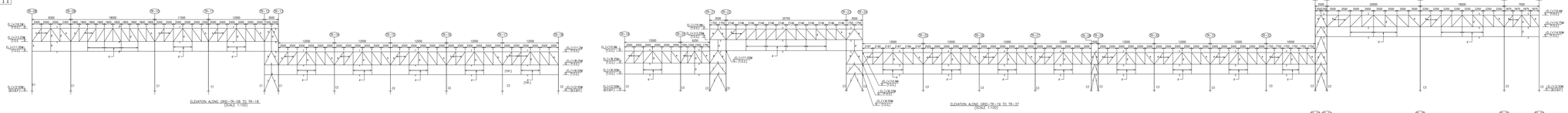
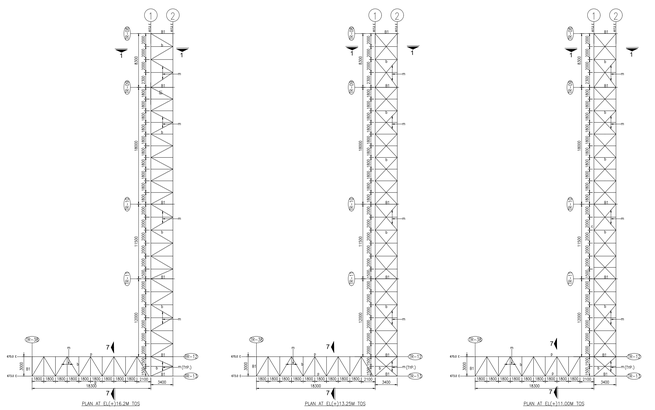
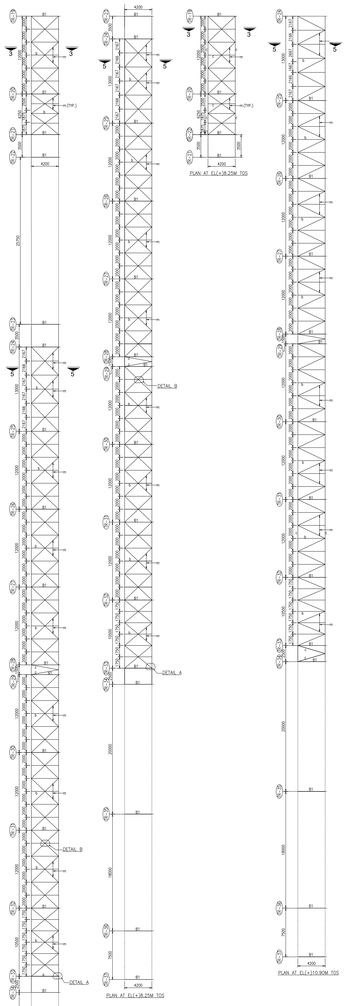
COPY RIGHT AND CONFIDENTIAL
The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED.
it must not be used directly or indirectly in any way detrimental to the interest of the company.

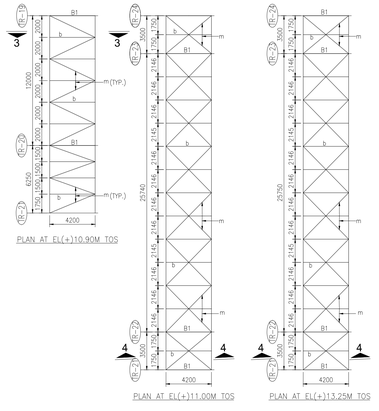
COMPUTER FILE NAME:

