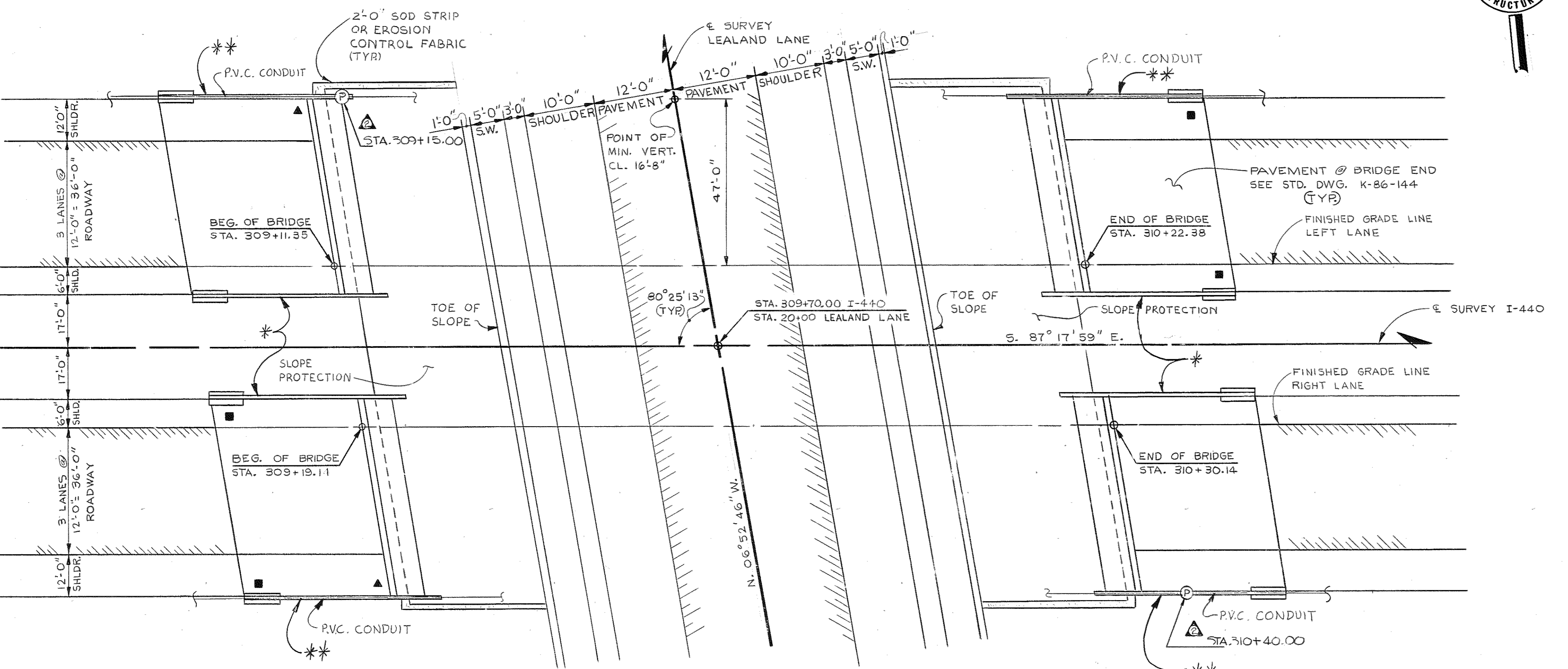
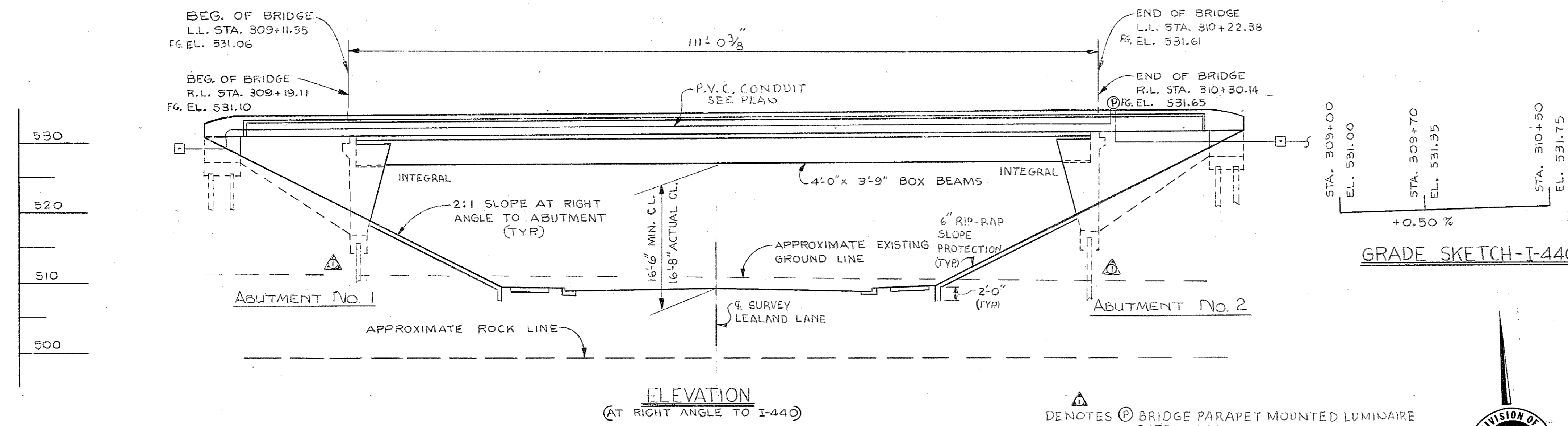


PROJECT NO.	YEAR	SHEET NO.
I-440-4(5+20)	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	9-29-81	JHW	VERTICAL PILES
2		HMB	ADDED LIGHTING
3	3-23-84	R.L.H.	MODIFICATION TO PARAPET AND INDICATED SOUND BARRIER LOCATION.



LIST OF DRAWINGS	DWG. NO.	LATEST REV. DATE
LAYOUT OF BRIDGE	M-110-55	
GENERAL NOTES AND ESTIMATED QUANTITIES	M-110-56	
FOUNDATION DATA	M-110-57	
SUPERSTRUCTURE	M-110-58	
SUPERSTRUCTURE DETAILS	M-110-59	
PRESTRESSED BOX BEAM (EXTERIOR)	M-110-60	
PRESTRESSED BOX BEAM (INTERIOR)	M-110-61	
ABUTMENTS NO. 1 & 2	M-110-62	
ABUTMENTS NO. 1 & 2 DETAILS	M-110-63	
BILL OF STEEL	M-110-64	

LIST OF STD. DWG'S	DWG. NO.	LATEST REV. DATE
STANDARD PILE DETAILS	H-5-111	11-23-73
STANDARD REINFORCING BAR SUPPORT	K-80-14	8-27-76
MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS	K-85-150	1-9-75
REINFORCED CONCRETE PAVEMENT AT BRIDGE ENDS	K-86-144	7-17-81
BRIDGE RAILING - CONCRETE PARAPET	M-28-1	7-17-81
TENNESSEE STANDARD PRECAST PAVEMENT DECK PANELS	M-103-149 & 150	7-7-82
STANDARD DRAWING LIGHT STANDARD SUPPORT DETAILS	M-8-143	11-20-75

LIST OF SPECIAL PROVISIONS	LATEST REV. DATE
907A REGARDING EPOXY COATED REINFORCING STEEL	9-8-81
105A REGARDING APPROVAL OF SHOP DRAWINGS	9-8-81

▲: DENOTES ROADWAY DRAIN REQUIRED.
■: DENOTES GUARDRAIL ATTACHMENT NEEDED.

NOTE: ALL EXPOSED SURFACES OF ABUTMENT AND PARAPET INSERT SHALL RECEIVE A DECORATIVE FORM FINISH. SEE SURFACE FINISH SKETCH ON DRAWING NO. I-440-4(5+20).

*: DENOTES STANDARD M-28-1 RAILING.
*: DENOTES SOUND BARRIER RAILS (SEE DETAILS ON DRAWING NO. M-110-63).

DESIGNED BY HOUSTON WALKER DATE 6-81
DRAWN BY ROY JENKINS DATE 9-81
SUPERVISED BY HARRISON & ROWMAN DATE 9-81
CHECKED BY HOUSTON WALKER DATE 11-81

CORRECT *Colleton L. Lovell*
ENGINEER OF STRUCTURES
APPROVED *Louis Brans*
DIRECTOR OF HIGHWAYS

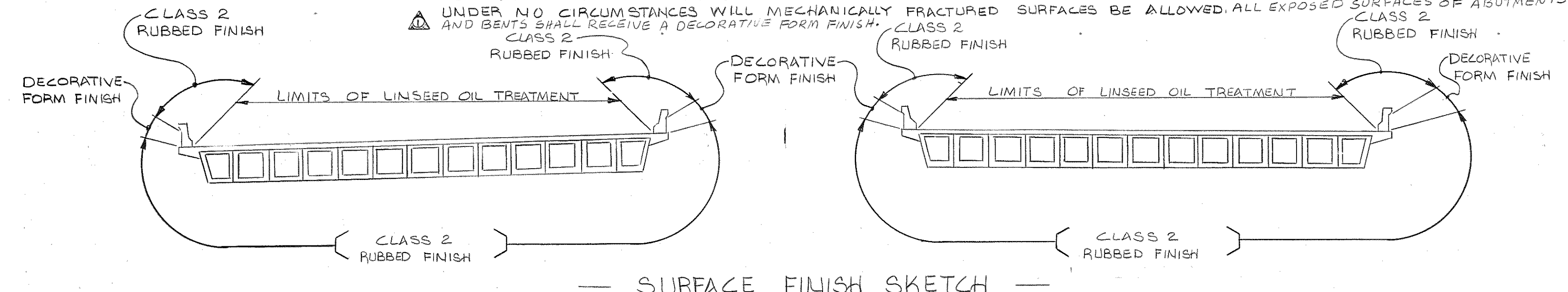
M-110-55

CLASS 'A' GRADING 'D' 73 cy.

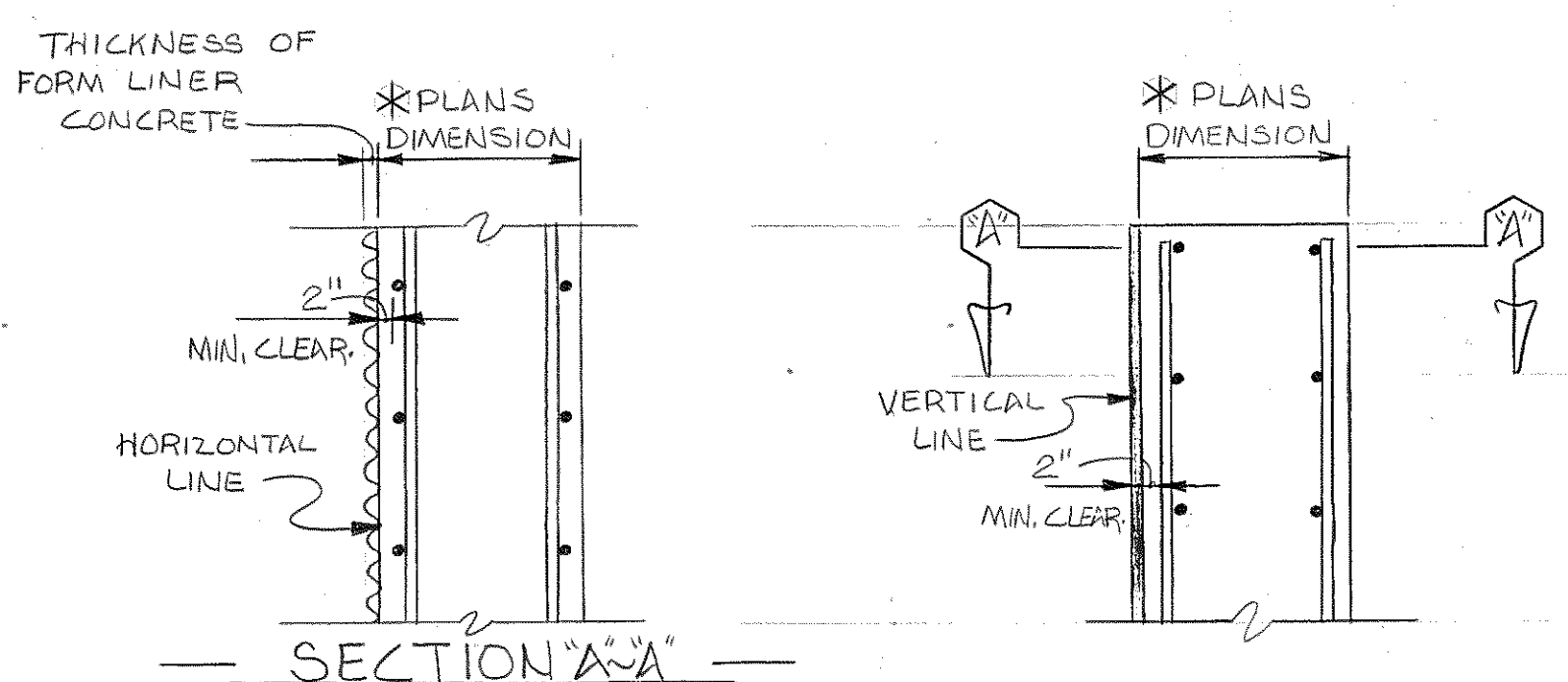
PROJECT NO.	YEAR	SHEET NO.
I-440-4(SA) 201	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	9-29-83	JHW	CONCRETE FINISH NOTE
2		HALL	ADDED LIGHTING

CONCRETE FINISHES: PORTIONS OF BRIDGE SURFACE DESIGNATED TO RECEIVE A CLASS 2 "RUBBED FINISH" SHALL BE FINISHED ACCORDING TO SUBSECTION 604-2.2 OF THE STANDARD SPECIFICATIONS. PORTIONS OF THE BRIDGE SURFACE DESIGNATED TO RECEIVE A DECORATIVE FORM FINISH SHALL BE FORMED USING A FORM LINER SIMILAR TO BURKE B4308 CONCRETE HARP, LITHOTEX FORM LINER FRACTURED FINISH GROOVED T-150, SYMONS 3/4" NARROW FRACTURED FIN P/C 30909-9 OR EQUAL. AFTER STRIPING FORM LINERS, THE DECORATIVE FORM FINISHED AREAS SHALL RECEIVE A CLASS 1, ORDINARY FINISH IN ACCORDANCE WITH SUBSECTION 604.23 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A SAMPLE CASTING USING THE FORM LINER TO BE FURNISHED. THE COST OF ALL CONCRETE FINISHES SHALL BE INCLUDED IN THE UNIT PRICE OF ITEMS BID ON. SURFACES RECEIVING A DECORATIVE OR CLASS 2 FINISH SHALL NOT RECEIVE A LINSEED OIL TREATMENT. SEE SURFACE SKETCH THIS SHEET. UNDER NO CIRCUMSTANCES WILL MECHANICALLY FRACTURED SURFACES BE ALLOWED. ALL EXPOSED SURFACES OF ABUTMENTS AND BENTS SHALL RECEIVE A DECORATIVE FORM FINISH.



* NOTE: ALL ESTIMATED QUANTITIES BASED ON PLANS DIMENSIONS.



NOTE: THESE DETAILS ARE TYPICAL FOR ALL STRUCTURAL ELEMENTS REQUIRING DECORATIVE FORM LINERS EXCEPT CONCRETE PARAPETS. PARAPET DIMENSIONS MAY BE REDUCED BY THE THICKNESS OF THE FORM LINERS IN ORDER TO UTILIZE STANDARD PARAPET FORMS. REINFORCING BAR BENDING DIMENSIONS SHALL BE REDUCED ACCORDINGLY.

GENERAL NOTES

SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION (MARCH, 1981 EDITION).
LOADING: HS20-44 WITH ALTERNATE MILITARY DESIGN SPECIFICATIONS: AASHTO 1977 EDITION WITH ADDENDA.
CONCRETE: TO BE CLASS "A" (LAST IN PLACE).
 f'c = 3,000 PSI.
BRIDGE DECK FORMS: BRIDGE DECK FORMS FOR CONCRETE DECKS SHALL BE CONSTRUCTED USING EITHER REMOVABLE FORMS OR PERMANENT FORMS. PERMANENT FORMS MAY BE EITHER REMAIN-IN-PLACE STEEL OR PRECAST, PRE-STRESSED CONCRETE PANELS. IN EITHER CASE, FORMS SHALL BE ATTACHED BY MEANS OTHER THAN WELDING TO SUPPORT MEMBERS.

ESTIMATED QUANTITIES

ITEM NO.	604-02.03	604-03.01	604-03.02	604-03.03	604-01.12	606-22.03	606-32.03	606-42.03	615-02.13	615-02.49	620-03	709-05.04	710-10	710-11	714-01.02
ITEM	EPOXY COATED REINFORCING STEEL LBS.	CLASS "A" CONCRETE (BRIDGES) C.Y.	STEEL BAR REINFORCEMENT (BRIDGES) LBS.	LINSEED OIL TREATMENT SY.	CLASS "A" CONCRETE (BRIDGE DECK) C.Y.	STEEL PILES (10 INCH) (DRIVING) L.F.	STEEL PILES (10 INCH) (FURNISH DOMESTIC) L.F.	STEEL PILES (10 INCH) (FURNISH FOREIGN) L.F.	PRESTRESSED CONCRETE BOX BEAM (45" x 48") L.F. ①	PRESTRESSED CONCRETE TRAPEZOIDAL BOX BEAM L.F. ①	CONCRETE PARAPET L.F. ④	MACHINED RIP-RAP (3 IN. TO 6 IN.) C.Y.	6" Ø PERFORATED C.M. PIPE (18 GA) W/ POROUS BACKFILL L.F. ②	6" Ø C.M. PIPE UNDERDRAINS (18 GA) L.F.	STRUCTURE LIGHTING (BRIDGE NO. 2) ⑤
LEFT LANE															
SUPERSTRUCTURE	28,260	24.2	875		88.5										
ABUTMENT NO. 1		107.2	18,957										48	13	
ABUTMENT NO. 2		107.2	18,957										48	13	
PVMT @ BRIDGE ENDS	6,493	109.9	21,626												
SUB TOTAL	34,753	348.5	60,415	951	88.5	745	745	745	1,199	218	302	184	96	26	
RIGHT LANE															
SUPERSTRUCTURE	28,260	24.2	875		88.5										
ABUTMENT NO. 1		107.2	18,957										48	13	
ABUTMENT NO. 2		107.2	18,957										48	13	
PVMT @ BRIDGE ENDS	6,493	109.9	21,626												
SUB TOTAL	34,753	348.5	60,415	951	88.5	690	690	690	1,199	218	302	184	96	26	
TOTAL	69,506	697.0	120,830	1902	177.0	1435	1435	1435	2,398	436	604	368	192	52	1

- ① NOTE: COST OF ELASTOMERIC PADS, RUBBER BONDING CEMENT, AND DOWEL BARS TO BE INCLUDED IN THE COST OF PRESTRESSED BEAM.
- ② NOTE: COST OF POLYETHYLENE SHEETING AND ALL MISCELLANEOUS ITEMS NECESSARY FOR INSTALLATION TO BE INCLUDED IN COST OF PERFORATED C.M. PIPE.
- ③ NOTE: THE COST OF 16 THREADED STEEL INSERTS AND 16 7/8" Ø x 4" HEX HEAD BOLTS, (A307), TO BE INCLUDED IN BRIDGE ITEMS BID ON.
- ④ ALL REINFORCING STEEL IN THE TRAFFIC FACE OF PARAPETS SHALL BE EPOXY COATED. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 620-03.
- ⑤ EXCAVATION BASED ON EXISTING GROUND.

MACHINED RIP-RAP FOR SLOPE PROTECTION SHALL BE 3 IN. TO 6 IN., IN SIZE AND MEET THE QUALITY REQUIREMENT OF SUBSECTION 918-10 AND PAID FOR UNDER ITEM 709-05.04.
 SEE STANDARD DRAWING NO. RD-SA-1.

