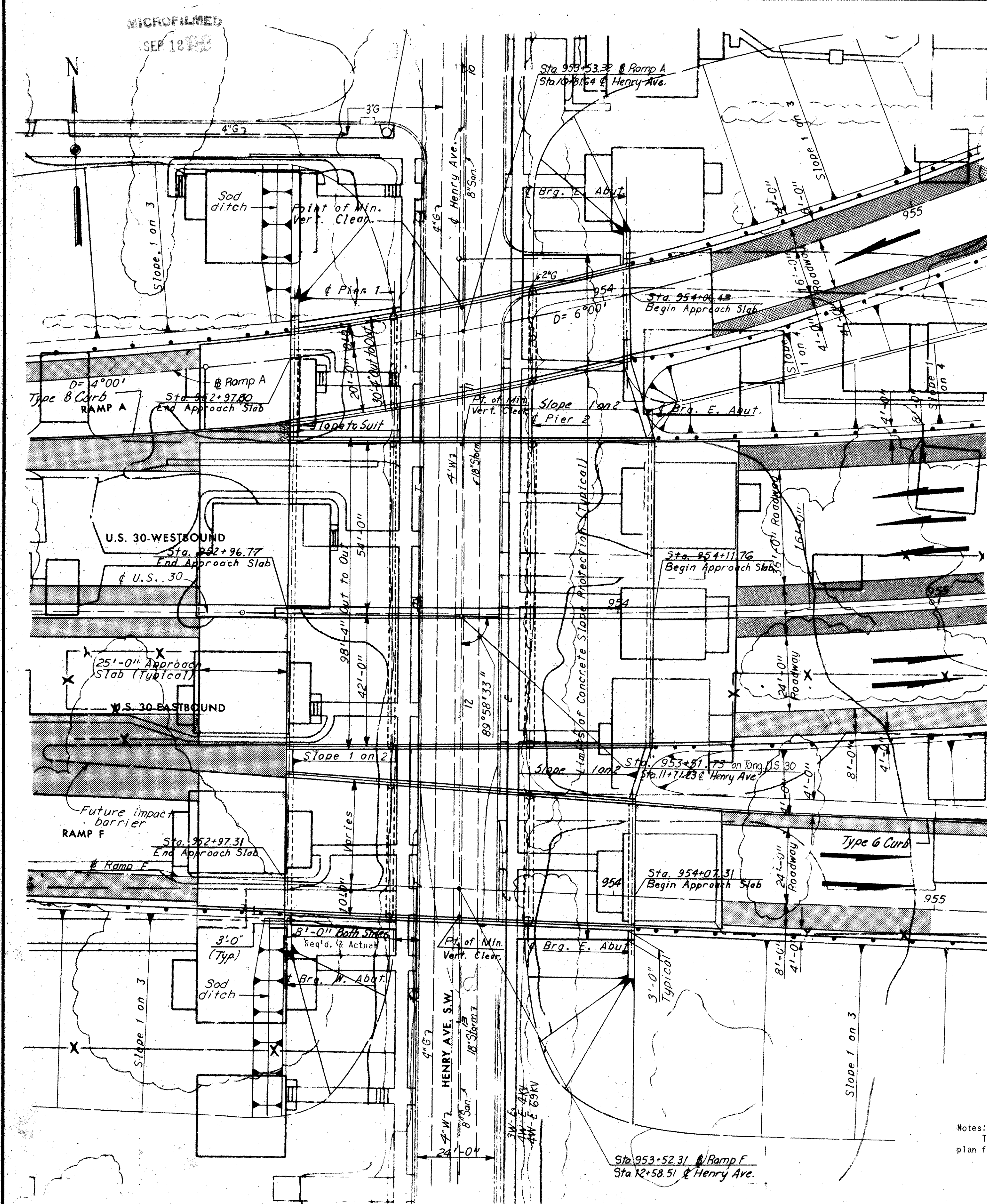




PLAN

Notes:

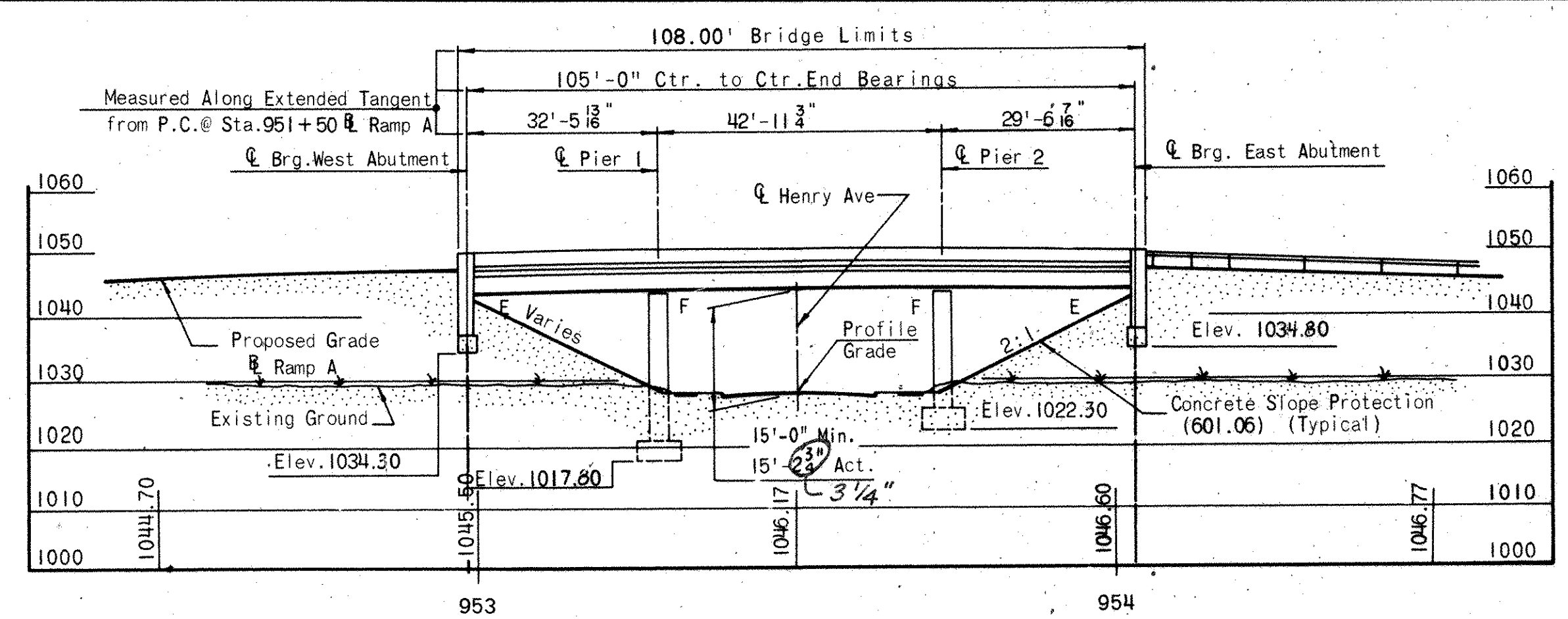
The following items are not included in the bridge plans. See roadway plan for details:

1. Relocation or removal of existing utilities.
2. Approach grading, pavements and slabs.
3. Guardrails.
4. Sod ditches.
5. Henry Avenue side walks.

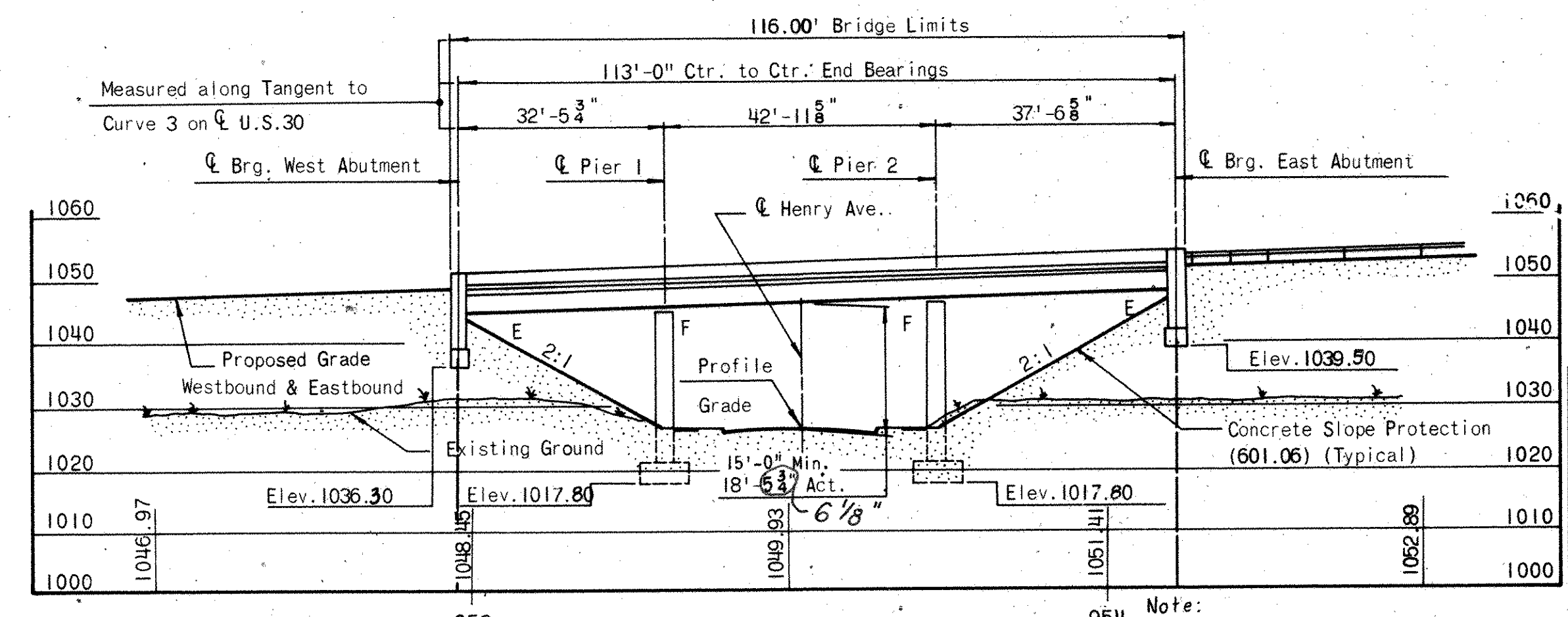
Earthwork limits shown are schematic. Actual slopes shall conform to plan cross-sections.

All piling in abutments shall be 12" x 6 C.I.P.C. piles driven to 45 tons capacity. Estimated average pay lengths are 70 feet for West abutment and 82 feet for East abutment.

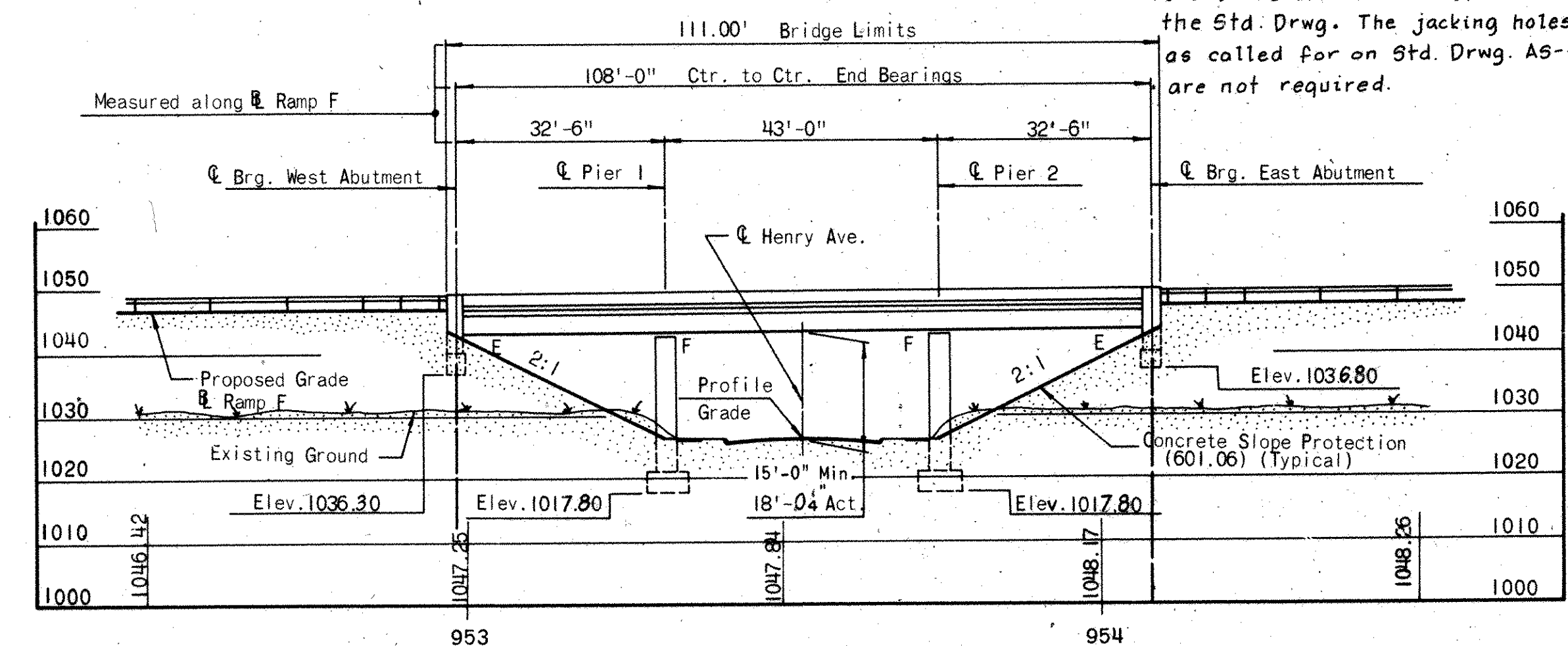
Embankments shall be constructed to the level of the subgrade for a minimum distance of 200 feet back of the abutments. Excavation shall then be made for the abutments and piers.



ELEVATION RAMP 'A'
STA - 30-1474L



ELEVATION U.S. 30
STA - 30-1474



ELEVATION - RAMP 'F'
STA - 30-1474R

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	TYPE FUNDS
2	OHIO		

215
389

STARK COUNTY
STA-30-14.12
STA-77-9.22

PROPOSED STRUCTURE - RAMP 'A'

Type: Continuous Rolled Beams with Reinforced Concrete Slab.

Spans: 32'-5 1/8", 42'-11 1/4", and 29'-6 1/8" measured along extended tangent from P.C. @ Sta. 951+50

Roadways: 28'-0" face to face of parapets

Loadings: HS20-44

Skew: 110.09° Lt. to tangent at Sta. 953+53.3

Wearing Surface: 2 1/2" Asphalt Concrete

Approach Slabs: A5-1-72 (25' Long) (Modified)

Alignment: 6° 00' Curve Left

1987 ADT: 13,981

PROPOSED STRUCTURE - U.S. 30

Type: Continuous Rolled Beams with Reinforced Concrete Slab

Spans: 32'-5 1/8", 42'-11 1/4", and 37'-6 1/8" measured along tangent to Curve 3 on U.S. 30

Roadways: including 3'-0" Median Barrier

Loadings: HS20-44

Skew: None

Wearing Surface: 2 1/2" Asphalt Concrete

Approach Slabs: A5-1-72 (25' Long) (Modified)

Alignment: Spiral (Lt.)

1987 ADT: 21,891 W.B., 18,853 E.B.

PROPOSED STRUCTURE - RAMP 'F'

Type: Continuous Rolled Beams with Reinforced Concrete Slab.

Spans: 32'-6", 43'-0" and 32'-6" measured along R Ramp F

Roadways: Varies; 40'-0 1/2" to 43'-7 1/2" face to face of parapets along U Bearing

Loadings: HS20-44

Skew: 151.8° Rt.

Wearing Surface: 2 1/2" Asphalt Concrete

Approach Slabs: A5-1-72 (25' Long) (Modified)

Alignment: Tangent

1987 ADT: 16,919

EXISTING UTILITY LEGEND

- 4" G2 GAS
- 4" W2 WATER
- 16" Storm STORM SEWER
- 8" San SANITARY SEWER
- T TELEPHONE
- E POWER LINES
- 4W-E4KV 4 WIRE, PRIMARY 14 KILOVOLT
- 3W-E3 3 WIRE, SECONDARY
- W WATER HYDRANT
- M MANHOLE
- C CATCH BASIN

H.N.T.B. BRIDGE NOS. 1, 5 AND 15 Revised 6-13-75 By W.E.B.

