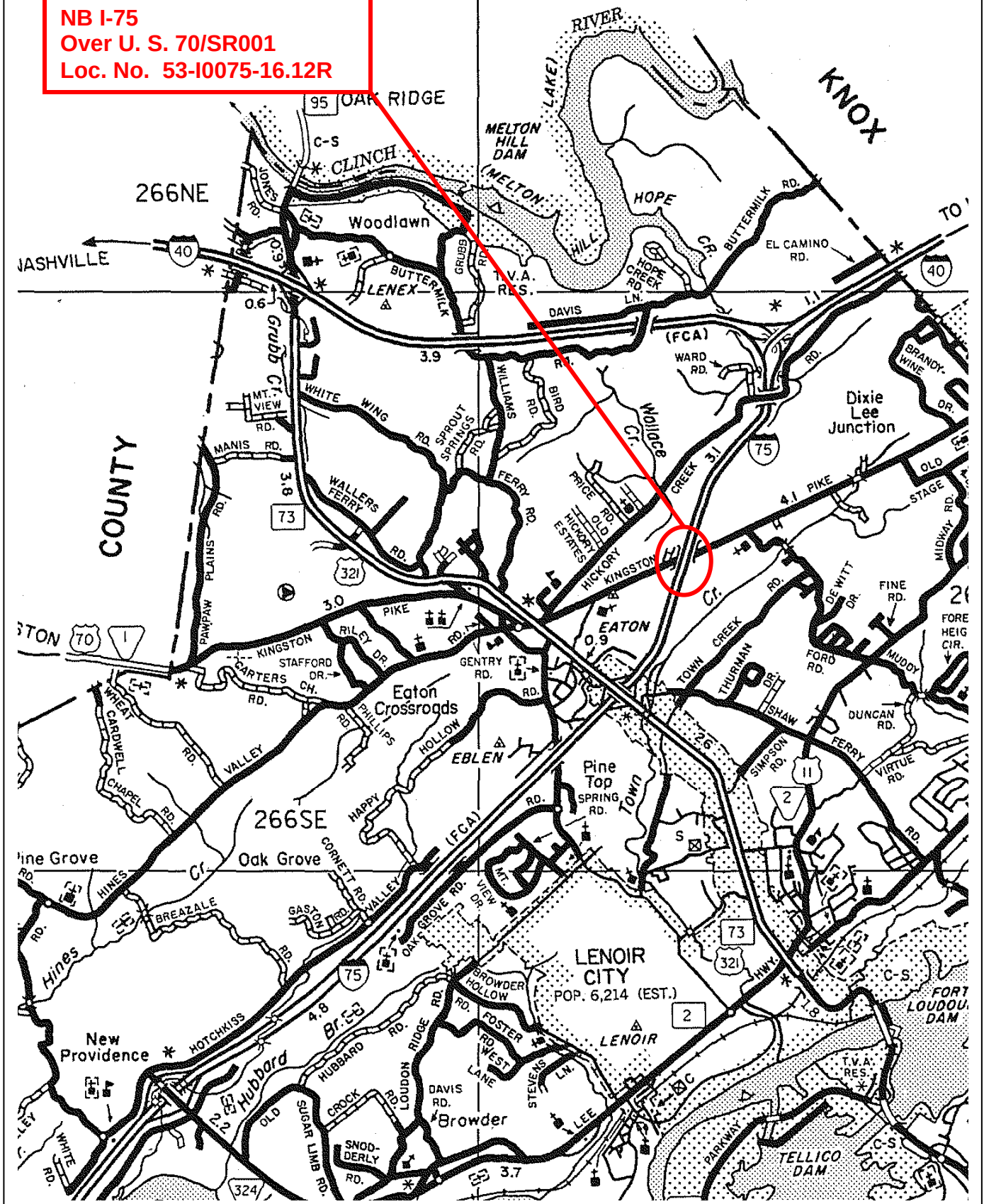


LOUDON COUNTY

ID No. 53I00750039
NB I-75
Over U. S. 70/SR001
Loc. No. 53-I0075-16.12R



		ESTIMATED QUANTITIES																	
		ALTERNATE LSDC						ALTERNATE PMC											
ITEM NO.	▲	204-02.01	604-03.01	604-03.16	604-03.01	604-03.17	604-03.02	604-25.03	604-25.04	606-02.03	616-08	616-12	710-10	710-11	604-10.51	604-03.20	604-10.50		
ITEM		DRY EXCAVATION (BRIDGES) (C.Y.) ①	CLASS "A" CONCRETE (BRIDGES) (C.Y.) ②	BRIDGE DECK SEALANT TYPE I (LSDC) (S.Y.)	CLASS "A" CONCRETE (BRIDGES) (C.Y.) ②	BRIDGE DECK SEALANT TYPE II (PMC) (S.Y.)	STEEL BAR REINFORCEMENT (BRIDGES) (LBS.)	TEXTURED COATED FINISHING (EXISTING STRUCTURES) (S.Y.)	TEXTURED COATED FINISHING (NEW STRUCTURES) (S.Y.)	STEEL PILES (10 INCH) (L.F.)	CONCRETE PARAPET (M-28-1) (L.F.)	PORTABLE BARRIER RAIL (K-38-158) (L.F.) ⑤	6" PERFORATED C.M. PIPE (18 GA.) WITH POROUS BACKFILL (L.F.) ⑥	6" C.M. PIPE UNDERDRAINS (8 GA.) (L.F.)	▲ ① SCARIFYING (S.Y.) ⑦	BRIDGE JOINT MODIFICATION (L.F.)	BRIDGE DECK REPAIRS (S.Y.) ⑧		
SUPERSTRUCTURE			116.2	692	115.0	692	42,896	▲							419	67	0		
ABUTMENT NO. 1		14.1	16.5		16.5		2,487			270									
BENT NO. 1		16.5	11.6		11.6		1,784			180									
BENT NO. 2		16.5	12.0		12.0		1,845			180									
ABUTMENT NO. 2		14.1	16.0		16.0		2,474			270									
TOTAL		61.2	172.3	692	171.1	692	51,486	523	751	900	307.6	293	112	8	419	67	0		
SUPERSTRUCTURE			116.2	692	115.0	692	42,896								419	67	50		
ABUTMENT NO. 1		14.1	16.0		16.0		2,474			172									
BENT NO. 1		14.7	12.3		12.3		1,900			80									
BENT NO. 2		14.7	12.6		12.6		1,938			80									
ABUTMENT NO. 2		14.1	16.5		16.5		2,487			172									
TOTAL		57.6	173.6	692	172.4	692	51,695	563	790	504	307.6	293	112	8	419	67	50		
GRAND TOTAL		118.8	345.9	1384	343.5	1384	103,181	1086	1,541	1,404	615.2	586	224	16	838	134	50		

THESE ITEMS TO BE PAID FOR UNDER PROJECT NO. I-75-2(23)83.

ITEM 604-10.50 TO BE PAID FOR UNDER PROJECT NO. I-75-2(24)83.

PROJECT NO.		YEAR	SHEET NO.
		1978	
REVISIONS			
NO.	DATE	BY	BRIEF DESCRIPTION
1	2-14-78	JWB	Add Item 604-03.20, NOTE 10
2	3/3/78	JMB	Alter Item 616-12 quantities
3	3/3/78	JMB	Change Item No. (Bridge Deck Repairs)
4	3/3/78	JMB	Add Item No. (Bridge Deck Repairs)
5	3/3/78	JMB	Revised Textured Coating Quantity to
6	3/3/78	JMB	Exclude Slope Paving
7	3/3/78	JMB	Deleted Structural Removal Item
8	3/3/78	JMB	Revised Note 6

NOTES: (1) EXCAVATION BASED ON EXISTING LOWER ROAD PROFILE.

(2) COST OF RUBBER BONDING CEMENT AND ELASTOMERIC BEARING PADS TO BE INCLUDED IN UNIT PRICE BID FOR CLASS "A" CONCRETE.

(3) THE COST OF EPOXY JOINT, CONCRETE GROUT, ETC., AND ALL MISCELLANEOUS JOINT MATERIAL TO BE INCLUDED IN BRIDGE ITEM 604-03.20

(4) COST OF POLYETHYLENE SHEETING AND ALL MISCELLANEOUS ITEMS NECESSARY FOR INSTALLATION TO BE INCLUDED IN COST OF PERFORATED C.M. PIPE.

(5) THE COST OF 24 THREADED STEEL INSERTS AND 24 1/8" X 4" HEX HEAD BOLTS, (A307), TO BE INCLUDED IN BRIDGE ITEMS BID ON.

(6) THE COST OF REMOVING THE EXTERIOR PORTION OF THE EXISTING SLAB, PORTIONS OF THE EXISTING ABUTMENT, AND THE BRIDGE RAIL SHALL BE INCLUDED IN THE COST OF ITEM 604-03.01. ALL SALVAGEABLE MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

(7) COST OF 1" X 8" BOLTS, WITH HEX NUTS AND WASHERS, 4" X 4" X 1/2" STEEL BACK-UP PLATES AND PLACING OF 5/8" X 3" X 1" STEEL PLATES @ EXISTING ABUTMENT, BEARING DEVICES TO BE INCLUDED IN BRIDGE ITEM 604-03.20 SEE DETAILS ON DWG. NO. M-38-149.

(8) THE CONTRACTOR SHALL BID EITHER ALTERNATE LSDC OR ALTERNATE PMC. THE VARIATION IN THE SUPERSTRUCTURE QUANTITY OF CLASS A CONCRETE FOR ALTERNATES LSDC AND PMC IS DUE TO THE DIFFERENCE IN DEPTH OF THE LSDC AND PMC SYSTEMS.

(9) SEE SPECIAL PROVISION NO. 481.

(10) QUANTITY OF 586 L.F. OF PORTABLE BARRIER RAIL INCLUDES 310 FT. FOR TRAFFIC CONTROL ON THE STRUCTURE AND 276 L.F. FOR TRAFFIC CONTROL UNDER THE STRUCTURE (ON SR-1) ▲

(11) COST OF REMOVAL OF EXISTING OVERLAY TO BE INCLUDED IN COST OF ITEM 604-10.51

GENERAL NOTES:

BRIDGE DECK SEALANT: THE BRIDGE DECK SHALL BE SEALED IN ACCORDANCE WITH SPECIAL PROVISION NO. 480. THESE BRIDGE DECK SEALANT SYSTEMS SHALL BE PAID FOR UNDER BRIDGE ITEMS 604-03.16 FOR LSDC OR 604-03.17 FOR PMC. 1384 S.Y. REQUIRED.

NOTE: THE CONTRACTOR SHALL CHECK THE LOCATION OF ALL EXISTING SUBSTRUCTURES AND VERIFY SPAN LENGTHS BEFORE CONSTRUCTION IS BEGUN.

GENERAL NOTES:

SPECIFICATIONS: STANDARD ROAD AND BRIDGE SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF HIGHWAYS (1968 EDITION).

LOADING: HS20-44.

