

G:\LANL Engineering Standards\Envr. Manual [LE]12 - Approved\ST-G4010-DBEZ.dwg, 11/09/02 09:50 083088

	8	7	6	5	4	3	2	1
H	BILL OF MATERIALS							
	ITEM	DESCRIPTION	QTY	MFR. CATALOG No.				
	①	POLES: _____ FL CLASS _____	2					
	③	CROSSARM ASSEMBLY: ASSEMBLED ARM FOR TANGENT STRUCTURE WITH ARM MOUNTING HARDWARE, & 2821.6 SWINGING ANGLE BRACKET COMPLETE WITH HARDWARE	1	HUGHES #C2561.7C				
	⑥	X-BRACES: COMPLETE WITH MOUNTING HARDWARE (2-7/8" x 16" AND 2-7/8" x 18" BOLTS)	1 SET	HUGHES #2094-14-6-CPT				
	⑨	VEE BRACES: COMPLETE WITH MOUNTING HARDWARE	2 SETS	HUGHES #2025ACV108				
G	⑪	SUSPENSION CLAMP: WITH 90° Y-EYE FOR 3/8", 7 STRAND SHIELD WIRE	2	HUBBELL/ANDERSON #MS-70-N WITH #YCS-05-90				
	⑫	ARMOR ROD: 3/8", 7 STRAND E.H.S.	2	PREFORMED #AR-1130				
	⑬	SHIELD WIRE DAMPER	4	ALCOA #1701-3				
	⑭	SHIELD WIRE ANGLE: WITH MOUNTING HARDWARE	1	HUGHES #C2561.7D				
	⑰	STEEL CABLE: 1/2", 7 STRAND E.H.S.	AS REQ'D	NATIONAL STRAND PRODUCTS: HOUSTON, TEXAS				
	⑳	CONNECTING LINK	1 PR.	HUGHES #3154				
F	㉓	GUY GRIP: 1/2", 7 STRAND E.H.S. STEEL CABLE	2	PREFORMED #BG-2115				
	㉕	Y-BALL	3	HUBBELL/ANDERSON #YBC-30				
	㉗	SUSPENSION CLAMPS: WITH SOCKET EYE FOR 477 KCM 26/7 ACSR	3	HUBBELL/ANDERSON #HAS-138-5				
	㉘	SUSPENSION INSULATORS: 15,000# TEST WITH BALL & SOCKET CLASS 52-5	21	LAPP #5960G				
	㉚	ARMOR ROD: FOR 477 KCM 26/7 ACSR	3	PREFORMED #AR-D134				
	㉛	CONDUCTOR DAMPER	6	ALCOA #1705-7				
E	㉞	GUY STRAIN INSULATOR: FIBERGLASS, 6'-6" WITH ROLLER & 2 PINS	1	MACLEAN POWER SYSTEMS #GCC30-78R				
	㉟	ANCHOR ROD: 1-1/4" x 10' WITH INSULATING WASHER, HEAVY CAST STEEL NUT & STEEL WASHER COATED WITH MASTIC ASPHALT & COVERED BY A PLASTIC PIPE	1	NATIONAL FOUNDRY #1251D				
	㊳	ANCHOR PLATE	1	NATIONAL FOUNDRY #NF024B-14				
	㊴	GROUND WIRE: 30% CONDUCTIVITY, 3#8 (REFER TO POLE HEIGHT FOR LENGTH)	AS REQ'D	COPPERWELD				
D	㊵	GROUND WIRE STAPLE	50	COOPER POWER SYSTEMS/ KEARNEY #1232B-1				
	㊶	GROUND ROD: 5/8" x 10'-0" SECTIONAL	4	THOMAS & BETTS/BLACKBURN #8260S				
	㊷	GROUND ROD COUPLERS: 5/8" ROD	2	THOMAS & BETTS/BLACKBURN #80C				
	㊸	GROUND ROD CONNECTOR: 5/8" ROD TO GROUND WIRE 3#8 (2)	2	FCI-BURNDY HYTAP #YGHP29C2				
C	㊹	POLE BAND: 2 WAY 180° (12" - 14")	1	HUGHES #3108.7 WITH #271B.55 BONDING UNIT				

- GENERAL NOTES:**
- THIS BILL OF MATERIALS APPLIES TO DRAWING ST-G4010-02, 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 402 (1'-4") BILL OF MATERIALS				DESIGN	D. BRYANT				
BLDG. X				CHECKED	J. LANDMAN				
TA-X				DATE	9/30/02				
SUBMITTED			APPROVED FOR RELEASE						
DISCIPLINE POC: DAVID POWELL			STANDARDS MANAGER: TOBIN GRUCH						
Los Alamos <small>NATIONAL LABORATORY</small>				SHEET		2			
<small>PO Box 1663 Los Alamos, New Mexico 87545</small>				2 of 2					
CLASSIFICATION U			REVIEWER MICHAEL LADACH		DATE 9/30/02				
PROJECT ID			DRAWING NO		REV				
CHAPTER 7			ST-G4010-02		0				