I-81 VIADUCT PROJECT - PHASE 1, CONTRACT 1

PIN 3501.90, Contract D900054

DB CONTRACT DOCUMENTS REQUEST FOR PROPOSALS

PART 7

ENGINEERING DATA (PART 2 OF 5)

Draft May 17, 2022

ENGINEERING DATA

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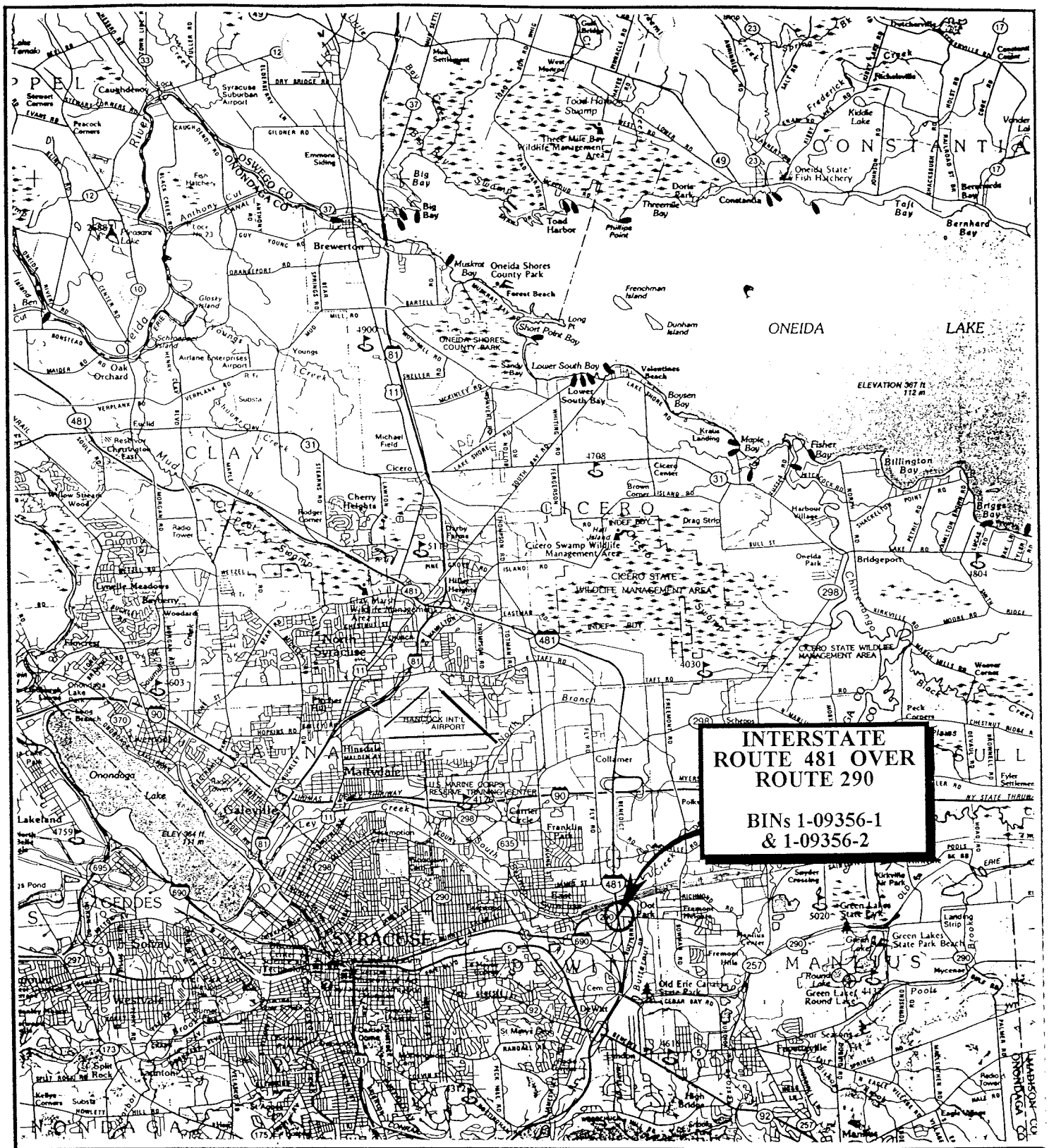
ASBESTOS SURVEY REPORTS (CONTINUED)

Asbestos Survey Reports (Continued)

Figures & Table



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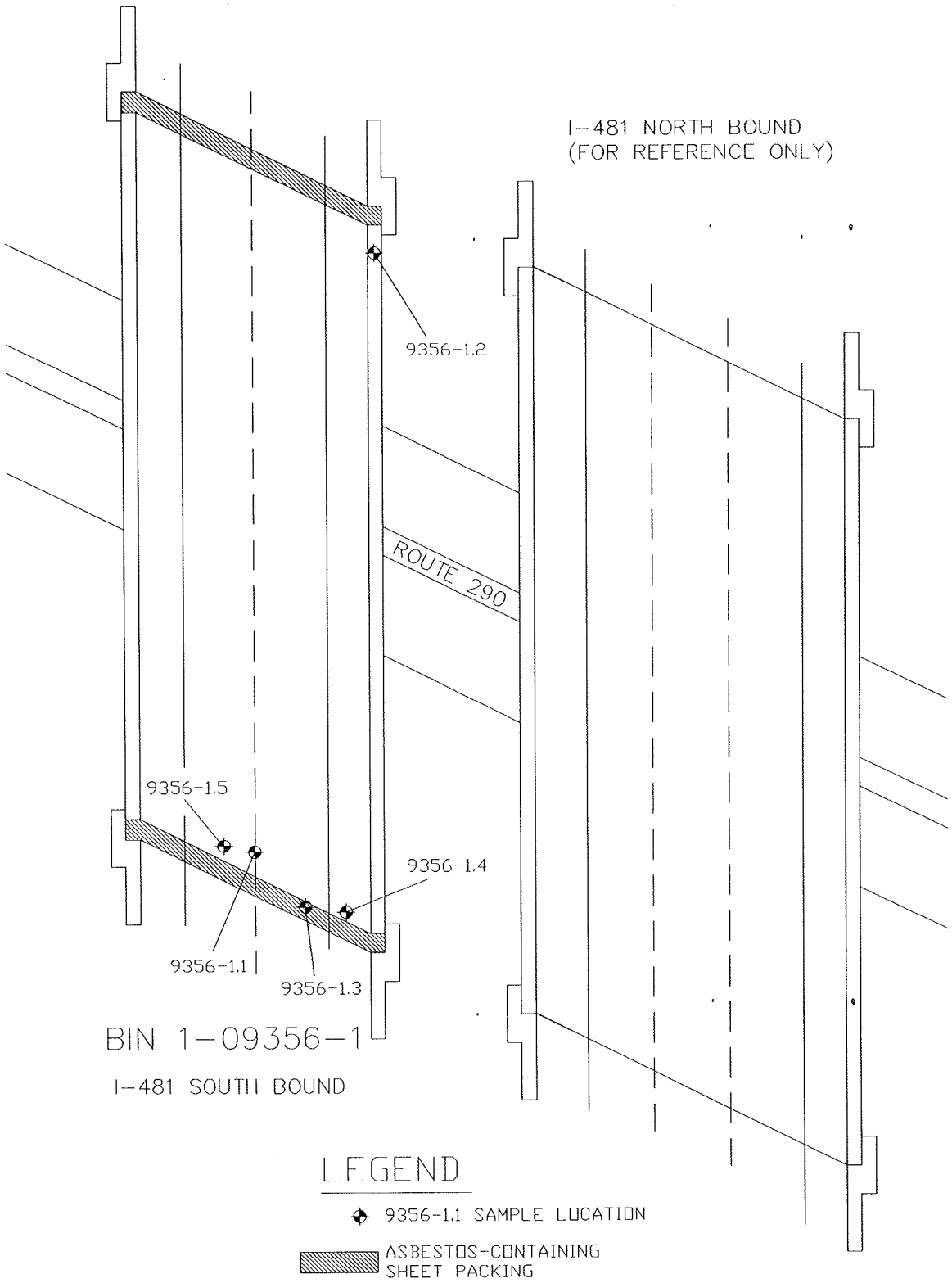
SCALE: 1" = 2000'

FIGURE 1
Site Location Map

Interstate Route 481
over Route 290
East Syracuse, New York

LABELLA

PROJECT NO. 97132



NORTH	PROJECT TITLE: ASBESTOS SAMPLING SURVEY 7 BRIDGES, ONONDAGA & OSWEGO COUNTIES, NEW YORK	PROJECT NO. 97132 PIN 3804.09.101
	FIGURE 2 : I-481 SOUTH BOUND OVER ROUTE 290 BIN 1-09356-1 SAMPLE LOCATIONS AND CONFIRMED ACM	NOT TO SCALE DATE: MAY, 1999

Bulk Sample Results Table

Asbestos Sampling Survey
BIN 1-09356-1
Interstate Route 481 South Bound over Route 290
Onondaga County, New York
LaBella Project # 97132
PIN 3804.09.101

Sample #	Sample Location	Type of Material	Results % Asbestos	Amount of Material	Specification Item No.
9356-1.1	South End of Bridge, on Inside I-Beam	Green Paint	None Detected	N/A	N/A
9356-1.2	North End of Bridge, on East I-Beam	Green Paint	None Detected	N/A	N/A
9356-1.3	**East End of Bridge Between Deck & Abutment**	**Sheet Packing**	**35% Chrysotile**	**8.1 Square Meters**	**15202.0627 (M)**
9356-1.4	East End of Bridge on Back Wall	Gray Masonry Coating	None Detected	N/A	N/A
9356-1.5	South End of Bridge, Beneath Bearing	Bearing Pad	None Detected	N/A	N/A

Watts
Architects
&Engineers

BIN 1093571

I-81 (Former I-481) SB over Conrail Railroad

BIN 1093571
Location: I-481 SB over CSX Railroad Yard

NYSDOT D031085 PIN 3501.60 - I-81 Viaduct Replacement or New Urban Arterial
City of Syracuse, Onondaga County
Bridge Asbestos Assessment Results

Asbestos containing materials have been identified on this bridge.

ITEM	DESCRIPTION	QUANTITY
210.481201	Removal and Disposal of Miscellaneous ACM (BV14) – Sheet Packing	76 SQ FT
210.3413	Removal and Disposal of Caulking ACM (BV14) – (Found around the guiderail base plates. Material was to have been removed during the 2002 rehabilitation project. Remaining quantity is unknown but likely minor.)	LUMP SUM
210.481202	Removal and Disposal of Miscellaneous ACM (BV14) – Bituminous Joint Filler (Assumed to be ACM based on record plan review.)	47 SQ FT

The following summarizes the results of the most recent asbestos survey and record plan review.

Watts Inspection Findings (February 2014)

A bridge inspection was completed on 2/10/2014 and the following suspect ACMs were identified and sampled:

- Bearing pad
- Sheet packing
- Green bridge girder paint
- Off-white/Grey masonry paint
- Grey caulk between 1093571/1093572 abutment walls
- Vinyl drain pipe
- Beige paint on deck sidewalls

Laboratory analysis indicated that the sheet packing sampled by Watts was confirmed positive for asbestos. Watts could not find any guiderail base plate caulk during our inspection.

Review of Bridge Record Plans

The record plans (FISH 70-7, D251438, D259214) were reviewed in support of the field survey. The following suspect ACMs were identified:

- Compressed asbestos sheet packing

- Bituminous joint filler
- Caulking compound (Indicates that this material [123 linear feet] is to be removed based on the reviewed rehabilitation plans dated 2002. Small amounts may still remain under some railing base plates).

Asbestos Survey Results

A previous asbestos survey competed by LaBella in 1998 was reviewed in support of this project.

- Bridge paint
- Compressed asbestos sheet packing
- Caulking compound (Guide rail base plates)
- Joint filler
- Masonry coating
- Bearing pad

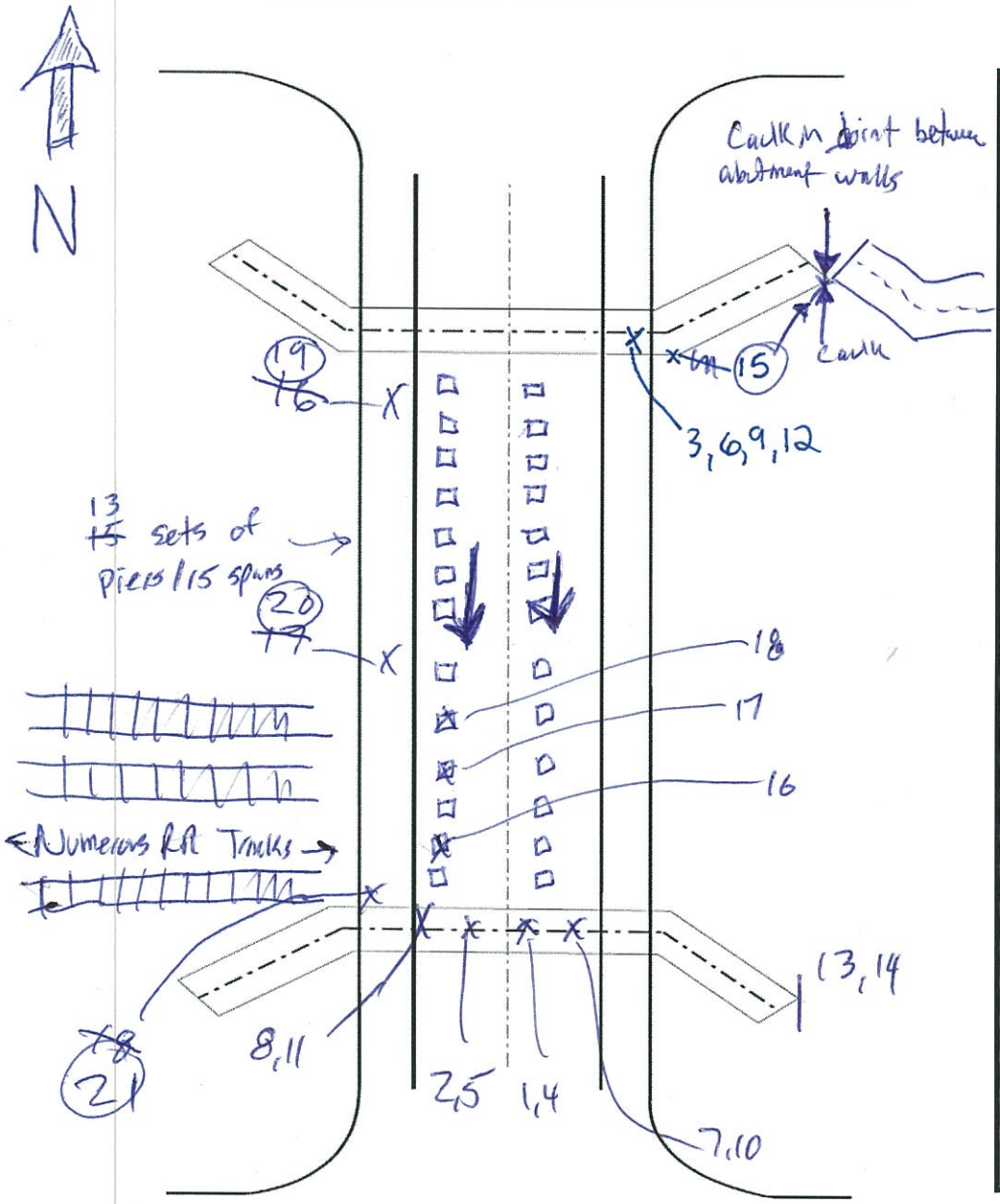
Laboratory analysis indicated that the sheet packing and guiderail caulk was confirmed positive for asbestos.

Watts Architecture & Engineering

BRIDGE ASBESTOS FIELD INSPECTION FORM

3-24-14
3-19-14
2-10-14
2-11-14

BIN Number/Location: 1093571 (481 SB over RR yard)
Inspection Date:
Project Name: : I-81 Viaduct Replacement or New Urban Arterial
PIN Number: PIN: 3501.60, D031085
Inspector(s): S. Matthews
Watts Project No: 13092



Field Inspection Checklist Item	Investigated	Present	Sampled	
Girder Paint	☐	☐	☒	7,8,9
Truss Paint	☐	☐	☒	
Abutment Coating	☐	☐	☒	10/11/12
Abutment Caulk	☐	☐	☒	13,14,15
Abut. Exp. Jt. Filler	☒	☐	☐	~~3,4,5~~ 4,5,6
Headwall Sheet Packing	☐	☐	☒	~~13,14,15~~
Bearing Pad	☐	☐	☒	1,2,3
Transite Pipe	☒	☐	☐	
Pipe Coating/Wtr. Proof	☒	☐	☐	
Scupper Wtr. Proof	☒	☐	☐	
Dum Dum Paint	☒	☐	☐	
Deck Caulk	☒	☐	☐	
Deck Exp. Jt. Filler	☒	☐	☐	
Approach Sheet Packing	☒	☐	☐	
Railing Paint	☒	☐	☐	
Railing Caulk	☒	☐	☐	
Sidewalk Caulk	☒	☐	☐	
Lighting Pole Caulk	☒	☐	☐	
Masonry Castings	☒	☐	☐	
Miscellaneous Tar	☒	☐	☐	
Utilities	☒	☐	☐	
Other Vinyl Pipe	☒	☐	☒	16,17,18
Other	☐	☐	☐	
Other Beige Paint	☒	☐	☒	19-20-21
Other on deck sidewalk	☐	☐	☐	
Other	☐	☐	☐	

SAMPLE LOCATION PLAN VIEW - N.T.S.

Notes: Bridge surveyed over numerous days. Several types of paint sampled above and below deck. Sheet packing/bearing pads observed and sampled. Access to below requires CSX spotter. Observations from above requires UBIV.

EMSL Analytical, Inc.
490 Rowley Road, Depew, NY 14043
Phone/Fax: (716) 651-0030 / (716) 651-0394
http://www.EMSL.com buffalolab@emsl.com

EMSL Order:	141401427
CustomerID:	WATT50A
CustomerPO:	
ProjectID:	

Attn: **Scott Matthews**
Watts Architecture & Engineering
2610 Salina Street
Syracuse, NY 13205

Phone:	(315) 443-8611
Fax:	(315) 443-8605
Received:	04/04/14 12:00 PM
Analysis Date:	4/11/2014
Collected:	2/10/2014

Project: **13092 / I-81 Viaduct Replacement or New Urban Arterial: BIN 1093571 (481 SB over CSX RR Yard)**

Test Report:Asbestos Analysis of Bulk Material

Test	Analyzed Date	Color	Non Asbestos Fibrous	Non Asbestos Non-Fibrous	Asbestos
Sample ID 1093571-1 *141401427-0001*		**Description** **Homogeneity**	bearing pad Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Brown /Green			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Brown /Green			**None Detected**
Sample ID 1093571-2 *141401427-0002*		**Description** **Homogeneity**	bearing pad Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Brown /Green			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Brown /Green			**None Detected**
Sample ID 1093571-3 *141401427-0003*		**Description** **Homogeneity**	bearing pad Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Brown /Green			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Brown /Green			**None Detected**
Sample ID 1093571-4 *141401427-0004*		**Description** **Homogeneity**	sheet packing Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Gray /Black			**7.7% Chrysotile** **7.7% Total**
TEM NYS 198.4 NOB	4/11/2014				**Not Analyzed**

Initial Report From 04/11/2014 09:25:17

EMSL Analytical, Inc.
490 Rowley Road, Depew, NY 14043
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http://www.EMSL.com buffalolab@emsl.com

EMSL Order:	141401427
CustomerID:	WATT50A
CustomerPO:	
ProjectID:	

Test Report:Asbestos Analysis of Bulk Material

Test		Color	Fibrous	Non Asbestos Non-Fibrous	Asbestos
Sample ID 1093571-5 *141401427-0005*		**Description** **Homogeneity**	sheet packing		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014				**Positive Stop (Not Analyzed)**
TEM NYS 198.4 NOB	4/11/2014				**Not Analyzed**
Sample ID 1093571-6 *141401427-0006*		**Description** **Homogeneity**	sheet packing		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014				**Positive Stop (Not Analyzed)**
TEM NYS 198.4 NOB	4/11/2014				**Not Analyzed**
Sample ID 1093571-7 *141401427-0007*		**Description** **Homogeneity**	green girder paint Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Green			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Green			**None Detected**
Sample ID 1093571-8 *141401427-0008*		**Description** **Homogeneity**	green girder paint Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Green			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Green			**None Detected**
Sample ID 1093571-9 *141401427-0009*		**Description** **Homogeneity**	green girder paint Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Green			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Green			**None Detected**
Sample ID 1093571-10 *141401427-0010*		**Description** **Homogeneity**	off-white/gray masonry paint Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Beige			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Beige			**None Detected**

Initial Report From 04/11/2014 09:25:17

EMSL Analytical, Inc.
490 Rowley Road, Depew, NY 14043
Phone/Fax: (716) 651-0030 / (716) 651-0394
http://www.EMSL.com buffalolab@emsl.com

EMSL Order:	141401427
CustomerID:	WATT50A
CustomerPO:	
ProjectID:	

Test Report:Asbestos Analysis of Bulk Material

Test		Color	Fibrous	Non Asbestos Non-Fibrous	Asbestos
Sample ID 1093571-11 *141401427-0011*		**Description**	off-white/gray masonry paint		
		Homogeneity	Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Beige			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Beige			**None Detected**
Sample ID 1093571-12 *141401427-0012*		**Description**	off-white/gray masonry paint		
		Homogeneity	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Beige			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Beige			**None Detected**
Sample ID 1093571-13 *141401427-0013*		**Description**	gray caulk between 1093571/72 abutment walls		
		Homogeneity	Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Gray			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Gray			**None Detected**
Sample ID 1093571-14 *141401427-0014*		**Description**	gray caulk between 1093571/72 abutment walls		
		Homogeneity	Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Gray			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Gray			**None Detected**
Sample ID 1093571-15 *141401427-0015*		**Description**	gray caulk between 1093571/72 abutment walls		
		Homogeneity	Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Gray			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Gray			**None Detected**
Sample ID 1093571-16 *141401427-0016*		**Description**	vinyl drain pipe		
		Homogeneity			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/11/2014				**Insufficient Residue**
Final Residue <1% of original subsample, Non-ACM.					
TEM NYS 198.4 NOB	4/11/2014				**Insufficient Residue**

Initial Report From 04/11/2014 09:25:17

EMSL Analytical, Inc.
490 Rowley Road, Depew, NY 14043
Phone/Fax: (716) 651-0030 / (716) 651-0394
http://www.EMSL.com buffalolab@emsl.com

EMSL Order:	141401427
CustomerID:	WATT50A
CustomerPO:	
ProjectID:	

Test Report:Asbestos Analysis of Bulk Material

Test		Color	Fibrous	Non Asbestos Non-Fibrous	Asbestos
Sample ID 1093571-17 *141401427-0017*		**Description** vinyl drain pipe **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Brown			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Brown			**None Detected**
Sample ID 1093571-18 *141401427-0018*		**Description** vinyl drain pipe **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Brown			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Brown			**None Detected**
Sample ID 1093571-19 *141401427-0019*		**Description** beige paint on deck sidewalls **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Beige			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Beige			**None Detected**
Sample ID 1093571-20 *141401427-0020*		**Description** beige paint on deck sidewalls **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Beige			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Beige			**None Detected**
Sample ID 1093571-21 *141401427-0021*		**Description** beige paint on deck sidewalls **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Beige			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Beige			**None Detected**

Initial Report From 04/11/2014 09:25:17

EMSL Analytical, Inc.
490 Rowley Road, Depew, NY 14043
Phone/Fax: (716) 651-0030 / (716) 651-0394
http://www.EMSL.com buffalolab@emsl.com

EMSL Order:	141401427
CustomerID:	WATT50A
CustomerPO:	
ProjectID:	

Test Report:Asbestos Analysis of Bulk Material

		Non Asbestos		
Test	**Color**	**Fibrous**	**Non-Fibrous**	**Asbestos**

Analyst(s)

Rachel Giese

Rhonda McGee

Taron Williams

Rhonda McGee, Laboratory Manager
or other approved signatory

NOB = Non Friable Organically Bound N/A = Not Applicable VCM = Vermiculite Containing Material

-In New York State, TEM is currently the only method that can be used to determine if NOB materials can be considered or treated as non-asbestos containing.
All samples examined for the presence of vermiculite when analyzed via NYS 198.1.
-NYS Guidelines for Vermiculite containing samples are available at http://www.wadsworth.org/labcert/elapcert/forms/VermiculiteInterimGuidance_Rev070913.pdf
EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples were received in good condition unless otherwise noted.
This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. This report may contain data that is not covered by the NVLAP accreditation.

Samples analyzed by EMSL Analytical, Inc. Depew, NY NYS ELAP 11606

Initial Report From 04/11/2014 09:25:17

OrderID: 141400415

WATTS ARCHITECTURE & ENGINEERING
ASBESTOS BULK SAMPLE CHAIN-OF-CUSTODY

141401427

Page: 1 of 2
Date: 2/10/14

Client: Parsons Engineering
Project: I-81 Viaduct Replacement or New Urban Arterial
Building / Location: BIN 1093571 (481 SB over CSX RR Yard)
Contact: Scott Matthews at (315) 443-8611
Email Preliminary Results to: smatthews@watts-ae.com

Watts Project No.: 13092
Turnaround Requested: ___ 3 Hr. ___ 48 Hr.
Analysis Requested: ___ 6 Hr. ___ 72 Hr.
PLM X TEM X ___ 12 Hr. X ~~5 Day~~
___ 24 Hr. ___ 6-10 Day

4/4/14

Mail Invoice to: Accounts Payable
Watts Architecture & Engineering
95 Perry Street, Buffalo, NY 14203

Mail Report to: Scott Matthews
Watts Architecture & Engineering
2610 S Salina Street, Syracuse, NY 13210

asper Scott

1 week

Sample Number	Material Description	Sample Location	Laboratory Results PLM	Laboratory Results TEM
1093571- 1	Bearing Pad	South end / east		
2	Bearing Pad	South end / west		
3	Bearing Pad	North end / east		
4	Sheet Packing	South end / east		
5	Sheet Packing	South end / west		
6	Sheet Packing	North end / east		
7	Green Girder Paint	South end / east		
8	Green Girder Paint	South end / west		
9	Green Girder Paint	North end / east		
10	Off-white/grey masonry paint	South end / east		
11	Off-white/grey masonry paint	South end / west		
12	Off-white/grey masonry paint	North end / east		

Sampled By: Scott Matthews Date: 3/24/2014 Received By: RECEIVED APR 04 2014 Date: Ex 12pm
Relinquished By: Scott Matthews to Fedex Date: 4/3/2014 Received By: Date:
BY:
Comments: Positive Stop Anywhere in Series

C:\Documents and Settings\wkoch\Desktop\Blanks\Blank Asbestos COC
4/3/2014

141401427

WATTS ARCHITECTURE & ENGINEERING
ASBESTOS BULK SAMPLE CHAIN-OF-CUSTODY

Date: 2/10/14

OrderID: 141400853

Client: Parsons Engineering

Watts Project No.: 13092

Project: I-81 Viaduct Replacement or New Urban Arterial

Turnaround Requested: ____ 3 Hr. ____ 48 Hr.

Building / Location: BIN 1093571 (481 SB over CSX RR Yard)

Analysis Requested: ____ 6 Hr. ____ 72 Hr.

Contact: Scott Matthews at (315) 443-8611

PLM X TEM X ____ 12 Hr. X 5 Day

Email Preliminary Results to: smatthews@watts-ae.com

____ 24 Hr. ____ 6-10 Day

Mail Invoice to: Accounts Payable
Watts Architecture & Engineering
95 Perry Street, Buffalo, NY 14203

Mail Report to: Scott Matthews
Watts Architecture & Engineering
2610 S Salina Street, Syracuse, NY 13210

Asper scott 1 week

Sample Number	Material Description	Sample Location	Laboratory Results PLM	Laboratory Results TEM
1093571- 13	Grey caulk between 1093571/72 abutment walls	South end - center of two bridges		
14	Grey caulk between 1093571/72 abutment walls	South end - center of two bridges		
15	Grey caulk between 1093571/72 abutment walls	North end - east of bridge deck		
16	Vinyl drain pipe	2nd pier from south		
17	Vinyl drain pipe	4th pier from south		
18	Vinyl drain pipe	5th pier from south		
19	Beige paint on deck sidewalls	North end outside lane		
20	Beige paint on deck sidewalls	Middle outside lane		
21	Beige paint on deck sidewalls	South end outside lane		

Page 2 Of 2

Sampled By: Scott Matthews Date: 3/24/2014 Received By: ____ Date: FX 12pm

Relinquished By: Scott Matthews to Fedex Date: 4/3/2014 Received By: ____ Date: ____

Comments: Positive Stop Anywhere in Series

RECEIVED APR 04 2014 BY: ____

C:\Documents and Settings\wkoch\Desktop\Blanks\Blank Asbestos COC
4/3/2014

Watts
Architects
&Engineers

BIN 1093571 Inspection Photos

I-81 (Former I-481) SB over Conrail Railroad

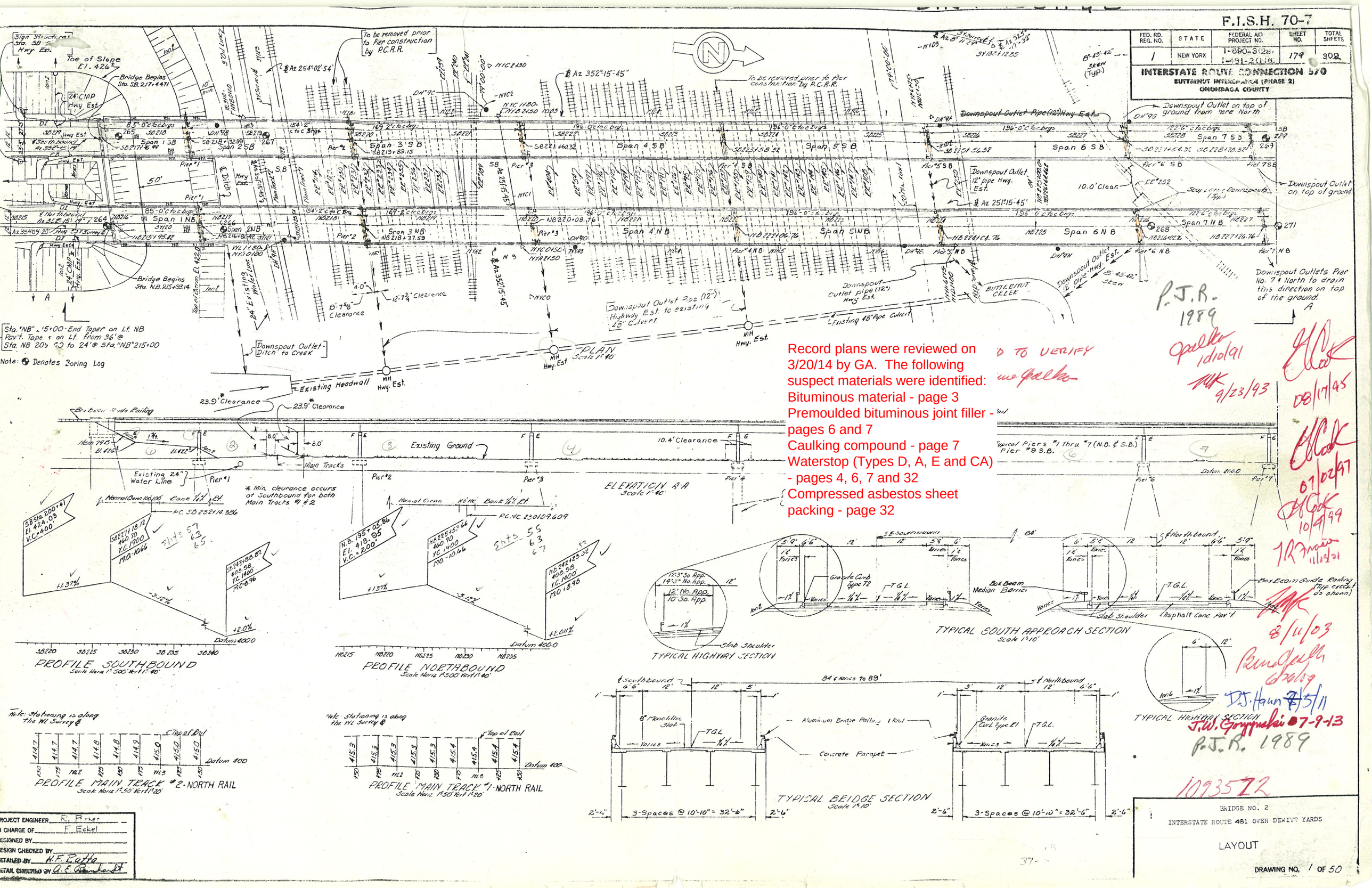
Photo 1

Photo 2

Photo 3

Photo 4

Photo 5



Record plans were reviewed on 3/20/14 by GA. The following suspect materials were identified:
Bituminous material - page 3
Premoulded bituminous joint filler - pages 6 and 7
Caulking compound - page 7
Waterstop (Types D, A, E and CA) - pages 4, 6, 7 and 32
Compressed asbestos sheet packing - page 32

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-81-2(38) I-81-2(16)	181	309

INTERSTATE ROUTE CONNECTION 570
DUTCHER ... INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

GENERAL NOTES

G1 - Design Specifications AASHO 1969 modified and current American Welding Society modified. The stresses assumed for design purposes conform to 1969 AASHO Specifications with the 28 day concrete stress (f'c) = 3000 psi minimum.

L.L. HS20-44 or two 24,000 lb. axles spaced 4'-0" on centers.

G2 - Material and Construction Specifications: Specifications of N.Y.S. Department of Public Works dated January 2, 1962 with current additions and modifications.

G3 - The Contractor's attention is directed to the Special Notes for this structure which appear in the proposal. Particular attention should be given to the foundation note which briefly outlines the anticipated subsurface conditions at the site of the structure and which specifies certain requirements relative to construction.

G4 - The cost of furnishing and placing water used for ~~molding and~~ selected granular fill will be paid for under Item 1W and 1WA of the highway portion of the contract.

G5 - Reinforcing bars shall be lapped a minimum of 24 diameters.

G6 - The cost of all joint material will be included in the price bid for the various items of the contract.

G7 - All concrete anchor studs which are attached to the various steel details shall meet the requirements listed in paragraph 5, Construction Details, of Item 29B-Stud Shear Connectors. Payment for furnishing and placing the concrete anchors will be included in the unit price bid for the item to which the anchors are attached.

G8 - Due to the incompatability of the caulking compound with the premoulded bituminous joint filler, a layer of an approved type of pressure-sensitive release tape shall be placed between these materials.

The contractor may elect to change the layout of diaphragms from that shown on the contract plans. Placement of the diaphragms parallel with the skew (in line, not staggered) will be permitted. The stiffener locations may be altered to accommodate the revised diaphragm layout, but the spacing of stiffeners shown on the plans shall not be exceeded. Diaphragm spacing shall not exceed 25 feet.

CONCRETE ITEMS AND CEMENT

Description	Item No.		Type of Cement
All footings	20		2
Abutment pedestals, backwalls and wingwalls	20		2
Abutment headers and parapets	18		2
Pier columns, beams, pedestals, and crash walls	18		2
Monolithic slab	18MA		2
Parapet (Superstructure & Substructure)	18		2
Cast-in-Place Concrete Piles	85C		2

All concrete shall have entrained air in accordance with the specifications.

PROJECT ENGINEER R. Paquel
IN CHARGE OF F. Eckert
DESIGNED BY
DESIGN CHECKED BY
DETAILED BY
DETAIL CHECKED BY

SUPERSTRUCTURE NOTES

Sup 1 - After all superstructure steel has been erected, elevations shall be taken on the top of the steel at the centerline of web, at each centerline of bearing, center of the span and at other locations where theoretical bottom of the slab elevations are indicated on the plans.

The depth of haunch required to position the slab forms is obtained as follows. From the measured top of steel elevations subtract the deflections due to slab and superimposed dead load. Subtract this result from the listed bottom of slab elevation.

Sup 2 - All bearings are to be field welded to beams or girders.

Sup 3 - The Structural Slab on this structure shall be formed with permanent corrugated metal forms for concrete decks.

Sup 4 - All connection plates used in pairs shall be welded to the web and be placed paint tight against both flanges. This may be accomplished by cutting the stiffeners to fit or by cutting the stiffeners 1/8 inch short and then placing the stiffener tightly against the tension flange and welding the opposite end to the compression flange. Fitted stiffeners shall not be driven in place with sufficient force to distort the flange, web or stiffeners.

Sup 5 - All intermediate stiffeners and/or connection plates used singly on one side only or staggered on both sides shall be placed paint tight against the flange which is in tension under dead load and welded to the web and flange which is in compression.

Sup 6 - All bearing stiffeners shall be fillet welded to the web and top flange and groove welded or milled to bear to the bottom flange.

Sup 7 - All intermediate transverse stiffeners and connection plates shall be vertical unless otherwise approved by the Deputy Chief Engineer (Design).

Sup 8 - All bearing stiffeners and the ends of all girders shall be vertical.

Sup 9 - All anchor bolts shall be galvanized in accordance with the requirements of Material Specification M19.

Sup 10 - Structural steel members which are imbedded or in contact with cast or pneumatically projected concrete shall not be painted.

Sup 11 - Machine finished sliding surfaces in contact shall receive in the shop one coat of a hot mixture of white lead and tallow as provided for in the specifications under Part II, Section 3A, Painting. This shop coat of white lead and tallow shall be removed immediately prior to the assembly of the member in the field. All other machine finished surfaces shall be given one shop coat of paint.

Sup 12 - Wherever Modified A441 Steel is used, the flux for submerged arc welding shall be dried in ovens at 500°F. to 550°F. for at least two hours and stored in ovens held at 250°F. or more. Flux not used within 4 hours after removal from a drying or storage oven shall be redried before use.

Minimum preheat and Interpass Temperatures shall be as follows:

Thickness of Thickest Part at Point of Welding in Inches	
To 3/4, inclusive	70°F.
Over 3/4 to 1 1/2, inclusive	100°F.
Over 1 1/2 to 2 1/2, inclusive	175°F.
Over 2 1/2	250°F.

INDEX OF DRAWINGS

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3	Notes and estimate of quant.	41	Approach shoulder details
4	Earthwork	42	Bearings
5	South Abutment	43	Bearings
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8	North Abutment	46	Bar list #3
9	Pier 1	47	Bar list #4
10	Piers 2, 3 and 4	48	Bar list #5
11	Piers 5 and 6	49	Bar list #6
12	Piers 7, 8 and 9 NBL	50	Bar list #7
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22	Spans 4, 5 and 6		
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24	Spans 7, 8 and 9		
25	Span 10		
26	Span 10		
27	Spans 11 thru 15 SB		
28	Spans 11 thru 15 SB		
29	Spans 11 thru 15 NB		
30	Spans 11 thru 15 NB		
31	Finger joint		
32	Downspout details		
33	Miscellaneous Details		
34	Miscellaneous Details		
35	Concrete parapet		
36	Railing details		
37	Railing layout 1		
38	Railing layout 2		

ESTIMATE OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	TOTAL NEAT	TOTAL PROPOSAL	FINAL
2EF-B	Selected Granular Fill	C.Y.	8,000	8,000	
2UF	Underdrain Filter	C.Y.	20	20	
5B	Structure Excavation	C.Y.	4,950	4,950	
11HG	Perforated Corrugated Metal Pipe	L.F.	410	410	
	Underdrain - 6" Dia				
13DE-6	Downspouts - 6" Dia.	L.F.	56	60	
13DE-8	Downspouts - 8" Dia.	L.F.	794	800	
18	Class A Concrete for Structures	C.Y.	2,512	2,520	
18MA	Class A Concrete for Structures	S.F.	158,700	158,700	
20	Class B Concrete for Structures	C.Y.	2,211	2220	
24A	Bagged Screened Aggregate	C.Y.	110	110	
28	Bar Reinforcement for Structures	Lb.	2,110,000	2,110,000	
28B	Stud Shear Connectors	Ea.	30,160	30,160	
29	Structural Steel	Lb.	7,508,000	7,508,000	
37M(1)	Aluminum Bridge Railing (One Rail)	L.F.	8,680	8,680	
61	Bituminous Material	Gal.	168	170	
79B	Concrete Block Paving	S.Y.	1,130	1130	
83S	Steel Sheet Piling	S.F.	7,700	7,700	
83TAS	Temporary Sheet Piling	S.F.	18,800	18,800	
85C	Cast-in-Place Concrete Piles	L.F.	75,200	75,200	
87	Furnishing Equipment for Driving Piles	L.S.	Nec.	Nec	
94SBW	Stone Curb - (Granite)	L.F.	9,050	9,050	
101C	Drainage Trough	L.F.	320	320	
124	Sodding	S.Y.	210	210	
363J	Epoxy Protective Coating for Concrete	S.F.	9,150	9,150	
1WPS	Watering Plants and Sod	M/Gal.	4	4	

Note -
Where Item 13DC or Item 13DD appear on these drawings, the specifications for Item 13DE-6 and 13DE-8 shall apply.
Six inch diameter downspouts shall be paid for under Item 13DE-6
Eight inch diameter downspouts shall be paid for under Item 13DE-8

ITEM 29

Type of Steel	Weight
A.S.T.M. Designation A36	1,917,000
" " A441	4,673,000
" " A441 Modified	1,378,500
" " A242	39,500
Total	7,508,000

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS
GENERAL NOTES
ESTIMATE OF QUANTITIES TABLE
DRAWING NO. 3 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-681-2(118)	182	300

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

SUBSTRUCTURE NOTES

All sod, topsoil and unsuitable material under the substructure embankment shall be removed as specified under the General Excavation Specifications and replaced by the same item as the layer of embankment adjacent and above as shown on the plans.

All embankments of Selected Granular Fill, Item 2EF-B and Selected Fill (Bridge Foundation) Item 2VJ-D shall be compacted to a minimum dry density of 100% of Maximum Density as defined under "h. Embankments" of the General Excavation Specifications. However, where piles are to be placed through the embankment, a minimum dry density of 90% of the Maximum Density will be required.

The Contractor shall place and compact all fill for bridges between the final toes of slope in accordance with the plans and specifications in a manner satisfactory to the Deputy Chief Engineer (Design).

Top of backwalls on which asbestos sheet packing is to be placed shall be steel trowel finished.

Bituminous Material, Item 61, shall be applied to the backs of all abutments and wingwalls above top of footings, where fill is in contact with the walls.

Epoxy Protective Coating for Concrete shall be applied to the following surfaces:

X Abutments - All exposed pedestal surfaces, including the area under the bearings, exposed vertical surfaces of backwall and curtain walls facing the superstructure.

Piers - All pedestal surfaces including the area under the bearings, and the top surface of pier between pedestals including the edge chamfer at top edge of pier.

The use of fibre forms will be permitted only if the interior surface of the forms have been treated in such a manner as to prevent helical corrugation marks on the finished concrete surface.

All exposed construction joints and exposed edges of concrete shall be chamfered one inch.

The embankment for the South Abutment has been constructed to subgrade elevation under a previous contract.

The embankment for the North Abutment shall be constructed to the bottom of footing elevation and allowed to stand for a period of time satisfactory to the Deputy Chief Engineer (Structures) prior to driving piles and proceeding with abutment construction.

A six month waiting period is required after backfilling behind North Abutment prior to placing approach pavement at north end of bridge.

Items 2 and 2EF-B and Items 2 and 2VJ-D shall be placed simultaneously, in contact, on both sides of the vertical payment line. Sheeting or other means shall not be used to separate the two materials.

The installation of Selected Fill, Item 2EF-B at the North Abutment, or backfill at the South Abutment as shown on the structural plans, shall be completed immediately following the completion of abutments or walls.

All abutments and piers for this structure are to be supported on cast-in-place concrete piles.

For design purposes the pile load does not exceed 35 tons per pile.

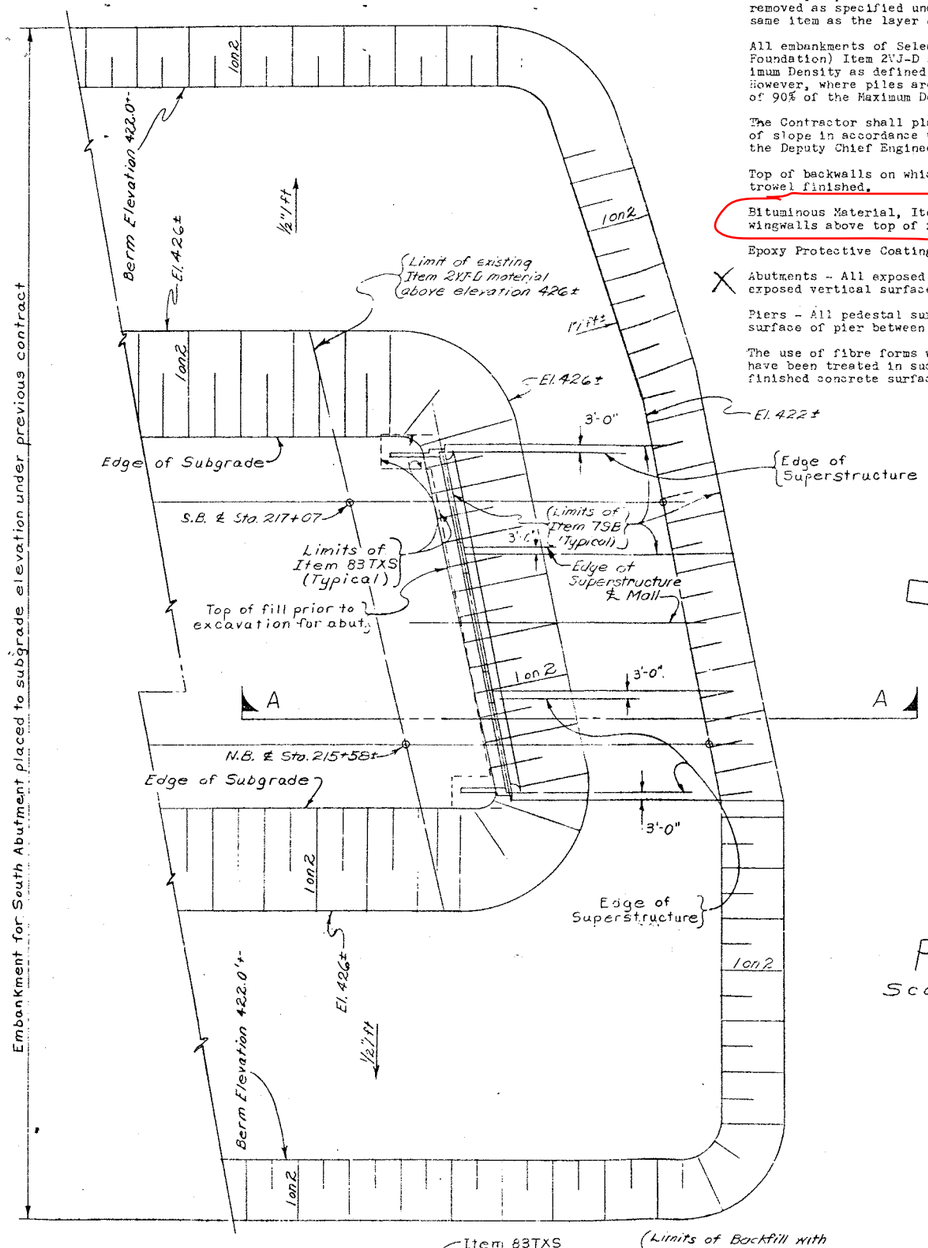
Estimated length of cast-in-place concrete piles:

South Abutment = 75 Feet

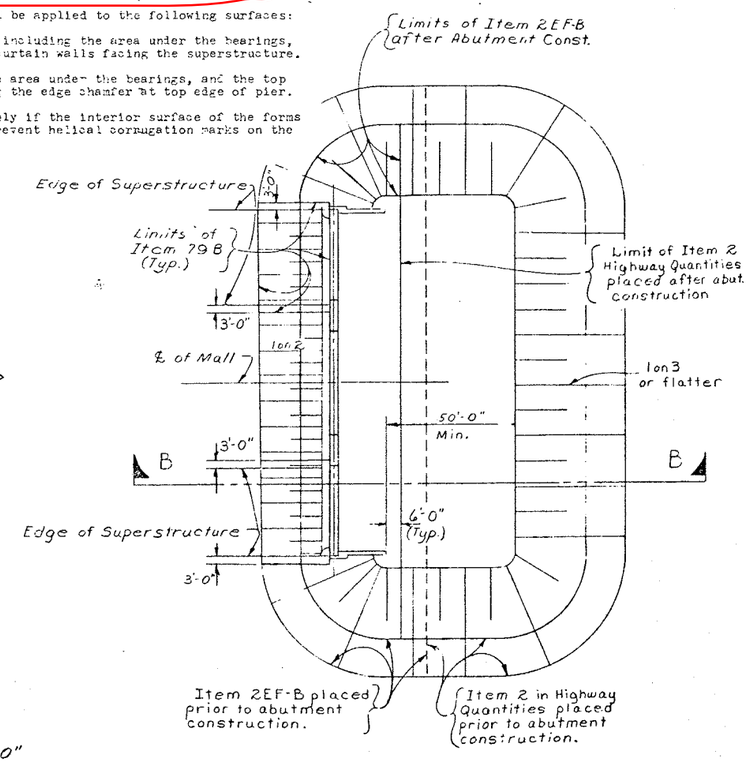
Pier 1	S.B. = 55		Pier 9	S.B. = 70	
	N.B. = 80			N.B. = 70	
Pier 2	S.B. = 55		Pier 10	S.B. = 70	
	N.B. = 80			N.B. = 65	
Pier 3	S.B. = 60		Pier 11	S.B. = 65	
	N.B. = 65			N.B. = 65	
Pier 4	S.B. = 70		Pier 12	S.B. = 65	
	N.B. = 70			N.B. = 65	
Pier 5	S.B. = 75		Pier 13	S.B. = 55	
	N.B. = 80			N.B. = 65	
Pier 6	S.B. = 80		Pier 14	S.B. = 80	
	N.B. = 50			N.B. = 50*	
Pier 7	S.B. = 80				
	N.B. = 80		North Abutment = 65		
Pier 8	S.B. = 70				
	N.B. = 70				

* Pier #14 N.B. has an existing 48" diameter water main in close proximity. The water main is to be relocated under this contract. See Drawing 2.

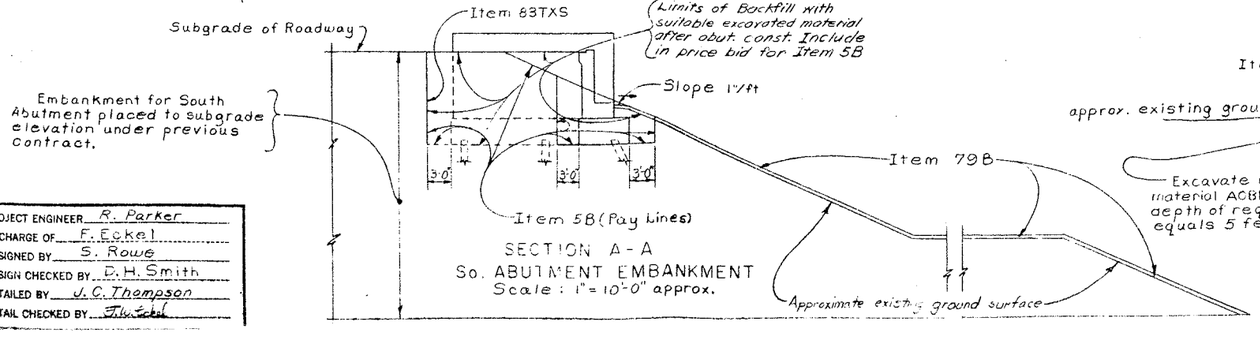
It is anticipated that difficult driving of piles through the South Abutment embankment may be encountered and it may be necessary to utilize mechanical equipment for removing consolidated material from the location of the piles. This may be accomplished by various types of earth augers, well drilling equipment or other devices to remove the consolidated material to permit the piles to be driven to the desired depth or required resistance without distortion.



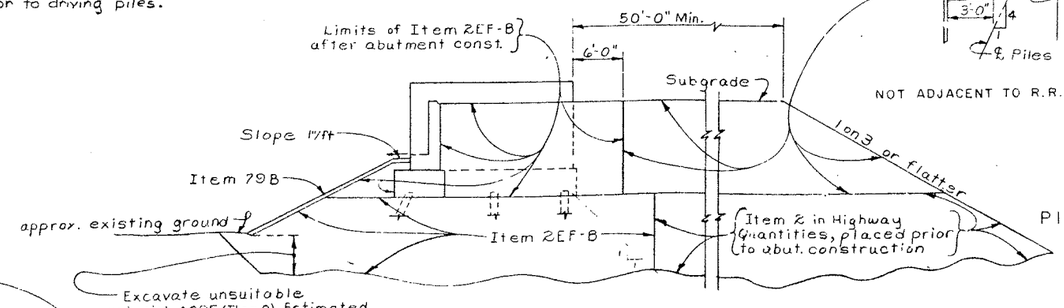
PLAN
Scale: 1" = 30'-0"



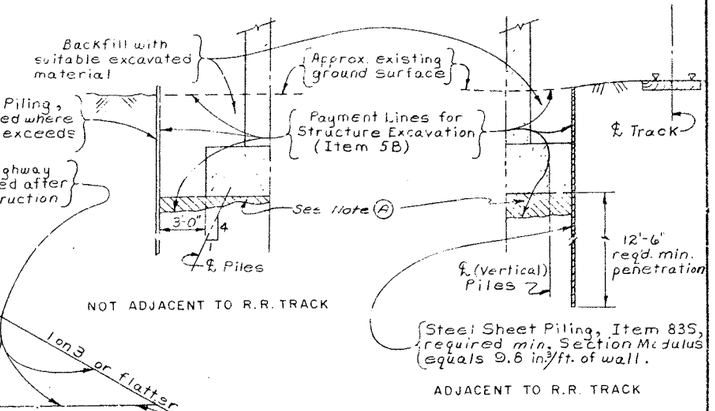
Note (A)
Remove any unsuitable material encountered below bottom of pier footing AOBE. Estimated depth of unsuitable material = 0 to 2 feet. Backfill to bottom of footing elevation with compacted Item 2 EF-B prior to driving piles.



SECTION A-A
So. ABUTMENT EMBANKMENT
Scale: 1" = 10'-0" approx.



SECTION B-B
No. ABUTMENT EMBANKMENT
Scale: 1" = 10'-0" approx.



PIER EXCAVATION
Scale: 3/16" = 1'-0"

PROJECT ENGINEER	R. Parker
IN CHARGE OF	F. Eckel
DESIGNED BY	S. Rowe
DESIGN CHECKED BY	D.H. Smith
DETAILED BY	J.C. Thompson
DETAIL CHECKED BY	[illegible]

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

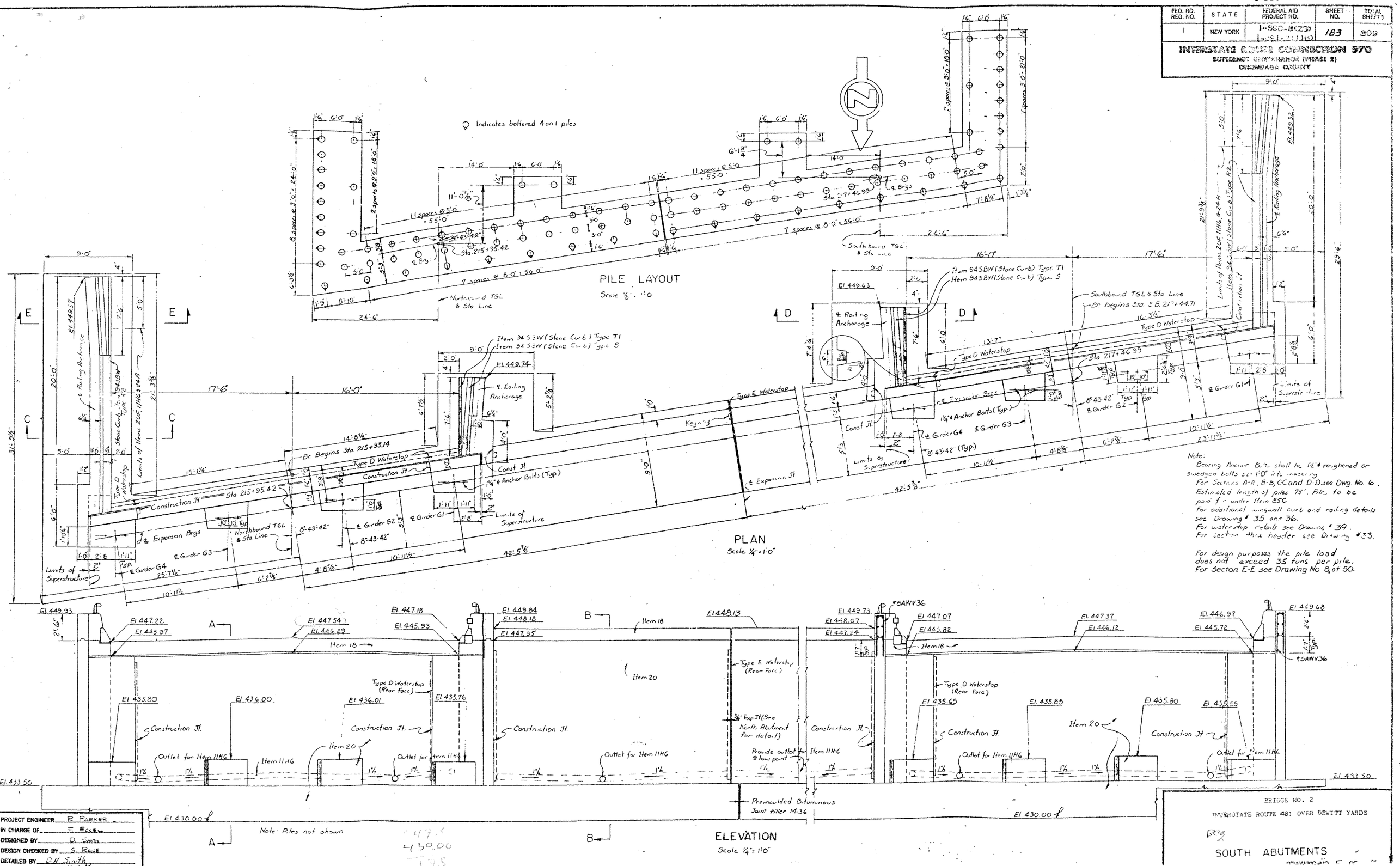
EARTHWORK

DRAWING NO. 4 OF 50

F.I.S.H. 70-7

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(23) I-481-2(116)	183	209

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



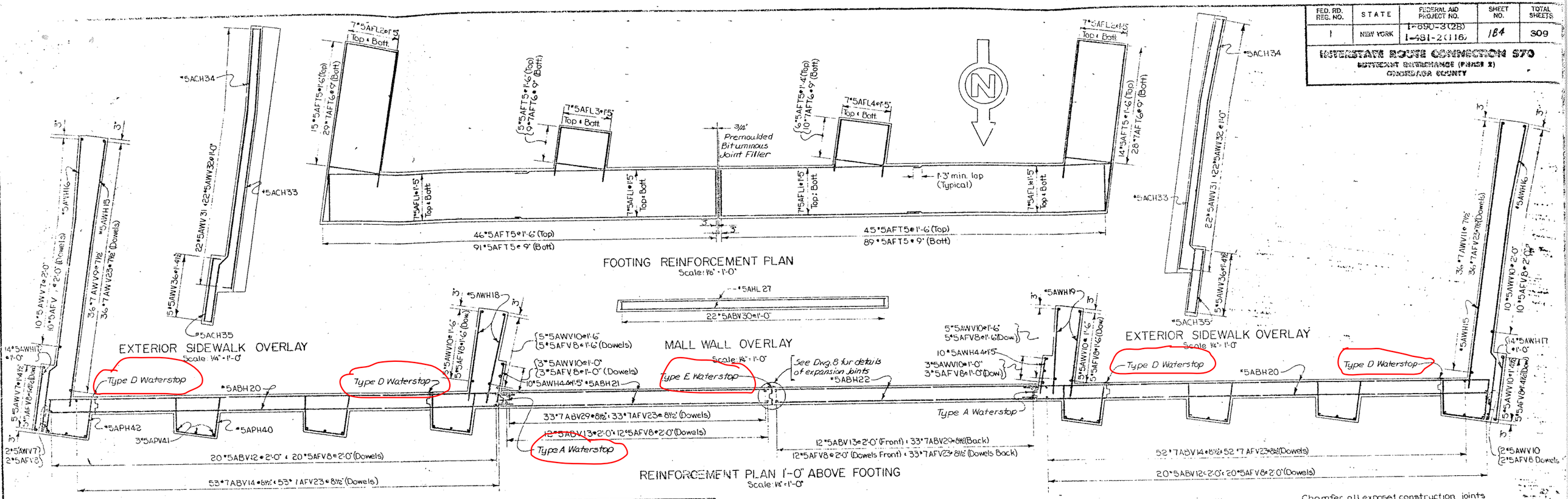
PROJECT ENGINEER R. PARKER
IN CHARGE OF F. ECKER
DESIGNED BY D. SMITH
DESIGN CHECKED BY S. ROWE
DETAILED BY O.H. Smith
DETAIL CHECKED BY W.G. Tyrrell

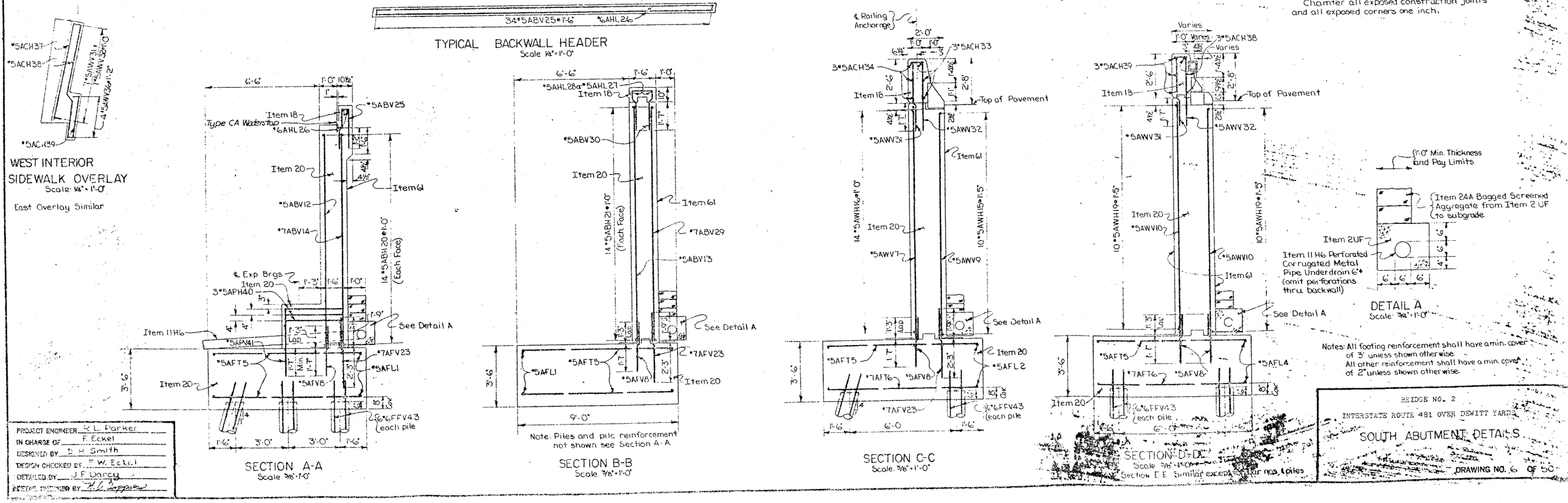
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

SOUTH ABUTMENTS

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-890-3(28) I-481-2(116)	184	309

INTERSTATE ROUTE CONNECTION 570
INTERCHANGE (PHASE X)
ONONDAGA COUNTY





PROJECT ENGINEER R. L. Parker
IN CHARGE OF F. Eckel
DESIGNED BY D. H. Smith
DESIGN CHECKED BY F. W. Eckel
DETAILED BY J. F. Darcy
DETAIL CHECKED BY

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARD

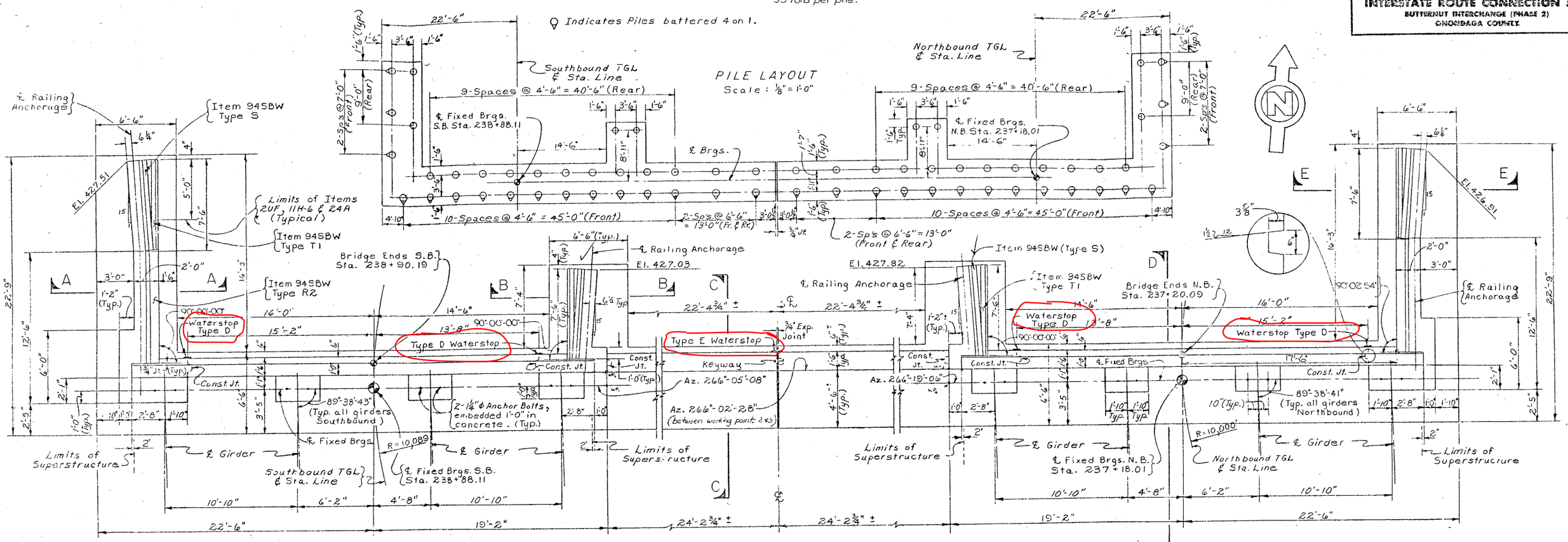
SOUTH ABUTMENT DETAILS

DRAWING NO. 6 OF 50

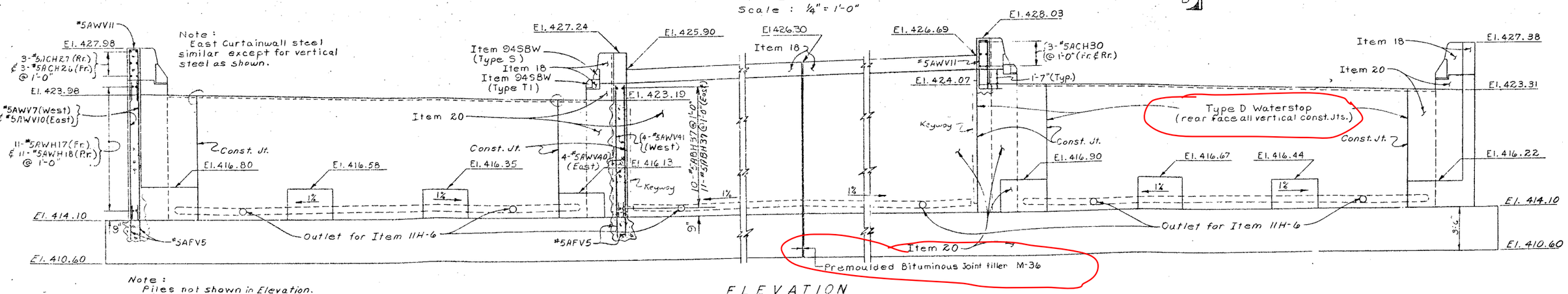
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(28) I-481-2(11)b	185	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

Piles to be Cast-in-Place Concrete Piles, Item 85C
Estimated length of pile = 65 feet
For design purposes the pile load does not exceed 35 tons per pile.



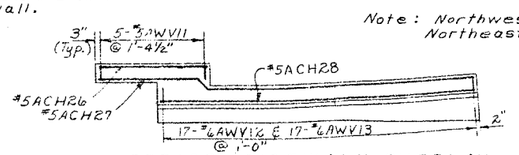
PLAN
Scale : 1/4" = 1'-0"



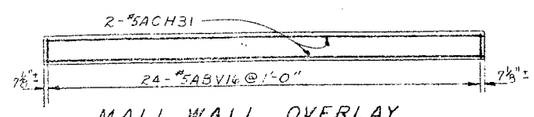
ELEVATION
Scale : 1/4" = 1'-0"

Note:
Piles not shown in Elevation.
Omit perforations in Item 11H-6 extension thru wall.

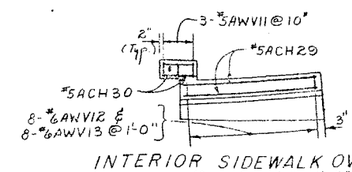
Note: Northwest overlays shown, Northeast similar by opposite hand.



EXTERIOR SIDEWALK OVERLAY
Scale : 1/4" = 1'-0"



MALL WALL OVERLAY
Scale : 1/4" = 1'-0"



INTERIOR SIDEWALK OVERLAY
Scale : 1/4" = 1'-0"

PROJECT ENGINEER	R. Parker
IN CHARGE OF	F. Eckel
DESIGNED BY	K. H. W. & Kaul
DESIGN CHECKED BY	J. B. Sherman
DETAILED BY	J. C. Thompson
DETAIL CHECKED BY	D. H. Smith

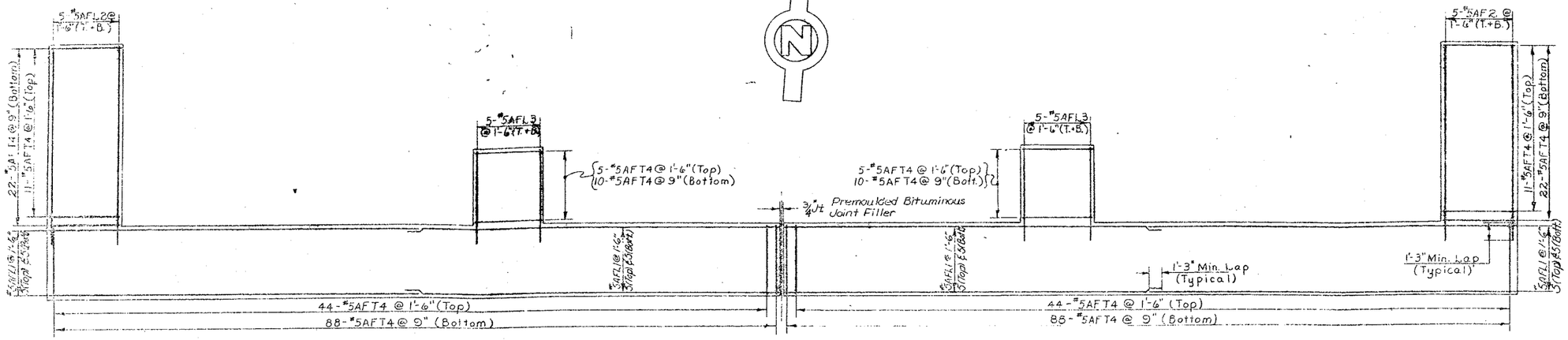
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

NORTH ABUTMENTS

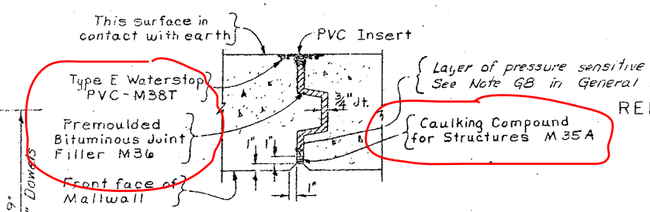
DRAWING NO. 7 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(28) I-481-2(18)	186	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

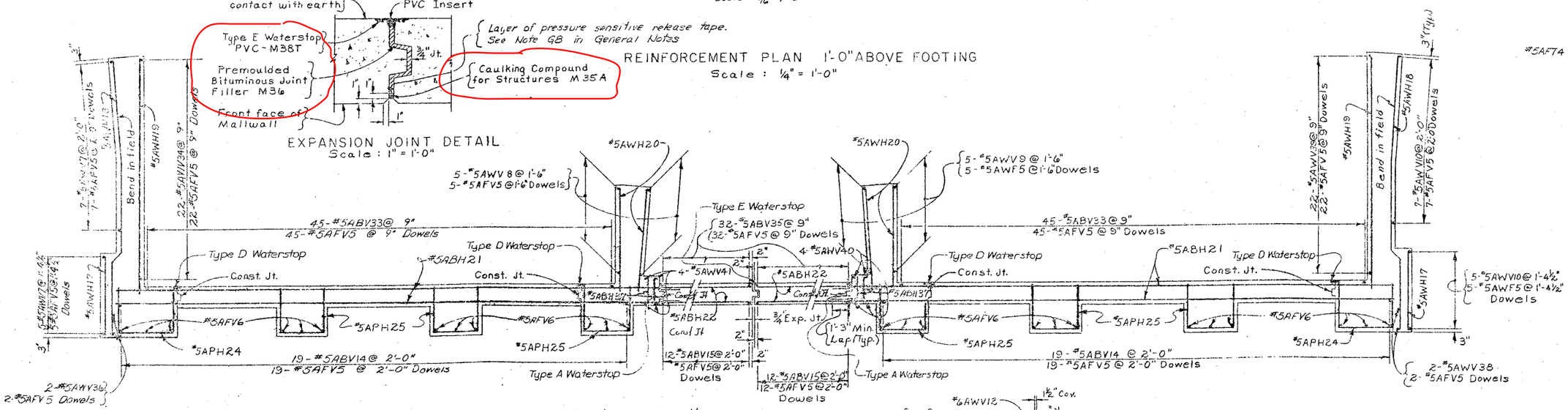


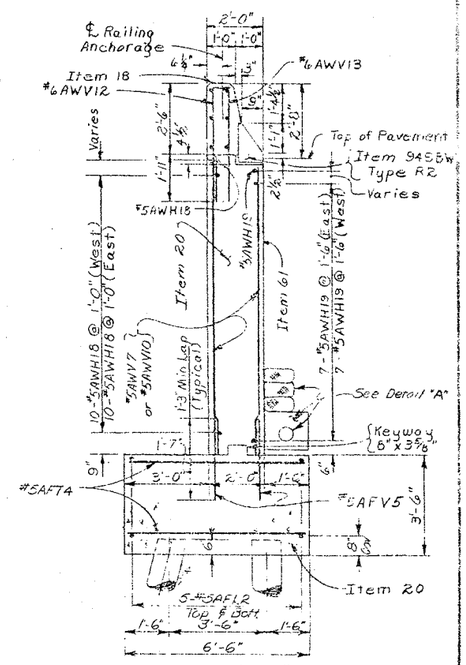
FOOTING REINFORCEMENT PLAN
Scale: 3/16" = 1'-0"



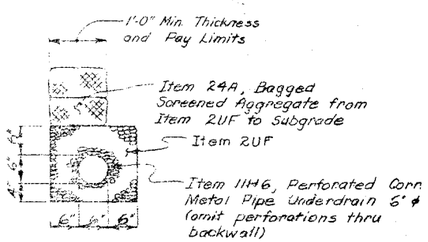
EXPANSION JOINT DETAIL
Scale: 1" = 1'-0"

REINFORCEMENT PLAN 1'-0" ABOVE FOOTING
Scale: 1/4" = 1'-0"

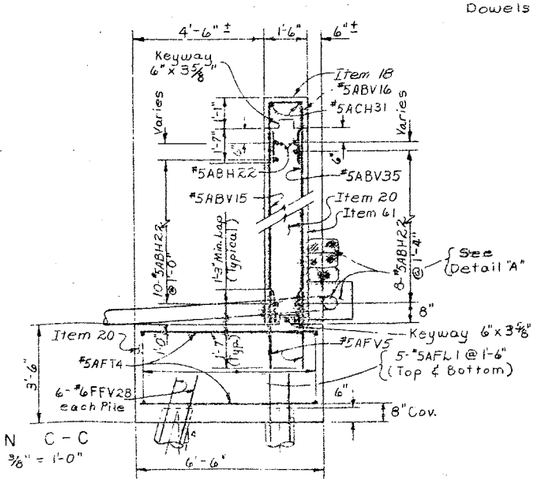




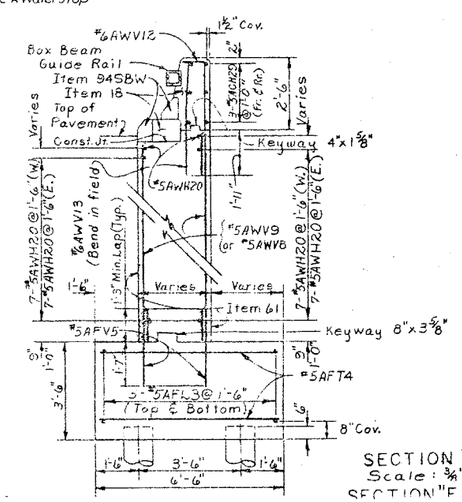
SECTION "A-A"
Scale: 3/8" = 1'-0"



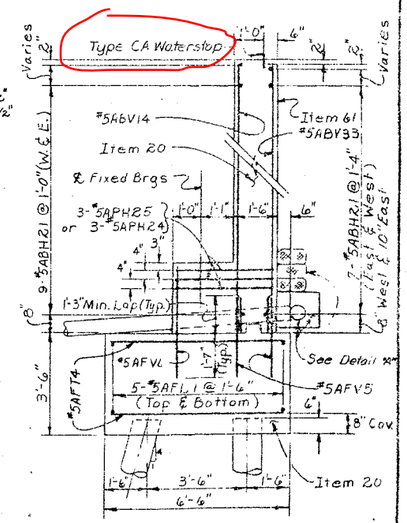
DETAIL "A"
Scale: 3/4" = 1'-0"



SECTION C-C
Scale: 3/8" = 1'-0"



SECTION "B-B"
Scale: 3/8" = 1'-0"
SECTION "E-E" (Similar except for Box No's and Piles)



SECTION D-D
Scale: 3/8" = 1'-0"

Notes:-

See Drawing # 39 for Waterstops.

