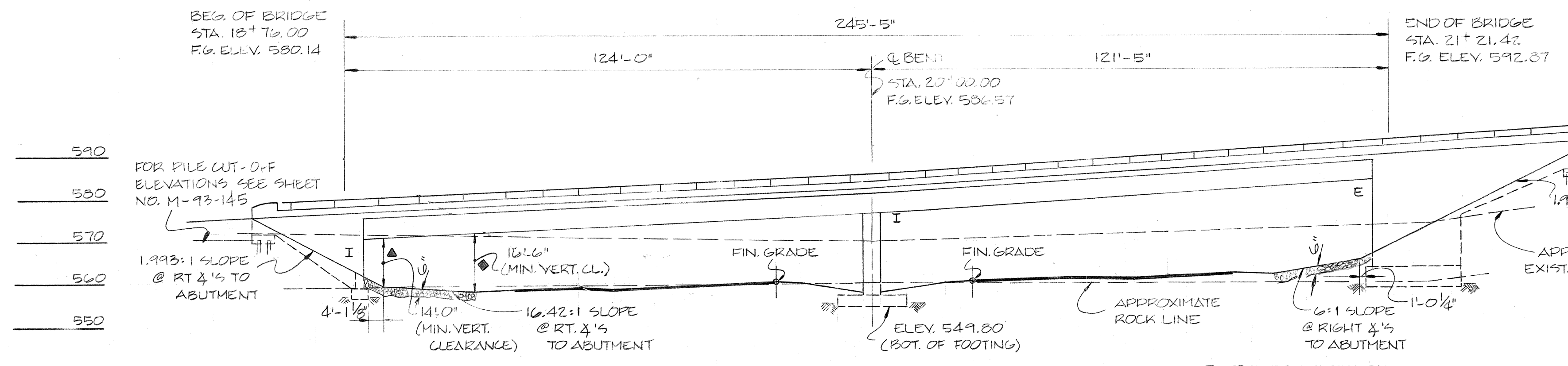


PROJECT NO.	YEAR	SHEET NO.
I-440-4(49)206	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
▲4-7-83		AMS	STRUCT. LIGHTING DETAILS

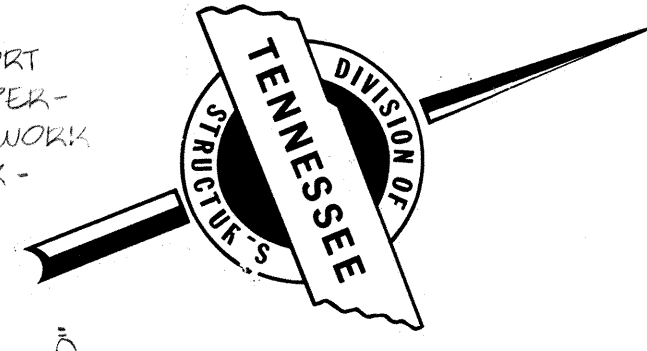


- ◆ DENOTES: ACTUAL VERTICAL CLEARANCE = 16'-10 1/8"
- ▲ DENOTES: ACTUAL VERTICAL CLEARANCE = 14'-4 1/8"

NOTE: MACHINED RIP-RAP FOR SLOPE PROTECTION SHALL BE SIZE 1 OR 2, SUBSECTION 903.22, AND MEET THE REQUIREMENTS OF SUBSECTION 918-10, AND TO BE PAID FOR UNDER ITEM 701-05-03. SEE STD. DWG. NO. RD-5A-1.

- I: DENOTES INTEGRAL
- E: DENOTES EXPANSION

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

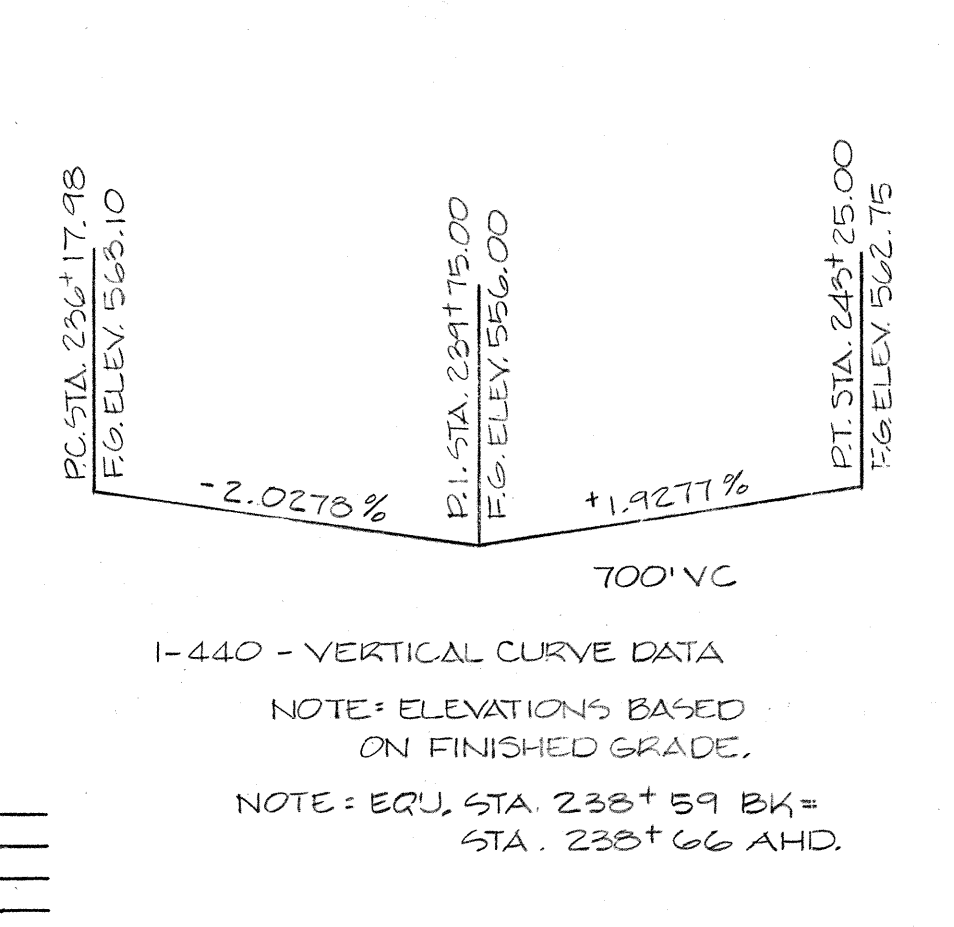
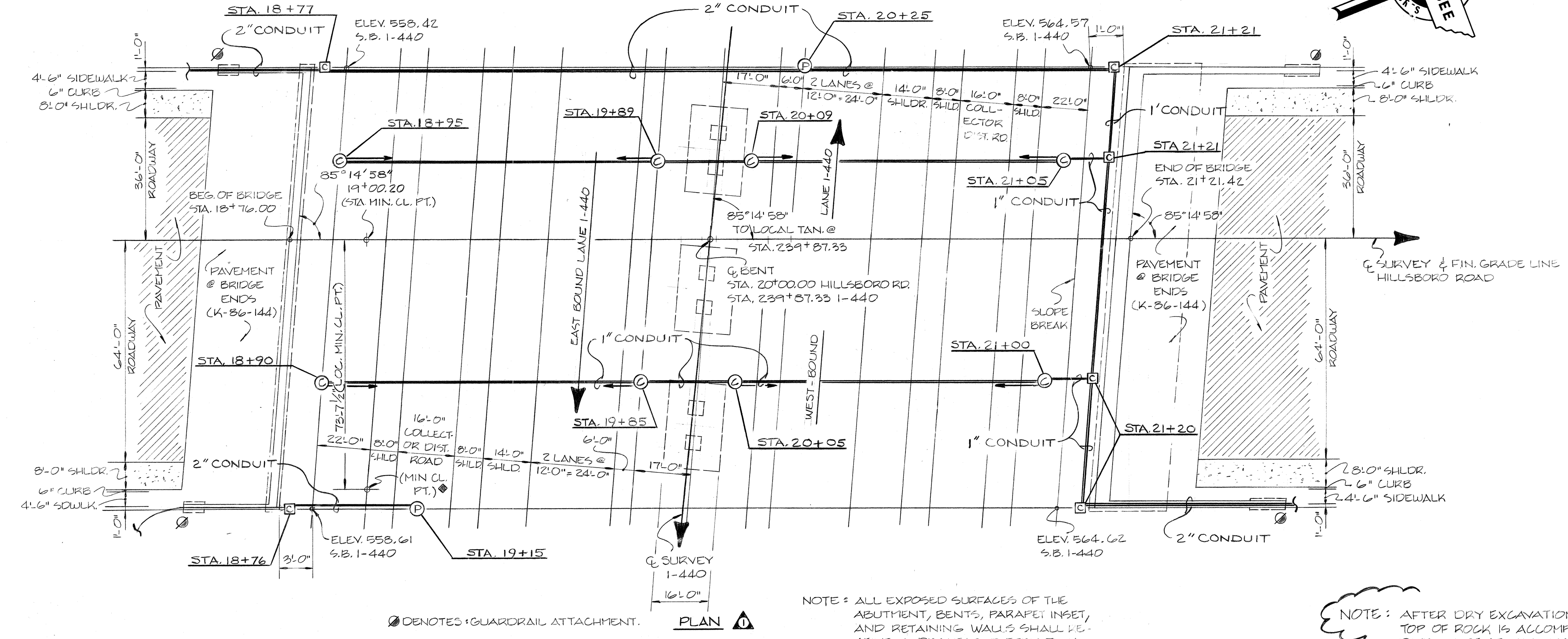


LAYOUT	DWG. NO.	REVISION DATE
GENERAL NOTES & EST. QUANTITIES	M-93-134	4-7-83
FOUNDATION DATA	M-93-136	11-10-83
SUPERSTRUCTURE	M-93-137	
SUPERSTRUCTURE DETAILS	M-93-138	4-27-83
SUPERSTRUCTURE DETAILS	M-93-139	2-1-83
SUPERSTRUCTURE DETAILS	M-93-140	2-1-83
SUPERSTRUCTURE DETAILS	M-93-141	2-1-83
SUPERSTRUCTURE DETAILS	M-93-142	4-27-83
ABUTMENT NO. 1	M-93-143	11-10-83
ABUTMENT NO. 1 DETAILS	M-93-144	2-1-83
ABUTMENT NO. 2	M-93-145	2-1-83
ABUTMENT NO. 2 DETAILS	M-93-146	2-1-83
ABUTMENT NO. 2 DETAILS	M-93-147	2-1-83
ABUTMENT NO. 2 DETAILS	M-93-148	2-1-83
ABUTMENT NO. 2 DETAILS	M-93-149	9-1-82
ABUTMENT NO. 2 DETAILS	M-93-150	2-1-83
BENT	M-93-151	4-29-83
BILL OF STEEL	M-93-152	4-29-83
BILL OF STEEL	M-93-153	11-10-83
BRIDGE RAILINGS - CONCRETE PARAPET W/STRUCTURAL TUBING - K-38-162		

LIST OF STANDARD DRAWINGS	DWG. NO.	REV. DATE
STD. REINFORCING BAR SUPPORT	K-80-14	8-27-76
MISC. ABUTMENT & DRAINAGE DETAILS	K-85-150	1-9-78
REINFORCED CONCRETE PAVEMENT AT BRIDGE ENDS	K-86-144	7-17-81

TENN. STD. PRECAST, PRESTRESSED BRIDGE DECK PANELS	DWG. NO.	REV. DATE
	K-80-15A	8-1-79
STD. FILE DETAILS	H-5-111	11-27-78
▲ LIGHT STR. SUPPORT DETAILS	M-8-149	11-20-78

LIST OF SPECIAL PROVISIONS	PROV. NO.	REV. DATE
REGARDING EPOXY-COATED REINFORCING STEEL	907A	9-8-81
REGARDING APPROVAL OF SHOP DRAWINGS	105A	9-8-81



I-440 HORIZONTAL CURVE DATA

PI = STA. 245+30.21

Δ = 45°17'56" RT.

ΔC = 36°32'56"

DC = 2°30'

R = 2,291.83'

T₈ = 1,132.24'

L_s = 350.0'

L_c = 1,146.96'

θ_s = 4.375°

P = 2.22'

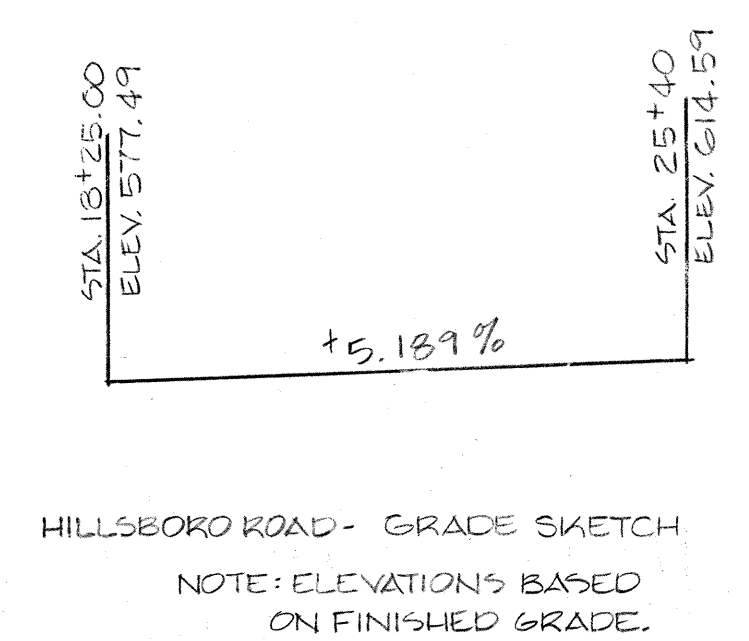
K = 174.97'

X_C = 349.80'

Y_C = 8.91'

E_s = 193.92'

S.E. = 0.05%



DESIGNED BY J. PRINCE
 DRAWN BY DONNA BRILEY
 SUPERVISED BY FIELDS & SMITH
 CHECKED BY

DATE 10/81
 DATE 10/81
 DATE

CORRECT *Robert L. Jewell*
 ENGINEER OF STRUCTURES

APPROVED *Louis Guard*
 DIRECTOR OF HIGHWAYS

SPECIAL NOTE FOR CONCRETE BRIDGE DECKS: 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.

CONST. NO. 1901A-3110-44

PROJECT NO.	YEAR	SHEET NO.
I-440-4(9)206	1982	

REVISIONS		
NO.	DATE	BRIEF DESCRIPTION
1	5-24-82	J.P. NOTE (2) REMOVED
2	7-23-82	J.P. QUANTITY CHANGE IN ITEM 7 604-02.03 604-03.01
3	2-1-83	J.P. GENERAL NOTES & ESTIMATED QUANTITIES
4	2-9-83	J.P. PILE QUANTITY & PAYMENT @ BRIDGE ENDS
5	4-7-83	A.M.S. STRUCT. LIGHTING DETAILS
6	11-10-83	J.P. Show Black Quantities Added

GENERAL NOTES

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

LOADING: H520-44

DESIGN SPECIFICATIONS: AASHTO 1977 EDITION WITH ADDENDA.

CONCRETE: TO BE CLASS 'A' F'C 3,000 P.S.I., EXCEPT CONCRETE FOR BRIDGE DECK, SEE SPECIAL NOTE ABOVE.

REINFORCING STEEL: TO BE ASTM A615 GRADE 60. STANDARD CRS1 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 NO. 907A.

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. SEE STANDARD DRAWING K-80-15A. THE CONTRACTOR SHALL TAKE STEPS TO ASSURE THE STABILITY OF THE EXTERIOR GIRDER AGAINST TWISTING OR OVERTURNING DURING SLAB POURING OPERATIONS.

SPECIAL NOTE FOR UTILITIES: IT IS INTENDED THAT THE COST OF MATERIALS AND LABOR NECESSARY FOR THE COMPLETE INSTALLATION OF UTILITIES SHALL BE BORNE BY OTHERS AND SHALL NOT BE PAID FOR AS A PART OF THIS CONTRACT. THE CONTRACTOR SHALL COOPERATE WITH OTHERS IN THE INSTALLATION OF UTILITIES WITH NO ADDITIONAL COMPENSATION ALLOWED THE CONTRACTOR AS A RESULT.

BEARING DEVICES SHALL BE IN ACCORDANCE WITH THE DETAILS AND DIMENSIONS SHOWN ON DRAWING M-93-146. THE CONTRACTOR MAY ALSO SUBMIT ALTERNATE DETAILS FOR APPROVAL. (DEAD LOAD REACTION = 142 KIPS, LIVE LOAD REACTION = 54 KIPS, TOTAL MOVEMENT = 1 1/4", AND ANGULAR ROTATION = 0.0070885 RAD.)

PILES: TO BE HP10 X 42 DRIVEN TO REFUSAL ON ROCK OR A MINIMUM BEARING OF 55 TONS FOR THE ABUTMENT WINGS.

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.

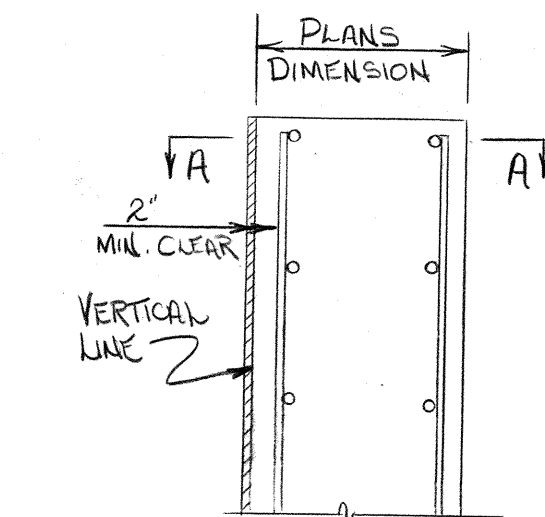
BRIDGE RAIL SYSTEM: BUILD PARAPETS WITH STRUCTURAL TUBING ACCORDING TO STANDARD DRAWING K-38-162

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 FORMLINER BG308 CONCRETE HARP, LITOTEX FORMLINER FRACTURED FINISHED GROOVED T-150, SYMONS 3/4" NARROW FRACTURED FIN P/C 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 FINISH SKETCH THIS SHEET. ALL ESTIMATED QUANTITIES ARE BASED ON PLANS DIMENSIONS.

ESTIMATED QUANTITIES

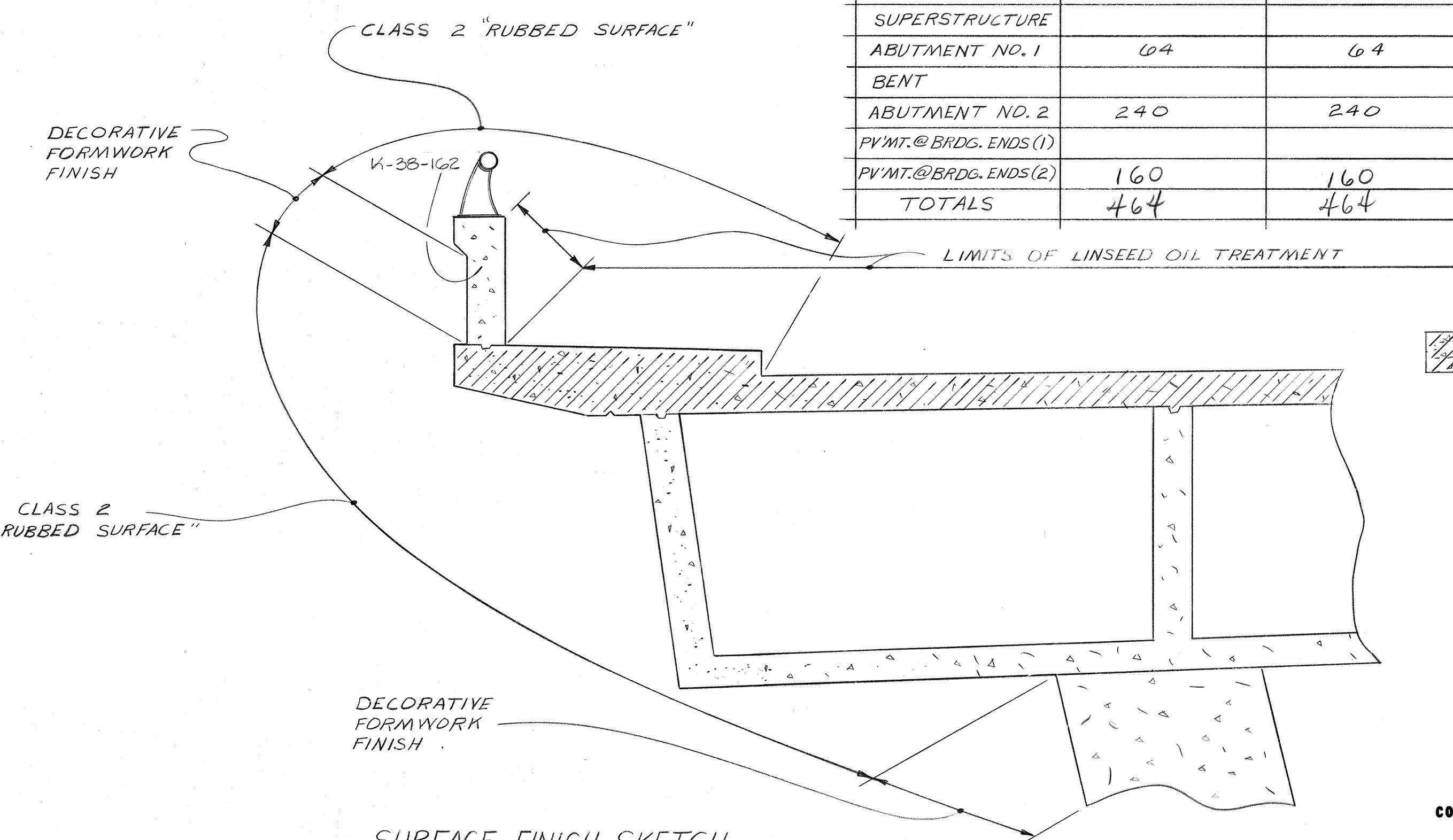
ITEM NO.'S	204-02.01	204-04.01	204-05	604-03.01	604-02.03	604-03.02	604-03.03	620-14	709-05.03	710-10	710-11	920-01.11	908-21.03
ITEM	DRY EXCAVATION (BRIDGES) C.Y. (1)	ROCK EXCAVATION (BRIDGES) C.Y. (1)	ROCK DRILLING (BRIDGES) L.F.	CLASS 'A' CONCRETE (BRIDGES) (C.Y.) (3) (4)	EPOXY-COATED REINFORCING STEEL LB. (1)	STEEL BAR REINFORCEMENT (BRIDGES) LB. (2) (3)	LINSEED OIL TREATMENT SQ. Y.	CONCRETE PARAPET WITH STRUCTURAL TUBING L.F. (6)	MACHINED RIP-RAP (SIZE 1 OR 2) C.Y. (9)	6" PERF. C.M. PIPE (18 GA) W/POROUS BACKFILL L.F. (3)	6" C.M. PIPE UNDERDRAINS (18 GA) L.F.	ROADWAY EXPANSION DEVICE L.F. (7)	BEARINGS (M-93-146) EA.
SUPERSTRUCTURE				1,272.0	596,517	437,266							
ABUTMENT NO. 1	187	95	30	357.0	42,449	24,246				128	11		
BENT		444	18	269.4		63,712							
ABUTMENT NO. 2	967	693	30	1,075.4	918	172,894				158	26		13
PVMT. @ BRDG. ENDS (1)				137.3	8,379	25,931							
PVMT. @ BRDG. ENDS (2)				135.8	8,890	20,033							
TOTALS	1,154	1,232	78	3,247.4	657,193	754,082	3,795	650	133	286	37	129.5	13

ITEM NO.'S	606-22.03	606-32.03	606-42.03	604-01.12	714-01.03
ITEM	STEEL PILES (10") (DRIVING) L.F. (5)	STEEL PILES (10") (FURNISH DOMESTIC) L.F. (6)	STEEL PILES (10") (FURNISH FOREIGN) L.F. (7)	CLASS 'A' CONCRETE (BRIDGE DECK) (C.Y.)	STRUCTURE LIGHTING (BRIDGE NO. 2) (10) L.S. (5)
SUPERSTRUCTURE				844.1	
ABUTMENT NO. 1	64	64	64		
BENT					
ABUTMENT NO. 2	240	240	240		
PVMT. @ BRDG. ENDS (1)					
PVMT. @ BRDG. ENDS (2)	160	160	160		
TOTALS	464	464	464	844.1	1



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.

- NOTES
- (1) EXCAVATION BASED ON LOWER ROAD PROFILE.
 - (2) COST OF BRIDGE POLYETHYLENE SHEETING AND ALL MISCELLANEOUS ITEMS NECESSARY FOR INSTALLATION TO BE INCLUDED IN COST OF PERFORATED C.M. PIPE.
 - (3) 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.
 - (4) ALL REINFORCING STEEL IN THE TRAFFIC FACE OF PARAPETS SHALL BE EPOXY COATED. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 620-14.
 - (5) ACCEPTABLE EXPANSION DEVICES ARE AS200 BY ACME; ON-FLEX 25 BY OLD NORTH MFG. CO; OR WABO-MAURER SA200 OR EQUAL. TOTAL REQ'D. MOVEMENT = 1 1/4"
 - (6) STEEL PILES FOR PAVEMENT AT BRIDGE ENDS ARE LOCATED AT ABUTMENT NO. 2.
 - (7) MACHINED RIP-RAP FOR SLOPE PROTECTION SHALL BE SIZE 1 OR 2, SUBSECTION 903.22 AND MEET THE QUALITY REQUIREMENT OF SUBSECTION 918-10 AND PAID FOR UNDER ITEM 709-05.03. SEE STANDARD DRAWING NO. RD-SA-1.
 - (8) LUMP SUM FOR STRUCTURE LIGHTING, ITEM NO 714-01.03 INCLUDES 375 FT. 2" Ø CONDUIT WITH PULL WIRES, 585 FT. 1" Ø CONDUIT WITH PULL WIRES, 14 PULL BOXES, 8 ANCHOR BOLTS AND ALL NECESSARY MATERIALS FOR INSTALLATION OF STRUCTURE LIGHTING.



