

PROJECT NO.	YEAR	SHEET NO.
I-440-4(5A) 209	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
Δ 14-7-83		AMS	STRUCT. LIGHTING DETAILS

**LIST OF DRAWINGS**

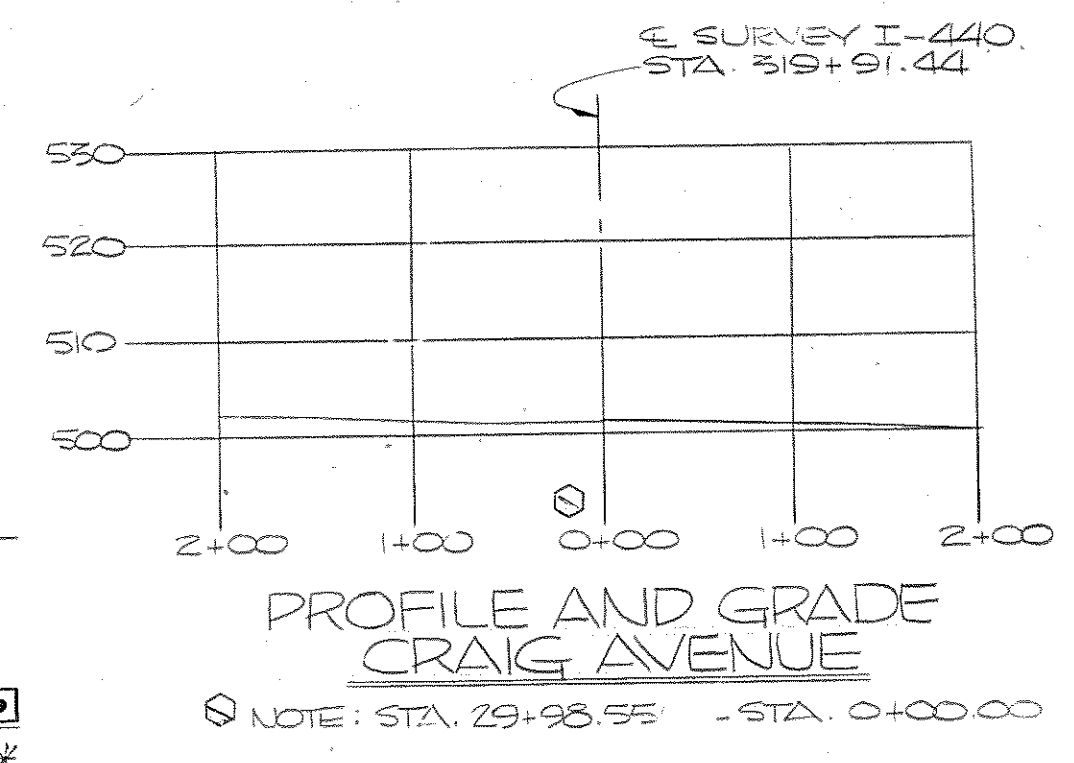
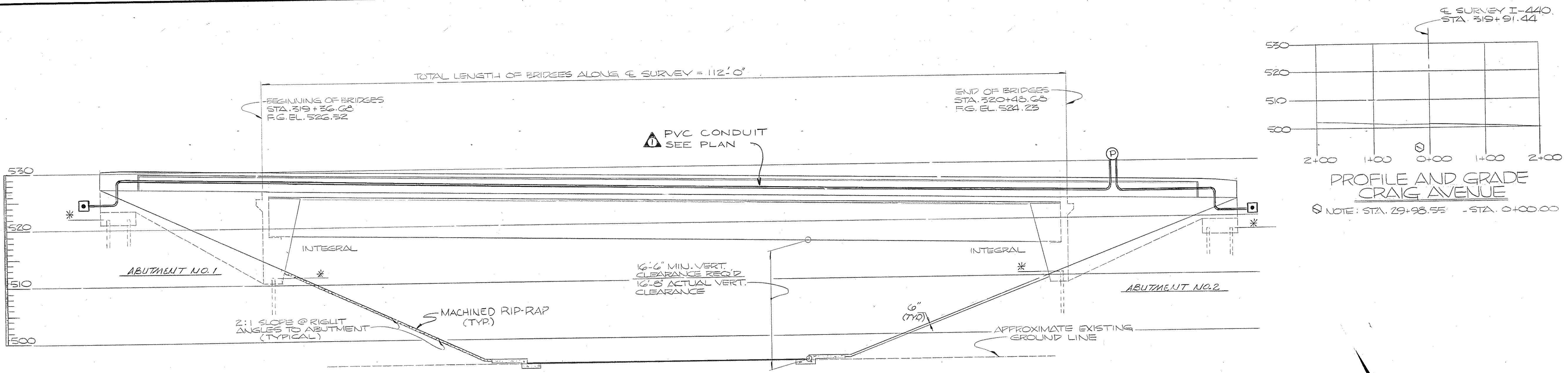
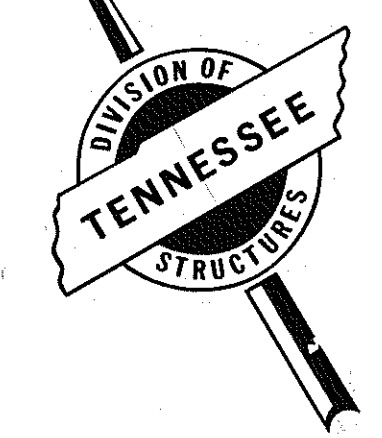
TITLE OF DWG.	DWG. NO.	LATEST REVISION DATE
LAYOUT OF BRIDGE	M-110-65	4-7-83
GENERAL NOTES AND ESTIMATED QUANTITIES	M-110-66	1-19-84
FOUNDATION DATA	M-110-67	
SUPERSTRUCTURE	M-110-68	3-9-84
SUPERSTRUCTURE DETAILS	M-110-69	
PRESTRESSED BOX BEAM	M-110-70	
ABUTMENTS NO. 1 (RIGHT LANE) AND NO. 2 (LEFT LANE)	M-110-71	3-9-84
ABUTMENTS NO. 1 (LEFT LANE) AND NO. 2 (RIGHT LANE)	M-110-72	3-9-84
ABUTMENT DETAILS	M-110-73	3-9-84
BILL OF STEEL	M-110-74	1-19-84

**LIST OF STANDARD DRAWINGS**

TITLE OF DWG.	DWG. NO.	LATEST REVISION DATE
STANDARD PILE DETAILS	L-5-111	11-27-73
STANDARD REINFORCEMENT BAR SUPPORT	K-80-14	08-27-76
MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS	K-85-150	01-09-75
REINFORCED CONCRETE PAVEMENT @ BRIDGE ENDS	K-86-144	07-17-81
BRIDGE RAILINGS CONCRETE PARAPET	M-28-1	07-17-81
TENNESSEE STD. PRECAST PRESTRESSED DECK PANELS	M-103-149	07-07-82
M-103-150		
▲ LIGHT STD. SUPPORT DETAILS	M-8-149	11-20-75

**LIST OF SPECIAL PROVISIONS**

SPECIAL PROVISION NO.	SUBJECT	LATEST REVISION DATE
907A	REGARDING EPONY COATED REINFORCING STEEL	9-8-81
105A	REGARDING APPROVAL OF SHOP DRAWINGS	9-8-81

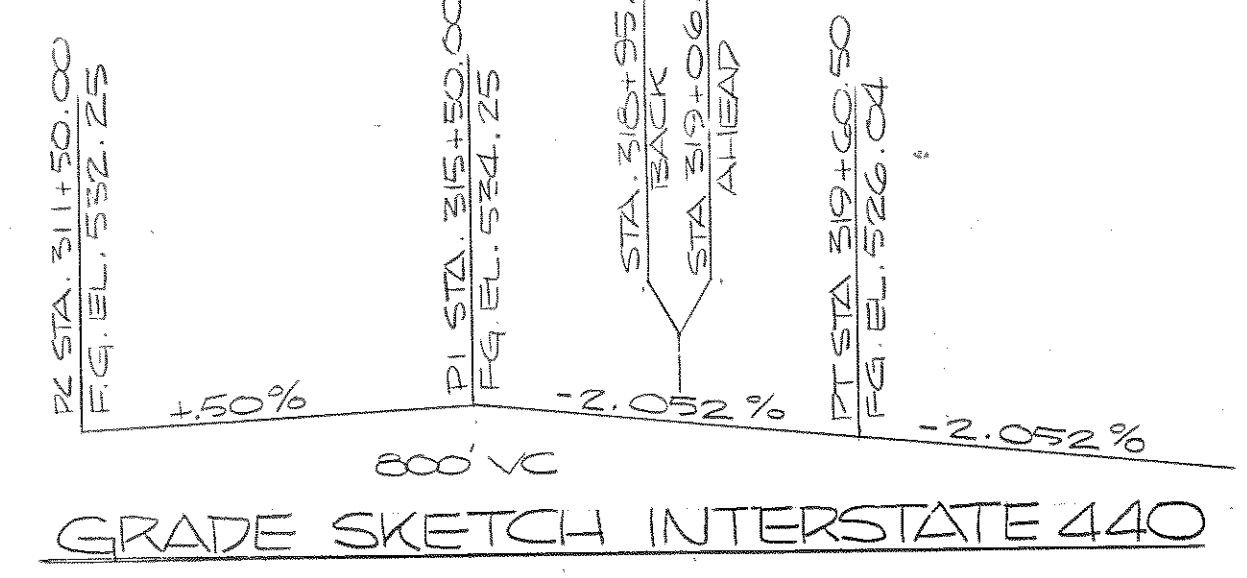


**HORIZONTAL CURVE DATA CRAIG AVENUE**

PI STA. = 30+07.76
Δ = 22° 05'
R = 8° 00'
L = 276.04
T = 139.76
E = 13.51
R = 716.20

\*: DENOTES STANDARD M-28-1 RAILING  
 \*\*: DENOTES SOUND BARRIER RAILS (SEE DETAILS ON DRAWING NO. M-110-72.)  
 ●: DENOTES GUARDRAIL ATTACHMENT REQUIRED, SEE STANDARD DRAWING 8-6R- SERIES.

DESIGNED BY MICHAEL MORRIS DATE 6-81  
 DRAWN BY MIKE CHILDRESS DATE 9-81  
 SUPERVISED BY E.L. HARRISON DATE 9-81  
 CHECKED BY MICHAEL MORRIS DATE 7-82



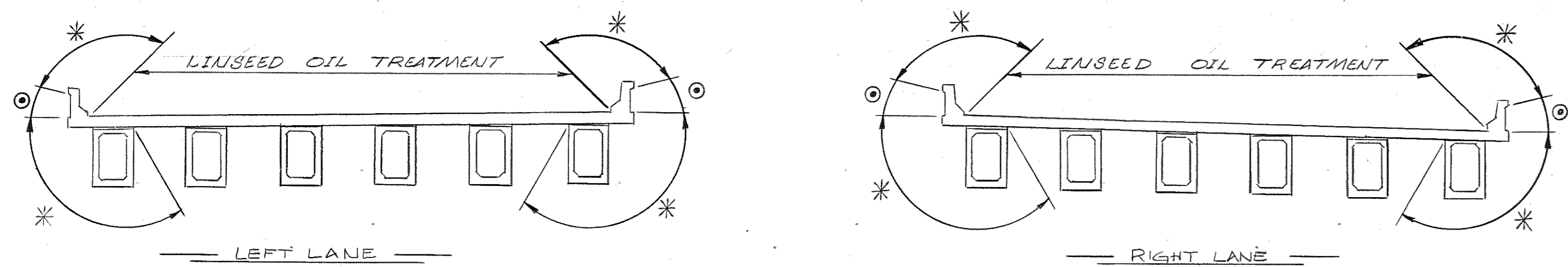
STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION  
 BUREAU OF HIGHWAYS  
 LAYOUT OF BRIDGE  
 INTERSTATE 440 OVER  
 CRAIG AVENUE  
 STATION 319+91.44  
 DAVIDSON COUNTY  
 1982

CORRECT *William L. Lora*  
 ENGINEER OF STRUCTURES  
 APPROVED *James Evans*  
 DIRECTOR OF HIGHWAYS

CLASS 'A' GRADING @ 150 C.Y.

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

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	9-7-83	A.M.S.	STRUCT. LIGHTING DETAILS
2	9-29-83	H.M.B.	CONCRETE FINISH NOTE
3	1-19-84	T.H.P.	EPOXY COATED BARS HS40



— SURFACE FINISH SKETCH —

\*: DENOTES CLASS 2 RUBBED FINISH.  
 O: DENOTES DECORATIVE FORM FINISH.

CONCRETE FINISHES: PORTIONS OF THE 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 FORMLINER SIMILAR TO BURKE FORMLINER BQ 308 CONCRETE MARK, LITHOTEX FORMLINER FRACTURED FINISH GROOVED T-150, SYMONS 3/4" MARROW FRACTURED FIN P/C 30909-9 OR EQUAL. AFTER STRIPPING FORMLINERS, THE DECORATIVE FORM FINISH AREAS SHALL RECEIVE A CLASS 1, ORDINARY FINISH IN ACCORDANCE WITH SUBSECTION 604-2.3 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A SAMPLE CASTING USING THE FORMLINER 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 FINISH SKETCH THIS SHEET. ALL EXPOSED SURFACES OF ABUTMENTS AND BENTS SHALL RECEIVE A DECORATIVE FORM FINISH.

— GENERAL NOTES —

SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION (MARCH, 1981 EDITION) LOADINGS: HS20-44 WITH ALTERNATE MILITARY DESIGN SPECIFICATIONS: MASHTO 1977 EDITION WITH ADDENDA.  
 CONCRETE: TO BE CLASS "X" (CAST IN PLACE). F<sub>c</sub> 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, PRESTRESSED CONCRETE PANELS. IN EITHER CASE, FORMS SHALL BE ATTACHED BY MEANS OTHER THAN WELDING TO SUPPORT MEMBERS. THE CONTRACTOR SHALL TAKE STEPS TO ASSURE THE STABILITY OF THE EXTERIOR 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.  
 PILES: TO BE HP 102 X 42 DRIVEN TO REFUSAL ON ROCK OR A MINIMUM BEARING OF 53 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.  
 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 - 5.0 GAL/SACK OF CEMENT  
 AIR CONTENT - 6.7% ± 2%  
 PAYMENT WILL BE UNDER ITEM 604-02.12  
 NOTE: MACHINED RIP-RAP FOR SLOPE PROTECTION SHALL BE 3" TO 6" IN SIZE AND MEET THE QUALITY REQUIREMENT OF SUBSECTION 918-10 AND PAID FOR UNDER ITEM 709-05.04 SEE STANDARD DWG. NO. RD-5A-1.

— ESTIMATED QUANTITIES —

ITEM NO.	604-02.03	604-01.12	604-03.01	604-03.02	604-03.03	606-22.03	606-32.03	606-42.03	615-02.36	620-03	710-10	710-11	204-02-01	709-05.04	714-D1.03
ITEM	EPOXY COATED REINFORCING STEEL LBS.	CLASS "A" CONCRETE (BRIDGE DECK) C.Y.	CLASS "A" CONCRETE (BRIDGES) C.Y.	STEEL BAR REINFORCEMENT (BRIDGES) LBS.	LINSEED OIL TREATMENT S.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 (66" X 48") L.F.	CONCRETE PARAPET L.F.	6" PERFORATED C.M. PIPE (18 GA) W/POROUS BACKFILL L.F.	6" C.M. PIPE UNDERDRAINS (18 GA) L.F.	DRY EXCAVATION (BRIDGES) C.Y.	MACHINED RIP-RAP (3 IN. TO 6 IN.) C.Y.	STRUCTURE LIGHTING (BRIDGE NO. 3) L.S.
SUPERSTRUCTURE	63,534	189.5		2,375											
ABUTMENT NO. 1	2,757		70.2	9,450		526	526	526					30		
ABUTMENT NO. 2	2,757		70.2	9,450		518	518	518					30		
PVMT AT BRIDGE ENDS	6,420		109.9	21,656											
SUB TOTAL	75,468	189.5	250.3	42,931	939	1044	1044	1044	660	316	100	30	60		
SUPERSTRUCTURE	64,680	192.5		2,418											
ABUTMENT NO. 1	2,757		70.2	9,450		512	512	512					31		
ABUTMENT NO. 2	2,757		71.8	9,555		518	518	518					31		
PVMT AT BRIDGE ENDS	6,546		112.7	22,078											
SUB TOTAL	76,740	192.5	254.7	43,501	957	1030	1030	1030	660	316	108	30	62		
TOTAL	152,208	382.0	505.0	86,432	1,896	2,074	2,074	2,074	1,320	732	214	60	122	142	6

- ① NOTE: COST OF POLYETHYLENE SHEETING AND ALL MISCELLANEOUS ITEMS NECESSARY FOR INSTALLATION TO BE INCLUDED IN COST OF PERFORATED C.M. PIPE.
- ② NOTE: THE COST OF 1/2" THREADED STEEL INSERTS AND 1/2" 7/8" Ø X 4" HEX HEAD BOLTS, (A307), TO BE INCLUDED IN BRIDGE ITEMS BID ON.
- ③ NOTE: THE COST OF ELASTOMERIC PADS, RUBBER BONDING CEMENT, AND DOWEL BARS TO BE INCLUDED IN THE COST OF PRESTRESSED BEAM.
- ④ ALL REINFORCING STEEL IN TRAFFIC FACE OF PARAPETS SHALL BE EPOXY COATED. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 620-03.
- ⑤ NOTE: EXCAVATION BASED ON LOWER ROAD PROFILE.
- ⑥ LUMP SUM FOR STRUCTURE LIGHTING, ITEM NO. 714-D1.03 INCLUDES 360 FT. 2" Ø CONDUIT WITH PULL WIRES, 8 ANCHOR BOLTS AND ALL NECESSARY MATERIALS FOR INSTALLATION OF STRUCTURE LIGHTING.

STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION  
 BUREAU OF HIGHWAYS

GENERAL NOTES and ESTIMATED QUANTITIES  
 INTERSTATE 440 Over CRAIG AVENUE  
 (LEFT and RIGHT LANES)  
 STATION 319+91.44  
 DAVIDSON COUNTY  
 1982

DESIGNED BY MICHAEL MORRIS DATE 6-81  
 DRAWN BY GRANT LLOYD DATE 7-81  
 SUPERVISED BY ROGER L. HADSON DATE 9-81  
 CHECKED BY MICHAEL MORRIS DATE 7-82

CORRECTED *Colleen L. Lora et al*  
 ENGINEER OF STRUCTURES

APPROVED *Quinn Roberts*  
 DIRECTOR OF HIGHWAYS

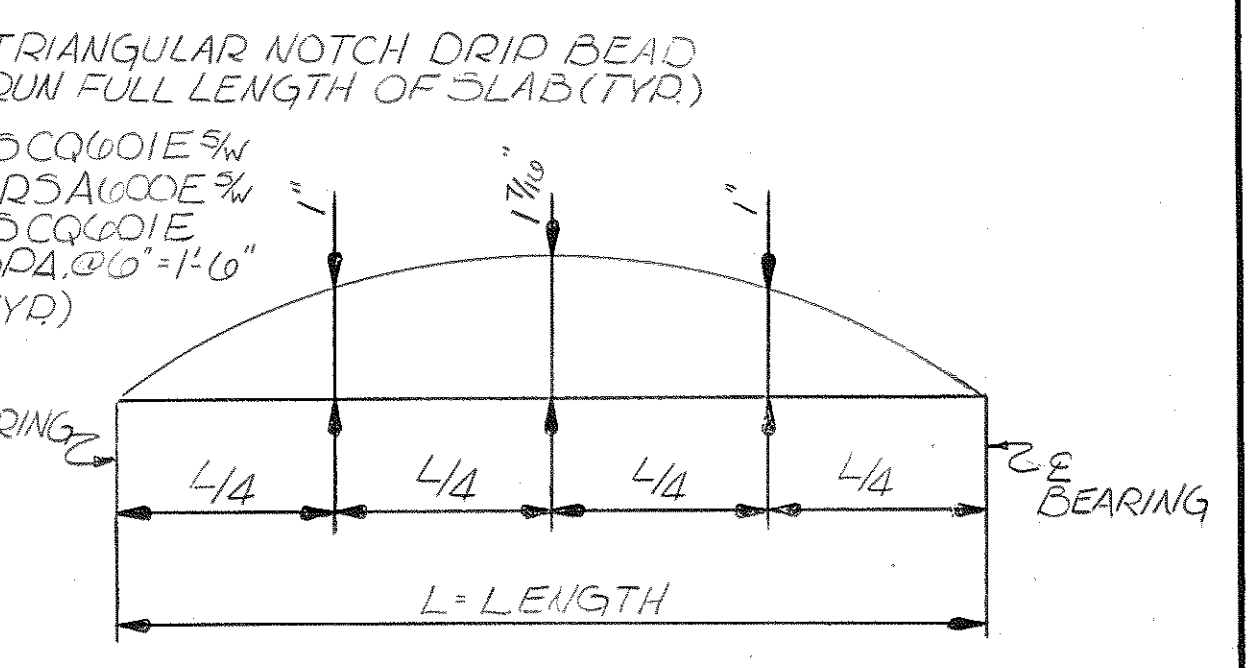
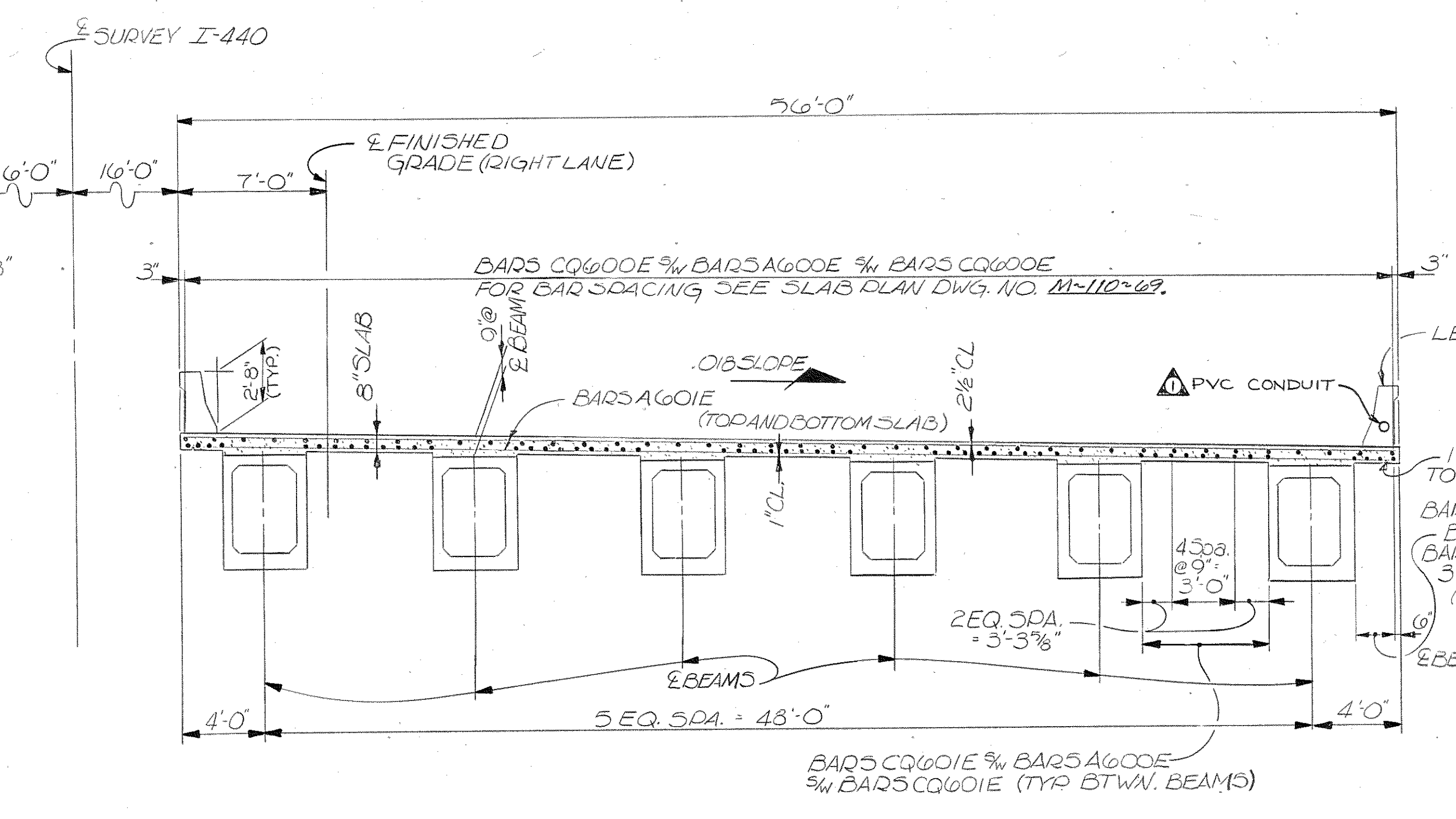
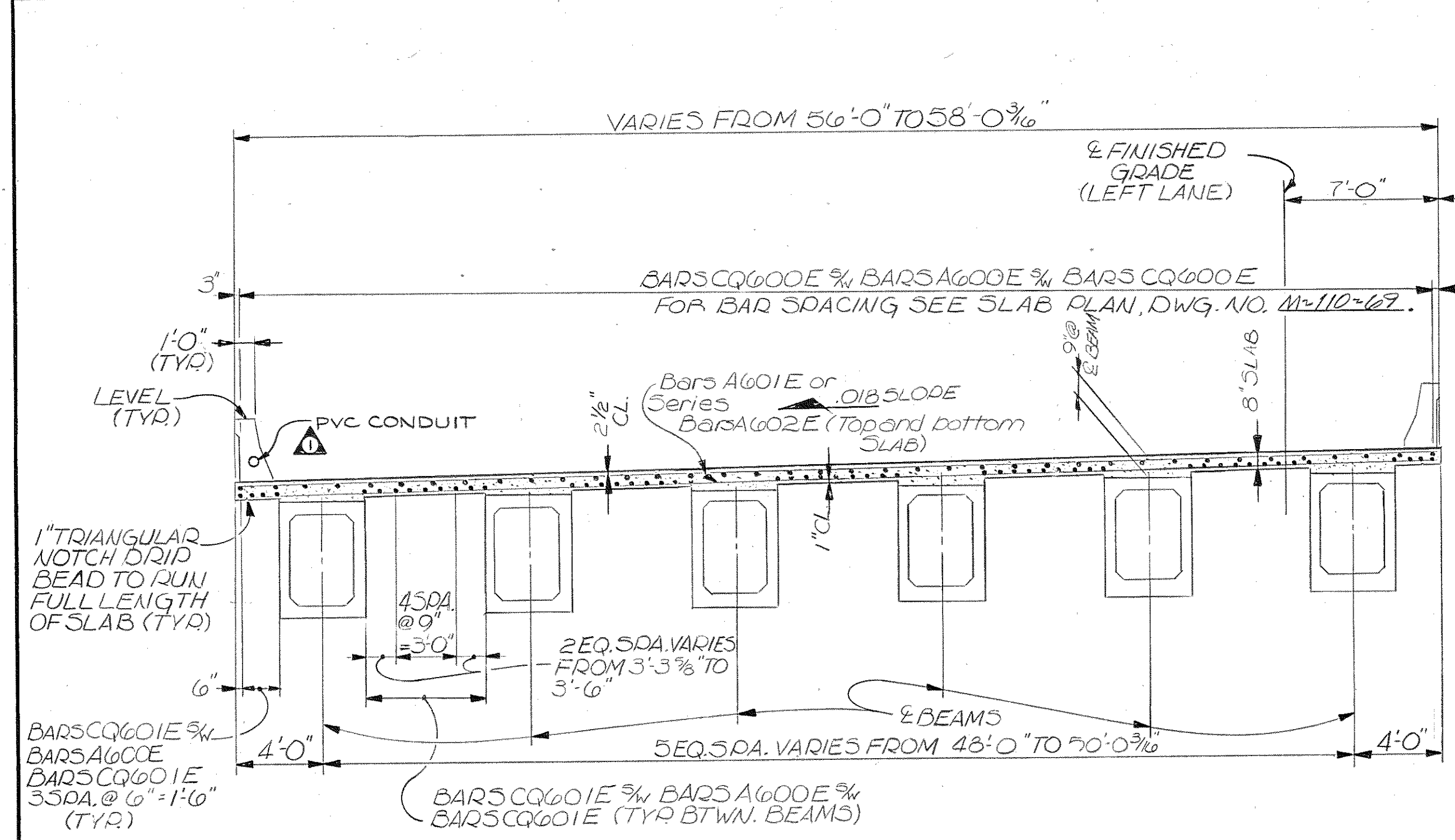
M-110-66



PROJECT NO.	YEAR	SHEET NO.
1-440-4(54)209	1982	

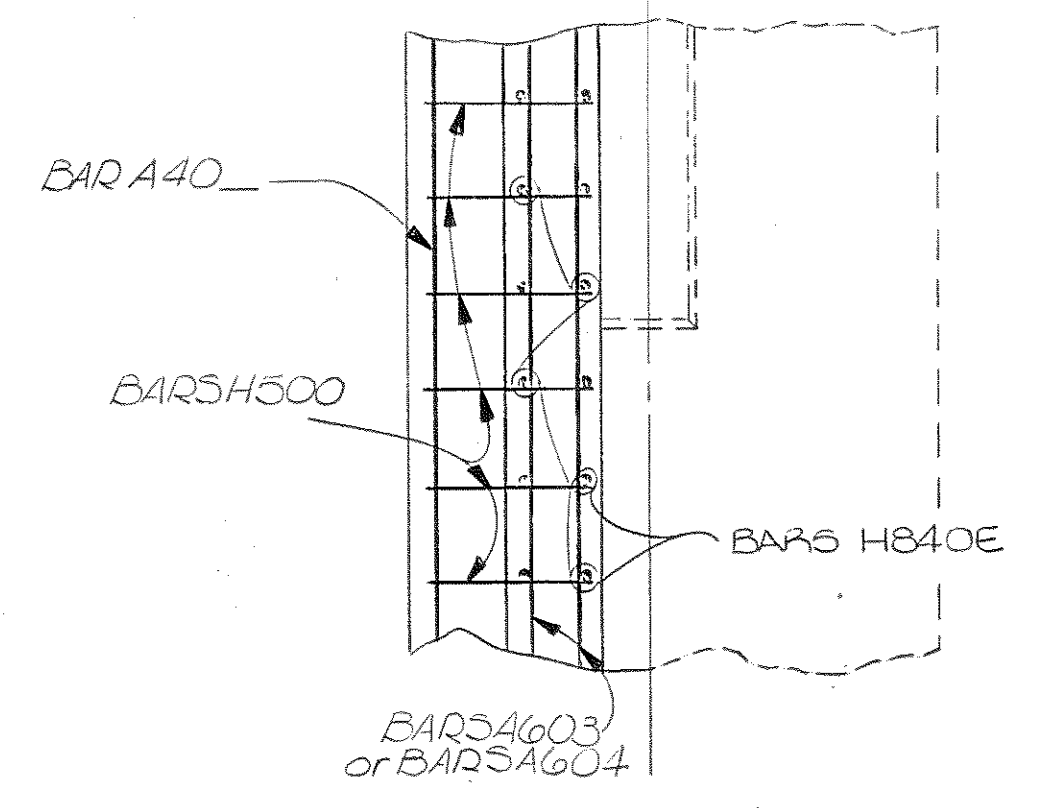
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	4-7-83	AMS	STRUCT. LIGHTING DETAILS (PVC CONDUIT)
2	3-9-83	JCP	CONSTRUCTION JOINT RE-LOCATED



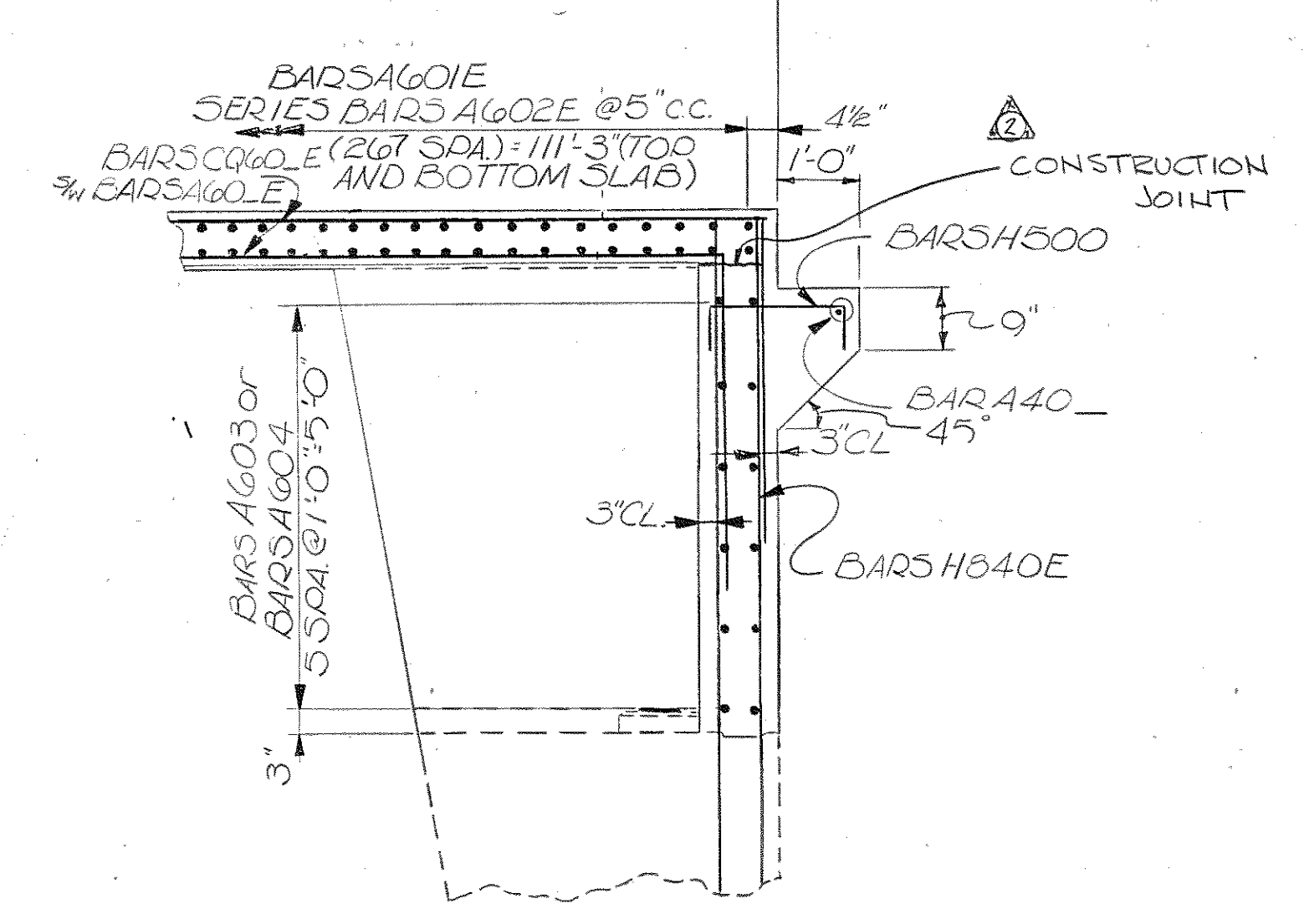
**- DEAD LOAD CORRECTION CURVE -**  
 This curve is for dead load slab and all dead loads that are applied after slabs in place and should be corrected to compensate for the effects due to vertical curve.

