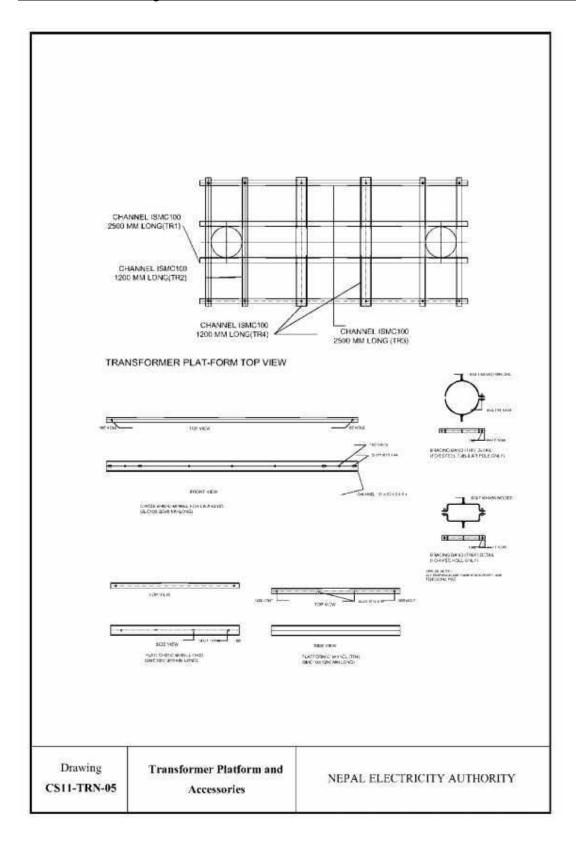
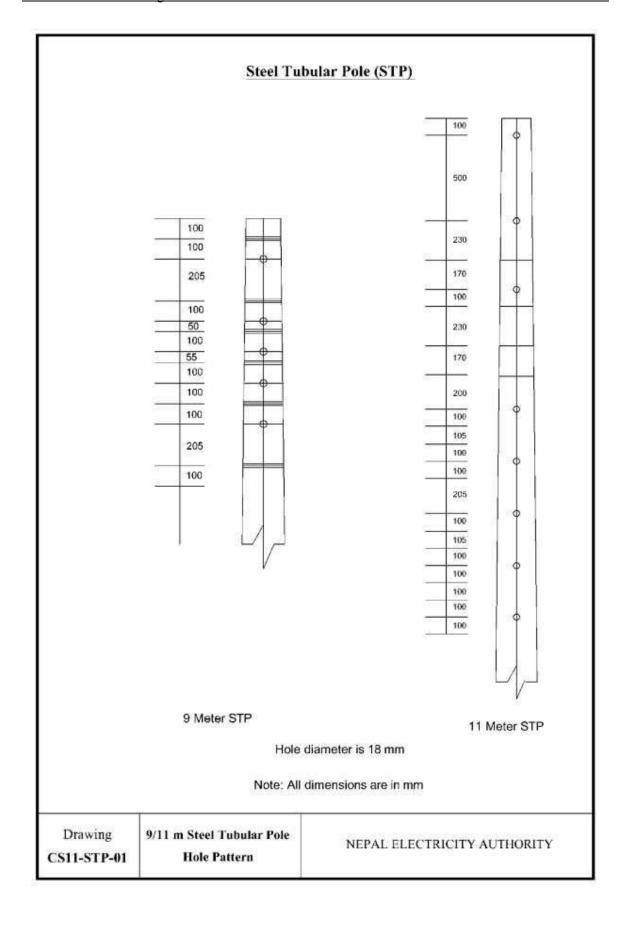
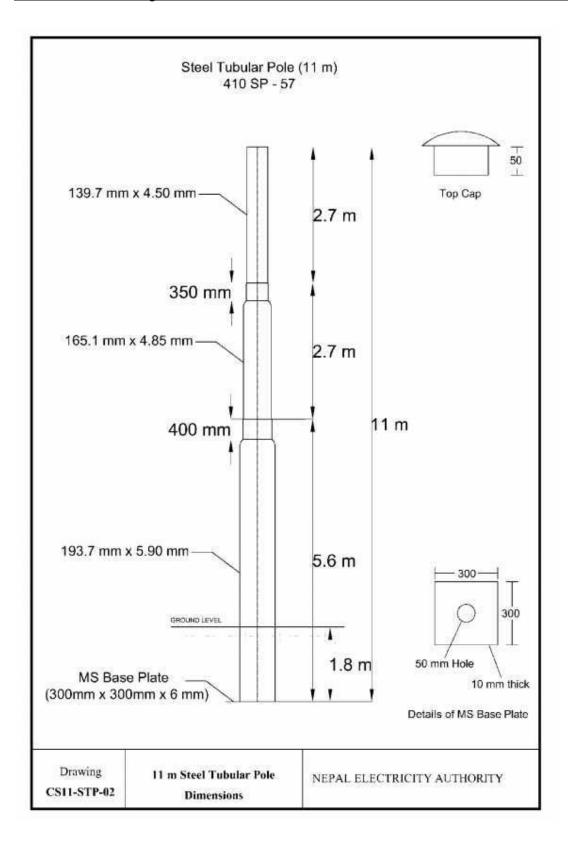
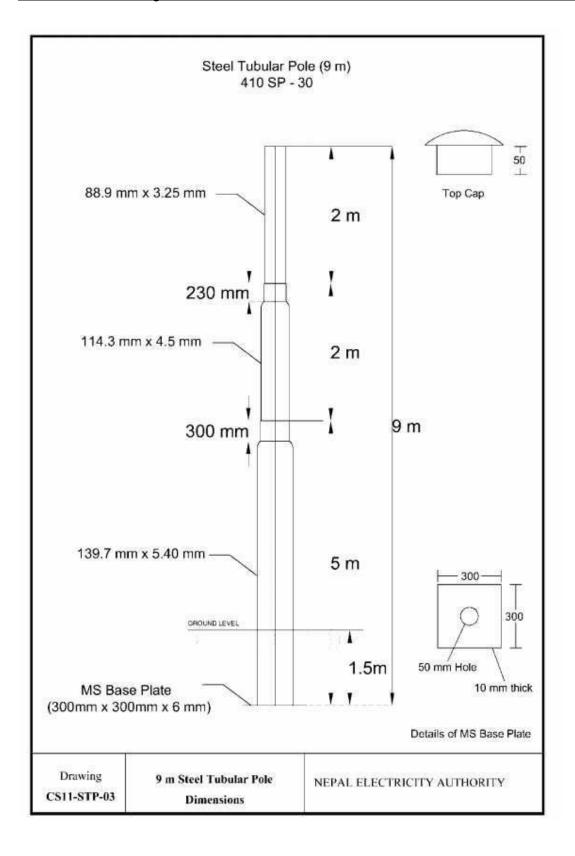
## **Section VI-D**

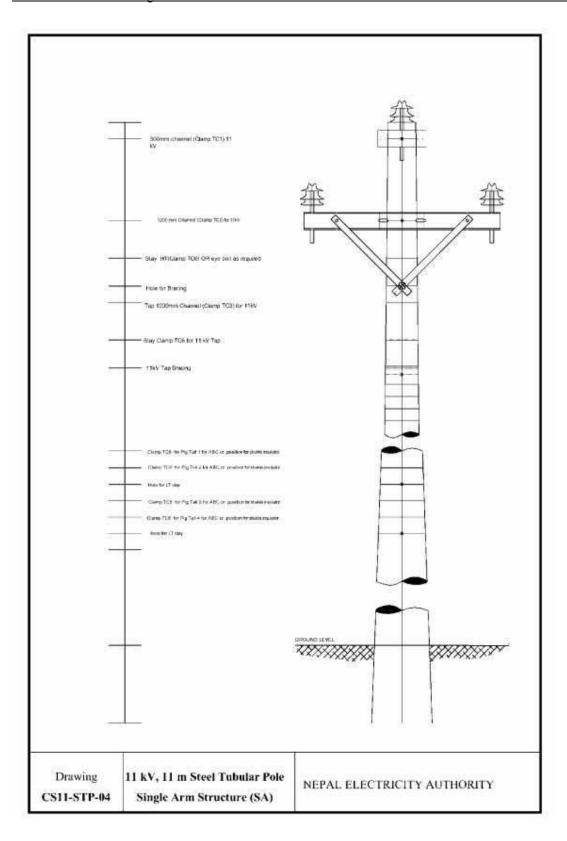
## CONSTRUCTION STANDARD DRAWINGS AND MATERIAL LISTS







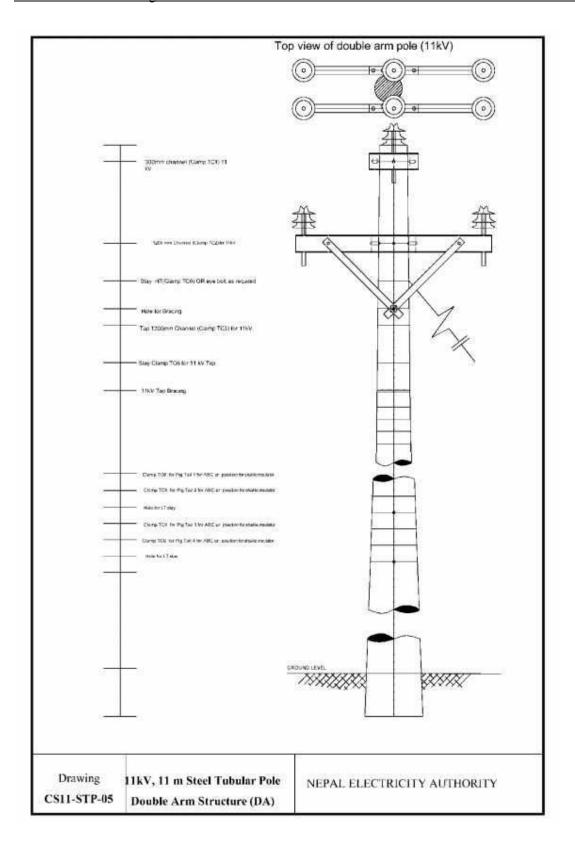




S.No.	QTY.	UNIT	MATERIAL
1	3	NOS	PIN INSULATOR WITH PIN AND NUTS/WASHER
2	1	NOS	STEEL CROSSARM CHANNEL (50x100x300) mm.
3	1	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC1)
4	1	NOS	STEEL CROSSARM CHANNEL (50x100x1200) mm.
5	1	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC2)
6	2	NOS	FLAT CROSSARM BRACE (40 X 6 X 660) mm
7	1	LOT	BOLTS WITH SUITABLE NUTS AND WASHERS
8	3	NOS	PREFORMED WIRE (TOP TIE)
9	1	NOS	STEEL TUBULAR POLE 11 M

