

PLAN

EXISTING STRUCTURE

TYPE: A FOUR (4) SPAN CONTINUOUS NON-COMPOSITE A36 STEEL GIRDER STRUCTURE WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURES.

SKEM: 50° 55' 00" R.F.

SPANS: c/c BEARINGS ALONG CENTERLINE LIME CITY ROAD: 100'-0", 134'-0", 134'-0", 100'-0"

ROADWAY: 28'-6" F TO F CONCRETE PARAPETS 30'-6" OUT TO W/T SLAB

LOADING: CF 130(57)

WEARING SURFACE: MONOLITHIC CONCRETE

APPROACH SLABS: 25'-0" (EACH ABUTMENT)

ALIGNMENT: TANGENT

SLOPE PROTECTION: CRUSHED AGGREGATE

PROPOSED STRUCTURE

TYPE: A FOUR (4) SPAN CONTINUOUS COMPOSITE, A572 GRADE 50 STEEL GIRDER (PAINTED) STRUCTURE WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURES

SKEM: 50° 55' 00" R.F.

SPANS: c/c BEARINGS ALONG CENTERLINE LIME CITY ROAD: 81'-0", 153'-0", 153'-0", 81'-0"

ROADWAY: 27'-2" TOE TO TOE PARAPETS 30'-2" OUT TO OUT SLAB

LOADING: HS 20-44 (CASE II) AND ALTERNATE MILITARY LOADING. F.W.S. + 30 PSF

WEARING SURFACE: MONOLITHIC CONCRETE

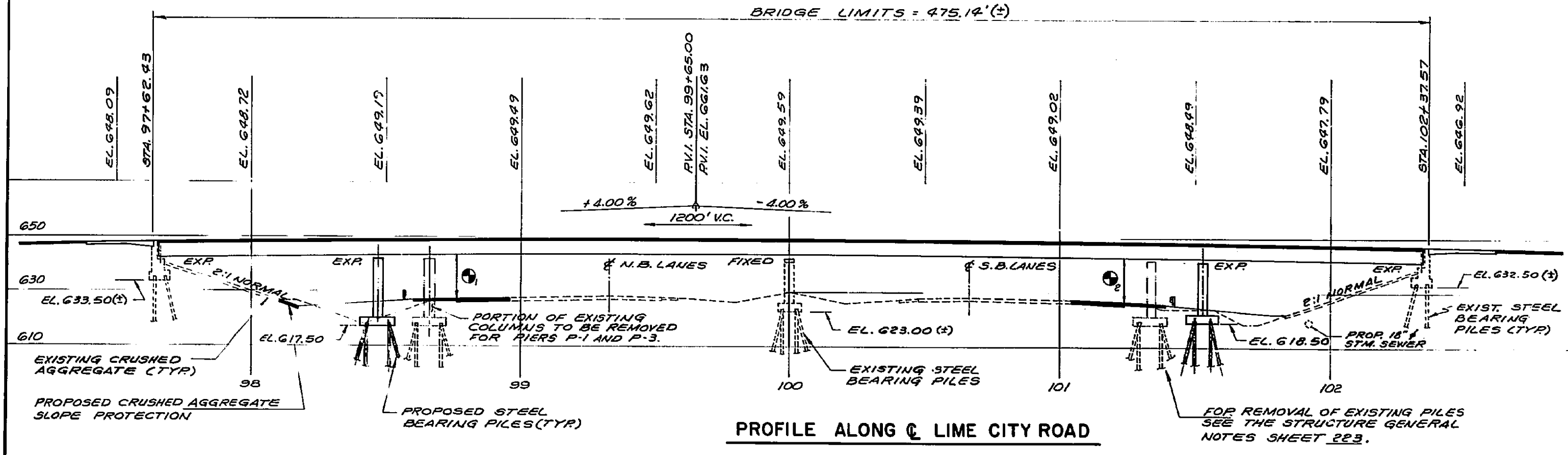
APPROACH SLABS: 25'-0" (ODOT STANDARD AS-1-81)

ALIGNMENT: TANGENT

SUPERELEVATION: NONE

SLOPE PROTECTION: CRUSHED AGGREGATE AT ABUTMENT A-1

TRAFFIC: 1,170 A.D.T. 117 A.D.T.T. (2010)



PROFILE ALONG Q LIME CITY ROAD

CURVE DATA @ I-75

RC. STA. = 315+35.39
 PI. STA. = 315+97.56
 RT. STA. = 316+59.72

Δ = 00° 18' 39" RT
 DC = 00° 15' 00"
 R = 22918.32'
 T = 62.17'
 Lc = 124.33'
 E = 0.08'

MINIMUM VERTICAL CLEARANCE

⊕ 1 15.00' REQUIRED
 18.20' ACTUAL

⊕ 2 15.00' REQUIRED
 15.03' ACTUAL

HORIZONTAL CLEARANCE

■ - REQUIRED
 ▲ - ACTUAL

NOTE

- EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS-SECTIONS.

- FOR THE PILING PLAN AND THE ESTIMATED PILE PAY LENGTHS, SEE SHEET 330.

- A CONTINGENCY OF 50 G.Y. OF ITEM 601-CRUSHED AGGREGATE SLOPE PROTECTION HAS BEEN INCLUDED IN THE ESTIMATED QUANTITIES FOR THE REPAIR OF WASHED-OUT AREAS.

ALJ DAM RER JFF 2-12-94

URS

OHIO TURNPIKE COMMISSION

GENERAL PLAN & ELEVATION

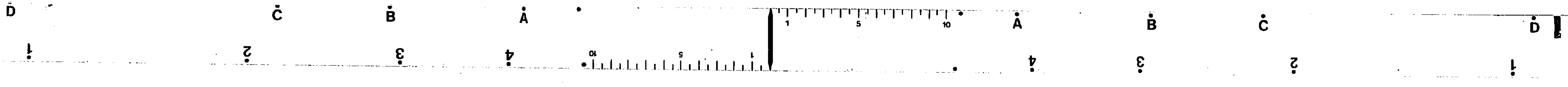
LIME CITY ROAD OVER I-75

BR. N^o WOO-75 - 2993
 WOOD COUNTY

STA. 97+62.43 TO STA. 102+37.57

DATE: 2/90 SCALE: N.T.S.

CIP: 55-90-03 SHEET 335 OF 364



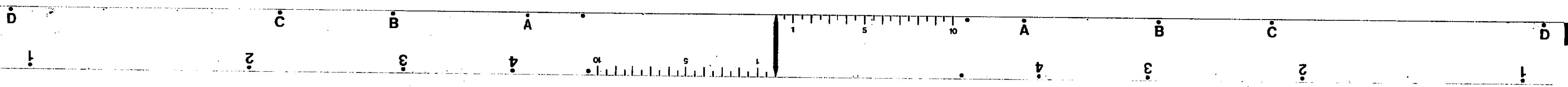
ESTIMATED QUANTITIES							
ITEM	TOTAL	UNIT	DESCRIPTION	SUPER.	ABUT.	PIER	GEN.
SP202	LUMP	LS	PORTIONS OF STRUCTURES REMOVED				
503	LUMP	LS	COFFERDAMS, CRIBS, AND SHEETING				
503	279	CY	UNCLASSIFIED EXCAVATION			279	
503	LUMP	LS	UNCLASSIFIED EXCAVATION, AS PER PLAN			LUMP	
505	LUMP	LS	PILE DRIVING EQUIPMENT AND MOBILIZATION			LUMP	
507	2160	LF	STEEL PILES HP 12X53			2160	
507	36	EA	STEEL POINTS (OR SHOES), AS PER PLAN			36	
509	22702	LBS	REINFORCING STEEL, GRADE 60			22702	
509	122426	LBS	EPOXY COATED REINFORCING STEEL, GRADE 60	119871	2555		
510	306	LF	DOWEL HOLES, USING NONSHRINKING EPOXY GROUT		234	72	
511	80	CY	CLASS 'C' CONCRETE, PIER FOOTINGS			80	
511	8	CY	CLASS 'C' CONCRETE, ABUTMENTS		8		
511	63	CY	CLASS 'C' CONCRETE, PIER COLUMNS AND CAPS			63	
SP511A	500	CY	CLASS 'S' CONCRETE, SUPERSTRUCTURE DECK AND BARRIERS USING SHRINKAGE COMPENSATING CEMENT	500			
SP511A	13	CY	CLASS 'S' CONCRETE, ABUTMENT BARRIERS USING SHRINKAGE COMPENSATING CEMENT		13		
513	422400	LBS	STRUCTURAL STEEL (A-572, GRADE 50) AISC CATEGORY III	422400			
513	2528	EA	WELDED STUD SHEAR CONNECTORS	2528			
516	89	LF	STRUCTURAL STEEL EXPANSION JOINTS INCLUDING ELASTOMERIC STRIP SEALS	89			
516	20	EA	LAMINATED ELASTOMERIC BEARINGS, COMPLETE, AS PER PLAN		8	12	
601	79	SY	CRUSHED AGGREGATE SLOPE PROTECTION		29	50	
SP527C	LUMP	LS	FALSEWORK, TEMPORARY BRACING, AND PROTECTIVE STRUCTURES	LUMP			
SPECIAL	12	EA	REMOVAL OF EXISTING PILES			12	
SPECIAL	955	SY	SEALING OF CONCRETE SURFACES (SEE PROPOSAL NOTE)	898	57		
SPECIAL	208	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY) (SEE PROPOSAL NOTE)			208	
SPECIAL	422400	LBS	FIELD PAINTING OF NEW STRUCTURAL STEEL, SYSTEM 12EU (SEE PROPOSAL NOTE)	422400			

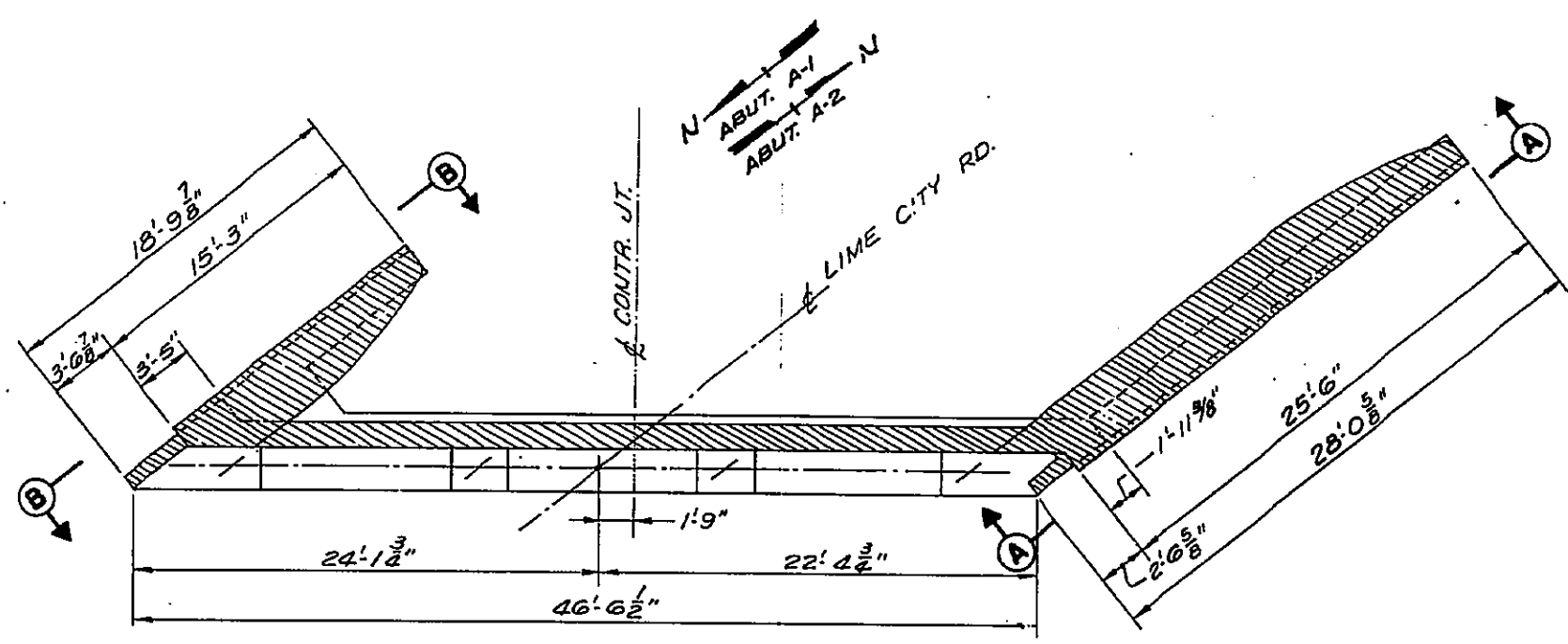
QUANTITIES
 CALCULATED BY : J.T.J. DATE : 11/8/89
 CHECKED BY : B.A.B. DATE : 12-6-89

DESIGNED	DRAWN	CHECKED	APPROVED	DATE
J.T.J.	F.F.	R.J.R.	JFP	2-12-90

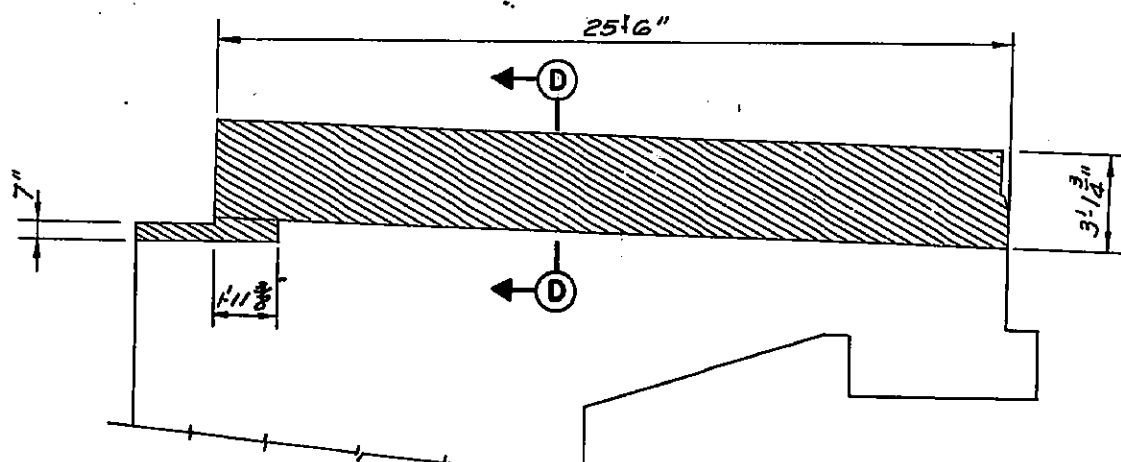
URS
 OHIO TURNPIKE COMMISSION

ESTIMATED QUANTITIES
 LIME CITY ROAD OVER I-75
 BR. N^o W00-75 - 2993
 WOOD COUNTY
 STA. 97+62.43 TO STA. 102+37.57
 DATE: 2/90 SCALE: N.T.S.
 CP: 55-90-03 SHEET 336 OF 364

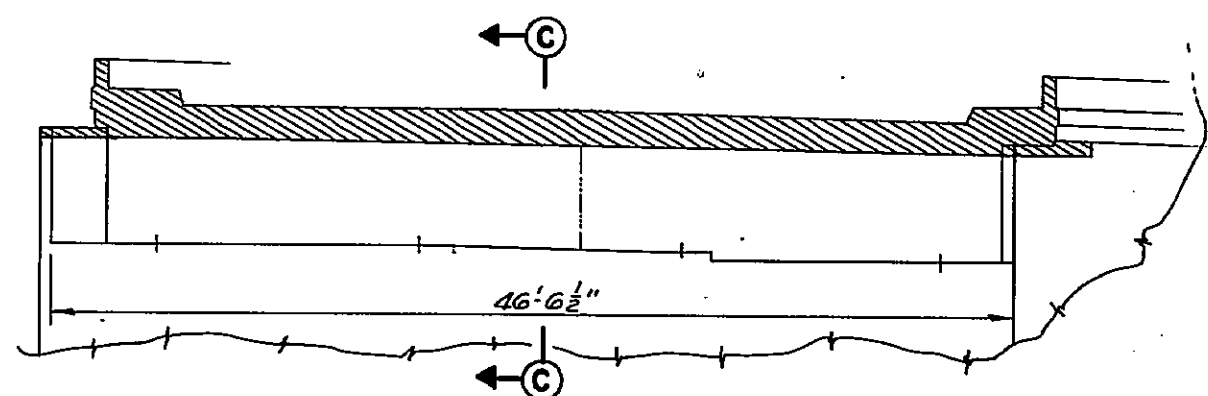




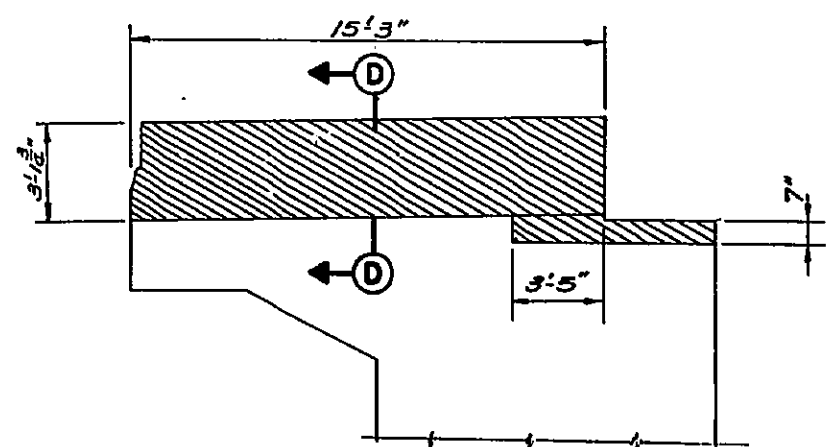
PARTIAL PLAN - ABUTMENTS



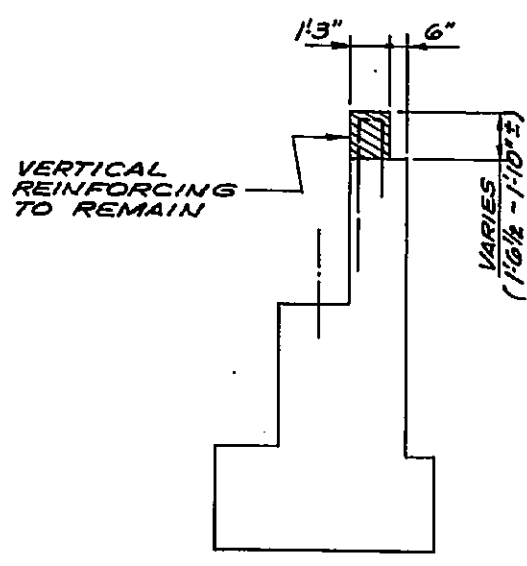
VIEW "A-A"



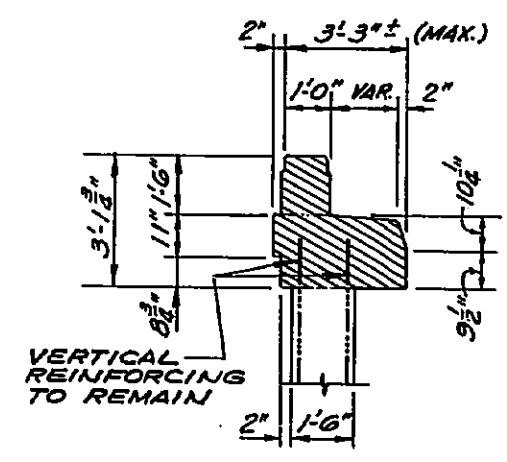
PARTIAL ELEVATION - ABUTMENTS



VIEW "B-B"



SECTION "C-C"