**LEFT LANE**      **TYPICAL CROSS SECTION** (LOOKING FORWARD ON SURVEY)

NOTE: WHEN POURING SLAB, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR PARADET. THE PARADET SHALL NOT BE POURED UNTIL THE SLAB IS POURED AND CURED. ALSO SEE DRAWING NO. M-28-1.

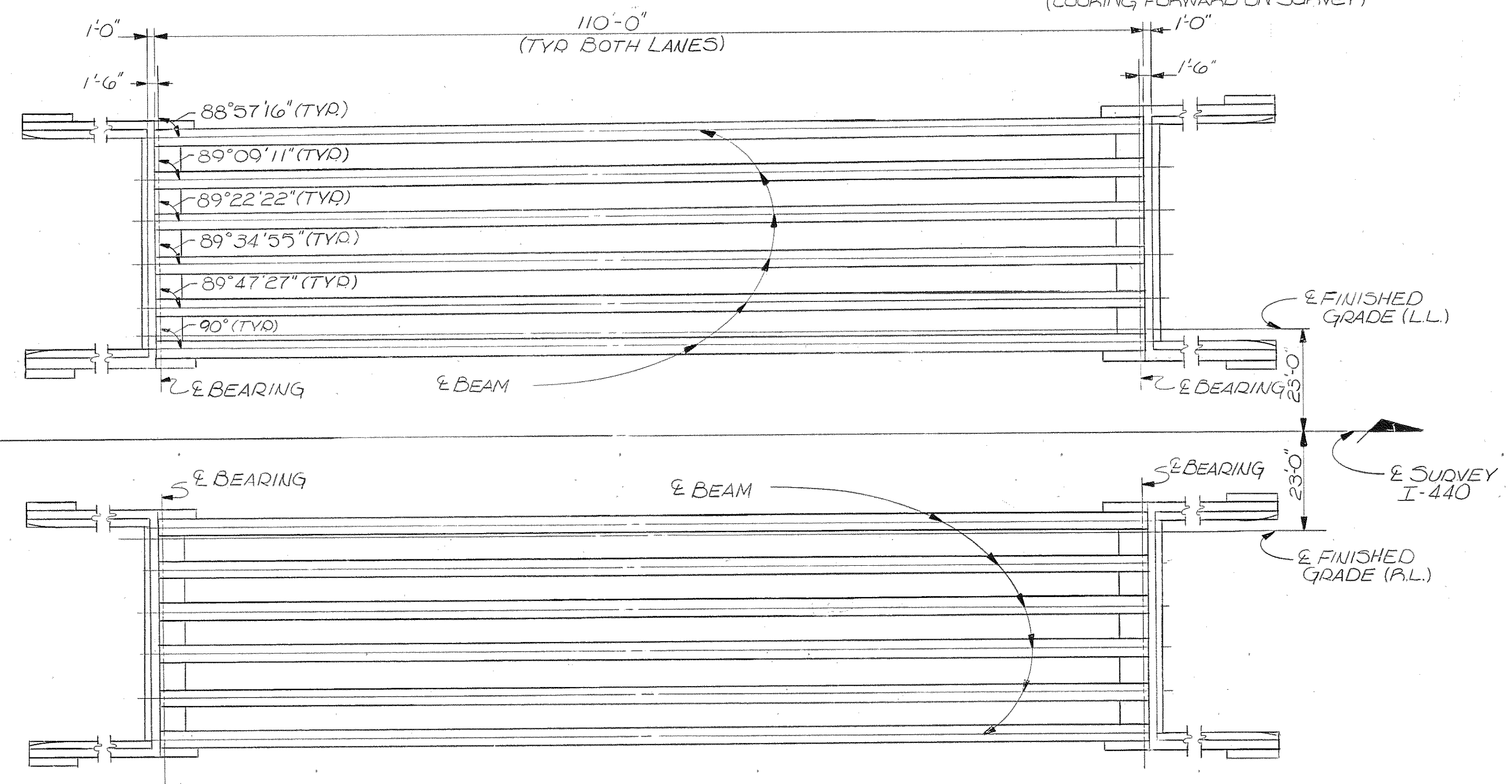


**- PART ELEVATION -**



**- PART PLAN -**

THE BACKWALL AND 2'-0" @ THE END OF SLAB SHALL NOT BE POURED UNTIL THE GIRDERS ARE IN PLACE AND THE REMAINDER OF THE SLAB IS POURED. THE BACKWALL AND ENDS OF SLAB SHALL BE POURED CONCURRENTLY.



**- FRAMING PLAN -**  
 NOTE: ALL BEAMS IN RIGHT LANE ARE 90° TO E BEARING.

**- ESTIMATED QUANTITIES -**

ITEM	CLASS "A" CONCRETE (BRIDGE DECK) C.Y.	REINFORCING STEEL lbs.	EPOXY COATED REINFORCING STEEL lbs.
SUPERSTRUCTURE			
LEFT LANE	192.5	2,418	64,680
RIGHT LANE	189.5	2,375	63,534

STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION  
 BUREAU OF HIGHWAYS

**SUPERSTRUCTURE INTERSTATE 440 OVER CRAIG AVENUE STATION 319+91.44 DAVIDSON COUNTY**

CORRECT *Colleen L. Swann* 1982  
 ENGINEER OF STRUCTURES

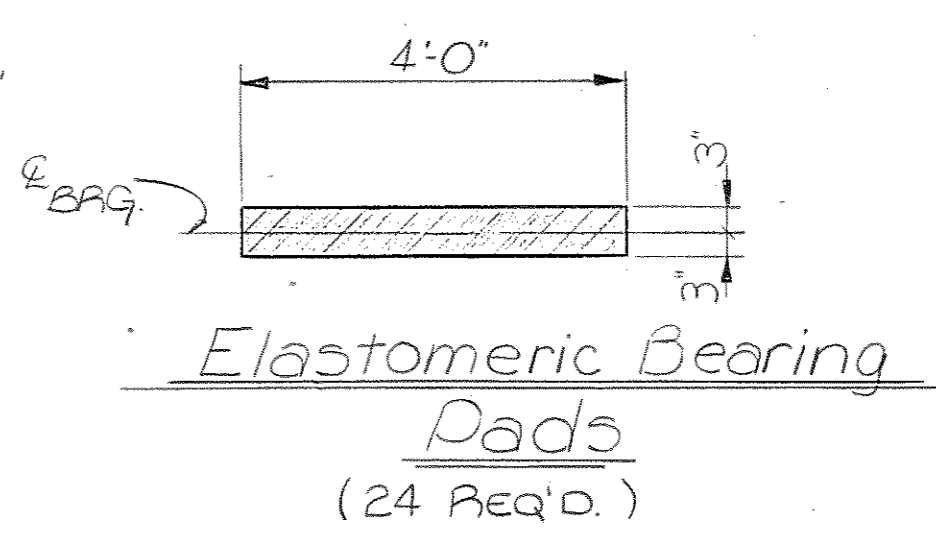
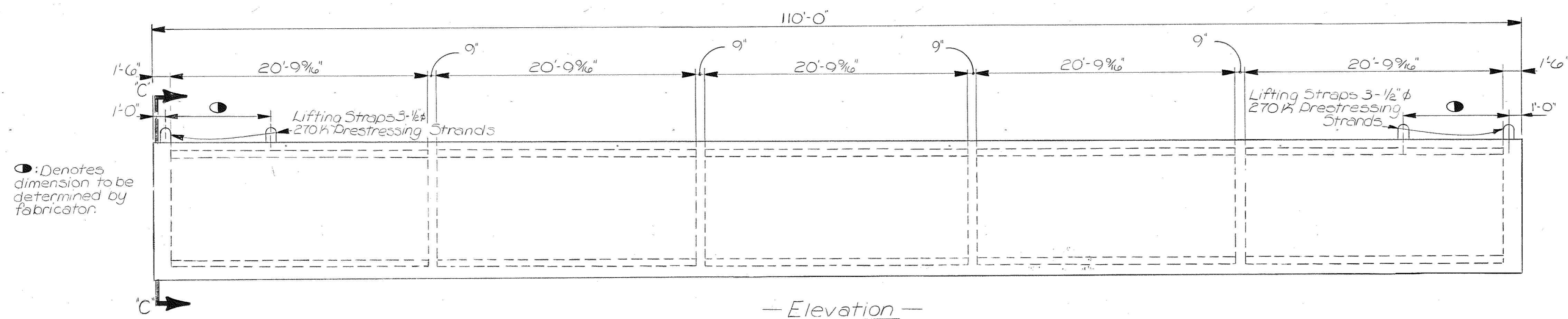
APPROVED *David S. Lovens*  
 DIRECTOR OF HIGHWAYS

DESIGNED BY MICHAEL MORRIS DATE 9-81  
 DRAWN BY DEBBY JACKSON DATE 9-81  
 SUPERVISED BY AM SMITH DATE 9-81  
 CHECKED BY MORRIS DATE 7-82



PROJECT NO.	YEAR	SHEET NO.
1-440-4(54) 209	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



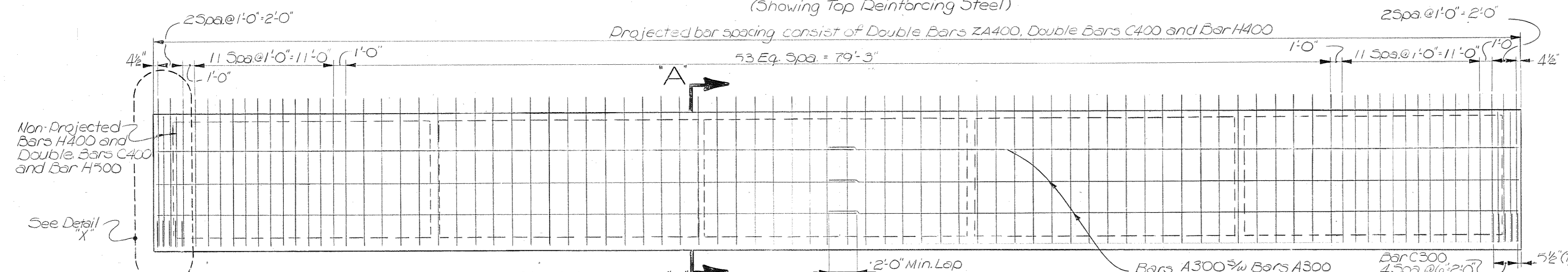
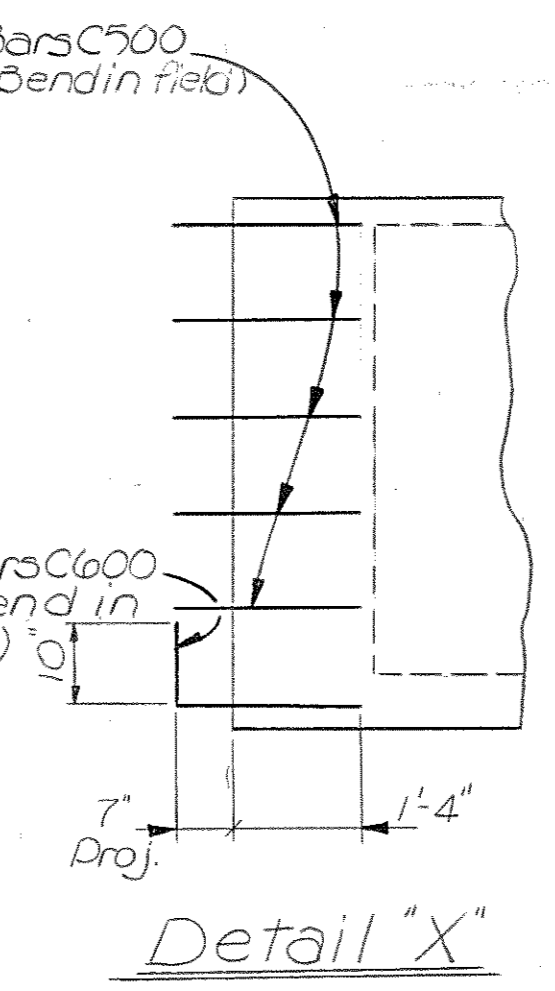
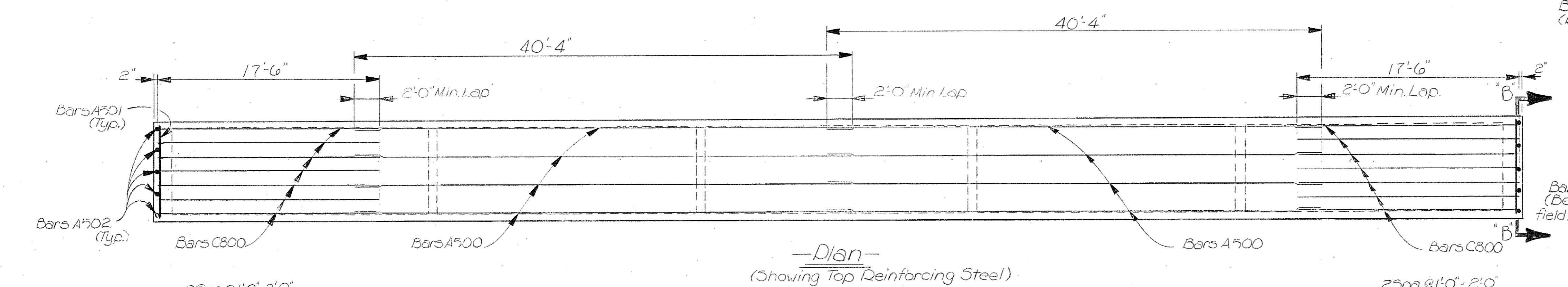
**General Notes:**

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. Where precast slab panels are to be used and set on felt pads, the outer two inches of the top flange may be troweled.

Mild steel reinforcing shall be ASTM A617 Grade 60.

All prestressing strands to be 1/2" High Strength Type 270K 7 wire uncoated stress-relieved prestressing strands.

An initial force of 28,936 lbs. shall be applied to each strand in all beams.