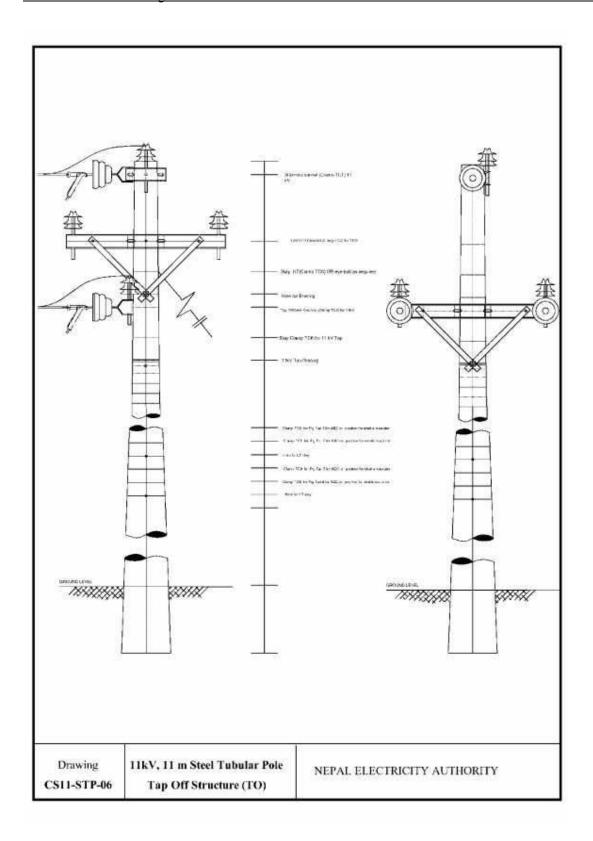
CONSTRUCTION STANDARDS

11 kV SINGLE ARM STRUCTURE (SA)
STEEL TUBULAR POLE



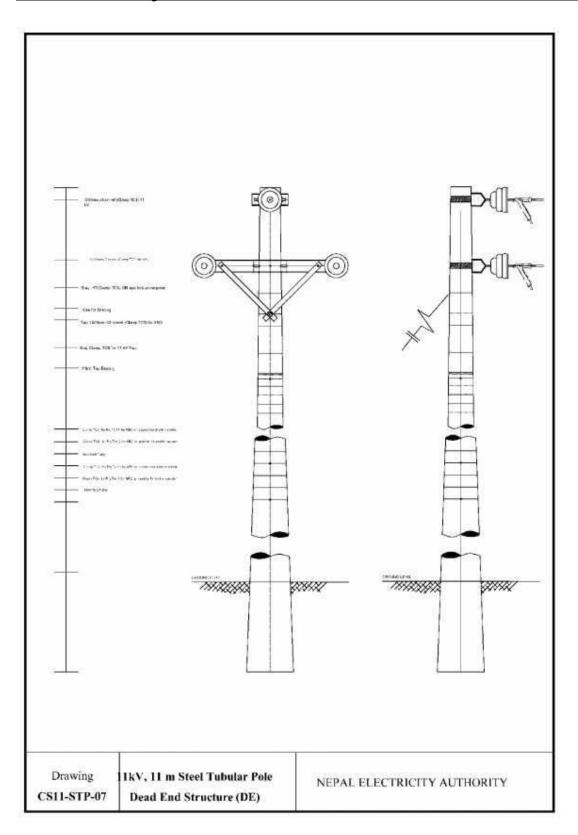
S.No.	QTY.	UNIT	MATERIAL
1	6	NOS	PIN INSULATOR WITH PIN AND NUTS/WASHER
2	2	NOS	STEEL CROSSARM CHANNEL (50x100x300) mm.
3	2	NOS	STEEL CROSSARM CHANNEL (50x100x1200) mm.
4	4	NOS	FLAT CROSSARM BRACE (40 X 6 X 660) mm
5	1	LOT	BOLTS WITH SUITABLE NUTS AND WASHERS
6	6	NOS	PREFORMED WIRE (DOUBLE SIDE TIES)
7	1	NOS	STEEL TUBULAR POLE - 11 M

CONSTRUCTION STANDARDS 11 kV DOUBLE ARM STRUCTURE (DA) STEEL TUBULAR POLE



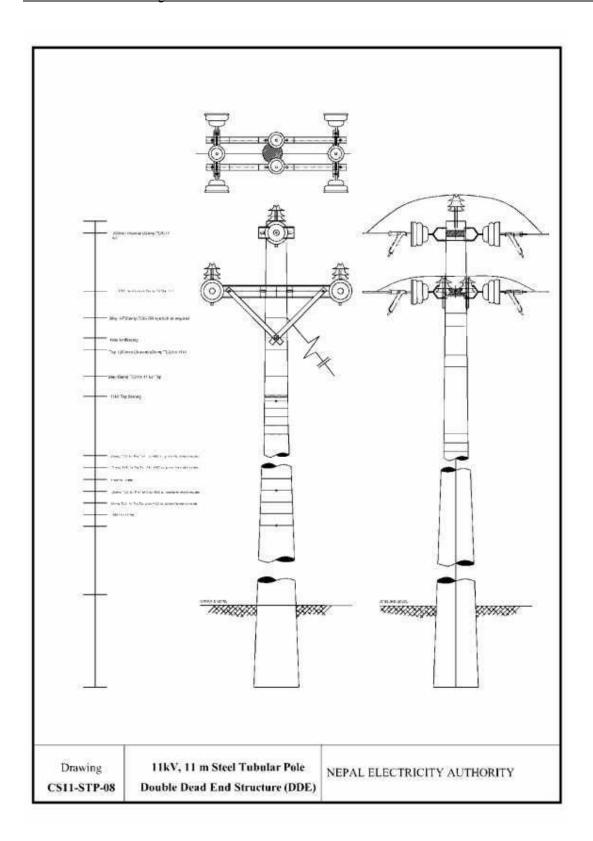
S.No.	QTY.	UNIT	MATERIAL
1	5	NOS	PIN INSULATOR WITH PIN AND NUTS/WASHER
2	3	SET	DISC INSULATOR WITH HARDWARE
3	3	NOS	DEAD END CLAMPS
4	1	NOS	STEEL CROSSARM CHANNEL ( 50x100x300 ) mm.
5	1	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC1)
6	2	NOS	STEEL CROSSARM CHANNEL ( 50x100x1200 ) mm.
7	1	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC3)
8	4	NOS	FLAT CROSSARM BRACE (40 X 6 X 660) mm
9	1	LOT	BOLTS WITH SUITABLE NUTS AND WASHERS
10	5	NOS	PREFORMED WIRE (TOP TIE)
11	3	NOS	INSULATED PIERCING CONNECTORS
12	1	SET	HT STAY (TYPE AS REQUIRED)
13	1	NOS	STEEL TUBULAR POLE - 11 M

CONSTRUCTION STANDARDS 11 kV TAP OFF STRUCTURE (TO) STEEL TUBULAR POLE



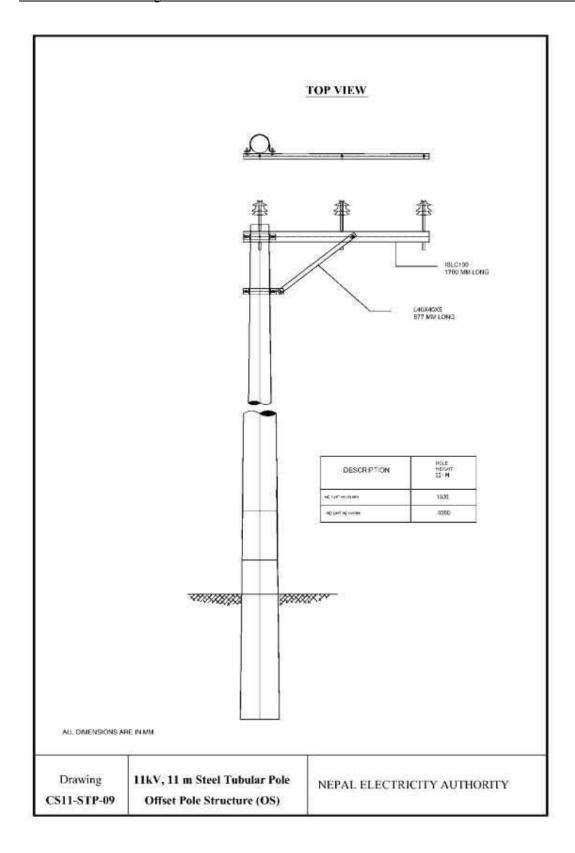
S.No.	QTY.	UNIT	MATERIAL
1	3	NOS	DISC INSULATOR WITH HARDWARE
2	3	NOS	DEAD END CLAMPS
3	1	NOS	STEEL CROSSARM CHANNEL ( 50x100x300 ) mm.
4	1	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS T)
5	1	NOS	STEEL CROSSARM CHANNEL ( 50x100x1200 ) mm.
6	1	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC2)
7	2	NOS	FLAT CROSSARM BRACE (40 X 6 X 660) mm
8	1	LOT	BOLTS WITH SUITABLE NUTS AND WASHERS
9	1	SET	HT STAY (TYPE AS REQUIRED)
10	1	NOS	STEEL TUBULAR POLE – 11m

