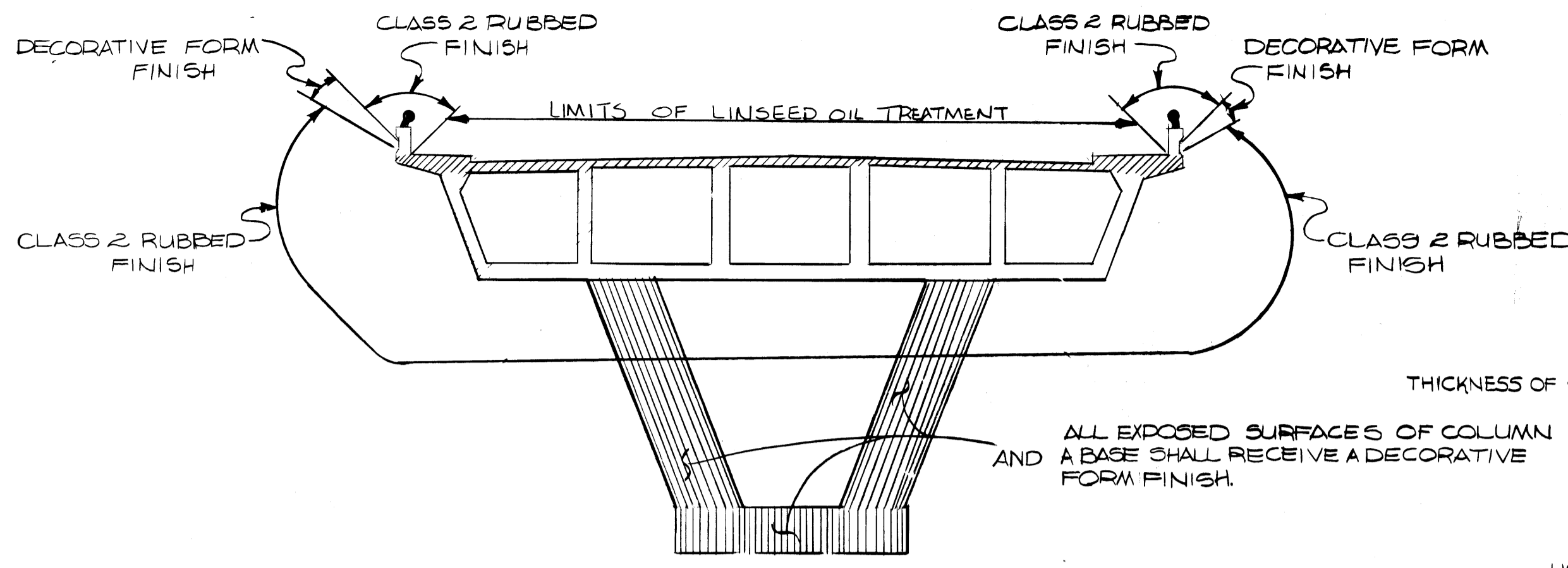


PROJECT NO.	YEAR	SHEET NO.
1-440-4(4)206	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	2-3-83	HALL	REVISED QUANTITIES & MISC.
2	3-10-83	HALL	REVISED QUANTITIES
3	6-17-83	HALL	ADDED LIGHTING

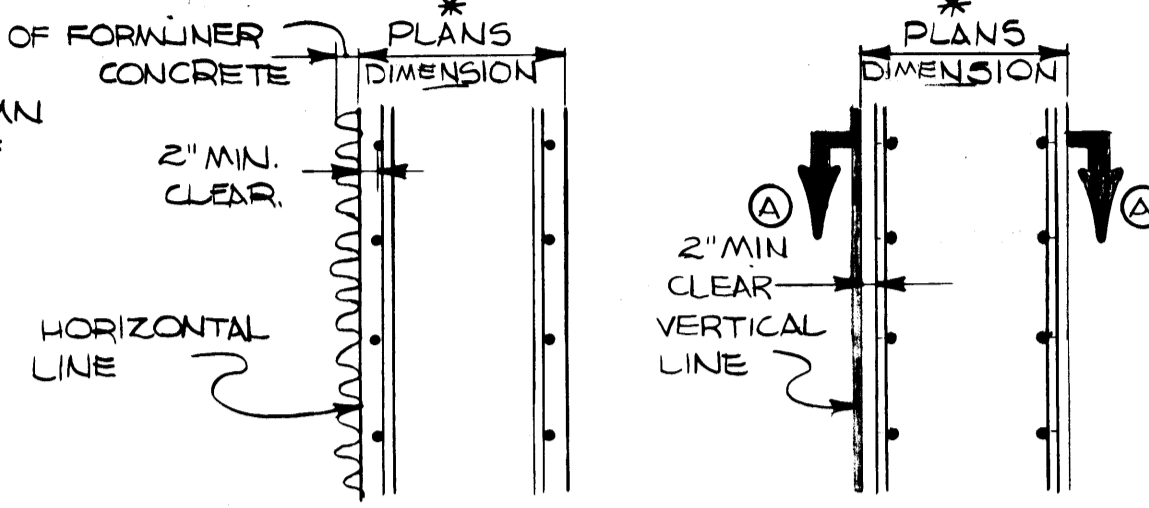


CONCRETE FINISH SKETCH

NOTE: ALL EXPOSED SURFACES ON 1-440 SIDE OF ABUTMENTS SHALL RECEIVE A DECORATIVE FORM FINISH. THE PARAPET INSET AND ALL EXPOSED SURFACES OF BENT NO 1 SHALL RECEIVE A DECORATIVE FORM FINISH.

NOTE: CROSS HATCHED AREA DENOTES CLASS "A" CONCRETE BRIDGE DECKS ITEM 604-01.12

CONCRETE FINISHES: PORTIONS OF THE BRIDGE SURFACE DESIGNATED TO RECEIVE A CLASS 2 RUBBED FINISH SHALL BE FINISHED ACCORDING TO SUBSECTION 604.22 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 B9308 CONCRETE HARP LITHOTEX FORMLINER FRACTURED FINISH GROOVED T-150, SYMONS 3/4" NARROW FRACTURED FIN PK 30909-9 OR EQUAL AFTER STRIPPING FORMLINERS, 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 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 SKETCH THIS SHEET. UNDER NO CIRCUMSTANCES WILL MECHANICALLY FRACTURED SURFACES BE ALLOWED.



TYPICAL FORMING DETAILS

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

* NOTE: ALL ESTIMATED QUANTITIES BASED ON PLANS DIMENSIONS.

SPECIAL NOTE FOR CONCRETE BRIDGE DECK

CLASS "A" CONCRETE FOR BRIDGE DECKS SHALL BE IN ACCORDANCE WITH SECTION 604 EXCEPT AS FOLLOWS. MINIMUM 28 DAYS COMPRESSIVE STRENGTH = 4500 p.s.i. MAXIMUM WATER/CEMENT = 50 GAL/SACK OF CEMENT. AIR CONTENT = 6% ± 2%. SEE SURFACE FINISH SKETCH FOR LIMITS.

GENERAL NOTES

SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE DEPARTMENT OF TRANSPORTATION (MARCH 1981 EDITION).

LOADING: HS20-44

DESIGN SPECIFICATIONS: AASHTO 1977 EDITION WITH ADDENDA.

CONCRETE: TO BE CLASS "A" (CAST IN PLACE) F'C 3000 F.C.I. EXCEPT FOR CONC BRIDGE DECK. SEE SPECIAL NOTE FOR CONC BRIDGE DECKS.

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 GIRDER AGAINST TWISTING OR OVERTURNING DURING SLAB POURING OPERATIONS.

REINFORCING STEEL: TO BE ASTM A615 GRADE 60 STANDARD CP-51 HOOK DETAILS APPLY UNLESS OTHERWISE NOTED ON BILL OF STEEL. BENDING DIMENSIONS SHOWN ARE BASED ON GRADE 60 BENDING 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 105A.

SPECIAL NOTE - FOOTINGS FOR BENTS: AFTER EXCAVATION TO ROCK FOR FOOTING HAS BEEN COMPLETED, HOLES 6" DEEP SHALL BE DRILLED AT POINTS DESIGNATED BY THE ENGINEER. FROM THE RESULTS OBTAINED, THE ENGINEER SHALL DETERMINE THE FINAL FOOTING ELEVATIONS. NO REINFORCING STEEL FOR BENT COLUMNS SHALL BE ORDERED UNTIL FINAL FOOTING ELEVATIONS HAVE BEEN DETERMINED.

SHOP DRAWINGS: SEE SPECIAL PROVISION 105A.

LINSEED OIL PROTECTIVE TREATMENT: SURFACES RECEIVING CLASS 2 RUBBED FINISH OR DECORATIVE FORM FINISH SHALL NOT RECEIVE A LINSEED OIL TREATMENT. SEE CONCRETE FINISH SKETCH, THIS SHEET.

BEARING DEVICES: SHALL BE IN ACCORDANCE WITH THE DETAILS AND DIMENSIONS SHOWN ON DRAWING M-94-57 THE CONTRACTOR MAY ALSO SUBMIT ALT. DETAILS FOR APPROVAL.

* BEARING	TOTAL MOVEMENT	DEAD LOAD REACTION	LIVE LOAD REACTION	ANGULAR ROTATION
M-94-57	2"	160K	134K	100°

* DENOTES ELASTOMERIC BEARING ASSEMBLY
ELASTOMERIC BEARING 1" O 1/4" X 2" 8 1/2" X 4 1/8" WITH 5 3/16" INTERNAL PLATES WITH A 1" 1/4" X 2" 9 1/4" X 3/2" LOAD PLATE. SEE DWG. M-94-57.

ESTIMATED QUANTITIES *

ITEM NO	908-21.05	204-04.01	204-05	604-03.01	604-02.03	604-03.02	604-03.03	714-01.02	620-14	710-10	710-11	920-01.11	60622.03	60632.03	60642.03	604-01.12
ITEM	BEARINGS (M-94-57) EA.	ROCK EXCAVATION (BRIDGES) CY ①	ROCK DRILLING (BRIDGES) L.F.	CLASS 'A' CONCRETE (BRIDGES) CY ③ ④	EPOXY COATED REINFORCING STEEL L.B.	STEEL BAR REINFORCEMENT (BRIDGES) L.B.	LINSEED OIL TREATMENT SY	STRUCTURE LIGHTING (BRIDGE NO. 4) LUMP SUM ⑫	CONCRETE PARAPET WITH STRUCTURAL TUBING ⑩ (M-38-162) ⑬ L.F. ⑭	6" PERF. C.M. PIPE (18GA) W/ BACKFILL L.F. ⑦	6" C.M. PIPE UNDERDRAINS (18GA) L.F.	ROADWAY EXPANSION DEVICE L.F. ⑨	STEEL PILES (10-INCH) DRIVING L.F.	STEEL PILES (10-INCH) FURNISH DOMESTIC L.F.	STEEL PILES (10-INCH) FURNISH FOREIGN L.F.	CLASS 'A' CONCRETE BRIDGE DECKS CY
SUPERSTRUCTURE				514.4	214,367 ^Δ	137,740 ^Δ	1155		448							312.6
ABUTMENT NO 1		17	18	30.4		4,885				61	16					
BENT			12	72.7		20,480										
ABUTMENT NO 2	6	25	18	178.0	13	22,901 ^Δ				62						
PAVEMENT @ BRIDGE ENDS				115.5	10,003 ^Δ	21,990 ^Δ	287						70	70	70	
TOTALS	6	42	48	911.0	224,383 ^Δ	207,996 ^Δ	1,442	1	448	123	16	53	70	70	70	312.6

- ① NOTE: EXCAVATION BASED ON LOWER ROAD PROFILE.
- ② NOTE: THE COST OF 8 THREADED INSERTS WITH 3/8" Ø X 4" HEX HEAD BOLTS (A307) TO BE INCLUDED IN BRIDGE ITEM 620-14.
- ③ NOTE: COST OF RUBBER BONDING CEMENT AND ELASTOMERIC BEARING PADS TO BE INCLUDED IN UNIT PRICE BID FOR CLASS 'A' CONCRETE.
- ④ NOTE: THE COST OF WATER STOPS, BITUMINOUS-FIBERBOARD, ETC. AND ALL MISC. JOINT MATERIAL TO BE INCLUDED IN BRIDGE ITEMS BID ON.
- ⑤ NOTE: PAVEMENT AT BRIDGE ENDS, QUANTITIES ARE INCLUDED AS AN ITEM IN QUANTITY BOX UNDER ABUTMENT NO. 2 AND LISTED AS "PAVEMENT @ BRIDGE ENDS".
- ⑥ NOTE: COST OF BRIDGE RAIL ENDPOST IS TO BE INCLUDED IN THE COST OF THE BRIDGE RAIL SYSTEM.
- ⑦ NOTE: COST OF POLYETHYLENE SHEETING AND ALL MISCELLANEOUS ITEMS NECESSARY FOR INSTALLATION TO BE INCLUDED IN COST OF PERFORATED C.M. PIPE.
- ⑧ NOTE: ALL REINFORCING STEEL IN TRAFFIC FACE OF PARAPETS SHALL BE EPOXY COATED. COST TO BE INCLUDED IN THE PRICE FOR BID ITEM 620-07.
- ⑨ NOTE: ACCEPTABLE EXPANSION DEVICES ARE AS 200 BY ACME; OR FLEX 25 BY OLD NORTH MFG. CO. OR WABO-MAV ROR SA 200. OR EQUAL. TOTAL REQUIRED MOVEMENT IS 2 INCHES.
- ⑩ NOTE: FOR ITEM 620-14 - CONCRETE PARAPET WITH STRUCTURAL TUBING. SEE DWG NO. K-38-162 + M-94-58A.
- ⑪ NOTE: THE COST OF ALL CONCRETE FINISHES SHALL BE INCLUDED IN THE UNIT PRICE OF ITEMS BID ON.

- ⑫ LUMP SUM: FOR STRUCTURE LIGHTING, ITEM NO 714-01.02 INCLUDES 55 FT. OF 2" Ø CONDUIT, 258 L.F. OF 1" Ø GALVANIZED STEEL CONDUIT, 9 JUNCTION OR PULL BOXES AND ALL NECESSARY MATERIALS FOR INSTALLATION OF STRUCTURE LIGHTING.
- ⑬ THE COST OF THE 50 DUROMETER, 1/4" FABRIC REINFORCED, ELASTOMERIC GUTTER IS TO BE INCLUDED IN THE PRICE BID FOR ITEM 920-01.11.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

GENERAL NOTES AND ESTIMATED QUANTITIES
BELMONT BOULEVARD
OVER INTERSTATE 440
STATION 275+92.32
DAVIDSON COUNTY

1982

CORRECT *William L. Linnell*
ENGINEER OF STRUCTURES
APPROVED *Louis E. Evans*
DIRECTOR OF HIGHWAYS

M-94-50

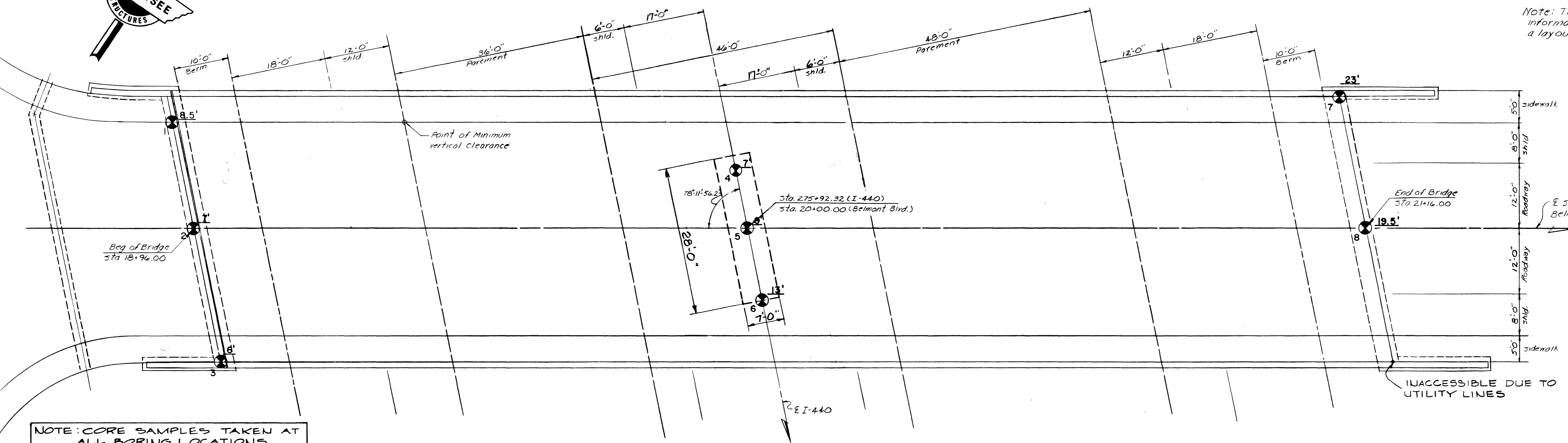
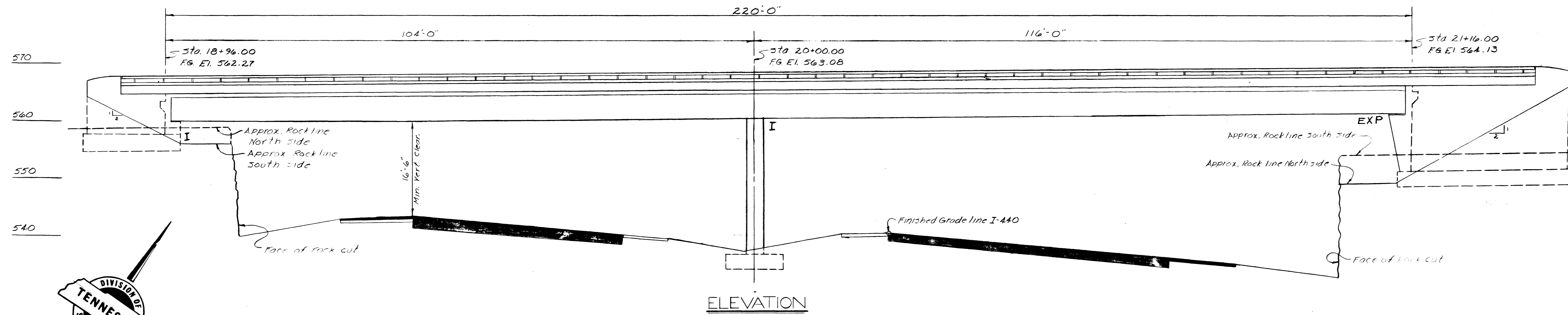
DESIGNED BY GARY HALL DATE 5-29-81
DRAWN BY KEIL OWENS DATE 12-4-81
SUPERVISED BY G.H. + R.L.H. DATE 12-81
CHECKED BY H.M.B. + G.H. DATE 12-81

MICROFILMED

PROJECT NO.	YEAR	SHEET NO.
1-440-4(49)206	1982	

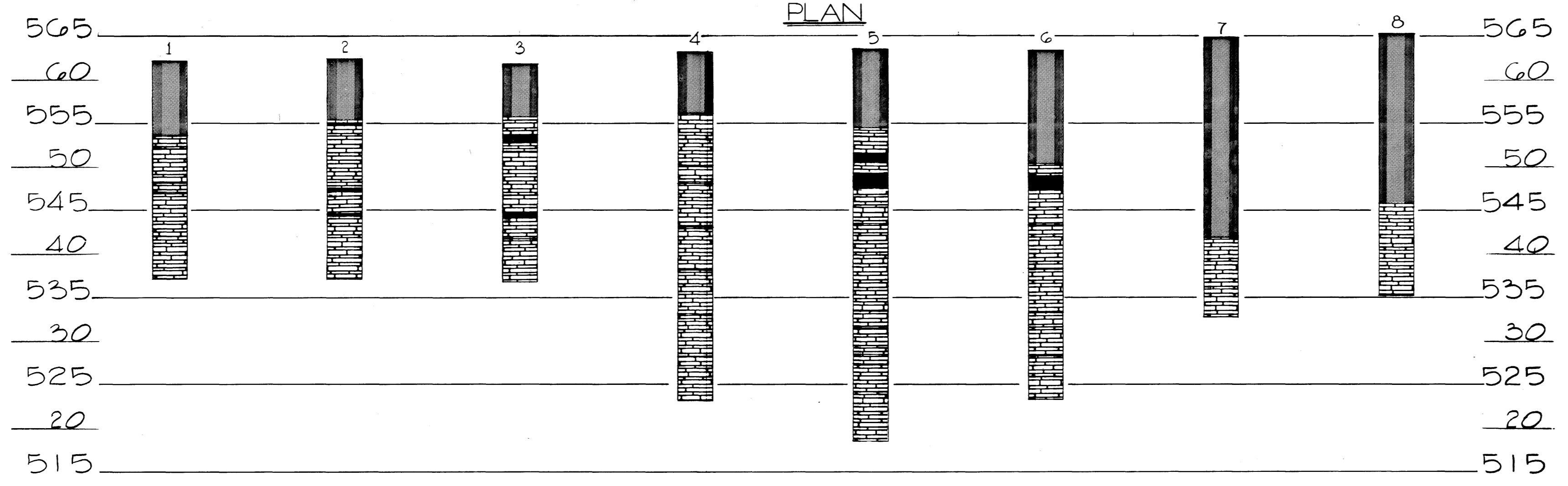
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

Required Information
 ① Approximate existing ground line and rock line
 ② Sufficient ground and coring information for bridge information
 Note: This drawing is for foundation information only and not to be used as a layout



NOTE: CORE SAMPLES TAKEN AT ALL BORING LOCATIONS

- 1. G. 562.2
R. 553.7
- 2. G. 562.4
R. 555.4
- 3. G. 561.8
R. 555.8
- 4. G. 563.1
R. 556.1
- 5. G. 563.3
R. 554.3
- 6. G. 563.2
R. 550.2
- 7. G. 564.9
R. 541.9
- 8. G. 565.2
R. 545.7



-Legend-

- CAVITY
- CLAY
- SHALEY LIMESTONE - 10 TONS/FT.² (WEATHERED TO VARIABLE DEPTHS)

