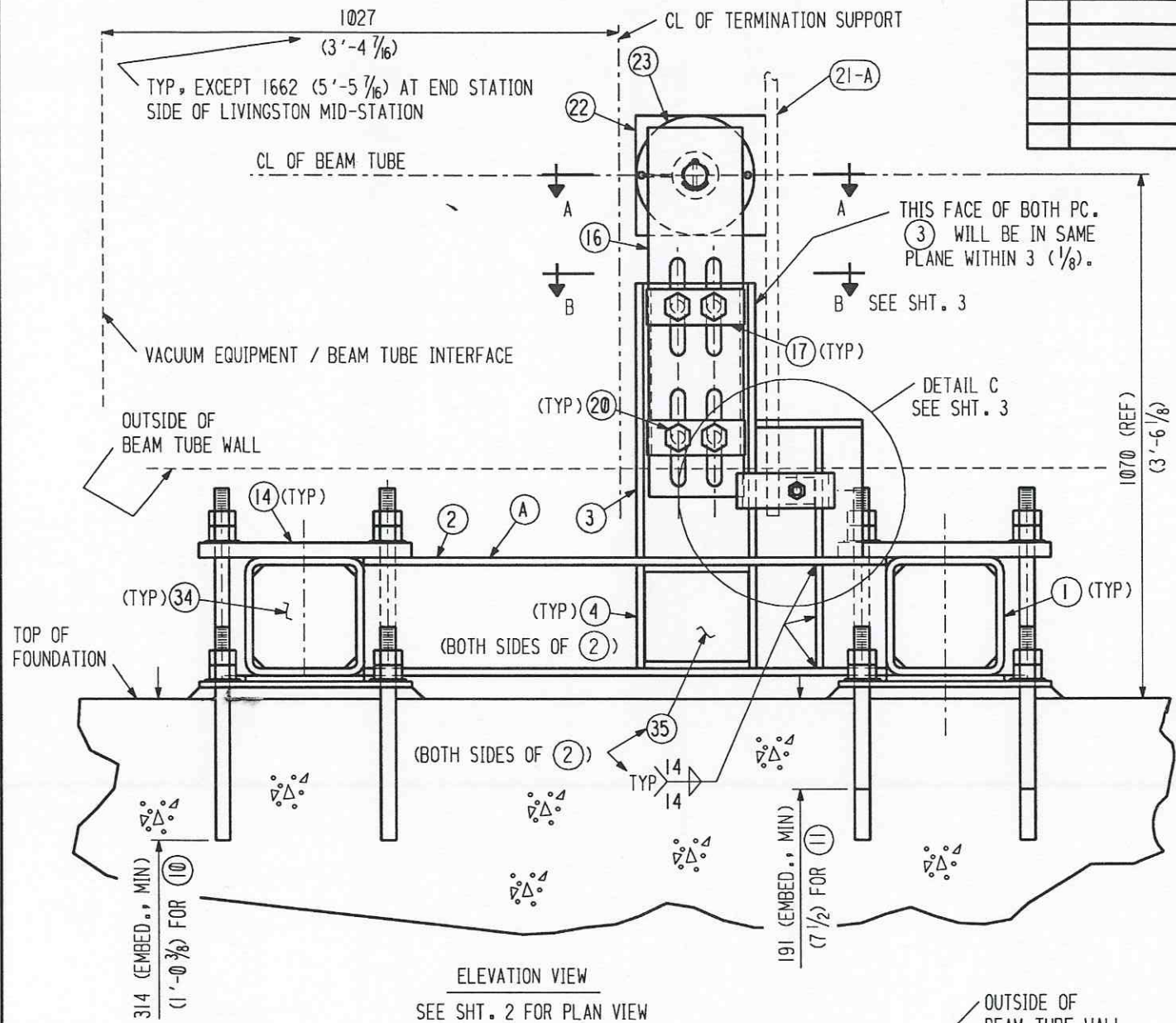


SHIP PC	MARK	ASSM PC	DESCRIPTION	LENGTH MM	SPEC	ID
			SELF LOCKING CUP POINT			
2	20-36		BEARING DIXON CJ32E40-16			C
			* = SA240-TP304L			
			** = 4140 W/ ROCKWELL C32			
			*** = A325 TYPE 3 (NOT GALV.)			
			M7 = SEE SPEC C-SUPT-1			