⑤ NOTE: LUMP SUM FOR STRUCTURE LIGHTING TO INCLUDE THE INSTALLATION OF 350 L.F. OF 2" PVC CONDUIT, 2 LIGHT SUPPORTS WITH 3 ANCHOR BOLTS, AND ALL NECESSARY MATERIALS FOR THE INSTALLATION OF STRUCTURE LIGHTING.

THE CONTRACTOR SHALL TAKE STEPS TO ASSURE THE STABILITY OF THE EXTERIOR GIRDER AGAINST TWISTING OR OVERTURNING DURING SLAB POURING OPERATIONS.
REINFORCING STEEL: TO BE ASTM A615 GRADE 60. STANDARD CRSI HOOK DETAILS APPLY UNLESS OTHERWISE NOTED ON BILL OF STEEL. BENDING DIMENSIONS SHOWN ARE BASED ON GRADE 60. SPACING DIMENSIONS ARE CENTER TO CENTER UNLESS OTHERWISE NOTED ON DETAIL DRAWINGS. THE SUFFIX 'E' FOR BARS SO MARKED, DENOTES EPOXY COATED REINFORCEMENT SEE SPECIAL PROVISION 907A.
BRIDGE RAIL SYSTEM: BUILD PARAPETS ACCORDING TO STANDARD DRAWING M-28-1.

NOTE: CLASS A CONCRETE FOR BRIDGE DECKS SHALL BE IN ACCORDANCE WITH SECTION 604 OF THE STANDARD SPECIFICATIONS EXCEPT AS FOLLOWS:
 MINIMUM 28 DAY COMPRESSIVE STRENGTH _____ 4500 PSI.
 MAXIMUM WATER/CEMENT _____ 50 GAL SACK OF CEMENT
 AIR CONTENT _____ 6% ± 2%
 * PAYMENT WILL BE UNDER ITEM 604-01.12

FILES: TO BE HP 10 x 42 DRIVEN TO REFUSAL ON ROCK OR A MINIMUM OF 44 TONS FOR THE ABUTMENTS.
NOTE: THE CONTRACTOR SHALL SUPPORT THE ABUTMENTS UNTIL THE SUPERSTRUCTURE IS IN PLACE. FALSEWORK HAS BEEN REMOVED AND BACKFILLING HAS BEEN COMPLETED.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS

General Notes and Estimated Quantities
 Interstate 440 Over Lealand Lane
 Station: 309+70.00
 Davidson County
 1982

DESIGNED BY Houston Walker DATE 6-81
 DRAWN BY Grant L. Lloyd DATE 9-81
 SUPERVISED BY Roger L. Harbison & Bowman DATE 9-81
 CHECKED BY Houston Walker DATE 11-81

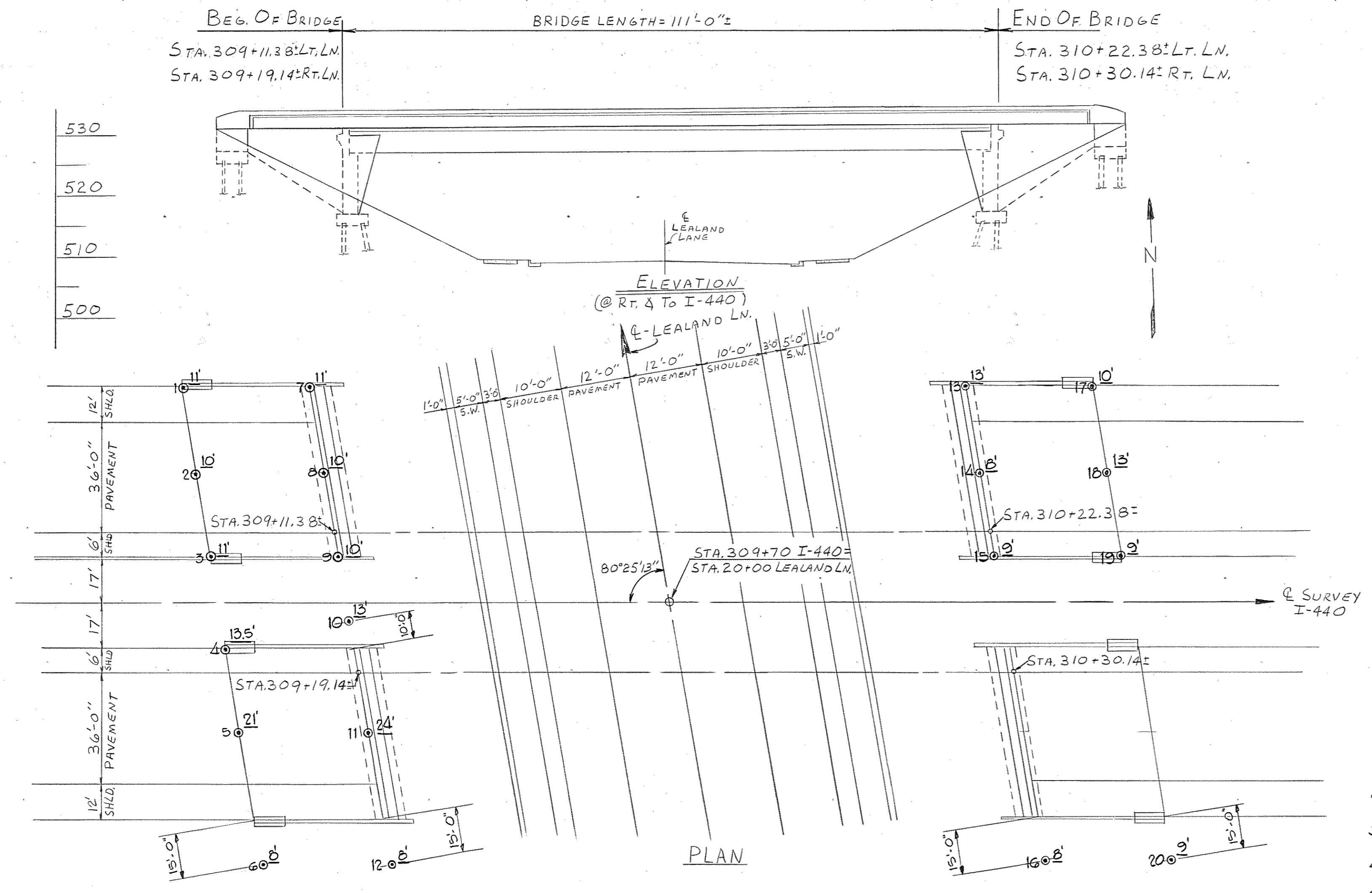
CORRECT *William L. Forner*
 ENGINEER OF STRUCTURES
 APPROVED *Lewis Evans*
 DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.
I-440-4(54)209	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

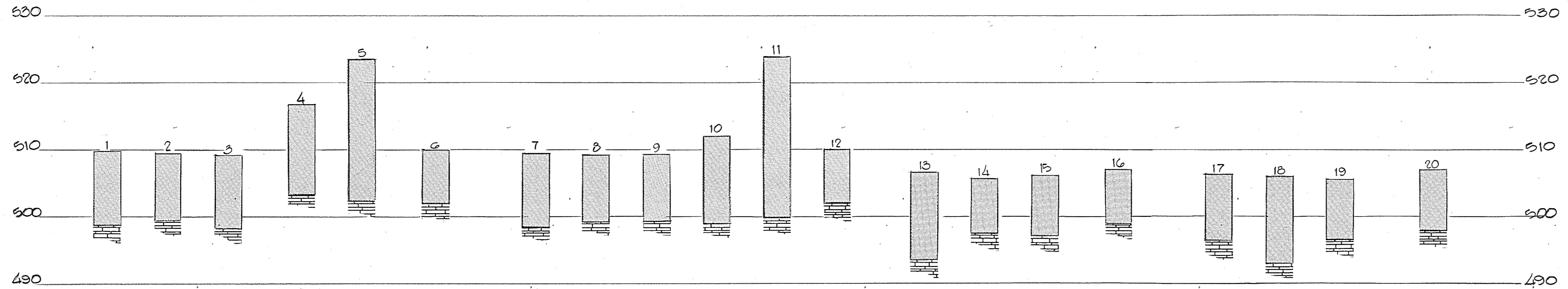
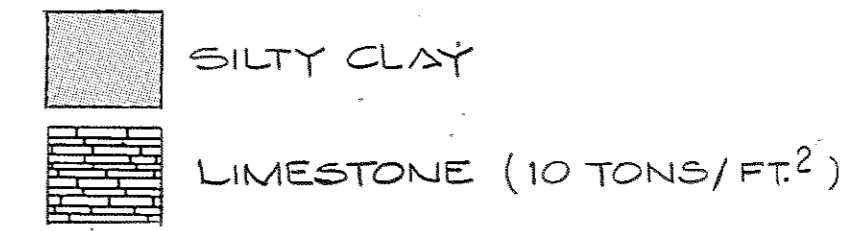
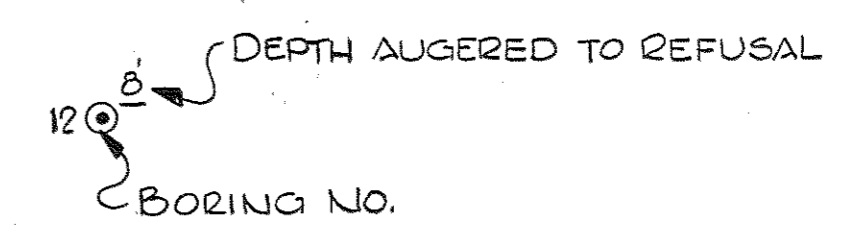
REQUIRED:
 1) APPROXIMATE EXISTING GROUND AND ROCK LINE.
 2) SUFFICIENT GROUND, ROCK & CORING INFORMATION FOR BRIDGE FOUNDATIONS.

BENCHMARK:



GROUND AND ROCK ELEVATIONS

1 G 509.9 R 498.9	6 G 510.0 R 502.0	11 G 523.9 R 499.9	16 G 507.0 R 499.0
2 G 509.9 R 499.9	7 G 509.4 R 498.4	12 G 510.0 R 502.0	17 G 506.3 R 496.3
3 G 509.9 R 498.9	8 G 509.2 R 499.2	13 G 506.7 R 493.7	18 G 506.0 R 493.0
4 G 516.9 R 503.4	9 G 509.3 R 499.3	14 G 505.7 R 497.7	19 G 503.7 R 496.7
5 G 523.6 R 499.6	10 G 512.0 R 499.0	15 G 506.1 R 497.1	20 G 507.0 R 498.0



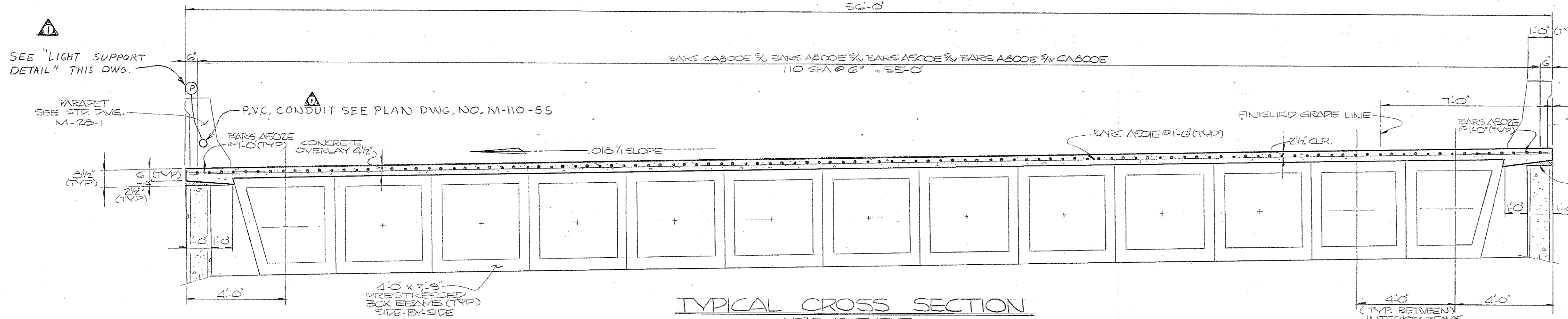
DESIGNED BY _____ DATE _____
 DRAWN BY _____ DATE _____
 SUPERVISED BY _____ DATE _____
 CHECKED BY _____ DATE _____

CORRECT _____ ENGINEER OF STRUCTURES
 APPROVED _____ DIRECTOR OF HIGHWAYS

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 FOUNDATION DATA
 I-440 OVER LEALAND LANE
 STA. 309+70, I-440
 STA. 20+00, LEALAND LN.
 DAVIDSON CO.
 1981

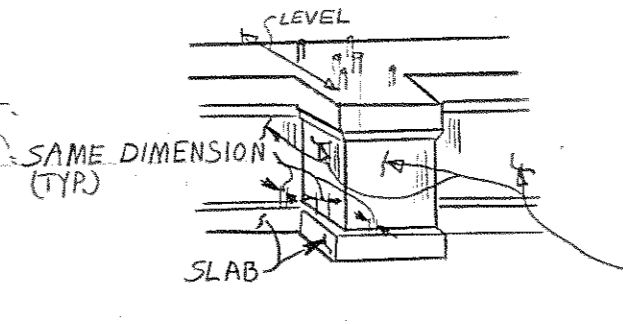
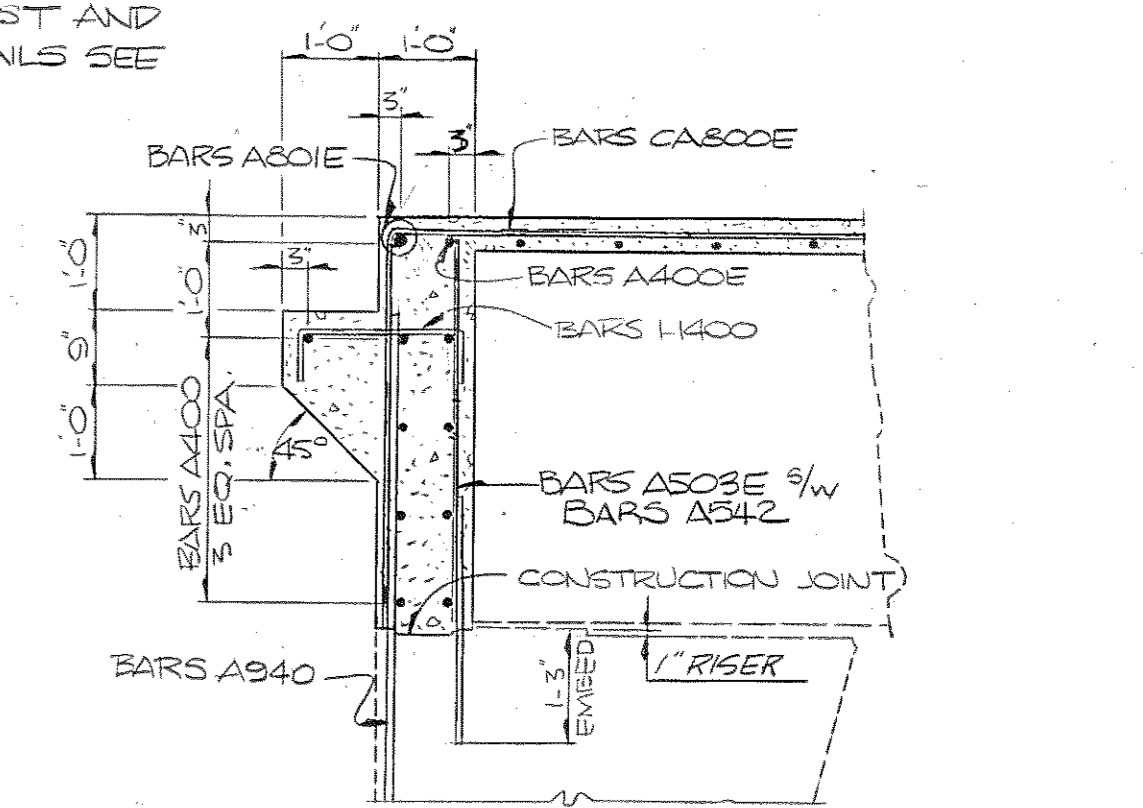
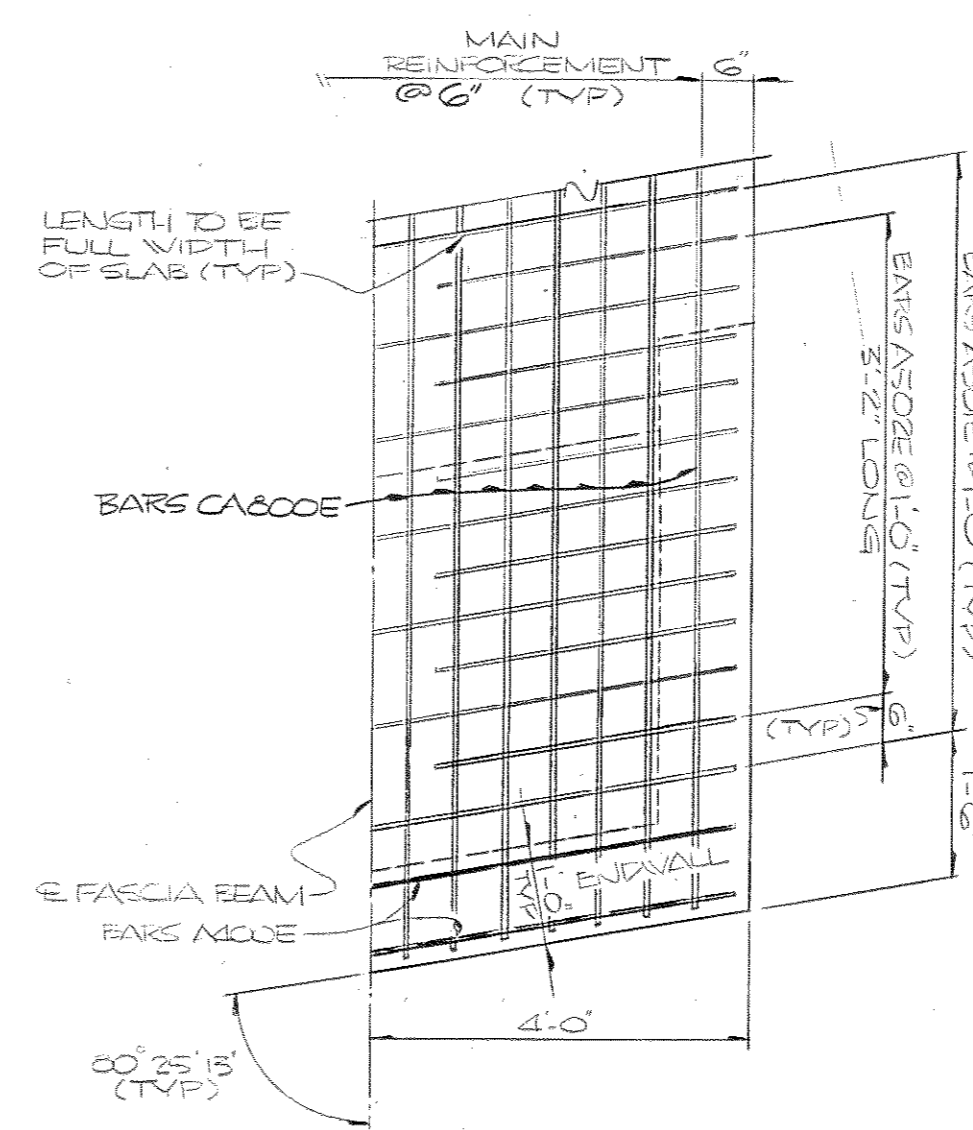
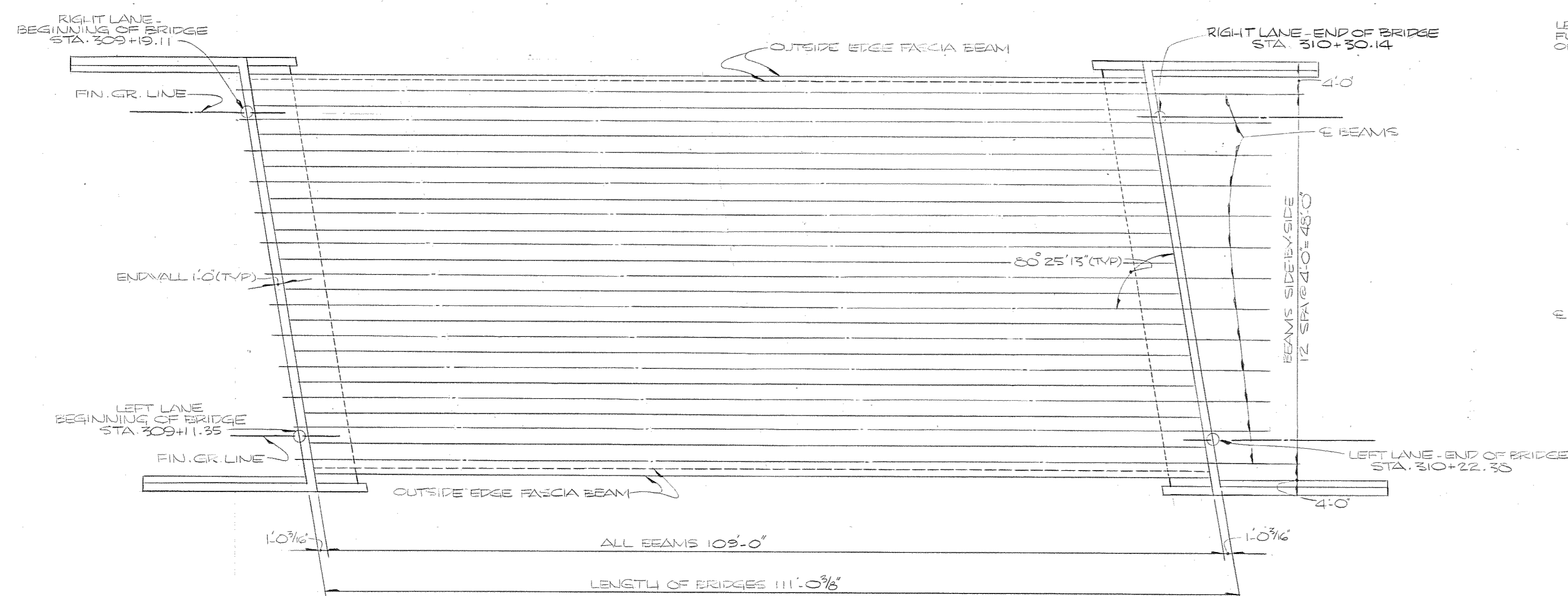
PROJECT NO.	YEAR	SHEET NO.
I-440-4(54) 201	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1		HMB	ADDED LIGHTING

