

2026 PRE-INSPECTION REPORT

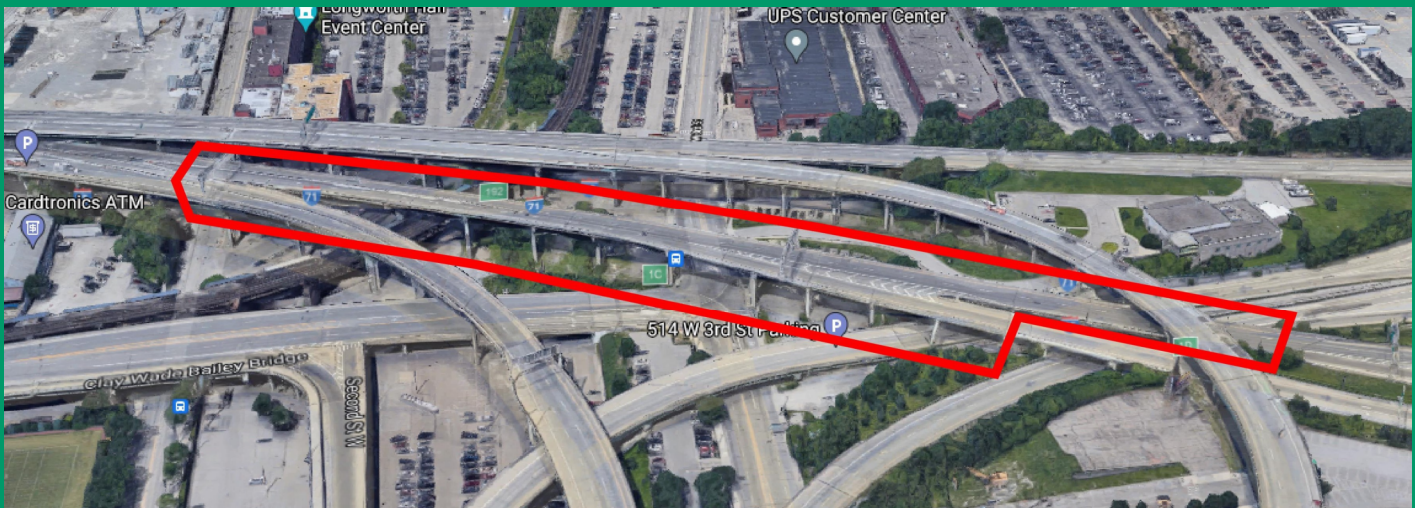
BRIDGES NO. HAM-75-0022 L AND R

SFN: 3108791 AND 3108805

PID No.: 109780

City of Cincinnati

DRAFT



Submitted to ODOT District 8
May 2026

Prepared by

AECOM

Prepared for



**OHIO DEPARTMENT OF
TRANSPORTATION**

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1 INTRODUCTION

1.1 Inspection Details

Bridge no.:	HAM-75-0022L HAM-75-0022R
Features intersected:	I-71 Southbound, CSX Railroad, Local Parking Lots, 3 rd Street, US 42 Ramp, US 50 Ramps
Locations to Inspect:	HAM-75-0022L: Routine HAM-75-0022R: Routine
No. of Inspection Days:	Anticipated 4 days for both structures
Inspection Dates:	Days: 8/24/2026 - 9/11/2026
Inspection Hours:	Day: 7:00 AM to 5:00 PM
Inspection Access Equipment:	125-foot lift, UAV, and ladders

1.2 Bridge Description

HAM-75-0022L

The Brent Spence Approach Bridge (HAM-75-0022L) consists of a six-span welded steel plate girder structure that carries two lanes of I-75 southbound traffic over West 3rd Street. The structure was constructed in 1963 and consists of a reinforced concrete deck that varies in width and bears directly on five continuous, welded, built-up steel girders supported by reinforced concrete piers. Crossframe angles spanning the width of the bays between the girders are welded to the transverse stiffeners of the girders. The structure is 428'-0" long and the longest spans (Spans 21A through 24A) are each 78'-0" in length.

The nomenclature for this bridge follows the convention set in the design plans with spans, substructure units, and cross frames labeled from south to north and girders labeled from west to east. The substructure units are numbered from Pier 19A to Abutment A, spans are numbered from Span 20A to Span 25A, and girders are labeled from A to E.

HAM-75-0022R

The Brent Spence Approach Bridge (HAM-75-0022R) is a 14-span structure that carries three lanes of I-75 northbound traffic over West 3rd Street, a railroad, and US 50 and I-75 Ramps. The structure was constructed in 1963. The original structure consists of a reinforced concrete deck that varies in width and bears directly on up to six (6) continuous, welded, built-up steel girders supported by reinforced concrete piers. Crossframe angles which span the width of the bays between the girders are welded to the transverse stiffeners of the girders.

A retrofit of the bridge was performed in 2000 and included the widening of the east side of the bridge. Steel beams, crossframes, and concrete piers were added to the structure along with two NSTM (Nonredundant Steel Tension Members) steel pier caps at Piers 25J and 26J. The structure is approximately 1,187 feet long and the longest span (Span 28C) is approximately 117 feet in length. The nomenclature of this bridge will follow the convention set in the design plans and retrofit plans with spans, substructure units and crossframes labeled from south to north, original girders labeled A through F from west to east, and retrofit beams labeled B1 through B4 from east to west. The substructure units are numbered from Pier 15C to Abutment C on the original structure and from Pier 22J to Pier 26J on the retrofit substructure units. Spans are numbered from Span 16C to 29C.

2 INSPECTION METHODS & PLAN

The AECOM Team will perform routine inspections as defined by the Scope of Services. The inspection will adhere to the relevant AECOM safety procedures. A UAV and a boom lift will be utilized to support the inspection. Traffic control or confined space entry will not be required during this routine inspection.

2.1 Field Coordination Contacts

The following entities will be involved in coordinating and performing all field work associated with the inspection of these structures.

AECOM - Field Team Contacts:

Travis Baker, P.E.: Team Leader, Project Manager C: 513-266-9344

Kyle Compton-Troesch, P.E.: Team Leader C: 513-255-7862

ODOT - Project and Permitting Contacts:

(No lane closures are required; therefore, no right-of-way permit is required)

Brandon Collett: Project Manager O: 513-933-6643
brandon.collett@dot.ohio.gov

Scott Kraus: District Work Zone Traffic Manager O: 513-933-6519
scott.kraus@dot.ohio.gov

Chris Bass: Right-of-Way Use Permits O: 513-933-6577
christopher.bass@dot.ohio.gov

Justin Kemp: Parking Lot Access O: 513-933-6120
justin.kemp@dot.ohio.gov

City of Cincinnati - Permitting Contacts:

(No work will be performed within the City right-of-way; therefore, no right-of way permit is required. Work performed on City owned property will be done so within ODOT easements therefore no right-of-entry permit is required.)

DOT Permit & License Center O: 513-352-3463
row.permits@cincinnati-oh.gov F: 513-352-5397

2.2 Follow-up Procedures for Inspection Findings

Critical inspection findings shall be reported to the District and documented in the final inspection report with other findings.

2.3 Quality Control and Quality Assurance

AECOM's Technical Quality Review Procedure - DCS (Procedure No. Q2[DCS]-351-PR1) will be followed. The team leaders for this inspection were chosen to ensure that inspector qualifications are met. The team leaders have completed the course FHWA-NHI-130078, "Bridge Inspection Techniques for Nonredundant Steel Tension Members (NSTM)."

2.4 Special Considerations

Based on the items discussed during the scoping meeting and in the previous inspection reports, the following will receive special consideration:

- Unauthorized/excessive material storage around substructure units.
- Crack arrest holes on Beam C at Span 23,24,25 (HAM-75-0022L).
- Expansion joint failures.
- Bearing pack rust.
- Fascia girder section loss.
- Unsanitary conditions around substructure units.
- Any small delaminations found over public areas during inspections shall be removed on-site with a hammer. ODOT shall be notified of larger spalls and may remove them during the inspection.

Appendix A:

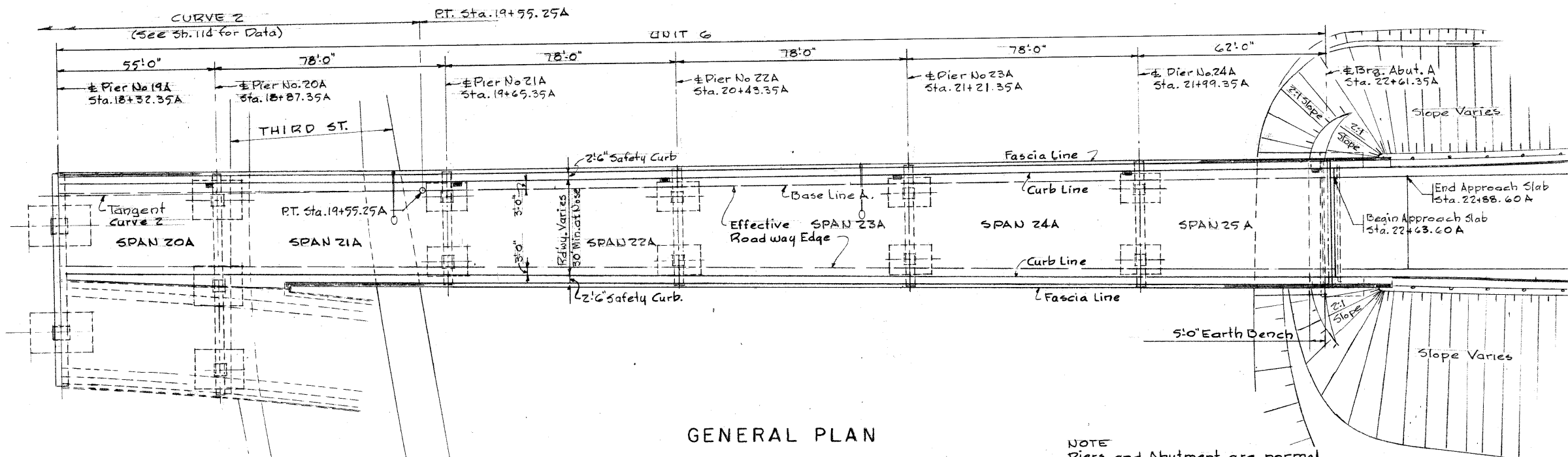
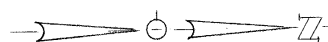
Plans for HAM-75-0022L

MICROFILMED
OCT 24 1979
REPRODUCTION

FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

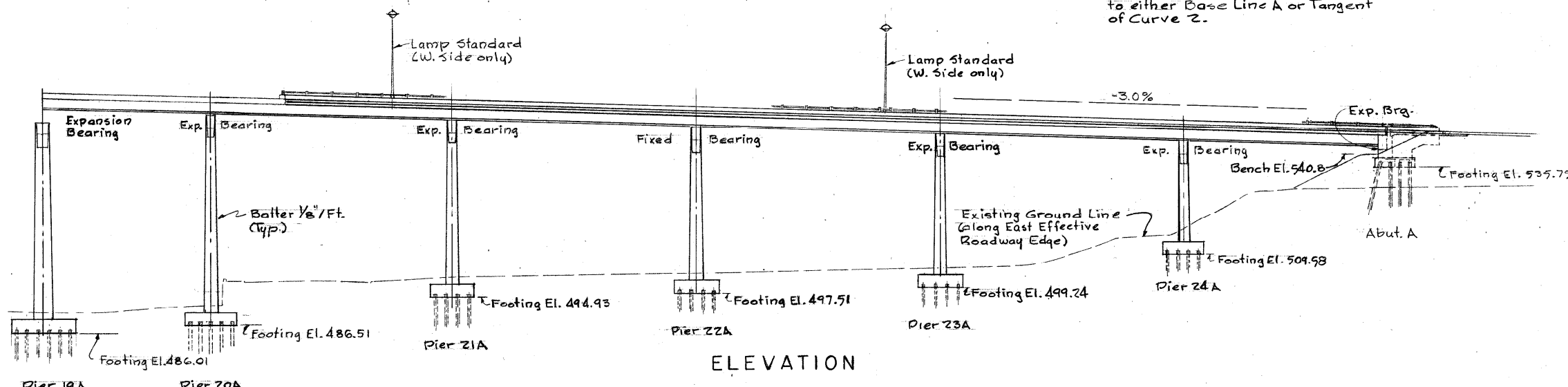
HAM-25-0.04

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GENERAL PLAN

NOTE
Piers and Abutment are normal
to either Base Line A or Tangent
of Curve 2.



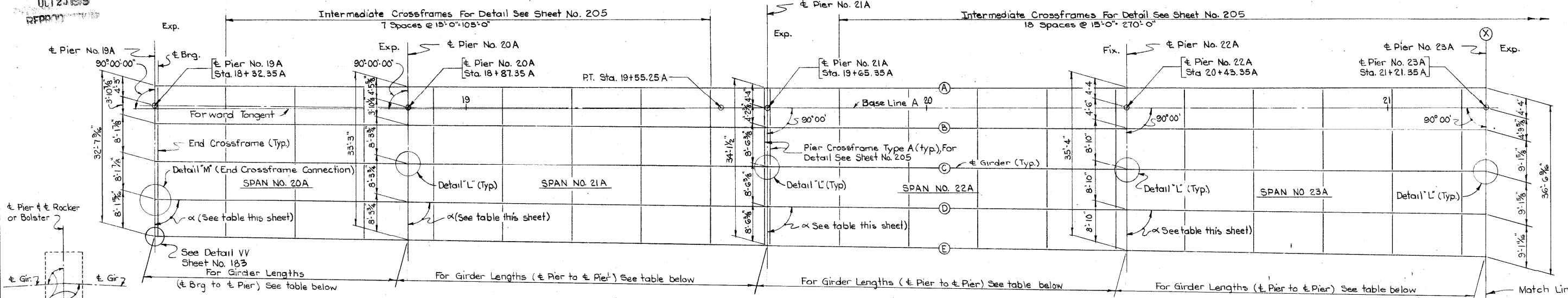
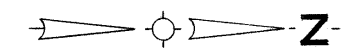
ELEVATION

For Railing & Lighting Details See Sh. 255
For General Notes See Sh. 97
For Estimate of Quantities See Sh. 97

HAZELET & ERDAL CONSULTING ENGINEERS CINCINNATI, OHIO				
GENERAL PLAN & ELEVATION UNIT 6				
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE
J.C.D.	G.J.T.		G.J.T.	10-13-60
6-9-59			9-23-60	

HAM-75-0022L

HAM-25-0.04



Girder	Span No. 20A	Span No. 21A thru No. 24A	Span No. 25A
A, B & C	54'-4 1/2"	78'-0"	62'-0"
D	54'-4 1/2"	78'-0 1/2"	62'-0 1/2"
E	54'-4 3/4"	78'-0 1/8"	62'-0 1/8"

GIRDER SPLICE WELDING PROCEDURE

Raise the ends of girders in Span No. 21A, at Pier No. 20A, 1 1/2" and the ends of girders in Span No. 23A, at Pier No. 23A, 1 1/2".

Butt weld girder flanges and webs, at Piers No. 21A & 22A, using the sequence outlined in Note 'A' Sheet No. 181.

Weld all pier crossframes at Pier No. 21A into place.

Lower girders to their final positions.

Raise the ends of girders in Span No. 20A, at Pier No. 19A, 3/4" and the ends of girders in Span No. 24A, at Pier No. 24A, 1 3/4".

Butt weld girder flanges and webs, at Piers No. 20A & 23A, using the sequence outlined in Note 'A' Sheet No. 181.

Lower girders to their final positions.

Raise the ends of girders in Span No. 25A, at N. Abut., 1/4".

Butt weld girder flanges and webs at Pier No. 24A, using the sequence outlined in Note 'A' Sheet No. 181.

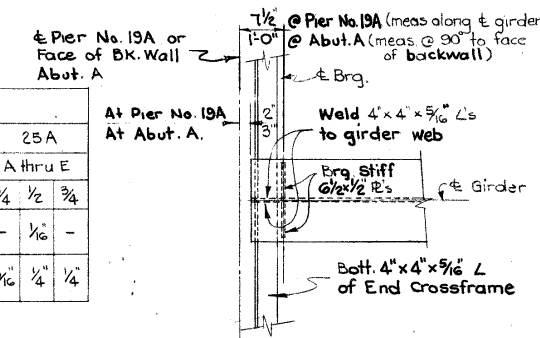
Lower girders to their final positions.

Girder	Angle	α
A	89° 45' 07"	90° 00' 00"
B	89° 35' 29"	89° 46' 38"
C	89° 25' 51"	89° 33' 18"
D	89° 16' 12"	89° 19' 57"
E	89° 06' 36"	89° 06' 36"

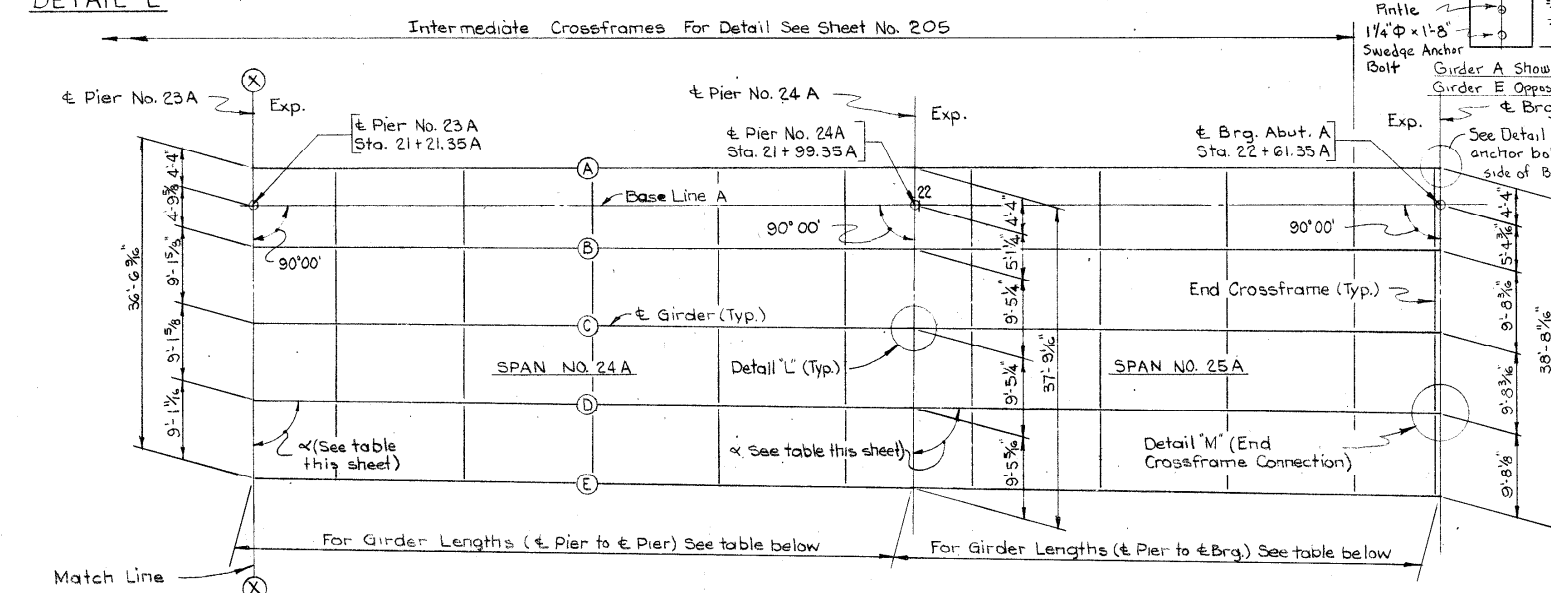
Note: E's of Piers No. 19A thru 24A and E Brg. Abut. A are parallel

Span No.	DEAD LOAD DEFLECTIONS											
	20A			21A			22A			23A		
Girder	A thru E	A thru E	A thru E	A thru E	A thru E	A thru E	A thru E	A thru E	A thru E	A thru E	A thru E	A thru E
Location	1/4	1/2	3/4	1/4	1/2	3/4	1/4	1/2	3/4	1/4	1/2	3/4
Deflection due to weight of steel	-	-	-	-	-	-	-	-	-	-	-	-
Deflection due to remaining Dead Load	1/8	1/8	1/8	1/4	3/8	1/4	3/8	3/8	3/8	3/8	3/8	3/8

Girders for Unit No. 6 shall not be combered



DETAIL 'M'
(End Crossframe connection at Pier No. 19A, Span No. 20A)
(Rotate thru 180° for connection at Abut. A, Span No. 25A)



FRAMING PLAN UNIT NO. 6
(Spans No. 24A & No. 25A)

	Pier No. 19A	Pier No. 20A	Pier No. 21A	Pier No. 22A	Pier No. 23A	Pier No. 24A	Pier No. 25A
Span No. 20A							
Span No. 21A							
Span No. 22A							
Span No. 23A							
Span No. 24A							
Span No. 25A							
Flg R's Girders A thru E (Top & Both.)	14" x 3/8"	14" x 1 1/4"	14" x 1"	14" x 1 1/8"	14" x 1"	14" x 1 1/8"	14" x 1 1/8"
Flg to Web Weld (Top & Both.)	1/4" Weld	5/16" Weld	3/8" Weld	5/16" Weld	3/8" Weld	5/16" Weld	5/16" Weld

TABLE OF FLANGE PLATES AND WELD SIZES

	End Brg. Stiff.	Intermediate Stiffeners	End Brg. Stiff.
Span No. 20A	45" Spacing (Max.)	48" Spacing (Max.)	42" Spacing (Max.)
Span No. 21A thru No. 24A	36" Spacing (Max.)	45" Spacing (Max.)	36" Spacing (Max.)
Span No. 25A	36" Spacing (Max.)	48" Spacing (Max.)	42" Spacing (Max.)

