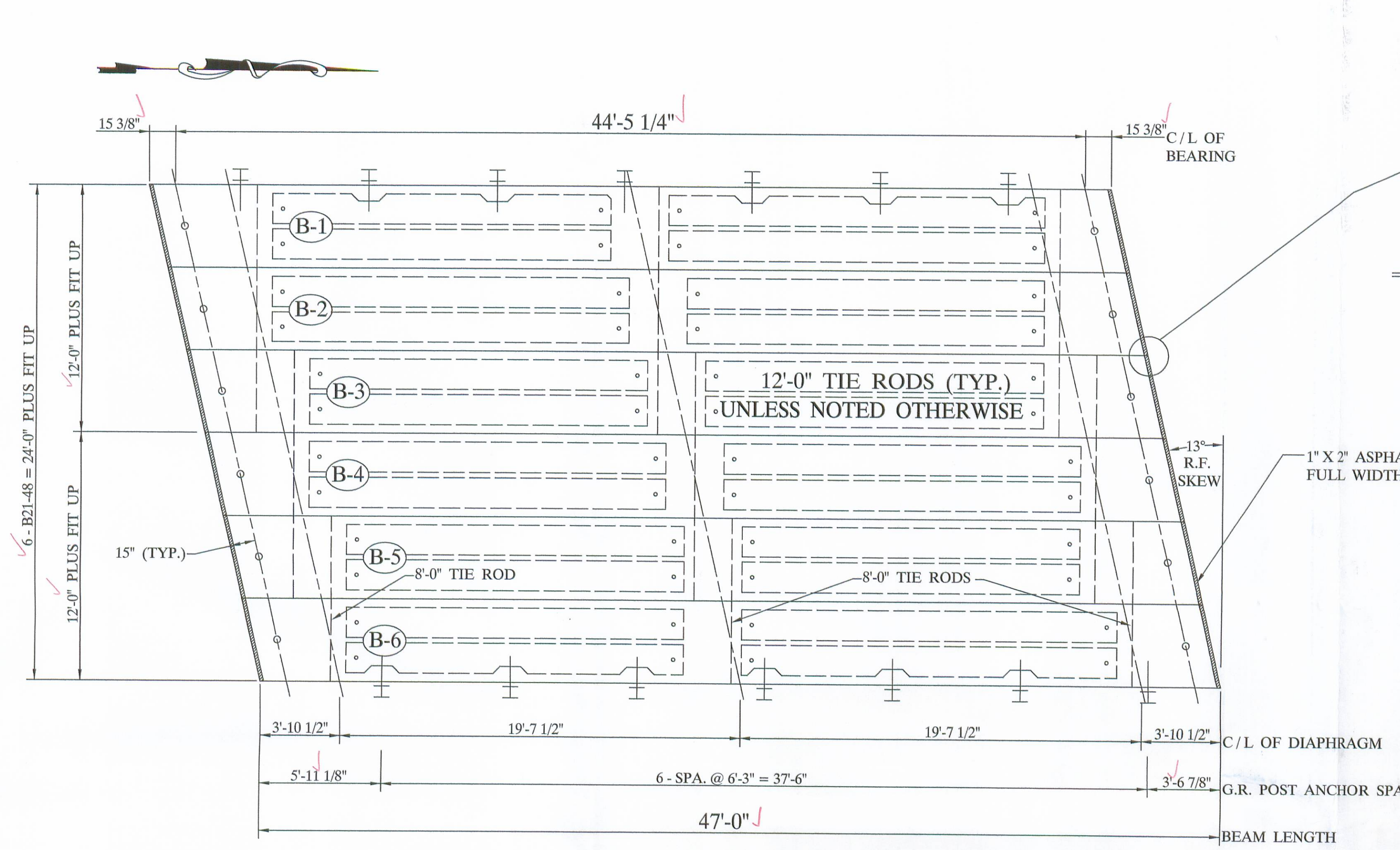
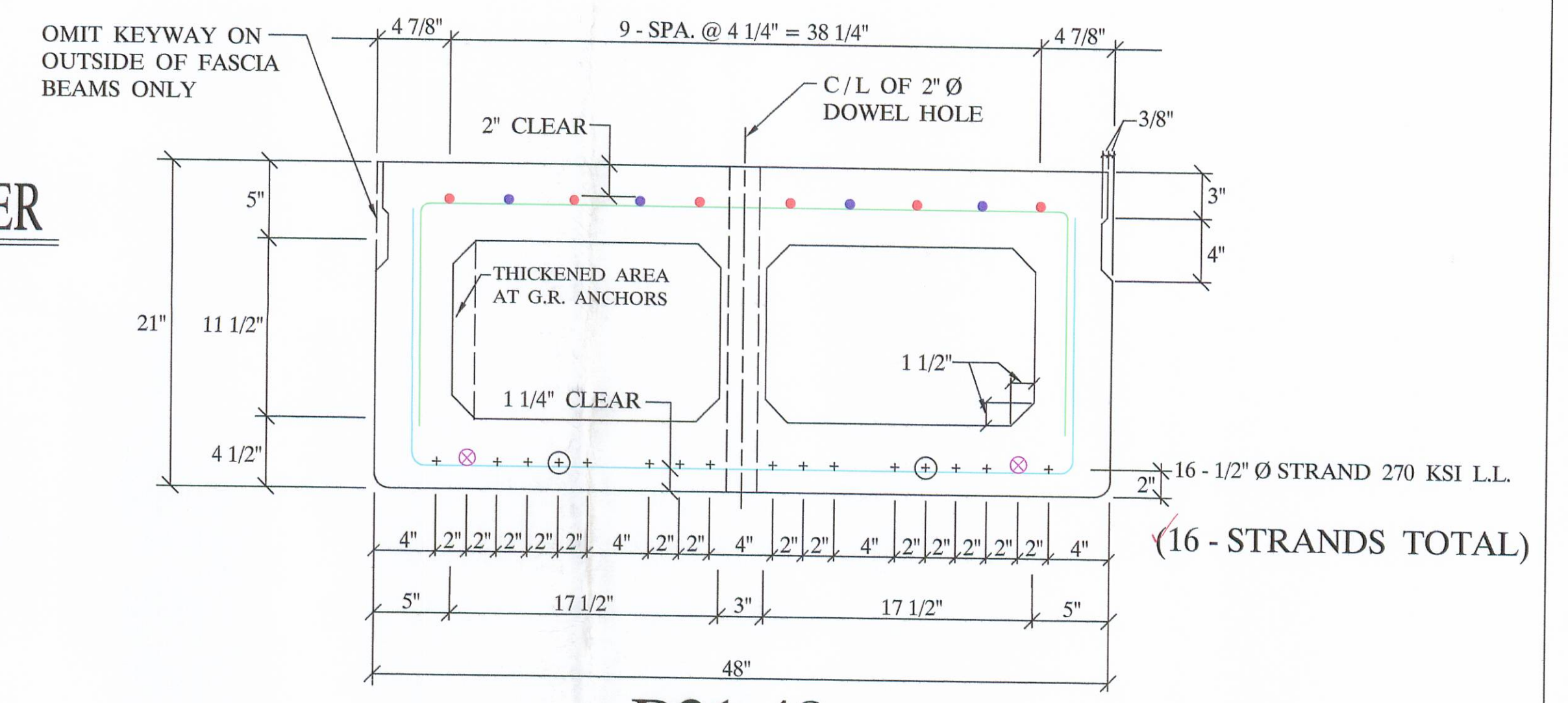
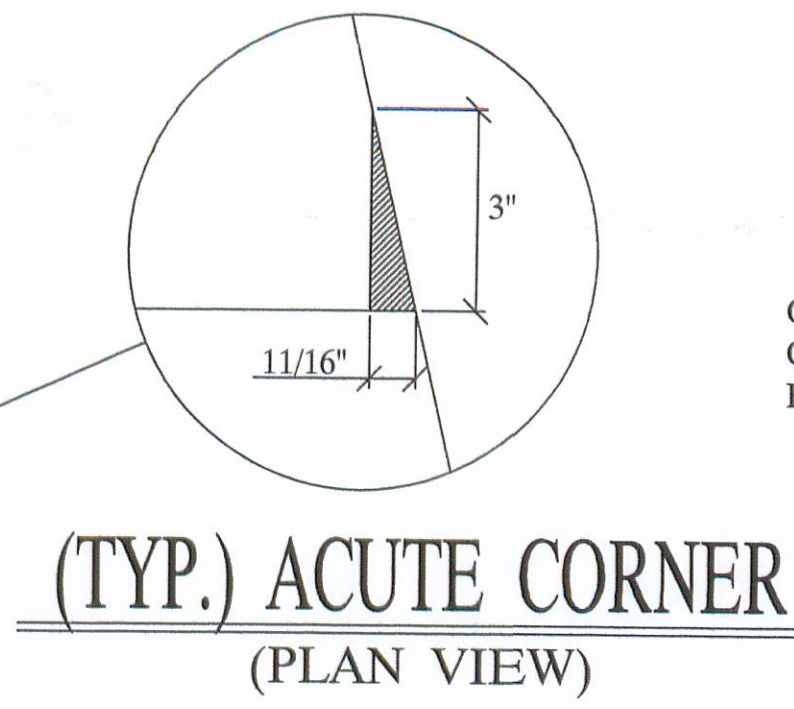