SHIP PC	MARK	ASSM PC	DESCRIPTION	LENGTH MM	SPEC	ID
1	20-A		TERMINATION SUPPORT		M7	
	20-1	2	TUBE 254 X 254 X 16 (10 X 10 X 5/8)	1626 (5'-4)	A500 GR.B	C
	20-2	2	W254 X 45 (W10 X 45)	1118 (3'-8)	A36	C
	20-3	2	W254 X 45 X SK (W10 X 45)		A36	C
	20-4	12	PL SK X 16 (5/8)		A36	C
	20-5	2	L 102 X 102 X 16 (4 X 4 X 5/8)	279 (11)	A36	C
	20-6	2	PL 102 X 16 (4 X 5/8)	229 (9)	A36	C
	20-12	4	PL 254 X 13 (10 X 1/2)	584 (1'-11)	A36	C
	20-15	4	PL SK X 32 (1 1/8)		A36	C
	20-34	4	PL SK X 16 (5/8)		A36	C
	20-35	4	PL 194 X 10 (7 5/8 X 3/8)	194 (7 5/8)	A36	C
2	20-B R/L		LATERAL CLAMP ASSEMBLY			
	20-7	2	PL SK X 25 (1")		A36	C
	20-8	4	BAR 13 X 6 (1/2 X 1/4)	25 (1")	A36	C
2	20-9		PL SK X 19 (3/4)		A36	C
8	20-10		ANCHOR BOLT 25 (1" DIA HILTI)	737 (2'-5)	A193-B7	C
			HY-150 314 (1'-0 3/8) EMBED.		ZINC PL.	
			W/ WASHER, 2 NUTS AND ADHESIVE			
12	20-11		ANCHOR BOLT 22 (7/8) DIA HILTI)	305 (1'-0)	A193-B7	C
			HY-150 191 (7 1/2) EMBED.		ZINC PL.	
			W/ WASHER, 2 NUTS AND ADHESIVE			
4	20-13		PL 76 X 13 (3 X 1/2)	381 (1'-3)	A36	C
4	20-14		PL SK X 32 (1 1/4)		A36	C
4	20-16		PL SK X 25 (1")		A514 GR.B	C
4	20-17		PL SK X 32 (1 1/4)		A36	C
4	20-18		PL SK X 32 (1 1/4)		**	C
24	20-19		BELLEVILLE WASHERS 25 (1" DIA)		SS	C
			SPEC PART # B2000-065-S			
8	20-20		BOLT 29 (1 1/8) DIA HVY HEX HD	191 (7 1/2)	***	Ac
2	20-21		WASHER 19 (3/4) DIA		F436	Ac
2	20-22		PL SK X 51 (2)		*	C
4	20-23		SHEET SK X 3 (1/8) YOROLITE		G-11	C
2	20-24		BEARING SPHERICAL SKF GEZ 208 ES			C
2	20-25		BAR 51 (2) DIA X SK		303 SS	C
4	20-26		COTTER PIN 6 (1/4) DIA	76 (3)	316 SS	C
2	20-27		CABLE 10 (3/8) DIA (7 X 19 DR)	914 (3'-0)	CS	C
			6 X 19) GALV. W/ TWO 19 (3/4) DIA X			
			102 (4) LONG THREADED PLUGS ZINC PL.			
4	20-28		NUT 19 (3/4) DIA HVY HEX		A307B	Ac
2	20-29		GROMMET X SK YOROLITE		GRADE G11	C
2	20-30		PL SK X 10 (3/8)		*	C
1	20-31		PL SK X 13 (1/2)		*	C
4	20-32		BOLT 6 (1/4) DIA HEX W/ NUT	76 (3)	A307	Ac
2	20-33		SET SCREW 6 (1/4) DIA - 20 UNC	13 (1/2)	CS	C