CORE HOLE NO. 8.5' DEPTH DRILLED WITH AUGER TO REFUSAL

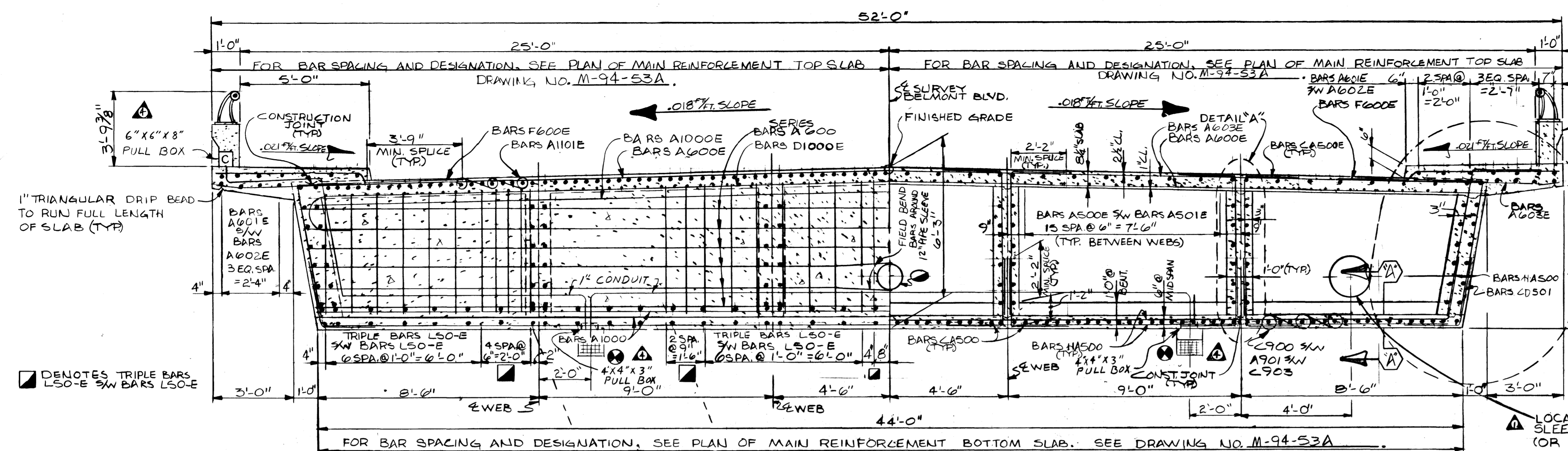
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 FOUNDATION DATA
 BELMONT BOULEVARD OVER
 INTERSTATE - 440
 STATION 257+92.32
 DAVIDSON COUNTY
 1982

DESIGNED BY Gary Hall DATE 5-81
 DRAWN BY Mark Taylor DATE 6-81
 SUPERVISED BY R.L. Harbison, Brooks DATE 6-81
 CHECKED BY _____ DATE 6-81

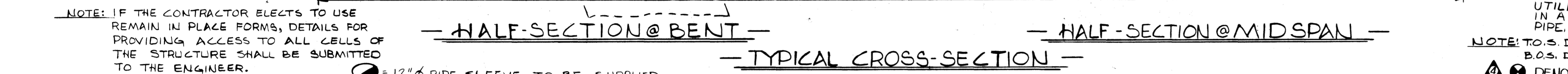
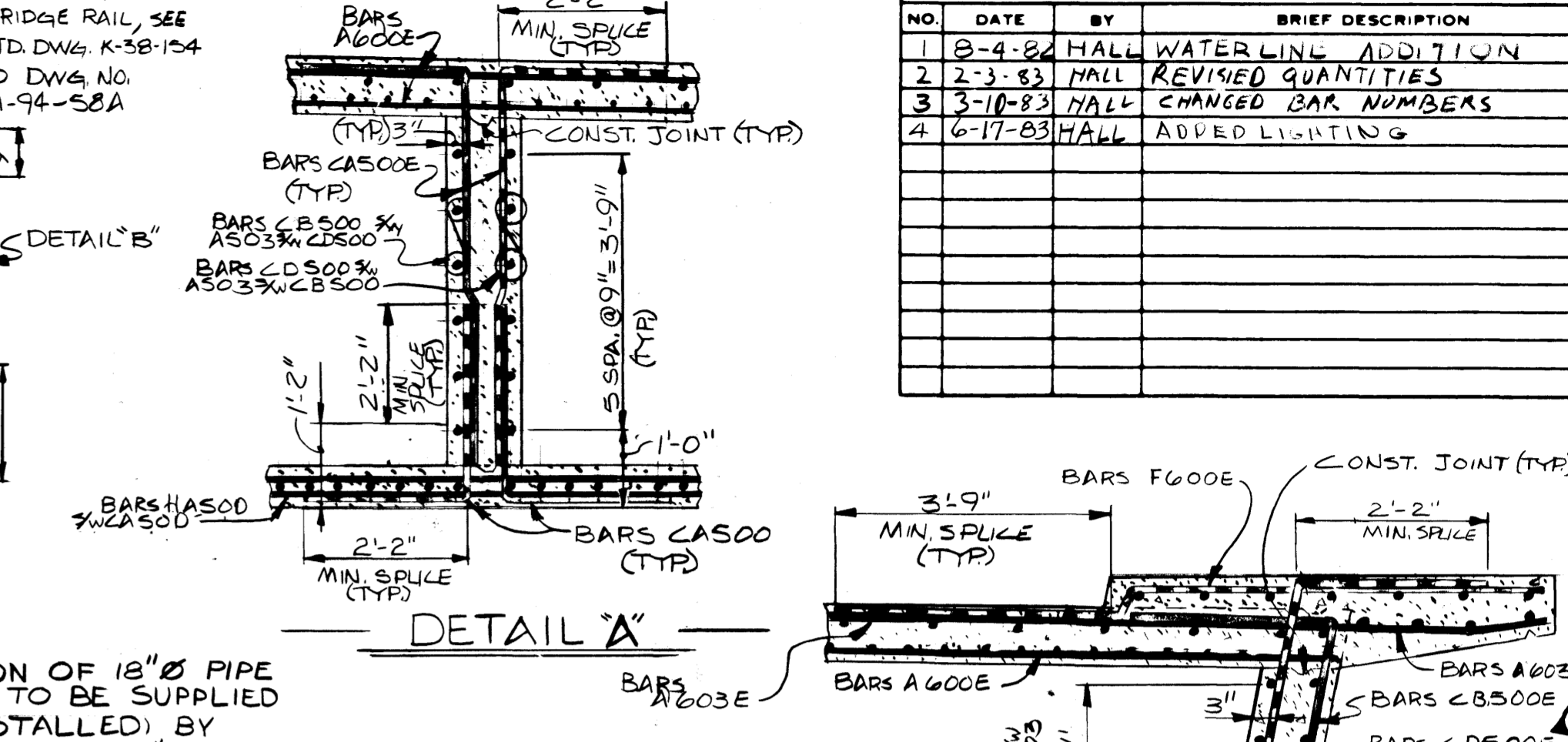
CORRECT Clifton L. Lovell
 ENGINEER OF STRUCTURES
 APPROVED Jervis L. ...
 DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.
1-440-4(4)206	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	8-4-82	HALL	WATER LINE ADDITION
2	2-3-83	HALL	REVISED QUANTITIES
3	3-10-83	HALL	CHANGED BAR NUMBERS
4	6-17-83	HALL	ADDED LIGHTNING



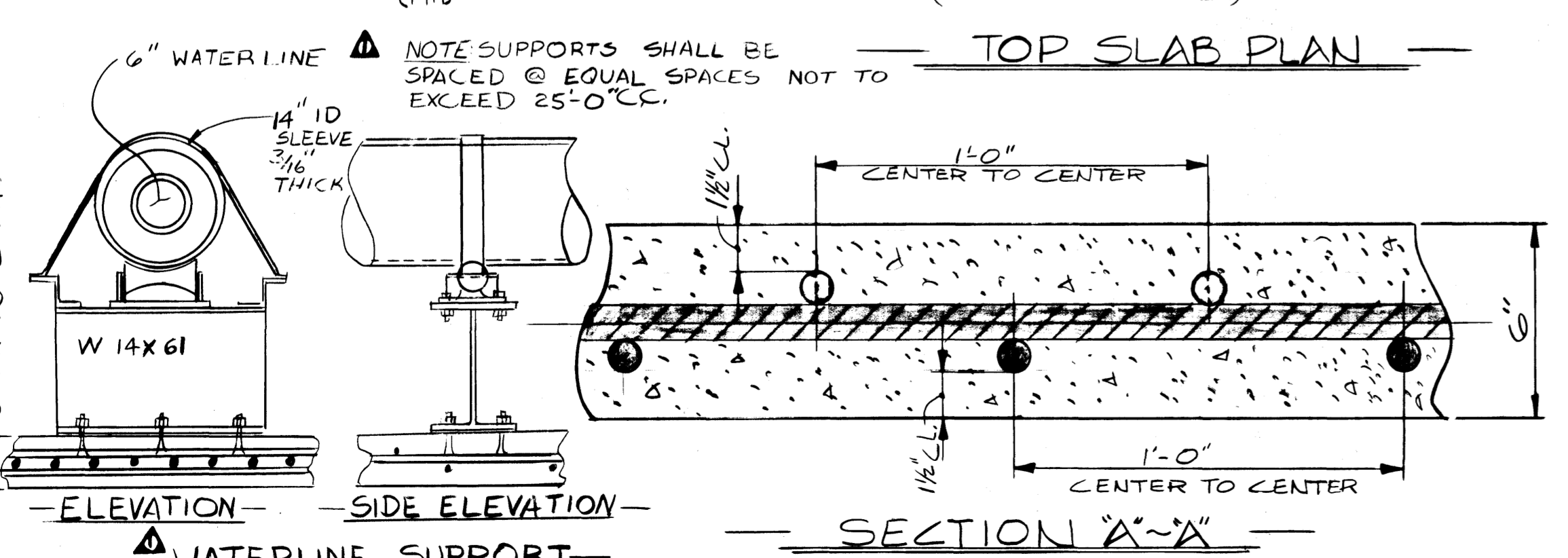
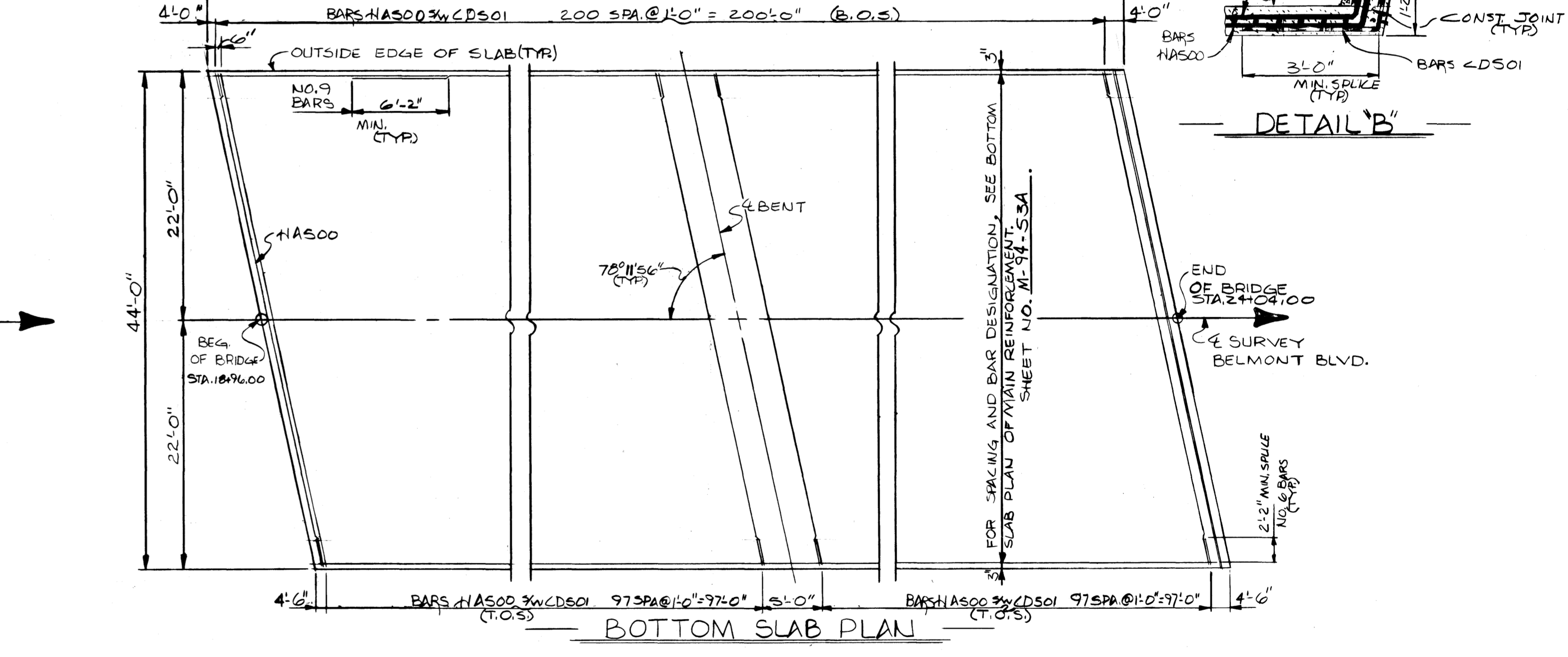
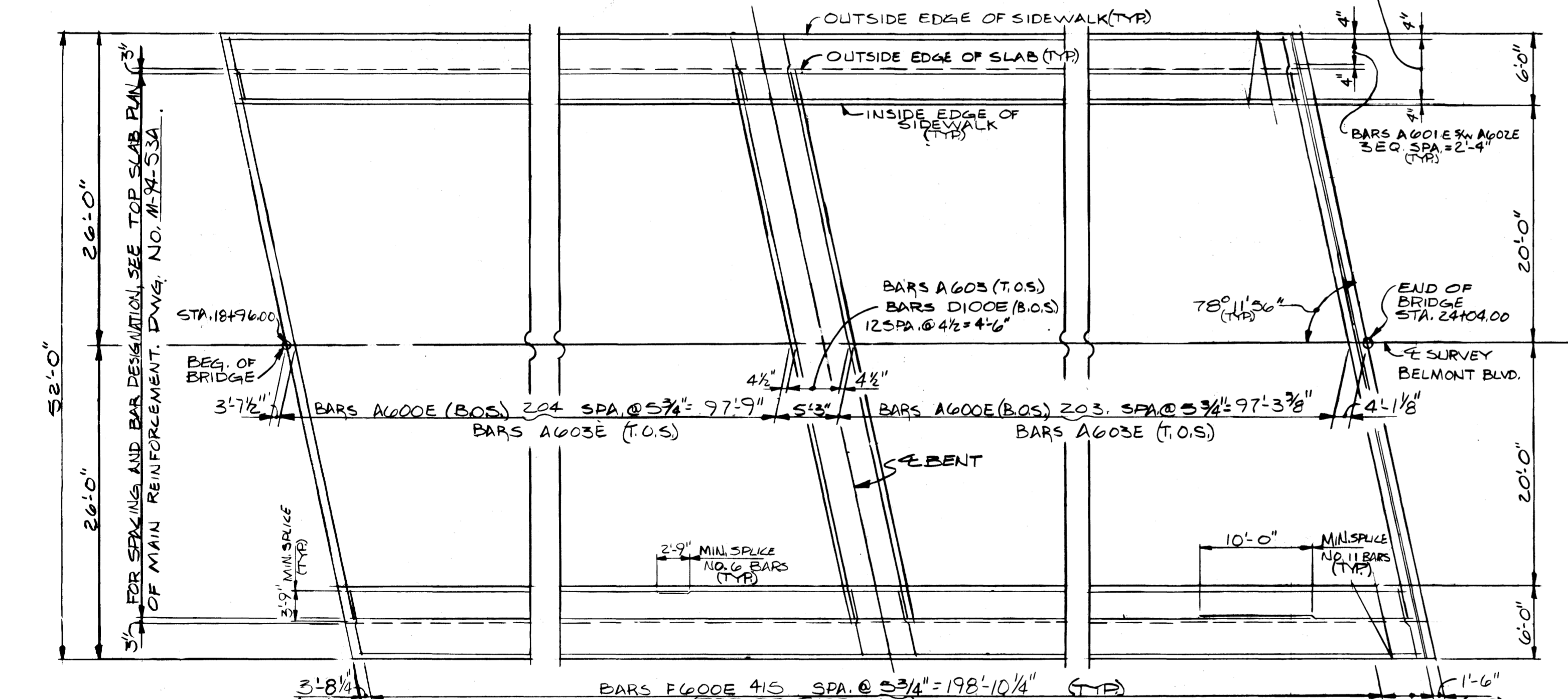
NOTE: WHEN POURING SLAB, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR PARAPET. THE PARAPET SHALL NOT BE POURED UNTIL THE SLAB IS POURED AND CURED. WHEN POURING PARAPET, PROVISIONS SHALL BE MADE FOR SETTING ANCHOR BOLTS FOR PARAPET RAILS. ALSO SEE DWG. NO. K-38-162.



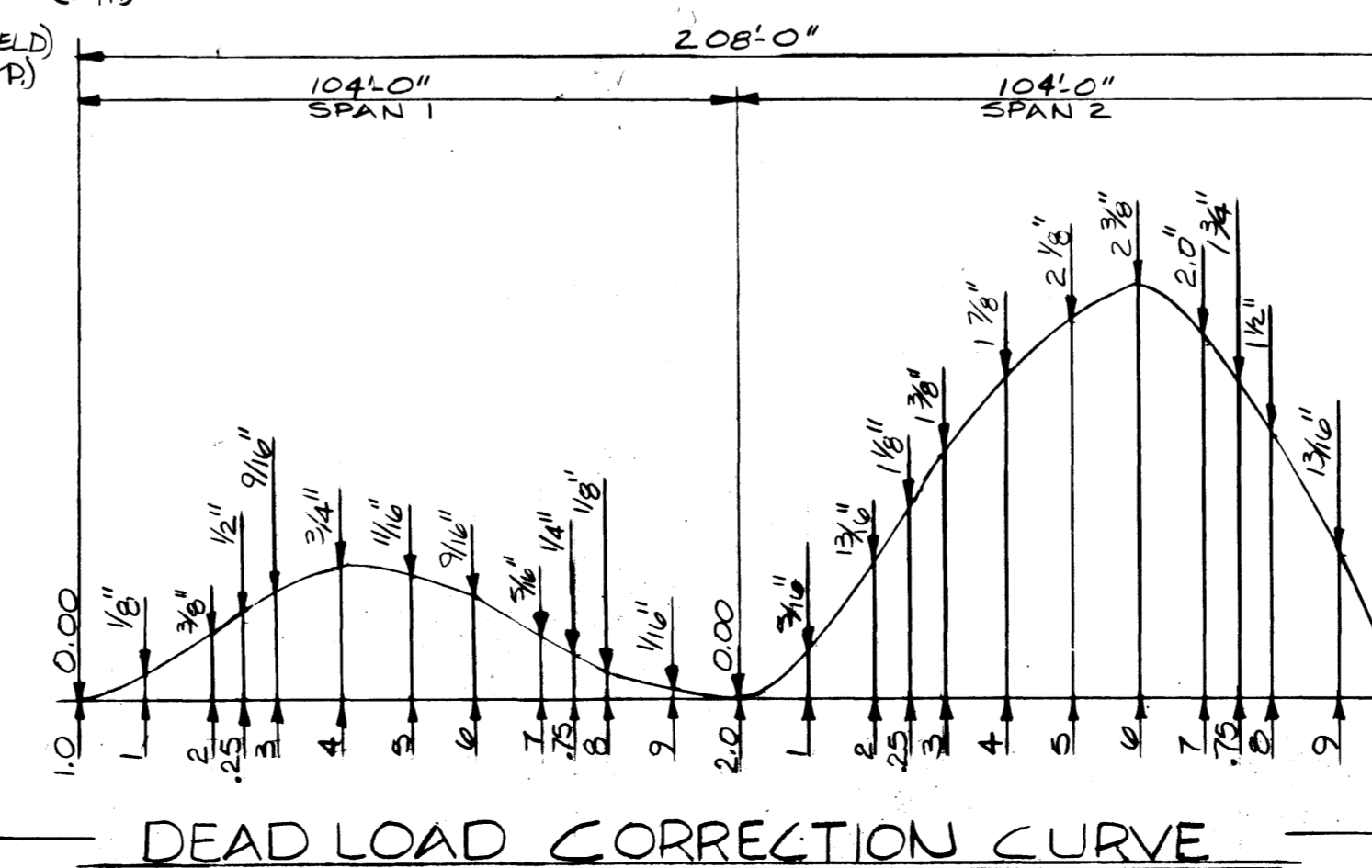
NOTE: IF THE CONTRACTOR ELECTS TO USE REMAIN IN PLACE FORMS, DETAILS FOR PROVIDING ACCESS TO ALL CELLS OF THE STRUCTURE SHALL BE SUBMITTED TO THE ENGINEER.

NOTE: TO S. DENOTES TOP OF SLAB. B.O.S. DENOTES BOTTOM OF SLAB.

NOTE: LUMINAIRES ARE NOT INCLUDED IN THIS PROJECT.



DESIGNED BY GARY HALL DATE 5-81
 DRAWN BY BRANT L. LLOYD DATE 12-81
 SUPERVISED BY ROGER L. HARRISON DATE 12-81
 CHECKED BY HMB + GH DATE 12-81



ESTIMATED QUANTITIES				
ITEM	CLASS 'A' CONCRETE BRIDGE DECKS	CLASS 'A' CONCRETE	REINFORCING STEEL LBS.	EPOXY-COATED REINFORCING STEEL LBS.
SUPERSTRUCTURE	312.6	514.4	137,740	28,967

DEAD LOAD CORRECTION CURVE: NOTE: THIS CURVE IS FOR DEAD LOAD CAMBER ONLY AND SHOULD BE INCREASED BY THE AMOUNT OF ANTICIPATED TAKE UP IN THE FALSEWORK.