DENOTES: AREA OF CLASS 'A' CONCRETE BRIDGE DECKS, ITEM NO 604-01.12.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
GENERAL NOTES AND ESTIMATED QUANTITIES
HILLSBORO ROAD OVER
I-440
STATION 239+87.33
DAVIDSON COUNTY
1982

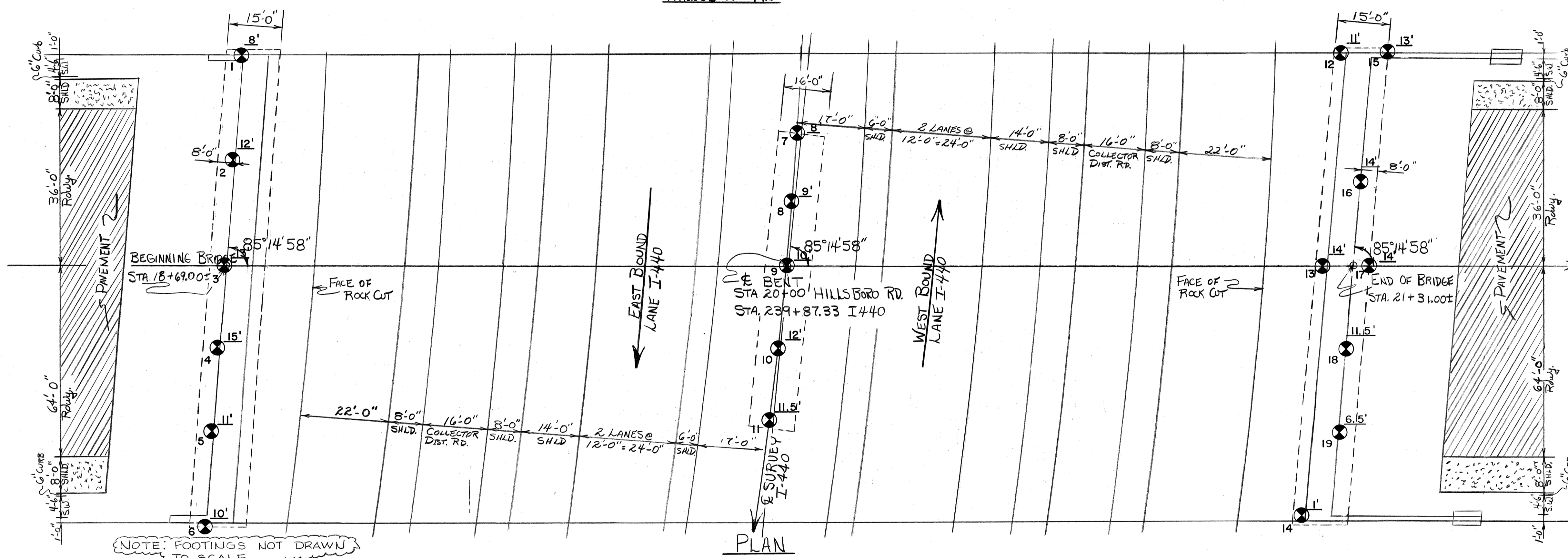
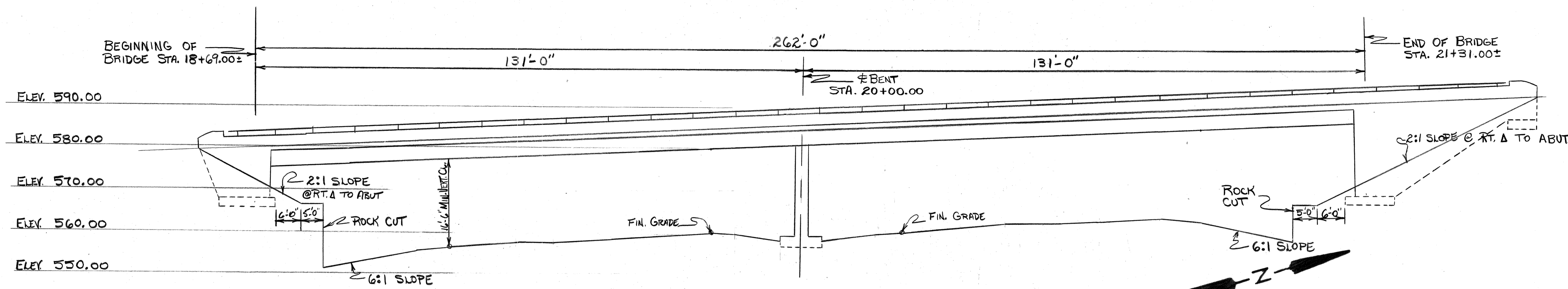
DESIGNED BY J. PRINCE DATE 10/81
DRAWN BY D. BRILEY DATE 10/81
SUPERVISED BY FELTUS & SMITH DATE 10/81
CHECKED BY DATE

CORRECT
APPROVED
ENGINEER OF STRUCTURES
DIRECTOR OF HIGHWAYS

M-93-135

MICROFILMED

PROJECT NO.	YEAR	SHEET NO.	
I-440-4(49)206	1982		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION



NOTE: FOOTINGS NOT DRAWN TO SCALE.

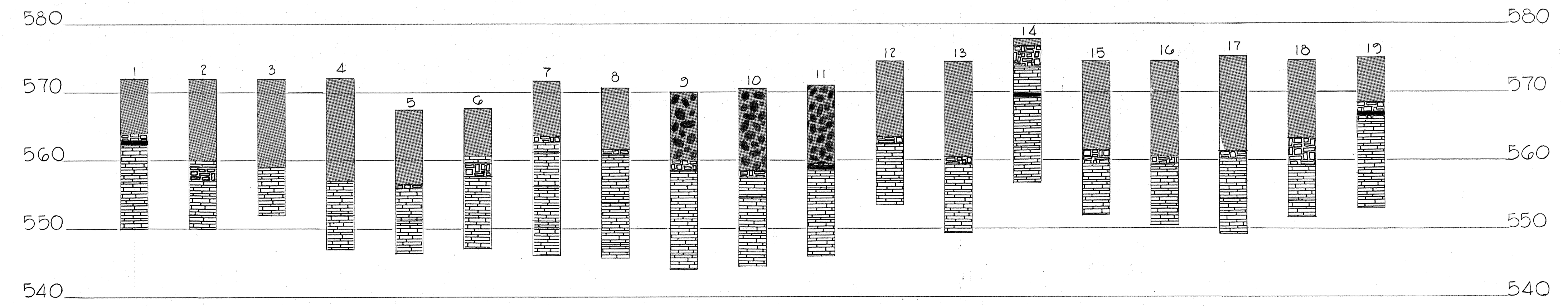
REQUIRED INFORMATION

1) APPROXIMATE EXISTING GROUND LINE & ROCK LINE.

2) SUFFICIENT GROUND & CORING INFORMATION FOR FOUNDATION

1. G. 572.± R. 564.±	11. G. 571.± R. 559.5±
2. G. 572.± R. 560.±	12. G. 574.5 R. 563.5
3. G. 572.± R. 559.±	13. G. 574.3 R. 560.3
4. G. 572.± R. 557.±	14. G. 577.8± R. 576.8±
5. G. 557.5± R. 556.5±	15. G. 574.3± R. 561.3±
6. G. 557.6± R. 560.6±	16. G. 574.5± R. 560.5±
7. G. 571.7± R. 563.7±	17. G. 575.2± R. 561.2±
8. G. 570.5± R. 561.5±	18. G. 574.5± R. 563.0±
9. G. 570.± R. 560.±	19. G. 575.± R. 568.5±
10. G. 570.5± R. 558.5±	

NOTE: THIS DRAWING IS FOR FOUNDATION INFORMATION ONLY, AND IS NOT TO BE USED AS A LAYOUT.



Legend

- CAVITY
- CLAY
- CLAY & BOULDERS
- WEAT. LIMESTONE
- LIMESTONE (10 TONS/FT.²)

CORE HOLE NO. 8

DEPTH AUGERED TO REFUSAL

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

FOUNDATION DATA
HILLSBORO RD. OVER I-440
STA. 20+00.00
DAVIDSON CO.
1981

DESIGNED BY _____ DATE _____
DRAWN BY J. Prince DATE 7-2-81
SUPERVISED BY _____ DATE _____
CHECKED BY _____ DATE _____

CORRECT _____ ENGINEER OF STRUCTURES
APPROVED _____ DIRECTOR OF HIGHWAYS

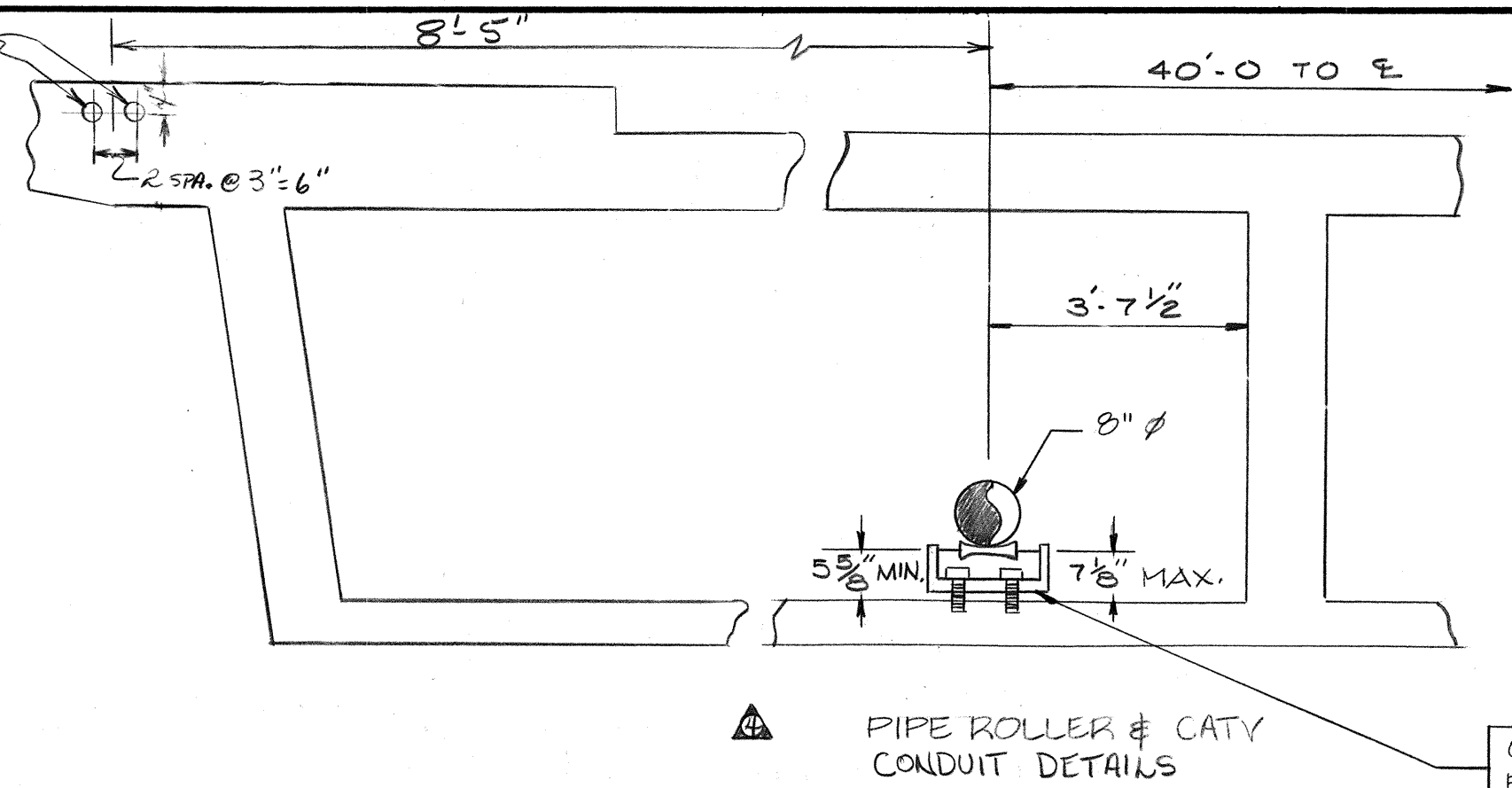
MICROFILMED

PROJECT NO.	YEAR	SHEET NO.
I-440-4(43) 206	1982	

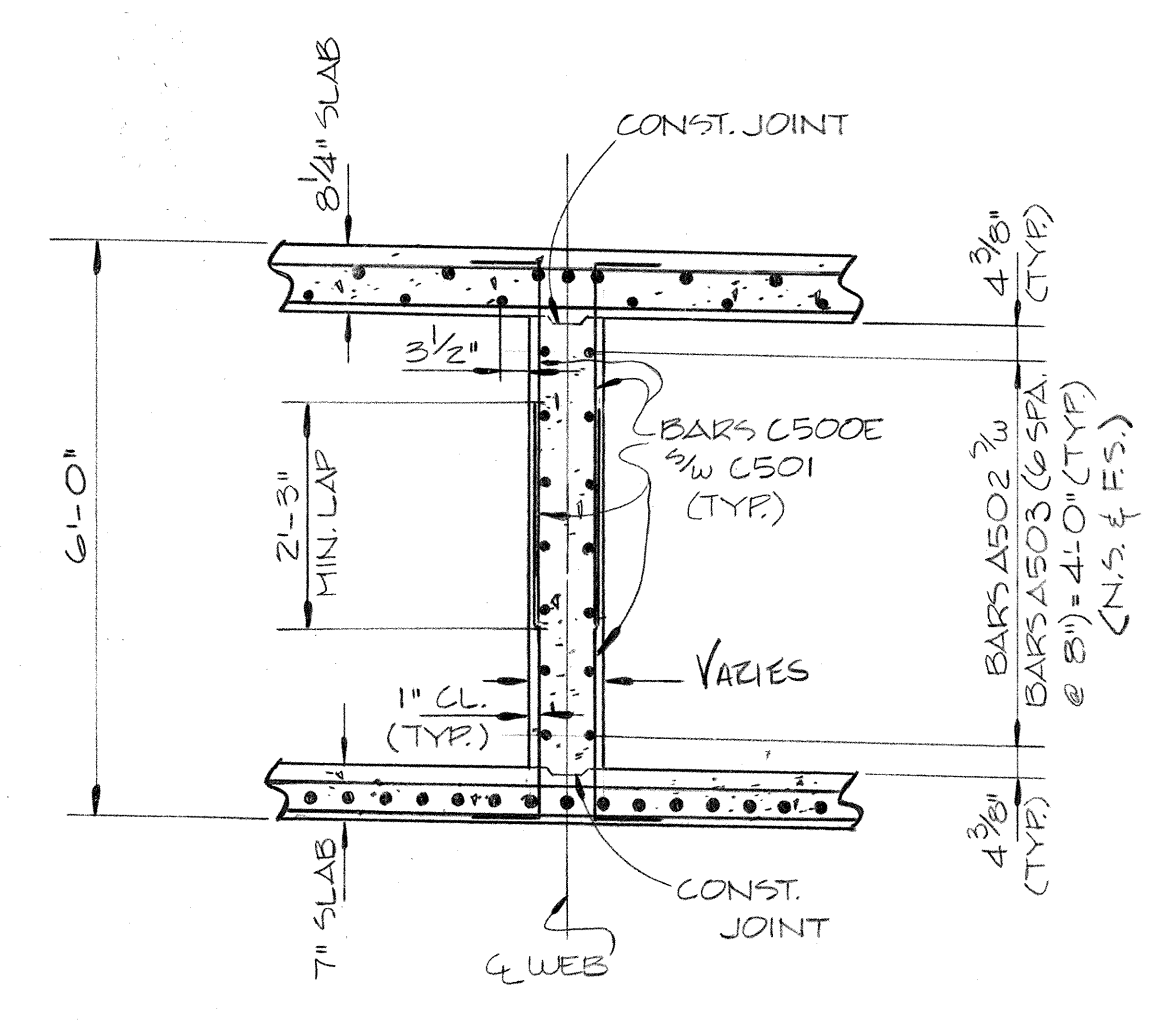
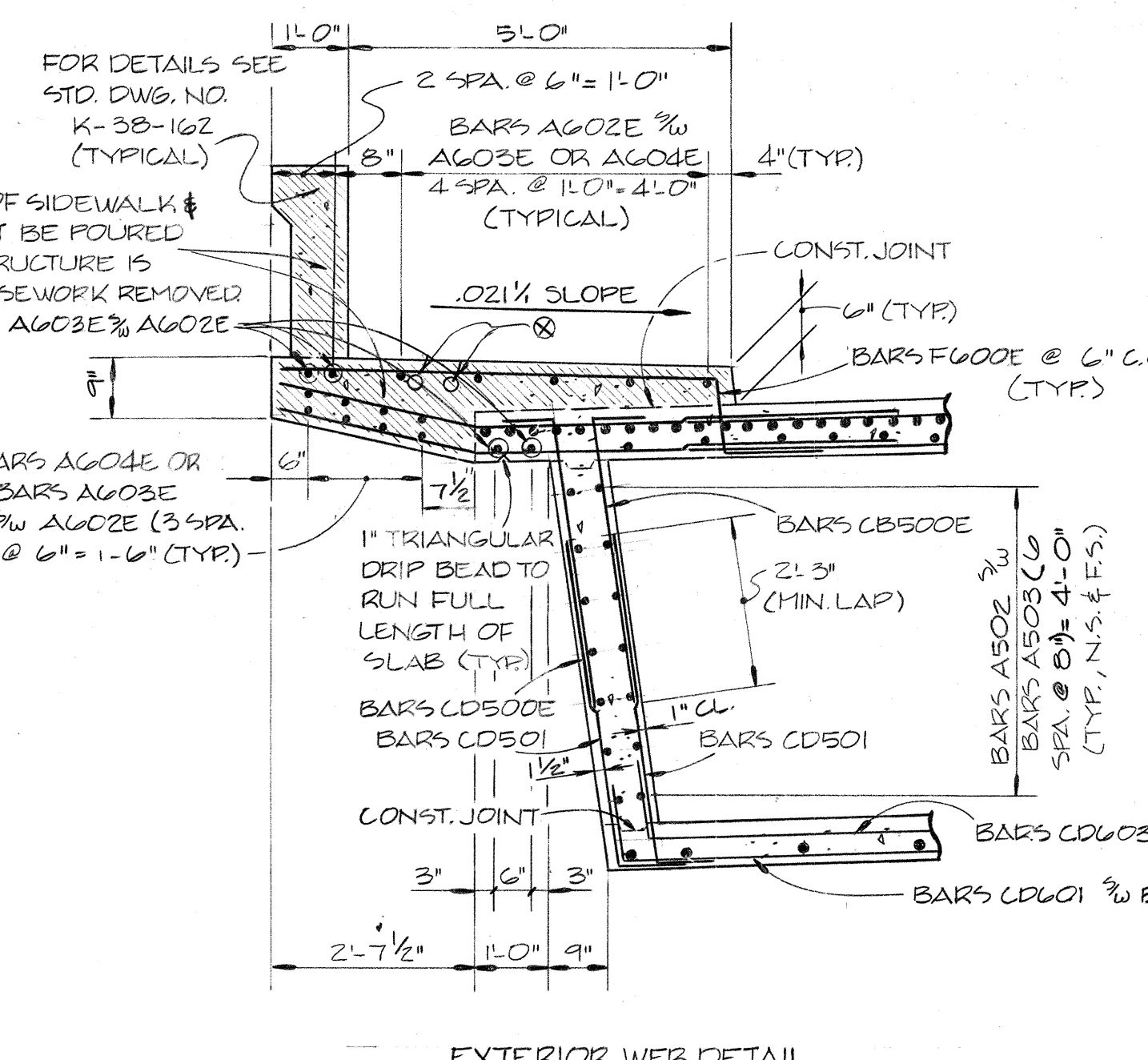
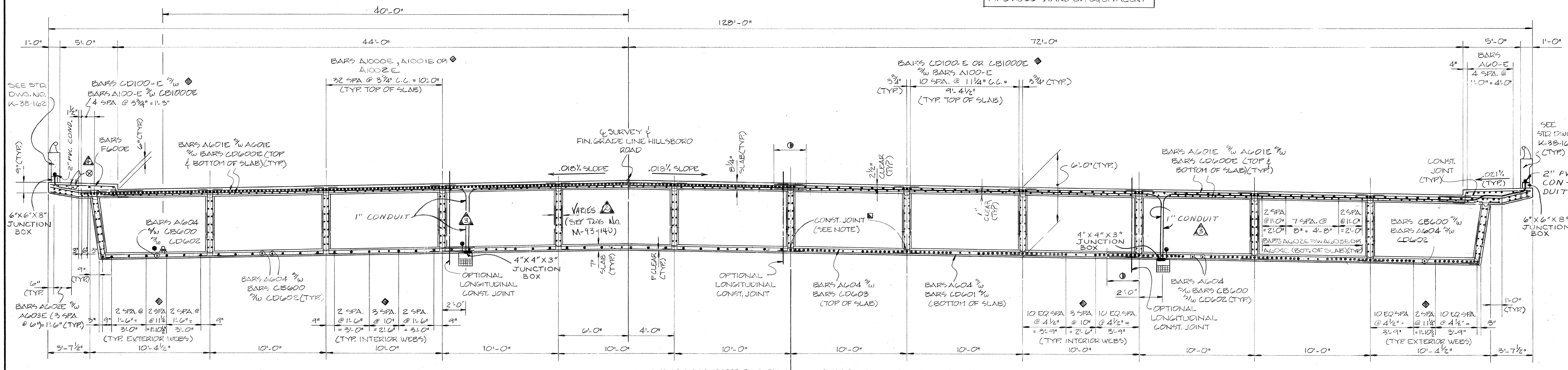
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	9-23-82	JHP	QUANTITY CHANGE IN EST. QUANTITY BOX
2	2-1-83	JHP	W/RT & EST. QUANTITIES
3	4-7-83	AMS	STRUCT. LIGHTING DETAILS
4	4-29-83	JHP	CATV CONDUIT ADDED

NOTE: WHEN POURING SIDEWALK, PROVISIONS SHALL BE MADE FOR SETTING REINFORCING STEEL FOR BRIDGE RAIL. 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.

NOTE: IF THE CONTRACTOR ELECTS TO USE PERMANENT STEEL BRIDGE DECK FORMS, DETAILS FOR PROVIDING ACCESS TO ALL CELLS OF THE STRUCTURE SHALL BE SUBMITTED TO THE ENGINEER.



○ DENOTES: 21-9" (MIN. SPLICE) TYPICAL BAR #6's.
 □ DENOTES: CONSTRUCTION JOINT TYPICAL EXCEPT AT BENT CAP.



TYPICAL CROSS SECTION (LOOKING FORWARD ON SURVEY)

○ DENOTES: FOR BAR DESIGNATIONS AND FURTHER DETAILS SEE DWG. NO. M-93-135.
 □ DENOTES: CATV CONDUITS. NOTE: at Abutment No. 2, an Expansion Coupling is required.

ESTIMATED QUANTITIES			
CLASS 'A' * CONCRETE (BRIDGE DECK) (C.Y.)	CLASS 'A' CONCRETE (C.Y.)	REINFORCING STEEL LBS.	EPOXY-COATED STEEL LBS.
844.1	1,272	437,266	596,517

* NOTE: SEE SPECIAL NOTE FOR CONCRETE BRIDGE DECKS, DWG. NO. M-93-135.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE
 HILLSBORO ROAD OVER
 INTERSTATE-440
 STATION 239+87.33
 DAVIDSON COUNTY
 1982

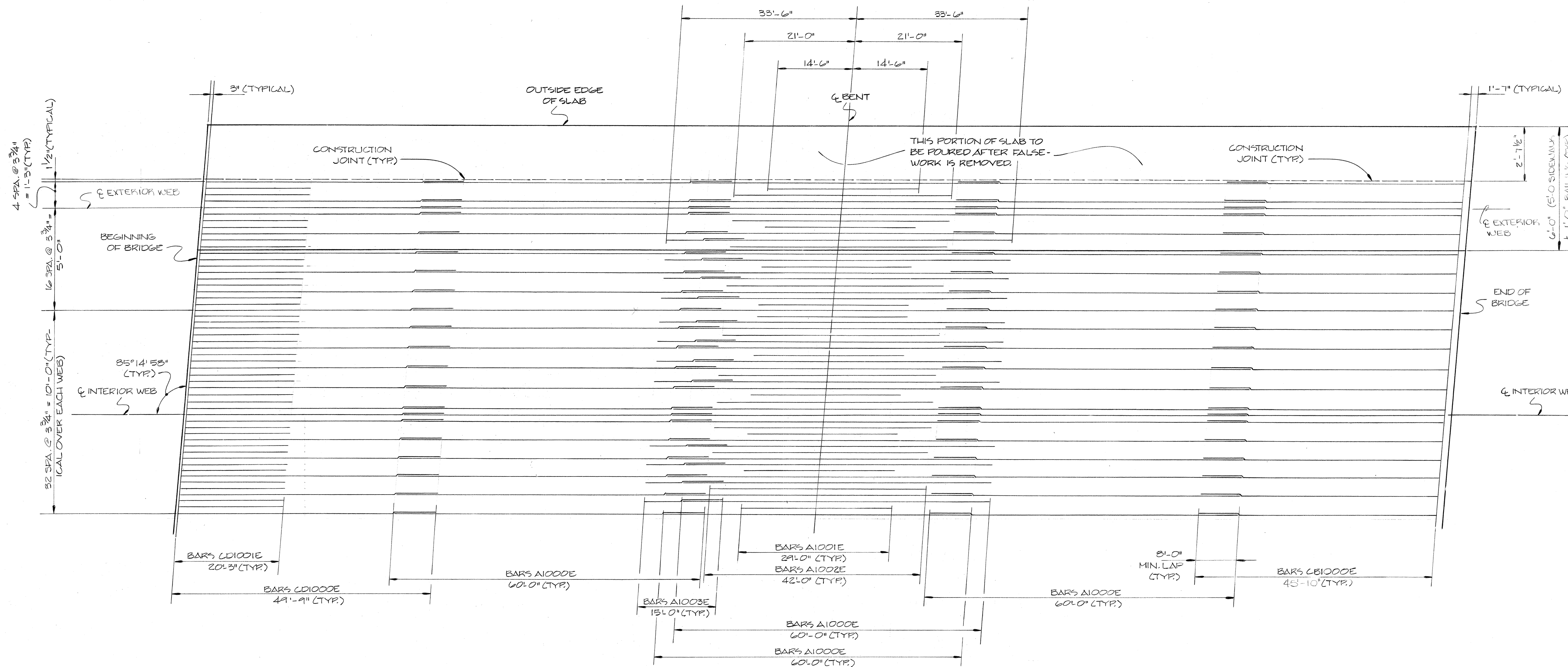
DESIGNED BY J. PRINCE
 DRAWN BY D. BRILEY
 SUPERVISED BY J. FIELDS & A. SMITH
 CHECKED BY
 DATE 10/81
 DATE 10/81
 DATE

CORRECT *Colleen L. Howell*
 ENGINEER OF STRUCTURES
 APPROVED *Louis S. Swain*
 DIRECTOR OF HIGHWAYS

