

Public Works Commission

Electric Systems Division

City of Fayetteville, North Carolina

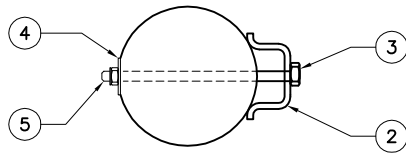


14.4/24.9 kV (25 kV)

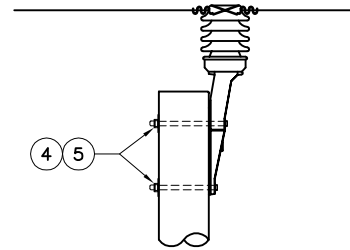
Overhead Structure Manual

Revised June 2023

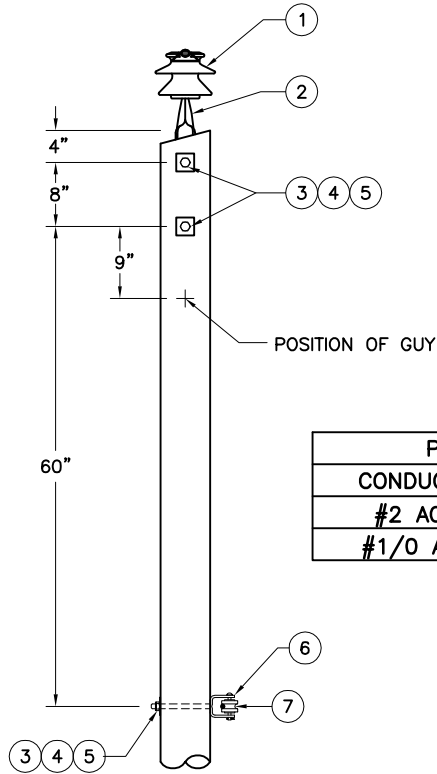
14.4/24.9 KV SINGLE PHASE STRUCTURES



POLE TOP PIN ASSEMBLY

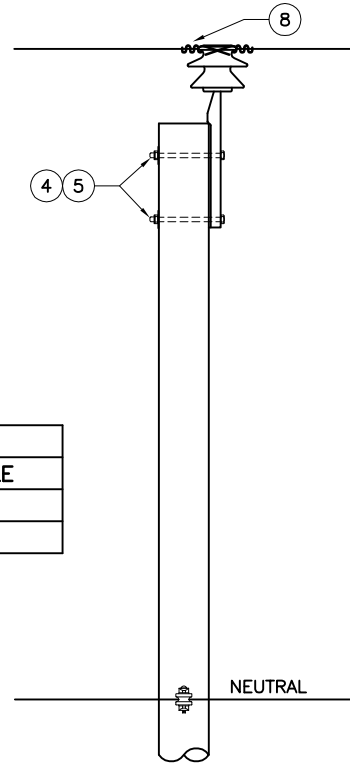


ALTERNATE



FRONT VIEW

PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#2 ACSR	15°
#1/0 AAAC	12°

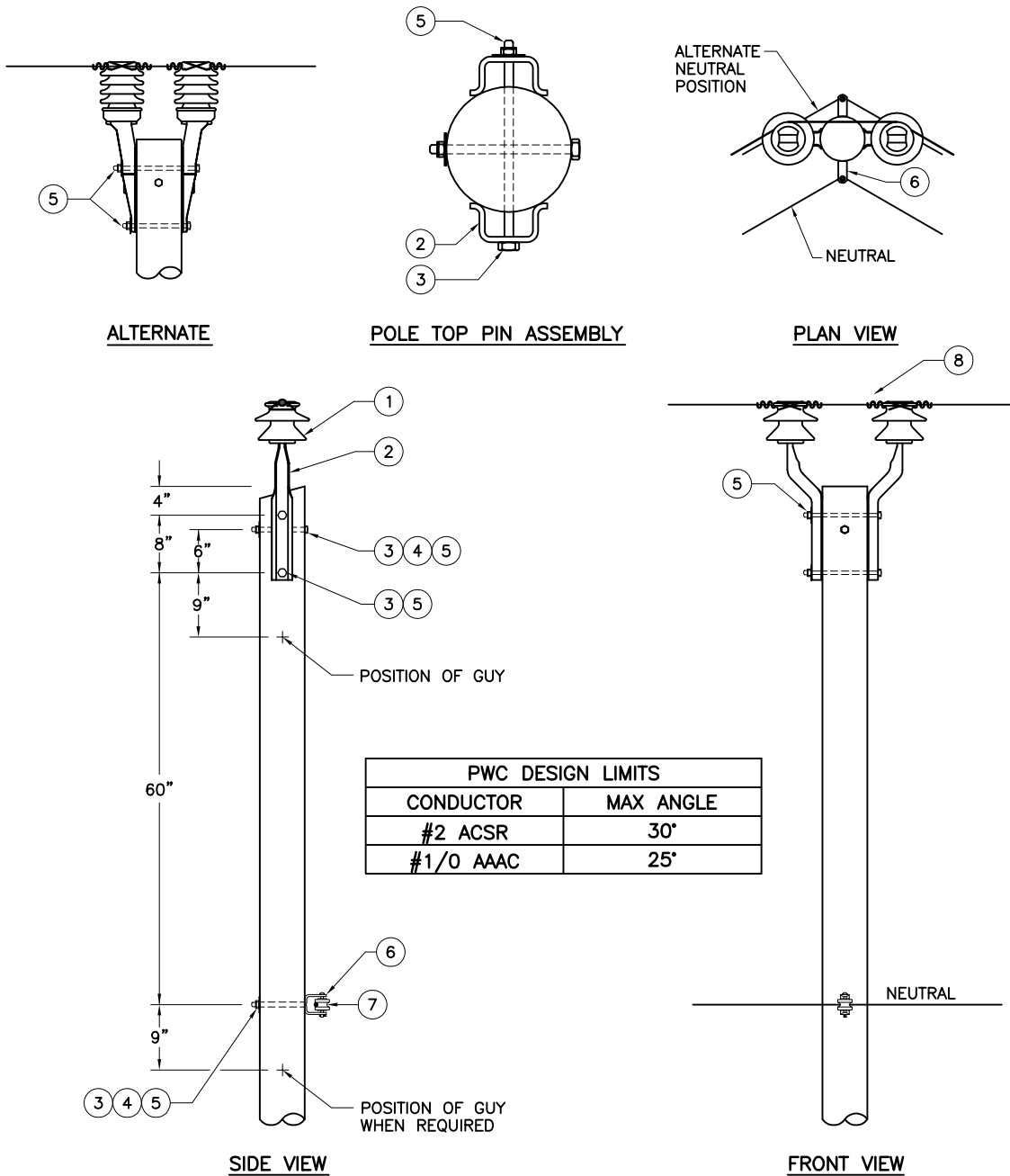


SIDE VIEW

NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

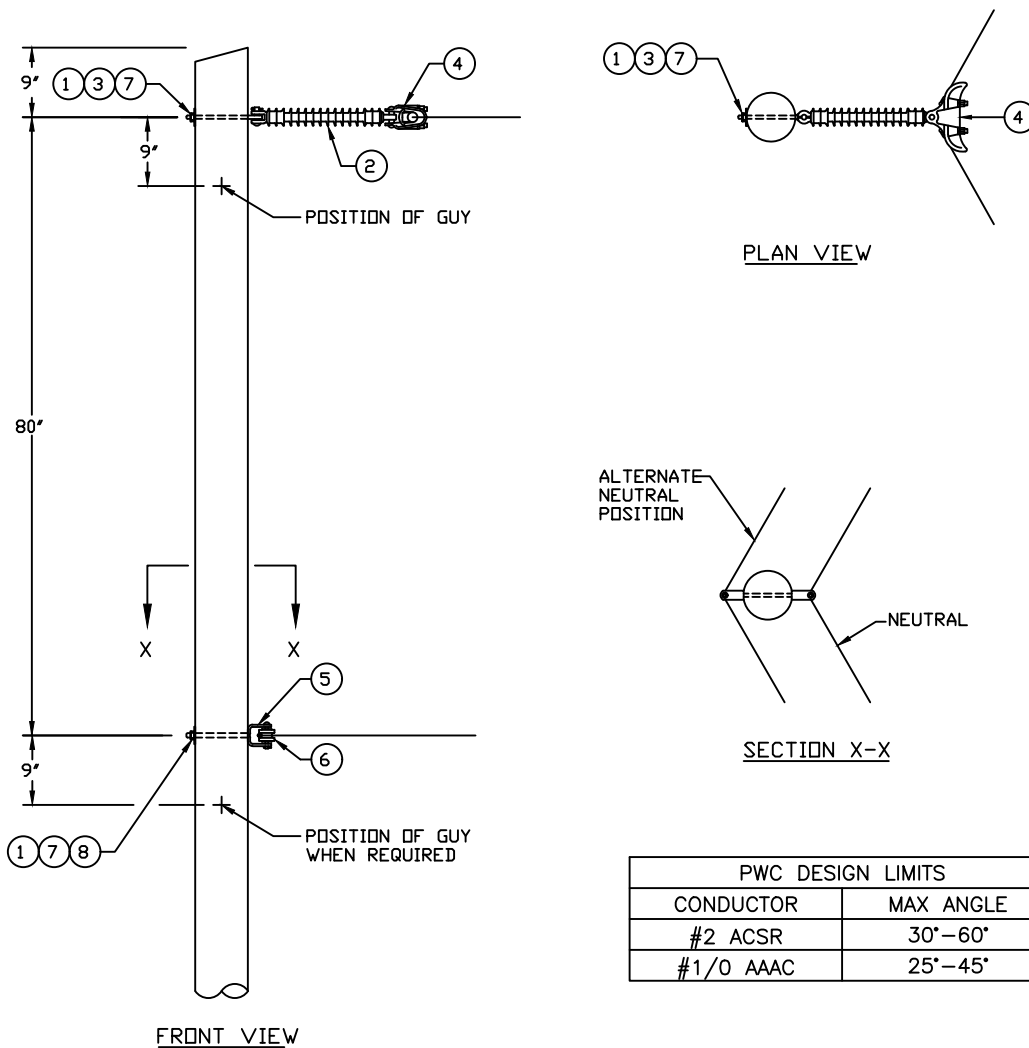
FWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE ANSI 55-6	1
				2	1100568	PIN, POLE TOP 20" X 1"	1
				3	1325180	BOLT, MACHINE 5/8" X 12"	3
1	6/2020	WRW/3	PWCOST	4	1325760	WASHER, SQUARE/CURVED, 3"	3
0	12/3/07	WJ	PWCOST	5	1325733	WASHER, DOUBLE COIL, SPRING LOCK; 5/8"	3
REVISED	BY	APPR		6	1230010	CLEVIS, INSULATED SECONDARY/DEADEND	1
PWC REVISIONS				7	1160130	INSULATOR, SPOOL 53-2	1
3				8	1065010	WIRE, TIE, #4 SOLID ALUMINUM	8'
2				PRIMARY, SINGLE PHASE SINGLE SUPPORT, 25KV			
1							
0	1/31/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
							SCALE 1/2"=1'-0"
							DWG. VA1EC



NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

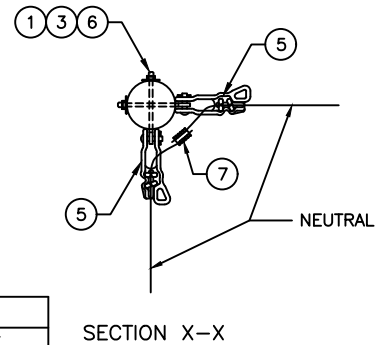
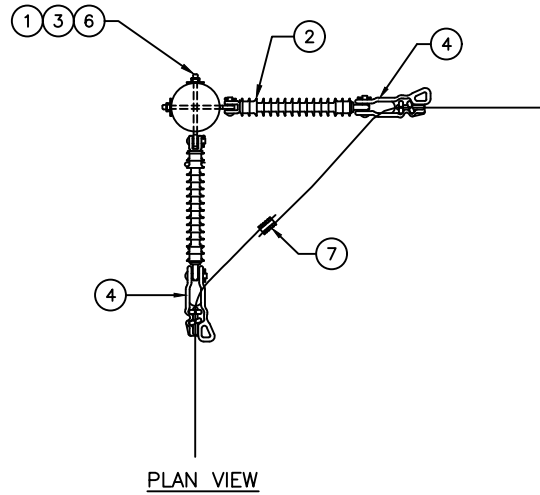
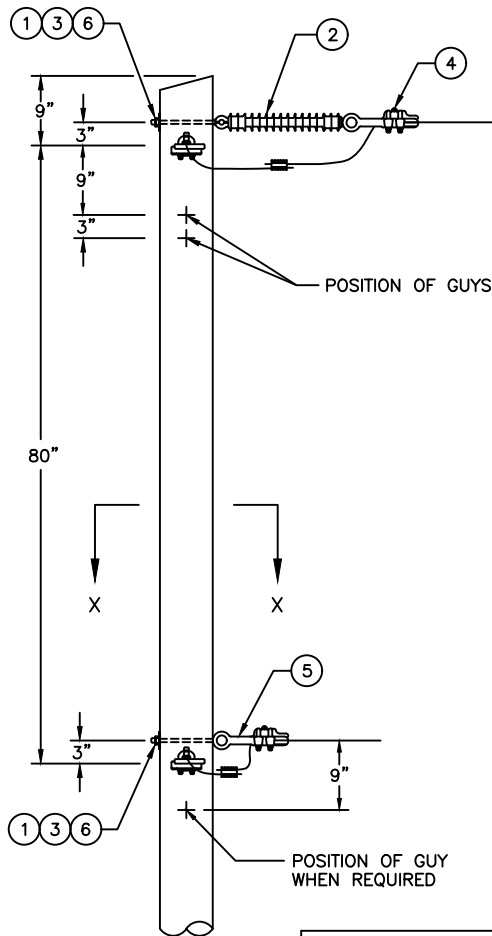
FWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE ANSI 55-6	2
				2	1100572	PIN, POLE TOP, OFFSET, 21" X 1"	2
				3	1325180	BOLT, MACHINE, 5/8" X 12"	4
1	6/2020	WRW3	PWCOST	4	1325760	WASHER, SQUARE/CURVED, 3"	3
0	12/3/07	WJ	PWCOST	5	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	4
REVISED	BY	APPR		6	1230010	CLEVIS, INSULATED SECONDARY/DEADEND	1
PWC REVISIONS				7	1160130	INSULATOR, SPOOL 53-2	1
3				8	1065010	WIRE, TIE, #4 SOLID ALUMINUM	16'
2				PRIMARY, SINGLE PHASE DOUBLE SUPPORT, 25KV			
1							
0	2/1/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
							SCALE 1/2"=1'-0"
							DWG. VA2EC



NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1325760	WASHER, SQUARE/CURVED, 3"	2
				2	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	1
2	06/05/23	D. KELTON	PWCOST	3	1325080	BOLT, OVAL EYE, 5/8" X 12" w/NUT	1
1	6/2020	WRW3	PWCOST	4	1050020	CLAMP, ANGLE SUSPENSION, #4-4/0 AL	1
0	12/3/07	WJ	PWCOST	5	1230010	CLEVIS, INSULATED SECONDARY/DEADEND	1
REVISED	BY	APPR		6	1160130	INSULATOR, SPOOL 53-2	1
PWC REVISIONS				7	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	2
3				8	1325180	INSULATOR, PIN TYPE	1
2				PRIMARY, SINGLE PHASE SUSPENSION STRUCTURE, 25KV			
1							
	1/31/05	CADD GRAPHICS	DST				
REVISED	BY	APPR.					
				ELECTRICITIES SCALE 1/2"=1'-0" DWG. VA3EC			

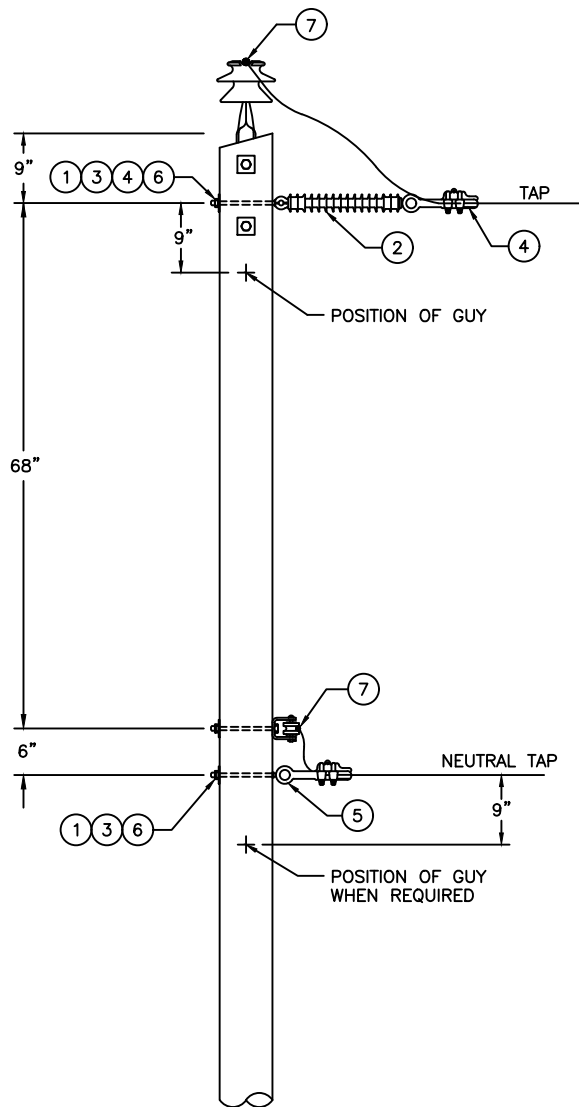


PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#2 ACSR	GREATER THAN 60°
#1/0 AAAC	GREATER THAN 45°

NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

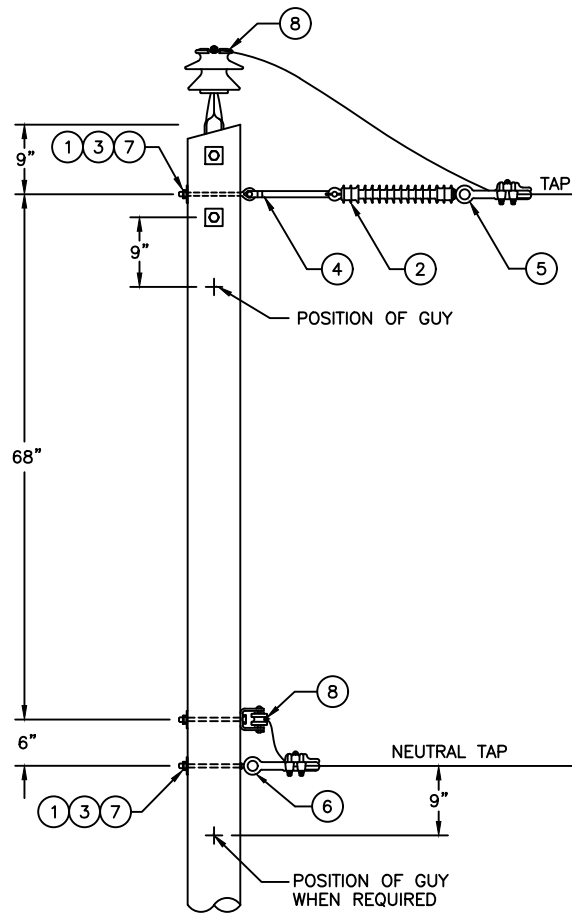
PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
3	06/05/23	D. KELTON	PWCOST	1	1325760	WASHER, SQUARE/CURVED, 3"	4
2	6/2020	WRW3	PWCOST	2	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	2
1	02/10/09	WJ	PWCOST	3	1325080	BOLT, OVAL, EYE, 5/8" x 12" w/NUT	4
0	12/3/07	WJ	PWCOST	4	1050149	CLAMP, AL. STRAIGHT, AUTOMATIC D.E. #4-2/0 AL	2
REVISED	BY	APPR		5	1050149	CLAMP, AL. STRAIGHT, AUTOMATIC D.E. #4-4/0 AL	2
PWC REVISIONS				6	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	4
3				7	1075245	CONNECTOR, PRL. GRVE., COMP., #1/7 AS REQ'D	2
2				PRIMARY, SINGLE PHASE CORNER STRUCTURE, 25KV			
1							
0	1/31/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
				ELECTRICITIES SCALE 1/2"=1'-0" DWG. VA4EC			



NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
3	06/05/23	D. KELTON	PWCOST	1	1325760	WASHER, SQUARE/CURVED, 3"	2
2	6/2020	WRW3	PWCOST	2	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	1
1	02/10/09	WJ	PWCOST	3	1325080	BOLT, OVAL, EYE, 5/8" X 12" w/NUT	2
0	12/3/07	WJ	PWCOST	4	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4-2/0 AL	1
REVISED	BY	APPR		5	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4-2/0 AL	1
PWC REVISIONS				6	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	2
3				7	1075245	CONNECTOR, PRL. GRVE., COMP., #1/7	1
2				PRIMARY, SINGLE PHASE TAP, 25KV			
1							
0	8/25/04	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
				 SCALE 1/2"=1'-0" DWG. VA5-1EC			

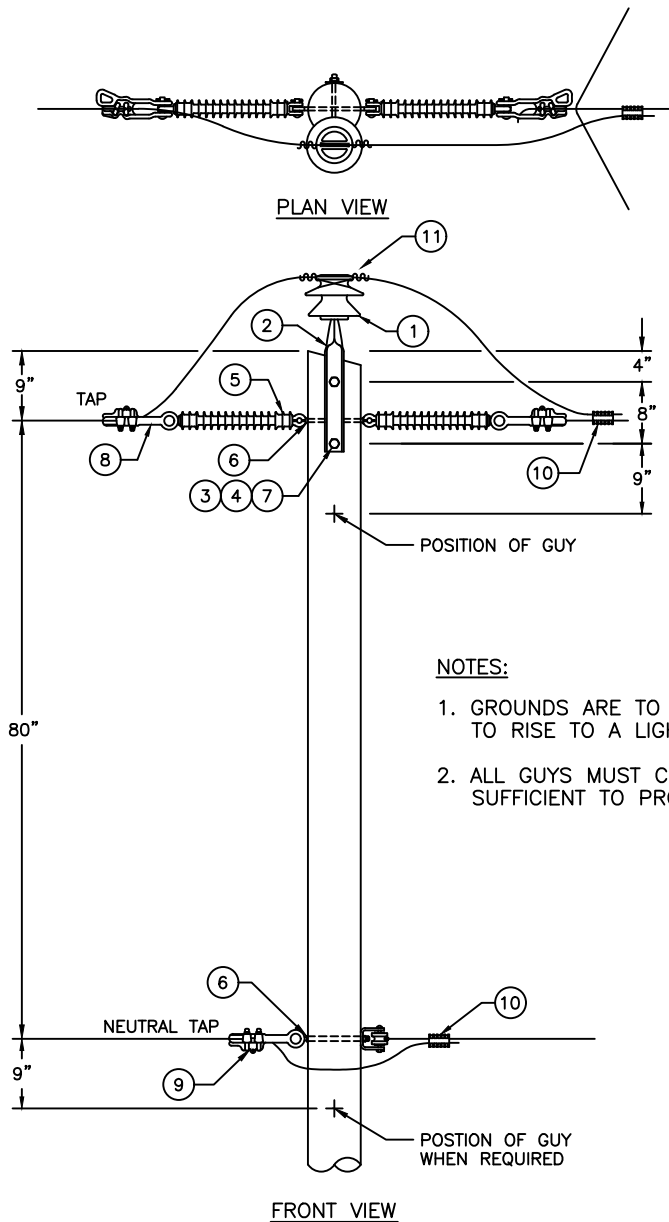


FRONT VIEW

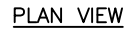
NOTES:

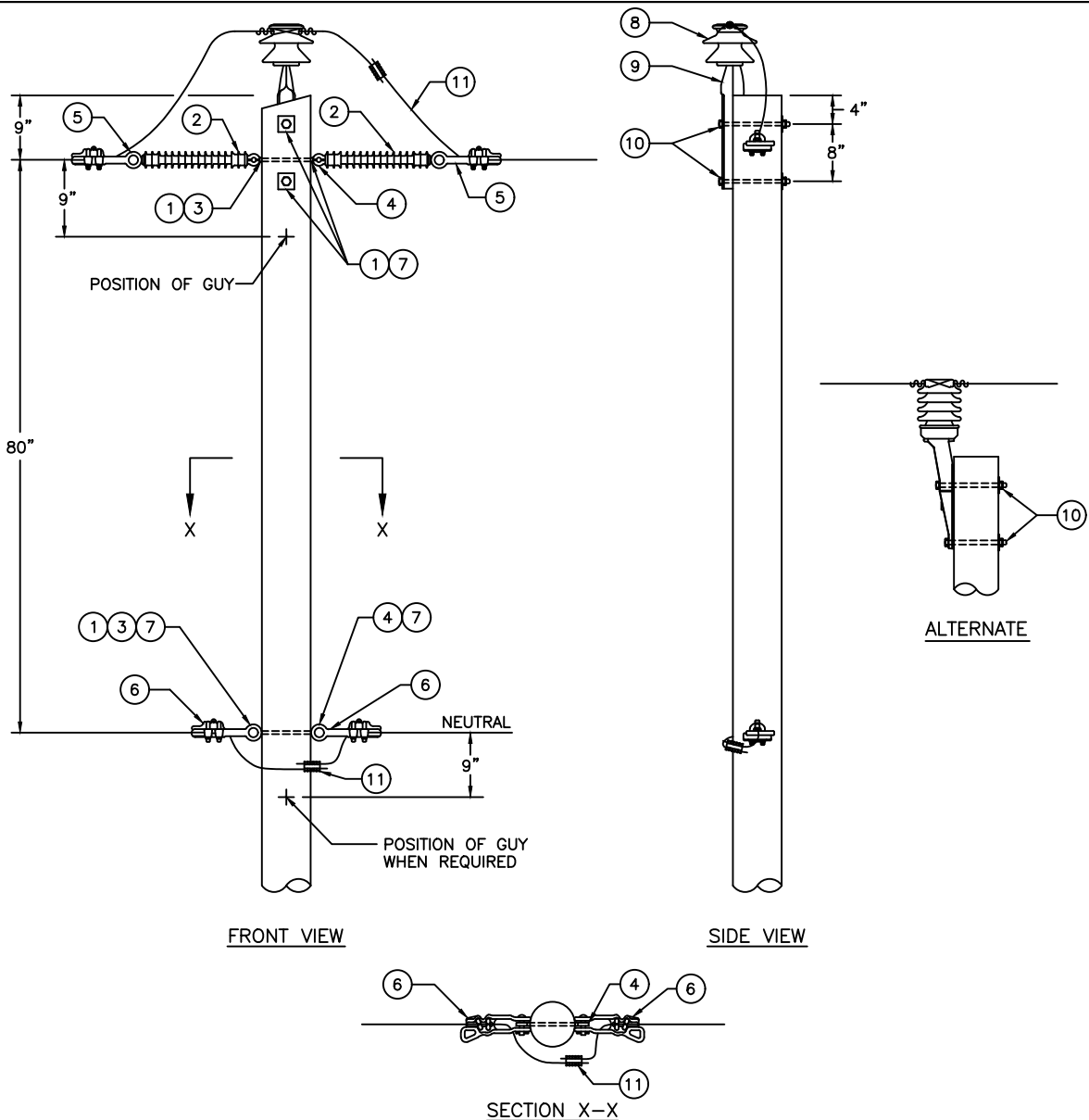
1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.	
3	06/05/23	D. KELTON	PWCOST	1	1325760	WASHER, SQUARE/CURVED, 3"	2	
2	6/2020	WRW3	PWCOST	2	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	1	
1	02/10/09	WJ	PWCOST	3	1325080	BOLT, OVAL, EYE, 5/8" x 12" w/NUT	2	
0	12/3/07	WJ	PWCOST	4	1105110	LINK, EXTENSION, 14"	1	
REVISED		BY	APPR	5	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4-2/0 AL	1	
PWC REVISIONS				6	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4-2/0 AL	1	
3				7	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	2	
2				8	1075245	CONNECTOR, PRL. GRVE., COMP., #1/7	2	
1				PRIMARY, SINGLE PHASE TAP, OFFSET, 25KV				
0	1/31/05	CADD GRAPHICS	OST					
REVISED		BY	APPR.					
						ELECTRICITIES		
						SCALE 1/2"=1'-0"	DWG. VA5-2EC	



FWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6	1
				2	1100568	PIN, POLE TOP, 20" X 1"	1
				3	1325080	BOLT, OVAL, EYE, 5/8" x 12" w/NUT	2
				4	1325760	WASHER, SQUARE/CURVED, 3"	2
3	06/05/23	D. KELTON	PWCOST	5	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	1
2	6/2020	WRW3	PWCOST	6	1325525	NUT, EYE, GALV, 5/8"	2
1	02/10/09	WJ	PWCOST	7	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	2
0	12/3/07	WJ	PWCOST	8	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4-2/0 AL	1
REVISED	BY	APPR		9	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4-2/0 AL	1
PWC REVISIONS				10	1075245	CONNECTOR, PRL. GRVE., COMP., #1/7	2
3				11	1065010	WIRE, TIE, #4 SOLID ALUMINUM	8'
2				PRIMARY, SINGLE PHASE TAP OFF DEADEND, 25KV			
1							
0	1/31/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
							