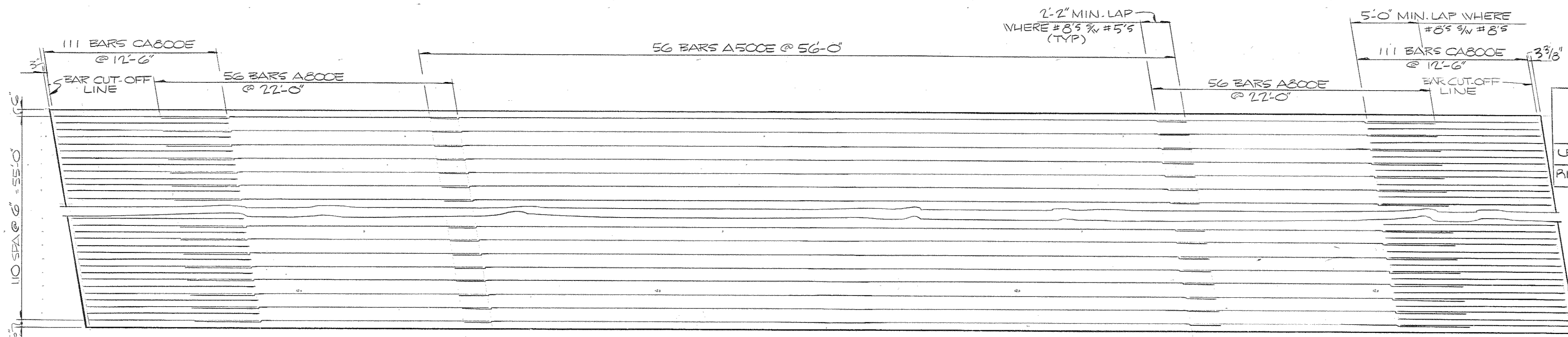
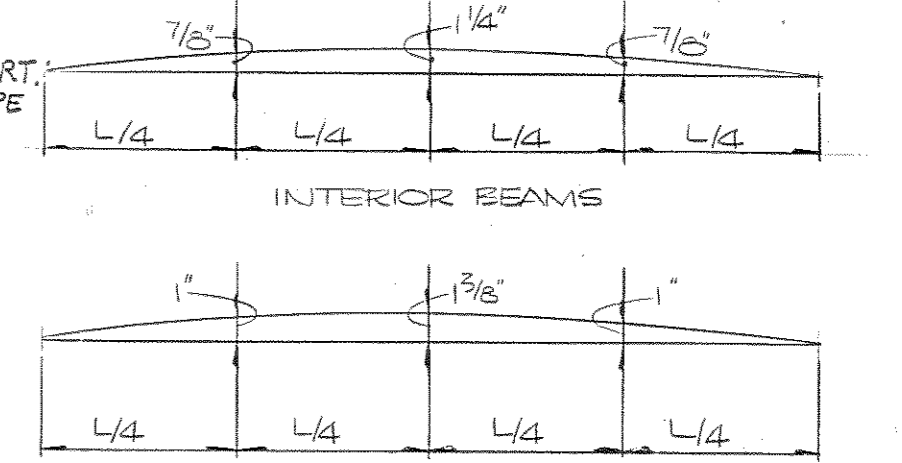


NOTE: WHEN POURING SLAB PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR PARAPET. THE PARAPET SHALL NOT BE TOURED UNTIL THE SLAB IS POURED AND CURED.

NOTE: WHEN POURING WINGWALLS PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR WINGWALLS AND PARAPET. FOR DETAILS SEE STD. DWG M-12-1.



SEE "STANDARD DRAWING LIGHT STANDARD SUPPORT DETAILS" STD. DWG. M-8-143 FOR THE REMAINING DETAILS.
NOTE: LIGHT STANDARD SUPPORT TO CONFORM TO PARAPET SHAPE



ESTIMATED QUANTITIES

	CLASS 'A' CONCRETE (BRIDGE DECK) CY.	CLASS 'A' CONCRETE (BRIDGES) CY.	STEEL BAR REINFORCEMENT (BRIDGES) LBS.	EPOXY COATED REINFORCEMENT LBS.
LEFT LANE	85.5	24.2	875	28,260
RIGHT LANE	85.5	24.2	875	28,260

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
SUPERSTRUCTURE
INTERSTATE 440 OVER
LEALAND LANE
STATION 309+70
DAVIDSON COUNTY
1982

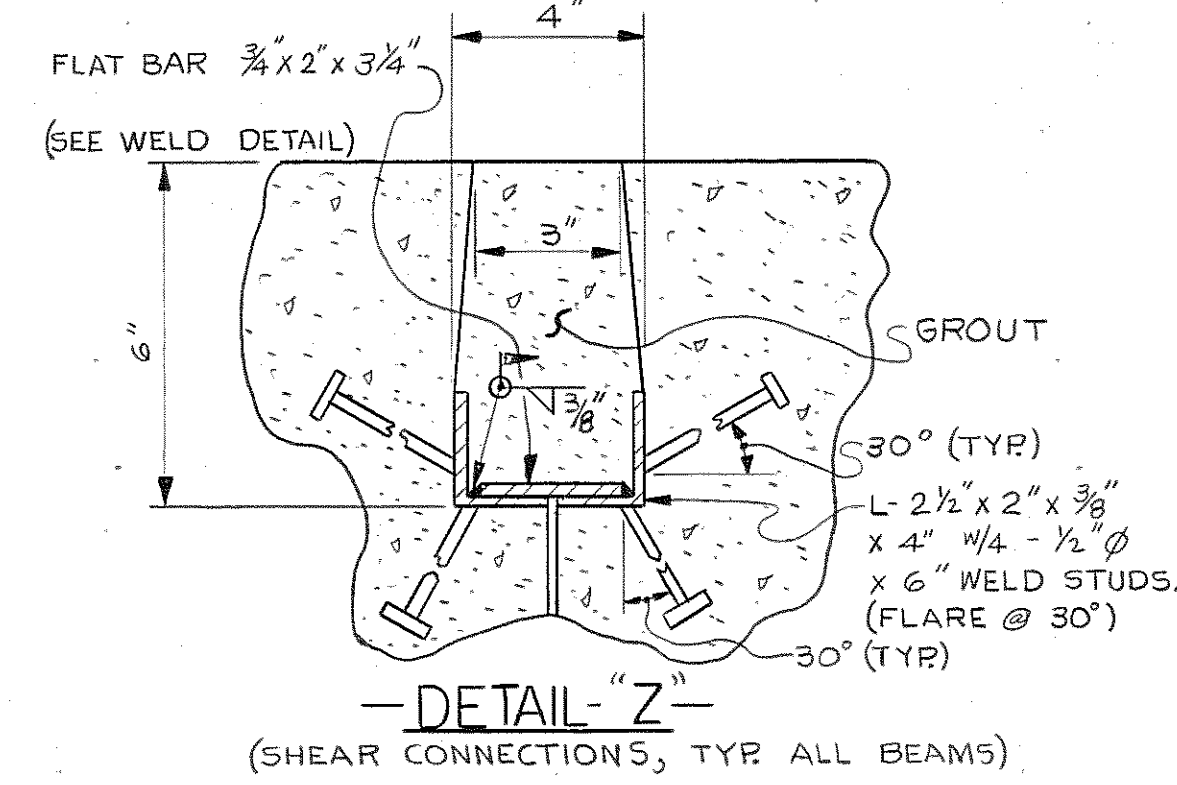
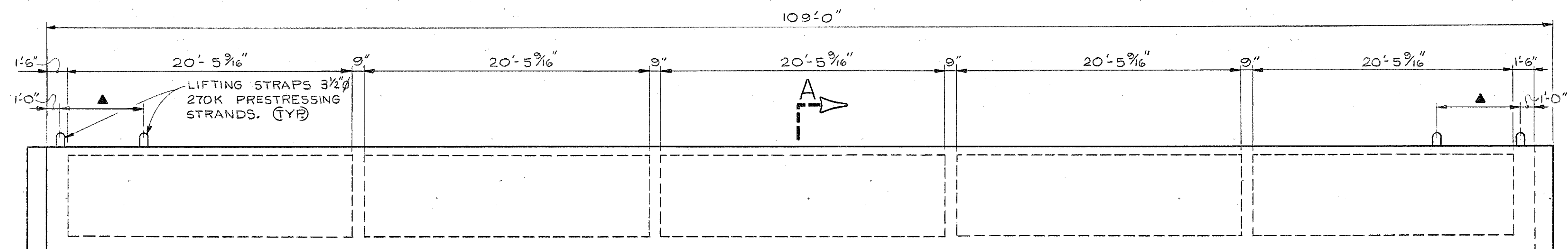
DESIGNED BY HOUSTON WALKER DATE 6-81
DRAWN BY MIKE CHIL/RESS DATE 10-81
SUPERVISED BY R. L. HARRISON/BOWMAN DATE 10-81
CHECKED BY HOUSTON WALKER DATE 11-81

CORRECT *Colleen L. Lovell*
ENGINEER OF STRUCTURES
APPROVED *Raymond Brown*
DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.
I-440-4(54)209	1982	

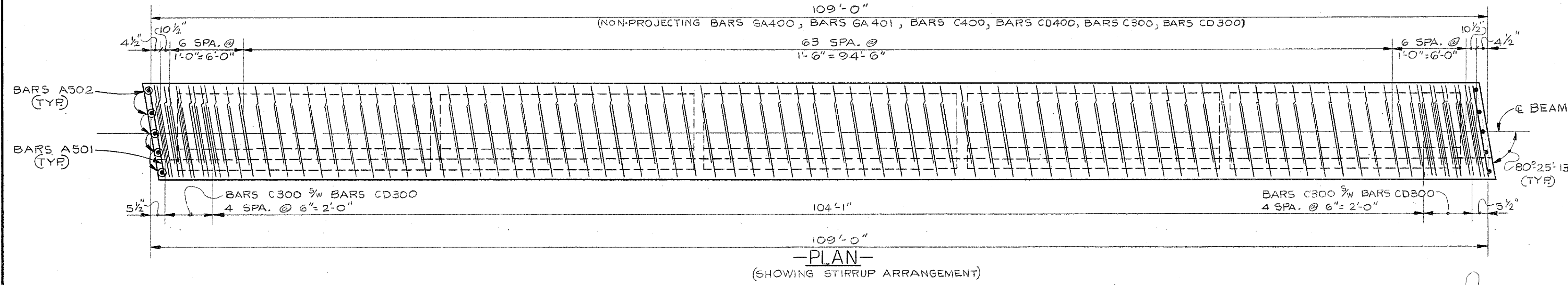
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

NOTE: FOR GENERAL NOTES AND ELASTOMERIC BEARING PAD DETAILS SEE DWG. NO. M-110-61.

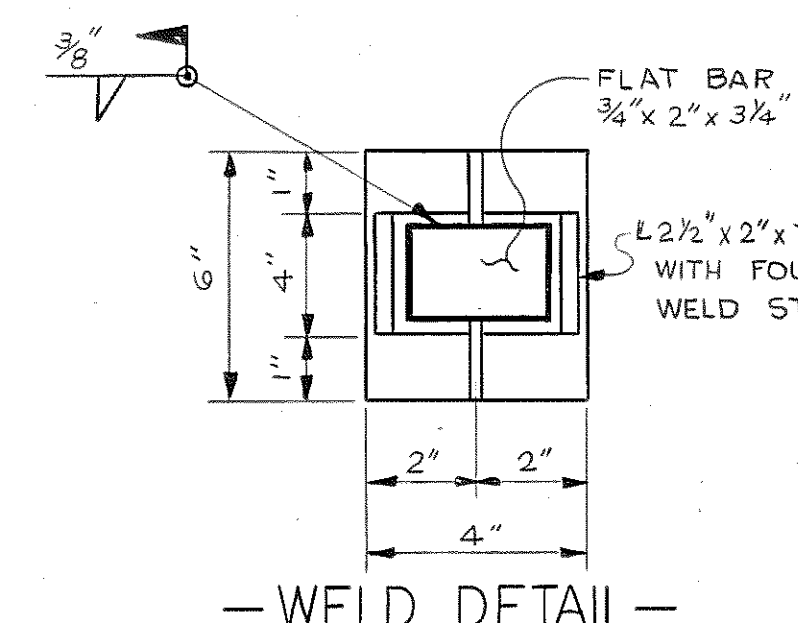


▲: DIMENSION TO BE DETERMINED BY FABRICATOR.

-ELEVATION-



-PLAN- (SHOWING STIRRUP ARRANGEMENT)



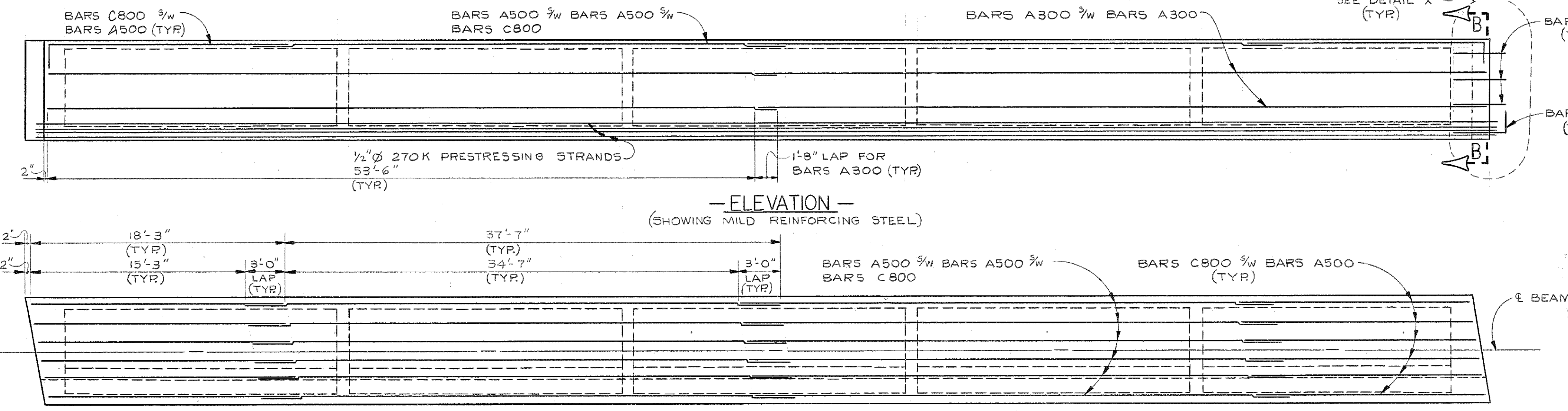
-ESTIMATED QUANTITIES -PER BEAM-

ITEM	NO. REQD.	CLASS "A" CONCRETE C.Y.	REINFORCING STEEL LBS.	PRESTRESSING STEEL LBS.
BEAM	2	23.9	2,423	2,300

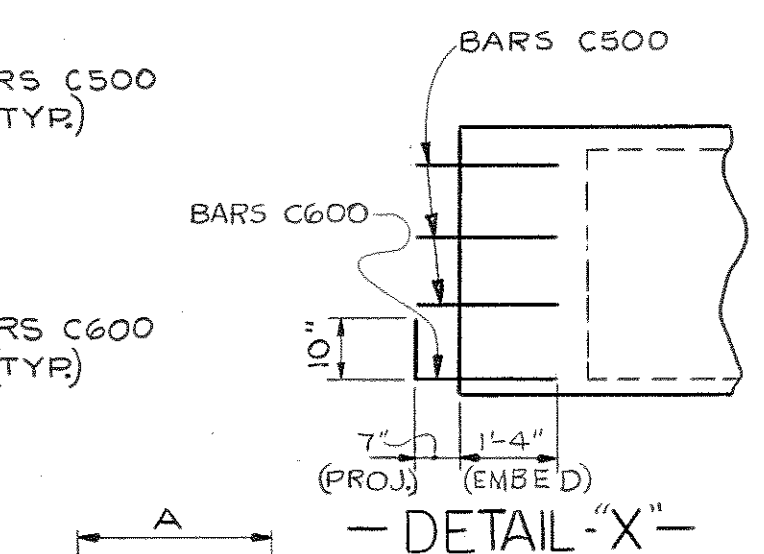
NOTE: COST OF ELASTOMERIC PADS, AND RUBBER BONDING CEMENT TO BE INCLUDED IN THE COST OF PRESTRESSED BEAM.