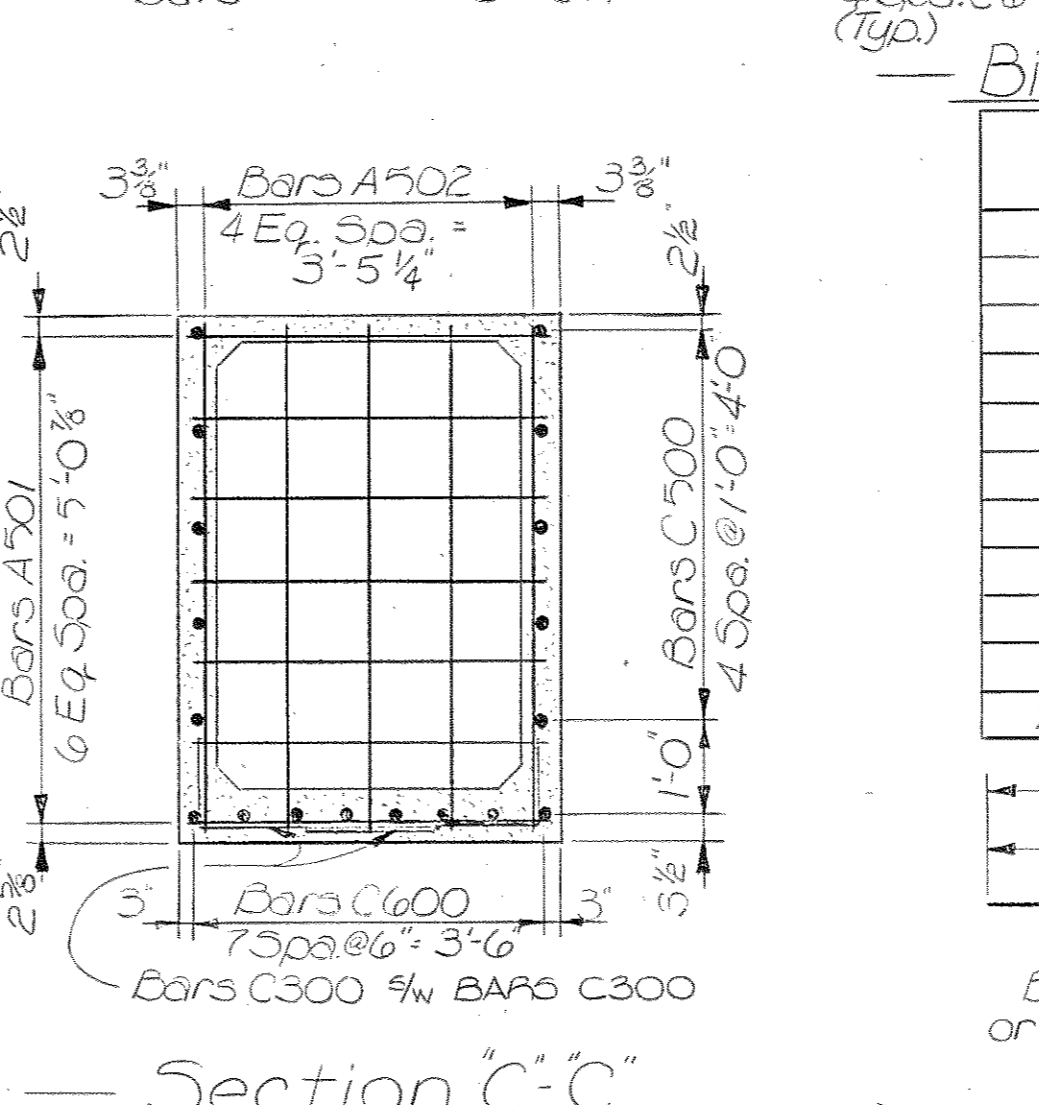
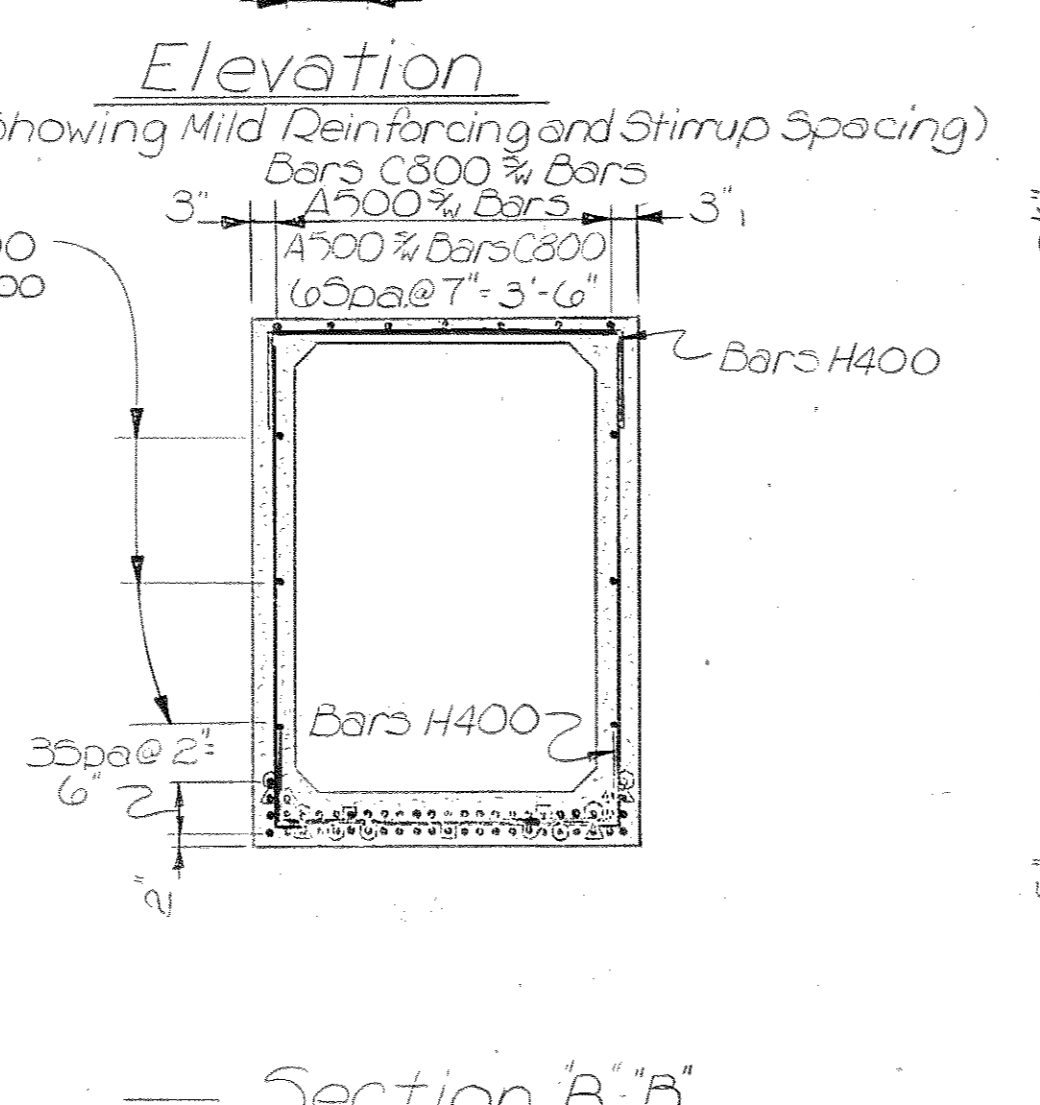
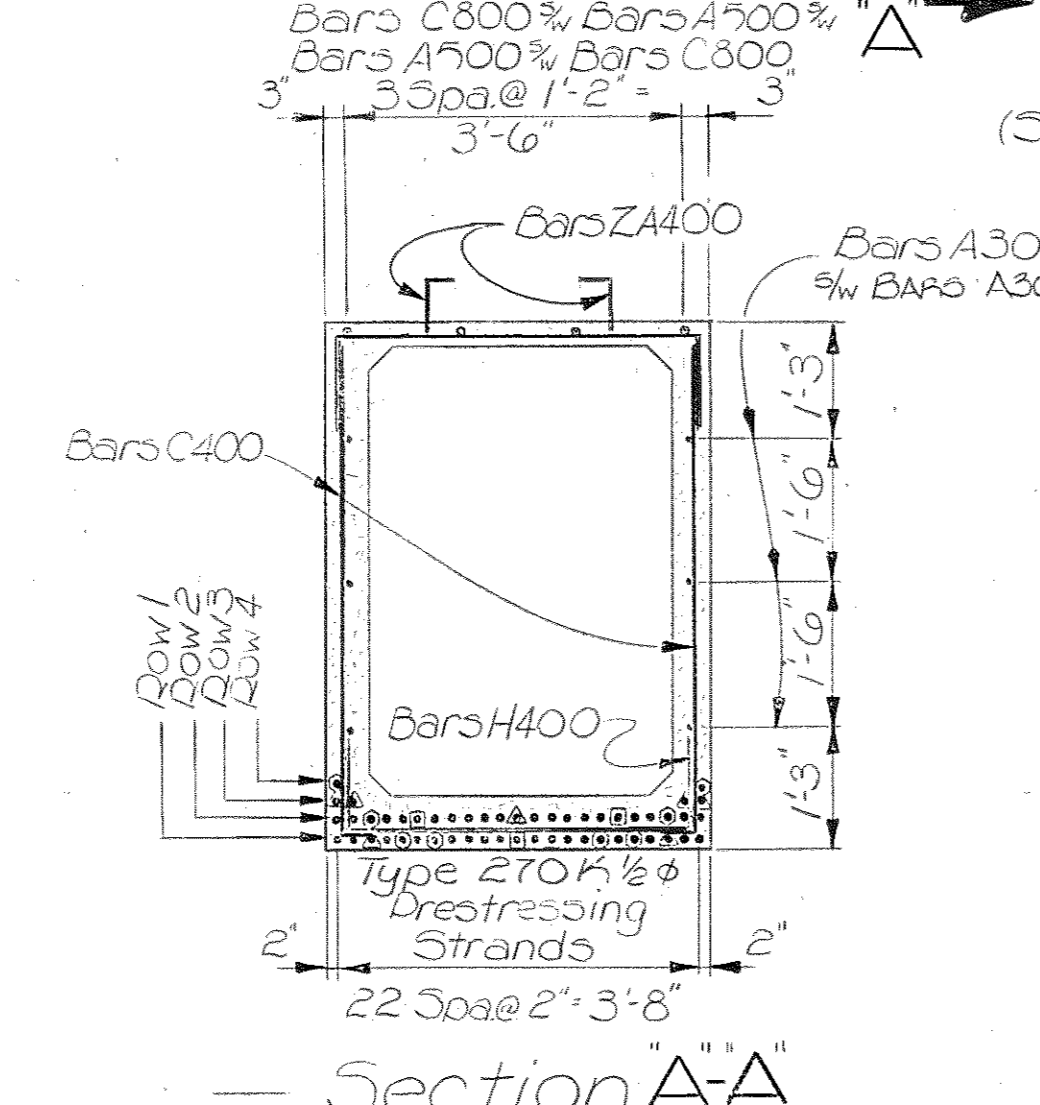
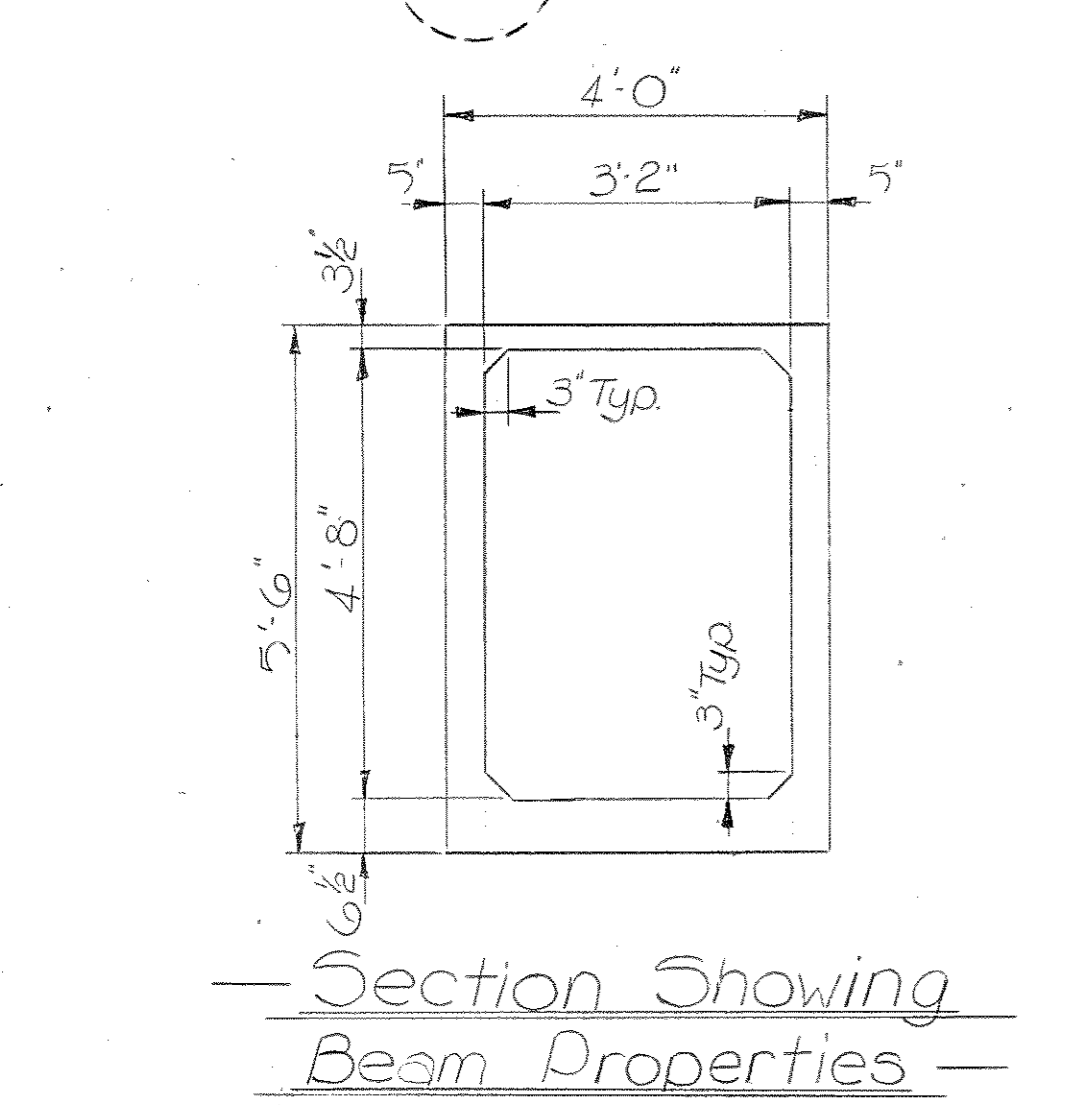
The prestressing strands shall be left projecting 3" from the end of the beams there shall not be any protective coating placed on the ends of the beams or on the projecting strands.

Elastomeric pads to be 0" x 4'-0" x 6".

The concrete for this construction shall be of such properties as to attain a compressive strength of not less than 3200 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 4500 psi. See Layout for concrete finishing note.

1" Weep holes required at low point of each cell.

Each cell shall be vented (During the fabrication phase), in such a manner so as not to allow external water to enter the cell.



Bill of Steel Per Beam

Bars	No. Req'd.	Size	Length
A300	6	3	55'-10"
A500	16	5	40'-6"
A501	14	5	3'-8"
A502	10	5	5'-1"
C300	20	3	3'-5"
C400	176	4	5'-8"
C500	20	5	2'-9"
C600	16	6	2'-9"
C800	14	8	18'-10"
H400	88	4	5'-7"
ZA400	176	4	4'-10"

Estimated Quantities - Der Beam

Item	No. Req'd.	Concrete Class 'A' C.Y.	Reinforcing Steel lbs.	Prestressing Steel lbs.
Beam	12	332	3,325	3,017

Note: Cost of Elastomeric Pads and Rubber Bonding Cement to be included in the cost of Prestressed Beam.

STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION  
 BUREAU OF HIGHWAYS

Dressed Box Beam  
 Interstate 440 over  
 Craig Avenue  
 Station 319+91.44  
 Davidson County

DESIGNED BY Michael Morris DATE 9-81  
 DRAWN BY Deann Johnson DATE 9-81  
 SUPERVISED BY AMS DLH DATE 9-81  
 CHECKED BY Morris DATE 7-82

⊙ Break bond 10'-0" from end of beam.  
 ⊕ Break bond 5'-0" from end of beam.  
 ⊠ Break bond 2'-0" from end of beam.