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

SITE PLAN

BR. NO. STA. - 30-1474 STA. 952+96.77
BR. NO. STA. - 30-1474R STA. 954+11.76
BR. NO. STA. - 30-1474L
SCALE: 1" = 20'-0"

RELOCATED U.S. 30

CANTON STARK COUNTY OHIO

DRAWN	TRACED	CHECKED	REVIEWED	DATE
K.T.B.	W.G.B.	J.B.C.	W.G.B.	3-10-69
DATE 3-10-69	DATE 3-11-69	DATE 3-11-69	DATE 11-22-71	

1668

Revised 4-28-77

ESTIMATED QUANTITIES																
ITEM	TOTAL	UNIT	DESCRIPTION	BRIDGE STA.-30-1474 US-30				BRIDGE STA.-30-1474R RAMP F				BRIDGE STA.-30-1474L RAMP A				
				ABUTMENTS	PIERS	SUPER-STRUCTURE	GENERAL	ABUTMENTS	PIERS	SUPER-STRUCTURE	GENERAL	ABUTMENTS	PIERS	SUPER-STRUCTURE	GENERAL	
404	138	Cu.Yd.	Asphalt Concrete, AC-20			81				34				23		
409	6	Cu.Yd.	Seal Coat Cover Aggregate, No. 9			3				2				1		
409	183	Gallon	Seal Coat Bituminous Material: 702.02, MC-800 or MC-3000; 702.03, CBAE 800; 702.04, RS-1, RS-2 or CRS-1, CRS-2, OF 702.09, RT-9 or RT-10.			101				50				32		
503	1,882	Cu. Yd.	Unclassified Excavation	253	766			179	324			160	200			
503	Lump Sum	Lump Sum	Cofferdams, Cribbs and Sheeting				Lump Sum				Lump Sum				Lump Sum	
505	Lump Sum	Lump Sum	Test Pile*				Lump Sum				Lump Sum				Lump Sum	
507	4,975	Lin. Ft.	12" ϕ Cast-In-Place Reinforced Concrete Piles	2,103				1,520				1,352				
509	330,983	Pounds	Reinforcing Steel	15,109	61,894	111,286		9,278	23,841	50,490		7,313	15,961	35,811		
511	704	Cu. Yd.	Class "C" Concrete, Superstructure			391				178				135		
511	263	Cu. Yd.	Class "C" Concrete, Pier Caps and Columns		148				65				50			
511	242	Cu. Yd.	Class "C" Concrete, Abutments (Above Footings)	107				72				63				
511	481	Cu. Yd.	Class "C" Concrete, Footings	67	183			50	79			44	58			
512	368	Lin. Ft.	Premolded Sealing Strip	204				95				69				
513	303,600	Pounds	Structural Steel (ASTM A36)			176,000				74,700				52,900		
514	303,600	Pounds	Field Painting of Structural Steel			176,000				74,700				52,900		
516	314	Sq. Ft.	1" Preformed Expansion Joint Filler	174				81				59				
516	232	Sq. Ft.	1" Preformed Expansion Joint Filler	114				65				53				
516	570	Sq. Ft.	1" Preformed Expansion Joint Filler	90	127			119	64			107	63			
518	902	Lin. Ft.	Subdrainage for Wearing Course, As Per Plan			460				222					220	
518	251	Cu. Yd.	Porous Backfill	119				72				60				
518	447	Lin. Ft.	6" Perforated Helical C.M.P. 707.01	202				127				118				
518	85	Lin. Ft.	6" Non-Perforated Helical C.M.P. including Specials, 707.01	17				34				34				
601	1723	Sq. Yd.	Concrete Slope Protection 601.06				896				456				371	
625			See Sheet 137 For Lighting Summary													
808	704	Units	Chemical Admixture For Concrete, Type A, B or D.			391				178				135		
838	9	Hours	Special Pile Test				3				3				3	
Spec.	1982	Sq. Yds.	Membrane Waterproofing (See Proposal Note)			1,169				493				320		

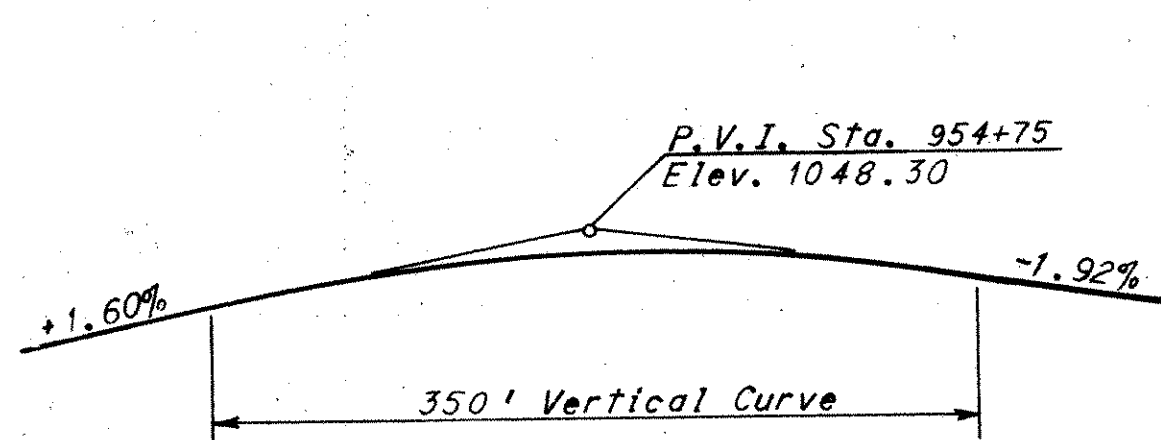
FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	TYPE FUNDS
2	OHIO		

216
389

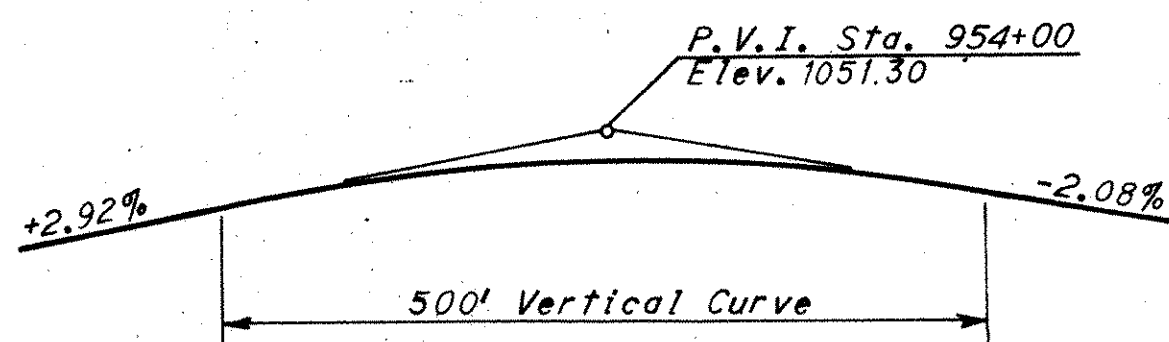
STARK COUNTY
STA-30-14.12
STA-77-9.22

*Test pile may be driven at Sta.-30-14.74,
Sta.-30-14.74R or Sta.-30-14.74L

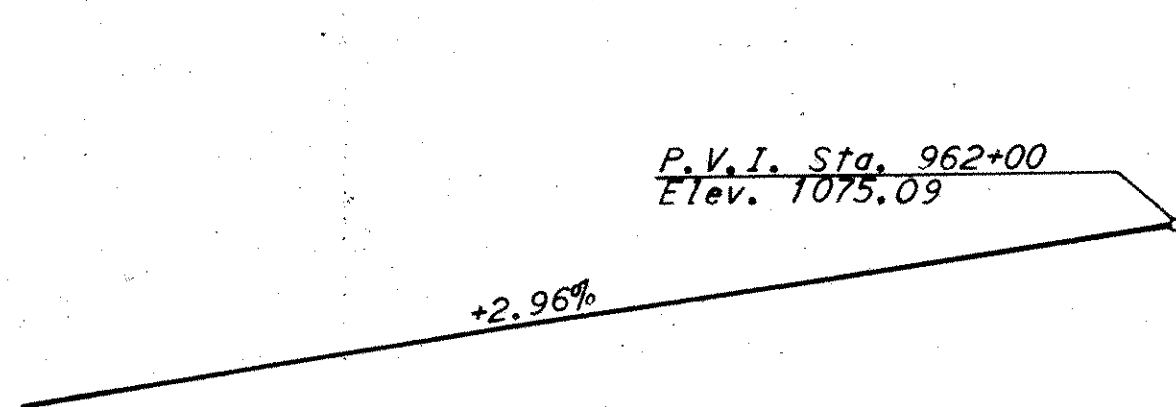
MICROFILMED
SEP 12 1967



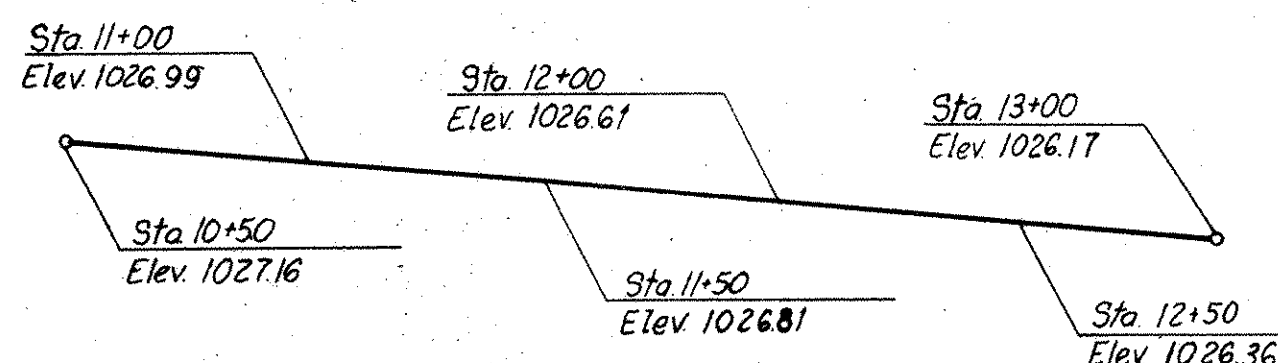
PROFILE GRADE-RAMP A



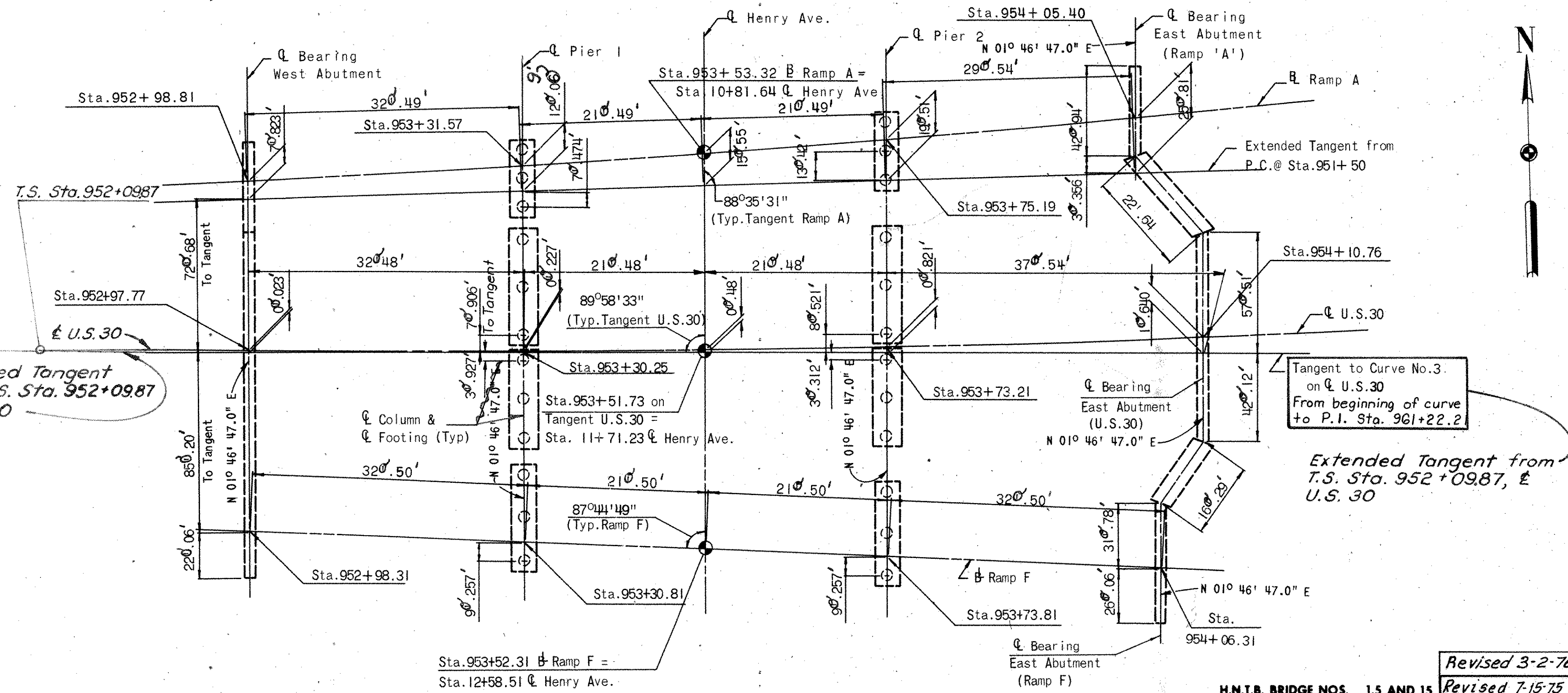
PROFILE GRADE-RAMP F



PROFILE GRADE-U.S. 30



PROFILE GRADE-HENRY AVE.