All footing reinforcement shall have a min. cover of 3" unless otherwise noted.

All other reinforcement shall have a min. cover of 2" unless otherwise noted

All exposed construction joints shall be chamfered one inch

All exposed corners shall be chamfered one inch.

PROJECT ENGINEER R. Parker
IN CHARGE OF L. E. Kel
DESIGNED BY K. Wachter
DESIGN CHECKED BY V. Rao & J. Sherman
DETAILED BY J. Durrant & J.C.T.
DETAIL CHECKED BY C.H. Smith

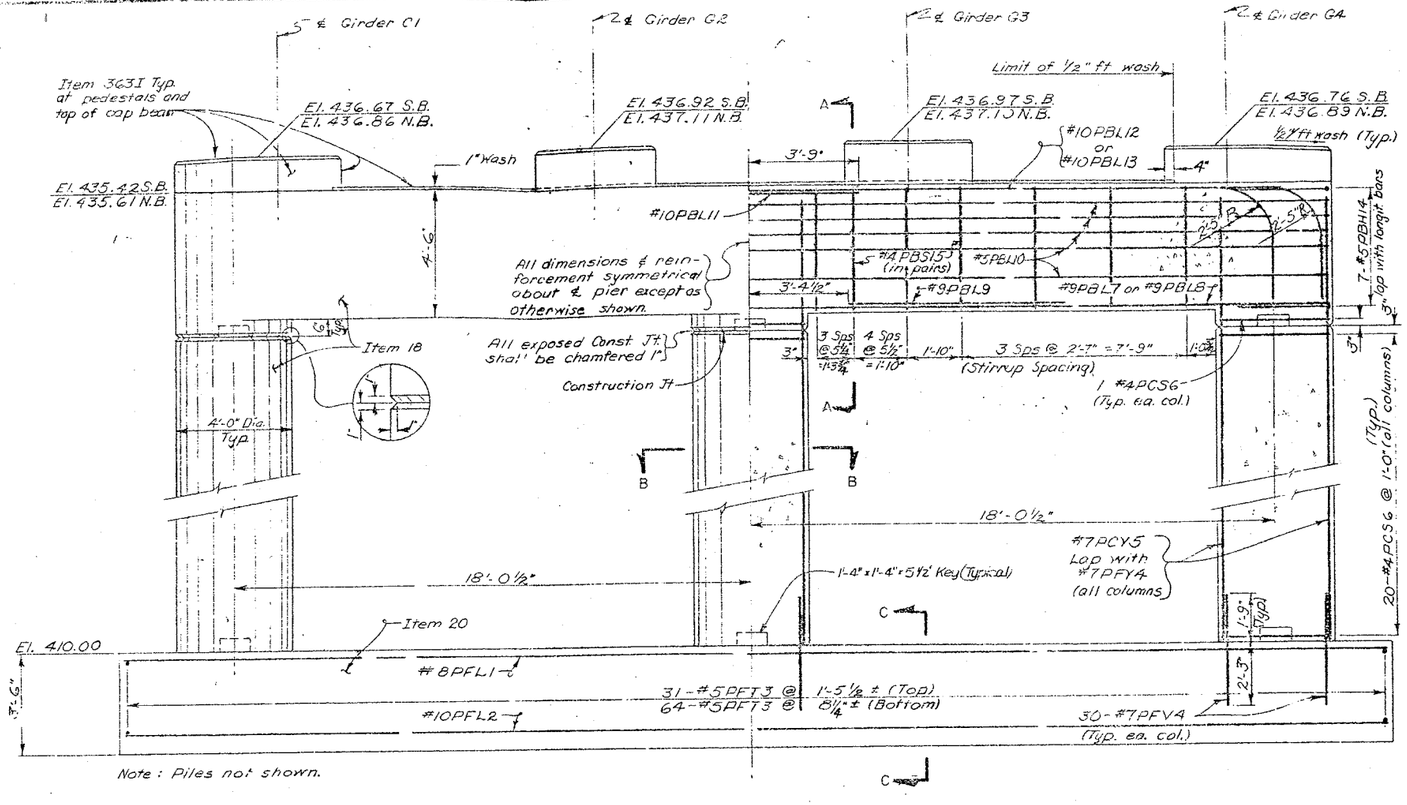
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

NORTH ABUTMENT DETAILS

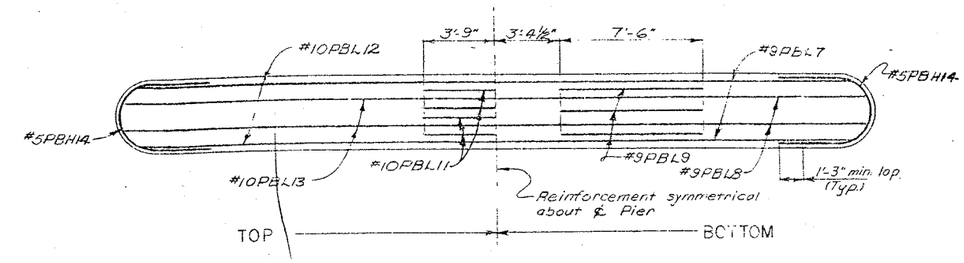
DRAWING NO. 8 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	~~(F-030-3(26))~~ I-481-2(116)	187	309

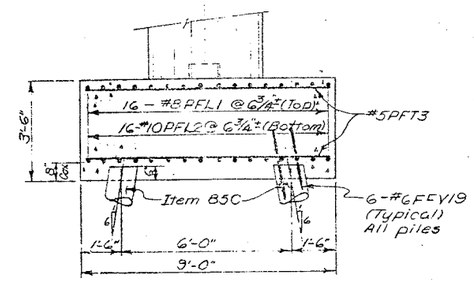
INTERSTATE ROUTE CONSTRUCTION 570
* DEWITT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



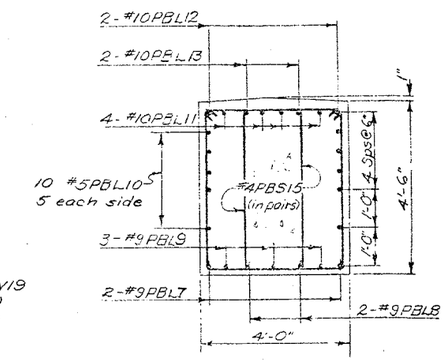
ELEVATION
Scale: 3/8" = 1'-0"



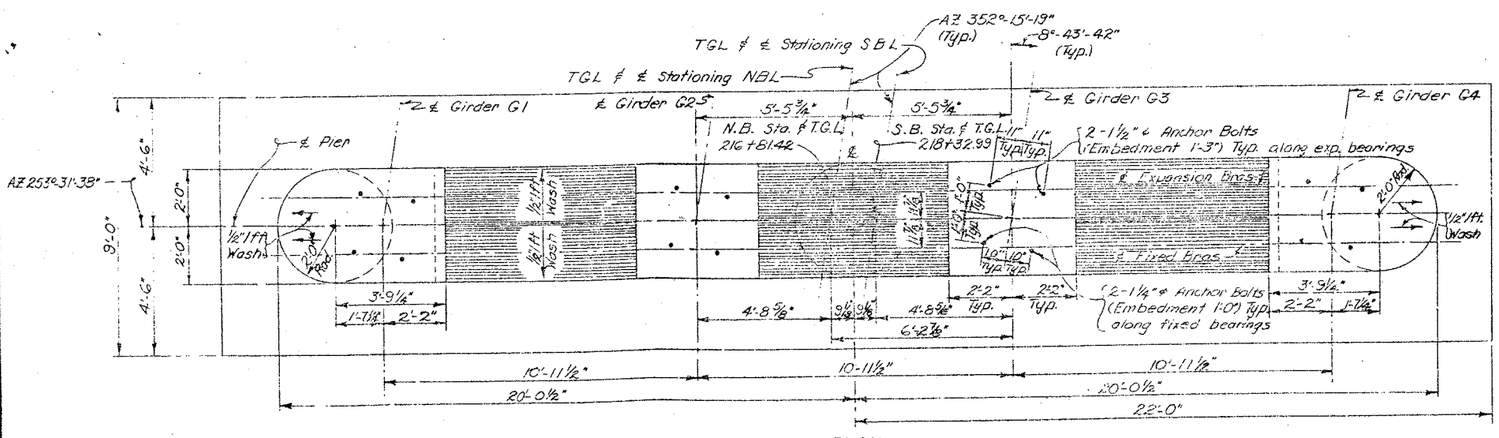
PIER CAP REINFORCEMENT
Scale: 1/4" = 1'-0"



SECTION C-C
Scale: 3/8" = 1'-0"

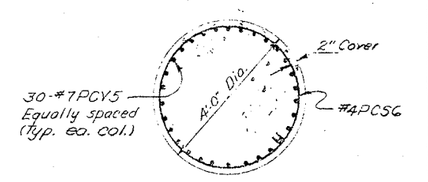


SECTION A-A
Scale: 1/2" = 1'-0"



PLAN
Scale: 3/16" = 1'-0"

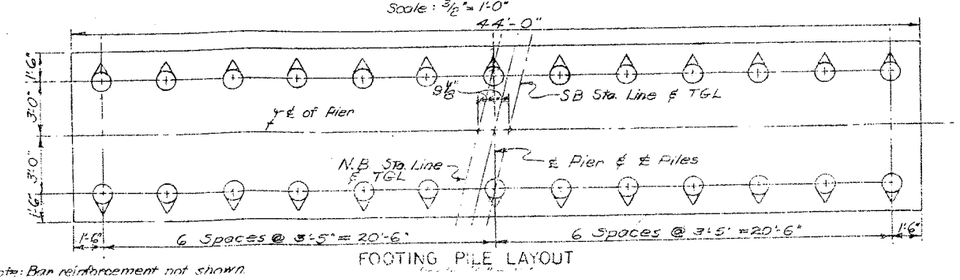
SECTION D-D
Scale: 1/2" = 1'-0"



SECTION B-B
Scale: 1/2" = 1'-0"

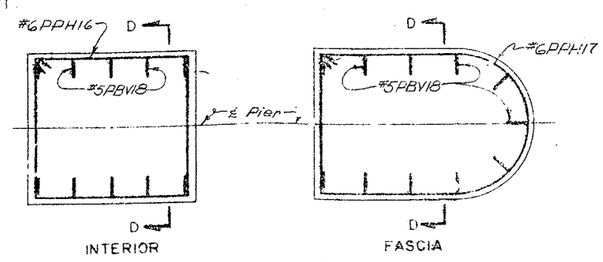
Notes:
All footing reinforcement shall have a min. cover of 3" unless otherwise shown.
All other reinforcement shall have a min. cover of 2" unless otherwise shown.
Estimated length of cast-in-place concrete piles = 55' Southbound and 60' Northbound.
For design purposes the pile load does not exceed 35 tons per pile.
For details of pile reinforcement see Drawing No. 42

Indicates battered piles (6 on 1)



FOOTING PILE LAYOUT

Note: Bar reinforcement not shown.



PEDESTALS
Scale: 1/2" = 1'-0"

PROJECT ENGINEER	R. L. Parker
IN CHARGE OF	F. Eckel
DESIGNED BY	N. A. Tolkes
DESIGN CHECKED BY	F. Thimble
DETAILED BY	J. Thomas
DETAIL CHECKED BY	W. C. Stevens

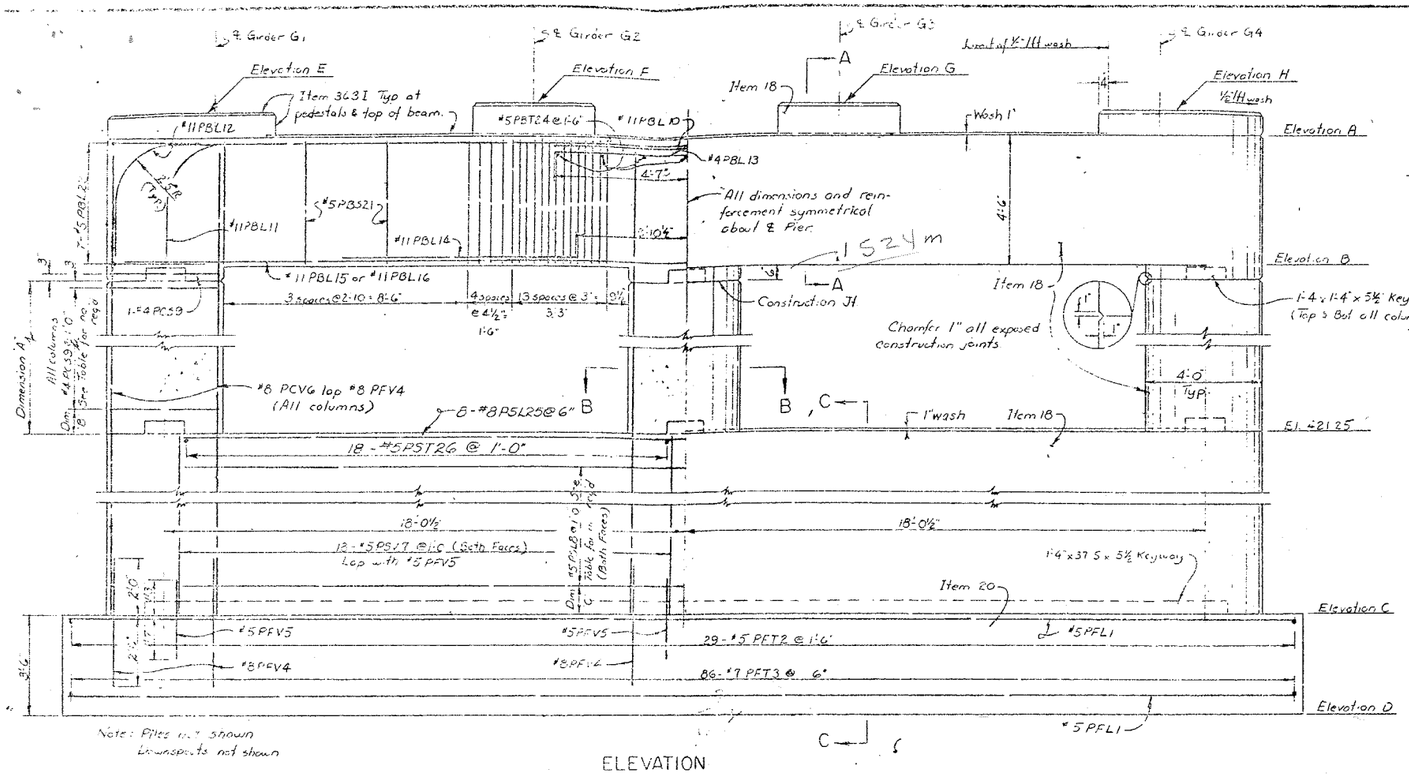
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

PIER 1 (NB & SB)

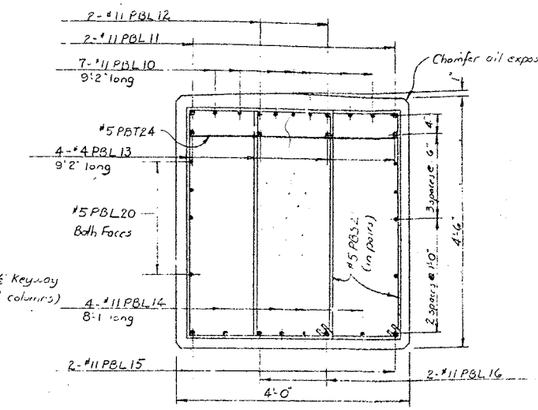
DRAWING NO. 3 [illegible]

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-530-8(26) I-481-2(116)	188	309

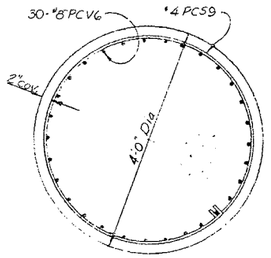
INTERSTATE ROUTE CONNECTION 570
DEWITT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



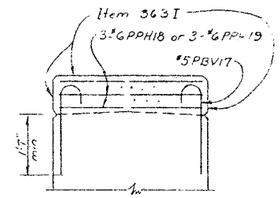
ELEVATION
Scale 3/16" = 1'-0"



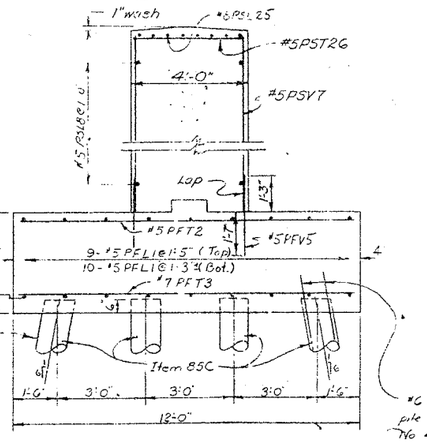
SECTION A-A
Scale 3/4" = 1'-0"



SECTION B-B
Scale 3/4" = 1'-0"



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



SECTION C C
Scale 3/8" = 1'-0"

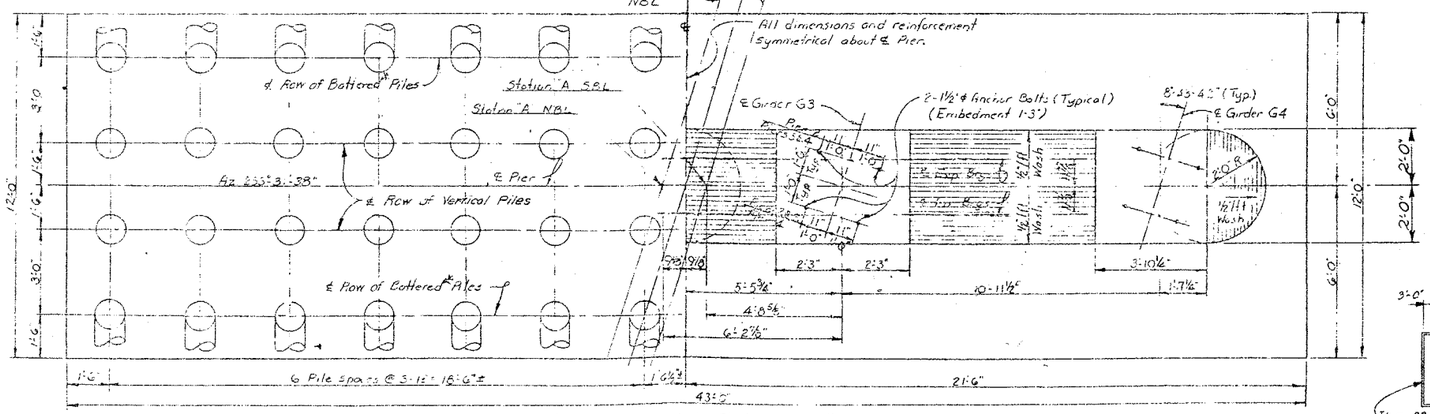
Battered Pile shown. Do not batter piles adjacent to Steel Sheet Piling, Item 83S

Note All footing reinforcement shall have a min. cover of 3" unless otherwise shown.
All other reinforcement shall have a min cover of 2" unless otherwise shown.
Estimated length of cast-in-place concrete piles Pier #2 SB 55' long, Pier #2 NB & Pier #3 SB 60' long, Pier #3 NB 65' long, & Pier #4 NB & SB 70' long
For design purposes the pile load does not exceed 35 tons/pile.

Downspouts to be paid for under Item 13DE Each hopper to be drained by one downspout attached to each exterior column See drawing #32 for details

*6 FFV23 For details of pile reinforcement see Drawing No 42

STATION "A"	NBL	SBL
PIER 2	218+37.59	219+89.15
PIER 3	220+08.76	221+60.32
PIER 4	222+06.76	223+58.32

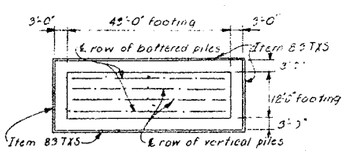


FOOTING PILE LAYOUT
Scale 3/8" = 1'-0"

* Piles adjacent to Steel Sheet Piling shall not be battered.

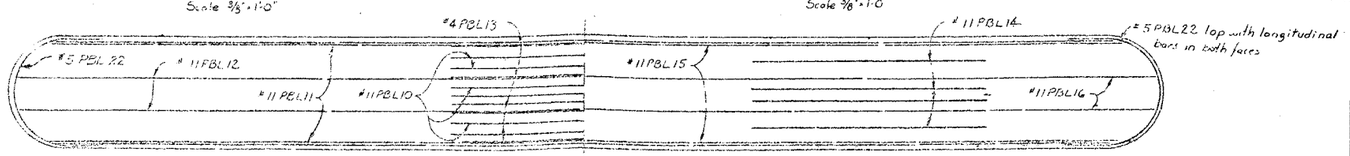
PLAN
Scale 3/8" = 1'-0"

PIER DATA						
DESCRIPTION	NORTHBOUND			SOUTHBOUND		
	PIER 2	PIER 3	PIER 4	PIER 2	PIER 3	PIER 4
ELEVATION A	437.00	438.00	438.50	437.00	438.00	438.50
" B	432.50	433.50	434.00	432.50	433.50	434.00
" C	411.00	413.00	412.80	411.00	413.00	412.80
" D	407.50	409.50	409.30	407.50	409.50	409.30
" E	438.42	439.47	439.83	438.28	439.38	439.80
" F	438.66	439.70	440.09	438.52	439.61	440.05
" G	438.64	439.68	440.04	438.56	439.65	440.08
" H	438.43	439.46	439.79	438.35	439.43	439.83
DIM A	10.75'	11.75'	12.25'	10.75'	11.75'	12.25'
" B	6"	6"	1'-0"	6"	6	1'-0"
NO. PCS9 per col.	12	13	13	12	13	13
DIM C	1'-0"	1'-0"	3"	1'-0"	1'-0"	3"
NO. PSL8 per pier	20	16	18	20	16	18

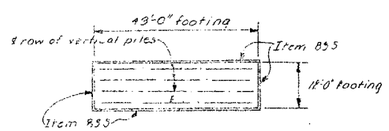


PIERS 3 SB & 3 NB

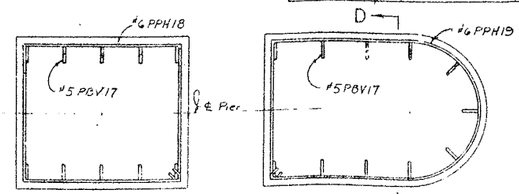
For details of Steel Sheet Piling, Item 83S, see Drawing No 4.



PIER CAP REINFORCEMENT
Scale 3/8" = 1'-0"



PIERS 2 & 4 SB, 2 & 4 NB



INTERIOR
FASCIA
PEDESTALS
Scale 1/2" = 1'-0"

PROJECT ENGINEER
IN CHARGE OF
DESIGNED BY
DESIGN CHECKED BY
DETAILED BY
DETAILS CHECKED BY

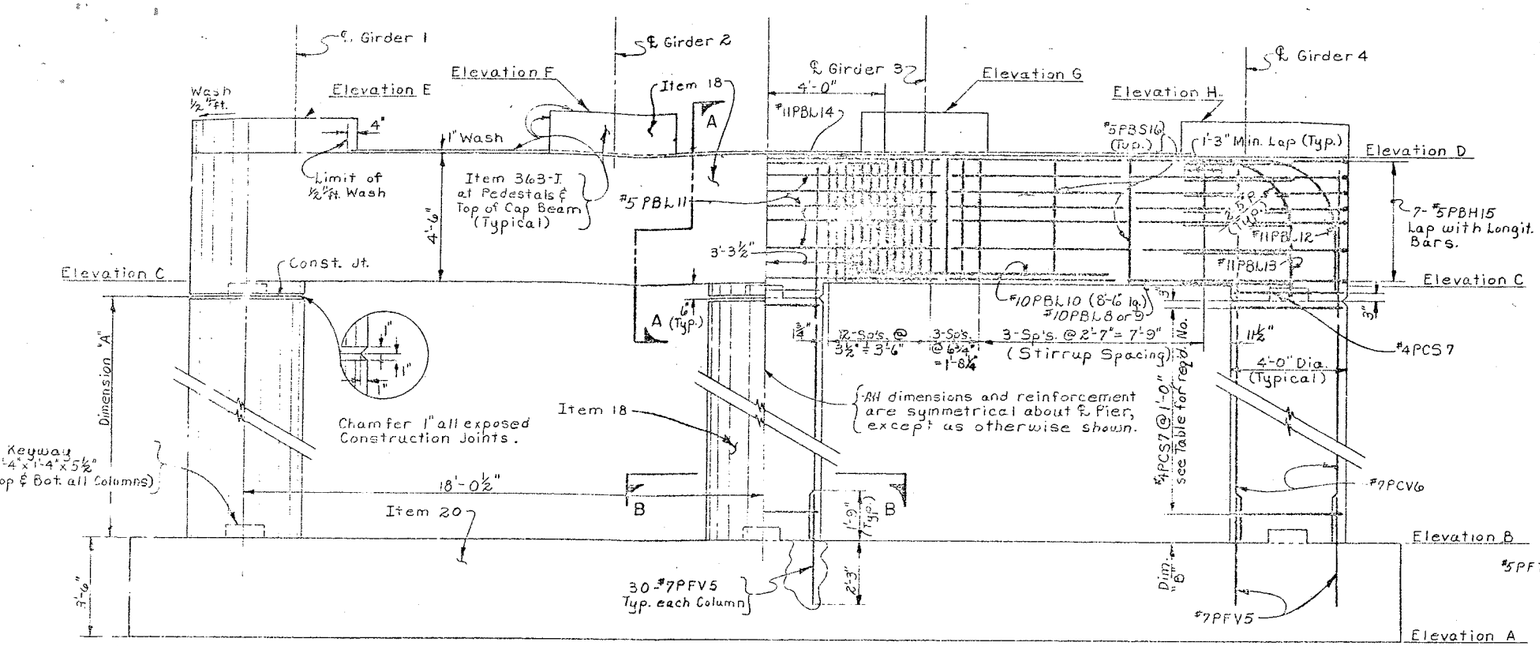
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

PIERS #2, #3, #4 (NB & SB)

DRAWING NO. 10 OF 30

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK	I-681-3(1) 1-681-2(116)	189	308

INTERSTATE ROUTE CONNECTION 570
RUTTSHUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



Notes:

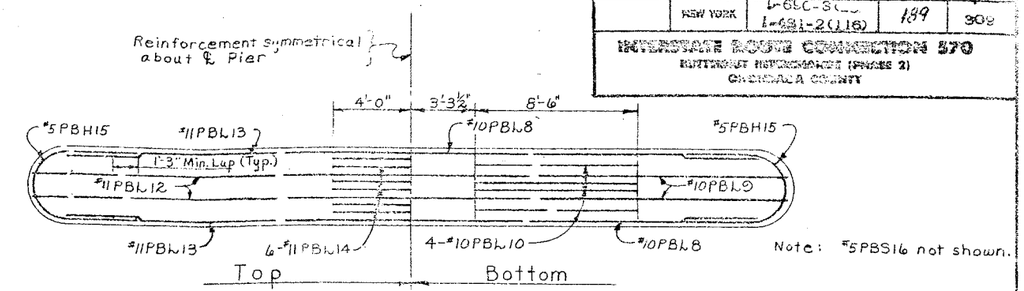
Piles and Downspouts not shown.
Footing reinforcement not shown.

ELEVATION
Scale: ⅜"=1'-0"

Notes:

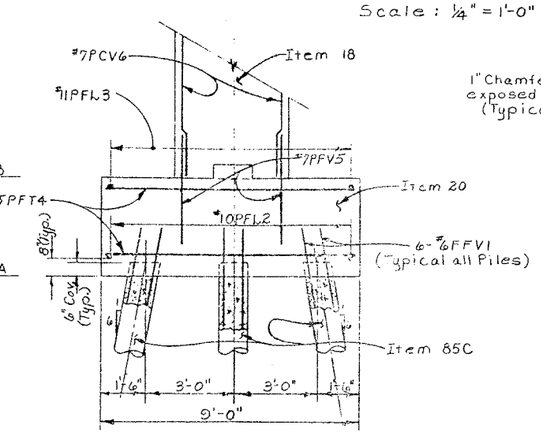
All footing reinforcement shall have a minimum cover of 3" unless otherwise shown.

All other reinforcement shall have a minimum cover of 2" unless otherwise shown.

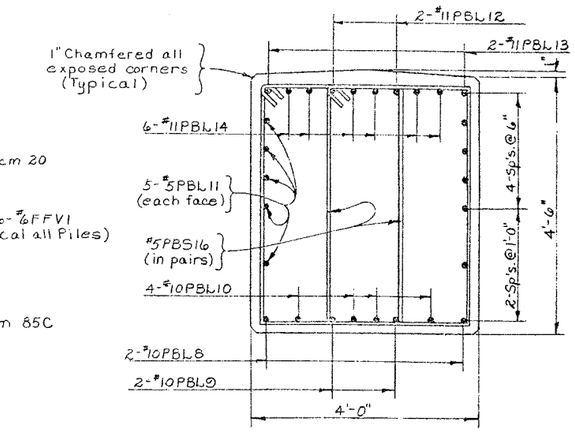


Note: #5PBS16 not shown.

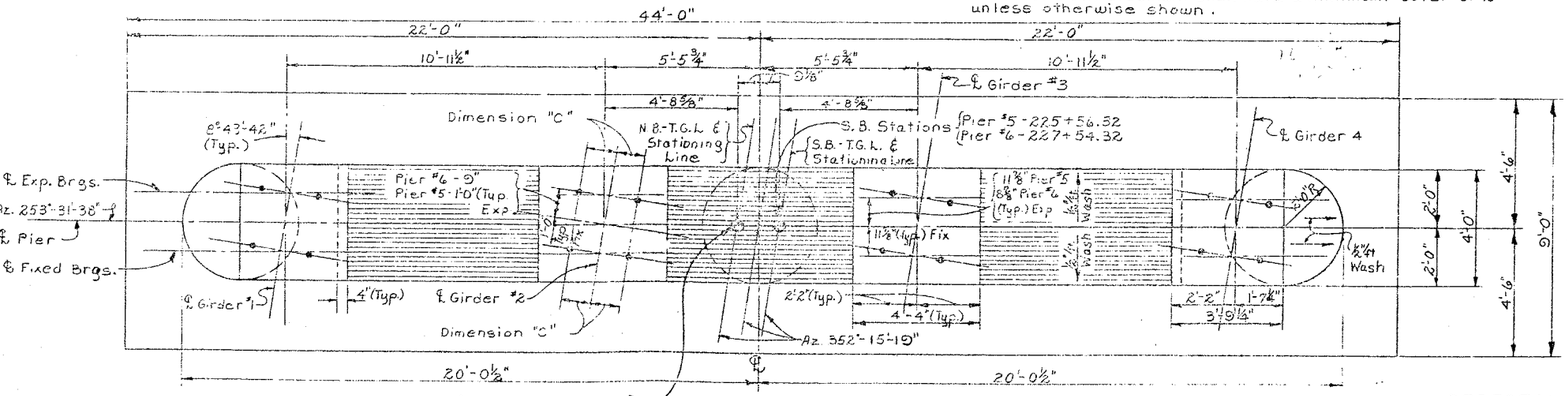
PIER CAP REINFORCEMENT
Scale: ¼"=1'-0"



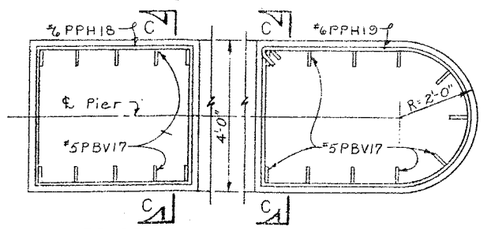
END SECTION
Scale: ⅜"=1'-0"



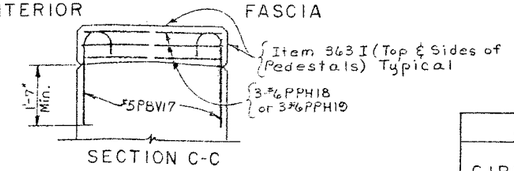
SECTION A-A
Scale: ¾"=1'-0"



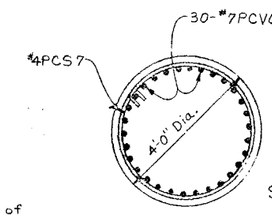
PLAN
Scale: ⅜"=1'-0"



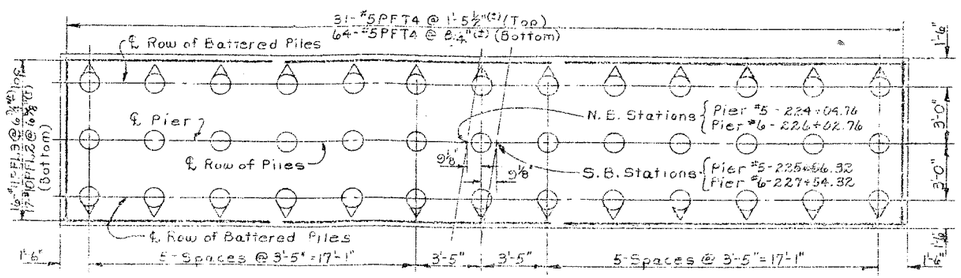
PEDESTAL REINFORCEMENT
Scale: ½"=1'-0"



SECTION C-C



SECTION B-B
Scale: ½"=1'-0"



FOOTING REINFORCEMENT PLAN & PILE LAYOUT
Scale: ¼"=1'-0"

Indicates Piles Battered 6 on 1

Estimated length of Cast-in-Place Piles:

Pier #5 S.B. = 75'
Pier #5 N.B. = 60'
Pier #6 S.B. = 80'
Pier #6 N.B. = 80'

Note:

For Design Purposes the pile load does not exceed 35 Tons per Pile.

PIER DATA				
DESCRIPTION	PIER No. 5		PIER No. 6	
	N.B.	S.B.	N.B.	S.B.
ELEVATION A	409.30	409.30	410.50	407.30
" " B	412.80	412.80	414.00	410.80
" " C	433.45	433.55	431.96	432.12
" " D	437.95	438.05	436.46	436.62
" " E	439.26	439.30	437.79	437.88
" " F	439.50	439.54	438.00	438.10
" " G	439.46	439.56	437.95	438.11
" " H	439.20	439.30	437.71	437.87
DIM. A	20'-2"	20'-3"	17'-5½"	20'-10"
DIM. B	11"	1'-0"	3"	7"
NO. HOOPS	21	21	19	22

ANCHOR BOLT DATA							
GIRDER		PIER NO. 5 S.B. & N.B.			PIER NO. 6 N.B. & S.B.		
		ϕ BOLT	REQ'D. EMBED.	DIM. C	ϕ BOLT	REQ'D. EMBED.	DIM. C
FIXED BRGS.	G1	1½"	1'-3"	1'-0"	1½"	1'-3"	1'-0"
	G2	1½"	1'-3"	1'-0"	1½"	1'-3"	1'-0"
	G3	1½"	1'-3"	1'-0"	1½"	1'-3"	1'-0"
	G4	1½"	1'-3"	1'-0"	1½"	1'-3"	1'-0"
EXP BRGS.	G1	1½"	1'-3"	1'-0"	1½"	1'-3"	1'-0"
	G2	1½"	1'-3"	1'-0"	1¼"	1'-0"	10"
	G3	1½"	1'-3"	1'-0"	1¼"	1'-0"	10"
	G4	1½"	1'-3"	1'-0"	1½"	1'-3"	1'-0"

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

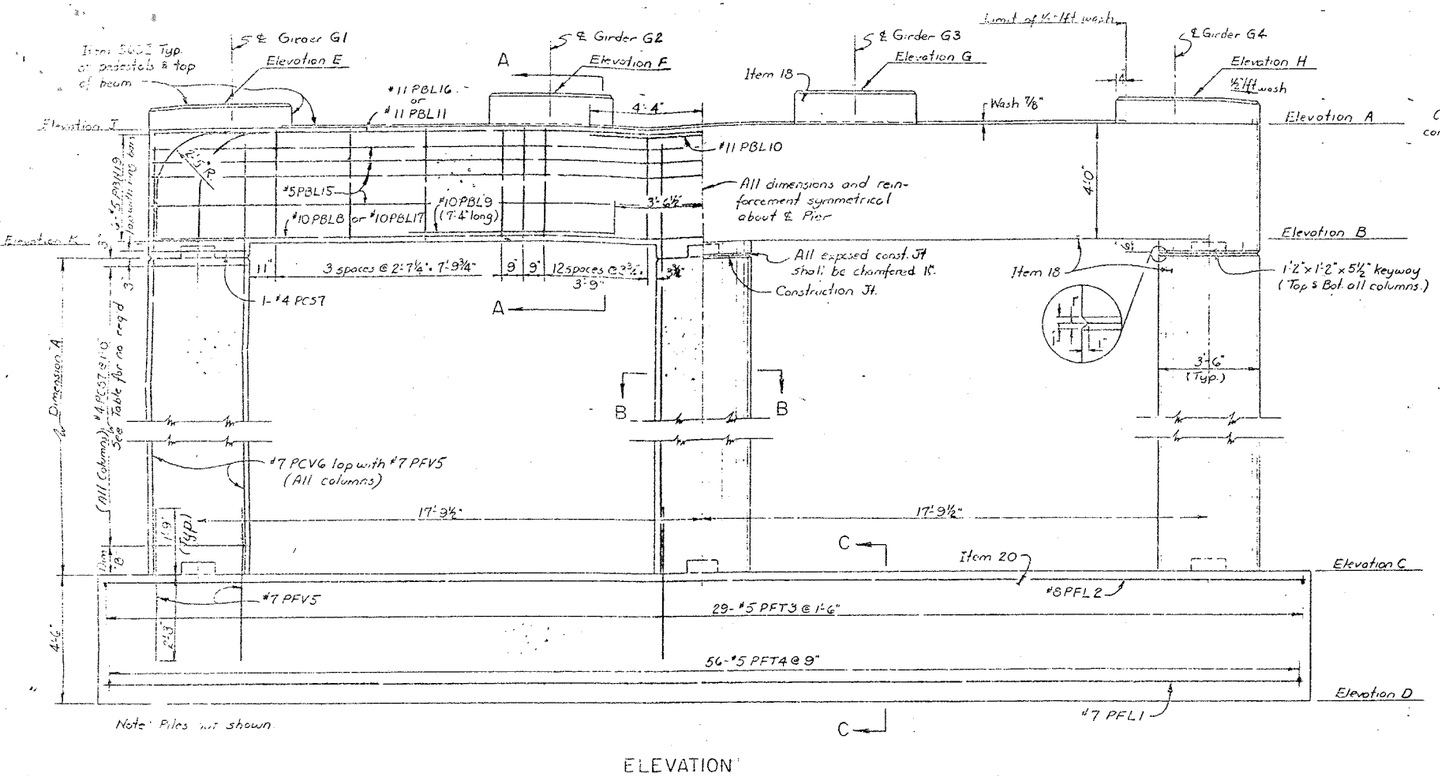
PIERS 5 & 6 (N.B. & S.B.)

DRAWING NO. 11 OF 50

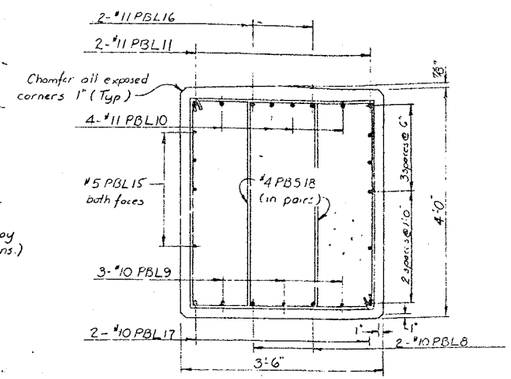
PROJECT ENGINEER P. Parker
CHARGE OF I. Eckel
DESIGNED BY J. D. Tumbas
DESIGN CHECKED BY N. J. Toppuzis
DETAILED BY J. C. Thompson
DETAIL CHECKED BY W. J. Spencer

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-680-3(28) I-481-2(116)	170	570

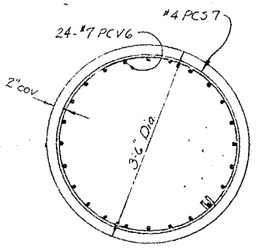
STRUCTURE NO. 3301170
CONTRACT DRAWING (FORM 2)
ORANGE COUNTY



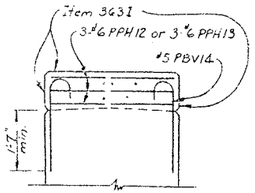
ELEVATION
Scale 3/8"=1'-0"



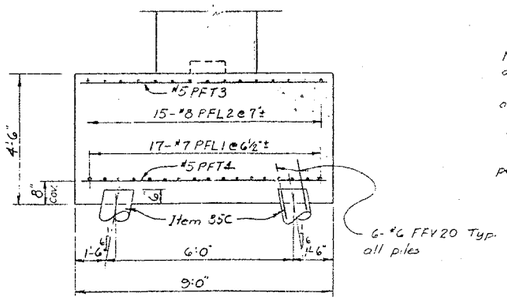
SECTION A-A
Scale 3/4"=1'-0"



SECTION B-B
Scale 3/4"=1'-0"



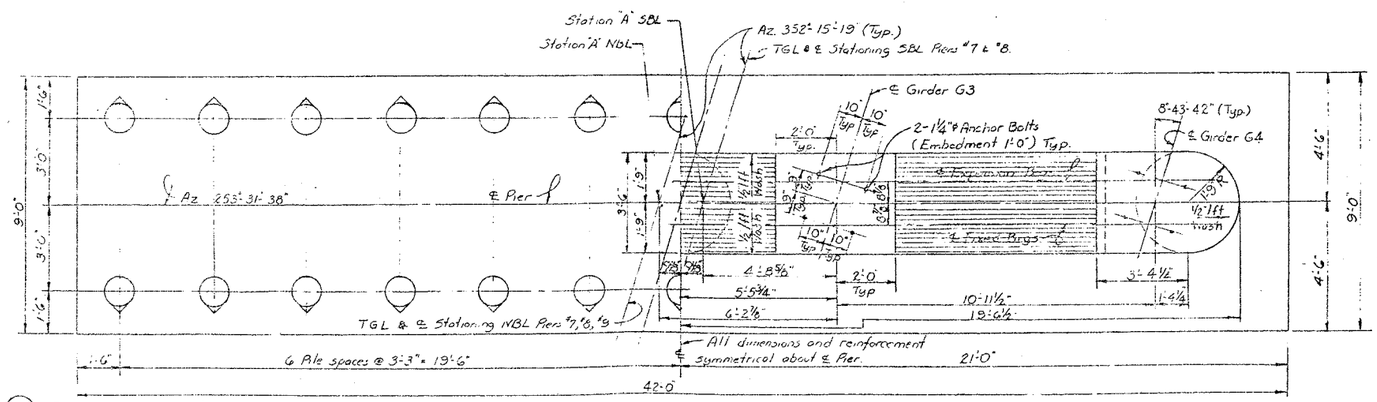
SECTION D-D
Scale ½"=1'-0"



SECTION C-C
Scale 3/8"=1'-0"

Note. All footing reinforcement shall have a min. cover of 3" unless otherwise shown.
All other reinforcement shall have a min. cover of 2" unless otherwise shown.
Estimated length of cast-in-place concrete piles = 80' at Pier 7 NB & SB, 70' at Pier 8 NB & SB and Pier 9 NB
For design purposes the pile load does not exceed 35 tons per pile.

For details of pile reinforcement see Drawing No. 42



Indicates battered piles. (4 on 1)

FOOTING PILE LAYOUT
Scale 3/8"=1'-0"

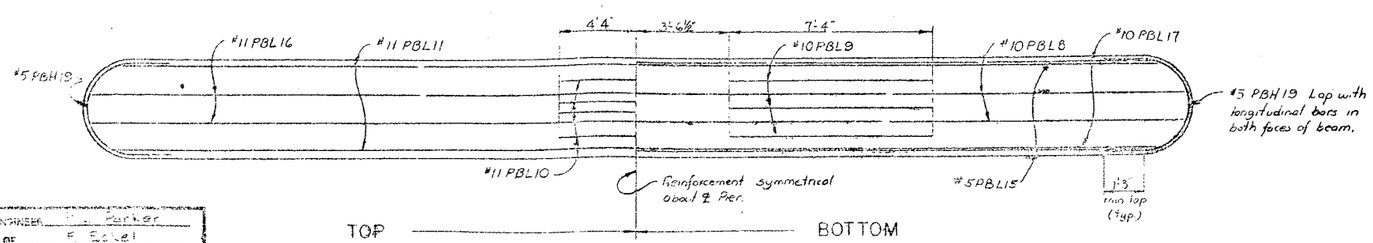
PLAN
Scale 3/8"=1'-0"

STATION "A"

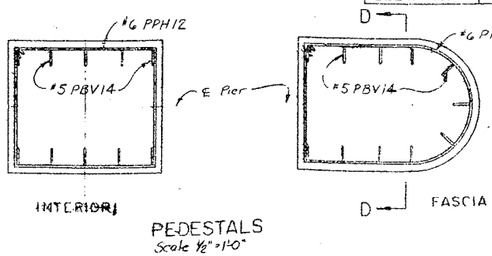
	NBL	SBL
PIER 7	227+26.76	228+78.32
PIER 8	228+50.76	230+02.32
PIER 9	229+74.76	

PIER DATA

DESCRIPTION	NORTHBOUND PIER 7	NORTHBOUND PIER 8	NORTHBOUND PIER 9	SOUTHBOUND PIER 7	SOUTHBOUND PIER 8
ELEVATION A	438.29	436.51	434.36	438.49	436.74
" B	434.29	432.51	430.36	434.49	432.74
" C	410.00	408.80	407.70	409.00	408.00
" D	405.50	404.30	403.20	404.50	403.50
" E	439.39	437.62	435.69	439.52	437.79
" F	439.59	437.82	435.74	439.73	437.99
" G	439.54	437.76	435.62	439.74	438.00
" H	439.29	437.51	435.36	439.49	437.74
DIM A	23.79	23.21	22.16	24.99	24.24
" B	6½"	11½"	11"	9"	1'-0"
NO. HOOPS	24	23	22	25	24
ELEVATION J	438.29	436.51	434.69	438.49	436.74
ELEVATION K	434.29	432.51	430.69	434.49	432.74



PIER CAP REINFORCEMENT
Scale 3/8"=1'-0"



PEDESTALS
Scale ½"=1'-0"

PROJECT ENGINEER: L. Parker
IN CHARGE OF: F. Fogel
REVIEWED BY: E. Howe
DESIGN ENGINEER: L. A. Torres
CHECKED BY: [illegible]
DRAWN BY: S. Pierce

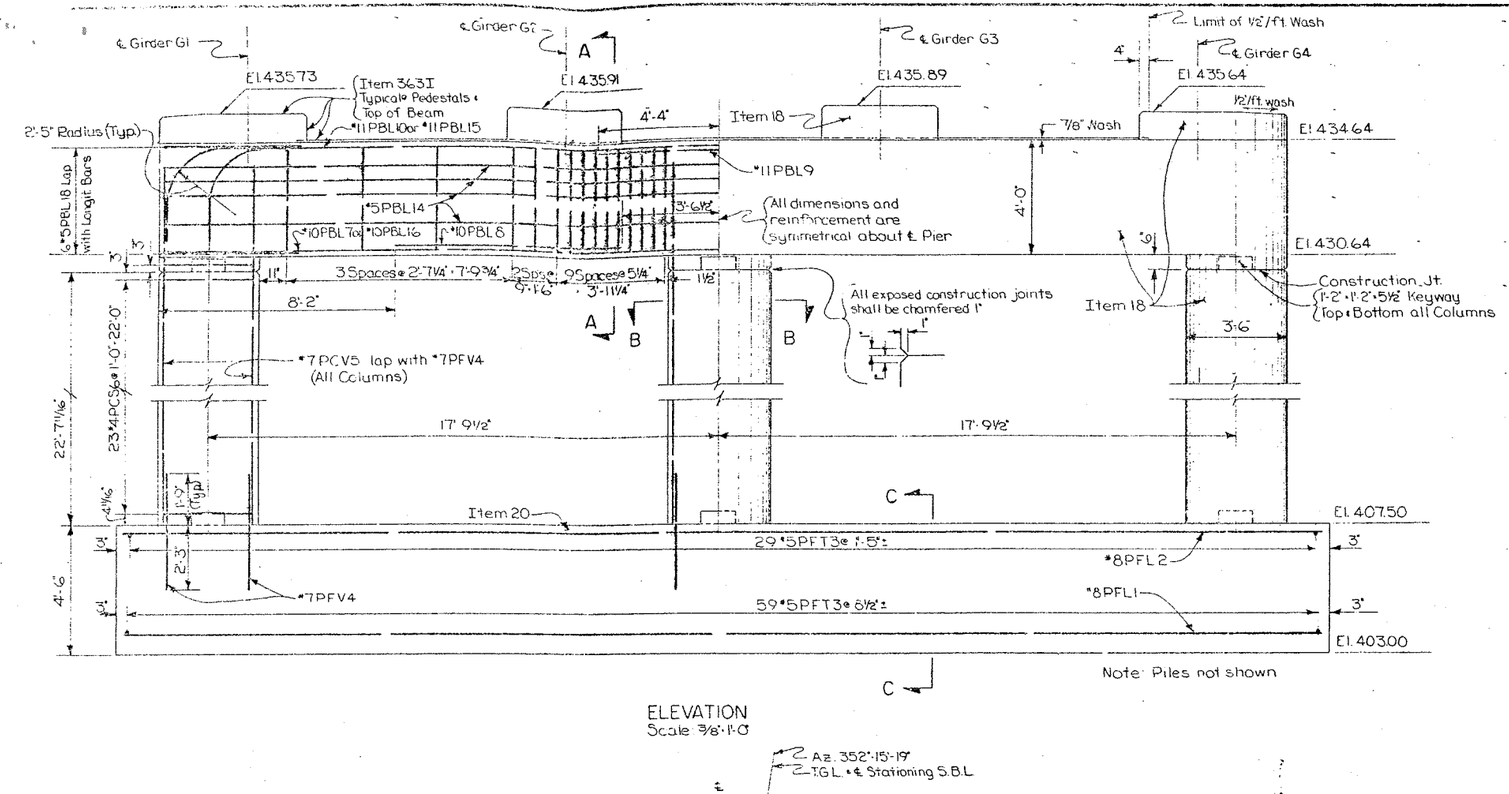
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

PIERS 7 & 8 NBL & SBL, PIER 9 NBL
DRAWING NO. 12 OF 50

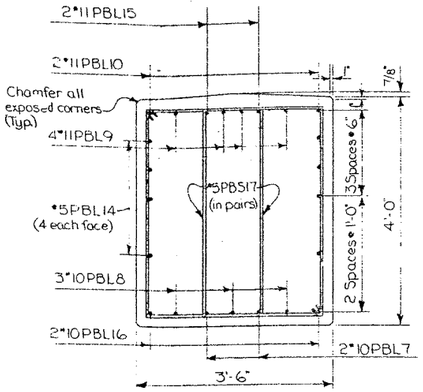
F.I.S.H. 70-7

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-090C-8(28) I-431-2(116)	191	309

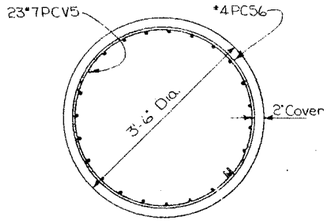
INTERSTATE ROUTE CONNECTION 570
BUFFALO INTERCHANGE (PHASE 2)
CHEMUNG COUNTY



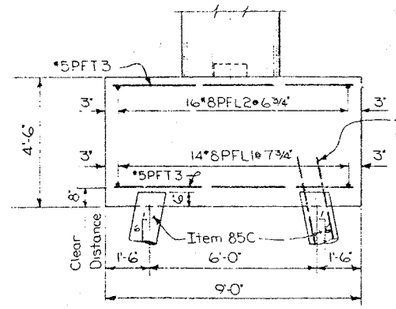
ELEVATION
Scale: 3/8" = 1'-0"



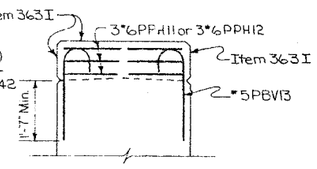
SECTION A-A
Scale: 3/4" = 1'-0"



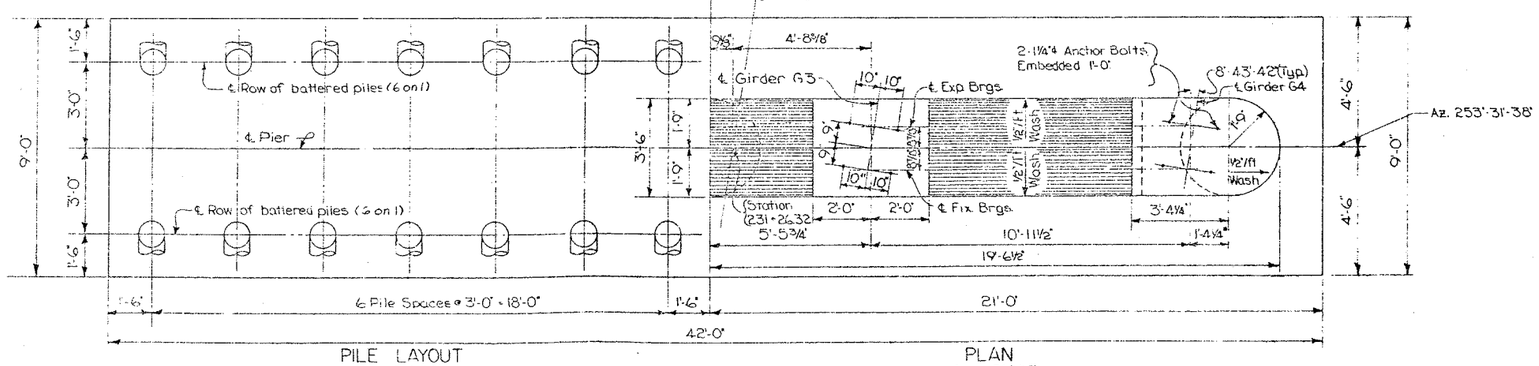
SECTION B-B
Scale: 3/4" = 1'-0"



SECTION C-C
Scale: 3/8" = 1'-0"



SECTION D-D
Scale: ½" = 1'-0"

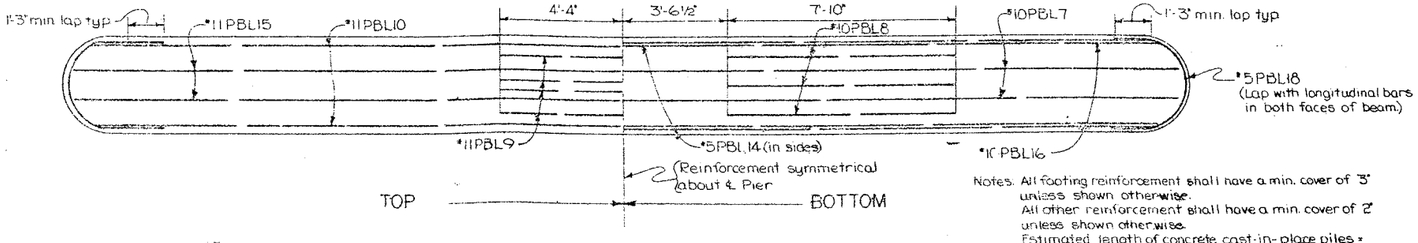


PILE LAYOUT
Scale: 3/8" = 1'-0"

PLAN
Scale: 3/8" = 1'-0"

INTERIOR

PEDESTALS
Scale: ½" = 1'-0"



PIER CAP REINFORCEMENT
Scale: 3/8" = 1'-0"

Notes: All footing reinforcement shall have a min. cover of 3" unless shown otherwise.
All other reinforcement shall have a min. cover of 2" unless shown otherwise.
Estimated length of concrete cast-in-place piles = 70'. For design purposes the pile load does not exceed 35 tons per pile.

PROJECT ENGINEER E. L. Parker
IN CHARGE OF F. Eckel
DESIGNED BY S. Rowe
DESIGN CHECKED BY N. A. Toppres
DETAILED BY J. Darcy
DETAIL CHECKED BY S. Rowe

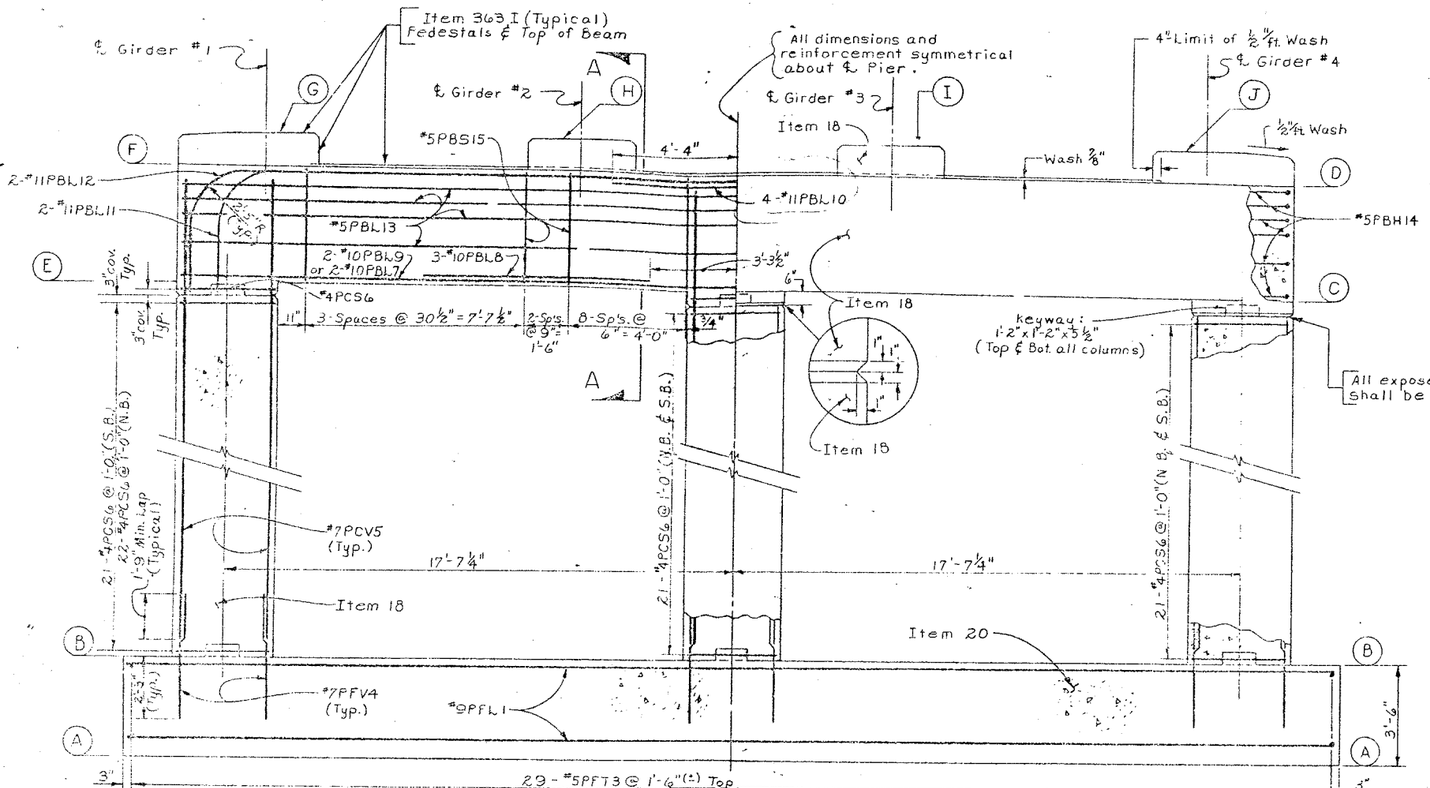
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

PIER 9 (SB)

DRAWING NO. 13 OF 50

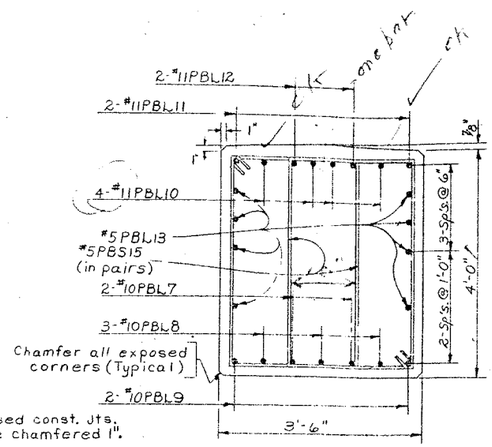
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	F-690-3(28) 481-2(116)	192	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

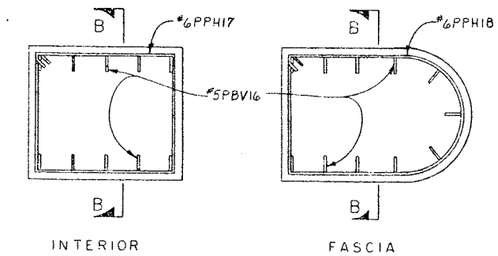


Note: Piles not shown in Elevation.

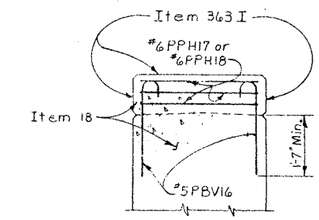
ELEVATION
Scale: ⅜" = 1'-0"



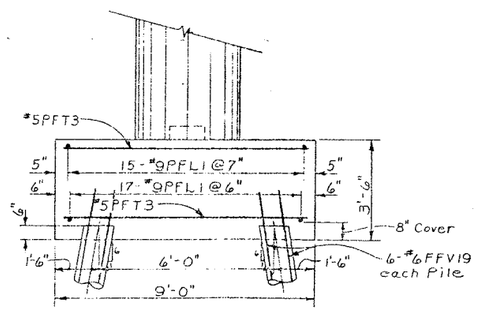
SECTION A-A
Scale: ¾" = 1'-0"



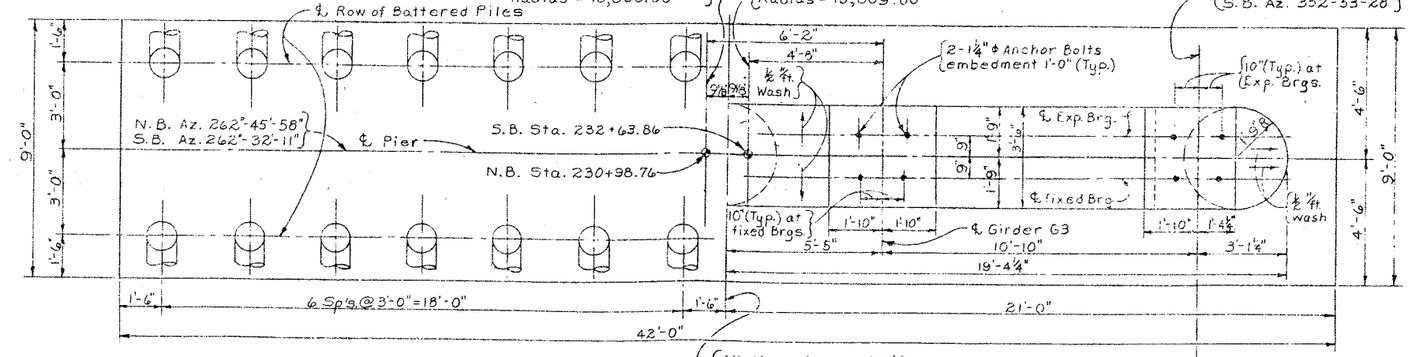
PEDESTAL REINFORCEMENT
Scale: ½" = 1'-0"



SECTION B-B
Scale: ½" = 1'-0"

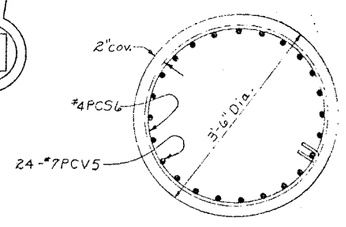


END VIEW
Scale: ⅜" = 1'-0"



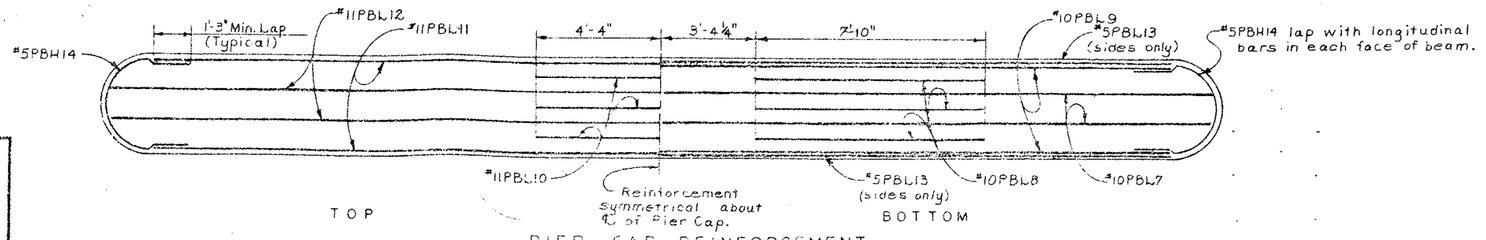
PILE LAYOUT
Scale: ⅜" = 1'-0"

PLAN
Scale: ⅜" = 1'-0"



TYPICAL COLUMN SECTION
Scale: ¾" = 1'-0"

Notes:
All footing reinforcement shall have a min. cover of 3" unless otherwise shown.
All other reinforcement shall have a min. cover of 2" unless otherwise shown.
Estimated length of Cast-in-Place concrete piles = 70'-0" S.B. & 65'-0" N.B.
For Design Purposes the pile load does not exceed 35 Tons per Pile.
For details of Cast-in-Place Piles see Dwg. #42.



PIER CAP REINFORCEMENT

ELEVATIONS		
LOCATION	SOUTHBOUND	NORTHBOUND
A	403.20	403.00
B	406.70	406.50
C	427.85	427.83
D	431.85	431.83
E	428.35	428.48
F	432.35	432.48
G	433.42	433.55
H	433.31	433.35
I	433.15	433.13
J	432.92	432.91

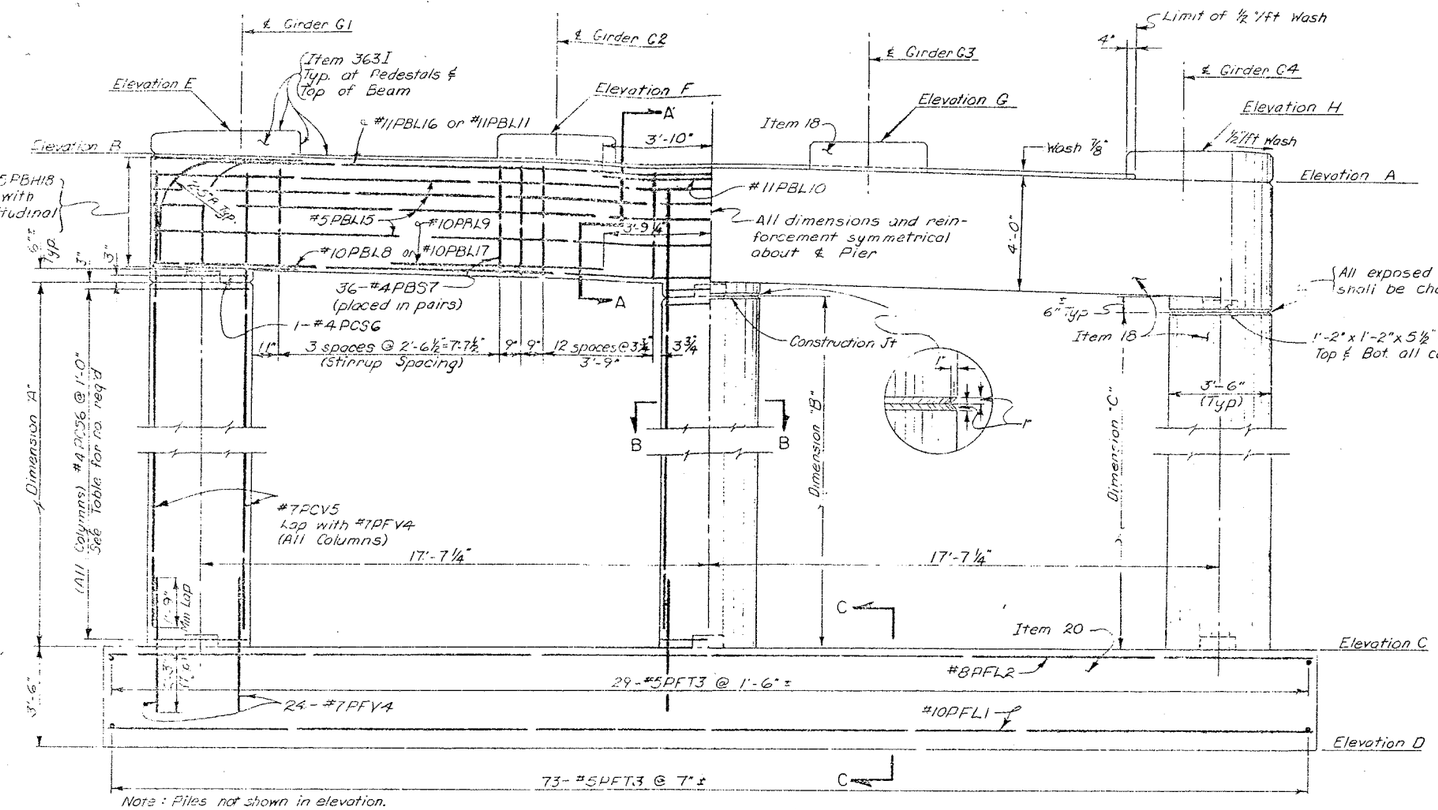
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

PIER 10 (SB & NB)

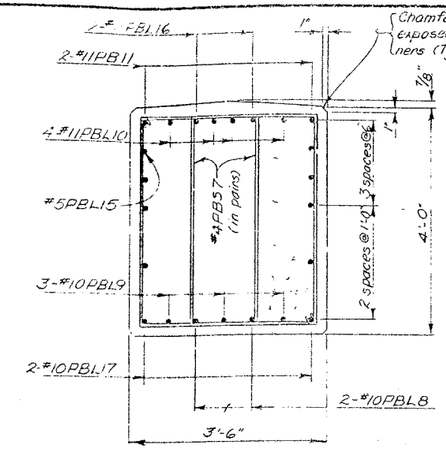
PROJECT ENGINEER R. Parker
CHARGE OF F. Eckel
DESIGNED BY S. Rowe
DESIGN CHECKED BY N. A. Tappses
DETAILED BY J. C. Thompson
DETAIL CHECKED BY [illegible]

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(28) I-481-2(116)	193	309

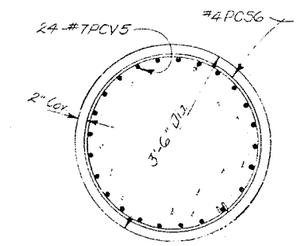
INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



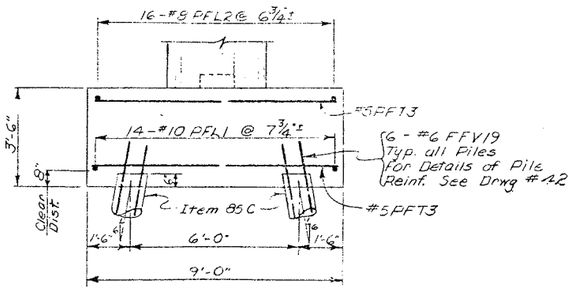
ELEVATION
Scale: 3/16"=1'-0"



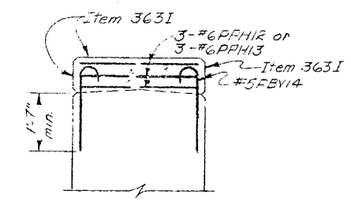
SECTION A-A
Scale: 3/4"=1'-0"



SECTION B-B
Scale: 3/4"=1'-0"
Typical all columns

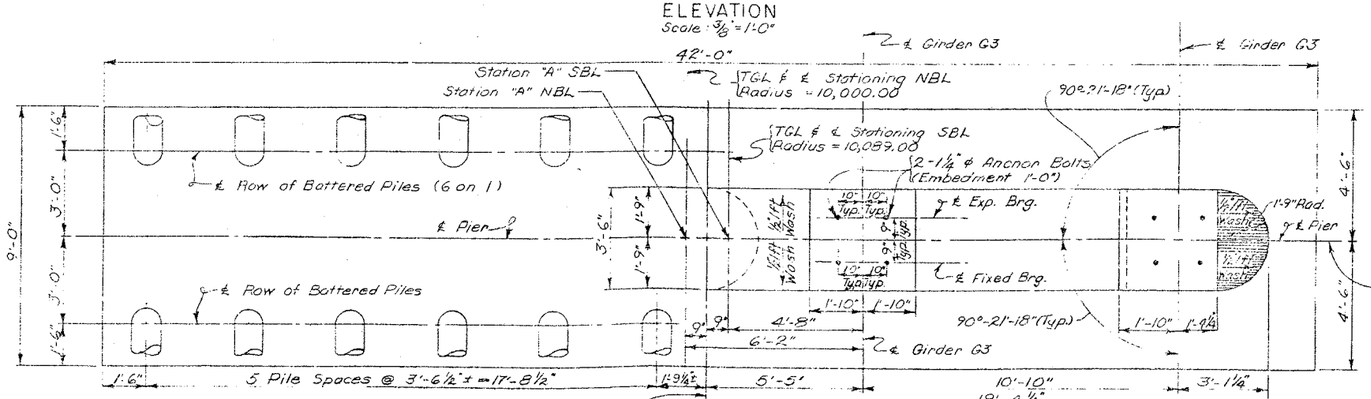


SECTION C-C
Scale: 3/8"=1'-0"



SECTION D-D
Scale: 1/2"=1'-0"

Note: All footing reinforcement shall have a min. cover of 3" unless otherwise shown.
All other reinforcement shall have a min. cover of 2" unless otherwise shown.
Estimated length of Cast-In-Place Concrete Piles = 65' at Piers 11 & 12 NB & SB.
For design purposes the Pile Load does not exceed 35 Tons Per Pile.

