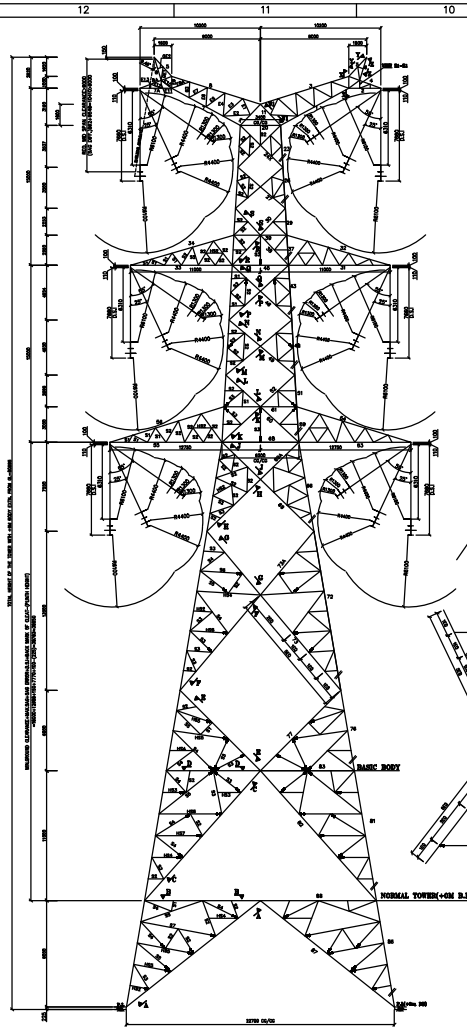
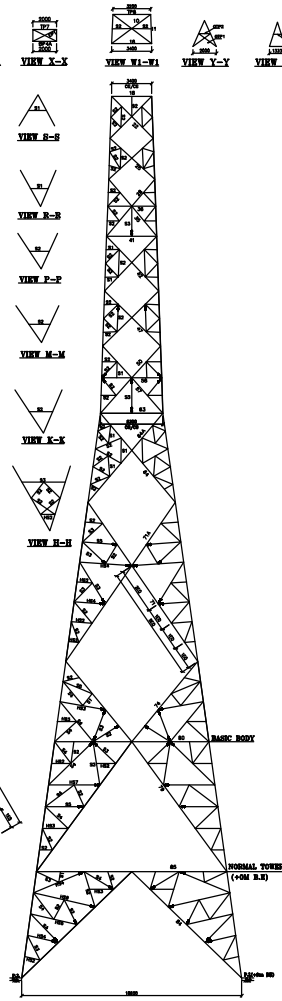
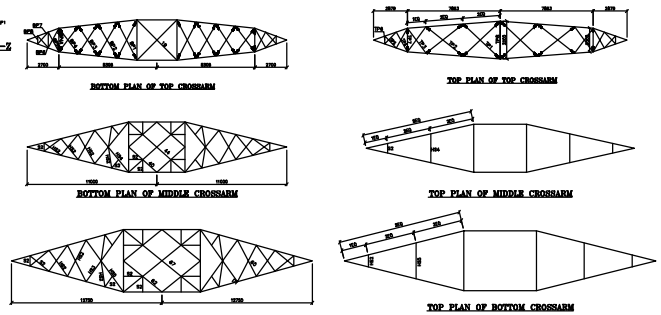
THIS IS PROPRIETARY ITEM AND DESIGN RIGHT IS STRICTLY RESERVED WITH POWERGRID. UNDER NO CIRCUMSTANCES THIS DRAWING SHALL BE USED BY ANYBODY WITHOUT PRIOR PERMISSION FROM POWERGRID IN WRITING.



