



फोन / Ph: 0121-2665734
फैक्स / Fax: 0121-2666062
CIN: U31200UP2003SGC027458

No.: 16920/PVVNL-MT/IPDS/335/15-16.

Dated: 05.11.2016

Subject:- Regarding approval of 250 KVA & 400 KVA distribution transformer plinth drawing against tender No. PVVNL-MT/IPDS/335/15-16.

M/s Tata Projects Ltd.,
Ground Floor Tower-B Green Boulevard,
Plot No. B-9/A, Sector-62,
Noida-201307(UP)

Email: abhikpal@tataprojects.com

Dear Sir,

Please refer to your letter No. TPL/Noida/PVVNL/IPDS/17 dt. 03.11.16 regarding approval of the Drawing of the 250 & 400 KVA distributions transformer plinth. This approval is subject to the following conditions:-

Correction wherever required in Drawing submitted by the contractor has been done by red ink. However, the correctness of Drawing as per technical specification of the SBD for IPDS/DDUGJY and the entire responsibility of the correctness of the Drawing as per the specification shall be that of the contractor.

In case of any contradiction between Drawing & Technical specification the version of the M.D. PVVNL, Meerut shall be final and binding on both the parties. Contractor shall have to reconstruct the plinth entirely with the new material to the satisfaction of purchaser.

One copy of approved drawing is enclosed herewith. This drawing shall be treated as approved for all tenders under DDUGJY and IPDS scheme.

Encl.: As above

Your's faithfully

(Anil Kumar)

Superintending Engineer (MM-2)

No.: 16920/PVVNL-MT/IPDS/335/15-16.

Dated: 05.11.2016

Copy forwarded to following for information and necessary action:

1. Chief Engineer, Saharanpur zone, Saharanpur.
2. SE (Equator), PVVNL, Meerut.
3. SE, (EDC & EUDC), Saharanpur/Shamli/Muzaffarnagar
4. Project Manager M/s. REC, PDCL, (PMA for IPDS/DDUGJY)

(Anil Kumar)

Superintending Engineer (MM-2)

Figure 1 is a plan view of a rectangular plate. The overall width is 2000 and the overall height is 2000. A central slot of width X is cut out. The distance from the left edge to the left side of the slot is 230, and the distance from the right edge to the right side of the slot is 230. The distance from the top edge to the top of the slot is 1540. A dashed rectangle is shown inside the plate, centered on the slot. A section line A-A is indicated on the left and right sides.

The diagram illustrates the cross-section of a retaining wall with the following components and dimensions:

- MS BAR 10MM @200MM C/C BOTHWAYS**: Reinforcement bars in the concrete slab.
- 125X65X6MM GI CHANNEL**: Channel reinforcement at the top of the wall.
- TOP OF T/F PLINTH**: The top surface of the foundation.
- R.C.C. SLAB 100MM THK 1:2:4**: The concrete slab at the top of the wall.
- P.C.C. 100MM THK 1:4:8**: Plain concrete course below the R.C.C. slab.
- 12MM THK. PLASTAR**: A thin layer below the P.C.C. course.
- 230MM THK BRICK WALL**: The main body of the retaining wall.
- 40MM THK. DPC 1:2:4 MIX CONCRETE**: Dimpled plastic course at the base of the wall.
- P.C.C. 1:4:8**: Plain concrete at the base of the wall.
- FILL WITH COMPACTED EARTH SOIL**: The material retained by the wall.
- Dimensions**:
 - Overall height: 1200
 - Height of brick wall: 1000
 - Height of P.C.C. slab: 100
 - Height of top reinforcement: 100
 - Base width: 345 (top) / 550 (bottom)
 - Base thickness: 100
 - Base offset: 150
 - Ground level (GL) is indicated on both sides.

SECTION "A-A"

APPROVED

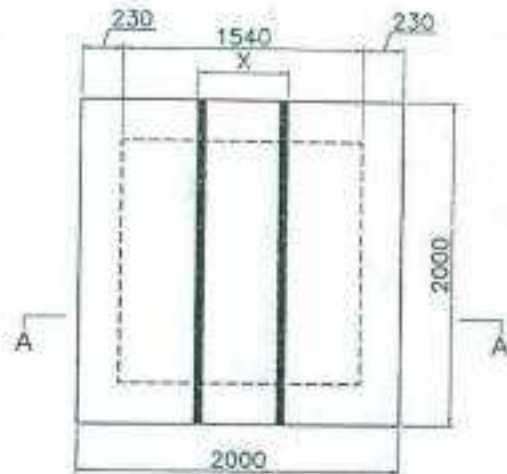
Chief Engineer

(Materials Management)
P.V.V.N.L. MEERUT

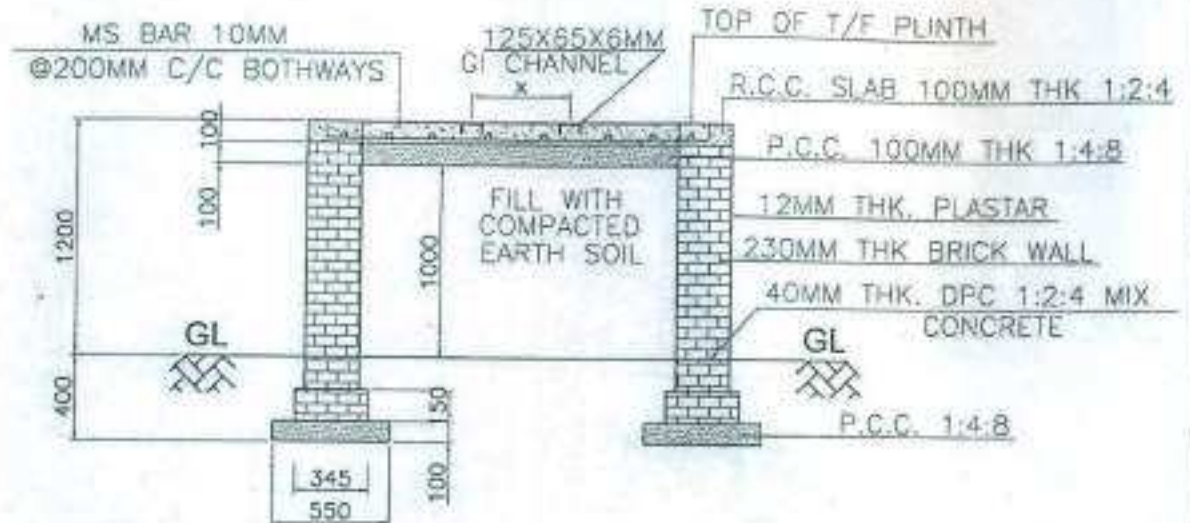
P.V.V.N.L. MEERUT

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TOP PLAN
FOR GENERAL ARRANGEMENT OF
DISTRIBUTION TRANSFORMER



SECTION "A-A"

APPROVED

Chief Engineer
(Material Management)
P.V.V.N.L., MEERUT

- NOTE:-
1. ALL THE DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED.
 2. ALL HOLES ARE 18MM DIA UNLESS OTHERWISE SPECIFIED.
 3. X-SUIT AT SITE TO AS PER TRANSFORMER
 4. 12 MM THICK PLASTER WITH CEMENT MORTAR RATIO 1:4
 5. 1st CLASS BRICK WORK FOR SIDE WALL SIZE 230MM WIDE WITH CC RATIO 1:4 (CEMENT & FINE SAND)



Sl. No.	Description	Q	Check By	Rev
LOA No.	6446/PVNL-MT/SPS/306/18-19 DT.20.06.2018 6449/PVNL-MT/SPS/340/18-19 DT. 20.06.2018			
OWNER	PASCHIMANCHAL VIDYUT VITARAN NIGAM LIMITED (PVVNL)			
CONTRACTOR	TATA PROJECTS LIMITED GROUND FLOOR, TOWER & BUSH ROAD, WIND PLANT, KOLKATA, WEST BENGAL, INDIA			
PROJECT	UNDER MDS SCHEME WORK FOR MORADABAD & SAHARANPUR (ZONE)			
DESCRIPTION	FOUNDATION DETAIL OF 119.433 KV (66/220 KVA) DISTRIBUTION TRANSFORMER WITH DEF FENCING (TYPICAL)			
DESIGN BY	J.S. RAJAT	DATE	28/10/2016	DRAWING No.
CHECKED BY	VIJAY R. K.	SCALE	M/S	TP-PID-11-MT-CA-01
APPROVED BY	P. K. Paul	REVISION NO.	1 OF 1	REV. 0

The diagram illustrates the cross-section of a retaining wall with the following components and dimensions:

- Top Reinforcement:** MS BAR 10MM @200MM C/C BOTHWAYS.
- Top Layer:** 125X65X6MM GI CHANNEL.
- Plinth:** TOP OF T/F PLINTH.
- Slab:** R.C.C. SLAB 100MM THK 1:2:4.
- Concrete Layers:** P.C.C. 100MM THK 1:4:8 and 40MM THK DPC 1:2:4 MIX CONCRETE.
- Wall Structure:** 230MM THK BRICK WALL with 12MM THK PLASTAR.
- Soil:** FILL WITH COMPACTED EARTH SOIL.
- Dimensions:**
 - Overall height: 1200.
 - Top section height: 100.
 - Section below top: 100.
 - Section below that: 100.
 - Main wall height: 1000.
 - Base section height: 150.
 - Bottom section height: 100.
 - Base width: 345 (top) and 550 (bottom).
 - Ground level (GL) is indicated on both sides.

APPROVED

NOTE:- 1. ALL THE DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED.
2. ALL HOLES ARE 18MM DIA UNLESS OTHERWISE SPECIFIED.
3. X-SUIT AT SITE TO AS PER TRANSFORMER
4. 12 MM THICK PLASTER WITH CEMENT MORTAR RATIO 1:4
5. 1st CLASS BRICK WORK FOR SIDE WALL SIZE 230MM WIDE
WITH CC RATIO 1:4 (CEMENT & FINE SAND)



No.	Date	Description	By	Checked By	Appr.
QA No.	6406/PPVNL-MT/IPDS/346/15-18 DT 20.06.2018 8403/PPVNL-MT/IPDS/346/15-18 DT 20.06.2018				
OWNER	PASCHIMANCHAL VIDYUT VITARAN NEGAM LIMITED (PVVNL)				
CONTRACTOR	 TATA PROJECTS LIMITED GROUND FLOOR, TOWER NUMBER BUILDING, PLOT NO. 8, SARABJI VILAS, BHADRAKANT,				
PROJECT	UNDER IPDS SCHEME WORK FOR MORADABAD & SAHARANPUR (ZONE)				
DESCRIPTION	FOUNDATION DETAIL OF LINE-3 IVC (800/250 KVA) DISTRIBUTION TRANSFORMER WITH F&P FENCING (TYPICAL)				
DRAWN BY	J.S. RAWAT	DATE	20/10/2016	DRAWING No.	
CHECKED BY	VEDAY S. KH.	SCALE	1/10	TFC-PDS-11-07-CA-01	
APPROVED BY	H. R. Patel	SHEET NO.	1 OF 1	REV.	

4 Supermax
10/10



No.: 3617/ PVVNL-MT/DDUGJY/370/15-16

Dated: 23.05.2017

Subject:- Approval of GTP/Drawing of Material/Equipment for Work of capacity augmentation of 9 no. 33 KV Substations along with construction of 33 KV and 11 KV Line at different places in Electricity Distribution Zone Meerut on partial turnkey basis under Deen Dayal Updhyay Gram Jyoti Yojna (DDUGJY) against tender No. PVVNL-MT/DDUGJY/370/15-16.

M/s Om Veer Singh,
Kayasthbara, Sikandrabad,
Bulandshahr.

Email ID – msomveersingh@gmail.com

Dear Sir,

Please refer to your letter No. Nil dated 18.05.17 regarding approval of the Drawing as detailed below:-

Sl. No.	Material/equipment	Approved Vendor
1.	Fire Protection wall	M/s Omveer Singh, Bulandshahr

This approval is subject to the following conditions:-

1. The said approval is with the condition the material supplied by the above firms may be sent for testing by independent lab on firm's cost by Managing Director, PVVNL, Meerut.
2. M/s Omveer Singh, Bulandshahr is not blacklisted/Debarred by any Discom/Govt. Organization.

Correction wherever required in Drawing submitted by the contractor has been done by red ink However, these Drawing shall be subjected to correctness as per technical specification of the SBD for IPDS/DDUGJY and tender document and the entire responsibility of the correctness of the Drawing as per the specification as well as contract agreement and these Drawing shall be that of the contractor.

In case of any contradiction between Drawing & Technical specification the version of the M.D. PVVNL, Meerut shall be final and binding on both the parties. Contractor shall have to rework to the entire satisfaction of purchaser in case the construction is not found suitable for use in the projects.

One copy of approved Drawings are enclosed herewith. This drawing shall be treated as approved for all tenders under DDUGJY and IPDS scheme.

Encl: As above

Your's faithfully


(S K Singh)

Superintending Engineer (IPDS & DDUGJY)

Dated: 23.05.2017

No.: 3617/PVVNL-MT/DDUGJY/370/15-16

Copy forwarded to following for information and necessary action:

1. Chief Engineer, Meerut zone, Meerut.
2. SE (Equator), PVVNL, Meerut.
3. SE, EDC/EUDC Meerut & Baghpat.
4. Project Manager M/s. REC, PDCL, (PMA for IPDS/DDUGJY)

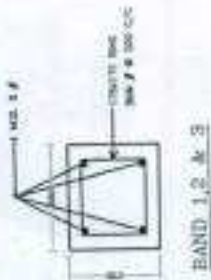
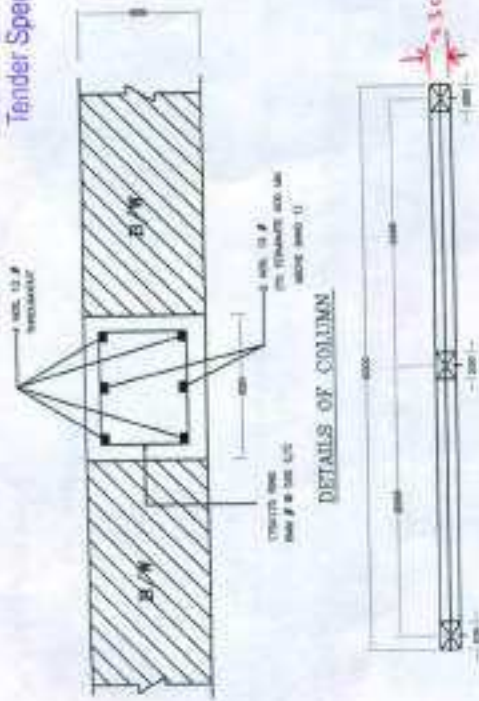

(S K Singh)

Superintending Engineer (IPDS & DDUGJY)

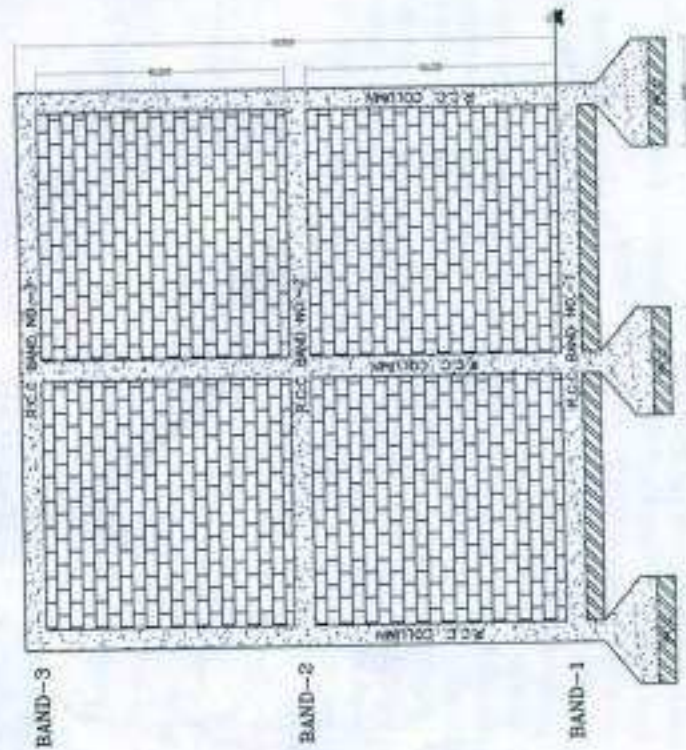
GTP Approved in IPDS/DDUGJY
Tender Spec. No. NVNL-MT/DDUGJY/370/15-16

SPECIFICATION:-

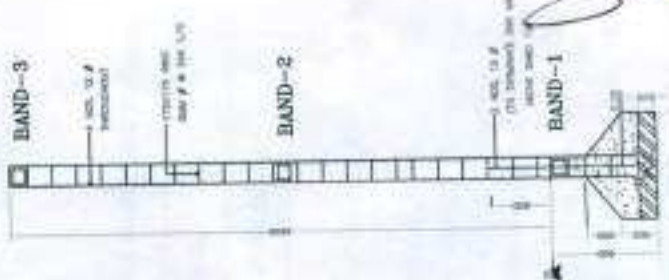
1. ALL DIM. ARE IN MM
2. AL TO GROUND LEVEL
3. ALL LEAN CONCRETE SHALL BE OF M20 (1:1.5:3)
4. ALL RCC USED SHALL BE OF STANDARD M20



PLAN OF WALL/COLUMN



SECTIONAL ELEVATION



SECTION OF COLUMN

TITLE:-

FIRE PROTECTION WALL

CLIENT:-

PASCHIMANCHAL VIDYUT VITRAN NIGAM LTD.
URJA BHAWAN, VIKTORIA PARK, MEERUT.

PROJECT:-

DDUGJY 9 NOS. CAPACITY AUGMENTATION
OF 33/11KV SUBSTATION

CONTRACTOR:-

M/S OMTEER SINGH

TENDER NO.:-

10893/PVNL-MT/DDUGJY/370/15-16

APPROVED

Chief Engineer
(IPDS/DDUGJY)
P.V.N.L., MEERUT
Notwithstanding the aforesaid approval
the entire responsibility of correctness and
supply of material according to the
Specification/Type test report/GTP
shall be that of the contractor which is to
be checked during inspection.

DATE

AA

RELEASED FOR

☒ APPROVAL ☒ CONSTRUCTION

PMA IPDS/DDUGJY
Asst. Engr.
RECPDCL

THE ELECTRICITY IN THE
INTEREST OF THE NATION



दूरभाष / Ph.: 0121-2665734
फैक्स / Fax: 0121-2666062
CIN: U31200UP2003SGC027458

कार्यालय :
Office of the :
प्रबन्ध निदेशक
MANAGING DIRECTOR
पश्चिमांचल विद्युत वितरण निगम लि.,
Paschimanchal Vidyut Vitran Nigam Ltd.
विक्टोरिया पार्क, मेरठ
Victoria Park, MEERUT-250 001
CIN No. U31200UP2003SGC027458

No.: 18707/ PVVNL-MT/ IPDS/335/15-16

Dated: 2.12.2016

Subject:- Approval of GTP/Drawing of Material/Equipment for Work of Construction of 33 KV Line, 11 KV Line, LT Line, Installation of New 11/0.4 KV Transformers, Augmentation of 11/0.4 KV Transformers & other works at different places of Electricity Distribution Zone Saharanpur on partial-turnkey basis under Integrated Power Development Scheme (IPDS) Against Tender specification no. PVVNL-MT/IPDS/335/15-16.

M/s Tata Projects Limited,
Ground Floor Tower-B Green Boulevard,
Plot No. B-9/A, Sector-62,
Noida-201307 UP.

Email ID - abhikpal@tataprojects.com

Dear Sir,

Please refer to your letter No. TPL/NOIDA/PVVNL/IPDS/16 dated 03.11.2016 regarding approval of the General Construction GA drawings as detailed below:-

Sl. No.	Material/equipment	Approved Vendor
1.	General Construction GA drawings	M/s Tata projects Limited, Noida

Correction wherever required in Drawing submitted by the contractor has been done by red ink. However, these Drawings shall be subjected to the correctness as per technical specification of the SBD for IPDS and tender document and the entire responsibility of the correctness of the Drawings as per the specification as well as according to the contract agreement and these Drawings shall be that of the contractor.

In case of any contradiction between Drawing & Technical specification the version of the M.D. PVVNL, Meerut shall be final and binding on both the parties. Contractor shall have to work to the entire satisfaction of purchaser in case the work is not found suitable in the projects.

One copy of approved Drawings are enclosed herewith. These Drawings shall be treated as approved for all tenders under IPDS scheme.

Encl.: As above

Your's faithfully

(G.K Gupta)
Chief Engineer (MM)

Dated: 2.12.2016

No.: 18707/ PVVNL-MT/ IPDS/335/15-16

Copy forwarded to following for information and necessary action:

1. Chief Engineer, Saharanpur Zone, Saharanpur.
2. SE (Equator), PVVNL, Meerut.
3. SE (EDC/EUDC), Saharanpur/Muzaffarnagar/Shamli.
4. Project Manager M/s. REC, PDCL, (PMA for IPDS/DDUGJY)

((G.K Gupta)
Chief Engineer (MM)



PLATE (BASE PLATE)
TO BE WELDED AT BOTTOM

Actual
RECPDCI



L1	L2	L3
4000	4450	8250

1. ALL DIMENSION ARE IN MM OTHERWISE SPECIFIED
2. THE POLES SHALL BE COATED WITH BITUMINOUS PAINTS INTENSELY AND EXTERNALLY UPTO THE LEVEL WHICH GOES INSIDE THE EARTH AND REMAINING PORTION OF EXTERIOR SHALL BE PAINTS WITH ONE COAT OF RED OXIDE PRIMER
3. APPLIED LOAD FROM TOP = 0.6 M
4. PLANTING DEPTH = 2.0 M
5. TOTAL WEIGHT OF POLE = 343 KG
6. THIS DRAWING IS BASED ON IS: SP-72 (HOT DIPPED)
IS: 2713:1980(PART I)

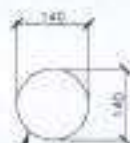
Chief Engineer
(Material Management)
P.V.V.N.L. MEERUT

the entire responsibility of correctness and supply of material according to the

shall be that of the contractor which is to
CONTRACTOR:  TALA PROJECTS LIMITED

DESCRIPTION	33KV, 11KV & LT LINE 11 M STEEL TUBULAR POLE
-------------	---

1						PROJECT	IPIS - Saharanpur Project		
0	02/06/2015	Release for Approval	SANDEEP KM.	SANDEEP KM.	R. R. Patel	DESCRIPTION	JMKY, MKV & LT LINE 13 M STEEL TUBULAR POLE		
Rev	Date	Description	DRAWN BY	CHECKED BY	APPROVED BY	SCALE	DATE	REVISION NO.	REVISION



FOR EARTHING
Ø 12 HOLE
NUT SHALL
BE WELDED

RECPDCL

1. ALL DIMENSION ARE IN MM OTHERWISE SPECIFIED
2. THE POLES SHALL BE COATED WITH BITUMINIOUS PAINTS INTENSELY AND EXTERNALLY UPTO THE LEVEL WHICH GOES INSIDE THE EARTH AND REMAINING PORTION OF EXTERIOR SHALL BE PAINTS WITH ONE COAT OF RED OXIDE PRIMER
3. APPLIED LOAD FROM TOP = 0.6 M
4. PLANTING DEPTH = 1.8 M
5. TOTAL WEIGHT OF POLE = 227 KG
6. THIS DRAWING IS BASED ON IS: SP-55 (410 MPa)
IS: 2713:1980(PART II)

Chief Engineer
(Material Management)
P.V.V.N.L., MEERUT

P.V.V.N.L. MEERUT
"Not Withstanding the aforesaid approval
the entire responsibility of correctness and
accuracy of material according to the
specification of the contract is with the
contractor."

DATA PROJECTS LIMITED



TATA PROJECTS LIMITED
1st FLOOR, TOWER 1, OKAYA CENTRE, B-5, SECTOR-43, NOIDA-201301, U.P.

IPDS - Saharanpur Project
33KV, 11KV & LT LINE
11 M STEEL TUBULAR POLE

L1	L2	L3
3050	3450	6000

1					
0	03/08/2015	Release for Approval	SANDEEP KR.	SANDEEP KR.	H. R. Paul
Rev	Date	Description	DRAWN BY	CHECKED BY	APPROVED BY

ICA No.	640024
OWNER-	PASIR MANGHAL VISHDEVITRAN NIGAM LIMITED, PUNE
CONTRACTOR	 TATA PROJECTS LIMITED 1st FLOOR, TOWER-1, OKAYA CENTRE, B-5, SECTOR-42, NOIDA-201307, U.P.
PROJECT	IPDS - Sahasrampur Project
DESCRIPTION	33KV, 11KV & LT LINE 11 MSTEEL, TUBULAR POLE
SCALE	1:100
SHEET NO.	1 OF 2
DRAWING No.	TPL - R/WLD - STP - 1 - 01



NOTE:-

1. All Dimensions are in mm. Unless otherwise Specified.
2. Drawing As Per IS 2551
3. The thickness of SMC (sheet moulding compound) plate for danger board shall be of 2 mm (14SWG).
4. Hole Dia for shall be 12 mm for 10 mm Bolts
5. The corners of the plate should be rounded off
6. The letter figures and the conventional skull and bones of plate shall be in a signal red on the front of the board

APPROVED

PMA IPDS/DDUGJY

Actual
RECPDCL

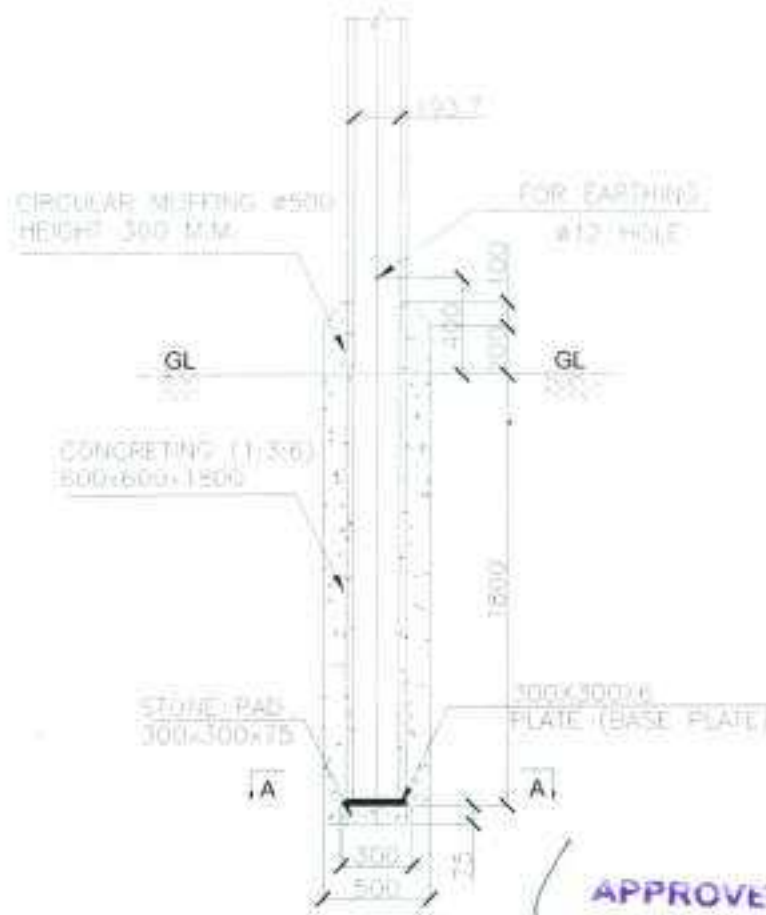
Chief Engineer
(Material Management)

P.V.V.N.L.MEERUT

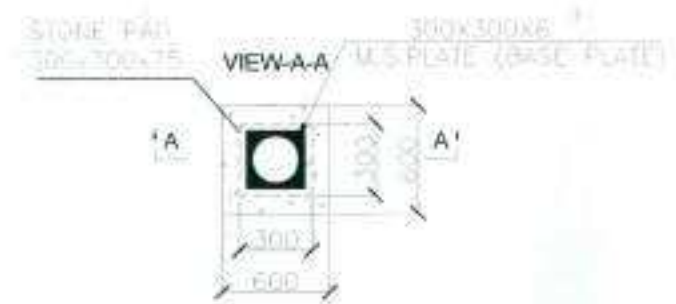
**Not Withstanding the aforesaid approval,
the entire responsibility of correctness and
supply of material according to the
Specification / Type test report / GTP
shall be that of the contractor which is to
be checked by the authority.**

Sl. No.	LOG No.	DATE	DESCRIPTION	PROJECT	IPDS - Subcontractor Project
0	0200005	Release for Approval	SANDEEP K.S.	SANDEEP K.S.	S. K. Paul
1		Drawn By	CHECKED BY	APPROVED BY	SCALE
					DATE
					SHEET NO. 1 OF 1
					DRAWING No. P.V.V.N.-ACC-01

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S.NO.	DESCRIPTION	Vol. in M
1	Excavation	0.400
2	Concreting (1:3:6)	0.440



- NOTE:-
1. All Dimensions are in mm. Unless otherwise Specified.
 2. Pole Drawing As Per IS 2713 - 1980 (Part II), SP-55(410Mpa)

APPROVED

Chief Engineer
(Material Management)
P.V.V.N.L., MEERUT

Not Withstanding the aforesaid approval
the entire responsibility of correctness and
supply of material according to the
Specification / Type test report / GTP
shall be that of the contractor which is to
be certified by the contractor.