CONSTRUCTION STANDARDS 11 kV DEAD END STRUCTURE (DE) STEEL TUBULAR POLE



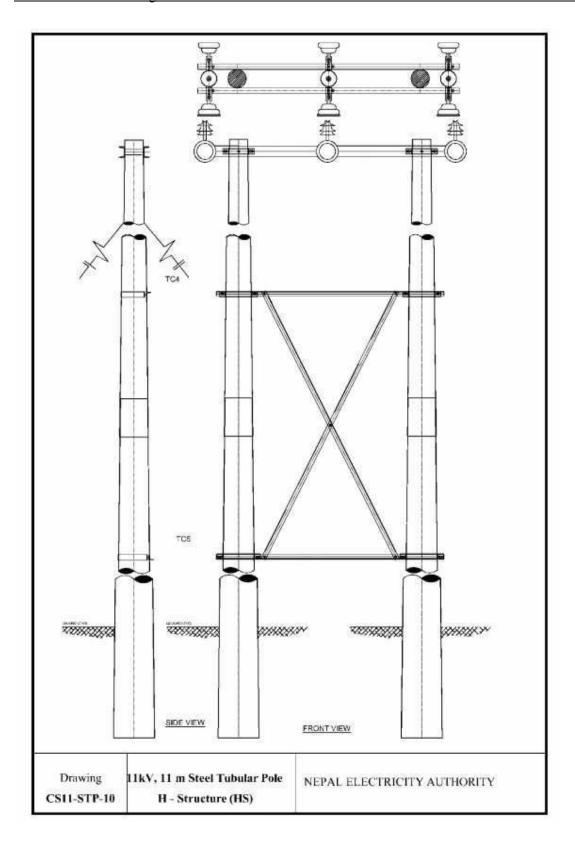
S.No.	QTY.	UNIT	MATERIAL
1	3	NOS	PIN INSULATOR WITH PIN AND NUTS/WASHER
2	6	SET	DISC INSULATOR WITH HARDWARE
3	6	NOS	DEAD END CLAMPS
4	2	NOS	STEEL CROSSARM CHANNEL ( 50x100x300 ) mm.
5	2	NOS	STEEL CROSSARM CHANNEL ( 50x100x1200 ) mm.
6	4	NOS	FLAT CROSSARM BRACE (40 X 6 X 660) mm
7	1	LOT	BOLTS WITH SUITABLE NUTS AND WASHERS
8	3	NOS	PREFORMED WIRE (TOP TIE)
9	3	NOS	INSULATED PIERCING CONNECTOR
10	1	NOS	STEEL TUBULAR POLE - 11 M

CONSTRUCTION STANDARDS
11 kV DOUBLE DEAD END STRUCTURE
(DDE)
STEEL TUBULAR POLE



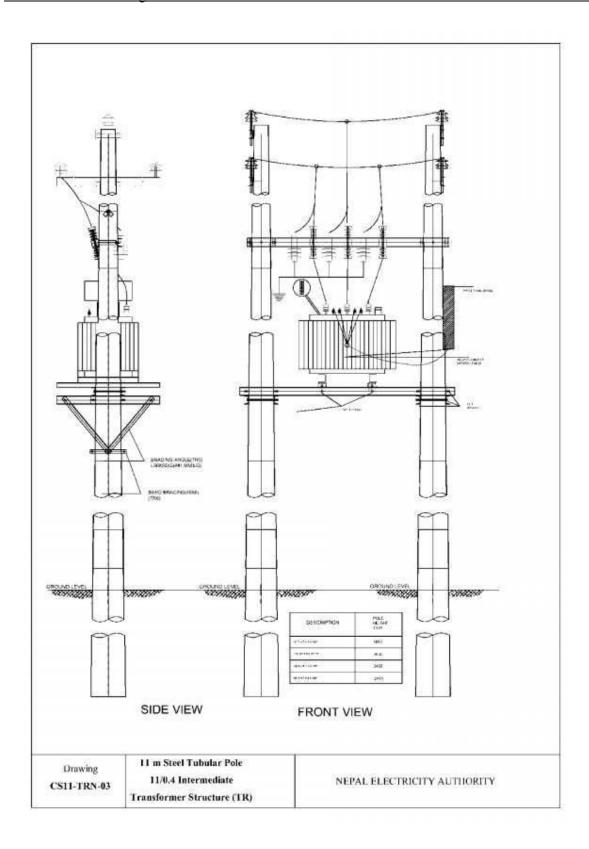
S.No.	QTY.	UNIT	MATERIAL
1	3	NOS	PIN INSULATOR WITH PIN AND NUTS/WASHER
2	1	NOS	STEEL CROSSARM CHANNEL ( 50x100x1700 ) mm.
3	1	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC1)
4	1	NOS	BRACING ANGLE FOR OFFSET STRUCTURE (827 X 40 X 5) mm
5	1	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC2)
6	4	NOS	FLAT BRACE FOR OFFSET STRUCTURE (40 X 6 X 374) mm
7	1	LOT	BOLTS WITH SUITABLE NUTS AND WASHERS
8	3	NOS	PREFORMED WIRE (TOP TIE)
9	1	NOS	STEEL TUBULAR POLE - 11 M

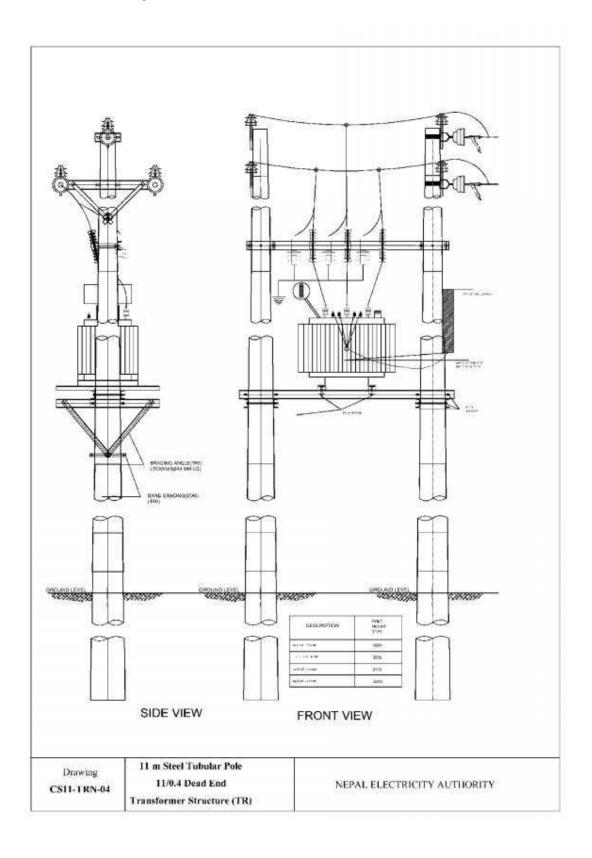
CONSTRUCTION STANDARDS 11 kV OFF SET STRUCTURE (OS) STEEL TUBULAR POLE

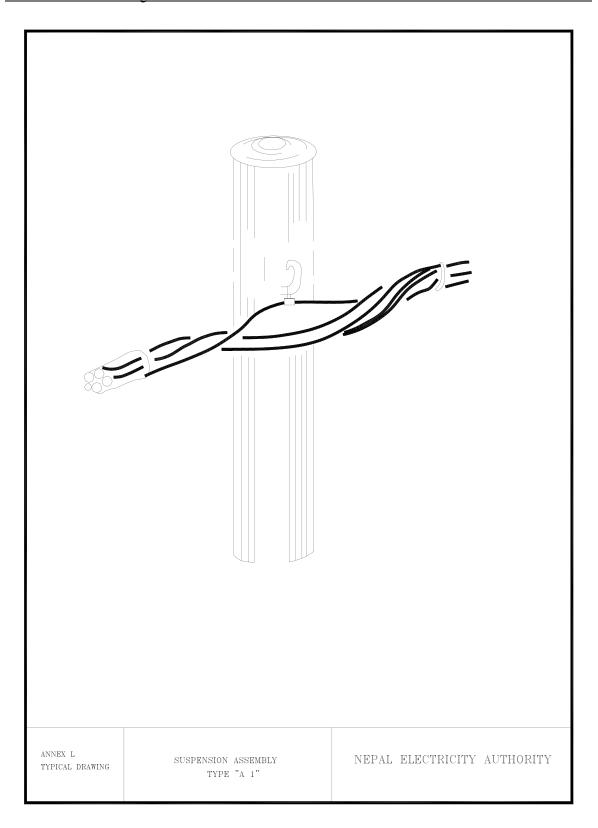


S.No.	QTY.	UNIT	MATERIAL
1	3	NOS	PIN INSULATOR WITH PIN AND NUTS/WASHER
2	6	SET	DISC INSULATOR WITH HARDWARE
3	6	NOS	DEAD END CLAMPS
4	1	NOS	STEEL CROSSARM CHANNEL (50x100x6.4 x2390) mm.
5	2	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC1)
6	2	NOS	BRACING ANGLE ( 40 x 40 x 5 x 2071 ) mm.
7	2	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC4)
8	2	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC5)
9	2	NOS	BRACING ANGLE ( 40 x 40 x 5 x 2723 ) mm.
10	1	LOT	BOLTS WITH SUITABLE NUTS AND WASHERS
11	3	NOS	PREFORMED TIE (TOP TIE)
12	3	NOS	INSULATED PIERCING CONNECTORS
13	1	SET	HT STAY SET (TYPE AS REQUIRED)
14	2	NOS	STEEL TUBULAR POLE - 11 M