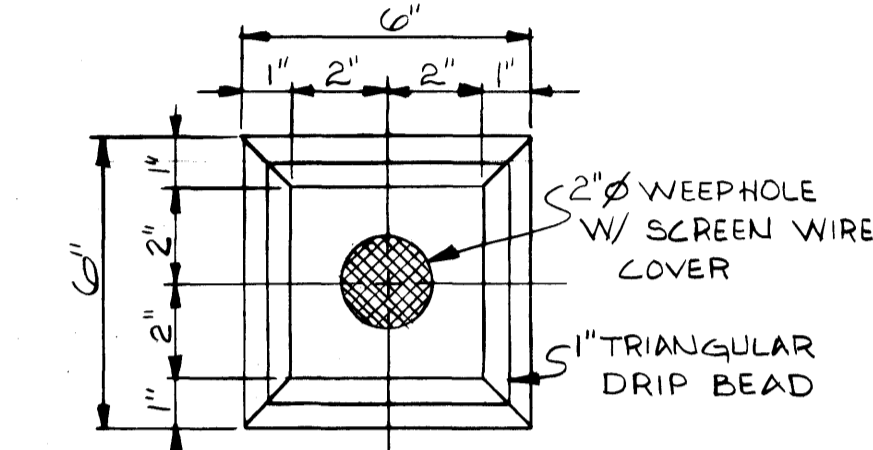
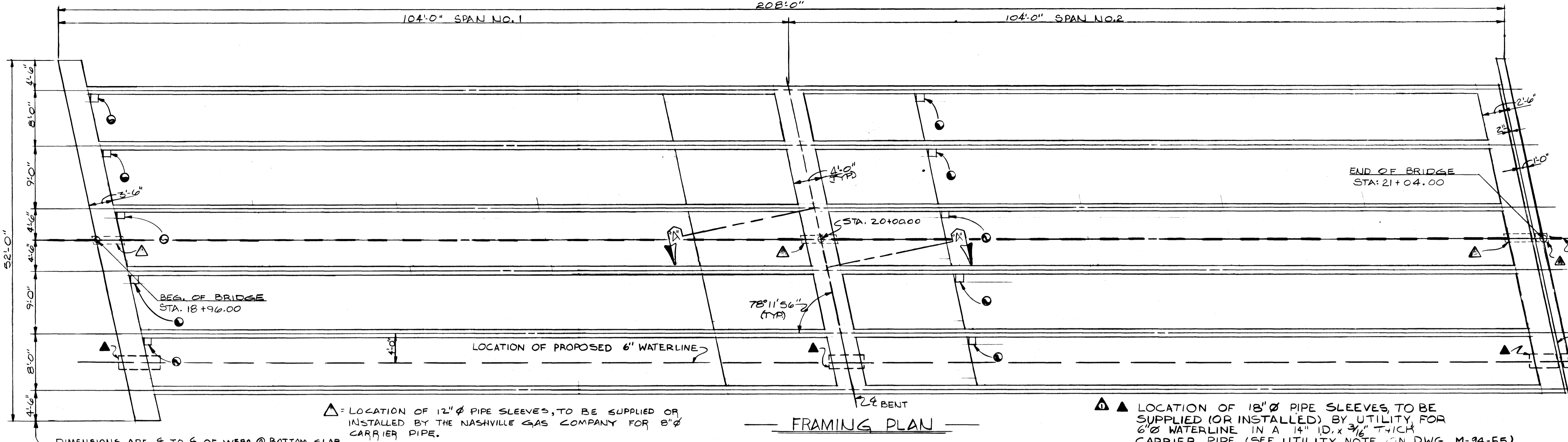
*NOTE: SEE SPECIAL NOTE FOR CONCRETE BRIDGE DECK PANELS DWG. NO. M-94-20

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE
 BELMONT BOULEVARD Over
 INTERSTATE 440
 STATION: 275+92.32
 DAVIDSON COUNTY
 1982

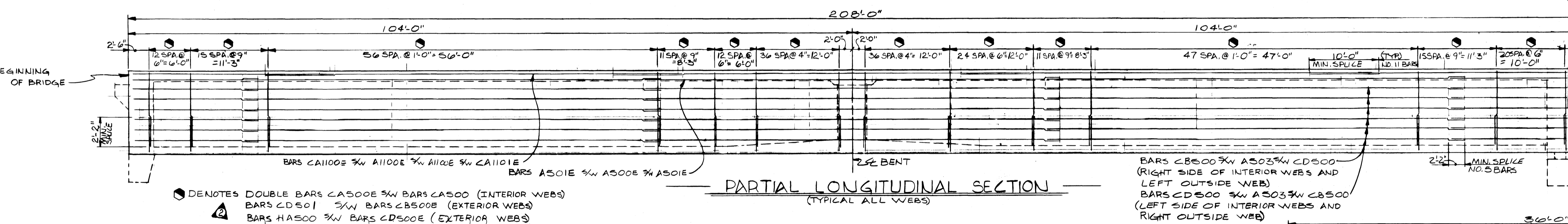
CORRECT *Calvin L. Fowler*
 ENGINEER OF STRUCTURES
 APPROVED *Lewis J. Evans*
 DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.
1-440-4(49)200	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	8-4-82	HALL	WATERLINE ADDITION
2	3-10-83	HALL	CHANGE BAR NUMBERS



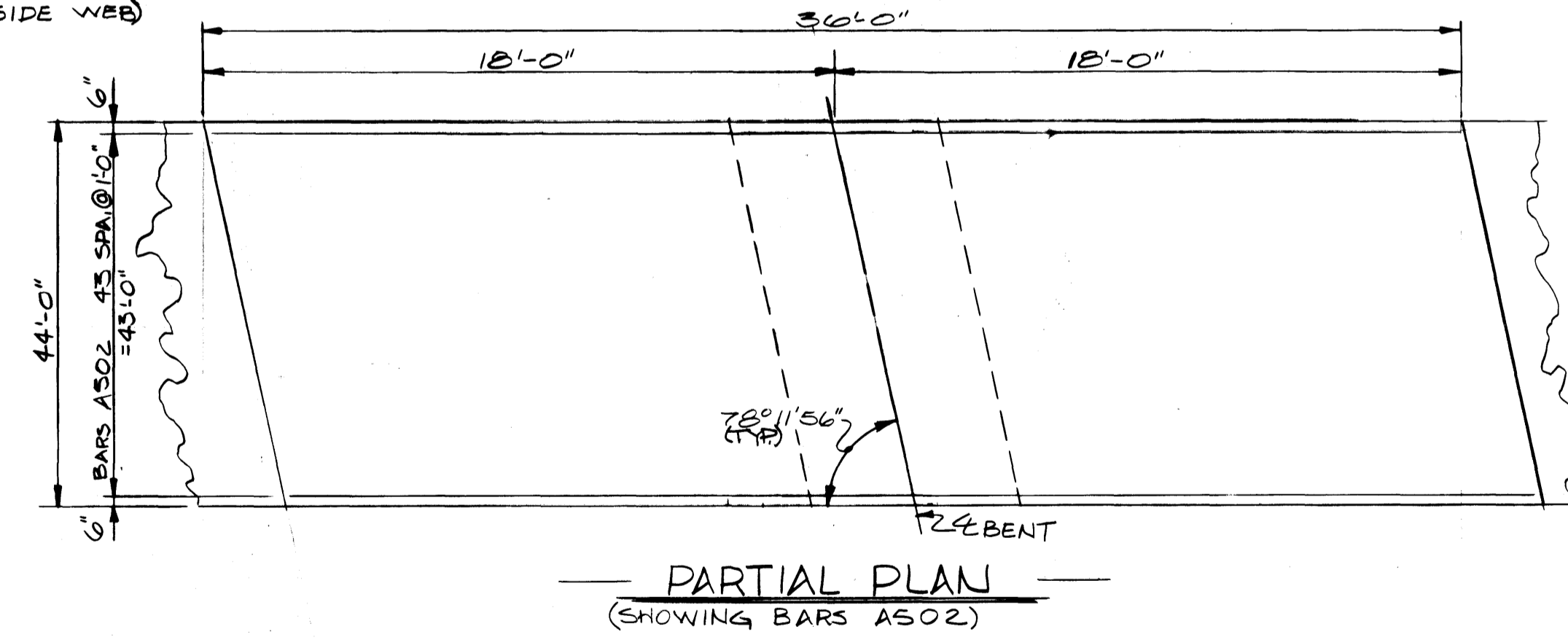
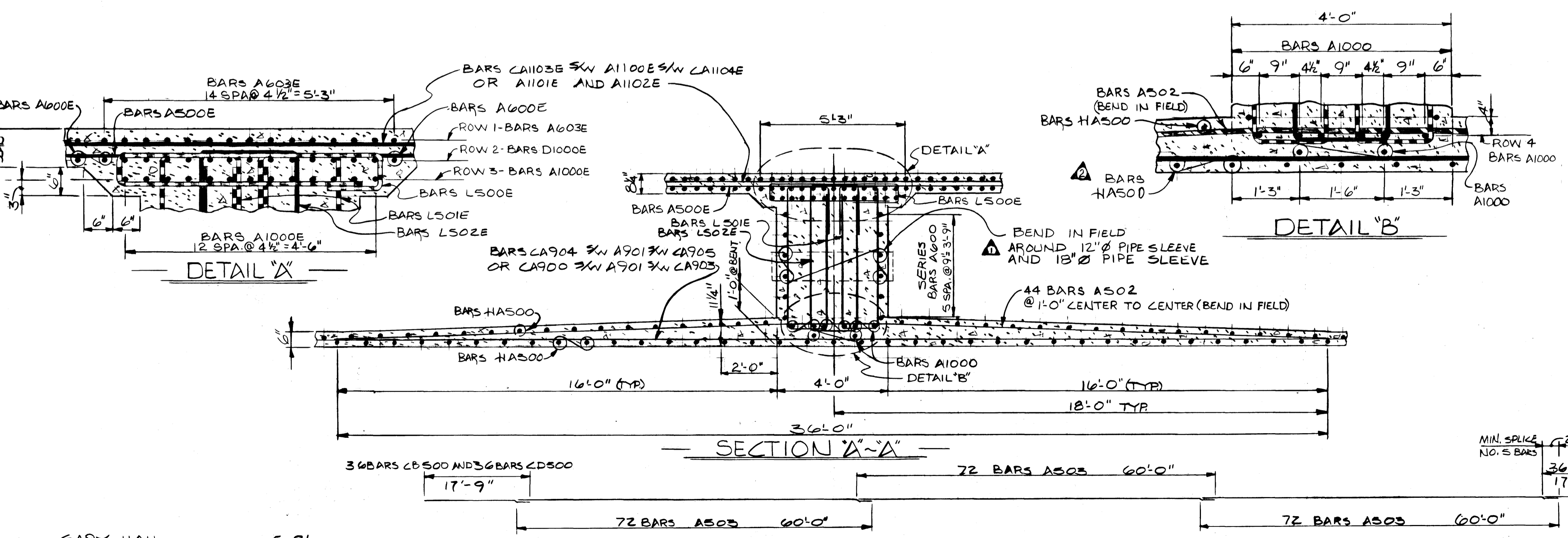
NOTE: 2" WEEPHOLES WITH SCREEN WIRE COVER REQUIRED AT LOW POINTS OF EACH CELL.



● DENOTES DOUBLE BARS CAS00E 3/4W BARS CAS00 (INTERIOR WEBS)
 ▲ BARS CD501 3/4W BARS CBS00E (EXTERIOR WEBS)
 ▲ BARS HAS00 3/4W BARS CDS00E (EXTERIOR WEBS)

BARS CBS00 3/4W A503 3/4W CDS00 (RIGHT SIDE OF INTERIOR WEBS AND LEFT OUTSIDE WEB)
 BARS CD500 3/4W A503 3/4W CBS00 (LEFT SIDE OF INTERIOR WEBS AND RIGHT OUTSIDE WEB)

NOTE: THE BRIDGE IS DESIGNED FOR 2" OF EXPANSION AT THIS ABUTMENT (ABUT. NO. 2).



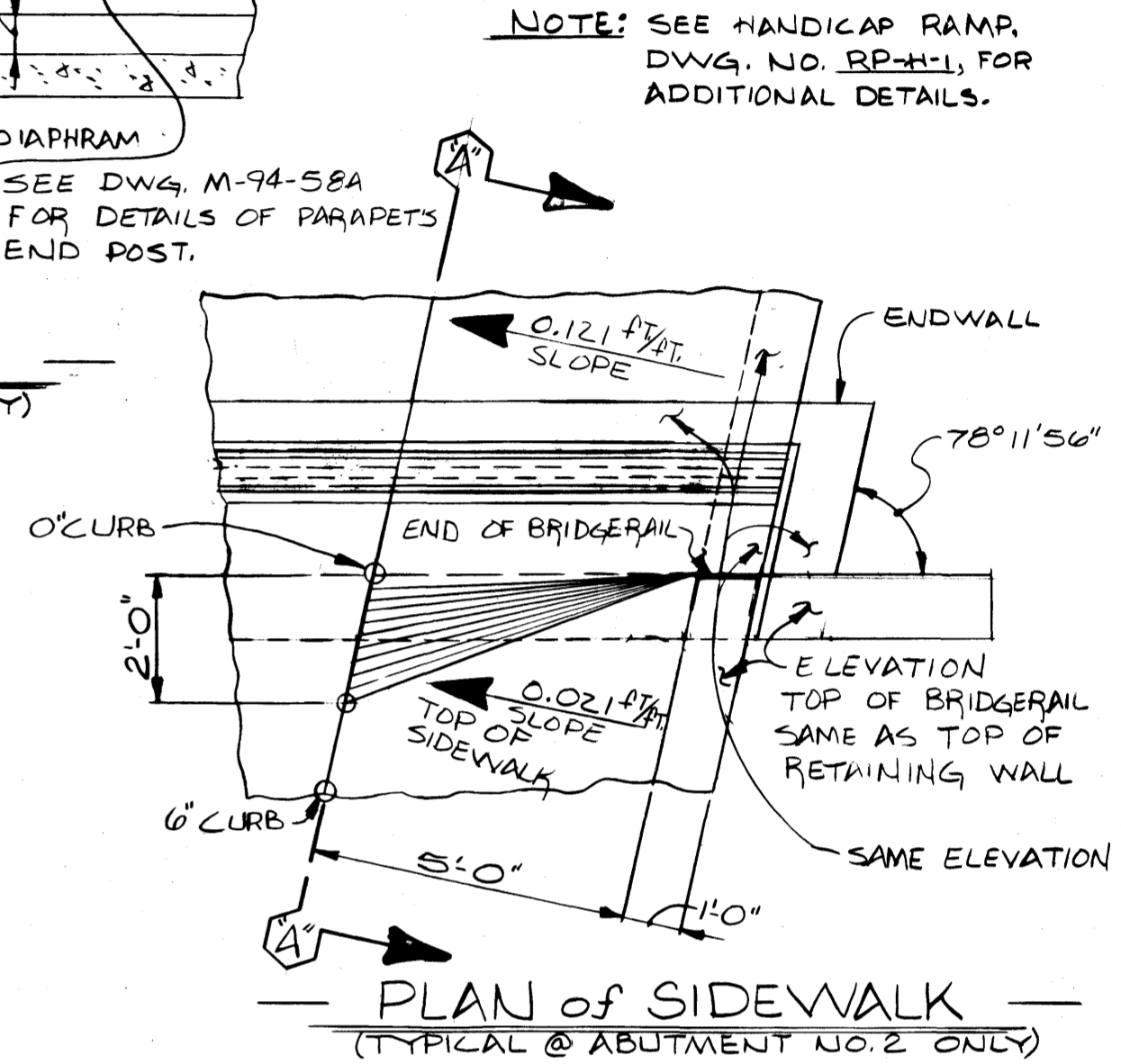
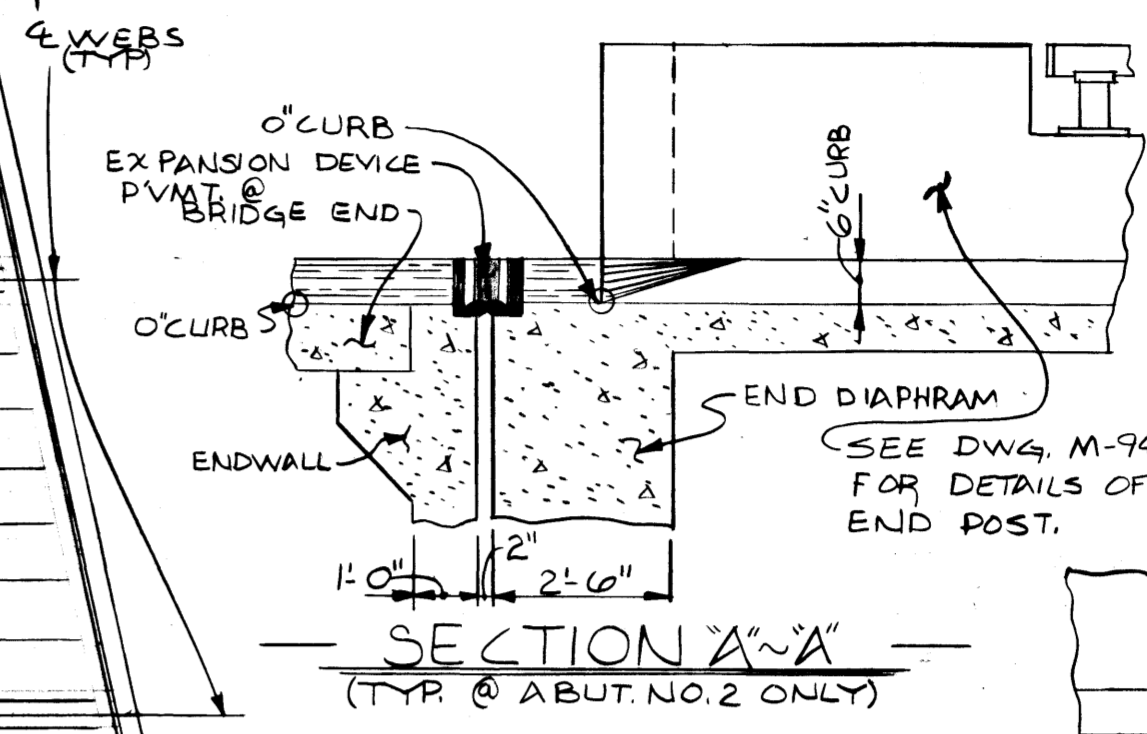
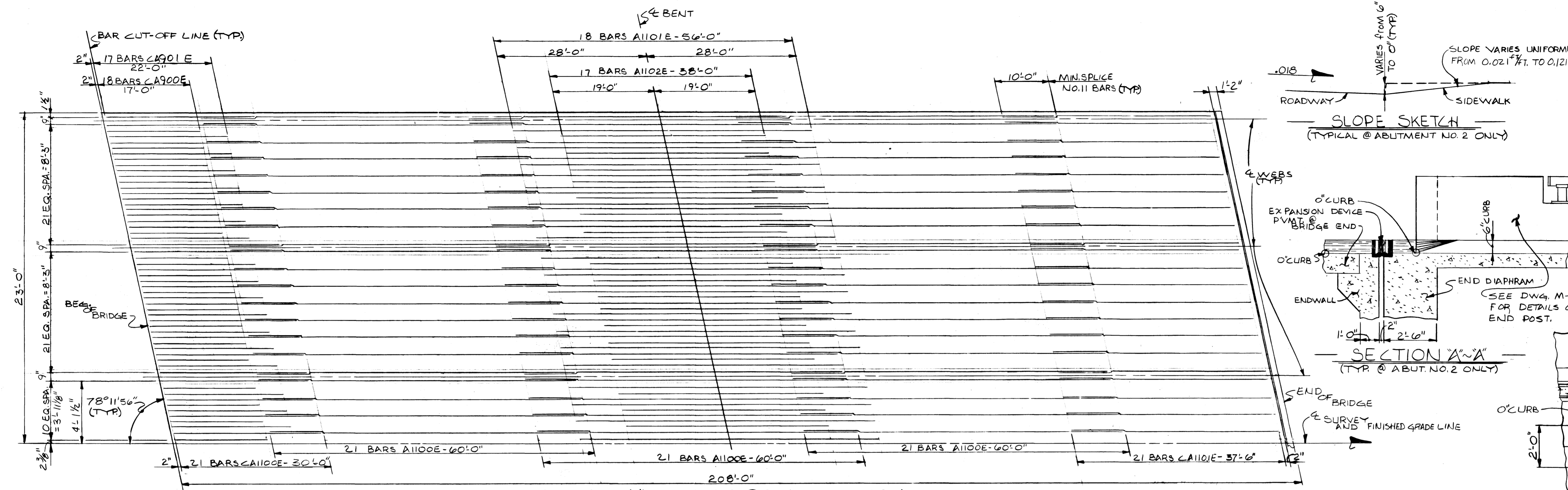
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE DETAILS
 BELMONT BOULEVARD OVER
 INTERSTATE 440
 STATION: 275 + 92.32
 DAVIDSON COUNTY
 1982

CORRECT *Clendon L. Forward*
 ENGINEER OF STRUCTURES
 APPROVED *Lewis J. Lewis*
 DIRECTOR OF HIGHWAYS

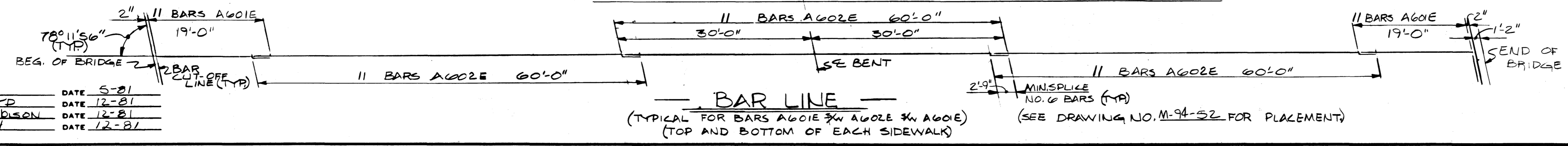
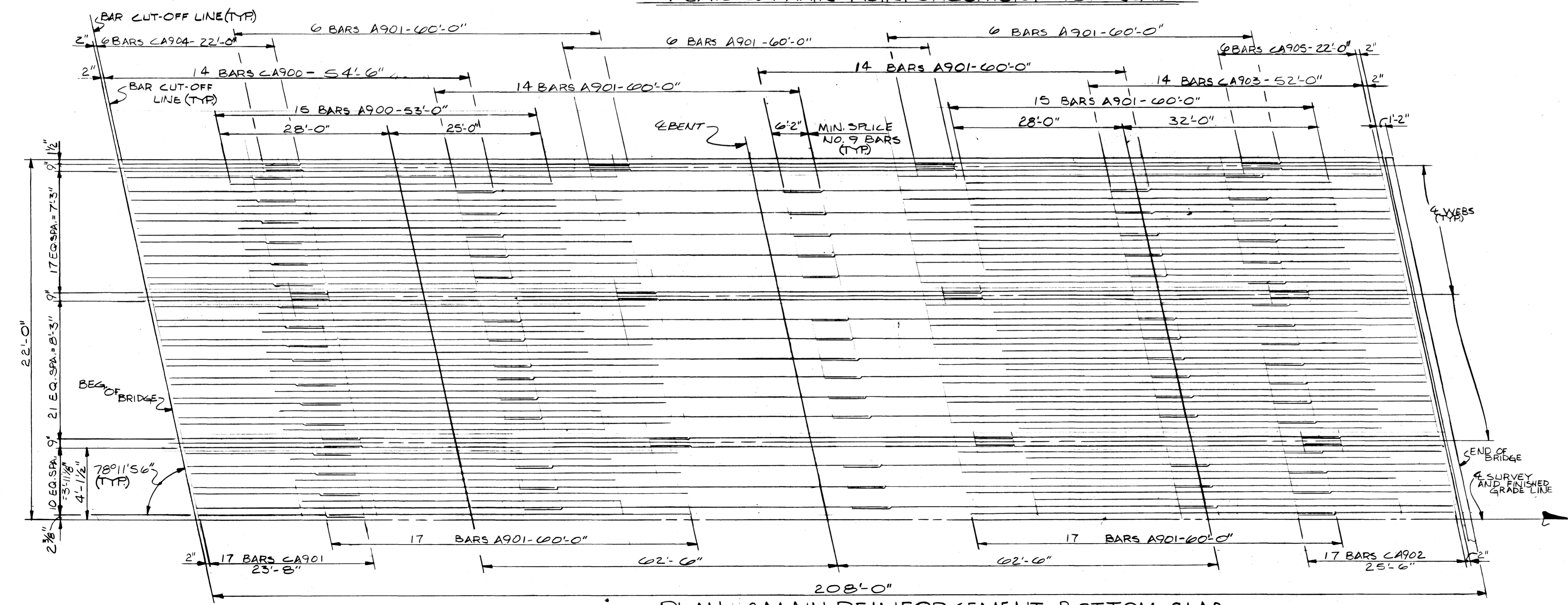
DESIGNED BY SARY HALL DATE 5-81
 DRAWN BY GRANT L. LLOYD DATE 12-81
 SUPERVISED BY Roger L. Harrison DATE 12-81
 CHECKED BY H.M.B.T.G.H. DATE 12-81

PROJECT NO.	YEAR	SHEET NO.
1-440-4(49)206	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



NOTE: SEE HANDICAP RAMP, DWG. NO. RP-H-1, FOR ADDITIONAL DETAILS.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
SUPER STRUCTURE DETAILS
BELMONT BOULEVARD OVER
INTERSTATE 440
STATION: 275+92.32
DAVIDSON COUNTY
1982