DESIGN SPECIFICATIONS: AASHTO 1973 EDITION WITH ADDENDA.

CONCRETE: TO BE CLASS "A", FC = 3000 PSI. SEE SPECIAL PROVISION NO. 130.

BRIDGE DECK FORMS: BRIDGE DECK FORMS FOR CONCRETE DECKS SHALL BE CONSTRUCTED USING EITHER REMOVABLE FORMS OR PERMANENT FORMS. IN EITHER CASE FORMS SHALL BE ATTACHED BY MEANS OTHER THAN WELDING TO SUPPORT MEMBERS. SEE SPECIAL PROVISION NO. 450.

PRECAST, PRESTRESSED BRIDGE DECK PANELS: A PORTION OF THE CONCRETE DECK MAY BE CONSTRUCTED OF PRECAST, PRESTRESSED BRIDGE DECK PANELS FABRICATED AND USED IN ACCORDANCE WITH STANDARD DRAWING K-80-15.

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.

SPECIAL NOTE: FOUNDATIONS FOR BENTS SHALL BE EXCAVATED TO THE PILE CUT-OFF ELEVATIONS SHOWN; ROD SOUNDINGS SHALL BE MADE AS DIRECTED BY THE ENGINEER. FROM THE RESULTS OBTAINED THE ENGINEER WILL DECIDE IF PILES WILL BE USED OR THE FOOTINGS CARRIED TO ROCK. COST OF ROD SOUNDINGS TO BE INCLUDED IN ITEMS BID ON. NO REINFORCING STEEL FOR BENT COLUMNS SHALL BE ORDERED UNTIL FINAL FOOTING ELEVATIONS HAVE BEEN DETERMINED.

PILES: TO BE HP10X42 DRIVEN TO REFUSAL ON ROCK OR A MINIMUM BEARING OF 65 TONS FOR THE BENTS AND 70 TONS FOR THE ABUTMENTS.

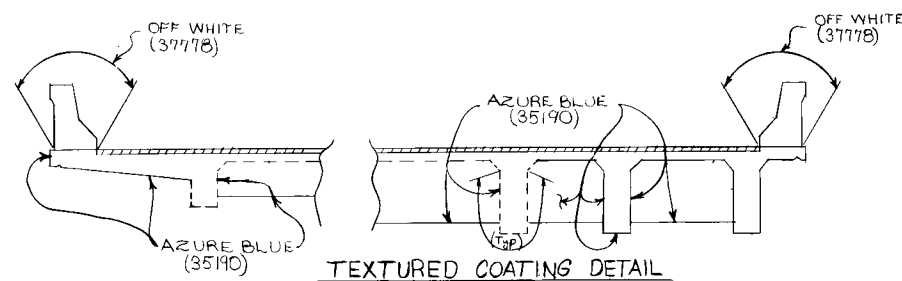
BRIDGE RAIL SYSTEM: BUILD PARAPETS ACCORDING TO STANDARD DRAWING M-28-1.

ELASTOMERIC BEARING PAD: SEE SPECIAL PROVISION NO. 210.

WELDING: SEE SPECIAL PROVISION NO. 410 AND DRAWING NO. M-38-149.

PRECAST, PRESTRESSED BRIDGE MEMBERS: SEE SPECIAL PROVISION NO. 555.

EPOXY: THE BINDER MIX, SAND AGGREGATE BATCH, PLACING METHOD, TEMPERATURE AND HUMIDITY LIMITATIONS, AND CURING TIMES SHALL BE AS RECOMMENDED BY THE MANUFACTURER. ACCEPTABLE BRANDS OF EPOXY ARE: EPI-TO-100, CELANESSE COATING CO., COLMA DUR-SIKA CHEMICAL CORP., SINMAST MORTAR MIX RESIN #4, SINMAST CORPORATION OF AMERICA, AND SIKASTIX 370-SIKA CHEMICAL CORP. COST OF JOINT PREPARATION AND EPOXY IN PLACE TO BE INCLUDED IN ITEMS BID ON.



FINISHING CONCRETE SURFACES: CONCRETE FINISHING SHALL BE IN ACCORDANCE WITH SECTION 604.22 OF THE TENNESSEE STANDARD SPECIFICATION EXCEPT AS MODIFIED BY SPECIAL PROVISION NO. 130.

A TEXTURED COATED FINISH SHALL BE USED IN LIEU OF A CLASS 2 FINISH. THE COLOR OF THE FINISH SHALL BE SIMILAR TO AZURE BLUE, FEDERAL SPECIFICATION NO. 35190 AND OFF WHITE, FEDERAL SPECIFICATION NO. 37778, FEDERAL COLOR STANDARD NO. 5950, AND A COLOR SAMPLE SHALL BE SUBMITTED TO THE ENGINEER OF STRUCTURES FOR APPROVAL.

IN ADDITION TO THE ABOVE REQUIREMENTS, AZURE BLUE (35190) SHALL BE USED ON ALL EXPOSED EXISTING AND NEW SUPERSTRUCTURE AND ABUTMENT SURFACES. OFF WHITE (37778) SHALL BE USED ON ALL EXPOSED EXISTING AND NEW BENT SURFACES, AND CONCRETE PARAPET. SEE TEXTURED COATING SKETCH ABOVE. ▲

DESIGNED BY WAYMAN Bolly DATE Oct. '77
DRAWN BY KENNY Elice DATE Dec. '77
SUPERVISED BY M. J. J. Barry DATE Dec. '77
CHECKED BY T. Wilson DATE Dec. '77

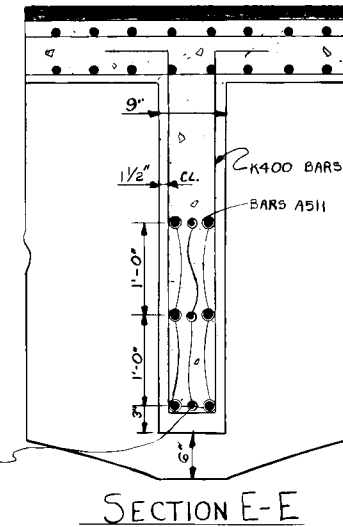
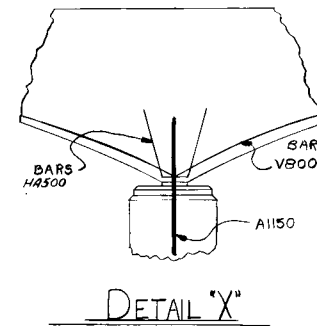
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

ESTIMATED QUANTITIES AND GENERAL NOTES
WIDENING INTERSTATE 75
OVER STATE ROUTE 1
STA. 1207+66.50
LOUDON COUNTY

CORRECT: H. C. LaRue
ENGINEER OF STRUCTURES
APPROVED: Lewis Evans
DIRECTOR OF HIGHWAYS

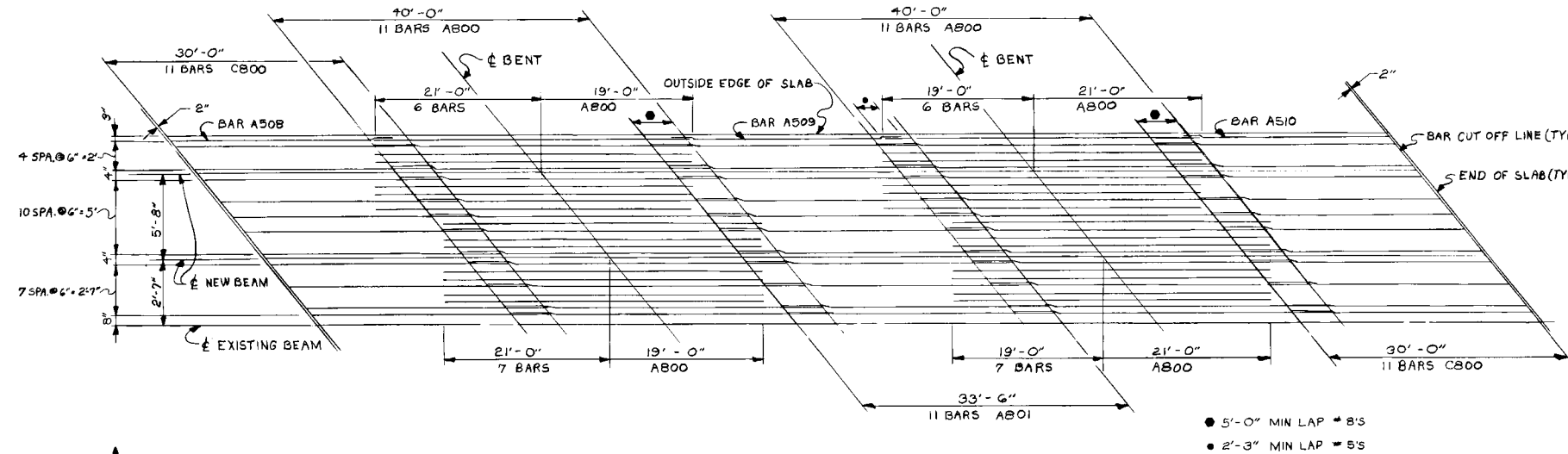
M-38-144

NOTE: TOP OF DOWELS TO BE COVERED WITH 1/2" OF COMPRESSIBLE MATERIAL AND THE 2'-0" PROJECTION WRAPPED WITH TWO LAYERS OF WATERPROOF PAPER.

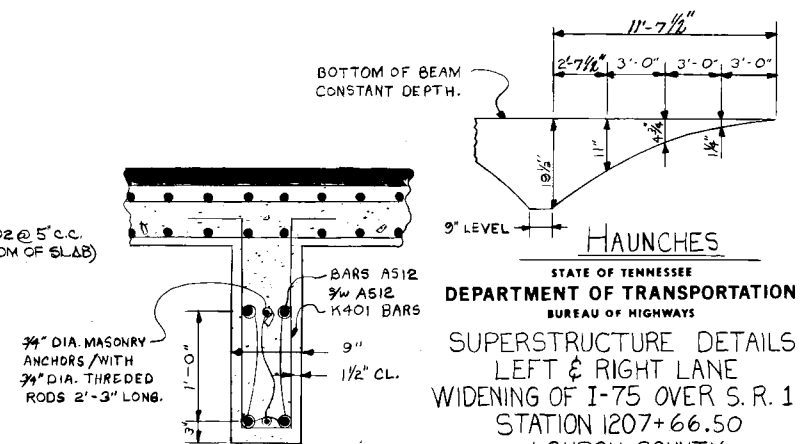
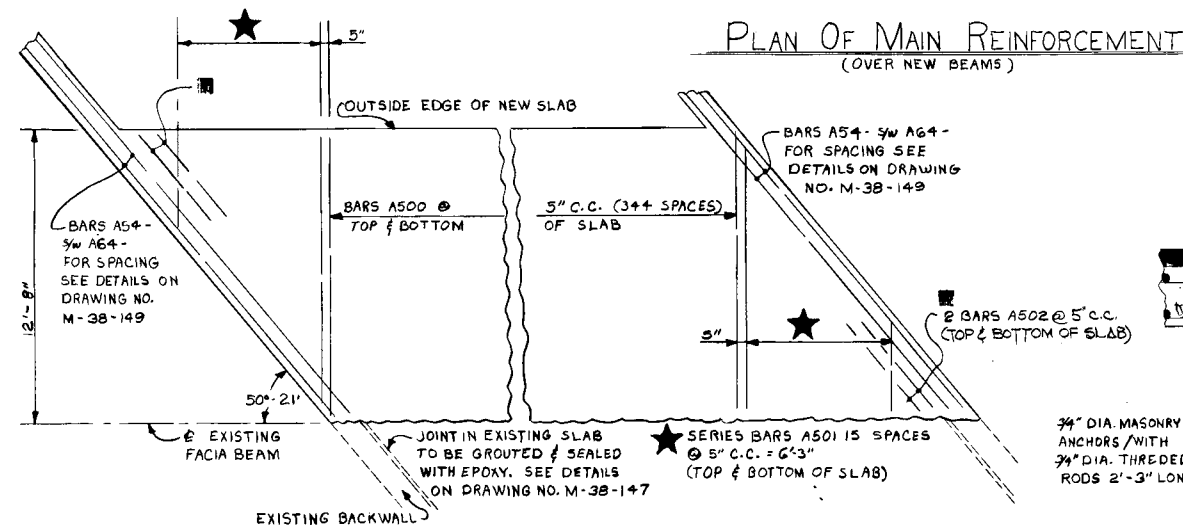
[illegible]