SANDEEP K. SANDEEP K. K. R. Patel

PMA IPDS/DDUGJY
Ashish
RECPDCL

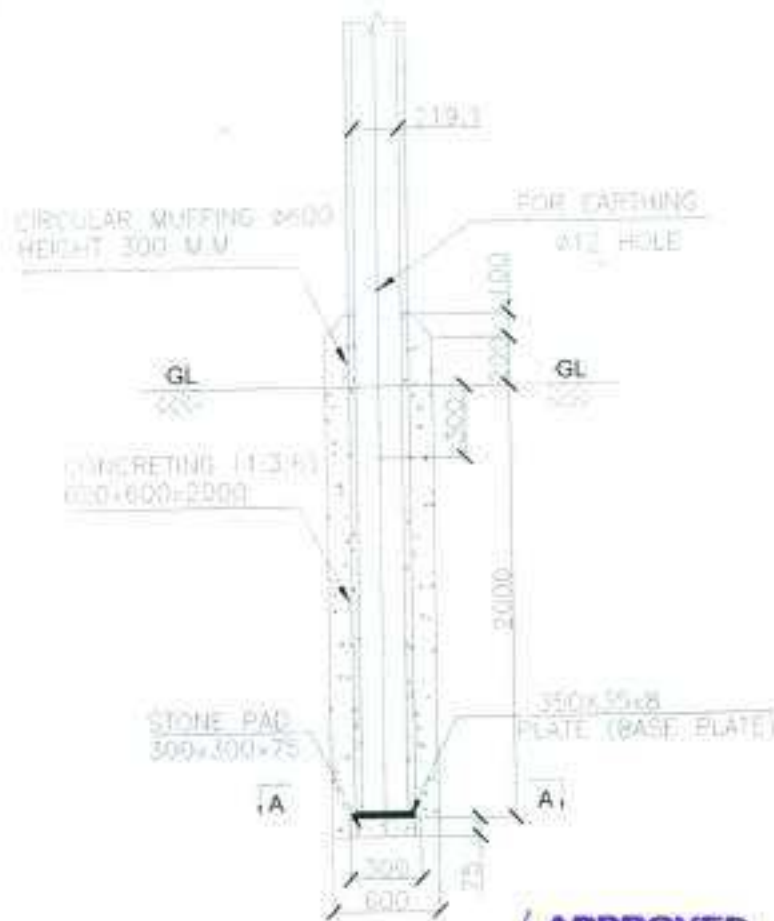
1	02/08/2015	Release for Approval
Rev	001	Design

LOA No.	04PVPVNL-MT/335/15-16 DT. 2006/2016
OWNER-	PANCHAMANCHAL VIDYUT VITRAN NIGAM LIMITED (P.V.N.L.)
CONTRACTOR	TATA PROJECTS LIMITED 14 FLOOR TOWER-1 ORAYA CENTRE, B-5 SECTOR-42 NOIDA-201301 UP
PROJECT	IPDS - Saharanpur Project
DESCRIPTION	11KV, 11KV & LT LINE FOUNDATION DETAIL FOR 11M STEEL TUBULAR POLE
SCALE	1:15
SHEET NO.	1 OF 1
DRAWING NO.	PL-IPDS-MT-335-15-16

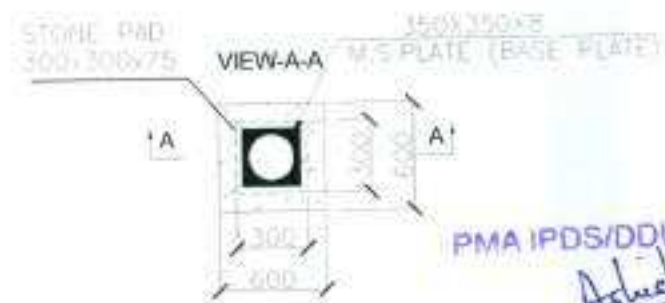
QTP Approved in IPDS/DDUGJY

Tender Spec. No. PVVNL-MT/IPDS/33/15-16

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S.NO.	DESCRIPTION	Vol. m ³
1.	Excavation	0.147
2.	Concreting (1:3:6)	0.680



PMA IPDS/DDUGJY
Asst. Engr
RECPDCL

NOTE:-

1. All dimensions are in mm unless otherwise specified.
2. Pole Drawing As Per IS-2713 - 1980 (Part 1), 50-72 (540 Mpa)

APPROVED

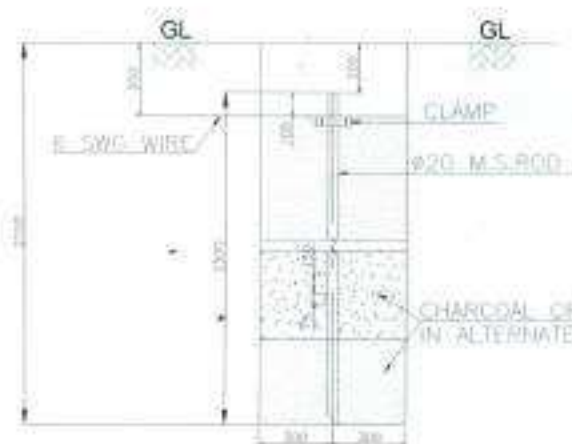
Chief Engineer
(Material Management)
P.V.V.N.L. MEERUT

"Not Withstanding the aforesaid approval the entire responsibility of correctness and supply of material according to the Specification / Type test report / QTP shall rest with the contractor which is to be verified by the Engineer."

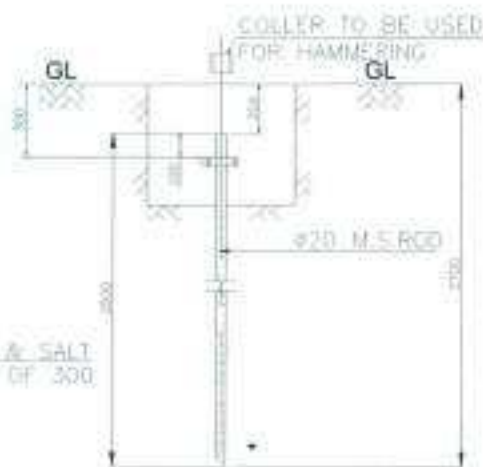
1	02/06/2015	Release for Approval
2	02/06/2015	Design/Check

LOA No.	666PVVNL-MTIPDS/33/15-16/01, 20.06.2015
OWNER-	PASCHIMANCHAL VIDYUT VITRAN NIGAM LIMITED (PVVNL)
CONTRACTOR	 TATA PROJECTS LIMITED 14 FLOOR, TOWER-1, OKAYA CENTRE, 545, SECTOR-42, Gurgaon-122001 (Haryana)
PROJECT	IPDS - Saharanpur Project
DESCRIPTION	DRY, DEVI & LT LINE FOUNDATION DETAIL FOR 150 MM STEEL TUBULAR POLE
SCALE	HTS: 1:10, 1:20, 1:40, 1:80, 1:160, 1:320, 1:640, 1:1280, 1:2560, 1:5120, 1:10240, 1:20480, 1:40960, 1:81920, 1:163840, 1:327680, 1:655360, 1:1310720, 1:2621440, 1:5242880, 1:10485760, 1:20971520, 1:41943040, 1:83886080, 1:167772160, 1:335544320, 1:671088640, 1:1342177280, 1:2684354560, 1:5368709120, 1:10737418240, 1:21474836480, 1:42949672960, 1:85899345920, 1:171798691840, 1:343597383680, 1:687194767360, 1:1374389534720, 1:2748779069440, 1:5497558138880, 1:10995116277760, 1:21990232555520, 1:43980465111040, 1:87960930222080, 1:175921860444160, 1:351843720888320, 1:703687441776640, 1:1407374883553280, 1:2814749767106560, 1:5629499534213120, 1:11258999068426240, 1:22517998136852480, 1:45035996273704960, 1:90071992547409920, 1:180143985094819840, 1:360287970189639680, 1:720575940379279360, 1:1441151880758558720, 1:2882303761517117440, 1:5764607523034234880, 1:11529215046068469760, 1:23058430092136939520, 1:46116860184273879040, 1:92233720368547758080, 1:184467440737095516160, 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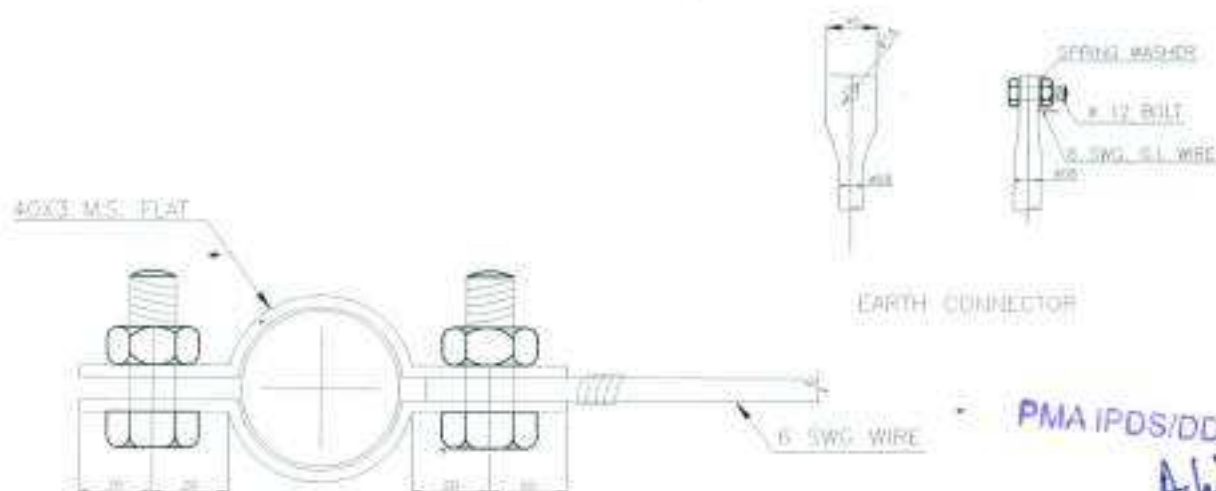
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EARTHING FOR HARD, STIFF OR MEDIUM CLAY



EARTHING FOR ORDINARY SOIL
WHERE PIPE COULD BE HAMMERED IN



TYPICAL DETAIL OF CLAMP
FOR PIPE EARTH

APPROVED

Chief Engineer
(Material Management)
P.V.V.N.L., MEERUT

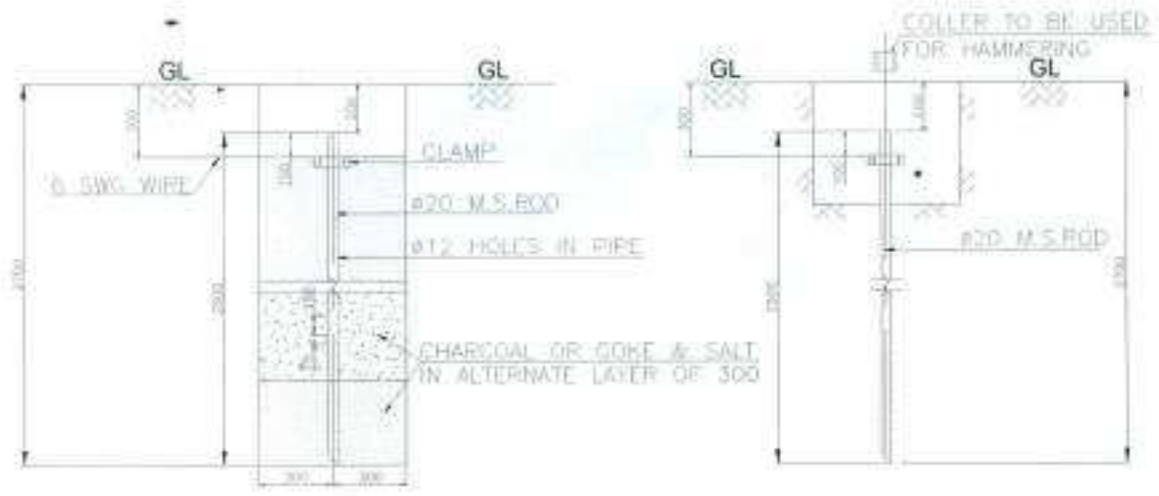
"Notwithstanding the aforesaid approval, the entire responsibility of correctness and supply of material according to the Specification / Type test report / GTP shall be that of the contractor which is to be checked during inspection."

BILL OF MATERIAL						
ERECTION CODE	DESCRIPTION	SECTION	LENGTH (MM.)	WL/Mtr (K.g.)	Qty. (Nos.)	Total Wt. (Kgs)
EF	Clamp for Earth pipe	40x2	146	0.042	2	0.275
TOTAL :						0.275
1	Bolts & Nuts	M12	20	0.057	2	0.114
2	Spring Washers	M12	5.5mm THK.	0.006	2	0.012
TOTAL :						0.136

LOA No.	6-RDPVNL-MT/DPDS/73315-16- DT. 30.06.2016		
OWNER:-	PASCHIMANCHAL VIDYUT VITRAN NIGAM LIMITED (PVVNL)		
CONTRACTOR		TATA PROJECTS LIMITED 1st FLOOR, TOWER - I, OKADA CENTRE, B-5, SECTOR-42, NOIDA-201301, U.P.	
PROJECT	IPDS - Saharanpur Project		
DESCRIPTION	ROD TYPE EARTHING ARRANGEMENT FOR 33kV HV HT LINE 30 MM DIA 2.5 M LONG		
SCALE	HTG	SHEET NO.	DRAWING NO.
		1 OF 1	TPL - PVVNL - EA - D1

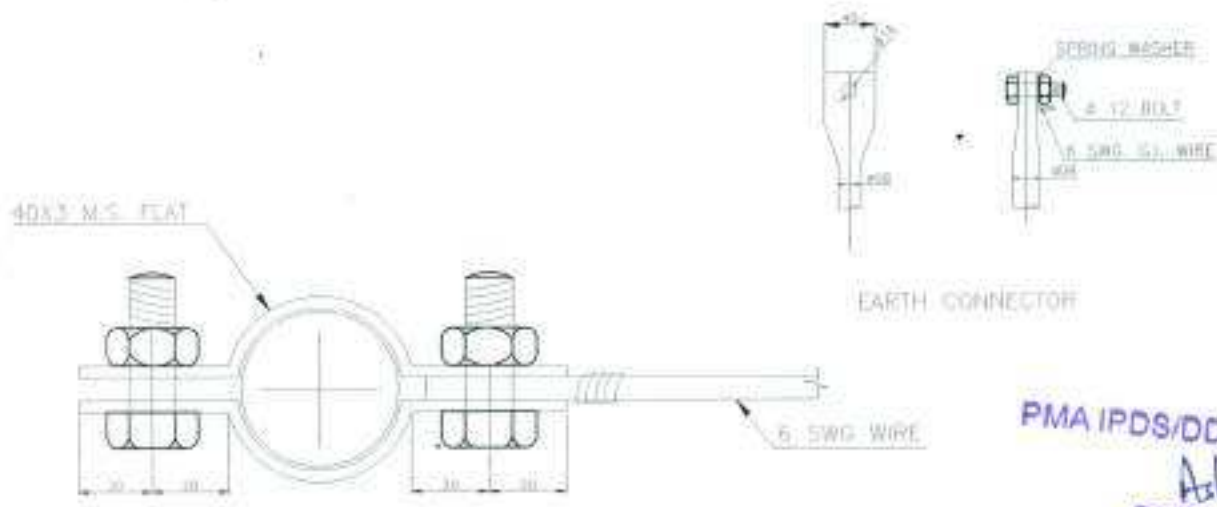
0	02/08/2012	Return for Approval	SANDHEEP KR.	SANDHEEP KR.	R. B. Patel
Rev	Date	Description	D6WH BY	CHKD BY	APPROVED

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EARTHING FOR HARD, STIFF OR MEDIUM CLAY

EARTHING FOR ORDINARY SOIL WHERE PIPE COULD BE HAMMERED IN



TYPICAL DETAIL OF CLAMP FOR PIPE EARTH

EARTH CONNECTOR

PMA IPDS/DDUGJY
Ashish
RECDCL

APPROVED

Chief Engineer (Material Management)
P.V.V.N.L., MEERUT
Notwithstanding the aforesaid approval the entire responsibility of correctness and supply of material according to the Specification / Type test report / GTP shall be that of the contractor which is to be checked during inspection.

BILL OF MATERIAL						
ERECTION CODE	DESCRIPTION	SECTION	LENGTH (M.M.)	Wt./Mtr (K.G.)	Qty. (Nos.)	Total Wt. (Kgs)
EP	Clamp for Earth pole	40x3	146	0.942	2	0.275
TOTAL :						0.275
1	Bolts & Nuts	M12	30	0.057	2	0.114
2	Spring Washers	M12	5.0mm thick	0.006	2	0.012
TOTAL :						0.136

LOA No.	6/90/PV/VNL/MCDIPDS/225/15-18 DT. 20.06.2016
OWNER:-	PASCHIMANCHAL VIDYUT VITRAN NIGAM LIMITED (PVVNL)
CONTRACTOR:-	TATA PROJECTS LIMITED 1st FLOOR TOWER-1 OKAYA CENTRE, B-5, SECTOR-42, NOIDA-201301, U.P.
PROJECT:-	IPDS - Saharanpur Project
DESCRIPTION:-	ROD TYPE EARTHING ARRANGEMENT FOR LT LINE 20 MM DIA 2.5 M LONG
SCALE	HTS: SHEET NO. 1 OF 1
DRAWING No.	TPL-PV/VNL-E4-02

Rev	Date	Drawn By	Checked By	Approved By
0	02/06/2015	Released by Approval	SANDEEP KIL	SANDEEP KIL
				S. R. Patel

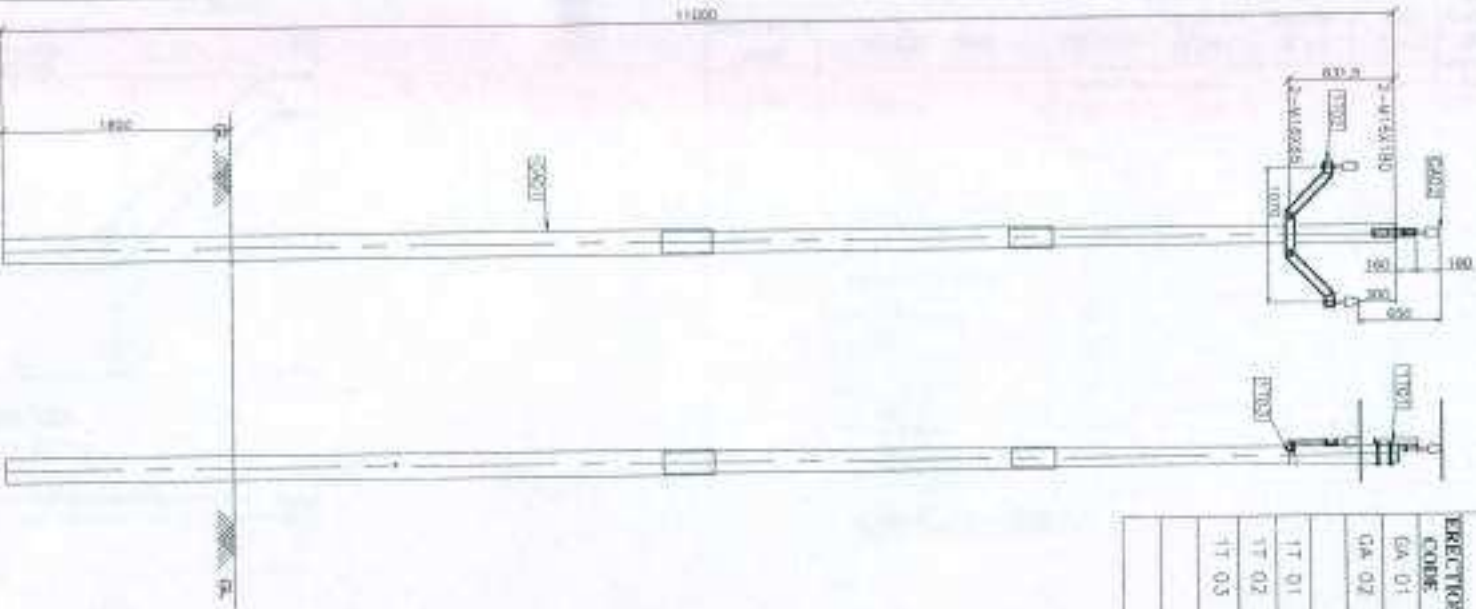
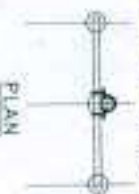
BILL OF MATERIAL

ERECTION CODE	DESCRIPTION	QTY.	REF DRAWING NO.
GA-01	11m/SP-S5 (410 MPa) STP Pole	1 No.	
GA-02	11KV Pin Insulators	3 Nos.	
1T-01	F Bracket	1 No.	TPL-PVNL-11-11-GA-01
1T-02	V-Cross Arm	1 No.	TPL-PVNL-11-11-GA-01
1T-03	Bolt Clamp For V X-arm	1 No.	TPL-PVNL-11-11-GA-01
	Spike Earthing	1 No.	
	Foundation	1 No.	

APPROVED

Chief Engineer
(Material Management)
P.V.V.N.L. MEERUT

"Notwithstanding the aforesaid approval the entire responsibility of correctness and supply of material according to the Specification / type test report / GTP shall be that of the contractor which is to be checked during inspection."



NOTE:- 1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE MENTIONED.

2. ALL HOLES ARE 18MM DIA UNLESS OTHERWISE SPECIFIED.
3. ALL SLOTTED HOLES ARE 38MM LONG AND 18MM WIDTH UNLESS OTHERWISE SPECIFIED.
4. MANUFACTURING TOLERANCE IS AS PER IS 1002.
5. ALL NG PARTS SHALL CONFORM TO IS 2062.
6. ALL NG FABRICATED ITEMS SHALL BE NOT DR PALWESSED AS PER IS 2629.
7. ALL WASHERS SHALL BE ELECTRO GALVANIZED.
8. ALL NG ITEMS SHALL BE MARKED WITH ERECTION CODE.
9. ALL CLAMPS, ANGLE IR CHANNELS SHALL CONFORM TO IS 808.
10. ALL NG ITEMS SHALL BE OF GRADE E250 (Fe+Mn).
11. WEIGHTS MENTIONED IN ROW ARE BEFORE PUNCHING HOLES.

PMA IPDS/DDUGAY
RECPDCL

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Rev	Date	Revised by Approval	SAKDEEP KAL	SAKDEEP KAL	R. R. Paul
		Description	DSMAN 09	CHECKED BY	APPROVED BY

Loc. No.	644/PVNL-KTBR/0000015-14 DT. 30.06.2016
OWNER:-	PASCHIMANCHAL VIDYUT VITHAN NIGAM LIMITED (PVVNL)
CONTRACTOR	 TATA PROJECTS LIMITED 18, MIDC, TOWER-1, DADAR CENTRAL, DIST. BOMBAY-400014-201901/001
PROJECT:	IPDS - Saharanpur Project
DESCRIPTION	G.A. Component for 11kV Line Erection at 11 km. 575 Poles to Line Erection
SCALE	MTS
SHEET NO.	1 OF 2
DRAWING No.	TPL-PVNL-11-11-GA-01

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BILL OF MATERIAL.

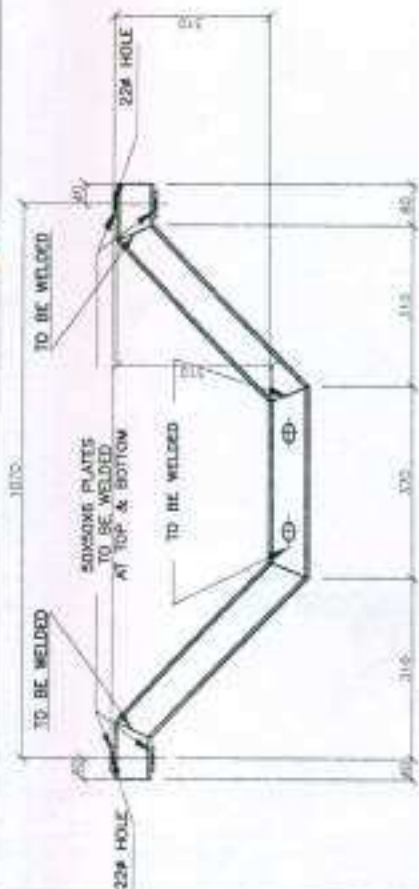
[illegible]

APPROVED

**Chief Engineer
(Material Management)**
P.V.V.N.L. MEERUT

***Not Withstanding the aforesaid approval**
the entire responsibility of correctness and
supply of material according to the
Specification / Type as reported shall
be that of the contractor who shall
be checked by the Engineer.

7. ALL WASHERS SHALL BE ELECTRO GALVANIZED.

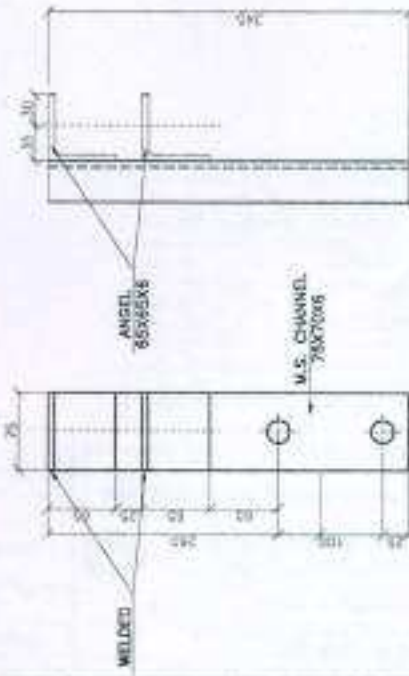
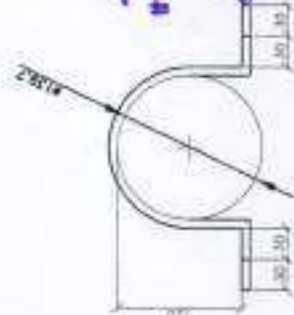


ELEVATION



PLAN

UT02: V-CROSS ARM



RELEVATION

END VIEW

TOL. F. DRACKLEY

TT03, BACK_CLAMP
V-X_ARM (50X25)

10A No.	6-92/PV/VNL-467/PTDS/13/13-14-PT. 25.06.2016		
OWNER:-	PASCHIMANCHAL VIDYUT VITRAN NIGAM LIMITED (PVVNL)		
CONTRACTOR	 TATA PROJECTS LIMITED THE FLOOR, TOWER 2, ORAYA CENTRE, B-4, SECTOR 46, ANDHERI WEST, MUMBAI		
PROJECT:	IPDS - Saharanpur Project		
DESCRIPTION	G.A. Compensator for 11kV Line Formation on 11 meter STD Poles (No Line Location)		
SCALE	NTS	SHEET NO. 2 OF 2	DATE PLOTTED: - 11-11-2016

ELEVATION END VIEW IT03, BLACK CLAMP Y-X ARM (50X8)			
ELEVATION IT01, E-BRACKET			

PMA/PTDS/DDUGJY			
SAMPLED BY	DRIVEN BY	CHECKED BY	SAMPLED KE. R. K. Patel
			
Relate for Approval Description			
Rev	Date		
0	02/04/2015		

Tender Spec. No. PUVNL-MT | IPDS | 335 | 15-16

RECPDGL

ERECTION CODE	DESCRIPTION	QTY.	REF DRAWING NO.
GA-01	11m/SP-55 (410 MPa) STP Pole	1 No.	
GA-02	11KV Pin Insulators with GI pins	3 Nos.	
GA-03	Stay Set Arrangement	1 Nos.	
1T-01	F Bracket	1 No.	TPL-PVVNL-11-11-GA-02
1T-02	V-Cross arm	1 No.	TPL-PVVNL-11-11-GA-02
1T-03	Back Clamp For V, X-arm	1 No.	TPL-PVVNL-11-11-GA-02
1T-04	Stay set Clamp	1 No.	TPL-PVVNL-11-11-GA-02
	Spike Earthing	1 No.	
	Foundation	1 No.	

Chief Engineer
(Material Management)
P.V.V.N.L., MEERUT

"Not Withstanding the aforesaid approval, the entire responsibility of correctness and supply of material according to the Specification / Type test report / GTR shall be that of the manufacturer which is to be checked during inspection."



NOTE:-

1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE MENTIONED.
2. ALL HOLES ARE 18MM DIA UNLESS OTHERWISE SPECIFIED.
3. ALL SLOTTED HOLES ARE 38MM LONG AND 18MM WIDTH UNLESS OTHERWISE SPECIFIED.
4. MANUFACTURING TOLERANCE IS AS PER IS 1802.
5. ALL MS PARTS SHALL CONFORM TO IS 2062.
6. ALL MS FABRICATED ITEMS SHALL BE HOT DIP GALVANISED AS PER IS 2062.
7. ALL WAGHERS SHALL BE ELECTRO GALVANISED.
8. ALL MS ITEMS SHALL BE MARKED WITH SECTION CODE.
9. ALL CLAMPS, ANGLE & CHANNELS SHALL CONFORM TO IS 808.
10. ALL MS ITEMS SHALL BE OF GRADE E250A (Fe510).
11. WEIGHTS MENTIONED IN BOB ARE BEFORE PUNCHING HOLES.

LOA No.	6403PVVNL-MTIPDS/133/13-16 DT. 20.08.2016.
OWNER:-	PASCHIMANCHAL VIDYUT VITRAN NIGAM LIMITED (PVVNL)
CONTRACTOR	 TATA PROJECTS LIMITED 1st FLOOR, TOWER-1 CROSS CENTRE, B-8, SECTOR-62, NOIDA-201301, U.P.
PROJECT	IPDS - Saharanpur Project
DESCRIPTION	G.A. Compensate for 11kV Line Formation on 11 amp. STEP Poles (Angular Lwp. 0-10°)
SCALE	NTS
SHEET NO.	1 OF 3
DESIGN NO.	TPL-PVVNL-11-11-GA-02

BILL OF MATERIAL

[illegible]

APPROVED

TOTAL WEIGHT:

Chief Engineer
(Material Management)
NAVYAL MEERUT

P.V.V.N.L., NIELEROT
notwithstanding the aforesaid approval

Notwithstanding the above, the Contractor shall retain the entire responsibility of correctness and supply of material according to the Specification / type test report / GTR and TSMW INCH shall be that of the contractor which is to be checked during inspection.

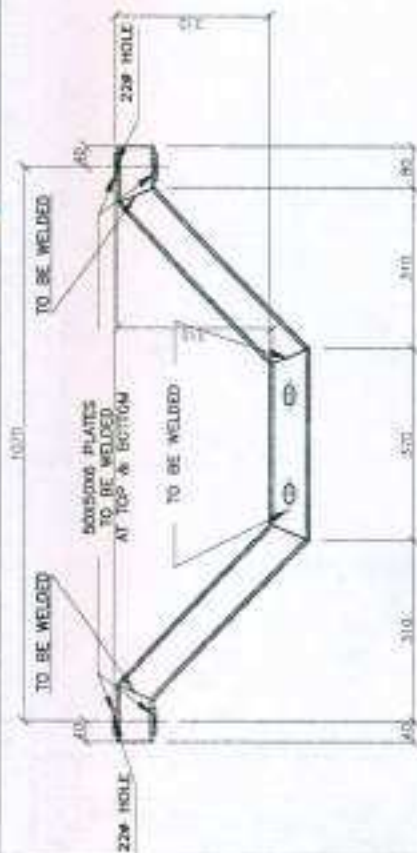
15. ALL MS FABRICATED ITEMS SHALL BE HOT DIP GALVANIZED.
AS PER S. 20238

7. ALL WORKMEN SHALL BE ELECTRO CALLOUSED.

B. ALL MS ITEMS SHALL BE MARKED WITH ERECTION CODE.

9. ALL CLAMP/ANGLE & CHANNELS SHALL CONFORM TO IS 808.

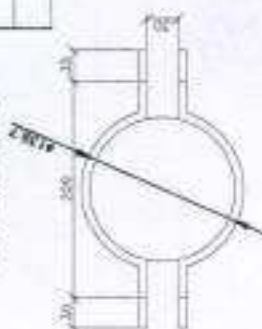
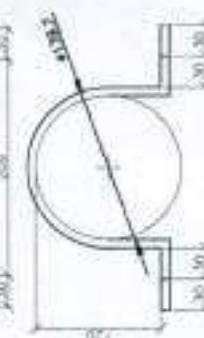
ALL MS FILMS SHOT BY CHAZZ ELSA (F&W).



ELEVATION.