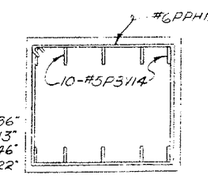


FOOTING PILE LAYOUT
Scale: 3/8"=1'-0"

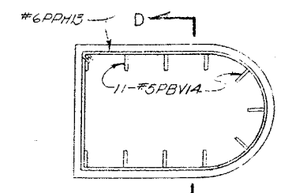
(All dimensions & reinforcement symmetrical about ℄ Pier

PLAN
Scale: 3/16"=1'-0"

Pier 11 NB AZ 263°-28'-36"
Pier 12 NB AZ 263°-11'-13"
Pier 11 SB AZ 263°-14'-46"
Pier 12 SB AZ 263°-57'-22"

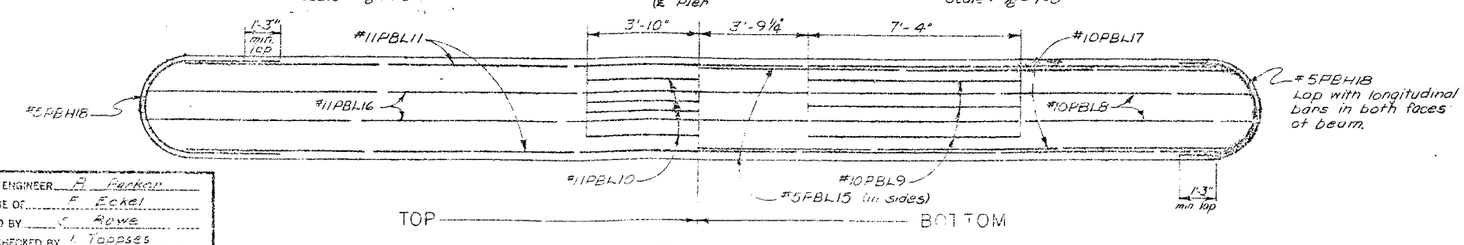


INTERIOR



FASCIA

PEDESTALS
Scale: 1/2"=1'-0"



PIER CAP REINFORCEMENT
Scale: 3/8"=1'-0"

PIER DATA

DESCRIPTION		NORTHBOUND PIER 11	NORTHBOUND PIER 12	SOUTHBOUND PIER 11	SOUTHBOUND PIER 12
ELEVATION	A	429.04	425.81	429.03	425.77
"	B	429.72	426.49	429.71	426.44
"	C	406.30	406.40	406.30	406.40
"	D	402.80	402.90	402.80	402.90
"	E	430.72	427.49	430.71	427.45
"	F	430.49	427.26	430.48	427.22
"	G	430.27	427.04	430.26	427.00
"	H	430.04	426.81	430.03	426.77
DIM "A"		18.92	15.59	18.91	15.54
"B"		18.58	15.25	18.57	15.21
"C"		18.24	14.91	18.23	14.87
NO. HOOPS		19 Per Col.	16 Per Col.	19 Per Col.	16 Per Col.
STATION "A"		232+22.76	233+46.76	233+88.86	235+13.86

PROJECT ENGINEER R. Parker
CHARGE OF F. Eckel
DESIGNED BY K. Rowe
DESIGN CHECKED BY L. Toppses
DETAILED BY J. Duncant
DETAIL CHECKED BY [illegible]

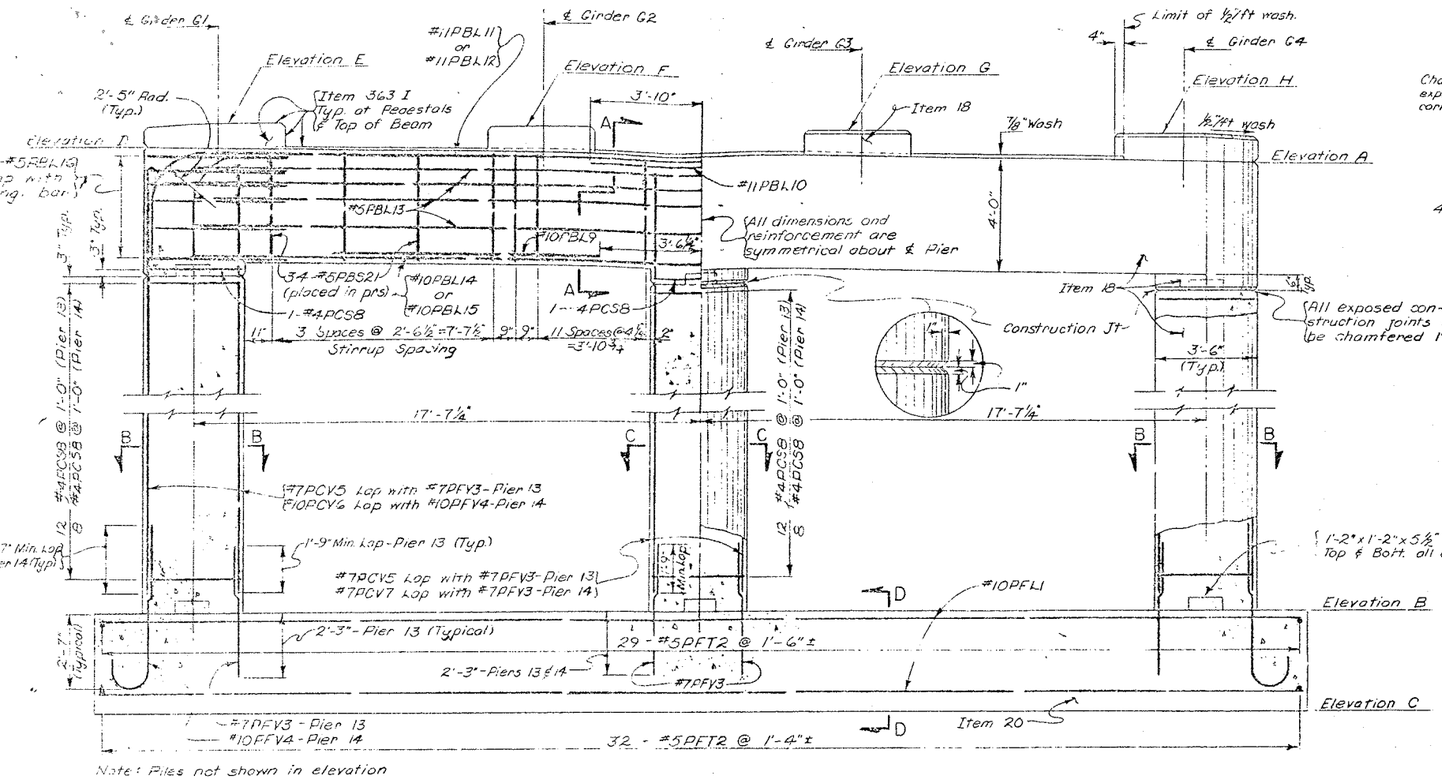
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

PIERS 11 & 12 (N.B. & S.B.)

DRAWING NO. 15 OF 50

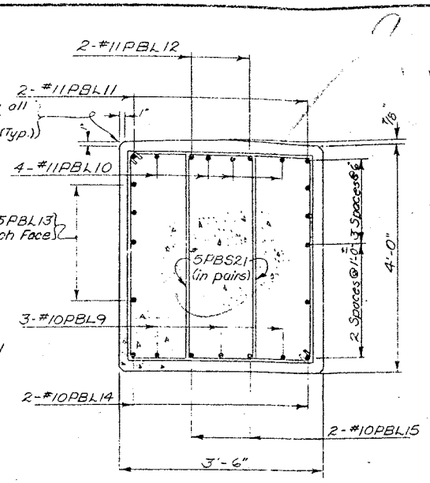
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-590-3(28) I-481-2(116)	194	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

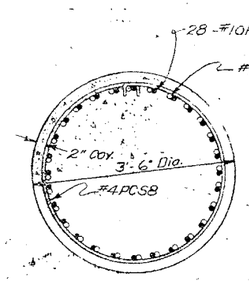


Note: Piles not shown in elevation

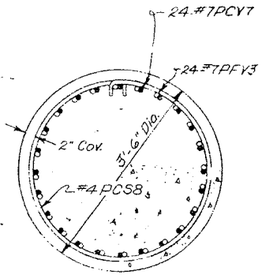
ELEVATION
Scale: 3/8" = 1'-0"



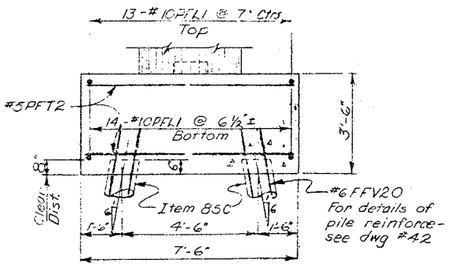
SECTION A-A
Scale: 3/4" = 1'-0"



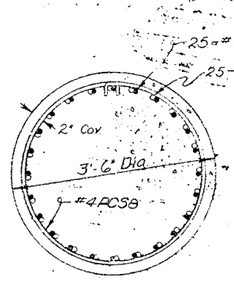
SECTION B-B, PIER 14
Scale: 3/4" = 1'-0"



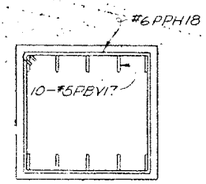
SECTION C-C, PIER 14
Scale: 3/4" = 1'-0"



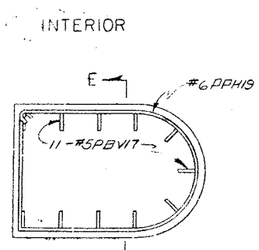
SECTION D-D
Scale: 3/8" = 1'-0"



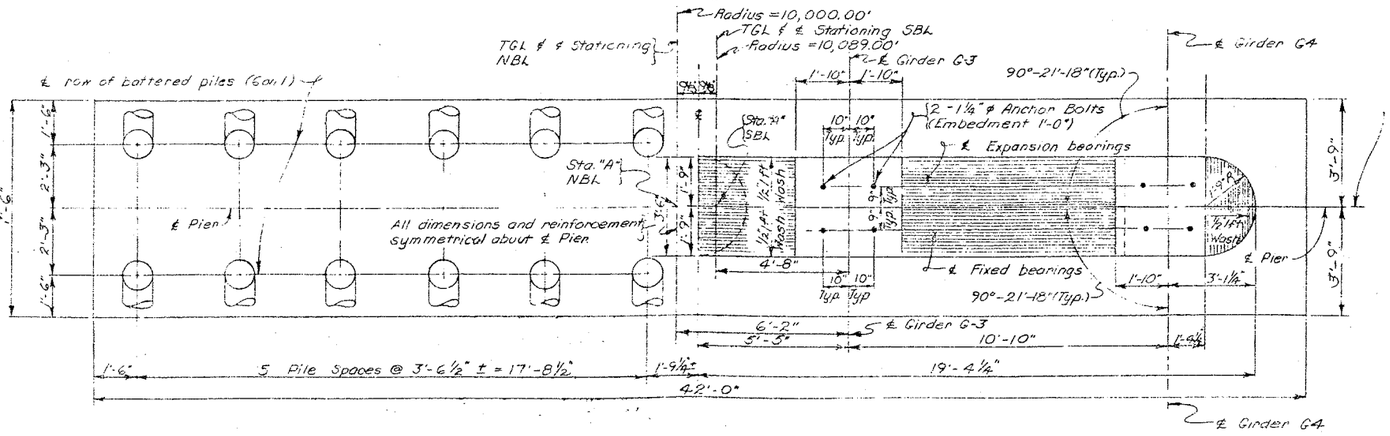
SECTION B-B & C-C, PIER 13
Scale: 3/4" = 1'-0"

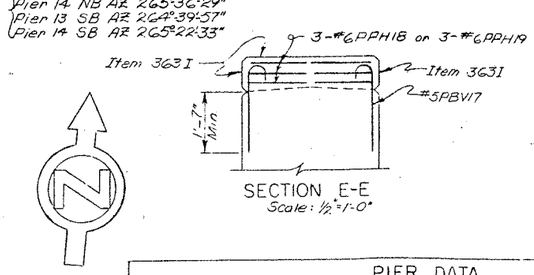


INTERIOR



FASCIA PEDESTALS
Scale: 1/2" = 1'-0"





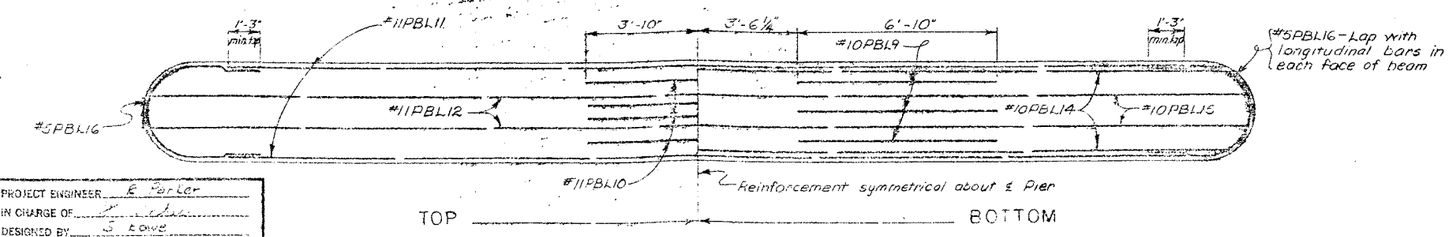
SECTION E-E
Scale: 1/2" = 1'-0"

STATION "A"		
PIER	NBL	SBL
#13	234+70.76	236+38.86
#14	235+94.76	237+63.86

PIER DATA				
DESCRIPTION	NORTHBOUND		SOUTHBOUND	
	PIER 13	PIER 14	PIER 13	PIER 14
ELEVATION A	422.22	418.44	422.14	418.36
" B	406.70	407.00	406.70	407.00
" C	403.20	403.50	403.20	403.50
" D	422.90	419.12	422.81	419.03
" E	423.89	420.12	423.81	420.03
" F	423.67	419.90	423.59	419.81
" G	423.44	419.67	423.36	419.58
" H	423.22	419.44	423.14	419.36

Note:
All footing reinforcement shall have a min. cover of 3" unless otherwise shown.
All other reinforcement shall have a min. cover of 2" unless otherwise shown.
Estimated length of Cast-in-Place Concrete Piles = 65' Pier 13 SB, 60' Pier 13 NB & 60' Piers 14 NB & SB

For design purposes the pile load does not exceed 35 tons per pile.



PIER CAP REINFORCEMENT
Scale: 3/8" = 1'-0"

PROJECT ENGINEER E. Porter
IN CHARGE OF
DESIGNED BY S. Lowe
DESIGN CHECKED BY
DETAILED BY
DETAIL CHECKED BY

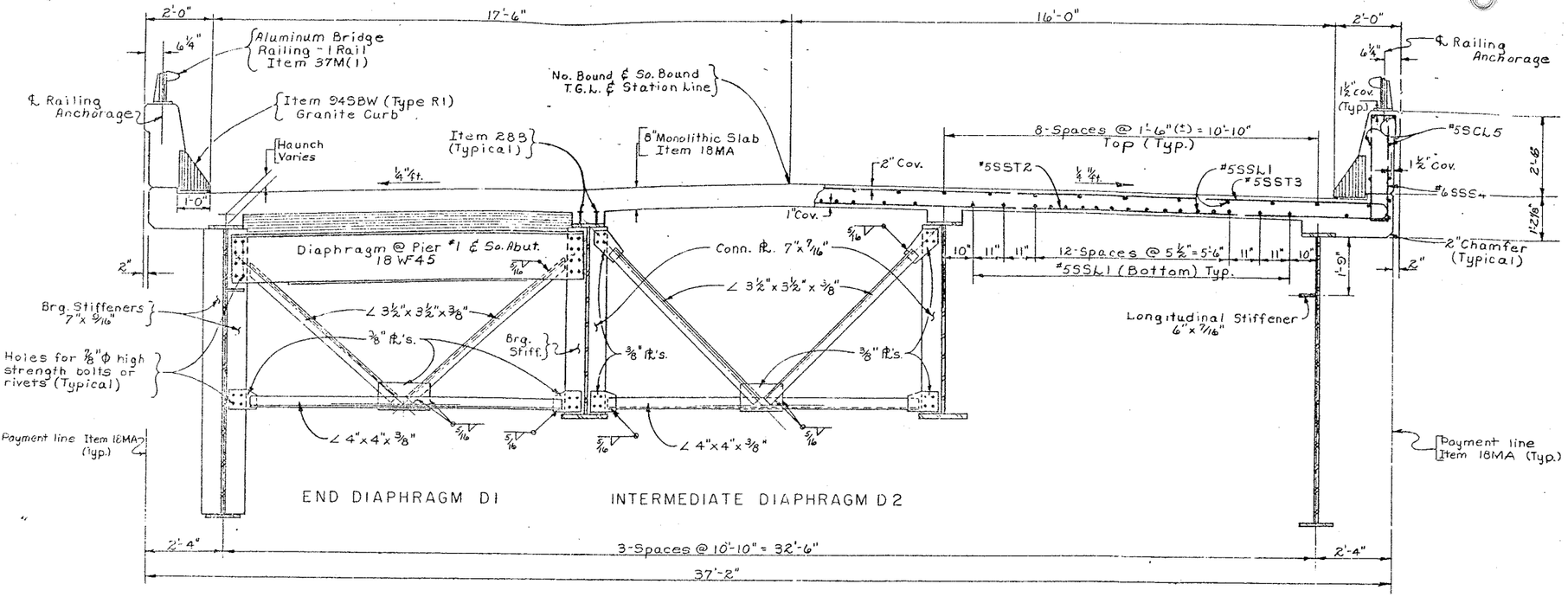
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

PIERS #13 & #14 (NB & SB)

DRAWING NO. 16 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(23) I-481-2(116)	195	309

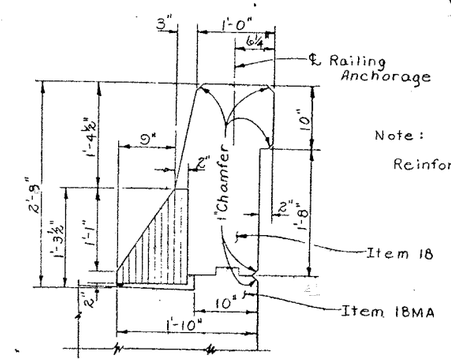
INTERSTATE ROUTE CONNECTION 570
BUTTERMILK INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



TRANSVERSE SECTION
Scale: ½" = 1'-0"

Note:

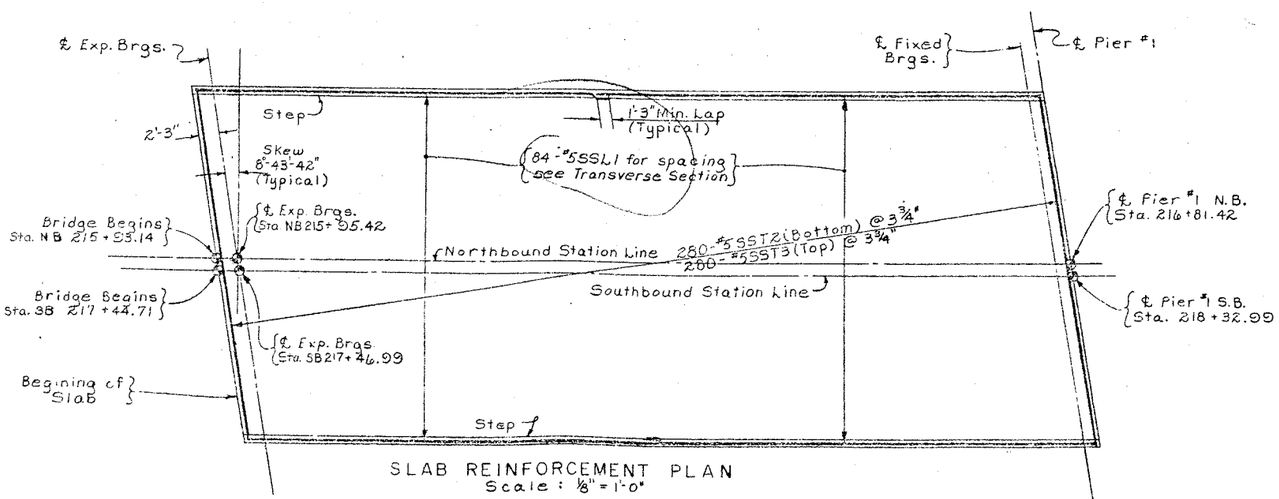
South Bound Lane looking up station.
North Bound Lane looking down station.



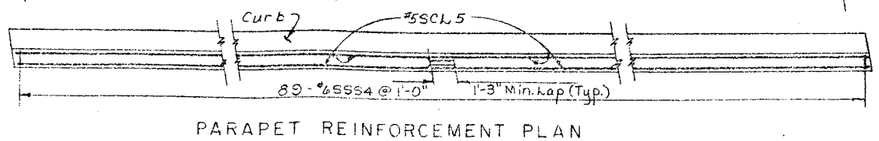
PARAPET DETAIL
Scale: 1" = 1'-0"

Note:

Reinforcement not shown.



SLAB REINFORCEMENT PLAN
Scale: ⅛" = 1'-0"



PARAPET REINFORCEMENT PLAN
Scale: ¼" = 1'-0"

Notes:

Holes for ⅞" ϕ rivets or high strength bolts may be omitted and welding substituted if contractor so elects. When the contractor elects to substitute the welded connection for the bolted connection shown, the amount of welding used shall be equivalent in strength to the bolts removed.

For details of Railing, Railing Anchorage and Granite Curbs see Dwg. # 35 & 36.

For Joint Details see Dwg. # 33.

PROJECT ENGINEER R. Parker
IN CHARGE OF F. Fekal
DESIGNED BY N. Toppses
DESIGN CHECKED BY R. Thimple
DETAILED BY J. C. Thompson
DETAIL CHECKED BY [illegible]

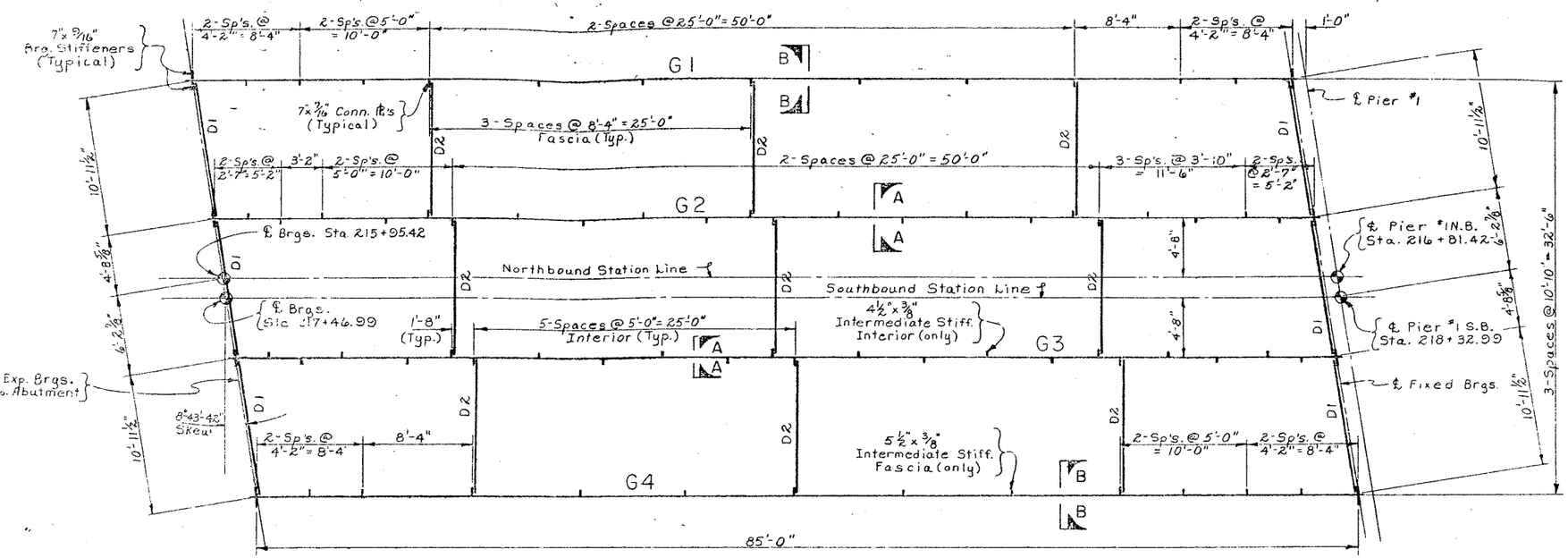
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

TRANSVERSE SECTION & SLAB PLAN
SPAN 1 N.B. & S.B.

DRAWING NO. 17 OF 50

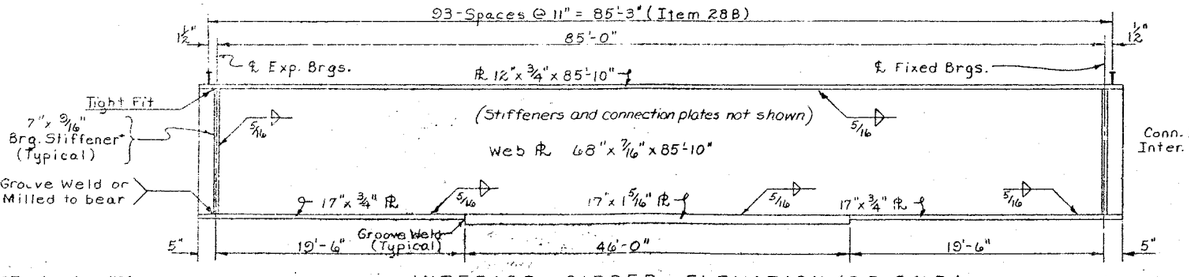
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
11	NEW YORK	I-690-8(28) I-481-2(16)	196	322

INTERSTATE ROUTE CONNECTION 570
BUFFALO INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



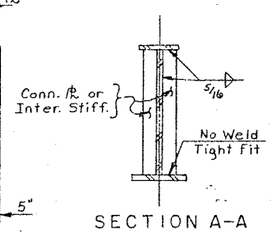
see Transverse Section for Diaphragms.

STEEL LAYOUT (S.B. & N.B.)
Scale : 3/16" = 1'-0"

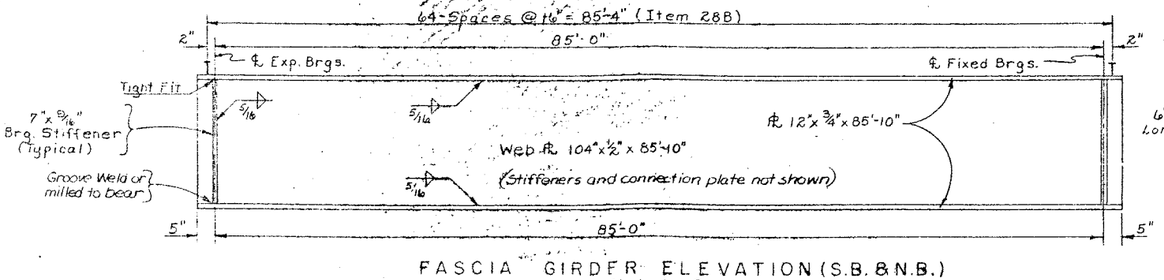


INTERIOR GIRDER ELEVATION (S.B. & N.B.)
Not to Scale

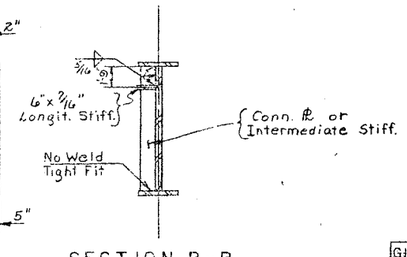
*Two bearing stiffeners required at each end of girder.



SECTION A-A
Not to Scale



FASCIA GIRDER ELEVATION (S.B. & N.B.)
Not to Scale



SECTION B-B
Not to Scale

Notes :

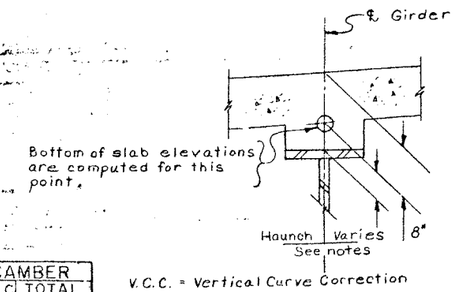
Web and flanges shall be ASTM designation A36 steel.

Stiffeners, Connection Plates, Diaphragm and Gusset Plates shall be ASTM designation A36 steel.

For Bearing Details see Drawing No's. 42 & 43.

Stud Shear Connectors shall be 6" high and placed in pairs. See Drawing No. 42 for additional details.

For Height of Haunch see Table of Haunch Heights Drawing No. 34.



V.C.C. = Vertical Curve Correction

S.D.L. = Superimposed Dead Load, includes weight of railing.

		THEO. BOTTOM OF SLAB ELEVATIONS			DEFLECTIONS (FT.)				CAMBER		
									V.C.C.	TOTAL	
GIRDER	SPAN	℄ Exp. Brgs.	℄ Span	℄ Fix. Brgs.	STEEL	SLAB	SDL	TOTAL	(ft.)	(ft.)	(in.)
G1 N.B.	1	446.55	447.12	447.65	.01	.03	.01	.05	.02	.07	3/8
G2 N.B.	1	446.80	447.40	447.90	.02	.08	.02	.12	.02	.14	1 11/16
G3 N.B.	1	446.79	447.36	447.89	.02	.08	.02	.12	.02	.14	1 11/16
G4 N.B.	1	446.59	447.16	447.68	.01	.03	.01	.05	.08	.07	7/8
G1 S.B.	1	446.34	446.92	447.46	.01	.03	.01	.05	.02	.07	3/8
G2 S.B.	1	446.59	447.17	447.71	.02	.08	.02	.12	.02	.14	1 11/16
G3 S.B.	1	446.64	447.22	447.76	.02	.08	.02	.12	.02	.14	1 11/16
G4 S.B.	1	446.44	447.02	447.55	.01	.03	.01	.05	.02	.07	7/8

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

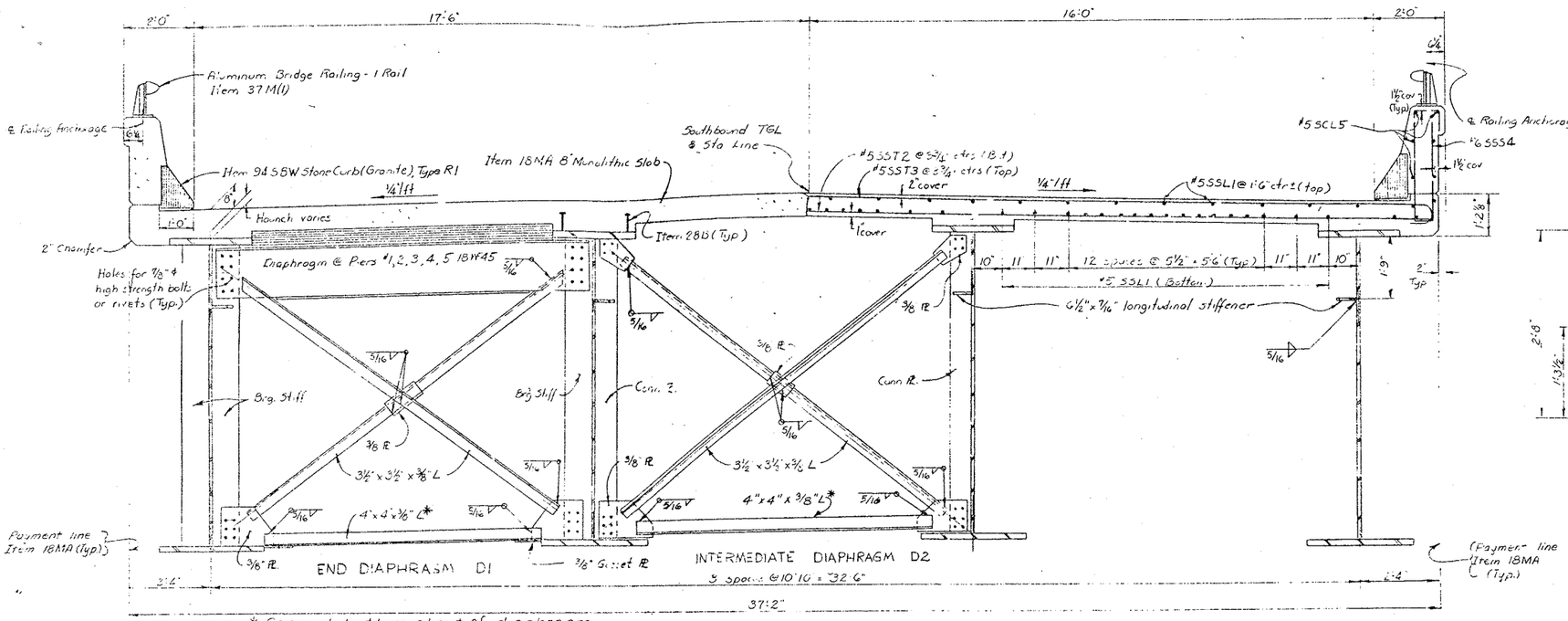
SPAN 1 (S.B. & N.B.)

DRAWING NO. 18 OF 52

PROJECT ENGINEER F. Parker
IN CHARGE OF F. Fekel
DESIGNED BY N. Toepsee
DESIGN CHECKED BY N. Tamule
DETAILED BY J. C. Thompson
DETAIL CHECKED BY [illegible]

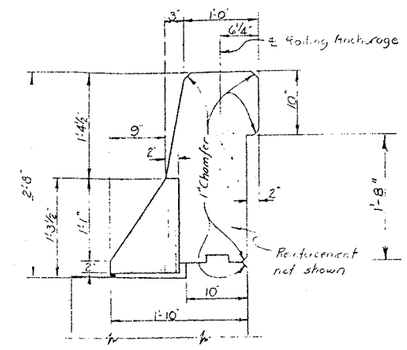
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	~~F-880-3(29)~~ I-481-2(116)	197	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



TRANSVERSE SECTION (SPANS 2,3,4,5 & 6)
Scale 1/2" = 1'-0"

Note: Southbound Lane looking up station shown. Northbound Lane looking down station similar



PARAPET DETAIL
Scale 1" = 1'-0"

Note: Holes for 7/8" ϕ high strength bolts or rivets may be omitted and welding substituted if the contractor so elects. When the contractor elects to substitute the welded connection for the bolted connection shown, the amount of welding used shall be equivalent in strength to the bolts omitted.

For parapet railing details see drawing no. 35 & 36

For granite curb details see drawing no. 35

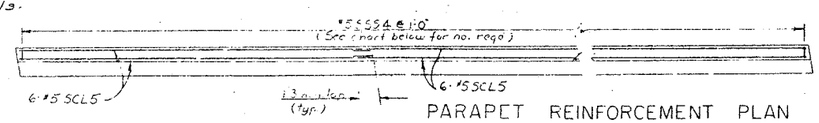
Steel meeting the minimum requirements of A.S.T.M. Designations A36 shall be used for all intermediate stiffeners, longitudinal stiffeners, connection plates, bearing stiffeners, diaphragm, bracing, & thru lateral bracing (except gusset plates), through support angles, finger joint support plates and open armored joint support plates at the south end of span 2.

Finger joint plates, vertical side plates, and deflector plates at finger joints, and armoring angles and side plates at open joint at south end of span 2 shall be corrosion resistant steel A.S.T.M. Designation A242.

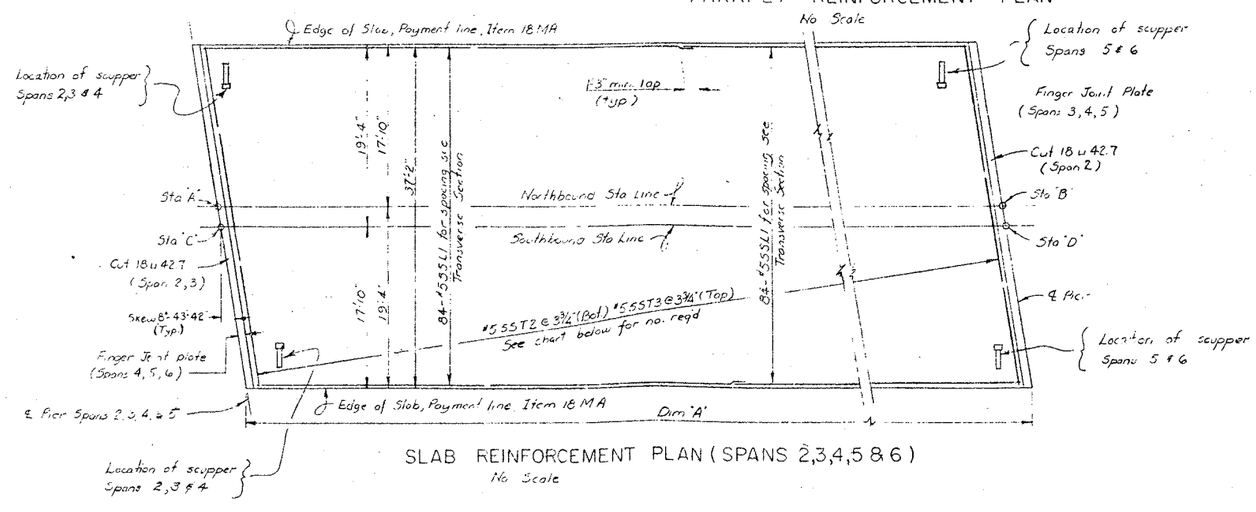
The webs of the girders shall be A.S.T.M. Designation A441.

See details of individual spans for type of steel to be used in girder flanges and bottom lateral gusset plates.

* Connect bottom strut of diaphragm to horizontal gusset plate in bays where there are bottom laterals. Connect bottom strut of diaphragm to vertical gusset plates in bays where there are no bottom laterals.



PARAPET REINFORCEMENT PLAN
No Scale



SLAB REINFORCEMENT PLAN (SPANS 2,3,4,5 & 6)
No Scale

PROJECT ENGINEER E. Farber
IN CHARGE OF E. Farber
DESIGNED BY E. Farber
DESIGN CHECKED BY A. Tarpess
DETAILED BY C.H. Smith
DETAIL CHECKED BY [illegible]

SPAN	DIM "A"	STA. A	STA. B	STA. C	STA. D	SST2 & SST3 NO. REQ'D	SSS4 NO. REQ'D
2	150'-2" SB & NB	214+81.42	216+37.59	218+32.99	219+89.15	497	157
3	171'-2" SB & NB	218+37.59	220+08.76	219+89.15	221+60.32	544	172
4	198'-0" SB & NB	220+08.76	222+06.76	221+60.32	223+58.32	629	198
5	198'-0" SB & NB	222+06.76	224+04.76	223+58.32	225+56.32	629	198
6	198'-0" SB & NB	224+04.76	226+02.76	225+56.32	227+54.32	629	198

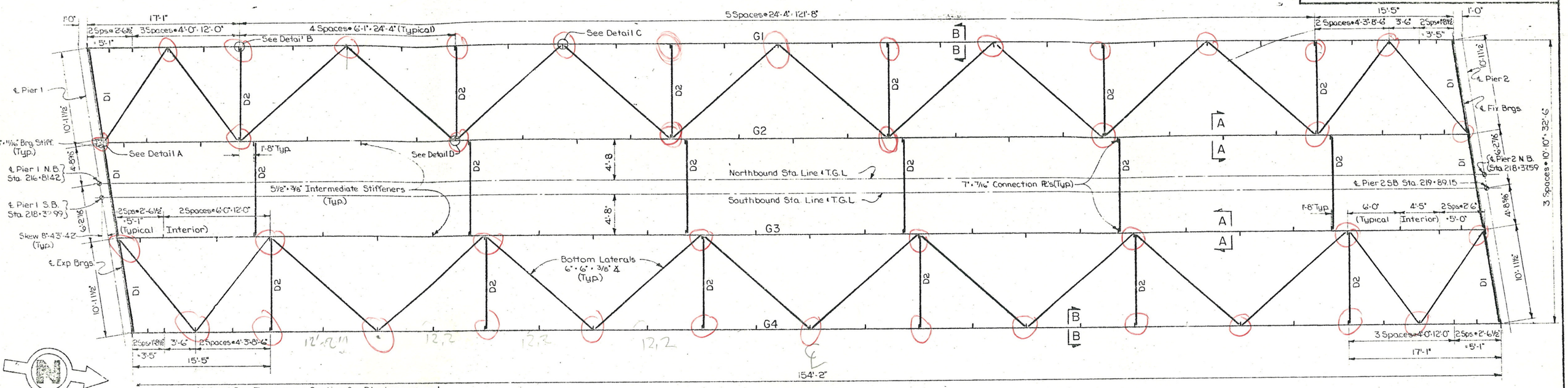
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

TRANSVERSE SECTION & SLAB PLAN
SPANS 2,3,4,5 & 6 NB & SB

DRAWING NO. 19 OF 50

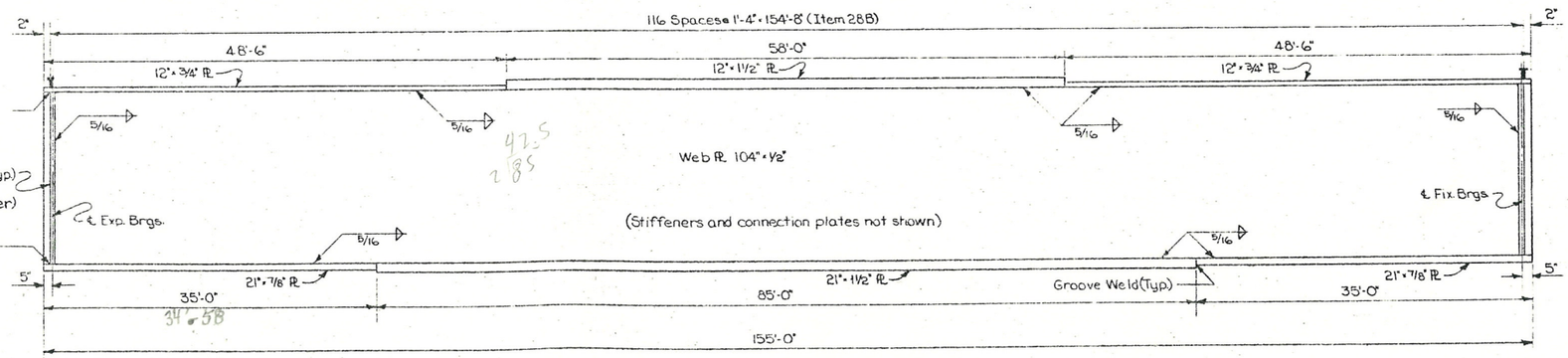
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-535-3(28) I-481-2(116)	198	300

INTERSTATE ROUTE CONSTRUCTION 570
SUPERIOR STRUCTURE (PHASE 2)
ONONDAGA COUNTY

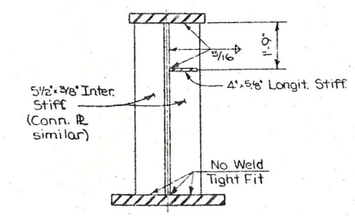


Notes: See Transverse Section for Diaphragms and Lateral Bracing.
See Drawing No. 22 for Cross Lateral Bracing Details A, B, C & D.

STEEL FRAMING PLAN NB & SB
Scale: 3/16" = 1'-0"



FASCIA & INTERIOR GIRDER ELEVATION NB & SB
Not to Scale

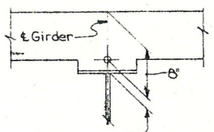


SECTION A-A
Not to Scale

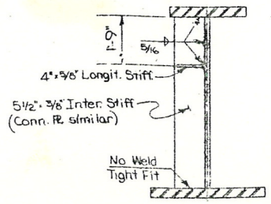
Notes:
Web and flanges shall be A.S.T.M. designation A441 Steel.
Stiffeners, connection plates, diaphragms, lateral bracing and gusset plates shall be A.S.T.M. designation A36 Steel.
For details of bearings see Dwg. No. 42 & 43.
Stud Shear Connectors shall be 6" high.

GIRDER	SPAN	THEO. BOTTOM OF SLAB ELEVATIONS ℄ EXP BRGS.	℄ SPAN	℄ FIX. BRGS.	DEFLECTIONS (FT.) STEEL	SLAB	SDL.	TOT.	CAMBER V.C.C. (FT.)	TOTAL (FT.)	(IN.)
G1 NB	2	447.67	448.52	449.28	.08	.16	.07	.31	.07	.38	4 9/16
G2 NB	2	447.92	448.76	449.47	.08	.24	.07	.39	.07	.46	5 1/8
G3 NB	2	447.91	448.75	449.45	.08	.24	.07	.39	.07	.46	5 1/2
G4 NB	2	447.70	448.54	449.24	.08	.16	.07	.31	.07	.38	4 9/16
G1 SB	2	447.48	448.35	449.08	.08	.16	.07	.31	.07	.38	4 9/16
G2 SB	2	447.73	448.60	449.32	.08	.24	.07	.39	.07	.46	5 1/2
G3 SB	2	447.78	448.65	449.37	.08	.24	.07	.39	.07	.46	5 1/2
G4 SB	2	447.58	448.44	449.16	.08	.16	.07	.31	.07	.38	4 9/16

V.C.C. - Vertical Curve Correction
S.D.L. - Superimposed Dead Load, includes weight of railing.



For haunch see Haunch Table Dwg. No. 34.



SECTION B-B
Not to Scale

BRIDGE NO. 2
INTERSTATE ROUTE 381 OVER DEWITT YARDS

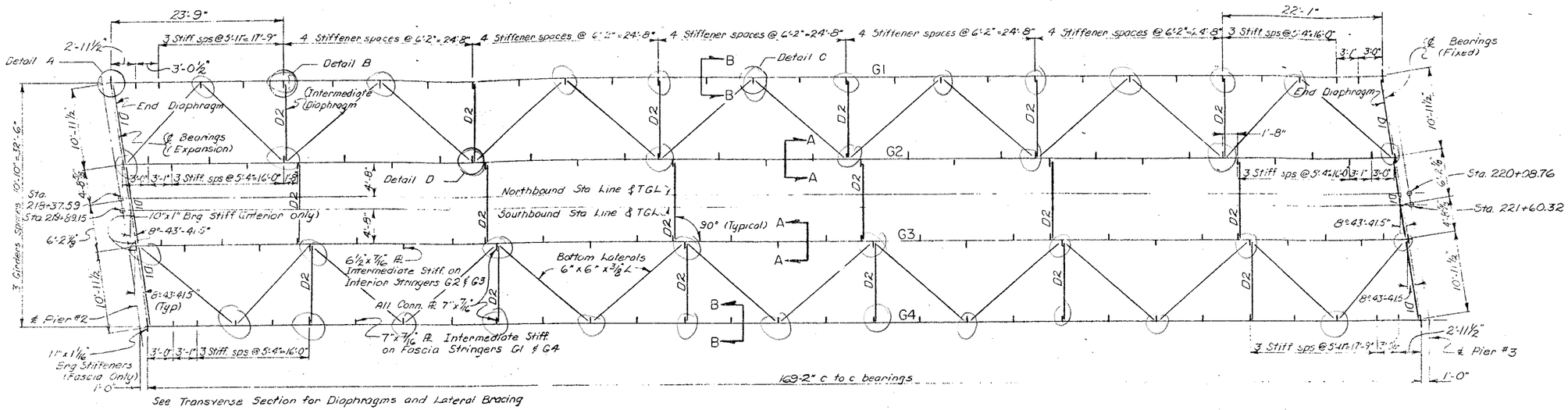
SPAN 2 FRAMING PLAN

DRAWING NO. 20 OF 50

PROJECT ENGINEER R. L. Parker
IN CHARGE OF F. Eckel
DESIGNED BY N. P. Tsoposes
DESIGN CHECKED BY R. Thimble
DETAILED BY J. F. Darcy
FINAL CHECKED BY [illegible]

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(28) I-481-2(116)	199	309

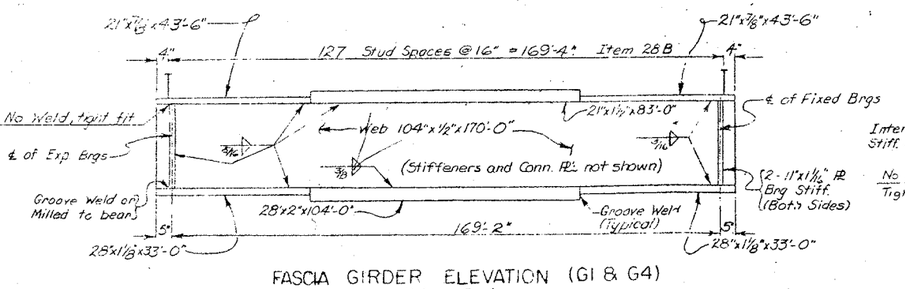
INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



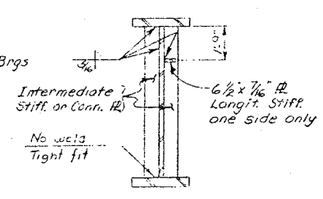
STEEL LAYOUT (SPAN #3 NB & SB)
Scale 1/8" = 1'-0"

Note: Stud Shear Connectors shall be 6" high.

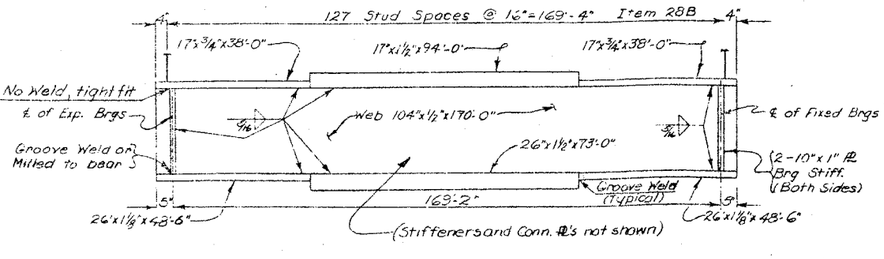
For Bearings Details see Drawing # 42 and 43
For Joint Details see Drawing # 31
For Trough Details see Drawing # 39



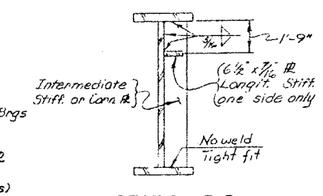
FASCIA GIRDER ELEVATION (G1 & G4)
Not to Scale



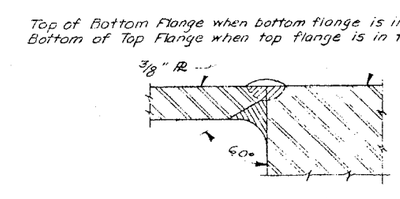
SECTION A-A
Not to Scale
Note: All Conn. Plates 7"x7/16"



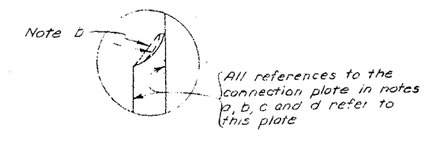
INTERIOR GIRDER ELEVATION (G2 & G3)
Not to Scale



SECTION B-B
Not to Scale
Note: All Conn. Plates 7"x7/16"

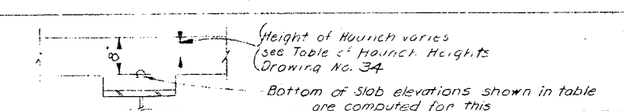


DETAIL #1



DETAIL #2

LATERAL BRACING DETAILS
Not to Scale



GIRDER	NORTHBOUND THEO. BOT. OF SLAB EL.			SOUTHBOUND THEO. BOT. OF SLAB EL.			DL DEFLECTION STEEL (FT.)	SLAB (FT.)	S.D.L. (FT.)	TOTAL (FT.)	CAMBER V.C.C. (FT.)	TOTAL (FT.)	(IN.)
SPAN 3	℄ SO. BRG	℄ SPAN	℄ NO. BRG	℄ SO. BRG	℄ SPAN	℄ NO. BRG							
G1	449.24	449.95	450.29	449.10	449.74	450.20	.11	.15	.11	.37	.08	.45	5 3/8
G2	449.48	450.09	450.52	449.34	449.97	450.44	.12	.29	.04	.45	.08	.53	6 3/8
G3	449.46	450.07	450.50	449.39	450.02	450.48	.12	.29	.04	.45	.08	.53	6 3/8
G4	449.25	449.85	450.28	449.18	449.80	450.26	.11	.15	.11	.37	.08	.45	5 3/8

S.D.L. = superimposed dead load, includes weight of parapet and railing.
V.C.C. = vertical curve correction

Note:

a. The connection plate shall be prepared and welded as a single bevel groove weld as shown in Detail #1. It shall then be Air Carbon-Arc gauged from the second side into sound weld metal and then welded as detailed. All welding shall be in the flat or "downhand" position.

b. The plate may be of any shape that will provide often welding, cutting, and finish grinding a smooth transition from the flange edge at a minimum radius of 12".

c. Both the connection plate and flange are to be the same type of steel.

d. Field welding to the connection plate will not be permitted.

The webs, flanges and gusset plates for bottom lateral bracing for the Span 3 girders shall be A.S.T.M. Designation A441 steel. Stiffeners, diaphragms, bearings, and bottom lateral bracing (except gusset plates) shall be A.S.T.M. A36 steel.

For additional details of bottom lateral bracing see drawing No. 22

PROJECT ENGINEER: A. PARKER
IN CHARGE OF: F. D. ECKEL
DESIGNED BY: S. FANE
DESIGN CHECKED BY: K. JARSKI
DETAILED BY: Mr. Dunnell
DETAIL CHECKED BY: Carl Smith

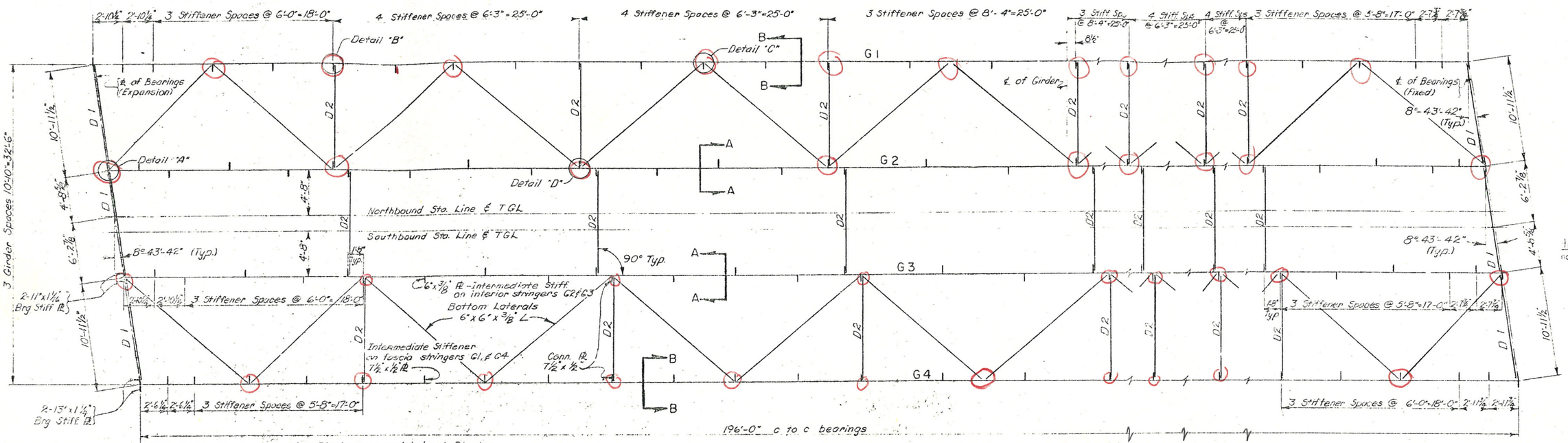
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

SPAN 3

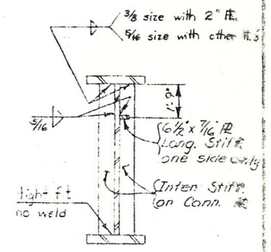
DRAWING NO. 21 OF 30

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-090-S(28) I-481-2(116)	200	309

INTERSTATE ROUTE 690 OVER DEWITT YARDS
SOUTHBOUND ROADWAY (PHASE 2)
ONONDAGA COUNTY

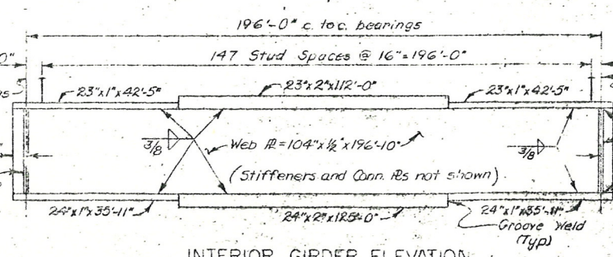


STEEL LAYOUT — SPANS 4, 5 & 6 (NB & SB)
Scale: 3/16" = 1'-0"

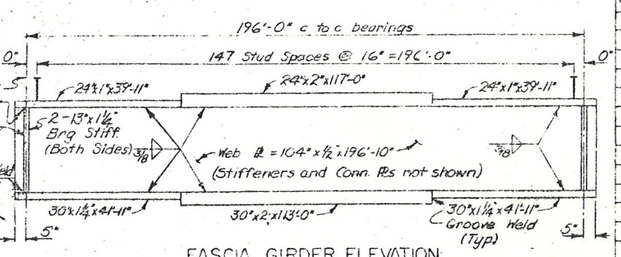


SECTION A-A
Not to Scale

All Connection ℞'s 7½" x ½"

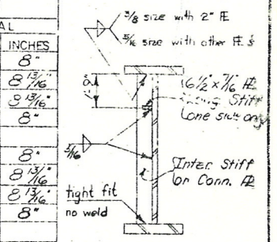


INTERIOR GIRDER ELEVATION
Not to Scale



FASCIA GIRDER ELEVATION
Not to Scale

GIRDER	SOUTHBOUND THEO. BOT. OF SLAB EL.			NORTHBOUND THEO. BOT. OF SLAB EL.			DL DEFLECTION (FT)				CAMBER		
	℄ SO. BRG	℄ SPAN	℄ NO. BRG	℄ SO. BRG	℄ SPAN	℄ NO. BRG	STEEL	SLAB	SDL	TOTAL DL	VCC (FT)	TOTAL FEET	TOTAL INCHES
SPAN 4													
G1	450.21	450.54	450.63	450.30	450.59	450.66	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"
G2	450.45	450.77	450.86	450.53	450.82	450.89	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8 13/16"
G3	450.48	450.80	450.89	450.51	450.80	450.85	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8 13/16"
G4	450.27	450.58	450.67	450.29	450.57	450.63	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"
SPAN 5													
G1	450.63	450.50	450.14	450.66	450.50	450.10	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"
G2	450.86	450.72	450.36	450.89	450.72	450.32	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8 13/16"
G3	450.89	450.75	450.38	450.85	450.68	450.28	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8 13/16"
G4	450.66	450.52	450.15	450.63	450.45	450.05	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"
SPAN 6													
G1	450.13'	449.54'	448.72	450.09	449.47	448.62	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"
G2	450.35	449.75	448.93	450.31	449.68	448.83	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8 13/16"
G3	450.37	449.77	448.94	450.27	449.64	448.78	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8 13/16"
G4	450.14	449.53	448.70	450.04	449.40	448.54	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"



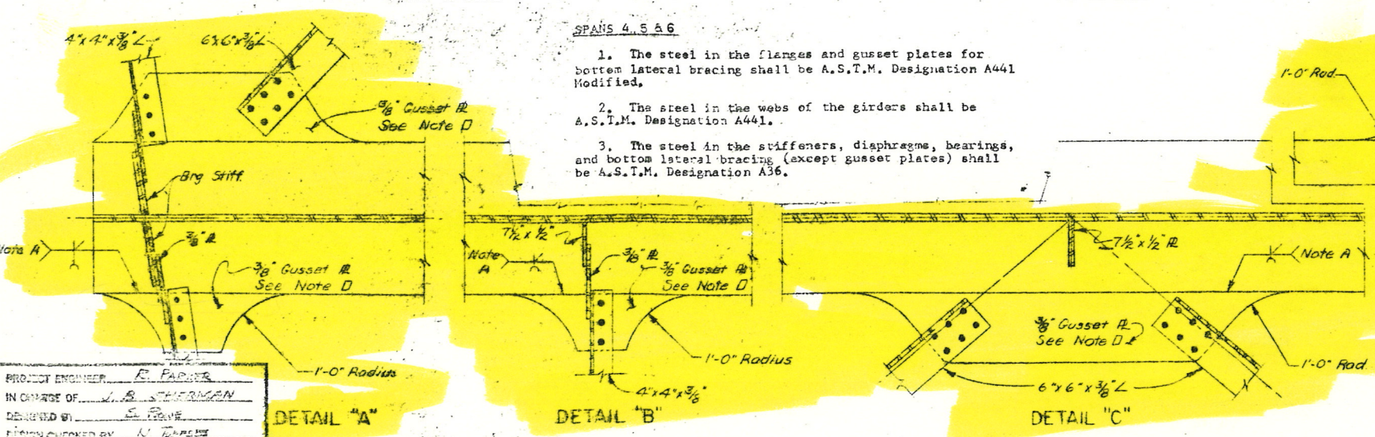
SECTION B-B
Not to Scale

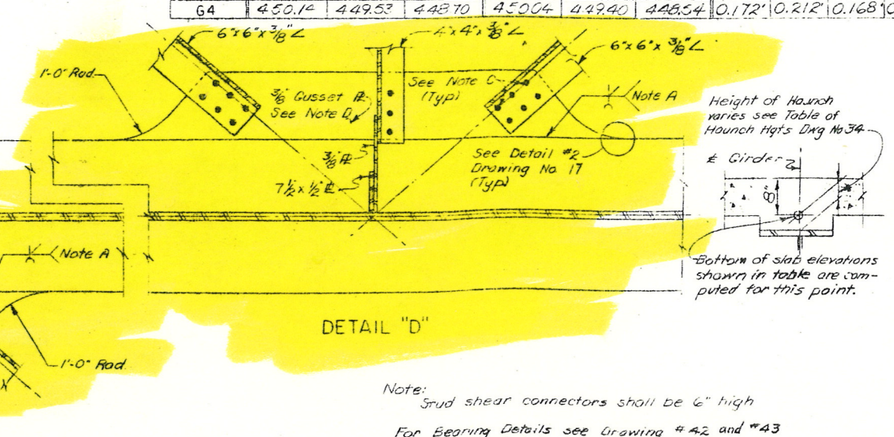
SPANS 4, 5 & 6

1. The steel in the flanges and gusset plates for bottom lateral bracing shall be A.S.T.M. Designation A441 Modified.

2. The steel in the webs of the girders shall be A.S.T.M. Designation A441.

3. The steel in the stiffeners, diaphragms, bearings, and bottom lateral bracing (except gusset plates) shall be A.S.T.M. Designation A36.





Note:
A. The connection plate shall be prepared and welded as a single bevel groove weld as shown in Detail #1. It shall then be Air Carbon-Arc gouged from the second side into sound weld metal and then welded as detailed. All welding shall be in the flat or "downhand" position.
B. The plate may be of any shape that will provide after welding, cutting, and finish grinding a smooth transition from the flange edge on a minimum radius of 12".
C. Lateral bracing shall be attached to gusset plates with ⅞" ϕ high strength bolts. Field welding will not be permitted.
D. The gusset plate shall be the same type of steel as the flange to which it is welded.

Note:
Stud shear connectors shall be 6" high

For Bearing Details see Drawing #42 and #43
For Joint Details see Drawing #31
For Trough Details see Drawing #39

PROJECT ENGINEER	R. Parker
IN CHARGE OF	L. B. Thirman
DESIGNED BY	S. Grove
FORMS CHECKED BY	N. Tarsese
ATTENUED BY	Otto d'Emanuele
[illegible] BY	D. H. Smith

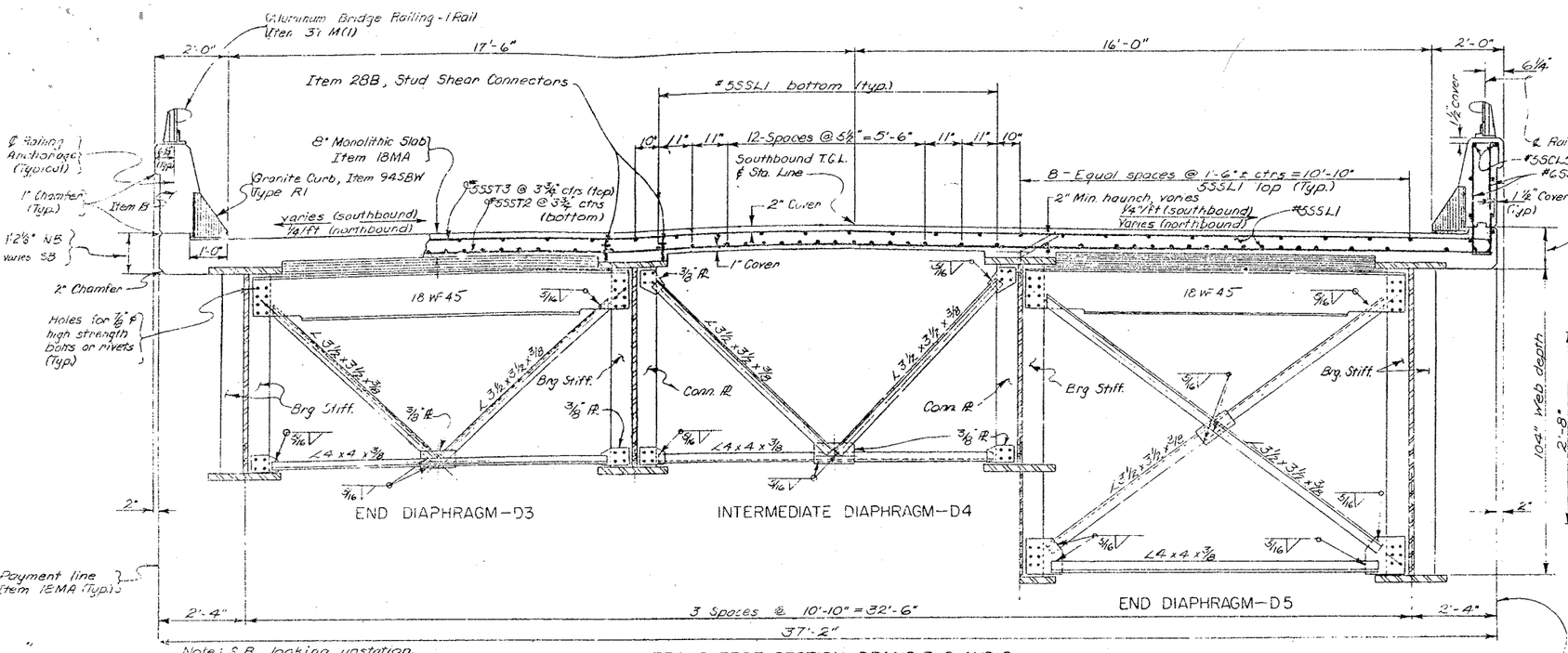
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

SPANS 4, 5 & 6

DRAWING NO. 22 OF 50

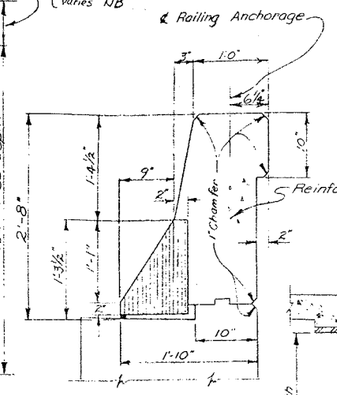
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(28) I-481-2(16)	201	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



Note: S.B. looking upstation.
N.B. looking downstation.

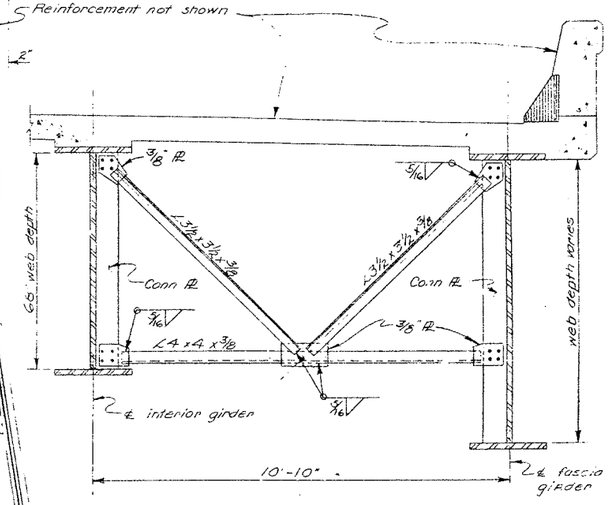
TRANSVERSE SECTION - SPANS 7, 8 AND 9
Scale: ½" = 1'-0"



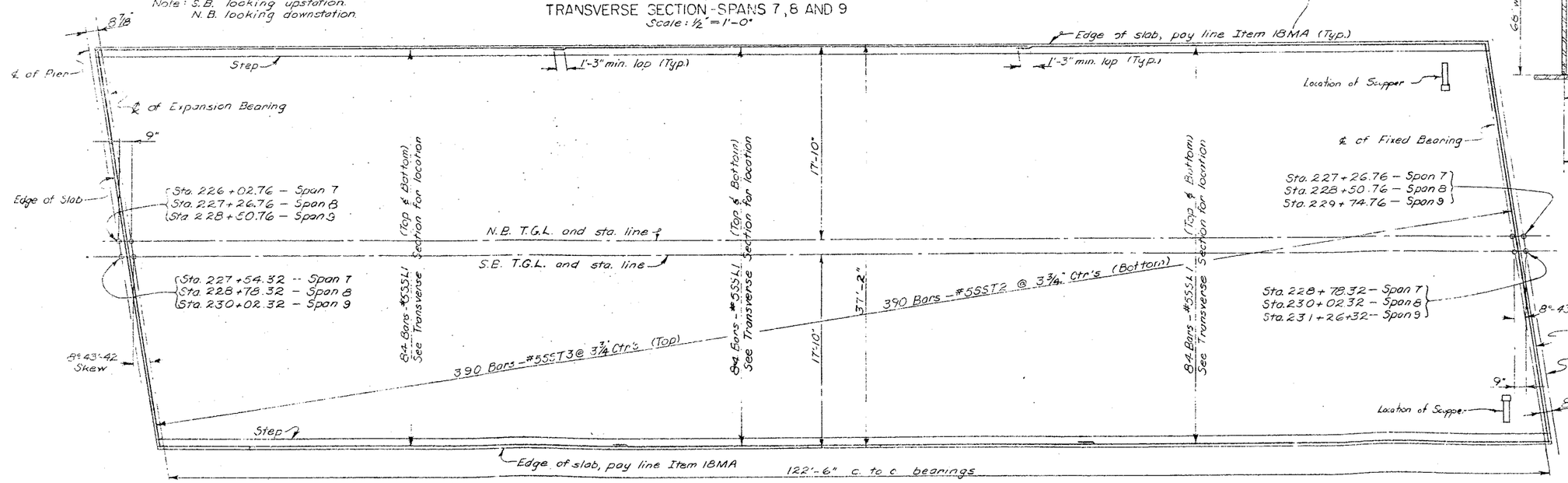
PARAPET DETAIL
Scale 1" = 1'-0"

Note: Holes for ⅞" ϕ high strength bolts or rivets may be omitted and welding substituted if the contractor so elects. When the contractor elects to substitute the welded connection for the bolted connection shown, the amount of welding used shall be equivalent in strength to the bolts omitted.

For detail of Railing see Drawing #36

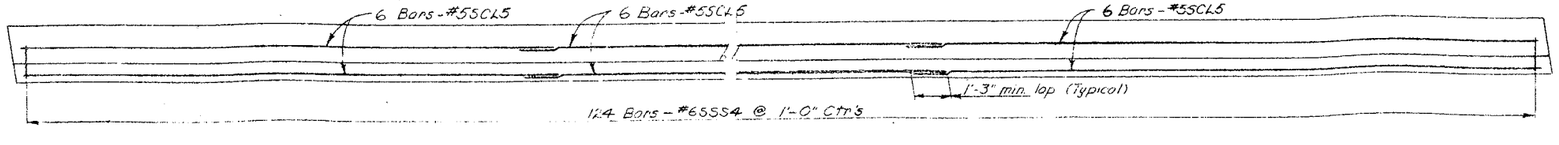


INTERMEDIATE DIAPHRAGM-D6
Scale: ½" = 1'-0"



Note
Transverse reinforcement shall be placed parallel to skew.

SLAB REINFORCEMENT PLAN, SPANS 7, 8 AND 9
Scale: 3/16" = 1'-0"



PARAPET REINFORCEMENT PLAN
Not to Scale

PROJECT ENGINEER F. Parker
IN CHARGE OF J.B. Sherman
DESIGNED BY [illegible]
DESIGN CHECKED BY [illegible]
DETAILED BY [illegible]
DETAIL CHECKED BY [illegible]

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

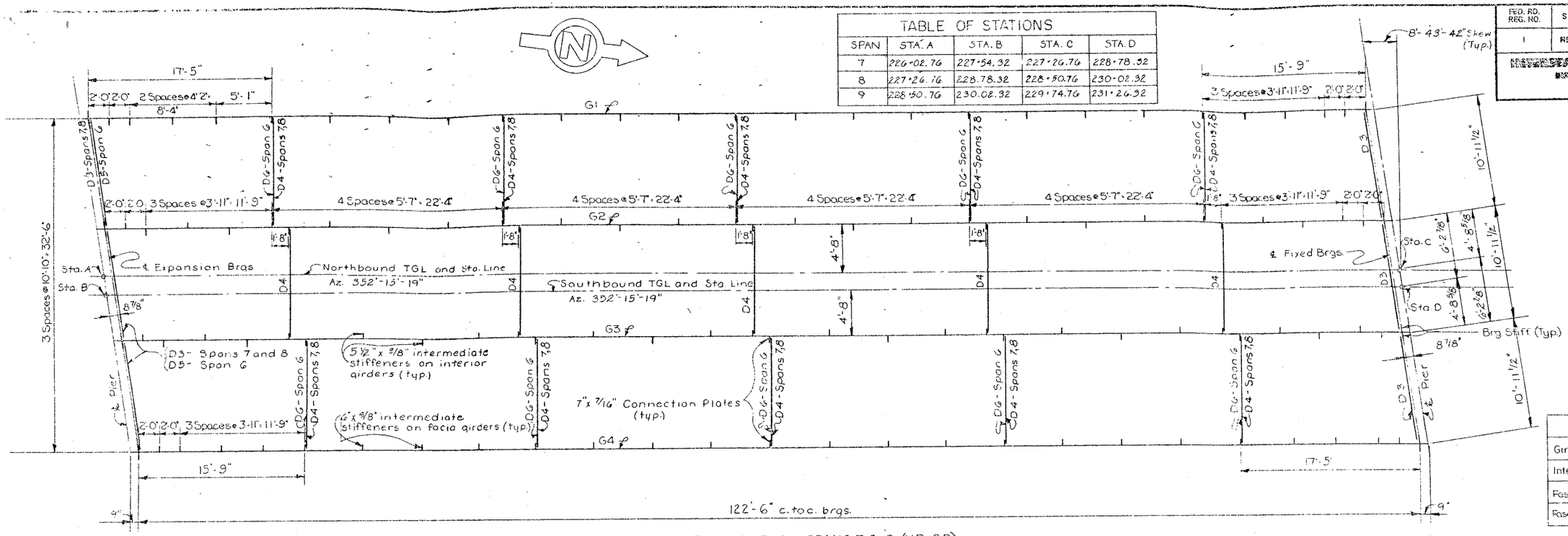
SPANS 7, 8 & 9

DRAWING NO. 23 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-880-3(28) I-481-2(116)	202	309

INTERSTATE ROUTE CONSTRUCTION 370
INTERCHANGE (PIERS 2)
ONONDAGA COUNTY

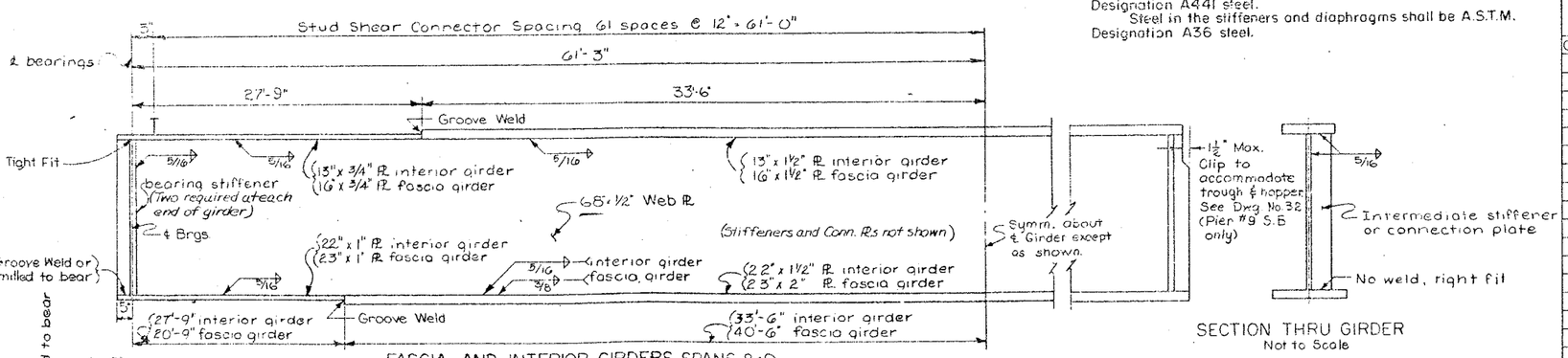
TABLE OF STATIONS				
SPAN	STA. A	STA. B	STA. C	STA. D
7	226+02.76	227+54.32	227+26.76	228+78.32
8	227+26.76	228.78.32	228+50.76	230+02.32
9	228+50.76	230.02.32	229+74.76	231+26.32



STEEL FRAMING PLAN SPANS 7, 8 & 9 (NB & SB)
Scale: 3/16" = 1'-0"

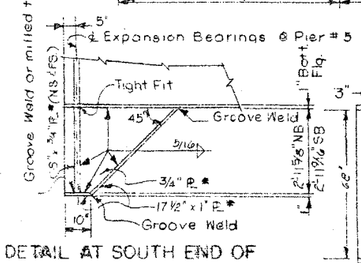
BEARING STIFFENER SIZES	
Girder	Size of each plate (2 plates @ each end of girder)
Interior spans 7,8 & 9	8" x 3/4"
Fascia span 7	8" x 3/4"
Fascia spans 8 & 9	9" x 7/8"

Steel in the girder webs and flanges shall be A.S.T.M. Designation A441 steel.
Steel in the stiffeners and diaphragms shall be A.S.T.M. Designation A36 steel.