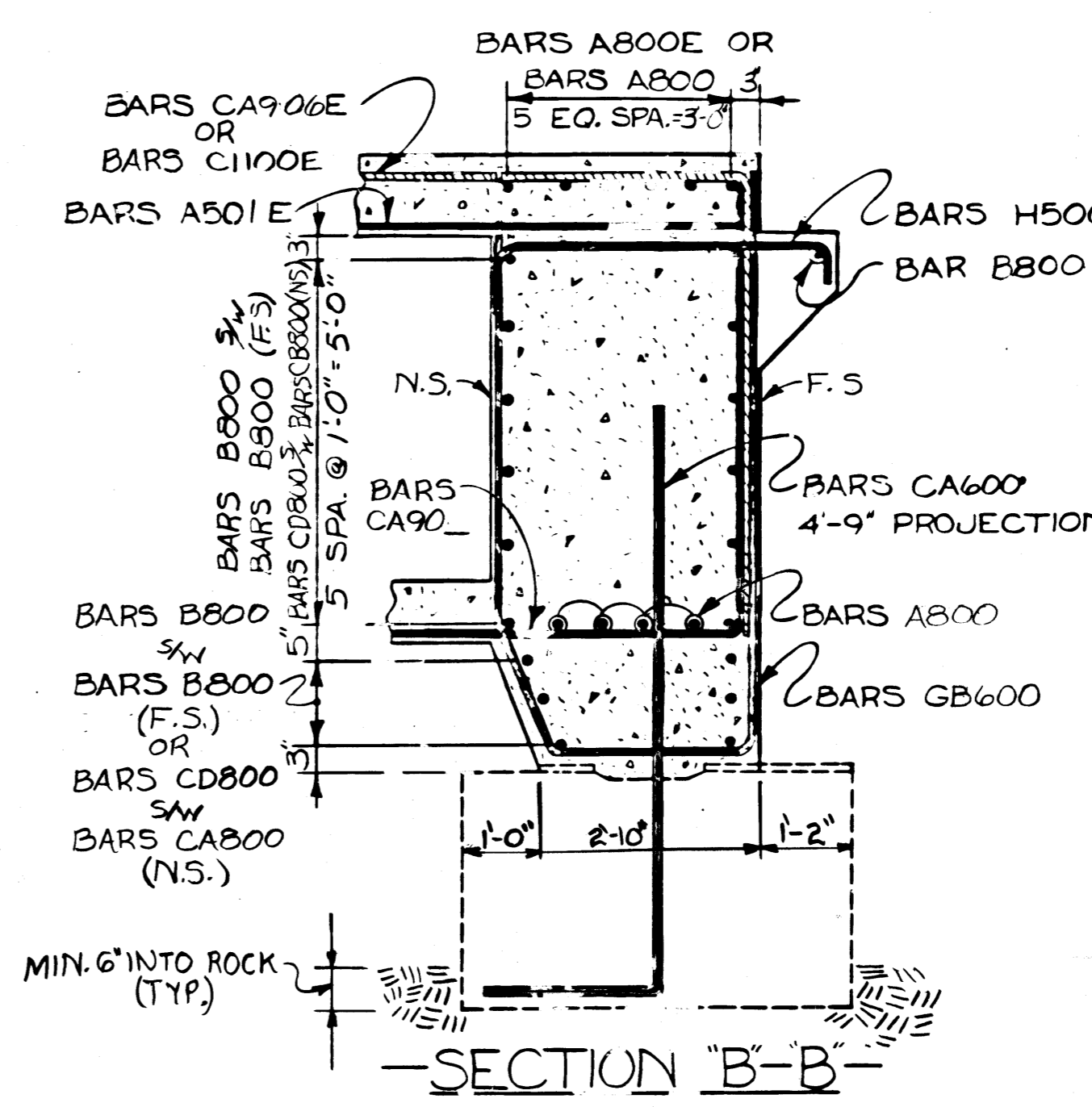
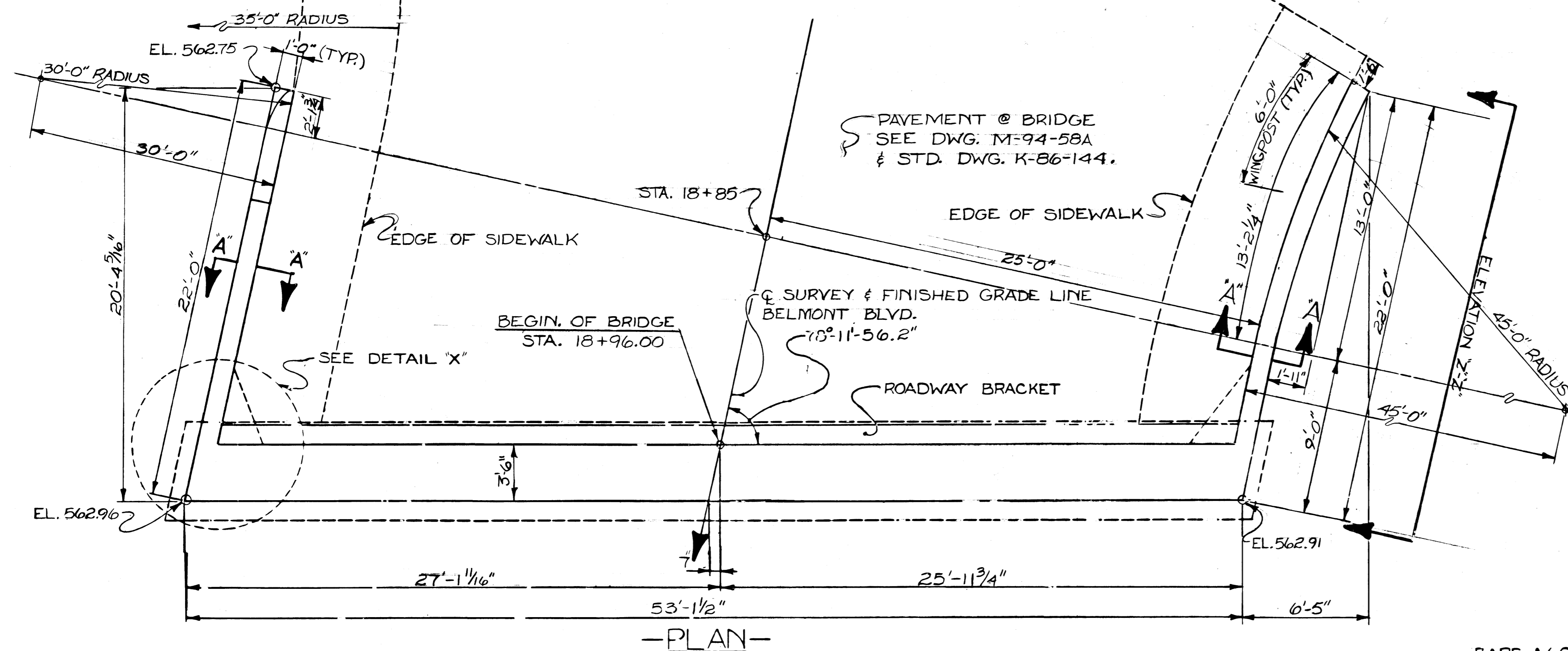
CORRECT *Clifton L. Lovell*
ENGINEER OF STRUCTURES
APPROVED *James Evans*
DIRECTOR OF HIGHWAYS

MICROFILMED

DESIGNED BY GARY HALL DATE 5-81
DRAWN BY BRANT L. LLOYD DATE 12-81
SUPERVISED BY ROGER L. HARRISON DATE 12-81
CHECKED BY T.M.B. & G.H. DATE 12-81

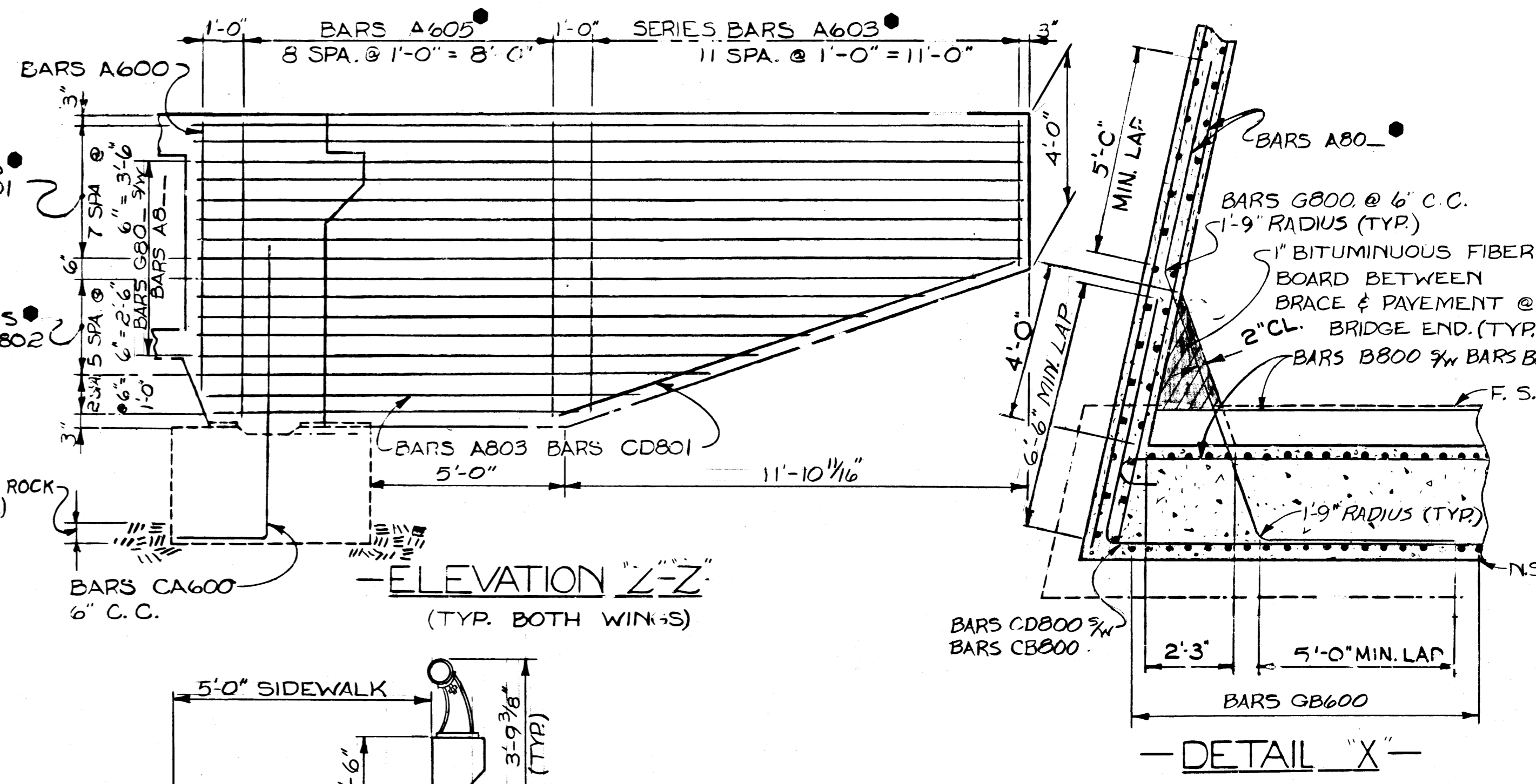
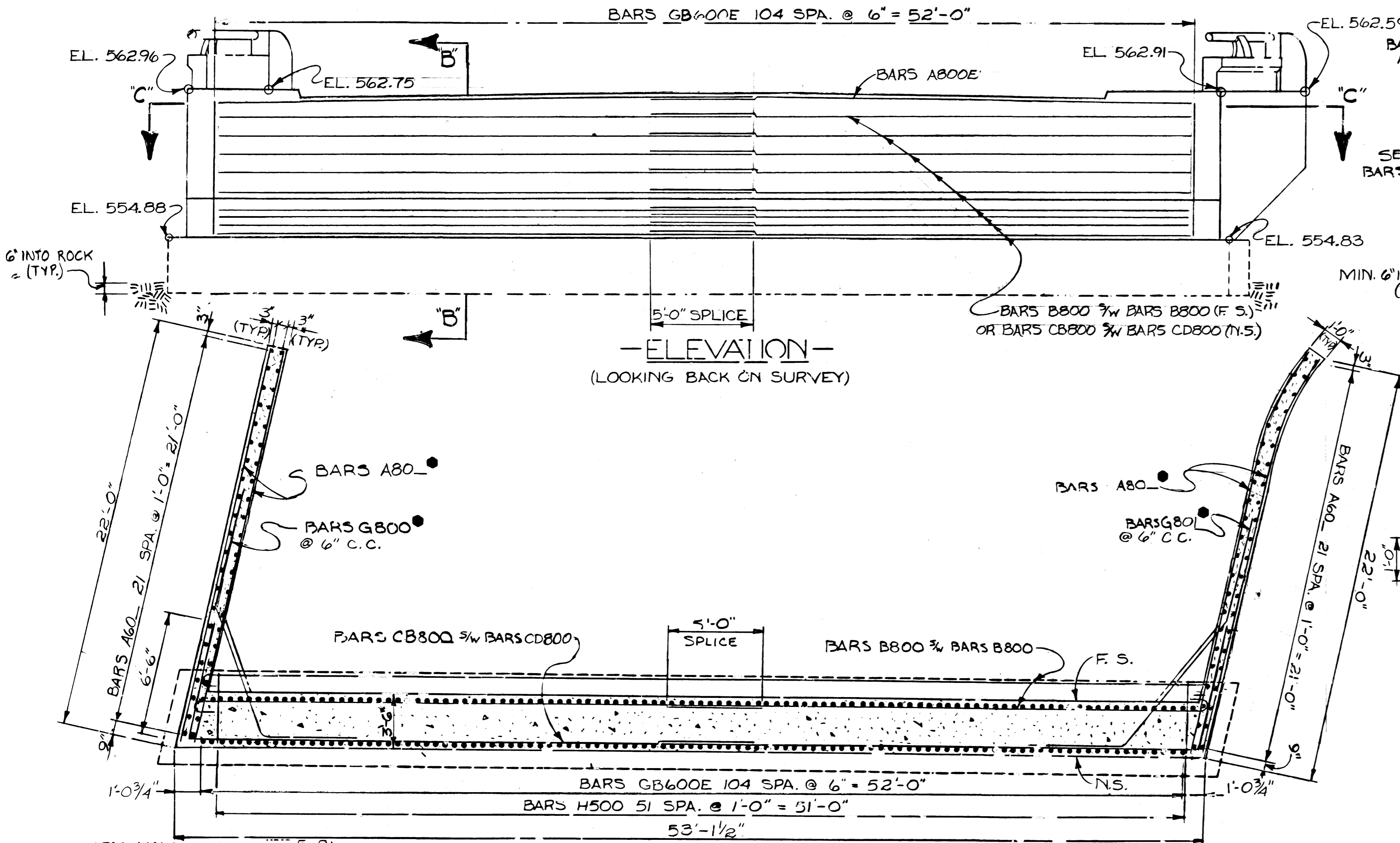
PROJECT NO.	YEAR	SHEET NO.
1-440-4(4) 206	1982	

REVISIONS		
NO.	DATE	BRIEF DESCRIPTION



NOTE: WHEN POURING WINGWALLS, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR WINGPOST AND BRIDGE RAIL. FOR DETAILS OF WINGPOST AND BRIDGE RAIL SEE DRAWING K-38-162 AND M-94-58A.

NOTE: OUTSIDE AND INSIDE EDGES OF BRIDGE RAIL TO CONFORM TO THE RADIUS USED AT BATTLEFIELD DRIVE AND BELMONT BOULEVARD.



NOTE: BAR A80_ SHALL BE ON OUTSIDE FACES OF WING. THE WINGS ARE DESIGNED TO RESIST A HORIZONTAL FORCE. THE A605 AND SERIES BARS A603 ARE FOR MOMENT DISTRIBUTION AND SHALL BE INSIDE OF BARS A80_.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SUPERSTRUCTURE DETAILS
AT ABUTMENT NUMBER 1
BELMONT BOULEVARD
OVER INTERSTATE 440
STATION 275+92.32
DAVIDSON COUNTY

1982

DESIGNED BY GARY HALL DATE 5-81
DRAWN BY VICKY FORREST DATE 1-82
SUPERVISED BY R. L. HARRISON D.T. 1-82
CHECKED BY H.M. B. & G.H. DATE 1-82

SECTION "A-A" AND A SECTION THROUGH PAVEMENT AT BRIDGE END (TYP. BOTH WINGS ABUT 1 ONLY)

SEE DETAIL "A-A" FOR SECTION THROUGH PAVEMENT @ BRIDGE END. DWG. NO. M-94-58A

0.18 SLOPE (TYP.)

5'-0" SIDEWALK

2'-6"

3'-9 7/8" (TYP.)

2" CL. (TYP.)

15 SPA. @ 6" = 7'-0"

VARIABLES

2" BITUMINOUS FIBERBOARD JOINT (TYP.)

BARS A60_

NOTE: BAR A80_ SHALL BE ON OUTSIDE FACES OF WING. THE WINGS ARE DESIGNED TO RESIST A HORIZONTAL FORCE. THE A605 AND SERIES BARS A603 ARE FOR MOMENT DISTRIBUTION AND SHALL BE INSIDE OF BARS A80_.

SERIES BARS A802 ARE TO BE NEAR FACE OF WALL.