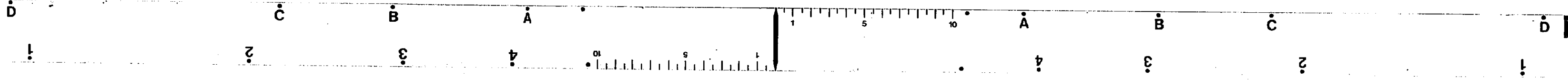


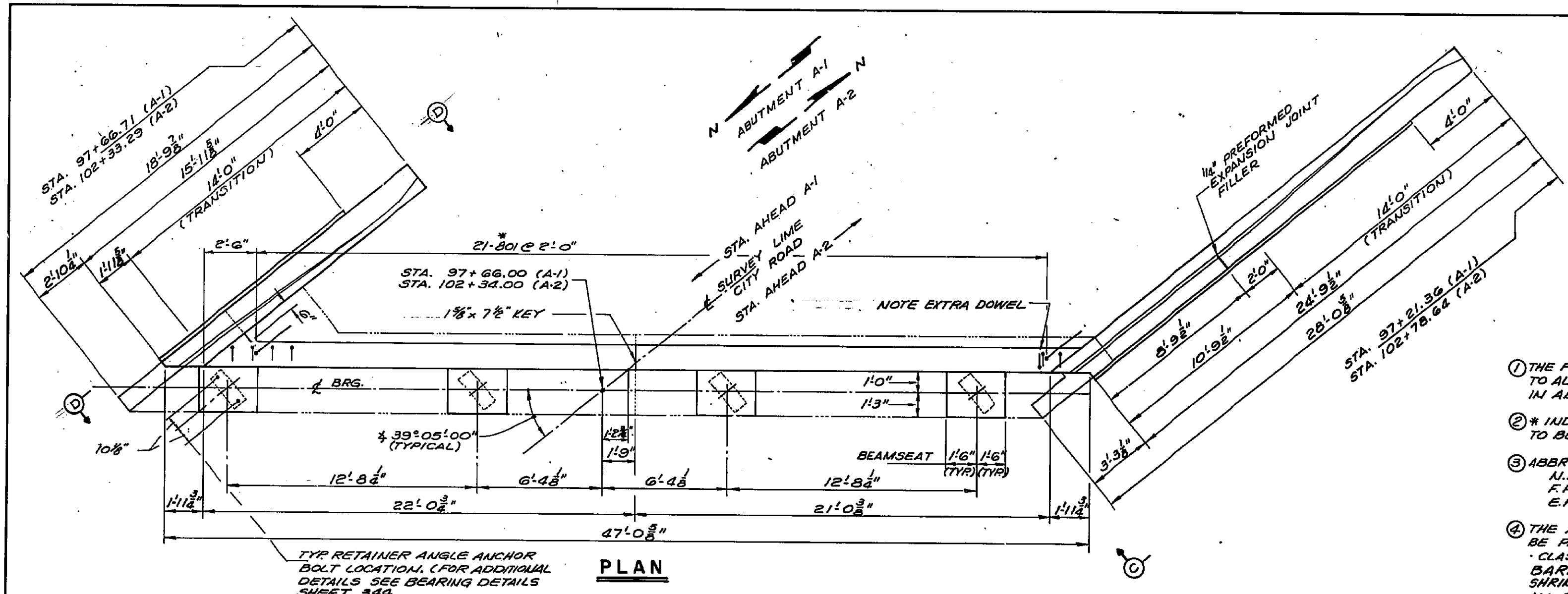
SECTION "D-D"

- NOTES**
- ① INDICATES AREAS TO BE REMOVED AND SHALL BE INCLUDED WITH ITEM 202 - PORTIONS OF STRUCTURES REMOVED FOR PAYMENT.
 - ② ALL EXISTING REINFORCING, IN HATCHED AREAS, SHALL BE REMOVED UNLESS NOTED OTHERWISE.
 - ③ CONSTRUCTION JOINT PREPARATION: SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE, WHERE PRACTICABLE, AT LEAST 1'-6" LENGTH OF PROTRUDING REINFORCING STEEL SHALL BE LEFT IN PLACE. INSTALL DOWEL BARS AS SPECIFIED, PRIOR TO CONCRETE PLACEMENT. ABRASIVELY CLEAN JOINT SURFACE AND EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THEN, THE JOINT SURFACE AND EXPOSED REINFORCEMENT SHALL BE THOROUGHLY CLEANED OF ALL DIRT, DUST, OR OTHER FOREIGN MATERIALS, BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHOD THAT PRODUCES RESULTS SATISFACTORY TO THE ENGINEER. THE CONCRETE BONDING SURFACE SHALL BE WET WITHOUT FREE WATER AS CONCRETE IS PLACED. PAYMENT FOR THE ABOVE MENTIONED WORK SHALL BE INCLUDED WITH THE LUMP SUM BID FOR ITEM 202 - PORTIONS OF STRUCTURES REMOVED.

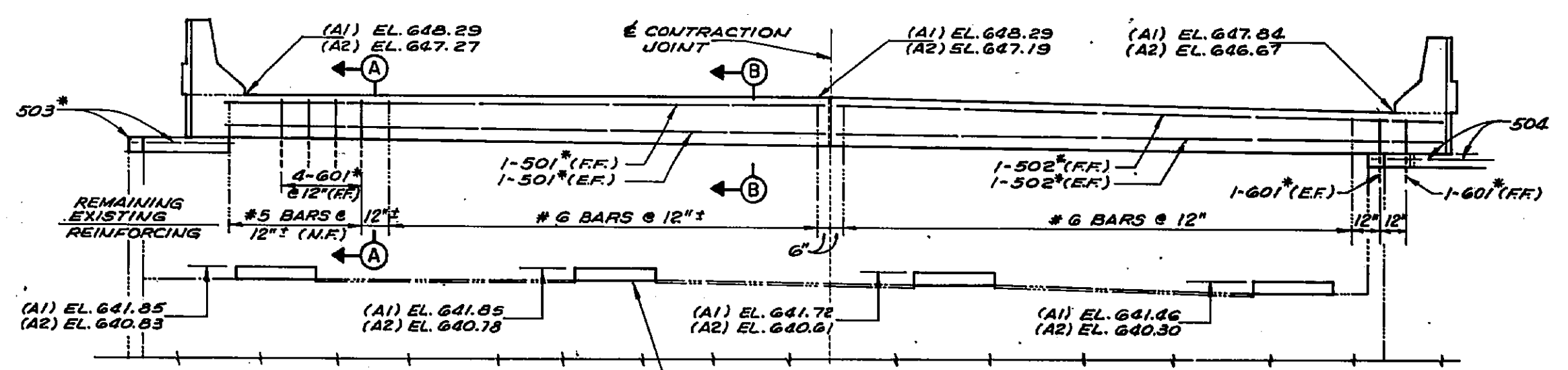
URS	
OHIO TURNPIKE COMMISSION	
ABUTMENT REMOVAL DETAILS	
LIME CITY ROAD OVER I-75	
BR. NO. W00-75-2993	
WOOD COUNTY	
STA. 97+62.43 TO STA. 102+37.57	
DATE: 2/90	SCALE: M.T.S.
CIP: 55-90-03	SHEET 337 OF 364

DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
A.L.H.	A.L.H.	R.J.P.	J.F.P.	2-12-90

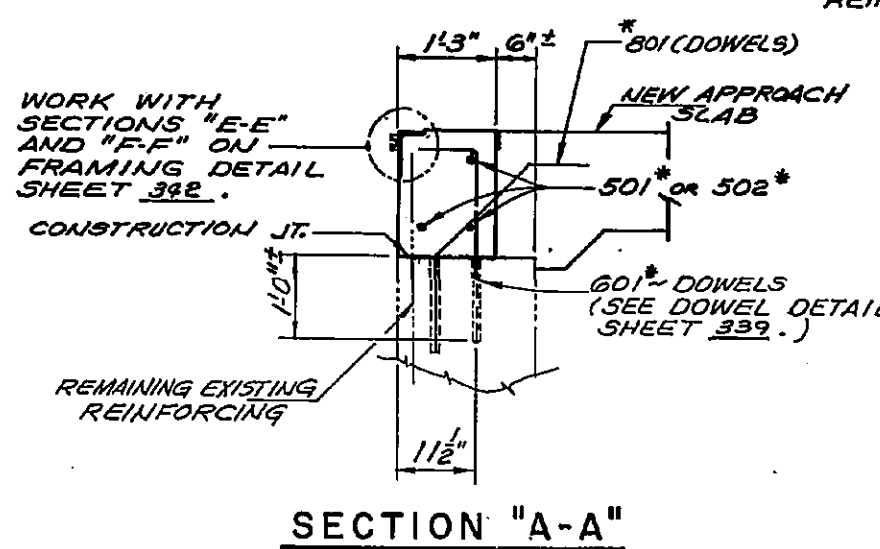




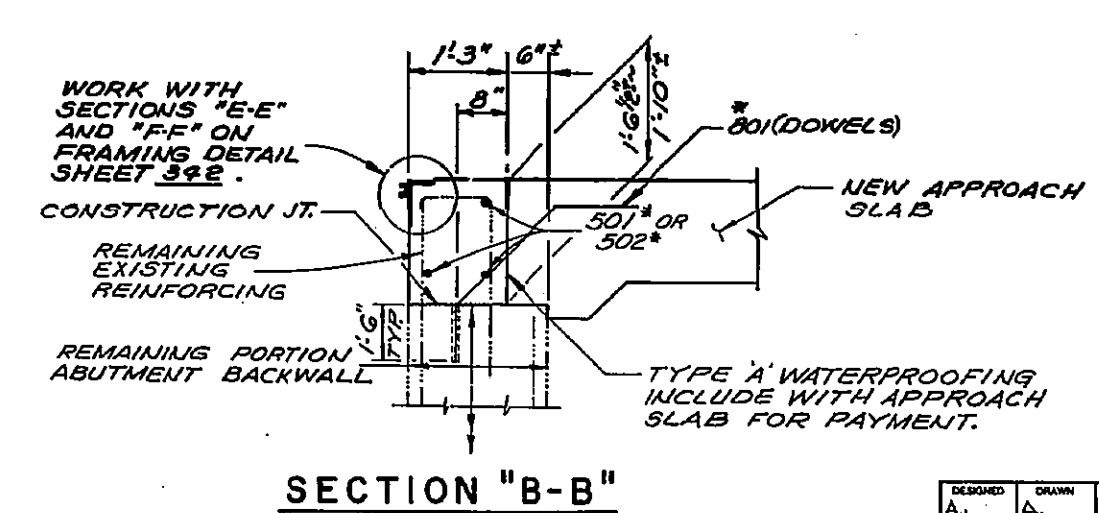
PLAN



ELEVATION



SECTION "A-A"

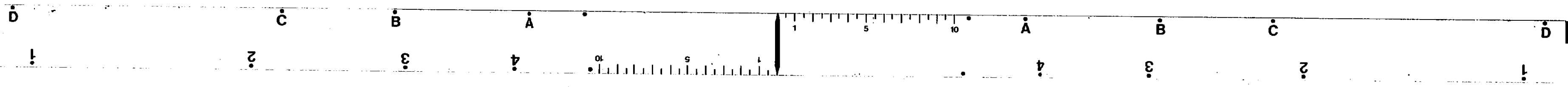


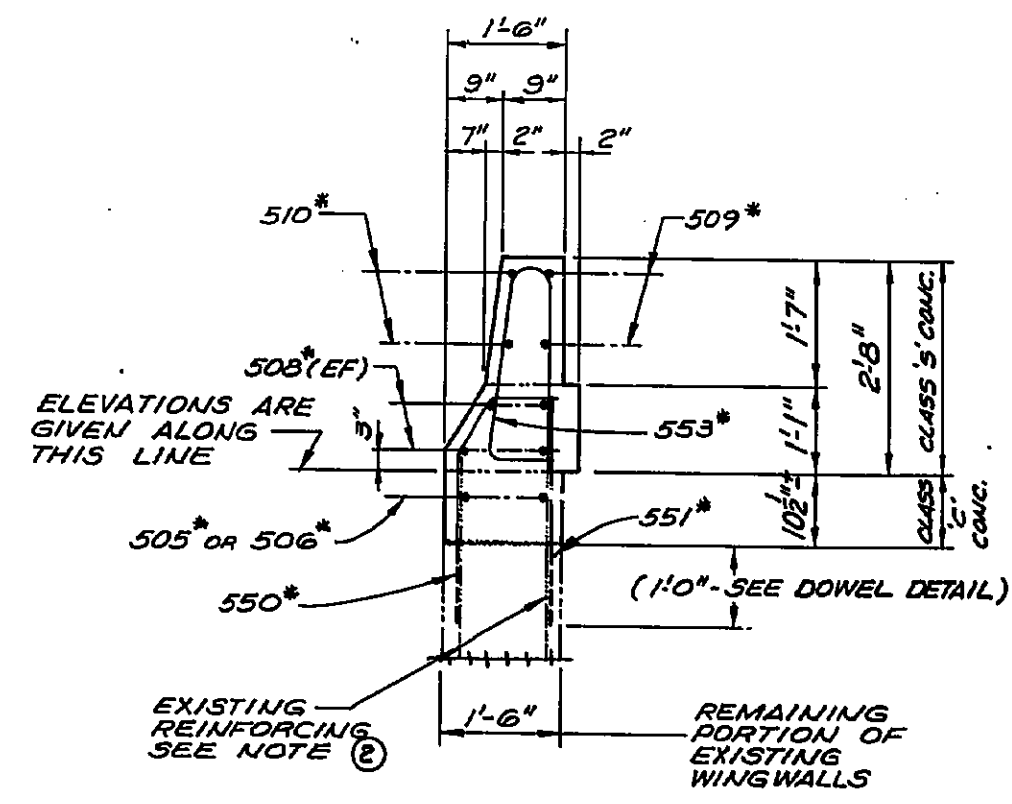
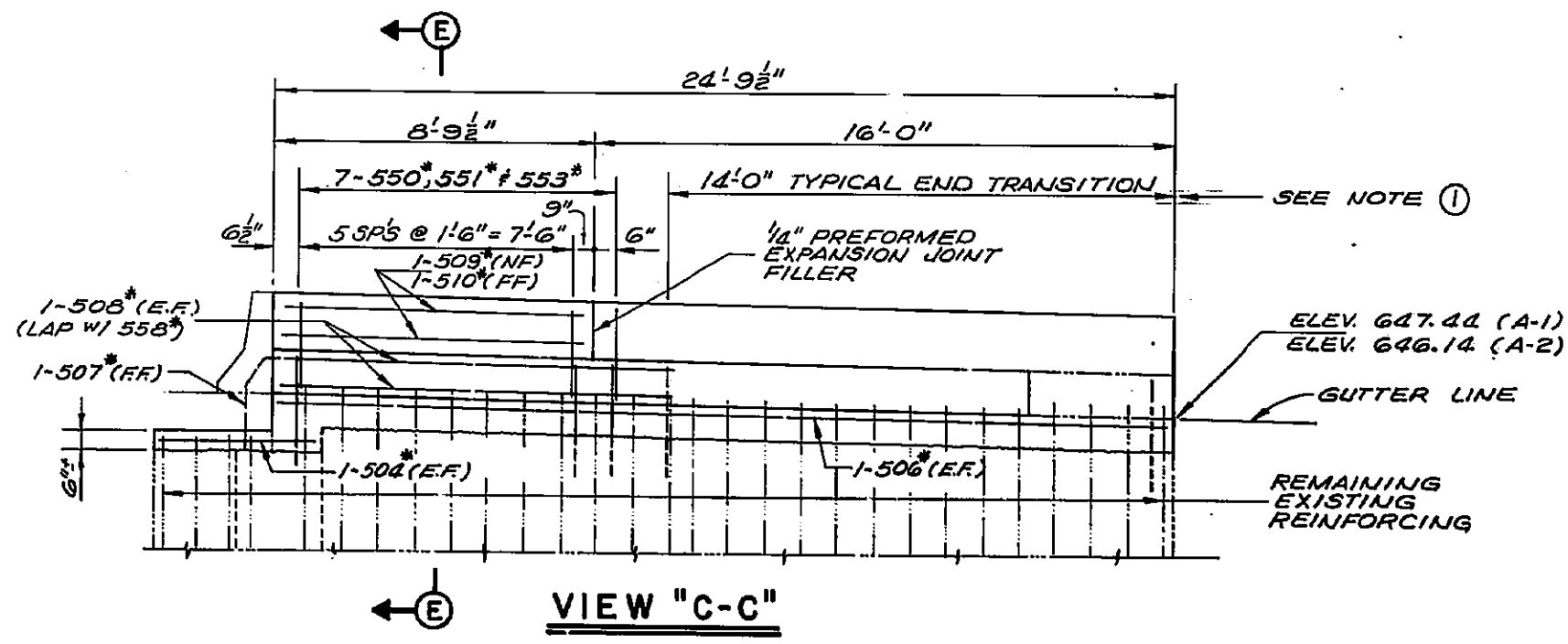
SECTION "B-B"

- NOTES**
- ① THE PREFIX "EA" SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN ABUTMENT
 - ② * INDICATES REINFORCING BARS TO BE EPOXY COATED. (PREFIX EA)
 - ③ ABBREVIATIONS USED ARE:
N.F. - NEAR
F.F. - FAR FACE
E.F. - EACH FACE
 - ④ THE ABUTMENT PARAPETS SHALL BE PAID FOR AS PER ITEM SP511A - CLASS 'S' CONCRETE, ABUTMENT BARRIERS USING SHRINKAGE COMPENSATING CEMENT. ALL OTHER CONCRETE IN THE ABUTMENT SHALL BE PAID FOR AS PER ITEM S11 - CLASS 'C' CONCRETE ABUTMENT.
 - ⑤ BACKWALL CONSTRUCTION PROCEDURE: IN ADDITION TO THE PROVISIONS OF 511.08, BACKWALL CONCRETE ABOVE THE CONSTRUCTION JOINT AT THE APPROACH SLAB SEAT SHALL NOT BE PLACED UNTIL AFTER THE DECK CONCRETE IN THE SPAN ADJACENT TO THE BACKWALL HAS BEEN PLACED.
 - ⑥ FOR LAMINATED ELASTOMERIC BEARING DETAILS SEE SHEET 334.
 - ⑦ FOR VIEWS C-C / D-D SEE SHEET 339.

