

C:\LANL\Engineering\Bumblers\Eng. Manual [LEU]2. Approved\ST-G4010-08E2.dwg, 10/31/02, 11:39 083508

	8	7	6	5	4	3	2	1
H	BILL OF MATERIALS							
	ITEM	DESCRIPTION	QTY	MFR. CATALOG No.				
	①	POLES: _____ FL CLASS _____ POLES: _____ FL CLASS _____	2					
	⑩	CROSS ARM ASSEMBLY: MK TYPE GG-SIDE, 3-3/4" X 9 1/2" X 11'-6" W/MOUNTING HARDWARE	2	HUGHES C2561.3A				
	⑬	SHIELD WIRE DAMPER	4	ALCOA #1701-3				
	⑮	STEEL CABLE: 1/2", 7 STRAND E.H.S.	AS REQ'D	NATIONAL STRAND PRODUCTS; HOUSTON, TEXAS				
G	⑯	PARALLEL GROOVE CLAMPS: FOR 397.5 KCM ACSR	3	BURNDY CP34A34A				
	⑰	CROSSARM ASSEMBLY: MK TYPE GG-CENTER, 3-3/4" X 9 1/2" X 14'-6" WITH MOUNTING HARDWARE	1	HUGHES #C2561.3B				
	⑱	SHIELD WIRE ANGLE: WITH MOUNTING HARDWARE (15'-6")	1	HUGHES #C2561.1D				
	⑲	CONNECTING LINK	16 PR	HUGHES #3152				
	⑳	GUY ROLLER	4	HUGHES #28082				
	㉑	MACHINE BOLT: 7/8" x 3" WITH #MF80 LOCKNUT	4	HUGHES #B83-2				
F	㉒	GUY GRIP: 1/2", 7 STRAND E.H.S.	24	PREFORMED #BC-2115				
	㉔	SHIELD WIRE DEAD END STRAIN CLAMP: FOR 3/8", 7 STRAND STEEL CABLE	4	HUBBELL/ANDERSON #SWDE-55-N				
	㉕	Y-BALL	8	HUBBELL/ANDERSON #YBC-3D				
	㉘	SUSPENSION INSULATOR: 15,000# TEST WITH BALL & SOCKET CLASS 52-5	14	LAPP #596DG				
	㉚	DEAD END STRAIN CLAMP: FOR 397.5 KCM 26/7 ACSR OR 477 KCM 26/7 ACSR WITH SOCKET	6	HUBBELL/ANDERSON #SD-88-S W/#SA-07				
E	㉛	ARMOR ROD: FOR 397.5 KCM 26/7 ACSR	2	PREFORMED #AR-0132				
	㉝	CONDUCTOR DAMPER	6	ALCOA #1705-7				
	㉞	SUSPENSION CLAMP: WITH SOCKET EYE FOR 397.5 KCM 26/7 ACSR OR 477 KCM 26/7 ACSR	2	HUBBELL/ANDERSON #HAS-11B-S				
	㉟	GUY STRAIN INSULATOR: FIBERGLASS, 6'-6" WITH ROLLER & 2 PINS	8	MACLEAN POWER SYSTEMS #GCC30-76R				
	㊱	VEE BRACE: MK TYPE GG, 8'-1" C.C. HOLES WITH MOUNTING HARDWARE	1 SET	HUGHES #2025				
D	㊳	ANCHOR ROD: 1 1/4" X 10' WITH INSULATING WASHER, HEAVY CAST STEEL NUT & STEEL WASHER COATED W/MASTIC ASPHALT & COVERED BY A PLASTIC PIPE	12	NATIONAL FOUNDRY #12510				
	㊵	KNEE BRACE: MK TYPE GG, 7'-11" C.C. HOLES WITH MOUNTING HARDWARE	1 SET	HUGHES #2025				
	㊷	ANCHOR PLATE	12	NATIONAL FOUNDRY #NFO24B-14				
	㊹	GROUND WIRE: 30% CONDUCTIVITY, 3-#8 (REFER TO POLE HEIGHT FOR LENGTH)	AS REQ'D	COPPERWELD				
C	④	GROUND ROD: 5/8" X 10'-0" SECTIONAL	8	THOMAS & BETTS/ BLACKBURN #6260S				
	④	GROUND ROD COUPLER: 5/8" ROD	4	THOMAS & BETTS/ BLACKBURN #80C				
	④	GROUND ROD CONNECTOR: 5/8" ROD TO GROUND WIRE 3#8 (1)	4	FCI-BURNDY HYTAP #YGHP29C2				
	④	CRIMPIT: 1/2" STEEL TO (1) 3-#8 WIRE	4	FCI-BURNDY HYTAP #YC2BU26				
	④	CONNECTING LINK	4 PR.	HUGHES #3151				
B	⑤	POLE BAND: 2 WAY, 180 DEGREE (10"-12")	6	HUGHES #3108.6 W/#2718.55 BONDING UNIT				
	⑤	POLE BAND: 2 WAY, 180 DEGREE (8"-10")	4	HUGHES #3108.5 W/#2718.55 BONDING UNIT				
	⑥	X-BRACE: COMPLETE WITH MOUNTING HARDWARE (2-7/8" X 16" & 2-7/8" X 18" BOLTS)	1 SET	HUGHES #1042-13-6-CPT				
	⑥	X-BRACE: COMPLETE WITH MOUNTING HARDWARE (2-7/8" X 14" & 2-7/8" X 16" BOLTS)	2 SETS	HUGHES #1042-10-6-CPT				
A	⑥	SUSPENSION INSULATOR: 20,000# TEST WITH BALL AND SOCKET	42	LAPP #61236				