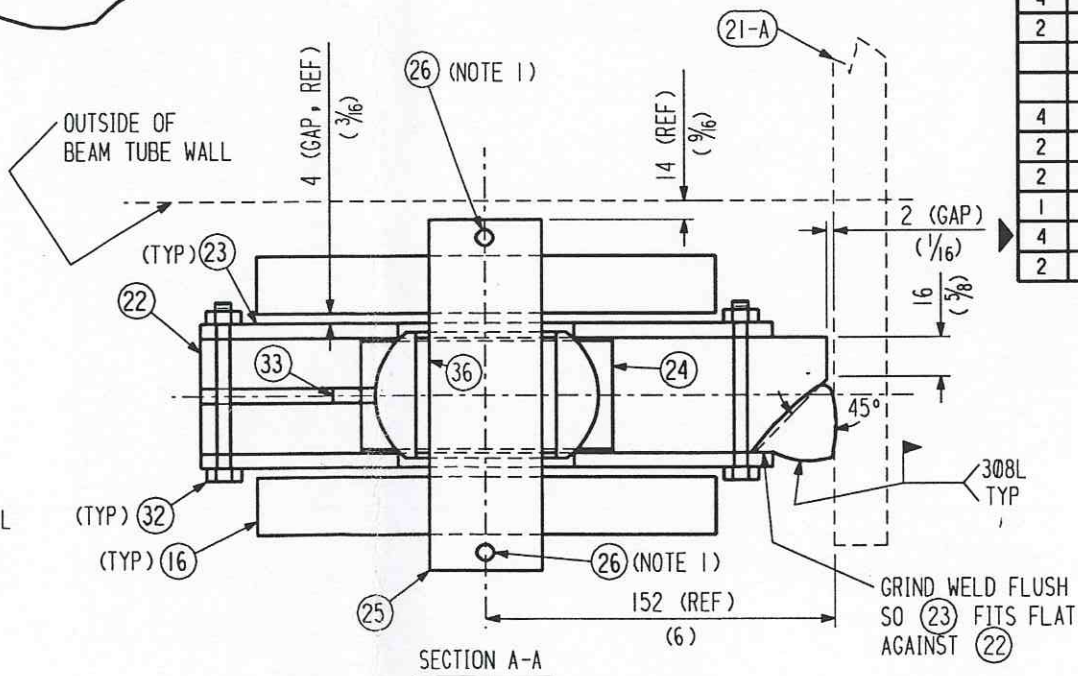


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M. Tellalian 6-28-96

CBI DATE

CALTECH DATE



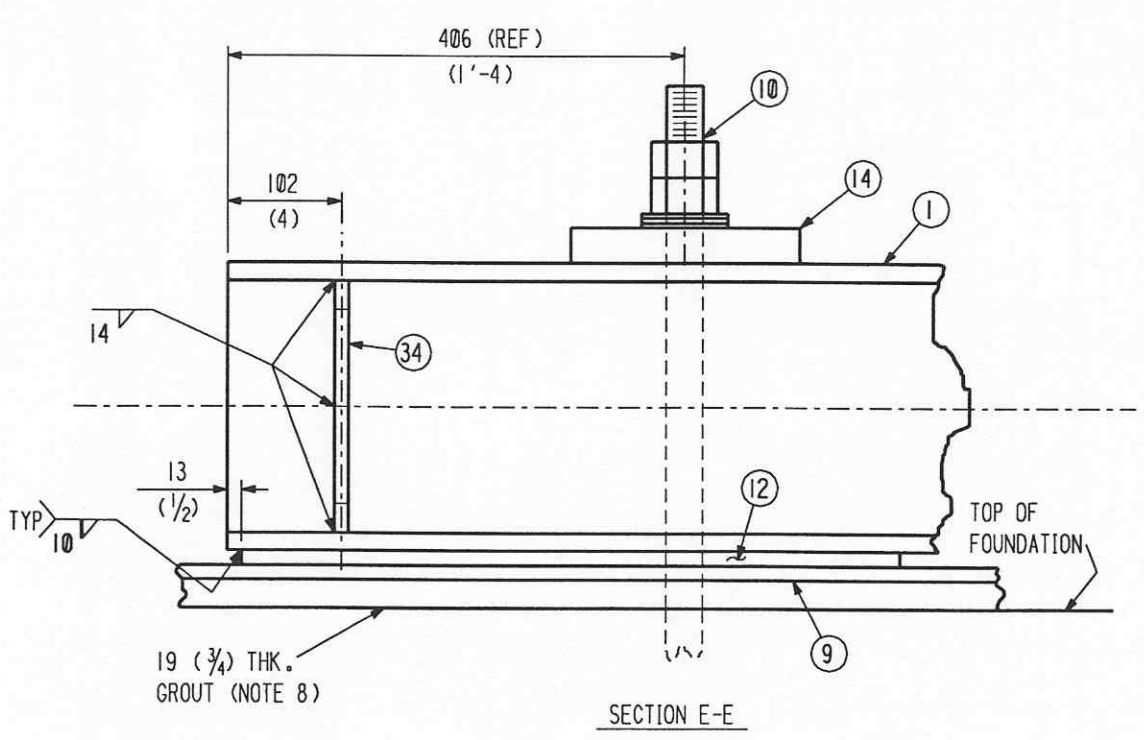
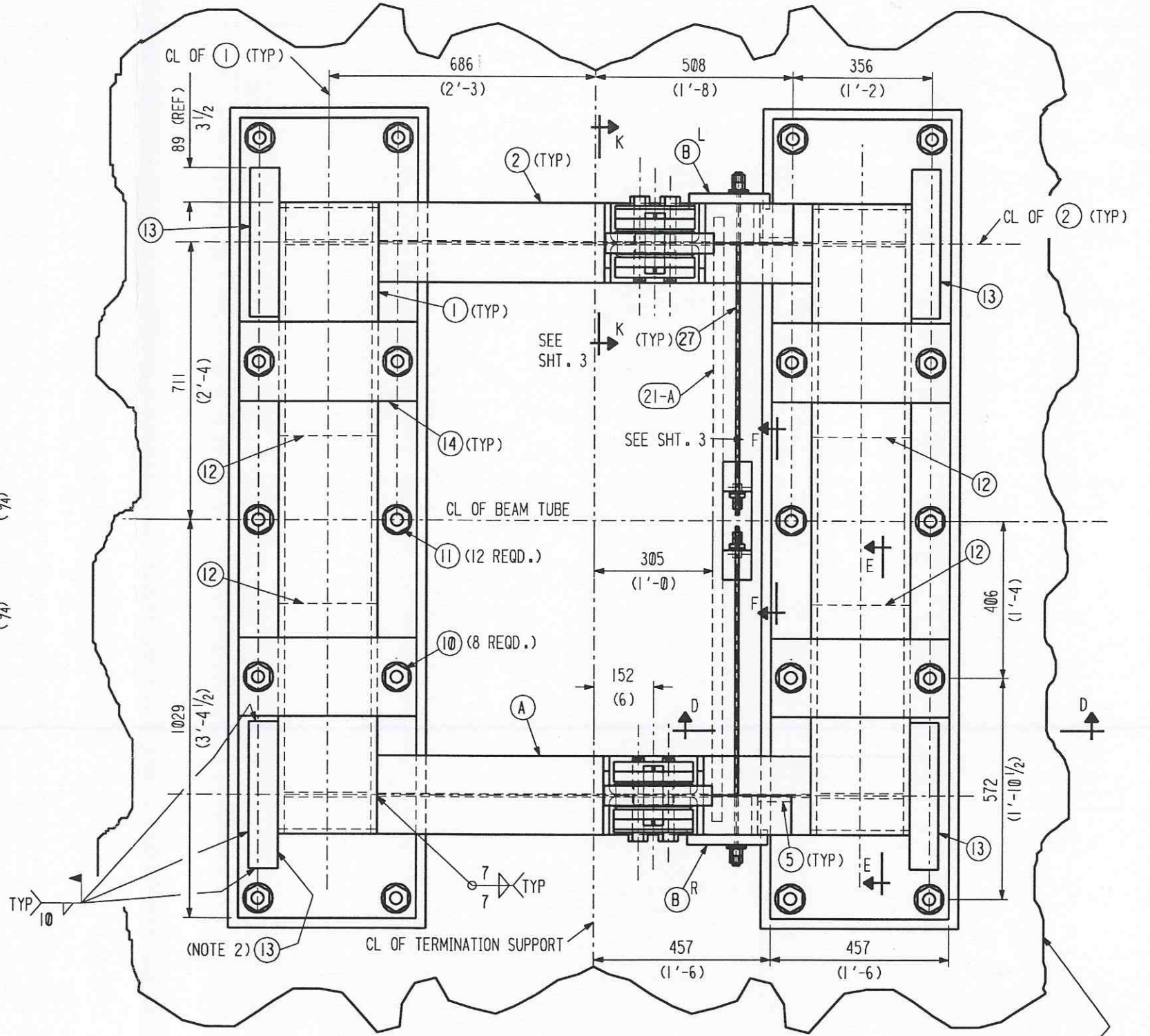
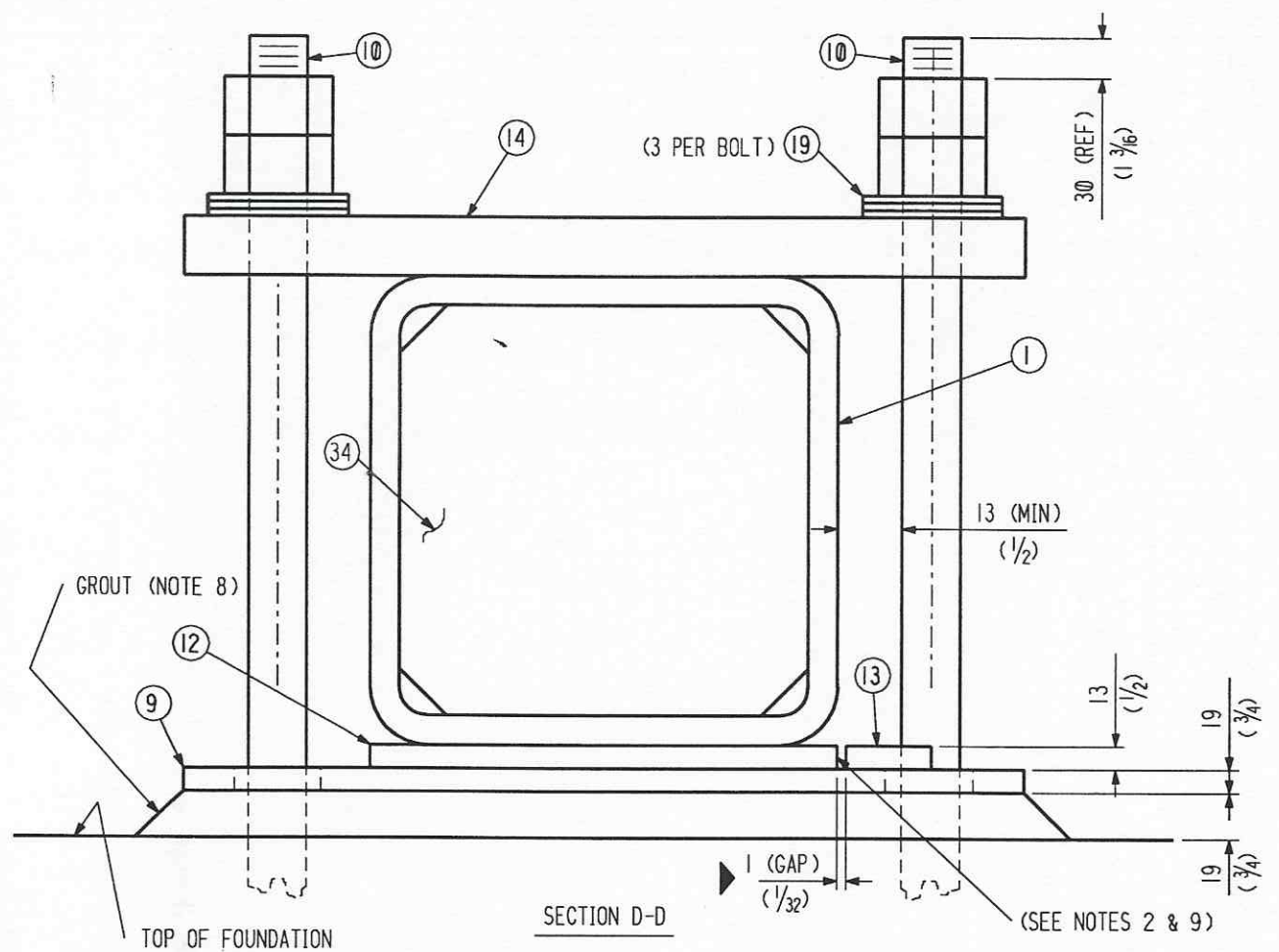
- NOTES:
- 1) COTTER PIN TO HAVE BOTH LEGS BENT UP TO PREVENT ROTATION OF COTTER PIN.
 - 2) POSITION TERMINATION SUPPORT IN PROPER LOCATION BEFORE INSTALLING (13).
 - 3) ROUGHEN THE FOUNDATION SURFACE BY CHIPPING, SAND BLASTING OR OTHER MECHANICAL MEANS TO REMOVE ANY LAITANCE OR WEAK SURFACE LAYER..
 - 4) CLEAN BOTTOM OF BASE PLATE (9) TO REMOVE DIRT AND CONTAMINATION. WIPE SURFACE WITH ISOPROPYL ALCOHOL TO DECREASE THE SURFACE..
 - 5) POSITION AND LEVEL THE BASE PLATE (9). A MINIMUM CLEARANCE BETWEEN THE BASE PLATE AND THE FOUNDATION OF 13 (1/2) IS REQUIRED OVER THE ENTIRE BASE PLATE.
 - 6) PROVIDE FORMS OR RESTRAINTS TO CONTAIN THE GRAOUT UNDER THE BASE PLATE. THE FORMS SHALL PROVIDE CHAMFERED EDGES AROUND THE PERIMETER OF THE BASE PLATE.
 - 7) USE "FIVE STAR SPEED EPOXY GROUT" OR EQUAL.
 - 8) ENSURE THAT THE GROUT FILLS THE SPACES BETWEEN THE ANCHOR BOLTS AND THE BASE PLATE TO THE TOP SURFACE OF THE BASE PLATE.
 - 9) OUTER EDGES OF (12) TO BE PARALLEL WITHIN 2 (1/16).