MICROFILMED

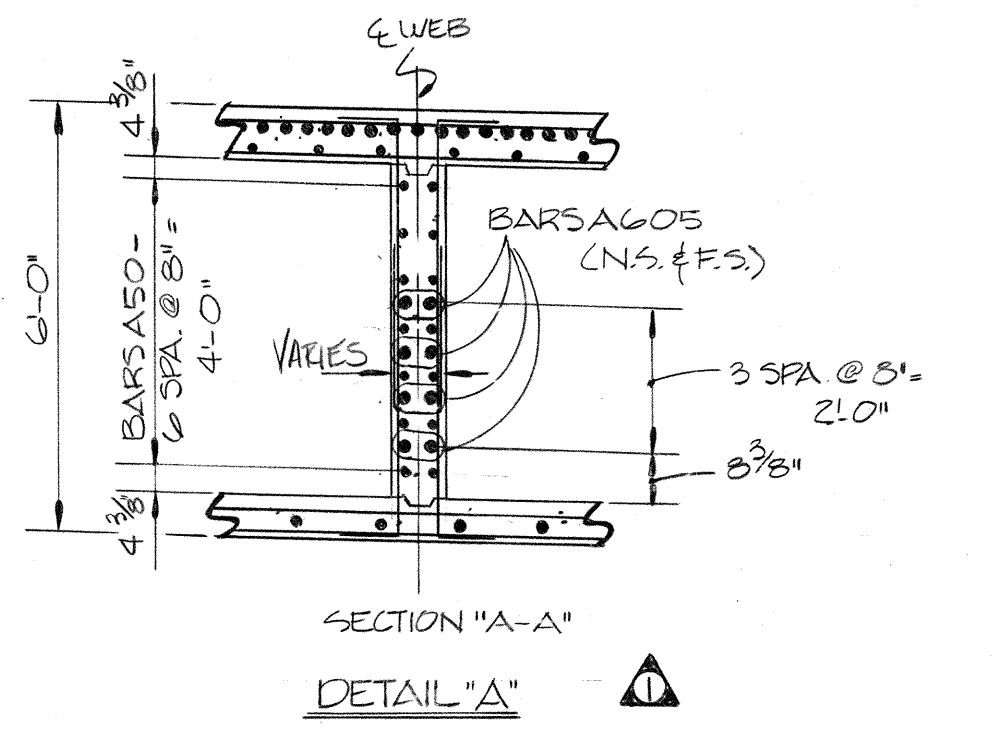
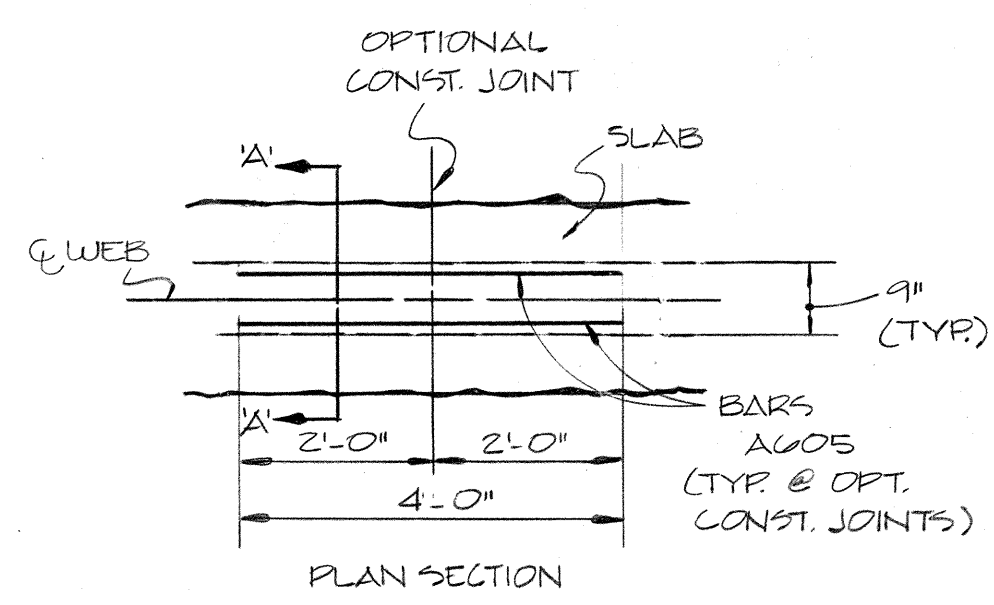
PROJECT NO.	YEAR	SHEET NO.
I-440-4(4B)206	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	2-1-83	JLP	WEB THICKNESS

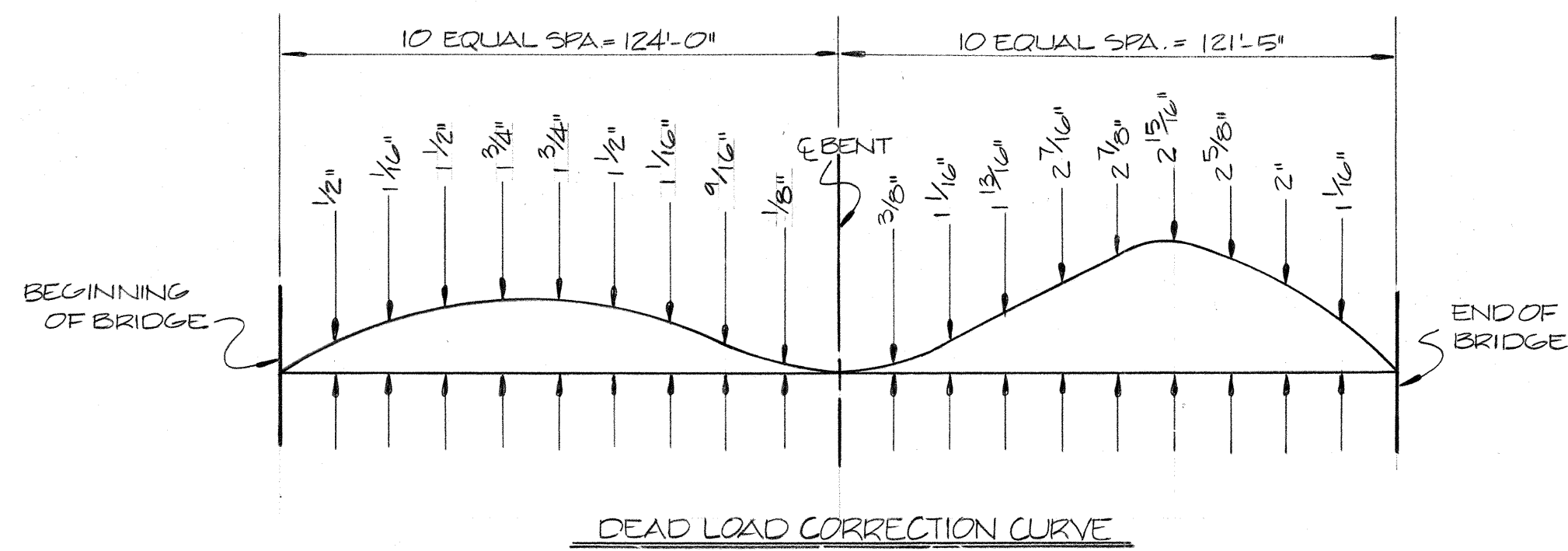


PART PLAN OF MAIN REINFORCING (TYPICAL TOP SLAB)

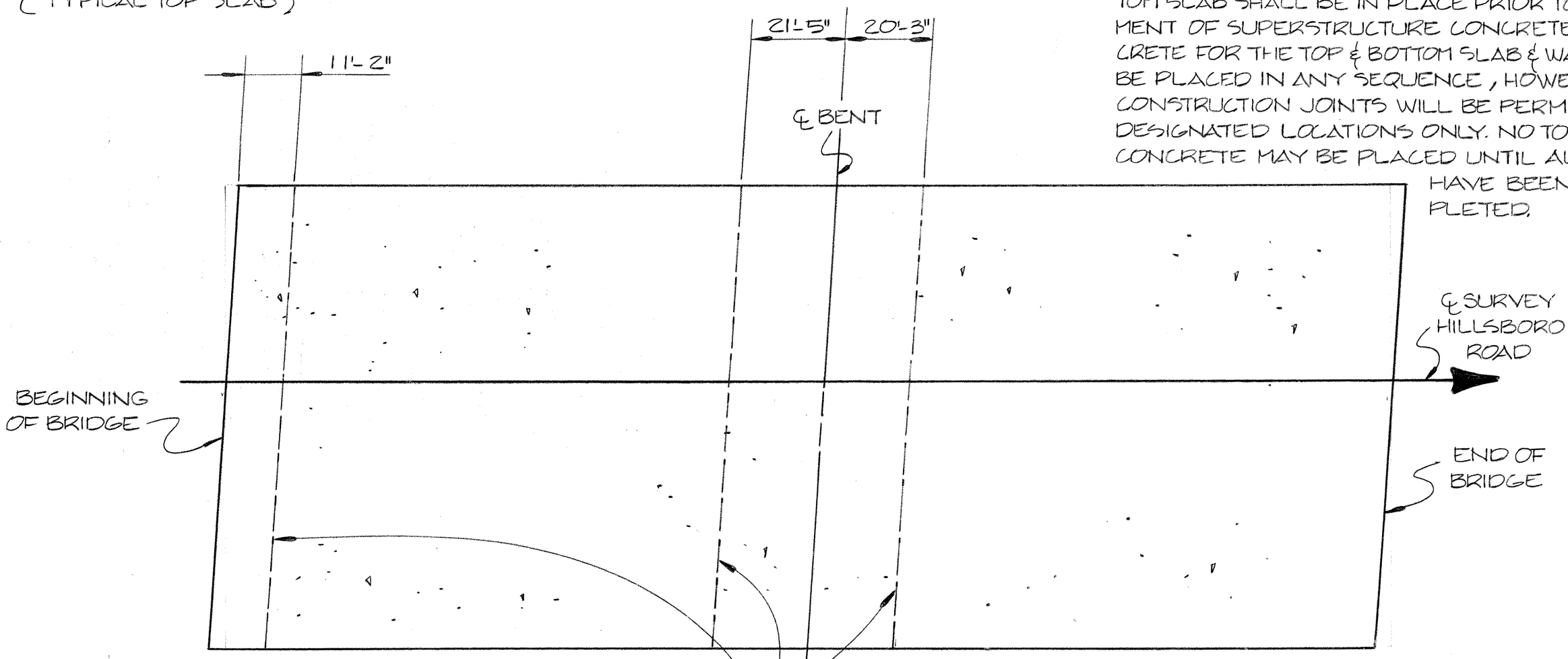
NOTE: FORMS AND SUPPORTS FOR THE ENTIRE BOTTOM SLAB SHALL BE IN PLACE PRIOR TO PLACEMENT OF SUPERSTRUCTURE CONCRETE. CONCRETE FOR THE TOP & BOTTOM SLAB & WALLS MAY BE PLACED IN ANY SEQUENCE, HOWEVER, CONSTRUCTION JOINTS WILL BE PERMITTED AT DESIGNATED LOCATIONS ONLY. NO TOP SLAB CONCRETE MAY BE PLACED UNTIL ALL WALLS HAVE BEEN COMPLETED.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
SUPERSTRUCTURE DETAILS
HILLSBORO ROAD OVER
INTERSTATE-440
STATION 239+87.33
DAVIDSON COUNTY
1982



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



POURING SEQUENCE

DESIGNED BY J. PRINCE
DRAWN BY DONNA BRILEY
SUPERVISED BY FIELDS & SMITH
CHECKED BY
DATE 10/81
DATE 10/81
DATE

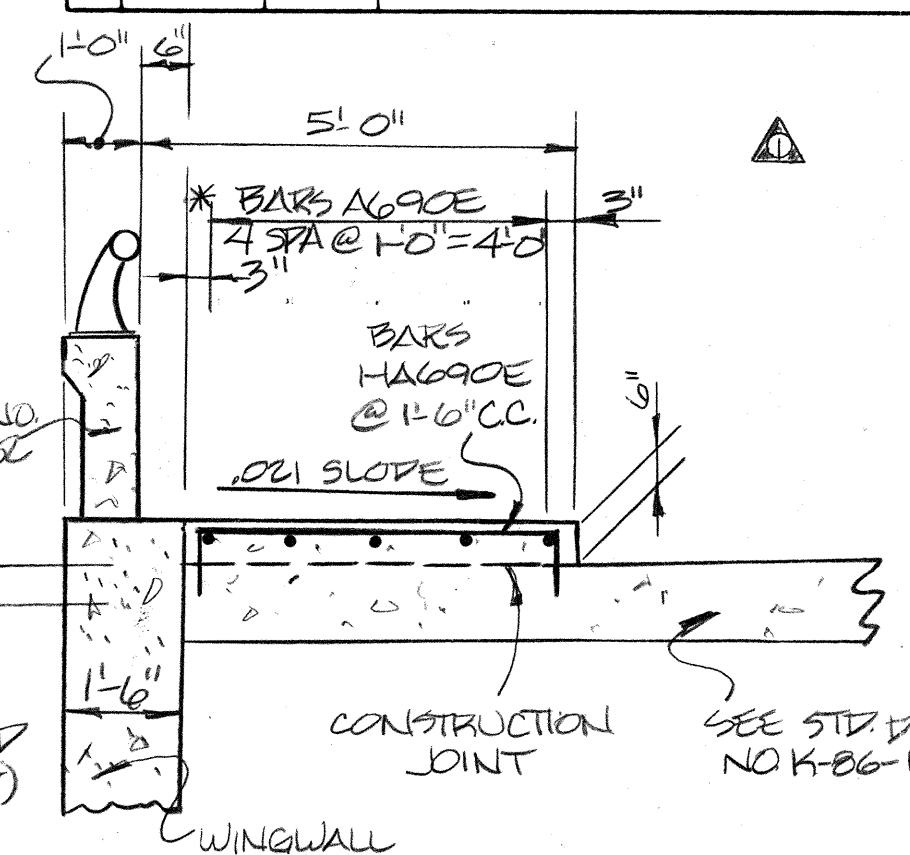
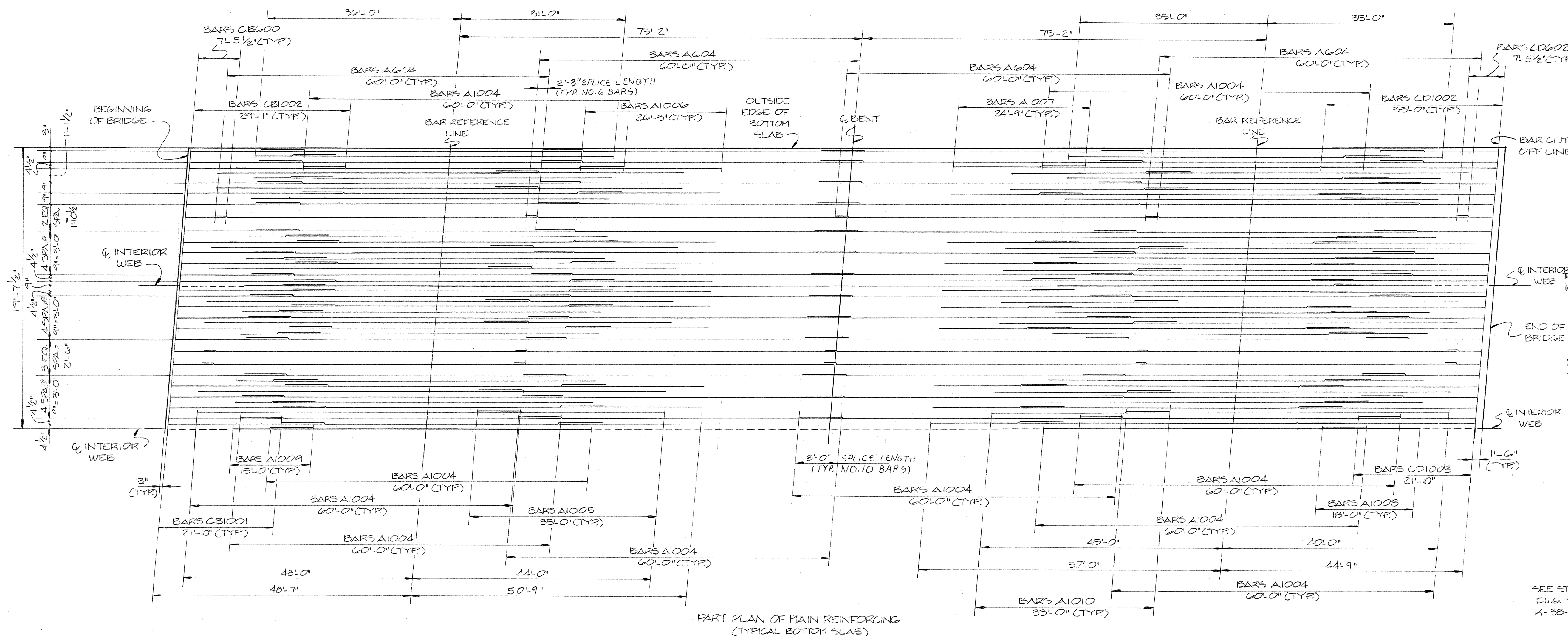
CORRECT
Colleen L. Small
ENGINEER OF STRUCTURES
APPROVED
Director of Highways

MICROFILMED

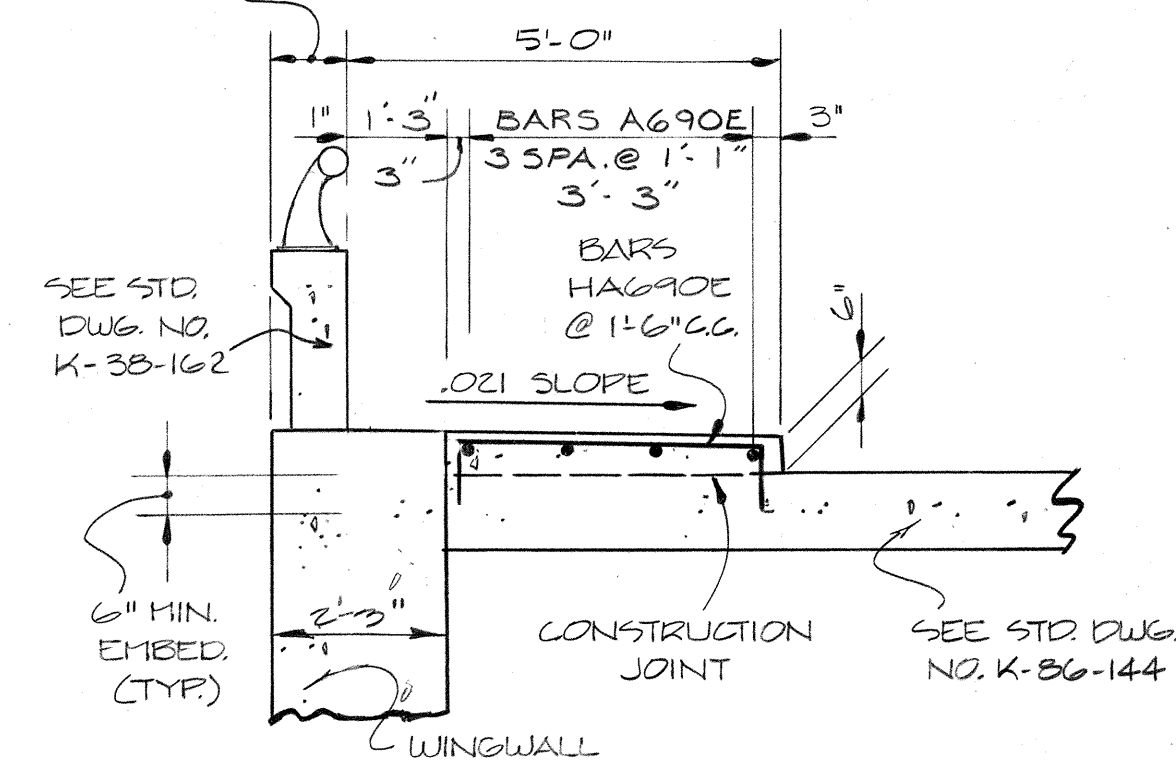
PROJECT NO.	YEAR	SHEET NO.
I-440-4 (49)206	1982	

REVISIONS

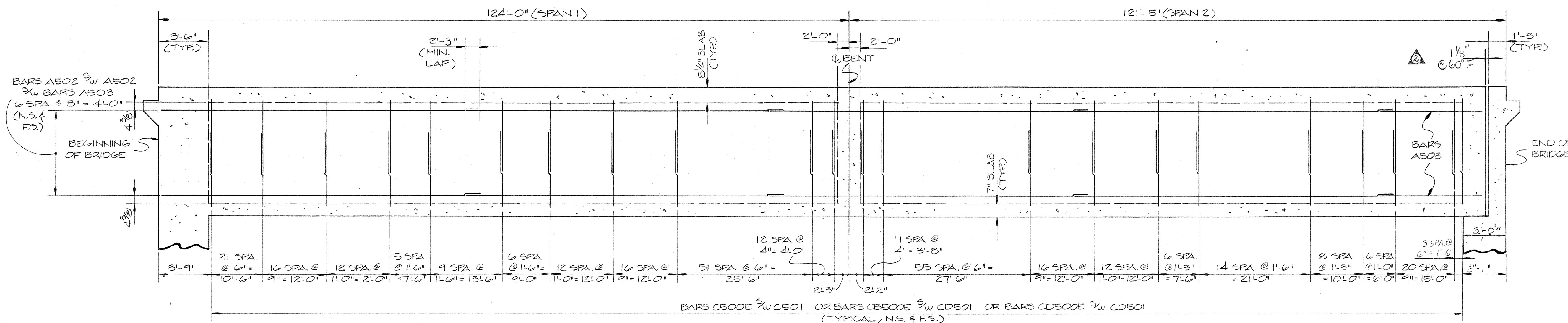
NO.	DATE	BY	BRIEF DESCRIPTION
1	7-23-82	JLP	PART SECTIONS OF SIDEWALK @ PAVEMENT @ BRIDGE ENDS REVISED
2	2-1-83	JLP	EXPANSION OPENING



*NOTE: REINFORCING STEEL AND CONCRETE QUANTITIES INCLUDED IN QUANTITIES FOR PAVEMENT @ BRIDGE ENDS.



*NOTE: REINFORCING STEEL AND CONCRETE QUANTITIES INCLUDED IN QUANTITIES FOR PAVEMENT @ BRIDGE ENDS.



DESIGNED BY J. PRINCE
 DRAWN BY DONNA BRILEY
 SUPERVISED BY FIELDS & SMITH
 CHECKED BY

DATE 10-81
 DATE 10-81
 DATE

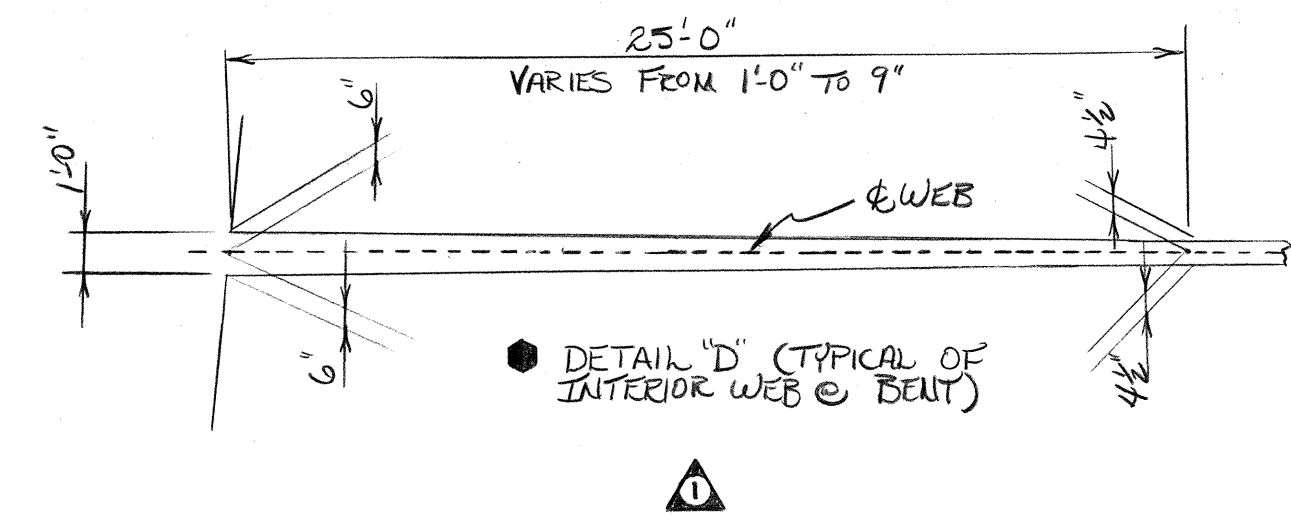
LONGITUDINAL SECTION (SHOWING WEB REINFORCEMENT)

NOTE: DIMENSIONS ARE GIVEN ALONG @ WEB.