CONSTRUCTION STANDARDS 11 kV H - STRUCTURE (HS) STEEL TUBULAR POLE



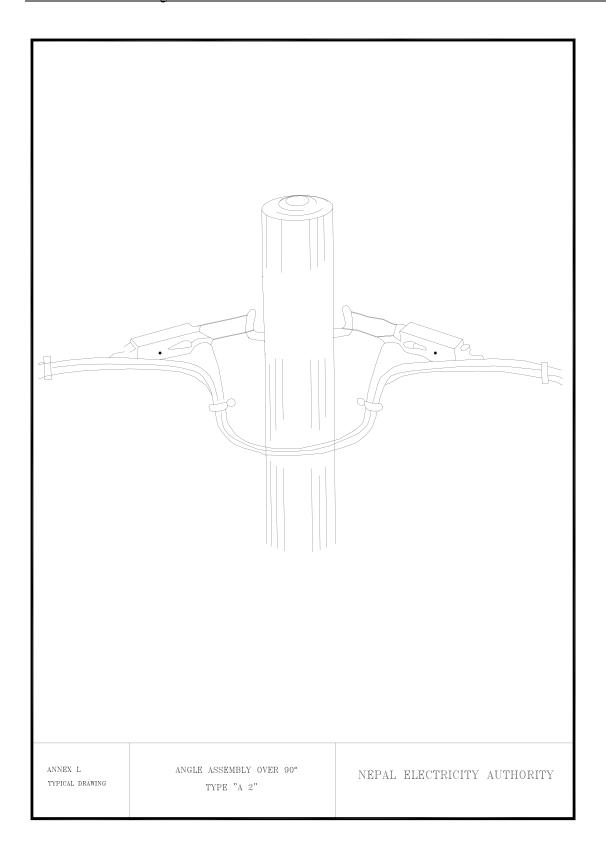




## For PSC Pole

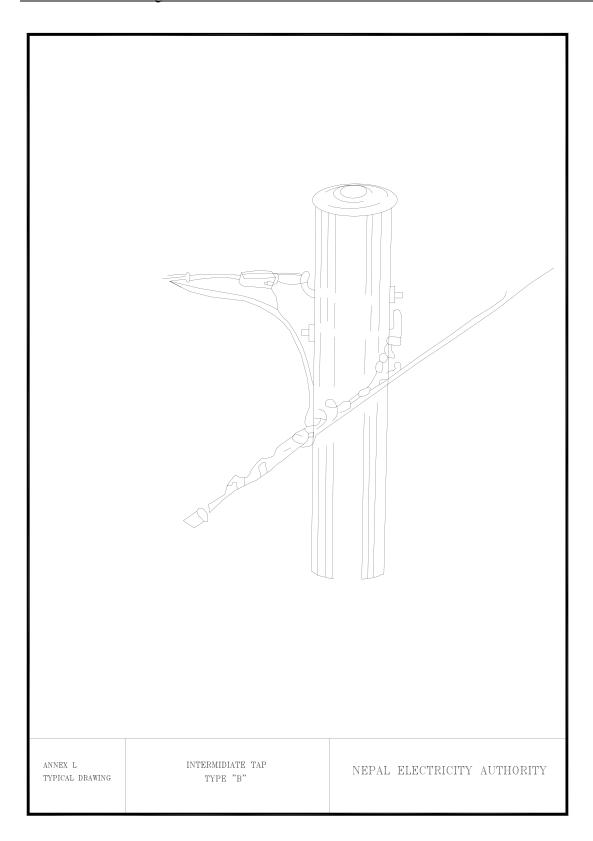
S.NO.	QTY.	UNIT	MATERIAL
1	1	NOS	SUSPENSION CLAMP
2	1 for STP 0 for PSC	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC8)
3	1 for PSC 0 for STP	NOS	PIGTAIL WITH HEXAGONAL NUTS AND WASHERS (16 X 203) MM
4	1	NOS	POLE 9 METER

**CONSTRUCTION STANDARDS LV TYPE – A1 (Suspension Type)** 



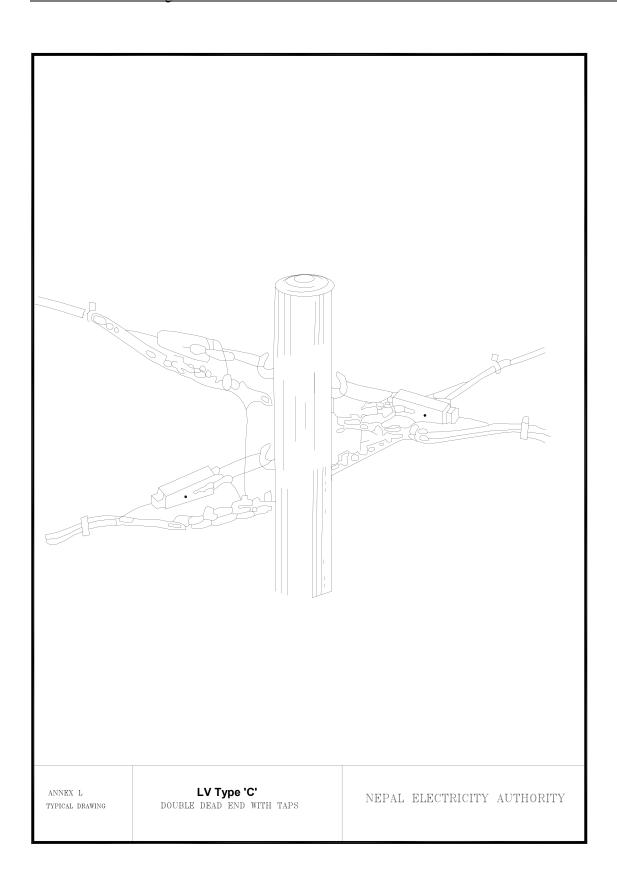
S.NO.	QTY.	UNIT	MATERIAL
1	2	NOS	ANCHOR CLAMP
2	2 for PSC 0 for STP	NOS	PIGTAIL WITH HEXAGONAL NUTS AND WASHERS (16 X 203) MM
3	2 for PSC 0 for STP	NOS	EYE NUT
4	2 for STP 0 for PSC	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC8)
5	1	NOS	POLE 9 METER
6	1	SET	LT STAY SET

CONSTRUCTION STANDARDS LV TYPE – A2 (Suspension Type with Angle)



S.NO.	QTY.	UNIT	MATERIAL
1	1	NOS	SUSPENSION CLAMP
2	1	NOS	ANCHOR CLAMP
3	2 for PSC 0 for STP	NOS	PIGTAIL WITH HEXAGONAL NUTS AND WASHERS (16 X 203) MM
4	1 for PSC 0 for STP	NOS	EYE NUT
5	2 for STP 0 for PSC	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC8)
6	5	NOS	INSULATED PIERCING CONNECTOR
7	5	NOS	INSULATED CABLE CAPS
8	1	NOS	POLE 9 METER
9	1	SET	LT STAY

CONSTRUCTION STANDARDS
LV TYPE - B (Suspension with an Anchor for Dead)

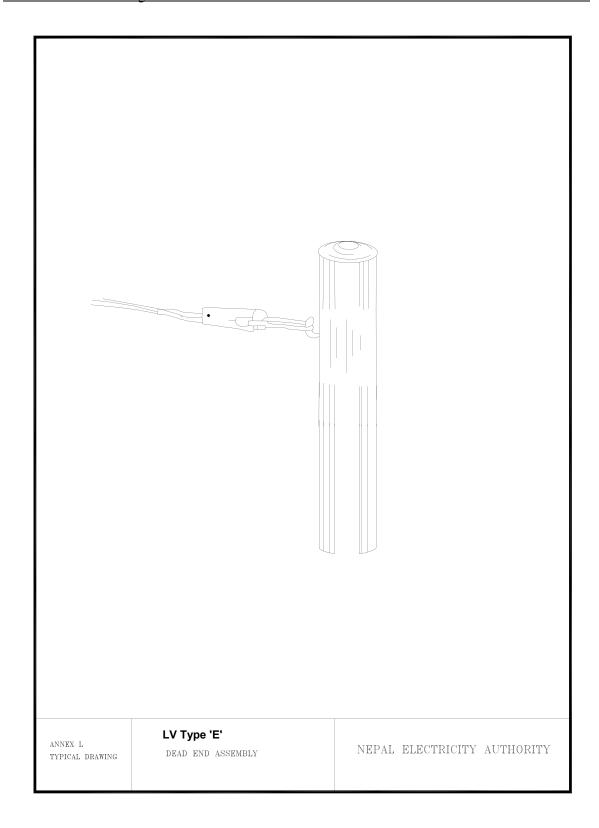


S.NO.	QTY.	UNIT	MATERIAL
1	4	NOS	ANCHOR CLAMP
2	2 for PSC 0 for STP	NOS	PIGTAIL WITH HEXAGONAL NUTS AND WASHERS (16 X 203) MM
3	1 for PSC 0 for STP	NOS	EYE NUT
4	2 for STP 0 for PSC	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC8)
5	15	NOS	INSULATED PIERCING CONNECTOR
6	20	NOS	INSULATED CABLE CAPS
7	1	NOS	POLE 9 METER

CONSTRUCTION STANDARDS	NEPAL ELECTRICITY AUTHORITY
LV TYPE - C (Four Anchor Dead End)	

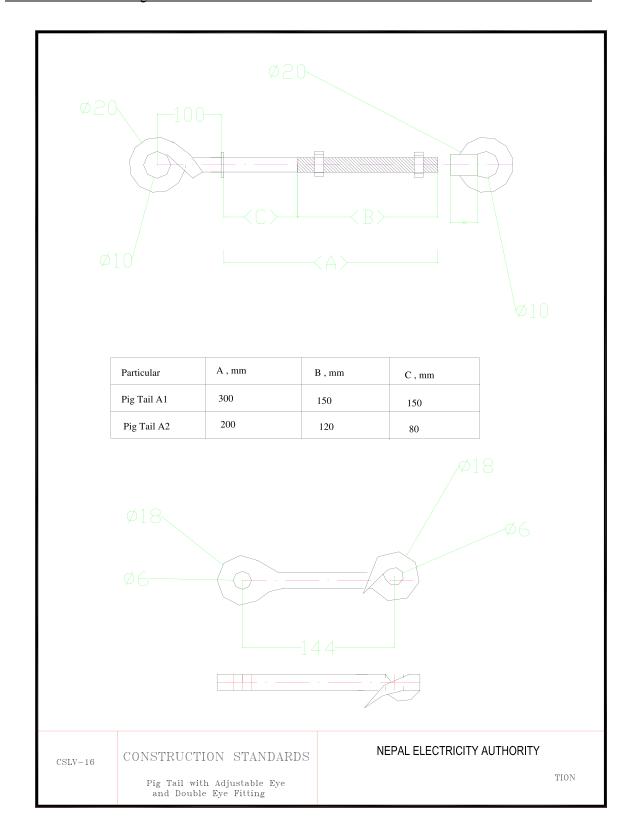
S.NO.	QTY.	UNIT	MATERIAL
1	1	NOS	SUSPENSION CLAMP
2	2	NOS	ANCHOR CLAMP
3	2 for PSC 0 for STP	NOS	PIGTAIL WITH HEXAGONAL NUTS AND WASHERS (16 X 203) MM
4	2 for PSC 0 for STP	NOS	EYE NUT
5	2 for STP 0 for PSC	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC8)
6	10	NOS	INSULATED PIERCING CONNECTOR
7	10	NOS	INSULATED CABLE CAPS
8	1	NOS	POLE 9 METER