SUBSTRUCTURE LAYOUT DIAGRAM

H.N.T.B. BRIDGE NOS. 1, 5 AND 15				Revised 3-2-76	
HOWARD, NEEDLES, TAMMEN & BERGENDOFF CONSULTING ENGINEERS KANSAS CITY CLEVELAND NEW YORK				By W.E.B. 2/18	
PROFILES, SUBSTRUCTURE LAYOUT DIAGRAM & ESTIMATED QUANTITIES					
BR. NO. STA. - 30-1474		STA. 952+96.77			
BR. NO. STA. - 30-1474R		STA. 954+11.76			
BR. NO. STA. - 30-1474L					
SCALE: NO SCALE					
RELOCATED U.S. 30					
CANTON		STARK COUNTY		OHIO	
DRAWN K.T.B.	TRACED J.M.W.	CHECKED J.B.C.	REVIEWED M.T.T.	REVISED 3-2-76	
DATE 3-7-69	DATE 3-14-69	DATE 3-13-69	DATE 11-22-71	1668	

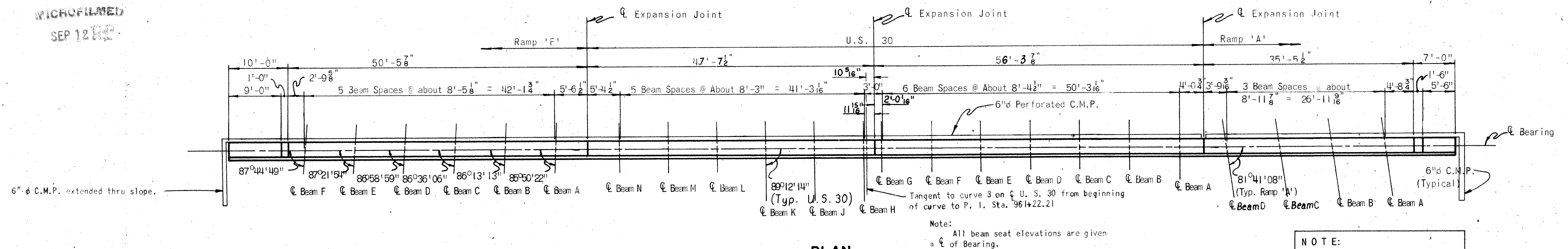
Revised 4-28-77

MICROFILMED
SEP 12 1982

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	TYPE FUNDS
2	OHIO		

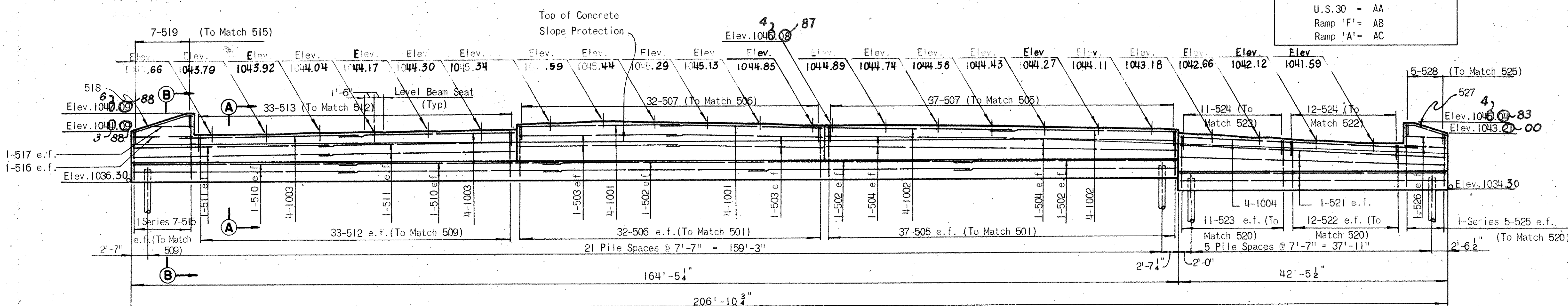
217
389

STARK COUNTY
STA-30-14.12
STA-77-9.22

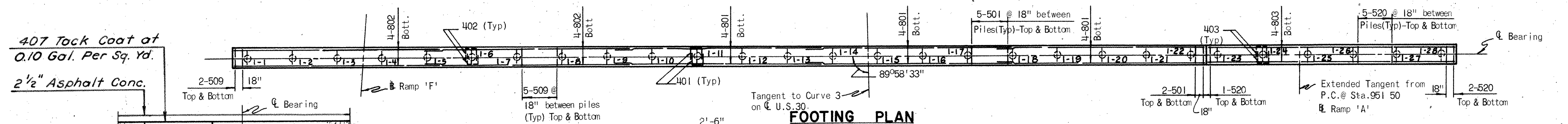


PLAN

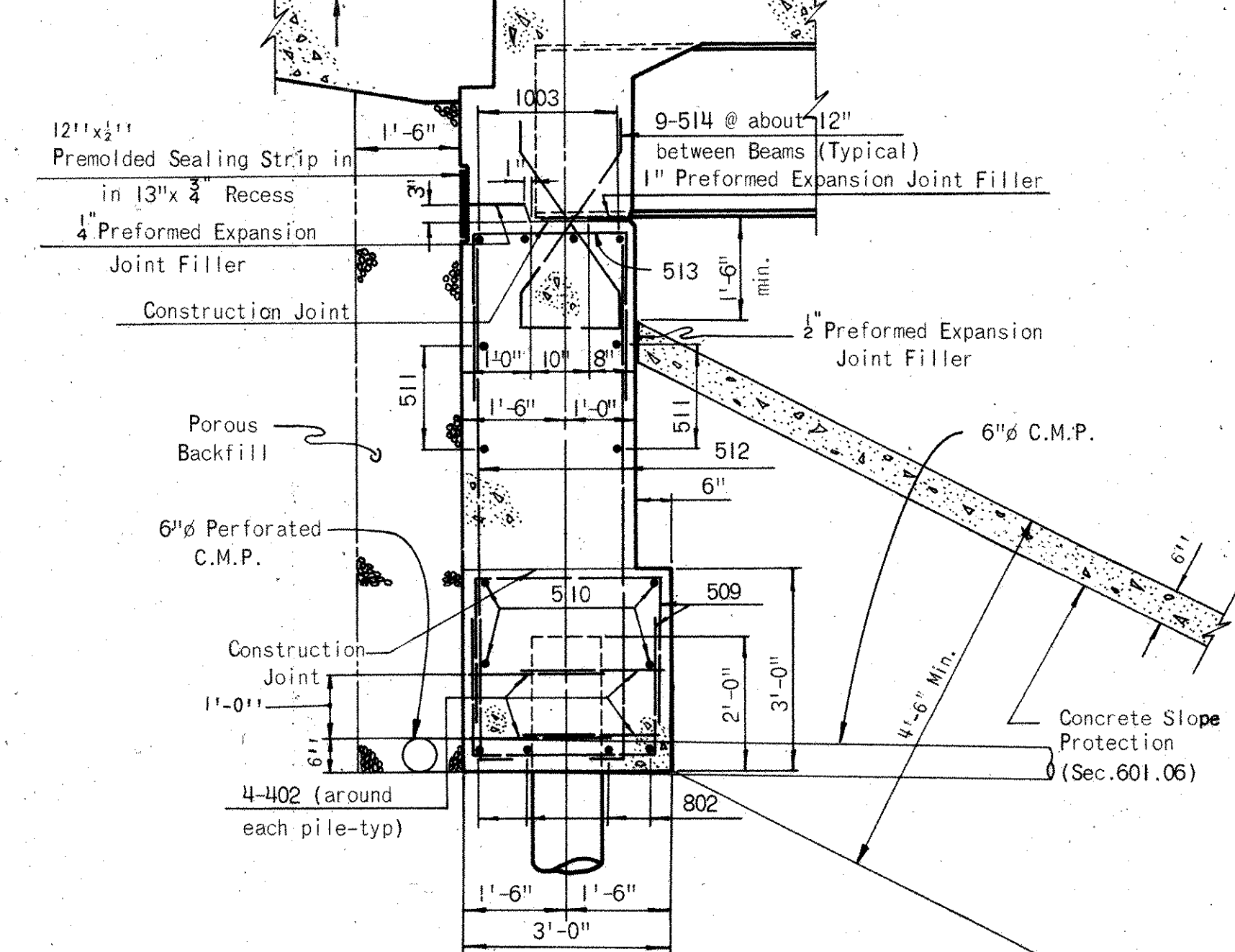
NOTE:
All reinforcing bar marks shall
be prefixed as follows:
U.S. 30 - AA
Ramp 'F' - AB
Ramp 'A' - AC



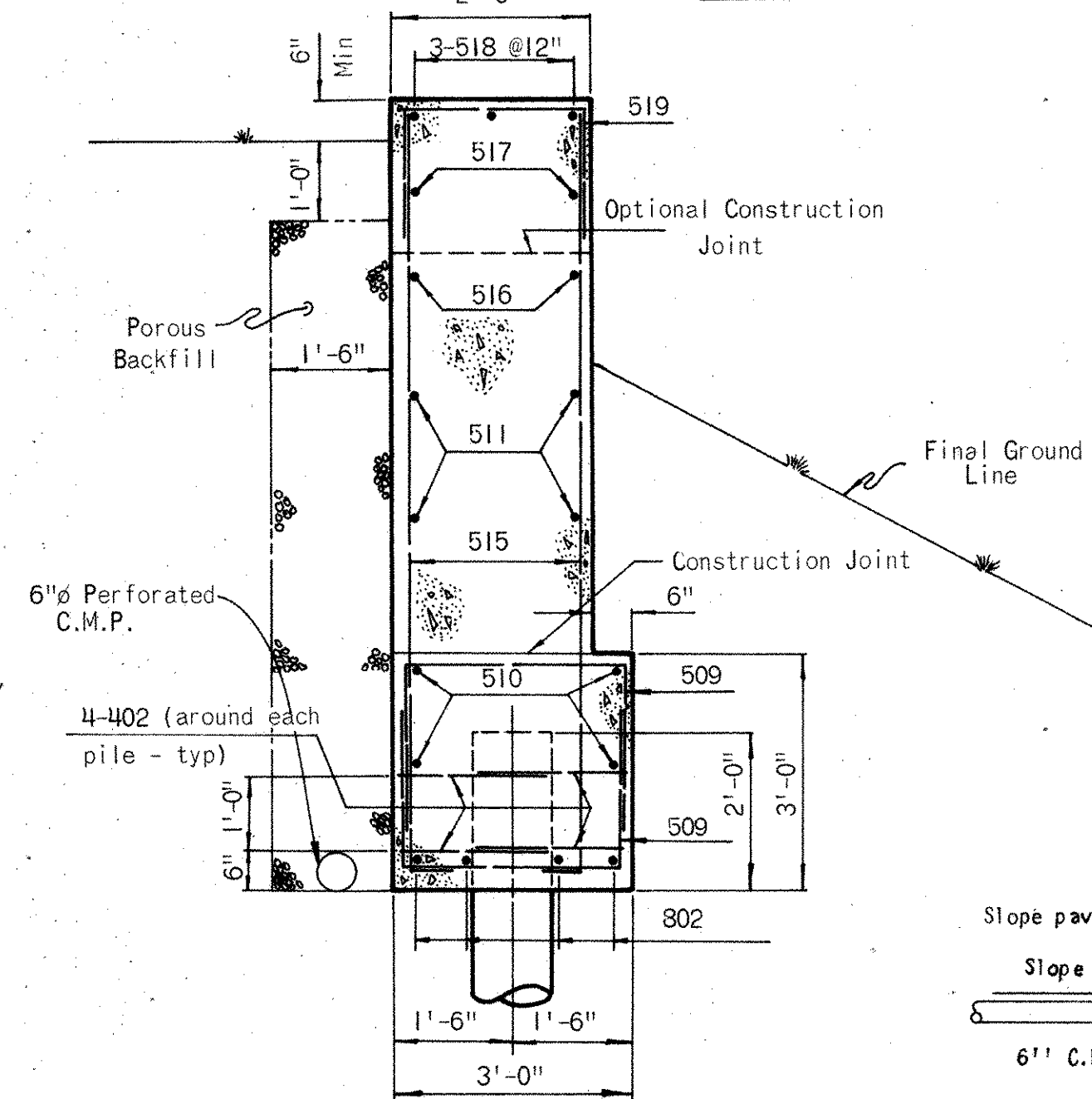
ELEVATION



FOOTING PLAN

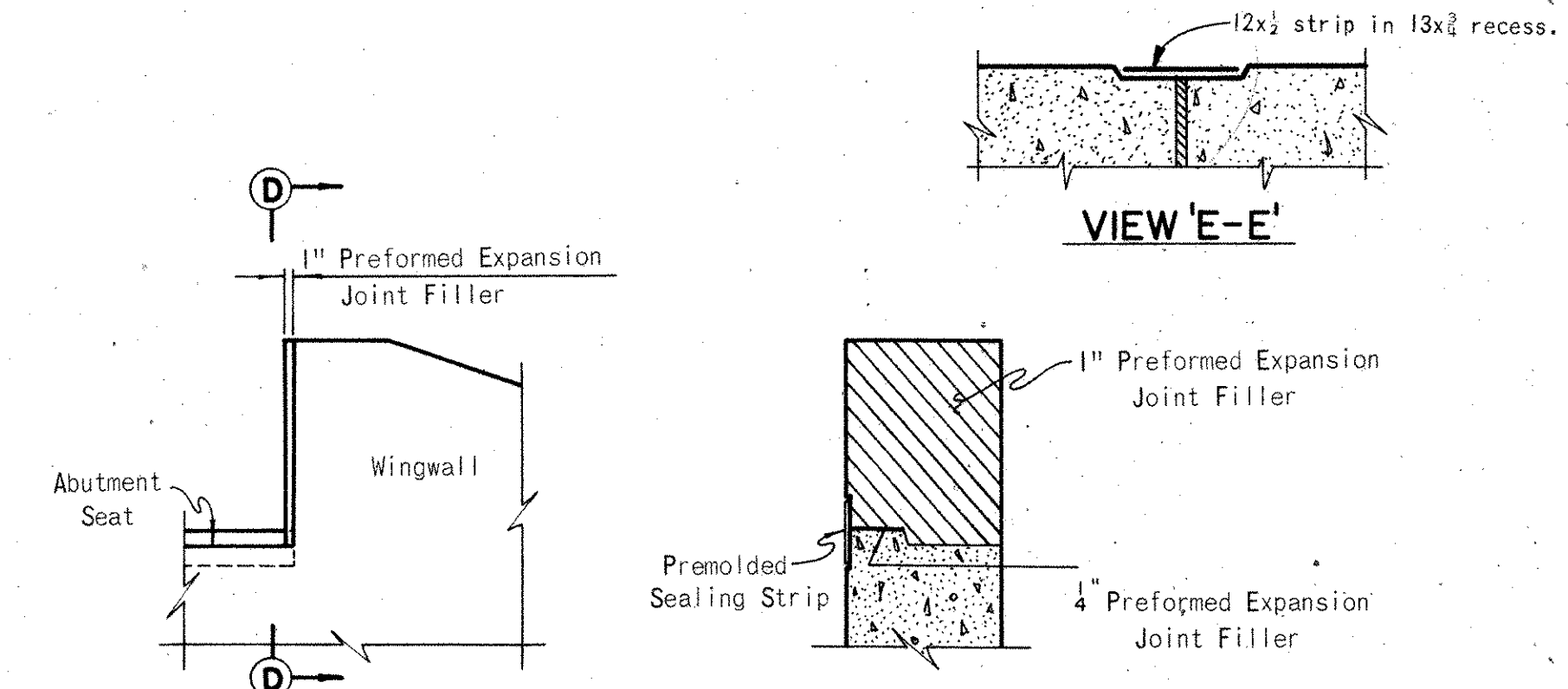


SECTION 'A-A'



SECTION 'B-B'

