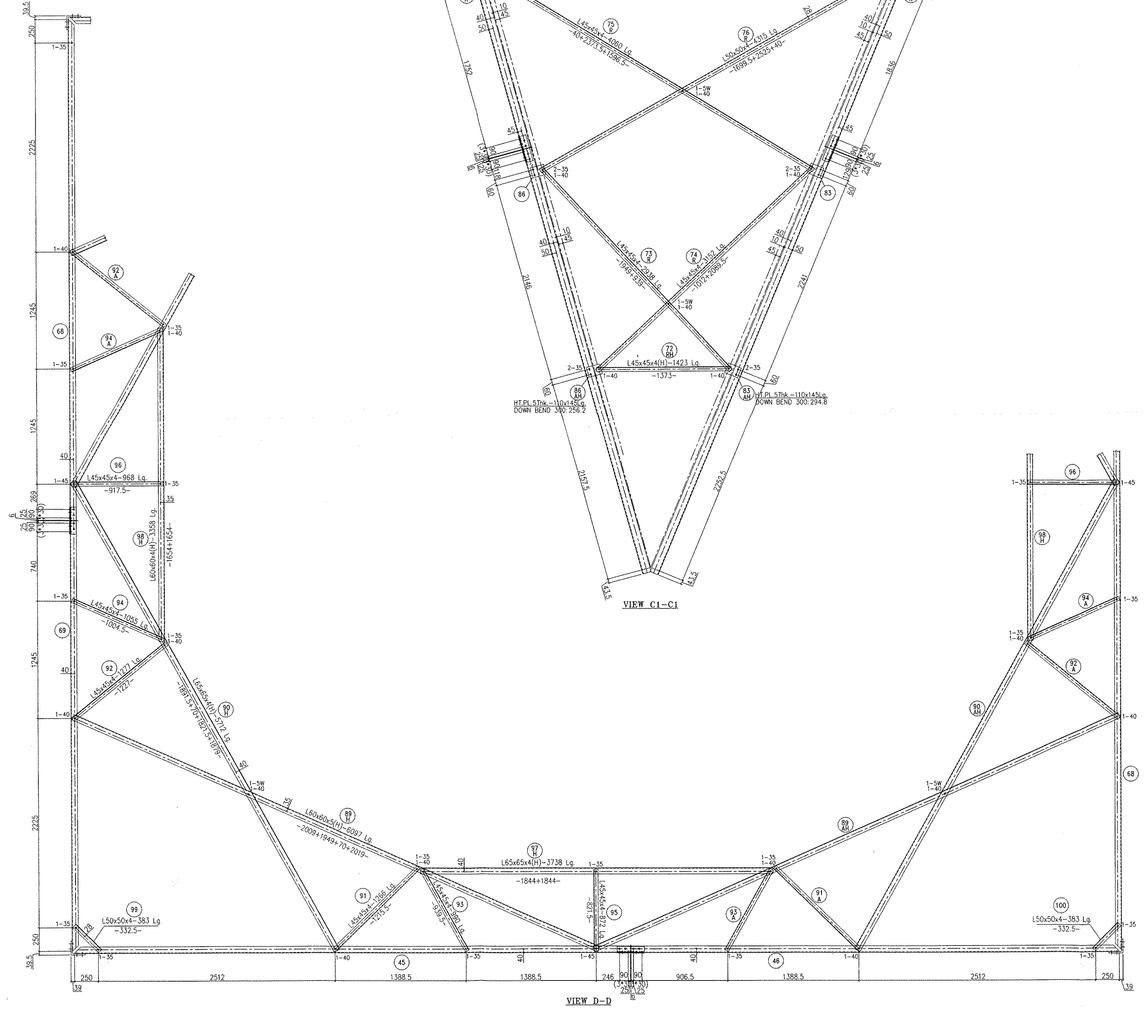


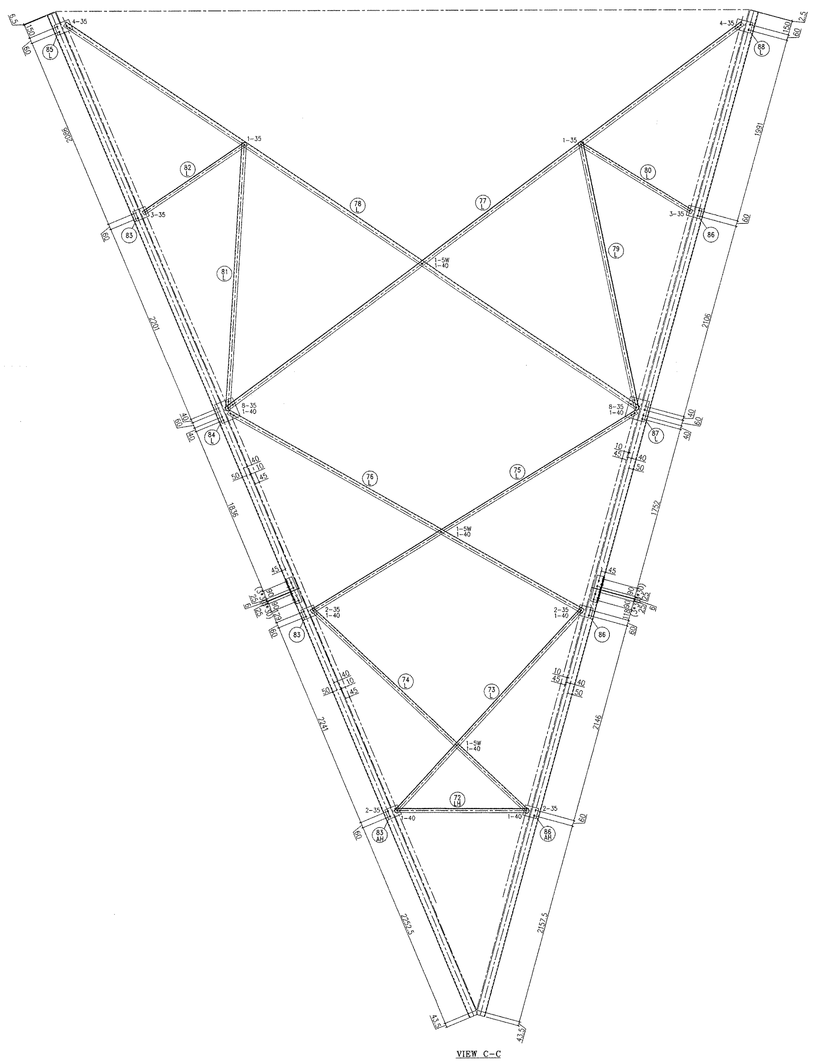



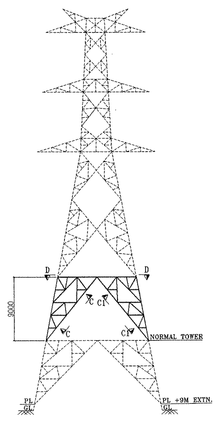


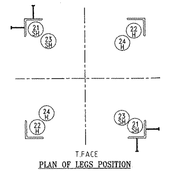




| REQUIREMENT OF BOLTS, NUTS & WASHERS | | | |
|---|---|---|---|
| SIZE | QTY. | GRADE | REMARKS |
| 16ø x 35mm Lg. | 264 | 5.6 | BOLTS & NUTS |
| 16ø x 40mm Lg. | 220 | 5.6 | BOLTS & NUTS |
| 16ø x 45mm Lg. | 144 | 5.6 | BOLTS & NUTS |
| 16ø x 50mm Lg. | 16 | 5.6 | BOLTS & NUTS |
| 16ø x 60mm Lg. | 160 | 5.6 | BOLTS & NUTS |
| 16ø x 3.5 THK | 784 | - | SPRING WASHERS |
| 16ø x 175mm Lg. | 32 | - | STEP BOLTS |
| | | | |
| 16ø x 4 THK | 4 | - | PACK WASHERS |
| 16ø x 5 THK | 16 | - | PACK WASHERS |




PLAN OF LEGS POSITION

NOTES:

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED.
2. BOLT SYMBOLS 16ø = 17.5ø HOLES
   16ø = 17.5ø HOLES FOR STEP BOLTS
3. ALL ERECTION MARKS ARE TO BE PREFIXED WITH "77840A"
4. STRUCTURAL STEEL SHALL BE AS PER IS 2062-2011
   (i) MILD STEEL - GRADE E250 QUALITY A - UNLESS OTHERWISE SPECIFIED.
   (ii) "H" STANDS FOR HIGH TENSILE STEEL - GRADE E350 QUALITY A
5. BOLTS & NUTS SHALL CONFORM TO IS : 12427-2001 (R-2007) FOR DIMENSIONS AND IS : 1367 (PART 3)-2002 FOR MECHANICAL PROPERTIES
6. GALVANISING SHALL CONFORM TO IS:2629-1985 (R-2006) & IS:4759-1996 (R-2006)
7. SPRING WASHER SHALL BE CONFORM TO IS 3063-1994 (R-2004)
8. STEP BOLTS SHALL BE PROVIDED ON THE DIAGONALLY OPPOSITE LEGS.
9. ALL PARTS/ MEMBERS OF TESTED TOWER SHOULD BE PUNCHED WITH PART NUMBER PREFIXED WITH 'T' IN ADDITION TO THE STANDARD MARK NUMBERS

PART NO. 21 TO 100

PART NO. 44 NOT USED

**SUCCESSFULLY TESTED AT L&T-TLTRS-KANCHIPURAM ON 30th OF JULY 2019**

| DATE | REV.NO. | DESCRIPTION | DESIGNED (STRUCTURAL) | CHECKED (STRUCTURAL) | DRAWN (DETAILING) | CHECKED (DETAILING) | APPROVED |
|---|---|---|---|---|---|---|---|
| 31.07.19 | 1 | SUBMISSION AFTER SUCCESSFUL TESTING | PB | RJR | MBR | PU/BSR | CSR |
| 05.04.19 | 0 | FIRST SUBMISSION FOR APPROVAL BEFORE PROTO | PB | RJR | MR | SVR/BSR | CSR |

REVISIONS

**CLIENT :** BIHAR STATE POWER TRANSMISSION CO.LTD., PATNA

**SUPPLIER / CONTRACTOR :** L&T Construction — Power Transmission & Distribution

**PROJECT :** PACKAGE - NIT 77 UNDER STATE PLAN [80:20], CONSTRUCTION OF :
(I) LILO OF BARH-PATNA 400 KV D/C ( QUAD) TL AT BAKHTIYARPUR (LINE LENGTH 10RKM),
(II) 220 KV D/C BAKHTIYARPUR - SHEIKHPURA TL (ACSR ZEBRA) (LINE LENGTH - 51 RKM)
(III) 220 KV D/C BAKHTIYARPUR -HATHIDAH TL (ACSR ZEBRA) (LINE LENGTH -32 RKM) AND
(IV) 220 KV D/C BAKHTIYARPUR – FATHUA TL (ACSR ZEBRA) (LINE LENGTH - 28 RKM)

**JOB No. :** 01808B-T-TL

| | NAME | DATE |
|---|---|---|
| DSGN | PB | 10.03.19 |
| DRWN | MR | 20.03.19 |
| CHKD | SVR/BSR | 20.03.19 |
| APPD | CSR | 20.03.19 |

**TITLE :** G.A OF +0M BODY EXTN. FOR TOWER TYPE –"4DA" (0°–2°DEV) 400KV D/C QUAD ACSR MOOSE (WZ-4)

SCALE 1 : 30

SHEET NO. 1 OF 1

**DRG. No.** 0 1 8 0 8 9 - T - T L - 8 D - G A - 0 1 0 3

| SIZE | REV. |
|---|---|
| A0 | 1 |

RELEASED FOR: ☐ PRELIMINARY ☐ TENDER ☐ INFORMATION ☑ APPROVAL ☐ CONSTRUCTION

APPROVED

Subject to the ... as mentioned in the ... specification.

Electrical Superintending Engineer
(Planning and Design Wing)
Bihar State Power (Holding) Company Limited
Vidyut Bhawan, Patna-800021
SE
20.05.19