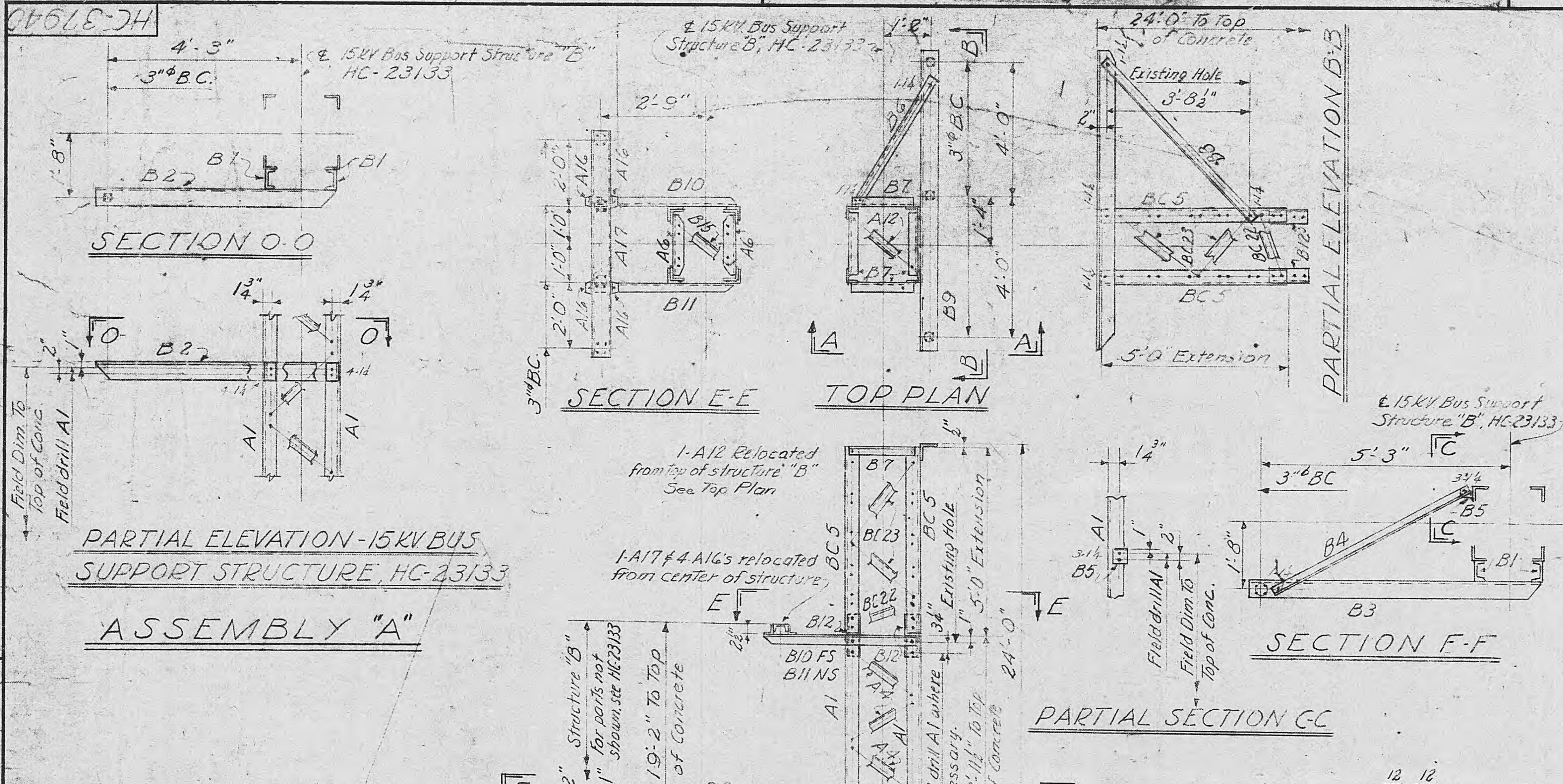
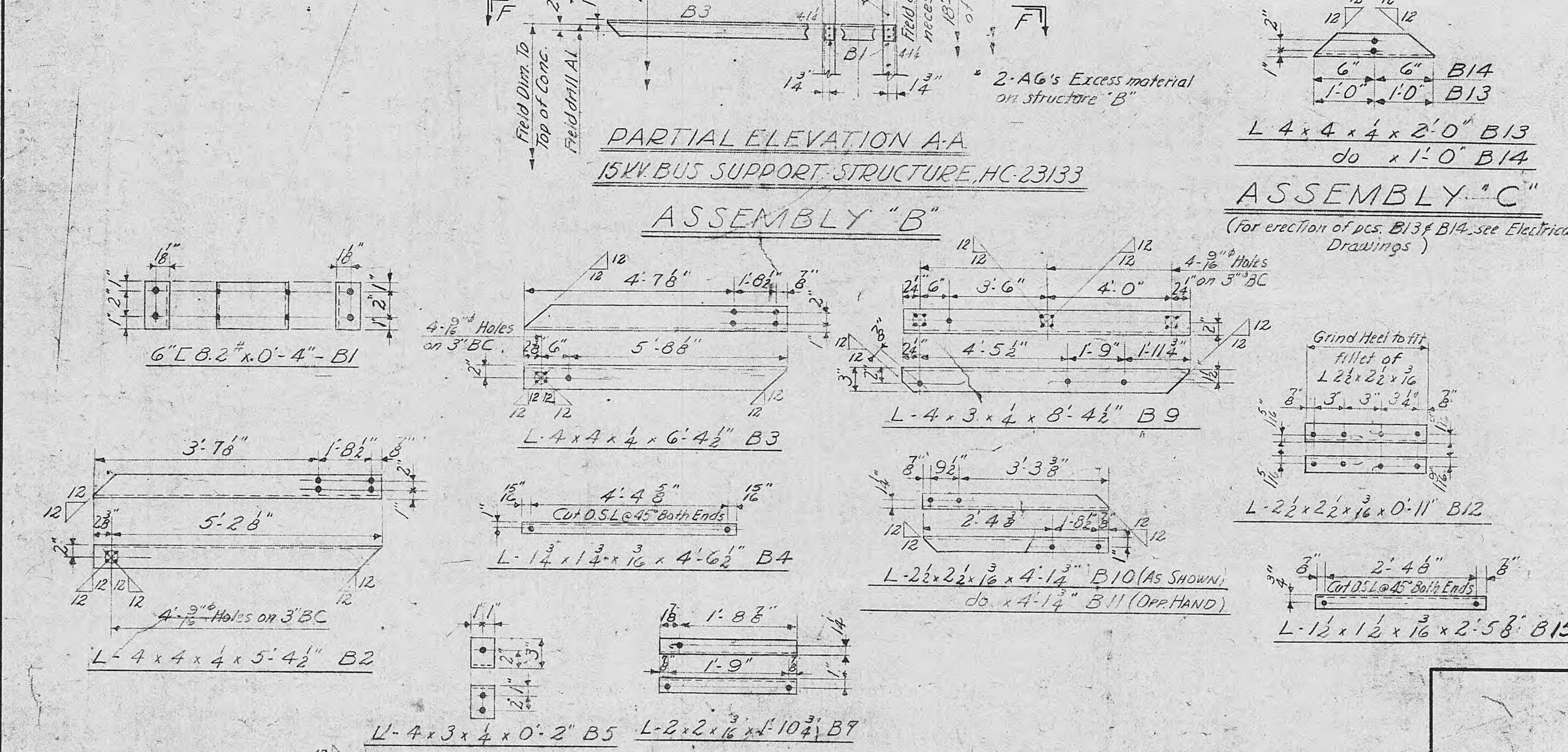
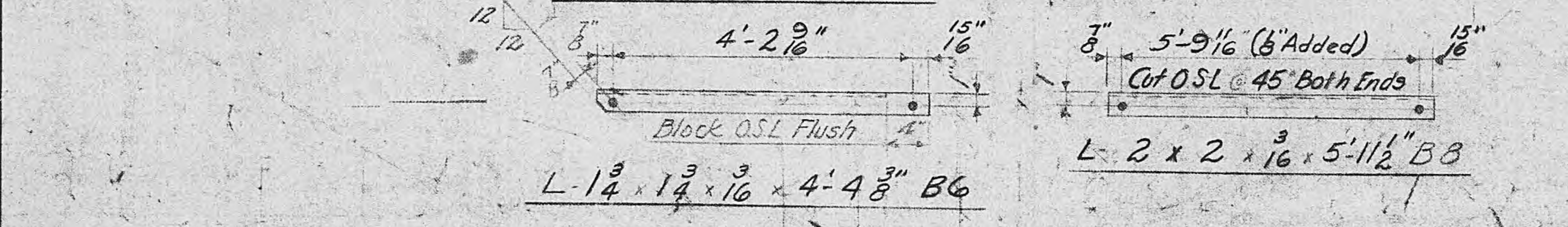