Note: Adjust intermediate stiffener spacing to conform to intermediate crossframe spacing

HAZELET & ERDAL
CONSULTING ENGINEERS
CINCINNATI, OHIO

STRUCTURAL STEEL DETAILS
UNIT NO. 6.

DESIGNED M.K.K.	DRAWN J.C.	TRACED J.H.O.	CHECKED J.H.O.	REVIEWED DATE 10-14-60	REVIEWED
2-15-60	5-1-60		7-27-60		

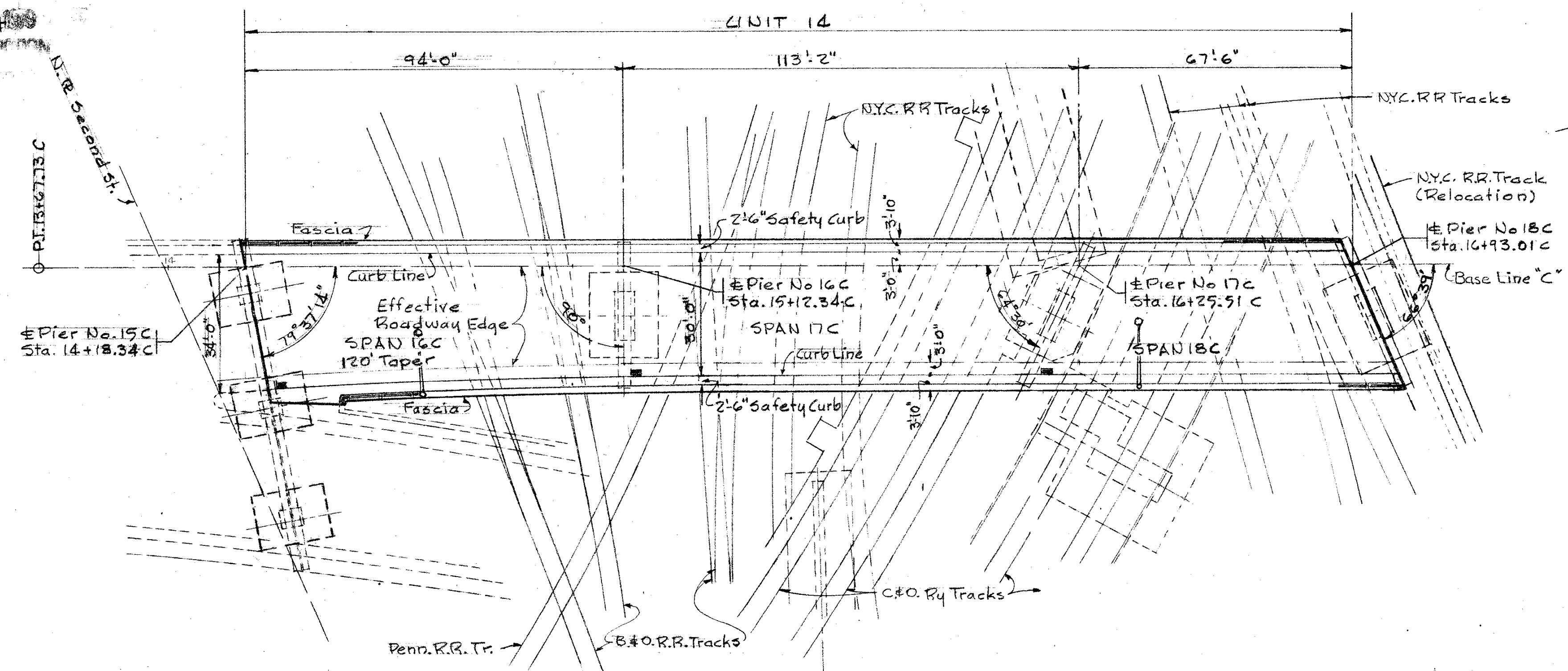
Appendix B:

Plans for HAM-75-0022R

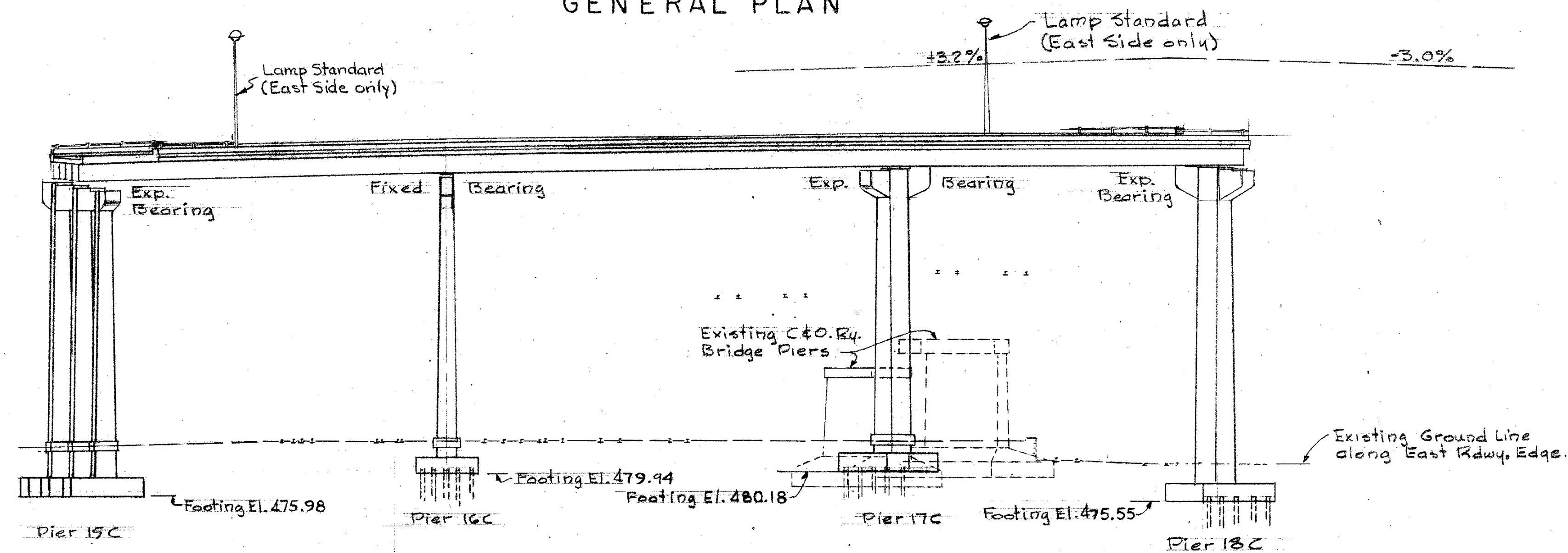
FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

HAM-25-0.04

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GENERAL PLAN



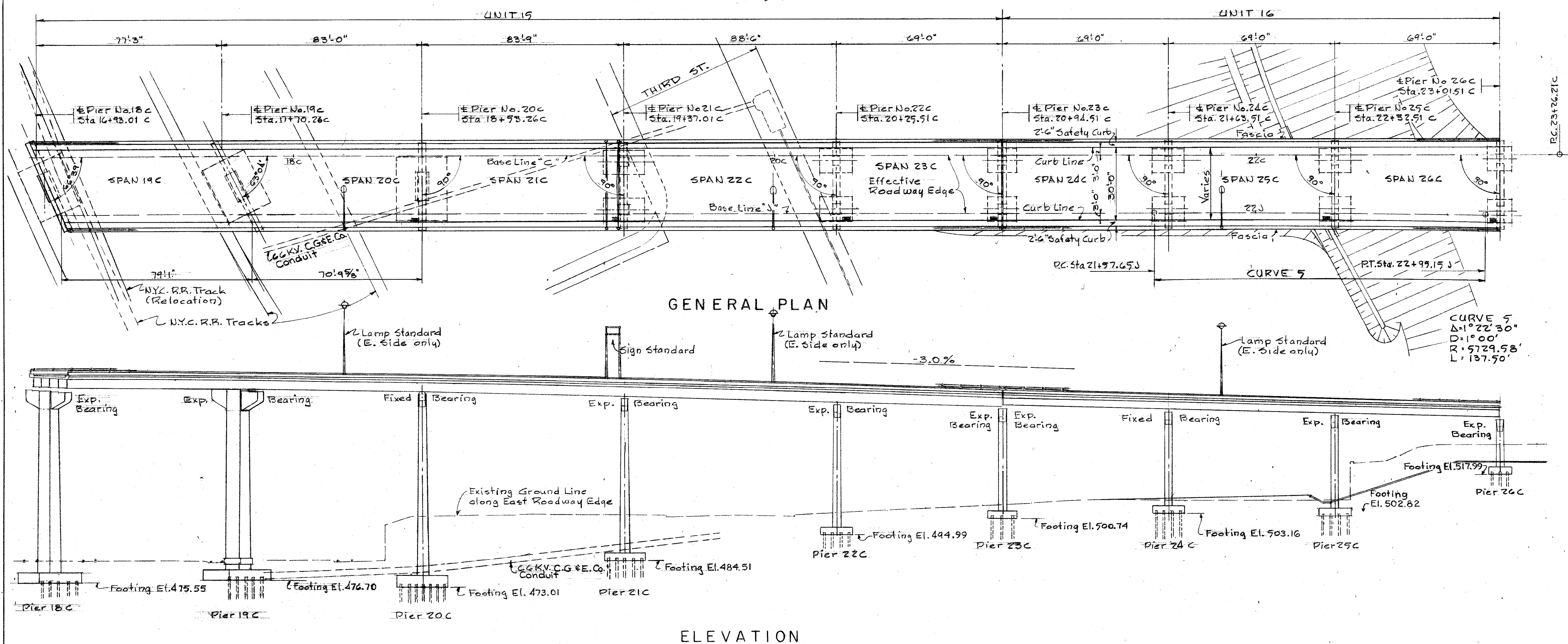
ELEVATION

For Railing & Lighting Details See Sht. No. 260
For General Notes see Sheet No. 97
For Estimate of Quantities see Sheet No. 97

HAM-75-0022R
SPANS 16C-18C

HAZELET & EROAL CONSULTING ENGINEERS CINCINNATI, OHIO					
GENERAL PLAN & ELEVATION UNIT 14					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
	J.C.D.		G.W.T.	11-1-60	
	9-4-59		9-23-60	10-13-60	

HAM-25-0.04



For Railing & Lighting Details See Sheets 260 & 261
For General Notes See Sheet 97
For Estimate of Quantities See Sheet 97

HAM-75-0022R
SPANS 19C-26C

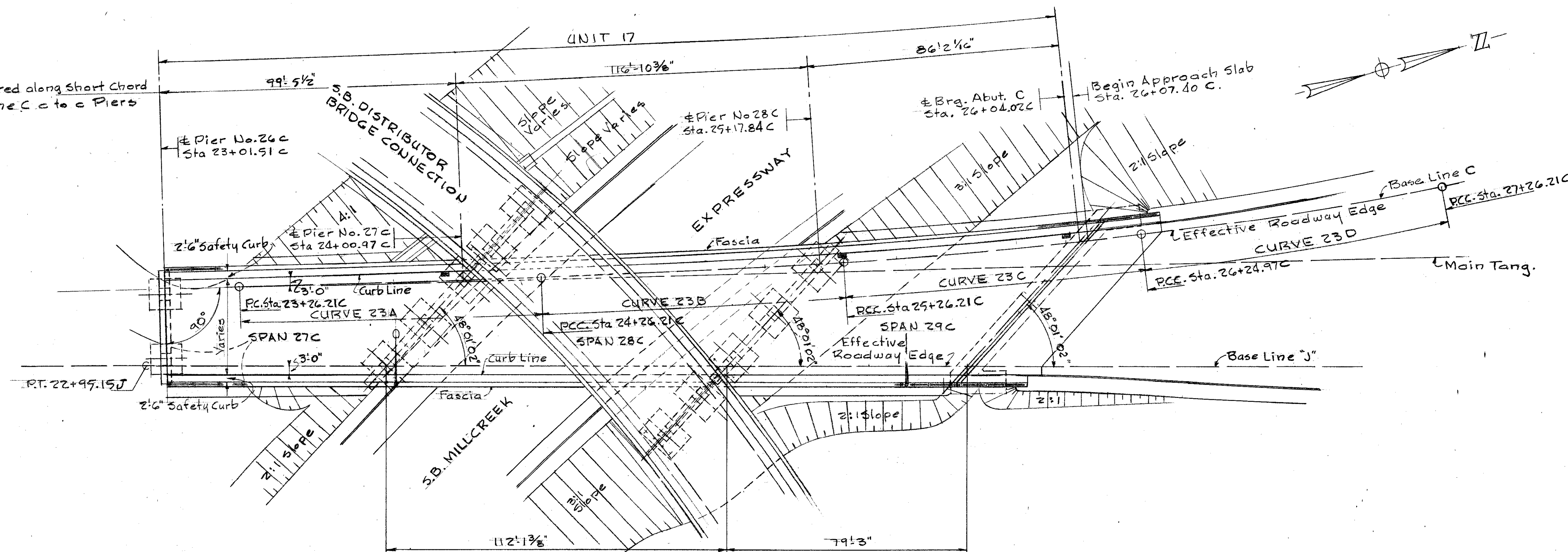
HAZELET & ERDAL CONSULTING ENGINEERS CINCINNATI, OHIO				
GENERAL PLAN & ELEVATION UNITS 15 & 16				
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE
	J.C.D.		G.J.T.	
	9-8-59		9-22-60	10-13-60

REPRODUCED
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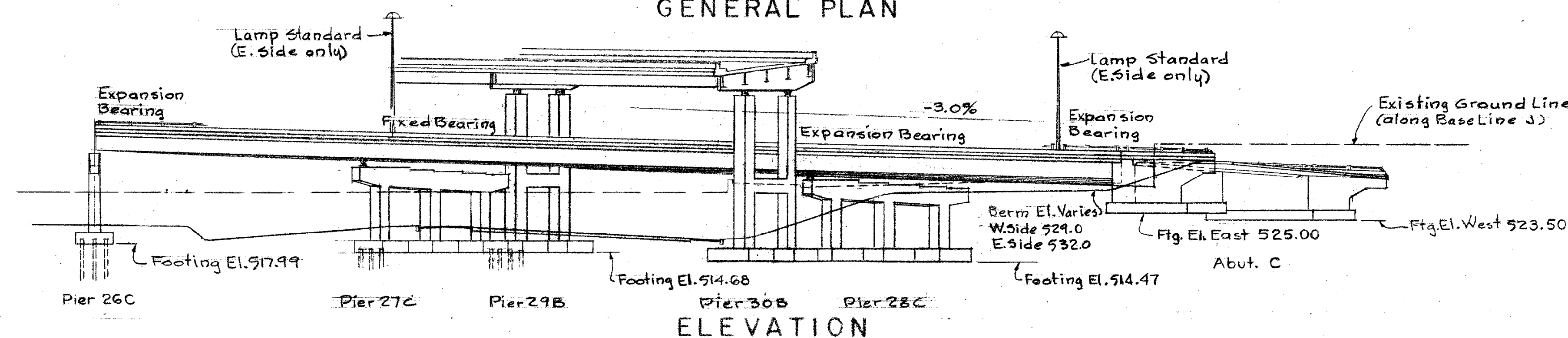
FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

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HAM-25-0.04



GENERAL PLAN



ELEVATION

CURVE 23A
Δ = 0°29'
D = 0°25'
R = 13,750.99'
L = 100.0'

CURVE 23B
Δ = 2°04'34"
D = 2°04'34"
R = 2,759.77'
L = 100.0'

CURVE 23C
Δ = 2°53'04"
D = 2°55'14"
R = 1,961.81'
L = 98.76'

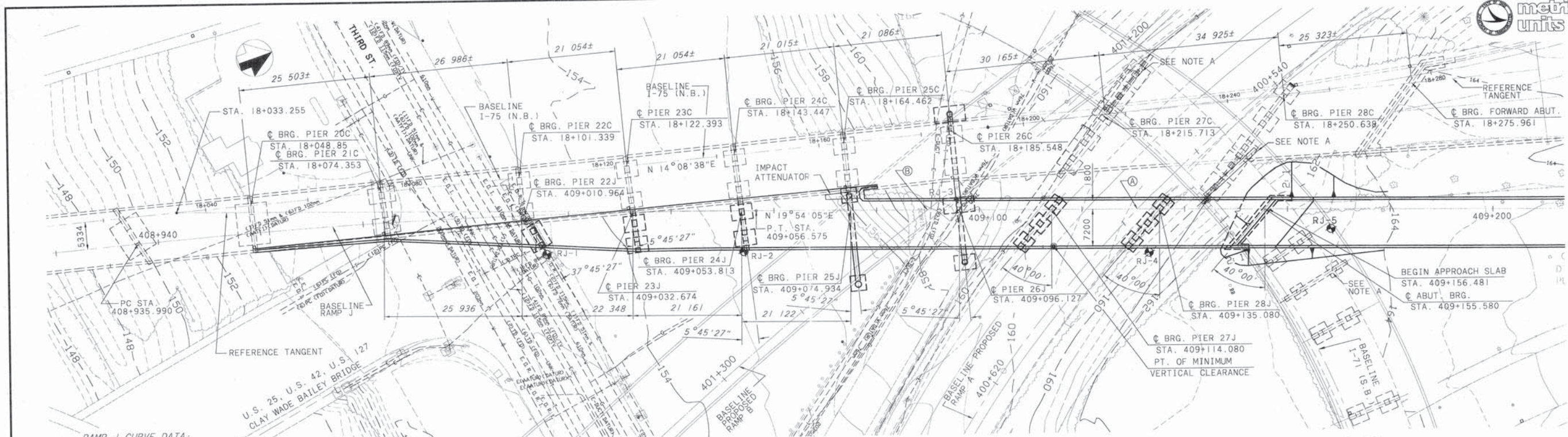
CURVE 23D
Δ = 4°37'22"
D = 4°33'58"
R = 1,254.81'
L = 101.24'

ALIGNMENT NOTE
See Sheet 85

For Railing & Lighting Details See Sheet No. 261.
For General Notes See Sheet No. 97.
For Estimate of Quantities See Sheet No. 97.