- GENERAL NOTES:**
- THIS BILL OF MATERIALS APPLIES TO DRAWING ST-G4010-08, SHT. 1.
 - EQUIPMENT ITEM NUMBERS (①) REFER TO EQUIPMENT NUMBERS IN LANL SUPPORT SERVICES CONTRACTOR'S MASTER BILL OF MATERIALS. ONLY THOSE NUMBERS USED ON SHT. 1 OF THIS DRAWING ARE SHOWN.

NOTES FOR DESIGNER:
 (DO NOT INCLUDE ON CONSTRUCTION DRAWING)
 1. COMPLY WITH CURRENT EDITION OF LANL DRAFTING MANUAL FOR CALL-OUTS PROTOCOL AND LOCATION OF SCHEDULES/MATERIAL.
 2. ASSIGN AN APPROPRIATE DRAWING NUMBER PER CURRENT EDITION OF LANL DRAFTING MANUAL PROTOCOL FOR DETAILS.

DRAWING DEVELOPED FOR ML-3/ML-4 PROJECTS. FOR ML-1/ML-2, ADDITIONAL REQUIREMENTS AND QA REVIEWS ARE REQUIRED. (REMOVE THIS NOTE WHEN INSERTED INTO A DRAWING PACKAGE).

NO.	DATE	CLASS	REV	DESCRIPTION	OWN	VER	CHKD	SUB	APP	
FACILITY & WASTE OPERATIONS SYSTEMS ENGINEERING & MAINTENANCE										
LANL ENGINEERING MANUAL SITE ELECTRICAL DISTRIBUTION STDS.					DRAWN	M. BAKER				
TANGENT STRUCTURE 409 (DEAD END)					DESIGN	D. BRYANT				
BILL OF MATERIALS					CHECKED	J. LANDMAN				
BLDG. X					DATE	9/30/02				
SUBMITTED					APPROVED FOR RELEASE					
DISCIPLINE POCI DAVID POWELL					STANDARDS MANAGER TOBIN GRUCH					
					SHEET					
					2 of 2					
CLASSIFICATION U					REVIEWER MICHAEL LADACH					
PROJECT ID					DATE 9/30/02					
CHAPTER 7					DRAWING NO					
ST-G4010-08					REV					
					0					