DETAILED AND BILLED FOR (1), (16) REQUIRED

CBI		SUPPLIER'S / PURCHASER'S NO	
LIGO BEAM TUBE			
HANFORD, WA & LIVINGSTON, LA			
BEAM TUBE TERMINATION SUPPORT			
ELEVATION			
CUSTOMER'S NO		CONTRACT NO	
BY DTR CHKD ARL DATE 3-11-96		953571	
M.J. TELLALIAN		DWG 20	REV
ENGINEERING ASSIGNED		SHT 1	2D
D96052-02-B			

55710120.DGN

INDICATES CHANGE FROM PREVIOUS ISSUE

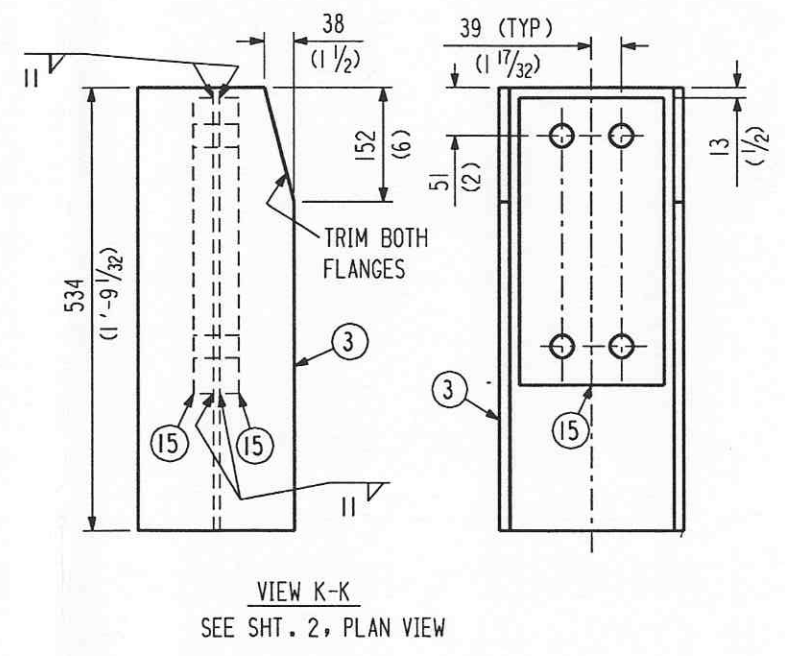
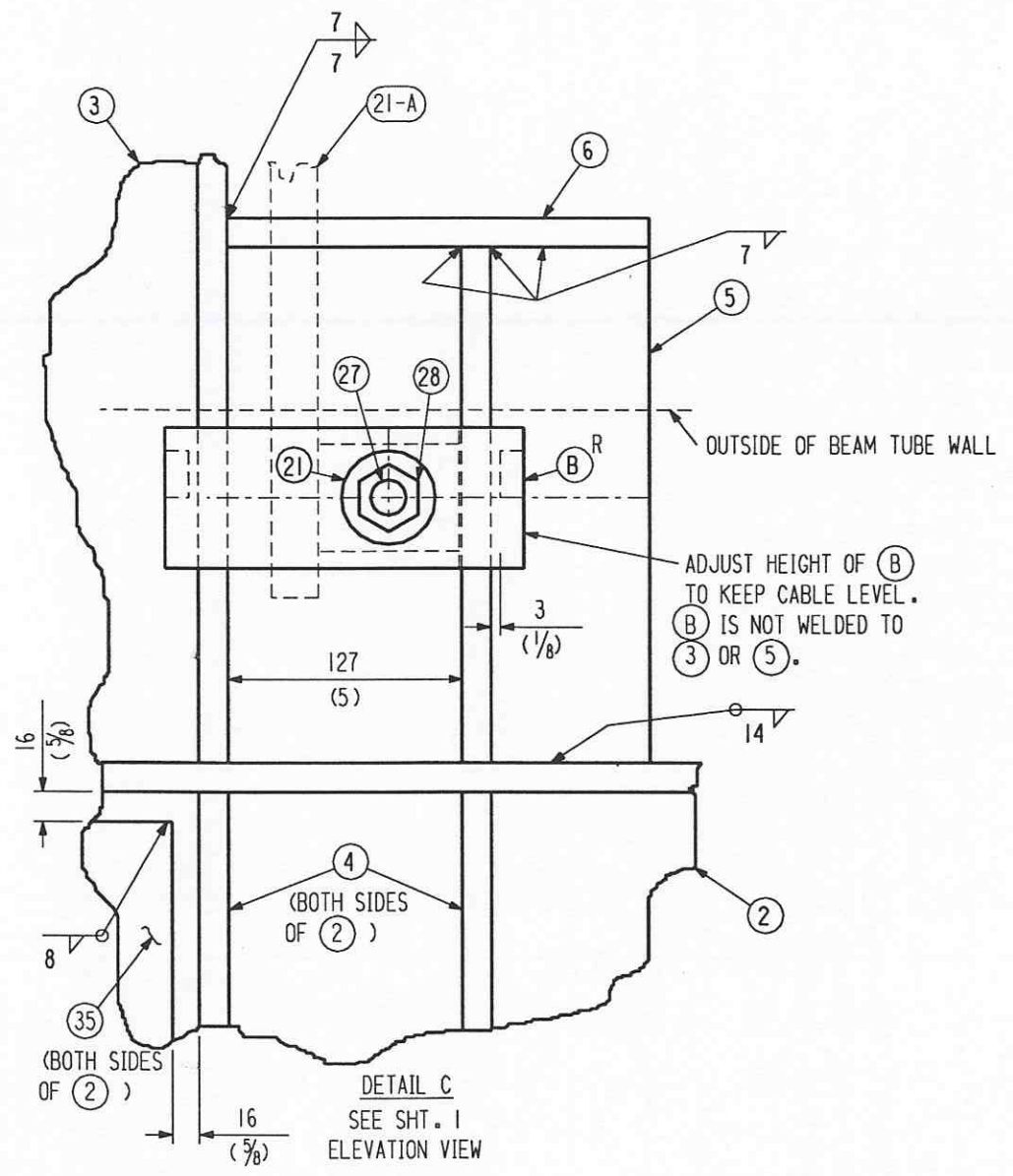
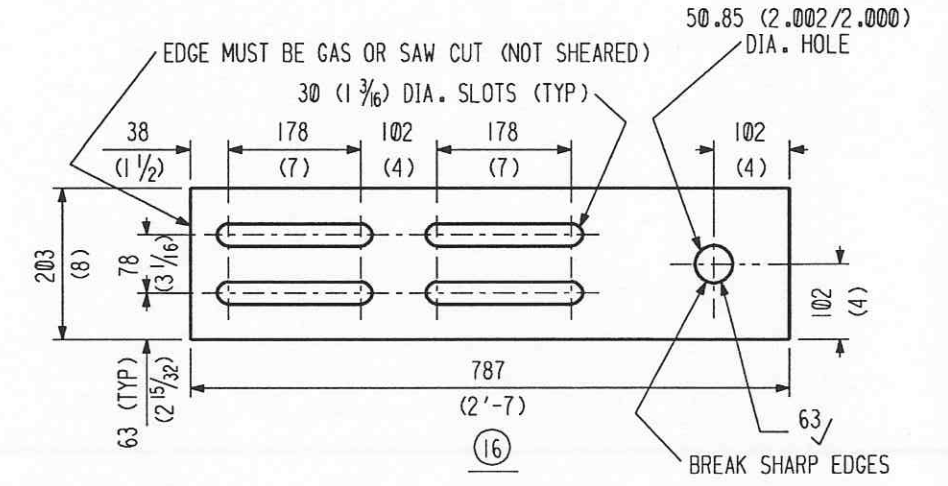
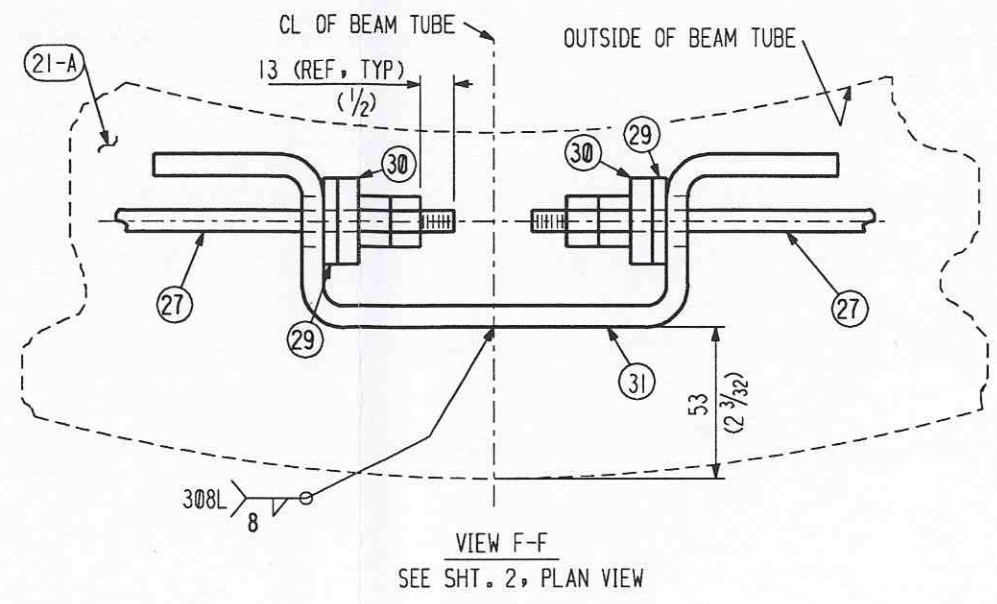
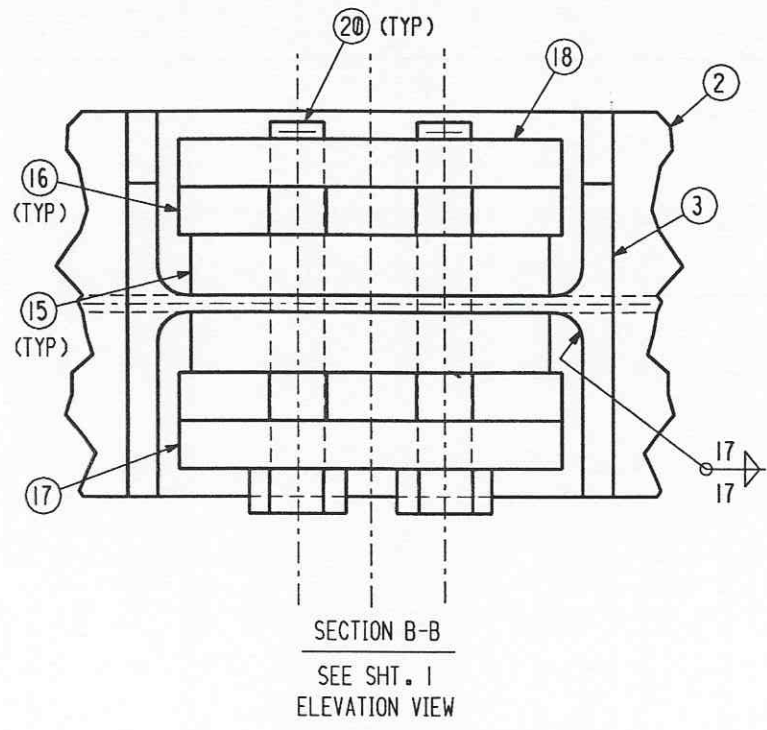