-BILL OF STEEL -PER BEAM-

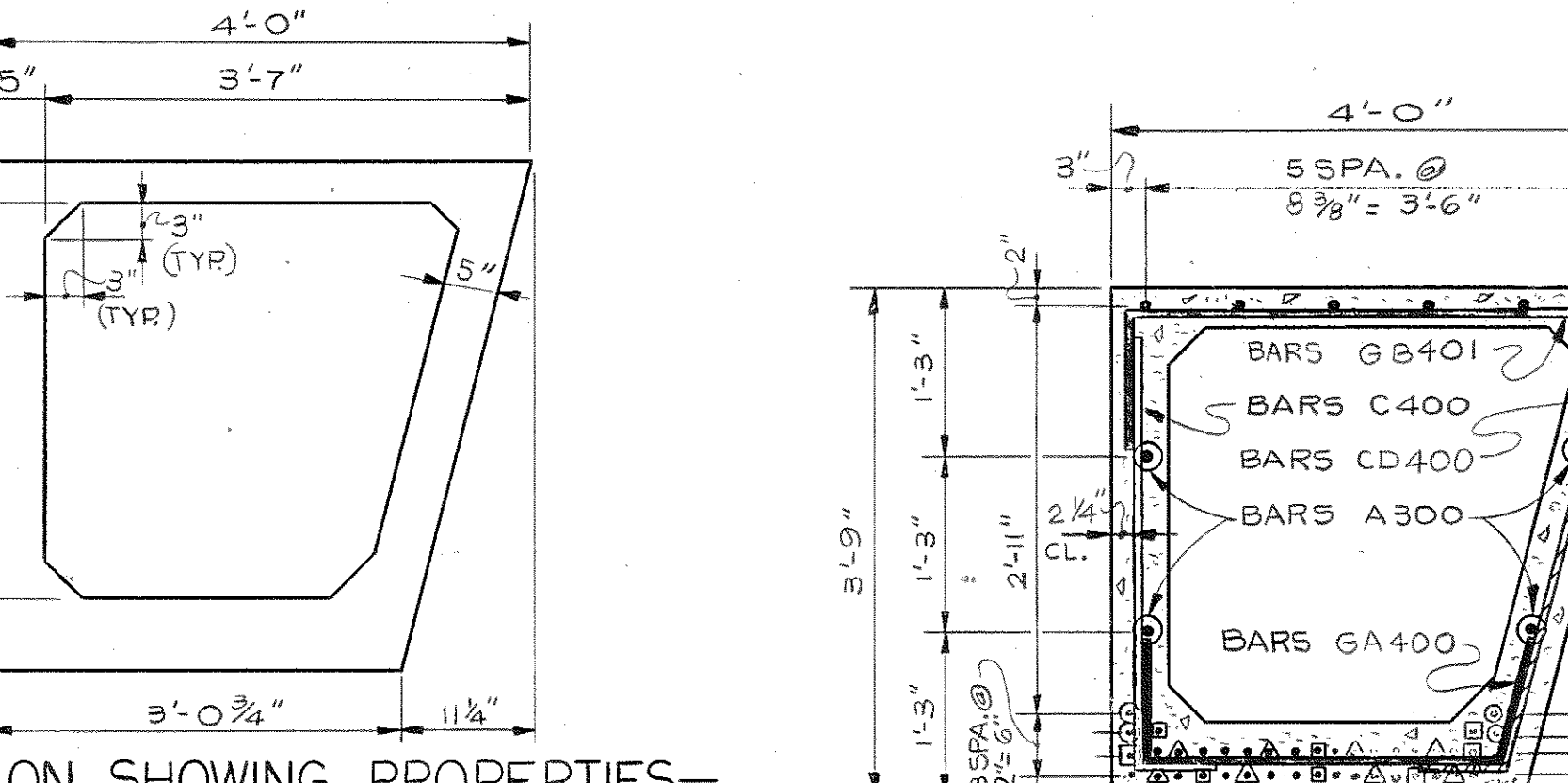
BARS	SIZE	NO. REQD.	BENDING DIMENSIONS				LENGTH
			A	B	C	D	
A300	3	8	55'-2"				55'-2"
A500	5	12	40'-7"				40'-7"
SERIES A501	5	2	LENGTH VARIES FROM 2'-9 3/8" TO 3'-7 1/2" IN INC. OF 2 1/2", 5 BARS				16'-0"
A502	5	10	3'-5"				3'-5"
C800	8	12	18'-5"	1'-4"			19'-7"
C300	3	10	15'-11"	1'-0"			2'-11"
C400	4	78	3'-5"	6"			3'-11"
C500	5	12	1'-11"	10"			2'-9"
C600	6	12	1'-11"	10"			2'-9"
CD300	3	10	1'-11"	1'-0"	3"		2'-11"
CD400	4	78	3'-6 1/2"	6"	1 1/2"		4'-0"
GA400	4	78	2'-7 1/2"	1'-0"	1'-0"	3"	4'-7"
GB401	4	78	3'-7 1/2"	1'-0"	1'-0"	3"	5'-8"



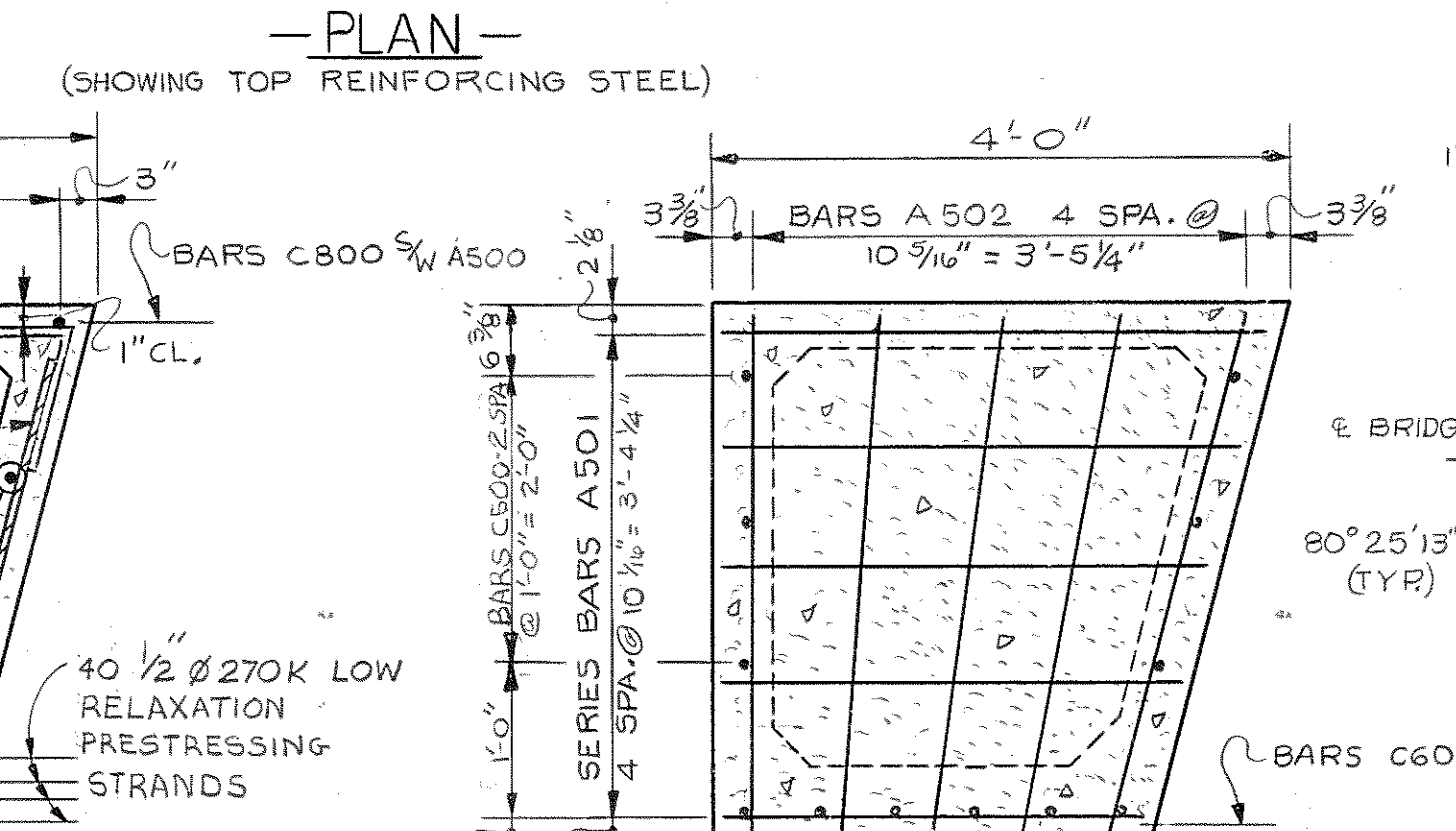
-ELEVATION- (SHOWING MILD REINFORCING STEEL)



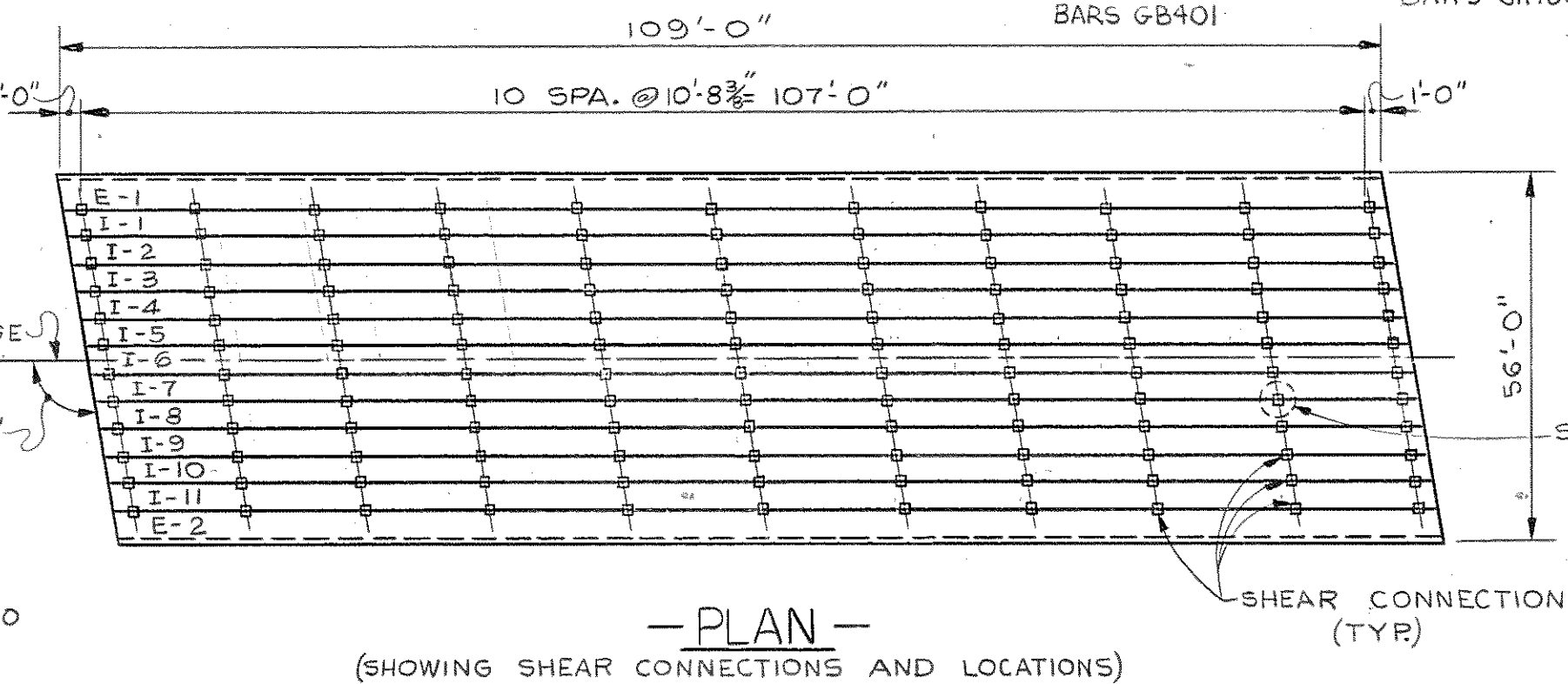
-DETAIL "X"



-SECTION SHOWING PROPERTIES-



-SECTION "B-B" (SHOWING END GRID)



-PLAN- (SHOWING SHEAR CONNECTIONS AND LOCATIONS)

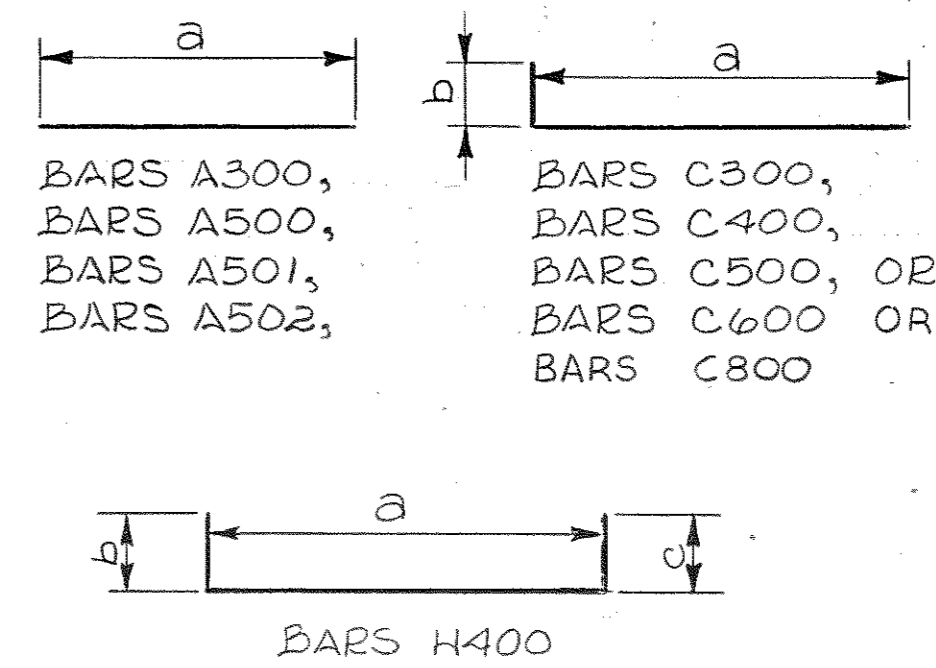
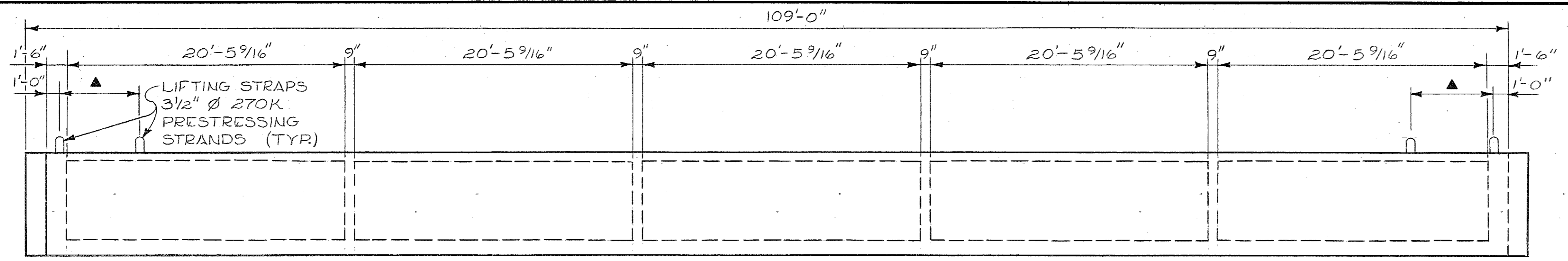
NOTE: E-DENOTES EXTERIOR BEAM. I-DENOTES INTERIOR BEAM.

DESIGNED BY HOUSTON WALKER DATE 8-81
 DRAWN BY ROY JENKINS DATE 9-81
 SUPERVISED BY HARBISON & BOWMAN DATE 9-81
 CHECKED BY H. WALKER DATE 11-81

SECTION "A-A" (SHOWING STRAND ARRANGEMENT)
 SECTION "B-B" (SHOWING STRAND ARRANGEMENT)
 BREAK BOND @ 13'-9" FROM END OF BEAM.
 BREAK BOND @ 18'-9" FROM END OF BEAM.
 BREAK BOND @ 23'-9" FROM END OF BEAM.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 PRESTRESSED BOX BEAMS
 EXTERIOR BEAM DETAILS
 I-440 OVER LEALAND LANE
 STATION 309+70 (I-440)
 STATION 20+00 (LEALAND LANE)
 DAVIDSON COUNTY
 1982