				SCALE 1/2"=1'-0"		DWG. VA5-4EC	

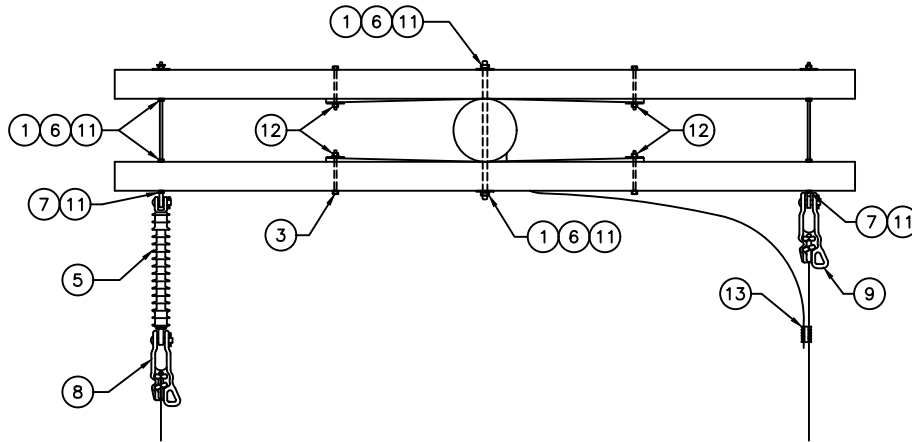




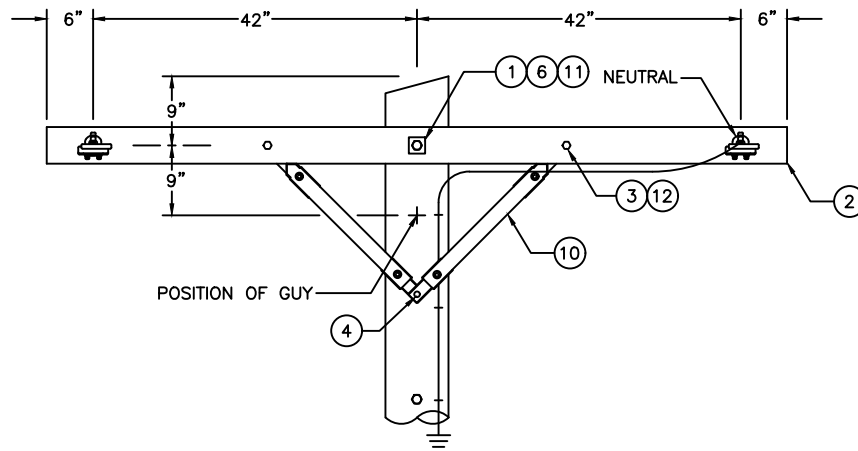
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUYS STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1325760	WASHER, SQUARE/CURVED, 3"	6
				2	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	2
				3	1325180	BOLT, MACHINE, 5/8" X 12"	2
				4	1325530	NUT, EYE, GALV, 3/4"	2
				5	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4-2/0 AL	2
3	06/05/23	D. KELTON	PWCOST	6	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4-2/0 AL	2
2	6/2020	WRW3	PWCOST	7	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	4
1	02/10/09	WJ	PWCOST	8	1160065	INSULATOR, PIN-TYPE, ANSI 55-6	1
0	12/3/07	WJ	PWCOST	9	1100568	PIN, POLE TOP, 20" X 1"	1
REVISED	BY	APPR		10	1325180	BOLT, MACHINE, 5/8" X 12"	2
PWC REVISIONS				11	1075245	CONNECTOR, PRL. GRVE., COMP., #1/7	1
3				12	1065010	WIRE, TIE, #4 SOLID ALUMINUM	8'
2				PRIMARY, SINGLE PHASE DOUBLE DEADEND, 25KV			
1							
0	1/31/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
							SCALE 1/2"=1'-0"
							DWG. VA6EC



PLAN VIEW

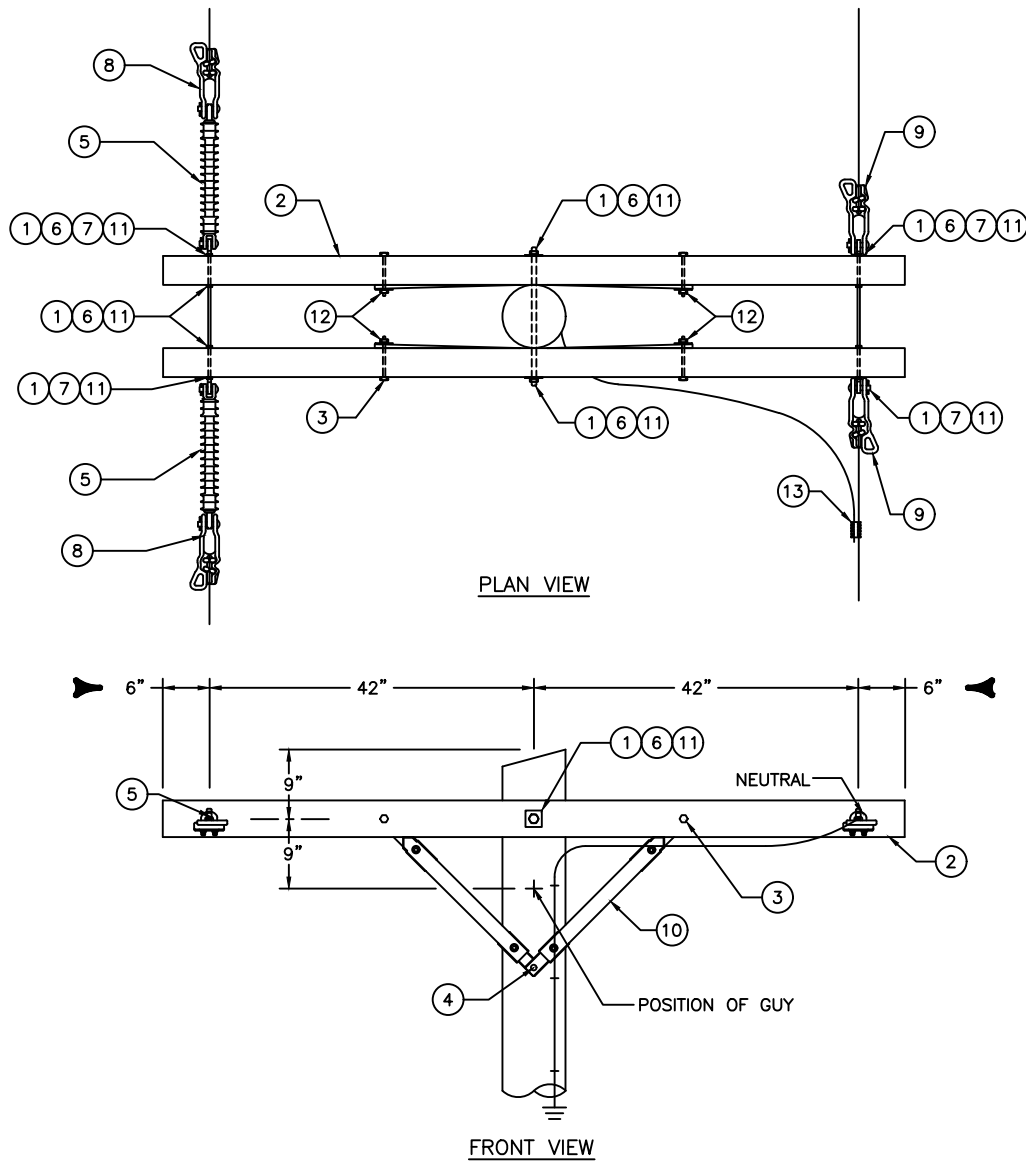


FRONT VIEW

NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

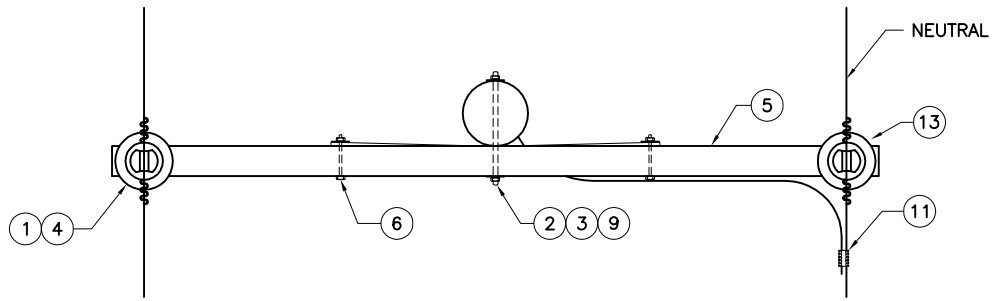
PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1325760	WASHER, SQUARE/CURVED, 3"	10
				2	1100010	CROSSARM, 8 FOOT, WOOD	2
				3	1325005	BOLT, CARRIAGE, GALV, 3/8 X 4-1/2" W/NUT	4
				4	1325145	SCREW, LAG, GALV., 1/2" X 4"	2
				5	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	1
				6	1325025	BOLT, DOUBLE ARMING, 5/8" X 20"	3
				7	1325535	NUT, SQUARE, 5/8"	2
3	06/05/23	D. KELTON	PWCOST	8	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4-2/0 AL	1
2	6/2020	WRWS	PWCOST	9	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4-2/0 AL	1
1	02/10/09	WJ	PWCOST	10	1100530	BRACE, CROSSARM, WOOD 38 X 18, PAIR	2
0	12/3/07	WJ	PWCOST	11	1325740	WASHER, SPRING LOCK, 5/8"	10
REVISED	BY	APPR		12	1325710	WASHER, FLAT ROUND, 3/8"	4
PWC REVISIONS				13	1075245	CONNECTOR, PRL. GRVE., COMP., #1/7	2
3				CROSSARM CONSTRUCTION, PRIMARY SINGLE PHASE, DEADEND, 25KV			
2							
1							
0	1/31/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
							
						SCALE 1/2"=1'-0"	DWG. VA7EC



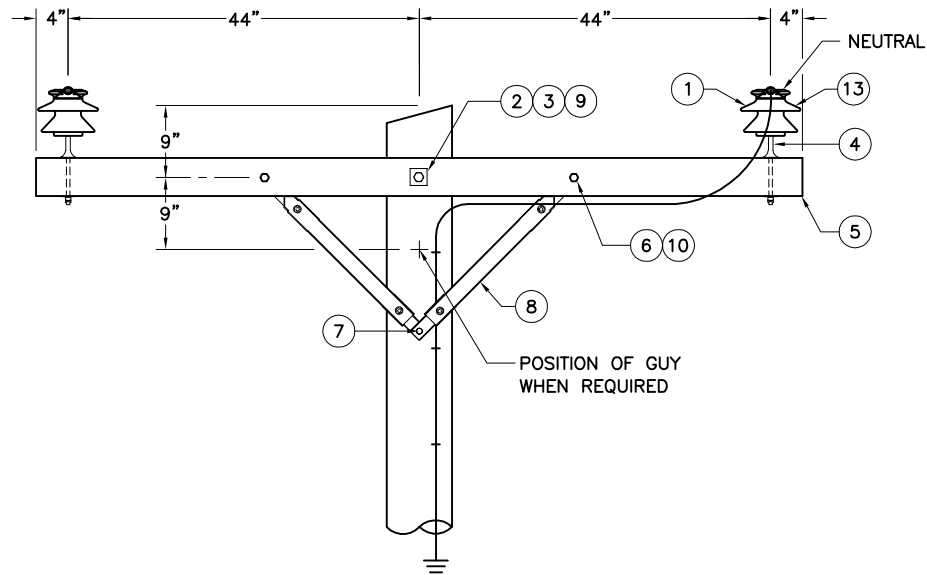
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1325760	WASHER, SQUARE/CURVED, 3"	10
				2	1100010	CROSSARM, 8 FOOT, WOOD	2
				3	1325005	BOLT, CARRIAGE, GALV., 3/8 X 4-1/2" W/NUT	4
				4	1325145	SCREW, LAG, GALV., 1/2" X 4"	2
				5	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	2
				6	1325025	BOLT, DOUBLE ARMING, 5/8" X 20"	3
3	06/05/23	D. KELTON	PWCOST	7	1325535	NUT, SQUARE, 5/8"	4
2	6/2020	WRW3	PWCOST	8	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4-2/0 AL	2
1	02/10/09	WJ	PWCOST	9	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4-2/0 AL	2
0	12/3/07	WJ	PWCOST	10	1100530	BRACE, CROSSARM, WOOD 38 X 18, PAIR	2
REVISED	BY	APPR.		11	1325740	WASHER, SPRING LOCK, 5/8"	10
PWC REVISIONS				12	1325710	WASHER, FLAT ROUND, 3/8"	4
3				13	1075245	CONNECTOR, PRL. GRVE., COMP., #1/7	2
2				CROSSARM CONSTRUCTION PRIMARY SINGLE PHASE DOUBLE DEADEND, 25KV			 SCALE 1/2"=1'-0" DWG. VA8EC
1	11/10/05	CADD GRAPHICS	OST				
0	1/31/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					



PLAN VIEW



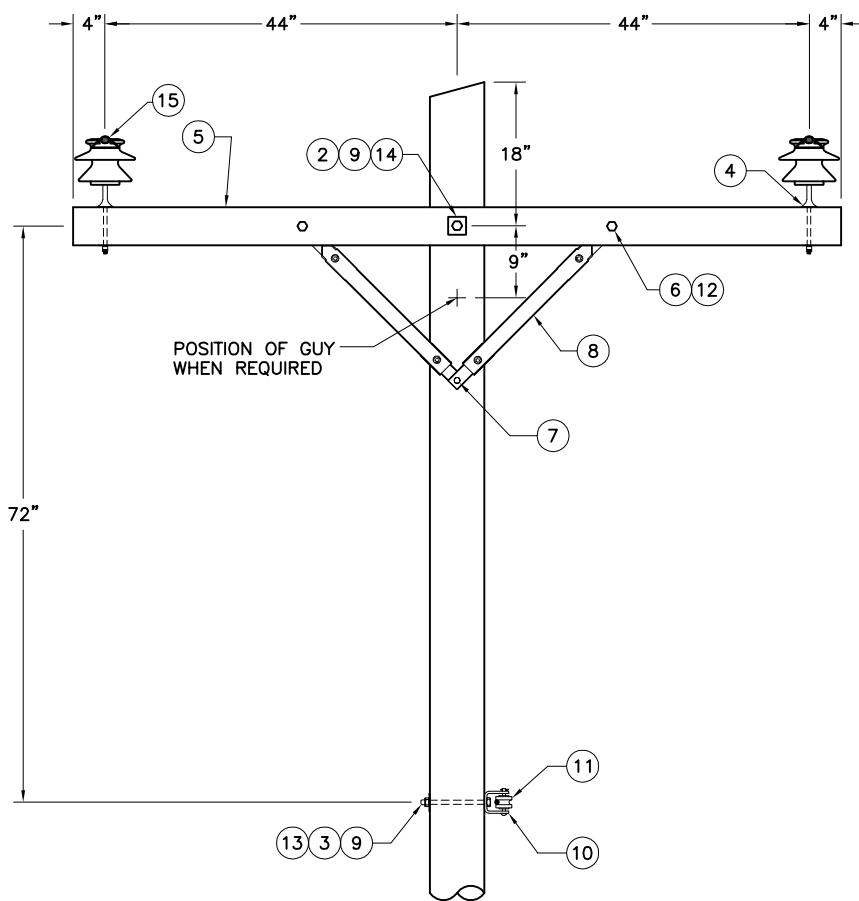
FRONT VIEW

NOTES:

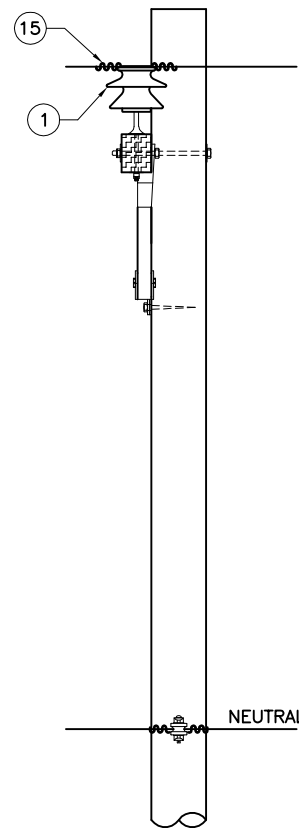
1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.
3. THE NEUTRAL INSULATOR IS TO BE DIFFERENT IN SIZE OR COLOR FROM THE PRIMARY INSULATOR PER NESC 220B2B.

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, 55-6, 25 KV	1
				2	1325190	BOLT, MACHINE, 5/8" X 16"	1
				3	1325760	WASHER, SQUARE/CURVED, 3"	2
				4	1100562	PIN, CROSSARM, 1" X 6"	2
				5	1100010	CROSSARM, 8 FOOT, WOOD	1
				6	1325005	BOLT, CARRIAGE, GALV, 3/8 X 4-1/2" W/NUT	2
3	6/2020	WRW3	PWCOST	7	1325145	SCREW, LAG, GALV., 1/2" X 4"	1
2	09/21/09	JLL	PWCOST	8	1100530	BRACE, CROSSARM, WOOD 38 X 18, PAIR	1
1	08/12/08	JLL	PWCOST	9	1325740	WASHER, SPRING LOCK, 5/8"	1
0	12/3/07	WJ	PWCOST	10	1325710	WASHER, FLAT ROUND, 3/8"	2
REVISED	BY	APPR		11	1075245	CONNECTOR, PRL. GRVE., COMP., #1/7	2
PWC REVISIONS				12	1065010	WIRE, TIE, #4 SOLID ALUMINUM	8'
3				13	1160040	INSULATOR, PIN-TYPE, ANSI 55-4, 1" GROOVE, 15 KV	1
2				CROSSARM CONSTRUCTION PRIMARY, SINGLE PHASE NEUTRAL ON SINGLE ARM, 25KV			 SCALE 1/2"=1'-0" DWG. VA9-1EC
1							
0	1/31/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					

14.4/24.9 KV
OPEN WYE
(V-PHASE)
STRUCTURES



FRONT VIEW



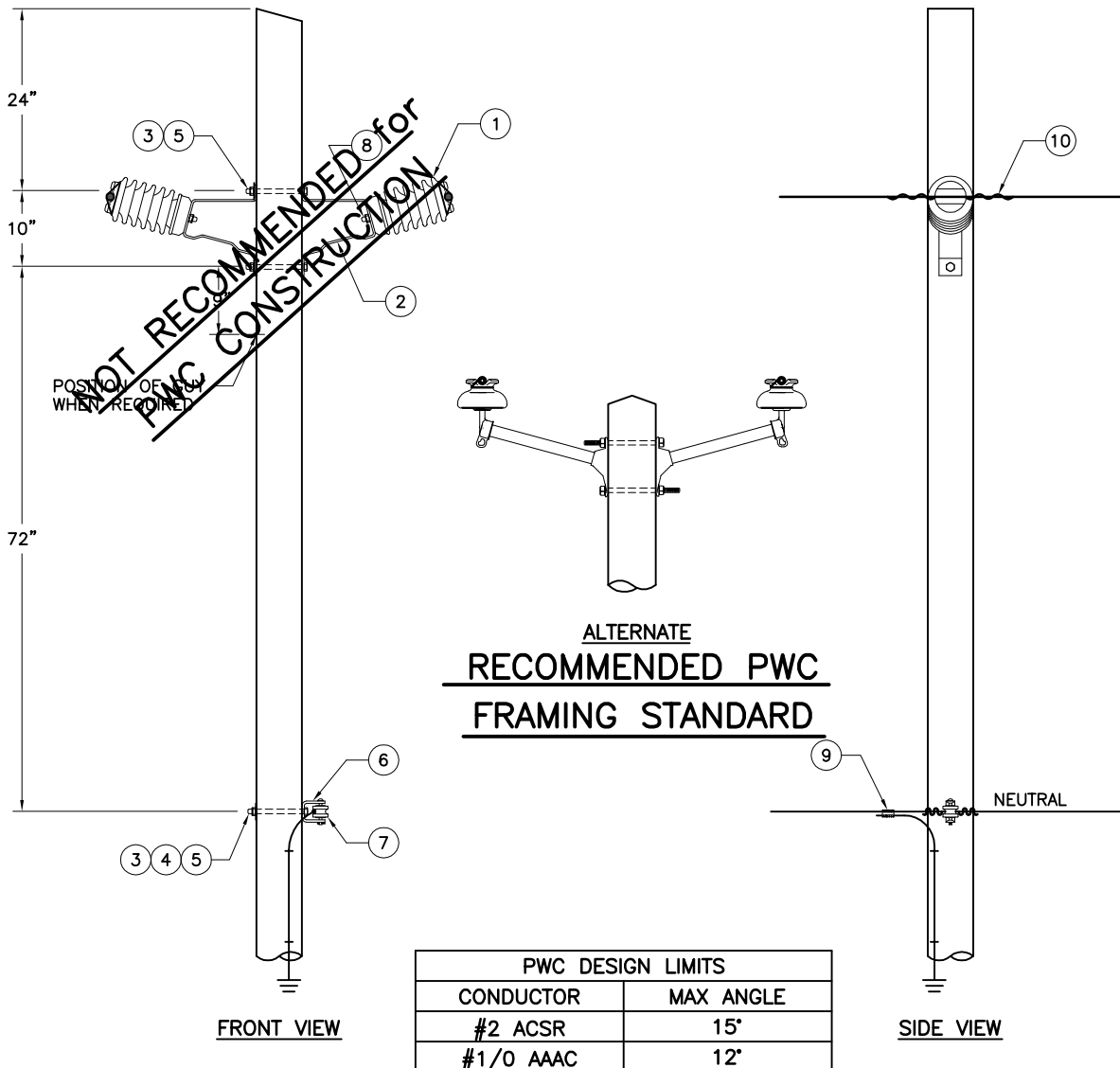
SIDE VIEW

PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#2 ACSR	15°
#1/0 AAAC	12°

NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

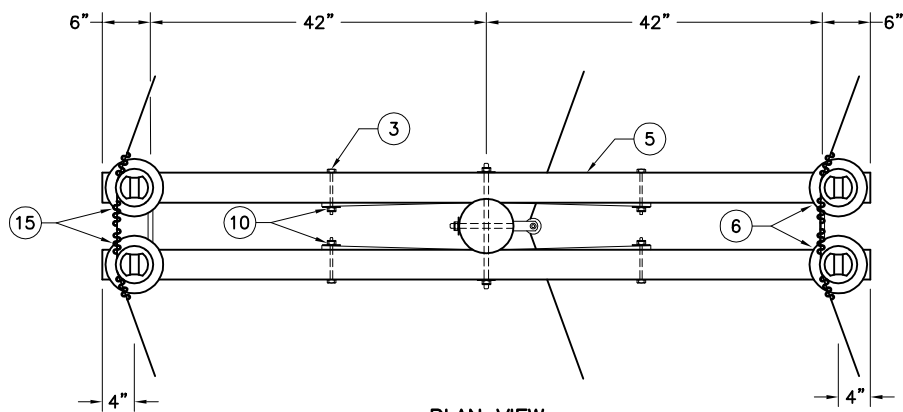
PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.	
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6	2	
				2	1325190	BOLT, MACHINE, 5/8" X 16", w/NUT	1	
				3	1325760	WASHER, SQUARE, CURVED, 3"	2	
				4	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	2	
				5	1100010	CROSSARM, 8" WOOD	1	
				6	1325005	BOLT, CARRIAGE, 3/8" X 4 1/2", w/NUT	2	
				7	1325145	SCREW, LAG, 1/2" X 4"	1	
				8	1100530	BRACE, CROSSARM, WOOD, 38" X 18"	1	
2	6/2020	WRW3	PWC OST	9	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	2	
1	01/22/08	JEC	PWC OST	10	1230010	CLEVIS, INSULATED SECONDARY, DEADEND	1	
0	12/3/07	JLL	PWC OST	11	1160130	INSULATOR, SPOOL, 53-2	1	
				12	1325710	WASHER, FLAT, ROUND, 3/8"	2	
				13	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	1	
REVISED	BY	APPR		14	1325765	WASHER, SQUARE, FLAT, 5/8"	1	
PWC REVISIONS				15	1065010	WIRE, TIE, #4 SOLID ALUMINUM	16	
3				CROSSARM CONSTRUCTION, TWO PHASE SINGLE LINE ARM, 25KV				
2								
1								
0	12/8/05	CADD GRAPHICS	OST					
REVISED	BY	APPR.						
				SCALE 1/2"=1'-0"				DWG. VB1EC



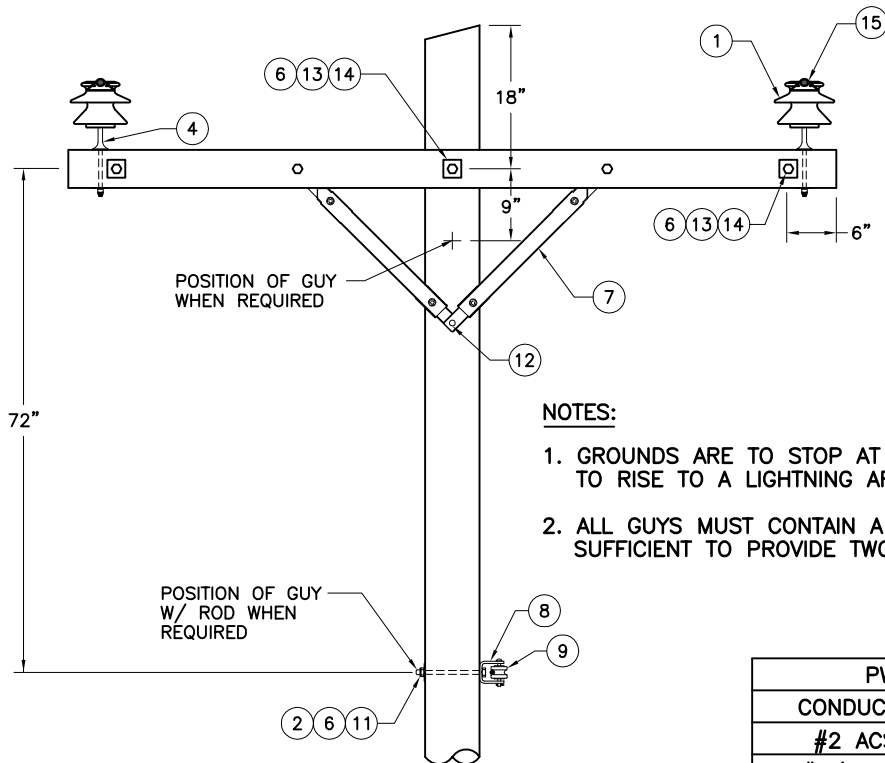
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN TYPE, ANSI 55-6, 25 KV	2
				2	1025255	BRACKET, FIBERGLASS, 21"	2
				3	1325190	BOLT, MACHINE, 5/8" X 14", w/NUT	3
				4	1325760	WASHER, SQUARE, CURVED, 3"	1
2	6/2020	WRW3	PWC OST	5	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	3
1	8/22/08	WRW3	PWC OST	6	1230010	CLEVIS, INSULATED SECONDARY, DEADEND	1
0	12/3/07	JLL	PWC OST	7	1160130	INSULATOR, SPOOL, 53-2	1
REVISED		BY	APPR	9	1075245	CONNECTOR PRL. GRVE. COMP., #1/7	1
				10	1065010	WIRE TIE, #4 SOLID ALUMINUM	16
PWC REVISIONS							
3				TWO PHASE, ALTERNATE LINE POST CONTRUCTION, 25KV  SCALE 1/2"=1'-0" DWG. VB1LPA-EC			
2							
1							
0	3/31/06	CADD GRAPHICS	OST				
REVISED		BY	APPR.				