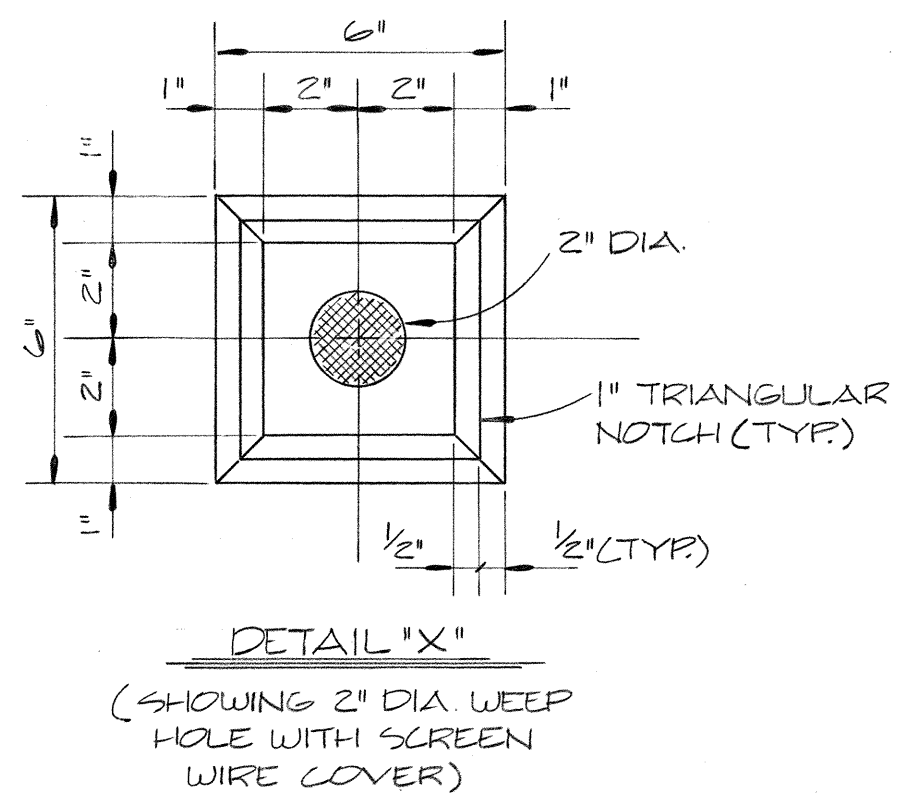
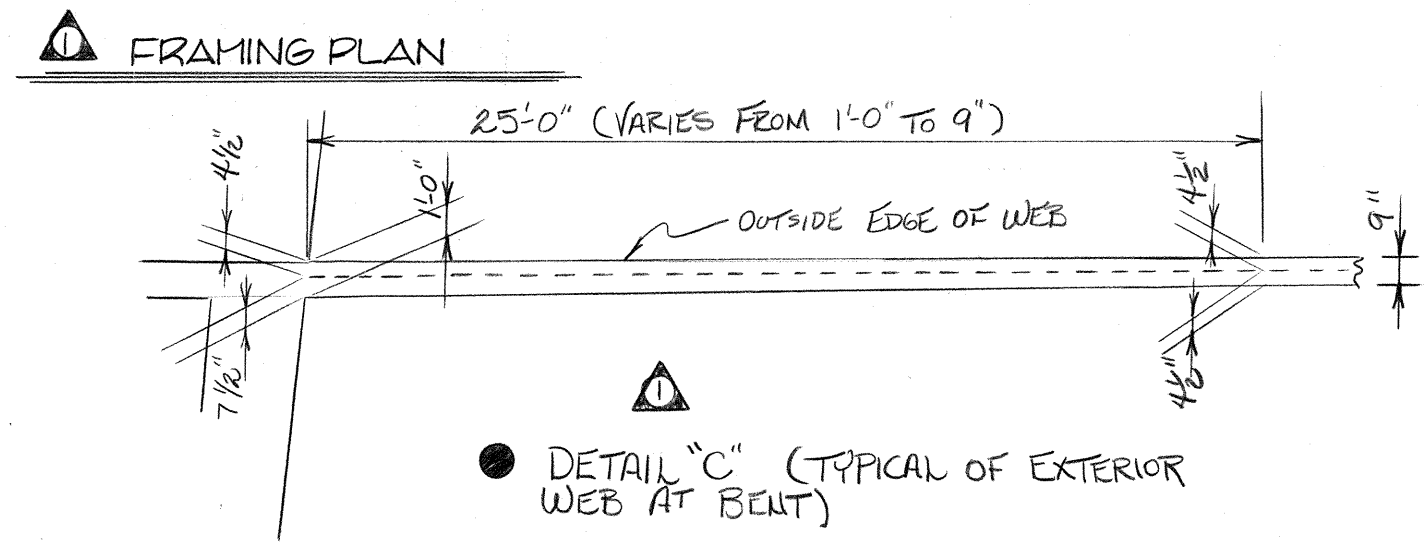
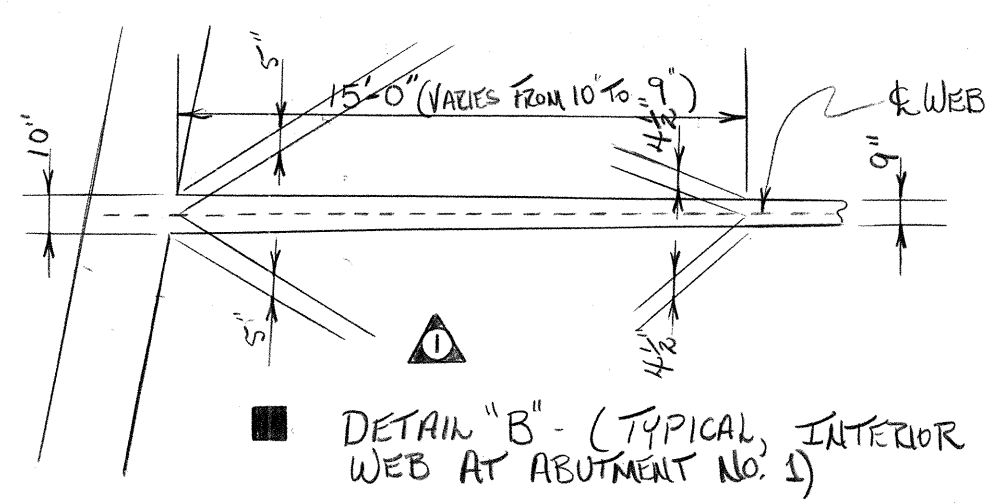
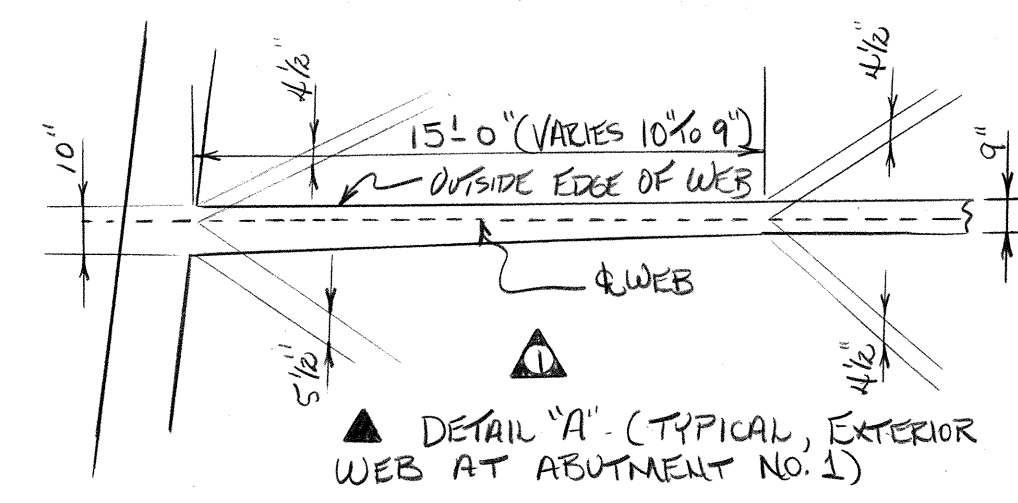
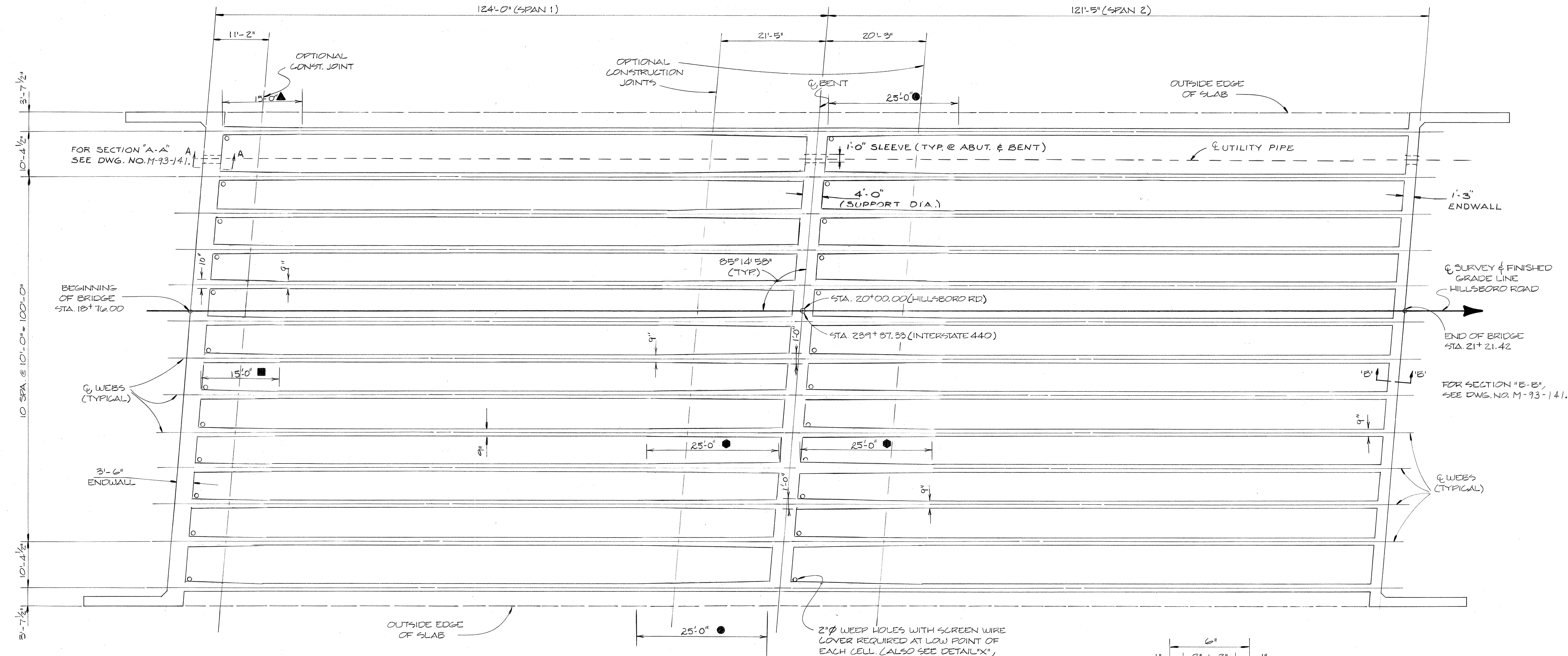
STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE DETAILS
 HILLSBORO ROAD OVER
 INTERSTATE-440
 STATION 239+87.33
 DAVIDSON COUNTY
 1982

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

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	2-1-83	JHP	WEB THICKNESS



NOTE:
FOR FURTHER DETAILS OF OPTIONAL CONST. JOINTS, SEE DETAIL "A", DWG. NO. M-93-138.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
SUPERSTRUCTURE DETAILS
HILLISBORO ROAD OVER
INTERSTATE 440
STATION 239+87.33
DAVIDSON COUNTY
1982

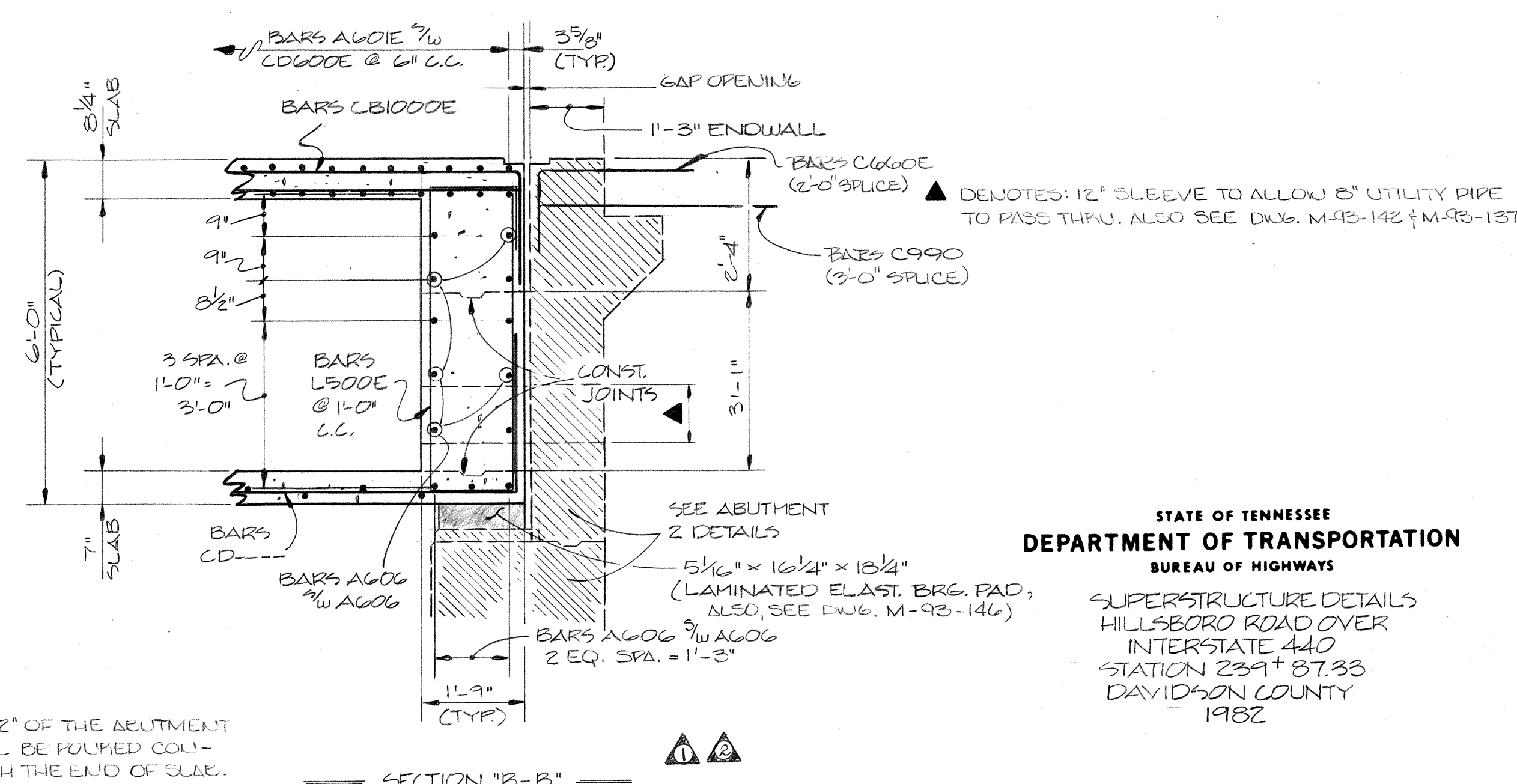
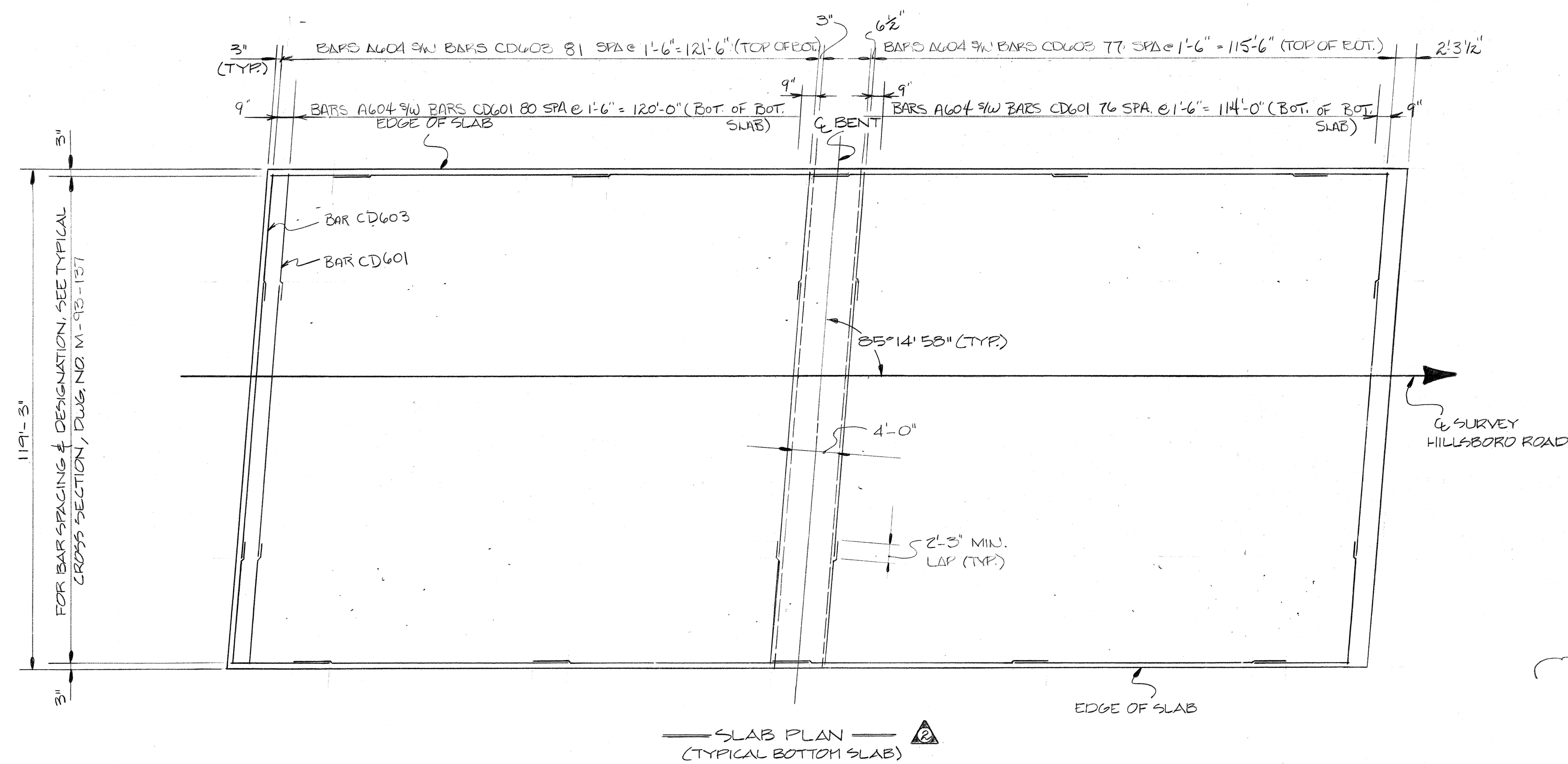
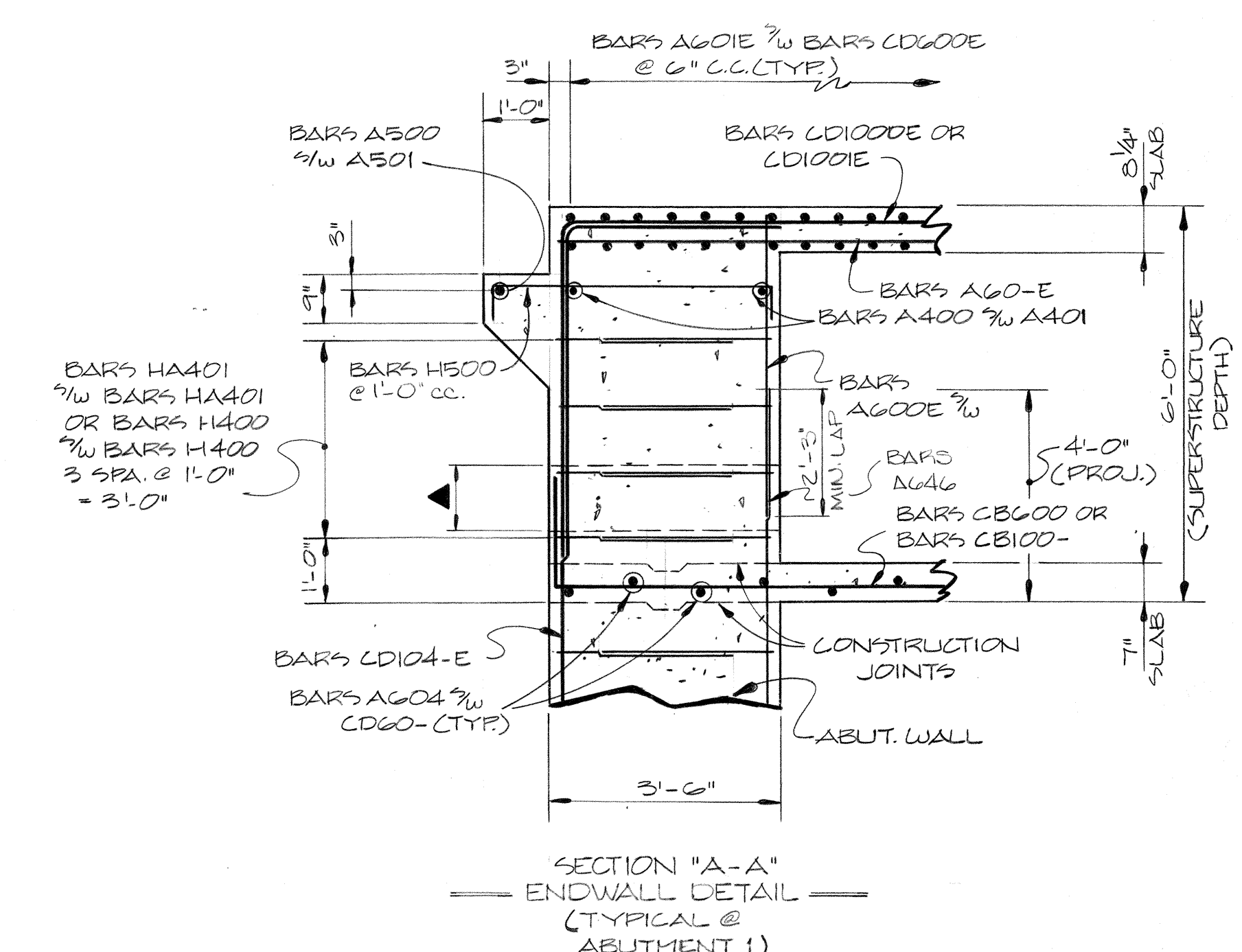
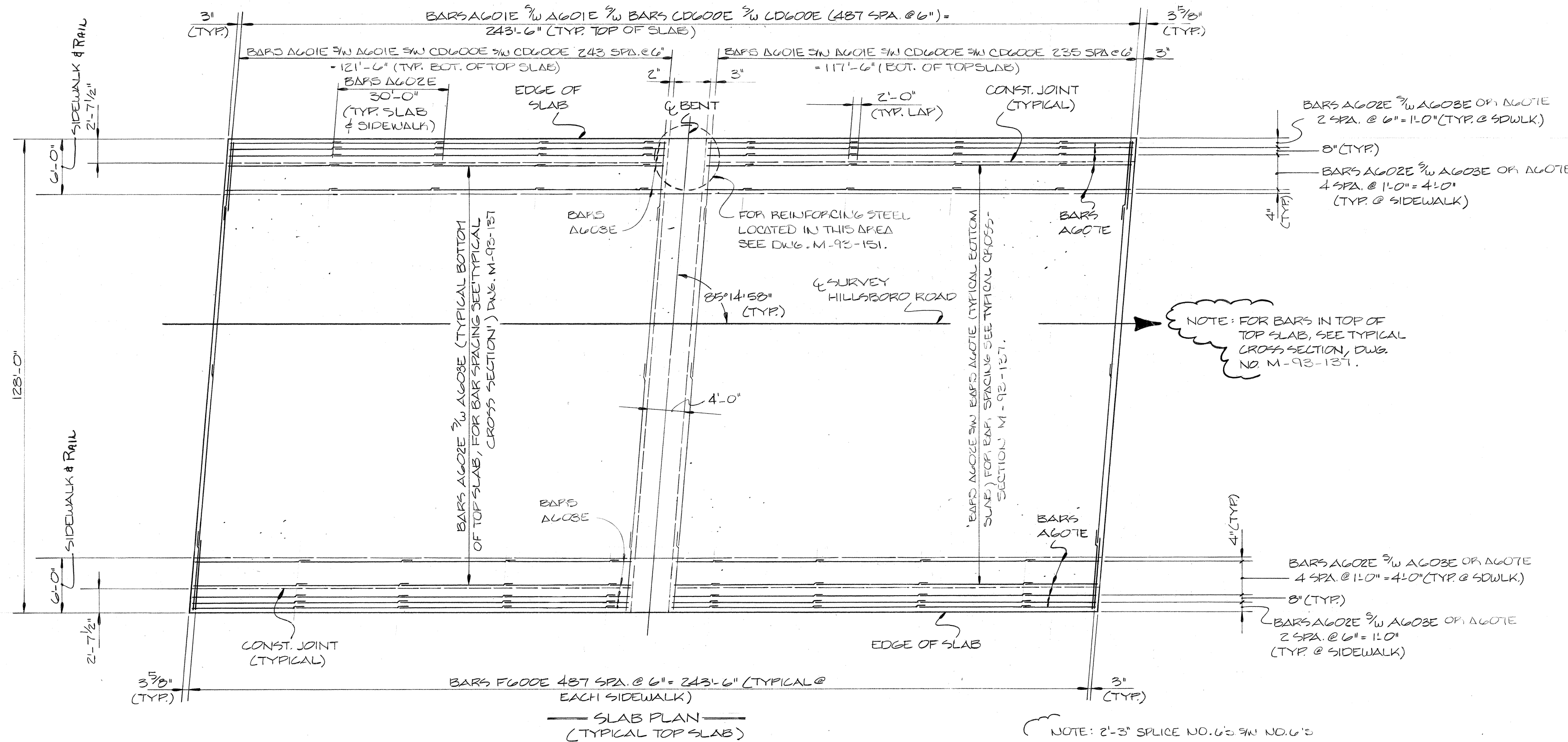
DESIGNED BY J. PRINCE
DRAWN BY DONNA BRILEY
SUPERVISED BY FIELDS & SMITH
CHECKED BY
DATE 11-81
DATE 11-81

CORRECT *Colleen L. Lonsell*
ENGINEER OF STRUCTURES
APPROVED *Louis B. Bland*
DIRECTOR OF HIGHWAYS

MICROFILMED

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

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	9-23-82	JHP	CD600E & C990 BARS SHOWN @ SECTION "B-B"
2	2-1-83	JHP	SPEC & QUANTITY OF CD603, CD601 & A604



DESIGNED BY J. PRINCE
 DRAWN BY D. BRILEY
 SUPERVISED BY FIELDS & SMITH
 CHECKED BY

NOTE: ALSO SEE DWG. NO. M-93-142 FOR UTILITY PIPE SUPPORTS.

NOTE: THE TOP 12" OF THE ABUTMENT BACKWALL SHALL BE FORMED COEFFICIENTLY WITH THE END OF SLAB.