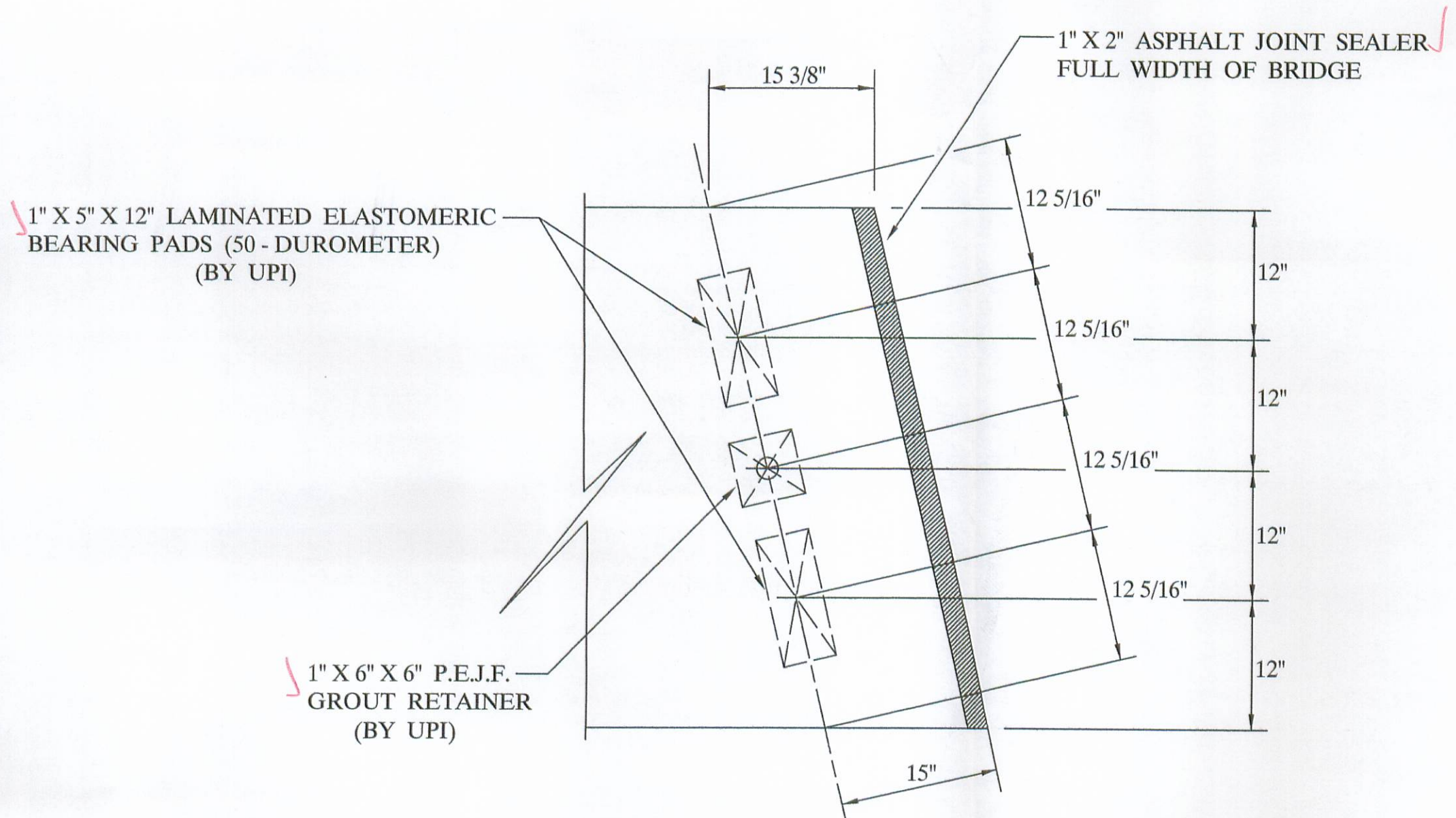
SPO. # 2038
 PLEASE MARK SPO. # ON TOP OF ALL BEAMS ALONG WITH COUNTY NAME



DECK PLAN



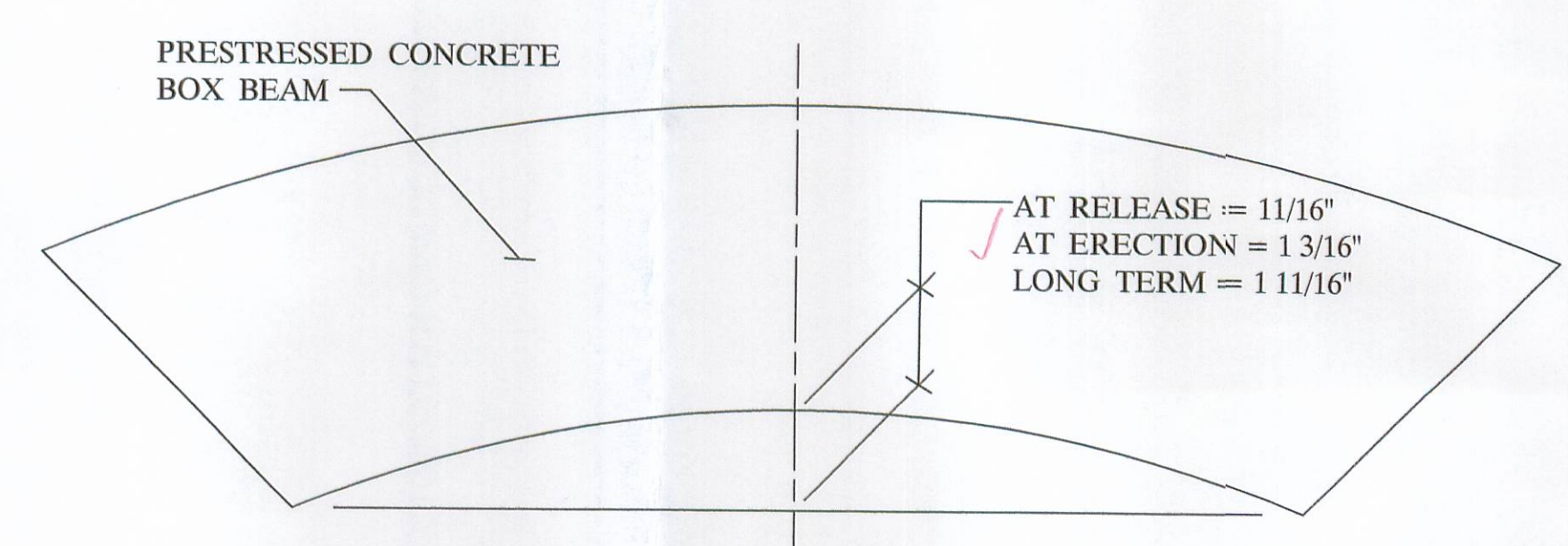
- 6 - #4 BARS FULL LENGTH RUN (TOP)
- 4 - #4 ADDITIONAL BARS 8'-9\"
- ⊗ 2 - #5 BARS FULL LENGTH RUN (BOTTOM)
- ⊕ DEBOND STRAND 1'-6\"



BEARING PAD LAYOUT
(PLAN VIEW)

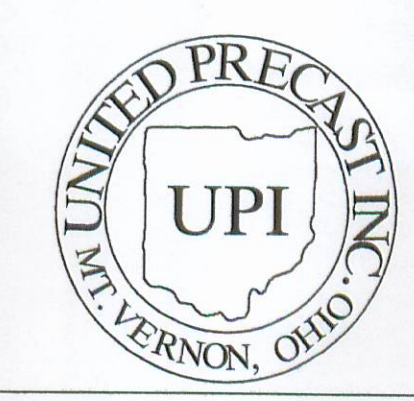
QUALITY CONTROL NOTE :

- STRAND AREA IS .153 IN. SQ.
- STRAND IS LOW LAX.
- INITIAL LOAD IS 30,982 # / STRAND.
- STIRRUPS UNDER STRAND.
- REBAR TO BE ALL GRADE - 60.
- CONCRETE STRENGTHS: 5500 PSI AT 28 DAYS
4000 PSI AT RELEASE
- ODOT 2005 SPECIFICATION.



CAMBER DETAIL
(ELEVATION)

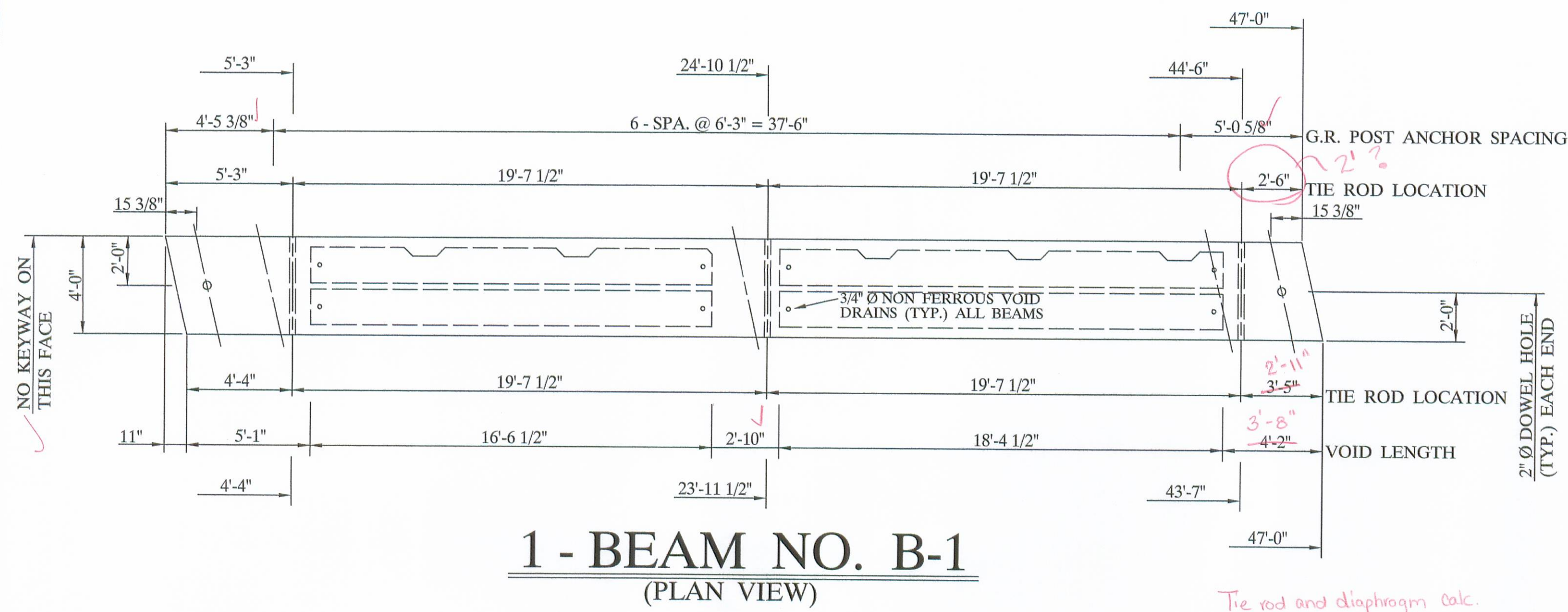
BILL OF MATERIALS				
NO	ITEM	QTY / BEAM	NOTES	TOTAL
1	BEAM WEIGHT		35,030 #	
2	CONCRETE	8.4 CY.		50.4 CY.
3	CALCIUM NITRITE (D.C.I.)	33.6 GAL.		201.6 GAL.
4	STRAND		4 - GAL. / CY.	5,120 L.F.
5	RE - STEEL		1/2" Ø STRAND 270 KSI L.L.	5,304 #
6	VOID		GRADE - 60	453 L.F.
7	VOID DRAINS		11 1/2" X 17 1/2"	48 EA.
8	TIE ROD		3/4" Ø NON FERROUS	6 EA.
9	TIE ROD SLEEVES		1" Ø STEEL ROD	3 EA.
10	TYPE - B - ANCHORS			96 L.F.
11	TYPE - C - ANCHORS			28 EA.
12	DOWELS & SLEEVES			14 EA.
13	WASSER		MC - TAR	12 EA.
14	SILANE			0.5 GAL.
15	JUTE			2.2 GAL.
16	BEARING PADS			235 L.F.
17	GUARDRAIL POST		1" X 5" X 12" , 1 - LAM.	24 EA.
18	OFF DECK POST		TYPE - 2	14 EA.
19	TUBULAR BACK UP		SHIP LOOSE	8 EA.
20	NON SHRINK GROUT ADDITIVE			125 L.F.
21	ASPHALT JOINT SEALER		1 1/4 CY. GROUT, BY OTHERS	11 LBS.
	P.E.J.F.		1" X 2" X 50'	50 FT.
			1/2" X 2" X 50'	8.5 S.F.
			1' X 6" X 6"	24 EA