BARS A803

BARS CD801

APPROVED

CONTRACT

1982

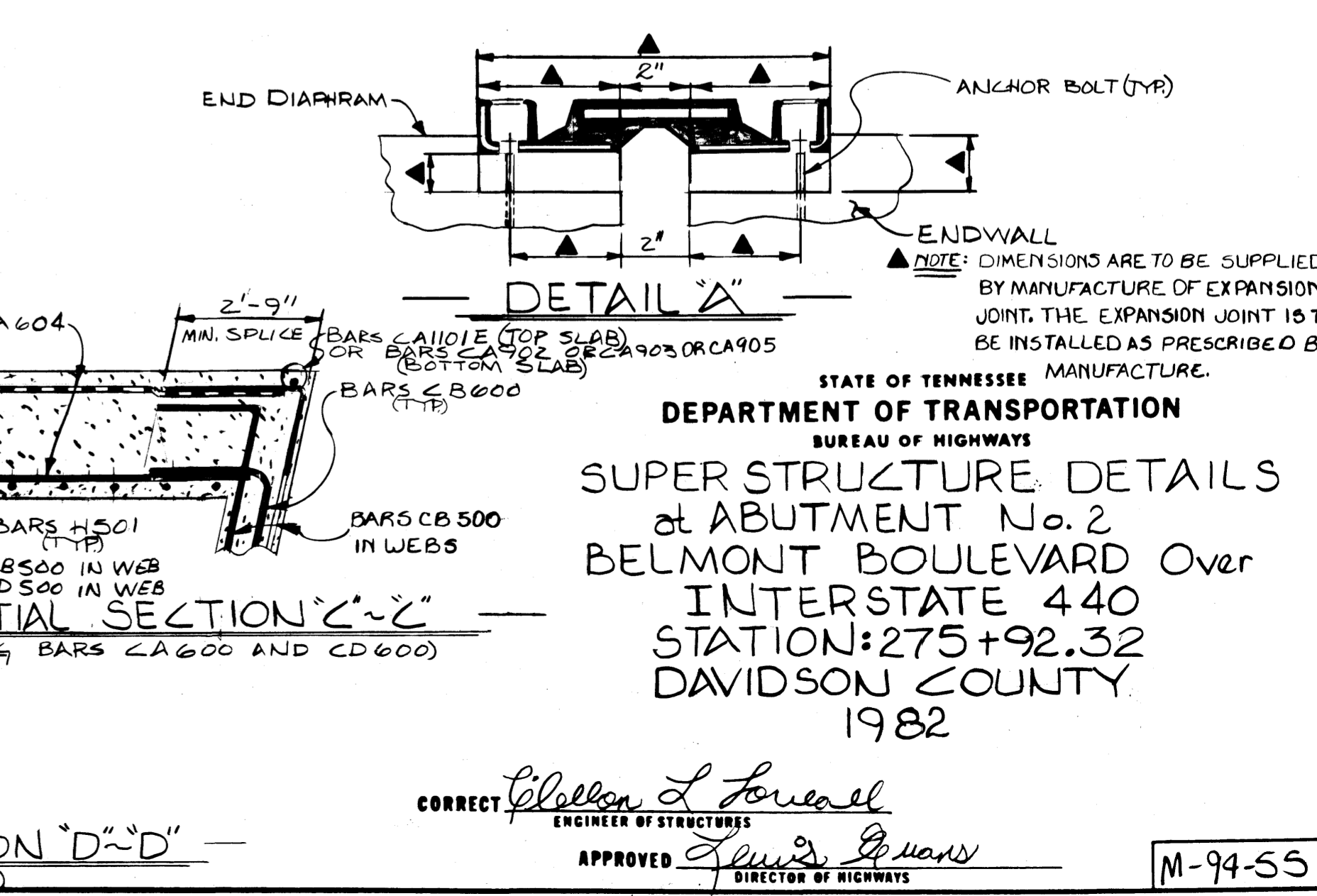
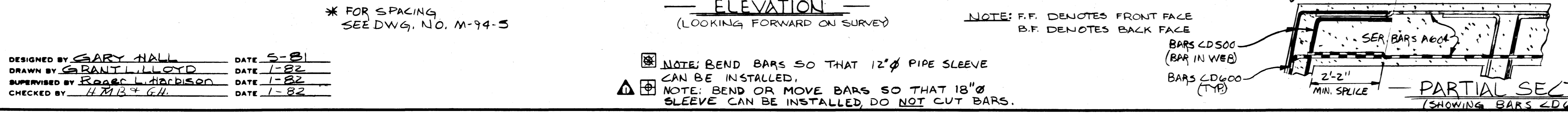
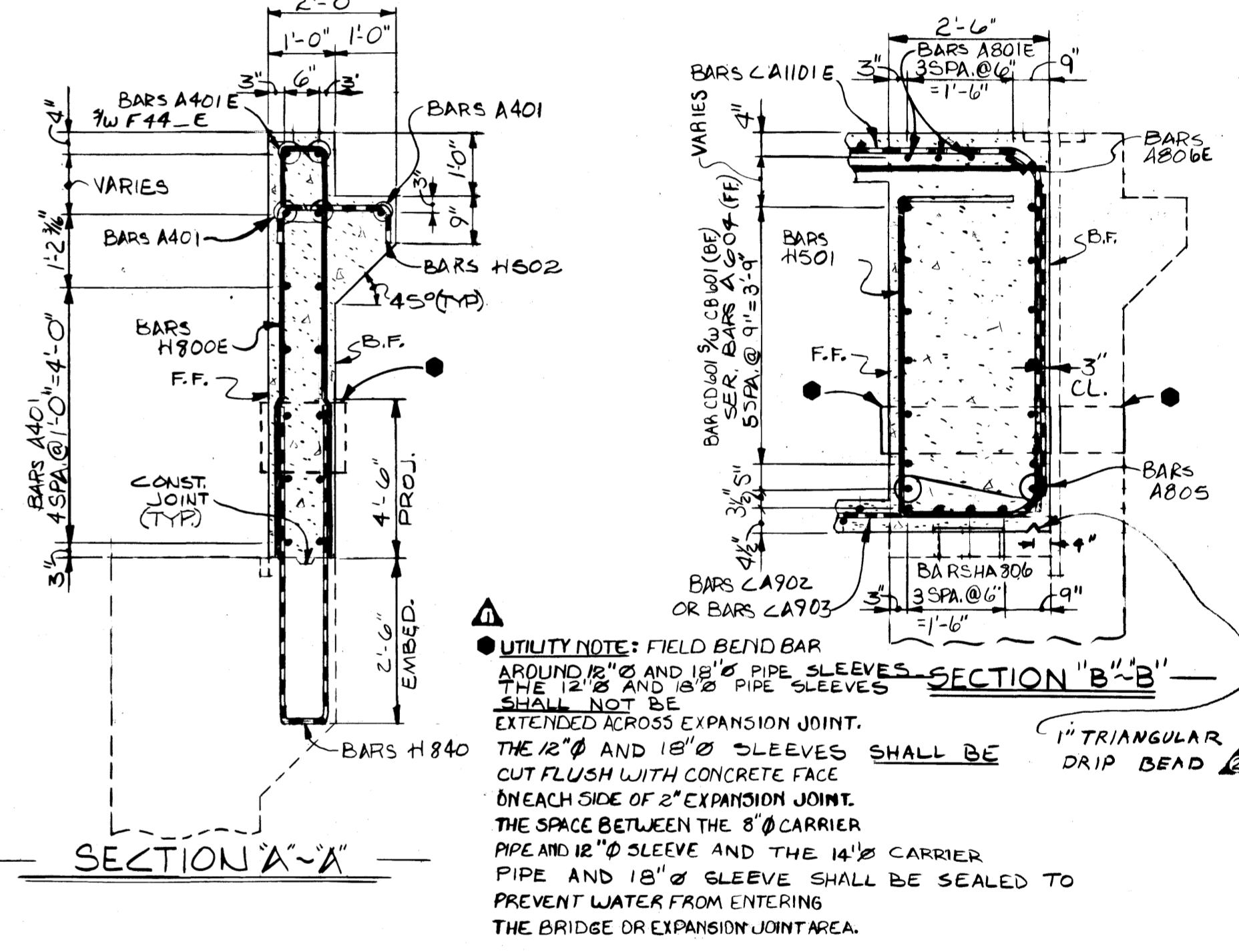
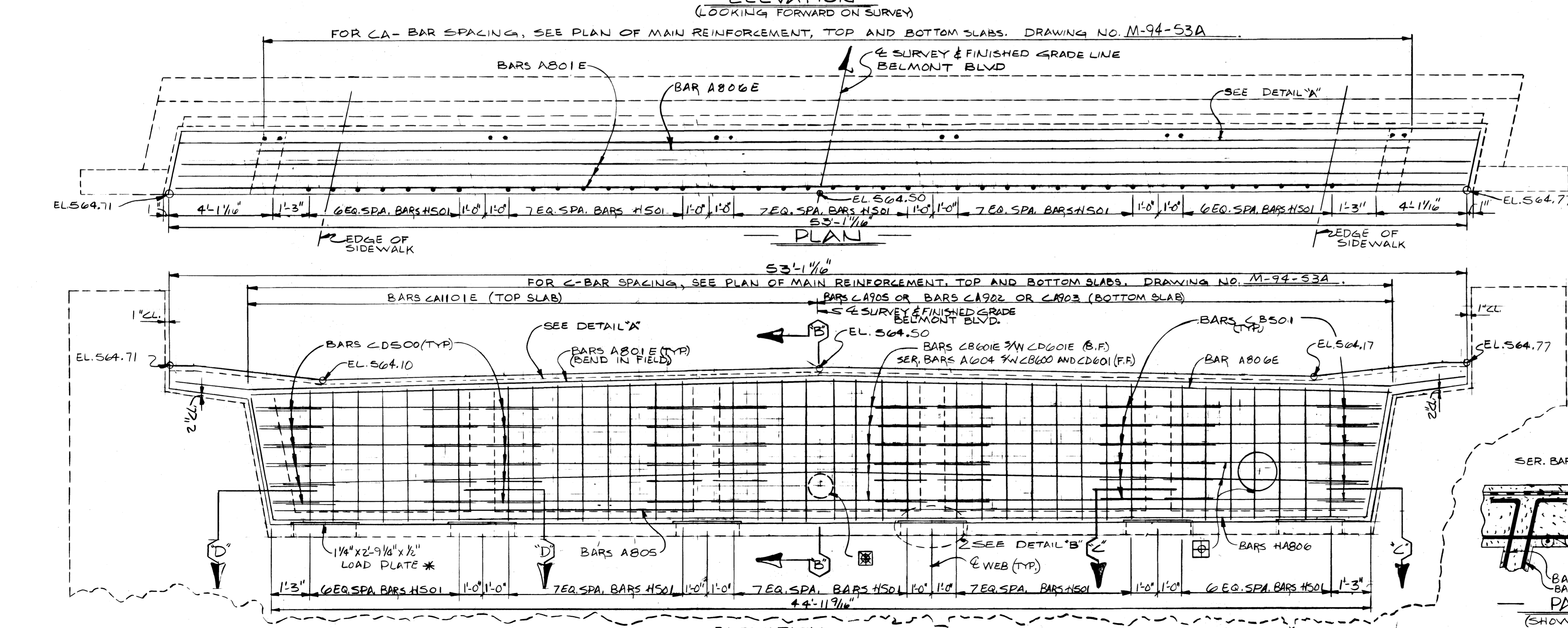
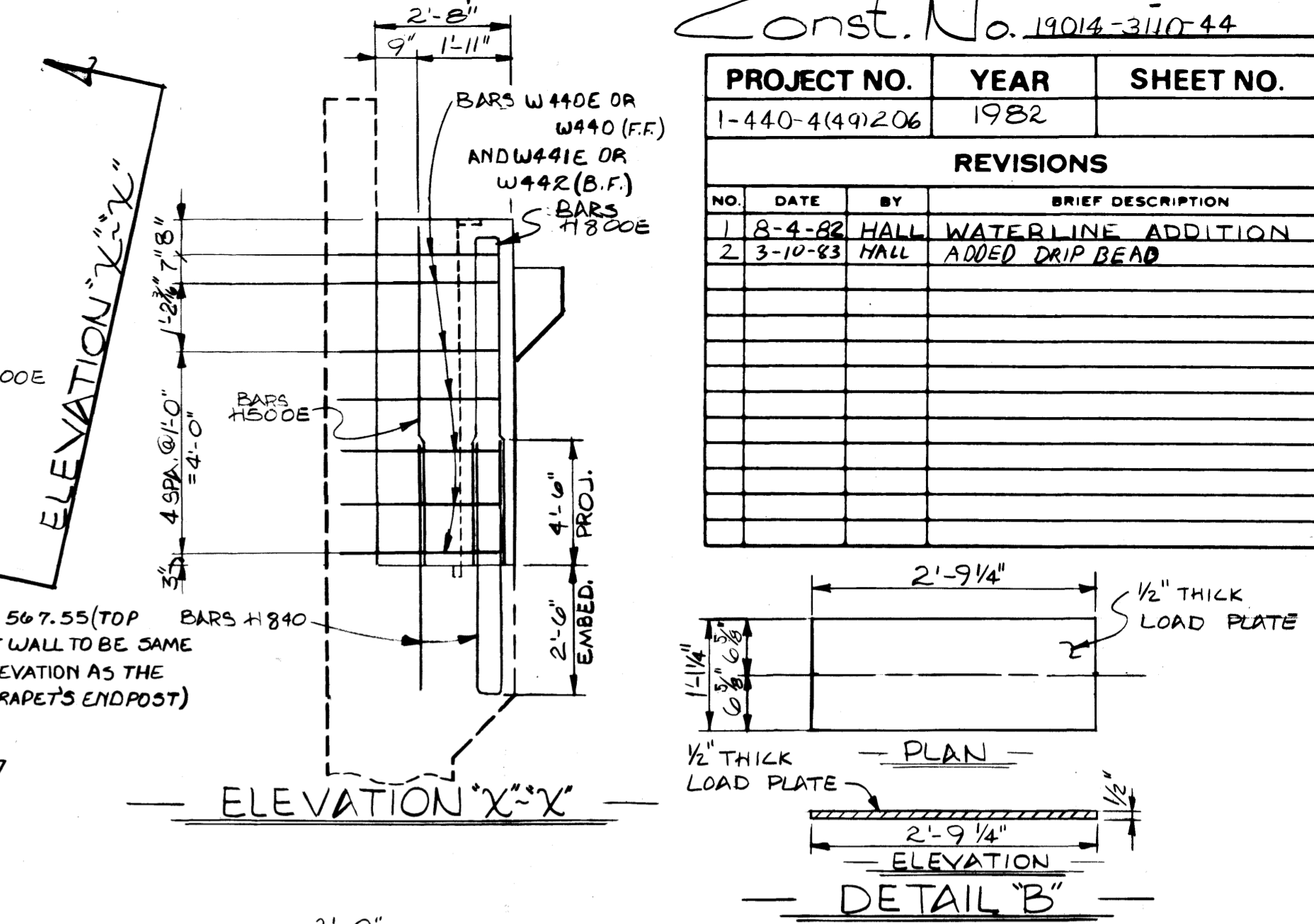
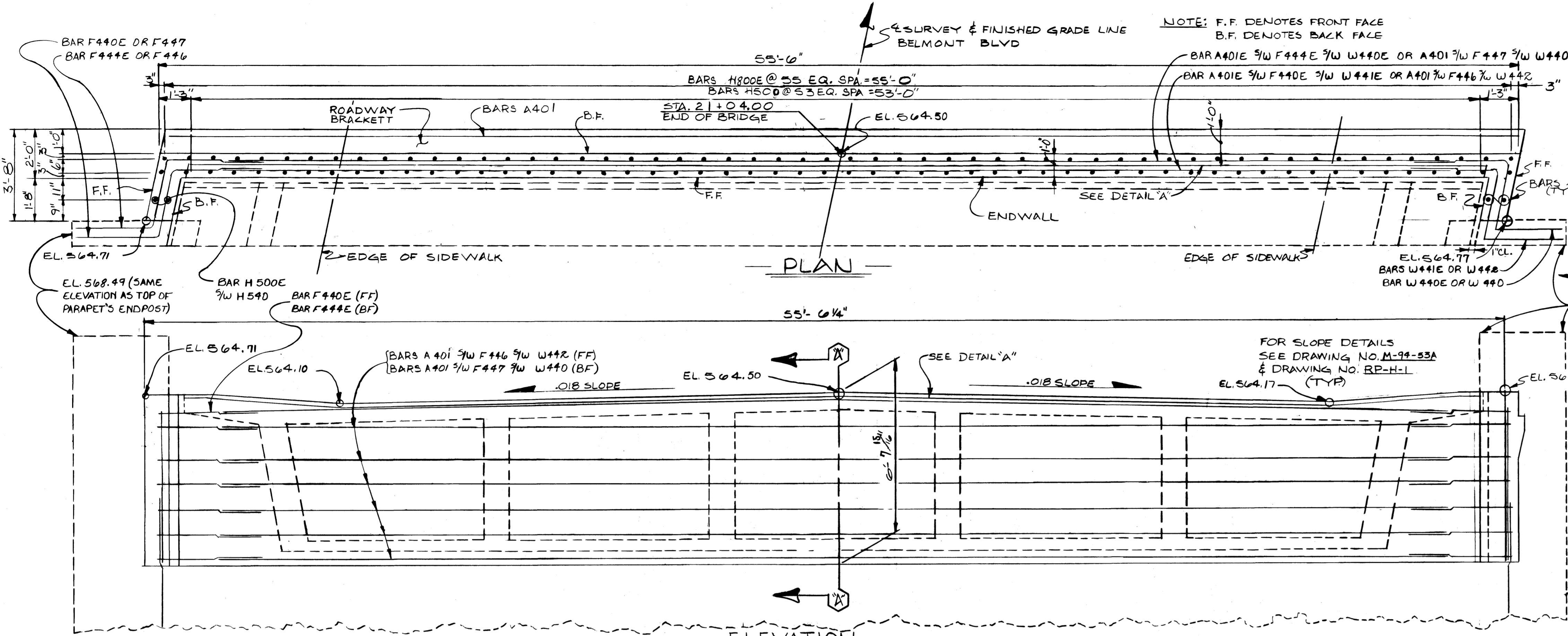
APPROVED

1982

MICROFILMED

PROJECT NO.	YEAR	SHEET NO.
1-440-4(4)206	1982	

REVISIONS		
NO.	DATE	BRIEF DESCRIPTION
1	8-4-82	HALL WATERLINE ADDITION
2	3-10-83	HALL ADDED DRIP BEAD



UTILITY NOTE: FIELD BEND BAR AROUND 12" AND 18" PIPE SLEEVES. THE 12" AND 18" PIPE SLEEVES SHALL NOT BE EXTENDED ACROSS EXPANSION JOINT. THE 12" AND 18" SLEEVES SHALL BE CUT FLUSH WITH CONCRETE FACE ON EACH SIDE OF 2" EXPANSION JOINT. THE SPACE BETWEEN THE 8" CARRIER PIPE AND 12" SLEEVE AND THE 14" CARRIER PIPE AND 18" SLEEVE SHALL BE SEALED TO PREVENT WATER FROM ENTERING THE BRIDGE OR EXPANSION JOINT AREA.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SUPER STRUCTURE DETAILS
at ABUTMENT No. 2
BELMONT BOULEVARD Over
INTERSTATE 440
STATION: 275+92.32
DAVIDSON COUNTY
1982

CORRECT *Clifton L. Leland*
ENGINEER OF STRUCTURES
APPROVED *James A. Gowan*
DIRECTOR OF HIGHWAYS

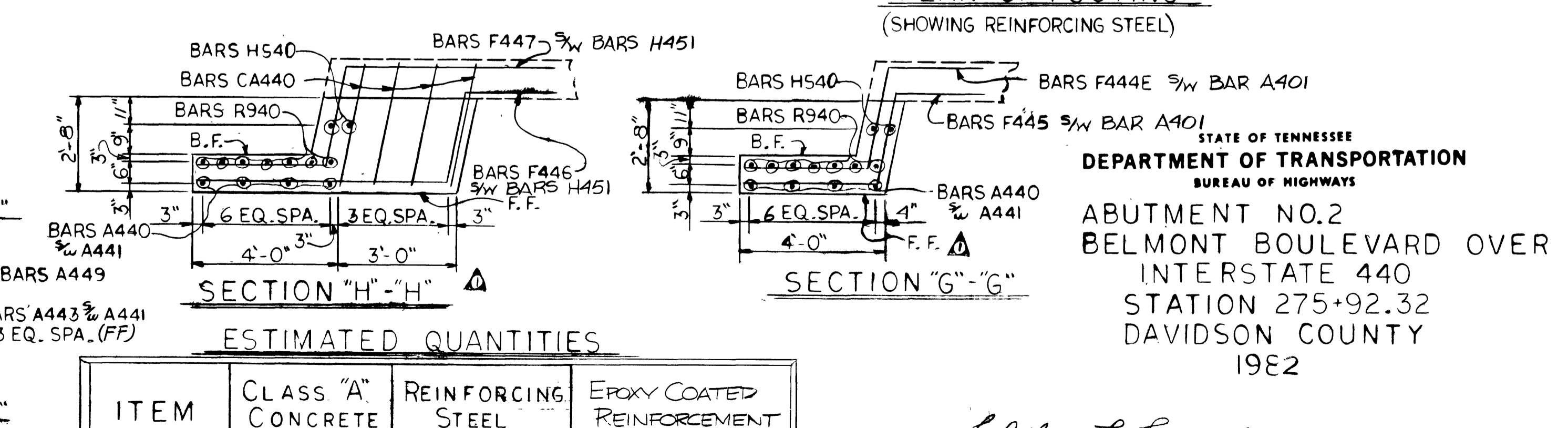
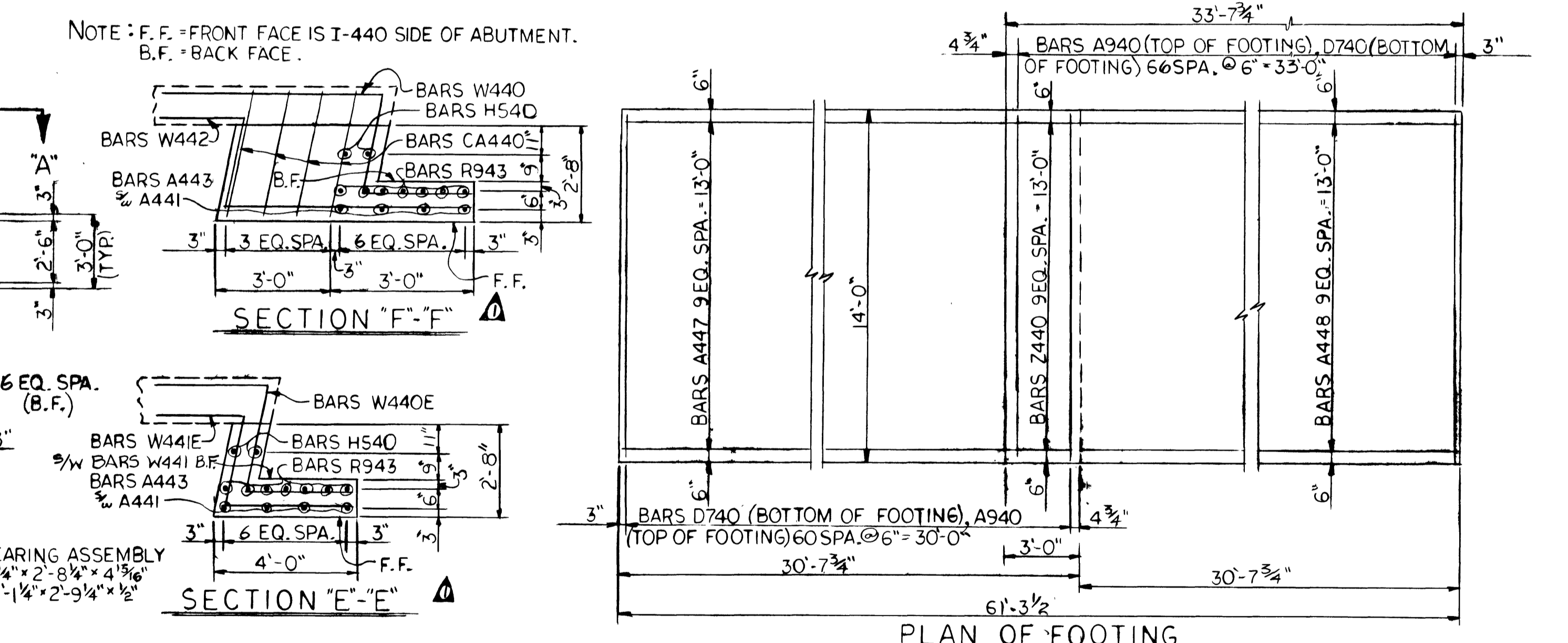
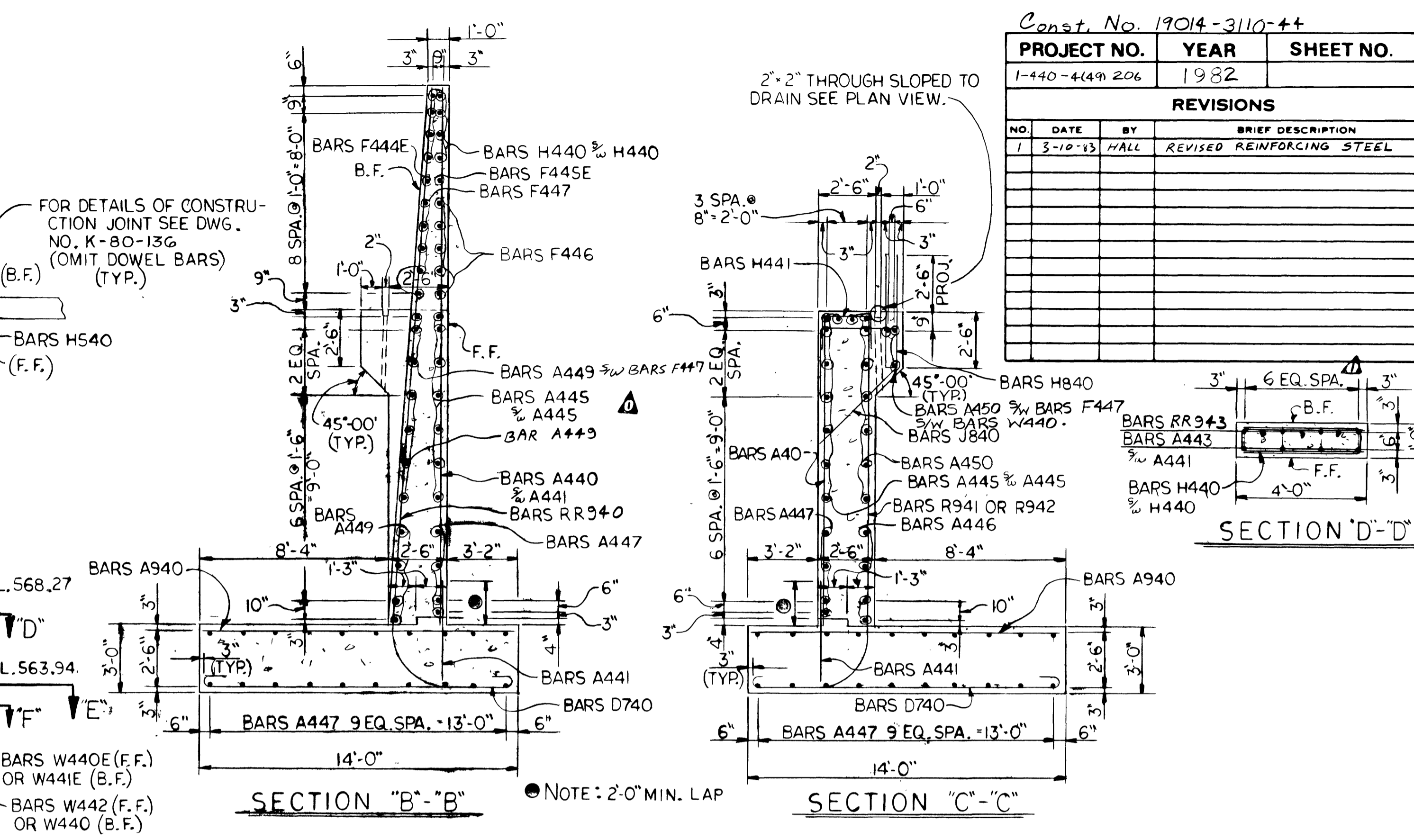
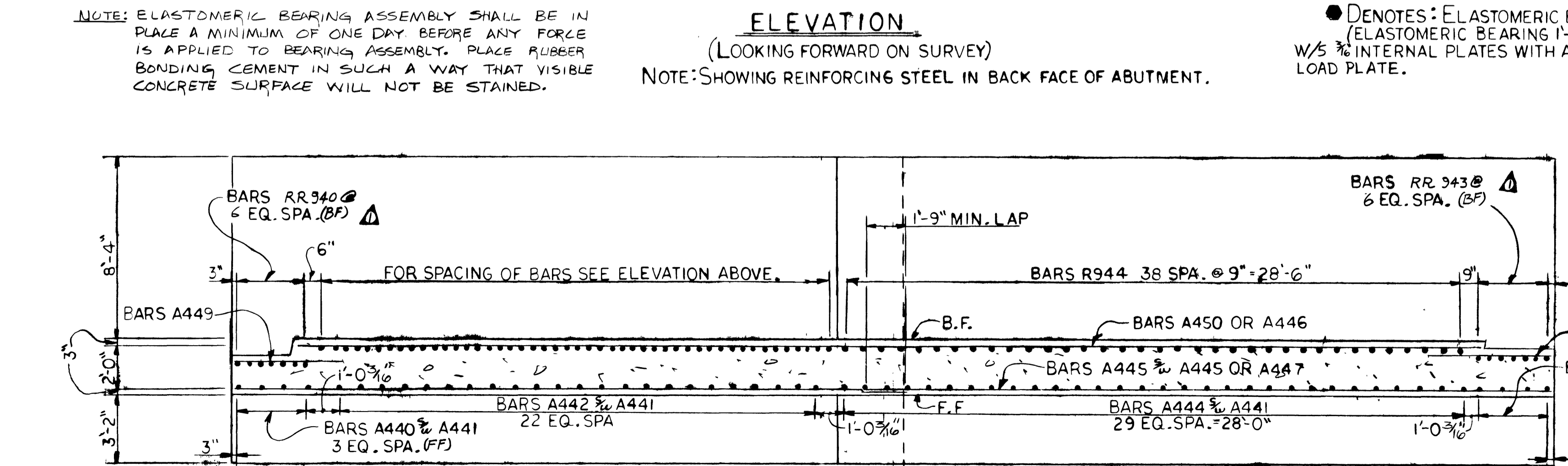
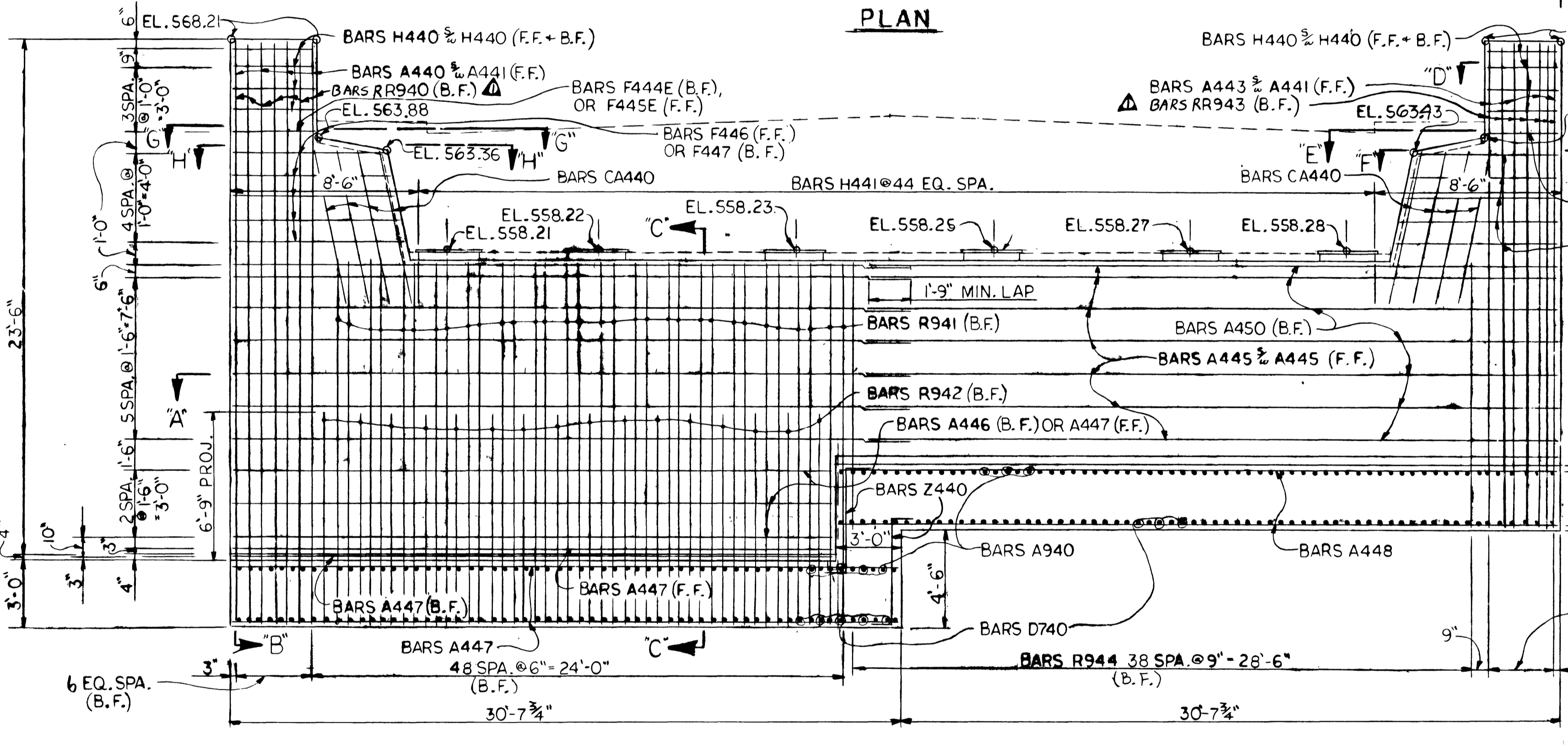
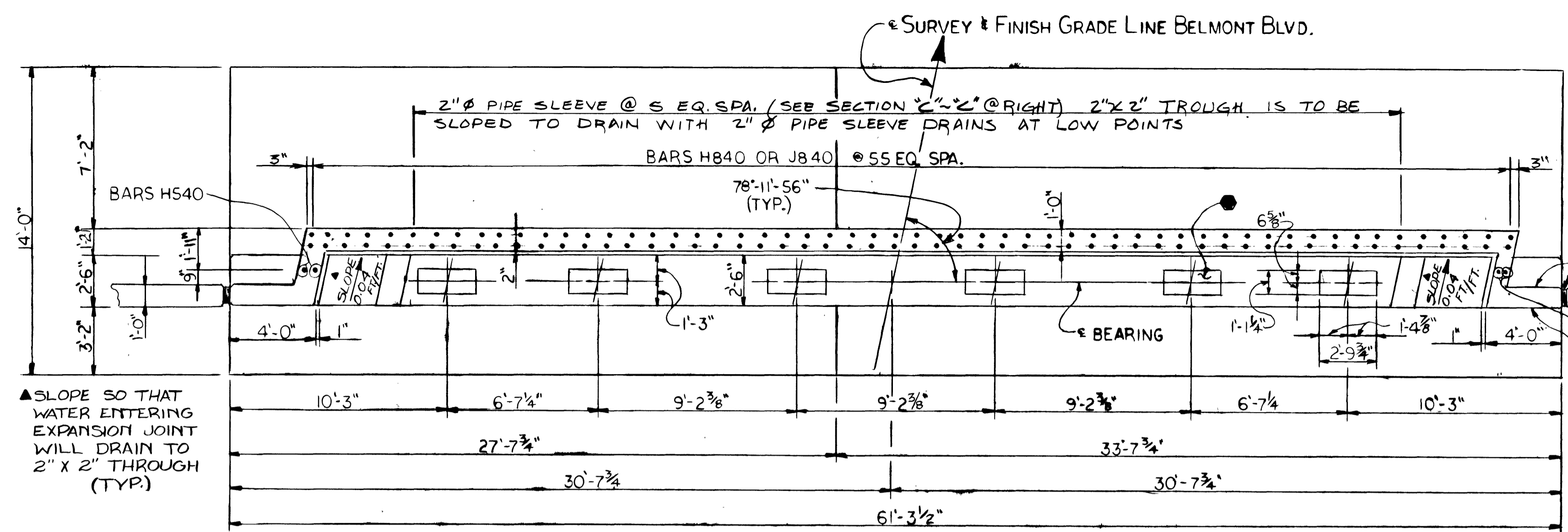
DESIGNED BY GARY HALL DATE 5-81
DRAWN BY BRANT LLOYD DATE 1-82
SUPERVISED BY ROBERT L. HARRISON DATE 1-82
CHECKED BY H.M.B. & G.H. DATE 1-82