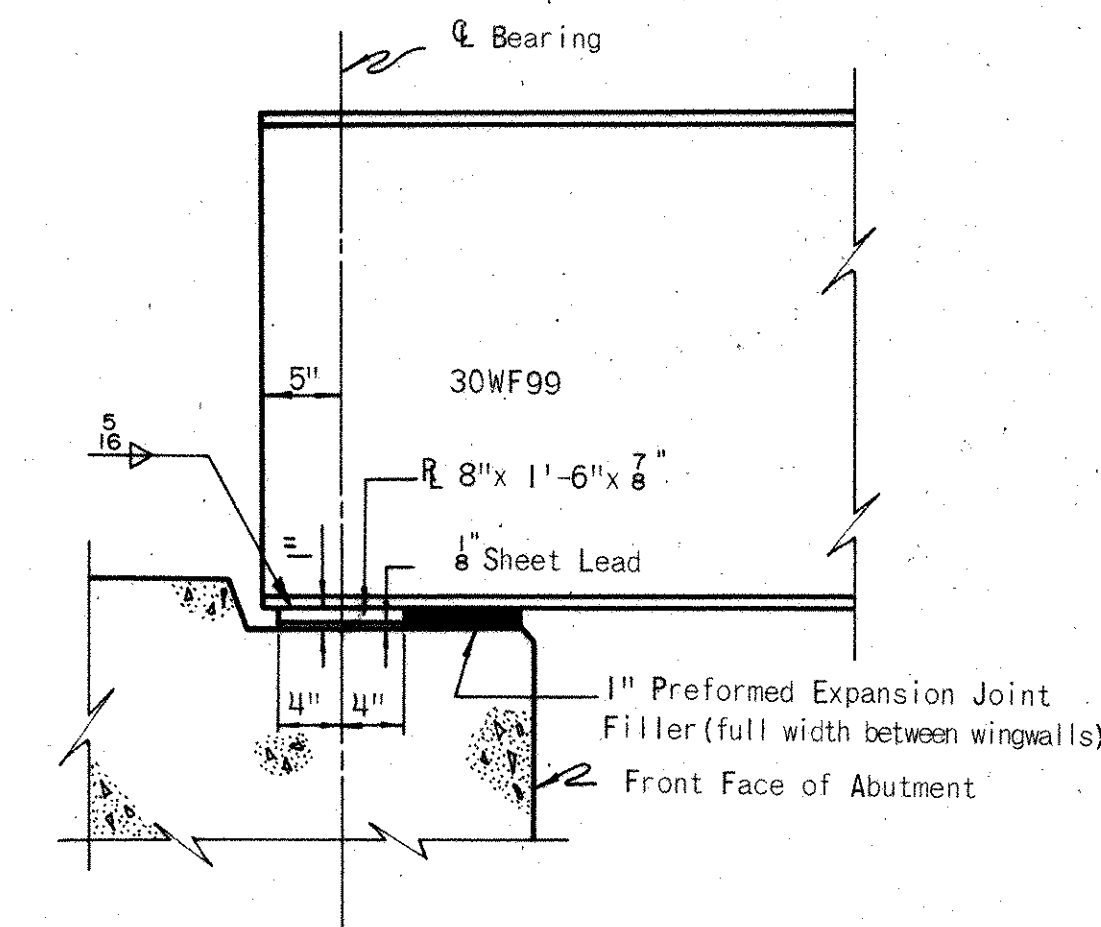
C.M.P. AT OUTLET



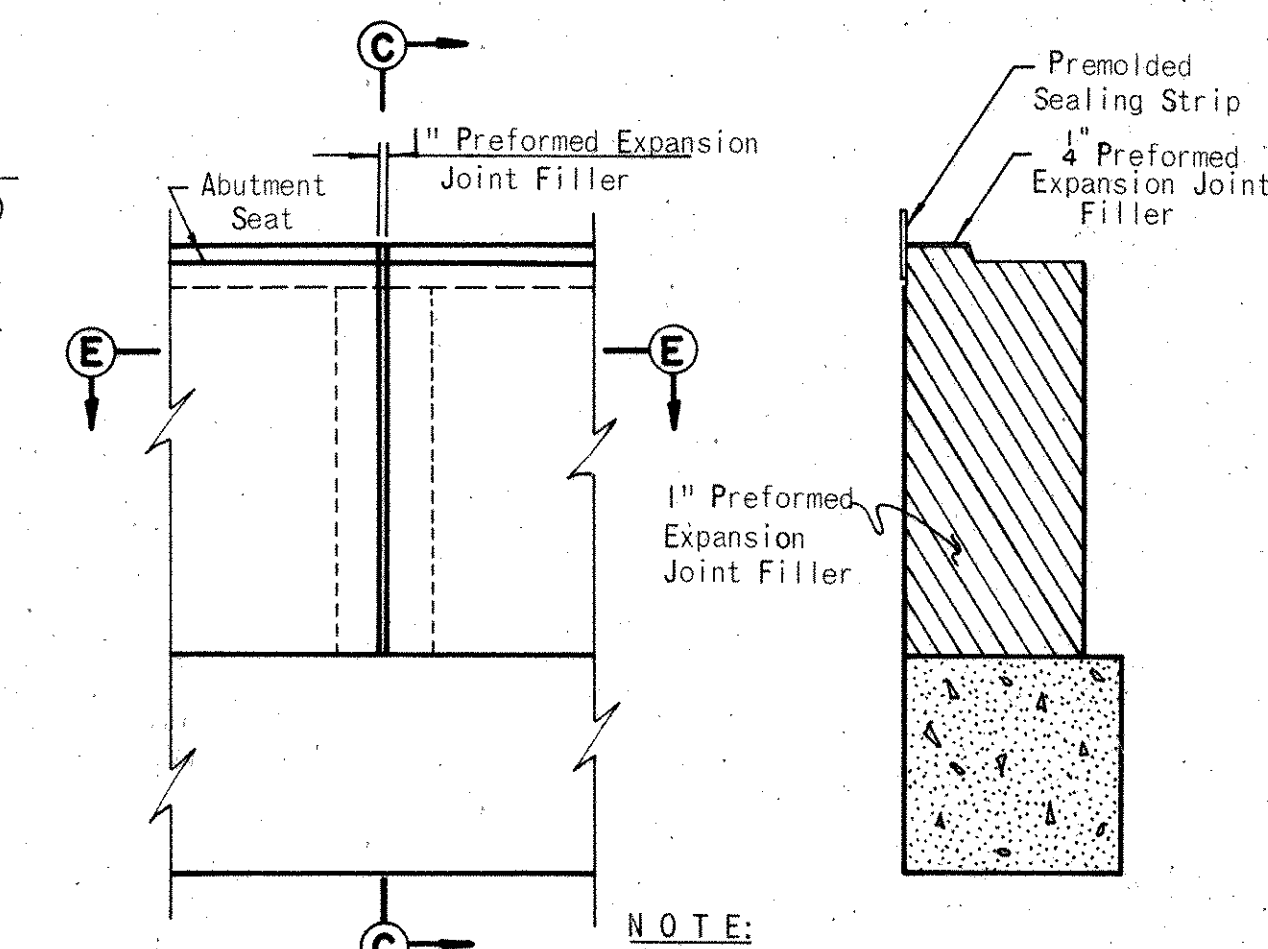
FRONT VIEW

VIEW 'D-D'

TYPICAL EXPANSION JOINT AT WINGWALL



ABUTMENT BEARING PLATE DETAIL



FRONT VIEW

VIEW 'C-C'

TYPICAL EXPANSION JOINT

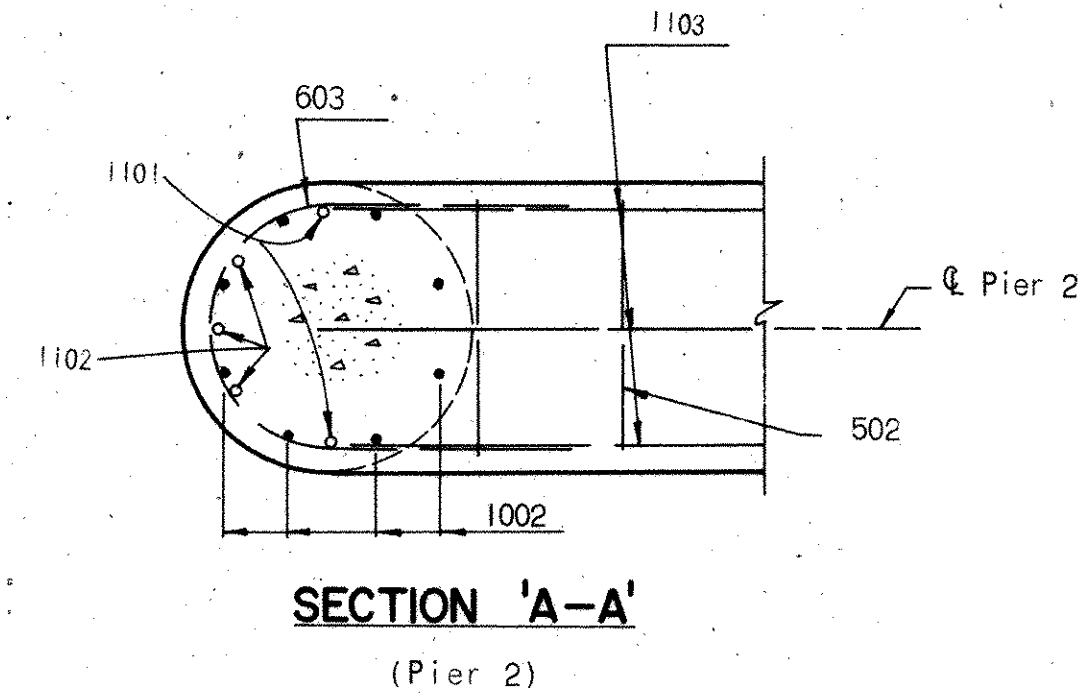
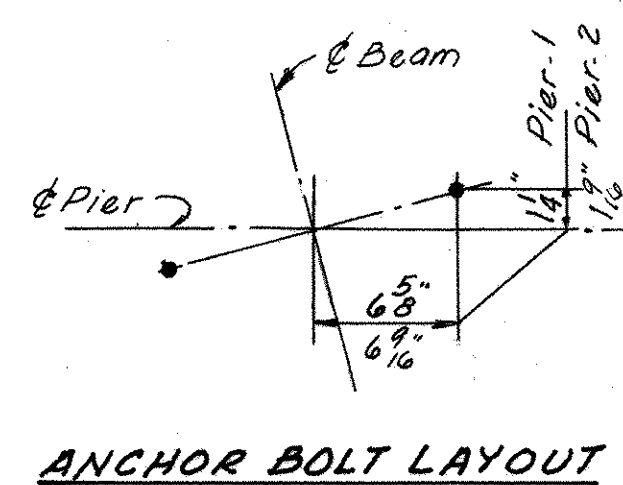
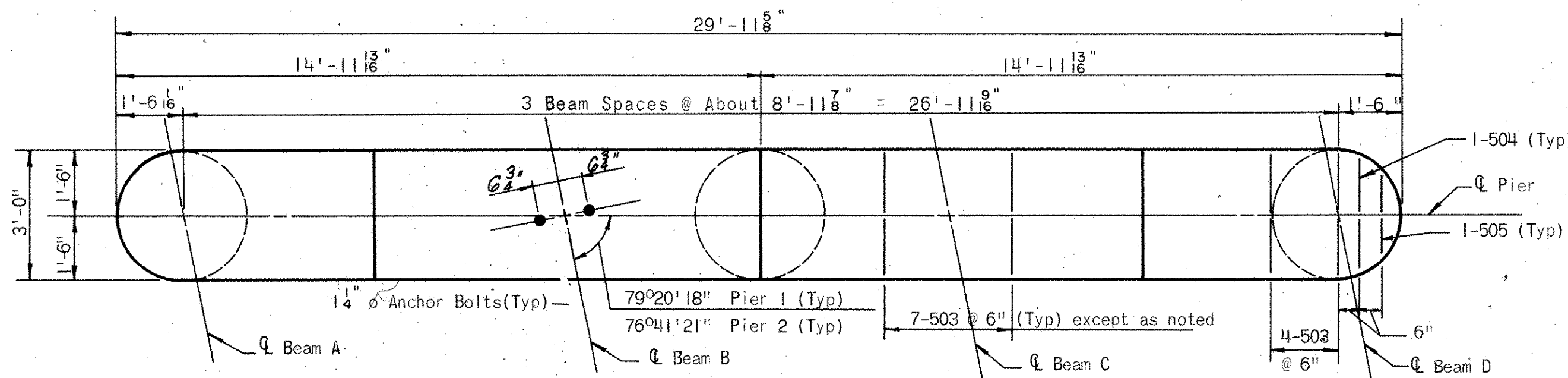
Notes:
All piles shall be 12" C.I.P.C.
The following abbreviation is used:
e.f. = each face.
Section A-A and B-B are similar for
all three bridges.
6" C.M.P. shall be perforated only
within limits of porous backfill.
See deck plans for abutment details
above beam seats.
For reinforcement schedule see
sheets 9, 13, 17 & 18.

H.N.T.B. BRIDGE NOS. 15 AND 15 Revised 6-16-75 By W.E.B.
HOWARD, NEEDLES, TAMMEN & BERGENDOFF 3 / 18
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

WEST ABUTMENTS			
BR NO. STA - 30-1474		STA. 952-96.77	
BR NO. STA - 30-1474R		STA. 954-11.76	
BR NO. STA - 30-1474L			
SCALE: 1" = 10'-0"			
RELOCATED U.S. 30			
CANTON		STARK COUNTY	
		OHIO	
DRAWN	TRACED	CHECKED	REVIEWED
K.T.B.	J.M.W.	J.A.H.	MJK
DATE: 2-21-69	DATE: 3-6-69	DATE: 3-4-69	DATE: 11-22-71
			1668