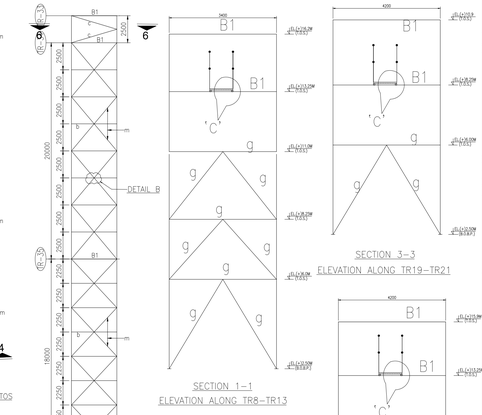
NORTH

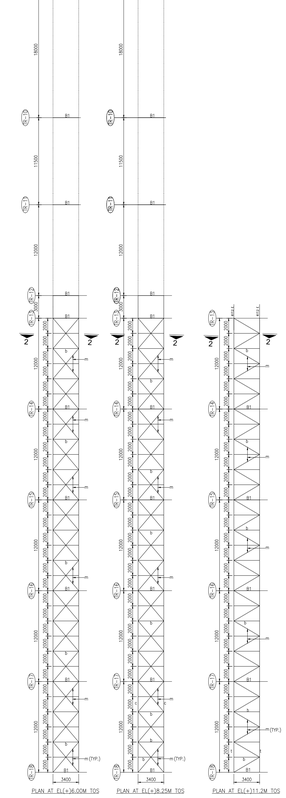


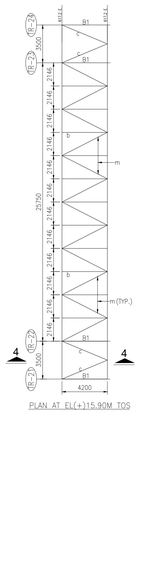


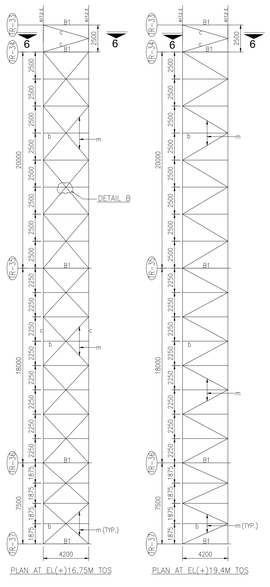


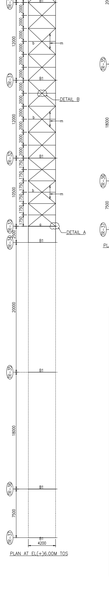


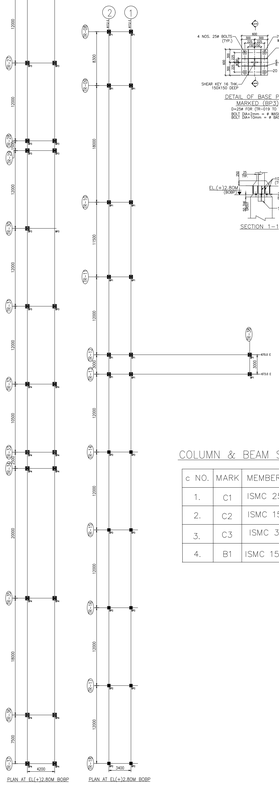


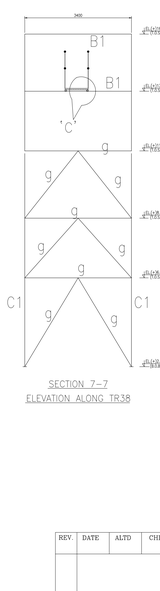


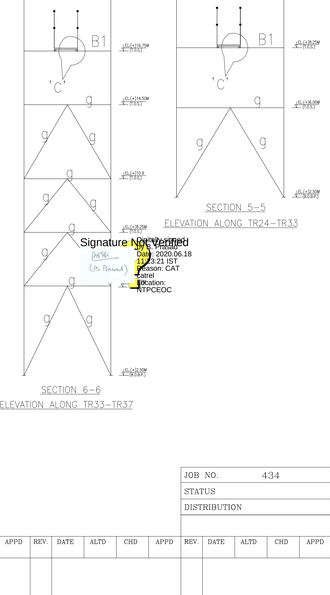


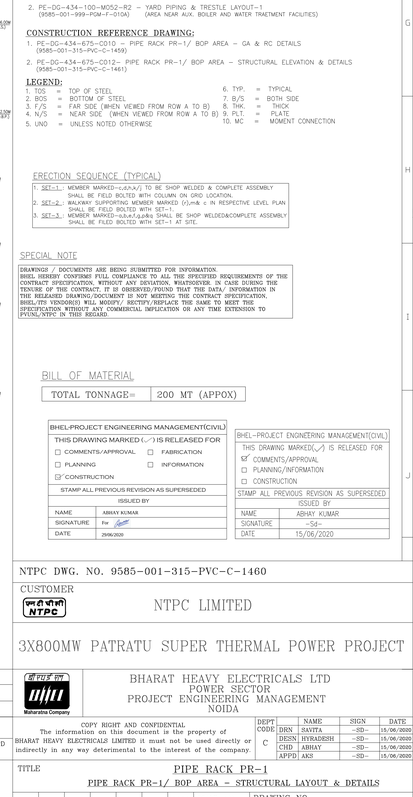


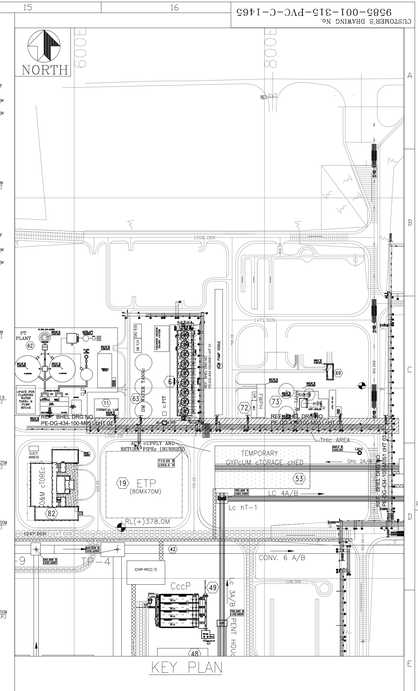












NOTEc:-

1. ALL DIMENsIONS ARE IN MILLIMETERS, CO-ORDINATES & LEVELS IN METERS.
2. ALL ELEVATIONS ARE REFERRED TO FINISHED FLOOR LEVEL OF POWER HOUSE BUILDING AT EL(+)30.00 WHICH CORRESPONDS TO RL (+)375.50M. ABOVE MSL.
3. UNLESS NOTED OTHERWISE, END CONNECTION OF BEAMS SHALL BE DESIGNED FOR A MIN. OF 60% OF BEAM SHEAR CAPACITY OR FORCES INDICATED ON THE DWG. IN CASE OF BEAM WITH ADDITIONAL FLANGE PLATES THIS PERCENTAGE SHALL BE 80%.
4. ALL MC (MOMENT CONNECTION) TO BE DESIGNED FOR FULL CAPACITY.
5. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITIONS, TECHNICAL SPECIFICATIONS AND SCHEDULE OF ITEMS.
6. FOR OTHER NOTES AND STD. DETAILS REF. DRG. PE-DG-434-600-C002 (NTPC DRG NO. 9585-001-315-PVC-C-0089A)
7. CONNECTION DETAILS SHOWN ARE INDICATIVE ONLY. SIZE & THICKNESS OF GUSSETS, NO. & DIA. OF CONNECTION BOLTS ETC. SHALL BE DESIGNED & DETAILED BY FABRICATOR AND SHALL BE SHOWN IN CORRESPONDING FABRICATION DRG.
8. COLUMN BASE SURFACE & BOTTOM FACE OF VERTICAL STIFFENERS SHALL BE PROPERLY MACHINED BEFORE WELDING TO BASE PLATE.