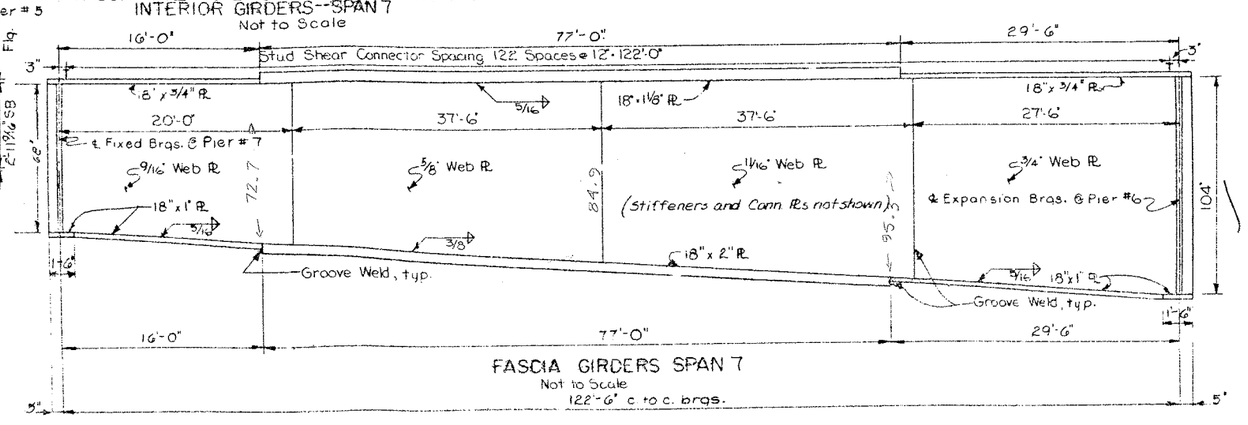


FASCIA AND INTERIOR GIRDERS SPANS 8 & 9
INTERIOR GIRDERS--SPAN 7
Not to Scale

SECTION THRU GIRDER
Not to Scale



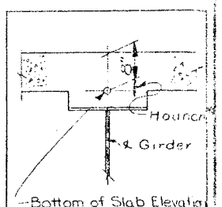
DETAIL AT SOUTH END OF INTERIOR STRINGERS--SPAN 7
Scale 3/8" = 1'-0"
* A441 Steel



FASCIA GIRDERS SPAN 7
Not to Scale
122'-6" c to c. brgs.

BOTTOM OF SLAB ELEVATIONS

NORTHBOUND					SOUTHBOUND				
GIRDER	SPAN	℄ EXP BRGS	℄ SPAN	℄ FIX BRGS	GIRDER	SPAN	℄ EXP BRGS	℄ SPAN	℄ FIX BRGS
G1	7	448.60	447.95	447.22	G1	7	448.70	448.07	447.35
G2	7	448.61	448.16	447.42	G2	7	448.91	448.28	447.56
G3	7	448.77	448.11	447.37	G3	7	448.93	448.29	447.57
G4	7	448.52	447.87	447.12	G4	7	448.68	448.05	447.32
G1	8	447.20	446.37	445.45	G1	8	447.33	446.52	445.63
G2	8	447.40	446.57	445.65	G2	8	447.54	446.73	445.83
G3	8	447.35	446.52	445.59	G3	8	447.55	446.73	445.83
G4	8	447.10	446.27	445.34	G4	8	447.30	446.48	445.58
G1	9	445.43	444.42	443.33	G1	9	445.60	444.61	443.67
G2	9	445.63	444.62	443.38	G2	9	445.80	444.81	443.74
G3	9	445.57	444.56	443.46	G3	9	445.81	444.81	443.73
G4	9	445.32	444.30	443.20	G4	9	445.56	444.56	443.48



Bottom of Slab Elevations shown in table are computed for this point.

*Height of Haunch varies See Table of Haunch Heights on Drawing No. 34

	GIRDER	SPAN	DEFLECTIONS STEEL (FT.)	SLAB (FT.)	SDL. (FT.)	TOTAL (FT.)	CAMBER VCC (FT.)	TOTAL (FT.)	(IN.)
NB AND SB	G1	7	.05	.09	.06	.20	.04	.24	2 7/8
	G2	7	.08	.24	.03	.35	.04	.31	4 5/8
	G3	7	.08	.24	.03	.35	.04	.39	4 5/8
	G4	7	.05	.09	.06	.20	.04	.24	2 7/8
	G1	8	.07	.12	.08	.27	.04	.31	3 3/4
	G2	8	.08	.24	.03	.35	.04	.39	4 5/8
	G3	8	.08	.24	.03	.35	.04	.39	4 5/8
	G4	8	.07	.12	.08	.27	.04	.31	3 3/4
SB	G1	9	.07	.12	.08	.27	.02	.29	3 1/2
	G2	9	.08	.24	.03	.35	.03	.38	4 1/2
	G3	9	.08	.24	.03	.35	.04	.39	4 5/8
	G4	9	.07	.12	.08	.27	.04	.31	3 3/4
NB	G1	9	.07	.12	.08	.27	-.06	.21	2 1/2
	G2	9	.08	.24	.03	.35	.01	.36	4 3/8
	G3	9	.08	.24	.03	.35	.04	.39	4 5/8
	G4	9	.07	.12	.08	.27	.04	.31	3 3/4

V.C.C. = Vertical Curve Camber
S.D.L. = Superimposed dead load, includes the weight of sidewalk & railing.

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DE-WITT YARDS

SPANS 7, 8 & 9 (NB & SB)

2929

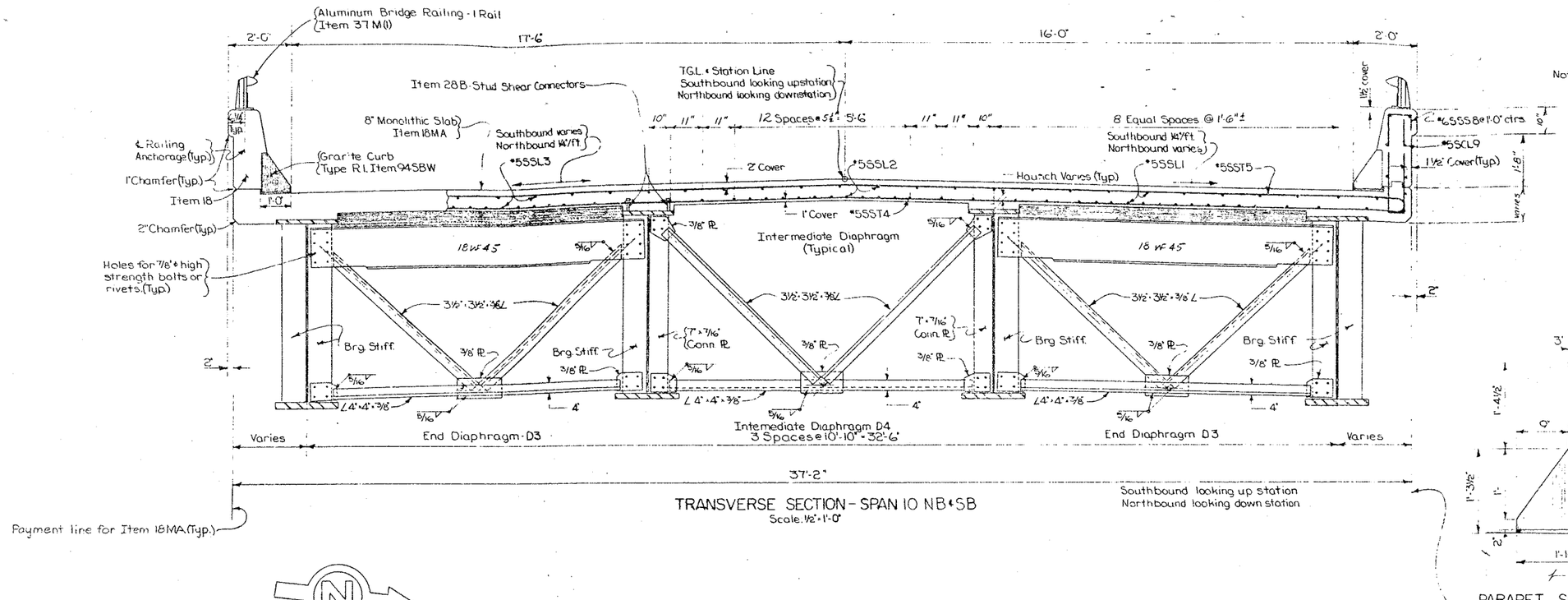
DRAWING NO. 24 OF 50

PROJECT ENGINEER R. L. Parker
IN CHARGE OF J. B. Sherman
DESIGNED BY [illegible]
DESIGN CHECKED BY [illegible]
DETAILED BY J. F. Dorey & N. L. Gallner
DETAIL CHECKED BY [illegible]

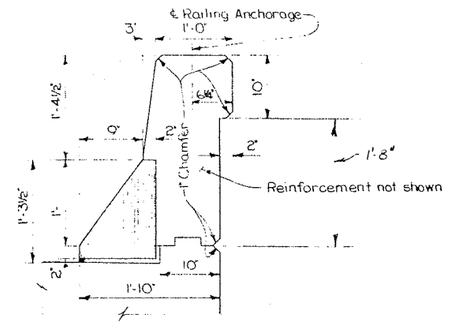
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(28) I-481-2(116)	203	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

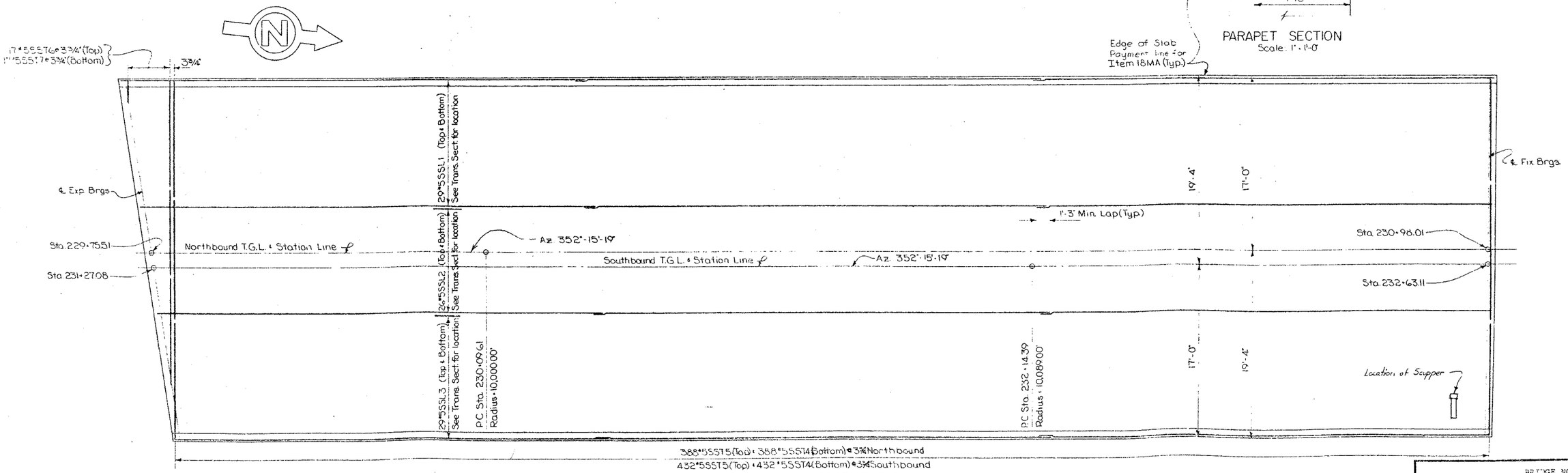
Notes: Holes for 7/8" ⌀ rivets or high strength bolts may be omitted and welding substituted if the Contractor so elects. When the Contractor elects to substitute the welded connection for the bolted connection shown, the amount of welding used shall be equivalent in strength to the bolts removed.
For details of railing see Dwg No. 36.



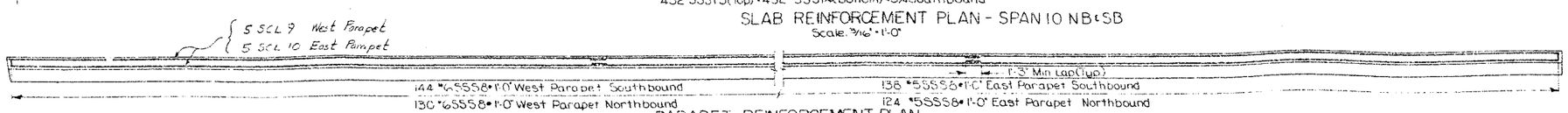
TRANSVERSE SECTION - SPAN 10 NB & SB
Scale: ½" = 1'-0"



PARAPET SECTION
Scale: 1" = 1'-0"



SLAB REINFORCEMENT PLAN - SPAN 10 NB & SB
Scale: 3/16" = 1'-0"



PARAPET REINFORCEMENT PLAN
Scale: 3/16" = 1'-0"

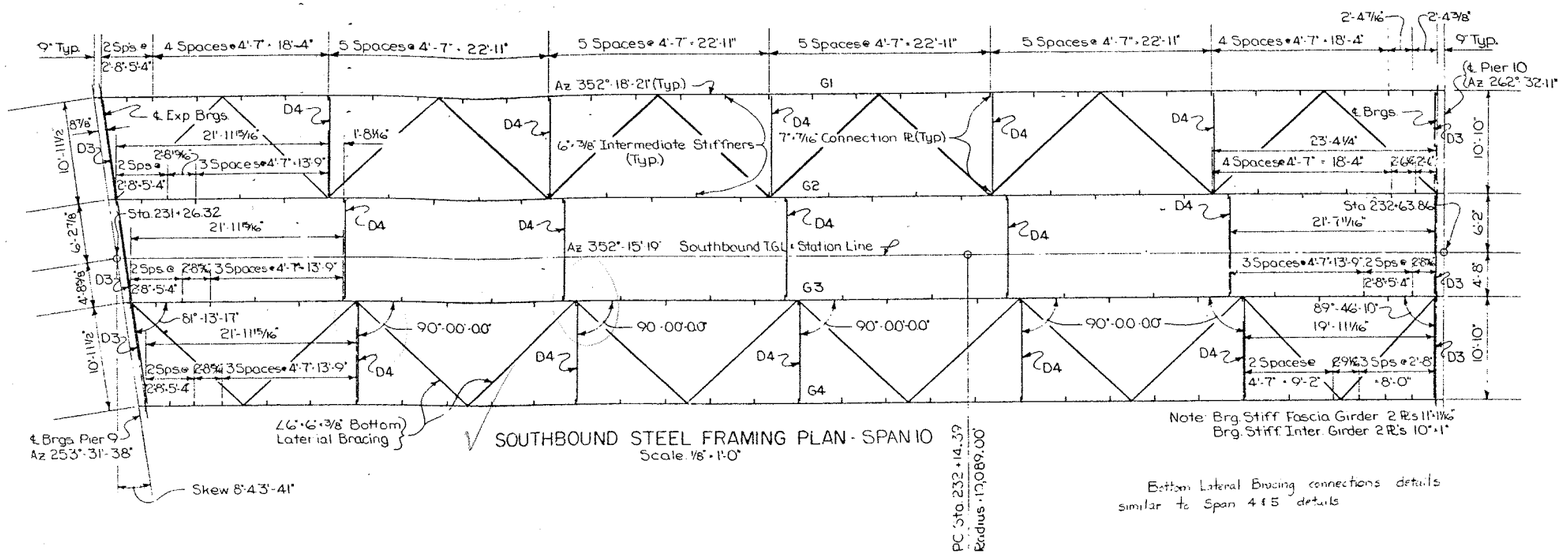
PROJECT ENGINEER E. L. Parker
IN CHARGE OF F. Eckel
DESIGNED BY S. Rowe
DESIGN CHECKED BY N. Toppses
DETAILED BY J. F. Darcy
DETAIL CHECKED BY [illegible]

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS
SPAN 10 NB & SB

DRAWING NO. 25 OF 5[illegible]

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(28) I-481-2(16)	204	509

INTERSTATE ROUTE CONNECTION 690
BUTTERMILK CREEK BRIDGE (BRIDGE 2)
ONONDAGA COUNTY



SOUTHBOUND STEEL FRAMING PLAN - SPAN 10
Scale 1/8" = 1'-0"

Bottom Lateral Bracing connections details similar to Span 4 & 5 details

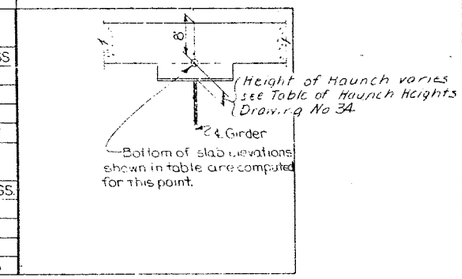
BOTTOM OF SLAB ELEVATIONS

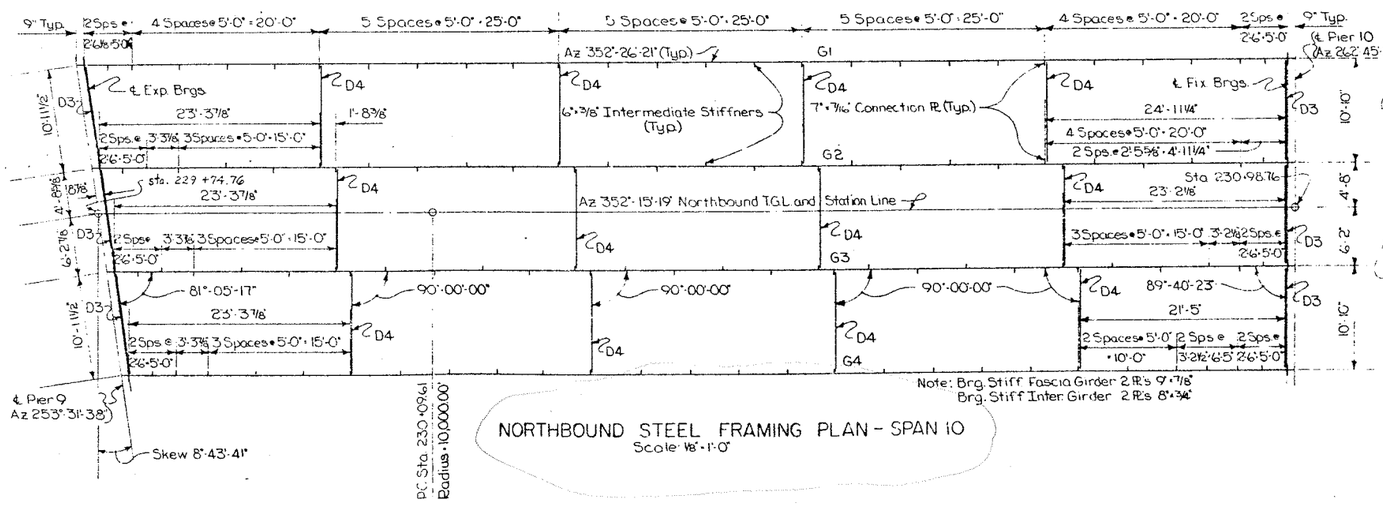
SOUTHBOUND

GIRDER	SPAN	℄ EXP. BRGS.	℄ SPAN	℄ FIX. BRGS.
G1	10	443.54	442.46	441.26
G2	10	443.72	442.49	441.15
G3	10	443.70	442.40	440.99
G4	10	443.45	442.16	440.77

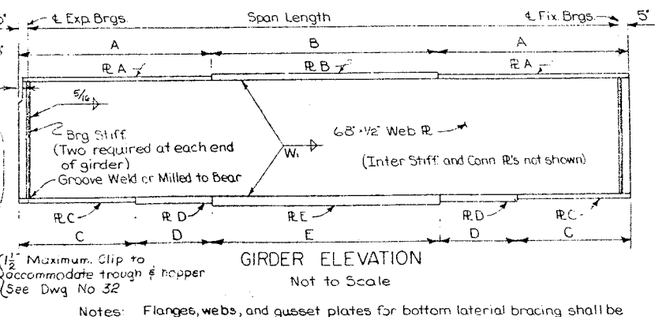
NORTHBOUND

GIRDER	SPAN	℄ EXP. BRGS.	℄ SPAN	℄ FIX. BRGS.
G1	10	443.50	442.49	441.39
G2	10	443.56	442.42	441.19
G3	10	443.43	442.24	440.98
G4	10	443.17	442.00	440.75

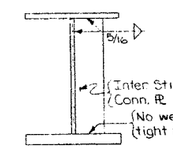




NORTHBOUND STEEL FRAMING PLAN - SPAN 10
Scale 1/8" = 1'-0"



GIRDER ELEVATION
Not to Scale



TYPICAL SECTION
Not to Scale

Notes: Flanges, webs, and gusset plates for bottom lateral bracing shall be A.S.T.M. Designation A441 Steel.
Diaphragms, stiffeners, bearings, and bottom lateral bracing (except gusset plates) shall be A.S.T.M. Designation A36 Steel.

WELD SIZE TABLE

Thickness of Flange	W1 Size of fillet weld joining web to flange
1 1/2" and under	5/16"
over 1 1/2" to 2 1/4"	3/8"
over 2 1/4"	1/2"

SPAN 10 GIRDER TABLE

	GIRDER	SPAN LENGTH ℄ TO ℄ BRGS.	FLANGE PLATE SIZES Pl A	Pl B	Pl C	Pl D	Pl E	FLANGE PLATE LENGTHS A	B	C	D	E
Southbound	G1	138'-8 13/16"	23" x 1"	23" x 1 1/2"	24" x 1"	24" x 2"	24" x 2 1/2"	36'-9 7/16"	66'-0"	20'-3 7/16"	19'-0"	61'-0"
	G2	137'-0 3/16"	19" x 7/8"	19" x 1 1/2"	24" x 1"	None	24" x 2"	32'-11 1/16"	72'-0"	23'-5 1/16"	0	91'-0"
	G3	135'-3 5/8"	19" x 7/8"	19" x 1 1/2"	24" x 1"	None	24" x 2"	32'-0 9/16"	72'-0"	22'-6 9/16"	0	91'-0"
	G4	133'-7"	23" x 1"	23" x 1 1/2"	24" x 1"	24" x 2"	24" x 2 1/2"	34'-2 1/2"	66'-0"	17'-8 1/2"	19'-0"	61'-0"
Northbound	G1	125'-0 1/4"	17" x 3/4"	17" x 1 1/2"	24" x 1"	None	24" x 2"	28'-11 1/8"	68'-0"	21'-5 1/8"	0	83'-0"
	G2	123'-3 1/8"	14" x 3/4"	14" x 1 1/2"	23" x 1"	None	23" x 1 1/2"	27'-6 9/16"	69'-0"	28'-0 9/16"	0	68'-0"
	G3	121'-6"	14" x 3/4"	14" x 1 1/2"	23" x 1"	None	23" x 1 1/2"	26'-8"	69'-0"	27'-2"	0	68'-0"
	G4	119'-8 7/8"	17" x 3/4"	17" x 1 1/2"	24" x 1"	None	24" x 2"	26'-3 7/16"	68'-0"	18'-9 7/16"	0	83'-0"

	DEFLECTIONS (FT) STEEL	CONC.	S.D.L.	TOTAL	CAMBER V.C.C. (FT.)	TOTAL (FEET)	TOTAL (INCHES)	STUD SHEAR CONNECTOR SPACING
G1	0.10	0.15	0.11	0.36	.06	0.42'	5"	138 Spaces @ 12" = 138'-0"
G2	0.11	0.28	0.04	0.43	.06	0.49	5 7/8"	137 Spaces @ 12" = 137'-0"
G3	0.10	0.27	0.04	0.41	.05	0.46	5 1/2"	135 Spaces @ 12" = 135'-0"
G4	0.09	0.13	0.09	0.31	.05	0.36	4 3/8"	133 Spaces @ 12" = 133'-0"
G1	0.07	0.12	0.09	0.28	.05	0.33	4"	125 Spaces @ 12" = 125'-0"
G2	0.08	0.24	0.03	0.35	.05	0.40	4 3/4"	123 Spaces @ 12" = 123'-0"
G3	0.07	0.23	0.03	0.33	.04	0.37	4 1/2"	121 Spaces @ 12" = 121'-0"
G4	0.06	0.10	0.08	0.24	.04	0.28	3 3/8"	119 Spaces @ 12" = 119'-0"

G4	33.54	17.24
G1	28.51	21.01
G2	27.13	27.63
G3	26.25	26.75
G4	25.8698	18.3698

S.D.L. = superimposed dead load, includes weight of railing and parapet.
V.C.C. = vertical curve correction

PROJECT ENGINEER R. L. Parker
IN CHARGE OF F. Eckel
DESIGNED BY S. Rave
DESIGN CHECKED BY Toppse & Smith
DETAILED BY J. F. Darcy
DETAIL CHECKED BY [illegible]

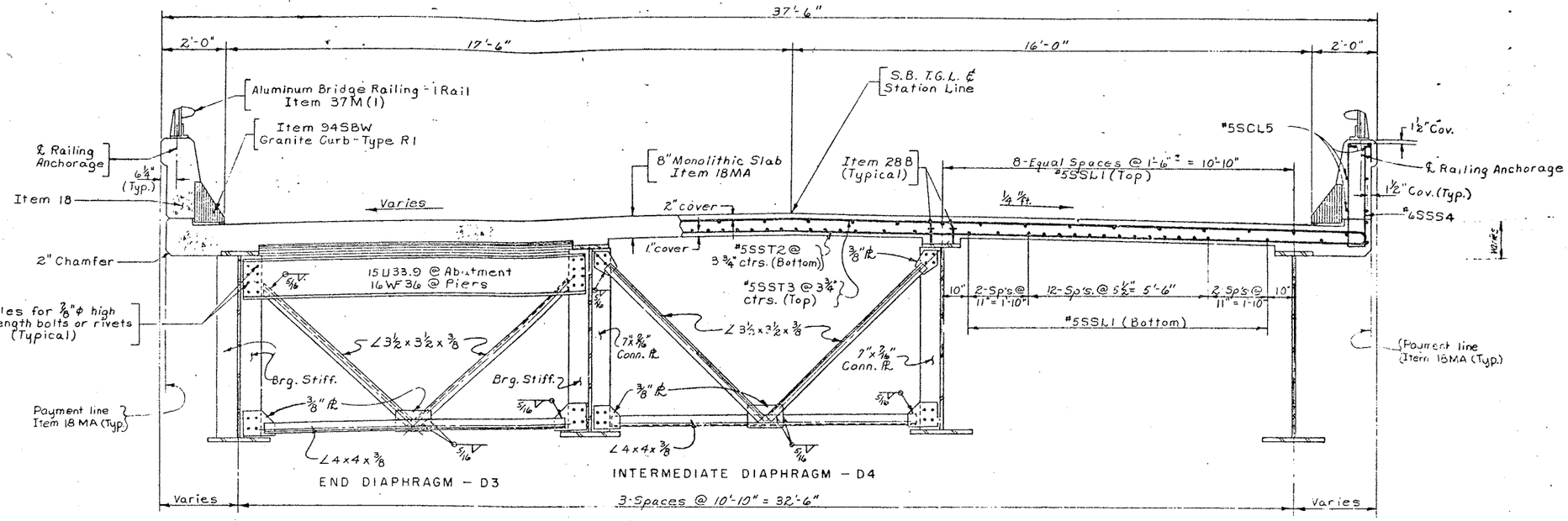
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

SPAN 10 NB & SB

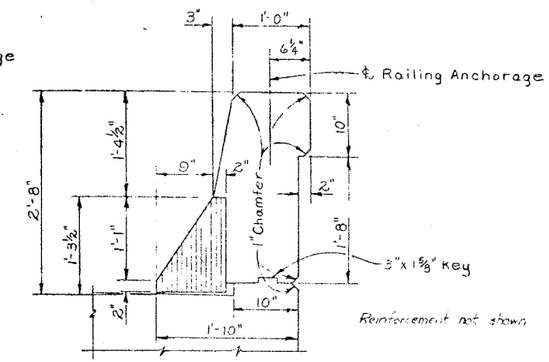
DRAWING NO. 26 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-88(1-9)(13) I-481-1-2(116)	205	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



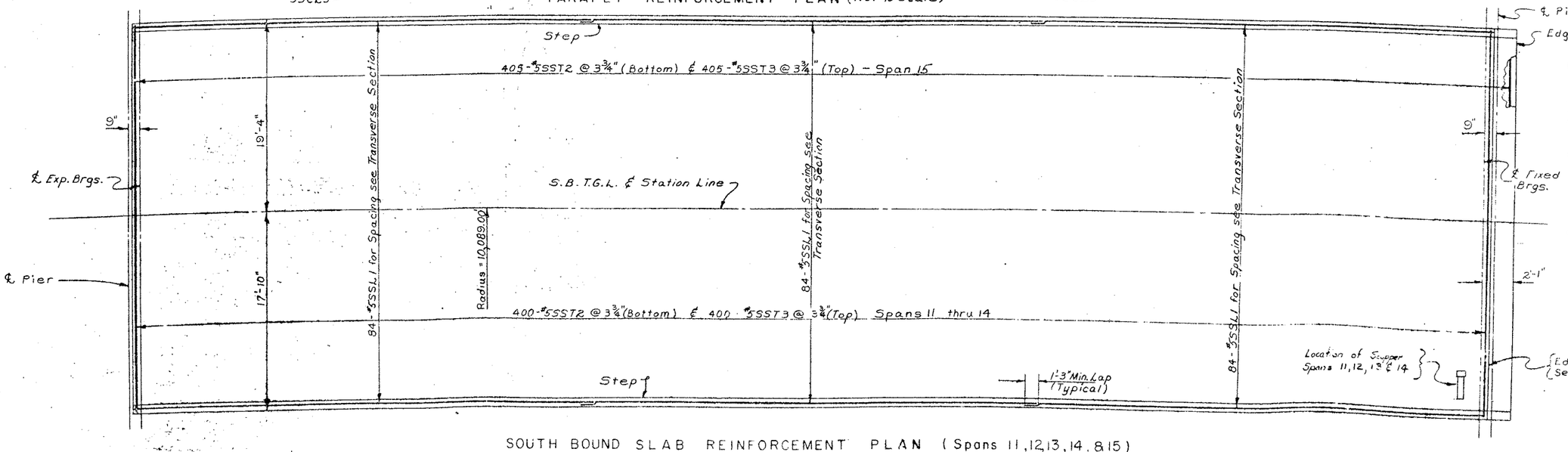
TRANSVERSE SECTION SOUTHBOUND SPANS 11,12,13,14 & 15
Scale: ½" = 1'-0"



PARAPET DETAIL
Scale: 1" = 1'-0"

Note: East parapet shown, West parapet similar by rotation.

PARAPET REINFORCEMENT PLAN (Not to Scale)



Notes:

Holes for ⅞"ϕ rivets or high strength bolts may be omitted and welding substituted if contractor so elects. When the contractor elects to substitute the welded connection for the bolted connection shown, the amount of welding used shall be equivalent in strength to the bolts removed.

For details of Railing, Railing Anchorage and Granite Curbs see Dwgs. #35 and 36. For Joint Details see Dwg. #33 & 34.

SOUTH BOUND SLAB REINFORCEMENT PLAN (Spans 11,12,13,14 & 15)
Scale: 3/16" = 1'-0"

PROJECT ENGINEER R. Parker
IN CHARGE OF J. B. Sherman
DESIGNED BY D. H. Smith
DESIGN CHECKED BY S. Rowe
DETAILED BY J. C. Thompson
DETAIL CHECKED BY [illegible]

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

SPANS 11 THRU 15 SOUTHBOUND

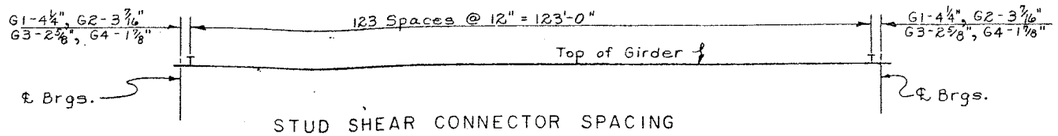
DRAWING NO. 37 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO	TOTAL SHEETS
1	NEW YORK	I-690-3(28) I-481 2(118)	206	309

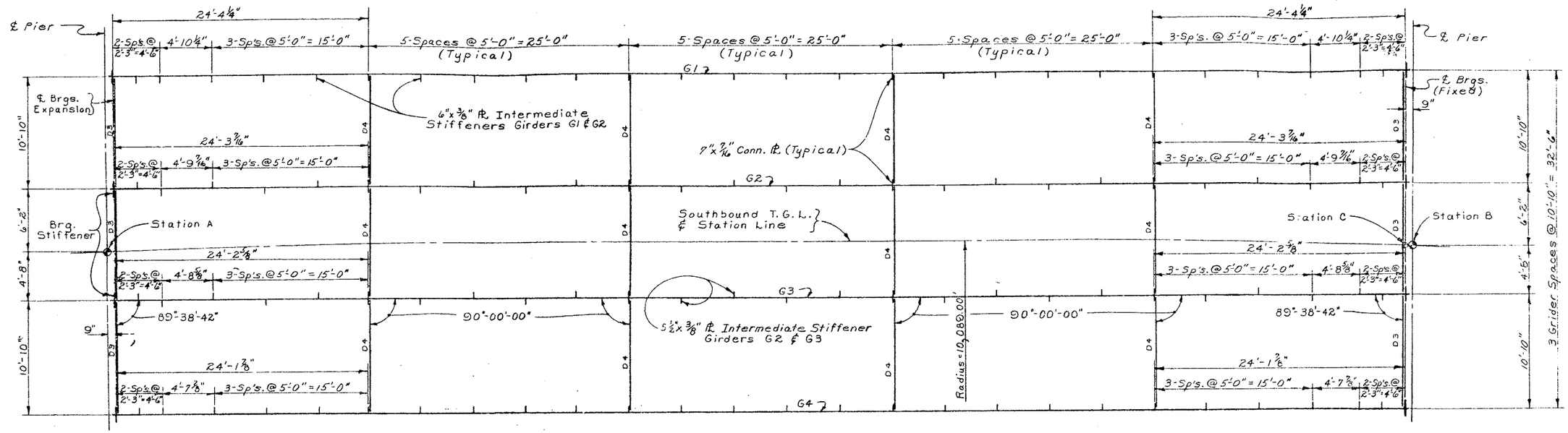
INTERSTATE ROUTE CONNECTION STG
DEWITT YARD (PHASE X)
ONONDAGA COUNTY

TABLE OF STATIONS

SPAN	STATION "A" STATION	STATION "A" ℄	STATION "B" STATION	STATION "B" ℄	STATION "C" STATION	STATION "C" ℄
11 S.B.	232+63.86	℄ Pier #9 S.B.	233+88.86	℄ Pier #10 S.B.	—	—
12 S.B.	233+88.86	℄ Pier #10 S.B.	235+13.86	℄ Pier #11 S.B.	—	—
13 S.B.	235+13.86	℄ Pier #11 S.B.	236+38.86	℄ Pier #12 S.B.	—	—
14 S.B.	236+38.86	℄ Pier #12 S.B.	237+63.86	℄ Pier #13 S.B.	—	—
15 S.B.	237+63.86	℄ Pier #13 S.B.	—	—	238+88.11	℄ Fixed Brgs No. Abut. (S.B.)



STUD SHEAR CONNECTOR SPACING
Not to Scale



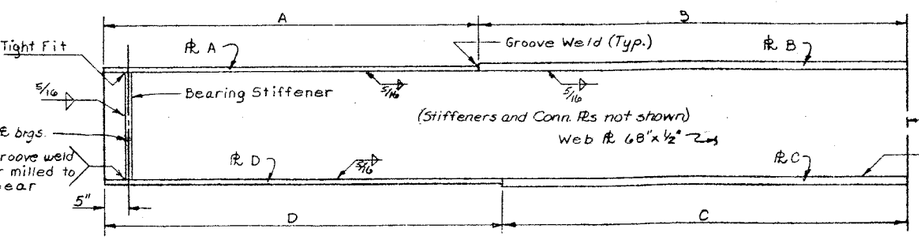
Note:
See Transverse Section for Diaphragms.

STEEL FRAMING PLAN (SPANS 11, 12, 13, 14 & 15 SOUTHBOUND)
Scale: 3/16" = 1'-0"

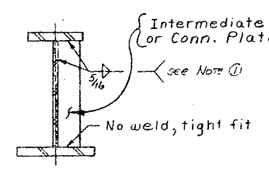
Notes:

Web and flanges shall be A.S.T.M. designation A441 Steel.

Stiffeners, connection plates, and diaphragms shall be A.S.T.M. designation A36 Steel.



GIRDER ELEVATION
Not to Scale



TYPICAL SECTION
Not to Scale

Note ①: Where connection plates are used in pairs, the fillet weld at top of stiffener is optional. See Note "Sup 4" in the Superstructure Notes.

THEO. BOTTOM OF SLAB ELEV. (Southbound)

GIRDER	SPAN	℄ So. Brg.	℄ Span	℄ No. Brg.
G1	11	441.24	440.03	438.56
G2	11	441.12	439.30	438.33
G3	11	440.96	439.58	438.11
G4	11	440.74	439.35	437.88
G1	12	438.52	436.95	435.30
G2	12	438.29	436.73	435.07
G3	12	438.07	436.50	434.85
G4	12	437.84	436.27	434.62
G1	13	435.66	433.51	431.67
G2	13	435.03	433.28	431.45
G3	13	434.81	433.06	431.22
G4	13	434.58	432.83	431.00
G1	14	431.63	429.72	427.89
G2	14	431.40	429.49	427.66
G3	14	431.18	429.26	427.44
G4	14	430.95	429.04	427.21
G1	15	427.85	426.16	424.62
G2	15	427.62	425.93	424.39
G3	15	427.40	425.71	424.16
G4	15	427.17	425.48	423.94

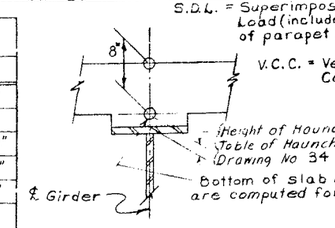
SPAN	GIRDER	DEFLECTIONS (ft.) STEEL	SLAB	SDL	TOTAL	CAMBER VCC (ft)	TOTAL (ft)	TOTAL (in.)
Spans 11, 12 & 13 (S.B.)	G1 and G4	.07	.12	.08	.27	.04	.31	3¾
	G2 and G3	.08	.24	.03	.35	.04	.39	4⅝
Span 14 (S.B.)	G1 and G4	.07	.12	.08	.27	.05	.22	2⅝
	G2 and G3	.08	.24	.03	.35	-.05	.30	3⅝
Span 15 (S.B.)	G1 and G4	.07	.12	.08	.27	-.07	.20	2⅜
	G2 and G3	.08	.24	.03	.35	-.07	.28	3⅜

S.D.L. = Superimposed Dead Load (includes weight of parapet and railing.)

V.C.C. = Vertical Curve Correction

TABLE OF AZIMUTHS

LOCATION	AZIMUTHS
℄ Pier #10 (S.B.)	262°-32'-11"
℄ Pier #11 (S.B.)	263°-14'-46"
℄ Pier #12 (S.B.)	263°-57'-22"
℄ Pier #13 (S.B.)	264°-39'-57"
℄ Pier #14 (S.B.)	265°-22'-33"
℄ Fixed Brgs. @ North Abut. (S.B.)	266°-05'-08"
℄ Girders, Span 11 (SB)	352°-53'-28"
℄ Girders, Span 12 (S.B.)	353°-36'-04"
℄ Girders, Span 13 (S.B.)	354°-18'-40"
℄ Girders, Span 14 (S.B.)	355°-01'-15"
℄ Girders, Span 15 (S.B.)	355°-43'-51"



SOUTHBOUND GIRDER TABLE — SPANS 11 thru 15

GIRDER	SPAN C. to C. BRGS.	FLANGE SIZES PL A	PL B	PL C	PL D	FLANGE DIMENSIONS A	B	C	D	Brg. Stiffener 2-PLs. required each end of Girder	Intermediate Stiffener Size
G1	123'-8½"	16"x¾"	16"x1⅛"	23"x2"	23"x1"	28'-9¼"	33'-6"	40'-6"	21'-5¼"	9"x⅞"	6"x⅜"
G2	123'-6 15/16"	13"x¾"	13"x1½"	22"x1½"	22"x1"	28'-8 7/16"	33'-6"	33'-6"	28'-8 7/16"	8"x¾"	5½"x⅜"
G3	123'-5 5/16"	13"x¾"	13"x1½"	22"x1½"	22"x1"	28'-7⅝"	33'-6"	33'-6"	28'-7⅝"	8"x¾"	5½"x⅜"
G4	123'-3 11/16"	16"x¾"	16"x1½"	23"x2"	23"x1"	28'-6⅞"	33'-6"	40'-6"	21'-6⅞"	9"x⅞"	6"x⅜"

PROJECT ENGINEER R. Parker
IN CHARGE OF J. B. Sherman
DESIGNED BY N. J. Toppses
DESIGN CHECKED BY S. Rowe
DETAILED BY J. C. Thompson
DETAIL CHECKED BY [illegible]

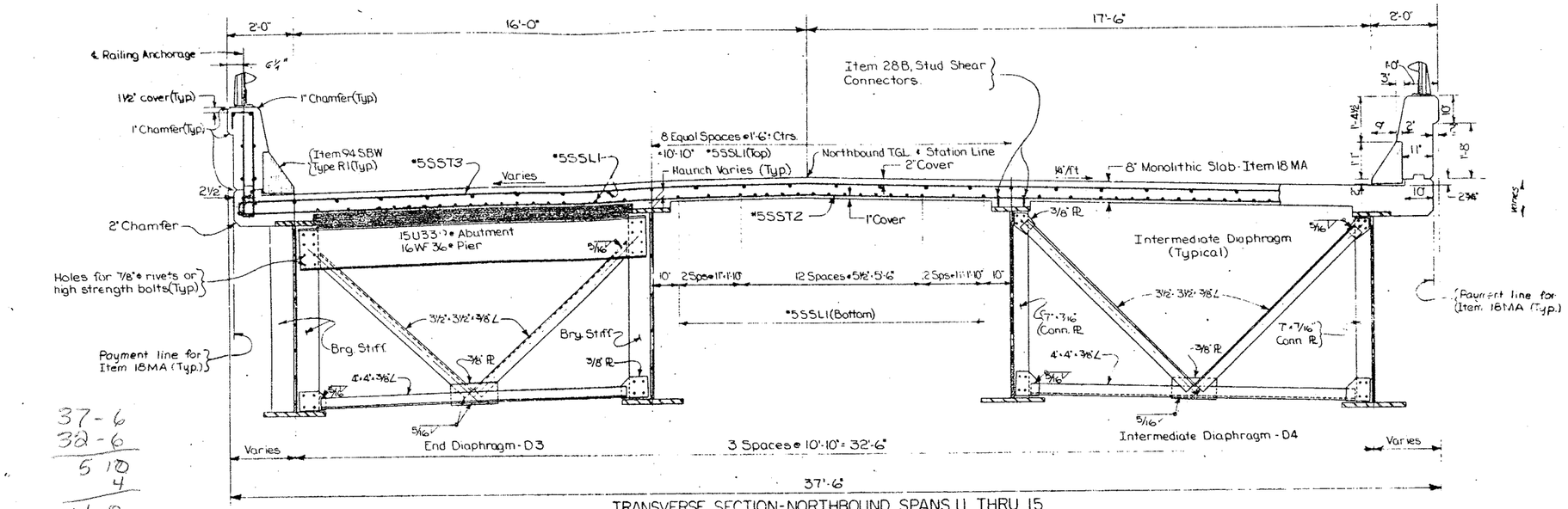
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

SPANS 11 THRU 15 SOUTHBOUND

DRAWING NO. 28 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(28) I-481-2(1)(2)	207	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

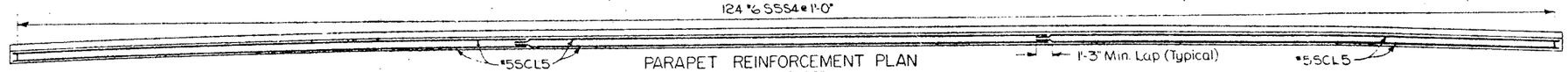


TRANSVERSE SECTION - NORTHBOUND SPANS 11 THRU 15
Scale ½" = 1'-0"

37-6
32-6
5 10
4
4-8
2-4

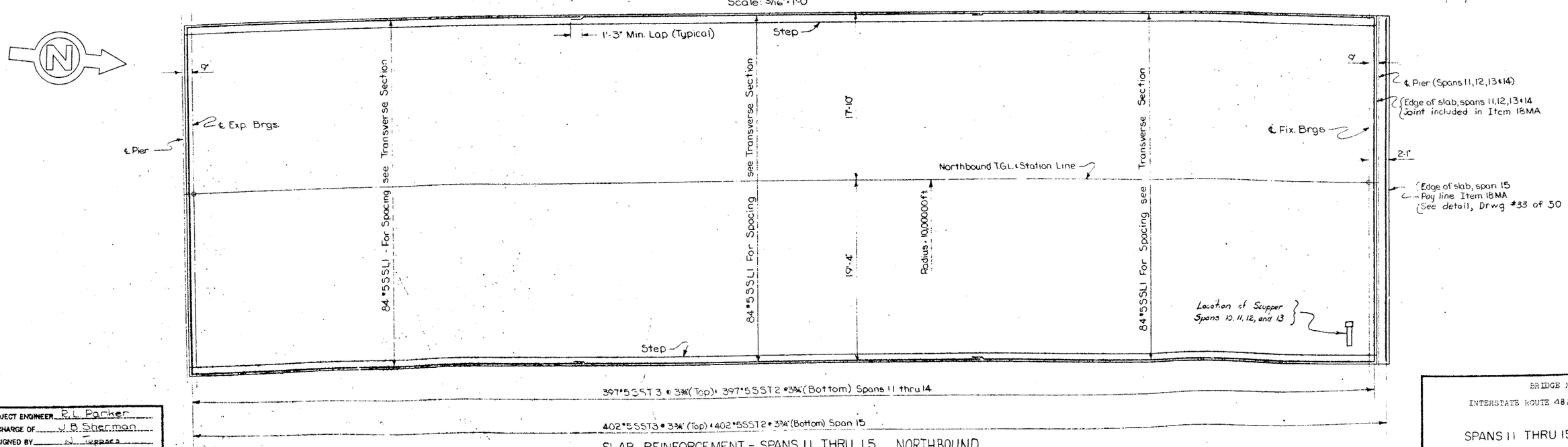
Notes:
Holes for 7/8" ϕ rivets or high strength bolts may be omitted and welding substituted if the contractor so elects. When the contractor elects to substitute the Welded Connection for the Bolted Connection shown, the amount of welding used shall be equivalent in strength to the bolts removed.

For details of Railing, Railing Anchorage, Granite Curbs and Joint Details, See Misc Detail Sheets.



PARAPET REINFORCEMENT PLAN
Scale: 3/16" = 1'-0"

Note: West parapet shown
East parapet similar



SLAB REINFORCEMENT - SPANS 11 THRU 15 NORTHBOUND
Scale 3/16" = 1'-0"

PROJECT ENGINEER R. L. Parker
IN CHARGE OF J. B. Sherman
DESIGNED BY N. Tepper
DESIGN CHECKED BY R. Smith
DETAILED BY J. F. Darcy
DETAIL CHECKED BY J. W. Eble

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

SPANS 11 THRU 15 NORTHBOUND

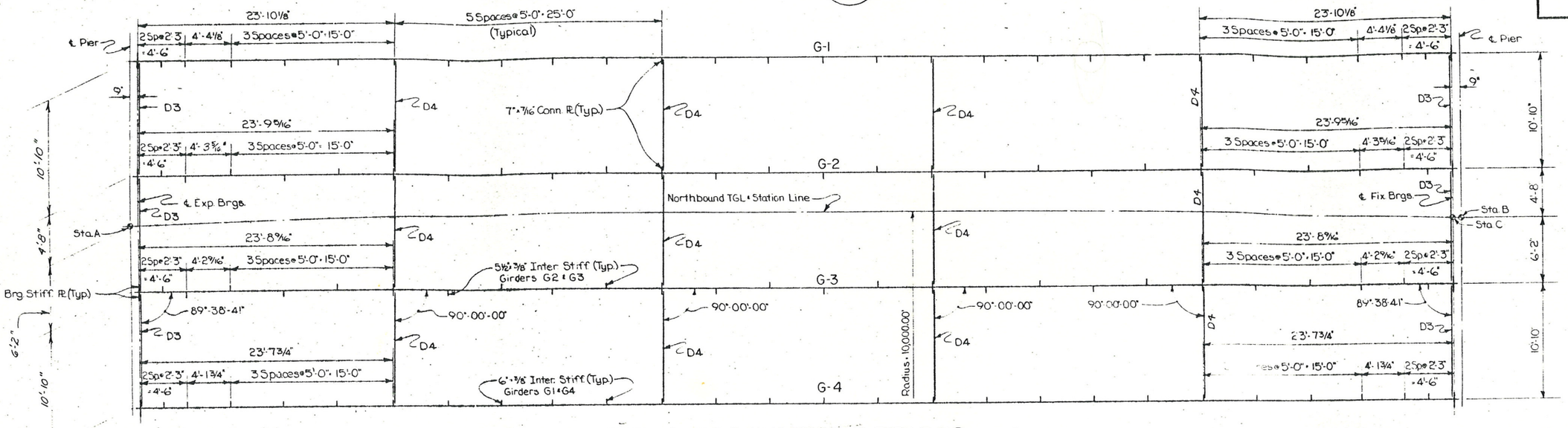
DRAWING NO. 29 OF 50

F.I.S.H. 70-7

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-890-3(23) I-481-2(113)	208	309

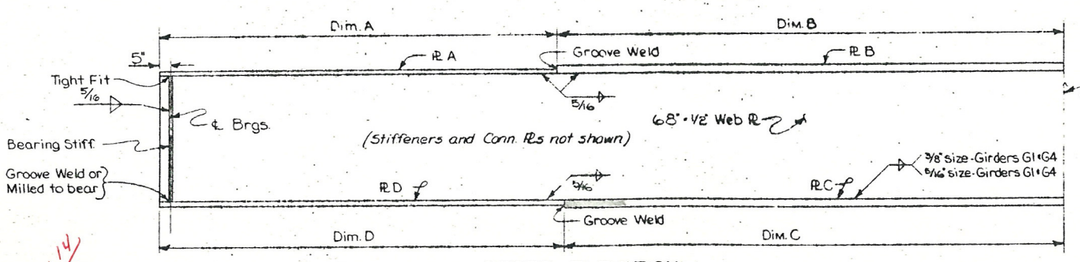
INTERSTATE ROUTE CONNECTION 570
BURTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

345-5584

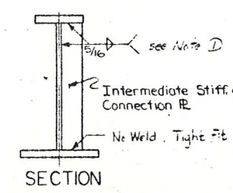


STEEL FRAMING PLAN – SPANS 11 THRU 15 N.B.
Scale: 3/16" = 1'-0"

TABLE OF AZIMUTHS	
LOCATION	AZIMUTH
℄ Pier #10 N.B.	262°-45'-57"
℄ Pier #11 N.B.	263°-28'-36"
℄ Pier #12 N.B.	264°-11'-13"
℄ Pier #13 N.B.	264°-53'-51"
℄ Pier #14 N.B.	265°-36'-28"
℄ Fixed Bearings @ North Abutment N.B.	266°-19'-06"
℄ girders, Span 11 N.B.	353°-07'-17"
℄ girders, Span 12 N.B.	353°-49'-55"
℄ girders, Span 13 N.B.	354°-32'-32"
℄ girders, Span 14 N.B.	355°-15'-10"
℄ girders, Span 15 N.B.	355°-57'-47"

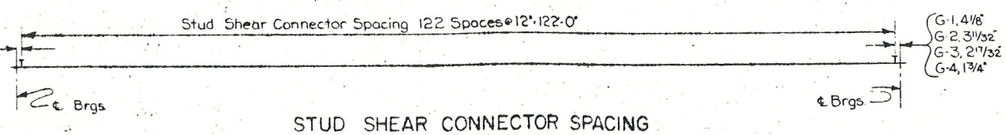


GIRDER ELEVATION
Not to Scale



SECTION

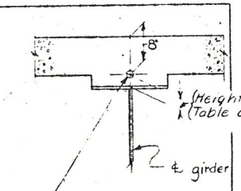
Web and flanges shall be A.S.T.M. Designation A441 Steel. Stiffeners, connection plates and diaphragms shall be A.S.T.M. Designation A36 Steel.



STUD SHEAR CONNECTOR SPACING
Not to Scale

Note ①: Where connection plates are used in pairs, the fillet weld at top of stiffener is optional. See Note "Sup 4" in the Superstructure Notes.

BOTTOM OF SLAB ELEVATIONS NORTHBOUND				
GIRDER	SPAN	℄ EXP. BRGS.	℄ SPAN	℄ FIX. BRGS.
G-1	11	441.36	440.02	438.57
G-2	11	441.16	439.80	438.34
G-3	11	440.94	439.57	438.12
G-4	11	440.72	439.34	437.89
G-1	12	438.53	436.98	435.34
G-2	12	438.30	436.75	435.12
G-3	12	438.08	436.52	434.89
G-4	12	437.85	436.30	434.66
G-1	13	435.30	433.57	431.75
G-2	13	435.07	433.34	431.53
G-3	13	434.85	433.12	431.30
G-4	13	434.62	432.89	431.08
G-1	14	431.71	429.80	427.98
G-2	14	431.48	429.57	427.75
G-3	14	431.26	429.34	427.53
G-4	14	431.03	429.12	427.30
G-1	15	427.93	426.25	424.71
G-2	15	427.71	426.02	424.48
G-3	15	427.48	425.80	424.26
G-4	15	427.26	425.57	424.03



Elevations shown in table are computed for this point.

NORTHBOUND GIRDER TABLE – SPANS 10 THRU 14										
GIRDER	SPAN LENGTH ℄ TO ℄ BEARINGS	FLANGE SIZE PL A	PL B	PL C	PL D	FLANGE DIMENSIONS A	B	C	D	BEARING STIFF. 2 PLs Required at each end of girder	INTERMEDIATE STIFFENER SIZE
G1	122'-8 5/16"	16" x 3/4"	16" x 1 1/2"	23" x 2"	23" x 1"	23'-3 1/8"	33'-6"	40'-6"	21'-3 1/8"	9" x 7/8"	6" x 3/8"
G2	122'-6 11/16"	13" x 3/4"	13" x 1 1/2"	22" x 1 1/2"	22" x 1"	28'-2 7/8"	33'-6"	33'-6"	28'-2 7/8"	8" x 3/4"	5 1/2" x 3/8"
G3	122'-5 1/16"	13" x 3/4"	13" x 1 1/2"	22" x 1 1/2"	22" x 1"	28'-1 9/16"	33'-6"	33'-6"	28'-1 9/16"	8" x 3/4"	5 1/2" x 3/8"
G4	122'-3 7/16"	16" x 3/4"	16" x 1 1/2"	23" x 2"	23" x 1"	28'-0 3/4"	33'-6"	40'-6"	21'-0 3/4"	9" x 7/8"	6" x 3/8"

PROJECT ENGINEER	R. L. Porter		
IN CHARGE OF	J. B. Sherman		
DESIGNED BY	J. Tarasek	27.84	20.84
DESIGN CHECKED BY	D. Smith	27.78	27.84
DETAILED BY	J. F. Darcy	27.71	
DETAIL CHECKED BY	J. W. Fabel		

DEFLECTIONS (FT.)						CAMBER		
SPAN	GIRDER	STEEL	SLAB	S.D.L.	TOTAL	V.C.C. (FT.)	TOTAL FT.	TOTAL IN.
Spans 11, 12 & 13 Northbound	G1 & G4	.07	.12	.08	.27	.04	.31	3 3/4"
	G2 & G3	.08	.24	.03	.35	.04	.39	4 5/8"
Span 14 Northbound	G1 & G4	.07	.12	.08	.27	-.04	.23	2 3/4"
	G2 & G3	.08	.24	.03	.35	-.04	.31	3 3/4"
Span 15 Northbound	G1 & G4	.07	.12	.08	.27	-.07	.20	2 3/8"
	G2 & G3	.08	.24	.03	.35	-.07	.28	3 3/8"

V.C.C. - Vertical Curve Camber
S.D.L. (Superimposed Dead Load) - Includes weight of parapet & railing.

TABLE OF STATIONS						
SPAN	STATION A		STATION B		STATION C	
	STATION	℄	STATION	℄	STATION	℄
11 (NB)	230+98.76	℄ Pier #10 (NB)	232+22.76	℄ Pier #11 (NB)	—	—
12 (NB)	232+22.76	℄ Pier #11 (NB)	233+46.76	℄ Pier #12 (NB)	—	—
13 (NB)	233+46.76	℄ Pier #12 (NB)	234+70.76	℄ Pier #13 (NB)	—	—
14 (NB)	234+70.76	℄ Pier #13 (NB)	235+94.76	℄ Pier #14 (NB)	—	—
15 (NB)	235+94.76	℄ Pier #14 (NB)	—	—	237+18.01	℄ Fix. Brgs. N.A. (NB)

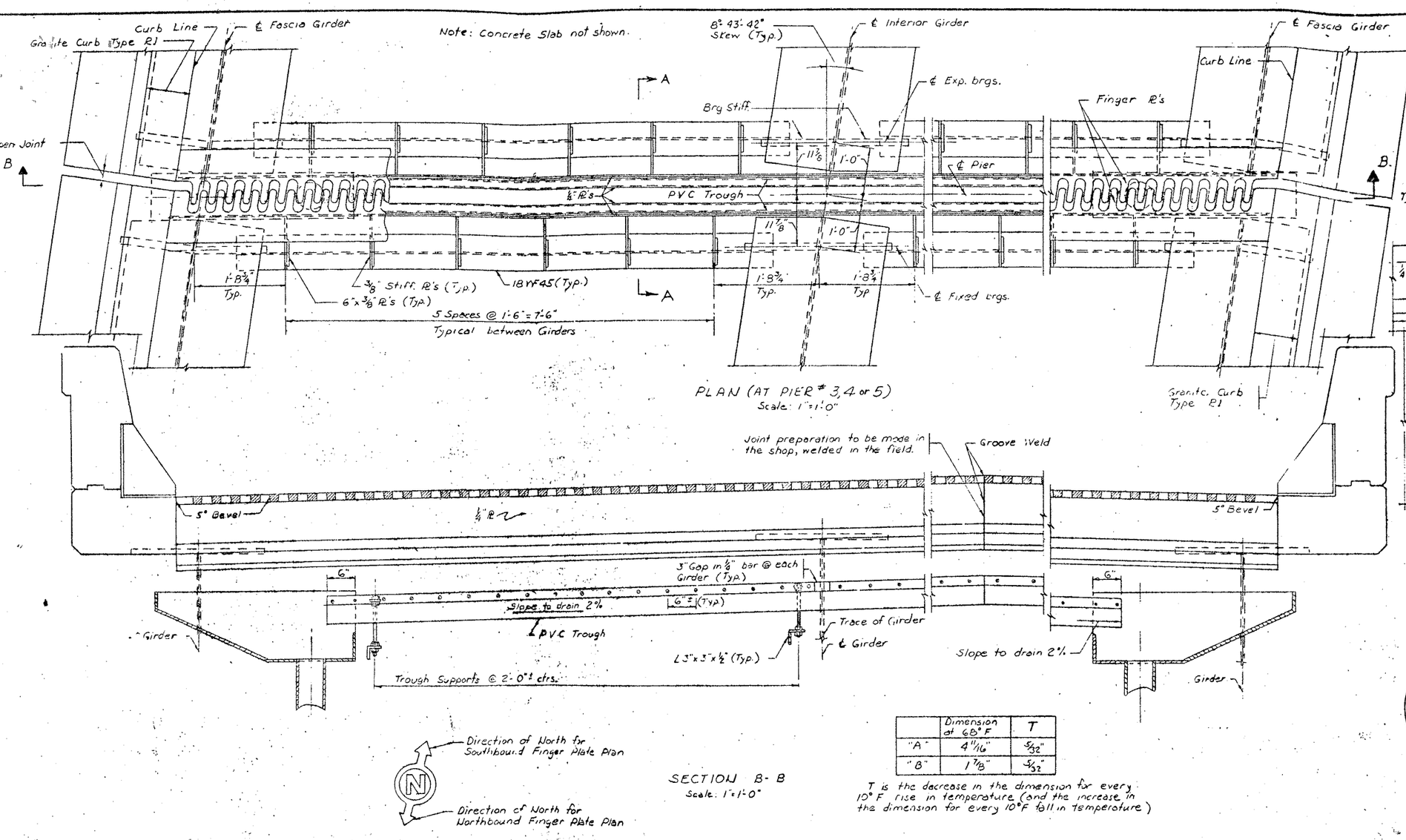
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

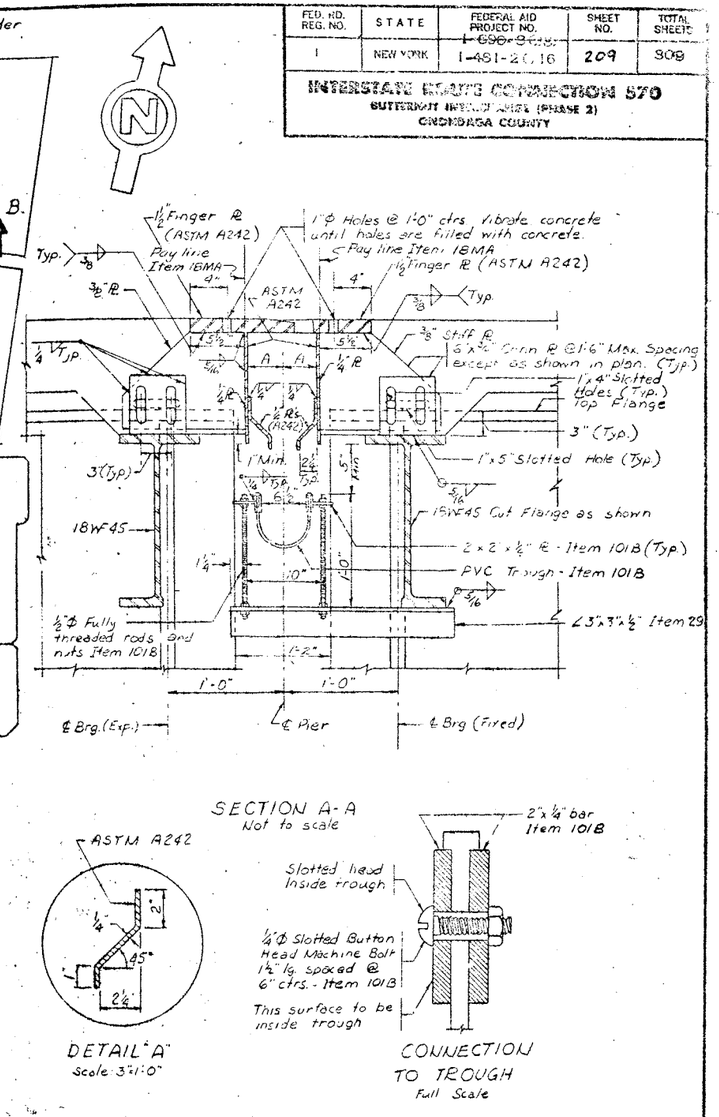
SPANS 11 THRU 15 NORTHBOUND

DRAWING NO. 30 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	~~I-690-3(43)~~ I-481-2(16)	209	308

INTERSTATE ROUTE 690 CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY





	Dimension at 68° F	T
"A"	4 11/16"	5/32"
"B"	1 7/8"	5/32"

T is the decrease in the dimension for every 10° F rise in temperature (and the increase in the dimension for every 10° F fall in temperature)

SECTION B-B
Scale: 1" = 1'-0"

Direction of North for Southbound Finger Plate Plan

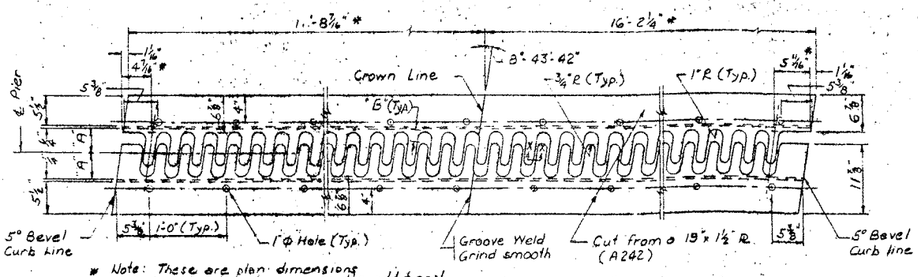
Direction of North for Northbound Finger Plate Plan

SECTION A-A
Not to scale

DETAIL "A"
Scale: 3" = 1'-0"

CONNECTION TO TROUGH
Full Scale

NOTES:
Finger R's shall follow slope and grade of roadway. All steel shall be Item 29 unless otherwise indicated.
The 1/2" finger plates, the 1/4" vertical side plates, and 1/4" bent deflector plates shall be corrosion resistant steel A.S.T.M. Designation A242.

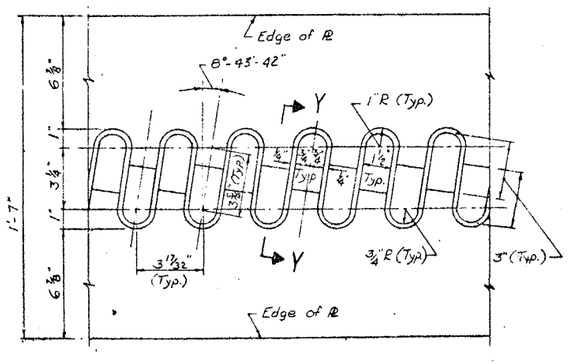


* Note: These are plan dimensions and do not take into account the additional length needed due to the cross slope and profile of the roadway.

FINGER PLATE PLAN
Scale: 1" = 1'-0"

SECTION X-X
No Scale

SECTION Y-Y
No Scale



FINGER DETAIL
Scale: 3" = 1'-0"

PROJECT ENGINEER R. Parker
IN CHARGE OF V. Sherman
DESIGNED BY N.A. Toppses
DESIGN CHECKED BY F. Eckel
DETAILED BY N.A. Toppses
DETAIL CHECKED BY J. Kutcal

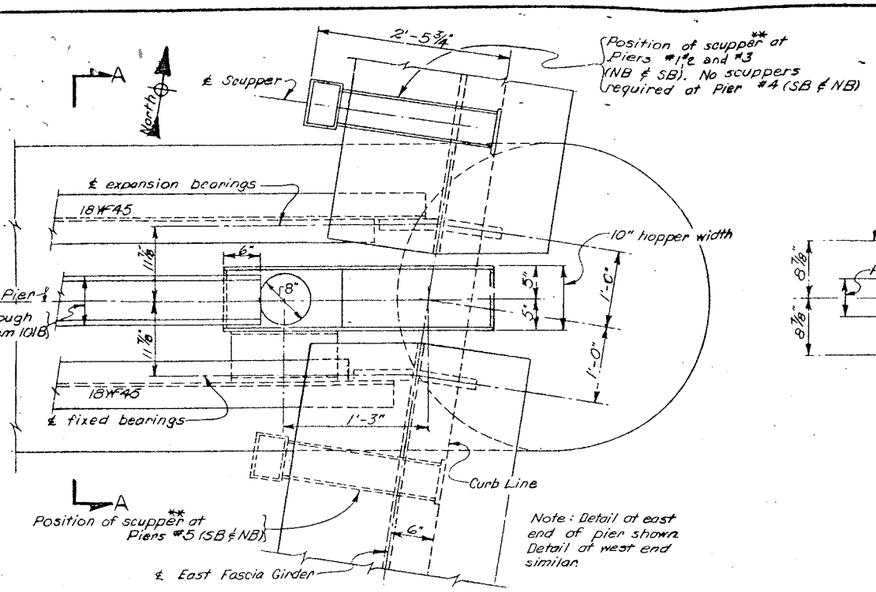
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

FINGER JOINT AT PIERS 3,4 & 5

DRAWING NO. 31 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(23) I-481-2(116)	210	309

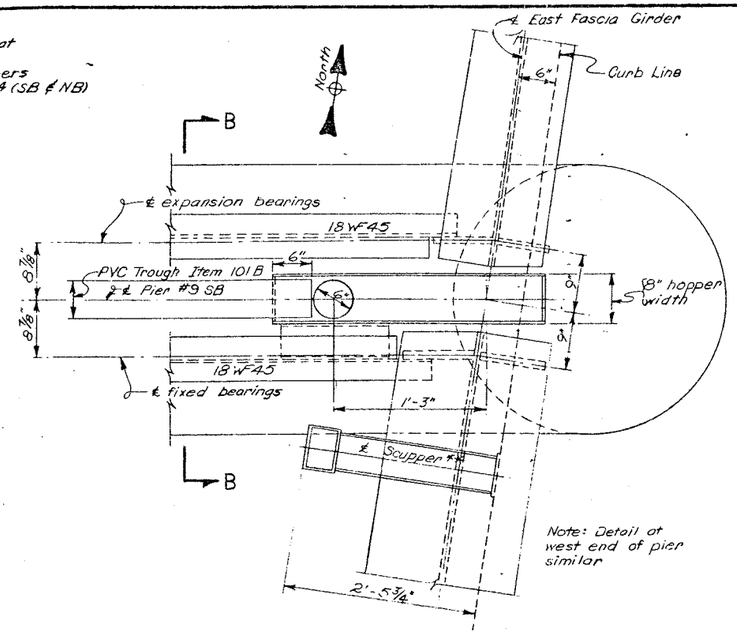
INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



Note: Detail at east end of pier shown. Detail at west end similar.

PLAN AT EAST END, PIERS 1,2,3,4 & 5 (NB & SB)

Scale: 1" = 1'-0"



Note: Detail at west end of pier similar

PLAN AT EAST END OF PIER #9 SOUTHBOUND

Scale: 1" = 1'-0"

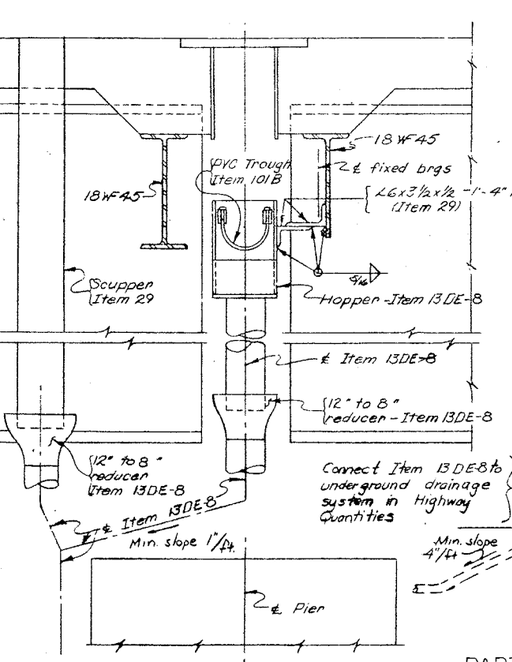
** Adjust exact location of scuppers which drain into downspouts systems so as to accommodate the location of the downspouts.
Adjust exact location of scuppers which drain directly onto the ground so as not to spill on piers or onto diaphragms

Hoppers and downspouts (including all necessary pipe supports, hangers, and fittings) shall be paid for under Item 13DE-6 & Item 13DE-8.

Hopper shall be fabricated from steel plates, 3/8 inch thick, A.S.T.M. Designation A36 Steel. Hopper shall be galvanized after fabrication is complete in accordance with M19.

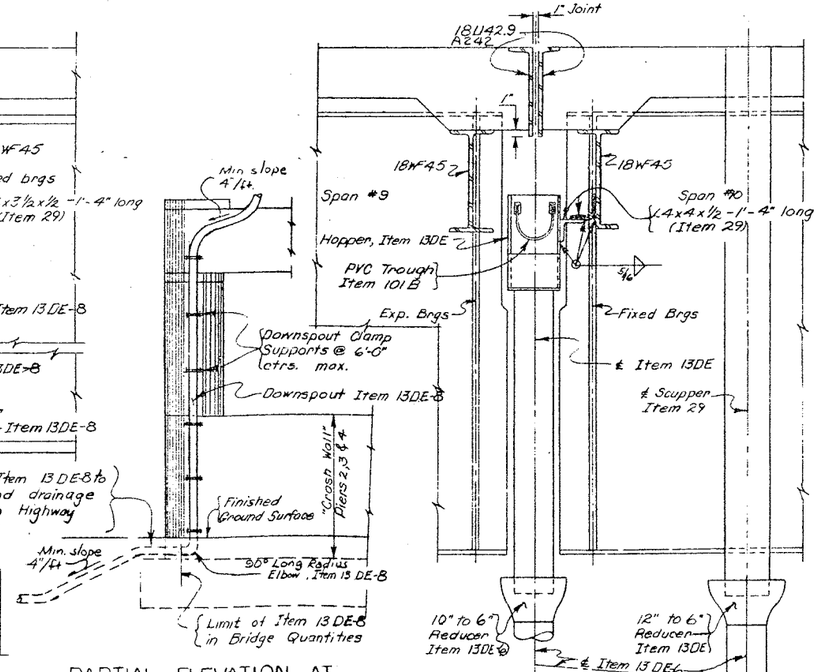
All bends in downspouts will be long radius bends. All indicated slopes on horizontal pipe runs will be the minimum allowed, and the long radius bends will be fabricated to take this slope into account. All costs involved will be included in the price bid for Item 13DE-6 & Item 13DE-8

PIER NO.	JOINTS: EXP. JT. SEALED WITH PREFORMED JOINT SEALER	JOINTS: OPEN JOINT WITH HOPPER AND TROUGH	JOINTS: FINGER JOINT WITH HOPPER AND TROUGH	SCUPPER **	DOWNSPOUT
1		✓		(East & West curb lines North side of Pier)	✓ (8" dia)
2		✓		(East & West curb lines North side of Pier)	✓ (8" dia)
3			✓	(East & West curb lines North side of Pier)	✓ (8" dia)
4			✓	None	✓ (8" dia.)
5			✓	(East & West curb lines South side of Pier)	✓ (8" dia)
6	✓			(East & West curb lines South side of Pier)	✓ (8" dia)
7	✓			(East & West curb lines South side of Pier)	✓ (8" dia.)
8	✓			(East & West curb lines South side of Pier)	
9	NB only	SB only		(East & West curb lines South side of Pier	SB only (6" dia.)
10	✓			(East curb line only South side of Pier)	
11	✓			(East curb line only South side of pier)	
12	✓			(East curb line only South side of pier)	
13	✓			(East curb line only South side of pier)	
14	✓			(East curb line only South side of pier)	



SECTION A-A

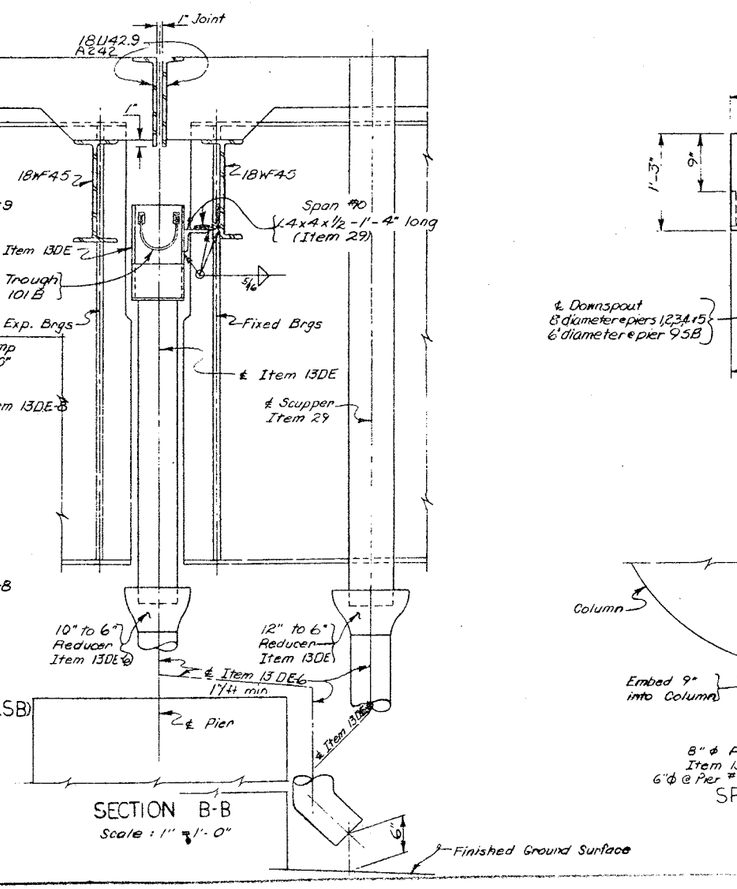
Scale: 1" = 1'-0"



PARTIAL ELEVATION AT PIERS 1,2,3,4,5*,6 & 7 (NB & SB)

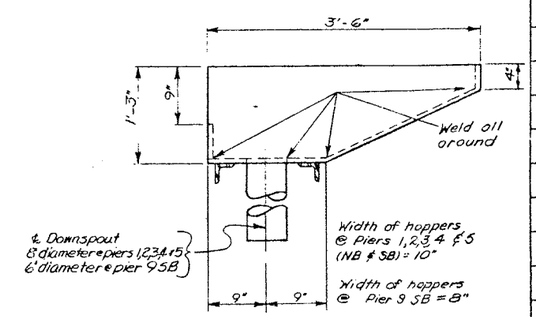
Scale: 3/16" = 1'-0"

*No Hopper at Piers #6 & #7 Downspout drains only the scupper.