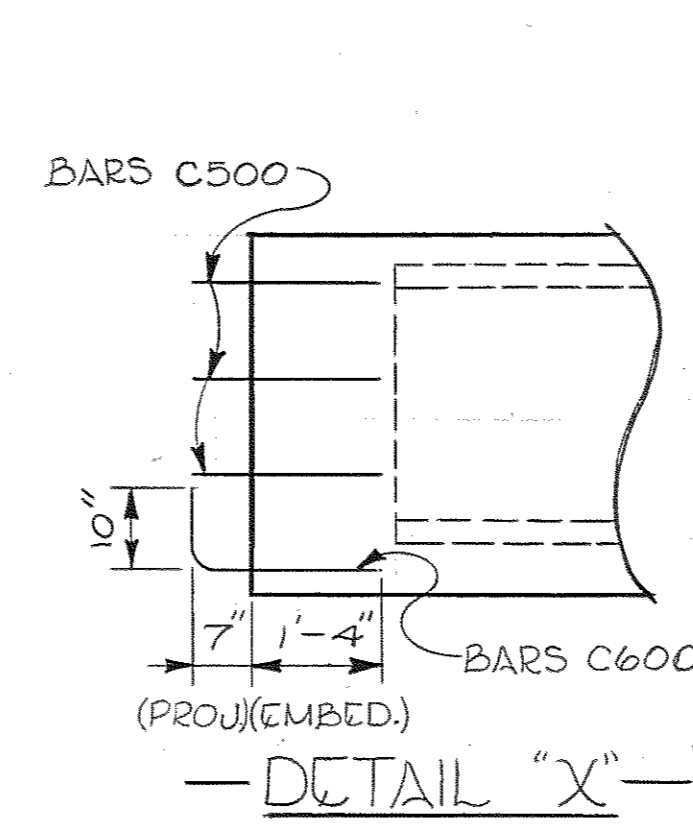
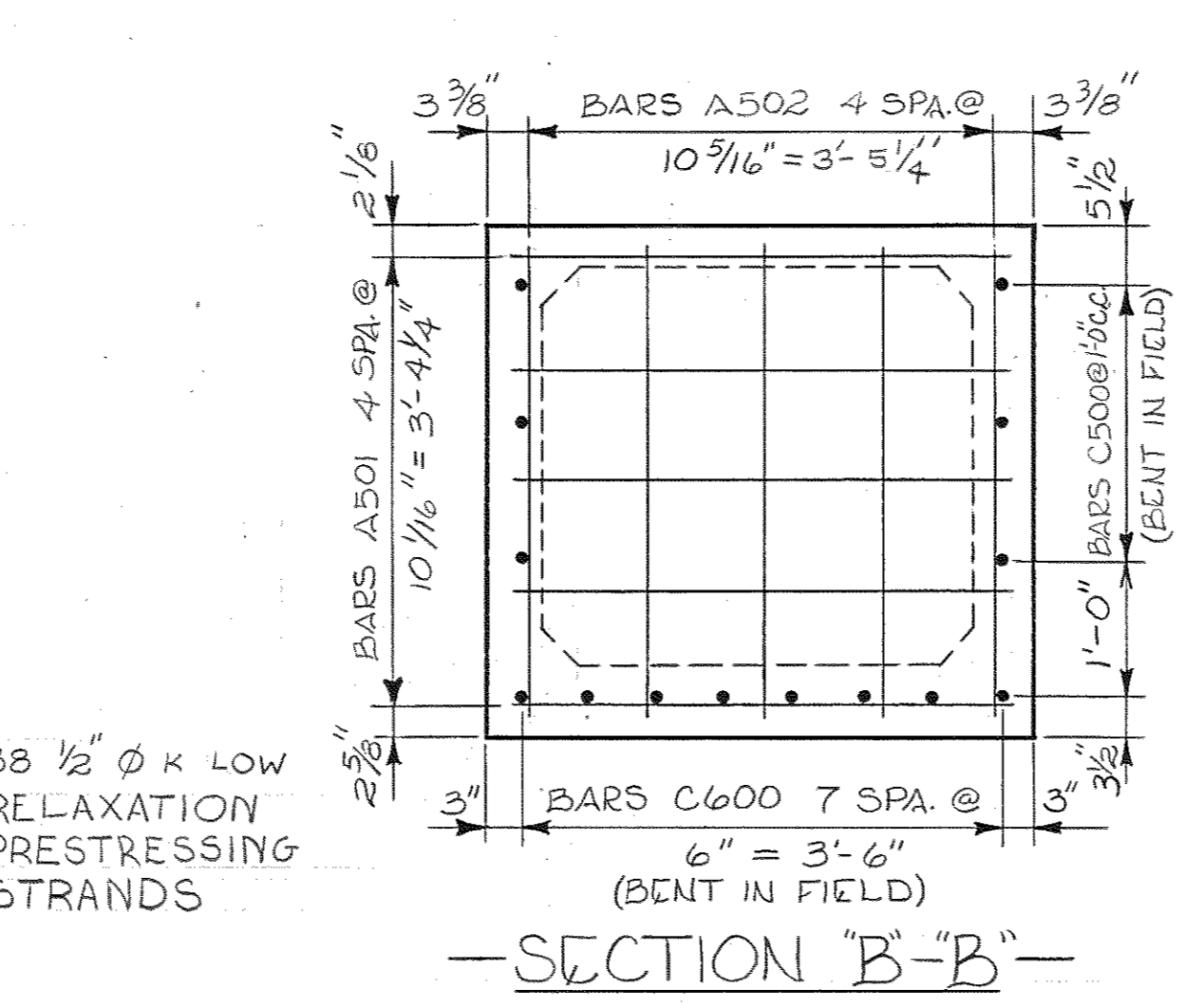
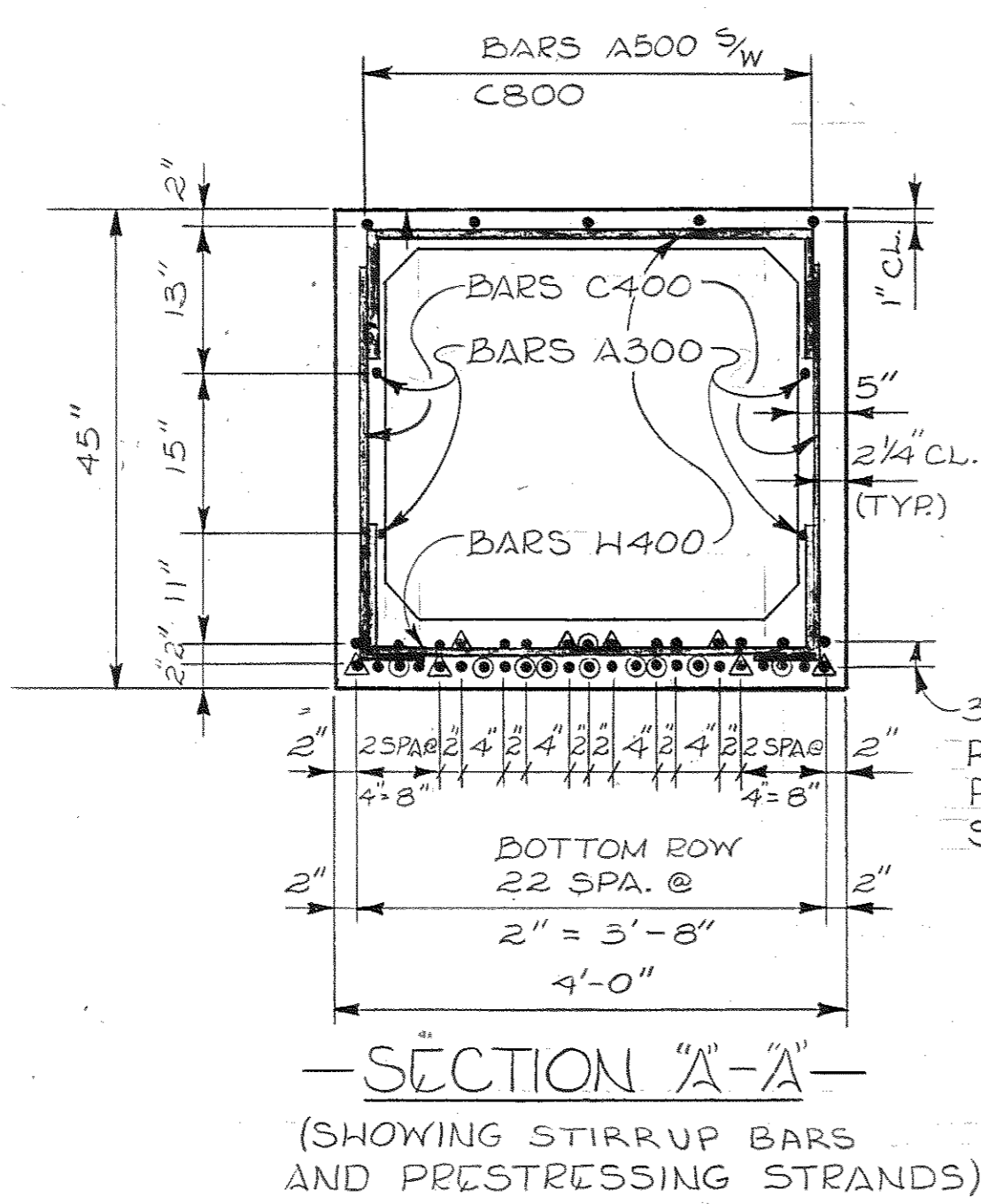
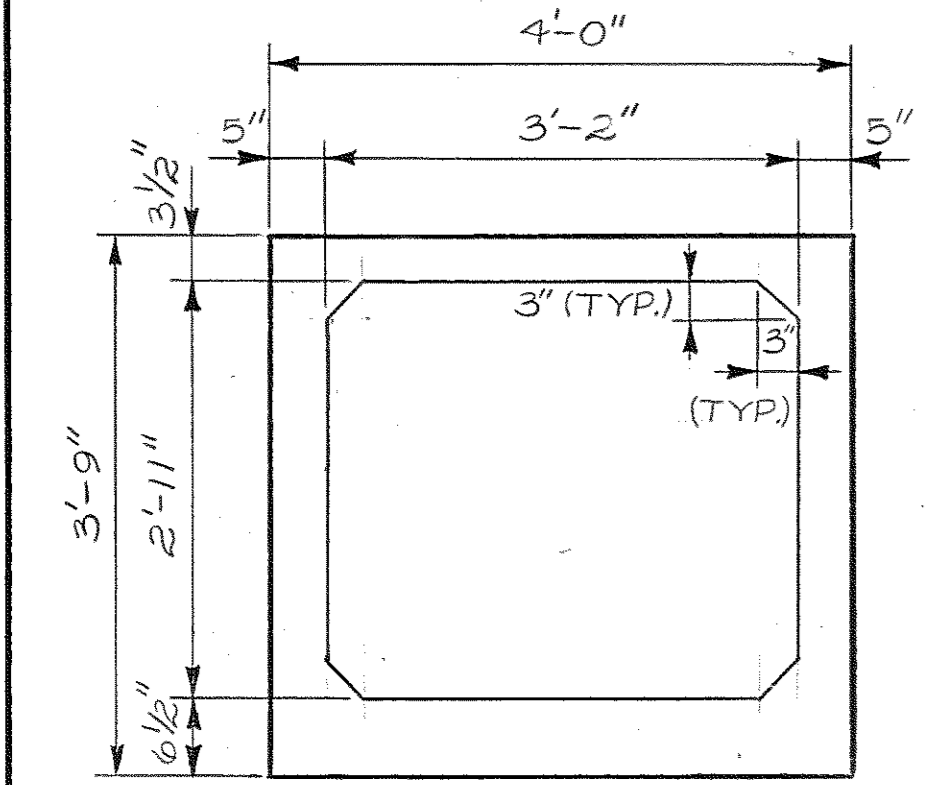
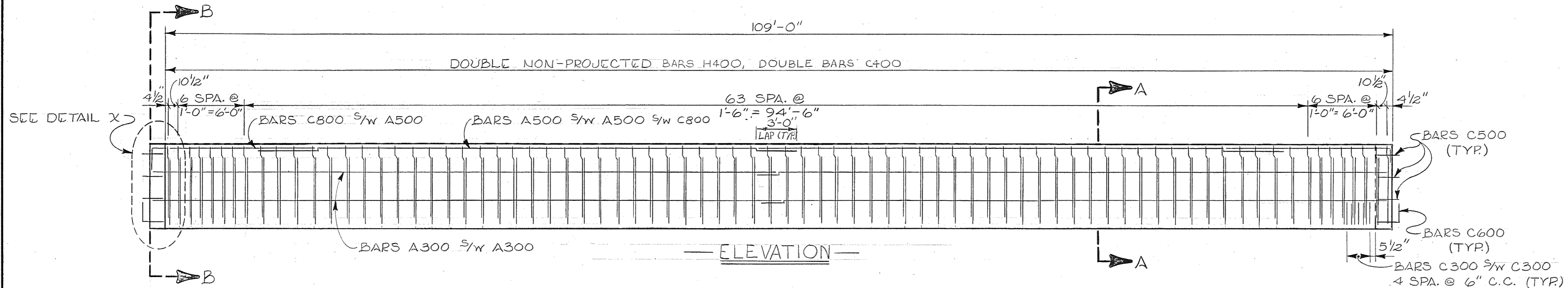
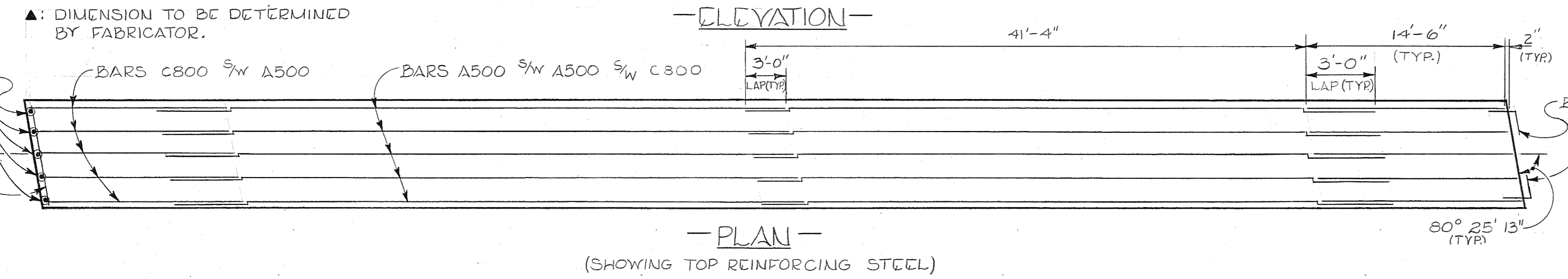
CORRECT *Colleton L. Lovell*
 ENGINEER OF STRUCTURES
 APPROVED *Louis B. ...*
 DIRECTOR OF HIGHWAYS
 M-110-60



CONST. NO. 19014-3112-44

PROJECT NO.	YEAR	SHEET NO.
I-440-4(59)204	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



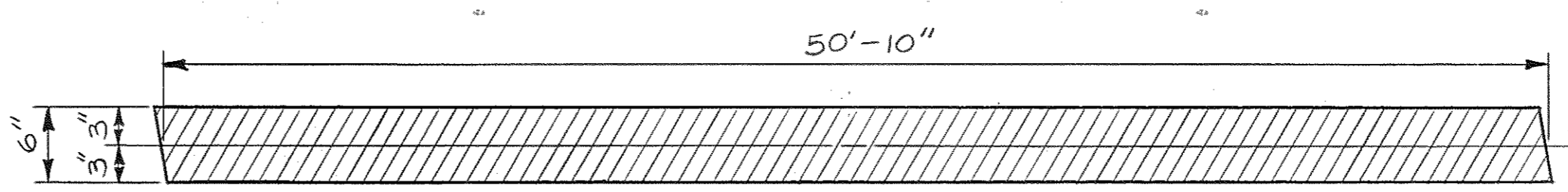
BAR	SIZE	NO. REQD.	BENDING DIMENSIONS				LENGTH
			a	b	c	d	
A300	3	8					55'-10"
A500	5	10					44'-4"
A501	5	10					3'-8"
A502	5	10					3'-5"
C800	8	10	14'-6"	1'-4"			15'-10"
C300	3	20	2'-5"	1'-0"			3'-5"
C400	4	156	3'-5"	6"			3'-11"
C500	5	12	1'-11"	10"			2'-9"
C600	6	16	1'-11"	10"			2'-9"
H400	4	136	3'-7 1/2"	1'-0"	1'-0"		5'-7"

- GENERAL NOTES**
- THE TOP OF ALL BEAMS ARE TO BE ROUGH FLOATED. AT APPROXIMATELY THE TIME OF INITIAL SET, THE TOP OF THE BEAMS WILL ALSO BE SCRUBBED TRANSVERSELY WITH A COARSE WIRE BRUSH TO REMOVE ALL LAITANCE AND PRODUCE A ROUGH SURFACE.
 - MILD STEEL REINFORCING SHALL BE ASTM A615 GRADE 60.
 - ALL PRESTRESSING STRANDS TO BE 1/2" diameter HIGH STRENGTH TYPE LOW RELAXATION 270 K 7 WIRE UNCOATED STRESS-RELIEVED PRESTRESSING STRANDS.
 - AN INITIAL FORCE OF 31,003 LBS., SHALL BE APPLIED TO EACH STRAND IN ALL BEAMS.
 - AFTER THE BEAM IS REMOVED FROM THE PRESTRESSING BED, BARS C600 AND C400 SHALL BE BENT A SUFFICIENT AMOUNT SO AS TO PERMIT THE BEAMS TO BECOME INTEGRAL WITH BACKWALL.
 - THE PRESTRESSING STRANDS SHALL BE LEFT PROJECTING 3" FROM THE ENDS OF THE BEAMS. THERE SHALL NOT BE ANY PROTECTIVE COATING PLACED ON THE ENDS OF THE BEAMS OR ON THE PROJECTING STRANDS.
 - ELASTOMERIC PADS TO BE 0'1/4" X 50'-10" X 6"
 - THE CONCRETE FOR THIS CONSTRUCTION SHALL BE OF SUCH PROPERTIES AS TO ATTAIN A COMPRESSIVE STRENGTH OF NOT LESS THAN 5300 PSI AT THE AGE OF 28 DAYS AND STRESS TRANSFER SHALL NOT BE MADE TO THE BRIDGE MEMBER UNTIL THE TEST SPECIMENS INDICATE THAT THE CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF AT LEAST 4,500 + PSI. SEE LAYOUT SHEET FOR CONCRETE FINISHING NOTE.
 - 1" diameter WEEP HOLES REQUIRED AT LOW POINT OF EACH CELL.
 - EACH CELL SHALL BE YENTED (DURING THE FABRICATION PHASE), IN SUCH A MANNER SO AS NOT TO ALLOW EXTERNAL WATER TO ENTER THE CELL.

ESTIMATED QUANTITIES-PER BEAM

ITEM	NO. REQD.	CONCRETE CLASS "A" C.Y.	REINFORCING STEEL LBS.	PRESTRESSING STEEL LBS.
BEAM	11	26.1	2,243	2,185

NOTE: COST OF ELASTOMERIC PADS, AND RUBBER BONDING CEMENT TO BE INCLUDED IN THE COST OF PRESTRESSED BEAM.



DESIGNED BY J. H. WALKER DATE 7-81
 DRAWN BY YICKY FOREST DATE 9-21-81
 SUPERVISED BY HARRISON & BOWMAN DATE 9-21-81
 CHECKED BY H. WALKER DATE 11-81

- RUN THROUGHOUT BEAM. (20 STRANDS)
- ▲ BREAK BOND 13'-8" FROM END OF BEAM. (8 STRANDS)
- BREAK BOND 18'-6" FROM END OF BEAM. (10 STRANDS)

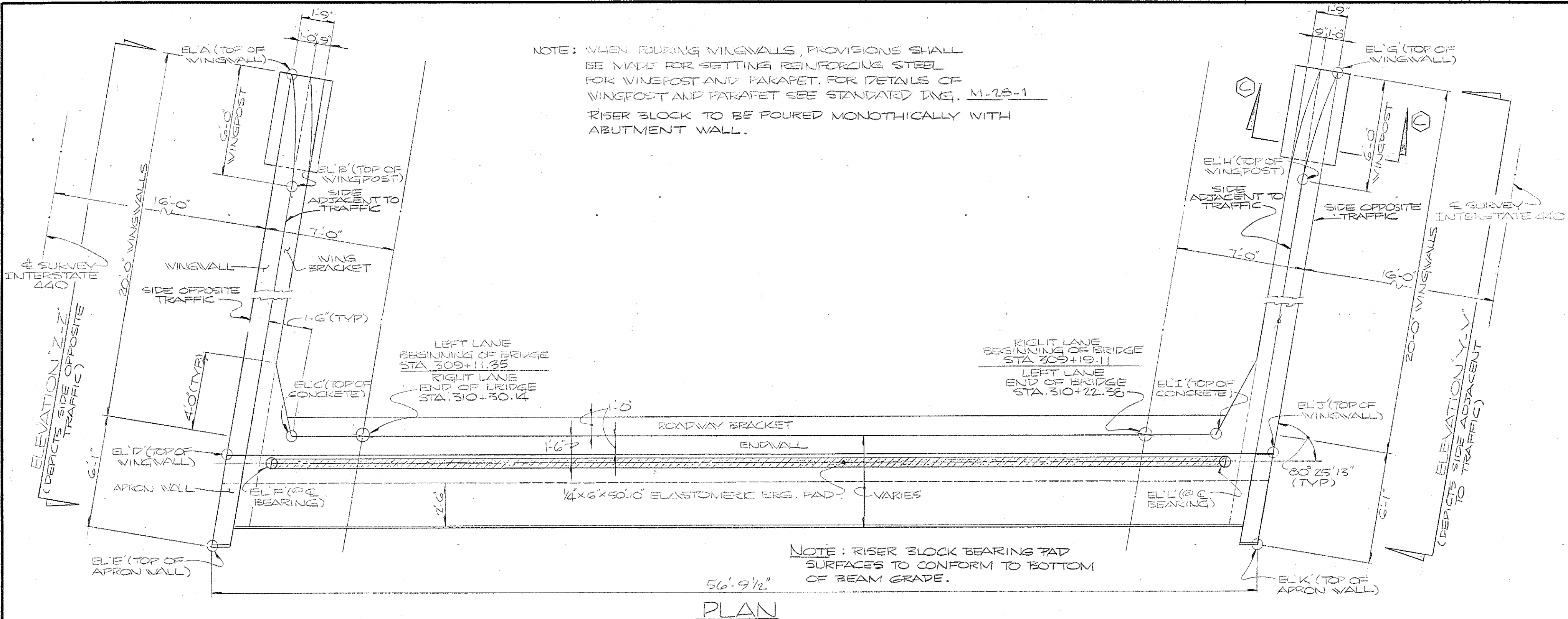
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 PRESTRESSED BOX BEAM
 INTERIOR BEAM
 I-440 OVER LEALAND LANE
 STATION 309 + 70.00
 DAVIDSON COUNTY
 1982

CORRECT *Clayton L. Lovess*
 ENGINEER OF STRUCTURES
 APPROVED *Louis Evans*
 DIRECTOR OF HIGHWAYS