NOTE: COST OF FURNISHING & PLACING
INSERTS TO BE INCLUDED IN BRIDGE
ITEMS BID ON. (SEE PULL OUT NOTE
ON DRAWING NO. M-38-150)

NOTE: 3/4" DIA. MASONRY ANCHORS TO BE
DRILLED INTO EXISTING BEAM AS
SHOWN ON DRAWING NO. M-38-145.



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



9" LEVEL

HAUNCHES

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

SUPERSTRUCTURE DETAILS
LEFT & RIGHT LANE
WIDENING OF I-75 OVER S.R. 1
STATION 1207+66.50
LOUDON COUNTY
1978

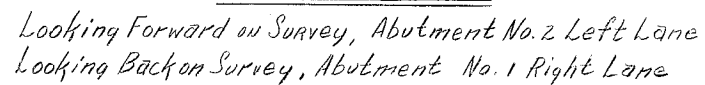
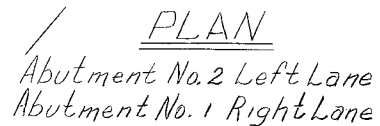
SLAB PLAN SHOWING TRANSVERSE REINFORCING OVER NEW BEAMS

SECTION F-F

DESIGNED BY WAYMAN BOLLY DATE 10-77
DRAWN BY DYAN CROSBY DATE 12-77
SUPERVISED BY MSINTURF & BARRY DATE 12-77
CHECKED BY WILSON DATE 12-77

CORRECT *A. P. Duthie*
ENGINEER OF STRUCTURES
APPROVED *Leuris Evans*
DIRECTOR OF HIGHWAYS

M-38-146

[illegible]

<u>ESTIMATED QUANTITIES</u>		
ITEM	Concrete CLASS "A" C. Y.	Reinf. Steel Lbs.
ABUT. NO. 2 L. L.	16.0	2,474
ABUT. NO. 1 R. L.	16.0	2,474

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

ABUTMENT NO. 2 LEFT LANE
ABUTMENT NO. 1 RIGHT LANE
WIDENING OF I-75 OVER ST. RT. 1
STATION 1207 + 66.50
LOUDON COUNTY

1978

CORRECT L. W. Derthick
ENGINEER OF STRUCTURES

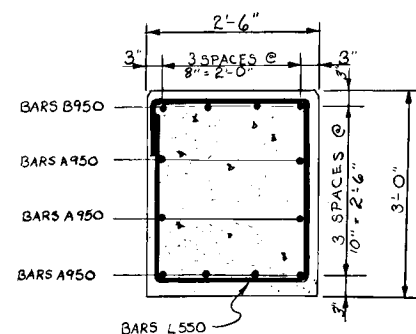
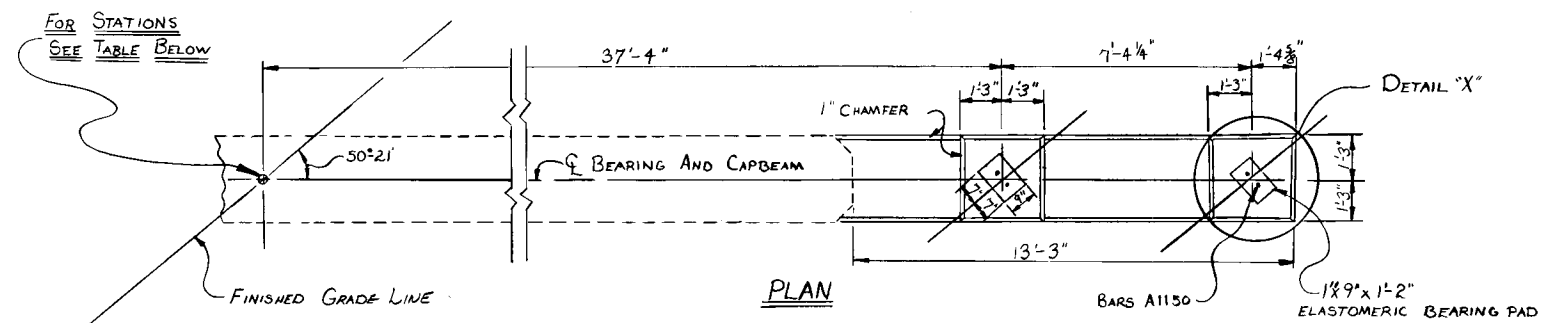
APPROVED Louis Guanel
DIRECTOR OF HIGHWAYS

M-38-148

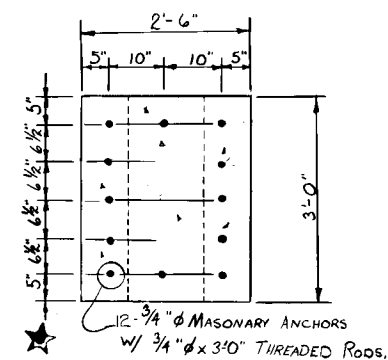
DESIGNED BY Wayman Bolly DATE 11-77
 DRAWN BY Bernie Fugua DATE 12-77
 SUPERVISED BY McInturff Barry DATE 12-77
 CHECKED BY Graves & Bolly DATE 12-77

MICROFILMED

FOR STATIONS
SEE TABLE BELOW

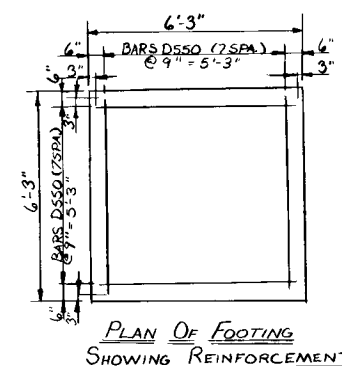


SECTION A-A

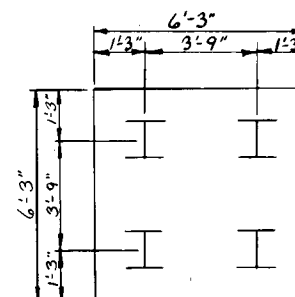


NOTE: COST OF FURNISHING AND PLACING INSERTS
TO BE INCLUDED IN BRIDGE ITEMS BID ON.

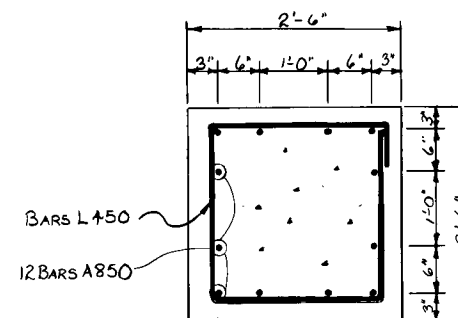
SECTION B-B



31 PLAN OF FOOTING
SHOWING REINFORCEMENT



PLAN OF FOOTING
SHOWING PILE ARRANGEMENT



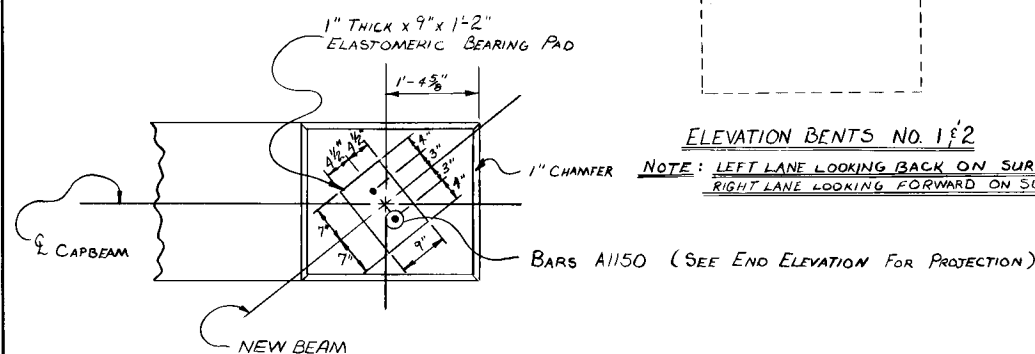
SECTION C-C

THE CONTRACTOR SHALL FURNISH ANCHOR
PULL OUT DATA FROM AN INDEPENDENT
TESTING LABORATORY AS PRESCRIBED BY
TENNESSEE HIGHWAY SPECIFICATIONS. THE
REQUIRED ULTIMATE LOAD FOR $\frac{3}{4}$ " $\emptyset$
ANCHORS IS 18,000 (LBS). SLIPPAGE
SHALL NOT EXCEED $\frac{1}{4}$ ". THE DEPARTMENT
WILL PERFORM TESTING OF ANCHORS
ON SITE TO INSURE THE SPECIFIED IN
PLACE REQUIREMENTS. INSTALLATIONS NOT
MEETING THESE REQUIREMENTS MUST BE
CORRECTED AT THE CONTRACTORS EXPENSE.

NOTE: WHEN POURING CAP BEAM, PROVISIONS SHALL BE MADE FOR SETTING BARS AT 50 PROJECTION TO BE 2'-0" FROM TOP OF RISER BLOCK.

NOTE: RISER BLOCKS TO BE POURED MONOLITHICALLY WITH CAP BEAM.

NOTE: COLUMN STEEL TO EXTEND 2'-6" INTO CAPBEAM.