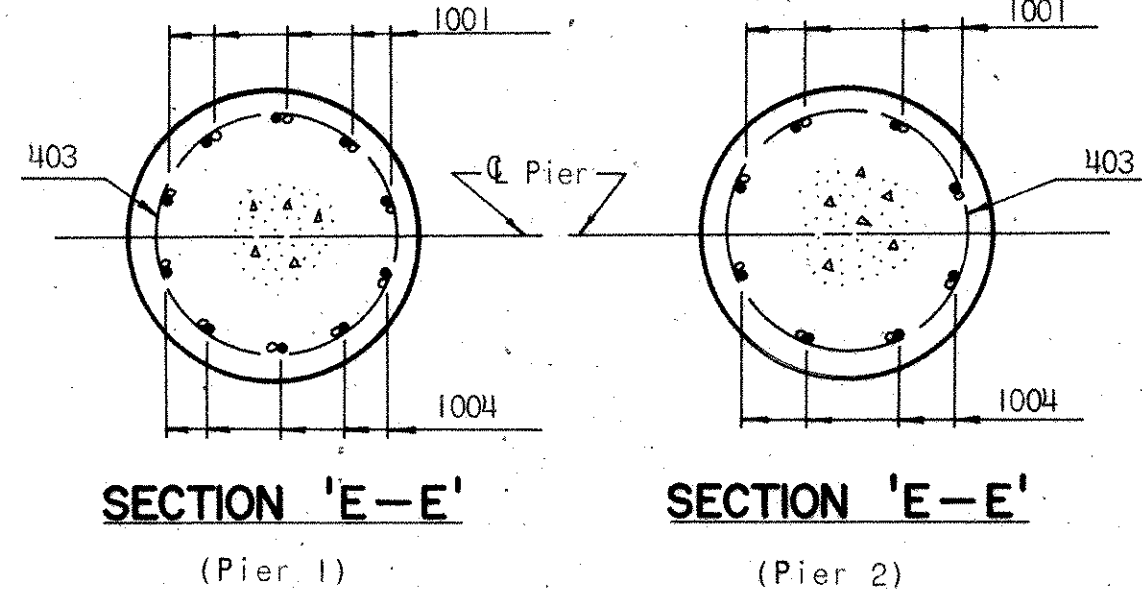
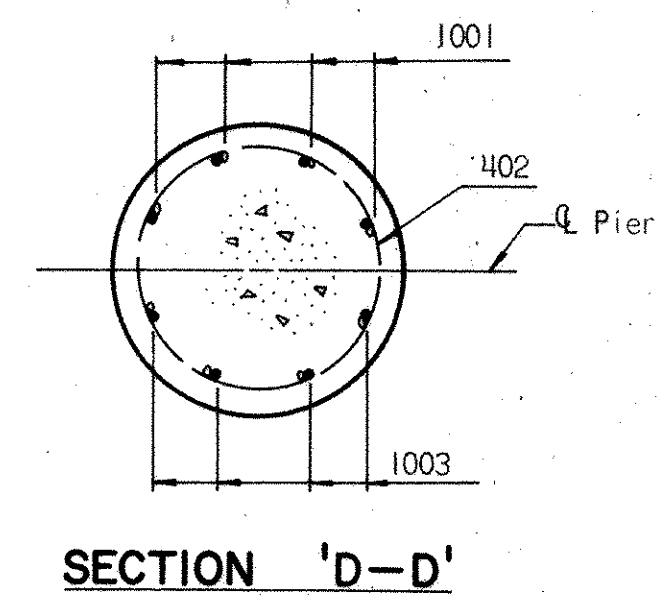
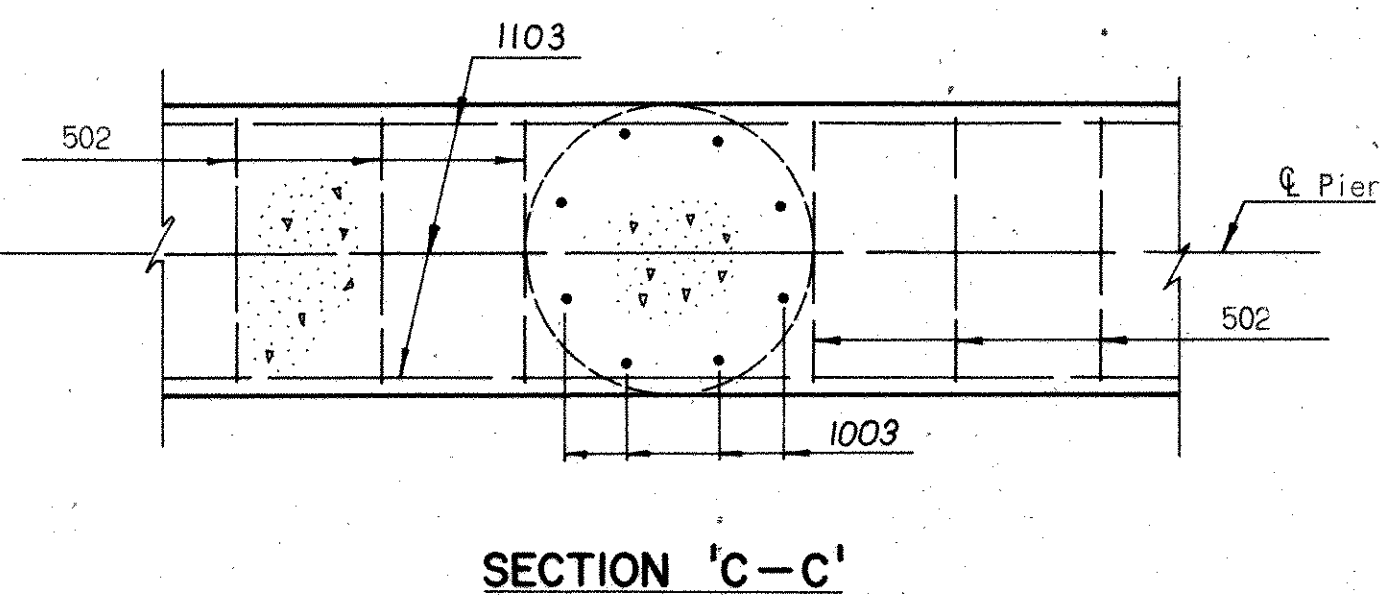
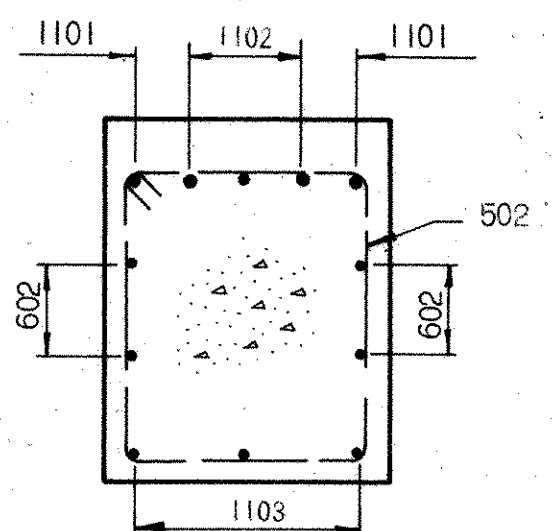
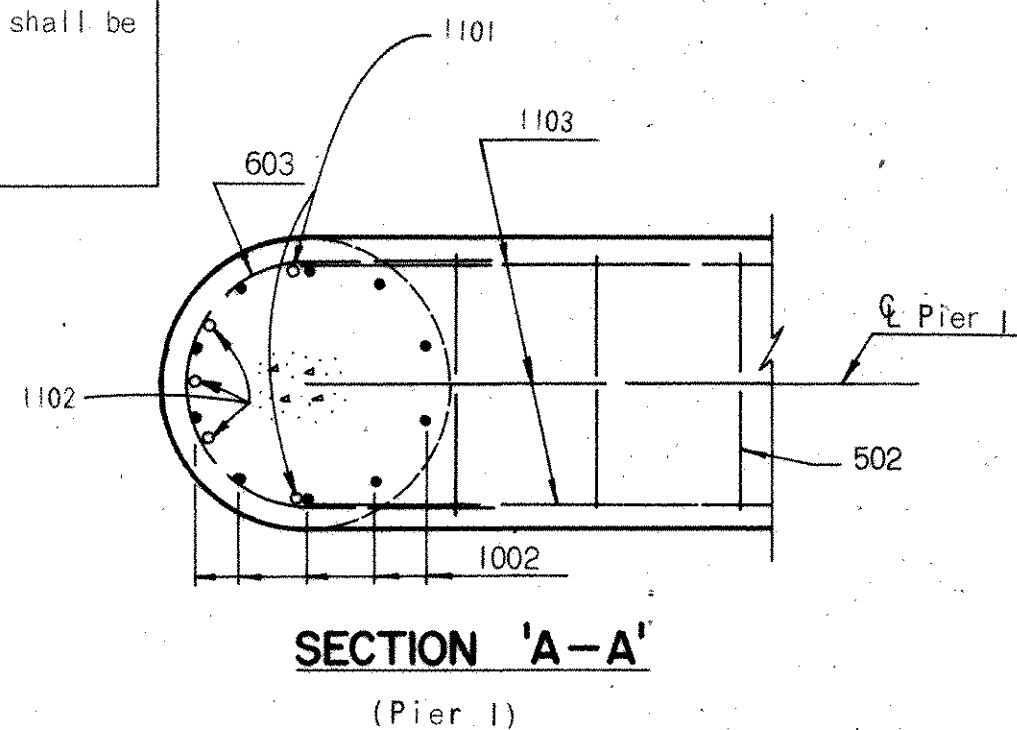
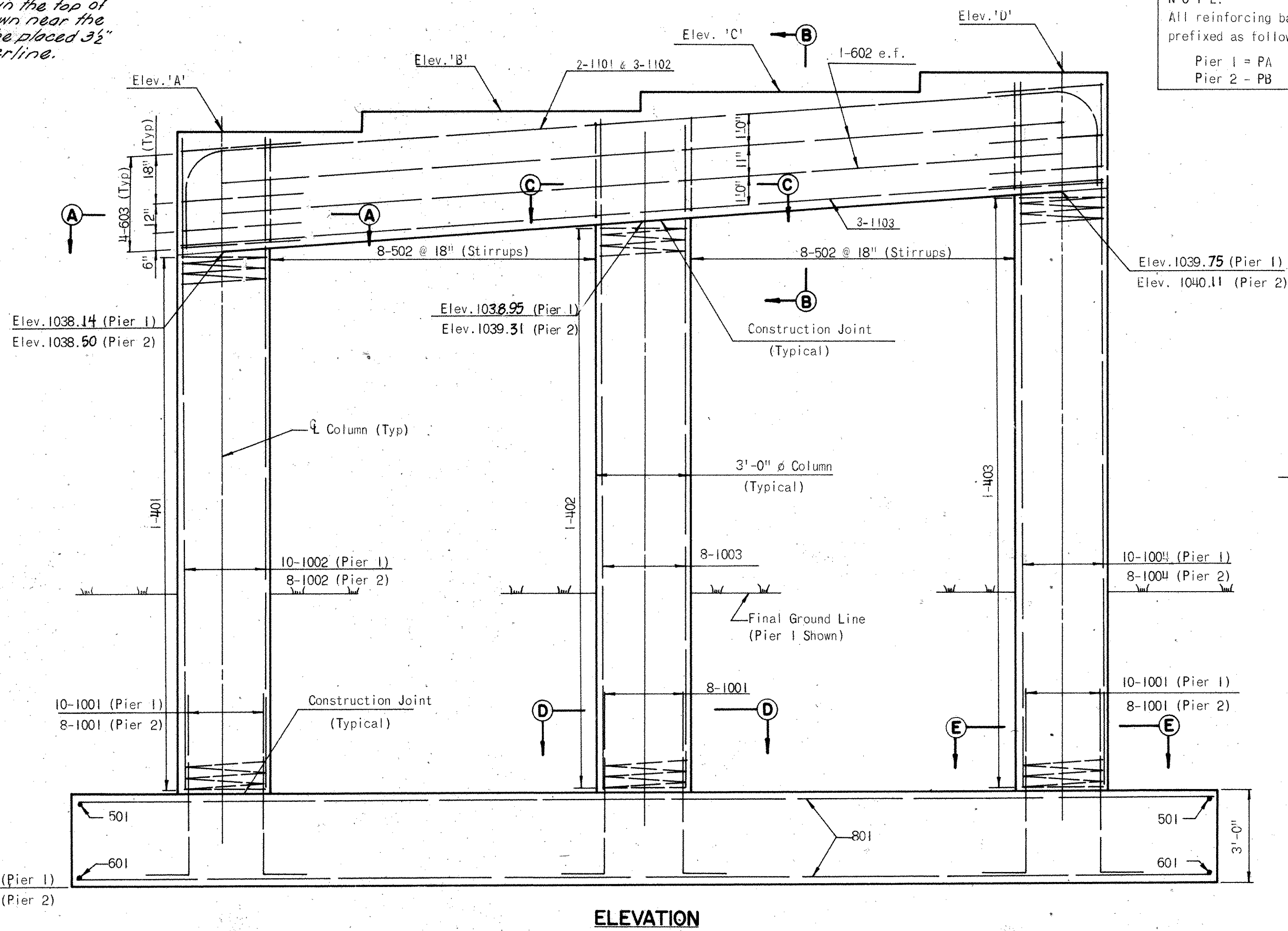
Revised 4-28-77

STARK COUNTY
STA-30-14.12
STA-77-9.22

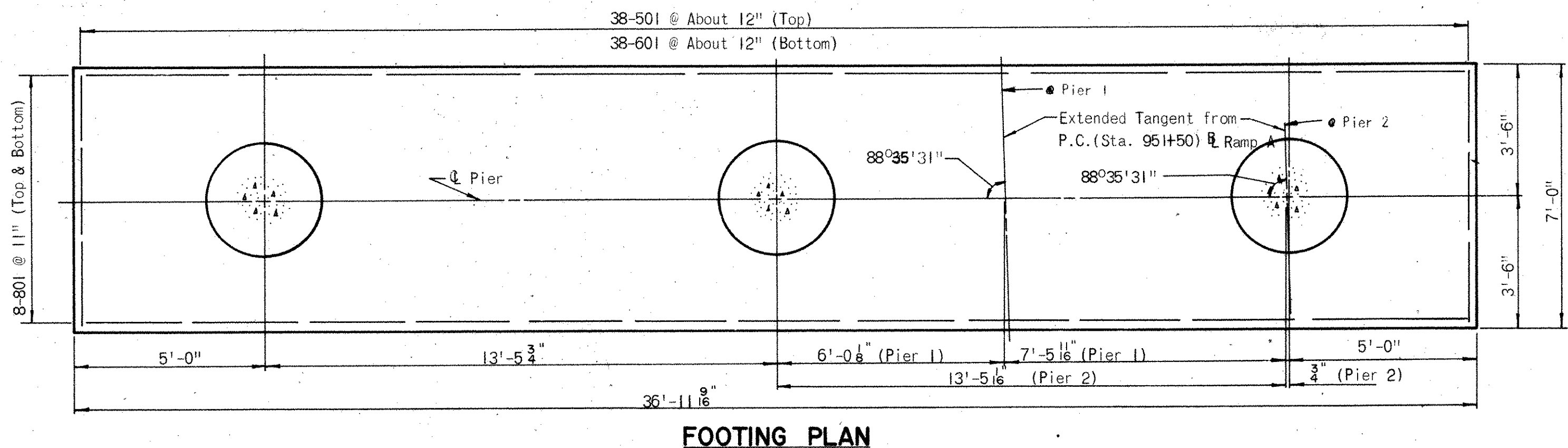


NOTE:
Special care shall be taken when placing reinforcement so as not to interfere with anchor bolt setting. The reinf. bar in the top of the cap, shown near the pier shall be placed 3 1/2" off the centerline.

NOTE:
All reinforcing bars shall be prefixed as follows:
Pier 1 = PA
Pier 2 = PB



Notes:
For Anchor Bolt details see Sheet 18/18.
For Layout Diagram see Sheet 27/18.
The following abbreviation is used:
e.f. = each face.
Pier 2 is similar to Pier 1 except as noted.
All stirrups within 4 feet of Column shall be placed with hooks in the bottom of cap. All others shall be placed with hook in the top.



PIER SEAT ELEVATIONS		
	PIER 1	PIER 2
'A'	1041.95	1042.43
'B'	1042.49	1042.97
'C'	1043.03	1043.50
'D'	1043.56	1044.04

H.N.T.B. BRIDGE NO. 15 Revised 7-9-75 By WEB

HOWARD, NEEDLES, TAMMEN & BERGENDOFF 14/18
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

PIERS

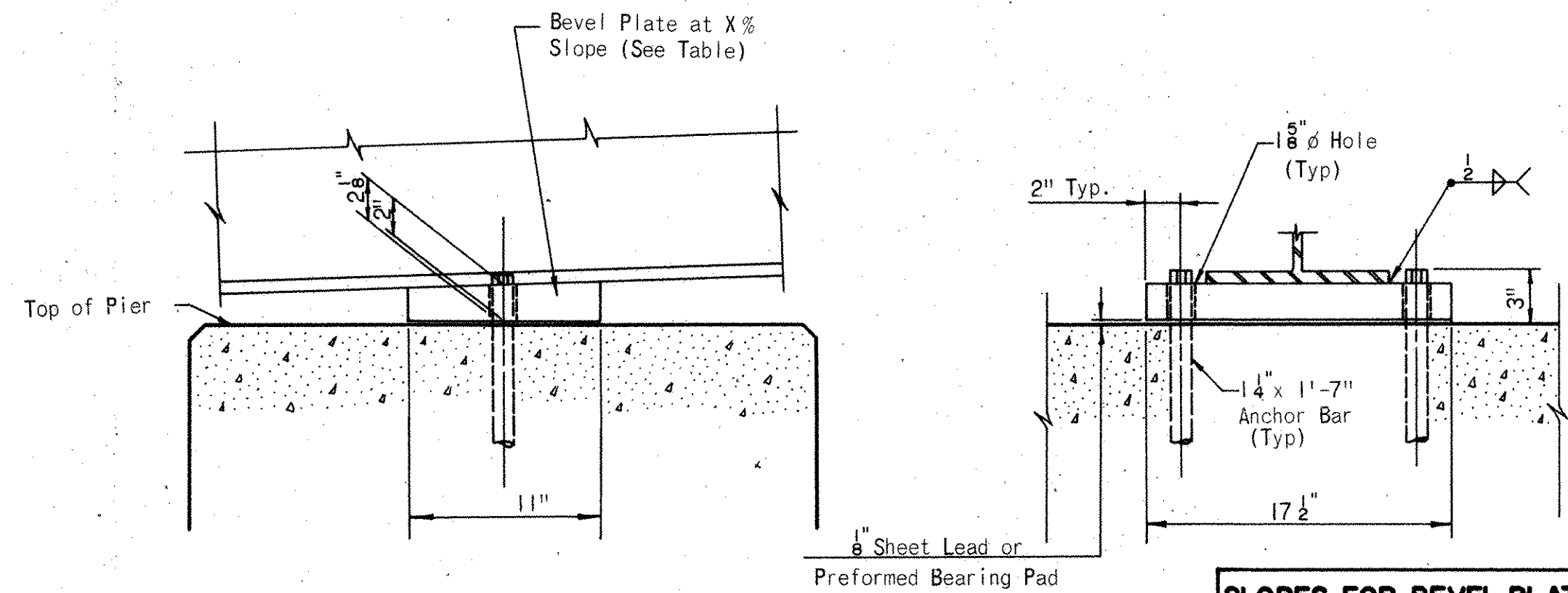
RAMP A OVER HENRY AVE.
BR. NO. STA-30-1474L STA. 952+97.80
SCALE: 3/8" = 1'-0" STA. 954+06.43
RELOCATED U.S. 30

CANTON STARK COUNTY OHIO

DRAWN J.B.C. DATE 2-20-69	TRACED J.M.W. DATE 2-26-69	CHECKED K.T.B. DATE 2-25-69	REVIEWED H.P.K. DATE 4-22-71	REVISED 3-2-76
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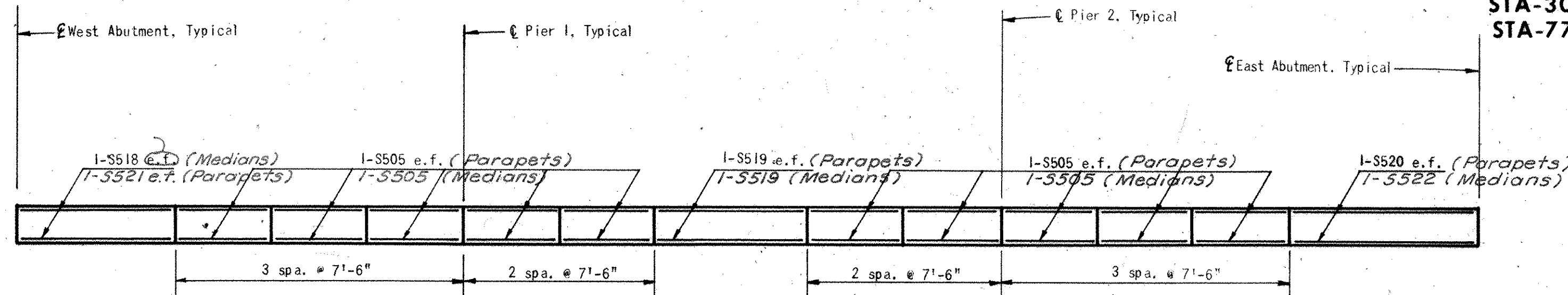
1668