BILL OF MATERIAL

NO. REQUIRED ASSM "C"	NO. REQUIRED ASSM "A"	NO. REQUIRED ASSM "B" Lot "Y"	NO. REQUIRED ASSM "B" Lot "X"	MARK	DESCRIPTION	LENGTH FT	LENGTH IN	WT. EACH
	2		2	B1	6" [8.2#	0	4	3
	1			B2	L 4 x 4 x 1/4	5	4 1/2	37
			1	B3	do	6	4 1/2	43
			1	B4	L 1 3/4 x 1 3/4 x 3/16	4	6 1/2	10
			1	B5	L 4 x 3 x 1/4	0	2	1
			1	B6	L 1 3/4 x 1 3/4 x 3/16	4	4 3/8	10
			4	B7	L 2 x 2 x 3/16	1	10 3/4	5
			1	B8	do	5	11 1/2	15
			1	B9	L 4 x 3 x 1/4	8	4 1/2	50
			1	B10	L 2 1/2 x 2 1/2 x 3/16	4	1 3/4	13
			1	B11	do	4	1 3/4	13
			4	B12	do	0	11	3
		4		BC5	do	4	11	15
		4		BC22	L 1 1/2 x 1 1/2 x 3/16	2	0 3/8	4
		8		BC23	do	2	7 1/2	5
1				B13	L 4 x 4 x 1/4	2	0	14
1				B14	do	1	0	7
			1	B15	L 1 1/2 x 1 1/2 x 3/16	2	5 3/8	3
4	9	76			5/8" Bolts. Sq Hd. Hex Nut. Std Thd	0	1 1/4	0.31
Total Weight 22#	Total Weight 46#	Lot "Y" Total Weight 140#	Lot "X" Total Weight 198#					

From Stores

NOTES:

All holes 11/16" ⌀ unless otherwise noted.
All material to be hot-dip galvanized after fabrication.
Piece marks to be die stamped before galvanizing.
B/M includes 10% excess bolts.

REFERENCES

BC material detailed on LC-34236 Sh 1
Erection diagram and details of 15 KV Bus Support Structure "B" HC-23133
For location of Assemblies, see Electrical Drawings

REV. NO.	DATE	WORK ORDER	DSGN	DRWN	CHKD	SUPV	APPD
B13 & B14 were L4 x 3 x 1/4, Wt. of Assm. "C" was 19#							
1	5-23-60			DTA	WHFA	WGT	BW