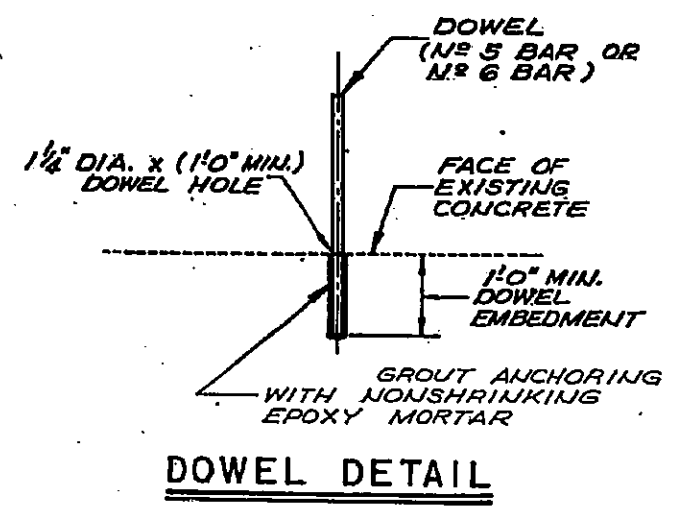
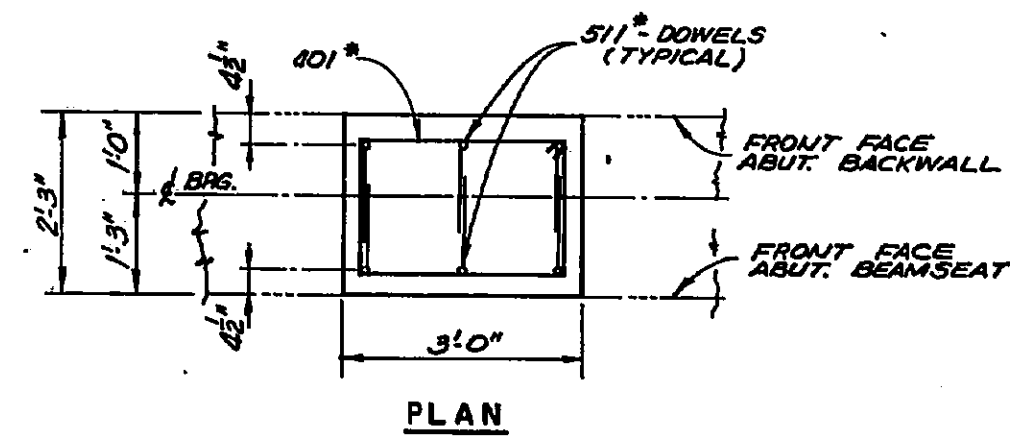
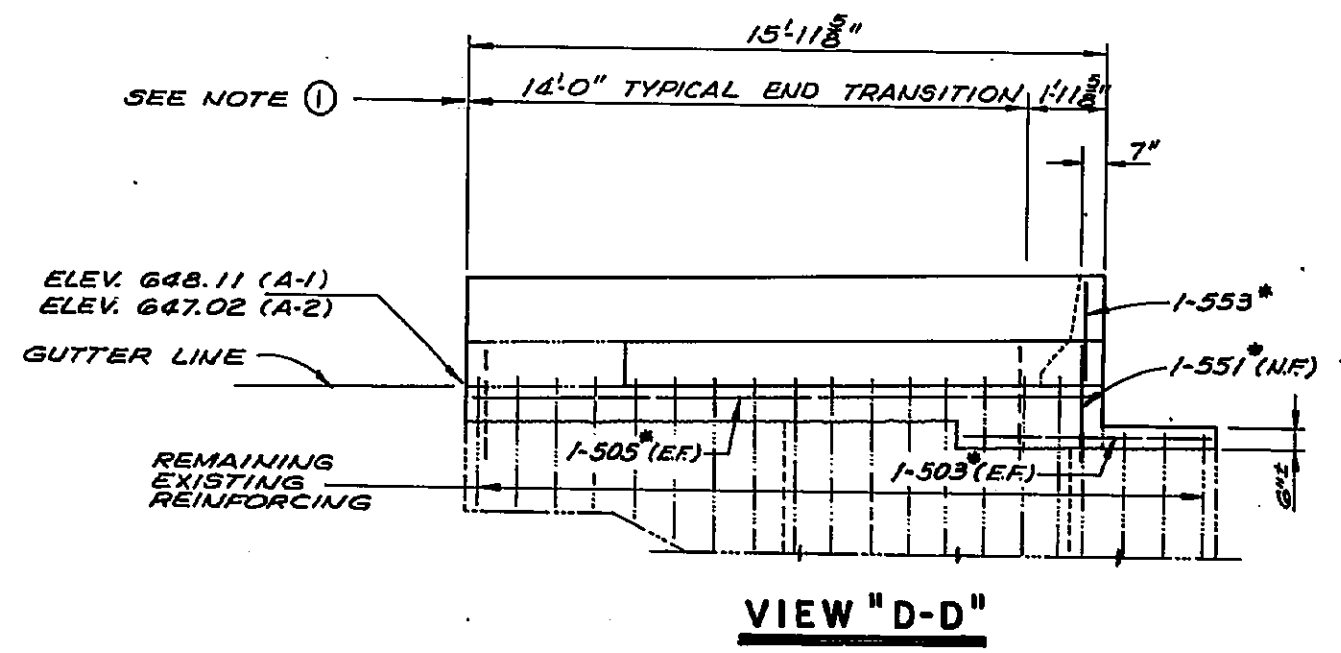
DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
A.L.H.	A.L.H.	R.J.P.	J.F.P.	2-11-90

URS	
OHIO TURNPIKE COMMISSION	
ABUTMENTS A-1 & A-2	
LIME CITY ROAD OVER I-75	
BR. NO. W00-75-2993	
WOOD COUNTY	
STA. 97+62.43 TO STA. 102+37.57	
DATE: 2/90	SCALE: N.T.S.
CIP: 55-90-03	SHEET 338 OF 367

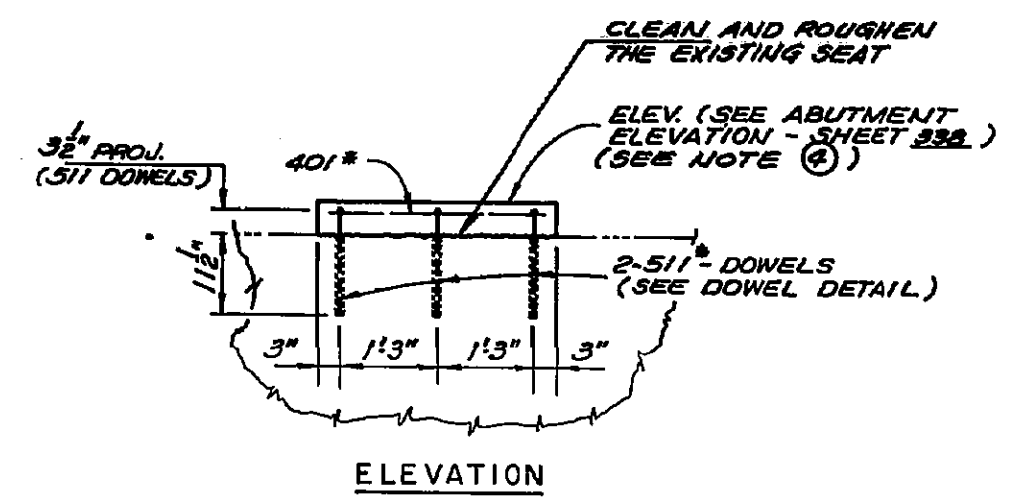




- NOTES**
- FOR ADDITIONAL DIMENSIONS AND REINFORCING STEEL FOR THE PARAPET AND REINFORCING STEEL TO BE PLACED IN THE WALL CONCRETE POUR, SEE WINGWALL PARAPET DETAILS ON COMMON DETAIL SHEET 327.
 - THE REMAINING EXISTING REINFORCING STEEL TO BE INCORPORATED INTO NEW WORK SHALL BE CLEANED, CLEANING SHALL BE INCLUDED IN ITEM 202, PORTIONS OF STRUCTURE REMOVED FOR PAYMENT. FIELD BENDING OR CUTTING OF REMAINING EXISTING REINFORCING WHICH MAY BE REQUIRED TO ASSURE PROPER CLEARANCES IN THE NEW WORK, SHALL BE INCLUDED IN ITEM 509, EPOXY COATED REINFORCING STEEL, GRADE 60 FOR PAYMENT.
 - FOR ADDITIONAL NOTES SEE SHEET 328.
 - BEARING SEATS: SPECIAL CARE SHALL BE TAKEN TO FINISH THE BEARING SEATS FLAT, SMOOTH AND LEVEL.



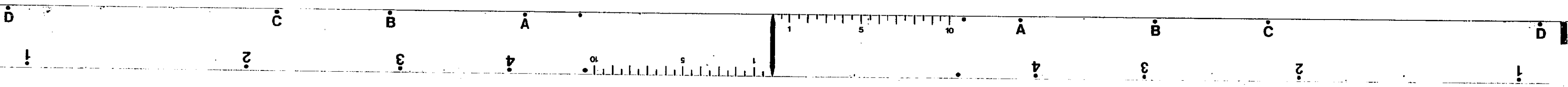
DOWEL BARS SHALL BE DRILLED AND GROUTED INTO THE EXISTING ABUTMENT AS SHOWN AND IN ACCORDANCE WITH ITEM 510, DOWEL HOLES.

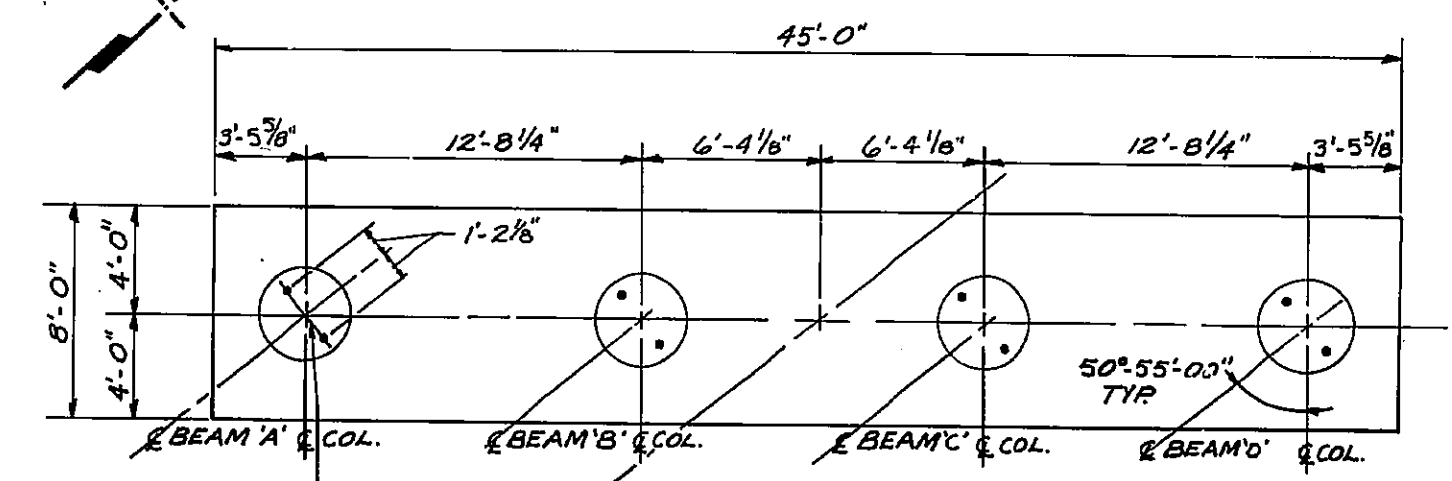


TYPICAL PEDESTAL DETAIL
(USE CLASS 'C' CONCRETE, ABUTMENTS)

URS	
OHIO TURNPIKE COMMISSION	
ABUTMENT DETAILS	
LIME CITY ROAD OVER I-75	
BR. NO. W00-75-2993	
WOOD COUNTY	
STA. 97+62.43 TO STA. 102+37.57	
DATE: 2/90	SCALE: N.T.S.
CIP: 55-90-03	SHEET 339 OF 364

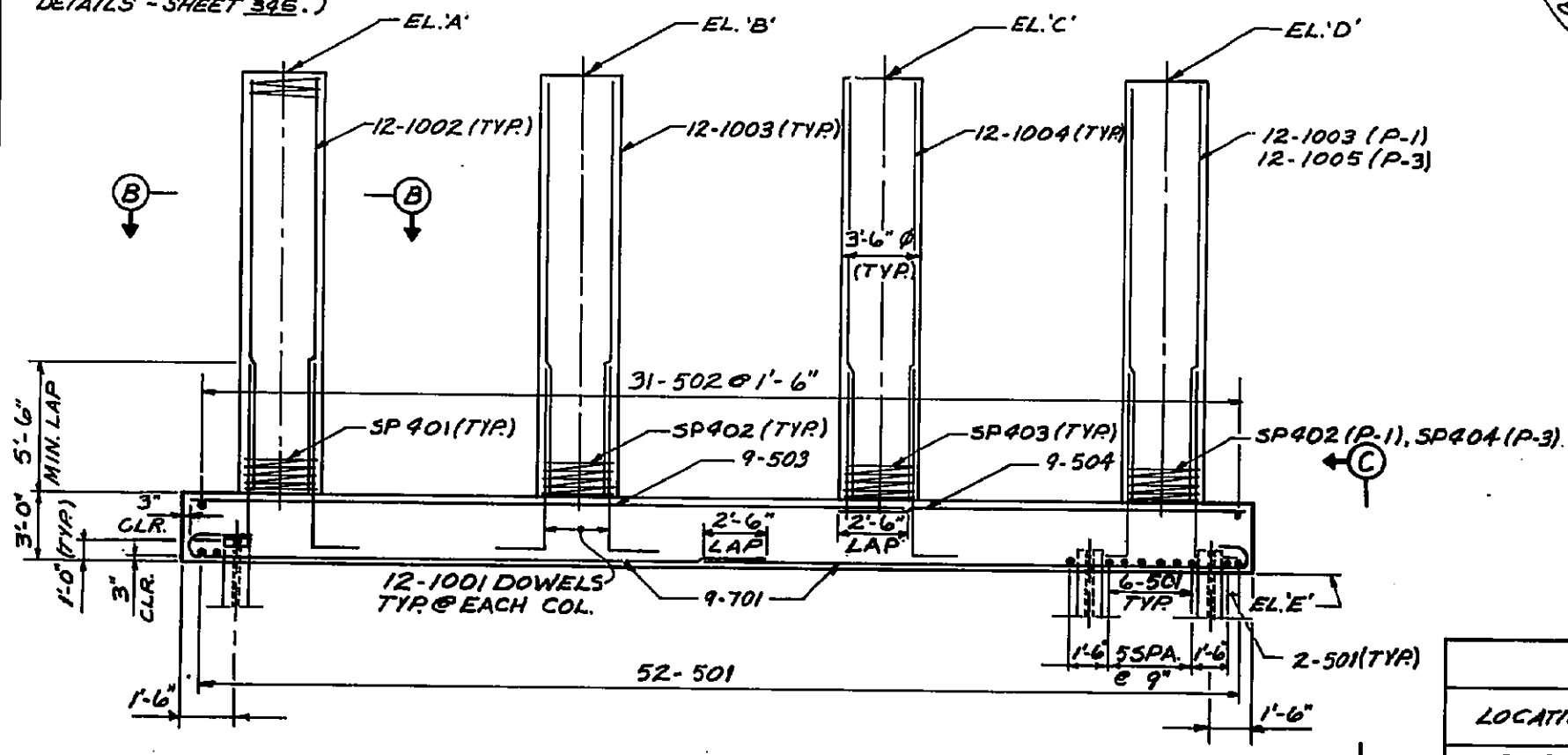
DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
ALH	ALH	R.J.P.	J.P.	2-12-90



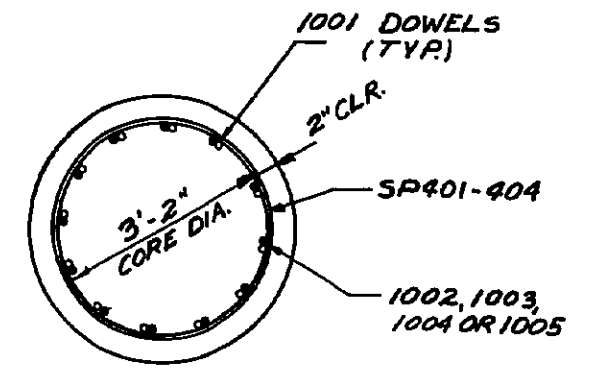


PLAN PIERS P-1 & P-3

TYPICAL RETAINER ANGLE ANCHOR BOLT LOCATION FOR BEAMS 'A' & 'D' AT PIERS P-1 & P-3. (FOR ADDITIONAL DETAIL SEE BEARING DETAILS - SHEET 346.)

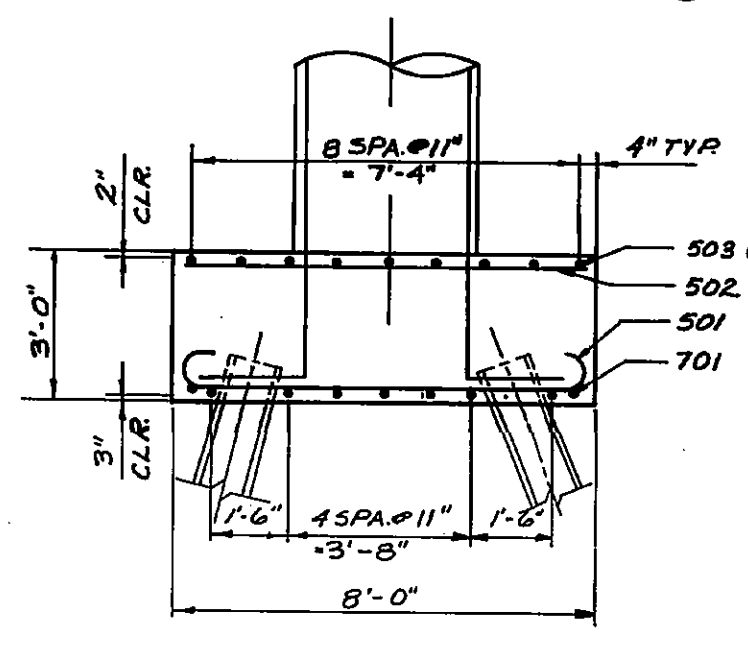


ELEVATION

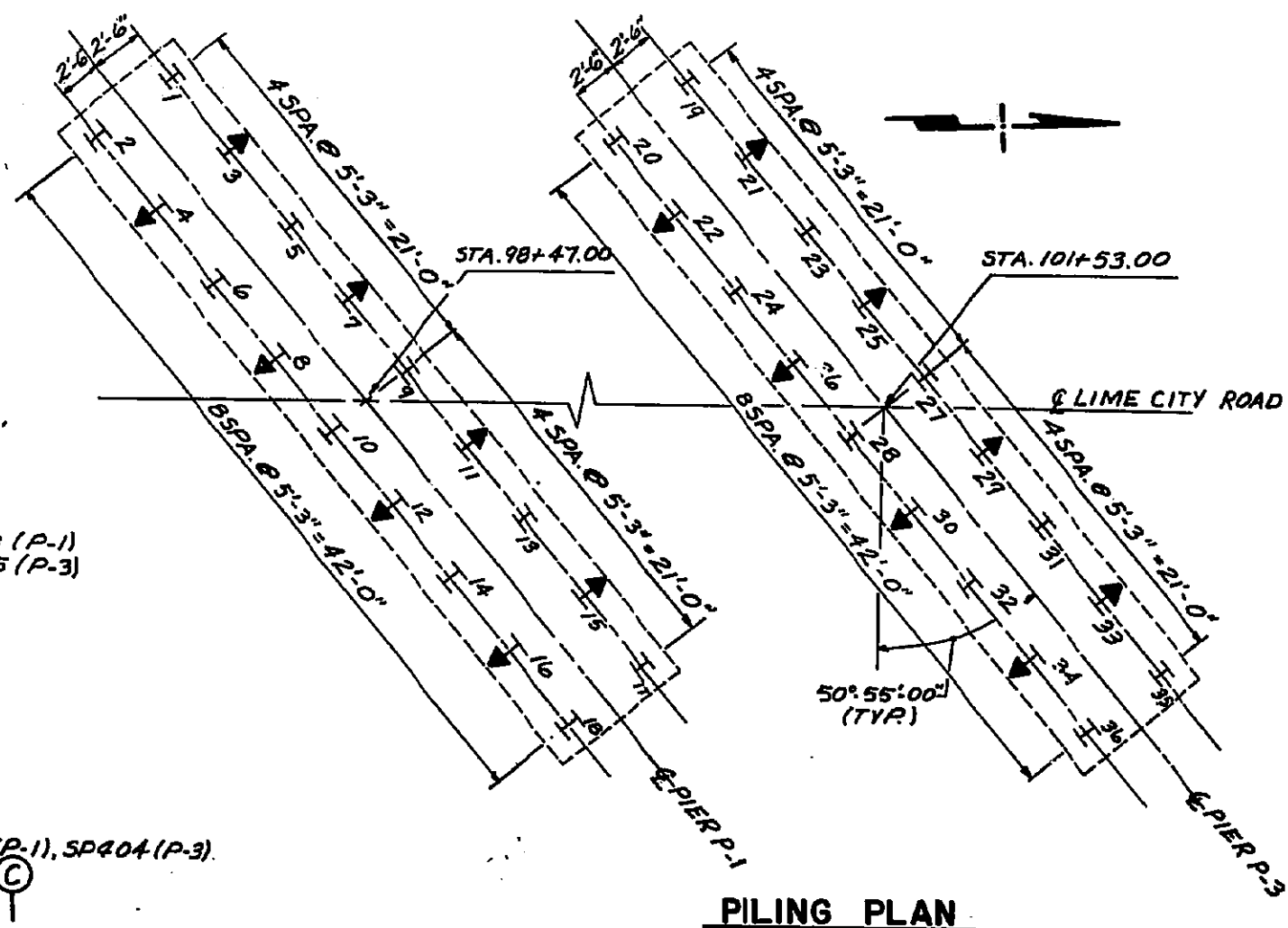


SECTION B-B

TABLE OF ELEVATIONS					
ELEVATION	'A'	'B'	'C'	'D'	'E'
PIER P-1	642.39	642.60	642.68	642.62	617.5
PIER P-3	641.98	641.99	641.86	641.61	618.5
PIER P-2	642.93	643.04	643.01	642.86	~