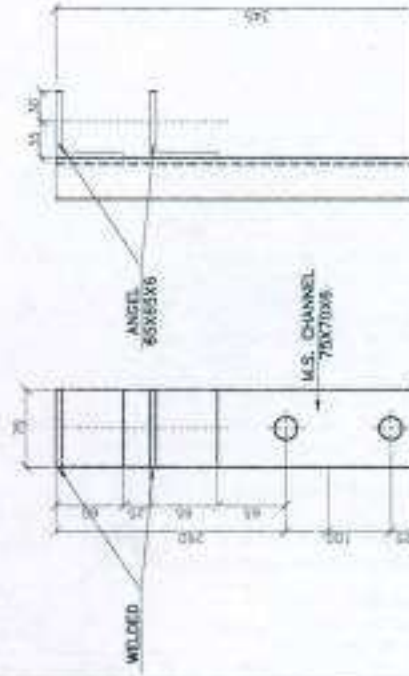


UT02: V-CROSS ARM


T04. BACK CLAMP
STAY SET (50X30)T03: BACK_CLAMP
 11-5-40M (revs)

END VIEW

[70], F BRACKET



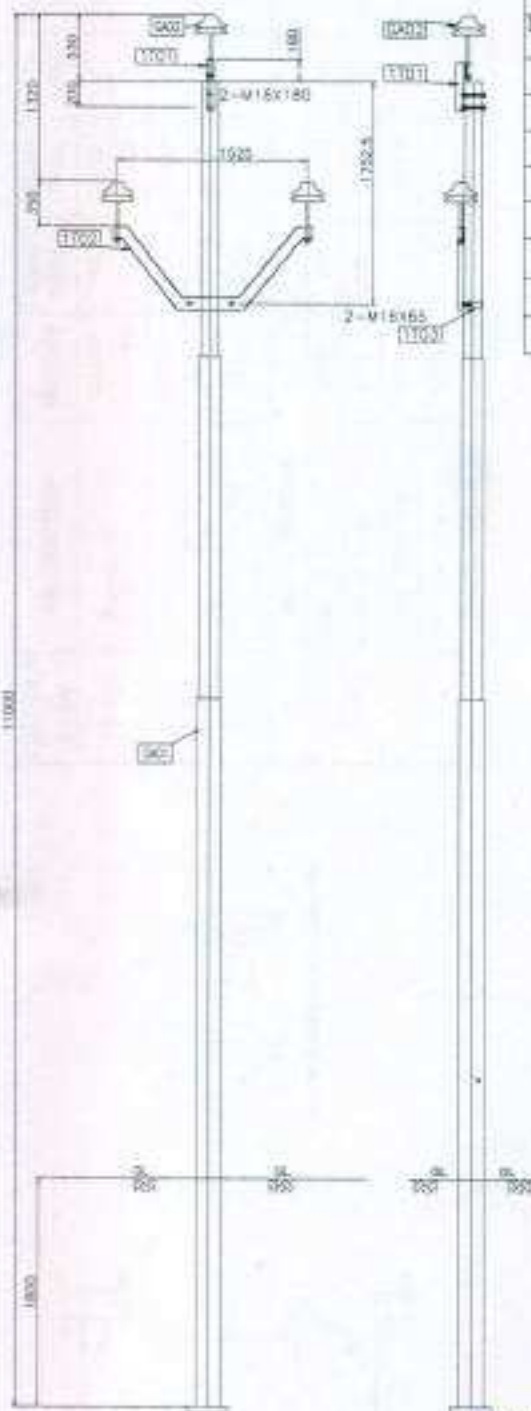
DISCUSSION

LOA No.	6400/PV/NL-MTH/PS/03/15-16 DT. 30.06.2016
OWNER:-	PASCHIMANCHAL VIDYUT VITRAN NIGAM LIMITED (PVVNL)
CONTRACTOR	 TATA PROJECTS LIMITED 5th FLOOR, TOWER - 1, OKADA CENTRE, B-5, SECTOR-42, MIDC-A-20/30/1, A.P.
PROJECT	IPDS - Saharanpur Project G.A. Compensates for 18K Line Formation on 11 mtr. 8TP Poles (Magnum Loc. 6-100)
SCALE	1:25
SHEET NO.	2 OF 2
SHEET NO.	2 OF 2
SHEET NO.	2 OF 2

I.		PNAIPDSIDUGJY	SANTHEEP KR.	M. S. Prasad
O.	02/06/2019	Release for Approval	SANTHEEP KR.	APPROVED BY:
Rev - Date		Destruction	DRAWN BY:	CHECKED BY:

PMATPDSIDDU6JY

Asma



BILL OF MATERIAL

ERECTION CODE	DESCRIPTION	QTY.	REF DRAWING NO.
GA-01	11m/SP-55 (410 MPa) STP Pole	1 No.	
GA-02	33KV Pin Insulators	3 Nos.	
IT-01	F Bracket	1 No.	TPL-PVVNL-33-11-GA-11
IT-02	V-Cross arm	1 No.	TPL-PVVNL-33-11-GA-11
IT-03	Back Clamp For V X-arm	1 No.	TPL-PVVNL-33-11-GA-11
	Spike Earthing	1 No.	
	Foundation	1 No.	

APPROVED

Chief Engineer
(Material Management)
P.V.V.N.L., MEERUT

"Not Withstanding the aforesaid approval the entire responsibility of correctness and supply of material according to the Specification / Type test report / GTP shall be that of the contractor which is to be checked during inspection."

- NOTE:-
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE MENTIONED.
 2. ALL HOLES ARE 18MM DIA UNLESS OTHERWISE SPECIFIED.
 3. ALL SLOTTED HOLES ARE 36MM LONG AND 18MM WIDE UNLESS OTHERWISE SPECIFIED.
 4. MANUFACTURING TOLERANCE IS AS PER IS 1852.
 5. ALL MS PARTS SHALL CONFORM TO IS 2062.
 6. ALL MS FABRICATED ITEMS SHALL BE HOT DIP GALVANIZED AS PER IS 2629.
 7. ALL WISHERS SHALL BE ELECTRO GALVANIZED.
 8. ALL MS ITEMS SHALL BE MARKED WITH ERECTION CODE.
 9. ALL CLAMPS, ANGLE & CHANNELS SHALL CONFORM TO IS 808.
 10. ALL MS ITEMS SHALL BE OF GRADE E250A (Fe410w).
 11. WEIGHTS MENTIONED IN BOM ARE BEFORE RUNDING HOLES.

PMA IPDS/DDUGJY

RECPDCL

PLAN

LOA No.	0490PVVNL-MT/IPDS/335/15-16 DT: 20.06.2016
OWNERS:-	PASCHIMANCHAL VIDYUT VITRAN NIGAM LIMITED (PVVNL)
CONTRACTOR:-	 TATA PROJECTS LIMITED 1st FLOOR, TOWER-LOKAYA CENTRE, B-5, SECTOR-62, NOIDA-201301 U.P.
PROJECT:-	IPDS - Saharanpur Project
DESCRIPTION:-	G.A. Components for 33kV Line Formation on 11 mtr. ST Poles with ACSB DOG for (In Line Location)
SCALE	NTS
SHEET NO.	3 OF 2
DRAWING No.	TPL-PVVNL-33-11-GA-11

Rev	Date	Description	DRAWN BY	CHECKED BY	APPROVED BY
0	20/06/2016	Released for Approval	SANDEEP KR.	SANDEEP KR.	R. R. Paul

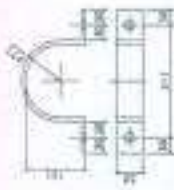
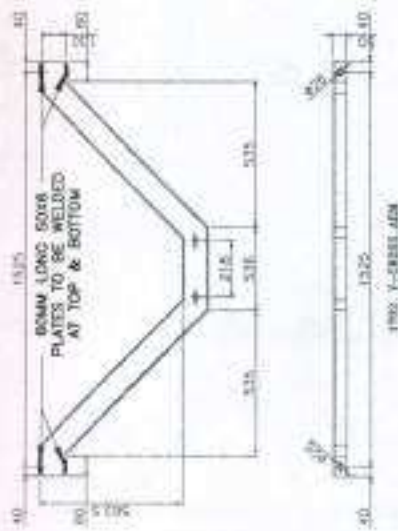
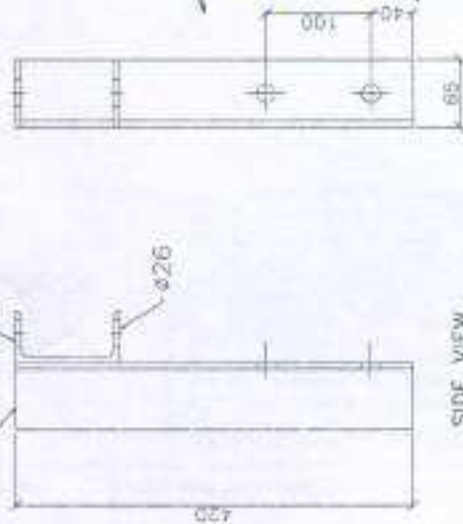


FIG. BACK CLAMP FOR Y-CROSS ARM

MS ANGLE 65x65x6
MS CHANNEL 100x50
WELDED



SIDE VIEW

FRONT VIEW

1T01, TOP CLEAR

Rev	Date	Description
0	20/06/2016	Release for Approval

APPROVED

Chief Engineer
(Material Management)
P.V.V.N.L., MEERUT

*Not Withstanding the aforesaid approval the entire responsibility of correctness and supply of material according to the Specification / Type test report / CTP shall be that of the contractor which is to be attested by the inspection.

- NOTE:-
1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE MENTIONED.
 2. ALL HOLES ARE 18MM DIA UNLESS OTHERWISE SPECIFIED.
 3. ALL SLOTTED HOLES ARE 38MM LONG AND 18MM WIDTH UNLESS OTHERWISE SPECIFIED.
 4. MANUFACTURING TOLERANCE IS AS PER IS 1052.
 5. ALL MS PARTS SHALL CONFORM TO IS 2002.
 6. ALL MS FABRICATED ONES SHALL BE HOT DIP GALVANISED AS PER IS 2029.
 7. ALL WELDERS SHALL BE ELECTRO GALVANISED.
 8. ALL MS ITEMS SHALL BE MARKED WITH ERECTION CODE.
 9. ALL CLAMPS, ANGLE & CHANNELS SHALL CONFORM TO IS 808.
 10. ALL MS ITEMS SHALL BE OF GRADE E250A (F410M).
 11. WEIGHTS MENTIONED IN BOM ARE BEFORE PURCHASING HOLE.

PMA IPDS/DDUGJY

RECPDCL

BILL OF MATERIAL

ERECTION CODE	DESCRIPTION	SECTION	LENGTH (M.M.)	WL/Mtr (K.G.)	Qty. (Nos.)	Total WL (K.G.)
1T 01	F Bracket	100X50	65	7.90	1	2.44
		65x65x6	470	5.89	1	0.51
1T 02	V - Cross Arm	100X50	2143	7.90	1	16.93
		50X6	60	2.36	4	0.57
1T 03	Back Clamp for V X-arm	50X8	470	3.14	1	1.44
TOTAL WEIGHT:						21.89
1	Bolts & Nuts	M16	85	0.164	2	0.328
2	Bolts & Nuts	M16	180	0.354	2	0.668
3	Spring Washers	M16		0.009	4	0.036
4	Flat Washers	M16		0.014	4	0.056
TOTAL WEIGHT:						1.088

44000PVVNL-ACIPDS/215/15-16 DT. 20.06.2016

PASCHIMANCHAL VIDYUT VITRAN NIGAM LIMITED (PVVNL)



TATA PROJECTS LIMITED

1ST FLOOR, TOWER-1, KRAYA CENTRE, B-3, BESPORE-2, MUMBAI-400016, INDIA

IPDS - Saharanpur Project

O.A. Consignments for A.M.S. Line Formulation on 11 mtr. ST Poles with ACSSR DOLG for the Line Location

OWNER:-

CONTRACTOR

PROJECT

DESCRIPTION

SCALE: NTS

SHEET NO. 2 OF 2

DATE

APPROVED BY

CHECKED BY

DRAWN BY

DATE

Technical drawing of a vertical structure, likely a chimney or shaft, showing dimensions and labels. The drawing includes a side elevation and a cross-section at the top.

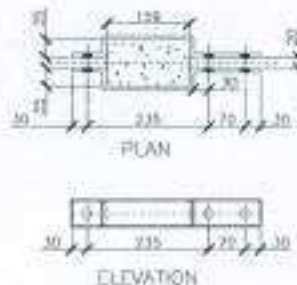
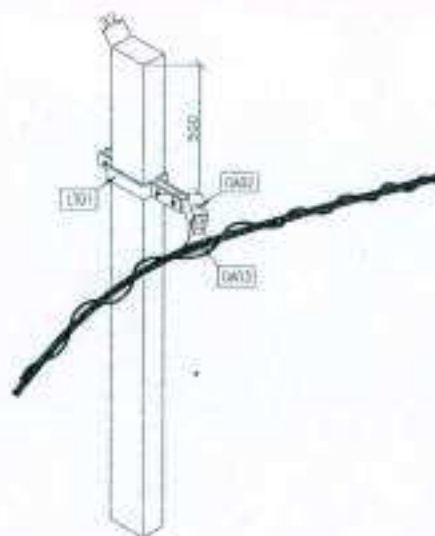
Dimensions:

- Overall height: 45.30
- Height from base to ground level (GL): 15.00
- Height from ground level (GL) to the top of the structure: 30.30
- Top width: 1.40
- Height of the top section: 1.00

Labels:

- GA02
- GA03
- GA07
- GL (Ground Level)

The drawing shows a vertical shaft with a cross-section at the top. The cross-section is a circle with a diameter of 1.40. The shaft has a height of 45.30. The ground level (GL) is indicated at a height of 15.00 from the base. The top section of the shaft is 1.00 high. The labels GA02, GA03, and GA07 are positioned near the top of the shaft. The label GL is positioned at the ground level.



STU1 CLAMP FOR EYE HOOK TOP (50 X 8)

0	22/09/2016	RELEASE FOR APPROVAL	SANDEEP KR.	SANDEEP KR.	R. R. Paul
Revision	Date	Description	DRAWN BY	CHECKED BY	APPROVED BY

BILL OF MATERIAL						
ERECTION CODE	DESCRIPTION	QTY.	REF DRAWING NO.			
GA 01	8.5m PCC Pole	1 No.				
GA 02	Forged Eye hook for LT AB Cable	1 No.				
GA 03	Suspension Clamp for LT AB Cable	1 No.				
	Foundation	1 No.				
	Spike Earthing	1 No.				
ERECTION CODE	DESCRIPTION	SECTION	LENGTH (M.M.)	Wt./Mtr (K.G.)	Qty. (Nos.)	Total Wt (Kgs)
LT 01	Clamp for Eye Hook (TOP)	50X8	435	3.14	2	2.732
					TOTAL :	2.732
1	Bolts & Nuts		65	0.184	3	0.492
2	Spring Washers			0.009	3	0.027
3	Flat Washers			0.014	3	0.042
					TOTAL :	0.561

NOTE:-

1. All the Dimensions are in mm Unless otherwise specified.
2. All Holes are 18mm Dia Unless otherwise Specified;
3. All Slotted Holes are 36mm long and 18mm width.
4. Manufacturing Tolerance as per IS:1852
5. All M.S. Parts Shall Conform to IS:2062
6. All M.S. Fabricated Items Shall be Hot Dip Galvanised As Per IS: 2629
7. All Washer Shall be Electro Galvanised
8. All M.S. Items Shall be Marked with Factory Code
9. All M.S. Clamps, Angles & Channel Shall Conform to IS:808
10. All M.S. Items Shall be of Grade E250A (fy=410N)
11. Weight Mention in BOM are Before Punching Holes.
12. Cable Earthing Shall Be Conform to IS: 6163 Type Earthing

APPROVED

Chief Engineer
(Material Management)
P.V.V.N.L. MEERUT

"Not Withstanding the aforesaid approval
the entire responsibility of correctness and

Specification / Type test report / CTP
PASCHIMANCHAL VIDYUT NIGAM LIMITED, PUNEA
Shell on that of the contractor which is to

he explained during his trip.

1M FLOOR, TOWER-1 ORAYA CENTRE, B-4, SECTOR-62, NOIDA-201301, U.P.

IPDS - Saharapur Project

C.A. Composers for LT Line Formation on 8.5 mtr.
PCC Poles With All Cable for (In Line Location)

89412 HTS	SHEET NO. 1 OF 1	DRAWING NAME: TPL-DVYRL-IG-R5-CA-13
-----------	------------------	-------------------------------------

Technical drawing of a vertical structural member, likely a column or pier, showing dimensions and labels. The drawing includes a cross-section at the top with a circular feature labeled 'GABT' and a rectangular feature labeled 'GABT'. The cross-section is also labeled '2. WIDENED' and '2. M100075'. The main vertical member is labeled 'GABT' at the top and 'GABT' at the bottom. Dimensions include a total height of 3550, a section height of 1500, and a base width of 200. A curved line indicates a transition or bend in the member. The drawing is signed 'GABT' and 'GABT' at the bottom.

APPROVED

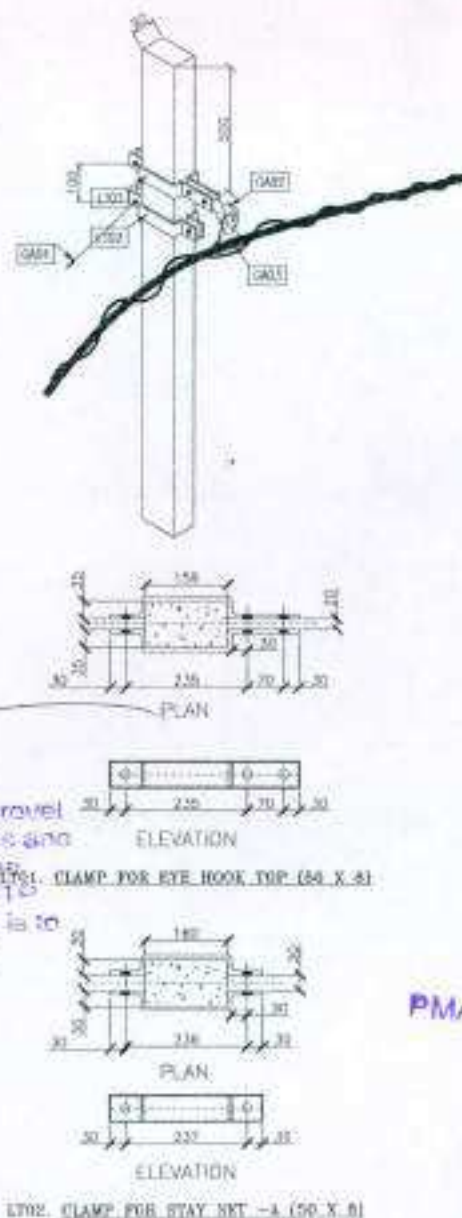
Chief Engineer
(Material Management)
P.V.V.N.L., MEERU

Not Withstanding the aforesaid, the entire responsibility of correct supply of material according to Specification / Type test results shall be that of the contractor. He checked during inspection.

[Signature]

Chief Engineer
(Material Management)
P.V.V.L. MEERUT

"Not Withstanding the aforesaid approval, the entire responsibility of correctness and supply of material according to the Specification / Type test report / CTS shall be that of the contractor which is to be checked upon inspection."



BILL OF MATERIAL						
ERECTION CODE	DESCRIPTION	QTY.	REF DRAWING NO.			
GA 01	8.5m PCC Pole	1 No.				
GA 02	Forged Eye hook for LT AB Cable	1 No.				
GA 03	Suspension Clamp for LT AB Cable	1 No.				
GA 04	LT Stay Set Arrangement	1 No.				
	Foundation	1 No.				
	Spike Earthing	1 No.				
ERECTION CODE	DESCRIPTION	SECTION	LENGTH (M.M.)	Wt./Mtr (K.g)	Qty. (Nos.)	Total Wt (Kgs)
LT 01	Clamp for Eye Hook (TOP)	50XB	433	3.14	2	2.719
LT 02	Stay set Clamp A	50XB	357	3.14	2	2.242
			TOTAL :			4.961
1	Bolts & Nuts	M16	75	0.180	2	0.360
2	Bolts & Nuts	M16	65	0.164	3	0.492
3	Spring Washers	M16		0.009	5	0.045
4	Flat Washers	M16		0.014	5	0.070
TOTAL :						0.967

NOTE:-

1. All the Dimensions are in mm Unless otherwise specified.
2. All Holes are 18mm Dia Unless otherwise Specified;
3. All Slotted Holes are 36mm long and 18mm width.
4. Manufacturing Tolerance as per IS:1852
5. All M.S. Parts Shall Conform to IS:2062
6. All M.S. Fabricated Items Shall be Hot Dip Galvanised.
As Per IS: 2829
7. All Washer Shall be Electro-Galvanised
8. All M.S. Items Shall be Marked with Erection Code
9. All M.S. Clamps, Angel & Channel Shall Conform to IS:800
10. All M.S. Items Shall be of Grade E250A (Fe410W)
11. Weight Mention in BOM are Before Punching Holes.
12. Pole Earthing Shall be Connected to Spike Type Earthing

PMA IPDS/DDUGJY

Ashish
RECPD

UDA No.	6/992PVVN-IT/PPDS/035/15-16 DT. 20.06.2016		
OWNER -	PASCHIMANCHAL VIDYUT VITRAN NIGAM LIMITED (PVVN)		
CONTRACTOR	 TATA PROJECTS LIMITED 1st FLOOR, TOWER-1, GRAYA CENTRE, B-5, SECTOR-62, NOIDA-201301, U.P.		
PROJECT	IPDS - Saharanpur Project		
DESCRIPTION	G.A. Components for LT Line Formation on R.S. str. FCC Poles With AB Cables for (Angular Loc. 9°-30°)		
SCALE	1:10	SHEET NO. 1 OF 1	DRAWING No. TPL-PVVN-10-85-GA-12

0	22/09/2016	RELEASE FOR APPROVAL	SANDEEP KR.	SANDEEP KR.	K. R. Patel
Revision	Date	Description	DRAWN BY	CHECKED BY	APPROVED BY

BILL OF MATERIAL

ERECTION CODE	DESCRIPTION	QTY.	REF DRAWING NO.			
GA 01	8.5m PCC Pole	1 No.				
GA 02	Forged Eye hook for LT AG Cable	1 No.				
GA 04	LT Stay Set Arrangement	1 No.				
GA 05	Dead Clamp Clamp LT AG Cable	1 No.				
	Foundation	1 No.				
	Splice Earthing	1 No.				
ERECTION CODE	DESCRIPTION	SECTION	LENGTH (M.M.)	WL/MR (K.G)	Qty. (Nos.)	Total Wt. (Kgs)
LT 01	Clamp for Eye Hook (TOP)	50X8	433	3.14	2	2,719
LT 02	Stay set Clamp A	50X8	357	3.14	2	2,242
			TOTAL:			4,961
1	Bolts & Nuts	M16	75	0.180	2	0.360
2	Bolts & Nuts	M16	65	0.164	3	0.492
3	Spring Washers	M16		0.009	5	0.045
4	Flat Washers	M16		0.014	5	0.070
			TOTAL:			0.967

NOTE:- 1. All the Dimensions are in mm unless otherwise specified.

2. All Holes are 18mm Dia Unless otherwise Specified.

3. All Stalled Holes are 36mm long x 18mm wide.

4. Manufacturing Tolerance as per IS:8032

5. All M.S. Parts Shall Conform to IS:2062

6. All M.S. Fabricated Items Shall be Hot Dip Galvanised

As Per IS: 2620

7. All Washer Shall be Electro Galvanised

8. All M.S. Items Shall be Marked With Engraved

9. All M.S. Channels, Angles, Plates, etc. Shall be of Grade E 250

10. All M.S. Items Shall be of Grade E 250

11. Weight Mention in BOM are Before Painting

12. Weight Mention in BOM are Before Painting

13. Weight Mention in BOM are Before Painting

14. Weight Mention in BOM are Before Painting

15. Weight Mention in BOM are Before Painting

16. Weight Mention in BOM are Before Painting

17. Weight Mention in BOM are Before Painting

18. Weight Mention in BOM are Before Painting

19. Weight Mention in BOM are Before Painting

20. Weight Mention in BOM are Before Painting

21. Weight Mention in BOM are Before Painting

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27. Weight Mention in BOM are Before Painting

28. Weight Mention in BOM are Before Painting

29. Weight Mention in BOM are Before Painting

30. Weight Mention in BOM are Before Painting

31. Weight Mention in BOM are Before Painting

32. Weight Mention in BOM are Before Painting

APPROVED

Chief Engineer

(Material Management)

P.V.V.N. MEERUT

Not Withstanding the aforesaid approval the entire responsibility of correctness and supply of material according to the Specification / Type test report / GTP shall be that of the contractor which is to be ascertained during inspection.

PMA 11115/DDUGJY

Asish

RECEIVED

LOA No.	069/2016-10
OWNER:-	PASCHIMANCHAL VIDYUT VITAN NIGAM LIMITED (PVVNL)
CONTRACTOR	TATA PROJECTS LIMITED 14 FLOOR, TOWER-1, KOKA CENTRE, B-5, SECTOR-10, KOKA, J.P.
PROJECT	IPPS - Saharanpur Project
DESCRIPTION	G.A. Components for LT Line Pole on 8.5m PCC Pole With AG Cable for (Dead End Location)
SCALE	MPS
SHEET NO.	1 OF 1
DRAWING NO.	IPPS-IPPS-16-8.5-04-13

R. S. Paul

APPROVED BY

DECKED BY

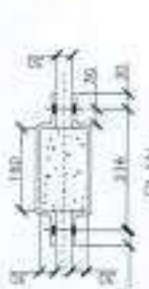
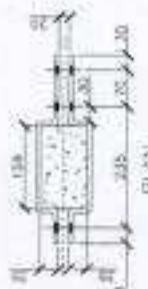
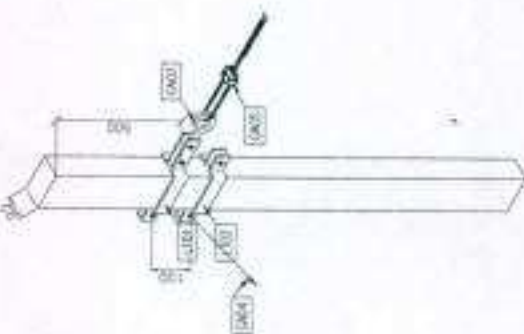
SANDEEP KH.

SANDEEP KH.

RELEASE FOR APPROVAL

22/09/2016

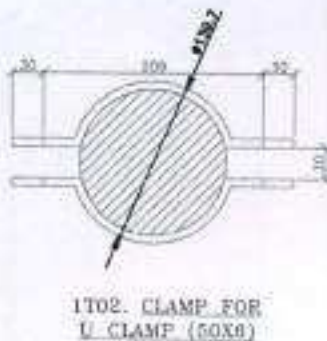
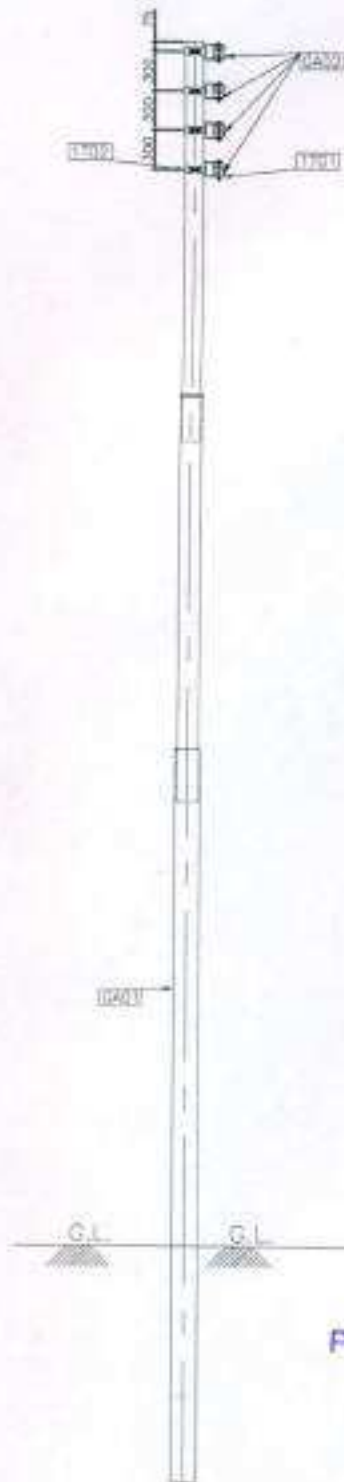
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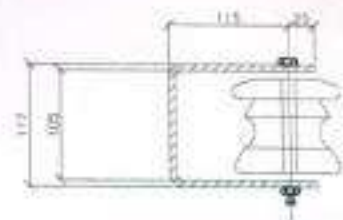
LT04 CLAMP FOR STAY SET -A (8.5 X 8)

LT04 CLAMP FOR EYE HOOK TOP (8.5 X 8)

BILL OF MATERIAL						
ERECTION CODE	DESCRIPTION	QTY.	REF DRAWING NO.			
GA-01	11m/SP-55 (410 MPa) STP Pole	1 No.				
GA-02	LT Shackle insulators with GI pins	4 Nos.				
1T-01	U Clamp	4 Nos.	TPL-PVVNL-STP-10-11-GA-11			
1T-02	Clamp for U Clamp	8 Nos.	TPL-PVVNL-STP-10-11-GA-11			
	Earthing	1 No.				
	Foundation	1 No.				
ERECTION CODE	DESCRIPTION	SECTION	LENGTH (MM.)	WL/Mtr (K.g.)	Qty. (Nos.)	Total Wt. (Kgs)
1T-01	U Clamp	30X6	385	1.41	4	2.17
1T-02	Clamp for U Clamp	50X6	318	2.36	8	6.00
TOTAL WEIGHT :						8.17
1	Boils & Nuts	M16	75	0.180	8	1.440
2	Spring Washers	M16		0.009	8	0.072
3	Flat Washers	M16		0.014	8	0.112
TOTAL WEIGHT :						1.624



1T02. CLAMP FOR U CLAMP (50X6)



1T01-U CLAMP (30X6)

APPROVED

Chief Engineer
(Material Management)
PVVNL MEERUT

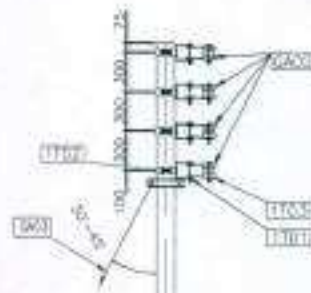
NOTE:- 1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE MENTIONED.
2. ALL DIMENSIONS ARE TO BE TAKEN TO THE CENTER LINE UNLESS OTHERWISE SPECIFIED.
3. ALL DIMENSIONS ARE TO BE TAKEN TO THE CENTER LINE UNLESS OTHERWISE SPECIFIED.
4. ALL DIMENSIONS ARE TO BE TAKEN TO THE CENTER LINE UNLESS OTHERWISE SPECIFIED.
5. ALL DIMENSIONS ARE TO BE TAKEN TO THE CENTER LINE UNLESS OTHERWISE SPECIFIED.
6. ALL MS FABRICATED OVER THE CONTRACTOR WHICH IS TO BE AS PER IS 3628.
7. ALL WASHERS SHALL BE ELECTRO GALVANIZED.
8. ALL MS ITEMS SHALL BE MARKED WITH ERECTION CODE.
9. ALL CLAMPS, ANGLE & CHANNELS SHALL CONFORM TO IS 808.
10. ALL MS ITEMS SHALL BE OF GRADE E250A (Fe410w).
11. WEIGHTS MENTIONED IN BOM ARE BEFORE PUNCHING HOLES.