9. LOCATION OF COLUMN SPLICES TO BE DECIDED BY MANUFACTURING UNIT BASED ON AVAILABILITY OF PLATE SIZES AND TRANSPORTATION PLAN TO SITE. SPLICE DETAILS MAY BE REFERRED FROM GENERAL NOTES DRG. NO.- PE-DG-434-600-C002 (NTPC DRG NO. 9585-001-315-PVC-C-0089A)

ENGINEERING REFERENCE DRAWING:

1. PE-DG-434-100-M001 – PLOT PLAN (9585-001-999-P0C-F-001)
2. PE-DG-434-100-M052-R2 – YARD PIPING & TRESTLE LAYOUT-1 (9585-001-999-POM-F-010A) (AREA NEAR AUX. BOILER AND WATER TREATMENT FACILITIES)

CONSTRUCTION REFERENCE DRAWING:

1. PE-DG-434-675-C010 – PIPE RACK PR-1/ BOP AREA – GA & RC DETAILS (9585-001-315-PVC-C-1459)
2. PE-DG-434-675-C012– PIPE RACK PR-1/ BOP AREA – STRUCTURAL ELEVATION & DETAILS (9585-001-315-PVC-C-1461)

LEGEND:

1. TOS = TOP OF STEEL
2. BOS = BOTTOM OF STEEL
3. F/S = FAR SIDE (WHEN VIEWED FROM ROW A TO B)
4. N/S = NEAR SIDE (WHEN VIEWED FROM ROW A TO B)
5. UNO = UNLESS NOTED OTHERWISE
6. TYP. = TYPICAL
7. B/S = BOTH SIDE
8. THK. = THICK
9. PLT. = PLATE
10. MC = MOMENT CONNECTION

ERECTION SEQUENCE (TYPICAL)

1. SET-1 :- MEMBER MARKED-(a,b,h,j) TO BE SHOP WELDED & COMPLETE ASSEMBLY SHALL BE FIELD BOLTED WITH COLUMN ON GRID LOCATION.
2. SET-2 :- WALKWAY SUPPORTING MEMBER MARKED (c),m& c IN RESPECTIVE LEVEL PLAN SHALL BE FIELD BOLTED WITH SET-1.
3. SET-3 :- MEMBER MARKED-n,b,e,f,g,p&q SHALL BE SHOP WELDED&COMPLETE ASSEMBLY SHALL BE FILED BOLTED WITH SET-1 AT SITE.