TRANSVERSE FACE



LONGITUDINAL FACE

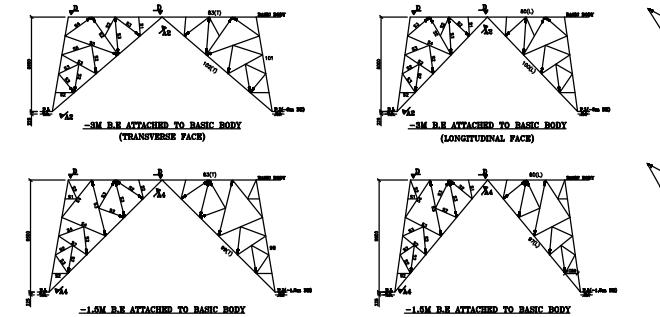


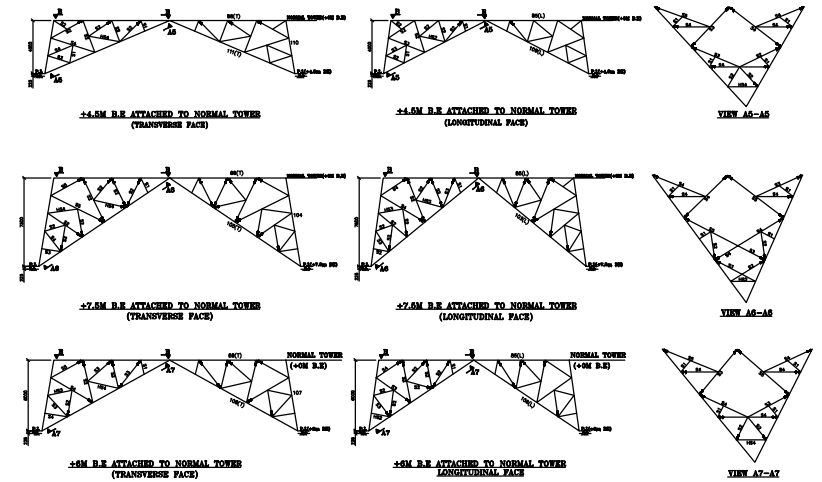
REDUNDANT TABLE			
S1	45X30X4L	HS1	H45X30X4L
S2	45X45X4L	HS2	H45X45X4L
S3	50X50X4L	HS3	H50X50X4L
S4	55X55X4L	HS4	H55X55X4L
S5	60X60X4L	HS5	H60X60X4L
S6	65X65X4L	HS6	H65X65X4L
S7	75X75X4L	HS7	H75X75X4L
S8	60X60X5L	HS8	H60X60X5L
S9	65X65X5L	HS9	H65X65X5L
S10	70X70X5L	HS10	H70X70X5L
S11	75X75X5L	HS11	H75X75X5L
S12	80X80X5L	HS12	H80X80X5L
S13	90X90X5L	HS13	H90X90X5L
S14	70X70X6L	HS14	H70X70X6L
S15	75X75X6L	HS15	H75X75X6L
S16	80X80X6L	HS16	H80X80X6L
S17	90X90X6L	HS17	H90X90X6L
S18	100X100X6L	HS18	H100X100X6L
S19	90X90X7L	HS19	H90X90X7L
S20	100X100X7L	HS20	H100X100X7L

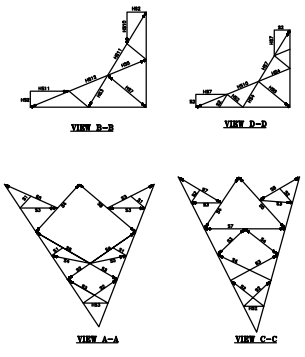
MEMBER DESIGN CHART

GROUP LABEL	GROUP DESC.	ANGLE SECTIONS	NOS. BOLT
1	RCA: BOT	H100X100X8	6
2	RCA: BOT	H100X100X7	4
3	RCA: TOP	H90X90X6	5
4	RCA: TOP	H75X75X5	4
5	LPK: TOP	H55X55X5	2
6	LPK: BOT	H55X55X5	2
7	LCA: BOT	H100X100X8	6
7A	LCA: BOT	H100X100X7	4
8	LCA: TOP	H90X90X6	5
8A	LCA: TOP	H75X75X5	4
10	L.BRG	H75X75X4L	2
11	LEG	H90X90X5L	3
16	L.BELT	H75X75X4L	2
19	P.BRG	H80X80X5L	2
20	T.BELT	H120X120X7L	5
22	L.BRG	H65X65X4DL	3DS
23	LEG	H90X90X6L	4 BUTT
24	T.BRG	H65X65X5DL	3DS
25	L.BRG	H60X60X4DL	3DS
26	LEG	H100X100X7L	6 BUTT
27	T.BRG	H65X65X4DL	3DS
28	L.BRG	H60X60X4DL	3DS
29	LEG	H110X110X8L	6 BUTT
30	T.BRG	H60X60X4DL	3DS
31	RCA: BOT: T	H100X100X7L	5
32	RCA: TOP: T	H90X90X5L	5
33	LCA: BOT: T	H100X100X7L	5
34	LCA: TOP: T	H90X90X5L	5
35	L.BRG	H60X60X4DL	3DS
36	L.K.BELT	H75X75X4L	2
37	LEG	H110X110X8L	6 BUTT
38	T.BRG	H60X60X4DL	3DS
39	T.K.BELT	H80X80X5L	5
40	D.BRG	H65X65X4L	2
41	L.BELT	H75X75X4L	2
42	L.BRG	H60X60X4DL	3DS
43	LEG	H120X120X8L	8 BUTT
44	P.BRG	H65X65X4L	2
45	T.BELT	H90X90X6L	3
46	T.BRG	H65X65X5DL	3DS
47	L.BRG	H60X60X4DL	3DS
48	LEG	H130X130X10L	10 BUTT
49	T.BRG	H65X65X4DL	3DS
50	L.BRG	H60X60X4DL	3DS
51	LEG	H130X130X12L	10 BUTT
52	T.BRG	H75X75X4DL	3DS
53	RCA: BOT: T	H100X100X7L	5
54	RCA: TOP: T	H90X90X5L	5
55	LCA: BOT: T	H100X100X7L	5
56	LCA: TOP: T	H90X90X5L	5
57	L.BRG	H65X65X4DL	3DS
58	L.K.BELT	H65X65X4L	2
59	LEG	H130X130X12L	10 BUTT
60	T.BRG	H75X75X4DL	3DS
61	T.K.BELT	H75X75X5L	4
62	D.BRG	H80X80X5L	2
63	L.BELT	70X70X5L	2
64	L.BRG	H80X80X6L	3
64A	L.BRGA	H80X80X6L	3
66	LEG	H150X150X11L	10 BUTT
67	P.BRG	H80X80X5L	2
68	T.BELT	H100X100X6L	3
69	T.BRG	H90X90X5L	3
69A	T.BRGA	H80X80X5L	3
71	L.BRG	H100X100X8L	3
71A	L.BRGA	H90X90X6L	3
72	LEG	H150X150X12L	10 BUTT
73	T.BRG	100X100X6L	3
73A	T.BRGA	90X90X6L	3
74	L.BRG	H80X80X5L	2
76	LEG	H150X150X12L	10 BUTT
77	T.BRG	H80X80X5L	2