UNITED PRECAST INC.
 ROUNDHOUSE LANE
 MOUNT VERNON, OHIO 43050
 PHONE : (740) 393-1121
 FAX : (740) 393-0044

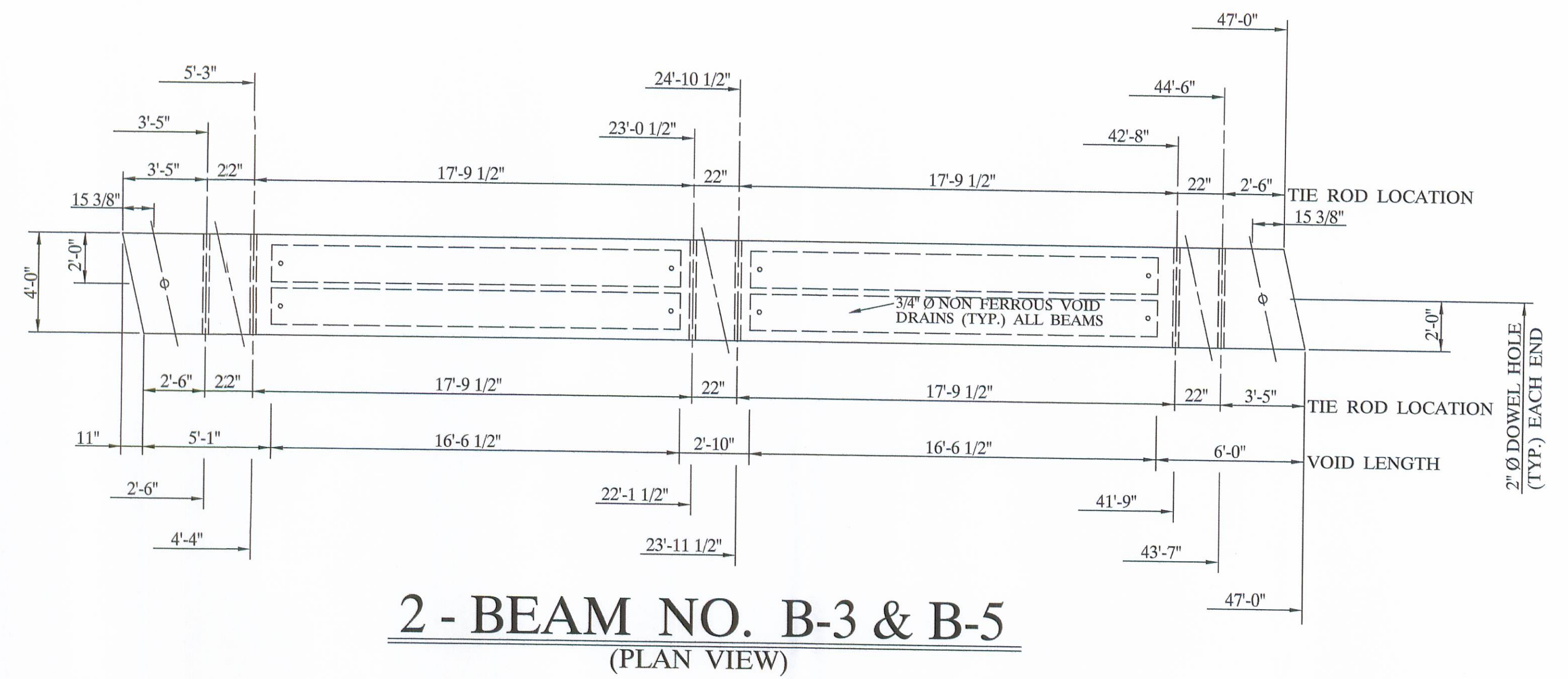
DESCRIPTION:	BOX BEAM DETAILS	SCALE:	DRAWN BY:
JOB NAME:	BRIDGE NO. BR 35 - 5.40 LOGAN COUNTY	PROJECT NO. C.R. 35	PHIL
DATE:	MARCH 2007	APPROVED BY:	REVISED:
		E.O.C. 4/7/07	DRAWING NO. 1 OF 4

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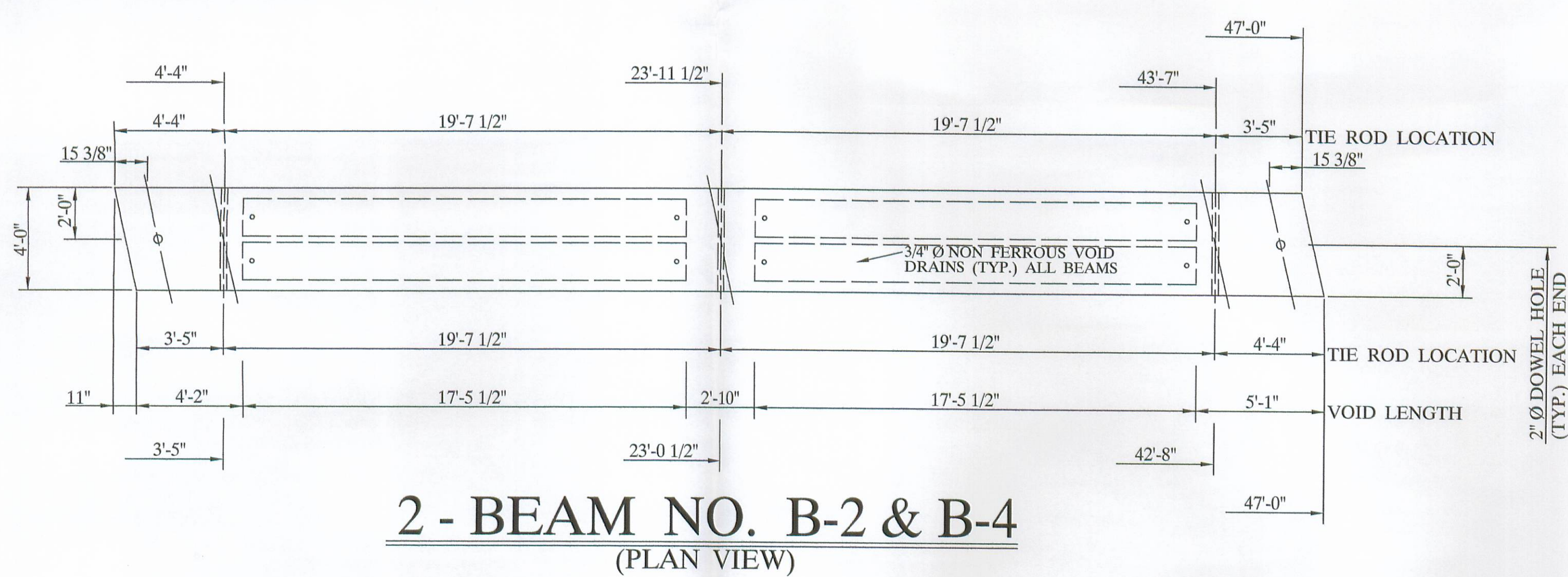


1 - BEAM NO. B-1
(PLAN VIEW)

