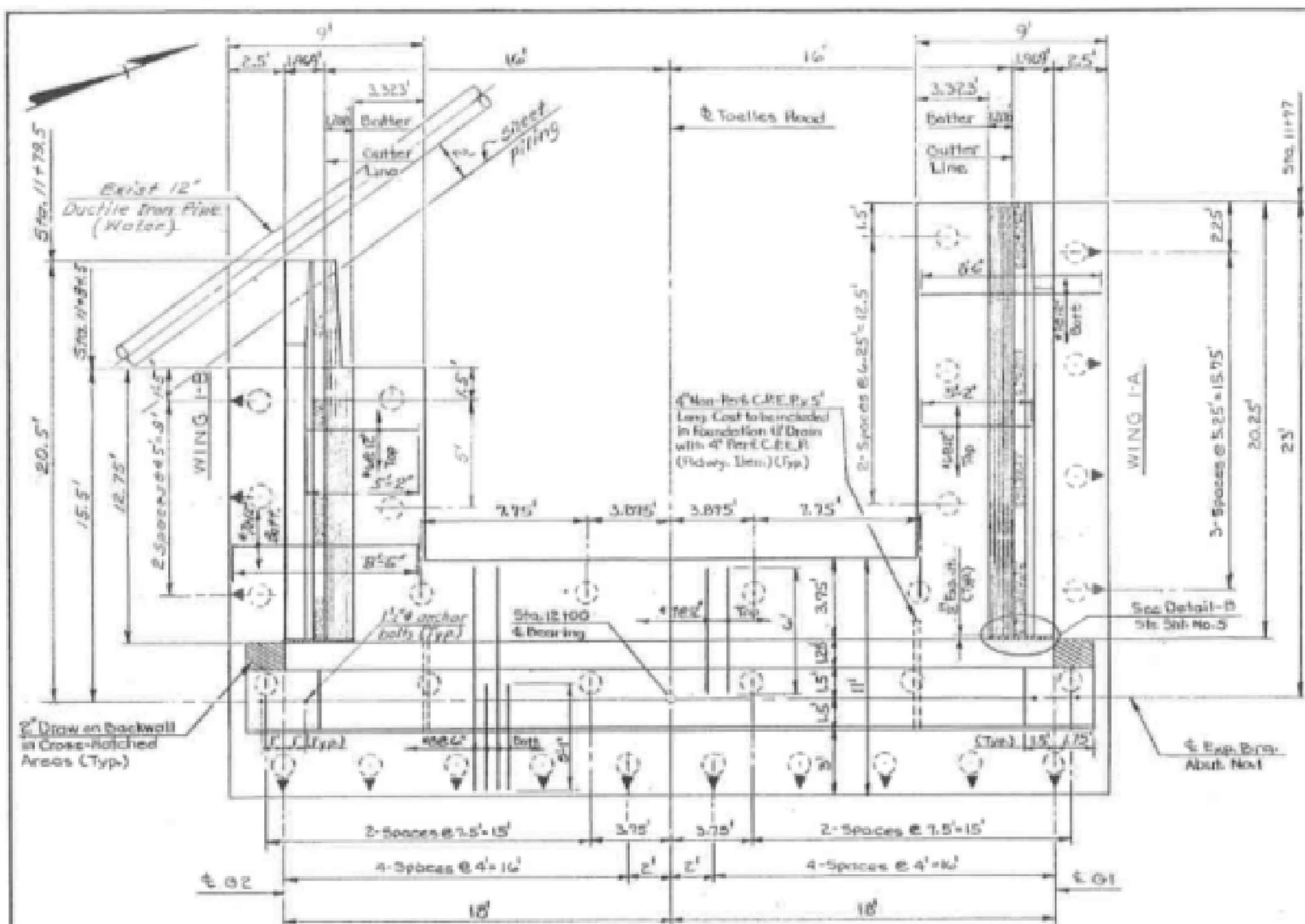
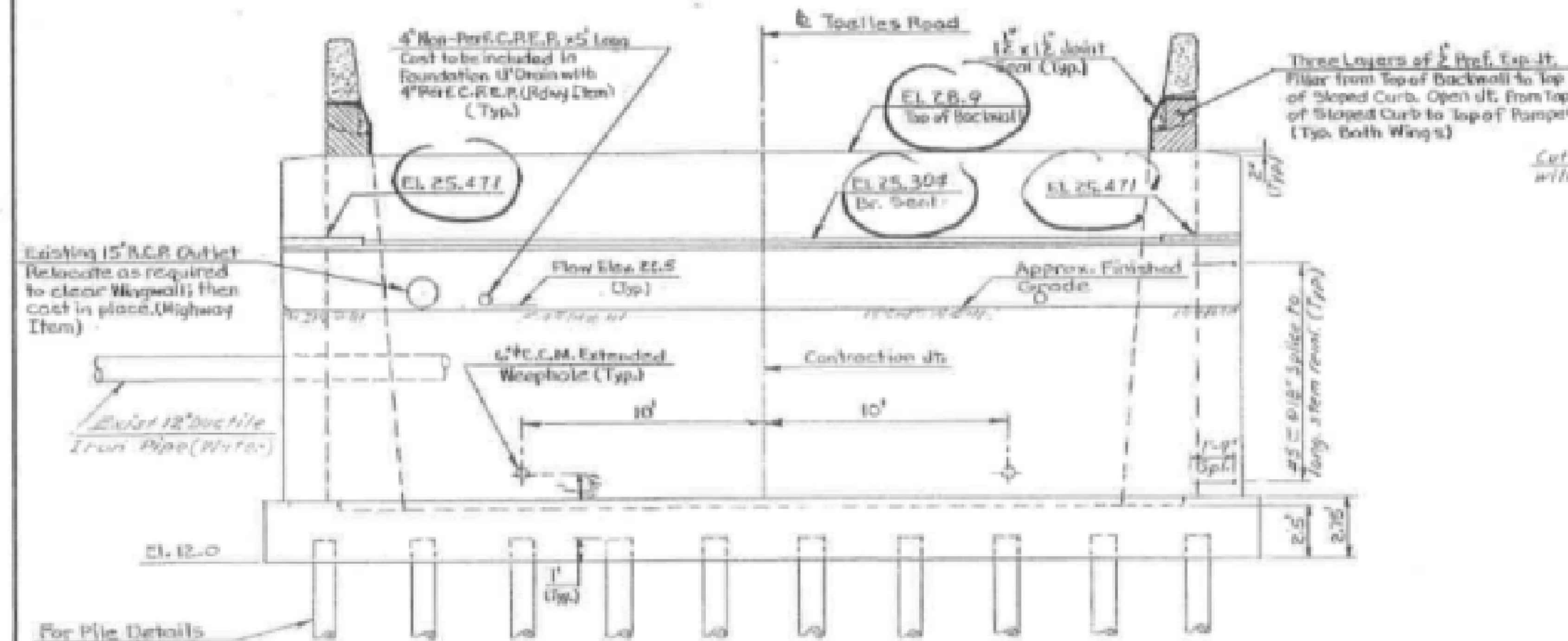


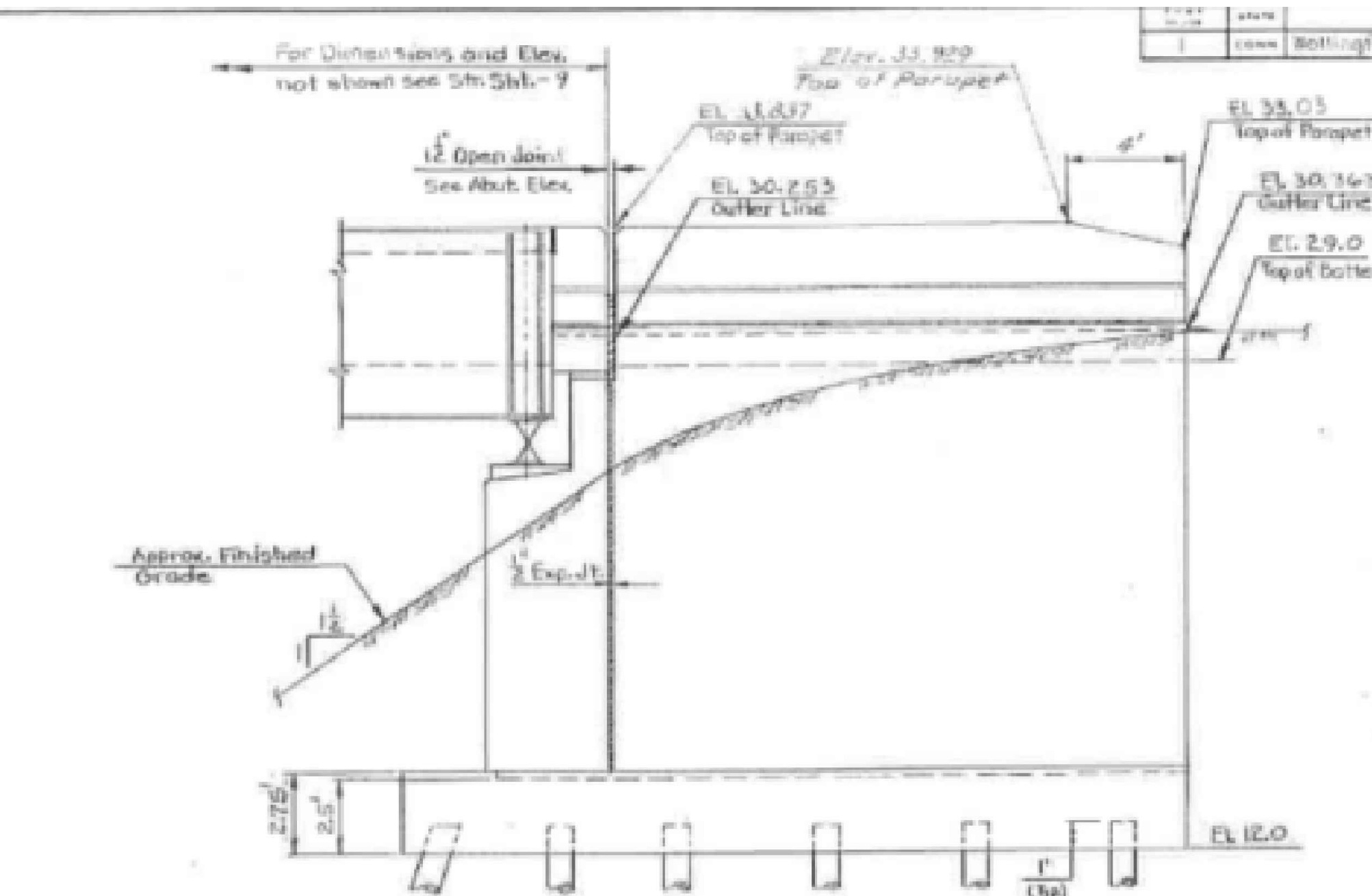
[illegible][illegible]



