

GENERAL NOTES

Specification: A.A.S.H.O. 1957 "Standard Specifications for Highway Bridges" except as modified by Bureau of Public Road's "Policy on Interstate System" and "Criteria for Prestressed Concrete Bridges, 1954," and the Standard Specifications for Road and Bridge Construction of the Tennessee Department of Highway and Public Works.

Loading H 20-S16-4.4

Cost of joint material shall be included in class "A" concrete unless otherwise provided for in special provisions.

Lighting Accessories installation shall include all lighting accessories shown on plan complete in place except wiring, SPECIFICATIONS for roadway lighting shall apply. Wiring to be installed under Roadway Lighting item.

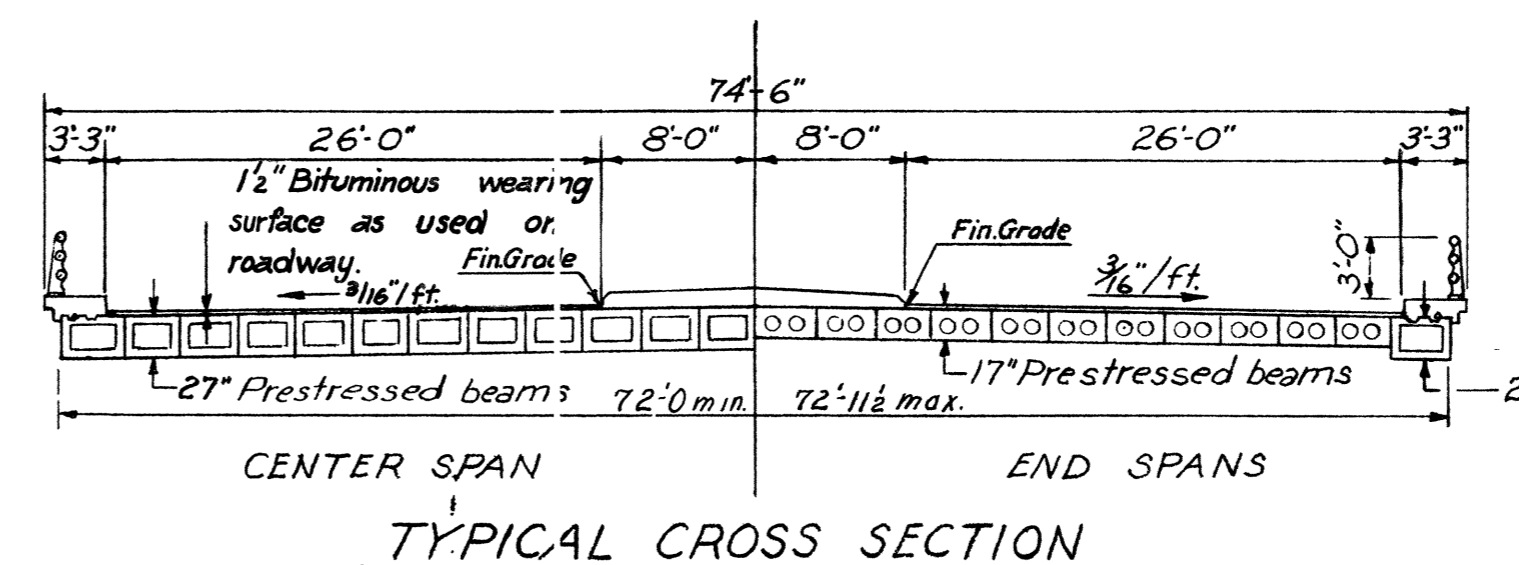
Bar sizes indicated in the bar marks. The first digit of three numeral marks and the first two digits of four numeral marks indicate the bar diameter in eighths of inches and the last two digits indicate the specific bar.

The 1/2" Bituminous Wearing Surface is included in Bridge Quantities on Roadway Plans.

The Contractor for prestressed members must submit details for members and obtain approval from the Engineer before proceeding with manufacture of members.

Steel bar reinforcement shall be intermediate grade or hard grade.

All poured in place concrete shall be Class "A"



BORINGS				
Hole	Station	Offset	Ground El.	Rock El.
1	2+3+67	167' Rt.	665.0	659.0
2	2+4+33	170' Rt.	667.4	661.4
3	2+3+67	142' Rt.	665.1	660.1
4	2+4+33	146' Rt.	667.5	657.5
5	2+3+67	87' Rt.	664.3	658.3
6	2+4+33	91' Rt.	666.9	662.9
7	2+3+67	60' Rt.	664.6	658.6
8	2+4+33	64' Rt.	666.4	661.4
17	2+3+67	±	665.0	657.0
18	2+4+33	±	665.3	659.3

Boring locations referenced to survey I-502

TABLE OF ESTIMATED QUANTITIES

ITEM NO.	UNIT	ITEM	SUB-STRUCTURE			SUPER-STRUCTURE			TOTAL	
			ABUT. 1	ABUT. 2	BENT 2	SPAN 1	SPAN 2	SPAN 3		
172	C.Y.	Dry Excavation (Bridges)		75	75				150	
135-4	C.Y.	Class "A" Concrete	30	30	68	69	18	36	21	272
135-12	lbs.	Steel Bar Reinforcement	3023	3023	14061	14192	681	1240	771	36310
137-3	L.F.	Steel Piles 10" BP 42#								1450
Prestressed Beams										
154-20A	Ea.	17" Deep X 26 1/2" Uniform Section					22			22
154-20B	Ea.	27" Deep X 26 1/2" do do					2			2
154-20C	Ea.	27" Deep X 55 1/2" do do					24			24
154-20D	Ea.	17" Deep X 30 1/2" do do						22		22
154-20E	Ea.	27" Deep X 30 1/2" do do						2		2
501	L.F.	Aluminum Railings (3 Rail)					46	112	54	212
		Lump Sum Lighting Accessories								see notes

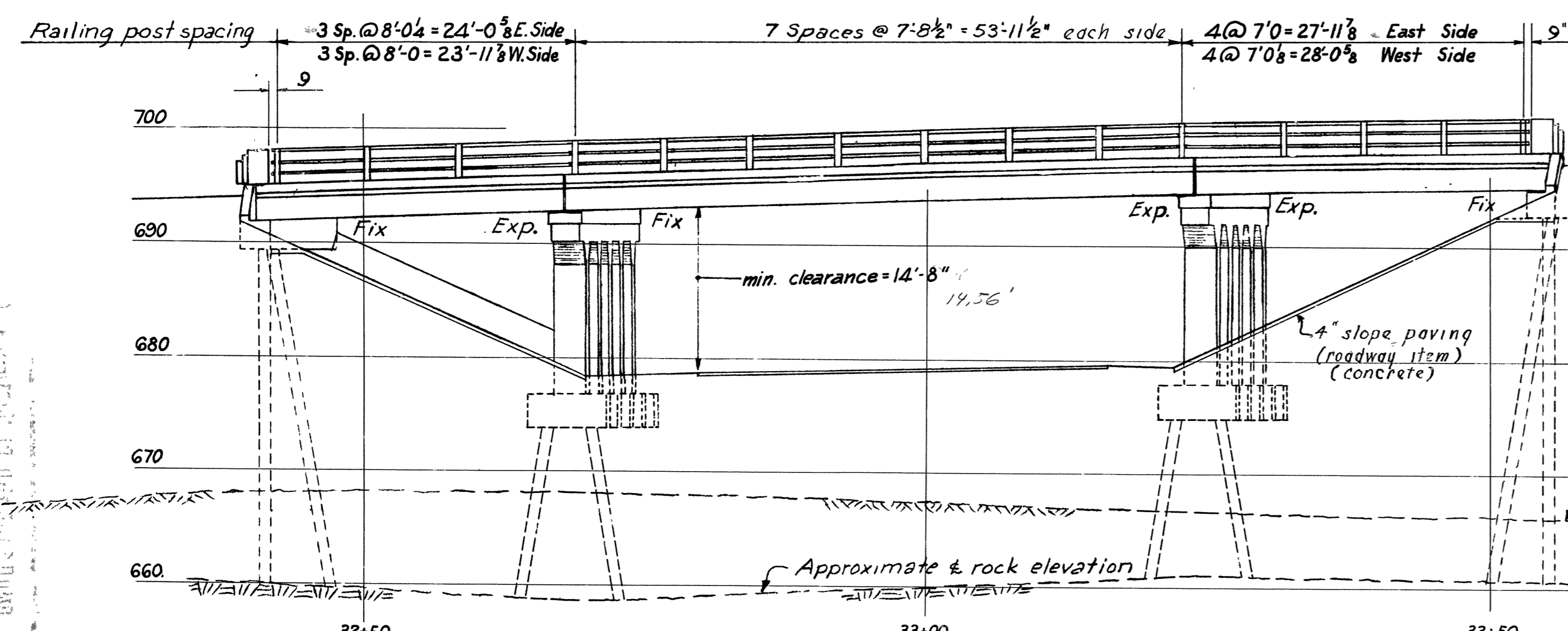
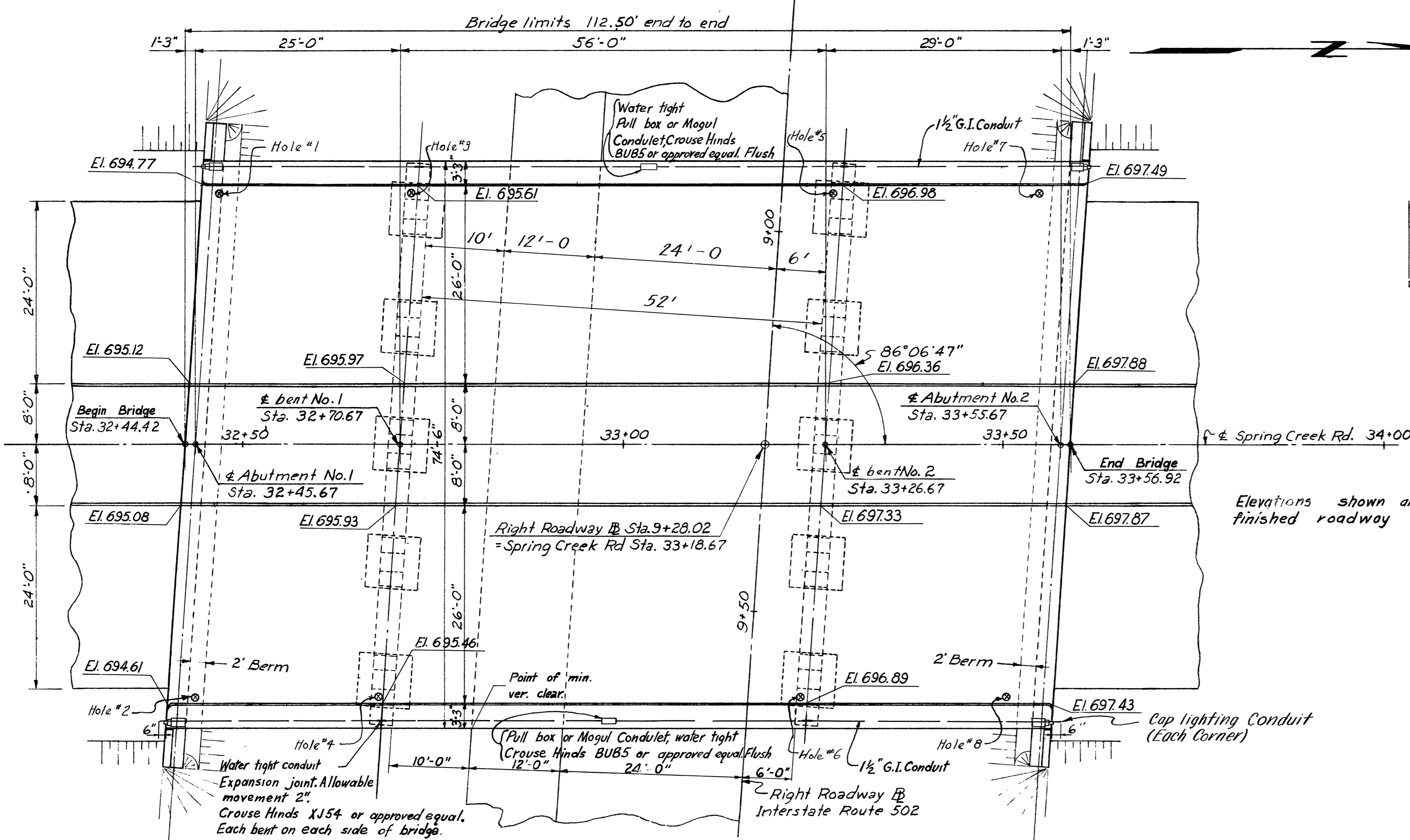
LIST OF DRAWINGS	
TITLE	NO.
GENERAL PLAN	43
DECK PLAN & DETAILS	44
BENTS / ABUTMENTS	45
STD. THREE PIPE ALUMINUM HANDRAIL	F-10-47
STANDARD PILE DETAILS	F-2-118

LIGHTING ACCESSORIES

- 231' G.I. Conduit 1 1/2" (Deck)
 - 2 Pull boxes
 - 4 Expansion joints
 - 1 Junction box
 - 1 Circuit breaker
 - 1 "T" Junction 3/4"
 - 15' G.I. Conduit 1" (Bent 1)
 - 40' G.I. Conduit 3/4" (Bent 1)
 - 8 Luminares (Horizontal)
 - 4 Caps
- Wiring not included

For railing details see Tennessee Department of Highways and Public Works Standard F10-47. All railing posts shall be vertical. Railing spacing shown is an E of anchor bolts.