PMA IPDS/DDUGJY

Asish
RECPDCL

LOA No.	PVVNL-MT/IPDS/335/15-16 DT: 30.06.2016		
OWNER:-	PASCHIMANCHAL VIDYUT VITRAN NIGAM LIMITED (PVVNL)		
CONTRACTOR	 TATA PROJECTS LIMITED 11 FLOOR, TOWNS-1, OKAYA CENTRE, 4-S, SECTOR-42, NOIDA-201301, U.P.		
PROJECT	IPDS - Saharanpur Project		
DESCRIPTION	G.A. Components for LT Line Foundation on 11 mtr. ST Pole with ACSR DDG for (its Line Location)		
Rev	Date	Description	SCALE: MTS SHEET NO. 1 OF 1 DRAWING No. TPL-PVVNL-STP-10-11-GA-11

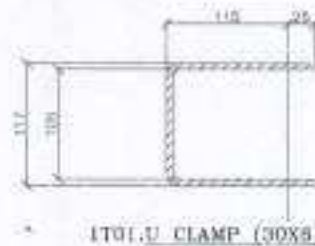
1					
0	24/06/2016	Release for Approval	SANDEEP KR.	SANDEEP KR.	R. R. Patel
Rev	Date	Description	DRAWN BY	CHECKED BY	APPROVED BY



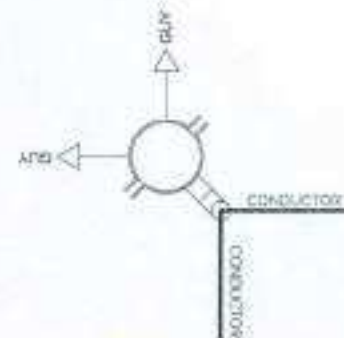
BILL OF MATERIAL

ERECTION CODE	DESCRIPTION	QTY.	REF DRAWING NO.
GA 01	11m/SP-55 (410 MPa) STP Pole	1 No.	
GA 02	LT Shackle Insulators with GI pins	4 Nos.	
GA 03	Stay Set	2 sets	
1T 01	U Clamp	4 Nos.	TPL-PVVNL-STP-10-11-GA-12
1T 02	Clamp for U Clamp	8 Nos.	TPL-PVVNL-STP-10-11-GA-12
1T 03	STRAP	8 Nos.	TPL-PVVNL-STP-10-11-GA-12
	Earthing	1 No.	
	Foundation	1 No.	

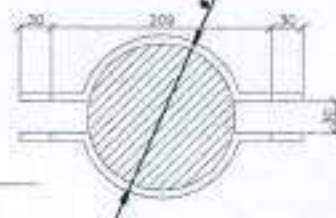
ERECTION CODE	DESCRIPTION	SECTION	LENGTH (M.M.)	Wt/Mtr (K.G.)	Qty. (Nos.)	Total Wt. (Kgs)
1T 01	U Clamp	30X6	585	1.41	4	2.17
1T 02	Clamp for U Clamp	50X8	318	2.35	8	6.00
1T 02	Strap	40X8	206	1.903	8	3.136
TOTAL WEIGHT:						11.306
1	Bolts & Nuts	M16	75	0.180	8	1.440
2	Bolts & Nuts	M16	145	0.291	8	2.328
3	Spring Washers	M16		0.009	16	0.144
4	Flat Washers	M16		0.014	16	0.224
TOTAL WEIGHT:						4.136



1T01 U CLAMP (30X6)



1T02 CLAMP FOR U CLAMP (50X8)



1T03 STRAP (40X8)

NOTE:- 1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE MENTIONED.
 2. ALL DIMENSIONS SHALL BE MARKED WITH ERECTION CODE.
 3. ALL SLOTTED HOLES ARE 36MM LONG AND 18MM WIDE UNLESS OTHERWISE SPECIFIED.
 4. MANUFACTURING TOLERANCE IS AS PER IS 1852.
 5. ALL PARTS SHALL CONFORM TO IS 2062.
 6. ALL DIMENSIONS SHALL BE HOT DIP GALVANIZED.

APPROVED

Chief Engineer
 (Material Management)
 P.V.V.N.L. MEERUT

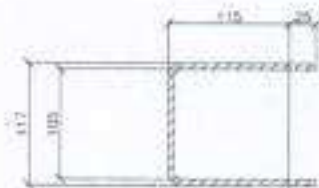
"Notwithstanding the aforesaid approval the entire responsibility of correctness and supply of material according to the Specification / Type test report / GTP shall be that of the contractor which is to be confirmed by the contractor."

PASCARAN NIGAM LIMITED (PVVNL)

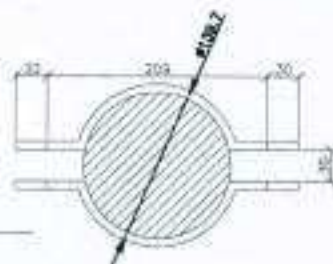
CONTRACTOR:		TATA PROJECTS LIMITED 1st FLOOR, TOWER-1, OKAYA CENTRE, 5-3, SECTOR-52, NOIDA-201301 (U.P.)
PROJECT:	IPDS - Saharanpur Project	
DESCRIPTION:	G.A. Components for LT Line Formation on 11 mtr. ST Poles with ACSSR DOG for (Angular Loc. 0°-90°)	
SCALE:	MTS	SECRET NO. 1 OF 1
DRAWING No:	TPL-PVVNL-STP-10-11-GA-12	

Rev	Date	Description	DRAWN BY	CHECKED BY	APPROVED BY
0	24/03/2016	Release for Approval	SANDEEP KR.	SANDEEP KR.	R. R. Patel

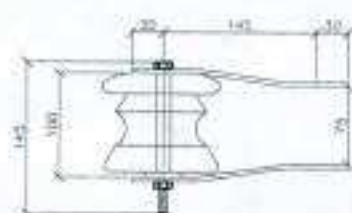
The schematic diagram illustrates the geometry of the test specimen. It features a vertical central shaft with several horizontal reinforcement bars or bolts extending from it at different heights. Key dimensions are indicated: a total height of 700 mm, a section width of 100 mm, and a distance of 300 mm between two specific points. Labels include 'T10x' for the top reinforcement bar, 'G02' for a component near the base, and 'T10x' for another reinforcement bar lower down. A curved arrow indicates a rotation angle of 90°.

[illegible]

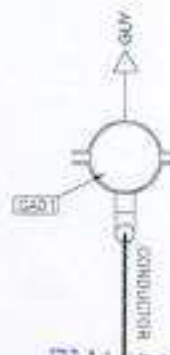
IT01.U CLAMP (30X8)



1T02. CLAMP FOR
U CLAMP (50X6)



1Y03. STRAP (40X6)



PLAN

APPROVED

NOTE: 1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTED.
2. ALL HOLES ARE 10MM DIA UNLESS OTHERWISE SPECIFIED.
3. ALL SLOTTED HOLES ARE 38MM LONG AND 18MM WIDE
UNLESS OTHERWISE SPECIFIED

Chief Engineer

(Material Management)

P.V.V.N. MEERLOT

*Notwithstanding the aforesaid approval, the entire responsibility of correctness and supply of material according to the Specification (Type test report) GTP shall be that of the contractor which is to

LDW No.	0400PVNL-MTIPDS-INTD-01-2015
OWNER:-	PASCHIMANCHAL VIDYUT VITRAN NIGAM LIMITED (PPVNL)
CONTRACTOR	 TATA PROJECTS LIMITED 1st FLOOR TOWER-1, OKAYA CENTRE, 9-B, SECTOR-A2 NOIDA-201301, U.P.
PROJECT	IPDS - Saharanpur Project
DESCRIPTION	G.A. Components for LT Line Formation on 11 mtr. ST Poles with ACSR DGG for (Dead End Location)
SCALE: NTS	SHEET NO. : OF :
	DRAWING No.TPL-PVNL-STP-10-11-GA-13



दूरभाष / Ph.: 0121-2665734
फैक्स / Fax: 0121-2666062
CIN: U31200UP2003SGC027458

कार्यालय :
Office of the :
प्रबन्ध निदेशक
MANAGING DIRECTOR
पश्चिमांचल विद्युत वितरण निगम लि.,
Paschimanchal Vidyut Vitran Nigam Ltd.
विक्टोरिया पार्क, मेरठ
Victoria Park, MEERUT-250 001
CIN No. U31200UP2003SGC027458

No.: 20844/ PVVNL-MT/ IPDS/335/15-16

Dated: 13.01.2017

Subject:- Approval of GTP/Drawing of Material/Equipment for Work of Construction of 33 KV Line, 11 KV Line, LT Line, Installation of New 11/0.4 KV Transformers, Augmentation of 11/0.4 KV Transformers & other works at different places of Electricity Distribution Zone Saharanpur on partial-turnkey basis under Integrated Power Development Scheme (IPDS) Against Tender specification no. PVVNL-MT/IPDS/335/15-16.

M/s Tata Projects Limited,
Ground Floor Tower-B Green Boulevard,
Plot No. B-9/A, Sector-62,
Noida-201307 UP.

Email ID - abhikpal@tataprojects.com

Dear Sir,

Please refer to your letter No. TPL/NOIDA/PVVNL/IPDS/62 dated 30.12.2016 regarding approval of the GTP & Drawing of the material & make as detailed below:-

Sl. No.	Material/equipment	Approved Vendor
1.	GA Drawings	M/s Tata Projects Ltd, Noida

This approval is subject to the following conditions:-

1. The said approval is with the condition the material supplied by the above firms may be sent by Managing Director, PVVNL, Meerut for testing by independent lab on firm's cost.
2. M/s Tata Projects Ltd, Noida is not blacklisted/Debarred by any Discom/Govt. Organization.

Correction wherever required in GTP & Drawing submitted by the contractor has been done by red ink. However, these GTP & Drawing shall be subjected to the valid type test report and correctness as per technical specification of the SBD for IPDS/DDUGJY and tender document and the entire responsibility of the correctness of the GTP & Drawing as per the specification as well as supply of material according to the technical specification of the contract agreement and these GTP & Drawing shall be that of the contractor.

In case of any contradiction between GTP & Drawing & Technical specification the version of the M.D. PVVNL, Meerut shall be final and binding on both the parties. Contractor shall have to replace the material to the entire satisfaction of purchaser in case the material is not found suitable for use in the projects.

One copy of approved GTP and Drawings are enclosed herewith. This GTP and Drawing shall be treated as approved for all tenders under DDUGJY and IPDS scheme.

Encl.: As above

Your's faithfully


(Anil Kumar)

Superintending Engineer (MM-2)

Dated: 13.01.2017

No.: 20844/ PVVNL-MT/ IPDS/335/15-16

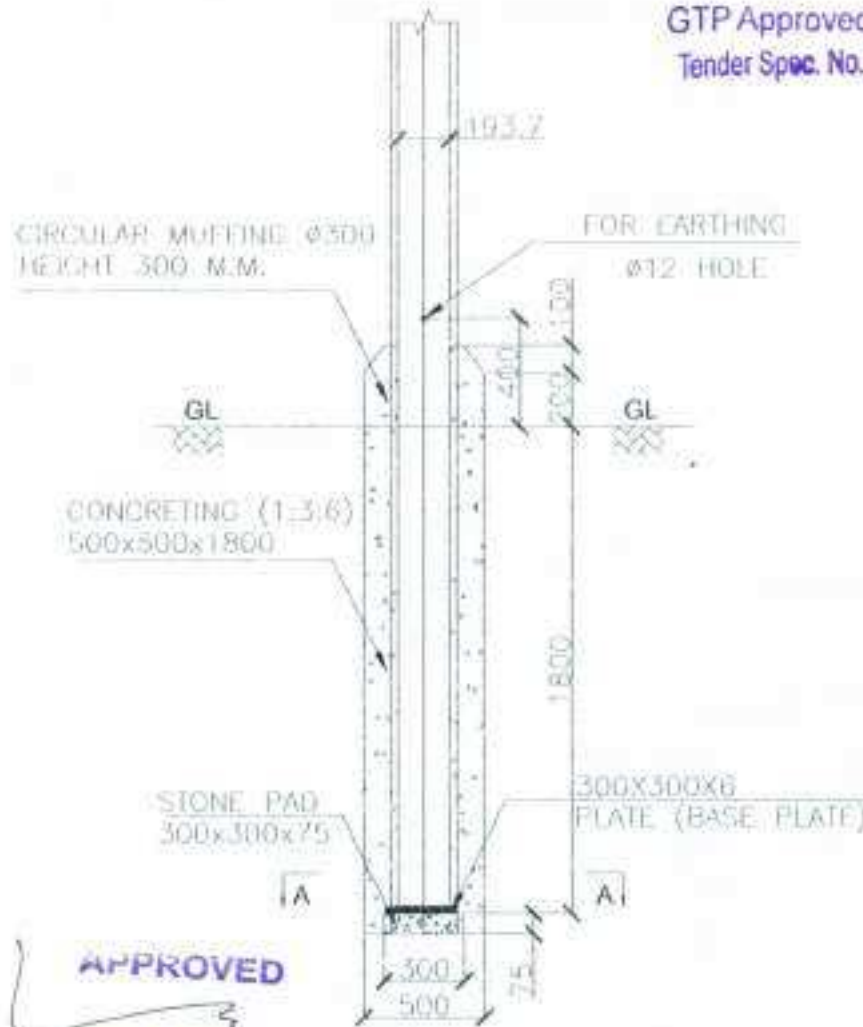
Copy forwarded to following for information and necessary action:

1. Chief Engineer, Saharanpur Zone, Saharanpur.
2. SE (Equator), PVVNL, Meerut.
3. SE (EDC/EUDC), Saharanpur/Muzaffarnagar/Shamli.
4. Project Manager M/s. REC, PDCL, (PMA for IPDS/DDUGJY)

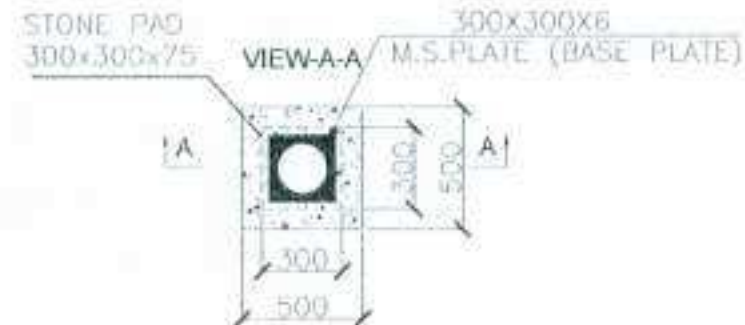
(Anil Kumar)

Superintending Engineer (MM-2)

GTP Approved in IPDS/DDUGJY
Tender Spec. No. PUVNL-MT/IPDS/335/15-16



S.NO.	DESCRIPTION	Vol. in ³ M
1	Excavation	0.471
2	Concreting (1:3:6)	0.425 0.44



APPROVED

Chief Engineer
(Material Management)
P.V.V.N.L., MEERUT

"Not Withstanding the above, I approve the entire report and drawings and all according to the type test report / GTP contractor which is to be inspected."

NOTE:-

1. All Dimensions are in mm. Unless otherwise Specified.
2. Pole Drawing As Per IS 2713 - 1980(Part II), SP-55(410Mpa)

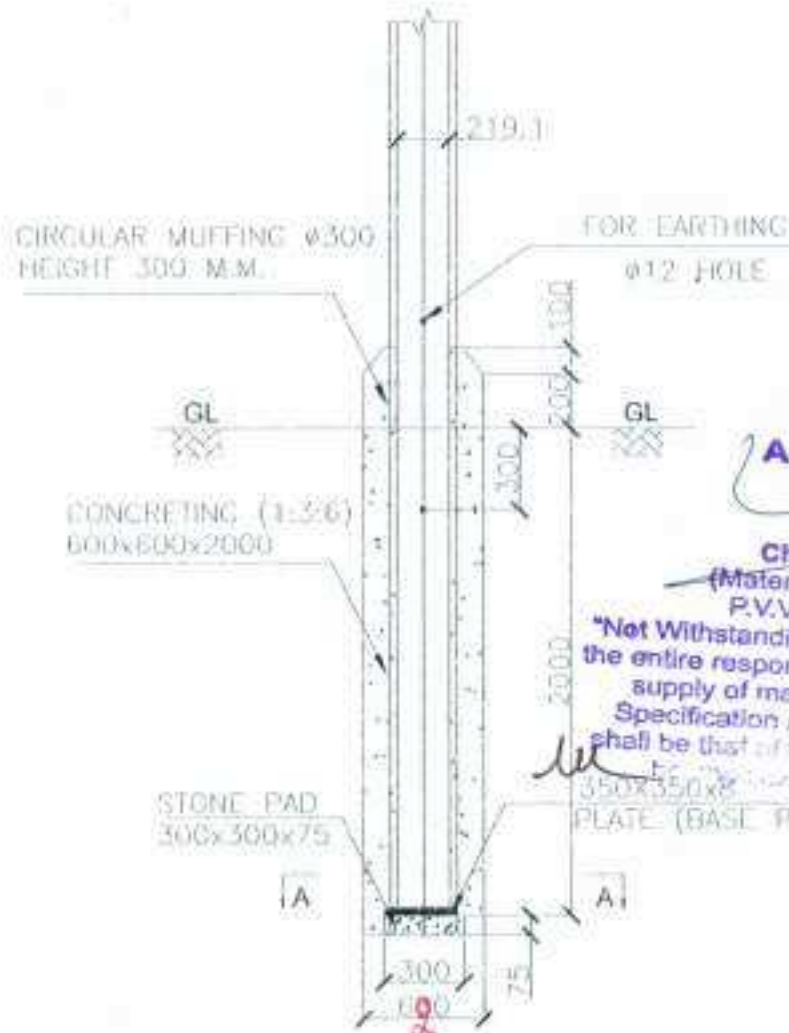


LOA No.	649/PVNL-MT/105/335/15 DT. 30.06.2016
OWNER:-	PASCHIMANCHAL VIDYUT VITRAN NIGAM LIMITED (P.V.V.N.L.)
CONTRACTOR	TATA PROJECTS LIMITED 1st FLOOR TOWER-1, CHAKRA CENTRE, B-4, SECTOR-42 NOIDA-201301, U.P.
PROJECT	IPDS - Saharanpur Project
DESCRIPTION	Ø300, 11KV & LT LINE FOUNDATION DETAIL FOR 11M STEEL TUBULAR POLE
SCALE	NTS
SHEET NO.	1 OF 1
DRAWING No.	TPL-PVNL-STP-11-FDN-01

Rev	Date	Description	DRAWN BY	CHECKED BY	APPROVED BY
1	29/12/2016	FOUNDATION 500X500X1800	ADITYA BHATT	SANDEEP KR.	R. K. Paul
0	02/08/2015	Release for Approval	SANDEEP KR.	SANDEEP KR.	R. K. Paul

GTP Approved in IPDS/DDUGJY
Tender Spc. No. PVVNL-MT/IPDS/335/15-16

S.NO.	DESCRIPTION	Vol. in ³ M
1	Excavation	0.588
2	Concreting (1:3:6)	0.516 0.64



APPROVED

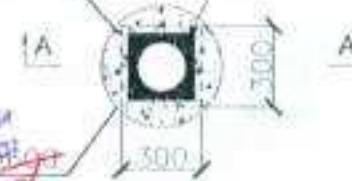
Chief Engineer
(Material Management)
P.V.V.N.L., MEERUT

"Not Withstanding the aforesaid approval the entire responsibility of correctness and supply of material according to the Specification / Type test report / GTP shall be that of the contractor which is to be verified by the inspecting inspection."

350x350x8
M.S. PLATE (BASE PLATE)

STONE PAD
300x300x75

VIEW-A-A
350x350x8
M.S. PLATE (BASE PLATE)



NOTE:-

1. All Dimensions are in mm. Unless otherwise Specified.
2. Pole Drawing As Per IS 2713 - 1980 (Part II), 5P-72 (540 Mpa)

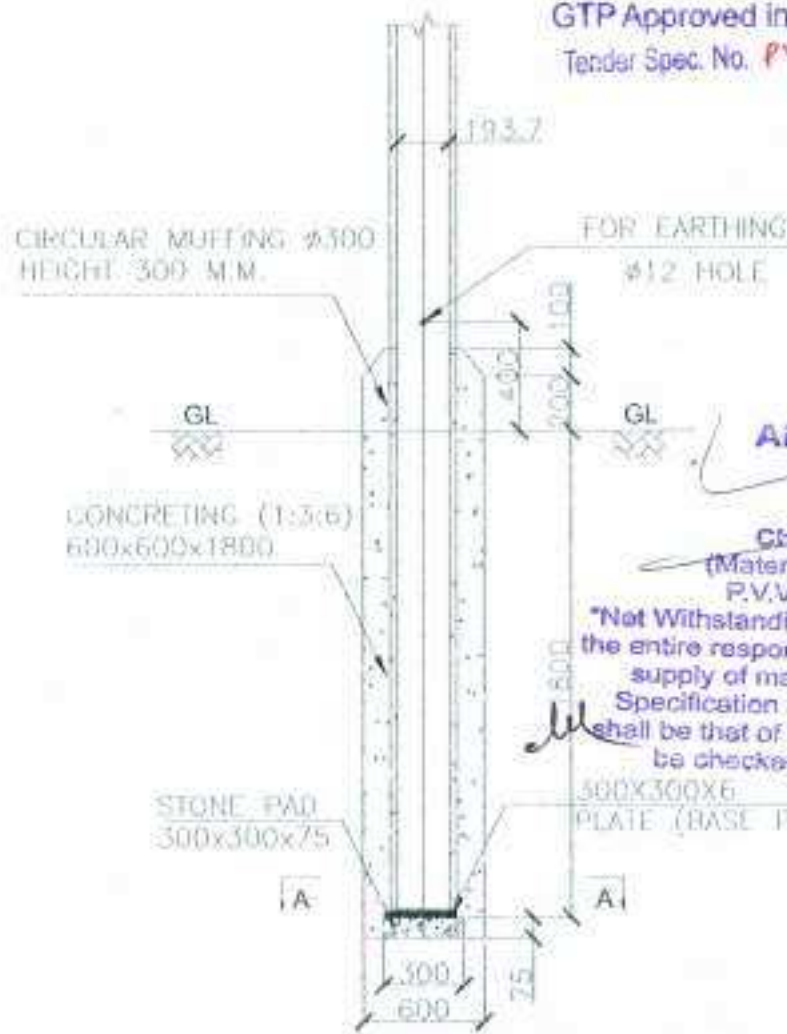


LOA No.	6400/PVVNL-MT/IPDS/335/15-16 DT. 20.06.2016
OWNER:-	PASCHIMANCHAL VIDYUT VITRAN NIGAM LIMITED (PVVNL)
CONTRACTOR	 TATA PROJECTS LIMITED 1st FLOOR, TOWER-1, ORAYA CENTRE, B-5, SECTOR-62, NOIDA-201301 (U.P.)
PROJECT.	IPDS - Saharanpur Project
DESCRIPTION	DRY, TIKYA T.T. LINE FOUNDATION DETAIL FOR 43 M STEEL TUBULAR POLE
SCALE	1:10
SHEET NO.	1 OF 1
DRAWING No.	TPL-PVVNL-STP-13-FDN-01-A

Rev	Date	Description	DRAWN BY	CHECKED BY	APPROVED BY
1	20/12/2016	Inkane for Approval	ADITYA BHATT	SANDEEP K.R.	E. B. Paul

THIS DOCUMENT IS THE EXCLUSIVE PROPERTY OF TATA PROJECTS LTD. IT SHALL NOT BE COPIED OR COMMUNICATED TO A THIRD PARTY WITHOUT THE PRIOR WRITTEN PERMISSION OF THE COMPANY.

GTP Approved in IPDS/DDUGJY
Tender Spec. No. **PVVNL-MT/IPDS/335/15-16**

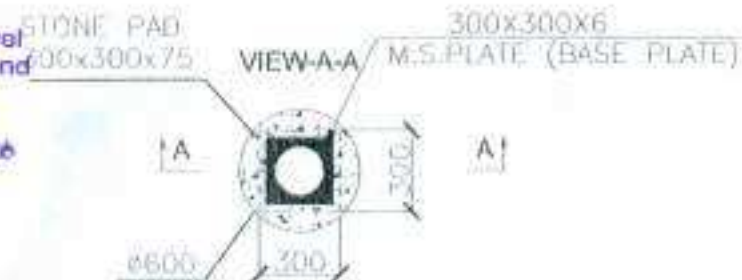


S.NO.	DESCRIPTION	Vol. in m^3
1	Excavation	0.532
2	Concreting (1:3:6)	0.485

APPROVED

Chief Engineer
(Material Management)
P.V.V.N.L., MEERUT

"Not Withstanding the aforesaid approval the entire responsibility of correctness and supply of material according to the Specification / Type test report / GTP shall be that of the contractor which is to be checked during inspection."



NOTE:-

- All Dimensions are in mm. Unless otherwise Specified.
- Refer Drawing As Per IS 2713 - 1980(Part II), SP-55(410Mpa)

PMA IPDS/DDUGJY

Ashish
RECPDCL

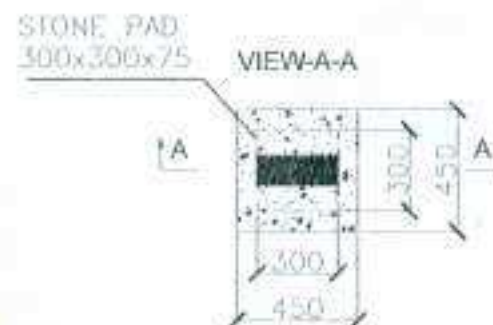
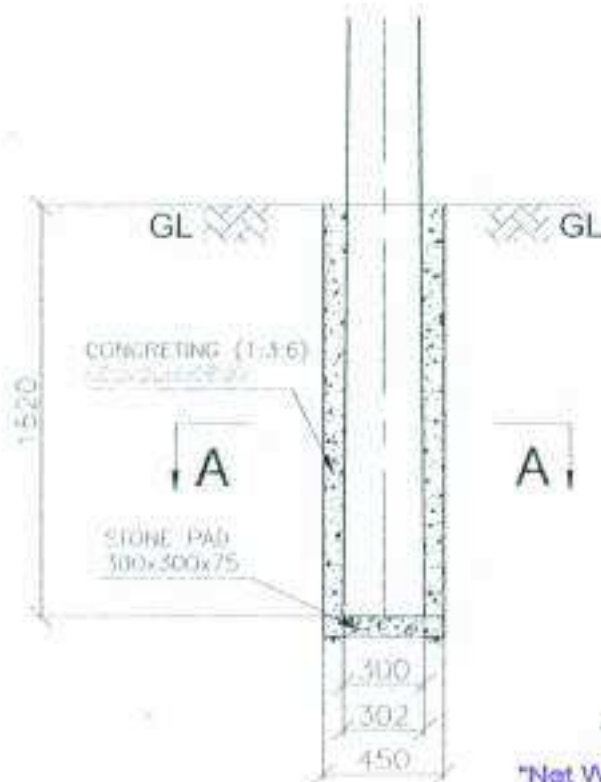


LOA No.	0400/PVVNL-MT/IPDS/335/15-16 DT: 20/06/2016
OWNER:-	PASCHIMANCHAL VIDYUT VITRAN NIGAM LIMITED (PVVNL)
CONTRACTOR	TATA PROJECTS LIMITED 11/FLOOR, TOWER-1, CHAYA CENTRE, B-6, SECTOR-42 NOIDA-201301, U.P.
PROJECT	IPDS - Saharanpur Project
DESCRIPTION	33KV, 11KV & LT LINE FOUNDATION DETAIL FOR LIM STEEL TUBULAR POLE
SCALE	HTS
SHEET NO.	1 OF 1
DRAWING No.	TPL-PVVNL-STP-11-FON-01-A

Rev	Date	Description	DRAWN BY	CHECKED BY	APPROVED BY
0	28/12/2016	Revised for Approval	ADITYA BHATTI	SANDEEP K.R.	R. K. Paul

GTP Approved as IPDS/DDUGJY
Tender Spec No. PUVNL-MT/IPDS/335/15-16

S.NO.	DESCRIPTION	Vol. in ³ M
1	Excavation	0.323
2	Concreting (1:3:6)	0.276




APPROVED

"Not Withstanding the aforesaid approval the entire responsibility of correctness and supply of material according to the Specification / Type test report / GTP shall be that of the contractor which is to be checked during inspection."

NOTE: All Dimensions are in mm. Unless otherwise Specified.

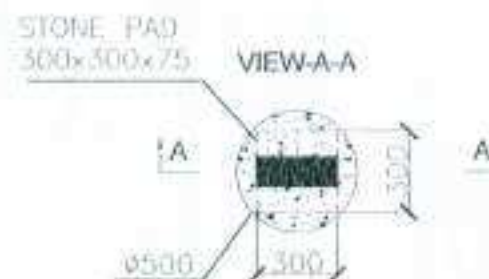
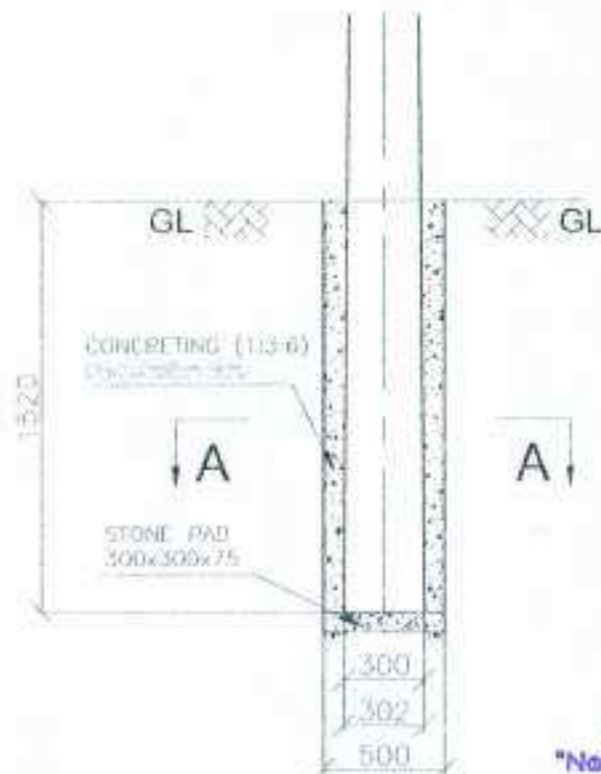
PMA IPDS/DDUGJY
Ashish
RECPDCL



1									
2	2W12/2015	Release for Approval	ADITYA BHATT	SANDEEP K.R.	R. R. Pant	LOA No.	678/PVNL-MT/335/15-16 DT. 10.06.2015		
Rev	Date	Description	DRAWN BY	CHECKED BY	APPROVED BY	OWNER:-	PASCHIMANCHAL VIDYUT VITRAN NIGAM LIMITED (PVVNL)		
						CONTRACTOR	 TATA PROJECTS LIMITED 1st FLOOR, TOWER-3, KANAKA CENTRE, D-5, SECTOR-62, NOIDA-201301, U.P.		
						PROJECT	IPDS - Saharanpur Project		
						DESCRIPTION	10KV, TRIV KTY LINE FOUNDATION DETAIL & M.F.C. POLE		
						SCALE	NTS	SHEET NO. 1 OF 1	DRAWING No. TPL-PVNL-STP-8.5-FDN-01

GTP Approved in IPDS/DDUGJY
Tender Spec. No. P.V.V.N.L-MT/IDS/335/15-16

S.NO.	DESCRIPTION	Vol. in ³ M
1	Excavation	0.313
2	Concreting (1:3:6)	0.268 0.268



APPROVED

Chief Engineer
(Material Management)
P.V.V.N.L., MEERUT

"Not Withstanding the aforesaid approval
the entire responsibility of correctness and
supply of material according to the
Specification & Test report of GTP
shall be that of the contractor."