NOTE: BEND BARS SO THAT 12" PIPE SLEEVE CAN BE INSTALLED.
NOTE: BEND OR MOVE BARS SO THAT 18" SLEEVE CAN BE INSTALLED, DO NOT CUT BARS.

Const. No. 19014-3110-44

PROJECT NO.	YEAR	SHEET NO.
1-440-449 206	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	3-10-83	HALL	REVISED REINFORCING STEEL



ESTIMATED QUANTITIES

ITEM	CLASS "A" CONCRETE C.Y.	REINFORCING STEEL LBS.	EPOXY COATED REINFORCEMENT LBS.
ABUT. NO. 2	178	22,901	13

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

ABUTMENT NO. 2
BELMONT BOULEVARD OVER
INTERSTATE 440
STATION 275+92.32
DAVIDSON COUNTY
1982

DESIGNED BY: GARY M. ... DATE: 12-81
DRAWN BY: FRANK F. FROST DATE: 12-81
SUPERVISED BY: R.L. HARRISON DATE: 12-81
CHECKED BY: H.M.P. + G.H. DATE: 12-81

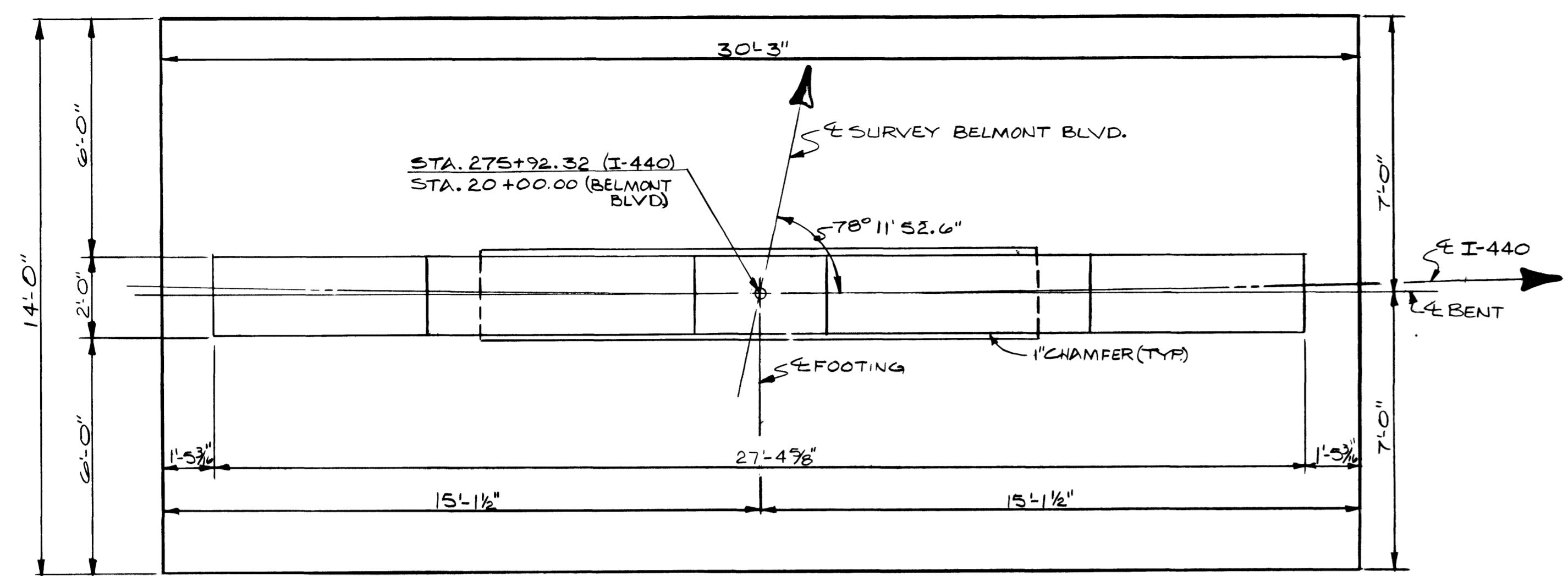
ENGINEER OF STRUCTURES
APPROVED: Lewis E. ... DIRECTOR OF HIGHWAYS

MICROFILMED

M-94-57

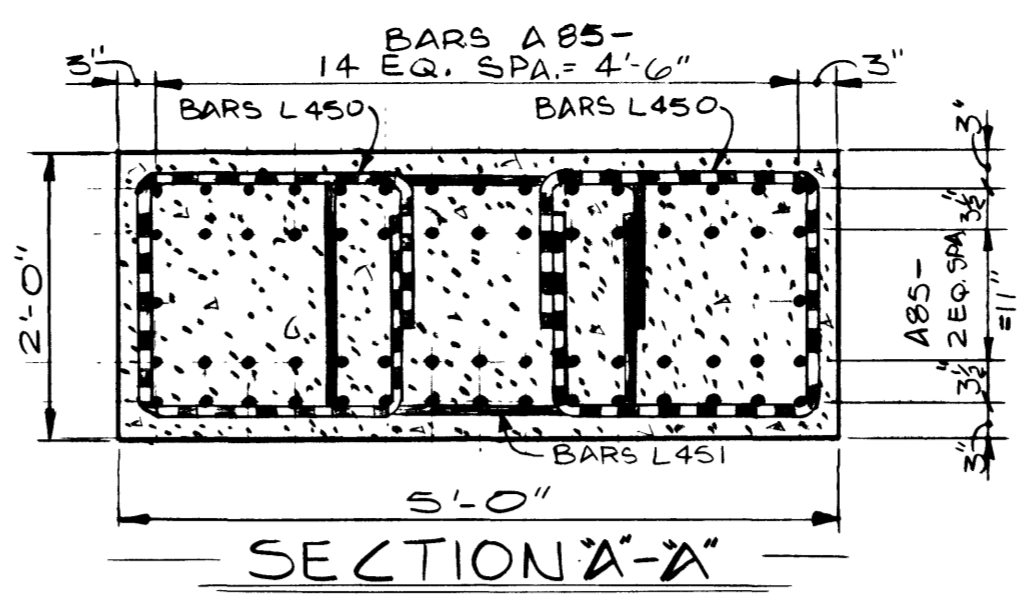
PROJECT NO.	YEAR	SHEET NO.
1-40-449 206	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

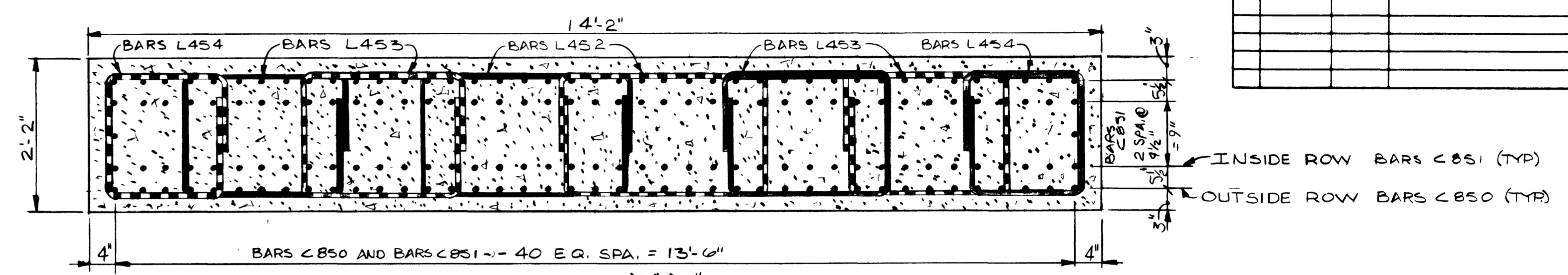


PLAN

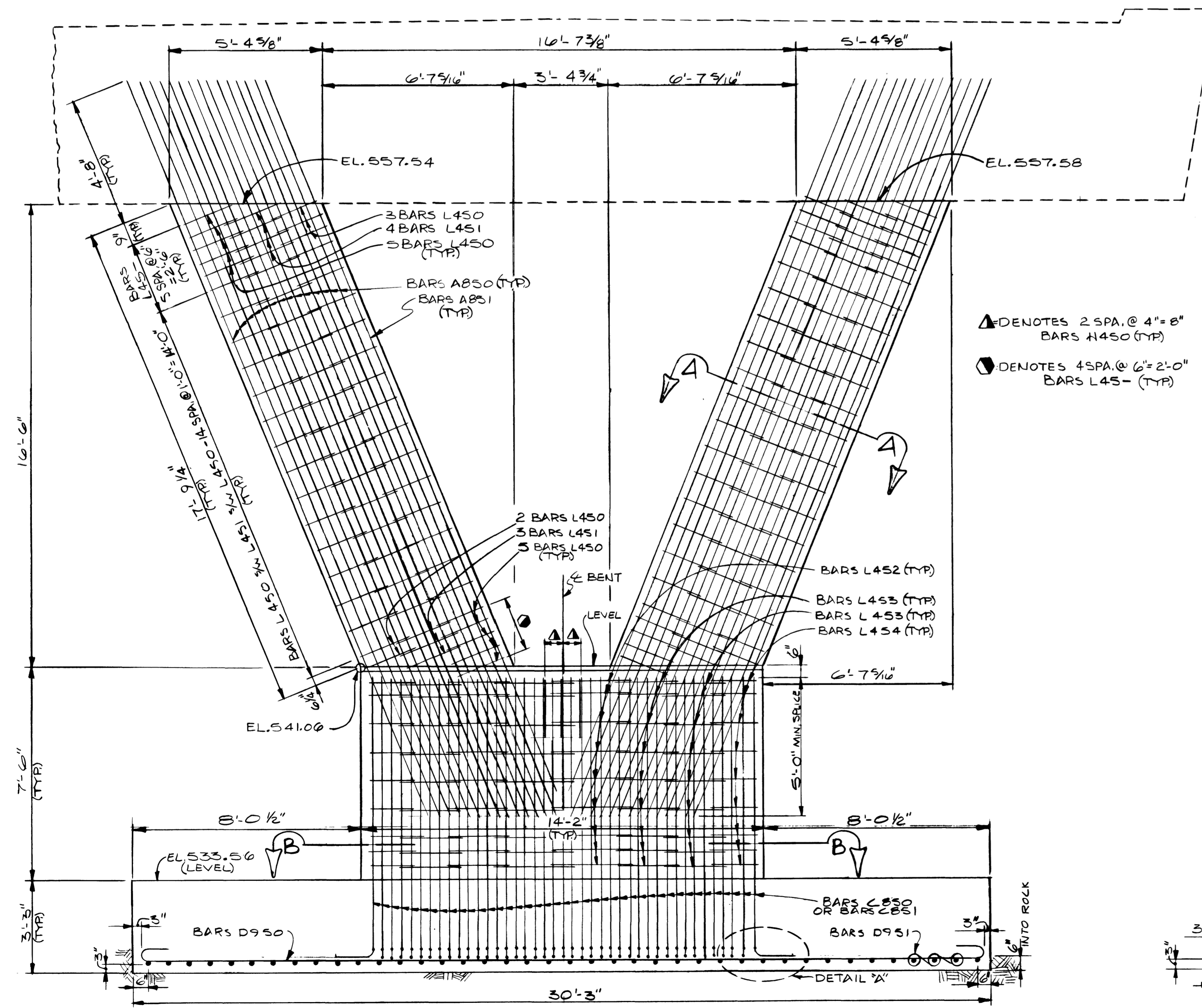
NOTE: COLUMN STEEL TO EXTEND 4'-8" INTO SUPERSTRUCTURE.