GROUP LABEL	GROUP DESC.	ANGLE SECTIONS	NOS. BOLT
E1	RED	60X60X4	2
E2	RED	H60X60X4	2
E3	RED	55X55X4	2
E4	RED	H65X65X4	2
E5	RED	H65X65X4	2
E6	RED	H60X60X4	2
E7	RED	H65X65X4	2
E8	RED	H60X60X4	2
E8A	RED	H70X70X5	3
E9	RED	H65X65X5	3
E10	RED	H65X65X4	2
E11	RED	50X50X4	2
E11A	RED	50X50X4	2
E12	RED	45X30X4	2
E13	RED	45X30X4	1
BP1	RED	70X70X5	2
BP2	RED	H70X70X5	2
BP3	RED	H70X70X5	2
BP4	RED	H70X70X5	2
BP4A	RED	H55X55X4	2
BP5	RED	45X45X4	1
BP6	RED	45X45X4	1
BP7	RED	45X45X4	1
BP8	RED	45X45X4	1
TP1	RED	H65X65X4	1
TP2	RED	H65X65X4	1
TP3	RED	H50X50X4	1
TP4	RED	H45X45X4	1
TP4A	RED	H45X45X4	2
TP5	RED	H45X45X4	1
TP6	RED	45X30X4	1
TP7	RED	H75X75X4	2
TP8	RED	H100X100X6	2
GE1	RED	45X30X4	1
GE2	RED	45X30X4	1
GBP1	RED	H45X45X4	1
GTP1	RED	H45X45X4	1
GTP2	RED	H45X45X4	1
EP1	RED	H55X55X4	2
EP2	RED	50X50X4	1
+0M BODY EXTENSION (ATTACHED TO BASIC BODY)			
79	L.BRG	H80X80X6L	2
80	L.K.BELT	H70X70X5L	2
81	LEG	H150X150X12L	10 BUTT
82	T.BRG	H90X90X6L	2
83	T.K.BELT	H90X90X5L	2
+9M BODY EXTENSION (ATTACHED TO NORMAL TOWER)			
84	L.BRG	H90X90X6L	3
85	L.K.BELT	H90X90X5L	2
86	LEG	H160X160X12L	12 BUTT
87	T.BRG	H90X90X6L	2
88	T.K.BELT	H100X100X6L	2
+7.5M BODY EXTENSION (ATTACHED TO NORMAL TOWER)			
103	L.BRG	H80X80X5L	3
104	LEG	H160X160X12L	12 BUTT
105	T.BRG	H90X90X5L	2
+6M BODY EXTENSION (ATTACHED TO NORMAL TOWER)			
106	L.BRG +6MBE	H80X80X5L	3
107	LEG +6MBE	H160X160X12L	12 BUTT
108	T.BRG +6MBE	H90X90X5L	2
+4.5M BODY EXTENSION (ATTACHED TO NORMAL TOWER)			
109	L.BRG +4.5MBE	H80X80X5L	2
110	LEG +4.5MBE	H160X160X12L	12 BUTT
111	T.BRG +4.5MBE	H80X80X5L	2
+3M BODY EXTENSION (ATTACHED TO BASIC BODY)			
91	L.BRG +3MBE	H90X90X5L	3
92	LEG +3MBE	H150X150X12L	10 BUTT
93	T.BRG +3MBE	H90X90X6L	3
+1.5M BODY EXTENSION (ATTACHED TO BASIC BODY)			
94	L.BRG +1.5MBE	H90X90X5L	3
95	LEG +1.5MBE	H150X150X12L	10 BUTT
96	T.BRG +1.5MBE	H90X90X6L	3
-1.5M BODY EXTENSION (ATTACHED TO BASIC BODY)			
97	L.BRG -1.5MBE	H80X80X5L	3
98	LEG -1.5MBE	H150X150X12L	10 BUTT
99	T.BRG -1.5MBE	H90X90X6L	2
-3M BODY EXTENSION (ATTACHED TO BASIC BODY)			
100	L.BRG -3MBE	H90X90X5L	3
101	LEG -3MBE	H150X150X12L	10 BUTT
102	T.BRG -3MBE	H90X90X6L	2