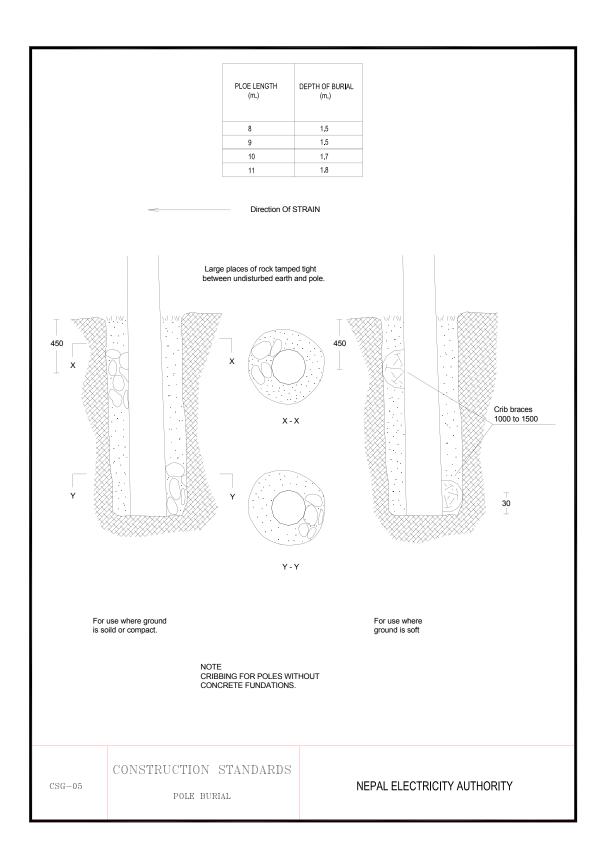
CONSTRUCTION STANDARDS LV TYPE - D (One Suspension with two anchor dead end)

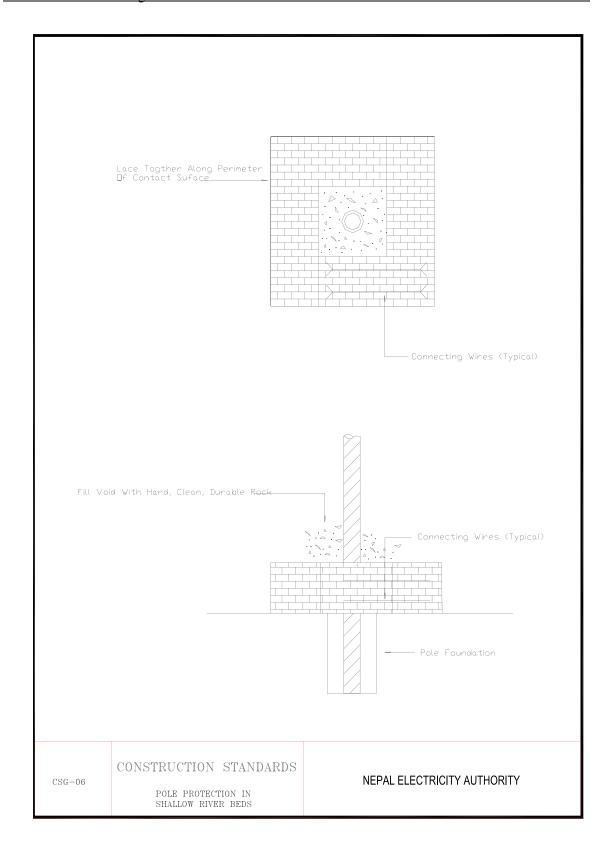


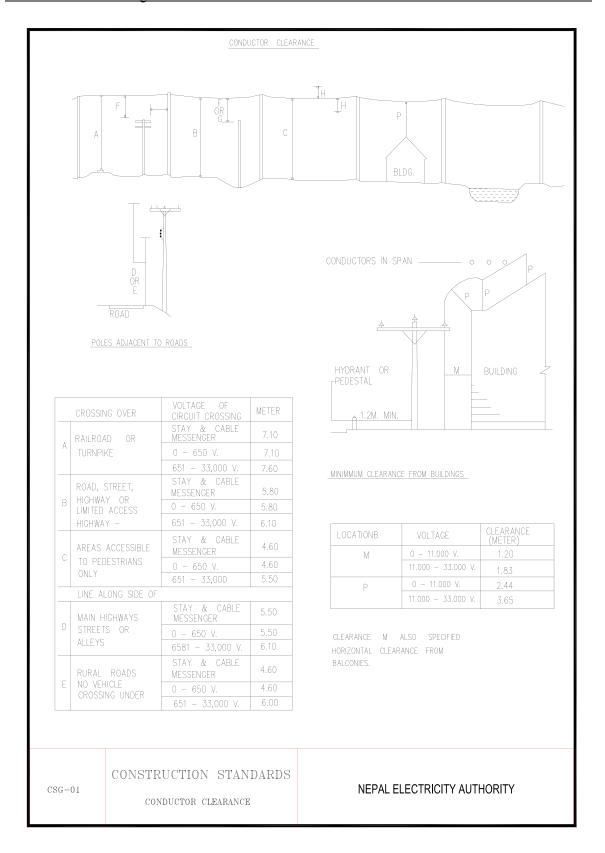
S.No.	QTY.	UNIT	MATERIAL
1	1	NOS	ANCHOR CLAMP
2	1 for PSC 0 for STP	NOS	PIGTAIL WITH HEXAGONAL NUTS AND WASHERS (16 X 203) MM
3	1 for PSC 0 for STP	NOS	EYE NUT
4	2 for STP 0 for PSC	NOS	POLE CLAMP WITH NUTS, BOLTS AND WASHERS (TC8)
5	5	NOS	INSULATED CABLE CAPS
6	1	NOS	POLE 9 METER
7	1	SET	LT STAY

CONSTRUCTION STANDARDS	NEPAL ELECTRICITY AUTHORITY
LV TYPE - E (Single Anchor Dead End)	





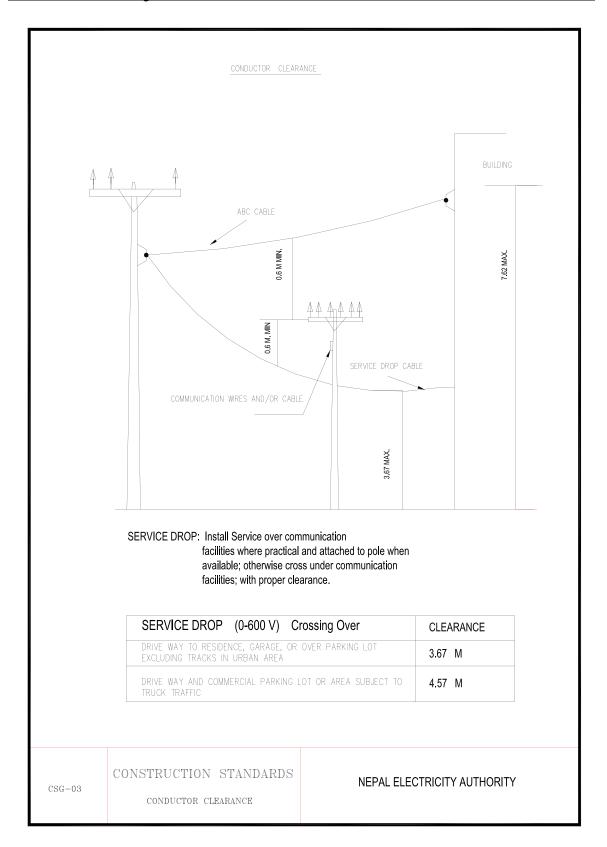




CONDUCTORS AT HIGHER LEVEL CONDUCTORS AT LOWER LEVEL		SERVICE DROP	OPEN SUPPLY WIRES			STAYS AND SUPPLY CABLES
		0 - 650 V	0 - 650V	651 – 11000 V	33000 V	ON GROUNDED MESSENGER
	COMMUNICATION WIRES	0.60 M.				
F	COMMUNICATION CABLES AND MESSENGER	0.6 M. OVER 1.2 M. UNDER	1.38	2.15	_	0.60
G	SUPPLY CABLES ON EFFECTIVE GROUNDED MESSENGER	0.6 M. OVER 1.2 M. UNDER	0.60	0.60	_	0.60
	OPEN SUPPLY 0 - 650 V.		1.30	1.80	2.70	0.60
Н	WRES 651 - 11,000 V.			1.20	_	1.20
	GUYS SERVICE DROPS 0 - 650 V.	0.60	0.60	1.20		_

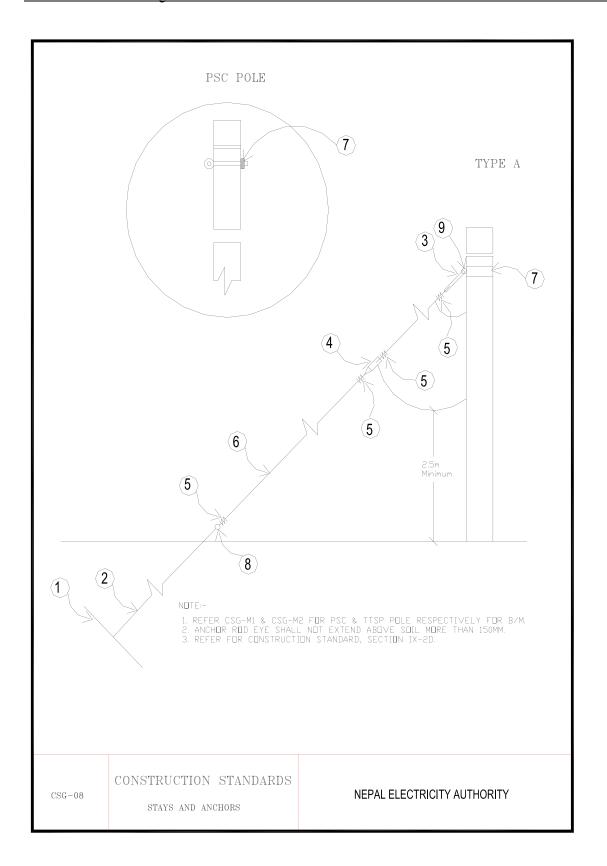
--- VOLTAGE SHOWN ARE PHASE TO GROUND VALUES.

