RURAL DISTRIBUTION

DRAWING NUMBER	SHT.	DRAWING TITLE	DWG REV.	BOM REV.
A-12-00	**1 – 3**	**GENERAL INFORMATION – 1 Ø**	**L/I/A**	
A-12-01	**1 – 2**	**1 Ø TANGENT STRUCTURE AND DEFLECTION UP TO 4°**	**A**	**B**
A-12-02	**1 – 2**	**1 Ø ANGLE STRUCTURE 5° TO 10°**	**B**	**B**
A-12-03	**1 – 2**	**SINGLE PHASE ANGLE STRUCTURE 11° TO 59°**	**A**	**A**
A-12-04	**1 – 2**	**SINGLE PHASE DOUBLE DEADEND CORNER STRUCTURE 60° TO 90°**	**A**	**A**
A-12-05	**1 – 2**	**SINGLE PHASE DEADEND STRUCTURE**	**A**	**A**
A-12-06	**1 – 2**	**SINGLE PHASE DOUBLE DEADEND CONDUCTOR CHANGE**	**A**	**B**
A-12-07	**1 – 2**	**SINGLE PHASE LONG SPAN DEADEND STRUCTURE**	**A**	**B**
A-12-08	**1 – 2**	**SINGLE PHASE TAP-OFF**	**B**	**C**
A-12-09	**1 – 2**	**SINGLE PHASE SLACKSPAN TAP-OFF**	**F**	**F**
A-12-10	**1 – 2**	**SINGLE PHASE TWO WAY TAP-OFF**	**A**	**B**
A-12-11	**1 – 2**	**RURAL NEUTRAL WIRE TANGENT AND DEFLECTION UP TO 4°**	**A**	**C**
A-12-12	**1 – 2**	**RURAL NEUTRAL WIRE DEFLECTION 5° TO 59°**	**A**	**A**
A-12-13	**1 – 2**	**RURAL NEUTRAL WIRE CORNER STRUCTURE 60° TO 90°**	**A**	**A**
A-12-14	**1 – 2**	**RURAL NEUTRAL WIRE DEADEND AND MODIFIED PRIMARY TANGENT**	**B**	**A**
A-12-15	**1 – 2**	**RURAL NEUTRAL WIRE DEADEND (WITH PRIMARY DEADEND)**	**A**	**A**
A-12-16	**1 – 2**	**FARMYARD SERVICE – LOAD CENTRE STRUCTURE WITH O.H. SECONDARY**	**0**	**0**

RURAL DISTRIBUTION

DRAWING NUMBER	SHT.	DRAWING TITLE	DWG REV.	BOM REV.
A-12-50	1	GENERAL INFORMATION – 3 Ø	J	
A-12-50	2	GENERAL INFORMATION – 3 Ø WITHOUT NEUTRAL	L	
A-12-50	3	GENERAL INFORMATION – 3 Ø WITH NEUTRAL	L	
A-12-50	4	GENERAL INFORMATION – 3 Ø	I	
A-12-51	1 – 2	3 Ø TANGENT 3/0 ACSR & SMALLER	C	A
A-12-52	1 – 2	3 Ø TANGENT 4/0 & 266 ACSR	C	E
A-12-53	1 – 2	MODIFIED 3 Ø TANGENT 3/0 ACSR & SMALLER	A	A
A-12-54	1 – 2	MODIFIED 3 Ø TANGENT 4/0 & 266 ACSR	C	D
A-12-55	1 – 2	3 Ø ANGLE SINGLE CROSSARM DEFLECTIONS OF UP TO 10°	B	C
A-12-56	1 – 2	3 Ø ANGLE DOUBLE CROSSARM DEFLECTIONS OF 11° TO 30°	A	B
A-12-57	1 – 2	3 Ø DEFLECTION AND CORNER 3/0 ACSR & SMALLER, ANGLES OF 31° TO 90°	B	B
A-12-58	1 – 2	3 Ø DEFLECTION & CORNER 4/0 & 266 ACSR ANGLES OF 31° TO 90°	D	D
A-12-58A	1 – 2	3 Ø SLACK SPAN DEFLECTION & CORNER ANGLES OF 31° TO 90°	B	A
A-12-59	1 – 2	3 Ø CROSSARM DEADEND 3/0 ACSR AND SMALLER	C	B
A-12-60	1 – 2	3 Ø CROSSARM DEADEND 4/0 & 266 ACSR	D	E
A-12-61	1 – 2	3 Ø DOUBLE DEADEND CONDUCTOR CHANGE	D	C
A-12-62	1 – 2	3 Ø TAP-OFF 3/0 ACSR AND SMALLER	D	C
A-12-63	1 – 2	3 Ø TAP-OFF 4/0 & 266 ACSR	E	E
A-12-64	1 – 2	3 Ø SLACK-SPAN TAP-OFF	D	B
A-12-65	1 – 2	DOUBLE CIRCUIT 3 Ø TANGENT 3/0 ACSR AND SMALLER	A	A
A-12-66	1 – 2	DOUBLE CIRCUIT 3 Ø TANGENT 4/0 & 266 ACSR	C	D
A-12-67	1 – 2	DOUBLE CIRCUIT 3 Ø ANGLE SINGLE CROSSARM DEFLECTIONS OF UP TO 10°	C	B
A-12-68	1 – 2	DOUBLE CCT 3 Ø ANGLE DOUBLE CROSSARM DEFLECTIONS OF 11° TO 30°	B	A
A-12-69	1 – 2	DBL CCT DEFLECTION & CORNER 3/0 ACSR & SMALLER ANGLES 31° TO 90°	B	B
A-12-70	1 – 2	DOUBLE CCT DEFLECTION AND CORNER, 4/0 & 266 ACSR ANGLES 31° TO 90°	D	D
A-12-71	1 – 2	DOUBLE CIRCUIT CROSSARM DEADEND 3/0 ACSR AND SMALLER	B	A
A-12-72	1 – 2	DOUBLE CIRCUIT CROSSARM DEADEND 4/0 & 266 ACSR	D	D
A-12-73	1 – 2	3 Ø TAP-OFF FROM DOUBLE CIRCUIT TANGENT 3/0 ACSR AND SMALLER	B	A
A-12-74	1 – 2	3 Ø TAP-OFF FROM DOUBLE CIRCUIT TANGENT 4/0 & 266 ACSR	E	B
A-12-75	1 – 2	3 Ø SLACKSPAN TAP-OFF FROM DOUBLE CIRCUIT TANGENT	B	A
A-12-76	1 – 2	3 Ø LONG SPAN DOUBLE DEADEND 1/0 TO 266 ACSR SPANS OF 105m TO 210m	C	D
A-12-76B	1 – 2	MONOPOLE LONG SPAN 100m TO 155m 1/0 TO PARTRIDGE ACSR ONLY	D	D
A-12-76C	1 – 2	DELTA MONOPOLE LONG SPAN 100m TO 155m 1/0 TO PARTRIDGE ACSR ONLY	A	A
A-12-77	1 – 2	3 Ø LONG SPAN DOUBLE DEADEND 1/0 TO 266 ACSR SPANS OF 211m TO 245m	C	B
A-12-78	1 – 2	SINGLE ALLEY ARM	B	A

*Sask**Power*** - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **PP**	**INDEX**
L MOEN	**P PATEL**	CHKD. **LM**	
		2021-08-19	

DATE OF ISSUE: **2022-01-10** DRAWING NO: **A-12-INDEX** **SHEET 2 OF 4** REV. **AA**

RURAL DISTRIBUTION

DRAWING NUMBER	SHT.	DRAWING TITLE	DWG REV.	BOM REV.
A-12-80	1 – 2	3 Ø TANGENT PELICAN CONDUCTOR	C	B
A-12-81	1 – 2	3 Ø DEFLECTION PELICAN CONDUCTOR, ANGLES OF 2° TO 10°	D	D
A-12-82	1 – 2	3 Ø DEFLECTION PELICAN CONDUCTOR, ANGLES OF 11° TO 60°	B	A
A-12-83	1 – 2	3 Ø DEFLECTION PELICAN CONDUCTOR, ANGLES OF 61° TO 89°	C	B
A-12-87	1 – 2	PELICAN ACSR LONG SPAN SPANS OF 105m TO 210m	A	A
A-12-88	1 – 2	PELICAN ACSR LONG SPAN SPANS OF 211m TO 245m	B	B
A-12-100	1 – 2	GENERAL INFORMATION 3 Ø COMPOSITE CROSSARMS	D / D	
A-12-102	1 – 2	3 Ø TANGENT COMPOSITE CROSSARM	C	0
A-12-102A	1 – 2	3 Ø TANGENT COMPOSITE CROSSARM LINE POST INSULATOR	-	-
A-12-104	1 – 2	MODIFIED 3 Ø TANGENT COMPOSITE CROSSARM	0	0
A-12-104A	1 – 2	MODIFIED 3 Ø TANGENT COMPOSITE CROSSARM LINE POST INSULATOR	-	-
A-12-105	1 – 2	3 Ø ANGLE COMPOSITE CROSSARM DEFLECTIONS OF 5° TO 10°	B	B
A-12-105A	1 – 2	3 Ø ANGLE COMPOSITE CROSSARM DEFLECTIONS OF 5° TO 10° LINE POST INS	-	-
A-12-106	1 – 2	3 Ø ANGLE COMPOSITE CROSSARM DEFLECTIONS OF 11° TO 30°	A	B
A-12-106A	1 – 2	3 Ø ANGLE COMPOSITE CROSSARM DEFLECTIONS OF 11° TO 30° LINE POST	-	-
A-12-108	1 – 2	3 Ø DEFLECTION AND CORNER COMPOSITE CROSSARM ANGLES OF 31° TO 90°	A	A
A-12-108A	1 – 2	3 Ø SLACK SPAN DEFLECTION AND CORNER ANGLES OF 31° TO 90° - COMPOSITE	0	0
A-12-110	1 – 2	3 Ø CROSSARM DEADEND COMPOSITE CROSSARM	A	A
A-12-111	1 – 2	3 Ø DOUBLE DEADEND CONDUCTOR CHANGE COMPOSITE CROSSARM	B	B
A-12-113	1 – 2	3 Ø TAP-OFF COMPOSITE CROSSARM	A	A
A-12-114	1 – 2	3 Ø SLACK SPAN TAP-OFF COMPOSITE CROSSARM	0	0
A-12-116	1 – 2	DOUBLE CIRCUIT 3 Ø TANGENT COMPOSITE CROSSARM	B	0
A-12-117	1 – 2	DOUBLE CIRCUIT 3 Ø ANGLE COMPOSITE CROSSARM DEFLECTIONS OF 5° TO 10°	B	A
A-12-118	1 – 2	DOUBLE CIRCUIT 3 Ø ANGLE COMPOSITE CROSSARM DEFLECTIONS OF 11° TO 30°	A	A
A-12-120	1 – 2	DOUBLE CIRCUIT DEFLECTION AND CORNER COMPOSITE CROSSARM ANGLES OF 31° TO 90°	A	A
A-12-122	1 – 2	DOUBLE CIRCUIT CROSSARM DEADEND COMPOSITE CROSSARM	A	A
A-12-124	1 – 2	3 Ø TAP-OFF FROM DOUBLE CIRCUIT TANGENT COMPOSITE CROSSARM	A	0
A-12-125	1 – 2	3 Ø SLACK SPAN TAP-OFF FROM DOUBLE CIRCUIT TANGENT COMPOSITE CROSSARM	0	0
A-12-130	1 – 2	3 Ø TANGENT PELICAN CONDUCTOR COMPOSITE CROSSARM	C	A
A-12-134	1 – 2	3 Ø CORNER PELICAN CONDUCTOR ANGLE OF 90° - COMPOSITE	C	B
A-12-135	1 – 2	3 Ø DEADEND PELICAN CONDUCTOR COMPOSITE CROSSARM	C	B
A-12-136	1 – 2	3 Ø TAP-OFF PELICAN CONDUCTOR COMPOSITE CROSSARM	C	A
A-12-139	1 – 2	3 Ø DOUBLE DEADEND CONDUCTOR CHANGE FROM PELICAN COMPOSITE CROSSARM	C	C
A-12-140	1 – 2	3Ø UNDERSTRUNG TANGENT COMPOSITE CROSSARM	0	A
A-12-142	1 – 2	LINE POST INSULATOR INSTALLATION DETAILS	-	-

RURAL DISTRIBUTION

DRAWING NUMBER	SHT.	DRAWING TITLE	DWG REV.	BOM REV.
A-12-150	**1 – 2**	**3Ø TANGENT DEFLECTIONS UP TO 2 DEGREES TULIP AAC**	**-**	**0**
A-12-151	**1 – 2**	**3Ø LIGHT ANGLE DEFLECTIONS OF 3 TO 10 DEGREES TULIP AAC**	**-**	**0**
A-12-152	**1 – 2**	**3Ø MEDIUM ANGLE DEFLECTIONS OF 11 TO 30 DEGREES TULIP AAC**	**-**	**0**
A-12-153	**1 – 2**	**3Ø HEAVY ANGLE/CORNERS DEFLECTIONS OF 31 TO 90 DEGREES TULIP AAC**	**-**	**0**
A-12-154	**1 – 2**	**3Ø DEAD END TULIP AAC**	**-**	**0**
A-12-155	**1 – 2**	**3Ø TAP OFF TULIP AAC**	**-**	**0**
A-12-160	**1 – 2**	**DOUBLE CIRCUIT 3Ø TANGENT DEFLECTIONS UP TO 2 DEGREES TULIP AAC**	**-**	**0**
A-12-161	**1 – 2**	**DOUBLE CIRCUIT 3Ø LIGHT ANGLE DEFLECTIONS OF 3 TO 10 DEGREES TULIP AAC**	**-**	**0**
A-12-162	**1 – 2**	**DOUBLE CIRCUIT 3Ø MEDIUM ANGLE DEFLECTIONS OF 11 TO 30 DEGREES TULIP AAC**	**-**	**0**
A-12-163	**1 – 2**	**DOUBLE CIRCUIT 3Ø HEAVY ANGLE/CORNERS DEFLECTIONS OF 31 TO 90 DEGREES TULIP AAC**	**-**	**0**
A-12-164	**1 – 2**	**DOUBLE CIRCUIT 3Ø DEAD END TULIP AAC**	**-**	**0**
A-12-165	**1 – 2**	**DOUBLE CIRCUIT 3Ø TAP OFF TULIP AAC**	**-**	**0**

GENERAL INFORMATION – 1 Ø

1. USE BELOW TABLE TO DETERMINE CONDUCTOR AND 3PH READINESS.

CONNECTED kVA	DESIGN DESCRIPTION
≥300	3PH READY – PIGEON
100 – 299	1PH ONLY – PIGEON
<100	1PH ONLY – RAVEN

2. REFER TO DWG. A-12-00 SHT. 2 FOR RULING SPAN, MINIMUM POLE HEIGHT AND CLASS.
3. OVERHEAD LINES ARE TO BE BUILT 0.5m INSIDE THE ROAD ALLOWANCE (NOT INCLUDING LEASED ROADS).
4. DO NOT SET POLES WITHIN THE DISTANCE FROM THE BOTTOM OF THE DITCH SLOPE TO THE ROAD SURFACE. IF THIS IS NOT POSSIBLE WITHIN THE EXISTING ROAD ALLOWANCE, OBTAIN THE REQUIRED EASEMENT WITHIN THE ADJACENT PROPERTY OR BUILD ON THE OPPOSITE SIDE OF THE ROAD ALLOWANCE.
5. ON PRIVATE PROPERTY, PRIMARY CIRCUITS WILL BE UNDERGROUND, EXCEPT THAT CONSTRUCTION MAY BE OVERHEAD ON UNCULTIVATED LAND, OR ON CULTIVATED LAND WHERE THERE IS MINIMAL EFFECT ON AGRICULTURAL OPERATIONS AND WHERE THE LANDOWNER READILY AGREES TO GRANT A REGISTERED EASEMENT.
6. NEW PRIMARY OVERHEAD LINES SHOULD NOT BE BUILT INTO FARMYARDS.
7. REFER TO SECTION A-38 FOR POLE SETTING INFORMATION.
8. ALL DEADEND, ANGLE OR CORNER STRUCTURES ARE TO BE RAKED 300mm AT THE TOP (UNLESS STATED OTHERWISE).
9. JAM NUTS ARE TO BE USED WITH EYE NUTS IF THE EYE NUT CANNOT BE INSTALLED TIGHT AGAINST THE POLE.
10. THROUGH BOLTS TO BE INSTALLED WITH NUT ON POLE SIDE.
11. CONDUCTOR SIZES SHOWN ARE ACSR UNLESS OTHERWISE NOTED.
12. DO NOT USE AUTOMATIC SPLICES ON SLACK SPAN CONDUCTORS.
13. AUTOMATIC DEADEND CONNECTORS ON SLACK SPAN CONDUCTORS ARE PERMITTED, PROVIDED THE RUN THRU CONDUCTOR TAIL IS BENT AND CRIMPED.
14. <u>USE OF POLYMER DEADEND INSULATORS</u>

   A) THESE INSULATORS ARE RUGGED AND LESS PRONE TO DAMAGE THAN PORCELAIN UNITS. THEY SHOULD STILL BE TREATED CAREFULLY LIKE ANY OTHER HIGH VOLTAGE APPARATUS.
   B) ALTHOUGH THEY HAVE HIGH TENSILE STRENGTH, THEY DO NOT HAVE GOOD TORTIONAL STRENGTH (ONE END FIXED AND THE OTHER END TWISTED). NOR DO THEY HAVE GOOD CANTILEVER STRENGTH (ONE END FIXED AND THE OTHER BENT). THIS SHOULD BE KEPT IN MIND DURING INSTALLATION.
   C) ON DEADEND AND DEFLECTION STRUCTURES KEEP THE EYES OF BOLTS & NUTS VERTICAL. THIS ALLOWS MOVEMENT OF THE INSULATOR WITHOUT CAUSING A CANTILEVER LOAD.
   D) THESE INSULATORS PERFORM VERY WELL IN CONTAMINATED ENVIRONMENTS. DO NOT APPLY ANY SILICON GREASES TO THEM SINCE THE CHEMICAL COMPATABILITIES ARE NOT KNOWN. PRESSURIZED WATER WASHING CAN BE USED IF REQUIRED.

NOTES CONTINUED ON SHEET 3

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GENERAL INFORMATION – SINGLE PHASE

CONDUCTOR	INSULATOR TIE	DEADEND CLAMP (FULL TENSION)	DEADEND PREFORMED	BAIL CLAMP WITH EYE NUTS
1/0 ACSR RAVEN - 2 78 10	#8 STEEL WIRE 2 97 28	AUTOMATIC 2 01 75	5 13 10	2 02 82 OR 2 02 83
3/0 ACSR PIGEON - 2 78 30	#8 STEEL WIRE 2 97 28	AUTOMATIC 2 01 78	5 13 20	2 02 83
4/0 ACSR PENGUIN - 2 78 40	#8 STEEL WIRE 2 97 28	AUTOMATIC 2 01 80	5 13 40	2 02 83

CONDUCTOR	ARMOUR ROD (SINGLE INSULATOR)	ARMOUR ROD (DOUBLE INSULATOR)	RUNNING CORNER CLAMP (SEMI-STRAIN)
1/0 ACSR RAVEN - 2 78 10	2 58 10	2 58 11	2 02 32
3/0 ACSR PIGEON - 2 78 30	2 58 30	2 58 31	2 02 29 & 1 32 01
4/0 ACSR PENGUIN - 2 78 40	2 58 40	2 58 41	2 02 29 & 1 32 01

CONDUCTOR	RULING SPAN	POLE LENGHT / CLASS* (PRIMARY ONLY)		POLE LENGTH / CLASS* (PRIMARY & NEUTRAL)	
		NO APPARATUS	1x 500 kg 1Ø TFMR OR APPARATUS	NO APPARATUS	1x 500 kg 1Ø TFMR OR APPARATUS
1/0 ACSR RAVEN - 2 78 10	90m	12.2 m (40ft) / 5	12.2 m (40ft) / 5	13.7 m (45ft) / 5	13.7 m (45ft) / 4
3/0 ACSR PIGEON - 2 78 30	90m	12.2 m (40ft) / 5	12.2 m (40ft) / 5	13.7 m (45ft) / 5	13.7 m (45ft) / 4
4/0 ACSR PENGUIN - 2 78 40	90m	12.2 m (40ft) / 5	12.2 m (40ft) / 5	13.7 m (45ft) / 5	13.7 m (45ft) / 4

*UNLESS OTHERWISE NOTED

NOTES:

1. REFER TO SECTION A-36 FOR CONNECTORS AND SPLICING SLEEVES.
2. REFER TO SECTION A-34 FOR INSULATOR TIES.
3. REFER TO DIST. PLANNING GUIDELINES SECTION 7.4 / TABLE 7.2 FOR CONDUCTOR SELECTION.
4. FOR POLES AND SPAN LENGTHS NEAR RAILWAY TRACKS SEE SECTION C-24.
5. GRADE 2 CONSTRUCTION.
6. 10.7m (35ft) POLES TO BE USED FOR MAINTENANCE ONLY.
7. IF USING POLES TALLER THAN LISTED, ENSURE THAT POLE CLASS IS ADEQUATE.
8. STRUCTURES ARE NOT CONVERTIBLE. OTHERWISE, REFER TO A-12-50.
9. POLE CLASS DATA DERIVED BY NON-LINEAR ANALYSIS.

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GENERAL INFORMATION – 1 Ø

15. ENSURE A MINIMUM DISTANCE OF 6m BETWEEN ANY TWO POLES OF DIFFERENT STRUCTURES TO ALLOW FOR MAINTENANCE.

16. HARDWARE COMPONENTS INSTALLED WITHIN 150mm OF EACH OTHER SHALL BE SOLIDLY BONDED TOGETHER TO PREVENT RADIO INTERFERENCE AND RISK OF POLE FIRES.

17. CONSULT TRANSMISSION SERVICES – ENGINEERING LINES WHEN DISTRIBUTION FACILITIES ARE UNDERSTRUNG ON TRANSMISSION STRUCTURES OR CROSSINGS.

18. ALL PRIMARY, RURAL, VEHICULAR ROAD CROSSINGS (ROAD ALLOWANCE) SHALL BE OVERHEAD CONSTRUCTION WHERE POSSIBLE, WITH EXCEPTIONS NOTED BELOW:

    A) DESIGNATED HIGH LOAD CORRIDORS.
    B) TO PREVENT CREATING A DOCUMENTED SAFETY HAZARD TO SASKPOWER AND CUSTOMER OPERATIONS.
    C) OTHERWISE TECHNICALLY UNFEASIBLE TO CONSTRUCT OVERHEAD.

19. REFER TO DISTRIBUTION ENGINEERING DESIGN AIDS (SEP'S, DISTRIBUTION PLANNING GUIDELINES) FOR GUIDANCE ON DESIGNING OVERHEAD AND CROSSING FACILITIES.

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BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 13 12	2	BOLT - MACHINE - 5/8" X 12"
2	1 54 24	1	PIN - SKY - 24"
3	1 93 27	2	WASHER - LOCK DOUBLE COIL SPRING - 5/8"
4	1 93 42	2	WASHER - SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE
5	2 20 23	1	INSULATOR - PIN TYPE
6	2 58 XX	1	ARMOUR ROD (SIZE TO SUIT – SEE NOTE 1)
7	2 97 XX	1	TIE - INSULATOR (SIZE TO SUIT – SEE NOTE 1)

NOTE:

1. **REFER TO DWG. A-12-00 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS				
APPROVAL	DESIGN CHK	DRN. **ARU**	**1 Ø TANGENT STRUCTURE AND DEFLECTION UP TO 4°**	
L. MOEN	**A. UHREN**	CHKD.		
		2016-05-25		
DATE OF ISSUE: 2016/07/26		DRAWING NO: **A-12-01**	**SHEET 1 OF 2**	REV. **B**

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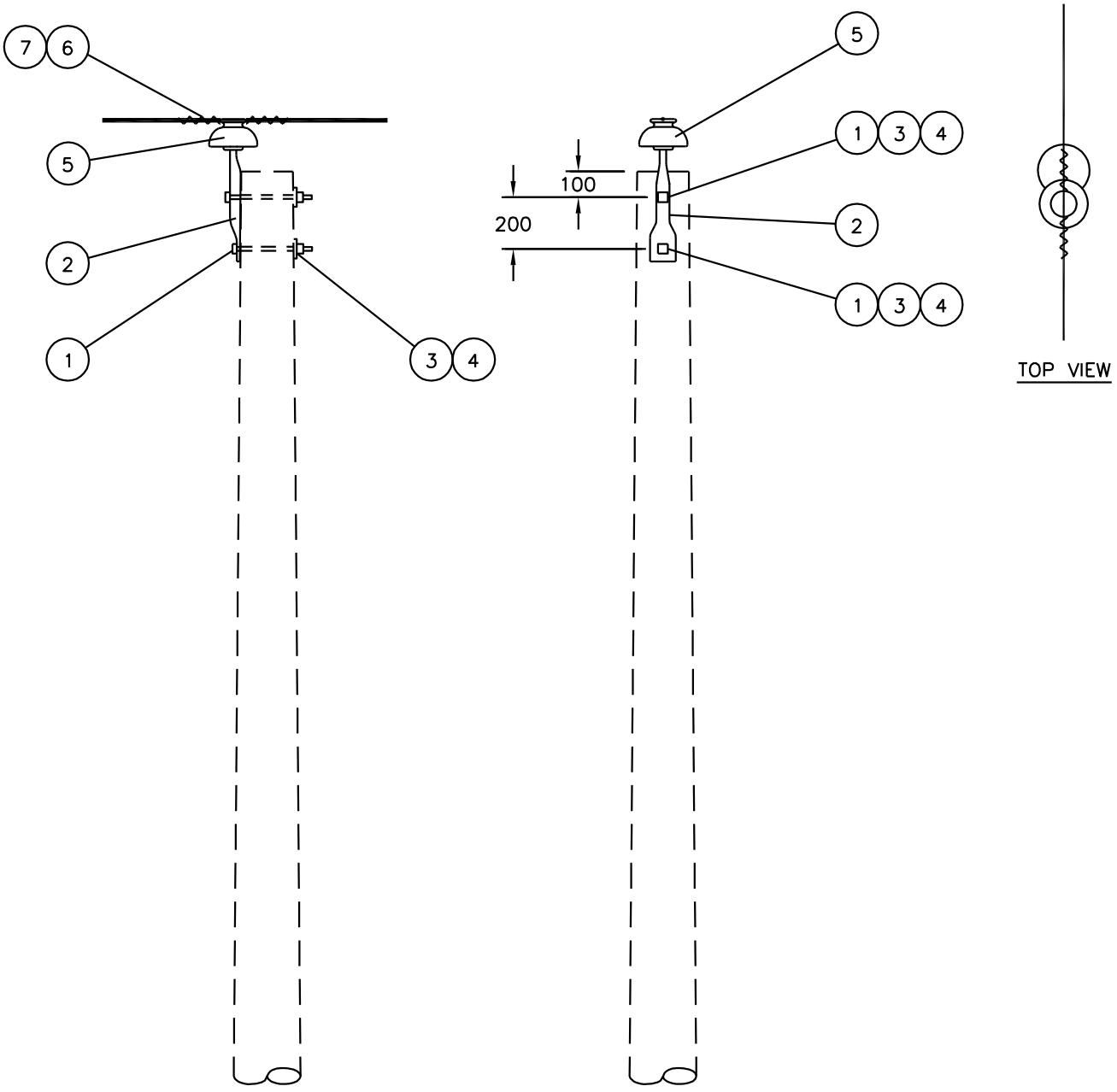

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. A.UHREN	DRN. D.REDEKOPP CHKD.	1ø TANGENT STRUCTURE AND DEFLECTION UP TO 4°
		2016-06-08	
DATE OF ISSUE 2016/07/26	DRAWING NO. A-12-01	SHEET 2 of 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 13 14	2	BOLT - MACHINE - 5/8" X 14"
2	1 54 01	1	INSULATOR PIN – ANGLE POLE TOP
3	1 93 27	2	WASHER - LOCK DOUBLE COIL SPRING - 5/8"
4	1 93 42	2	WASHER - SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE
5	2 20 23	1	INSULATOR - PIN TYPE
6	2 58 XX	1	ARMOUR ROD (SIZE TO SUIT – SEE NOTE 1)
7	2 97 XX	1	TIE - INSULATOR (SIZE TO SUIT – SEE NOTE 1)

NOTE:

1. **REFER TO DWG. A-12-00 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**1 Ø ANGLE STRUCTURE 5° TO 10°**
L. MOEN	**A. UHREN**	CHKD.	
		2016-05-25	

DATE OF ISSUE: 2016/07/26	DRAWING NO: **A-12-02**	**SHEET 1 OF 2**	REV. **B**

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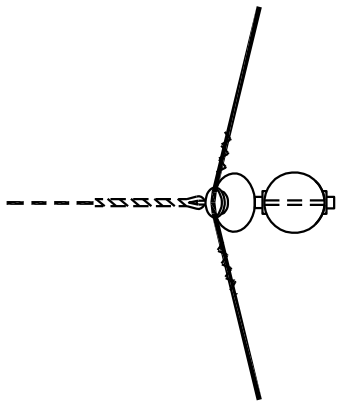
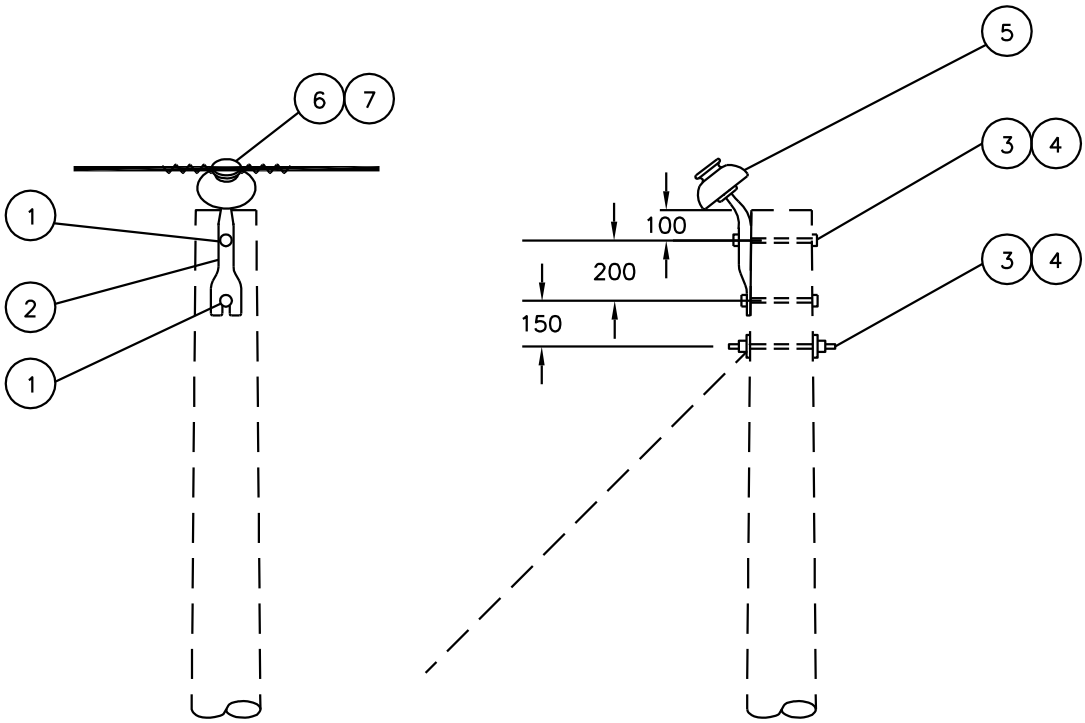


TOP VIEW



NOTE:
1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32.
2. CONDUCTOR IS ON TOP OF THE INSULATOR NOT THE SIDE.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. A.UHREN	DRN. D.REDEKOPP CHKD. 2016–06–08	1ø ANGLE STRUCTURE 5° TO 10°
DATE OF ISSUE 2016/07/26	DRAWING NO. A–12–02	SHEET 2 of 2	REV. B

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY A	QUANTITY B	DESCRIPTION
1	1-11-12	1	1	BOLT-EYE - 5/8" x 12"
2	1-25-03	1	1	CLEVIS - 1/2" x 3" - 20,000 LB
2	1-32-01	-	1	FITTING - BALL CLEVIS - 25,000 LB
3	2-02-XX	1	1	CLAMP-SEMI STRAIN (SIZE TO SUIT - SEE NOTE 2)
4	2-29-24	1	1	DEADEND-POLYMER TONGUE-TO-CLEVIS
5	2-58-XX	1	1	ROD-PREFORMED ARMOUR (SIZE TO SUIT - SEE NOTE 2)
6	05-640-000	1	1	SIGN-DANGER

NOTE:

1. **BILL OF MATERIAL - COLUMN A - CONDUCTORS UP TO AND INCLUDING #1/0, BILL OF MATERIAL - COLUMN B - CONDUCTORS #3/0 AND LARGER.**
2. **REFER TO DWG. A-12-00 SH.2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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*Sask**Power*** - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	**SINGLE PHASE ANGLE STRUCTURE 11° TO 59°**
CHKD.			
DATE	DATE	DATE	

DATE OF ISSUE **87-12-01** | DRAWING NO: **A-12-03** **SHEET 1 of 2** | REV. **A**

SPC/AUTODRAFT

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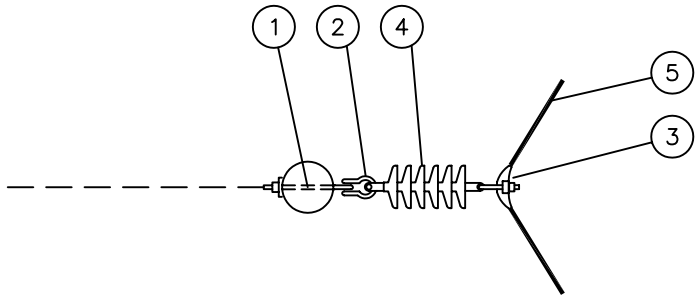
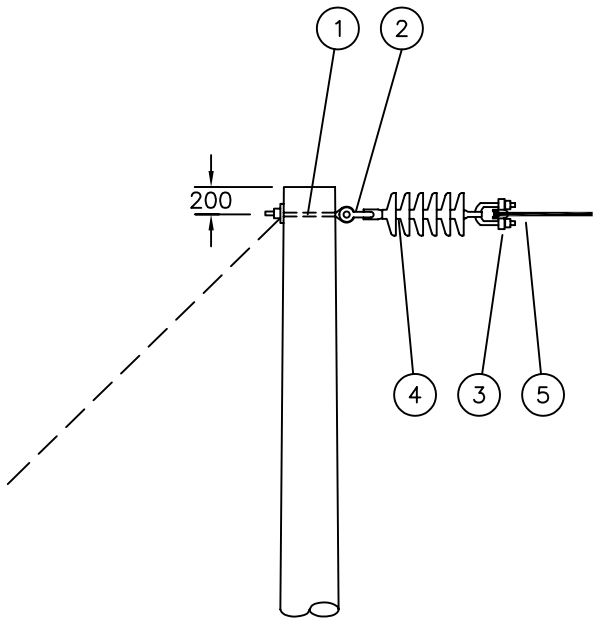
STRUCTURE USED HERE





NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32.
2. DANGER SIGN (ITEM 6) TO BE MOUNTED ON POLE 1.5 METRES ABOVE GRADE. REFER TO SECTION A–30

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS

DRN. R. A. B.	DESIGN CHK.	SAFETY APP.	APPROVAL	SINGLE PHASE ANGLE STRUCTURE 11° TO 59°	
CHKD. FTK					
DATE 87-04-15	DATE	DATE	DATE		
DATE OF ISSUE 87-12-01			DRAWING NO. A-12-03	SHEET 2 OF 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 11 12	2	BOLT-EYE - 5/8" x 12"
2		2	NUT - 5/8" (FROM SALVAGE)
3	1 93 20	2	WASHER-LOCK - 5/8"
4	1 93 33	4	WASHER-ROUND - 11/16" HOLE
5	2 XX XX	2	CLAMP-DEADEND (SIZE TO SUIT - SEE NOTE 1)
6	2 29 24	2	DEADEND-POLYMER-CLEVIS AND TONGUE ENDS
7	2 83 04	1m	WIRE-CU #4/7 STR
8	5 09 XX	1	CONNECTOR-COMPRESSION (SIZE TO SUIT - SEE NOTE 2)

NOTE:

1. **REFER TO DWG. A-12-00 SH.2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

2. **REFER TO SECTION A-36 FOR TYPE AND SIZE OF CONNECTOR.**

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*Sask**Power*** - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	**SINGLE PHASE DOUBLE DEADEND CORNER STRUCTURE 60° TO 90**
CHKD.			
DATE	DATE	DATE	

DATE OF ISSUE: **2003/05/30**	DRAWING NO: **A-12-04 SHEET 1 of 2**	REV. **A**

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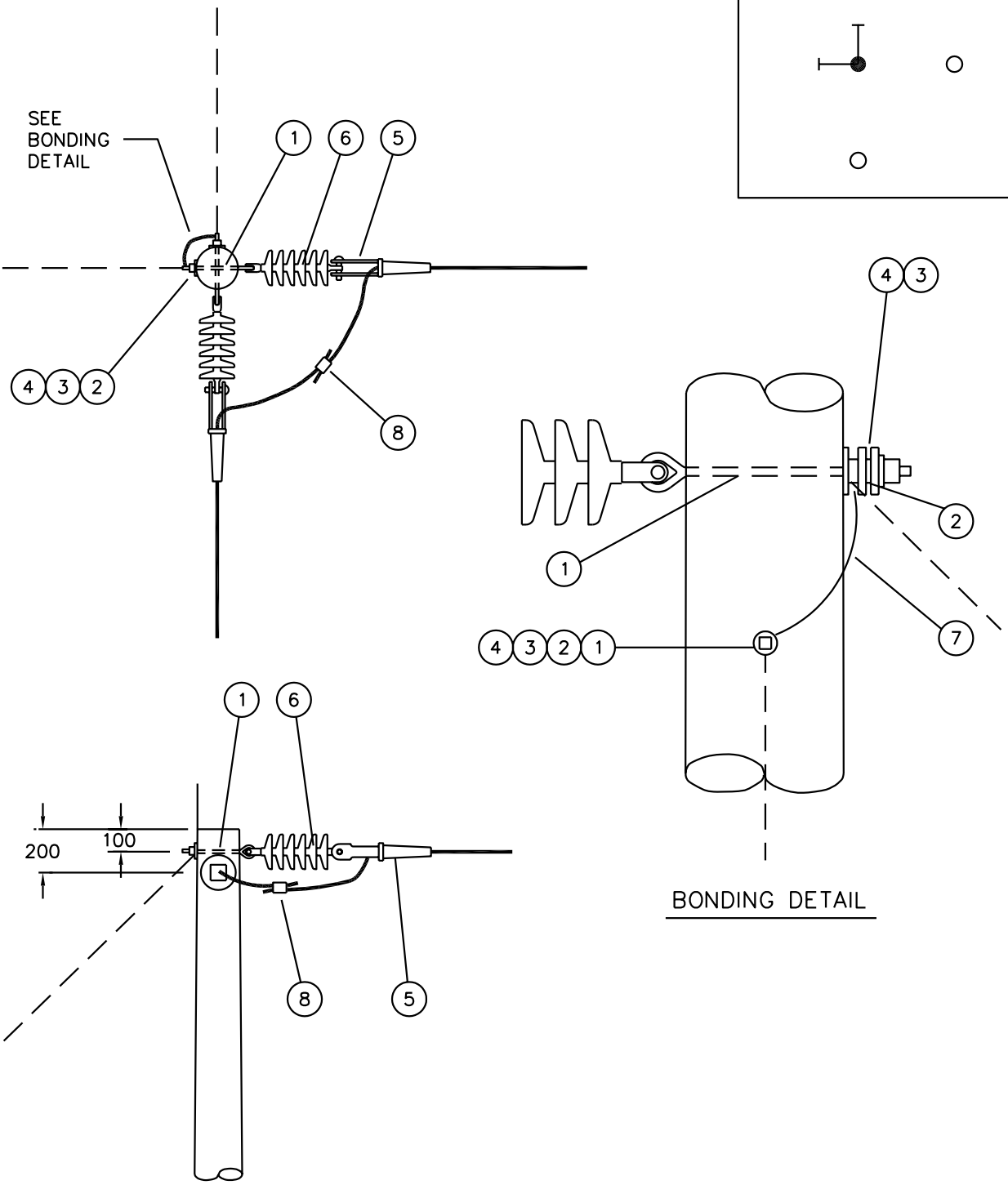

BONDING DETAIL

NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SASKATCHEWAN POWER CORP. – DISTRIBUTION ENGINEERING STANDARDS				
DRN. R. A. B.	DESIGN CHK.	SAFETY APP.	APPROVAL	SINGLE PHASE DOUBLE DEADEND CORNER STRUCTURE 60° TO 90°
CHKD.				
DATE	DATE	DATE	DATE	
DATE OF ISSUE: 2003/05/30		DRAWING NO. A–12–04	SHEET 2 OF 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	**1 11 12**	**1**	**BOLT EYE – 5/8” x 12”**
2	**2 XX XX**	**1**	**CLAMP – DEADEND (SIZE TO SUIT – SEE NOTE 1)**
3	**2 29 24**	**1**	**DEADEND-POLYMER-CLEVIS AND TONGUE ENDS**

NOTE:
1. **REFER TO DRAWING A-12-00 SHEET 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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*Sask**Power*** - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	**SINGLE PHASE DEADEND STRUCTURE**
CHKD.			
DATE	DATE	DATE	

DATE OF ISSUE: **2003/05/30** | DRAWING NO: **A-12-05** **SHEET 1 of 2** | REV. **A**

SPC/AUTODRAFT

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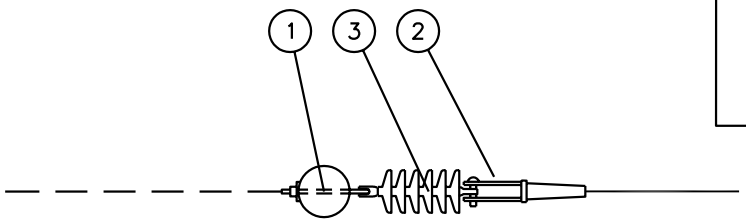

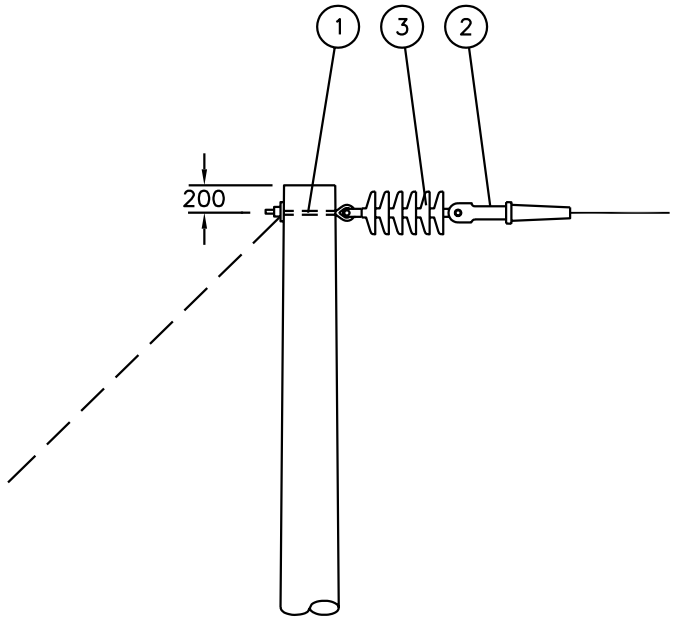

NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A-32 FOR GUY INSTALLATION AND MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SASKATCHEWAN POWER CORP. – DISTRIBUTION ENGINEERING STANDARDS					
DRN. R. A. B.	DESIGN CHK.	SAFETY APP.	APPROVAL	SINGLE PHASE DEADEND STRUCTURE	
CHKD. FTK					
DATE 87-04-15	DATE	DATE	DATE		
DATE OF ISSUE: 2003/05/30			DRAWING NO. A-12-05	SHEET 2 of 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY A	QUANTITY B	DESCRIPTION
1	1 11 12	1	1	BOLT - EYE - 5/8” x 12”
2	1 13 12	1	1	BOLT - MACHINE - 5/8” x 12”
3	1 50 00	1	1	NUT - EYE - 5/8”
4	1 54 24	1	1	PIN - SKY - 24”
5	1 93 27	1	1	WASHER - LOCK DOUBLE COIL SPRING - 5/8”
6	1 93 42	1	1	WASHER - SQUARE - 2 ¼” x 2 ¼” x 13/16” HOLE
7	2 20 23	1	1	INSULATOR - PIN TYPE
8	2 29 24	2	1	DEADEND - POLYMER-CLEVIS AND TONGUE ENDS
9	2 XX XX	1	1	CLAMP - DEADEND (SIZE TO SUIT – SEE NOTE 2)
10	2 XX XX	1	-	CLAMP - DEADEND (SIZE TO SUIT – SEE NOTE 2)
11	2 97 50	1	1	UNI - TIE
12	5 09 XX	1	1	CONNECTOR - CRIMPIT (SIZE TO SUITE-SEE NOTE 3)

NOTE:

1. BILL OF MATERIAL - COLUMN A - COMPLETE STRUCTURE FOR NEW CONSTRUCTION.
   BILL OF MATERIAL - COLUMN B - ADDITIONAL DEADEND ON EXISTING 1∅ DEADEND STRUCTURE.
2. REFER TO DWG. A-12-00 SH.2 FOR SPECIFIC MATERIAL ITEM REQUIRED.
3. REFER TO SECTION A-36 FOR TYPE AND SIZE OF CRIMPIT.

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*Sask**Power*** - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	SINGLE PHASE DOUBLE DEADEND CONDUCTOR CHANGE
CHKD.			
DATE	DATE	DATE	

DATE OF ISSUE: **2003/05/30** | DRAWING NO: **A-12-06** | **SHEET 1 OF 2** | REV. **B**

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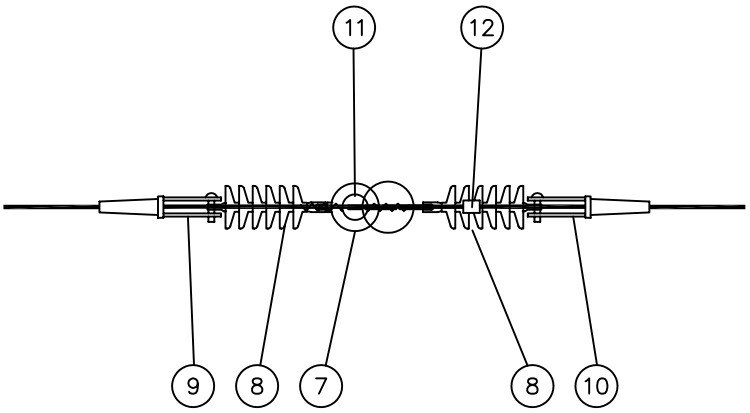

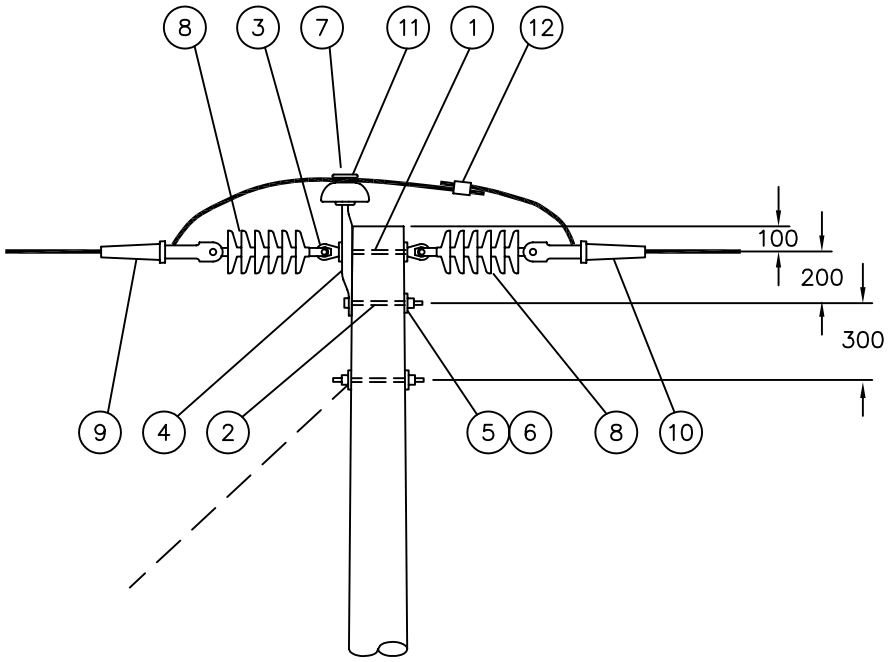

NOTE:

1. THIS STRUCTURE IS TO BE USED FOR NORMAL SPANS WHERE THERE IS A CHANGE IN CONDUCTOR SIZE.
2. ANCHOR CONDUCTOR WITH GREATER HEAVY LOADING TENSION.
3. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.
4. RELOCATE DOWN GUY, AS SHOWN, WHEN ADDING NEW DEADEND TO AN EXISTING DEADEND STRUCTURE.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS

DRN. N.J.C.	DESIGN CHK.	APPROVAL	SINGLE PHASE DOUBLE DEADEND CONDUCTOR CHANGE
CHKD. FTK			
DATE 87-04-16	DATE	DATE	
DATE OF ISSUE	DRAWING NO. A–12–06	SHEET 2 OF 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 11 12	1	BOLT - EYE - 5/8” x 12”
2	1 13 12	1	BOLT - MACHINE - 5/8” x 12”
3	1 50 00	1	NUT-EYE - 5/8”
4	1 54 24	1	PIN - SKY - 24”
5	1 93 27	1	WASHER - LOCK DOUBLE COIL SPRING - 5/8”
6	1 93 42	1	WASHER - SQUARE - 2 ¼” x 2 ¼” x 13/16” HOLE
7	2 20 23	1	INSULATOR - PIN TYPE
8	2 29 24	2	DEADEND - POLYMER-CLEVIS AND TONGUE ENDS
9	2 XX XX	2	CLAMP - DEADEND (SIZE TO SUIT - SEE NOTE 1)
10	2 97 50	1	UNI -TIE
11	5 09 XX	1	CONNECTOR - CRIMPIT (SIZE TO SUIT - SEE NOTE 2)

NOTE:

1. **REFER TO DWG. A-12-00 SH.2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**
2. **REFER TO SECTION A-36 FOR TYPE AND SIZE OF CRIMPIT.**

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*Sask**Power*** - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	**SINGLE PHASE LONG SPAN DEADEND STRUCTURE**
CHKD.			
DATE	DATE	DATE	

DATE OF ISSUE: **2003/05/30** | DRAWING NO: **A-12-07** | **SHEET 1 OF 2** | REV. **B**

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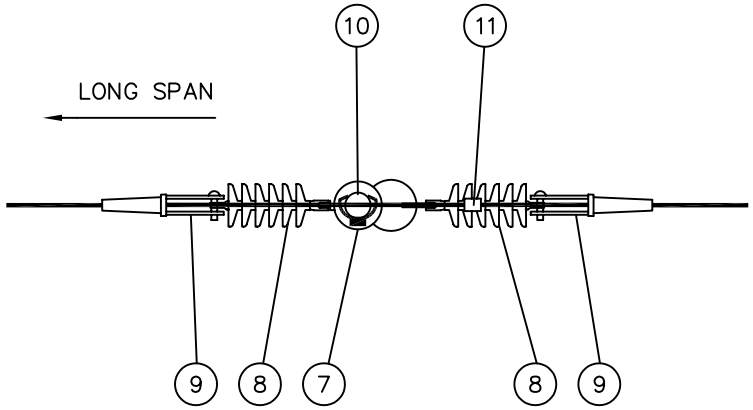

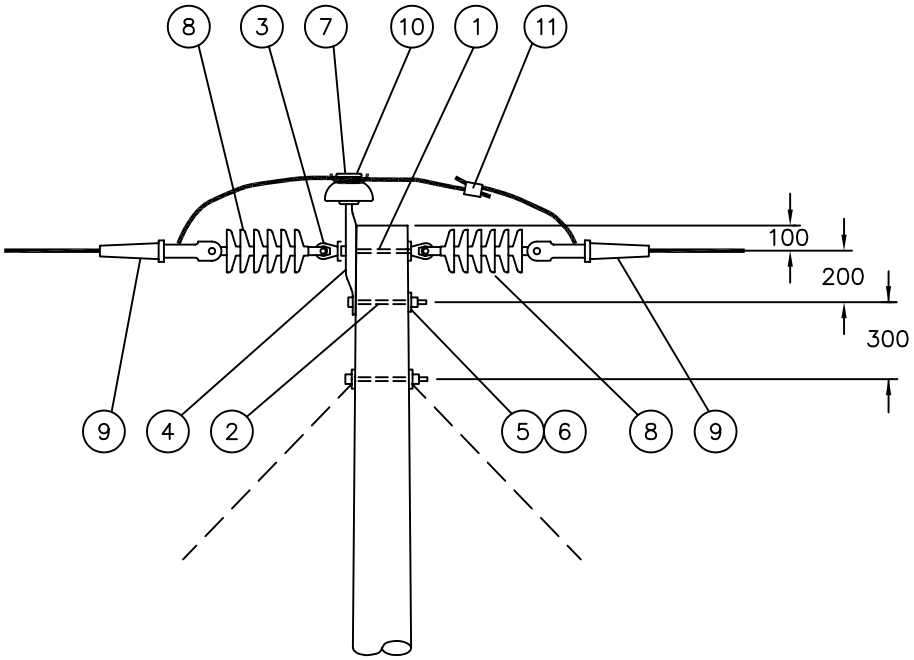

NOTE:

1. THIS STRUCTURE TO BE USED FOR TRANSITION FROM NORMAL SPAN LENGTHS TO EXTRA LONG SPAN/SPANS.
2. USE CLASS 4 POLE OR BETTER.
3. REFER TO SECTION C–24–05 FOR LONG SPAN SAG TABLES. IF GROUND CLEARANCE PERMITS, INCREASE THE LONG SPAN SAG THEREBY DECREASING CONDUCTOR TENSIONS. THIS WILL REDUCE POLE LEAN AND HARDWARE STRESS.
4. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS

DRN. R. A. B.	DESIGN CHK.	APPROVAL	SINGLE PHASE LONG SPAN DEADEND STRUCTURE
CHKD. FTK			
DATE 87-04-20	DATE	DATE	
DATE OF ISSUE	DRAWING NO. A–12–07	SHEET 2 OF 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	**1 11 12**	**1**	**BOLT - EYE - 5/8" x 12"**
2	**2 XX XX**	**1**	**CLAMP - DEADEND (SIZE TO SUIT - SEE NOTE 1)**
3	**2 02 70**	**1**	**CLAMP - LIVE-LINE**
4	**2 02 8X**	**1**	**CLAMP - HOT - LINE BAIL (SEE NOTE 2)**
5	**2 29 24**	**1**	**DEADEND - POLYMER - CLEVIS AND TONGUE ENDS**
6	**2 83 02**	**2 m**	**WIRE - CU #2/7 STR**
7	**5 09 XX**	**1**	**CONNECTOR - CRIMPIT (SIZE TO SUIT - SEE NOTE 2)**

NOTE:

1. **REFER TO DWG. A-12-00 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**
2. **REFER TO SECTION A-36 FOR SPECIFIC MATERIAL REQUIREMENTS.**

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*Sask**Power*** - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	**SINGLE PHASE TAP-OFF**
CHKD.			
DATE	DATE	DATE	

DATE OF ISSUE: **2003/05/30** | DRAWING NO: **A-12-08** **SHEET 1 OF 2** | REV. **C**

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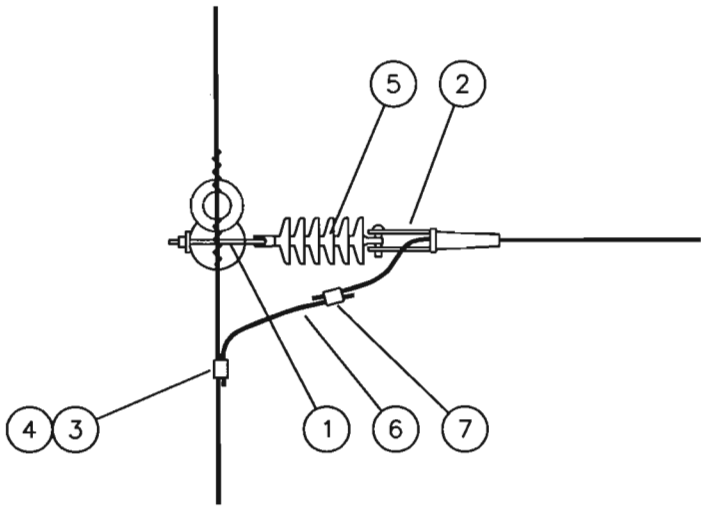

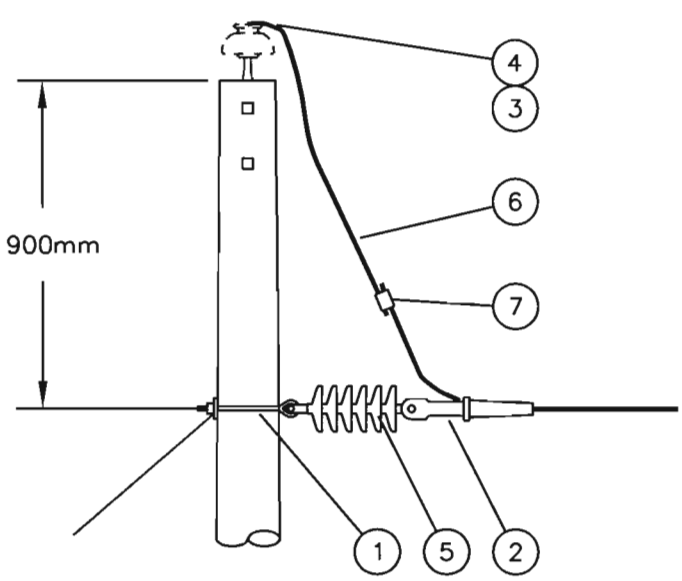

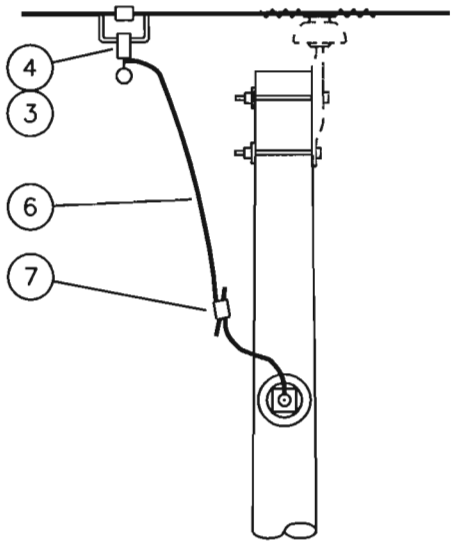

NOTE:

1. DWG. ILLUSTRATES A 1 Ø TAP–OFF FROM A 1 Ø TANGENT STRUCTURE. DIMENSIONS ALSO SUITABLE FOR 1 Ø TAP–OFF FROM A 3 Ø TANGENT STRUCTURE.
2. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.
3. REFER TO SECTION A–26 FOR CUTOUT OR O.C.R. INSTALLATION AND MATERIAL IF REQUIRED.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS

DRN. R. A. B.	DESIGN CHK.	APPROVAL M. Sretb	SINGLE PHASE TAP–OFF
CHKD. FTK			
DATE 87-04-21	DATE	DATE 2005/07/13	
DATE OF ISSUE 2005/03/21		DRAWING NO. A–12–08	SHEET 2 OF 2 REV. B

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BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 01 92	2	ANCHOR – POLE KEY (SEE NOTE 3)
2	1 11 12	1	BOLT – EYE – 5/8" X 12"
3	1 13 12	1	BOLT – MACHINE – 5/8" X 12"
4	1 54 24	1	PIN – SKY – 24"
5	1 93 27	1	WASHER – LOCK – DOUBLE COIL SPRING – 5/8"
6	1 93 42	2	WASHER – SQUARE – 2-1/4" X 13/16" HOLE
7	2 02 17	1	DEADEND – BOLTED – #2 TO 4/0
8	2 02 70	1	CLAMP – LIVELINE
9	2 02 8X	1	CLAMP – HOT – LINE BAIL (SIZE TO SUIT – SEE NOTE 1)
10	2 20 23	1	INSULATOR – PIN TYPE
11	2 29 24	1	DEADEND – POLYMER – TONGUE AND CLEVIS
12	2 83 02	2 m	WIRE – CU – #2 – 7 STR
13	5 09 XX	2	CONNECTOR – CRIMPIT (SIZE TO SUIT – SEE NOTE 2)
14	5 13 XX	1	DEADEND – PREFORMED (SIZE TO SUIT – SEE NOTE 1)

NOTES:

1. REFER TO DRAWING A-12-00 SHEET 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.
2. REFER TO SECTION A-36 FOR TYPE AND SIZE OF CRIMPIT.
3. FOR TAPPING FROM AN EXISTING POLE USE ONLY ONE POLE KEY.

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*Sask**Power*** - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **PP**	**SINGLE PHASE SLACKSPAN TAP-OFF**	
L MOEN	**P PATEL**	CHKD. **LM**		
		2022-01-27		
DATE OF ISSUE: **2022-08-15**		DRAWING NO: **A-12-09**	**SHEET 1 OF 2**	REV. **F**

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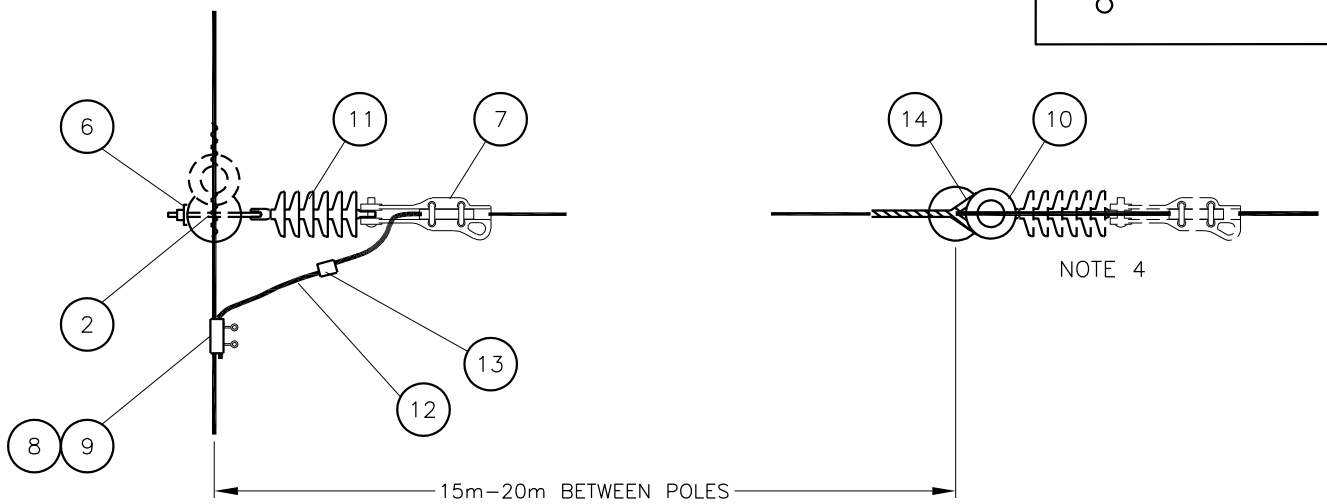

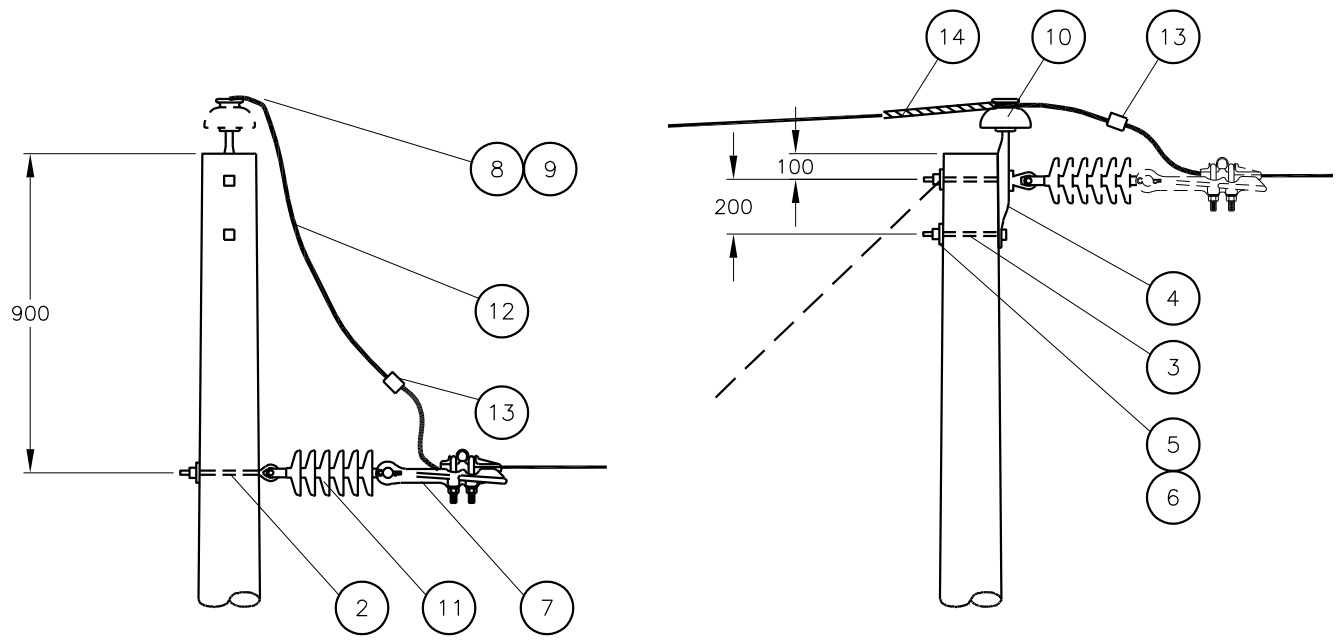

NOTES:

1. DWG. ILLUSTRATES A 1ø SLACKSPAN TAP–OFF FROM A 1ø TANGENT STRUCTURE. FRAMING DIMENSIONS ALSO SUITABLE FOR 1ø SLACKSPAN TAP–OFF FROM A 3ø TANGENT STRUCTURE.
2. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.
3. REFER TO SECTION A–26 FOR CUTOUT OR O.C.R. INSTALLATION AND MATERIAL IF REQUIRED.
4. MATERIAL FOR DEAD–END NOT INCLUDED IN BILL OF MATERIAL LIST, REFER TO DWG. A–12–05 FOR DEAD–END MATERIAL.
5. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.

SCALE: N.T.S.

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. P.PATEL	DRN.D.REDEKOPP CHKD. 2022–02–16	SINGLE PHASE SLACKSPAN TAP–OFF
DATE OF ISSUE 2022-08-15	DRAWING NO. A–12–09	SHEET 2 of 2	REV. F

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1-11-12	1	BOLT - EYE - 5/8" x 12"
2	1-13-12	1	BOLT - MACHINE - 5/8" x 12"
3	1-50-00	1	NUT - EYE - 5/8"
4	1-53-13	1	PIN - FEMALE
5	1-93-27	1	WASHER - LOCK DOUBLE COIL SPRING - 5/8"
6	1-93-42	3	WASHER - SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE
7	2-XX-XX	2	CLAMP - DEADEND (SIZE TO SUIT - SEE NOTE 1)
8	2-02-70	1	CLAMP - LIVELINE
9	2-02-8X	1	CLAMP - HOTLINE, BAIL (SIZE TO SUIT - SEE NOTE 2)
10	2-20-23	1	INSULATOR - PIN TYPE
11	2-29-24	2	DEADEND - POLYMER TONGUE-TO-TONGUE
12	2-83-02	2m	WIRE - CU #2/7 STR
13	2-97-50	1	UNI - TIE
14	5-09-XX	1	CONNECTOR - CRIMPIT (SIZE TO SUIT - SEE NOTE 2)
15	5-09-XX	1	CONNECTOR - CRIMPIT (SIZE TO SUIT - SEE NOTE 2)

NOTE:

1. **REFER TO DWG. A-12-00 SH.2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

2. **REFER TO SECTION A-36 FOR SPECIFIC MATERIAL REQUIREMENTS.**

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*Sask**Power*** - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	**SINGLE PHASE TWO-WAY TAP-OFF**
CHKD.			
DATE	DATE	DATE	

DATE OF ISSUE: **2003/05/30**	DRAWING NO: **A-12-10 SHEET 1 of 2**	REV. **B**

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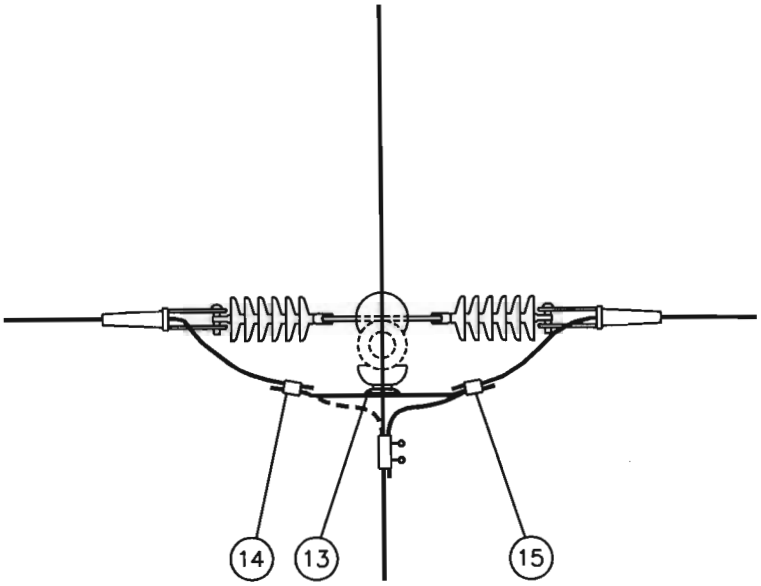

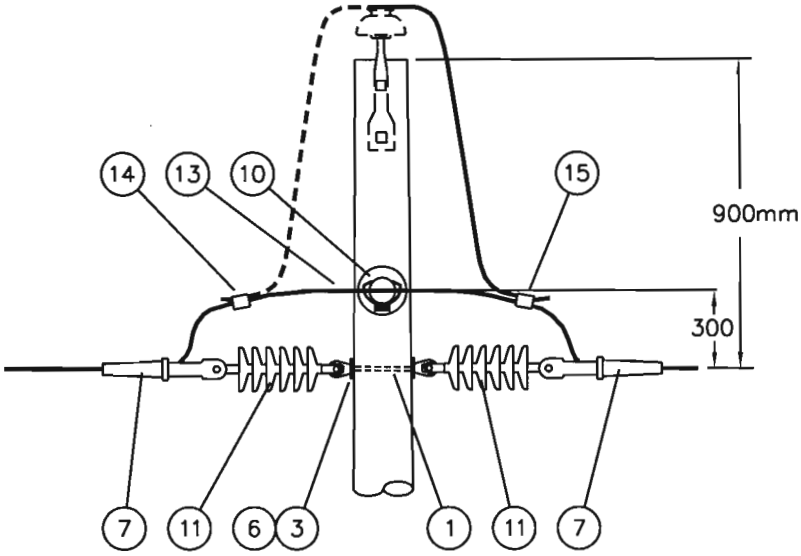

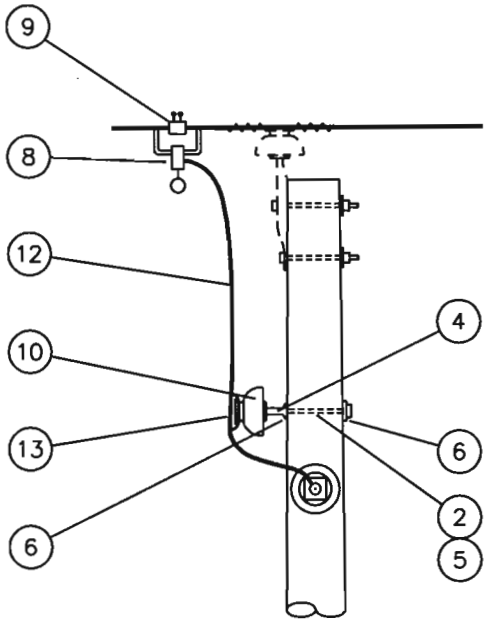

NOTE:

1. DWG. ILLUSTRATES A 1ø TWO WAY TAP-OFF FROM A 1ø TANGENT STRUCTURE. FRAMING DIMENSIONS ALSO SUITABLE FOR 1ø TWO WAY TAP-OFF FROM A 3ø TANGENT STRUCTURE.