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M. Tellalian 6-28-96
 CBI DATE
 CALTECH DATE

SUPPLIER'S / PURCHASER'S NO CBI	
LIGO BEAM TUBE HANFORD, WA & LIVINGSTON, LA BEAM TUBE TERMINATION SUPPORT PLAN VIEW	
CUSTOMER'S NO BY DTR CHKD ARL DATE 3-11-96 M.L. TELLALIAN ENGINEERING ASSIGNED	CONTRACT NO 953571 DWG 20 REV SHT 2 2D
DATE 5-18-96	REVISIONS 1. ADDED 1/8" GAP BETWEEN PCS. 12 AND 13. 2. REVISED ENTIRE SHEET

INDICATES CHANGE FROM PREVIOUS ISSUE

55710220.DGN



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M. Tellalian 6-28-96

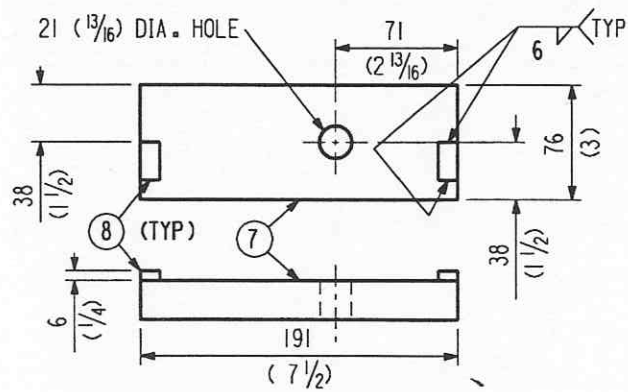
CBI DATE

CALTECH DATE

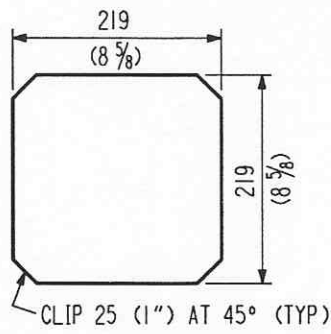
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CHKD: []		DATE: []		REVISED ENTIRE SHEET		CBI	
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CHKD: []		DATE: []		CST		HANFORD, WA & LIVINGSTON, LA	
DATE: []		DATE: []		CST		BEAM TUBE TERMINATION SUPPORT	
DATE: []		DATE: []		CST		PIECE DETAILS	
CUSTOMER'S NO. []				CONTRACT NO. []			
BY: [] CHKD: [] ARL DATE: []				DWG: [] REV: []			
M.L. TELLALIAN				SHT: []			
ENGINEERING ASSIGNED				REV: []			

55710320.DGN

INDICATES CHANGE FROM PREVIOUS ISSUE

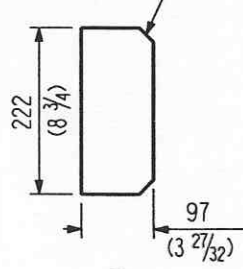


(B)^R (AS SHOWN)
(B)^L (MIRROR)

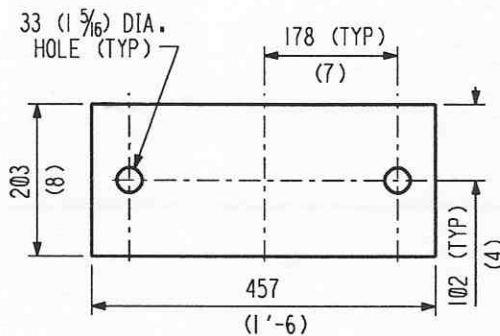


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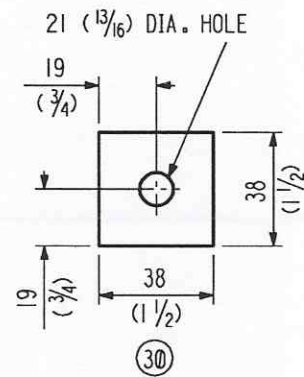
CLIP 19 (3/4) AT 45° (TYP)



(4)

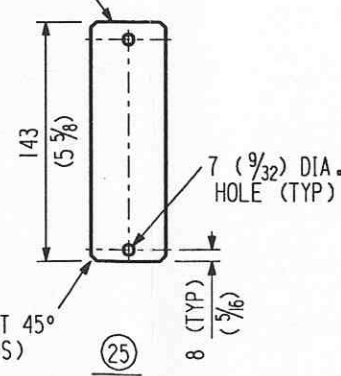


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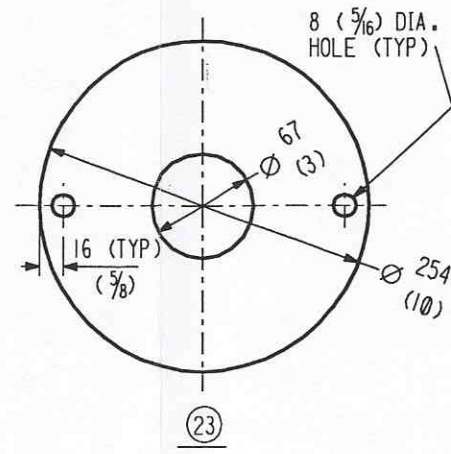


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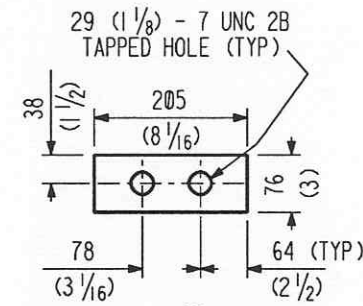
PIN TO BE ANNEALED AND CENTERLESS GROUND 50.76 (1.9995/1.9980) DIA.