Lower Roadway fill shall be placed in roadway subgrade and thoroughly compacted before excavating for bent footings. Upper roadway fill shall be placed at least to bottom of abutment and thoroughly compacted. Drive all piles through any fill in such locations.

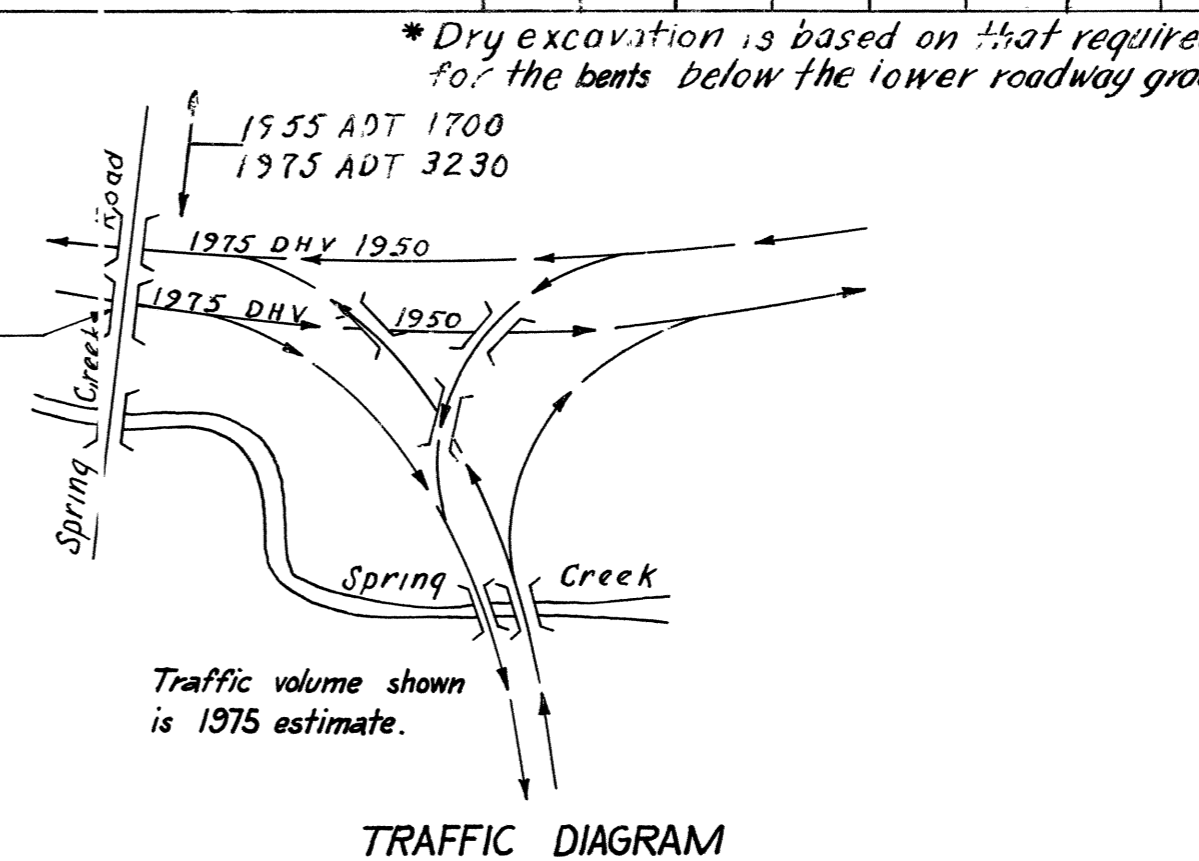


QUANTITIES IN PRESTRESSED BEAMS

Concrete	393 Cu. Yds.
Wire Rope	17,670'
Reinf. Steel	23,920'

VERTICAL CURVE DATA

V.P.I. Station	34+80
Elevation	706.30
L.V.C.	600'
M.O.	7.95'

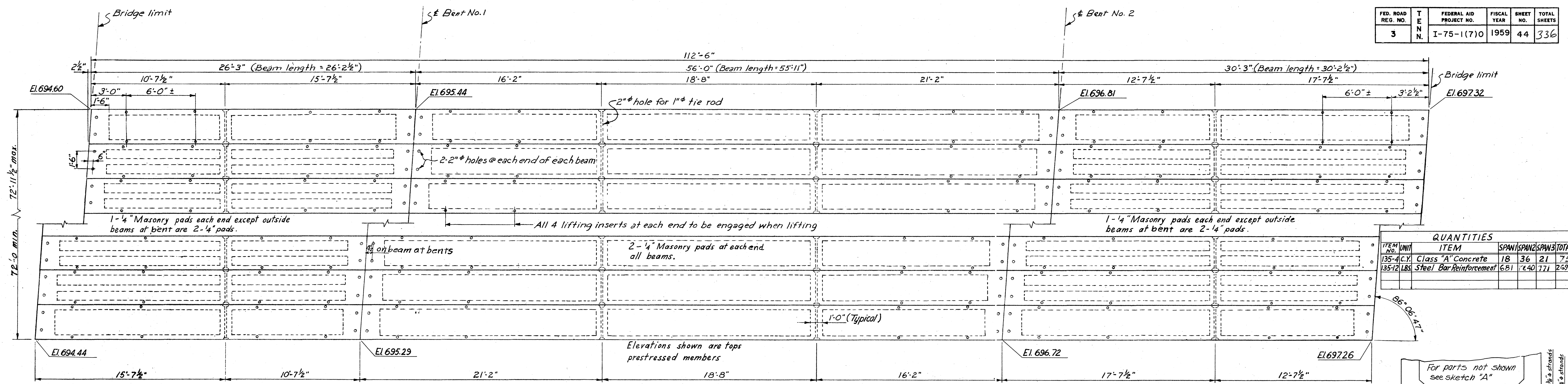


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CAPITOL ENGINEERING CORPORATION, DILLSBURG, PA.
FOR

STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
AND PUBLIC WORKS
NASHVILLE

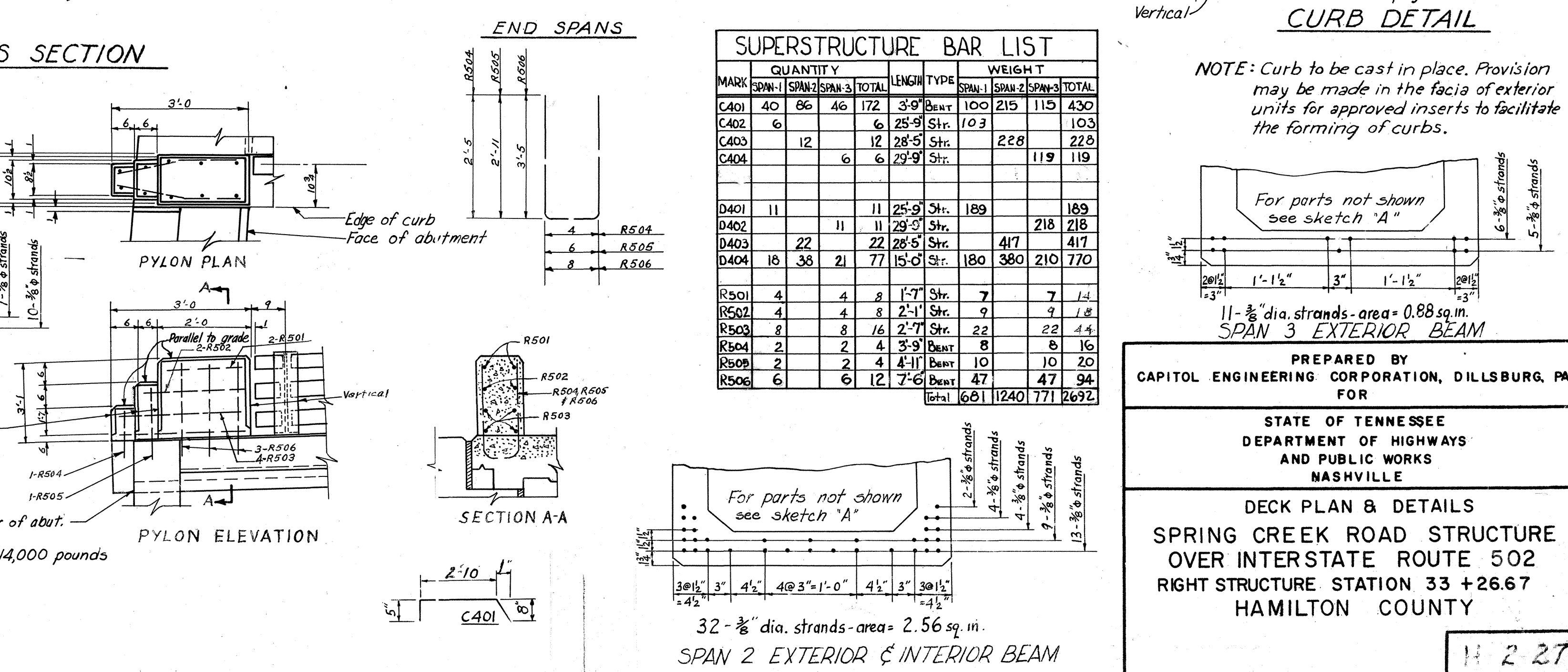
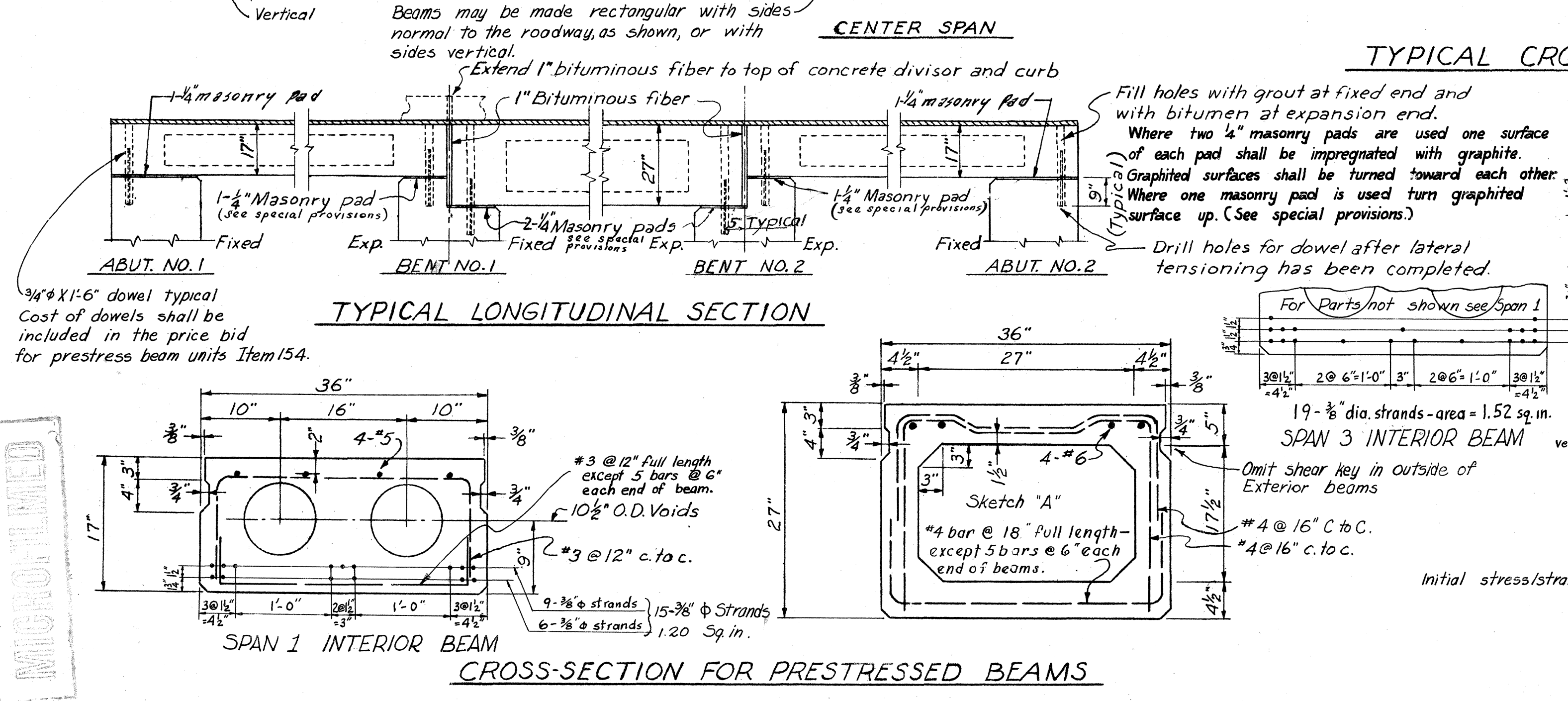
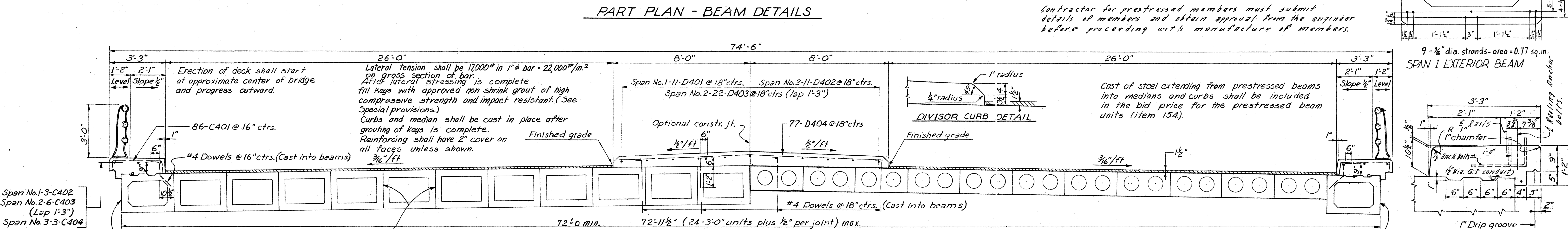
GENERAL PLAN
SPRING CREEK ROAD STRUCTURE
OVER INTERSTATE ROUTE 502
RIGHT STRUCTURE STATION 33 + 26.67
HAMILTON COUNTY