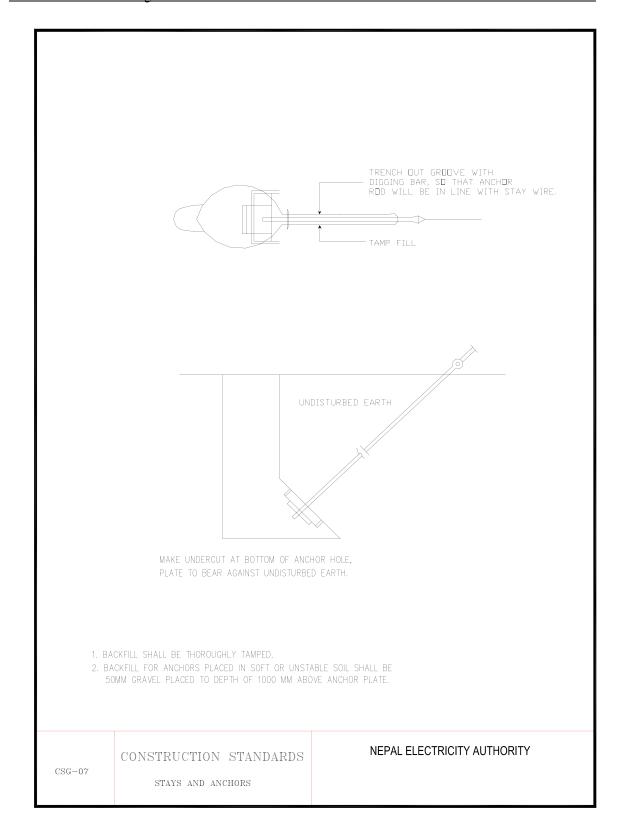
CSG-02 CONSTRUCTION STANDARDS
CONDUCTOR CLEARANCE



SN	ELECTRIC SYMBOLS	EXISTING	PROPOSED
1	Transformer	— <b>)</b> —	
2	Fuse Cutout		6
3	Disconnecting Switch	/	
4	Load Break Switch		
5	Auto Reclosure	A	<u>A</u>
6	Substation		
7	Lighting Arrester		d II
8	Pole Telescopic with Stay	0	<b>○</b> + >
9	Pole P.S.C. with Stay		[ <del>]</del> +>
10	Tapping Point		•

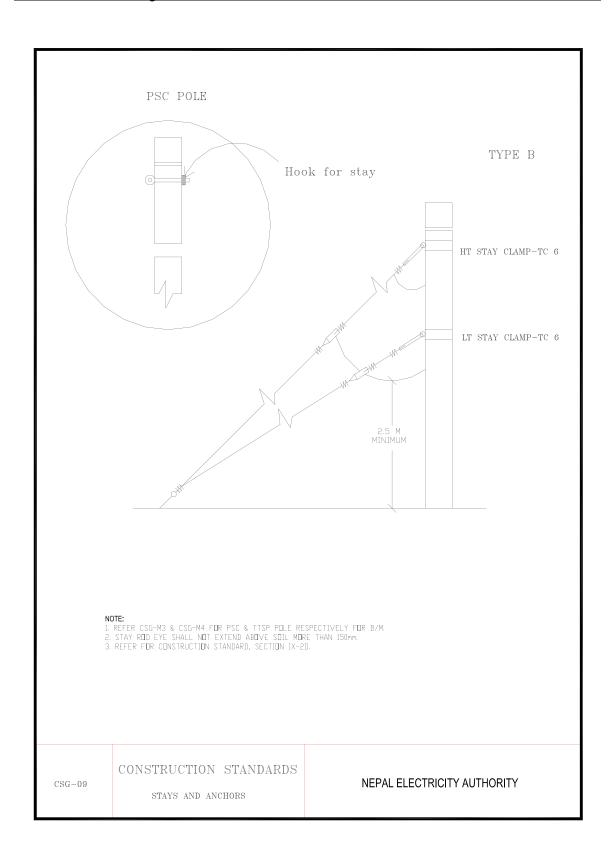
CSG-04 CONSTRUCTION STANDARDS
ELECTRICAL SYMBOLS





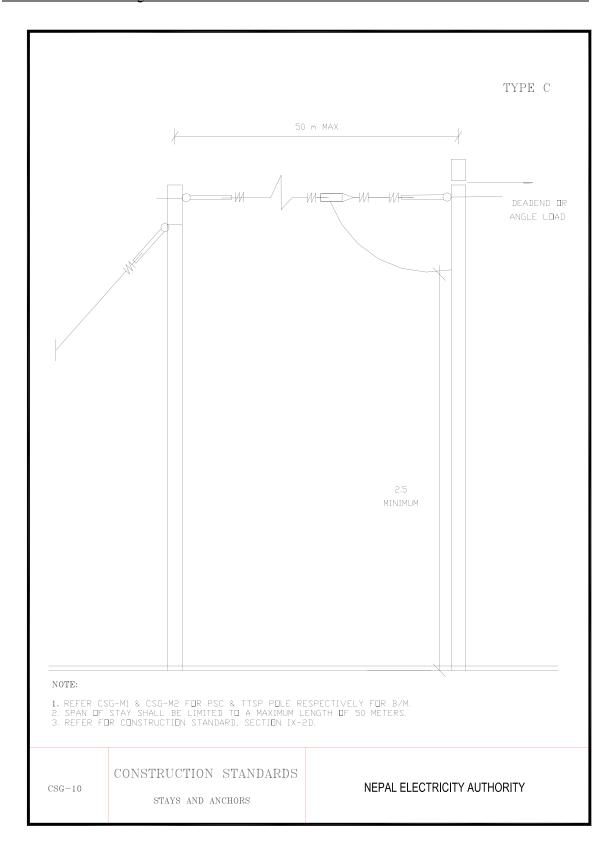
S.No.	MATERIAL (HT-STAY)	QTY.	UNIT	MATERIAL (LT-STAY)	QTY
1	HT STAY SET (600 x 600 MM PLATE AND ROD)	1	NOS	LT STAY SET (300 X 300 MM PLATE AND ROD)	1
2	HT TURN BUCKLE	1	NOS	LT TURN BUCKLE	1
3	HT THIMBLES	1	NOS	LT THIMBLES	1
4	POLE CLAMP(TC6)	1	NOS	POLE CLAMP(TC8)	0
5	HT STAY INSULATOR	1	NOS	STAY INSULATOR	1
6	PREFORM TIE FOR STAY WIRE 7/8 SWG	4	NOS	PREFORM TIE FOR STAY WIRE 7/12 SWG	4
7	7/8" SWG STAY WIRE	12	M	7/12" SWG STAY WIRE	10
8	HT EYE BOLT	0	NOS	LT EYE BOLT	0

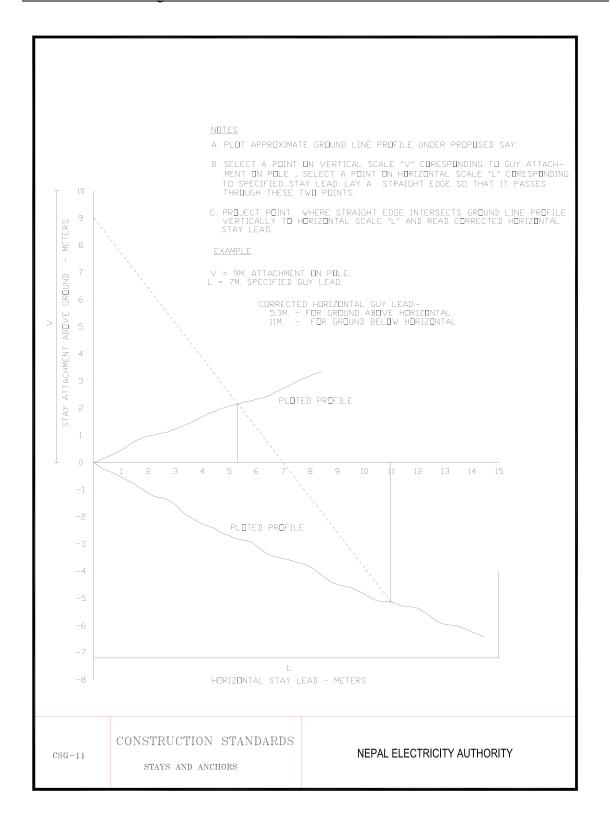
CONSTRUCTION STANDARDS HT AND LT - SINGLE STAY



S.No.	MATERIAL (HT-STAY)	QTY.	UNIT	MATERIAL (LT-STAY)	QTY
1	HT STAY SET (600 x 600 MM PLATE AND ROD)	1	NOS	LT STAY SET (300 X 300 MM PLATE AND ROD)	1
2	HT TURN BUCKLE	2	NOS	LT TURN BUCKLE	2
3	HT THIMBLES	2	NOS	LT THIMBLES	2
4	POLE CLAMP(TC6)	2	NOS	POLE CLAMP(TC8)	1
5	HT STAY INSULATOR	2	NOS	STAY INSULATOR	2
6	PREFORM TIE FOR STAY WIRE 7/8 SWG	8	NOS	PREFORM TIE FOR STAY WIRE 7/12 SWG	8
7	7/8" SWG STAY WIRE	24	M	7/12" SWG STAY WIRE	20
8	HT EYE BOLT	0	NOS	LT EYE BOLT	0