Showing non-projected bar

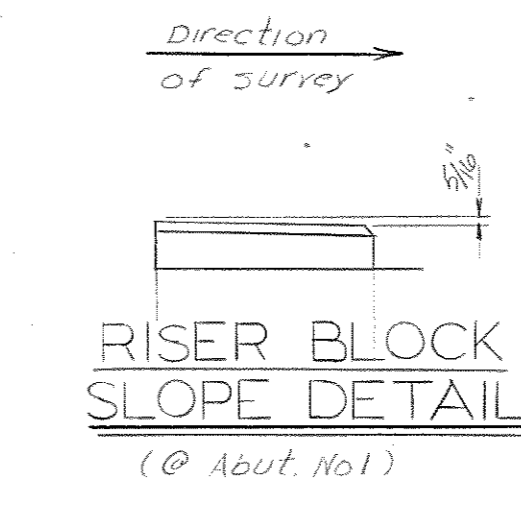
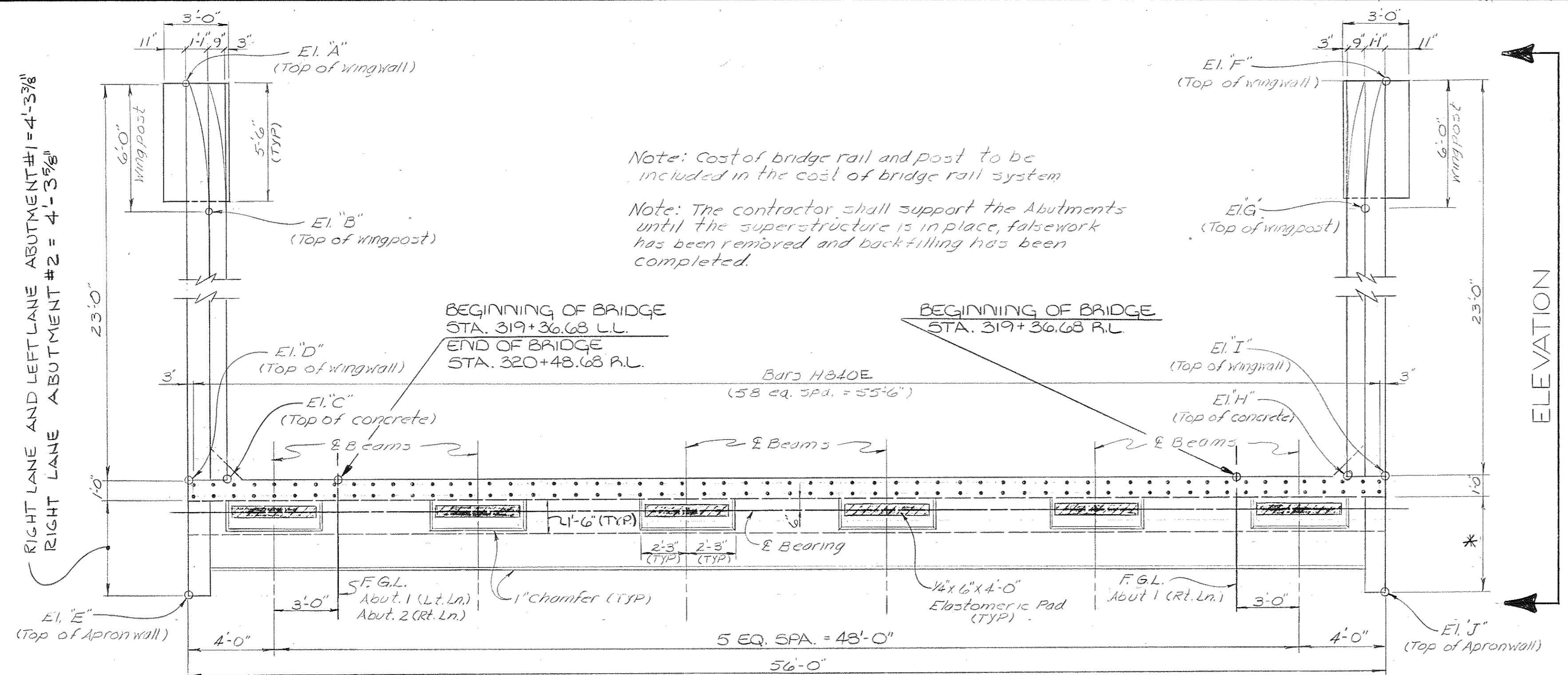
1982  
 CORRECT *William L. Powell*  
 ENGINEER OF STRUCTURES  
 APPROVED *David Grand*  
 DIRECTOR OF HIGHWAYS

Const. No. 19014-3112-44

PROJECT NO.	YEAR	SHEET NO.
I-440-4(54)203	1982	

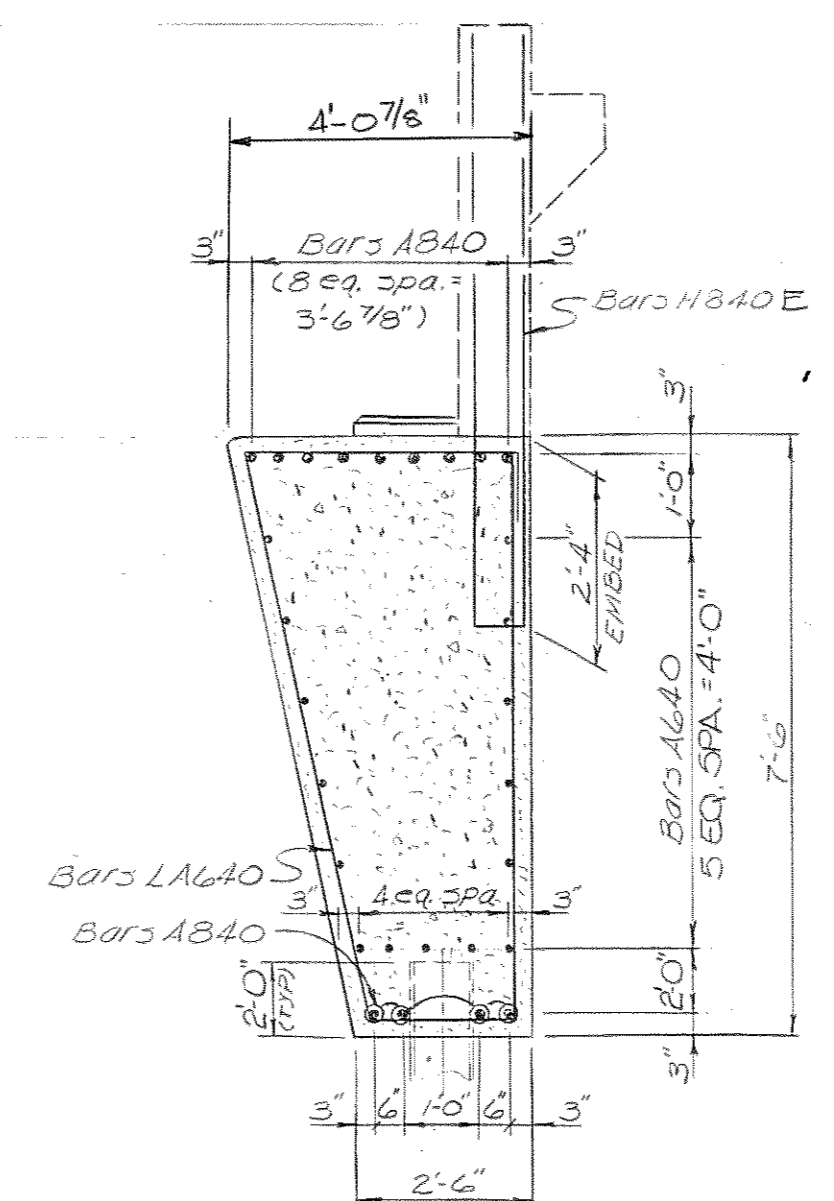
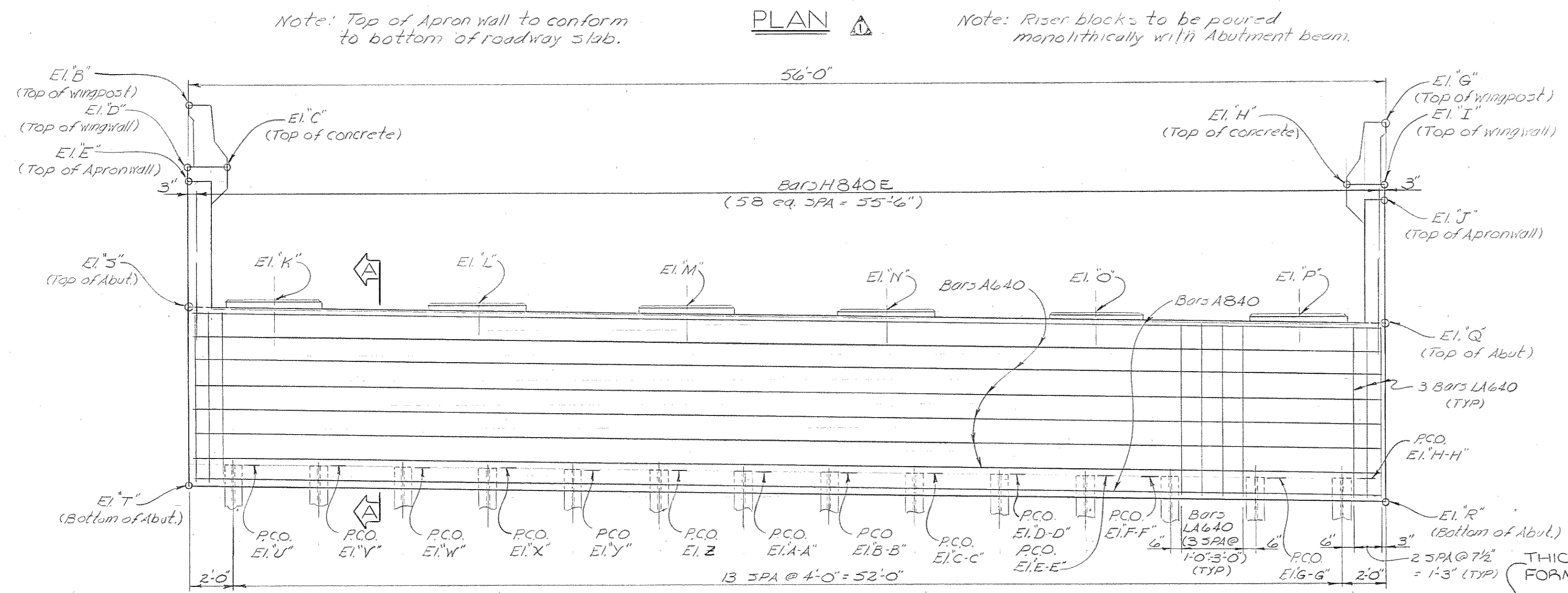
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	1-19-84	JHP	EPOXY COATED BARS H840
2	3-9-84	JCP	APRON WALL DIMENSIONS



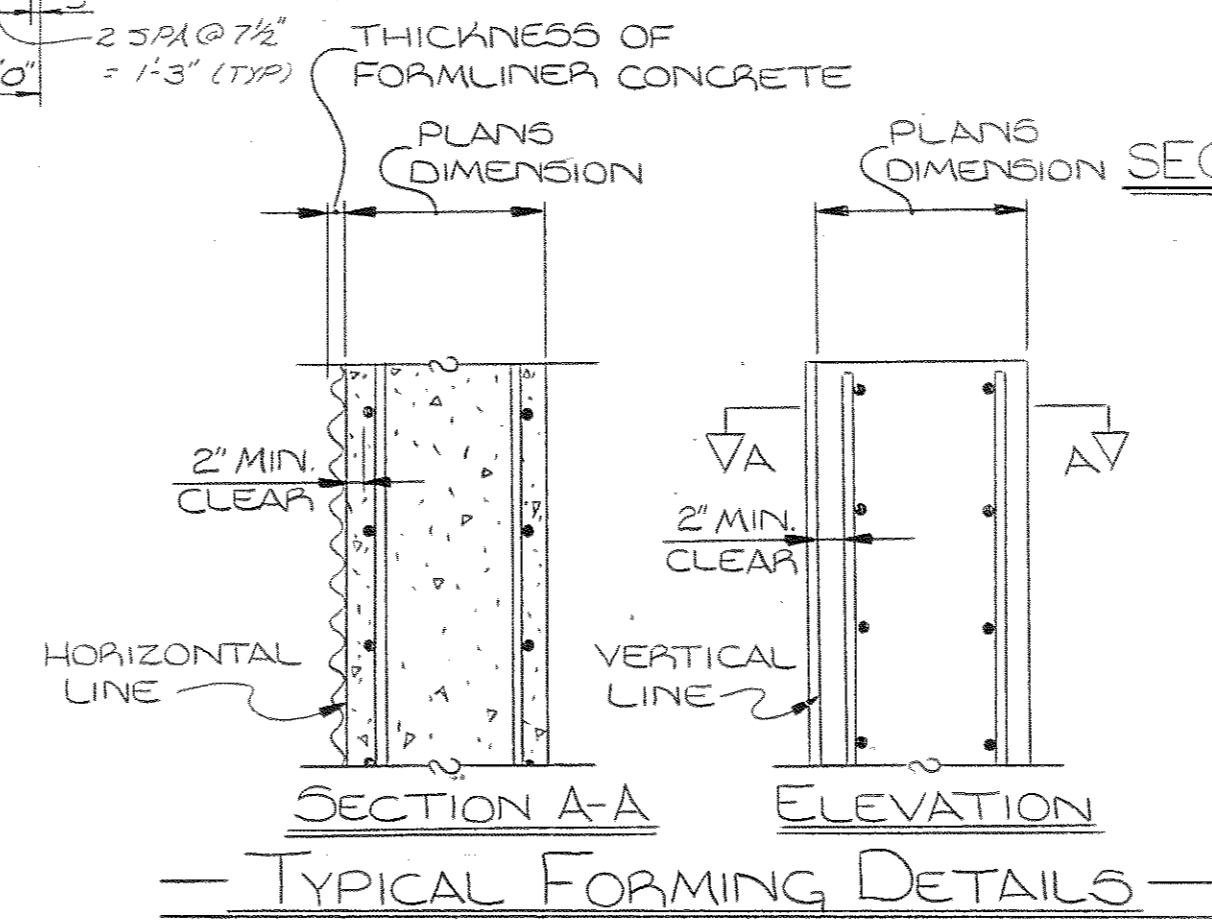
\* RIGHT LANE AND LEFT LANE ABUT.#1 = 4'-3 1/2"  
RIGHT LANE ABUT.#2 = 4'-3 3/4"

TABLE OF ELEVATIONS

ELEVATION	ABUTMENT RIGHT LANE STA. 319+36.68	ABUTMENT 2 RIGHT LANE STA. 320+48.68	ABUTMENT 1 LEFT LANE STA. 319+36.68
A	526.11	523.89	527.13
B	528.68	526.65	529.64
C	525.67	524.33	526.61
D	525.64	524.36	526.65
E	524.81	523.71	525.83
F	527.12	522.88	526.12
G	529.62	525.68	528.69
H	526.61	523.38	525.67
I	526.65	523.35	525.64
J	525.84	522.73	524.86
K	519.39	518.03	520.28
L	519.56	517.87	520.11
M	519.74	517.70	519.93
N	519.91	517.53	519.76
O	520.08	517.35	519.59
P	520.26	517.18	519.42
Q	520.08	516.84	519.10
R	512.58	509.34	511.60
S	519.07	517.83	520.11
T	511.57	510.35	512.61
U	513.61	511.31	514.57
V	513.68	511.24	514.50
W	513.75	511.17	514.43
X	513.83	511.10	514.36
Y	513.90	511.03	514.29
Z	513.97	510.95	514.21
A-A	514.04	510.88	514.14
B-B	514.11	510.81	514.07
C-C	514.19	510.74	514.00
D-D	514.26	510.67	513.93
E-E	514.33	510.60	513.85
F-F	514.40	510.53	513.78
G-G	514.47	510.45	513.71
H-H	514.54	510.38	513.64



ELEVATION  
(Abutment No. 1 (Lt. Ln.) Looking back on survey)  
(Abutment No. 2 (Rt. Ln.) Looking forward on survey)  
(Abutment No. 1 (Rt. Ln.) similar but opposite hand, LOOKING BACK ON SURVEY)



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 LINER IN ORDER TO UTILIZE STANDARD PARAPET FORMS. REINFORCING BAR BENDING DIMENSIONS SHALL BE REDUCED ACCORDINGLY.