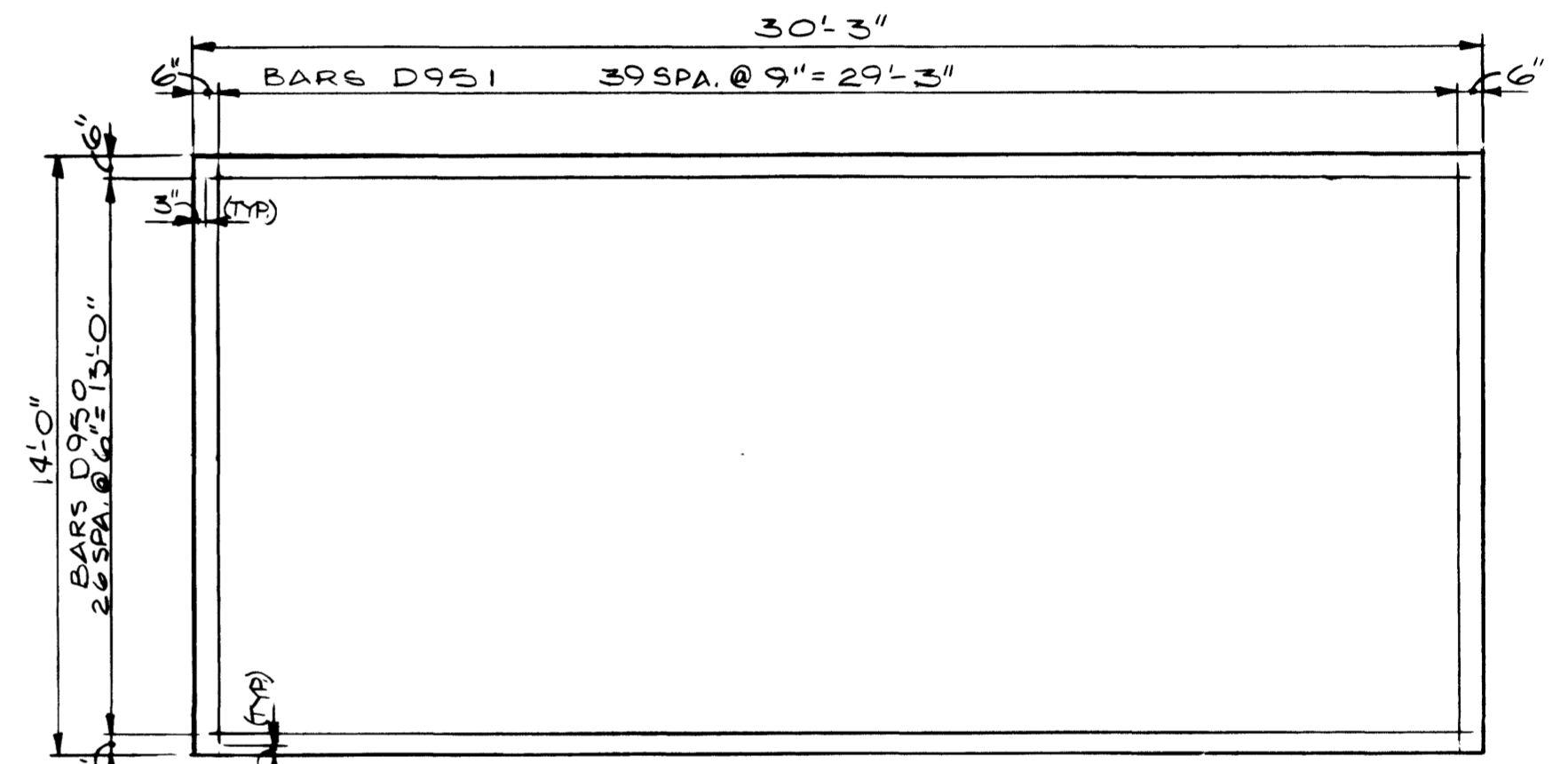
SECTION A-A



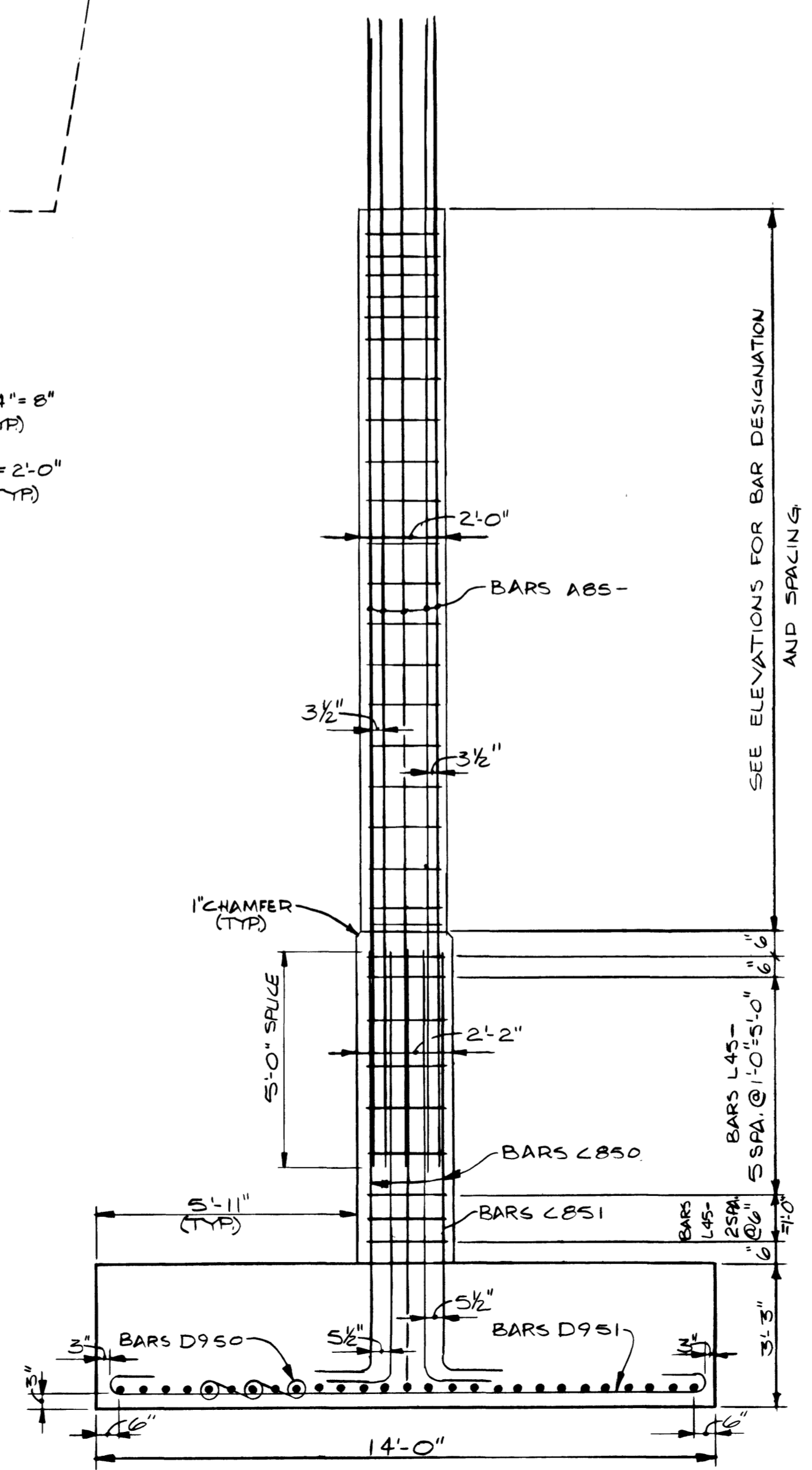
SECTION B-B



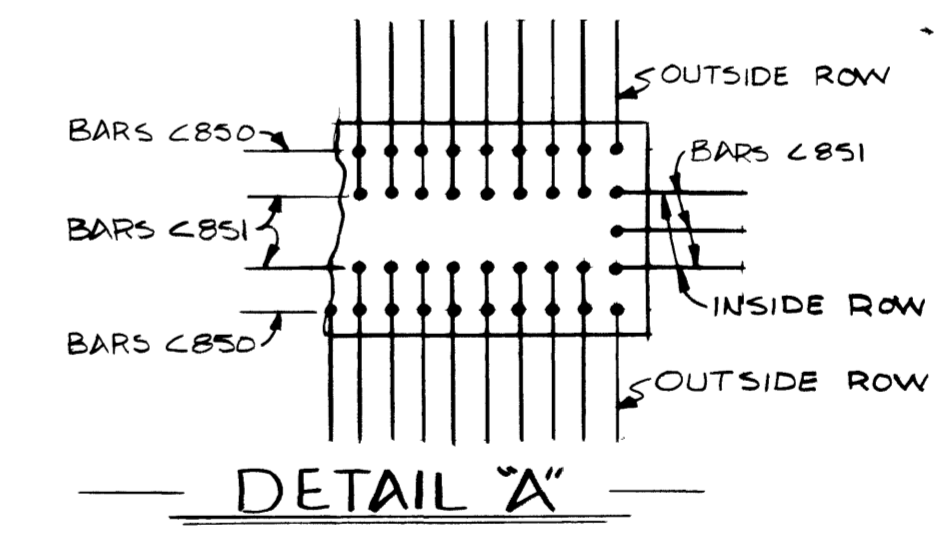
ELEVATION (LOOKING FORWARD ON SURVEY)



PLAN OF FOOTING



END ELEVATION



DETAIL A

ESTIMATED QUANTITIES		
ITEM	CLASS "A" CONCRETE	REINFORCING STEEL LBS.
BENT NO. 1	72.7	20,480

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 BENT NO. 1
 BELMONT BOULEVARD Over INTERSTATE-440
 STATION: 275+92.32
 DAVIDSON COUNTY
 1982

CORRECT *Clendon L. Lowell*
 ENGINEER OF STRUCTURES
 APPROVED *Louis Evans*
 DIRECTOR OF HIGHWAYS

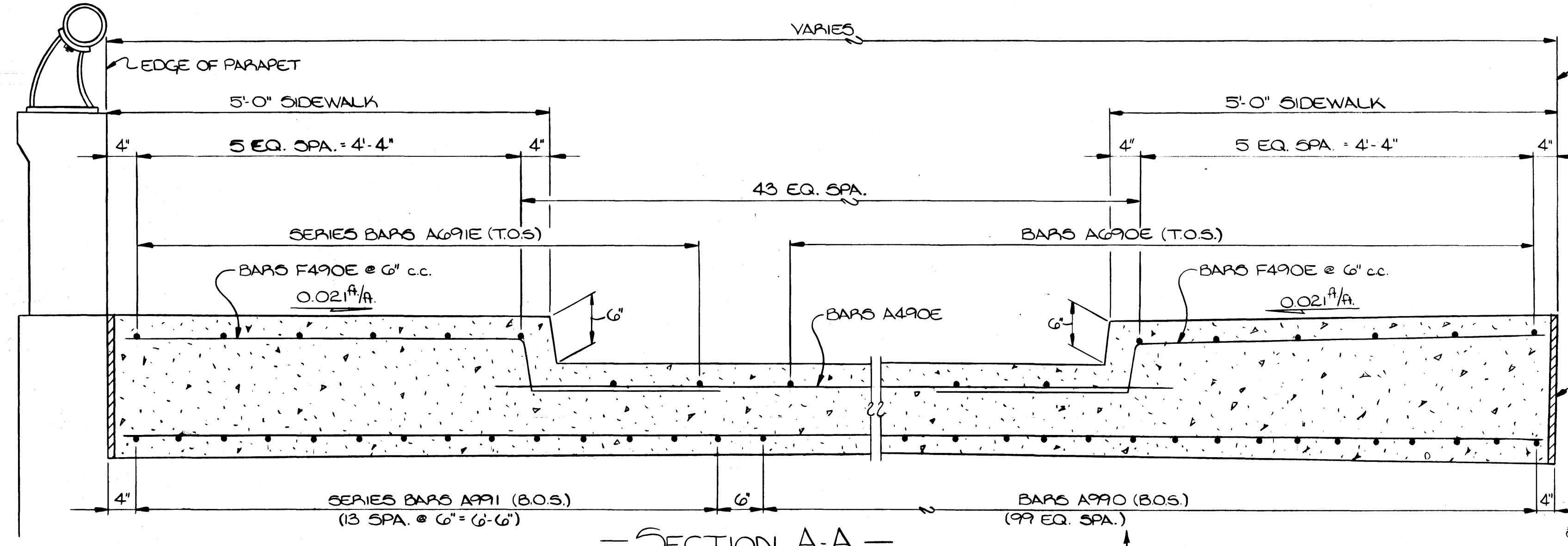
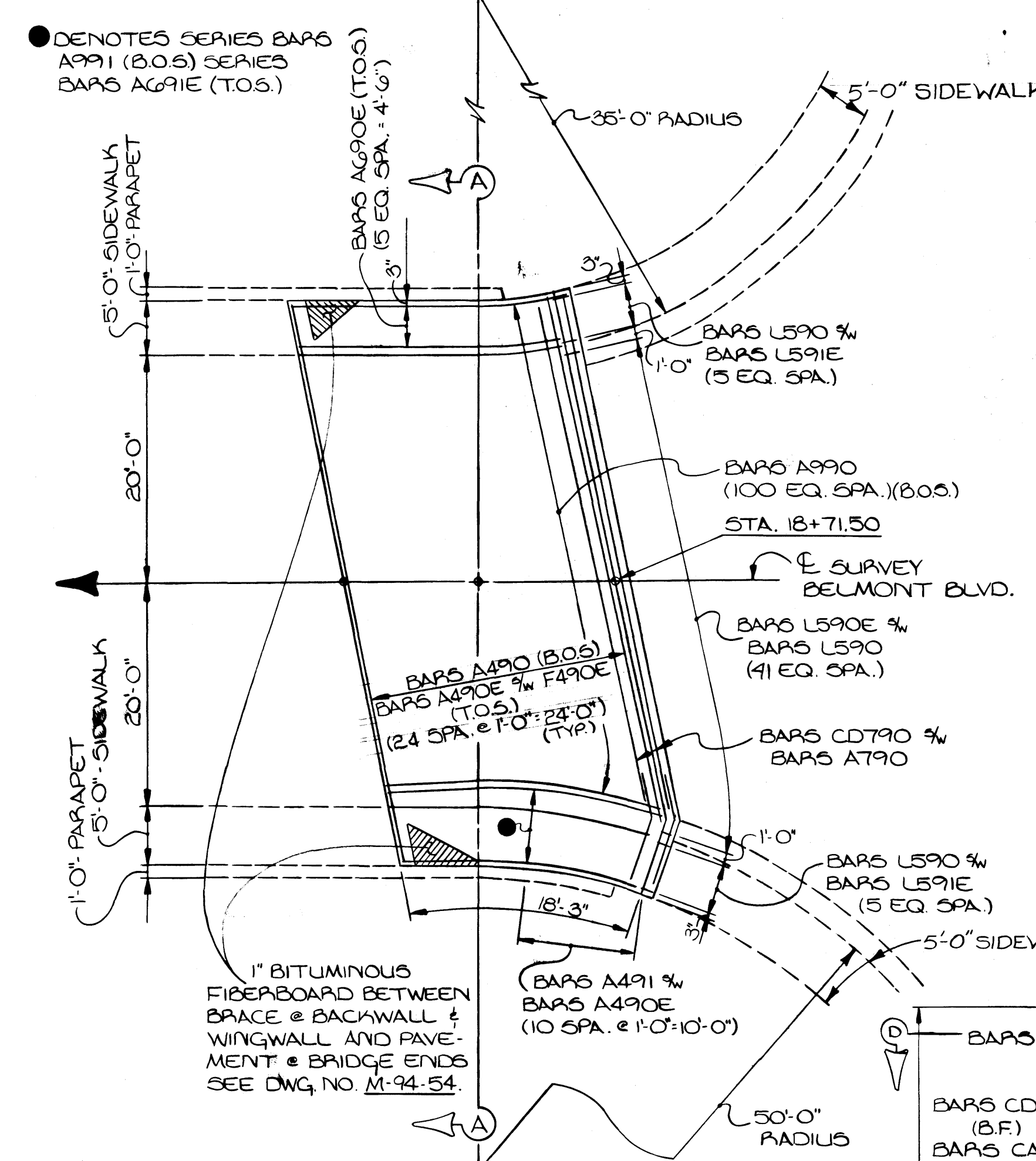
MICROFILMED

DESIGNED BY GARY HALL
 DRAWN BY GRANT LEROY LLOYD
 SUPERVISED BY ROGER L. HARRISON
 CHECKED BY H.M.B. + G.H.

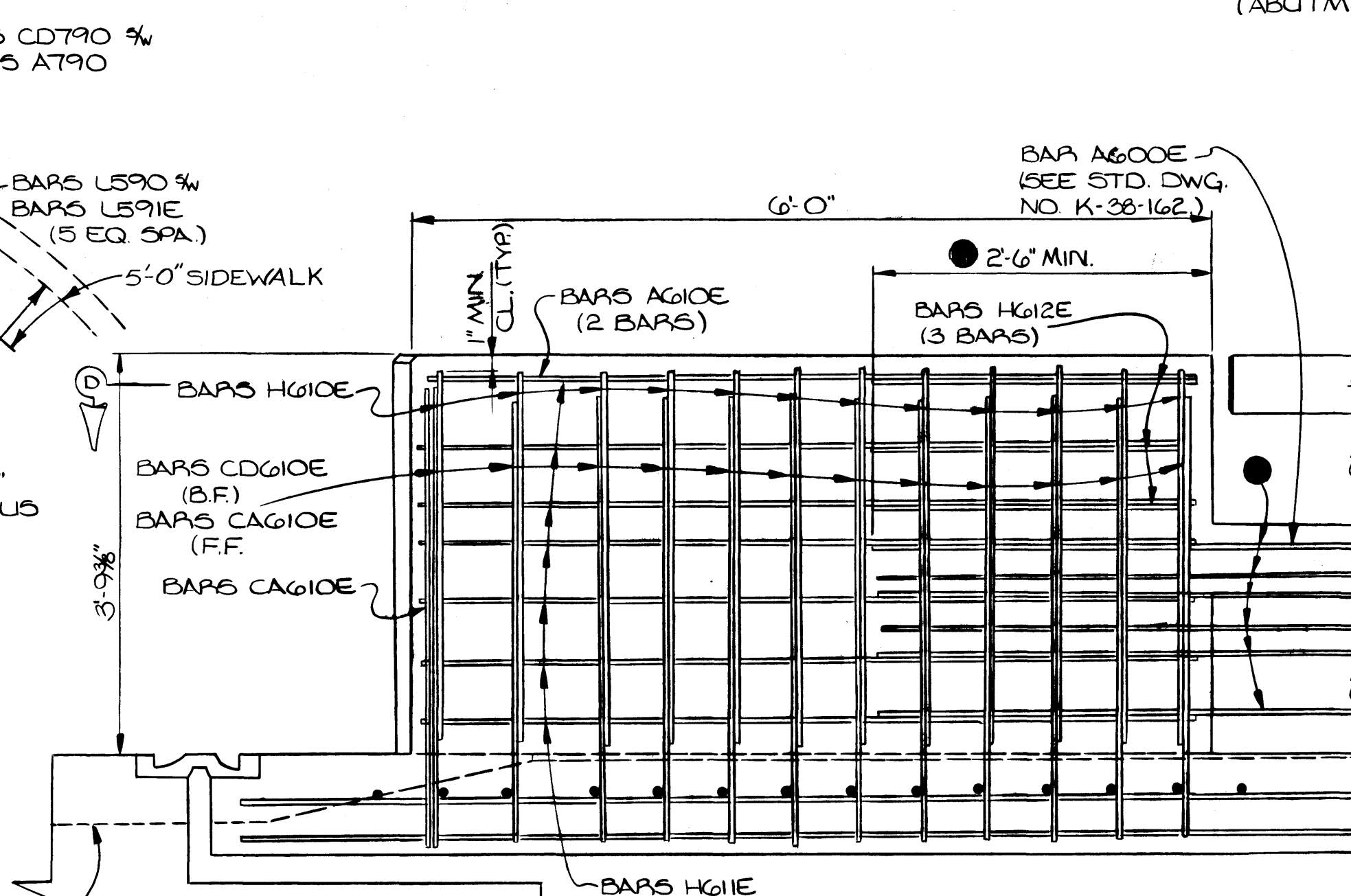
DATE 12-81
 DATE 12-81
 DATE 12-81

PROJECT NO.	YEAR	SHEET NO.
I440-4(4) 206	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION

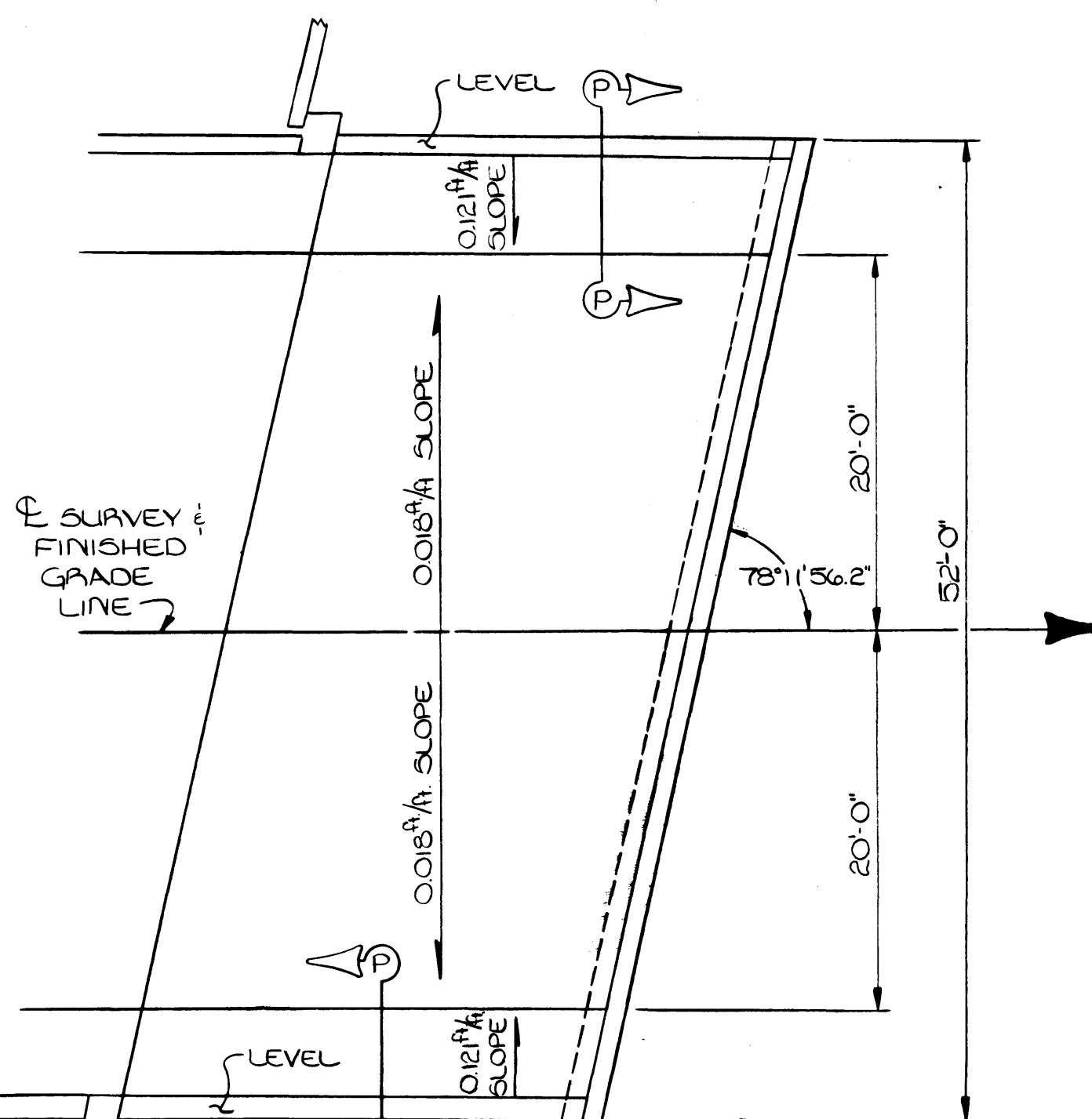


SECTION A-A
(ABUTMENT NO. 1)

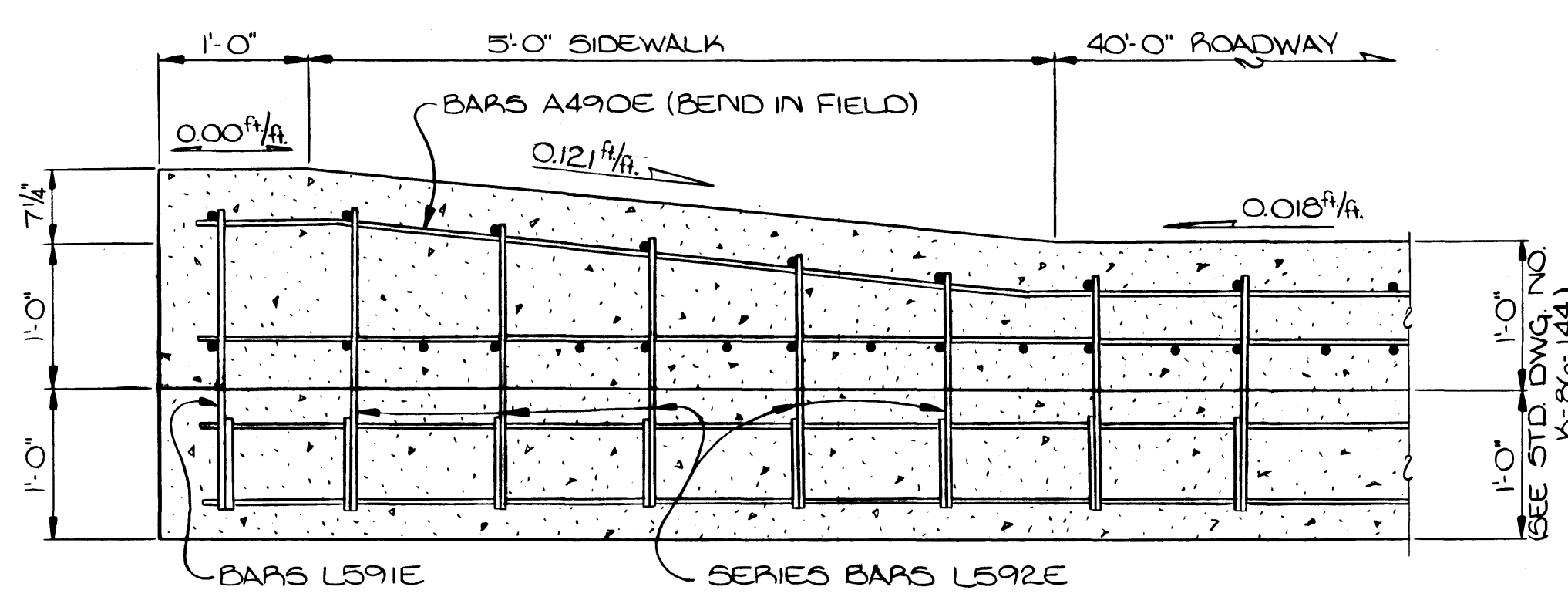


ELEVATION
(END POSTS @ ABUTMENT NO. 2)

NOTE: END OF OTHER BRIDGERAIL AND SECTION OF RETAINING WALL AT ABUTMENT NO. 2 ARE TO BE SIMILAR.