HAM-75-0022R
SPANS 27C-29C

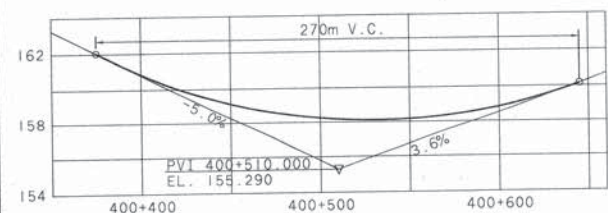
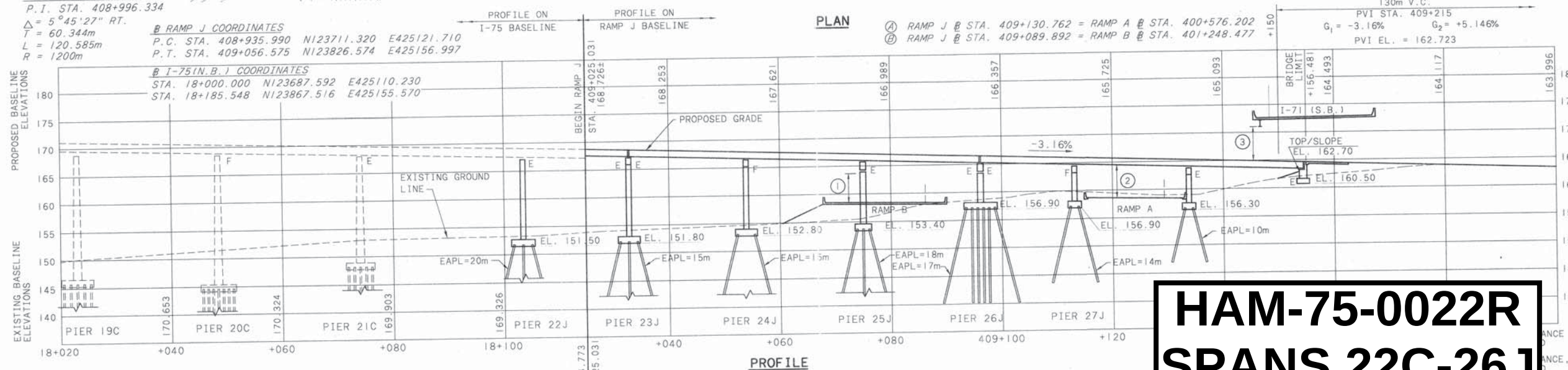
HAZELET & ERDAL CONSULTING ENGINEERS CINCINNATI, OHIO					
GENERAL PLAN & ELEVATION UNIT 17					
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVIEWED
	J.C.D. 9-16-59		G.J.T. 9-26-60	N.A.F. 10-13-60	



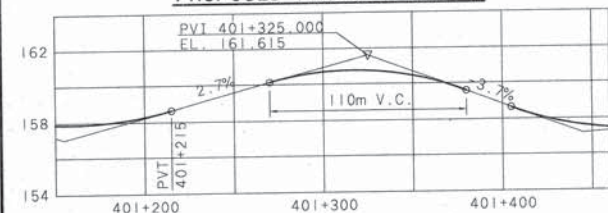
RAMP J CURVE DATA:
P.I. STA. 408+996.334
 $\Delta = 5^\circ 45' 27''$ RT.
 $L = 60.344m$
 $R = 120.585m$

RAMP J COORDINATES
P.C. STA. 408+935.990 N123711.320 E425121.710
P.T. STA. 409+056.575 N123826.574 E425156.997

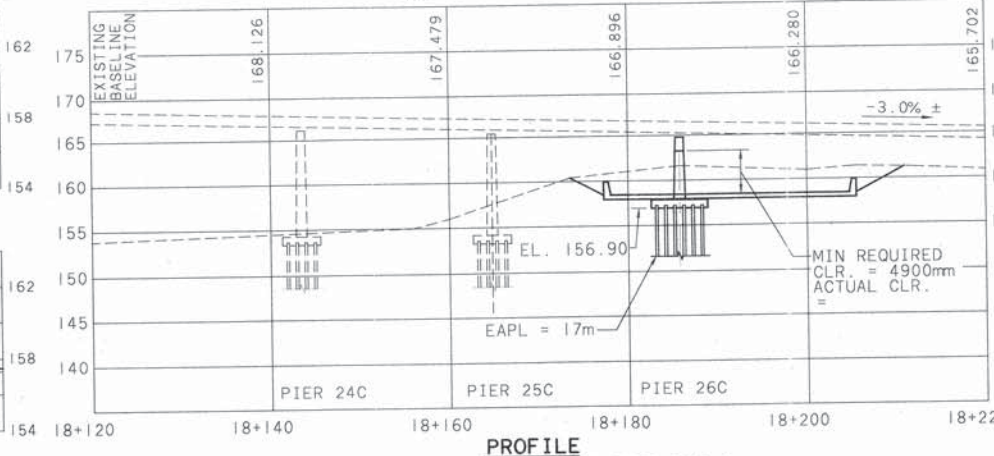
I-75 (N.B.) COORDINATES
STA. 18+000.000 N123687.592 E425110.230
STA. 18+185.548 N123867.516 E425155.570



PROPOSED PROFILE RAMP A



PROPOSED PROFILE RAMP B



PROFILE

ALONG BASELINE EXISTING I-75 (N.B.)

NOTE A: FUTURE PROPOSED PIER 28C AND 29C TO BE CONSTRUCTED UNDER SEPARATE CONTRACT.

EAPL DENOTES ESTIMATED AVERAGE PILE LENGTH

☒ DENOTES BORING LOCATION

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

EXISTING STRUCTURE (I-75 N.B.)

TYPE: CONTINUOUS STEEL GIRDER WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 28 652, 34 495, 20 524, 23 500, 25 300, 25 503, 26 986, 21 054, 21 015, 21 086, 30 165, 34 925, 25 323 ALL±

STRUCTURE FILE NO.: 3111709

ROADWAY: 10 465± TOE/TOE PARAPET SKREW: VARIES

ORIGINAL DESIGN LOADING: CF2000 (57)

WEARING SURFACE: CONCRETE

SUPERELEVATION: 0.016 AND VARIES

APPROACH SLABS: 7620±

YEAR BUILT: 1963

PROPOSED STRUCTURE (RAMP J)

TYPE: COMPOSITE CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 25 936, 22 348, 21 161, 21 122, 21 193, 17 953, 21 000, 20 500 c/c PIERS ALONG REFERENCE LINE

ROADWAY: 9000 TOE/TOE PARAPET SKREW: VARIES

DESIGN LOADING: HS20-44 (CASE II) AND ALT. MILITARY

WEARING SURFACE: CONCRETE

CROWN: 0.016 (ONE-WAY)

APPROACH SLAB: AS-1-BIM, 7600 LONG

ALIGNMENT: CURVED AND TANGENT

CURRENT ADT: NA

DESIGN YEAR ADT (2020): 11 000

DESIGN YEAR ADT (2020): 440

LATITUDE: 39°05'50"

LONGITUDE: 84°31'13"

HAM-75-0022R
SPANS 22C-26J

FINAL FOR CONSTRUCTION

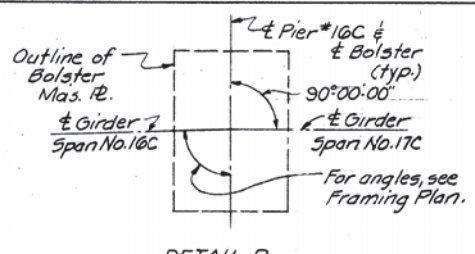
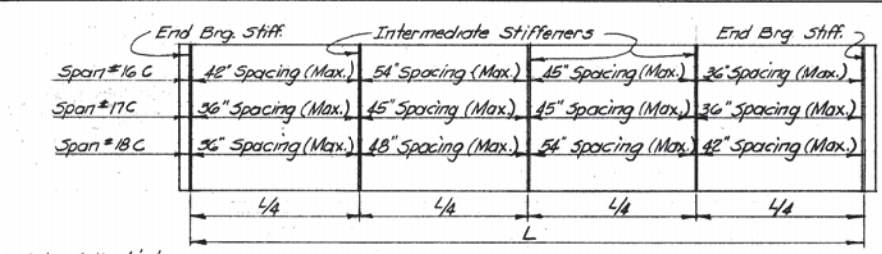
SITE PLAN
BRIDGE NO. 1
RAMP J

FORT WASHINGTON WAY.
CONTRACT NO. 6

1/55

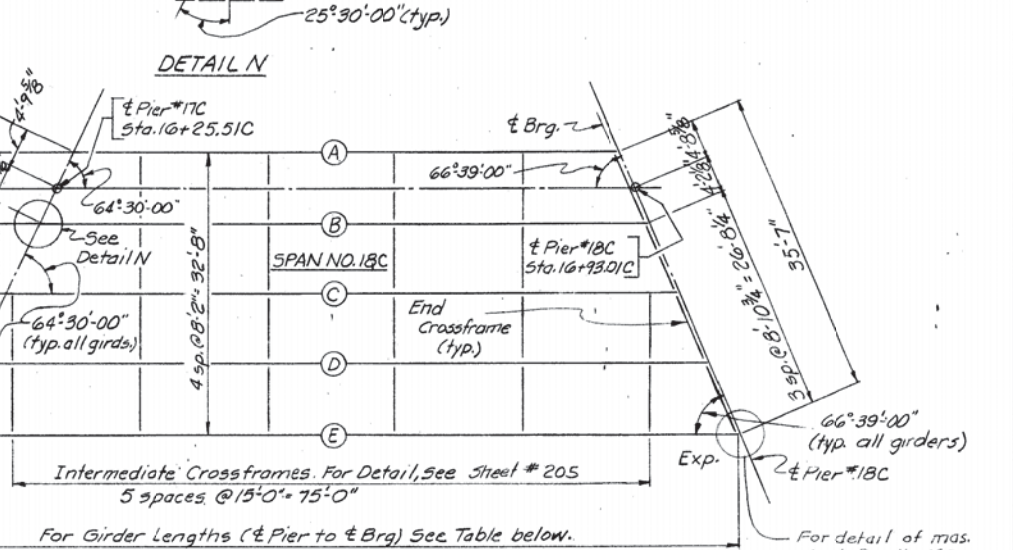
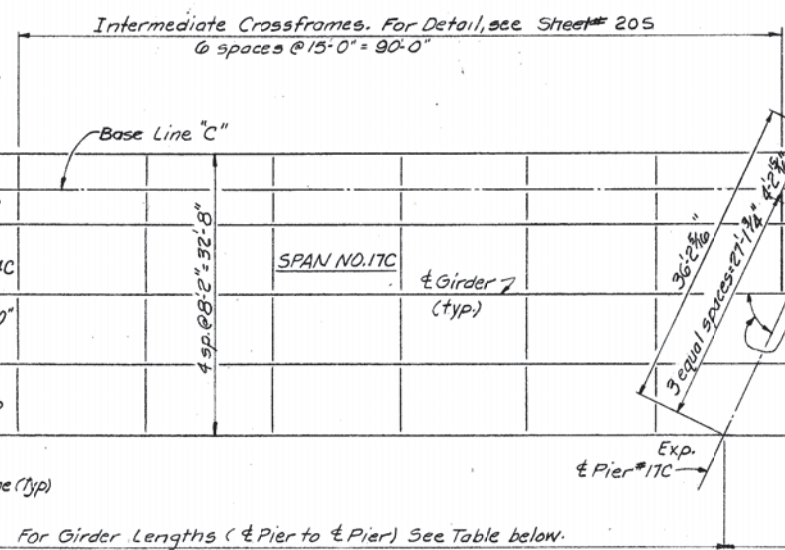
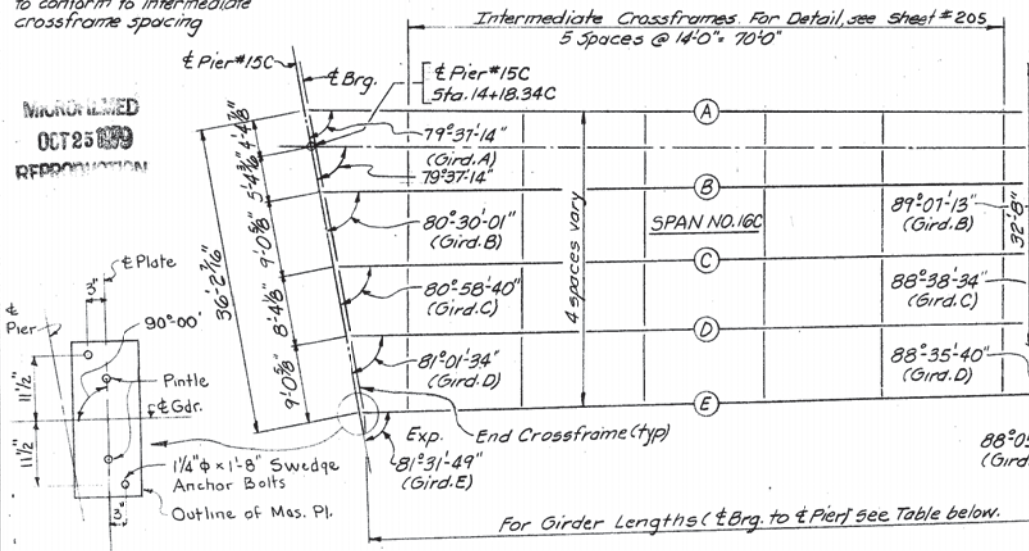
534
588

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Note: Adjust intermediate stiffener spacing to conform to intermediate crossframe spacing

DETAIL P



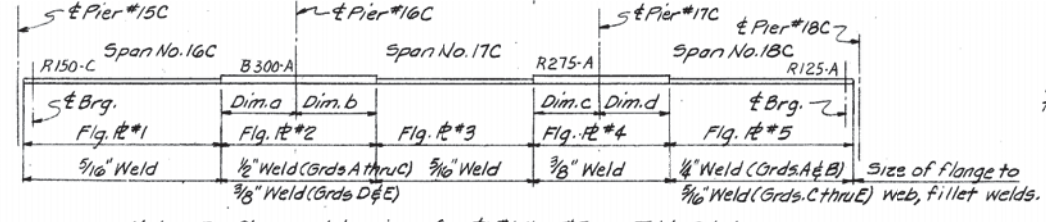
DETAIL OF MASONRY PLATE AT PIER 15C

Notes: All web plates are 5/8" x 3/8".
All intermediate stiffeners are 4" x 3/8".
End bearing stiffeners are as follows:
Piers #15C, 17C & 18C = 7 1/2" x 1/2" PEs.
Pier #16C = 7 1/2" x 3/8" PEs.

FRAMING PLAN UNIT NO. 14
(Spans No. 16C thru 18C)

TABLE P (See Detail at right.)

Girder	Dim. a	Dim. b	Dim. c	Dim. d
A	17'-9"	16'-3"	8'-6"	24'-0"
B	17'-9"	16'-3"	8'-6"	24'-0"
C	15'-6"	16'-0"	11'-3"	18'-6"
D	13'-0"	16'-6"	14'-0"	13'-0"
E	13'-0"	16'-6"	14'-0"	13'-0"



DETAIL OF FLANGE PLATES AND WELDS

TABLE O (See Detail above)

Girder	Flg. P#1	Flg. P#2	Flg. P#3	Flg. P#4	Flg. P#5
A	16" x 1 3/8"	16" x 2 3/8"	16" x 1 3/8"	16" x 1 3/4"	16" x 3/4"
B	do	do	16" x 1 3/8"	do	16" x 3/4"
C	do	16" x 2 3/8"	16" x 1 1/4"	16" x 1 3/4"	16" x 1"
D	do	16" x 2 1/8"	16" x 1 1/8"	16" x 1 1/8"	16" x 1 1/4"
E	16" x 1 3/8"	16" x 2 1/8"	16" x 1 1/8"	16" x 1 1/8"	16" x 1 1/4"

TABLE OF GIRDER LENGTHS

Girder	Span No. 16C	Span No. 17C	Span No. 18C
A	74'-2"	115'-2 3/8"	62'-11 1/4"
B	92'-5 1/16"	111'-4 1/8"	70'-4 1/16"
C	90'-9 1/16"	107'-5 3/8"	77'-9 3/8"
D	89'-3 3/8"	103'-6 3/8"	85'-2 3/8"
E	87'-8 3/8"	99'-7 1/8"	92'-1 1/16"

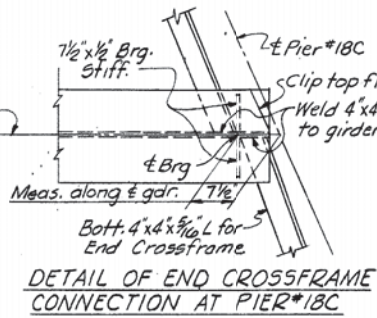
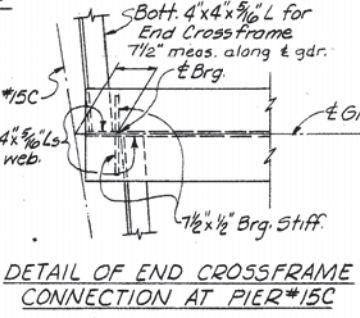


TABLE Q

Dim. to raise girders for welding.

Girder	Span #16C	Span #18C
A	3 3/8"	1 3/4"
B	3"	1 1/8"
C	2 3/4"	2 1/8"
D	2 1/2"	2 1/4"
E	2 1/4"	2 3/8"

Note: Convexity includes variations due to vertical curvature, superelevation and horizontal curvature.

DEFLECTION AND CAMBER																																				
SPAN	SPAN NO. 16C															SPAN NO. 17C							SPAN NO. 18C													
GIRDER	A			B			C			D			E			A			B		C		D		E											
LOCATION	1/4	1/2	3/4	1/4	1/2	3/4	1/4	1/2	3/4	1/4	1/2	3/4	1/4	1/2	3/4	1/4	1/2	3/4	1/4	1/2	3/4	1/4	1/2	3/4	1/4	1/2	3/4									
Deflection due to weight of steel	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8									
Deflection due to remaining Dead Load	1/2	5/8	1	1/2	5/8	1	1/2	5/8	1	1/2	5/8	1	1/2	5/8	1	1/2	5/8	1	1/2	5/8	1	1/2	5/8	1	1/2	5/8	1									
Convexity (See note above)	1	1 1/8	1	1	1 1/8	1	1 1/8	1	1 1/8	1	1 1/8	1	1 1/8	1	1 1/8	1	1 1/8	1	1 1/8	1	1 1/8	1	1 1/8	1	1 1/8	1	1 1/8									
Sum of deflection and convexity	1 1/8	2 1/8	1 1/8	1 1/8	2 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8									
Required Camber	2 1/8"			2 1/8"			2 1/8"			2 1/8"			2 1/8"			3 3/8"			2 7/8"		2 5/8"		2 1/4"		2"		1"		1"		1 3/8"		1 3/4"		2 1/4"	

Girder web plates shall be cut to a parabolic crown.

GIRDER SPLICE WELDING PROCEDURE

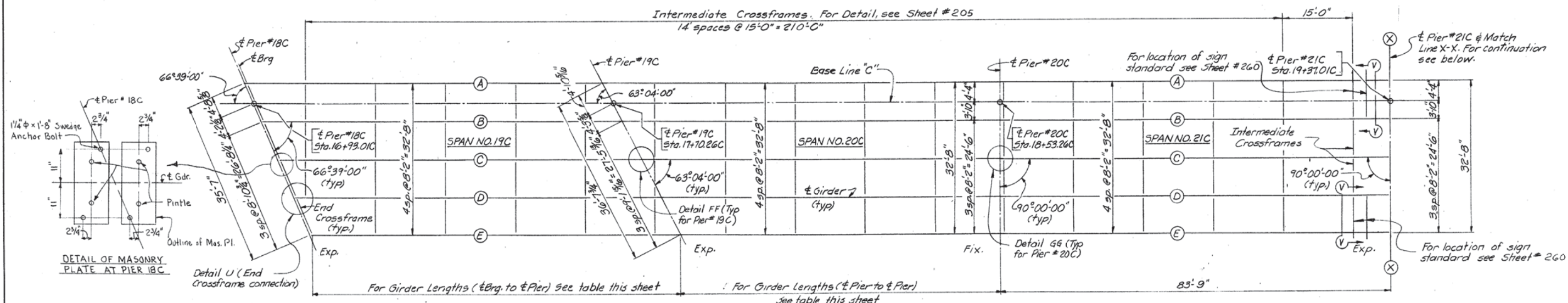
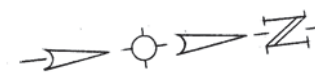
1. Raise the ends of girders of Span #16C at Pier #15C, and ends of girders of Span #18C at Pier #18C; the dimensions shown for each span in Table Q.
2. Butt-weld girder flanges and webs at Piers #16C & 17C, using the following welding sequence:
Make two passes on each flange, then two on the web; repeat using one pass at each location until welds are completed.
3. Weld all Pier Crossframes at Pier #16C into place.
4. Lower the girders of Spans #16C & 18C into final positions.

Notes:
For Details of End Crossframes see Sheet # 215
For Details of Pier Crossframes, see Sheet # 205
For Details of Intermediate & Bearing Stiffeners, see Sheet # 205
For Rocker & Bolster Details, see Sheet # 206
For Typical Girder Elevation, see Sheet # 205

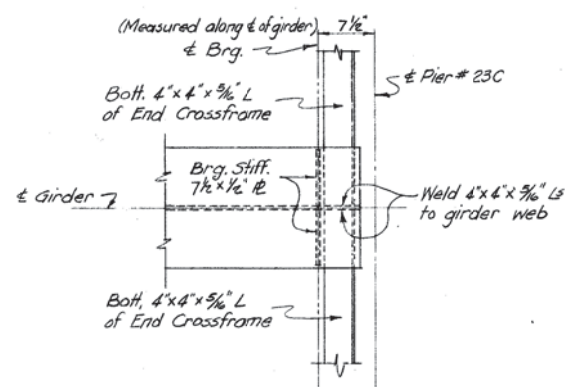
HAM-75-0022R
SPANS 16C-18C

HAZELET & ERDAL CONSULTING ENGINEERS CINCINNATI, OHIO	
STRUCTURAL STEEL DETAILS UNIT NO. 14.	
DESIGNED REL	DRAWN REL 4-28-60
TRACED JHO	CHECKED JHO 8/2/60
REVISOR N.A.G.	REVISION 10-14-60

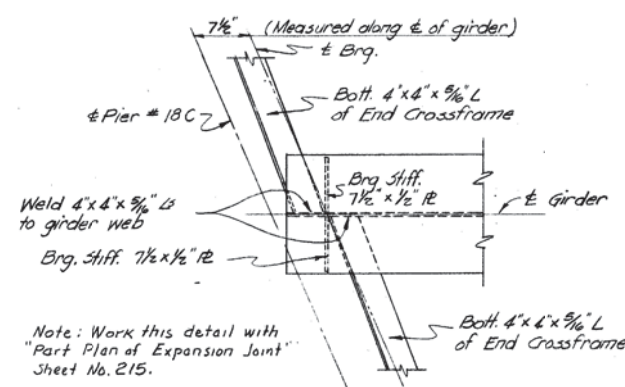
REPRODUCTION
OCT 25 1979



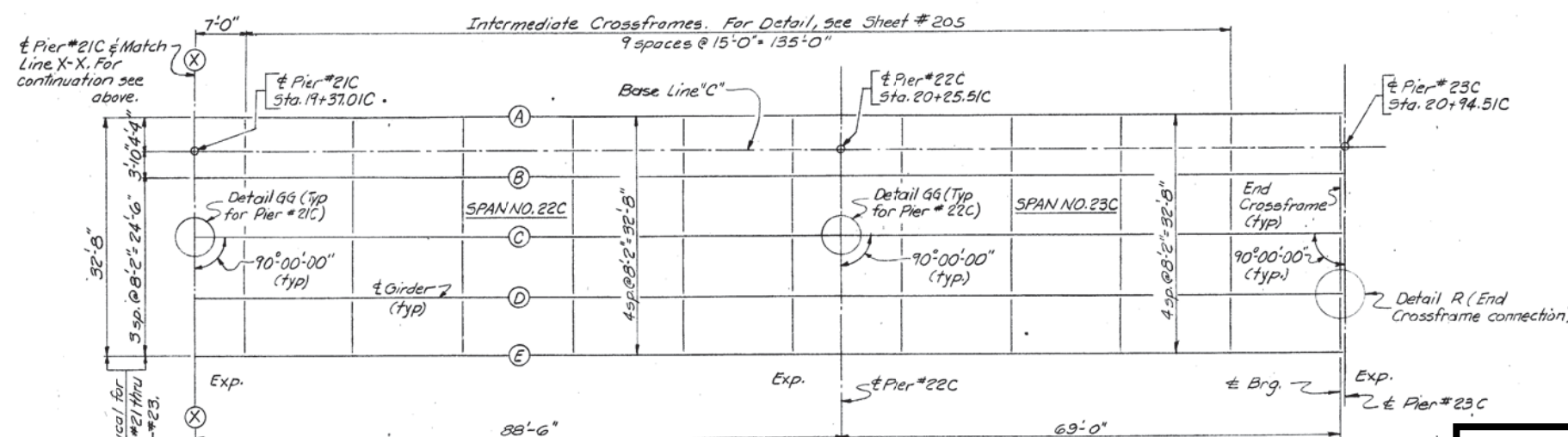
Note: For inlet framing see Sh. No. 268.