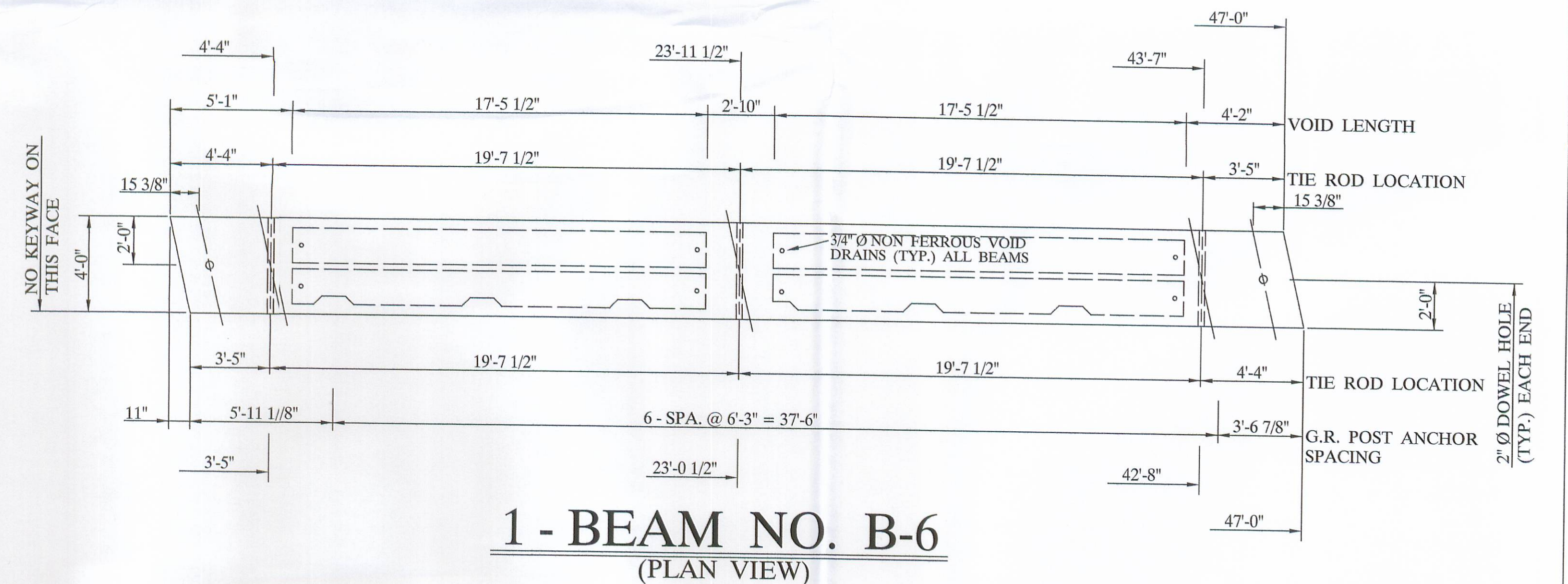
Tie rod and diaphragm calc. appear to be for 21, 33' and 42' beams instead of 12, 17, 21' per PSBD-1-93 Sheet 2 of 4



2 - BEAM NO. B-3 & B-5
(PLAN VIEW)



2 - BEAM NO. B-2 & B-4
(PLAN VIEW)



1 - BEAM NO. B-6
(PLAN VIEW)

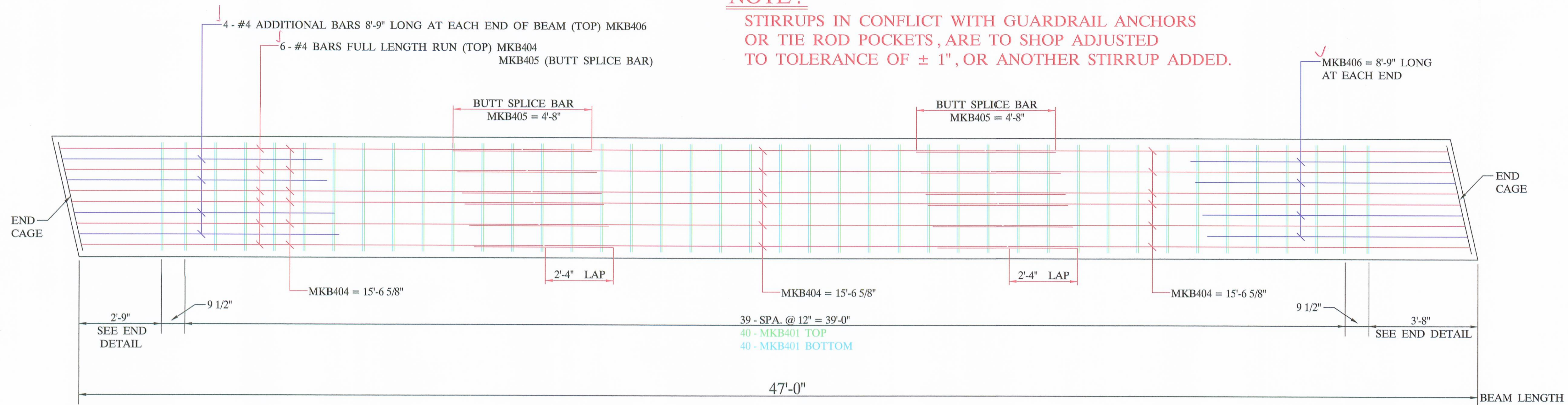


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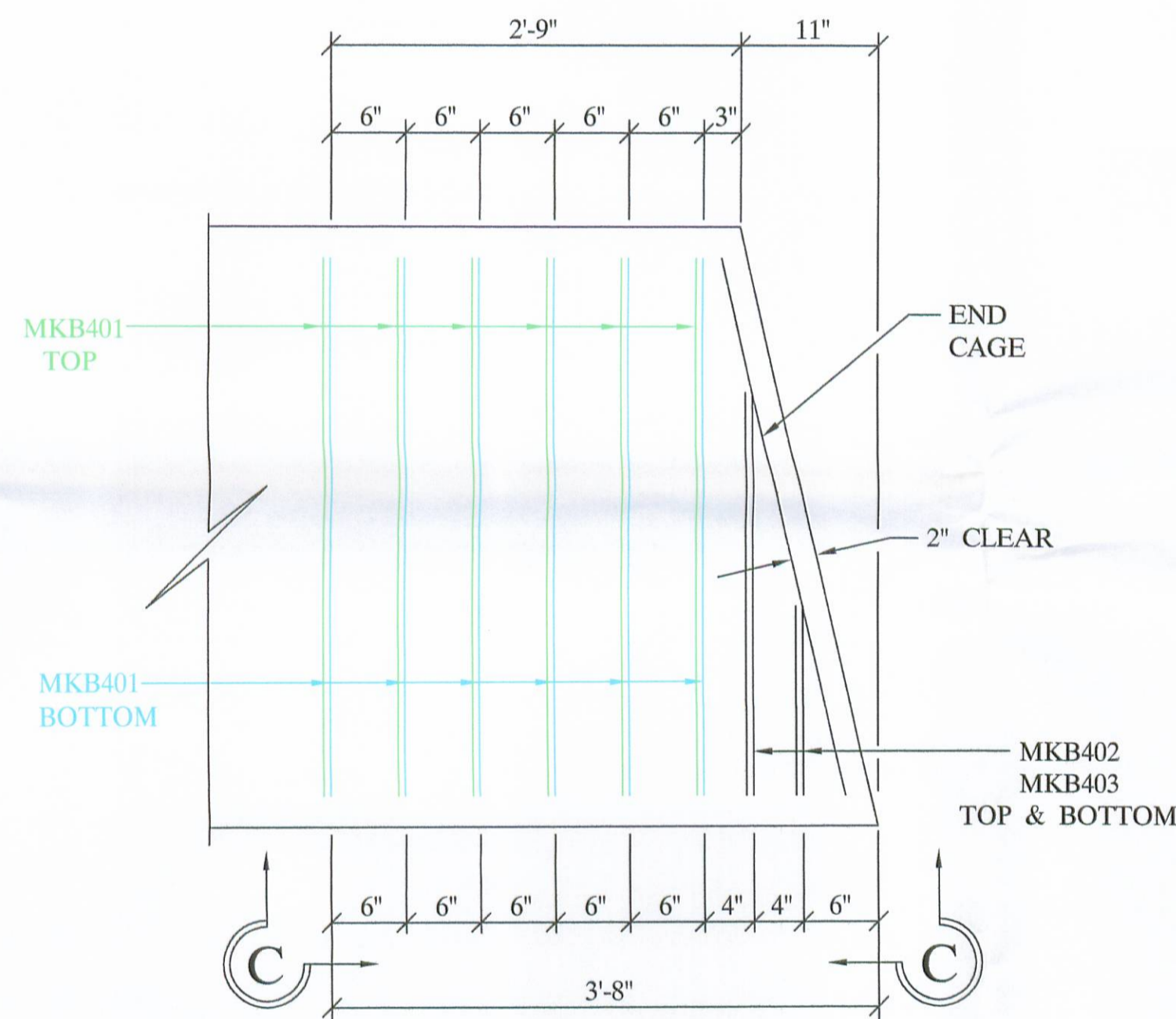
DESCRIPTION:	BOX BEAM DETAILS		SCALE:	DRAWN BY:
JOB NAME:	BRIDGE NO. BR 35 - 5.40 LOGAN COUNTY	PROJECT NO. C.R. 35	---	PHIL
DATE:	MARCH 2007	APPROVED BY:	E.O.C. 4/7/07	REVISED:
				DRAWING NO. 2 OF 4