STARK COUNTY
STA-30-14.12
STA-77-9.22

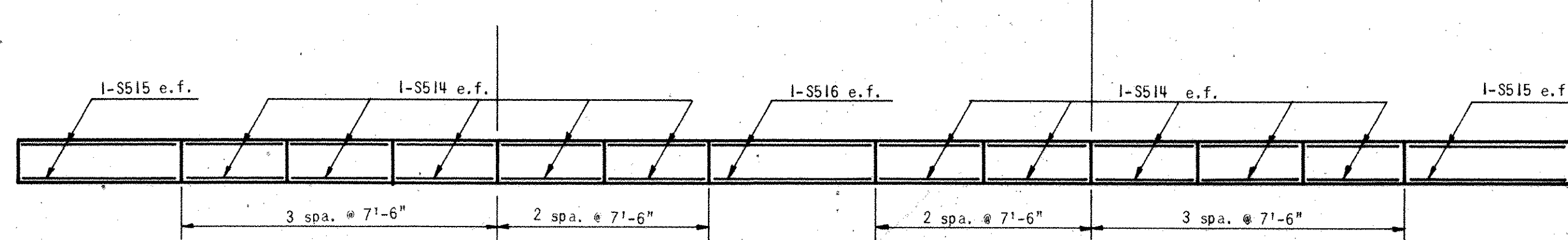


FIXED BEARING (F-150)

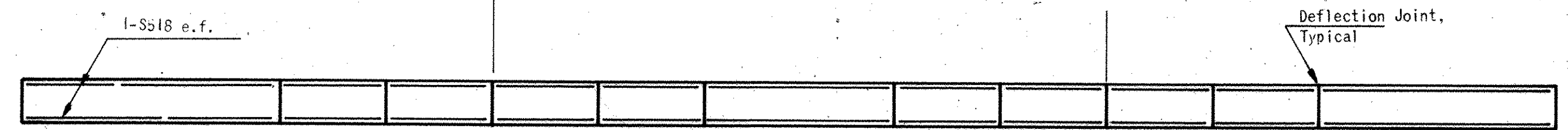
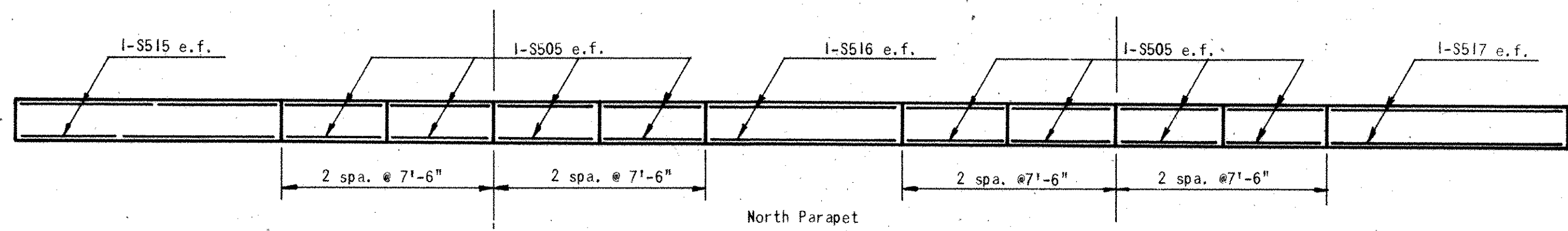
SLOPES FOR BEVEL PLATES		
		% SLOPE
Br.No.1	Pier 1	2.96
	Pier 2	2.96
Br.No.5	Pier 1	1.11
	Pier 2	0.68
Br.No.15	Pier 1	1.28
	Pier 2	0.85



PARAPET JOINTS - US 30
Typical for Both Parapets and Median

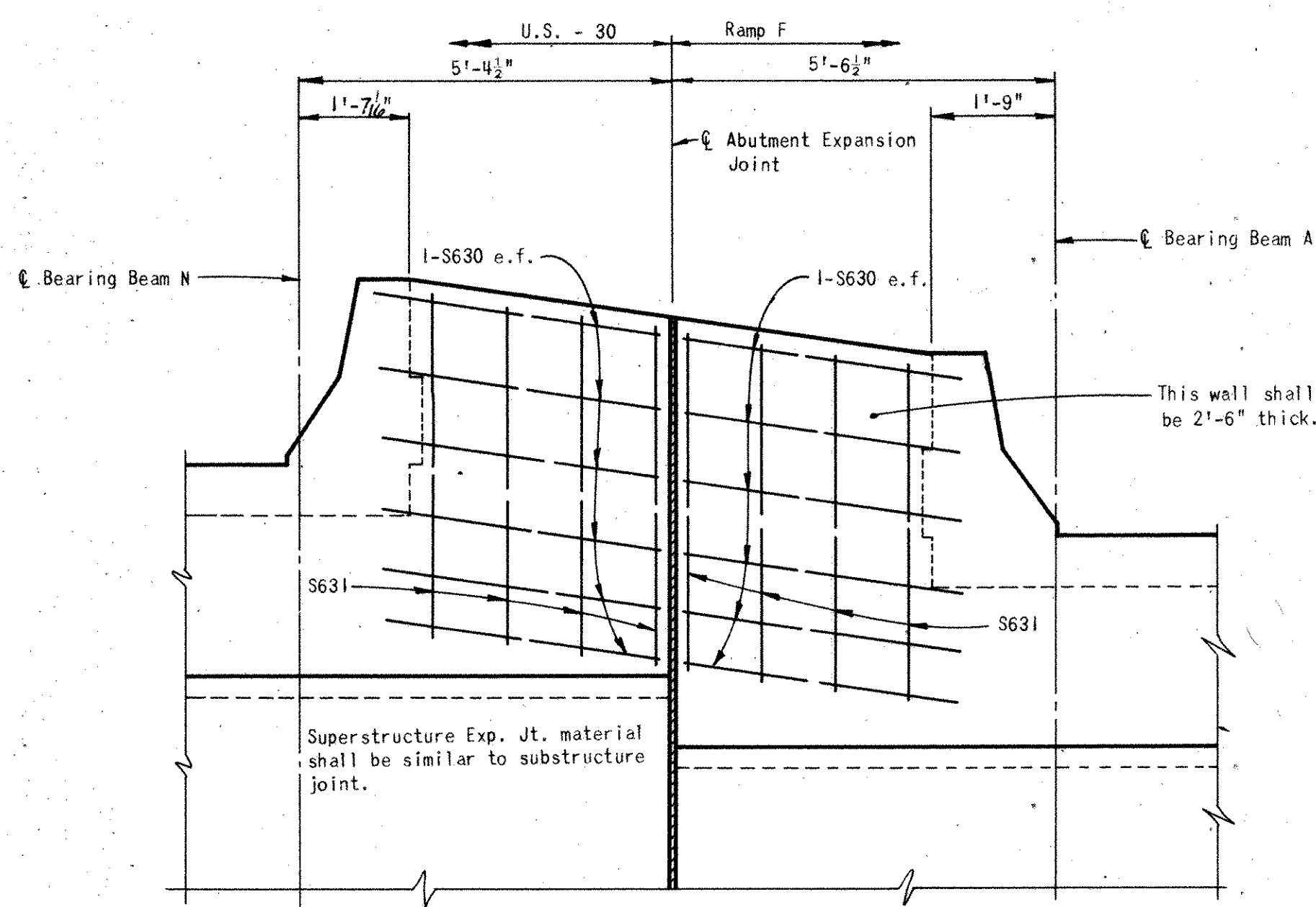


PARAPET JOINTS - RAMP F
Typical for Both Parapets



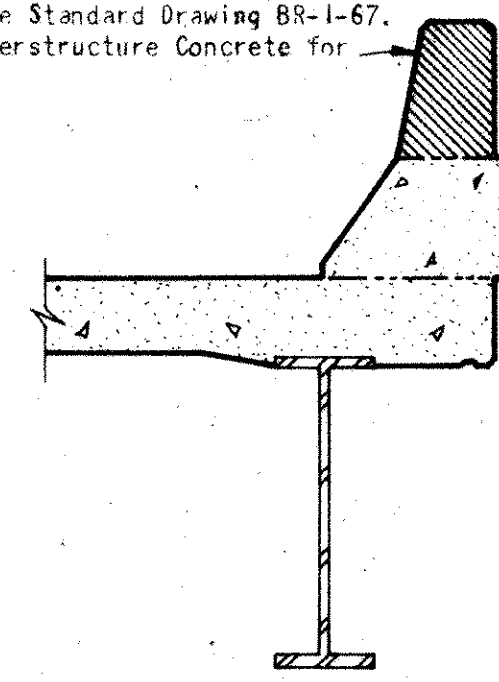
Joint spacing and other reinforcing similar to North Parapet, except as noted.

PARAPET JOINTS - RAMP A



BARRIER WALL AT WEST ABUTMENT

1 1/2" gray sponge rubber expansion joint filler or 1 1/2" gray cellular polyvinyl chloride (PVC) sponge. See Standard Drawing BR-1-67. (Include with Superstructure Concrete for payment.)

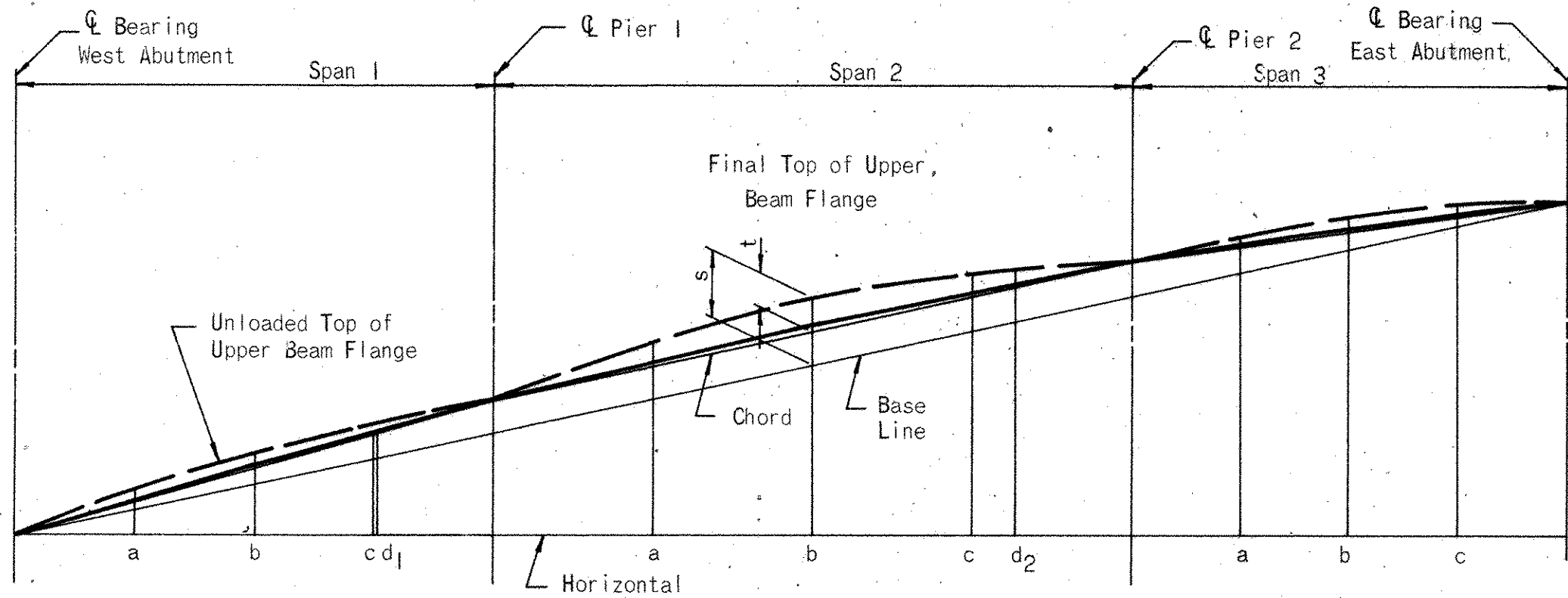


SECTION THRU
DEFLECTION JOINT

H.N.T.B. BRIDGE NOS. 1, 5 AND 15			
HOWARD, NEEDLES, TAMMEN & BERGENDOFF			18 / 18
CONSULTING ENGINEERS			
KANSAS CITY CLEVELAND NEW YORK			
SPECIAL DETAILS			
BR NO STA. 30-1474		STA. 952-96.77	
BR NO STA. 30-1474R		STA. 954-11.76	
BR NO STA. 30-1474L			
SCALE: NO SCALE			
RELOCATED U.S. 30			
CANTON		STARK COUNTY OHIO	
DRAWN K.T.B.	TRACED J.M.W.	CHECKED J.B.C.	REVIEWED M.T.K.
DATE: 6-69	DATE: 10-69	DATE: 1-69	DATE: 11-71
			1668

STARK COUNTY
STA-30-14.12
STA-77-9.22

NOTE:
The $\frac{1}{4}$, $\frac{1}{2}$, and $\frac{3}{4}$ points of the spans are indicated by a, b, and c, respectively. The center lines of Bend Line 1 (Field Splice 1) and Bend Line 2 (Field Splice 2) are indicated by d_1 and d_2 respectively. Vertical offsets measured from the base line between abutment bearings to the unloaded top of upper flange and measured from the chord between bearing points to the unloaded top of upper beam flange are indicated by s and t respectively.



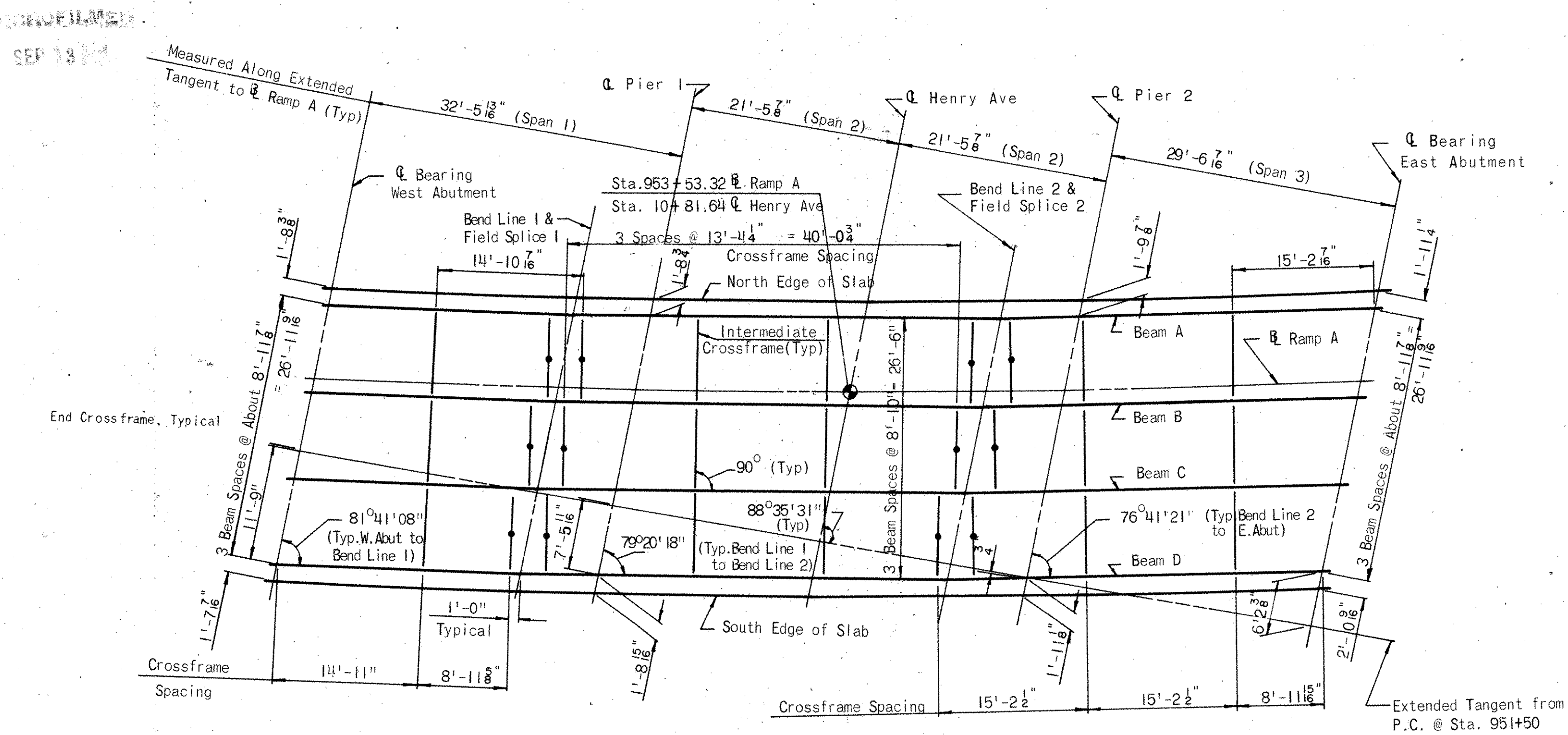
CAMBER DIAGRAM
(See Table)