DETAIL R
(End Crossframe connection
@ Pier # 23C, Span 23C)



DETAIL U
(End Crossframe connection
@ Pier # 18C, Span # 19C)



Note: Web R 48"x 3/8" For Flg. R's see table below
Brg. Stiff. 7 1/2" x 1/2" R's. Intermediate Stiff. 6" x 3/8" R's
For bearing details see Sheet No. 206
For Typical Girder Elevation see Sheet No. 205
For End Crossframe detail see Sheet No. 215
For Detail GG, See Sheet No. 197

FRAMING PLAN - UNIT NO. 15
(Spans No. 19C thru 23C)

GIRDER LENGTHS		
Girder	Span # 19C	Span # 20C
A	76'-3 1/2"	85'-2 1/2"
B	76'-11"	81'-0 3/8"
C	77'-6 1/2"	76'-10 3/8"
D	78'-2"	72'-9"
E	78'-9 1/2"	68'-7 1/4"

Span # 19C	Span # 20C	Span # 21C	Span # 22C	Span # 23C
R125-E Gdr. A R125-F Gdr. B R125-G Gdrs. C & E R125-H Gdr. D 16" x 1 1/4"	R225-A 16" x 1 1/2"	B225-B 16" x 3/8"	R225-A 16" x 1 3/8"	R225-A 16" x 1"
8'-6"	13'-0"	12'-0"	10'-0"	11'-6"
5/16" Weld	5/16" Weld	5/16" Weld	5/16" Weld	5/16" Weld

TABLE OF FLANGE PLATES AND WELD SIZE

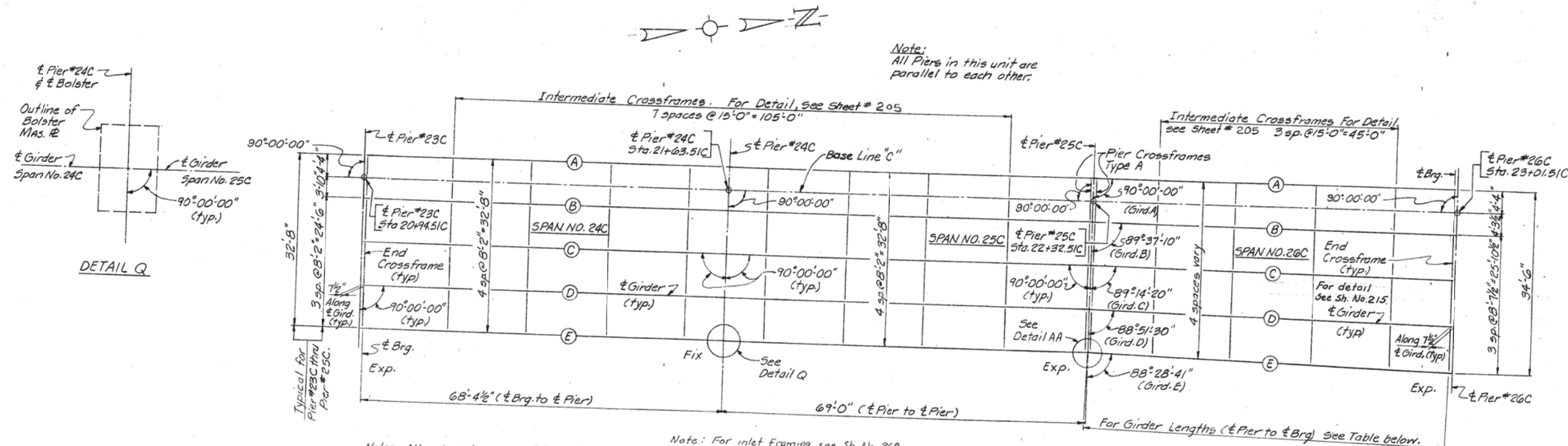
HAM-75-0022R
SPANS 19C-23C

Work this sheet with Sheet No. 197

HAZELET & ERDAL
CONSULTING ENGINEERS
CINCINNATI, OHIO

STRUCTURAL STEEL DETAILS
UNIT NO. 15.

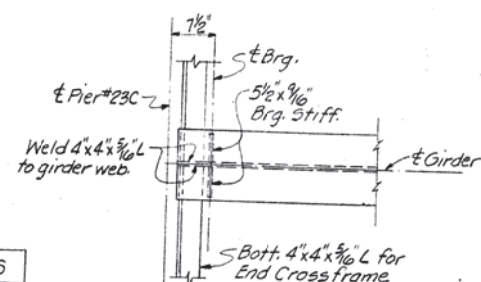
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
RCF	REL		JHO 8/1/60	10-14-60	



Notes: All web plates are 48"x3/8".
All intermediate stiffeners are 4"x3/8".
All end bearing stiffeners are 5 1/2"x3/8".

Note: For inlet framing see Sh. No. 26B

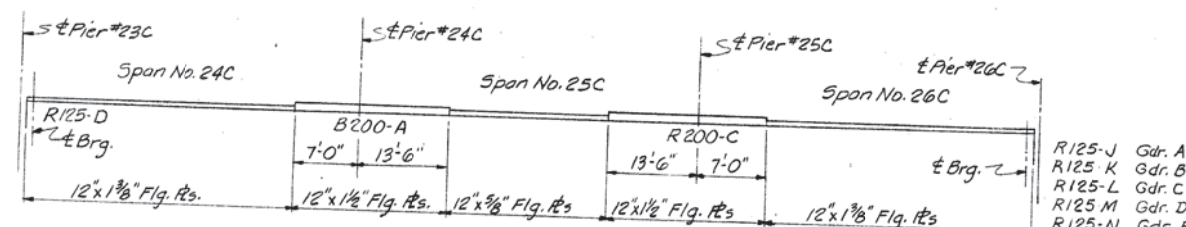
FRAMING PLAN - UNIT NO. 16
(Spans No. 24C thru 26C)



DETAIL OF END CROSSFRAME
CONNECTION AT PIER #23C

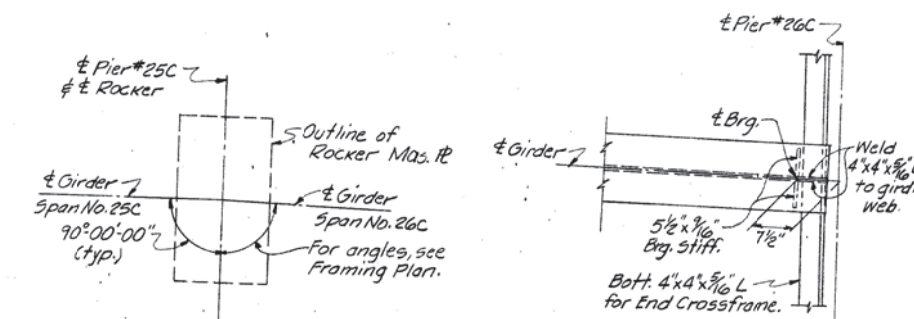
Note: Work this detail with "Part Plan of Expansion Joint," Sheet No. 215.

GIRDER LENGTHS	
SPAN NO. 26C	
Girder	Length
A	68'-4 1/2"
B	68'-4 1/2"
C	68'-4 1/2"
D	68'-4 1/2"
E	68'-4 1/2"



Note: Flange to web welds are 5/16" fillet welds throughout.

DETAIL OF FLANGE PLATES AND DIMENSIONS



DETAIL A A

DETAIL OF END CROSSFRAME
CONNECTION AT PIER #26C

Note: Work this detail with "Part Plan of Expansion Joint," Sheet No. 215

HAM-75-0022R SPANS 24C-26C

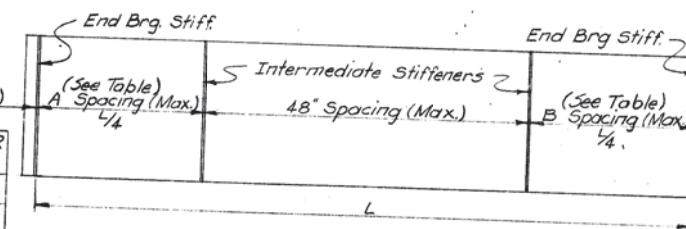
DEFLECTION AND CAMBER			
SPAN	SPAN NO. 24C	SPAN NO. 25C	SPAN NO. 26C
GIRDER	A thru E	A thru E	A thru E
LOCATION	1/4	1/2	3/4
Deflection due to weight of steel	1/16	1/8	1/16
Deflection due to remaining Dead Load	5/16	5/16	5/16

Girders for Unit #16 shall not be cambered

GIRDER SPLICE WELDING PROCEDURE

1. Raise the ends of girders of Span #26C at Pier #26C 1" and ends of girders of Span #24C at Pier #23C-1".
2. Butt-weld girder flanges and webs at Piers #24C & 25C, using the following welding sequence:
Make two passes on each flange, then two on the web; repeat using one pass at each location until welds are completed.
3. Weld all Pier Crossframes at Pier #25C into place.
4. Lower the girders of Spans #24C & 26C into final positions.

INTERMEDIATE STIFFENER SPACING		
Span	A	B
24 C	42"	39"
25 C	42"	42"
26 C	39"	42"



Note: Adjust intermediate stiffener spacing to conform to intermediate crossframe spacing.

INTERMEDIATE STIFFENER SPACING

Notes:
For Details of Crossframes, see Sheet #205
For Details of Intermediate & Bearing Stiffeners, see Sheet #205
For Typical Girder Elevations, see Sheet #205
For Details of End Crossframes, see Sheet #215

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CONSULTING ENGINEERS
CINCINNATI, OHIO

STRUCTURAL STEEL DETAILS
UNIT NO. 16

Note: $\pm$ Pier #27C, $\pm$ Pier #28C & $\pm$ Brg. N. Abut. are parallel to each other.

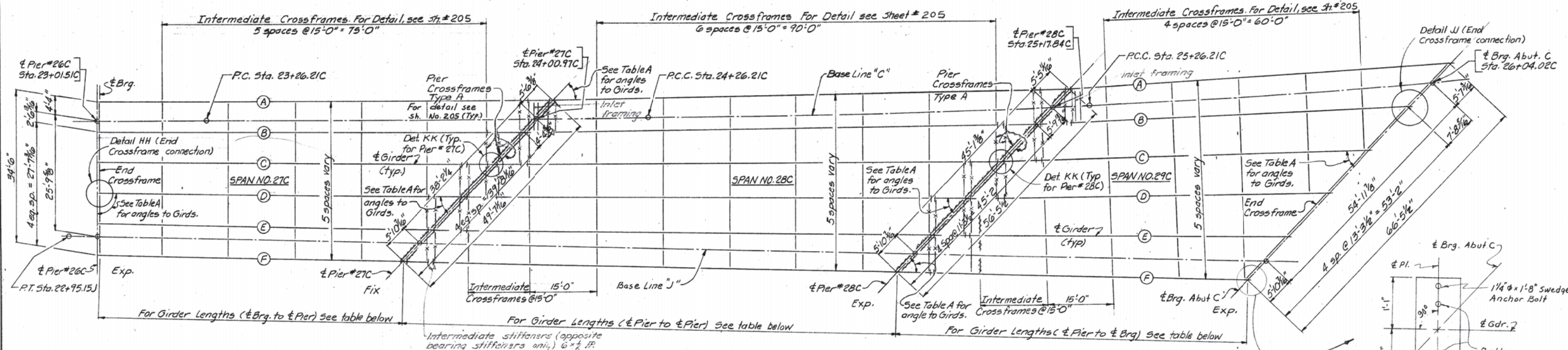


TABLE A (Angles from $\pm$ Piers or $\pm$ Brgs. to $\pm$ Girders) See Plan.

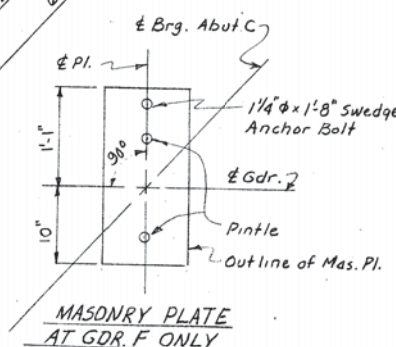
Girder	Pier #26C	Pier #27C	Pier #28C	Abut. C
A	89°56'20"	46°42'12"	45°30'38"	43°04'31"
B	89°44'56"	46°53'29"	45°59'45"	43°59'49"
C	89°31'59"	47°06'33"	46°29'18"	44°57'04"
D	89°16'41"	47°21'40"	46°59'18"	45°56'15"
E	88°58'52"	47°39'36"	47°29'56"	46°57'36"
F	88°37'27"	48°01'02"	48°01'02"	48°01'02"

Same as shown for Span #28C @ Pier #27C.
Same as shown for Span #29C @ Pier #28C.

Note: For inlet framing see Sh. No. 268

FRAMING PLAN-UNIT NO. 17
(Spans No. 27C thru 29C)

Note: Web R 54"x $\frac{3}{8}$ ". For Flg. R's see table below
Brg. Stiff. 7 $\frac{1}{2}$ "x $\frac{1}{2}$ " R's. Intermediate Stiff. 6"x $\frac{3}{8}$ " R's
For bearing details see Sheet # 206
For detail of End Crossframe see Sheet No. 215
For Typical Girder Elevation see Sheet No. 205
For Detail KK, See Sheet # 200



	Span #27C	Span #28C	Span #29C
Flg. R's Gdrs. A & B (Top & Bot.)	16" x 1 $\frac{3}{8}$ "	16" x 2 $\frac{1}{8}$ "	16" x 2 $\frac{1}{8}$ "
Flg. R's Gdrs. C & D	16" x 1 $\frac{3}{8}$ "	16" x 1 $\frac{3}{8}$ "	16" x 1 $\frac{3}{8}$ "
Flg. R's Gdrs. E & F	16" x $\frac{3}{4}$ "	16" x 1 $\frac{3}{8}$ "	16" x 2 $\frac{1}{8}$ "
Flg. to Web Weld Size (Typ. all girders)	$\frac{5}{16}$ " weld	$\frac{3}{8}$ " weld	$\frac{5}{16}$ " weld

TABLE OF FLANGE PLATES AND WELD SIZES

GIRDER LENGTHS

Girder	Span #27C	Span #28C	Span #29C
A	102'-7 $\frac{3}{8}$ "	116'-9 $\frac{1}{8}$ "	86'-3 $\frac{3}{8}$ "
B	95'-9 $\frac{1}{8}$ "	115'-10 $\frac{3}{8}$ "	84'-9 $\frac{1}{8}$ "
C	89'-0 $\frac{3}{8}$ "	114'-10 $\frac{3}{8}$ "	83'-4 $\frac{1}{8}$ "
D	82'-2 $\frac{3}{8}$ "	113'-11 $\frac{3}{8}$ "	81'-11 $\frac{3}{8}$ "
E	75'-4 $\frac{3}{8}$ "	113'-0 $\frac{1}{8}$ "	80'-7 $\frac{1}{4}$ "
F	68'-7 $\frac{1}{8}$ "	112'-1 $\frac{3}{8}$ "	79'-

Work this sheet with Sheet #200

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CONSULTING ENGINEERS
CINCINNATI, OHIO

STRUCTURAL STEEL DETAILS
UNIT NO. 17.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVIS
RCF	REL/JC 7-13-60		JHO 8/11/60	11-13- 10-14-60	5-61

HAM-75-0022R
SPANS 27C-29C

DETAIL HH
(End Crossframe connection)
(at Pier #26C, Span 27C)

DETAIL JJ
(End Crossframe connection)
(at Abutment C)

BURGESS
& NIPLE
ENGINEERS
ARCHITECTS

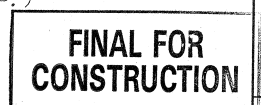
DESIGNED	DRAWN	REVIEWED	DATE
JCS	AAA	RMK	7/8/98
CHECKED	REVISED	STRUCTURE FILE NUMBER	
TMR			

FRAMING PLAN - UNIT 2

FORT WASHINGTON WAY
CONTRACT NO. 6

23	55
----	----

556
588



ROCKER & BOLSTER BEARINGS				
BEAM	PIER 23 J	PIER 24 J	PIER 25 J	PIER 26 J
B4	R575	B1000	R1000A	R675A
B3	---	B775	R1225A	R675B
B2	R675	B1225	R1225B	R675C
B1	R675	B1225	R1225	R675D