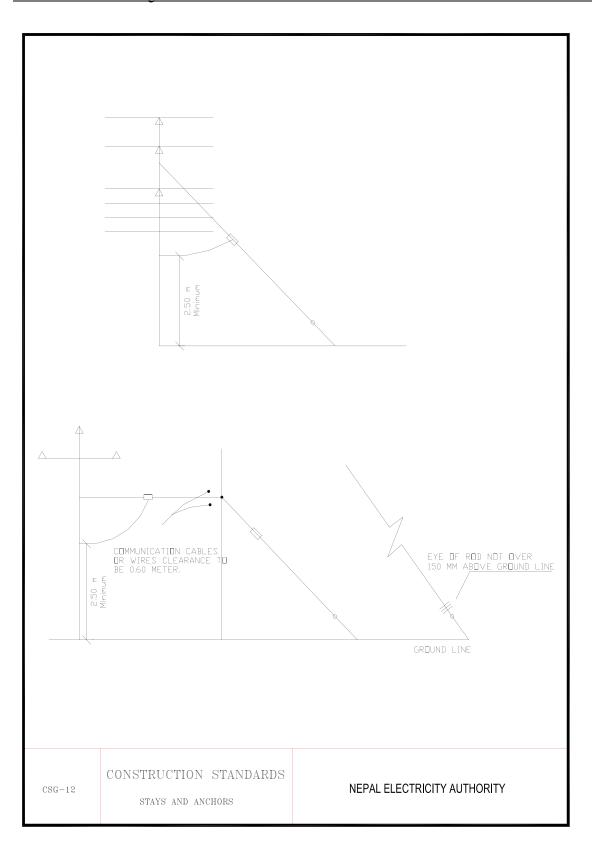
CONSTRUCTION STANDARDS HT AND LT – DOUBLE STAY

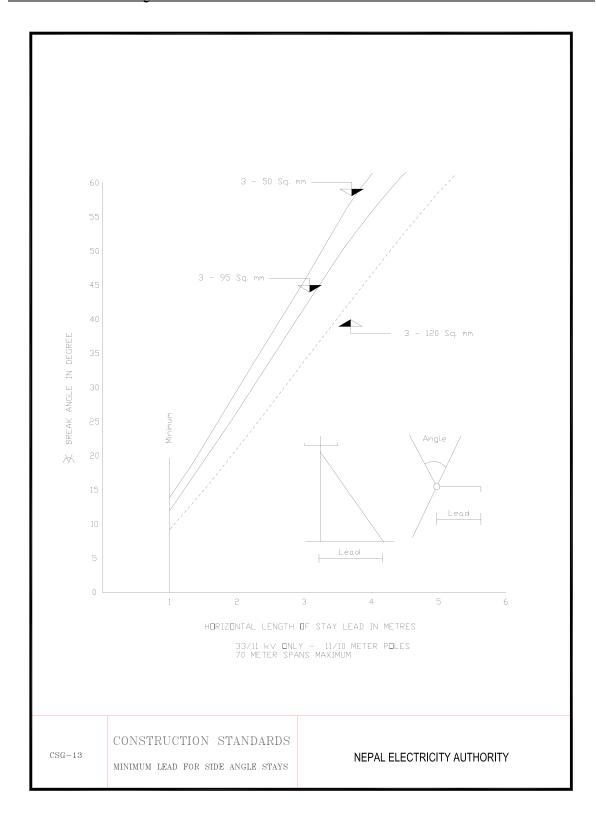


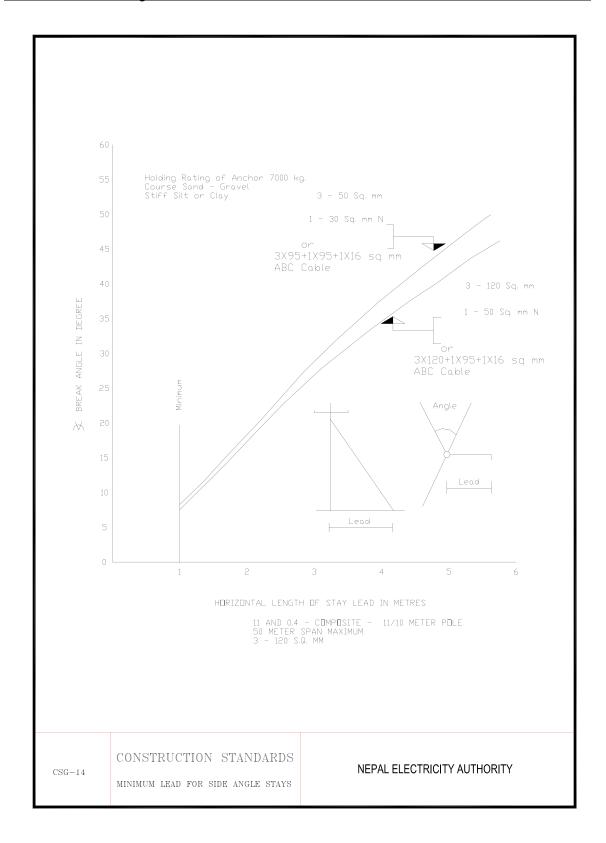


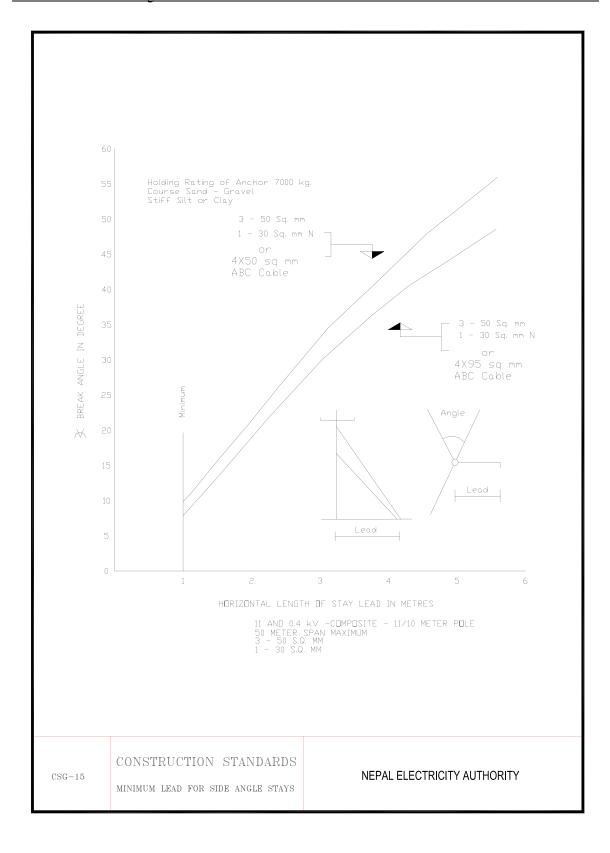
S.No.	MATERIAL (HT-STAY)	QTY.	UNIT	MATERIAL (LT-STAY)	QTY
1	HT STAY SET (600 x 600 MM PLATE AND ROD)	1	NOS	LT STAY SET (300 X 300 MM PLATE AND ROD)	1
2	HT TURN BUCKLE	2	NOS	LT TURN BUCKLE	2
3	HT THIMBLES	1	NOS	LT THIMBLES	1
4	POLE CLAMP(TC6)	1	NOS	POLE CLAMP(TC8)	1
5	POLE CLAMP(TC8)	1	NOS		
6	HT STAY INSULATOR	2	NOS	STAY INSULATOR	2
7	PREFORM TIE FOR STAY WIRE 7/8 SWG	8	NOS	PREFORM TIE FOR STAY WIRE 7/12 SWG	8
8	7/8" SWG STAY WIRE	25	M	7/12" SWG STAY WIRE	20
9	HT EYE BOLT	0	NOS	LT EYE BOLT	0
10	POLE 11M	1	NOS	POLE 9M	1

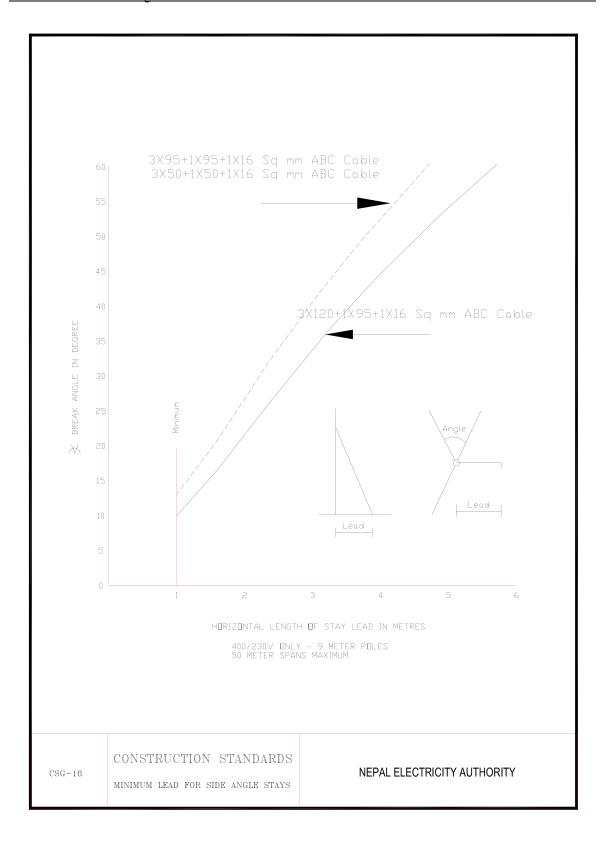
CONSTRUCTION STANDARDS HT AND LT – FLYING STAY