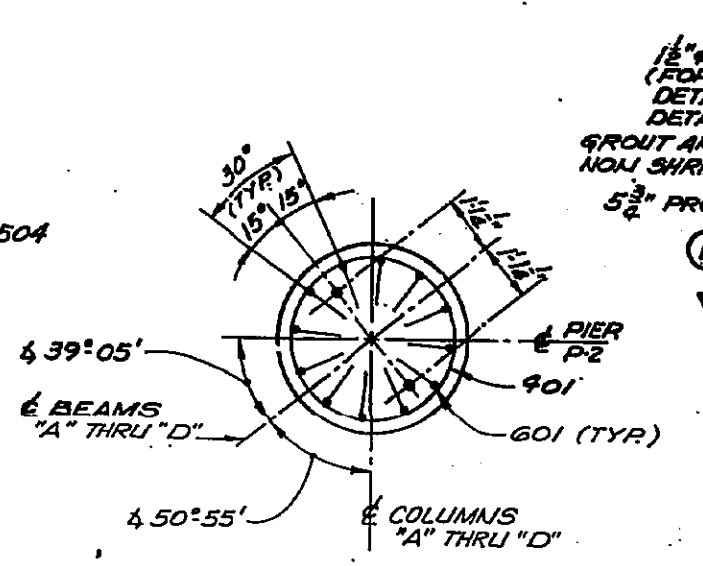


SECTION C-C

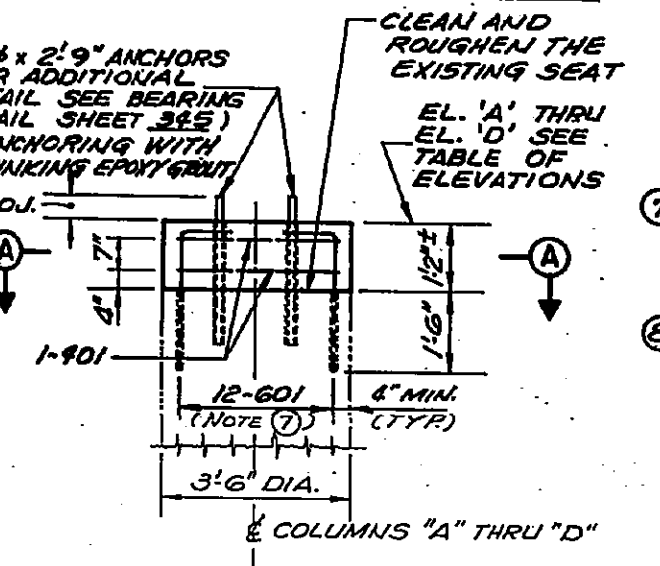


PILING PLAN

PILE TABLE					
LOCATION	PILE NO.	PILE TYPE	ESTIMATED TIP ELEVATION	CUT-OFF ELEVATION	ESTIMATED LENGTH
PIER P-1	1-18	HP12x53	558.5	618.5	60'
PIER P-3	19-36	HP12x53	559.5	619.5	60'



SECTION "A-A"



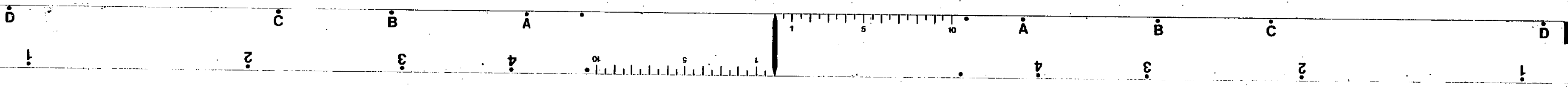
TYPICAL COLUMN ELEVATION

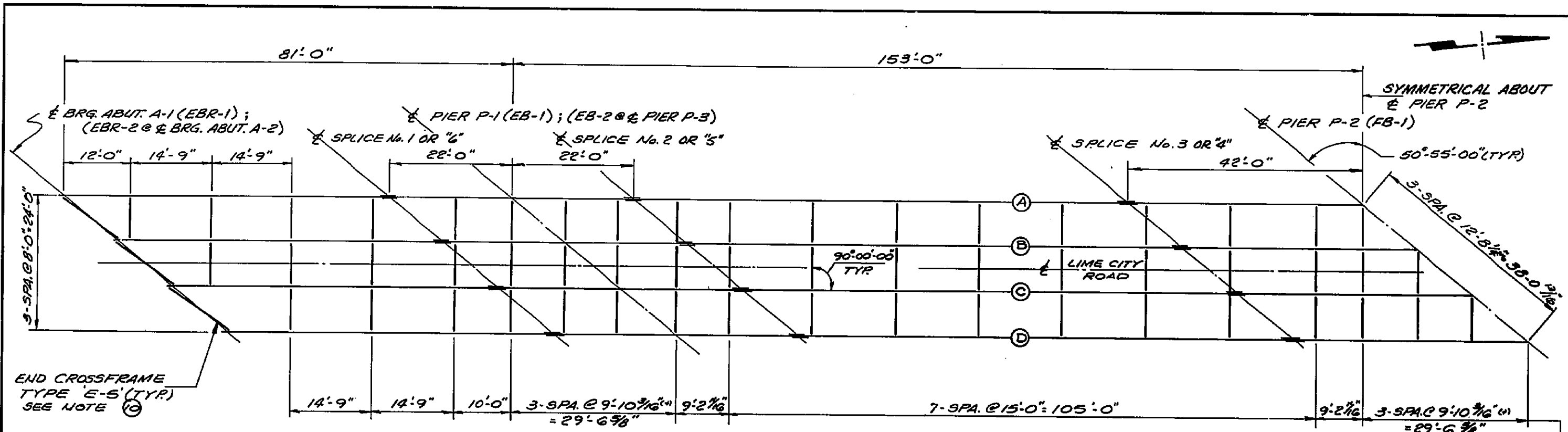
DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
			JFP	2-12-96

DETAIL PIER P-2 (SHOWING EXTENSION OF EXISTING COLUMNS)

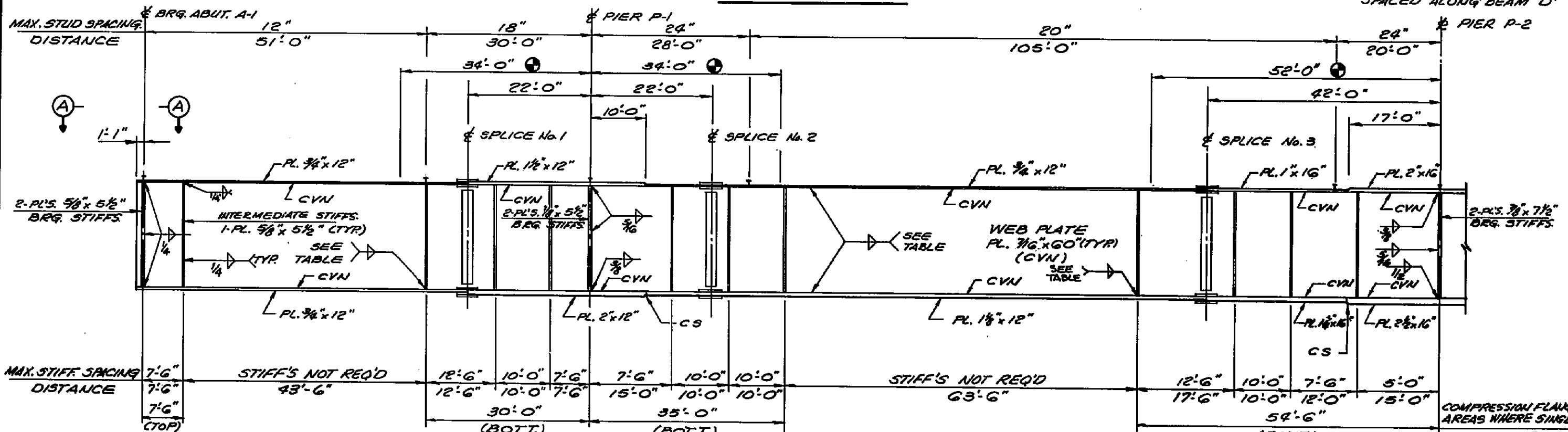
- NOTES**
- THE BAR PREFIX TO BE ADDED TO ALL REINFORCING BAR MARKS IN THE PIERS SHALL BE AS FOLLOWS:
PIER P-1 ~ 1P AND 1SP
PIER P-2 ~ 2P
PIER P-3 ~ 3P AND 3SP
 - PILES SHOWN THUS SHALL BE BATTERED 1:4 IN THE DIRECTION SHOWN.
 - THE HP 12x53 PILES HAVE A MAXIMUM DESIGN LOAD OF 43.2 TONS PER PILE FOR THE PIER PILES.
 - FOR PILE CUT-OFF ELEVATIONS AND ESTIMATED PILE LENGTHS SEE PILE TABLE.
 - PILES SHALL BE DRIVEN TO REFUSAL ON BEDROCK. REFUSAL SHALL BE CONSIDERED AS ATTAINED BY PENETRATING SOFT BEDROCK WITH A MINIMUM RESISTANCE OF 20 BLOWS PER INCH, OR REFUSAL SHALL BE CONSIDERED AS ATTAINED AFTER THE PILE HAS CONTACTED HARD BEDROCK AND THE PILE HAS THEN RECEIVED AT LEAST 20 BLOWS.
 - STEEL PILE POINTS SHALL BE USED TO PROTECT THE TIPS OF ALL THE PROPOSED STEEL "H" PILING. THE STEEL POINTS SHALL BE FURNISHED BY ASSOCIATED PILE AND FITTING CORPORATION, 262 RUTHERFORD BOULEVARD, CLIFTON, NEW JERSEY 07014; INTERNATIONAL CONSTRUCTION EQUIPMENT, INC., 301 WAREHOUSE DRIVE, MATTHEWS, NORTH CAROLINA 28015; DOUGHERTY FOUNDATION PRODUCTS, INC., P.O. BOX 688, FRANKLIN LAKES, NEW JERSEY 07417; VERSA STEEL INC., 3601 N.W. YEON AVENUE, P.O. BOX 10550, PORTLAND, OREGON 97210 OR BY A MANUFACTURER THAT CAN FURNISH A STEEL POINT THAT IS ACCEPTABLE TO THE ENGINEER. THE PILE POINTS SHALL SATISFY OR EXCEED THE REQUIREMENTS OF ASTM A27 (GRADE 65/35) OR ASTM A148 (GRADE 90/60).
 - 601 DOWELS SHALL BE DRILLED AND GROUTED INTO THE EXISTING PIER COLUMNS AS SHOWN, AND IN ACCORDANCE WITH ITEM 510 - DOWEL HOLES, USING NONSHRINKING GROUT. BEARING SEATS: SPECIAL CARE SHALL BE TAKEN TO FINISH THE BEARING SEATS FLAT, SMOOTH AND LEVEL.

URS
OHIO TURNPIKE COMMISSION
PIER DETAILS
& PILING PLAN
LIME CITY ROAD OVER I-75
BR. No. WOO-75-2993
WOOD COUNTY
STA. 97+62.43 TO STA. 102+37.57
DATE: 2/90 SCALE: N.T.S.
CIP: 55-90-03 SHEET 340 OF 365



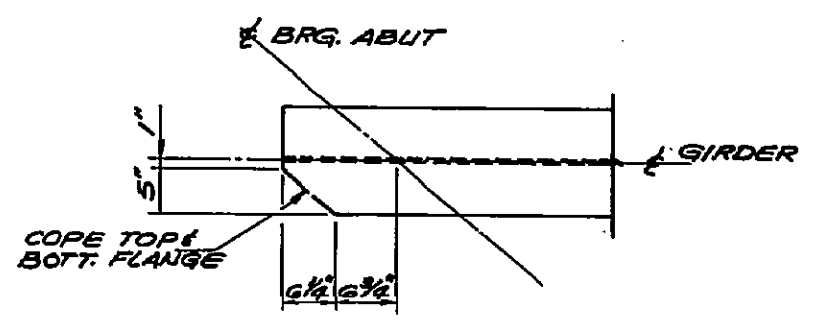


FRAMING PLAN



GIRDER ELEVATION

FLANGE THICKNESS	FLANGE TO WEB WELD	INTERMEDIATE STIFF TO FLANGE WELD
3/4"	1/4"	1/4"
1" TO 1 1/2"	5/16"	5/16"
2"	3/8"	3/8"
2 1/2"	7/16"	1/2"



VIEW A-A
TYR @ ENDS OF ALL GIRDERS

- NOTES**
- ALL STRUCTURAL STEEL SHALL BE ASTM A572 GRADE 50 UNLESS NOTED OTHERWISE.
 - HIGH STRENGTH BOLTS SHALL BE 1" DIAMETER CONFORMING TO ASTM A325 UNLESS OTHERWISE NOTED.
 - WHERE A SHAPE OR PLATE IS DESIGNATED (C.V.N.) THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01 OF THE SPECIFICATIONS. ALL FIELD SPAKE MATERIAL EXCEPT FILL PLATES SHALL BE (C.V.N.).
 - WELDED ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE MAY BE MADE ANY WHERE TO THE FASCIA STRINGER FLANGES EXCEPT IN AREA SHOWN THUS WHICH IS TENSION AREA FOR THE TOP FLANGE.
FILLET WELDS TO COMPRESSION FLANGES SHALL NOT BE CLOSER THAN 1" FROM EDGE OF FLANGE, BE NOT MORE THAN 2" LONG AND BE NOT SMALLER THAN THE MINIMUM SIZE REQUIRED BY SECTION 2.7 OF THE AASHTO JAWS BRIDGE WELDING CODE, 1988.
 - WELDED STUD SHEAR CONNECTORS SHALL CONFORM TO CMS 513 & AASHTO M-169.
 - FOR FIELD SPLICE DETAILS SEE SHEET 382.
 - FOR EXPANSION JOINT DETAILS SEE STANDARD DRAWING ENJ-4-87 SHEETS 1 THRU 5.
 - FOR INTERMEDIATE CROSSFRAMES AND STUD DETAILS SEE SHEET 228.
 - FOR BEARING DETAILS SEE SHEETS 382 & 385.
 - FOR END CROSSFRAME & PLAN OF EXPANSION JOINT SUPPORTS SEE SHEET 382.
 - C.S. INDICATES BUTT WELDS SUBJECT TO COMPRESSIVE STRESSES ONLY.
 - ALL FLANGE AND BUTT WELDS SHALL BE COMPLETE PENETRATION BUTT WELDS, THE WELD REINFORCEMENTS NEED NOT BE GROUND FLUSH.
 - FOR ADDITIONAL NOTES SEE SHEET 382.

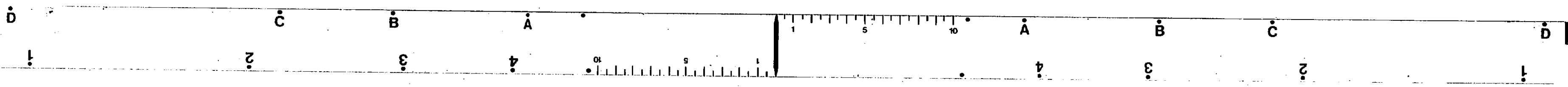
FOR THE WELDING OF THE INTERMEDIATE STIFFENERS TO THE COMPRESSION FLANGE, SEE THE TYPICAL WELD DETAIL ON SHEET 228.