ESTIMATED QUANTITIES

ITEM	Class "A" Concrete	Reinforcing Steel	EPOXY COATED REINF. STEEL
	CY	LBS	LBS.
Abutment No. 1 (R.L.)	70.2	9450	2757
Abutment No. 2 (R.L.)	70.2	9450	2757
Abutment No. 1 (L.L.)	70.2	9450	2757

DESIGNED BY Michael Morris DATE 8-81  
DRAWN BY Mark Taylor DATE 9-81  
SUPERVISED BY P.L. Harrison DATE 9-81  
CHECKED BY MORRIS DATE 7-82

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAYS  
ABUTMENTS No. 1 AND 2 RT. LN.  
AND ABUTMENT No. 1 LT. LN.  
INTERSTATE-440 OVER  
CRAIG AVENUE  
STATION 319+91.44  
DAVIDSON COUNTY  
1982

CORRECT *William L. Powell*  
ENGINEER OF STRUCTURES  
APPROVED *James L. Lewis*  
DIRECTOR OF HIGHWAYS

M-110-71

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

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	1-19-84	JHP	EPXY COATED BARS H840
2	3-9-84	JCP	ABUT WALL DIMENSION

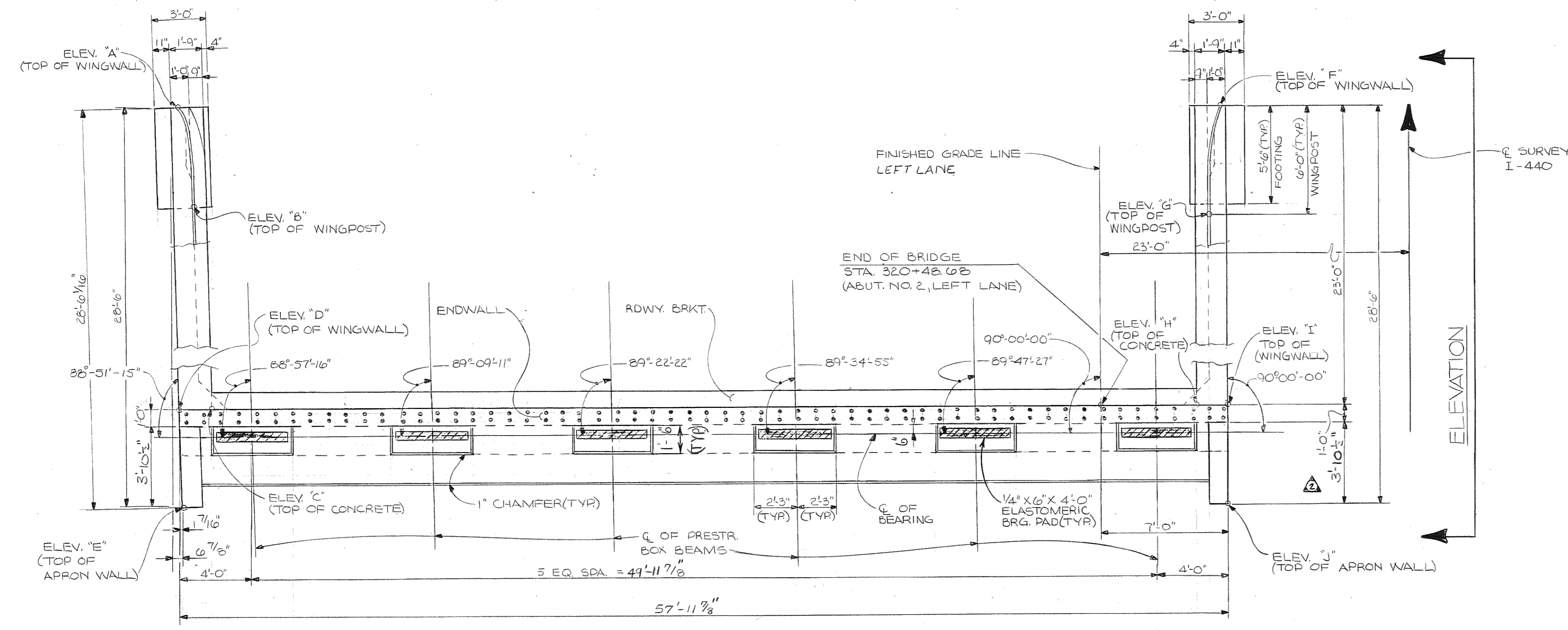
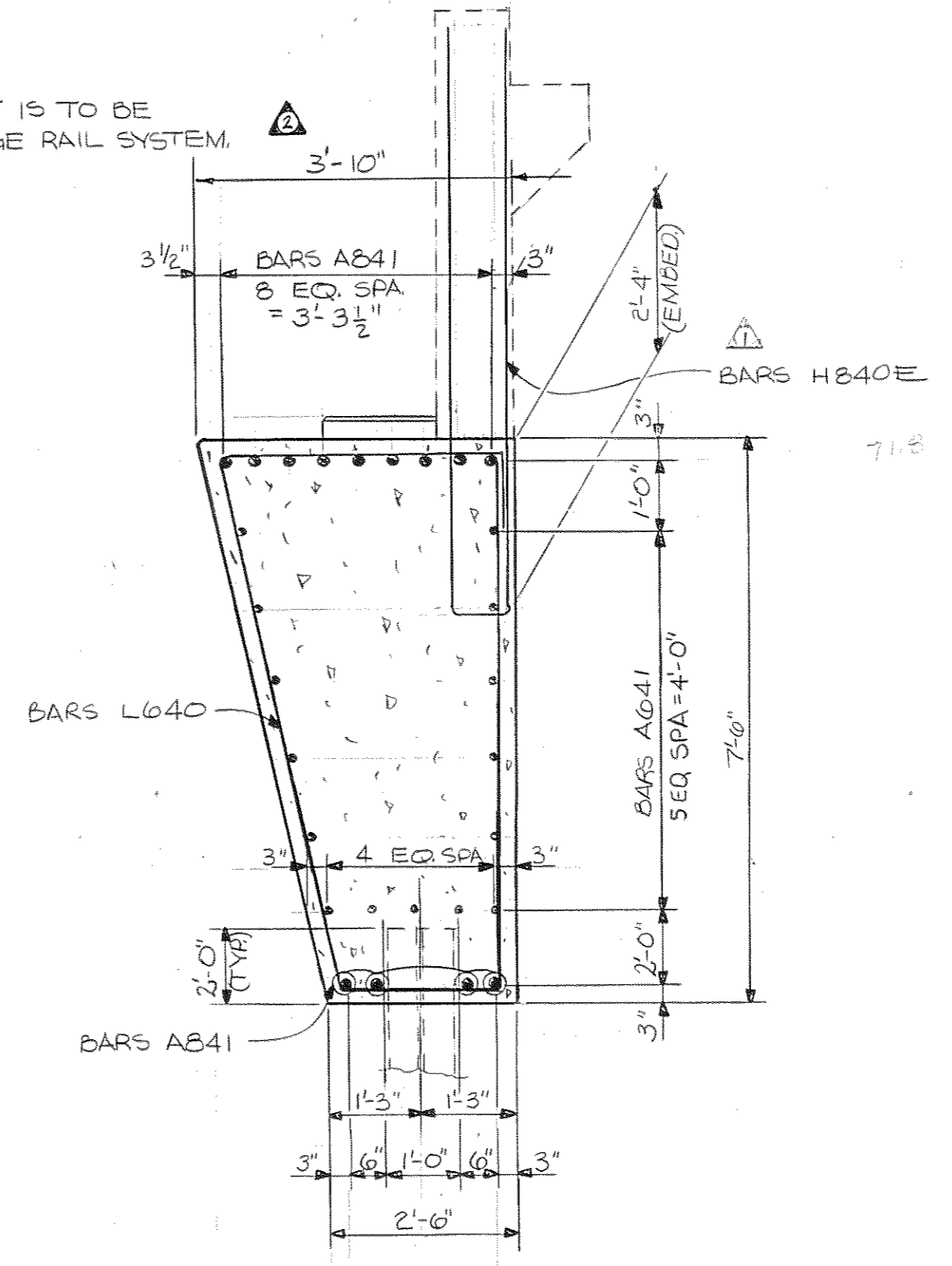
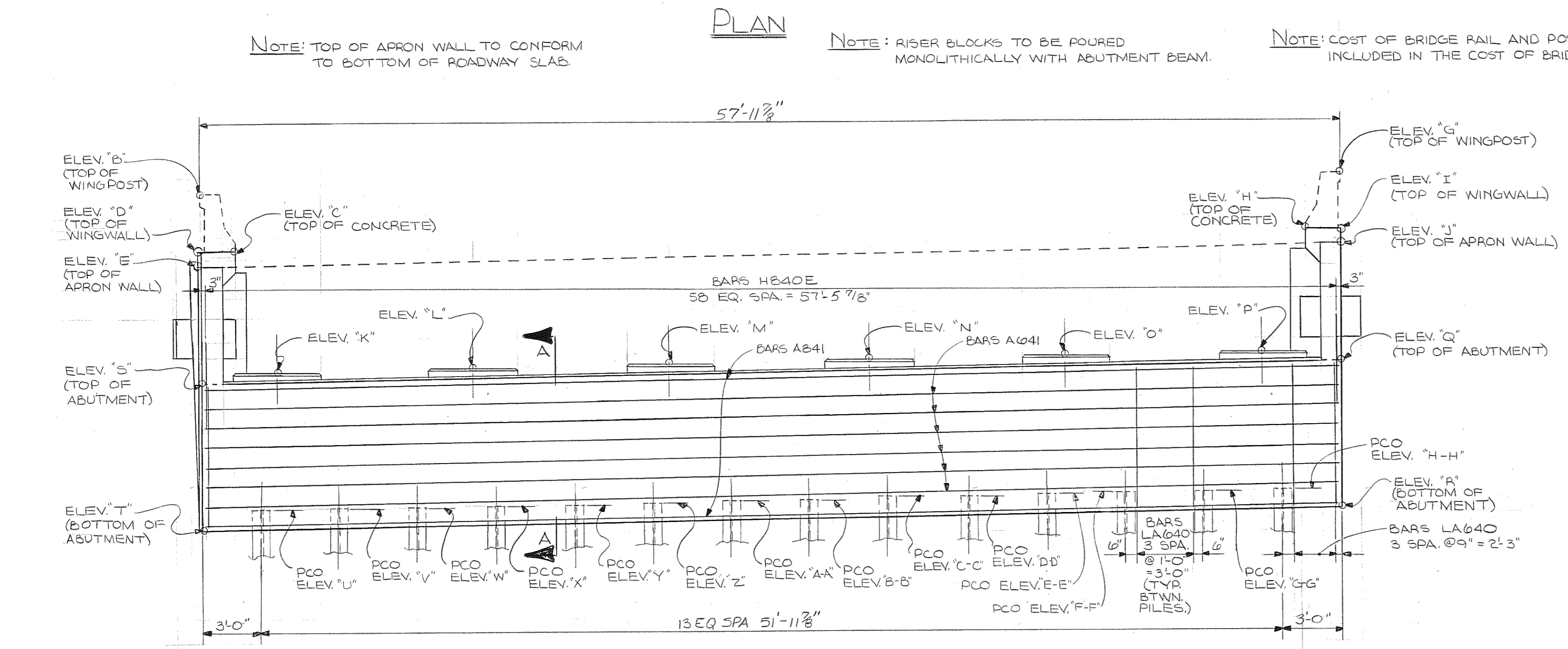


TABLE OF ELEVATIONS

ELEVATION DESIGNATION	ELEVATION
A	522.83
B	525.64
C	523.34
D	523.31
E	522.72
F	523.89
G	526.05
H	524.32
I	524.30
J	523.74
K	517.18
L	517.36
M	517.54
N	517.67
O	517.85
P	518.03
Q	517.85
R	510.35
S	510.81
T	509.31
U	511.30
V	511.44
W	511.51
X	511.58
Y	511.65
Z	511.72
A-A	511.80
B-B	511.87
C-C	511.94
D-D	512.01
E-E	512.08
F-F	512.16
G-G	512.23
H-H	512.30



ESTIMATED QUANTITIES

ITEM	CLASS 'A' CONCRETE CY.	EPXY STEEL LBS.	REINFORCING STEEL LBS.
ABUT. NO. 2 LEFT LANE	71.8	2,757	9,555

STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION  
 BUREAU OF HIGHWAYS

ABUTMENT NO. 2 - LEFT LANE  
 INTERSTATE 440 OVER  
 CRAIG AVENUE  
 STATION 319+91.44  
 DAVIDSON COUNTY  
 1982

DESIGNED BY MICHAEL MORRIS  
 DRAWN BY ANDY TUCKER  
 SUPERVISED BY DON HARRISON  
 CHECKED BY MORRIS

DATE 6-81  
 DATE 9-81  
 DATE 9-81  
 DATE 7-82

CORRECT *Chellon L. Rowell*  
 ENGINEER OF STRUCTURES

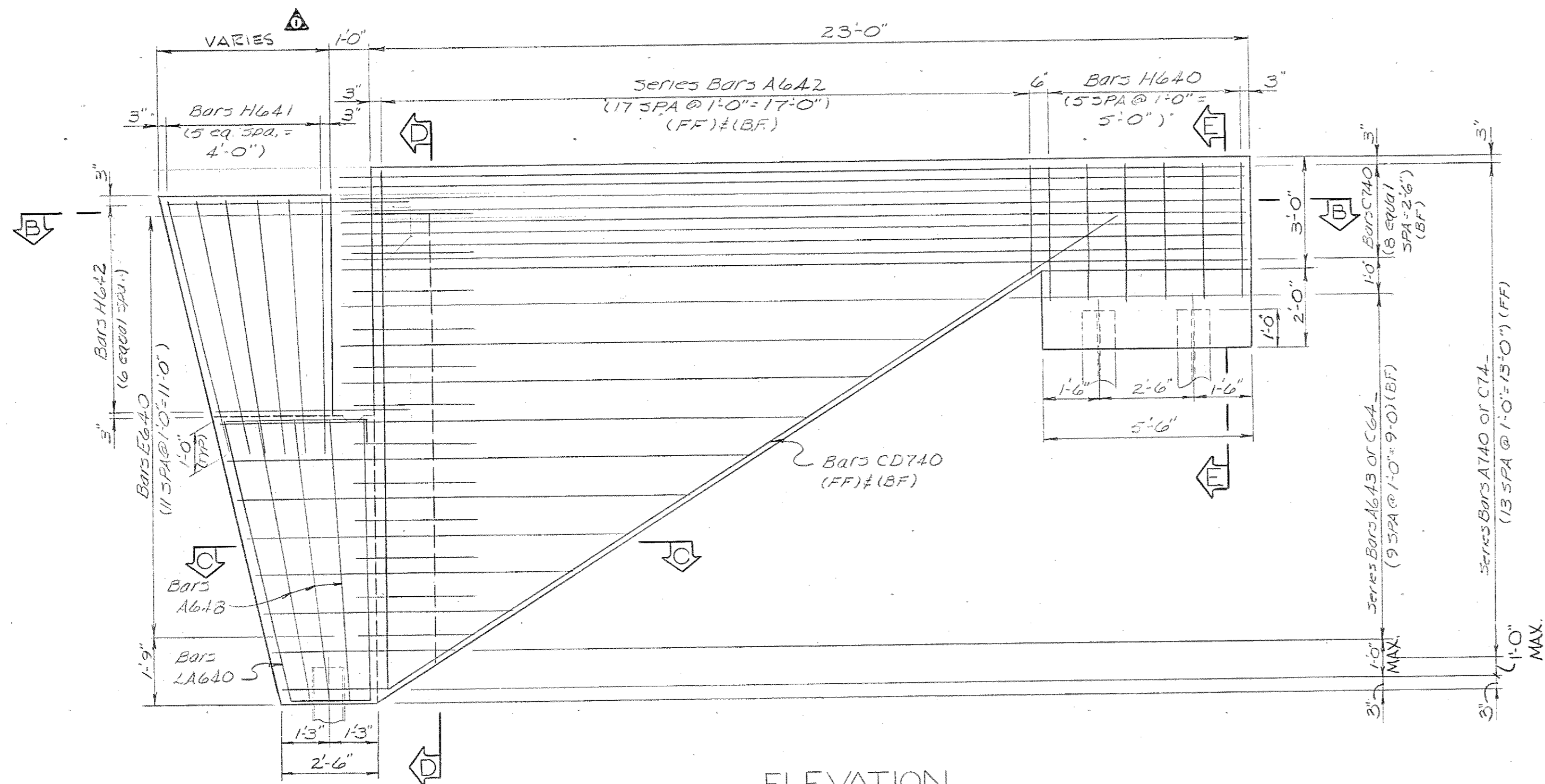
APPROVED *Lewis Chavis*  
 DIRECTOR OF HIGHWAYS