PLAN VIEW



FRONT VIEW

NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

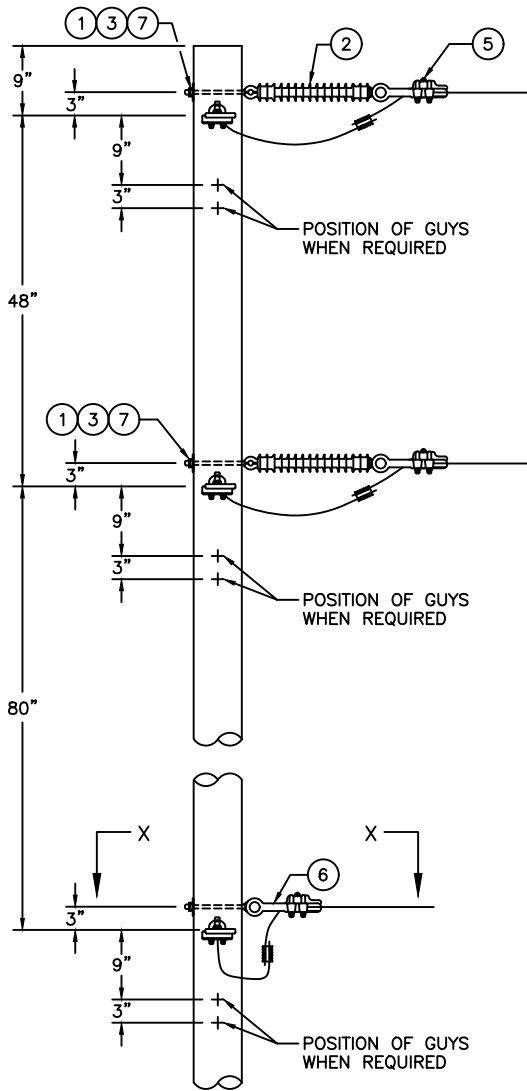
PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#2 ACSR	30°
#1/0 AAAC	25°

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6	4
				2	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	1
				3	1325005	BOLT, CARRIAGE, 3/8" X 4 1/2", w/NUT	4
				4	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	4
				5	1100010	CROSSARM, 8" WOOD	2
				6	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	11
				7	1100530	BRACE, CROSSARM, WOOD, 3/8" X 18"	2
				8	1230010	CLEVIS, INSULATED SECONDARY, DEADEND	1
				9	1160130	INSULATOR, SPOOL, 53-2	1
				10	1325710	WASHER, FLAT, ROUND, 3/8"	4
				11	1325760	WASHER, SQUARE, CURVED, 3"	1
1	6/2020	WRW3	PWC OST	12	1325145	SCREW, LAG, 1/2" X 4"	2
0	12/3/07	JLL	PWC OST	13	1325025	BOLT, DOUBLE ARMING, 5/8" X 20", w/NUT	3
REVISED	BY	APPR		14	1325765	WASHER, SQUARE, FLAT, 5/8"	10
PWC REVISIONS				15	1065010	WIRE, TIE, #4 SOLID ALUMINUM	32
3				CROSSARM CONSTRUCTION, TWO PHASE DOUBLE ARM, 25KV			
2							
1							
0	12/8/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					

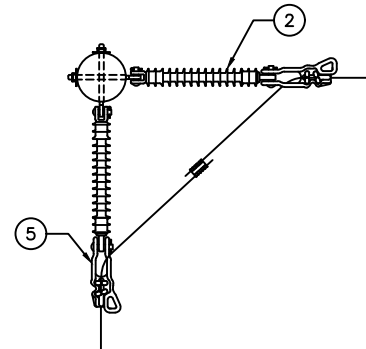
ELECTRICITIES

SCALE
1/2"=1'-0"

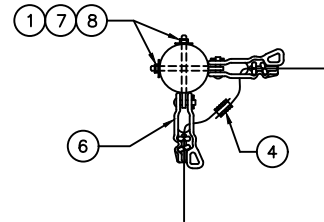
DWG.
VB2EC



FRONT VIEW



PLAN VIEW

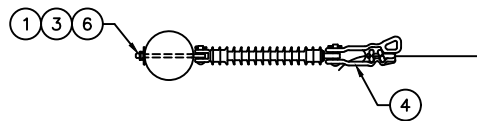


SECTION X-X

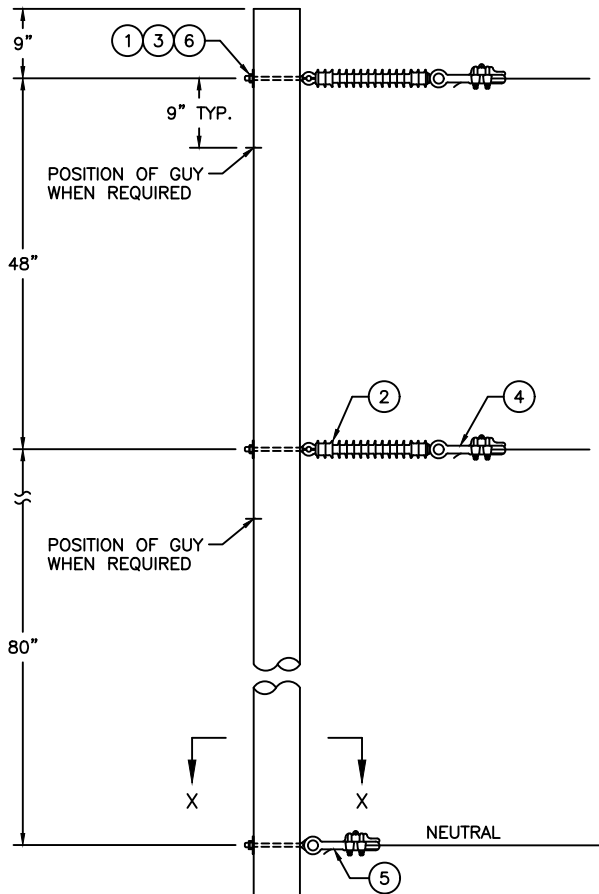
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

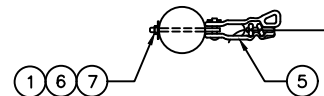
PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
3	06/05/23	D. KELTON	PWCOST	1	1325760	WASHER, SQAURE, CURVED, 3"	6
2	6/2020	WRW3	PWC OST	2	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	4
1	02/10/09	WJ	PWC OST	3	1325085	BOLT, OVAL EYE, 5/8" X 14", w/NUT	4
0	12/3/07	JLL	PWC OST	4	1075245	CONNECTOR, PRL. GRVE., COMP., #1/7	1
REVISED	BY	APPR		5	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4 - 2/0	4
PWC REVISIONS				6	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4 - 2/0	2
3				7	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	6
2				8	1325080	BOLT, OVAL EYE, 5/8" X 12", w/NUT	2
1				VERTICAL CONSTRUCTION, TWO PHASE CORNER STRUCTURE, DOUBLE DEADEND, 25KV			ELECTRICITIES SCALE 1/2"=1'-0"
0	12/8/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
							DWG. VB4EC



PLAN VIEW



PLAN VIEW



SECTION X-X

NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

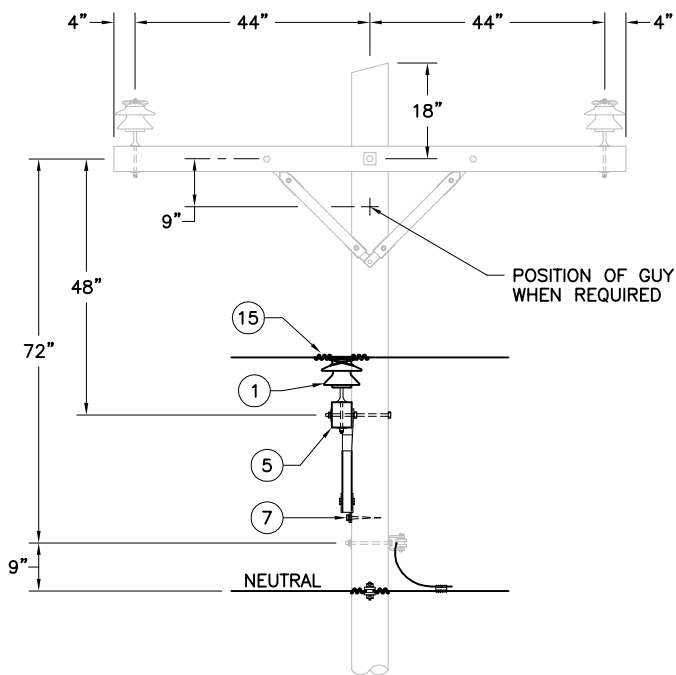
PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
3	06/05/23	D. KELTON	PWCOST	1	1325760	WASHER, SQAURE, CURVED, 3"	3
2	6/2020	WRWS	PWC OST	2	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	2
1	02/11/09	WJ	PWC OST	3	1325085	BOLT, OVAL EYE, 5/8" X 14", w/NUT	2
0	12/3/07	JLL	PWC OST	4	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4 - 2/0	2
REVISED	BY	APPR		5	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4 - 2/0	1
				6	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	3
				7	1325080	BOLT, OVAL EYE, 5/8" X 12", w/NUT	1
PWC REVISIONS							
3							
2							
1							
0	12/14/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					

VERTICAL CONSTRUCTION, TWO PHASE
DEADEND, 25KV

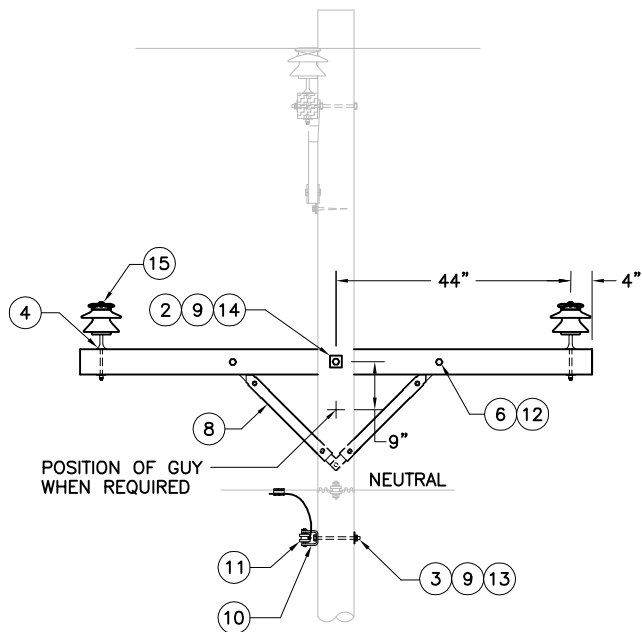


SCALE
1/2"=1'-0"

DWG.
VB5EC



FRONT VIEW



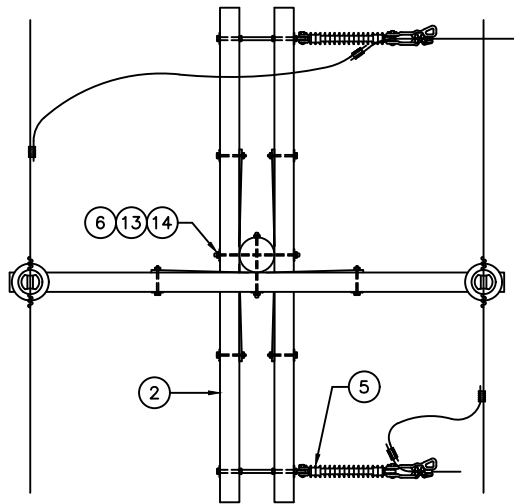
SIDE VIEW

PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#2 ACSR	15°
#1/0 AAAC	12°

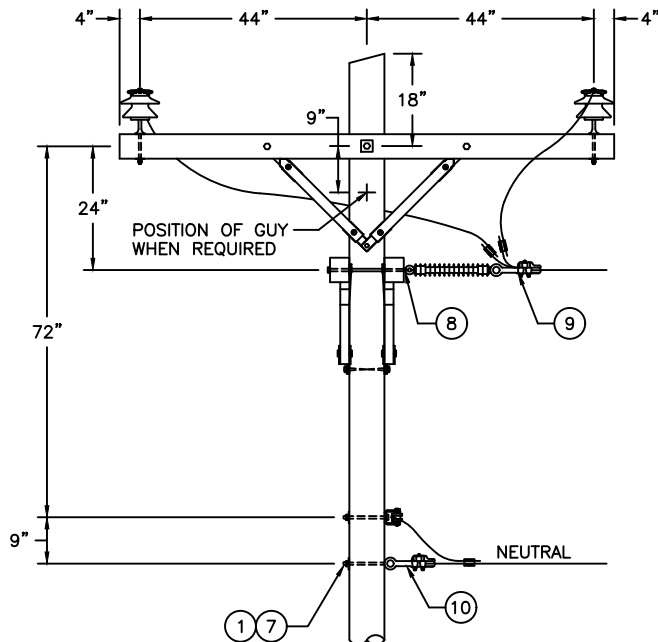
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

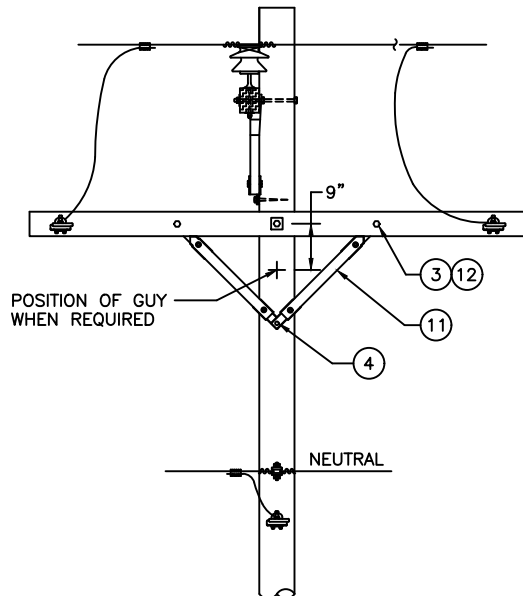
PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6	2
				2	1325190	BOLT, MACHINE, 5/8" X 16", w/NUT	1
				3	1325760	WASHER, SQUARE, CURVED, 3"	2
				4	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	2
				5	1100010	CROSSARM, 8" WOOD	1
				6	1325005	BOLT, CARRIAGE, 3/8" X 4 1/2", w/NUT	2
				7	1325145	SCREW, LAG, 1/2" X 4"	1
				8	1100530	BRACE, CROSSARM, WOOD, 38" X 18"	1
				9	1325740	WASHER, LOCK, 5/8"	2
				10	1230010	CLEVIS, INSULATED SECONDARY, DEADEND	1
1	6/2020	WRW3	PWC OST	11	1160130	INSULATOR, SPOOL, 53-2	1
0	12/3/07	JLL	PWC OST	12	1325710	WASHER, FLAT, ROUND, 3/8"	2
REVISED	BY	APPR		13	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	1
PWC REVISIONS				14	1325765	WASHER, SQUARE, FLAT, 5/8"	1
3				15	1065010	WIRE, TIE, #4 SOLID ALUMINUM	16
2				CROSSARM CONSTRUCTION, TWO PHASE SINGLE LINE ARM, 25KV			 SCALE 1/2"=1'-6" DWG. VB6EC
1							
0	12/14/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					



PLAN VIEW



FRONT VIEW

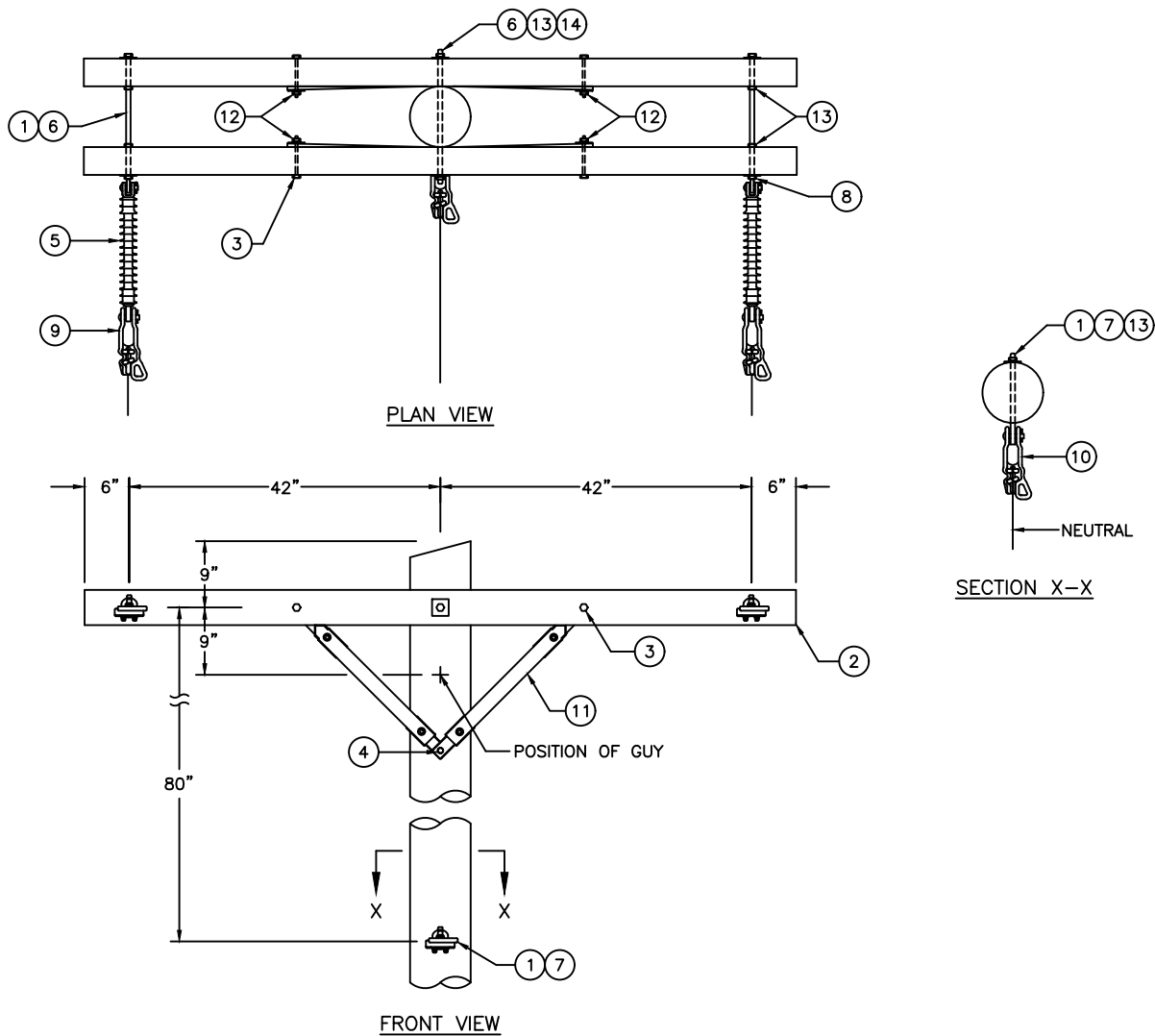


SIDE VIEW

NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.
3. ADD PIN INSULATOR SUPPORT FOR JUMPER CONDUCTORS AS NEEDED.

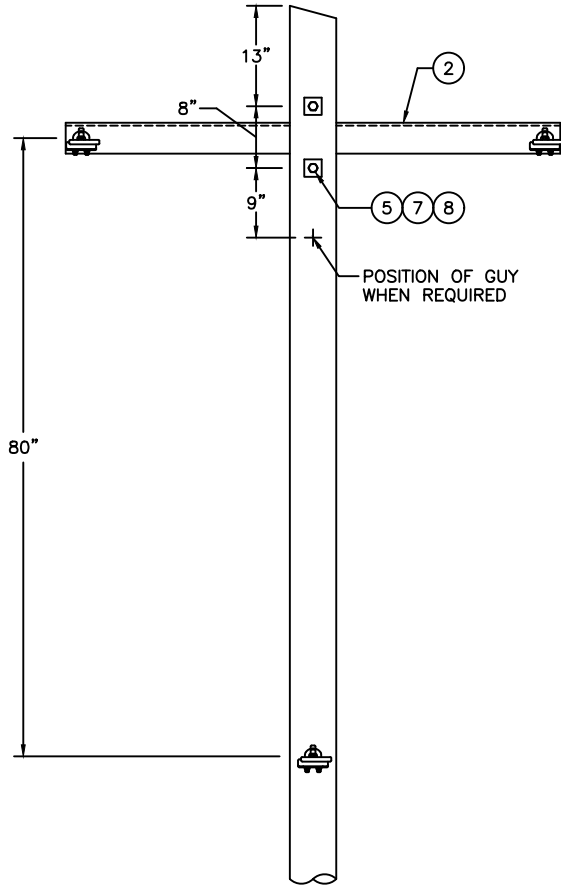
PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1325760	WASHER, SQUARE, CURVED, 3"	1
				2	1100010	CROSSARM, 8" WOOD	2
				3	1325005	BOLT, CARRAGE, 3/8" X 4-1/2" w/NUT	4
				4	1325145	SCREW, LAG, 1/2" X 4"	2
				5	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	2
				6	1325025	BOLT, DOUBLE ARMING, 5/8" X 20", w/NUT	3
				7	1325080	BOLT, OVAL, EYE, 5/8" X 12"	1
				8	1325530	NUT, EYE, GALV, 5/8"	2
3	06/05/23	D. KELTON	PWCOST	9	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4 - 2/0	2
2	6/2020	WRWS	PWC OST	10	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4 - 2/0	1
1	02/11/09	WJ	PWC OST	11	1100530	BRACE, CROSSARM, WOOD, 38" X 18"	2
0	12/3/07	JLL	PWC OST	12	1325710	WASHER, FLAT, ROUND, 3/8"	4
REVISED	BY	APPR		13	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	11
PWC REVISIONS				14	1325765	WASHER, SQUARE, FLAT, 5/8"	10
3				CROSSARM CONSTRUCTION, TWO PHASE SINGLE LINE ARM, 25KV			
2							
1							
0	12/14/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
				ELECTRICITIES			
				SCALE 1/2"=1'-6" DWG. VB7-2EC			



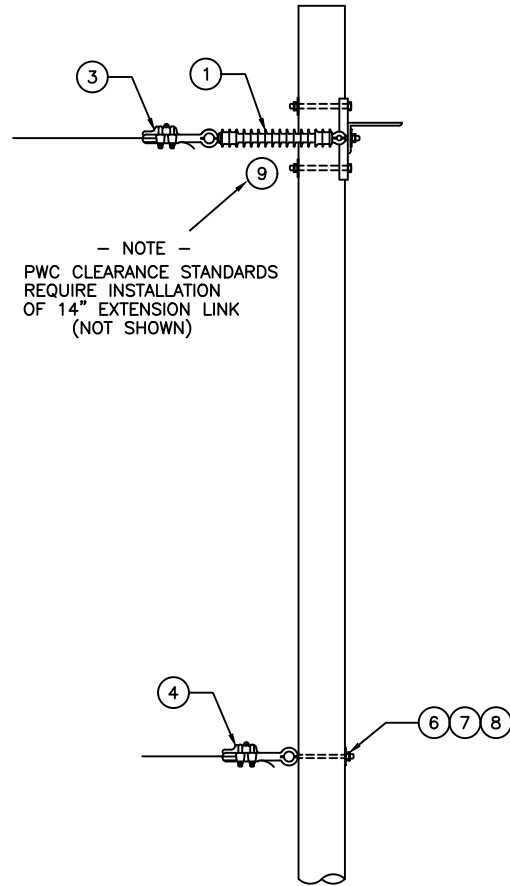
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1325760	WASHER, SQUARE, CURVED, 3"	1
				2	1100010	CROSSARM, 8" WOOD	2
				3	1325005	BOLT, CARRAGE, 3/8" X 4-1/2" w/NUT	4
				4	1325145	SCREW, LAG, 1/2" X 4"	2
				5	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	2
				6	1325025	BOLT, DOUBLE ARMING, 5/8" X 20", w/NUT	3
				7	1325080	BOLT, OVAL EYE, 5/8" X 12", w/NUT	1
				8	1325530	NUT, EYE, GALV, 5/8"	2
3	06/05/23	D. KELTON	PWCOST	9	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4 - 2/0	2
2	6/2020	WRWS	PWC OST	10	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4 - 2/0	1
1	02/11/09	WJ	PWC OST	11	1100530	BRACE, CROSSARM, WOOD, 38" X 18"	2
0	12/3/07	JLL	PWC OST	12	1325710	WASHER, FLAT, ROUND, 3/8"	4
REVISED	BY	APPR		13	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	11
PWC REVISIONS				14	1325765	WASHER, SQUARE, FLAT, 5/8"	10
3				CROSSARM CONSTRUCTION, TWO PHASE DEADEND, 25KV			 SCALE 1/2"=1'-0" DWG. VB7EC
2							
1							
0	12/8/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					



FRONT VIEW

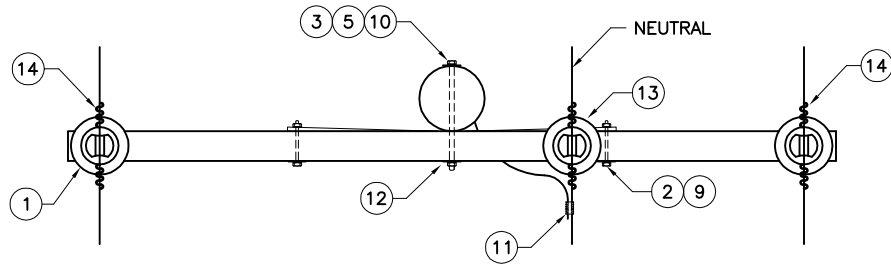


SIDE VIEW

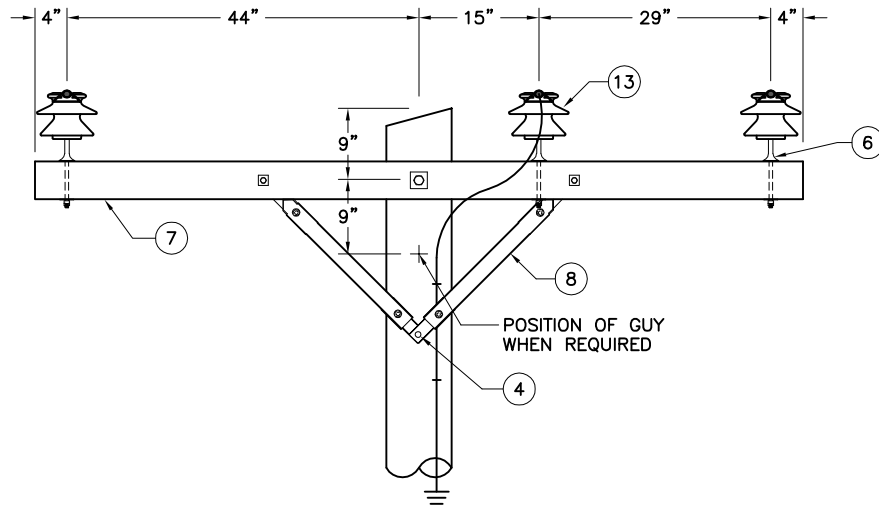
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	2
				2	1100023	CROSSARM, 60-INCH, STEEL	1
3	06/05/23	D. KELTON	PWCOST	3	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4 - 2/0	2
2	6/2020	WRWS	PWC OST	4	1050149	CLAMP, AL. STRAIGHT AUTOMATIC D.E. #4 - 2/0	1
1	02/11/09	WJ	PWC OST	5	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	2
0	12/3/07	JLL	PWC OST	6	1325080	BOLT, OVAL EYE, 5/8" X 12", w/NUT	3
REVISED	BY	APPR		7	1325760	WASHER, SQUARE, CURVED, 3"	3
PWC REVISIONS				8	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	5
3				9	1105110	LINK, EXTENSION, 14"	2
2				STEEL ARM TWO PHASE DEADEND, 25KV			 SCALE 1/2"=1'-0"
1							
0	3/31/06	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
							DWG. VB7SEC



PLAN VIEW

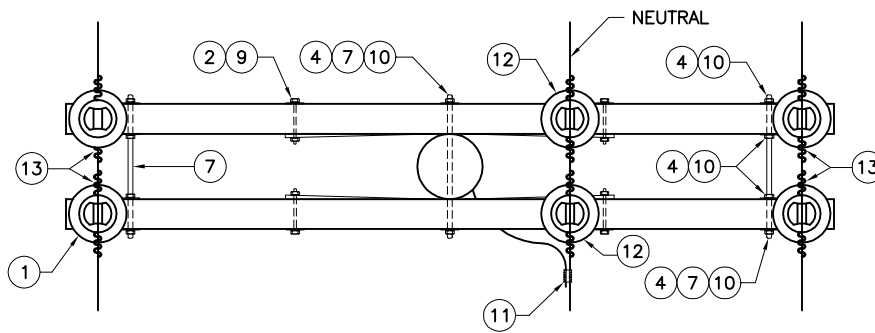


FRONT VIEW

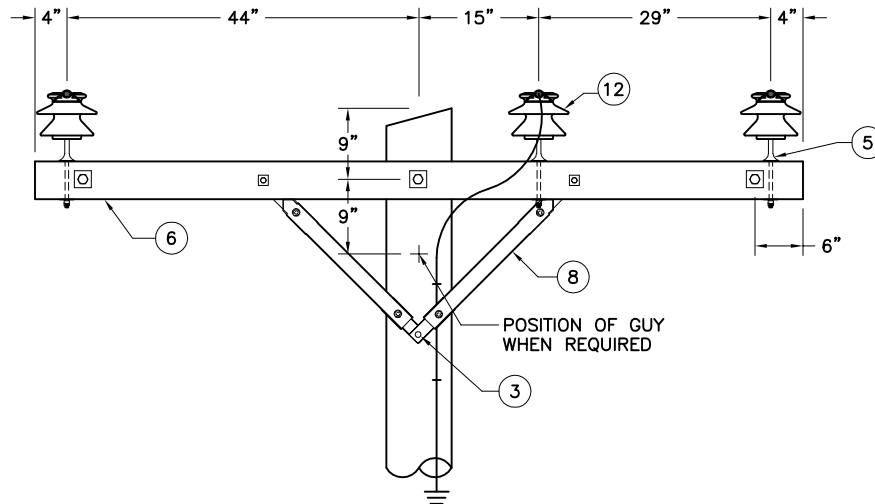
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.
3. THE NEUTRAL INSULATOR IS TO BE DIFFERENT IN SIZE OR COLOR FROM THE PRIMARY INSULATORS PER NESC 220B2B.

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6, 25 KV	2
				2	1325005	BOLT, CARRAGE, 3/8" X 4-1/2" w/NUT	2
				3	1325190	BOLT, MACHINE, 5/8" X 16", w/NUT	1
				4	1325145	SCREW, LAG, 1/2" X 4"	1
				5	1325760	WASHER, SQUARE, CURVED, 3"	1
				6	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	3
				7	1100010	CROSSARM, 8" WOOD	1
3	6/2020	WRW3	PWC OST	8	1100530	BRACE, CROSSARM, WOOD, 38" X 18"	1
2	09/21/09	JLL	PWC OST	9	1325710	WASHER, FLAT, ROUND, 3/8"	2
1	08/12/08	JLL	PWC OST	10	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	1
0	12/3/07	JLL	PWC OST	11	1075245	CONNECTOR PRL. GRVE. COMP., #1/7	1
REVISED	BY	APPR		12	1325765	WASHER, SQUARE, FLAT, 5/8"	1
PWC REVISIONS				13	1160040	INSULATOR, PIN-TYPE, ANSI 55-4, 1" GROOVE, 15 KV	1
3				14	1065010	WIRE, TIE, #4 SOLID ALUMINUM	24
2				CROSSARM CONSTRUCTION, TWO PHASE NEUTRAL ON SINGLE ARM, 25KV			 SCALE 1/2"=1'-0" DWG. VB9-1EC
1							
0	12/8/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					



PLAN VIEW



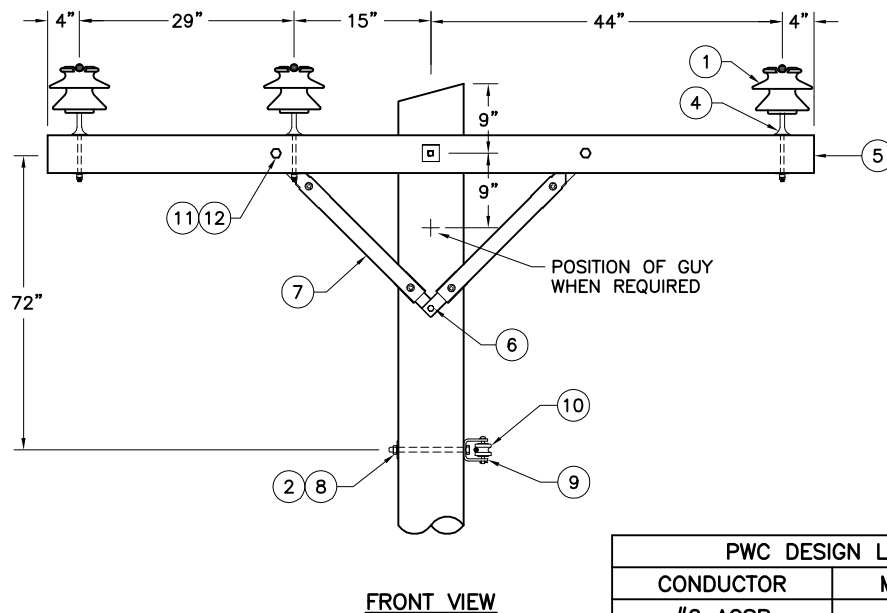
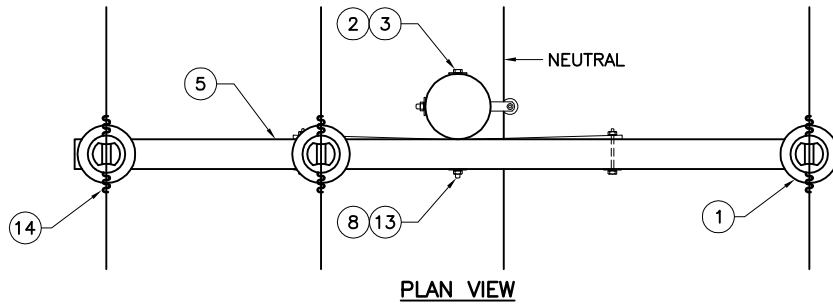
FRONT VIEW

NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.
3. THE NEUTRAL INSULATOR IS TO BE DIFFERENT IN SIZE OR COLOR FROM THE PRIMARY INSULATORS PER NESC 220B2B.