NOTE:-

1. All Dimensions are in mm. Unless otherwise Specified.

PMA IPDS/DDUGJY

Ashish
RECPDCL



EDA No.	6/PV/PVNL-MT/IPDS/111/15-16 DT. 20.06.2016
OWNER:-	PASCHIMANCHAL VIDYUT VITAN NIGAM LIMITED (PVVNL)
CONTRACTOR	 TATA PROJECTS LIMITED 10/FLOOR, TOWER 1/OKAYA CENTRE, B-2, SECTOR-62 NOIDA-201301, U.P.
PROJECT	IPDS - Saharanpur Project
DESCRIPTION	SHEV. TIRV & EYEING FOUNDATION DETAIL 4.5 M P.C. PILE
SCALE	NTS
SHEET NO.	1 OF 1
DRAWING No.	TPL-PVNL-STP-8.5-FDN-02

Rev	Date	Description	DRAWN BY	CHECKED BY	APPROVED BY
0	29/12/2014	Release for Approval	ADITYA BHATT	SANDEEP K.	S. R. Patel



दूरभाष / Ph.: 0121-2665734

फैक्स / Fax: 0121-2666062

CIN: U31200UP2003SGC027458

No.:20127 /PVVNL-MT/DDUGJY/351/15-16

Dated: 30.12.2016

Subject:- Approval of GTP/Drawing of Material/Equipment for Work of Rural Electrification works including 11 KV Feeder segregation, Sansad Adarsh Gram Yojana and other works on partial turnkey basis in District Meerut under DDUGJY Scheme of Government of India against tender No. PVVNL-MT/ DDUGJY/351/15-16.

M/s Larsen & Toubro Ltd.,
Power Transmission &, Distribution
PO Box 979, Mount Poonamallee Road,
Manapakkam, Chennai-600089

Email: krj@intec.com, akr@intec.com
hojha@intec.com

Dear Sir,

Please refer to your letter No. LTCD/PT&D/DDUGJY/Meerut/G/1017 dated 19.12.2016 regarding approval of the GTP & Drawing of the material & make as detailed below:-

Sl. No.	Material/equipment	Approved Vendor
1.	GA Drawings	M/s Larsen & Toubro, Chennai

This approval is subject to the following conditions:-

1. The said approval is with the condition the material supplied by the above firms may be sent by Managing Director, PVVNL, Meerut for testing by independent lab on firm's cost.
2. M/s Larsen & Toubro, Chennai is not blacklisted/Debarred by any Discom/Govt. Organization.

Correction wherever required in Drawings submitted by the contractor has been done by red ink. However, these Drawings shall be subjected to the correctness as per technical specification of the SBD of IPDS & DDUGJY / tender document and the entire responsibility of the correctness of the Drawings as per the specification as well as supply of material according to the technical specification of the contract agreement and these Drawing shall be that of the contractor.

In case of any contradiction between Drawings & Technical specification the version of the M.D. PVVNL, Meerut shall be final and binding on both the parties. Contractor shall have to replace the material to the entire satisfaction of purchaser in case the drawing/material is not found suitable for use in the projects.

One copy of approved GTP and Drawings are enclosed herewith. This GTP and Drawing shall be treated as approved for all tenders under DDUGJY scheme only.

Encl.: As above

Your's faithfully

(Anil Kumar)

Superintending Engineer (MM-2)

Dated: 30.12.2016

No.: 20127 /PVVNL-MT/DDUGJY/351/15-16

Copy forwarded to following for information and necessary action:

1. Chief Engineer, Meerut zone, Meerut.
2. SE (Equator), PVVNL, Meerut.
3. SE, EUDC/EDC, Meerut, Baghpat
4. Project Manager M/s. REC, PDCL, (PMA for IPDS/DDUGJY)

(Anil Kumar)

Superintending Engineer (MM-2)

GTP Approved in IPDS/DDUGJY

Spec No. NVNL-MT/DDUGJY/35115-16

BILL OF MATERIAL

SL. NO.	DESCRIPTION	UOM	QTY
01.	PCC SUPPORT 8.5M POLE	Nos	02
02.	TOP CHANNEL 125X53X5	Nos	01
03.	DO FUSE MOUNTING CHANNEL 100X50X20X6	Nos	02
04.	ANGLE 75X75X6 FOR TF MOUNTING	Nos	02
05.	DISTRIBUTION TF	Nos	01
06.	DO FUSE UNIT SERVICE	SET	01
07.	DISTRIBUTION BOX	Nos	01
08.	EARTHING MT (TREATED)	SET	02
09.	EARTHING MT (GALVANIZED)	SET	02
10.	BACK CLAMP FOR DO FUSE CHANNEL	Nos	04
11.	DANGER BOARD	Nos	01
	BARBED WIRE	4kg	
	STONE PAD	Nos	02
	BACK CLAMP FOR TOP CHANNEL	Nos	02
	STAY SET	Nos	04
	1 KV DISC INSULATOR WITH FITTING	SET	02
	OS MOUNTING CHANNEL	Nos	02
	BACK CLAMP FOR DISTRIBUTION BOX	Nos	02
	BACK CLAMP FOR DANGER BOARD	Nos	01
	LT PVC cable	20 m	
	ACSR WEAGER CONDUCTOR	20 m	

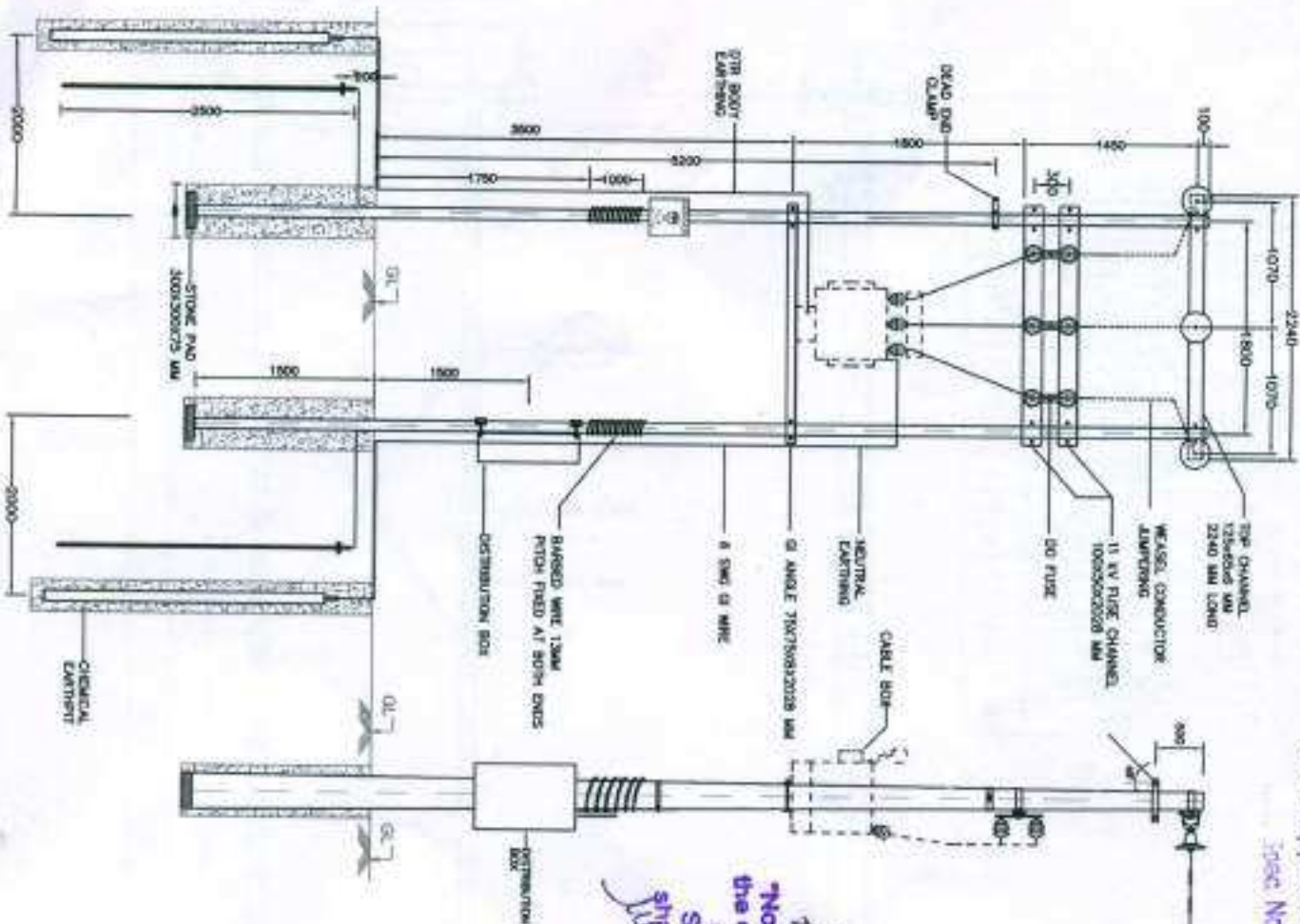
APPROVED

Chief Engineer
(Material Management)
P.V.V.N.L. MEERUT

Notwithstanding the aforesaid approval the entire responsibility of correctness and supply of material according to the Specification / Type test report / GTP shall be that of the contractor which is to be checked during inspection.

PMA IPDS/DDUGJY

Actual
RECPDCL

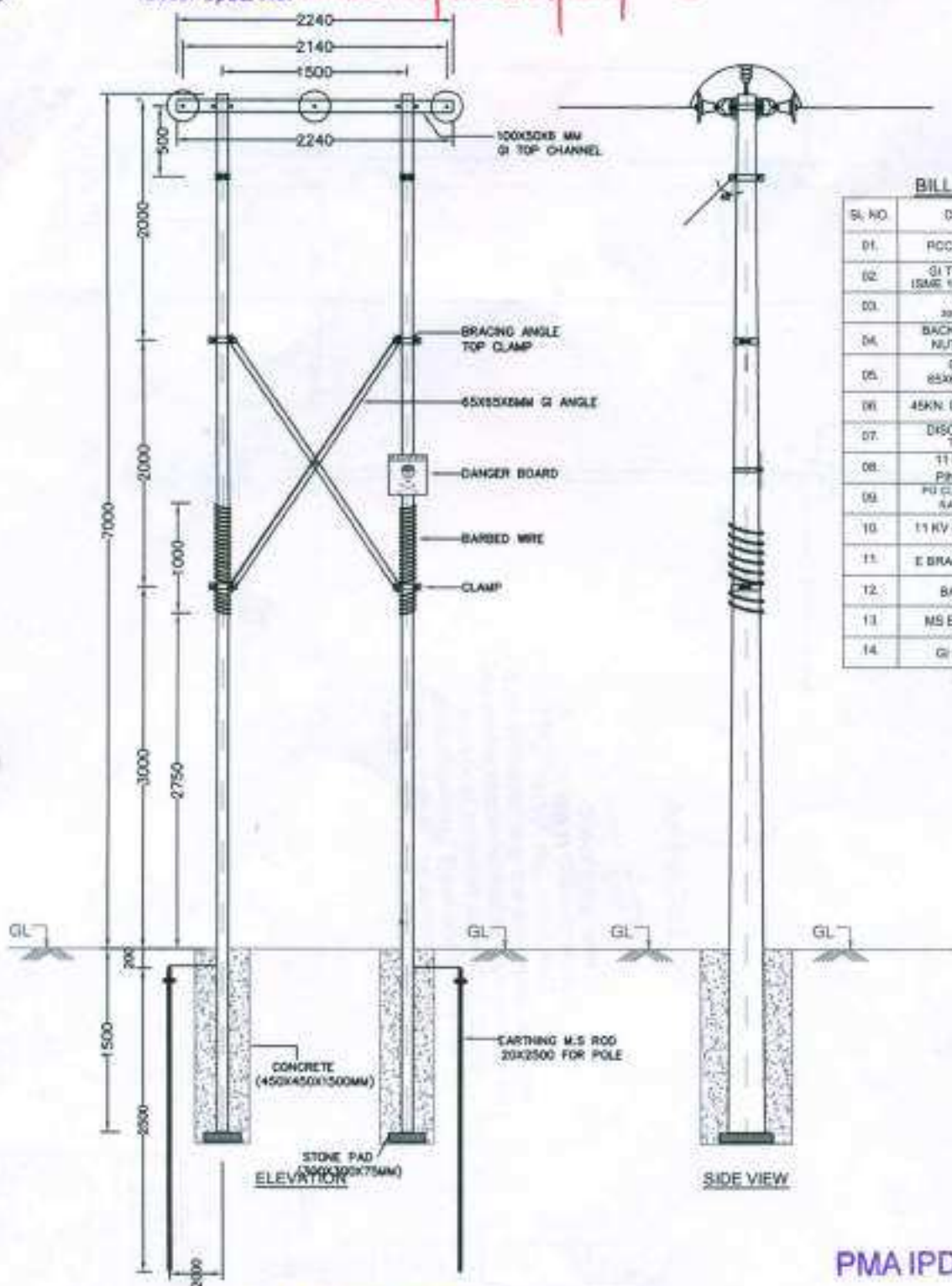


CONTRACTOR		G & T Construction	
CLIENT		POWER TRANSMISSION & DISTRIBUTION	
PROJECT		11KV/25/63/100 KVA DT MOUNTING ARRANGEMENT ON 8.5 M DP STRUCTURE	
REV	DATE	BY	DATE
001	10/01/2016	001	10/01/2016
002	10/01/2016	002	10/01/2016
003	10/01/2016	003	10/01/2016
004	10/01/2016	004	10/01/2016
005	10/01/2016	005	10/01/2016
006	10/01/2016	006	10/01/2016
007	10/01/2016	007	10/01/2016
008	10/01/2016	008	10/01/2016
009	10/01/2016	009	10/01/2016
010	10/01/2016	010	10/01/2016

GTP Approved in IPDS/DDUGJY

Technical Spec. No. PVVNL-MT/DDUGJY/351/15-16

This Drawing is the property of L & T Construction, Power Transmission & Distribution and shall remain the property of L & T Construction. It shall not be used for any other purpose without the prior written permission of L & T Construction.



BILL OF MATERIAL

Sl. NO.	DESCRIPTION	UOM	QTY
01.	PCC POLE 8.5 Mtr	Nos	02
02.	GI TOP CHANNEL (SAME 100X50X2.5 mm)	Nos	01
03.	STONE PAD (300X300X75 mm)	Nos	02
04.	BACK CLAMP WITH NUT AND BOLTS	Nos	02
05.	G.I. ANGLE 65X65X6MM	Nos	02
06.	45KN DISC INSULATOR	Nos	06
07.	DISC FITTING T&C TYPE 45KN	Nos	06
08.	11 KV POLYMER PIN INSULATOR	Nos	03
09.	PG CLAMP FOR ALUM (S&B/WEASEL)	Nos	06
10.	11 KV DANGER BOARD	Nos	01
11.	E BRACKET FOR 11 KV	Nos	03
12.	BARBED WIRE	Kg.	04
13.	MS EARTHING ROD	Nos	02
14.	GI EARTH WIRE	Nos	02

APPROVED

Chief Engineer
(Material Management)
P.V.V.N.L. MEERUT

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NOTES:

1. ALL DIMENSIONS ARE IN MM

PMA IPDS/DDUGJY

Ashish
RECPDCL

CONTRACTOR		L & T Construction	
CLIENT		PARISHRAMCHANDR VEDYUT VITRAN NIGAM LIMITED	
PROJECT		RURAL ELECTRIFICATION WORK AT MEERUT DISTRICT IN PVVNL OF U. P. STATE UNDER DDUGJY SCHEME	
BY	NAME	DESIGN	DATE
DRWN	WS		
CHKD	NSH		
APPD	LNM		
SCALE	1:100	REV. NO.	2
DRAWING NUMBER		LNT/PVVNL/DDUGJY/MEERUT/GA-02	

GTP Approved in IPDS/DDUGJY
 Insulator Spec No. P.V.V.N.L-MT/DDUGJY/351/15-16

BILL OF MATERIAL

SL NO	DESCRIPTION	UOM	QTY
01	V CROSS ARM	Nm	01
02	BACK CLAMP	Nm	01
03	FOR V CROSS ARM	Nm	01
04	7- SOCKET	Nm	01
05	POLYMER TYPE	Nm	02
06	INSULATOR	Nm	02
07	BURIED WIRE	Kg	02
08	DANGER BOARD	Nm	01
09	20000 MM	Nm	01
10	SAFETY ELECTRODE	Nm	01
11	PCC POLE	Nm	01
12	STONE PAD	Nm	01

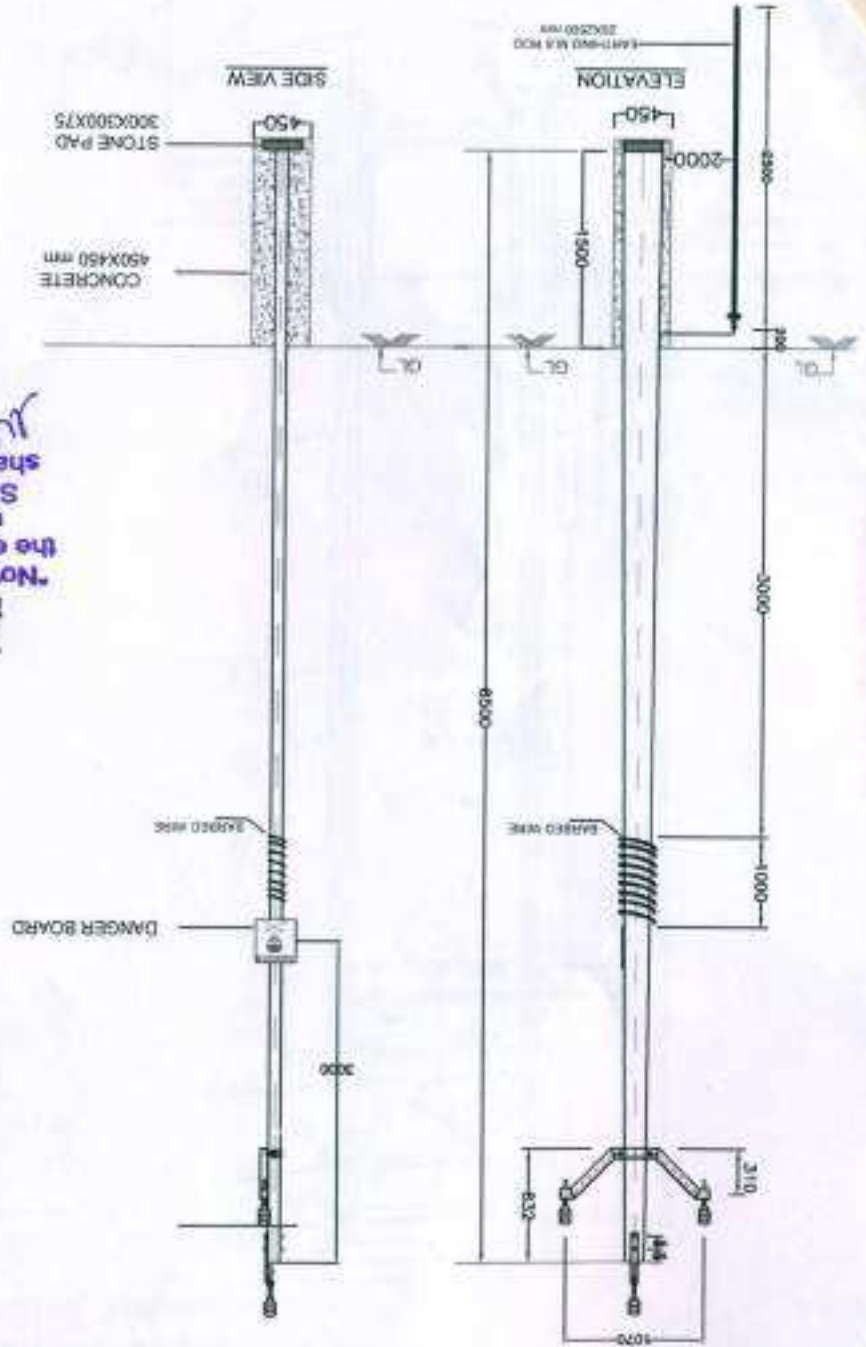
NOTES:
 1. ALL DIMENSIONS ARE IN MM

CONTRACTOR L & T Construction POWER TRANSMISSION & DISTRIBUTION		CLIENT P.V.V.N.L. MOORE LIMITED	
PROJECT - STATE ELECTRICITY WORKS, AT KERALA DISTRIBUTION TYPICAL OF C.P. RIVER CROSS ARMS SCHEME			
DRAWN W.S. CHECKED W.S. REV L.M. DATE 01/05/16		GENERAL ARRANGEMENT OF 11KV LINE WITH V CROSS ARM ON 8.5M PCC POLE	
APPD L.M. SCALE 1:100 REV NO 0 DATE 01/05/16		APPROVED L.M. DATE 01/05/16	

APPROVED

Chief Engineer
 (Material Management)
 P.V.V.N.L. MOORE LIMITED

Not Withstanding the aforesaid approval
 the entire responsibility of correctness and
 supply of material according to the
 Specification / Type test report / GTP
 shall be that of the contractor which is to
 be checked during inspection.



PMA IPDS/DDUGJY

RECDCL

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ITEM NO.	DESCRIPTION	QTY.
1	500 PILE DRIVER	2 NOS.
2	TOP CHANNEL 150x25x20 mm	1 NO.
3A	TOP CHANNEL BAY CLAMP ITEM 2 (DOX THE FLAT)	2 NOS.
3B	50 BOLTS, NUTS & WASHERS FOR ITEM 3A (PROSS LONG BOLTS NUT AND WASHER)	4 SET
3	UPSTAND BRACKET 8 KV	3 NOS.
3A	MOUNTING CHANNEL FOR 3A (100x20x10 CHANNEL)	1 NO.
3B	CLAMP FOR ITEM 3A (DOX THE FLAT)	2 NOS.
3C	50 BOLTS, NUTS & WASHERS FOR ITEM 3B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
4	150x10	1 NO.
4A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
4B	CLAMP FOR ITEM 4A (DOX THE FLAT)	4 NOS.
4C	50 BOLTS, NUTS & WASHERS FOR ITEM 4B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
5	50 PILE UNIT	SET OF
5A	50x100 BRACKET FOR 50 PILE (100x20x10 CHANNEL)	1 NO.
5B	CLAMP FOR ITEM 5A (DOX THE FLAT)	2 NOS.
5C	50 BOLTS, NUTS & WASHERS FOR ITEM 5B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
6	150x10	1 NO.
6A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
6B	CLAMP FOR ITEM 6A (DOX THE FLAT)	4 NOS.
6C	50 BOLTS, NUTS & WASHERS FOR ITEM 6B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
7	50 PILE UNIT	SET OF
7A	50x100 BRACKET FOR 70 PILE (100x20x10 CHANNEL)	2 NOS.
7B	CLAMP FOR ITEM 7A (DOX THE FLAT)	2 NOS.
7C	50 BOLTS, NUTS & WASHERS FOR ITEM 7B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
8	150x10	1 NO.
8A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
8B	CLAMP FOR ITEM 8A (DOX THE FLAT)	4 NOS.
8C	50 BOLTS, NUTS & WASHERS FOR ITEM 8B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
9	50 PILE UNIT	SET OF
9A	50x100 BRACKET FOR 90 PILE (100x20x10 CHANNEL)	2 NOS.
9B	CLAMP FOR ITEM 9A (DOX THE FLAT)	2 NOS.
9C	50 BOLTS, NUTS & WASHERS FOR ITEM 9B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
10	150x10	1 NO.
10A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
10B	CLAMP FOR ITEM 10A (DOX THE FLAT)	4 NOS.
10C	50 BOLTS, NUTS & WASHERS FOR ITEM 10B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
11	50 PILE UNIT	SET OF
11A	50x100 BRACKET FOR 110 PILE (100x20x10 CHANNEL)	2 NOS.
11B	CLAMP FOR ITEM 11A (DOX THE FLAT)	2 NOS.
11C	50 BOLTS, NUTS & WASHERS FOR ITEM 11B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
12	150x10	1 NO.
12A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
12B	CLAMP FOR ITEM 12A (DOX THE FLAT)	4 NOS.
12C	50 BOLTS, NUTS & WASHERS FOR ITEM 12B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
13	50 PILE UNIT	SET OF
13A	50x100 BRACKET FOR 130 PILE (100x20x10 CHANNEL)	2 NOS.
13B	CLAMP FOR ITEM 13A (DOX THE FLAT)	2 NOS.
13C	50 BOLTS, NUTS & WASHERS FOR ITEM 13B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
14	150x10	1 NO.
14A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
14B	CLAMP FOR ITEM 14A (DOX THE FLAT)	4 NOS.
14C	50 BOLTS, NUTS & WASHERS FOR ITEM 14B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
15	50 PILE UNIT	SET OF
15A	50x100 BRACKET FOR 150 PILE (100x20x10 CHANNEL)	2 NOS.
15B	CLAMP FOR ITEM 15A (DOX THE FLAT)	2 NOS.
15C	50 BOLTS, NUTS & WASHERS FOR ITEM 15B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
16	150x10	1 NO.
16A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
16B	CLAMP FOR ITEM 16A (DOX THE FLAT)	4 NOS.
16C	50 BOLTS, NUTS & WASHERS FOR ITEM 16B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
17	50 PILE UNIT	SET OF
17A	50x100 BRACKET FOR 170 PILE (100x20x10 CHANNEL)	2 NOS.
17B	CLAMP FOR ITEM 17A (DOX THE FLAT)	2 NOS.
17C	50 BOLTS, NUTS & WASHERS FOR ITEM 17B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
18	150x10	1 NO.
18A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
18B	CLAMP FOR ITEM 18A (DOX THE FLAT)	4 NOS.
18C	50 BOLTS, NUTS & WASHERS FOR ITEM 18B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
19	50 PILE UNIT	SET OF
19A	50x100 BRACKET FOR 190 PILE (100x20x10 CHANNEL)	2 NOS.
19B	CLAMP FOR ITEM 19A (DOX THE FLAT)	2 NOS.
19C	50 BOLTS, NUTS & WASHERS FOR ITEM 19B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
20	150x10	1 NO.
20A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
20B	CLAMP FOR ITEM 20A (DOX THE FLAT)	4 NOS.
20C	50 BOLTS, NUTS & WASHERS FOR ITEM 20B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
21	50 PILE UNIT	SET OF
21A	50x100 BRACKET FOR 210 PILE (100x20x10 CHANNEL)	2 NOS.
21B	CLAMP FOR ITEM 21A (DOX THE FLAT)	2 NOS.
21C	50 BOLTS, NUTS & WASHERS FOR ITEM 21B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
22	150x10	1 NO.
22A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
22B	CLAMP FOR ITEM 22A (DOX THE FLAT)	4 NOS.
22C	50 BOLTS, NUTS & WASHERS FOR ITEM 22B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
23	50 PILE UNIT	SET OF
23A	50x100 BRACKET FOR 230 PILE (100x20x10 CHANNEL)	2 NOS.
23B	CLAMP FOR ITEM 23A (DOX THE FLAT)	2 NOS.
23C	50 BOLTS, NUTS & WASHERS FOR ITEM 23B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
24	150x10	1 NO.
24A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
24B	CLAMP FOR ITEM 24A (DOX THE FLAT)	4 NOS.
24C	50 BOLTS, NUTS & WASHERS FOR ITEM 24B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
25	50 PILE UNIT	SET OF
25A	50x100 BRACKET FOR 250 PILE (100x20x10 CHANNEL)	2 NOS.
25B	CLAMP FOR ITEM 25A (DOX THE FLAT)	2 NOS.
25C	50 BOLTS, NUTS & WASHERS FOR ITEM 25B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
26	150x10	1 NO.
26A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
26B	CLAMP FOR ITEM 26A (DOX THE FLAT)	4 NOS.
26C	50 BOLTS, NUTS & WASHERS FOR ITEM 26B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
27	50 PILE UNIT	SET OF
27A	50x100 BRACKET FOR 270 PILE (100x20x10 CHANNEL)	2 NOS.
27B	CLAMP FOR ITEM 27A (DOX THE FLAT)	2 NOS.
27C	50 BOLTS, NUTS & WASHERS FOR ITEM 27B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
28	150x10	1 NO.
28A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
28B	CLAMP FOR ITEM 28A (DOX THE FLAT)	4 NOS.
28C	50 BOLTS, NUTS & WASHERS FOR ITEM 28B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
29	50 PILE UNIT	SET OF
29A	50x100 BRACKET FOR 290 PILE (100x20x10 CHANNEL)	2 NOS.
29B	CLAMP FOR ITEM 29A (DOX THE FLAT)	2 NOS.
29C	50 BOLTS, NUTS & WASHERS FOR ITEM 29B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
30	150x10	1 NO.
30A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
30B	CLAMP FOR ITEM 30A (DOX THE FLAT)	4 NOS.
30C	50 BOLTS, NUTS & WASHERS FOR ITEM 30B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
31	50 PILE UNIT	SET OF
31A	50x100 BRACKET FOR 310 PILE (100x20x10 CHANNEL)	2 NOS.
31B	CLAMP FOR ITEM 31A (DOX THE FLAT)	2 NOS.
31C	50 BOLTS, NUTS & WASHERS FOR ITEM 31B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
32	150x10	1 NO.
32A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
32B	CLAMP FOR ITEM 32A (DOX THE FLAT)	4 NOS.
32C	50 BOLTS, NUTS & WASHERS FOR ITEM 32B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
33	50 PILE UNIT	SET OF
33A	50x100 BRACKET FOR 330 PILE (100x20x10 CHANNEL)	2 NOS.
33B	CLAMP FOR ITEM 33A (DOX THE FLAT)	2 NOS.
33C	50 BOLTS, NUTS & WASHERS FOR ITEM 33B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
34	150x10	1 NO.
34A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
34B	CLAMP FOR ITEM 34A (DOX THE FLAT)	4 NOS.
34C	50 BOLTS, NUTS & WASHERS FOR ITEM 34B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
35	50 PILE UNIT	SET OF
35A	50x100 BRACKET FOR 350 PILE (100x20x10 CHANNEL)	2 NOS.
35B	CLAMP FOR ITEM 35A (DOX THE FLAT)	2 NOS.
35C	50 BOLTS, NUTS & WASHERS FOR ITEM 35B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
36	150x10	1 NO.
36A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
36B	CLAMP FOR ITEM 36A (DOX THE FLAT)	4 NOS.
36C	50 BOLTS, NUTS & WASHERS FOR ITEM 36B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
37	50 PILE UNIT	SET OF
37A	50x100 BRACKET FOR 370 PILE (100x20x10 CHANNEL)	2 NOS.
37B	CLAMP FOR ITEM 37A (DOX THE FLAT)	2 NOS.
37C	50 BOLTS, NUTS & WASHERS FOR ITEM 37B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
38	150x10	1 NO.
38A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
38B	CLAMP FOR ITEM 38A (DOX THE FLAT)	4 NOS.
38C	50 BOLTS, NUTS & WASHERS FOR ITEM 38B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
39	50 PILE UNIT	SET OF
39A	50x100 BRACKET FOR 390 PILE (100x20x10 CHANNEL)	2 NOS.
39B	CLAMP FOR ITEM 39A (DOX THE FLAT)	2 NOS.
39C	50 BOLTS, NUTS & WASHERS FOR ITEM 39B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
40	150x10	1 NO.
40A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
40B	CLAMP FOR ITEM 40A (DOX THE FLAT)	4 NOS.
40C	50 BOLTS, NUTS & WASHERS FOR ITEM 40B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
41	50 PILE UNIT	SET OF
41A	50x100 BRACKET FOR 410 PILE (100x20x10 CHANNEL)	2 NOS.
41B	CLAMP FOR ITEM 41A (DOX THE FLAT)	2 NOS.
41C	50 BOLTS, NUTS & WASHERS FOR ITEM 41B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
42	150x10	1 NO.
42A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
42B	CLAMP FOR ITEM 42A (DOX THE FLAT)	4 NOS.
42C	50 BOLTS, NUTS & WASHERS FOR ITEM 42B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
43	50 PILE UNIT	SET OF
43A	50x100 BRACKET FOR 430 PILE (100x20x10 CHANNEL)	2 NOS.
43B	CLAMP FOR ITEM 43A (DOX THE FLAT)	2 NOS.
43C	50 BOLTS, NUTS & WASHERS FOR ITEM 43B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
44	150x10	1 NO.
44A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
44B	CLAMP FOR ITEM 44A (DOX THE FLAT)	4 NOS.
44C	50 BOLTS, NUTS & WASHERS FOR ITEM 44B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
45	50 PILE UNIT	SET OF
45A	50x100 BRACKET FOR 450 PILE (100x20x10 CHANNEL)	2 NOS.
45B	CLAMP FOR ITEM 45A (DOX THE FLAT)	2 NOS.
45C	50 BOLTS, NUTS & WASHERS FOR ITEM 45B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
46	150x10	1 NO.
46A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
46B	CLAMP FOR ITEM 46A (DOX THE FLAT)	4 NOS.
46C	50 BOLTS, NUTS & WASHERS FOR ITEM 46B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
47	50 PILE UNIT	SET OF
47A	50x100 BRACKET FOR 470 PILE (100x20x10 CHANNEL)	2 NOS.
47B	CLAMP FOR ITEM 47A (DOX THE FLAT)	2 NOS.
47C	50 BOLTS, NUTS & WASHERS FOR ITEM 47B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
48	150x10	1 NO.
48A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
48B	CLAMP FOR ITEM 48A (DOX THE FLAT)	4 NOS.
48C	50 BOLTS, NUTS & WASHERS FOR ITEM 48B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
49	50 PILE UNIT	SET OF
49A	50x100 BRACKET FOR 490 PILE (100x20x10 CHANNEL)	2 NOS.
49B	CLAMP FOR ITEM 49A (DOX THE FLAT)	2 NOS.
49C	50 BOLTS, NUTS & WASHERS FOR ITEM 49B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
50	150x10	1 NO.
50A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
50B	CLAMP FOR ITEM 50A (DOX THE FLAT)	4 NOS.
50C	50 BOLTS, NUTS & WASHERS FOR ITEM 50B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
51	50 PILE UNIT	SET OF
51A	50x100 BRACKET FOR 510 PILE (100x20x10 CHANNEL)	2 NOS.
51B	CLAMP FOR ITEM 51A (DOX THE FLAT)	2 NOS.
51C	50 BOLTS, NUTS & WASHERS FOR ITEM 51B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
52	150x10	1 NO.
52A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
52B	CLAMP FOR ITEM 52A (DOX THE FLAT)	4 NOS.
52C	50 BOLTS, NUTS & WASHERS FOR ITEM 52B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
53	50 PILE UNIT	SET OF
53A	50x100 BRACKET FOR 530 PILE (100x20x10 CHANNEL)	2 NOS.
53B	CLAMP FOR ITEM 53A (DOX THE FLAT)	2 NOS.
53C	50 BOLTS, NUTS & WASHERS FOR ITEM 53B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
54	150x10	1 NO.
54A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
54B	CLAMP FOR ITEM 54A (DOX THE FLAT)	4 NOS.
54C	50 BOLTS, NUTS & WASHERS FOR ITEM 54B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
55	50 PILE UNIT	SET OF
55A	50x100 BRACKET FOR 550 PILE (100x20x10 CHANNEL)	2 NOS.
55B	CLAMP FOR ITEM 55A (DOX THE FLAT)	2 NOS.
55C	50 BOLTS, NUTS & WASHERS FOR ITEM 55B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
56	150x10	1 NO.
56A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
56B	CLAMP FOR ITEM 56A (DOX THE FLAT)	4 NOS.
56C	50 BOLTS, NUTS & WASHERS FOR ITEM 56B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
57	50 PILE UNIT	SET OF
57A	50x100 BRACKET FOR 570 PILE (100x20x10 CHANNEL)	2 NOS.
57B	CLAMP FOR ITEM 57A (DOX THE FLAT)	2 NOS.
57C	50 BOLTS, NUTS & WASHERS FOR ITEM 57B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
58	150x10	1 NO.
58A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
58B	CLAMP FOR ITEM 58A (DOX THE FLAT)	4 NOS.
58C	50 BOLTS, NUTS & WASHERS FOR ITEM 58B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
59	50 PILE UNIT	SET OF
59A	50x100 BRACKET FOR 590 PILE (100x20x10 CHANNEL)	2 NOS.
59B	CLAMP FOR ITEM 59A (DOX THE FLAT)	2 NOS.
59C	50 BOLTS, NUTS & WASHERS FOR ITEM 59B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
60	150x10	1 NO.
60A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
60B	CLAMP FOR ITEM 60A (DOX THE FLAT)	4 NOS.
60C	50 BOLTS, NUTS & WASHERS FOR ITEM 60B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
61	50 PILE UNIT	SET OF
61A	50x100 BRACKET FOR 610 PILE (100x20x10 CHANNEL)	2 NOS.
61B	CLAMP FOR ITEM 61A (DOX THE FLAT)	2 NOS.
61C	50 BOLTS, NUTS & WASHERS FOR ITEM 61B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
62	150x10	1 NO.
62A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
62B	CLAMP FOR ITEM 62A (DOX THE FLAT)	4 NOS.
62C	50 BOLTS, NUTS & WASHERS FOR ITEM 62B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
63	50 PILE UNIT	SET OF
63A	50x100 BRACKET FOR 630 PILE (100x20x10 CHANNEL)	2 NOS.
63B	CLAMP FOR ITEM 63A (DOX THE FLAT)	2 NOS.
63C	50 BOLTS, NUTS & WASHERS FOR ITEM 63B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
64	150x10	1 NO.
64A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
64B	CLAMP FOR ITEM 64A (DOX THE FLAT)	4 NOS.
64C	50 BOLTS, NUTS & WASHERS FOR ITEM 64B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
65	50 PILE UNIT	SET OF
65A	50x100 BRACKET FOR 650 PILE (100x20x10 CHANNEL)	2 NOS.
65B	CLAMP FOR ITEM 65A (DOX THE FLAT)	2 NOS.
65C	50 BOLTS, NUTS & WASHERS FOR ITEM 65B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
66	150x10	1 NO.
66A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
66B	CLAMP FOR ITEM 66A (DOX THE FLAT)	4 NOS.
66C	50 BOLTS, NUTS & WASHERS FOR ITEM 66B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
67	50 PILE UNIT	SET OF
67A	50x100 BRACKET FOR 670 PILE (100x20x10 CHANNEL)	2 NOS.
67B	CLAMP FOR ITEM 67A (DOX THE FLAT)	2 NOS.
67C	50 BOLTS, NUTS & WASHERS FOR ITEM 67B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
68	150x10	1 NO.
68A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
68B	CLAMP FOR ITEM 68A (DOX THE FLAT)	4 NOS.
68C	50 BOLTS, NUTS & WASHERS FOR ITEM 68B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
69	50 PILE UNIT	SET OF
69A	50x100 BRACKET FOR 690 PILE (100x20x10 CHANNEL)	2 NOS.
69B	CLAMP FOR ITEM 69A (DOX THE FLAT)	2 NOS.
69C	50 BOLTS, NUTS & WASHERS FOR ITEM 69B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
70	150x10	1 NO.
70A	SUPPORT/BASE CHANNEL FOR 150x10 (100 X 50 X 2)HD CHANNEL	2 NOS.
70B	CLAMP FOR ITEM 70A (DOX THE FLAT)	4 NOS.
70C	50 BOLTS, NUTS & WASHERS FOR ITEM 70B (PROSS LONG BOLTS NUT AND WASHER)	4 SET
71	50 PILE UNIT	SET OF
71A	50x100 BRACKET FOR 710 PILE (100x20x10 CHANNEL)	2 NOS.
71B	CLAMP FOR ITEM 71A (DOX THE FLAT)	2 NOS.
71C	50 BOLTS, NUTS & WASHERS FOR ITEM 71B (PROSS LONG BOLTS NUT AND WASHER)	4 SET