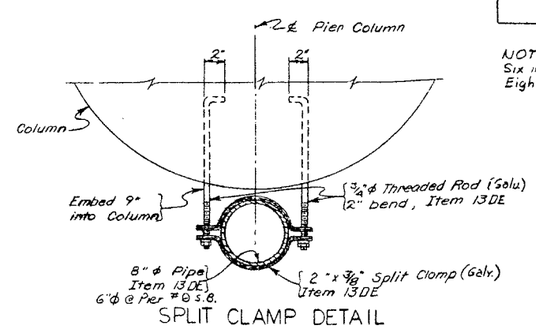
SECTION B-B

Scale: 1" = 1'-0"



HOPPER ELEVATION

Scale: 1" = 1'-0"



SPLIT CLAMP DETAIL

Scale: 1½" = 1'-0"

NOTES:
Six inch diameter downspouts shall be paid for under Item 13 DE-6
Eight inch diameter downspouts shall be paid for under Item 13 DE-8

PROJECT ENGINEER R. Parker
IN CHARGE OF F.W. Eckel
DESIGNED BY
DESIGN CHECKED BY
DETAILED BY J. Dunnant
DETAIL CHECKED BY F.W. Eckel

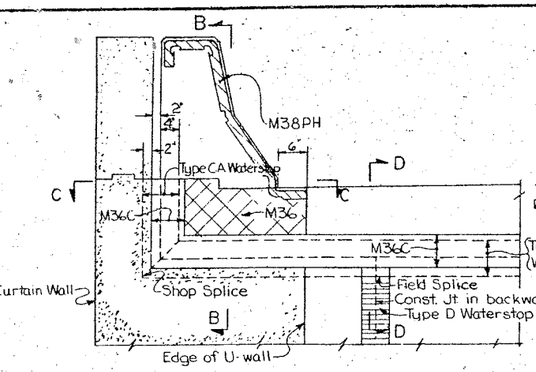
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

DOWNSPOUT DETAILS

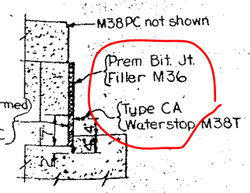
DRAWING NO. 32 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-080-8(18)	211	309

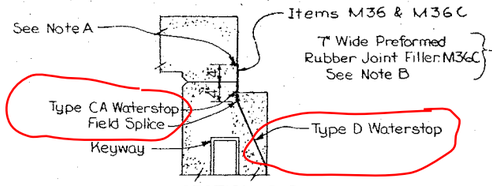
INTERSTATE ROUTE CONNECTION 690
DEWITT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



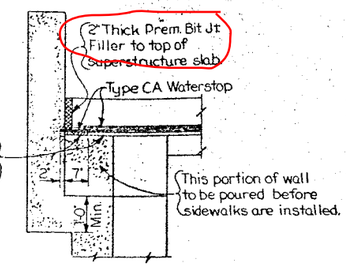
SECTION LOOKING TOWARD SUPERSTRUCTURE AT ABUTMENTS



SECTION B-B

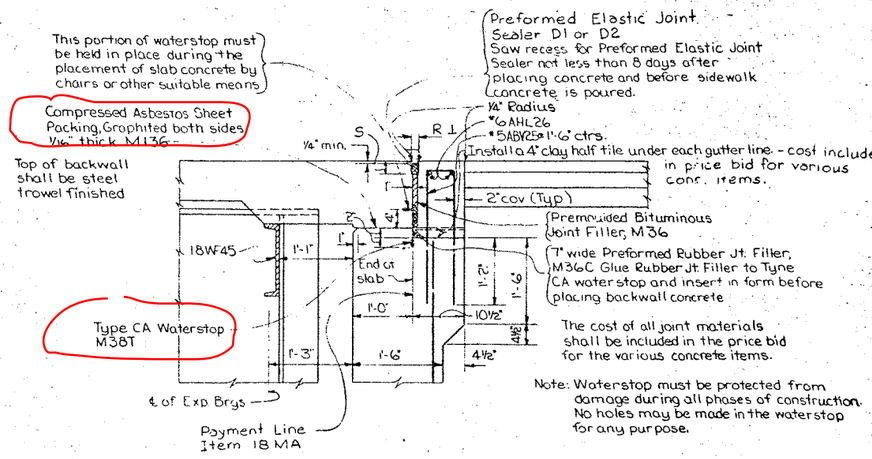


SECTION D-D

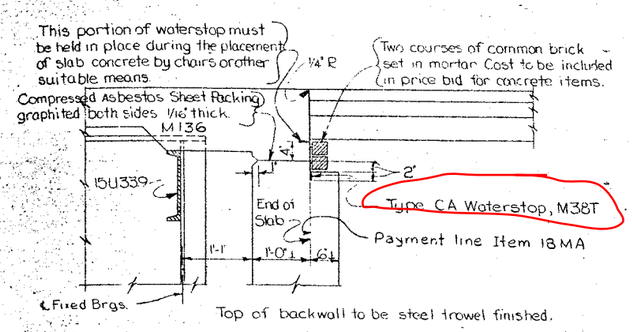


SECTION C-C

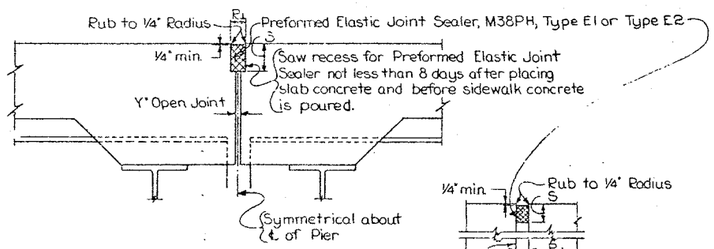
INSTALLATION OF WATER STOPS AT ABUTMENTS
Not to Scale



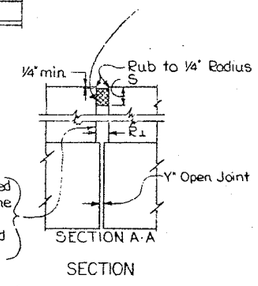
EXPANSION JOINT AT SOUTH ABUTMENT
Not to Scale



FIXED JOINT AT NORTH ABUTMENT
Not to Scale

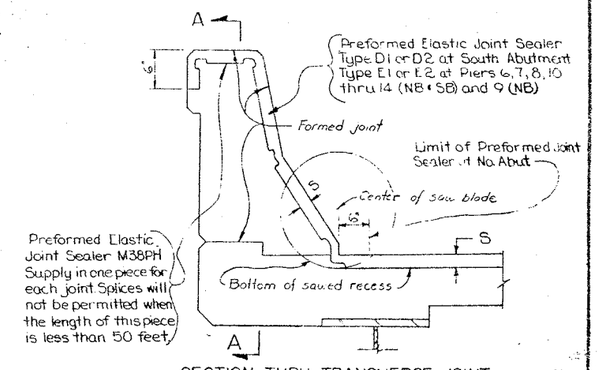


ROADWAY SECTION

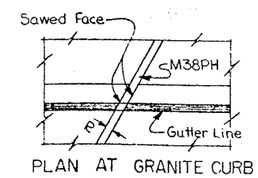


SECTION A-A
SECTION

EXPANSION JOINT AT PIERS #6, #7, #8, #10 THRU #14 (NB & SB) & #9 (NB)
Not to Scale



SECTION THRU TRANSVERSE JOINT



PLAN AT GRANITE CURB

PARAPET DETAILS FOR PREFORMED ELASTIC JOINT SEALER
Not to Scale

JOINT DIMENSIONS				
Preformed Elastic Joint Sealer	R	S	Y	T
Type E1	1 7/8"	4 1/8"	3/4"	3/32"
Type E2	1 7/8"	3 3/4"	3/4"	3/32"
Type D1	1 5/8"	3 3/8"	1"	3/64"
Type D2	1 5/8"	3 3/8"	1"	3/64"

Notes:
'R' dimension is measured at 68° F.
'T' is the amount that 'R' must be decreased for every 10° rise in temperature or increased for every 10° fall in temperature.

Notes. A) This portion of waterstop must be held in place during the placement of slab concrete by chairs or other suitable means.
B) Glue Rubber Joint Filler to Type CA Waterstop with an approved type of commercial cement and insert in form before placing backwall concrete.
Exposed waterstop must be protected from damage by suitable means during all phases of construction. No holes may be made in the waterstop for any purpose.
The cost of all joint materials shall be included in the price bid for the various concrete items.
All splices shall be thermal splices. Method for field splicing waterstops shall be approved by Deputy Chief Engineer, Design.

PROJECT ENGINEER R. L. Parker
IN CHARGE OF J. B. Sherman
DESIGNED BY
DESIGN CHECKED BY
DETAILED BY J. F. Darcy
DETAIL CHECKED BY

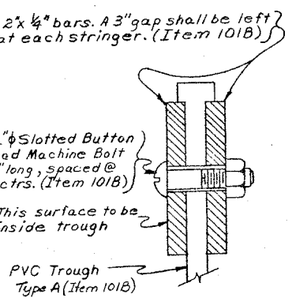
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

MISCELLANEOUS DETAILS.

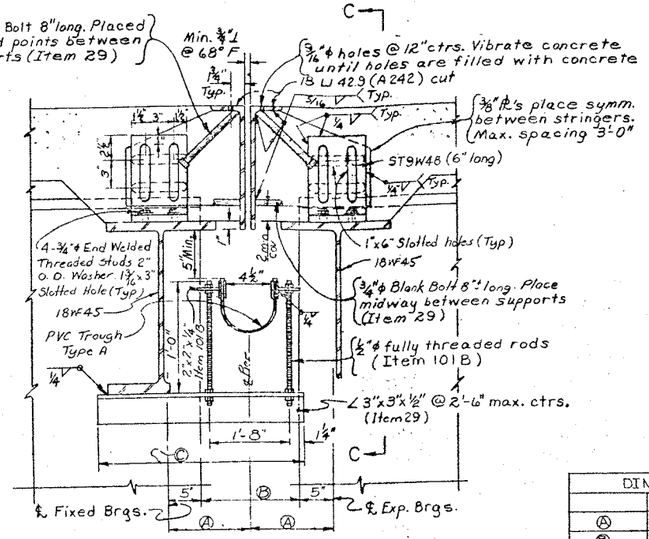
DRAWING NO. 33 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-890-3(29) I-481-A(118)	212	309

INTERSTATE ROUTE 481 IN CONNECTION WITH
INTERHOUSE INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



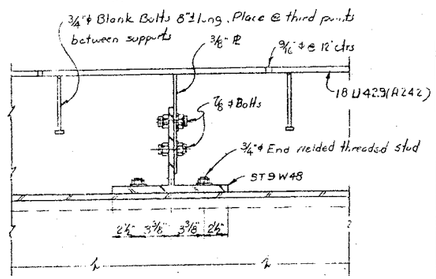
CONNECTION TO TROUGH
Not to Scale



OPEN JOINT AT PIERS #9SB, #1 & 2 NB & SB
Not to Scale

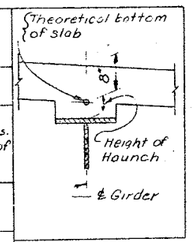
DIMENSION TABLE		
	#1&2 NB·SB	#9SB
Ⓐ	1'-0"	9"
Ⓑ	1'-2"	8"
Ⓒ	2'-0"	1'-9"

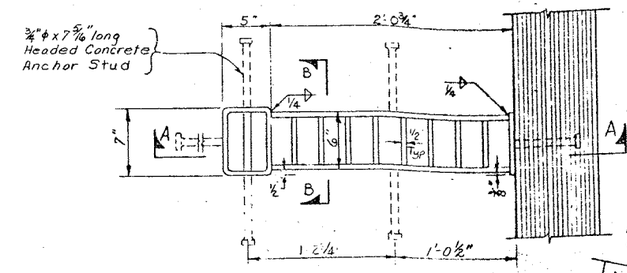
Note:
¾"ϕ end welded headed studs, 8" ± long, may be substituted for the ¾"ϕ Blank Bolts.



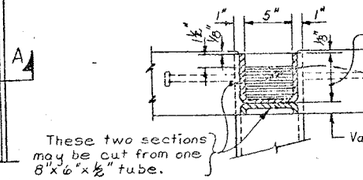
SECTION C-C
No Scale

TABLE OF HAUNCH HEIGHTS (AT ENDS OF GIRDERS)			
GIRDER		Height of Haunch	
		@ ℄ exp. brgs. (South end of Girder)	@ ℄ fix. brgs. (North End of Girder)
Span 1 (SB & NB)	Fascias (G1 & G4)	3½"	3½"
	Interiors (G2 & G3)	3½"	3½"
Spans 2 (SB & NB)	Fascias (G1 & G4)	3½"	3½"
	Interiors (G2 & G3)	3½"	3½"
Span 3 (SB & NB)	Fascias (G1 & G4)	3⅜"	3⅜"
	Interiors (G2 & G3)	3½"	3½"
Spans 4, 5 & 6 (SB & NB)	Fascias (G1 & G4)	3¼"	3¼"
	Interiors (G2 & G3)	3¼"	3¼"
Spans 7, 8 & 9 (SB & NB)	Fascias (G1 & G4)	3⅛"	3½"
	Interiors (G2 & G3)	3½"	3½"
Span 10 (Southbound)	Fascias (G1 & G4)	3¼"	3¼"
	Interiors (G2 & G3)	3⅜"	3⅜"
Span 10 (Northbound)	Fascias (G1 & G4)	3½"	3½"
	Interiors (G2 & G3)	3½"	3½"
Spans 11 to 15 S.B. & N.B.	Fascias (G1 & G4)	3½"	3½"
	Interiors (G2 & G3)	3½"	3½"

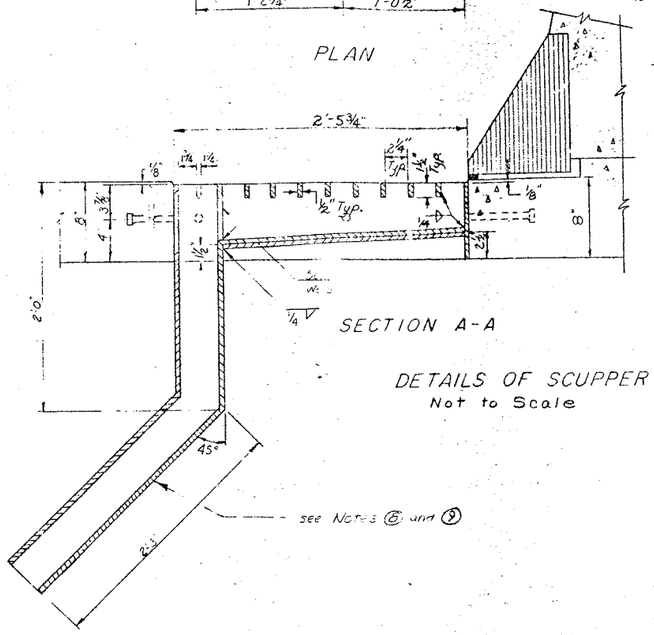




PLAN



SECTION B-B



SECTION A-A

DETAILS OF SCUPPER
Not to Scale

Notes:
1. Material in Scupper - ½" thick.
2. Tubes - ASTM designation A500 grade A.
3. Plates or Bars - ASTM designation A36.
4. Anchor Studs - ASTM designation A108, grade designation 1015 or 1020.
5. Scupper shall be galvanized after fabrication is complete in accordance with M19.
6. Place top of Scupper on same slope as top of pavement.
7. Scupper shall be paid for under Item 29.
8. Scupper Outlet Detail shown is for use at scuppers adjacent to Piers #6 (S.B. & N.B.), #9 (N.B.), and #10 thru #14 (S.B. & N.B.).
9. Extend Scupper Outlet Tube vertically downward to Downspout (Item 13DE) at scuppers adjacent to Piers #1, 2, 3, 5, 6, 7 (all S.B. & N.B.) and Pier #9 (S.B.).
10. Adjust exact location of scuppers which drain into downspout system so as to accommodate the location of the downspouts.
11. Adjust exact location of scuppers which drain directly onto the ground so as not to spill on piers or onto steel diaphragms.

PROJECT ENGINEER R. Parker
IN CHARGE OF J.B. Sherman
DESIGNED BY S. Rouse
DESIGN CHECKED BY N.A. Toppses
DETAILED BY J.C. Thompson
DETAIL CHECKED BY J.W. Eal

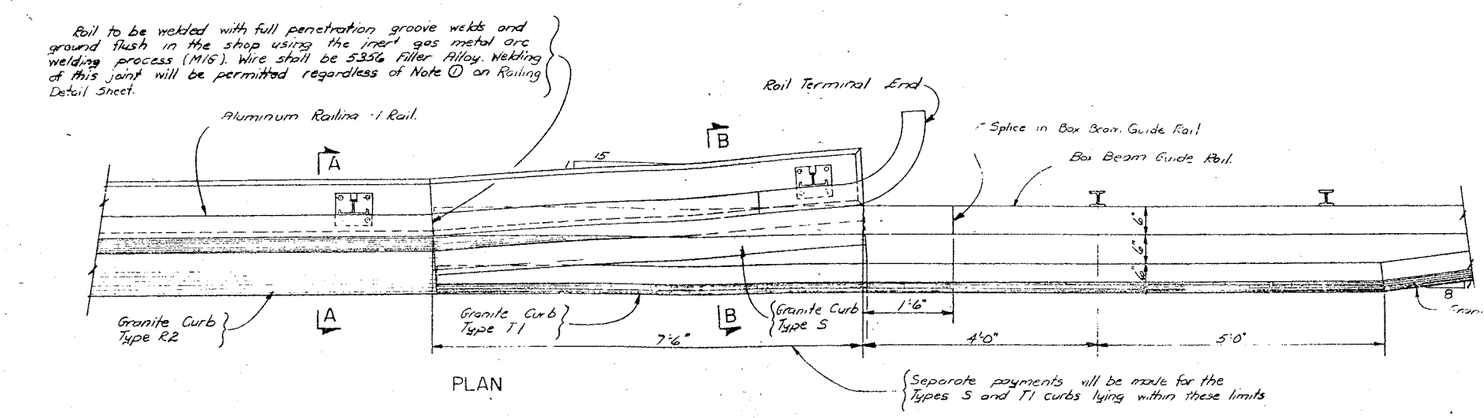
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

MISCELLANEOUS DETAILS

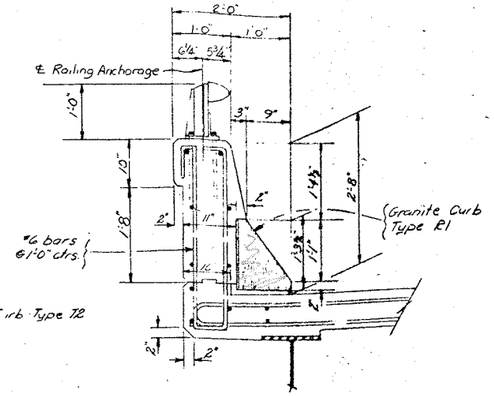
DRAWING NO. 34 OF 5[illegible]

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-590-3(28) I-481-2(116)	213	329

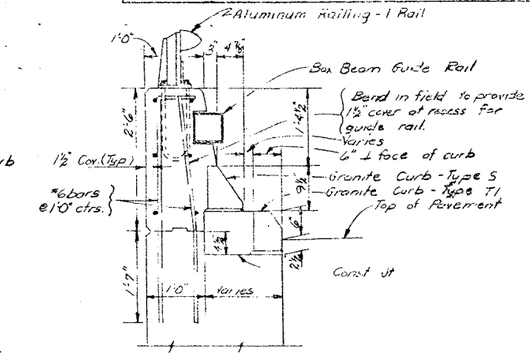
INTERSTATE ROUTE CONNECTION 570
BUTTERMILK INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



PLAN

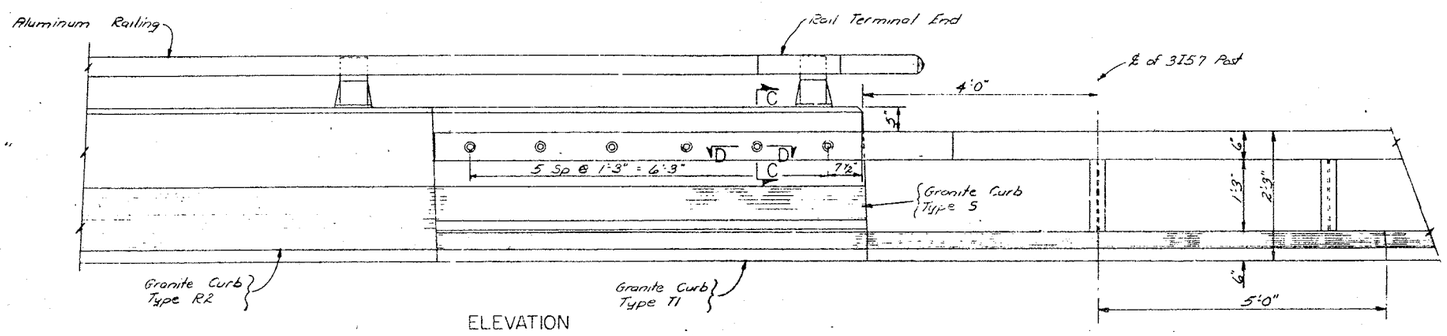


SECTION THRU SUPERSTRUCTURE

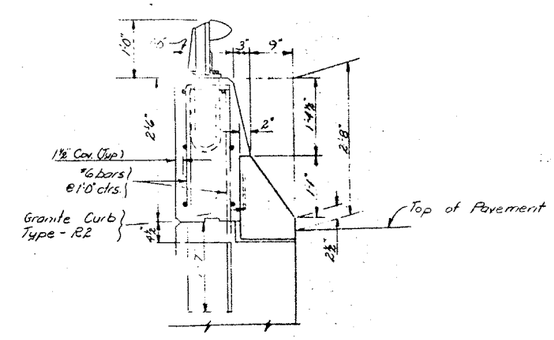


SECTION B-B

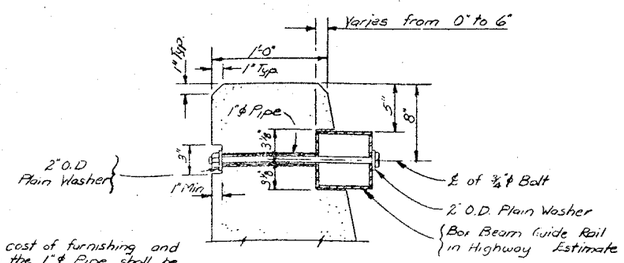
All chamfers shown on this sheet are 1" unless otherwise indicated.



ELEVATION



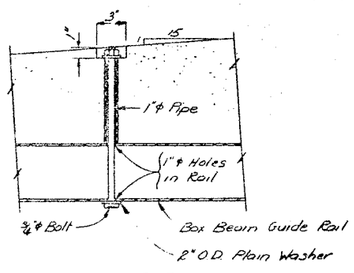
SECTION A-A



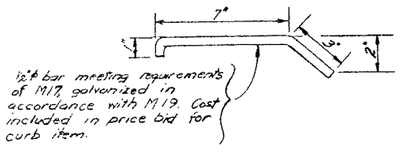
The cost of furnishing and placing the 1" ϕ Pipe shall be included in the unit price bid for the concrete in the parapet.

The cost of furnishing and placing the ¾" ϕ Bolts with their nuts and washers shall be included in the Box Beam Guide Rail Item.

SECTION C-C

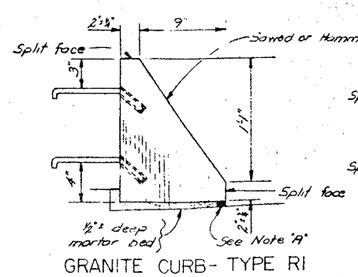


SECTION D-D

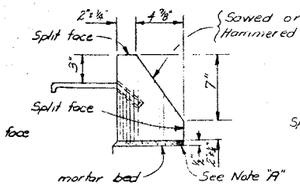


ANCHOR BAR

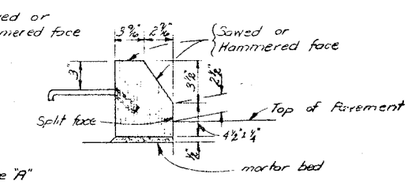
Note A:
Rake out joint to a depth of ¾" and tuck point flush with expoxy mortar.



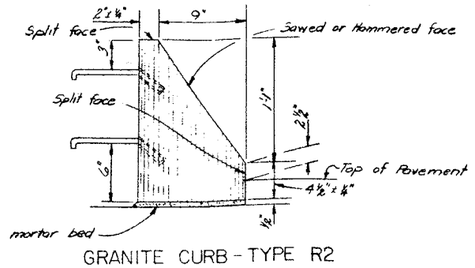
GRANITE CURB - TYPE R1



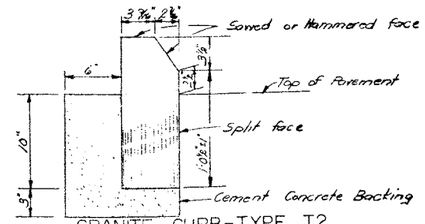
GRANITE CURB-TYPE S



GRANITE CURB-TYPE T1



GRANITE CURB - TYPE R2



GRANITE CURB-TYPE T2

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

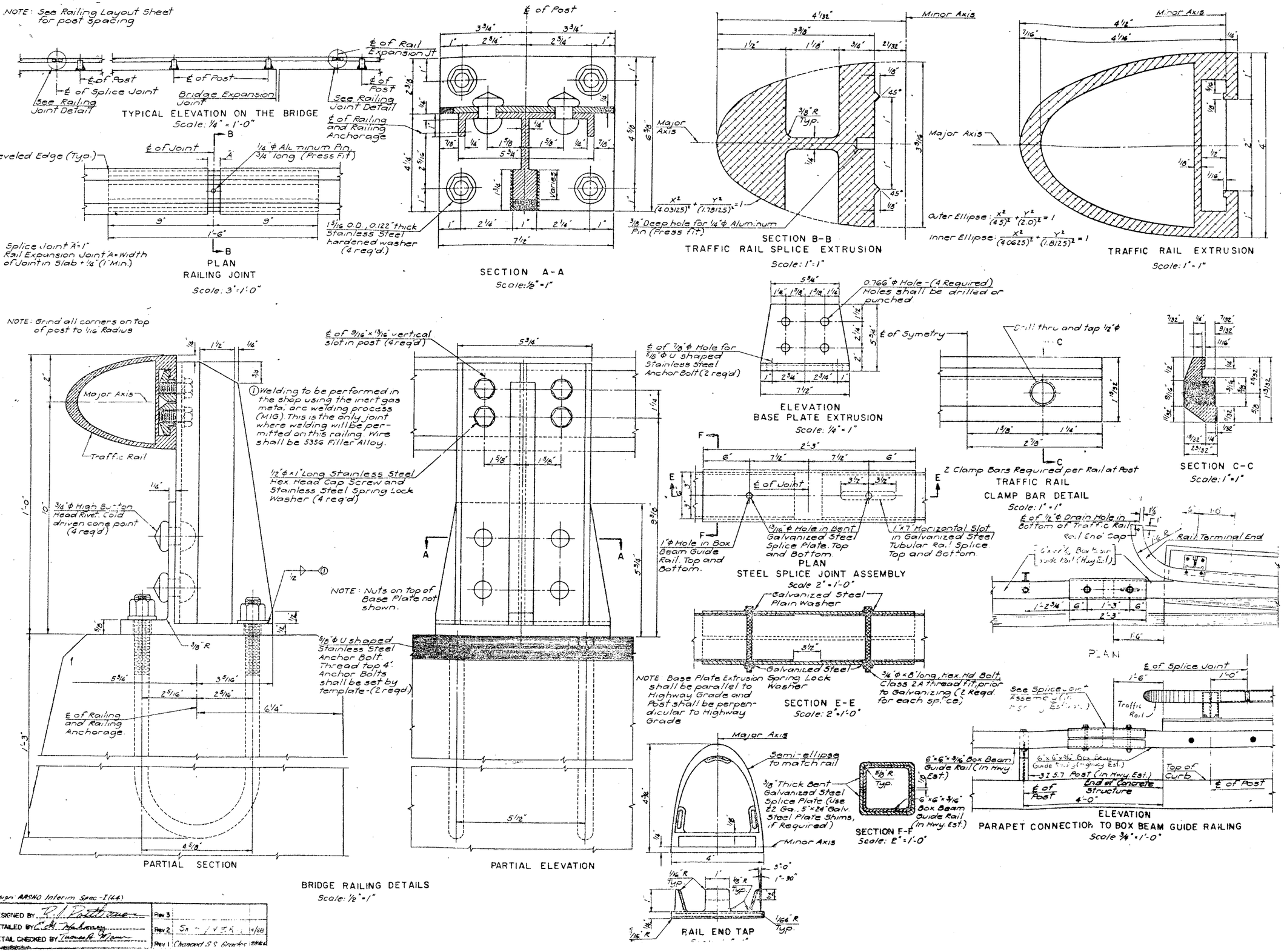
CONCRETE PARAPET

DRAWING NO. 35 OF 50

DETAILED BY Vince Kazakovich
DETAIL CHECKED BY D Granoff 1/1/68
Rev: D Smith 1/ Jan 68

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO	TOTAL SHEETS
1	NEW YORK	I-690-3(26) I-481-2(116)	214	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



Notes:

All railing is to be fabricated and erected so that the rail is parallel to the parapet.

Since the finished railing must meet all requirements of fit, alignment and grade to the full satisfaction of the Engineer, it is suggested that complete field measurements be made before any shop fabrication is performed.

Aluminum rails, posts, post bases, clamp bars including stainless steel cap screws and lock washers, rail splices, rivets, end caps, pins, rail terminal ends, aluminum caulking compound and any necessary shims and/or pads and steel splice joint assembly between the end of the parapet and the box beam guide railing including tubular rail splice, end splice plate and anchor studs shall be paid for under the railing item.

Anchor bolts, nuts and washers shall be paid for under Item 20

After the anchor bolt nuts have been placed and tightened to the satisfaction of the Engineer, the bolts shall be cut off 1/8 inch above the nut and peened.

Rails shall be continuous over a minimum of three posts. On "U" type wingwalls the rails may be continuous over two posts.

Aluminum rivets shall be cold driven.

Galvanizing shall be done in accordance with Material Specification M19. Bolts to be galvanized shall have a Class 2A thread fit prior to galvanizing.

Materials used in the manufacture of this railing shall conform to the requirements and/or specifications listed below:

Piece	ASTM Designation	Commercial Alloy & Temper
Aluminum Extrusions (Posts, Post bases, rails, rail splices, clamp bars, pins and rail terminal ends)	B221	6061-T6
Aluminum Rivets	B316	6061-T6
Aluminum Plate Shims	B209	1100-0
Aluminum Rail End Caps	B26	43F or 356F
Steel Plate Shims	A36	
Steel Tubular Rail Splices	A500 Grade B or A501	
Steel Splice Plates	A36	
Steel Splice Bolts, Nuts and Washers	A307	
Steel Anchor Studs	A307	
Stainless Steel Anchor Bolts (100,000 psi. Min. Tensile Strength and 80,000 psi. Min. Yield Point)	A193 Grade B8 or A276 Type 304 or A276 Type 430	

Stainless Steel Cap Screws A193 Grade B8
Stainless Steel Spring Lock Washers shall be in accordance with the Military Standard MS35338
Stainless Steel Nuts for Anchor Bolts A 194 Grade 6
Stainless Steel Washers for Anchor Bolts A 167 Type 302 or 304

Design: AASHO Interim Spec-1964

DESIGNED BY R. L. Rathbone	Rev 3	
DETAILED BY C. H. Mahoney	Rev 2	Sn - J V F K 9/68
DETAIL CHECKED BY Thomas R. Wilson	Rev 1	Changed S.S. Bracket 7/14/66

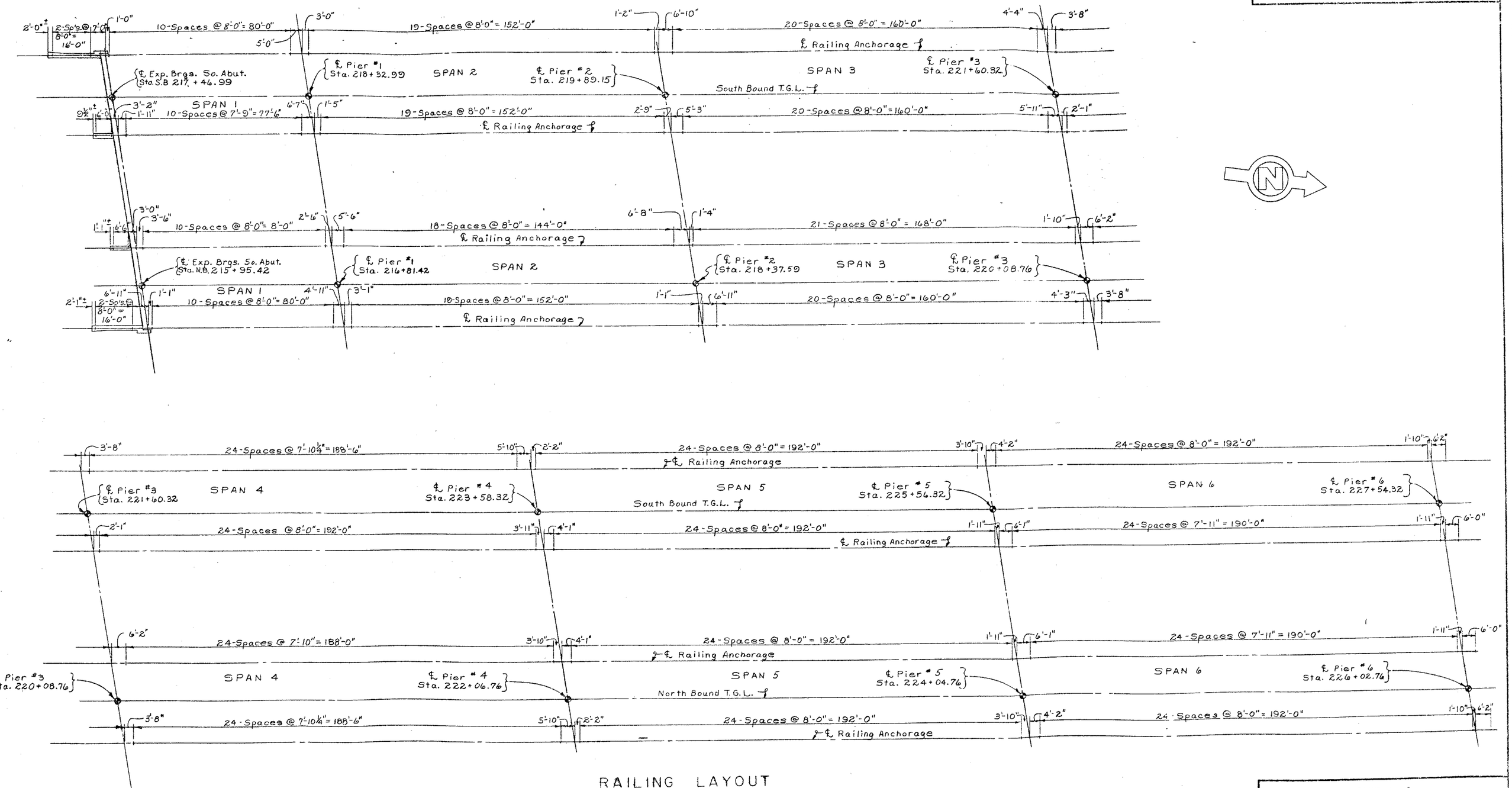
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

ALUMINUM BRIDGE RAILING - I RAIL

F.I.S.H. 70-7

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-5(18) I-481-2(116)	215	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT CONNECTION (PHASE 2)
ONONDAGA COUNTY



RAILING LAYOUT
Scale: 1" = 20'-0"

PROJECT ENGINEER R. Parker
IN CHARGE OF F. Eckel
DESIGNED BY J.C. Thompson
DESIGN CHECKED BY D.H. Smith
DETAILED BY J.C. Thompson
DETAIL CHECKED BY D.H. Smith

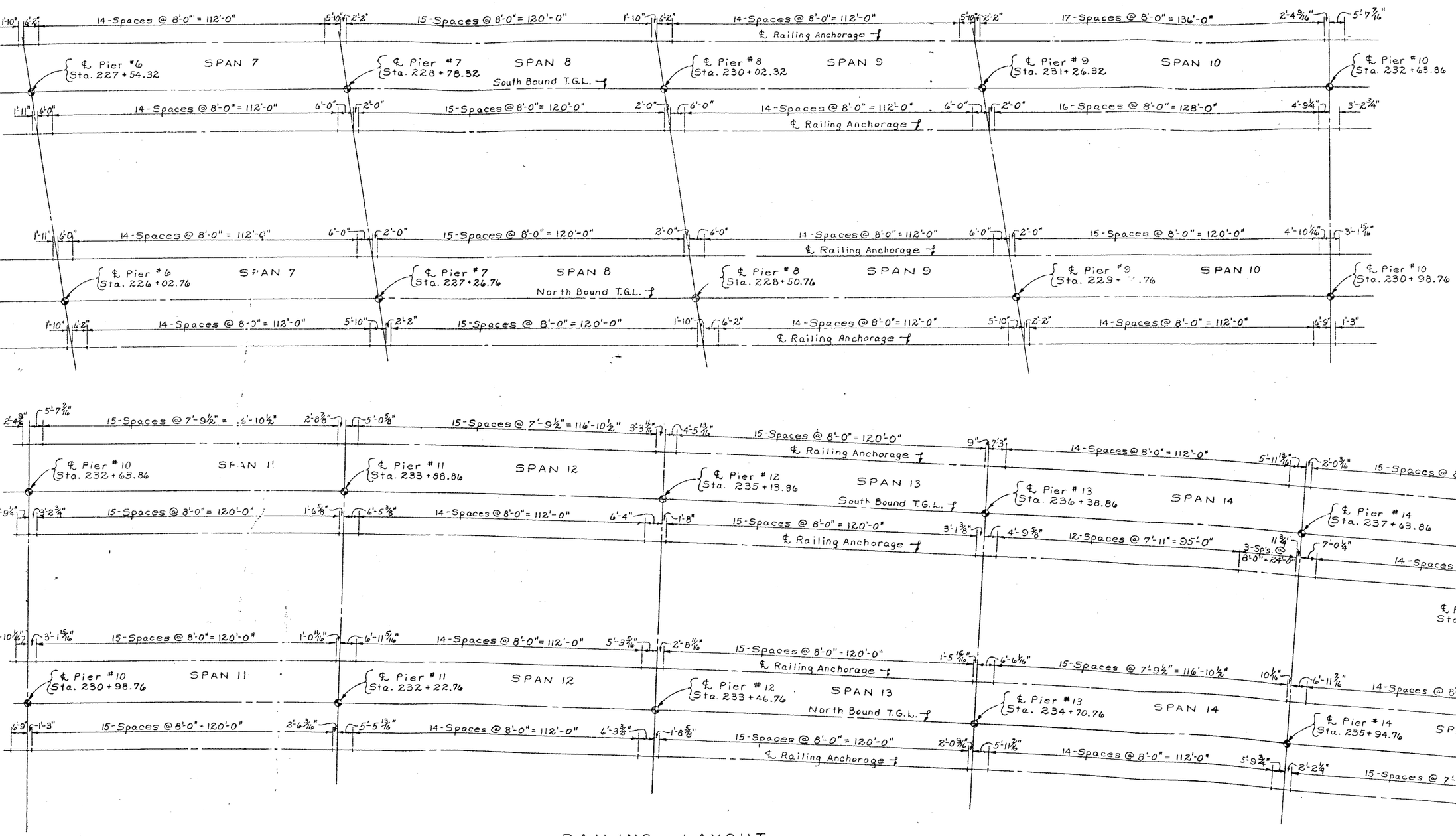
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

RAILING LAYOUT

DRAWING NO. [illegible]

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-81-2(23) I-481-2(115)	216	808

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



RAILING LAYOUT
Scale: 1" = 20'-0"

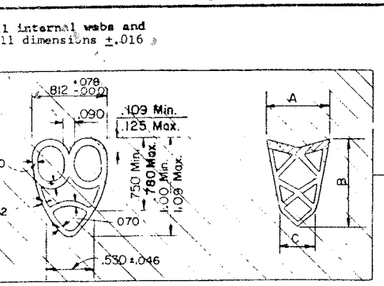
PROJECT ENGINEER R. Parker
IN CHARGE OF F. Eckel
DESIGNED BY J.C. Thompson
DESIGN CHECKED BY D.H. Smith
DETAILED BY J.C. Thompson
DETAIL CHECKED BY D.H. Smith

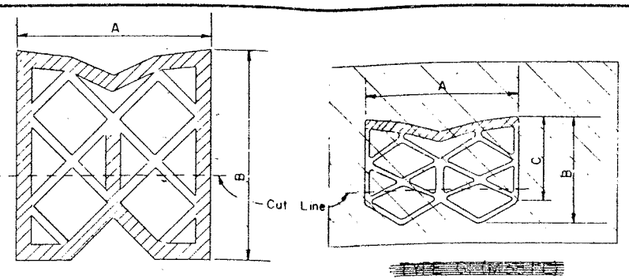
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

RAILING LAYOUT

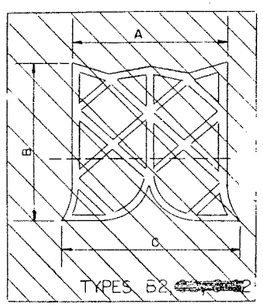
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-890-3(25) I-481-2(216)	217	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

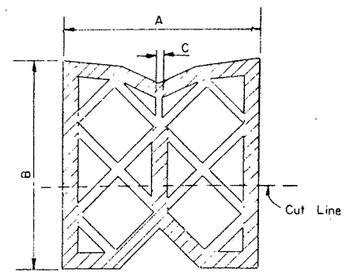




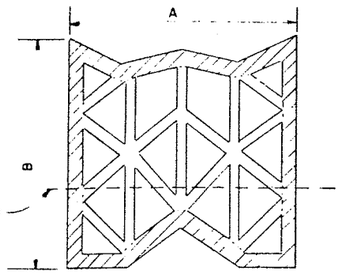
TYPES DI, EI, (M38PH)



TYPES B2

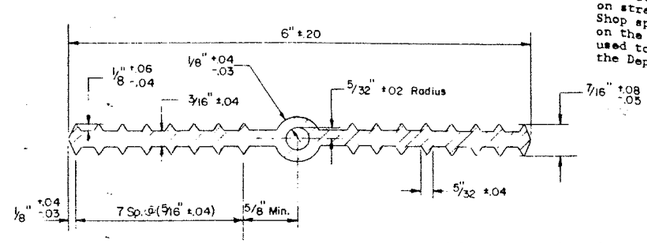


TYPE D2 (M38PH)



TYPES E2 (M38PH)

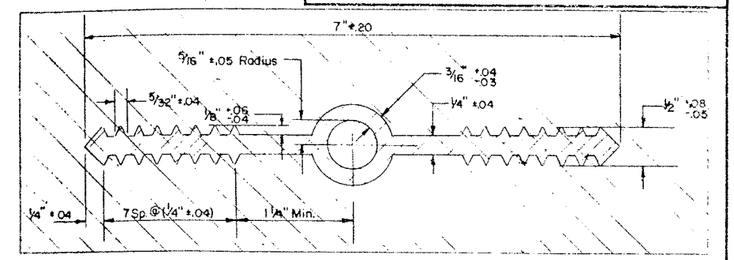
Cross hatched portions of the above details shall be considered as the shell.
Non-cross hatched portions of the above details shall be considered as webs unless a specific dimension is shown.



To facilitate shipping and handling of PVC Waterstops, field butt splices will be permitted on straight runs at points approved by the Engineer. Shop splices shall be used at the locations shown on the Contract Plans. The method and equipment used to make the field splice must be approved by the Deputy Chief Engineer (Design).

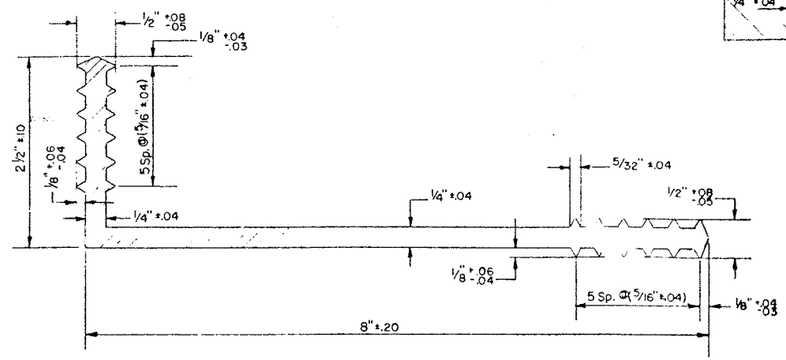
Holes must not be made in waterstop for any purpose.

TYPE A (M38T)



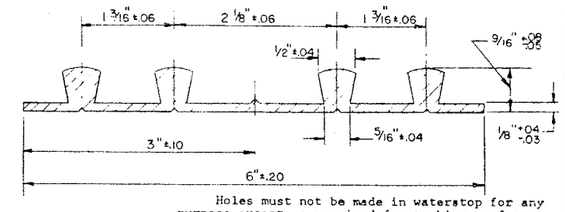
~~Holes must not be made in waterstop for any purpose.~~

~~TYPE B (M38T)~~



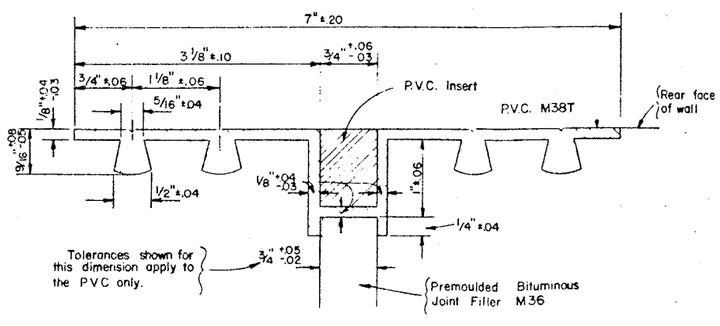
Holes must not be made in waterstop for any purpose.

TYPE CA (M38T)



Holes must not be made in waterstop for any purpose except as required for tacking to forms.
Tacking to forms will only be permitted in the area between the outside ribs and the edges of waterstop.
Type D waterstop shall be light gray in color

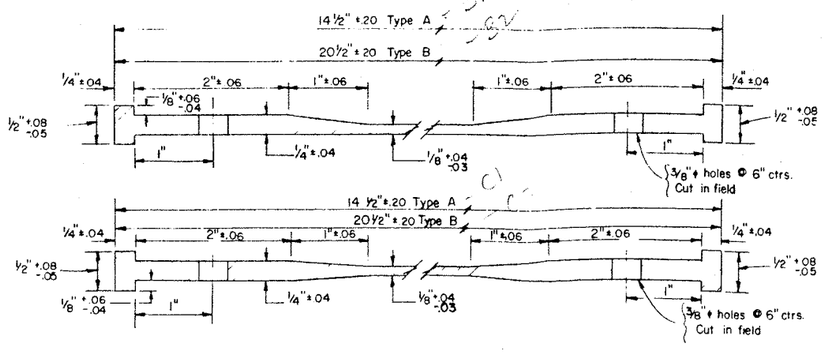
TYPE D (M38T)



TYPE E

PVC Insert:
Closed cell polyvinyl chloride (SP) Grade VE-45W as per ASTM D1667. Color shall be light gray.
Density shall be a min. of 3 lbs. and a max. of 5 lbs. per cubic foot.
Material shall be sampled as and at the same time as the M3C7. The sides of the PVC Insert shall be bonded to the waterstop at the factory.

Holes must not be made in waterstop for any purpose except as required for tacking to forms.
Tacking to forms will only be permitted in the area between the outside ribs and the edges of waterstop.
Type E waterstop shall be light gray in color.



One longitudinal shop splice will be permitted in the fabrication of the Type B Trough.
PVC trough to be paid for under Item 101B.

TYPES A & B PVC TROUGHS (M38T)
EITHER SHAPE MAY BE USED

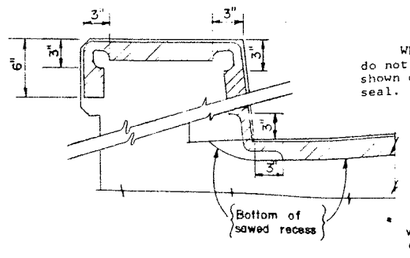
DIMENSIONS FOR PREFORMED ELASTIC JOINT SEALER					
TYPES	A	B	C	THICKNESS	
				SHELL	WEBS
A1	3/16" ±.06	1/8" ±.03	7/16" ±.04	3/32" ±.02	3/64" +.02,-.01
A2					
B1	3/4" +.25,-.00	2" ±.13		1/8" +.03,-.02	3/32" +.02,-.03
B2	3/4" +.25,-.00	1 3/4" ±.13	2" ±.19		5/64" +.03,-.02
C1	7/8" ±.13	2 1/16" ±.13		1/8" +.03,-.02	3/32" +.03,-.02
C2	2" ±.19,-.00	2" ±.13	2 1/4" ±.19		5/32" +.03,-.02
D1	2 1/2" +.25,-.00	2 3/4" ±.13		3/16" +.04,-.03	3/32" +.03,-.02
D2	2 1/2" +.25,-.00	2 3/4" ±.13	3/64" +.03,-.02	3/16" +.04,-.03	3/32" +.03,-.02
E1	3" +.25,-.00	3 13/32" ±.19		3/16" +.04,-.03	1/8" +.04,-.03
E2	3" +.25,-.00	3" ±.19		3/16" +.04,-.03	1/8" +.04,-.03
F1	4" +.31,-.00	4 25/32" ±.25		1/4" +.04,-.03	3/16" +.04,-.03
F2	4" +.31,-.00	4" ±.25		3/16" +.04,-.03	1/8" +.04,-.03
G1	5/8" ±.13,-.00	1 3/8" ±.06	1/16" ±.06	7/32" ±.02	5/64" ±.02
G2	5/8" ±.13,-.00	1 1/8" ±.13	1 3/8" ±.13		5/64" ±.03,-.02

ny changes in the shape r dimensions of preformed lastic joint sealer must e approved by the Deputy hief Engineer, (Design). he minimum thickness of ny web shall not be less han as specified. The verage thickness of all ebs shall be within the olerances specified.

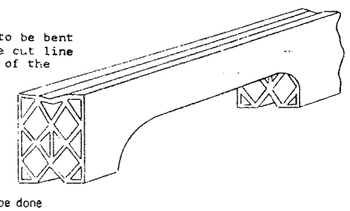
Joints which are to be sealed with preformed elastic joint sealers shall be sealed before the structure opened to traffic, including construction traffic, and before discontinuing operation when work is suspended ring the Winter. The joints shall be thoroughly cleaned, using whatever equipment or method is necessary and en they are free of foreign material, M38PH Sealer shall be installed by suitable hand or machine tools and oroughly secured in place with the lubricant which shall cover both sides of the sealer over the full area contact with the sides of the joint. The sealer shall be installed in a compressed condition at the depth own on the contract plans.

The sealer shall be supplied in one piece for the full width of each joint. Splices will not be permitted en the length of this piece is less than 50 feet. ~~For lengths of 50 to 100 feet one splice will be permitted. For lengths in excess of 100 feet shop splices may be placed at approximately 70 feet intervals.~~

~~Crossings with a longitudinal expansion joint the transverse sealers shall be placed in one piece for the full length of the sealer but shall be laved in one piece between the transverse sealers at joints and the intersections between transverse and longitudinal sealers shall be sealed with lubricant.~~



Where seal is to be bent do not cut above the cut line shown on the detail of the seal.



All cutting to be done with a coping saw, soap and water.

DETAIL FOR CUTTING AND BENDING SEAL (M38PH)

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

PREFORMED ELASTIC JOINT SEALER
PVC WATERSTOPS AND PVC TROUGHS

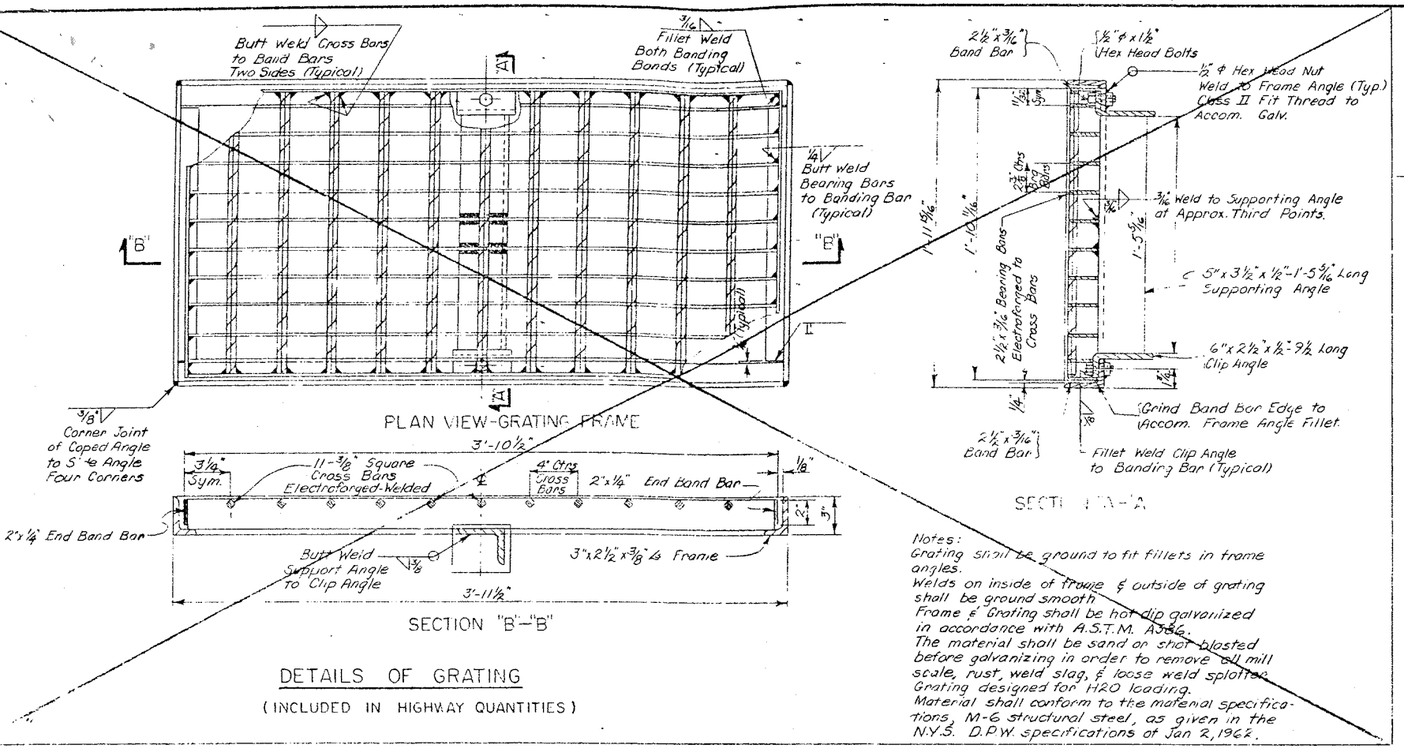
DRAWING NO. [illegible] OF 50

OJECT ENGINEER
CHARGE OF
SIGNED BY
SIGN CHECKED BY
TAILED BY Vincent Kozakevich
TAIL CHECKED BY D. Granoff 7/1/67

Revised: 10/67

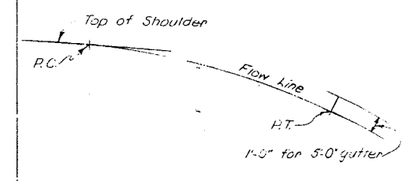
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-[illegible]-3(26) I-81-2(16)	218	309

INTERSTATE ROUTE CONSTRUCTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

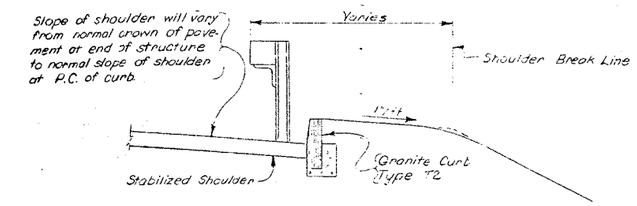


Notes:
Grating shall be ground to fit fillets in frame angles.
Welds on inside of frame & outside of grating shall be ground smooth.
Frame & Grating shall be hot dip galvanized in accordance with A.S.T.M. A386.
The material shall be sand or shot blasted before galvanizing in order to remove all mill scale, rust, weld slag, & loose weld spatter.
Grating designed for H20 loading.
Material shall conform to the material specifications, M-6 structural steel, as given in the N.Y.S. D.P.W. specifications of Jan 2, 1962.

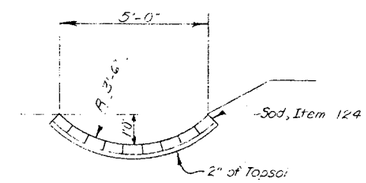
DETAILS OF GRATING
(INCLUDED IN HIGHWAY QUANTITIES)



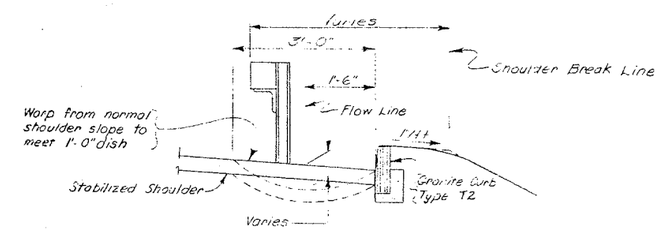
FLOW LINE PROFILE



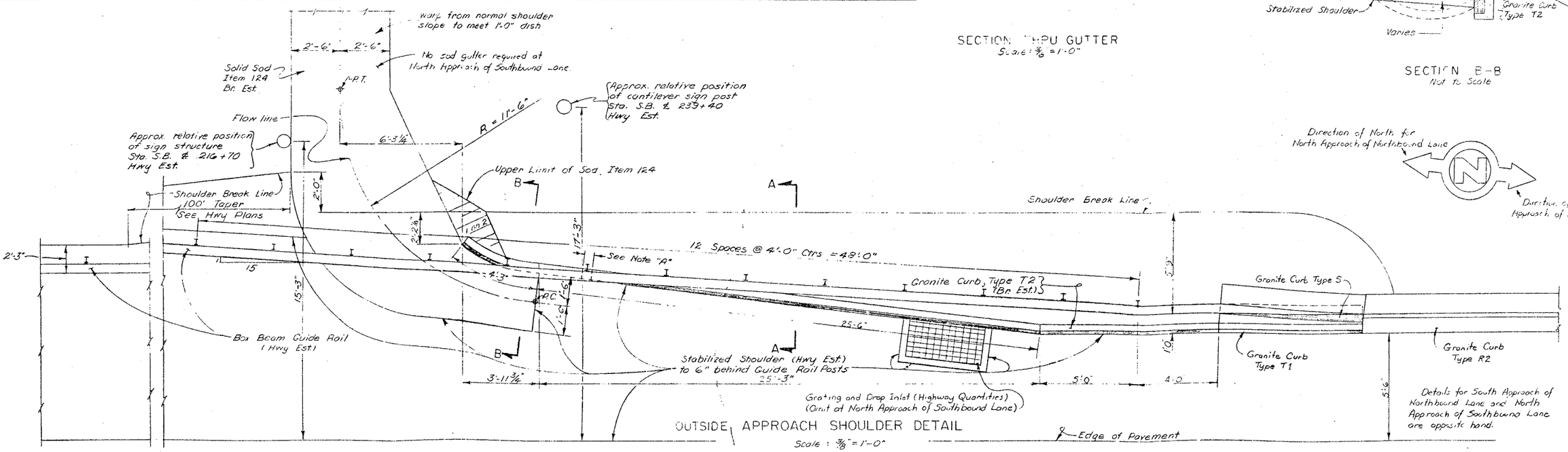
SECTION A-A
Not to Scale



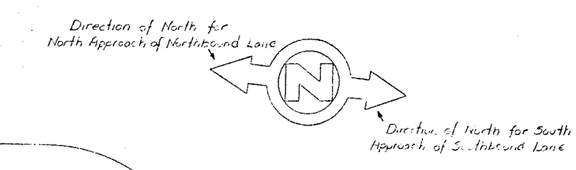
SECTION "HPU GUTTER
Scale: 3/8" = 1'-0"



SECTION B-B
Not to Scale



OUTSIDE APPROACH SHOULDER DETAIL
Scale: 3/8" = 1'-0"



Details for South Approach of Northbound Lane and North Approach of Southbound Lane are opposite hand.

Note "A" - 6" min. gap in granite curb to be filled with mortar after guide rail post has been set. This filled in portion shall be paid for at the unit price bid for the adjacent granite curb.

Grating and Drop Inlet to be included in the Hwy Est.

All sod to be included in the Bridge Estimate.

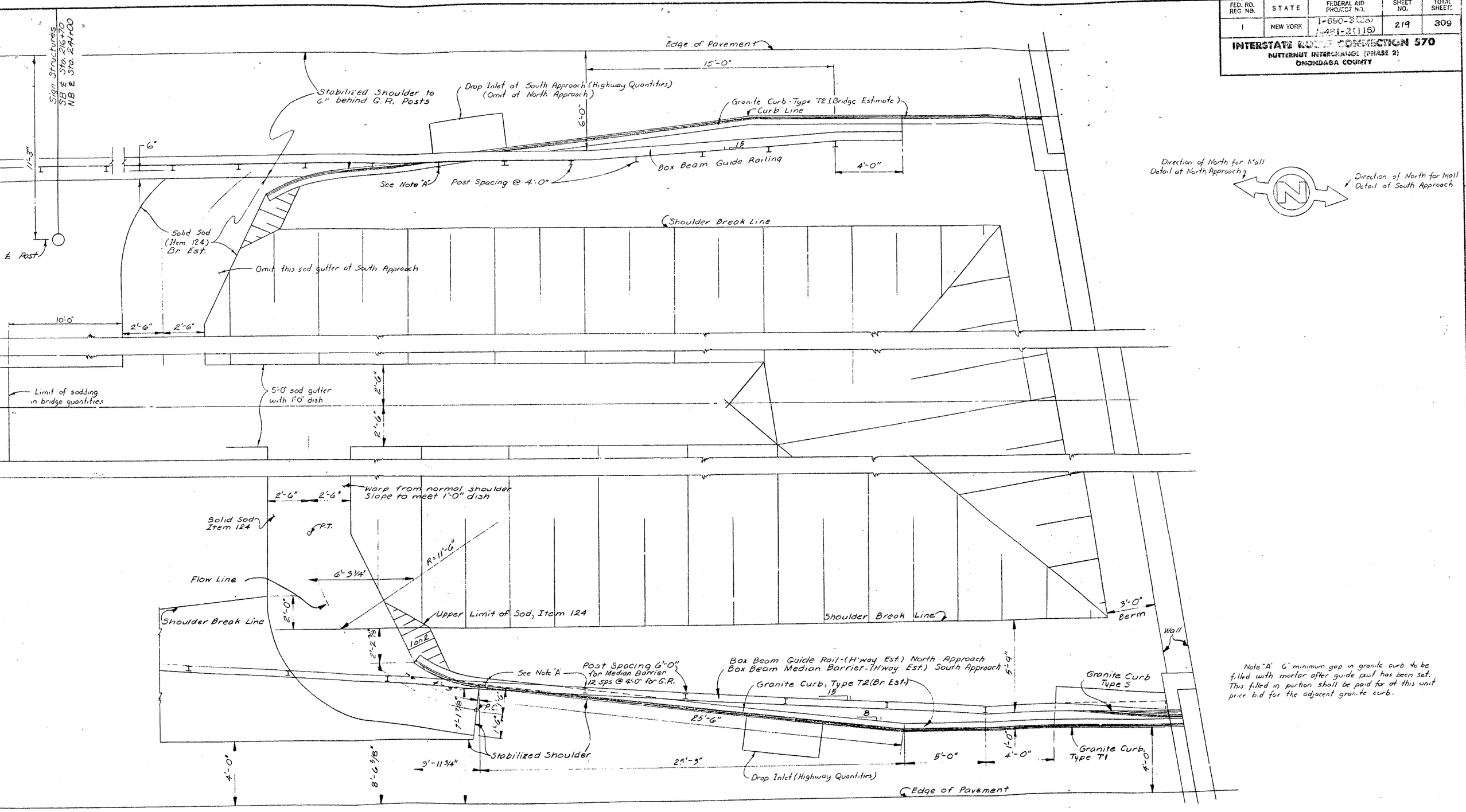
PROJECT ENGINEER E. PAPILLO
IN CHARGE OF L. E. SHERMAN
DESIGNED BY
DESIGN CHECKED BY
DETAILED BY
DETAIL CHECKED BY

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

DRAINAGE DETAILS
DRAWING NO. 40 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3 (26) I-481-2(116)	219	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



Note "A" 6" minimum gap in granite curb to be filled with mortar after guide post has been set. This filled in portion shall be paid for at this unit price bid for the adjacent granite curb.

MALL APPROACH SHOULDER DETAILS

SCALE: 3/8"=1'-0"

PROJECT ENGINEER	R. Parker
IN CHARGE OF	F.W. Eckel
DESIGNED BY	
DESIGN CHECKED BY	
DETAILED BY	N.F. Colbert
DETAIL CHECKED BY	F.W. Eckel

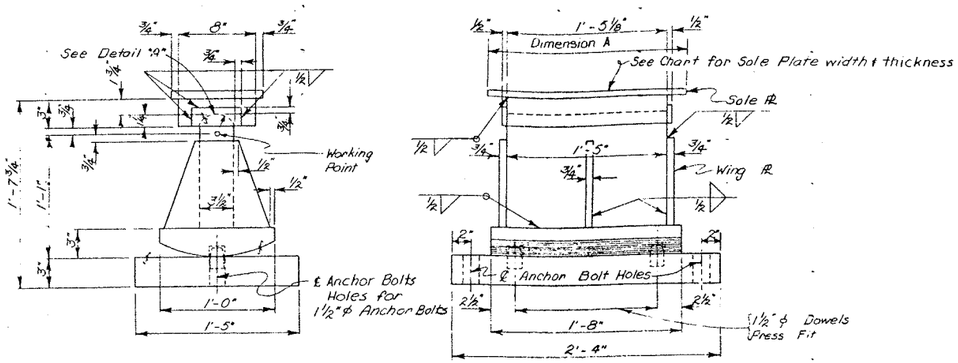
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

MALL APPROACH SHOULDER DETAILS

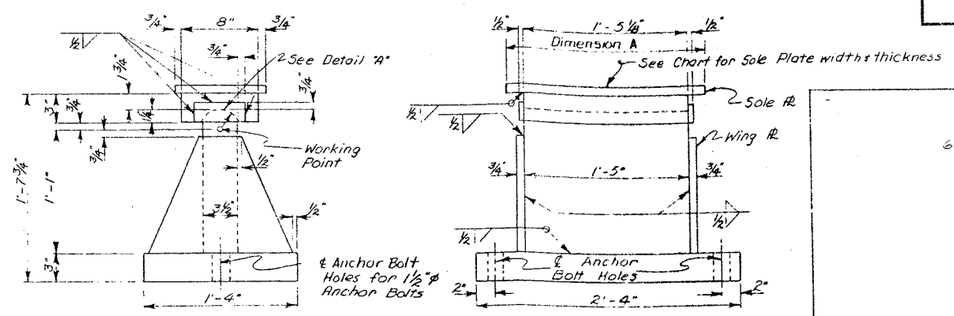
DRAWING NO. 41 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	~~I-390-2(23)~~ I-481-2(116)	220	899

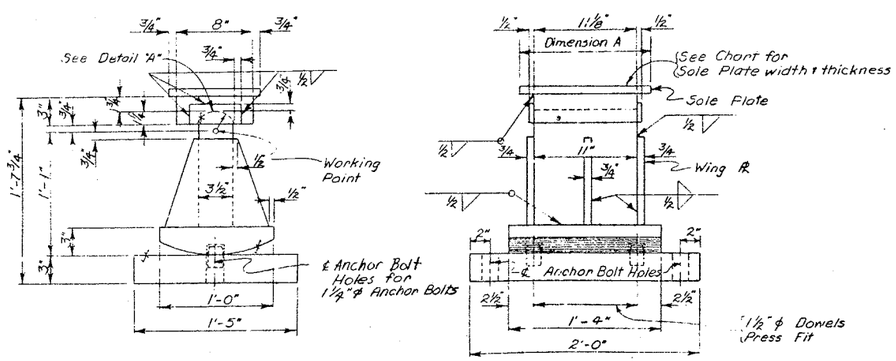
INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



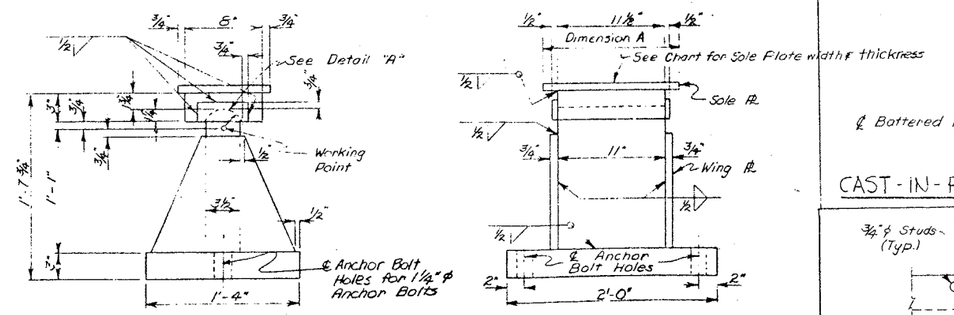
EXPANSION BEARING - TYPE II
Scale: 1½"=1'-0"



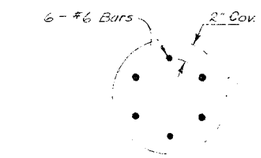
FIXED BEARING - TYPE II
Scale: 1½"=1'-0"



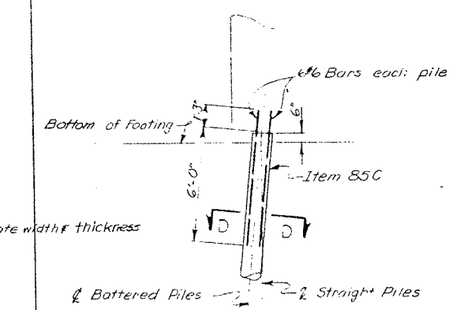
EXPANSION BEARING - TYPE I
Scale: 1½"=1'-0"



FIXED BEARING - TYPE I
Scale: 1½"=1'-0"

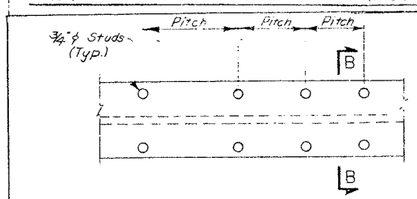


SECTION D-D
Scale: 1½"=1'-0"

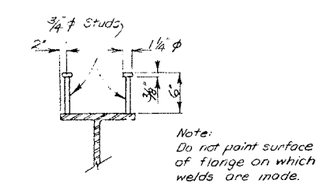


PILE ELEVATION
Scale: ¼"=1'-0"

CAST-IN-PLACE CONCRETE PILES ITEM 85C

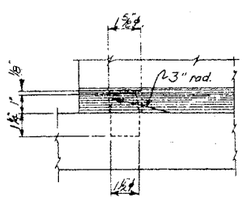


PARTIAL PLAN OF STUDS
Scale: None

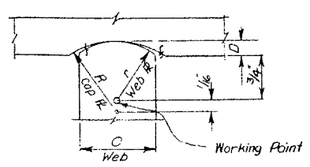


SECTION B-B
Scale: None

STUD SHEAR CONNECTORS ITEM 28B.

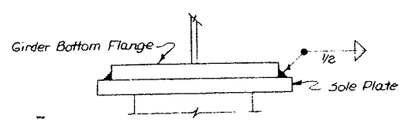


DETAIL OF DOWEL
Scale: 3"=1'-0"



Bearing Type	R	r	C	D
Type I	2 1/16"	2"	3½"	1¼"
Type II	2 1/16"	2"	3½"	1¼"
Type III	2 1/16"	2"	3½"	1¼"

DETAIL A
No Scale



TYPICAL SOLE PLATE
TO GIRDER CONNECTION DETAIL
No Scale

PROJECT ENGINEER R. Parker
IN CHARGE OF F. Eckel
DESIGNED BY
DESIGN CHECKED BY
DETAILED BY J. Dumont
DETAIL CHECKED BY Y.C. Toppers

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

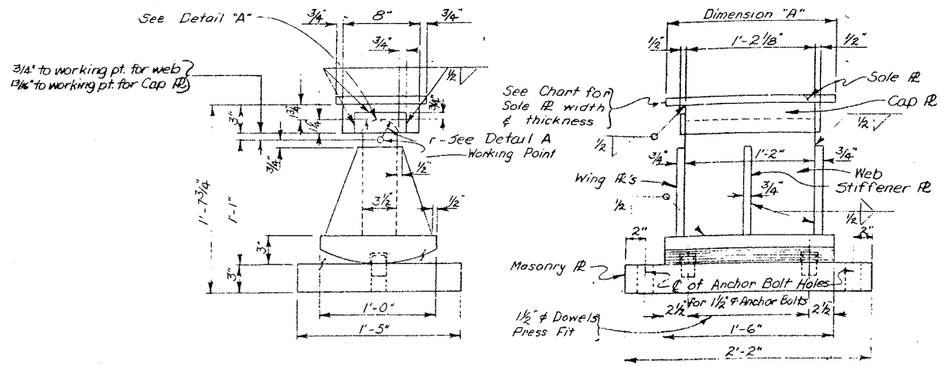
BEARINGS

DRAWING NO. 42 OF 50

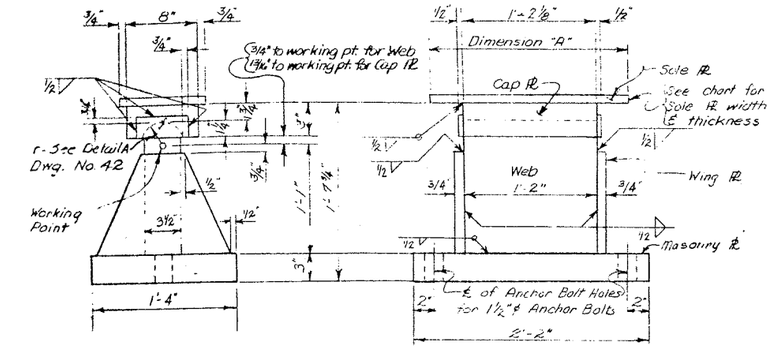
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-481-3(28) 1-481-2(116)	221	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

Note: See Miscellaneous Drawing #42 for Detail "A" & for Detail of Dowels.