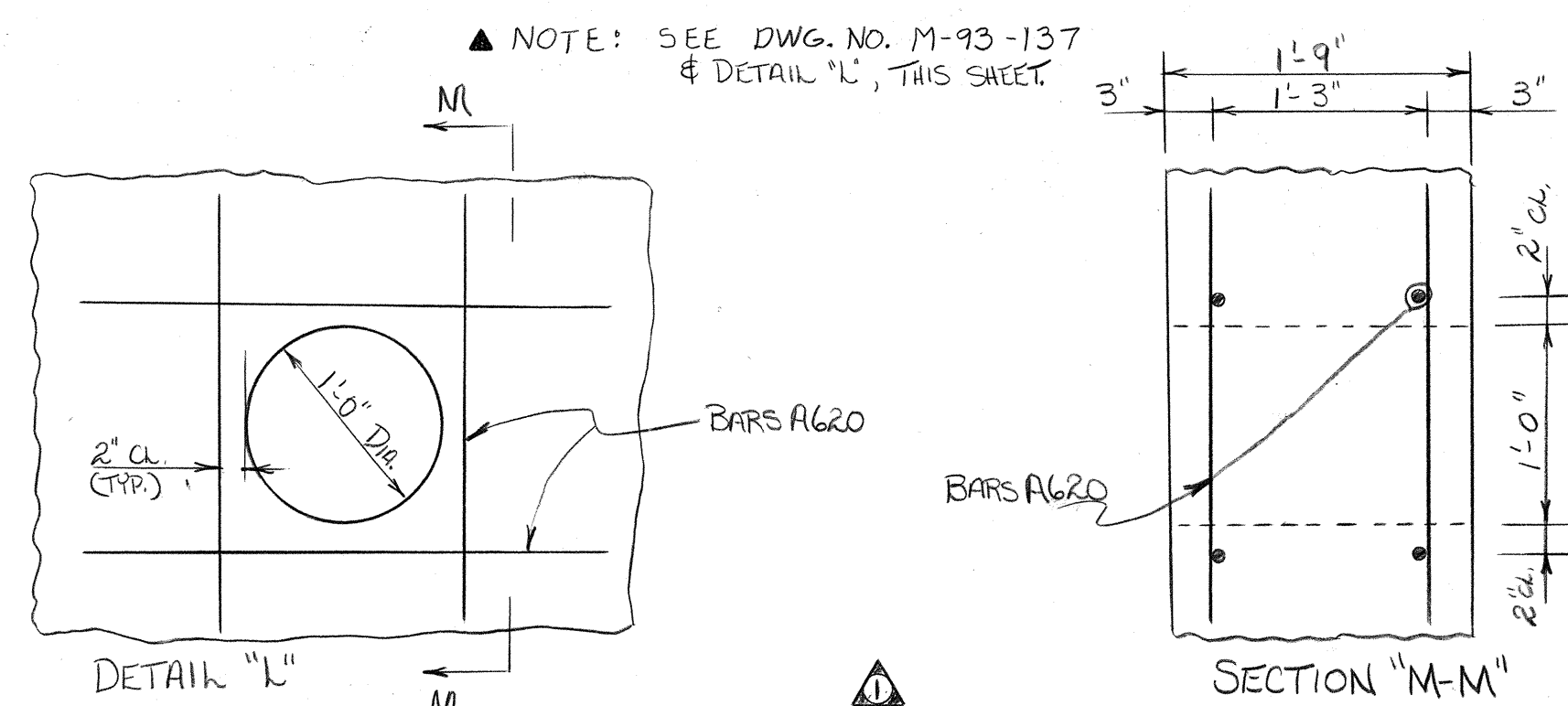
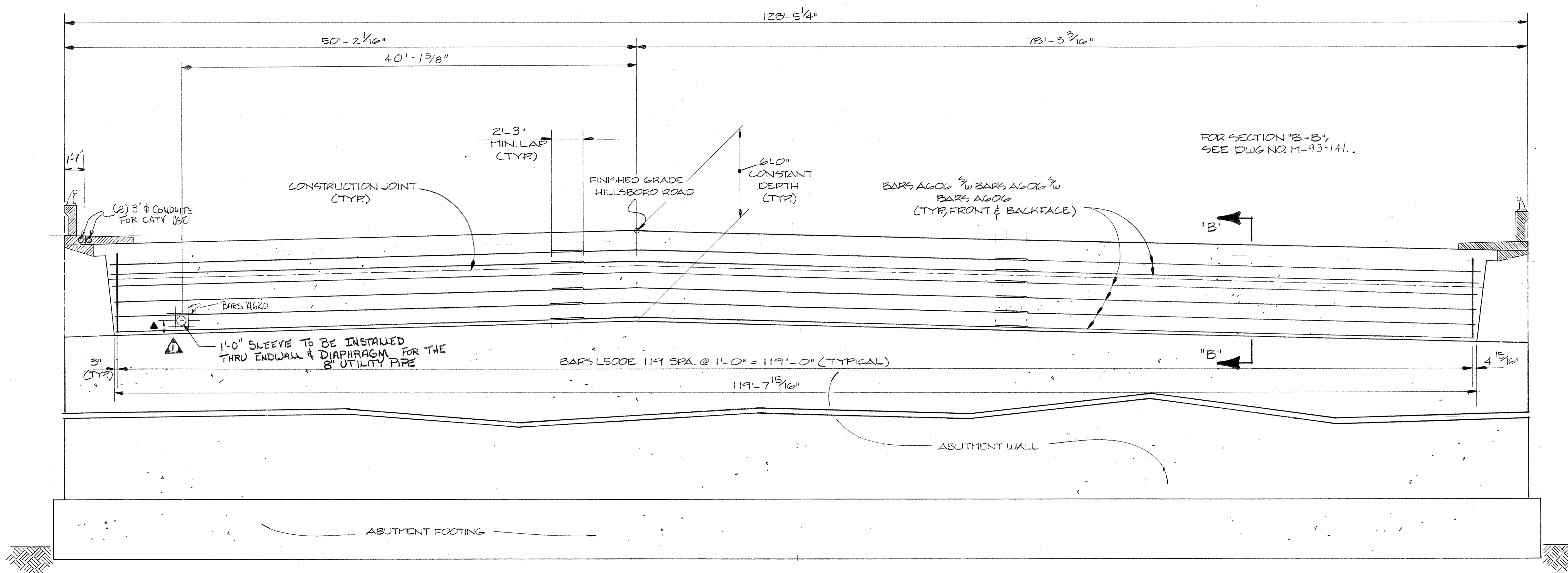
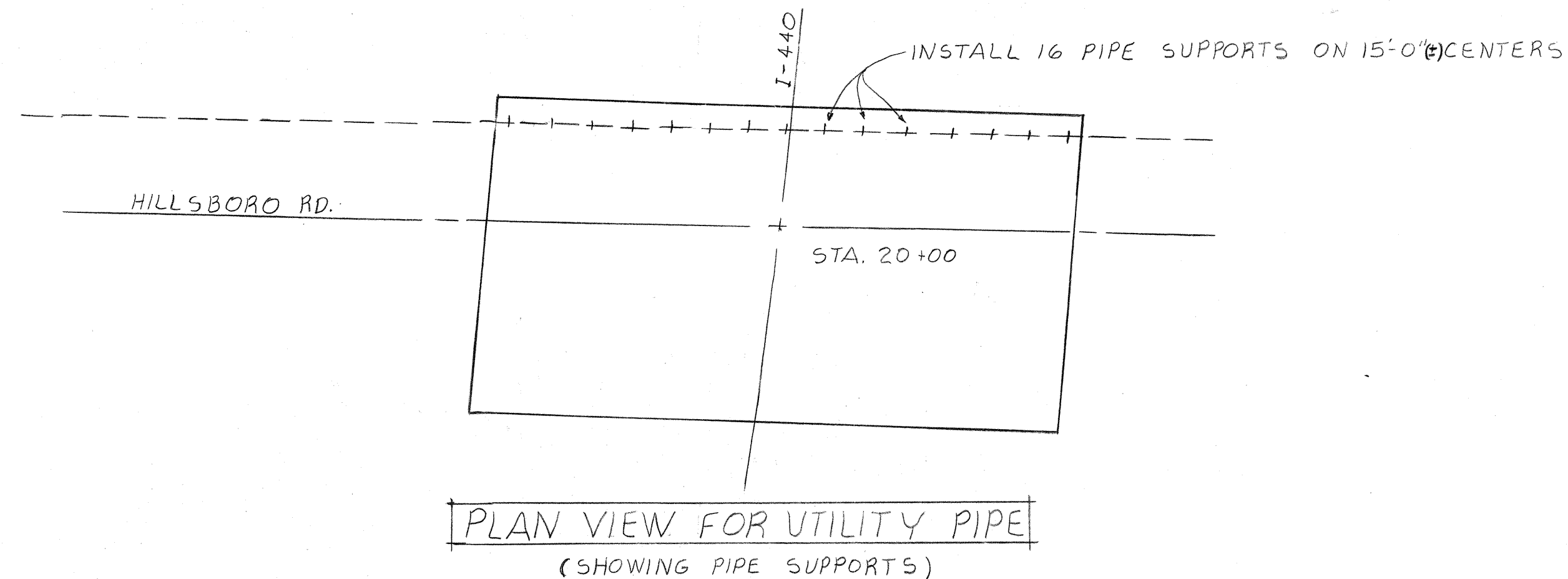
SECTION "B-B" (TYPICAL @ ABUTMENT 2) (*SEE DWG. NO. M-93-142 FOR ELEVATION OF DIAPHRAGM & SECTION CUT)

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE DETAILS
 HILLSBORO ROAD OVER
 INTERSTATE 440
 STATION 239+87.33
 DAVIDSON COUNTY
 1982

CORRECT *Clifton L. Linnell*
 ENGINEER OF STRUCTURES
 APPROVED *David L. Swann*
 DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.
I-440-4(49)206	1988	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	2-1-88	JHP	DETAIL "L" ADDED
2	4-29-88	JHP	CATV CONDUITS ADDED



END DIAPHRAGM ELEVATION
(TYPICAL @ ABUTMENT 2 ONLY)

DESIGNED BY J. PRINCE
 DRAWN BY DONNA BRILEY
 SUPERVISED BY FIELDS & SMITH
 CHECKED BY _____

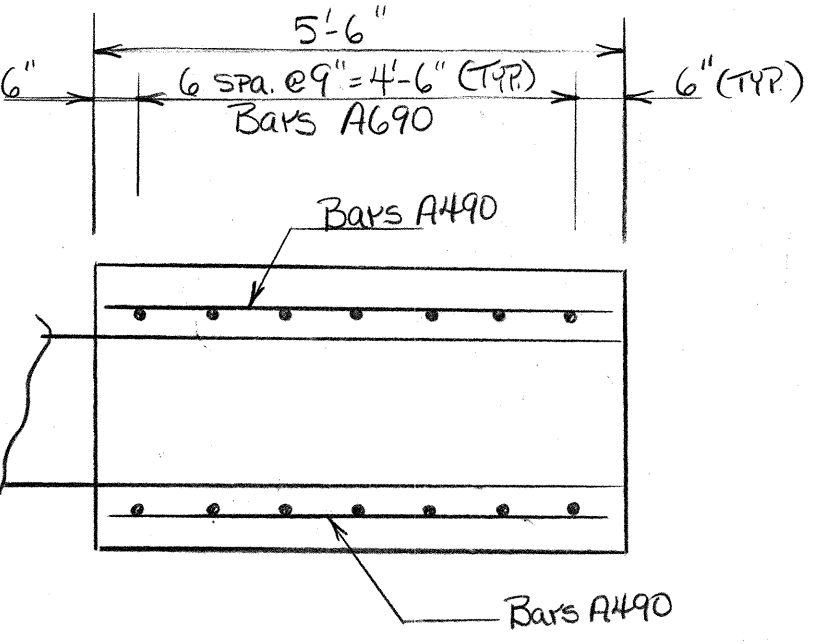
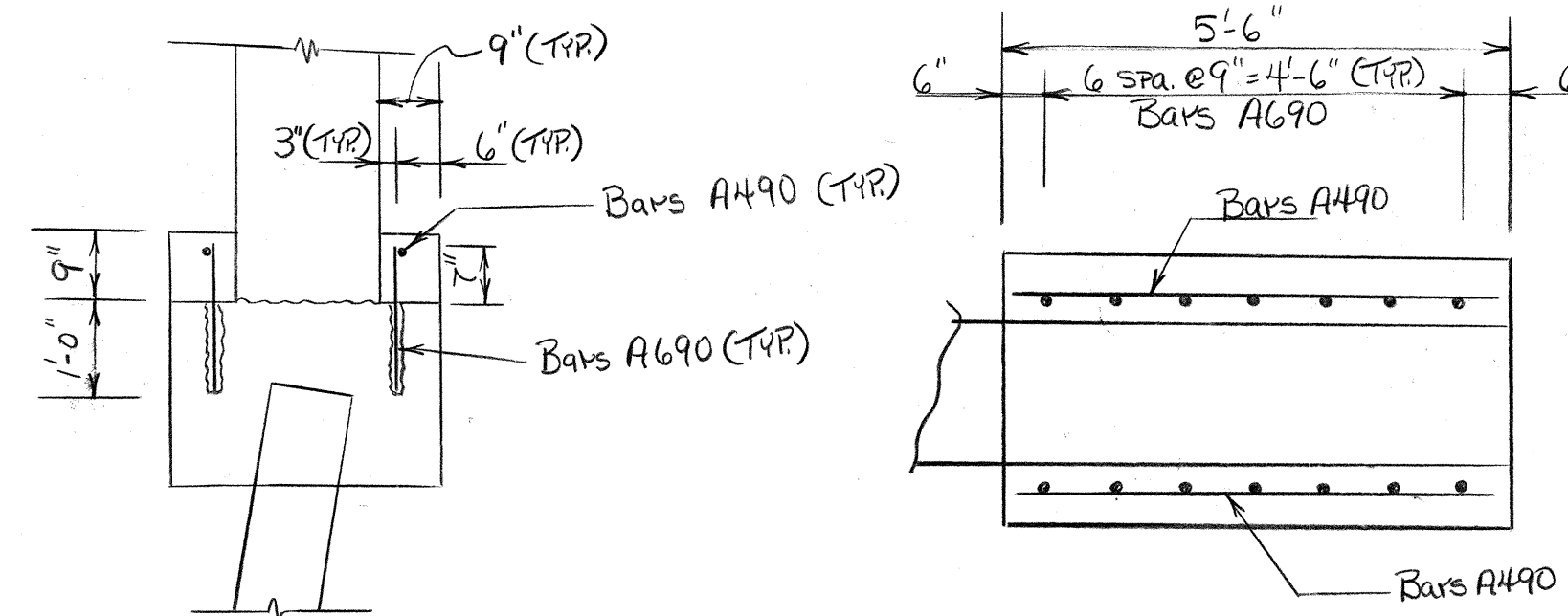
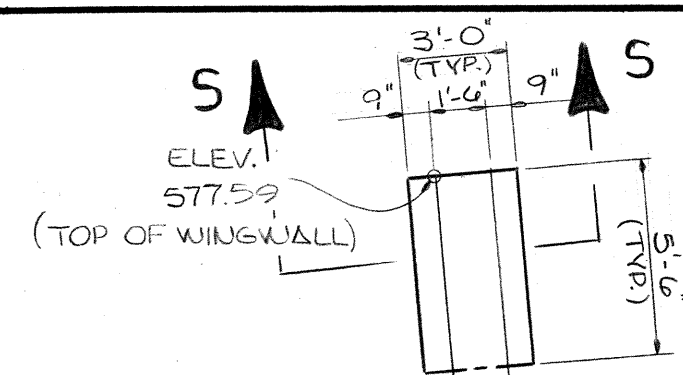
DATE 11-81
 DATE 11-81
 DATE _____

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 SUPERSTRUCTURE DETAILS
 HILLSBORO ROAD OVER
 INTERSTATE 440
 STATION 239+87.33
 DAVIDSON COUNTY
 1982

CORRECT *Colleen L. Sorell*
 ENGINEER OF STRUCTURES
 APPROVED *Lewis Evans*
 DIRECTOR OF HIGHWAYS

PROJECT NO.	YEAR	SHEET NO.
I-440-4(47)206	1982	

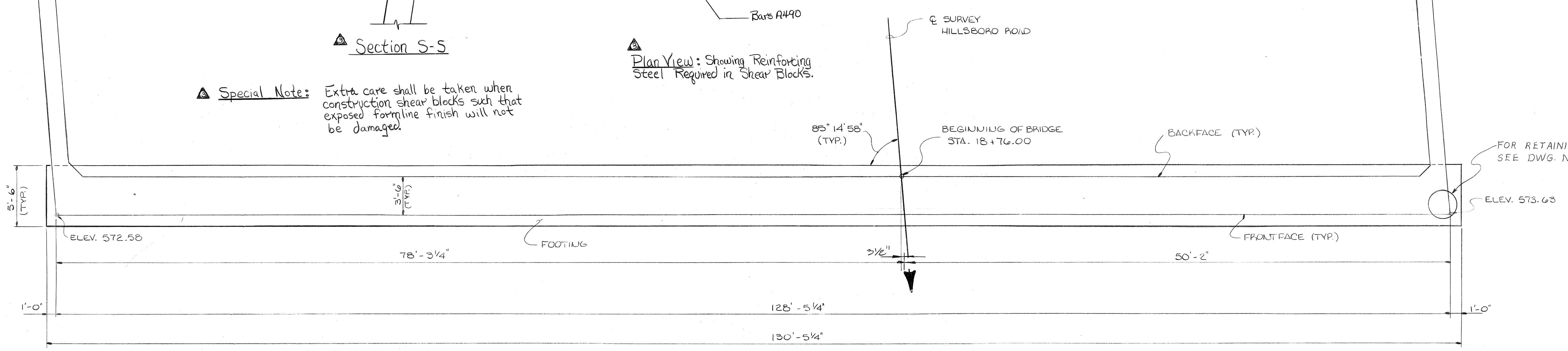
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	9-23-82	JHP	GENERAL REVISIONS
2	2-83	JHP	GENERAL REVISIONS
3	11-10-83	JHP	Detail showing the addition of shear blocks on wing footing



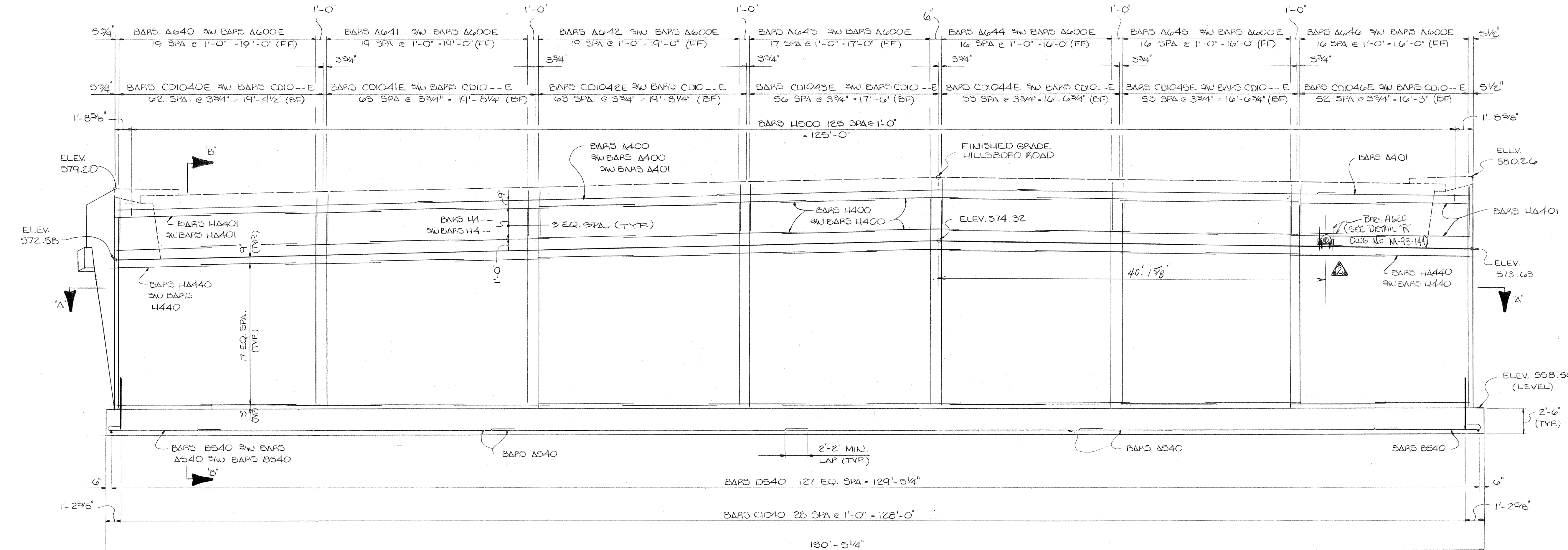
Note: Holes for the grouted A690 bars are to be drilled 1/2 inch in diameter larger than the bar. After cleaning hole, pack with grout and drive bar to its seat. Approved grouts are: EPI Top 100 (Celanese Coating Co.); Colma-DUR or Sikastix 370 (Sika Chemical Corp.); FX-75 Hydro-Ester Bonding Agent (Fox Industries) and Fel-Poxy 102 (Fel-Pro Building Products, Inc.).

Special Note: Extra care shall be taken when construction shear blocks such that exposed formline finish will not be damaged.

Plan View: Showing Reinforcing Steel Required in Shear Blocks.



- PLAN -
(LOOKING BACK ON SURVEY)



NOTE: (F.F) DENOTES: FRONT FACE
(B.F) DENOTES: BACKFACE

- ESTIMATED QUANTITIES -

ABUT. NO. 1	CLASS 'A' CONCRETE CY.	REINFORCING STEEL (LBS.)	EPOXY-COATED STEEL (LBS.)
1	357.0	24,246	42,449

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
ABUTMENT NO. 1
HILLSBORO ROAD OVER INTERSTATE -440
STATION 239+87.33
DAVIDSON COUNTY
1982