Chief Engineer
(Material Management)
Notwithstanding the above approval,
the entire responsibility of the
supply of material according to the
Specification / Type test report
shall be that of the contractor and
be checked during inspection.

Chief Engineer

(Material Management)

outlet pressure, and vapor

the entire responsibility of the user.

Specification / Type-test report / G/T

shall be that of the contract.

100

17	(b)(7)(D)
	(b)(7)(D)

18	EYE HOOK FOR IRON PIPE
----	------------------------

22	RABBIT CONJUGION
----	------------------

STONE PAV	
-----------	--

10

CONTRACTOR: 01874

CONCRETE
(450450100)

PROJECT: RURAL ELECTRIFICATION

7000	NOIS	3000	AB
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	High	Low
	High	Low

MS	MS	MS
MS	MS	MS

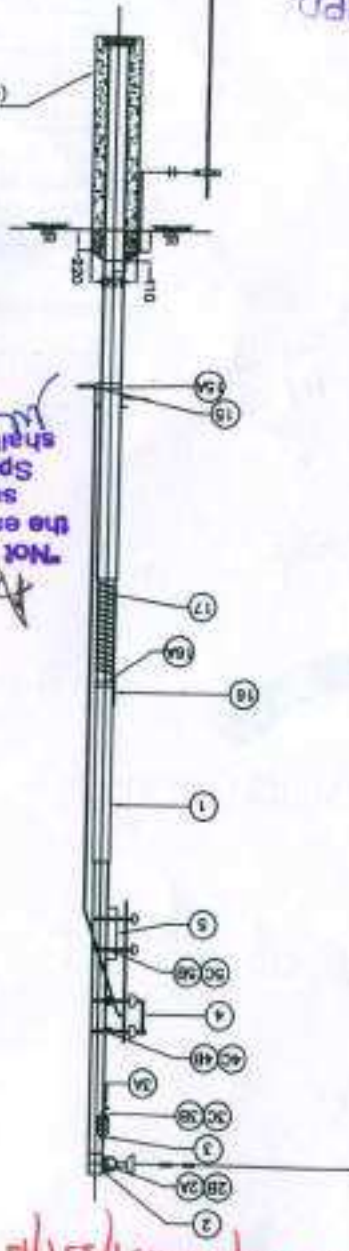
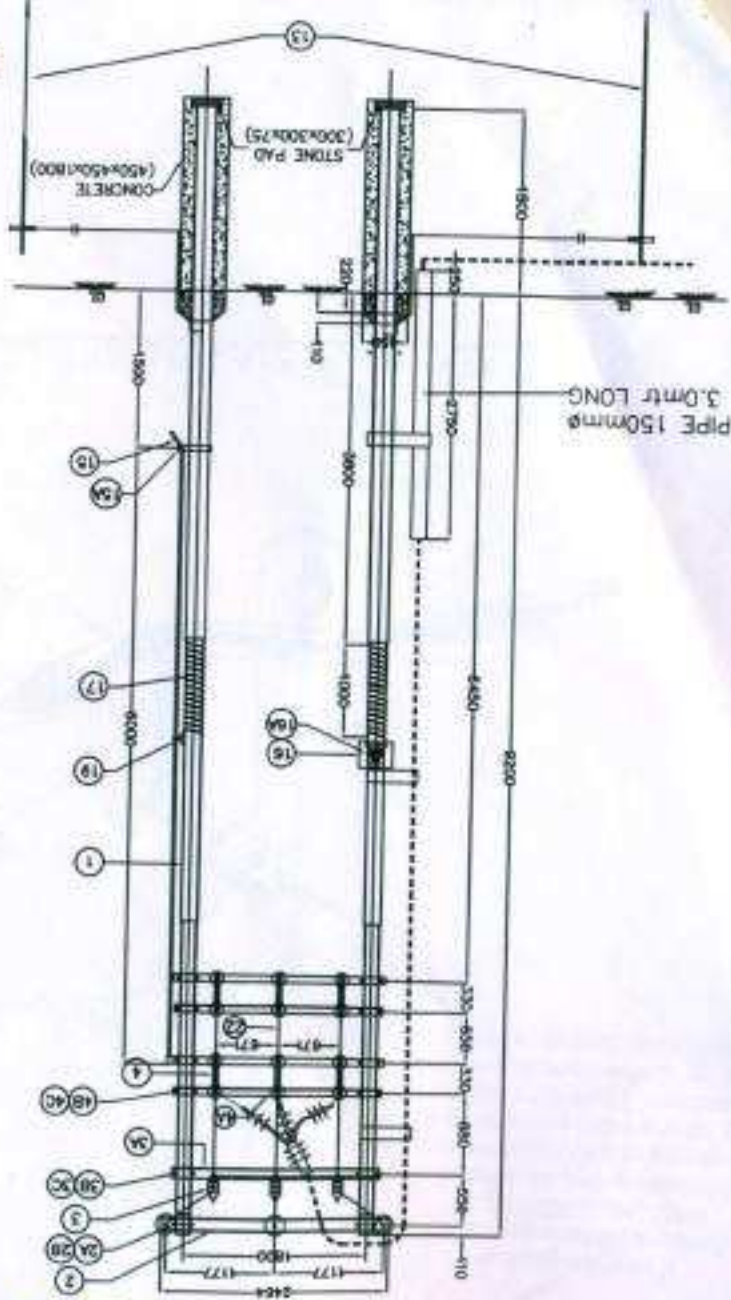
DATE	UNIT	SCALE	REV. NO.

0	0011	M4	
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RECEIVED
H. J. K. J.

PMA IPD?

(00014024-0001)

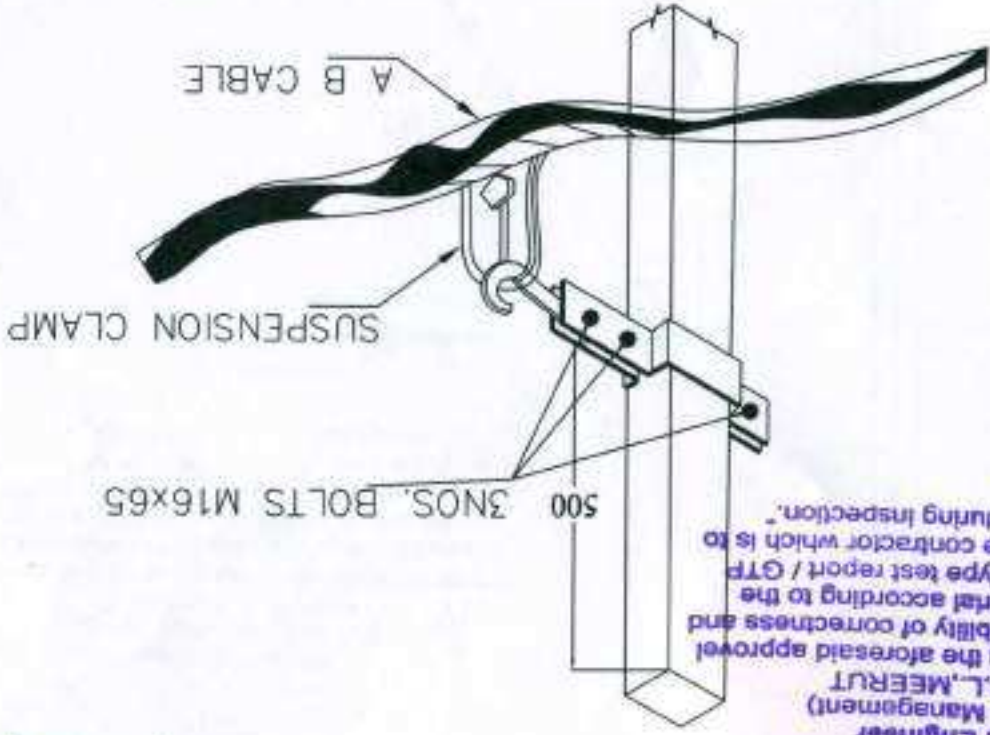
GI PIPE 150mm
3.0mtr LONG

APPROVED

Chief Engineer

(Material Management)
P.V.N.L. MEERUT

Notwithstanding the aforesaid approval the entire responsibility of correctness and supply of material according to the Specification / Type test report / GTP shall be that of the contractor which is to be checked during inspection.

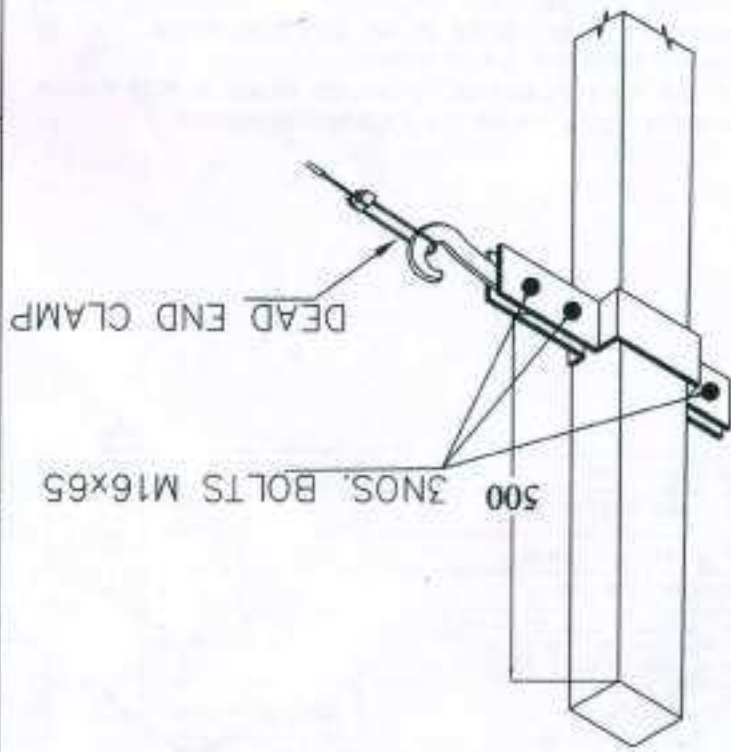


LT ABC WITH SUSPENSION CLAMP

GTP Approved in IPDS/DDUGY

Tender Spec. No. P.V.N.L.-M7/DDUGY/351/15-16

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LT ABC WITH DEAD END CLAMP

CONTRACTOR:  **L & T Construction**
POWER TRANSMISSION & DISTRIBUTION

CLIENT:  **PASCHIMANCHAL VIDYUT VITRAN NIGAM LIMITED**
PROJECT : RURAL ELECTRIFICATION WORK AT MEERUT DISTRICT
P.V.N.L. OF U.P. STATE UNDER DDUGY SCHEME

BY	NAME	SIGN	TITLE
CHKD	VKS		
REV	NSH		
APPD	LNM		
SCALE	LNM		
SIZE	1:100		
REVNO	0		
DRAWING NUMBER, INT/PV/NL/ DDUGY/MEERUT/GA-05			

NOTE:- All Dimensions are in mm.

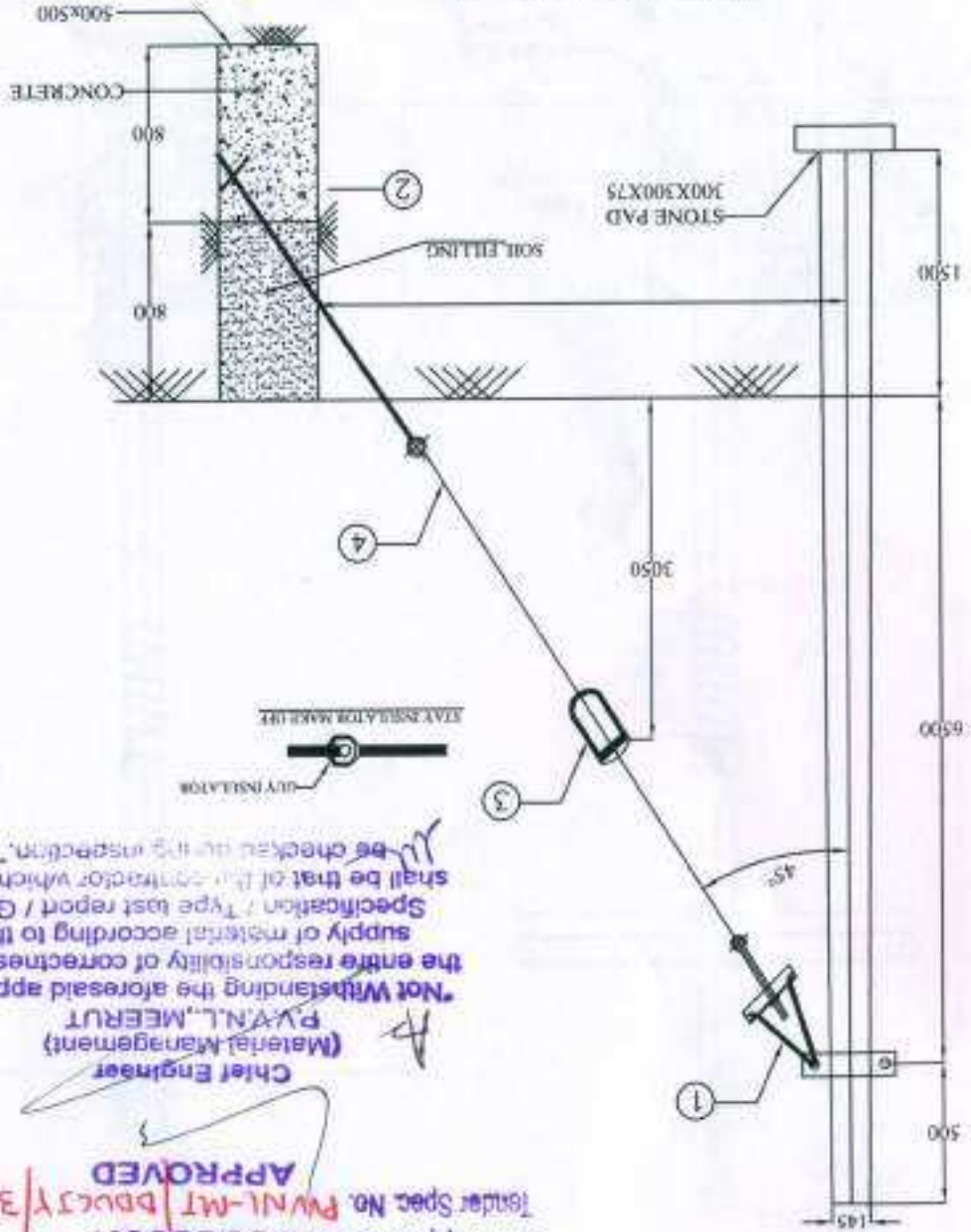
PMA IPDS/DDUGY
RECDCL
Habit

All Dimensions are in mm.

RECEIVED

PMA IPS/DD

STAY SET ARRANGEMENT



Chief Engineer
(Material Management)
P.V.N.L. MEERUT
Notwithstanding the aforesaid approval
supply of material according to the
Specification / Type test report / GTP
shall be checked during inspection.

GTP Approved in IPS/DDUGY
Tender Spec No. P.V.N.L.-MT/BUCKLY/35/15-16
APPROVED

NOTES:-
1) ALL DIMENSION ARE IN MM UNLESS OTHERWISE MENTIONED.
2) ALL M.S ITEM SHALL BE HOT DIP GALVANISED AS PER IS 2629 & 4759
3) M.S MATERIAL SHALL CONFORM TO IS: 2062
4) GUY INSULATORS TO BE UTILISED AS PER SPECIFICATION FOR HT & LT LINES RESPECTIVELY.

ITEM NO	DESCRIPTION	SECTION	MATERIAL LENGTH MM	QTY.
1	TURN BUCKLE ASSEMBLY	GI		
2	ANCHOR ROD & ANCHOR PLATE	GI		
3	ANCHOR ROD	GI	1900	
4	ANCHOR PLATE	75MM	450X450	
5	GUY INSULATOR	7/3.15mm	GI	
6	STAY WIRE	7/3.15mm	GI	

BILL OF MATERIALS

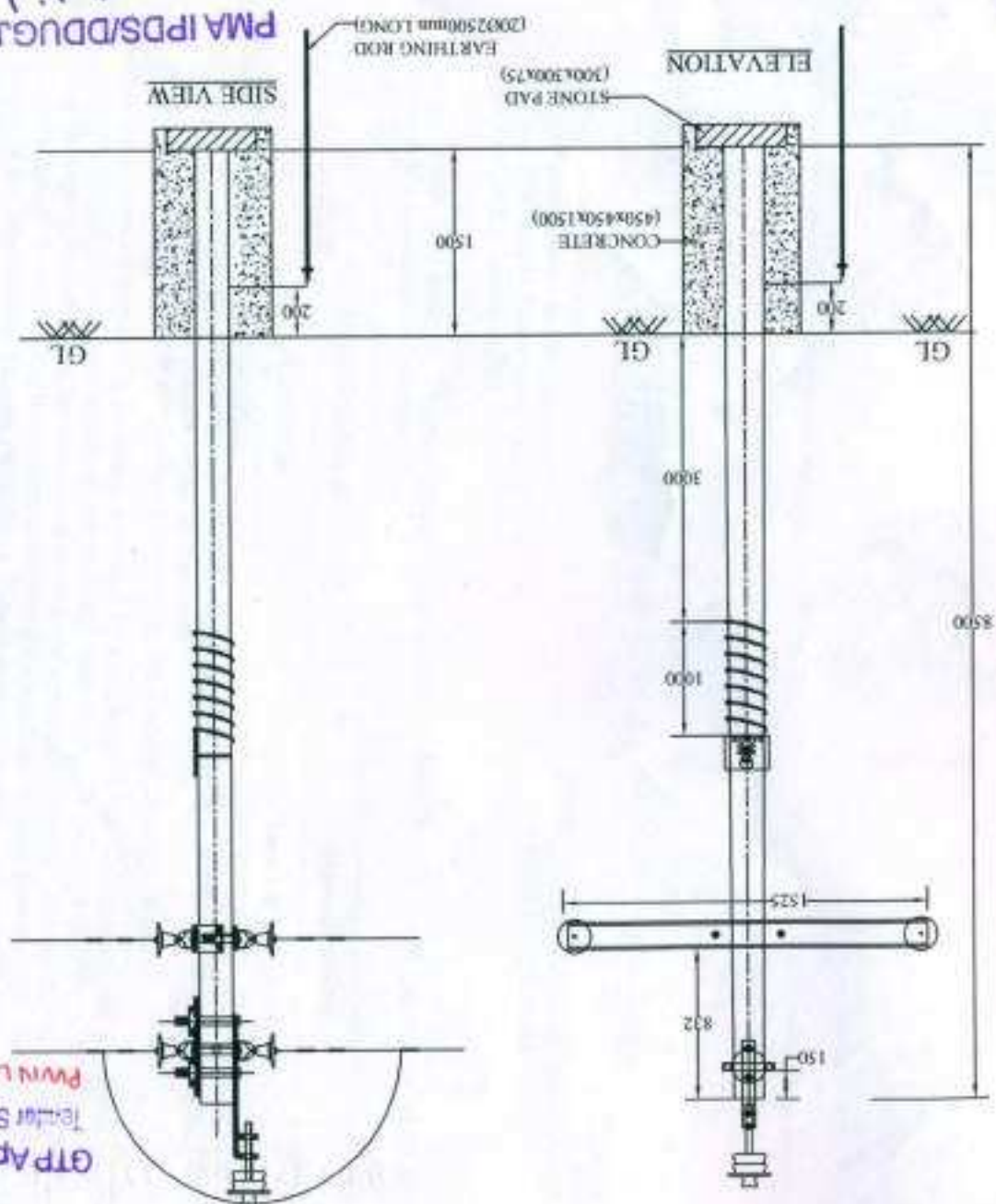
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CONTRACTOR: L & T Construction POWER TRANSMISSION & DISTRIBUTION		CLIENT: PASCHIMANCHAL VIDYUT VITHAN NIGAM LIMITED PROTECTION:	
PROJECT: RURAL ELECTRIFICATION WORK AT MEERUT DISTRICT IN P.V.N.L. STATE UNDER DDUGY SCHEME			
BY: _____	NAME: _____	SIGN: _____	DATE: _____
DRAWN: _____	CHKD: _____	REV: _____	APRD: _____
WKS: _____	NSH: _____	LNM: _____	LNM: _____
SCALE: _____	RENO: _____	SIZE: _____	SCALE: _____
DRAWING NUMBER: LNT/PV/NL/DDUGY/MEERUT/KJA-06			

STAY SET ARRANGEMENT FOR HT/LT LINE

All Dimensions are in mm.

REC'D
PMA IPS/DDUGY



CONTRACTOR: L & T Construction	CUSTOMER: PASCHAMANCHAL VIDYUT VITHAN NIGAM LIMITED	PROJECT: MURAL ELECTRIFICATION WORK AT MEERUT DISTRICT IN PUNE, ON L. P. STATE UNDER DDUGY SCHEME
BY: NAME	DATE	SCALE
CHKD: VKS		1:100
REV: LNM		
APPD: LNM		
DRAWING NUMBER: LTM / PWNVNL / DDUGY / PMA/01	REV NO: 0	

APPROVED

Chief Engineer
(Material Management)
P.V.V.N.L. MEERUT

Not Withstanding the aforesaid approval the entire responsibility of correctness and supply of material according to the Specification / Type test report / GTP shall be that of the contractor which is to be checked during inspection.

BILL OF MATERIALS	
1 No	P.C.C POLE 8.5M
1 No	POLE TOP CLAMP
1 No	SINGLE POLE SECTION CHANNEL 100x50x15.5MM
1 No	11KV PIN INSULATORS WITH PINS
5 Nos	11KV 45KN DISC INSULATOR
1 No	BACK CLAMP FOR CHANNEL
1 No	EARTHING ROD
AS REQUIRED	BOLTS, NUTS, CLAMPS ETC.
1 No	STONE PAD

GTP Approved in IPS/DDUGY
Tester Spec No.
PWNVNL-MT/ DDUGY / 351/15-11

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LEGEND

EXISTING GROUND LINE
TYPICAL
CENTER TO CENTER
THICK
TOP OF CONCRETE

NOTES

1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED.
2. FILL CORRESPONDS TO FINISHED GROUND LEVEL.
3. ALL LIME CONCRETE SHALL BE OF PCC M7.5 (1:4:8).
4. ALL RCC USED SHALL BE OF GRADE M20.
5. ALL REINFORCEMENT STEEL SHALL BE HYSD BARS OF GRADE T415 CONFORMING TO IS 1786.
6. GRADE OF STRUCTURE SHALL BE MSL (SEA LEVEL) AS PER S.D. 100-100.
7. THE CLEAR COVER FOR REINFORCEMENT SHALL BE 40mm.
8. ALL HOOKS AND SPICES SHALL BE AS PER IS 4523 (1:1).
9. MINIMUM SAFE BEARING CAPACITY IS 57 N/m² AT FINISHED LEVEL.
10. DEVELOPMENT LENGTH / LAP LENGTH FOR REINFORCEMENT BARS SHALL BE AS PER IS 4523.
11. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS.

APPROVED

Chief Engineer
(Material Management)
P.V.V.N.L. MURUGU

"Notwithstanding the above approval the entire responsibility of correctness and supply of material according to the Specification / Type test report / GTR shall be that of the contractor which is to be checked during inspection."