HORIZONTAL OFFSETS		
	BEAM A to NORTH EDGE SLAB	BEAM D to SOUTH EDGE SLAB
Q Brg.W.Abut.	1'-8 1/2"	1'-7 1/4"
1	1'-7 1/2"	1'-7 7/8"
2	1'-8 3/8"	1'-7 1/2"
3	1'-10 1/8"	1'-6 3/4"
4	1'-10 1/2"	1'-6 1/2"
Bend Line 1	1'-10 1/2"	1'-6 1/2"
Q Pier 1	1'-8 1/2"	1'-8 3/8"
1	1'-7 1/2"	1'-10 3/8"
2	1'-8 3/8"	1'-10 1/2"
3	1'-10 1/4"	1'-8 15/16"
4	1'-10 1/2"	1'-8 1/4"
Bend Line 2	1'-10 1/2"	1'-8 1/4"
Q Pier 2	1'-9 1/2"	1'-10 1/2"
1	1'-8 3/8"	2'-0"
2	1'-8 1/2"	2'-0 5/8"
3	1'-9 3/8"	2'-0 9/8"
4	1'-10 1/2"	1'-11 1/2"
Q Brg.E.Abut.	1'-10 1/2"	1'-11 1/2"

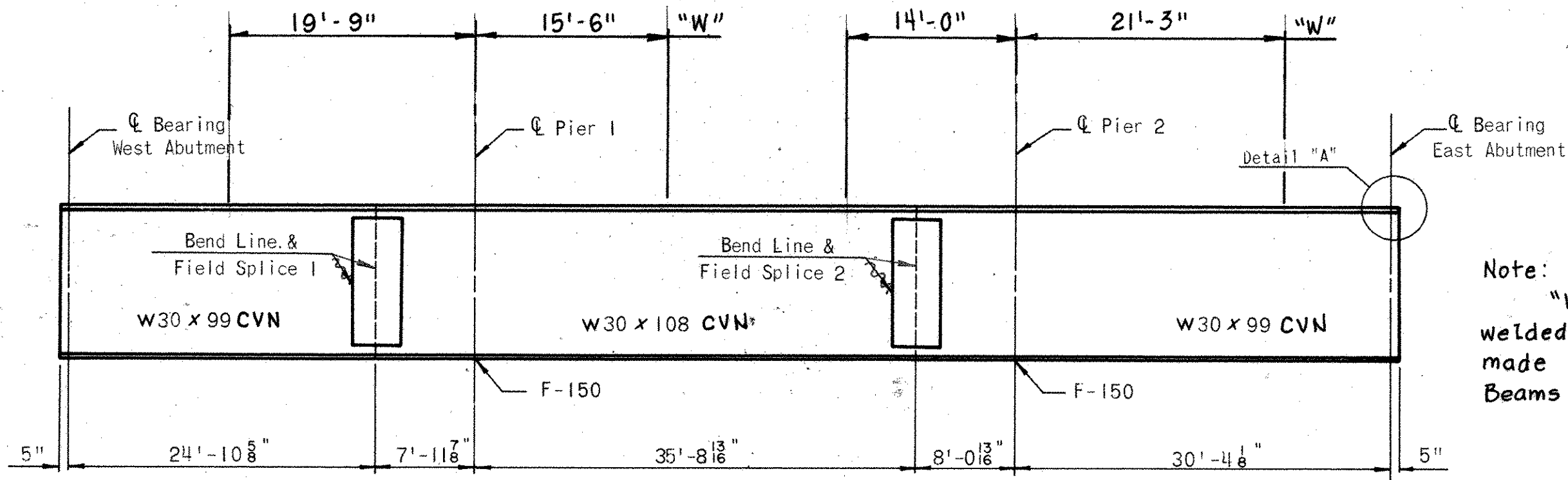
NOTE:
Horizontal offsets are given at Bend Lines, Q Bearings and 4 points between Q Bearings and are perpendicular to Q Beams.

Notes:
For Details of Fixed Bearing see Sheet 13/18.
For Details of Intermediate and Bend Line Crossframes see Sheet 360.
For Details of Beam Field Splices see Sheet 355.
For Detail "A" see Sheet 7/18.
—•— Denotes Bend Line Crossframe

NOTES:
Deflections and Convexities are given to the nearest 1/16 inch.
The following abbreviations are used:
S = Dead Load Deflection due to the weight of the steel
R = Remaining Dead Load Deflection
C = Convexity
T = Required Shop Camber



FRAMING PLAN



CVN- See Sheet 214.

TYPICAL BEAM ELEVATION

VERTICAL OFFSETS FOR ALL BEAMS IN UNLOADED POSITION																										
BEAMS	Span 1								Span 2								Span 3								BEAMS	
	1 Point		2 Point		3 Point		Bend Line 1		Pier 1	1 Point		2 Point		3 Point		Bend Line 2		Pier 2	1 Point		2 Point		3 Point			
	a		b		c		d ₁			a		b		c		d ₂			a		b		c			
	s	t	s	t	s	t	s	t		s	t	s	t	s	t	s	t		s	t	s	t	s	t		
	A	9 16	3 16	15 16	4 16	14 16	5 16	3 16	7 16	0	14 16	5 16	7 16	2 16	13 16	3 16	11 16	5 16	13 16	0	11 16	16	13 16	8 16		7 16
B	2 8	3 16	1 8	4 16	5 16	4 16	5 16	4 16	0	11 16	4 16	13 16	7 16	13 16	7 16	11 16	5 16	13 16	0	11 16	16	13 16	8 16	7 16	8 16	B
C	5 16	1 8	1 16	5 16	13 16	4 16	13 16	4 16	12 0	0	12 16	4 16	7 16	13 16	7 16	11 16	5 16	13 16	0	11 16	16	13 16	8 16	7 16	8 16	C
D	3 8	3 8	13 16	3 8	7 16	3 16	11 16	7 16	0	18 16	4 16	2 16	7 16	15 16	7 16	14 16	5 16	11 16	0	18 16	16	13 16	8 16	7 16	8 16	D

		DEAD LOAD DEFLECTION AND CAMBER																																												
BEAM	Span 1												Span 2												Span 3												BEAM									
	1/4 Point				1/2 Point				3/4 Point				Bend Line 1				1/4 Point				1/2 Point				3/4 Point				Bend Line 2				1/4 Point					1/2 Point				3/4 Point				
	a				b				c				d1				a				b				c				d2				a					b				c				
	S	R	C	T	S	R	C	T	S	R	C	T	S	R	C	T	S	R	C	T	S	R	C	T	S	R	C	T	S	R	C	T	S	R	C	T										
A	0	1/16	1/8	3/16	0	1/16	3/16	1/4	0	0	3/16	3/16	0	0	3/16	3/16	0	1/8	3/16	5/16	0	3/16	5/16	1/2	0	1/8	1/4	3/8	0	1/16	1/4	5/16	0	0	1/16	1/16	0	1/16	1/16	1/8	0	1/16	1/16	1/8	A	
B	0	1/16	1/8	3/16	0	1/16	3/16	1/4	0	0	1/4	1/4	0	0	1/4	1/4	0	1/8	1/8	1/4	0	3/16	4/16	5/16	1/8	0	8	5/16	7/16	0	1/16	1/16	1/8	0	0	1/16	1/16	0	1/16	1/16	1/8	0	1/16	1/16	1/8	B
C	0	1/16	3/16	1/4	0	1/16	1/4	5/16	0	0	1/4	1/4	0	0	1/4	1/4	0	1/8	1/8	1/4	0	3/16	1/4	7/16	0	1/8	5/16	7/16	0	1/16	1/4	5/16	0	0	1/16	1/16	0	1/16	1/16	1/8	0	1/16	1/16	1/8	C	
D	0	1/16	5/16	3/8	0	1/16	5/16	3/8	0	0	3/16	3/16	0	0	3/16	3/16	0	1/8	1/8	1/4	0	3/16	1/4	7/16	0	1/8	5/16	7/16	0	1/16	1/4	5/16	0	0	1/16	1/16	0	1/16	1/16	1/8	0	1/16	1/16	1/8	D	

H.N.T.B. BRIDGE NO. 15

Revised 7-9-75 By WEB

HOWARD, NEEDLES, TAMMEN & BERGENOFF

CONSULTING ENGINEERS

KANSAS CITY CLEVELAND NEW YORK

FRAMING PLAN

RAMP A OVER HENRY AVE.

BR. NO. STA-30-1474L STA. 952+97.80

SCALE: 1" = 10'-0" STA. 954+06.43

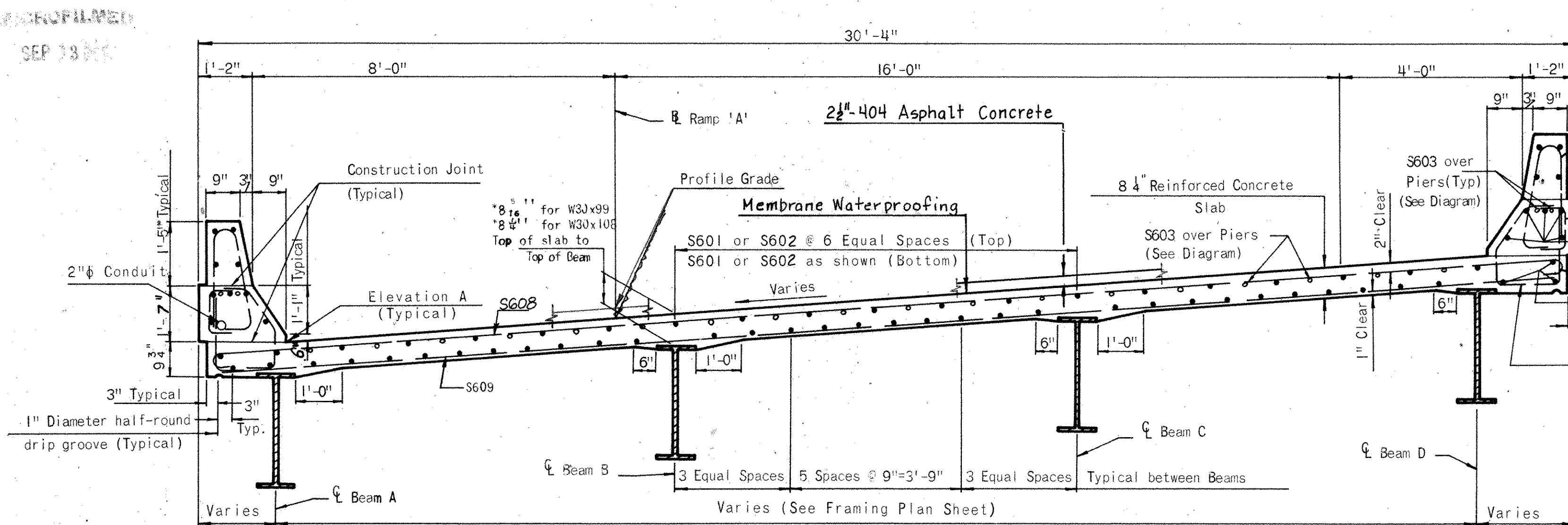
RELOCATED U.S. 30

CANTON STARK COUNTY OHIO

DRAWN J.B.C. TRACED J.M.W. CHECKED R.T.B. REVIEWED MOK
DATE: 1-31-69 DATE: 2-26-69 DATE: 2-24-69 DATE: 1-22-71

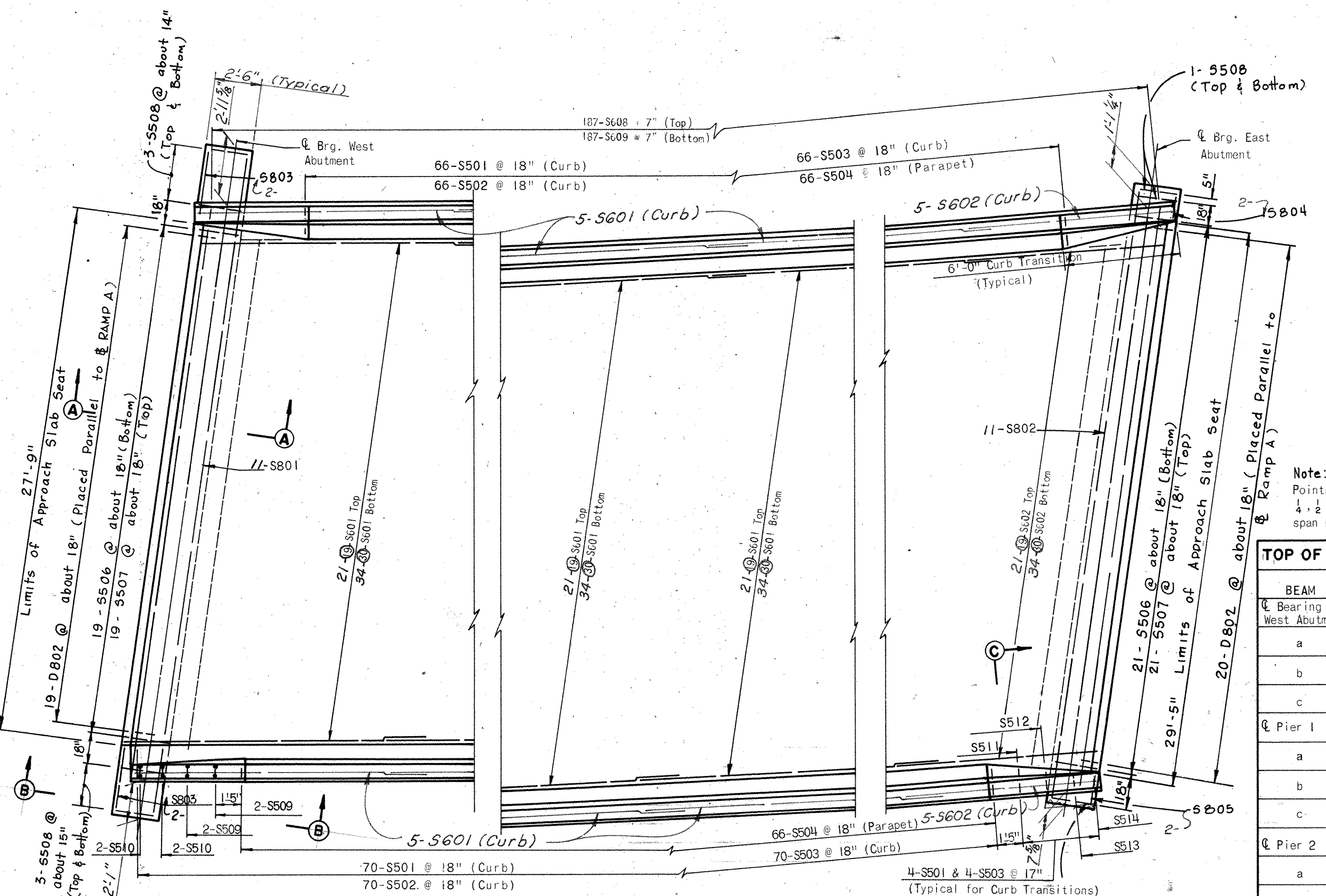
1668

Revised 4-28-77



*Deck Slab Depth:
The distance shown from top of deck slab to top of steel beam is the design dimension. The quantity of deck concrete to be paid for shall be based on this dimension, even though deviation from it may be necessary because the top flange of the beam may not have the exact camber or conformation required to place it parallel to the finished grade.