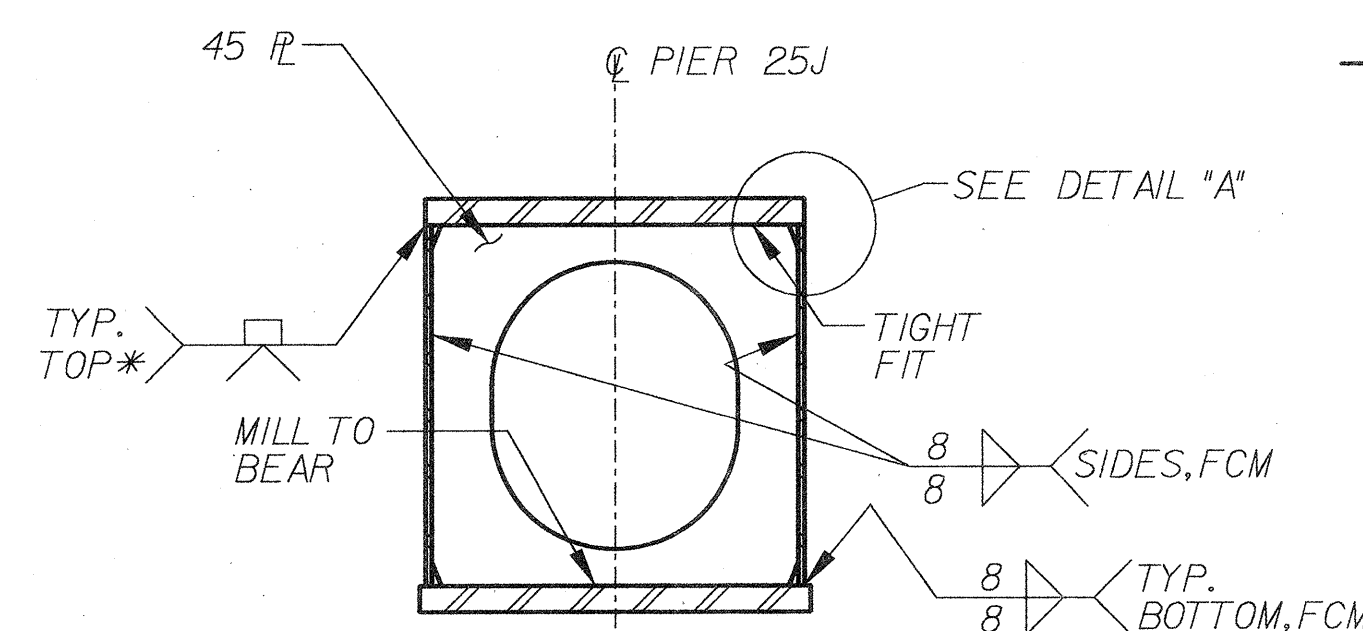
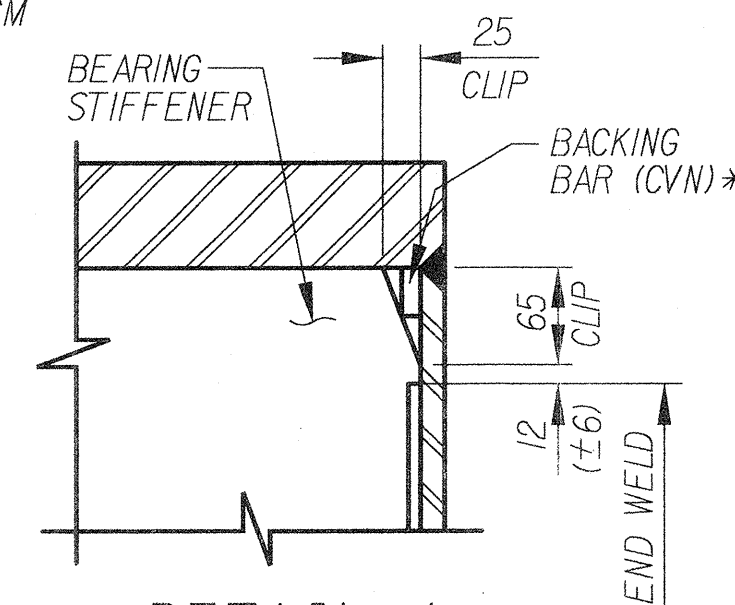
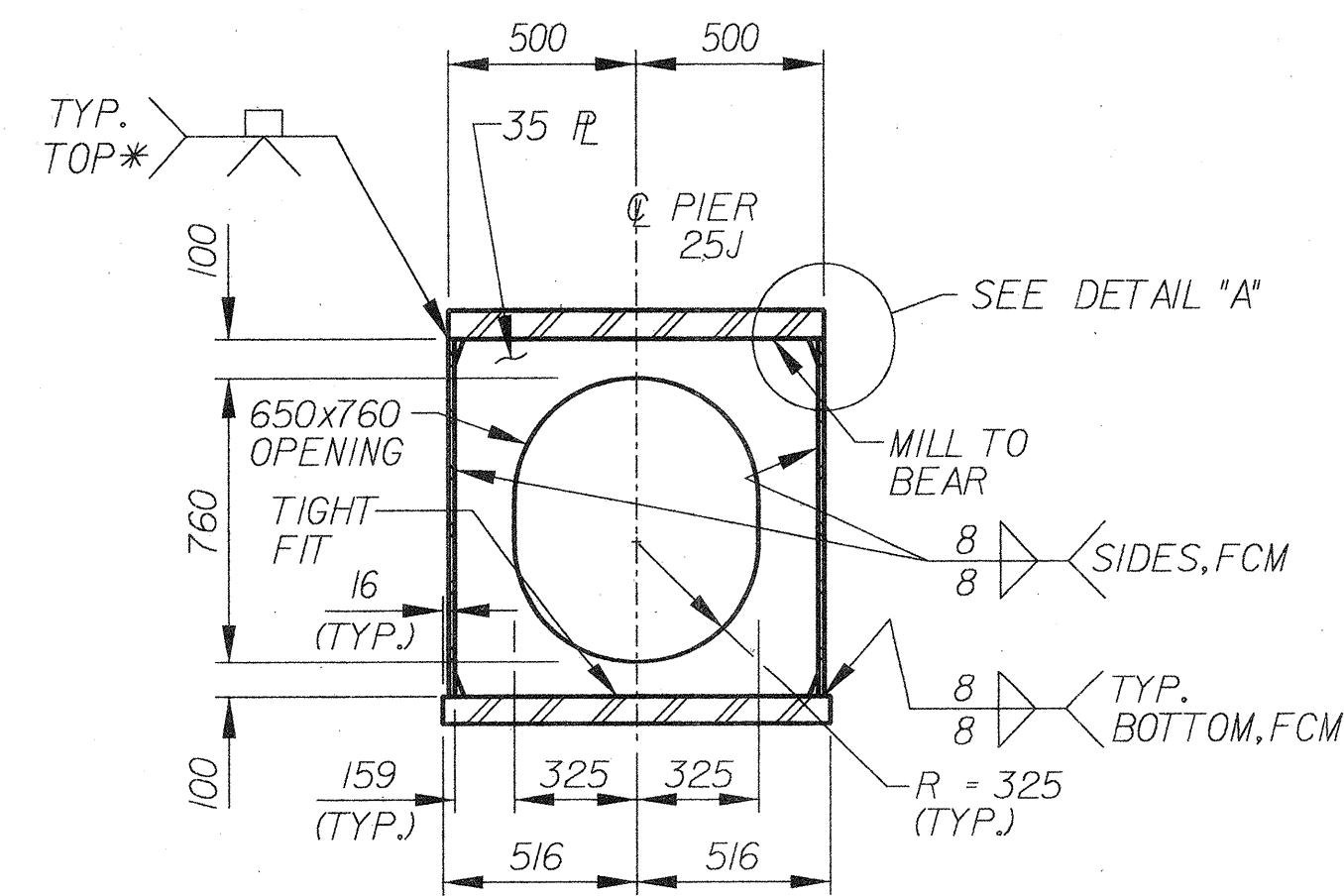
* = SEE DIAPHRAGM CONNECTION
DETAIL B ON SHEET 32/55.

* * = SEE DIAPHRAGM CONNECTION
DETAIL A ON SHEET 32/55.

NOTES:

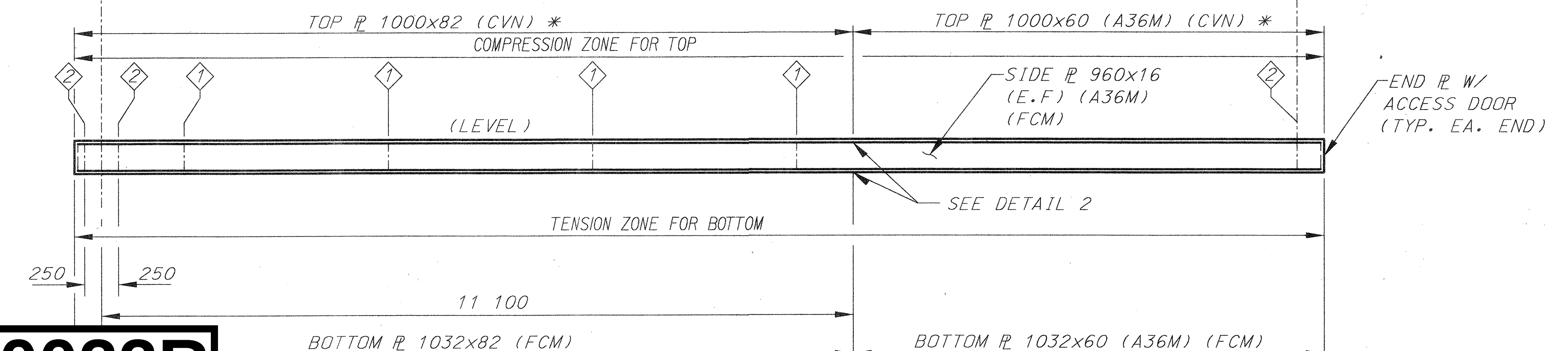
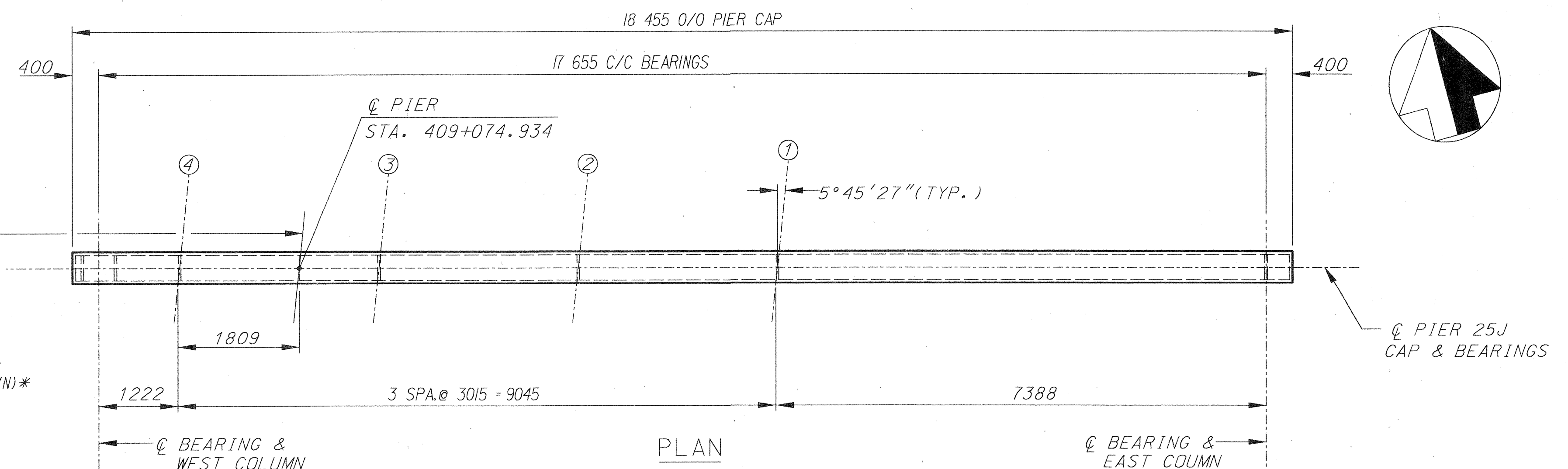
1. STRUCTURAL STEEL SHALL BE ASTM A572M LEVEL 3 FABRICATION.
2. SEE SHEET 48/55 FOR BEARING DETAILS.
3. CROSSFRAMES IN THIS BAY SHALL NOT BE WELDED UNTIL AFTER STAGE 1 DECK PLACEMENT.

LEGEND:
F.S. = FIELD SPLICE
BRGS. = BEARINGS
(X) = BEAM LINE DESIGNATION
U.N.O. = UNLESS NOTED OTHERWISE
● = BEAM SUPPORT DIAPHRAGM

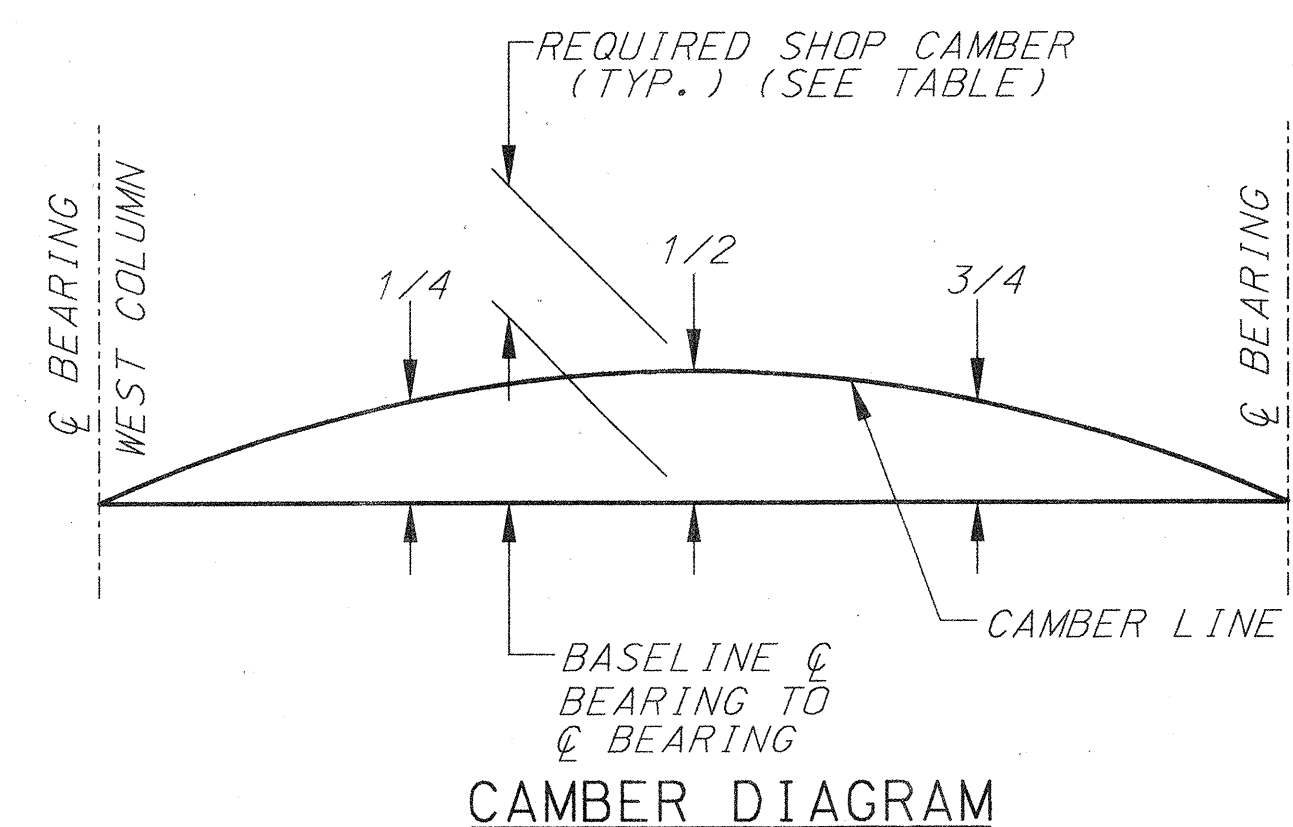
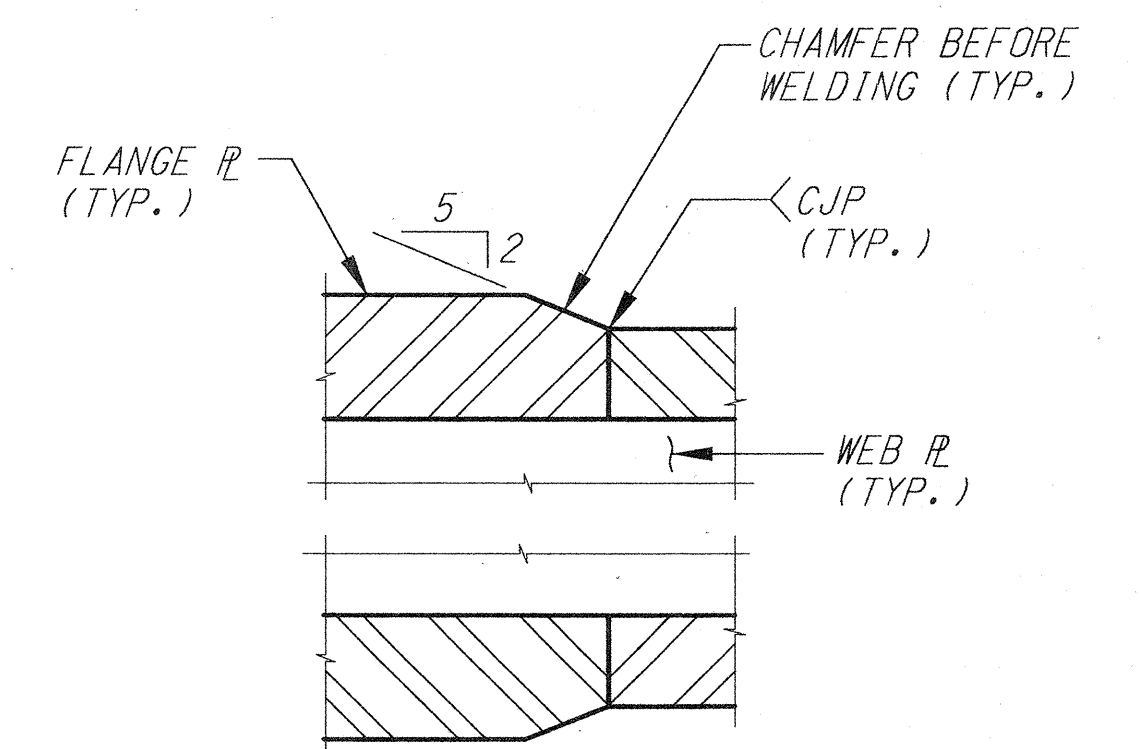


FOR DETAILS SHOWN BUT NOT NOTED, SEE TYPE 1 STIFFENER DETAIL.

HAM-75-0022R PIER 25J



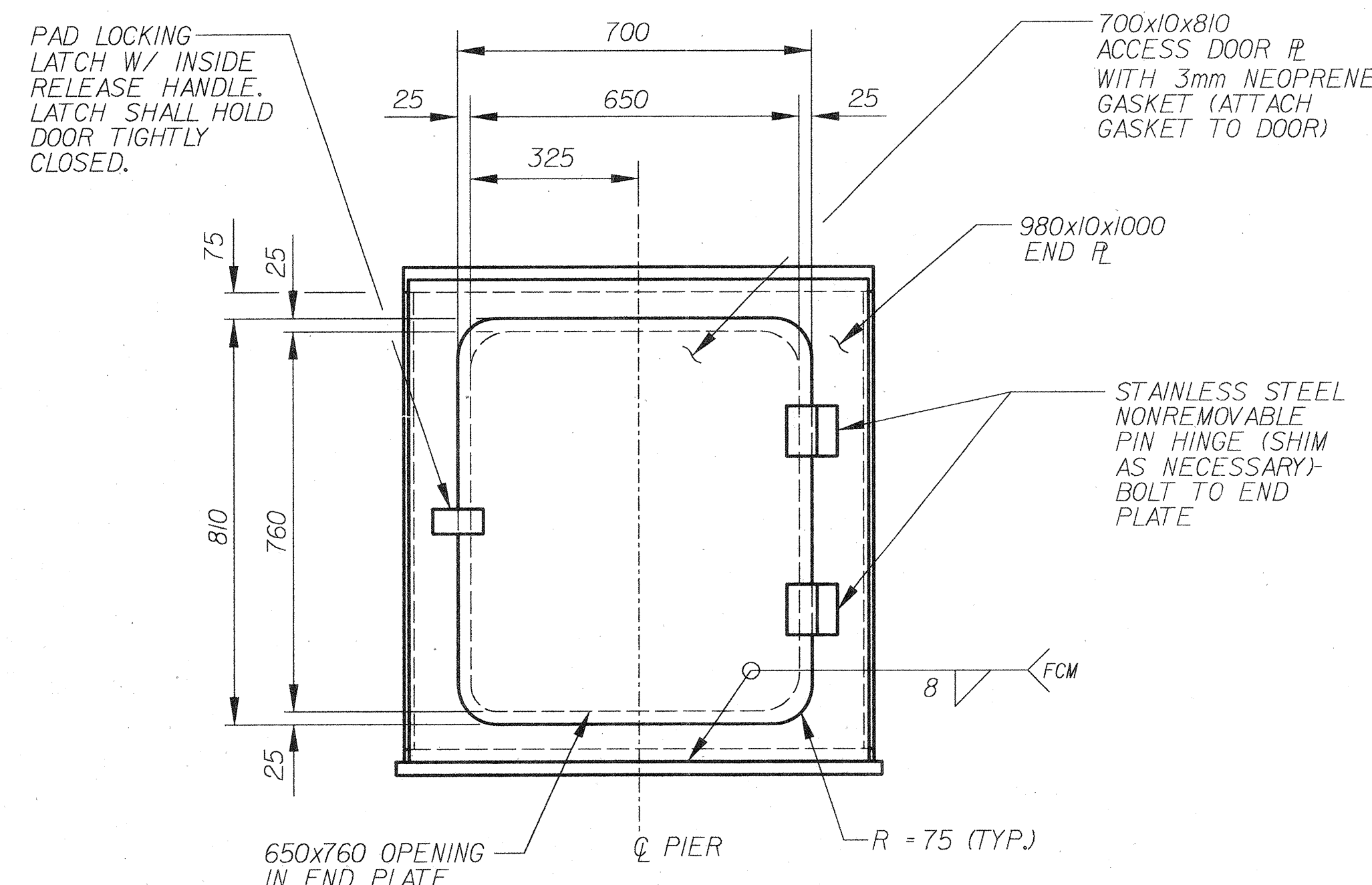
* - FABRICATOR MAY SUBSTITUTE 1032mm WIDE TOP PLATE ATTACHED TO WEBS WITH DOUBLE 8mm FILLET WELDS AT EACH WEB PL IN PLACE OF 1000mm WIDE TOP PLATE WITH FULL PENETRATION WELDS AND BACKING BAR.