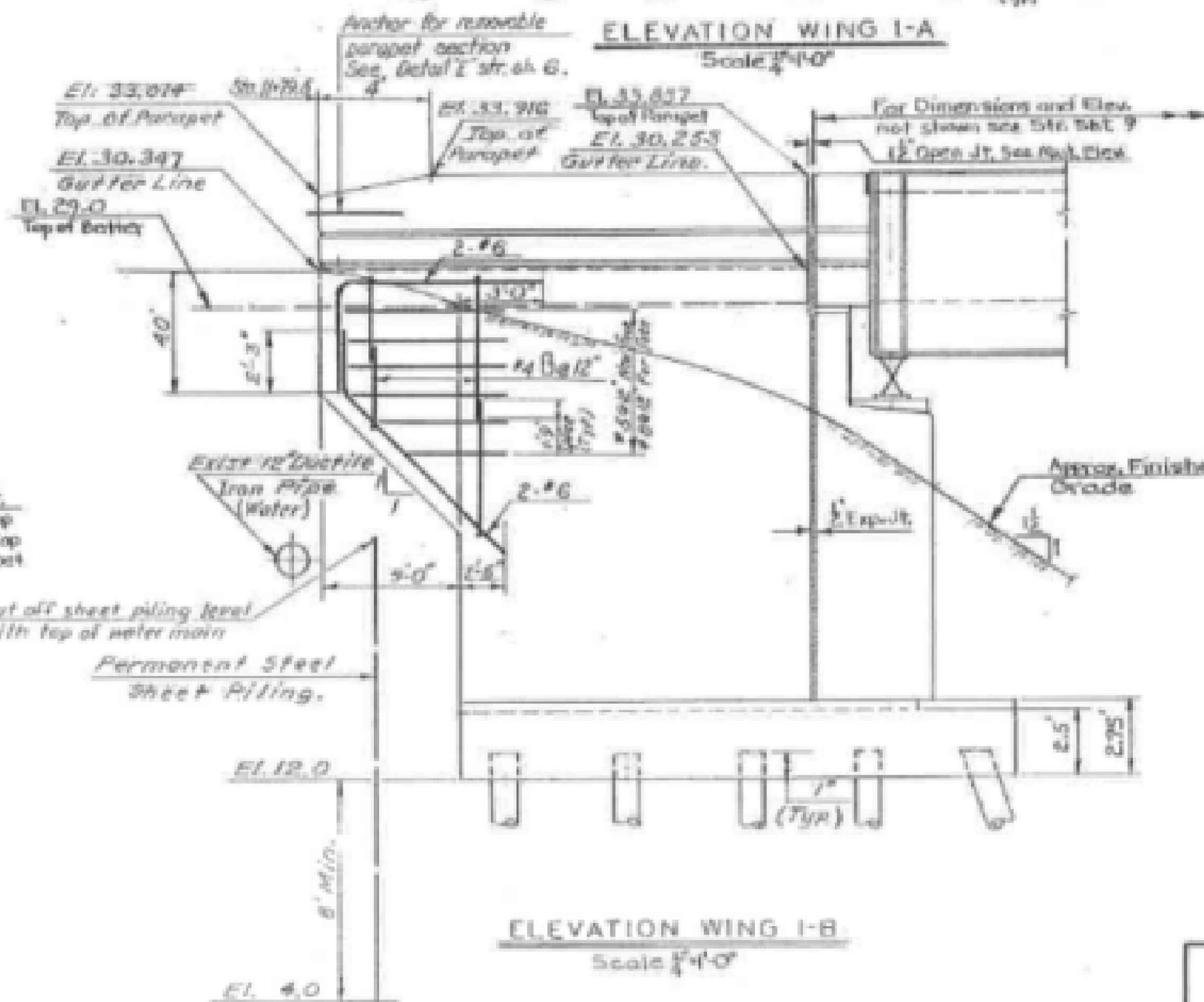
PLAN
Scale 1/4"=1'-0"



ELEVATION
Scale 1/4"=1'-0"



ELEVATION WING 1-A
Scale 1/4"=1'-0"



ELEVATION WING 1-B
Scale 1/4"=1'-0"

NOTES
For Typical Abutment & Wingwall Sections, see
Structure Sheet No. 5.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF
WORK SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTI-
GATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO
INDICATE THE TRUE CONDITIONS OR ACTUAL QUANTITIES OR
DISTRIBUTION OF QUANTITIES OF WORK WHICH WILL BE
REQUIRED.

CONNECTICUT DEPARTMENT OF TRANSPORTATION			
WALLINGFORD-NORTH HAVEN			
TOELLES RD. OVER QUINNIPIAC RIVER			
ABUTMENT NO. 1 - WINGS 1-A & 1-B			
ENGINEER Bridge Design Unit			
DESIGNER W.F.C.	DRAFTER F.T.R.	CHECKER G.D.B.	
APPROVED <i>[Signature]</i>		DATE 7/21/91	
STRUCTURE NO. 14B-115-1		SHEET 14B-115-1	3 of 10

REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 12/4/2025

DESIGNER/DRAFTER:
EH
CHECKED BY:
AG

TOWN OF WALLINGFORD

Filename: FIO-04 ABUTMENT NO.1.DWG

SIGNATURE/
BLOCK:

919 MIDDLE STREET
MIDDLETOWN, CT 06457

PROJECT TITLE:

REHABILITATION OF
BRIDGE NO. 04392 TOELLES ROAD
OVER THE QUINNIPIAC RIVER

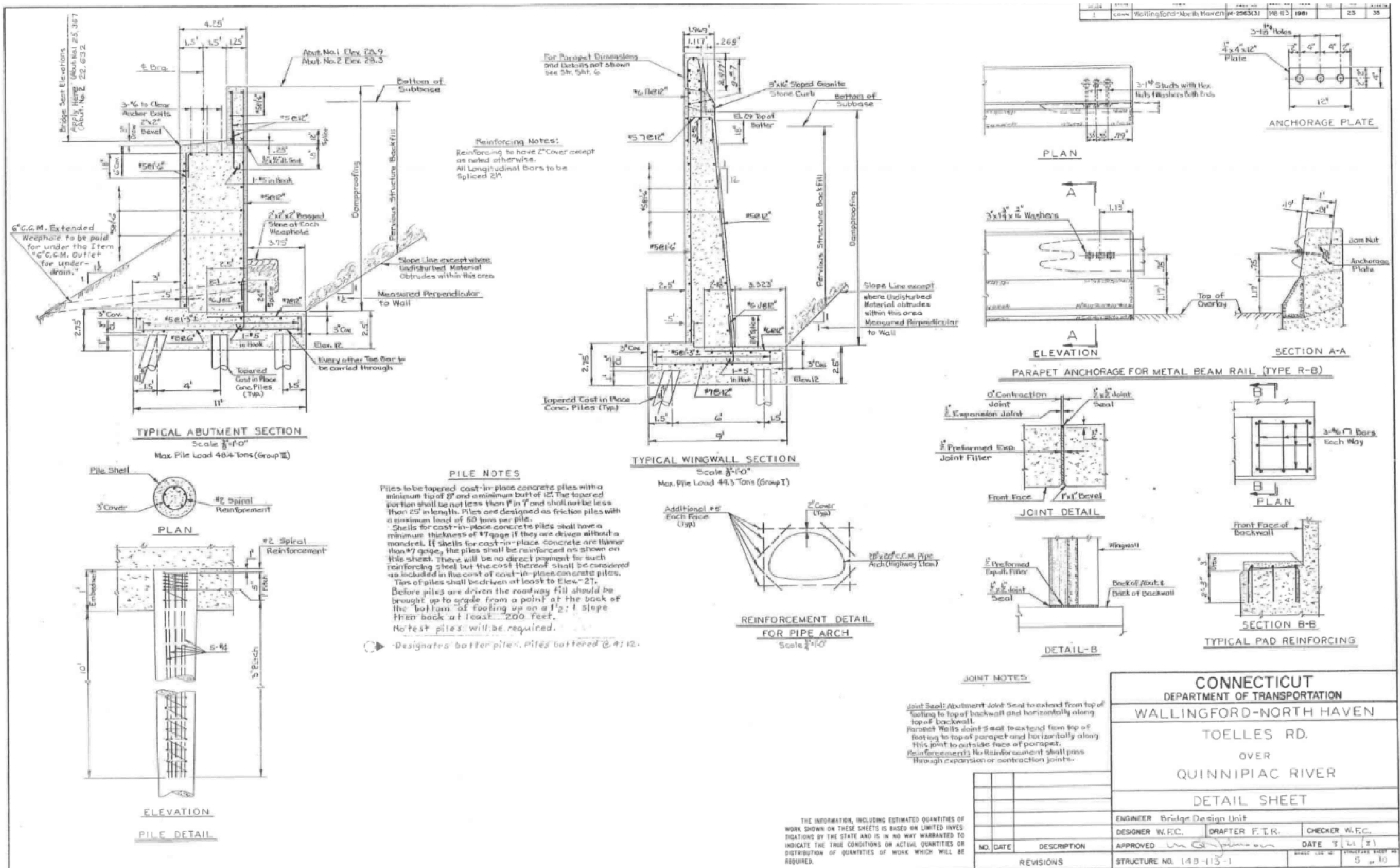
TOWN:


WALLINGFORD

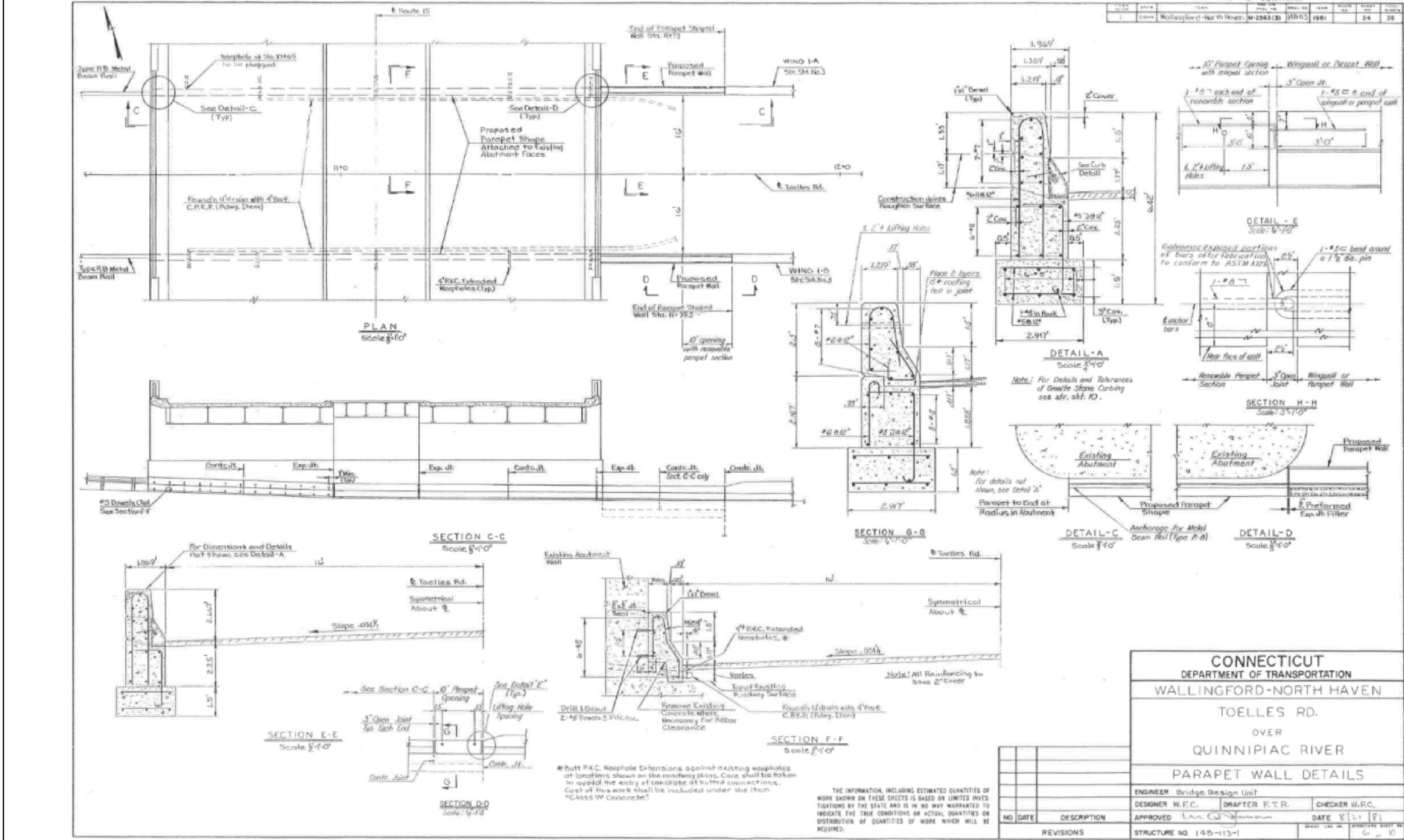
DRAWING TITLE:

ABUTMENT NO. 1 -
WINGS 1-A & 1-B

PROJECT NO.
L148-0003
DRAWING NO.
FIO-04
SHEET NO.



DESIGNER/DRAFTER: EH	TOWN OF WALLINGFORD	SIGNATURE/ BLOCK:  919 MIDDLE STREET MIDDLETOWN, CT 06457	PROJECT TITLE: REHABILITATION OF BRIDGE NO. 04392 TOELLES ROAD OVER THE QUINNIPIAC RIVER	TOWN: WALLINGFORD	PROJECT NO. L148-0003
CHECKED BY: AG					
THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.	Plotted Date: 12/4/2025	Filename: FIO-06 DETAIL SHEET.DWG		DRAWING TITLE: DETAIL SHEET	SHEET NO. FIO-06
REV.	DATE	REVISION DESCRIPTION	SHEET NO.		



REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 12/4/2025

DESIGNER/DRAFTER:	EH
CHECKED BY:	AG

TOWN OF WALLINGFORD

Filename: FIO-07 PARAPET WALL DETAILS.DWG.DWG

SIGNATURE/BLOCK:

AI Engineers
919 MIDDLE STREET
MIDDLETOWN, CT 06457

PROJECT TITLE:

**REHABILITATION OF
BRIDGE NO. 04392 TOELLES ROAD
OVER THE QUINNIPIAC RIVER**

TOWN:

WALLINGFORD
**PARAPET WALL
DETAILS**

PROJECT NO.
L148-0003
DRAWING NO.
FIO-07
SHEET NO.

DATE	BY	REVISION	DATE	BY	REVISION	DATE	BY	REVISION	DATE	BY	REVISION
1	CON	Wallingford North Haven	10-25-83	10-25-83	1983	25	25				

NOTES

Welded splices other than those indicated on the plans, will not be allowed except with the written permission of the Engineer prior to the submission of shop plans. If these splices are allowed and they are in addition to the shop and field splices indicated on the plans, the cost of these additional splices including the nondestructive testing of their welds as determined by the Engineer, shall be at no extra expense to the State.

Welding details, procedures and testing methods, shall conform to AWS D1.1-B00s modified by AASHTO Standard Specifications for Welding of Structural Steel Highway Bridges, unless otherwise noted on the plans or in the Special Provisions.

Transition of Thickness of Flange Plates shall be made with a smooth transition of the type specified in paragraphs 9.20.1 and 9.20.2 of AWS D1.1 as modified in the latest AASHTO.

All shop and field butt and groove welds in the web and top and bottom flanges shall be completely inspected by radiographic or ultrasonic testing and shall be finished smooth and flush with the base metal on all surfaces by grinding in the direction of applied stress, leaving surfaces free from depressions. Chipping may be used provided it is followed by such grinding. (The grinding shall not reduce the thickness of the base metal by more than 1/8 inch nor five (5) percent of the thickness, whichever is smaller).

All web to flange and web to bearing stiffener fillet welds shall be inspected by the magnetic particle method. At least one (1) foot of every ten (10) feet length of fillet weld and one (1) foot of each fillet weld less than ten (10) feet in length shall be tested. If unacceptable discontinuities are found in any feet length of weld, the full length of the weld, or five (5) feet on either side of the test length, whichever is lesser, shall be tested.

Multiple pass welds inspected by the magnetic particle method shall have each pass or layer inspected and accepted before proceeding to the next pass or layer, as determined by the Engineer.

Groove weld details shall conform to AWS D1.1 as modified by the latest AASHTO.

Web shop splices shall be located within the middle third of the span.

Stiffeners shall be located a minimum of six (6) inches from flange or web splices.

Shop flange splices shall be located a minimum of six (6) inches from web splices. Bearing and intermediate stiffeners and ends of girders and floor beams shall be vertical after application of full dead loads.