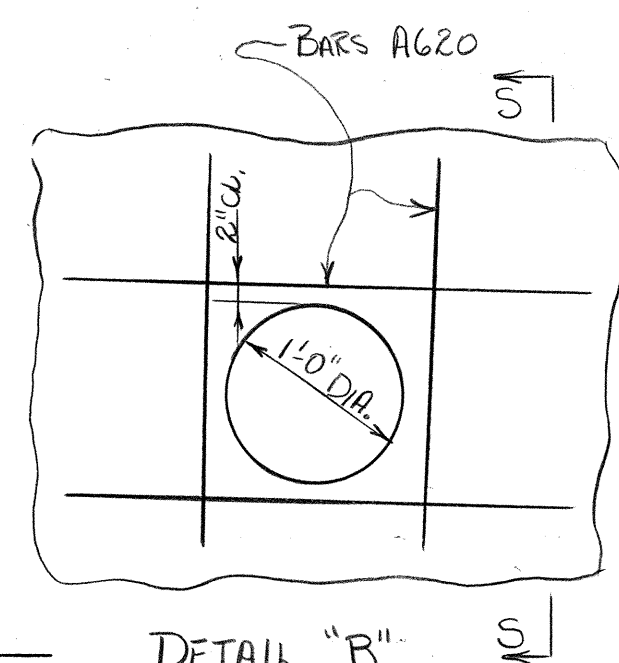
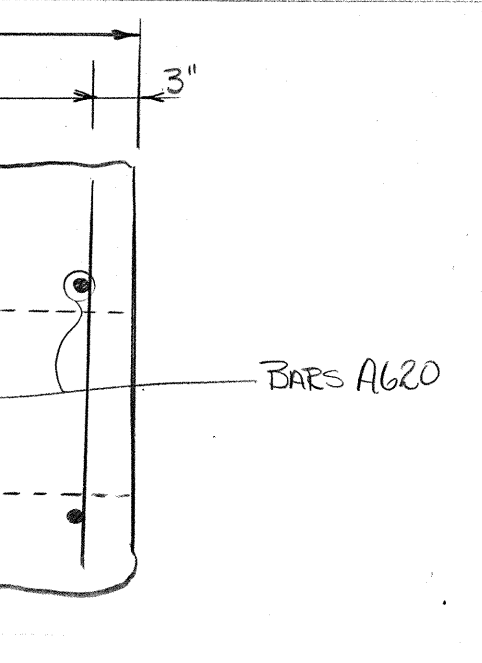
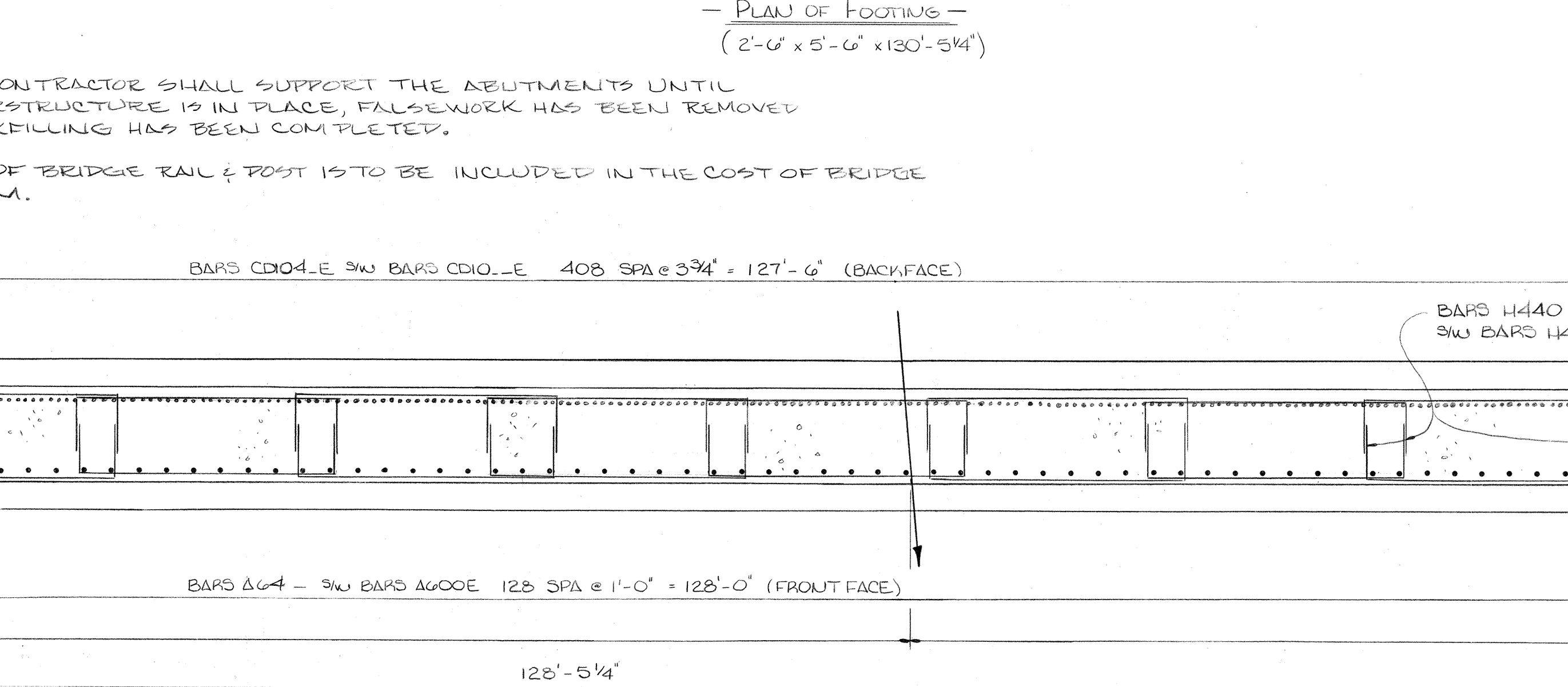
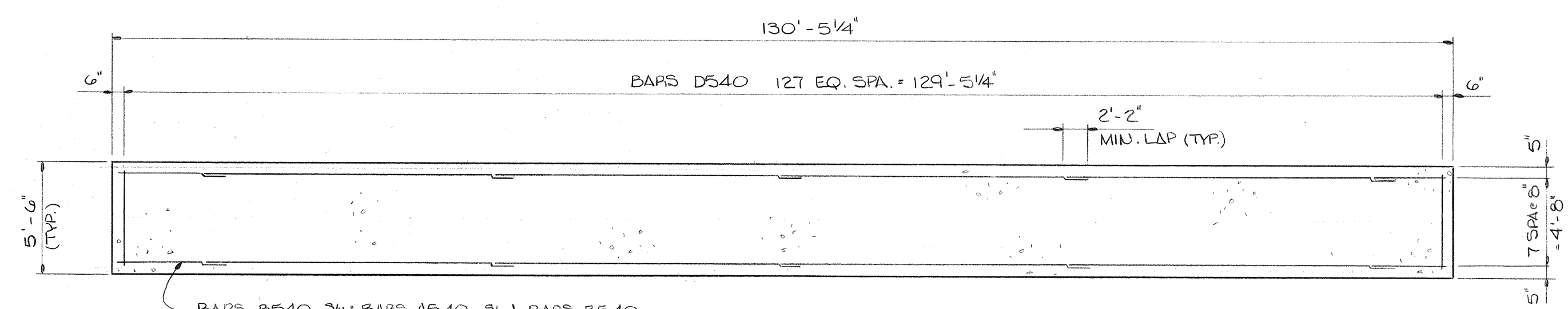
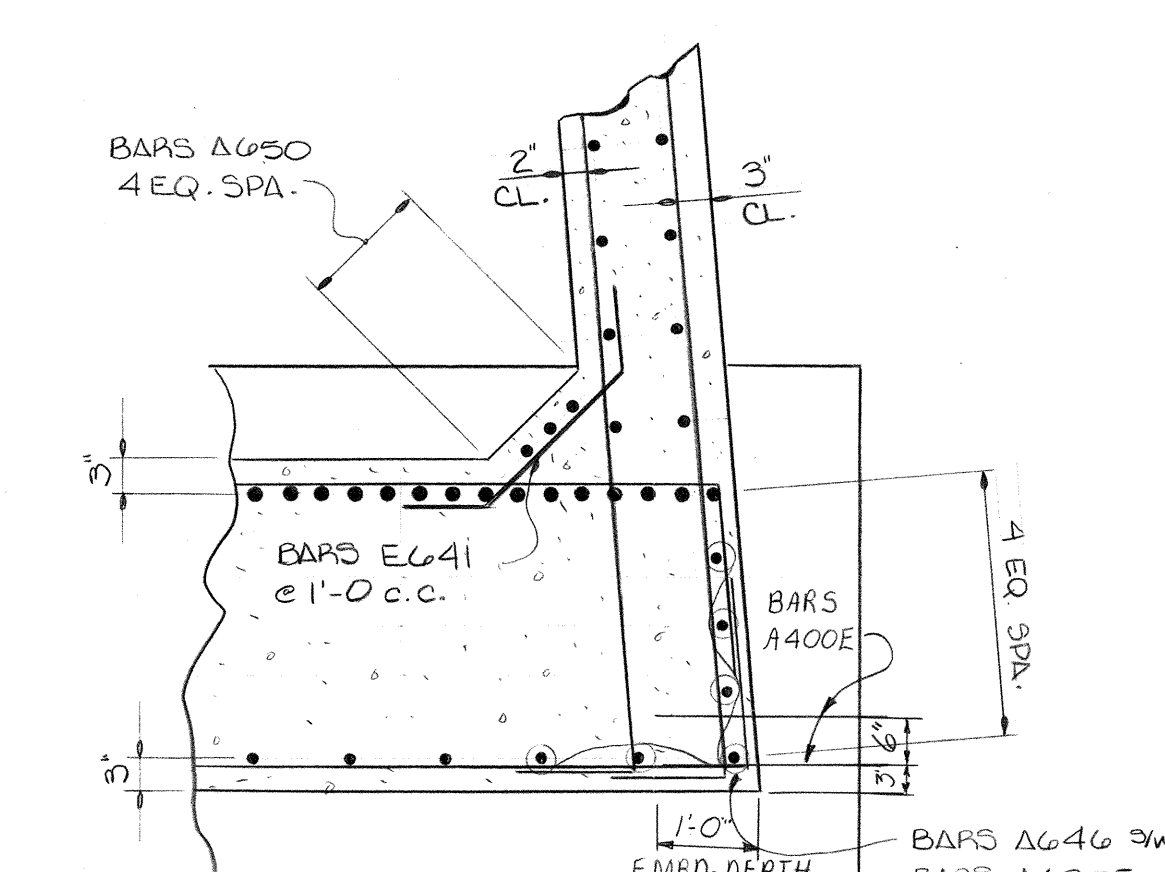
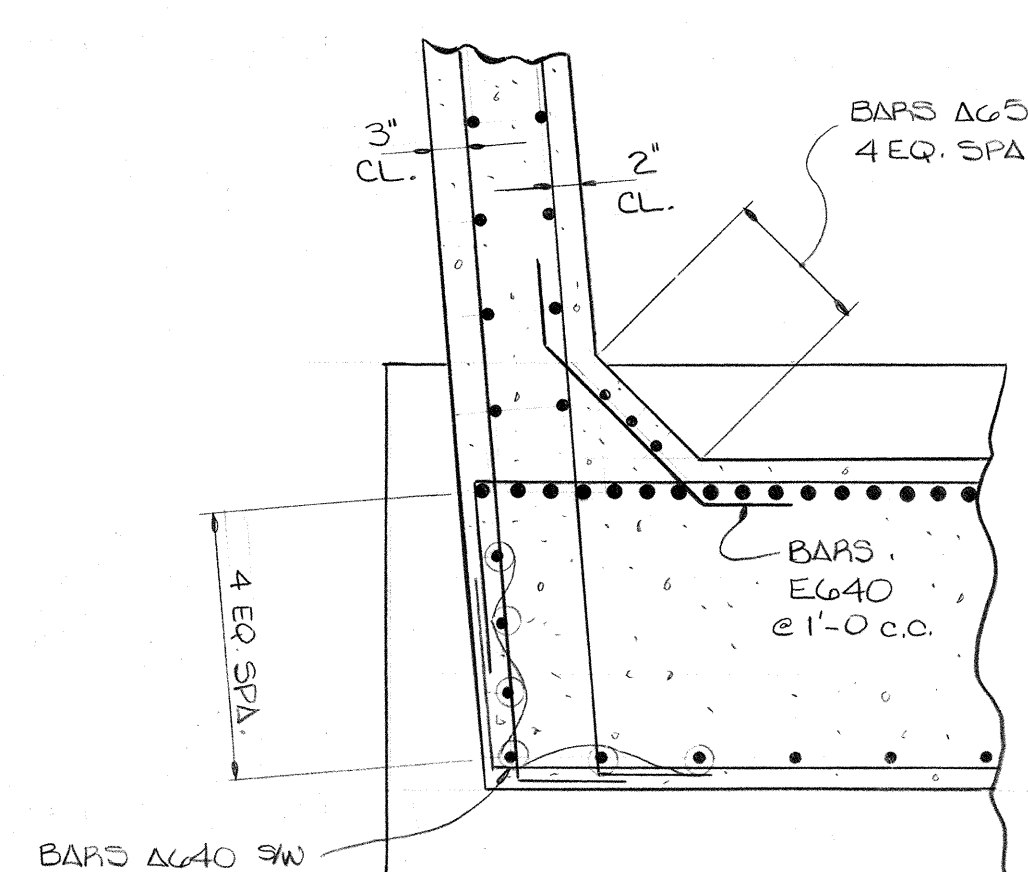
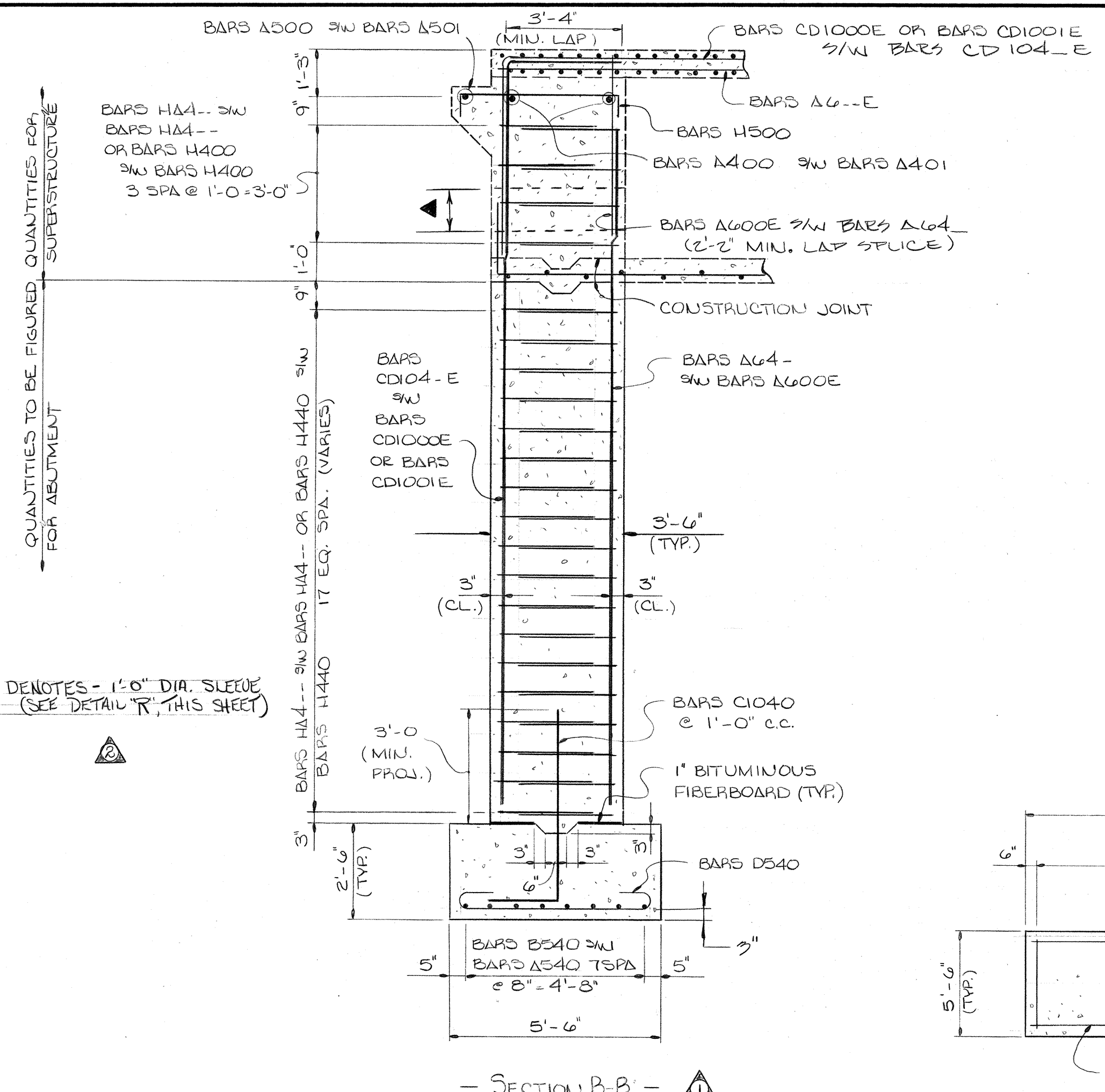
CORRECT *William L. Howard*
ENGINEER OF STRUCTURES
APPROVED *Louis Howard*
DIRECTOR OF HIGHWAYS

DESIGNED BY J. PRINCE
DRAWN BY K. COLEMAN
SUPERVISED BY J. FIELDS & A. SMITH
CHECKED BY

DATE 10-81
DATE 10-81
DATE

- ELEVATION -
(SHOWING STEEL IN FRONTFACE)

PROJECT NO.	YEAR	SHEET NO.	
I-440-4(49)206	1982		
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	9-23-82	J.H.P.	GENERAL REVISIONS
2	2-1-83	J.H.P.	DETAIL "R" ADDED



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

NOTE: COST OF BRIDGE RAIL & POST IS TO BE INCLUDED IN THE COST OF BRIDGE RAIL SYSTEM.

NOTE: FOR ELEVATIONS SEE DWG. NO. M-93-143 & M-93-145.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 ABUTMENT NO. 1 DETAILS
 HILLSBORO ROAD OVER
 INTERSTATE 440
 STATION 239+87.33
 DAVIDSON COUNTY
 1981

CORRECT *William L. Lorcatt*
 ENGINEER OF STRUCTURES
 APPROVED *Louis F. Ward*
 DIRECTOR OF HIGHWAYS

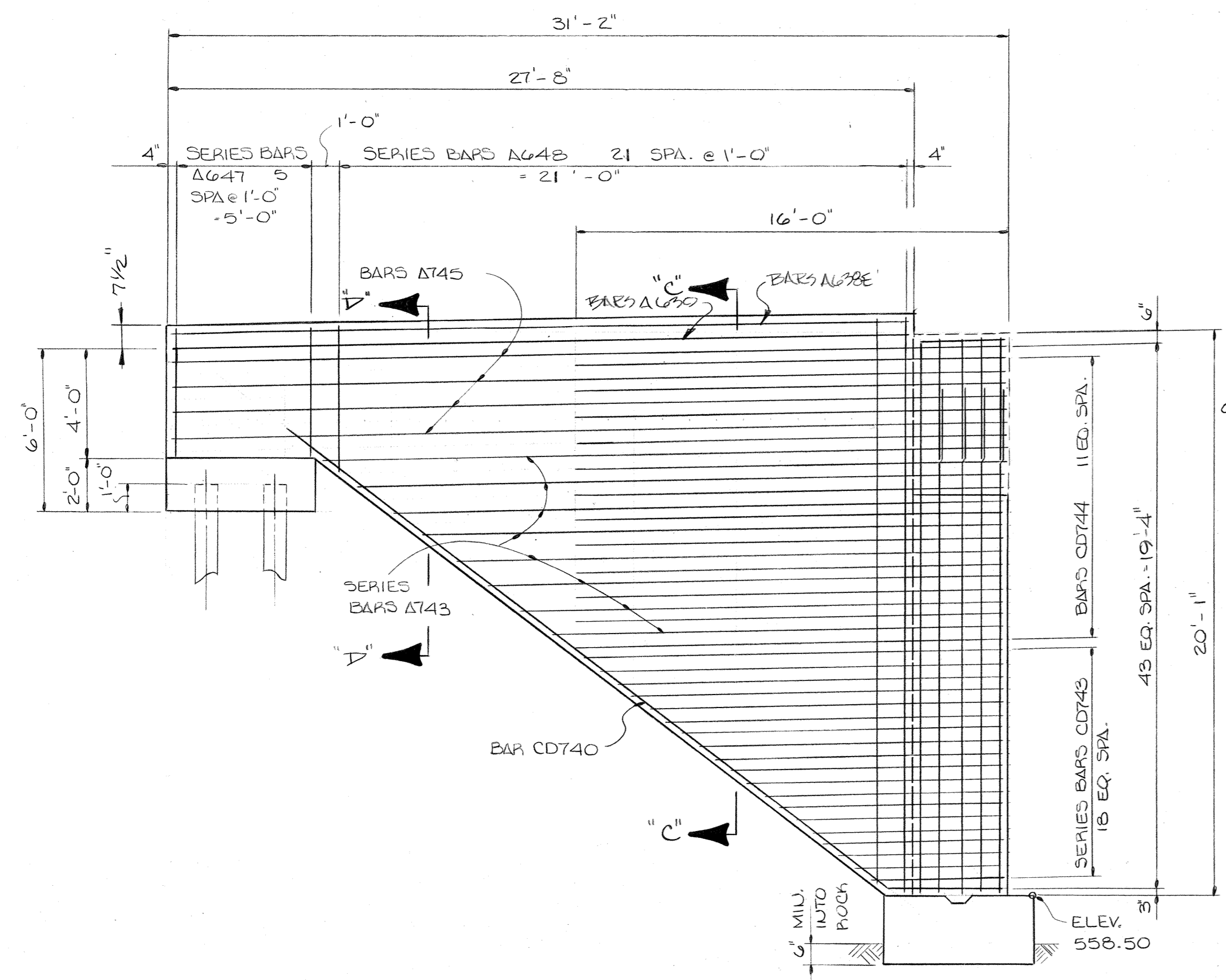
DESIGNED BY J. PRINCE
 DRAWN BY K. COLEMAN
 SUPERVISED BY J. FIELDS & A. SMITH
 CHECKED BY

DATE 10-81
 DATE 10-81
 DATE

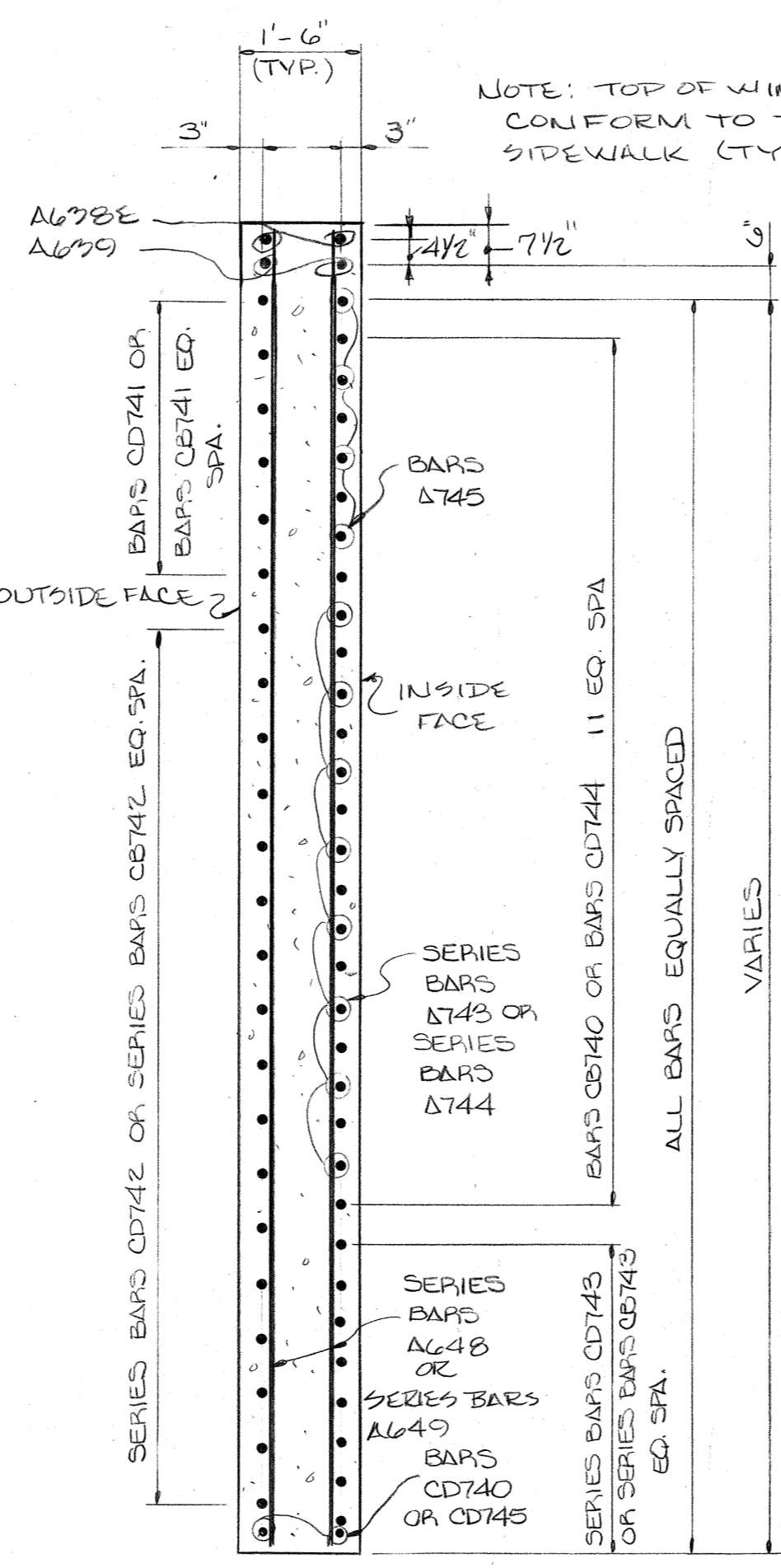
MICROFILMED

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

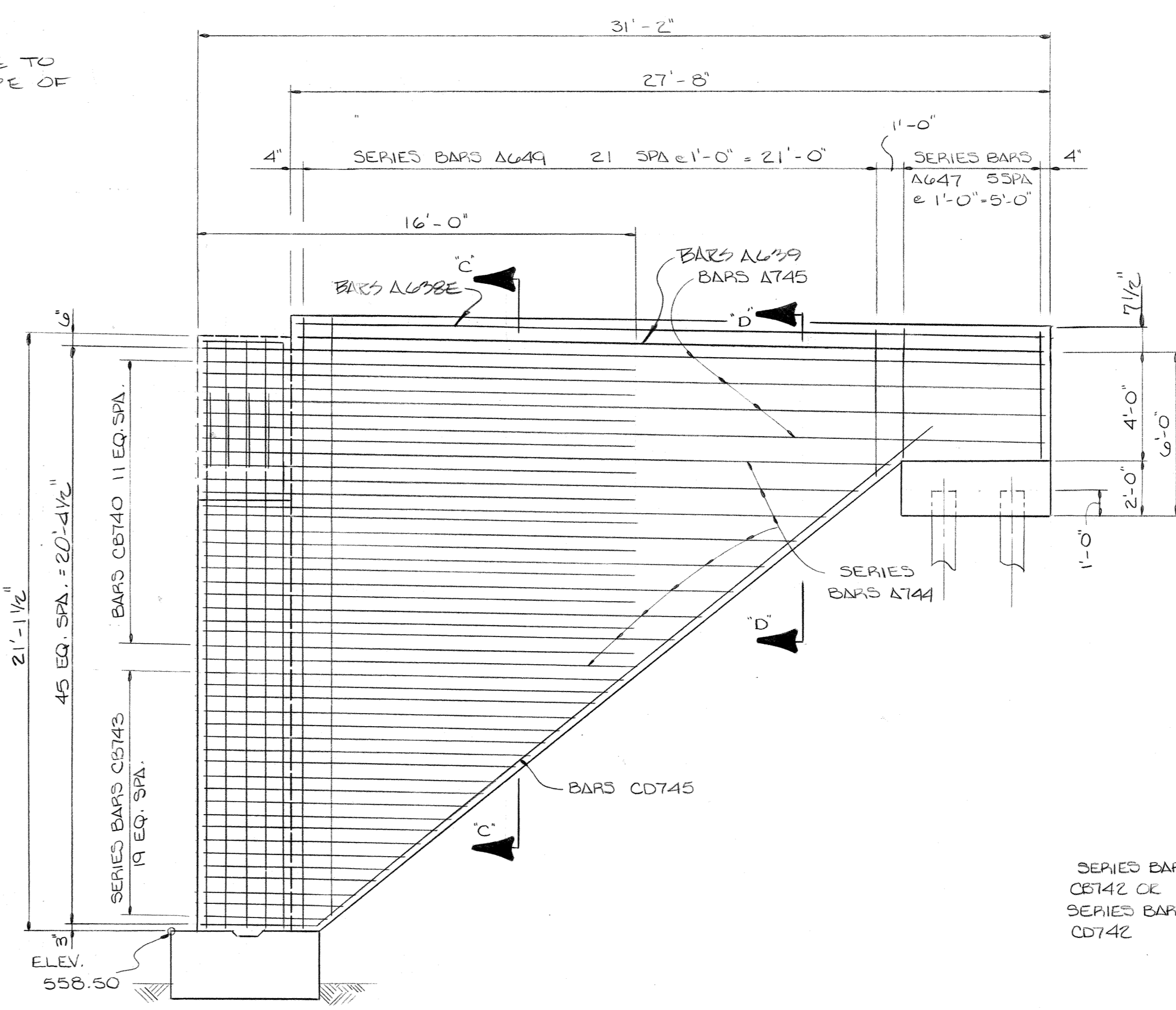
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	9-23-82	JHP	GENERAL REVISIONS
2	2-1-83	JHP	GENERAL REVISIONS



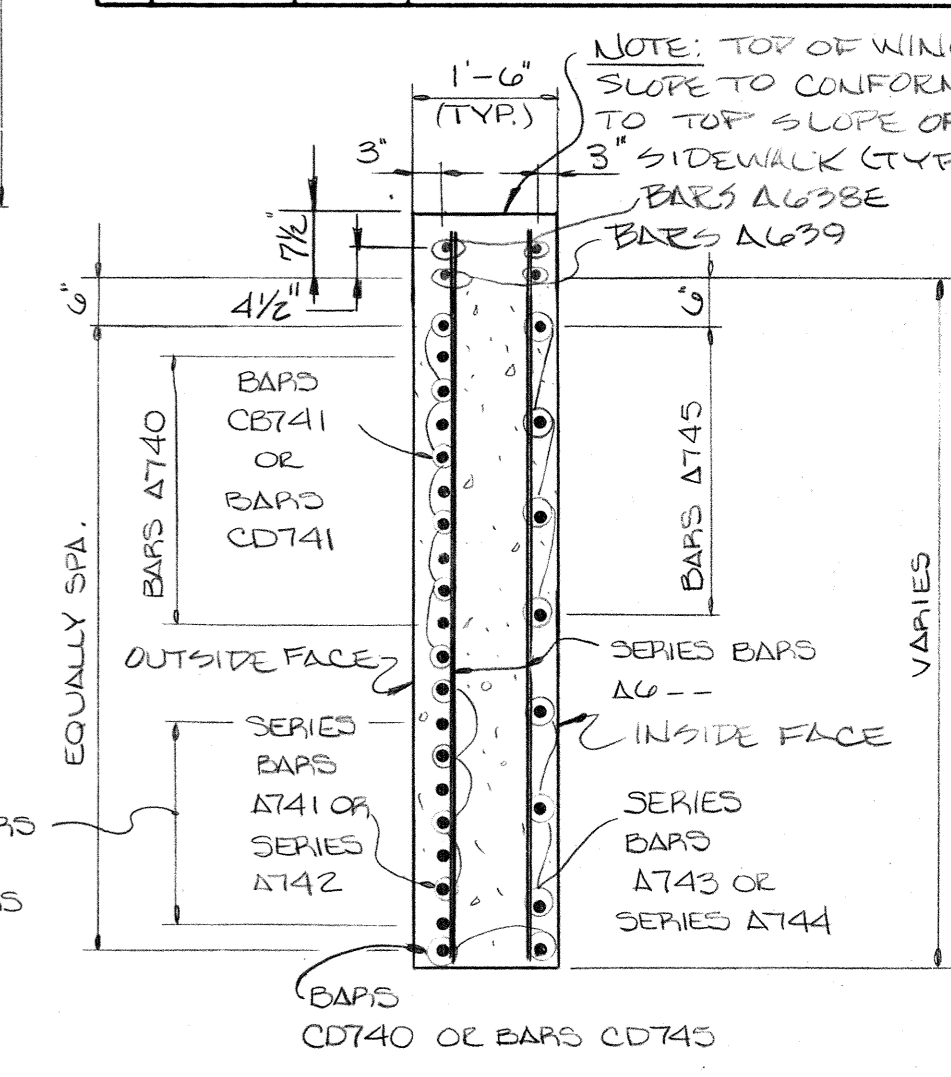
- RIGHT WING -
(INSIDE FACE)
ELEVATION X-X