DESIGNED BY J.G. DATE 2-26-52
 DRAWN BY J.F.J. DATE 2-26-52
 TRACED BY J.F.J. DATE 2-26-52
 CHECKED BY J.G. DATE 5-19-59
 Jan. 13, 1959 and conference of Feb. 10, 1959.
 Revised 4-9-59
 Revised 5-19-59 Added underbridge Luminares.
 5-19-59 Added note about reinforcing.



QUANTITIES

ITEM NO.	UNIT	ITEM	SPAN 1	SPAN 2	SPAN 3	TOTAL
135-4	C.Y.	Class "A" Concrete	18	36	21	75
135-12	LBS	Steel Bar Reinforcement	681	1,240	771	2,692



NOTE: Curb to be cast in place. Provision may be made in the face of exterior units for approved inserts to facilitate the forming of curbs.

For parts not shown see sketch "A"

11 - 3/8" dia. strands - area = 0.88 sq. in.

SPAN 3 EXTERIOR BEAM

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FOR

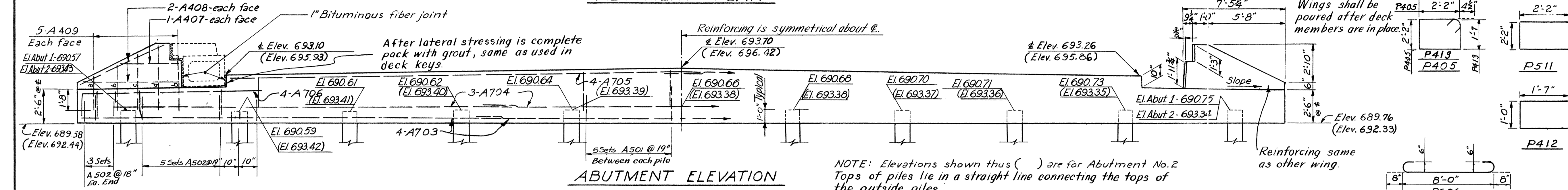
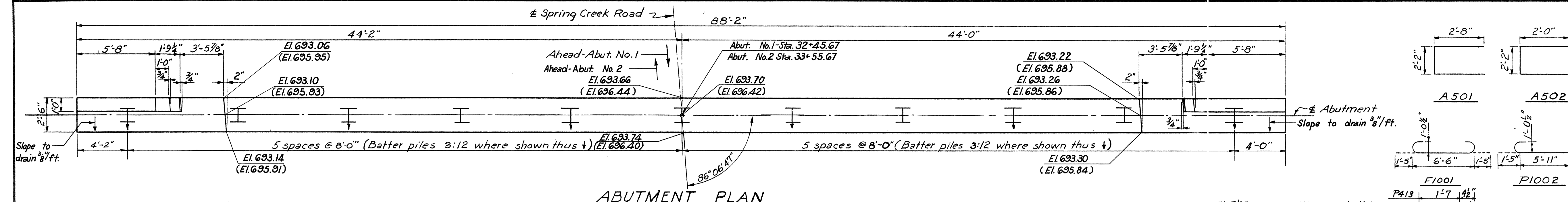
STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
AND PUBLIC WORKS
NASHVILLE

DECK PLAN & DETAILS
SPRING CREEK ROAD STRUCTURE
OVER INTERSTATE ROUTE 502
RIGHT STRUCTURE STATION 33 +26.67
HAMILTON COUNTY

DESIGNED BY: J.E.S. DATE: 2-2-59
DRAWN BY: S.F.L. DATE: 2-2-59
CHECKED BY: D.S. J.M.R. DATE: 2-2-59
REVISIONS: 1-19-59 and conference of Feb. 10, 11, 1959.
REVISIONS: 4-9-59

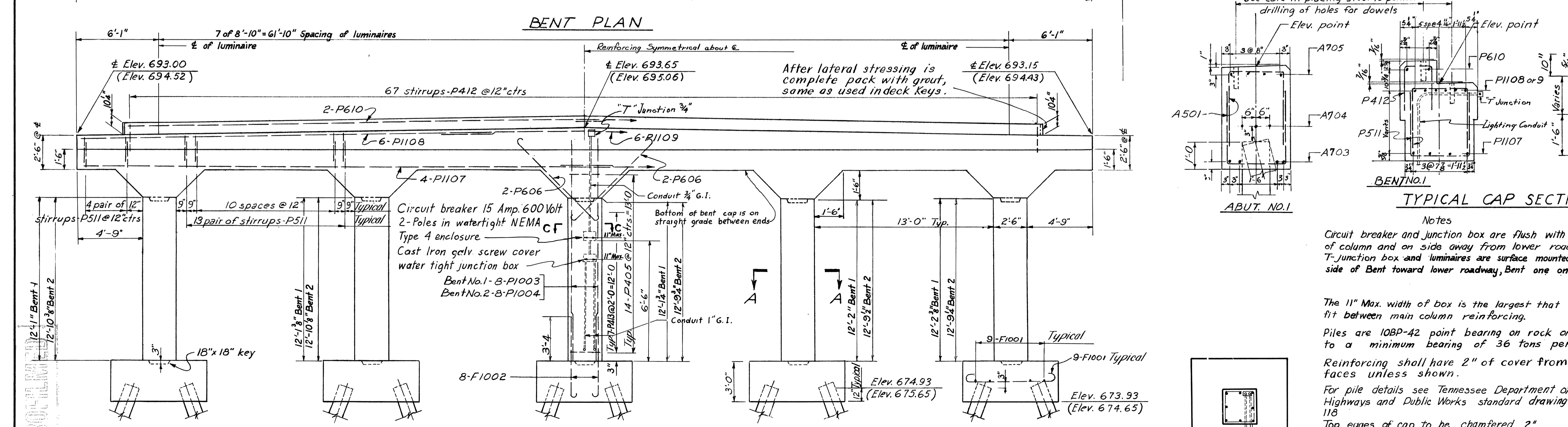
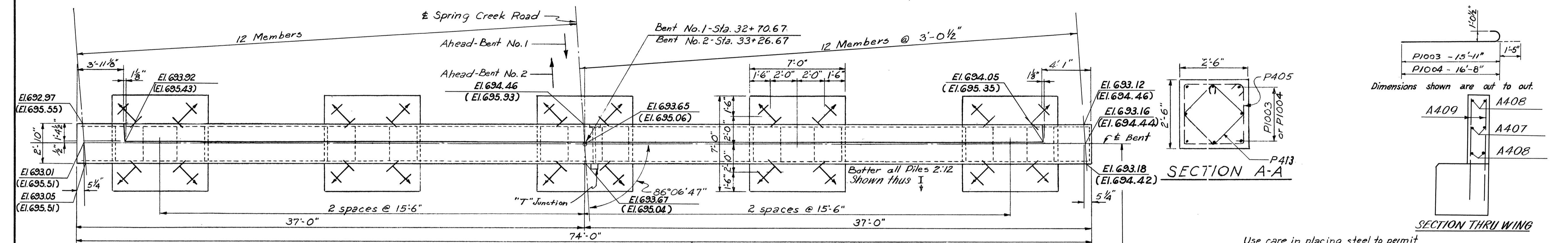
MICROFILMED

FED. ROAD REG. NO.	T E N N.	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3		T-75-1(7)0	1959	45	336