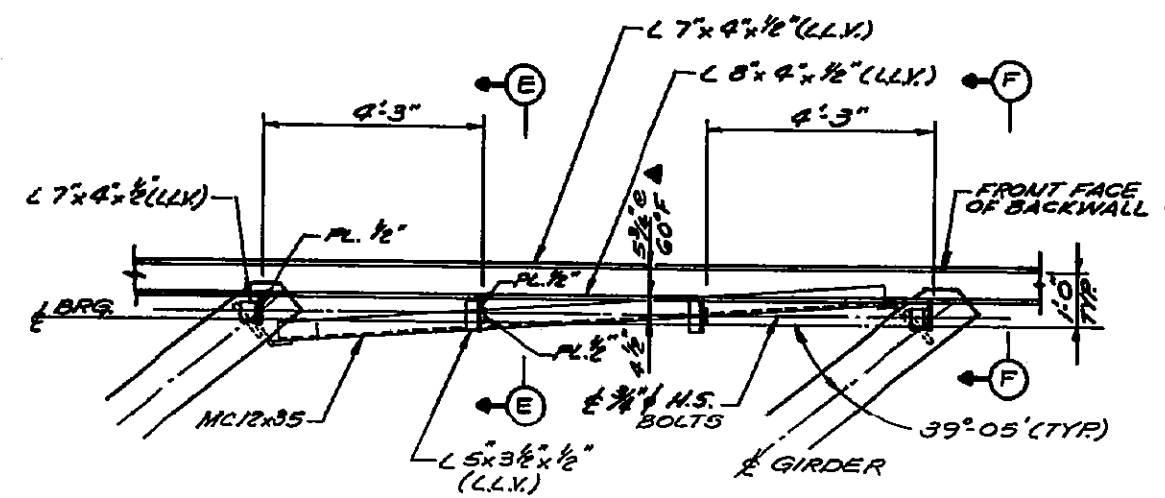
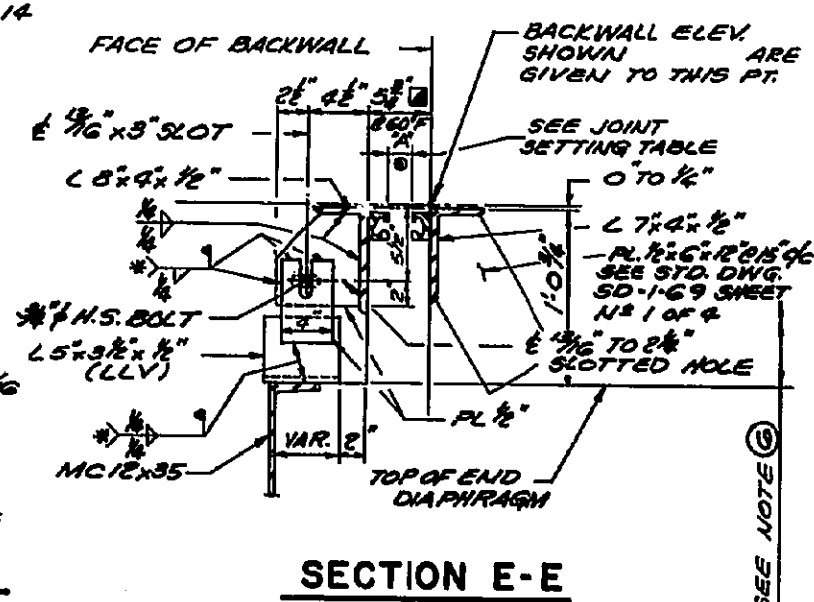
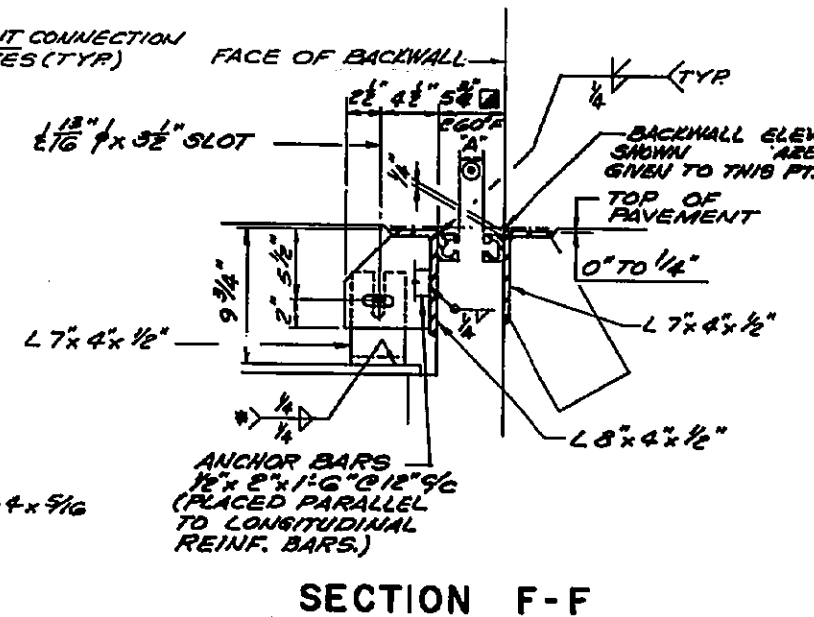
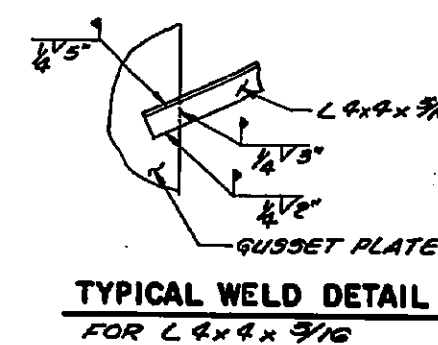
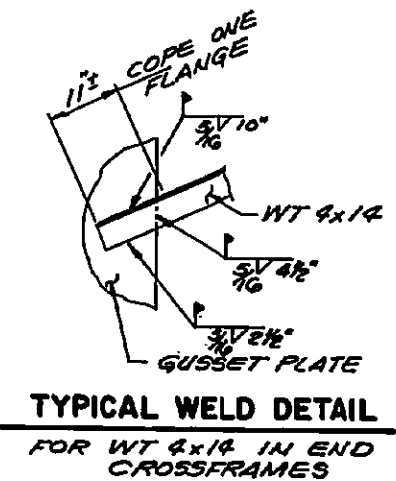
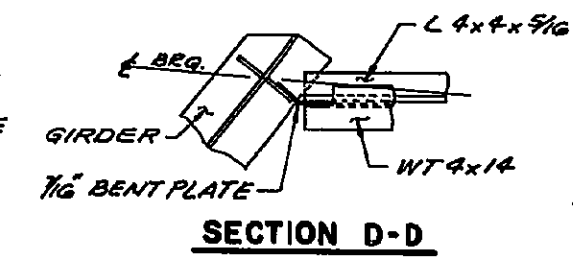
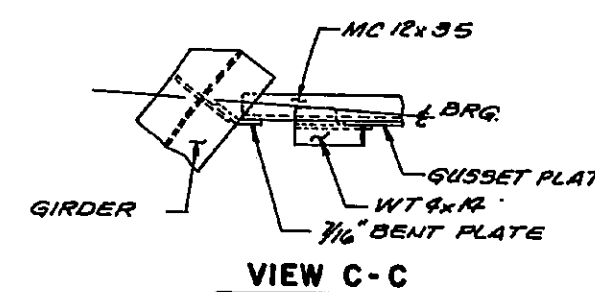
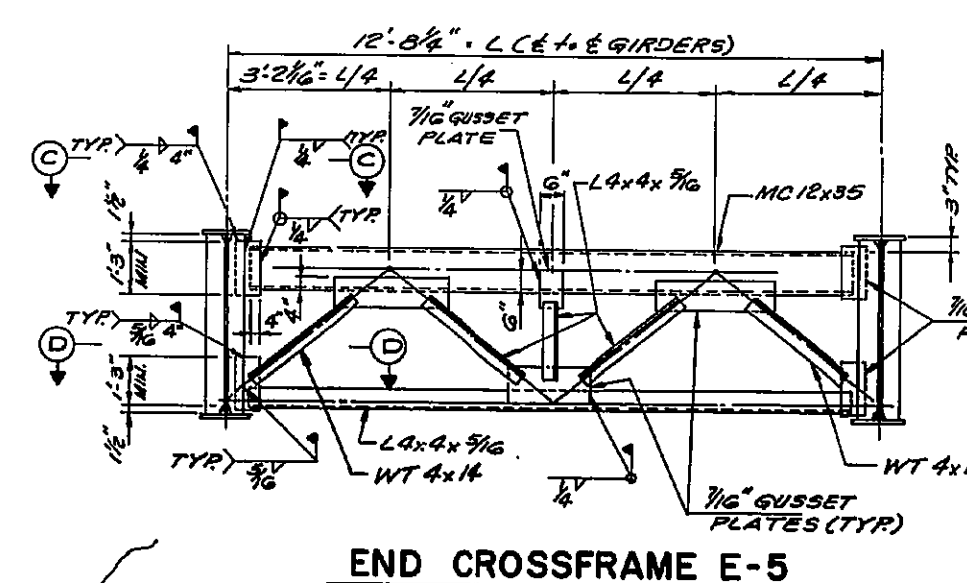
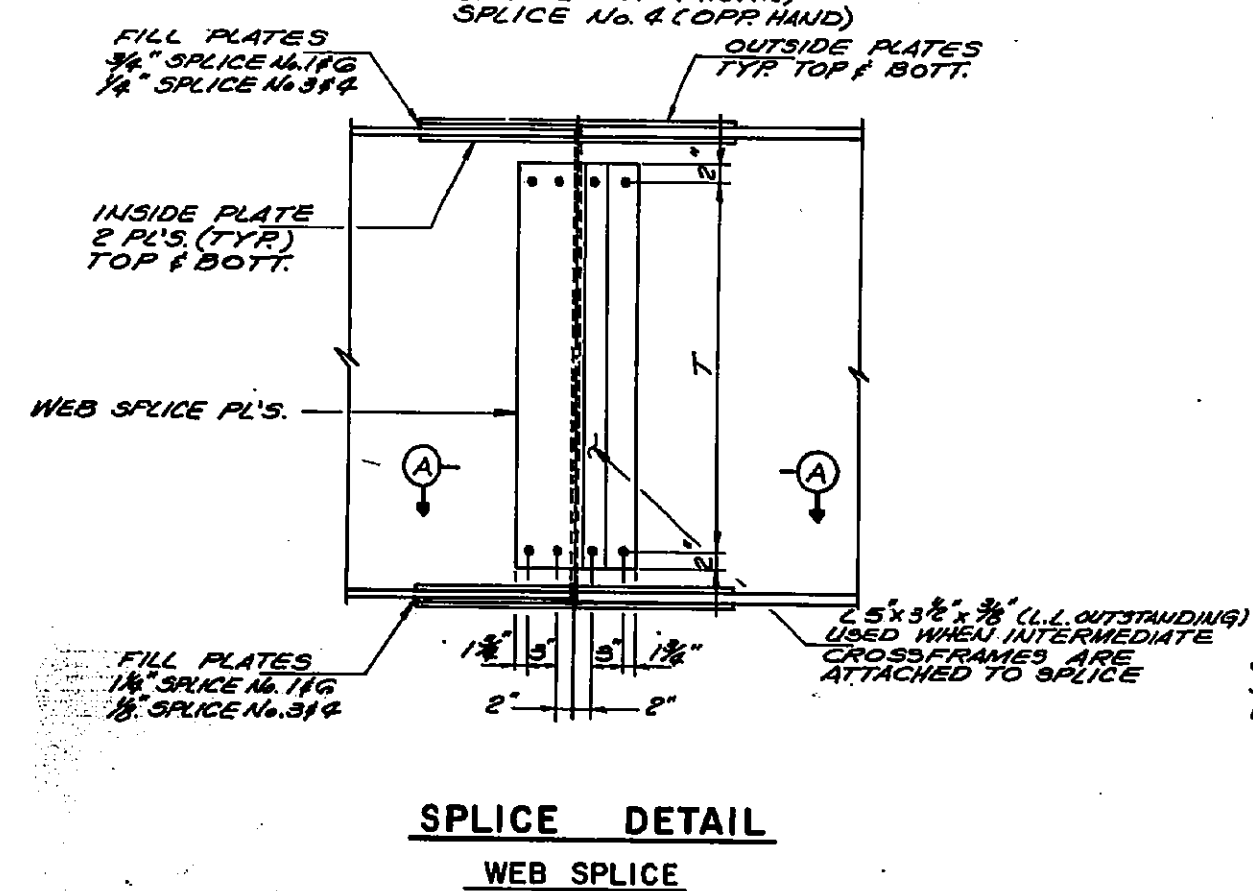
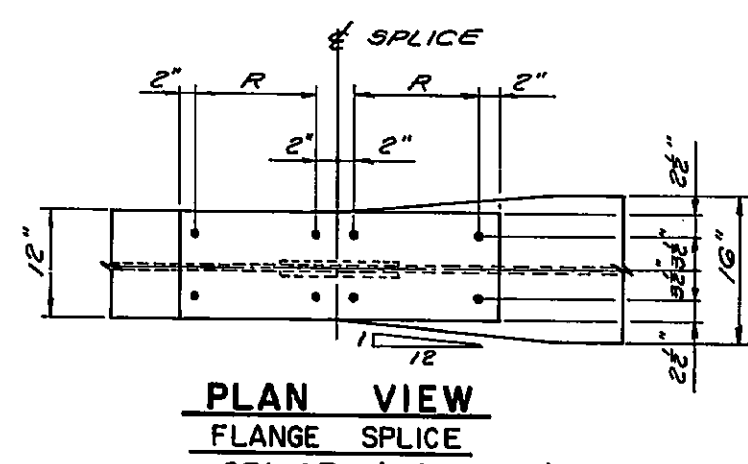
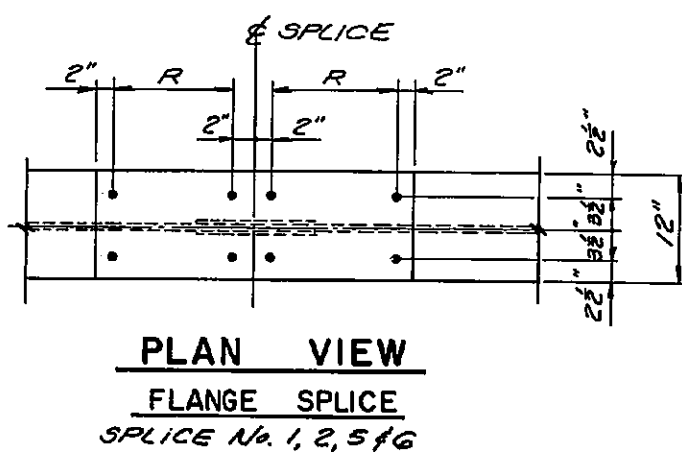
URS
OHIO TURNPIKE COMMISSION

FRAMING PLAN
LIME CITY ROAD OVER I-75
BR. NO. W00-75 - 2993
WOOD COUNTY
STA. 97+62.43 TO STA. 102+37.57

DESIGNED: GTC
DRAWN: F.F.
CHECKED: R.J.P.
REVIEWED: JFP
DATE: 2-12-90

DATE: 2/90
SCALE: N.T.S.
CIP: 55-90-03
SHEET 391 OF 364





SPLICE NO	GIRDER SPLICE DATA					
	FLANGE SPLICE		WEB PLATES			
	FLANGE PLATES	FLANGE BOLTS	WEB PLATES	WEB BOLTS	T	
1-6	3/8" x 12" x 3'-0"	40 4-SPA @ 3 1/2"	3/8" x 13 1/2" x 4'-9"	52 12EQ.SPA. @ 4'-5"		
2-5	3/8" x 12" x 2'-5"	32 3-SPA @ 3 1/2"	3/8" x 13 1/2" x 4'-9"	44 10EQ.SPA. @ 4'-5"		
3-4	3/8" x 12" x 3'-0"	40 4-SPA @ 3 1/2"	3/8" x 13 1/2" x 4'-9"	44 10EQ.SPA. @ 4'-5"		

DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
GTC	F.F.	R.J.P.	J.F.P.	2-12-90

① JOINT SETTING DIMENSION "A" (NOTE ③)	② ALL FIELD SPLICE MATERIAL EXCEPT FILL PLATES SHALL BE (C.V.N).
TEMPERATURE (°F)	40° 50° 60° 70°
BOTH ABUT'S	3" 2 1/2" 2 1/2" 2 1/2"

③ FOR LAYOUT DIAGRAM AND TABLE OF DEFLECTIONS AND CAMBERS, SEE SHEET 343.

NOTES

- INTERMEDIATE STIFFENERS AT LOCATIONS OTHER THAN CROSSFRAMES SHALL BE PLACED ON ONE SIDE OF THE GIRDER WEB IN ACCORDANCE WITH MAXIMUM STIFFENER SPACING SHOWN ON THE GIRDER ELEVATION. THESE STIFFENERS SHALL ALTERNATE ON EACH SIDE OF INTERIOR GIRDER WEB. FOR EXTERIOR GIRDERS, ALL STIFFENERS SHALL BE PROVIDED ON THE INSIDE.
- INTERMEDIATE STIFFENERS AT CROSSFRAME LOCATIONS SHALL BE PLACED IN PAIRS, EXCEPT FOR EXTERIOR GIRDERS.
- THE JOINT SETTING DIMENSION "A" IS PERPENDICULAR TO THE BACKWALL FACE AT ABUTMENTS
- "A" DENOTES THIS DIMENSION WAS DETERMINED USING 1/2" WIDE RETAINER EXTRUSIONS.
- * DENOTES WELD NOT TO BE MADE UNTIL REQUIRED ADJUSTMENTS AND ALIGNMENTS HAVE BEEN MADE TO THE EXPANSION JOINT ARMOR, TO ASSURE PROPER INSTALLATION OF THE ELASTOMER EXPANSION JOINT.
- ALL STRUCTURAL STEEL ASSOCIATED WITH THE EXPANSION JOINTS, SUCH AS ANCHOR ASSEMBLIES, SUPPORT PLATE ASSEMBLIES, ERECTION BOLTS FIELD WELDING AND ALL INCIDENTALS SHALL BE INCLUDED WITH ITEM 510, STRUCTURAL EXPANSION JOINTS INCLUDING ELASTOMERIC STRIP SEALS.
- THE EXPANSION JOINTS AT THE ABUTMENTS SHALL HAVE A MOVEMENT RATING OF 5"
- SEE STATE OF OHIO STANDARD DRAWINGS EX-1-4-87 ON SHEETS 1 THRU 5 FOR DETAILS, MATERIALS, INSTALLATION, MEASUREMENT AND CONSTRUCTION PROCEDURES NOT SHOWN HERE.
- THE HIGH STRENGTH BOLTS FOR ALL FIELD SPLICES FOR NEW BEAMS SHALL BE PLACED WITH THEIR HEADS ON THE OUTSIDE FACE OF EXTERIOR BEAM ON THE BOTTOM OF THE BOTTOM FLANGE PLATES, AND TOP OF THE TOP FLANGE PLATES.

URS
OHIO TURNPIKE COMMISSION

FRAMING DETAILS
LIME CITY ROAD OVER I-75
BR. NO. W00-75-2993
WOOD COUNTY
STA. 97+62.43 TO STA. 102+37.57
DATE: 2/90 SCALE: N.T.S.
CIP: 55-90-03 SHEET 342 OF 364

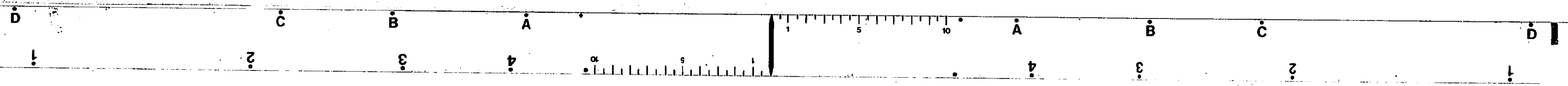


TABLE OF PAVEMENT ELEVATIONS					
LOCATION	A	B	BRG.	C	D
CENTERLINE BRIDGE ABUTMENT A-1	647.92	648.18	648.31	648.31	648.31
1/4 PT.	648.19	648.44	648.56	648.56	648.55
1/2 PT.	648.44	648.68	648.79	648.78	648.75
3/4 PT.	648.66	648.88	648.99	648.98	648.93
CENTERLINE BRIDGE PIER P-1	648.86	649.06	649.17	649.14	649.09
1/8 PT.	649.01	649.21	649.30	649.27	649.21
1/4 PT.	649.14	649.33	649.42	649.38	649.30
3/8 PT.	649.25	649.42	649.51	649.46	649.37
1/2 PT.	649.34	649.50	649.57	649.52	649.42
5/8 PT.	649.40	649.54	649.61	649.56	649.44
3/4 PT.	649.43	649.56	649.63	649.57	649.44
7/8 PT.	649.44	649.56	649.62	649.55	649.41
CENTERLINE BRIDGE PIER P-2	649.43	649.54	649.59	649.51	649.36
1/8 PT.	649.39	649.49	649.53	649.45	649.28
1/4 PT.	649.33	649.41	649.45	649.36	649.18
3/8 PT.	649.24	649.31	649.34	649.25	649.06
1/2 PT.	649.13	649.19	649.21	649.12	648.91
5/8 PT.	649.00	649.04	649.06	648.96	648.74
3/4 PT.	648.84	648.87	648.88	648.77	648.54
7/8 PT.	648.65	648.67	648.68	648.56	648.32
CENTERLINE BRIDGE PIER P-3	648.44	648.45	648.45	648.33	648.07
1/4 PT.	648.19	648.19	648.18	648.05	647.78
1/2 PT.	647.92	647.90	647.89	647.75	647.47
3/4 PT.	647.62	647.58	647.57	647.42	647.13
CENTERLINE BRIDGE ABUTMENT A-2	647.29	647.24	647.22	647.07	646.76

SEE NOTE ①

DEFLECTION AND CAMBER TABLE							
LOCATION	ALL BEAMS			BEAMS A AND D		BEAMS B AND C	
	a	c	b	d	b	d	
CENTERLINE BRIDGE ABUTMENT A-1							
1/4 PT.	0.01	0.49	0.06	0.56	0.08	0.58	
1/2 PT.	-0.01	0.66	-0.03	0.62	-0.04	0.61	
CENTERLINE SPLICE NO. 1	-0.04	0.52	-0.14	0.34	-0.16	0.32	
3/4 PT.	-0.04	0.49	-0.14	0.31	-0.16	0.29	
CENTERLINE PIER P-1							
1/8 PT.	0.18	1.02	0.77	1.97	0.85	2.05	
CENTERLINE SPLICE NO. 2	0.24	1.15	1.01	2.40	1.12	2.51	
1/4 PT.	0.41	1.76	1.74	3.91	1.96	4.13	
3/8 PT.	0.49	2.19	2.07	4.75	2.33	5.01	
1/2 PT.	0.48	2.34	2.04	4.86	2.29	5.11	
5/8 PT.	0.38	2.19	1.60	4.17	1.80	4.37	
CENTERLINE SPLICE NO. 3	0.26	1.86	1.08	3.20	1.21	3.33	
3/4 PT.	0.22	1.76	0.93	2.91	1.05	3.03	
7/8 PT.	0.07	1.02	0.28	1.37	0.31	1.40	
CENTERLINE PIER P-2							
1/8 PT.	0.07	1.02	0.28	1.37	0.31	1.40	
1/4 PT.	0.22	1.76	0.93	2.91	1.05	3.03	
CENTERLINE SPLICE NO. 4	0.26	1.86	1.08	3.20	1.21	3.33	
3/8 PT.	0.38	2.19	1.60	4.17	1.80	4.37	
1/2 PT.	0.48	2.34	2.04	4.86	2.29	5.11	
5/8 PT.	0.49	2.19	2.07	4.75	2.33	5.01	
3/4 PT.	0.41	1.76	1.74	3.91	1.96	4.13	
CENTERLINE SPLICE NO. 5	0.24	1.15	1.01	2.40	1.12	2.51	
7/8 PT.	0.18	1.02	0.77	1.97	0.85	2.05	
CENTERLINE PIER P-3							
1/4 PT.	-0.04	0.49	-0.14	0.31	-0.16	0.29	
CENTERLINE SPLICE NO. 6	-0.04	0.52	-0.14	0.34	-0.16	0.32	
1/2 PT.	-0.01	0.66	-0.03	0.62	-0.04	0.61	
3/4 PT.	0.01	0.49	0.06	0.56	0.08	0.58	
CENTERLINE BRIDGE ABUTMENT A-2							

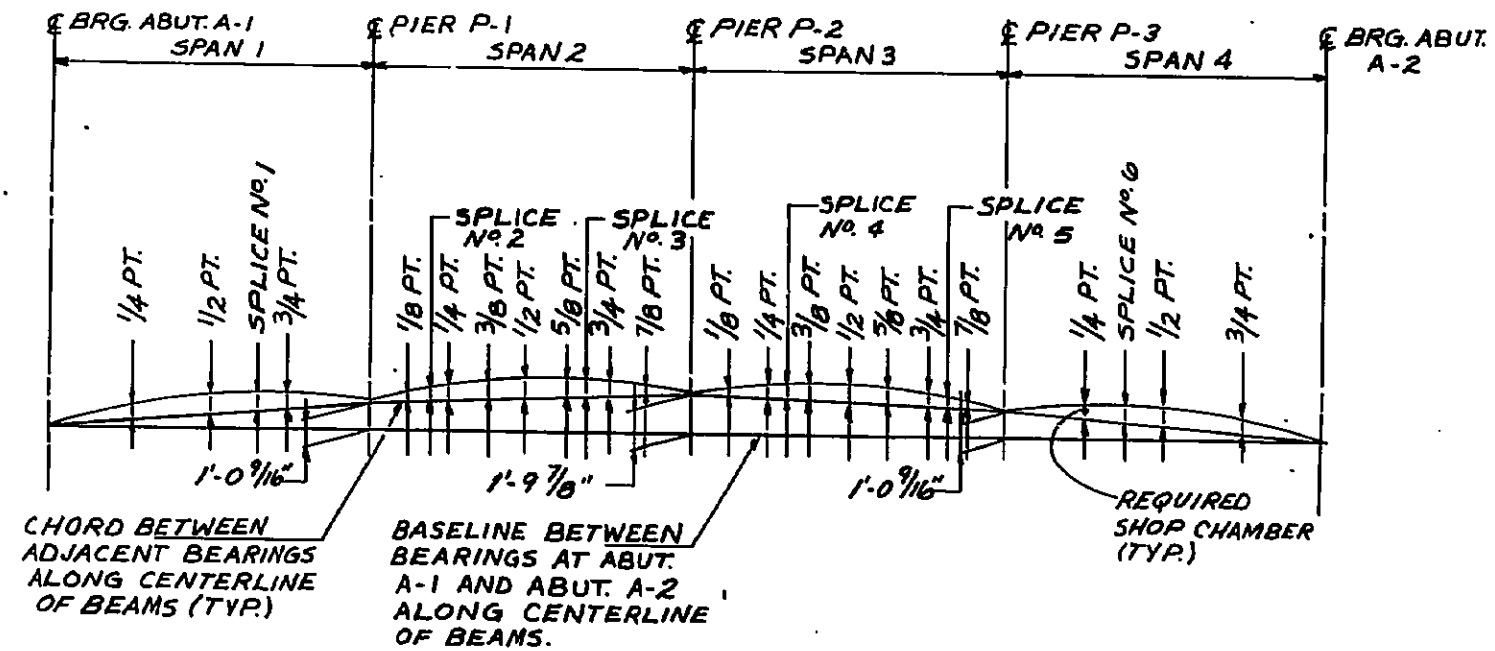
NOTES

① THE ELEVATIONS SHOWN ARE FINISHED PAVEMENT ELEVATIONS. PRIOR TO THE POURING OF THE DECK CONCRETE, PROPER ALLOWANCE SHALL BE MADE FOR THE DEAD LOAD DEFLECTION CAUSED BY THE WEIGHT OF THE CONCRETE.