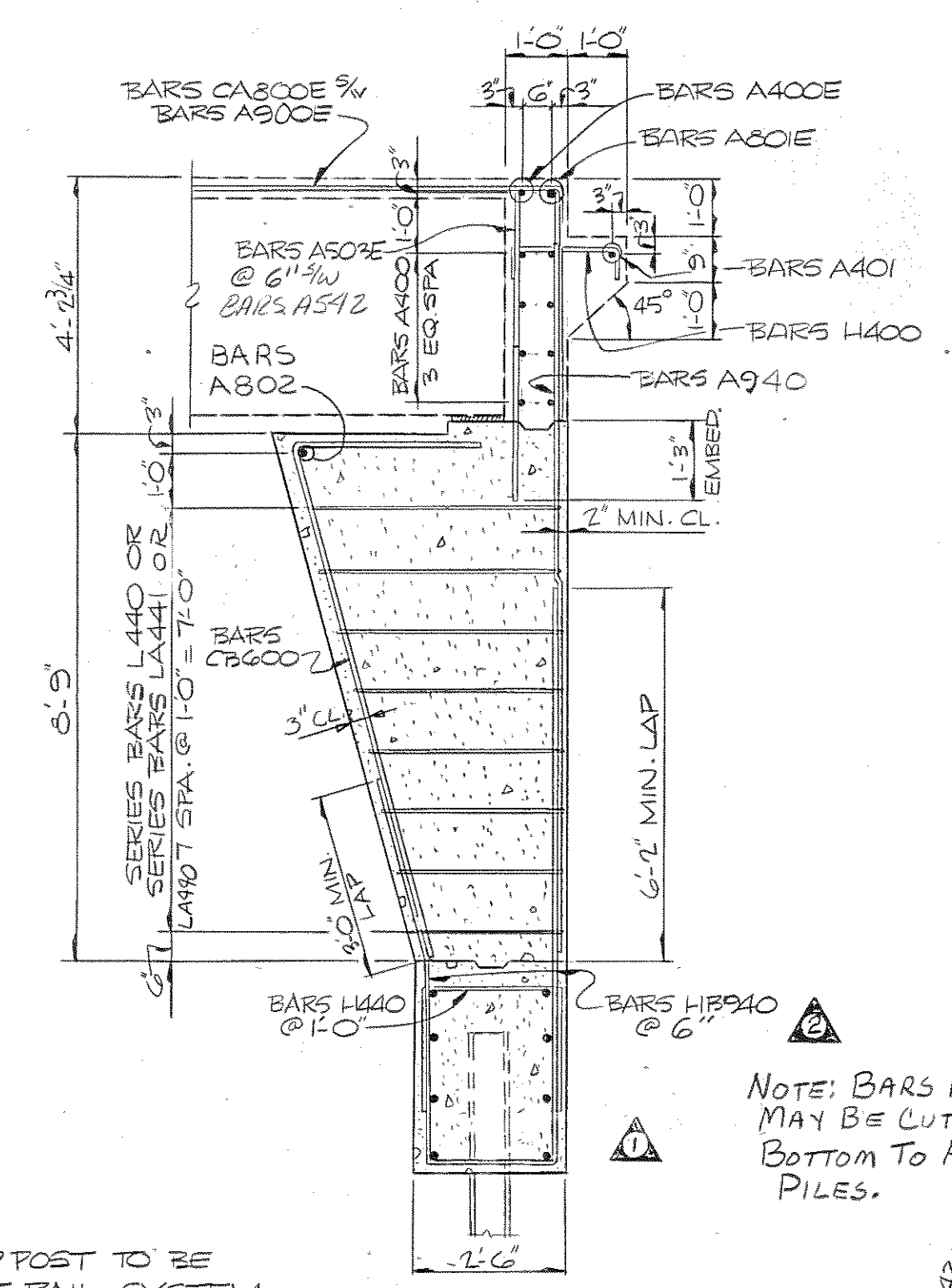
PROJECT NO.	YEAR	SHEET NO.
I-440-4(54)209	1982	

REVISIONS		
NO.	DATE	BY
1	4-24-83	JHW
2	10-31-83	JHW

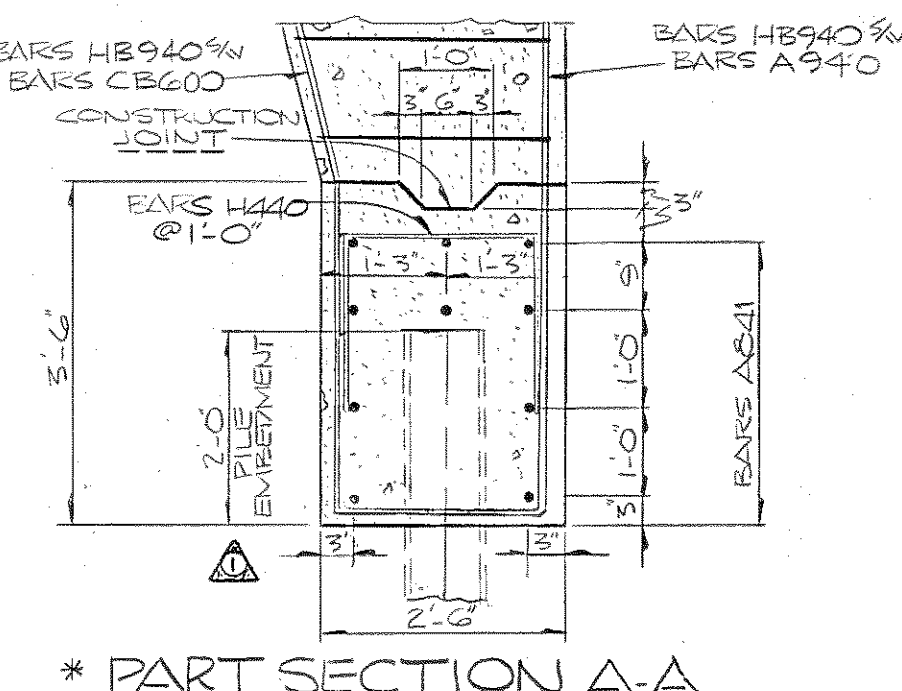
NOTE: WHEN POURING WINGWALLS, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR WINGPOST AND PARAFET. FOR DETAILS OF WINGPOST AND PARAFET SEE STANDARD DWS. M-28-1. RISER BLOCK TO BE POURED MONOTHICALLY WITH ABUTMENT WALL.



PLAN



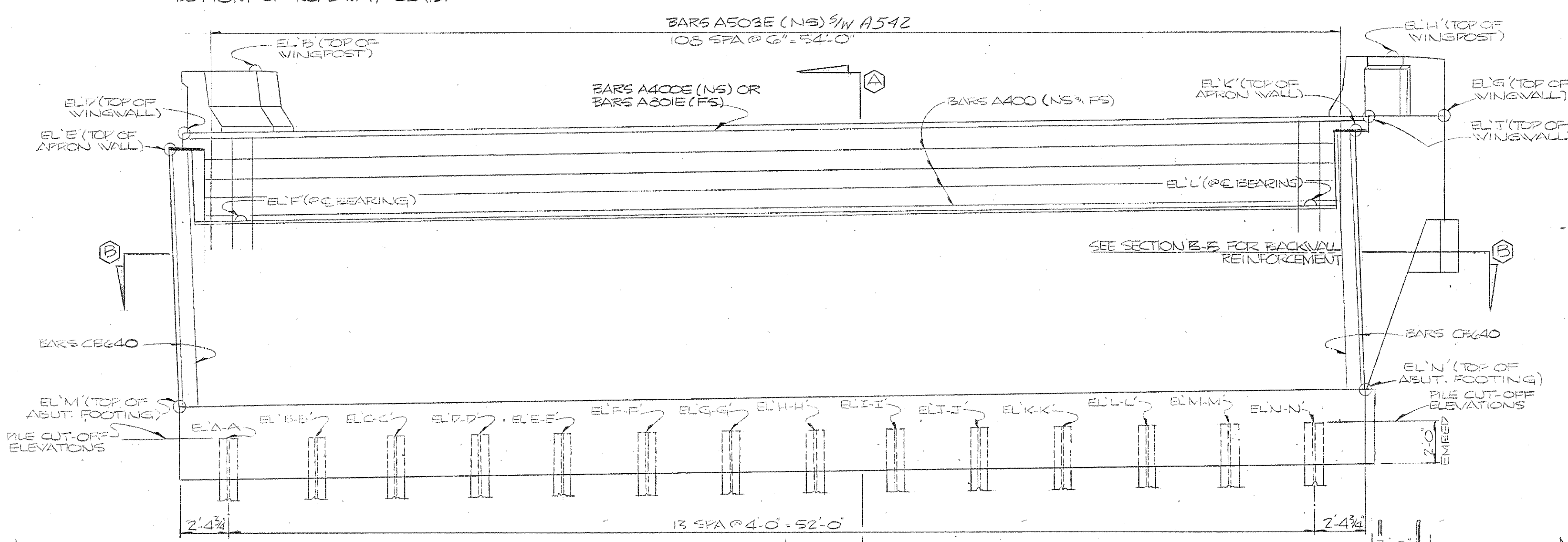
SECTION A-A



* PART SECTION A-A

NOTE: TOP OF APRON WALL TO CONFORM TO BOTTOM OF ROADWAY SLAB.

NOTE: COST OF BRIDGE RAIL AND POST TO BE INCLUDED IN COST OF BRIDGE RAIL SYSTEM.



ELEVATION

NOTE: ELEVATION DEPCTS - RIGHT LANE ABUT NO.1 LOOKING BACK ON SURVEY
LEFT LANE ABUT NO.2 LOOKING FORWARD ON SURVEY
(SLOPE IS OPPOSITE ON RIGHT LANE ABUT NO.2 AND LEFT LANE ABUT NO.1.)

ABUTMENT ELEVATIONS

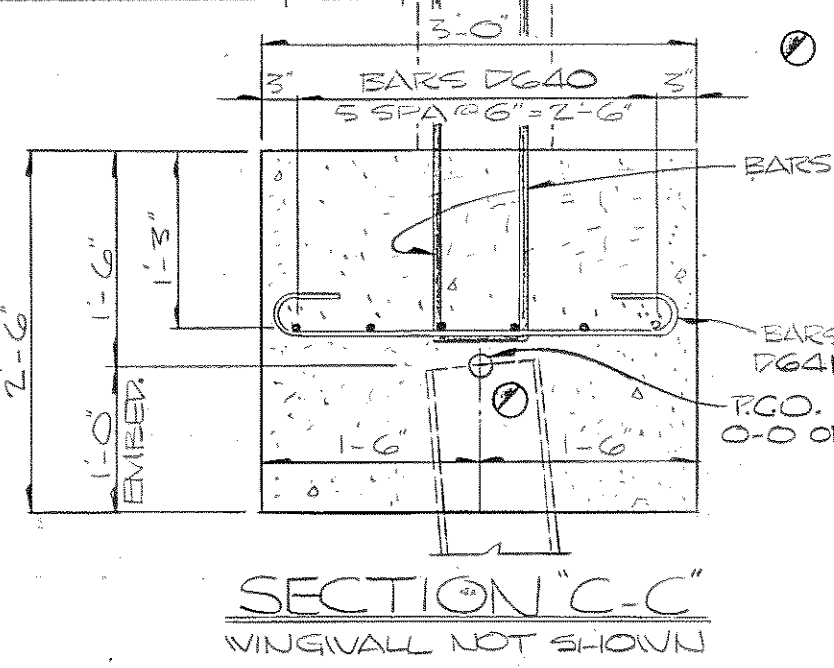
		EL'A'	EL'B'	EL'C'	EL'D'	EL'E'	EL'F'	EL'G'	EL'H'	EL'I'	EL'J'	EL'K'	EL'L'	EL'M'	EL'N'
LEFT LANE	ABUT NO.1	531.08	532.76	531.14	531.19	530.47	526.99	530.04	532.75	530.15	530.14	529.41	526.05	516.21	517.15
	ABUT NO.2	530.74	533.44	530.74	530.68	529.51	526.59	531.85	534.46	531.70	531.74	530.96	527.53	517.65	516.73
RIGHT LANE	ABUT NO.1	530.16	532.07	530.30	530.26	529.54	526.17	531.12	533.79	531.17	531.22	530.50	527.03	517.27	516.23
	ABUT NO.2	531.87	534.43	531.73	531.77	531.05	527.57	530.91	533.56	530.85	530.80	530.05	526.71	518.76	517.60

PILE CUT-OFF ELEVATIONS (ABUTMENTS)

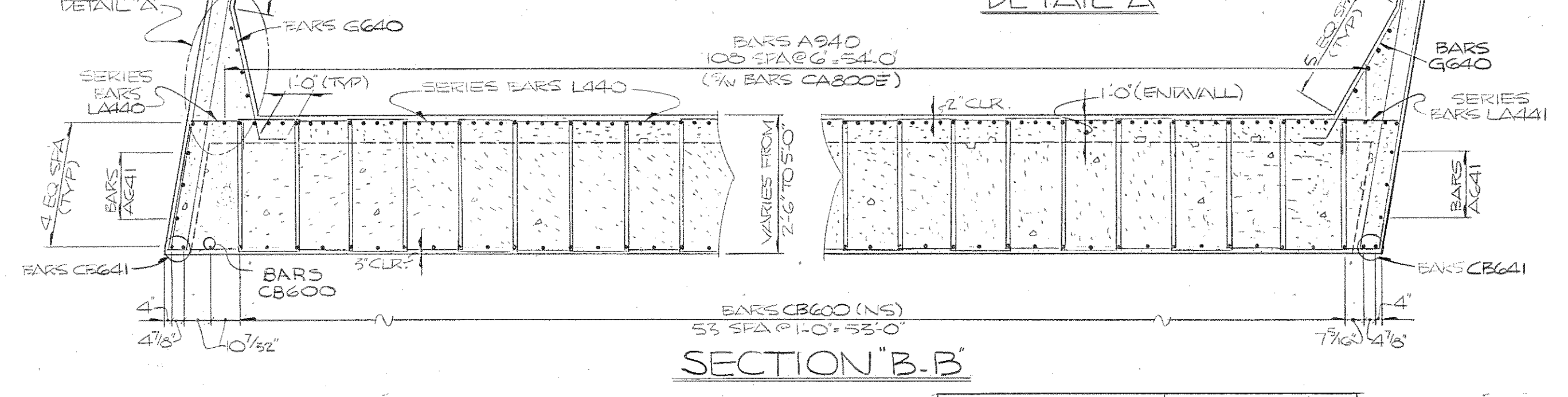
		EL'A-A'	EL'B-B'	EL'C-C'	EL'D-D'	EL'E-E'	EL'F-F'	EL'G-G'	EL'H-H'	EL'I-I'	EL'J-J'	EL'K-K'	EL'L-L'	EL'M-M'	EL'N-N'	EL'O-O'	EL'P-P'
LEFT LANE	ABUT. NO.1	516.67	516.59	516.52	516.45	516.38	516.31	516.23	516.16	516.09	516.02	515.95	515.87	515.80	515.73	523.54	524.58
	ABUT. NO.2	516.22	516.30	516.37	516.44	516.51	516.58	516.66	516.73	516.80	516.87	516.94	517.02	517.09	517.16	525.35	524.29
RIGHT LANE	ABUT. NO.1	515.81	515.09	515.96	516.03	516.10	516.17	516.25	516.32	516.39	516.46	516.53	516.61	516.68	516.75	524.62	523.66
	ABUT. NO.2	517.22	517.14	517.07	517.00	516.93	516.86	516.78	516.71	516.64	516.57	516.50	516.42	516.35	516.28	524.41	525.37

DESIGNED BY HOUSTON WALKER DATE 6-81
 DRAWN BY MIKE KILLIPRESS DATE 9-81
 SUPERVISED BY HARVEYSON-BOWMAN DATE 9-81
 CHECKED BY HOUSTON WALKER DATE 11-81

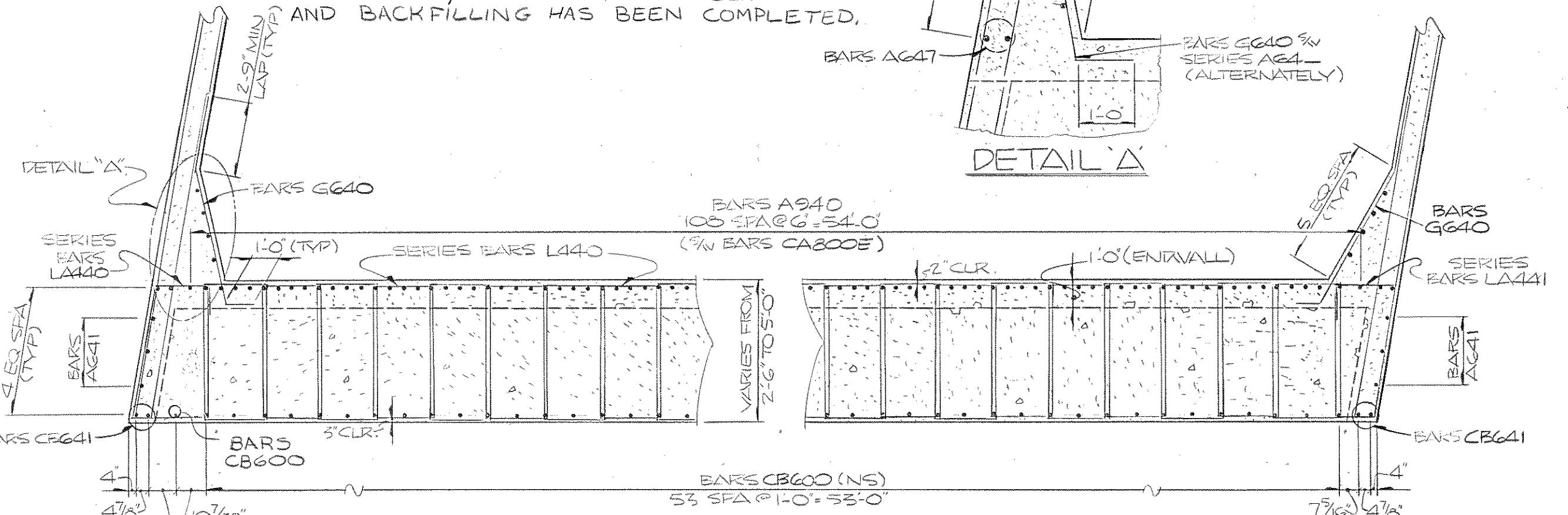
NOTE: BATTER PILES OUTWARD 2:12



SECTION C-C



SECTION B-B



DETAIL A

NOTE: THE CONTRACTOR SHALL SUPPORT THE ABUTMENTS UNTIL THE SUPERSTRUCTURE IS IN PLACE, FALSEWORK HAS BEEN REMOVED AND BACKFILLING HAS BEEN COMPLETED.