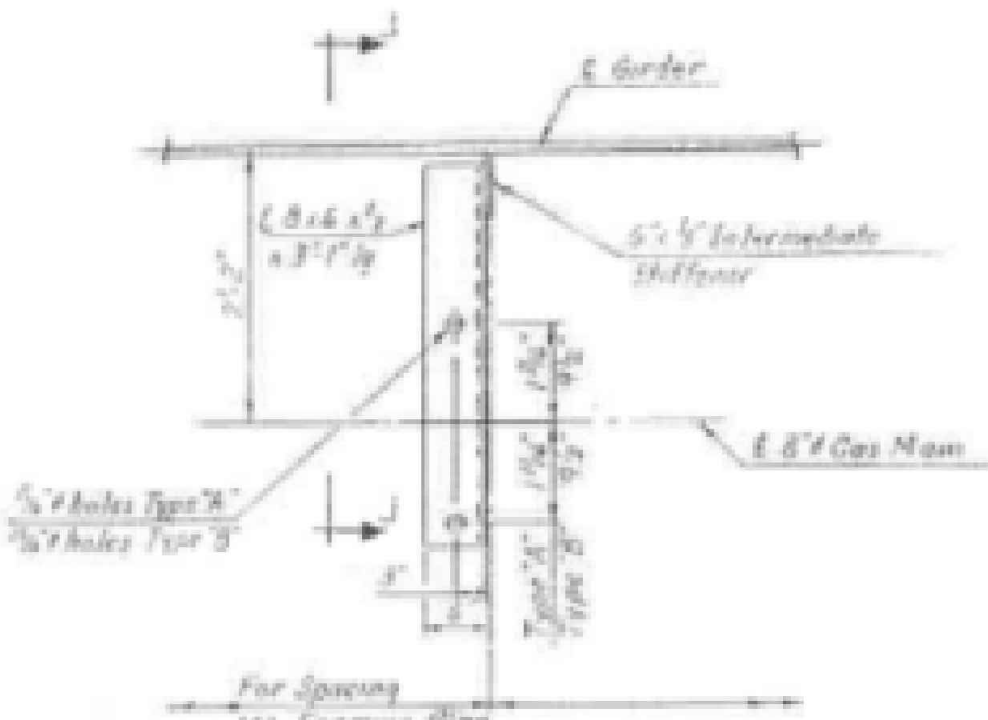
Structural Steel shall conform to ASTM A588 steel.

Bolted field connections shall be friction type connections.

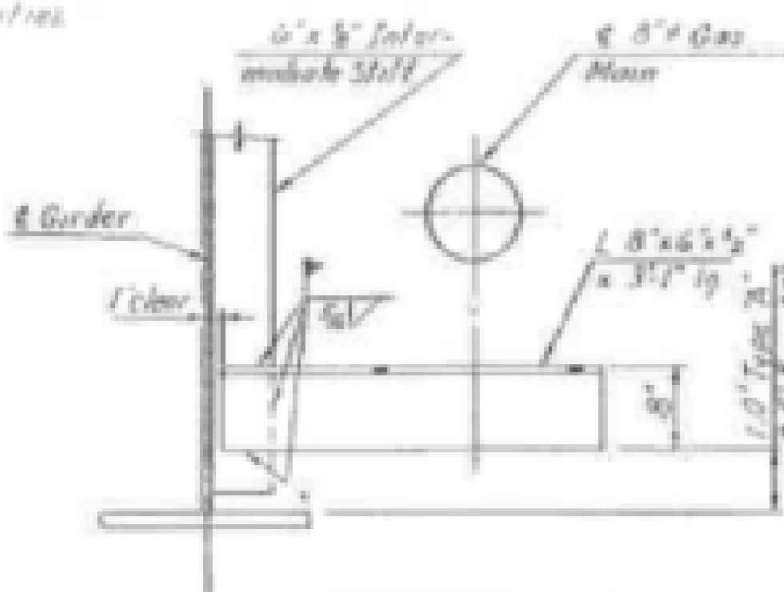
All bolts shall be 5/8" H.S. bolts.

All bolts, including nuts and washers, shall conform to ASTM A325.

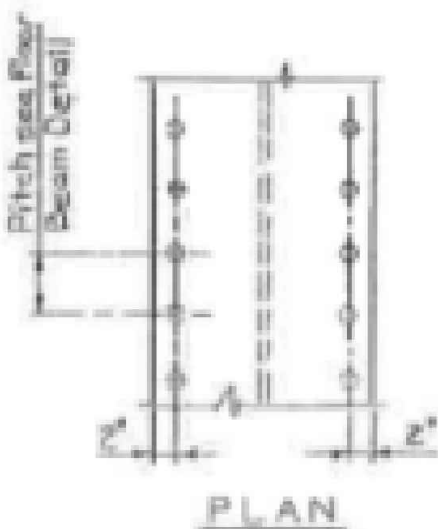
Bottom flanges and webs of main girders are fracture critical members and shall be fabricated in conformance with the requirements of the "Guide Specifications for Fracture Critical Non-Redundant Steel Bridge Members (AASHTO-1978)".



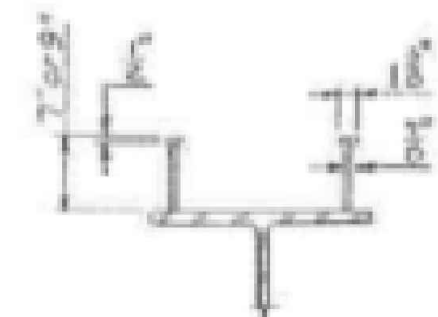
GAS MAIN SUPPORT PLAN
Scale 1/2" = 1'-0"



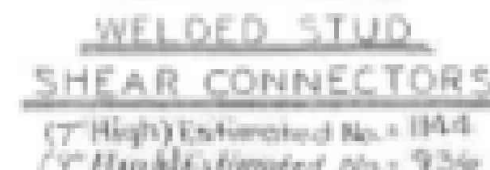
SECTION 3-3
Scale 1/2" = 1'-0"



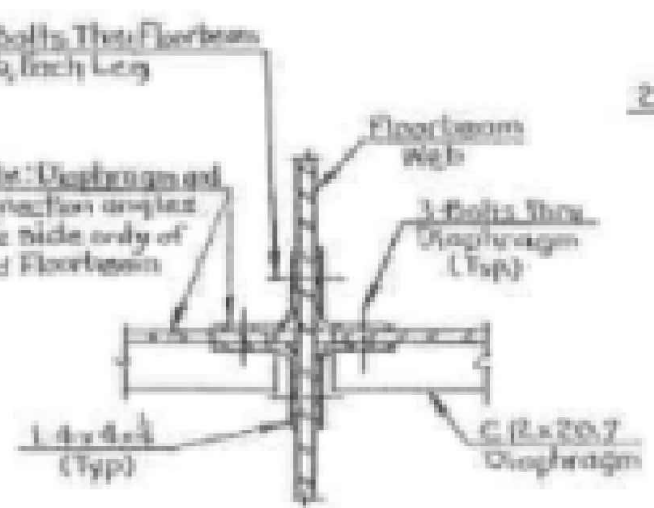
PLAN



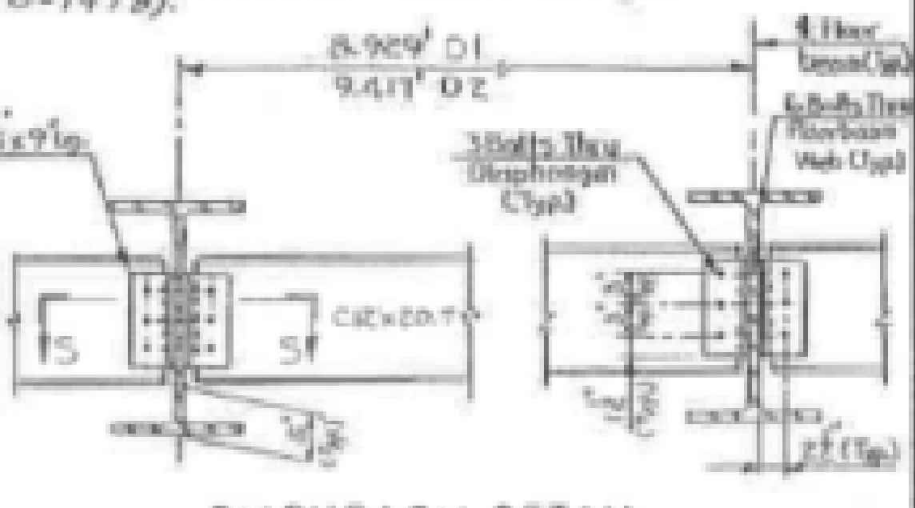
ELEVATION



WELDED STUD SHEAR CONNECTORS
(7" High) Estimated No. 184
(9" High) Estimated No. 956