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6, 25 KV	4
				2	1325005	BOLT, CARRAGE, 3/8" X 4-1/2" w/NUT	4
				3	1325145	SCREW, LAG, 1/2" X 4"	2
				4	1325765	WASHER, SQUARE, FLAT, 5/8"	10
				5	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	6
				6	1100010	CROSSARM, 8" WOOD	2
3	6/2020	WRW3	PWC OST	7	1325025	BOLT, DOUBLE ARMING, 5/8" X 20", w/NUT	3
2	09/21/09	JLL	PWC OST	8	1100530	BRACE, CROSSARM, WOOD, 38" X 18"	2
1	08/12/08	JLL	PWC OST	9	1325710	WASHER, FLAT, ROUND, 3/8"	4
0	12/3/07	JLL	PWC OST	10	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	10
REVISED	BY	APPR		11	1075245	CONNECTOR PRL. GRVE. COMP., #1/7	1
PWC REVISIONS				12	1160040	INSULATOR, PIN-TYPE, ANSI 55-4, 1" GROOVE, 15 KV	2
3				13	1065010	WIRE, TIE, #4 SOLID ALUMINUM	48
2				CROSSARM CONSTRUCTION, TWO PHASE, NEUTRAL ON DOUBLE ARMS, 25KV			 SCALE 1/2"=1'-0" DWG. VB9EC
1							
0	12/8/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					

14.4/24.9 KV
THREE PHASE
STRUCTURES



PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#2 ACSR	15°
#1/0 AAAC	12°

NOTES:

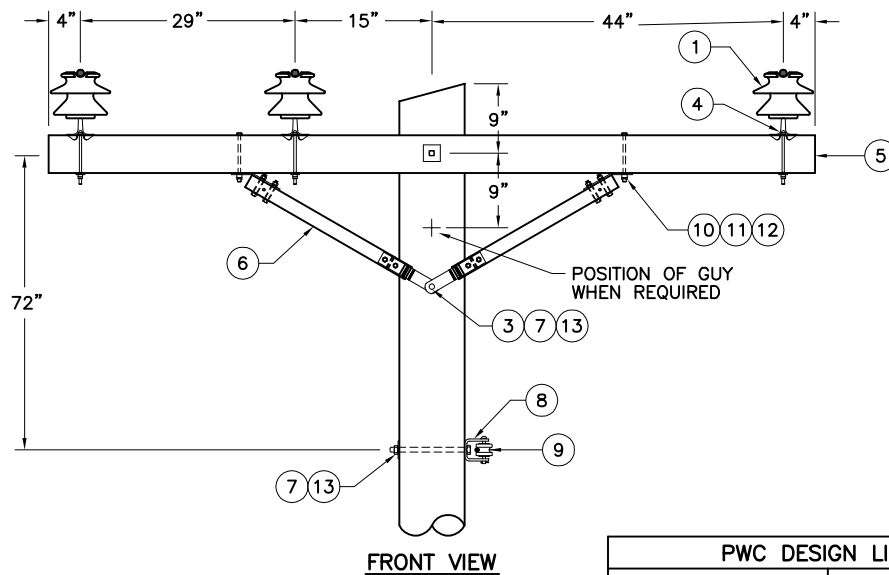
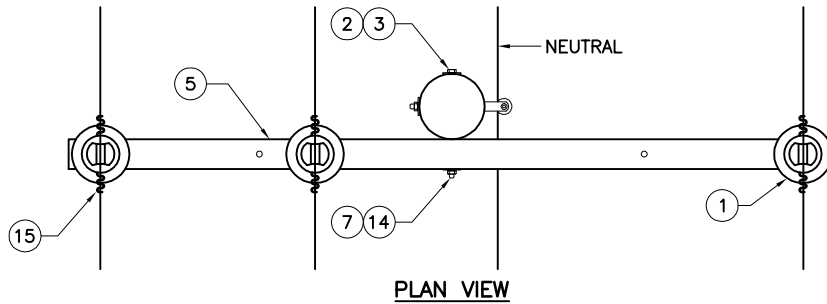
1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6	3
				2	1325190	BOLT, MACHINE, GALV., 5/8" X 16" w/NUT	1
				3	1325760	WASHER, SQUARE, CURVED, 3"	2
				4	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	3
				5	1100010	CROSSARM, 8" WOOD	1
				6	1325145	SCREW, LAG, 1/2" X 4"	1
				7	1100530	BRACE, CROSSARM, WOOD, 38" X 18"	1
				8	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	2
				9	1230010	CLEVIS, INSULATED SECONDARY, DEADEND	1
1	6/2020	WRW3	PWCOST	10	1160130	INSULATOR, SPOOL, 53-2	1
0	12/3/07	JLL	PWCOST	11	1325005	BOLT, CARRAGE, 3/8" X 4-1/2" w/NUT	2
REVISED	BY	APPR		12	1325710	WASHER, FLAT, ROUND, 3/8"	2
PWC REVISIONS				13	1325765	WASHER, SQUARE, FLAT, 5/8"	1
3				14	1065010	TIE WIRE, #4 SOLID ALUMINUM	24
2				CROSSARM CONSTRUCTION, THREE PHASE CENTER PHASE ON ARM, 25KV			 SCALE 1/2"=1'-0" DWG. VC1-1EC
1							
0	2/1/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					

PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#2 ACSR	15°
#1/0 AAAC	12°



PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#336 ACSR	11°
#477 AAC	10°

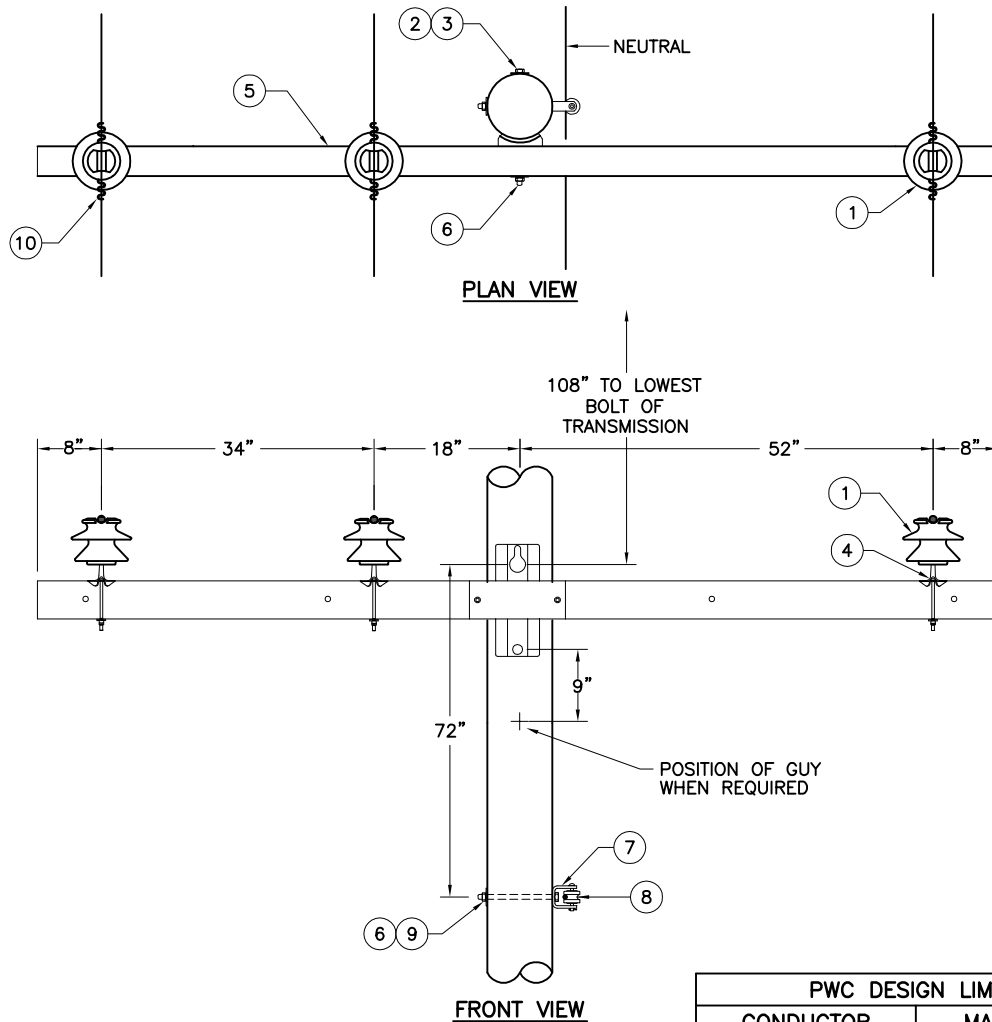
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6	3
				2	1325190	BOLT, MACHINE, GALV., 5/8" X 16" w/NUT	1
				3	1325760	WASHER, SQUARE, CURVED, 3"	2
				4	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	3
				5	1100010	CROSSARM, 8" WOOD	1
				6	1100532	BRACE, CROSSARM, WOOD, 60" X 30"	1
				7	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	3
				8	1230010	CLEVIS, INSULATED SECONDARY, DEADEND	1
				9	1160130	INSULATOR, SPOOL, 53-2	1
1	6/2020	WRW3	PWCOST	10	1325155	BOLT, MACHINE, 1/2" X 6", w/NUT	2
0	12/3/07	JLL	PWCOST	11	1325710	WASHER, FLAT, ROUND, 3/8"	2
REVISED	BY	APPR		12	1325735	WASHER, SPLIT RING, LOCK, 1/2"	2
PWC REVISIONS				13	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	2
3				14	1325765	WASHER, SQUARE, FLAT, 5/8"	1
2				15	1065010	TIE WIRE, #4 SOLID ALUMINUM	24
1				CROSSARM CONSTRUCTION THREE PHASE, LARGE CONDUCTOR CENTER PHASE ON ARM, 25KV			 SCALE 1/2"=1'-0" DWG. VC1-1SEC
0	2/1/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					

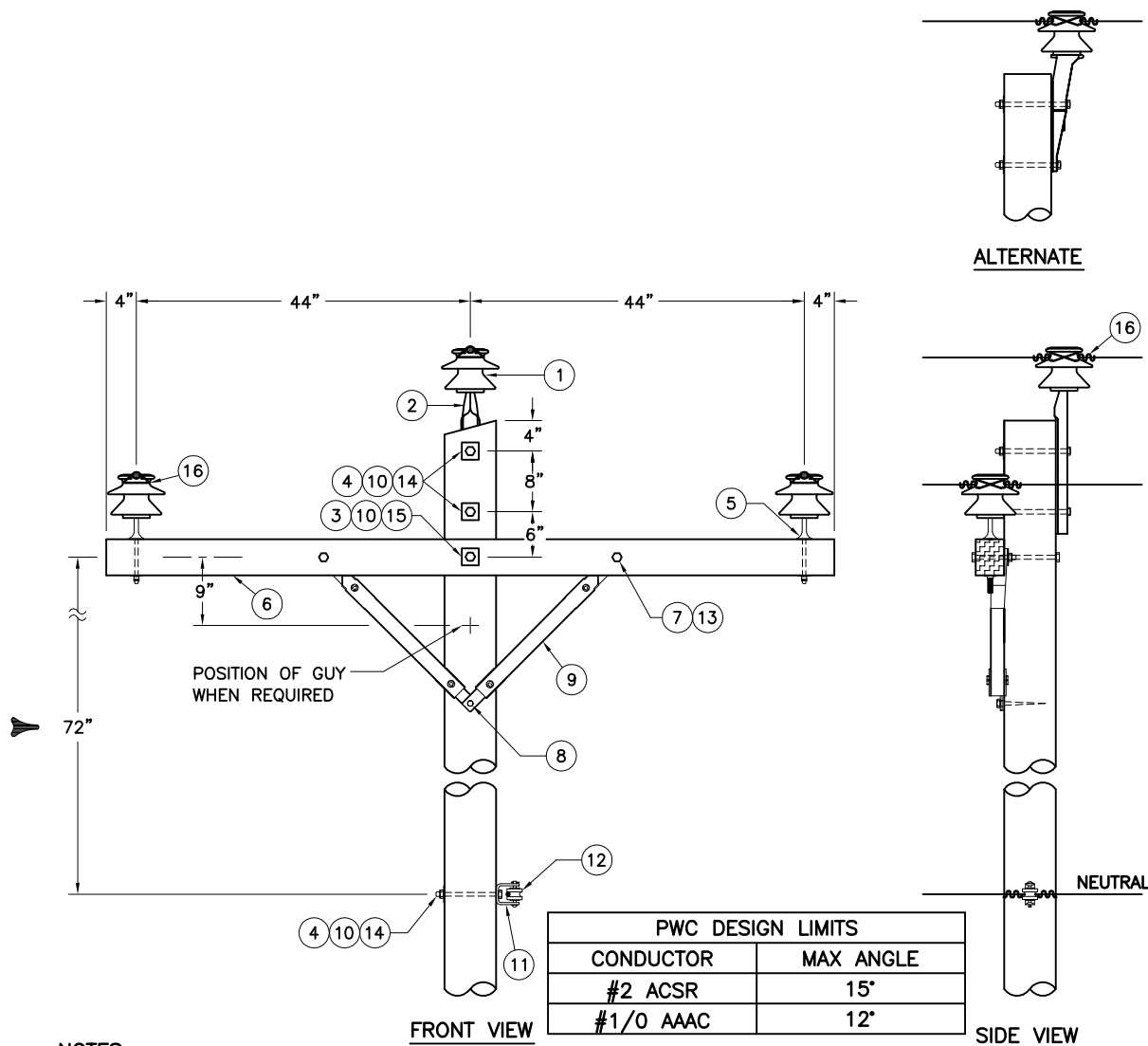


PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#336 ACSR	11°
#477 AAC	10°

NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.
3. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.
4. 10' FIBERGLASS ARM IS STANDARD CONSTRUCTION FOR DISTRIBUTION UNDERBUILD ON STEEL POLES.

PWC REVISIONS				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6	3
				2	1325190	BOLT, MACHINE, GALV., 5/8" X 16" w/NUT	2
				3	1325760	WASHER, SQUARE, CURVED, 3"	3
				4	1100547	PIN, CROSSARM, SADDLE, 1' x 6"	3
				5	1100017	CROSSARM, 10 FOOT, FBGL. REIN. COMPOSITE	1
				6	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	3
				7	1230010	CLEVIS, INSULATED SECONDARY, DEADEND	1
				8	1160130	INSULATOR, SPOOL, 53-2	1
				9	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	1
				10	1065010	TIE WIRE, #4 SOLID ALUMINUM	24
3				UNDERBUILD FBG. CROSSARM CONSTRUCTION THREE PHASE, LARGE CONDUCTOR CENTER PHASE ON ARM, 25KV			
2							
1	8/9/11	JLL					
0	2/6/09	WJJ	PWCOST				
REVISED	BY	APPR.					
				SCALE 1/2"=1'-0"			DWG. VC1-1SFBG



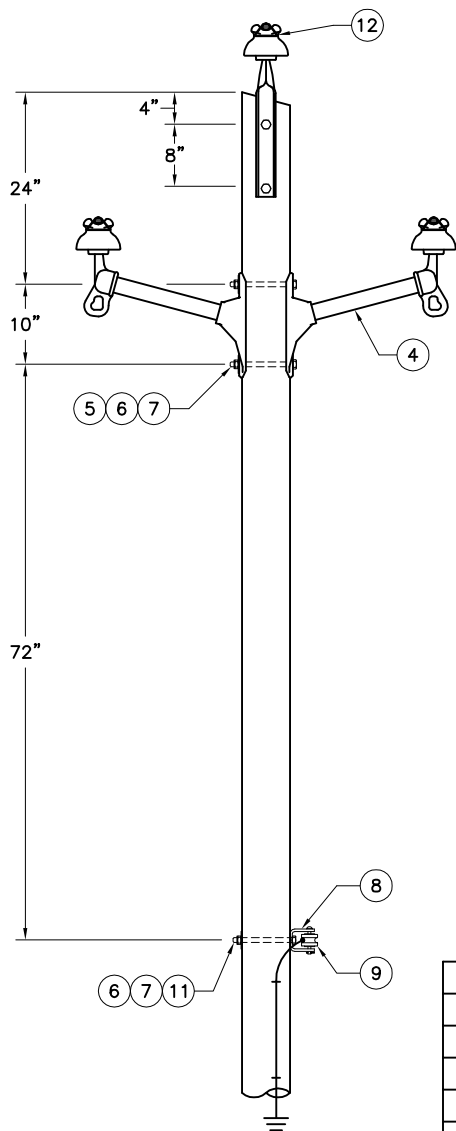
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

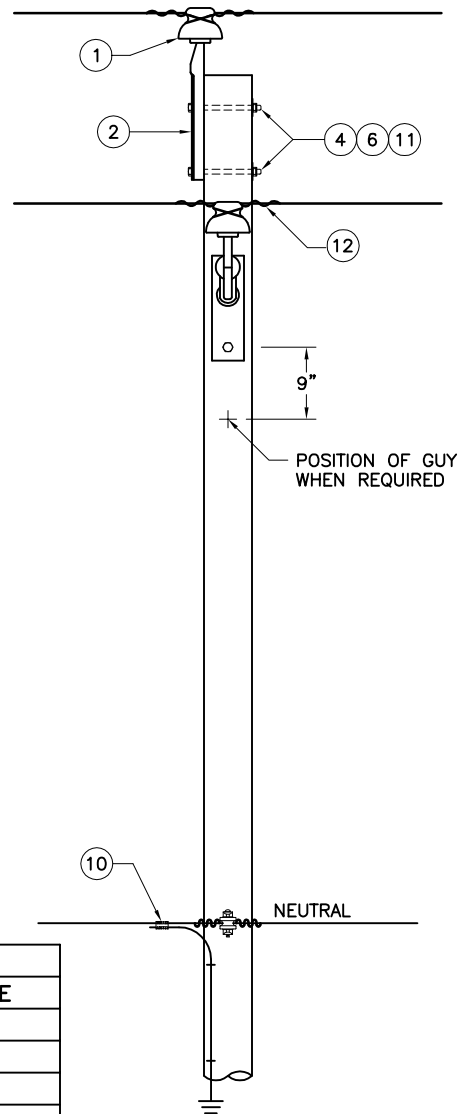
PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6	3
				2	1100568	PIN, POLE TOP, 20" X 1"	1
				3	1325190	BOLT, MACHINE, 5/8" X 16", w/NUT	1
				4	1325760	WASHER, SQUARE, CURVED, 3"	5
				5	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	2
				6	1100010	CROSSARM, 8" WOOD	1
				7	1325005	BOLT, CARRIAGE, 3/8" X 4 1/2", w/NUT	2
				8	1325145	SCREW, LAG, 1/2" X 4"	1
				9	1100530	BRACE, CROSSARM, WOOD, 38" X 18"	1
				10	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	4
				11	1230010	CLEVIS, INSULATED SECONDARY, DEADEND	1
				12	1160130	INSULATOR, SPOOL, 53-2	1
1	6/2020	WRW3	PWCOST	13	1325710	WASHER, FLAT, ROUND, 3/8"	2
O	12/3/07	JLL	PWCOST	14	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	3
REVISED	BY	APPR		15	1325765	WASHER, SQUARE, FLAT, 5/8"	1
PWC REVISIONS				16	1065010	TIE WIRE, #4 SOLID ALUMINUM	24
3				CROSSARM CONSTRUCTION THREE PHASE SINGLE LINE ARM, 25KV			
2							
1	12/8/05	CADD GRAPHICS	OST				
O	2/1/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
				SCALE 1/2"=1'-0" DWG. VC1EC			



FRONT VIEW



SIDE VIEW

PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#2 ACSR	15°
#1/0 AAAC	12°
#336 ACSR	11°
#477 AAC	10°

NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.

2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

PWC CONSTRUCTION NOTES:

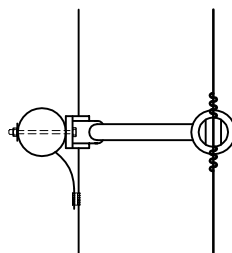
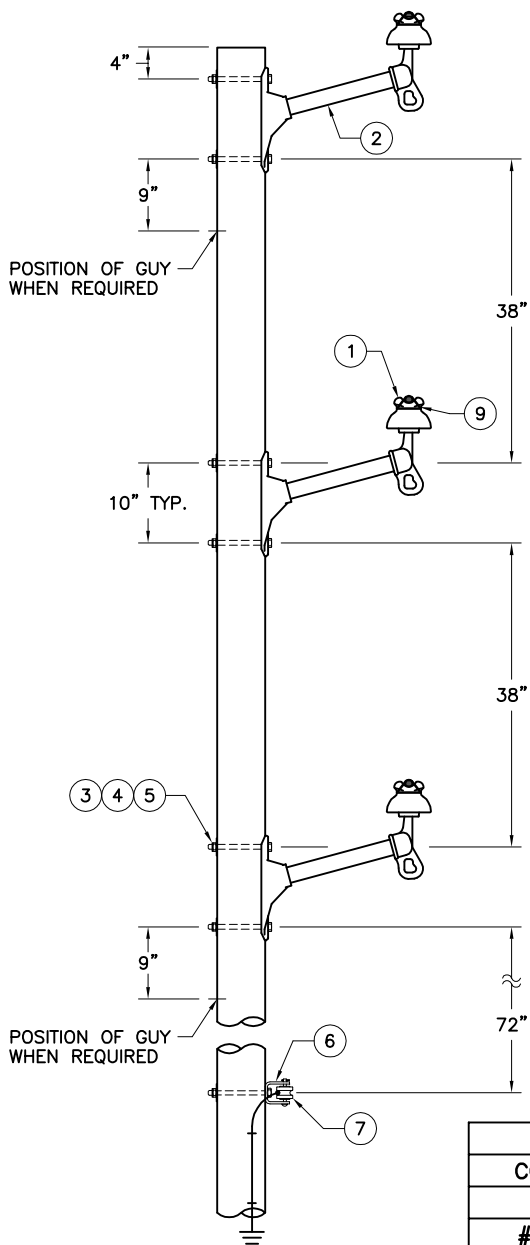
1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6, 25 KV	3
				2	1100568	PIN, POLE TOP, 20" X 1"	1
				4	1025255	BRACKET, FIBERGLASS 21"	2
				5	1325190	BOLT, MACHINE, 5/8" X 16", w/NUT	2
				6	1325760	WASHER, SQUARE, CURVED, 3"	5
2	6/2020	WRW3	PWCOST	7	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	5
1	08/12/08	JLL	PWCOST	8	1230010	CLEVIS, INSULATED SECONDARY, DEADEND	1
0	12/3/07	JLL	PWCOST	9	1160130	INSULATOR, SPOOL, 53-2	1
REVISED	BY	APPR		10	1075245	CONNECTOR, PRL. GRVE., COMP., #1/7	1
PWC REVISIONS				11	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	3
3				12	1065010	TIE WIRE, #4 SOLID ALUMINUM	24
2				FIBERGLASS ARM, NARROW PROFILE CONSTRUCTION, 25KV			
1							
0	2/10/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					

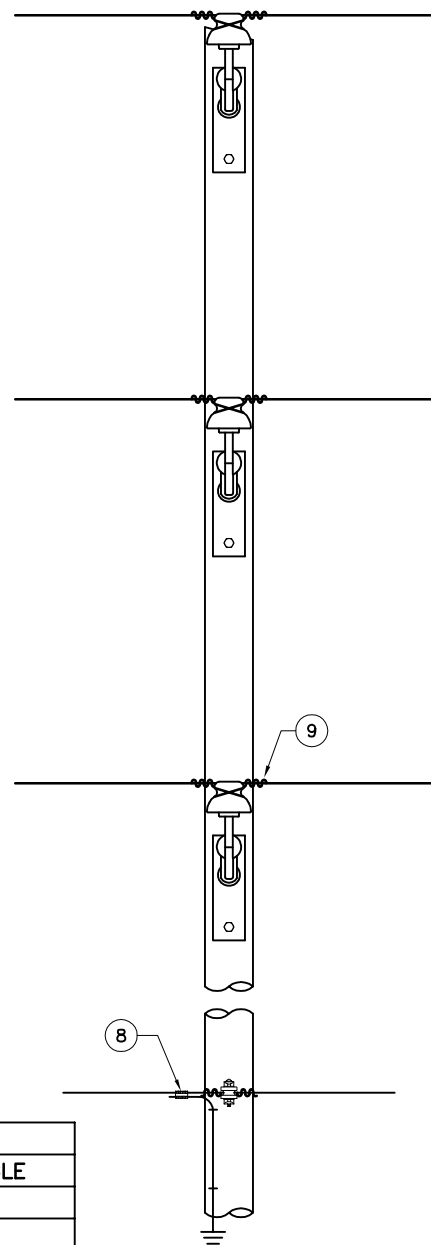
ELECTRICITIES

SCALE
1/2"=1'-0"

DWG.
VC1FEC



PLAN VIEW



SIDE VIEW

PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#2 ACSR	15°
#1/0 AAAC	12°
#336 ACSR	11°
#477 AAC	10°

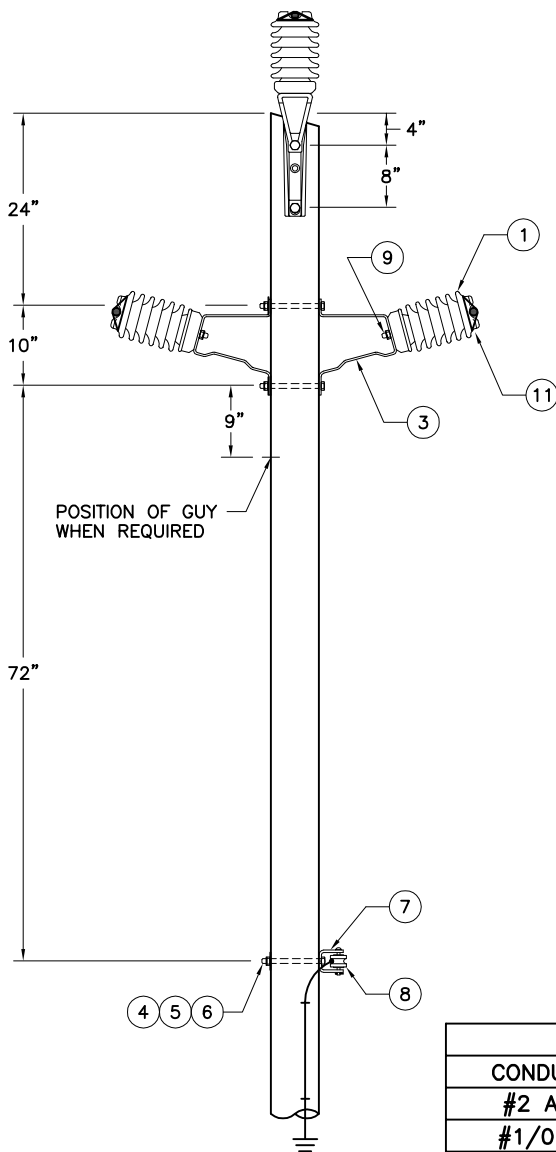
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

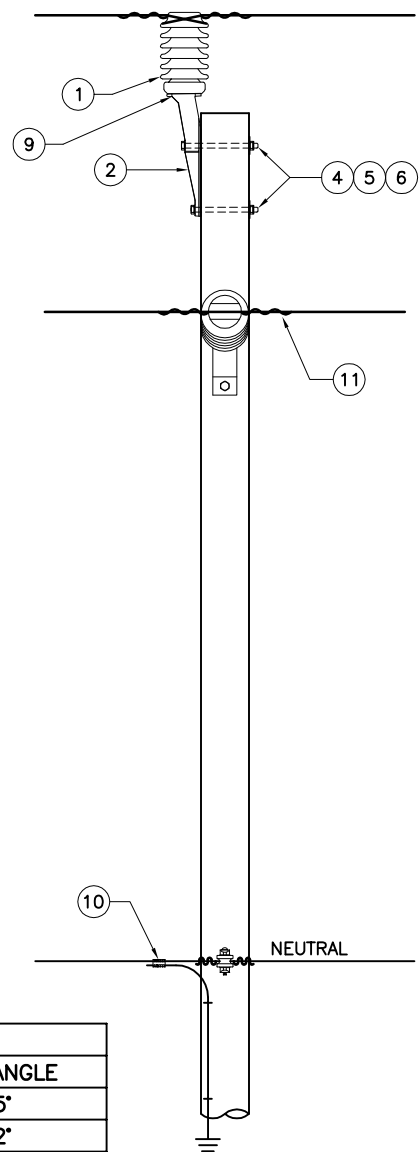
PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6, 25 KV	3
				2	1025255	BRACKET, FIBERGLASS 21"	3
3	6/2020	WRW3	PWCOST	3	1325180	BOLT, MACHINE, 5/8" X12", w/NUT	7
2	09/21/09	JLL	PWCOST	4	1325760	WASHER, SQUARE, CURVED, 3"	7
1	08/12/08	JLL	PWCOST	5	1325733	WASHER, DOUBLE COIL SPRING LOCK, 5/8"	7
0	12/3/07	JLL	PWCOST	6	1230010	CLEVIS, INSULATED SECONDARY, DEADEND	1
REVISED	BY	APPR		7	1160130	INSULATOR, SPOOL, 53-2	1
PWC REVISIONS				8	1075245	CONNECTOR, PRL. GRVE., #1/7	1
3				9	1065010	TIE WIRE, #4 SOLID ALUMINUM	24
2				THREE PHASE VERTICAL, FIBERGLASS, ARMLESS CONSTRUCTION, 25KV			 SCALE 1/2"=1'-0" DWG. VC1F-VEC
1							
0	2/10/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					