DETAIL "X"

ELEVATION BENTS NO. 1 & 2

NOTE: LEFT LANE LOOKING BACK ON SURVEY
RIGHT LANE LOOKING FORWARD ON SURVEY

<u>TABLE OF STATIONS ELEVATIONS AND DIMENSIONS</u>									
		<u>ELEVATIONS</u>						<u>DIMENSION</u>	
	<u>ITEM</u>	<u>STATIONS</u>	<u>"A"</u>	<u>"B"</u>	<u>"C"</u>	<u>"D"</u>	<u>"E"</u>	<u>"F"</u>	<u>"X"</u>
<u>LEFT</u> <u>LANE</u>	<u>BENT NO1</u>	<u>1207+10.64</u>	<u>996.47</u>	<u>996.30</u>	<u>996.17</u>	<u>978.17</u>	<u>976.17</u>	<u>975.17</u>	<u>15'-0"</u>
	<u>BENT NO2</u>	<u>1207+72.64</u>	<u>997.23</u>	<u>997.11</u>	<u>996.97</u>	<u>977.47</u>	<u>975.47</u>	<u>974.47</u>	<u>16'-6"</u>
<u>RIGHT</u> <u>LANE</u>	<u>BENT NO1</u>	<u>1207+40.36</u>	<u>997.63</u>	<u>997.63</u>	<u>997.29</u>	<u>976.29</u>	<u>974.29</u>	<u>973.29</u>	<u>18'-0"</u>
	<u>BENT NO2</u>	<u>1208+22.36</u>	<u>998.26</u>	<u>998.25</u>	<u>997.93</u>	<u>975.93</u>	<u>973.93</u>	<u>972.93</u>	<u>19'-0"</u>

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES			
	ITEM	CONCRETE CLASS "A" CY	REINFORCING STEEL (LBS.)
LEFT	BENT NO. 1	11.6	1784
LANE	BENT NO. 2	12.0	1845
RIGHT	BENT NO. 1	12.3	1900
LANE	BENT NO. 2	12.6	1938

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BENTS No. 1 E 2
LEFT AND RIGHT LANES
WIDENING OF INTERSTATE 75
OVER STATE ROUTE 1
STATION 1207+66.50
LOUDON COUNTY
1978

DESIGNED BY WAYMAN BOLLY DATE 10-77
DRAWN BY STEVEN BROWN DATE 11-77
SUPERVISED BY MCMINTURE & BARRY DATE 11-77
CHECKED BY WILSON DATE 12-77

CORRECT H. Y. Dearthick
ENGINEER OF STRUCTURES

APPROVED Lewis Evans
DIRECTOR OF HIGHWAYS

M-38-150

MICROFILMED

LEFT LANE

BILL OF STEEL

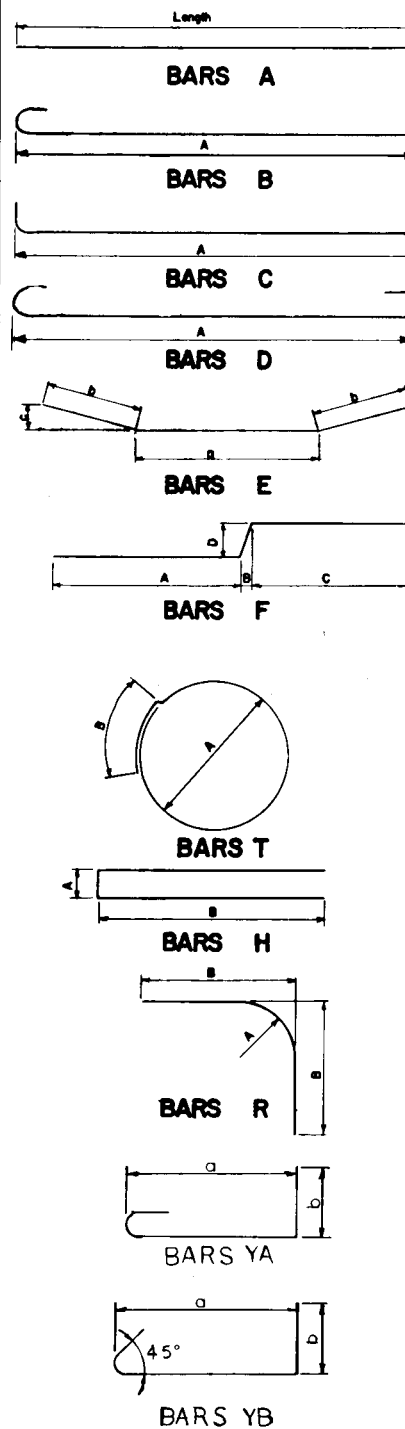
RIGHT LANE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.		1978		

SUPERSTRUCTURE						ABUTMENT NO. 1 L.L.						BENTS NO. 1 & 2 L.L.					
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
A500	SLAB	5	690		12'-4"	SERIES	WINGWALL	4	2	VARY IN LENGTH FROM 2'-2" TO 5'-2 1/2" IN INC. OF 1/4" (30 BARS)	110'-4"	A550	COL. BENT 1	8	12		17'-6"
SERIES	SLAB	5	4	VAR. IN LENGTH FROM 1'-10" TO 4'-4" IN INC. OF 6" (16 BARS)	12'-9"	A550	COL. BENT 2	8	12		17'-6"	A550	CAPBEAM	9	16		13'-0"
A501						A550	CAPBEAM	11	8		4'-0"	A550	CAPBEAM	11	8		4'-0"
A502	SLAB	5	8		5'-0"	SERIES	WINGWALL	4	2	VARY IN LENGTH FROM 1'-9" TO 4'-1 1/2" IN INC. OF 5 1/2" (8 BARS)	26'-10"	B550	CAPBEAM	9	8	13'-0"	18'-3"
A503	SLAB	5	357		6'-6"	A550	FOOTING	8	24	6'-8"	8'-0"	C550	FOOTING	8	24	6'-8"	8'-0"
SERIES	SLAB	5	4	VAR. IN LENGTH FROM 6'-0" TO 3'-6" IN INC. OF 6" (6 BARS)	28'-6"	A550	FOOTING	5	32	5'-9"	6'-11"	D550	FOOTING	5	32	5'-9"	6'-11"
A504						A550	COL. BENT 1 & 2	4	32	2'-2" 1'-0" 2'-2"	9'-8"	L550	COL. BENT 1 & 2	4	32	2'-2" 1'-0" 2'-2"	9'-8"
A505	SLAB	5	12		4'-0"	A550	CAPBEAM	5	22	2'-2" 1'-0" 2'-8"	10'-8"						
A506	SLAB	5	58		60'-0"	A540	ABUT. BM.	5	5		15'-5"						
A507	SLAB	5	29		38'-0"	A541	ABUT. BM.	5	5		15'-5"						
A508	SLAB	5	1		24'-6"	A542	ENDWALL	5	7		10'-3"						
A509	SLAB	5	1		28'-6"	A543	ENDWALL	5	10		5'-7"						
A510	SLAB	5	1		29'-6"	A640	WINGWALL	6	10		34'-0"						
A511	SUP. DIAPH.	5	12		15'-6"	A641	WINGWALL	6	2		29'-5"						
A512	INT. DIAPH.	5	36		4'-1"	A642	WINGWALL	6	2		24'-6"						
A600	SLAB	8	48		40'-0"	A643	WINGWALL	6	2		15'-0"						
A601	SLAB	8	11		33'-6"	A644	WINGWALL	6	2		10'-0"						
A602	BEAM	8	8		29'-3"	A645	WINGWALL	6	2		5'-0"						
A603	BEAM	8	6		33'-3"	A646	WINGWALL	6	2		9'-10"						
A604	BEAM	8	14		52'-0"	A647	WINGWALL	6	2		8'-10"						
A605	BEAM	8	6		33'-0"	A648	WINGWALL	6	2		7'-9"						
A606	BEAM	8	12		37'-6"	A649	WINGWALL	6	2		6'-9"						
A900	SLAB	9	19		40'-0"	A650	WINGWALL	6	2		5'-7"						
A901	SLAB	9	7		43'-0"	A651	WINGWALL	6	2		4'-7"						
C800	SLAB	8	22	30'-0"	31'-4"	A652	WINGWALL	6	2		3'-5"						
C801	BEAM	8	6	38'-3"	39'-7"	A740	ABUT. BM.	7	7		5'-7"						
C802	BEAM	8	6	43'-6"	44'-10"	A741	ABUT. BM.	7	7		15'-5"						
C900	SLAB	9	8	30'-0"	31'-7"	H540	RDWY. BKT.	5	19	1'-8" 6"	2'-8"						
D800	BEAM	8	6	54'-0"	55'-10"	H640	BACKWALL	6	12	2'-8" 3'-11"	10'-6"						
G500	SLAB	5	357	5'-9" 10" 9" 7 1/2"	7'-10"	H641	BACKWALL	6	12	8" 3'-4"	8'-6"						
H4500	BEAM	5	8	9" 6" 1'-11" 2'-0"	4'-9"	L540	ABUT. BM.	5	23	2'-8" 1'-0" 2'-2"	10'-8"						
K400	SUP. DIAPH.	4	20	6" 6" 3'-6"	8'-6"												
K401	INT. DIAPH.	4	30	6" 6" 2'-4"	6'-2"												
S																	
S00	BEAM	5	192	10 1/2" 2'-6"	6'-9"												
S01	BEAM	5	8	10 1/2" 2'-6"	6'-9"												
S02	BEAM	5	8	10 1/2" 2'-6"	6'-10"												
S03	BEAM	5	8	10 1/2" 2'-6"	6'-11"												
S04	BEAM	5	8	10 1/2" 2'-6"	7'-0"												
S05	BEAM	5	8	10 1/2" 2'-6"	7'-2"												
S06	BEAM	5	8	10 1/2" 2'-6"	7'-5"												
S07	BEAM	5	8	10 1/2" 2'-6"	7'-7"												
S08	BEAM	5	8	10 1/2" 2'-6"	7'-11"												
S09	BEAM	5	8	10 1/2" 2'-6"	8'-3"												
S10	BEAM	5	8	10 1/2" 2'-6"	8'-7"												
S11	BEAM	5	8	10 1/2" 2'-6"	9'-0"												
S12	BEAM	5	8	10 1/2" 2'-6"	9'-6"												
S13	BEAM	5	8	10 1/2" 2'-6"	9'-9"												
S14	BEAM	5	8	10 1/2" 2'-6"	10'-0"												
Y800	BEAM	8	12	10'-0" 1'-7 1/2" 1'-5 1/2" 10 1/2"	20'-6"												

ABUTMENT NO. 2 LEFT LANE
BILL OF STEEL SAME AS ABUT.
NO. 1, RIGHT LANE

ABUTMENT NO. 2 RIGHT LANE
BILL OF STEEL SAME AS
ABUTMENT NO. 1, LEFT LANE



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

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF HIGHWAYS

BILL OF STEEL
WIDENING OF
INTERSTATE 75 OVER STATE ROUTE 1
STATION 1207+66.50
LOUDON COUNTY
1978

CORRECT *[Signature]*
ENGINEER OF STRUCTURES

APPROVED *[Signature]*
DIRECTOR OF HIGHWAYS

M-38-151

5-0-1

DESIGNED BY WAYMAN BOLLY DATE 12-77
DRAWN BY MIKE HEATH DATE 12-77
SUPERVISED BY MCINTOSH & MCLELLAN DATE 12-77
CHECKED BY WILSON & BOLLY DATE 12-77