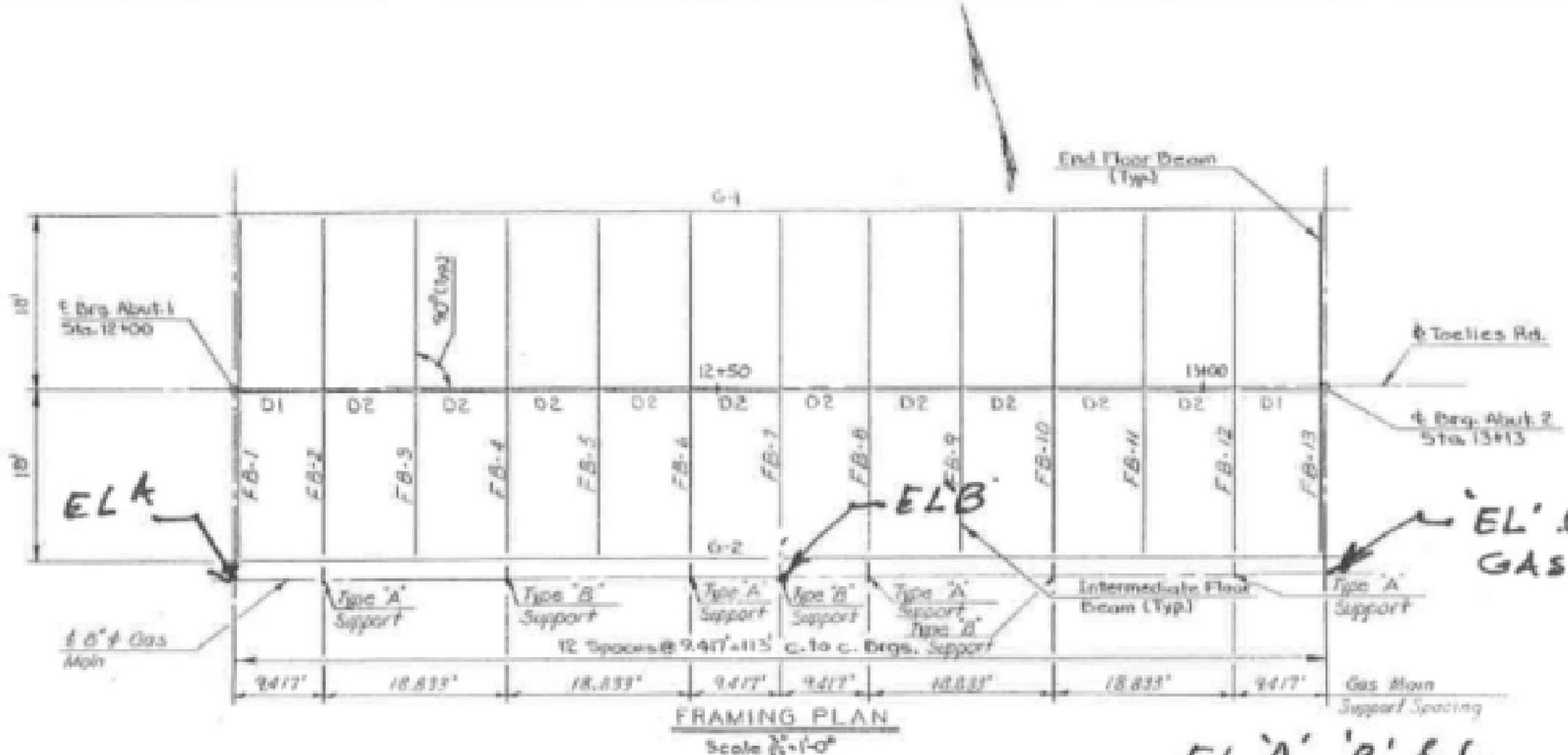


SECTION 5-5
Scale 1/2" = 1'-0"

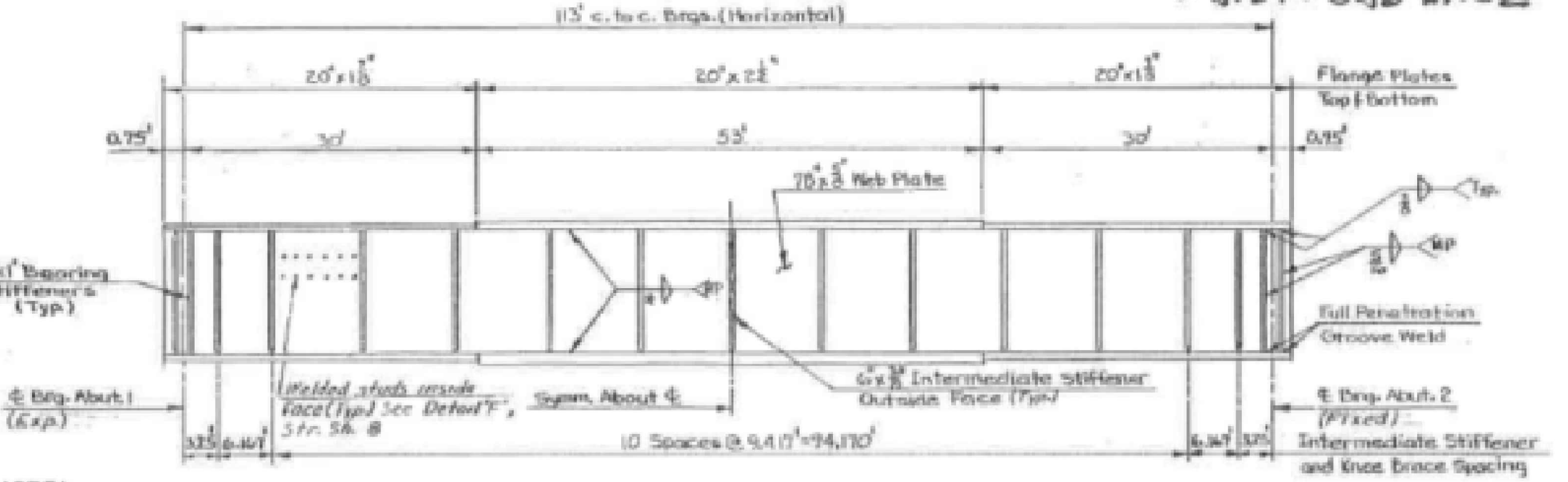


DIAPHRAGM DETAIL
Scale 1/2" = 1'-0"

CONNECTICUT DEPARTMENT OF TRANSPORTATION			
WALLINGFORD - NORTH HAVEN			
TOELLES RD. OVER QUINNIPIAC RIVER			
FRAMING PLAN & STEEL DETAILS			
ENGINEER Bridge Design Unit			
DESIGNER G.D.	DRAFTSMAN F.T.R.	CHECKER M.F.C.	
APPROVED	DATE 8/21/81		
REVISIONS		STRUCTURE NO. 148-113-1	

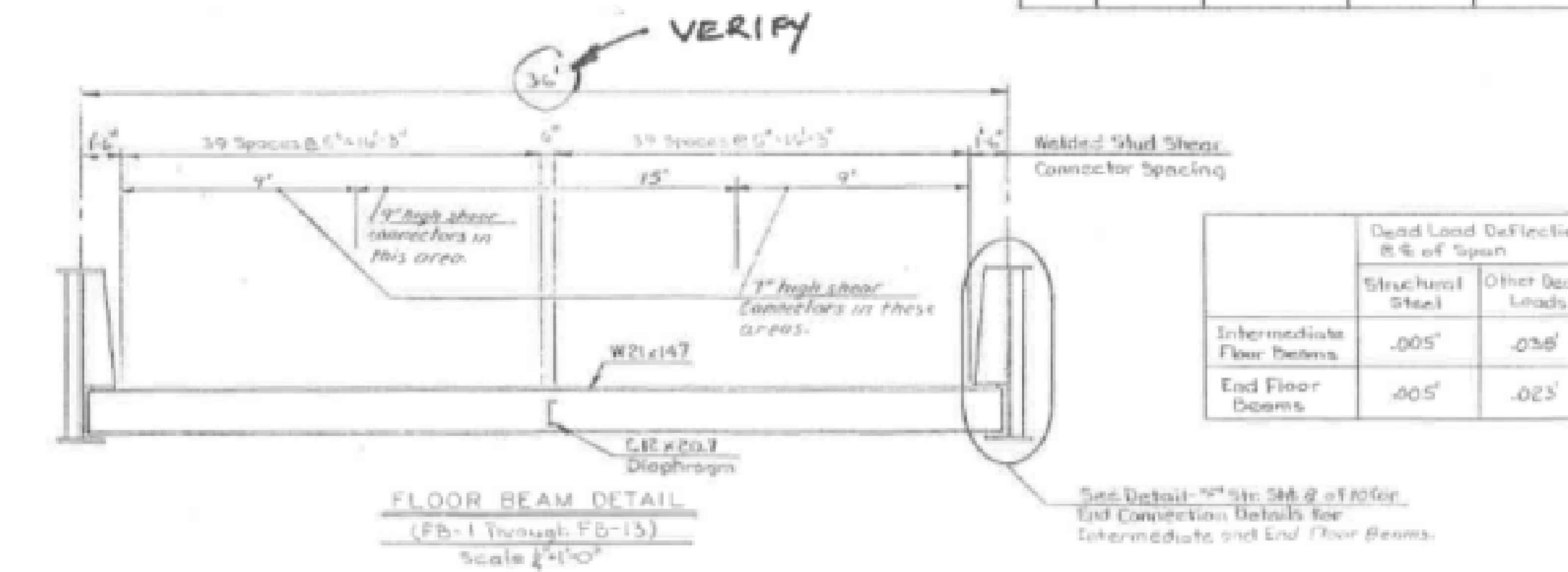


FRAMING PLAN
Scale 1/2" = 1'-0"



WELDED GIRDER DIAGRAM

NOTE: For Flange Plates 1/2" to 3/4" thick, use 1/8" Fillet Weld. For Flange Plates over 3/4" thick use 1/4" Fillet Weld.