FRONT VIEW



SIDE VIEW

PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#2 ACSR	15°
#1/0 AAAC	12°
#336 ACSR	11°
#477 AAC	10°

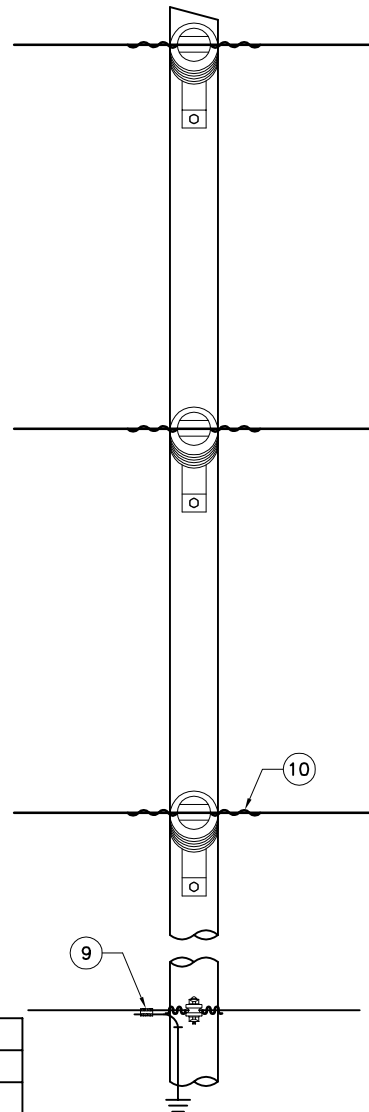
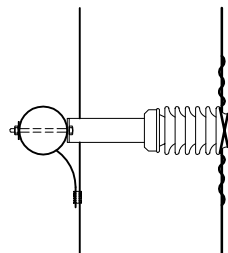
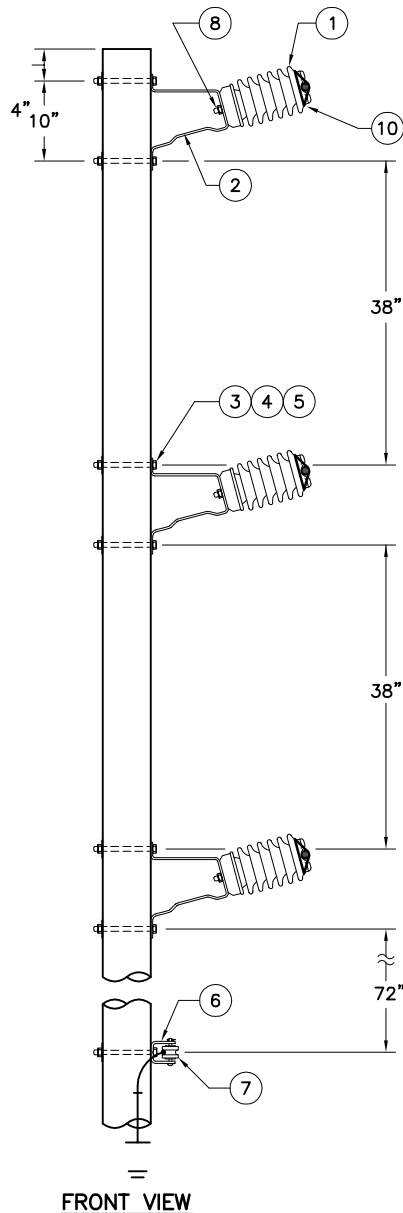
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160073	INSULATOR, LINE POST, TIE TOP, 35 KV	3
				2	1025320	BRACKET, POLE TOP INSULATOR	1
				3	1025226	BRACKET, INSULATOR, OFFSET, 9"	2
				4	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	5
				5	1325760	WASHER, SQUARE, CURVED, 3"	3
				6	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	5
				7	1230010	CLEVIS, INSULATED SECONDARY, DEADEND	1
1	6/2020	WRW3	PWCOST	8	1160130	INSULATOR, SPOOL, 53-2	1
0	12/3/07	JLL	PWCOST	9	1100537	STUD, INSULATOR, SHORT	3
REVISED	BY	APPR		10	1075245	CONNECTOR, PRL. GRVE., #1/7	1
PWC REVISIONS				11	1065010	TIE WIRE, #4 SOLID ALUMINUM	24
3				THREE PHASE, ALTERNATE LINE POST CONSTRUCTION, 25KV			
2							
1							
0	3/10/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
				ELECTRICITIES SCALE 1/2"=1'-0" DWG. VC1LPA-EC			



PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#2 ACSR	15°
#1/0 AAAC	12°
#336 ACSR	11°
#477 AAC	10°

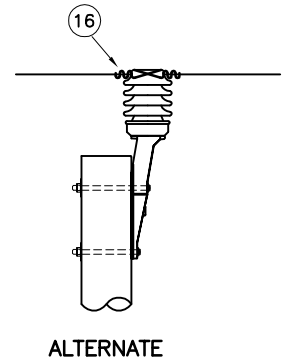
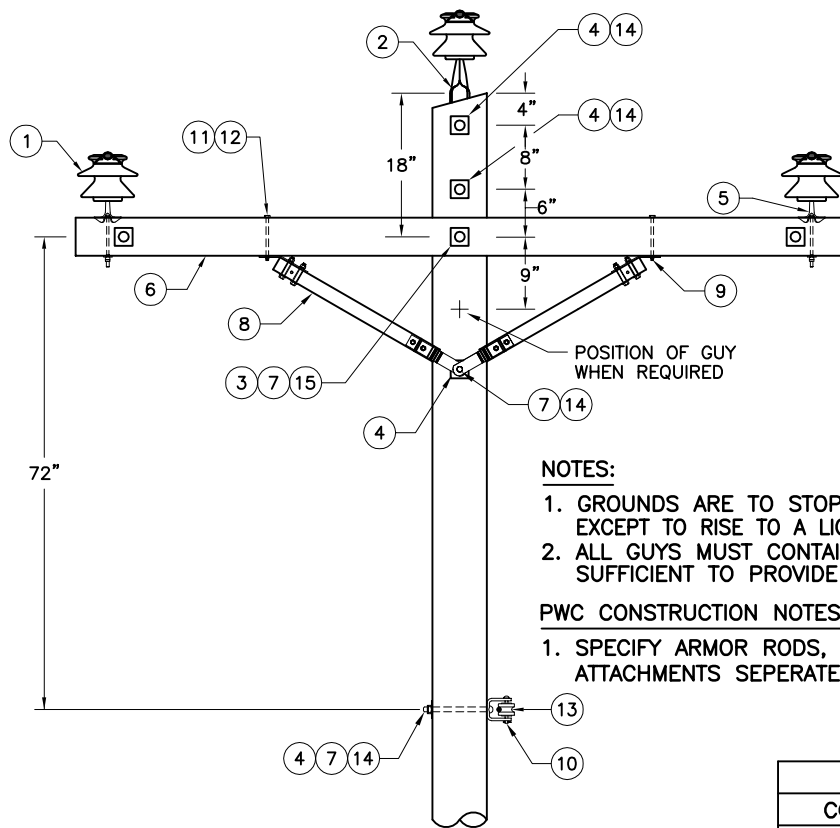
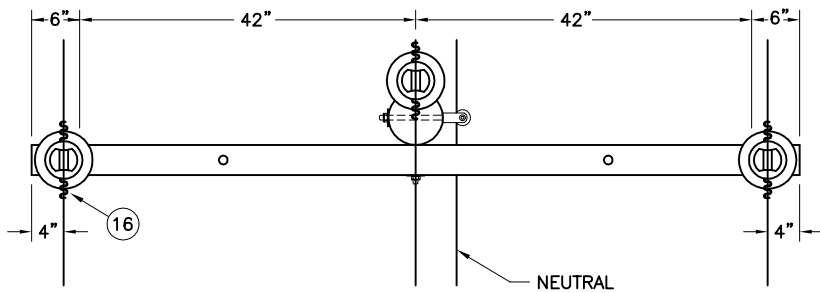
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

PWC REVISIONS				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160073	INSULATOR, LINE POST, TIE TOP, 35 KV	3
				2	1025226	BRACKET, INSULATOR, OFFSET, 9"	3
				3	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	7
				4	1325760	WASHER, SQUARE, CURVED, 3"	7
				5	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	7
				6	1230010	CLEVIS, INSULATED SECONDARY, DEADEND	1
				7	1160130	INSULATOR, SPOOL, 53-2	1
				8	1100537	STUD, INSULATOR, SHORT	3
				9	1075245	CONNECTOR, PRL. GRVE., #1/7	1
				10	1065010	TIE WIRE, #4 SOLID ALUMINUM	24
3				THREE PHASE, ALTERNATE VERTICAL LINE POST CONSTRUCTION, 25KV			
2							
1							
0	3/10/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
				SCALE		DWG.	
				1/2"=1'-0"		VC1LPA-VEC	



NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

PWC CONSTRUCTION NOTES:

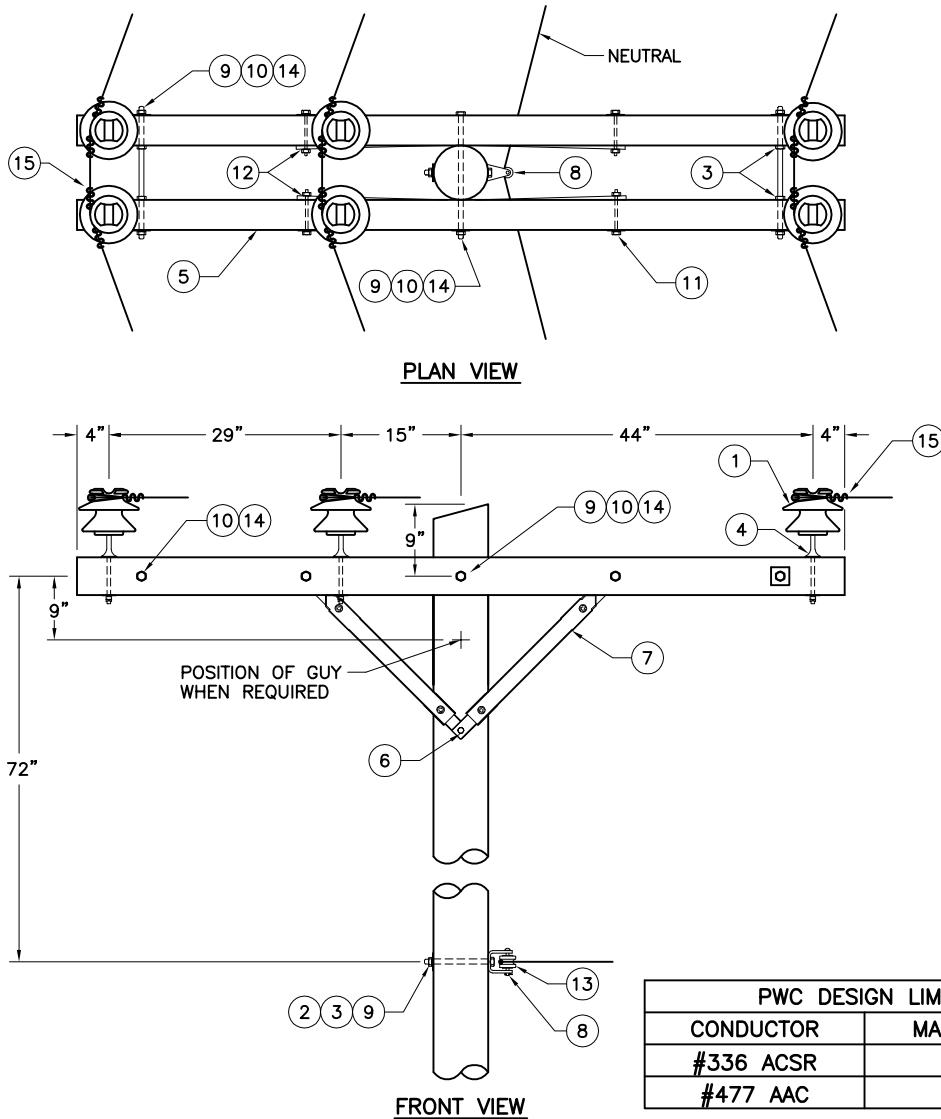
1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

PWC DESIGN LIMITS

CONDUCTOR	MAX ANGLE
#336 ACSR	11°
#477 AAC	10°

FRONT VIEW

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6	3
				2	1100568	PIN, POLE TOP, 20" X 1"	1
				3	1325190	BOLT, MACHINE, 5/8" X 16", w/NUT	1
				4	1325760	WASHER, SQUARE, CURVED, 3"	5
				5	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	2
				6	1100010	CROSSARM, 8' WOOD	1
				7	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	5
				8	1100532	BRACE, CROSSARM, WOOD, 60" X 30"	1
				9	1325735	WASHER, SPLIT RING, LOCK, 1/2"	2
				10	1230010	CLEVIS, INSULATED SECONDARY, DEADEND	1
				11	1325155	BOLT, MACHINE, 1/2" X 6", w/NUT	2
				12	1325710	WASHER, FLAT ROUND, 3/8"	2
1	6/2020	WRW3	PWCOST	13	1160130	INSULATOR, SPOOL, 53-2	1
0	12/3/07	JLL	PWCOST	14	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	4
REVISED	BY	APPR		15	1325765	WASHER, SQUARE, FLAT, 5/8"	1
PWC REVISIONS				16	1065010	TIE WIRE, #4 SOLID ALUMINUM	24
3				CROSSARM CONSTRUCTION, THREE PHASE LARGE CONDUCTOR, SINGLE ARM, 25KV			
2							
1	11/10/05	CADD GRAPHICS	OST				
0	2/1/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
				SCALE 1/2"=1'-0" DWG. VC1SEC			



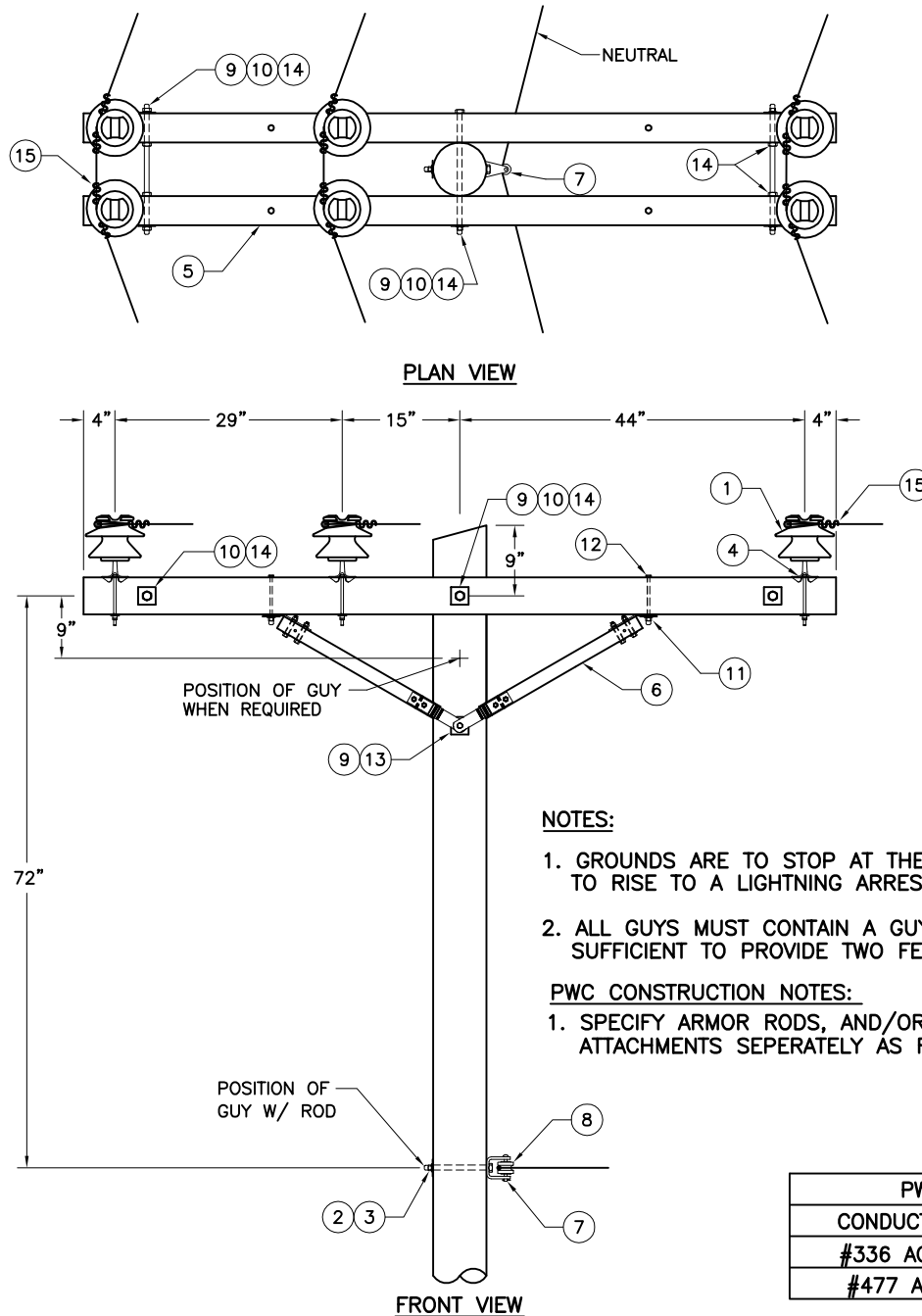
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6	6
				2	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	1
				3	1325760	WASHER, SQUARE, CURVED, 3"	1
				4	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	6
				5	1100010	CROSSARM, 8" WOOD	2
				6	1325145	SCREW, LAG, 1/2" X 4"	2
				7	1100530	BRACE, CROSSARM, WOOD, 38" X 18"	2
				8	1230010	CLEVIS, INSULATED SECONDARY, DEADEND	1
				9	1325733	WASHER, DOUBLE COIL SPRING LOCK, 5/8"	11
				10	1325025	BOLT, DOUBLE ARMING, 5/8" X 20", w/NUT	3
				11	1325005	BOLT, CARRIAGE, 3/8" X 4-1/2", w/NUT	4
				12	1325710	WASHER, FLAT, ROUND, 3/8"	4
				13	1160130	INSULATOR, SPOOL, 53-2	1
				14	1325765	WASHER, SQUARE, FLAT, 5/8"	10
				15	1065010	TIE WIRE, #4 SOLID ALUMINUM	24
PWC REVISIONS							
3				CROSSARM CONSTRUCTION THREE PHASE, LARGE CONDUCTOR CENTER PHASE ON DOUBLE ARMS, 25KV			
2							
1							
0	2/1/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
							
						SCALE 1/2"=1'-0"	DWG. VC2-1EC



NOTES:

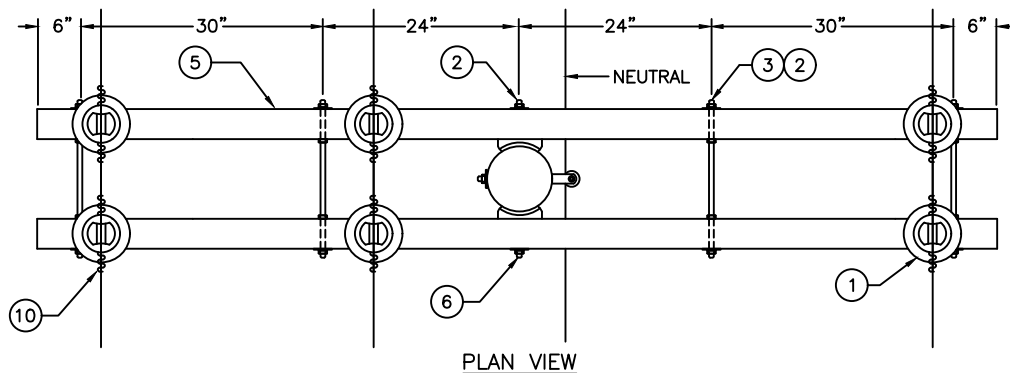
1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

PWC CONSTRUCTION NOTES:

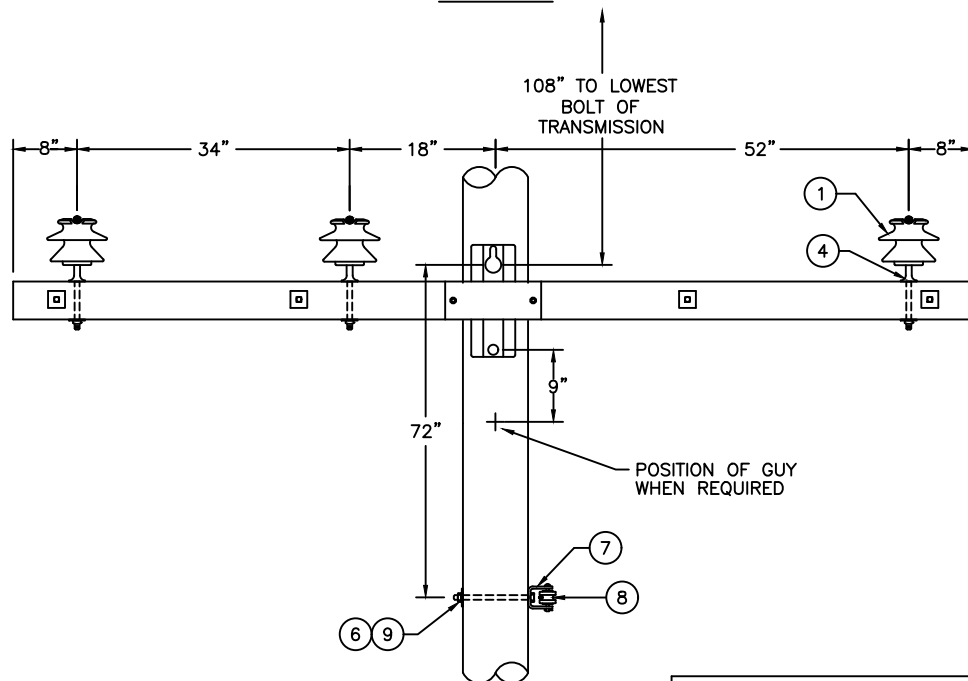
1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#336 ACSR	22°
#477 AAC	20°

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6	6
				2	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	1
				3	1325760	WASHER, SQUARE, CURVED, 3"	1
				4	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	6
				5	1100010	CROSSARM, 8" WOOD	2
				6	1100532	BRACE, CROSSARM, WOOD, 60" X 30"	2
				7	1230010	CLEVIS, INSULATED SECONDARY, DEADEND	1
				8	1160130	INSULATOR, SPOOL, 53-2	1
				9	1325733	WASHER, DOUBLE COIL SPRING LOCK, 5/8"	11
				10	1325025	BOLT, DOUBLE ARMING, 5/8" X 20", w/NUT	3
				11	1325155	BOLT, MACHINE, 1/2" X 6", w/NUT	4
				12	1325735	WASHER, SPLIT RING, LOCK, 1/2"	4
				13	1325020	BOLT, DOUBLE ARMING, 5/8" X 18", w/NUT	1
				14	1325765	WASHER, SQUARE, FLAT 5/8"	10
				15	1065010	TIE WIRE, #4 SOLID ALUMINUM	24
PWC REVISIONS							
3				CROSSARM CONSTRUCTION THREE PHASE, LARGE CONDUCTOR CENTER PHASE ON DOUBLE ARMS, 25KV			
2							
1							
0	4/7/05	CADD GRAPHICS	OST				
REVISION	BY	APPR.					
						SCALE 1/2"=1'-0"	DWG. VC2-1SEC



PLAN VIEW



FRONT VIEW

PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#336 ACSR	11°
#477 AAC	10°

NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.
3. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.
4. 10' FIBERGLASS ARM IS STANDARD CONSTRUCTION FOR DISTRIBUTION UNDERBUILD ON STEEL POLES.

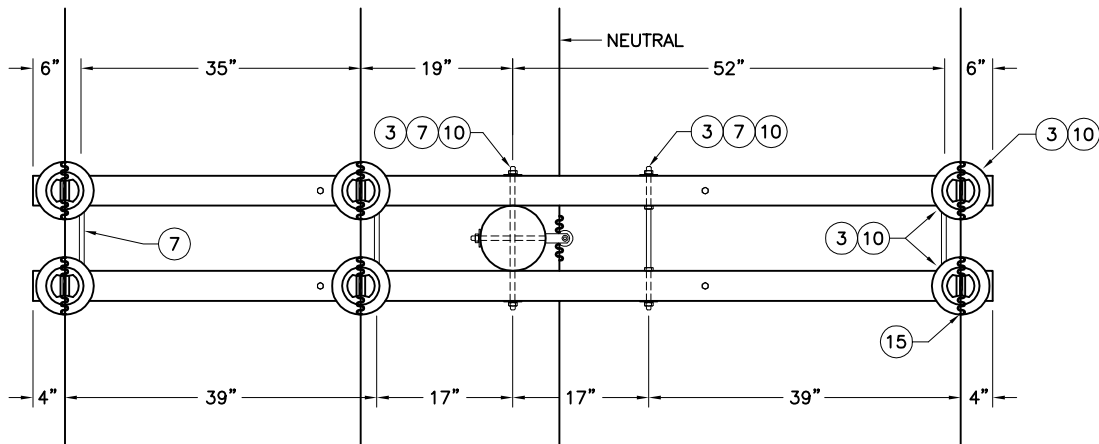
PWC REVISIONS				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
1	8/2023	DK	PWCOST	1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6	6
0	6/2020	WRW3	PWCOST	2	1325025	BOLT, DOUBLE ARMING, 5/8" X 20" w/NUT	5
REVISED	BY	APPR		3	1325765	WASHER, SQUARE, FLAT, 5/8"	16
3				4	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	6
2				5	1100017	CROSSARM, 10 FOOT, FBGL. REIN. COMPOSITE	2
1				6	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	6
0	8/9/11	JLL	PWCOST	7	1230010	CLEVIS, INSULATED SECONDARY, DEADEND	1
REVISED	BY	APPR.		8	1160130	INSULATOR, SPOOL, 53-2	1
				9	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	1
				10	1065010	TIE WIRE, #4 SOLID ALUMINUM	48

**UNDERBUILD FBG. DOUBLE CROSSARM
CONSTRUCTION
THREE PHASE, LARGE CONDUCTOR
CENTER PHASE ON ARM, 25KV**

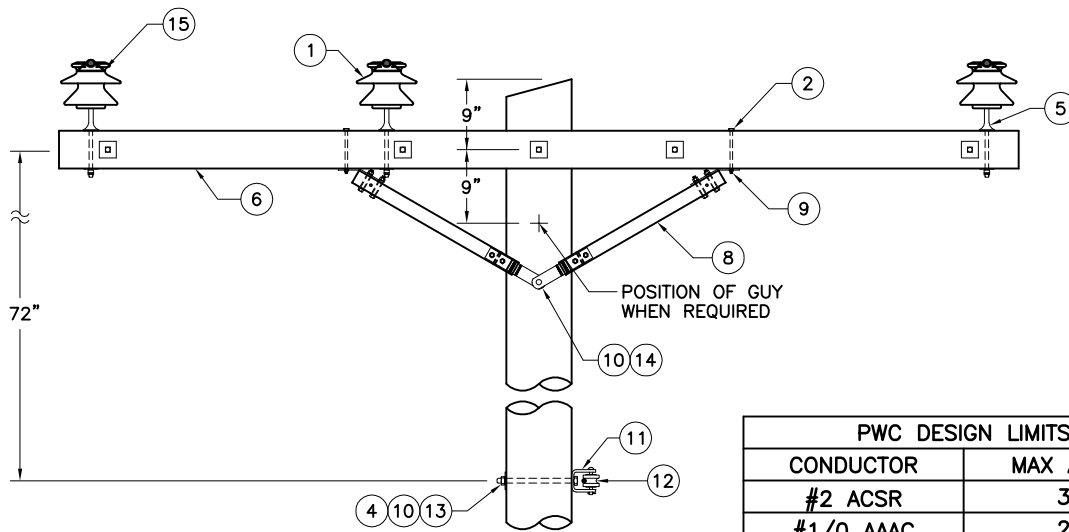
FWC

SCALE
1/2"=1'-0"

DWG.
VC2-1SFBG



PLAN VIEW



FRONT VIEW

PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#2 ACSR	30°
#1/0 AAAC	25°

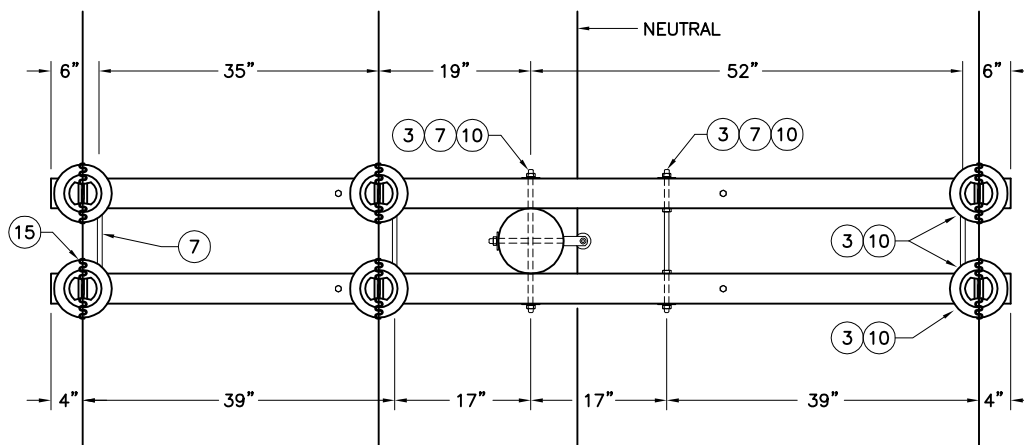
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