(25)

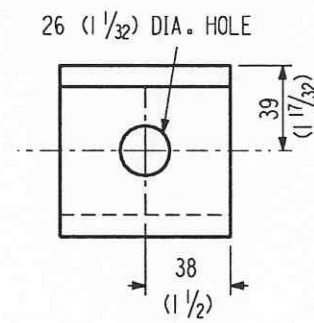


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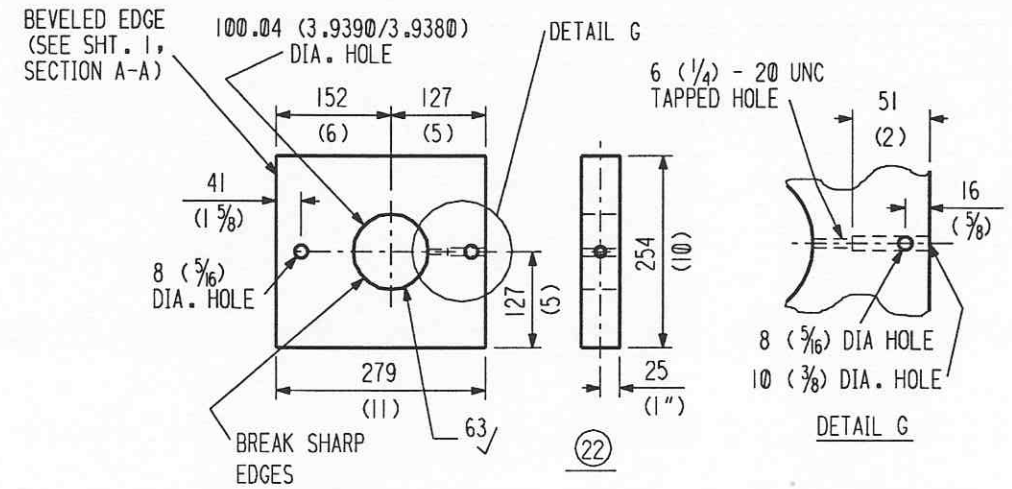


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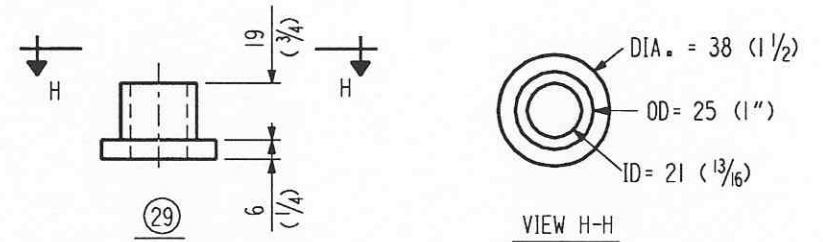
(FABRICATOR TO SPRAY COLD GALV., TAKING CARE NOT TO SPRAY THE THREADS)



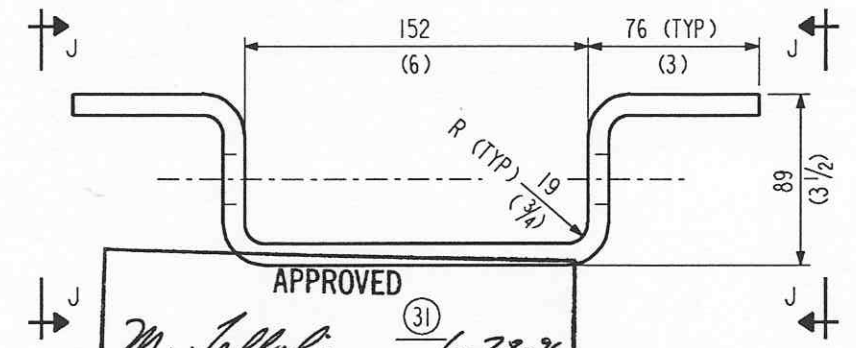
VIEW J-J



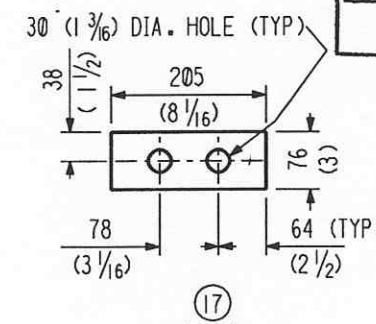
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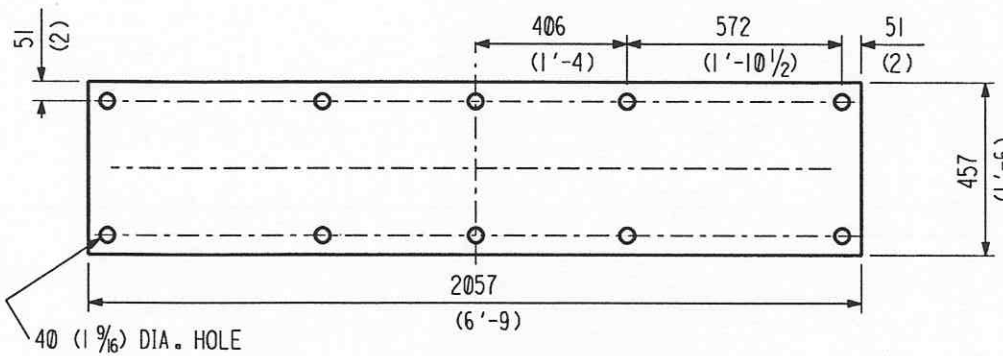
VIEW H-H



APPROVED
M. Tellalian (31) 6-28-96
CBI DATE
CALTECH DATE



(17)



(9) (ALL DIMENSIONS TYP)

REVISIONS		REMARKS		SUPPLIER'S / PURCHASER'S NO	
BY	CHKD	DATE	DATE		
DIR	DIR	2-28-96	3-11-96		
CHKD	CHKD	5-6-96	3-11-96		
DATE	DATE				
LIGO BEAM TUBE HANFORD, WA & LIVINGSTON, LA BEAM TUBE TERMINATION SUPPORT PIECE DETAILS				CONTRACT NO 953571	
CUSTOMER'S NO BY DIR CHKO ARL DATE 3-11-96 M.L. TELLALIAN ENGINEERING ASSIGNED				DWG 20 SHT 4	
				REV 2D	

INDICATES CHANGE FROM PREVIOUS ISSUE

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