2. REFER TO SECTION A-26 FOR CUTOUT OR O.C.R. INSTALLATION AND MATERIAL IF REQUIRED.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SASKATCHEWAN POWER CORP. – DISTRIBUTION ENGINEERING STANDARDS

DRN. R. A. B.	DESIGN CHK.	SAFETY APP.	APPROVAL	SINGLE PHASE TWO WAY TAP-OFF
CHKD. FTK				
DATE 87-04-20	DATE	DATE	DATE 2005/07/13	
DATE OF ISSUE 2005/03/21			DRAWING NO. A-12-10	SHEET 2 OF 2 REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	**1 13 12**	**1**	**BOLT – MACHINE – 5/8" x 12"**
2	**1 93 27**	**1**	**WASHER – LOCK – DOUBLE COIL SPRING – 5/8"**
3	**1 93 42**	**1**	**WASHER – SQUARE – 2-1/4" X 2-1/4" X 13/16" HOLE**
4	**2 32 02**	**1**	**BRACKET – SECONDARY/NEUTRAL**
5	**2 58 10**	**1 SET**	**ARMOUR ROD – 1/0 – 47" – STEEL**
6	**2 97 28**	**0.5m**	**WIRE – TIE – #8 STEEL**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **BG**	**RURAL**
L MOEN	**B. GEBHART**	CHKD. **LM**	**NEUTRAL WIRE TANGENT AND DEFLECTION UP TO 4°**
		07/30/2020	

DATE OF ISSUE: 2020-12-18 | DRAWING NO: **A-12-11** | **SHEET 1 OF 2** | REV. **C**

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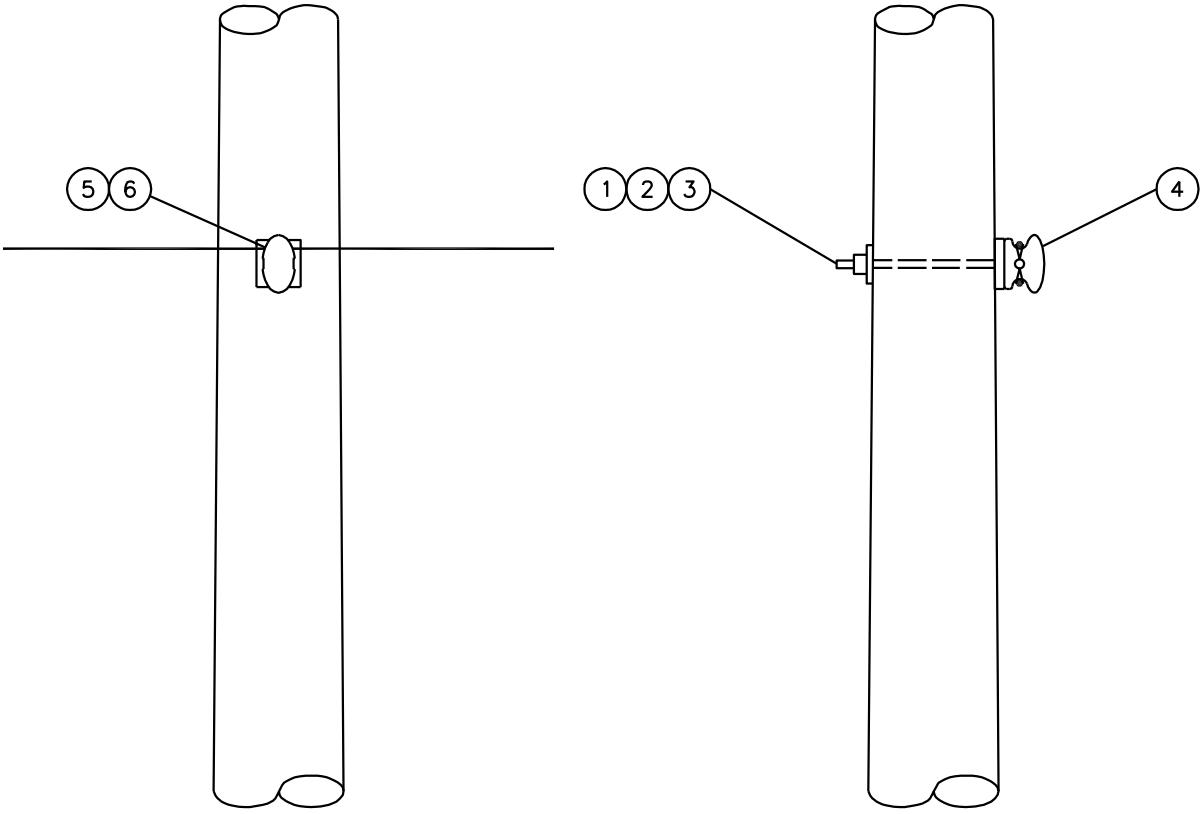

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SASKATCHEWAN POWER CORP. – DISTRIBUTION ENGINEERING STANDARDS					
DRN. DK CHKD. FTK DATE 87-03-16	DESIGN CHK. DATE	SAFETY APP. DATE	APPROVAL DATE	RURAL NEUTRAL WIRE TANGENT AND DEFLECTION UP TO 4°	
DATE OF ISSUE: 2007/04/16			DRAWING NO. A-12-11	SHEET 2 of 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 11 12	1	BOLT-EYE - 5/8" x 12"
2	1 25 03	1	CLEVIS - 20,000lb - 1/2” x 3"
3	1 93 27	1	WASHER – LOCK – 5/8” DOUBLE COIL SPRING
4	2 02 32	1	CLAMP –SEMI STRAIN
5	2 58 10	1 SET	ARMOUR – ROD 1/0 47" PREFORM GALV. STEEL

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*Sask**Power*** - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	**RURAL** **NEUTRAL WIRE DEFLECTION** **5° TO 59°**
CHKD.			
DATE	DATE	DATE	

DATE OF ISSUE **2007/04/16**	DRAWING NO: **A-12-12**	**SHEET 1 OF 2**	REV. **A**

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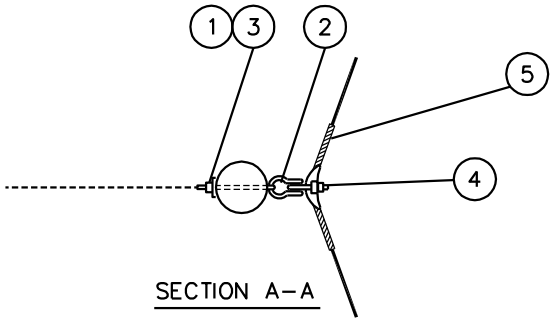
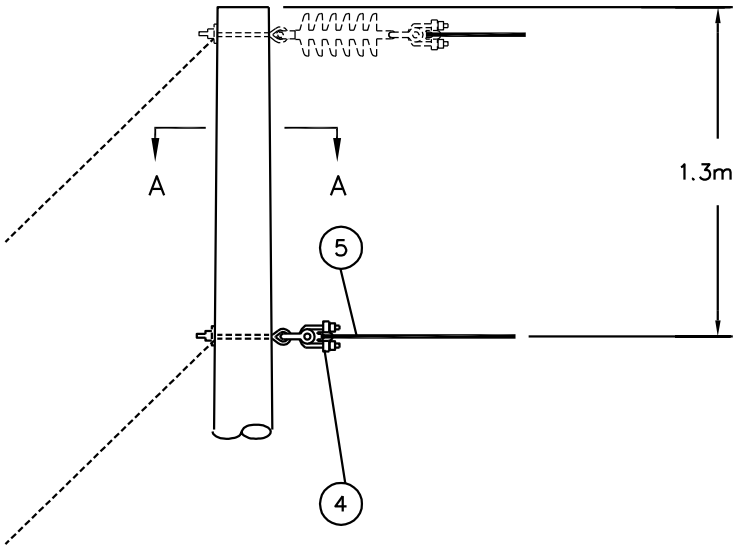


SECTION A–A



NOTE:

1. FOR GUYING & ANCHORING DETAILS – REFER TO SECTION A–32.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SASKATCHEWAN POWER CORP. – DISTRIBUTION ENGINEERING STANDARDS					
DRN. N.J.C.	DESIGN CHK.	SAFETY APP.	APPROVAL	RURAL NEUTRAL WIRE DEFLECTION 5° TO 59°	
CHKD. FTK					
DATE 87-04-21	DATE	DATE	DATE		
DATE OF ISSUE: 2007/04/16			DRAWING NO. A–12–12	SHEET 2 of 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	**1 11 12**	**2**	**BOLT-EYE - 5/8" x 12"**
2	**2 01 7X**	**2**	**CLAMP-DEADEND AUTOMATIC (SEE NOTE 1)**
3	**5 09 XX**	**1**	**CONNECTOR AL – CRIMPIT (SEE NOTE 1)**

NOTE:

1. REFER TO SECTION A-36 FOR SPECIFIC MATERIAL REQUIREMENTS.

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*Sask**Power*** - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	**RURAL** **NEUTRAL WIRE CORNER STRUCTURE** **60° TO 90°**
CHKD.			
DATE	DATE	DATE	

DATE OF ISSUE **2007/04/16**	DRAWING NO: **A-12-13 SHEET 1 of 2**	REV. **A**

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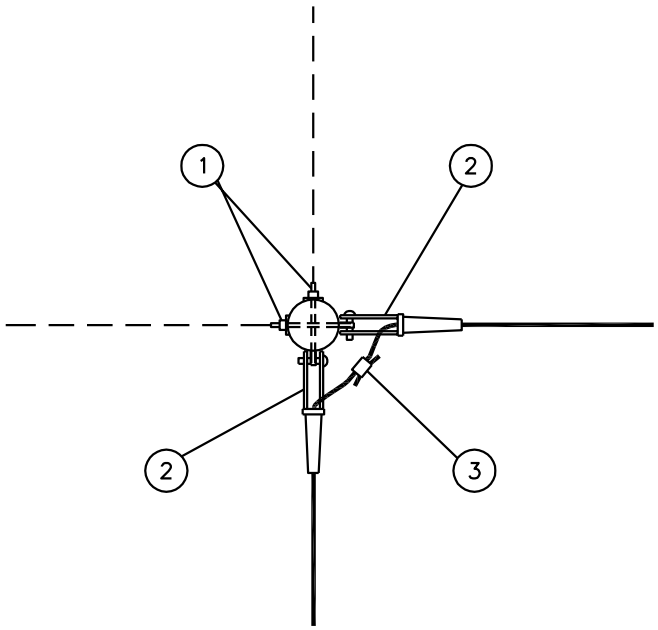
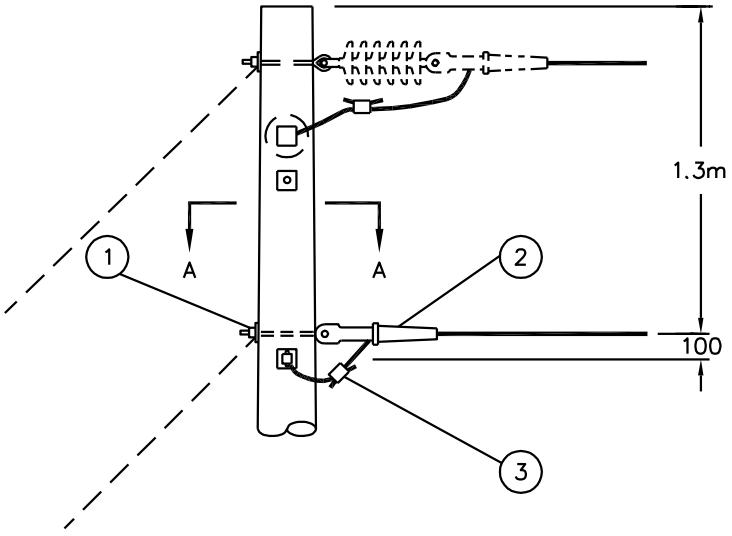


SECTION A–A



NOTE:

1. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SASKATCHEWAN POWER CORP. – DISTRIBUTION ENGINEERING STANDARDS					
DRN. N.J.C.	DESIGN CHK.	SAFETY APP.	APPROVAL	RURAL NEUTRAL WIRE CORNER STRUCTURE 60° TO 90°	
CHKD. FTK					
DATE 87-04-21	DATE	DATE	DATE		
DATE OF ISSUE: 2007/04/16			DRAWING NO. A–12–13	SHEET 2 OF 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	**1 11 12**	**1**	**BOLT-EYE - 5/8" x 12"**
2	**1 85 01**	**0.5 LB**	**STAPLE-FENCE**
3	**1 85 02**	**24**	**STAPLE-MOULDING**
4	**1 93 42**	**1**	**WASHER-SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE**
5	**2 01 7X**	**1**	**CLAMP-DEADEND AUTOMATIC (SEE NOTE 1)**
6	**2 27 00**	**4**	**MOULDING-GROUND WIRE – 10' LENGTH**
7	**2 83 04**	**13m**	**WIRE-CU #4/7 STR**
8	**5 09 2X**	**2**	**CONNECTOR AL – CRIMPIT (SEE NOTE 1)**
9	**5 12 06**	**1**	**CONNECTOR CU – 4C4**

NOTE:

1. REFER TO SECTION A-36 FOR SPECIFIC MATERIAL REQUIREMENTS.

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*Sask***Power** - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	**RURAL** **NEUTRAL WIRE DEADEND AND MODIFIED PRIMARY TANGENT**
CHKD.			
DATE	DATE	DATE	

DATE OF ISSUE **2007/04/16** | DRAWING NO: **A-12-14** | **SHEET 1 of 2** | REV. **A**

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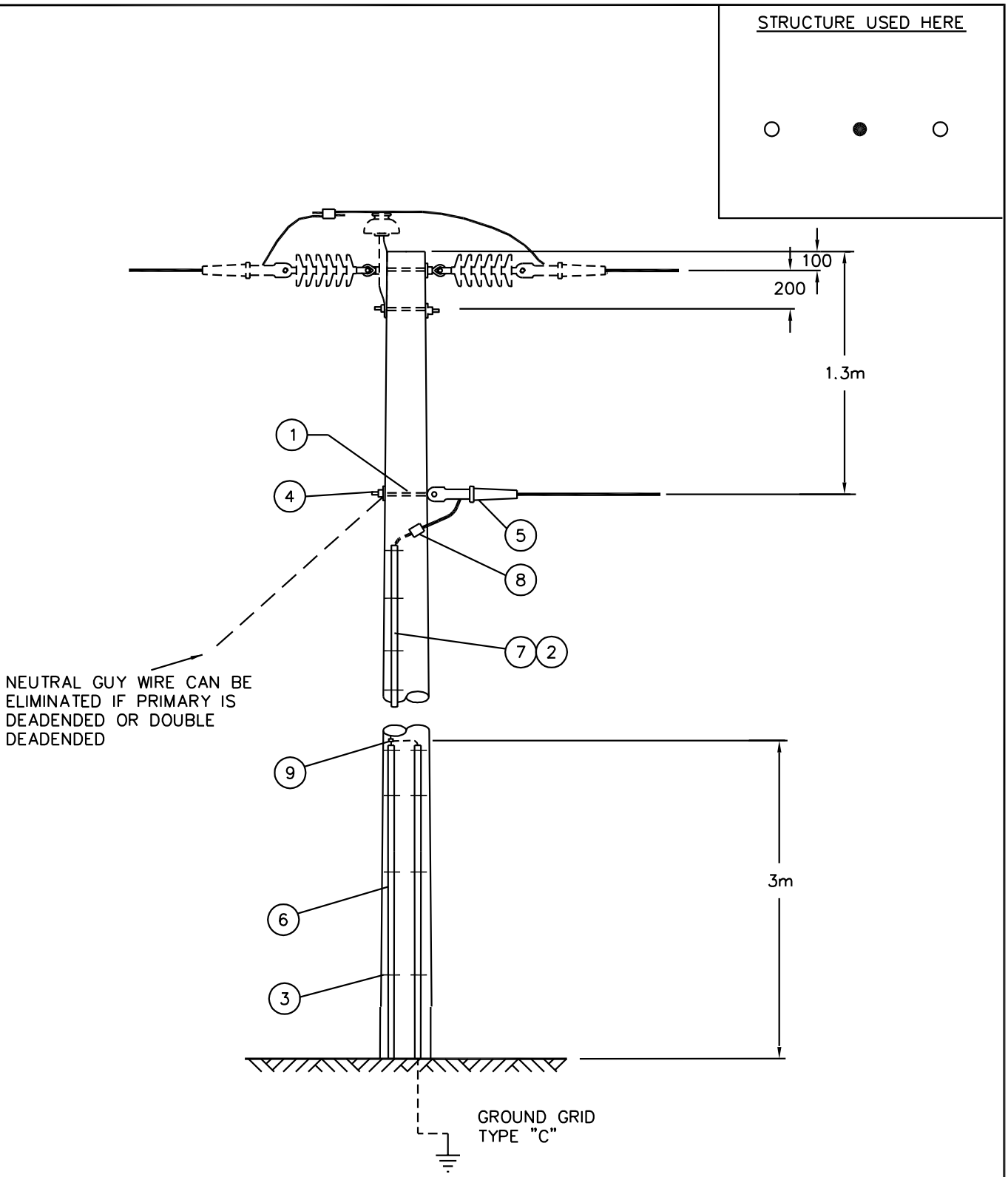

NOTE:

1. FOR GROUNDING DETAILS – REFER TO SECTION A–33.
2. SEPARATE GROUND WIRES BY 150mm.GROUND WIRE LOCATIONS ON DRAWING ONLY SHOWN FOR CLARITY.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL	DESIGN CHK.	DRN. N.J.C. CHKD. FTK	RURAL NEUTRAL WIRE DEADEND
		DATE 1987/04/21	
DATE OF ISSUE 2011–04–01		DRAWING NO. A–12–14 SHEET 2 of 2	REV. B

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	**1 11 12**	**1**	**BOLT – EYE - 5/8" x 12"**
2	**1 85 01**	**0.5 LB**	**STAPLE – FENCE**
3	**1 85 02**	**24**	**STAPLE – MOULDING**
4	**1 93 42**	**1**	**WASHER – SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE**
5	**2 01 7X**	**1**	**CLAMP – DEADEND (SEE NOTE 1)**
6	**2 27 00**	**4**	**MOULDING-GROUND WIRE – 10' LENGTH**
7	**2 83 04**	**13m**	**WIRE – CU #4/7 STR**
8	**5 09 2X**	**1**	**CONNECTOR AL – CRIMPIT (SEE NOTE 1)**
9	**5 12 06**	**1**	**CONNECTOR CU – 4C4**

NOTES:

1. REFER TO SECTION A-36 FOR SPECIFIC MATERIAL REQUIREMENTS.

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*Sask**Power*** - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	**RURAL NEUTRAL WIRE DEADEND (WITH PRIMARY DEADEND)**
CHKD.			
DATE	DATE	DATE	

DATE OF ISSUE **2007/04/16**	DRAWING NO: **A-12-15**	**SHEET 1 of 2**	REV. **A**

SPC/AUTODRAFT

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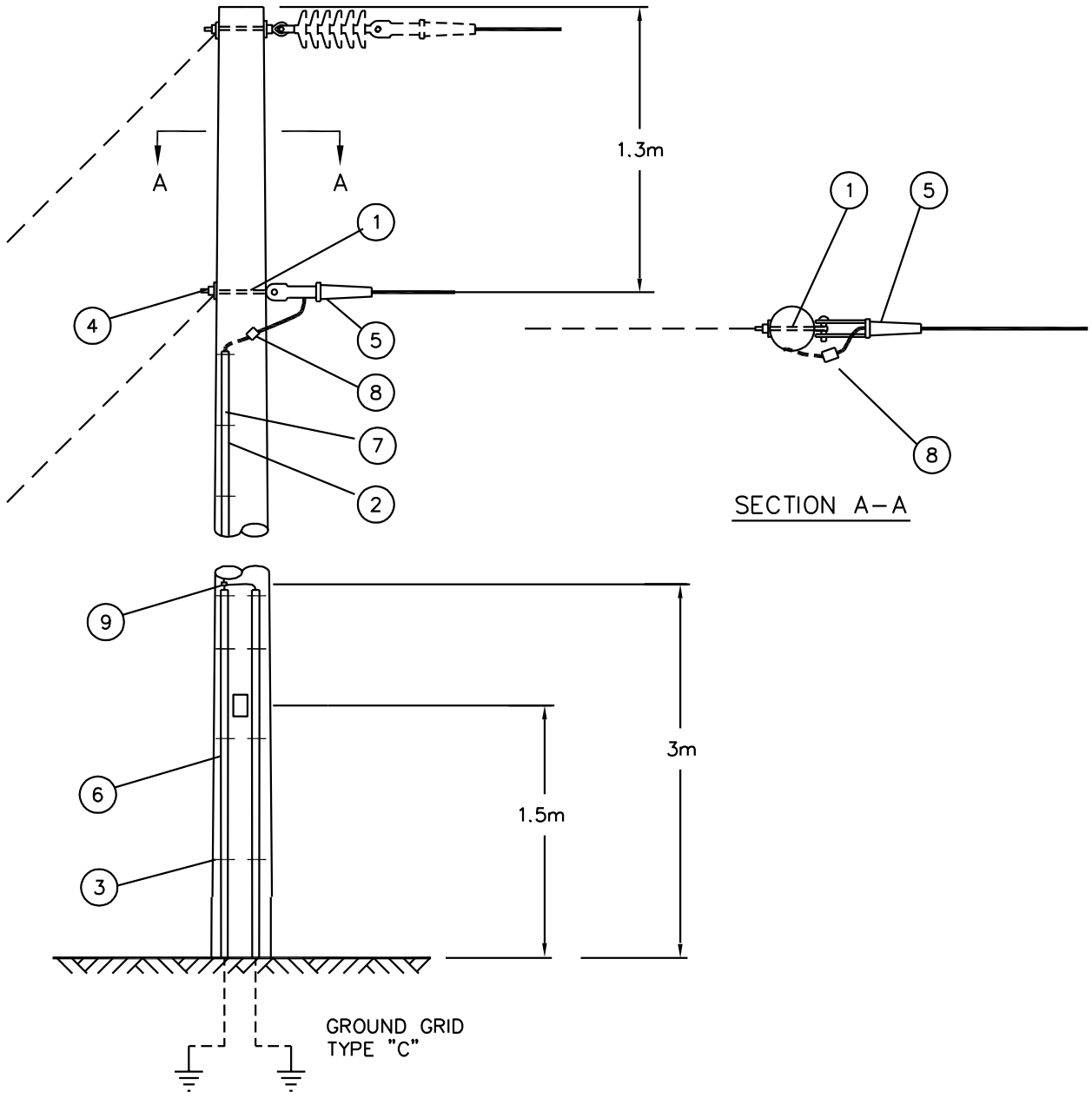

NOTE:

1. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.
2. REFER TO SECTION A–33 FOR GROUNDING DETAILS AND MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SASKATCHEWAN POWER CORP. – DISTRIBUTION ENGINEERING STANDARDS					
DRN. N.J.C.	DESIGN CHK.	SAFETY APP.	APPROVAL	RURAL NEUTRAL WIRE DEADEND (WITH PRIMARY DEADEND)	
CHKD. FTK					
DATE 87-04-21	DATE	DATE	DATE		
DATE OF ISSUE: 2007/04/16			DRAWING NO. A–12–15	SHEET 2 OF 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	**1-11-12**	**2**	**BOLT-EYE - 5/8" x 12"**
2	**1-85-01**	**0.5 LB**	**STAPLE-FENCE**
3	**1-85-02**	**12**	**STAPLE-MOULDING**
4	**1-93-42**	**2**	**WASHER-SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE**
5	**2-27-00**	**30 FT**	**MOULDING-GROUND WIRE**
6	**2-83-04**	**12m**	**WIRE-CU #4/7 STR**
7	**05-640-000**	**2**	**SIGN-DANGER**

*Sask**Power*** - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	**FARMYARD SERVICE**
CHKD.			**LOAD CENTER STRUCTURE**
DATE	DATE	DATE	**WITH OVERHEAD SECONDARY**

DATE OF ISSUE **87-06-01** | DRAWING NO: **A-12-16** | **SHEET 1 of 2** | REV. **0**

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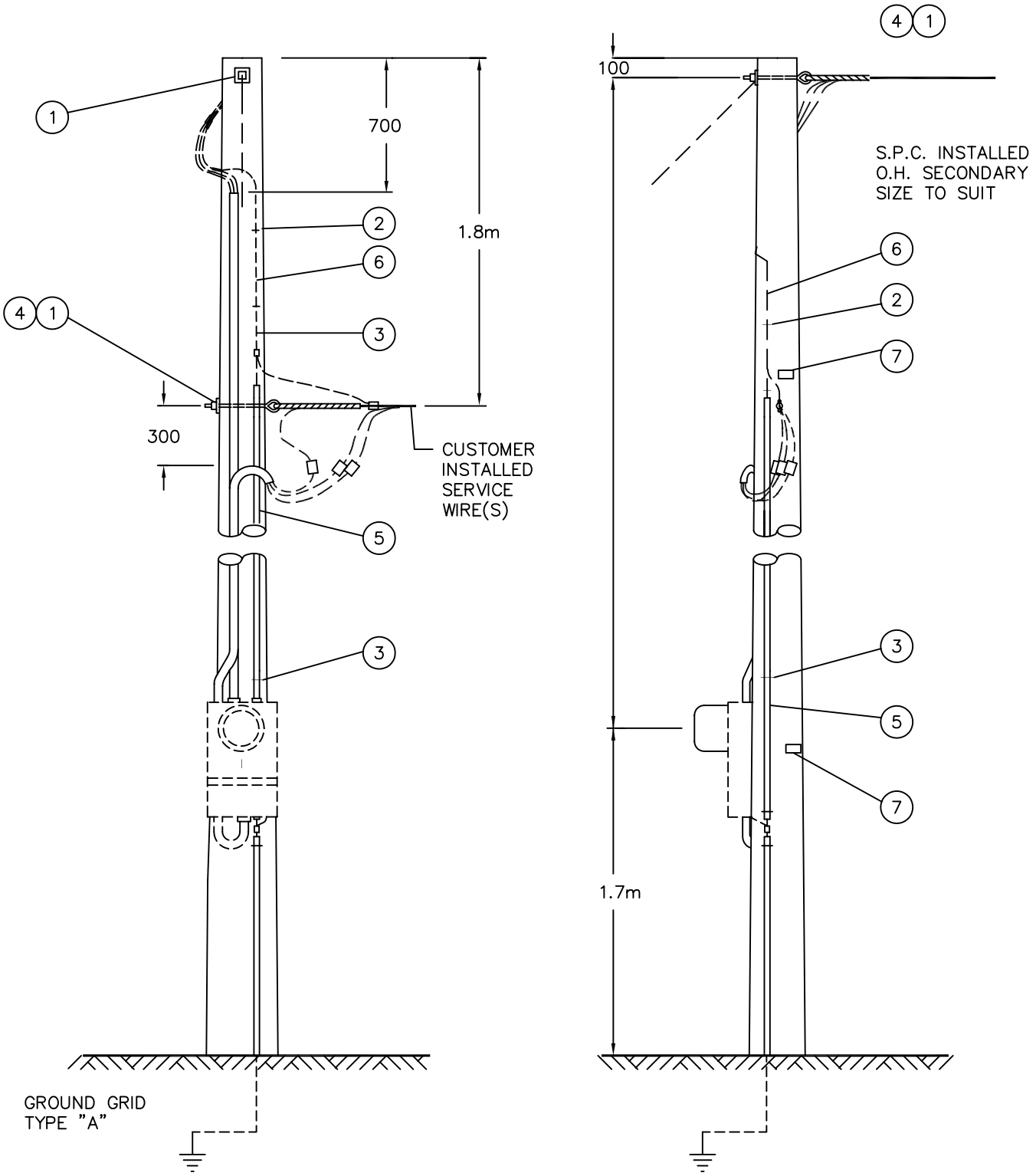

NOTE:

1. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SASKATCHEWAN POWER CORP. – DISTRIBUTION ENGINEERING STANDARDS					
DRN. N.J.C.	DESIGN CHK.	SAFETY APP.	APPROVAL	FARMYARD SERVICE LOAD CENTRE STRUCTURE WITH O.H. SECONDARY	
CHKD. FTK					
DATE 87-04-22	DATE	DATE	DATE		
DATE OF ISSUE 87-06-01			DRAWING NO. A-12-16	SHEET 2 OF 2	REV. 0

GENERAL INFORMATION – 3 Ø

1. THE STANDARD CONDUCTORS FOR NEW RURAL CONSTRUCTION ARE 1/0 ACSR RAVEN FOR RADIALS, AND 3/0 ACSR PIGEON FOR FEEDERS.

2. REFER TO DWG. A-12-50 SHTS 2 AND 3 FOR RULING SPAN, MINIMUM POLE HEIGHT AND CLASS.

3. CROSSARM BOLTS USED FOR 72" ANGLE BRACES ARE TO BE INSTALLED WITH THE BOLT HEAD TO THE TOP OF THE ARM.

4. REFER TO SECTION A-38 FOR POLE SETTING INFORMATION.

5. OVERHEAD LINES ARE TO BE BUILT 0.5m INSIDE THE ROAD ALLOWANCE (NOT INCLUDING LEASED ROADS).

6. DO NOT SET POLES WITHIN THE DISTANCE FROM THE BOTTOM OF THE DITCH SLOPE TO THE ROAD SURFACE. IF THIS IS NOT POSSIBLE WITHIN THE EXISTING ROAD ALLOWANCE, OBTAIN THE REQUIRED EASEMENT WITHIN THE ADJACENT PROPERTY OR BUILD ON THE OPPOSITE SIDE OF THE ROAD ALLOWANCE.

7. ON PRIVATE PROPERTY, PRIMARY CIRCUITS WILL BE UNDERGROUND, EXCEPT THAT CONSTRUCTION MAY BE OVERHEAD ON UNCULTIVATED LAND, OR ON CULTIVATED LAND WHERE THERE IS MINIMAL EFFECT ON AGRICULTURAL OPERATIONS AND WHERE THE LANDOWNER READILY AGREES TO GRANT A REGISTERED EASEMENT.

8. NEW PRIMARY OVERHEAD LINES SHOULD NOT BE BUILT INTO FARMYARDS.

9. ALL DEADEND, ANGLE OR CORNER STRUCTURES ARE TO BE RAKED 300mm AT THE TOP (UNLESS STATED OTHERWISE).

10. JAM NUTS ARE TO BE USED WITH EYE NUTS IF THE EYE NUT CANNOT BE INSTALLED TIGHT AGAINST THE POLE.

11. THROUGH BOLTS TO BE INSTALLED WITH NUT ON POLE SIDE.

12. CONDUCTOR SIZES SHOWN ARE ACSR UNLESS OTHERWISE NOTED.

13. DO NOT USE AUTOMATIC SPLICES ON SLACK SPAN CONDUCTORS.

14. AUTOMATIC DEADEND CONNECTORS ON SLACK SPAN CONDUCTORS ARE PERMITTED, PROVIDED THE RUN THRU CONDUCTOR TAIL IS BENT AND CRIMPED.

15. SINGLE CIRCUIT – CENTER PHASE TO BE STAGGERED FROM POLE TO POLE AND CROSSARM TO ALTERNATE FROM SIDE TO SIDE OF POLE DOWN THE LINE.
    DOUBLE CIRCUIT – CROSSARM TO ALTERNATE FROM SIDE TO SIDE DOWN THE LINE, BUT DO NOT STAGGER CENTER PHASE.

16. CROSSARM FLAT BRACES TO BE INSTALLED ON THE INSIDE OF THE CROSSARM.

NOTES CONTINUED ON SHEET 4

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SaskPower - DISTRIBUTION STANDARDS			
APPROVAL **L MOEN**	DESIGN CHK **L MOEN**	DRN. **LM** CHKD. **LM** **2021-11-30**	**GENERAL INFORMATION 3 Ø**
DATE OF ISSUE: **2022-01-10**		DRAWING NO: **A-12-50**	**SHEET 1 of 4** REV. **J**

MINIMUM POLE REQUIREMENTS FOR RURAL 3Ø CONSTRUCTION **WITHOUT A NEUTRAL**

CONDUCTOR	RULING SPAN	LENGTH / CLASS* NO APPARATUS	LENGTH / CLASS* 1x 500kg 1Ø TFMR or APPARATUS	LENGTH / CLASS* 3x 500kg 1Ø TFMR or 1x 910kg 3Ø TFMR or APPARATUS
SINGLE CIRCUIT				
1/0 ACSR RAVEN – 2 78 10	90m	12.2m (40ft) / 3	12.2m (40ft) / 3	12.2m (40ft) / 2
3/0 ACSR PIGEON – 2 78 30	90m	12.2m (40ft) / 3	12.2m (40ft) / 3	12.2m (40ft) / 2
4/0 ACSR PENGUIN – 2 78 40	90m	12.2m (40ft) / 3	12.2m (40ft) / 2	12.2m (40ft) / 2
266.8 KCMIL ACSR PARTRIDGE – 2 78 50	90m	12.2m (40ft) / 3	12.2m (40ft) / 2	12.2m (40ft) / 2
477 KCMIL ACSR PELICAN – 2 78 82	90m	12.2m (40ft) / 2**	12.2m (40ft) / 2**	12.2m (40ft) / 1**
336.4 KCMIL AL TULIP – 2 74 70	60m	12.2m (40ft) / 4	12.2m (40ft) / 3	12.2m (40ft) / 3
477 KCMIL AL COSMOS – 2 74 80	60m	12.2m (40ft) / 4	12.2m (40ft) / 3	12.2m (40ft) / 2
DOUBLE CIRCUIT				
1/0 ACSR RAVEN – 2 78 10	60m	13.7m (45ft) / 2	13.7m (45ft) / 2	13.7m (45ft) / 1
3/0 ACSR PIGEON – 2 78 30	60m	13.7m (45ft) / 2	13.7m (45ft) / 2	13.7m (45ft) / 1
4/0 ACSR PENGUIN – 2 78 40	60m	13.7m (45ft) / 2	13.7m (45ft) / 1	13.7m (45ft) / 1
266.8 KCMIL ACSR PARTRIDGE – 2 78 50	60m	13.7m (45ft) / 2	13.7m (45ft) / 1	13.7m (45ft) / 1
477 KCMIL ACSR PELICAN – 2 78 82	60m	NOT PERMITTED	NOT PERMITTED	NOT PERMITTED
336.4 KCMIL AL TULIP – 2 74 70	60m	13.7m (45ft) / 2	13.7m (45ft) / 1	13.7m (45ft) / 1
477 KCMIL AL COSMOS – 2 74 80	60m	13.7m (45ft) / 1	13.7m (45ft) / 1	13.7m (45ft) / 1

* UNLESS OTHERWISE SPECIFIED
** MAXIMUM SPAN MUST BE LIMITED TO LESS THAN 110% OF RULING SPAN

NOTES:
1. REFER TO SECTION A-36 FOR CONNECTORS AND SPLICING SLEEVES.
2. REFER TO SECTION A-34 FOR INSULATOR TIES.
3. REFER TO DIST. PLANNING GUIDELINES SEC 7.4 / TABLE 7.2 FOR CONDUCTOR SELECTION.
4. FOR POLES AND SPAN LENGTHS NEAR RAILWAY TRACKS SEE SECTION C-24.
5. GRADE 2 CONSTRUCTION.
6. 10.7m (35ft) POLES ARE TO BE USED FOR MAINTENANCE ONLY.
7. APPARATUS (CAP BANKS, INTELLIRUPTERS, ETC.) SHALL REFER TO APPLICABLE COLUMN BASED ON SINGLE UNIT WEIGHTS (500kg OR 910kg) AS APPLICABLE. MAX 1 APPARATUS PER STRUCTURE.
8. IF USING POLES TALLER THAN LISTED, ENSURE THAT POLE CLASS IS ADEQUATE.
9. POLE CLASS DATA DERIVED BY NON-LINEAR ANALYSIS.

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MINIMUM POLE REQUIREMENTS FOR RURAL 3Ø CONSTRUCTION **WITH A NEUTRAL**

CONDUCTOR	RULING SPAN	LENGTH / CLASS* NO APPARATUS	LENGTH / CLASS* 1x 500kg 1Ø TFMR or APPARATUS	LENGTH / CLASS* 3x 500kg 1Ø TFMR or 1x 910kg 3Ø TFMR or APPARATUS
SINGLE CIRCUIT				
1/0 ACSR RAVEN – 2 78 10	90m	13.7m (45ft) / 2	13.7m (45ft) / 2	13.7m (45ft) / 1
3/0 ACSR PIGEON – 2 78 30	90m	13.7m (45ft) / 2	13.7m (45ft) / 2	13.7m (45ft) / 1
4/0 ACSR PENGUIN – 2 78 40	90m	13.7m (45ft) / 2	13.7m (45ft) / 2	13.7m (45ft) / 1
266.8 KCMIL ACSR PARTRIDGE – 2 78 50	90m	13.7m (45ft) / 2	13.7m (45ft) / 2	13.7m (45ft) / 1
477 KCMIL ACSR PELICAN – 2 78 82	90m	13.7m (45ft) / 2**	13.7m (45ft) / 1**	13.7m (45ft) / 1**
336.4 KCMIL AL TULIP – 2 74 70	60m	12.2m (40ft) / 3	12.2m (40ft) / 3	12.2m (40ft) / 2
477 KCMIL AL COSMOS – 2 74 80	60m	12.2m (40ft) / 3	12.2m (40ft) / 3	12.2m (40ft) / 2
DOUBLE CIRCUIT				
1/0 ACSR RAVEN – 2 78 10	60m	13.7m (45ft) / 2	13.7m (45ft) / 2	13.7m (45ft) / 1
3/0 ACSR PIGEON – 2 78 30	60m	13.7m (45ft) / 2	13.7m (45ft) / 1	13.7m (45ft) / 1
4/0 ACSR PENGUIN – 2 78 40	60m	13.7m (45ft) / 1	13.7m (45ft) / 1	13.7m (45ft) / 1
266.8 KCMIL ACSR PARTRIDGE – 2 78 50	60m	13.7m (45ft) / 1	13.7m (45ft) / 1	13.7m (45ft) / 1
477 KCMIL ACSR PELICAN – 2 78 82	60m	NOT PERMITTED	NOT PERMITTED	NOT PERMITTED
336.4 KCMIL AL TULIP – 2 74 70	60m	15.2m (50ft) / 1	15.2m (50ft) / 1	15.2m (50ft) / 1**
477 KCMIL AL COSMOS – 2 74 80	60m	15.2m (50ft) / 1	15.2m (50ft) / 1**	15.2m (50ft) / 1**

* UNLESS OTHERWISE SPECIFIED
** MAXIMUM SPAN MUST BE LIMITED TO LESS THAN 110% OF RULING SPAN

NOTES:

1. REFER TO SECTION A-36 FOR CONNECTORS AND SPLICING SLEEVES.
2. REFER TO SECTION A-34 FOR INSULATOR TIES.
3. REFER TO DIST. PLANNING GUIDELINES SEC 7.4 / TABLE 7.2 FOR CONDUCTOR SELECTION.
4. FOR POLES AND SPAN LENGTHS NEAR RAILWAY TRACKS SEE SECTION C-24.
5. GRADE 2 CONSTRUCTION.
6. 10.7m (35ft) POLES ARE TO BE USED FOR MAINTENANCE ONLY.
7. APPARATUS (CAP BANKS, INTELLIRUPTERS, ETC.) SHALL REFER TO APPLICABLE COLUMN BASED ON SINGLE UNIT WEIGHTS (500kg OR 910kg) AS APPLICABLE. MAX 1 APPARATUS PER STRUCTURE.
8. IF USING POLES TALLER THAN LISTED, ENSURE THAT POLE CLASS IS ADEQUATE.
9. POLE CLASS DATA DERIVED BY NON-LINEAR ANALYSIS.

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GENERAL INFORMATION – 3 Ø

17. USE OF POLYMER DEADEND INSULATORS:

    A) THESE INSULATORS ARE RUGGED AND LESS PRONE TO DAMAGE THAN PORCELAIN UNITS. THEY SHOULD STILL BE TREATED CAREFULLY LIKE ANY OTHER HIGH VOLTAGE APPARATUS.

    B) ALTHOUGH THEY HAVE HIGH TENSILE STRENGTH, THEY DO NOT HAVE GOOD TORTIONAL STRENGTH (ONE END FIXED AND THE OTHER END TWISTED). NOR DO THEY HAVE GOOD CANTILEVER STRENGTH (ONE END FIXED AND THE OTHER BENT). THIS SHOULD BE KEPT IN MIND DURING INSTALLATION.

    C) ON DEADEND AND DEFLECTION STRUCTURES KEEP THE EYES OF BOLTS AND NUTS VERTICAL. THIS ALLOWS MOVEMENT OF THE INSULATOR WITHOUT CAUSING A CANTILEVER LOAD.

    D) THESE INSULATORS PERFORM VERY WELL IN CONTAMINATED ENVIRONMENTS. DO NOT APPLY ANY SILICON GREASES TO THEM SINCE THE CHEMICAL COMPATABILITIES ARE NOT KNOWN. PRESSURIZED WATER WASHING CAN BE USED IF REQUIRED.

18. ENSURE A MINIMUM DISTANCE OF 6m BETWEEN ANY TWO POLES OF DIFFERENT STRUCTURES TO ALLOW FOR MAINTENANCE.

19. HARDWARE COMPONENTS INSTALLED WITHIN 150mm OF EACH OTHER SHALL BE SOLIDLY BONDED TOGETHER TO PREVENT RADIO INTERFERENCE AND RISK OF POLE FIRES.

20. CONSULT TRANSMISSION SERVICES – ENGINEERING LINES WHEN DISTRIBUTION FACILITIES ARE UNDERSTRUNG ON TRANSMISSION STRUCTURES OR CROSSINGS.

21. ALL PRIMARY, RURAL, VEHICULAR ROAD CROSSINGS (ROAD ALLOWANCE) SHALL BE OVERHEAD CONSTRUCTION WHERE POSSIBLE, WITH EXCEPTIONS NOTED BELOW:

    A) DESIGNATED HIGH LOAD CORRIDORS.
    B) TO PREVENT CREATING A DOCUMENTED SAFETY HAZARD TO SASKPOWER AND CUSTOMER OPERATIONS.
    C) OTHERWISE TECHNICALLY UNFEASIBLE TO CONSTRUCT OVERHEAD.

22. REFER TO DISTRIBUTION ENGINEERING DESIGN AIDS (SEP'S, DISTRIBUTION PLANNING GUIDELINES) FOR GUIDANCE ON DESIGNING OVERHEAD AND CROSSING FACILITIES.

23. LONGER POLES MAY BE REQUIRED TO ACCOUNT FOR DIFFERENCES IN GRADE.

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BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY A	QUANTITY B	DESCRIPTION
1	1 08 38	2	2	BOLT-CARRIAGE - 3/8" x 4 1/2"
2	1 13 14	1	1	BOLT-MACHINE - 5/8" x 14"
3	1 19 32	2	2	BRACE-CROSSARM - 32"
4	1 29 10	1	1	CROSSARM-WOOD - 4" x 5" x 10'-0"
5	1 53 09	3	2	PIN-STEEL
6	1 78 12	1	1	SCREW-LAG
7	1 93 25	2	2	WASHER-DOUBLE LOCK - 3/8"
8	1 93 27	1	1	WASHER-DOUBLE LOCK - 5/8"
9	1 93 28	3	2	WASHER-DOUBLE LOCK - 3/4"
10	1 93 34	3	2	WASHER-ROUND - 2" x 13/16" HOLE
11	1 93 42	2	2	WASHER-SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE
12	2 20 23	3	2	INSULATOR-PIN TYPE
13	2 58 XX	3	2	ARMOUR ROD (SIZE TO SUIT-SEE NOTE 1)
14	2 97 28	5.1m	3.4m	WIRE-TIE - #8 STEEL SOLID

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

2. **BILL OF MATERIAL - COLUMN A - FOR 3 WIRE CONSTRUCTION.**
   BILL OF MATERIAL - COLUMN B - FOR 2 WIRE CONSTRUCTION.

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**3Ø TANGENT 3/0 ACSR AND SMALLER**
M. ERETH	**A. UHREN**	CHKD.	
		2013-10-09	
DATE OF ISSUE 2014/03/21		DRAWING NO. **A-12-51**	**SHEET 1 OF 2** REV. **A**

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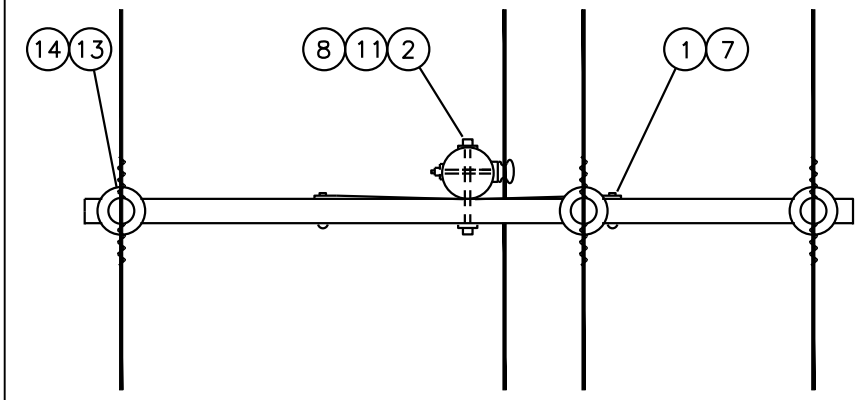

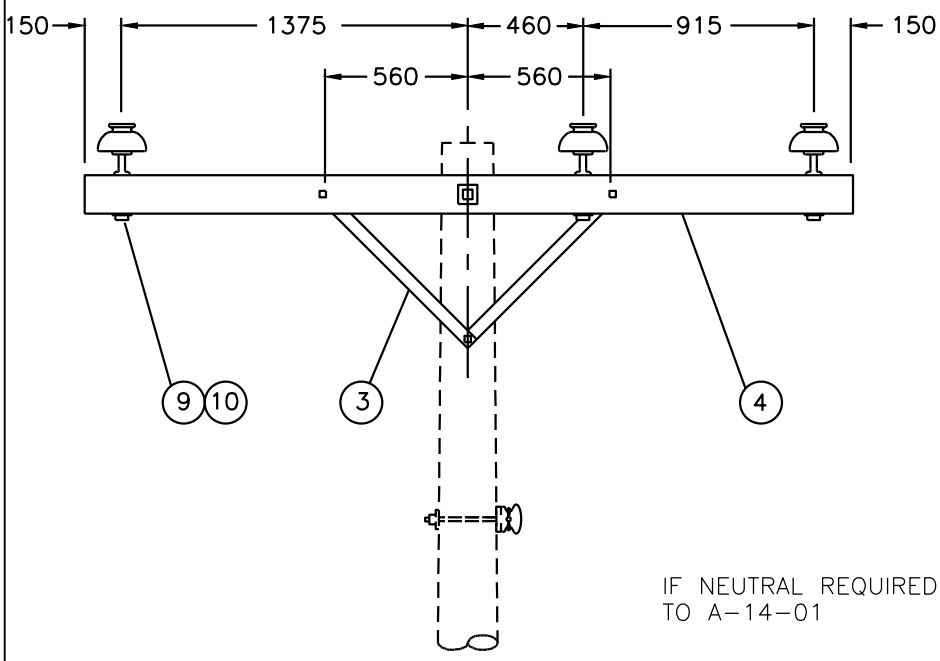

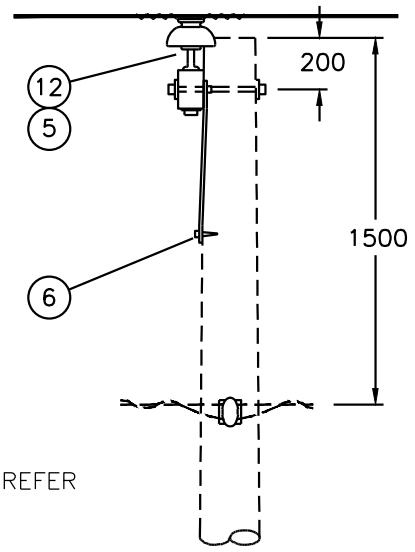

IF NEUTRAL REQUIRED REFER TO A-14-01

NOTE:

1. FOR TWO WIRE CONSTRUCTION DELETE CENTER PHASE WIRE.
2. STRUCTURE SUITABLE FOR LINE DEFLECTIONS UP TO A MAXIMUM OF 4° FOR 1/0 RAVEN AND 3° FOR 3/0 PIGEON.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. A. UHREN	DRN. Y.HAO CHKD. 2016-08-30	3ø TANGENT 3/0 ACSR & SMALLER
DATE OF ISSUE 2016/11/08	DRAWING NO. A-12-51	SHEET 2 of 2	REV. C

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 12 06	2	BOLT-MACHINE - 1/2" x 6"
2	1 13 12	1	BOLT-MACHINE - 5/8" x 12"
3	1 13 16	1	BOLT-MACHINE - 5/8" x 16"
4	1 18 72	1	BRACE-ANGLE - 72"
5	1 29 10	1	CROSSARM-WOOD - 4" x 5" x 10'-0"
6	1 53 09	3	PIN-STEEL
7	1 93 26	2	WASHER-DOUBLE LOCK - 1/2"
8	1 93 27	2	WASHER-DOUBLE LOCK - 5/8"
9	1 93 28	3	WASHER-DOUBLE LOCK - 3/4"
10	1 93 30	2	WASHER-ROUND - 1 3/8" x 9/16" HOLE
11	1 93 34	3	WASHER-ROUND - 2" x 13/16" HOLE
12	1 93 42	3	WASHER-SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE
13	2 20 23	3	INSULATOR-PIN TYPE
14	2 58 XX	3	ARMOUR ROD (SIZE TO SUIT-SEE NOTE 1)
15	2 97 28	5.1m	WIRE-TIE - #8 STEEL SOLID

NOTE:

1. REFER TO DWG. A-12-50 SHEET 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**3Ø TANGENT 4/0 & 266 ACSR**
M. ERETH	**A. UHREN**	CHKD.	
		2013-10-09	

DATE OF ISSUE: 2014/03/21 | DRAWING NO: **A-12-52** | **SHEET 1 OF 2** | REV. **E**

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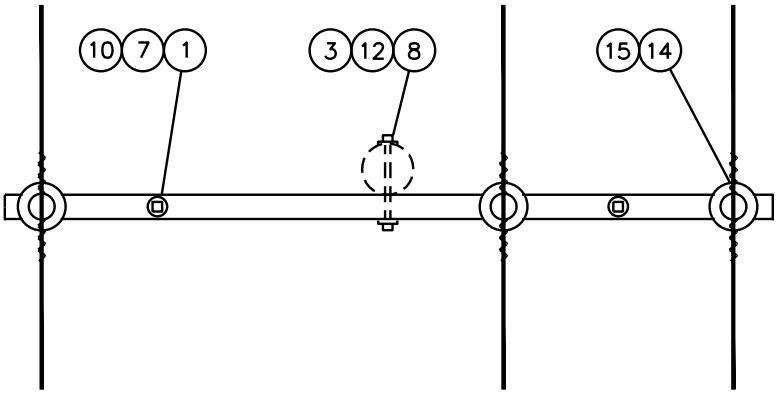

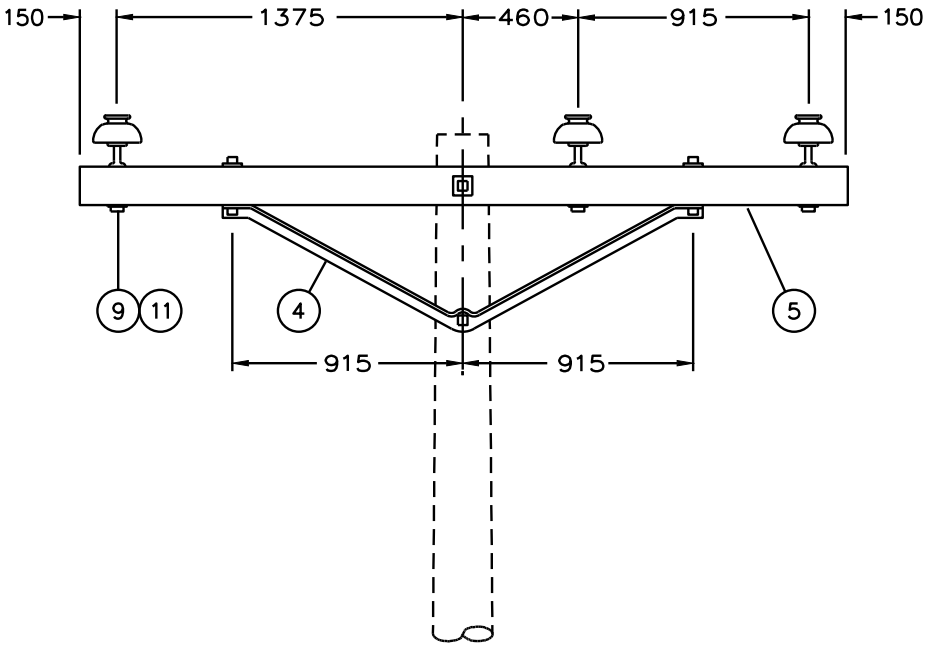

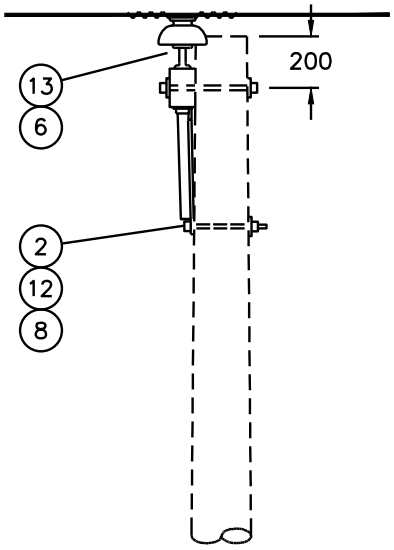

COND. SIZE		MAX DEFLECTION
4/0	–	2.5°
266	–	2°

NOTE:

1. REFER TO DWG. A-12-50 SHT. 1 FOR INSTRUCTIONS ON STAGGERING CENTER PHASE WIRE AND ALTERNATING THE CROSSARMS ON ADJACENT STRUCTURES.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL M. ERETH	DESIGN CHK. A. UHREN	DRN. DC CHKD. 2013-10-17	3ø TANGENT 4/0 & 266 ACSR
DATE OF ISSUE 2014/03/21	DRAWING NO. A-12-52	SHEET 2 of 2	REV. C

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 08 38	2	BOLT-CARRIAGE - 3/8" x 4 1/2"
2	1 13 14	1	BOLT-MACHINE - 5/8" x 14"
3	1 19 32	2	BRACE-CROSSARM - 32"
4	1 29 10	1	CROSSARM-WOOD - 4" x 5" x 10'-0"
5	1 53 09	2	PIN-STEEL
6	1 78 12	1	SCREW-LAG - 1/2" x 4 1/2"
7	1 93 25	2	WASHER-DOUBLE LOCK - 3/8"
8	1 93 27	1	WASHER-DOUBLE LOCK - 5/8"
9	1 93 28	2	WASHER-DOUBLE LOCK - 3/4"
10	1 93 34	2	WASHER-ROUND - 2" x 13/16" HOLE
11	1 93 42	2	WASHER-SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE
12	2 20 23	2	INSULATOR-PIN TYPE
13	2 58 XX	2	ARMOUR ROD (SIZE TO SUIT-SEE NOTE 1)
14	2 97 28	3.4m	WIRE-TIE - #8 STEEL SOLID

NOTE:

1. REFER TO DWG. A-12-50 SHEET 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**MODIFIED 3Ø TANGENT 3/0 ACSR AND SMALLER**
M. ERETH	**A. UHREN**	CHKD.	
		2013-10-09	

DATE OF ISSUE: 2014/03/21 | DRAWING NO: **A-12-53** | **SHEET 1 OF 2** | REV. **A**

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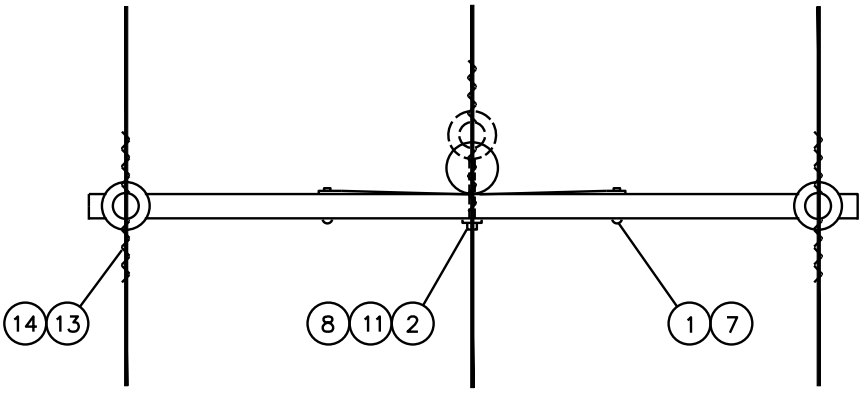

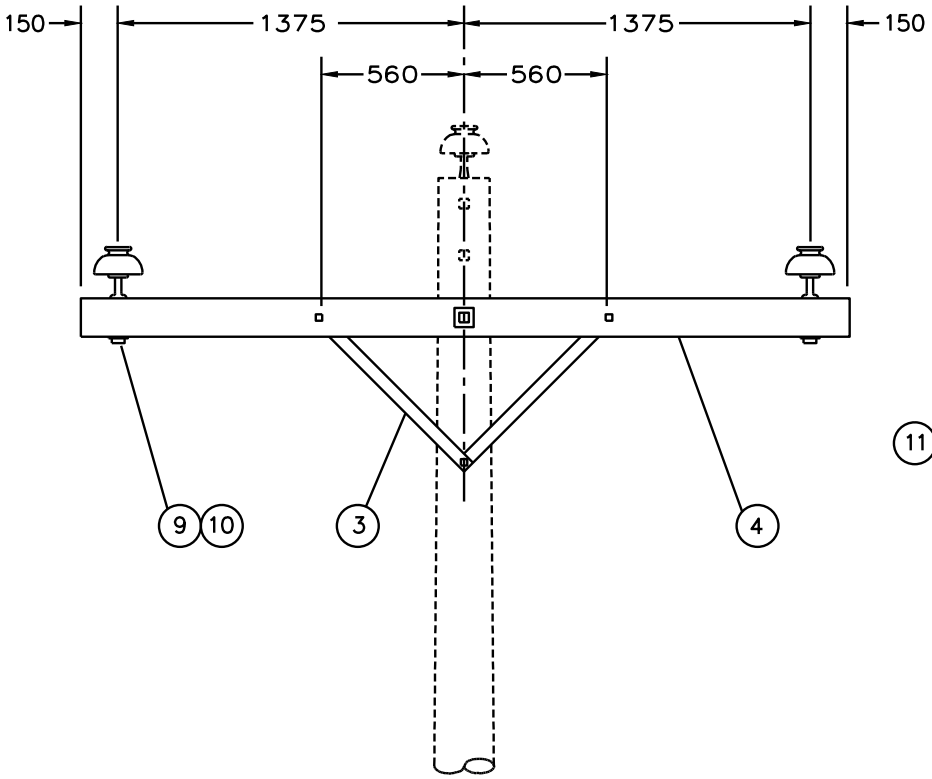

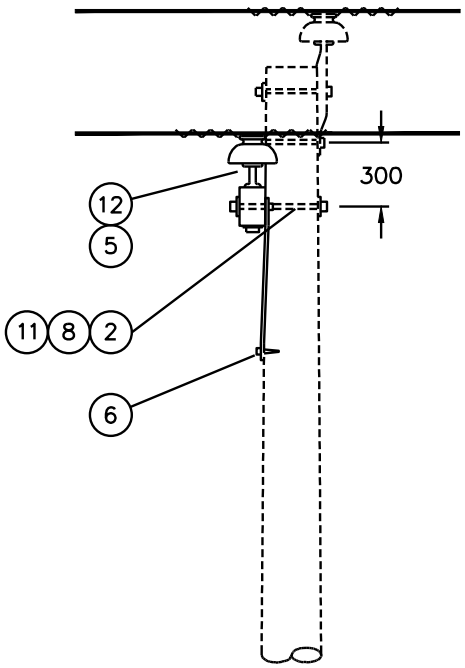

NOTE:

1. THIS STRUCTURE TO BE USED TO CONVERT AN EXISTING SINGLE PHASE LINE TO THREE PHASE.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL M. ERETH	DESIGN CHK. A. UHREN	DRN. DC CHKD. 2013-10-17	MODIFIED 3ø TANGENT 3/0 ACSR & SMALLER
DATE OF ISSUE 2014/03/21	DRAWING NO. A-12-53	SHEET 2 of 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 12 06	2	BOLT-MACHINE – ½" x 6"
2	1 13 14	1	BOLT-MACHINE – 5/8" x 14"
3	1 13 16	1	BOLT-MACHINE – 5/8" x 16"
4	1 18 72	1	BRACE-ANGLE – 72"
5	1 29 10	1	CROSSARM-WOOD – 4" x 5" x 10'-0"
6	1 53 09	2	PIN-STEEL
7	1 93 26	2	WASHER-DOUBLE LOCK – ½"
8	1 93 27	2	WASHER-DOUBLE LOCK – 5/8"
9	1 93 28	2	WASHER-DOUBLE LOCK – ¾"
10	1 93 30	2	WASHER-ROUND – 1 3/8" x 9/16" HOLE
11	1 93 34	3	WASHER-ROUND – 2" x 13/16" HOLE
12	1 93 42	3	WASHER-SQUARE – 2 ¼" x 2 ¼" x 13/16" HOLE
13	2 20 23	2	INSULATOR-PIN TYPE
14	2 58 XX	2	ARMOUR ROD (SIZE TO SUIT-SEE NOTE 1)
15	2 97 28	3.4m	WIRE-TIE - #8 STEEL SOLID

NOTE:

1. REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**MODIFIED 3Ø TANGENT 4/0 & 266 ACSR**
M. ERETH	**A. UHREN**	CHKD.	
		2013-10-09	

DATE OF ISSUE: 2014/03/21 | DRAWING NO: **A-12-54** | **SHEET 1 OF 2** | REV. **D**

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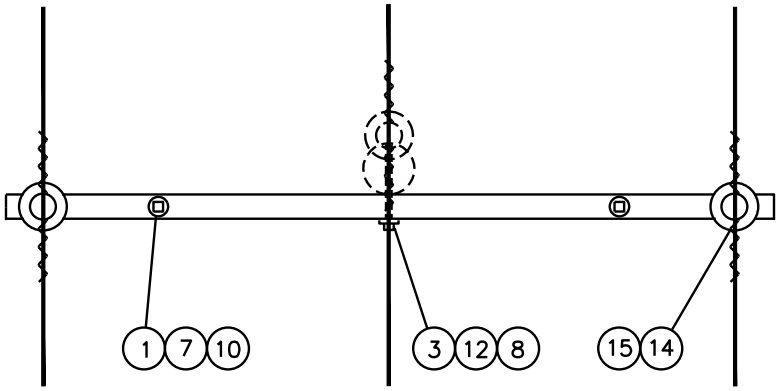

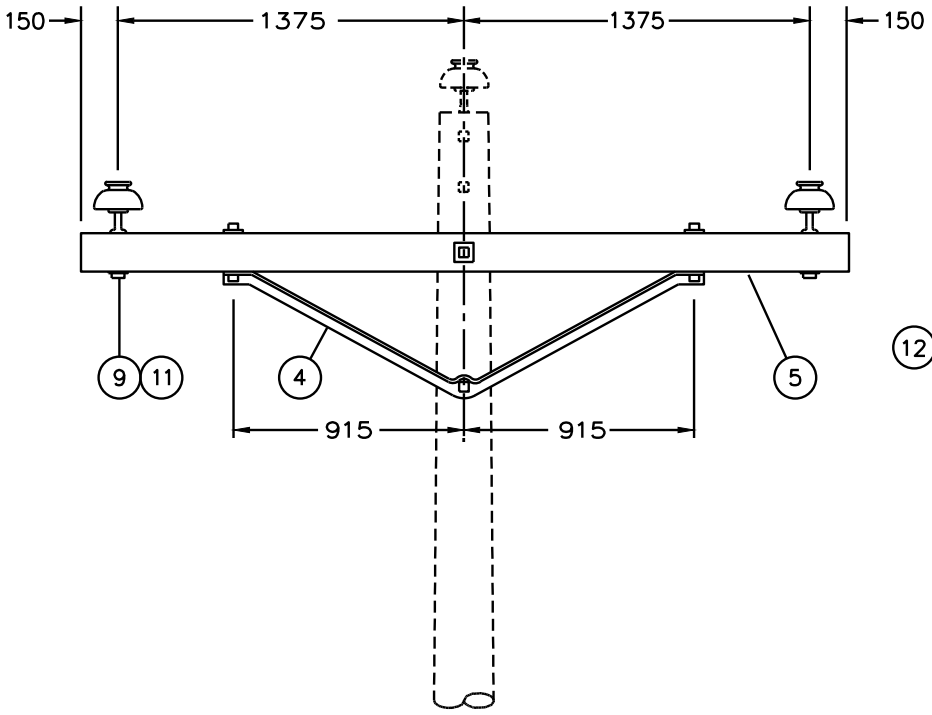

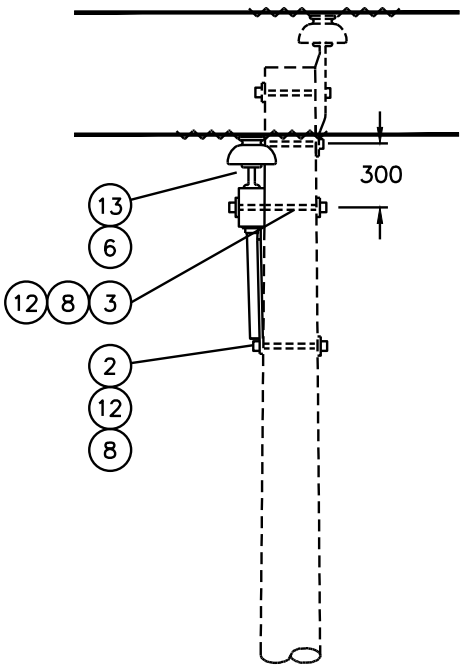

NOTE:

1. THIS STRUCTURE TO BE USED TO CONVERT AN EXISTING SINGLE PHASE LINE TO THREE PHASE.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL M. ERETH	DESIGN CHK. A. UHREN	DRN. DC CHKD. 2013–10–17	MODIFIED 3ø TANGENT 4/0 & 266 ACSR
DATE OF ISSUE 2014/03/21	DRAWING NO. A–12–54	SHEET 2 of 2	REV. C

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY A	QUANTITY B	DESCRIPTION
1	1 12 06	2	2	BOLT-MACHINE - 1/2" x 6"
2	1 13 10	1	1	BOLT-MACHINE - 5/8" x 10"
3	1 13 14	1	1	BOLT-MACHINE - 5/8" x 14"
4	1 13 16	1	1	BOLT-MACHINE - 5/8" x 16"
5	1 18 72	1	1	BRACE-ANGLE - 72"
6	1 29 10	1	1	CROSSARM-WOOD - 4" x 5" x 10'-0"
7	1 53 01	3	2	PIN-ANGLE
8	1 93 26	2	2	WASHER-DOUBLE LOCK - 1/2"
9	1 93 27	6	5	WASHER-DOUBLE LOCK - 5/8"
10	1 93 30	2	2	WASHER-ROUND - 1 3/8" x 9/16" HOLE
11	1 93 33	3	2	WASHER-ROUND - 1 3/4" x 11/16" HOLE
12	1 93 42	5	5	WASHER-SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE
13	2 20 23	3	2	INSULATOR-PIN TYPE
14	2 58 XX	3	2	ARMOUR ROD (SIZE TO SUIT-SEE NOTE 2)
15	2 97 28	5.1m	3.4m	WIRE-TIE - #8 STEEL SOLID

NOTE:

1. **COLUMN "A" MATERIAL FOR 3 WIRE CONSTRUCTION.**
   COLUMN "B" MATERIAL FOR 2 WIRE CONSTRUCTION.
2. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**3Ø ANGLE SINGLE CROSSARM DEFLECTIONS OF UP TO 10°**
L. MOEN	**A. UHREN**	CHKD.	
		2016-08-09	

DATE OF ISSUE 2016/11/08	DRAWING NO. **A-12-55**	**SHEET 1 OF 2**	REV. **C**

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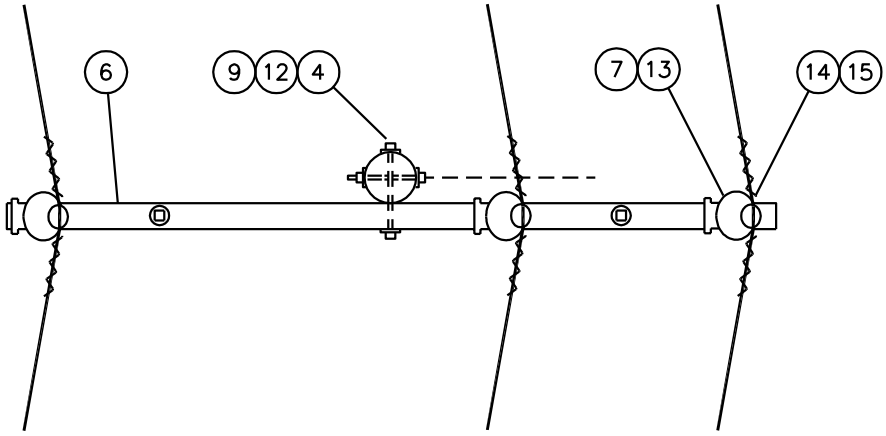
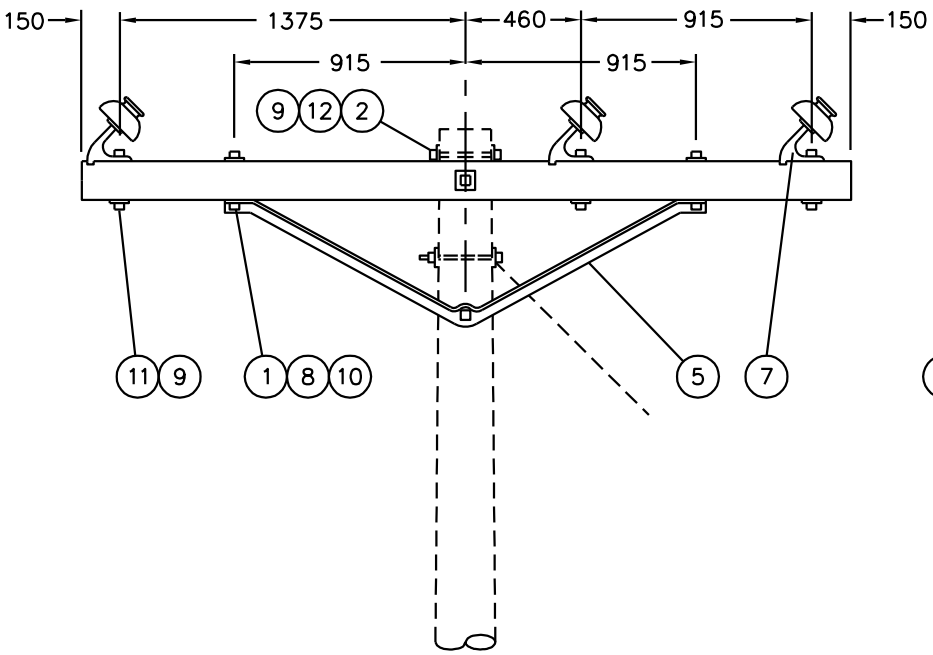
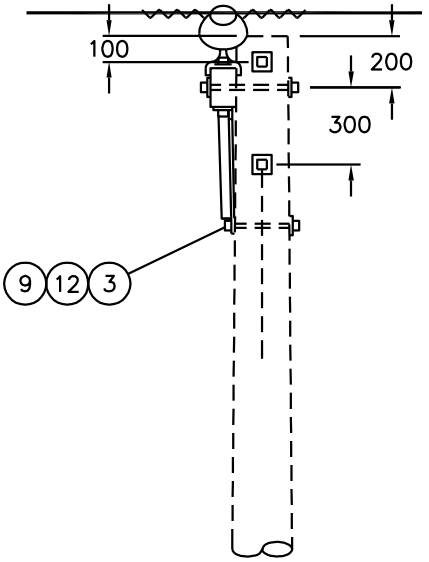


COND SIZE	DEFLECTION
1/0 ACSR	4°–10°
3/0 ACSR	3°–10°
4/0 ACSR	2.5°–10°
266 ACSR	2°–10°





NOTE:

1. FOR TWO WIRE CONSTRUCTION DELETE CENTER PHASE WIRE.
2. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. A. UHREN	DRN. N.KIM CHKD. 2016–04–19	3ø ANGLE SINGLE CROSSARM DEFLECTIONS OF UP TO 10°
DATE OF ISSUE 2016/05/04	DRAWING NO. A–12–55	SHEET 2 of 2	REV. B

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY A	QUANTITY B	DESCRIPTION
1	1 09 20	3	3	BOLT-DOUBLE ARMING - 5/8" x 20"
2	1 12 06	4	4	BOLT-MACHINE - 1/2" x 6"
3	1 13 10	1	1	BOLT-MACHINE - 5/8" x 10"
4	1 13 12	1	1	BOLT-MACHINE - 5/8" x 12"
5	1 18 72	2	2	BRACE-ANGLE - 72"
6	1 29 10	2	2	CROSSARM-WOOD - 4" x 5" x 10'-0"
7	1 53 01	6	4	PIN-ANGLE
8	1 93 26	4	4	WASHER LOCK-DOUBLE COIL SPRING - 1/2"
9	1 93 27	14	12	WASHER LOCK-DOUBLE COIL SPRING - 5/8"
10	1 93 30	4	4	WASHER-ROUND - 1 3/8" x 9/16" HOLE
11	1 93 33	6	4	WASHER-ROUND - 1 3/4" x 11/16" HOLE
12	1 93 42	12	12	WASHER-SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE
13	2 20 23	6	4	INSULATOR-PIN TYPE
14	2 58 XX	3	3	ARMOUR ROD (SIZE TO SUIT - SEE NOTE 2)
15	2 97 28	10.2m	6.8m	TIE-WIRE

NOTE:

1. **COLUMN "A" MATERIAL FOR 3 WIRE CONSTRUCTION.**
   COLUMN "B" MATERIAL FOR 2 WIRE CONSTRUCTION.

2. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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*Sask**Power*** - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	**THREE PHASE ANGLE DOUBLE CROSSARM DEFLECTIONS OF 11° TO 30°**
CHKD.			
DATE	DATE	DATE	

DATE OF ISSUE **2007/04/16** | DRAWING NO: **A-12-56** | **SHEET 1 of 2** | REV. **B**

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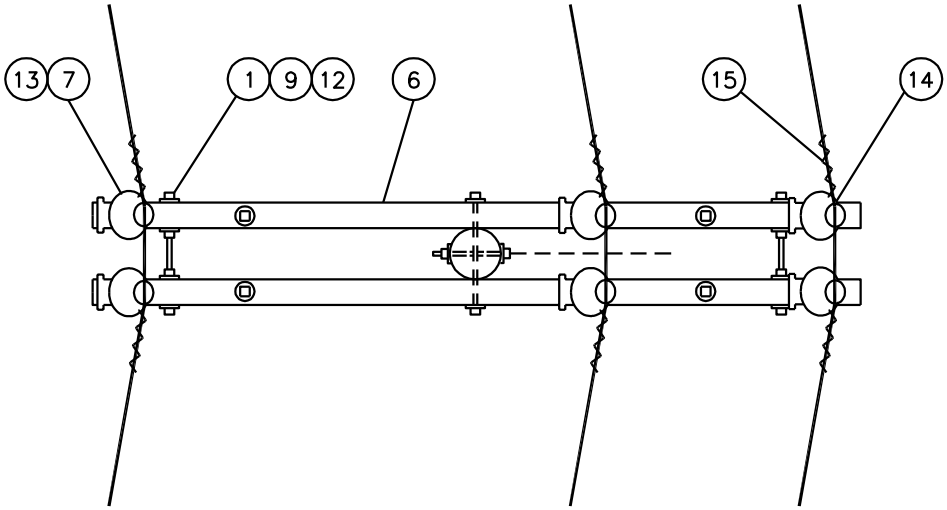

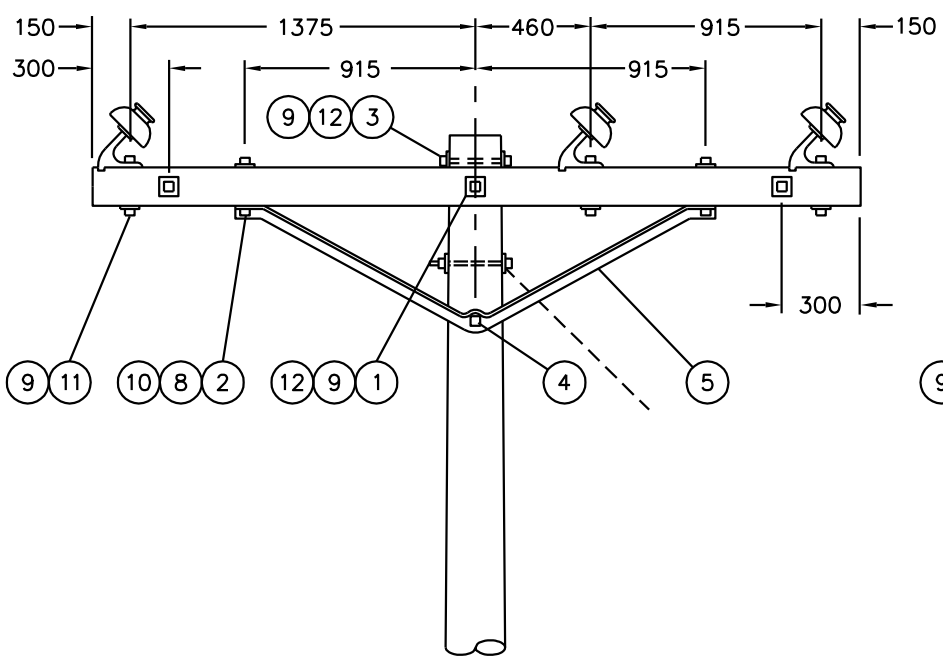

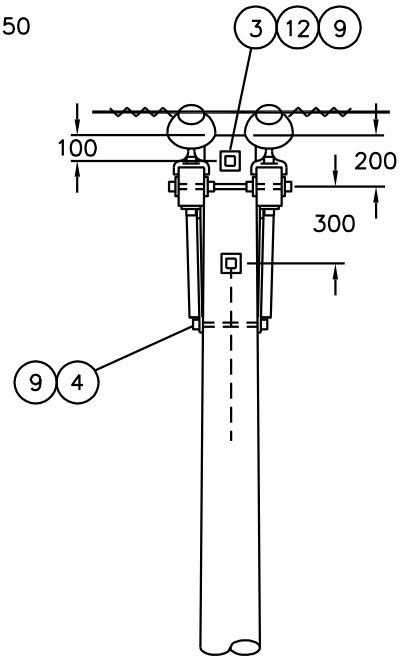

NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SASKATCHEWAN POWER CORP. – DISTRIBUTION ENGINEERING STANDARDS				
DRN. DC	DESIGN CHK.	SAFETY APP.	APPROVAL	THREE PHASE ANGLE DOUBLE CROSSARM DEFLECTIONS OF 11° TO 30°
CHKD. FTK				
DATE 86-08-12	DATE	DATE	DATE	
DATE OF ISSUE: 2007/04/16		DRAWING NO. A–12–56	SHEET 2 of 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY A	QUANTITY B	DESCRIPTION
1	1 08 42	4	4	BOLT - CARRIAGE - 3/8" x 7"
2	1 09 24	2	2	BOLT - DOUBLE ARMING - 5/8" x 24"
3	1 11 08	4	4	BOLT - EYE - 5/8" x 8"
4	1 19 32	4	4	BRACE - CROSSARM 32"
5	1 29 39	2	2	CROSSARM - WOOD - 6" x 6" x 9'
6	1 32 86	2	2	GAIN - POLE
7	1 50 00	2		NUT - EYE - 5/8"
8	1 53 09	2	2	PIN - STEEL
9	1 78 12	2	2	SCREW - LAG 1/2" x 4 1/2"
10	1 93 25	4	4	WASHER - LOCK DOUBLE COIL - 3/8"
11	1 93 27		4	WASHER - LOCK DOUBLE COIL - 5/8"
12	1 93 28	2	2	WASHER - LOCK DOUBLE COIL - 3/4"
13	1 93 34	2	2	WASHER - ROUND 2" x 13/16" HOLE
14	1 93 42	8	8	WASHER - SQUARE 2 1/4" x 2 1/4" x 13/16" HOLE
15	2 XX XX	6	4	CLAMP - DEADEND (SIZE TO SUIT - SEE NOTE 2)
16	2 20 23	2	2	INSULATOR - PIN TYPE
17	2 29 24	6	4	DEADEND - POLYMER TONGUE - TO - TONGUE
18	2 97 50	2	2	UNI - TIE
19	5 09 XX	3	2	CONNECTOR - CRIMPIT (SIZE TO SUIT SEE NOTE 3)

NOTE:

1. **COLUMN "A" MATERIAL FOR 3 WIRE CONSTRUCTION. COLUMN "B" MATERIAL FOR 2 WIRE CONSTRUCTION.**

2. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

3. **REFER TO SECTION A-36 FOR TYPE AND SIZE OF CONNECTOR REQUIRED.**

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*Sask**Power*** DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	**THREE PHASE DEFLECTION AND CORNER 3/0 ACSR AND SMALLER ANGLES OF 31° TO 90°**
CHKD.			
DATE	DATE	DATE	

DATE OF ISSUE: **2003/05/30** | DRAWING NO: **A-12-57** | **SHEET 1 of 2** | REV. **B**

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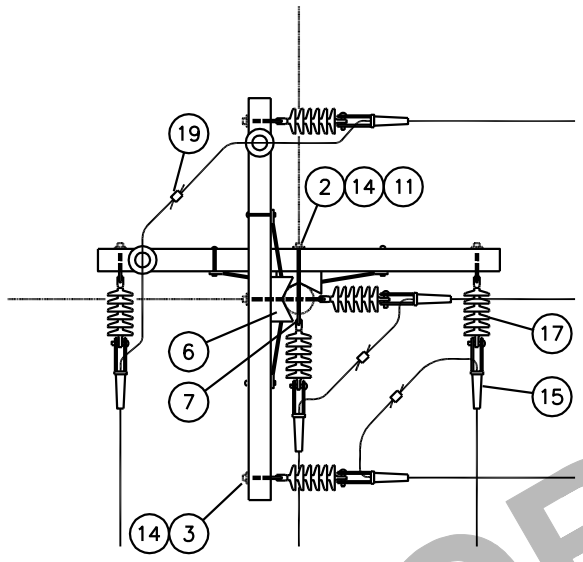

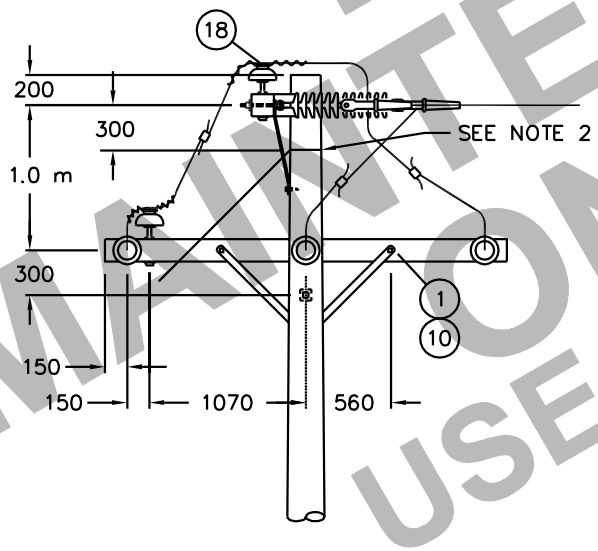

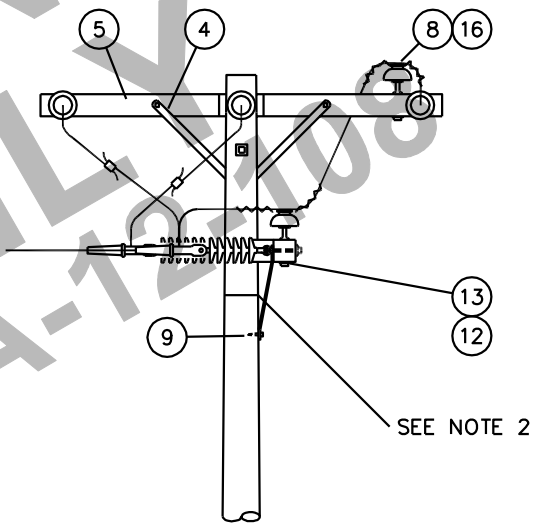

NOTE:

1. FOR TWO WIRE CONSTRUCTION, DELETE CENTER PHASE WIRE.
2. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. J.ARSENAULT	DRN.E.GOTANA CHKD. 2018–11–19	THREE PHASE DEFELCTION AND CORNER 3/0 ACSR AND SMALLER ANGLES OF 30° TO 90°
DATE OF ISSUE 2003-05-30	DRAWING NO. A–12–57	SHEET 2 of 2	REV. B

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 08 42	8	BOLT-CARRIAGE - 3/8" x 7"
2	1 09 26	6	BOLT-DOUBLE ARMING - 5/8" x 26"
3	1 19 32	8	BRACE-CROSSARM - 32"
4	1 29 39	4	CROSSARM-WOOD - 6" x 6" x 9'
5	1 50 00	6	NUT-EYE - 5/8"
6	1 53 09	2	PIN-STEEL
7	1 78 12	4	SCREW-LAG - 1/2 " x 4 1/2"
8	1 93 25	8	WASHER-DOUBLE LOCK - 3/8"
9	1 93 28	2	WASHER-DOUBLE LOCK - 3/4"
10	1 93 34	2	WASHER-ROUND - 2" x 13/16" HOLE
11	1 93 42	20	WASHER-SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE
12	2 20 23	2	INSULATOR-PIN TYPE
13	2 29 24	6	DEADEND-POLYMER CLEVIS/TONGUE ENDS
14	2 01 XX	6	DEADEND-AUTOMATIC-CLEVIS TYPE (SEE NOTE 2)
15	2 97 50	2	UNI-TIE
16	5 09 XX	3	CONNECTOR-COMPRESSION (SIZE TO SUIT – SEE NOTE 1)

NOTE:

1. **REFER TO SECTION A-36 FOR TYPE AND SIZE OF CONNECTOR REQUIRED.**
2. **REFER TO A-12-50 SHEET 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**3 Ø DEFLECTION & CORNER 4/0 & 266 ACSR ANGLES OF 31º TO 90º**
L. MOEN	**A. UHREN**	CHKD.	
		2017-08-04	

DATE OF ISSUE: 2017-11-03	DRAWING NO: **A-12-58**	**SHEET 1 OF 2**	REV. **D**

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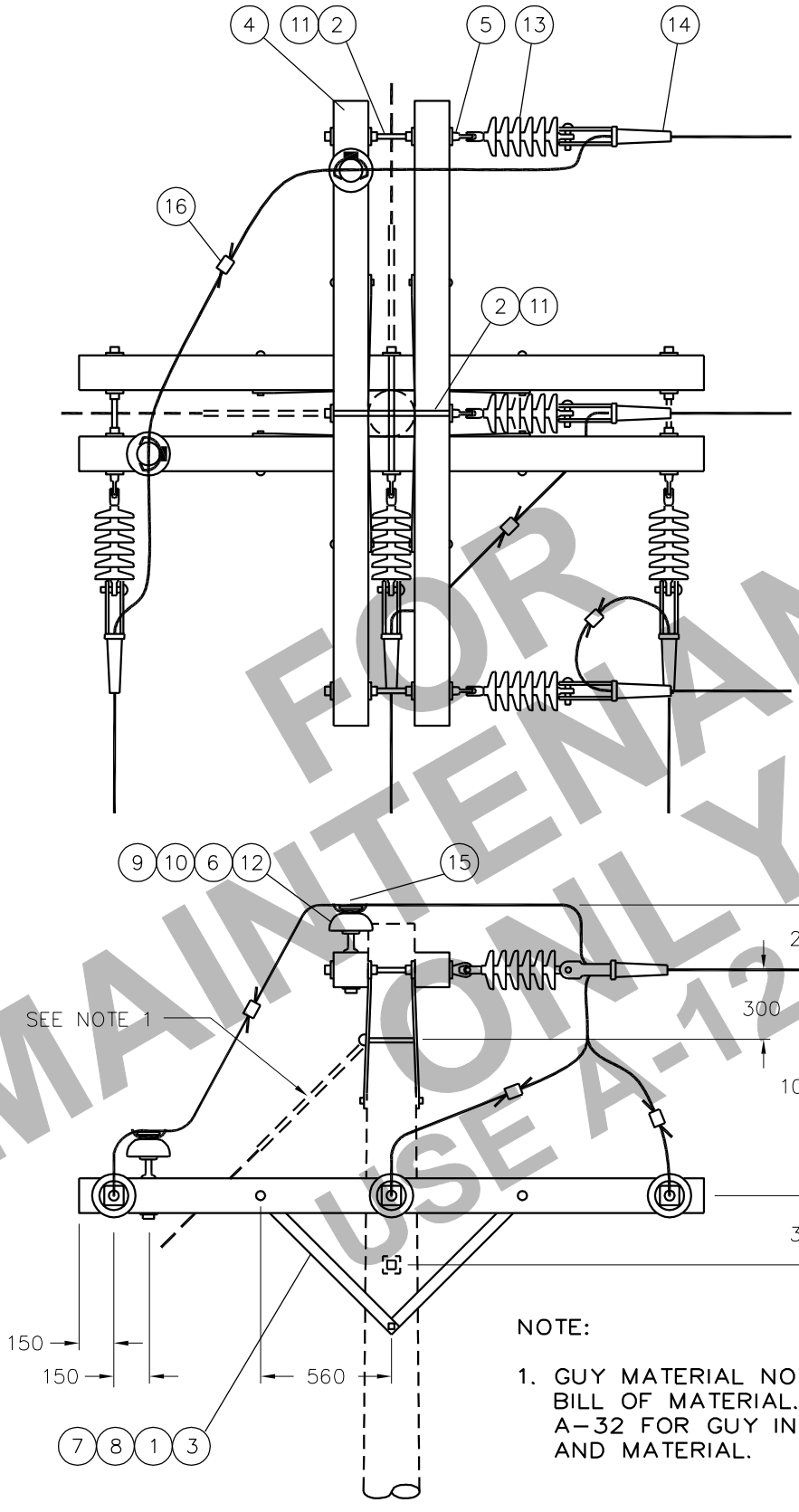

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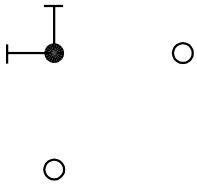

NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L. MOEN	DESIGN CHK. J.ARSENAULT	DRN.E.GOTANA CHKD. 2018–11–19	3ø DEFLECTION & CORNER 4/0 & 266 ACSR ANGLES OF 31° TO 90°
DATE OF ISSUE 2017-11-03	DRAWING NO. A–12–58	SHEET 2 of 2	REV. D

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY A	QUANTITY B	DESCRIPTION
1	1 08 38	4	4	BOLT-CARRIAGE - 3/8" x 4 1/2"
2	1 13 20	2	2	BOLT-MACHINE - 5/8" x 20"
3	1 19 32	4	4	BRACE-CROSSARM - 32"
4	1 29 10	2	2	CROSSARM-WOOD - 4" x 5" x 10'
5	1 32 86	2	2	GAIN-POLE
6	1 53 09	12	8	PIN-STEEL
7	1 78 12	2	2	SCREW-LAG - 1/2" x 4 1/2"
8	1 93 25	4	4	WASHER-DOUBLE LOCK - 3/8"
9	1 93 27	2	2	WASHER-DOUBLE LOCK - 5/8"
10	1 93 28	12	8	WASHER-DOUBLE LOCK - 3/4"
11	1 93 34	12	8	WASHER-ROUND - 2" - 13/16" HOLE
12	1 93 42	4	4	WASHER-SQUARE - 2 1/4" x 2 1/4" - 13/16" HOLE
13	2 20 23	12	8	INSULATOR-PIN TYPE
14	2 65 8X	6	4	COMPRESSION LUG-ONE HOLE 9/16"
15	5 XX XX	4	2	CONNECTOR-COMPRESSION (SIZE TO SUIT-SEE NOTE 3)
16	5 13 XX	12	8	DEADEND PREFORMED (SIZE TO SUIT-SEE NOTE 2)
17	70 08 07	6	4	BOLT - 1/2" x 1 3/4" CAD C/W LOCK WASHER

NOTE:

1. **COLUMN "A" MATERIAL FOR 3 WIRE CONSTRUCTION.**
   COLUMN "B" MATERIAL FOR 2 WIRE CONSTRUCTION.
2. **REFER TO DWG A-12-50 SHEET 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**
3. **REFER TO SECTION A-36 FOR TYPE AND SIZE OF CONNECTOR REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**3Ø SLACK SPAN DEFLECTION AND CORNER ANGLES OF 31° TO 90°**
M. ERETH	**A. UHREN**	CHKD.	
		2014-07-30	

DATE OF ISSUE	DRAWING NO.		
2014/11/17	**A-12-58A**	**SHEET 1 OF 2**	REV. **A**

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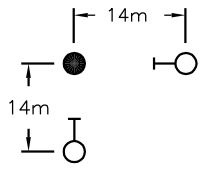

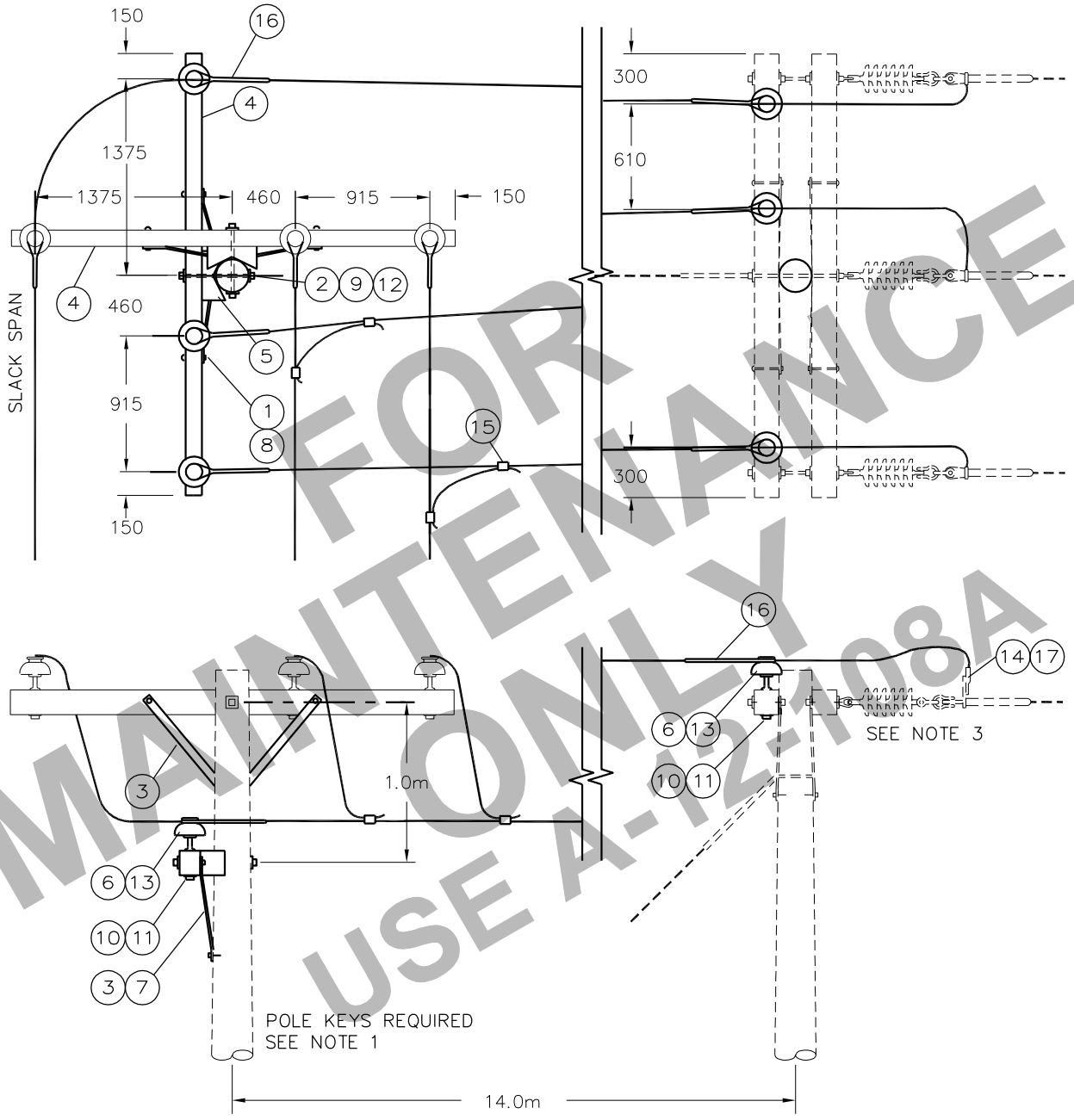

NOTE:

1. POLE KEY ANCHORING MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR POLE KEY INSTALLATION AND MATERIAL.
2. FOR TWO WIRE CONSTRUCTION DELETE CENTER PHASE WIRE.
3. MATERIAL FOR DEAD–ENDS NOT INCLUDED IN BILL OF MATERIAL LIST, REFER TO DWG. A–12–60 FOR DEAD–END MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. J.ARSENAULT	DRN.E.GOTANA CHKD. 2018–11–19	3ø SLACK–SPAN DEFLECTION & CORNER ANGLES OF 31° TO 90°
DATE OF ISSUE 2014-08-01	DRAWING NO. A–12–58A	SHEET 2 of 2	REV. B

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY A	QUANTITY B	DESCRIPTION
1	1 08 42	2	2	BOLT-CARRIAGE – 3/8" x 7"
2	1 11 08	2	2	BOLT-EYE – 5/8" x 8"
3	1 09 20	1	1	BOLT-DOUBLE ARMING – 5/8" x 20"
4	1 19 32	2	2	BRACE – CROSSARM – 32"
5	1 29 39	1	1	CROSSARM-WOOD – 6" x 6" x 9'
6	1 32 86	1	1	GAIN – POLE
7	1 50 00	1	-	NUT – EYE – 5/8"
8	1 78 12	1	1	SCREW-LAG – ½" x 4 ½"
9	1 93 25	2	2	WASHER – LOCK DOUBLE COIL – 3/8"
10	1 93 27	1	1	WASHER – LOCK DOUBLE COIL – 5/8"
11	1 93 42	4	4	WASHER – SQUARE – 2 ¼" x 2 ¼" x 13/16" HOLE
12	2 XX XX	3	2	CLAMP-DEADEND (SIZE TO SUIT – SEE NOTE 2)
13	2 29 24	3	2	DEADEND-POLYMER TONGUE-TO-CLEVIS

NOTE:

1. **COLUMN "A" MATERIAL FOR 3 WIRE CONSTRUCTION.**
   COLUMN "B" MATERIAL FOR 2 WIRE CONSTRUCTION.
2. **REFER TO DWG A-12-50 SHEET 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**3Ø CROSSARM DEADEND 3/0 ACSR AND SMALLER**
M. ERETH	**A. UHREN**	CHKD.	
		2014-07-30	

DATE OF ISSUE	2014/11/17	DRAWING NO. **A-12-59**	**SHEET 1 OF 2**	REV. **B**

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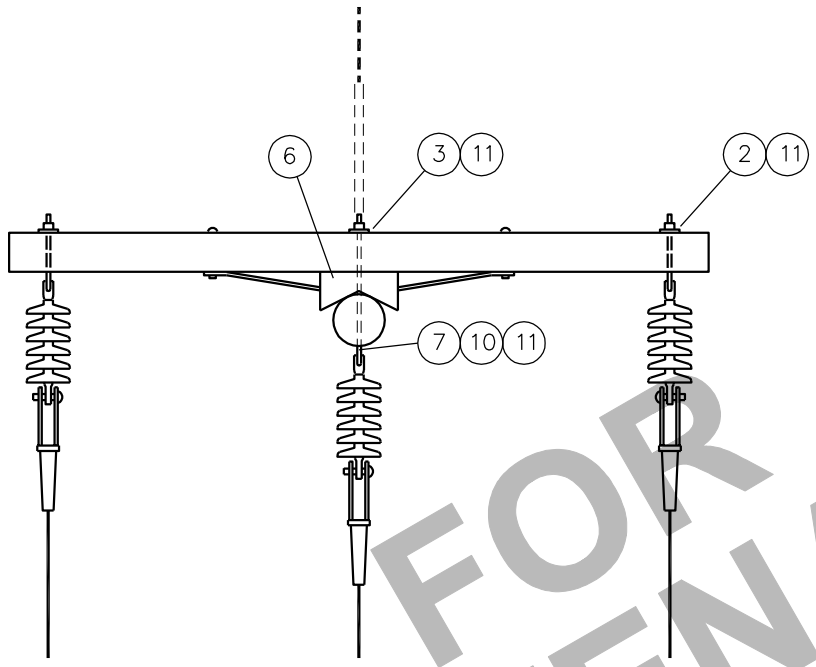

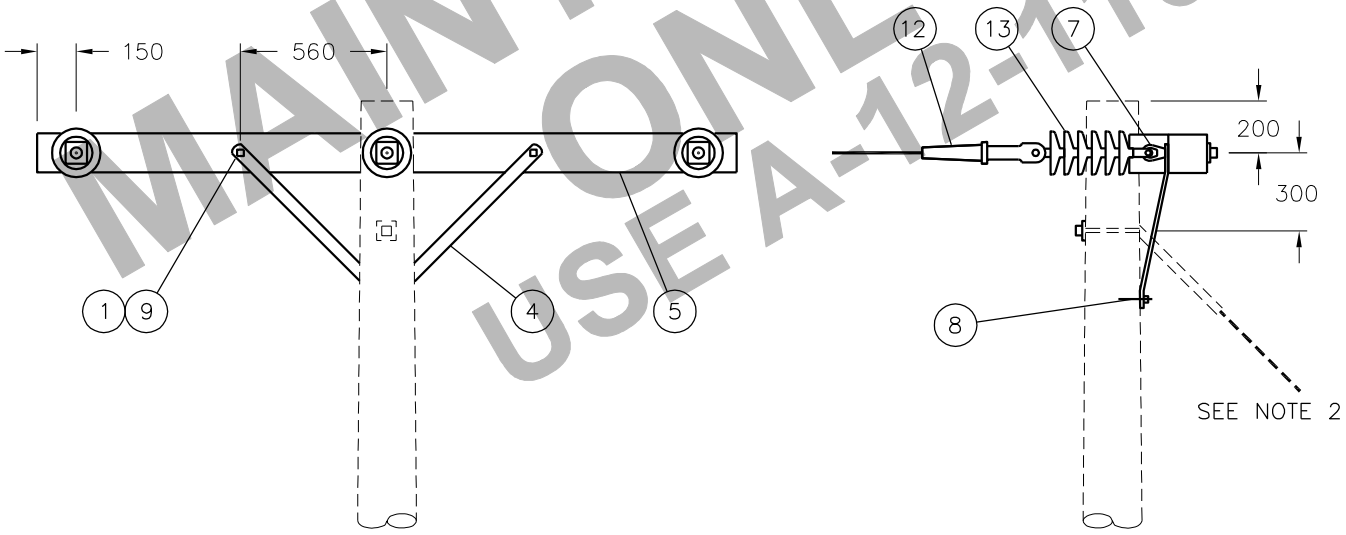

NOTE:

1. FOR TWO WIRE CONSTRUCTION DELETE CENTER PHASE.
2. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A-32 FOR GUY INSTALLATION AND MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. J.ARSENAULT	DRN.E.GOTANA CHKD.	3ø CROSSARM DEADEND 3/0 ACSR AND SMALLER
		2018-11-19	
DATE OF ISSUE 2014-11-17	DRAWING NO. A-12-59	SHEET 2 of 2	REV. C

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 08 42	4	BOLT-CARRIAGE - 3/8" x 7"
2	1 09 26	3	BOLT-DOUBLE ARMING - 5/8" x 26"
3	1 19 32	4	BRACE-CROSSARM - 32"
4	1 29 39	2	CROSSARM-WOOD - 6" x 6" x 9’
5	1 50 00	3	NUT-EYE - 5/8"
6	1 78 12	2	SCREW-LAG - 1/2" x 4 1/2"
7	1 93 25	4	WASHER-DOUBLE LOCK - 3/8"
8	1 93 42	10	WASHER-SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE
9	2 29 24	3	DEADEND-POLYMER CLEVIS TONGUE ENDS
10	2 01 XX	3	DEADEND-AUTOMATIC-CLEVIS TYPE (SEE NOTE 1)

NOTE:

1. **REFER TO A-12-50 SHEET 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**3 Ø CROSSARM DEADEND 4/0 & 266 ACSR**
L. MOEN	**A. UHREN**	CHKD.	
		2017-08-04	

DATE OF ISSUE: 2017-11-03 | DRAWING NO: **A-12-60** | **SHEET 1 OF 2** | REV. **E**

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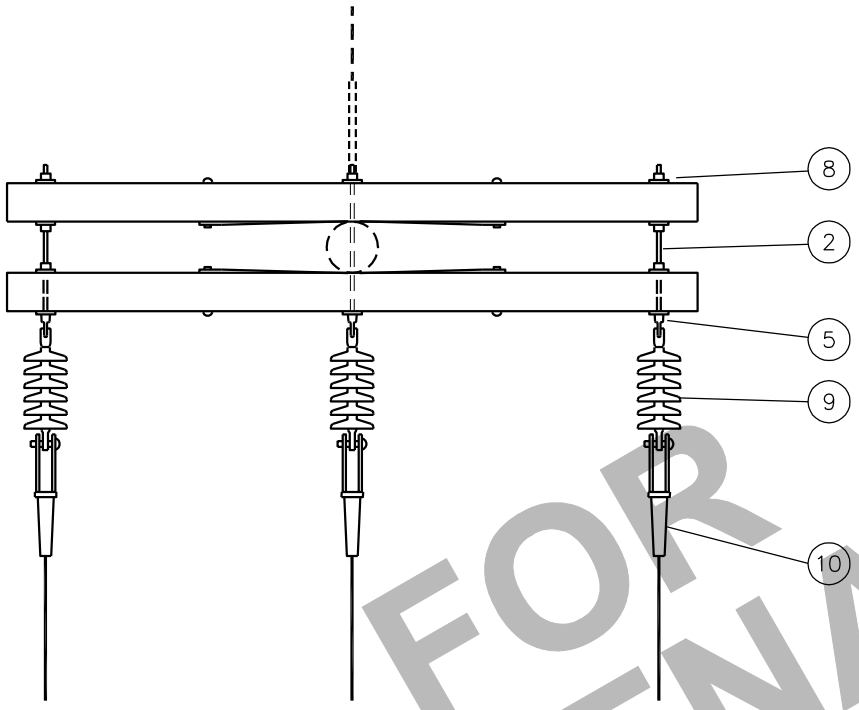

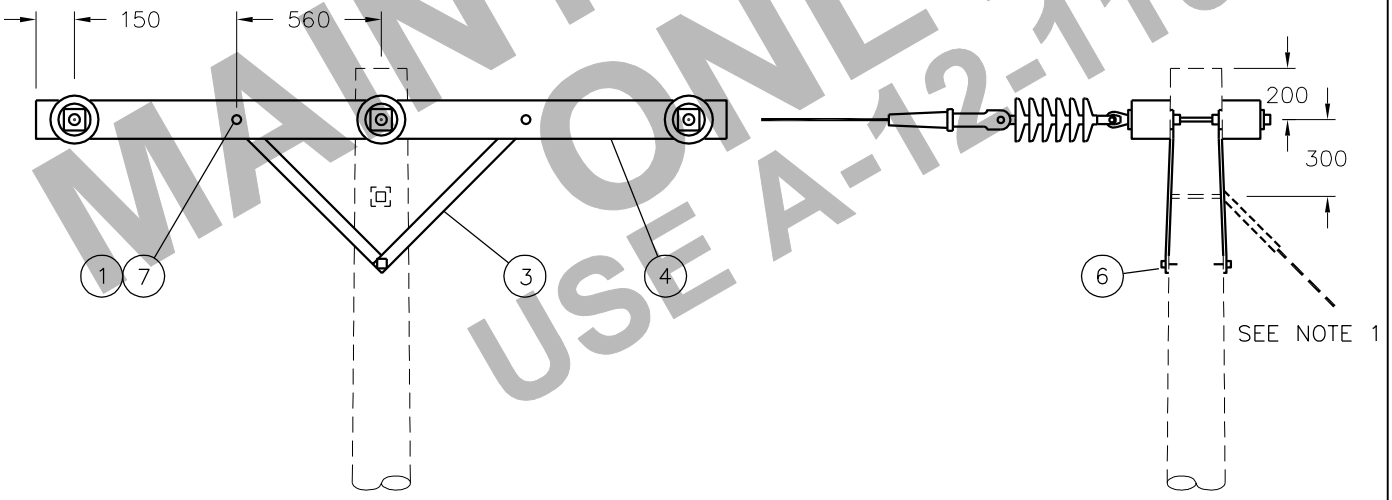

NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. J.ARSENAULT	DRN.E.GOTANA CHKD.	3ø CROSSARM DEADEND 4/0 & 266 ACSR
		2018–11–19	
DATE OF ISSUE 2017-11-03	DRAWING NO. A–12–60	SHEET 2 of 2	REV. D

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 08 42	4	BOLT – CARRIAGE – 3/8” x 7”
2	1 09 24	3	BOLT – DOUBLE ARMING – 5/8” x 24”
3	1 19 32	4	BRACE – CROSSARM – 32”
4	1 29 39	2	CROSSARM – WOOD – 6” x 6” x 9’
5	1 50 00	6	NUT – EYE – 5/8”
6	1 53 09	3	PIN – STEEL
7	1 78 12	2	SCREW – LAG – 1/2” x 4 1/2”
8	1 93 25	4	WASHER – DOUBLE LOCK – 3/8”
9	1 93 28	3	WASHER – DOUBLE LOCK – 3/4”
10	1 93 34	3	WASHER – ROUND – 2” x 13/16” HOLE
11	1 93 42	10	WASHER – SQUARE – 2 1/4” x 2 1/4” x 13/16” HOLE
12	2 01 XX	3	DEADEND-AUTOMATIC-CLEVIS TYPE (SEE NOTE 1)
13	2 01 XX	3	DEADEND-AUTOMATIC-CLEVIS TYPE (SEE NOTE 1)
14	2 20 23	3	INSULATOR – PIN TYPE
15	2 29 24	6	DEADEND-POLYMER-CLEVIS AND TONGUE ENDS
16	2 97 50	3	UNI-TIE
17	5 09 XX	3	CONNECTOR-COMPRESSION (SIZE TO SUIT – SEE NOTE 2)

NOTE:

1. **REFER TO DWG A-12-50 SHEET 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**
2. **REFER TO SECTION A-36 FOR TYPE AND SIZE OF CONNECTOR REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**3Ø DOUBLE DEADEND CONDUCTOR CHANGE**
L. MOEN	**A. UHREN**	CHKD.	
		2017-08-04	

DATE OF ISSUE: 2017-11-03 | DRAWING NO: **A-12-61** | **SHEET 1 OF 2** | REV. **C**

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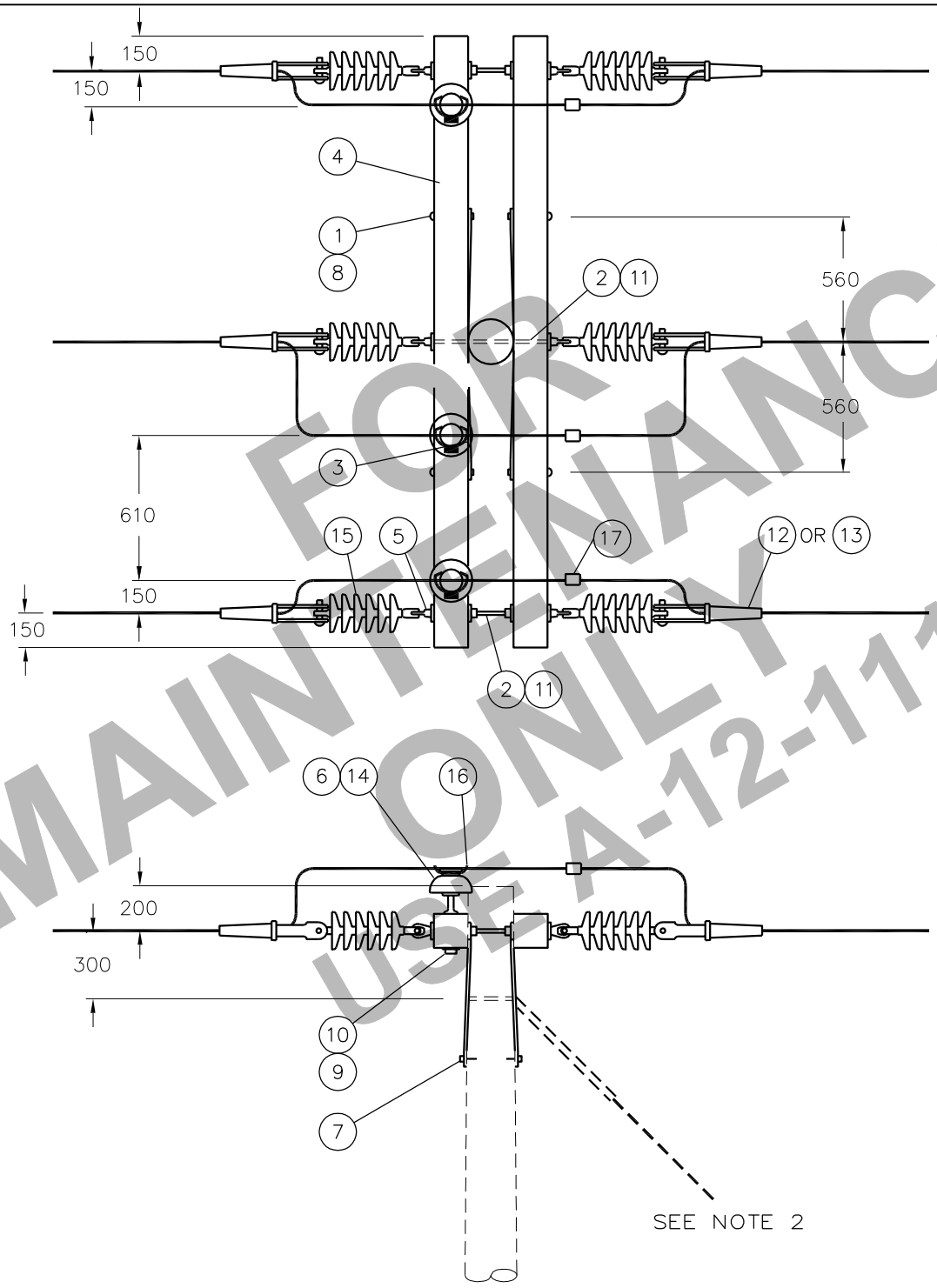

NOTE:

1. DOWNGUY & ANCHOR NOT REQUIRED UNLESS THERE IS A CHANGE IN CONDUCTOR TENSION.
2. GUYING MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. J.ARSENAULT	DRN.E.GOTANA CHKD. 2018–11–19	3ø DOUBLE DEADEND CONDUCTOR CHANGE
DATE OF ISSUE **2017-11-03**	DRAWING NO. A–12–61	SHEET 2 of 2	REV. D

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY A	QUANTITY B	DESCRIPTION
1	1 08 42	2	2	BOLT-CARRIAGE - 3/8" x 7"
2	1 11 08	2	2	BOLT-EYE - 5/8" x 8"
3	1 09 20	1	1	BOLT-DOUBLE ARMING - 5/8" x 20"
4	1 19 32	2	2	BRACE-CROSSARM - 32"
5	1 29 39	1	1	CROSSARM-WOOD - 6" x 6" x 9'
6	1 32 86	1	1	GAIN-POLE
7	1 50 00	1	-	NUT-EYE - 5/8"
8	1 53 09	2	1	PIN-STEEL
9	1 78 12	1	1	SCREW-LAG - 1/2" x 4 1/2"
10	1 93 25	2	2	WASHER-LOCK DOUBLE COIL - 3/8"
11	1 93 27	-	2	WASHER-LOCK DOUBLE COIL - 5/8"
12	1 93 28	2	1	WASHER-LOCK DOUBLE COIL - 3/4"
13	1 93 34	2	1	WASHER-ROUND 2" x 13/16" HOLE
14	1 93 42	4	4	WASHER-SQUARE 2 1/4" x 2 1/4" x 13/16" HOLE
15	2 0X XX	3	2	CLAMP-DEADEND (SIZE TO SUIT - SEE NOTE 2)
16	2 20 23	2	1	INSULATOR-PIN TYPE
17	2 29 24	3	2	DEADEND-POLYMER-CLEVIS AND TONGUE ENDS
18	2 97 50	2	1	UNI-TIE
19	5 09 XX	3	2	CONNECTOR-COMPRESSION (SIZE TO SUIT - SEE NOTE 3)

NOTE:

1. **COLUMN "A" MATERIAL FOR 3 WIRE CONSTRUCTION.**
   COLUMN "B" MATERIAL FOR 2 WIRE CONSTRUCTION.
2. **REFER TO DWG A-12-50 SHEET 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**
3. **REFER TO SECTION A-36 FOR TYPE AND SIZE OF CONNECTOR REQUIRED.**
4. **IF CENTRE PHASE WIRE IS ON OPPOSITE SIDE OF POLE TO THE TAP-OFF, THEN SUBTRACT ONE EACH OF ITEMS 8, 12, 13, 16 AND 18.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**3Ø TAP-OFF 3/0 ACSR AND SMALLER**
M. ERETH	**A. UHREN**	CHKD.	
		2014-07-30	

DATE OF ISSUE 2014/11/17	DRAWING NO. **A-12-62**	**SHEET 1 OF 2**	REV. **C**

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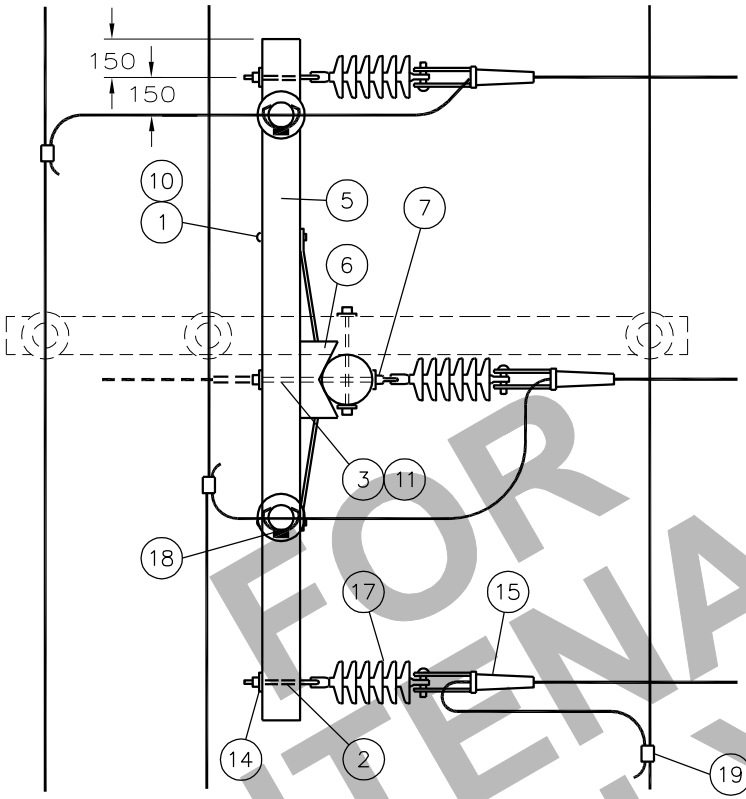

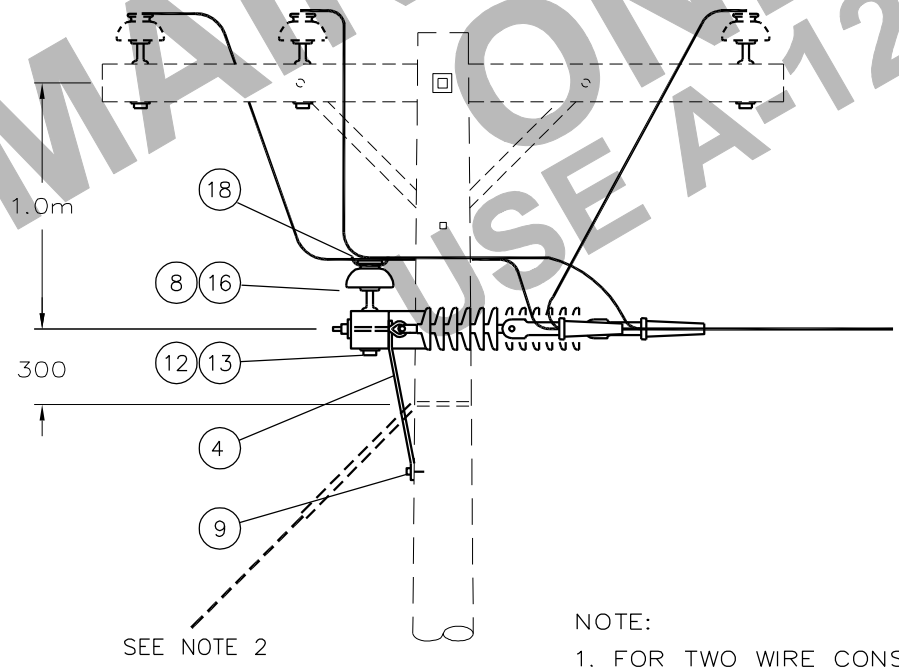

NOTE:

1. FOR TWO WIRE CONSTRUCTION DELETE CENTER PHASE WIRE.
2. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND BILL OF MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. J.ARSENAULT	DRN.E.GOTANA CHKD.	3ø TAP–OFF 3/0 ACSR AND SMALLER
		2018–11–19	
DATE OF ISSUE 2014-08-01	DRAWING NO. A–12–62	SHEET 2 of 2	REV. D

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 08 42	4	BOLT – CARRIAGE – 3/8" x 7"
2	1 09 26	3	BOLT – DOUBLE ARMING – 5/8" x 26"
3	1 19 32	4	BRACE – CROSSARM – 32"
4	1 29 39	2	CROSSARM-WOOD – 6" x 6" x 9'
5	1 50 00	3	NUT – EYE – 5/8"
6	1 53 09	1	PIN – STEEL
7	1 78 12	2	SCREW – LAG – ½" x 4 ½"
8	1 93 25	4	WASHER – DOUBLE LOCK – 3/8"
9	1 93 28	1	WASHER – DOUBLE LOCK – ¾"
10	1 93 34	1	WASHER – ROUND – 2" x 13/16" HOLE
11	1 93 42	10	WASHER – SQUARE – 2 ¼" x 2 ¼" x 13/16" HOLE
12	2 06 XX	3	CONNECTOR – AMPACT (SIZE TO SUIT – SEE NOTE 1)
13	2 20 23	1	INSULATOR – PIN TYPE
14	2 29 24	3	DEADEND-POLYMER-CLEVIS AND TONGUE ENDS
15	2 01 XX	3	DEADEND-AUTOMATIC-CLEVIS TYPE (SEE NOTE 3)
16	2 97 50	1	UNI-TIE

NOTE:

1. **SEE SECTION A-36 FOR TYPE AND SIZE OF CONNECTOR REQUIRED.**
2. **IF CENTRE PHASE WIRE IS ON THE OPPOSITE SIDE OF THE POLE TO THE TAP-OFF, THEN ADD 1 EACH OF ITEMS 6, 9, 10, 13, AND 16.**
3. **REFER TO A-12-50 SHEET 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**3 Ø TAP-OFF 4/0 & 266 ACSR**
L. MOEN	**A. UHREN**	CHKD.	
		2017-08-04	

DATE OF ISSUE: 2017-11-03	DRAWING NO: **A-12-63**	**SHEET 1 OF 2**	REV. **E**

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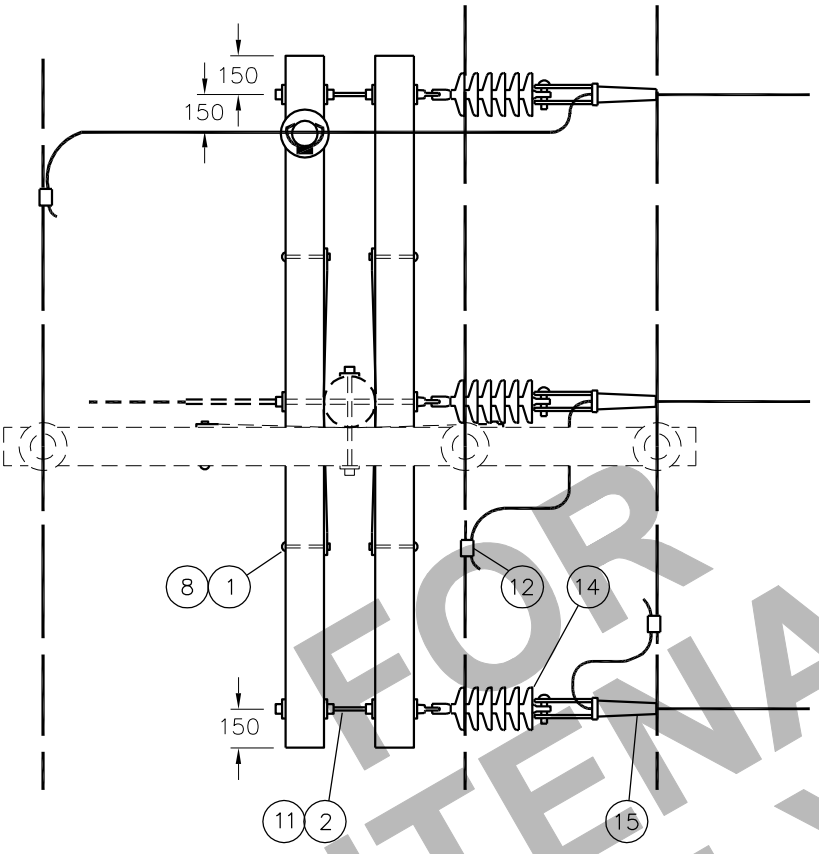

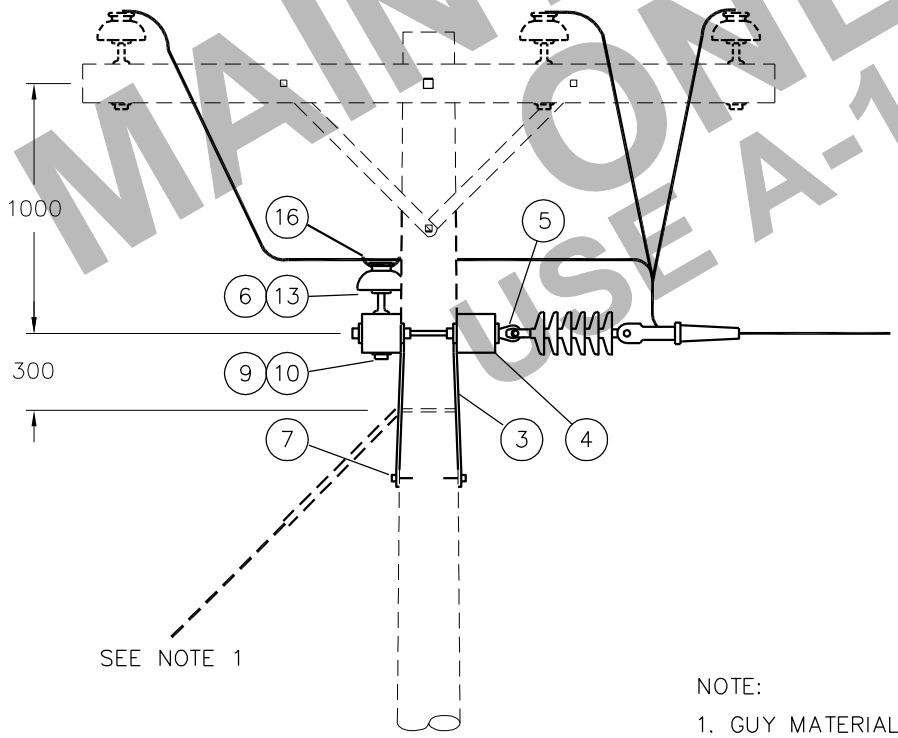

NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND BILL OF MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. J.ARSENAULT	DRN.E.GOTANA CHKD.	3ø TAP–OFF 4/0 & 266 ACSR
		2018–11–19	
DATE OF ISSUE 2017-08-10		DRAWING NO. A–12–63	SHEET 2 of 2 REV. E

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY A	QUANTITY B	DESCRIPTION
1	1 08 38	2	2	BOLT-CARRIAGE - 3/8" x 4 1/2"
2	1 13 20	1	1	BOLT-MACHINE - 5/8" x 20"
3	1 19 32	2	2	BRACE-CROSSARM - 32"
4	1 29 10	1	1	CROSSARM-WOOD - 4" x 5" x 10'
5	1 32 86	1	1	GAIN-POLE
6	1 53 09	6	4	PIN-STEEL
7	1 78 12	1	1	SCREW-LAG - 1/2" x 4 1/2"
8	1 93 25	2	2	WASHER-DOUBLE LOCK - 3/8"
9	1 93 27	1	1	WASHER-DOUBLE LOCK - 5/8"
10	1 93 28	6	4	WASHER-DOUBLE LOCK - 3/4"
11	1 93 34	6	4	WASHER-ROUND - 2" - 13/16" HOLE
12	1 93 42	2	2	WASHER-SQUARE - 2 1/4" x 2 1/4" - 13/16" HOLE
13	2 06 XX	5	3	CONNECTOR-AMPACT (SIZE TO SUIT - SEE NOTE 3)
13	5 XX XX	5	3	CONNECTOR-COMPRESSION (SIZE TO SUIT - SEE NOTE 3)
14	2 20 23	6	4	INSULATOR-PIN TYPE
15	2 65 8X	3	2	COMPRESSION LUG - ONE HOLE 9/16"
16	5 13 XX	6	4	DEADEND-PREFORMED (SIZE TO SUIT - SEE NOTE 2)
17	70 08 07	3	2	BOLT - 1/2" x 1 3/4" CAD C/W LOCK WASHER

NOTE:

1. **COLUMN "A" MATERIAL FOR 3 WIRE CONSTRUCTION.**
   COLUMN "B" MATERIAL FOR 2 WIRE CONSTRUCTION.
2. **REFER TO DWG A-12-50 SHEET 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**
3. **REFER TO SECTION A-36 FOR TYPE AND SIZE OF CONNECTOR REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**3Ø SLACKSPAN TAP-OFF**
M. ERETH	**A. UHREN**	CHKD.	
		2014-07-31	

DATE OF ISSUE 2014/11/17 | DRAWING NO. **A-12-64** | **SHEET 1 OF 2** | REV. **B**

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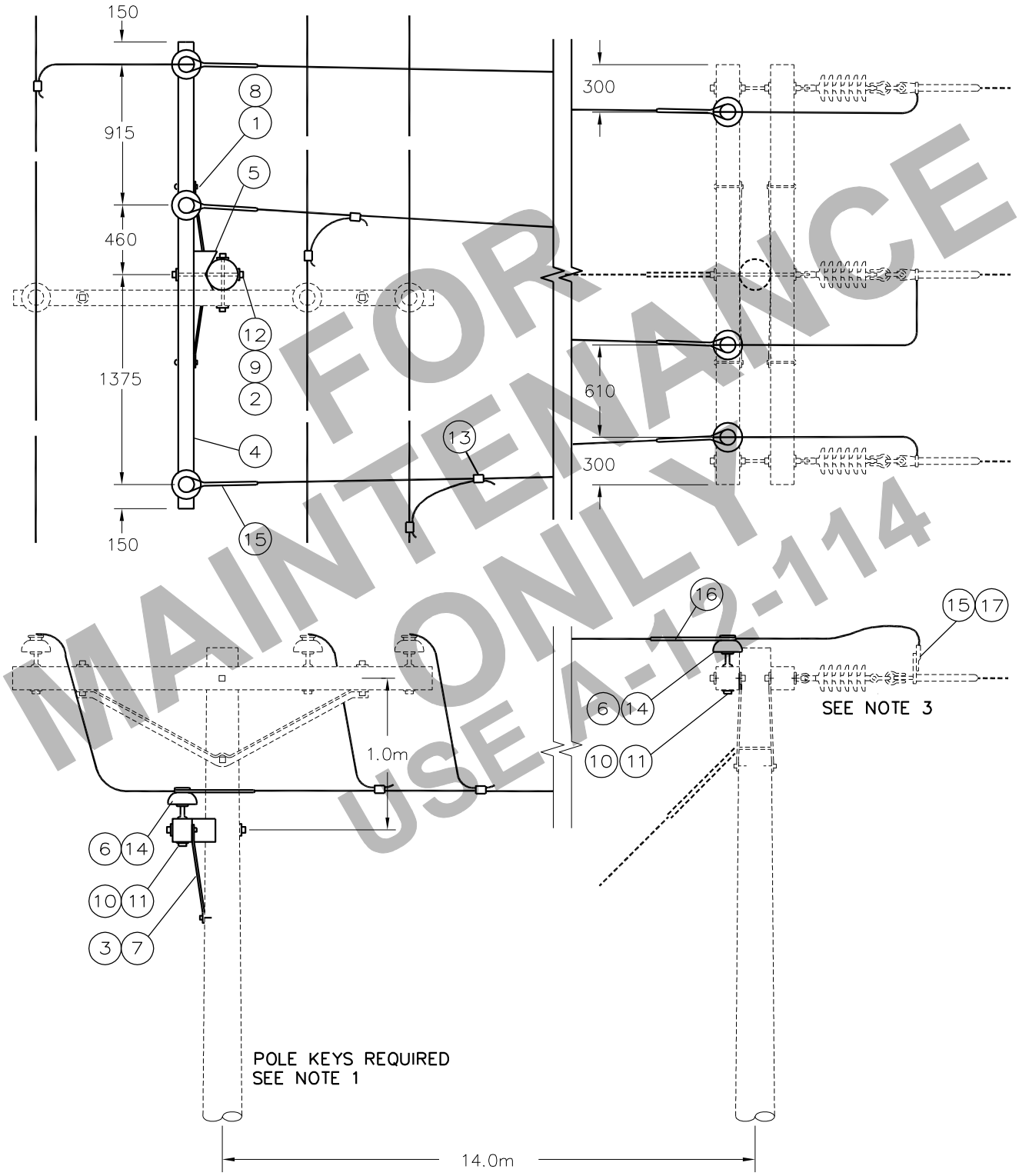

NOTE:

1. POLE KEY ANCHORING MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR POLE KEY INSTALLATION AND MATERIAL.
2. FOR TWO WIRE CONSTRUCTION DELETE CENTER PHASE WIRE.
3. MATERIAL FOR DEAD–ENDS NOT INCLUDED IN BILL OF MATERIAL LIST, REFER TO DWG. A–12–60 FOR DEAD–END MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. J.ARSENAULT	DRN.E.GOTANA CHKD.	3ø SLACK–SPAN TAP–OFF
		2018–11–19	
DATE OF ISSUE 2014-08-01	DRAWING NO. A–12–64	SHEET 2 of 2	REV. D

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 08 38	4	BOLT-CARRIAGE - 3/8" x 4 1/2"
2	1 13 14	2	BOLT-MACHINE - 5/8" x 14"
3	1 19 32	4	BRACE-CROSSARM - 32"
4	1 29 10	2	CROSSARM-WOOD - 4" x 5" x 10'-0"
5	1 53 09	6	PIN-STEEL
6	1 78 12	2	SCREW-LAG - 1/2" x 4 1/2"
7	1 93 25	4	WASHER-DOUBLE LOCK - 3/8"
8	1 93 27	2	WASHER-DOUBLE LOCK - 5/8"
9	1 93 28	6	WASHER-DOUBLE LOCK - 3/4"
10	1 93 34	6	WASHER-ROUND - 2" x 13/16" HOLE
11	1 93 42	4	WASHER-SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE
12	2 20 23	6	INSULATOR-PIN TYPE
13	2 58 XX	6	ARMOUR ROD (SIZE TO SUIT-SEE NOTE 1)
14	2 97 28	10.2m	WIRE-TIE - #8 STEEL SOLID

NOTE:

1. REFER TO DWG. A-12-50 SHEET 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**DOUBLE CIRCUIT 3Ø TANGENT 3/0 ACSR AND SMALLER**
M. ERETH	**A. UHREN**	CHKD.	
		2013-10-09	

DATE OF ISSUE: 2014/03/21	DRAWING NO: **A-12-65**	**SHEET 1 OF 2**	REV. **A**

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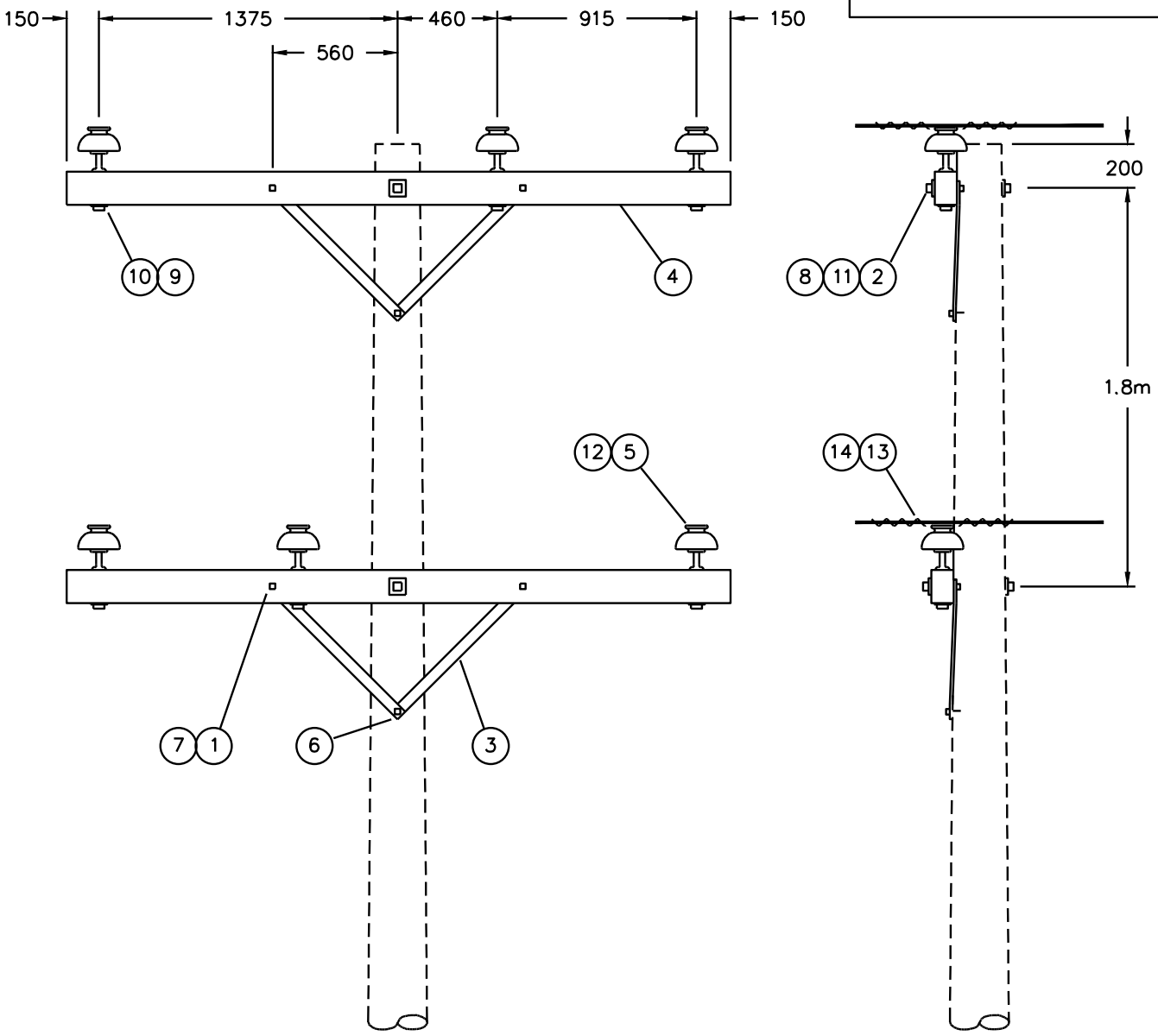

NOTE:

1. STRUCTURE SUITABLE FOR LINE DEFLECTIONS UP TO A MAXIMUM OF 4° FOR 1/0 RAVEN AND 3° FOR 3/0 PIGEON.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL M. ERETH	DESIGN CHK. A. UHREN	DRN. DC CHKD. 2013-10-17	DOUBLE CIRCUIT 3ø TANGENT 3/0 ACSR & SMALLER
DATE OF ISSUE 2014/03/21	DRAWING NO. A-12-65	SHEET 2 of 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 12 06	4	BOLT-MACHINE - 1/2" x 6"
2	1 13 12	2	BOLT-MACHINE - 5/8" x 12"
3	1 13 14	2	BOLT-MACHINE - 5/8" x 14"
4	1 18 72	2	BRACE-ANGLE - 72"
5	1 29 10	2	CROSSARM-WOOD - 4" x 5" x 10'-0"
6	1 53 09	6	PIN-STEEL
7	1 93 26	4	WASHER-DOUBLE LOCK - 1/2"
8	1 93 27	4	WASHER-DOUBLE LOCK - 5/8"
9	1 93 28	6	WASHER-DOUBLE LOCK - 3/4"
10	1 93 30	4	WASHER-ROUND - 1 3/8" x 9/16" HOLE
11	1 93 34	6	WASHER-ROUND - 2" x 13/16" HOLE
12	1 93 42	6	WASHER-SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE
13	2 20 23	6	INSULATOR-PIN TYPE
14	2 58 XX	6	ARMOUR ROD (SIZE TO SUIT-SEE NOTE 1)
15	2 97 28	10.2m	WIRE-TIE - #8 STEEL SOLID

NOTE:

1. REFER TO DWG. A-12-50 SHEET 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**DOUBLE CIRCUIT 3Ø TANGENT 4/0 & 266 ACSR**
M. ERETH	**A. UHREN**	CHKD.	
		2013-10-09	

DATE OF ISSUE: 2014/03/21 | DRAWING NO: **A-12-66** | **SHEET 1 OF 2** | REV. **D**

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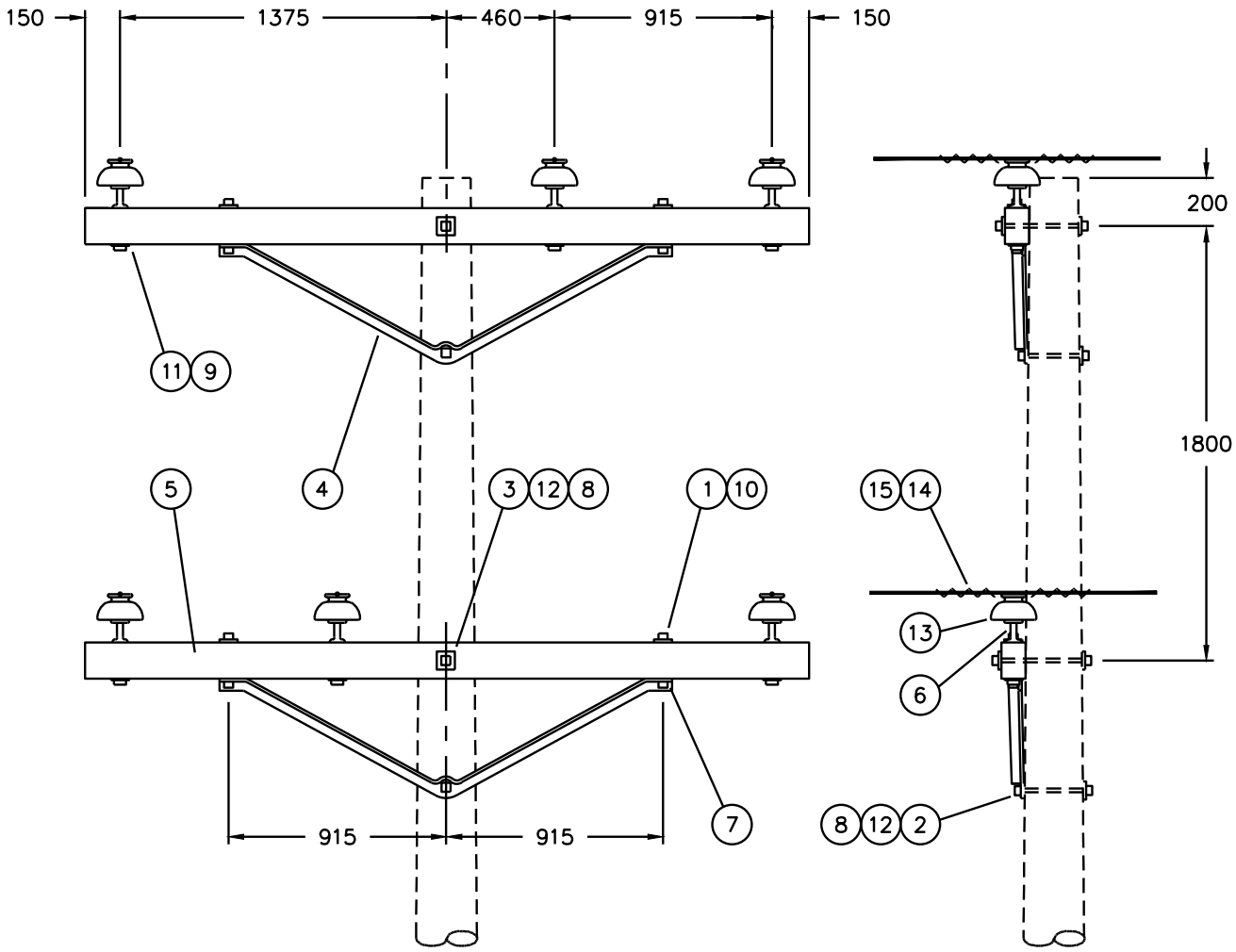

COND. SIZE		MAX DEFLECTION
4/0	–	2½"
266	–	2"

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL M. ERETH	DESIGN CHK. A. UHREN	DRN. DC CHKD. 2013-10-17	DOUBLE CIRCUIT 3ø TANGENT 4/0 & 266 ACSR
DATE OF ISSUE 2014/03/21	DRAWING NO. A-12-66	SHEET 2 of 2	REV. C

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 12 06	4	BOLT-MACHINE - 1/2" x 6"
2	1 13 10	1	BOLT-MACHINE - 5/8" x 10"
3	1 13 12	2	BOLT-MACHINE - 5/8" x 12"
4	1 13 14	2	BOLT-MACHINE - 5/8" x 14"
5	1 18 72	2	BRACE-ANGLE - 72"
6	1 29 10	2	CROSSARM-WOOD - 4" x 5" x 10'
7	1 53 01	6	PIN-ANGLE
8	1 93 26	4	WASHER-DOUBLE LOCK - 1/2"
9	1 93 27	11	WASHER-DOUBLE LOCK - 5/8"
10	1 93 30	4	WASHER-ROUND - 1 3/8" x 9/16" HOLE
11	1 93 33	6	WASHER-ROUND - 1 3/4" x 11/16" HOLE
12	1 93 42	8	WASHER-SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE
13	2 20 23	6	INSULATOR-PIN TYPE
14	2 58 XX	6	ARMOUR ROD (SIZE TO SUIT-SEE NOTE 1)
15	2 97 28	10.2m	WIRE-TIE - #8 STEEL SOLID

NOTE:

1. REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. ARU	DOUBLE CIRCUIT 3Ø ANGLE SINGLE CROSSARM DEFLECTIONS OF UP TO 10°
L. MOEN	A. UHREN	CHKD.	
		2016-08-09	

DATE OF ISSUE: 2016/11/08	DRAWING NO: A-12-67	SHEET 1 OF 2	REV. B

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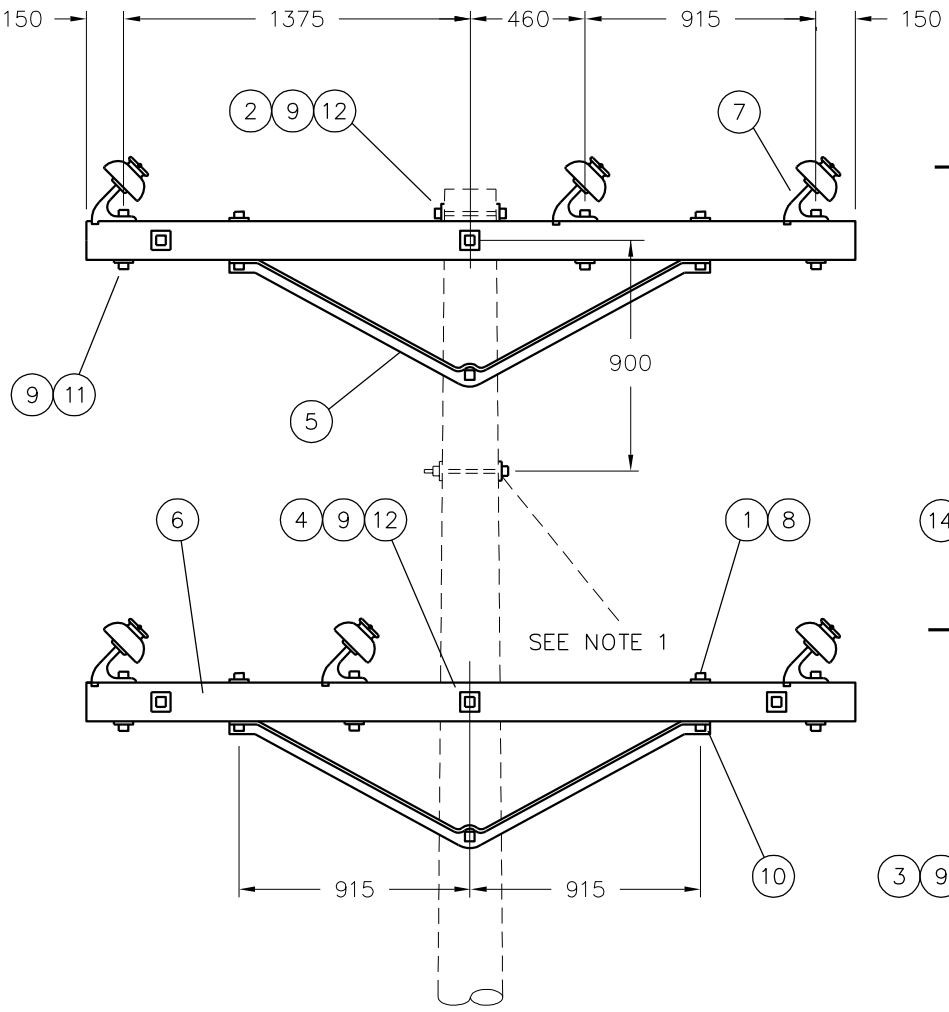
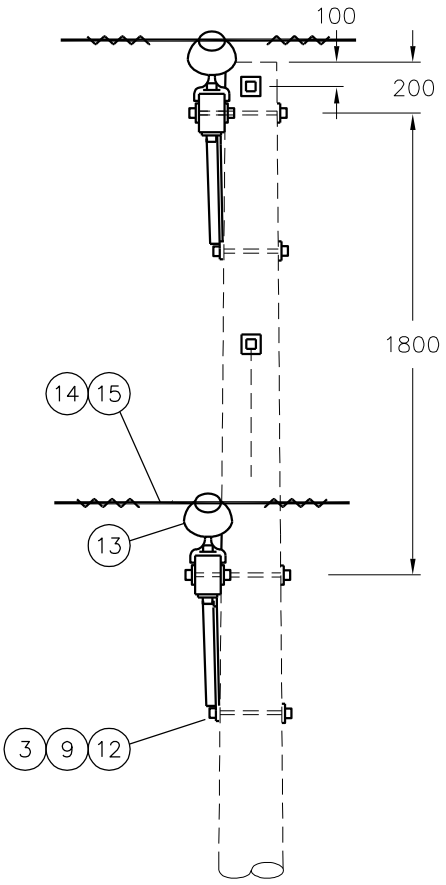


COND SIZE	DEFLECTION
1/0 ACSR	4° – 10°
3/0 ACSR	3° – 10°
4/0 ACSR	2.5° – 10°
266 ACSR	2° – 10°



NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND BILL OF MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. A.UHREN	DRN. N.KIM CHKD. 2016–04–19	DOUBLE CIRCUIT 3ø ANGLE SINGLE CROSSARM DEFLECTIONS OF UP TO 10°
DATE OF ISSUE 2016/05/04		DRAWING NO. A–12–67 SHEET 2 of 2	REV. C

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	6	BOLT-DOUBLE ARMING - 5/8" x 20"
2	1 12 06	8	BOLT-MACHINE - 1/2" x 6"
3	1 13 10	1	BOLT-MACHINE - 5/8" x 10"
4	1 13 12	2	BOLT-MACHINE - 5/8" x 12"
5	1 18 72	4	BRACE-ANGLE - 72"
6	1 29 10	4	CROSSARM-WOOD - 4" x 5" x 10'
7	1 53 01	12	PIN-ANGLE
8	1 93 26	8	WASHER-DOUBLE LOCK - 1/2"
9	1 93 27	27	WASHER-DOUBLE LOCK - 5/8"
10	1 93 30	8	WASHER-ROUND - 1 3/8" x 9/16" HOLE
11	1 93 33	12	WASHER-ROUND - 1 3/4" x 11/16" HOLE
12	1 93 42	22	WASHER-SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE
13	2 20 23	12	INSULATOR-PIN TYPE
14	2 58 XX	6	ARMOUR ROD (SIZE TO SUIT-SEE NOTE 1)
15	2 97 28	20.4m	WIRE-TIE - #8 STEEL SOLID

NOTE:

1. REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**DOUBLE CIRCUIT 3Ø ANGLE DOUBLE CROSSARM DEFLECTIONS OF 11° to 30°**
M. ERETH	**A. UHREN**	CHKD.	
		2013-10-09	

DATE OF ISSUE: 2014/03/21 | DRAWING NO: **A-12-68** | **SHEET 1 OF 2** | REV. **A**

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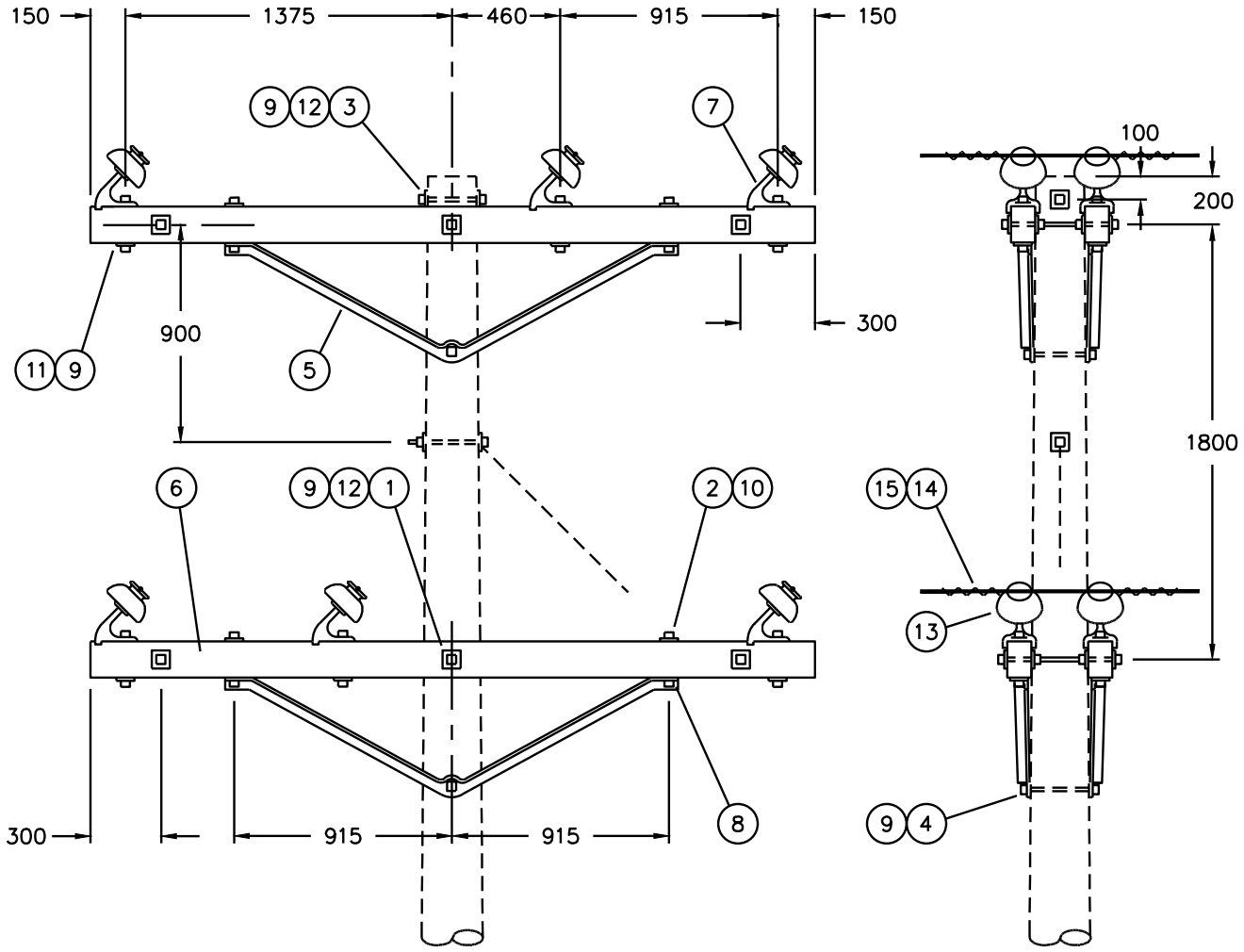

NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A-32 FOR GUY INSTALLATION AND BILL OF MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL M. ERETH	DESIGN CHK. A. UHREN	DRN. DC CHKD. 2013-10-17	DOUBLE CIRCUIT 3ø ANGLE DOUBLE CROSSARM DEFLECTIONS OF 11° TO 30°
DATE OF ISSUE 2014/03/21	DRAWING NO. A-12-68	SHEET 2 of 2	REV. B

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 08 42	8	BOLT - CARRIAGE - 3/8" x 7"
2	1 11 08	8	BOLT - EYE - 5/8" x 8"
3	1 09 20	4	BOLT - DOUBLE ARMING - 5/8" x 20"
4	1 19 32	8	BRACE - CROSSARM - 32"
5	1 29 39	4	CROSSARM - WOOD - 6" x 6" x 9'
6	1 32 86	4	GAIN - POLE
7	1 50 00	4	NUT - EYE - 5/8"
8	1 53 09	4	PIN - STEEL
9	1 78 12	4	SCREW - LAG - 1/2" x 4 1/2"
10	1 93 25	8	WASHER - DOUBLE LOCK - 3/8"
11	1 93 28	4	WASHER - DOUBLE LOCK - 3/4"
12	1 93 34	4	WASHER - ROUND - 2" x 13/16" HOLE
13	1 93 42	16	WASHER - SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE
14	2 01 XX	12	CLAMP - DEADEND (SIZE TO SUIT - SEE NOTE 1)
15	2 20 23	4	INSULATOR - PIN TYPE
16	2 29 24	12	DEADEND - POLYMER - CLEVIS AND TONGUE ENDS
17	2 97 50	4	UNI - TIE
18	5 09 XX	6	CONNECTOR - CRIMPIT (SIZE TO SUIT - SEE NOTE 2)

NOTE:

1. REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.

2. REFER TO SECTION A-36 FOR TYPE AND SIZE OF CONNECTOR REQUIRED.

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*Sask**Power*** - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	**DOUBLE CIRCUIT DEFLECTION & CORNER 3/0 ACSR AND SMALLER ANGLES OF 31° TO 90°**
CHKD.			
DATE	DATE	DATE	

DATE OF ISSUE: **2003/05/30**	DRAWING NO: **A-12-69**	**SHEET 1 of 2**	REV. **B**

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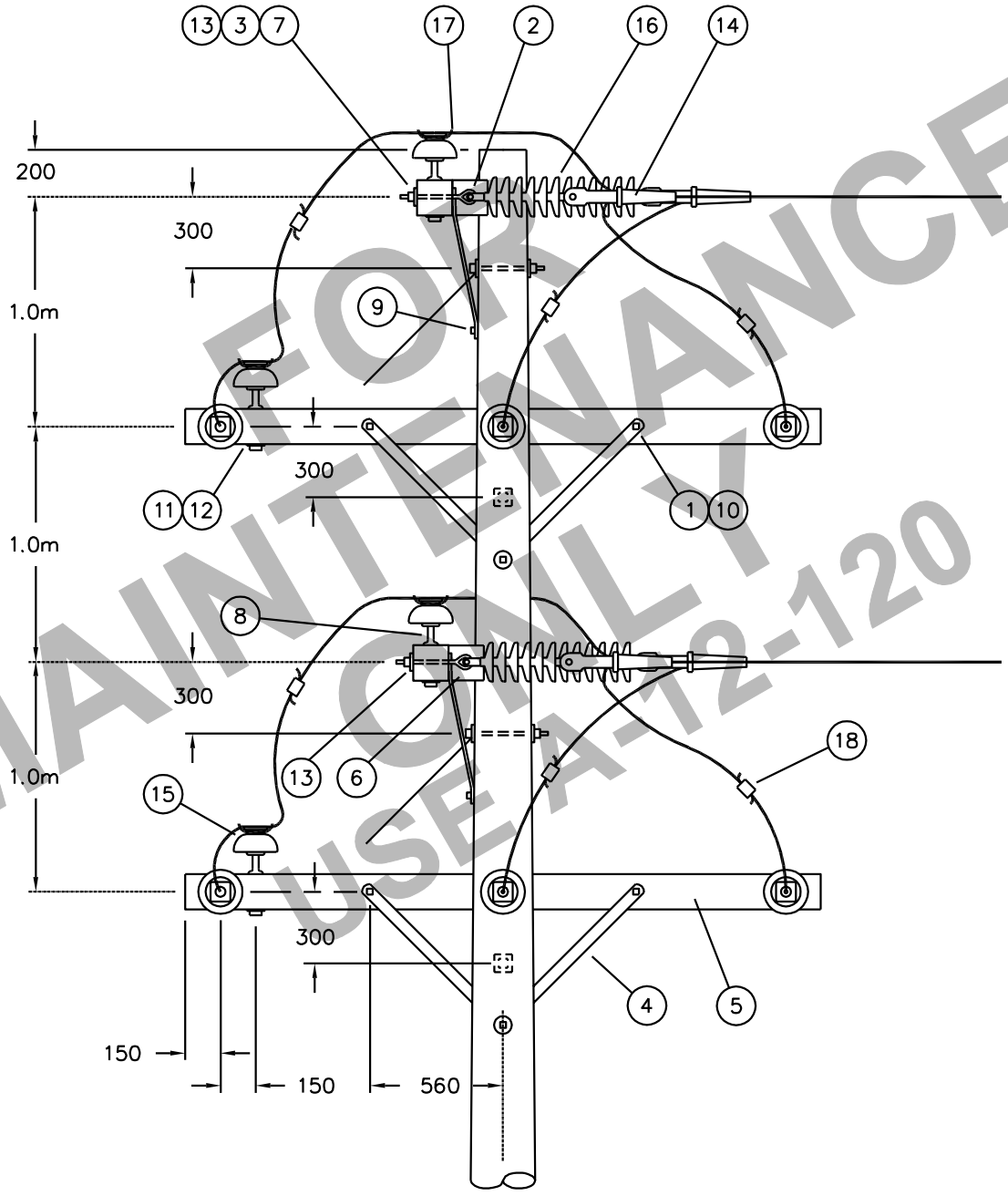

NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND BILL OF MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

	SaskPower – DISTRIBUTION STANDARDS			
	APPROVAL L.MOEN	DESIGN CHK. J.ARSENAULT	DRN.E.GOTANA CHKD. 2018-11-19	DOUBLE CIRCUIT DEFLECTION & CORNER 3/0 ACSR AND SMALLER ANGLES OF 31° TO 90°
	DATE OF ISSUE 2003-05-30		DRAWING NO. A–12–69 SHEET 2 of 2	REV. B

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 08 42	16	BOLT-CARRIAGE - 3/8" x 7"
2	1 09 24	12	BOLT-DOUBLE ARMING - 5/8" x 24"
3	1 19 32	16	BRACE-CROSSARM - 32"
4	1 29 39	8	CROSSARM-WOOD - 6" x 6" x 9’
5	1 50 00	12	NUT-EYE - 5/8"
6	1 53 09	4	PIN-STEEL
7	1 78 12	8	SCREW-LAG - 1/2" x 4 1/2"
8	1 93 25	16	WASHER-DOUBLE LOCK - 3/8"
9	1 93 28	4	WASHER-DOUBLE LOCK - 3/4"
10	1 93 34	4	WASHER-ROUND - 2" x 13/16" HOLE
11	1 93 42	40	WASHER-SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE
12	2 20 23	4	INSULATOR-PIN TYPE
13	2 29 24	12	DEADEND-POLYMER CLEVIS/TONGUE ENDS
14	2 01 XX	12	DEADEND-AUTOMATIC-CLEVIS TYPE (SEE NOTE 2)
15	2 97 50	4	UNI-TIE
16	5 09 XX	6	CONNECTOR-COMPRESSION (SIZE TO SUIT – SEE NOTE 1)

NOTE:

1. **REFER TO SECTION A-36 FOR TYPE AND SIZE OF CONNECTOR REQUIRED.**
2. **REFER TO A-12-50 SHEET 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**DOUBLE CIRCUIT DEFLECTION & CORNER 4/0 & 266 ACSR ANGLES OF 31º TO 90º**
L. MOEN	**A. UHREN**	CHKD.	
		2017-08-04	

DATE OF ISSUE: 2017-11-03	DRAWING NO: **A-12-70**	**SHEET 1 OF 2**	REV. **D**

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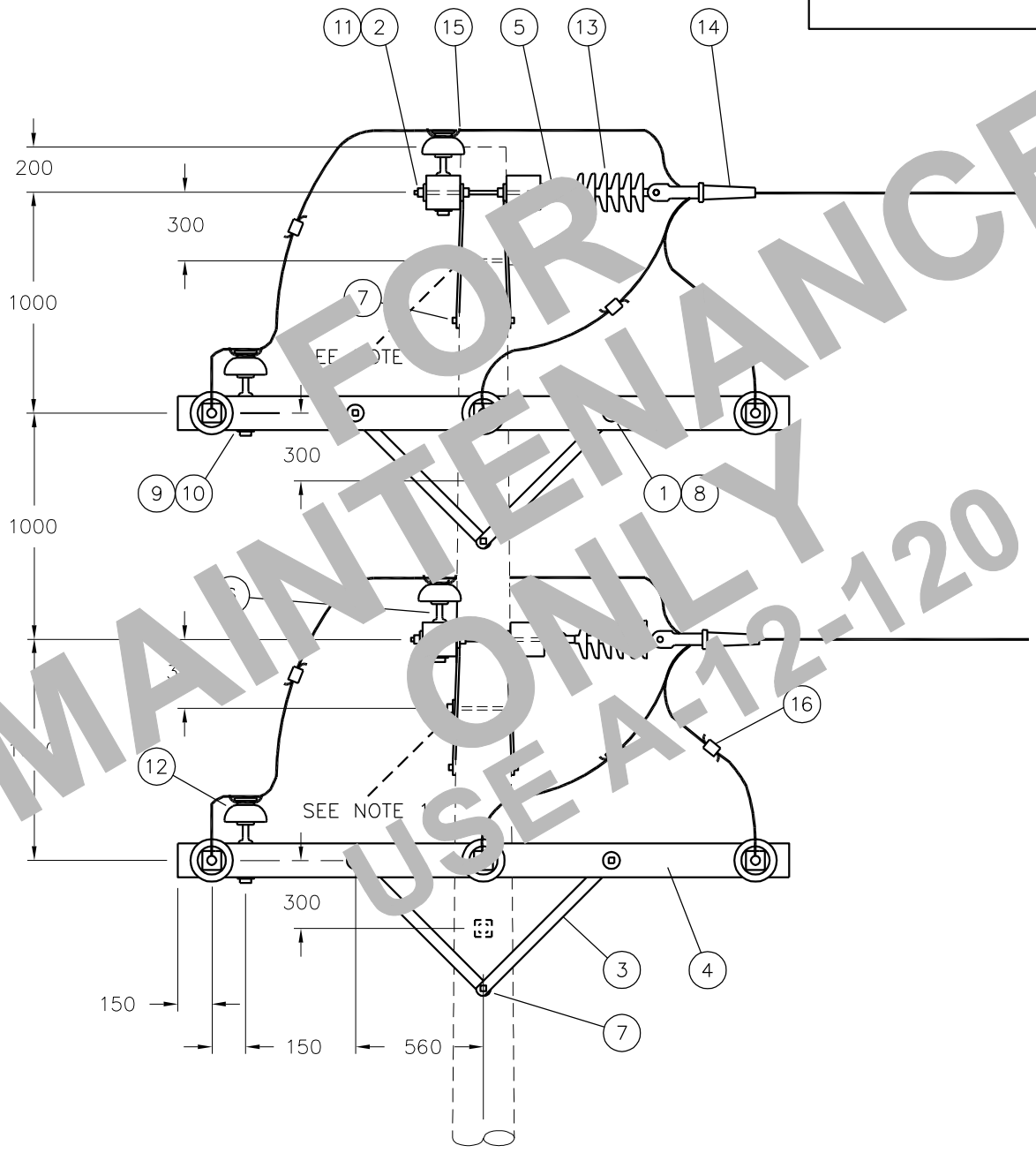

NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND BILL OF MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. J.ARSENAULT	DRN.E.GOTANA CHKD. 2018–11–19	DOUBLE CIRCUIT DEFLECTION & CORNER 4/0 & 266 ACSR ANGLES 31° TO 90°
DATE OF ISSUE 2017-11-03	DRAWING NO. A–12–70	SHEET 2 of 2	REV. D

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 08 42	4	BOLT-CARRIAGE - 3/8" x 7"
2	1 11 08	4	BOLT-EYE - 5/8" x 8"
3	1 09 20	2	BOLT-DOUBLE ARMING - 5/8" x 20"
4	1 19 32	4	BRACE-CROSSARM - 32"
5	1 29 39	2	CROSSARM-WOOD - 6" x 6" x 9'
6	1 32 86	2	GAIN-POLE
7	1 50 00	2	EYE-NUT - 5/8"
8	1 78 12	2	SCREW-LAG - 1/2" x 4 1/2"
9	1 93 25	4	WASHER-DOUBLE LOCK - 3/8"
10	1 93 42	8	WASHER-SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE
11	2 01 XX	6	CLAMP-DEADEND (SIZE TO SUIT - SEE NOTE 1)
12	2 29 24	6	DEADEND-POLYMER-CLEVIS AND TONGUE ENDS

NOTE:

1. SEE DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.

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*Sask**Power*** - DISTRIBUTION STANDARDS

DRN.	DESIGN CHK.	APPROVAL	**DOUBLE CIRCUIT CROSSARM DEADEND 3/0 ACSR AND SMALLER**
CHKD.			
DATE	DATE	DATE	

DATE OF ISSUE: **2003/05/30** | DRAWING NO: **A-12-71** | **SHEET 1 of 2** | REV. **A**

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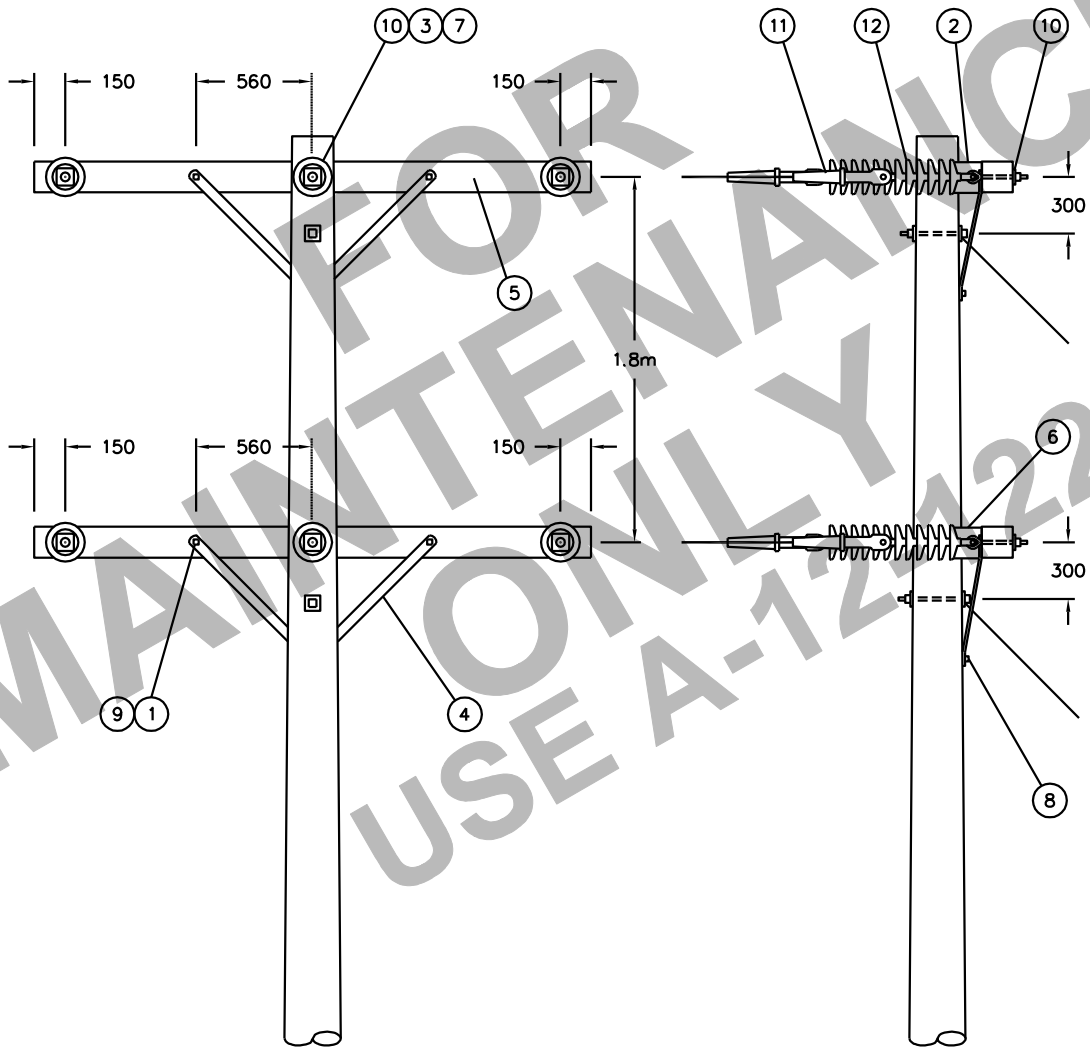

NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. J.ARSENAULT	DRN.E.GOTANA CHKD. 2018–11–20	DOUBLE CIRCUIT CROSSARM DEADEND 3/0 ACSR AND SMALLER
DATE OF ISSUE 2003-05-30	DRAWING NO. A–12–71	SHEET 2 of 2	REV. B

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 08 42	8	BOLT-CARRIAGE - 3/8" x 7"
2	1 09 24	6	BOLT-DOUBLE ARMING - 5/8" x 24"
3	1 19 32	8	BRACE-CROSSARM - 32"
4	1 29 39	4	CROSSARM-WOOD - 6" x 6" x 9'
5	1 50 00	6	NUT-EYE - 5/8"
6	1 78 12	4	SCREW-LAG - 1/2" x 4 1/2"
7	1 93 25	8	WASHER-DOUBLE LOCK - 3/8"
8	1 93 42	20	WASHER-SQUARE - 2 1/4" x 2 1/4" x 13/16" HOLE
9	2 29 24	6	DEADEND-POLYMER CLEVIS/TONGUE ENDS
10	2 01 XX	6	DEADEND-AUTOMATIC-CLEVIS TYPE (SEE NOTE 1)

NOTE:

1. **REFER TO A-12-50 SHEET 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**DOUBLE CIRCUIT CROSSARM DEADEND 4/0 & 266 ACSR**
L. MOEN	**A. UHREN**	CHKD.	
		2017-08-04	

DATE OF ISSUE: 2017-11-03 | DRAWING NO: **A-12-72** | **SHEET 1 OF 2** | REV. **D**

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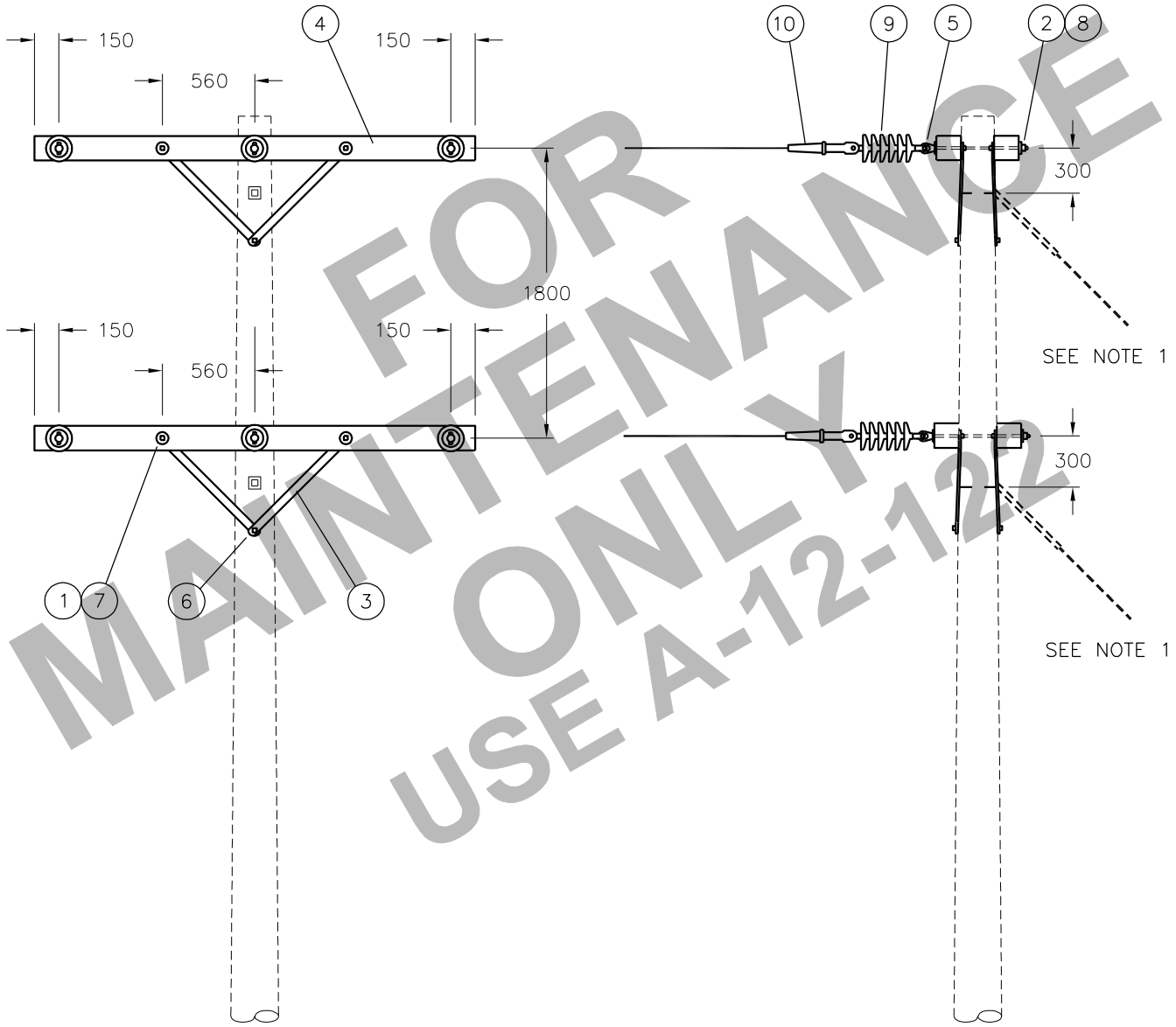

NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. J.ARSENAULT	DRN.E.GOTANA CHKD.	DOUBLE CIRCUIT CROSSARM DEADEND 4/0 & 266 ACSR
		2018–11–20	
DATE OF ISSUE 2017-11-03	DRAWING NO. A–12–72	SHEET 2 of 2	REV. D

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
			NOTE:
			REFER TO DRAWING A-12-62 FOR BILL OF MATERIAL.

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	SaskPower - DISTRIBUTION STANDARDS			
APPROVAL	DESIGN CHK	DRN. **ARU**	**3Ø TAP-OFF FROM DOUBLE CIRCUIT TANGENT 3/0 ACSR AND SMALLER**	
M. ERETH	**A. UHREN**	CHKD.		
		2014-07-31		
DATE OF ISSUE: 2014/11/17		DRAWING NO: **A-12-73**	**SHEET 1 OF 2**	REV. **A**

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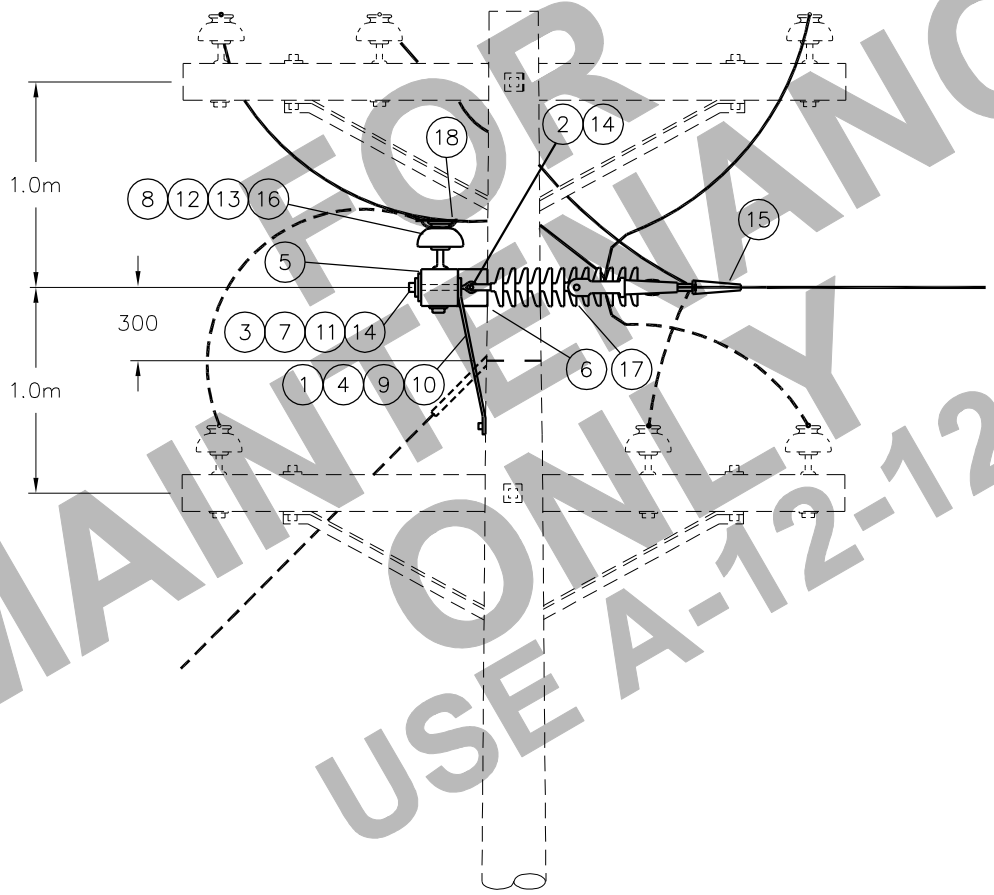

NOTE:

1. IF TAPPING FROM BOTTOM CIRCUIT AND ADEQUATE CLEARANCE CAN BE MAINTAINED, INSTALL TAP-OFF UNDER LOWER CIRCUIT AS PER DWG. A-12-62.

2. THE FOLLOWING ITEMS APPLY WHEN TAPPING-OFF BETWEEN UPPER AND LOWER CIRCUITS:
   - CENTER PHASE INSULATOR OF UPPER AND LOWER CIRCUITS TO BE LOCATED AS PER THIS DRAWING DUE TO DOWN GUY.
   - DROP LOWER ARM 200mm ON EXISTING DOUBLE CIRCUIT LINES.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. J.ARSENAULT	DRN.E.GOTANA CHKD. 2018-11-20	3ø TAP-OFF FROM DOUBLE CIRCUIT TANGENT 3/0 ACSR AND SMALLER
DATE OF ISSUE 2014-08-01		DRAWING NO. A-12-73 SHEET 2 of 2	REV. B

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
			NOTE: **REFER TO DRAWING A-12-63 FOR BILL OF MATERIAL.**

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	SaskPower - DISTRIBUTION STANDARDS			
	APPROVAL	DESIGN CHK	DRN. CHKD.	**3 Ø TAP-OFF FROM DOUBLE CIRCUIT TANGENT 4/0 & 266 ACSR**
	DATE OF ISSUE: **2011-04-01**		DRAWING NO: **A-12-74**	**SHEET 1 OF 2** REV. **B**

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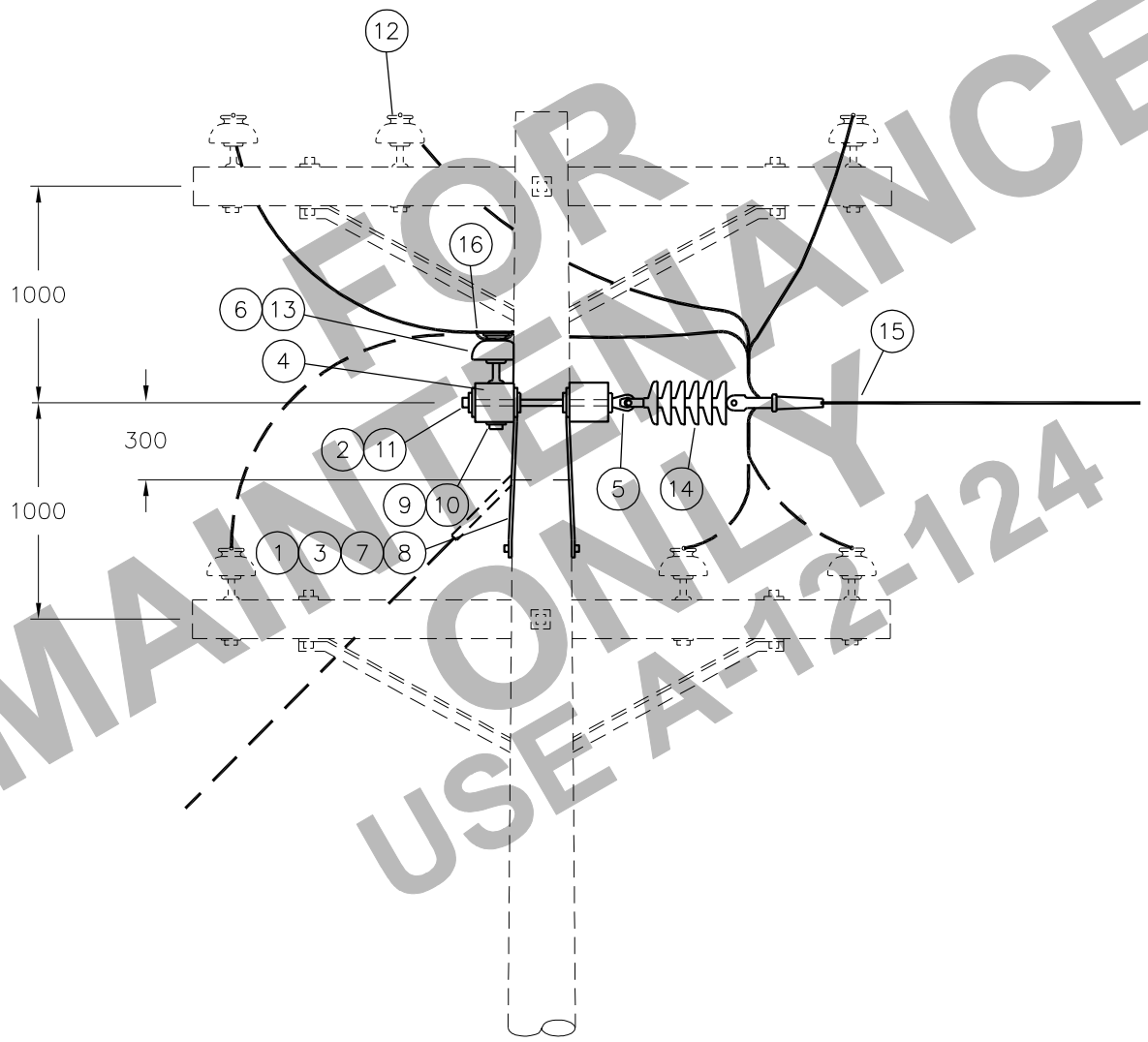

NOTE:

1. IF TAPPING FROM BOTTOM CIRCUIT AND ADEQUATE CLEARANCE CAN BE MAINTAINED, INSTALL TAP–OFF UNDER LOWER CIRCUIT AS PER DWG. A–12–63.

2. THE FOLLOWING ITEMS APPLY WHEN TAPPING–OFF BETWEEN UPPER AND LOWER CIRCUITS:
   –CENTER PHASE INSULATOR OF UPPER AND LOWER CIRCUITS TO BE LOCATED AS PER THIS DRAWING DUE TO DOWN GUY.
   –DROP LOWER ARM 200mm ON EXISTING DOUBLE CIRCUIT LINES.

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. J.ARSENAULT	DRN.E.GOTANA CHKD. 2018–11–20	3ø TAP–OFF FROM DOUBLE CIRCUIT TANGENT 4/0 & 266 ACSR
DATE OF ISSUE 2017-08-18		DRAWING NO. A–12–74 SHEET 2 of 2	REV. E

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
			NOTE: **REFER TO DRAWING A-12-64 FOR BILL OF MATERIAL.**

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	SaskPower - DISTRIBUTION STANDARDS			
	APPROVAL **M. ERETH**	DESIGN CHK **A. UHREN**	DRN. **ARU** CHKD. **2014-07-31**	**3Ø SLACKSPAN TAP-OFF FROM DOUBLE CIRCUIT TANGENT**
	DATE OF ISSUE: 2014/11/17		DRAWING NO: **A-12-75**	**SHEET 1 OF 2** REV. **A**

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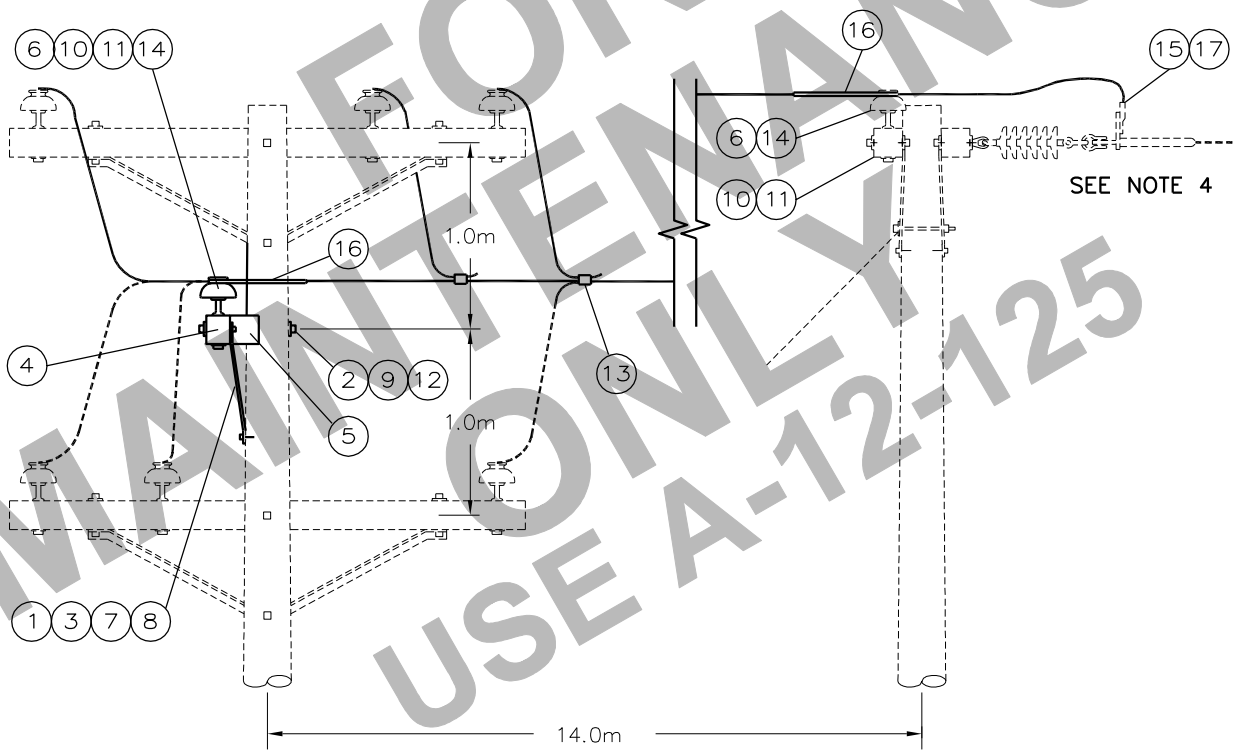

NOTE:

1. IF TAPPING FROM BOTTOM CIRCIUT AND ADEQUATE CLEARANCE CAN BE MAINTAINED, INSTALL TAP-OFF UNDER LOWER CIRCUIT AS PER DWG. A-12-64.
2. WHEN TAPPING-OFF BETWEEN UPPER AND LOWER CIRCUITS OF EXISTING DOUBLE CIRCUIT LINES, THE BOTTOM ARM MUST BE LOWERED 200mm.
3. REFER TO SECTION A-32 FOR POLE KEY INSTALLATION AND MATERIAL.
4. MATERIAL FOR DEAD-ENDS NOT INCLUDED IN BILL OF MATERIALS. REFER TO DRAWING A-12-60 FOR DEAD-END MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. J.ARSENAULT	DRN.E.GOTANA CHKD. 2018-11-20	3ø SLACKSPAN TAP-OFF FROM DOUBLE CIRCUIT TANGENT
DATE OF ISSUE 2014-11-17	DRAWING NO. A-12-75	SHEET 2 of 2	REV. B

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 24	5	BOLT – DOUBLE ARMING – 5/8" X 24"
2	1 29 28	2	CROSSARM – 5-1/4" X 6" X 16'
3	1 50 00	6	NUT – EYE – 5/8"
4	1 53 09	3	PIN – STEEL
5	1 80 50	0	CULVERT – 1 PIECE – 750mm X 3500mm (SEE NOTES 3 & 4)
6	1 93 27	4	WASHER – DOUBLE LOCK – 5/8"
7	1 93 28	3	WASHER – DOUBLE LOCK – 3/4"
8	1 93 34	3	WASHER – ROUND – 2" X 13/16" HOLE
9	1 93 42	16	WASHER – SQUARE – 2-1/4" X 2-1/4" X 13/16" HOLE
10	2 20 23	3	INSULATOR – PIN TYPE
11	2 29 24	6	DEADEND – POLYMER – CLEVIS AND TONGUE ENDS
12	2 01 XX	6	DEADEND – AUTOMATIC – CLEVIS TYPE (SEE NOTE 1)
13	2 97 50	3	UNI-TIE
14	3 91 07	0	BEARING PAD – CONCRETE – 700mm DIAM. (SEE NOTE 4)
15	5 09 XX	3	CONNECTOR – COMPRESSION (SIZE TO SUIT – SEE NOTE 2)

NOTE:

1. **REFER TO DWG. A-36-02 FOR SPECIFIC MATERIAL ITEM REQUIRED.**
2. **REFER TO SECTION A-36 FOR TYPE AND SIZE OF CONNECTOR REQUIRED.**
3. **REFER TO A-32-11 FOR INSTALLATION. INSTALLATION TOOL IS STOCK CODED 3100270.**
4. **THESE MATERIALS ARE REQUIRED FOR WET/POOR SOIL CONDITIONS ONLY.**

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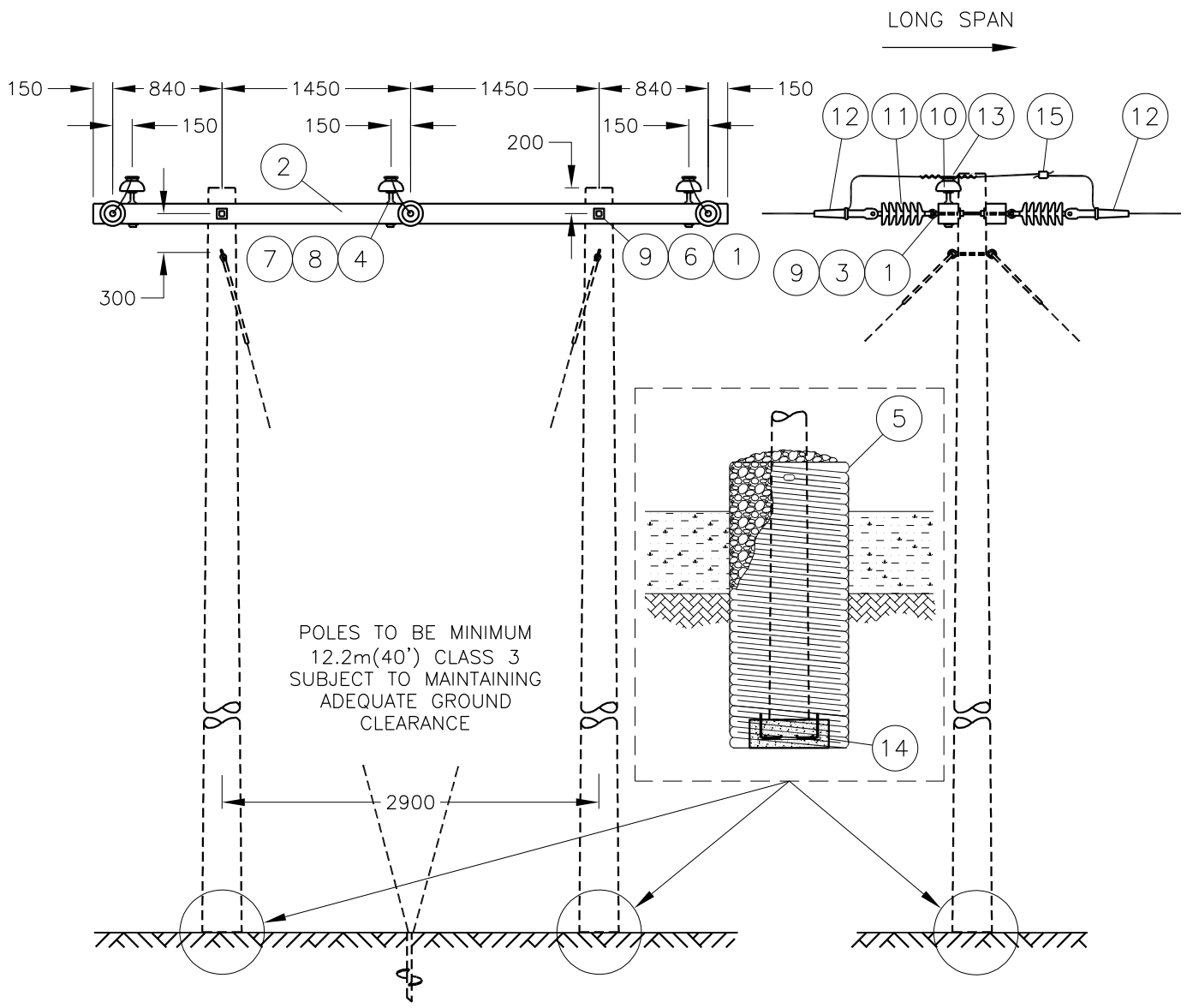
*Sask**Power*** - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **PP**	**3 Ø LONG SPAN DOUBLE DEADEND 1/0 TO 266 ACSR SPANS OF 105 m TO 210 m**
L MOEN	**P PATEL**	CHKD. **LM**	
		2021-10-21	

DATE OF ISSUE: **2022-01-10**	DRAWING NO: **A-12-76**	**SHEET 1 OF 2**	REV. **D**

STRUCTURE USED HERE



FRONT VIEW
TWO POLE STRUCTURE

SIDE VIEW
TWO POLE STRUCTURE

NOTES:

1) CLASS OF POLE AND GUYING SHOWN, ASSUME THAT THE GROUNDLINE OF THE STRUCTURES AT EACH END OF THE LONG SPAN ARE THE SAME ELEVATION. IF NOT, CONTACT STANDARDS DEPARTMENT.
2) GUYING FOR THIS STRUCTURE SHALL USE STANDARD GUY COMPONENTS (INSULATORS, PREFORMS, ETC.) AS SHOWN IN SECTION A–32. THE GUYS FOR THE LONG SPAN SHALL EACH BE TYPE "B" GUY TO A TYPE "D" ANCHOR. ALTERNATIVELY, TYPE "E" ANCHORS MAY BE USED OR IF REQUIRED FOR SOIL CONDITIONS.
3) CONTACT STANDARDS DEPARTMENT FOR SAG INFORMATION.
4) REFER TO A–32–11 FOR DETAILS ON PROPER INSTALLATION OF CULVERT.
5) ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED. SCALE: N.T.S.

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. P.PATEL	DRN.E.GOTANA CHKD.	3Ø LONG SPAN DOUBLE DEADEND 1/0 TO 266 ACSR SPANS OF 105m TO 210m
		2021–10–01	
DATE OF ISSUE 2022-01-10	DRAWING NO. A–12–76	SHEET 2 of 2	REV. C

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BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	2	BOLT – DOUBLE ARMING – 5/8" X 20"
2	1 14 12	4	BOLT – MACHINE – 3/4" X 12"
3	1 29 38	2	CROSSARM – COMPOSITE – 4-5/8" X 3-5/8" X 9'
4	1 50 00	4	NUT – EYE – 5/8"
5	1 53 09	6	PIN – STEEL
6	1 80 50	0	CULVERT – 1 PIECE – 750mm x 3500mm (SEE NOTES 5 & 6)
7	1 93 28	10	WASHER – DOUBLE LOCK – 3/4"
8	1 93 42	2	WASHER – SQUARE – 2-1/4" X 2-1/4" X 13/16" HOLE
9	1 93 45	2	WASHER – SQUARE – 4" X 4" X 11/16" HOLE
10	1 93 95	6	WASHER – SQUARE – 3" X 3" X 13/16" HOLE
11	1 93 96	4	WASHER – CURVED – 3" X 3" X 13/16" HOLE
12	2 01 XX	6	DEADEND – AUTOMATIC – CLEVIS TYPE (SEE NOTE 1)
13	2 02 XX	6	DEADEND – BOLTED – CLEVIS TYPE (SEE NOTE 1)
14	2 20 23	6	INSULATOR – PIN TYPE
15	2 29 24	12	DEADEND – POLYMER – CLEVIS AND TONGUE ENDS
16	2 29 50	3	INTERPHASE SPACER
17	2 59 XX	6	LINE GUARD (SIZE TO SUIT – SEE NOTE 2)
18	2 97 50	6	UNI-TIE
19	3 91 07	0	BEARING PAD – CONCRETE – 700mm DIAM. (NOTE 6)
20	5 09 XX	6	CONNECTOR – COMPRESSION (SIZE TO SUIT – SEE NOTE 3)

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**
2. **REFER TO DWG. A-36-09 FOR SPECIFIC MATERIAL ITEM REQUIRED.**
3. **REFER TO SECTION A-36 FOR TYPE AND SIZE OF CONNECTOR REQUIRED.**
4. **BOM IS FOR BOTH POLES.**
5. **REFER TO A-32-11 FOR INSTALLATION. INSTALLATION TOOL IS STOCK CODED 3100270.**
6. **THESE MATERIALS ARE REQUIRED FOR WET/POOR SOIL CONDITIONS ONLY.**

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*Sask**Power*** - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **PP**	**MONOPOLE LONGSPAN 100M TO 155M 1/0 TO PARTRIDGE ACSR ONLY**
L MOEN	**P PATEL**	CHKD. **LM**	
		2021-10-21	

DATE OF ISSUE: **2022-01-10**	DRAWING NO: **A-12-76B**	**SHEET 1 OF 2**	REV. **D**

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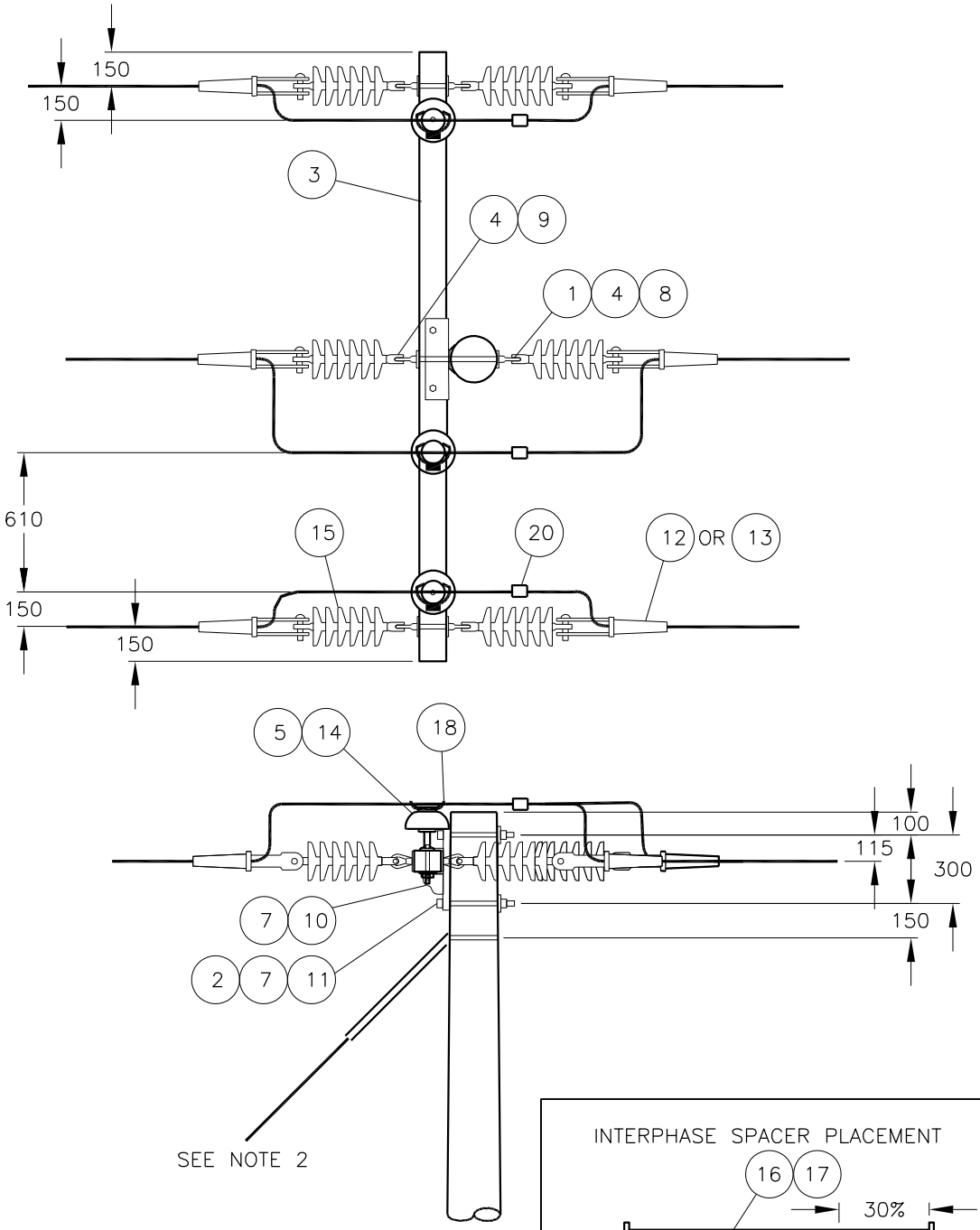

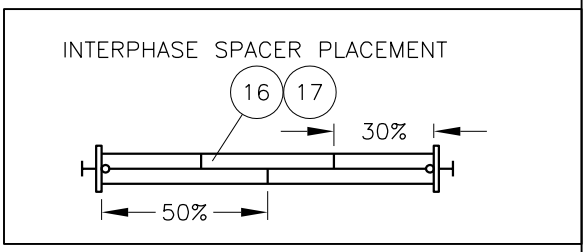

NOTES:

1. POLE SHALL BE MINIMUM CLASS 1/45'. NO APPARATUS.
2. GUYING SHALL BE TYPE 'B' WITH TYPE 'D' ANCHOR. ALTERNATIVELY, TYPE "E" ANCHORS MAY BE USED OR IF REQUIRED FOR SOIL CONDITIONS.
3. GUYING MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.
4. BILL OF MATERIAL IS FOR BOTH POLES.
5. REFER TO A–32–11 FOR DETAILS ON PROPER INSTALLATION OF CULVERT.
6. REFER TO A–12–76 SHT 2 FOR DETAILS ON PROPER INSTALLATION OF CULVERT & CONCRETE BEARING PAD.
7. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SCALE: N.T.S.

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. P.PATEL	DRN.E.GOTANA CHKD. 2021–10–04	MONOPOLE LONGSPAN 100M TO 155M 1/0 TO PARTRIDGE ACSR ONLY
DATE OF ISSUE 2022-01-10		DRAWING NO. A–12–76B	SHEET 2 of 2 REV. D

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 18	1	BOLT – DOUBLE ARMING – 5/8" X 18"
2	1 13 12	2	BOLT – MACHINE – 5/8" X 12"
3	1 14 12	2	BOLT – MACHINE – 3/4" X 12"
4	1 29 38	1	CROSSARM – COMPOSITE – 4-5/8" X 3-5/8" X 9'
5	1 50 00	2	NUT – EYE – 5/8"
6	1 53 09	2	PIN – STEEL
7	1 54 24	1	PIN – SKY – 24"
8	1 80 50	0	CULVERT – 1 PIECE – 750mm x 3500mm (SEE NOTES 4 & 5)
9	1 93 27	2	WASHER – DOUBLE LOCK – 5/8"
10	1 93 28	4	WASHER – DOUBLE LOCK – 3/4"
11	1 93 46	2	WASHER – SQUARE – 4" X 4" X 15/16" HOLE
12	1 93 95	2	WASHER – SQUARE – 3" X 3" X 13/16" HOLE
13	1 93 96	4	WASHER – CURVED – 3" X 3" X 13/16" HOLE
14	2 01 XX	6	DEADEND – AUTOMATIC – CLEVIS TYPE (SEE NOTE 1)
15	2 20 23	3	INSULATOR – PIN TYPE
16	2 29 24	6	DEADEND – POLYMER – CLEVIS AND TONGUE ENDS
17	2 59 XX	3	ARMOR ROD (SIZE TO SUIT – SEE NOTE 2)
18	2 97 04	5.4 m	WIRE – TIE – #4 AL
19	3 91 07	0	BEARING PAD – CONCRETE – 700mm DIAM. (SEE NOTE 5)
20	5 09 XX	3	CONNECTOR – COMPRESSION (SIZE TO SUIT – SEE NOTE 3)

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**
2. **REFER TO DWG. A-36-02 FOR SPECIFIC MATERIAL ITEM REQUIRED.**
3. **REFER TO SECTION A-36 FOR TYPE AND SIZE OF CONNECTOR REQUIRED.**
4. **REFER TO A-32-11 FOR INSTALLATION. INSTALLATION TOOL IS STOCK CODED 3100270.**
5. **THESE MATERIALS ARE REQUIRED FOR WET/POOR SOIL CONDITIONS ONLY.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **PP**	**DELTA MONOPOLE LONGSPAN 100M TO 155M RAVEN TO PARTRIDGE – ACSR ONLY**
L MOEN	**P PATEL**	CHKD. **LM**	
		2021-10-21	

DATE OF ISSUE: **2022-01-10**	DRAWING NO: **A-12-76C**	**SHEET 1 OF 2**	REV. **A**

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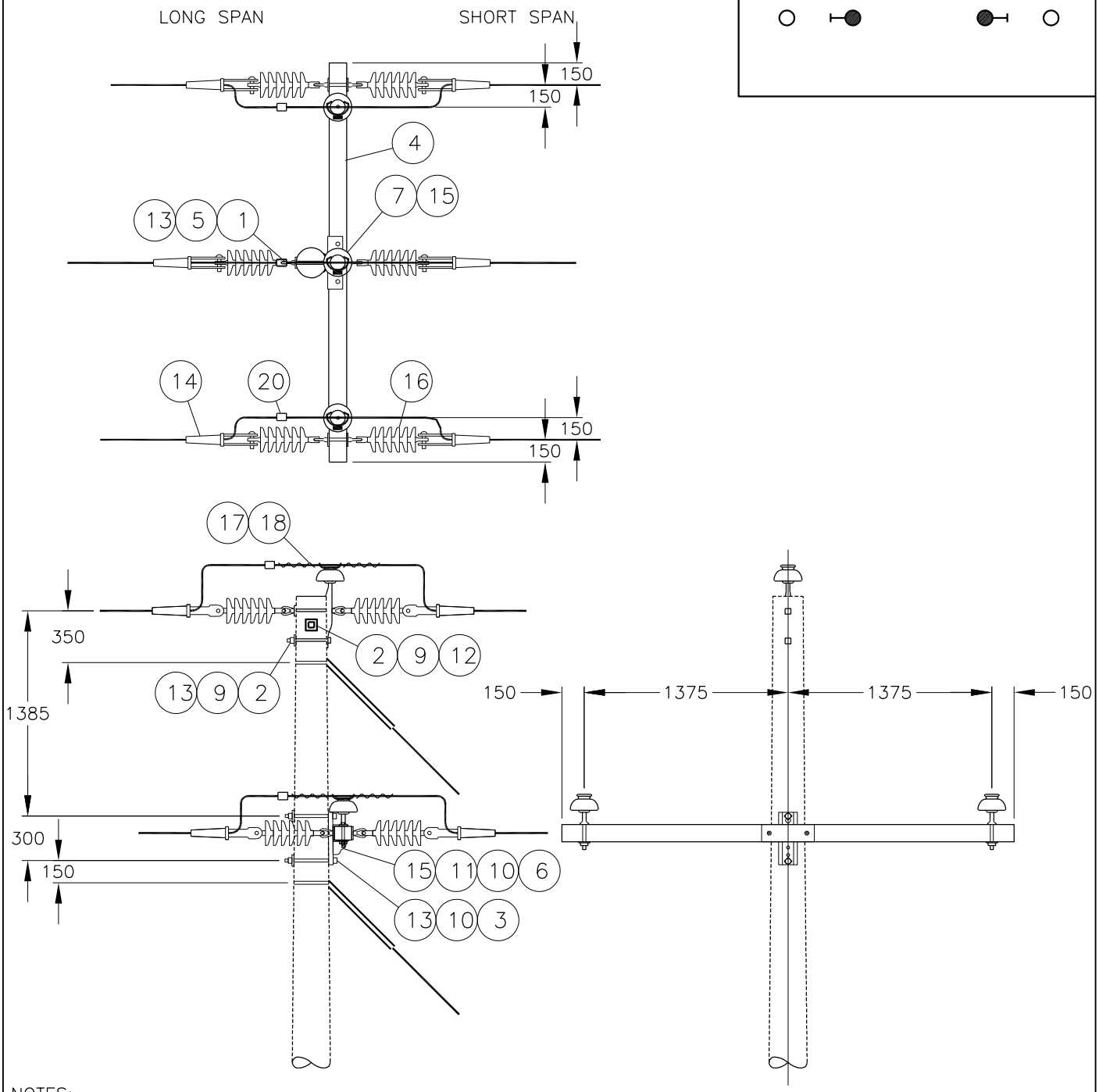

NOTES:

1. POLES SHALL BE A MINIMUM OF CLASS 1.
2. NO APPARATUS SHALL BE SUPPORTED.
3. GUYING SHALL BE TYPE 'B' WITH TYPE 'D' ANCHORS. TYPE 'E' ANCHORS MAY BE USED OR IF REQUIRED FOR SOIL CONDITIONS.
4. GUYING MATERIAL NOT INCLUDED IN BILL OF MATERIAL, REFER TO SECTION A-32 FOR GUY INSTALLATION AND MATERIAL.
5. REFER TO A-32-11 FOR DETAILS ON PROPER INSTALLATION OF CULVERT.
6. REFER TO A-12-76 SHT 2 FOR DETAILS ON PROPER INSTALLATION OF CULVERT & CONCRETE BEARING PAD.
7. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED

SCALE: N.T.S.

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. P.PATEL	DRN.E.GOTANA CHKD. 2021-10-04	DELTA MONOPOLE LONGSPAN 100M TO 155M RAVEN TO PARTRIDGE – ACSR ONLY
DATE OF ISSUE 2022-01-10	DRAWING NO. A-12-76C	SHEET 2 of 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 11 12	3	BOLT – EYE – 5/8" X 12"
2	1 11 12	1	BOLT – EYE – 5/8" X 12"
3	1 13 10	3	BOLT – MACHINE – 5/8" X 12"
4	1 33 00	4	GRIP – PREFORMED GUY – 5/16"
5	1 50 00	6	NUT – EYE – 5/8"
6	1 54 24	3	PIN – SKY – 24" – 1" THREAD
7	1 80 50	0	CULVERT – 1 PIECE – 750mm x 3500mm (SEE NOTES 3 & 4)
8	1 91 12	4	THIMBLES – GUY – GALVANIZED – 1/2"
9	1 93 42	11	WASHER – SQUARE – 2-1/4" X 2-1/4" X 13/16" HOLE
10	1 95 16	6 m	WIRE – GUY STRAND – 5/16" STEEL
11	2 20 23	3	INSULATOR – PIN TYPE
12	2 29 24	6	DEADEND – POLYMER – CLEVIS AND TONGUE ENDS
13	2 97 50	3	UNI-TIE
14	2 XX XX	6	CLAMP – DEADEND (SIZE TO SUIT – SEE NOTE 1)
15	3 91 07	0	BEARING PAD – CONCRETE – 700mm DIAM. (SEE NOTE 4)
16	5 XX XX	3	CONNECTOR – COMPRESSION (SIZE TO SUIT – SEE NOTE 2)

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**
2. **REFER TO SECTION A-36 FOR TYPE AND SIZE OF CONNECTOR REQUIRED.**
3. **REFER TO A-32-11 FOR INSTALLATION. INSTALLATION TOOL IS STOCK CODED 3100270.**
4. **THESE MATERIALS ARE REQUIRED FOR WET/POOR SOIL CONDITIONS ONLY.**

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*Sask**Power*** - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **PP**	**3 Ø LONG SPAN DOUBLE DEADEND 1/0 TO 266 ACSR SPANS OF 211 m TO 245 m**
L MOEN	**P PATEL**	CHKD. **LM**	
		2021-10-21	

DATE OF ISSUE: **2022-01-10** | DRAWING NO: **A-12-77** | **SHEET 1 OF 2** | REV. **B**

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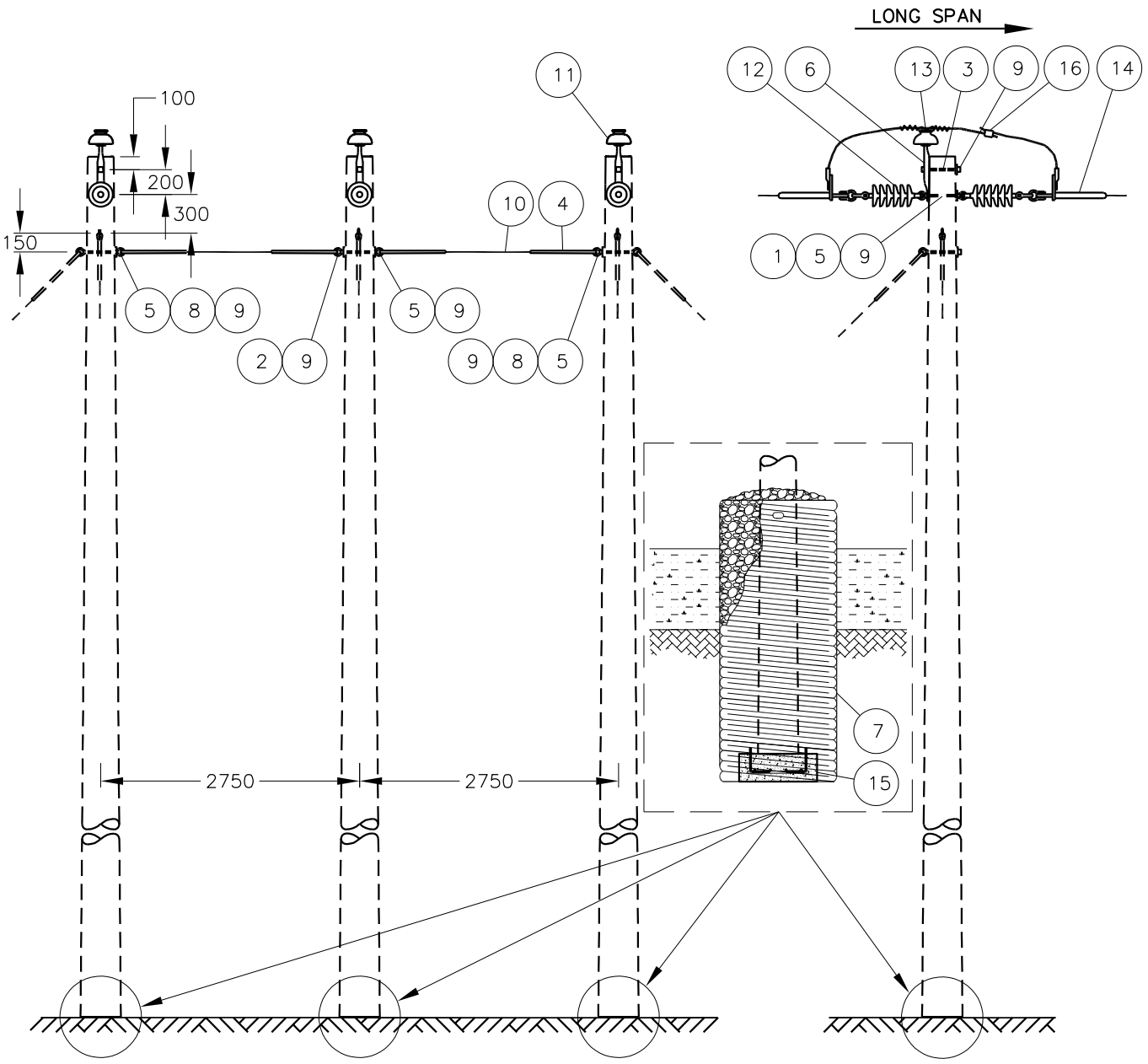

NOTE:

1. POLES TO BE MINIMUM 12.2m(40') CLASS 3 SUBJECT TO MAINTAINING ADEQUATE GROUND CLEARANCE. CLASS OF POLE AND GUYING SHOWN ASSUME THAT THE GROUNDLINE OF THE STRUCTURES AT EACH END OF THE LONG SPAN ARE THE SAME ELEVATION. IF NOT, CONTACT STANDARDS DEPARTMENT.
2. GUYING FOR THIS STRUCTURE SHALL USE STANDARD GUY COMPONENTS (INSULATORS, PREFORMS, ETC.) AS SHOWN IN SECTION A-32. THE GUYS FOR THE LONG SPAN SHALL EACH BE TYPE "B" GUY TO A TYPE "B" ANCHOR. THE GUYS FOR A SHORT SPAN SHALL BE TYPE "A" GUY TO A TYPE "B" ANCHOR.
3. CONTACT STANDARDS DEPARTMENT FOR SAG INFORMATION.
4. REFER TO A-32-11 FOR DETAILS ON PROPER INSTALLATION OF CULVERT.
5. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.