DSGN. ______ SUPV. WGT W.O. ______
DRWN. JWP PROJ. ENGR. BW
CHKD. BB

TENNESSEE VALLEY AUTHORITY
DIVISION OF POWER ENGINEERING AND CONSTRUCTION

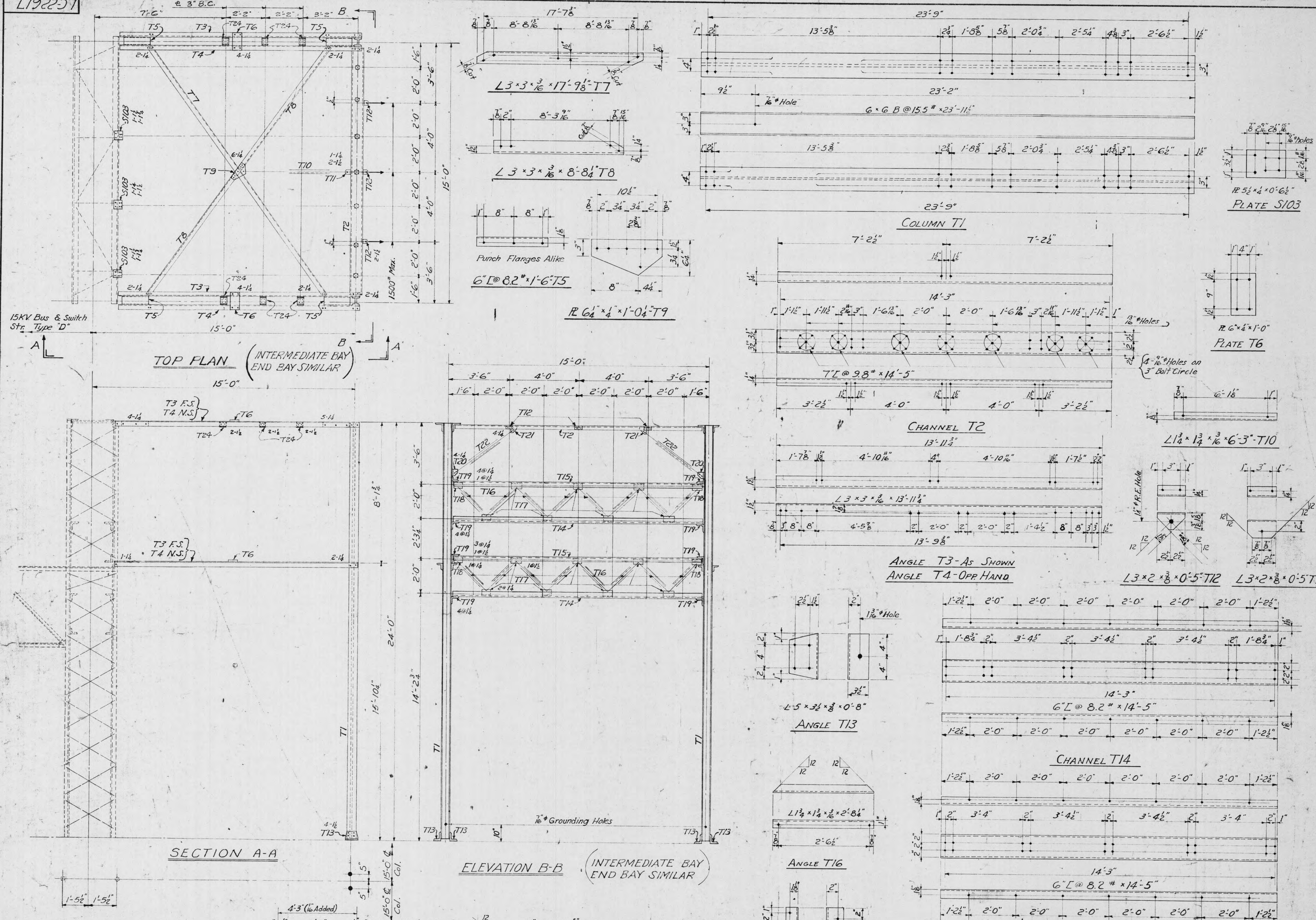
SUBSTATIONS GENERAL
15 KV BUS SUPPORT STRUCTURES
5'-0" EXTENSION & INSULATOR SUPPORTS

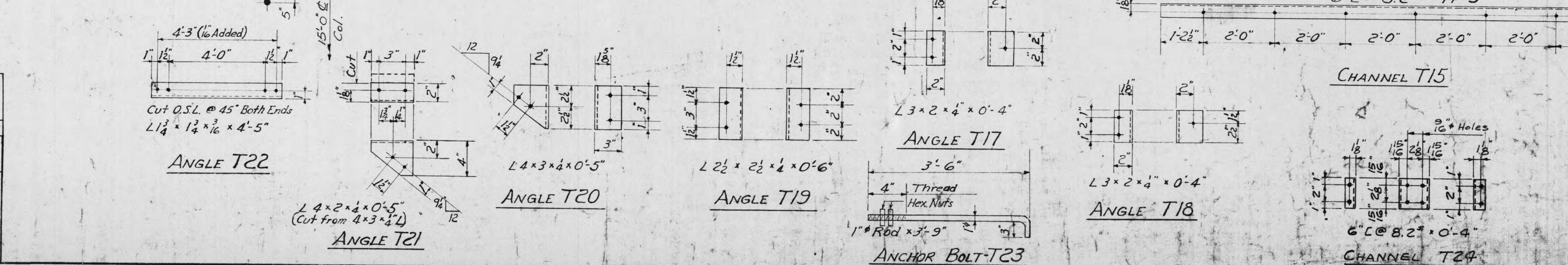
DATE 6-23-59 SUBMITTED R. P. Connelly APPROVED A. J. Reeves
SCALE N.T.S. S051C
SHEET 1 OF 1 SHEETS