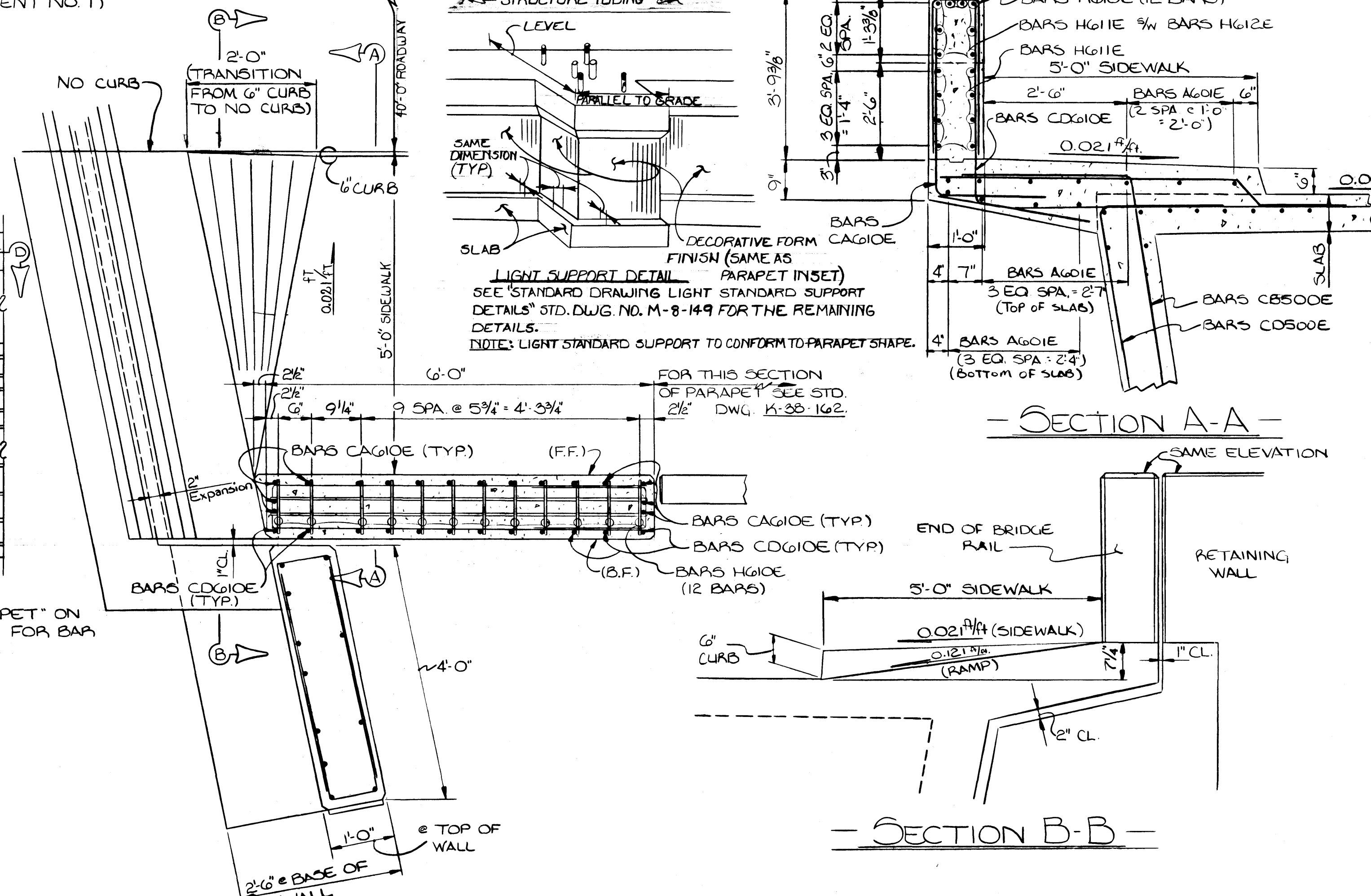


PLAN VIEW
(PAVEMENT @ BRIDGE END - ABUT. NO. 2)



SECTION P-P
(ABUTMENT NO. 2)

NOTE: FOR BAR SPACING AND ALL OTHER BARS SEE STD. DWG. NO. K-86-144.

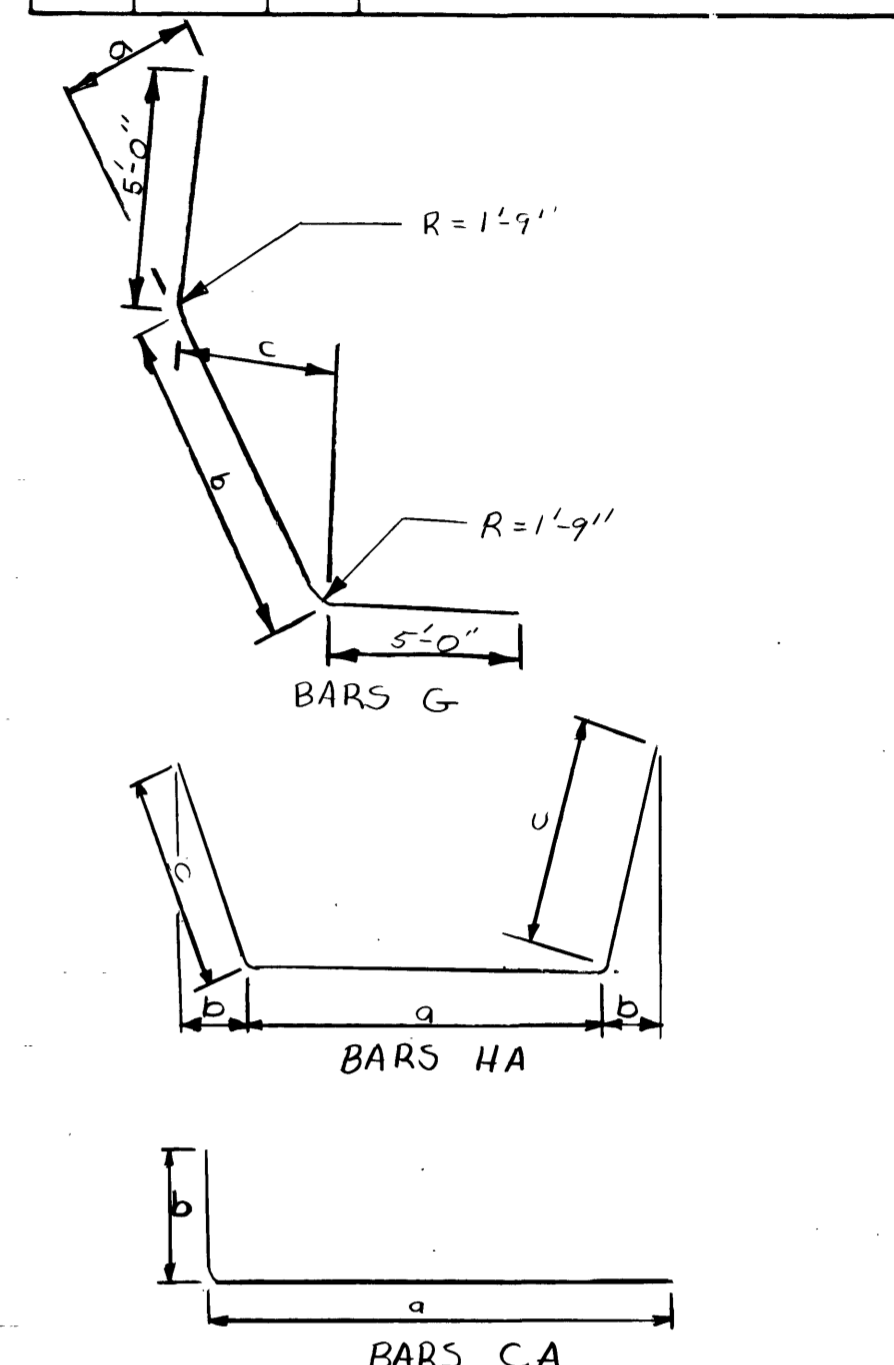


BILL OF STEEL

CONST. NO. 19014-3110-44

SUPERSTRUCTURE										SUPERSTRUCTURE (CONT.)										BENT NO. 1 (CONT.)										PAVEMENT AT BRIDGE ENDS (AT ABUT NO. 1) (CONT.)									
BAR	LOCATION	SIZE	NO RECD	BENDING DIMENSIONS				LENGTH	BAR	LOCATION	SIZE	NO RECD	BENDING DIMENSIONS				LENGTH	BAR	LOCATION	SIZE	NO RECD	BENDING DIMENSIONS				LENGTH	BAR	LOCATION	SIZE	NO RECD	BENDING DIMENSIONS				LENGTH				
				a	b	c	d						a	b	c	d						a	b	c	d						a	b	c	d					
A401E	END WALL	4	2					55'-0"	A701	BOTTOM SLAB	9	190					60'-0"	L451	COLUMNS	4	42	1'-8"	1'-0"	2'-0"		8'-4"	Series	SLAB	9	1	VARIES FROM 24'-0" TO 18'-0" IN INC. OF 10 1/2" (8 BARS)				24'-0"				
A500E	TOP SLAB	5	240					60'-0"	A1000	BOTTOM SLAB	10	8					44'-7"	L452	WALL	4	18	1'-10"	1'-0"	2'-11"		10'-4"	A991	FOOTING	7	8					49'-0"				
A501E	TOP SLAB	5	80					36'-0"	Series	WINGWALL	8	4	DIM A VARIES FROM 12'-9" TO 20'-2 3/4" IN INC. OF 1'-5 3/8" (6 BARS)					L453	WALL	4	36	1'-10"	1'-0"	2'-2"		8'-10"	A490E	SLAB (T.O.S.)	4	25					48'-0"				
A600E	TOP SLAB	6	409					46'-10"	A802									L454	WALL	4	18	1'-10"	1'-0"	1'-8"		7'-10"	A690E	SLAB	6	46					24'-0"				
A601E	TOP SLAB	6	44					19'-0"																			Series	SLAB	6	1	VARIES FROM 24'-0" TO 18'-0" IN INC. OF 10 1/2" (8 BARS)				168'-0"				
A602E	TOP SLAB	6	66					60'-0"																															
A603E	TOP SLAB	6	422					52'-9"	B800	BEGINNING DIAPH	8	10					52'-9"	A440	WALL	4	4					23'-6"	A691E												
A800E	BEGINNING DIAPH	8	6					28'-11"	CA500	INTERIOR WEBS	5	2376	4'-9"	2'-2"			5'-7"	A441	WALL	4	61					4'-11"													
A801E	END DIAPHRAGM	8	3					52'-10"	CA900	BOTTOM SLAB	9	28	5'-4"	5'-6"			60'-0"	A442	WALL	4	23					12'-6"	F490E	SLAB	4	50	2'-0"	2"	4'-4"	7"	6'-9"				
A1000E	SUPPORT DIAPH.	10	13					46'-7"	CA901	BOTTOM SLAB	9	34	2'-9"	5'-5"			30'-10"	A443	WALL	4	4					19'-0"	L590E	FOOTING	5	54	1'-2"	1'-0"	2'-2"		7'-5"				
A806E	END DIAPHRAGM	8	1					46'-6"	CA902	BOTTOM SLAB	9	34	2'-5"	5'-5"			30'-11"	A444	WALL	4	30					7'-10"	L591E	(SLAB) FOOTING	5	12	1'-2"	1'-0"	2'-8"		8'-5"				
A1100E	TOP SLAB	11	126					60'-0"	CA903	BOTTOM SLAB	9	28	5'-2"	5'-5"			57'-5"	A445	WALL	4	16					3'-11"													
A1101E	TOP SLAB	11	36					56'-0"	CA904	BOTTOM SLAB	9	12	2'-0"	5'-5"			27'-5"	A446	WALL	4	3					2'-6"													
A1102E	TOP SLAB	11	34					38'-0"	CA905	BOTTOM SLAB	9	12	2'-0"	5'-5"			27'-5"	A447	FOOTING	4	25					30'-2"	A490	SLAB (BOS)	4	25					54'-8"				
CA500E	INTERIOR WEBS	5	2376	4'-9"	2'-2"			6'-10"	CB500	INTERIOR WEBS	5	72	17'-9"	2'-2"	2'-3"		19'-11"	A448	FOOTING	4	20					33'-10"	A990	SLAB	9	111					24'-0"				
CA900E	TOP SLAB	9	36	17'-0"	5'-5"			12'-5"	CB600	END DIAPHRAGM	6	6	4'-0"	2'-11"			6'-0"	A449	WALL	4	20					6'-0"	L590	FOOTING/SLAB	5	55	1'-2"	1'-0"	2'-2"		7'-5"				
CA901E	TOP SLAB	9	34	22'-0"	5'-5"			27'-5"	CB601	END DIAPHRAGM	6	6	2'-4"	2'-11"			24'-3"	A450	WALL	9	11					55'-0"	L591E	FOOTING/SLAB	5	2	1'-2"	1'-0"	2'-8"		8'-5"				
CA1100E	TOP SLAB	11	42	30'-0"	5'-5"			35'-5"	CB800	BEGINNING DIAPH	8	9	28'-10"	6'-6"	1'-4"		35'-5"	A940	FOOTING	9	128					13'-4"	A490E	SLAB (T.O.S.)	4	25					54'-8"				
CA1101E	TOP SLAB	11	42	37'-6"	5'-5"			42'-11"	CD500	INTERIOR WEBS	5	72	17'-9"	2'-2"	2'-2 3/8"		19'-11"	CA440	WALL	4	8	7'-0"	3'-4"			10'-4"	A690E	SLAB	6	56					24'-0"				
CB500E	EXTERIOR WEBS	5	594	5'-2"	2'-2"	4"		7'-4"	CD501	EXTERIOR WEBS	5	594	3'-0"	3'-2"	3'-3"		6'-11"	D740	FOOTING	7	128					14'-8"	A790E	FOOTING	7	8					54'-8"				
CD500E	EXTERIOR WEBS	5	594	4'-7"	3'-0"	4"		7'-7"	CD601	END DIAPHRAGM	6	6	2'-4"	2'-0"	2'-11"		26'-5"	H440	WALL	4	16	8"	3'-6"			7'-7"	C690E	FOOTING/SLAB	6	56	3'-0"				3'-8"				
D1000E	SUPPORT DIAPH.	10	13	46'-5"				50'-5"	CD800	BEGINNING DIAPH	8	9	28'-10"	6'-6"	1'-4"		35'-5"	H441	WALL	4	45	2'-2"	3'-0"			8'-11"	C990E	SLAB	9	111	4'-0"				5'-3"				
F600E	SIDE WALK	6	836	5'-8"	3"	2'-9"	6"	8'-0"	CD801	WINGWALL	8	4	9'-0"	12'-0"	11'-4"		21'-0"	H451	WALL	4	10	4"	3'-0"			6'-3"	L590E	FOOTING/SLAB	5	44	1'-2"	1'-0"	2'-2"		7'-5"				
H800E	END WALL	8	58	7'-8"	6'-0"			12'-7"	G800	BEGINNING DIAPH	8	11	2'-0"	3'-3"	1'-6"		4'-7"	HB40	WALL	8	58	7'-8"	7'-0"			14'-7"	Series	FOOTING/SLAB	5	2	1'-2"	1'-0"			39'-7"				
L500E	SUPPORT DIAPH	5	42	6'-2"	1'-0"	4'-8"		11'-2"	G801	BEGINNING DIAPH	8	11	2'-3"	9'-6"	6'-0"		20'-0"	J840	WALL	8	56	3'-4"	3'-0"	1'-0"		12'-8"	L592E				DIM 'C' VARIES FROM 2'-3" TO 2'-8" IN INC. OF 1" (5 BARS)								
L501E	SUPPORT DIAPH	5	123	2'-2"	1'-0"	5'-2"		15'-6"	G8600	BEGINNING DIAPH	6	105	6'-7"	2'-7"	2'-0"	4'-9"	15'-11"	RR940	WALL	9	7	1'-9"	4'-0"	26'-7"	11/16	29'-10"													
L502E	SUPPORT DIAPH	5	42	1'-11"	1'-0"	5'-2"		8'-11"	H411	TOP RET. WALL	4	8	8"	2'-2"			5'-7"	R941	WALL	9	32	1'-9"	4'-0"	16'-3"		18'-6"													
A401	END WALL	4	13					55'-0"	H500	END WALL	5	52	4'-11"	6"			5'-0"	R942	WALL	9	16	1'-9"	4'-0"	9'-6"		12'-9"													
A502	BOTTOM SLAB	5	44					36'-0"	H502	ROADWAY BRKT.	5	54	1'-8"	6"			2'-7"	RR943	WALL	9	7	1'-9"	4'-0"	21'-7"	13/16	24'-10"													
A503	WEBS	5	216					60'-0"	H4500	BOTTOM SLAB EXT. WEB	5	398	43'-5"	7"	3'-3"		49'-10"	R944	WALL	9	39	1'-9"	4'-0"	10'-4"		14'-0"													
A504E	TOP SLAB	5	18					6'-0"										W440	WALL	4	8	3'-0"	7"	2'-8"		6'-3"													
Series	BENT DIAPHRAGM	6	2	DIM A VARIES FROM 44'-0" TO 45'-4 1/2" IN INC. OF 3 1/4" (6 BARS)				268'-0"										W441	WALL	4	1	3'-4"	7"	2'-8"		6'-7"													
A600									A740	BEAM	7	22					54'-2"	W442	WALL	4	5	6'-6"	7"	2'-8"		9'-9"													
HAB06	END DIAPHRAGM	8	5	44'-8"	1'-0"	5'-5"		55'-7"	CA600	BEAM	6	106	7'-6"	2'-6"			10'-0"	F446	WALL	4	5	6'-6"	7"	2'-8"		9'-9"													
Series	WINGWALL	6	4	DIM A VARIES FROM 3'-6" TO 7'-4" IN INC. OF 4 3/8" (12 BARS)				65'-0"	L540	BEAM	5	54	2'-6"	1'-0"	4'-5"		14'-8"	F447	WALL	4	9	3'-2"	7"	2'-8"		6'-5"													
A603									L541	BEAM	5	2	2'-6"	1'-0"	4'-7"		15'-0"	Z440	FOOTING	4	20	4'-8"	2'-0"			8'-7"													
A604	END DIAPHRAGM	6	6					42'-0"										F444E	WALL	4	1	3'-2"	7"	2'-8"		6'-5"													
A605	WINGWALL	6	18					7'-6"	A850	COLUMNS	8	114					28'-2"	F445E	WALL	4	1	3'-4"	7"	2'-8"		6'-7"													
A606	WINGWALL	6	2					7'-0"	A851	COLUMNS	8	10					27'-3"	W440E	WALL	4	1	3'-0"	7"	2'-8"		6'-3"													
A800	BEGINNING DIAPH	8	4					52'-9"	CB50	FOOTING	8	82	9'-8"				10'-7"																						
A801	WING WALL	8	32					20'-6"	CB51	FOOTING	8	84	10'-11"				10'-11"	A490	BOTTOM OF SLAB	4	25					50'-9"													
A803	WING WALL	8	4					11'-6"	D950	FOOTING	9	27	29'-9"				32'-11"	A991	BOTTOM OF SLAB	4	11					10'-0"													
A805	END DIAPHRAGM	8	2					43'-10"	D951	FOOTING	9	40	13'-6"				16'-8"	A990	SLAB (BOS)	9	101					24'-0"													
A900	BOTTOM SLAB	9	30					53'-0"	H450	WALL	4	3	1'-10"	2'-0"			5'-9"	CD790	FOOTING	7	8	7'-0"	6'-0"	5'-3"		13'-0"													
H501	ROADWAY BRKT.	5	48	5'-0"	2'-0"			9'-0"	L450	COLUMNS	4	84	1'-8"	1'-0"	1'-10"		8'-0"	L590	FOOTING	5	54	1'-2"	1'-0"	2'-2"		7'-5"													

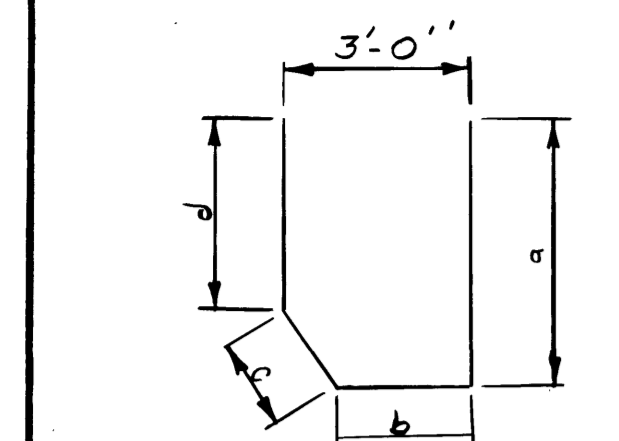
NO	DATE	BY	BRIEF DESCRIPTION
1	2-3-83	HALL	DELETED A BAR
2	3-10-83	HALL	CHANGED "R" BARS



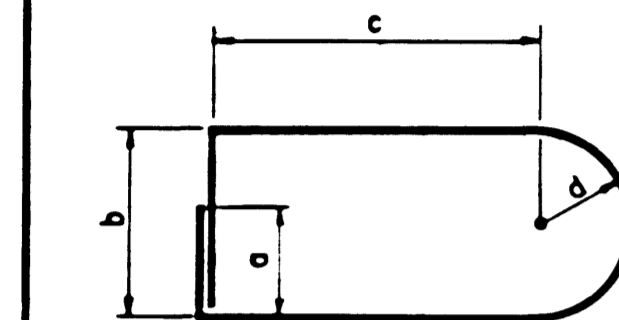
REINFORCING STEEL CODE

TYPE	SIZE	SERIES
A	5	06

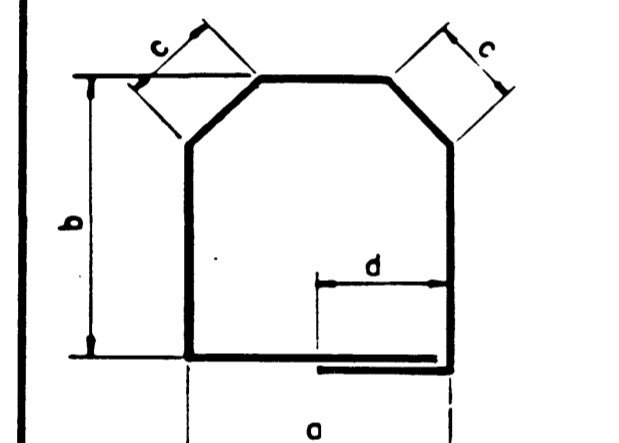
NOTE: Dimensions shown on this sheet are outside of outside of bar. Standard C R S I Hook Details Shall Apply, Except As Noted.



BARS X



BARS Y



BARS M

Length

BARS A

BARS B

BARS C