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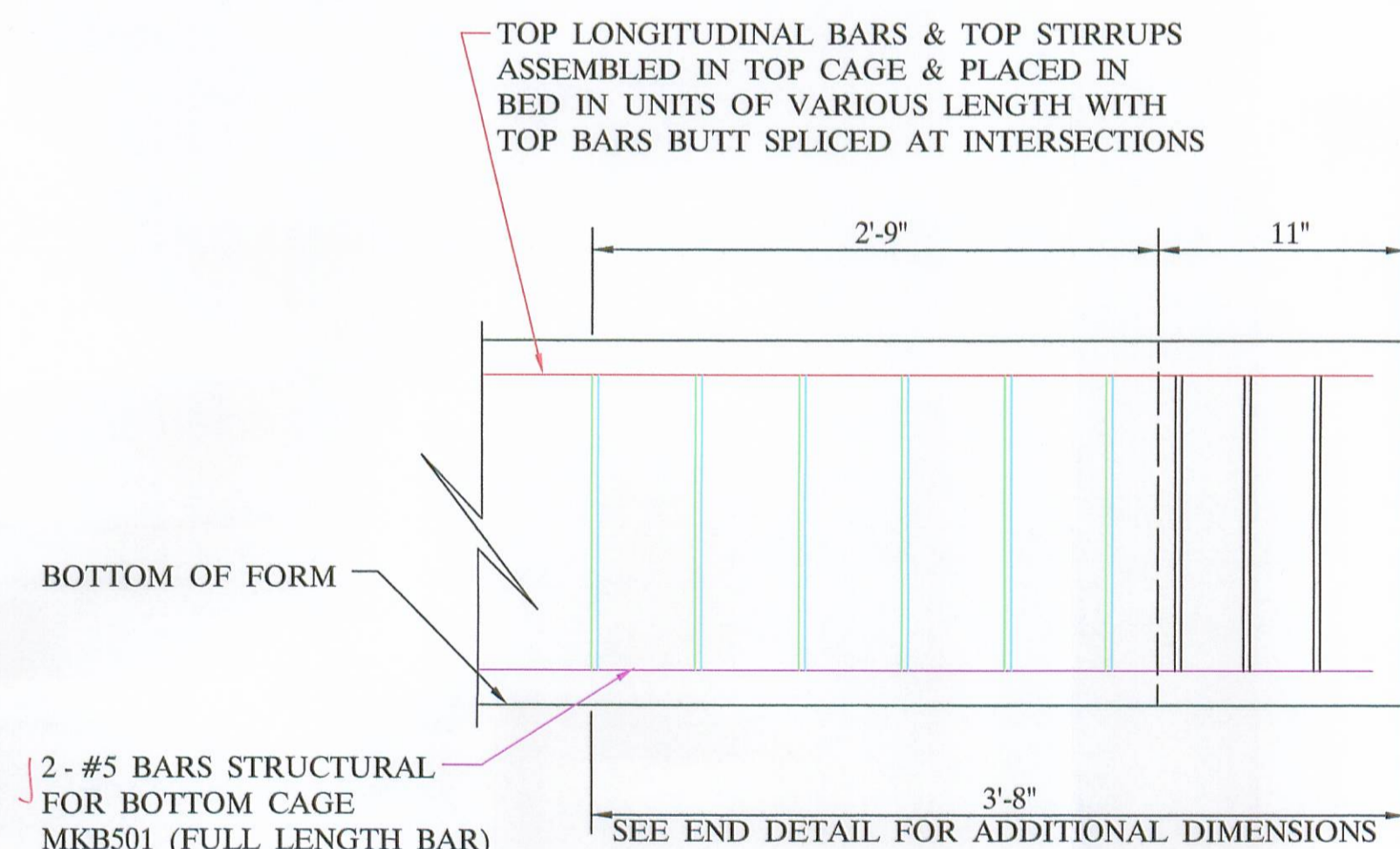
NOTE :
 STIRRUPS IN CONFLICT WITH GUARDRAIL ANCHORS
 OR TIE ROD POCKETS, ARE TO SHOP ADJUSTED
 TO TOLERANCE OF $\pm 1"$, OR ANOTHER STIRRUP ADDED.



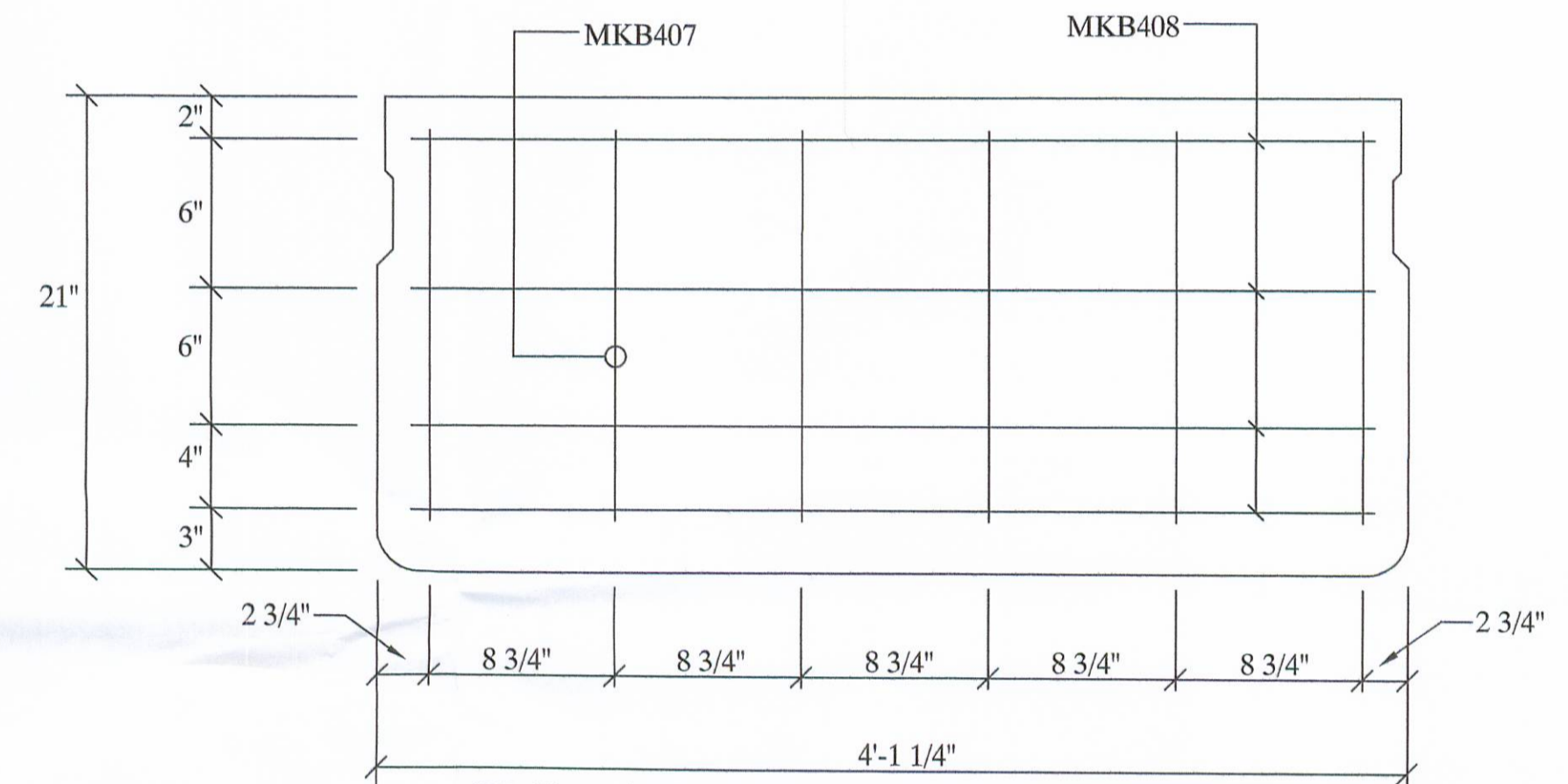
REINFORCING LAYOUT
 (PLAN VIEW)



(TYP.) END DETAIL
 (WITH SKEW)
 (PLAN VIEW)



ELEVATION C-C



BEAM END CAGE
 (WITH SKEW)
 (ELEVATION)

6 - B21-48 X 47'-0" WITH 13° R.F. SKEW

BAR LIST

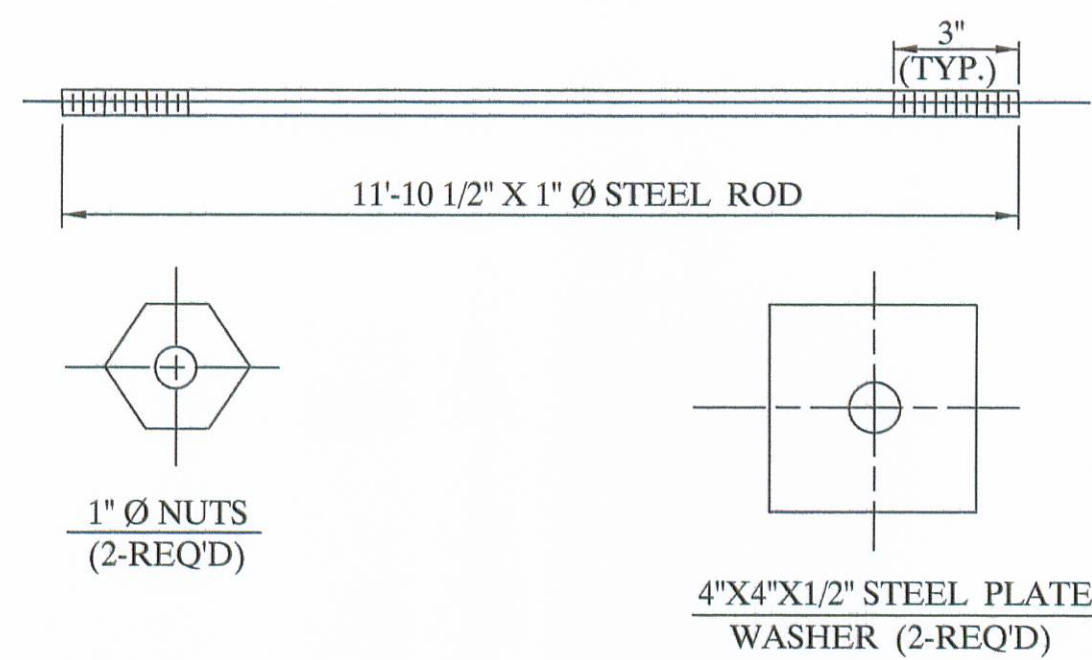
MARK	SIZE	LENGTH	QUANTITY	SHAPE	A	B	C	D
B401	4	6'-2 1/2"	624	TYPE - 2	43"	17"		
B402	4	3'-8 1/2"	24	TYPE - 2	13"	17"		
B403	4	5'-2 1/2"	24	TYPE - 2	31"	17"		
B404	4	15'-6 5/8"	108	TYPE - 3	15'-6 5/8"			
B405	4	4'-8"	72	TYPE - 3	4'-8"			
B406	4	8'-9"	48	TYPE - 3	8'-9"			
B407	4	1'-5"	72	TYPE - 3	17"			
B408	4	3'-8 3/4"	48	TYPE - 3	44 3/4"			
B501	5	15'-6 5/8"	36	TYPE - 3	15'-6 5/8"			
B502	5	5'-10"	24	TYPE - 3	5'-10"			