HC-37940 R1

MICROFILMED
Duncan, Tenn Sub
3 Assm "A" 1 Assm "C"
1 Assm "B"
R

L1922-07





BILL OF MATERIAL

MARK	NO. REQD. ONE INTERMEDIATE BAY	NO. REQD. ONE END BAY	DESCRIPTION	LENGTH FT.	LENGTH IN.	WT. EACH
T1	2	1	6×6 B @ 15.5#	23	11½	382
T2	1	1	7"[@ 9.8#	14	5	145
T3	4	2	L3×3×3/16	13	11¾	53
T4	4	2	Do	13	11¾	53
T5	4	2	6"[@ 8.2#	1	6	13
T6	4	2	PL 6×¼	1	0	5
T7	1	1	L3×3×3/16	17	9⅛	68
T8	2	2	Do	8	8¼	33
T9	1	1	PL 6¼×¼	1	0¼	6
T10	1	1	L1¾×1¾×3/16	6	3	14
T11	1	1	L3×2×⅜	0	5	3
T12	3	3	Do	0	5	3
T13	4	2	L5×3½×⅜	0	8	7
T14	2	2	6"[@ 8.2#	14	5	122
T15	2	2	Do	14	5	122
T16	16	16	L1¾×1¾×3/16	2	8¼	6
T17	14	14	L3×2×¼	0	4	1
T18	4	4	Do	0	4	1
T19	8	8	L2½×2½×¼	0	6	2
T20	2	2	L4×3×¼	0	5	3
T21	2	2	L4×2×¼	0	5	3
T22	2	2	L1¾×1¾×3/16	4	5	10
T23	4	2	1"φ Anchor Bolt with 2 Hex. Nuts	3	9	11
T24	6	3	6"[@ 8.2#	0	4	3
S103	3		PL 5½×¼	0	6½	3
	174	145	⅝"φ Bolts	0	1¼	0.27
	72	48	Do.	0	1½	0.285
	INTERMEDIATE BAY Total Wt.: 2388#	END BAY Total Wt.: 1689#				

NOTES:

All holes 11/16"φ unless otherwise noted.
Bolts ⅝"φ
Material to be hot dip-galvanized after fabrication
Piece marks to be die-stamped before galvanizing.
10% excess bolts included in B/M.

REFERENCE:

Erection Diagram & Details of 15KV Bus & Switch Structure Type "D" LC-22616, LC-28012
Foundation Dwg. SC-3709
Alternate Assembly of Elevation "B-B" HC-29655

Added T24. Revised Bolt weights
Total Wt. Inter. Bay was 2371#
Total Wt. End Bay was 1683#

REV. NO.	DATE	WORK ORDER	DSGN	DRWN	CHKD	SUPV.	SUBM
7	8-15-66			DTA	JBR	RWR	WGT
Traced-Omitted S101 & S102-chg'd bolt wts. Wt. of end bay was 1675#, Int. bay was 2501#. For Rev. 1 thru 5 see superseded dwg.							
6	8-19-54			K.B.	D.L.	GMW.	RFC

DSGN .... SUPV. .... W.O. ....
DRWN O.K.C. PROJ. ENGR. ....
CHKD R.F.C.