SCALE: N.T.S.

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. P.PATEL	DRN.E.GOTANA CHKD.	3ø LONG SPAN DOUBLE DEADEND 1/0 TO 266 ACSR SPANS OF 211m TO 245m
		2021-10-04	
DATE OF ISSUE 2022-01-10		DRAWING NO. A-12-77 SHEET 2 of 2	REV. C

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 12 06	2	BOLT-MACHINE - 1/2" x 6"
2	1 13 12	2	BOLT-MACHINE - 5/8" x 12"
3	1 13 16	1	BOLT-MACHINE - 5/8" x 16"
4	1 17 72	1	BRACES-ALLEY ARM - 72"
5	1 29 10	1	CROSSARM - 4" x 5" x 10'
6	1 53 09	3	PIN-STEEL
7	1 93 26	2	WASHER-DOUBLE LOCK – 1/2"
8	1 93 27	3	WASHER-DOUBLE LOCK – 5/8"
9	1 93 28	3	WASHER-DOUBLE LOCK – 3/4"
10	1 93 30	3	WASHER-ROUND – 1-3/8" x 9/16" HOLE
11	1 93 34	3	WASHER-ROUND – 2" x 13/16" HOLE
12	1 93 42	5	WASHER-SQUARE – 2-1/4" x 2-1/4" x 13/16" HOLE
13	2 20 23	3	INSULATOR-PIN TYPE
14	2 58 XX	3	ARMOUR ROD (SIZE TO SUIT-SEE NOTE 1)
15	2 97 28	5.1m	WIRE-TIE - #8 STEEL SOLID

NOTE:

1. REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.
2. FOR 2 CONDUCTOR, DELETE (1) OF EACH ITEMS, 6, 9, 11, 13 AND 14, AND USE 3.4m OF ITEM 15.

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*Sask**Power*** - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**SINGLE ALLEY ARM**
M. ERETH	**A. UHREN**	CHKD.	
		2013-10-09	

DATE OF ISSUE: 2014/03/21 | DRAWING NO: **A-12-78** | **SHEET 1 OF 2** | REV. **A**

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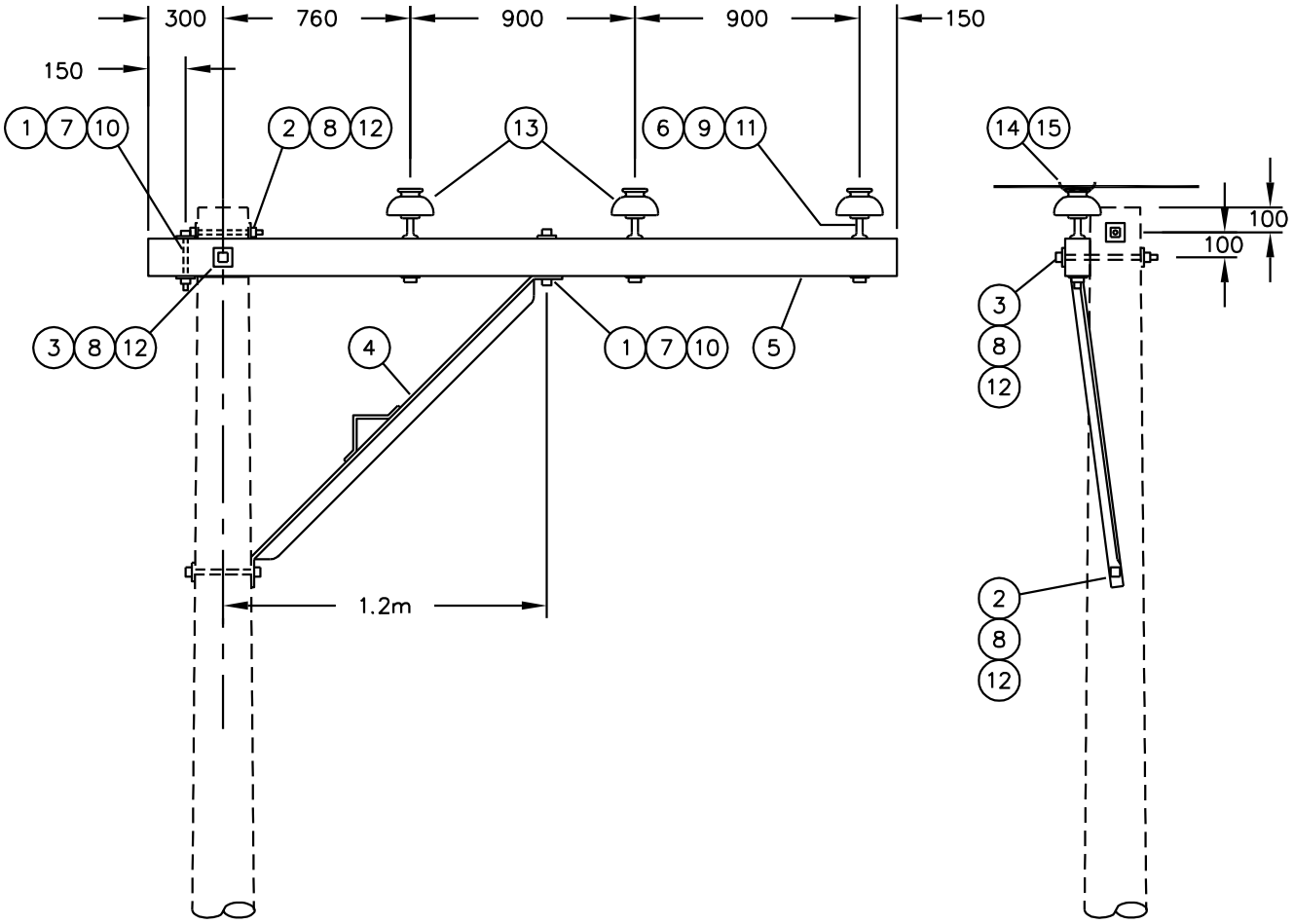

NOTE:

1. RAKE POLE 300mm AWAY FROM LANE.
2. MAX CONDUCTOR SIZE ALLOWED PER RULING SPAN SHOWN IN TABLE BELOW:

	ALLOWABLE RULING SPAN (m)		
	60	90	115
RAVEN (1/0 ACSR)	YES	YES	YES
PIGEON (3/0 ACSR)	YES	YES	NO
PENGUIN (4/0 ACSR)	YES	YES	NO
PARTRIDGE (266 ACSR)	YES	NO	NO
TULIP (366 AL)	YES	NO	NO
PELICAN (477 ACSR)	YES	NO	NO
COSMOS (477 AL)	YES	NO	NO

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. J.ARSENAULT	DRN.E.GOTANA CHKD.	SINGLE ALLEY ARM
		2018-11-20	
DATE OF ISSUE 2019-01-02	DRAWING NO. A-12-78	SHEET 2 of 2	REV. B

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 12 06	2	BOLT – MACHINE – 1/2” x 6”
2	1 13 10	1	BOLT – MACHINE – 5/8” x 10”
3	1 13 14	2	BOLT – MACHINE – 5/8” x 14”
4	1 13 18	1	BOLT – MACHINE – 5/8” x 18”
5	1 18 72	1	BRACE – BOW BRACE FOR CROSSARMS – 72”
6	1 29 08	1	CROSSARM – WOOD – 4” x 5” x 9’ – 2 PIN
7	1 93 26	2	WASHER – LOCK – DOUBLE COIL SPRING – 1/2”
8	1 93 27	4	WASHER – LOCK – DOUBLE COIL SPRING – 5/8”
9	1 93 28	2	WASHER – LOCK – DOUBLE COIL SPRING – 3/4”
10	1 93 30	2	WASHER – ROUND – 1 3/8” x 9/16” HOLE
11	1 93 34	2	WASHER – ROUND – 2” x 13/16” HOLE
12	1 93 42	5	WASHER – SQUARE – 2 1/4” x 2 1/4” x 13/16” HOLE
13	2 19 82	1	BRACKET-POLE TOP FOR 35KV LINE POST
14	2 19 91	1	STUD – 3/4” x 2 1/8”
15	2 19 92	2	STUD – 3/4” x 6 7/8”
16	2 20 00	3	INSULATOR – POLYMER – LINE POST – VERTICAL – CLAMP-TOP
17	2 59 71	3	ARMOUR ROD – PREFORMED ALUM – PELICAN ACSR – 76”

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**3 Ø TANGENT PELICAN CONDUCTOR**
L. MOEN	**A. UHREN**	CHKD.	
		2017-08-15	

DATE OF ISSUE: 2017-11-03 | DRAWING NO: **A-12-80** | **SHEET 1 OF 2** | REV. **B**

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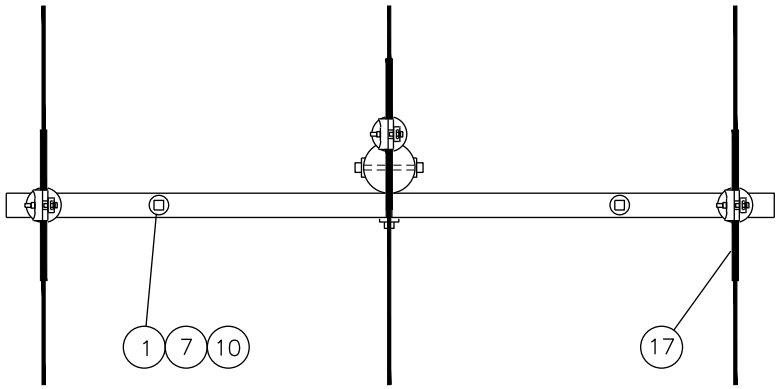

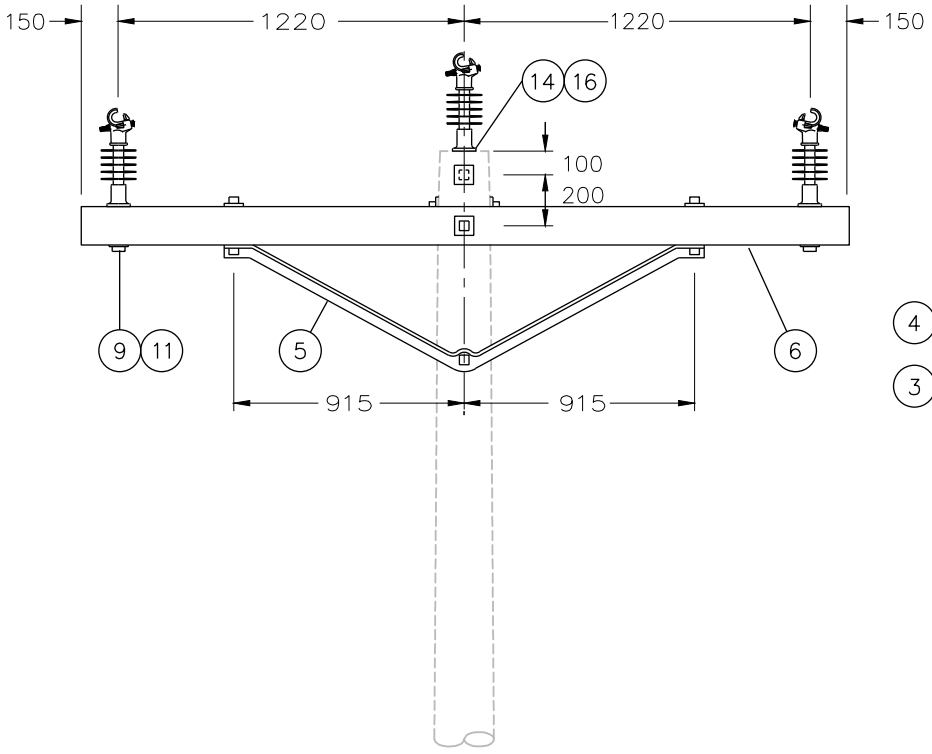

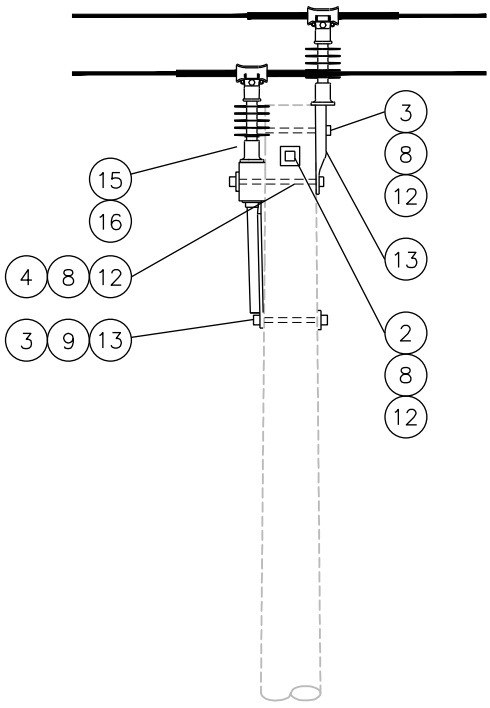

1. POLES SHALL BE A MINIMUM OF 40 FOOT / CLASS 3.
2. THIS STRUCTURE NOT TO EXCEED 2° DEFLECTION.
3. STRUCTURES SUPPORTING SPANS GREATER THAN 98m SHALL NOT SUPPORT ANY APPARATUS OF ANY KIND.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL M. ERETH	DESIGN CHK. A. UHREN	DRN. TmBIRAM CHKD.	3ø TANGENT PELICAN CONDUCTOR
		2014-08-01	
DATE OF ISSUE 2014/11/17	DRAWING NO. A-12-80	SHEET 2 of 2	REV. C

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	3	BOLT – DOUBLE ARMING – 5/8" x 20"
2	1 12 06	4	BOLT – MACHINE – 1/2" x 6"
3	1 13 10	1	BOLT – MACHINE – 5/8" x 10"
4	1 13 12	1	BOLT – MACHINE – 5/8" x 12"
5	1 13 16	2	BOLT – MACHINE – 5/8" x 16"
6	1 18 72	2	BRACE – BOW BRACE FOR CROSSARMS – 72"
7	1 29 08	2	CROSSARM – WOOD – 4" x 5" x 9' – 2 PIN
8	1 93 26	4	WASHER – LOCK – DOUBLE COIL SPRING – 1/2"
9	1 93 27	10	WASHER – LOCK – DOUBLE COIL SPRING – 5/8"
10	1 93 28	4	WASHER – LOCK – DOUBLE COIL SPRING – 3/4"
11	1 93 30	4	WASHER – ROUND – 1 3/8" x 9/16" HOLE
12	1 93 34	4	WASHER – ROUND – 2" x 13/16" HOLE
13	1 93 42	12	WASHER – SQUARE – 2 1/4" x 2 1/4" x 13/16" HOLE
14	2 19 82	2	BRACKET-POLE TOP FOR 35KV LINE POST
15	2 19 91	2	STUD – 3/4" x 2 1/8"
16	2 19 92	4	STUD – 3/4" x 6 7/8"
17	2 20 00	6	INSULATOR – POLYMER – LINE POST – VERTICAL – CLAMP-TOP
18	2 59 71	3	ARMOUR ROD – PREFORMED ALUM – PELICAN ACSR – 76"

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*Sask**Power*** - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **DCD**	**3 Ø DEFLECTION PELICAN CONDUCTOR ANGLES OF 2° TO 10°**
L. MOEN	**D. DONAIS**	CHKD.	
		2018-06-04	

DATE OF ISSUE: 2018-06-07 | DRAWING NO: **A-12-81** | **SHEET 1 OF 2** | REV. **D**

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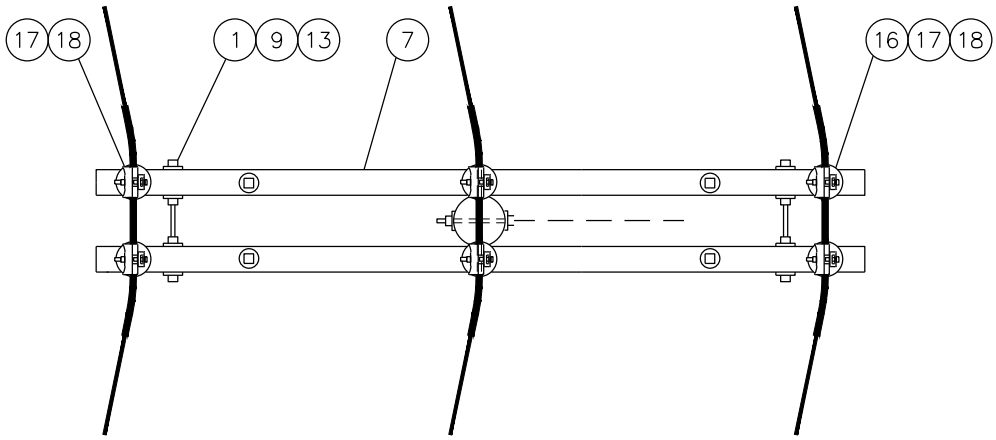

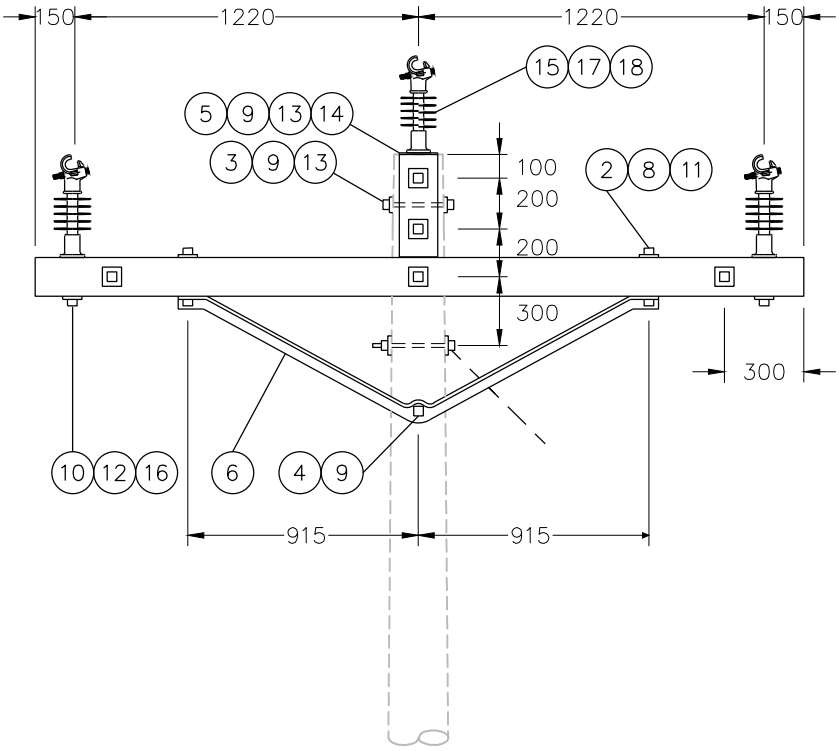

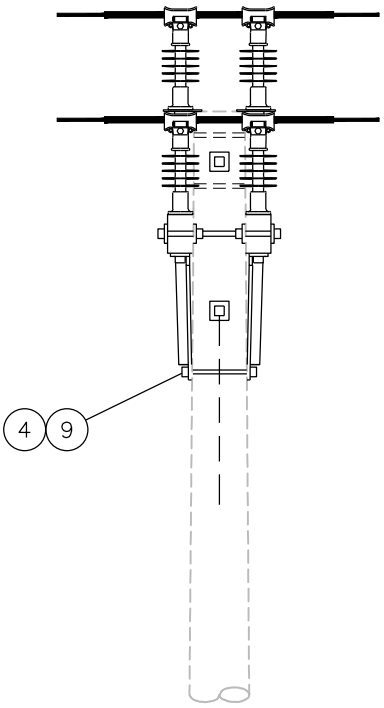

NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.
2. POLES SHALL BE A MINIMUM OF 40 FOOT / CLASS 3.
3. GUYING SHALL BE TYPE "B" RURAL DOWNGUY WITH TYPE "B" ANCHOR.
4. SHORT GUYING SHALL NOT BE USED.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

	SaskPower – DISTRIBUTION STANDARDS			
	APPROVAL L.MOEN	DESIGN CHK. Q.SUN	DRN. QS CHKD. 2018–05–17	3ø DEFLECTION PELICAN CONDUCTOR ANGLES OF 2° TO 10°
	DATE OF ISSUE 2018-06-07		DRAWING NO. A–12–81	SHEET 2 of 2	REV. D

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	**1 11 12**	**3**	**BOLT – EYE – 5/8" x 12"**
2	**1 32 01**	**3**	**FITTING – BALL CLEVIS**
3	**1 32 32**	**2**	**LINK – EXTENSION – CLEVIS EYE – 12”**
4	**1 50 00**	**3**	**NUT – EYE – 5/8"**
5	**1 93 27**	**3**	**WASHER – LOCK – DOUBLE COIL SPRING – 5/8"**
6	**1 93 42**	**3**	**WASHER – SQUARE – 2 1/4" x 2 1/4" x 13/16" HOLE**
7	**2 02 34**	**3**	**CLAMP – CORNER – COSMOS TO HAWK**
8	**2 29 24**	**3**	**INSULATOR – POLYMER – DEADEND – CLEVIS/TONGUE ENDS**
9	**2 59 71**	**3**	**ARMOUR ROD – PREFORMED ALUM – PELICAN ACSR – 76”**

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*Sask**Power*** - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **DCD**	**3 Ø DEFLECTION PELICAN ACSR CONDUCTOR ANGLES OF 11° TO 60°**
L. MOEN	**D. DONAIS**	CHKD.	
		2018-06-04	

DATE OF ISSUE: 2018-06-07 | DRAWING NO: **A-12-82** | **SHEET. 1 OF 2** | REV. **A**

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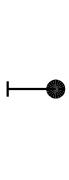

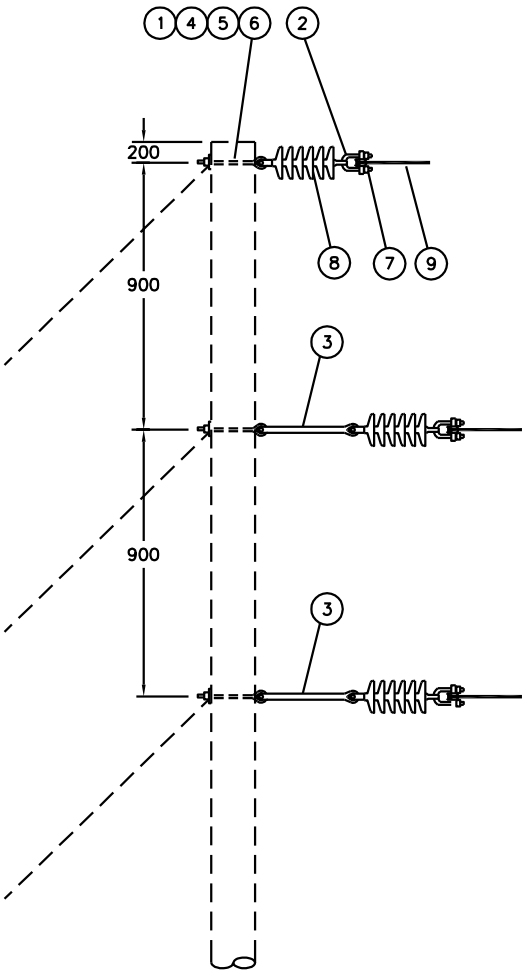

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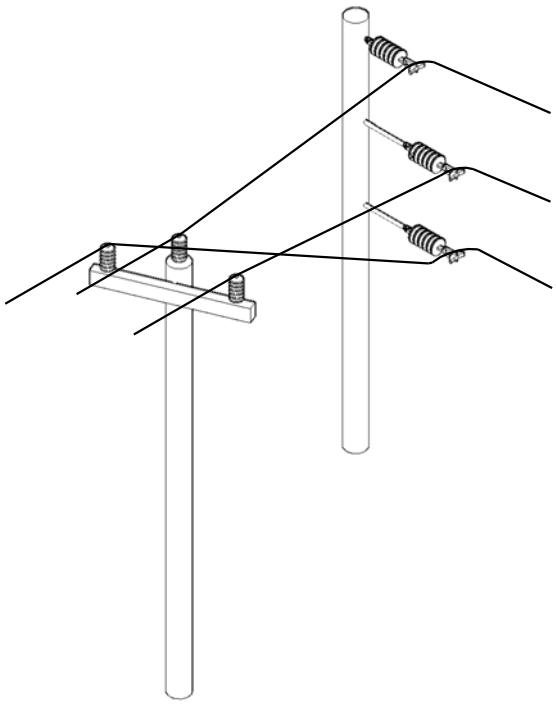

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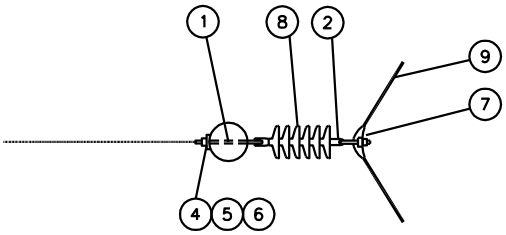

NOTE:
1. POLES SHALL BE A MINIMUM OF 45' CLASS 4.
2. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A-32 FOR GUY INSTALLATION AND MATERIAL.
3. GUYS SHALL BE A TYPE "A" DOWNGUYS TO SHARED TYPE "D" ANCHOR. ALTERNATIVELY, TYPE "E" ANCHORS MAY BE USED OR IF REQUIRED FOR SOIL CONDITIONS.
4. STRUCTURE SHALL NOT SUPPORT APPARATUS OF ANY KIND.
5. ADJACENT SPANS SHALL BE LIMITED TO 50m.
6. SHORT GUYING SHALL NOT BE USED.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. Q.SUN	DRN. D.REDEKOPP CHKD. 2018-06-04	THREE PHASE DEFLECTION PELICAN ACSR CONDUCTOR ANGLES OF 11° TO 60°
DATE OF ISSUE 2018-06-07	DRAWING NO. A-12-82	SHEET 2 of 2	REV. B

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 11 12	6	BOLT – EYE – 5/8" x 12"
2	1 13 12	6	BOLT – MACHINE – 5/8" x 12"
3	1 32 32	4	LINK – EXTENSION – CLEVIS EYE – 12”
4	1 93 27	12	WASHER – LOCK – DOUBLE COIL SPRING – 5/8"
5	1 93 33	12	WASHER – ROUND – 1 3/4" x 1 3/4" x 11/16" HOLE
6	1 93 42	6	WASHER – SQUARE – 2 1/4" x 2 1/4" x 13/16" HOLE
7	2 01 88	6	DEADEND – AUTOMATIC – PELICAN ACSR
8	2 06 30	3	CONNECTOR – AMPACT
9	2 19 85	3	BRACKET – GAIN STANDOFF – LINE POST INSULATOR
10	2 19 91	3	STUD – 3/4” x 2 1/8”
11	2 20 00	3	INSULATOR – POLYMER – LINE POST – VERTICAL – CLAMP-TOP
12	2 29 24	6	INSULATOR – POLYMER – DEADEND – CLEVIS/TONGUE ENDS
13	2 83 04	3m	WIRE – CU #4/7 STR
14		6	NUT – 5/8” (FROM ITEM 2)

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*Sask**Power*** - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **DCD**	**3 Ø DEFLECTION PELICAN CONDUCTOR ANGLES OF 61° TO 89°**
L. MOEN	**D. DONAIS**	CHKD.	
		2018-06-04	

DATE OF ISSUE: 2018-06-07 | DRAWING NO: **A-12-83** | **SHEET 1 OF 2** | REV. **B**

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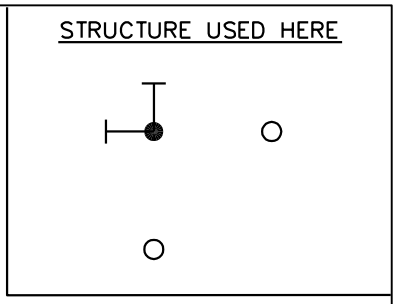

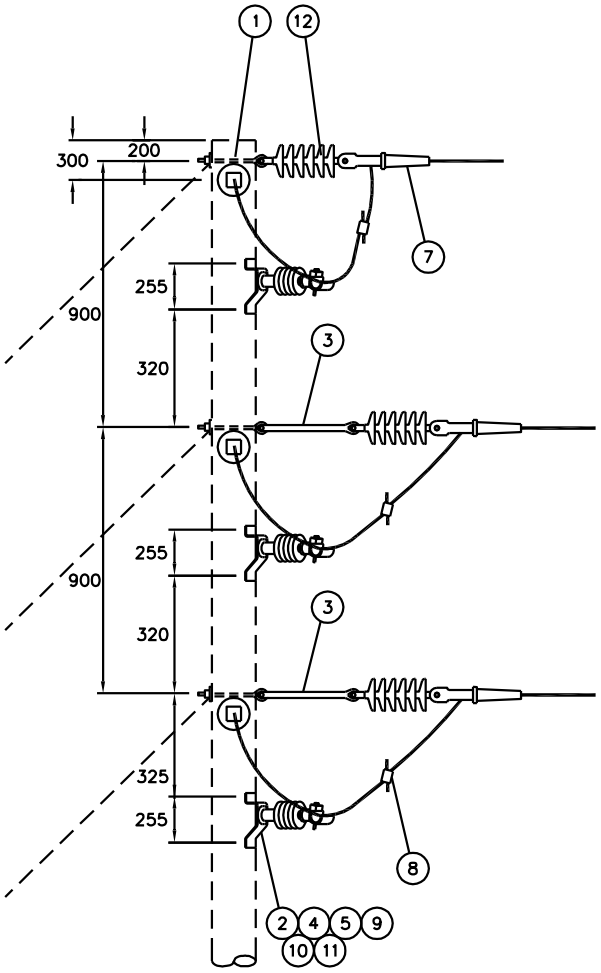

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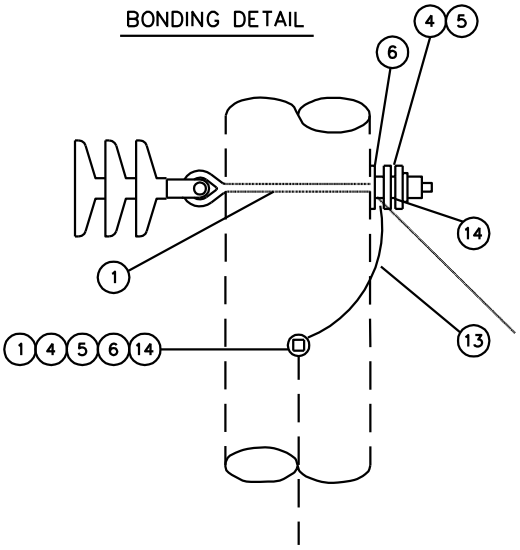

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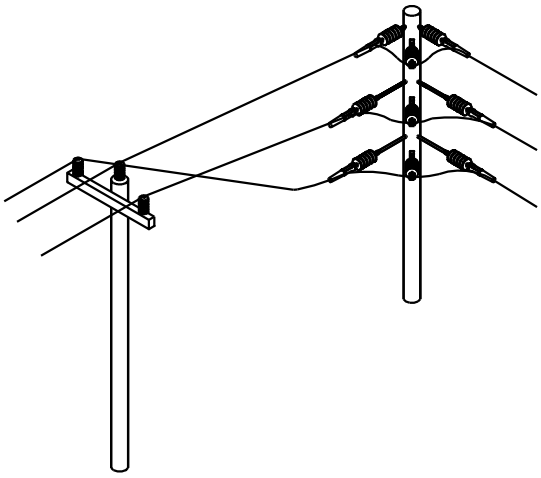

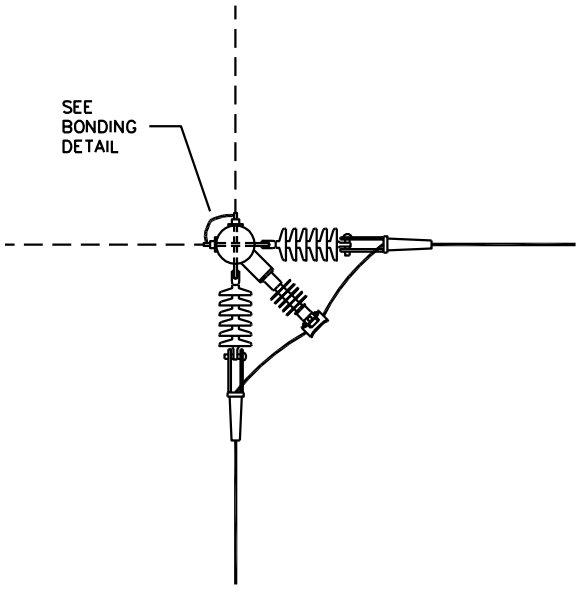

NOTE:
1. POLES SHALL BE A MINIMUM OF 45' CLASS 4.
2. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A-32 FOR GUY INSTALLATION AND MATERIAL.
3. GUYS SHALL BE A TYPE "A" DOWNGUYS TO SHARED TYPE "D" ANCHOR. ALTERNATIVELY, TYPE "E" ANCHORS MAY BE USED OR IF REQUIRED FOR SOIL CONDITIONS.
4. STRUCTURE SHALL NOT SUPPORT APPARATUS OF ANY KIND.
5. ADJACENT SPANS SHALL BE LIMITED TO 50m.
6. SHORT GUYING SHALL NOT BE USED.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. Q.SUN	DRN. QS CHKD. 2018-05-17	3ø DEFLECTION PELICAN CONDUCTOR ANGLES OF 61° TO 89°
DATE OF ISSUE 2018-06-07	DRAWING NO. A-12-83	SHEET 2 of 2	REV. C

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 24	5	BOLT – DOUBLE ARMING – 5/8" x 24"
2	1 29 28	2	TIMBER – FIR – 5 1/4" x 6" x 16' – LAMINATED
3	1 50 00	6	NUT – EYE – 5/8"
4	1 93 27	4	WASHER – LOCK – DOUBLE COIL SPRING – 5/8"
5	1 93 28	3	WASHER – LOCK – DOUBLE COIL SPRING – 3/4"
6	1 93 34	3	WASHER – ROUND – 2" x 13/16" HOLE
7	1 93 42	16	WASHER – SQUARE – 2 1/4" x 2 1/4" x 13/16" HOLE
8	2 01 88	3	DEADEND – AUTOMATIC – PELICAN ACSR
9	2 02 18	3	CLAMP – BOLTED DEADEND – 3/0 TO 477 KCMIL
10	2 06 30	3	CONNECTOR – AMPACT
11	2 19 92	3	STUD – 3/4" x 6 7/8"
12	2 20 00	3	INSULATOR – POLYMER – LINE POST – VERTICAL – CLAMP-TOP
13	2 29 24	6	INSULATOR – POLYMER – DEADEND – CLEVIS/TONGUE ENDS

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **DCD**	**PELICAN ACSR LONG SPAN SPANS OF 105 M TO 210 M**
L. MOEN	**D. DONAIS**	CHKD.	
		2018-04-27	

DATE OF ISSUE: 2018-06-07 | DRAWING NO: **A-12-87** | **SHEET. 1 OF 2** | REV. **A**

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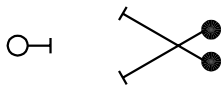

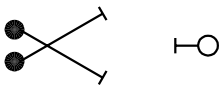

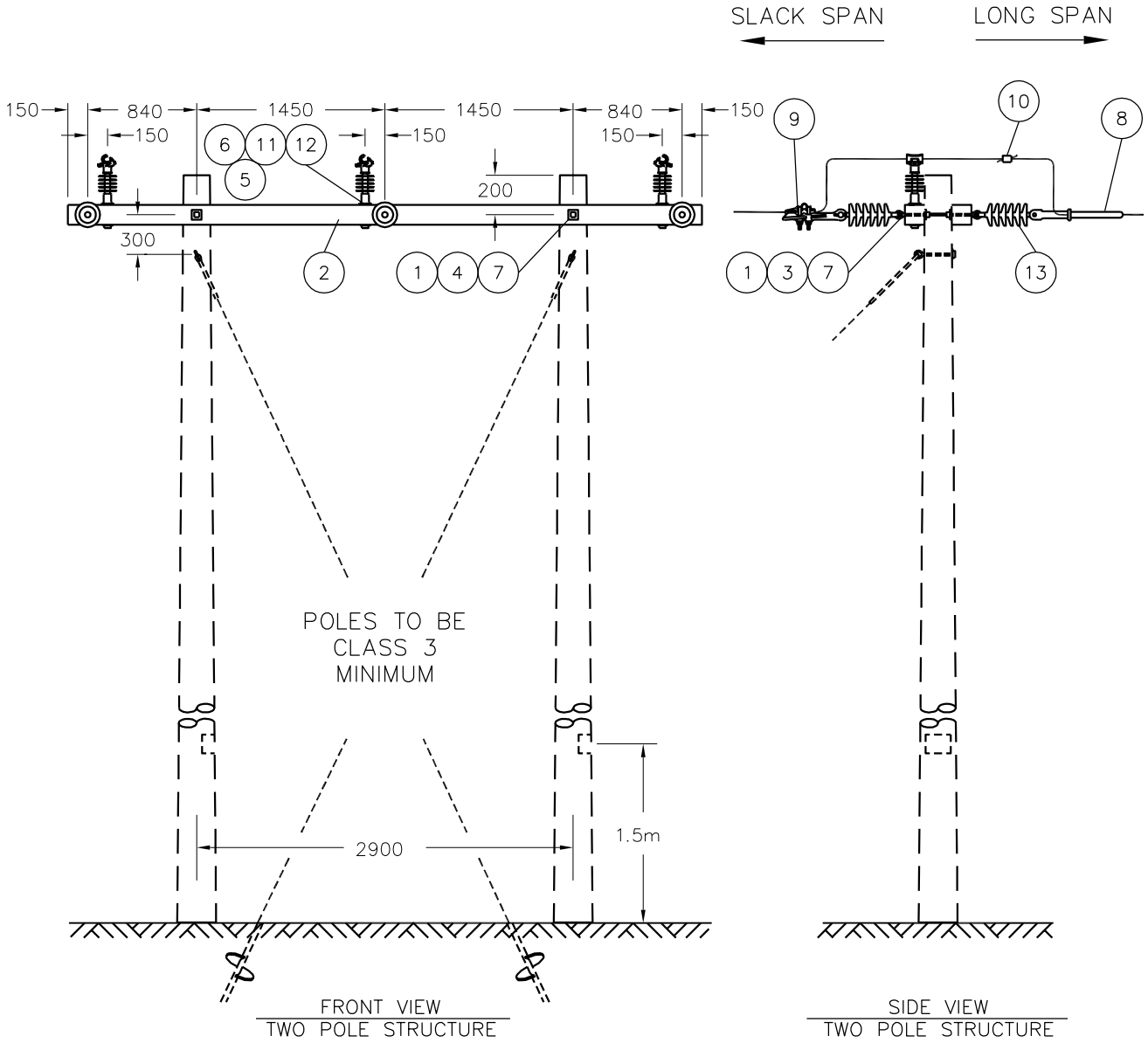

NOTES:

1) CLASS OF POLE AND GUYING SHOWN, ASSUME THAT THE GROUNDLINE OF THE STRUCTURES AT EACH END OF THE LONG SPAN ARE THE SAME ELEVATION. PLEASE VERIFY SUITABILITY OF POLE HEIGHT AND CLASS TO APPLICATION.
2) GUYING FOR THIS STRUCTURE SHALL USE STANDARD GUY COMPONENTS (INSULATORS, PREFORMS, ETC.) AS SHOWN IN SECTION A–32. THE LONGITUDINAL GUYS SHALL EACH BE 2 x 5/16" TO SEPARATE TYPE "B" ANCHORS. ALTERNATIVELY, TYPE "D" OR "E" ANCHORS MAY BE USED, OR IF REQUIRED FOR SOIL CONDITIONS. ANCHORS SHALL BE SET IN FRONT OF OPPOSING POLE.
3) GUYING SHALL BE STAGGERED WITH 6" CLEARANCE SO AS TO NOT RUB.
4) SLACKSPAN SHALL USE A–12–139.
5) SHORT GUYING SHALL NOT BE USED.
6) ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED. SCALE: N.T.S.

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. D.DONAIS	DRN. D.REDEKOPP CHKD. 2018–05–09	PELICAN ACSR LONG SPAN SPANS OF 105m TO 210m
DATE OF ISSUE **2018-06-07**	DRAWING NO. A–12–87	SHEET 2 of 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 11 12	6	BOLT – EYE – 5/8" x 12"
2	1 13 12	3	BOLT – MACHINE – 5/8" x 12"
3	1 13 14	6	BOLT – MACHINE – 5/8" x 14"
4	1 33 00	4	GRIP – PREFORMED GUY – 5/16"
5	1 50 00	6	NUT – EYE – 5/8"
6	1 93 42	16	WASHER-SQUARE – 2 1/4" x 2 1/4" x 13/16" HOLE
7	1 95 16	6m	WIRE – GUY – 5/16" STEEL
8	2 01 88	3	DEADEND – AUTOMATIC – PELICAN ACSR
9	2 02 18	3	CLAMP – BOLTED DEADEND – 3/0 TO 477 KCMIL
10	2 06 30	3	CONNECTOR – AMPACT
11	2 19 82	3	BRACKET-POLE TOP FOR 35KV LINE POST
12	2 19 91	3	STUD – 3/4" x 2 1/8"
13	2 20 00	3	INSULATOR – POLYMER – LINE POST – VERTICAL – CLAMP-TOP
14	2 29 24	6	INSULATOR – POLYMER – DEADEND – CLEVIS/TONGUE ENDS

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*Sask**Power*** - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **DCD**	**PELICAN ACSR LONG SPAN SPANS OF 211 M TO 245 M**
L. MOEN	**D. DONAIS**	CHKD.	
		2018-04-30	

DATE OF ISSUE: 2018-06-07 | DRAWING NO: **A-12-88** | **SHEET. 1 OF 2** | REV. **B**

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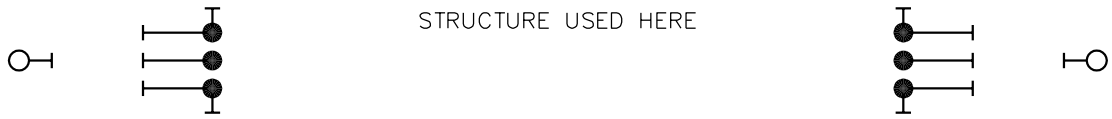

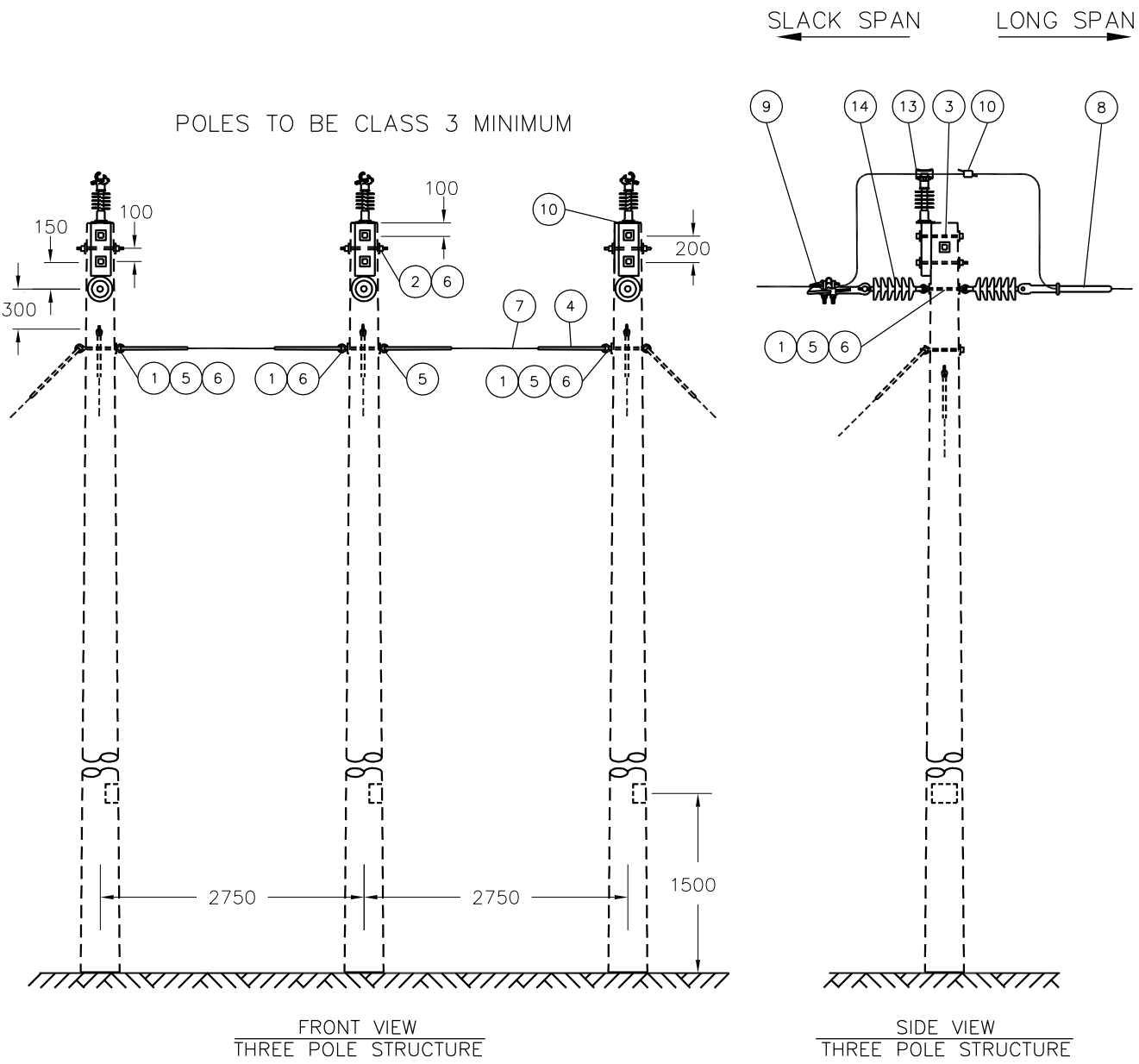

NOTES:

1) CLASS OF POLE AND GUYING SHOWN, ASSUME THAT THE GROUNDLINE OF THE STRUCTURES AT EACH END OF THE LONG SPAN ARE THE SAME ELEVATION. PLEASE VERIFY SUITABILITY OF POLE HEIGHT AND CLASS TO APPLICATION.
2) GUYING FOR THIS STRUCTURE SHALL USE STANDARD GUY COMPONENTS (INSULATORS, PREFORMS, ETC.) AS SHOWN IN SECTION A–32. THE LONGITUDINAL GUYS SHALL EACH BE 2 x 5/16" TO TYPE "B" ANCHORS. THE LATERAL GUYS SHALL BE 1 x 5/16" TO TYPE "B" ANCHORS.
3) SLACKSPAN SHALL USE A–12–139.
4) SHORT GUYING SHALL NOT BE USED.
5) ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED. SCALE: N.T.S.

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. D.DONAIS	DRN. D.REDEKOPP CHKD. 2018–05–09	PELICAN ACSR LONG SPAN SPANS OF 211m TO 245m
DATE OF ISSUE 2018-06-07	DRAWING NO. A–12–88	SHEET 2 of 2	REV. B

GENERAL INFORMATION – 3 Ø COMPOSITE CROSSARMS

1. THE STANDARD CONDUCTORS FOR NEW RURAL CONSTRUCTION ARE 1/0 ACSR RAVEN FOR RADIALS, AND 3/0 ACSR PIGEON FOR FEEDERS.

2. REFER TO DWG. A-12-50 SHT. 2 FOR RULING SPAN, MINIMUM POLE HEIGHT AND CLASS.

3. REFER TO SECTION A-38 FOR POLE SETTING INFORMATION.

4. REFER TO DISTRIBUTION PLANNING GUIDELINES SECTION 7.4 /TABLE 7.2 FOR CONDUCTOR SELECTION.

5. OVERHEAD LINES ARE TO BE BUILT 0.5m INSIDE THE ROAD ALLOWANCE (NOT INCLUDING LEASED ROADS).

6. DO NOT SET POLES WITHIN THE DISTANCE FROM THE BOTTOM OF THE DITCH SLOPE TO THE ROAD SURFACE. IF THIS IS NOT POSSIBLE WITHIN THE EXISTING ROAD ALLOWANCE, OBTAIN THE REQUIRED EASEMENT WITHIN THE ADJACENT PROPERTY OR BUILD ON THE OPPOSITE SIDE OF THE ROAD ALLOWANCE.

7. ON PRIVATE PROPERTY, PRIMARY CIRCUITS WILL BE UNDERGROUND, EXCEPT THAT CONSTRUCTION MAY BE OVERHEAD ON UNCULTIVATED LAND, OR ON CULTIVATED LAND WHERE THERE IS MINIMAL EFFECT ON AGRICULTURAL OPERATIONS AND WHERE THE LANDOWNER READILY AGREES TO GRANT A REGISTERED EASEMENT.

8. NEW PRIMARY OVERHEAD LINES SHOULD NOT BE BUILT INTO FARMYARDS.

9. ALL DEADEND, ANGLE OR CORNER STRUCTURES ARE TO BE RAKED 300mm AT THE TOP (UNLESS STATED OTHERWISE).

10. JAM NUTS ARE TO BE USED WITH EYE NUTS IF THE EYE NUT CANNOT BE INSTALLED TIGHT AGAINST THE POLE.

11. THROUGH BOLTS TO BE INSTALLED WITH NUT ON POLE SIDE.

12. CONDUCTOR SIZES SHOWN ARE ACSR UNLESS OTHERWISE NOTED.

13. STIRRUP CONNECTOR NOT REQUIRED ON HICON CONDUCTOR, WHEN CONNECTING TO THIS CONDUCTOR, USE CRIMPITS OR HOT LINE CLAMPS.

14. DO NOT USE AUTOMATIC SPLICES ON SLACK SPAN CONDUCTORS.

15. AUTOMATIC DEADEND CONNECTORS ON SLACK SPAN CONDUCTORS ARE PERMITTED, PROVIDED THE RUN THRU CONDUCTOR TAIL IS BENT AND CRIMPED.

16. SINGLE CIRCUIT – CENTER PHASE TO BE STAGGERED FROM POLE TO POLE AND CROSSARM TO ALTERNATE FROM SIDE TO SIDE OF POLE DOWN THE LINE.
    DOUBLE CIRCUIT – CROSSARM TO ALTERNATE FROM SIDE TO SIDE DOWN THE LINE, BUT DO NOT STAGGER CENTER PHASE.

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GENERAL INFORMATION – 3 Ø COMPOSITE CROSSARMS

17. USE OF POLYMER DEADEND INSULATORS:
THESE INSULATORS ARE RUGGED AND LESS PRONE TO DAMAGE THAN PORCELAIN UNITS. THEY SHOULD STILL BE TREATED CAREFULLY LIKE ANY OTHER HIGH VOLTAGE APPARATUS. ALTHOUGH THEY HAVE HIGH TENSILE STRENGTH, THEY DO NOT HAVE GOOD TORSIONAL STRENGTH (ONE END FIXED AND THE OTHER END TWISTED). NOR DO THEY HAVE GOOD CANTILEVER STRENGTH (ONE END FIXED AND THE OTHER BENT). THIS SHOULD BE KEPT IN MIND DURING INSTALLATION.

    ON DEADEND AND DEFLECTION STRUCTURES KEEP THE EYES OF BOLTS AND NUTS VERTICAL. THIS ALLOWS MOVEMENT OF THE INSULATOR WITHOUT CAUSING A CANTILEVER LOAD. THESE INSULATORS PERFORM VERY WELL IN CONTAMINATED ENVIRONMENTS. DO NOT APPLY ANY SILICON GREASES TO THEM SINCE THE CHEMICAL COMPATABILITIES ARE NOT KNOWN. PRESSURIZED WATER WASHING CAN BE USED IF REQUIRED.

18. HARDWARE COMPONENTS INSTALLED WITHIN 150mm OF EACH OTHER SHALL BE SOLIDLY BONDED TO TOGETHER TO PREVENT RADIO INTERFERENCE AND RISK OF POLE FIRES.

19. CONSULT TRANSMISSION SERVICES – ENGINEERING LINES WHEN DISTRIBUTION FACILITIES ARE UNDERSTRUNG ON TRANSMISSION STRUCTURES OR CROSSINGS.

20. TANGENT STRUCTURES UTILIZING COMPOSITE CROSSARMS ARE RECOMMENDED TO BE INSTALLED IN HEAVILY WOODED, HIGH MOISTURE, OR SEVERE CONTAMINATION AREAS SUCH AS POTASH MINES ONLY, OWING TO THE MUCH HIGHER COST. FOR GEOGRAPHICAL REFERENCE, THIS INCLUDES NORTH OF THE 53RD PARALLEL AND ALSO THE EASTERN REGION BETWEEN CANORA AND HUDSON BAY. ALL OTHER SITUATIONS ARE TO BE APPROVED BY THE BUDGET OWNER.

21. ALL TANGENT AND ANGLE STRUCTURES SHALL HAVE MINIMUM 3” X 3” SQUARE WASHER INSTALLED ON THE BOTTOM OF THE ARMS AT THE PIN HOLES. ALL TANGENT AND ANGLE STRUCTURES UTILIZING LINE POST INSULATORS SHALL HAVE A MINIMUM 4” X 4” SQUARE WASHER ON THE TOP AND BOTTOM OF THE ARMS AT THE PIN HOLES.

22. ALL DEADEND STRUCTURES SHALL HAVE A FULL FACE WASHER (4” X 4”) INSTALLED AT THE CENTER PHASE ATTACHMENT POINT ON THE CROSSARM TO PROVIDE ADDITIONAL STRENGTH AS RECOMMENDED BY THE SUPPLIER. THE OUTSIDE PHASES OF THE CROSSARM COME PRE-INSTALLED WITH FULL FACE WASHERS FROM THE SUPPLIER AND DO NOT REQUIRE ADDITIONAL WASHERS.

23. ALL PRIMARY, RURAL, VEHICULAR ROAD CROSSINGS (ROAD ALLOWANCE) SHALL BE OVERHEAD CONSTRUCTION WHERE POSSIBLE, WITH EXCEPTIONS NOTED BELOW:

    A) DESIGNATED HIGH LOAD CORRIDORS.
    B) TO PREVENT CREATING A DOCUMENTED SAFETY HAZARD TO SASKPOWER AND CUSTOMER OPERATIONS.
    C) OTHERWISE TECHNICALLY UNFEASIBLE TO CONSTRUCT OVERHEAD.

24. REFER TO DISTRIBUTION ENGINEERING DESIGN AIDS (SEP'S, DISTRIBUTION PLANNING GUIDELINES) FOR GUIDANCE ON DESIGNING OVERHEAD AND CROSSING FACILITIES.

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 14 12	2	BOLT-MACHINE – 3/4" x 12"
2	1 29 09	1	CROSSARM-COMPOSITE-3-5/8" x 4-5/8" x 10'
3	1 53 09	3	PIN-STEEL
4	1 93 28	5	WASHER-DOUBLE LOCK – 3/4"
5	1 93 95	3	WASHER-SQUARE – 3" x 3" x 13/16" HOLE
6	1 93 96	2	WASHER-CURVED – 3" x 3" x 13/16" HOLE
7	2 20 23	3	INSULATOR-PIN TYPE
8	2 58 XX	3	ARMOUR ROD (SIZE TO SUIT-SEE NOTE 1)
9	2 97 28	5.1m	WIRE-TIE – #8 STEEL SOLID

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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*Sask**Power*** - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**3Ø TANGENT COMPOSITE CROSSARM**
M. ERETH	**A. UHREN**	CHKD.	
		2014-09-02	

DATE OF ISSUE: 2014/11/17	DRAWING NO: **A-12-102**	**SHEET 1 OF 2**	REV. **0**

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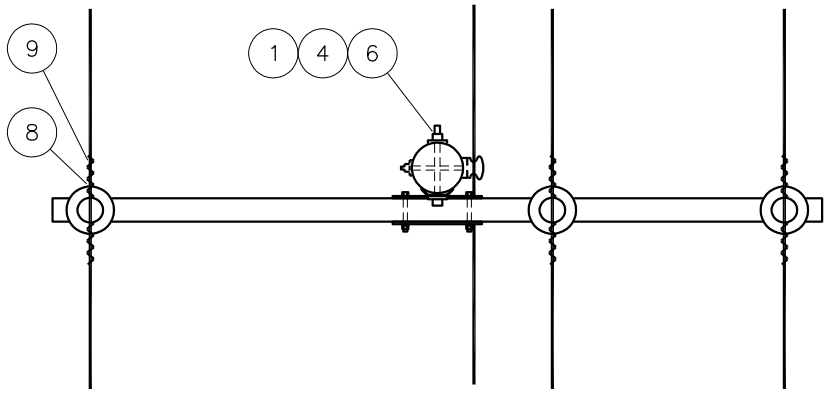

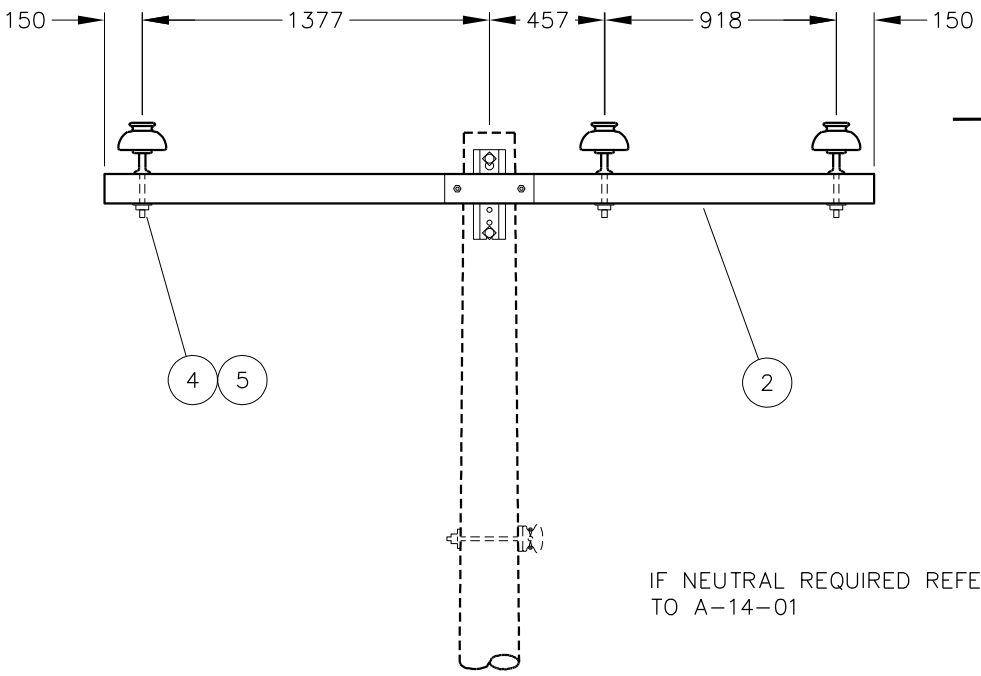

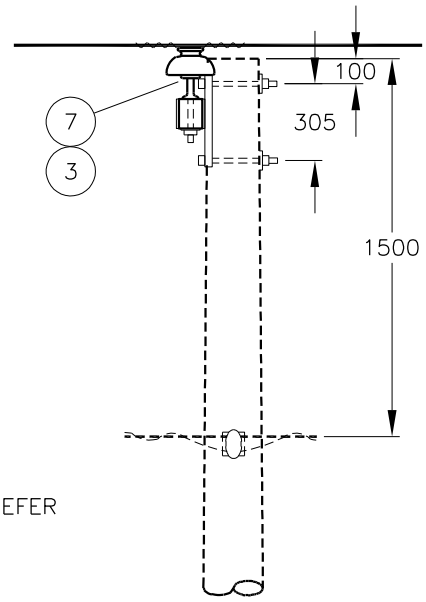

IF NEUTRAL REQUIRED REFER TO A–14–01

NOTES:

1. STRUCTURE SUITABLE FOR LINE DEFLECTIONS UP TO A MAXIMUM OF 4° FOR 1/0 ACSR (RAVEN), 3° FOR 3/0 ACSR (PIGEON), 2.5° FOR 4/0 ACSR (PENGUIN), AND 2° FOR 266 KCMIL ACSR (PARTRIDGE) AT 90m RULING SPANS.
2. STRUCTURE SUITABLE FOR LINE DEFLECTIONS UP TO A MAXIMUM OF 2° FOR 266 AL (DAISY), AT 60m RULING SPANS.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

A12_102_02

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN.Y.HAO CHKD. 2020-06-18	3ø TANGENT COMPOSITE CROSSARM
DATE OF ISSUE 2020-12-18	DRAWING NO. A–12–102	SHEET 2 of 2	REV. C

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 13 12	1	BOLT – MACHINE – 5/8" X 12"
2	1 14 12	2	BOLT – MACHINE – 3/4" X 12"
3	1 29 09	1	CROSSARM – COMPOSITE – 3-5/8" X 4-5/8" X 10'
4	1 93 23	3	WASHER – LOCK – 3/4"
5	1 93 27	1	WASHER – LOCK – DOUBLE COIL – 5/8"
6	1 93 28	2	WASHER – LOCK – DOUBLE COIL – 3/4"
7	1 93 47	3	WASHER – SQUARE – 4" X 13/16" HOLE
8	1 93 96	4	WASHER – CURVED – 3" X 13/16" HOLE
9	2 19 92	3	STUD – POLE TOP INSULATOR – 3/4" X 6"
10	2 20 00	3	INSULATOR – LINE POST – 35 kV
11	2 58 XX	3	ARMOUR ROD (SIZE TO SUIT) (SEE NOTE 1)
12	8 26 65	3	BRACKET – SUPPORT PLATE – LINE POST INSULATOR

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **PP**	**3Ø TANGENT COMPOSITE CROSSARM LINE POST INSULATOR**
L MOEN	**P PATEL**	CHKD. **LM**	
		2022-07-08	

DATE OF ISSUE: **2022-08-15** | DRAWING NO: **A-12-102A** | **SHEET 1 OF 2** | REV. **-**

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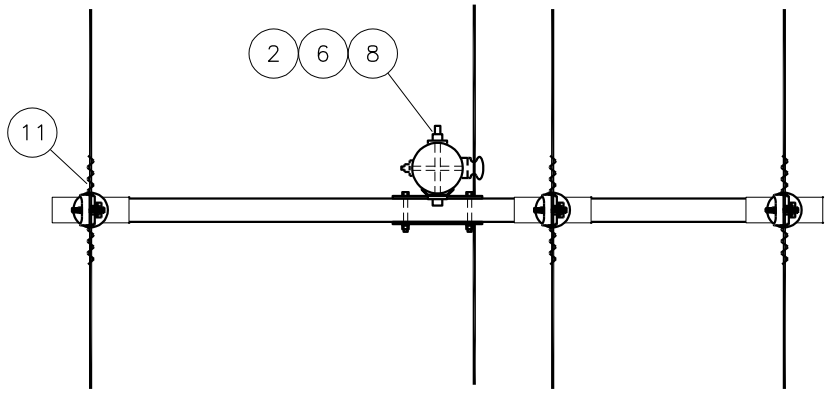

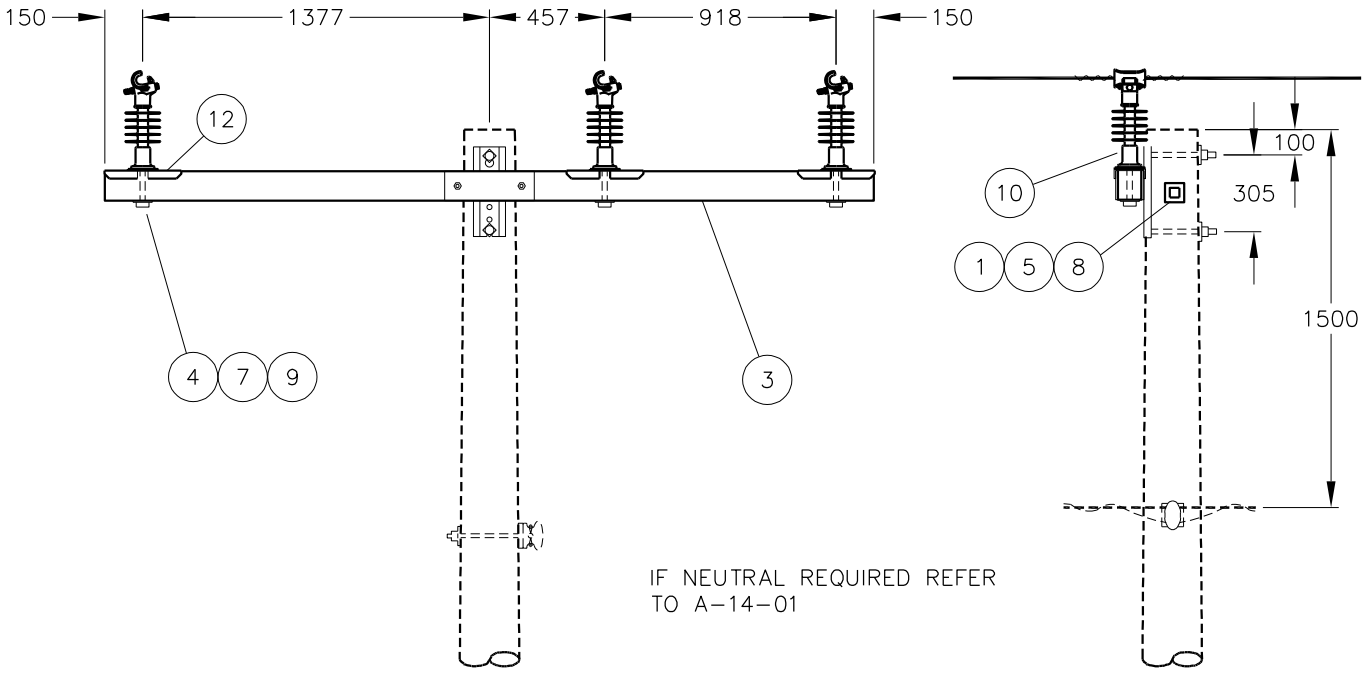

IF NEUTRAL REQUIRED REFER TO A–14–01

NOTES:

1. STRUCTURE SUITABLE FOR LINE DEFLECTIONS UP TO A MAXIMUM OF 4° FOR 1/0 ACSR (RAVEN), 3° FOR 3/0 ACSR (PIGEON), 2.5° FOR 4/0 ACSR (PENGUIN), AND 2° FOR 266 KCMIL ACSR (PARTRIDGE) AND LARGER ACSR AT UP TO 90m RULING SPANS.
2. STRUCTURE SUITABLE FOR LINE DEFLECTIONS UP TO A MAXIMUM OF 2° FOR 266 AL (DAISY) AND LARGER AL, AT UP TO 60m RULING SPANS.
3. REFER TO A–12–142 FOR PROPER INSTALLATION OF LINE POST INSULATOR.
4. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.

SCALE: N.T.S.