PROJECT: TOLL PLAZA PROJECT
CONTRACTOR: SATELITE BUILDERS AND CONSTRUCTORS, BANGALORE

DETAIL OF FOUNDATION FOR 10MVA & 5MVA TRANSFORMER



REVISION FOR

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

GTP Approved in letter No. 100/2019
Date: 10/10/2019

10.75 TPD C.P. WITH W.P.
BET. S.D. AND GRADE

25MM BARS WITH 20mm DIA

1000 C.C. OF RAIL (1000 C.C. OF RAIL) 1000 C.C. OF RAIL

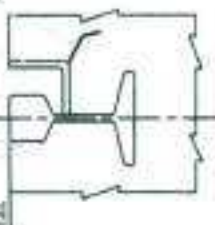
1000 C.C. OF RAIL

1000 C.C. OF RAIL



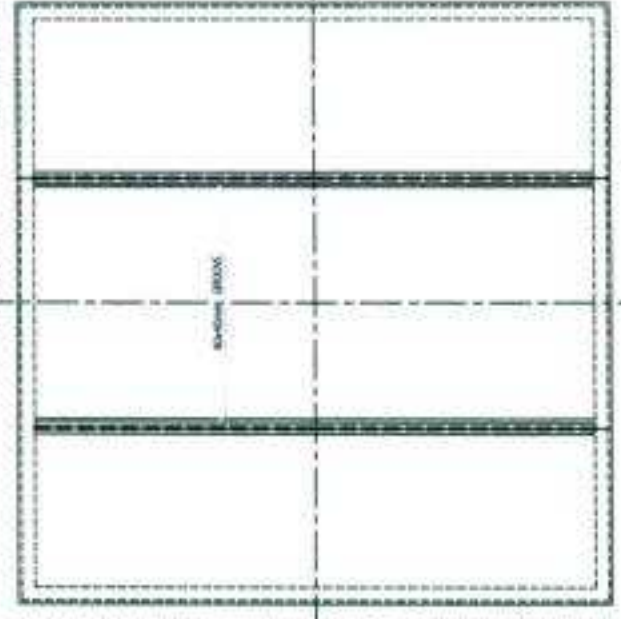
SECTION D-D

1000 C.C. OF RAIL
1000 C.C. OF RAIL
1000 C.C. OF RAIL



PLAN AT TOP OF RAIL

1000 C.C. OF RAIL



PLAN AT TOP OF RAIL

Checked by recommended
P.V.V.N.L. MURUGU

CHECKED BY	DATE	REMARKS
ARCHITECTURAL		
CIVIL ENGINEER		
MECHANICAL		
ELECTRICAL		
HYDRAULIC		

USE FOR	<input type="checkbox"/> PRELIMINARY	<input type="checkbox"/> TENDER	<input type="checkbox"/> RE-QUOTATION	<input checked="" type="checkbox"/> APPROVAL	<input type="checkbox"/> CONSTRUCTION
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No.:23476/ PVVNL-MT/ DDUGJY/15-16

Dated: 4.03.2017

Subject:- Approval of GTP/Drawing of Material/Equipment for Work of urban and rural electrification in PVVNL under IPDS and DDUGJY scheme

M/s Dynamic Power Solutions,
Mainapur Road, Industrial area, Merta
Ghaziabad, 201003

Email ID – dynamiempowersol@yahoo.com

Dear Sir,

Please refer to your letter No. Nil dated nil regarding approval of the GTP & Drawing of the material & make as detailed below:-

Sl. No.	Material/equipment	Approved Vendor
1.	MS Earthing rod	M/s Dynamic Power Solutions, Ghaziabad
	Steel Structures	

This approval is subject to the following conditions:-

1. The said approval is with the condition the material supplied by the above firms may be sent by Managing Director, PVVNL, Meerut for testing by independent lab on firm's cost.
2. M/s Dynamic Power Solutions, Ghaziabad is not blacklisted/Debarred by any Discom/Govt. Organization.

Correction wherever required in GTP & Drawing submitted by the contractor has been done by red ink. However, these GTP & Drawing shall be subjected to the valid type test report and correctness as per technical specification of the SBD for IPDS/DDUGJY and tender document and the entire responsibility of the correctness of the GTP & Drawing as per the specification as well as supply of material according to the technical specification of the contract agreement and these GTP & Drawing shall be that of the contractor.

In case of any contradiction between GTP & Drawing & Technical specification the version of the M.D. PVVNL, Meerut shall be final and binding on both the parties. Contractor shall have to replace the material to the entire satisfaction of purchaser in case the material is not found suitable for use in the projects.

One copy of approved GTP and Drawings are enclosed herewith. This GTP and Drawing shall be treated as approved for all tenders under DDUGJY and IPDS scheme.

Encl: As above

Your's faithfully

(S K Singh)

Superintending Engineer (IPDS & DDUGJY)

No.:23476/ PVVNL-MT/ DDUGJY/15-16

Dated: 4.03.2017

Copy forwarded to following for information and necessary action:

1. Chief Engineer, Moradabad Zone, Moradabad.
2. SE (Equator), PVVNL, Meerut.
3. SE (EDC/EUDC), Moradabad/Rampur/Amroha/Bijnor/Sambhal.
4. Project Manager M/s. REC, PDCL, (PMA for IPDS/DDUGJY)

(S K Singh)

Superintending Engineer (IPDS & DDUGJY)

GTP Approved in IPDS/DDUGJY
Tender Spec. No. **PVVNL-MT**

GUARANTEED TECHNICAL PARTICULARS OF EARTHING ROD

<u>SL. NO.</u>	<u>PARTICULARS</u>	<u>NAME OF THE FIRM</u>	<u>DYNAMIC POWER SOLUTIONS</u> MORTA GHAZIABAD 201003
1	MATERIAL	MILD STEEL as per IS : 2062	<i>grade 'a'</i>
2	LENGTH OF M.S. EARTHING ROD	2540 MM	
3	TOTAL WEIGHT OF M.S. EARTHING ROD	<i>Min.</i> 6.4 KG	<i>without nut, bolt & washer</i>
4	DIAMETER OF M S ROD	20MM	
5	SIZE OF FLAT	50X6MM	
6	MATERIAL	M.S. ROUND 20 MM M.S. FLAT 50x6 MM	
7	TOLERANCE	±2.5%	

*Size of bolt & nut (with 2 nos. plain washer & 1 no. spring washer) --
M12 X 40mm*

PMA IPDS/DDUGJY

Ashish
RECPDCL

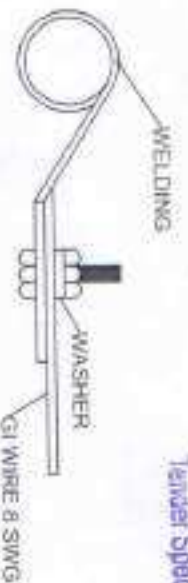


APPROVED

Chief Engineer
(IPDS/DDUGJY)
P.V.V.N.L., MEERUT

[Signature]
"Notwithstanding the aforesaid approval
the entire responsibility of correctness and
supply of material according to the
Specification/Type test report/GTP
shall be that of the contractor which is to
be checked during inspection."

GTP Approved in IPDS/DDUGY
Tender Spec. No.



CONNECTION WITH NUT BOLT

Note: the coil eye of GI Wire shall be fastened by hammering to have proper contact surface with fat



PLAN

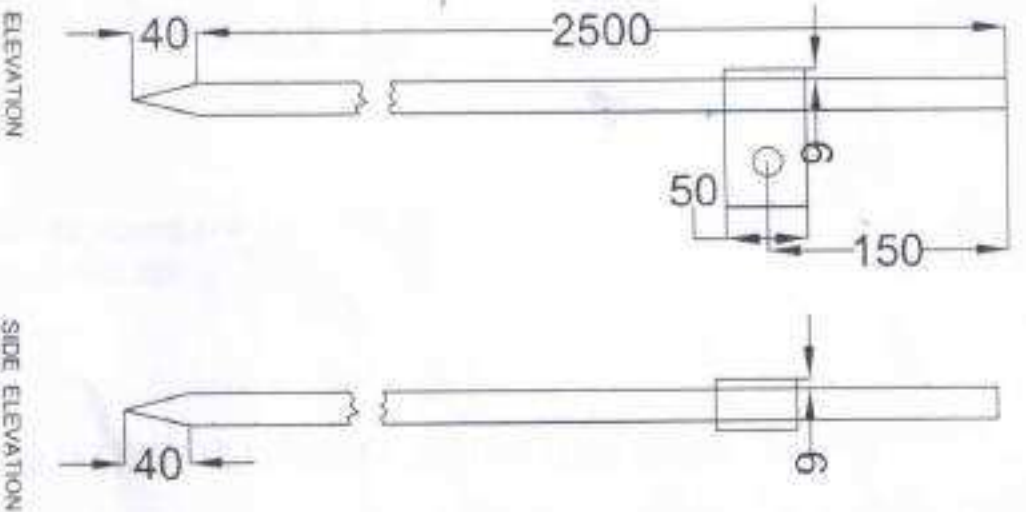
Note:
1. DRAWING NOT TO SCALE
2. ALL DIMENSIONS ARE IN MM
3. VARIATION: $\pm 5\%$ **2.5%**



APPROVED

Chief Engineer
(IPDS/DDUGY)
P.V.N.L. MEERUT

"Notwithstanding the aforesaid approval the entire responsibility of correctness and the supply of material according to the specification/type test report/GTP shall be that of the contractor which is to be checked during inspection."



MS EARTHING ROD

DYNAMIC POWER SOLUTIONS

MAINAPUR ROAD INDUSTRIAL AREA
MORTA GHAZIABAD

PMAIPDS/DDUGY

RECPDCL

GTP Approved in IPDS/DDUGJY
Tender Spec. No.

GUARANTEED TECHNICAL PARTICULARS FOR 11 KV V TYPE "X" ARM

SL.NO.	NAME OF THE FIRM	DYNAMIC POWER SOLUTIONS GHAZIABAD
	PARTICULARS	
1	MATERIAL ISS NO.	
	(i) FOR MILD STEEL	MILD STEEL IS: 2062 <i>grade 'S'</i>
	(ii) FOR WELDING PURPOSE	IS: 823-1964/LATEST
	(iii) FOR ELECTRODES	IS: 814 PART1
2	SIZE OF M S ANGEL	65X65X6MM
3	TOTAL RUNNING LENGTH	As per drawing
4	TOTAL WEIGHT OF X ARM	9.1 KG
5	TOLERANCE	±2.5%
6	Make of Red Oxide Primer	Asian/Berger/Nerolac/Bristish

*All steel structure shall be hot dip galvanised.
Min zinc coating shall be 610gm/m²*

APPROVED

Chief Engineer
(IPDS/DDUGJY)
P.V.V.N.L., MEERUT

**Notwithstanding the aforesaid approval
the entire responsibility of correctness and
supply of material according to the
Specification/Type test report/GTP
shall be that of the contractor which is to
be ascertained during inspection.**



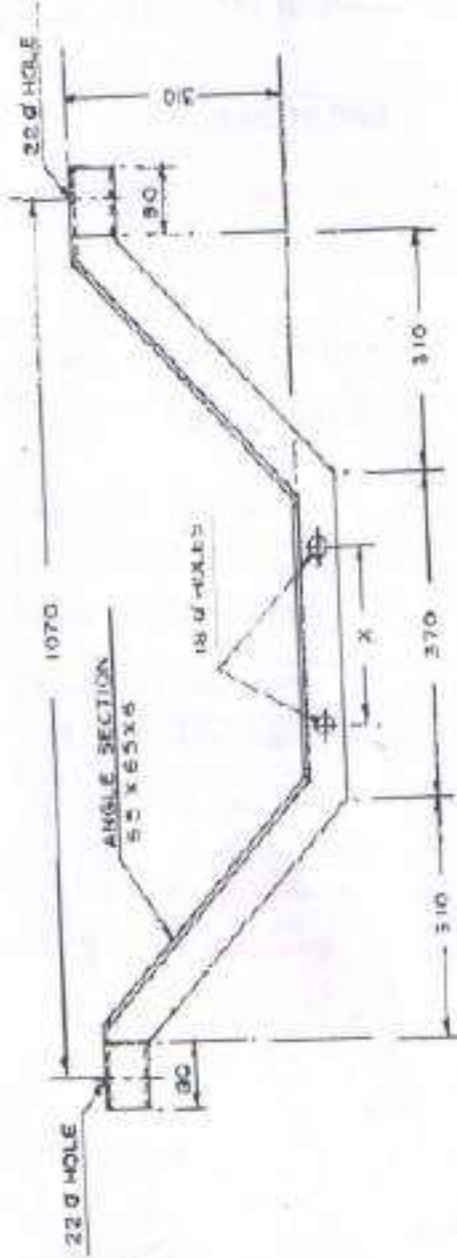
PMA IPDS/DDUGJY

Asish
RECPDCL

GTP Approved in IPDS/DDUGJY

Tender Spec. No.

11 KV LINE "V" TYPE X ARM (ANGEL SECTION 65X65X6)



ELEVATION



PLAN

APPROVED

Chief Engineer
(IPDS/DDUGJY)

P.V.V.N.L., MEERUT

"Notwithstanding the aforesaid approval and the entire responsibility of correctness and supply of material according to the Specifications/Type test report/GTP shall be that of the contractor which is to be checked during inspection."

- Notes:-
1. All Dimensions are in MM.
 2. Drawing not to SCALE.
 3. All MS items shall be HOT Deep Galvanized.

Contractor Name	M/s. Omveer Singh, Bulandshahr
Customer / Client	Paschimanchal Vidyut Vitran Nigam Ltd.
Project Name	IPDS - Saharanpur Project
Supplier Name:-	Dynamic Power Solutions, Ghaziabad.
Title:-	11 KV LINE "V" TYPE X ARM (Angel Section - 65X65X6)



PMA IPDS/DDUGJY

Asish
RECPDCL

GTP Approved in IPDS/DDUGJY

Tender Spec. No.

GUARANTEED TECHNICAL PARTICULARS FOR 33 KV V TYPE "X" ARM

SL.NO.	NAME OF THE FIRM	DYNAMIC POWER SOLUTIONS GHAZIABAD
	<u>PARTICULARS</u>	
1	MATERIAL ISS NO.	
	(i) FOR MILD STEEL	MILD STEEL IS: 2062 <i>grade 'a'</i>
	(ii) FOR WELDING PURPOSE	IS: 823-1964/LATEST
	(iii) FOR ELECTRODES	IS: 814 PART1
2	SIZE OF M S CHANNEL	100X50MM
3	Weight of channel in running meter	7.9 kg/mtr <i>9.57 kg/mtr</i>
4	TOTAL WEIGHT OF X ARM	16.55 KG <i>21 kg</i>
6	Make of Red oxide Primer	Asian/ Berger/Nerolac/British
7	Wheather ISS certification marks provided on Ms channel	NO
5	TOLERANCE in Dimension	±5%

*All steel structure shall be hot dip galvanized.
Min. zinc coating shall be 610gm/m².*

PMA IPDS/DDUGJY

Ashish

RECPDCL

APPROVED

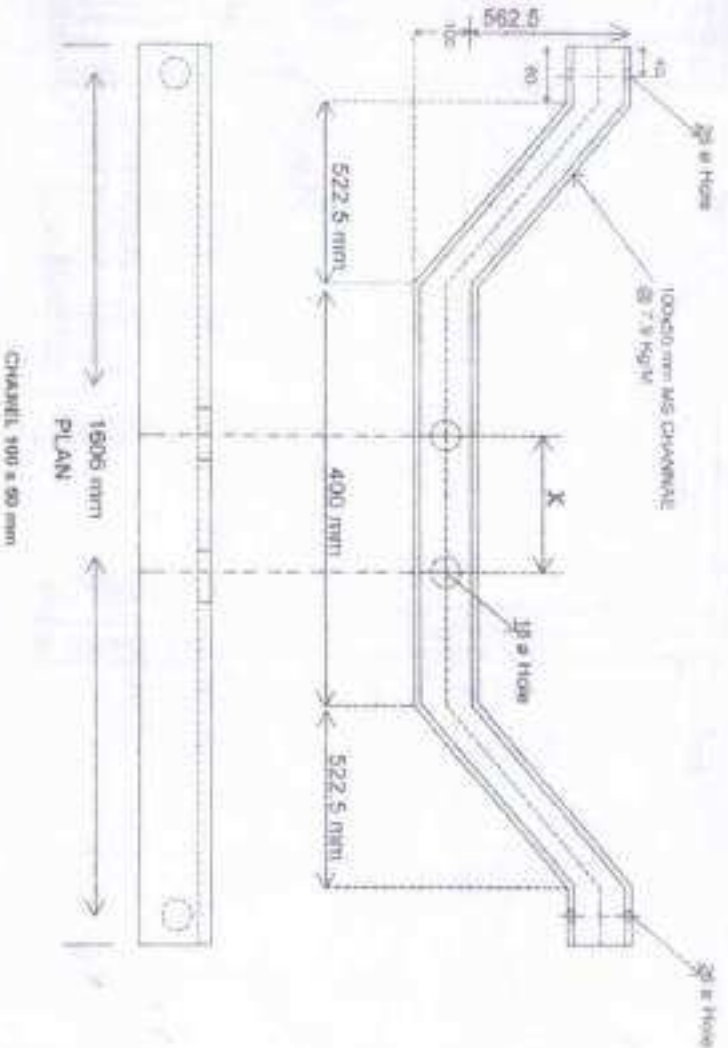
Chief Engineer

(IPDS/DDUGJY)

P.V.V.N.L., MEERUT

*Notwithstanding the aforesaid approval
the entire responsibility of correctness and
supply of material according to the
Specification/Type test report/GTP
shall be that of the contractor which is to*



33 KV LINE "V" TYPE X ARM (100x50 CHANNEL 7.9Kg/m)

CHANNEL 100 x 50 mm

PLAN

Notes:-	
1.	All Dimensions are in MM.
2.	Drawing not to SCALE.
3.	All MS Items shall be HOT Dip Galvanized.

Contractor Name:	M/s. Omveer Singh, Bulandshahr
Customer / Client:	Paschimanchal Vidyut Vitran Nigam Ltd.
Project Name:	IPDS - Saharapur Project
Supplier Name:-	Dynamic Power Solutions, Ghazabad.
Title:-	33 KV LINE "V" TYPE X ARM (100x50 CHANNEL)

PMA IPDS/DDUGJY

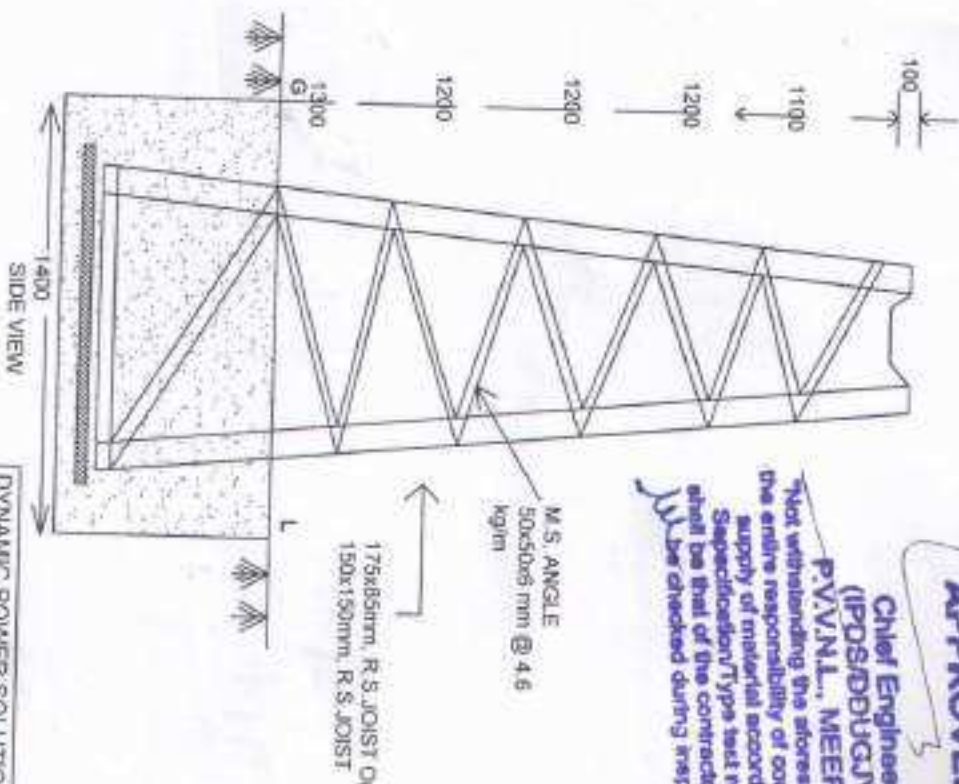
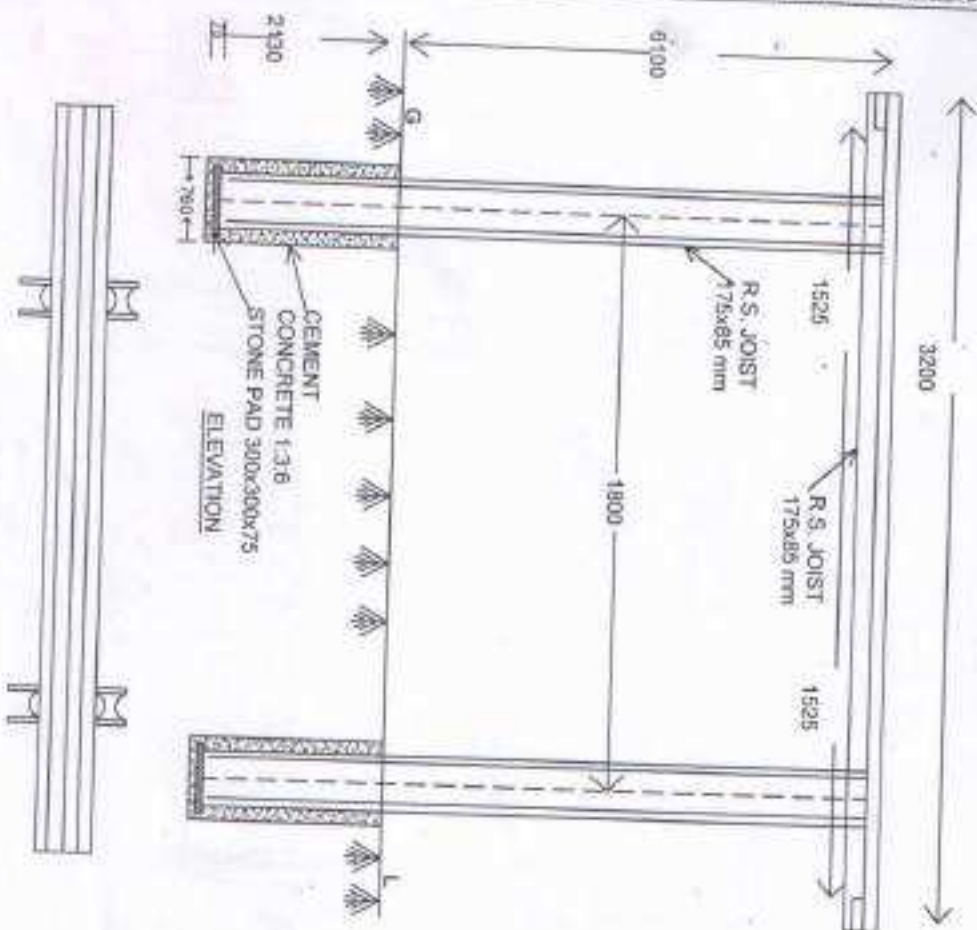
RECPDCL



"Notwithstanding the above, approval of the entire responsibility of correctness and supply of material according to the specifications of the tender, shall be that of the contractor which is to be observed during execution."

APPROVED
 Chief Engineer
 (IPDS/DDUGJY)
 P.V.N.L. MEERUT

STRUCTURE FOR TERMINAL GANTRY



PMAIPDS/DBUGUT
RECPDCL



- NOTES:-
1. ALL DIMENSIONS ARE IN MM
 2. DRAWING NOT TO SCALE
 3. ALL MS FABRICATED ITEMS SHALL BE HOT DIP GALVANIZED
 4. VARIATION $\pm 5\%$

APPROVED

Chief Engineer
(IPDS/DBUGUT)
P.V.N.L., MEERUT

Notwithstanding the aforesaid approval, the entire responsibility of correctness of supply of material according to the Specification/Types that reported shall be that of the contractor who shall be checked during inspection.

M.S. ANGLE
50x50x6 mm @ 4.6
kg/m

175x85mm, R.S. JOIST OR
150x150mm, R.S. JOIST

DYNAMIC POWER SOLUTIONS

M/s. LT PANELS APFC PCC WCC,

PHILLIP LINE, ADDERSONS,

WOLK'S, 01324 MANUPUR INDIA, AREA

MOHTA, GHANZABAD, 201003

EMAIL: info@dynamicpower.in

CUSTOMER SERVICE DESK

Phone: 01324 210101 (Urban Region) Limited

PROJECT: 2014 - MANUPUR INDIA PROJECT

TITLE: Structure For 33KV TERMINAL

PROJECT: 2014 - MANUPUR INDIA PROJECT

For more information, please contact the author at marco@math.berkeley.edu or the publisher at info@math.berkeley.edu. The publisher is the American Mathematical Society, 100 Brook Hill Drive, West Nyack, NY 10994-2173, USA. The publisher is also the American Mathematical Society, 100 Brook Hill Drive, West Nyack, NY 10994-2173, USA. The publisher is also the American Mathematical Society, 100 Brook Hill Drive, West Nyack, NY 10994-2173, USA.



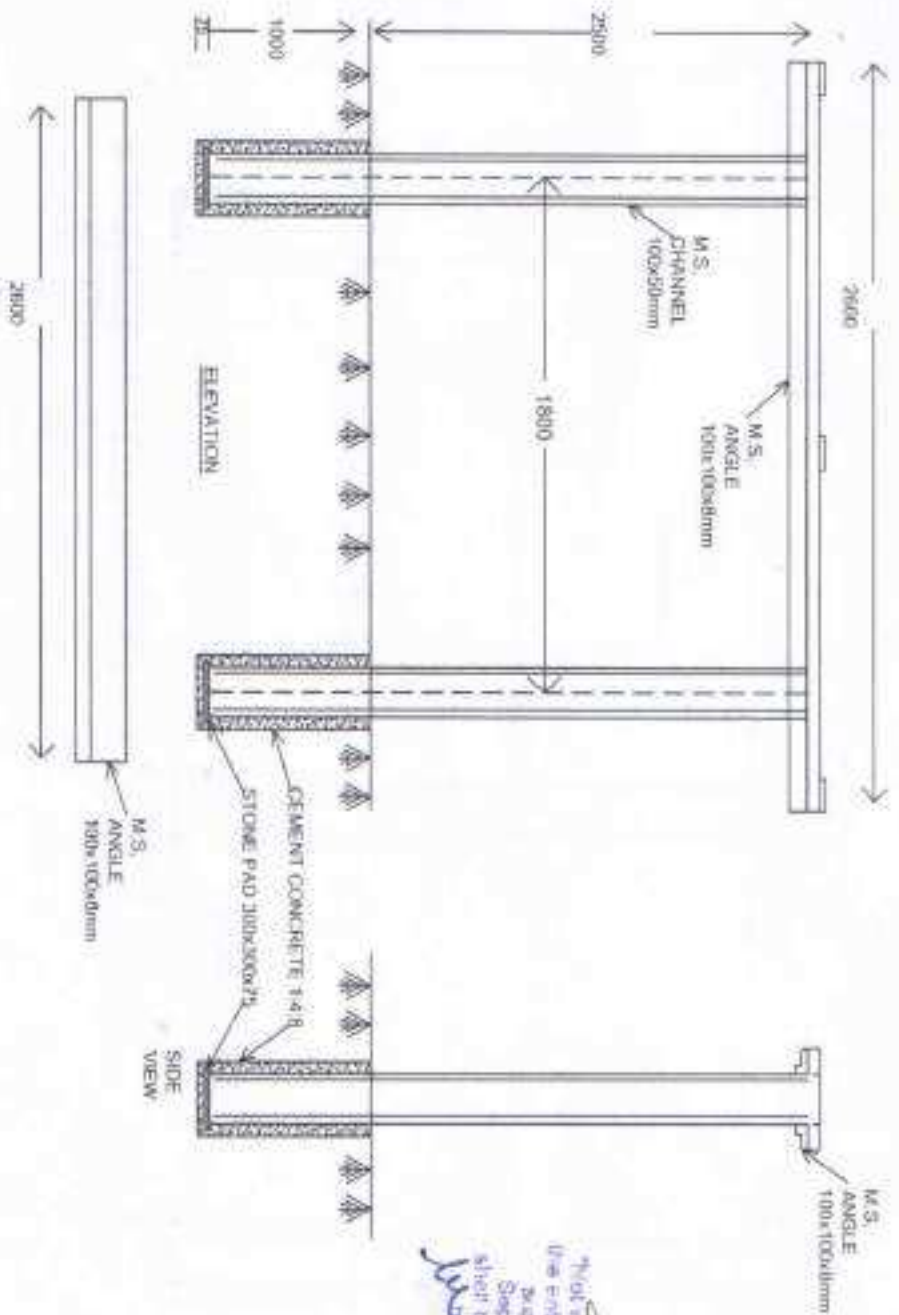
Chief Engineer
(IPDS/DDUGM)
P.V.N.L., MEERUT

Ashish
RECPDCL

- DYNAMIC POWER SOLUTIONS**
 MR. LT PANELS, APC, PRO, APC
 MR. IT LINE ACCESSORIES
 WORKS: 3111 UNIVERSITY AVENUE, APT 6
 MORTON, CHICAGO, IL 60438
 EMAIL: info@dynapower.com
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TITLE Structure for JMW BUSBAR CENTER

STRUCTURE FOR 33 KV CT



PMAIPDS/DDUGJY
Asish
RECPDCL

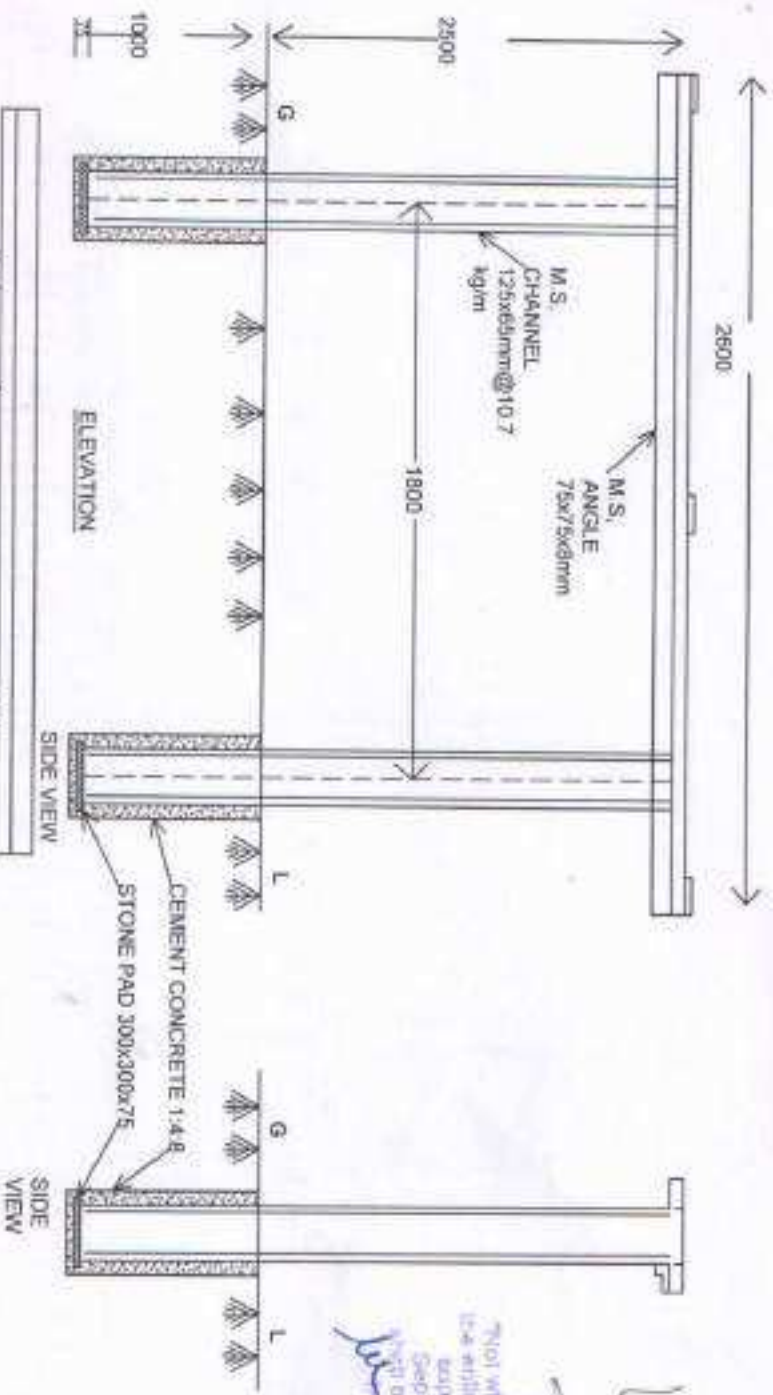
- NOTES:-
1. ALL DIMENSIONS ARE IN MM
 2. DRAWING NOT TO SCALE
 3. ALL MS FABRICATED ITEMS SHALL BE HOT DIP GALVANISED
 4. VARIATION $\pm 5\%$

APPROVED
Chief Engineer
(IPSD/Physics)
P.V.N.L. MEERUT
Notwithstanding the aforesaid approval the entire responsibility of correctness and supply of material according to the Specification/Type test report/STP sheet on that of the contractor which is to be attached during inspection.