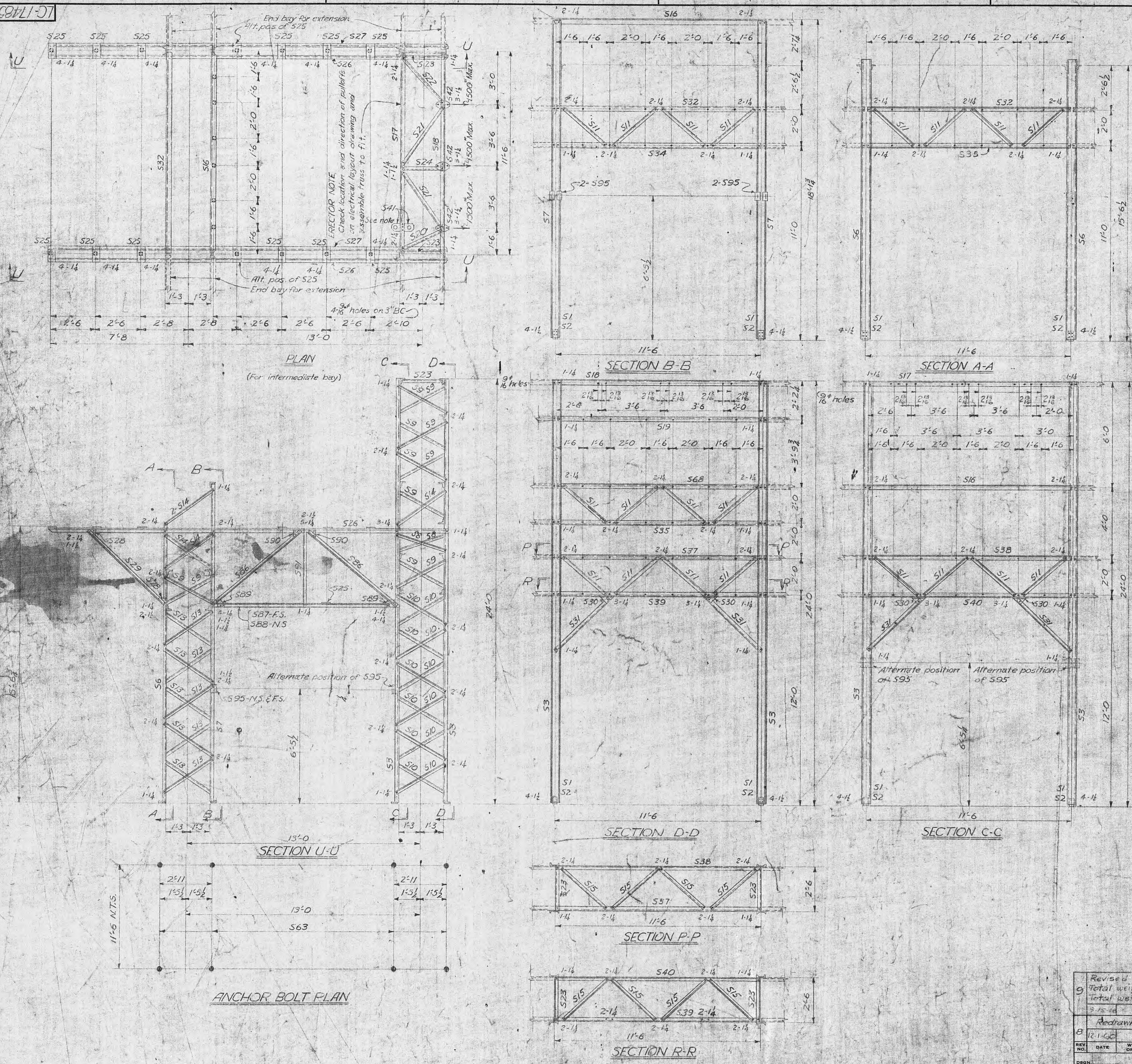
ERECTION DIAGRAM & STRUCTURAL DETAILS

TENNESSEE VALLEY AUTHORITY
DIVISION OF POWER ENGINEERING AND CONSTRUCTION

SUBSTATIONS GENERAL
EXTENSION TO 15KV. BUS AND SWITCH STRUCTURE TYPE "D" FOR REGULATOR

DATE 8-30-48 | SUBMITTED [illegible] | APPROVED [illegible] | SHEET 1 OF 1 SHEETS
SCALE ⅜"=1'-0"; N.T.S.

LC-22617



BILL OF MATERIAL

Mark	No. Req'd: One Intermediate Bay	No. Req'd: One End Bay	Description	Length: Ft	Length: In	Wt. Each
S1	8	4	L-6X4X½	0	4½	6
S2	8	4	Plate-4X½	0	3¼	2
S3	4	2	6"[-8.2#	23	11½	202
S6	2	1	6"[-8.2#	15	9¾	134
S7	2	1	Do.	18	0½	153
S8	4	2	L-1½X1½X3/16	2	11⅜	6
S9	22	11	Do.	3	2⅞	6
S10	24	12	Do.	3	3⅛	6
S11	20	20	Do.	3	2¼	6
S13	20	10	L-1½X1½X3/16	3	4⅞	6
S14	10	5	Do.	3	5½	6
S15	8	8	Do.	3	5¾	6
S16	2	2	L-4X4X¼	11	5¾	78
S17	1	1	L-3½X3X¼	11	5¾	64
S18	1	1	Do.	11	5¾	64
S19	1	1	Do.	11	5¾	64
S20	1	1	L-1¾X1¾X3/16	2	6⅞	6