LEGEND

- a DEFLECTION DUE TO WEIGHT OF STEEL
- b DEFLECTION DUE TO REMAINING DEAD LOAD
- c ADJUSTMENT REQUIRED FOR VERTICAL CURVE
- d REQUIRED SHOP CAMBER

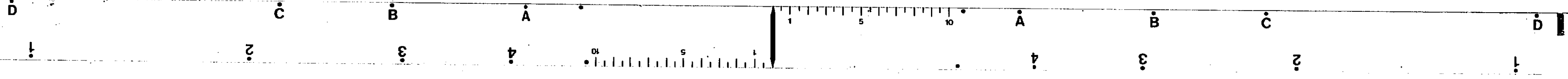
NOTE: ALL DIMENSIONS SHOWN IN THE DEFLECTION AND CAMBER TABLE ARE DECIMALS OF AN INCH.

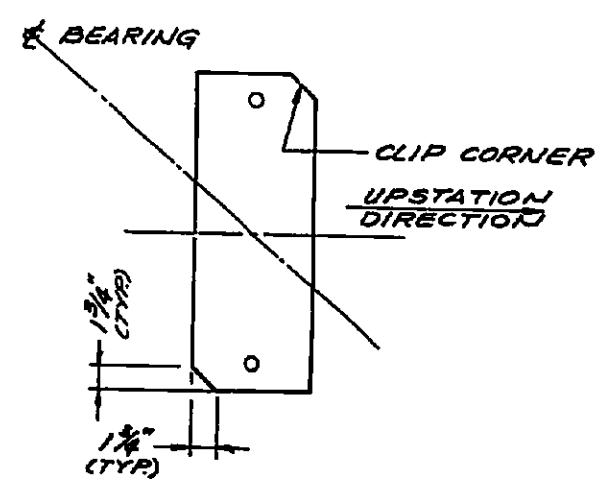
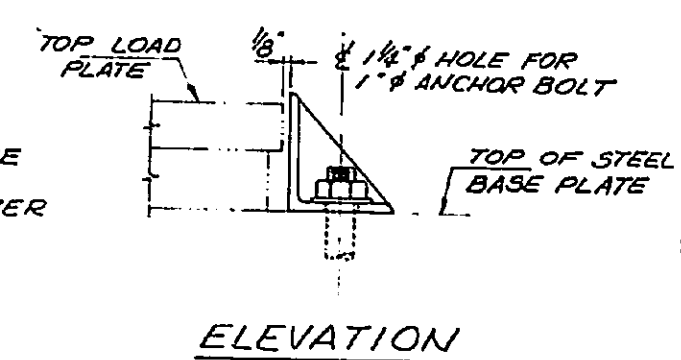
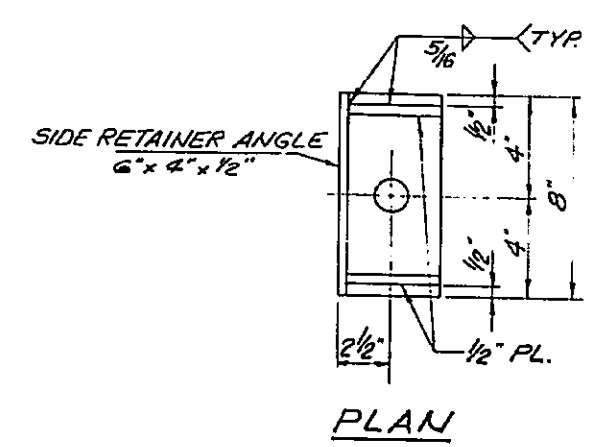
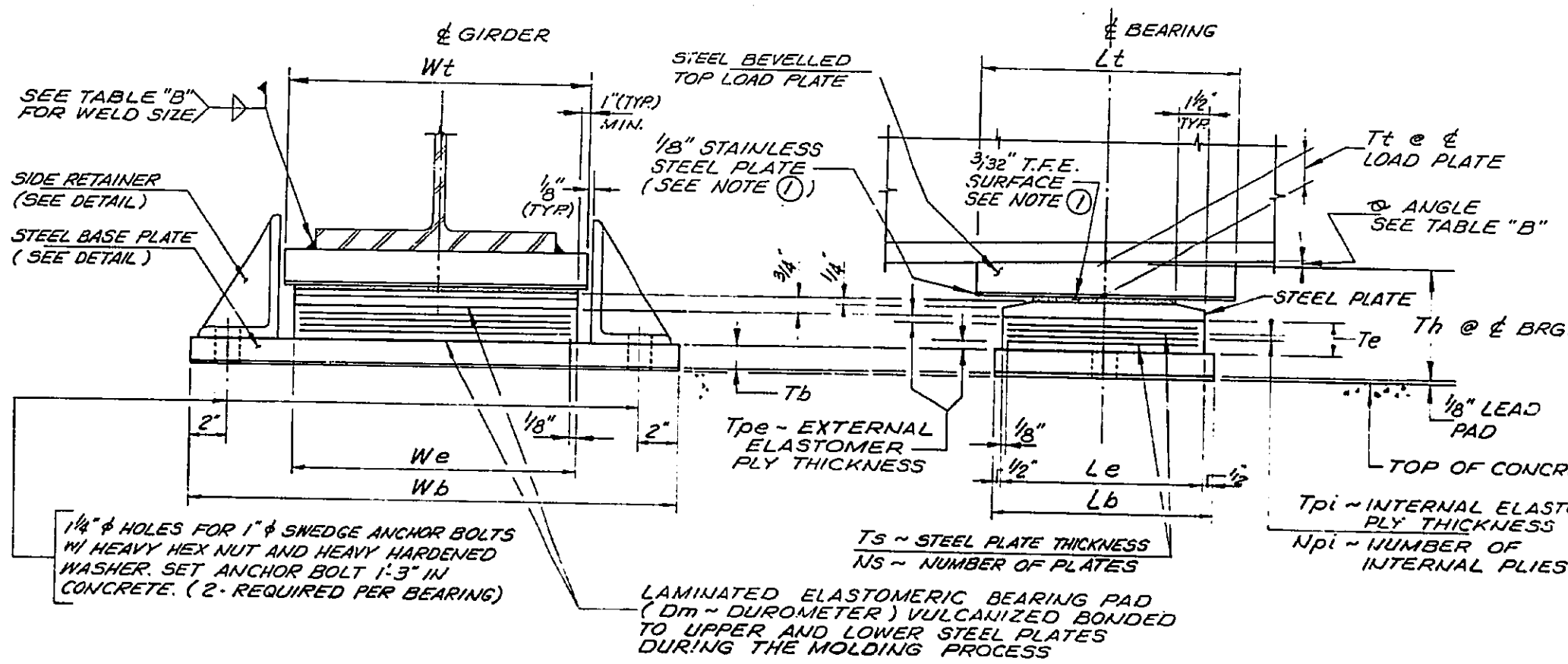


LAYOUT DIAGRAM

URS
OHIO TURNPIKE COMMISSION
FRAMING DETAILS & PAVEMENT ELEVATIONS
LIME CITY ROAD OVER I-75
BR. NO. WOO-75-2993
WOOD COUNTY
STA. 97+62.43 TO STA. 102+37.57
DATE: 2/90 SCALE: 1/2" = 1'-0"
CIP: 55-90-03 SHEET 343 OF 364

DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
GTC	JTJ	R.J.P.	J.F.F.	2-72-90





BASE PLATE DETAIL
 TYP. ABUT. A-1 AND A-2

NOTES

- FOR DETAILS OF EXPANSION BEARINGS (TYPE-EB), FIXED BEARING (TYPE-FB) AND BEARING TABLES "A" AND "B", SEE SHEET 345.
- FOR ADDITIONAL NOTES, SEE SHEET 229, 225, 345

NOTES FOR TYPE-EBR BEARINGS

GENERAL

THE MANUFACTURER SHALL HAVE AT LEAST FIVE (5) YEARS EXPERIENCE IN STAINLESS STEEL - TFE BEARING APPLICATIONS.

MATERIALS

1. POLYTETRAFLUOROETHYLENE

POLYTETRAFLUOROETHYLENE (TFE) SELF-LUBRICATING SLIDING SURFACES SHALL BE COMPOSED OF 100% VIRGIN TETRAFLUOROETHYLENE POLYMER FORMULATED WITH INERT REINFORCING AGGREGATES, CAST INTO SHEETS AND BONDED TO SPECIALLY PREPARED METAL SUBSTRATES WITH A SPECIAL HEAT CURED, HIGH-TEMPERATURE EPOXY CAPABLE OF OPERATING BETWEEN -320°F TO +500°F. THE MATERIAL WHEN OPERATING AGAINST ITS OPPOSING BURNISHED STAINLESS STEEL PLATE SHALL HAVE A STATIC COEFFICIENT OF FRICTION, WHEN LOADED, OF NOT MORE THAN .04, AT INITIAL INSTALLATION.

THE THICKNESS OF THE TFE SHEET SHALL BE 3/32". FINISHED FILLED TFE SHEETS CONTAINING GLASS FIBER OR CARBON SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

	ASTM METHOD	15% GLASS FIBERS	25% CARBON
MECHANICAL			
TENSILE STRENGTH (MINIMUM)	D1457	2,000 PSI	1,300 PSI
ELONGATION (MINIMUM)	D1457	150%	75%
PHYSICAL			
SPECIFIC GRAVITY (MINIMUM)	D792	2.20	2.10
MELTING POINT	D1457	327C+10C	327C+10C

EXPANSION BEARING DETAILS

(TYPE - EBR)

2. METALS

STAINLESS STEEL SURFACES SHALL BE OF 1/8" MINIMUM THICKNESS AND CONFORM TO ASTM A-167 TYPE 304 WITH A SURFACE FINISH OF 20 MICRO INCHES ROOT MEAN SQUARE AND SHALL HAVE A MINIMUM BRINELL HARDNESS OF 125.

3. BONDING MATERIALS

THE 3/32" TFE SHEET SHALL BE BONDED DIRECTLY TO THE 3/4" STEEL PLATE WITH A TWO-COMPONENT, MEDIUM VISCOSITY EPOXY RESIN, CONFORMING TO THE REQUIREMENTS OF THE FEDERAL SPECIFICATION WWM-A-134, TYPE 1.

THE CONTRACTOR SHALL FURNISH CERTIFIED TEST DATA SHOWING COMPLIANCE WITH THE ABOVE REQUIREMENTS FOR TFE AND STAINLESS STEEL.

CONSTRUCTION REQUIREMENTS

1. EPOXY BONDING OF TFE TO STEEL SURFACES

SELECTION OF THE EPOXY ADHESIVE AND SUPPLEMENTING THE SURFACE PREPARATION AND ADHESIVE APPLICATION PROCEDURES GIVEN BELOW SHALL BE BY THE BEARING MANUFACTURER WITH APPROVAL OF THE ENGINEER. AS A CONDITION OF SUCH APPROVAL, THE BEARING MANUFACTURER SHALL SUBMIT PROOF OF THE ADEQUACY OF HIS PROPOSED BONDING SYSTEM.

THE BONDING SURFACE OF THE STEEL SHALL BE CLEANED OF RUST, SCALE, OIL, AND GREASE BY BLAST CLEANING. THE ENTIRE SURFACE TO BE BONDED SHALL BE BLAST CLEANED TO THE ANCHOR PROFILE REQUIRED AND WIPED CLEAN WITH CLEANING SOLVENT. BLAST CLEANING SHALL BE PERFORMED WITHIN A MAXIMUM OF 4 HOURS PRIOR TO BONDING.

NOT MORE THAN ONE-HALF (1/2) HOUR PRIOR TO USE, A SUFFICIENT QUANTITY OF EPOXY SHALL BE PREPARED FOR THE AMOUNT OF WORK TO BE PERFORMED. ACCURATELY MEASURED PROPORTIONS OF THE TWO COMPONENTS SHALL BE BLENDED IN ACCORDANCE WITH THE EPOXY MANUFACTURER'S INSTRUCTIONS. TO INSURE ACCURATE PROPORTIONS FOR ALL PRODUCTION RUNS AND A RELATIVELY BUBBLE-FREE MIXTURE OF UNIFORM CONSISTENCY, THE BEARING MANUFACTURER SHALL PROVIDE SPECIFIC INSTRUCTIONS AND, IF NECESSARY, SPECIFIC EQUIPMENT FOR THE PROPER BLENDING OF THE EPOXY COMPONENTS.

A THIN UNIFORM COAT OF EPOXY SHALL BE SPREAD OVER THE ENTIRE SURFACE TO BE BONDED. IT MAY BE APPLIED TO EITHER THE STEEL OR THE TFE SURFACE OR TO BOTH.

THE TFE SURFACE SHALL THEN BE BONDED TO THE STEEL SURFACE UNDER FACTORY CONTROLLED CONDITIONS USING HEAT AND PRESSURE FOR THE TIME REQUIRED TO SET THE EPOXY ADHESIVE USED.

A COPY OF THE ADHESIVE MANUFACTURER'S INSTRUCTIONS, THE COMPLETE PROCEDURES USED TO ACHIEVE AN ADEQUATE BOND STRENGTH, AND A BONDED TFE/STEEL SAMPLE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO THE START OF PRODUCTION BONDING.

2. STAINLESS STEEL

STAINLESS SHEETS SHALL BE MECHANICALLY FASTENED OR WELDED TO THE BACKUP PLATE. MECHANICAL FASTENERS (RECESSED SLIGHTLY BELOW THE BEARING SURFACE) SHALL BE UNIFORMLY SPACED THROUGHOUT THE BEARING AREA AND IN ALL RESPECTS MEET EDGE SEALING SPECIFICATIONS. IF WELDED, SPOT WELDS SHALL BE UNIFORMLY SPACED THROUGHOUT THE BEARING AREA. SEAL WELDS ARE REQUIRED IN ALL CASES AND THEY SHALL BE CONTINUOUS FOR THE ENTIRE PERIPHERY OF THE STAINLESS OVERLAY. AFTER WELDING, WELD SHALL BE GROUND FLUSH AND BEARING SURFACE GIVEN A 20 MICRO INCH RMS FINISH. SURFACE SHALL HAVE A MINIMUM BRINELL HARDNESS OF 125.

3. WELDING

WELDING, AS A MEANS OF ATTACHMENT, SHALL BE DONE IN CONTROLLED MANNER USING MULTIPLE PASSES OR STITCH WELDING TECHNIQUES TO CONTROL THE HEAT BUILDUP WHICH MIGHT ADVERSELY AFFECT THE BEARING. WELDING TO A STEEL PLATE WHICH HAS A BONDED TFE SURFACE MAY BE PERMITTED PROVIDING THE WELDING PROCEDURES ARE ESTABLISHED WHICH RESTRICT THE MAXIMUM TEMPERATURE REACHED BY THE BOND AREA TO LESS THAN 400°F AS DETERMINED BY TEMPERATURE INDICATING WAX PENCILS OR OTHER SUITABLE MEANS. ALL WELDING SHALL BE DONE IN ACCORDANCE WITH SECTION 513.17 OF THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS.