NOTES:-

1) ALL DIMENSIONS ARE IN MM. UNLESS OTHERWISE SPECIFIED.
2) "#" INDICATES JOINT.
3) ALL HEIGHTS ARE CLEAR HEIGHTS.
4) ALL BOLTS ARE M16 DIA, AND 5.6 GRADE UNLESS OTHERWISE SPECIFIED.
5) D.S.I. REFERS DOUBLE SUSPENSION INSULATOR.
6) (T)/(L) REFERS TO TRANSVERSE FACE AND LONGITUDINAL FACE RESPECTIVELY.
7) 'S1', 'S2', .. REPRESENTS SUB-BRACING GROUP NOS.
8) GRADE OF STEEL AS PER IS:2062-2011
   ALL STEEL SECTIONS USED ARE MILD STEEL OF GRADE E250 QUALITY 'A' UNLESS OTHERWISE MENTIONED.
   'H' STANDS FOR HIGH TENSILE STEEL SECTION OF GRADE E350 QUALITY 'A'
9) GALVANIZATION OF STEEL REFERS TO IS 2629 QUALITY 'A'(R.2006):1985 & IS 4759:1996.
10) "LAP" DENOTES LAP JOINT AND "BUTT" DENOTES BUTT JOINT.
11) THE SUB BRACING MEMBER INDICATED IN LINE DIAGRAM ARE LIKELY TO CHANGE BASED ON THE ACTUAL MEMBER LENGTH AS PER GA DRAWING (KL/R RATIO CRITERIA).
12) THE SUB BRACING MEMBER CONNECTED TO LEG UPTO GROUP LABEL NO.66 FROM BOTTOM SHALL BE CONNECTED WITH TWO BOLTS ON LEG SIDE ONLY UNLESS OTHERWISE SPECIFIED.
13) "•—•" REFERS THAT THE PARTICULAR MEMBER HAS TO BE CONNECTED BY 2 BOLTS IN ONE END AND 1 BOLT IN OTHER END.
    "•—•—•" REFERS THAT THE PARTICULAR MEMBER HAS TO BE CONNECTED BY 2 BOLTS ON BOTH ENDS.
14) STEP BOLTS SHALL BE PROVIDED ON THE DIAGONALLY OPPOSITE LEGS ONLY.
15) B.M INDICATES THE BACK MARK.

DATE	REV.NO.	DESCRIPTION	DESIGNED	DRAWN	CHECKED	APPROVED
30.04.24	0	FIRST SUBMISSION FOR APPROVAL	RSK	MP	TRAMS	CSR

REVISIONS

for

CLIENT : POWER GRID CORPORATION OF INDIA LTD

CONTRACTOR : L&T Construction — Power Transmission & Distribution IC

PROJECT : TRANSMISSION LINE PACKAGE TL02: KOPPAL-II PS -NARENDRA (NEW) 765 KV D/C LINE- PART-II ASSOCIATED WITH TRANSMISSION SCHEME FOR INTEGRATION OF RENEWABLE ENERGY ZONE (PHASE-II) IN KOPPAL-II (PHASE-A) AND GADAG-II (PHASE- A)-THROUGH TARIFF BASED COMPETITIVE BIDDING (TBCB) ROUTE (SPEC. NO.: CC/T/W-TW/DOM/A02/23/02840/ 5006004459

JOB No.: 023032-T-TL		
	NAME	DATE
DSGN	RSK	30.04.24
DRWN	MP	30.04.24
CHKD	TRAMS	30.04.24
APPD	CSR	30.04.24

TITLE : LINE DIAGRAM & ELECTRICAL CLEARANCE DIAGRAM FOR TOWER TYPE-"DA(0°-2°)" (765KV D/C HEXA. AL59 ZEBRA) (WIND ZONE - 1)

SCALE 1 : 150

SHEET NO.

DRG. No. 0 2 3 0 3 2 - T - T L - O D - D C - 0 0 0 5

SIZE A0 REV. A

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

TL02023032-00023-T-23041-R12196-VR-DES-NN-DA-4100-CALC-A