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. P.PATEL	DRN.D.REDEKOPP CHKD. 2022–07–27	3ø TANGENT COMPOSITE CROSSARM LINE POST INSULATOR
DATE OF ISSUE 2022-08-15	DRAWING NO. A–12–102A	SHEET 2 of 2	REV. –

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 14 12	2	BOLT-MACHINE – 3/4" x 12"
2	1 29 09	1	CROSSARM-COMPOSITE-3-5/8" x 4-5/8" x 10'
3	1 53 09	2	PIN-STEEL
4	1 93 28	4	WASHER-DOUBLE LOCK – 3/4"
5	1 93 95	2	WASHER-SQUARE – 3" x 3" x 13/16" HOLE
6	1 93 96	2	WASHER-CURVED – 3" x 3" x 13/16" HOLE
7	2 20 23	2	INSULATOR-PIN TYPE
8	2 58 XX	2	ARMOUR ROD (SIZE TO SUIT-SEE NOTE 1)
9	2 97 28	3.4m	WIRE-TIE – #8 STEEL SOLID

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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*Sask**Power*** - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**MODIFIED 3Ø TANGENT COMPOSITE CROSSARM**
M. ERETH	**A. UHREN**	CHKD.	
		2014-09-02	

DATE OF ISSUE: 2014/11/17	DRAWING NO: **A-12-104**	**SHEET 1 OF 2**	REV. **0**

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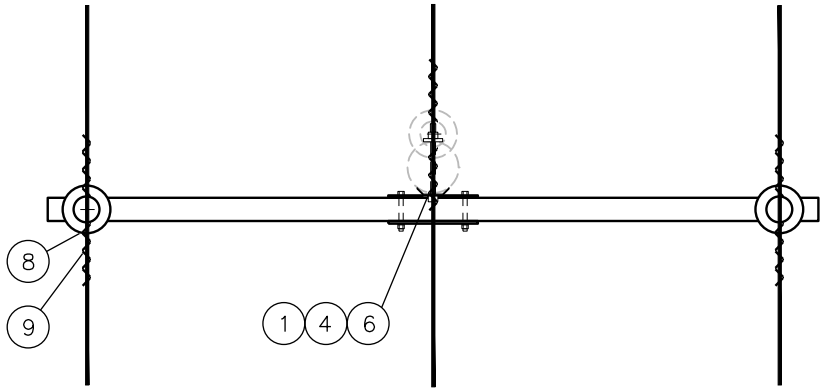

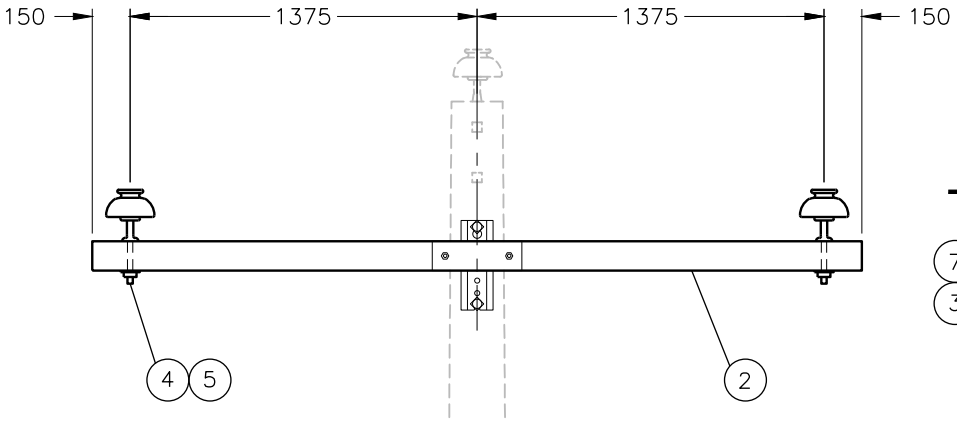

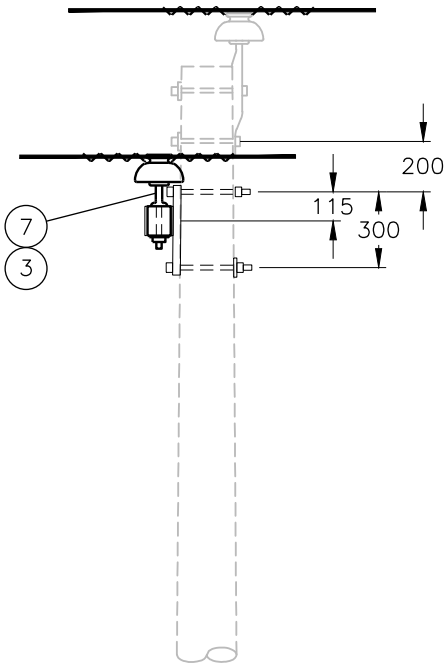

NOTE:

1. THIS STRUCTURE TO BE USED TO CONVERT AN EXISTING SINGLE PHASE LINE TO THREE PHASE.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL M. ERETH	DESIGN CHK. A. UHREN	DRN. TmBIRAM CHKD.	MODIFIED 3ø TANGENT COMPOSITE CROSSARM
		2014–09–08	
DATE OF ISSUE 2014/11/17		DRAWING NO. A–12–104 SHEET 2 of 2	REV. 0

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 14 12	2	BOLT – MACHINE – 3/4" X 12"
2	1 29 09	1	CROSSARM – COMPOSITE – 3-5/8" X 4-5/8" X 10'
3	1 93 23	2	WASHER – LOCK – COIL – 3/4"
4	1 93 28	2	WASHER – LOCK – DOUBLE COIL – 3/4"
5	1 93 47	2	WASHER – SQUARE – 4" X 13/16" HOLE
6	1 93 96	2	WASHER – CURVED – 3" X 13/16" HOLE
7	2 19 92	2	STUD – POLE TOP INSULATOR – 3/4" X 6"
8	2 20 00	2	INSULATOR – LINE POST – 35 kV
9	2 58 XX	2	ARMOUR ROD (SIZE TO SUIT) (SEE NOTE 1)
10	8 26 65	2	BRACKET – SUPPORT PLATE – LINE POST INSULATOR

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **PP**	**MODIFIED 3Ø TANGENT COMPOSITE CROSSARM LINE POST INSULATOR**
L MOEN	**P PATEL**	CHKD. **LM**	
		2022-06-17	

DATE OF ISSUE: **2022-08-15** | DRAWING NO: **A-12-104A** | **SHEET 1 OF 2** | REV. **-**

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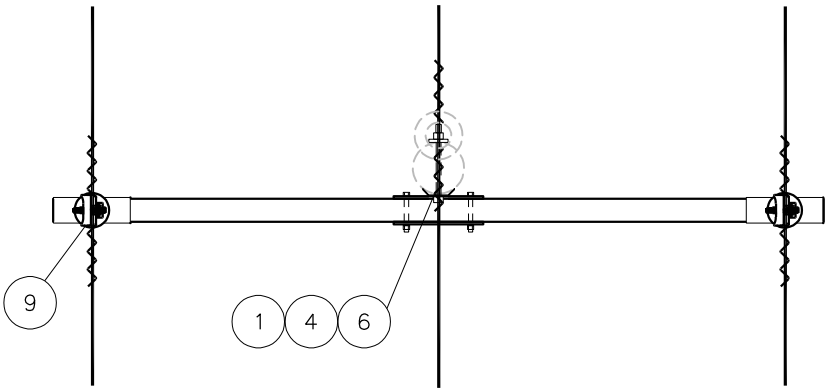

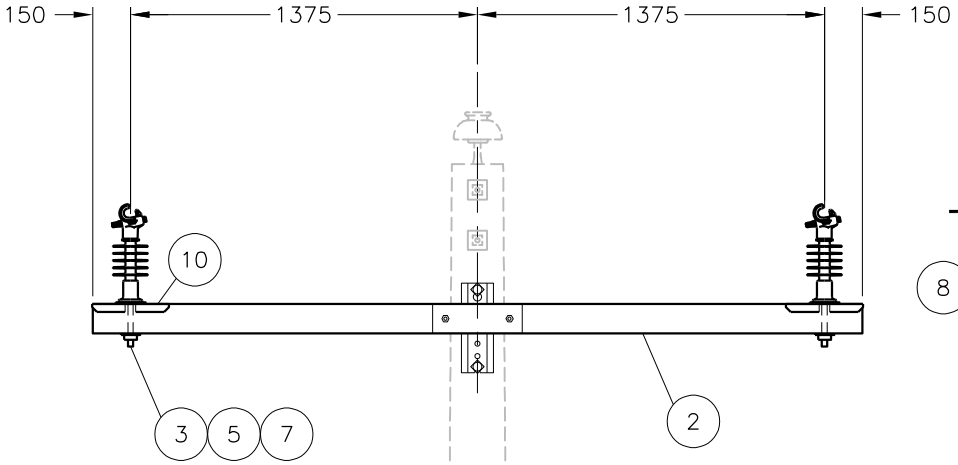

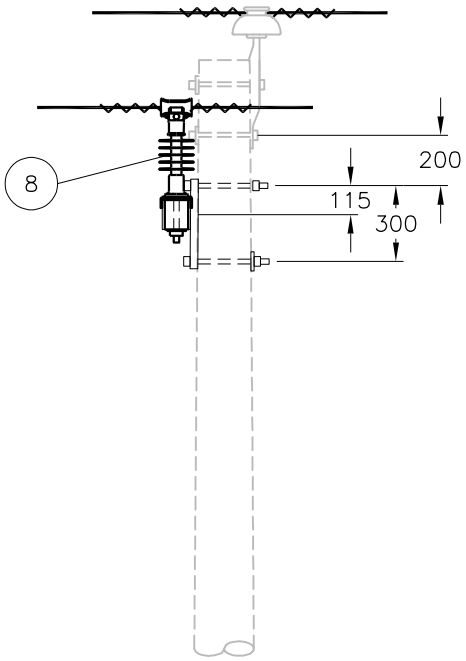

NOTES:

1. THIS STRUCTURE TO BE USED TO CONVERT AN EXISTING SINGLE PHASE LINE TO THREE PHASE.
2. REFER TO A-12-142 FOR PROPER INSTALLATION OF LINE POST INSULATOR.
3. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.

SCALE: N.T.S.

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. P.PATEL	DRN.D.REDEKOPP CHKD. 2022-07-27	MODIFIED 3ø TANGENT COMPOSITE CROSSARM LINE POST INSULATOR
DATE OF ISSUE 2022-08-15	DRAWING NO. A-12-104A	SHEET 2 of 2	REV. –

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 13 10	1	BOLT – MACHINE – 5/8” X 10”
2	1 14 12	2	BOLT – MACHINE – 3/4” X 12”
3	1 29 09	1	CROSSARM – COMPOSITE – 3-5/8” X 4-5/8” X 10’
4	1 53 01	3	PIN – ANGLE
5	1 93 27	4	WASHER – DOUBLE LOCK – 5/8”
6	1 93 28	2	WASHER – DOUBLE LOCK – 3/4”
7	1 93 42	2	WASHER – SQUARE – 2-1/4” X 13/16” HOLE
8	1 93 45	3	WASHER – SQUARE – 4” X 11/16” HOLE
9	1 93 96	2	WASHER – CURVED – 3” X 13/16” HOLE
10	2 20 23	3	INSULATOR – PIN TYPE
11	2 58 XX	3	ARMOUR ROD (SIZE TO SUIT) (SEE NOTE 1)
12	2 97 28	5.1 m	TIE WIRE – STEEL

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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*Sask**Power*** - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **PP**	**3Ø ANGLE COMPOSITE CROSSARM DEFLECTIONS OF 5° TO 10°**
L MOEN	**P PATEL**	CHKD. **LM**	
		2022-02-23	

DATE OF ISSUE: **2022-08-15** | DRAWING NO: **A-12-105** | **SHEET 1 OF 2** | REV. **B**

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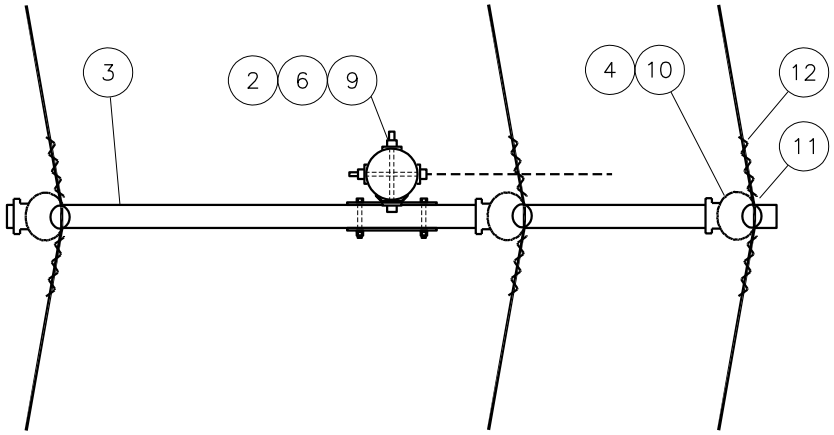
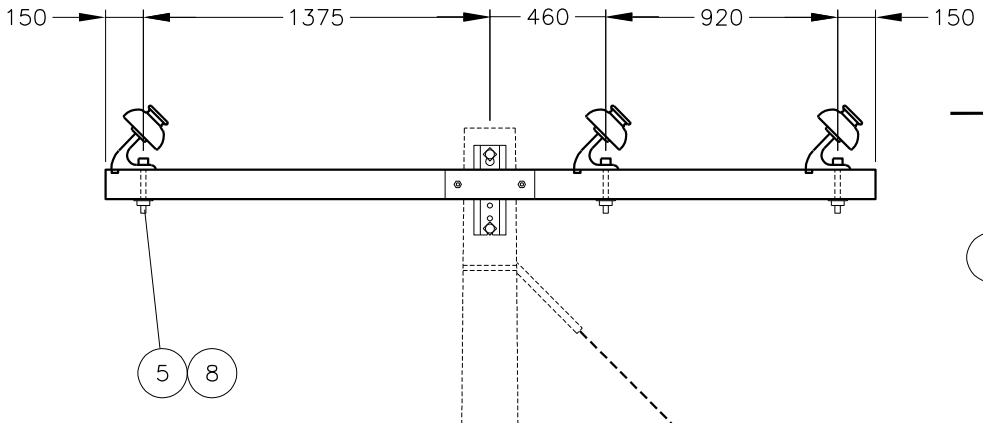


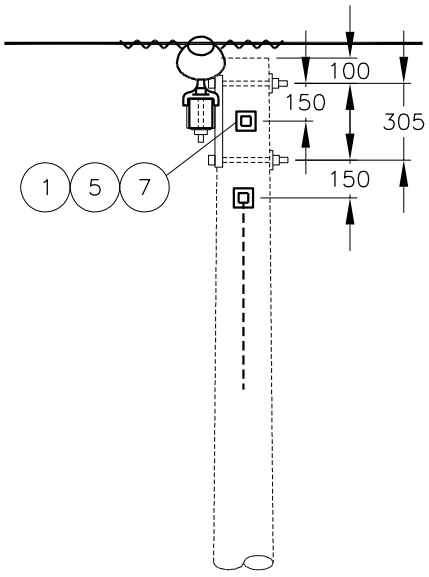
RURAL (90m RULING SPAN)

COND SIZE	DEFLECTION
1/0 ACSR	4°–10°
3/0 ACSR	3°–10°
4/0 ACSR	2.5°–10°
266 ACSR	2°–10°

URBAN (60m RULING SPAN)

COND SIZE	DEFLECTION
266 AL	2°–10°





NOTE:
1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

A12_105_02

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN.E.GOTANA CHKD. 2020–02–12	3ø ANGLE COMPOSITE CROSSARM DEFLECTIONS UP TO 10°
DATE OF ISSUE 2020-12-18	DRAWING NO. A–12–105	SHEET 2 of 2	REV. B

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 13 12	1	BOLT – MACHINE – 5/8" X 12"
2	1 14 12	2	BOLT – MACHINE – 3/4" X 12"
3	1 29 09	1	CROSSARM – COMPOSITE – 3-5/8" X 4-5/8" X 10'
4	1 93 23	3	WASHER – LOCK – COIL – 3/4"
5	1 93 27	1	WASHER – LOCK – DOUBLE COIL – 5/8"
6	1 93 28	2	WASHER – LOCK – DOUBLE COIL – 3/4"
7	1 93 47	3	WASHER – SQUARE – 4" X 13/16" HOLE
8	1 93 96	4	WASHER – CURVED – 3" X 13/16" HOLE
9	2 19 92	3	STUD – POLE TOP INSULATOR – 3/4" X 6"
10	2 20 00	3	INSULATOR – LINE POST – 35 kV
11	2 58 XX	3	ARMOUR ROD (SIZE TO SUIT) (SEE NOTE 1)
12	8 26 65	3	BRACKET – SUPPORT PLATE – LINE POST INSULATOR

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **PP**	**3Ø ANGLE COMPOSITE CROSSARM DEFLECTIONS OF 5° TO 10° LINE POST INSULATOR**
L MOEN	**P PATEL**	CHKD. **LM**	
		2022-06-17	

DATE OF ISSUE: **2022-08-15** | DRAWING NO: **A-12-105A** | **SHEET 1 OF 2** | REV. **-**

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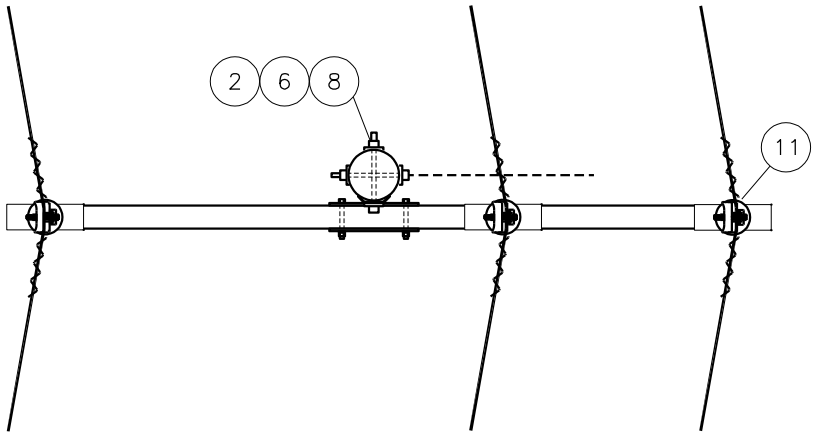
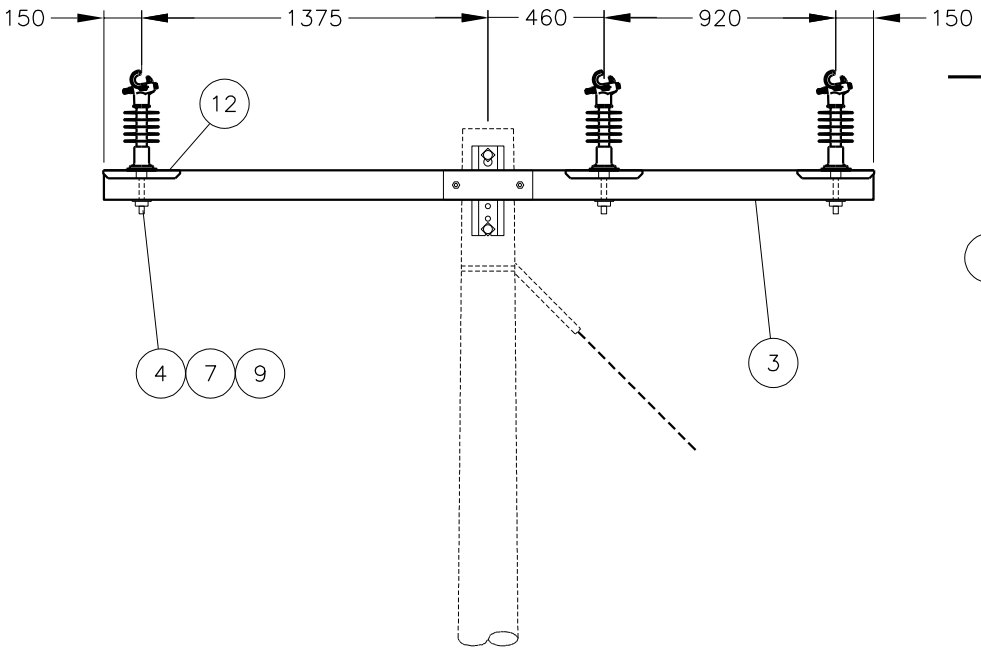


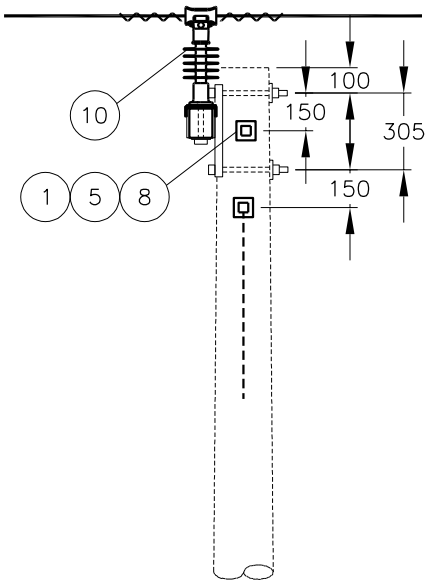
RURAL (90m RULING SPAN)

COND SIZE	DEFLECTION
1/0 ACSR	4°–10°
3/0 ACSR	3°–10°
4/0 ACSR	2.5°–10°
266 ACSR	2°–10°

URBAN (60m RULING SPAN)

COND SIZE	DEFLECTION
266 AL	2°–10°





NOTES:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.
2. REFER TO A–12–142 FOR PROPER INSTALLATION OF LINE POST INSULATOR.
3. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.

SCALE: N.T.S.

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. P.PATEL	DRN.D.REDEKOPP CHKD. 2022–07–27	3ø ANGLE COMPOSITE CROSSARM DEFLECTIONS OF 5° TO 10° LINE POST INSULATOR
DATE OF ISSUE 2022-08-15	DRAWING NO. A–12–105A	SHEET 2 of 2	REV. –

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	2	BOLT – DOUBLE ARMING – 5/8" X 20"
2	1 13 10	1	BOLT – MACHINE – 5/8" X 10"
3	1 14 16	2	BOLT – MACHINE – 3/4" X 16"
4	1 29 09	2	CROSSARM – COMPOSITE – 3-5/8" X 4-5/8" X 10'
5	1 53 01	6	PIN – ANGLE
6	1 93 27	7	WASHER – DOUBLE LOCK – 5/8"
7	1 93 28	2	WASHER – DOUBLE LOCK – 3/4"
8	1 93 42	12	WASHER – SQUARE – 2-1/4" X 13/16" HOLE
9	1 93 45	6	WASHER – SQUARE – 4" X 11/16" HOLE
10	2 20 23	6	INSULATOR – PIN TYPE
11	2 58 XX	3	ARMOUR ROD (SIZE TO SUIT) (SEE NOTE 1)
12	2 97 28	10.2 m	TIE WIRE – STEEL

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS			
APPROVAL	DESIGN CHK	DRN. **PP**	**3Ø ANGLE COMPOSITE CROSSARM DEFLECTIONS OF 11° TO 30°**
L MOEN	**P PATEL**	CHKD. **LM**	
		2022-02-23	
DATE OF ISSUE: **2022-08-15**		DRAWING NO: **A-12-106**	**SHEET 1 OF 2** REV. **B**

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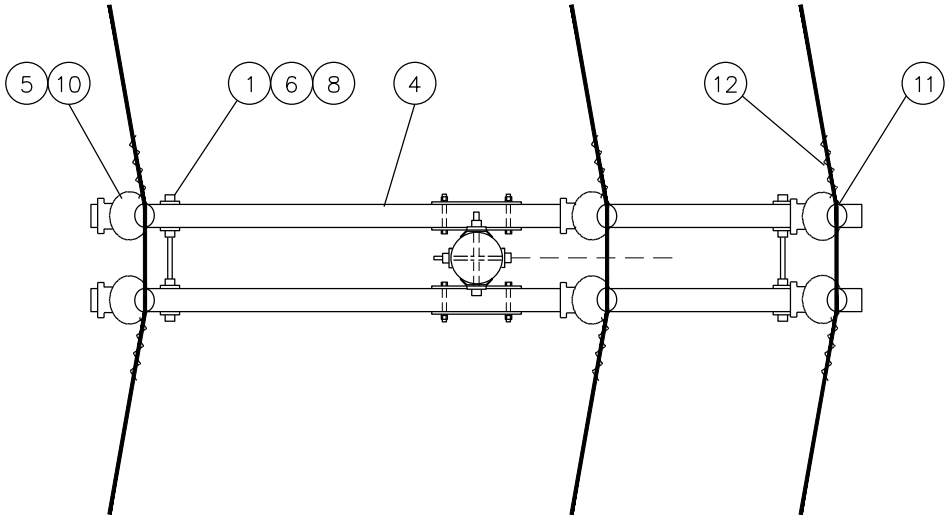

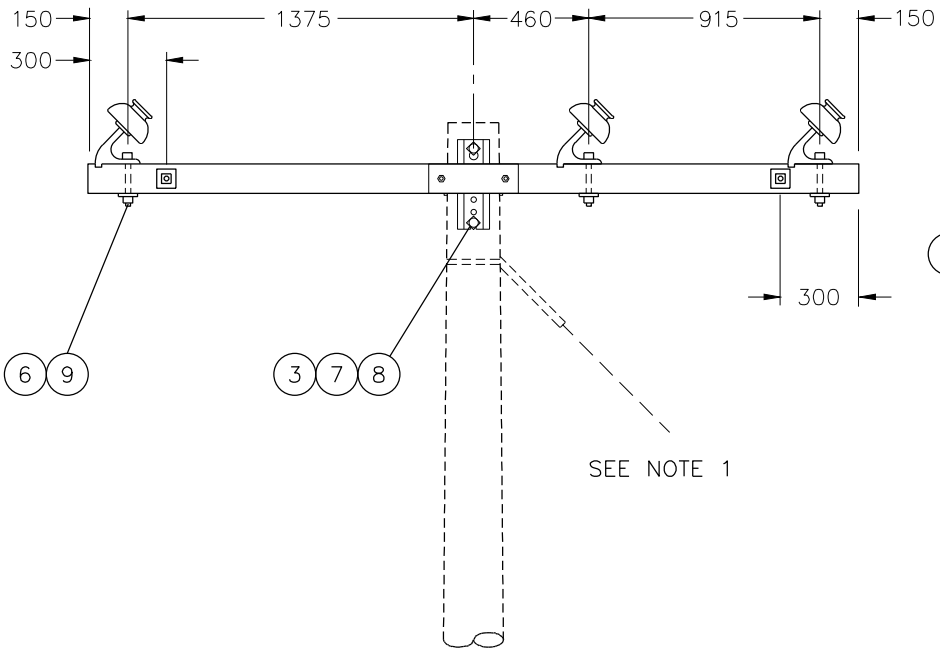

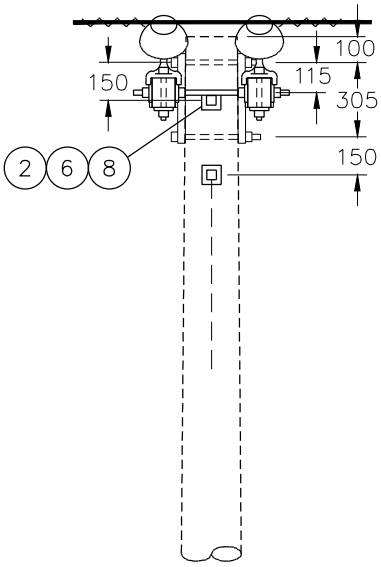

NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.
2. STRUCTURE SUITABLE FOR LINE DEFLECTIONS UP TO A MAXIMUM OF 30° FOR ALL CONDUCTORS, EXCEPT 266 KCMIL ACSR (PARTRIDGE) IS SUITABLE FOR A MAX DEFLECTION OF 25° AT 90m RULING SPANS.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. A. UHREN	DRN. E.GOTANA CHKD. 2015–08–11	3ø ANGLE COMPOSITE CROSSARM DEFLECTIONS OF 11° TO 30°
DATE OF ISSUE 2016/02/05	DRAWING NO. A–12–106	SHEET 2 of 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	2	BOLT – DOUBLE ARMING – 5/8" X 20"
2	1 13 12	1	BOLT – MACHINE – 5/8" X 12"
3	1 14 16	2	BOLT – MACHINE – 3/4" X 16"
4	1 29 09	2	CROSSARM – COMPOSITE – 3-5/8" X 4-5/8" X 10'
5	1 93 23	6	WASHER – LOCK – COIL – 3/4"
6	1 93 27	5	WASHER – LOCK – DOUBLE COIL – 5/8"
7	1 93 28	2	WASHER – LOCK – DOUBLE COIL – 3/4"
8	1 93 42	8	WASHER – SQUARE – 2-1/4" X 13/16" HOLE
9	1 93 47	6	WASHER – SQUARE – 4" X 13/16" HOLE
10	1 93 96	2	WASHER – CURVED – 3" X 13/16" HOLE
11	2 19 92	6	STUD – POLE TOP INSULATOR – 3/4" X 6"
12	2 20 00	6	INSULATOR – LINE POST – 35 kV
13	2 58 XX	3	ARMOUR ROD (SIZE TO SUIT) (SEE NOTE 1)
14	8 26 65	6	BRACKET – SUPPORT PLATE – LINE POST INSULATOR

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **PP**	**3Ø ANGLE COMPOSITE CROSSARM DEFLECTIONS OF 11° TO 30° LINE POST INSULATOR**
L MOEN	**P PATEL**	CHKD. **LM**	
		2022-06-17	

DATE OF ISSUE: **2022-08-15** | DRAWING NO: **A-12-106A** | **SHEET 1 OF 2** | REV. **-**

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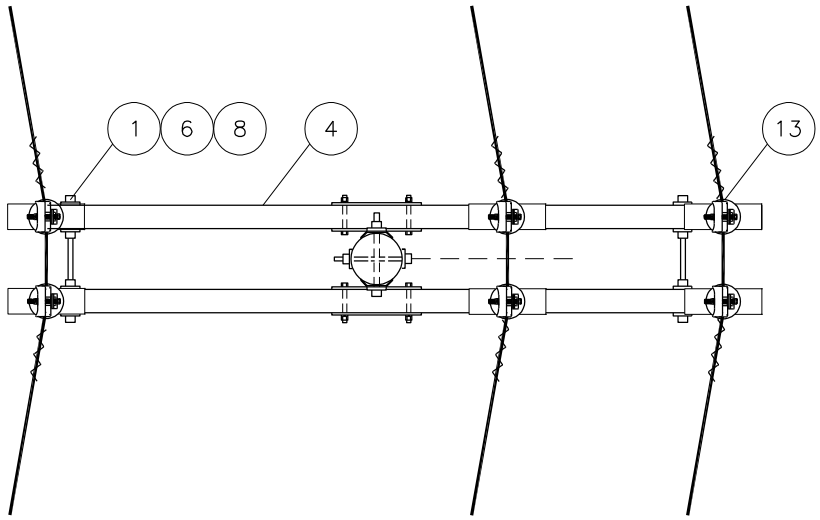
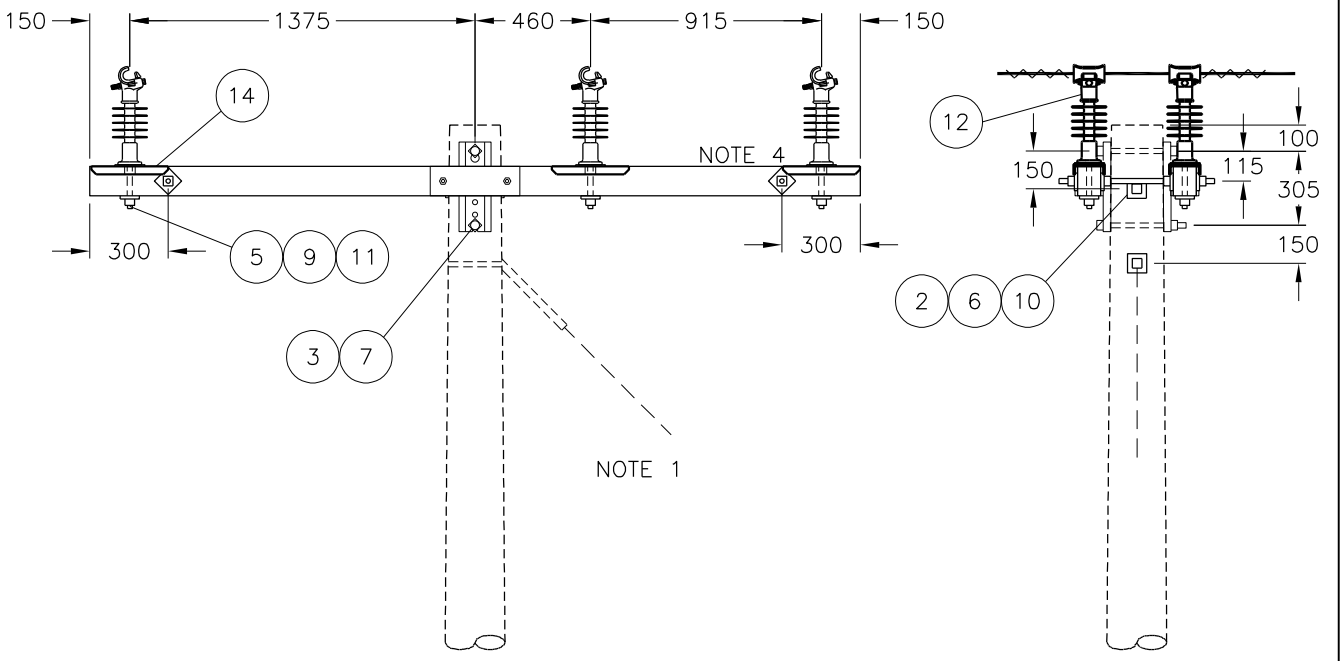
STRUCTURE USED HERE





NOTES:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.
2. STRUCTURE SUITABLE FOR LINE DEFLECTIONS UP TO A MAXIMUM OF 30° FOR ALL CONDUCTORS, EXCEPT 266 KCMIL ACSR (PARTRIDGE) IS SUITABLE FOR A MAX DEFLECTION OF 25° AT 90m RULING SPANS.
3. REFER TO A–12–142 FOR PROPER INSTALLATION OF LINE POST INSULATOR.
4. TO AVOID OVERLAP BETWEEN THE INSULATOR SUPPORT PLATE (8 26 65) AND THE SQUARE WASHER (1 93 42), THE SQUARE WASHER SHOULD BE ROTATED BY 45 DEGREES.
5. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

SCALE: N.T.S.

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. P.PATEL	DRN.D.REDEKOPP CHKD. 2022–07–27	3ø ANGLE COMPOSITE CROSSARM DEFLECTIONS OF 11° TO 30° LINE POST INSULATOR
DATE OF ISSUE 2022-08-15		DRAWING NO. A–12–106A SHEET 2 of 2	REV. –

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	2	BOLT-DOUBLE ARMING - 5/8" x 20"
2	1 14 12	4	BOLT-MACHINE – 3/4" x 12"
3	1 29 38	2	CROSSARM-COMPOSITE-4-5/8" x 3-5/8" x 9'
4	1 50 00	2	NUT-EYE - 5/8"
5	1 53 09	2	PIN-STEEL
6	1 93 28	6	WASHER-DOUBLE LOCK – 3/4"
7	1 93 42	2	WASHER-SQUARE – 2 1/4" x 2 1/4" x 13/16" HOLE
8	1 93 45	2	WASHER-SQUARE – 4" x 4" x 11/16" HOLE
9	1 93 95	2	WASHER-SQUARE – 3" x 3" x 13/16" HOLE
10	1 93 96	4	WASHER-CURVED 3" x 3" x 13/16" HOLE
11	2 01 XX	6	DEADEND-AUTOMATIC-CLEVIS TYPE (SEE NOTE 1)
12	2 20 23	2	INSULATOR-PIN TYPE
13	2 29 24	6	DEADEND-POLYMER-CLEVIS AND TONGUE ENDS
14	2 97 50	2	UNI-TIE
15	5 09 XX	3	CONNECTOR-COMPRESSION (SIZE TO SUIT - SEE NOTE 2)

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**
2. **REFER TO SECTION A-36 FOR TYPE AND SIZE OF CONNECTOR REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**3Ø DEFLECTION AND CORNER COMPOSITE CROSSARM ANGLES OF 31° TO 90°**
L. MOEN	**A. UHREN**	CHKD.	
		2017-08-21	

DATE OF ISSUE: 2017-11-03	DRAWING NO: **A-12-108**	**SHEET 1 OF 2**	REV. **A**

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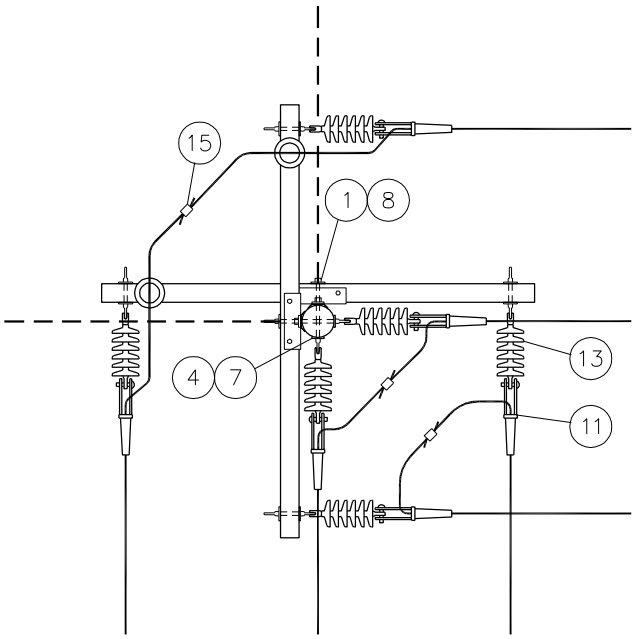

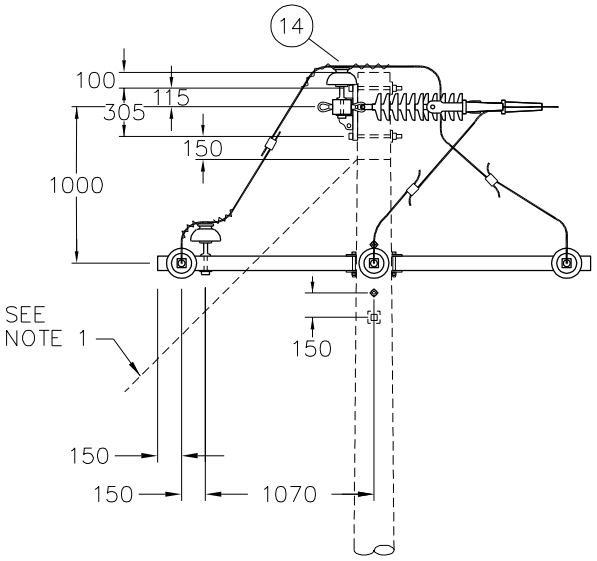

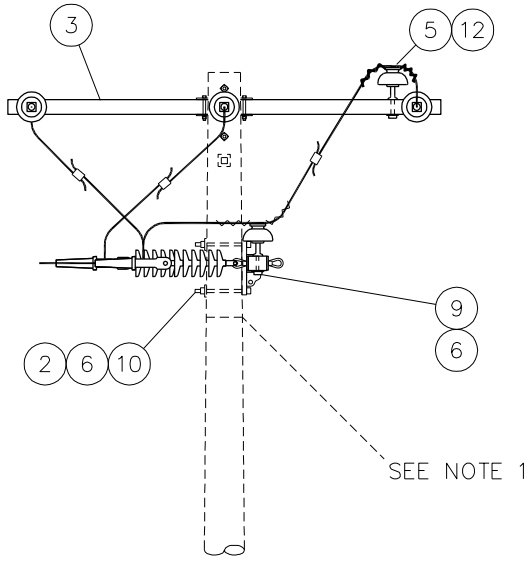

NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. A. UHREN	DRN. C.BAUTISTA CHKD. 2017–08–29	3ø DEFLECTION AND CORNER COMPOSITE CROSSARM ANGLES OF 31° TO 90°
DATE OF ISSUE 2017-11-03	DRAWING NO. A–12–108	SHEET 2 of 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 14 12	4	BOLT-MACHINE – 3/4" x 12"
2	1 29 09	2	CROSSARM-COMPOSITE-3-5/8" x 4-5/8" x 10'
3	1 53 09	12	PIN-STEEL
4	1 93 28	16	WASHER-DOUBLE LOCK – 3/4"
5	1 93 95	12	WASHER-SQUARE – 3" x 3" x 13/16" HOLE
6	1 93 96	4	WASHER-CURVED – 3" x 3" x 13/16" HOLE
7	2 20 23	12	INSULATOR-PIN TYPE
8	5 XX XX	10	CONNECTOR-COMPRESSION (SIZE TO SUIT - SEE NOTE 2)
9	5 13 XX	12	DEADEND-PREFORMED (SIZE TO SUIT - SEE NOTE 1)

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**
2. **REFER TO SECTION A-36 FOR TYPE AND SIZE OF CONNECTOR REQUIRED.**

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*Sask**Power*** - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**3Ø SLACK SPAN DEFLECTION AND CORNER ANGLES OF 31° TO 90° – COMPOSITE**
M. ERETH	**A. UHREN**	CHKD.	
		2014-09-02	

DATE OF ISSUE: 2014/11/17	DRAWING NO: **A-12-108A**	**SHEET 1 OF 2**	REV. **0**

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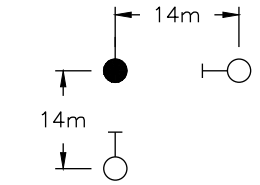

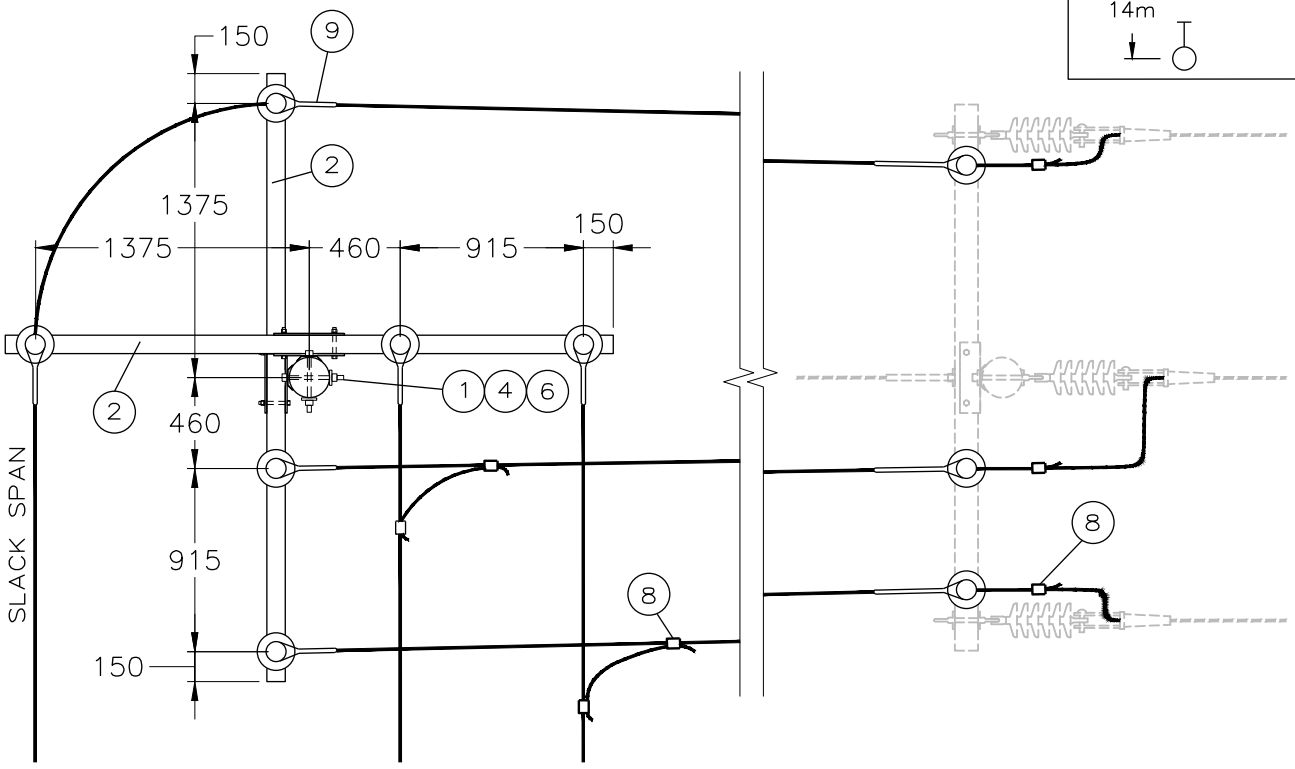

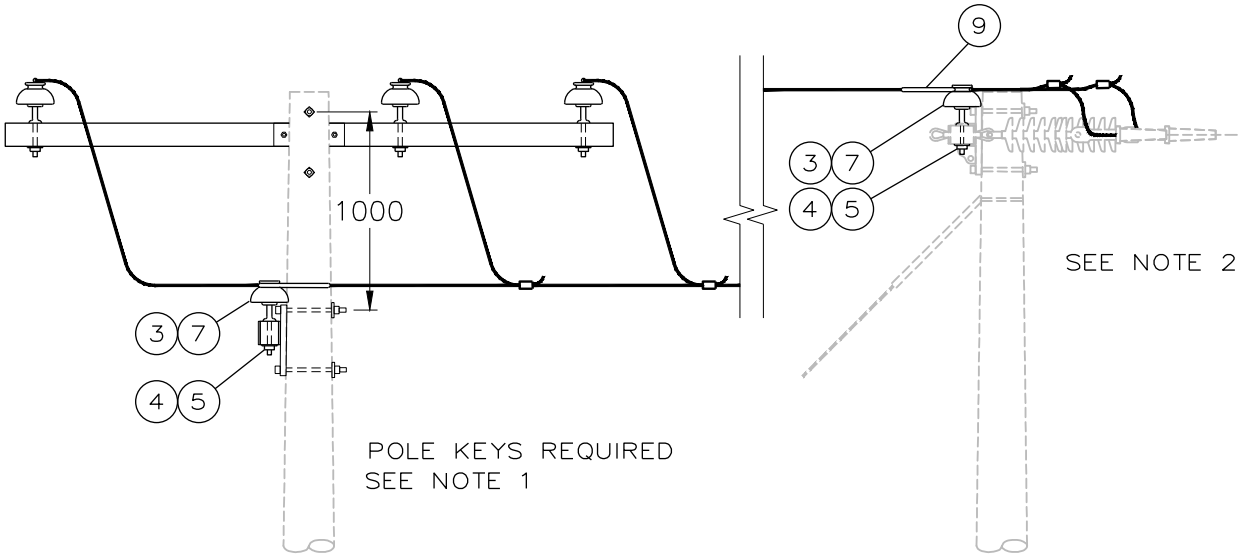

NOTE:

1. POLE KEY ANCHORING MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR POLE KEY INSTALLATION AND MATERIAL.
2. MATERIAL FOR DEAD–ENDS NOT INCLUDED IN BILL OF MATERIAL LIST, REFER TO DWG. A–12–110 FOR DEAD–END MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL M. ERETH	DESIGN CHK. A. UHREN	DRN. TmBIRAM CHKD. 2014–09–08	3ø SLACK SPAN DEFLECTION & CORNER ANGLES 31° TO 90° – COMPOSITE
DATE OF ISSUE 2014/11/17		DRAWING NO. A–12–108A SHEET 2 of 2	REV. 0

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	1	BOLT-DOUBLE ARMING - 5/8" x 20"
2	1 14 12	2	BOLT-MACHINE – 3/4" x 12"
3	1 29 38	1	CROSSARM-COMPOSITE-4-5/8" x 3-5/8" x 9'
4	1 50 00	1	NUT-EYE - 5/8"
5	1 93 28	2	WASHER-DOUBLE LOCK – 3/4"
6	1 93 42	1	WASHER-SQUARE – 2 1/4" x 2 1/4" x 13/16" HOLE
7	1 93 45	1	WASHER-SQUARE – 4" x 4" x 11/16" HOLE
8	1 93 96	2	WASHER-CURVED 3" x 3" x 13/16" HOLE
9	2 01 XX	3	DEADEND-AUTOMATIC-CLEVIS TYPE (SEE NOTE 1)
10	2 29 24	3	DEADEND-POLYMER-CLEVIS AND TONGUE ENDS

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**3Ø CROSSARM DEADEND COMPOSITE CROSSARM**
L. MOEN	**A. UHREN**	CHKD.	
		2017-08-21	

DATE OF ISSUE: 2017-11-03	DRAWING NO: **A-12-110**	**SHEET 1 OF 2**	REV. **A**

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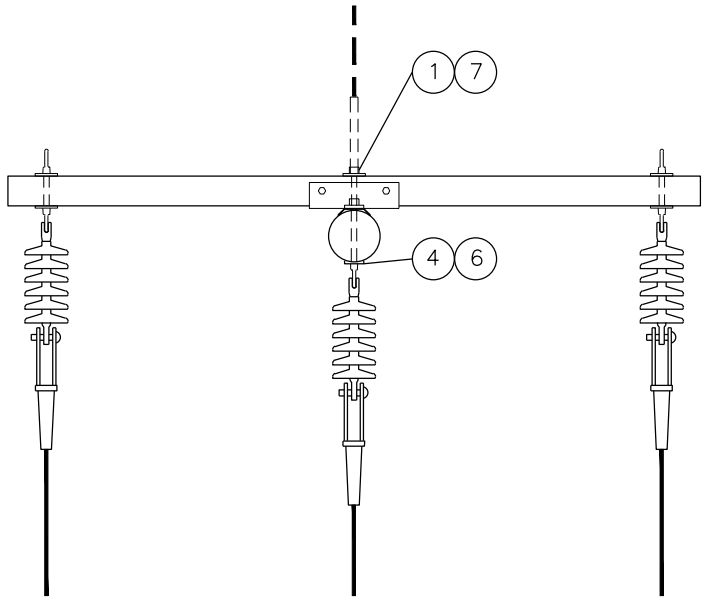

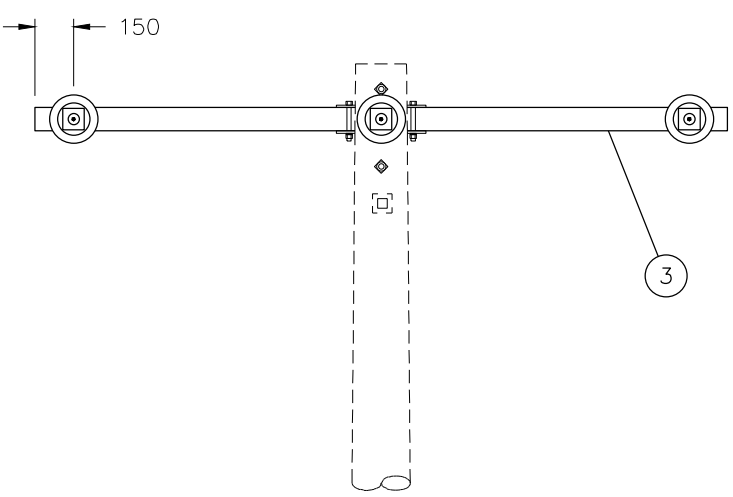

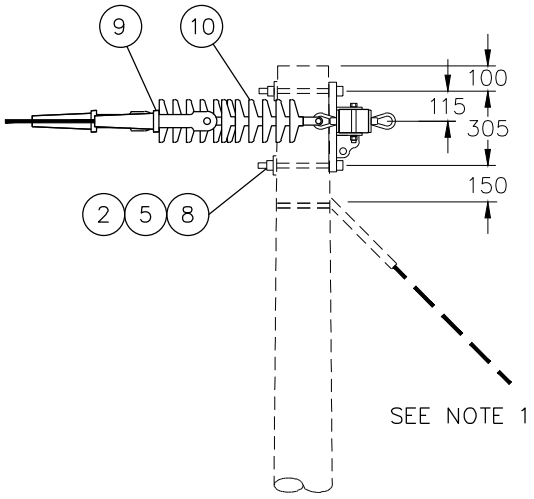

NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. A. UHREN	DRN. C.BAUTISTA CHKD. 2017–08–29	3ø CROSSARM DEADEND COMPOSITE CROSSARM
DATE OF ISSUE 2017-11-03	DRAWING NO. A–12–110	SHEET 2 of 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	1	BOLT-DOUBLE ARMING - 5/8" x 20"
2	1 14 12	2	BOLT-MACHINE – 3/4" x 12"
3	1 29 38	1	CROSSARM-COMPOSITE-4-5/8" x 3-5/8" x 9'
4	1 50 00	2	NUT-EYE - 5/8"
5	1 53 09	3	PIN-STEEL
6	1 93 28	5	WASHER-DOUBLE LOCK – 3/4"
7	1 93 42	1	WASHER-SQUARE – 2 1/4" x 2 1/4" x 13/16" HOLE
8	1 93 45	1	WASHER-SQUARE – 4" x 4" x 11/16" HOLE
9	1 93 95	3	WASHER-SQUARE – 3" x 3" x 13/16" HOLE
10	1 93 96	2	WASHER-CURVED 3" x 3" x 13/16" HOLE
11	2 01 XX	3	DEADEND-AUTOMATIC-CLEVIS TYPE (SEE NOTE 1)
12	2 01 XX	3	DEADEND-AUTOMATIC-CLEVIS TYPE (SEE NOTE 1)
13	2 20 23	3	INSULATOR-PIN TYPE
14	2 29 24	6	DEADEND-POLYMER-CLEVIS AND TONGUE ENDS
15	2 97 50	3	UNI-TIE
16	5 09 XX	3	CONNECTOR-COMPRESSION (SIZE TO SUIT - SEE NOTE 2)

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**
2. **REFER TO SECTION A-36 FOR TYPE AND SIZE OF CONNECTOR REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**3Ø DOUBLE DEADEND CONDUCTOR CHANGE COMPOSITE CROSSARM**
L. MOEN	**A. UHREN**	CHKD.	
		2017-08-21	

DATE OF ISSUE: 2017-11-03 | DRAWING NO: **A-12-111** | **SHEET 1 OF 2** | REV. **A**

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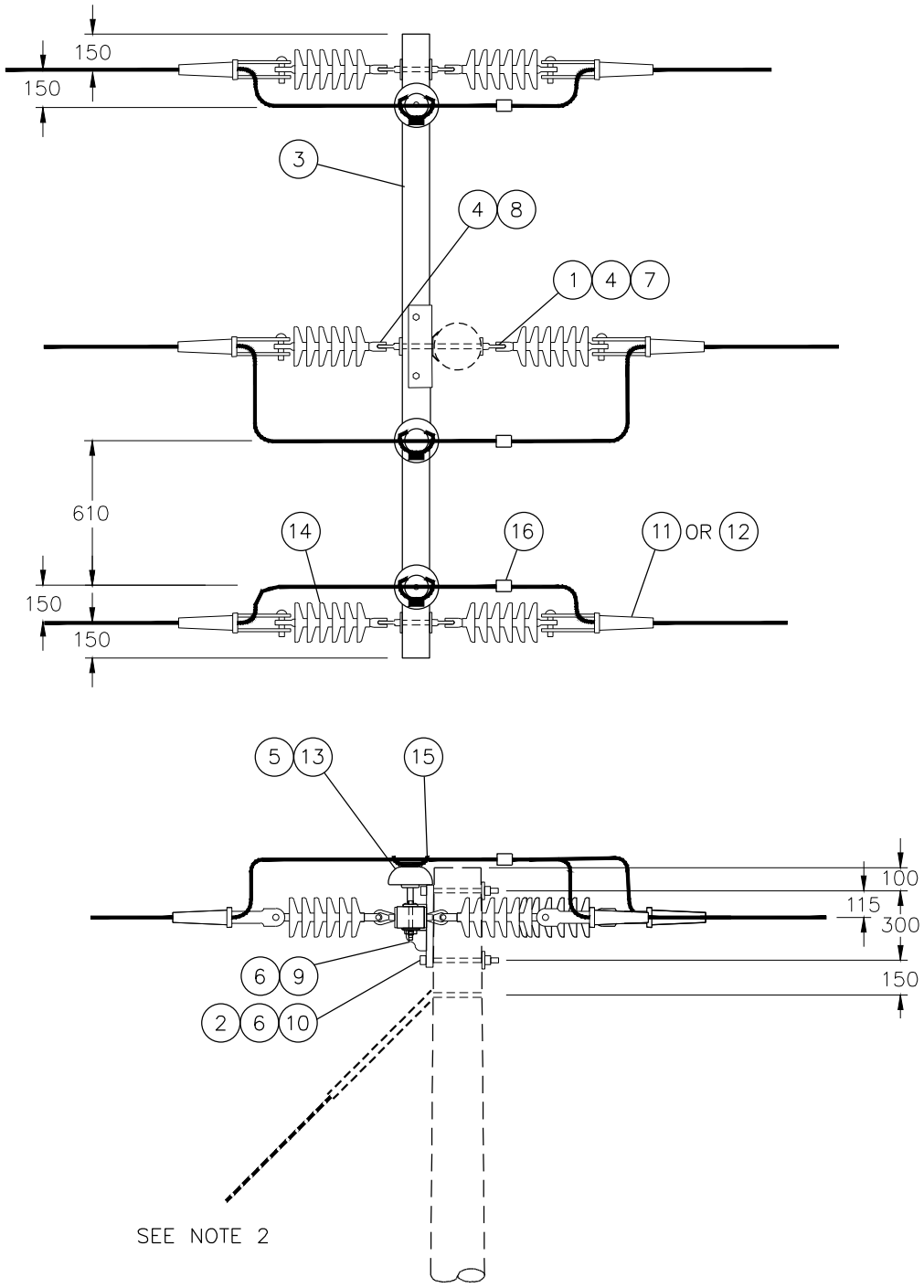

NOTE:

1. DOWNGUY & ANCHOR NOT REQUIRED UNLESS THERE IS A CHANGE IN CONDUCTOR TENSION.
2. GUYING MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN.D.REDEKOPP CHKD. 2019–08–14	3ø DOUBLE DEADEND CONDUCTOR CHANGE COMPOSITE CROSSARM
DATE OF ISSUE 2020/05/12	DRAWING NO. A–12–111	SHEET 2 of 2	REV. B

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	1	BOLT-DOUBLE ARMING - 5/8" x 20"
2	1 14 12	2	BOLT-MACHINE – 3/4" x 12"
3	1 29 38	1	CROSSARM-COMPOSITE-4-5/8" x 3-5/8" x 9'
4	1 50 00	1	NUT-EYE - 5/8"
5	1 53 09	2	PIN-STEEL
6	1 93 28	4	WASHER-DOUBLE LOCK – 3/4"
7	1 93 42	1	WASHER-SQUARE – 2 1/4" x 2 1/4" x 13/16" HOLE
8	1 93 45	1	WASHER-SQUARE – 4" x 4" x 11/16" HOLE
9	1 93 95	2	WASHER-SQUARE – 3" x 3" x 13/16" HOLE
10	1 93 96	2	WASHER-CURVED – 3" x 3" x 13/16" HOLE
11	2 01 XX	3	DEADEND-AUTOMATIC-CLEVIS TYPE (SEE NOTE 1)
12	2 20 23	2	INSULATOR-PIN TYPE
13	2 29 24	3	DEADEND-POLYMER-CLEVIS AND TONGUE ENDS
14	2 97 50	2	UNI-TIE
15	5 09 XX	3	CONNECTOR-COMPRESSION (SIZE TO SUIT - SEE NOTE 2)

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**
2. **REFER TO SECTION A-36 FOR TYPE AND SIZE OF CONNECTOR REQUIRED.**
3. **IF CENTRE PHASE WIRE IS ON OPPOSITE SIDE TO THE TAP-OFF, THEN SUBTRACT ONE EACH OF ITEMS 5, 6, 9, 12, 14.**

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*Sask**Power*** - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**3Ø TAP-OFF COMPOSITE CROSSARM**
L. MOEN	**A. UHREN**	CHKD.	
		2017-08-21	

DATE OF ISSUE: 2017-11-03 | DRAWING NO: **A-12-113** | **SHEET 1 OF 2** | REV. **A**

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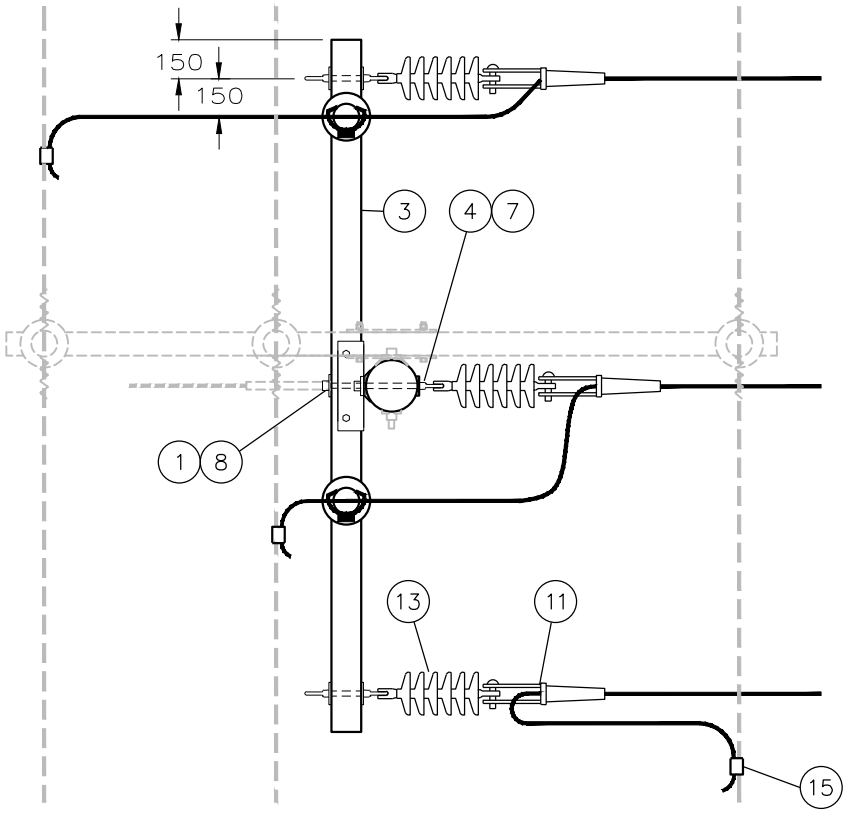

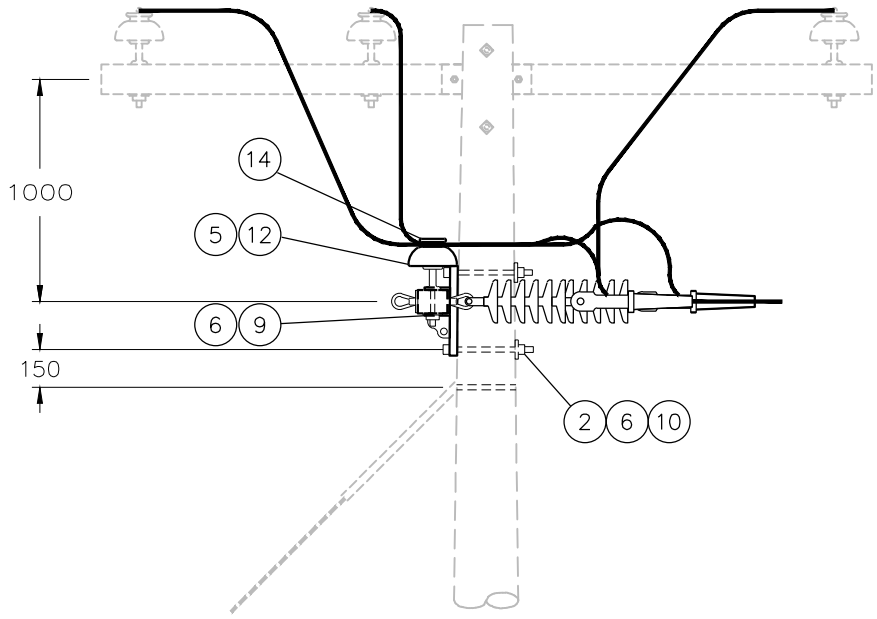

SEE NOTE 1

NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND BILL OF MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. A. UHREN	DRN. C.BAUTISTA CHKD. 2017–08–29	3ø TAP OFF COMPOSITE CROSSARM
DATE OF ISSUE 2017-11-03	DRAWING NO. A–12–113	SHEET 2 of 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 14 12	2	BOLT-MACHINE – 3/4" x 12"
2	1 29 09	1	CROSSARM-COMPOSITE-3-5/8" x 4-5/8" x 10'
3	1 53 09	6	PIN-STEEL
4	1 93 28	8	WASHER-DOUBLE LOCK – 3/4"
5	1 93 95	6	WASHER-SQUARE – 3" x 3" x 13/16" HOLE
6	1 93 96	2	WASHER-CURVED – 3" x 3" x 13/16" HOLE
7	2 06 XX	8	CONNECTOR-AMPACT (SIZE TO SUIT - SEE NOTE 2)
7	5 XX XX	8	CONNECTOR-COMPRESSION (SIZE TO SUIT - SEE NOTE 2)
8	2 20 23	6	INSULATOR-PIN TYPE
9	5 13 XX	6	DEADEND-PREFORMED (SIZE TO SUIT - SEE NOTE 1)

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**
2. **REFER TO SECTION A-36 FOR TYPE AND SIZE OF CONNECTOR REQUIRED.**

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*Sask**Power*** - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**3Ø SLACK SPAN TAP-OFF COMPOSITE CROSSARM**
M. ERETH	**A. UHREN**	CHKD.	
		2014-09-02	

DATE OF ISSUE: 2014/11/17 | DRAWING NO: **A-12-114** | **SHEET 1 OF 2** | REV. **0**

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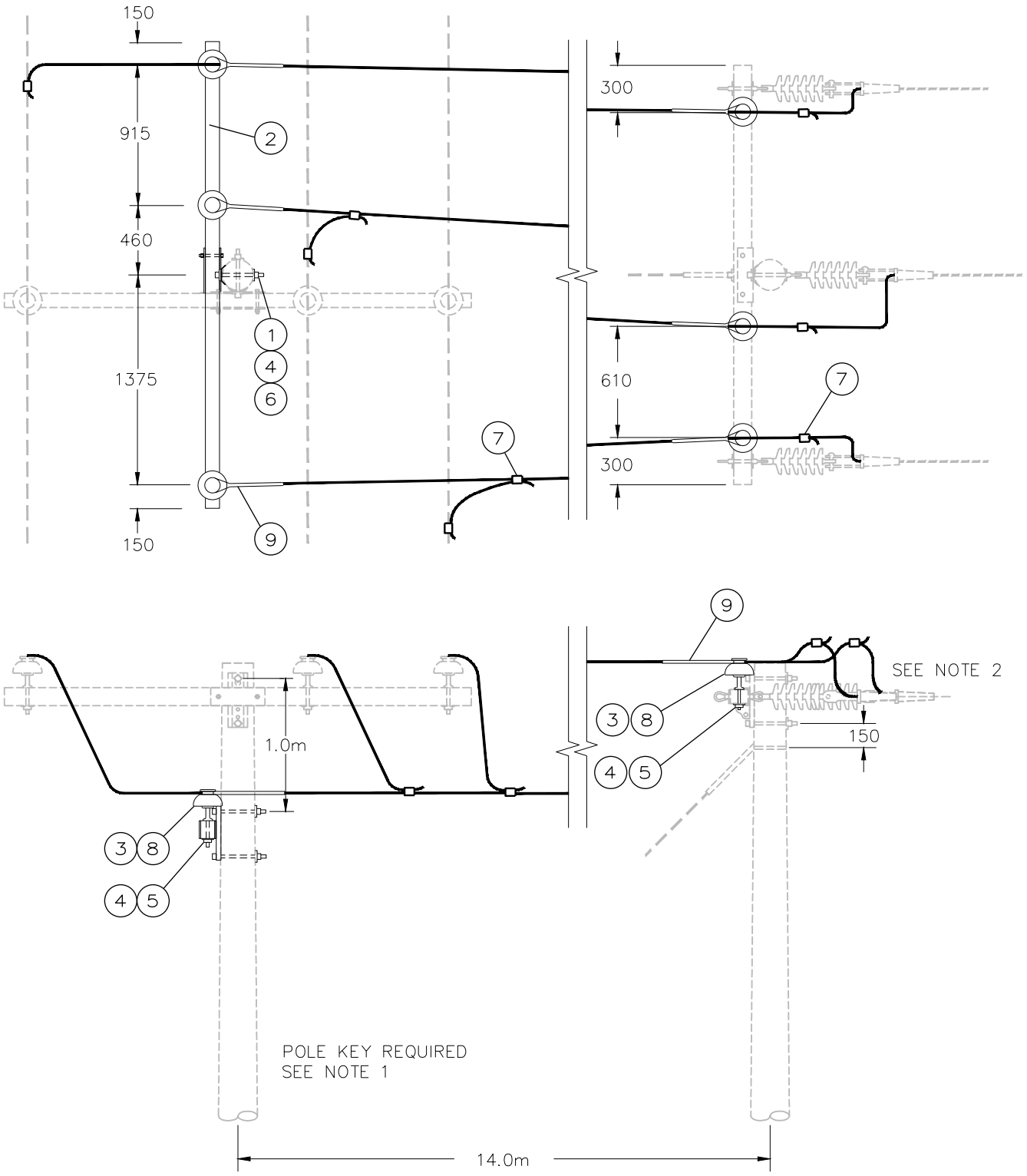

NOTE:

1. POLE KEY ANCHORING MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A-32 FOR POLE KEY INSTALLATION AND MATERIAL.
2. MATERIAL FOR DEAD-ENDS NOT INCLUDED IN BILL OF MATERIAL LIST, REFER TO DWG. A-12-110 FOR DEAD-END MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL M. ERETH	DESIGN CHK. A. UHREN	DRN. TmBIRAM CHKD. 2014-09-08	3ø SLACK-SPAN TAP-OFF COMPOSITE CROSSARM
DATE OF ISSUE 2014/11/17	DRAWING NO. A-12-114	SHEET 2 of 2	REV. 0

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 14 12	4	BOLT-MACHINE – 3/4" x 12"
2	1 29 09	2	CROSSARM-COMPOSITE-3-5/8" x 4-5/8" x 10'
3	1 53 09	6	PIN-STEEL
4	1 93 28	10	WASHER-DOUBLE LOCK – 3/4"
5	1 93 95	6	WASHER-SQUARE – 3" x 3" x 13/16" HOLE
6	1 93 96	4	WASHER-CURVED – 3" x 3" x 13/16" HOLE
7	2 20 23	6	INSULATOR-PIN TYPE
8	2 58 XX	6	ARMOUR ROD (SIZE TO SUIT-SEE NOTE 1)
9	2 97 28	10.2m	WIRE-TIE – #8 STEEL SOLID

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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*Sask**Power*** - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**DOUBLE CIRCUIT 3Ø TANGENT COMPOSITE CROSSARM**
M. ERETH	**A. UHREN**	CHKD.	
		2014-09-02	

DATE OF ISSUE: 2014/11/17	DRAWING NO: **A-12-116**	**SHEET 1 OF 2**	REV. **0**

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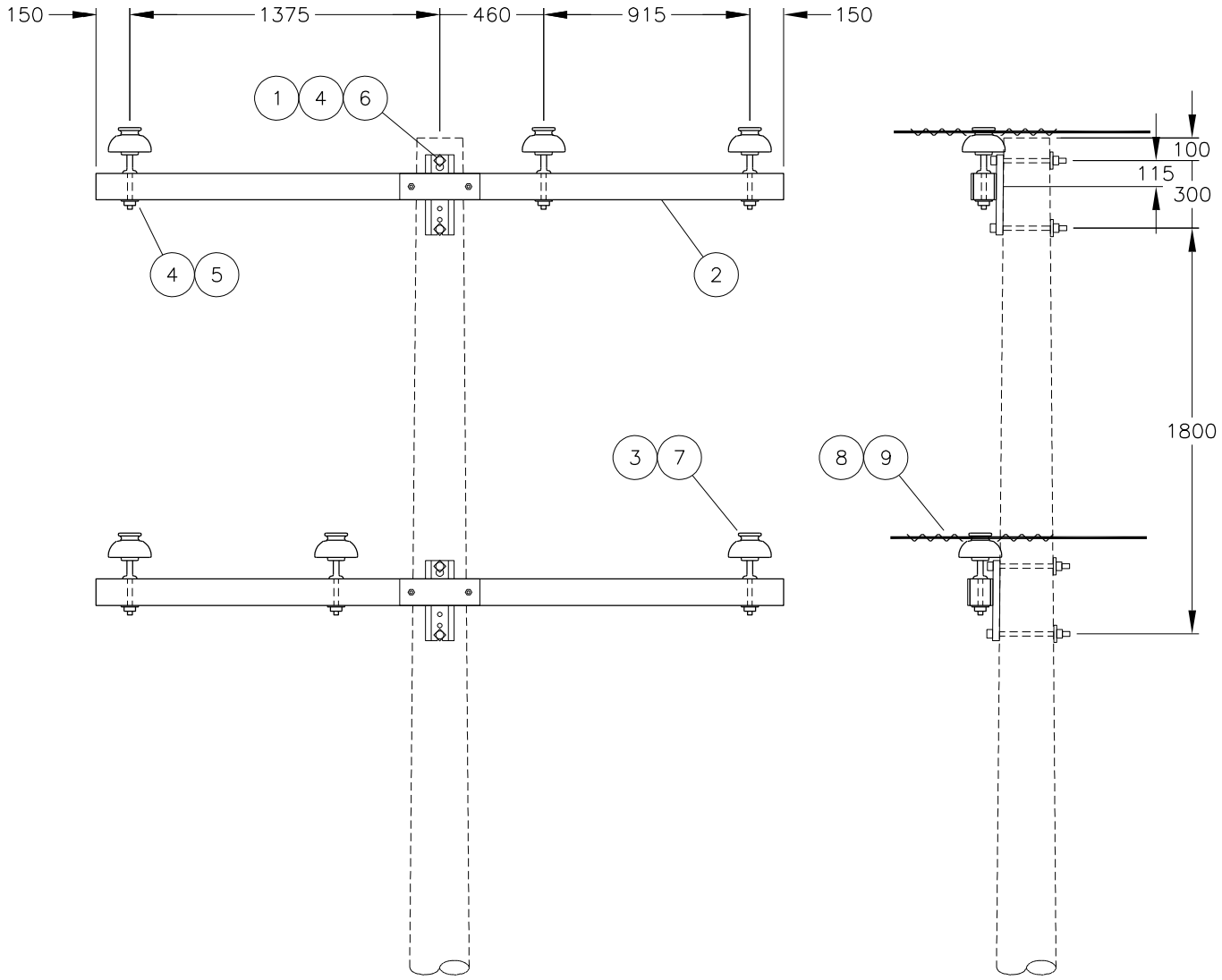

NOTES:

1. STRUCTURE SUITABLE FOR LINE DEFLECTIONS UP TO A MAXIMUM OF 4° FOR 1/0 ACSR (RAVEN), 3° FOR 3/0 ACSR (PIGEON), 2.5° FOR 4/0 ACSR (PENGUIN), AND 2° FOR 266 KCMIL ACSR (PARTRIDGE) AT 60m RULING SPANS.