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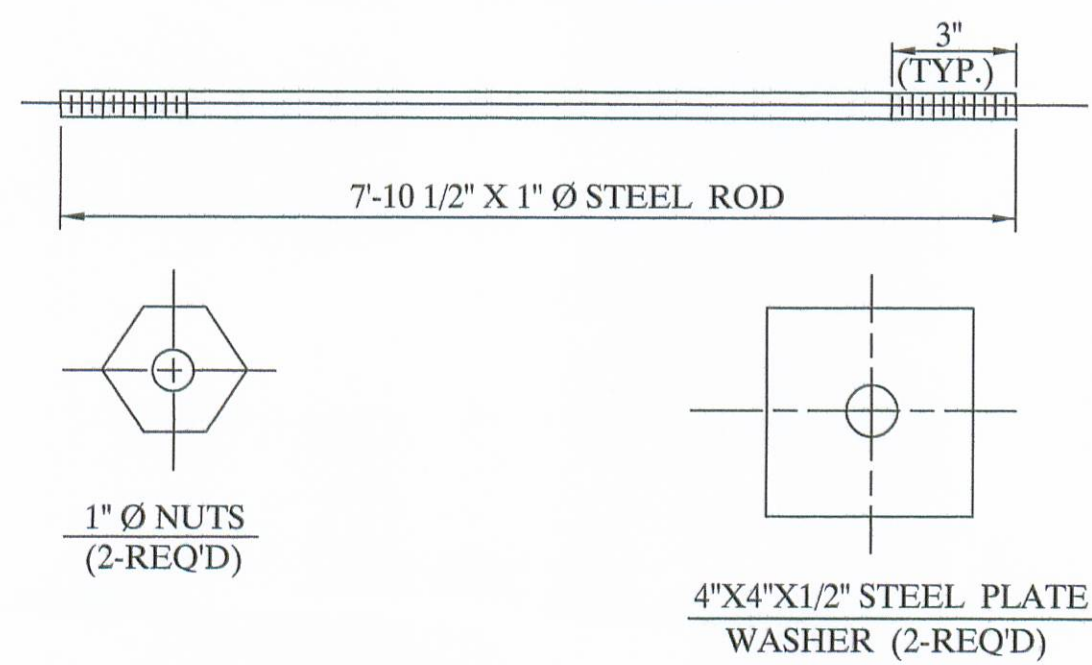
DESCRIPTION:	REINFORCING DETAILS	SCALE:	DRAWN BY:
JOB NAME:	BRIDGE NO. BR 35 - 5.40 LOGAN COUNTY	PROJECT NO. C.R. 35	PHIL
DATE:	MARCH 2007	APPROVED BY:	REVISIONS:
		E.O.C. 4/7/07	DRAWING NO. 3 OF 4

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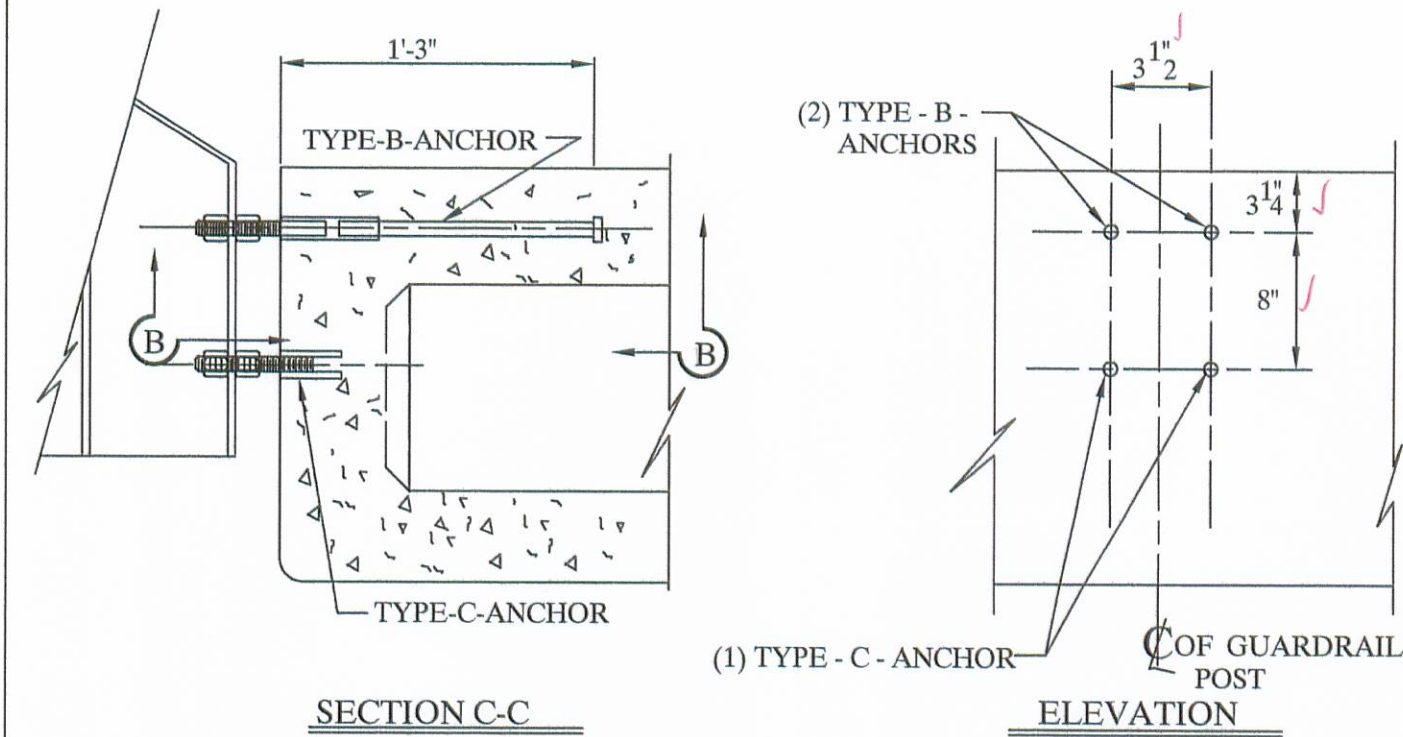
12'-0" TIE ROD ASS'Y



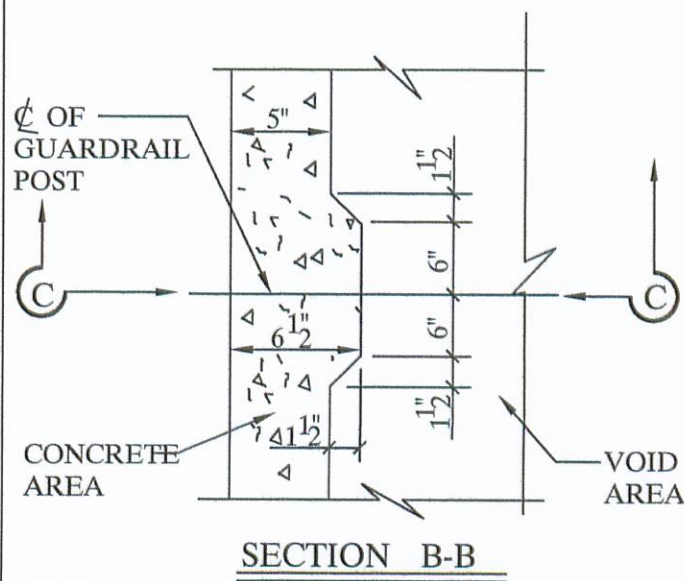
8'-0" TIE ROD ASS'Y



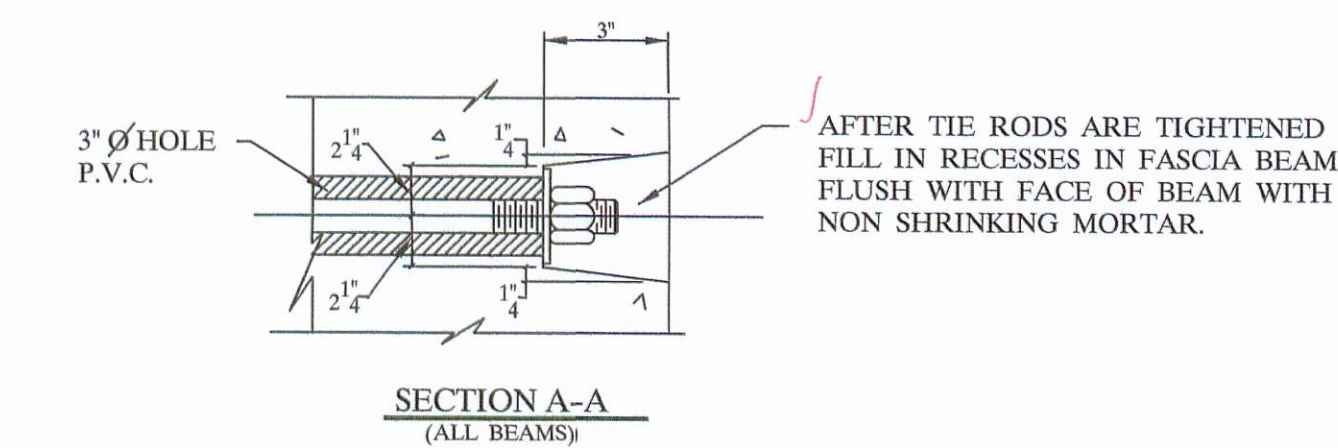
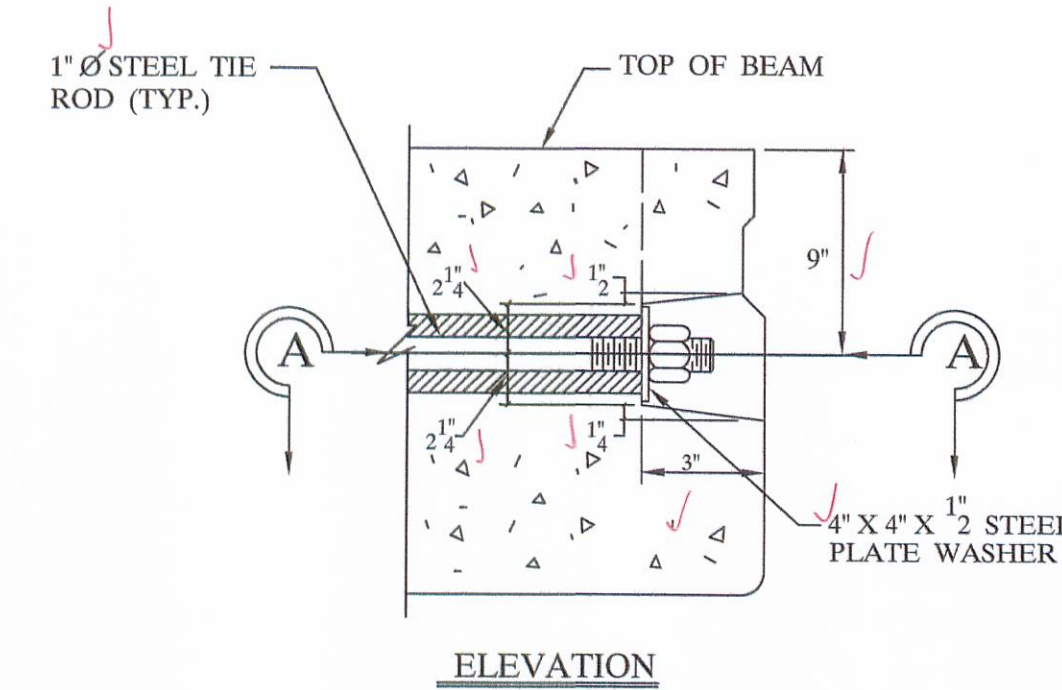
NOTE:
ALL ITEMS INCLUDING TIE RODS ACCESSORIES SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM-123 OR 153. PER CMS 711.02, UNLESS OTHERWISE NOTED.