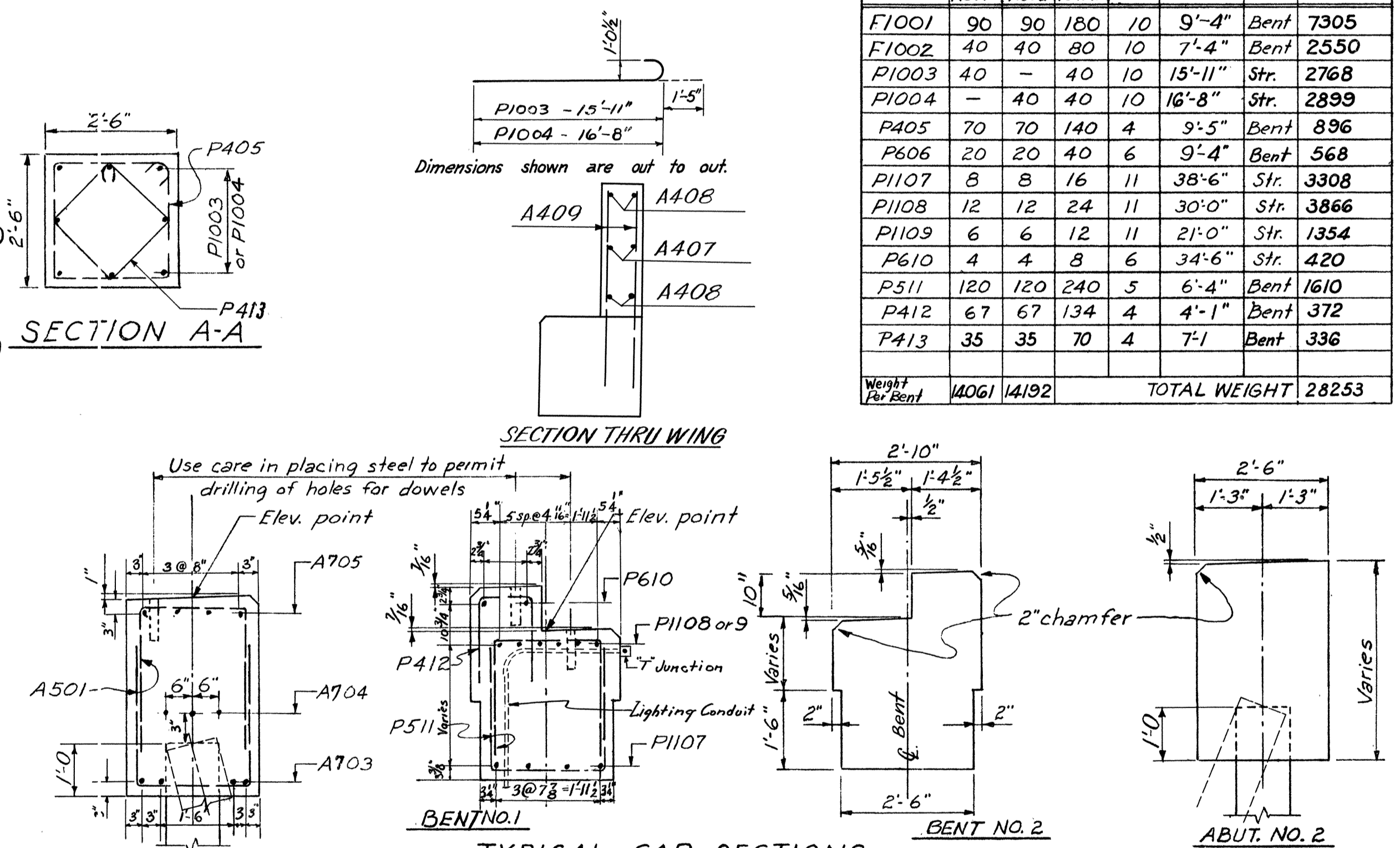
ABUTMENT BAR LIST

MARK	NO. REQ'D	NO. 2	TOTAL	SIZE	LENGTH	TYPE	WEIGHT
A501	80	80	160	5	7'-4"	Bent	1,223
A502	32	32	64	5	6'-2"	Bent	412
A703	12	12	24	7	30'-0"	Str.	1,521
A704	9	9	18	7	29'-3"	Str.	1,077
A705	8	8	16	7	34'-9"	Str.	1,136
A706	8	8	16	7	15'-0"	Str.	491
A407	4	4	8	4	4'-0"	Str.	22
A408	8	8	16	4	6'-6"	Str.	69
A409a	4	4	8	4	2'-6"	Str.	13
A409b	8	8	16	4	3'-3"	Str.	35
A409c	4	4	8	4	4'-0"	Str.	22
A409d	4	4	8	4	4'-9"	Str.	25
TOTAL	3023	3023	6046				6046



BENT BAR LIST

MARK	NO. REQ'D	NO. 2	TOTAL	SIZE	LENGTH	TYPE	WEIGHT
F1001	90	90	180	10	9'-4"	Bent	7305
F1002	40	40	80	10	7'-4"	Bent	2550
P1003	40	40	80	10	15'-11"	Str.	2768
P1004	40	40	80	10	16'-8"	Str.	2899
P405	70	70	140	4	9'-5"	Bent	896
P606	20	20	40	6	9'-4"	Bent	568
P1107	8	8	16	11	38'-6"	Str.	3308
P1108	12	12	24	11	30'-0"	Str.	3866
P1109	6	6	12	11	21'-0"	Str.	1354
P610	4	4	8	6	34'-6"	Str.	420
P511	120	120	240	5	6'-4"	Bent	1610
P412	67	67	134	4	4'-1"	Bent	372
P413	35	35	70	4	7'-1"	Bent	336
TOTAL	1406	14192	28253				28253



QUANTITIES

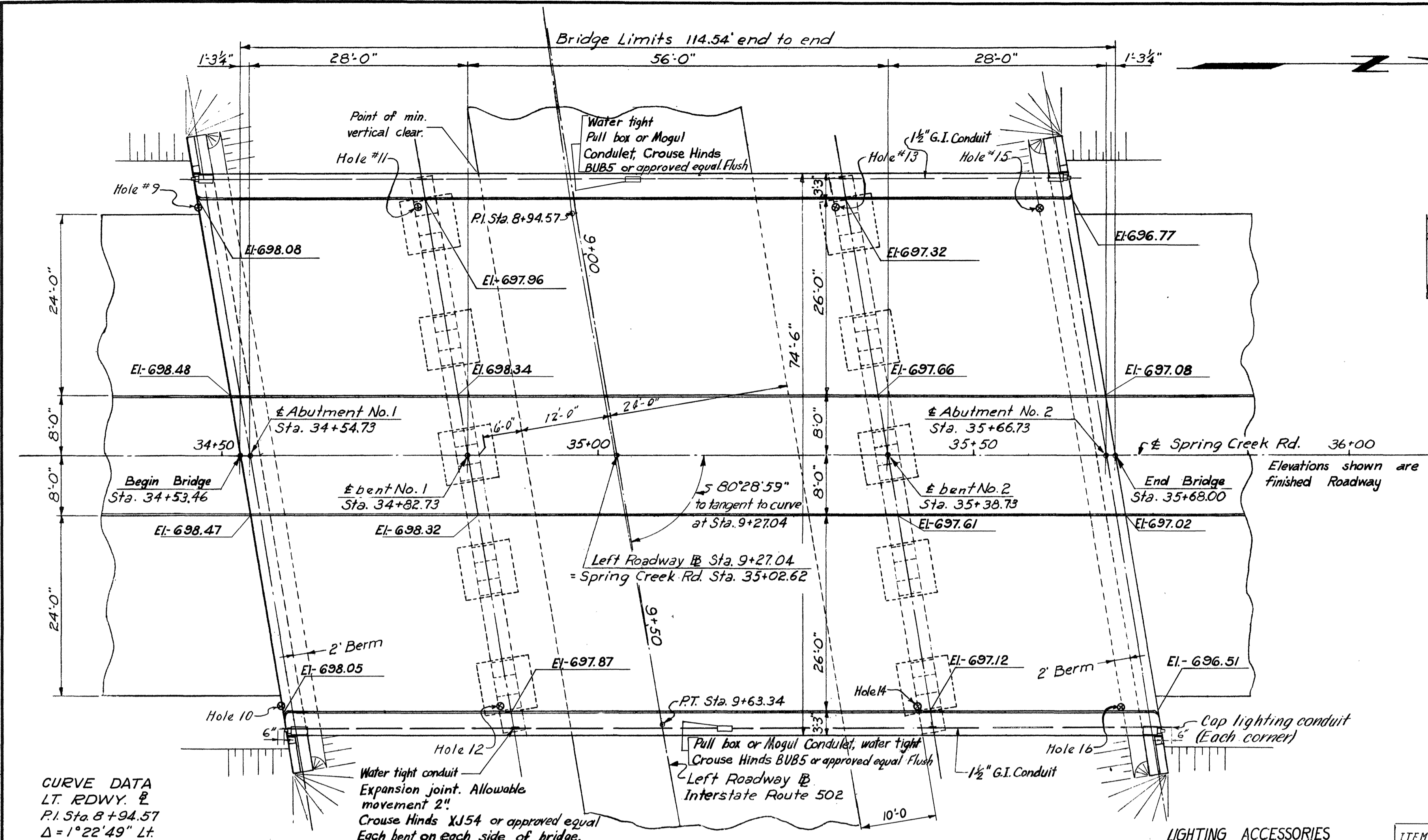
ITEM	UNIT	ABUT. 1	ABUT. 2	BENT 1	BENT 2	TOTAL
135-4 C.Y. Class "A" Concrete		30	30	68	69	197
135-12 LBS. Steel Bar Reinforcement		3023	3023	1406	14192	34298

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FOR
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DEPARTMENT OF HIGHWAYS
AND PUBLIC WORKS
NASHVILLE

BENTS & ABUTMENTS
SPRING CREEK ROAD STRUCTURE
OVER INTERSTATE ROUTE 502
RIGHT STRUCTURE STATION 33 + 26.67
HAMILTON COUNTY

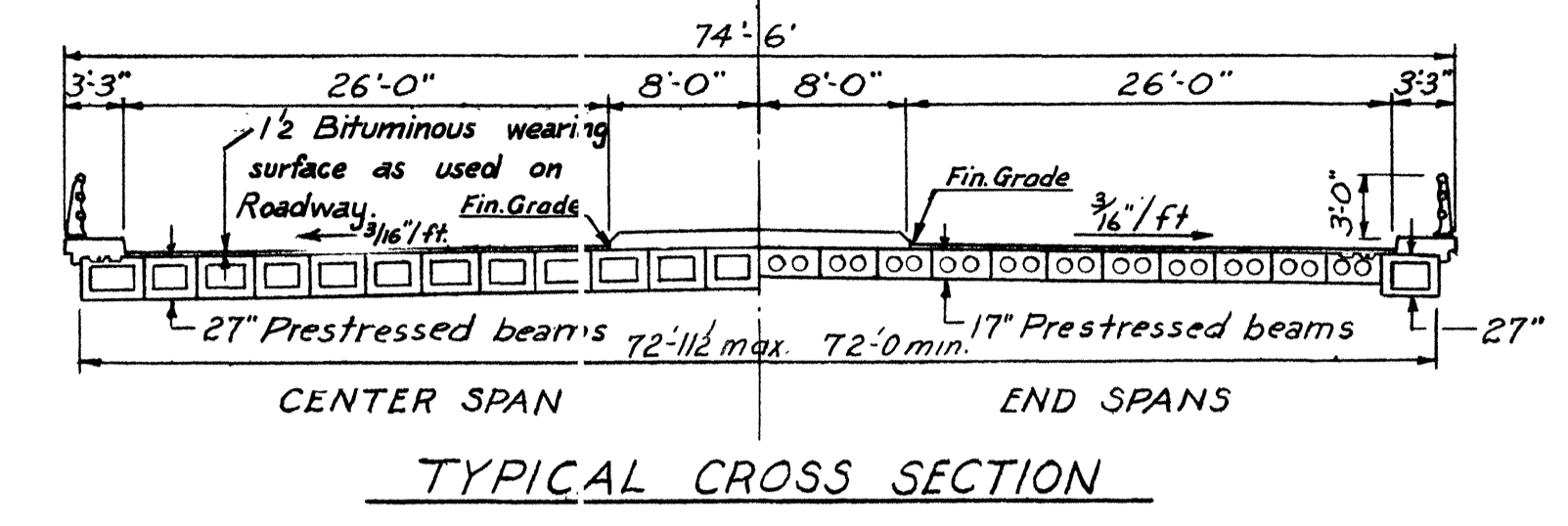
DESIGNED BY: J.M.L.E.
DRAWN BY: J.M.L.E.
CHECKED BY: J.M.L.E.
DATE: 2-2-59
REVISED: 4-9-59
REVISIONS: Add underbridge luminaires.