BARS GA

BARS V

BARS G

BARS K

BARS L

BARS S

BARS M

BARS CD

BARS CB

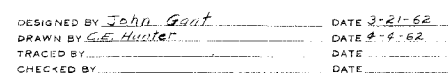
BARS JX

BARS HA

N-38-154

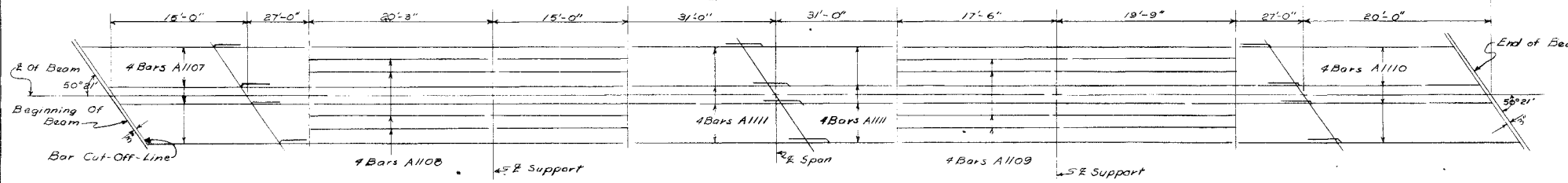
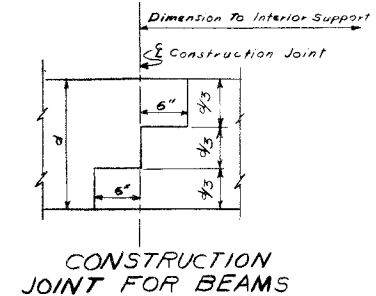
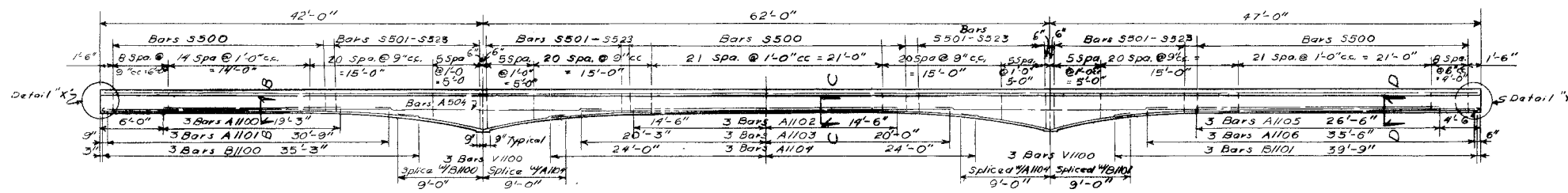
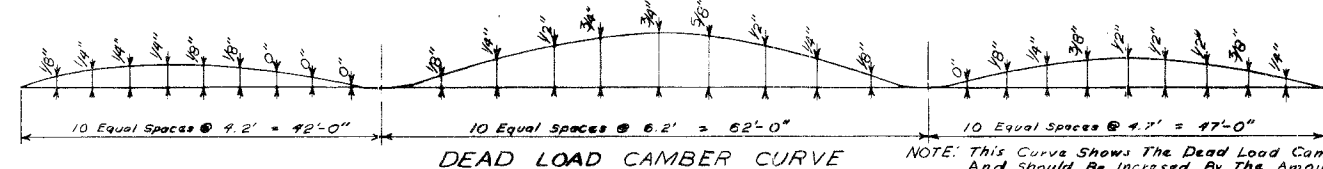
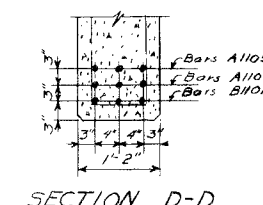
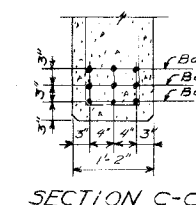
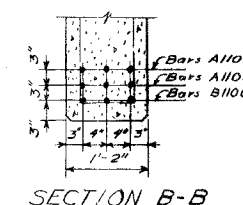
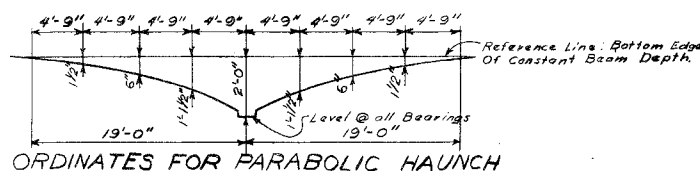
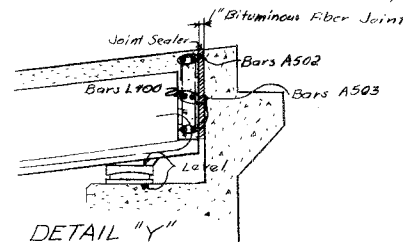
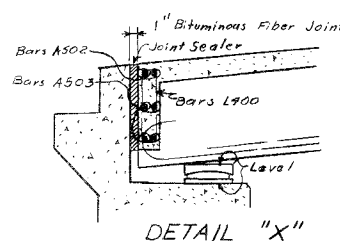
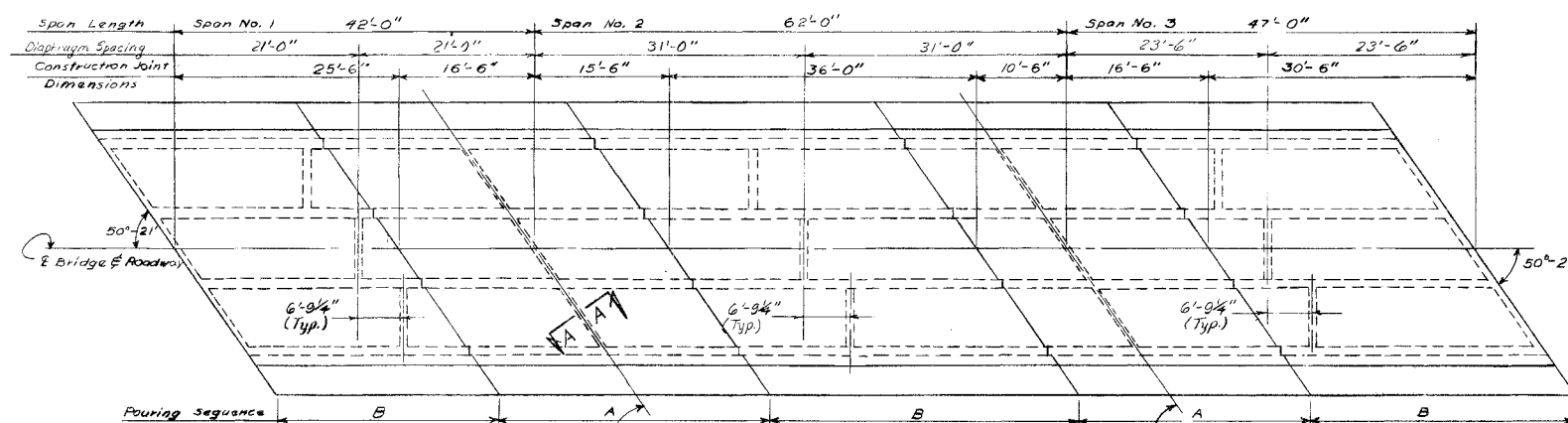
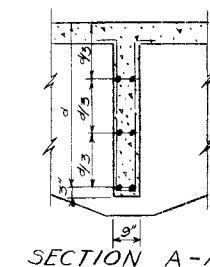
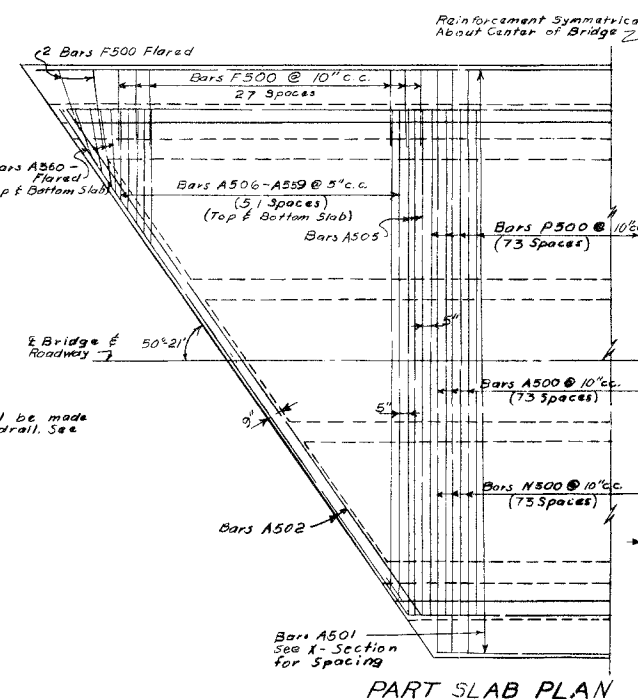
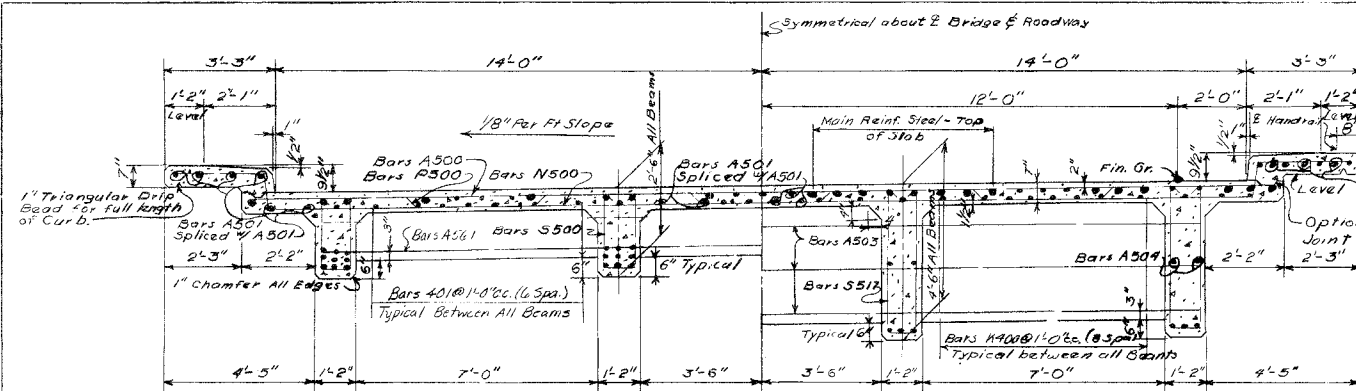