S21	2	2	Do.	4	0½	9
S22	1	1	Do.	3	5⅛	8
S23	6	6	L-1½X1½X3/16	2	4⅜	4
S24	1	1	L-2X2X3/16	2	4⅞	6
S25	14	7	Plate 5X¼	0	10	4
S26	2	1	L-2½X2X3/16	22	3½	61
S27	2	1	Do.	22	3½	[illegible]
S28	8	4	Plate 5X¼	0	5	2
S29	4	2	L-2X2X3/16	6	1	15
S30	4	4	L-2½X2½X3/16	0	5	1
S31	4	4	L-2X2X3/16	4	3⅝	11
S32	2	2	L-3½X3X¼	11	5¾	64
S34	1	1	L-3½X3X¼	11	5¾	64
S35	2	2	Do.	11	5¾	64
S37	1	1	L-2½X2½X3/16	11	5¾	36
S38	1	1	Do.	11	5¾	36
S39	1	1	Do.	11	5¾	36
S40	1	1	Do.	11	5¾	36
S41	3	3	Plate-5X⅜	0	6½	4
S42	3	3	Plate-5½X⅜	0	8½	5
S63	8	4	1⅛"φ Anchor bolts, 2 Hex nuts	3	6	14
S68	1	1	L-3½X3X¼	11	5¾	64
S86	8	4	L-2X2X3/16	6	7⅜	[illegible]
S87	2	1	L-2½X2X3/16	9	7¾	28
S88	2	1	Do.	9	7¾	26
S89	8	4	Plate-5X¼	0	9	4
S90	8	4	Do.	0	4½	2
S91	4	2	L-2X2X3/16	4	4	11
S95	4	2	L-2½X2½X3/16	9	6½	[illegible]
	445	283	⅝"φ Bolts	0	1¼	0.27
	77	48	Do.	0	1½	0.284
	5	3	Do.	0	1¾	[illegible]
Total Weight	4088#	2652#				