2. STRUCTURE SUITABLE FOR LINE DEFLECTIONS UP TO A MAXIMUM OF 2° FOR 266 AL (DAISY), AT 60m RULING SPANS.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

A12_116_02

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN.E.GOTANA CHKD. 2020-02-12	DOUBLE CIRCUIT 3ø TANGENT COMPOSITE CROSSARM
DATE OF ISSUE 2020-12-18	DRAWING NO. A-12-116	SHEET 2 of 2	REV. B

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 13 10	1	BOLT-MACHINE – 5/8” x 10”
2	1 14 12	4	BOLT-MACHINE – 3/4” x 12”
3	1 29 09	2	CROSSARM-COMPOSITE-3-5/8” x 4-5/8” x 10’
4	1 53 01	6	PIN-ANGLE
5	1 93 27	7	WASHER-DOUBLE LOCK – 5/8”
6	1 93 28	4	WASHER-DOUBLE LOCK – 3/4”
7	1 93 42	2	WASHER-SQUARE – 2 1/4” x 2 1/4” x 13/16” HOLE
8	1 93 46	6	WASHER-SQUARE – 4” x 4” x 15/16” HOLE
9	1 93 96	4	WASHER-CURVED – 3” x 3” x 13/16” HOLE
10	2 20 23	6	INSULATOR-PIN TYPE
11	2 58 XX	6	ARMOUR ROD (SIZE TO SUIT-SEE NOTE 1)
12	2 97 28	10.2m	WIRE-TIE – #8 STEEL SOLID

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**DOUBLE CIRCUIT 3Ø ANGLE COMPOSITE CROSSARM DEFLECTIONS OF 5° TO 10°**
M. ERETH	**A. UHREN**	CHKD.	
		2015-03-06	

DATE OF ISSUE: 2015/08/18	DRAWING NO: **A-12-117**	**SHEET 1 OF 2**	REV. **A**

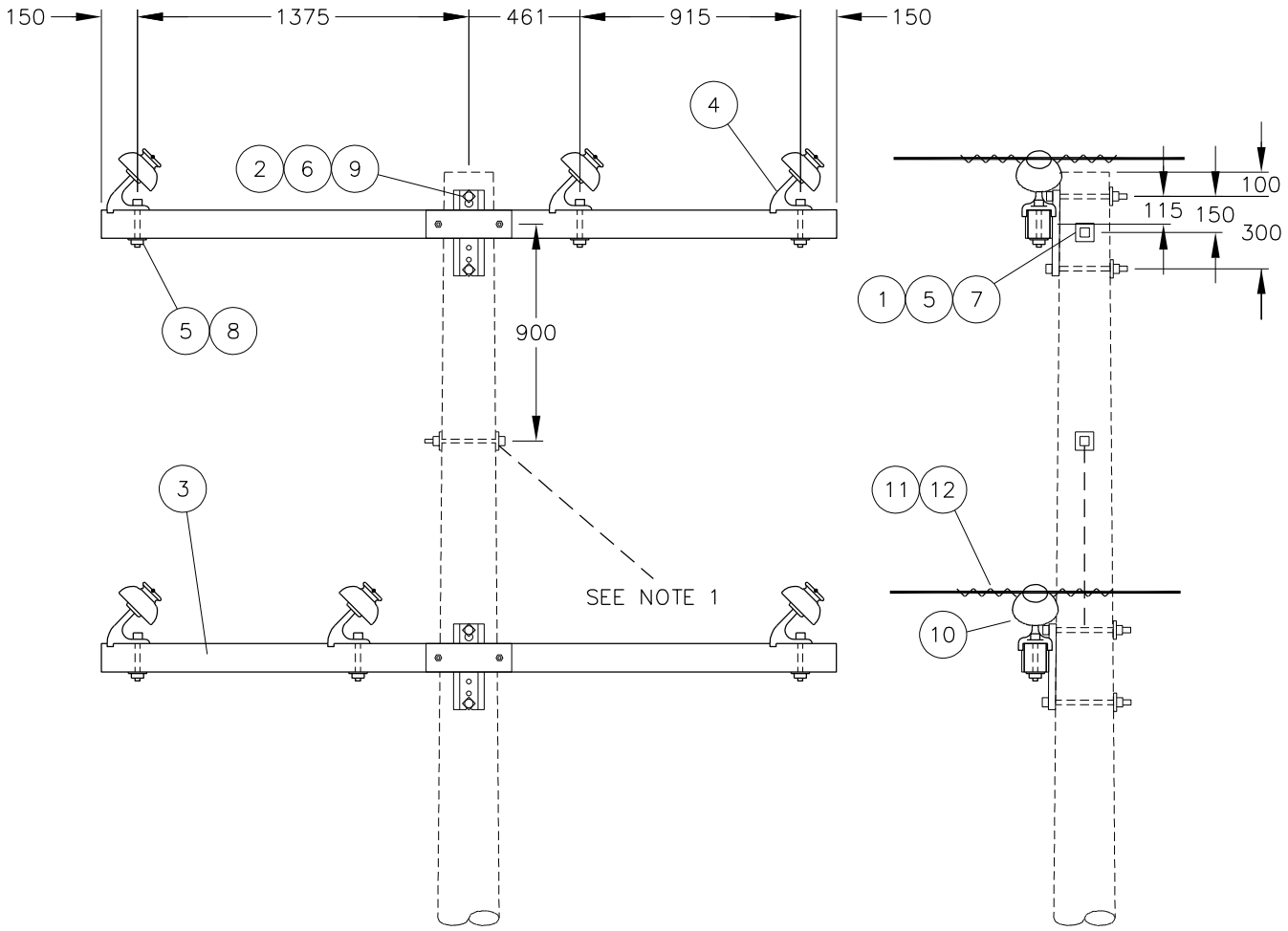
RURAL (60m RULING SPAN)

COND SIZE	DEFLECTION
1/0 ACSR	4°–10°
3/0 ACSR	3°–10°
4/0 ACSR	2.5°–10°
266 ACSR	2°–10°

URBAN (60m RULING SPAN)

COND SIZE	DEFLECTION
266 AL	2°–10°

STRUCTURE USED HERE



NOTE:
1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND BILL OF MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

A12_117_02

SaskPower – DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK.	DRN.E.GOTANA	DOUBLE CIRCUIT 3ø ANGLE COMPOSITE CROSSARM DEFLECTIONS OF UP TO 10°
L.MOEN	L.MOEN	CHKD.	
		2020–02–13	
DATE OF ISSUE 2020-12-18		DRAWING NO. A–12–117 SHEET 2 of 2	REV. B

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BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	4	BOLT-DOUBLE ARMING - 5/8" x 20"
2	1 13 10	1	BOLT-MACHINE – 5/8" x 10"
3	1 14 16	4	BOLT-MACHINE – 3/4" x 16"
4	1 29 09	4	CROSSARM-COMPOSITE-3-5/8" x 4-5/8" x 10'
5	1 53 01	12	PIN-ANGLE
6	1 93 27	13	WASHER-DOUBLE LOCK – 5/8"
7	1 93 28	4	WASHER-DOUBLE LOCK – 3/4"
8	1 93 42	22	WASHER-SQUARE – 2 1/4" x 2 1/4" x 13/16" HOLE
9	1 93 46	12	WASHER-SQUARE – 4" x 4" x 15/16" HOLE
10	2 20 23	12	INSULATOR-PIN TYPE
11	2 58 XX	6	ARMOUR ROD (SIZE TO SUIT-SEE NOTE 1)
12	2 97 28	20.4m	WIRE-TIE – #8 STEEL SOLID

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**DOUBLE CIRCUIT 3Ø ANGLE COMPOSITE CROSSARM DEFLECTIONS OF 11° TO 30°**
M. ERETH	**A. UHREN**	CHKD.	
		2015-03-06	

DATE OF ISSUE: 2015/08/18 | DRAWING NO: **A-12-118** | **SHEET 1 OF 2** | REV. **A**

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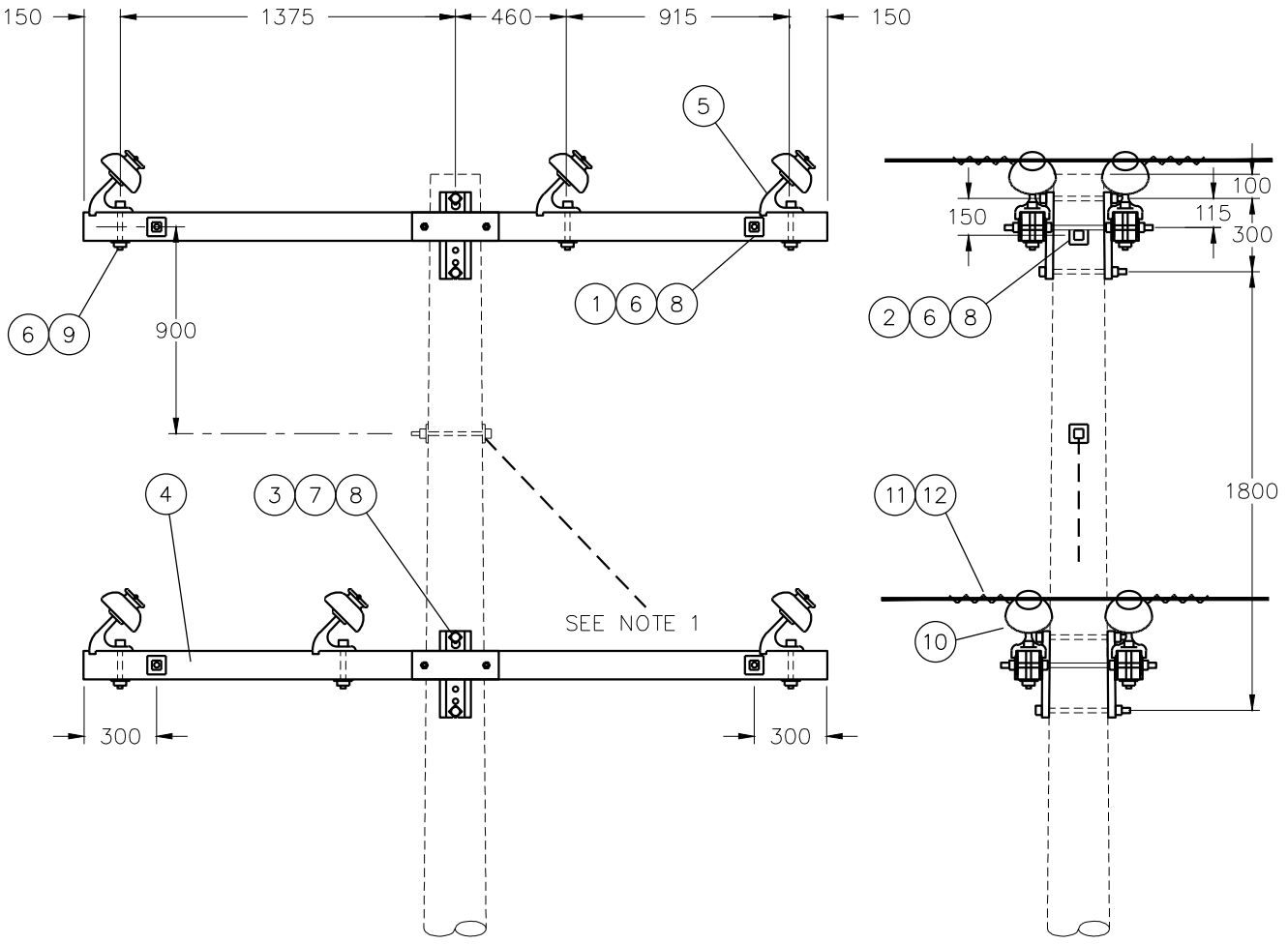
STRUCTURE USED HERE



NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND BILL OF MATERIAL.

2. STRUCTURE SUITABLE FOR LINE DEFLECTION UP TO A MAXIMUM OF 30° FOR ALL CONDUCTORS, EXCEPT 266 KCMIL ACSR (PARTRIDGE) IS SUITABLE FOR A MAX DEFLECTION OF 25° AT 60m RULING SPANS.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. A. UHREN	DRN. E.GOTANA CHKD. 2015–08–11	DOUBLE CIRCUIT 3ø ANGLE COMPOSITE CROSSARM DEFLECTIONS OF 11° TO 30°
DATE OF ISSUE 2016/02/05	DRAWING NO. A–12–118	SHEET 2 of 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	4	BOLT-DOUBLE ARMING - 5/8" x 20"
2	1 14 12	8	BOLT-MACHINE – 3/4" x 12"
3	1 29 38	4	CROSSARM-COMPOSITE-4-5/8" x 3-5/8" x 9'
4	1 50 00	4	NUT-EYE - 5/8"
5	1 53 09	4	PIN-STEEL
6	1 93 28	12	WASHER-DOUBLE LOCK – 3/4"
7	1 93 42	4	WASHER-SQUARE – 2 1/4" x 2 1/4" x 13/16" HOLE
8	1 93 45	4	WASHER-SQUARE – 4" x 4" x 11/16" HOLE
9	1 93 95	4	WASHER-SQUARE – 3" x 3" x 13/16" HOLE
10	1 93 96	8	WASHER-CURVED – 3" x 3" x 13/16" HOLE
11	2 01 XX	12	DEADEND-AUTOMATIC-CLEVIS TYPE (SEE NOTE 1)
12	2 20 23	4	INSULATOR-PIN TYPE
13	2 29 24	12	DEADEND-POLYMER-CLEVIS AND TONGUE ENDS
14	2 97 50	4	UNI-TIE
15	5 09 XX	6	CONNECTOR-COMPRESSION (SIZE TO SUIT - SEE NOTE 2)

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**
2. **REFER TO SECTION A-36 FOR TYPE AND SIZE OF CONNECTOR REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**DOUBLE CIRCUIT DEFLECTION & CORNER COMPOSITE CROSSARM ANGLES OF 31° TO 90°**
L. MOEN	**A. UHREN**	CHKD.	
		2017-08-21	

DATE OF ISSUE: 2017-11-03	DRAWING NO: **A-12-120**	**SHEET 1 OF 2**	REV. **A**

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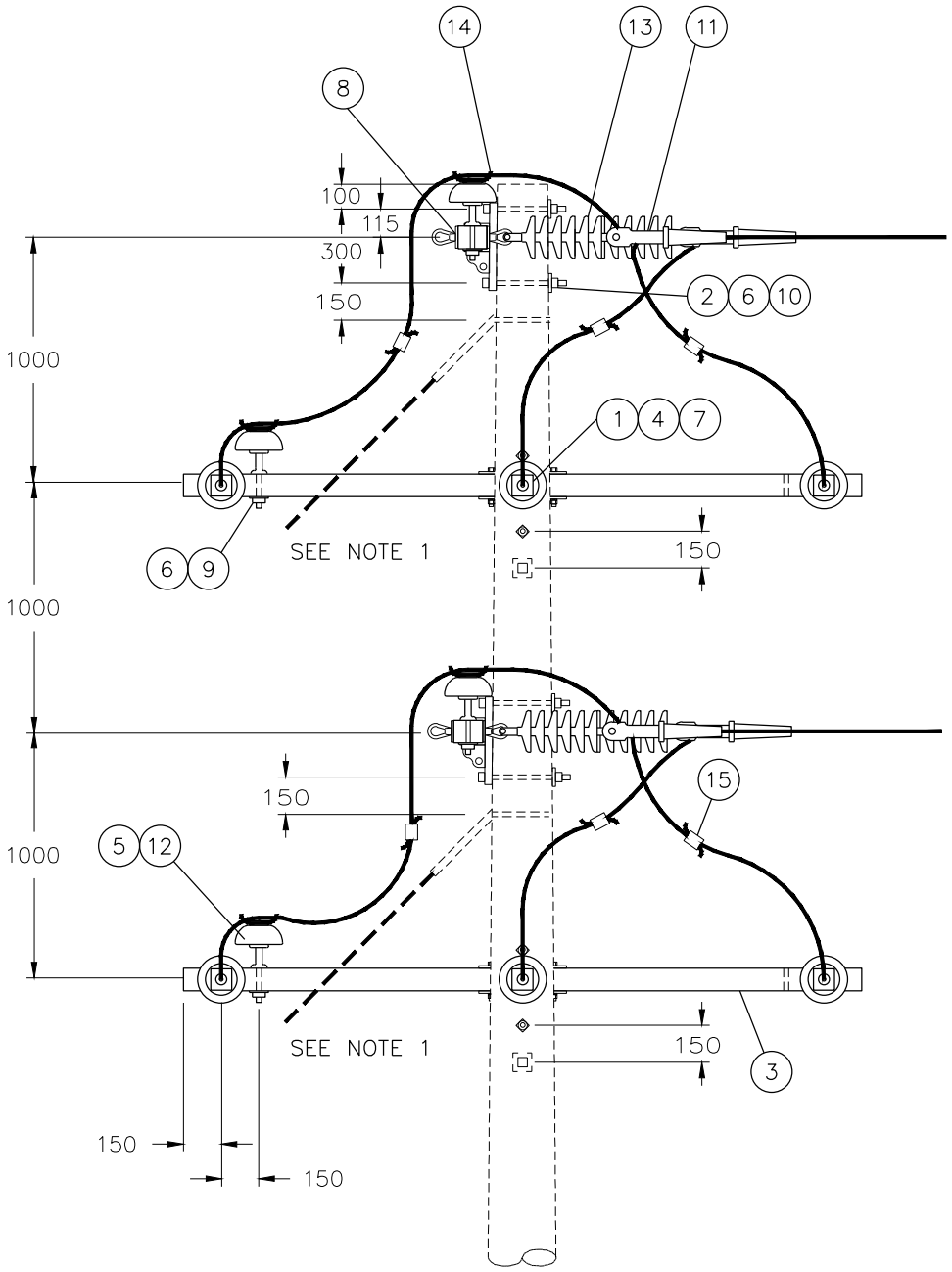

NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND BILL OF MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. A. UHREN	DRN. C.BAUTISTA CHKD. 2017–08–29	DOUBLE CIRCUIT DEFLECTION & CORNER COMPOSITE CROSSARM ANGLES 31° TO 90°
DATE OF ISSUE 2017-11-03	DRAWING NO. A–12–120	SHEET 2 of 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	2	BOLT-DOUBLE ARMING - 5/8" x 20"
2	1 14 12	4	BOLT-MACHINE – 3/4" x 12"
3	1 29 38	2	CROSSARM-COMPOSITE-4-5/8" x 3-5/8" x 9'
4	1 50 00	2	NUT-EYE - 5/8"
5	1 93 28	4	WASHER-DOUBLE LOCK – 3/4"
6	1 93 42	2	WASHER-SQUARE – 2 1/4" x 2 1/4" x 13/16" HOLE
7	1 93 45	2	WASHER-SQUARE – 4" x 4" x 11/16" HOLE
8	1 93 96	4	WASHER-CURVED – 3" x 3" x 13/16" HOLE
9	2 01 XX	6	DEADEND-AUTOMATIC-CLEVIS TYPE (SEE NOTE 1)
10	2 29 24	6	DEADEND-POLYMER-CLEVIS AND TONGUE ENDS

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**DOUBLE CIRCUIT CROSSARM DEADEND COMPOSITE CROSSARM**
L. MOEN	**A. UHREN**	CHKD.	
		2017-08-21	

DATE OF ISSUE: 2017-11-03	DRAWING NO: **A-12-122**	**SHEET 1 OF 2**	REV. **A**

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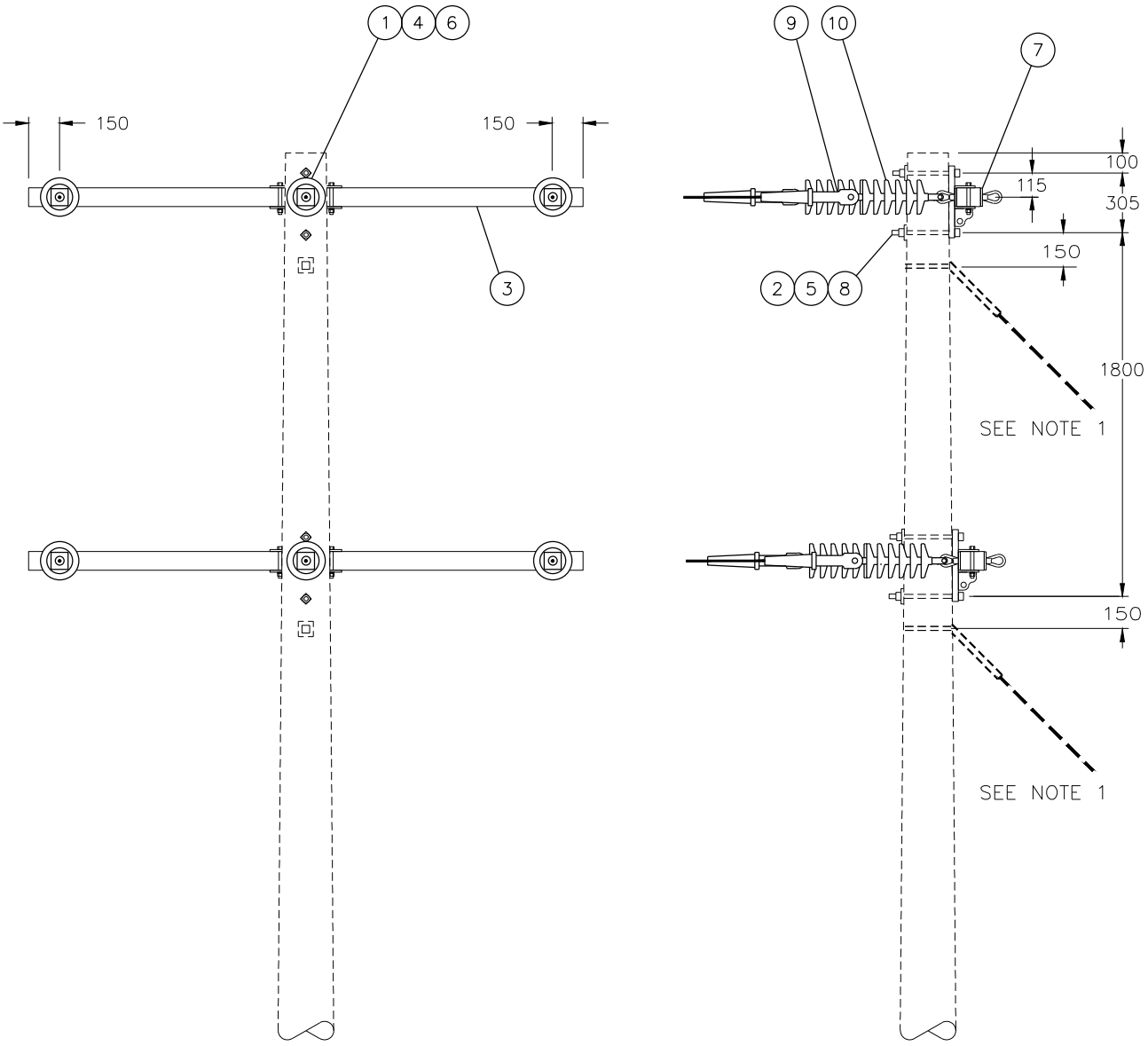

NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. A. UHREN	DRN. C.BAUTISTA CHKD. 2017–08–29	DOUBLE CIRCUIT CROSSARM DEADEND COMPOSITE CROSSARM
DATE OF ISSUE 2017-11-03	DRAWING NO. A–12–122	SHEET 2 of 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
			NOTE:
			REFER TO DRAWING A-12-113 FOR BILL OF MATERIAL.

*Sask**Power*** - DISTRIBUTION STANDARDS				
APPROVAL	DESIGN CHK	DRN. **ARU**	**3Ø TAP-OFF FROM DOUBLE CIRCUIT TANGENT COMPOSITE CROSSARM**	
M. ERETH	**A. UHREN**	CHKD.		
		2014-07-30		
DATE OF ISSUE: 2014/11/17		DRAWING NO: **A-12-124**	**SHEET 1 OF 2**	REV. **0**

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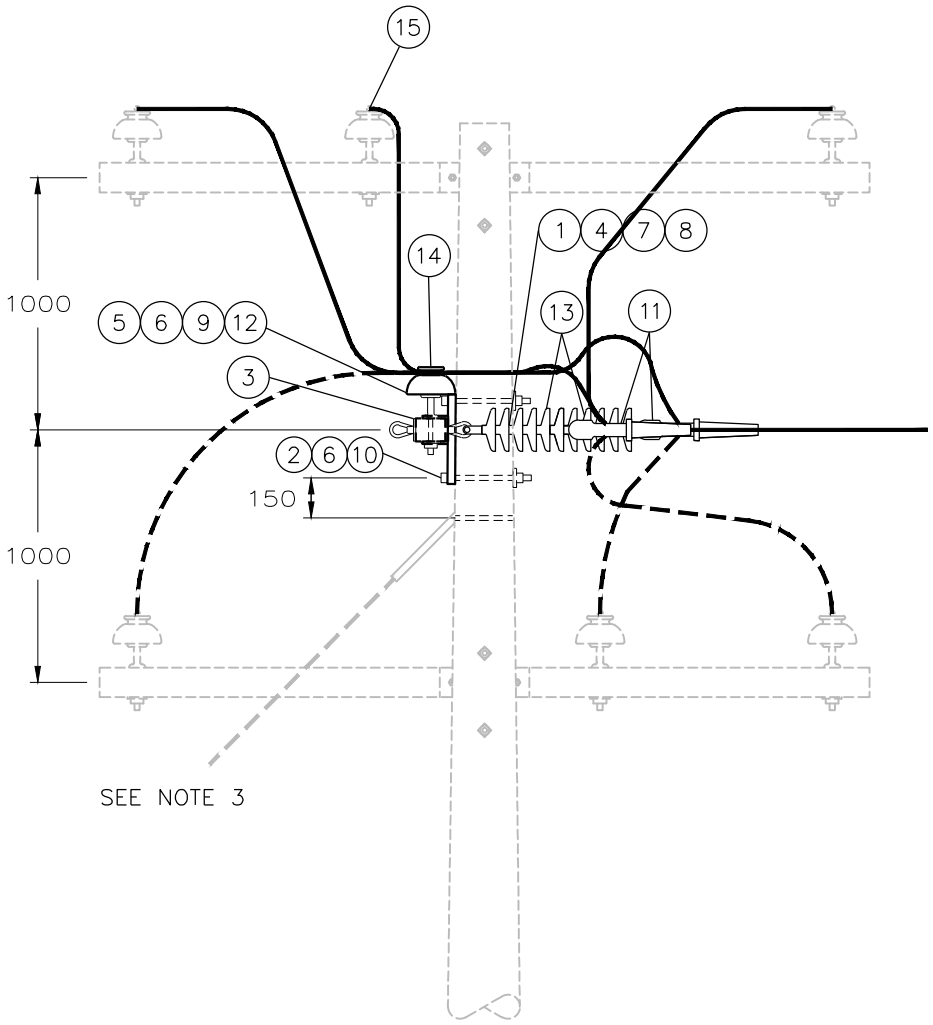

NOTE:

1. IF TAPPING FROM BOTTOM CIRCUIT AND ADEQUATE CLEARANCE CAN BE MAINTAINED, INSTALL TAP–OFF UNDER LOWER CIRCUIT AS PER DWG. A–12–113.

2. THE FOLLOWING ITEMS APPLY WHEN TAPPING–OFF BETWEEN UPPER AND LOWER CIRCUITS:
   – CENTER PHASE INSULATOR OF UPPER AND LOWER CIRCUITS TO BE LOCATED AS PER THIS DRAWING DUE TO DOWN GUY.
   – DROP LOWER ARM 200mm ON EXISTING DOUBLE CIRCUIT LINES.

3. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND BILL OF MATERIALS.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. A. UHREN	DRN. C.BAUTISTA CHKD. 2017–08–29	3ø TAP–OFF FROM DOUBLE CIRCUIT TANGENT COMPOSITE CROSSARM
DATE OF ISSUE 2017-11-03	DRAWING NO. A–12–124	SHEET 2 of 2	REV. A

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
			NOTE:
			REFER TO DRAWING A-12-114 FOR BILL OF MATERIAL.

*Sask**Power*** - DISTRIBUTION STANDARDS				
APPROVAL	DESIGN CHK	DRN. **ARU**	**3Ø SLACKSPAN TAP-OFF FROM DOUBLE CIRCUIT TANGENT COMPOSITE CROSSARM**	
M. ERETH	**A. UHREN**	CHKD.		
		2014-07-30		
DATE OF ISSUE: 2014/11/17		DRAWING NO: **A-12-125**	**SHEET 1 OF 2**	REV. **0**

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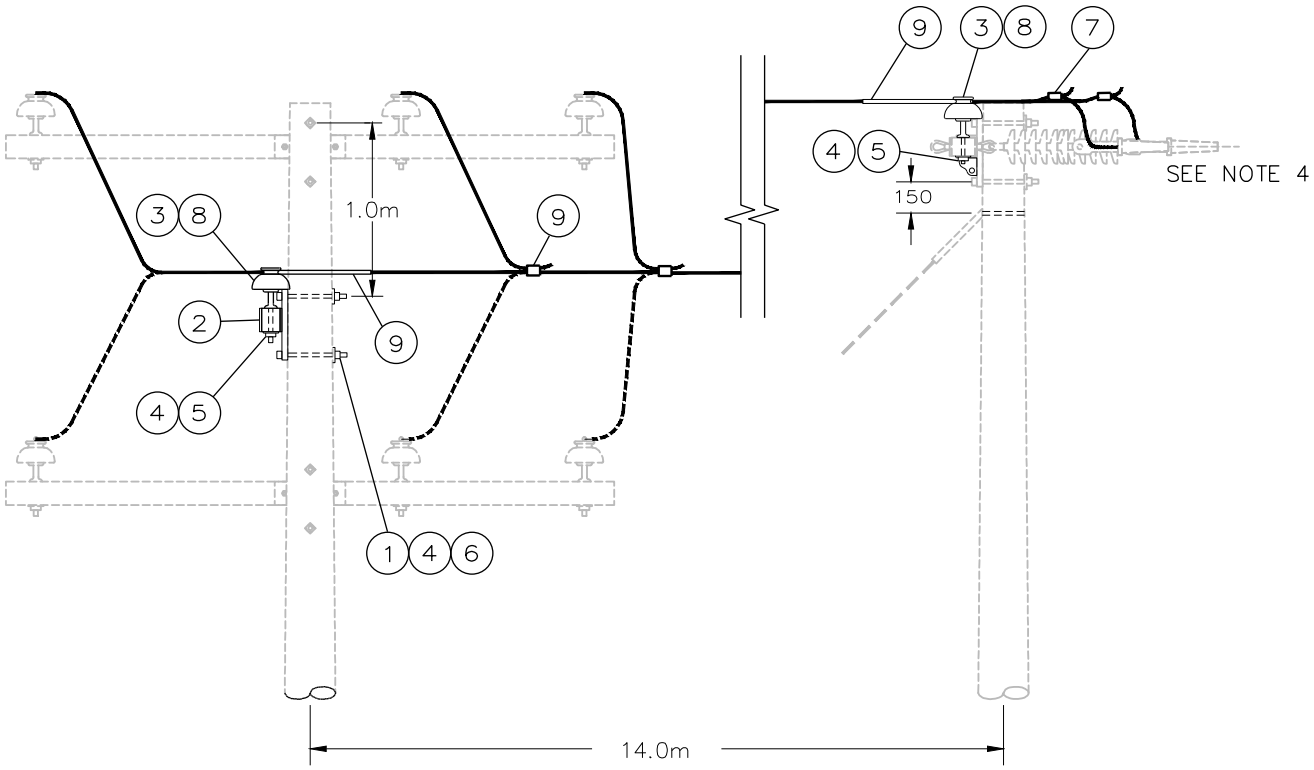

1. IF TAPPING FROM BOTTOM CIRCUIT AND ADEQUATE CLEARANCE CAN BE MAINTAINED, INSTALL TAP–OFF UNDER LOWER CIRCUIT AS PER DWG. A–12–114.
2. WHEN TAPPING–OFF BETWEEN UPPER AND LOWER CIRCUITS OF EXISTING DOUBLE CIRCUIT LINES, THE BOTTOM ARM MUST BE LOWERED 200mm.
3. REFER TO SECTION A–32 FOR POLE KEY INSTALLATION AND MATERIAL.
4. MATERIAL FOR DEAD–ENDS NOT INCLUDED IN BILL OF MATERIALS. REFER TO DRAWING A–12–110 FOR DEAD–END MATERIAL.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL M. ERETH	DESIGN CHK. A. UHREN	DRN. TmBIRAM CHKD.	3ø SLACKSPAN TAP–OFF FROM DOUBLE CIRCUIT TANGENT COMPOSITE CROSSARM
		2014–09–08	
DATE OF ISSUE 2014/11/17		DRAWING NO. A–12–125 SHEET 2 of 2	REV. 0

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 13 10	1	BOLT-MACHINE – 5/8” x 10”
2	1 13 14	2	BOLT-MACHINE – 5/8” x 14”
3	1 14 14	2	BOLT-MACHINE – 3/4” x 14”
4	1 29 07	1	CROSSARM-COMPOSITE-3-5/8” x 4-5/8” x 9’
5	1 93 27	3	WASHER-DOUBLE LOCK – 5/8”
6	1 93 28	4	WASHER-DOUBLE LOCK – 3/4”
7	1 93 42	2	WASHER-SQUARE – 2 1/4” x 2 1/4” x 13/16” HOLE
8	1 93 46	4	WASHER-SQUARE – 4” x 4” x 15/16” HOLE
9	1 93 94	2	WASHER-CURVED – 2-1/4” x 2-1/4” x 11/16” HOLE
10	1 93 96	2	WASHER-CURVED – 3” x 3” x 13/16” HOLE
11	2 19 82	1	BRACKET-POLE TOP FOR 35KV LINE POST
12	2 19 91	1	STUD – 3/4” x 2-1/8”
13	2 19 92	2	STUD – 3/4” x 6-7/8”
14	2 20 00	3	INSULATOR – POLYMER – LINE POST – VERTICAL – CLAMP-TOP
15	2 59 71	3	ARMOUR ROD – PREFORMED ALUM – PELICAN ACSR – 76”

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**3Ø TANGENT PELICAN CONDUCTOR COMPOSITE CROSSARM**
L. MOEN	**A. UHREN**	CHKD.	
		2017-08-15	

DATE OF ISSUE: 2017-11-03	DRAWING NO: **A-12-130**	**SHEET 1 OF 2**	REV. **A**

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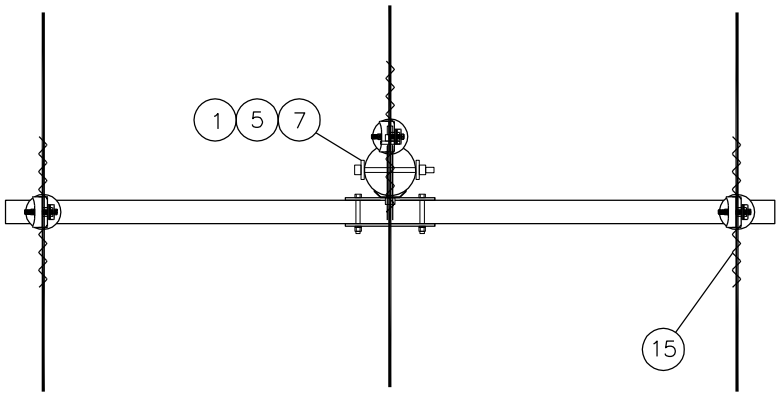

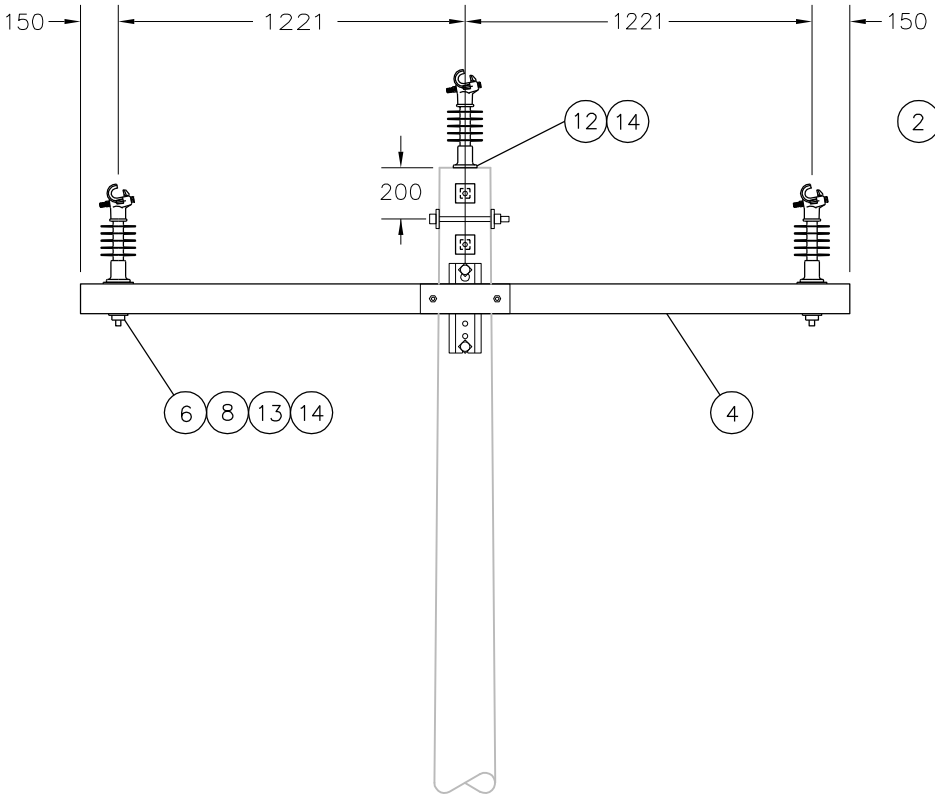

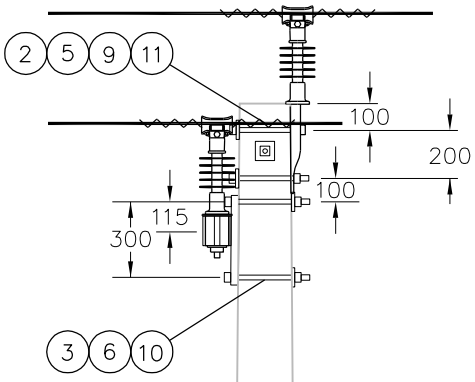

NOTE:
1. POLES SHALL BE A MINIMUM OF 40 FOOT / CLASS 3.
2. THIS STRUCTURE NOT TO EXCEED 2° DEFLECTION.
3. STRUCTURES SUPPORTING SPANS GREATER THAN 98m SHALL NOT SUPPORT ANY APPARATUS OF ANY KIND.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. D.DONAIS	DRN.C.BAUTISTA CHKD. 2018–08–09	3ø TANGENT PELICAN CONDUCTOR COMPOSITE CROSSARM
DATE OF ISSUE 2018-09-13	DRAWING NO. A–12–130	SHEET 2 of 2	REV. C

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	2	BOLT – DOUBLE ARMING – 5/8" x 20"
2	1 13 10	1	BOLT – MACHINE – 5/8” x 10”
3	1 14 12	4	BOLT-MACHINE – 3/4” x 12”
4	1 29 38	2	CROSSARM – COMPOSITE – 4-5/8” x 3-5/8” x 9’
5	1 50 00	2	NUT – EYE – 5/8”
6	1 93 27	1	WASHER – LOCK – DOUBLE COIL SPRING – 5/8”
7	1 93 28	6	WASHER-DOUBLE LOCK – 3/4”
8	1 93 42	4	WASHER-SQUARE – 2 1/4” x 2 1/4” x 13/16” HOLE
9	1 93 45	2	WASHER-SQUARE – 4” x 4” x 11/16” HOLE
10	1 93 95	2	WASHER-SQUARE – 3” x 3” x 13/16” HOLE
11	1 93 96	4	WASHER-CURVED – 3” x 3” x 13/16” HOLE
12	2 01 88	6	DEADEND – AUTOMATIC – PELICAN ACSR
13	2 19 92	2	STUD – 3/4” x 6-7/8”
14	2 20 00	2	INSULATOR – POLYMER – LINE POST – VERTICAL – CLAMP-TOP
15	2 29 24	6	INSULATOR – POLYMER – DEADEND – CLEVIS/TONGUE ENDS
16	5 09 48	3	CONNECTOR-COMPRESSION

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **DCD**	**3Ø CORNER PELICAN CONDUCTOR ANGLE OF 90° – COMPOSITE CROSSARM**
L. MOEN	**D. DONAIS**	CHKD.	
		2018-06-04	

DATE OF ISSUE: 2018-06-07 | DRAWING NO: **A-12-134** | **SHEET 1 OF 2** | REV. **B**

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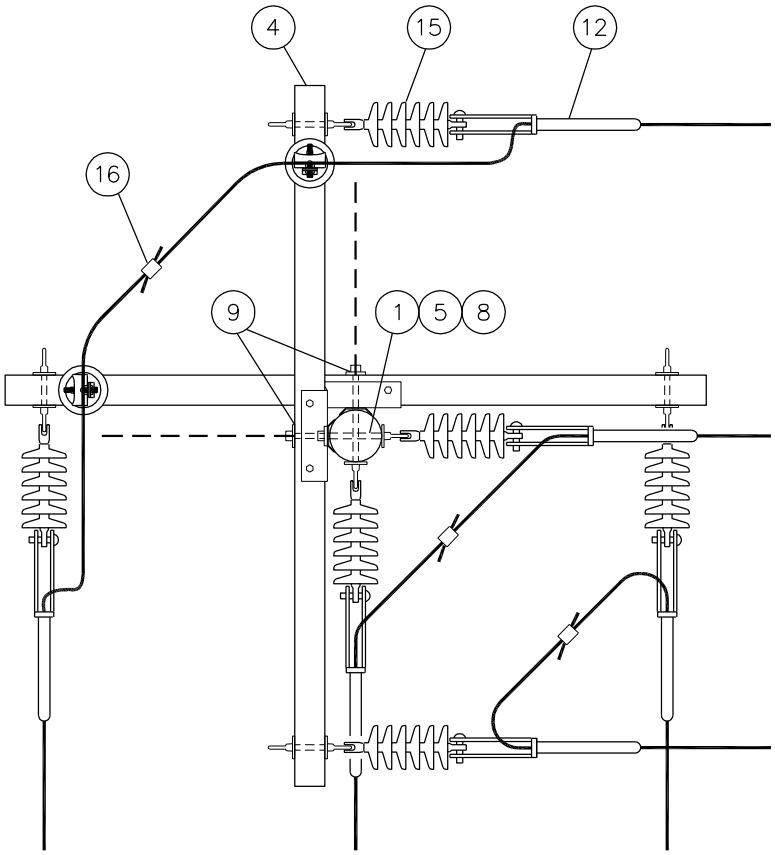

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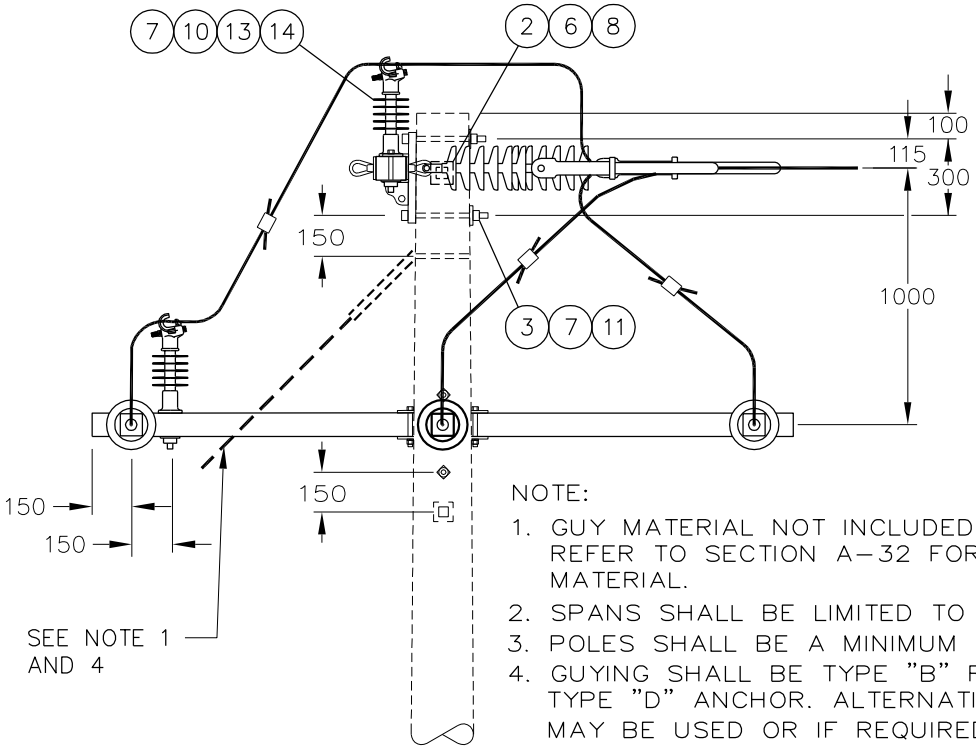

NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.
2. SPANS SHALL BE LIMITED TO 70m.
3. POLES SHALL BE A MINIMUM OF 45 FOOT/CLASS 2.
4. GUYING SHALL BE TYPE "B" RURAL DOWNGUY WITH TYPE "D" ANCHOR. ALTERNATIVELY, TYPE "E" ANCHORS MAY BE USED OR IF REQUIRED FOR SOIL CONDITIONS.
5. STRUCTURE SHALL NOT SUPPORT APPARATUS OF ANY KIND.
6. SHORT GUYING SHALL NOT BE USED.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS

APPROVAL L.MOEN	DESIGN CHK. J.ARSENAULT	DRN.E.GOTANA CHKD. 2018–11–20	3ø CORNER PELICAN CONDUCTOR ANGLE OF 90° – COMPOSITE CROSSARM
DATE OF ISSUE 2019-01-02	DRAWING NO. A–12–134	SHEET 2 of 2	REV. C

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	1	BOLT – DOUBLE ARMING – 5/8" x 20"
2	1 13 10	1	BOLT – MACHINE – 5/8” x 10”
3	1 14 12	2	BOLT-MACHINE – 3/4” x 12”
4	1 29 38	1	CROSSARM – COMPOSITE – 4-5/8” x 3-5/8” x 9’
5	1 50 00	1	NUT – EYE – 5/8”
6	1 93 27	1	WASHER – LOCK – DOUBLE COIL SPRING – 5/8”
7	1 93 28	2	WASHER-DOUBLE LOCK – 3/4”
8	1 93 42	3	WASHER-SQUARE – 2 1/4” x 2 1/4” x 13/16” HOLE
9	1 93 45	1	WASHER-SQUARE – 4” x 4” x 11/16” HOLE
10	1 93 96	2	WASHER-CURVED – 3” x 3” x 13/16” HOLE
11	2 01 88	3	DEADEND – AUTOMATIC – PELICAN ACSR
12	2 29 24	3	INSULATOR – POLYMER – DEADEND – CLEVIS/TONGUE ENDS

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*Sask**Power*** - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **DCD**	**3Ø DEADEND PELICAN CONDUCTOR COMPOSITE CROSSARM**
L. MOEN	**D. DONAIS**	CHKD.	
		2018-06-04	

DATE OF ISSUE: 2018-06-07 | DRAWING NO: **A-12-135** | **SHEET 1 OF 2** | REV. **B**

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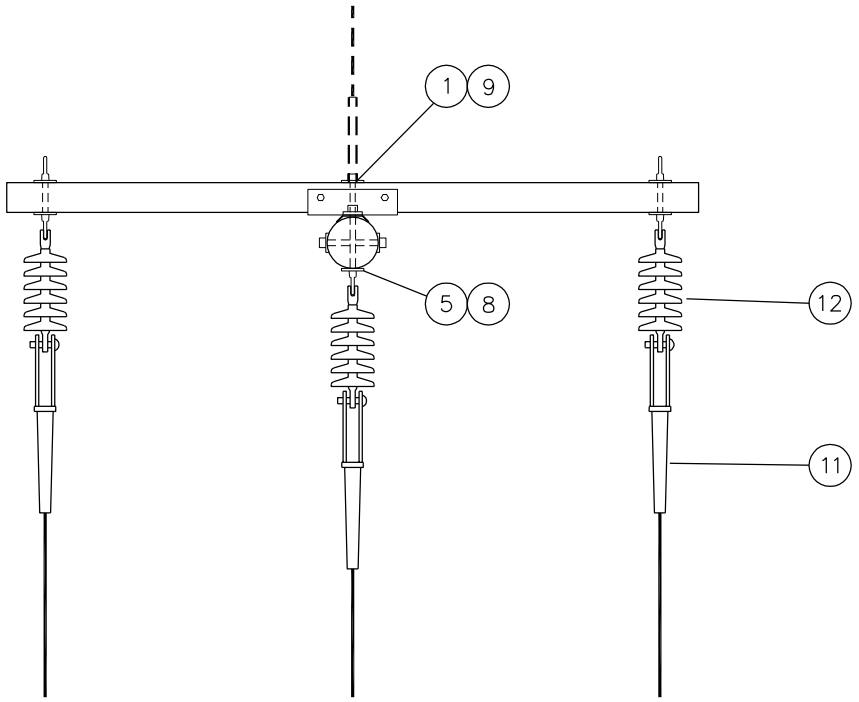

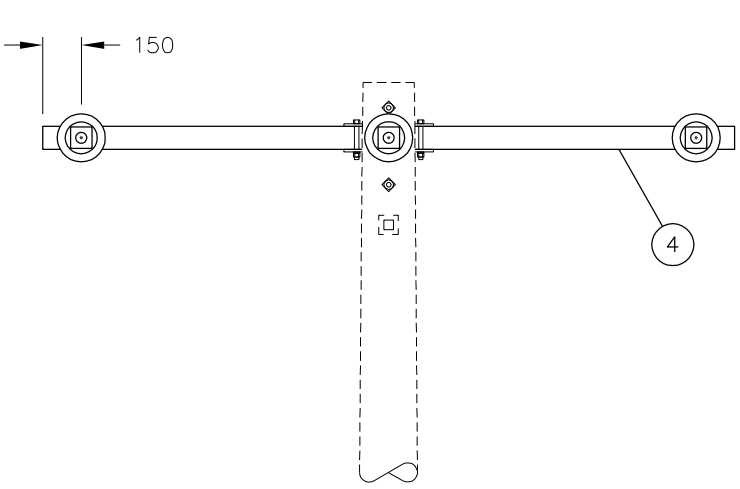

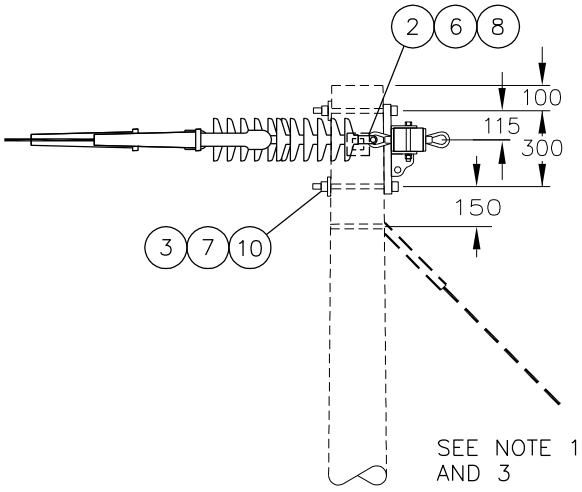

NOTE:
1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A-32 FOR GUY INSTALLATION AND MATERIAL.
2. POLES SHALL BE A MINIMUM OF 40'/CLASS 1 FOR NEW CONSTRUCTION.
3. GUYING SHALL BE TYPE "B" RURAL DOWN GUYS WITH TYPE "D" ANCHOR. ALTERNATIVELY, TYPE "E" ANCHORS MAY BE USED OR IF REQUIRED FOR SOIL CONDITIONS.
4. STRUCTURE SHALL NOT SUPPORT APPARATUS OF ANY KIND.
5. MAXIMUM SPAN SHALL BE 65m.
6. SHORT GUYING SHALL NOT BE USED.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. J.ARSENAULT	DRN.E.GOTANA CHKD. 2018-11-20	3ø DEADEND PELICAN CONDUCTOR COMPOSITE CROSSARM
DATE OF ISSUE 2019-01-02	DRAWING NO. A-12-135	SHEET 2 of 2	REV. C

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	1	BOLT – DOUBLE ARMING – 5/8" x 20"
2	1 14 12	2	BOLT-MACHINE – 3/4" x 12"
3	1 29 38	1	CROSSARM – COMPOSITE – 4-5/8" x 3-5/8" x 9'
4	1 50 00	1	NUT – EYE – 5/8"
5	1 93 28	3	WASHER-DOUBLE LOCK – 3/4"
6	1 93 42	1	WASHER-SQUARE – 2 1/4" x 2 1/4" x 13/16" HOLE
7	1 93 45	1	WASHER-SQUARE – 4" x 4" x 11/16" HOLE
8	1 93 95	1	WASHER-SQUARE – 3" x 3" x 13/16" HOLE
9	1 93 96	2	WASHER-CURVED – 3" x 3" x 13/16" HOLE
10	2 01 88	3	DEADEND – AUTOMATIC – PELICAN ACSR
11	2 06 3X	3	CONNECTOR – AMPACT (SIZE TO SUIT CONDUCTORS)
12	2 19 92	1	STUD – 3/4" x 6-7/8"
13	2 20 00	1	INSULATOR – POLYMER – LINE POST – VERTICAL – CLAMP-TOP
14	2 29 24	3	INSULATOR – POLYMER – DEADEND – CLEVIS/TONGUE ENDS

NOTE:

1. **SEE SECTION A-12-130 FOR TANGENT PORTION MATERIALS LIST.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **ARU**	**3Ø TAP-OFF PELICAN CONDUCTOR COMPOSITE CROSSARM**
L. MOEN	**A. UHREN**	CHKD.	
		2017-08-21	

DATE OF ISSUE: 2017-11-03 | DRAWING NO: **A-12-136** | **SHEET 1 OF 2** | REV. **A**

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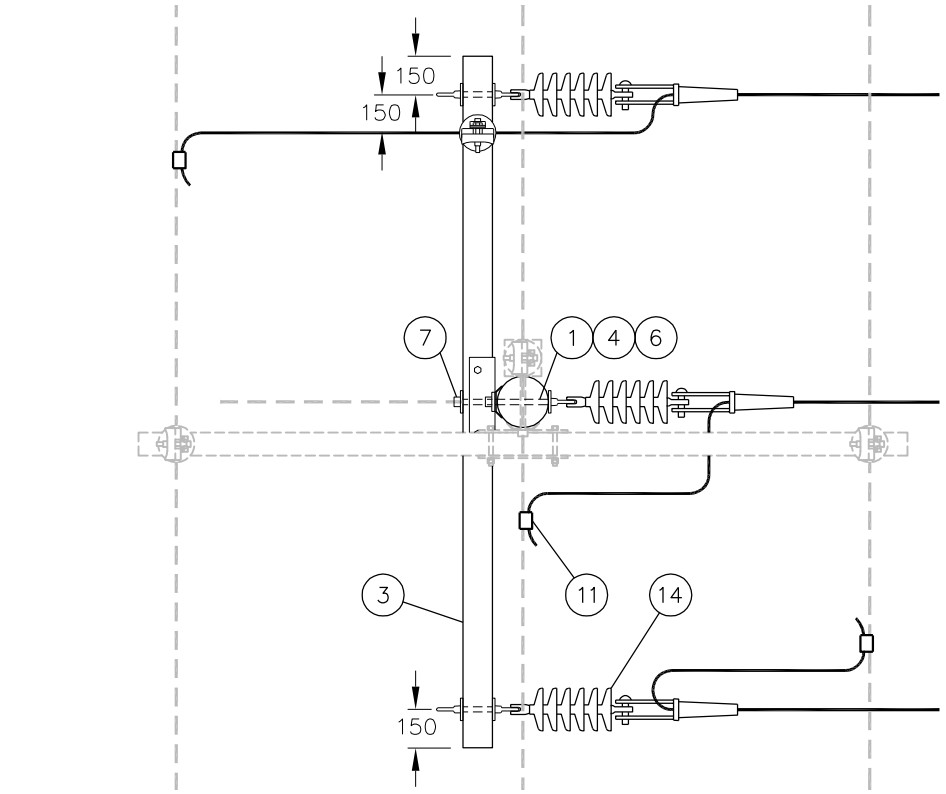

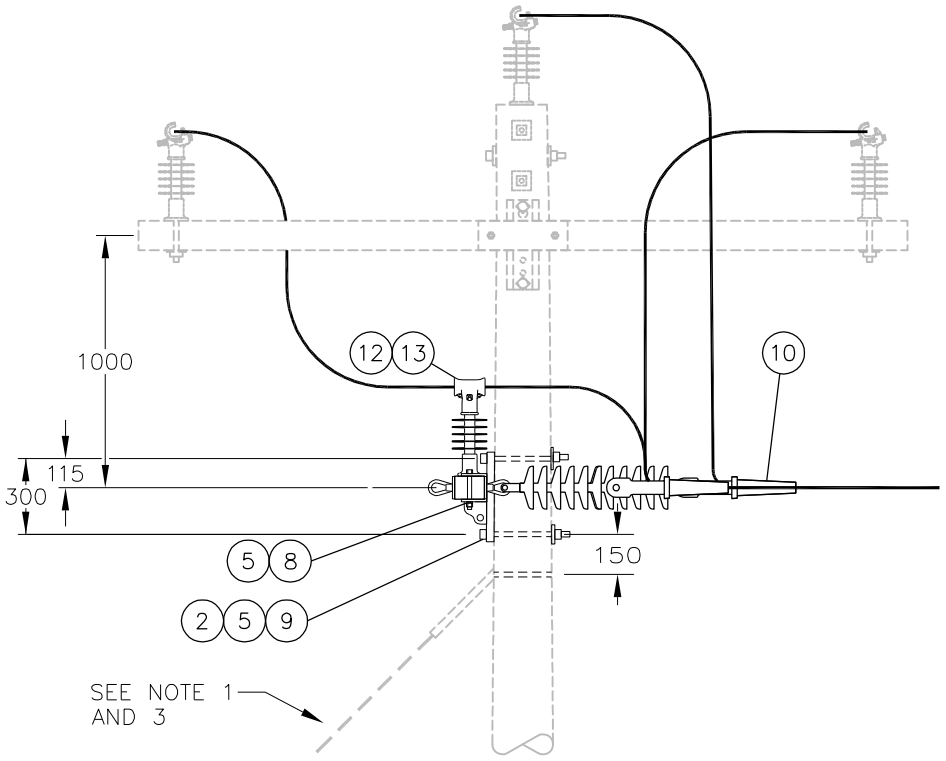

NOTE:

1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND BILL OF MATERIAL.
2. POLES SHALL BE A MINIMUM OF 40 FOOT/ CLASS 3.
3. GUYING SHALL BE TYPE "B" RURAL DOWNGUY AND TYPE "D" ANCHOR. ALTERNATIVELY, TYPE "E" ANCHORS MAY BE USED OR IF REQUIRED FOR SOIL CONDITIONS.
4. TAP–OFF SPAN SHALL NOT EXCEED 55m.
5. TANGENT NOT TO EXCEED 2° DEFLECTION
6. STRUCTURE SHALL NOT SUPPORT APPARATUS OF ANY KIND.
7. SHORT GUYING SHALL NOT BE USED.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS

APPROVAL L.MOEN	DESIGN CHK. J.ARSENAULT	DRN.E.GOTANA CHKD. 2018–11–20	3ø TAP–OFF PELICAN CONDUCTOR COMPOSITE CROSSARM
DATE OF ISSUE 2019-01-02	DRAWING NO. A–12–136	SHEET 2 of 2	REV. C

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	1	BOLT – DOUBLE ARMING – 5/8" x 20"
2	1 13 10	1	BOLT – MACHINE – 5/8” x 10”
3	1 14 12	2	BOLT-MACHINE – 3/4” x 12”
4	1 29 38	1	CROSSARM – COMPOSITE – 4-5/8” x 3-5/8” x 9’
5	1 50 00	2	NUT – EYE – 5/8”
6	1 93 27	1	WASHER – LOCK – DOUBLE COIL SPRING – 5/8”
7	1 93 28	5	WASHER-DOUBLE LOCK – 3/4”
8	1 93 42	3	WASHER-SQUARE – 2 1/4” x 2 1/4” x 13/16” HOLE
9	1 93 45	1	WASHER-SQUARE – 4” x 4” x 11/16” HOLE
10	1 93 95	3	WASHER-SQUARE – 3” x 3” x 13/16” HOLE
11	1 93 96	2	WASHER-CURVED – 3” x 3” x 13/16” HOLE
12	2 01 XX	3	DEADEND AUTOMATIC–CLEVIS TYPE (SEE NOTE 1)
12	2 01 88	3	DEADEND – AUTOMATIC – PELICAN ACSR
13	2 06 3X	3	CONNECTOR – AMPACT (SIZE TO SUIT CONDUCTORS)
14	2 19 92	3	STUD – 3/4” x 6-7/8”
15	2 20 00	3	INSULATOR – POLYMER – LINE POST – VERTICAL – CLAMP-TOP
16	2 29 24	6	INSULATOR – POLYMER – DEADEND – CLEVIS/TONGUE ENDS

NOTE:

1. REFER TO A-36-02 FOR SPECIFIC MATERIAL ITEM REQUIRED.

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **JDA**	**3Ø DOUBLE DEADEND CONDUCTOR CHANGE FROM PELICAN COMPOSITE CROSSARM**
L. MOEN	**J. ARSENAULT**	CHKD.	
		2018-11-15	

DATE OF ISSUE: 2019-01-02 | DRAWING NO: **A-12-139** | **SHEET 1 OF 2** | REV. **C**

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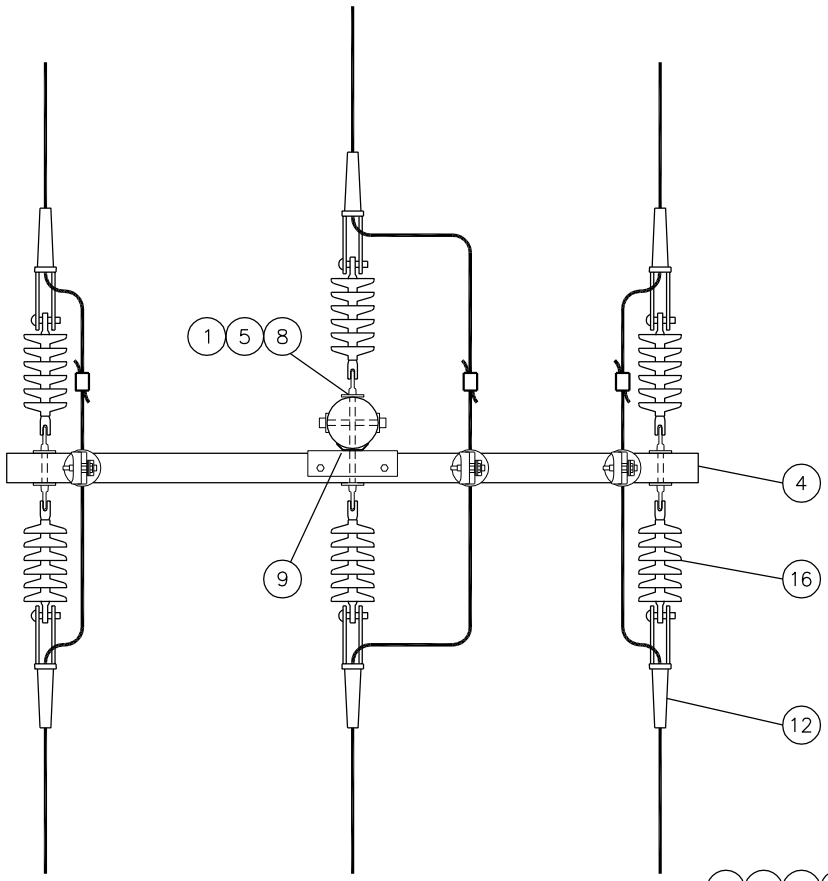

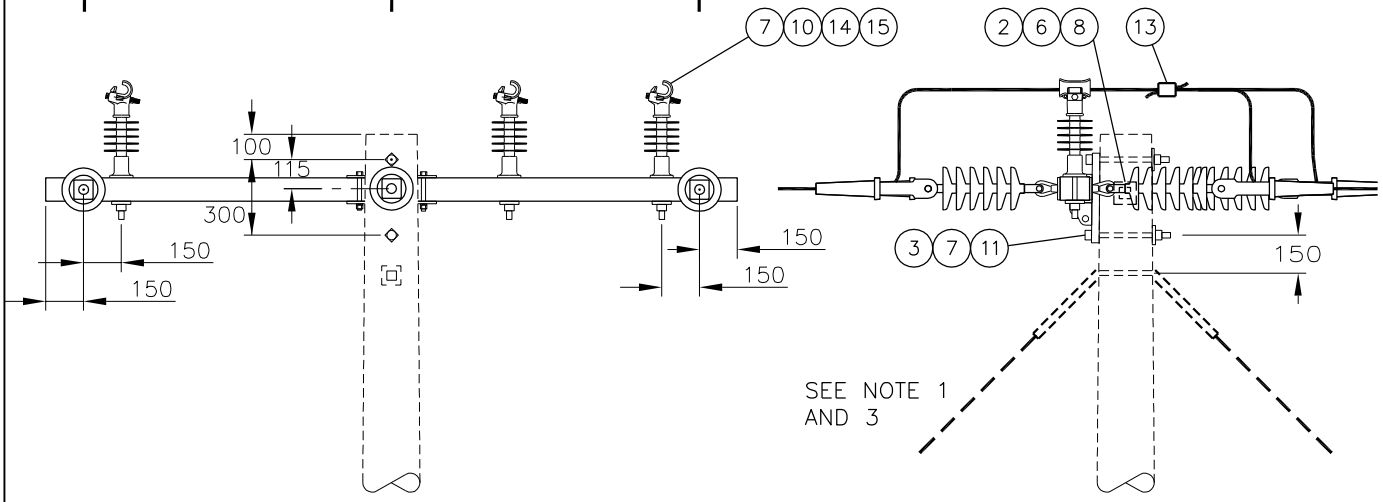

NOTE:
1. GUY MATERIAL NOT INCLUDED IN BILL OF MATERIAL. REFER TO SECTION A–32 FOR GUY INSTALLATION AND MATERIAL.
2. POLES SHALL BE A MINIMUM OF 40'/CLASS 1 FOR NEW CONSTRUCTION.
3. GUYING SHALL BE TYPE "B" RURAL DOWN GUYS WITH TYPE "D" ANCHOR FOR PELICAN ACSR. ALTERNATIVELY, TYPE "E" ANCHORS MAY BE USED OR IF REQUIRED FOR SOIL CONDITIONS. OTHER CONDUCTOR MAY HAVE LESSER GUYING REQUIREMENTS.
4. STRUCTURE SHALL NOT SUPPORT APPARATUS OF ANY KIND.
5. MAXIMUM SPAN SHALL BE 65m.
6. SHORT GUYING SHALL NOT BE USED.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. J.ARSENAULT	DRN.E.GOTANA CHKD. 2018–11–20	3ø DOUBLE DEADEND CONDUCTOR CHANGE FROM PELICAN – COMPOSITE CROSSARM
DATE OF ISSUE 2019-01-02	DRAWING NO. A–12–139	SHEET 2 of 2	REV. C

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 14 XX	3	BOLT – MACHINE – 3/4" X X" – SIZE TO SUIT POLE CLASS
2	1 17 80	1	BRACE – CROSSARM – UNDERSTRUNG
3	1 29 06	1	CROSSARM – COMPOSITE – UNDERSTRUNG TANGENT
4	1 93 28	6	WASHER – DOUBLE LOCK – 3/4"
5	1 93 46	6	WASHER – SQUARE – 4" X 4" X 15/16" HOLE
6	1 93 96	3	WASHER – CURVED – 3" X 3" X 13/16" HOLE
7	2 19 92	3	STUD – LINE POST INSULATOR – 3/4" X 6-7/8"
8	2 20 00	3	INSULATOR – LINE POST
9	2 58 XX	3	ARMOUR ROD (SIZE TO SUIT – SEE NOTE 1)
10	2 97 28	5.1m	WIRE – TIE – #8 STEEL

NOTE:

1. **REFER TO DWG. A-12-50 SH. 2 FOR SPECIFIC MATERIAL ITEM REQUIRED.**

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **PP**	**TRANSMISSION UNDERSTRUNG COMPOSITE 3Ø TANGENT**
L MOEN	**P PATEL**	CHKD. **LM**	
		2021-05-19	

DATE OF ISSUE: **2021-08-16** | DRAWING NO: **A-12-140** | **SHEET 1 OF 2** | REV. **A**

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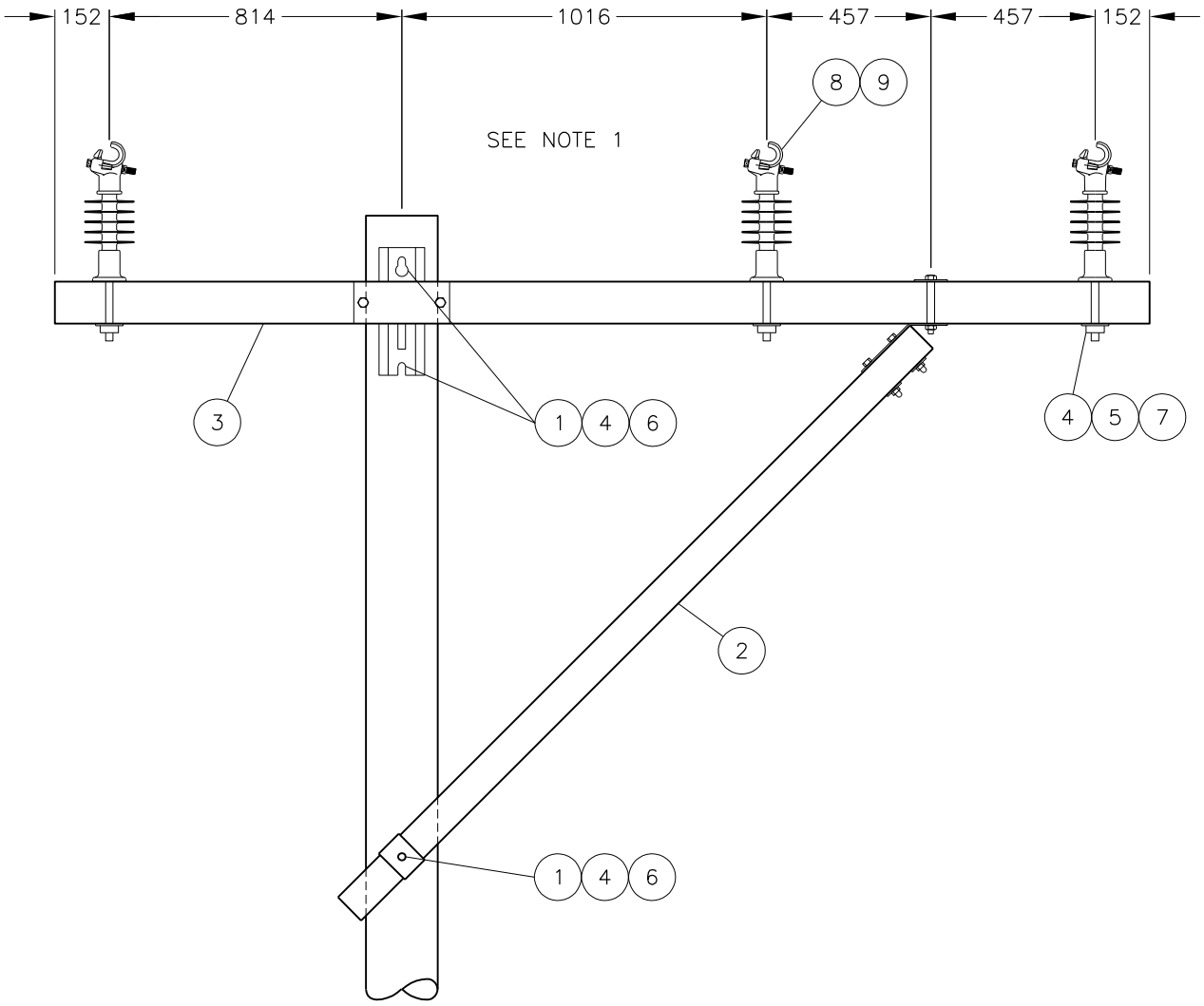

NOTE:
1. CONTACT TRANSMISSION LINES ENGINEERING FOR CLEARANCES AND OTHER REQUIREMENTS.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

A12_140_02

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN.E.GOTANA CHKD. 2020-02-13	TRANSMISSION UNDERSTRUNG COMPOSITE 3ø TANGENT
DATE OF ISSUE 2020-12-18	DRAWING NO. A-12-140	SHEET 2 of 2	REV. –

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 93 23	1	WASHER – LOCK – COIL – 3/4” (SEE NOTE 1)
2	1 93 28	-	WASHER – LOCK – DOUBLE COIL – 3/4” (SEE NOTE 1)
3	1 93 47	1	WASHER – SQUARE – 4” X 13/16” HOLE (SEE NOTE 2)
4	2 19 92	1	STUD – POLE TOP INSULATOR – 3/4” X 6”
5	2 20 00	1	INSULATOR – LINE POST – 35 kV
6	8 26 65	1	BRACKET – SUPPORT PLATE – LINE POST INSULATOR

NOTES:

1. **THIS ASSEMBLY IS SUITABLE FOR WOOD OR FIBERGLASS CROSSARMS. WITH WOOD, USE DOUBLE COIL LOCK WASHER (1 93 28). WITH FIBERGLASS, USE SINGLE COIL LOCK WASHER (1 93 23).**

2. **THIS WASHER REPLACES THE 2-1/4” X 2-1/4” SQUARE WASHER THAT COMES WITH THE INSULATOR STUD KIT.**

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*Sask**Power*** - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **AT**	**LINE POST INSULATOR INSTALLATION DETAILS**
L MOEN	**A TACIK**	CHKD. **PP**	
		2022-07-04	

DATE OF ISSUE: **2022-08-15**	DRAWING NO: **A-12-142**	**SHEET 1 OF 2**	REV. **-**

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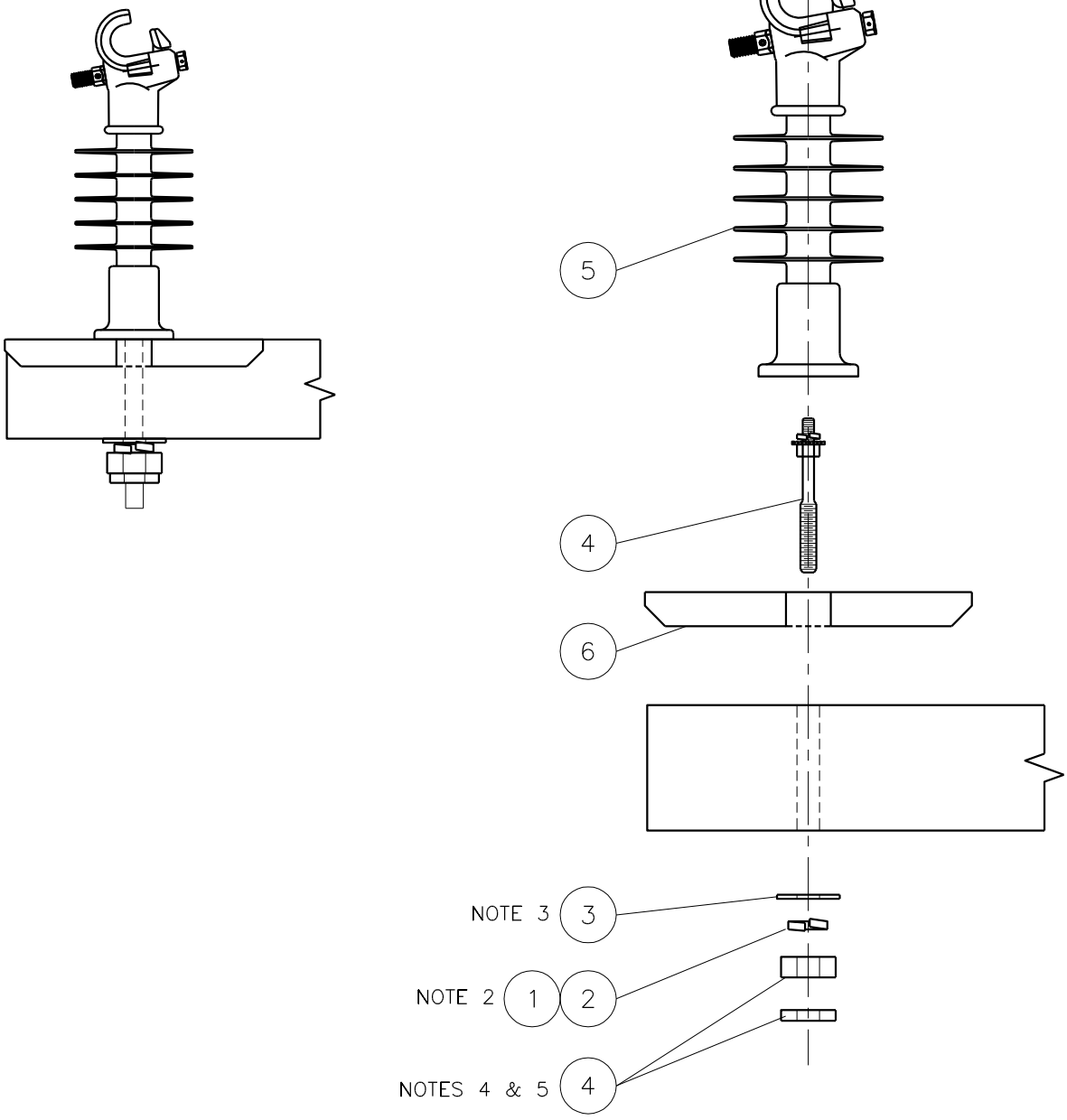

NOTES:

1. THIS DRAWING SHOWS THE INSTALLATION DETAILS FOR ADDING THE SUPPORT PLATE TO A LINE POST INSULATOR.
2. THIS ASSEMBLY IS SUITABLE FOR WOOD OR FIBERGLASS CROSSARMS. WITH WOOD, USE THE DOUBLE COIL LOCK WASHER. WITH FIBERGLASS, USE THE SINGLE COIL LOCK WASHER.
3. THIS WASHER REPLACES THE SQUARE WASHER THAT COMES WITH THE INSULATOR STUD KIT.
4. ON FIBERGLASS CROSSARMS, SQUARE NUT TO BE TIGHTENED TO NO MORE THAN 7 FT–LBS. THIS IS JUST ENOUGH TO FLATTEN THE SINGLE COIL LOCK WASHER. TIGHTENING MORE THAN THIS MAY CAUSE FIBERGLASS CROSSARM TO CRACK.
5. USING TWO WRENCHES, TIGHTLY INSTALL LOCKNUT AGAINST SQUARE NUT, WHILE PREVENTING SQUARE NUT FROM TIGHTENING ANY FURTHER.