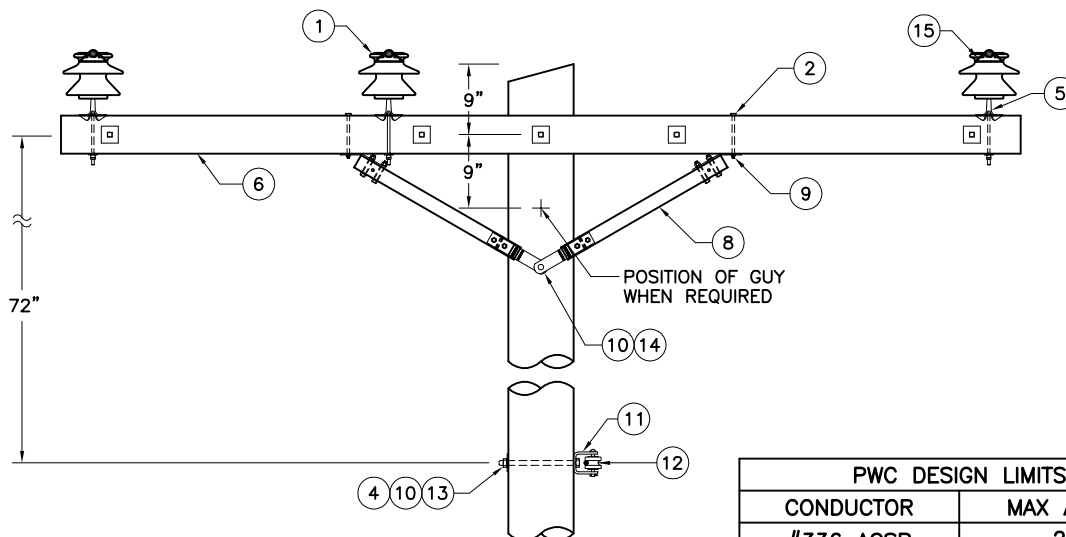
PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6	6
				2	1325155	BOLT, MACHINE, 1/2" X 6", w/NUT	4
				3	1325765	WASHER, SQUARE, FLAT, 5/8"	18
				4	1325760	WASHER, SQUARE, CURVED, 3"	1
				5	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	6
				6	1100015	CROSSARM, 10" WOOD	2
				7	1325025	BOLT, DOUBLE ARMING, 5/8" X 20", w/NUT	5
				8	1100532	BRACE, CROSSARM, WOOD, 60" X 30"	2
				9	1325735	WASHER, SPLIT RING, LOCK, 1/2"	4
				10	1325733	WASHER, DOUBLE COIL SPRING LOCK, 5/8"	20
1	6/2020	WRW3	PWCOST	11	1230010	CLEVIS, INSULATED SECONDARY, DEADEND	1
0	12/3/07	JLL	PWCOST	12	1160130	INSULATOR, SPOOL, 53-2	1
REVISED	BY	APPR		13	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	2
PWC REVISIONS				14	1325020	BOLT, DOUBLE ARMING, 5/8" X 18", w/NUT	1
3				15	1065010	TIE WIRE, #4 SOLID ALUMINUM	24
2				CROSSARM CONSTRUCTION THREE PHASE, CENTER PHASE ON ARM, 25KV			
1	11/10/05	CADD GRAPHICS	OST				
0	2/1/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
				ELECTRICITIES			
				SCALE 1/2"=1'-0" DWG. VC2-2EC			



PLAN VIEW



FRONT VIEW

PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#336 ACSR	22°
#477 AAC	20°

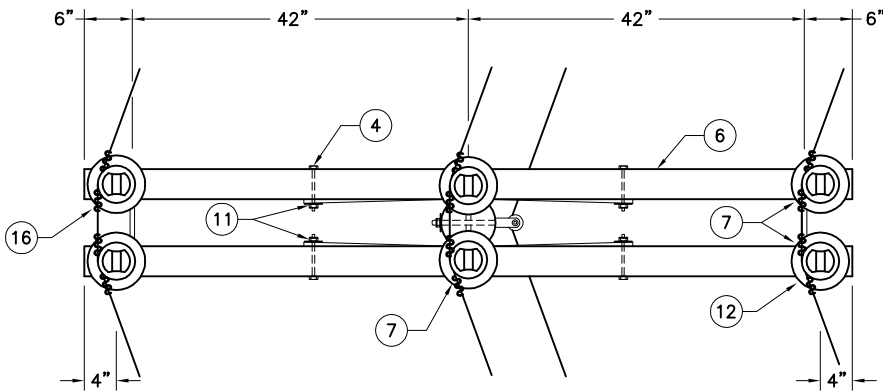
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

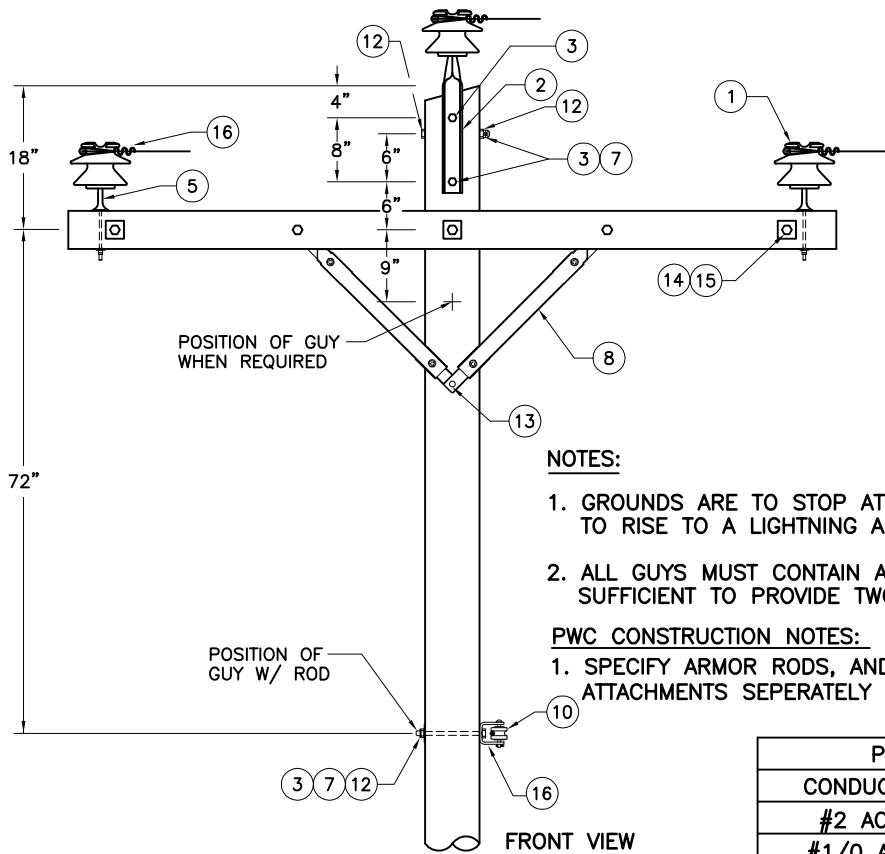
PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

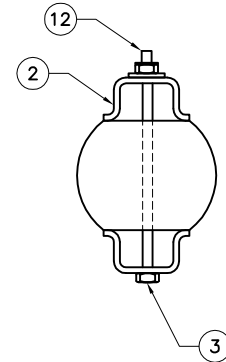
PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6	6
				2	1325155	BOLT, MACHINE, 1/2" X 6", w/NUT	4
				3	1325765	WASHER, SQUARE, FLAT, 5/8"	18
				4	1325760	WASHER, SQUARE, CURVED, 3"	1
				5	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	6
				6	1100015	CROSSARM, 10" WOOD	2
				7	1325025	BOLT, DOUBLE ARMING, 5/8" X 20", w/NUT	5
				8	1100532	BRACE, CROSSARM, WOOD, 60" X 30"	2
				9	1325735	WASHER, SPLIT RING, LOCK, 1/2"	4
				10	1325733	WASHER, DOUBLE COIL SPRING LOCK, 5/8"	20
1	6/2020	WRW3	PWCOST	11	1230010	CLEVIS, INSULATED SECONDARY, DEADEND	1
0	12/3/07	JLL	PWCOST	12	1160130	INSULATOR, SPOOL, 53-2	1
REVISED	BY	APPR		13	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	2
PWC REVISIONS				14	1325020	BOLT, DOUBLE ARMING, 5/8" X 18", w/NUT	1
3				15	1065010	TIE WIRE, #4 SOLID ALUMINUM	24
2				CROSSARM CONSTRUCTION THREE PHASE, LARGE CONDUCTOR CENTER PHASE ON ARM, 25KV			
1	11/10/05	CADD GRAPHICS	OST				
0	2/1/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
							
				SCALE 1/2"=1'-0"		DWG. VC2-2SEC	



PLAN VIEW



FRONT VIEW



POLE TOP PIN ASSEMBLY

NOTES:

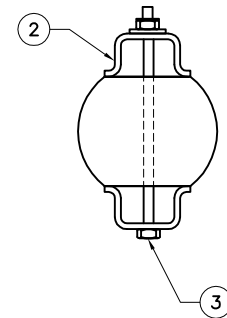
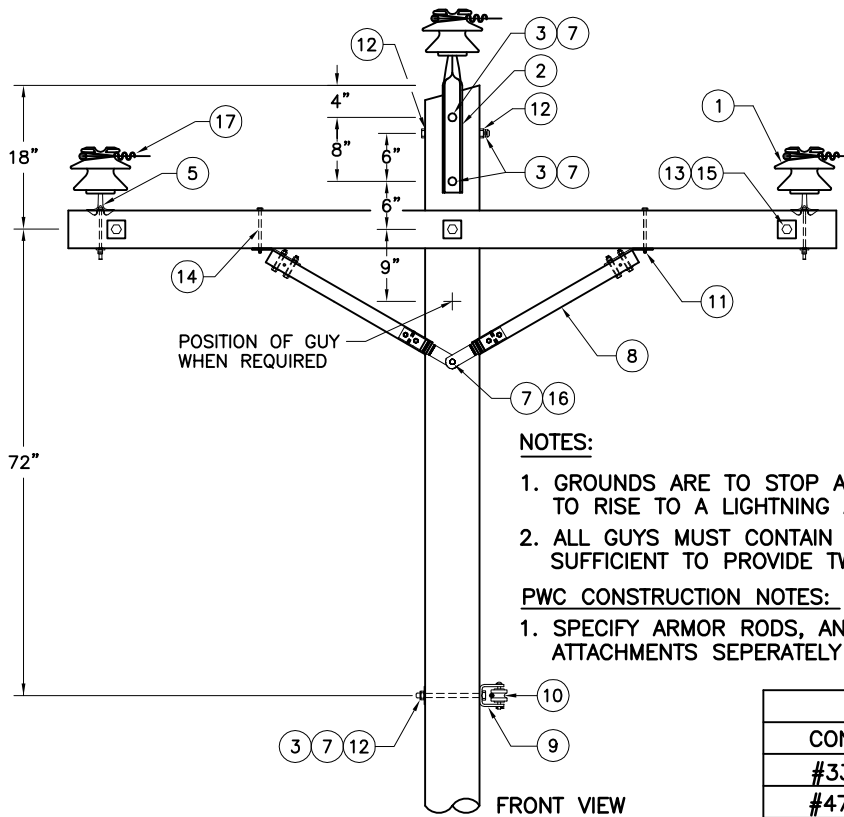
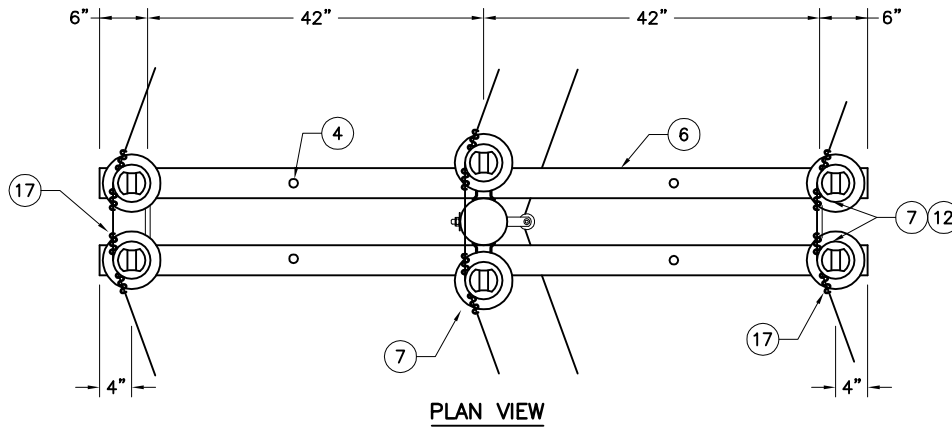
1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#2 ACSR	30°
#1/0 AAAC	25°

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.		
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6	6		
				2	1100572	PIN, POLE TOP, 20" X 1", OFFSET	2		
				3	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	4		
				4	1325005	BOLT, CARRIAGE, 3/8"X 4-1/2", w/NUT	4		
				5	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	4		
				6	1100010	CROSSARM, 8" WOOD	2		
				7	1325733	WASHER, DOUBLE COIL SPRING LOCK, 5/8"	14		
				8	1100530	BRACE, CROSSARM, WOOD, 38" X 18"	2		
				9	1230010	CLEVIS, INSULATED SECONDARY, DEADEND	1		
				10	1160130	INSULATOR, SPOOL, 53-2	1		
2	6/2020	WRW3	PWCOST	11	1325710	WASHER, FLAT, ROUND, 3/8"	4		
1	5/12/14	WRW3	PWCOST	12	1325760	WASHER, SQUARE, CURVED, 3"	2		
0	12/3/07	JLL	PWCOST	13	1325145	SCREW, LAG, 1/2" X 4"	2		
REVISED	BY	APPR		14	1325025	BOLT, DOUBLE ARMING, 5/8" X 20", w/NUT	3		
PWC REVISIONS				15	1325765	WASHER, SQUARE, FLAT, 5/8"	10		
3				16	1065010	TIE WIRE, #4 SOLID ALUMINUM	24		
2				CROSSARM CONSTRUCTION THREE PHASE, DOUBLE ARM, 25KV					
1	11/10/05	CADD GRAPHICS	OST						
0	2/1/05	CADD GRAPHICS	OST						
REVISED	BY	APPR.							
								SCALE 1/2"=1'-0"	DWG. VC2EC



NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

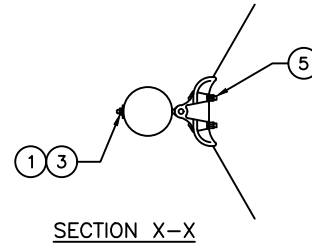
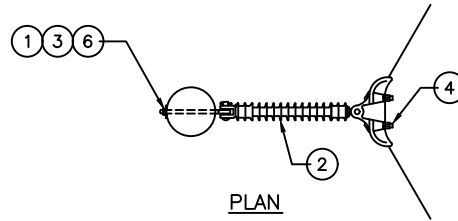
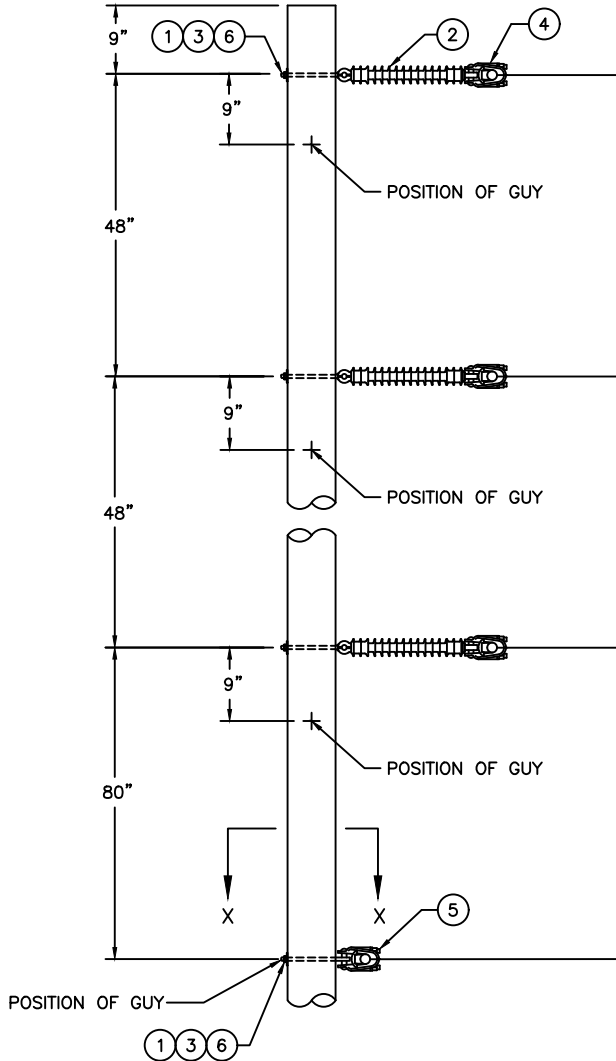
PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

PWC DESIGN LIMITS

CONDUCTOR	MAX ANGLE
#336 ACSR	22°
#477 AAC	20°

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6	6
				2	1100572	PIN, POLE TOP, 20" X 1", OFFSET	2
				3	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	4
				4	1325715	WASHER, FLAT, ROUND, 1/2"	4
				5	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	4
				6	1100010	CROSSARM, 8" WOOD	2
				7	1325733	WASHER, DOUBLE COIL SPRING LOCK, 5/8"	15
				8	1100532	BRACE, CROSSARM, WOOD, 60" X 30"	2
				9	1230010	CLEVIS, INSULATED SECONDARY, DEADEND	1
				10	1160130	INSULATOR, SPOOL, 53-2	1
				11	1325735	WASHER, SPLIT RING, LOCK, 1/2"	4
				12	1325760	WASHER, SQUARE, CURVED, 3"	2
2	6/2020	WRW3	WRW3	13	1325025	BOLT, DOUBLE ARMING, 5/8" X 20", w/NUT	3
1	5/12/14	WRW3	WRW3	14	1325155	BOLT, MACHINE, 1/2" X 6", w/NUT	4
0	12/3/07	JLL	PWCOST	15	1325765	WASHER, SQUARE, FLAT, 5/8"	10
REVISED	BY	APPR		16	1325020	BOLT, DOUBLE ARMING, 5/8" X 18", w/NUT	1
PWC REVISIONS				17	1065010	TIE WIRE, #4 SOLID ALUMINUM	24
3				CROSSARM CONSTRUCTION THREE PHASE LARGE CONDUCTOR, DOUBLE ARM, 25KV			
2							
1	11/10/05	CADD GRAPHICS	OST				
0	2/1/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
				 SCALE 1/2"=1'-0" DWG. VC2SEC			



PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#2 ACSR	30°-60°
#1/0 AAAC	30°-60°
#336 ACSR	22°-45°
#477 AAC	20°-45°

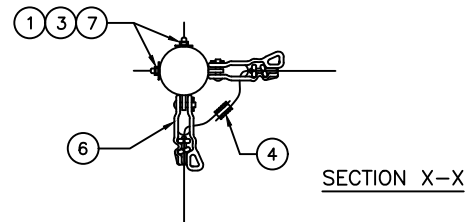
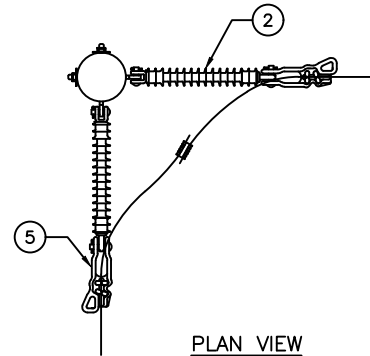
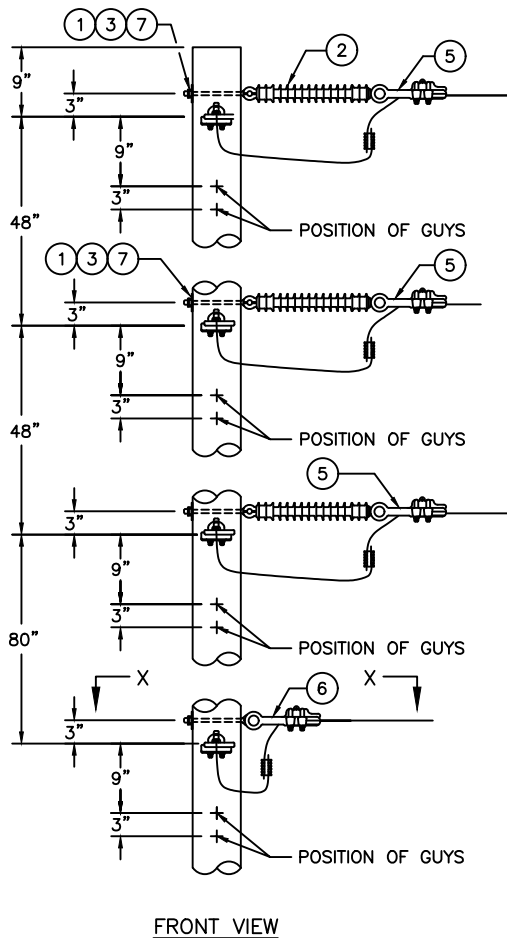
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTOR OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1325760	WASHER, SQUARE, CURVED, 3"	4
				2	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	3
				3	1325185	BOLT, MACHINE, 5/8" X 14"	4
				4	-	ANGLE ASSEMBLY, PRIMARY (AS REQUIRED)	3
				5	-	ANGLE ASSEMBLY, NEUTRAL (AS REQUIRED)	1
				6	1325733	WASHER, DOUBLE COIL SPRING LOCK, 5/8"	4
PWC REVISIONS							
3							
2							
1							
0	2/1/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
				VERTICAL CONSTRUCTION THREE PHASE SUSPENSION STRUCTURE, 25KV			
				SCALE 1/2"=1'-0"		DWG. VC3EC	



NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

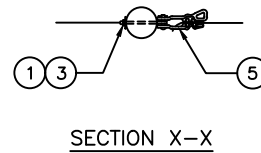
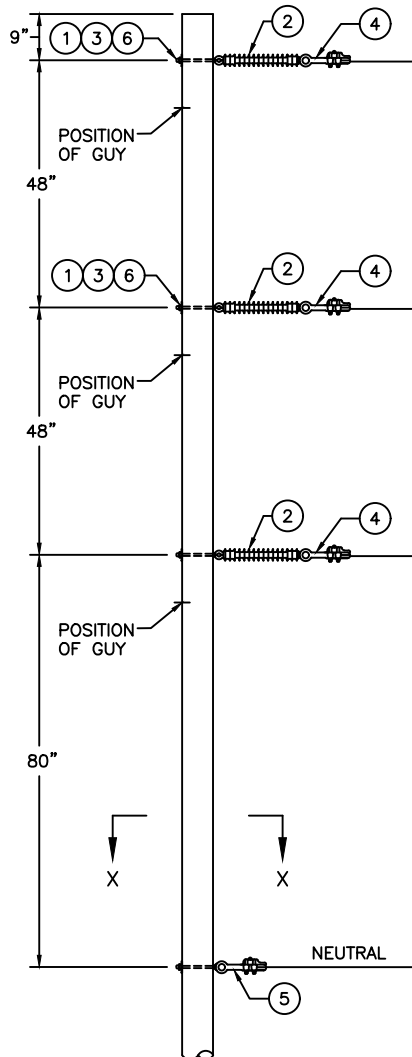
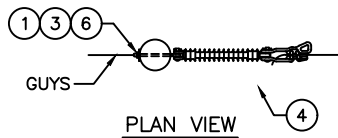
PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1325760	WASHER, SQAURE, CURVED, 3"	8
				2	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	6
2	06/05/23	D. KELTON	PWCOST	3	1325185	BOLT, MACHINE, 5/8" X 14"	8
1	6/2020	WRW3	PWCOST	4	1075245	CONNECTOR, PRL. GRVE., COMP., #1/7	4
0	12/3/07	JLL	PWCOST	5	-	CLAMP, AL. STRAIGHT D.E. (AS REQUIRED)	6
REVISED	BY	APPR		6	-	CLAMP, AL. STRAIGHT D.E. (AS REQUIRED)	2
				7	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	8
PWC REVISIONS							
3							
2							
1							
0	2/1/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					

**VERTICAL CONSTRUCTION, THREE
PHASE - CORNER STRUCTURE,
DOUBLE DEADEND, 25KV**



SCALE
1/2"=1'-0"

DWG.
VC4EC



NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

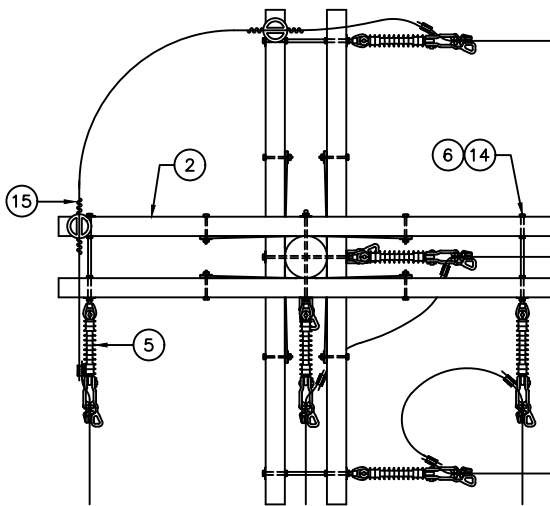
PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1325760	WASHER, SQAURE, CURVED, 3"	4
				2	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	3
				3	1325185	BOLT, MACHINE, 5/8" X 14"	4
				4	-	CLAMP, AL. STRAIGHT D.E. (AS REQUIRED)	3
				5	-	CLAMP, AL. STRAIGHT D.E. (AS REQUIRED)	1
				6	1325535	NUT, SQUARE, 5/8"	4
REVISED	BY	APPR					
PWC REVISIONS							
3							
2							
1							
0	12/14/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					

**VERTICAL CONSTRUCTION, THREE
PHASE, DEADEND, 25KV**

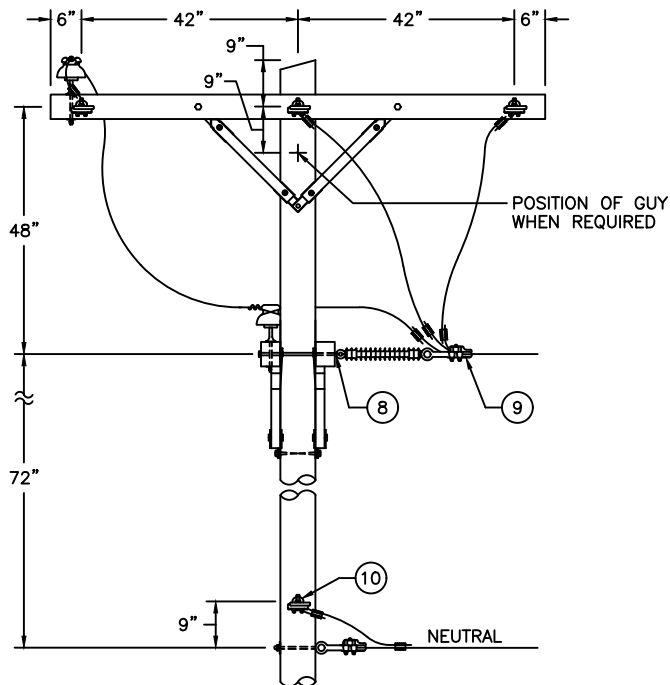


SCALE
1/2"=1'-6"

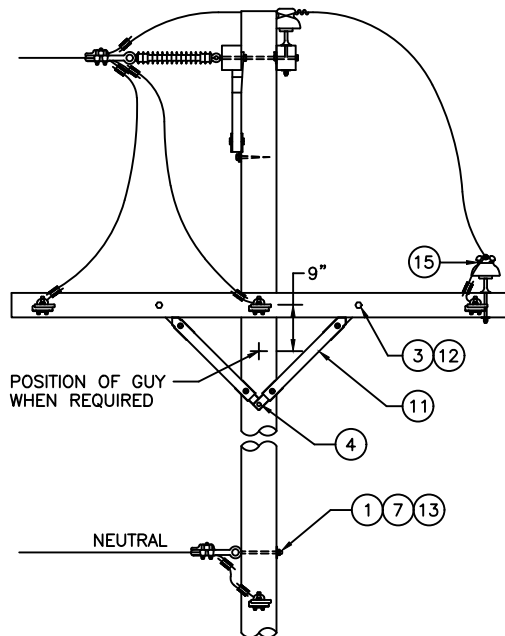
DWG.
VC5EC



PLAN VIEW



FRONT VIEW



SIDE VIEW

NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.
3. ADD PIN INSULATOR SUPPORT FOR JUMPER CONDUCTORS AS NEEDED.