DYNAMIC POWER SOLUTIONS	
Moh. LT Panel, APC, POC, MOC,	
HT, LT Line Accessories	
WORKS: 3/132 BANARAS, INDUS AREA	
MORITA, GUJARAT - 381001	
EMAIL: info@dynamicpower.in	
Website: www.dynamicpower.in	
Phone: 079-25555555	
PROJECT: 33KV CT	

STRUCTURE FOR 33 KV FUSE SET



PMAIPDS/IDUGJY
RECPDCL

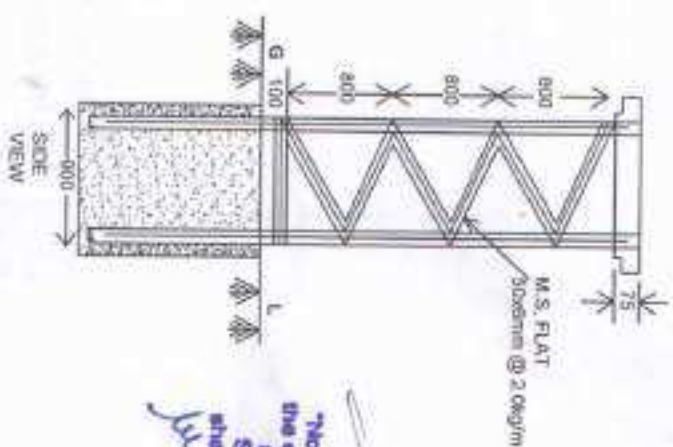


- NOTES:-
1. ALL DIMENSIONS ARE IN MM.
 2. DRAWING NOT TO SCALE
 3. ALL MS FABRICATED ITEMS SHALL BE HOT DIP GALVANISED
 4. VARIATION $\pm 5\%$

DYNAMIC POWER SOLUTIONS
MR. LT PANES/APC/PMC/MDC
HT/LT LINE ACCESSORIES
WORKS-31334 MANAPUR INDU. AREA
MOORE, CHAZHIDAM 201003
EMAIL: smd@dpowersolutions.in
CLIENT: MR. GANESH BHOOT
PROJECT: 33KV-3PH/3W/3C/3W/3C/3W/3C
TITLE: Structure for 33KV FUSE SET

APPROVED
Chief Engineer
(IPDS/IDUGJY)
P.V.N.L. MEERUT
Notwithstanding to the above approval, the Engineer shall be responsible for the safety of the structure and the safety of the equipment. The Engineer shall be responsible for the safety of the structure and the safety of the equipment. The Engineer shall be responsible for the safety of the structure and the safety of the equipment.

The regression coefficients are also partly determined by the number of test questions without separate answers directly related to the question. As such, including topics is likely to affect both the regression of ΔCOSTA measured on $\Delta \text{COSTA}_{\text{TOPIC}}$ and $\Delta \text{COSTA}_{\text{TOPIC}}$.

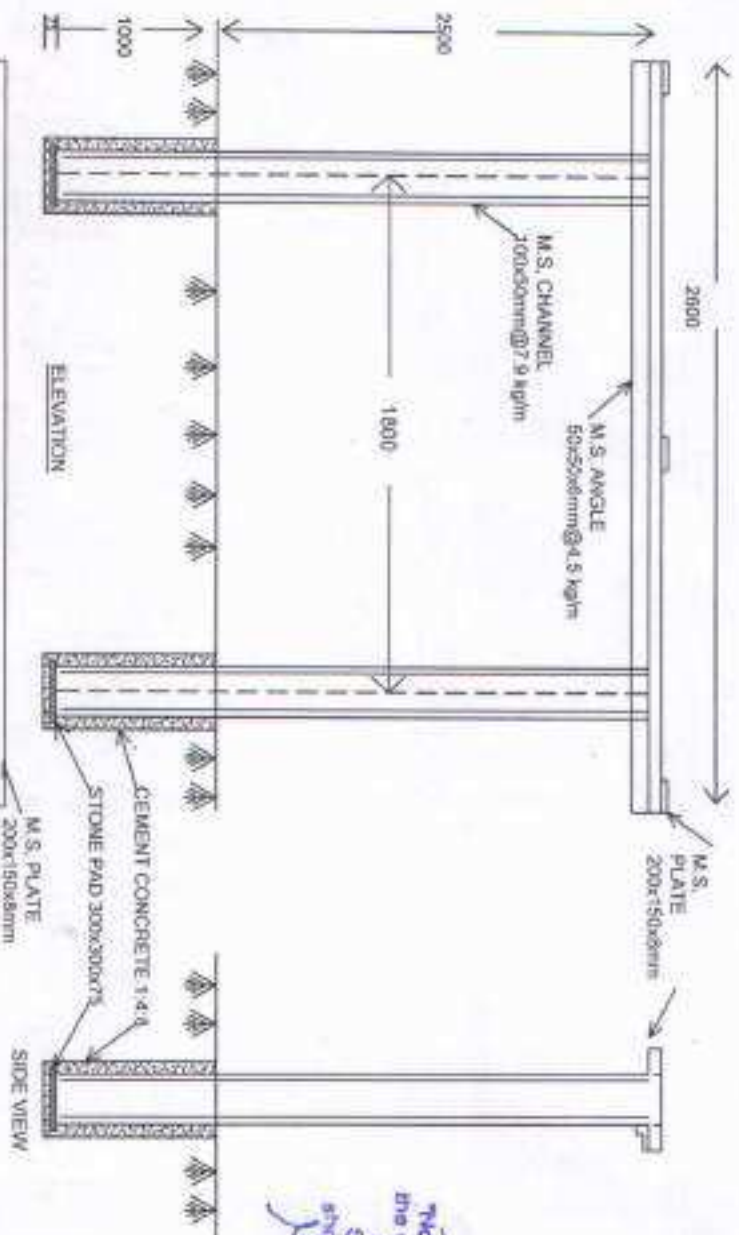


- NOTES:

DYNAMIC POWER SOLUTIONS
 Myri LTPANELS APFC PFC ACC.
 HITL LANE ACCESSORIES
 WORKS 341334 MANAPALAI RDUS ASEA
 MORTA GHAZIMBAD 300003
 EMAIL: info@dynamicpower.in
 E-EXT: 09500000000
 Panchanathan Vign Vign Rajan Limited
 PRODUCT: APFC, MANAPALAM PRODUCT

APPROVED

STRUCTURE FOR 33 KV LIGHTING ARRESTERS



NOTES:-

1. ALL DIMENSIONS ARE IN MM
2. DRAWING NOT TO SCALE
3. ALL MS FABRICATED ITEMS SHALL BE HOT DIP GALVANISED
4. VARIATION - $\pm 5\%$

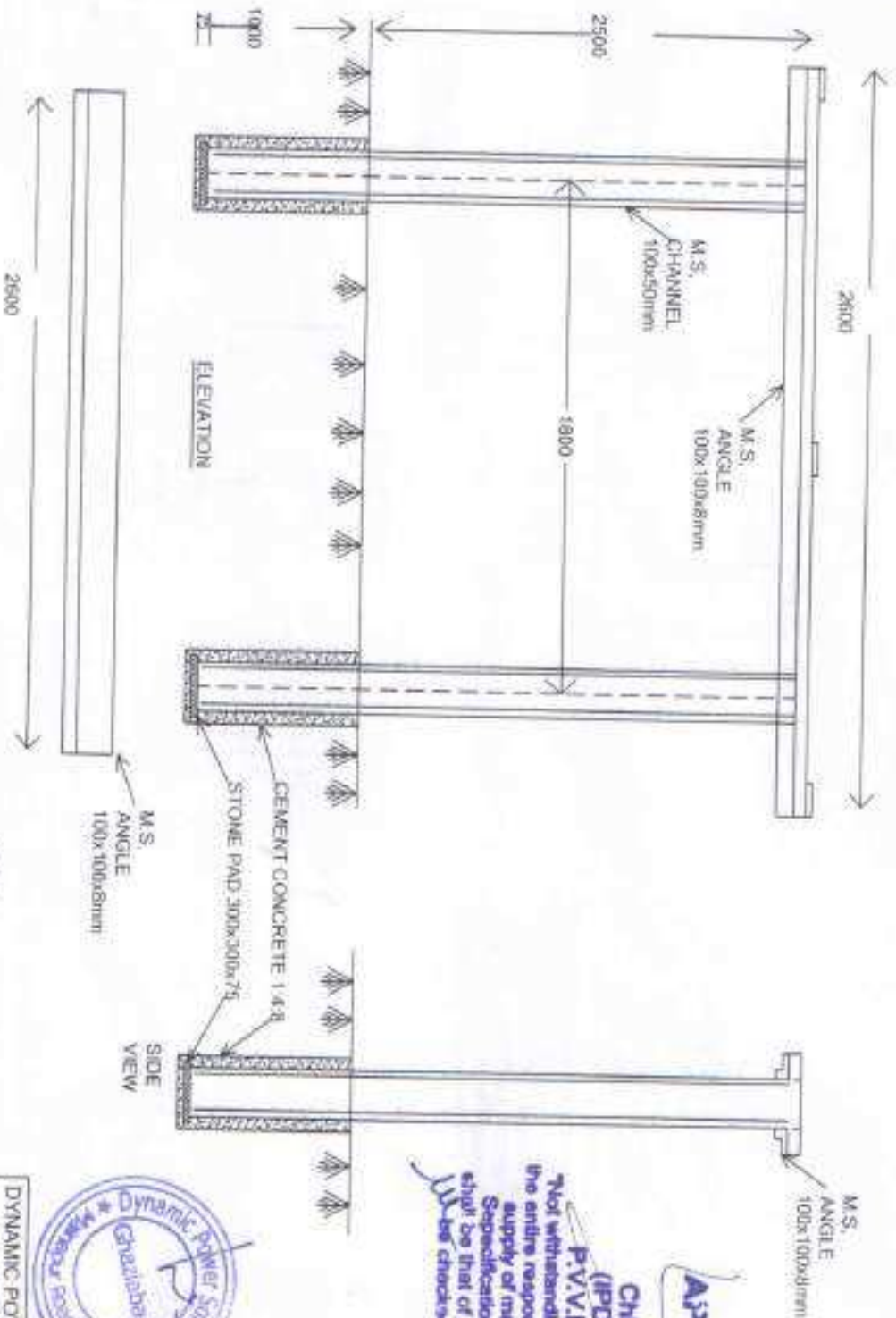
PMAIPDS/DDUGJY
RECPDCL



APPROVED
Chief Engineer
(IPDS/DDUGJY)
P.V.N.L., MEERUT
Notwithstanding the aforesaid approval
the entire responsibility of correctness and
supply of material according to the
Specification/Typon Test report/GTP
shall be that of the contractor which is to
be checked during inspection.

DYNAMIC POWER SOLUTIONS
M/S. LT PANELS APFC POC MCO.
HT/LT LINE ACCESSORIES
WORKS-31/34 MAINWATER INDUS. AREA
MADRAS - 600028/INDUS. AREA
EMAIL - info@dynamicpower.in
CLIENT - M/S. CHARTER 55/201
PROJECT - 31/34 MAINWATER INDUS. AREA
TITLE - Structure For 33KV Lighting Arresters

STRUCTURE FOR 33 KV PT



NOTES:-

1. ALL DIMENSIONS ARE IN MM
2. DRAWING NOT TO SCALE
3. ALL MS FABRICATED ITEMS SHALL BE HOT DIP GALVANISED
4. VARIATION $\pm 5\%$



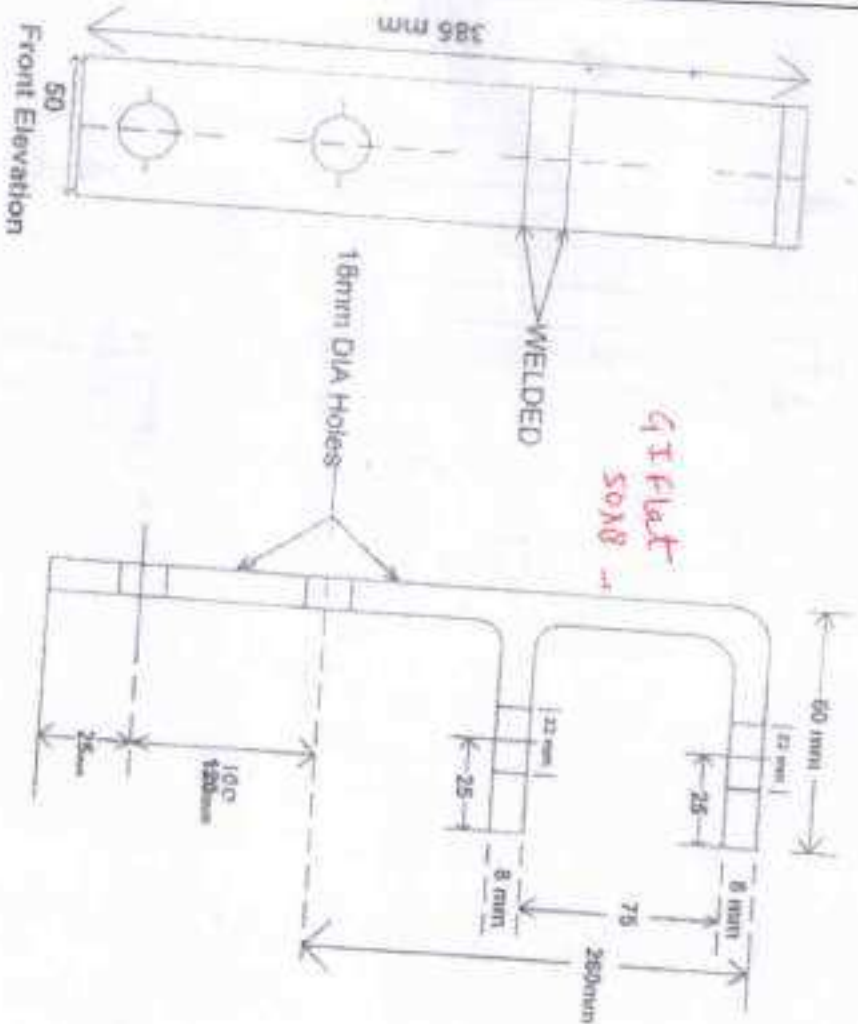
APPROVED
 Chief Engineer
 (IPDS/DDUGJ)
 P.V.N.L. MEERUT
 Notwithstanding the aforesaid approval, the entire responsibility of correctness of supply of material according to the Specification/Type test reports shall be that of the contractor which will be checked during inspection.

PMA IPDS/DDUGJ
 As per
 RECPDCL

DYNAMIC POWER SOLUTIONS
M/s. LT. PAVELI APFC, POC, KEC
WEEKS 111K MANIPAL INDUS. AREA
ROHTA, CHANDIGARH 160000
EMAIL - info@dpssolutions.in
CLIENT - M/s. SURESH SINGH
PROJECT NO. - SURESH/111K/POC/01
TITLE: Structure for 33KV PT

F - BRACKET FOR 11 KV LINE

GTP Approved in IPDS/DDUGJY
Tender Spec. No.



APPROVED

Chief Engineer
(IPDS/DDUGJY)
P.V.V.N.L., MEERUT

Notwithstanding the aforesaid approval the entire responsibility of correctness and supply of material according to the Specification/Type test report/GTP shall be that of the contractor which is to be checked during inspection.



- Notes:-
1. All Dimensions are in MM.
 2. Drawing not to SCALE.
 3. All MS Items shall be HOT Deep Galvanized.

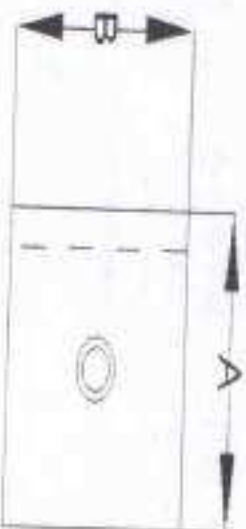
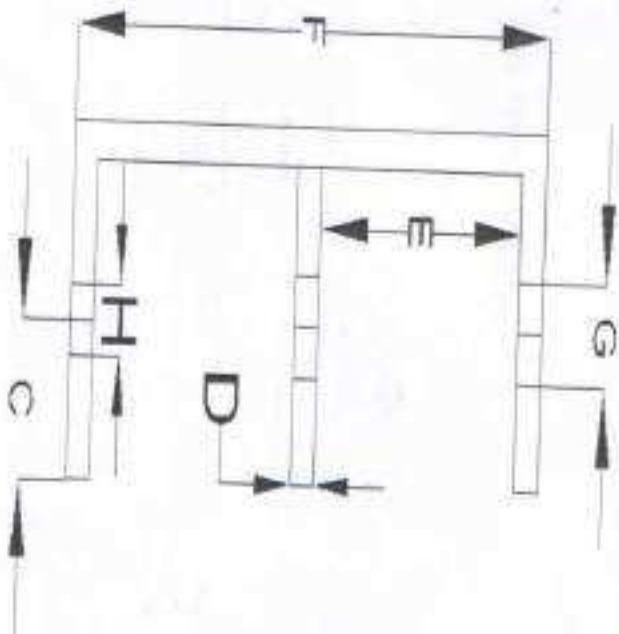
PMA IPDS/DDUGJY

RECPDCL

Contractor Name	M/s. Omveer Singh, Bulandshahr
Customer / Client	Paschimanchal Vidyut Vitran Nigam Ltd.
Project Name	IPDS - Saharanpur Project
Supplier Name:-	Dynamic Power Solutions, Ghaziabad
Title:-	F-Bracket

Min. wt. - 1.4 kg
All steel structure shall be hot dip galvanized.
Min. zinc coating shall be 610 gm/m².

E - BRACKET



Notes:

1. All Dimensions are in MM.
2. Drawing not to SCALE.
3. All MS Items shall be HOT Deep Galvanized.

GTP Approved in IPDS/DDUGY
Tech Spec. No.

APPROVED

Chief Engineer
(IPDS/DDUGY)
-P.V.N.L., MEERUT

"Notwithstanding the aforesaid approval the entire responsibility of correctness and supply of material according to the Specification/Type test report/GTP shall be that of the contractor which is to be checked during inspection."

E BRACKET	MS FLAT	A	B	C	D	E	F	G	H
11 KV LINE	50X8MM	60	50	25	8	88	200	22	18
33 KV LINE	75X10MM	80	75	40	10	85	200	26	18

Contractor Name	M/s. Omveer Singh, Bulandshahr
Customer / Client	Paschimanchal Vidyut Vitran Nigam Ltd.
Project Name	IPDS - Saharanpur Project
Supplier Name	Dynamic Power Solutions, Ghaziabad
Title	E-Bracket

All steel structure shall be hot dip galvanized.
min zinc coating shall be 110 gm/m².

PMA IPDS/DDUGY

RECPDC



GTP Approved in IPDS/DDUGJY
Tender Spec. No.

APPROVED

Chief Engineer
(IPD&BUDG)

D. J. N. L., MEERUT

1990), and according to the standard system of the club, the responsibility of correction is the club's responsibility of correction.

potential according to the
two test methods

5- Type test reports
6- Contractor with 10 years
5hp

W. L.

MS TEE - OFF CHANNEL

LENECTH X (mm)	Y (mm)	A (mm)	B (mm)
2240	1600	100	80
2240	1600	125	65
2200	2240	125	65

Prüfung

29.6 kg

Block 7

ELEVATION



MS DROPPER CHANNEL



NOTES

†: All Dimensions are in mm

2. Drawing Not to Scale



Notes:

1. All Dimensions are in MM.
2. Drawing not to SCALE.
3. All MS Items shall be HOT Dipped Galvanized.

Min. Zinc coating shall be 610 gm/m^2

Contractor Name	M/s. Omveer Singh, Bulandshahr
Customer / Client	Pachmarahal Vidyut Vitan Nigam Ltd.
Project Name	IPDS – Saharanpur Project
Supplier Name: -	Dynamic Power Solutions, Ghaziabad
Title: -	MS TOP Channel, Dropper & T-Off Channel

PIMA IPDS/DBUG.JY

Asish
RECPDCL

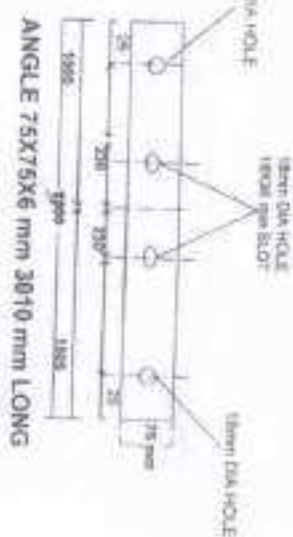
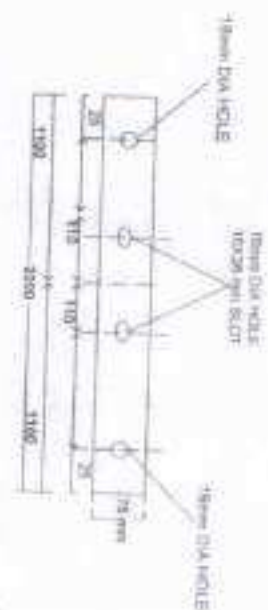
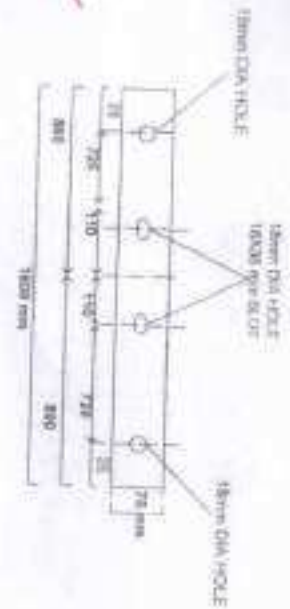
GUARDING ANGEL WITH CLAMP

GTP Approved in IPDS/DDUGJY

GUARDING ANGLE FOR STP 410-SP-11 MTR
LONG OF ANGLE 75X75X6 mm 1600mm LONG

ANGLE 75X75X6 mm 2200 mm LONG

Me. J.
10.5 kg



GUARDING ANGLE CLAMP

Notes:-

1. All Dimensions are in MM.
2. Drawing not to SCALE.
3. All M/S Items shall be HOT Deep Galvanized.

Min. Zinc coating shall be 610gm/m².

Contractor Name	M/s. Omveer Singh, Bulandshahr
Customer / Client	Paschimanchal Vidyut Vitran Nigam Ltd.
Project Name	IPDS - Saharanpur Project
Supplier Name:-	Dynamic Power Solutions, Ghaziabad
Title :-	Guarding Angle with Clamp



APPROVED
Chief Engineer
(IPDS/DDUGJY)
P.V.N.L., MEERUT
"Notwithstanding the aforesaid approval, the entire responsibility of correctness and supply of material according to the Specification/Type test report/GTP shall be that of the contractor which is to be checked during inspection."

PMA IPDS/DDUGJY

Asish
RECPDCL

M S BRACING ANGEL OF SIZE 65X65X6

GTP Approved in IPDS/DDUGJY
Tender Spec. No.



ELEVATION



PLAN

ITEM NO.	QTY	UNIT	DESCRIPTION
1	1.50	M	MS BRACING ANGEL 65X65X6
2	3	NO.	BOLT 12.9
3	3	NO.	NUT 12.9

Notes:-
1. All Dimensions are in MM.
2. Drawing not to SCALE.
3. All MS Items shall be HOT Dipped Galvanized.

Min Zinc coating shall be 60gm/m².

Contractor Name	M/s. Omveer Singh, Bulandshahr
Customer / Client	Paschimanchal Vidhut Vitaran Nigam Ltd.
Project Name	IPDS - Saharanpur Project
Supplier Name:-	Dynamic Power Solutions, Ghaziabad
Title:-	MS Bracing Angel (Size-65x65x6mm)

PMA IPDS/DDUGJY

Asish
RECPDCL



APPROVED
Chief Engineer
(IPDS/DDUGJY)
P.V.V.N.L., MEERUT
Notwithstanding the aforesaid approval the entire responsibility of correctness and supply of material according to the Specification/Type last reported GTP shall be that of the contractor which is to be checked during inspection.

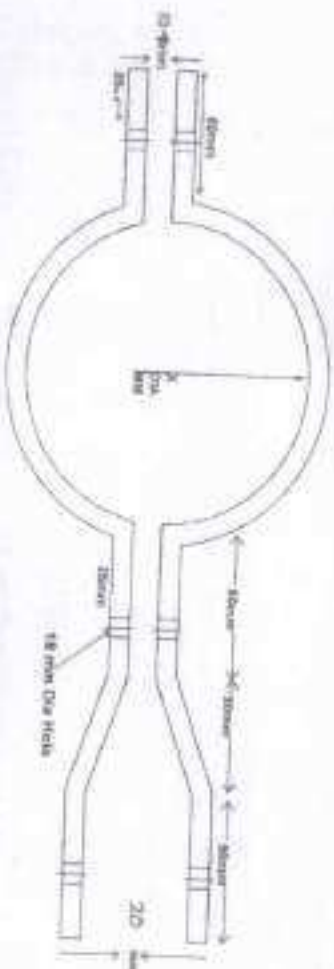
STAY CLAMP FOR ROUND POLE

GTP Approved in IPDS/DDUGJY
Tender Spec. No.

FOR SP - 65
TOP DIA X = 140mm

FOR SP - 72
TOP DIA X = 105mm

FOR SP - 33
TOP DIA X = 115mm



NOTES:-

1. All Dimensions are in MM
2. Drawing Not to Scale

Notwithstanding the aforesaid approval the entire responsibility of correctness and supply of material according to the Specification/Type test report/GTP shall be that of the contractor which is to be checked during inspection.

APPROVED

Chief Engineer
(IPDS/DDUGJY)

P.V.V.N.L. MEERUT

Notes:-

1. All Dimensions are in MM
2. Drawing not to SCALE
3. All MS items shall be HOT Deep Galvanized.

Min. Zinc coating shall be 610gm/m².

Contractor Name	M/s. Omveer Singh, Bulandshahr
Customer / Client	Paschimanchal Vidyal Vitaran Nigam Ltd.
Project Name	IPDS - Saharanpur Project
Supplier Name:-	Dynamic Power Solutions, Ghaziabad
Title:-	Stay Clamp for Round Pole



PMA IPDS/DDUGJY

RECPDCL

TOP HAMPER FOR 11/33 KV LINE

GTP Approved in IPDS/DDUGJY
Tender Spec. No.



NOTES:-

1. All Dimensions are in MM.
2. Drawing Not to Scale

Notes:-

1. All Dimensions are in MM.
2. Drawing not to SCALE
3. All MS Items shall be HOT DIPP Galvanized.

Min. Zinc coating shall be 60g/m².

APPROVED
Chief Engineer
(IPDS/DDUGJY)
P.V.N.L., MEERUT
Notwithstanding the aforesaid approval the entire responsibility of correctness and supply of material according to the Specification/Type test report/GTP shall be that of the contractor which is to be ascertained during inspection.



Contractor Name	M/s. Omveer Singh, Bulandshahr
Customer / Client	Panchsheel Vidya Vitran Nigam Ltd.
Project Name	IPDS - Saharanpur Project
Supplier Name:-	Dynamic Power Solutions, Ghazabad
Title:-	Top Hamper for 11/33KV Line

PMA/PPDS/DDUGJY

RECPDCL

दस्तावेज नं०
कार्यालय (Off.) : 0121-2667923
निवास (Res.) : 09412749173
मोबाइल (Mob.) : 0121-2667923
फैक्स (Fax) : 0121-2667923
ई-मेल (E-mail) : sewarksmrt@gmail.com



कार्यालय
Office of the
अधीक्षक अभियन्ता
Superintending Engineer
विद्युत निर्माण एवं कार्य मण्डल-अग्रम
Electricity Construction & Works Circle-I,
एचिमानचल विद्युत निगम निगम लि.
Panchmalanchal Vidyal Nigam Ltd.
विक्टोरिया पार्क, मेरठ
Victoria Park, Meerut-250 003

Dated : 24-12-2017

No. : 2050 / E.C.W.C.-I/MRT

Sub:- General arrangement laying of cables for Saharanpur under IPDS Scheme.

M/s. Tata Projects Ltd.
Underground Tower, B-Green Bowlword,
Plot No. B-9/A, Sector-62,
Noida - 201307

Kindly refer to your letter no. TPL/Noida/PVVNL/IPDS/377, dated 27.12.2017 on above said subject.

In this regard inform to you the drawing, which was sent by you through above letter, was approved by P.M.A., RECPDCL and according to same is being sent to you for kind information and necessary action.

Encl. As above.



(Ravindra Gupta)
Superintending Engineer

Dated : _____ 2017

No. : _____ / E.C.W.C.-I/MRT

Copy forwarded to the following for information and necessary action :-

1. Chief Engineer (IPDS/DDUGJY), P.V.V.N.L., Meerut
2. Executive Engineer, Electricity Construction & Works Division, Saharanpur.
3. Sh. Ravindra Kumar, Project Manager, R.E.C. P.D.C.L., Meerut


(Ravindra Gupta)
Superintending Engineer

GTP Approved in IPDS/DDUGJY

Tender Spec No PVVNL-MT-IPDS/333/15-16



PMA/PPDS/DDUGJY

Ashish
RECDCL

Sr. No.	Description	DOUBLE CABLE	SINGLE CABLE
1	Stone Slab Per Meter 450x600x50 mm	1.67	1.67
2	No. of Brick Per Meter	4.5x4=18	4.5x4=18

NOTE:-

1. All the Dimensions are in mm Unless otherwise specified
2. Bending Radius for Turning of Cable Laying will be 700 (i.e. the Dia. of cable)
3. For Road/Rail/River Crossing 6" HDD pipe Would be used in Cable Laying

DA No.	WPPVNL/MIPDS/333/15-16/306/216
OWNER-	PARCEMANCIAL VIDYUT VETAN NIGAM LIMITED (PVVNL)
CONTRACTOR	TATA PROJECTS LIMITED WINDOR TOWER I, CHAKRA CENTRE, 84, SECTOR 28 NOIDA-201301, U.P.
PROJECT	IPDS - Sakarajpur Project
REVISION/REMARK	LAYING OF UNDERGROUND CABLE FOR JALAY LINK (UNDER 20 M.M. CABLE)
DATE	DATE: 15/11/2015

DESIGNED BY	CHECKED BY	APPROVED BY
DATE	DATE	DATE