FED. ROAD REG. NO.	T E N N.	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3		I-75-1(7)0	1959	46	336



CURVE DATA
 LT. RDWY. $\frac{1}{2}$
 P.I. Sta. 8+94.57
 $\Delta = 1^\circ 22' 49''$ Lt.
 $R = 5709.58'$
 $L = 137.55'$
 $T = 68.78'$
 $S.E. = 0.02200$ ft./ft.
 Full Super. of P.T. Sta. 9+63.34
 Transition to Normal Section @ Sta. 10+00

GENERAL PLAN



TYPICAL CROSS SECTION

BORINGS

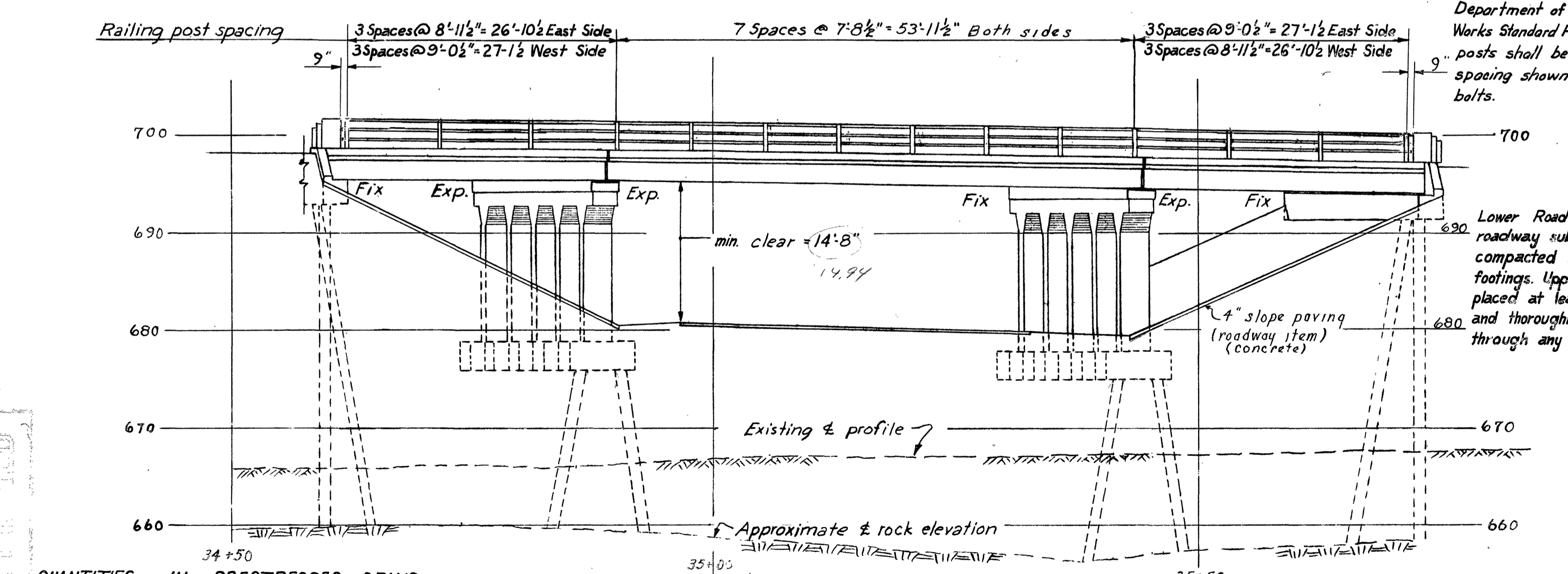
Hole	Station	Offset	Ground El.	Rock El.
9	243+67	32' Lft.	665.2	659.2
10	244+33	43' Lft.	666.0	660.0
11	243+67	61' Lft.	665.4	660.4
12	244+33	72' Lft.	666.4	658.4
13	243+67	116' Lft.	666.0	655.0
14	244+33	127' Lft.	673.1	657.1
15	243+67	143' Lft.	666.2	657.2
16	244+33	154' Lft.	673.6	657.6
17	243+67	2	665.0	657.0
18	244+33	2	665.3	659.3

Boring location referenced to Survey \pm I-502

TABLE OF ESTIMATED QUANTITIES

ITEM NO.	UNIT	ITEM	SUB-STRUCTURE			SUPER-STRUCTURE			TOTAL	
			ABUT1	ABUT2	BENT1	BENT2	SPAN1	SPAN2		SPAN3
17-2	C.Y.	Dry Excavation * Bridges			75	75			150	
135-4	C.Y.	Class "A" Concrete	30	30	68	69	20	36	273	
135-12	lbs.	Steel Bar Reinforcement	3063	3063	14293	14335	750	1242	37496	
137-3	L.F.	Steel Piles 10" BP 42"							1652	
Precast Prestressed Beams										
154-20F	Ea.	27" Deep x 55" U. Uniform Section					24		24	
154-20G	Ea.	17" Deep x 29" do				22		22	44	
154-20H	Ea.	27" Deep x 29" do				2		2	4	
501	L.F.	Aluminum Railing (3 Rail)					52	112	52	216
		Imp Sum Lighting Accessories	see notes							

- LIGHTING ACCESSORIES**
- 235' G.I. Conduit 1 1/2" (Deck)
 - 2 Pull boxes
 - 4 Expansion joints
 - 1 Junction box
 - 1 Circuit breaker
 - 1 "T" Junction
 - 15' G.I. Conduit 1" (Bent 2)
 - 40' G.I. Conduit 3/4" (Bent 2)
 - 8 Luminaires (Horizontal)
 - 4 Caps
- Wiring not included
 For Railing details, see Tennessee Department of Highways and Public Works Standard F10-47. All railing posts shall be vertical. Railing spacing shown is an $\frac{1}{2}$ of anchor bolts.



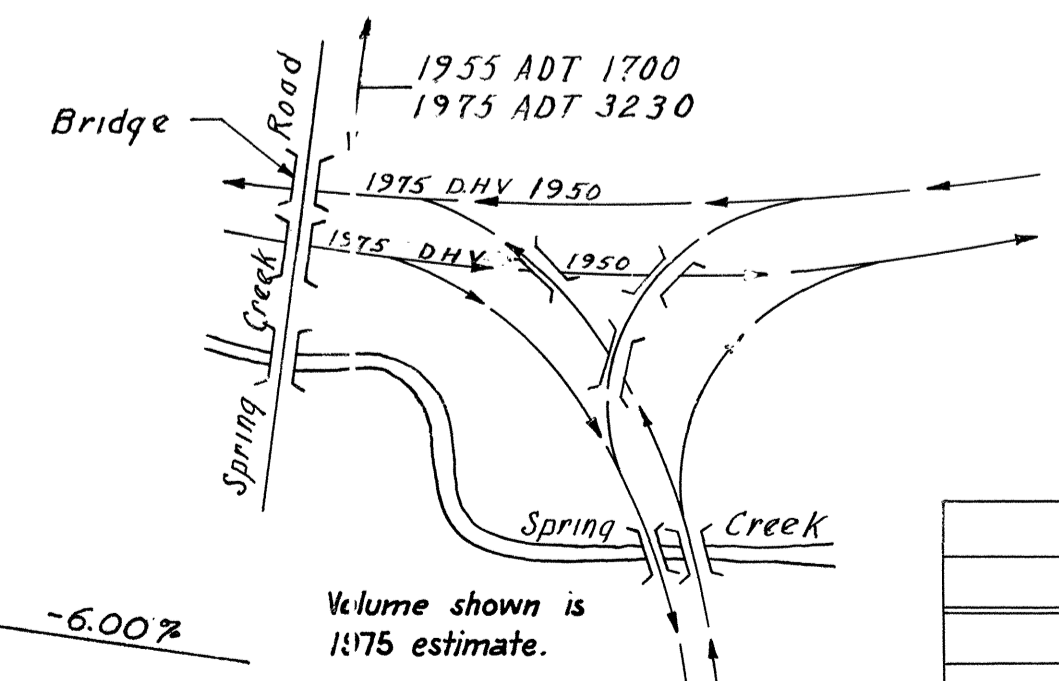
ELEVATION

QUANTITIES IN PRESTRESSED BEAMS

Concrete	398 Cu. Yds.
Wire Rope	13900'
Reinf. Steel	24,665'

Lower Roadway fill shall be placed to roadway subgrade and thoroughly compacted before excavating for bent footings. Upper roadway fill shall be placed at least to bottom of abutment and thoroughly compacted. Drive all piles through any fill in such locations.

* Dry excavation is based on that required for the bents below the lower roadway grade



VERTICAL CURVE DATA

V.P.I. Station	34+80
Elevation	706.30
L.V.C.	600'
M.O.	7.95'

LIST OF DRAWINGS

TITLE	NO.
GENERAL PLAN	46
DECK PLANS & DETAILS	47
BENTS & ABUTMENTS	48
STD. THREE PIPE ALUMINUM HANDRAILING	F-10-47
STANDARD PILE DETAILS	F-2-118

GENERAL NOTES

Specifications: A.A.S.H.O. 1957 "Standard Specifications for Highway Bridges" except as modified by Bureau of Public Roads "Policy on Interstate System" and "Criteria for Prestressed Concrete Bridges, 1954," and the Standard Specifications for Road and Bridge Construction of the Tennessee Department of Highway and Public Works.

Loading H20-S16-44

Cost of joint material shall be included in class "A" concrete unless otherwise provided for in special provisions.

The 1/2" Bituminous wearing surface is included in Bridge Quantities on Roadway Plans.

Lighting Accessories installation shall include all lighting accessories shown on plan complete in place except wiring. SPECIFICATIONS for roadway lighting shall apply. Wiring to be installed under Roadway Lighting item.

Bar sizes are indicated in the bar marks. The first digit of three numeral marks and the first two digits of four numeral marks indicate the bar diameter in eighths of inches and the last two digits indicate the specific bar.

Contractor for prestressed members shall submit details of members and obtain approval from the Engineer before proceeding with manufacture of members.