NOTE:
ONE TYPE "C" ANCHOR PROVIDE S FOR (2) STUDS (SEE BELOW).

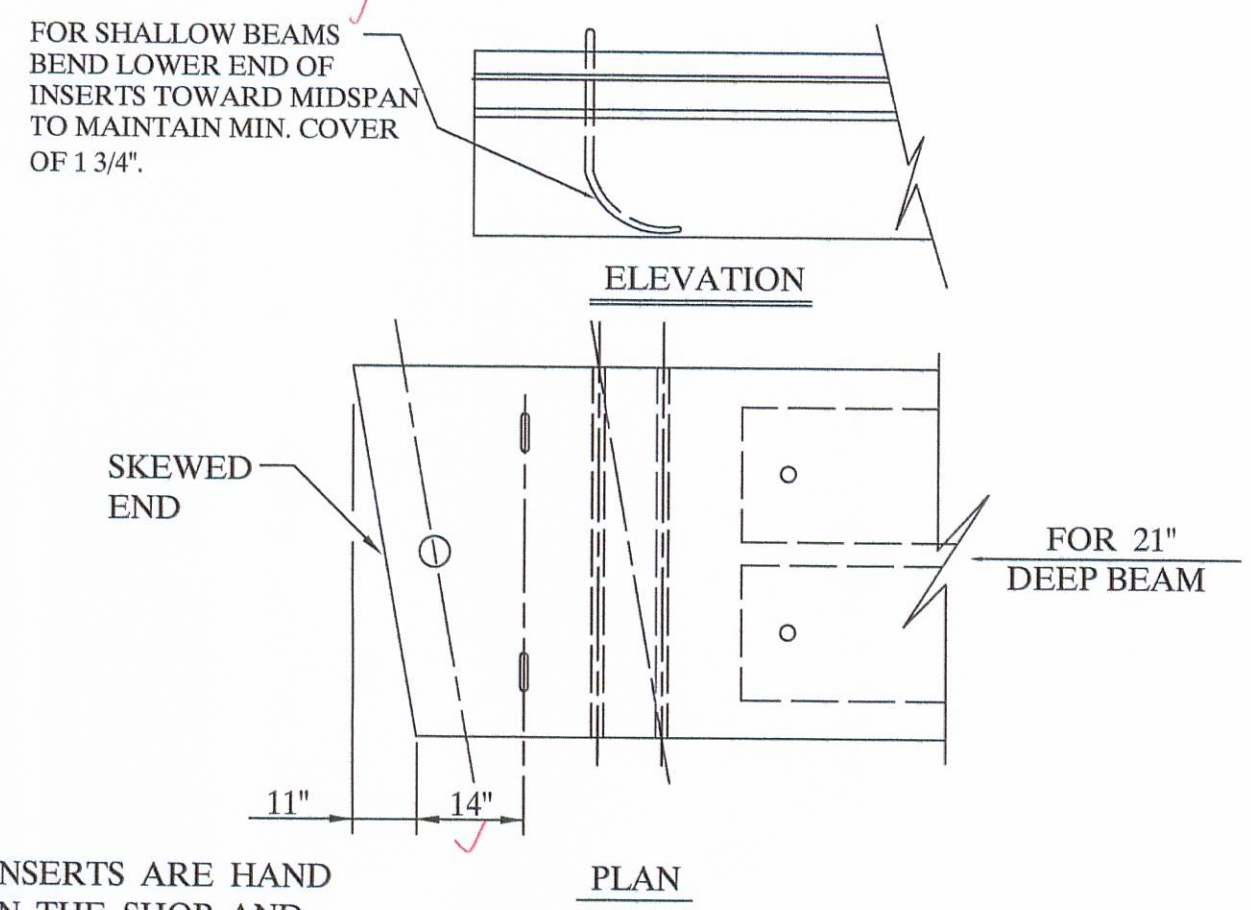
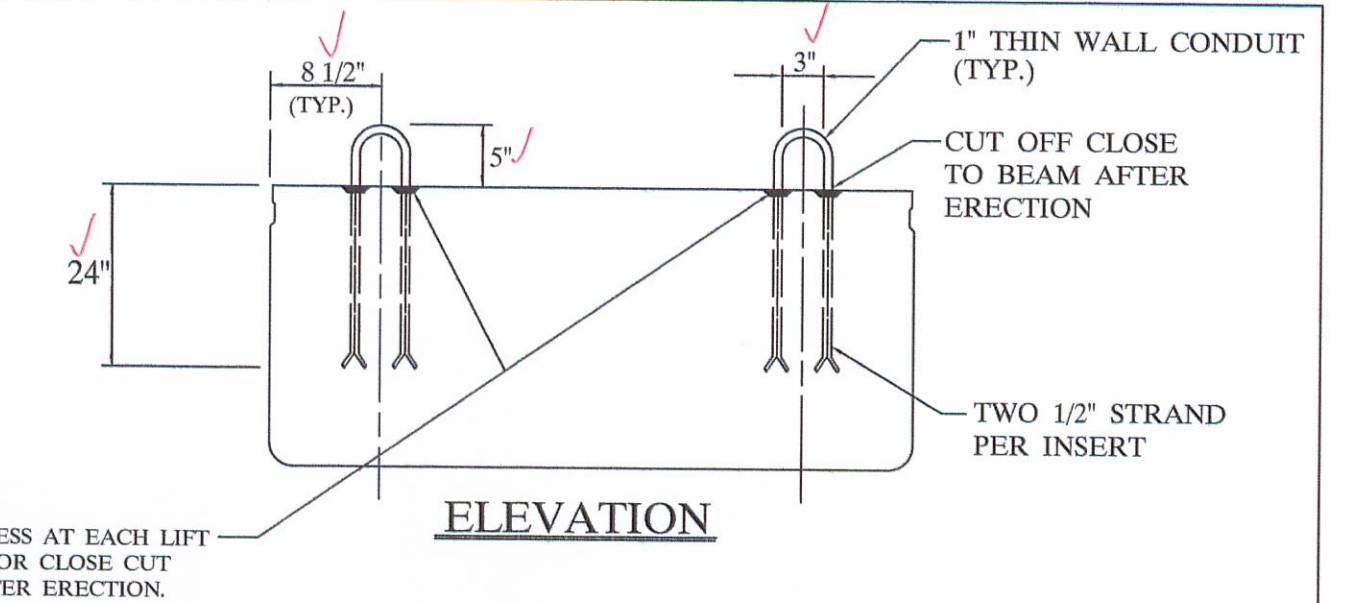


NOTE:
TYPE B & C ANCHOR ASSEMBLIES SHALL CONFORM TO PHYSICAL PROPERTIES OF ASTM-A-325. EXCEPT MIN. ELONGATION SHALL BE 10%. THE CHEMICAL PROPERTIES ARE WAIVED.



END DETAIL OF TRANSVERSE TIE ROD ANCHORAGE

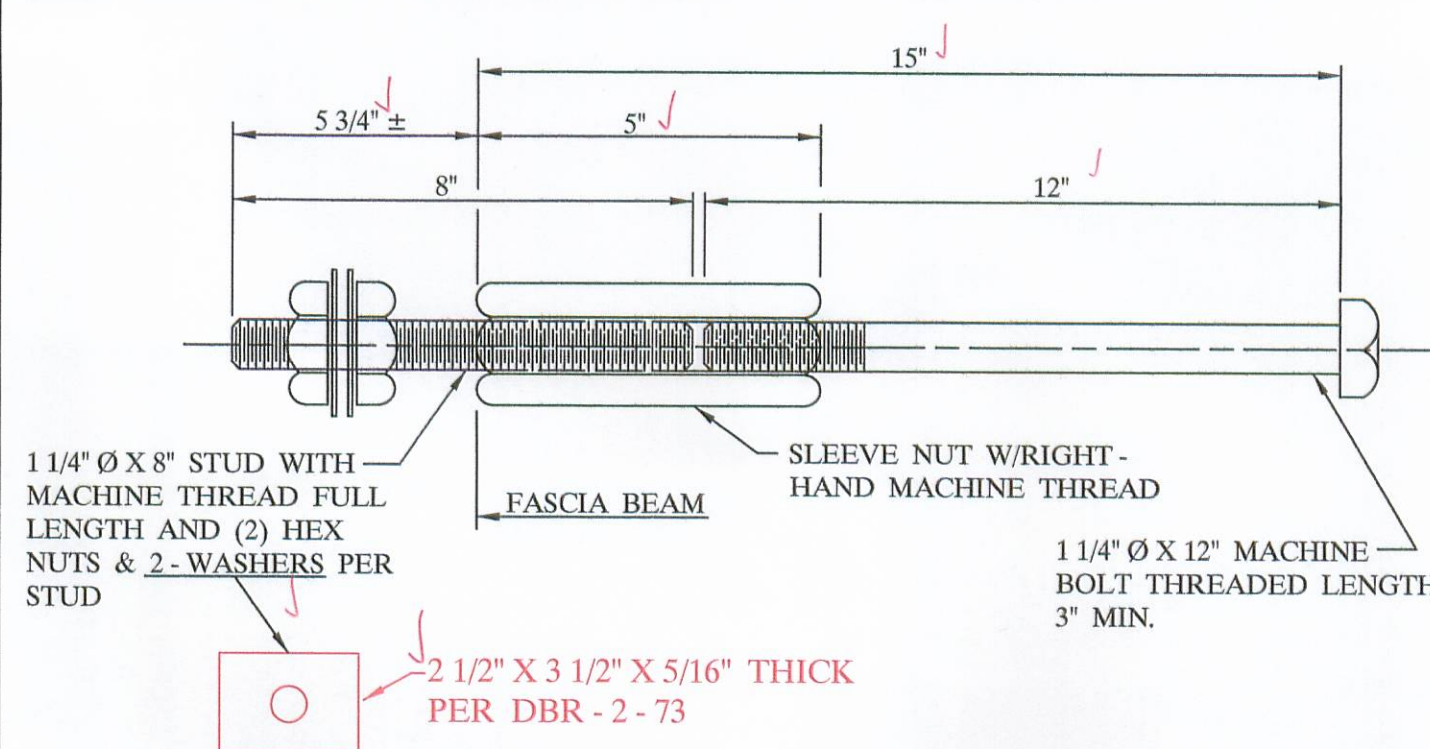
NOTE:
TIE RODS SHALL BE A311-G1018 STEEL, OR A-36 MODIFIED.