M-110-72



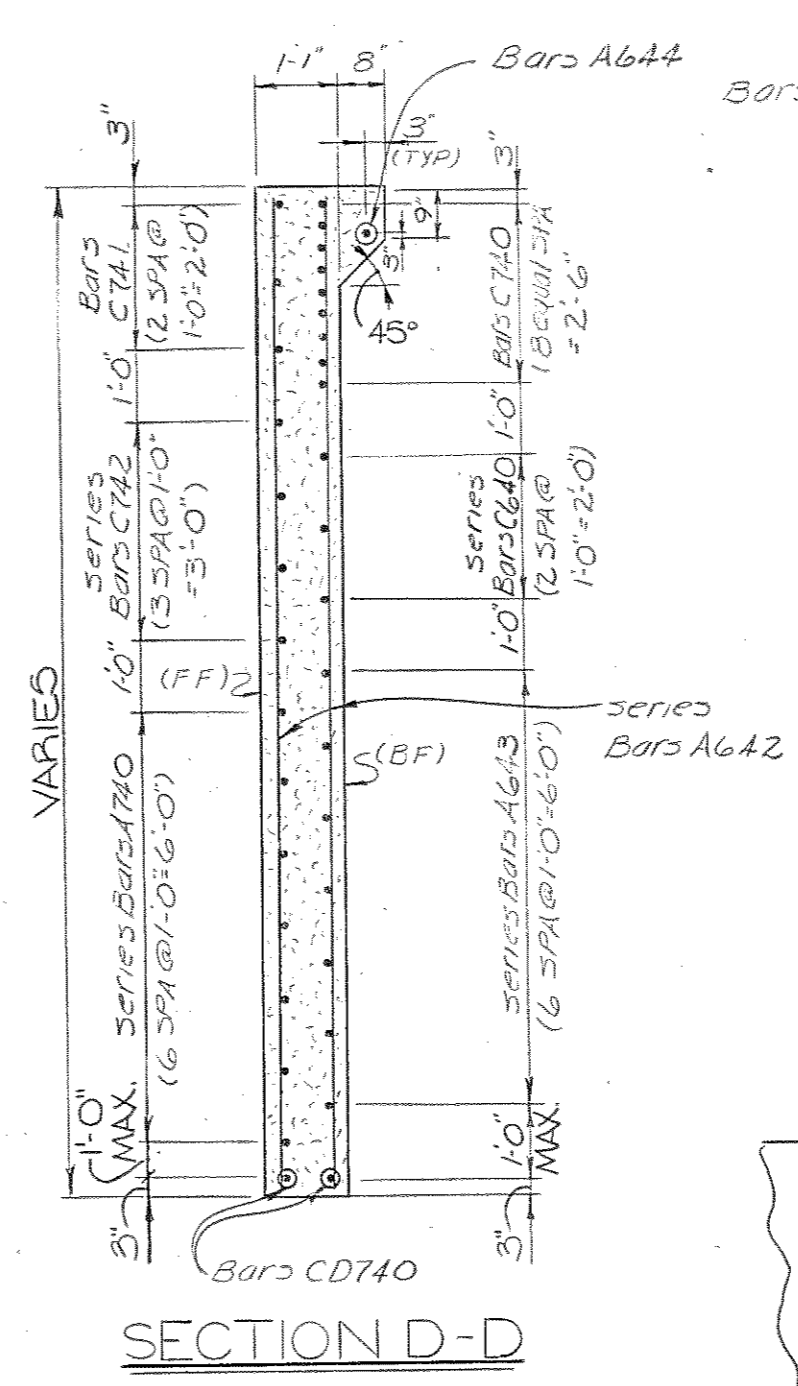
PROJECT NO.	YEAR	SHEET NO.
I-440-4(54)209	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	3-9-84	JCP	APRON WALL DIMENSIONS

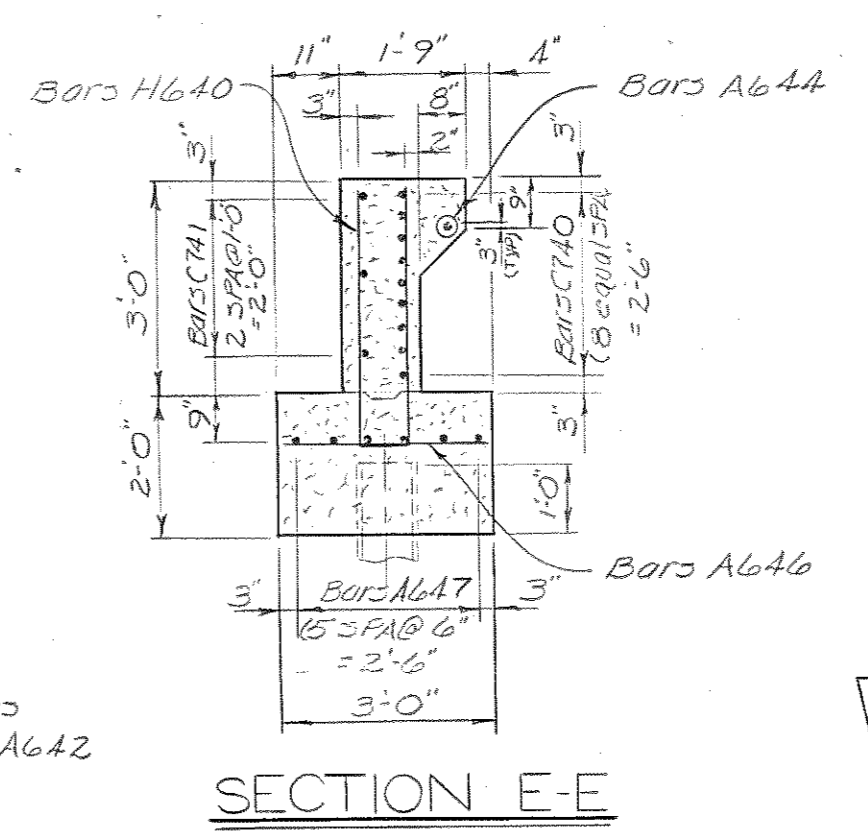


ELEVATION  
(ALL WINGS SIMILAR)