	ITEM	CLASS A CONCRETE C.Y.	STEEL BAR REINFORCEMENT LBS.
LEFT LANE	ABUT. NO.1	107.2	18,957
	ABUT. NO.2	107.2	18,957
RIGHT LANE	ABUT. NO.1	107.2	18,957
	ABUT. NO.2	107.2	18,957

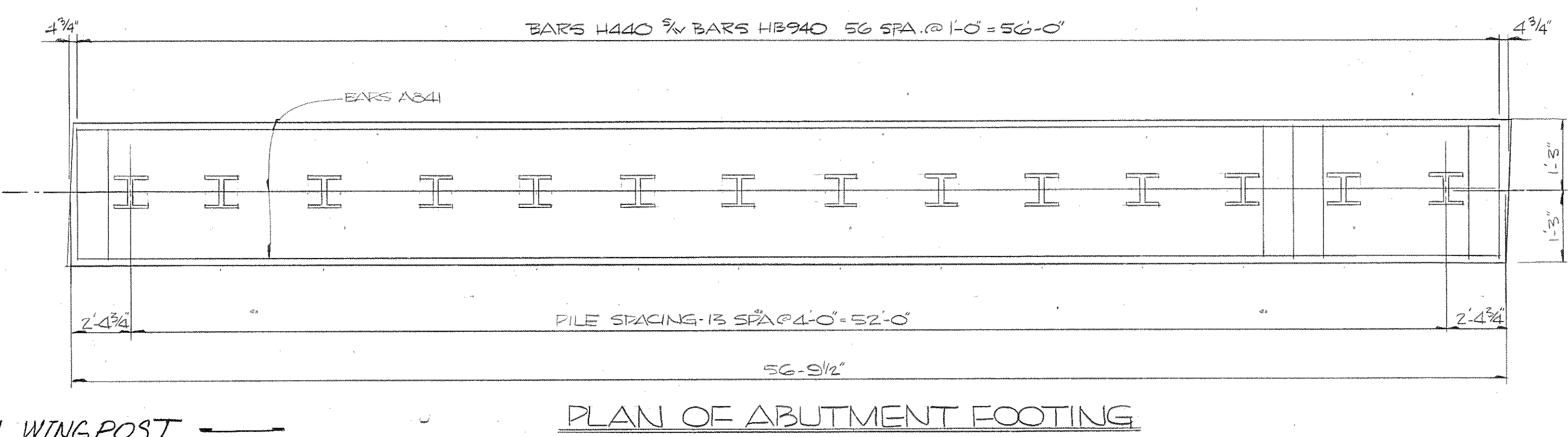
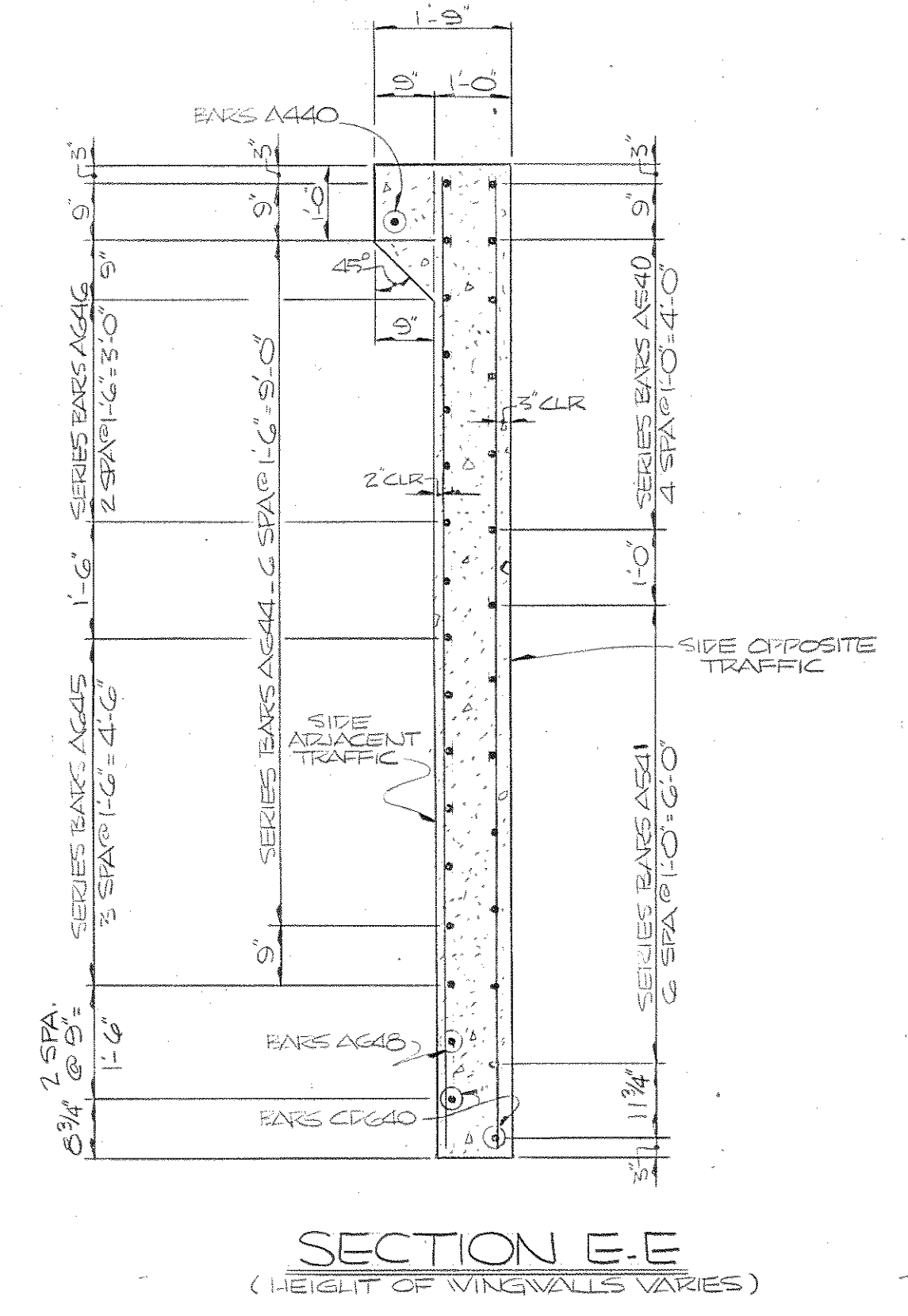
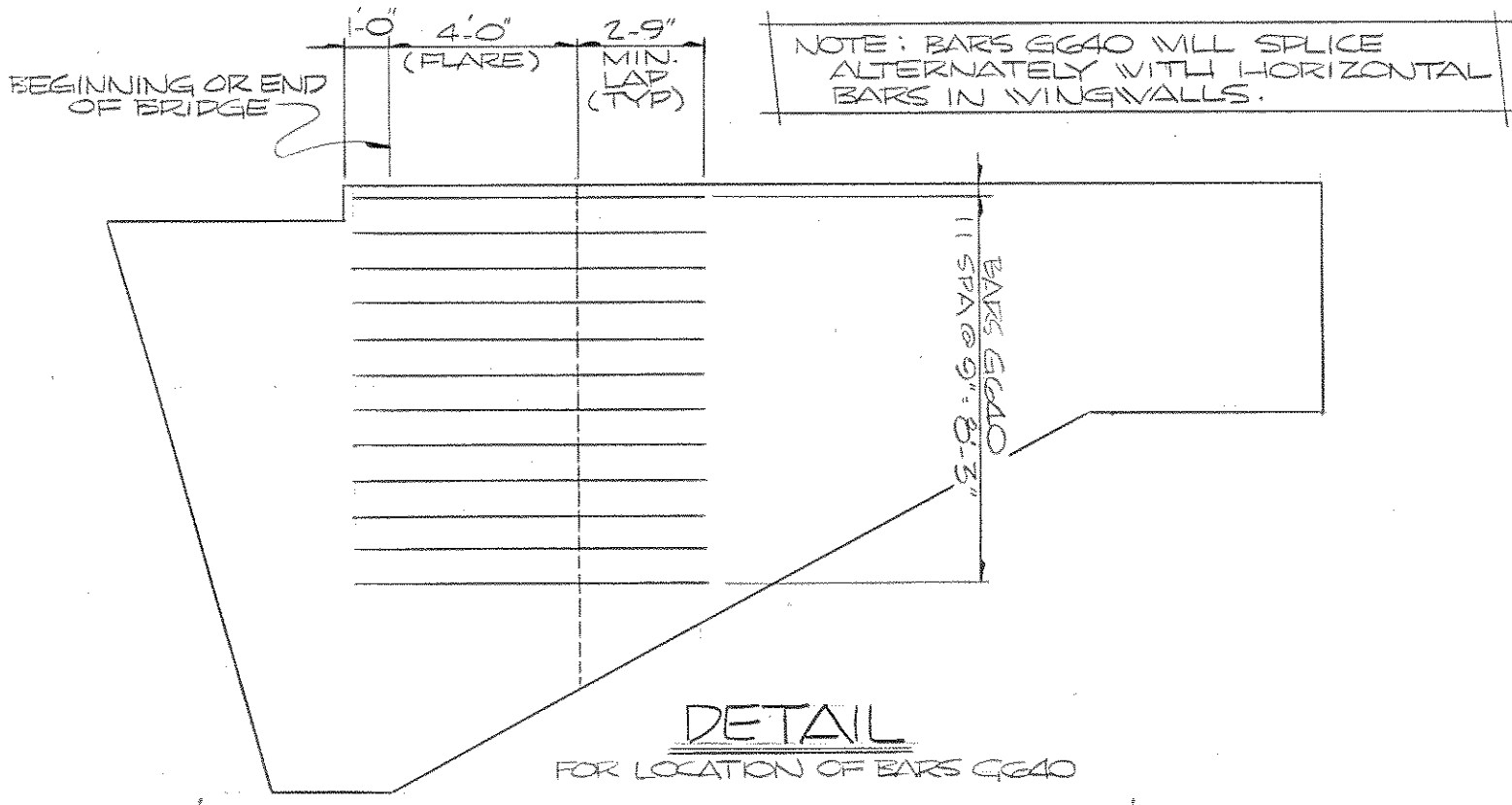
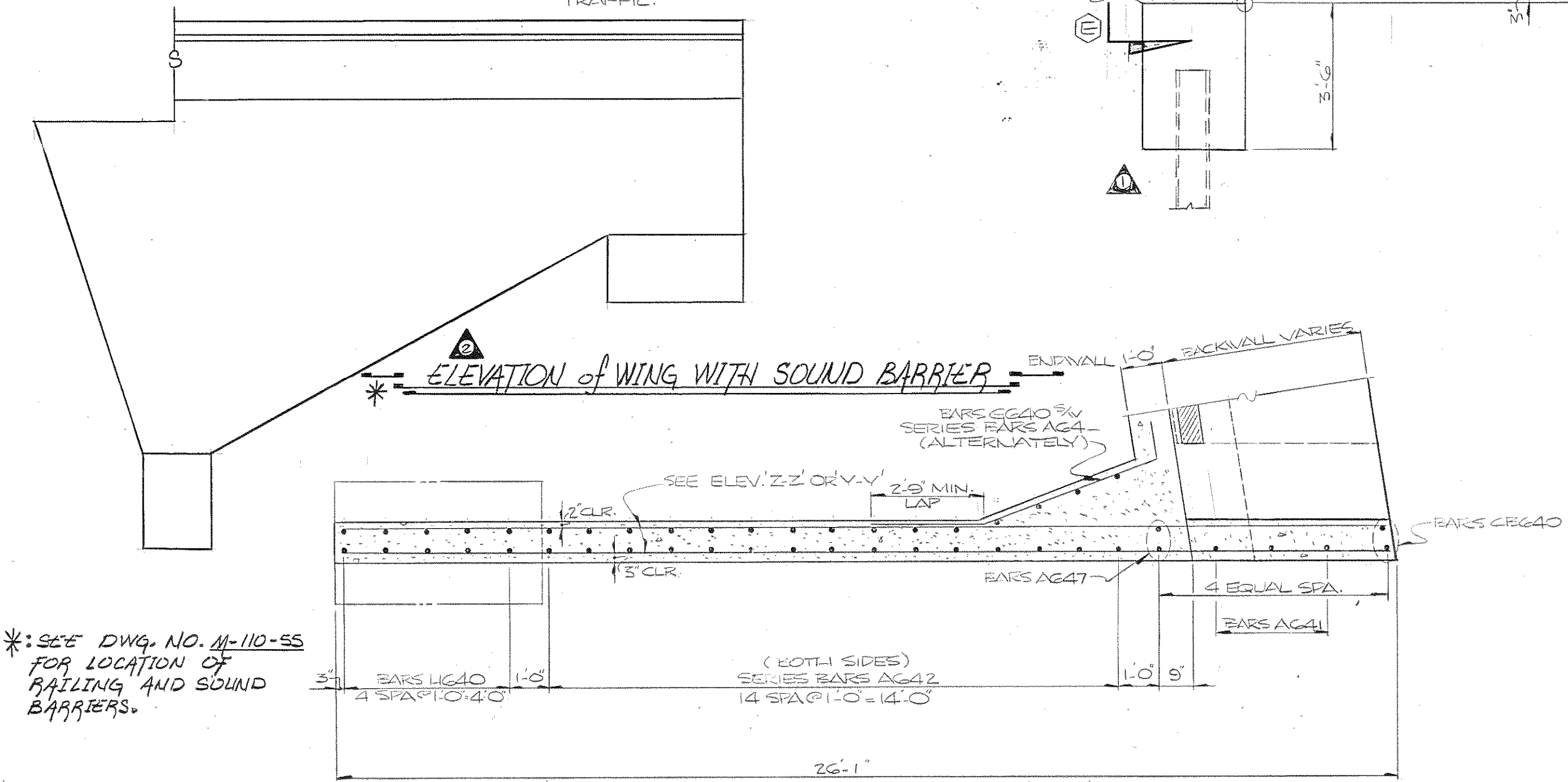
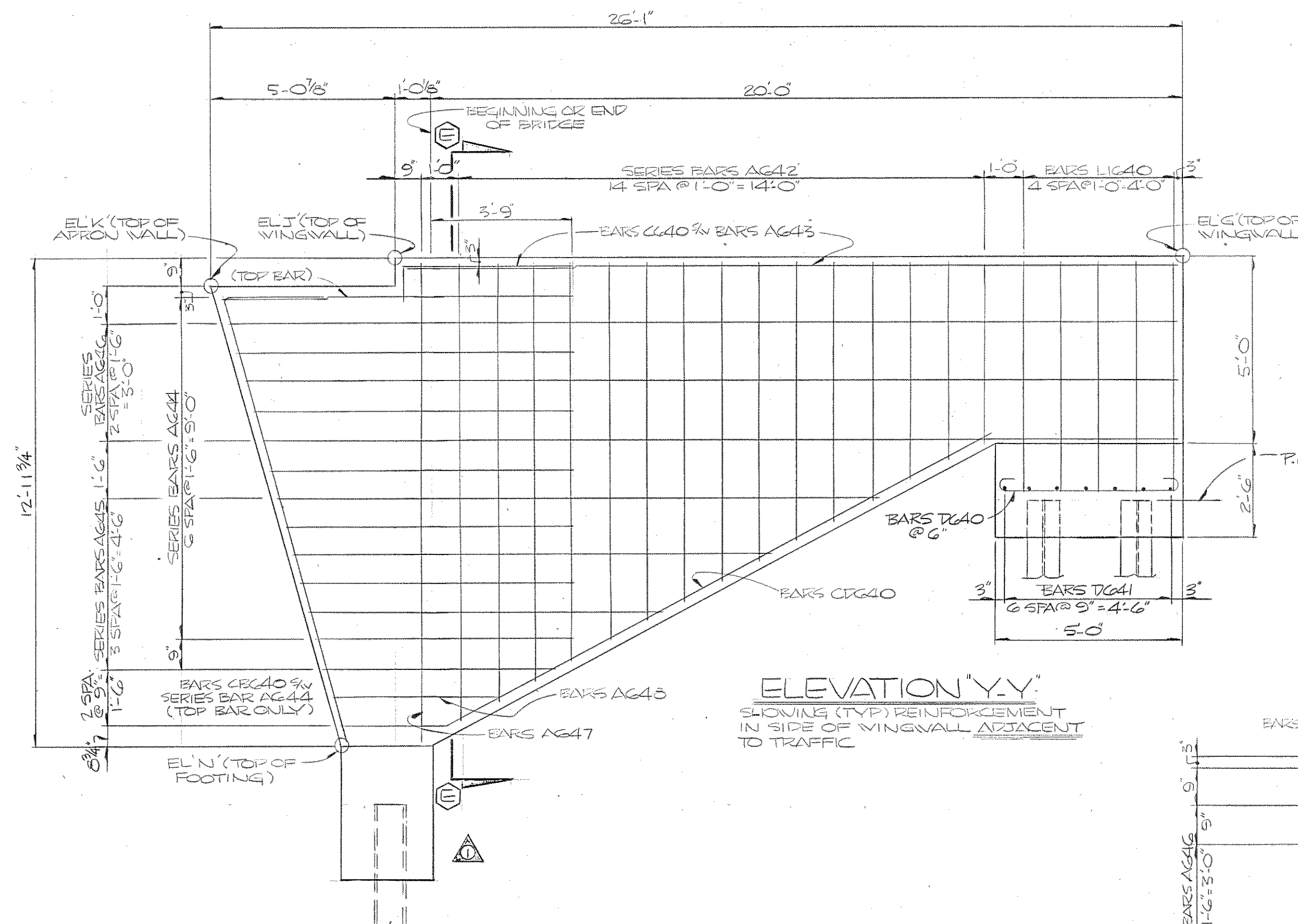
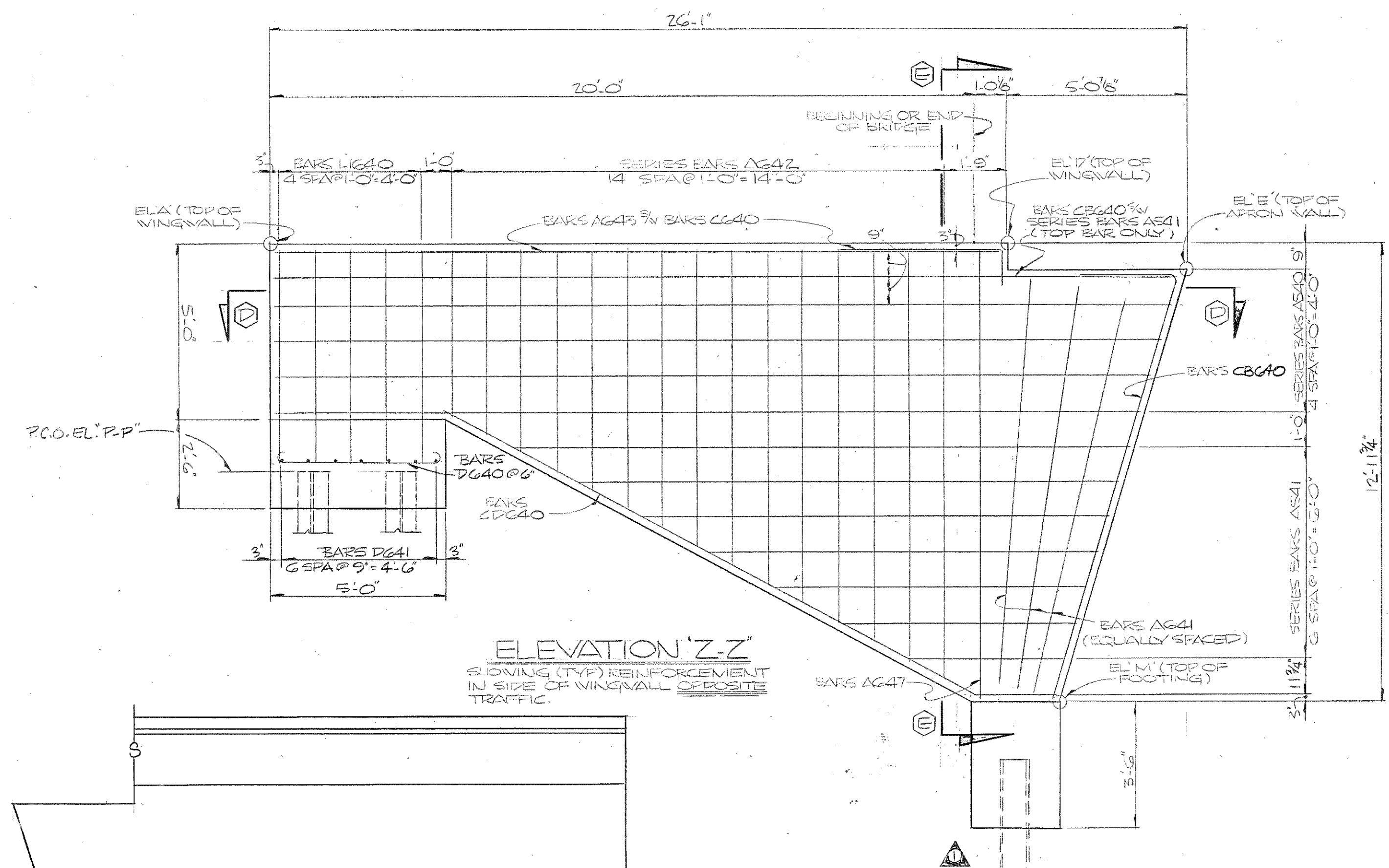
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 ABUTMENTS NO.1 AND 2
 LEFT AND RIGHT LANES
 INTERSTATE 440 OVER
 LEALAND LANE
 STATION 309+70
 DAVIDSON COUNTY
 1982

CORRECT *William L. Small*
 ENGINEER OF STRUCTURES
 APPROVED *Lewis Evans*
 DIRECTOR OF HIGHWAYS

PLAN OF WING FOOTING

PROJECT NO.	YEAR	SHEET NO.
F-440-4(54)209	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	9-24-83	JHN	VERTICAL PILES
2	3-23-84	R.L.H.	MODIFICATION TO PARAPET.



* SEE DWG. NO. M-110-55 FOR LOCATION OF RAILING AND SOUND BARRIERS.