SCALE: N.T.S.

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. P.PATEL	DRN.D.REDEKOPP CHKD. 2022–07–27	LINE POST INSULATOR INSTALLATION DETAILS
DATE OF ISSUE 2022-08-15	DRAWING NO. A–12–142	SHEET 2 of 2	REV. –

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 12 06	2	BOLT – MACHINE – 1/2" X 6"
2	1 13 12	1	BOLT – MACHINE – 5/8" X 12"
3	1 13 16	1	BOLT – MACHINE – 5/8" X 16"
4	1 18 72	1	BRACE – BOW – 72"
5	1 29 10	1	CROSSARM – WOOD – 4" X 5" X 10'-0"
6	1 93 26	2	WASHER – DOUBLE LOCK – 1/2"
7	1 93 27	2	WASHER – DOUBLE LOCK – 5/8"
8	1 93 28	3	WASHER – DOUBLE LOCK – 3/4"
9	1 93 30	2	WASHER – ROUND – 1-3/8" X 9/16" HOLE
10	1 93 42	3	WASHER – SQUARE – 2-1/4" X 2-1/4" X 13/16" HOLE
11	1 93 46	3	WASHER – SQUARE – 4" X 15/16" HOLE
12	2 19 92	3	STUD – LINE POST INSULATOR
13	2 20 00	3	INSULATOR – LINE POST
14	2 59 69	3	ARMOUR ROD – TULIP

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **LM**	**3Ø TANGENT DEFLECTIONS UP TO 2 DEGREES TULIP AAC**
L MOEN	**B GEBHART**	CHKD.	

DATE OF ISSUE: 08/13/2020	DRAWING NO: **A-12-150**	**SHEET 1 OF 2**	REV. **0**

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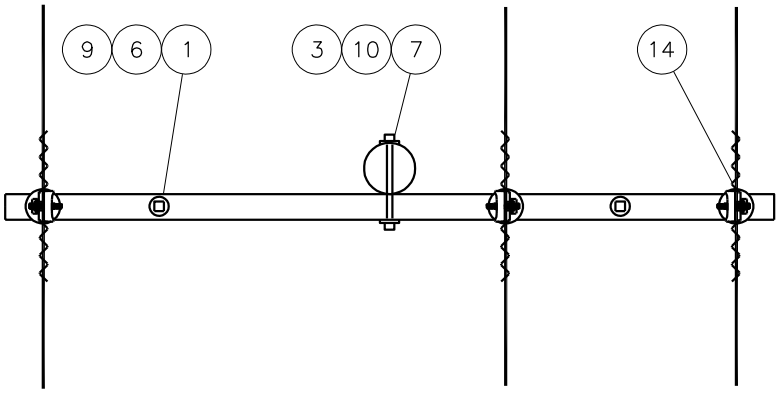

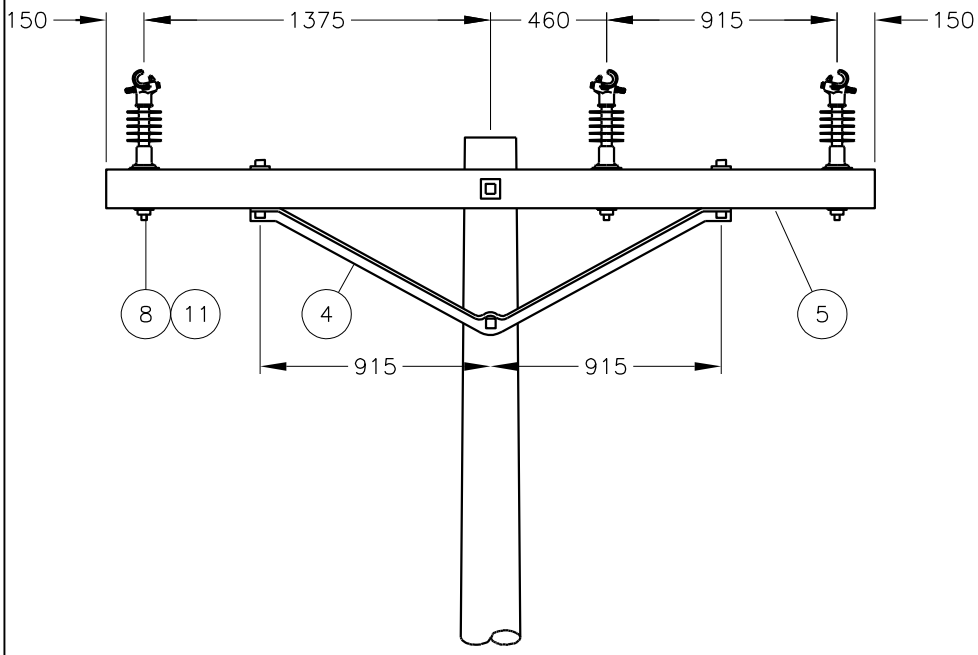

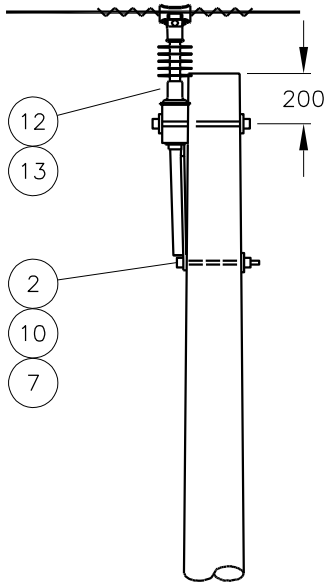

NOTE:
1. RULING SPAN IS 60m, WITH A 72m MAXIMUM SPAN.
2. DEFLECTIONS LIMITED TO 2 DEGREES.
3. REQUIRES 3/40' POLE MINIMUM.
4. ALLOWS CLUSTER MOUNTED 600kg TRANSFORMERS. LARGER OR HEAVIER APPARATUS REQUIRES UPCLASSED POLE.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

A12_150_02

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN.E.GOTANA CHKD. 2020-02-13	3ø TANGENT DEFLECTIONS UP TO 2 DEGREES TULIP AAC
DATE OF ISSUE 08/13/2020	DRAWING NO. A-12-150	SHEET 2 of 2	REV. –

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 12 06	2	BOLT – MACHINE – 1/2" X 6"
2	1 13 12	2	BOLT – MACHINE – 5/8" X 12"
3	1 13 16	1	BOLT – MACHINE – 5/8" X 16"
4	1 18 72	1	BRACE – ANGLE – 72"
5	1 29 10	1	CROSSARM – WOOD – 4" X 5" X 10'-0"
6	1 93 26	2	WASHER – DOUBLE LOCK – 1/2"
7	1 93 27	3	WASHER – DOUBLE LOCK – 5/8"
8	1 93 28	3	WASHER – DOUBLE LOCK – 3/4"
9	1 93 30	2	WASHER – ROUND – 1-3/8" X 9/16" HOLE
10	1 93 42	5	WASHER – SQUARE – 2-1/4" X 2-1/4" X 13/16" HOLE
11	1 93 46	3	WASHER – SQUARE – 4" X 15/16" HOLE
12	2 19 92	3	STUD – LINE POST INSULATOR
13	2 20 00	3	INSULATOR – LINE POST
14	2 59 69	3	ARMOUR ROD – TULIP

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **LM**	**3Ø LIGHT ANGLE DEFLECTIONS OF 3 TO 10 DEGREES TULIP AAC**
L MOEN	**B GEBHART**	CHKD.	

DATE OF ISSUE: 08/13/2020	DRAWING NO: **A-12-151**	**SHEET 1 OF 2**	REV. **0**

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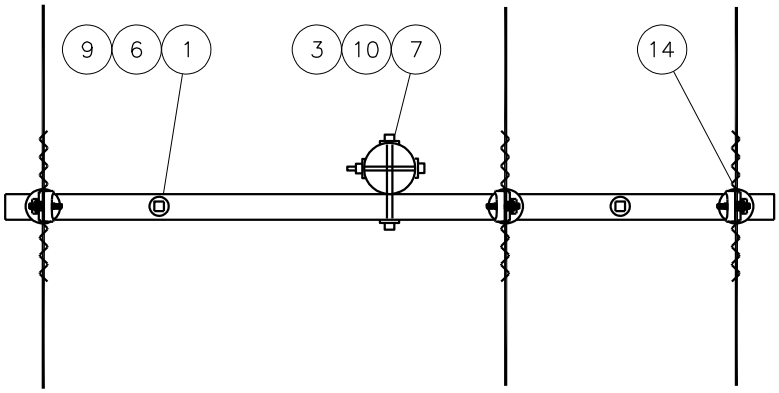

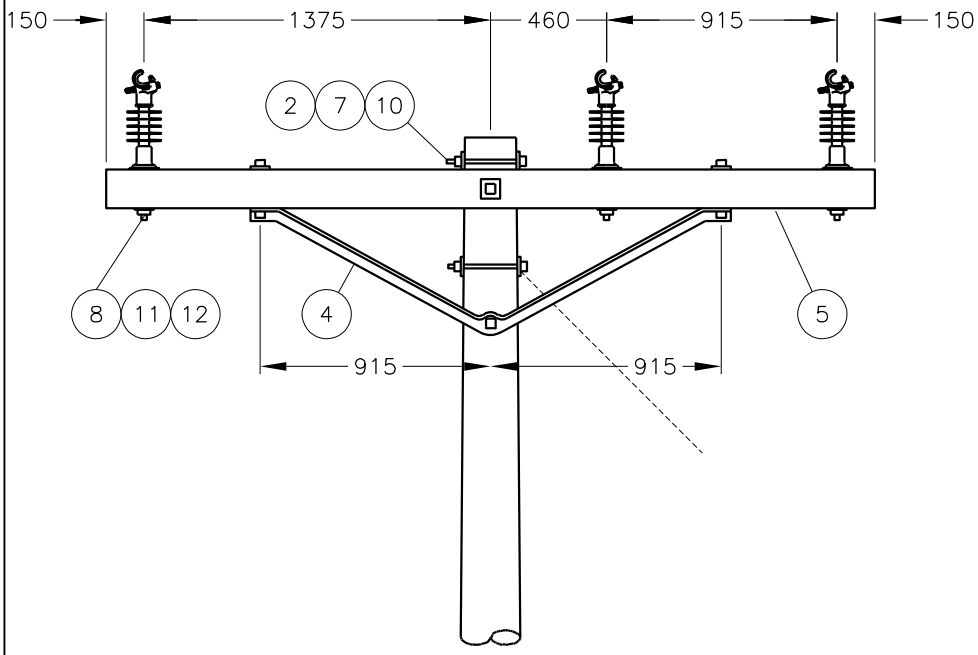

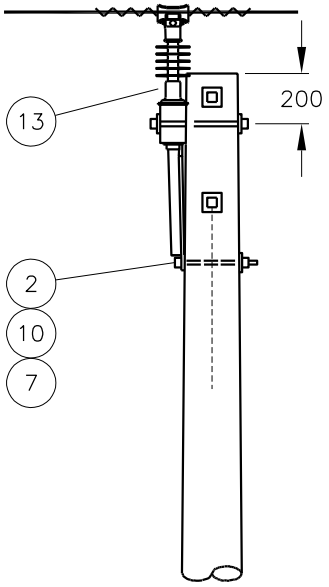

NOTES:

1. RULING SPAN IS 60M, WITH A 72M MAXIMUM SPAN.
2. REQUIRES 4/40' POLE MINIMUM.
3. ALLOWS CLUSTER MOUNTED 600KG TRANSFORMERS. LARGER OR HEAVIER APPARATUS REQUIRES UPCLASSED POLE.
4. DOWNGUY IS TYPE "A". SHORT GUYING IS PERMISSIBLE (MINIMUM 5M).
5. GUYING MATERIAL IS NOT INCLUDED. REFER TO A-32.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

A12_151_02

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN.E.GOTANA CHKD. 2020-02-13	3ø LIGHT ANGLE DEFLECTIONS OF 3 TO 10 DEGREES TULIP AAC
DATE OF ISSUE 08/13/2020	DRAWING NO. A-12-151	SHEET 2 of 2	REV. –

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	3	BOLT – DOUBLE ARMING – 5/8" X 20"
2	1 12 06	4	BOLT – MACHINE – 1/2" X 6"
3	1 13 12	1	BOLT – MACHINE – 5/8" X 12"
4	1 13 16	1	BOLT – MACHINE – 5/8" X 16"
5	1 18 72	2	BRACE – ANGLE – 72"
6	1 29 10	2	CROSSARM – WOOD – 4" X 5" X 10'-0"
7	1 93 26	4	WASHER – DOUBLE LOCK – 1/2"
8	1 93 27	8	WASHER – DOUBLE LOCK – 5/8"
9	1 93 28	6	WASHER – DOUBLE LOCK – 3/4"
10	1 93 30	4	WASHER – ROUND – 1 3/8" X 9/16" HOLE
11	1 93 42	12	WASHER – SQUARE – 2 1/4" X 2 1/4" X 13/16" HOLE
12	1 93 46	6	WASHER – SQUARE – 4" X 15/16" HOLE
13	2 19 92	6	STUD – LINE POST INSULATOR
14	2 20 00	6	INSULATOR – LINE POST
15	2 59 69	6	ARMOUR ROD – TULIP

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. LM	3Ø MEDIUM ANGLE DEFLECTIONS OF 11 TO 30 DEGREES TULIP AAC
L MOEN	B GEBHART	CHKD.	

DATE OF ISSUE: 08/13/2020 | DRAWING NO: A-12-152 | SHEET 1 OF 2 | REV. 0

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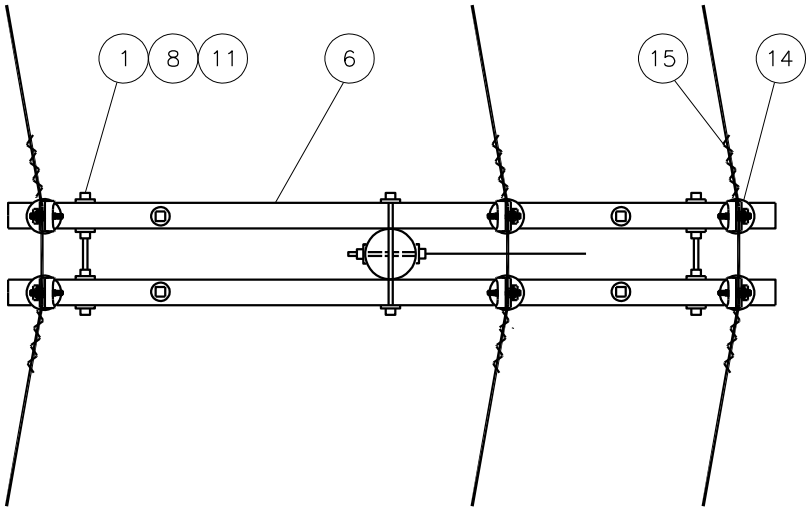

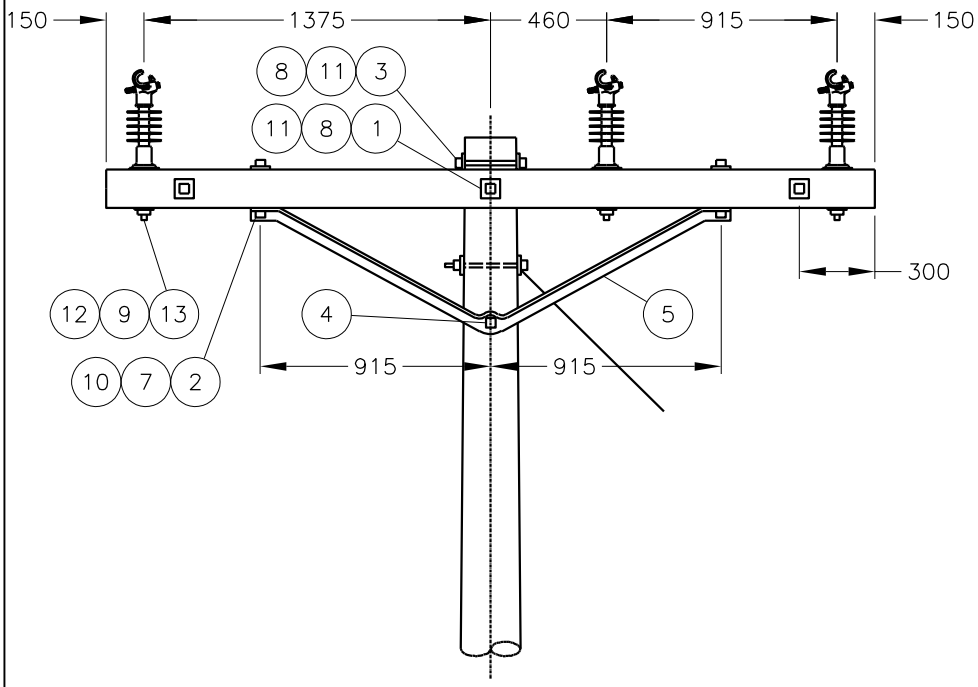

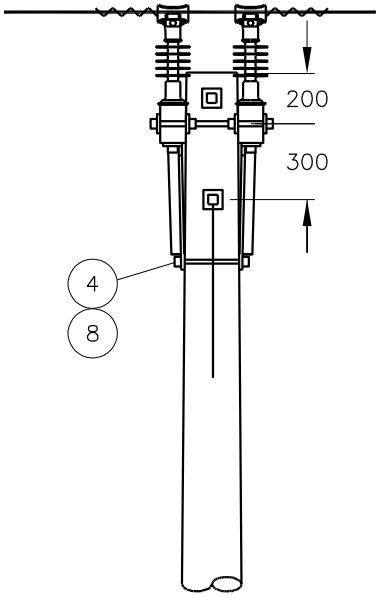

NOTES:

1. RULING SPAN IS 60M, WITH A 72M MAXIMUM SPAN.
2. REQUIRES 4/40' POLE MINIMUM.
3. ALLOWS CLUSTER MOUNTED 600KG TRANSFORMERS. LARGER OR HEAVIER APPARATUS REQUIRES UPCLASSED POLE.
4. DOWNGUY IS TYPE "B". SHORT GUYING IS PERMISSIBLE (MINIMUM 5M).
5. GUYING MATERIAL IS NOT INCLUDED. REFER TO A–32.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

A12_152_02

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN.E.GOTANA CHKD. 2020–02–13	3ø MEDIUM ANGLE DEFLECTIONS OF 11 TO 30 DEGREES TULIP AAC
DATE OF ISSUE 08/13/2020	DRAWING NO. A–12–152	SHEET 2 of 2	REV. –

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	2	BOLT – DOUBLE ARMING – 5/8” X 20”
2	1 14 12	4	BOLT – MACHINE – 3/4” X 12”
3	1 29 38	2	CROSSARM – COMPOSITE – 4-5/8” X 3-5/8” x 9’
4	1 50 00	2	NUT – EYE – 5/8”
5	1 93 27	2	WASHER – DOUBLE LOCK – 5/8"
6	1 93 28	6	WASHER – DOUBLE LOCK – 3/4”
7	1 93 45	4	WASHER – SQUARE – 4” X 4” X 11/16” HOLE
8	1 93 46	2	WASHER – SQUARE – 4” X 4” X 15/16” HOLE
9	1 93 96	4	WASHER – CURVED – 3" X 3" X 13/16" HOLE
10	2 02 18	6	DEADEND – BOLTED
11	2 19 92	2	STUD – LINE POST INSULATOR
12	2 20 00	2	INSULATOR – LINE POST
13	2 29 24	6	DEADEND – POLYMER – CLEVIS AND TONGUE ENDS
14	5 09 48	3	CONNECTOR – COMPRESSION

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **LM**	**3Ø HEAVY ANGLE / CORNERS DEFLECTIONS OF 31 TO 90 DEGREES TULIP AAC**
L MOEN	**B GEBHART**	CHKD.	

DATE OF ISSUE: 08/13/2020	DRAWING NO: **A-12-153**	**SHEET 1 OF 2**	REV. **0**

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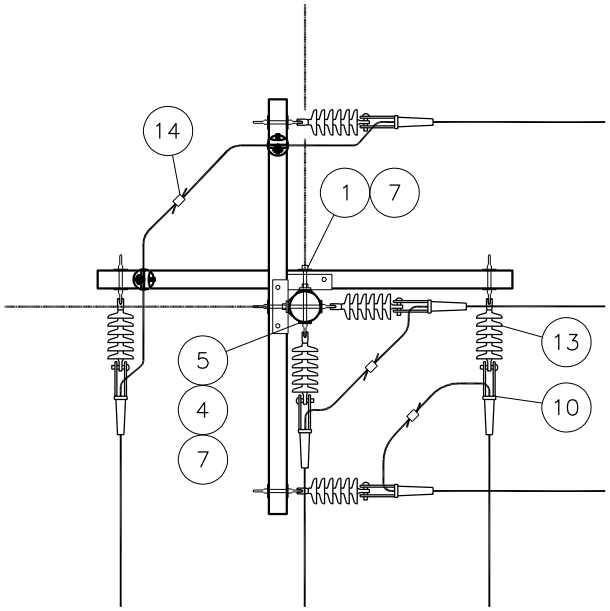

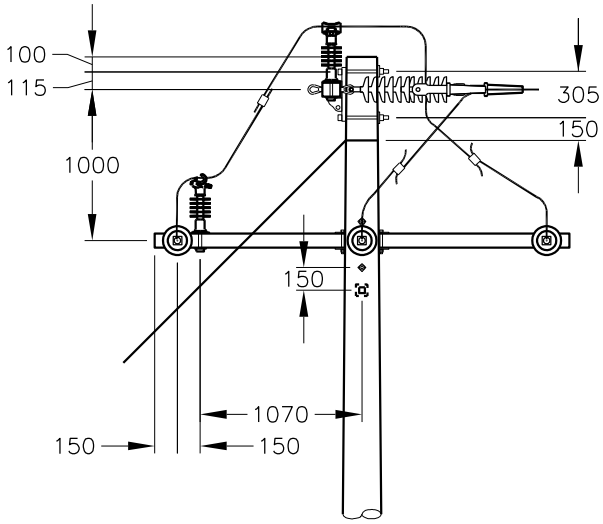

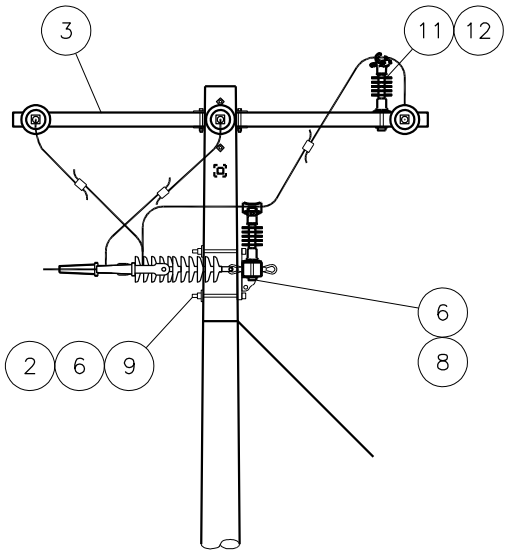

NOTES:

1. RULING SPAN IS 60M, WITH A 72M MAXIMUM SPAN.
2. REQUIRES 4/40' POLE MINIMUM.
3. TRANSFORMERS AND APPARATUS ARE NOT PERMITTED ON THE POLE.
4. DOWNGUY IS TYPE "B". SHORT GUYING IS NOT PERMITTED.
5. GUYING MATERIAL IS NOT INCLUDED. REFER TO A-32.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

A12_153_02

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN.E.GOTANA CHKD. 2020-02-27	3ø HEAVY ANGLE / CORNERS DEFLECTIONS OF 31 TO 90 DEGREES TULIP AAC
DATE OF ISSUE 08/13/2020	DRAWING NO. A-12-153	SHEET 2 of 2	REV. –

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	1	BOLT – DOUBLE ARMING – 5/8" X 20"
2	1 14 12	2	BOLT – MACHINE – 3/4" X 12"
3	1 29 38	1	CROSSARM – COMPOSITE – 4-5/8" X 3-5/8" X 9'
4	1 50 00	1	NUT – EYE – 5/8"
5	1 93 27	1	WASHER – DOUBLE LOCK – 5/8"
6	1 93 28	2	WASHER – DOUBLE LOCK – 3/4"
7	1 93 42	1	WASHER – SQUARE – 2 1/4" X 2 1/4" X 13/16" HOLE
8	1 93 45	1	WASHER – SQUARE – 4" X 4" X 11/16" HOLE
9	1 93 96	2	WASHER – CURVED – 3" X 3" X 13/16" HOLE
10	2 02 18	3	DEADEND – BOLTED
11	2 29 24	3	DEADEND – POLYMER – CLEVIS AND TONGUE ENDS

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **LM**	**3Ø DEAD END TULIP AAC**
L MOEN	**B GEBHART**	CHKD.	

DATE OF ISSUE: 08/13/2020 | DRAWING NO: **A-12-154** | **SHEET 1 OF 2** | REV. **0**

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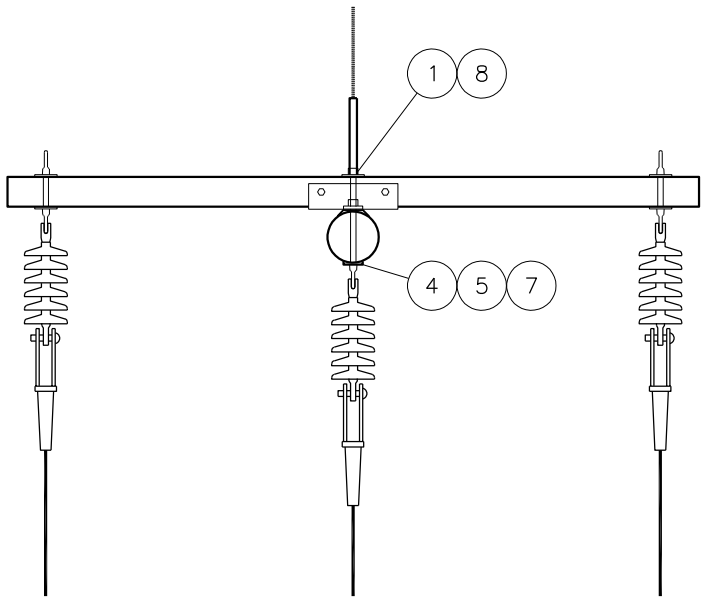
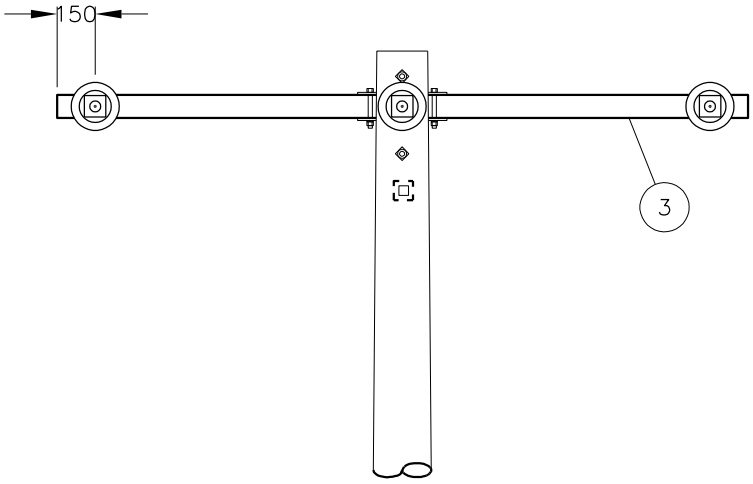
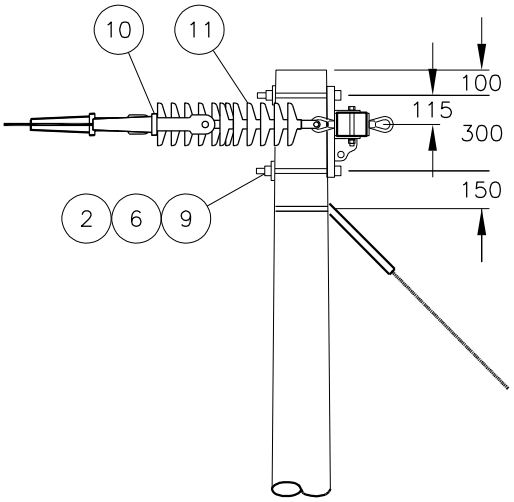
STRUCTURE USED HERE







NOTES:

1. RULING SPAN IS 60M, WITH A 60M MAXIMUM SPAN FOR THIS STRUCTURE.
2. REQUIRES 3/40' POLE MINIMUM.
3. ALLOWS CLUSTER MOUNTED 600KG TRANSFORMERS OR SINGLE 910KG 3 PHASE TRANSFORMER APPARATUS.
4. DOWNGUY IS TYPE "B". SHORT GUYING IS NOT PERMITTED.
5. GUYING MATERIAL IS NOT INCLUDED. REFER TO A-32.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

A12_154_02

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN.E.GOTANA CHKD. 2020-02-27	3ø DEAD END TULIP AAC
DATE OF ISSUE 08/13/2020	DRAWING NO. A-12-154	SHEET 2 of 2	REV. –

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	1	BOLT – DOUBLE ARMING – 5/8" X 20"
2	1 14 12	2	BOLT – MACHINE – 3/4" X 12"
3	1 29 38	1	CROSSARM – COMPOSITE – 4-5/8" X 3-5/8" X 9'
4	1 50 00	1	NUT – EYE – 5/8"
5	1 93 27	1	WASHER – DOUBLE LOCK – 5/8"
6	1 93 28	4	WASHER – DOUBLE LOCK – 3/4"
7	1 93 42	1	WASHER – SQUARE – 2 1/4" X 2 1/4" X 13/16" HOLE
8	1 93 45	1	WASHER – SQUARE – 4" X 4" X 11/16" HOLE
9	1 93 46	2	WASHER – SQUARE – 4" X 4" X 15/16" HOLE
10	1 93 96	2	WASHER – CURVED – 3" X 3" X 13/16" HOLE
11	2 02 18	3	DEADEND – BOLTED
12	2 19 92	2	STUD – INSULATOR
13	2 20 00	2	INSULATOR – LINE POST
14	2 29 24	3	DEADEND – POLYMER – CLEVIS AND TONGUE ENDS
15	5 09 48	3	CONNECTOR – COMPRESSION

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **LM**	**3Ø TAP OFF TULIP AAC**
L MOEN	**B GEBHART**	CHKD.	

DATE OF ISSUE: 08/13/2020 | DRAWING NO: **A-12-155** | **SHEET 1 OF 2** | REV. **0**

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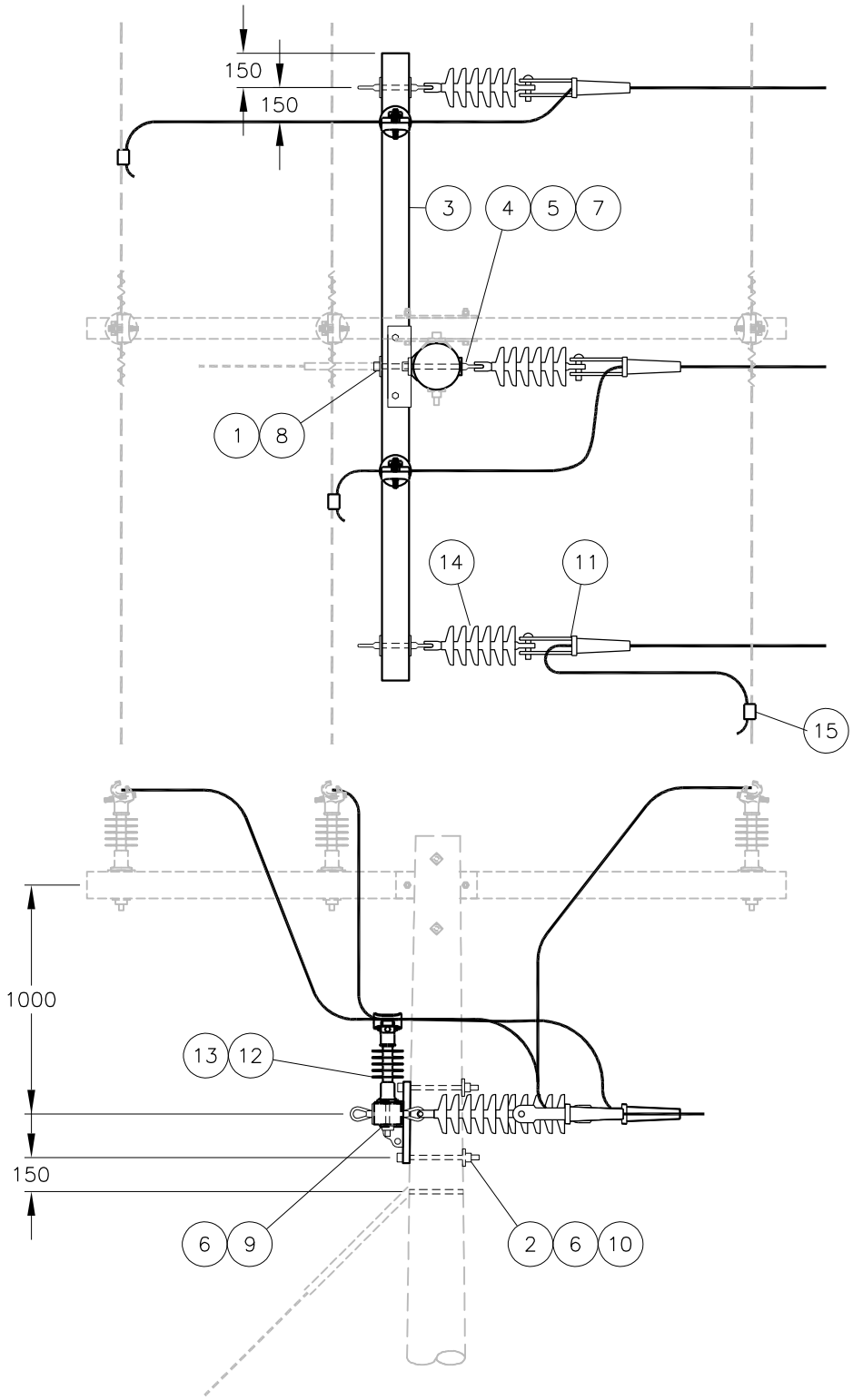

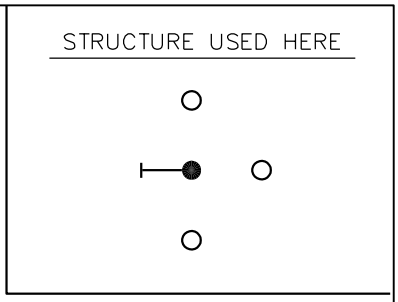

NOTES:
1. RULING SPAN IS 60M, WITH A 60M MAXIMUM TAP SPAN.
2. REQUIRES 3/40' POLE MINIMUM.
3. TRANSFORMERS AND APPARATUS ARE NOT PERMITTED ON THE POLE.
4. DOWNGUY IS TYPE "B". SHORT GUYING IS NOT PERMITTED.
5. GUYING MATERIAL IS NOT INCLUDED. REFER TO A-32.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

A12_155_02

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN.E.GOTANA CHKD.	3ø TAP OFF TULIP AAC
		2020-03-09	
DATE OF ISSUE 08/13/2020	DRAWING NO. A-12-155	SHEET 2 of 2	REV. –

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 12 06	4	BOLT – MACHINE – 1/2" X 6"
2	1 13 12	2	BOLT – MACHINE – 5/8" X 12"
3	1 13 16	2	BOLT – MACHINE – 5/8" X 16"
4	1 18 72	2	BRACE – ANGLE – 72"
5	1 29 10	2	CROSSARM – WOOD – 4" X 5" X 10'-0"
6	1 93 26	4	WASHER – DOUBLE LOCK – 1/2"
7	1 93 27	4	WASHER – DOUBLE LOCK – 5/8"
8	1 93 28	6	WASHER – DOUBLE LOCK – 3/4"
9	1 93 30	4	WASHER – ROUND – 1-3/8" X 9/16" HOLE
10	1 93 42	6	WASHER – SQUARE – 2-1/4" X 2-1/4" X 13/16" HOLE
11	1 93 46	6	WASHER – SQUARE – 4" X 15/16" HOLE
12	2 19 92	6	STUD – LINE POST INSULATOR
13	2 20 00	6	INSULATOR – LINE POST
14	2 59 69	6	ARMOUR ROD – TULIP

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **LM**	**DOUBLE CIRCUIT 3Ø TANGENT DEFLECTIONS UP TO 2 DEGREES TULIP AAC**
L MOEN	**B GEBHART**	CHKD.	

DATE OF ISSUE: 08/13/2020	DRAWING NO: **A-12-160**	**SHEET 1 OF 2**	REV. **0**

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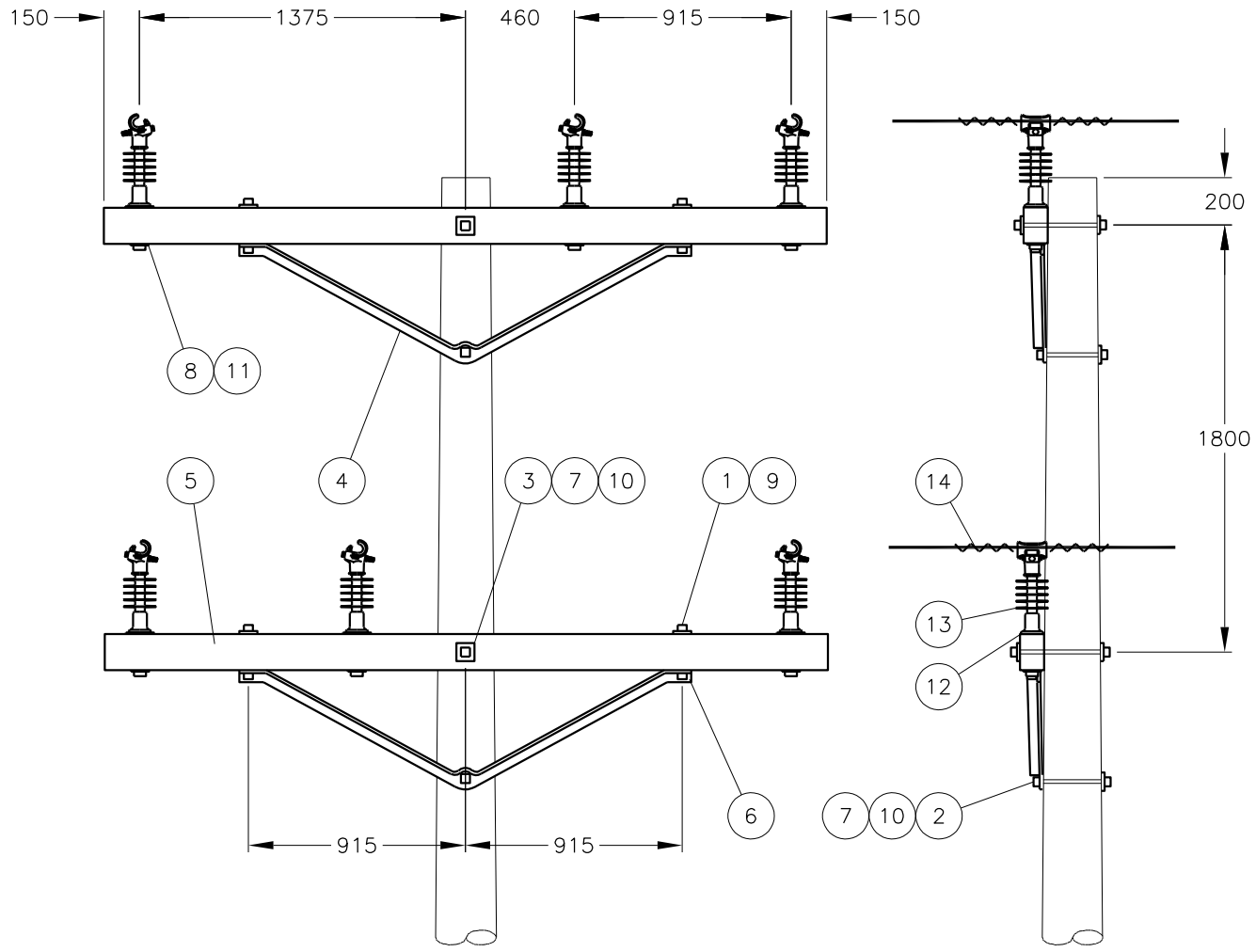

NOTES:
1. RULING SPAN IS 60M, WITH A 72M MAXIMUM SPAN.
2. DEFLECTIONS LIMITED TO 2 DEGREES.
3. REQUIRES 1/45' POLE MINIMUM.
4. ALLOWS CLUSTER MOUNTED 600KG TRANSFORMERS OR SINGLE 910KG 3 PHASE TRANSFORMER/APPARATUS.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

A12_160_02

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN.E.GOTANA CHKD. 2020-03-09	DOUBLE CIRCUIT 3ø TANGENT DEFLECTIONS UP TO 2 DEGREES TULIP AAC
DATE OF ISSUE 08/13/2020	DRAWING NO. A-12-160	SHEET 2 of 2	REV. –

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 12 06	4	BOLT – MACHINE – 1/2" X 6"
2	1 13 12	3	BOLT – MACHINE – 5/8" X 12"
3	1 13 16	2	BOLT – MACHINE – 5/8" X 16"
4	1 18 72	2	BRACE – ANGLE – 72"
5	1 29 10	2	CROSSARM – WOOD – 4" X 5" X 10'-0"
6	1 93 26	4	WASHER – DOUBLE LOCK – 1/2"
7	1 93 27	5	WASHER – DOUBLE LOCK – 5/8"
8	1 93 28	6	WASHER – DOUBLE LOCK – 3/4"
9	1 93 30	4	WASHER – ROUND – 1-3/8" X 9/16" HOLE
10	1 93 42	8	WASHER – SQUARE – 2-1/4" X 2-1/4" X 13/16" HOLE
11	1 93 46	6	WASHER – SQUARE – 4" X 15/16" HOLE
12	2 19 92	6	STUD – LINE POST INSULATOR
13	2 20 00	6	INSULATOR – LINE POST
14	2 59 69	6	ARMOUR ROD – TULIP

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **LM**	**DOUBLE CIRCUIT 3Ø LIGHT ANGLE DEFLECTIONS OF 3 TO 10 DEGREES TULIP AAC**
L MOEN	**B GEBHART**	CHKD.	

DATE OF ISSUE: 08/13/2020	DRAWING NO: **A-12-161**	**SHEET 1 OF 2**	REV. **0**

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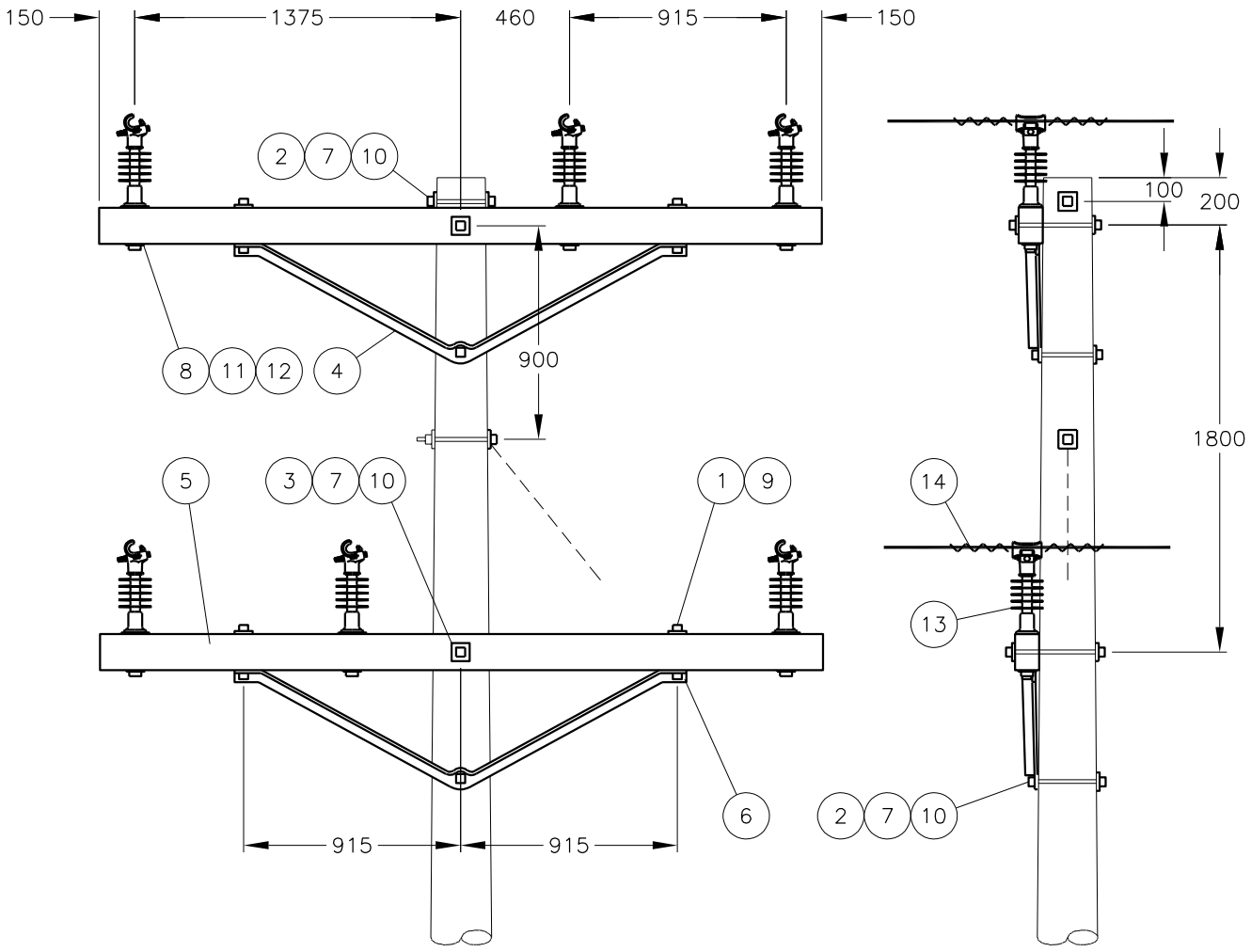

NOTES:
1. RULING SPAN IS 60M, WITH A 72M MAXIMUM SPAN.
2. DEFLECTIONS OF 3 TO 10 DEGREES.
3. REQUIRES 3/45' POLE MINIMUM.
4. ALLOWS CLUSTER MOUNTED 600KG TRANSFORMERS OR SINGLE 910KG 3 PHASE TRANSFORMER/APPARATUS.
5. DOWN GUY IS TYPE "B". SHORT GUYING IS NOT PERMISSIBLE.
6. GUYING MATERIAL IS NOT INCLUDED. REFER TO A-32.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

A12_161_02

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN.E.GOTANA CHKD. 2020-03-09	DOUBLE CIRCUIT 3ø LIGHT ANGLE DEFLECTIONS OF 3 TO 10 DEGREES TULIP AAC
DATE OF ISSUE 08/13/2020	DRAWING NO. A-12-161	SHEET 2 of 2	REV. –

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	6	BOLT – DOUBLE ARMING – 5/8" X 20"
2	1 12 06	8	BOLT – MACHINE – 1/2" X 6"
3	1 13 12	3	BOLT – MACHINE – 5/8" X 12"
4	1 13 16	2	BOLT – MACHINE – 5/8" X 16"
5	1 18 72	4	BRACE – ANGLE – 72"
6	1 29 10	4	CROSSARM – WOOD – 4" X 5" X 10'-0"
7	1 93 26	8	WASHER – DOUBLE LOCK – 1/2"
8	1 93 27	15	WASHER – DOUBLE LOCK – 5/8"
9	1 93 28	12	WASHER – DOUBLE LOCK – 3/4"
10	1 93 30	8	WASHER – ROUND – 1 3/8" X 9/16" HOLE
11	1 93 42	22	WASHER – SQUARE – 2 1/4" X 2 1/4" X 13/16" HOLE
12	1 93 46	12	WASHER – SQUARE – 4" X 15/16" HOLE
13	2 19 92	12	STUD – LINE POST INSULATOR
14	2 20 00	12	INSULATOR – LINE POST
15	2 59 69	6	ARMOUR ROD – TULIP

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. LM	DOUBLE CIRCUIT 3Ø MEDIUM ANGLE DEFLECTIONS OF 11 TO 30 DEGREES TULIP AAC
L MOEN	B GEBHART	CHKD.	

DATE OF ISSUE: 08/13/2020 | DRAWING NO: A-12-162 | SHEET 1 OF 2 | REV. 0

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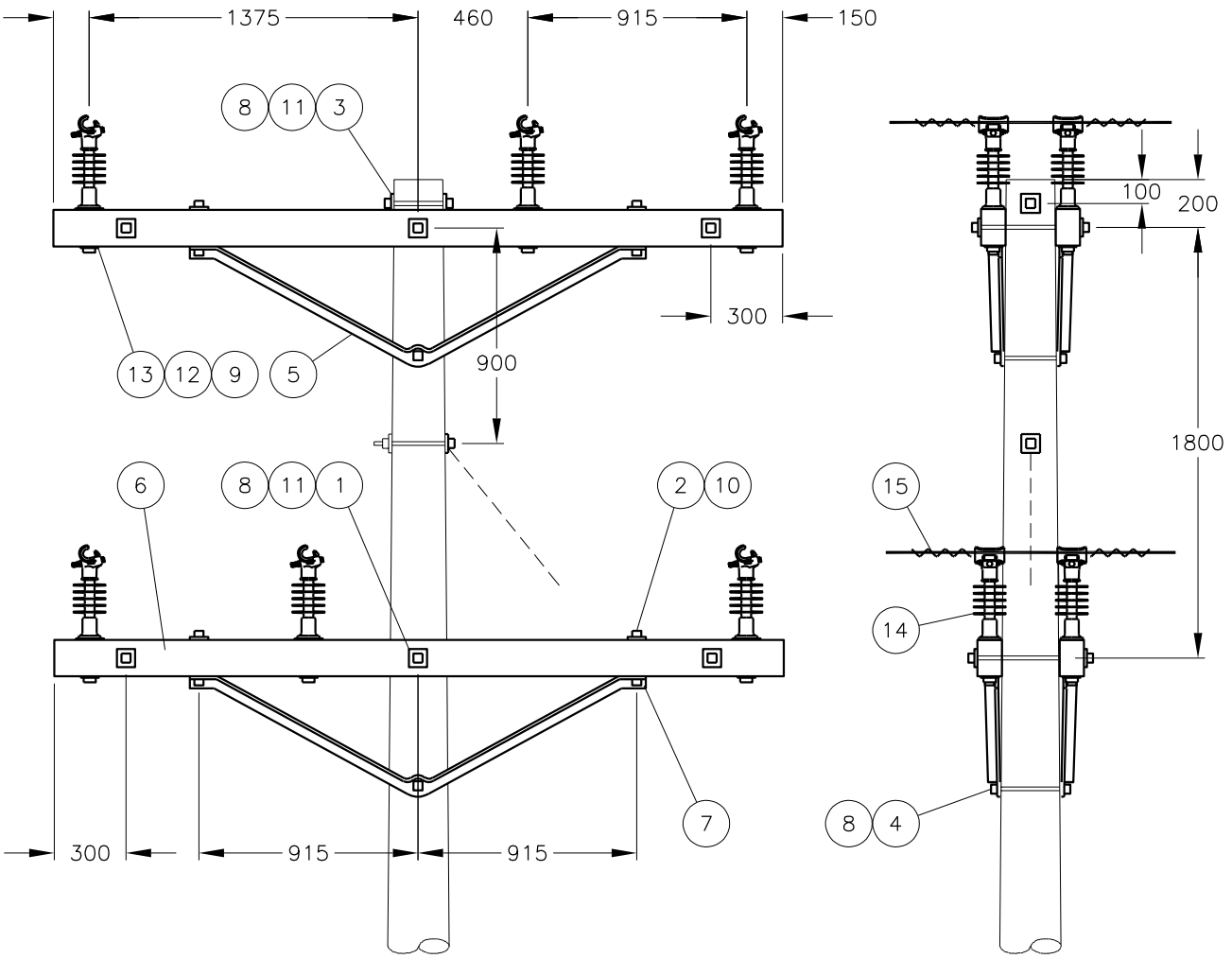

NOTES:

1. RULING SPAN IS 60M, WITH A 72M MAXIMUM TAP SPAN.
2. DEFLECTIONS OF 11 TO 30 DEGREES.
3. REQUIRES 2/45' POLE MINIMUM.
4. ALLOWS CLUSTER MOUNTED 600KG TRANSFORMERS OR SINGLE 910KG 3 PHASE TRANSFORMER/APPARATUS.
5. DOWN GUY IS TYPE "B". SHORT GUYING IS NOT PERMISSIBLE.
6. GUYING MATERIAL IS NOT INCLUDED. REFER TO A-32.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

APPROVED FOR CONSTRUCTION A12_162_02

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN.E.GOTANA CHKD. 2020-03-09	DOUBLE CIRCUIT 3ø MEDIUM ANGLE DEFLECTIONS OF 11 TO 30 DEGREES TULIP AAC
DATE OF ISSUE 08/13/2020	DRAWING NO. A-12-162	SHEET 2 of 2	REV. –

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	4	BOLT – DOUBLE ARMING – 5/8” X 20”
2	1 14 12	8	BOLT – MACHINE – 3/4” X 12”
3	1 29 38	4	CROSSARM – COMPOSITE – 4-5/8” X 3-5/8” x 9’
4	1 50 00	4	NUT – EYE – 5/8”
5	1 93 27	4	WASHER – DOUBLE LOCK – 5/8"
6	1 93 28	12	WASHER – DOUBLE LOCK – 3/4”
7	1 93 45	8	WASHER – SQUARE – 4” X 4” X 11/16” HOLE
8	1 93 46	4	WASHER – SQUARE – 4” X 4” X 15/16” HOLE
9	1 93 96	8	WASHER – CURVED – 3" X 3" X 13/16" HOLE
10	2 02 18	12	DEADEND – BOLTED
11	2 19 92	4	STUD – LINE POST INSULATOR
12	2 20 00	4	INSULATOR – LINE POST
13	2 29 24	12	DEADEND – POLYMER – CLEVIS AND TONGUE ENDS
14	5 09 48	6	CONNECTOR – COMPRESSION

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **LM**	**DOUBLE CIRCUIT 3Ø HEAVY ANGLE DEFLECTIONS OF 31 TO 90 DEGREES TULIP AAC**
L MOEN	**B GEBHART**	CHKD.	

DATE OF ISSUE: 08/13/2020 | DRAWING NO: **A-12-163** | **SHEET 1 OF 2** | REV. **0**

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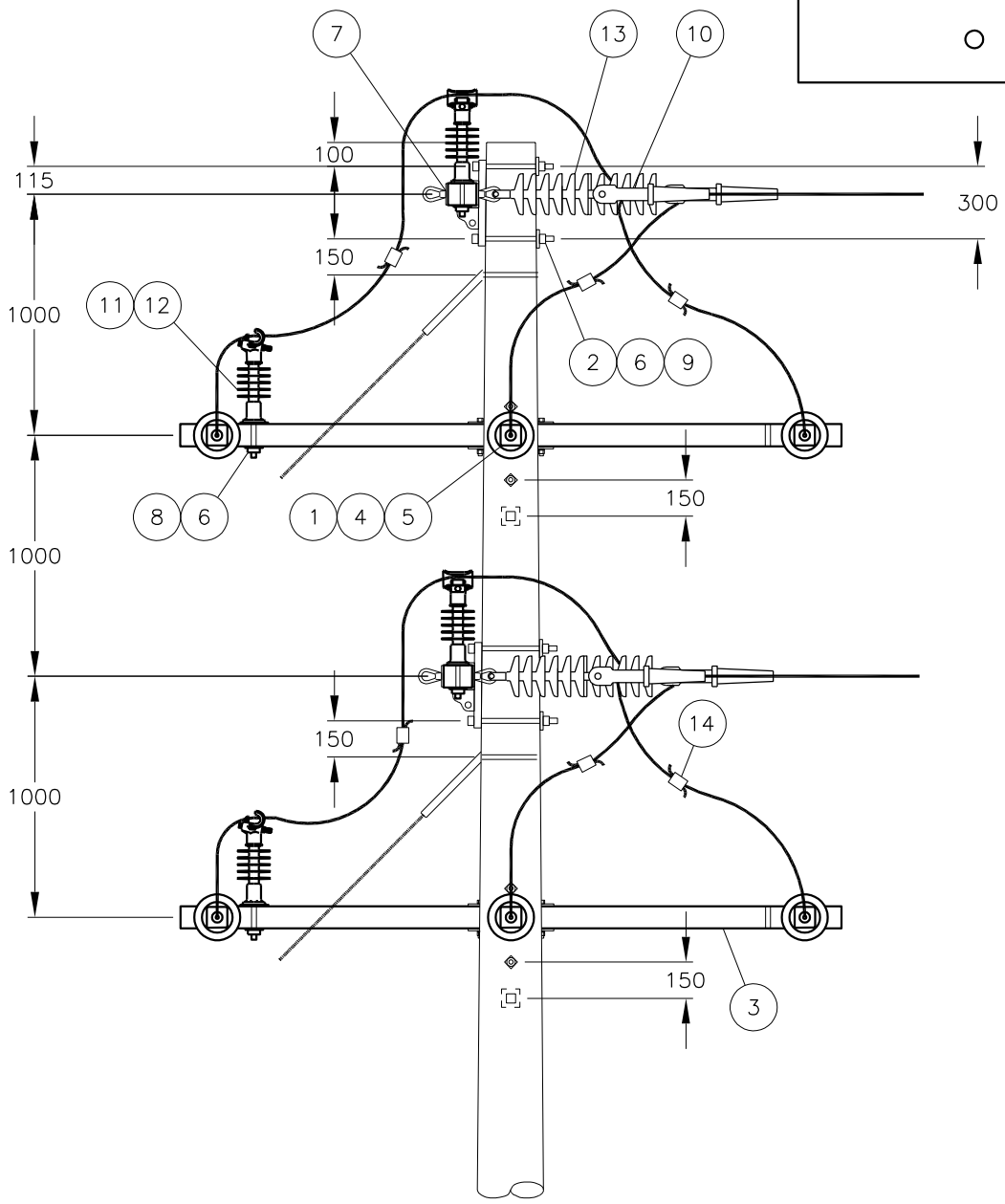

NOTES:

1. RULING SPAN IS 60M, MAX SPAN FOR 31–45 DEGREES IS 56M. MAX SPAN FOR 40–60 DEGREES IS 64M. MAX SPAN FOR 61–90 DEGREES IS 72M.
2. DEFLECTIONS OF 31 TO 90 DEGREES.
3. REQUIRES 4/45' POLE MINIMUM.
4. TRANSFORMERS AND APPARATUS ARE NOT PERMITTED ON THE POLE.
5. DOWN GUY IS TYPE "B". SHORT GUYING IS NOT PERMISSIBLE.
6. GUYING MATERIAL IS NOT INCLUDED. REFER TO A–32.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

A12_163_02

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN.E.GOTANA CHKD. 2020–03–09	DOUBLE CIRCUIT 3ø HEAVY ANGLE DEFLECTIONS OF 31 TO 90 DEGREES TULIP AAC
DATE OF ISSUE 08/13/2020	DRAWING NO. A–12–163	SHEET 2 of 2	REV. –

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	2	BOLT – DOUBLE ARMING – 5/8" X 20"
2	1 14 12	4	BOLT – MACHINE – 3/4" X 12"
3	1 29 38	2	CROSSARM – COMPOSITE – 4-5/8" X 3-5/8" X 9'
4	1 50 00	2	NUT – EYE – 5/8"
5	1 93 27	2	WASHER – DOUBLE LOCK – 5/8"
6	1 93 28	4	WASHER – DOUBLE LOCK – 3/4"
7	1 93 42	2	WASHER – SQUARE – 2 1/4" X 2 1/4" X 13/16" HOLE
8	1 93 45	2	WASHER – SQUARE – 4" X 4" X 11/16" HOLE
9	1 93 96	4	WASHER – CURVED – 3" X 3" X 13/16" HOLE
10	2 02 18	6	DEADEND – BOLTED
11	2 29 24	6	DEADEND – POLYMER – CLEVIS AND TONGUE ENDS

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **LM**	**DOUBLE CIRCUIT 3Ø DEAD END TULIP AAC**
L MOEN	**B GEBHART**	CHKD.	

DATE OF ISSUE: 08/13/2020 | DRAWING NO: **A-12-164** | **SHEET 1 OF 2** | REV. **0**

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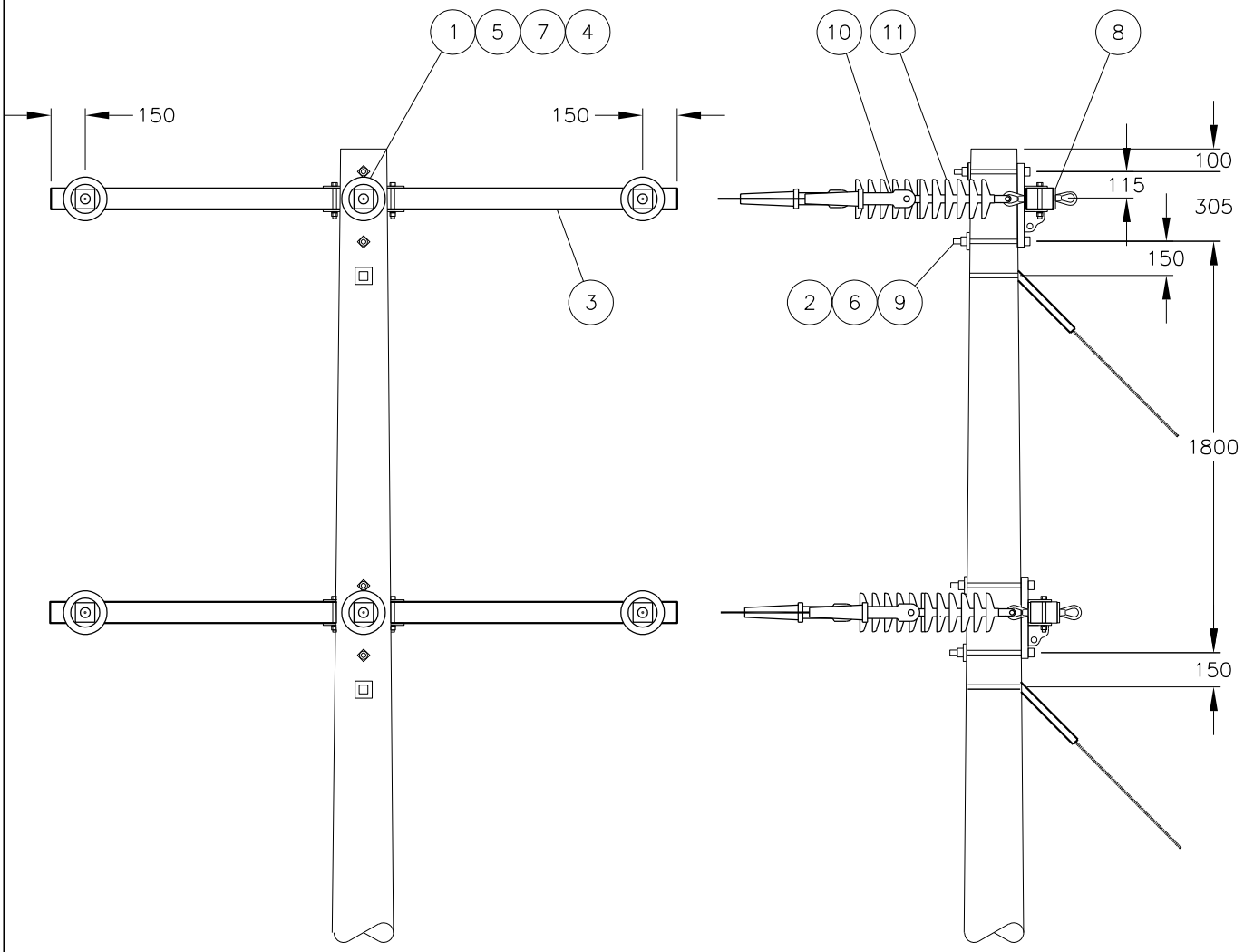
STRUCTURE USED HERE



NOTES:
1. RULING SPAN IS 60M, WITH A 60M MAXIMUM SPAN.
2. REQUIRES 1/45' POLE MINIMUM.
3. ALLOWS CLUSTER MOUNTED 600KG TRANSFORMERS OR SINGLE 910KG 3 PHASE TRANSFORMER/APPARATUS.
4. DOWNGUY IS TYPE "B". SHORT GUYING IS NOT PERMISSIBLE.
5. GUYING MATERIAL IS NOT INCLUDED. REFER TO A-32.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

A12_164_02

SaskPower – DISTRIBUTION STANDARDS			
APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN.E.GOTANA CHKD. 2020-03-09	DOUBLE CIRCUIT 3ø DEAD END TULIP AAC
DATE OF ISSUE 08/13/2020	DRAWING NO. A-12-164	SHEET 2 of 2	REV. –

BILL OF MATERIAL

ITEM NO.	CODE NO.	QUANTITY	DESCRIPTION
1	1 09 20	1	BOLT – DOUBLE ARMING – 5/8" X 20"
2	1 14 12	2	BOLT – MACHINE – 3/4" X 12"
3	1 29 38	1	CROSSARM – COMPOSITE – 4-5/8" X 3-5/8" X 9'
4	1 50 00	1	NUT – EYE – 5/8"
5	1 93 27	1	WASHER – DOUBLE LOCK – 5/8"
6	1 93 28	4	WASHER – DOUBLE LOCK – 3/4"
7	1 93 42	1	WASHER – SQUARE – 2 1/4" X 2 1/4" X 13/16" HOLE
8	1 93 45	1	WASHER – SQUARE – 4" X 4" X 11/16" HOLE
9	1 93 46	2	WASHER – SQUARE – 4" X 4" X 15/16" HOLE
10	1 93 96	2	WASHER – CURVED – 3" X 3" X 13/16" HOLE
11	2 02 18	3	DEADEND – BOLTED
12	2 19 92	2	STUD – INSULATOR
13	2 20 00	2	INSULATOR – LINE POST
14	2 29 24	3	DEADEND – POLYMER – CLEVIS AND TONGUE ENDS
15	5 09 48	3	CONNECTOR – COMPRESSION

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SaskPower - DISTRIBUTION STANDARDS

APPROVAL	DESIGN CHK	DRN. **LM**	**DOUBLE CIRCUIT 3Ø TAP OFF TULIP AAC**
L MOEN	**B GEBHART**	CHKD.	

DATE OF ISSUE: 08/13/2020 | DRAWING NO: **A-12-165** | **SHEET 1 OF 2** | REV. **0**

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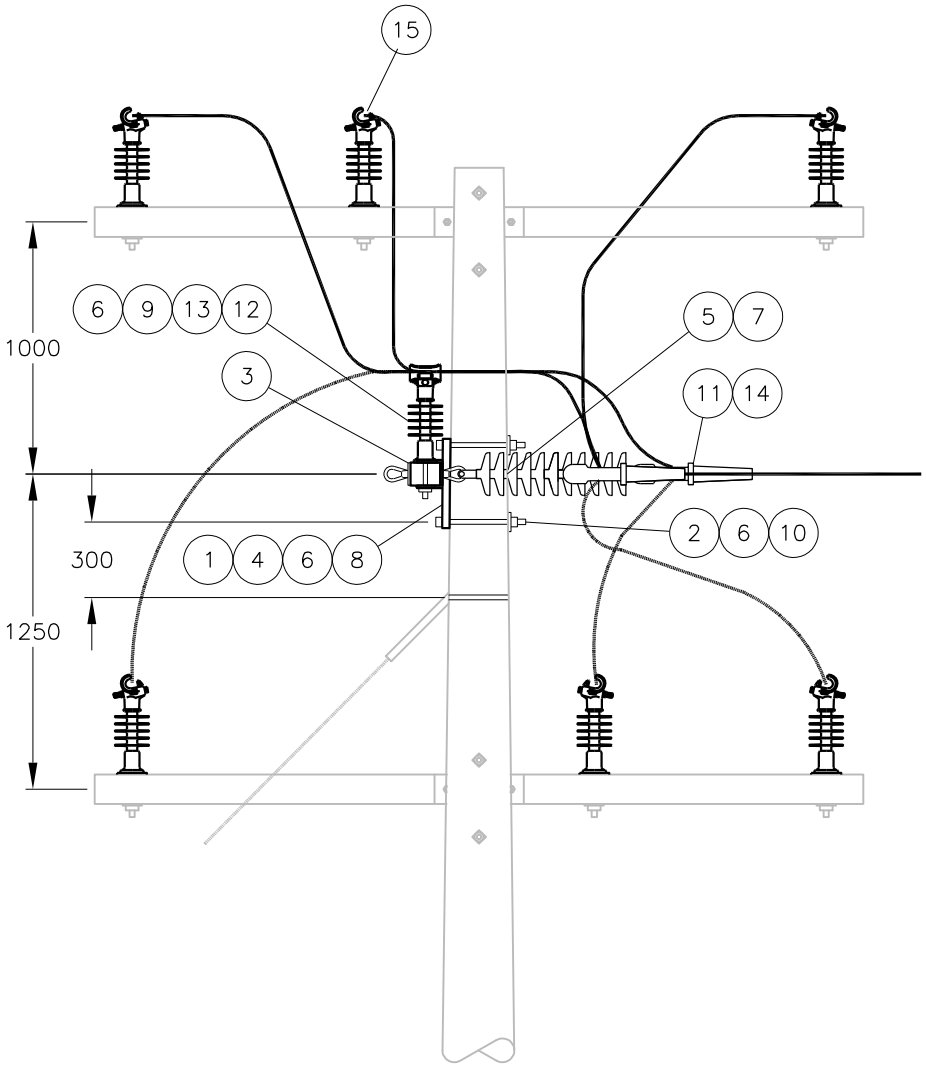
STRUCTURE USED HERE



NOTES:
1. RULING SPAN IS 60M, WITH A 60M MAXIMUM TAP SPAN.
2. REQUIRES 1/45' POLE MINIMUM.
3. TRANSFORMERS AND APPARATUS ARE NOT PERMITTED ON THE POLE.
4. DOWNGUY IS TYPE "B". SHORT GUYING IS NOT PERMISSIBLE.
5. GUYING MATERIAL IS NOT INCLUDED. REFER TO A-32.

SCALE: N.T.S. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

A12_165_02

	SaskPower – DISTRIBUTION STANDARDS			
	APPROVAL L.MOEN	DESIGN CHK. L.MOEN	DRN.E.GOTANA CHKD.	DOUBLE CIRCUIT 3ø TAP OFF TULIP AAC
			2020-03-09	
	DATE OF ISSUE 08/13/2020		DRAWING NO. A-12-165 SHEET 2 of 2	REV. -