GTC DAM R.J.P. JFP 2-12-90

URS

OHIO TURNPIKE COMMISSION

LAMINATED ELASTOMERIC BEARING DETAILS

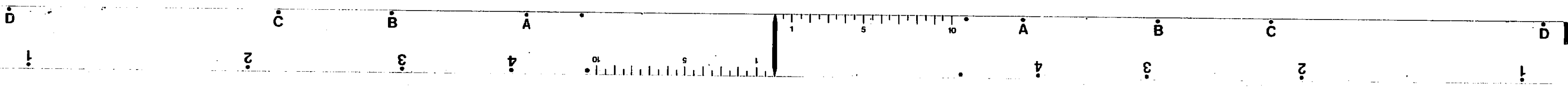
LIME CITY ROAD OVER 1-75

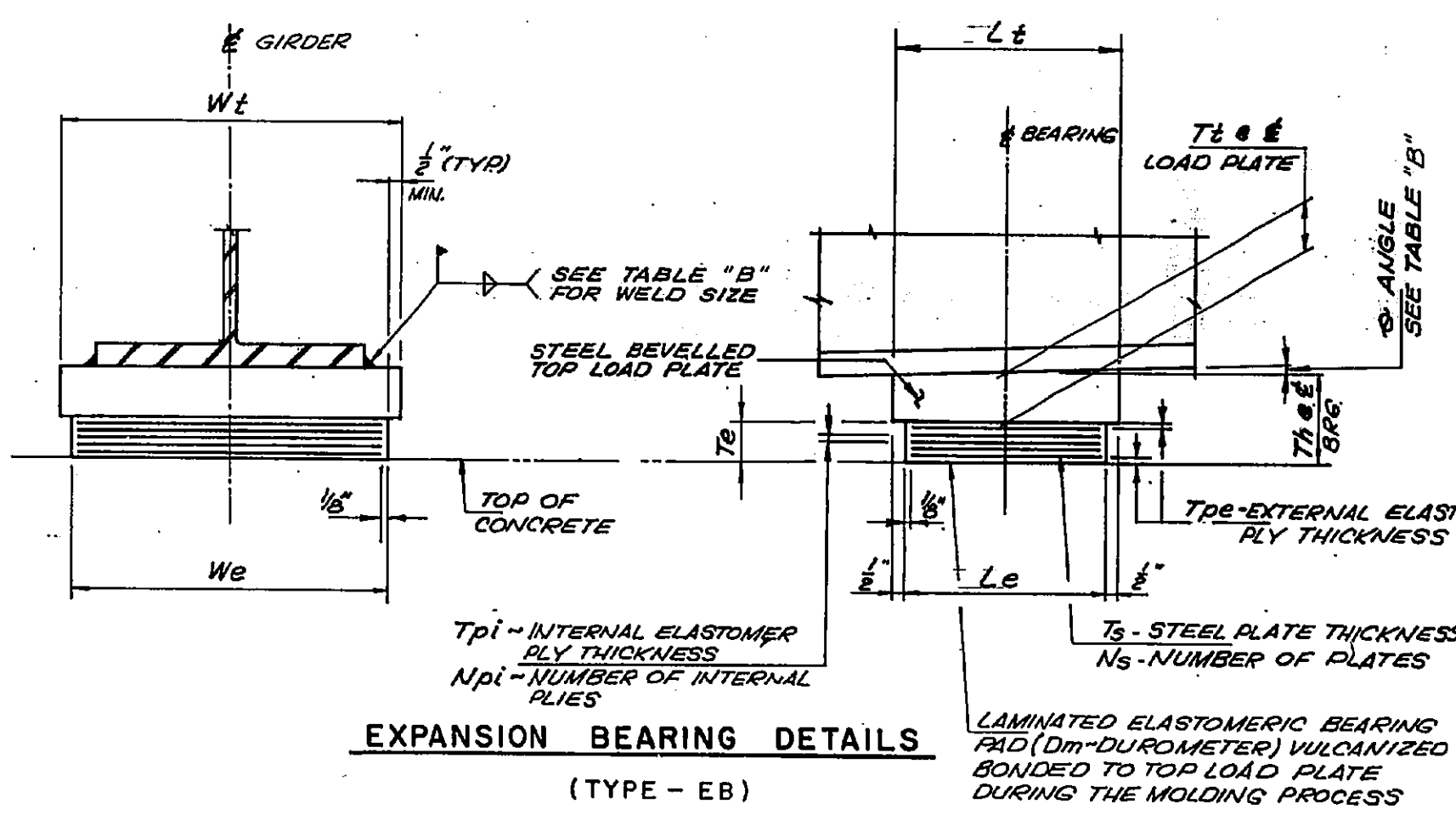
BR. NO. WOO-75-2993
WOOD COUNTY

STA. 97+62.43 TO STA. 102+37.57

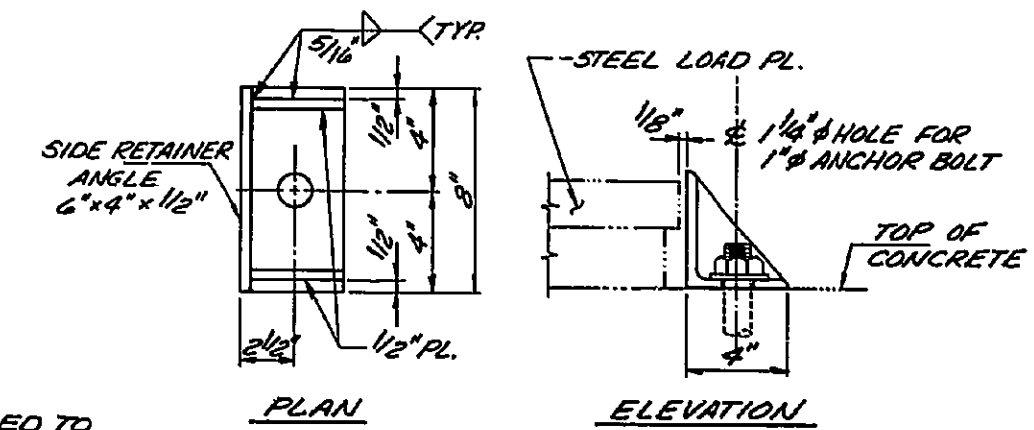
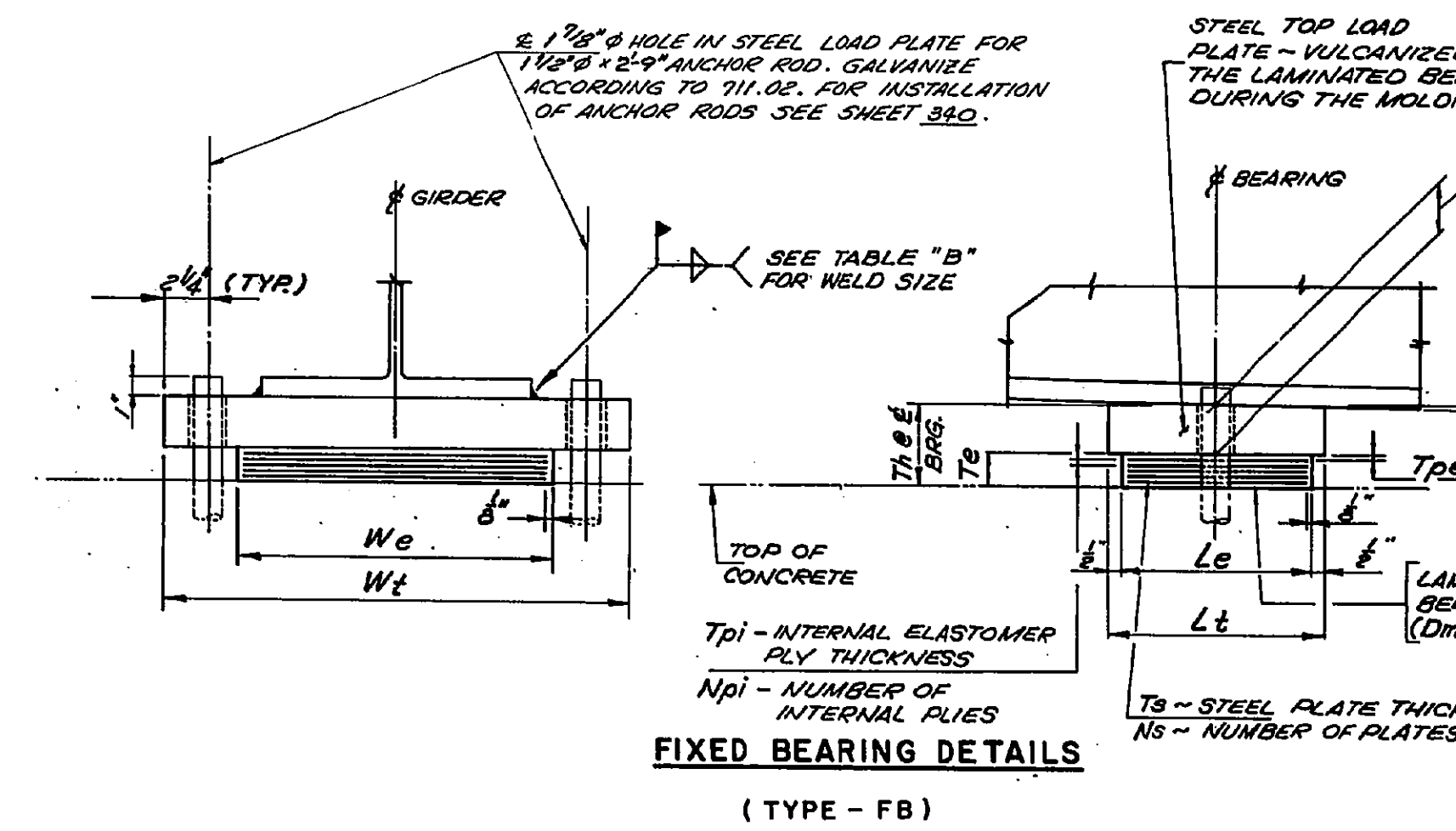
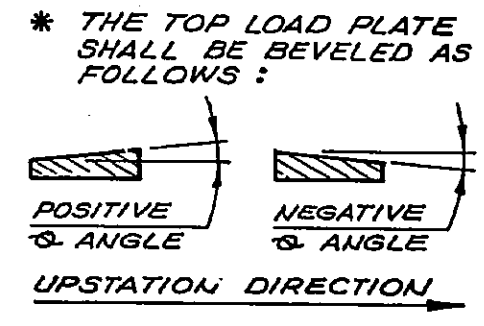
DATE: 2/90 SCALE: 1/4" = 1'-0"

CIP: 55-90-03 SHEET 344 OF 364

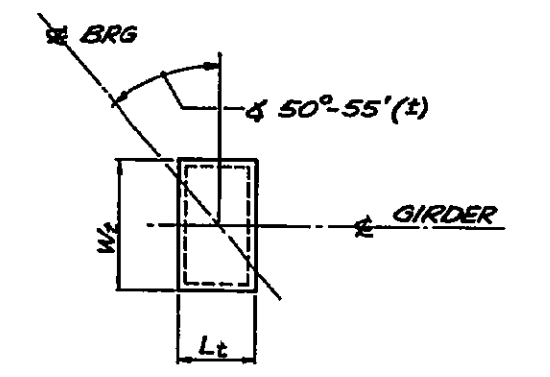




LOCATION	BEARING TYPE	N _s REQD.	LOAD (IN KIPS) FROM SUPERSTRUCTURE		TOP LOAD PLATE DATA		
			DEAD LOAD	LIVE LOAD W/O IMPACT	BEVEL ANGLE ϕ *	T _t	WELD SIZE
ABUTMENT A-1	EBR-1	4	32.0	47.6	0°-45'	1 1/2"	5/16"
PIER P-1	EB-1	4	190.4	93.0	0°-30'	2"	3/8"
PIER P-2	EB-1	4	254.1	105.8	0°-00'	2 1/2"	1/2"
PIER P-3	EB-2	4	190.4	93.0	-0°-45'	2"	3/8"
ABUTMENT A-2	EBR-2	4	32.0	47.6	-1°-00'	1 1/2"	5/16"



SIDE RETAINER DETAIL
(BEARINGS TYPE EB-1 & EB-2)



BEARING ORIENTATION PLAN
(ALL BEARINGS)

- NOTES
- THE STEEL LOAD PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS.
 - ELASTOMER TOLERANCES ARE AS FOLLOWS:
- INDIVIDUAL ELASTOMER LAYER THICKNESS: $\pm 20\%$ OF DESIGN VALUE (NOT TO EXCEED $\pm 1/8"$)
- PLAN DIMENSIONS: $\pm 0, +1/4"$
- DESIGN THICKNESS $T_e \le 1 1/4"$: $-0, +1/8"$
- DESIGN THICKNESS $T_e > 1 1/4"$: $-0, +1/4"$
- EDGE COVER OF EMBEDDED LAMINATES: $-0, +1/8"$
 - WELDING OF THE LOAD PLATE TO SUPERSTRUCTURE SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE SHALL NOT EXCEED 400°F AS DETERMINED BY THE USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
 - BEARING REPOSITIONING: IF DECK CONCRETE IS PLACED AT AN AMBIENT TEMPERATURE LOWER THAN 40°F AND THE BEARING SHEAR DEFLECTION EXCEEDING $1/6$ OF THE BEARING HEIGHT AT $60^\circ\text{F} \pm 10^\circ\text{F}$, THE BEAMS SHALL BE RAISED TO ALLOW THE BEARINGS TO RETURN TO THEIR UNDEFORMED SHAPE AT $60^\circ\text{F} \pm 10^\circ\text{F}$.
 - ALL ANCHOR BOLTS, GROUT, AND SIDE RETAINERS SHALL BE INCLUDED WITH ITEM 516 - LAMINATED ELASTOMERIC BEARINGS FOR PAYMENT.
 - BASIS OF PAYMENT: THE UNIT BID PRICE SHALL INCLUDE ALL MATERIALS, LABOR, AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL LAMINATED ELASTOMERIC BEARINGS, EITHER FIXED OR EXPANSION.
 - THE STEEL LOAD PLATE AND THE SIDE RETAINERS SHALL BE ASTM A572, GRADE 50 STEEL.
 - THE 1" DIAMETER X 1'-7" ANCHOR BOLTS SHALL BE GALVANIZED ACCORDING TO 711.02 FOR INSTALLATION OF ANCHOR BOLTS, SEE SHEET 340.
 - FOR ADDITIONAL NOTES AND SPECIFICATIONS, SEE THE STRUCTURE GENERAL NOTES.
 - FOR DETAILS OF EXPANSION BEARINGS (TYPE-EBR) AND ADDITIONAL NOTES, SEE SHEET 344.

BEARING TYPE	Dm	Le	We	Te	Lt	Wt	Tt	Lb	Wb	Tb	Th	Tpe	Tpi	Npi	Ts	Ns	RETAINER ANGLES
EXPANSION	EBR-1	50	8"	11"	2"	9"	15"	1 1/2"	2 1/4"	1 3/8"	5 1/8"	0.141"	0.197"	6	0.0747"	7	YES (ALL GIRDERS)
	EBR-2	50	8"	11"	2"	9"	15"	1 1/2"	2 1/4"	1 3/8"	5 1/8"	0.141"	0.197"	6	0.0747"	7	YES (ALL GIRDERS)
	EB-1	50	14"	22"	2 13/16"	15"	23"	2"	—	—	4 13/16"	0.260"	0.364"	5	0.0747"	6	YES (ALL GIRDERS)
	EB-2	50	14"	22"	2 13/16"	15"	23"	2"	—	—	4 13/16"	0.260"	0.364"	5	0.0747"	6	YES (ALL GIRDERS)
FIXED	FB-1	50	14"	24"	2 1/4"	15"	31"	2 1/2"	—	—	4 3/4"	0.244"	0.342"	4	0.0747"	5	NO

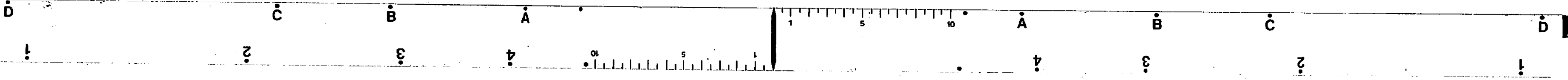
DATE	DRAWN	CHECKED	REVIEWED	DL
2/90	DAM	R.J.P.	J.P.P.	2-12-90

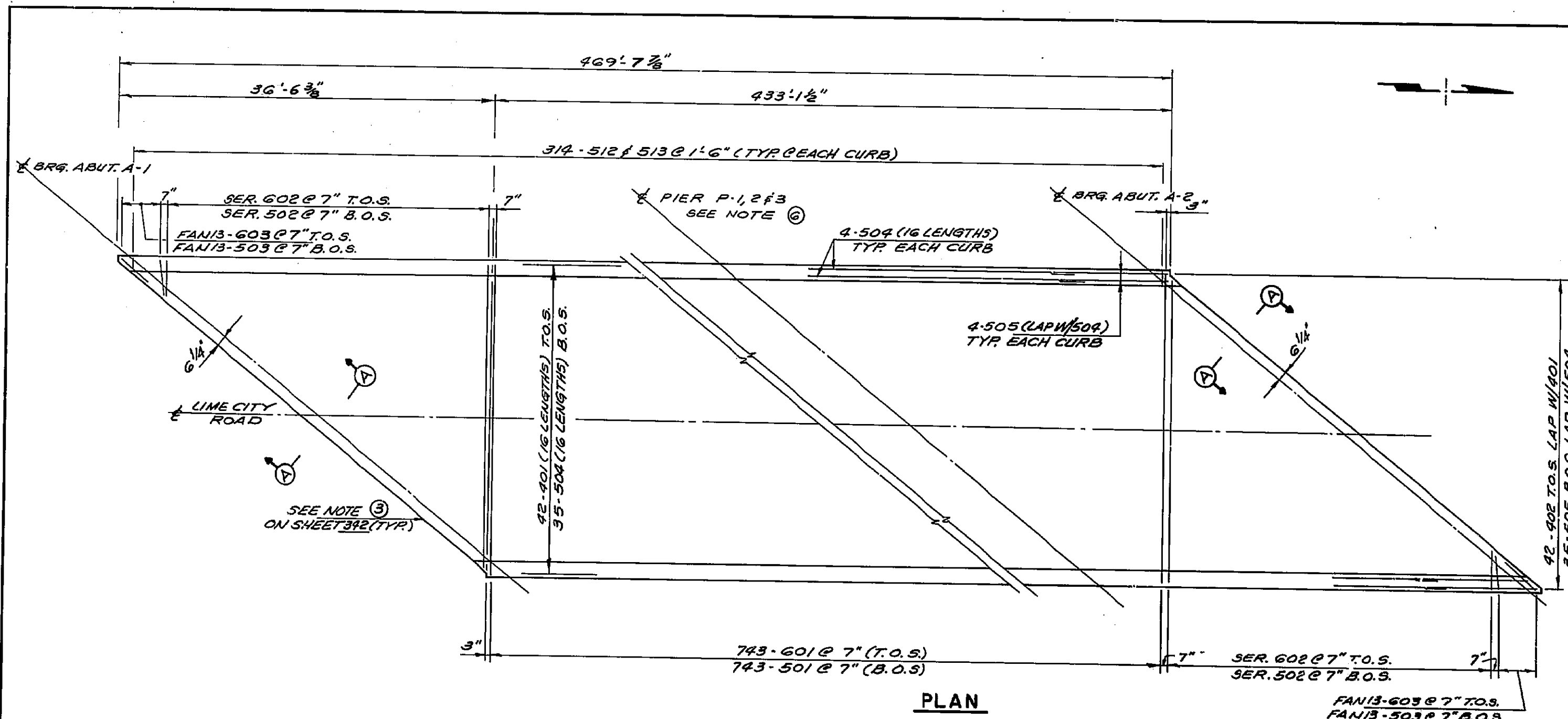
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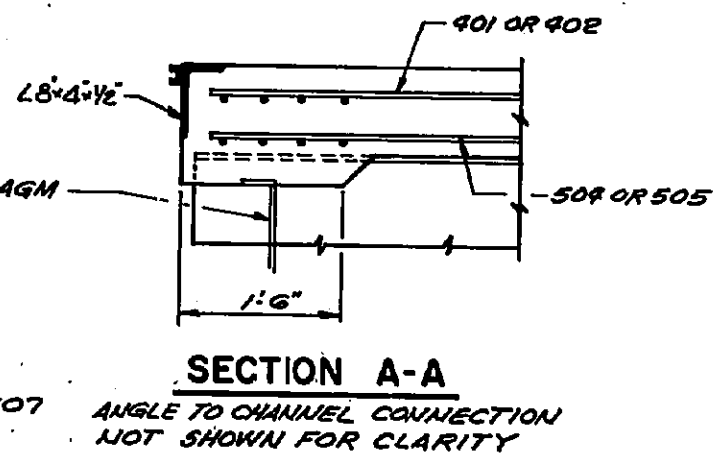
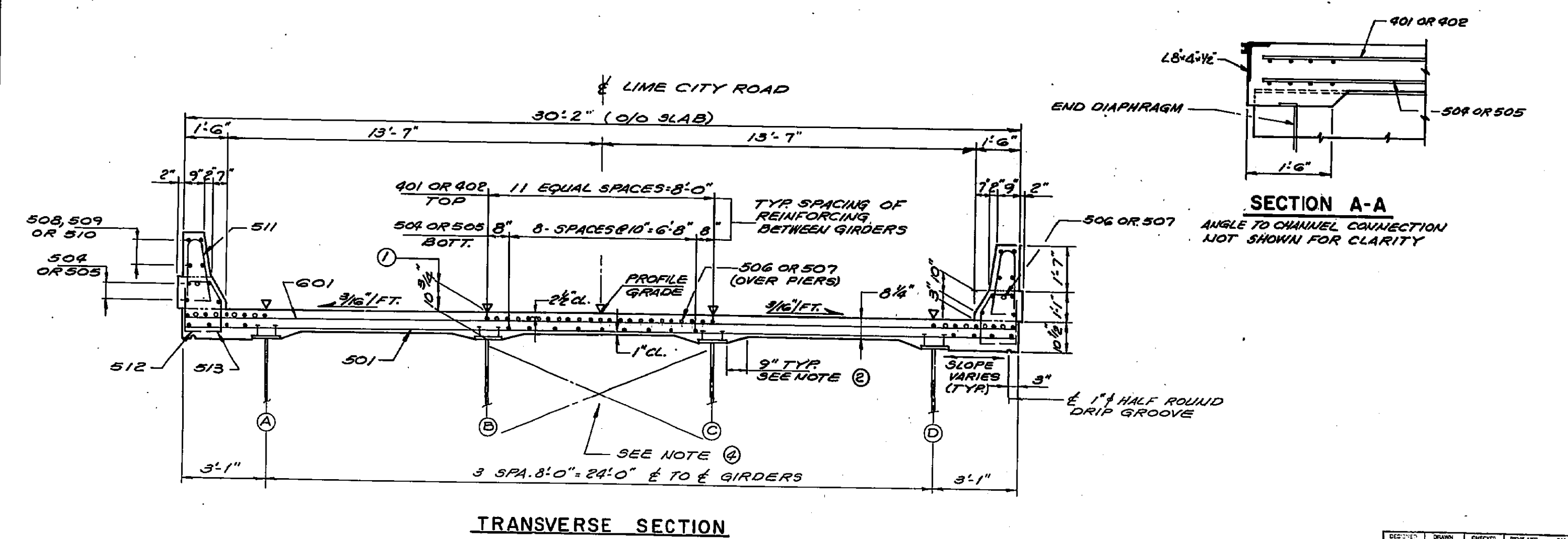
BEARING DETAILS

LIME CITY ROAD OVER I-75
BR. NO. W00-75-2993
WOOD COUNTY
STA. 97+62.43 TO STA. 102+37.57
DATE: 2/90 SCALE: N.T.S.
CIP: 55-90-03 SHEET 345 OF 364