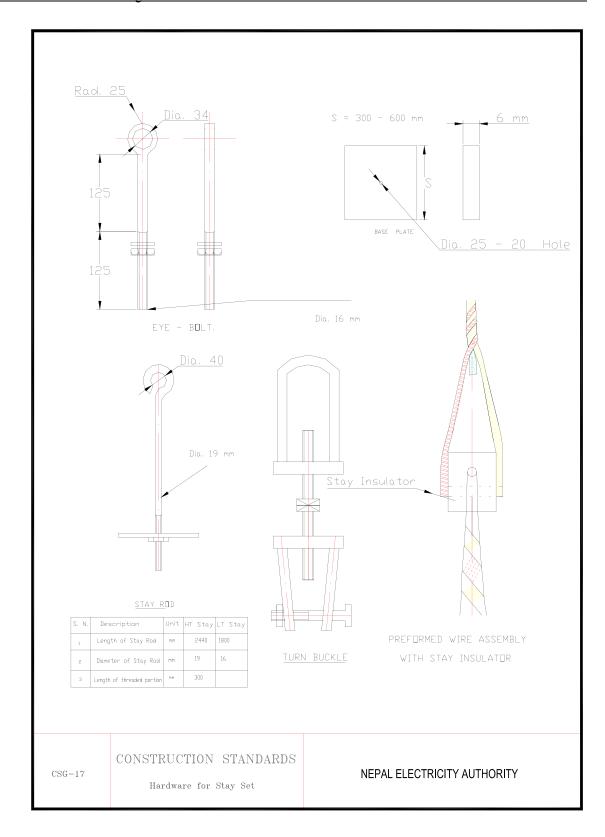


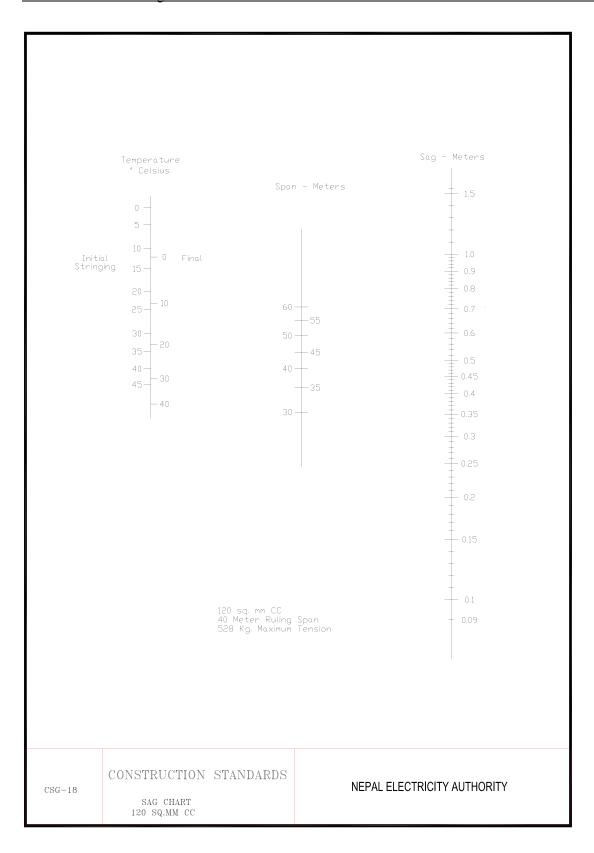


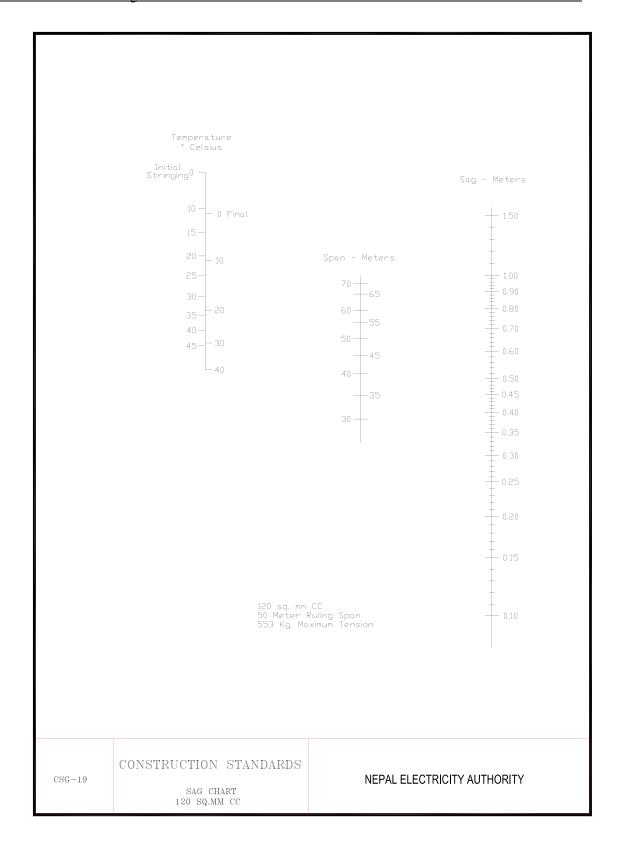


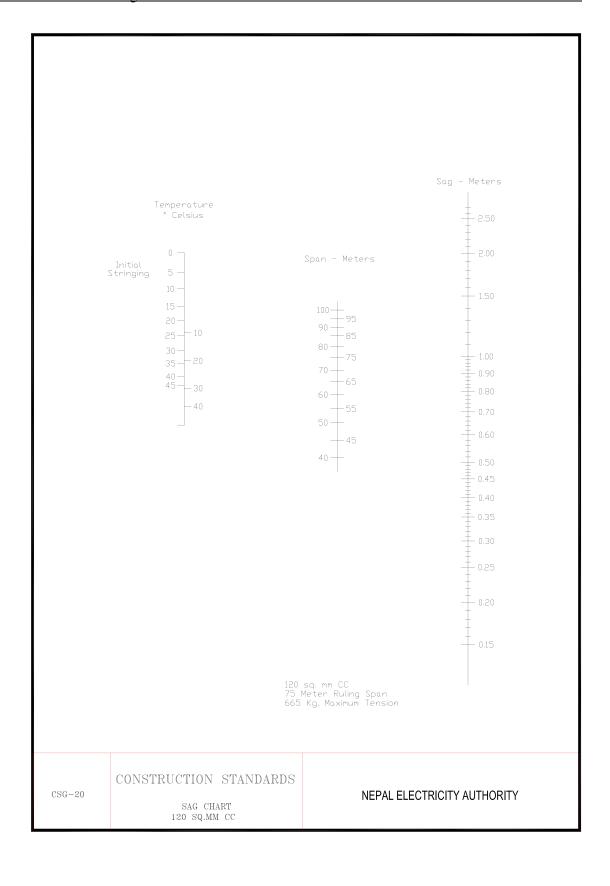


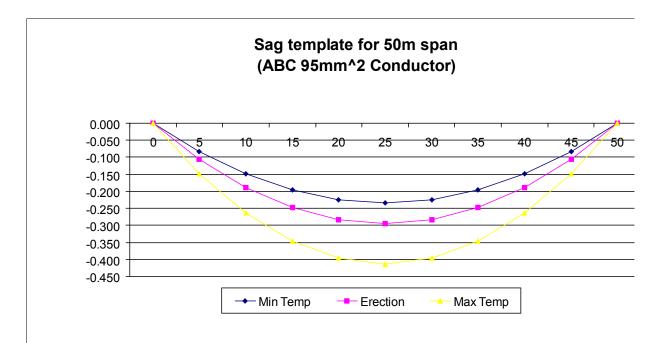


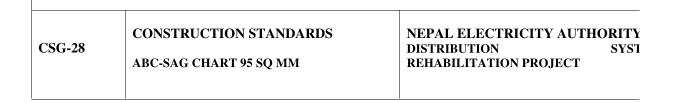




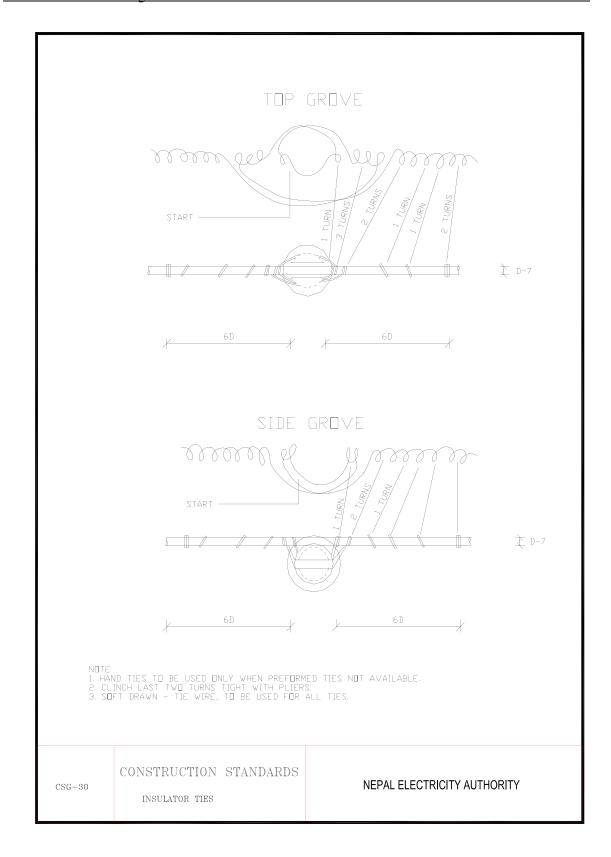


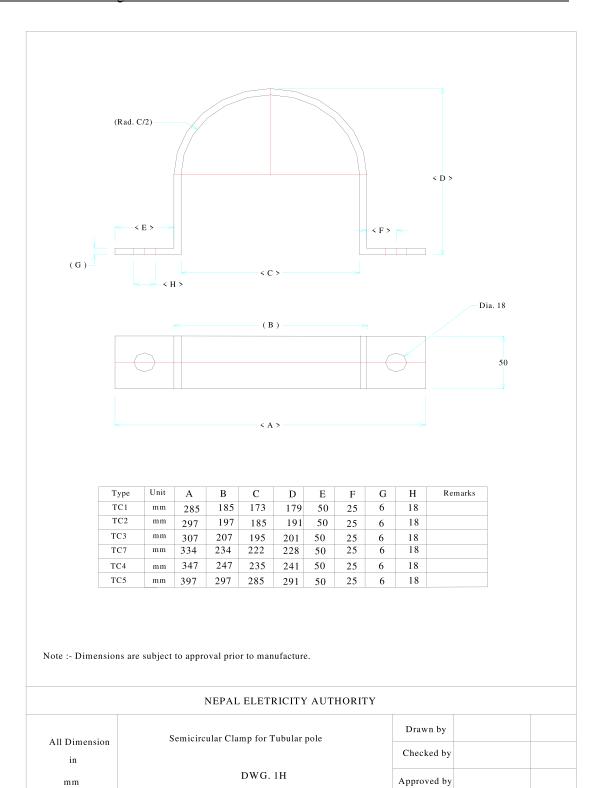


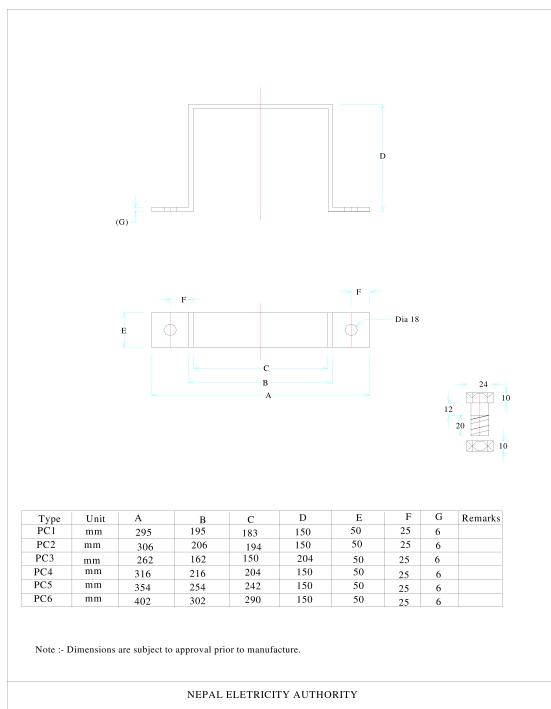




## JUMPER TIES TOP GROVE SIDE GROOV NOTES 1. TIE WIRE ASSEMBLY SHOULD BE AS TIGHT AS CAN BE WRAPPED. 2. TURNS MAY BE IN EITHER DIRECTION, AS LONG AS ONE-HALF THE TURNS OPPOSE THE OTHER HALF TO PREVENT LODSENING OF THE TIE. 3. USE ONLY FOR SECURING JUMPERS ON STRUCTURES. CONSTRUCTION STANDARDS NEPAL ELECTRICITY AUTHORITY CSG-29 INSULATOR TIES







All D'	Rectangular Clamp for PSC pole	Drawn by	
All Dimension in		Checked by	
mm	DWG. 2H	Approved by	