N-38-154



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3	TENN.		19	29	131

I-75-2(4)83



ESTIMATED QUANTITIES	
Concrete Class X	191.6
Reinforcing Steel	76,134

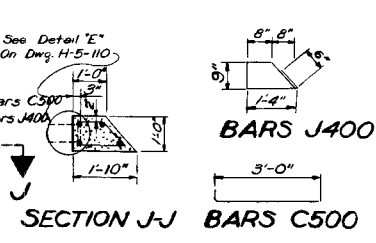
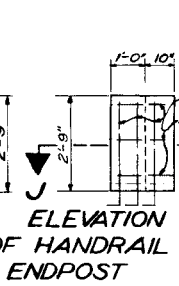
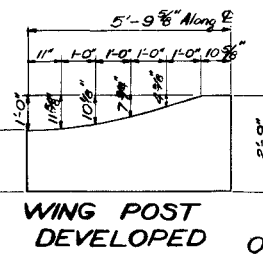
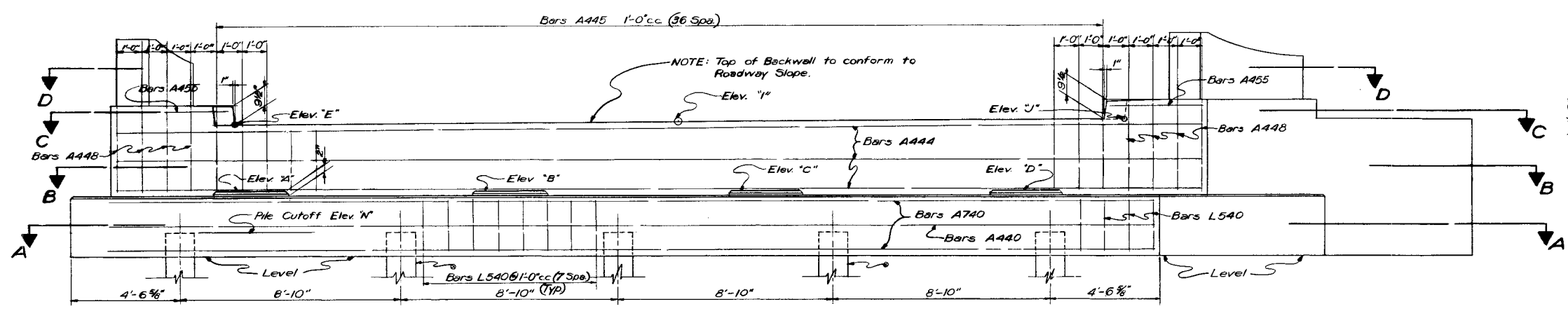
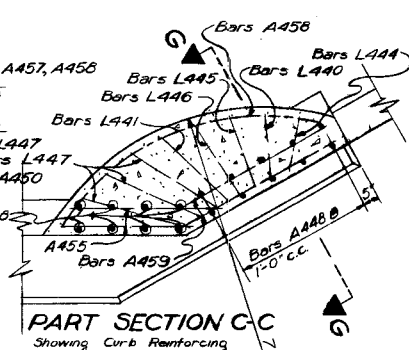
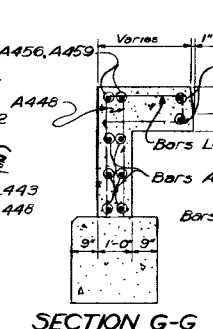
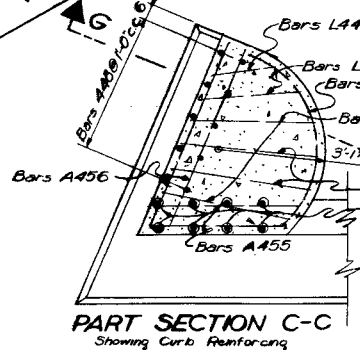
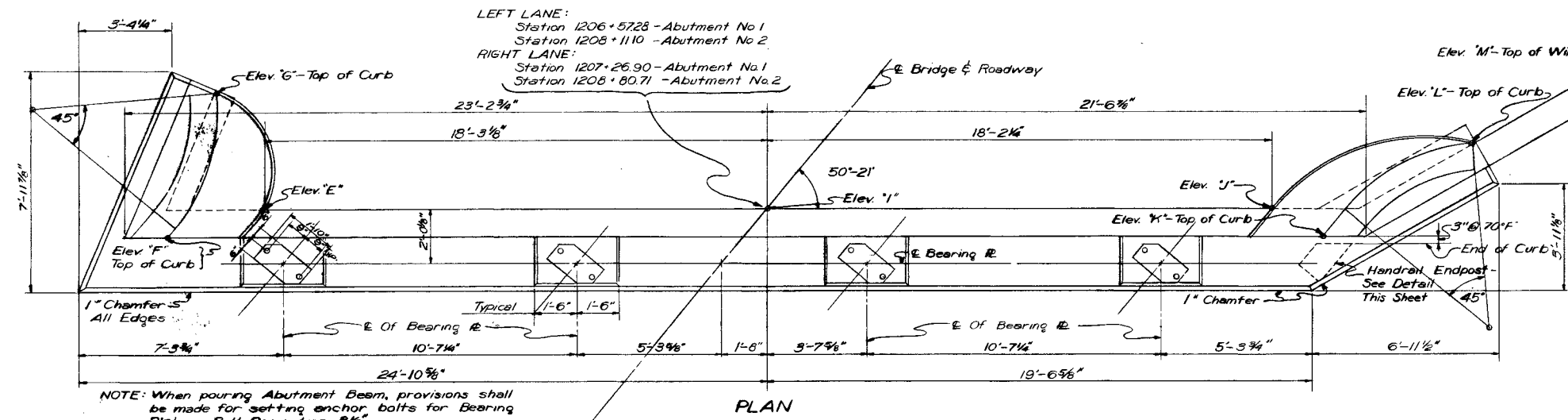
STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE
SUPERSTRUCTURE DETAILS
LEFT AND RIGHT LANES
INTERSTATE 75 OVER STATE ROUTE 1
STATION 1206+92.09
LOUDON COUNTY
1962

DESIGNED BY J. Goff
DRAWN BY J. D. Woodley
CHECKED BY J. G. & P. D. Q.

DATE 4-5-62
DATE
DATE

CORRECT
APPROVED
K-17-62

I-75-2(4)83

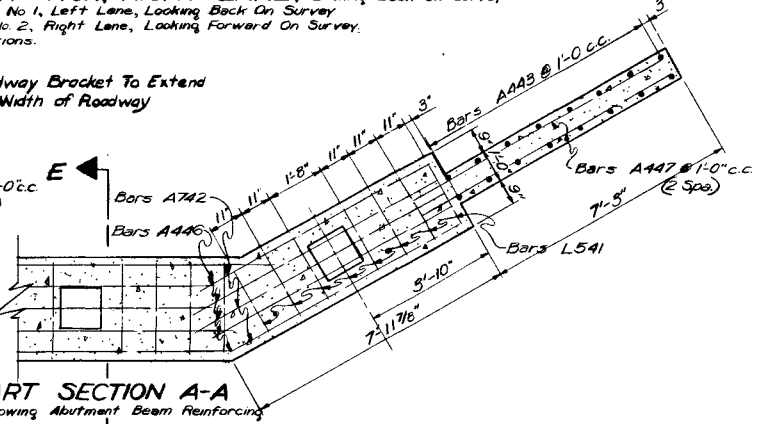
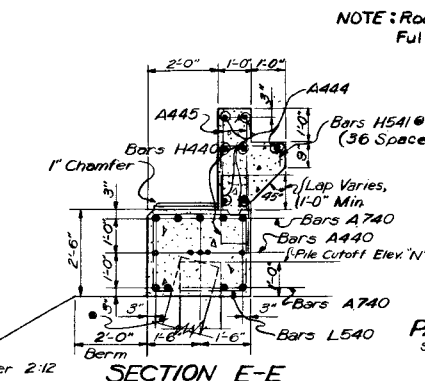
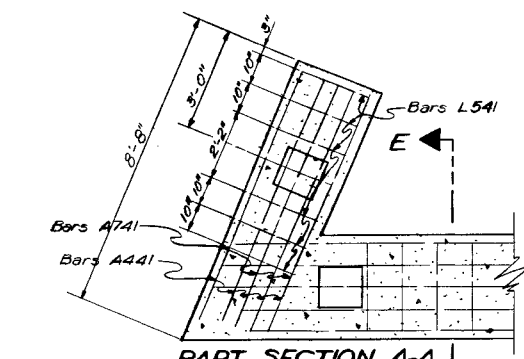
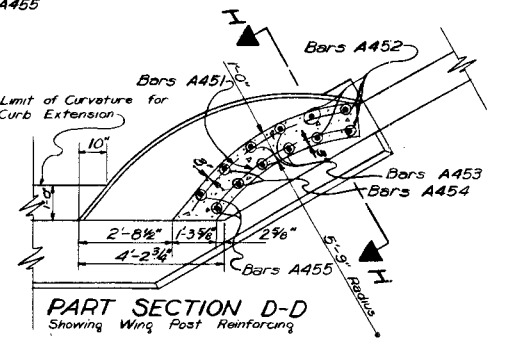
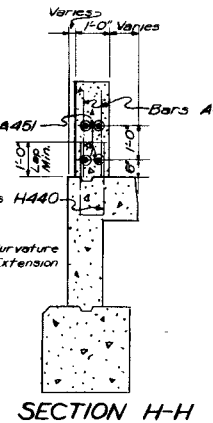
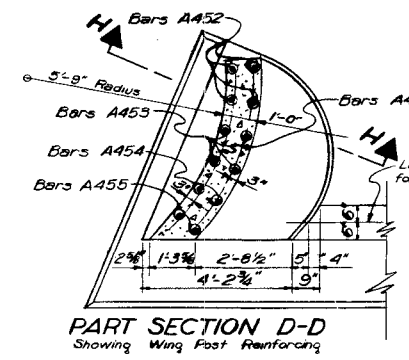


END POST - LIST OF MATERIALS - EACH

BAR	SIZE	NO.	LENGTH	QUANTITIES	
				Concrete - Cubic yds.	Steel - Lbs.
C500	5	4	3'-4"	.14	22
J400	4	3	4'-3"		

ELEVATION ABUTMENT NO. 1, RIGHT LANE, looking back on survey

Similar For Abutment No. 1, Left Lane, Looking Back On Survey
Similar For Abutment No. 2, Right Lane, Looking Forward On Survey.
See Table Of Elevations.