TYPICAL CROSS SECTION



NOTE:
Reinforcing bars S509 and S510 are typical for Parapet Transition.

PART SLAB PLAN

NOTE:
Reinforcing bars S511 to S514 are typical for Curb Transition

Note:
Points a, b and c are the 1/4, 1/2, and 3/4 points of span respectively

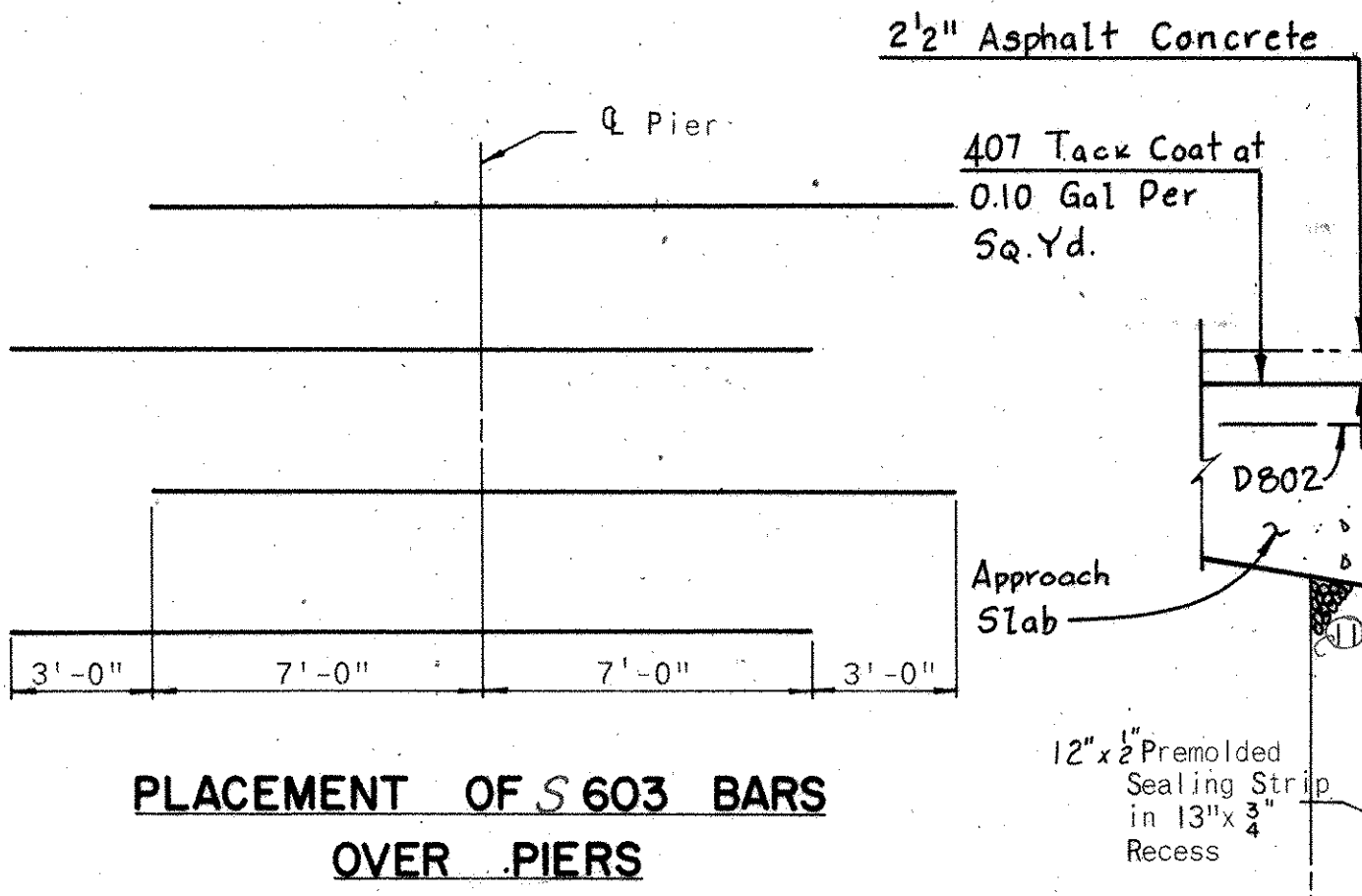
TOP OF PORTLAND CEMENT CONCRETE ELEVATIONS

BEAM	A	B	C	D
℄ Bearing West Abutment	1044.83	1045.36	1045.90	1046.42
a	1044.96	1045.49	1046.03	1046.57
b	1045.08	1045.62	1046.16	1046.69
c	1045.20	1045.74	1046.28	1046.81
℄ Pier 1	1045.30	1045.84	1046.38	1046.91
a	1045.44	1045.97	1046.51	1047.04
b	1045.56	1046.09	1046.63	1047.17
c	1045.68	1046.21	1046.75	1047.29
℄ Pier 2	1045.77	1046.31	1046.84	1047.38
a	1045.83	1046.36	1046.90	1047.43
b	1045.88	1046.41	1046.95	1047.48
c	1045.93	1046.47	1047.00	1047.54
℄ Bearing East Abutment	1045.98	1046.52	1047.05	1047.59

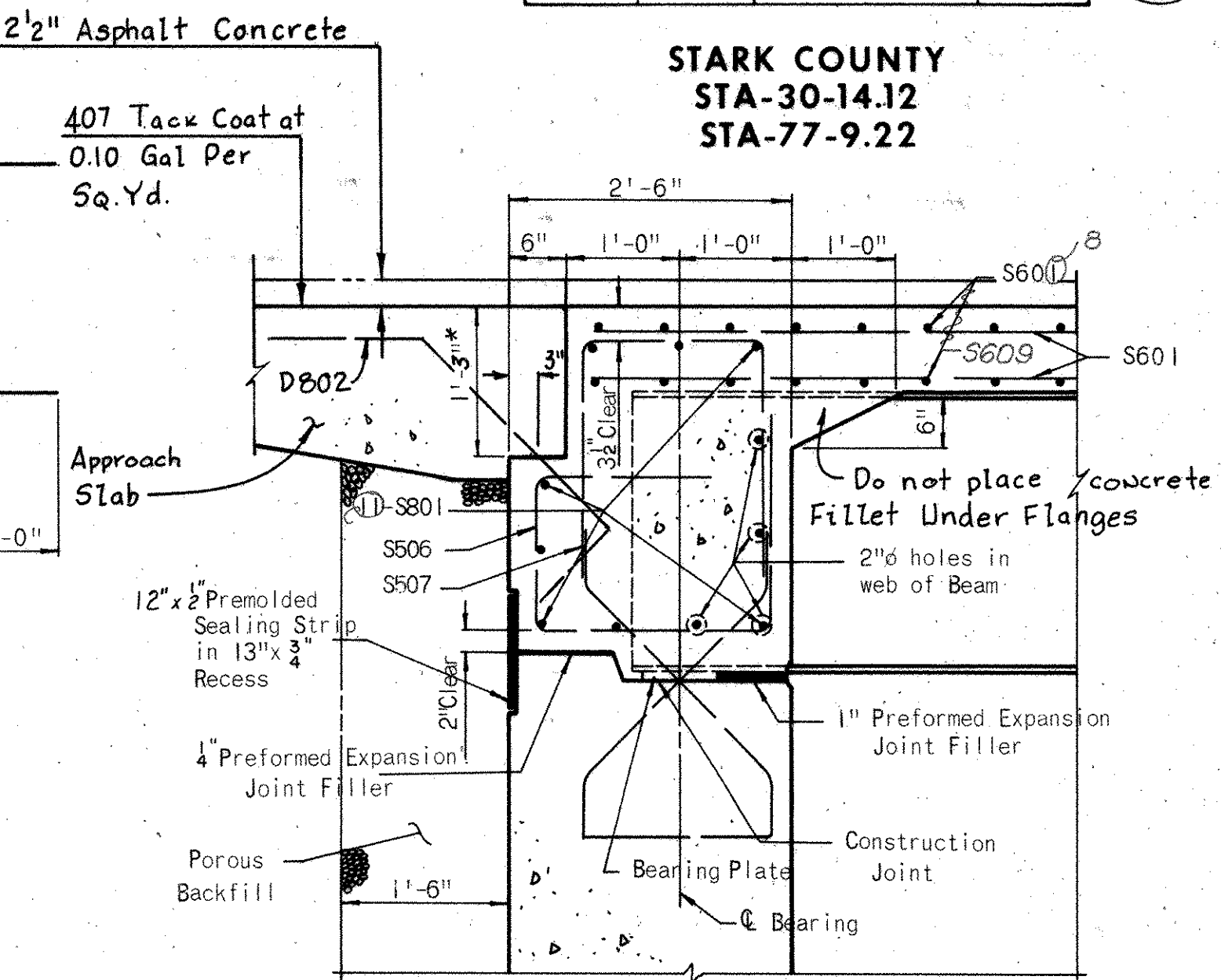
ELEVATION A

LOCATION	NORTH CURB	SOUTH CURB
℄ Bearing West Abutment	1044.83	1046.42
a	1044.96	1046.57
b	1045.08	1046.69
c	1045.20	1046.81
℄ Pier 1	1045.30	1046.91
a	1045.44	1047.05
b	1045.56	1047.17
c	1045.67	1047.29
℄ Pier 2	1045.77	1047.39
a	1045.83	1047.45
b	1045.88	1047.51
c	1045.93	1047.56
℄ Bearing East Abutment	1045.97	1047.61

NOTES:
For Notes see Sheet 18/18

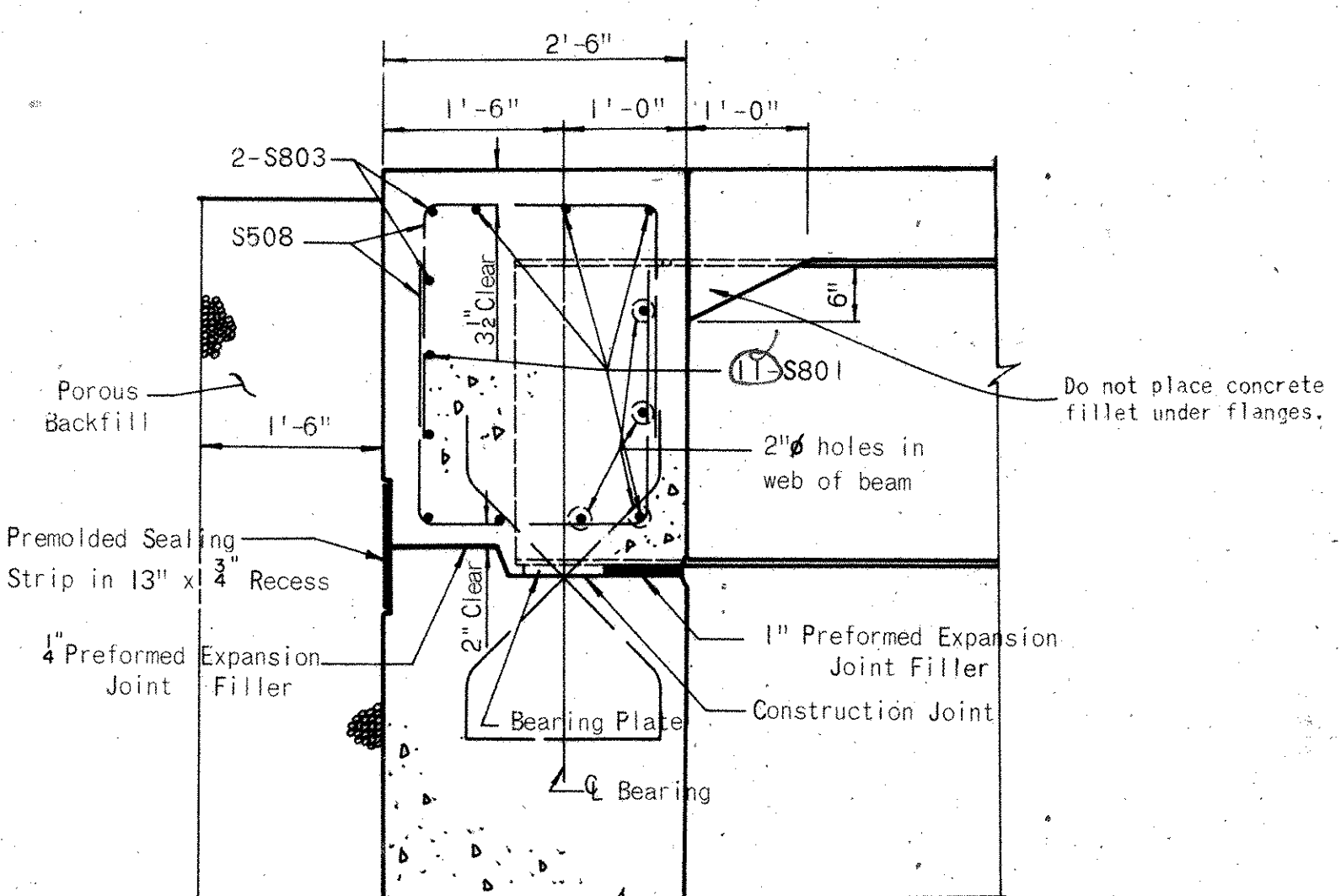


PLACEMENT OF S 603 BARS OVER PIERS

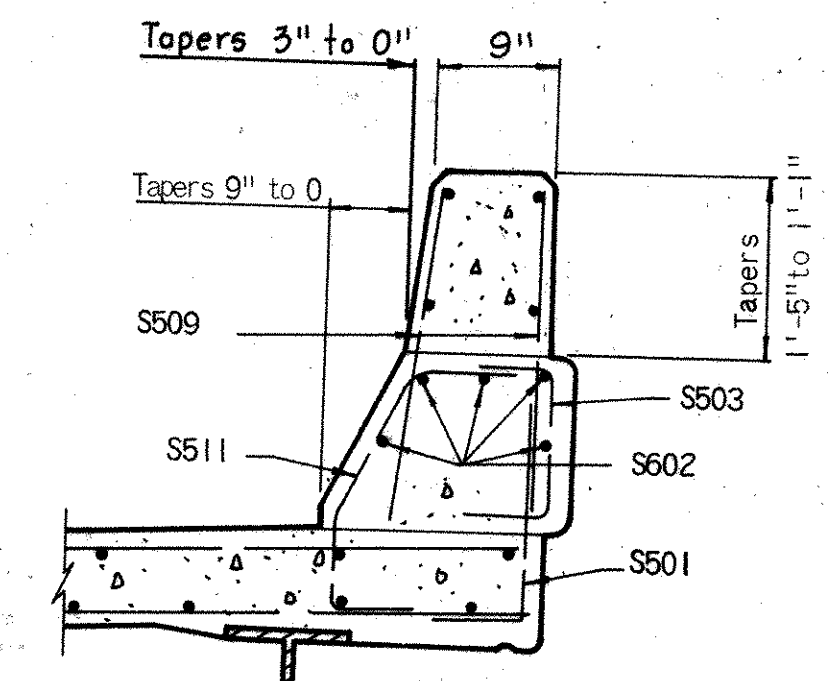


SECTION 'A-A'

*1'-3\" at ends of seat. The bottom of the approach slab seat shall be a plane.



SECTION 'B-B'



SECTION 'C-C'

H.N.T.B. BRIDGE NO. 15

Revised 7-11-75 By WEB

HOWARD, NEEDLES, TAMMEN & BERGENDOFF
CONSULTING ENGINEERS
KANSAS CITY CLEVELAND NEW YORK

DECK REINFORCEMENT AND TYPICAL SECTION

RAMP A OVER HENRY AVE.
BR. NO. STA-30-1474L STA. 952+97.80
SCALE: NO SCALE STA. 954+06.43

RELOCATED U.S. 30

CANTON STARK COUNTY OHIO

DRAWN J.B.C. DATE: 2-26-69	TRACED J.M.W. DATE: 11-69	CHECKED J.A.H. DATE: 2-17-69	REVIEWED M.P.A. DATE: 1-21-71	REVISED
				1668

Revised 4-28-77