NOTES
11/16"φ Holes unless otherwise noted.
⅝"φ Bolts unless noted.
Material to be hot-dip galvanized after fabrication.
Piece marks to be die-stamped before galvanizing.
For location of S41, see electrical drawing.
Bill of materials includes 10% excess bolts.

REFERENCES:
Foundation Dwg. .... HC-7645, Footing A.
Foundation Dwg. MC-19168, MC-19406
Extn. for Regulator .... LC 17713, LC-21730

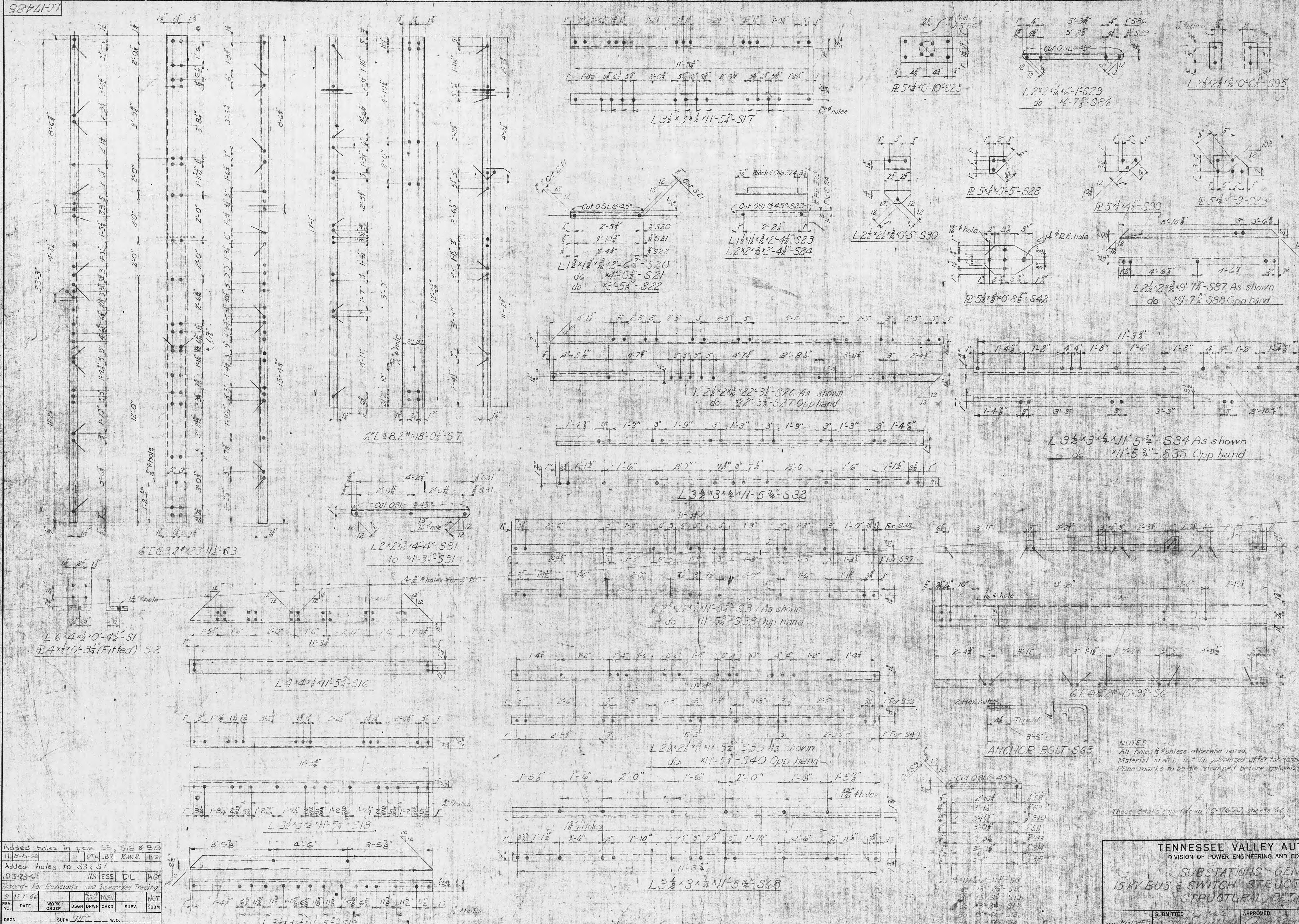
ERECTION DIAGRAM

Rev. No.	Date	Work Order	Dsgn.	Drwn.	Chkd.	Supv.	Appd.
9	5-15-68	Revised Bolt Weights. Total weight Inter. Bay was 4100#. Total weight End Bay was 2666#		DTA	JBR	R.V.I.R.	WGR
8	12-1-66	Redrawn		J.T.F.	RWR		WGT

DSGN. ____ SUPV. ____ W.O. ____
DRWN. ____ PROJ. ENGR. ____
CHKD. ____

TENNESSEE VALLEY AUTHORITY
DIVISION OF POWER PLANNING AND ENGINEERING
SUBSTATIONS GENERAL
15 KV. BUS AND SWITCH STRUCTURE
TYPE "B"

DATE 10-10-45 SUBMITTED APPROVED SHEET 1 OF 2 SHEETS
SCALE NONE CLASS. CODE S410B
LC-17485 R-9



LIST OF PIECES

MARK	NO. REQUIRED ONE INTERMEDIATE BAY	NO. REQUIRED ONE END BAY
S1	8	4
S2	8	4
S3	4	2
S6	2	1
S7	2	1
S8	4	2
S9	22	11
S10	24	12
S11	20	20
S13	20	10
S14	10	5
S15	8	8
S16	2	2
S17	1	1
S18	1	1
S19	1	1
S20	1	1
S21	2	2
S22	1	1
S23	6	6
S24	1	1
S25	14	7
S26	2	1
S27	2	1
S28	8	4
S29	4	2
S30	4	4
S31	4	4
S32	2	2
S34	1	1
S35	2	2
S37	1	1
S38	4	1
S39	1	1
S40	1	1
S42	3	3
S63	8	4
S68	1	1
S86	8	4
S87	2	1
S88	2	1
S89	8	4
S90	8	4
S91	4	2
S95	4	2
S41	3	3

NOTES:
All holes 11/16"Ø unless otherwise noted.
Material shall be hot dip galvanized after fabrication.
Piece marks to be die stamped before galvanizing

These details copied from LC-7677, sheets 6 & 7

TENNESSEE VALLEY AUTHORITY
DIVISION OF POWER ENGINEERING AND CONSTRUCTION

SUBSTATIONS - GENERAL
15 KV BUS & SWITCH STRUCTURE TYPE "B"
STRUCTURAL DETAILS

DATE 10-10-45	SUBMITTED	APPROVED	SHEET 2 OF 2 SHEETS
SCALE None	SC-913		LC-17485

REV. NO.	DATE	WORK ORDER	DSGN	DRWN	CHKD	SUPV.	SUBM
Added holes in pcs. S3, S18 & S19							
11	8-15-68			DTA	JBR	R.W.R.	WG
Added holes to S3 & S7							
10	5-23-67			WS	ESS	DL	WGT
Traced - For Revisions see Superseded Tracing							
9	12-1-66			RLW WAC	WHFH		WGT

DSGN
DRWN HWG
CHKD CWD
SUPV. REC
W.O.
PROJ. ENGR.

LC-17485

R-11