ESTIMATED QUANTITIES

ITEM	CONCRETE CLASS #1 CU. YDS.	REINFORCING STEEL LBS.
LEFT LANE ABUTMENT NO. 1	26.0	2704
LEFT LANE ABUTMENT NO. 2	28.1	2704
RIGHT LANE ABUTMENT NO. 1	27.1	2704
RIGHT LANE ABUTMENT NO. 2	27.1	2704

TABLE OF ELEVATIONS

LEFT LANE		RIGHT LANE	
Abutment No. 1	Abutment No. 2	Abutment No. 1	Abutment No. 2
998.09	999.46	998.76	1000.38
997.90	999.61	998.76	1000.35
997.72	999.77	998.76	1000.32
997.53	999.92	998.76	1000.29
1001.02	1002.58	1001.67	1003.53
1001.86	1003.15	1002.49	1004.10
1001.78	1003.19	1002.43	1004.15
1000.71	1002.64	1001.66	1003.28
1000.39	1002.90	1001.66	1003.23
1001.11	1003.72	1002.41	1004.05
1001.08	1003.76	1002.37	1004.08
1000.28	1002.97	1001.57	1003.29
995.66	997.79	997.09	998.62

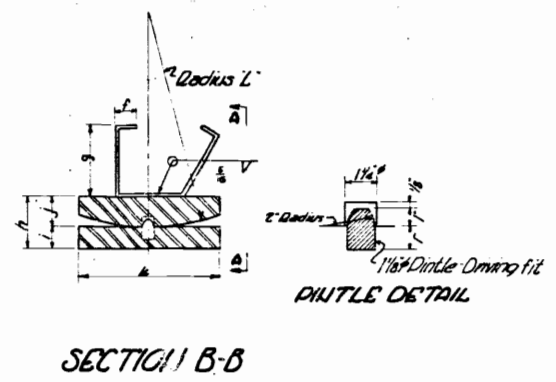
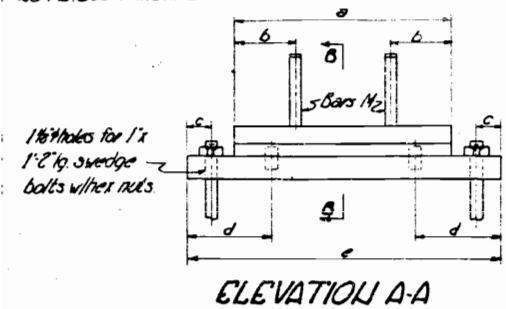
STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE
ABUTMENTS NO. 1 & 2
LEFT & RIGHT LANES
INTERSTATE 75 OVER STATE ROUTE 1
STATION 1206+92.09
LOUDON COUNTY
1962

DESIGNED BY: J. GANT
DRAWN BY: J. GRIFFITH
CHECKED BY: J.G. & P.D.Q.

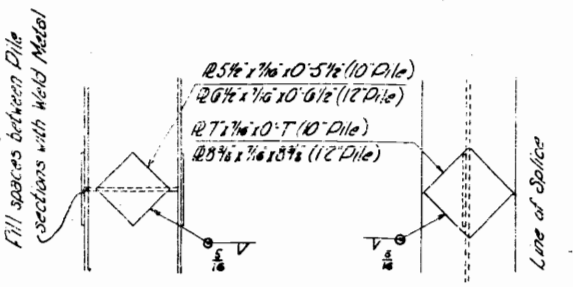
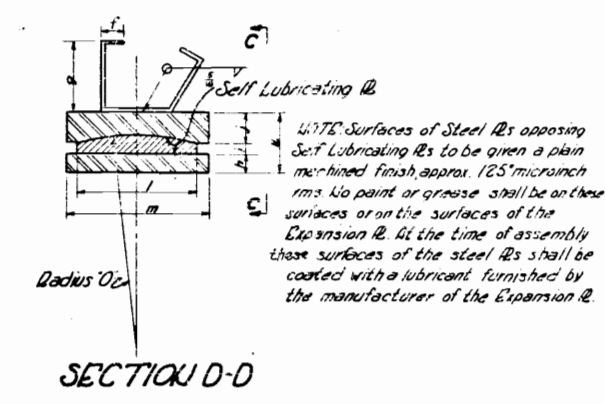
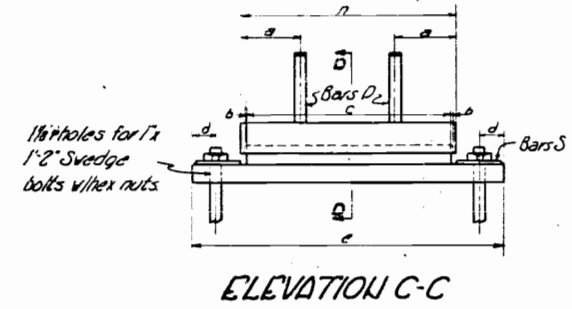
CORRECT: Fred Green
APPROVED: [Signature]
STATE HIGHWAY DEPT.

E-40-1(2)56

NOTE: Beam width = a



NOTE: Beam width = n



STANDARD FIXED BEARINGS

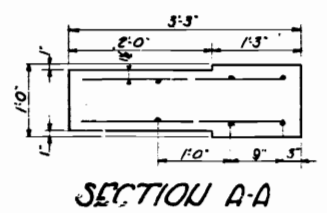
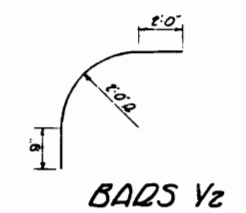
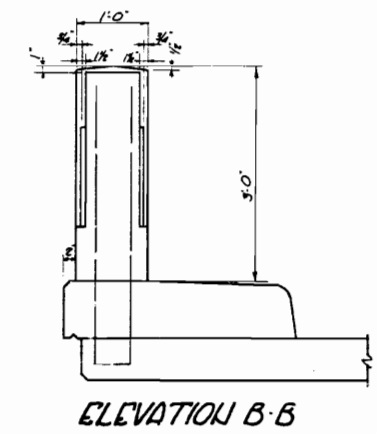
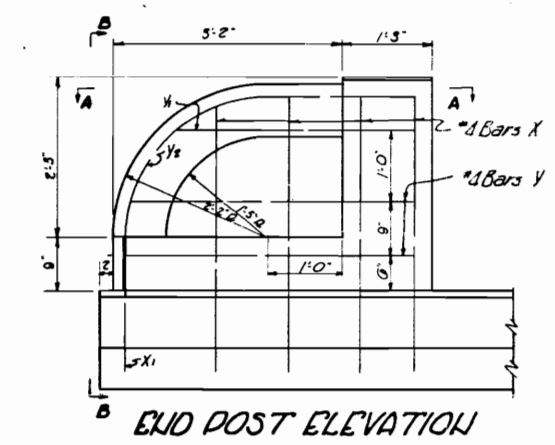
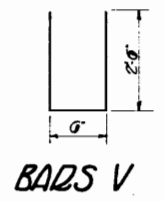
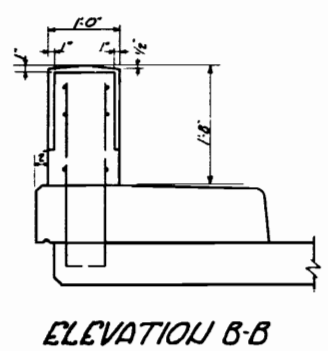
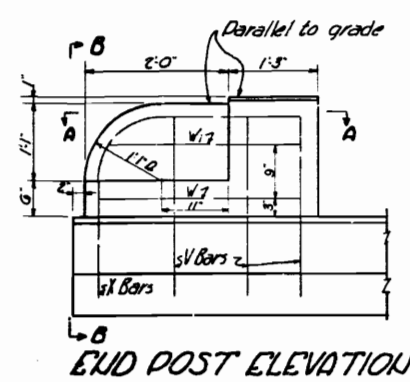
STANDARD EXPANSION BEARINGS

TABLE OF DIMENSIONS & ESTIMATED QUANTITIES

TYPE	DIMENSION												STRUCTURAL STEEL
Type F1	a	b	c	d	e	f	g	h	i	j	k	Bars M	Lbs.
Type F2	1'-0"	5"	2"	7"	2'-2"	2"	6"	4 1/2"	2"	2 1/2"	1'-0"	1'-0"	322
Type F3	1'-2"	4"	2"	7"	1'-10"	2"	6"	4 1/2"	2"	2 1/2"	1'-0"	1'-0"	205

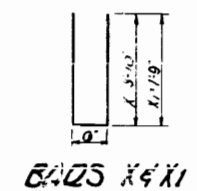
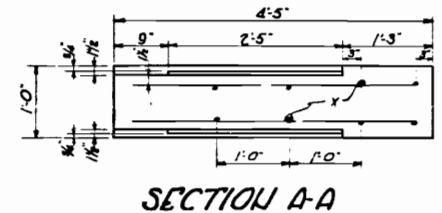
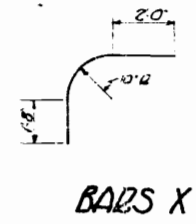
TABLE OF DIMENSIONS & ESTIMATED QUANTITIES

TYPE	DIMENSION																STRUCTURAL STEEL				BRONZE	
Type E1	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	Bars P	Bars S	Lbs.	Lbs.			
	5"	1/4"	1'-0"	2"	2'-2"	2"	6"	1 1/2"	1"	2 1/2"	5"	10"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	280	83			
Type E2	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	Bars P	Bars S	Lbs.	Lbs.			
	5"	1/4"	1'-0"	2"	2'-2"	2"	6"	1 1/2"	1"	2 1/2"	5"	10"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	238	62			
Type E3	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	Bars P	Bars S	Lbs.	Lbs.			
	5"	1/4"	1'-0"	2"	2'-2"	2"	6"	1 1/2"	1"	2 1/2"	5"	10"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	225	110			



BILL OF STEEL
For One End Post

Bar	No.	Size	Length
V	3	#4	5'-0"
W	2	#4	2'-10"
W1	2	#4	2'-9"
X	2	#4	5'-0"



BILL OF STEEL
For One End Post

Bar	No.	Size	Length
X	4	#4	8'-2"
X1	1	#4	4'-0"
Y	4	#4	4'-0"
Y1	2	#4	3'-3"
Y2	2	#4	6'-0"

ESTIMATED QUANTITIES
For One End Post
Concrete Class A 0.38 Cu Yds.
Reinforcing Steel 1.0 Lbs.

ESTIMATED QUANTITIES
For One End Post
Concrete Class A 0.17 Cu Yds.
Reinforcing Steel 25 Lbs.