FLOOR BEAM DETAIL
(FB-1 Through FB-13)
Scale 1/2" = 1'-0"

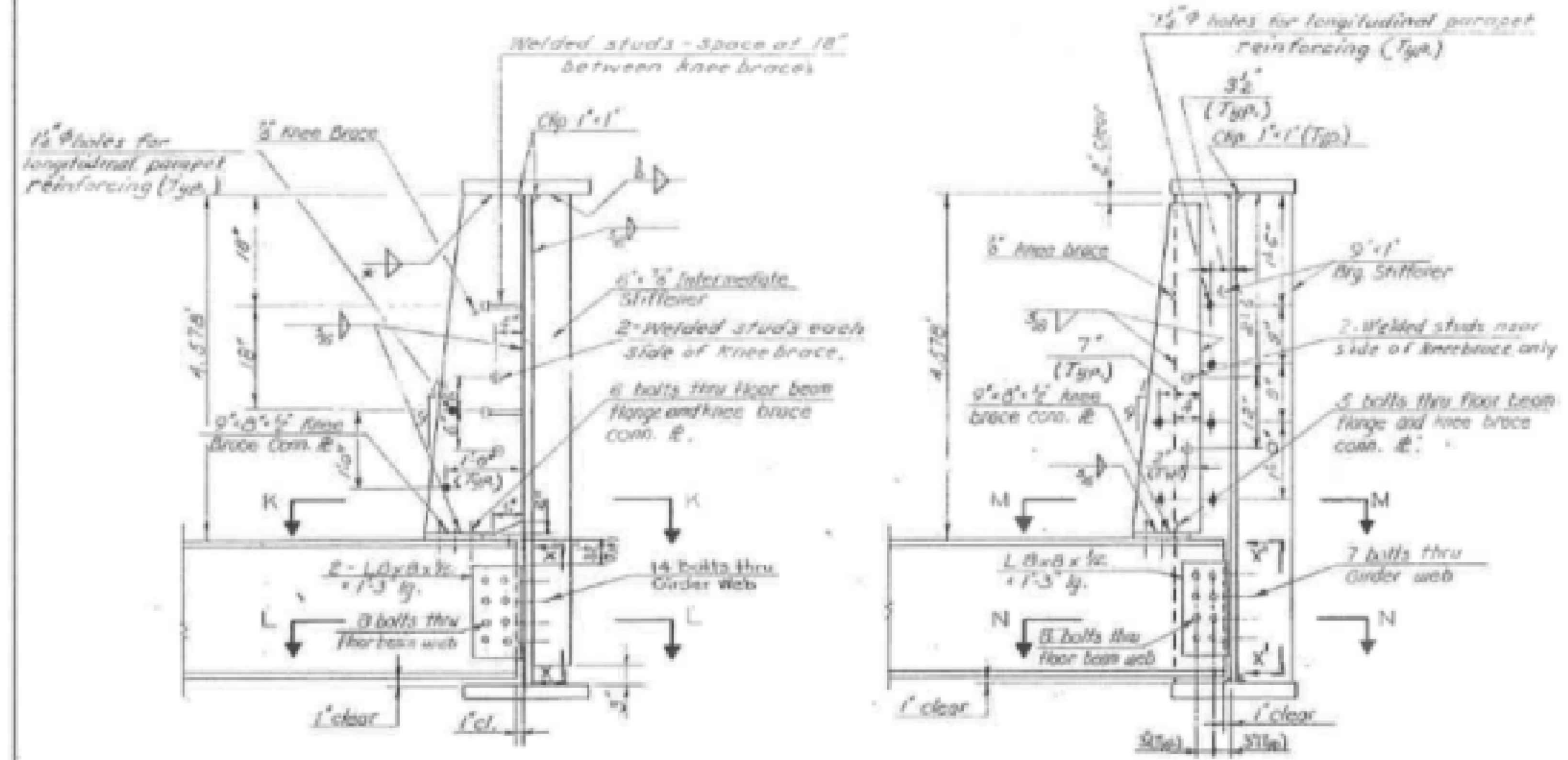
Mark	Dead Load Deflection at 1/4 of Span		Cambers at 1/4 of Span			
	Structural Steel	Other Dead Loads	Total Dead Load	Vertical Curve Ordinate	Extra Camber	Total
G-116-2	.043	.195	.238	0	.094	.332

	Dead Load Deflection at 1/4 of Span		Cambers at 1/4 of Span		
	Structural Steel	Other Dead Loads	Total Dead Load	Extra	Total
Intermediate Floor Beams	.005'	.035'	.040'	.165'	.205'
End Floor Beams	.005'	.025'	.030'	.180'	.205'

The information, including estimated quantities of work shown on these sheets is based on limited investigations by the State and is in no way warranted to indicate the true conditions or actual quantities or distribution of quantities of work which will be required.

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.				DESIGNER/DRAFTER: EH CHECKED BY: AG		TOWN OF WALLINGFORD		SIGNATURE/BLOCK: AI Engineers 919 MIDDLE STREET MIDDLETOWN, CT 06457		PROJECT TITLE: REHABILITATION OF BRIDGE NO. 04392 TOELLES ROAD OVER THE QUINNIPIAC RIVER		TOWN: WALLINGFORD DRAWING TITLE: FRAMING PLAN & STEEL DETAILS		PROJECT NO. L148-0003 DRAWING NO. FIO-08 SHEET NO.	
REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 12/4/2025	Filename: FIO-08 FRAMING PLAN AND STEEL DETAILS.DWG										

FILE NO.	STATE	NAME	PROJ. NO.	PROJ. NO.	YEAR	ROUTE NO.	SHEET NO.	TOTAL SHEETS
1	CONN.	Wallingford - North Haven	W-2563(3)	40-01	1980		26	35

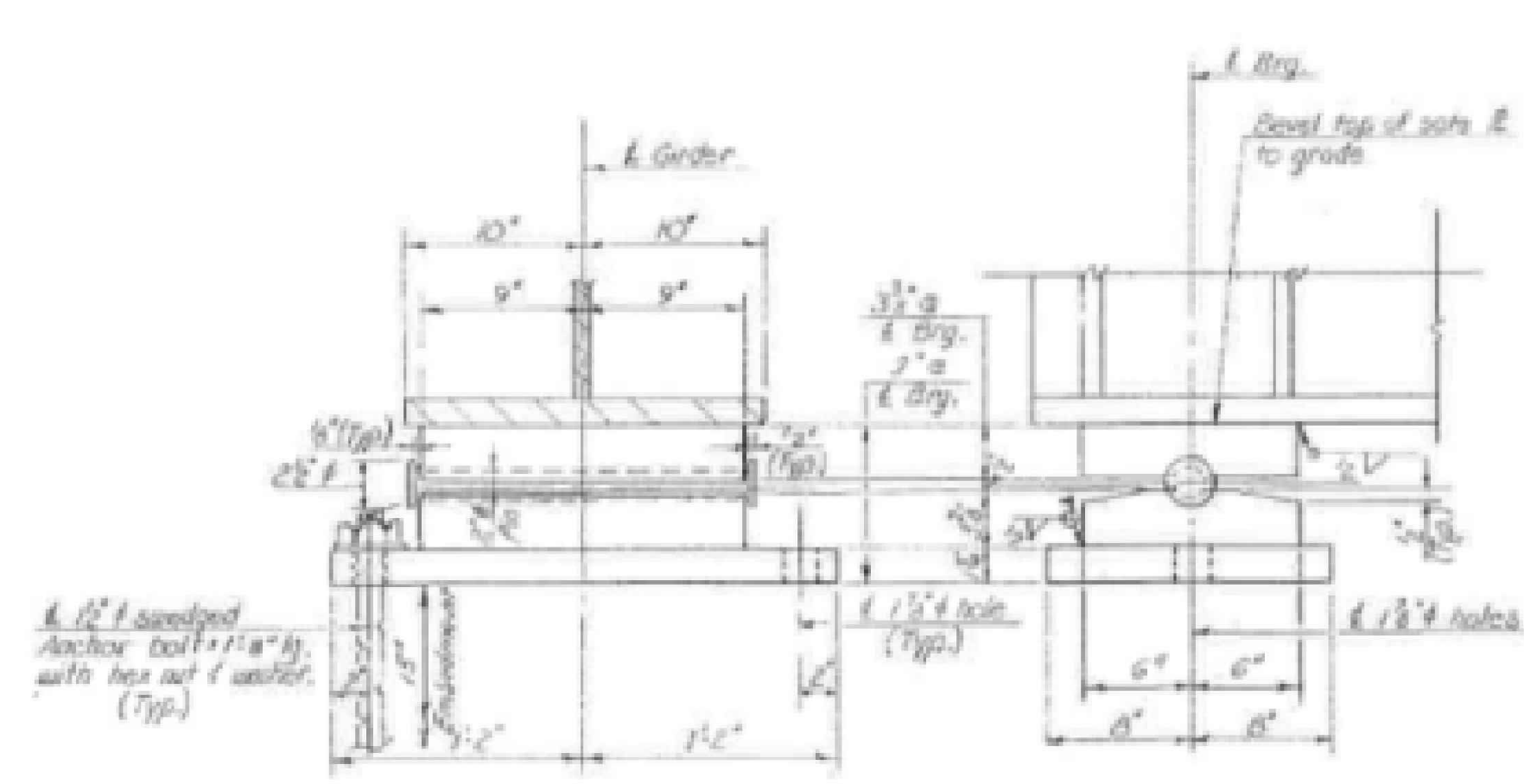


INTERMEDIATE FLOOR BEAM
Scale: 1/4" = 1'-0"

END FLOOR BEAM
Scale: 1/4" = 1'-0"