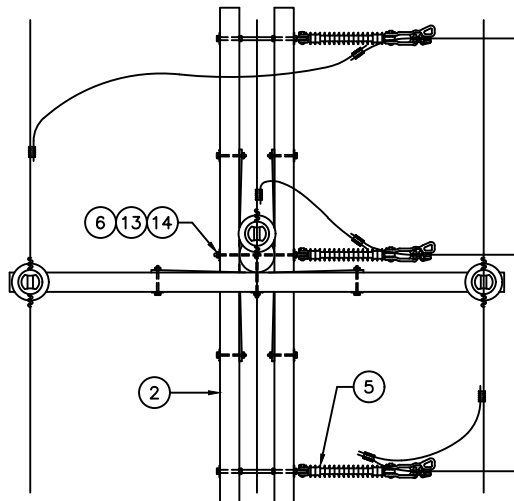
PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

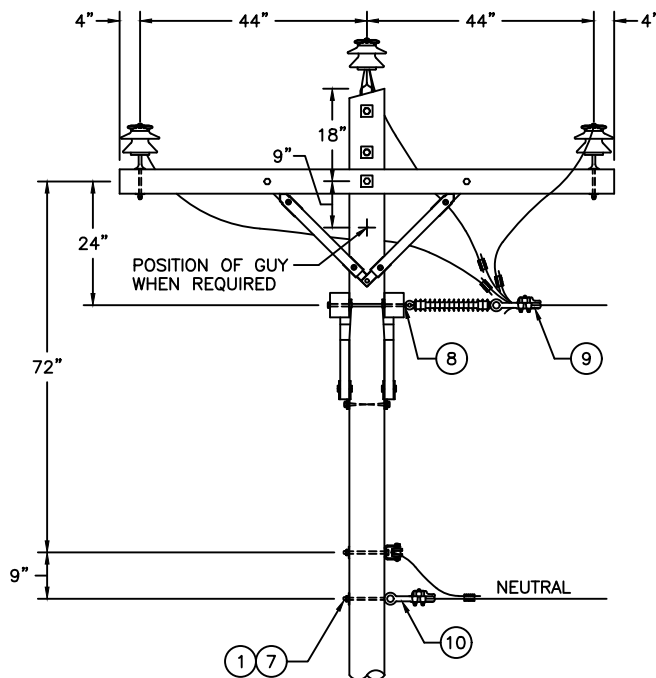
PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1325760	WASHER, SQUARE, CURVED, 3"	2
				2	1100010	CROSSARM, 8" WOOD	4
				3	1325005	BOLT, CARRAGE, 3/8" X 4-1/2" w/NUT	8
				4	1325145	SCREW, LAG, 1/2" X 4"	4
				5	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	6
				6	1325025	BOLT, DOUBLE ARMING, 5/8" X 20", w/NUT	6
				7	1325080	BOLT, OVAL, EYE, 5/8" X 12"	1
				8	1325530	NUT, EYE, GALV, 5/8"	6
				9	-	CLAMP, AL. STRAIGHT D.E. (AS REQUIRED)	6
2	06/05/23	D. KELTON	PWCOST	10	-	CLAMP, AL. STRAIGHT D.E. (AS REQUIRED)	2
1	6/2020	WRWS	PWCOST	11	1100530	BRACE, CROSSARM, WOOD, 38" X 18"	4
0	12/3/07	JLL	PWCOST	12	1325710	WASHER, FLAT, ROUND, 3/8"	8
REVISED	BY	APPR		13	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	22
PWC REVISIONS				14	1325765	WASHER, SQUARE, FLAT, 5/8"	20
3				15	1065010	TIE WIRE, #4 SOLID ALUMINUM	12
2				CROSSARM CONSTRUCTION, THREE-PHASE DOUBLE DEADEND, CORNER CONSTRUCTION, 25KV			
1							
0	2/26/07	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
				ELECTRICITIES			
				SCALE 1/2"=1'-6"		DWG. VC6-1EC	



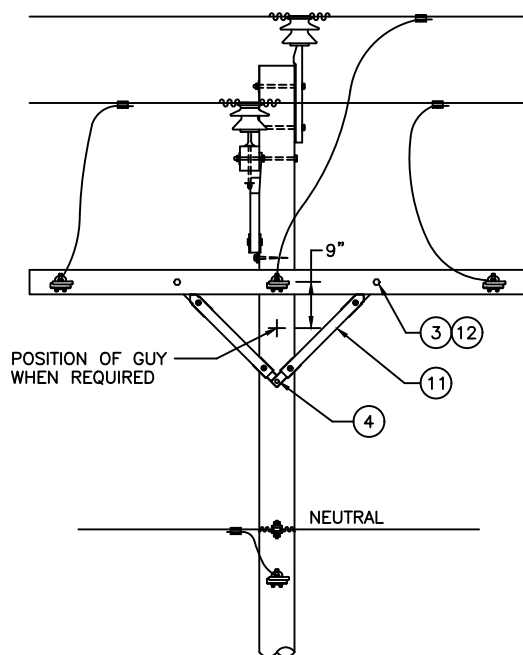
				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6	3
				2	1325190	BOLT, MACHINE, 5/8" X 16", w/NUT	1
				3	1325760	WASHER, SQUARE, CURVED, 3"	2
				4	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	3
				5	1100010	CROSSARM, 8" WOOD	1
				6	1325005	BOLT, CARRIAGE, 3/8" X 4 1/2", w/NUT	2
				7	1325145	SCREW, LAG, 1/2" X 4"	1
				8	1100530	BRACE, CROSSARM, WOOD, 38" X 18"	1
				9	1325740	WASHER, LOCK, 5/8"	3
				10	1230010	CLEVIS, INSULATED SECONDARY, DEADEND	1
1	6/2020	WRW3	PWCOST	11	1160130	INSULATOR, SPOOL, 53-2	1
0	12/3/07	JLL	PWCOST	12	1325710	WASHER, FLAT, ROUND, 3/8"	2
REVISED	BY	APPR		13	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	1
PWC REVISIONS				14	1325765	WASHER, SQUARE, FLAT, 5/8"	1
3				15	1065010	TIE WIRE, #4 SOLID ALUMINUM	24
2				CROSSARM CONSTRUCTION, THREE-PHASE SINGLE LINE ARM, 25KV			
1							
0	1/18/07	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
				CROSSARM CONSTRUCTION, THREE-PHASE SINGLE LINE ARM, 25KV			SCALE 1/2"=1'-6"
							DWG. VC6EC



PLAN VIEW



FRONT VIEW



SIDE VIEW

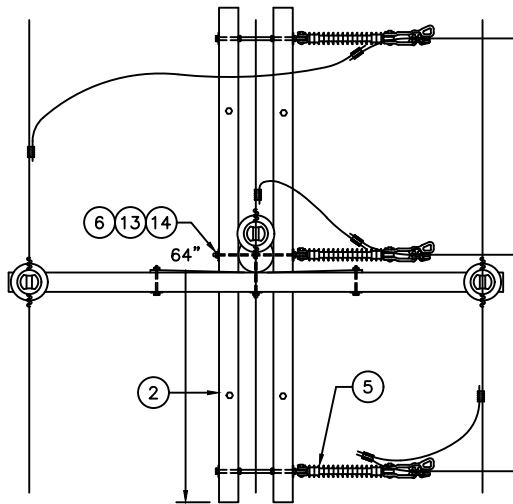
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.
3. ADD PIN INSULATOR SUPPORT FOR JUMPER CONDUCTORS AS NEEDED.

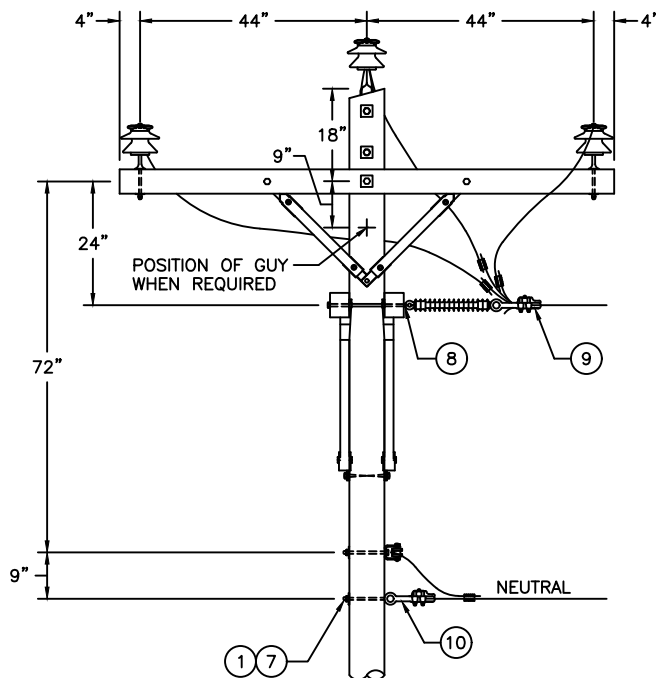
PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERARELY AS REQUIRED.

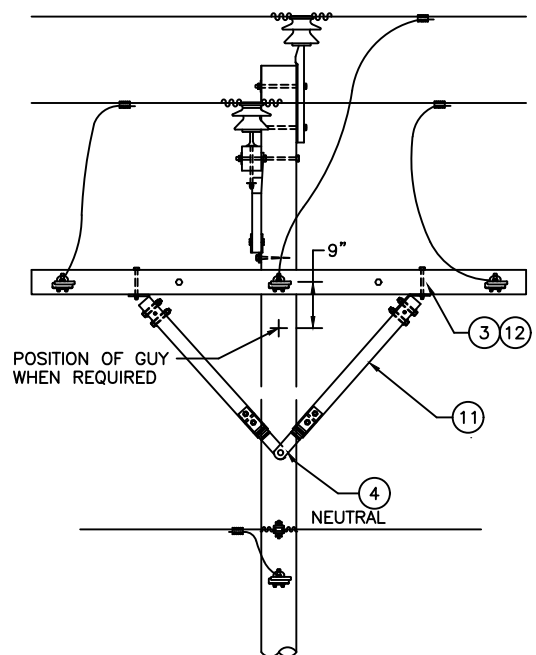
PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1325760	WASHER, SQUARE, CURVED, 3"	1
				2	1100010	CROSSARM, 8" WOOD	2
				3	1325005	BOLT, CARRAGE, 3/8" X 4-1/2" w/NUT	4
				4	1325145	SCREW, LAG, 1/2" X 4"	2
				5	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	3
				6	1325025	BOLT, DOUBLE ARMING, 5/8" X 20", w/NUT	3
				7	1325080	BOLT, OVAL, EYE, 5/8" X 12"	1
				8	1325530	NUT, EYE, GALV, 5/8"	3
2	06/05/23	D. KELTON	PWCOST	9	-	CLAMP, AL. STRAIGHT D.E. (AS REQUIRED)	3
1	6/2020	WRWS	PWCOST	10	-	CLAMP, AL. STRAIGHT D.E. (AS REQUIRED)	1
0	12/3/07	JLL	PWCOST	11	1100530	BRACE, CROSSARM, WOOD, 38" X 18"	2
REVISED	BY	APPR		12	1325710	WASHER, FLAT, ROUND, 3/8"	4
PWC REVISIONS				13	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	11
3				14	1325765	WASHER, SQUARE, FLAT, 5/8"	10
2				CROSSARM CONSTRUCTION THREE-PHASE TAP ARM, 25KV			 SCALE 1/2"=1'-6" DWG. VC7-2EC
1							
0	1/18/07	CADD GRAPHICS	OST				
REVISED	BY	APPR.					



PLAN VIEW



FRONT VIEW



SIDE VIEW

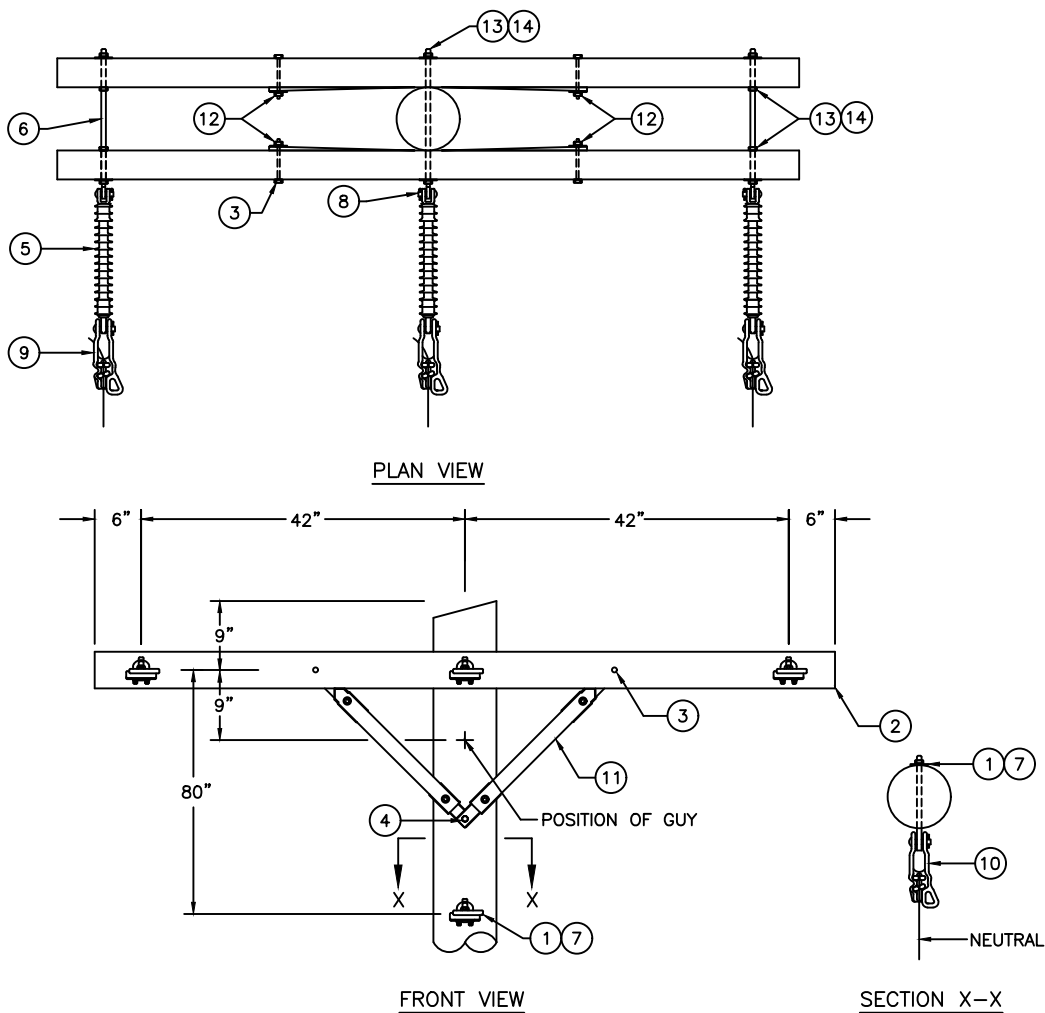
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.
3. ADD PIN INSULATOR SUPPORT FOR JUMPER CONDUCTORS AS NEEDED.

PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERARELY AS REQUIRED.

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1325760	WASHER, SQUARE, CURVED, 3"	1
				2	1100010	CROSSARM, 8" WOOD	2
				3	1325155	BOLT, MACHINE, 1/2" X 6" w/NUT	4
				4	1325145	SCREW, LAG, 1/2" X 4"	2
				5	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	3
				6	1325025	BOLT, DOUBLE ARMING, 5/8" X 20", w/NUT	3
				7	1325080	BOLT, OVAL, EYE, 5/8" X 12"	1
				8	1325530	NUT, EYE, GALV, 5/8"	3
2	06/05/23	D. KELTON	PWCOST	9	-	CLAMP, AL. STRAIGHT D.E. (AS REQUIRED)	3
1	6/2020	WRWS	PWCOST	10	-	CLAMP, AL. STRAIGHT D.E. (AS REQUIRED)	1
0	5/08/13	JLL	PWCOST	11	1100532	BRACE, CROSSARM, WOOD, 60" X 30"	2
REVISED	BY	APPR		12	1325735	WASHER, SPLIT-RING LOCK, 1/2"	4
PWC REVISIONS				13	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	11
3				14	1325765	WASHER, SQUARE, FLAT, 5/8"	10
2				CROSSARM CONSTRUCTION THREE-PHASE TAP ARM, LARGE CONDUCTOR 25KV			 SCALE 1/2"=1'-6" DWG. VC7-2S
1							
0	1/19/12	WJ	OST				
REVISED	BY	APPR.					



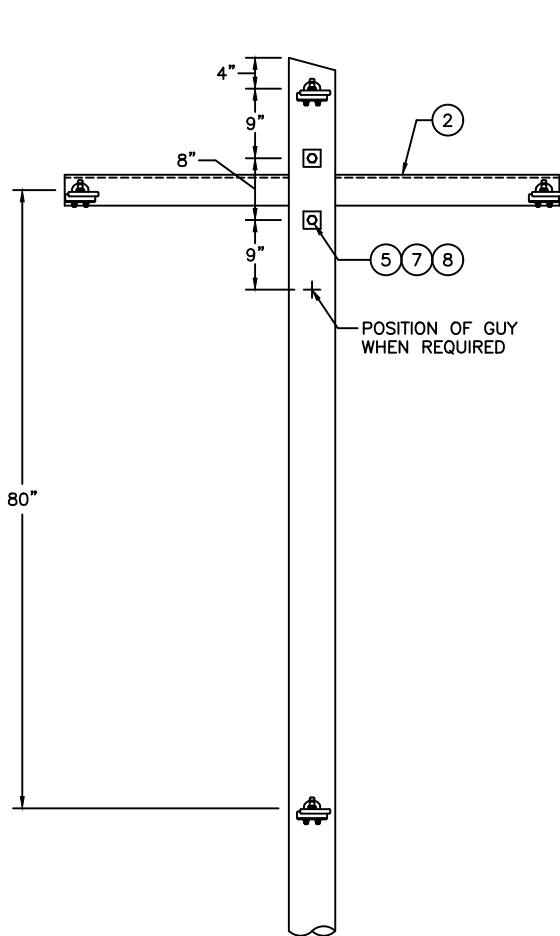
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

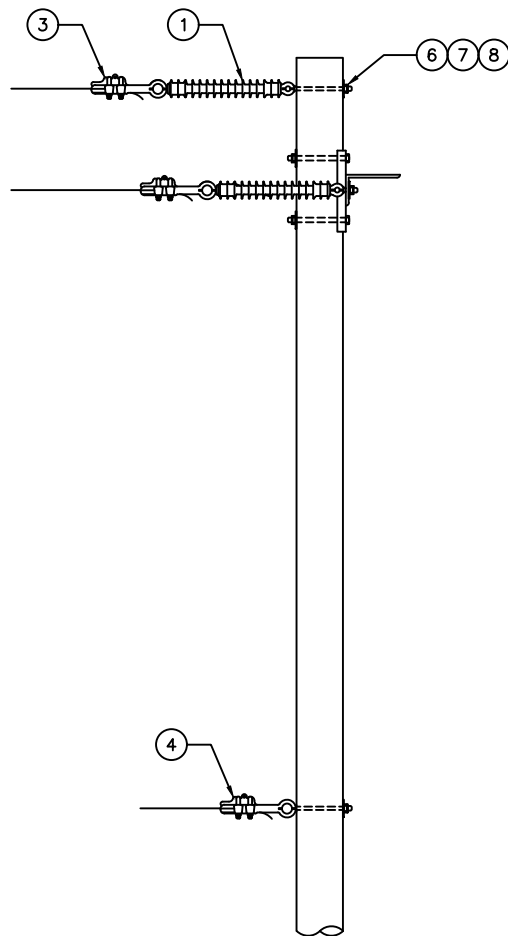
PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1325760	WASHER, SQUARE, CURVED, 3"	1
				2	1100010	CROSSARM, 8" WOOD	2
				3	1325005	BOLT, CARRAGE, 3/8" X 4-1/2" w/NUT	4
				4	1325145	SCREW, LAG, 1/2" X 4"	2
				5	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	3
				6	1325025	BOLT, DOUBLE ARMING, 5/8" X 20", w/NUT	3
				7	1325080	BOLT, OVAL, EYE, 5/8" X 12"	1
				8	1325530	NUT, EYE, GALV, 5/8"	3
2	06/05/23	D. KELTON	PWCOST	9	-	CLAMP, AL. STRAIGHT D.E. (AS REQUIRED)	3
1	6/2020	WRWS	PWCOST	10	-	CLAMP, AL. STRAIGHT D.E. (AS REQUIRED)	1
0	12/3/07	JLL	PWCOST	11	1100530	BRACE, CROSSARM, WOOD, 38" X 18"	2
REVISED	BY	APPR		12	1325710	WASHER, FLAT, ROUND, 3/8"	4
PWC REVISIONS				13	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	11
3				14	1325765	WASHER, SQUARE, FLAT, 5/8"	10
2				CROSSARM CONSTRUCTION, THREE PHASE, DEADEND, 25KV			 SCALE 1/2"=1'-0"
1							
0	2/1/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
							DWG. VC7EC



FRONT VIEW



SIDE VIEW

NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

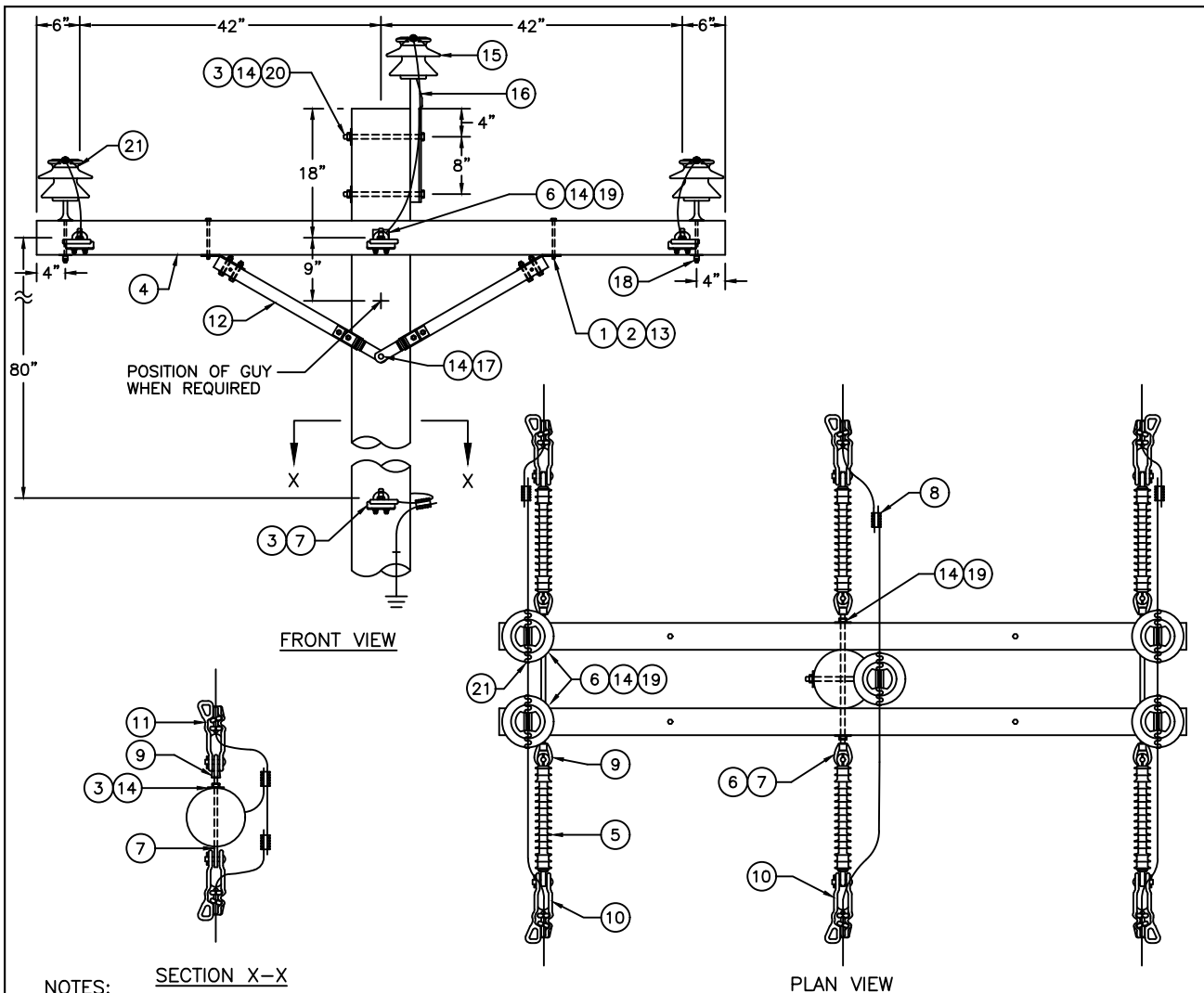
PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	3
				2	1100023	CROSSARM, 60-INCH, STEEL	1
				3	-	CLAMP, AL. STRAIGHT D.E. (AS REQUIRED)	3
				4	-	CLAMP, AL. STRAIGHT D.E. (AS REQUIRED)	1
2	06/05/23	D. KELTON	PWCOST	5	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	2
1	6/2020	WRWS	PWCOST	6	1325080	BOLT, OVAL EYE, 5/8" X 12", w/NUT	4
0	12/3/07	JLL	PWCOST	7	1325760	WASHER, SQUARE, CURVED, 3"	3
REVISED	BY	APPR		8	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	6
PWC REVISIONS							
3							
2							
1							
0	2/10/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					

STEEL ARM THREE PHASE DEADEND, 25KV



SCALE
1/2"=1'-0"

DWG.
VC7SEC



NOTES: SECTION X-X

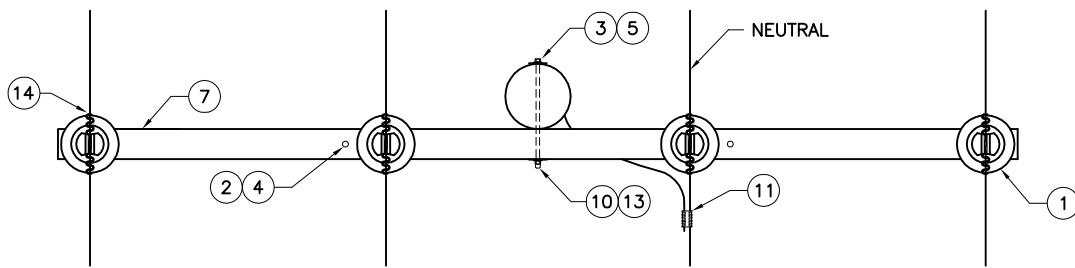
1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.

PWC CONSTRUCTION NOTES:

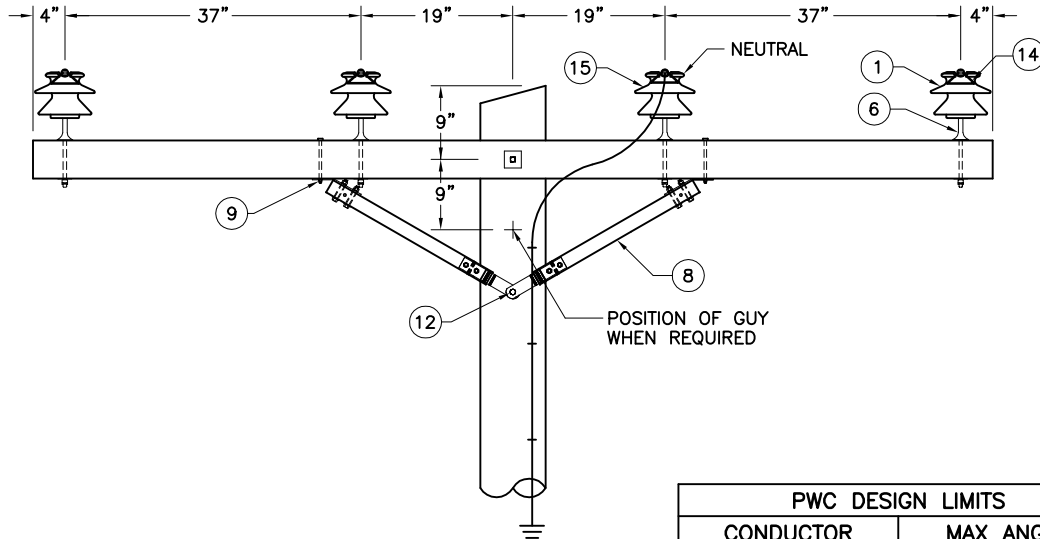
1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1325155	BOLT, MACHINE, 1/2" X 6", w/NUT	4
				2	1325735	WASHER, SPLIT RING, LOCK, 1/2"	4
				3	1325760	WASHER, SQUARE, CURVED, 3"	4
				4	1100010	CROSSARM, 8" WOOD	2
				5	1160026	INSULATOR, 35 KV DEAD-END, SILICONE POLYMER	6
				6	1325025	BOLT, DOUBLE ARMING, 5/8" X 20", w/NUT	3
				7	1325085	BOLT, OVAL EYE, 5/8" X 14"	1
				8	1075245	CONNECTOR PRL. GRVE. COMP., #1/7	1
				9	1325535	NUT, SQUARE, 5/8"	6
				10	-	CLAMP, AL. STRAIGHT D.E. (AS REQUIRED)	6
				11	-	CLAMP, AL. STRAIGHT D.E. (AS REQUIRED)	2
				12	1100532	BRACE, CROSSARM, WOOD, 60" X 30"	4
				13	1325715	WASHER, FLAT, ROUND, 1/2"	4
				14	1325740	WASHER, LOCK, 5/8"	15
				15	1160065	INSULATOR, PIN-TYPE, ANSI 55-6	5
2	06/05/23	D. KELTON	PWCOST	16	1100568	PIN, POLE TOP, 20"	1
1	6/2020	WRWS	PWCOST	17	1325020	BOLT, DOUBLE ARMING, 5/8" X 18", w/NUT	1
0	12/3/07	JLL	PWCOST	18	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	4
REVISED	BY	APPR		19	1325765	WASHER, SQUARE, FLAT, 5/8"	10
PWC REVISIONS				20	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	2
3				21	1065010	TIE WIRE, #4 SOLID ALUMINUM	24
2				CROSSARM CONSTRUCTION, THREE PHASE, LARGE CONDUCTOR DOUBLE DEADEND, 25KV			
1							
0	11/10/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
				SCALE 1/2"=1'-0" DWG. VC8-1SEC			

VC8-1SSTL



PLAN VIEW



FRONT VIEW

PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#2 ACSR	15°
#1/0 AAAC	12°

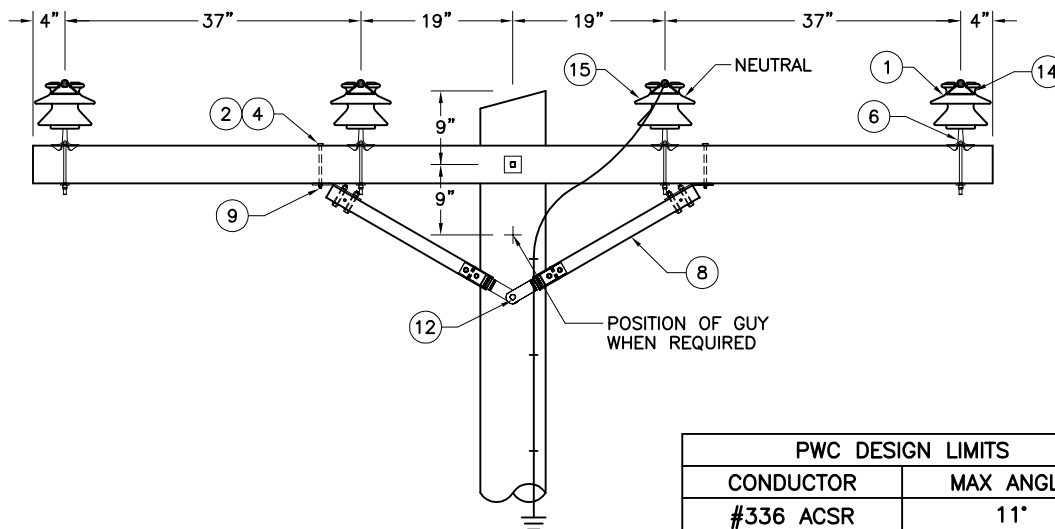
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.
3. THE NEUTRAL INSULATOR IS TO BE DIFFERENT IN SIZE OR COLOR FROM THE PRIMARY INSULATORS PER NESC 220B2B.

PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

PWC				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6, 25 KV	3
				2	1325155	BOLT, MACHINE, 1/2" X 6", w/NUT	2
				3	1325190	BOLT, MACHINE, GALV., 5/8" X 16", w/NUT	1
				4	1325735	WASHER, SPLIT RING, LOCK, 1/2"	2
				5	1325760	WASHER, SQUARE, CURVED, 3"	1
				6	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	4
				7	1100015	CROSSARM, 10" WOOD	1
				8	1100532	BRACE, CROSSARM, WOOD, 60" X 30"	2
3	6/2020	WRW3	PWCOST	9	1325715	WASHER, FLAT, ROUND, 1/2"	2
2	09/21/09	JLL	PWCOST	10	1325740	WASHER, LOCK, 5/8"	2
1	08/12/08	JLL	PWCOST	11	1075245	CONNECTOR, PRL. GRVE. COMP., #1/7	1
0	12/3/07	JLL	PWCOST	12	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	1
				13	1325765	WASHER, SQUARE, FLAT, 5/8"	1
				14	1065010	TIE WIRE, #4 SOLID ALUMINUM	32
				15	1160040	INSULATOR, PIN-TYPE, ANSI 55-4, 1" GROOVE, 15 KV	1
PWC REVISIONS				CROSSARM CONSTRUCTION, THREE PHASE NEUTRAL ON SINGLE ARM, 25KV			
3							
2							
1							
0	2/1/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
						SCALE 1/2"=1'-0"	DWG. VC9-1EC

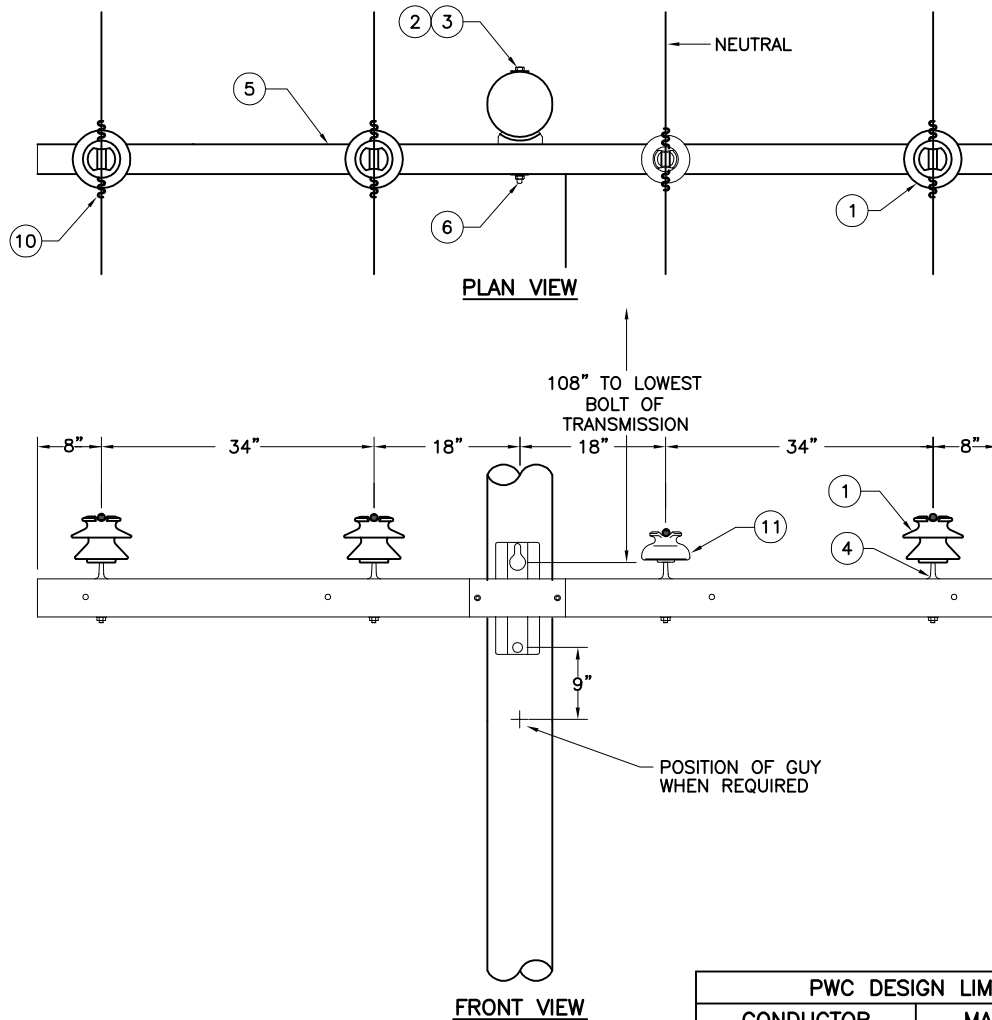


PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#336 ACSR	11°
#477 AAC	10°

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.
3. THE NEUTRAL INSULATOR IS TO BE DIFFERENT IN SIZE OR COLOR FROM THE PRIMARY INSULATORS PER NESC 220B2B.

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6, 25 KV	3
				2	1325155	BOLT, MACHINE, 1/2" X 6", w/NUT	2
				3	1325190	BOLT, MACHINE, GALV., 5/8" X 16", w/NUT	1
				4	1325715	WASHER, FLAT, ROUND, 1/2"	2
				5	1325760	WASHER, SQUARE, CURVED, 3"	1
				6	1100562	PIN, CROSSARM, SADDLE, 1" X 6"	4
				7	1100015	CROSSARM, 10" WOOD	1
				8	1100532	BRACE, CROSSARM, WOOD, 60" X 30"	2
3	6/2020	WRW3	PWCOST	9	1325735	WASHER, SPLIT RING, LOCK, 1/2"	2
2	09/21/09	JLL	PWCOST	10	1325740	WASHER, LOCK, 5/8"	2
1	08/12/08	JLL	PWCOST	11	1075245	CONNECTOR, PRL. GRVE. COMP., #1/7	1
0	12/3/07	JLL	PWCOST	12	1325180	BOLT, MACHINE, 5/8" X 12", w/NUT	1
REVISED	BY	APPR		13	1325765	WASHER, SQUARE, FLAT, 5/8"	1
PWC REVISIONS				14	1065010	TIE WIRE, #4 SOLID ALUMINUM	32
3				15	1160040	INSULATOR, PIN-TYPE, ANSI 55-4, 1" GROOVE, 15 KV	1
2				CROSSARM CONSTRUCTION THREE PHASE, LARGE CONDUCTOR NEUTRAL ON SINGLE ARM 25KV			
1							
0	2/1/05	CADD GRAPHICS	OST				
REVISED	BY	APPR.					
				SCALE 1/2"=1'-0"			DWG. VC9-1SEC



PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#336 ACSR	11°
#477 AAC	10°

NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.
3. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.
4. 10' FIBERGLASS ARM IS STANDARD CONSTRUCTION FOR DISTRIBUTION UNDERBUILD ON STEEL POLES.

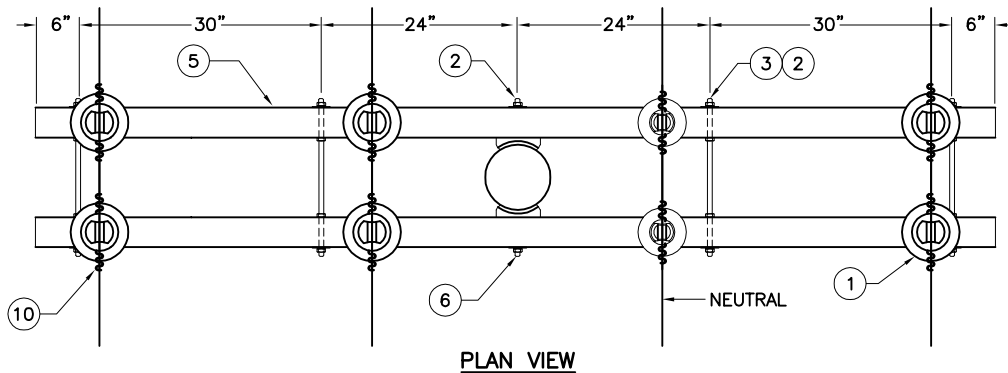
PWC REVISIONS				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6	3
				2	1325190	BOLT, MACHINE, GALV., 5/8" X 16" w/NUT	2
				3	1325760	WASHER, SQUARE, CURVED, 3"	3
				4	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	4
				5	1100017	CROSSARM, 10 FOOT, FBGL. REIN. COMPOSITE	1
				6	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	3
16	2/2020	WRW3	PWCOST	10	1065010	TIE WIRE, #4 SOLID ALUMINUM	24
0	2/12	JLL	PWCOST	11	1160040	INSULATOR, 1" GROOVE, 15KV	1
	REVISED	BY	APPR.				
3							
2							
1							
0							
	REVISED	BY	APPR.				

**UNDERBUILD FBG. CROSSARM CONSTRUCTION
THREE PHASE, LARGE CONDUCTOR
CENTER PHASE AND NEUTRAL ON ARM, 25KV**

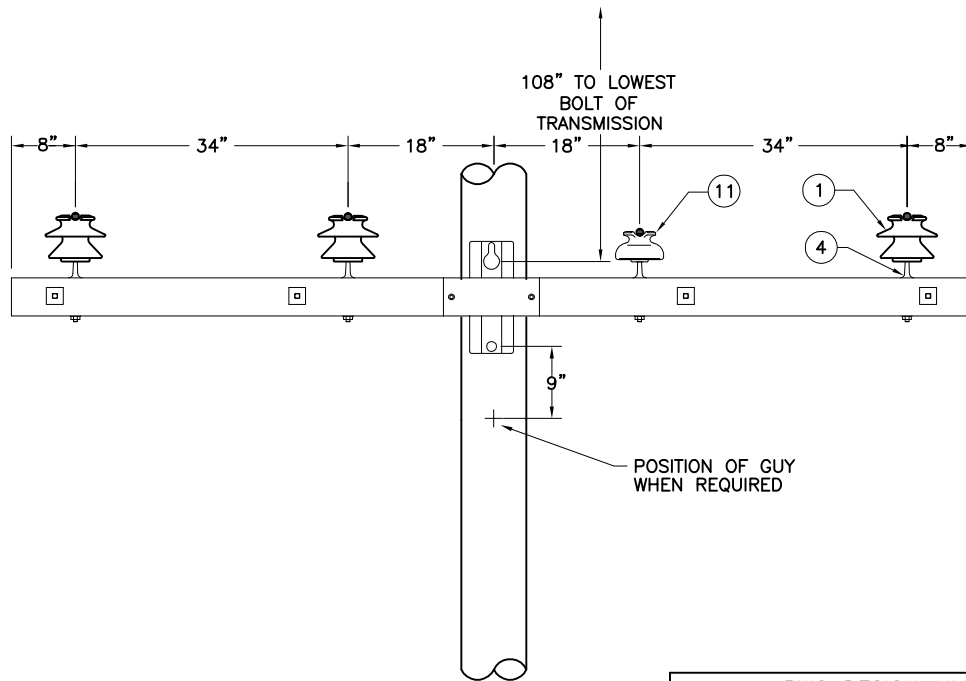
FWC

SCALE
1/2"=1'-0"

DWG.
VC9-1SFBG



PLAN VIEW



FRONT VIEW

PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#336 ACSR	11°
#477 AAC	10°

NOTES:

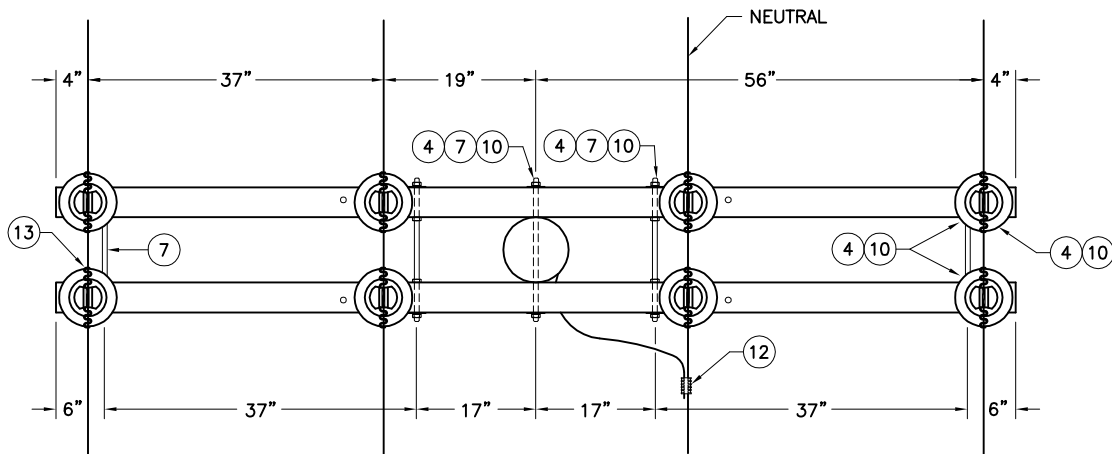
1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.
3. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.
4. 10' FIBERGLASS ARM IS STANDARD CONSTRUCTION FOR DISTRIBUTION UNDERBUILD ON STEEL POLES.

PWC REVISIONS				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
				1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6	6
				2	1325025	BOLT, DOUBLE ARMING, 5/8" X 20" w/NUT	5
				3	1325765	WASHER, SQUARE, FLAT, 5/8"	16
				4	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	8
				5	1100017	CROSSARM, 10 FOOT, FBGL. REIN. COMPOSITE	2
				6	1325733	WASHER, DOUBLE COIL, SPRING LOCK, 5/8"	6
				10	1065010	TIE WIRE, #4 SOLID ALUMINUM	48
				11	1160040	INSULATOR, 1" GROOVE, 15KV	2
0	6/20	WRW3	PWCOST				
0	2/12	JLL	PWCOST				
REVISED	BY	APPR.					
3							
2							
1							
0							
REVISED	BY	APPR.					

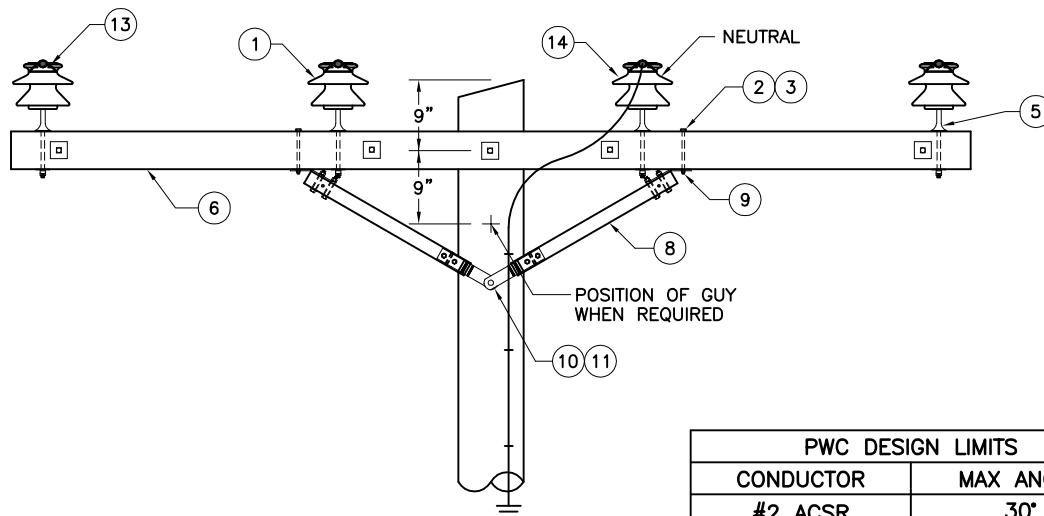
**UNDERBUILD FBG. DOUBLE CROSSARM
CONSTRUCTION
THREE PHASE, LARGE CONDUCTOR
CENTER PHASE & NEUTRAL ON ARM, 25KV**



SCALE 1/2"=1'-0" DWG. VC9-2SFBG



PLAN VIEW



FRONT VIEW

PWC DESIGN LIMITS	
CONDUCTOR	MAX ANGLE
#2 ACSR	30°
#1/0 AAAC	25°

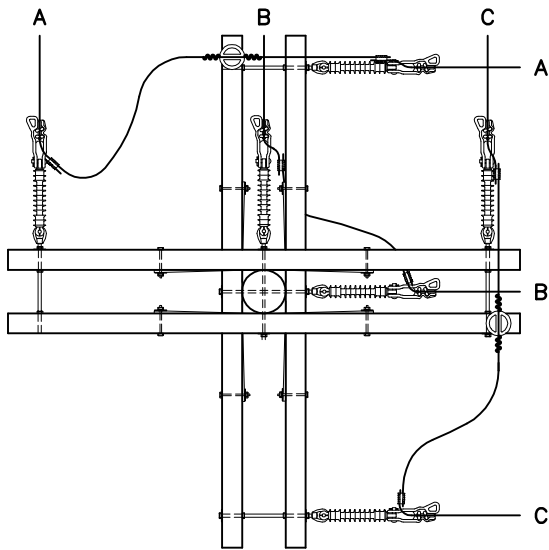
NOTES:

1. GROUNDS ARE TO STOP AT THE NEUTRAL POSITION EXCEPT TO RISE TO A LIGHTNING ARRESTER OR TRANSFORMER.
2. ALL GUYS MUST CONTAIN A GUY STRAIN INSULATOR SUFFICIENT TO PROVIDE TWO FEET OF AIR CLEARANCE.
3. THE NEUTRAL INSULATOR IS TO BE DIFFERENT IN SIZE OR COLOR FROM THE PRIMARY INSULATORS PER NESC 220B2B.

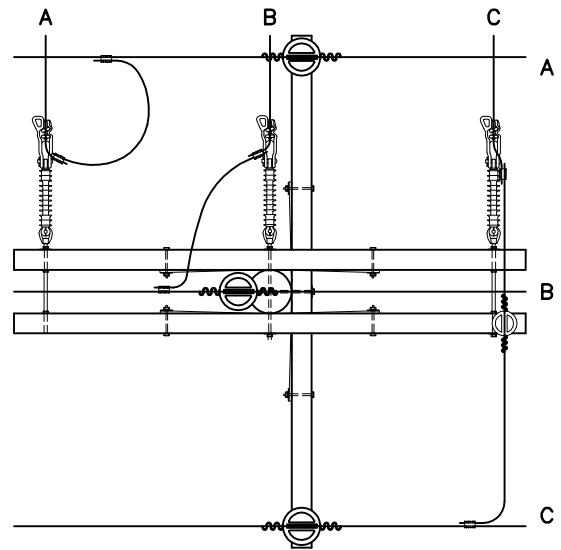
PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.

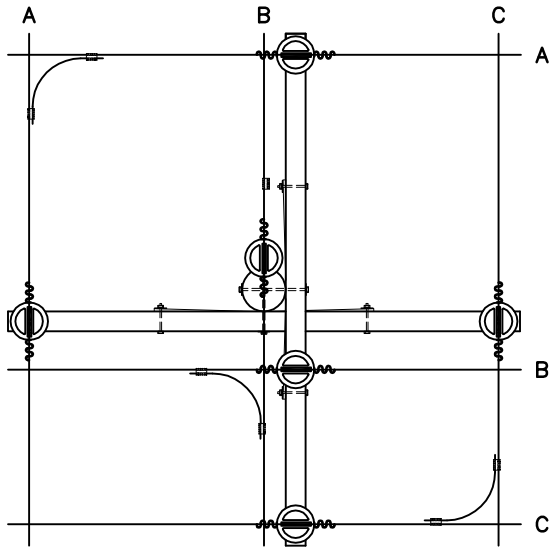
PWC REVISIONS				ITEM	PWC STOCK #	PWC MATERIAL DESCRIPTION	QTY.
3	6/2020	WRW3	PWCOST	1	1160065	INSULATOR, PIN-TYPE, ANSI 55-6, 25 KV	6
2	09/21/09	JLL	PWCOST	2	1325155	BOLT, MACHINE, 1/2" X 6", w/NUT	4
1	08/12/08	JLL	PWCOST	3	1325735	WASHER, SPLIT RING, LOCK, 1/2"	4
0	12/3/07	JLL	PWCOST	4	1325765	WASHER, SQUARE, FLAT, 5/8"	18
REVISED	BY	APPR		5	1100562	PIN, CROSSARM, 1", LONG SHANK w/NUT	8
3				6	1100015	CROSSARM, 10" WOOD	2
2				7	1325025	BOLT, DOUBLE ARMING, 5/8" X 20", w/NUT	5
1				8	1100532	BRACE, CROSSARM, WOOD, 60" X 30"	2
0				9	1325715	WASHER, FLAT, ROUND, 1/2"	4
REVISED	BY	APPR		10	1325740	WASHER, LOCK, 5/8"	19
3				11	1325020	BOLT, DOUBLE ARMING, 5/8" X 18", w/NUT	1
2				12	1075245	CONNECTOR, PRL. GRVE. COMP., #1/7	1
1	11/10/05	CADD GRAPHICS	OST	13	1065010	TIE WIRE, #4 SOLID ALUMINUM	32
0	2/1/05	CADD GRAPHICS	OST	14	1160040	INSULATOR, PIN-TYPE, ANSI 55-4, 1" GROOVE, 15 KV	2
REVISED	BY	APPR		CROSSARM CONSTRUCTION, THREE PHASE, NEUTRAL ON DOUBLE ARMS, 25KV			
				ELECTRICITIES			
				SCALE 1/2"=1'-0"			DWG. VC9EC



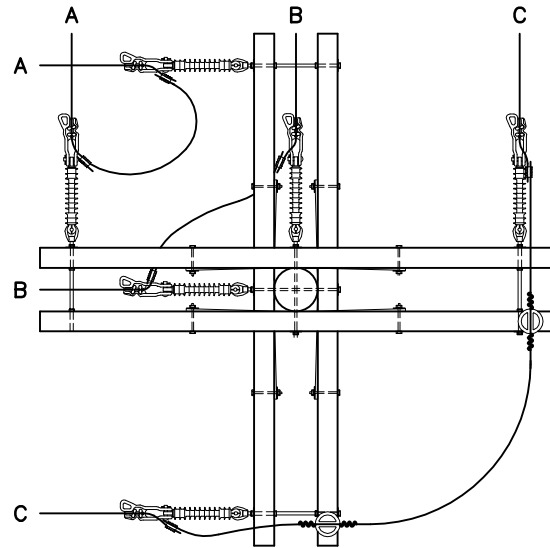
PLAN VIEW



PLAN VIEW



PLAN VIEW



PLAN VIEW

NOTES:

1. IF ONLY TWO PHASES ARE INSTALLED, PLACE CONDUCTORS IN END PIN POSITIONS.
2. SELECT APPROPRIATE INSULATORS FOR SYSTEM VOLTAGE USED AND CRITICAL FLASHOVER DESIRED.

PWC CONSTRUCTION NOTES:

1. SPECIFY ARMOR RODS, AND/OR CONDUCTOR DEADEND ATTACHMENTS SEPERATELY AS REQUIRED.



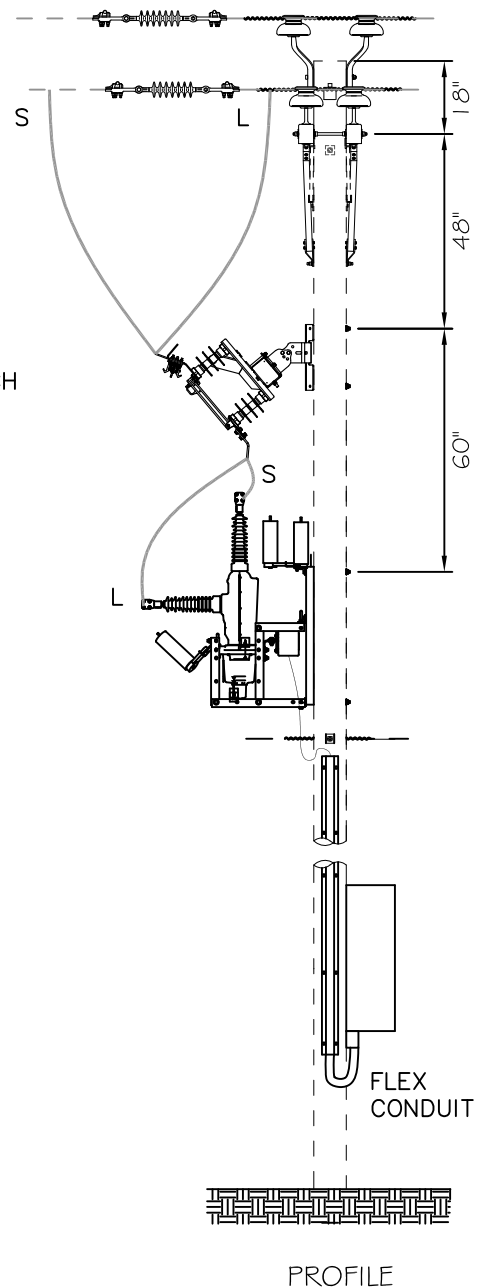
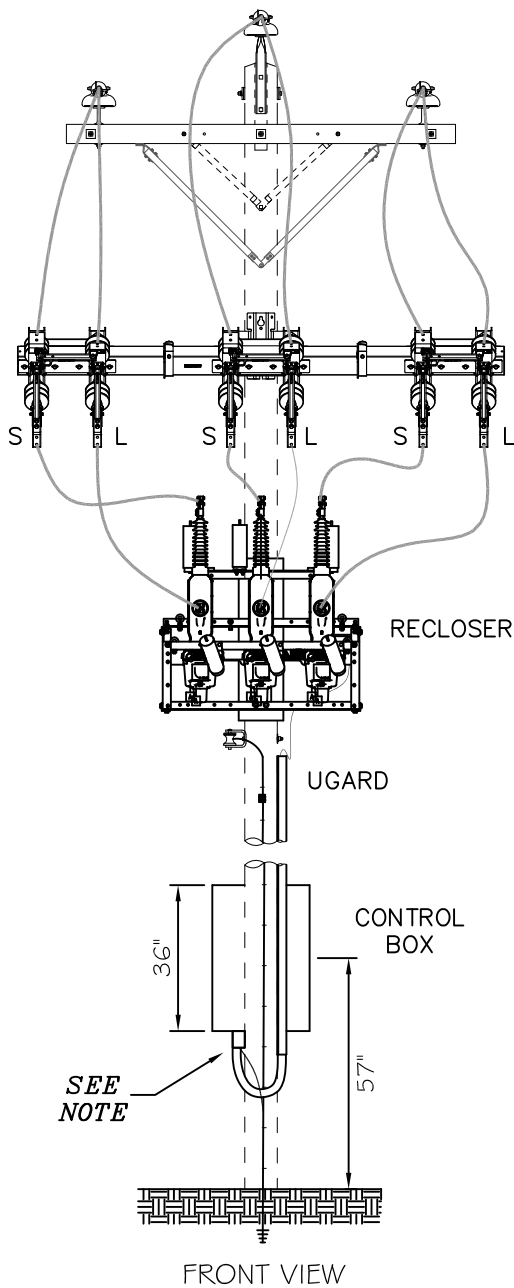
1	6/2020	WFW3	PWCOST
0	12/3/07	JLL	PWCOST
REVISED	BY	APPR	
PWC REVISIONS			
3			
2			
1			
0	1/18/07	CADD GRAPHICS	OST
REVISED	BY	APPR.	

**THREE-PHASE
CORNER CONSTRUCTION DISTRIBUTION,
25KV**



SCALE
1/2"=1'-0"

DWG.
V6-1EC



*NOTE;
ALL CABLE, FIBER, CONTROL, POWER
SHALL BE ENCLOSED IN EITHER
U.GUARD OR LIQUID TIGHT CONDUIT.

CONTROL CABINET TO BE BONDED TO
POLE GROUND.

FWC

PUBLIC WORKS COMMISSION
OF THE CITY OF FAYETTEVILLE, N.C.



DRAWN BY: S. COLLINS

SCALE: NONE

CHECKED BY:

APPROVED BY:

REVISION DATE : SEPTEMBER 9, 2022

600 AMP ELECTRONIC
CONTROLLED THREE-PHASE
RECLOSER WITH 600 AMP
HORIZONTAL BYPASS SWITCH

STRUCTURE ID.

REC600HS
REC600HF
VREC600HS
VREC600HF

[illegible]

CONDUCTOR ATTACHMENTS, DOWN GUYS, AND ANCHORS MUST BE SPECIFIED SEPARATELY.



STRUCTURE ID.

REVISION DATE : SEPTEMBER 9, 2022

MATERIAL LIST

[illegible]

NOTES:

CONDUCTOR ATTACHMENTS, DOWN GUYS, AND ANCHORS MUST BE SPECIFIED SEPARATELY.



PUBLIC WORKS COMMISSION
OF THE CITY OF FAYETTEVILLE, N.C.



15 KV- 600 AMP ELECTRONIC
(FLISR) CONTROL THREE-PHASE
RECLOSER WITH 600 AMP
HORIZONTAL BYPASS SWITCH

STRUCTURE ID.

REC600HF

DRAWN BY: S. COLLINS

SCALE: NONE

CHECKED BY:

APPROVED BY:

REVISION DATE : SEPTEMBER 9, 2022

[illegible]

CONDUCTOR ATTACHMENTS, DOWN GUYS, AND ANCHORS MUST BE SPECIFIED SEPARATELY.



STRUCTURE ID.

REVISION DATE : SEPTEMBER 9, 2022

MATERIAL LIST

[illegible]

NOTES:

CONDUCTOR ATTACHMENTS, DOWN GUYS, AND ANCHORS MUST BE SPECIFIED SEPARATELY.



PUBLIC WORKS COMMISSION
OF THE CITY OF FAYETTEVILLE, N.C.



25 KV- 600 AMP ELECTRONIC
(FLISR) CONTROLLED THREE-PHASE
RECLOSER WITH 600 AMP
HORIZONTAL BYPASS SWITCH

STRUCTURE ID.

VREC600HF

DRAWN BY: S. COLLINS

SCALE: NONE

CHECKED BY:

APPROVED BY:

REVISION DATE : SEPTEMBER 9, 2022