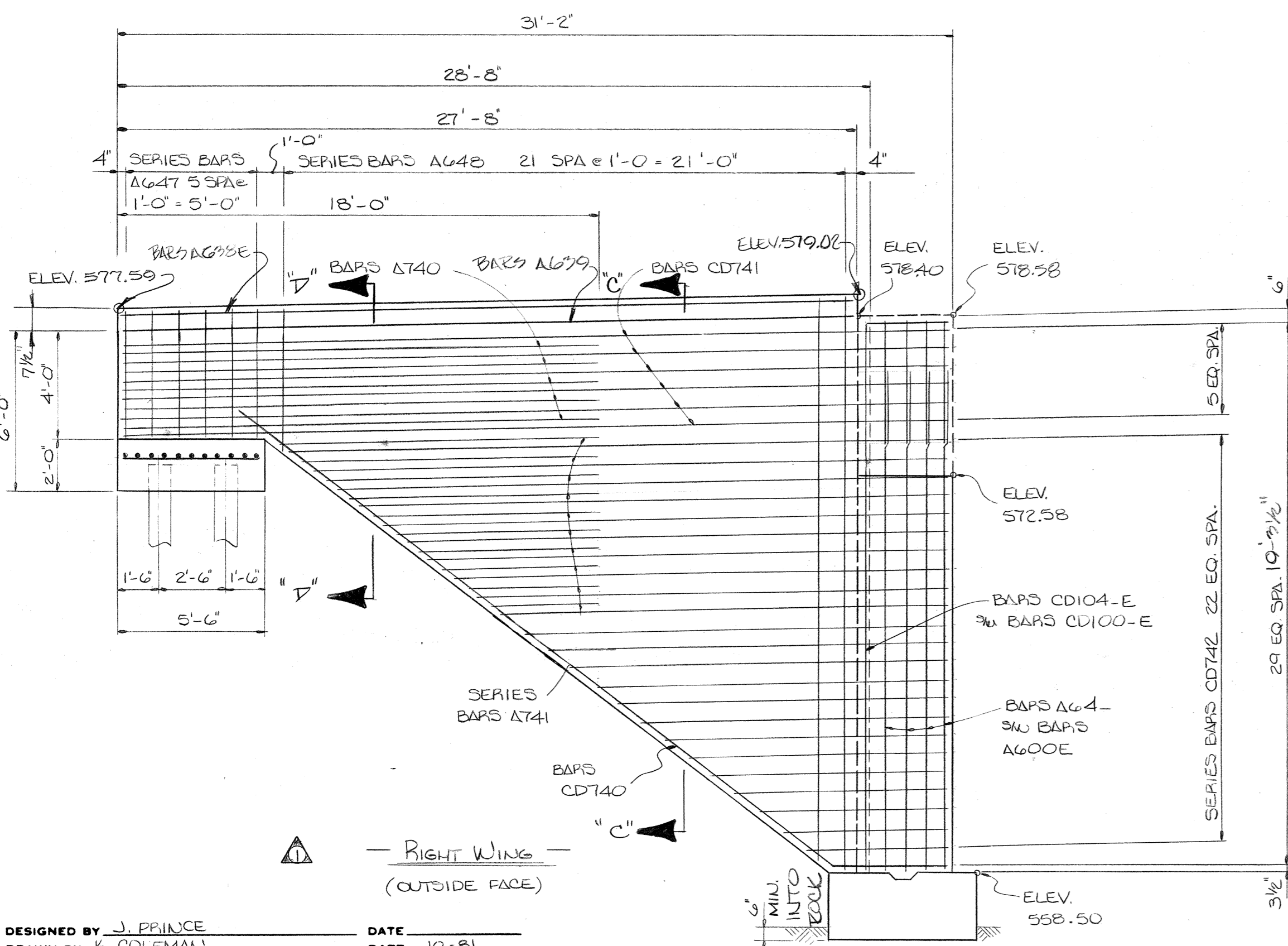
- SECTION C-C -



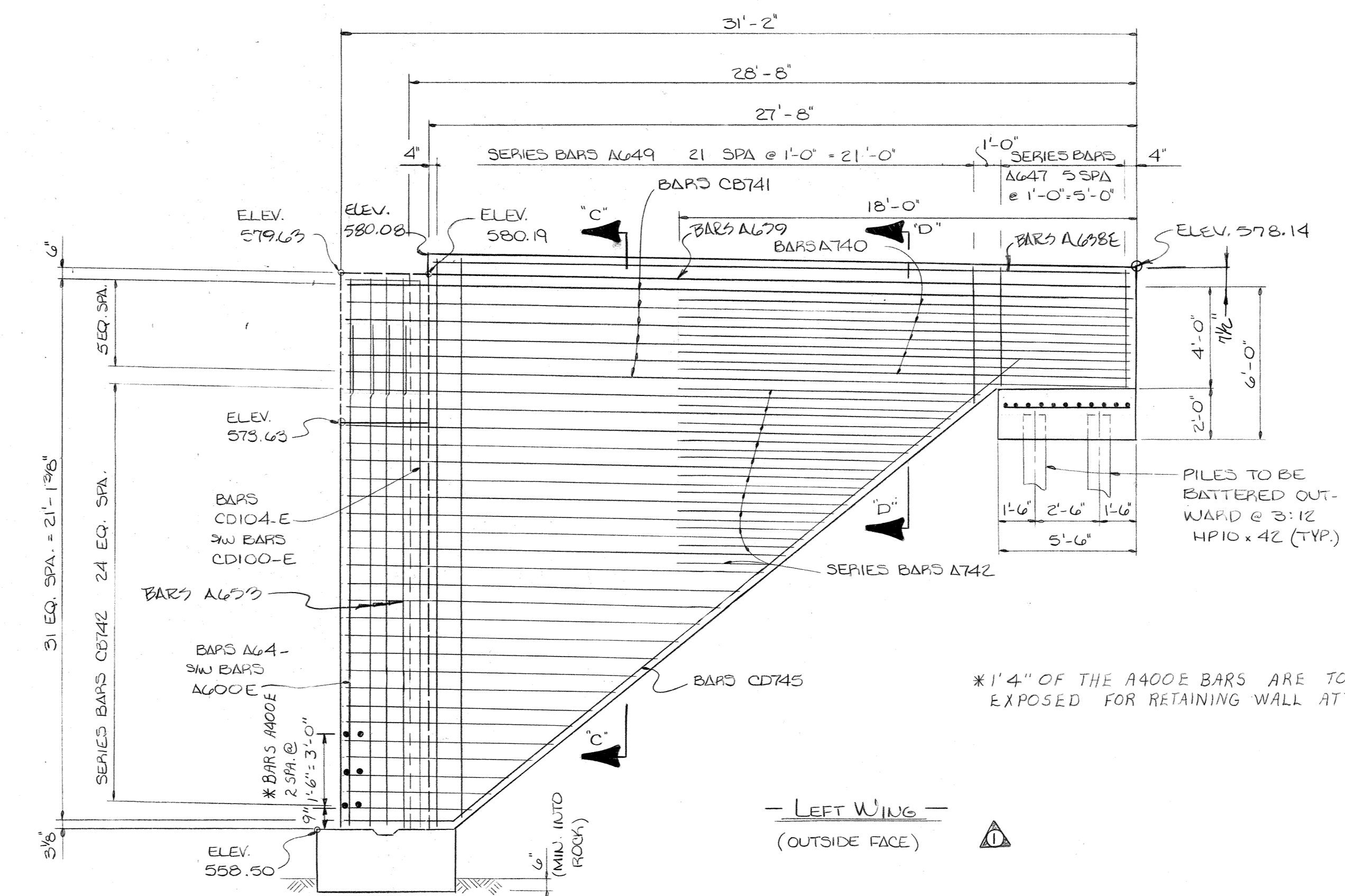
- LEFT WING -
(INSIDE FACE)
ELEVATION Y-Y



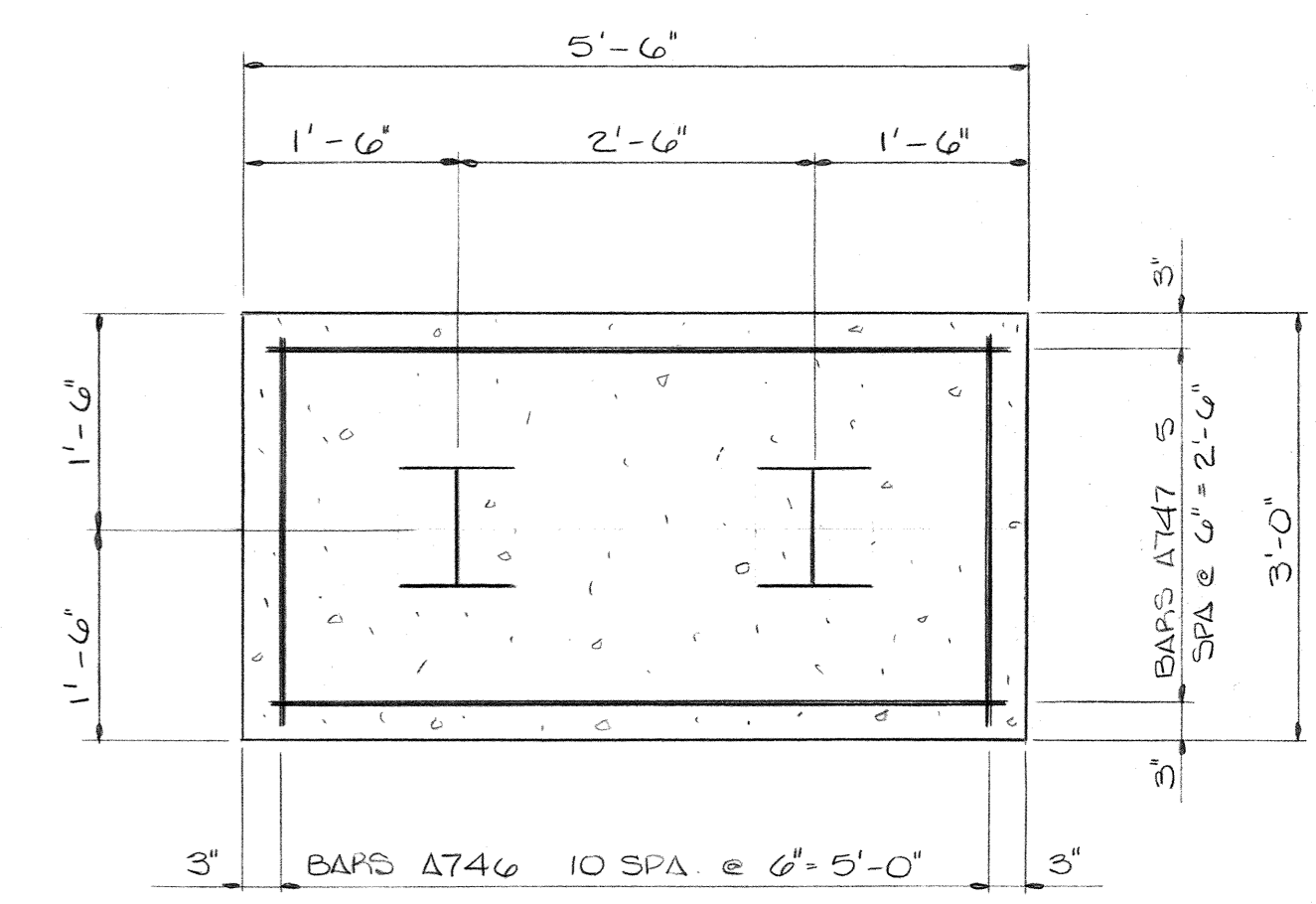
- SECTION D-D -



- RIGHT WING -
(OUTSIDE FACE)



- LEFT WING -
(OUTSIDE FACE)



- PLAN OF WING FOOTING -
(TYPICAL)

*1/4" OF THE A400E BARS ARE TO BE LEFT EXPOSED FOR RETAINING WALL ATTACHMENT.

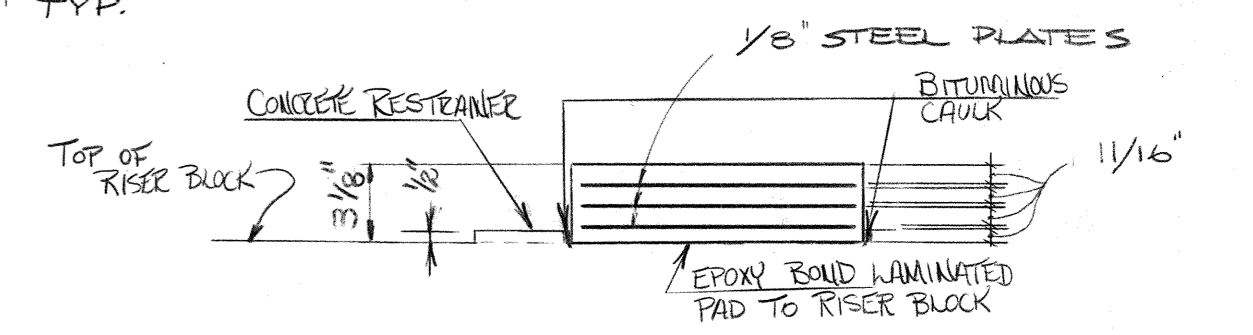
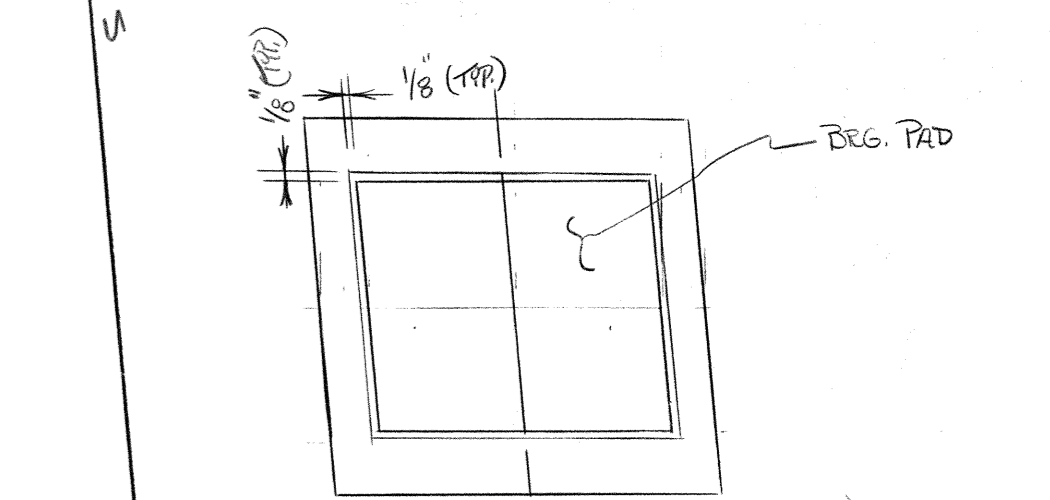
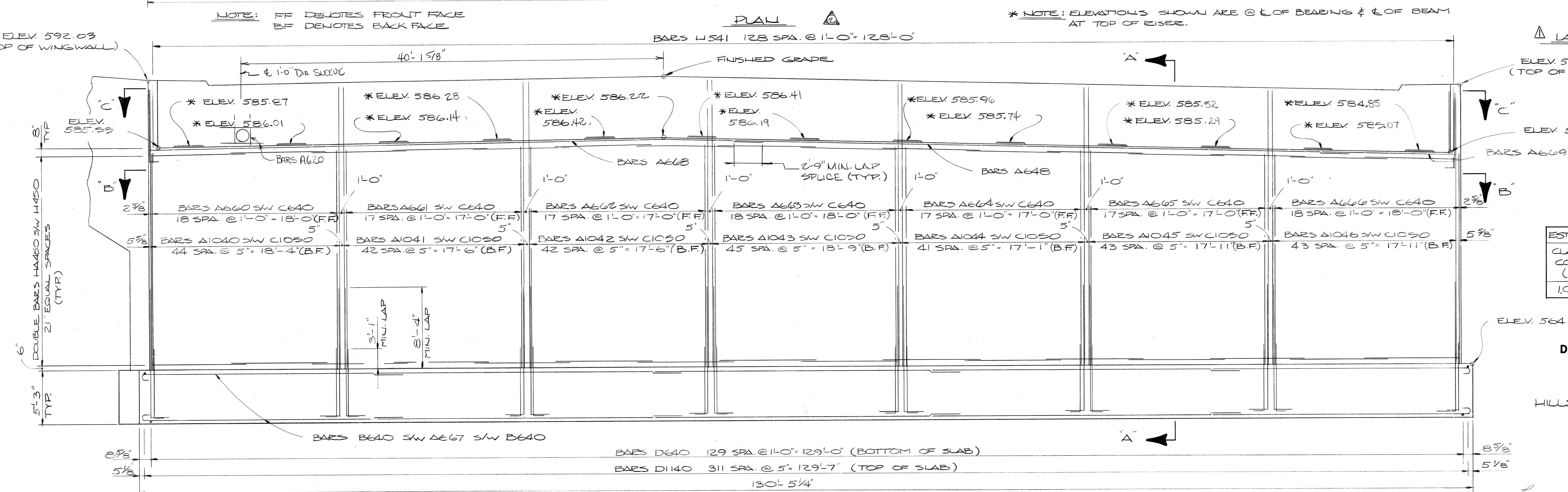
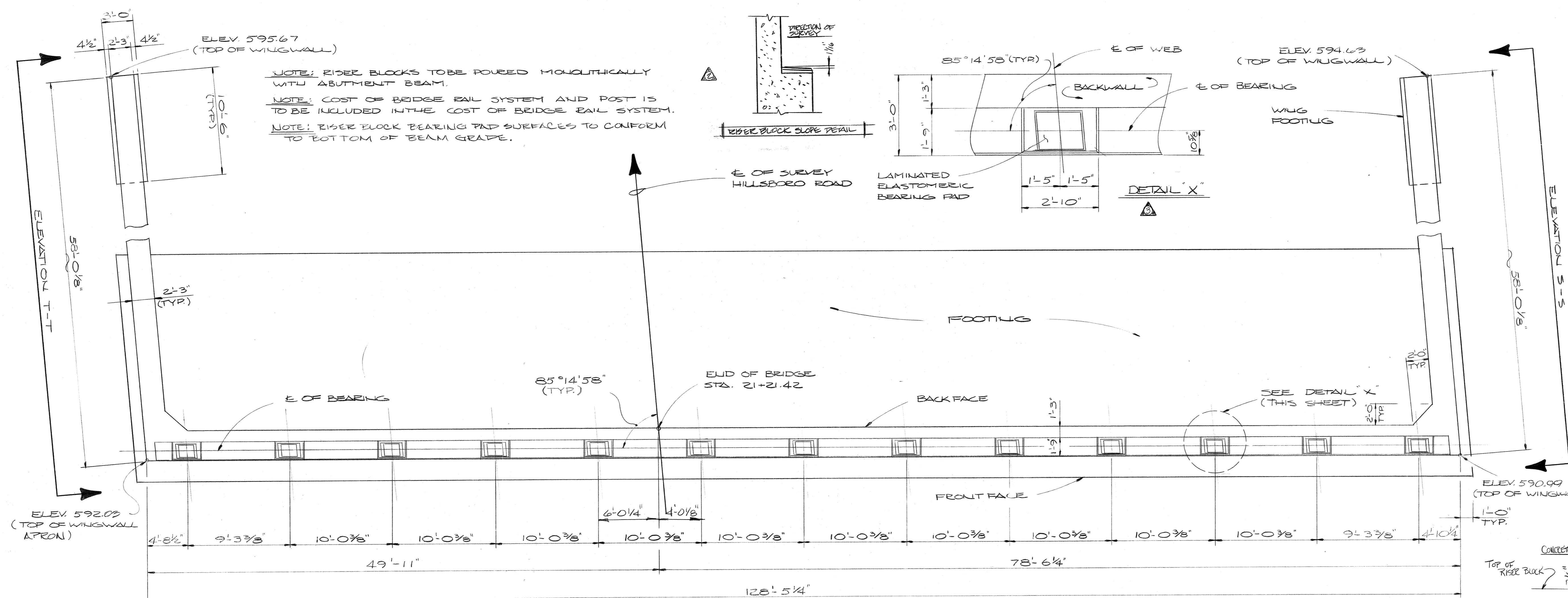
DESIGNED BY J. PRINCE
DRAWN BY K. COLEMAN
SUPERVISED BY J. FIELDS & A. SMITH
CHECKED BY _____

DATE 10-81
DATE 10-81
DATE _____

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
ABUTMENT NO. 1 DETAILS
HILLSBORO ROAD OVER
INTERSTATE-440
STATION 239+81.33
DAVIDSON COUNTY
1982

APPROVED *Richard L. Sevier*
ENGINEER OF STRUCTURES
Louis Swans
DIRECTOR OF HIGHWAYS

REVISIONS				
NO.	DATE	BY	BRIEF DESCRIPTION	
A	6-8-82	JHP	REVISED BRG THICKNESS	
B	9-23-82	JHP	GENERAL REVISIONS	
C	2-1-83	JHP	REG. ELEVATIONS & QUANTITY	



ESTIMATED QUANTITIES		
CLASS "A" CONCRETE (C.Y.)	REINFORCING STEEL (LBS.)	EPHOXY-COATED STEEL (LBS.)
1,075.4	172,894	918

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 ABUTMENT NO. 2
 HILLSBORO ROAD OVER INTERSTATE 440
 STATION 239+87.33
 DAVIDSON COUNTY
 1982

DESIGNED BY J. PRINCE
 DRAWN BY R. CHRISTY
 SUPERVISED BY FIELDS & SMITH
 CHECKED BY _____

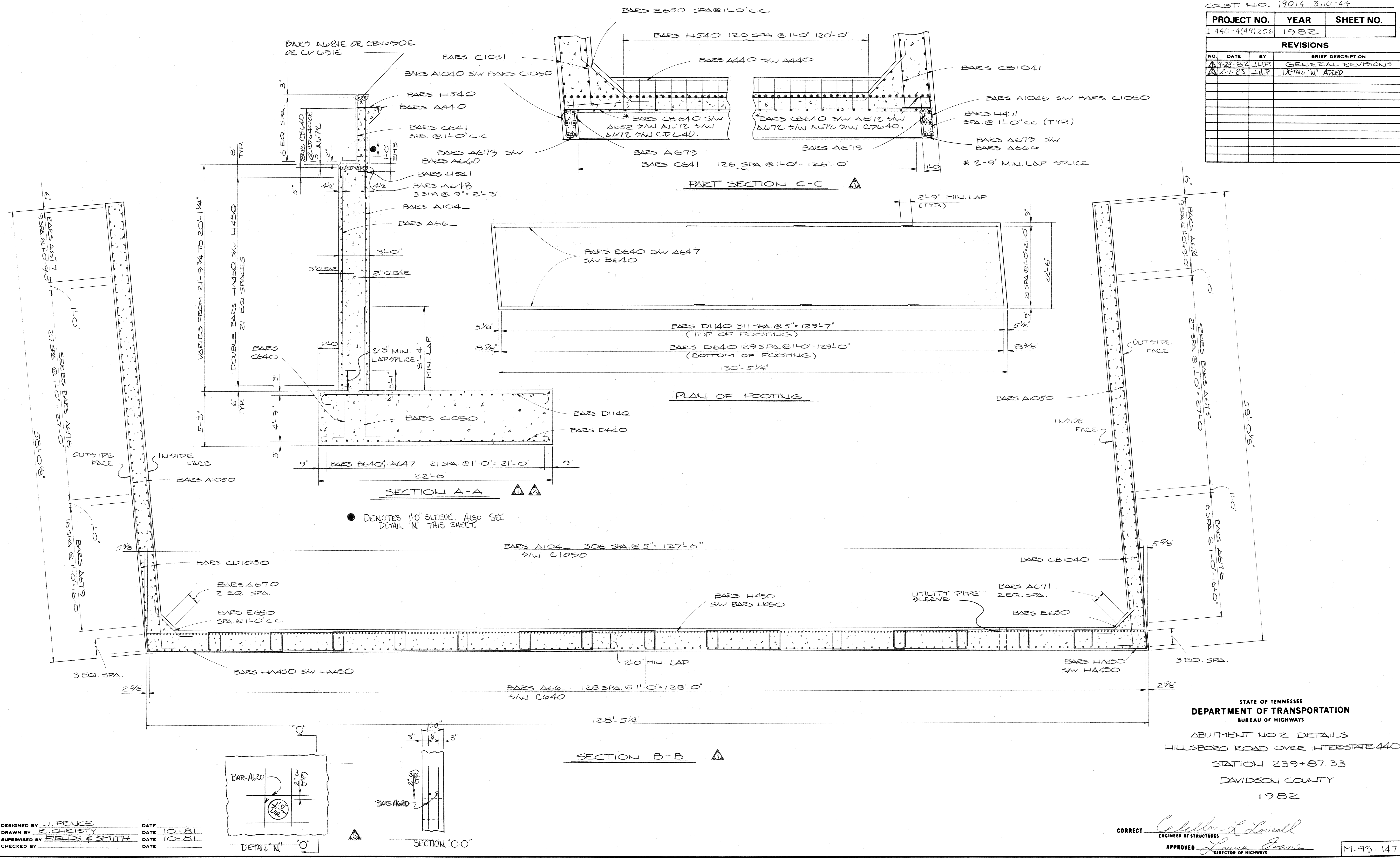
DATE 10-81
 DATE 10-81
 DATE _____

ELEVATION
 (LOOKING FORWARD ON SURVEY)

CORRECT
 Gellon L. Lovell
 ENGINEER OF STRUCTURES
 APPROVED Lewis Evans
 DIRECTOR OF HIGHWAYS

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

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	9-23-82	JHP	GENERAL REVISIONS
2	2-1-85	JHP	DETAIL "N" ADDED



● DENOTES 1'-0" SLEEVE. ALSO SEE DETAIL "N" THIS SHEET.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF HIGHWAYS
 ABUTMENT NO. 2 DETAILS
 HILLSBORO ROAD OVER INTERSTATE 440
 STATION 239+87.33
 DAVIDSON COUNTY
 1982