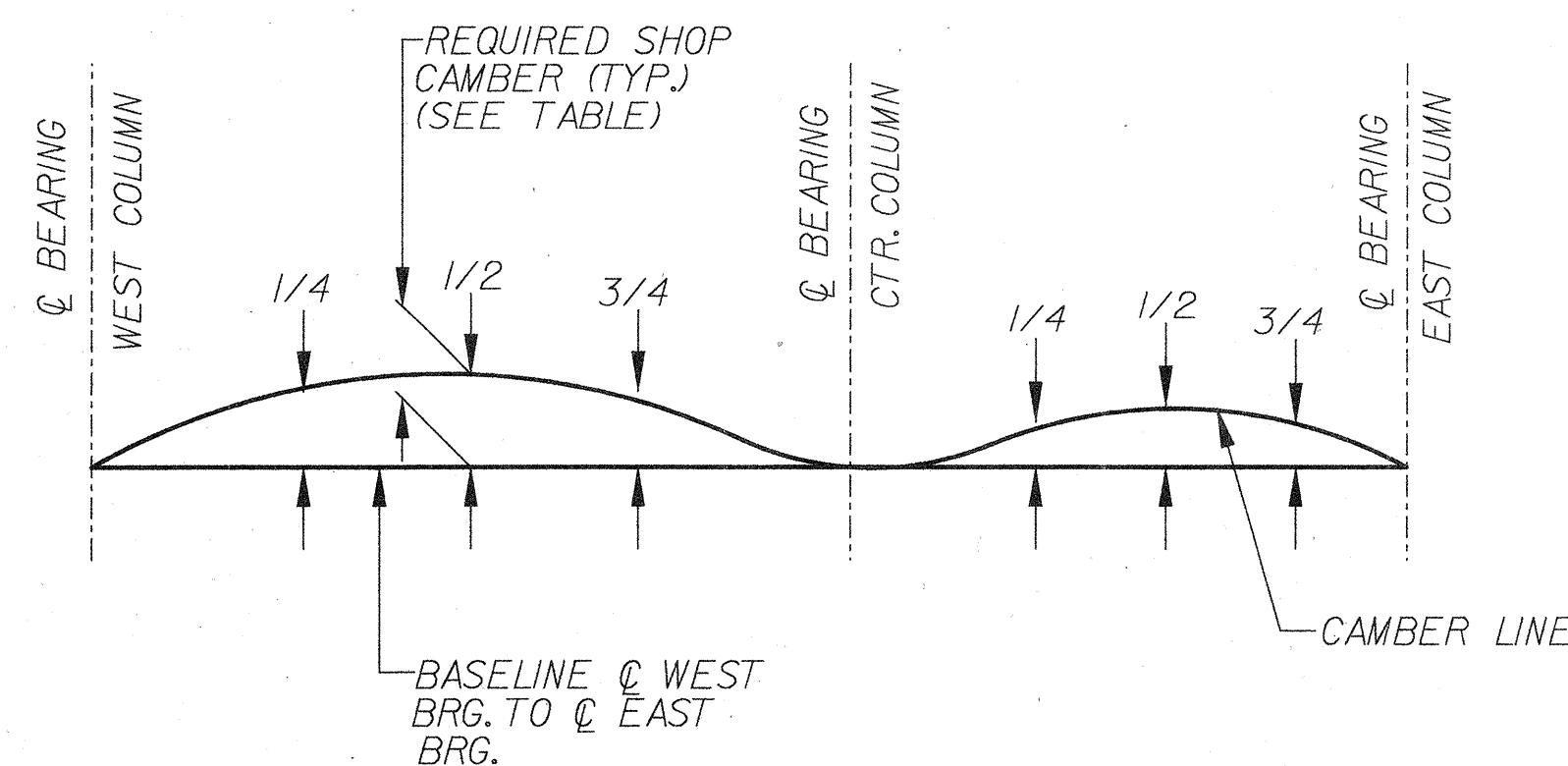
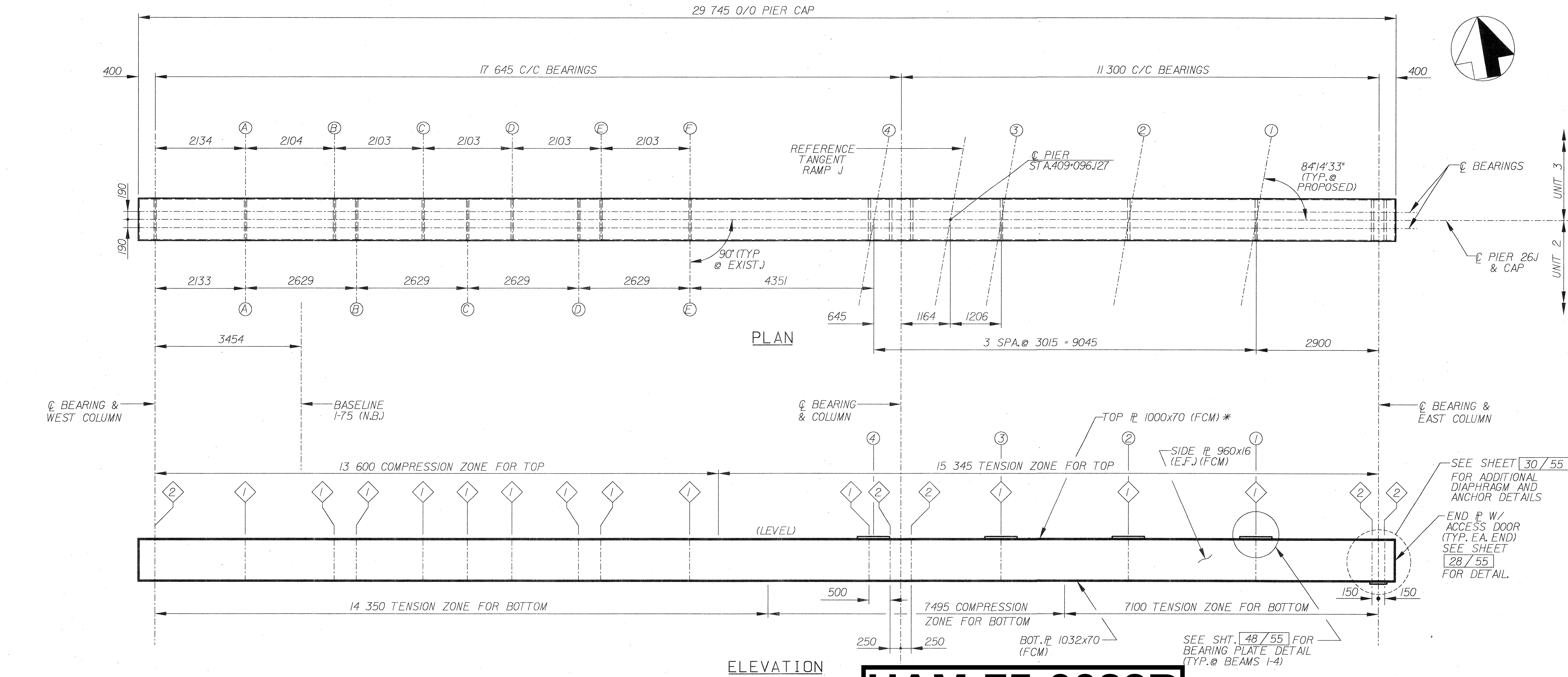
DEFLECTION AND CAMBER (mm)			
STEEL CAP			
POINT	1/4	1/2	3/4
DEFLECTION DUE TO WEIGHT OF CAP	2	2	2
DEFLECTION DUE TO RAINING D.L.	19	27	19
REQUIRED SHOP CAMBER	21	29	21

FINAL FOR
CONSTRUCTION

- LEGEND:
- ⊗ = BEAM LINE DESIGNATION
 - ⊠ = INDICATES BEARING STIFFENER TYPE
 - FCM = FRACTURE CRITICAL MEMBER
- NOTES:
- ALL STRUCTURAL STEEL THIS SHEET SHALL BE A572M GR345 UNLESS OTHERWISE NOTED.
 - CAP BOTTOM & SIDE PLATES ARE FRACTURE CRITICAL COMPONENTS AND SHALL CONFORM TO THE PROVISIONS OF CHAPTER 12 OF ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE AND THE WELDING REQUIREMENTS OF SUPPLEMENTAL SPECIFICATION 863.23. CHARTY V-NOTCH IMPACT TEST REQUIREMENTS SHALL MEET OR EXCEED THE FCM VALUES FOR ZONE 2.
 - INTERIOR SURFACES OF BOX SHALL BE PRIME PAINTED WITH A WHITE PAINT PRIOR TO WELDING OF FINAL BOX FLANGE.

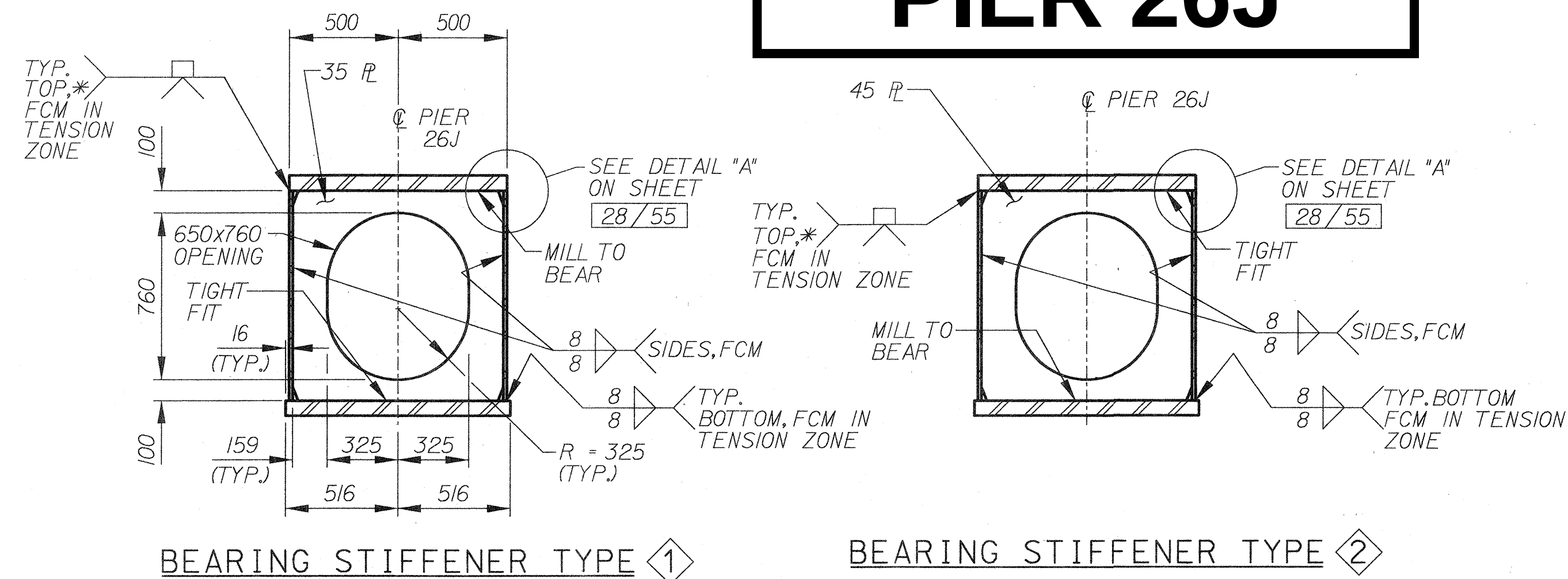


P:\PR21442\CADD\BRDG\SHS\SHS\22.DGN



CAMBER AND BLOCKING DIAGRAM

DEFLECTION AND CAMBER (mm)						
STEEL CAP		SPAN 1			SPAN 2	
POINT		1/4	1/2	3/4	1/4	1/2 3/4
DEFLECTION DUE TO WEIGHT OF CAP		1	1	1	0	0 0
DEFLECTION DUE TO REMAINING D.L.		13	16	9	1	1 0
REQUIRED SHOP CAMBER		14	17	10	1	1 0



FINAL FOR CONSTRUCTION

LEGEND:

- (X) = BEAM LINE DESIGNATION
- (X) = INDICATES BEARING STIFFENER TYPE
- FCM = FRACTURE CRITICAL MEMBER

NOTES:

- ALL STRUCTURAL STEEL THIS SHEET SHALL BE ASTM A36M, LEVEL 6 FABRICATION UNLESS OTHERWISE NOTED.
- CAP TOP, BOTTOM & SIDE PLATES ARE FRACTURE CRITICAL COMPONENTS AND SHALL CONFORM TO THE PROVISIONS OF CHAPTER 12 OF ANSI/AASHTO/AWS D15 BRIDGE WELDING CODE AND THE WELDING REQUIREMENTS OF SUPPLEMENTAL SPECIFICATION 863.23. CHARPY V-NOTCH IMPACT TEST REQUIREMENTS SHALL MEET OR EXCEED THE FCM VALUES FOR ZONE 2.
- INTERIOR SURFACES OF BOX SHALL BE PRIME PAINTED WITH WHITE PAINT PRIOR TO WELDING OF FINAL BOX FLANGE.

PIER 26J STEEL BOX GIRDER CAP

FORT WASHINGTON WAY
CONTRACT NO. 6

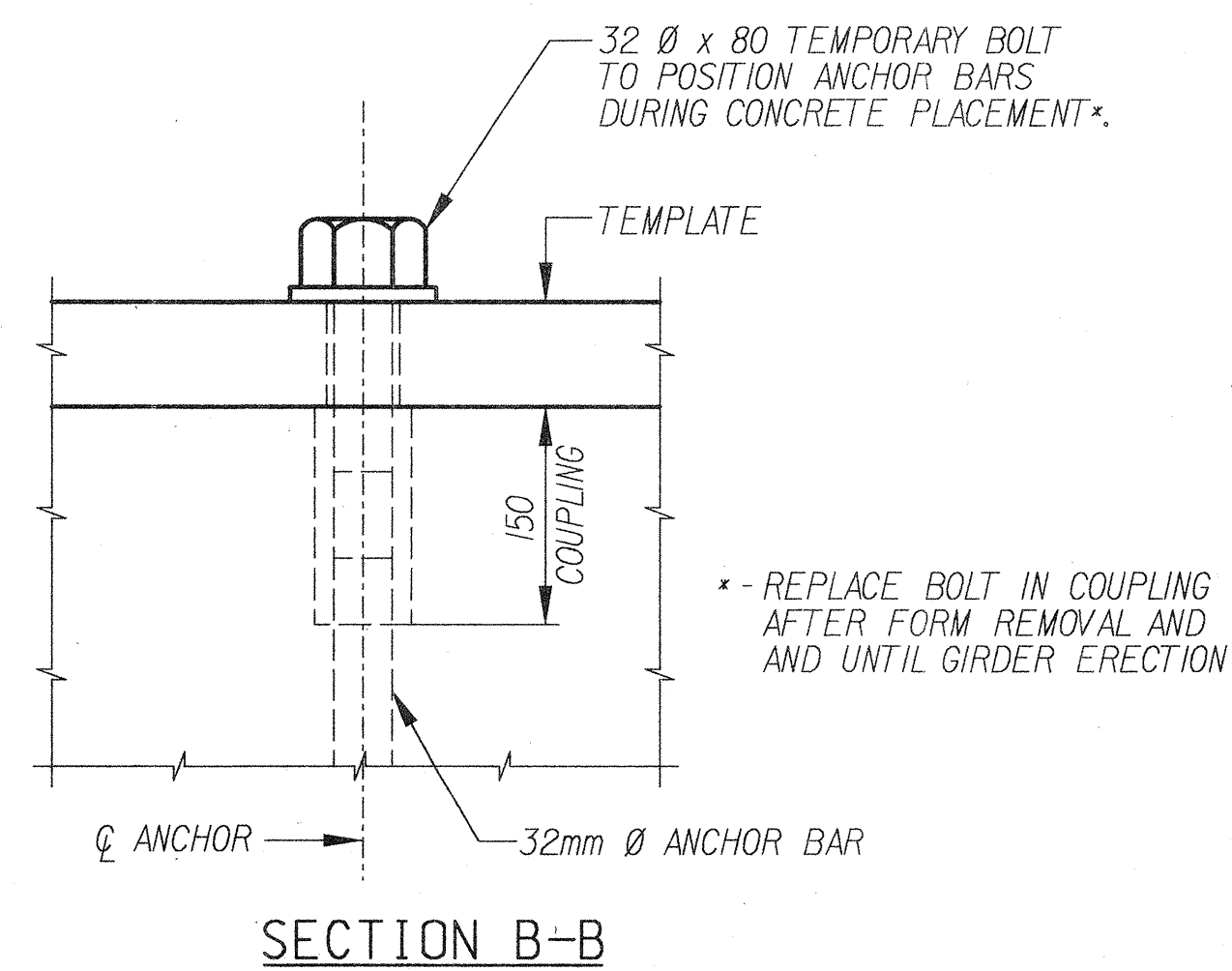
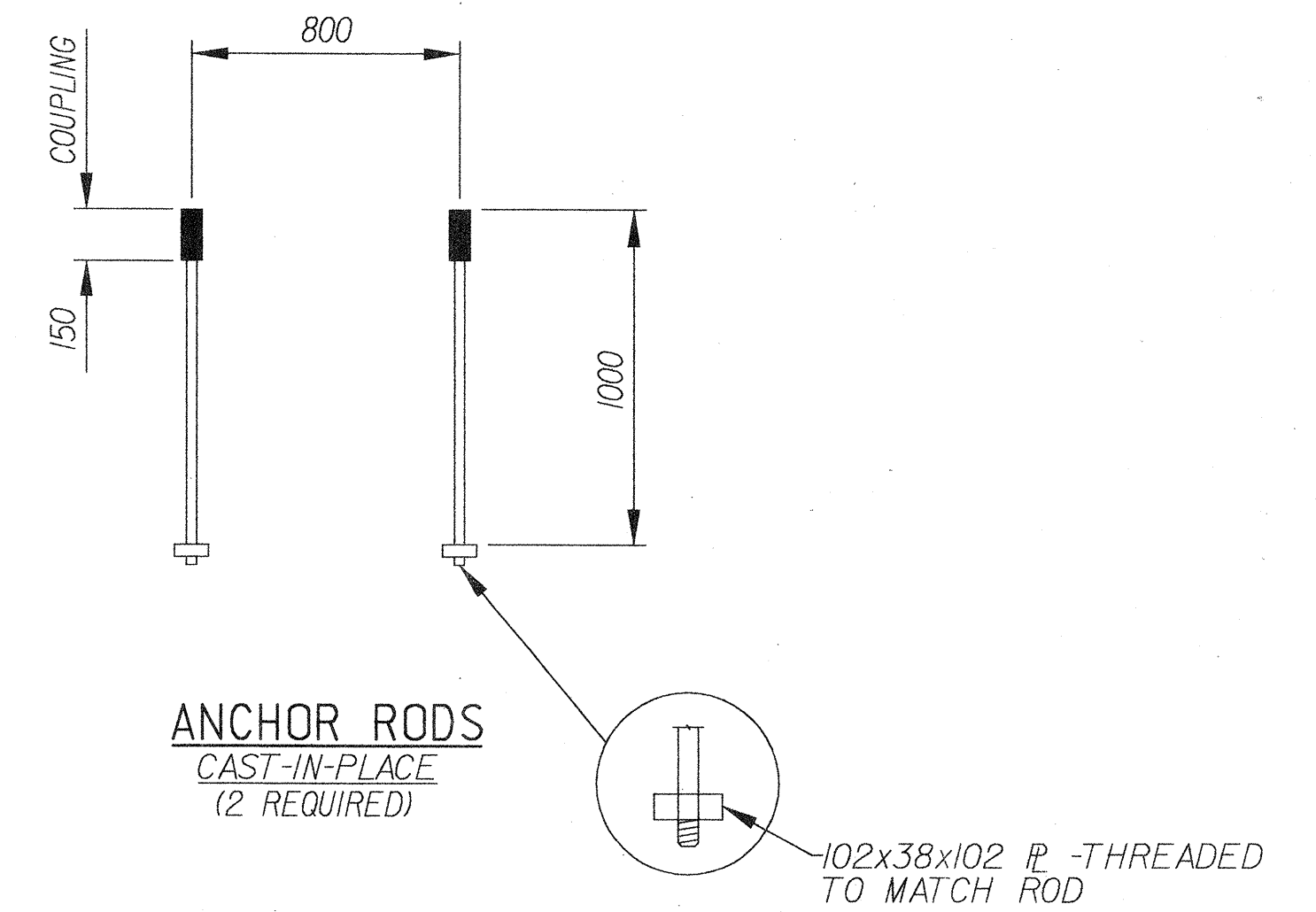
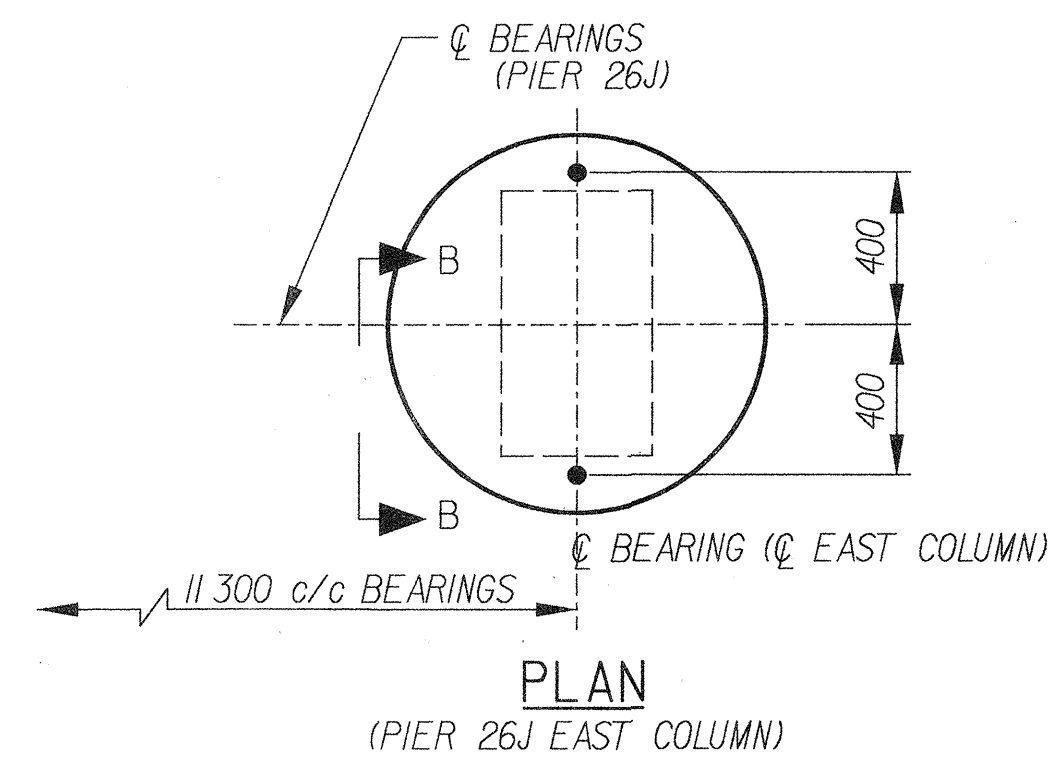
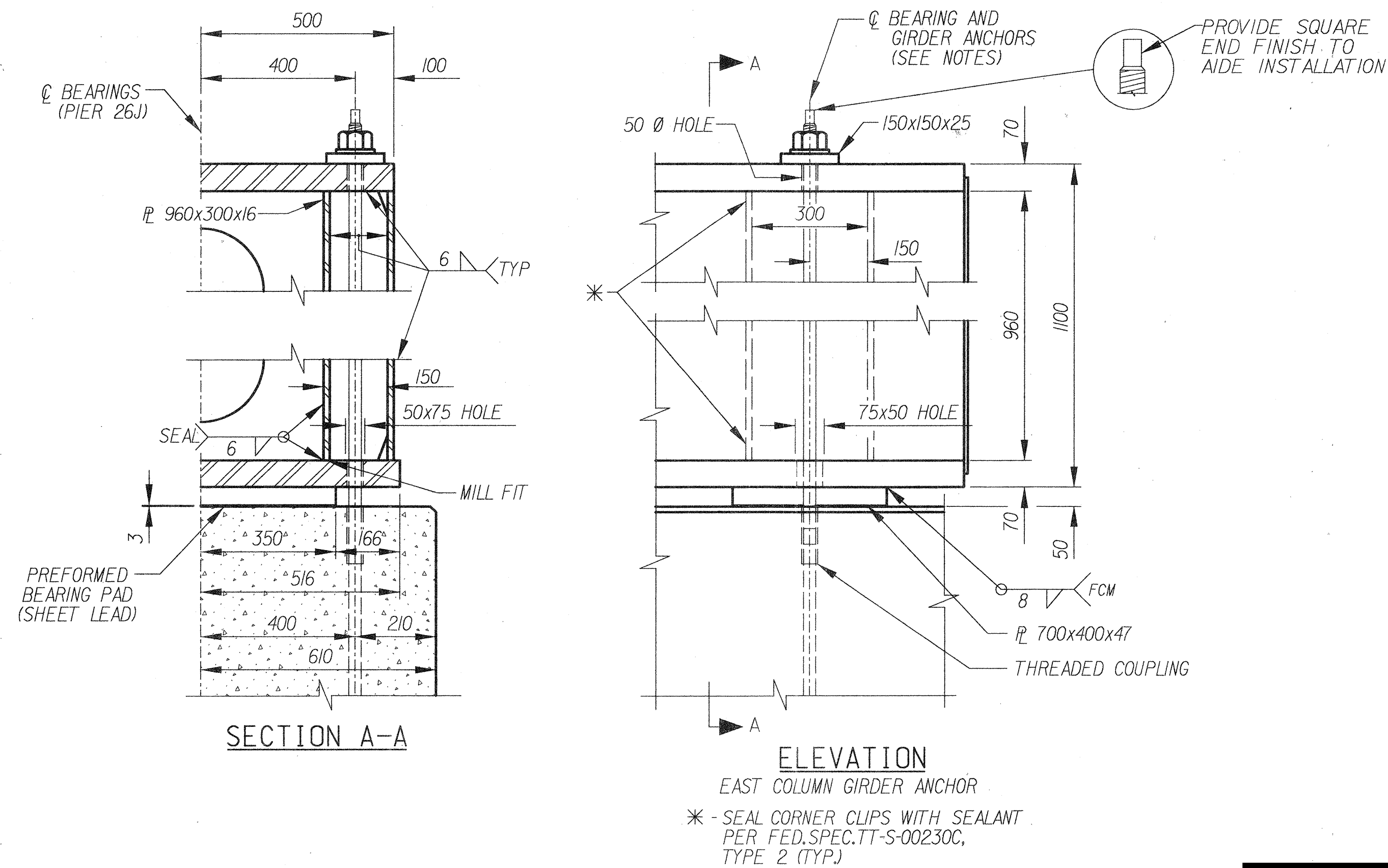
29 / 55