EXPANSION BEARING – TYPE III
Scale: 1½" = 1'-0"



FIXED BEARING – TYPE III
Scale: 1½" = 1'-0"

BEARING SCHEDULE
SOUTHBOUND LANE

SPAN	GIRDER	BEARING TYPE EXP	BEARING TYPE FIXED	SOLE PL. DIM. "A"	SOLE PL. THICKNESS EXP	SOLE PL. THICKNESS FIXED
1	1	I	I	1'-2"	3/4	3/4
	2	I	I	1'-7"	3/4	3/4
	3	I	I	1'-7"	3/4	3/4
	4	I	I	1'-2"	3/4	3/4
2	1	III	III	1'-11"	7/8	3/4
	2	III	III	1'-11"	7/8	3/4
	3	III	III	1'-11"	7/8	3/4
	4	III	III	1'-11"	7/8	3/4
3	1	III	III	2'-6"	3/4	3/4
	2	III	III	2'-4"	3/4	3/4
	3	III	III	2'-4"	3/4	3/4
	4	III	III	2'-6"	3/4	3/4
4	1	II	II	2'-8"	3/4	3/4
	2	II	II	2'-2"	1	3/4
	3	II	II	2'-2"	1	3/4
	4	II	II	2'-8"	1	3/4
5	1	II	II	2'-8"	3/4	7/8
	2	II	II	2'-2"	3/4	7/8
	3	II	II	2'-2"	3/4	7/8
	4	II	II	2'-8"	3/4	7/8
6	1	II	II	2'-8"	3/4	3/4
	2	II	II	2'-2"	3/4	1
	3	II	II	2'-2"	3/4	1
	4	II	II	2'-8"	3/4	3/4
7	1	II	I	1'-8"	3/4	1
	2	I	I	2'-0"	3/4	1
	3	I	I	2'-0"	3/4	1
	4	II	I	1'-8"	3/4	1
8	1	I	I	2'-1"	3/4	1
	2	I	I	2'-0"	3/4	1
	3	I	I	2'-0"	3/4	1
	4	I	I	2'-1"	3/4	1
9	1	I	I	2'-1"	3/4	1
	2	I	I	2'-0"	3/4	1
	3	I	I	2'-0"	3/4	1 1/8
	4	I	I	2'-1"	3/4	1 1/8
10	1	I	I	2'-2"	3/4	1 1/8
	2	I	I	2'-2"	3/4	1 1/8
	3	I	I	2'-2"	3/4	1 1/8
	4	I	I	2'-2"	3/4	1 1/8
11	1	I	I	2'-1"	3/4	1 1/4
	2	I	I	2'-0"	3/4	1 1/4
	3	I	I	2'-0"	3/4	1 1/4
	4	I	I	2'-1"	3/4	1 1/4
12	1	I	I	2'-1"	3/4	1 1/4
	2	I	I	2'-0"	3/4	1 1/4
	3	I	I	2'-0"	3/4	1 1/4
	4	I	I	2'-1"	3/4	1 1/4
13	1	I	I	2'-1"	3/4	1 1/4
	2	I	I	2'-0"	3/4	1 1/4
	3	I	I	2'-0"	3/4	1 1/4
	4	I	I	2'-1"	3/4	1 1/4
14	1	I	I	2'-1"	3/4	1 1/4
	2	I	I	2'-0"	3/4	1 1/4
	3	I	I	2'-0"	3/4	1 1/4
	4	I	I	2'-1"	3/4	1 1/4
15	1	I	I	2'-1"	3/4	3/4
	2	I	I	2'-0"	3/4	3/4
	3	I	I	2'-0"	3/4	3/4
	4	I	I	2'-1"	3/4	3/4

BEARING SCHEDULE
NORTHBOUND LANE

SPAN	GIRDER	BEARING TYPE EXP	BEARING TYPE FIXED	SOLE PL. DIM. "A"	SOLE PL. THICKNESS EXP	SOLE PL. THICKNESS FIXED
1	1	I	I	1'-2"	3/4	3/4
	2	I	I	1'-7"	3/4	3/4
	3	I	I	1'-7"	3/4	3/4
	4	I	I	1'-2"	3/4	3/4
2	1	III	III	1'-11"	7/8	3/4
	2	III	III	1'-11"	7/8	3/4
	3	III	III	1'-11"	7/8	3/4
	4	III	III	1'-11"	7/8	3/4
3	1	III	III	2'-6"	3/4	3/4
	2	III	III	2'-4"	3/4	3/4
	3	III	III	2'-4"	3/4	3/4
	4	III	III	2'-6"	3/4	3/4
4	1	II	II	2'-8"	3/4	3/4
	2	II	II	2'-2"	1	3/4
	3	II	II	2'-2"	1	3/4
	4	II	II	2'-8"	3/4	3/4
5	1	II	II	2'-8"	3/4	7/8
	2	II	II	2'-2"	3/4	7/8
	3	II	II	2'-2"	3/4	7/8
	4	II	II	2'-8"	3/4	7/8
6	1	II	II	2'-8"	3/4	3/4
	2	II	II	2'-2"	3/4	1
	3	II	II	2'-2"	3/4	1
	4	II	II	2'-8"	3/4	3/4
7	1	II	I	1'-8"	3/4	1
	2	I	I	2'-0"	3/4	1
	3	I	I	2'-0"	3/4	1
	4	II	I	1'-8"	3/4	1
8	1	I	I	2'-1"	3/4	1
	2	I	I	2'-0"	3/4	1
	3	I	I	2'-0"	3/4	1
	4	I	I	2'-1"	3/4	1
9	1	I	I	2'-1"	3/4	1
	2	I	I	2'-0"	3/4	1 1/8
	3	I	I	2'-0"	3/4	1 1/8
	4	I	I	2'-1"	3/4	1 1/8
10	1	I	I	2'-1"	3/4	1 1/8
	2	I	I	2'-0"	3/4	1 1/8
	3	I	I	2'-0"	3/4	1 1/8
	4	I	I	2'-1"	3/4	1 1/8
11	1	I	I	2'-1"	3/4	1 1/4
	2	I	I	2'-0"	3/4	1 1/8
	3	I	I	2'-0"	3/4	1 1/4
	4	I	I	2'-1"	3/4	1 1/4
12	1	I	I	2'-1"	3/4	1 1/4
	2	I	I	2'-0"	3/4	1 1/4
	3	I	I	2'-0"	3/4	1 1/4
	4	I	I	2'-1"	3/4	1 1/4
13	1	I	I	2'-1"	3/4	1 1/4
	2	I	I	2'-0"	3/4	1 1/4
	3	I	I	2'-0"	3/4	1 1/4
	4	I	I	2'-1"	3/4	1 1/4
14	1	I	I	2'-1"	3/4	1 1/4
	2	I	I	2'-0"	3/4	1 1/4
	3	I	I	2'-0"	3/4	1 1/4
	4	I	I	2'-1"	3/4	1 1/4
15	1	I	I	2'-1"	3/4	3/4
	2	I	I	2'-0"	3/4	3/4
	3	I	I	2'-0"	3/4	3/4
	4	I	I	2'-1"	3/4	3/4

PROJECT ENGINEER R. PARKER
IN CHARGE OF J. B. SHERMAN
DESIGNED BY
DESIGN CHECKED BY
DETAILED BY J. DURANT
DETAIL CHECKED BY M. G. Koppocw

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

BEARINGS

DRAWING NO. 43 OF 50

F.I.S.H. 70-2

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-090-3(28) I-481-2(116)	222	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

Note: For Pier Nal see Sheet No.47

PIER 2 NORTHBOUND

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
	5	19	42'-6"	Str.								Longitudinal top & bottom footing.
	5	29	11'-6"	Str.								Transverse top footing.
	7	80	11'-6"	Str.								Transverse bottom footing.
	8	90	4'-6"	Str.								Vertical footings to plinth.
	5	72	2'-10"	Str.								Vertical footings to plinth.
	8	90	25'-3"	Str.								Vertical plinth to cap beam.
	5	72	10'-0"	Str.								Vertical plinth.
	5	20	35'-0"	Str.								Longitudinal in plinth.
	4	36	12'-1"	V	11'-6⅜"	3'-8"	4½"					Hoops in columns.
	11	7	9'-2"	Str.								Longitudinal top of beam.
	11	2	41'-6"	XI	30'-9"	1'-8"	3'-8¾"	2'-5"				Longitudinal top of beam.
	11	2	45'-6"	XI	34'-9"	1'-8"	3'-8¾"	2'-5"				Longitudinal top of beam.
	4	4	9'-2"	Str.								Longitudinal top of beam.
	11	8	8'-1"	Str.								Longitudinal bottom of beam.
	11	2	36'-1"	Str.								Longitudinal bottom of beam.
	11	2	39'-9"	Str.								Longitudinal bottom of beam.
	5	42	3'-8"	III	3'-1"	7"	5"	5"				Vertical dowel beam to pedestal.
	6	6	16'-4"	IX	4'-2"	3'-8"	6¾"	6½"				Hoops in pedestals (interior).
	6	6	17'-6"	VI	3'-8"	5'-9"	1'-10"	3'-8"	6¾"	6½"		Hoops in pedestals (exterior).
	5	8	36'-1"	Str.								Longitudinal in sides of beam.
	5	84	16'-3"	IX	4'-2"	3'-8"	6¾"	5½"				Vertical stirrups in beams.
	5	14	11'-11"	XIII	3'-1"	3'-1"	5'-9"	1'-10"				Beam end hoop.
	6	336	7'-3"	Str.								Pile reinforcement.
	5	7	3'-8"	Str.								Transverse top of beam.
	8	8	36'-1"	Str.								Longitudinal top crashwall.
	5	36	3'-8"	Str.								Transverse top crashwall.

PIER 2 SOUTHBOUND

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
	5	19	42'-6"	Str.								Longitudinal top & bottom footing.
	5	29	11'-6"	Str.								Transverse top footing.
	7	80	11'-6"	Str.								Transverse bottom footing.
	8	90	4'-6"	Str.								Vertical footings to plinth.
	5	72	2'-10"	Str.								Vertical footings to plinth.
	8	90	25'-3"	Str.								Vertical plinth to cap beam.
	5	72	10'-0"	Str.								Vertical plinth.
	5	20	35'-0"	Str.								Longitudinal in plinth.
	4	36	12'-1"	V	11'-6⅜"	3'-8"	4½"					Hoops in columns.
	11	7	9'-2"	Str.								Longitudinal top of beam.
	11	2	41'-6"	XI	30'-9"	1'-8"	3'-8¾"	2'-5"				Longitudinal top of beam.
	11	2	45'-6"	XI	34'-9"	1'-8"	3'-8¾"	2'-5"				Longitudinal top of beam.
	4	4	9'-2"	Str.								Longitudinal top of beam.
	11	8	8'-1"	Str.								Longitudinal bottom of beam.
	11	2	36'-1"	Str.								Longitudinal bottom of beam.
	11	2	39'-9"	Str.								Longitudinal bottom of beam.
	5	42	3'-7"	III	3'-0"	7"	5"	5"				Vertical dowel beam to pedestal.
	6	6	16'-4"	IX	4'-2"	3'-8"	6¾"	6½"				Hoops in pedestals (interior).
	6	6	17'-6"	VI	3'-8"	5'-9"	1'-10"	3'-8"	6¾"	6½"		Hoops in pedestals (exterior).
	5	8	36'-1"	Str.								Longitudinal in sides of beam.
	5	84	16'-3"	IX	3'-8"	4'-2"	5¾"	5½"				Vertical stirrups in beams.
	5	14	11'-11"	XIII	3'-1"	3'-1"	5'-9"	1'-10"				Beam end hoop.
	6	336	7'-3"	Str.								Pile reinforcement.
	5	7	3'-8"	Str.								Transverse top of beam.
	8	8	36'-1"	Str.								Longitudinal top crashwall.
	5	36	3'-8"	Str.								Transverse top crashwall.

PIER 3 NORTHBOUND

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
	5	19	42'-6"	Str.								Longitudinal top & bottom footing.
	5	29	11'-6"	Str.								Transverse top footing.
	7	80	11'-6"	Str.								Transverse bottom footing.
	8	90	4'-6"	Str.								Vertical footings to plinth.
	5	72	2'-10"	Str.								Vertical footings to plinth.
	8	90	24'-3"	Str.								Vertical plinth to cap beam.
	5	72	8'-1"	Str.								Vertical plinth.
	5	16	35'-0"	Str.								Longitudinal in plinth.
	4	39	12'-1"	V	11'-6⅜"	3'-8"	4½"					Hoops in columns.
	11	7	9'-2"	Str.								Longitudinal top of beam.
	11	2	41'-6"	XI	30'-9"	1'-8"	3'-8¾"	2'-5"				Longitudinal top of beam.
	11	2	45'-6"	XI	34'-9"	1'-8"	3'-8¾"	2'-5"				Longitudinal top of beam.
	4	4	9'-2"	Str.								Longitudinal top of beam.
	11	8	8'-1"	Str.								Longitudinal bottom of beam.
	11	2	36'-1"	Str.								Longitudinal bottom of beam.
	11	2	39'-9"	Str.								Longitudinal bottom of beam.
	5	42	3'-7"	III	3'-0"	7"	5"	5"				Vertical dowel beam to pedestal.
	6	6	16'-4"	IX	4'-2"	3'-8"	6¾"	6½"				Hoops in pedestals (interior).
	6	6	17'-6"	VI	3'-8"	5'-9"	1'-10"	3'-8"	6¾"	6½"		Hoops in pedestals (exterior).
	5	8	36'-1"	Str.								Longitudinal in sides of beam.
	5	84	16'-3"	IX	3'-8"	4'-2"	5¾"	5½"				Vertical stirrups in beams.
	5	14	11'-11"	XIII	3'-1"	3'-1"	5'-9"	1'-10"				Beam end hoop.
	6	336	7'-3"	Str.								Pile reinforcement.
	5	7	3'-8"	Str.								Transverse top of beam.
	8	8	36'-1"	Str.								Longitudinal top crashwall.
	5	36	3'-8"	Str.								Transverse top crashwall.

PIER 3 NORTHBOUND (CONT'D)

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
PBL11	11	2	41'-6"	XI	30'-9"	1'-8"	3'-8¾"	2'-5"				Longitudinal top of beam.
PBL12	11	2	45'-6"	XI	34'-9"	1'-8"	3'-8¾"	2'-5"				Longitudinal top of beam.
PBL13	4	4	9'-2"	Str.								Longitudinal top of beam.
PBL14	11	8	8'-1"	Str.								Longitudinal bottom of beam.
PBL15	11	2	36'-1"	Str.								Longitudinal bottom of beam.
PBL16	11	2	39'-9"	Str.								Longitudinal bottom of beam.
PBV17	5	42	3'-9"	III	3'-2"	7"	5"	5"				Vertical dowel beam to pedestal.
PPH18	6	6	16'-4"	IX	4'-2"	3'-8"	6¾"	6½"				Hoops in pedestals (interior).
PPH19	6	6	17'-6"	VI	3'-8"	5'-9"	1'-10"	3'-8"	6¾"	6½"		Hoops in pedestals (exterior).
PBL20	5	8	36'-1"	Str.								Longitudinal in sides of beam.
PBS21	5	84	16'-3"	IX	3'-8"	4'-2"	5¾"	5½"				Vertical stirrups in beams.
PBL22	5	14	11'-11"	XII	3'-1"	3'-1"	5'-9"	1'-10"				Beam end hoop.
FFY23	6	336	7'-3"	Str.								Pile reinforcement.
PBT24	5	7	3'-8"	Str.								Transverse top of beam.
PSL25	8	8	36'-1"	Str.								Longitudinal top crashwall.
PST26	5	36	3'-8"	Str.								Transverse top crashwall.

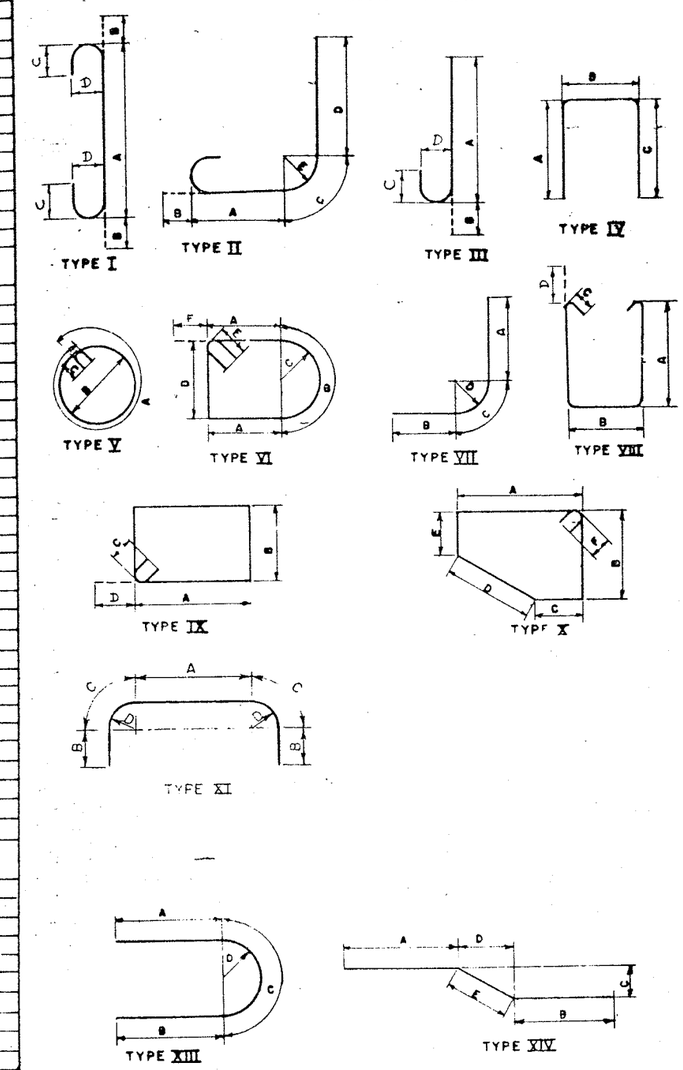
PIER 3 SOUTHBOUND

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
PFL1	5	19	42'-6"	Str.								Longitudinal top & bottom footing.
PFT2	5	29	11'-6"	Str.								Transverse top footing.
PFT3	7	80	11'-6"	Str.								Transverse bottom footing.
PFV4	8	90	4'-6"	Str.								Vertical footings to plinth.
PFV5	5	72	2'-10"	Str.								Vertical footings to plinth.
PCV6	8	90	24'-3"	Str.								Vertical plinth to cap beam.
PSV7	5	72	8'-1"	Str.								Vertical plinth.
PSL8	5	16	35'-0"	Str.								Longitudinal in plinth.
PCS9	4	39	12'-1"	V	11'-6⅜"	3'-8"	4½"					Hoops in columns.
PBL10	11	7	9'-2"	Str.								Longitudinal top of beam.
PBL11	11	2	41'-6"	XI	30'-9"	1'-8"	3'-8¾"	2'-5"				Longitudinal top of beam.
PBL12	11	2	45'-6"	XI	34'-9"	1'-8"	3'-8¾"	2'-5"				Longitudinal top of beam.
PBL13	4	4	9'-2"	Str.								Longitudinal top of beam.
PBL14	11	8	8'-1"	Str.								Longitudinal bottom of beam.
PBL15	11	2	36'-1"	Str.								Longitudinal bottom of beam.
PBL16	11	2	39'-9"	Str.								Longitudinal bottom of beam.
PBV17	5	42	3'-8"	III	3'-1"	7"	5"	5"				Vertical dowel beam to pedestal.
PPH18	6	6	16'-4"	IX	4'-2"	3'-8"	6¾"	6½"				Hoops in pedestals (interior).
PPH19	6	6	17'-6"	VI	3'-8"	5'-9"	1'-10"	3'-8"	6¾"	6½"		Hoops in pedestals (exterior).
PBL20	5	8	36'-1"	Str.								Longitudinal in sides of beam.
PBS21	5	84	16'-3"	IX	3'-8"	4'-2"	5¾"	5½"				Vertical stirrups in beams.
PBL22	5	14	11'-11"	XIII	3'-1"	3'-1"	5'-9"	1'-10"				Beam end hoop.
FFV23	6	336	7'-3"	Str.								Pile reinforcement.
PBT24	5	7	3'-8"	Str.								Transverse top of beam.
PSL25	8	8	36'-1"	Str.								Longitudinal top crashwall.
PST26	5	36	3'-8"	Str.								Transverse top crashwall.

PIER 4 NORTHBOUND

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
PFL1	5	19	42'-6"	Str.								Longitudinal top & bottom footing.
PFT2	5	29	11'-6"	Str.								Transverse top footing.
PFT3	7	80	11'-6"	Str.								Transverse bottom footing.
PFV4	8	90	4'-6"	Str.								Vertical footings to plinth.
PFV5	5	72	2'-10"	Str.								Vertical footings to plinth.
PCV6	8	90	25'-0"	Str.								Vertical plinth to cap beam.
PSV7	5	72	8'-3"	Str.								Vertical plinth.
PSL8	5	18	35'-0"	Str.								Longitudinal top of beam.
PCS9	4	39	12'-1"	V	11'-6⅜"	3'-8"	4½"					Hoops in columns.
PBL10	11	7	9'-2"	Str.								Longitudinal top of beam.
PBL11	11	2	41'-6"	XI	30'-9"	1'-8"	3'-8¾"	2'-5"				Longitudinal top of beam.
PBL12	11	2	45'-6"	XI	34'-9"	1'-8"	3'-8¾"	2'-5"				Longitudinal top of beam.
PBL13	4	4	9'-2"	Str.								Longitudinal top of beam.
PBL14	11	8	8'-1"	Str.								Longitudinal bottom of beam.
PBL15	11	2	36'-1"	Str.								Longitudinal bottom of beam.
PBL16	11	2	39'-9"	Str.								Longitudinal bottom of beam.
PBV17	5	42	3'-7"	III	3'-0"	7"	5"	5"				Vertical dowel beam to pedestal.
PPH18	6	6	16'-4"	IX	4'-2"	3'-8"	6¾"	6½"				Hoops in pedestals (interior).
PPH19	6	6	17'-6"	VI	3'-8"	5'-9"	1'-10"	3'-8"	6¾"	6½"		Hoops in pedestals (exterior).
PBL20	5	8	36'-1"	Str.								Longitudinal in sides of beam.
PBS21	5	84	16'-3"	IX	3'-8"	4'-2"	5¾"	5½"				Vertical stirrups in beams.
PBL22	5	14	11'-11"	XIII	3'-1"	3'-1"	5'-9"	1'-10"				Beam end hoop.
FFV23	6	336	7'-3"	Str.								Pile reinforcement.
PBT24	5	7	3'-8"	Str.								Transverse top of beam.
PSL25	8	8	36'-1"	Str.								Longitudinal top crashwall.
PST26	5	36	3'-8"	Str.								Transverse top crashwall.

BAR TYPES



ALL DIMENSIONS ARE OUT TO OUT OF BARS

...NS MADE	IN CHARGE OF R. Parker
REVISION	DESIGNED BY F. Eckel
	DETAILED BY J. Durcoat
REVISION	TRACED BY
	TRACING CHECKED BY J.F. Darcy
REVISION	

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

BAR LIST #1

DRAWING NO. 1 OF 5

FED. RD. DIST. NO.	STATE	PROJECT NO.	TOTAL SHEETS	SHEET NO.
1	N.Y.	I-481-2(11)	223	209

INTERSTATE ROUTE CONSTRUCTION 81.3
DEWITT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

PIER 4 SOUTHBOUND

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
[illegible]	5	19	42'-6"	Str.								Longitudinal top & bottom footing.
[illegible]	5	29	11'-6"	Str.								Transverse top footing.
[illegible]	7	80	11'-6"	Str.								Transverse bottom footing.
[illegible]	8	90	4'-6"	Str.								Vertical footing to plinth.
[illegible]	5	72	2'-10"	Str.								Vertical footing to plinth.
[illegible]	8	90	25'-0"	Str.								Vertical plinth to cap beam.
[illegible]	5	72	8'-3"	Str.								Vertical plinth.
[illegible]	5	18	35'-0"	Str.								Longitudinal in plinth.
[illegible]	4	39	12'-1"	V	11'-6⅝"	3'-8"	4½"					Hoops in columns
[illegible]	11	7	9'-2"	Str.								Longitudinal top of beam.
[illegible]	11	2	41'-6"	XI	30'-9"	1'-8"	3'-8¾"	2'-5"				Longitudinal top of beam.
[illegible]	11	2	45'-6"	XI	34'-9"	1'-8"	3'-8¾"	2'-5"				Longitudinal top of beam.
[illegible]	4	4	9'-2"	Str.								Longitudinal top of beam.
[illegible]	11	8	8'-1"	Str.								Longitudinal bottom of beam.
[illegible]	11	2	36'-1"	Str.								Longitudinal bottom of beam.
[illegible]	11	2	39'-9"	Str.								Longitudinal bottom of beam.
[illegible]	5	42	3'-7"	III	3'-0"	7"	5"	5"				Vertical dowel beam to pedestal.
[illegible]	6	6	16'-4"	IX	4'-2"	3'-8"	6¾"	6½"				Hoops in pedestals (interior).
[illegible]	6	6	17'-6"	VI	3'-8"	5'-9"	1'-10"	3'-8"	6¾"	6½"		Hoops in pedestals (exterior).
[illegible]	5	8	36'-1"	Str.								Longitudinal in sides of beam.
[illegible]	5	84	16'-3"	IX	3'-8"	4'-2"	5¾"	5½"				Vertical stirrups in beams.
[illegible]	5	14	11'-11"	XIII	3'-1"	3'-1"	5'-9"	1'-10"				Beam end hoop.
[illegible]	6	336	7'-3"	Str.								Pile reinforcement.
[illegible]	5	7	3'-8"	Str.								Transverse top beam
[illegible]	8	8	36'-1"	Str.								Longitudinal top crashwall.
[illegible]	5	36	3'-8"	Str.								Transverse top crashwall.

PIER 5 NORTHBOUND (SOUTHBOUND IDENTICAL)

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
[illegible]	6	234	7'-3"	Str.								Pile reinforcement
[illegible]	10	17	43'-6"	Str.								Longitudinal Bottom Footing
[illegible]	11	16	43'-6"	Str.								Longitudinal Top Footing
[illegible]	5	95	8'-6"	Str.								Transverse Top & Bottom Footing
[illegible]	7	90	4'-0"	Str.								Dowels in Columns
[illegible]	7	90	24'-8"	Str.								Vertical Columns
[illegible]	4	63	12'-1"	V	11'-6⅝"	3'-8"	4½"					Stirrups in Columns
[illegible]	10	2	36'-1"	Str.								Longitudinal Bottom Cap Beam
[illegible]	10	2	39'-9"	Str.								" " " "
[illegible]	10	8	8'-6"	Str.								" " " "
[illegible]	5	10	36'-1"	Str.								" Sides " "
[illegible]	11	2	45'-6"	XI	34'-9"	1'-8"	3'-8¾"	2'-5"				" Top " "
[illegible]	11	2	41'-6"	XI	30'-9"	1'-8"	3'-8¾"	2'-5"				" " " "
[illegible]	11	6	8'-0"	Str.								" " " "
[illegible]	5	14	13'-1"	XIII	3'-8"	3'-8"	5'-9"	1'-10"				Horizontal Ends " "
[illegible]	5	76	13'-10"	IX	4'-2"	2'-6"	5¾"	5½"				Stirrups Cap Beam
[illegible]	5	42	3'-6"	III	2'-11"	7"	5"	5"				Vertical Pedestals
[illegible]	6	6	16'-0"	IX	3'-8"	4'-0"	6¾"	6½"				Horizontal Interior Pedestals
[illegible]	6	6	17'-5"	VI	3'-7¼"	5'-9"	1'-10"	3'-8"	6¾"	6½"		" Fascia "

PIER 6 NORTHBOUND

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
[illegible]	6	234	7'-3"	Str.								Pile reinforcement
[illegible]	10	17	43'-6"	Str.								Longitudinal Bottom Footing
[illegible]	11	16	43'-6"	Str.								" Top "
[illegible]	5	95	8'-6"	Str.								Transverse Top & Bottom Footing
[illegible]	7	90	4'-0"	Str.								Dowels in Columns
[illegible]	7	90	21'-11"	Str.								Vertical Columns
[illegible]	4	57	12'-1"	V	11'-6⅝"	3'-8"	4½"					Stirrups in Columns
[illegible]	10	2	36'-1"	Str.								Longitudinal Bottom Cap Beam
[illegible]	10	2	39'-9"	Str.								" " " "
[illegible]	10	8	8'-6	Str.								" " " "
[illegible]	5	10	36'-1"	Str.								" Sides " "
[illegible]	11	2	45'-6"	XI	34'-9"	1'-8"	3'-8¾"	2'-5"				" Top " "

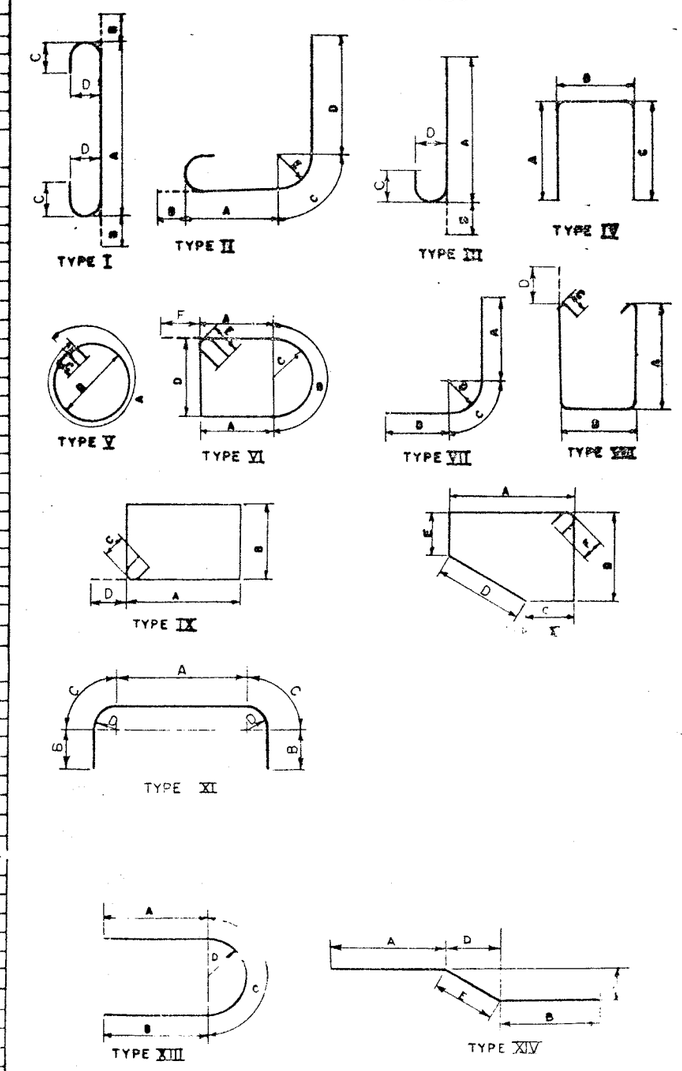
PIER 6 NORTHBOUND CONT'D

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
PBL13	11	2	41'-6"	XI	30'-9"	1'-8"	3'-8¾"	2'-5"				Longitudinal Top Cap Beam
PBL14	11	6	8'-0"	Str.								" " " "
PBH15	5	14	13'-1"	XIII	3'-8"	3'-8"	5'-9"	1'-10"				Horizontal Ends " "
PBS16	5	76	13'-10"	IX	4'-2"	2'-6"	5¾"	5½"				Stirrups Cap Beam
PBV17	5	42	3'-6"	III	2'-11"	7"	5"	5"				Vertical Pedestals
PPH18	6	6	16'-0"	IX	3'-8"	4'-0"	6¾"	6½"				Horizontal Interior Pedestals
PPH19	6	6	17'-5"	VI	3'-7¼"	5'-9"	1'-10"	3'-8"	6¾"	6½"		" Fascia "

PIER 6 SOUTHBOUND

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
FFV1	6	234	7'-3"	Str.								Pile reinforcement
PFL2	10	17	43'-6"	Str.								Longitudinal Bottom Footing
PFL3	11	16	43'-6"	Str.								" Top "
PFT4	5	95	8'-6"	Str.								Transverse Top & Bottom Footing
PFV5	7	90	4'-0"	Str.								Dowels in Columns
PCV6	7	90	25'-4"	Str.								Vertical Columns
PCS7	4	66	12'-1"	V	11'-6⅝"	3'-8"	4½"					Stirrups in Column
PBL8	10	2	36'-1"	Str.								Longitudinal Bottom Cap Beam
PBL9	10	2	39'-9"	Str.								" " " "
PBL10	10	8	8'-6"	Str.								" " " "
PBL11	5	10	36'-1"	Str.								" Sides " "
PBL12	11	2	45'-6"	XI	34'-9"	1'-8"	3'-8¾"	2'-5"				" Top " "
PBL13	11	2	41'-6"	XI	30'-9"	1'-8"	3'-8¾"	2'-5"				" " " "
PBL14	11	6	8'-0"	Str.								" " " "
PBH15	5	14	13'-1"	XIII	3'-8"	3'-8"	5'-9"	1'-10"				Horizontal Ends Cap Beam
PBS16	5	76	13'-10"	IX	4'-2"	2'-6"	5¾"	5½"				Stirrups Cap Beam
PBV17	5	42	3'-6"	III	2'-11"	7"	5"	5"				Vertical Pedestals
PPH18	6	6	16'-0"	IX	3'-8"	4'-0"	6¾"	6½"				Horizontal Interior Pedestals
PPH19	6	6	17'-5"	VI	3'-7¼"	5'-9"	1'-10"	3'-8"	6¾"	6½"		Horizontal Fascia Pedestals

BAR TYPES



ALL DIMENSIONS ARE OUT TO OUT OF BAR

IN CHARGE OF	R. Parker
DESIGNED BY	F. Eckel
DETAILED BY	J. Durrant
TRACED BY	
TRACING CHECKED BY	J.F. Darcy

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

BAR LIST #2

DRAWING NO. 15 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-481-2(16)	224	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

PIER 7 NORTHBOUND

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
PFL1	7	17	41'-6"	Str								Longitudinal bottom of footing.
PFL2	8	15	41'-6"	Str								Longitudinal top of footing.
PFT3	5	29	8'-6"	Str								Transverse top of footing.
PFT4	5	56	8'-6"	Str								Transverse bottom of footing.
PFV5	7	72	4'-0"	Str								Dowels footing to column.
PCV6	7	72	27'-5"	Str								Vertical in columns.
PCS7	4	75	11'-1"	V	10'-1½"	3'-2"	0'-5¾"					Hoops in columns.
PBL8	10	2	38'-4"	Str								Longitudinal in bottom of beam.
PBL9	10	6	7'-4"	Str								Longitudinal in bottom of beam.
PBL10	11	4	8'-8"	Str								Longitudinal in top of beam.
PBL11	11	2	40'-0"	XI	30'-3"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top of beam.
PPH12	6	6	14'-5"	IX	3'-8"	3'-2"	6¾"	6½"				Hoops interior pedestals.
PPH13	6	6	15'-2"	VI	3'-1¾"	5'-0"	1'-7"	3'-2"	6¾"	6½"		Hoops exterior pedestals.
PBV14	5	42	3'-4"	III	2'-9"	7"	5"	5"				Dowels pier beam to pedestals.
PBL15	5	8	35'-7"	Str								Longitudinal sides of beam.
PBL16	11	2	44'-0"	XI	34'-3"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top of beam.
PBL17	10	2	35'-7"	Str								Longitudinal in bottom of beam.
PBS18	4	72	12'-2"	IX	3'-8"	2'-2"	4½"	4½"				Stirrups pier beam.
PBH19	5	12	11'-2"	XIII	3'-1"	3'-1"	5'-0"	1'-7"				Hoop end of pier beam.
FFV20	6	156	7'-3"	Str								Pile reinforcement.

PIER 7 SOUTHBOUND

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
PFL1	7	17	41'-6"	Str								Longitudinal bottom of footing.
PFL2	8	15	41'-6"	Str								Longitudinal top of footing.
PFT3	5	29	8'-6"	Str								Transverse top of footing.
PFT4	5	56	8'-6"	Str								Transverse bottom of footing.
PFV5	7	72	4'-0"	Str								Dowels footing to column.
PCV6	7	72	26'-5"	Str								Vertical in columns.
PCS7	4	78	11'-1"	V	10'-1½"	3'-2"	0'-5¾"					Hoops in columns.
PBL8	10	2	38'-4"	Str								Longitudinal in bottom of beam.
PBL9	10	6	7'-4"	Str								Longitudinal in bottom of beam.
PBL10	11	4	8'-8"	Str								Longitudinal in top of beam.
PBL11	11	2	40'-0"	XI	30'-3"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top of beam.
PPH12	6	6	14'-5"	IX	3'-8"	3'-2"	6¾"	6½"				Hoops interior pedestals.
PPH13	6	6	15'-2"	VI	3'-1¾"	5'-0"	1'-7"	3'-2"	6¾"	6½"		Hoops exterior pedestals.
PBV14	5	42	3'-4"	III	2'-9"	7"	5"	5"				Dowels pier beam to pedestals.
PBL15	5	8	35'-7"	Str								Longitudinal sides of beam.
PBL16	11	2	44'-0"	XI	34'-3"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top of beam.
PBL17	10	2	35'-7"	Str								Longitudinal in bottom of beam.
PBS18	4	72	12'-2"	IX	3'-8"	2'-2"	4½"	4½"				Stirrups in beam.
PBH19	5	12	11'-2"	XIII	3'-1"	3'-1"	5'-0"	1'-7"				Hoop end of pier beam.
FFV20	6	156	7'-3"	Str								Pile reinforcement.

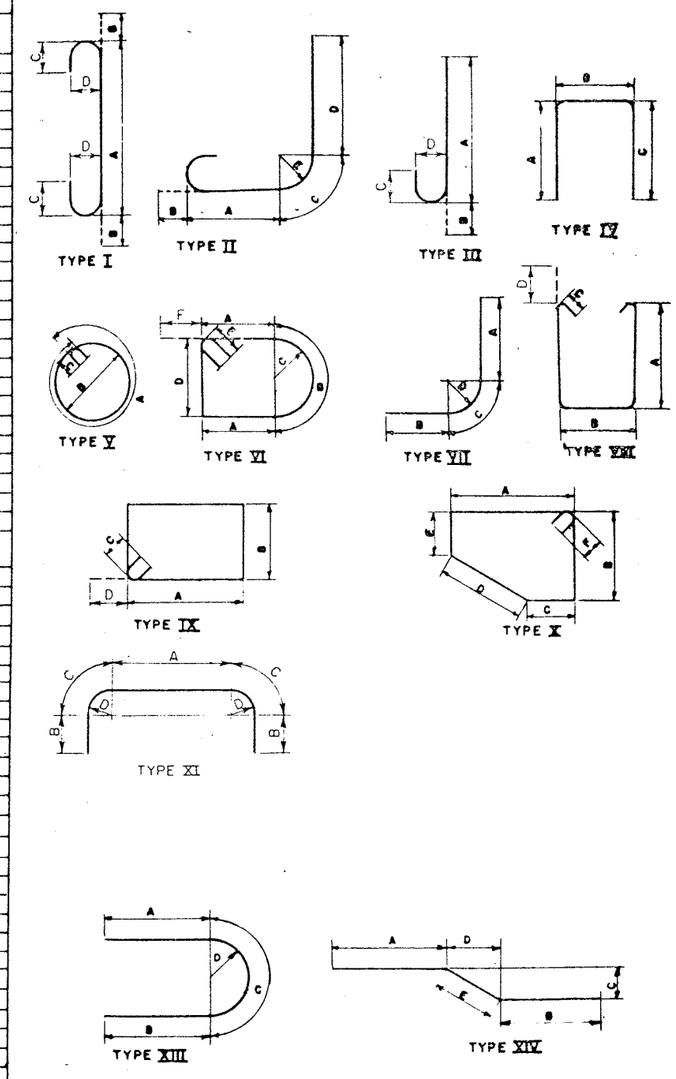
PIER 8 NORTHBOUND

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
PFL1	7	17	41'-6"	Str								Longitudinal bottom of footing.
PFL2	8	15	41'-6"	Str								Longitudinal top of footing.
PFT3	5	29	8'-6"	Str								Transverse top of footing.
PFT4	5	56	8'-6"	Str								Transverse bottom of footing.
PFV5	7	72	4'-0"	Str								Dowels footing to column.
PCV6	7	72	26'-10"	Str								Vertical in columns.
PCS7	4	72	11'-1"	V	10'-1½"	3'-2"	0'-5¾"					Hoops in columns.
PBL8	10	2	38'-4"	Str								Longitudinal in bottom of beam.
PBL9	10	6	7'-4"	Str								Longitudinal in bottom of beam.
PBL10	11	4	8'-8"	Str								Longitudinal in top of beam.
PBL11	11	2	40'-0"	XI	30'-3"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top of beam.
PPH12	6	6	14'-5"	IX	3'-8"	3'-2"	6¾"	6½"				Hoops interior pedestals.
PPH13	6	6	15'-2"	VI	3'-1¾"	5'-0"	1'-7"	3'-2"	6¾"	6½"		Hoops exterior pedestals.
PBV14	5	42	3'-4"	III	2'-9"	7"	5"	5"				Dowels pier beam to pedestals.
PBL15	5	8	35'-7"	Str								Longitudinal sides of beam.
PBL16	11	2	44'-0"	XI	34'-3"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top of beam.
PBL17	10	2	35'-7"	Str								Longitudinal in bottom of beam.
PBS18	4	72	12'-2"	IX	3'-8"	2'-2"	4½"	4½"				Stirrups pier beam.
PBH19	5	12	11'-2"	XIII	3'-1"	3'-1"	5'-0"	1'-7"				Hoop end of pier beam.
FFV20	6	156	7'-3"	Str								Pile reinforcement.

PIER 9 NORTHBOUND

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
PFL1	7	17	41'-6"	Str								Longitudinal bottom of footing.
PFL2	8	15	41'-6"	Str								Longitudinal top of footing.
PFT3	5	29	8'-6"	Str								Transverse top of footing.
PFT4	5	56	8'-6"	Str								Transverse bottom of footing.
PFV5	7	72	4'-0"	Str								Dowels footing to column.
PCV6	7	72	25'-10"	Str								Vertical in columns.
PCS7	4	69	11'-1"	V	10'-1½"	3'-2"	0'-5¾"					Hoops in columns.
PBL8	10	2	38'-4"	Str								Longitudinal in bottom of beam.
PBL9	10	6	7'-4"	Str								Longitudinal in bottom of beam.
PBL10	11	4	8'-8"	Str								Longitudinal in top of beam.
PBL11	11	2	40'-0"	XI	30'-3"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top of beam.
PPH12	6	6	14'-5"	IX	3'-8"	3'-2"	6¾"	6½"				Hoops interior pedestals.
PPH13	6	6	15'-2"	VI	3'-1¾"	5'-0"	1'-7"	3'-2"	6¾"	6½"		Hoops exterior pedestals.
PBV14	5	42	3'-4"	III	2'-9"	7"	5"	5"				Dowels pier beam to pedestals.
PBL15	5	8	35'-7"	Str								Longitudinal sides of beam.
PBL16	11	2	44'-0"	XI	34'-3"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top of beam.
PBL17	10	2	35'-7"	Str								Longitudinal in bottom of beam.
PBS18	4	72	12'-2"	IX	3'-8"	2'-2"	4½"	4½"				Stirrups pier beam.
PBH19	5	12	11'-2"	XIII	3'-1"	3'-1"	5'-0"	1'-7"				Hoop end of pier beam.
FFV20	6	156	7'-3"	Str								Pile reinforcement.

BAR TYPES



ALL DIMENSIONS ARE OUT TO OUT OF BARS

B MADE	
REVISION	
REVISION	
REVISION	

IN CHARGE OF R. Parker
DESIGNED BY F. Eckel
DETAILED BY J. Dunnett
TRACED BY
TRACING CHECKED BY J.F. Darcy

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

BAR LIST #5

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-BRC-3(29) I-481-2(16)	225	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

PIER 9 SOUTHBOUND

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
PFL1	8	14	41'-6"	Str.								Bottom of footing (Longitudinal).
PFL2	8	16	41'-6"	Str.								Top of footing (Longitudinal).
PFT3	5	88	8'-6"	Str.								Top & bottom of footing (Transverse).
PFV4	7	69	4'-0"	Str.								Dowels footing to column.
PCV5	7	69	26'-7"	Str.								Vertical column.
PCS6	4	72	11'-1"	V	10'-1½"	3'-2"	5¾"					Hoops in column.
PBL7	10	2	38'-5"	Str.								Top of beam (Longitudinal).
PBL8	10	6	7'-10"	Str.								Top of beam (Longitudinal).
PBL9	11	4	8'-8"	Str.								Bottom of beam (Longitudinal).
PBL10	11	2	40'-0"	XI	30'-3"	1'-2"	3'-8¾"	2'-5"				Bottom of beam (Longitudinal).
PBH11	6	6	14'-4"	IX	3'-8"	3'-2"	6¾"	6½"				Hoops in interior pedestals.
PBH12	6	6	15'-1"	VI	3'-4¾"	5'-0"	1'-7"	3'-2"	6¾"	6½"		Hoops in exterior pedestals.
PFV13	5	42	3'-4"	III	2'-9"	7"	5"	5"				Dowels pier beam to pedestals.
PBL14	5	8	35'-9"	Str.								Side of beam (Longitudinal).
PBL15	11	2	44'-0"	XI	34'-3"	1'-2"	3'-8¾"	2'-5"				Top of beam (Longitudinal).
PBL16	10	2	35'-9"	Str.								Bottom of beam (Longitudinal).
PBS17	5	60	12'-3"	IX	3'-8"	2'-0"	5¾"	5½"				Stirrups capbeam.
PBL18	5	10	11'-2"	XIII	3'-1"	3'-1"	5'-0"	1'-7"				Longitudinal in capbeam.
PFY19	6	168	7'-3"	Str.								Pile reinforcement.

PIER 10 NORTHBOUND

PFL1	9	32	41'-6"	Str.								Longitudinal (Top & bottom) footing.
PFT3	5	108	8'-6"	Str.								Transverse (Top & bottom) footing.
PFV4	7	72	4'-6"	Str.								Dowels footing to column.
PCV5	7	72	24'-10"	Str.								Vertical in columns.
PCS6	4	61	11'-1"	V	10'-1½"	3'-2"	5¾"					Hoops in columns.
PBL7	10	2	38'-3"	Str.								Longitudinal in bottom cap beam.
PBL8	10	3	7'-10"	Str.								Longitudinal in bottom cap beam.
PBL9	10	2	35'-3"	Str.								Longitudinal in bottom cap beam.
PBL10	11	4	8'-8"	Str.								Longitudinal in top cap beam.
PBL11	11	2	39'-8"	XI	29'-11"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top cap beam.
PBL12	11	2	43'-8"	XI	33'-11"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top cap beam.
PBL13	5	5	35'-2"	Str.								Longitudinal in sides cap beam.
PBH14	5	12	11'-2"	XIII	3'-1"	3'-1"	5'-0"	1'-7"				Horizontal ends of cap beam.
PBS15	5	56	12'-3"	IX	3'-8"	2'-0"	5¾"	5½"				Stirrups in cap beam.
PFV16	5	42	3'-4"	III	2'-9"	7"	5"	5"				Vertical in pedestals.
PBH17	6	6	13'-3"	IX	3'-4"	3'-2"	6¾"	6½"				Horizontal interior pedestals
PBH18	6	6	14'-1"	VI	3'-0"	5'-0"	1'-7"	3'-2"	6¾"	6½"		Horizontal fascia pedestals.
PFY19	6	168	7'-3"	Str.								Vertical in piles.

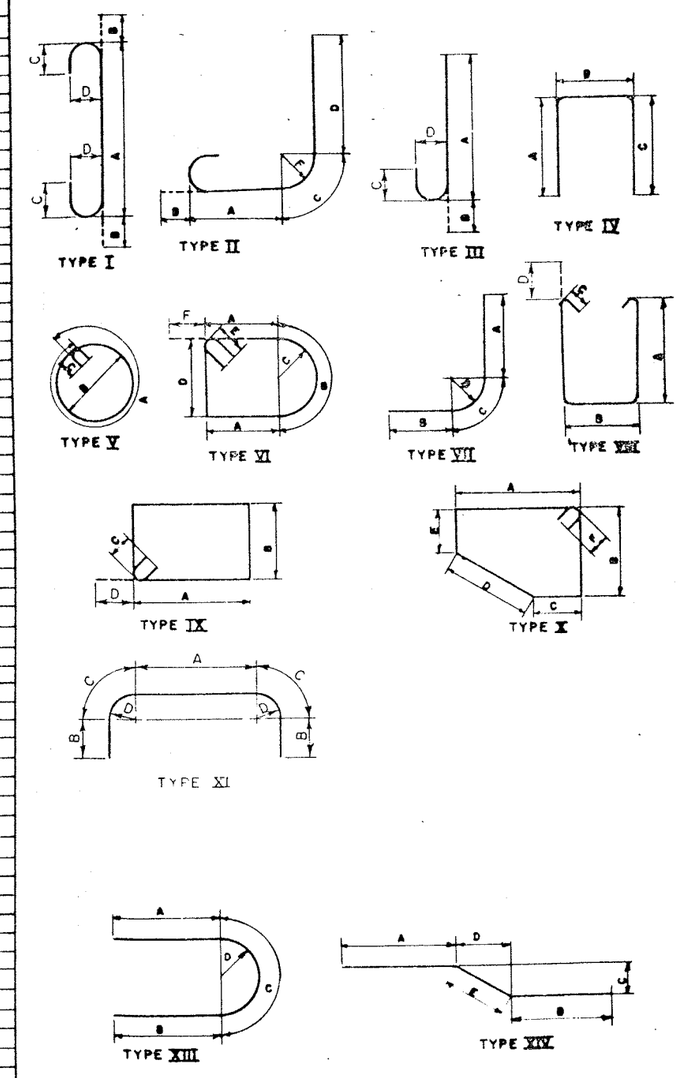
PIER 0 SOUTHBOUND

PFL1	9	32	41'-6"	Str.								Longitudinal (Top & bottom) footing.
PFT3	5	108	8'-6"	Str.								Transverse (Top & bottom) footing.
PFV4	7	72	4'-6"	Str.								Dowels footing to column.
PCV5	7	72	24'-9"	Str.								Vertical in columns.
PCS6	4	66	11'-1"	V	10'-1½"	3'-2"	5¾"					Hoops in columns.
PBL7	10	2	38'-3"	Str.								Longitudinal in bottom cap beam.
PBL8	10	6	7'-10"	Str.								Longitudinal in bottom cap beam.
PBL9	10	2	35'-3"	Str.								Longitudinal in bottom cap beam.
PBL10	11	4	8'-8"	Str.								Longitudinal in top cap beam.
PBL11	11	2	39'-8"	XI	29'-11"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top cap beam.
PBL12	11	2	43'-8"	XI	33'-11"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top cap beam.
PBL13	5	8	35'-2"	Str.								Longitudinal in sides cap beam.
PBH14	5	12	11'-2"	XIII	3'-1"	3'-1"	5'-0"	1'-7"				Horizontal ends of cap beam.
PBS15	5	56	12'-3"	IX	3'-8"	2'-0"	5¾"	5½"				Stirrups in cap beam.
PFV16	5	42	3'-4"	III	2'-9"	7"	5"	5"				Vertical in pedestals.
PBH17	6	6	13'-9"	IX	3'-4"	3'-2"	6¾"	6½"				Horizontal interior pedestals.
PBH18	6	6	14'-11"	VI	3'-0"	5'-0"	1'-7"	3'-2"	6¾"	6½"		Horizontal fascia pedestals.
PFY19	6	168	7'-3"	Str.								Vertical in piles.

PIER 1 SOUTHBOUND (PIER 1 NORTHBOUND IDENTICAL)

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
PFL1	8	16	43'-6"	Str.								Longitudinal-Top of footing.
PFL2	10	16	43'-6"	Str.								Longitudinal-Bottom of footing.
PFT3	5	95	8'-6"	Str.								Transverse-Top & Bottom footing.
PFV4	7	90	4'-0"	Str.								Dowels in footing.
PCV5	7	90	24'-11"	Str.								Vertical in column.
PCS6	4	63	12'-1"	V	11'-6¾"	3'-8"	4½"					Hoops in column.
PBL7	9	2	36'-1"	Str.								Longitudinal-Bottom of beam.
PBL8	9	2	39'-6"	Str.								Longitudinal-Bottom of beam.
PBL9	9	6	7'-6"	Str.								Longitudinal-Bottom of beam.
PBL10	5	10	36'-1"	Str.								Longitudinal-Sides of beam.
PBL11	10	4	7'-6"	Str.	✓	✓	✓	✓				Longitudinal-Top of beam.
PBL12	10	2	41'-6"	XI	30'-9"	1'-11"	3'-10"	2'-5"				Longitudinal-Top of beam.
PBL13	10	2	45'-6"	XI	34'-9"	1'-11"	3'-10"	2'-5"				Longitudinal-Top of beam.
PBH14	5	14	13'-1"	XIII	3'-8"	3'-8"	5'-9"	1'-10"				Pier cap end hoops.
PBS15	4	48	13'-11"	IX	4'-2"	2'-7"	4½"	4½"				Stirrups in cap beam.
PPH16	6	6	16'-0"	IX	3'-8"	4'-0"	6¾"	6½"				Hoops in interior pedestals.
PPH17	6	6	17'-5"	VI	3'-7¼"	5'-9"	1'-10"	3'-8"	6¾"	6½"		Hoops in fascia pedestals.
PBY18	5	42	3'-6"	III	2'-11"	7"	5"	5"				Dowels pier beam to pedestal
FFY19	6	156	7'-3"	Str.								Pile reinforcement.

BAR TYPES



ALL DIMENSIONS ARE OUT TO OUT OF BARS

NS MADE
REVISION
REVISION
REVISION

IN CHARGE OF R. Parker
DESIGNED BY F. Eckel
DETAILED BY J. DURRANT
TRACED BY
TRACING CHECKED BY J.F.D.

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

BAR LIST #4

FED. RD. REG NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO	TOTAL SHEETS
1	NEW YORK	F-890-3(23) F-651-2(16)	226	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

PIER 10 N.B.

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
PFL1	10	14	41'-6"	Str								Longitudinal in bottom of footing
PFL2	8	16	41'-6"	Str								Longitudinal in top of footing
PFT3	5	102	5'-6"	Str								Transverse top & bottom footing
PFV4	7	72	4'-3"	Str								Dowels footing to column
PCV5	7	72	22'-6"	Str.								Vertical in columns
PCS6	4	60	10'-11"	V	10'-1½"	3'-2"	0'-4½"					Hoops in columns
PBS7	4	72	12'-2"	IX	3'-8"	2'-2"	4½"	4½"				Stirrups in cap beam
PBL8	10	2	37'-10"	Str								Longitudinal in bottm of beam
PBL9	10	6	7'-4"	Str								Longitudinal in bottom of beam
PBL10	11	4	7'-8"	Str								Longitudinal in top of beam
PBL11	11	2	39'-8"	XI	29'-11"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top of beam
PBH12	6	6	13'-9"	IX	3'-4"	3'-2"	6¾"	6½"				Hoops in pedestals (interior)
PBH13	6	6	14'-11"	VI	3'-0"	5'-0"	1'-7"	3'-2"	6¾"	6½"		Hoops in pedestals (exterior)
PBV14	5	42	3'-1"	III	2'-6"	7"	5"	5"				Dowels pier beam to pedestals
PBL15	5	8	35'-3"	Str								Longitudinal in sides of beam
PBL16	11	2	43'-8"	XI	33'-11"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top of beam
PBL17	10	2	35'-3"	Str								Longitudinal in bottom of beam
PBL18	5	12	11'-2"	XIII	3'-1"	3'-1"	5'-0"	1'-7"				Horizontal in ends of beam
FFV19	6	144	7'-3"	Str								Reinforcement in piles

PIER 11 S.B.

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
PFL1	10	14	41'-6"	Str								Longitudinal in bottom of footing
PFL2	8	16	41'-6"	Str								Longitudinal in top of footing
PFT3	5	102	8'-6"	Str								Transverse top & bottom of footing
PFV4	7	72	4'-3"	Str								Dowels footing to column
PCV5	7	72	22'-6"	Str								Vertical in columns
PCS6	4	60	10'-11"	V	10'-1½"	3'-2"	4½					Hoops in columns
PBS7	4	72	12'-2"	IX	3'-8"	2'-2"	4½"	4½"				Stirrups in cap beam
PBL8	10	2	37'-10'	Str								Longitudinal in bottom of beam
PBL9	10	6	7'-4"	Str								Longitudinal in bottom of beam
PBL10	11	4	7'-8"	Str								Longitudinal in top of beam
PBL11	11	2	39'-8"	XI	29'-11"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top of beam
PBH12	6	6	13'-9"	IX	3'-4"	3'-2"	6¾"	6½"				Hoops in pedestals (interior)
PBH13	6	6	14'-11"	VI	3'-0"	5'-0"	1'-7"	3'-2"	6¾"	6½"		Hoops in pedestals (exterior)
PBV14	5	42	3'-1"	III	2'-6"	7"	5"	5"				Dowels pier beam to pedestals
PBL15	5	8	35'-3"	Str								Longitudinal in sides of beam
PBL16	11	2	43'-8"	XI	33'-11"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top of beam
PBL17	10	2	35'-3"	Str								Longitudinal in bottom of beam
PBL18	5	12	11'-2"	XIII	3'-1"	3'-1"	5'-0"	1'-7"				Horizontal in ends of beam
FFV19	6	144	7'-3"	Str								Reinforcement in piles

PIER 12 N.B.

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
PFL1	10	14	41'-6"	Str.								Longitudinal in bottom of footing
PFL2	8	16	41'-6"	Str								Longitudinal in top of footing
PFT3	5	102	8'-6"	Str.								Transverse top & bottom footing
PFV4	7	72	4'-3"	Str.								Dowels footing to column
PCV5	7	72	19'-2"	Str.								Vertical in colums
PCS6	4	51	10'-11"	V	10'-1½"	3'-2"	4½"					Hoops in colums
PBS7	4	72	12'-2"	IX	3'-8"	2'-2"	4½"	4½"				Stirrups in cap beam
PBL8	10	2	37'-10"	Str.								Longitudinal in bottom of beam
PBL9	10	6	7'-4"	Str.								Longitudinal in bottom of beam
PBL10	11	4	7'-8"	Str.								Longitudinal in top of beam
PBL11	11	2	39'-8"	XI	29'-11"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top of beam
PBH12	6	6	13'-9"	IX	3'-4"	3'-2"	6¾"	6½"				Hoops in pedestals (interior)
PBH13	6	6	14'-11"	VI	3'-0"	5'-0"	1'-7"	3'-2"	6¾"	6½"		Hoops in pedestals (exterior)
PBV14	5	42	3'-1"	III	2'-6"	7"	5"	5"				Dowels pier beam to pedestals
PBL15	5	8	35'-3"	Str								Longitudinal in sides of beam
PBL16	11	2	43'-8"	XI	33'-11"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top of beam
PBL17	10	2	35'-3"	Str.								Longitudinal in bottom of beam
PBL18	5	12	11'-2"	XIII	3'-1"	3'-1"	5'-0"	1'-7"				Horizontal in ends of beam
FFV19	6	144	7'-3"	Str								Reinforcement in piles

PIER 12 S.B. IDENTICAL TO PIER 11 N.B.

PIER 13 N.B.

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
PFL1	10	27	41'-6"	Str.								Longitudinal in top & bottom of footing
PFT2	5	61	7'-0"	Str.								Transverse in top & bottom of footing
PFV3	7	75	4'-6"	Str.								Dowels footing to columns
PCV4	7	75	15'-0"	Str.								Vertical in columns
PCS5	4	39	10'-11"	V	10'-1½"	3'-2"	0'-4½"					Hoops in columns
PBL6	10	6	6'-10"	Str.								Longitudinal in bottom of beam
PBL10	11	4	7'-8"	Str								Longitudinal in top of beam
PBL11	11	2	39'-8"	XI	29'-11"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top of beam
PBL12	11	2	43'-8"	XI	33'-11"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top of beam
PBL13	5	8	35'-2½"	Str.								Longitudinal in beam sides
PBL14	10	2	35'-2½"	Str.								Longitudinal in bottom of beam
PBL15	10	2	38'-2½"	Str.								Longitudinal in bottom of beam
PBL16	5	12	11'-2"	XIII	3'-1"	3'-1"	5'-0"	1'-7"				Beam end hoop.
PBV17	5	42	3'-1"	III	2'-6"	7"	5"	5"				Vertical dowel beam to pedestal
PBH18	6	6	13'-9"	IX	3'-4"	3'-2"	6¾"	6½"				Hoops in pedestals (interior)
PBH19	6	6	14'-11"	VI	3'-0"	5'-0"	1'-7"	3'-2"	6¾"	6½"		Hoops in pedestals (exterior)
FFV20	6	144	7'-3"	Str								Pile reinforcement
FBS21	4	68	12'-2"	IX	3'-8"	2'-2"	0'-4½"	4½"				Stirrups in cap beam

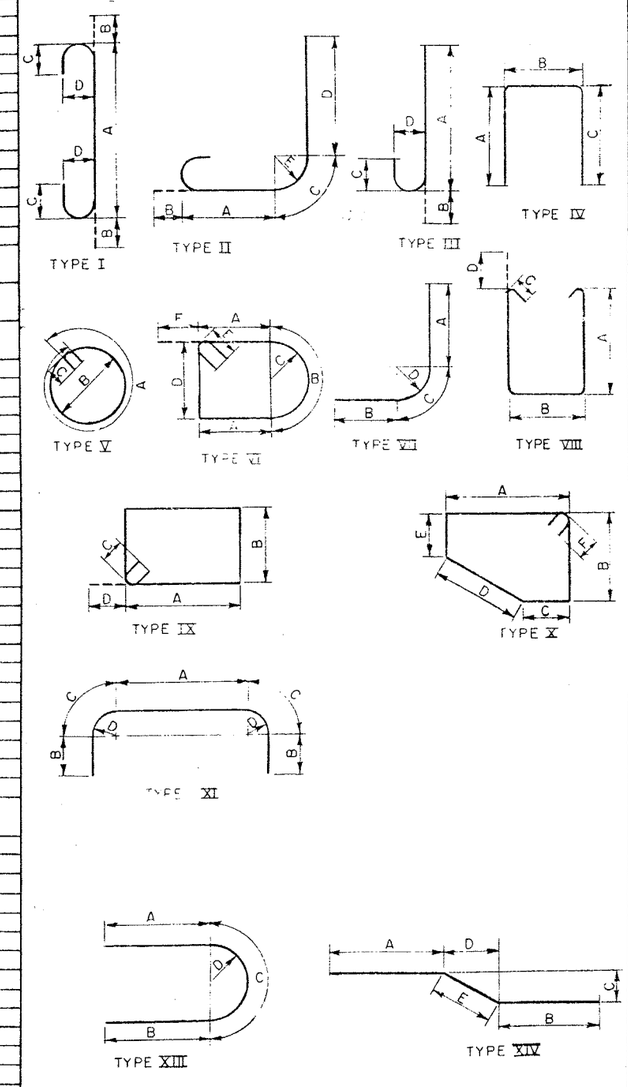
PIER 13 S.B. IDENTICAL TO PIER 12 N.B.

PIER 14 N.B.

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	LOCATION
PFL1	10	27	41'-6"	Str.								Longitudinal in top & bottom of footing
PFT2	5	61	7'-0"	Str.								Transverse top & bottom of footing
PFV3	7	24	4'-6"	Str.								Dowels footing to columns
PFV4	10	56	7'-2"	III	5'-7"	1'-7½"	1'-0¾"	1'-3¼"				Dowels footing to columns
PCV6	10	56	10'-11"	Str.								Vertical in columns (exterior)
PCV7	7	24	11'-4"	Str.								Vertical in columns (interior)
PCS8	4	27	10'-11"	V	10'-1½"	3'-2"	0'-4½"					Hoops in columns
PBL9	10	6	6'-10"	Str.								Longitudinal in bottom of beam
PBL10	11	4	7'-8"	Str.								Longitudinal in top of beam
PBL11	11	2	39'-8"	XI	29'-11"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top of beam
PBL12	11	2	43'-8"	XI	33'-11"	1'-2"	3'-8¾"	2'-5"				Longitudinal in top of beam
PBL13	5	8	35'-2½"	Str.								Longitudinal in beam sides
PBL14	10	2	35'-2½"	Str.								Longitudinal in bottom of beam
PBL15	10	2	38'-2½"	Str.								Longitudinal in bottom of beam
PBL16	5	12	11'-2"	XIII	3'-1"	3'-1"	5'-0"	1'-7"				Beam end hoop
PBV17	5	42	3'-1"	III	2'-6"	7"	5"	5"				Vertical dowel beam to pedestal
PBH18	6	6	13'-9"	IX	3'-4"	3'-2"	6¾"	6½"				Hoops in pedestals (interior)
PBH19	6	6	14'-11"	VI	3'-0	5'-0"	1'-7"	3'-2"	6¾"	6½"		Hoops in pedestals (exterior)
FFV20	6	144	7'-3"	Str.								Pile reinforcement
FBS21	4	68	12'-2"	IX	3'-8"	2'-2"	0'-4½"	4½"				Stirrups in cap beam

PIER 14 S.B. IDENTICAL TO PIER 13 N.B.

BAR TYPES



PLANS MADE
1 REVISION
2 REVISION
3 REVISION

PROJECT ENGINEER R. Fowler
IN CHARGE OF E. Eckel
DESIGNED BY
DESIGN CHECKED BY
DETAILED BY L. Everett & L. Hurt
DETAIL CHECKED BY JFD

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

BAR LIST # 5
DRAWING NO. 48 OF 50

FED. NO. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-481-2(10)	227	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

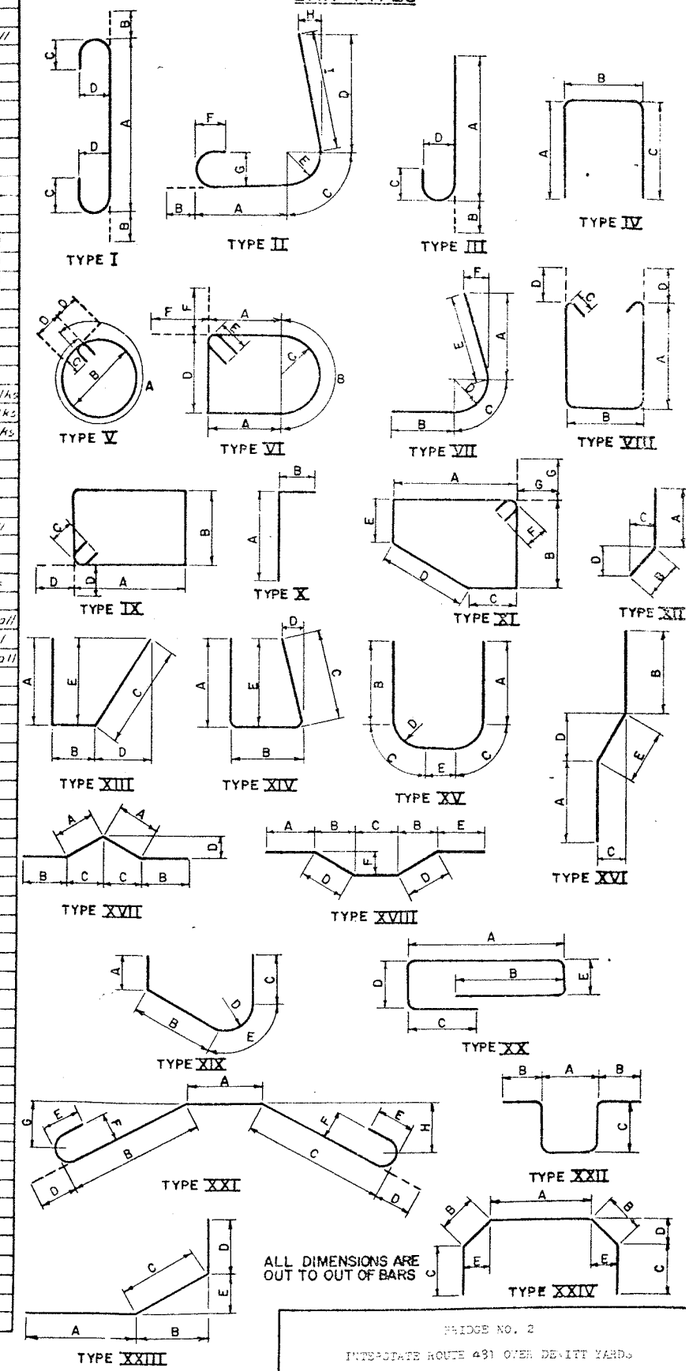
SOUTH ABUTMENT

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	I	LOCATION
AFL1	5	56	34'-4"	Str.										Longitudinal-Top & Bottom footing.
AFL2	5	28	23'-0"	Str.										Longitudinal-Top & Bottom footing.
AFL3	5	14	8'-6"	Str.										Longitudinal-Top & Bottom footing.
AFL4	5	14	9'-0"	Str.										Longitudinal-Top & Bottom footing.
AFT5	5	311	8'-6"	Str.										Transverse-Top & Bottom footing.
AFT6	7	76	8'-6"	Str.										Transverse - Bottom footing.
AWV7	5	17	3'-4"	Str.										Vertical - Wingwall.
AFV8	5	120	3'-0"	Str.										Dowels.
AWV9	7	36	12'-11"	Str.										Vertical - Wingwall.
AWV10	5	41	13'-0"	Str.										Vertical - Wingwall.
AWV11	7	36	13'-0"	Str.										Vertical - Wingwall.
ABV12	5	40	12'-0"	Str.										Backwall - Vertical.
ABV13	5	24	13'-7"	Str.										Backwall - Vertical.
ABV14	7	105	12'-0"	Str.										Backwall - Vertical.
AWH15	5	28	23'-0"	Str.										Wingwall - Horizontal.
AWH16	5	28	26'-0"	XVI	20'-0"	5'-9"	6"	6"	8½"					Wingwall - Horizontal.
AWH17	5	28	5'-8"	Str.										Curtainwall - Horizontal.
AWH18	5	20	8'-0"	Str.										Wingwall - Horizontal.
AWH19	5	10	7'-8"	Str.										Wingwall - Horizontal.
ABH20	5	56	40'-6"	Str.										Backwall - Horizontal.
ABH21	5	28	22'-3"	Str.										Backwall - Horizontal.
ABH22	5	28	22'-11"	Str.										Backwall - Horizontal.
AFV23	7	243	4'-2"	Str.										Dowels.
ABV24	5	68	4'-9"	IV	2'-3"	5½"	2'-3"							Vertical - Header.
AHL26	5	4	33'-6"	Str.										Longitudinal - Header.
AHL27	5	2	22'-3"	Str.										Longitudinal - Header (Mall).
AHL28	5	2	22'-11"	Str.										Longitudinal - Header. "
ABV29	7	66	13'-7"	Str.										Backwall - Vertical.
ABV30	5	44	5'-5½"	IV	2'-3"	1'-2"	2'-3"							Header - Vertical (Mall).
AWV31	5	58	4'-6"	X	8"	3'-11"								Parapet - Vertical.
AWV32	5	58	3'-11"	Str.										Parapet - Vertical.
ACH33	5	6	23'-6"	Str.										Parapet - Horizontal (Exterior).
ACH34	5	6	25'-10"	XVI	5'-4"	19'-10"	6"	6"	8½"					Parapet - Horizontal (Exterior).
ACH35	5	6	5'-8"	Str.										Parapet - Horizontal (Exterior).
AWV36	5	18	8'-3½"	IV	3'-11"	8"	3'-11"							Curtainwall - Vertical.
ACH37	5	6	8'-4"	Str.										Parapet - Horizontal.
ACH38	5	6	8'-9"	XVI	3'-0"	5'-1"	6"	6"	8½"					Parapet - Horizontal.
ACH39	5	26	3'-8"	Str.										Parapet & Curtainwall.
APH40	5	21	10'-4"	XIII	3'-10"	3'-6"	3'-3"	0'-9"	3'-3"					Pedestal - Horizontal.
AFV41	5	24	3'-11"	Str.										Pedestal - Vertical.
APH42	5	3	10'-4"	IV	3'-10"	3'-6"	3'-3"							Horizontal - Pedestal.
FFV43	6	582	7'-3"	Str.										Pile reinforcement.

NORTH ABUTMENT

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	I	LOCATION
AFL1	5	40	33'-4"	Str.										Longitudinal (Top & Bottom) footing
AFL2	5	20	17'-6"	Str.										Longitudinal (T&B) outside wingwall
AFL3	5	20	8'-7"	Str.										Longitudinal (T&B) inside wingwall
AFT4	5	360	6'-0"	Str.										Transverse (T&B) footing
AFV5	5	316	2'-10"	Str.										Dowels
AFV6	5	24	4'-3"	Str.										Vertical pedestals
AWV7	5	12	Varies	Str.	Varies from 10'-9" to 11'-2" in equal incre									Vertical (Fr.) west exterior wingwall
AWV8	5	10	Varies	Str.	Varies from 9'-10" to 10'-1" in equal incre.									Vertical west interior wingwall
AWV9	5	10	Varies	Str.	Varies from 10'-10" to 11'-8" in equal incre									Vertical east interior wingwall
AWV10	5	12	Varies	Str.	Varies from 10'-2" to 10'-7" in equal incre.									Vertical east exterior wingwall
AWV11	5	16	8'-4"	IV	3'-11"	8"	3'-11"							Vertical curtainwall sidewalks
AWV12	6	50	4'-10"	IV	4'-3"	8"	0"							Vertical parapets
AWV13	6	50	4'-3"	Str.										Vertical parapets
ABV14	5	38	Varies	Str.	Varies from 8'-11" to 9'-8 in equal incre. 2 sets									Vertical backwalls
ABV15	5	24	Varies	Str.	Varies from 10'-6" to 11'-4" in equal incre									Vertical mallwall
ABV16	5	48	6'-0"	IV	2'-6"	1'-2"	2'-6"							Vertical sidewalk on mallwall
AWH17	5	22	5'-8"	Str.										Horizontal curtainwalls
AWH18	5	22	19'-10"	XVI	14'-2"	5'-4"	6"	6"	8½"					Horizontal outside wingwall (Fr)
AWH19	5	16	16'-6"	Str.										Horizontal outside wingwall (rear)
AWH20	5	32	7'-7"	Str.										Horizontal inside wingwall (F&R)
ABH21	5	36	40'-1"	Str.										Horizontal backwall
ABH22	5	40	24'-0"	Str.										Horizontal mallwall (bottom)
APH24	5	6	10'-6"	IV	3'-3"	4'-2"	3'-3"							Horizontal facia pedestals
APH25	5	18	9'-8"	IV	3'-3	3'-4"	3'-3"							Horizontal interior
ACH26	5	6	5'-8"	Str.										Horizontal curtainwall sidewalks
ACH27	5	6	19'-10"	XVI	14'-2"	5'-4"	6"							Horizontal outside wingwall sidewalks
ACH28	5	6	16'-6"	Str.										Horizontal outside wingwall sidewalks
ACH29	5	12	7'-6"	Str.										Horizontal inside wingwall sidewalks
ACH30	5	12	1'-8"	Str.										Horizontal inside wingwall sidewalks
ACH31	5	4	24'-0"	Str.										Horizontal mallwall sidewalks
FFV32	6	384	7'-3"	Str.										Vertical all piles
ABV33	5	90	Varies	Str.	Varies from 8'-9" to 9'-8" in equal incre 2 sets									Vertical in backwall (Rear)
AWV34	5	22	Varies	Str.	Varies from 10'-5" to 10'-9" in equal incre.									Vertical in back of west ext. wingwall
ABV35	5	64	Varies	Str.	Varies from 10'-6" to 11'-4" in equal incre.									Vertical in back of mallwall
AWV36	5	2	11'-2"	Str.										Vertical in curtainwall (west)
ABH37	5	32	1'-8"	Str.										Horizontal in nterior curtainwalls
AWV38	5	2	10'-7"	Str.										Vertical in curtainwall (East)
AWV39	5	22	Varies	Str.	Varies from 9'-9" to 10'-3" in equal incre									Vertical in back of (East) ext wingwall
AWV40	5	4	11'-3"	Str.										Vertical in interior (East) curtain wall
AWV41	5	4	10'-6"	Str.										Verterical in interior (West) curtainwall

BAR TYPES



ALL DIMENSIONS ARE OUT TO OUT OF BARS

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

BAR LIST #6

PROJECT ENGINEER K. Marker
IN CHARGE OF F. Eckel
DESIGNED BY
DESIGN CHECKED BY
DETAILED BY K. Silbert
DETAIL CHECKED BY

BIN 1093571

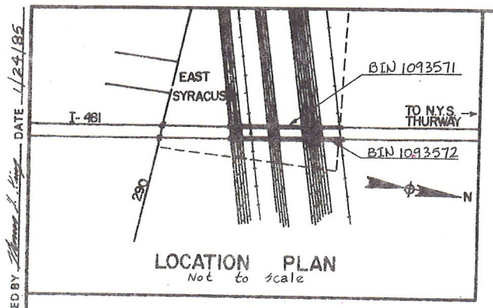
D251438

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.
1	N.Y.	IR-481-(174) BHI-481-(174)	37

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE - PHASE 2
BUTTERNUT INTERCHANGE TO COLLAMER,
SH 70-7 ONONDAGA COUNTY

D.J. Hann 7/5/11
J.W. Gouyounchi 7-9-13
Pete Kiehlson 10/4/89
9/23/93

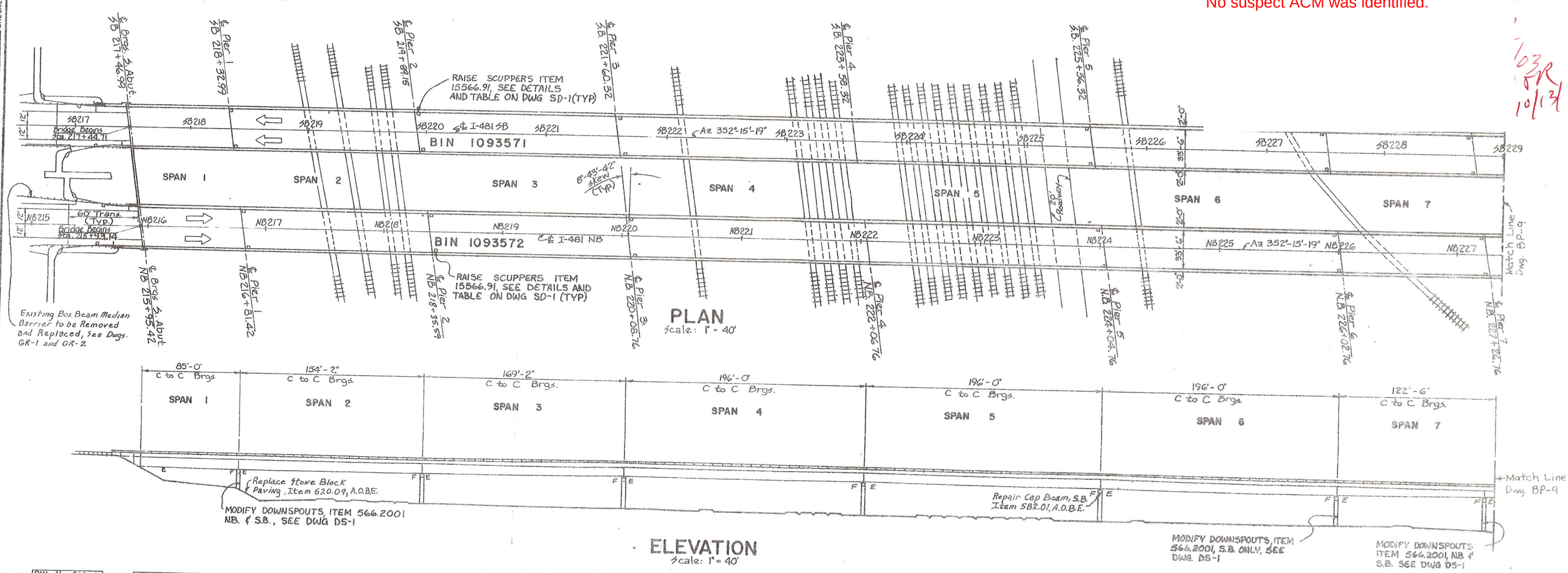
Record plans reviewed on 3/20/14by GA.
No suspect ACM was identified.