SPECIAL NOTE

DRAWINGS / DOCUMENTS ARE BEING SUBMITTED FOR INFORMATION.
BHEL HEREBY CONFIRMS FULL COMPLIANCE TO ALL THE SPECIFIED REQUIREMENTS OF THE CONTRACT SPECIFICATION, WITHOUT ANY DEVIATION, WHATSOEVER. IN CASE DURING THE TENURE OF THE CONTRACT, IT IS OBSERVED/FOUND THAT THE DATA/ INFORMATION IN THE RELEASED DRAWING/DOCUMENT IS NOT MEETING THE CONTRACT SPECIFICATION, BHEL/ITS VENDOR(S) WILL MODIFY/ RECTIFY/REPLACE THE SAME TO MEET THE SPECIFICATION WITHOUT ANY COMMERCIAL IMPLICATION OR ANY TIME EXTENSION TO PVUNL/NTPC IN THIS REGARD.

BILL OF MATERIAL

TOTAL TONNAGE=	200 MT (APPOX)

MEMBER SCHEDULE

c NO.	MARK	MEMBERc SIZE	
1.	b	ISMC 150 BOX	
2.	c	ISMC 150 BOX	
3.	d	ISMC 75	
4.	e	ISA 90X90X12	
5	f	ISA 110X110X10	
6.	g	ISA 90X90X10	
7.	h	ISA 75X75X10	
8.	j	ISA 130X130X10	
9.	m	ISA 75X75X6	
10.	p	ISMC 150	
11.	r	ISMC 100	
12.	s	ISMC 200	

COLUMN & BEAM SCHEDULE

c NO.	MARK	MEMBERc SIZE	
1.	C1	ISMC 250 BOX	
2.	C2	ISMC 150 BOX	
3.	C3	ISMC 300 BOX	
4.	B1	ISMC 150	

Signature Not Verified
Digitally signed by Abhay Kumar
Date: 2020.06.18 11:39:21 IST
Reason: CAT
Location: NTPCEOC

BHEL-PROJECT ENGINEERING MANAGEMENT(CIVIL)
THIS DRAWING MARKED (✓) IS RELEASED FOR
☐ COMMENTS/APPROVAL ☐ FABRICATION
☐ PLANNING ☐ INFORMATION
☑ CONSTRUCTION
STAMP ALL PREVIOUS REVISION AS SUPERSEDED
ISSUED BY
NAME: ABHAY KUMAR
SIGNATURE: For
DATE: 29/06/2020

BHEL-PROJECT ENGINEERING MANAGEMENT(CIVIL)
THIS DRAWING MARKED(✓) IS RELEASED FOR
☑ COMMENTS/APPROVAL
☐ PLANNING/INFORMATION
☐ CONSTRUCTION
STAMP ALL PREVIOUS REVISION AS SUPERSEDED
ISSUED BY
NAME: ABHAY KUMAR
SIGNATURE: -Sd-
DATE: 15/06/2020

NTPC DWG. NO. 9585-001-315-PVC-C-1460

CUSTOMER
NTPC LIMITED

3X800MW PATRATU SUPER THERMAL POWER PROJECT

JOB NO. 434
STATUS
DISTRIBUTION

BHARAT HEAVY ELECTRICALS LTD
POWER SECTOR
PROJECT ENGINEERING MANAGEMENT
NOIDA

COPY RIGHT AND CONFIDENTIAL
The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED it must not be used directly or indirectly in any way deterimental to the interest of the company.

REV.	DATE	ALTD	CHD	APPD	REV.	DATE	ALTD	CHD	APPD	REV.	DATE	ALTD	CHD	APPD

DEPT. CODE		NAME	SIGN	DATE
C	DRN	SAVITA	-SD-	15/06/2020
	DESN	HYRADESH	-SD-	15/06/2020
	CHD	ABHAY	-SD-	15/06/2020
	APPD	AKS	-SD-	15/06/2020

TITLE
PIPE RACK PR-1
PIPE RACK PR-1/ BOP AREA – STRUCTURAL LAYOUT & DETAILS

DEPT. | SCALE 1:100 | SIGN
DRAWING NO. PE-DG-434-675-C011
SHEET 1 OF 1 | REV. R0
SIZE-A0