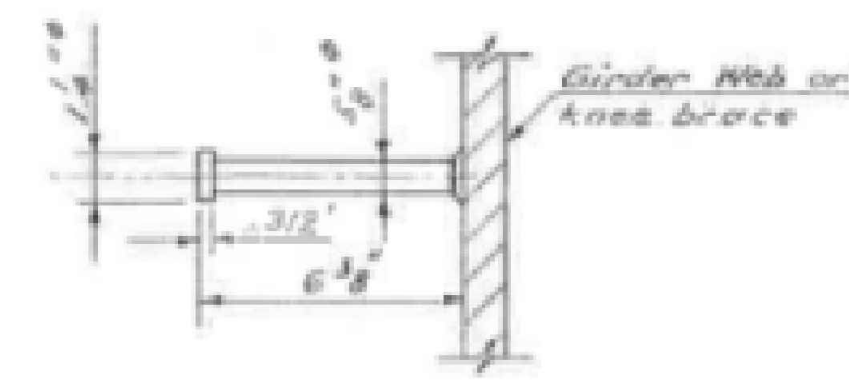
NOTES:
* 3/8" Fillet Weld to Flange Plates 1/8" to 2 1/4" in thickness
1/2" Fillet Weld to Flange Plates over 2 1/4" in thickness

DETAIL "F"

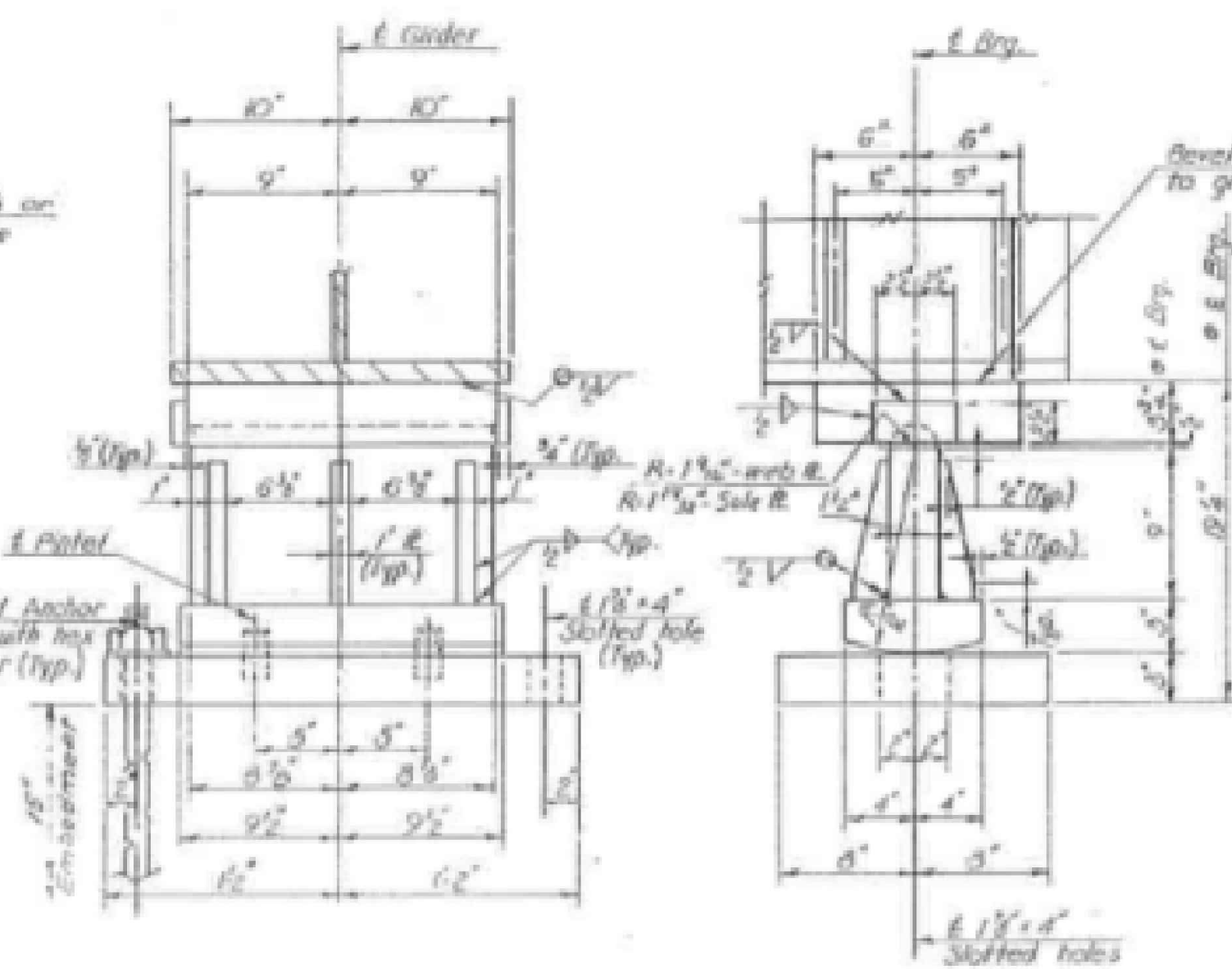


FIXED BEARING
Scale: 1/2" = 1'-0"

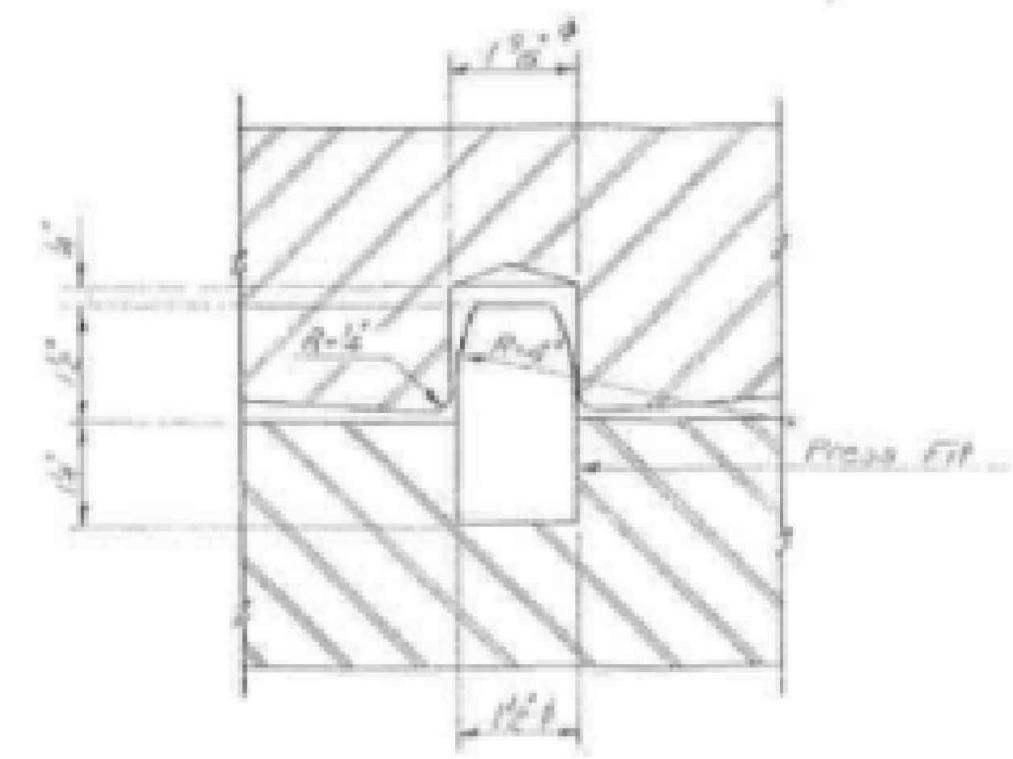
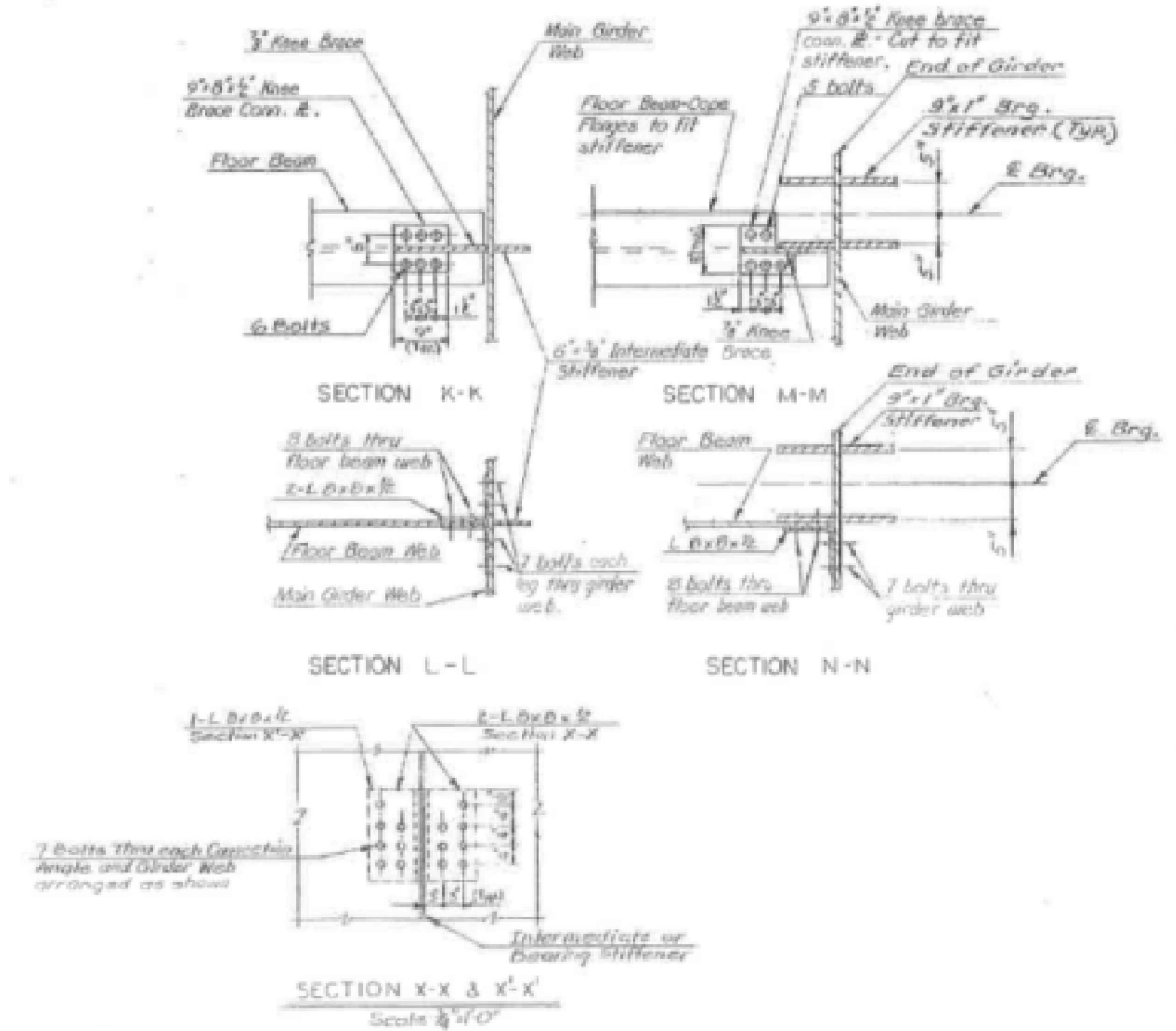
Bearing Notes:
Steel for bearings shall conform to ASTM A-588 except that steel for pins shall conform to ASTM A108 Grades 1015 to 1030 inclusive.
Nuts shall be set to be vertical at 50° F.