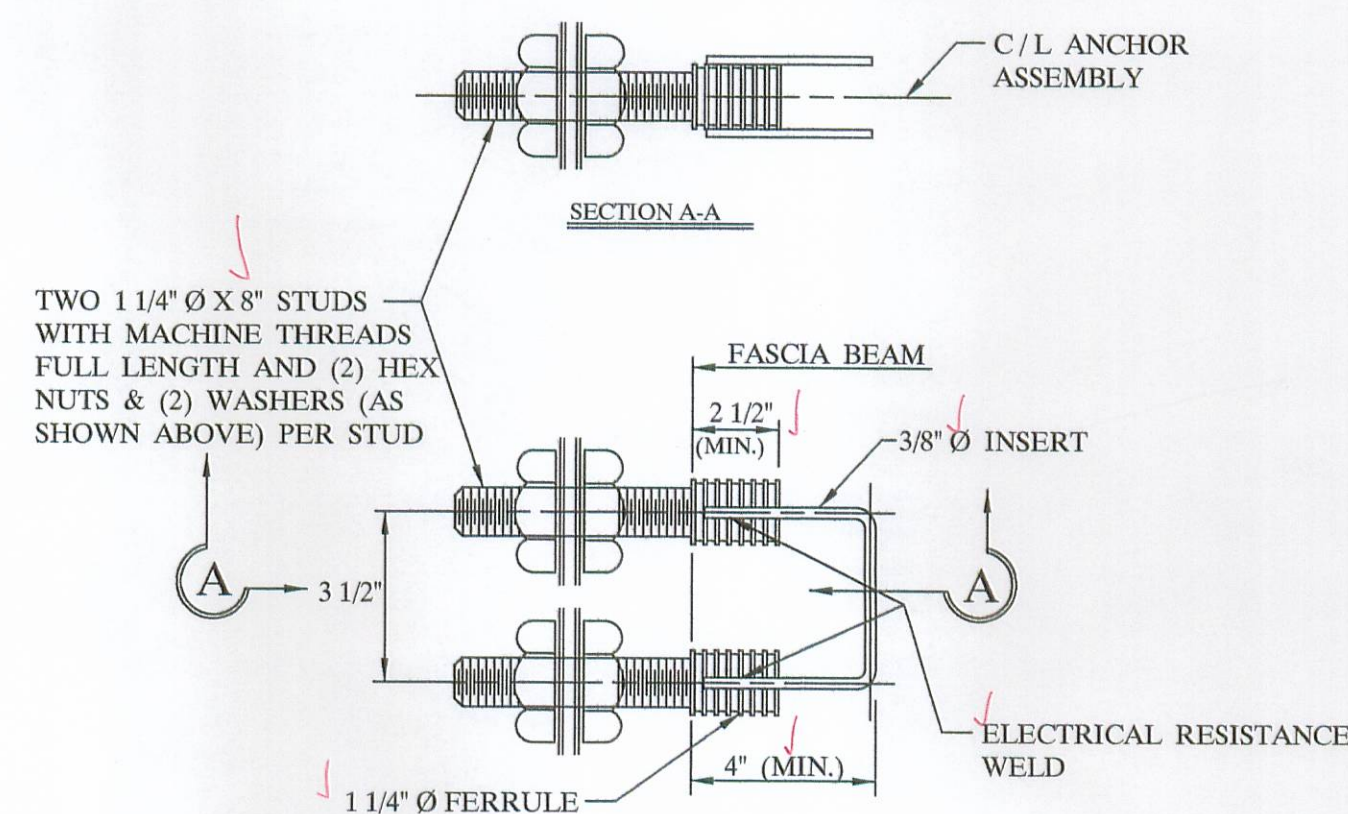
NOTE:
LIFTING INSERTS ARE HAND PLACED IN THE SHOP AND ARE TO BE ADJUSTED TO CLEAR REINFORCEMENT, ANCHOR DOWEL SLEEVES, TIE ROD SLEEVES, OR ANY ADDITIONAL EMBEDDED ITEMS IN THIS REGION.

LIFTING INSERT DETAIL

TYPE "B" ANCHOR



TYPE "C" ANCHOR



"B" & "C" ANCHOR DETAILS

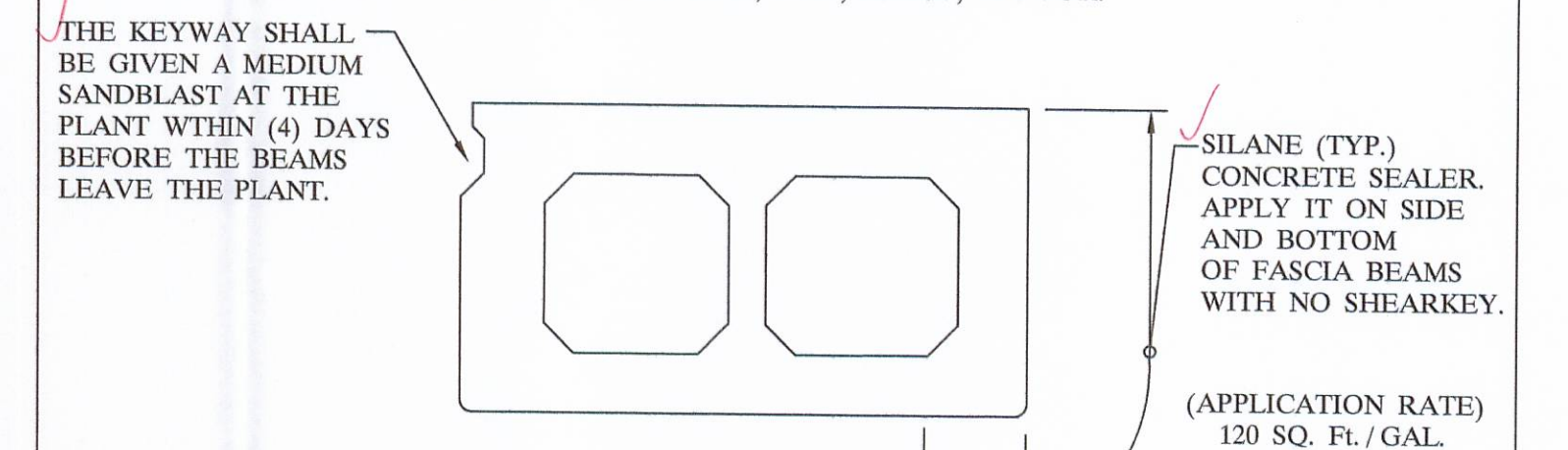
NOTE:

- 1) GALVANIZE ALL HARDWARE PER CMS. 711.02.
- 2) PROVIDE A BROOM FINISH ON TOP SURFACE OF BEAM SUITABLE FOR WATERPROOFING.
- 3) ADD D.C.I. TO CONCRETE (4 - GAL. / CUBIC YARD).
- 4) WATERPROOF BEAM ENDS.
- 5) DETENSION STRAND SYMMETRICALLY ABOUT CENTERLINE.

SPECIFICATIONS

- DESIGN LOADING: HS20-44 AND ALTERNATE MILITARY LOADING.
- CONCRETE: COMPRESSIVE STRENGTH, $f_c = 5500$ PSI @ 28 DAYS (SHIPPING), $f_c = 4000$ PSI @ RELEASE.
- PRESTRESSING STRAND: ASTM A - 416 GRADE 270, 1/2" DIAMETER, SEVEN WIRE, UNCOATED LOW RELAXATION STRAND, $A_s = .153$ in², $f_s = 270$ KSL, INITIAL STRESS: $0.75 f_s = 202.5$ KSL.
- REINFORCING STEEL: GRADE - 60: ASTM A - 615, ASTM A - 616, ASTM A - 617. UNIT STRESS 24,000 PSI.

NOTE:
PRESTRESSED CONCRETE BEAMS AND APPURTENANCES CONFORM TO O.D.O.T. STANDARD BRIDGE DRAWINGS PSBD - 1 - 93 SHEETS ONE, TWO, THREE, & FOUR.



TYPICAL FASCIA BEAM

BRIDGE NO. BR 35 - 5.40 PROJECT NO. C.R. 35
LOGAN COUNTY ITEM 515

UNITED PRECAST INC.

ROUNDHOUSE LANE
MT. VERNON, OHIO 43050
PHONE:(740)393-1121, FAX:(740)393-0044

SCALE: -----
DRAWN BY: PHIL
REVISED

DATE: MARCH '07 APPROVED BY: E.O.C. 4/7/07
DRAWING NO. 4 OF 4