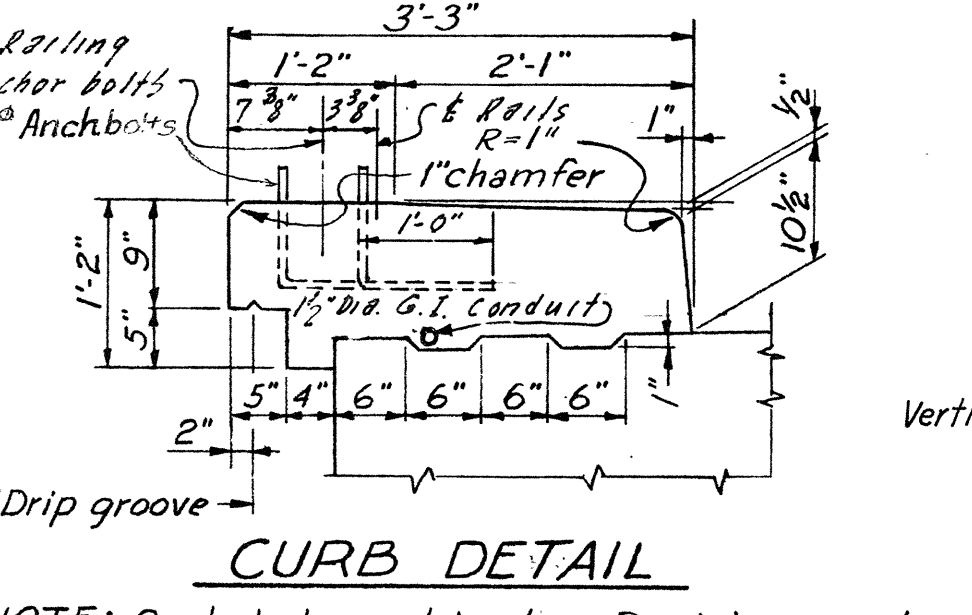
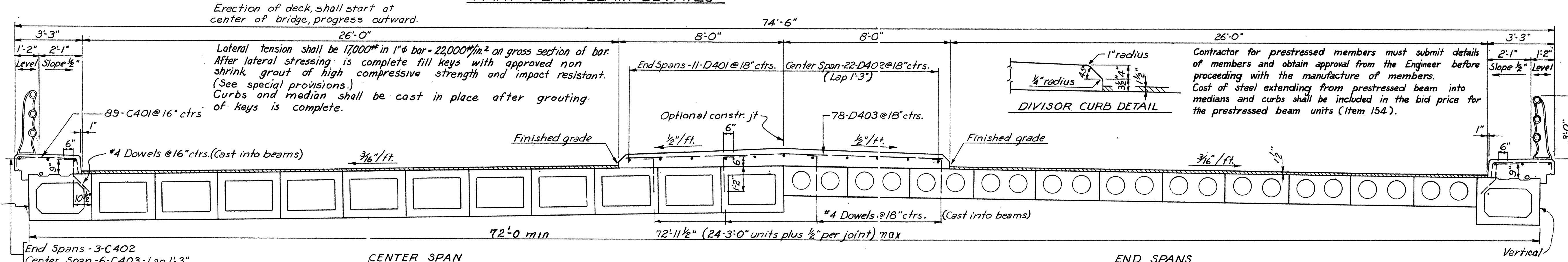
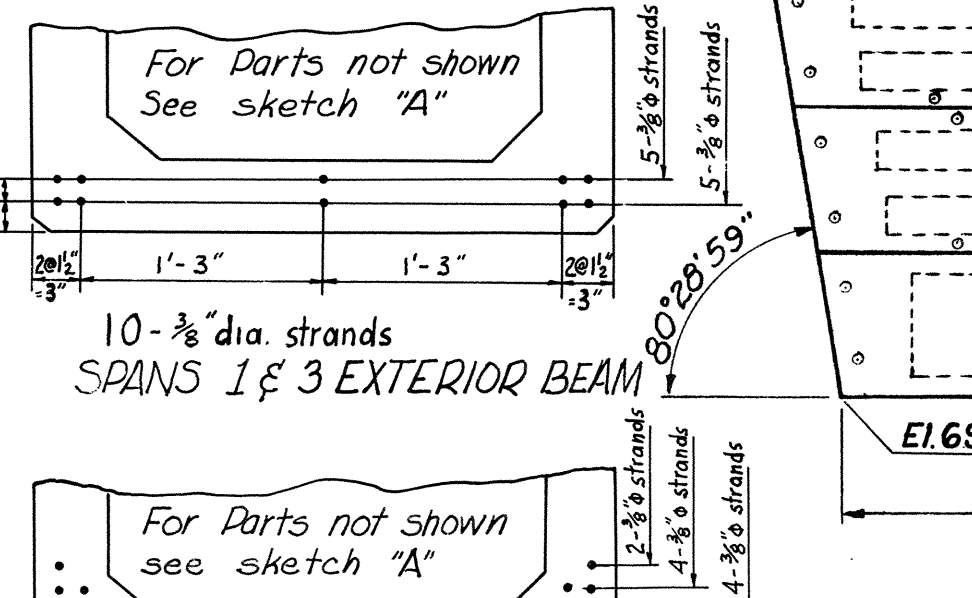
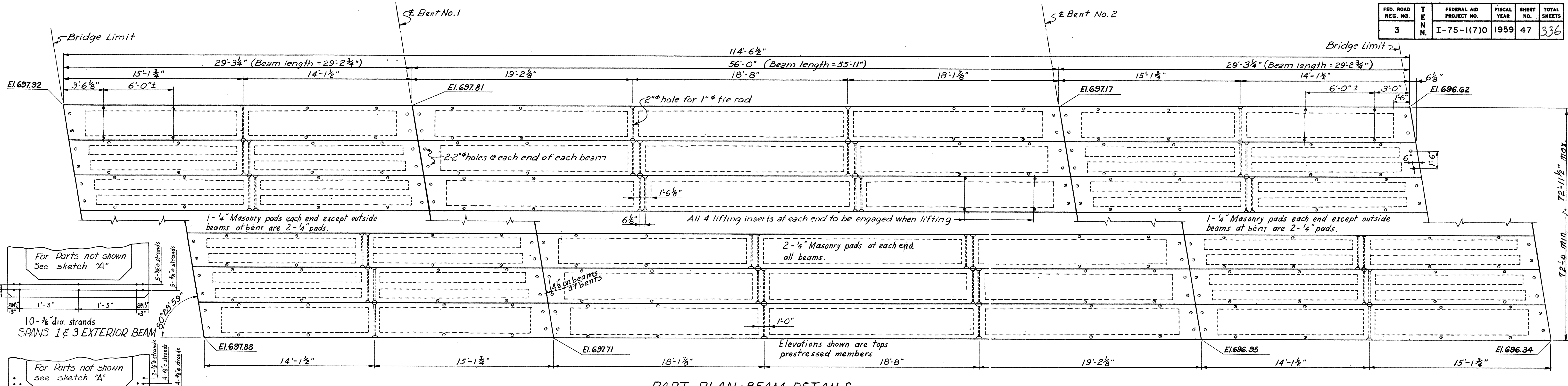
Steel bar reinforcement shall be intermediate grade or hard grade.

All poured in place concrete shall be Class "A."

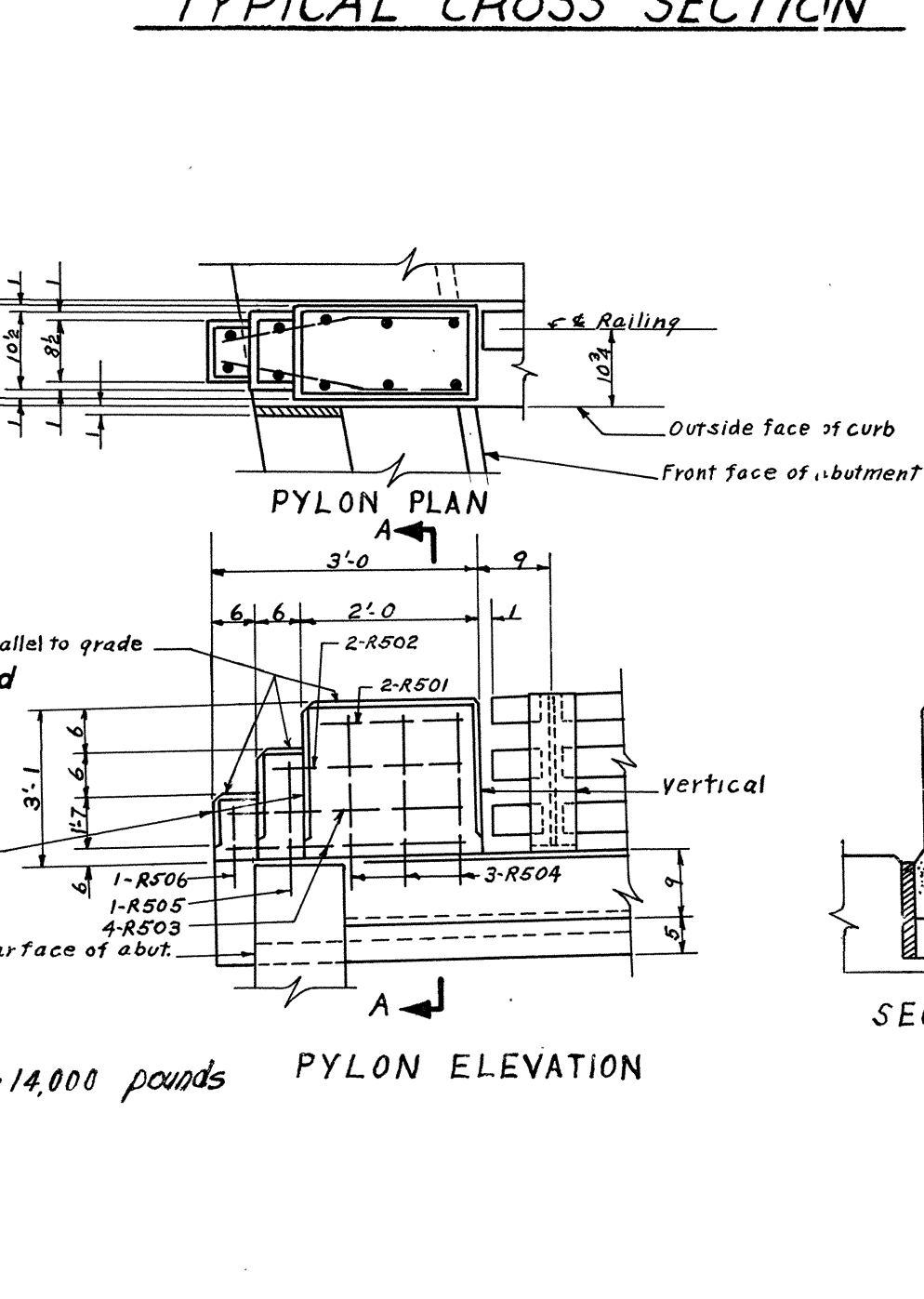
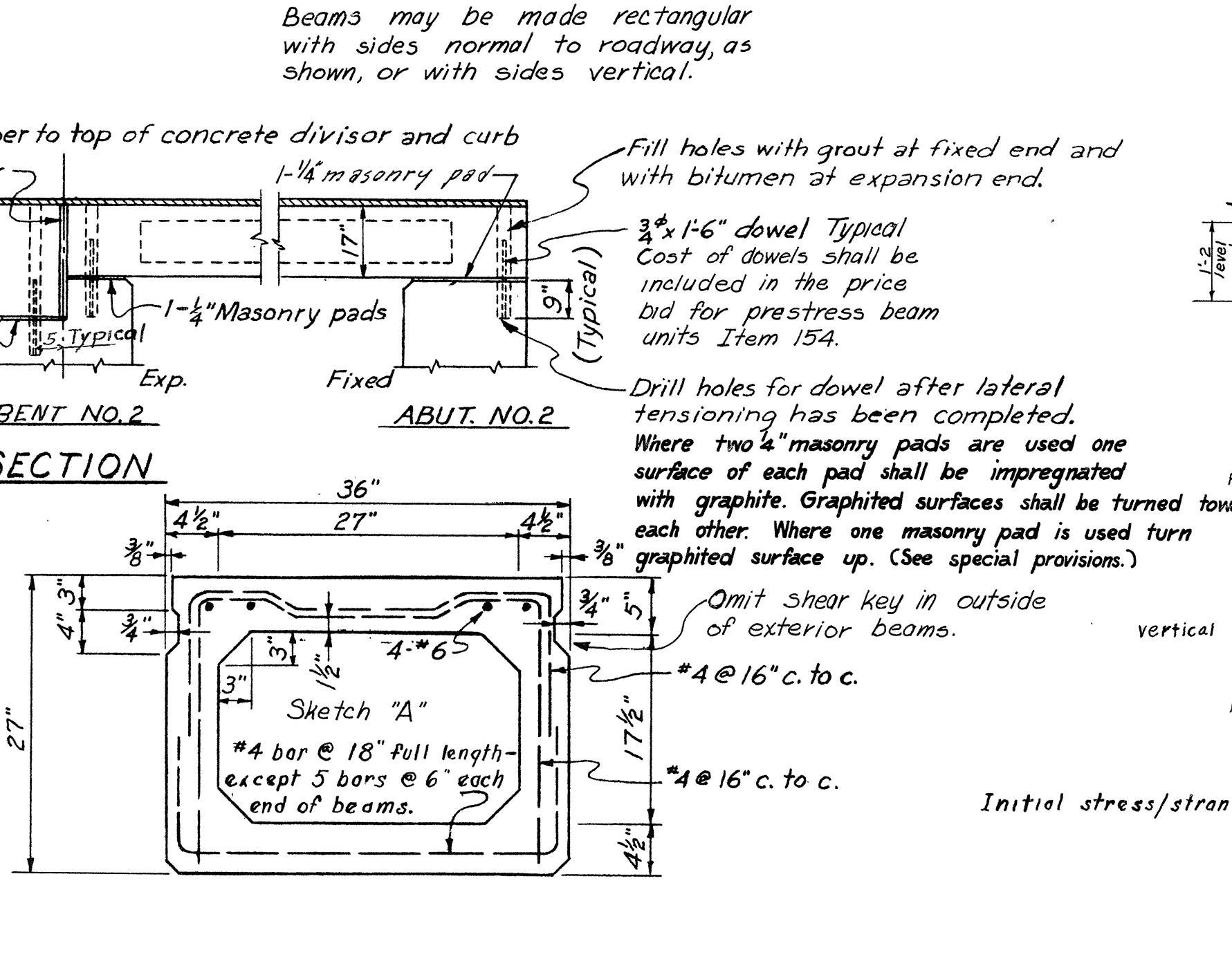
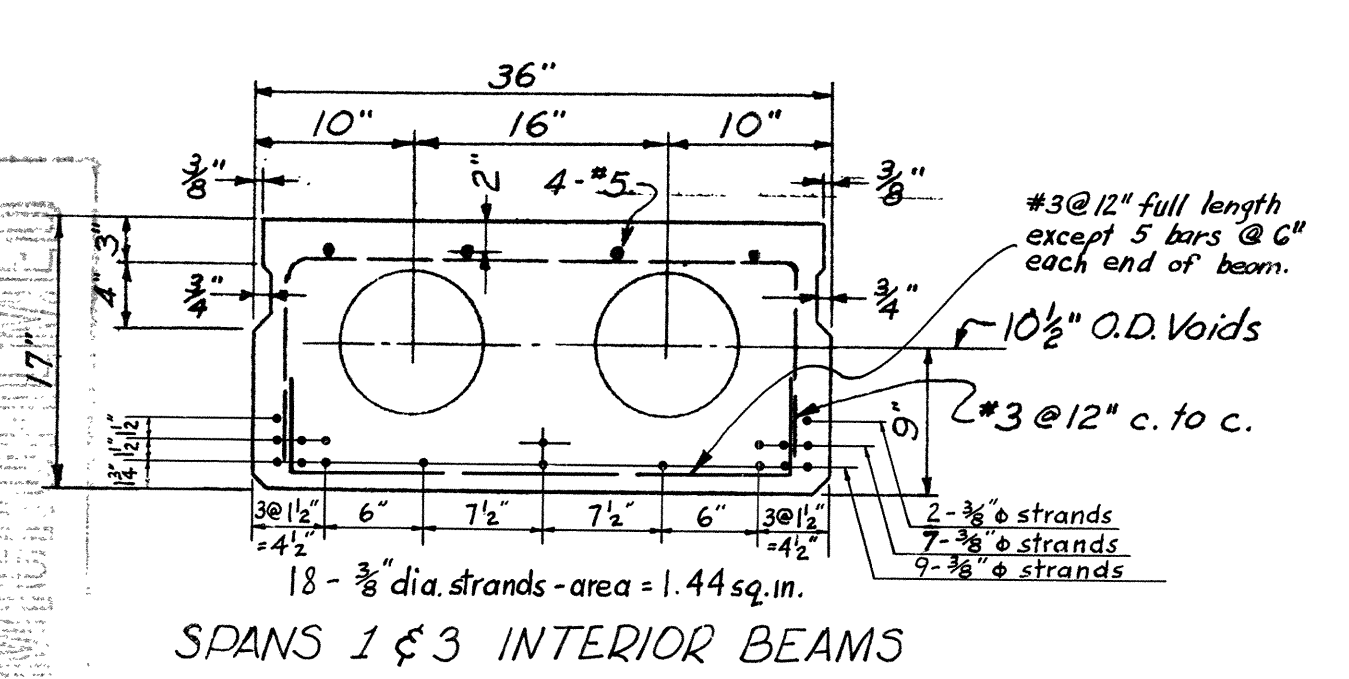
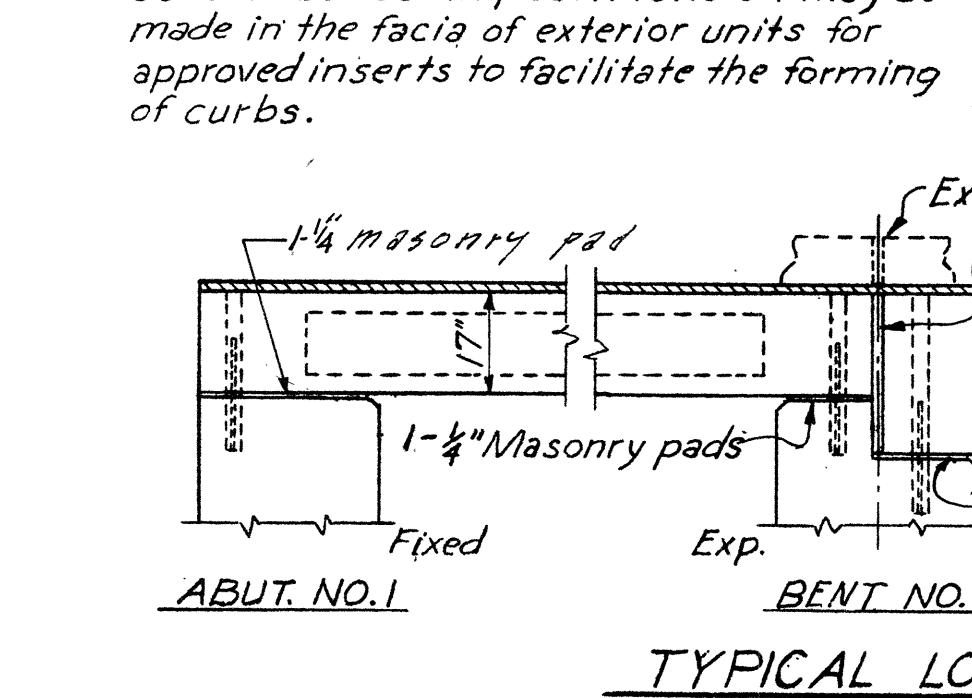
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 FOR
 STATE OF TENNESSEE
 DEPARTMENT OF HIGHWAYS
 AND PUBLIC WORKS
 NASHVILLE