562
588

ENGINEERS
ARCHITECTS

DATE 7/8/98
REVIEWED RMK
DESIGNED MJM
CHECKED CAS

STRUCTURE FILE NUMBER



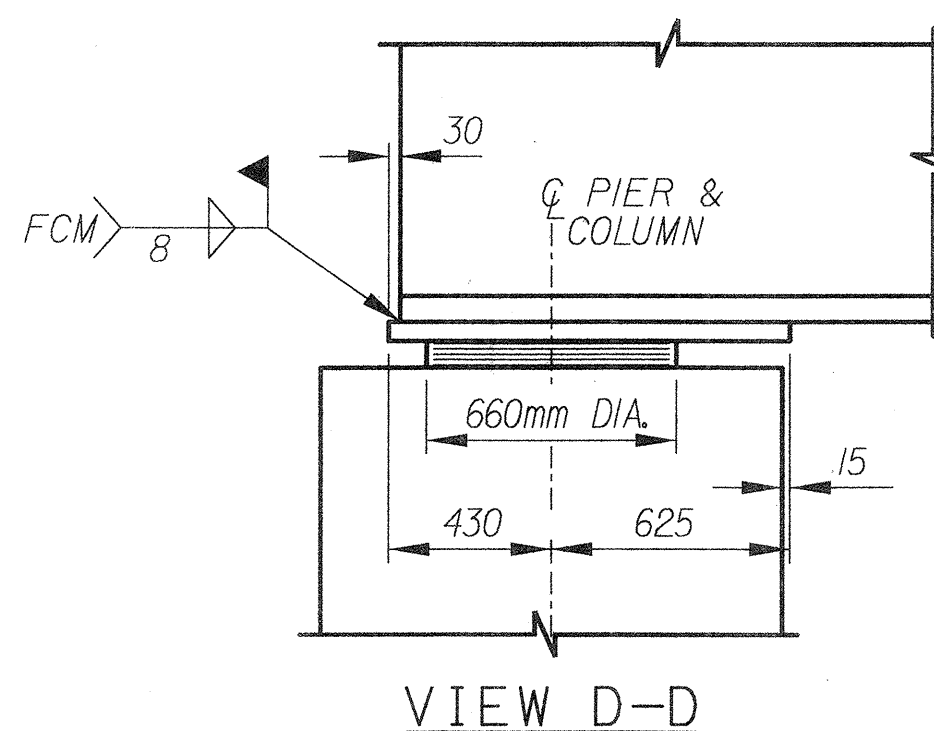
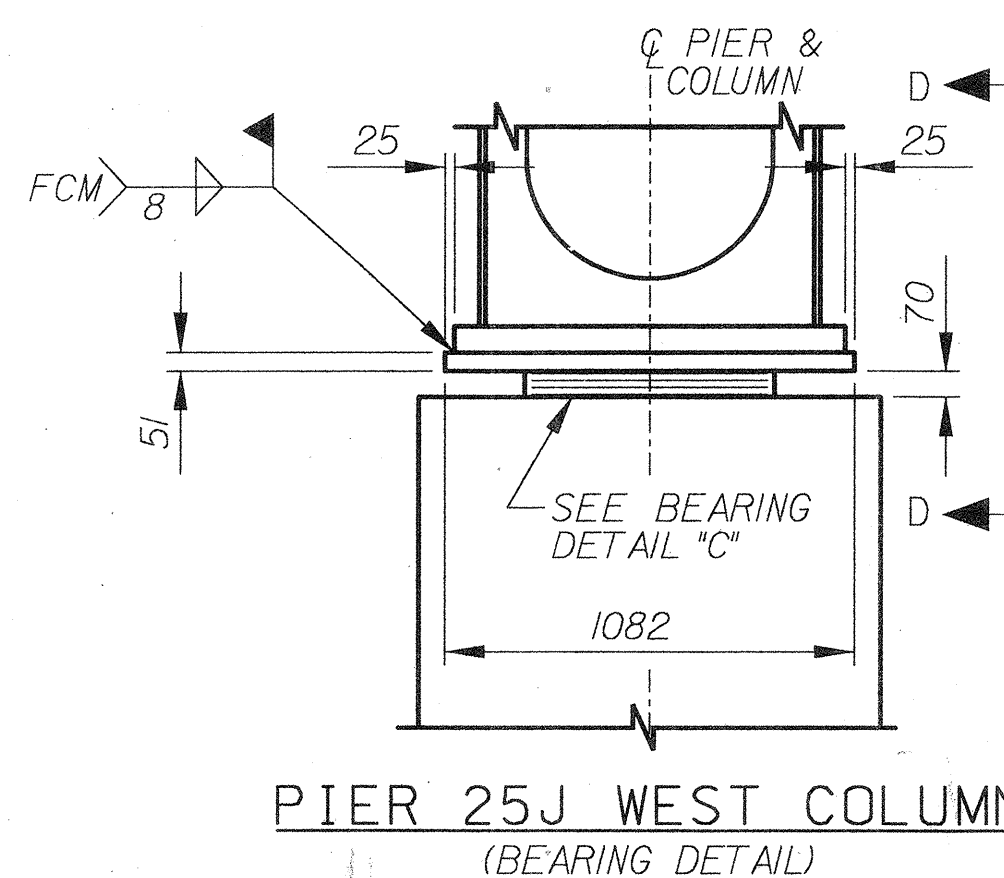
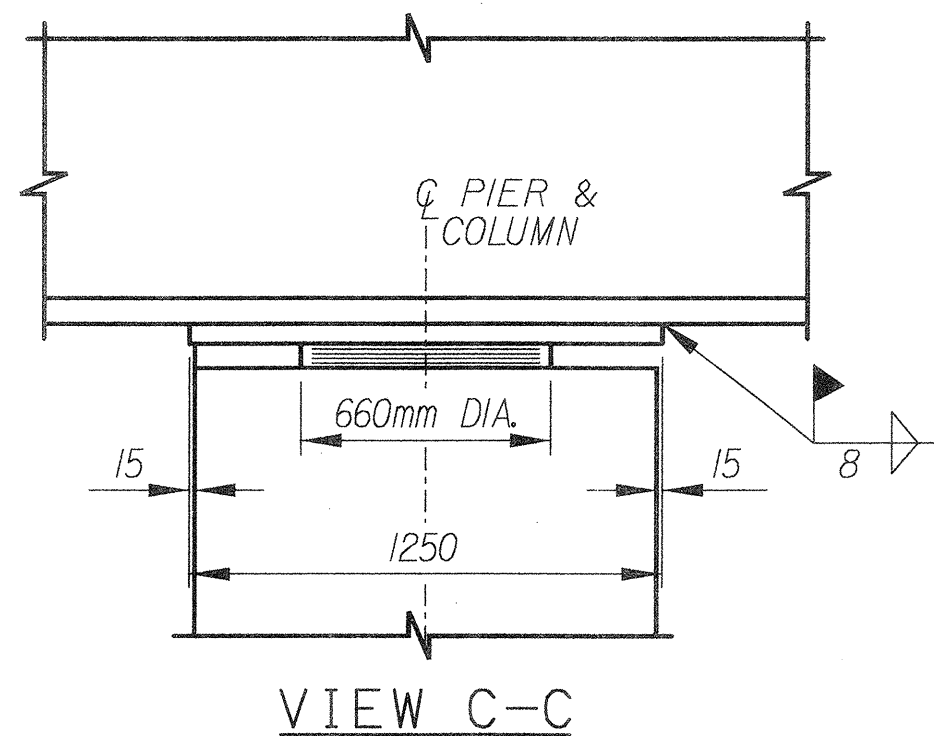
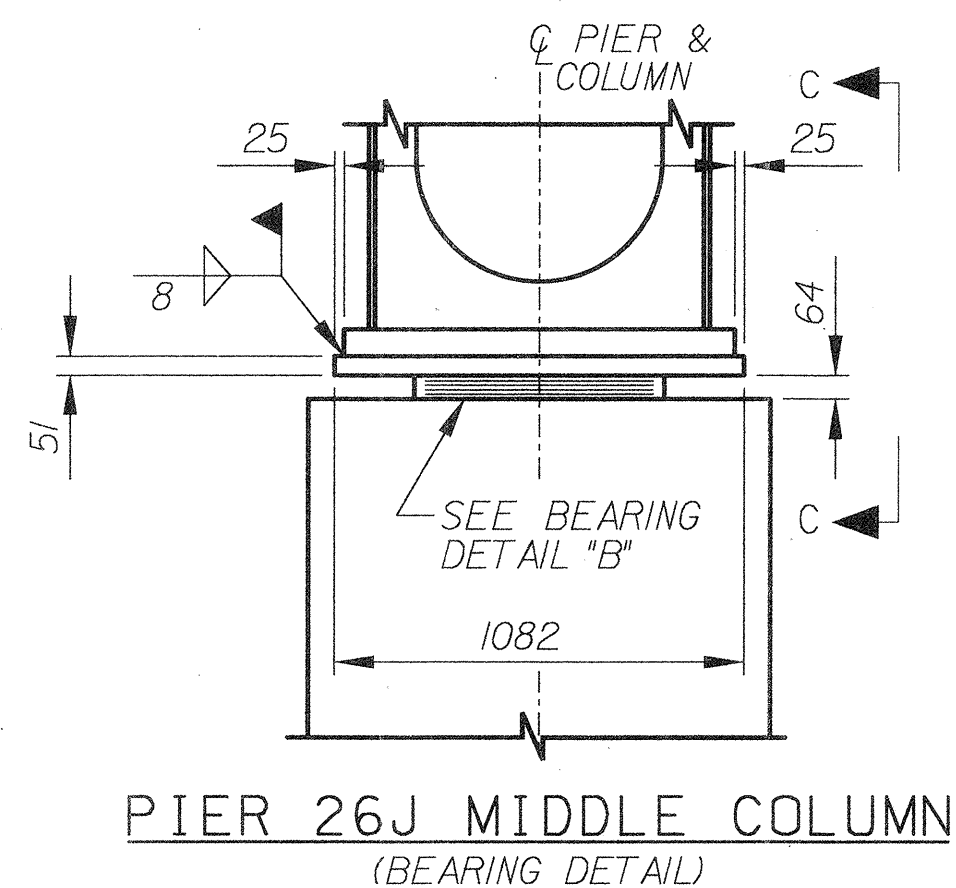
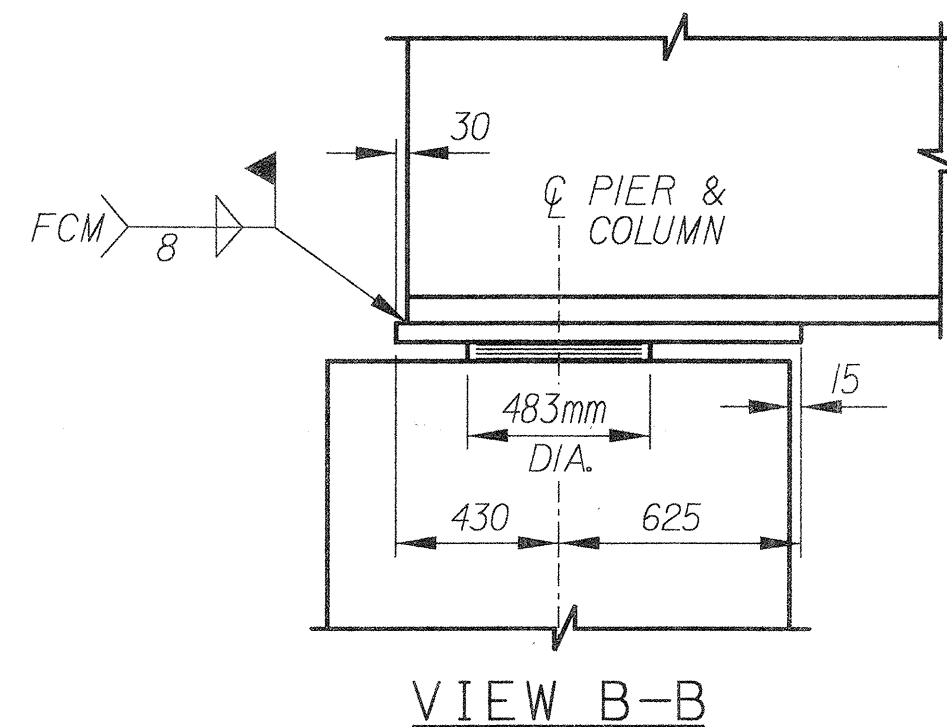
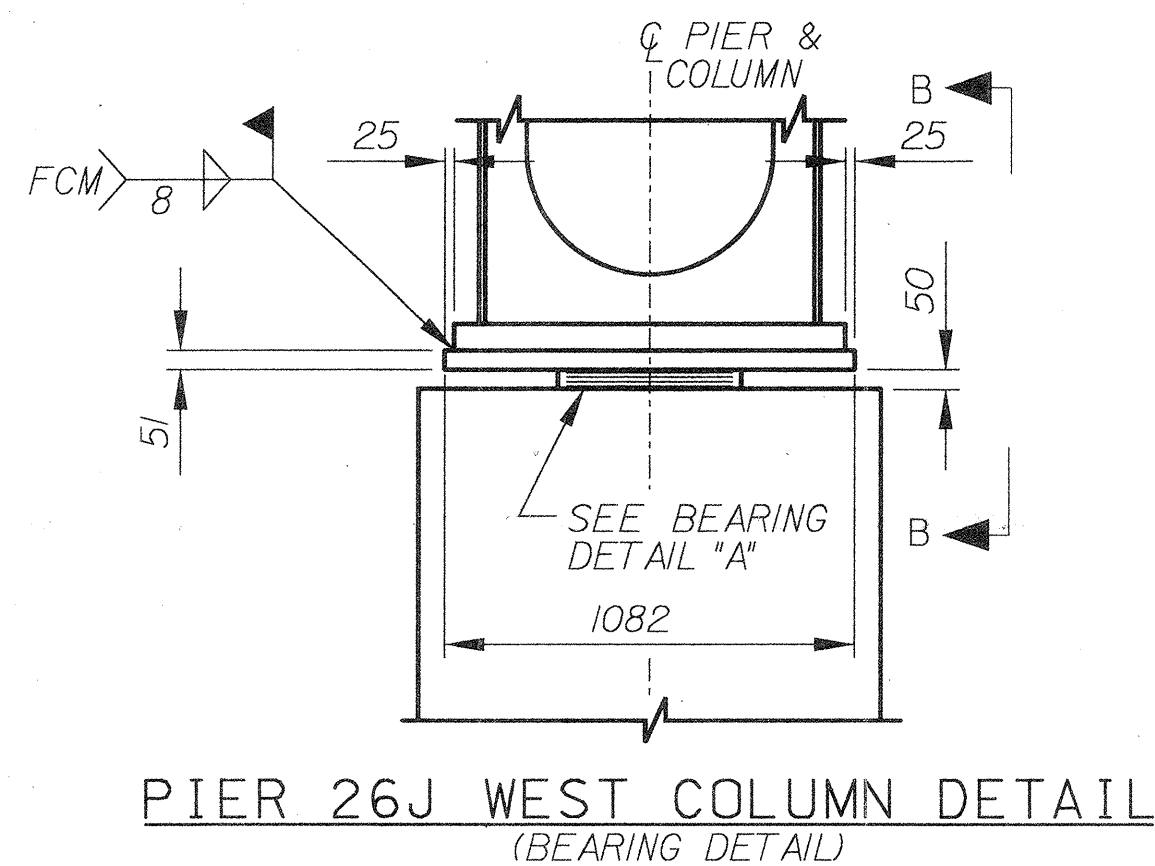
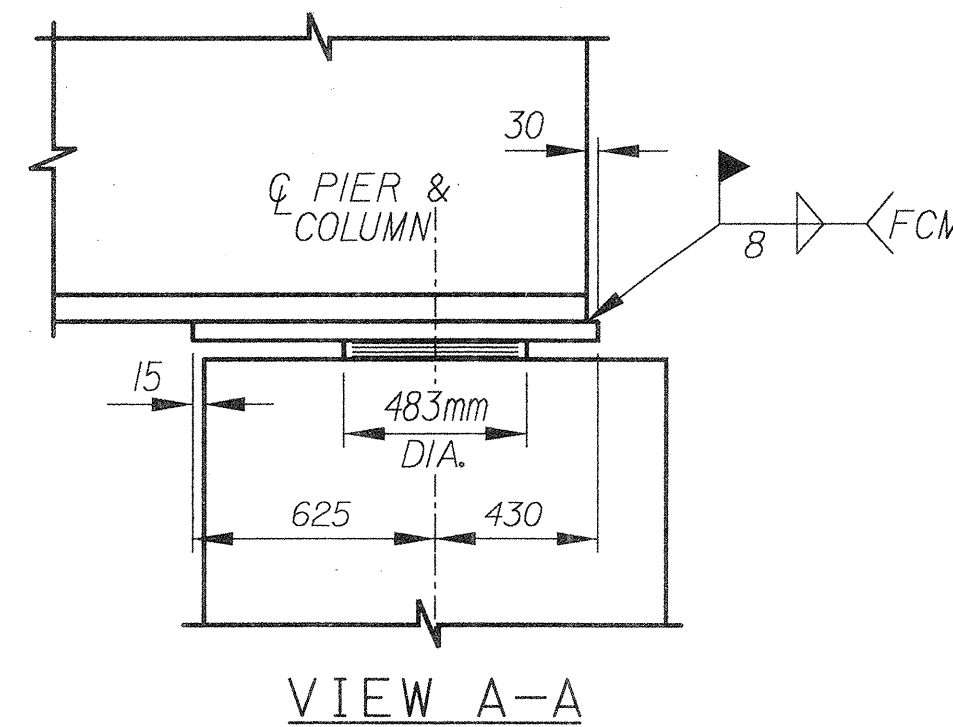
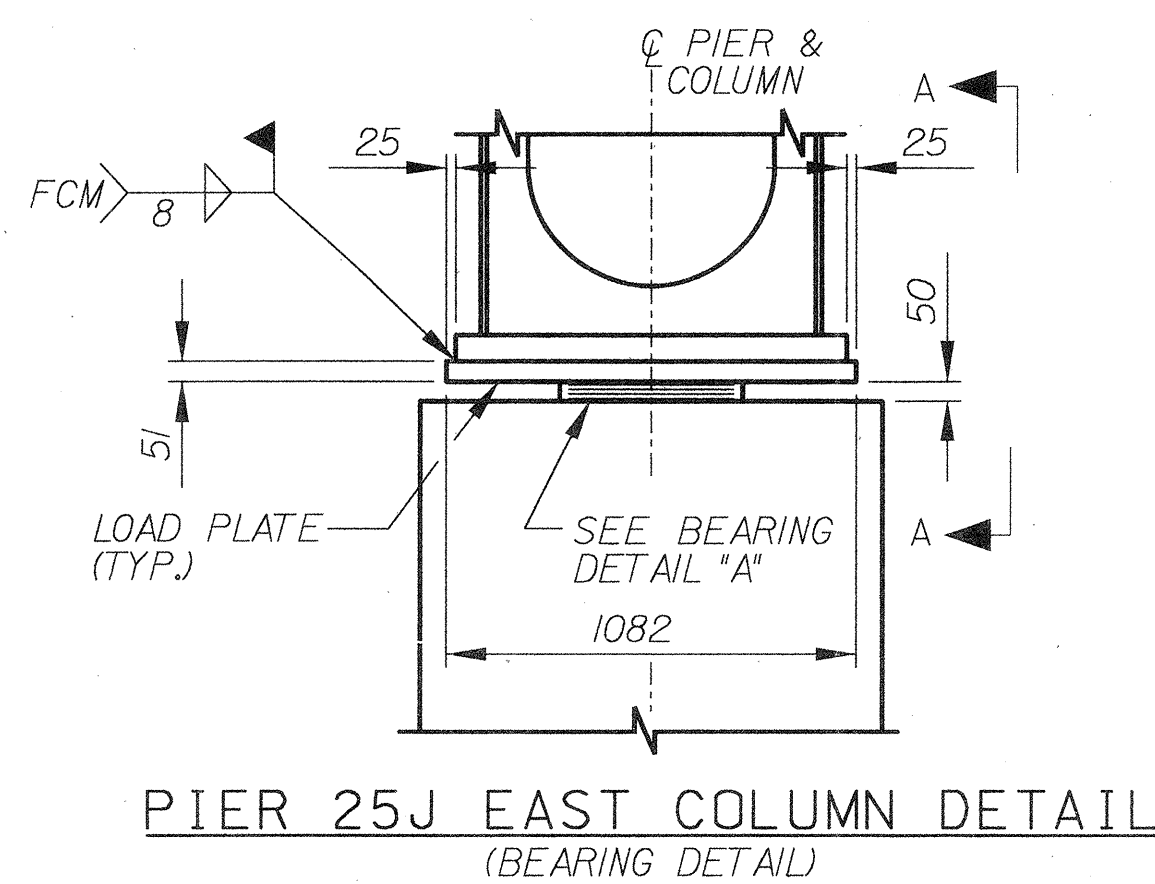
HAM-75-0022R
PIER 26J