DESIGNED BY J. PRINCE
 DRAWN BY R. CHESTY
 SUPERVISED BY FIELDS & SMITH
 CHECKED BY
 DATE 10-81
 DATE 10-81
 DATE

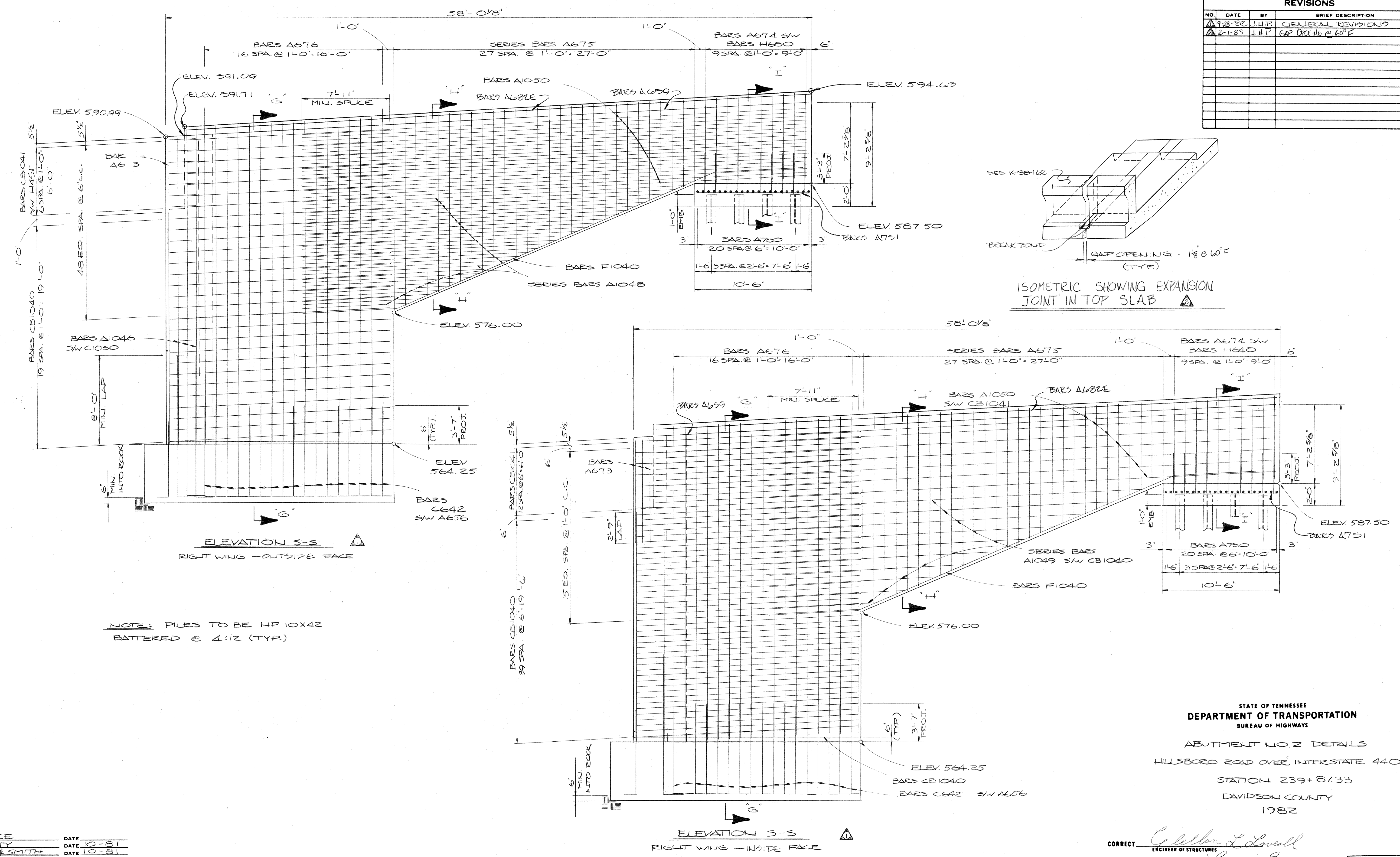
CORRECT *Celland Lovell*
 ENGINEER OF STRUCTURES
 APPROVED *Louis Evans*
 DIRECTOR OF HIGHWAYS
 M-93-147

MICROFILMED

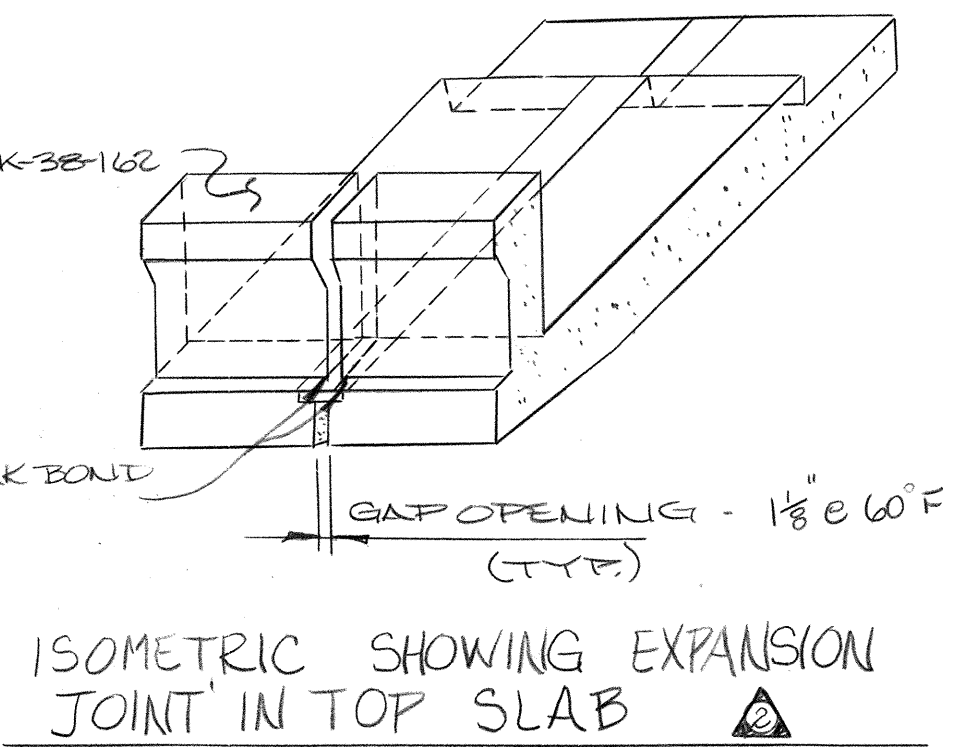
CONST. NO. 19014-3110-44

PROJECT NO.	YEAR	SHEET NO.
I-444-4(49)206	1982	

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	9-28-82	J.H.P.	GENERAL REVISIONS
2	2-1-83	J.A.P.	GAP OPENING @ 60° F



NOTE: PILES TO BE HP 10X42
BATTERED @ 4:12 (TYP.)



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

ABUTMENT NO. 2 DETAILS
HILLSBORO ROAD OVER INTERSTATE 440
STATION 239+87.33
DAVIDSON COUNTY
1982

DESIGNED BY J. PRINCE
DRAWN BY R. CHRISTY
SUPERVISED BY FIELDS & SMITH
CHECKED BY _____

DATE 10-81
DATE 10-81
DATE _____

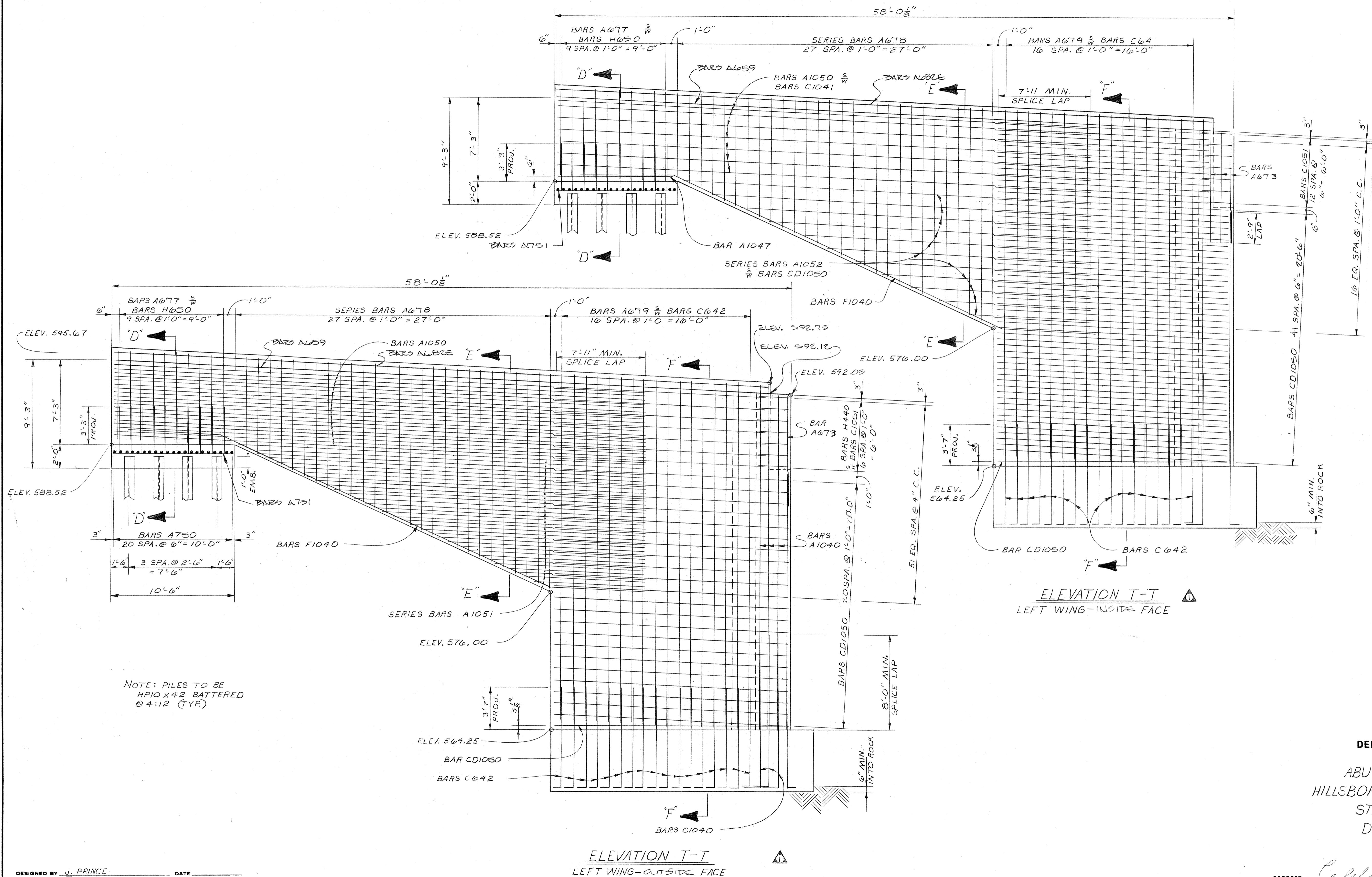
CORRECT
APPROVED
C. L. Lovell
ENGINEER OF STRUCTURES
L. J. Evans
DIRECTOR OF HIGHWAYS

M-93-148

MICROFILMED

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

REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	9-23-82	JLF	GENERAL REVISION



NOTE: PILES TO BE
HP10 X 42 BATTERED
@ 4:12 (TYR)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
ABUTMENT NO. 2 DETAILS
HILLSBORO ROAD OVER INTERSTATE 440
STATION 239+87.33
DAVIDSON COUNTY
1982

DESIGNED BY J. PRINCE
DRAWN BY T. LEWIS
SUPERVISED BY FIELDS & SMITH
CHECKED BY _____

DATE 11-81
DATE 11-81
DATE _____

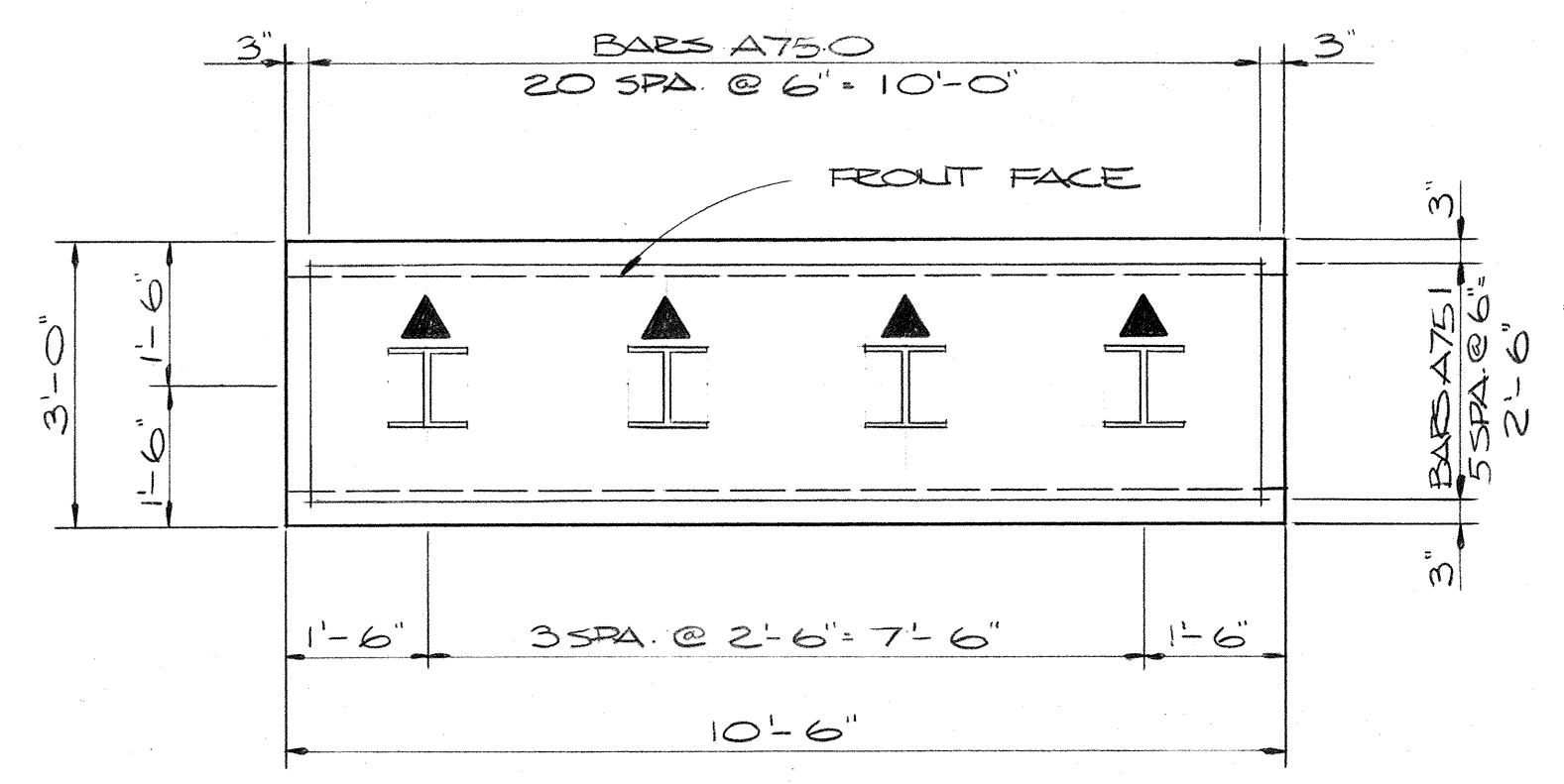
CORRECT
APPROVED
DIRECTOR OF HIGHWAYS

MICROFILMED

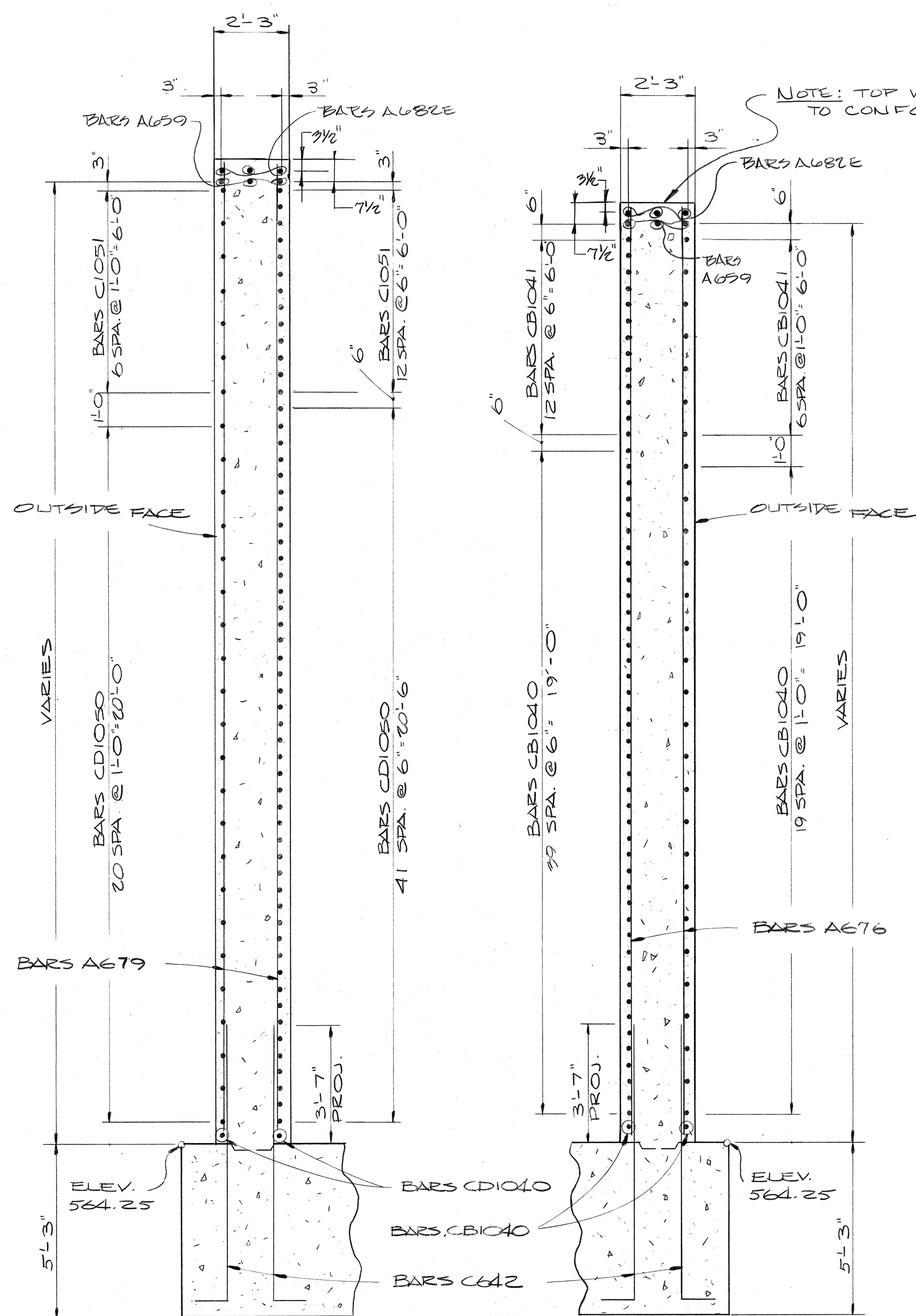
PROJECT NO.	YEAR	SHEET NO.
I-440-4(49)206	1982	

REVISIONS				
NO.	DATE	BY	BRIEF DESCRIPTION	
Δ 9-23-82	J.H.P.		GENERAL REVISIONS	
Δ 2-1-83	J.H.P.		GENERAL REVISIONS	

▲ DENOTES DIRECTION OF A 4:12 BATTER OF PILES.

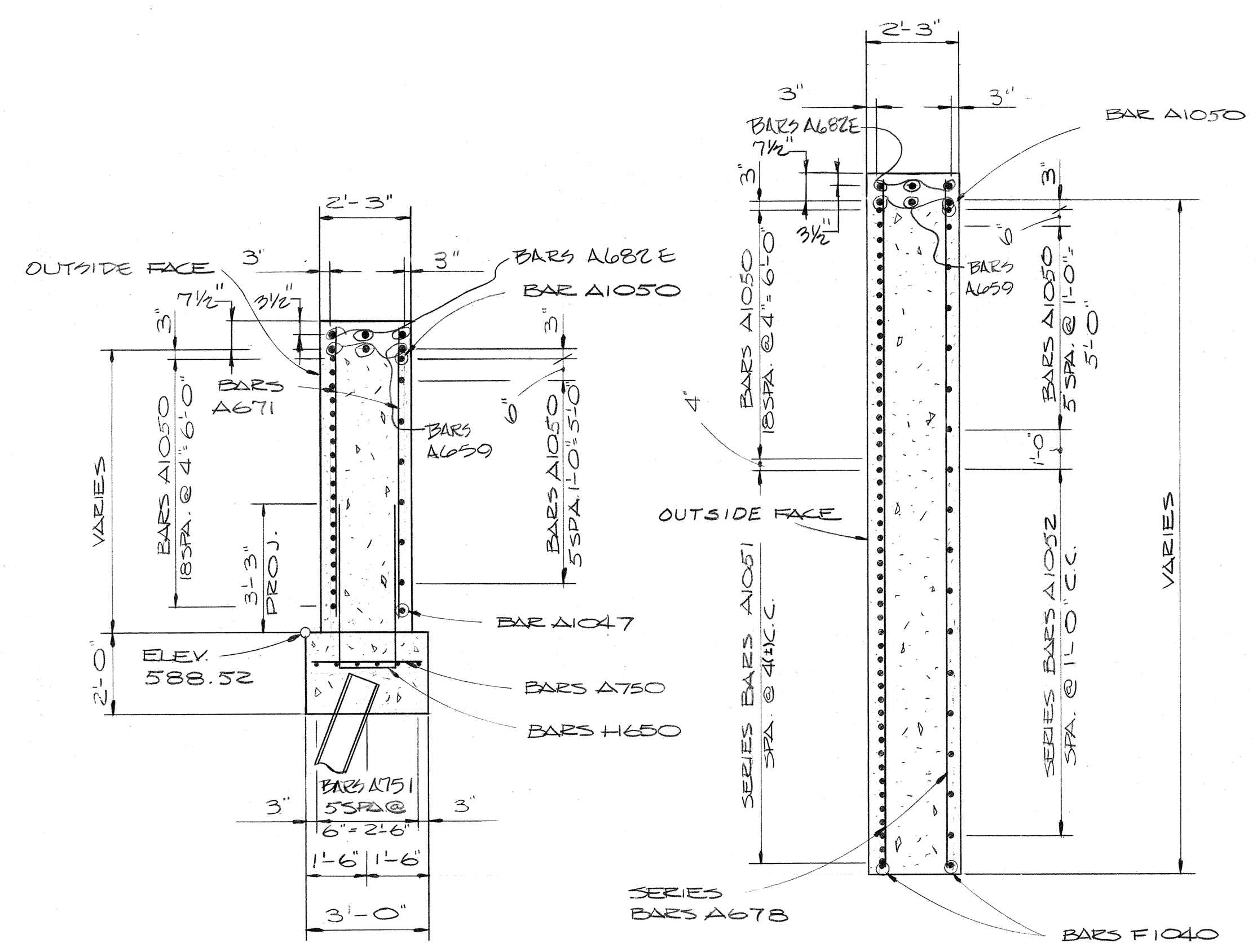


PLAN OF WING FOOTING (TYPICAL)



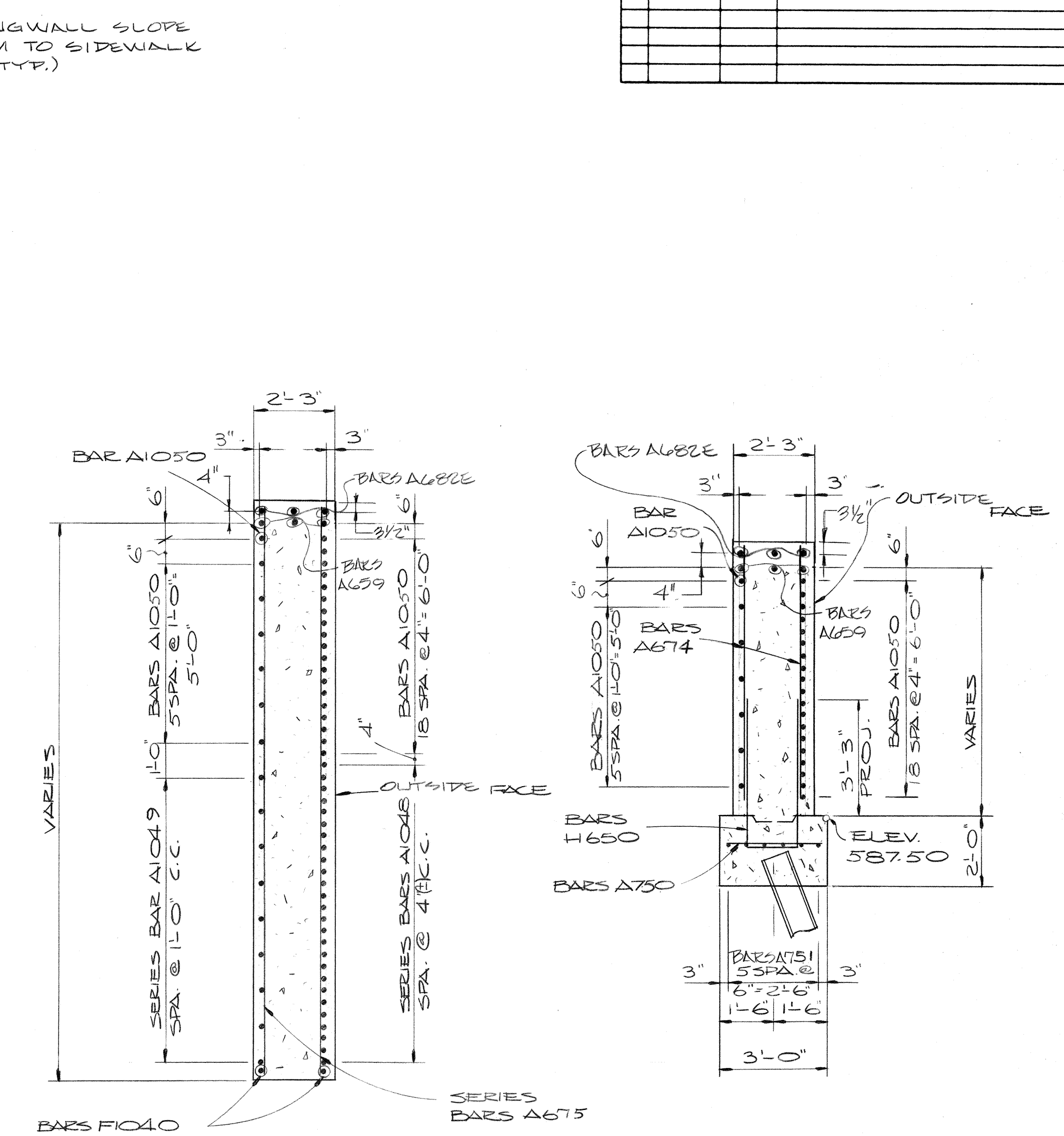
SECTION F-F (LEFT WING)

SECTION G-G (RIGHT WING)



SECTION D-D (LEFT WING)

SECTION E-E (LEFT WING)



SECTION H-H (RIGHT WING)

SECTION I-I (RIGHT WING)

NOTE: TOP WINGWALL SLOPE TO CONFORM TO SIDEWALK (TYP.)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS
ABUTMENT NO. 2 DETAILS
HILLSBORO ROAD OVER INTERSTATE 440
STATION 239+ 87.33
DAVIDSON COUNTY
1982

CORRECT *Colbert L. Lovell*
ENGINEER OF STRUCTURES
APPROVED *Louis Evans*
DIRECTOR OF HIGHWAYS

M-93-150

MICROFILMED

DESIGNED BY J. PRINCE DATE 11-81
DRAWN BY R. CHRISTY DATE 11-81
SUPERVISED BY FIELDS & SMITH DATE 11-81
CHECKED BY DATE