GENERAL PLAN
 SPRING CREEK ROAD STRUCTURE
 OVER INTERSTATE ROUTE 502
 LEFT STRUCTURE STATION 35+02.62
 HAMILTON COUNTY

FED. ROAD REG. NO.	T E N N.	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3		I-75-1(7)0	1959	47	336



MARK	QUANTITY	LENGTH	TYPE	WEIGHT			
C401	46	26	4.6	178			
C402	6	6	12	28.9			
C403	12	12	28.5	228			
D401	11	11	22	28.9			
D402	22	22	28.5	417			
D403	20	38	20	78			
R501	4	4	8	1.8			
R502	4	4	8	2.2			
R503	8	8	16	2.8			
R504	6	6	12	7.6			
R505	2	2	4	6.4			
R506	2	2	4	5.2			
Totals				750	1242	750	2742



Reinforcing shall have 2" of cover from all faces unless otherwise shown.

ITEM NO.	UNIT	ITEM	SPAN 1	SPAN 2	SPAN 3	TOTAL
135-A	C.Y.	Class "A" Concrete	20	36	20	76
135-12	LBS.	Steel Bar Reinforcement	750	1242	750	2742

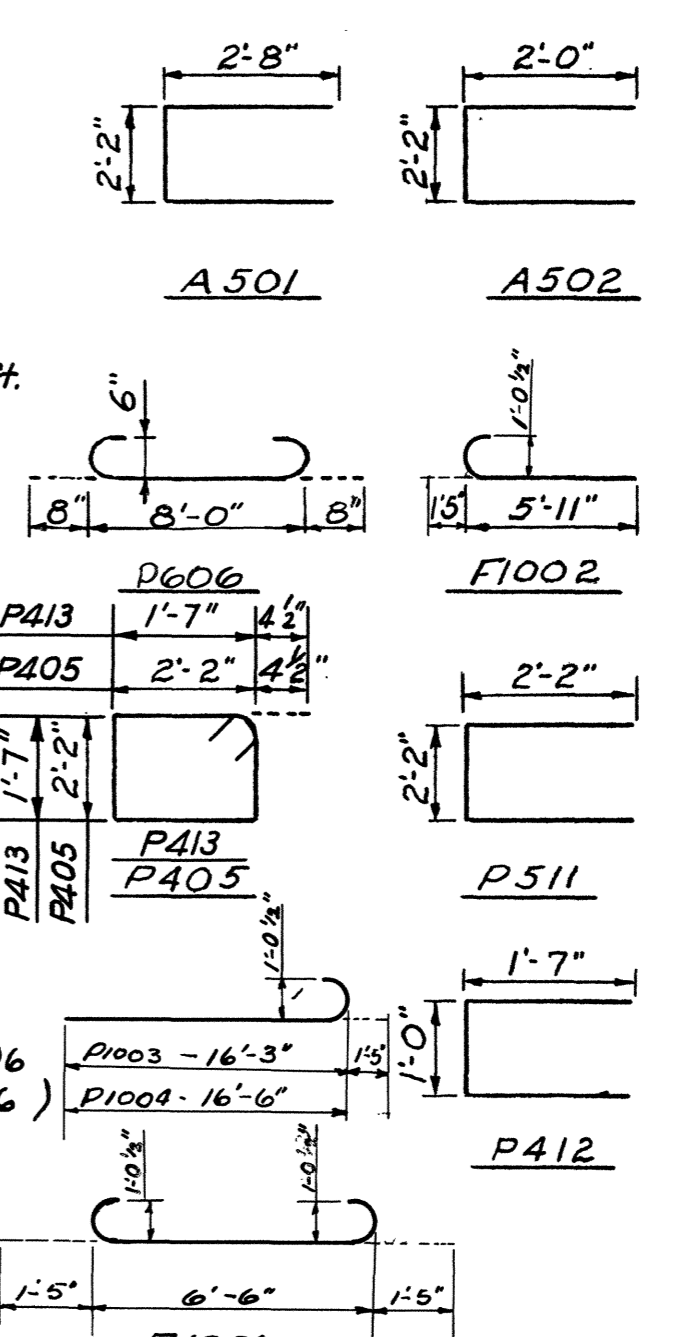
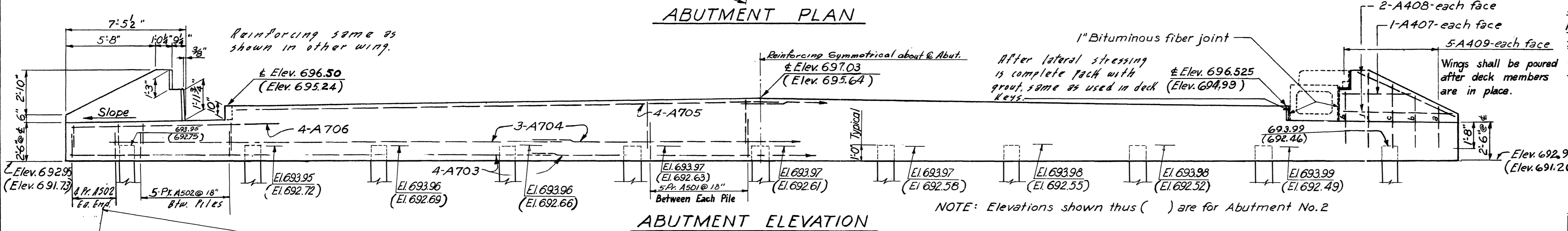
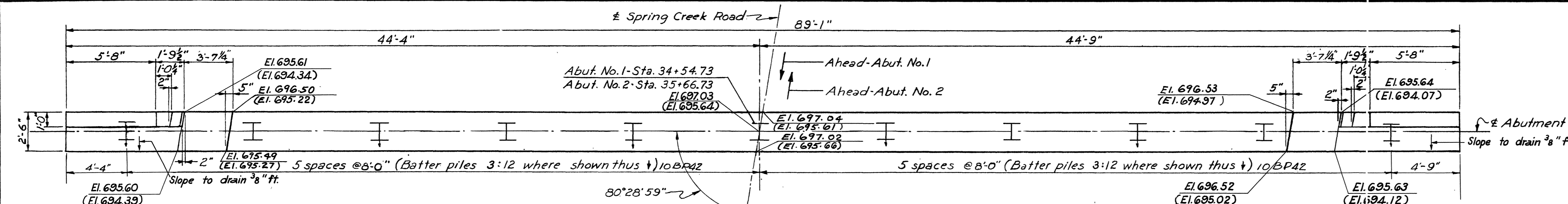
PREPARED BY
CAPITOL ENGINEERING CORPORATION, DILLSBURG, PA.
FOR
STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
AND PUBLIC WORKS
NASHVILLE

DECK PLAN & DETAILS
SPRING CREEK ROAD STRUCTURE
OVER INTERSTATE ROUTE 502
LEFT STRUCTURE STATION 35 + 02.62
HAMILTON COUNTY