**FINAL FOR
CONSTRUCTION**

NOTE

GIRDER ANCHORS: PROVIDE 2-32mm Ø ANCHOR RODS FOR THE EAST COLUMN OF PIER 26J. THESE ANCHORS INCLUDE 2-150x150x25 SQUARE WASHERS, 2 ROUND WASHERS, 2-THREADED COUPLINGS WITH 2-32mm Ø CAST-IN-PLACE ANCHOR RODS AND 2-32x80 TEMPORARY BOLTS TO SECURE CAST-IN-PLACE ANCHOR RODS IN POSITION DURING PLACEMENT OF CONCRETE. MATERIALS FOR ANCHORS AND HARDWARE SHALL CONFORM TO ASTM A325M, TYPE 3 SPECIFICATIONS. COUPLING SHALL BE SUITABLE TO DEVELOP THE FULL STRENGTH OF THE ANCHOR BOLTS. USE FORM TEMPLATE TO POSITION ANCHOR BAR IN PROPER POSITION DURING CONCRETE PLACEMENT. AFTER REMOVAL OF TEMPLATE, PLACE TEMPORARY BOLTS INTO EXPOSED COUPLINGS UNTIL THEY ARE REPLACED BY PERMANENT ANCHOR BARS DURING GIRDER ERECTION.

AFTER GIRDER ERECTION AND BEFORE RELEASING AND REMOVING TEMPORARY SUPPORTS UNDER THE EXISTING STRUCTURE, BOLTS SHOULD BE TIGHTENED. TO TIGHTEN, TURN NUTS UNTIL STEEL IS FULLY COMPACTED IN BEARING PLATE. THEN TURN NUTS 2/3 TURN RELATIVE TO ROD. INCLUDE ALL MATERIALS, LABOR AND EQUIPMENT TO PLACE AND STRESS GIRDER ANCHORS WITH STRUCTURE LUMP SUM BID PAYMENT. ANCHORS AND HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH CMS 711.02.



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PIERS 25J-26J

ELASTOMERIC BEARINGS:

ELASTOMERIC BEARINGS SHALL COMPLY WITH 516 AND ARTICLES 18.4.5J THROUGH 18.5.6.2 OF SECTION 18, BEARING DEVICES, DIVISION II, CONSTRUCTION OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES. BEARINGS SHALL BE GRADE 3, 60 DUROMETER ELASTOMER, AND SHALL BE SUBJECTED TO THE LOAD TESTING REQUIREMENTS OF ARTICLE 18.7.4.5 CORRESPONDING TO DESIGN BY ARTICLE 14.6.5. PAYMENT FOR TESTING SHALL BE INCLUDED IN THE STRUCTURE LUMP SUM BID.

BEARING REPOSITIONING:

IF STEEL PIER CAPS ARE PLACED AT AN AMBIENT TEMPERATURE HIGHER THAN 27°C OR LOWER THAN 4°C, AND THE BEARING SHEAR DEFLECTION EXCEEDS 1/6 OF THE BEARING HEIGHT AT 15°C ± 5°C, THE STEEL PIER CAPS SHALL BE RAISED TO ALLOW THE BEARINGS TO RETURN TO THEIR UNDEFORMED SHAPE AT 15°C ± 5°C.

LOAD PLATE:

THE STEEL LOAD PLATE SHALL BE THE SAME MATERIAL AS THE ATTACHED STRUCTURAL STEEL AND BE SIMILARLY CLEANED AND COATED. PAINTING SHALL BE DONE IN THE SHOP, EXCEPT THE EDGES TO BE WELDED SHALL BE MASKED OFF. PAINTING SHALL BE INCLUDED IN THE PRICE BID FOR THE BEARINGS.

THE STEEL PLATE SHALL BE BONDED BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS. WELDING OF THE LOAD PLATE TO THE SUPERSTRUCTURE SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE SHALL NOT EXCEED 150°C AS DETERMINED BY THE USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.

DESIGN LOADING:

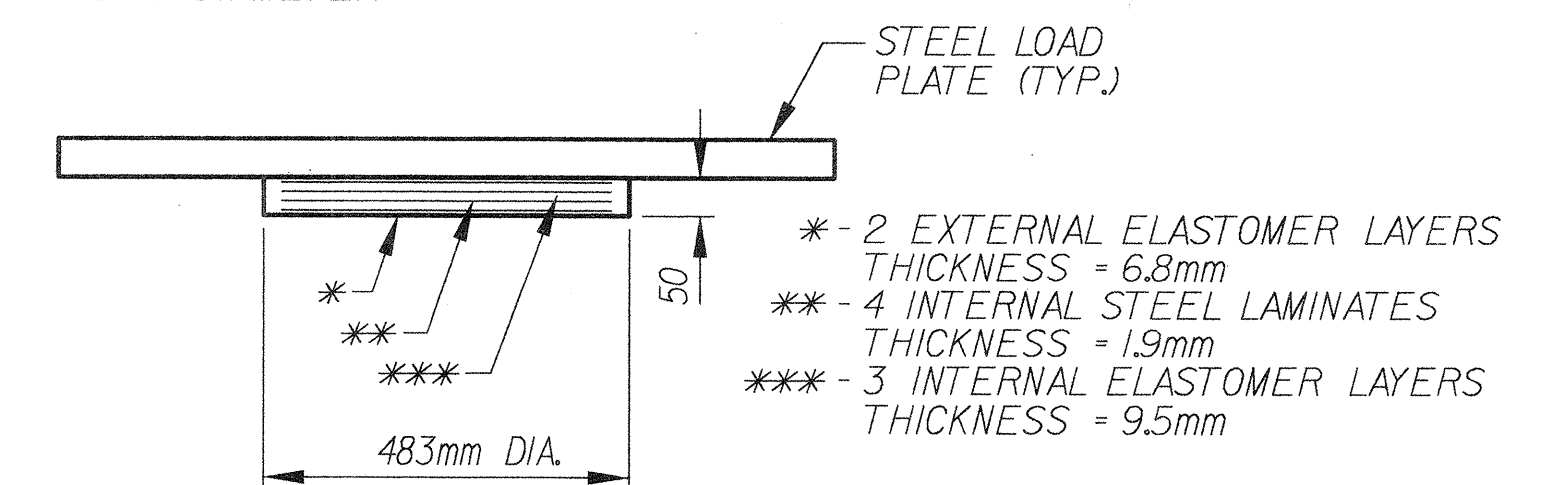
BEARINGS ARE DESIGNED FOR THE FOLLOWING LOADS:

PIER NO.	PIER 25J		PIER 26J	
COLUMN LOCATION	WEST	EAST	WEST	MIDDLE
DEAD LOAD (kN)	2015	979	1112	2831
LIVE LOAD w/o IMPACT (kN)	512	334	535	728
TOTAL DESIGN LOAD (kN)	2527	1313	1647	3559

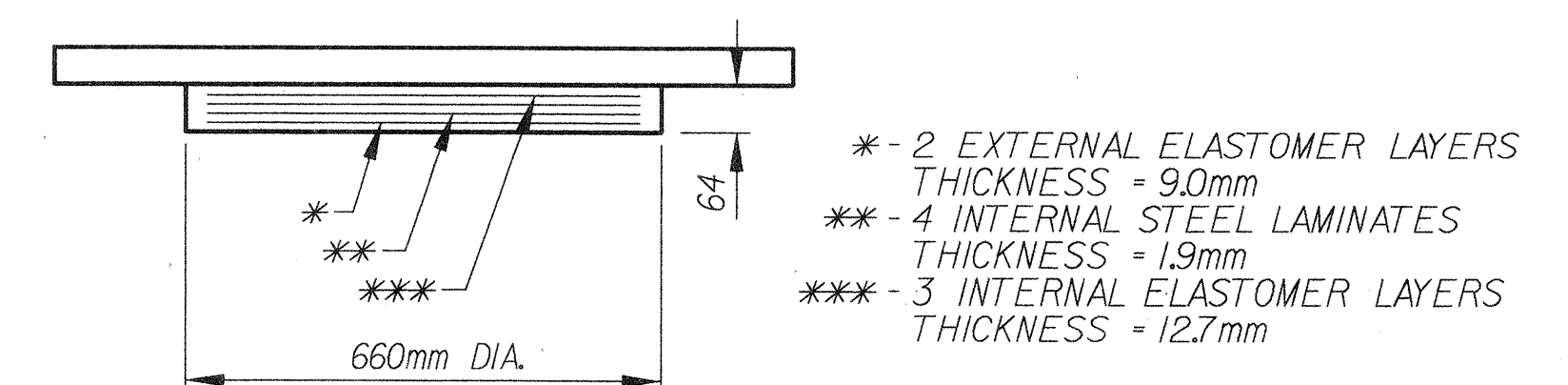
BEARING LOCATIONS (25 W, 26 M, TYP.) SHALL BE CLEARLY MARKED ON THE BEARINGS PRIOR TO SHIPMENT.

LEGEND:

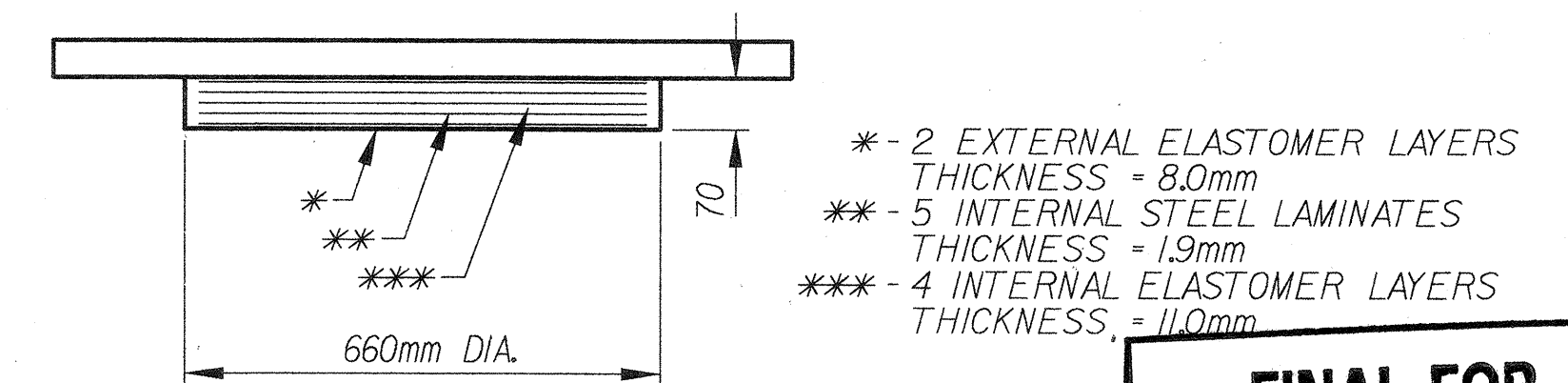
DIA. = DIAMETER



BEARING DETAIL A
(PIER 25J EAST COLUMN AND PIER 26J WEST COLUMN)



BEARING DETAIL B
(PIER 26J MIDDLE COLUMN)



BEARING DETAIL C
(PIER 25J WEST COLUMN)

FINAL FOR CONSTRUCTION



BEARING	R575D	R575E	R575F	R575G
DIMENSION "T"	282	224	171	113
BEARING	R675A	R675B	R675C	R675D
DIMENSION "T"	218	180	103	45



BEARING	R575A	R575B	R575C
DIMENSION "T"	78	79	87



BEARING	R1000A	R1225A	R1225B
DIMENSION "T"	298	205	127

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PIER 26J



1. ROCKERS AND BOLSTERS SHALL BE IN ACCORDANCE WITH STANDARD DRAWING RB-I-55M, EXCEPT THAT DIMENSION "T" SHALL BE AS SHOWN IN THE TABLE ON THIS SHEET FOR BEARING DESIGNATIONS WITH A LETTER SUFFIX. BASE PLATES MAY BE ONE SINGLE PLATE OR MULTIPLE LAYERS WELDED TOGETHER AS SHOWN.

2. CONTRACTOR SHALL VERIFY EXISTING
PINTLE SPACING PRIOR TO FABRICATION OF
REPLACEMENT BASE PLATE.

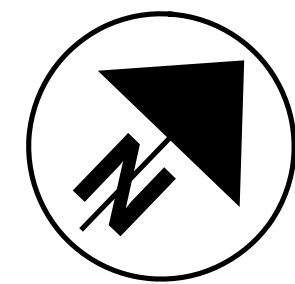


FINAL FOR CONSTRUCTION

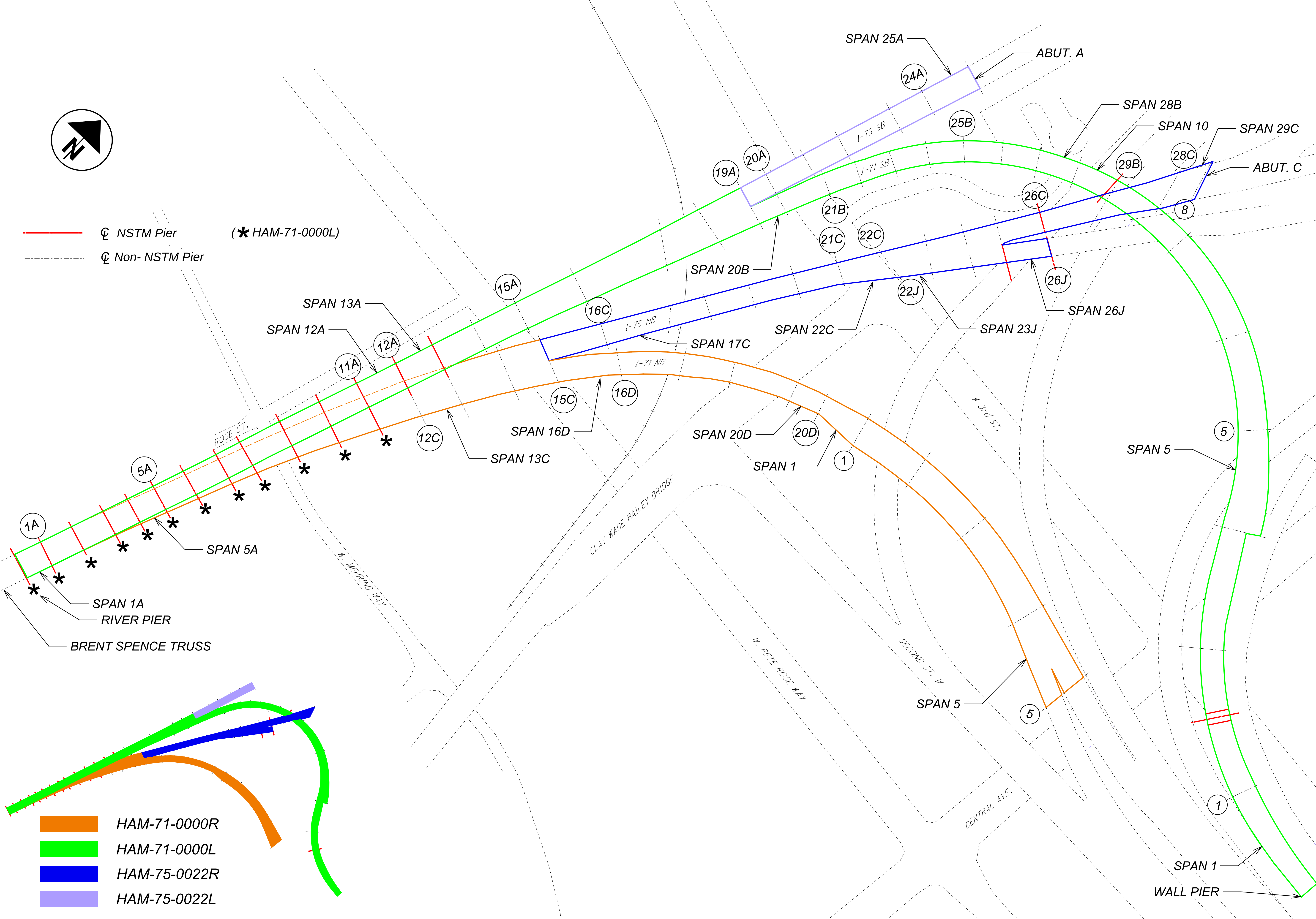
Appendix C:

HAM-71/75 General Plan

C:\Users\John.corley\Desktop\Spenc\08 Bridges\dgn Untitled Sheet 5/3/2021 7:35:44 AM John.corley



- NSTM Pier (* HAM-71-0000L)
- - - Non- NSTM Pier



DESIGN AGENCY
525 VINE ST., SUITE 1800
CINCINNATI, OHIO 45202
PH. (513) 651-3440

AECOM

DESIGNED	DRAWN	REVIEWED	DATE
CHECKED	REVISED	STRUCTURE FILE NUMBER	

GENERAL PLAN

HAM-71/75

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