DESIGNED BY HOUSTON WALKER DATE 8-81
 DRAWN BY MIKE CHILLIPERS DATE 9-81
 SUPERVISED BY HARRISON EDWARDS DATE 9-81
 CHECKED BY HOUSTON WALKER DATE 11-81

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 DETAILS (ABUTMENTS NO.1 AND 2)
 LEFT AND RIGHT LANES
 INTERSTATE 440 OVER
 LEALAND LANE
 STATION 309+70
 DAVIDSON COUNTY
 1982

CORRECT *Edison L. Ince*
 ENGINEER OF STRUCTURES
 APPROVED *L. Williams*
 DIRECTOR OF HIGHWAYS

M-110-69

RIGHT AND LEFT LANES EACH

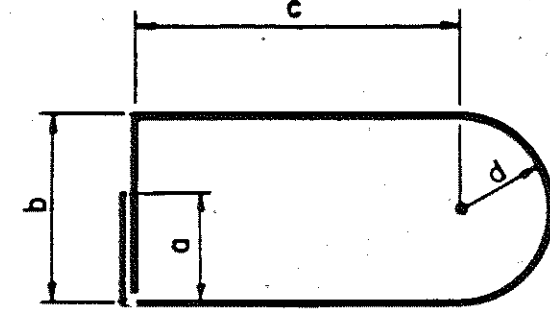
BILL OF STEEL

CONST. NO. 19014-3112-44

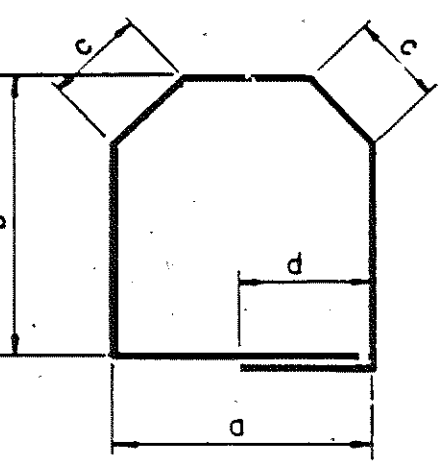
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TE	I-40-154209	1982		

REVISIONS				
NO.	DATE	BY	BRIEF DESCRIPTION	

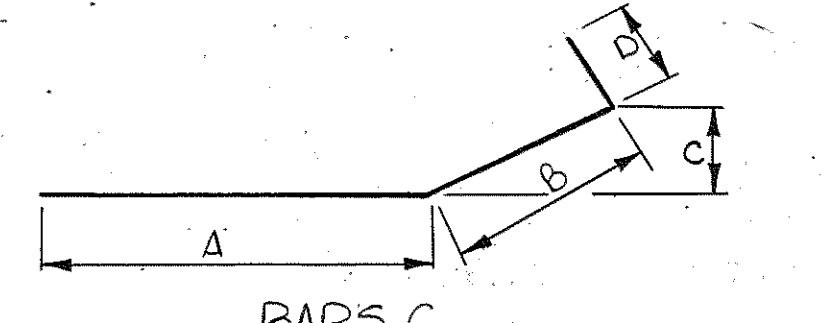
SUPERSTRUCTURE						ABUTMENTS NO. 1 AND 2.						ABUTMENTS NO. 1 AND 2. CONT.															
BAR	LOCATION	SIZE	NO. REQD.	BENDING DIMENSIONS			LENGTH	BAR	LOCATION	SIZE	NO. REQD.	BENDING DIMENSIONS			LENGTH	BAR	LOCATION	SIZE	NO. REQD.	BENDING DIMENSIONS			LENGTH				
				a	b	c	d					a	b	c	d					a	b	c	d				
A400	ENDWALL	4	16					56'-6"	A440	WING BKT.	4	4					20'-4"	D640	WING FOOTING	6	24	4'-8"	8"				6'-0"
A401	RDW'Y. BKTS.	4	2					54'-5"	SERIES	WING WALL	5	4	LENGTH VARIES FROM 12'-10" TO 24'-7" TO 25'-9" IN INC OF 3 1/2" (5 BARS)			D641	WING FOOTING	6	28	2'-8"	8"						4'-0"
H400	RDW'Y. BKTS.	4	108	1'-8"	7"			2'-9"	A540								G640	FILLET	6	48	2'-9"	4'-10"	1'-8"	1'-0"		8'-7"	
A400E	ENDWALL	4	2					56'-6"	SERIES	WING WALL	5	4	LENGTH VARIES FROM 79'-4" TO 4'-9" TO 17'-11" IN INC OF 2'-2 3/4" (7 BARS)			H440	FOOTING	4	114	2'-2"	2'-0"						6'-2"
A500E	SLAB	5	56					56'-0"	A541								H640	WING WALL	6	20	6'-2"	7"				12'-10"	
A501E	SLAB	5	109					56'-5"	A542	BACKWALL	5	218															
A502E	SLAB	5	216					3'-2"	A641	WING WALL	6	12						HB940	FTG.+BACKWALL	9	218	9'-6"	2'-2"	3'-4"	3'-0"		18'-0"
A503E	BACKWALL	5	218					3'-11"	SERIES	WING WALL	6	8	LENGTH VARIES FROM 126'-3" TO 4'-9" TO 12'-1" IN INC OF 6 1/4" (15 BARS)			SERIES	BACKWALL	4	54	2'-2"	1'-0"	"C" DIM. VARIES FROM 2'-2" TO 4'-4" IN INC OF 3 3/4" (8 BARS)					
A800E	SLAB	8	112					22'-0"	A642																		
A801E	ENDWALL	8	2					56'-6"	A643	WING WALL	6	8															
CA300E	SLAB+ENDWALL	8	222	12'-6"	3'-11"			16'-5"	SERIES	WING WALL	6	4	LENGTH VARIES FROM 58'-4" TO 7'-0" TO 9'-8" IN INC OF 5 3/8" (7 BARS)			SERIES	BACKWALL	4	2	1'-7"	1'-0"	"D" DIM. VARIES FROM 2'-3" TO 4'-5" IN INC OF 3 3/4" "E" DIM. VARIES FROM 2'-2" TO 4'-4" IN INC OF 3 3/4" (8 BARS)					
PAVEMENT @ BRIDGE ENDS																											
A490	SLAB (BOT.)	4	50					52'-9"	A644																		
A790	FOOTING	7	16					52'-9"	SERIES	WING WALL	6	4	LENGTH VARIES FROM 75'-2" TO 24'-7" TO 25'-6" IN INC OF 5 1/2" (3 BARS)			SERIES	BACKWALL	4	2	1'-1"	1'-0"	"D" DIM. VARIES FROM 2'-3" TO 4'-5" IN INC OF 3 3/4" "E" DIM. VARIES FROM 2'-2" TO 4'-4" IN INC OF 3 3/4" (8 BARS)					
A990	SLAB (BOT.)	9	210					24'-2"	A645																		
A1190	SLAB DRAINS (ABUT. NO.1)	11	2					6'-0"	A646																		
L590	FOOTING	5	106	1'-2"	1'-0"	2'-1 1/2"		7'-5"	A647	WING WALL	6	8															
A490E	SLAB (TOP)	4	50					52'-9"	A648	WING WALL	6	4															
A690E	SLAB	6	106					24'-2"	A802	BACKWALL	8	2															
A1190E	SLAB DRAINS (ABUT. NO.1)	11	2					6'-0"	A841	FOOTING	8	20															
L590E	FOOTING/SLAB	5	106	1'-2"	1'-0"	2'-1 1/2"		7'-5"	CB640	BACKWALL	6	110	8'-10"	4'-9"	1'-5"												
									CB640	WING WALL	6	8	12'-5"	2'-9"	9 3/8"												
									CD640	WING WALL	6	8	17'-0"	2'-4"	24 3/4"												



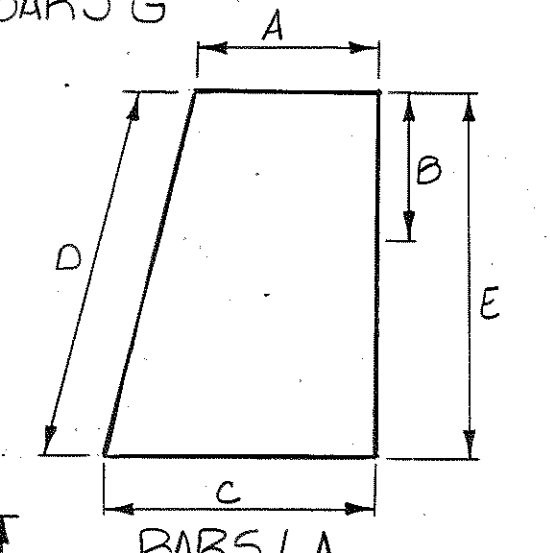
BARS X



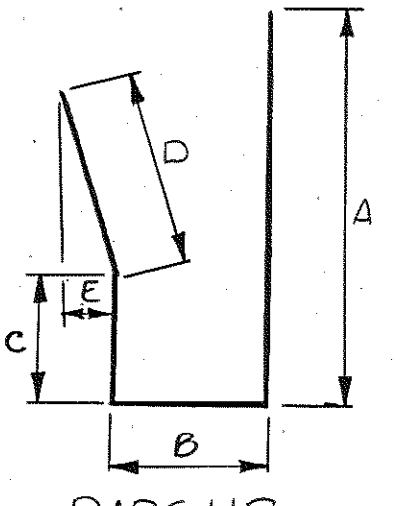
BARS M



BARS G



BARS LA

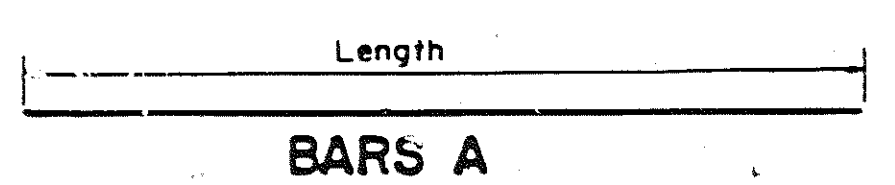


BARS HB

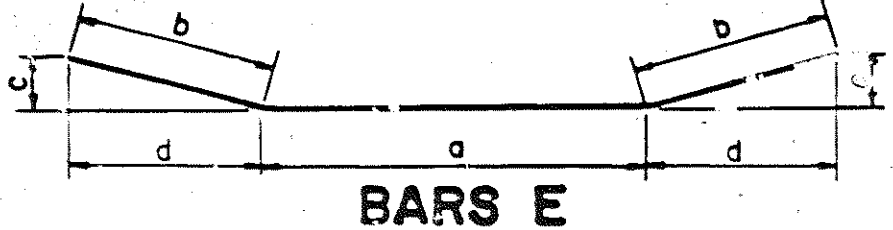
REINFORCING STEEL CODE

TYPE	SIZE	SERIES
A	5	06

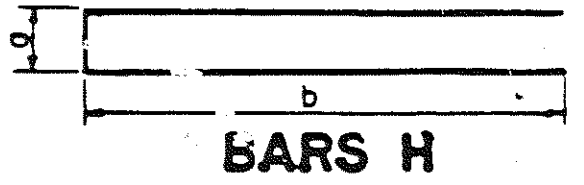
NOTE: Dimensions shown on this sheet are outside to outside of bar. Standard C.R.S.I. Hook Details Shall Apply, Except As Noted.



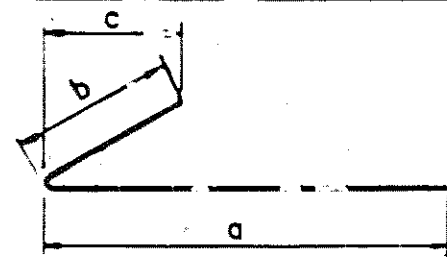
BARS A



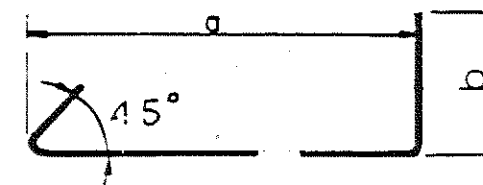
BARS E



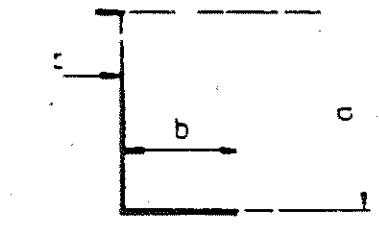
BARS H



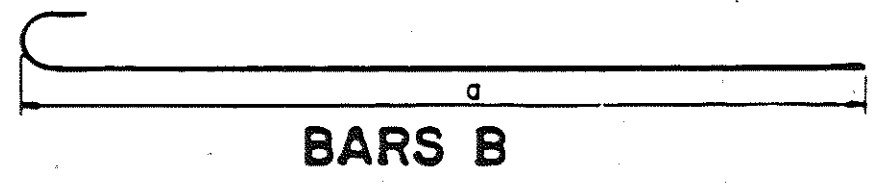
BARS CB



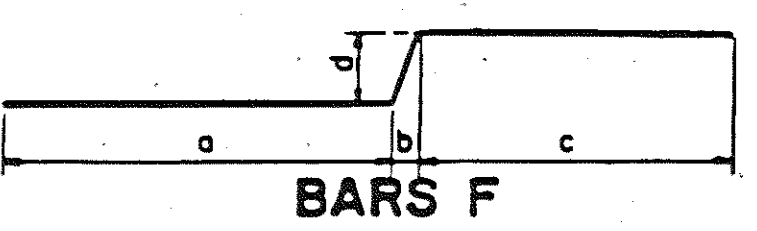
BARS YB



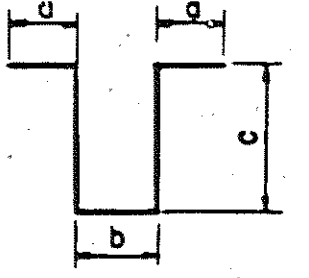
BARS Z



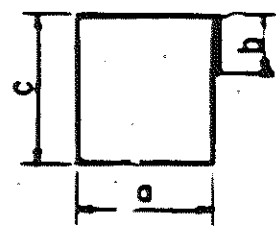
BARS B



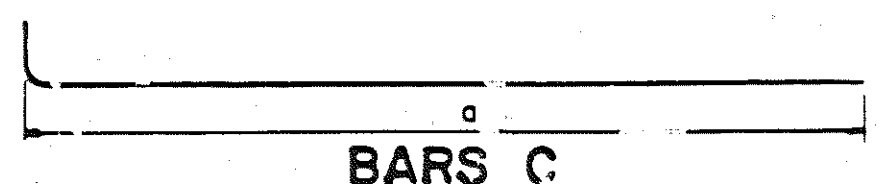
BARS F



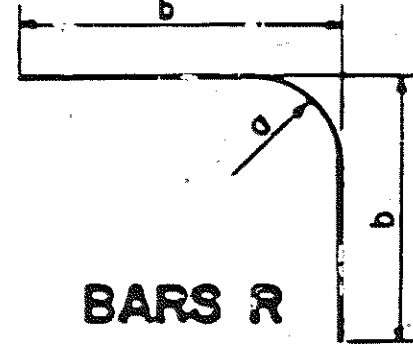
BARS K



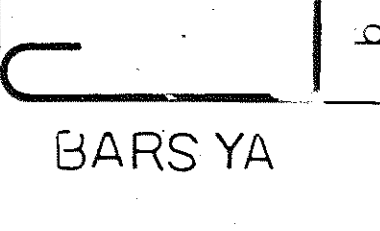
BARS L



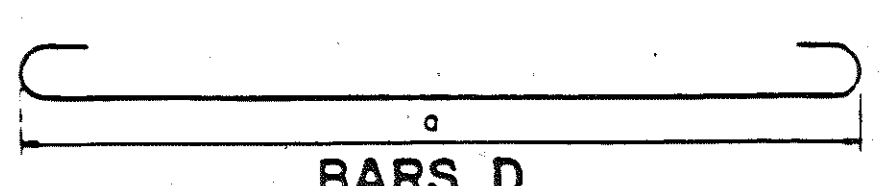
BARS C



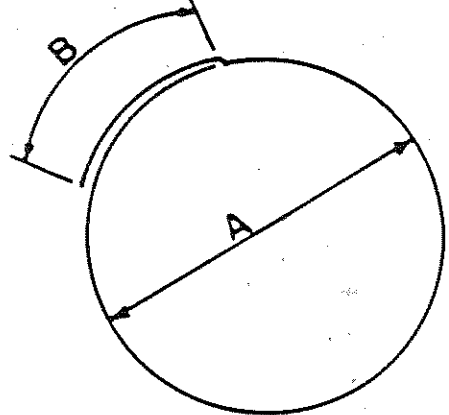
BARS R



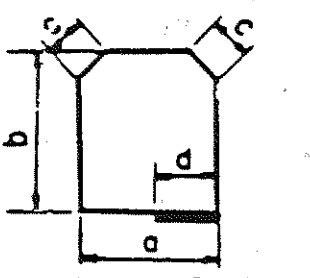
BARS YA



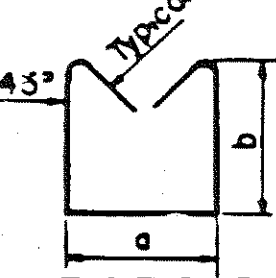
BARS D



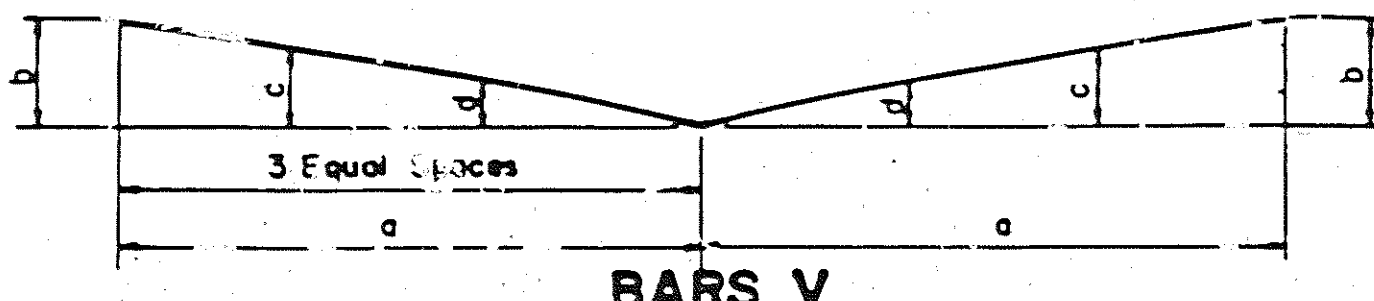
BARS T



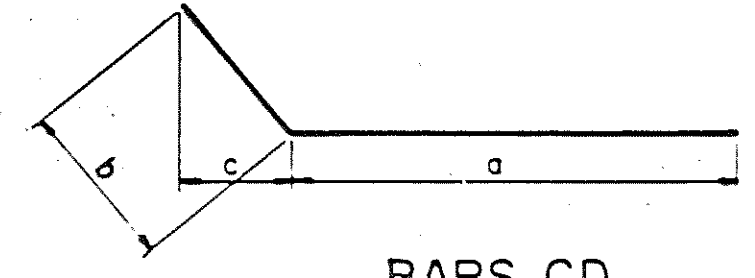
BARS M



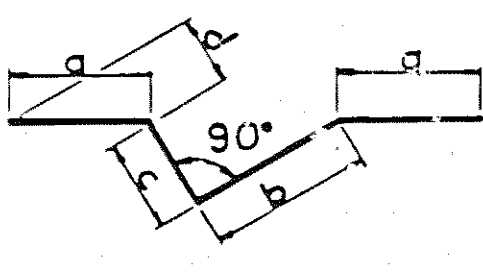
BARS S



BARS V



BARS CD



BARS JX

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
BILL OF STEEL
INTERSTATE 440 OVER
LEALAND LANE
STATION 309+70.00
DAVIDSON COUNTY
1982

DESIGNED BY HOUSTON WALKER DATE 8-81
DRAWN BY MIKE FAGAN DATE 11-81
SUPERVISED BY BOWMAN+HARBISON DATE 11-81
CHECKED BY H. WALKER DATE 12-81

CORRECT *Robert L. Furey*
ENGINEER OF STRUCTURES
APPROVED *Levie Evans*
DIRECTOR OF HIGHWAYS

M-110-64