LOCATION PLAN
Not to scale

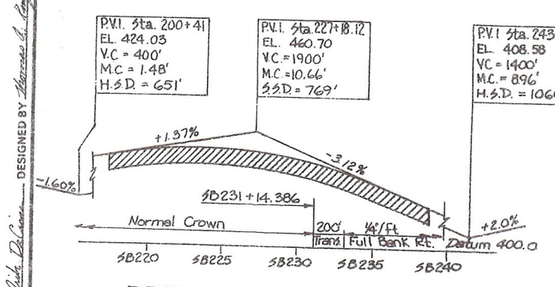
LOAD RATING	H.S. LOADING
INVENTORY	OPERATING
HS 21.7 (39T) L.F. *	HS 36.3 (65T) L.F. *

Northbound and Southbound Bridges
* L.F. = Load Factor

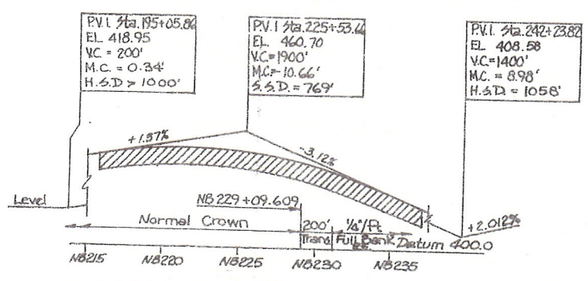


PLAN
Scale: 1" = 40'

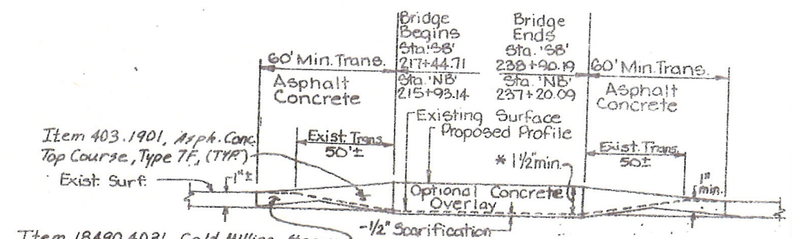
ELEVATION
Scale: 1" = 40'



PROFILE SOUTHBOUND
Scale: Horiz. 1" = 500'
Vert. 1" = 40'



PROFILE NORTHBOUND
Scale: Horiz. 1" = 500'
Vert. 1" = 40'



PROPOSED PROFILE
Not to Scale

AS - BUILT REVISIONS

SIGNATURE DATE

BIN 1093571 AND 1093572
SB AND NB OVER CONRAIL

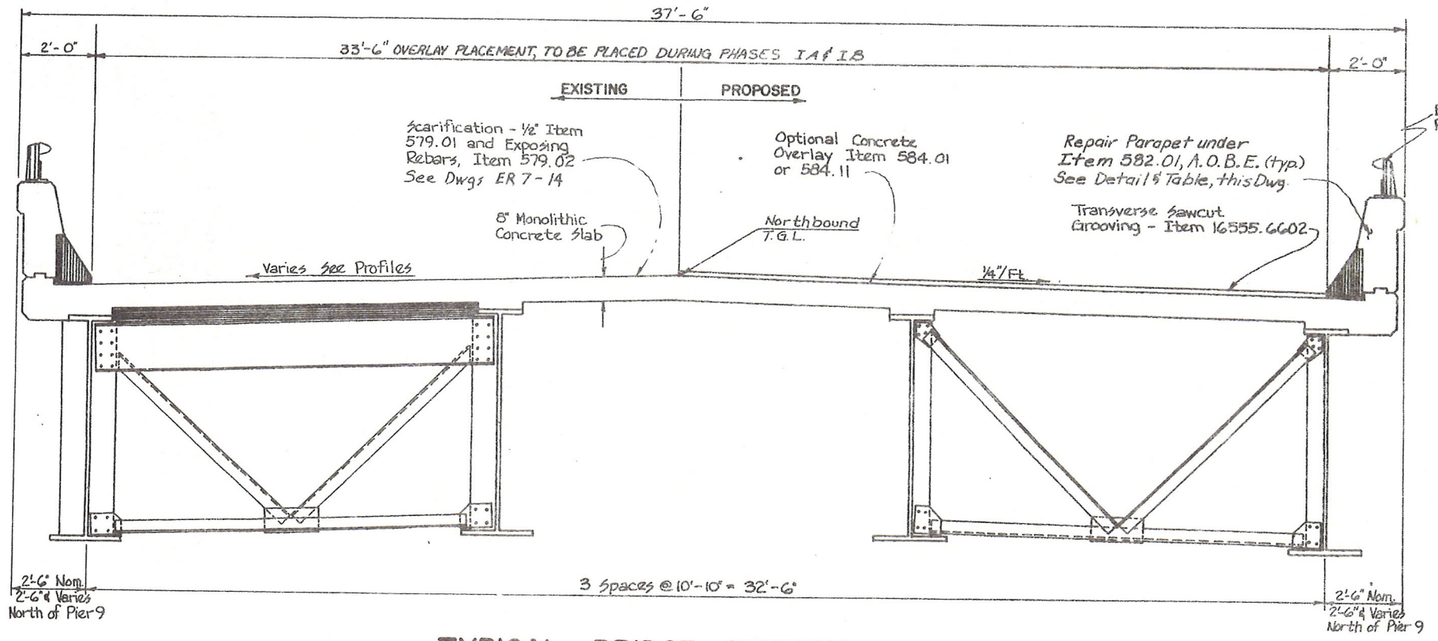
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

DRAWING No. | SCALE | DATE

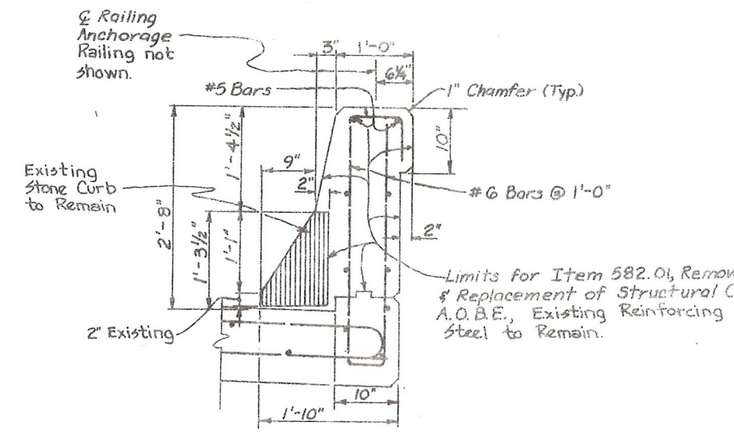
DATE 11/24/85 — CHECKED BY — DRAFTED BY — CHECKED BY — ESTIMATED BY — CHECKED BY — DESIGNED BY — IN CHARGE OF

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	IR-431-(174) BHI 481-(174)	39	66

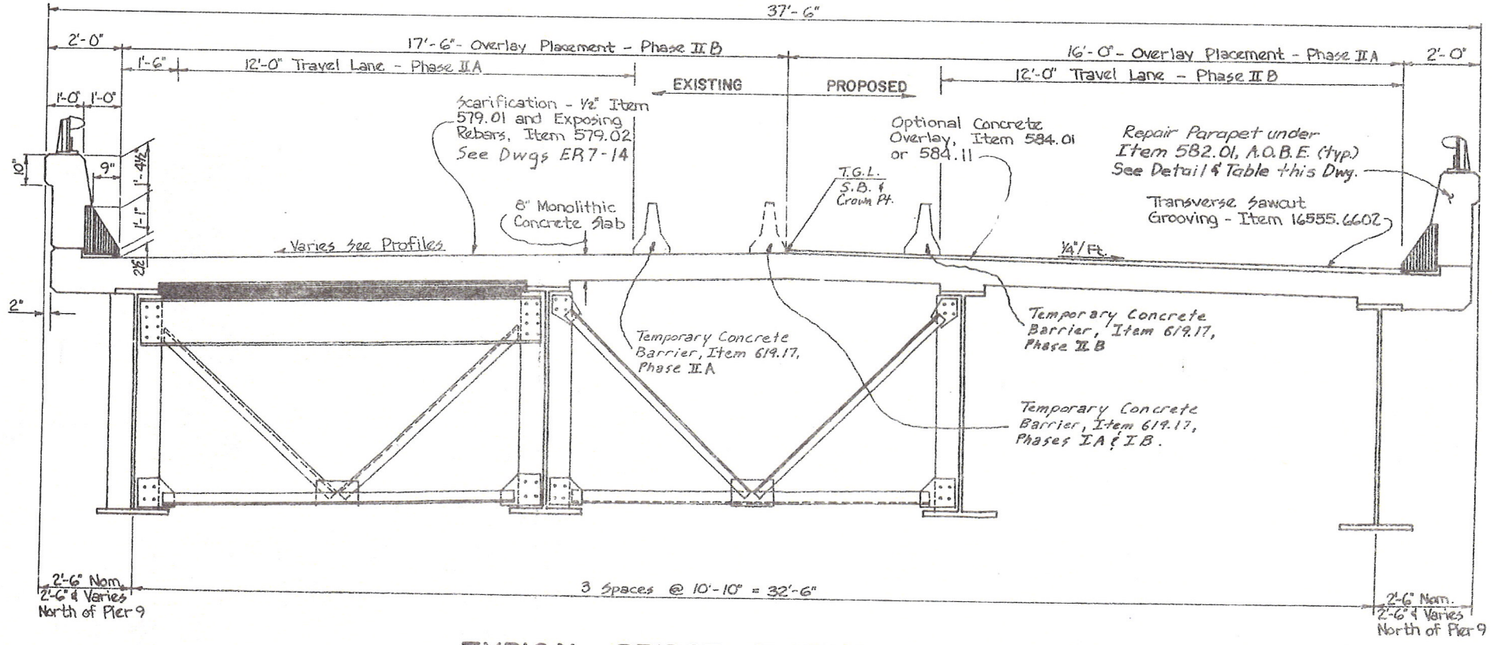
INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE - PHASE 2
BUTTERNUT INTERCHANGE TO COLLAMER,
SH 70-7 ONONDAGA COUNTY



TYPICAL BRIDGE SECTION
(N.B. Bridge Looking North)
Scale: ½" = 1'-0"



PARAPET REPAIR DETAIL
Scale: 1" = 1'-0"



TYPICAL BRIDGE SECTION
(S.B. Bridge Looking North)
Scale: ½" = 1'-0"

REPAIR OF PARAPET WALL
Item 582.01

BIN 1093571		BIN 1093572	
SPAN #	EST. LENGTH	SPAN #	EST. LENGTH
4, Rt. Side	170 ft.	10, Rt. Side	55'
4, Lt. Side	70 ft.	15, Lt. Side	20'

AS - BUILT REVISIONS

SIGNATURE DATE

BIN 1093571 AND 1093572
SB AND NB OVER CONRAIL

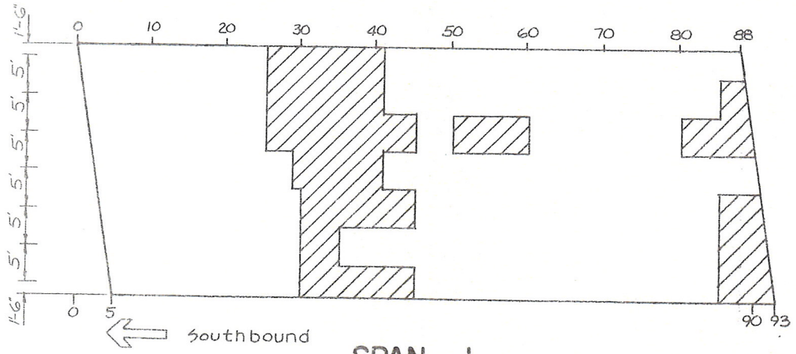
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

DRAWING No.	SCALE	DATE	REGION	SHEET NO.
BP10	As shown		3	39

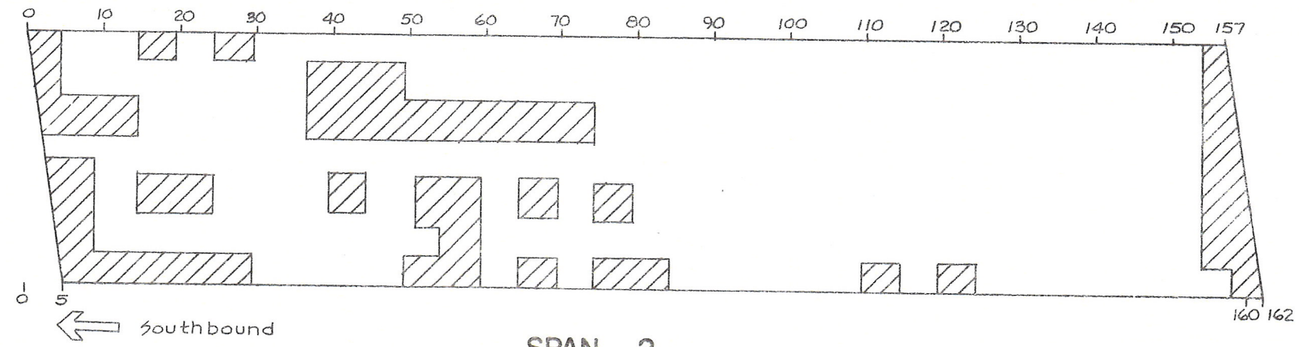
DESIGNED BY ESTIMATED BY CHECKED BY CHECKED BY DRAFTED BY CHECKED BY DATE 4/24/85

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	1R-481-(174) BH1 481-(174)	58	66

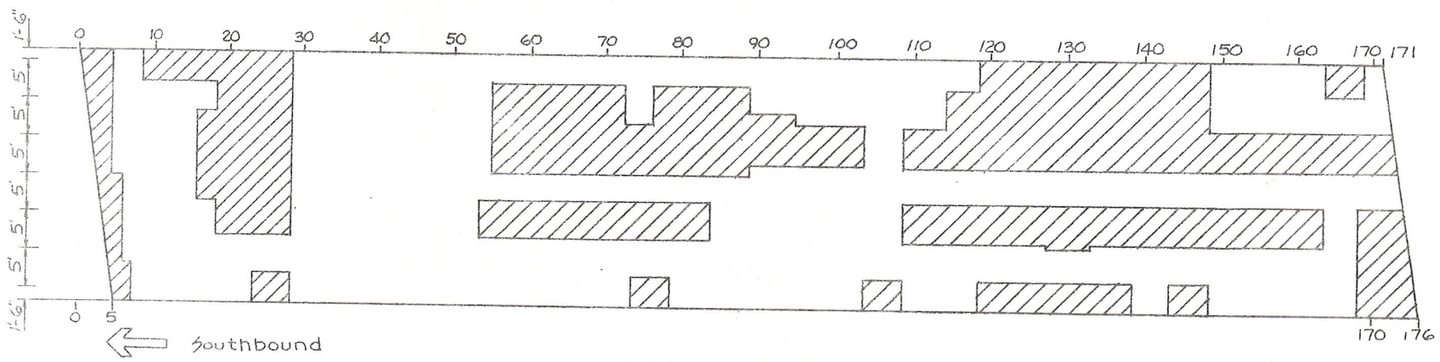
INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE - PHASE 2
BUTTERNUT INTERCHANGE TO COLLAMER,
SH 70-7 ONONDAGA COUNTY



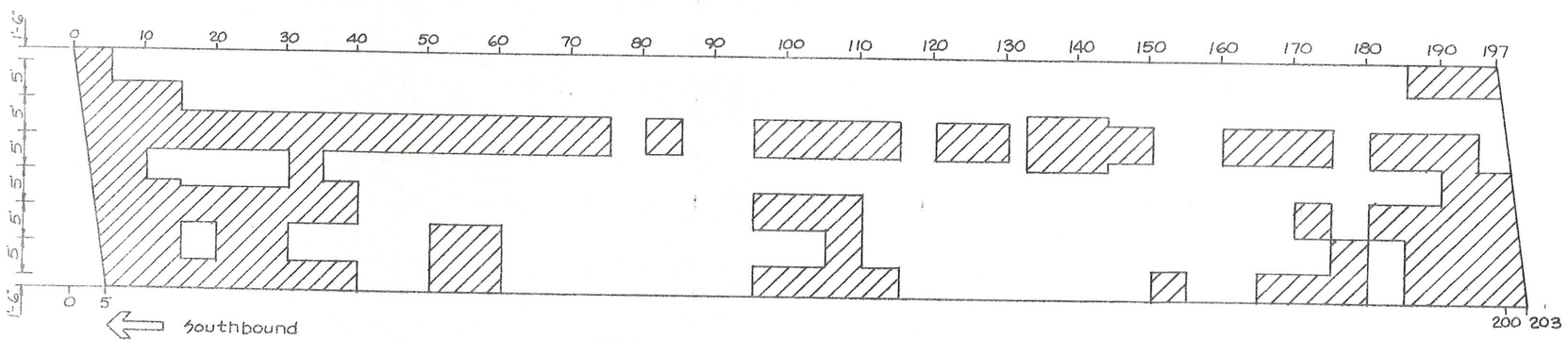
SPAN 1



SPAN 2



SPAN 3



SPAN 4

Approximate Area for Exposing Reinforcing Bars, Item 579.02

AS - BUILT REVISIONS

SIGNATURE DATE

BIN 1093571 I-481 SOUTHBOUND OVER CONRAIL

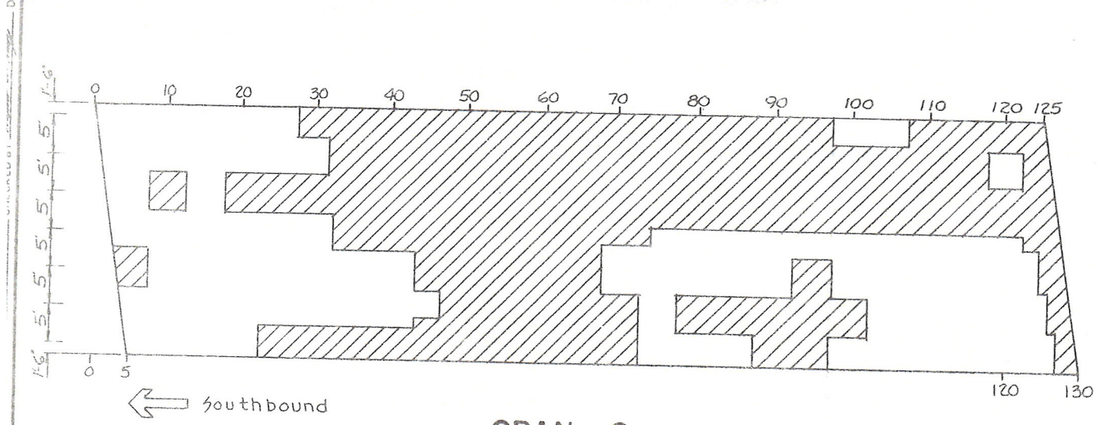
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

DRAWING No.	SCALE	DATE	REGION	SHEET NO.
ER-7			3	58

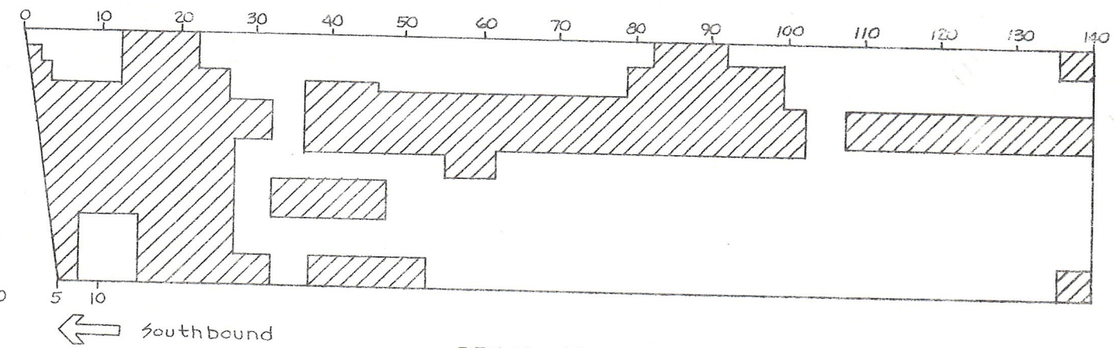
D251436

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	IR-481-4(19) BHI-481-4(19)	60	66

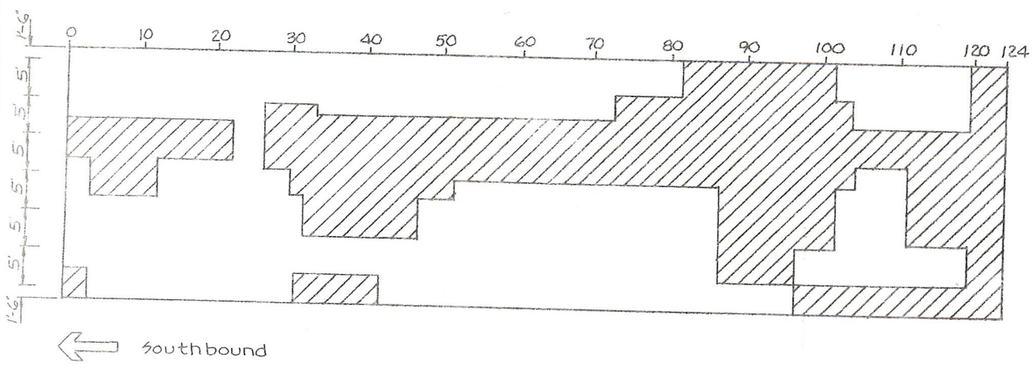
INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE - PHASE 2
BUTTERNUT INTERCHANGE TO COLLAMER,
SH 70-7 ONONDAGA COUNTY



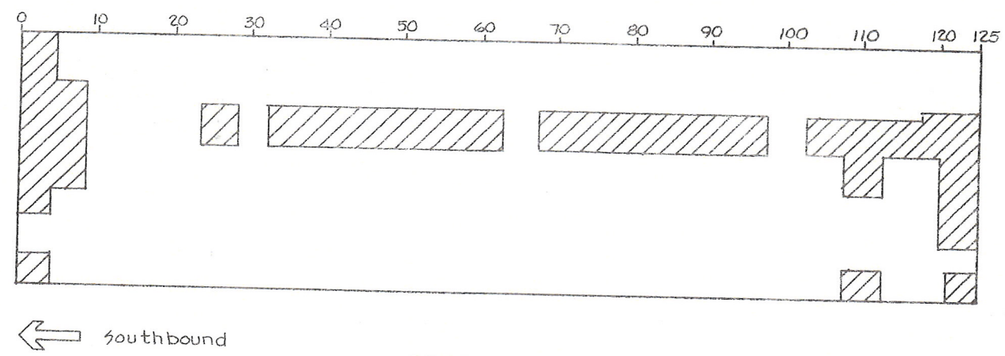
SPAN 9



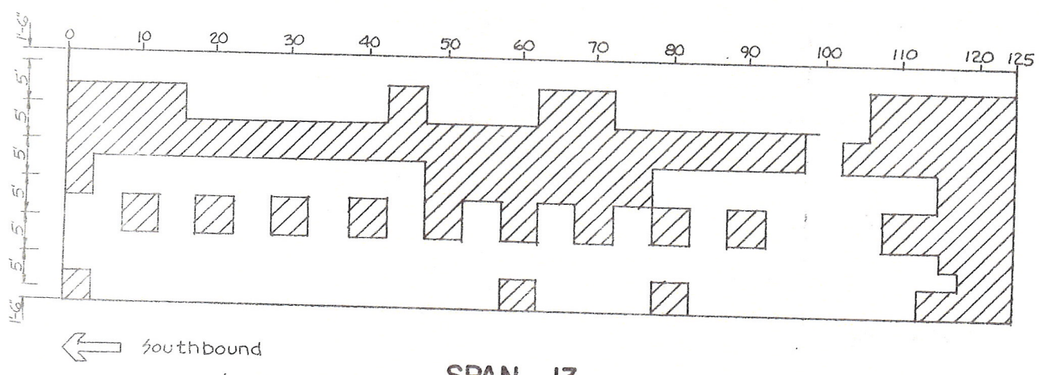
SPAN 10



SPAN 11



SPAN 12



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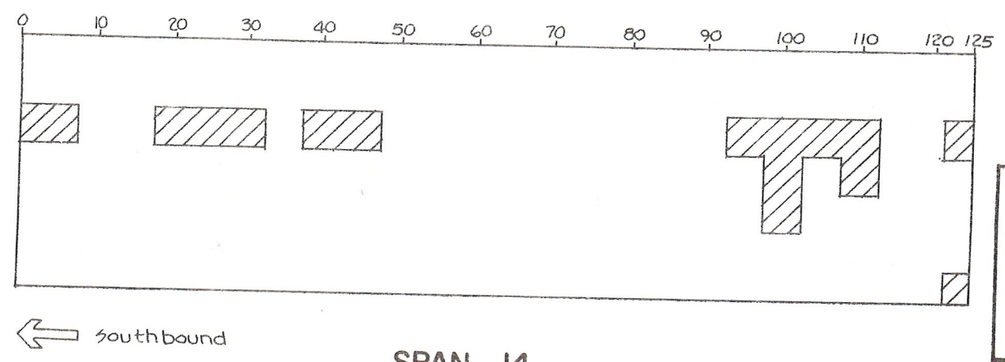


SPAN 14

Approximate Area for Exposing Reinforcing Bars, Item 579.02

AS - BUILT REVISIONS

SIGNATURE DATE

BIN 1093571 I-481 SOUTHBOUND OVER CONRAIL

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

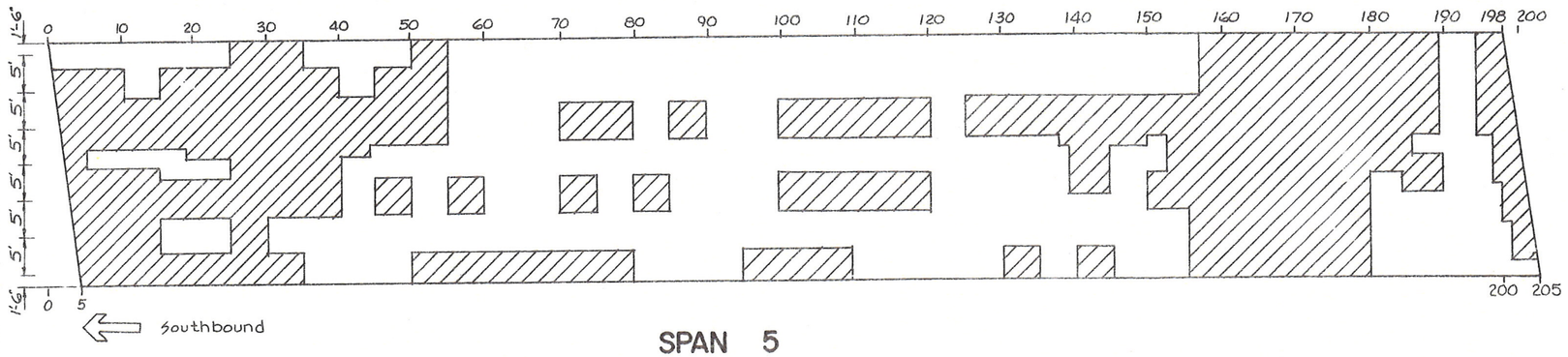
DRAWING No.	SCALE	DATE	REGION	SHEET NO.
ER-9			3	60

D251436

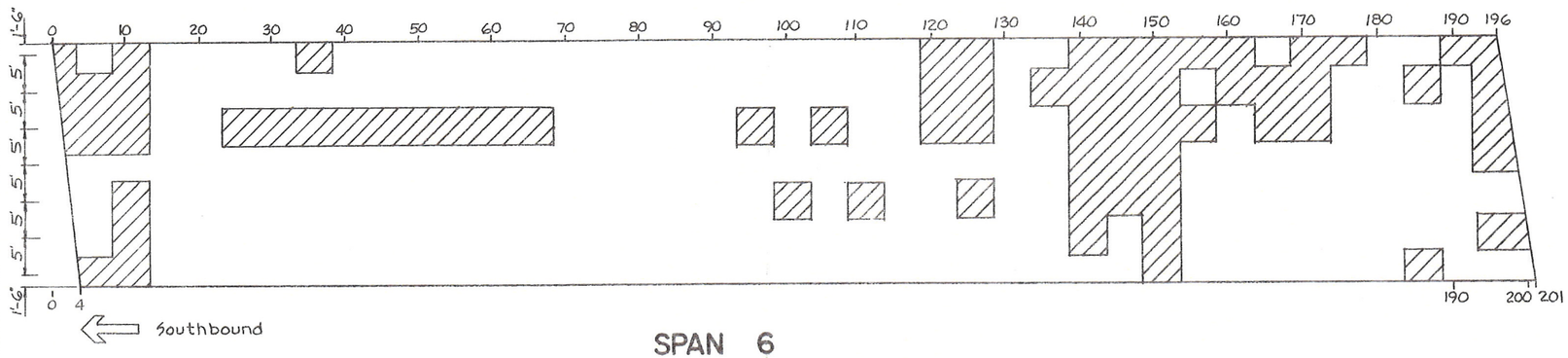
FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.
1	N.Y.	IR-481-(174) BH1-481-(174)	59

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE - PHASE 2
BUTTERNUT INTERCHANGE TO COLLAME
SH 70-7 ONONDAGA COUNTY

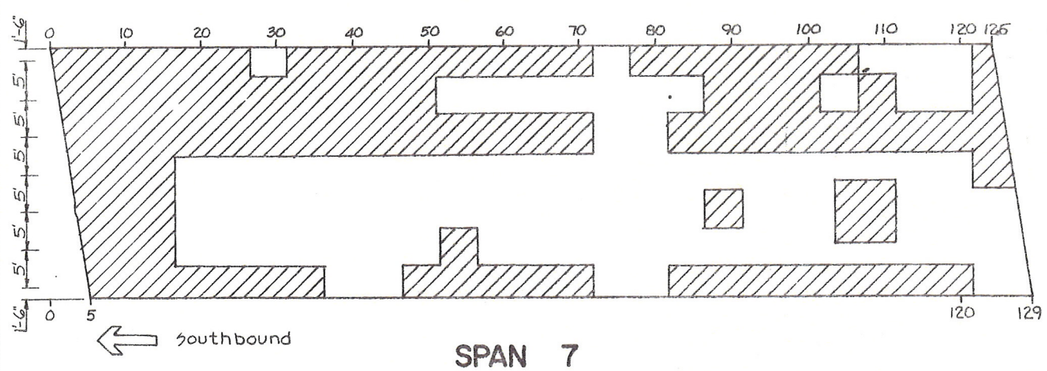
N



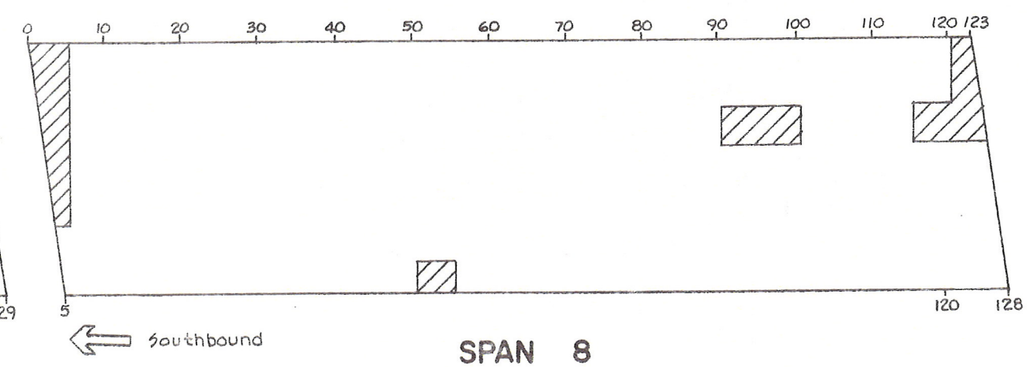
SPAN 5



SPAN 6



SPAN 7



SPAN 8

Approximate Area for Exposing Reinforcing Bars, Item 579.02

AS - BUILT REVISIONS

SIGNATURE DATE

BIN 1093571 I-481 SOUTHBOUN OVER CONRAIL

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATIC

DRAWING No. | SCALE | DATE

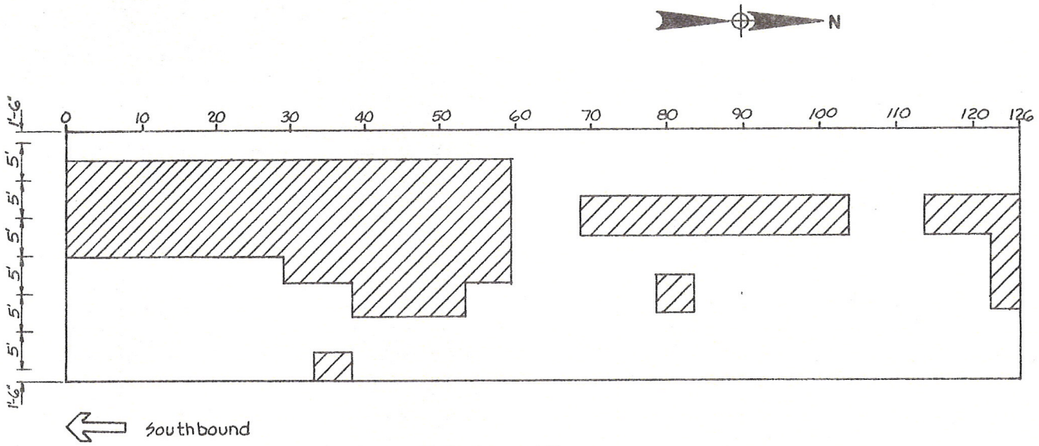
DATE 1/24/85 CHECKED BY DRAFTED BY CHECKED BY DESIGNED BY CHECKED BY ESTIMATED BY

7-2 (5/76)
ARGE OF

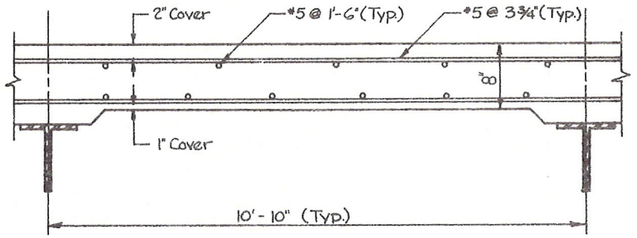
D251438

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.
1	N.Y.	IR-431-(179) BHI-481-(178)	61

INTERSTATE ROUTE CONNECTION 370
BUTTERNUT INTERCHANGE - PHASE 2
BUTTERNUT INTERCHANGE TO COLLAME
SH 70-7 ONONDAGA COUNTY



SPAN 15



TOP BAR REINFORCEMENT
Not to Scale

Approximate Area for Exposing Reinforcing Bars, Item 579.02

AS - BUILT REVISIONS

SIGNATURE DATE

BIN 1093571 I-481 SOUTHBOUN
OVER CONRAIL

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATIC

DRAWING No.	SCALE	DATE	REGION	SH
ER-10			3	6

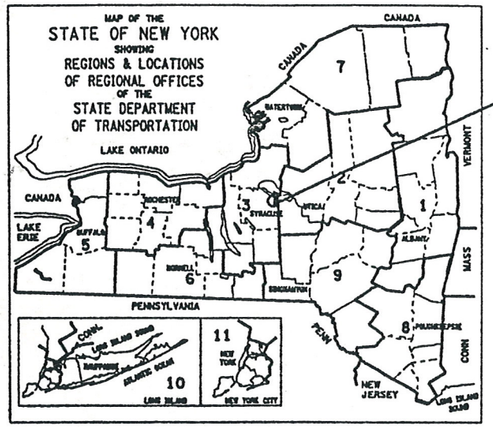
HC 47-2 (5/76)
IN CHARGE OF
DESIGNED BY
CHECKED BY
ESTIMATED BY
CHECKED BY
DRAFTED BY
CHECKED BY
DATE 1/24/85

3/3 1093572

2003

D259214

Record plans were reviewed on 3/20/14 by GA.
There were notes on page 4 for the removal of asbestos-containing caulking and miscellaneous ACM
On page 59, there are asbestos removal notes for the removal of caulk.



PROJECT LOCATION

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
OFFICE OF ENGINEERING

STANDARD SHEETS

M203-4, M203-5, M203-6R1, M603-1
M606-32, M606-33, M606-34,
M619-3R1, M619-4, M619-5
M685-1, M685-2R1, M685-3R1
M685-4R1, M685-5R1, M403-1, M203-4,
M203-5, M203-6R1, M603-1

6/26/2009
D.J. Hann 7/5/11
J.W. Gorzynski 7-9-13

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO

VOLUME 1 OF 2

432 SHEETS ONONDAGA COUNTY CONTRACT D259214

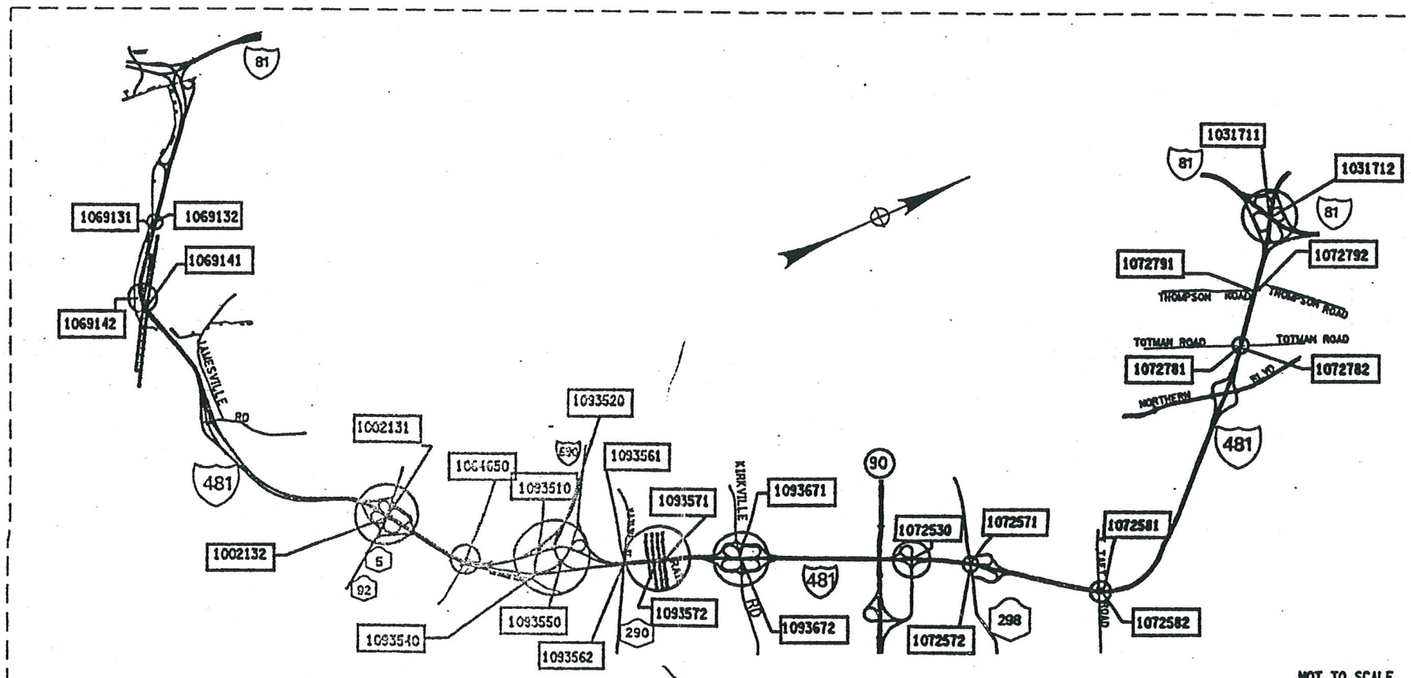
F.A. PROJECT

THIS IS A BRIDGE REHABILITATION PROJECT ON VARIOUS BRIDGES ON INTERSTATE 481, LOCATED IN THE TOWNS OF CICERO AND DEWITT IN ONONDAGA COUNTY. THIS WORK CONSISTS OF BRIDGE JOINTS, BEARINGS, BRIDGE RAIL AND CONCRETE REPAIR OF SUBSTRUCTURES. THERE ARE 28 BRIDGES IN THE PROJECT BEGINNING AT REFERENCE MARKER 481I-3301-1000 SOUTH OF THE CITY OF SYRACUSE AND ENDING AT REFERENCE MARKER 481I-3301-2143. I481 INTERCHANGE NORTH OF THE CITY.

ALL WORK CONTEMPLATED UNDER THIS CONTRACT IS TO BE COVERED BY AND IN CONFORMITY WITH THE STANDARD SPECIFICATIONS (METRIC UNITS) OF JANUARY 2, 2002, AS AMENDED BY ADDENDA NOS. 1 AND 2, EXCEPT AS MODIFIED ON THESE PLANS AND IN THE ITEMIZED PROPOSAL.

CONTRACTOR'S NAME _____
AWARD DATE _____
COMPLETION DATE _____
FINAL ACCEPTANCE DATE _____
REGIONAL DIRECTOR _____
ENGINEER IN CHARGE _____
FINAL COST TOTAL _____

FISCAL SHARE COST(S)



PROJECT LOCATION

BRIDGE REHAB. PROJ.- ELEMENT SPECIFIC			
VARIOUS BRIDGES ON INTERSTATE 481			
TOWNS OF DEWITT AND CICERO			
ONONDAGA COUNTY			
FED. ROAD REG. NO.	STATE	SHEET NO.	TOTAL SHEETS
1	N.Y.	1	432
FEDERAL AID PROJECT NO.			
CAPITAL PROJECT IDENTIFICATION NO. 3056.13			

INDEX ON SHEET NO. 5 & 6

RECOMMENDED BY John E. Fritze 9/04/02 REGIONAL DESIGN ENGINEER DATE

RECOMMENDED BY Myron A. Shirley 9/4/02 REGIONAL CONSTRUCTION ENGINEER DATE

RECOMMENDED BY 9/04/02 REGIONAL TRANSPORTATION MAINTENANCE ENGINEER DATE

RECOMMENDED BY 9-4-02 REGIONAL TRAFFIC ENGINEER DATE

APPROVED BY 09-04-02 REGIONAL DIRECTOR DATE

DESIGN SUPERVISOR Clement JOB MANAGER Nick DeCirce DESIGNED BY CHECKED BY ESTIMATED BY DRAFTED BY CHECKED BY

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	5	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. ALL BINS

INDEX

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5,6	INDEX	IDX-1 - IDX-2
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156	CROSSOVER TYPICAL SECTION	CTS-1
157-160	CROSSOVER SURVEY CONTROL DATA	HC-1 - HC-4
161-166	CROSSOVER PLANS	CPL-1 - CPL-6
167-174	CROSSOVER PROFILES	CPR-1 - CPR-8
175-177	CROSSOVER MISC. DETAILS	CMD-1 - CMD-3
178-179	CROSSOVER MISC. TABLES	CMT-1 - CMT-2
180-191	ESTIMATE OF QUANTITIES BY STRUCTURE	QE-1A - QE-4C
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194	BIN 1002131, TYPICAL BRIDGE SECTION AND PROFILE	TS1-1
195-197	BIN 1002131, SOUTH ABUTMENT (SB)	AB1-1 - AB1-3
198-199	BIN 1002131, NORTH ABUTMENT (SB), SHEET PILING LAYOUT	AB1-4 - AB1-5
200-201	BIN 1002131 PIER 1 & PIER 2 SB REMOVAL DETAILS	PR1-1 & PR1-2
202	BIN 1002131, PEDESTAL REPLACEMENT	PR1-3
203	BIN 1002131, BOLSTER DETAILS	PR1-4
204	BIN 1002131, ANCHOR BOLT LAYOUT (SB)	PR1-5
205	BIN 1002132, I481NB/RT. 5, PLAN AND ELEVATION	GP2-1
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214-219	BIN 1002132, NORTH ABUTMENT (NB)	AB2-7 - AB2-12
220-221	BIN 1002132, PIERS (NB)	PR2-1 & PR2-2
222	BIN 1002132, PEDESTAL REPLACEMENT (NB)	PR2-3
223	BIN 1002132, BOLSTER DETAILS (NB)	PR2-4
224	BIN 1002132, ANCHOR BOLT LAYOUT (NB)	PR2-5
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228	BIN 1031711, WEST ABUTMENT (SB) PLAN & ELEVATION	AB3-2
229	BIN 1031712, EAST ABUTMENT (NB) PLAN & ELEVATION	AB3-3
230	BIN 1031712, WEST ABUTMENT (NB) PLAN & ELEVATION	AB3-4
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234	BIN 1069131 & 1069132, TYPICAL BRIDGE SECTION AND PROFILE AND BRIDGE SECTION	TS5-1
235	BIN 1069131, WEST ABUTMENT (SB) PLAN & ELEVATION	AB5-1
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243	BIN 1069141, EAST ABUTMENT (SB) PLAN & ELEVATION	AB6-2
244	BIN 1069142, WEST ABUTMENT (NB) PLAN & ELEVATION	AB6-3
245	BIN 1069142, EAST ABUTMENT (NB) PLAN & ELEVATION	AB6-4

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250	BIN 1072571 & BIN 1072572, TYPICAL BRIDGE SECTION AND PROFILE	TS8-1
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253	BIN 1072572, SOUTH ABUTMENT (NB) PLAN & ELEVATION	AB8-3
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256-257	BIN 1072581, SOUTH ABUTMENT AND NORTH ABUTMENT (SB)	AB9-1 & AB9-2
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261	BIN 1072781 & BIN 1072782 TYPICAL BRIDGE SECTION AND PROFILE	TS10-1
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265	BIN 1072781, APPROACH SLABS	AS10-1
266	BIN 1072791 & BIN 1072792, I-481/ THOMPSON ROAD, PLAN, ELEVATION AND BRIDGE SECTION	GP11-1
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INTERSTATE 481
REHABILITATION PROJECT

INDEX

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AAJL2A	3	10/02	IDX-1

CHECKED BY
DRAFTED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	6	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGE ON INTERSTATE 481
TOWN OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. VARIOUS

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INTERSTATE 481
REHABILITATION PROJECT

INDEX

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AAL2A	3	10/02	IDX-2

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1	N.Y.	D259214	189	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. VARIOUS

ESTIMATE OF QUANTITIES BY STRUCTURE

ITEM #	DESCRIPTION	UNIT	1093550		1093561		1093562		1093571		1093572		1093671		1093672	
			EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL
203.02 M	UNCLASSIFIED EXCAVATION & DISPOSAL	CM	—		—		—		—		—		—		—	
203.03 M	EMBANKMENT IN PLACE	CM	—		—		—		—		7		—		—	
203.07 M	SELECT GRANULAR FILL	CM	—		—		—		4		10		—		—	
203.1770 M	CLEAN EXISTING PIPE CULVERT	M	—		—		—		4		4		—		—	
203.18 M	CLEANING CLOSED DRAINAGE SYSTEMS	M	34		—		—		256		269		—		—	
203.19 M	CLEAN DRAINAGE STRUCTURES AND MANHOLES	EA	—		—		—		4		6		—		—	
203.21 M	SELECT STRUCTURE FILL	CM	—		—		—		—		—		—		—	
15203.51 M	GRADING, CLEANING AND RESHAPING EXISTING DITCHES	M	—		—		—		70		77		—		—	
206.01 M	STRUCTURE EXCAVATION	CM	—		—		—		—		—		—		—	
206.02 M	TRENCH AND CULVERT EXCAVATION	CM	—		—		—		24		22		—		—	
207.10 M	GEOTEXTILE BEDDING	SM	—		—		—		32		32		—		—	
210.5433 M	REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING CAULKING (BV 12)	LS	—		—		—		NEC		NEC		—		—	
210.9913 M	REMOVAL AND DISPOSAL OF MISC. ASBESTOS CONTAINING MATERIAL BV-12	LS	NEC		—		—		—		—		—		—	
304.15 M	SUBBASE COURSE, OPTIONAL TYPE	CM	—		—		—		—		2		—		—	
402.128201 M	12.5mm F2 SUPERPAVE HMA, 80 SERIES COMPACTION	MT	6		4		5		3		3		5		5	
402.128211 M	PLANT PRODUCTION QUALITY ADJUSTMENT TO ITEM 402.128201M	QU	1		1		1		1		1		1		1	
402.258901 M	25mm F9 SUPERPAVE HMA, 80 SERIES COMPACTION	MT	10		6		8		5		5		8		8	
402.258911 M	PLANT PRODUCTION QUALITY ADJUSTMENT TO 402.258901M	QU	1		1		1		1		1		1		1	
402.378901 M	37.5mm, F9 SUPERPAVE HMA, 80 SERIES COMPACTION	MT	—		—		—		—		—		—		—	
402.378911 M	PLANT PRODUCTION QUALITY ADJUSTMENT TO 402.378901M	QU	—		—		—		—		—		—		—	
407.01 M	TACK COAT	L	22		13		17		12		12		17		17	
490.30 M	MISC. COLD MILLING OF BITUMINUS CONCRETE	SM	61		37		48		31		31		48		48	
502.92 M	SEALING TRANSVERSE JOINTS	M	—		—		—		—		—		—		—	
08520.5014 M	SAWCUT, ASPH, CONC/ASPH, OVERLAY- PCC PAVE	M	41		25		32		21		21		32		32	
552.13 M	TEMPORARY STEEL SHEETING	SM	—		—		—		—		—		—		—	
555.0105 M	CONCRETE FOR STRUCTURES - CLASS A	CM	—		—		—		1		2		—		—	
555.09 M	CONCRETE FOR STRUCTURES, CLASS HP	CM	2		2		2		88		15		2		2	
18555.81 M	STRUCTURAL CRACK SEALING	LM	—		—		—		—		—		—		—	
556.0201 M	UNCOATED BAR REINFORCEMENT FOR CONCRETE STRUCTURES	KG	—		—		—		1975		—		—		—	
556.0202 M	EPOXY COATED REBAR FOR STRUCTURES	KG	137		109		140		2732		613		145		145	
558.01 M	TRANSVERSE SAWCUT GROOVING OF STR SLAB SURF	SM	—		—		12		—		77		—		—	
18559.1696 M	PROTECTIVE SEALER STRUCTURAL CONCRETE	SM	—		—		—		1027		1031		—		—	
18559.1896 M	PROT SEAL STR. CONC. - NEW BRIDGE DECK OVERLAYS	SM	—		—		12		—		77		—		—	
564.0501 M	STRUCTURAL STEEL	LS	—		—		—		—		—		—		—	
565.1522 M	TYPE M.R. EXPANSION BEARING (1001 TO 2000 KN)	EA	—		—		—		8		—		—		—	
565.1722 M	TYPE M.R. FIXED BEARING (1001 TO 2000 KN)	EA	—		—		—		8		—		—		—	
15565.4302 M	BRIDGE BEARING RESTORATION	EA	12		—		—		32		36		—		—	
566.01 M	MODULAR EXPANSION JOINT SYSTEM, ONE-CELL	M	—		—		—		104		115		—		—	
566.02 M	MODULAR EXPANSION JOINT SYSTEM TWO-CELL	M	—		—		—		—		—		—		—	
567.31 M	ARM JNT SYS WI COMPRESSION SEAL - TY A1	M	—		—		—		—		—		—		—	
567.32 M	ARM JNT SYS WI COMPRESSION SEAL - TY A2	M	—		—		—		—		—		—		—	
567.35 M	ARM JNT SYS WI COMPRESSION SEAL - TY A5	M	—		13		17		—		—		17		17	
567.36 M	ARM JNT SYS WI COMPRESSION SEAL - TY A6	M	—		—		—		—		—		—		—	
18567.46 M	ELASTOMERIC CONCRETE FOR BRIDGE JOINT SYSTEMS	M	—		—		—		31		21		—		—	
16567.640001 M	REPLACE COMPRESSION SEAL IN EXISTING BRIDGE JOINTS	M	—		—		—		—		—		—		—	
568.32 M	CEMENT MORTAR PADS	EA	—		—		—		—		—		—		—	
568.50 M	STEEL BRIDGE RAILING (2 RAIL)	M	—		—		—		—		—		—		—	
570.090001 M	ENVIRONMENTAL GROUND PROTECTION	LS	—		—		—		NEC		—		—		—	
570.090002 M	ENVIRONMENTAL GROUND PROTECTION	LS	—		—		—		—		NEC		—		—	
570.090003 M	ENVIRONMENTAL GROUND PROTECTION	LS	—		—		—		—		—		—		—	

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SHEET 10 OF 12

ESTIMATE OF QUANTITIES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613J.1A	3	10/02	QE-4A

CHECKED BY
DRAFTED BY
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DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	190	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. VARIOUS

ESTIMATE OF QUANTITIES BY STRUCTURE

ITEM #	DESCRIPTION	UNIT	1093550		1093561		1093562		1093571		1093572		1093671		1093672	
			EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL
570.090004 M	ENVIRONMENTAL GROUND PROTECTION	LS	—		—		—		—		—		—		—	
570.100001 M	ENVIRONMENTAL WATERWAY PROTECTION	LS	—		—		—		NEC		—		—		—	
570.100002 M	ENVIRONMENTAL WATERWAY PROTECTION	LS	—		—		—		—		NEC		—		—	
16570.32 M	LOCALIZED PAINTING OF BARE STRUCTURAL STEEL	SM	—		—		—		18		21		—		—	
16570.72 M	LOCALIZED VACUUM CONTAINED CLEANING OF STRUCTURAL STEEL PLANAR SURFACES	SM	—		—		—		18		21		—		—	
16570.76 M	LOCALIZED VACUUM CONTAINED CLEANING OF STRUCTURAL STEEL - IRREGUALR	SM	—		—		—		—		—		—		—	
571.010001 M	TREATMENT AND DISPOSAL OF PAINT REMOVAL WASTE	CM	—		—		—		1		—		—		—	
571.010002 M	TREATMENT AND DISPOSAL OF PAINT REMOVAL WASTE	CM	—		—		—		—		1		—		—	
571.010003 M	TREATMENT AND DISPOSAL OF PAINT REMOVAL WASTE	CM	—		—		—		—		—		—		—	
571.010004 M	TREATMENT AND DISPOSAL OF PAINT REMOVAL WASTE	CM	—		—		—		—		—		—		—	
572.010001 M	STRUCTURAL STEEL PAINT SYSTEM: SHOP APPLIED	SM	—		—		—		1		—		—		—	
572.010002 M	STRUCTURAL STEEL PAINT SYSTEM: SHOP APPLIED	SM	—		—		—		—		1		—		—	
576.2001M	DOWNSPOUT SYSTEM, DUCTILE IRON	M	—		—		—		3		4		—		—	
578.020001 M	OVERLAY CONCRETE - CLASS E	SM	—		—		—		—		—		—		—	
578.020002 M	OVERLAY CONCRETE - CLASS E	SM	—		—		—		—		—		—		—	
578.020003 M	OVERLAY CONCRETE - CLASS E	SM	—		—		—		—		—		—		—	
578.020004 M	OVERLAY CONCRETE - CLASS E	SM	—		—		—		—		77		—		—	
578.020005 M	OVERLAY CONCRETE - CLASS E	SM	—		—		12		—		—		—		—	
578.030001 M	SLAB RECONSTRUCTION CONCRETE - CLASS D OR E	SM	—		—		—		—		—		—		—	
578.030002 M	SLAB RECONSTRUCTION CONCRETE - CLASS D OR E	SM	—		—		—		—		—		—		—	
578.030003 M	SLAB RECONSTRUCTION CONCRETE - CLASS D OR E	SM	—		—		—		—		—		—		—	
578.030004 M	SLAB RECONSTRUCTION CONCRETE - CLASS D OR E	SM	—		—		—		—		77		—		—	
578.030005 M	SLAB RECONSTRUCTION CONCRETE - CLASS D OR E	SM	—		—		12		—		—		—		—	
578.030006 M	SLAB RECONSTRUCTION CONCRETE - CLASS D OR E	SM	—		—		—		—		—		—		—	
578.030007 M	SLAB RECONSTRUCTION CONCRETE - CLASS D OR E	SM	—		—		—		—		—		—		—	
579.02 M	REINFORCING BAR EXPOSURE	SM	—		—		12		—		77		—		—	
580.01 M	REMOVAL OF STRUCTURAL CONCRETE	CM	2		2		2		62		15		2		2	
582.05 M	REMOVE STRUCTURAL CONCRETE WITH CLASS A CONCRETE	CM	16		1		1		43		46		2		5	
582.07 M	REMOVE STRUCTURAL CONCRETE AND REPLACE WITH VERTICAL OVERHEAD PATCH MATERIAL	SM	—		—		—		151		221		—		—	
16584.13 M	RAPID SETTING CONCRETE FOR BRIDGE AND APPROACH SLAB REPAIRS	KG	—		—		—		—		—		—		—	
585.01 M	STRUCTURAL LIFTING OPERATIONS - TYPE A	EA	12		—		—		—		—		—		—	
585.02 M	STRUCTURAL LIFTING OPERATIONS - TYPE B	EA	—		—		—		21		25		—		—	
585.03 M	STRUCTURAL LIFTING OPERATIONS TYPE C	EA	—		—		—		35		35		—		—	
586.01 M	DRILL AND GROUT BOLTS, OR REINFORCING BARS	mm	19200		13050		16650		53700		59100		15600		15600	
17586.18M	DRILLING HOLES IN EXISITING SUBSTRUCTURE	M	—		—		—		—		—		—		—	
16586.200125 M	DRILL AND GROUT ANCHOR BOLTS AND REBAR IN CONCRETE	EA	—		—		—		—		—		—		—	
16586.200216 M	DRILL AND GROUT ANCHOR BOLTS AND REBAR IN CONCRETE	EA	—		—		—		—		—		—		—	
587.01 M	BRIDGE RAILING REMOVAL AND DISPOSAL	M	—		—		—		—		—		—		—	
589.520001 M	REMOVAL OF EXISTING STEEL	EA	—		—		—		4		—		—		—	
589.520002 M	REMOVAL OF EXISTING STEEL	EA	—		—		—		—		6		—		—	
589.520003 M	REMOVAL OF EXISTING STEEL	EA	—		—		—		—		—		—		—	
589.520004 M	REMOVAL OF EXISTING STEEL	EA	—		—		—		—		—		—		—	
589.520005 M	REMOVAL OF EXISTING STEEL	EA	—		—		—		8		—		—		—	
590.01M	VERTICAL ADJUSTMENT OF BRIDGE DRAINAGE DEVICES	EA	—		—		—		7		9		—		—	
603.6001 M	REINFORCED CONCRETE PIPE CLASS III, 300 mm	M	—		—		—		—		4		—		—	
603.7301M	REINFORCED CONCRETE PIPE END SECTION 300 mm DIAMETER	EA	—		—		—		—		3		—		—	

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SHEET 11 OF 12

ESTIMATE OF QUANTITIES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613J1A	3	10/02	QE-4B

DESIGN SUPERVISOR ____ JOB MANAGER ____ ESTIMATED BY ____ DESIGNED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

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			EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL
605.0901 M	UNDERDRAIN FILTER TYPE 1	CM	—		—		—		—		—		—		—	
605.1702 M	OPT. UNDERDRAIN PIPE 150 mm ø	M	—		—		—		—		—		—		—	
606.73 M	REMOVE AND DISPOSE OF BOX BEAM GUIDE RAIL	M	—		—		—		—		—		—		—	
606.8701 M	CORRUGATED BEAM GUIDE RAILING TRANSITION ASSEMBLY, TWO RAIL, STEEL BRIDGE RAILING	EA	—		—		—		2		2		—		—	
16606.80 M	TRANSITION BRIDGE RAILING TO BOX BEAM GUIDE RAIL	M	—		—		—		—		—		—		—	
609.15 M	RESETTING EXISTING CURB	M	—		—		—		—		—		—		—	
610.0203 M	ESTABLISH TURF	SM	—		—		—		100		200		—		—	
612.0205 M	CLASS II TYPE B EROSION CONTROL MATERIAL	SM	—		—		—		100		150		—		—	
08615.0402 M	TREE AND VEGETATION BARRIER	M	—		—		—		150		150		—		—	
620.03 M	STONE FILLING (LIGHT)	CM	—		—		—		6		8		—		—	
625.01 M	SURVEY AND STAKEOUT	LS	—		—		—		—		—		—		—	
637.03 M	CONCRETE CYLINDER CURING BOX	EA	—		—		—		—		—		—		—	
637.0702 M	ENGINEER'S OFFICE TYPE C	MNTH	—		—		—		—		—		—		—	
10637.2101 M	FURN PORTABLE CELLULAR TELEPHONE EQUIP.	LS	—		—		—		—		—		—		—	
08637.3501 M	MICRO COMPUTER SYSTEM	EA	—		—		—		—		—		—		—	
15637.61 M	CPM SCHEDULE	LS	—		—		—		—		—		—		—	
15637.51 M	DIGITAL CAMERA SYSTEM	LS	—		—		—		—		—		—		—	
15637.91 M	CHAMPS MANAGEMENT SYSTEM	LS	—		—		—		—		—		—		—	
15637.98 M	PARTNERING WORKSHOP	LS	—		—		—		—		—		—		—	
640.10 M	WHITE PAINT REFLEC PAVEMENT STRIPES-0.38 mm	M	12		8		9		8		8		9		9	
640.11 M	YELLOW PAINT REFLEC PAVEMENT STRIPES-0.38 mm	M	9		4		6		6		6		6		6	
14646.10 M	MILLED IN AUDIBLE ROWAY DELINS (MIARD)	M	—		—		—		—		—		—		—	
23675.15M	FURNISH AND PLACE STONE BALLAST SURFACING COURSE	MT	—		—		—		—		2		—		—	
91685.0705 M	WHT POLYESTER REFLEC PAVEMENT STRIPE	M	12		8		9		8		8		9		9	
91685.0706 M	YEL POLYESTER REFLEC PAVEMENT STRIPE	M	9		4		6		6		6		6		6	
697.02 M	FIELD CHANGE ORDER	LS	—		—		—						—		—	
699.040001 M	MOBILIZATION	LS	NEC		NEC		NEC		NEC		NEC		NEC		NEC	

STANDARD SYMBOL (PLANS)	ITEM PAYMENT UNIT: ESTIMATE OF QUANTITIES SHEET	EQUIVALENT NOMENCLATURE: SPEC BOOK/PROPOSAL
m	M	METER
m^2	SQM	SQUARE METER
m^3	CM	CUBIC METER
km	KM	KILOMETER
ha	HA	HECTARE
kg	KG	KILOGRAM
t OR Mg*	MT	METRIC TON
L	L	LITER

* THE METRIC TON IS EQUIVALENT TO ONE MEGAGRAM (Mg)

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

SHEET 12 OF 12

ESTIMATE OF QUANTITIES

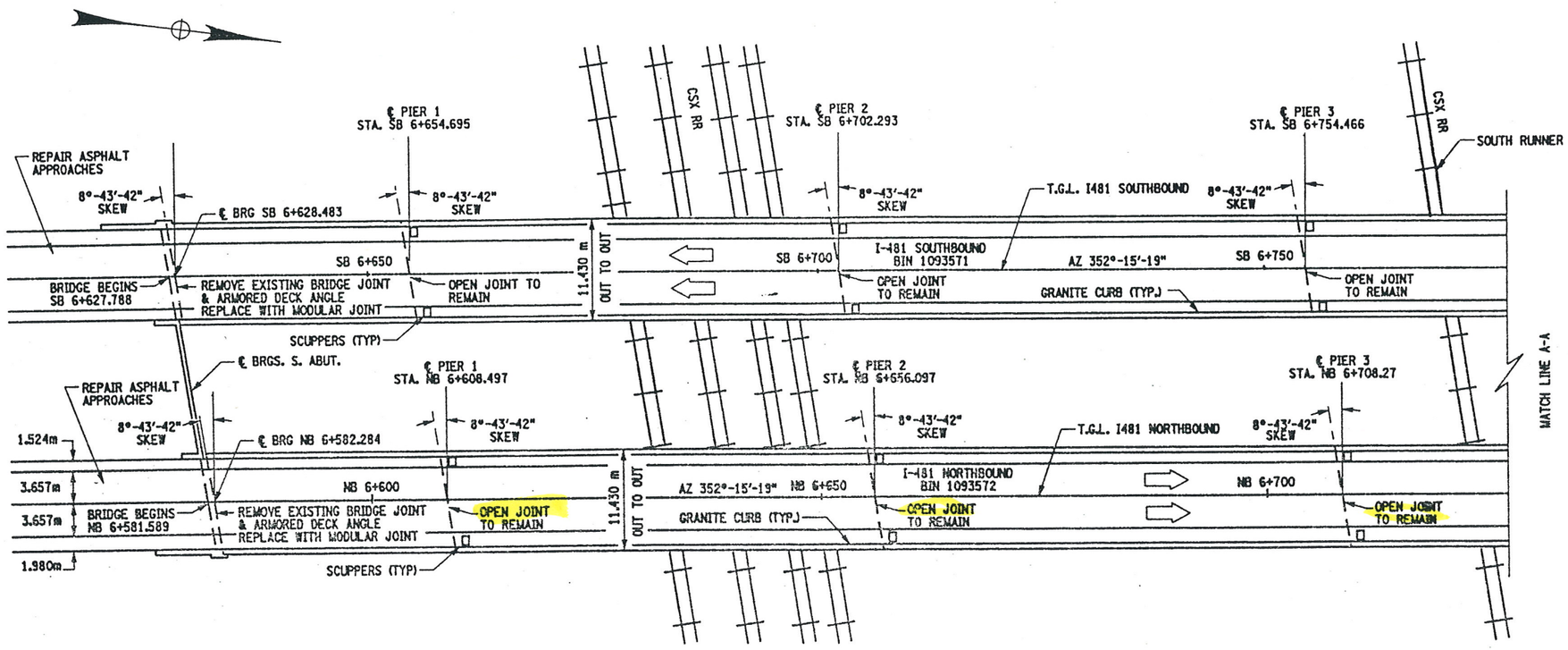
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613.L1A	3	10/02	QE-4C

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

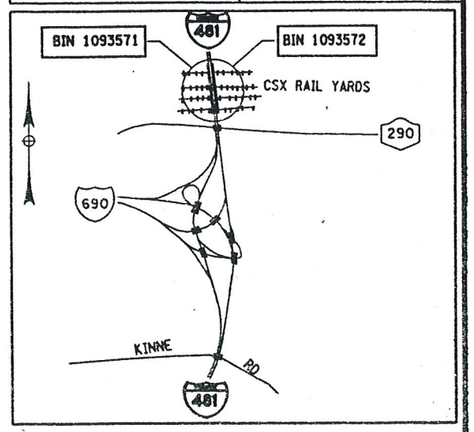
FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	284	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 | B.I.N. 1093571 & 1093572



PLAN

SCALE 1:300



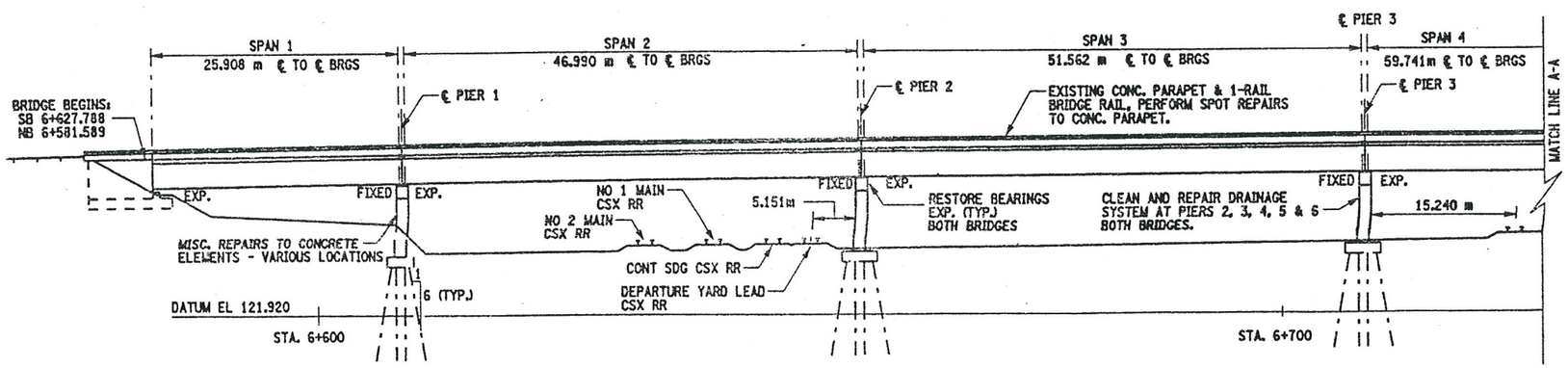
LOCATION MAP
NOT TO SCALE

NOTES:

SEE DWG. GP17-2 FOR WORK TO BE DONE ON BIN 1093571 AND DWG. GP17-3 FOR WORK TO BE DONE ON BIN 1093572.

REFER TO DWG. NO. JT-3 AND JT-4 FOR BRIDGE JOINT INFORMATION.

ELECTRIC UTILITY IN THE VICINITY OF BRIDGES. SEE INFORMATION AVAILABLE TO BIDDERS FOR ADDITIONAL INFORMATION.



ELEVATION

SCALE 1:300

BIN 1093571 SOUTHBOUND
BIN 1093572 NORTHBOUND

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE | DATE

INTERSTATE 481
OVER
CSX RAILROAD YARD

PLAN AND ELEVATION
1 OF 4

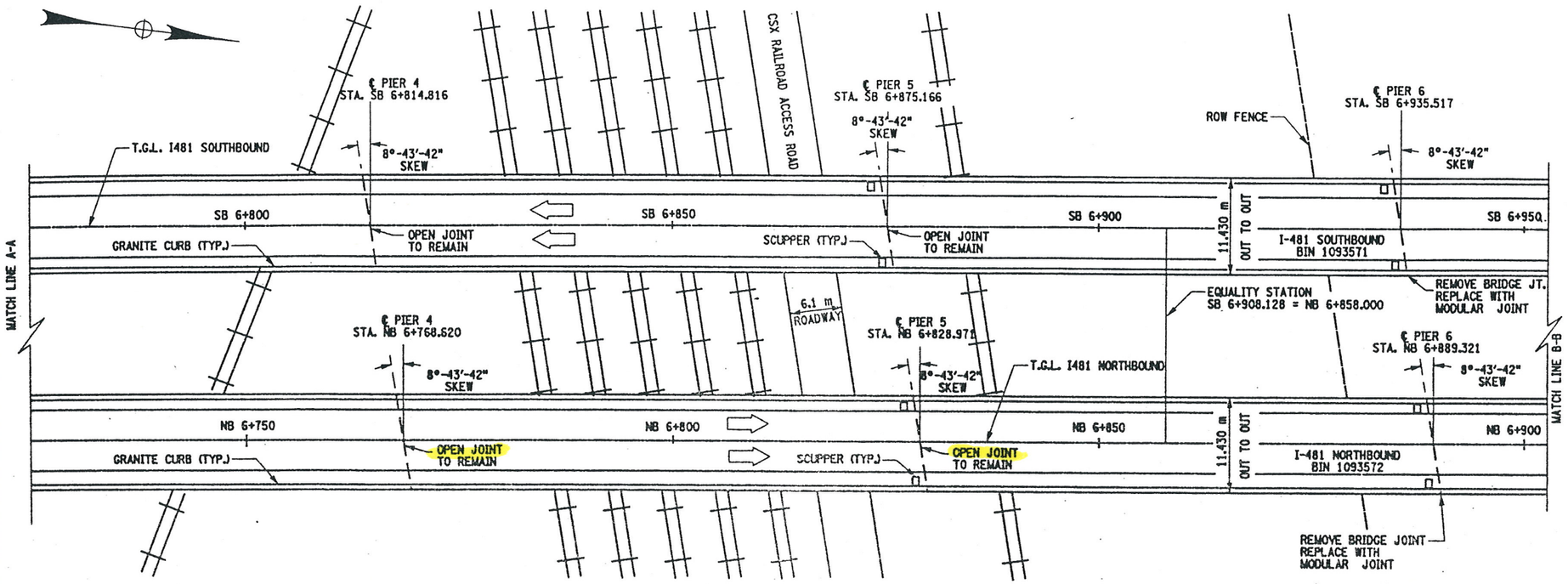
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.G1A	3	10/02	GP17-1

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

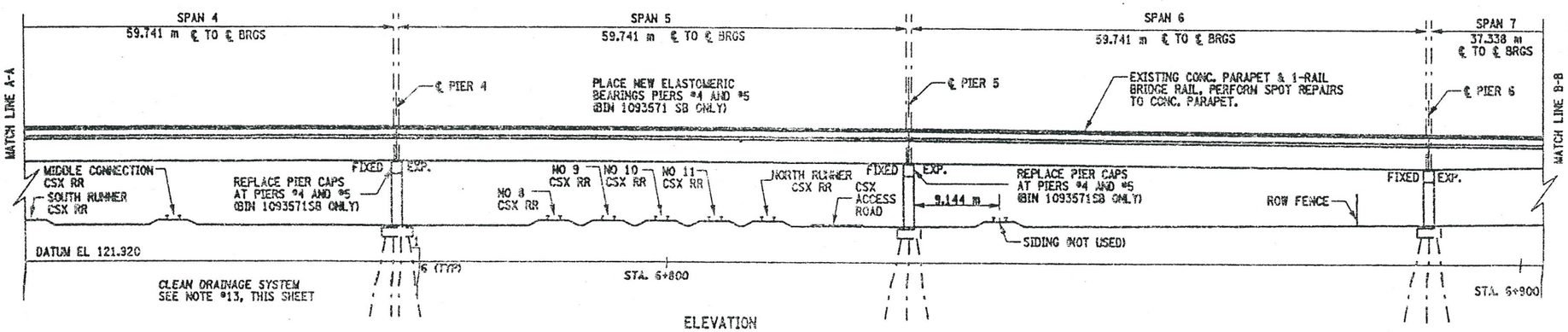
FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	285	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
COUNTY OF ONONDAGA
P.I.N. 305613 B.I.N. 1093571 & 1093572



PLAN

SCALE 1:300



ELEVATION

SCALE 1:300

TRACK	VERTICAL CLEARANCE	HORIZONTAL CLEARANCE
	METERS	METERS
NO 2 MAIN	7.468	16.000
NO 1 MAIN	7.295	NA
CONT SDG	7.498	NA
DEPARTURE YARD LEAD	7.559	5.151
SOUTH RUNNER	8.169	15.240
MIDDLE CONNECTION	8.077	NA
NO 8	8.077	17.891
NO 9	8.077	NA
NO 10	8.077	NA
NO 11	8.169	NA
NORTH RUNNER	8.169	NA
SIDING	NA	9.144

NOTE: ALL DIMENSIONS SHOWN IN THIS TABLE ARE FIELD MEASUREMENTS.

WORK TO BE DONE ON BIN 1093571 SB: (NOT NECESSARILY IN THIS ORDER)

1. ESTABLISH MP&T SCHEME FOR STAGE CONSTRUCTION, (RR TRAFFIC CONTROL REQUIRED).
2. REMOVE EXISTING BRIDGE JOINTS AT THE BEGINNING ABUTMENT (TO INCLUDE ARMORING DECK ANGLE) AND PIERS #6, #7, #8, #10, #11 #12, #13 AND #14.
3. INSTALL NEW BRIDGE JOINTS, (MODULAR ONE-CELL JOINT SYSTEM).
4. INSTALL NEW COMPRESSION SEALS AT THE PARAPET SECTIONS OF THE EXISTING OPEN JOINTS, (PIERS #1, #2, #3, #4, #5 & #9). REPAIR EXISTING CONCRETE PARAPETS. OPEN JOINTS TO REMAIN.
5. REMOVE EXISTING ARMORING DECK ANGLE, AT END ABUTMENT.
6. REPAIR THE DECK AREA, WHERE ARMORING ANGLE WAS REMOVED.
7. PERFORM MINOR REPAIRS TO ASPHALT APPROACHES.
8. REPAIR THE CONCRETE ELEMENTS (I.E. PIER CAPS, PIER COLUMNS AND PIER PEDESTALS).
9. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDER EXTENDED BEARINGS).
10. REMOVE PIER CAP #4 AND #5, TO INCLUDE PEDESTALS AND BEARINGS.
11. CONSTRUCT NEW PIER CAPS AND PEDESTALS AT PIERS #4 AND #5.
12. PLACE NEW BEARINGS AT PIERS #4 & #5, (ELASTOMERIC BEARINGS).
13. CLEAN AND MODIFY EXISTING CLOSED DRAINAGE SYSTEM AT PIERS #1, #2, #3, #4, #5 AND #9.
14. INSTALL SCUPPER DOWNSPOUT EXTENSIONS AT EXISTING SCUPPERS, SPANS #7 THRU #14.
15. PERFORM DRAINAGE IMPROVEMENTS AT RR YARD.
16. REPAIR EXISTING CONCRETE PARAPETS.