H-2-30

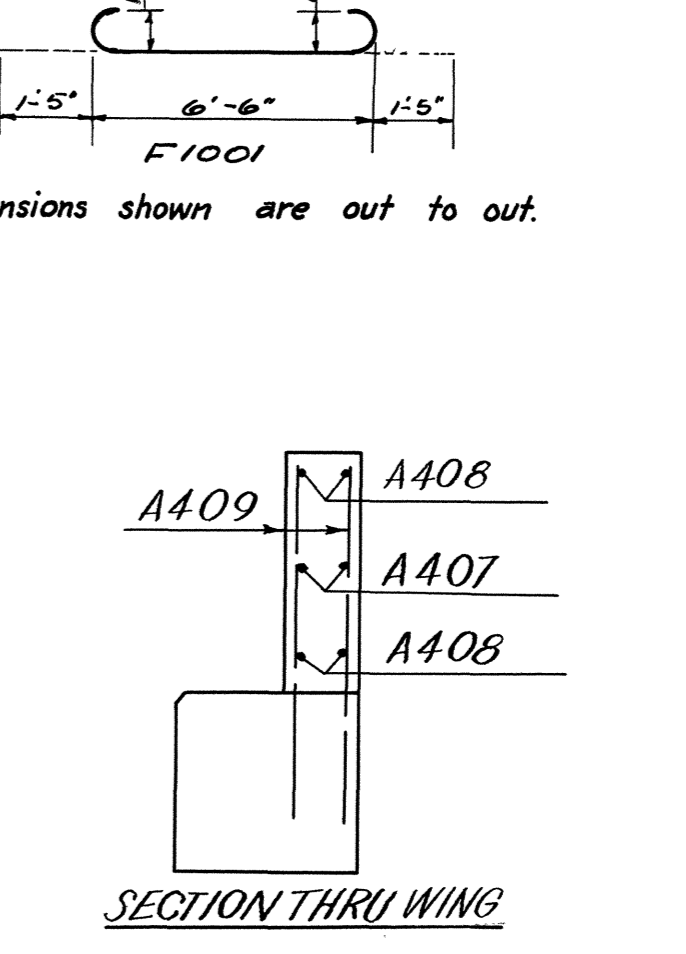
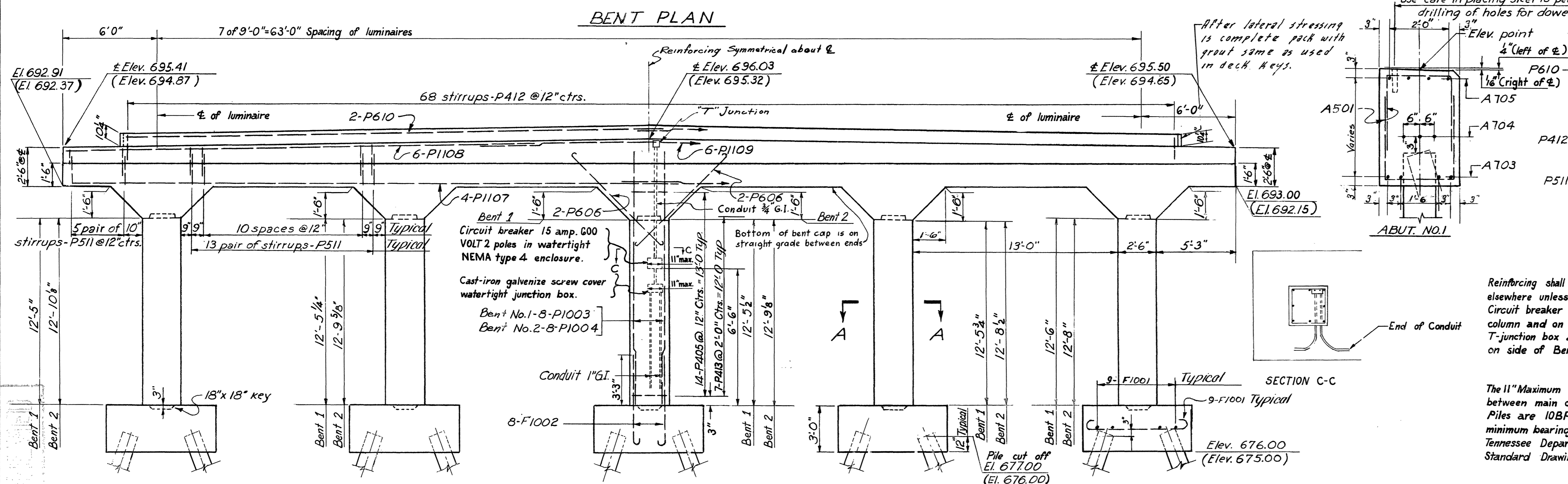
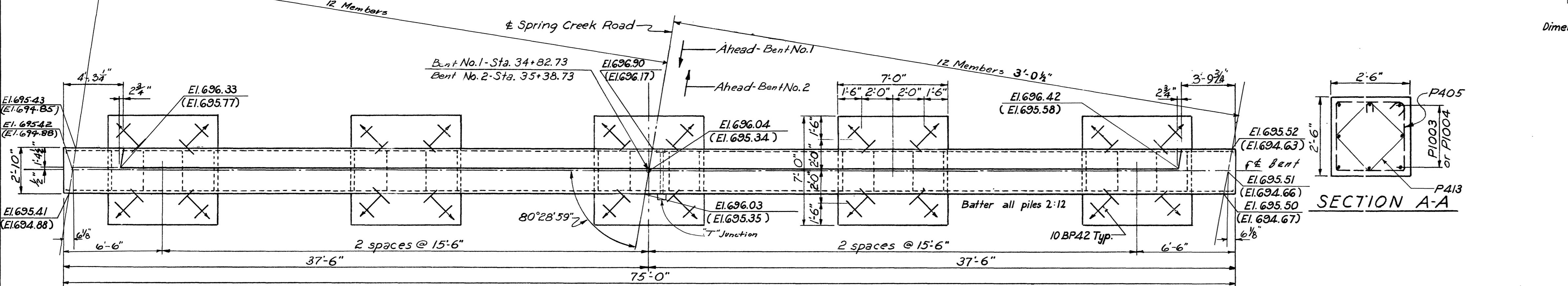
DESIGNED BY J.P. ...
DRAWN BY ...
CHECKED BY ...
DATE 9-2-59

FED. ROAD REG. NO.	T E N N.	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
3		I-75-1(7)0	1959	48	336



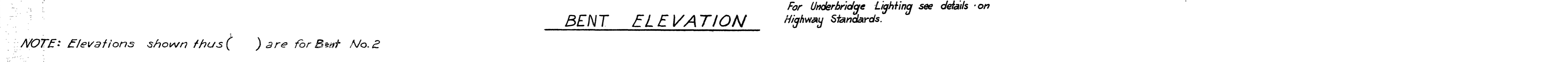
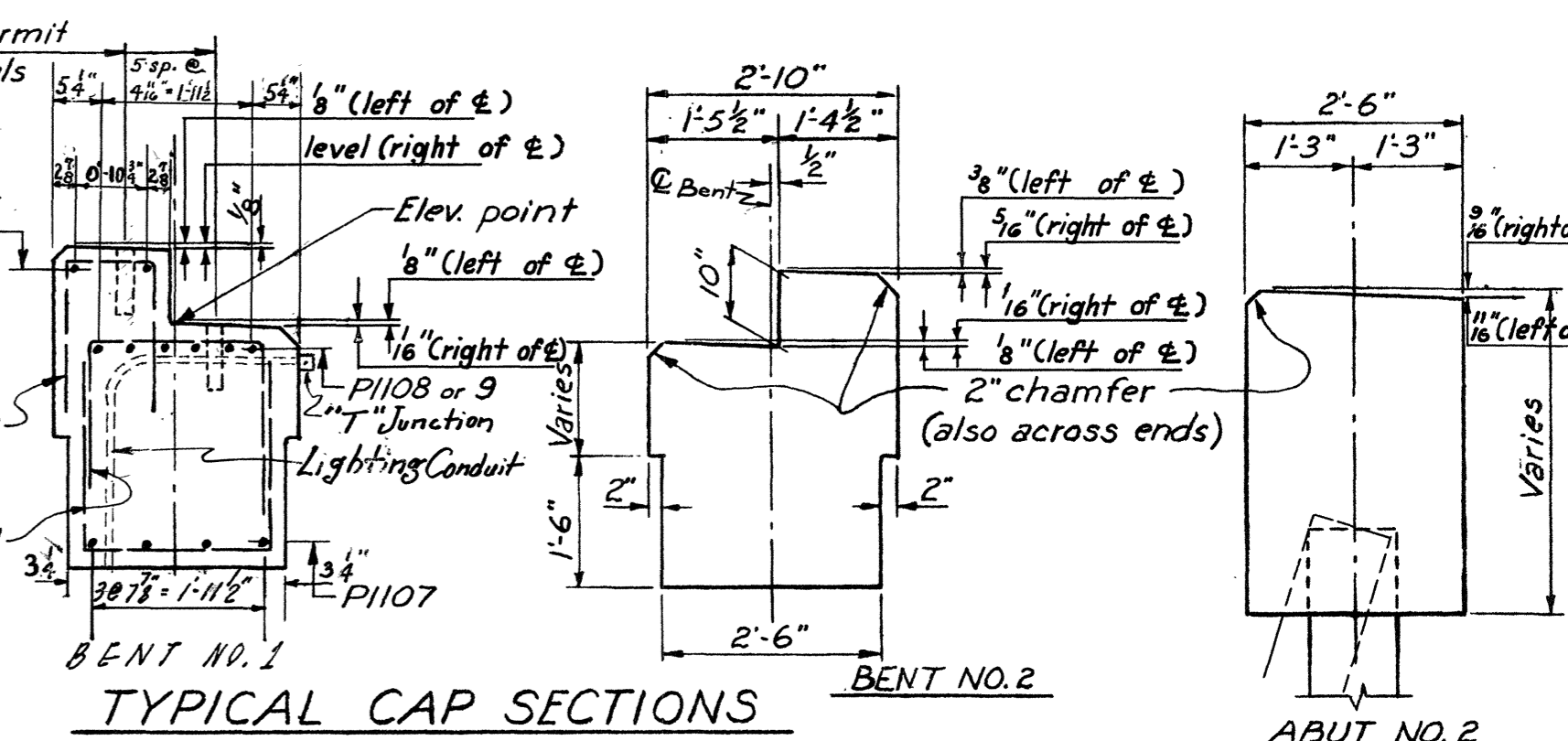
ABUTMENT BAR LIST

MARK	NO. REQ'D	NO. 1	NO. 2	TOTAL	SIZE	LENGTH	TYPE	WEIGHT
A501	80	80	160	5	7'-4"	Bent		1,223
A502	36	36	72	5	6'-0"	Bent		451
A703	12	12	24	7	3'-6"	Str.		1,545
A704	9	9	18	7	29'-6"	Str.		1,085
A705	8	8	16	7	35'-0"	Str.		1,145
A706	8	8	16	7	15'-0"	Str.		491
A407	4	4	8	4	4'-0"	Str.		22
A408	8	8	16	4	6'-6"	Str.		69
A409a	4	4	8	4	2'-6"	Str.		13
A409b	8	8	16	4	3'-3"	Str.		35
A409c	4	4	8	4	4'-0"	Str.		22
A409d	4	4	8	4	4'-9"	Str.		25
	3063	3063				TOTAL WEIGHT		6,126



BENT BAR LIST

MARK	NO. REQ'D	NO. 1	NO. 2	TOTAL	SIZE	LENGTH	TYPE	WEIGHT
F1001	90	90	180	10	9'-4"	Bent		1,225
F1002	40	40	80	10	7'-4"	Bent		2,523
P1003	40	-	40	10	17'-8"	Bent		3,041
P1004	-	40	40	10	17'-11"	Bent		3,044
P405	70	70	140	4	9'-5"	Bent		879
P606	20	20	40	6	9'-8"	Bent		560
P1107	8	8	16	11	39'-3"	Str.		3,337
P1108	12	12	24	11	30'-0"	Str.		3,825
P1109	6	6	12	11	22'-0"	Str.		1,403
P610	4	4	8	6	35'-0"	Str.		421
P511	124	124	248	5	6'-4"	Bent		1,638
P412	68	68	136	4	4'-1"	Bent		370
P413	35	35	70	4	7'-1"	Bent		322
	Weight	14,293	14,335			TOTAL WEIGHT		28,628



QUANTITIES

ITEM	UNIT	ABUT 1	ABUT 2	BENT 1	BENT 2	TOTAL
135-4	CY Class 'A' Concrete	30	30	68	69	197
135-12	LBS Steel Bar Reinforcement	3063	3063	14293	14335	34754

PREPARED BY
CAPITOL ENGINEERING CORPORATION, DILLSBURG, PA.
FOR
STATE OF TENNESSEE
DEPARTMENT OF HIGHWAYS
AND PUBLIC WORKS
NASHVILLE
BENTS & ABUTMENTS
SPRING CREEK ROAD STRUCTURE
OVER INTERSTATE ROUTE 502
LEFT STRUCTURE STATION 35 + 02.62
HAMILTON COUNTY

DESIGNED BY _____
DRAWN BY _____
CHECKED BY _____
DATE _____