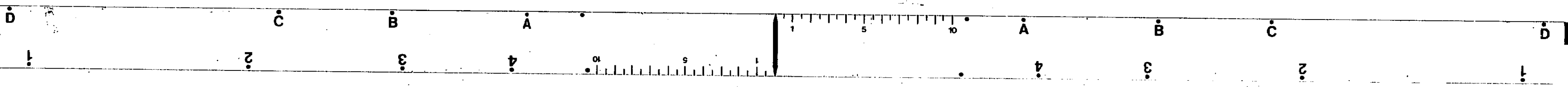


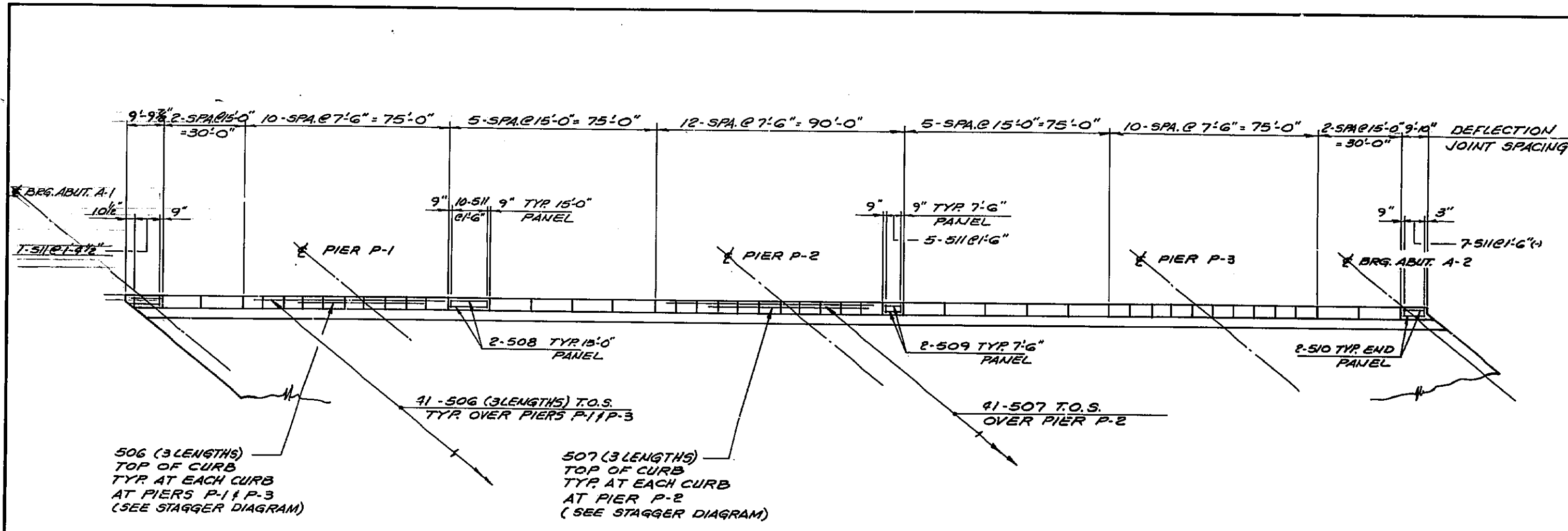
- NOTES**
- ① THIS IS THE DESIGN DIMENSION THE QUANTITY OF DECK CONCRETE TO BE PAID FOR SHALL BE BASED UPON THIS DIMENSION, EVEN THOUGH DEVIATION FROM IT MAY BE NECESSARY BECAUSE THE TOP FLANGE OF THE GIRDER MAY NOT HAVE THE EXACT CAMBER OR CONFORMATION REQUIRED TO PLACE IT PARALLEL TO THE FINISHED GRADE. DEDUCTION SHALL BE MADE FOR VOLUME OF ENCASED STEEL PLATES AS PER 511.18.
 - ② A TYPICAL HAUNCH WIDTH OF 9" SHALL BE USED FOR COMPUTING THE QUANTITY OF CONCRETE, HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6" AND 12" PROVIDED THAT THE SLOPE SHALL NOT BE MORE THAN 1:4 FOR A HAUNCH LESS THAN 9" IN WIDTH.
 - ③ THE PREFIX 'E'S' SHALL BE ADDED TO ALL REINFORCING BAR MARKS IN THE SUPERSTRUCTURE. ALL REINFORCING SHALL BE EPOXY COATED.
 - ④ FOR FRAMING PLAN, CROSS FRAME DETAILS AND ADDITIONAL FRAMING DETAILS, SEE SHEETS 341 & 342.
 - ⑤ FOR ADDITIONAL NOTES, SEE STRUCTURAL GENERAL NOTES, SHEETS 223, 224 & 225.
 - ⑥ FOR PARAPET PANEL SPACING AND STAGGER DIAGRAMS, SEE SHEET 347.
 - ⑦ TRANSVERSE AND LONGITUDINAL REINFORCEMENT SHALL BE FIELD BENT AS REQUIRED. PAYMENT SHALL BE INCLUDED WITH ITEM 509, EPOXY COATED REINFORCING STEEL.
 - ⑧ ∇ INDICATES LOCATION OF FINISHED PAVEMENT ELEVATIONS, FOR TABLE OF FINISHED PAVEMENT ELEVATIONS SEE SHEET 343.
 - ⑨ TYPICAL BAR LAPS SHALL BE AS FOLLOWS
 # 4 BARS = 1'-7"
 # 5 BARS = 1'-11"



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 SLAB PLAN &
 TRANSVERSE SECTION
 LIME CITY ROAD OVER I-75
 BR. N# W00-75-2993
 WOOD COUNTY
 STA. 97+62.43 TO STA. 102+37.57
 DATE: 2/90 SCALE: 1/4" = 1'-0"
 CIP: 55-90-03 SHEET 346 OF 364

DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
RER	FF	R.J.P.	JFP	2-2-90





- NOTES**
- ① 1/4" PREFORMED EXPANSION JOINT FILLER SHALL BE PLACED IN ALL DEFLECTION JOINTS AND INCLUDED WITH SUPERSTRUCTURE CONCRETE FOR PAYMENT. SEE STD DWG. BR-1 FOR DETAILS.
 - ② FOR ADDITIONAL NOTES SEE SHEET 346.

PLAN OF PARAPETS
WEST PARAPET SHOWN
EAST PARAPET SIMILAR

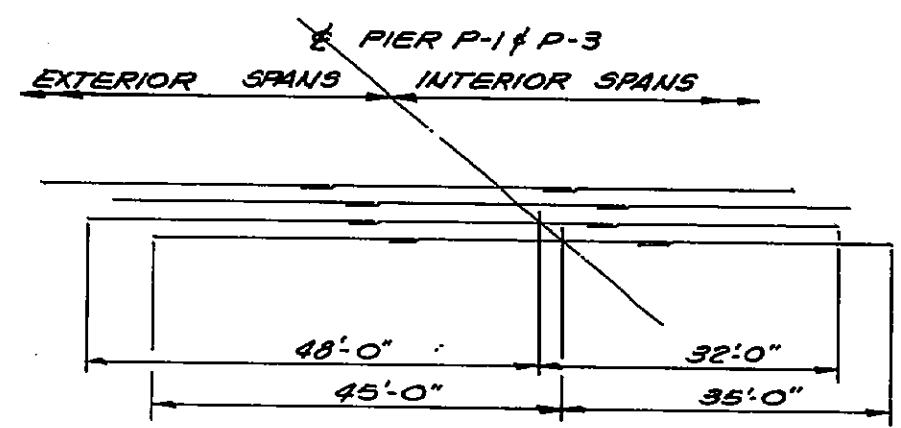


DIAGRAM SHOWING STAGGER OF 506 BARS OVER PIERS P-1 & P-3

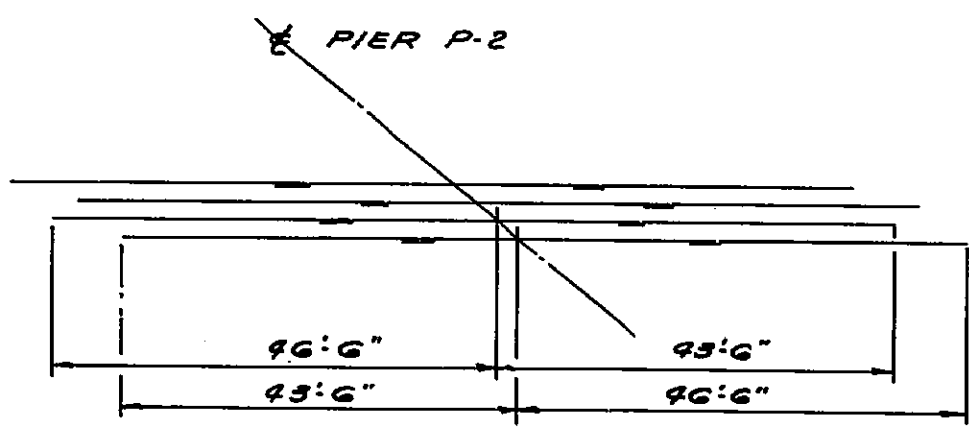


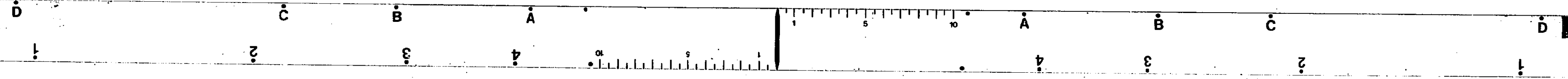
DIAGRAM SHOWING STAGGER OF 507 BARS OVER PIER P-2

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PARAPET DETAILS
LIME CITY ROAD OVER I-75
BR. NO. WOO-75-2993
WOOD COUNTY
STA. 97+62.43 TO STA. 102+37.57

DATE: 2/90 SCALE: N.T.S.
CIP: 55-90-03 SHEET 347 OF 364

DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
RER	JUN	R.J.P.	JFF	2-12-90



MARK	No. REQD.	LGTH.	TYPE	DIMENSIONS				INCRM.	WEIGHT LBS.
				A	B	C	D		
ABUTMENTS									
EA 401	8	9-7	14	2-8	1-11			51	
EA 402	16	1-11	ST					20	
EA 501	6	22-9	ST					142	
EA 502	6	23-0	ST					144	
EA 503	4	6-8	ST					28	
EA 504	4	4-0	ST					17	
EA 505	4	15-6	ST					65	
EA 506	4	24-3	ST					101	
EA 507	2	3-1	19	0-6	0-8	0-8	1-9	6	
EA 508	8	12-6	ST					104	
EA 509	4	8-3	ST					34	
EA 510	4	9-3	ST					39	
EA 511	48	2-5	1	1-3	1-3			119	
EA 550	46	3-6	19	0-8	0-6	0-8	2-1	166	
EA 551	16	2-9	ST					46	
EA 552	48	4-5	ST					221	
EA 553	16	5-4	23	2-5	2-2			89	
EA 554	32	3-0	6	2-5				100	
EA 555	16	4-0	ST					67	
EA 556	8	13-8	GO					114	
EA 557	8	13-6	ST					113	
EA 558	16	15-6	ST					259	
EA 601	14	3-0	1	1-0	2-2			63	
EA 801	42	4-0	19	1-0	1-3	1-1	1-6	447	
TOTAL ABUTMENTS = 2555									
PIER 1									
1 P 501	52	8-8	7	7-6				470	
1 P 502	31	7-6	ST					242	
1 P 503	9	29-10	ST					280	
1 P 504	9	17-2	ST					161	
1 P 701	18	24-4	6	23-6				895	
1 P1001	48	9-10	1	1-10	8-3			2022	
1 P1002	12	21-8	ST					1119	
1 P1003	24	21-11	ST					2263	
1 P1004	12	22-0	ST					1136	
TOTAL PIER 1 = 8588									
PIER 2									
2 P 401	8	10-7	35	1-6				56	
2 P 601	48	3-4	1	1-0	2-6			240	
TOTAL PIER 2 = 296									

MARK	No. REQD.	LGTH.	TYPE	DIMENSIONS				INCRM.	WEIGHT LBS.
				A	B	C	D		
PIER 3									
3 P 501	52	8-8	7	7-6				470	
3 P 502	31	7-6	ST					242	
3 P 503	9	29-10	ST					280	
3 P 504	9	17-2	ST					161	
3 P 701	18	24-4	6	23-6				895	
3 P1001	48	9-10	1	1-10	8-3			2022	
3 P1002	12	20-2	ST					1041	
3 P1003	12	20-3	ST					1046	
3 P1004	12	20-1	ST					1037	
3 P1005	12	19-11	ST					1028	
TOTAL PIER 3 = 8222									
SUPERSTRUCTURE									
ES 401	672	30-0	ST					13467	
ES 402	42	15-2	ST					426	
ES 501	743	29-10	ST					23119	
SERIES OF 2-SETS OF 49- TO 98 BAR		6-4	ST					3	
ES 502	98	29-4	ST					1823	
ES 503	26	5-10	ST					158	
ES 504	688	30-0	ST					21528	
ES 505	43	16-5	ST					736	
ES 506	258	27-11	ST					7512	
ES 507	129	31-4	ST					4216	
ES 508	112	14-8	ST					1713	
ES 509	256	7-2	ST					1914	
ES 510	16	9-6	ST					159	
ES 511	628	5-4	23	2-2	2-5			3493	
ES 512	628	2-3	1	0-10	1-6			1446	
ES 513	628	3-1	20	0-10	0-9	0-6		2014	
ES 601	743	29-10	ST					33294	
SERIES OF 2-SETS OF 49- TO 98 BAR		6-4	ST					3	
ES 602	98	29-4	ST					1823	
ES 603	26	5-10	ST					228	
TOTAL SUPERSTRUCTURE = 119871									

SPIRAL REINFORCING SCHEDULE					
MARK	Nº REQ'D	CORE DIA.	LENGTH	PITCH INS.	WEIGHT LBS.
SPIRAL PIER 1					
1 SP401	1	3-2	21-8	3.0	722
1 SP402	2	3-2	21-11	3.0	1460
1 SP403	1	3-2	22-0	3.0	733
TOTAL SPIRAL PIER 1 = 2915					
SPIRAL PIER 3					
3 SP401	1	3-2	20-2	3.0	672
3 SP402	1	3-2	20-3	3.0	675
3 SP403	1	3-2	20-1	3.0	670
3 SP404	1	3-2	19-11	3.0	564
TOTAL SPIRAL PIER 3 = 2681					

FOUR ANGLE SPACERS WEIGHING APPROX. .80 LBS. PER LINEAL FT. OF SPACER SHALL BE PROVIDED FOR EACH SPIRAL UNIT. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF EACH COIL. THE NUMBER OF POUNDS OF THESE SPACERS WILL BE PAID FOR AS REINFORCING STEEL AND IS INCLUDED IN THE TABULATED SPIRAL WEIGHT.

THE LENGTH SHOWN IN THE STEEL SCHEDULE FOR THE SPIRAL BARS IS THE DISTANCE FROM THE TOP OF THE FOOTING TO THE TOP OF THE COLUMN INCLUDING THREE (3) CLOSED COILS (ONE AND ONE HALF CLOSED COILS AT THE ENDS OF EACH SPIRAL UNIT).

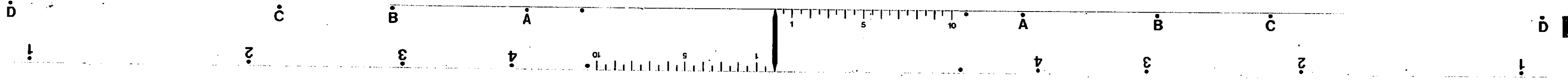
DR. JWS	DRAWN DAM	CHECKED R.J.P.	REVIEWED JFP	DATE 2-12-90
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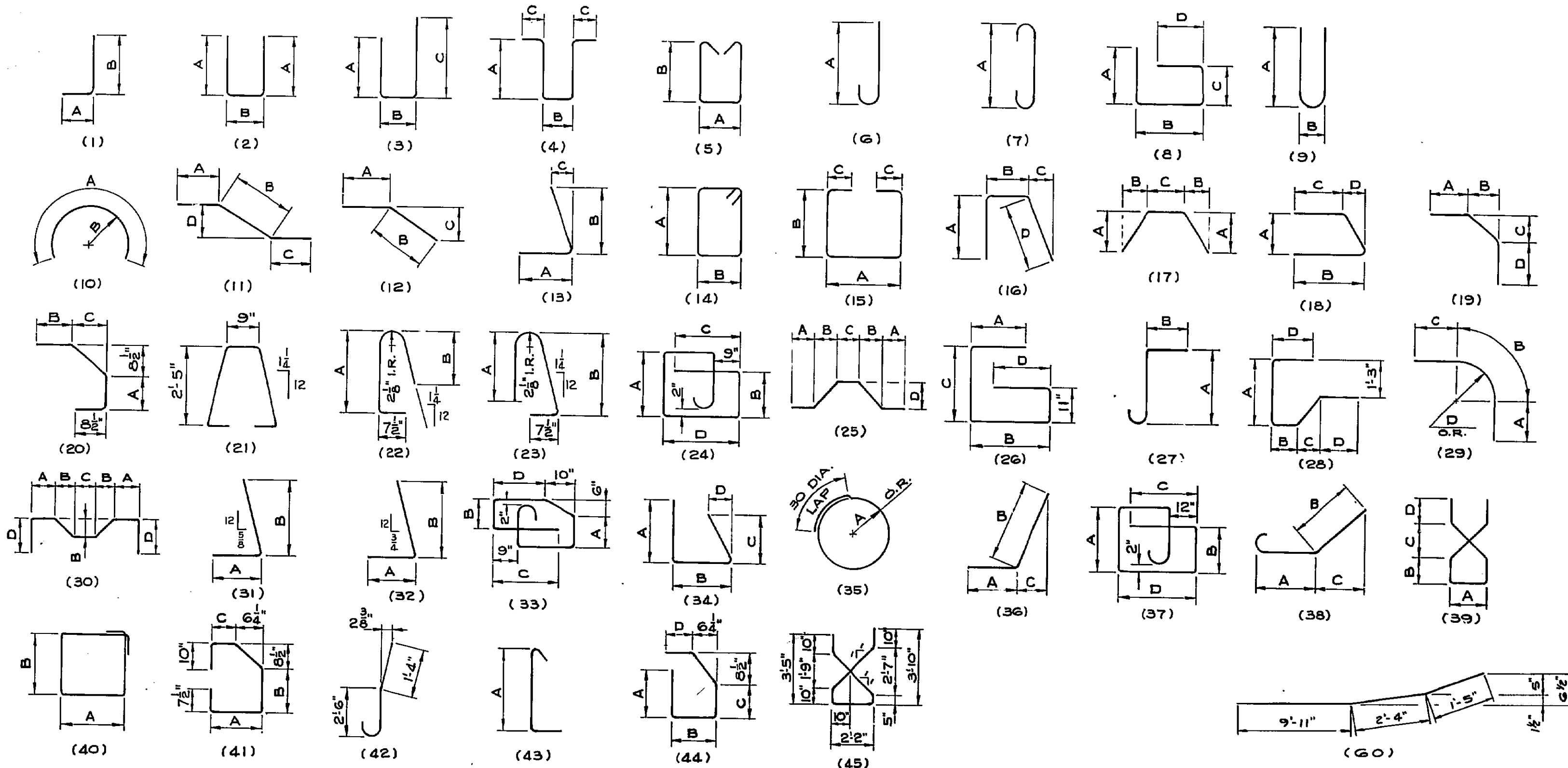
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REINFORCING SCHEDULE
LIME CITY ROAD OVER I-75

BR. Nº WOO-75-2993
WOOD COUNTY
STA. 97+62.43 TO STA. 102+37.57

DATE: 2/90 SCALE: N.T.S.
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ITEM 509 REINFORCING STEEL, (GRADE 60)

ABUTMENT	=	0 LBS
PIER	=	22702 LBS
SUPERSTRUCTURE	=	0 LBS
GRAND TOTAL	=	22702 LBS

ITEM 509 EPOXY COATED, REINFORCING STEEL, (GRADE 60)

ABUTMENT	=	2555 LBS
PIER	=	0 LBS
SUPERSTRUCTURE	=	119871 LBS
GRAND TOTAL	=	122426 LBS

REINFORCING STEEL SAMPLES
 REFER TO O.T.C. GENERAL CONDITIONS G-G.02 AND CMS SECTION 700, 709.01 THROUGH 709.05 AND 709.08. SUFFICIENT ADDITIONAL REINFORCING STEEL SHALL BE PROVIDED FOR SAMPLING FOR EACH BRIDGE. RANDOM SAMPLES SHALL BE REPLACED IN THE STRUCTURES BY THE ADDITIONAL STEEL, SPICED IN ACCORDANCE WITH 509.08.

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REINFORCING SCHEDULE	
LIME CITY ROAD OVER I-75	
BR. N ^o WOO-75-2993	
WOOD COUNTY	
STA. 97+62.43 TO STA. 102+37.57	
DATE: 2/90	SCALE: N.T.S.
CIP: 55-90-03	SHEET 349 OF 364

DESIGNED	DRAWN	CHECKED	REVIEWED	DATE
JTJ	DAM	R.J.P.	JPP	2-12-90