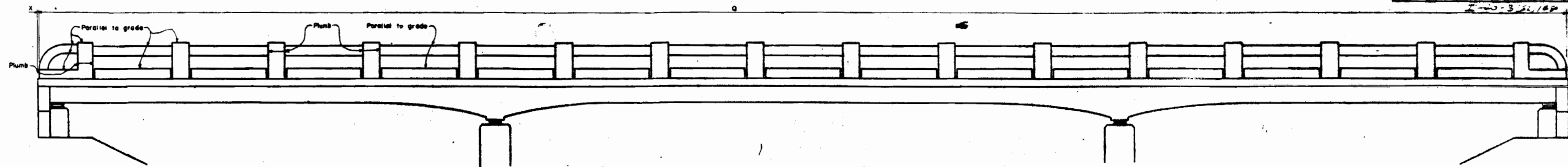
END POST DETAIL TYPE 1

END POST DETAIL TYPE 2

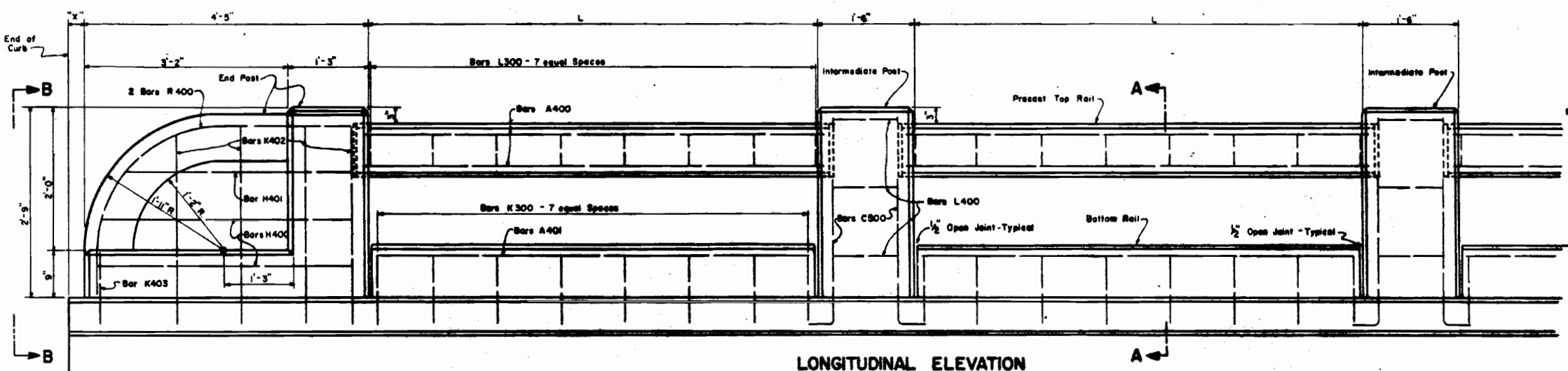
STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
AND PUBLIC WORKS
NASHVILLE
STANDARD BRIDGE DETAILS
BEARING DEVICES
PILE SPLICE
END POSTS
1958

DESIGNED BY: *E. J. Sullivan*
DRAWN BY: *E. J. Sullivan*
CHECKED BY: *M. J. Sullivan*
DATE: 12-10-58
DATE: 12-10-58
DATE: 12-10-58

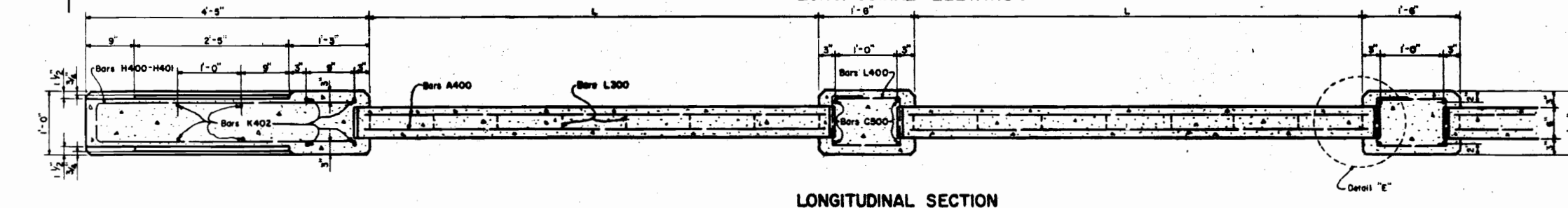
CORRECT: *Ed. G. G.*
APPROVED: *Ed. G. G.*
DATE: 12-10-58



TYPICAL ELEVATION



LONGITUDINAL ELEVATION



LONGITUDINAL SECTION

GENERAL NOTES

SPECIFICATIONS: Standard Road & Bridge Specifications of the Tennessee Department of Highways.

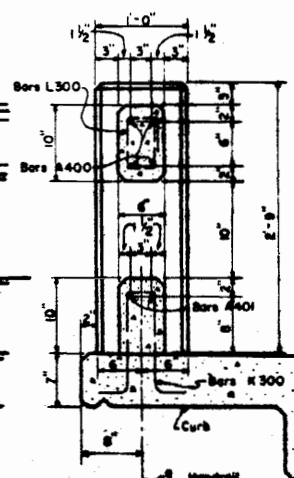
CONCRETE: To be Class "A".

REINFORCING STEEL: See Specifications. To be intermediate or high grade with Standard Hook Details as recommended by C.R.S.I.

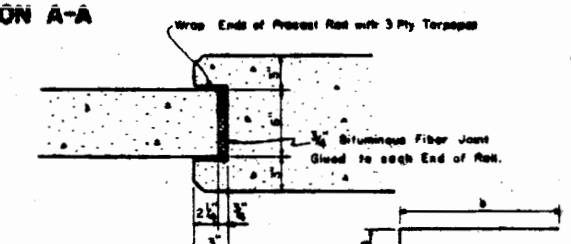
FORMS & FINISH: See Specifications.

NOTE: Chamfer all edges on Handrail Posts and Rails 1/2".

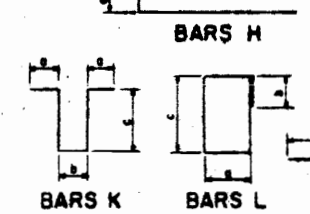
NOTE: For Dimensions K, O, B, L See Bridge Layout Sheet.



SECTION A-A



DETAIL E



BARS A

BARS C

BARS K

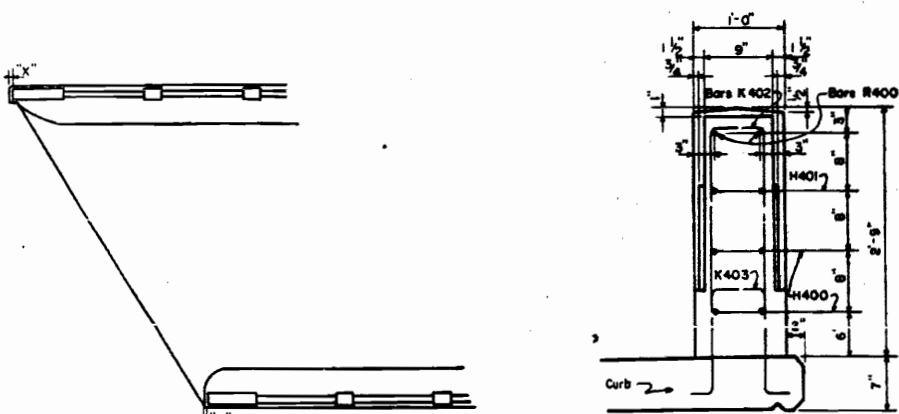
BARS L

BARS R

BENDING DIAGRAMS

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
NASHVILLE

**STANDARD
CONCRETE HANDRAIL
1960**



HANDRAIL ON SKEWED DECK

ELEV. B-B

END POST-LIST OF MATERIALS-EACH

Bar	Size	No.	Bending Dimensions	Length	Quantities
			a b c d		Steel Lbs. Conc. Cu. Yds.
H400	4	2	0'-6" 4'-0"	8'-6"	
H401	4	1	0'-6" 3'-7"	7'-8"	
K402	4	4	0'-3" 0'-7" 2'-11"	6'-11"	45.0 0.37
K403	4	1	0'-3" 0'-7" 1'-2"	3'-5"	
R400	4	2	1'-9" 4'-0" 2'-6"	5'-9"	

INTERMEDIATE POST
LIST OF MATERIALS-EACH

Bar	Size	No.	Bending Dimensions	Length	Quantities
			a b c d		Steel Lbs. Conc. Cu. Yds.
C500	5	4	3'-0"	3'-4"	22.6 0.15
L400	4	3	0'-9" 0'-6" 1'-2"	4'-4"	

TOP RAIL-LIST OF MATERIALS-EACH

L	Bar	Size	No.	Bending Dimensions	Length	Quantities
				a b c d		Steel Lbs. Conc. Cu. Yds.
6'-0"	A400	4	4	0'-4" 0'-6" 0'-7"	5'-2"	23.6 0.10
6'-0"	L300	3	8	0'-4" 0'-6" 0'-7"	5'-2"	23.6 0.10
6'-0"	A400	4	4	0'-4" 0'-6" 0'-7"	5'-2"	23.6 0.10
6'-0"	L300	3	8	0'-4" 0'-6" 0'-7"	5'-2"	24.1 0.10
6'-0"	A400	4	4	0'-4" 0'-6" 0'-7"	5'-2"	24.1 0.10
6'-0"	L300	3	8	0'-4" 0'-6" 0'-7"	5'-2"	24.3 0.10
6'-0"	A400	4	4	0'-4" 0'-6" 0'-7"	5'-2"	24.5 0.10
6'-0"	L300	3	8	0'-4" 0'-6" 0'-7"	5'-2"	24.7 0.11
6'-0"	A400	4	4	0'-4" 0'-6" 0'-7"	5'-2"	25.0 0.11
6'-0"	L300	3	8	0'-4" 0'-6" 0'-7"	5'-2"	25.2 0.11
6'-0"	A400	4	4	0'-4" 0'-6" 0'-7"	5'-2"	25.4 0.11
6'-0"	L300	3	8	0'-4" 0'-6" 0'-7"	5'-2"	25.6 0.11
6'-0"	A400	4	4	0'-4" 0'-6" 0'-7"	5'-2"	25.9 0.11
6'-0"	L300	3	8	0'-4" 0'-6" 0'-7"	5'-2"	26.1 0.11

BOTTOM RAIL-LIST OF MATERIALS-EACH

L	Bar	Size	No.	Bending Dimensions	Length	Quantities
				a b c d		Steel Lbs. Conc. Cu. Yds.
6'-0"	A400	4	2	0'-4" 0'-6" 1'-2"	3'-4"	17.7 0.09
6'-0"	L300	3	8	0'-4" 0'-6" 1'-2"	3'-4"	17.7 0.09
6'-0"	A400	4	2	0'-4" 0'-6" 1'-2"	3'-4"	17.8 0.09
6'-0"	L300	3	8	0'-4" 0'-6" 1'-2"	3'-4"	17.9 0.09
6'-0"	A400	4	2	0'-4" 0'-6" 1'-2"	3'-4"	18.1 0.10
6'-0"	L300	3	8	0'-4" 0'-6" 1'-2"	3'-4"	18.1 0.10
6'-0"	A400	4	2	0'-4" 0'-6" 1'-2"	3'-4"	18.2 0.10
6'-0"	L300	3	8	0'-4" 0'-6" 1'-2"	3'-4"	18.3 0.10
6'-0"	A400	4	2	0'-4" 0'-6" 1'-2"	3'-4"	18.4 0.10
6'-0"	L300	3	8	0'-4" 0'-6" 1'-2"	3'-4"	18.5 0.10
6'-0"	A400	4	2	0'-4" 0'-6" 1'-2"	3'-4"	18.6 0.10
6'-0"	L300	3	8	0'-4" 0'-6" 1'-2"	3'-4"	18.7 0.10
6'-0"	A400	4	2	0'-4" 0'-6" 1'-2"	3'-4"	18.8 0.10
6'-0"	L300	3	8	0'-4" 0'-6" 1'-2"	3'-4"	19.0 0.11