WELDED STUD DETAIL



EXPANSION BEARING
Scale: 1/2" = 1'-0"



PINEL DETAIL
Scale: 1/2" = 1'-0"

CONNECTICUT DEPARTMENT OF TRANSPORTATION		
WALLINGFORD - NORTH HAVEN		
TOELLES ROAD OVER QUINNIPIAC RIVER		
BEARINGS & STEEL DETAILS		
ENGINEER BRIDGE DESIGN UNIT		
DESIGNER G. D. B.	DRAFTSMAN J. J. C.	CHECKER W. F. C.
APPROVED	DATE 8/21/81	
STRUCTURE NO. 148-115		

REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 12/4/2025

DESIGNER/DRAFTER: EH	TOWN OF WALLINGFORD
CHECKED BY: AG	

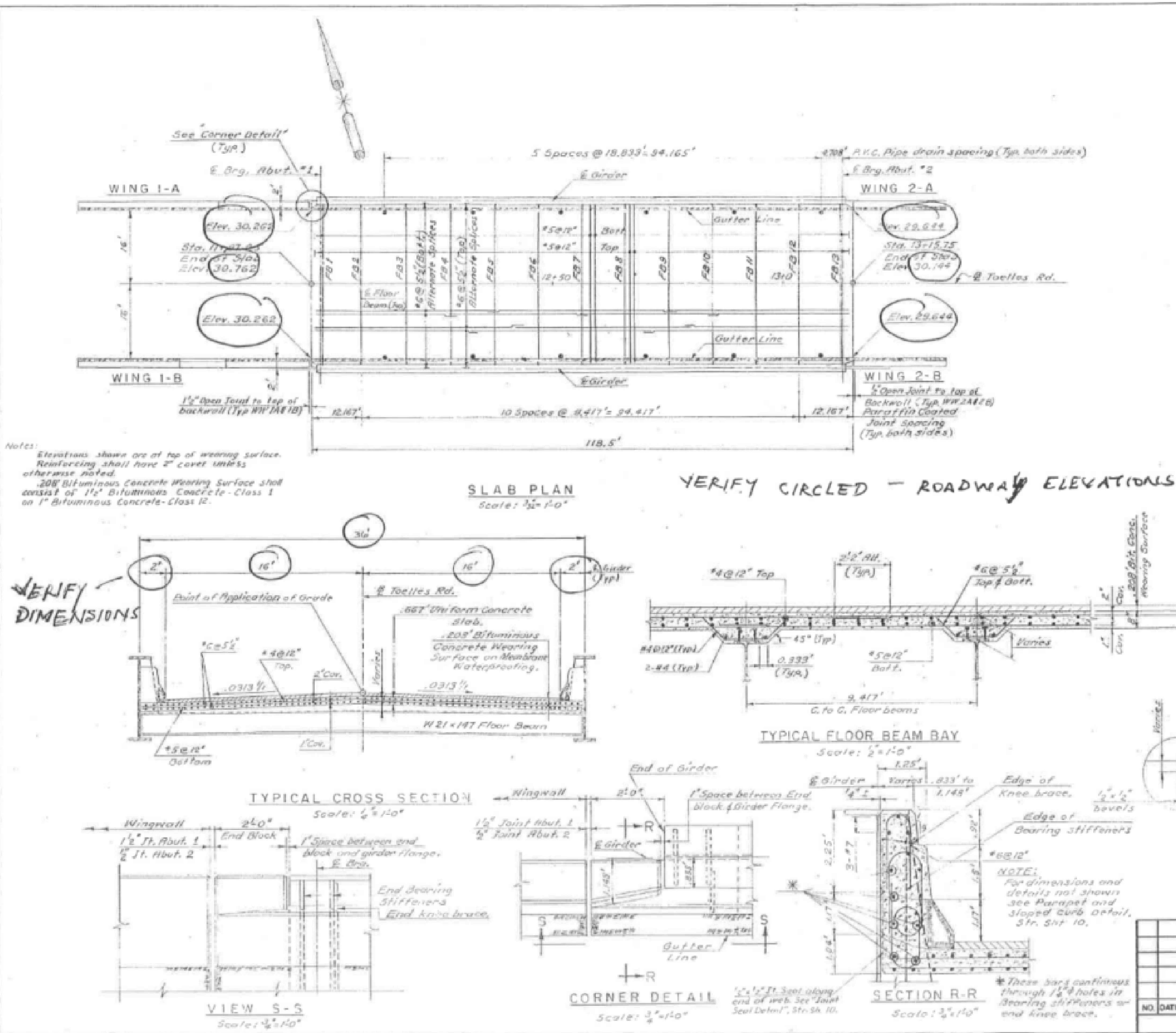
SIGNATURE/BLOCK:	AI Engineers
	919 MIDDLE STREET MIDDLETOWN, CT 06457

PROJECT TITLE:	REHABILITATION OF BRIDGE NO. 04392 TOELLES ROAD OVER THE QUINNIPIAC RIVER

TOWN:	WALLINGFORD
DRAWING TITLE:	
	BEARINGS & STEEL DETAILS

PROJECT NO.	L148-0003
DRAWING NO.	
	FIO-09
SHEET NO.	

THIRD SHEET	DATE	TOWN	PER. NO.	PROJ. NO.	YEAR	ROUTE NO.	SHEET NO.	TOTAL SHEETS
1	CONV	Wallingford-North Haven	M-2563(3)	14-013	1961		27	35



FINISHED ROWY.ELEVATIONS OVER FLOOR BEAMS					
MARK	LEFT GUTTER LINE	4 EQUAL SPACES			RIGHT GUTTER LINE
		1	2	3	
FB1	30.245	30.495	30.745	30.495	30.245
FB2	30.198	30.448	30.698	30.448	30.198
FB3	30.149	30.399	30.649	30.399	30.149
FB4	30.100	30.350	30.600	30.350	30.100
FB5	30.051	30.301	30.551	30.301	30.051
FB6	30.002	30.252	30.502	30.252	30.002
FB7	29.953	30.203	30.453	30.203	29.953
FB8	29.904	30.154	30.404	30.154	29.904
FB9	29.855	30.105	30.355	30.105	29.855
FB10	29.806	30.056	30.306	30.056	29.806
FB11	29.757	30.007	30.257	30.007	29.757
FB12	29.708	29.958	30.208	29.958	29.708
FB13	29.661	29.911	30.161	29.911	29.661

CONNECTICUT DEPARTMENT OF TRANSPORTATION			
WALLINGFORD-NORTH HAVEN			
TOELLES RD. OVER QUINNIPIAC RIVER			
SLAB PLAN			
ENGINEER BRIDGE DESIGN UNIT		CHECKER M.F.C.	
DESIGNER G.D.B.	DRAFTSMAN G.A.K.	DATE 8/21/81	
APPROVED [Signature]		STRUCTURE NO. 148-113-1	
NO.	DATE	DESCRIPTION	REVISIONS

REV.	DATE	REVISION DESCRIPTION	SHEET NO.	Plotted Date: 12/4/2025

DESIGNER/DRAFTER: EH	CHECKED BY: AG

TOWN OF WALLINGFORD
File name: FIO-10 SLAB PLAN.DWG

SIGNATURE/BLOCK:	AI Engineers
	919 MIDDLE STREET MIDDLETOWN, CT 06457

PROJECT TITLE:	REHABILITATION OF BRIDGE NO. 04392 TOELLES ROAD OVER THE QUINNIPIAC RIVER
----------------	---

TOWN:	WALLINGFORD	PROJECT NO. L148-0003
DRAWING TITLE:	SLAB PLAN	DRAWING NO. FIO-10
		SHEET NO.