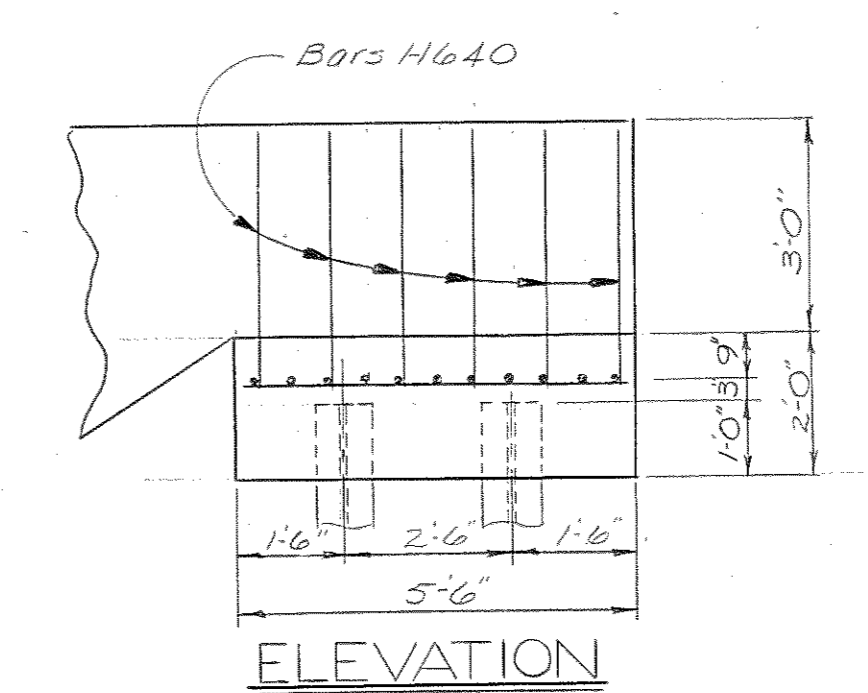
NOTE: (FF) Front Face  
(BF) Back Face



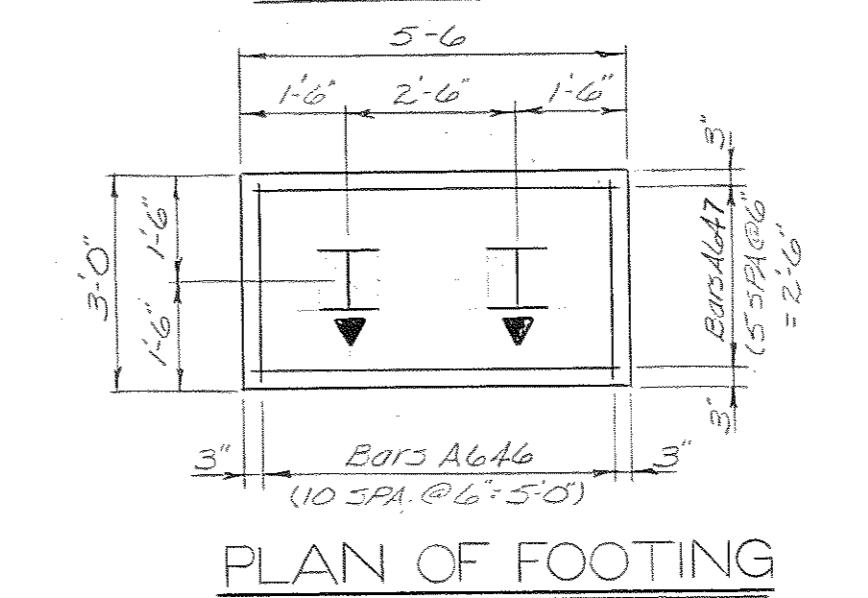
SECTION D-D



SECTION E-E

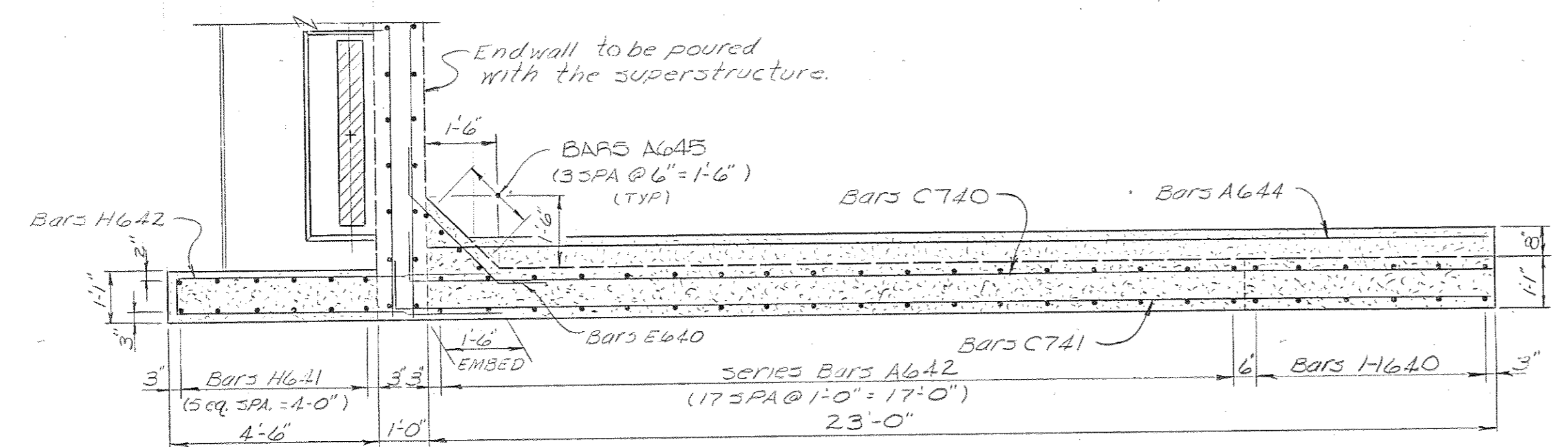


ELEVATION

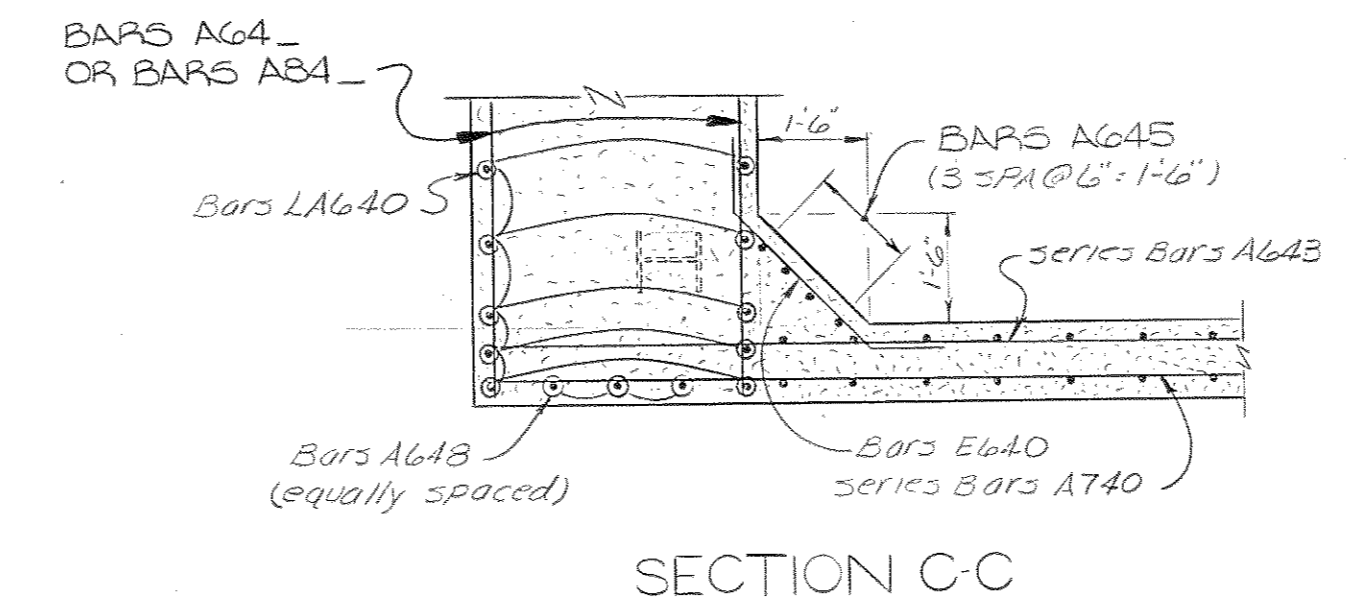


PLAN OF FOOTING

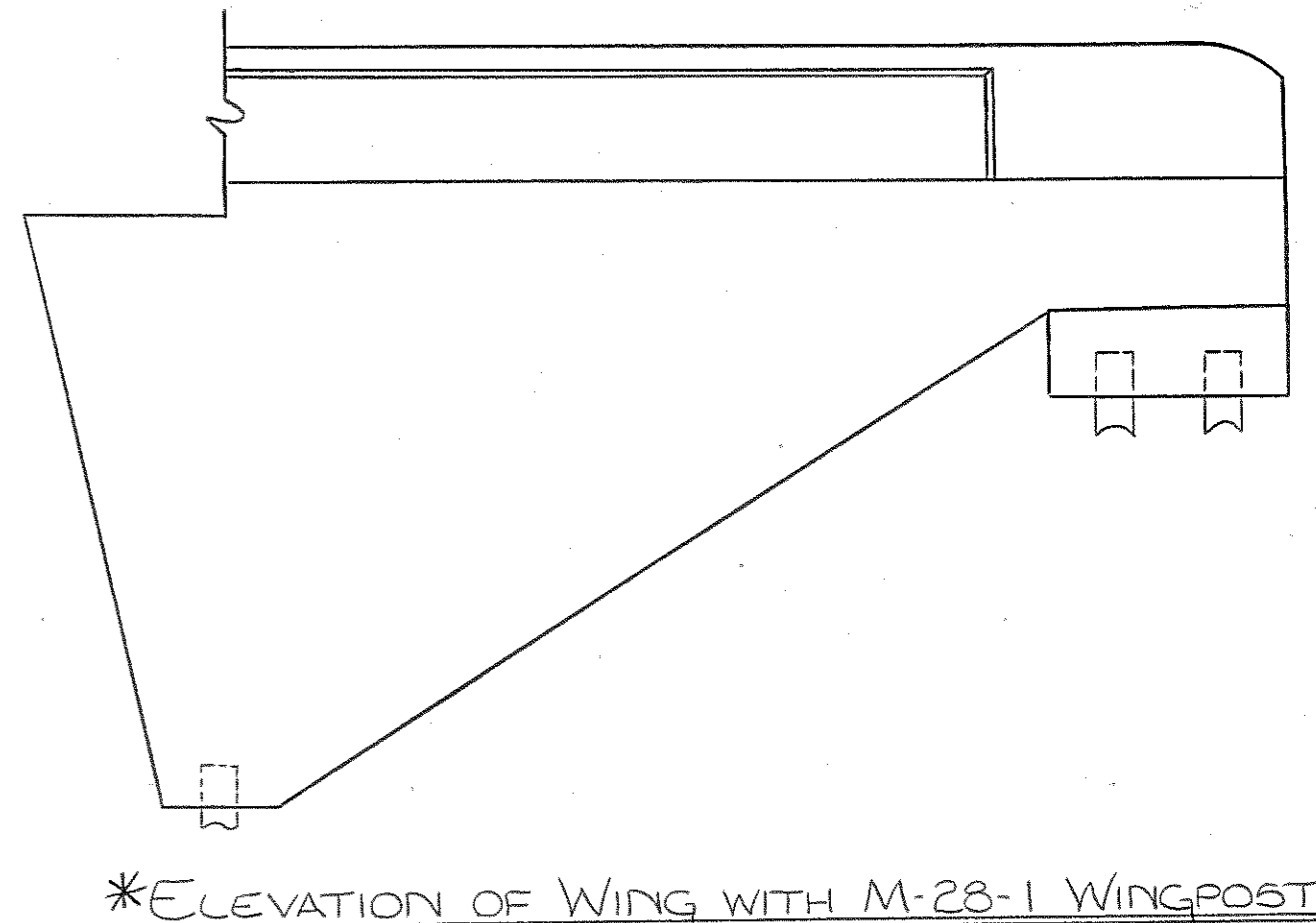
▲ Denotes piles battered outward 2:12



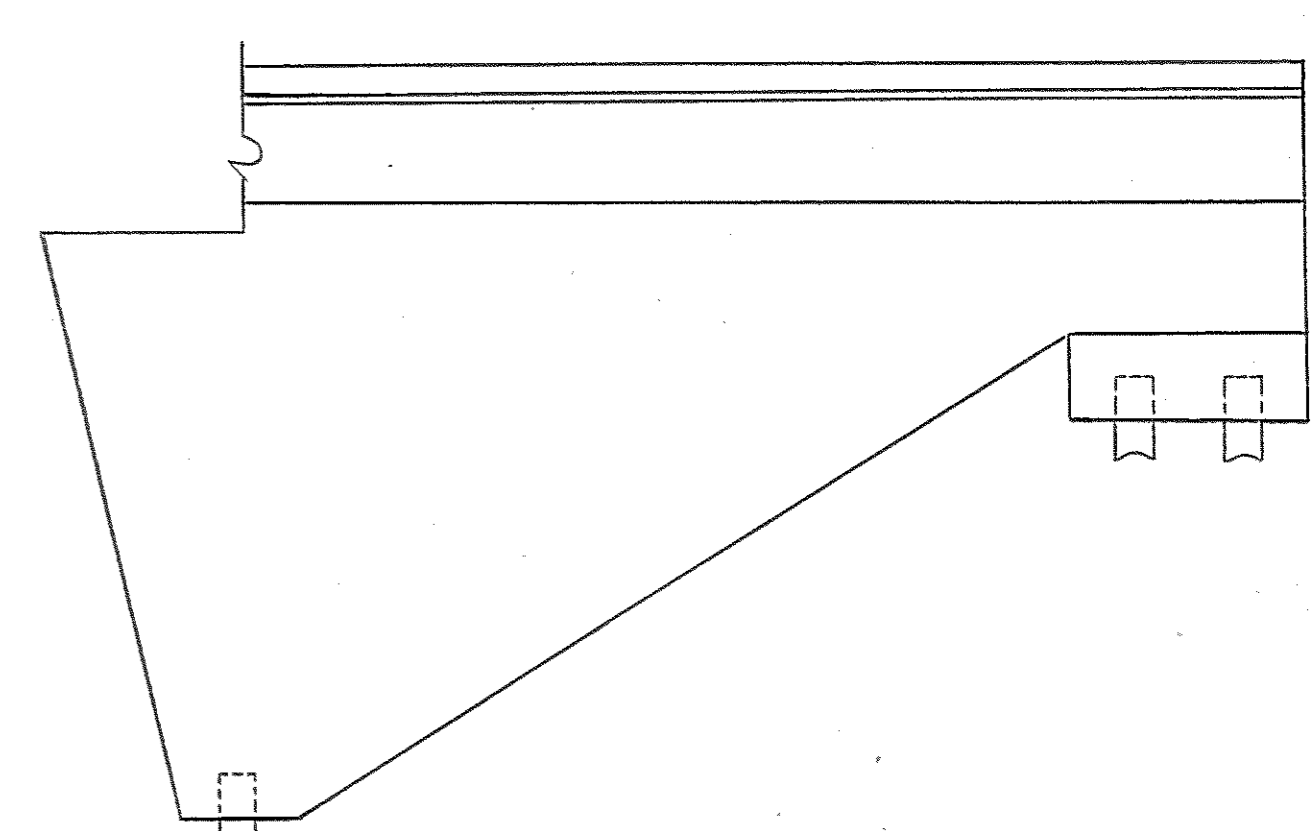
SECTION B-B



SECTION C-C



\*ELEVATION OF WING WITH M-28-1 WINGPOST



\*ELEVATION OF WING WITH SOUND BARRIER

\*SEE DWG. NOM-110-65 FOR LOCATION OF RAILING AND SOUND BARRIERS.

NOTE: SEE 'TYPICAL FORMING DETAILS' ON DWG. NO. M-110-71

DESIGNED BY Michael Morris DATE 8-81  
 DRAWN BY Mark Taylor DATE 9-81  
 SUPERVISED BY J.L. Harrison DATE 9-81  
 CHECKED BY MORRIS DATE 7-82

CORRECT *William L. Lovell*  
 ENGINEER OF STRUCTURES  
 APPROVED *Dennis Coombs*  
 DIRECTOR OF HIGHWAYS

M-110-73

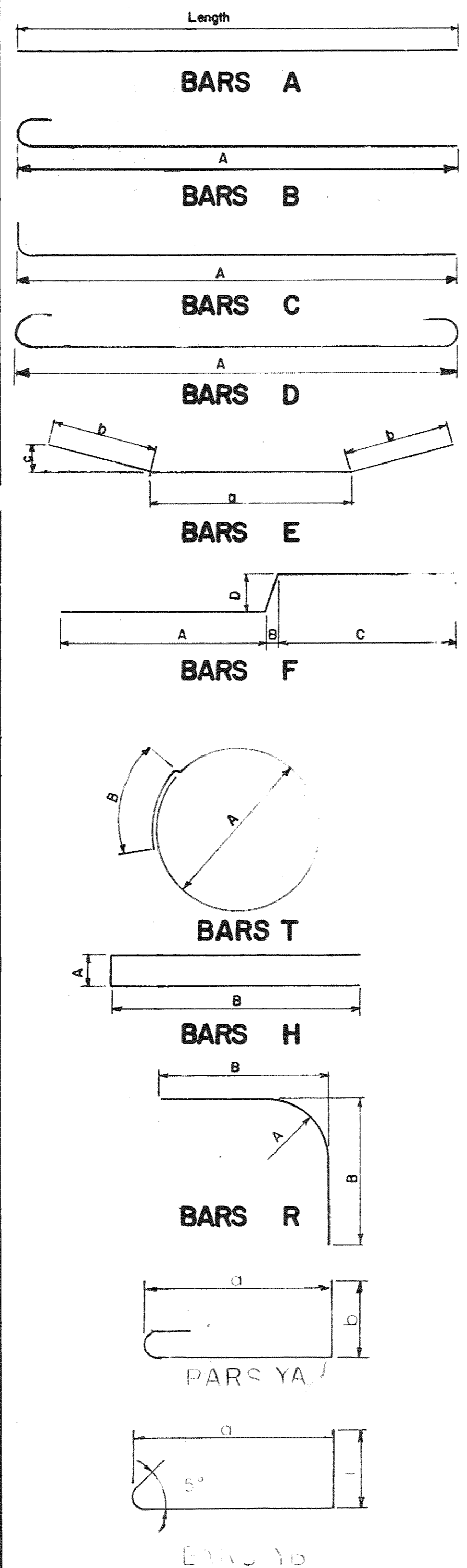
STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION  
 BUREAU OF HIGHWAYS  
 ABUTMENT DETAILS  
 INTERSTATE-440 OVER  
 CRAIG AVENUE  
 STATION 319+91.44  
 DAVIDSON COUNTY  
 1982

LEFT LANE

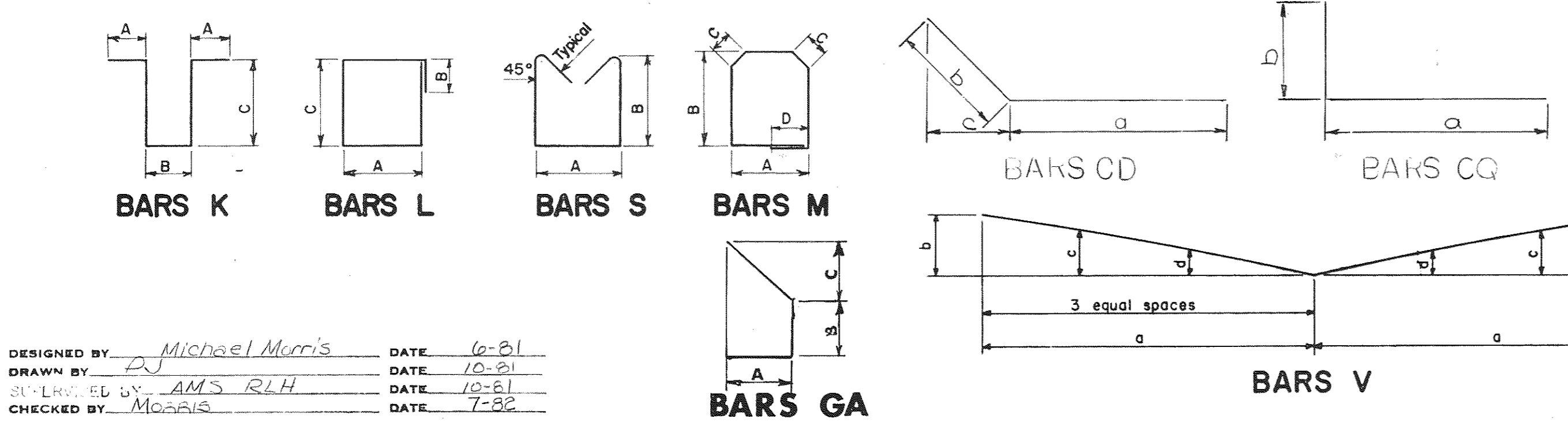
BILL OF STEEL

RIGHT LANE

SUPERSTRUCTURE					ABUTMENTS NO. 1					ABUTMENT NO. 2							
Bar	Location	Size	No. Req'd	Bending Dimensions	Length	Bar	Location	Size	No. Req'd	Bending Dimensions	Length	Bar	Location	Size	No. Req'd	Bending Dimensions	Length
A400	Rdwy Brkt	4	1		53'-8"	A640	Backwall	6	15		53'-8"	A641	ABUT. BM	6	12		57'-6"
A401	Rdwy Brkt	4	1		55'-9"	A642	Wing	6	4	Length varies from 2'-10 1/2" to 13'-6" in inc. of 7 1/2" (18 Bars)	147'-5"	A642	WING	6	4	DIM. VAR. FROM 2'-10 1/2" TO 13'-6" IN INC. OF 7 1/2" (18 BARS)	147'-5"
A600E	Slab	6	186		50'-0"	A643	WING	6	2		68'-7"	A643	WING	6	2		68'-7"
A601E	Slab	6	54		55'-6"	A644	WING	6	2		22'-8"	A644	WING	6	2		22'-8"
A602E	Slab	6	2	Length varies from 55'-6" to 57'-2 1/2" in inc. of 3/32" (241 Bars)	1360'-0"	A645	WING	6	8		13'-0"	A645	WING	6	8		13'-0"
A603	Endwall	6	12		55'-8"	A646	FOOTING	6	22		21'-8"	A646	FOOTING	6	22		21'-8"
A604	Endwall	6	12		57'-8"	A647	FOOTING	6	12		5'-2"	A647	FOOTING	6	12		5'-2"
A605E	Slab	6	158	10'-0" 4'-0"	14'-0"	A648	ABUT. BM (EXT)	6	6		7'-2"	A648	ABUT. BM (EXT)	6	6		7'-2"
A606E	Slab	6	106	8'-9" 4'-0"	12'-9"	A649	WING	7	2	DIM. VAR. FROM 3'-6" TO 14'-3" IN INC. OF 1'-9 1/2" (7 BARS)	62'-2"	A649	WING	7	2	DIM. VAR. FROM 3'-6" TO 14'-3" IN INC. OF 1'-9 1/2" (7 BARS)	62'-2"
H500	Rdwy Brkt	5	112	1'-8" 6"	2'-7"	A649	WING	6	2		47'-3"	A649	WING	6	2		47'-3"
Dvmt @ Bridge Ends @ Abut. No. 1																	
A400	Slab (Bottom)	4	25		52'-0"	A649	WING	6	2		55'-8"	A649	WING	6	2		55'-8"
A400E	Slab (Top)	4	25		52'-0"	A649	WING	6	2	Dim. A varies from 3'-6" to 14'-3" in inc. of 1'-9 1/2" (7 BARS)	47'-3"	A649	WING	6	2		47'-3"
A600E	Slab (Top)	6	53		24'-2"	A649	WING	6	2		55'-8"	A649	WING	6	2		55'-8"
A700	Footing	7	8		52'-0"	A649	WING	6	2		47'-3"	A649	WING	6	2		47'-3"
A800	Slab (Bottom)	9	165		24'-2"	A649	WING	6	2		47'-3"	A649	WING	6	2		47'-3"
L500	Footing/Slab	5	54	1'-2" 1'-0" 2'-2"	7'-5"	A649	WING	6	2		47'-3"	A649	WING	6	2		47'-3"
L500E	Footing/Slab	5	54	1'-2" 1'-0" 2'-2"	7'-5"	A649	WING	6	2		47'-3"	A649	WING	6	2		47'-3"
Dvmt @ Bridge Ends @ Abut. No. 2																	
A400	Slab (Bottom)	4	25		54'-3"	A649	WING	6	2		47'-3"	A649	WING	6	2		47'-3"
A400E	Slab (Top)	4	25		54'-3"	A649	WING	6	2		47'-3"	A649	WING	6	2		47'-3"
A600E	Slab (Top)	6	55		24'-2"	A649	WING	6	2		47'-3"	A649	WING	6	2		47'-3"
A700	Footing	7	8		54'-0"	A649	WING	6	2		47'-3"	A649	WING	6	2		47'-3"
A900	Slab	9	109		24'-2"	A649	WING	6	2		47'-3"	A649	WING	6	2		47'-3"
A1100	Slab (Drains)	11	4		6'-0"	A649	WING	6	2		47'-3"	A649	WING	6	2		47'-3"
L500	Footing/Slab	5	56	1'-2" 1'-0" 2'-2"	7'-5"	A649	WING	6	2		47'-3"	A649	WING	6	2		47'-3"
L500E	Footing/Slab	5	56	1'-2" 1'-0" 2'-2"	7'-5"	A649	WING	6	2		47'-3"	A649	WING	6	2		47'-3"



SUPERSTRUCTURE					ABUTMENTS NO. 1 AND 2					BENTS NO.							
Bar	Location	Size	No. Req'd	Bending Dimensions	Length	Bar	Location	Size	No. Req'd	Bending Dimensions	Length	Bar	Location	Size	No. Req'd	Bending Dimensions	Length
A400	Rdwy Brkt	4	2		53'-8"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
A600E	Slab	6	182		50'-0"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
A601E	Slab	6	53		55'-6"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
A603	Endwall	6	24		55'-8"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
A605E	Slab	6	150	6'-0" 4'-0"	14'-0"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
A606E	Slab	6	106	8'-9" 4'-0"	12'-9"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
H500	Rdwy Brkt	5	110	1'-8" 6"	2'-7"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
A644	Wing	6	4		22'-8"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
A645	Wing	6	162		13'-0"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
Dvmt @ Bridge Ends @ Abut. No. 1																	
A400	Slab (Bottom)	4	25		52'-0"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
A400E	Slab (Top)	4	25		52'-0"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
A600E	Slab	6	53		24'-2"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
A700	Footing	7	8		52'-0"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
A800	Slab (Bottom)	9	165		24'-2"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
A900	Slab (Bottom)	9	165		24'-2"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
L500	Footing/Slab	5	54	1'-2" 1'-0" 2'-2"	7'-5"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
L500E	Footing/Slab	5	54	1'-2" 1'-0" 2'-2"	7'-5"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
Dvmt @ Bridge Ends @ Abut. No. 2																	
A400	Slab (Bottom)	4	25		52'-0"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
A400E	Slab (Top)	4	25		52'-0"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
A600E	Slab (Top)	6	53		24'-2"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
A700	Footing	7	8		52'-0"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
A900	Slab (Bottom)	9	165		24'-2"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
A1100	Slab (Drains)	11	4		6'-0"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
L500	Footing/Slab	5	54	1'-2" 1'-0" 2'-2"	7'-5"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"
L500E	Footing/Slab	5	54	1'-2" 1'-0" 2'-2"	7'-5"	A640	Backwall	6	30		55'-8"	A640	Backwall	6	30		55'-8"



DESIGNED BY: Michael Morris DATE: 6-81  
 DRAWN BY: RLH DATE: 10-81  
 SUPERVISED BY: AMS RLH DATE: 10-81  
 CHECKED BY: Mossis DATE: 7-82

\* TO BE EPOXY COATED  
 REINFORCING STEEL CODE  

Type	Size	Series
A	5	06

 NOTE: Dimensions shown on this sheet are outside to outside of Bar. Standard C. & S. I. hook details shall apply, except as noted.  
 REVISIONS  

NO.	DATE	BY	BRIEF DESCRIPTION
1	11-98	RLH	EPOXY COAT H840

 NOTE: THE SUFFIX "E" DENOTES EPOXY COATED REINFORCEMENT.

STATE OF TENNESSEE  
 DEPARTMENT OF TRANSPORTATION  
 BUREAU OF HIGHWAYS  
**BILL OF STEEL**  
 Interstate 440 over  
 Craig Avenue  
 Station 319+91.44  
 Davidson County  
 1982  
 CORRECTED: [Signature]  
 APPROVED: Lewis Evans, DIRECTOR OF HIGHWAYS