BIN 1093571 SOUTHBOUND
BIN 1093572 NORTHBOUND
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481
OVER
CSX RAILROAD YARD
PLAN AND ELEVATION
2 OF 4

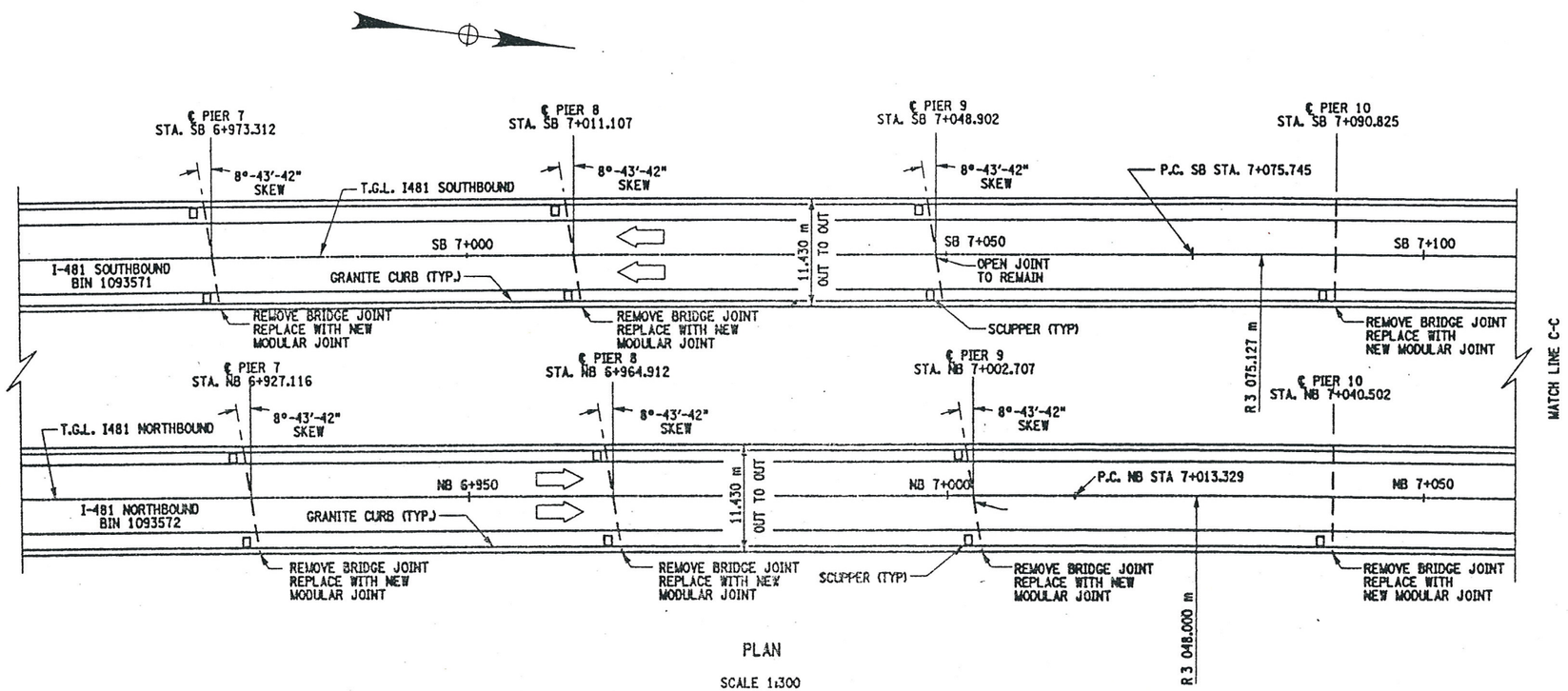
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.G1A	3	10/02	GP17-2

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	286	432

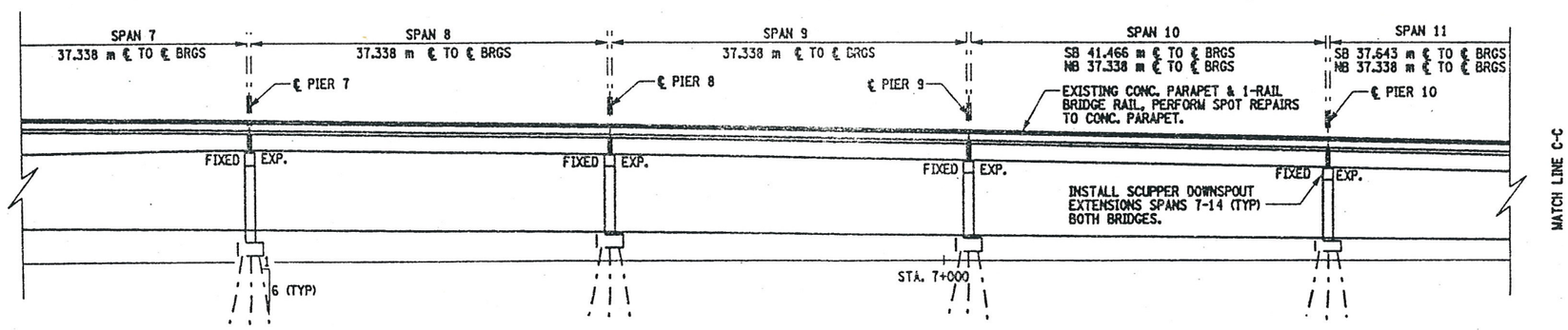
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
COUNTY OF ONONDAGA
P.I.N. 305613 B.I.N. 1093571 & 1093572



PLAN
SCALE 1:300

WORK TO BE DONE ON BIN 1093572, NB: (NOT NECESSARILY IN THIS ORDER)

1. ESTABLISH MP&T SCHEME FOR STAGE CONSTRUCTION, (RR TRAFFIC CONTROL REQUIRED).
2. REMOVE EXISTING BRIDGE JOINT AT BEGINNING ABUTMENT AND PIERS #6, #7, #8, #9, #10, #11, #12, #13 AND #14.
3. INSTALL NEW BRIDGE JOINTS, (MODULAR ONE-CELL JOINTS).
4. INSTALL NEW COMPRESSION SEALS AT THE PARAPET SECTIONS OF THE EXISTING OPEN JOINTS AT PIERS #1, #2, #3, #4 AND #5.
5. REPAIR EXISTING CONCRETE PARAPETS.
6. PERFORM REBAR EXPOSURE IN AREAS SHOWN ON PLANS, OR A.O.B.E. TO REPACE ASPHALT PATCHES, (SPOT REPAIRS TO BRIDGE DECK).
7. PLACE SLAB RECONSTRUCTION CONCRETE.
8. REMOVE EXISTING ARMORING DECK ANGLE, AT END ABUTMENT.
9. REPAIR THE BRIDGE DECK AREA AT THE END ABUTMENT, WHERE THE ARMORING DECK ANGLE WAS REMOVED.
10. PERFORM MINOR REPAIRS TO ASPHALT APPROACHES.
11. REPAIR CONCRETE ELEMENTS, (PIER CAPS, COLUMNS AND PEDESTALS).
12. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDER EXTENDED BEARINGS).
13. CLEAN AND MODIFY EXISTING CLOSED DRAINAGE SYSTEMS AT PIERS #1, #2, #3, #4, #5 AND #6.
14. INSTALL SCUPPER DOWNSPOUT EXTENSIONS AT EXISTING SCUPPERS, SPANS #7 THRU #14.
15. PERFORM DRAINAGE IMPROVEMENTS AT RR YARD.



ELEVATION
SCALE 1:300

CURVE DATA	
SOUTHBOUND	NORTHBOUND
P.C.=7+075.745	P.C.=7+013.329
Δ=7°-04'-13"	Δ=7°-04'-13"
R=3075.127	R=3048.000
L=379.470	L=376.122
T=189.976	T=188.300

BIN 1093571 SOUTHBOUND
BIN 1093572 NORTHBOUND
ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481
OVER
CSX RAILROAD YARD
PLAN AND ELEVATION
3 OF 4

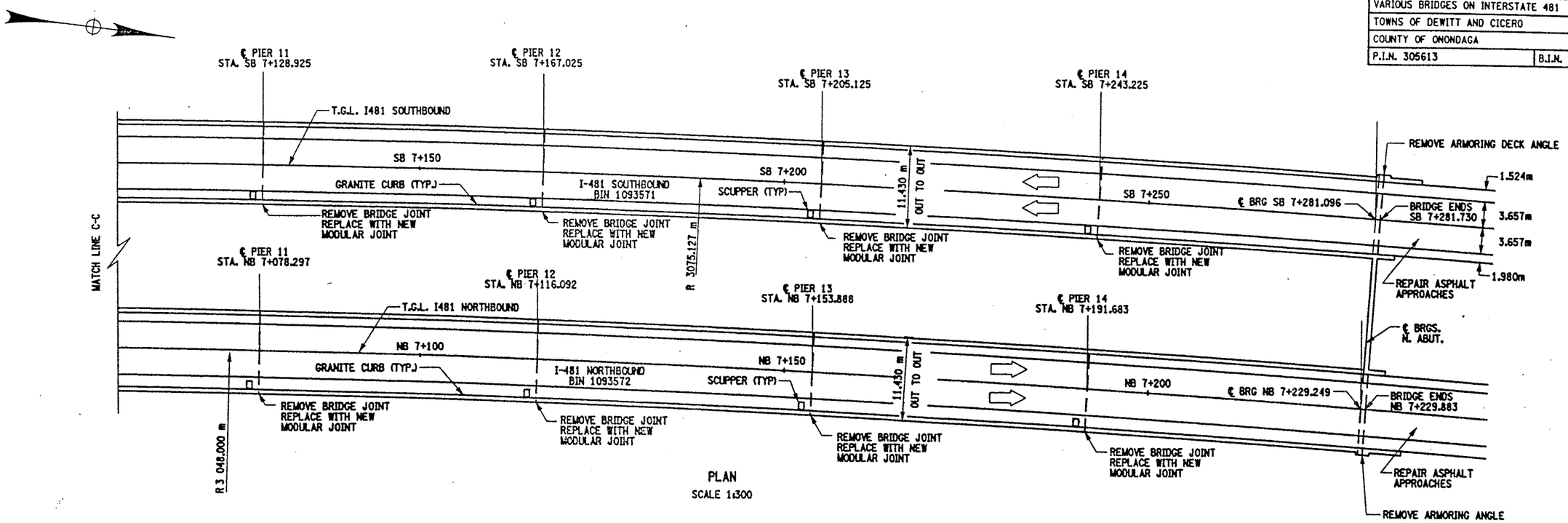
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.G1A	3	10/02	GP17-3

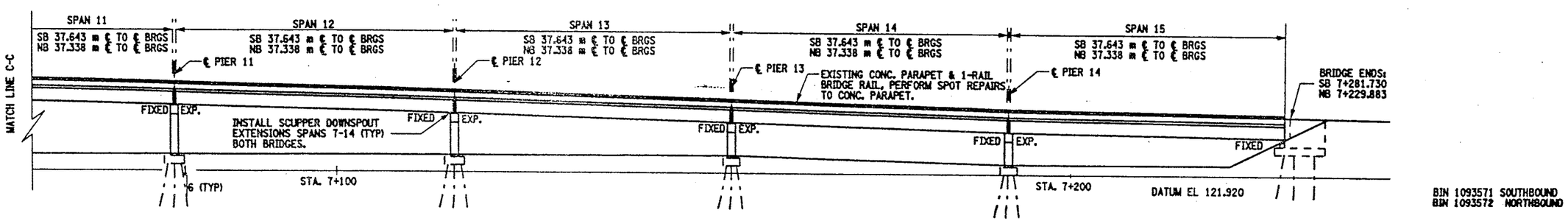
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	287	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
COUNTY OF ONONDAGA
P.I.N. 305613 | B.I.N. 1093571 & 1093572



PLAN
SCALE 1:300



ELEVATION
SCALE 1:300

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481
OVER
CSX RAILROAD YARD

PLAN AND ELEVATION
4 OF 4

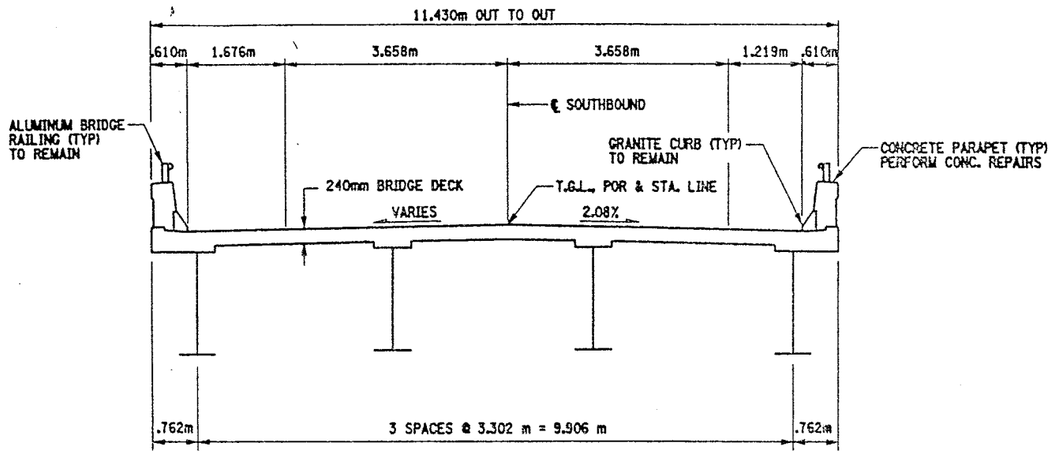
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.G1A	3	10/02	GP17-4

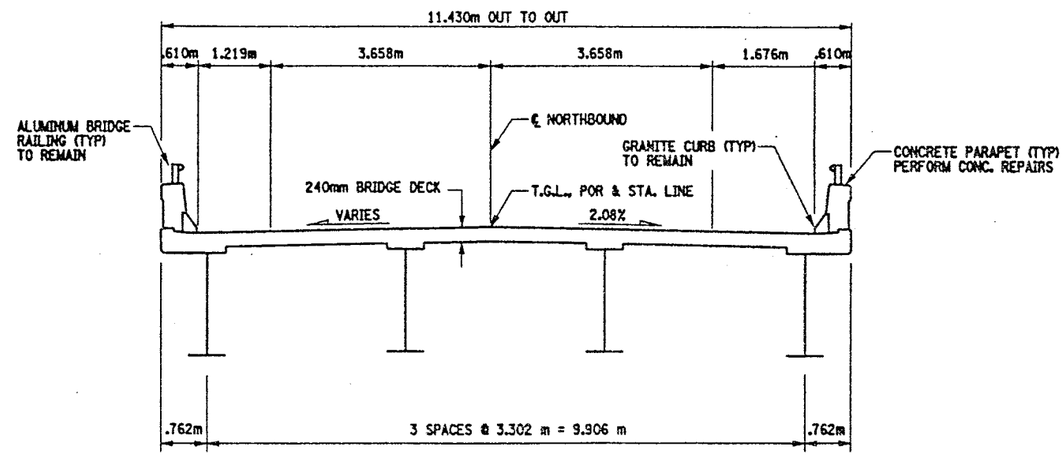
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	288	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
COUNTY OF ONONDAGA
P.I.N. 305613 | B.I.N. 1093571 & 1093572



SOUTHBOUND
BIN 1093571



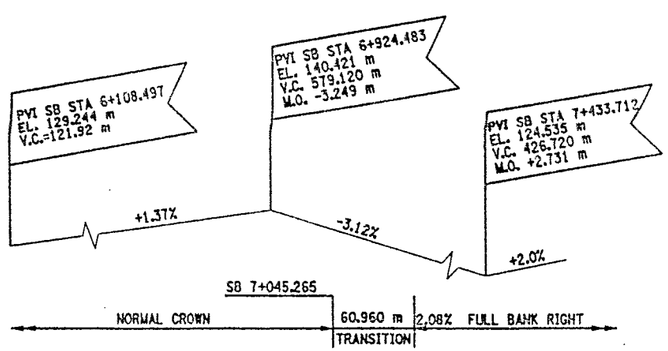
NORTHBOUND
BIN 1093572

TYPICAL BRIDGE SECTIONS

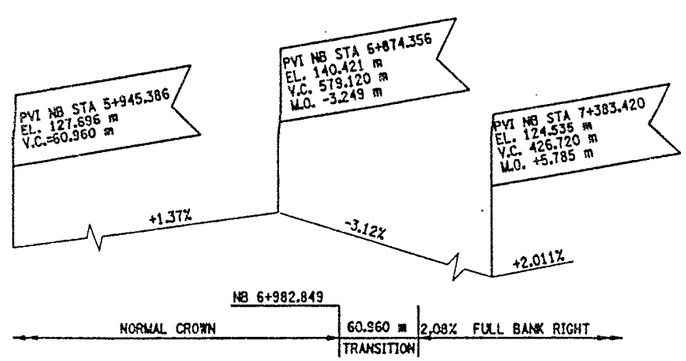
NOTES:

ORIGINAL BRIDGE DECK 203mm MONOLITHIC SLAB.
38mm CONCRETE OVERLAY ADDED LATER.

SEE ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND CONTRACT PLANS D251436.



PROFILE SOUTHBOUND
NOT TO SCALE



PROFILE NORTHBOUND
NOT TO SCALE

BIN 1093571 SOUTHBOUND
BIN 1093572 NORTHBOUND

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE | DATE

INTERSTATE 481
OVER
CSX RAILROAD YARD

TYPICAL BRIDGE SECTION AND PROFILES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.G1A	3	10/02	TS17-1

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	289	432

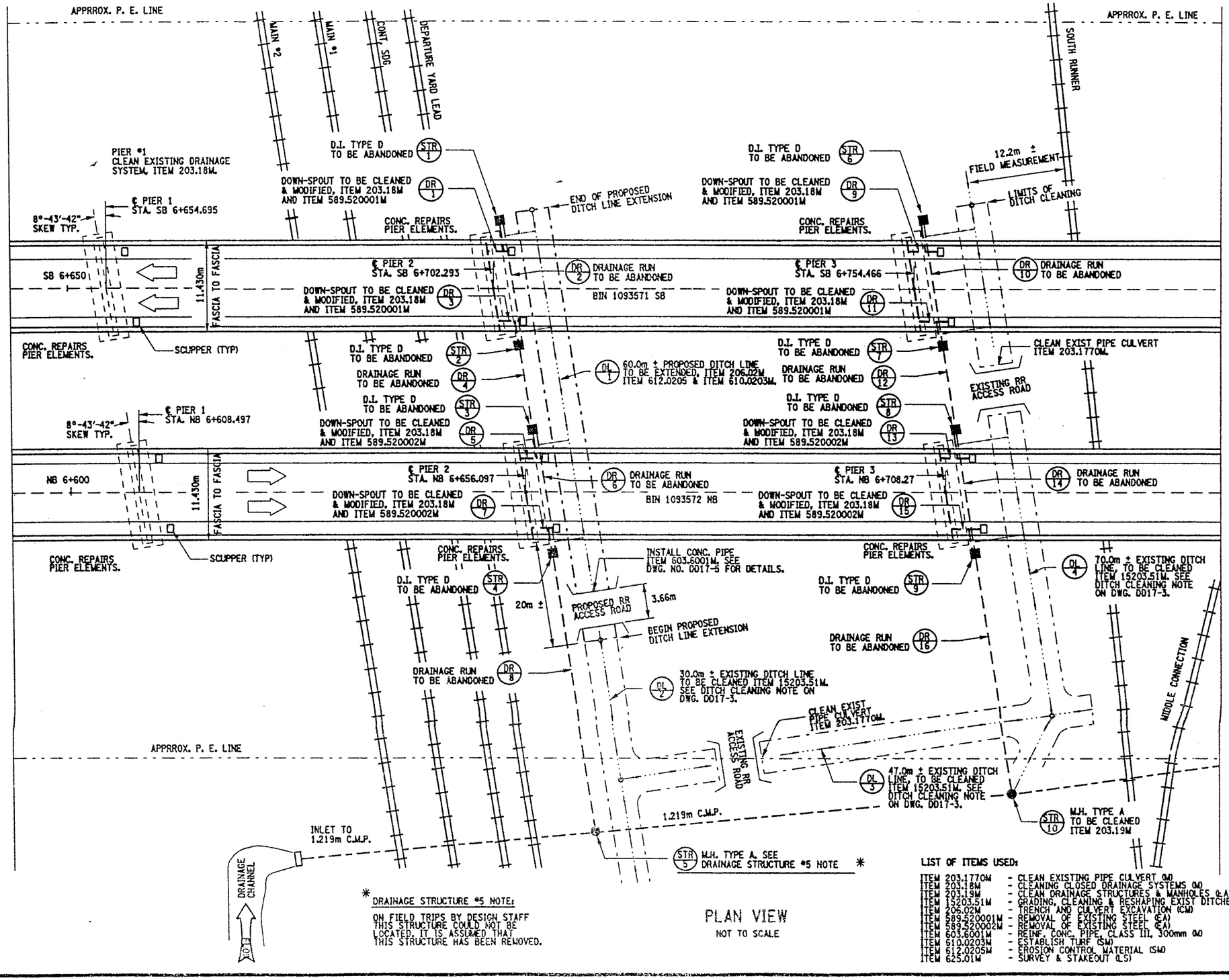
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)

VARIOUS BRIDGES ON INTERSTATE 481

TOWNS OF DEWITT AND CICERO

COUNTY OF ONONDAGA

P.I.N. 305613 | B.I.N. 1093571 & 1093572



* DRAINAGE STRUCTURE #5 NOTE:

ON FIELD TRIPS BY DESIGN STAFF THIS STRUCTURE COULD NOT BE LOCATED. IT IS ASSUMED THAT THIS STRUCTURE HAS BEEN REMOVED.

PLAN VIEW

NOT TO SCALE

LIST OF ITEMS USED:

ITEM 203.177OM	- CLEAN EXISTING PIPE CULVERT (LS)
ITEM 203.18M	- CLEANING CLOSED DRAINAGE SYSTEMS (LS)
ITEM 203.19M	- CLEAN DRAINAGE STRUCTURES & MANHOLES (EA)
ITEM 15203.51M	- GRADING, CLEANING & RESHAPING EXIST DITCHES (LS)
ITEM 206.02M	- TRENCH AND CULVERT EXCAVATION (CM)
ITEM 589.520001M	- REMOVAL OF EXISTING STEEL (EA)
ITEM 589.520002M	- REMOVAL OF EXISTING STEEL (EA)
ITEM 603.6001M	- REINF. CONC. PIPE, CLASS III, 300mm (LS)
ITEM 610.0203M	- ESTABLISH TURF (SM)
ITEM 612.0205M	- EROSION CONTROL MATERIAL (SM)
ITEM 625.01M	- SURVEY & STAKEOUT (LS)

GENERAL NOTES:

THE PROPOSED DRAINAGE WORK IS BASED ON DRAINAGE INFORMATION FROM ORIGINAL CONTRACT F.I.S.H. 70-7. REFER TO ORIGINAL CONTRACT PLANS FOR DETAILS OF EXISTING DRAINAGE STRUCTURES.

THE CONTRACTOR SHALL VERIFY THIS INFORMATION WITH FIELD SITE INSPECTIONS.

CONTRACTOR SHALL NOTE THAT ALL DRAINAGE SYSTEMS AND STRUCTURES SHALL BE CLEANED UNDER ITEMS 203.18M OR 203.19M.

THE EXACT PLACEMENT OF THE PROPOSED RR ACCESS ROAD (CONC. PIPE CULVERT) SHALL BE AT THE DISCRETION OF THE ENGINEER.

NO EXISTING SURVEY IS AVAILABLE, ITEM 625.01M "SURVEY & STAKEOUT" IS INCLUDED IN CONTRACT FOR ALL NECESSARY WORK, AS DIRECTED BY ENGINEER.

SEE DRAWING NO. D017-3 FOR TABLE OF DRAINAGE WORK AND DITCH LINE WORK, TO BE DONE.

SEE DWG. NO. D017-4 FOR DOWN-SPOUT MODIFICATION DETAILS.

SEE DWG. NO. GN-1 FOR SERIALIZED ITEM NOTES.

SEE DWG. NO. D017-5 FOR PROPOSED CONC. PIPE AND MISCEL. DETAILS.

WORK TO BE DONE:

PIER #1 - CLEAN EXISTING DRAINAGE SYSTEM. PERFORM REPAIRS TO CONCRETE PIER ELEMENTS AND BEARING RESTORATION.

PIER #2 - DRAINAGE STRUCTURES AND DRAINAGE RUNS TO BE ABANDONED. MODIFY EXISTING DOWN-SPOUTS (REFER TO DRAWING NO. D017-4 FOR DETAILS). CLEAN THE REMAINING DRAINAGE SYSTEM. THIS WORK SHALL INCLUDE EXTENSION OF THE EXISTING DITCH LINE AND INSTALLATION OF A CULVERT PIPE. ALSO CLEANING AND RESHAPING THE EXISTING DITCH LINE. PERFORM REPAIRS TO CONCRETE PIER ELEMENTS AND BEARING RESTORATION.

PIER #3 - DRAINAGE STRUCTURES AND DRAINAGE RUNS TO BE ABANDONED. MODIFY EXISTING DOWN-SPOUTS (REFER TO DRAWING NO. D017-4 FOR DETAILS). CLEAN THE REMAINING DRAINAGE SYSTEM. THIS WORK SHALL ALSO INCLUDE CLEANING THE EXISTING DITCH LINE AND CLEANING EXISTING CULVERT PIPE. PERFORM REPAIRS TO CONCRETE PIER ELEMENTS AND BEARING RESTORATION.

PIER #4 - CLEAN EXISTING DRAINAGE SYSTEM TO INCLUDE ANY REPAIRS TO DRAINAGE STRUCTURES.
NORTH BOUND, PERFORM REPAIRS TO CONCRETE PIER ELEMENTS AND BEARING RESTORATION. SOUTH BOUND, REPLACE PIER CAP.

PIER #5 - CLEAN EXISTING DRAINAGE SYSTEM TO INCLUDE ANY REPAIRS TO DRAINAGE STRUCTURES AND INSTALLATION OF A NEW OUTLET SECTION (305mm RCCP)
NORTH BOUND, PERFORM REPAIRS TO CONCRETE PIER ELEMENTS AND BEARING RESTORATION. SOUTH BOUND, REPLACE PIER CAP.

PIER #6 (NB ONLY)- DRAINAGE STRUCTURES AND DRAINAGE RUNS TO BE ABANDONED. MODIFY EXISTING DOWN-SPOUTS (REFER TO DRAWING NO. D017-4 FOR DETAILS). CLEAN REMAINING DRAINAGE SYSTEM. PERFORM REPAIRS TO CONCRETE PIER ELEMENTS AND BEARING RESTORATION. CONSTRUCT A SWALE TO DIRECT RUNOFF AWAY FROM PIER AND RR PROPERTY.

PIER #9 (SB ONLY) - CLEAN EXISTING DRAINAGE SYSTEM.

SEE DRAWING NO. GP17-2 AND GP17-3 FOR COMPLETE LISTING OF WORK TO BE DONE.

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE | DATE

INTERSTATE 481
OVER
CSX RAILROAD YARD

DRAINAGE DETAILS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.G1A	3	10/02	D017-1

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FED ROAD REC. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	290	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
COUNTY OF ONONDAGA
P.I.N. 305613 B.I.N. 1093571 & 1093572

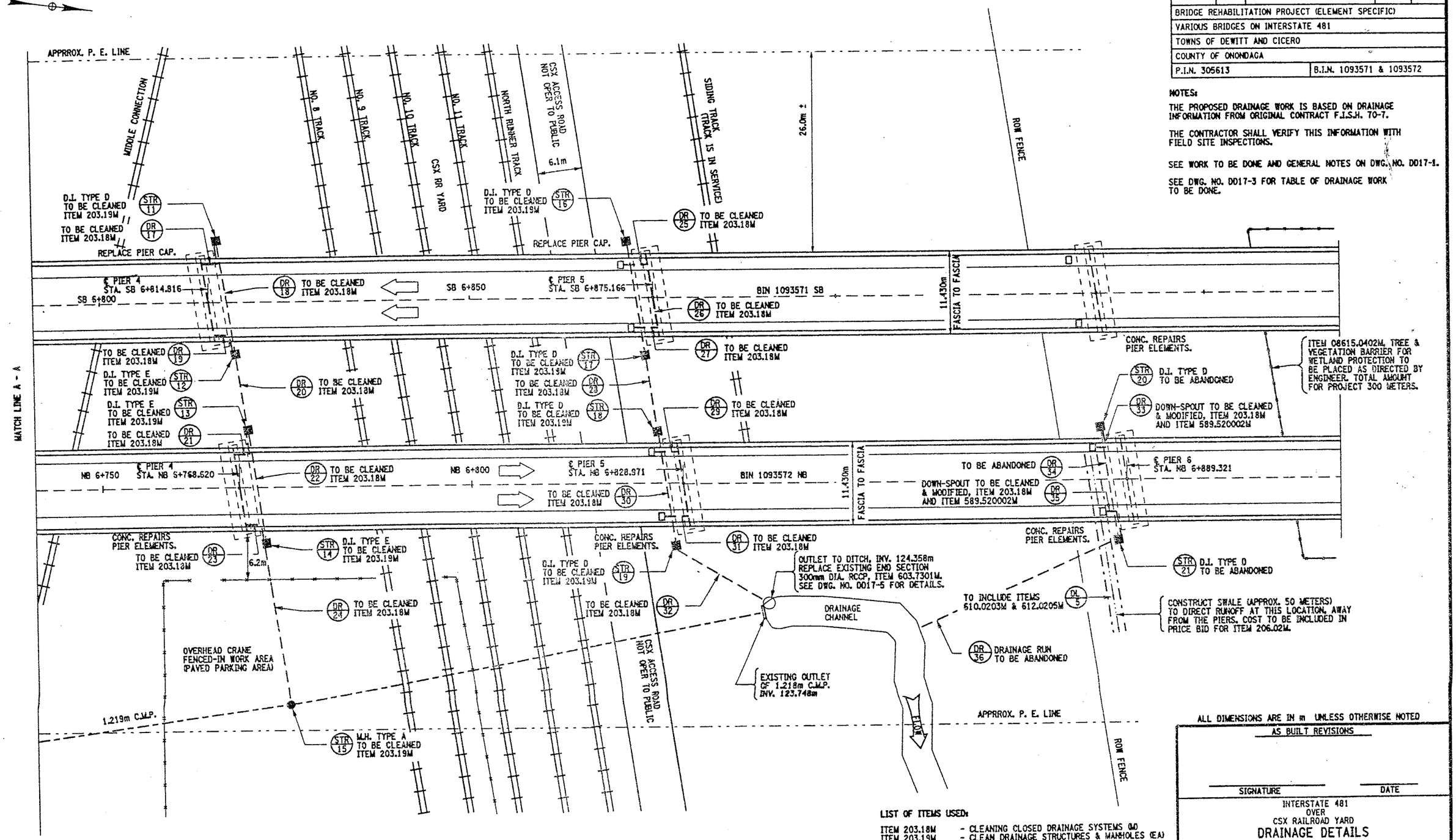
NOTES:

THE PROPOSED DRAINAGE WORK IS BASED ON DRAINAGE INFORMATION FROM ORIGINAL CONTRACT F.I.S.H. 70-7.

THE CONTRACTOR SHALL VERIFY THIS INFORMATION WITH FIELD SITE INSPECTIONS.

SEE WORK TO BE DONE AND GENERAL NOTES ON DWG. NO. DD17-1.

SEE DWG. NO. DD17-3 FOR TABLE OF DRAINAGE WORK TO BE DONE.



PLAN VIEW
NOT TO SCALE

LIST OF ITEMS USED:

ITEM 203.18M	- CLEANING CLOSED DRAINAGE SYSTEMS (M)
ITEM 203.19M	- CLEAN DRAINAGE STRUCTURES & MANHOLES (EA)
ITEM 206.02M	- TRENCH AND CULVERT EXCAVATION (CM)
ITEM 589.520002M	- REMOVAL OF EXISTING STEEL (EA)
ITEM 603.7301M	- REINF. CONC. PIPE END SECTION, 300mm (EA)
ITEM 610.0203M	- ESTABLISH TURF (SM)
ITEM 612.0205M	- EROSION CONTRAL MATERIAL (SM)
ITEM 08615.0402M	- TREE AND VEGTATION BARRIER (M)

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481
OVER
CSX RAILROAD YARD
DRAINAGE DETAILS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.G1A	3	10/02	DD17-2

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	291	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
COUNTY OF ONONDAGA
P.I.N. 305613 B.I.N. 1093571 & 1093572

DRAINAGE RUN TABLE

DR NO	FROM STRUCTURE	203mm C.I.P.	305mm R.C.C.P.	TO STRUCTURE	WORK TO BE DONE	REMARKS
1	B.I.N. 1093571 SB, PIER 2, WEST COLUMN	18.0m		STR. #1	ITEM 203.18M/589.520001M	CLEAN & OUTLET TO GROUND
2	STR. #1			STR. #2		TO BE ABANDONED
3	B.I.N. 1093571 SB, PIER 2, EAST COLUMN	18.0m		STR. #2	ITEM 203.18M/589.520001M	CLEAN & OUTLET TO GROUND
4	STR. #2			STR. #3		TO BE ABANDONED
5	B.I.N. 1093572 NB, PIER 2, WEST COLUMN	18.0m		STR. #3	ITEM 203.18M/589.520002M	CLEAN & OUTLET TO GROUND
6	STR. #3			STR. #4		TO BE ABANDONED
7	B.I.N. 1093572 NB, PIER 2, EAST COLUMN	18.0m		STR. #4	ITEM 203.18M/589.520002M	CLEAN & OUTLET TO GROUND
8	STR. #4			STR. #5	—	TO BE ABANDONED
9	B.I.N. 1093571 SB, PIER 3, WEST COLUMN	18.0m		STR. #6	ITEM 203.18M/589.520001M	CLEAN & OUTLET TO GROUND
10	STR. #6			STR. #7		TO BE ABANDONED
11	B.I.N. 1093571 SB, PIER 3, EAST COLUMN	18.0m		STR. #7	ITEM 203.18M/589.520001M	CLEAN & OUTLET TO GROUND
12	STR. #7			STR. #8		TO BE ABANDONED
13	B.I.N. 1093572 NB, PIER 3, WEST COLUMN	18.0m		STR. #8	ITEM 203.18M/589.520002M	CLEAN & OUTLET TO GROUND
14	STR. #8			STR. #9		TO BE ABANDONED
15	B.I.N. 1093572 NB, PIER 3, EAST COLUMN	18.0m		STR. #9	ITEM 203.18M/589.520002M	CLEAN & OUTLET TO GROUND
16	STR. #9			STR. #10		TO BE ABANDONED
17	B.I.N. 1093571 SB, PIER 4, WEST COLUMN	18.0m		STR. #11	ITEM 203.18M	CLEAN
18	STR. #11		14.6m	STR. #12	ITEM 203.18M	CLEAN
19	B.I.N. 1093571 SB, PIER 4, EAST COLUMN	18.0m		STR. #12	ITEM 203.18M	CLEAN
20	STR. #12		9.8m	STR. #13	ITEM 203.18M	CLEAN
21	B.I.N. 1093572 NB, PIER 4, WEST COLUMN	18.0m		STR. #13	ITEM 203.18M	CLEAN
22	STR. #13		14.6m	STR. #14	ITEM 203.18M	CLEAN
23	B.I.N. 1093572 NB, PIER 4, EAST COLUMN	18.0m		STR. #14	ITEM 203.18M	CLEAN
24	STR. #14		22.8m	STR. #15	ITEM 203.18M	CLEAN
25	B.I.N. 1093571 SB, PIER 5, WEST COLUMN	18.0m		STR. #16	ITEM 203.18M	CLEAN
26	STR. #16		13.4m	STR. #17	ITEM 203.18M	CLEAN
27	B.I.N. 1093571 SB, PIER 5, EAST COLUMN	18.0m		STR. #17	ITEM 203.18M	CLEAN
28	STR. #17		9.3m	STR. #18	ITEM 203.18M	CLEAN
29	B.I.N. 1093572 NB, PIER 5, WEST COLUMN	18.0m		STR. #18	ITEM 203.18M	CLEAN
30	STR. #18		14.6m	STR. #19	ITEM 203.18M	CLEAN
31	B.I.N. 1093572 NB, PIER 5, EAST COLUMN	18.0m		STR. #19	ITEM 203.18M	CLEAN
32	STR. #19		12.6m	TO OUTLET	ITEM 203.18M/603.7301M	CLEAN AND REPLACE END SECTION
33	B.I.N. 1093572 NB, PIER 6, WEST COLUMN	14.0m		STR. #20	ITEM 203.18M/589.520002M	CLEAN & OUTLET TO GROUND
34	STR. #20			STR. #21		TO BE ABANDONED
35	B.I.N. 1093572 NB, PIER 6, EAST COLUMN	14.0m		STR. #21	ITEM 203.18M/589.520002M	CLEAN & OUTLET TO GROUND
36	STR. #21			TO OUTLET		TO BE ABANDONED
	PIER #1 BOTH BRIDGES	64.0m				
	PIER #9 SB (ONLY)	32.0m				

EST. TOTAL OF ITEM 203.18M IS 525 METERS.

GENERAL NOTES:

THE QUANITIES SHOWN ARE FOR THE PURPOSE OF ESTIMATING THE PROJECT, THE CONTRACTOR SHALL VERIFY THESE QUANITIES.

ELEVATIONS TAKEN FROM ORIGINAL CONTRACT F.I.S.H. 70-7. CONTRACTORS SHALL VERIFY ELEVATIONS.

DRAINAGE RUNS AT THE TROUGHS ARE DIVIDED AT MID-POINT OF PIER.

DRAINAGE STRUCTURE TABLE

STR NO	LOCATION OF STRUCTURE	TYPE	EXISTING T.G.	EXISTING INV.	ITEM USED	REMARKS
1	B.I.N. 1093571 SB, PIER 2, WEST COLUMN	D.I. TYP D	125.882m	124.815m		TO BE ABANDONED
2	B.I.N. 1093571 SB, PIER 2, EAST COLUMN	D.I. TYP D	125.882m	124.724m		TO BE ABANDONED
3	B.I.N. 1093572 NB, PIER 2, WEST COLUMN	D.I. TYP D	125.882m	124.633m		TO BE ABANDONED
4	B.I.N. 1093572 NB, PIER 2, EAST COLUMN	D.I. TYP D	125.882m	124.541m		TO BE ABANDONED
5	35.4m EAST OF STRUCT. #4 (OUTLET INTO 1.219m C.M.P.)	M.H. TYP A	125.882m	124.358m		NO WORK PLANNED
6	B.I.N. 1093571 SB, PIER 3, WEST COLUMN	D.I. TYP D	126.034m	124.998m		TO BE ABANDONED
7	B.I.N. 1093571 SB, PIER 3, EAST COLUMN	D.I. TYP D	126.034m	124.876m		TO BE ABANDONED
8	B.I.N. 1093572 NB, PIER 3, WEST COLUMN	D.I. TYP D	126.034m	124.705m		TO BE ABANDONED
9	B.I.N. 1093572 NB, PIER 3, EAST COLUMN	D.I. TYP D	126.034m	124.678m		TO BE ABANDONED
10	30.8m EAST OF STRUCT. #9 (OUTLET INTO 1.219m C.M.P.)	M.H. TYP A	126.034m	124.571m	ITEM 203.19M	CLEAN
11	B.I.N. 1093571 SB, PIER 4, WEST COLUMN	D.I. TYP D	126.034m	125.120m	ITEM 203.19M	CLEAN
12	B.I.N. 1093571 SB, PIER 4, EAST COLUMN	D.I. TYP E	126.034m	124.876m	ITEM 203.19M	CLEAN
13	B.I.N. 1093572 NB, PIER 4, WEST COLUMN	D.I. TYP E	126.034m	124.785m	ITEM 203.19M	CLEAN
14	B.I.N. 1093572 NB, PIER 4, EAST COLUMN	D.I. TYP E	126.034m	124.693m	ITEM 203.19M	CLEAN
15	22.6m EAST OF STRUCT. #14 (OUTLET INTO 1.219m C.M.P.)	M.H. TYP A	126.034m	124.541m	ITEM 203.19M	CLEAN
16	B.I.N. 1093571 SB, PIER 5, WEST COLUMN	D.I. TYP D	125.943m	124.876m	ITEM 203.19M	CLEAN
17	B.I.N. 1093571 SB, PIER 5, EAST COLUMN	D.I. TYP D	125.943m	124.785m	ITEM 203.19M	CLEAN
18	B.I.N. 1093572 NB, PIER 5, WEST COLUMN	D.I. TYP D	125.943m	124.693m	ITEM 203.19M	CLEAN
19	B.I.N. 1093572 NB, PIER 5, EAST COLUMN	D.I. TYP D	125.943m	124.571m	ITEM 203.19M	CLEAN
20	B.I.N. 1093572 NB, PIER 6, WEST COLUMN	D.I. TYP D	126.339m	125.425m		TO BE ABANDONED
21	B.I.N. 1093572 NB, PIER 6, EAST COLUMN	D.I. TYP D	126.339m	124.663m		TO BE ABANDONED
		GRAND TOTAL OF 10 EACH OF ITEM 203.19M				

TABLE OF DITCH LINES

DL NO	APPROX. LOCATION	ESTIMATED LENGTH	ITEM USED
1	PIER #2, FROM STR. 1 TO EXISTING DITCH LINE	60 METERS ±	206.02M
2	FROM PROPOSED DITCH LINE EXTENTION TO STR. 5	30 METERS ±	15203.51M
3	FROM @ PIER #2 TO @ PIER #3	47 METERS ±	15203.51M
4	FROM @ STR. 10 TO @ STR. 6	70 METERS ±	15203.51M
5	FROM @ STR. 20 TO ROW FENCE	50 METERS ±	206.02M

LIST OF ITEMS USED:

ITEM 203.18M - CLEAN CLOSED DRAINAGE SYSTEMS (M)
ITEM 203.19M - CLEAN DRAINAGE STRUCTURES AND MANHOLES (EA)
ITEM 15203.51M - GRADING, CLEANING & RESHAPING EXISTING DITCH (M)
ITEM 206.02M - TRENCH & CULVERT EXCAVATION (CM)
ITEM 589.520001M - REMOVAL OF EXISTING STEEL (EA)
ITEM 589.520002M - REMOVAL OF EXISTING STEEL (EA)
ITEM 603.7301M - REINF. CONC. PIPE END SECTION (EA)
ITEM 610.0203M - ESTABLISH TURF (SM)
ITEM 612.0205M - EROSION CONTROL MATERIAL (SM)

DITCH CLEANING NOTE:

IN CONJUNCTION WITH THE USE OF ITEM 15203.51M - GRADING, CLEANING & RESHAPING EXISTING DITCHES. ITEM 612.0205M - EROSION CONTROL MATERIAL AND ITEM 610.0203M - ESTABLISH TURF, SHALL ALSO BE INCORPORATED WITH ANY DITCH WORK.

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481
OVER
CSX RAILROAD YARD

TABLE OF DRAINAGE RUNS & STRUCTURES

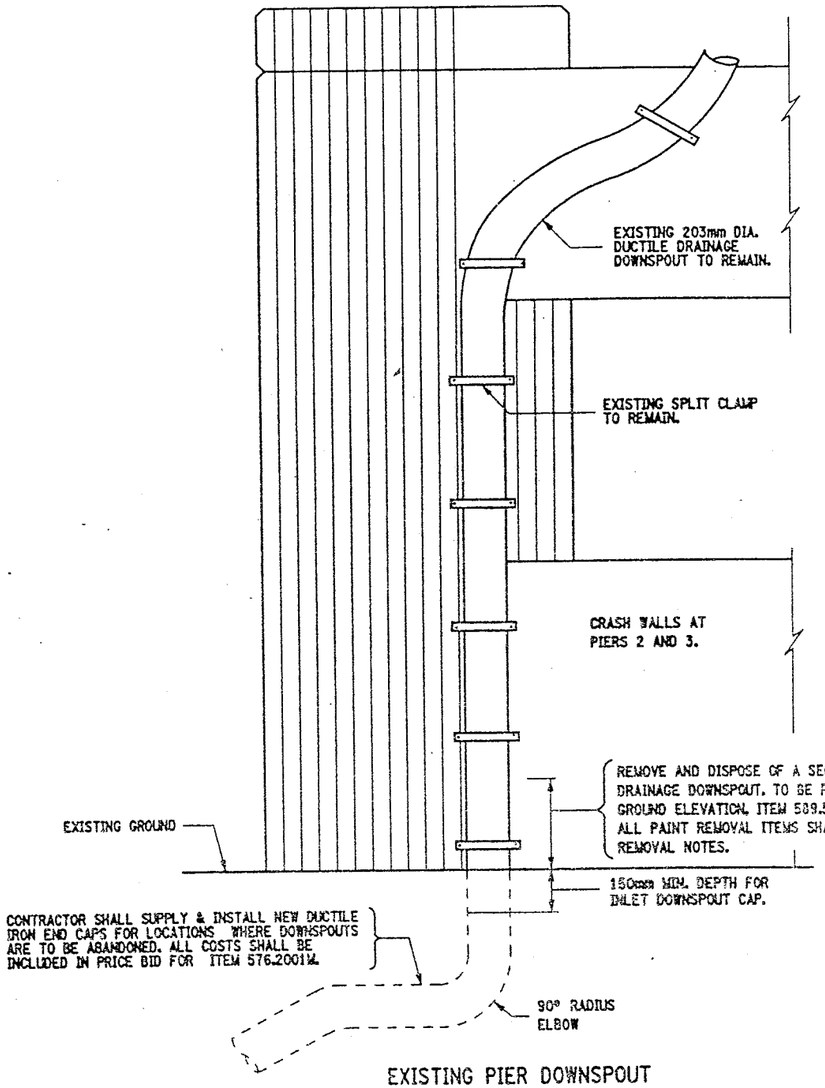
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.G1A	3	10/02	D017-3

CHECKED BY
DRAFTED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

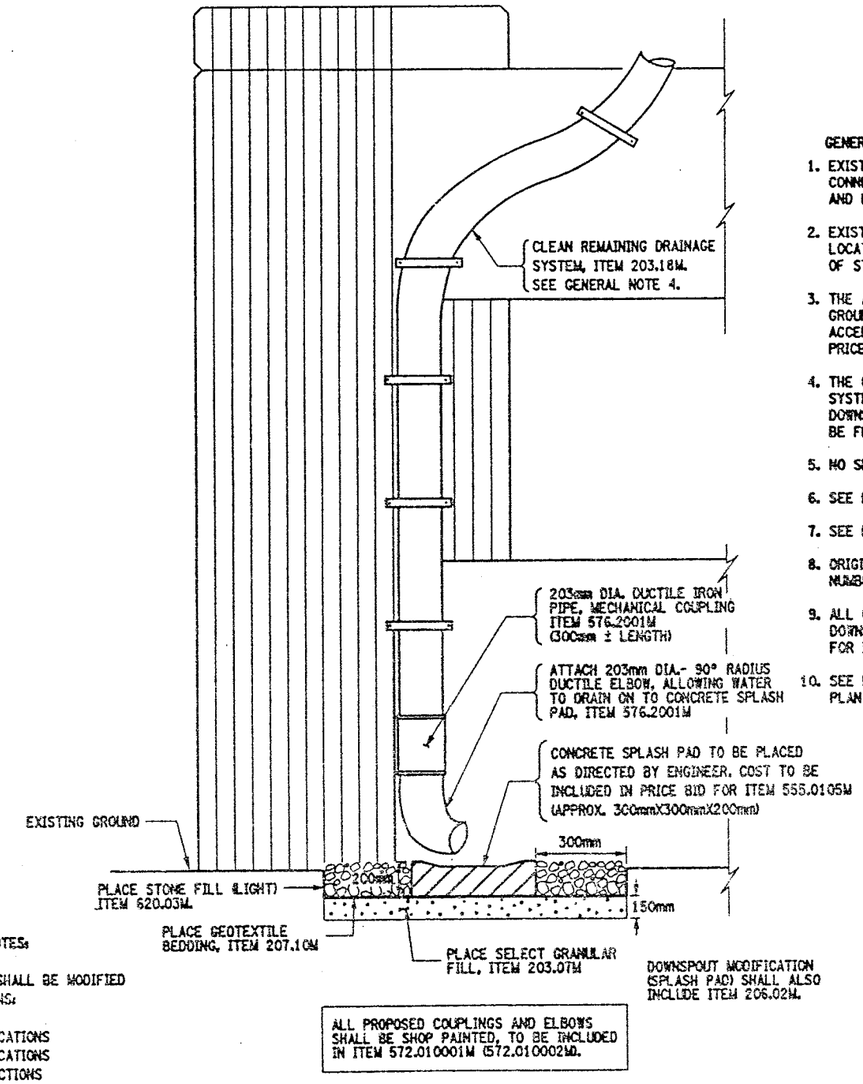
FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	292	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093571 & 1093572



EXISTING PIER DOWNSPOUT

SCALE: 1 TO 10



DOWNSPOUT MODIFICATION (SPLASH PAD) SHALL ALSO INCLUDE ITEM 206.02M.

ALL PROPOSED COUPLINGS AND ELBOWS SHALL BE SHOP PAINTED, TO BE INCLUDED IN ITEM 572.010001M (572.010002M).

PROPOSED PIER DOWNSPOUT

SCALE: 1 TO 10

GENERAL NOTES:

1. EXISTING INLET DOWNSPOUT, ADJACENT DRAINAGE STRUCTURES AND CONNECTING DRAINAGE RUNS AT PIER #2 NB & SB, PIER #3 NB & SB AND PIER #6 NORTHBOUND ONLY, TO BE ABANDONED.
2. EXISTING DRAINAGE PIPE (DUCTILE IRON PIPE) SHALL BE CUT OFF AT LOCATION SHOWN OR AS DIRECTED BY ENGINEER. AS PER SECTION 589 OF STANDARD SPECIF. (SEE MODIFICATION NOTES).
3. THE ABANDONED INLET DOWNSPOUT PIPE (THE PORTION STILL IN THE GROUND) SHALL BE CAPPED WITH A DUCTILE IRON CAP, IN A MANNER ACCEPTABLE TO THE ENGINEER. ALL COSTS SHALL BE INCLUDED IN BID PRICE FOR ITEM 576.2001M.
4. THE CONTRACTOR SHALL NOTE THAT CLEANING THE DRAINAGE SYSTEM SHALL INCLUDE SCUPPERS, HOPPERS, TROUGHS AND DOWNSPOUTS. THE CLEANING OF THE DRAINAGE SYSTEM SHALL BE FROM THE BRIDGE DECK TO THE OUTLETTED DOWNSPOUTS.
5. NO SHOP DRAWINGS SHALL BE REQUIRED FOR DOWNSPOUT ELBOW.
6. SEE DRAWINGS NO. D017-1 AND D017-2 FOR MODIFICATION LOCATIONS.
7. SEE DRAWING NO. D017-3 FOR TABLE OF DRAINAGE WORK TO BE DONE.
8. ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND PREVIOUS CONTRACT NUMBER D251436.
9. ALL COSTS ASSOCIATED WITH THE INSTALLATION OF THE PROPOSED DOWNSPOUT ELBOW & COUPLING TO BE INCLUDED IN THE BID PRICE FOR ITEM 576.2001M.
10. SEE DRAWING NO. D017-8 FOR MISC. DRAINAGE CLEANING DETAILS AND PLAN VIEW OF SPLASH PAD WITH STONE FILL.

ITEM CLARIFICATION NOTE:

ITEM 570.09NNNNM - ENVIRONMENTAL GROUND PROTECTION IS A SERIALIZED ITEM AND THE FOLLOWING PAY ITEMS SHALL BE INCORPORATED BY BRIDGE.

BIN 1093571 SB SHALL USE ITEM 570.090001M
BIN 1093572 NB SHALL USE ITEM 570.090002M

ITEM 572.01NNNNM - STRUCTURAL STEEL PAINT SYSTEM: SHOP APPLIED, IS A SERIALIZED ITEM AND THE FOLLOWING PAY ITEMS SHALL BE INCORPORATED BY BRIDGE.

BIN 1093571 SB SHALL USE ITEM 572.010001M
BIN 1093572 NB SHALL USE ITEM 572.010002M

ITEM 589.52NNNNM - REMOVAL OF EXISTING STEEL IS A SERIALIZED ITEM AND THE FOLLOWING PAY ITEMS SHALL BE INCORPORATED BY BRIDGE.

BIN 1093571 SB SHALL USE ITEM 589.520001M
BIN 1093572 NB SHALL USE ITEM 589.520002M

ITEM 571.01NNNNM - TREATMENT AND DISPOSAL OF PAINT REMOVAL WASTE, IS A SERIALIZED ITEM AND THE FOLLOWING PAY ITEMS SHALL BE INCORPORATED BY BRIDGE.

BIN 1093571 SB SHALL USE ITEM 571.010001M
BIN 1093572 NB SHALL USE ITEM 571.010002M

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

PAINT REMOVAL NOTES:

PAINT REMOVAL WORK SHALL BE DONE IN ACCORDANCE WITH REQUIREMENTS OF SECTION 741 OF STANDARD SPECIF.

REMOVE EXISTING PAINT FROM SPECIFIED ELEMENTS, PRIOR TO ANY CUTTING OR WELDING.

PAINT SHALL BE REMOVED TO 100mm MIN. FROM THE PROPOSED WELD/CUT LOCATON.

IN CONJUNCTION WITH THE USE OF ITEM 16570.72M - LOCALIZED VACCUM CONTAINED CLEANING OF STRUCTURAL STEEL.
ITEM 570.09NNNNM - ENVIRONMENTAL GROUND PROTECTION AND ITEM 571.01NNNNM - TREATMENT AND DISPOSAL OF PAINT REMOVAL WASTE, SHALL ALSO BE INCORPORATED DURING PAINT REMOVAL OPERATIONS, (SEE ITEM CLARIFICATION NOTE, THIS SHEET).

THIS PAINT REMOVAL OPERATION SHALL BE REGARDED AS "EXEMPT SMALL GENERATOR STATUS" AND ALL PROVISIONS OF PART 372, 6 NYCRR SHALL APPLY .

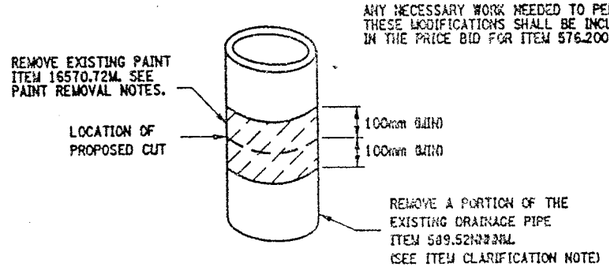
DOWNSPOUT MODIFICATION NOTES:

THE EXISTING DOWNSPOUTS SHALL BE MODIFIED AT THE FOLLOWING LOCATIONS:

PIER #2 NB AND SB	4 LOCATIONS
PIER #3 NB AND SB	4 LOCATIONS
PIER #6 NB	2 LOCTIONS

10 LOCATIONS TOTAL

ANY NECESSARY WORK NEEDED TO PERFORM THESE MODIFICATIONS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 576.2001M.



LIMITS OF PAINT REMOVAL

NOT TO SCALE

ITEMS USED:

ITEM 203.07M	- SELECT GRANULAR FILL, (CM)
ITEM 203.18M	- CLEAN CLOSED DRAINAGE SYSTEMS (m)
ITEM 206.02M	- TRENCH & CULVERT EXCAV. (CM)
ITEM 207.10M	- GEOTEXTILE BEDDING, (SM)
ITEM 555.0105M	- CONCRETE FOR STRUCTURES, CLASS "A" (CM)
ITEM 570.090001M	- ENVIRONMENTAL GROUND PROTECTION (LS)
ITEM 570.090002M	- ENVIRONMENTAL GROUND PROTECTION (LS)
ITEM 16570.72M	- LOCALIZED VACUUM CONT. CLEANING STRUCT. STEEL (SM)
ITEM 571.010001M	- TREATMENT & DISPOSAL OF PAINT REMOVAL WASTE (CM)
ITEM 571.010002M	- TREATMENT & DISPOSAL OF PAINT REMOVAL WASTE (CM)
ITEM 572.010001M	- STRUCTURAL STEEL PAINT SYSTEM: SHOP APPLIED (SM)
ITEM 572.010002M	- STRUCTURAL STEEL PAINT SYSTEM: SHOP APPLIED (SM)
ITEM 589.520001M	- REMOVAL OF EXISITNG STEEL (EA)
ITEM 589.520002M	- REMOVAL OF EXISTING STEEL (EA)
ITEM 576.2001M	- DOWNSPOUT SYSTEM, DUCTILE IRON (m)
ITEM 620.03M	- STONE FILL, LIGHT (CM)

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB AND SB
OVER
CSX RAILROAD YARD

MODIFICATION OF PIER DOWNSPOUTS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.D1A	3	10/02	D017-4

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	293	432

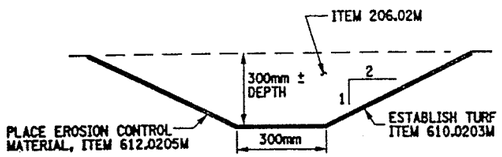
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093571 & 1093572

TYPICAL DITCH LINE NOTES:

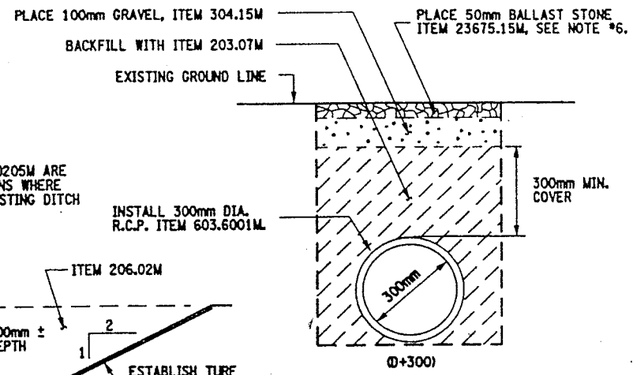
1) SEE TABLE OF DITCH LINES DWG NO. D017-3.

2) DIMENSIONS SHOWN ARE FOR ROUGH CALCULATIONS.

3) ITEMS 610.0203M AND ITEM 612.0205M ARE TO BE INCLUDE AT ALL LOCATIONS WHERE ITEM 15203.51M - CLEANING EXISTING DITCH LINES IS USED.



TYPICAL DITCH LINE
DITCH LINE EXTENSION AT PIER #2
NOT TO SCALE



(0+300)

PROPOSED CONCRETE PIPE SECTION X-X
NOT TO SCALE

CULVERT PIPE NOTES:

1) EXTEND EXISTING DITCH LINE FROM ITS CURRENT LOCATION (SEE DWG. NO. D017-1) APPROXIMATELY 20 METER EAST OF PIER #2. TO 5 METERS BEYOND PIER #2, WEST SIDE. THE COST TO BE PAID UNDER ITEM 206.02M. REFER TO "TABLE OF DITCH LINES" DWG. NO. D017-3 FOR DITCH LINE NUMBER #1.

2) INSTALL PIPE CULVERT TO PROVIDE RAILROAD (CSX) ACCESS TO PIER 2. THE EXACT LOCATION OF THE PROPOSED CULVERT SHALL BE DETERMINED BY THE ENGINEER.

3) THE PROPOSED CULVERT PIPE SLOPE TO MATCH THE SLOPE OF THE EXISTING DITCH LINE. NOTE, NO EXISTING SURVEY AVAILABLE, ITEM 625.01M, "SURVEY & STAKEOUT" IS INCLUDED IN CONTRACT. NO PROPOSED INVERT ELEVATIONS GIVEN.

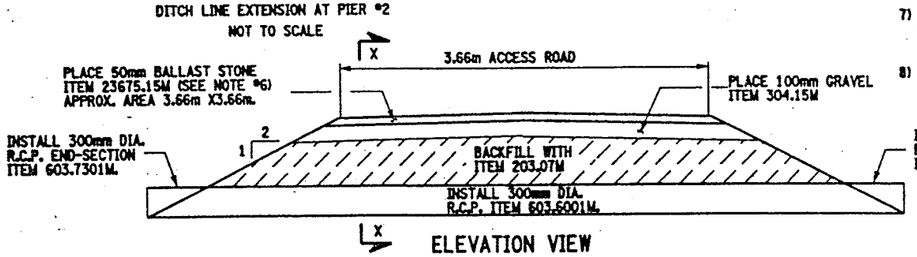
4) REFER TO NYS STANDARD SHEETS M203-4, M203-5 M203-6R1 AND M603-1.

5) NO LEAKAGE TEST REQUIRED.

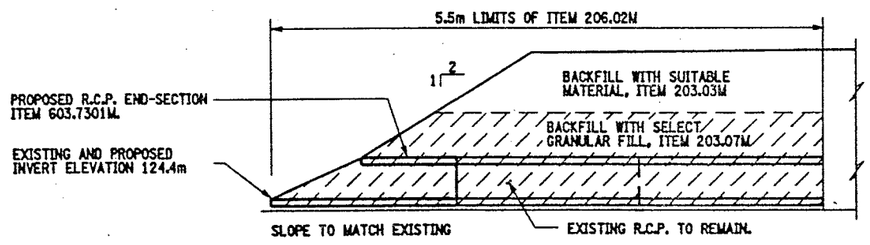
6) FINISHED GRADE AT PROPOSED CULVERT INSTALLATION PLACEMENT OF ITEM 23675.15M, SHALL BE APPROVED BY CSXT DISTRICT ENGINEER. IF THIS MATERIAL DOES NOT SATISFY THE RAILROAD REQUIREMENTS FOR "APPROVED RAILROAD BALLAST STONE", THEN THE APPROPRIATE MATERIAL SHALL BE SUBSTITUTED FOR ITEM 23675.15M AT NO ADDITIONAL COST TO THE STATE.

7) THE CLASS & SIZE REQUIREMENTS FOR THE BALLAST STONE ITEM 23675.15M, SHALL BE DETERMINED BY THE ENGINEER.

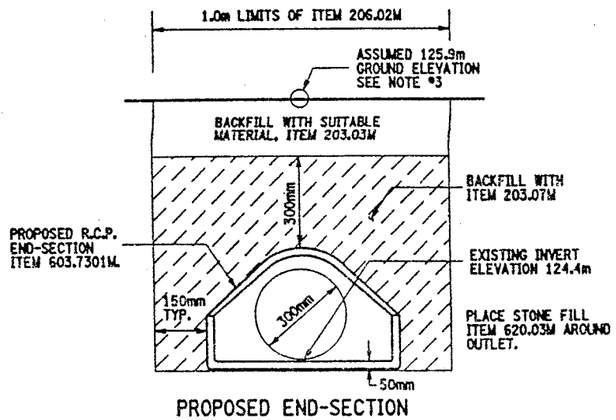
8) INSTALLATION OF R.C.P. END-SECTIONS SHALL INCLUDE STONE FILL, ITEM 620.03M. (PLACED AT INLET & OUTLET OF RCP END- SECTIONS, A0BE).



ELEVATION VIEW
NOT TO SCALE



PROPOSED CONCRETE END-SECTION
SECTION VIEW
(DRAINAGE RUN #32)
NOT TO SCALE



PROPOSED END-SECTION
END VIEW
NOT TO SCALE

END SECTION NOTES:

1) AT THE OUTLET OF DRAINAGE RUN #32 (SEE DWG. NO. D017-2) REMOVE EXISTING R.C.P. END-SECTION AND INSTALL A NEW CONCRETE PIPE END-SECTION, ITEM 603.7301M.

2) ANCHORING OF THE PROPOSED END-SECTION SHALL BE AS PER SECTION 603-3.06 OF STANDARD SPCIFICATIONS AND TO THE SATISFACTION OF THE ENGINEER. COST BE INCLUDED IN THE BID PRICE FOR ITEM 603.7301M.

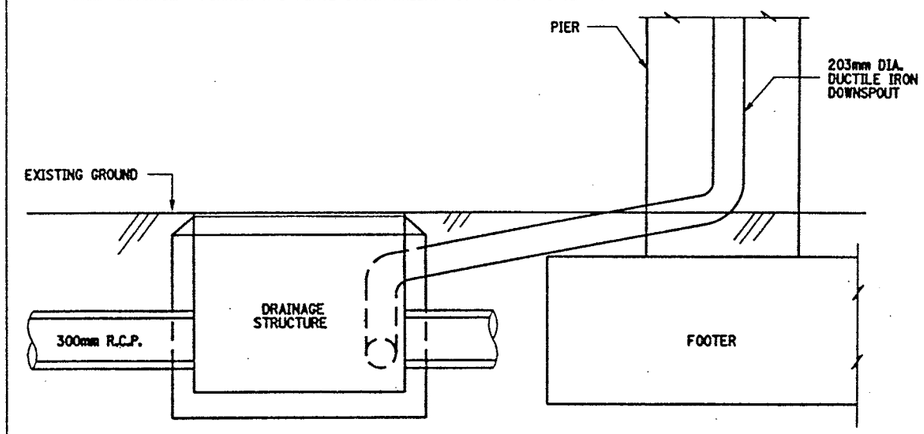
3) THE ASSUMED GROUND ELEVATION IS TAKEN FROM THE DRAINAGE STRUCTURE TABLE ON DRAWING NO. D017-3 USING STRUCTURE #19 EXISTING T.G. ELEVATION. CONTRACTOR SHALL VERIFY ALL ELEVATIONS, ITEM 625.01M.

4) REFER TO NYS STANDARD SHEET M603-1.

5) INSTALLATION OF R.C.P. END-SECTION SHALL INCLUDE STONE FILL, ITEM 620.03M. (PLACED A.O.B.E.)

ITEMS USED:

ITEM 203.03M - EMBANKMENT IN PLACE (CM)
ITEM 203.07M - SELECT GRANULAR FILL (CM)
ITEM 206.02M - TRENCH & CULVERT EXCAVATION (CM)
ITEM 304.15M - SUBBASE COURSE, OPTIONAL (CM)
ITEM 603.6001M - REINFORCED CONCRETE PIPE CLASS III (M)
ITEM 603.7301M - REINFORCED CONCRETE PIPE END SECTION (EACH)
ITEM 610.0203M - ESTABLISHING TURF (SM)
ITEM 612.0205M - EROSION CONTROL MATERIAL, CLASS II TYPE B (SM)
ITEM 620.03M - STONE FILL, LIGHT, (CM)
ITEM 625.01M - SURVEY & STAKEOUT (L.S.)
ITEM 23675.15M - FURNISH AND PLACE STONE BALLAST SURFACING COURSE (MT)



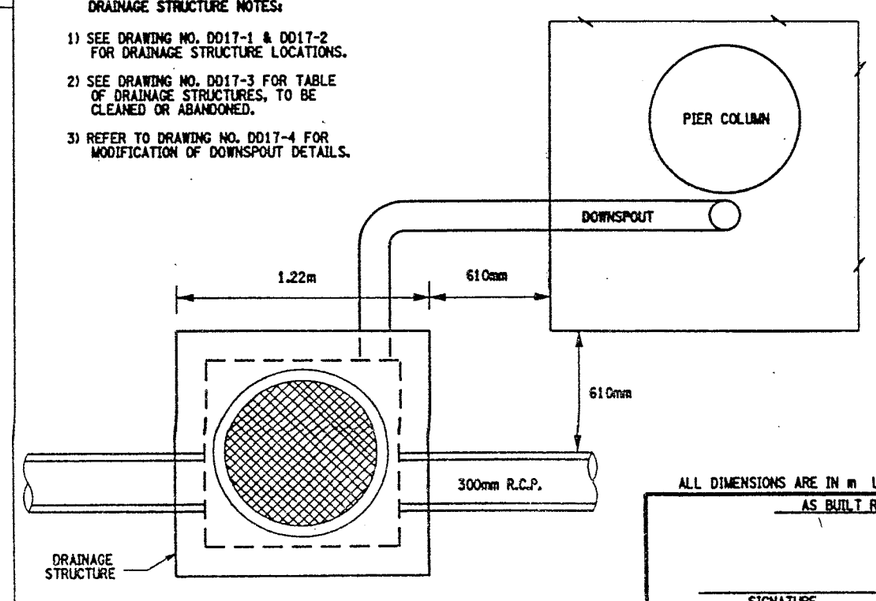
TYPICAL ELEVATION VIEW
DRAINAGE STRUCTURES ADJACENT TO PIERS (RR YARD).
NOT TO SCALE

DRAINAGE STRUCTURE NOTES:

1) SEE DRAWING NO. D017-1 & D017-2 FOR DRAINAGE STRUCTURE LOCATIONS.

2) SEE DRAWING NO. D017-3 FOR TABLE OF DRAINAGE STRUCTURES, TO BE CLEANED OR ABANDONED.

3) REFER TO DRAWING NO. D017-4 FOR MODIFICATION OF DOWNSPOUT DETAILS.



TYPICAL PLAN VIEW
DRAINAGE STRUCTURES ADJACENT TO PIERS (RR YARD).
NOT TO SCALE

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB AND SB
OVER
CSX RAILROAD YARD
MISCELLANEOUS DETAILS

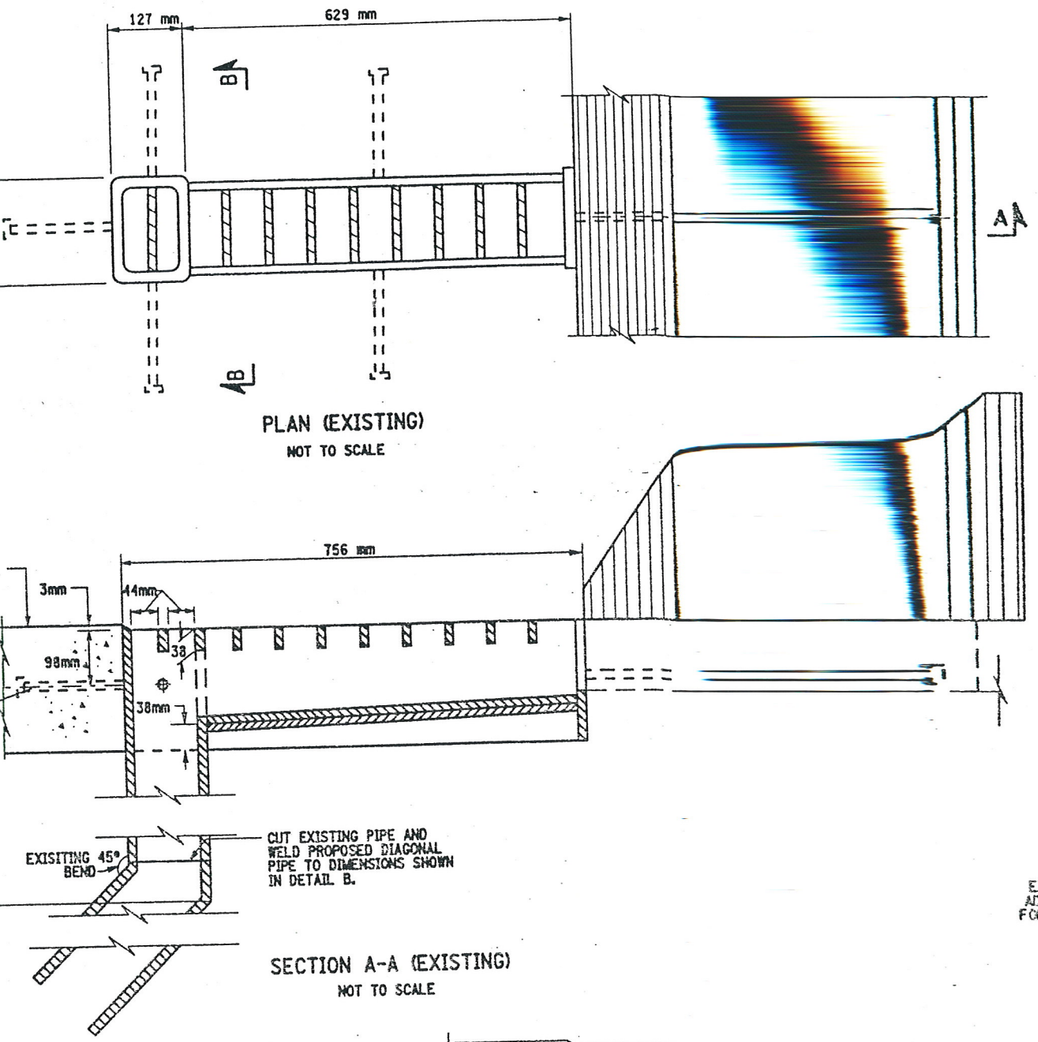
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.D1A	3	10/02	D017-5

CHECKED BY
DRAFTED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

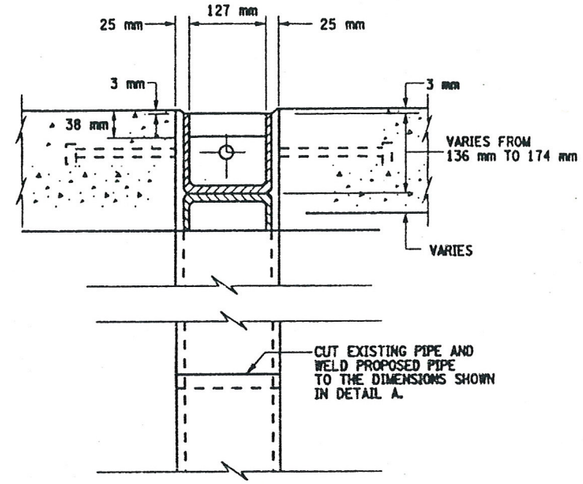
FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	294	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093571 & 1093572



PLAN (EXISTING)
NOT TO SCALE

SECTION A-A (EXISTING)
NOT TO SCALE



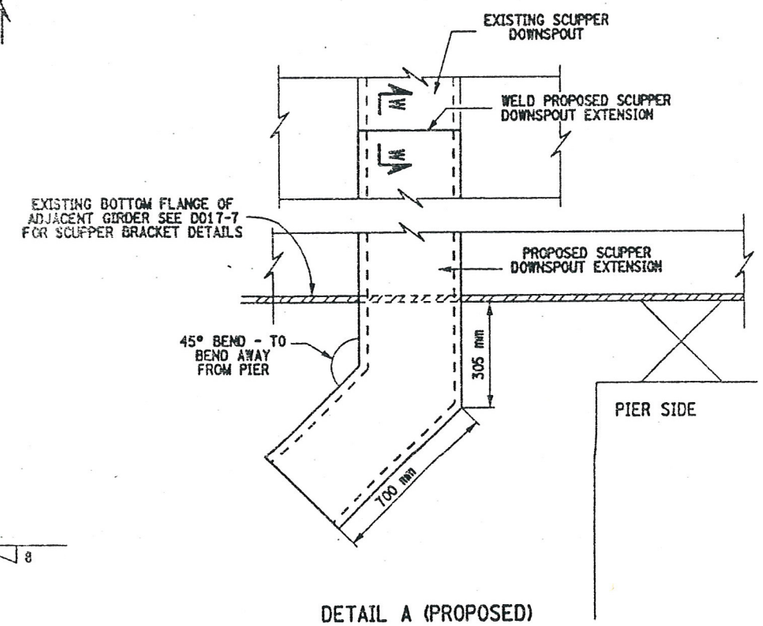
SECTION B-B
NOT TO SCALE

NOTES:

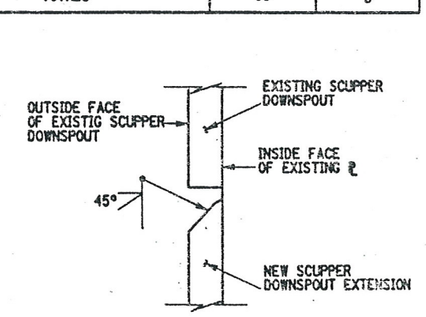
1) ALL WORK AND MATERIALS NECESSARY FOR SCUPPER ADJUSTMENT AND EXTENSION SHALL BE INCLUDED IN PRICE BID FOR ITEM 590.01M.

SCUPPER LOCATION TABLE

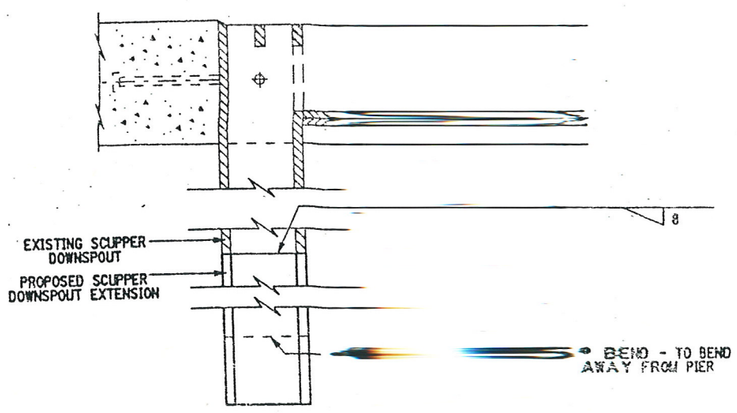
	LOCATION	EAST CURB LINE	WEST CURB LINE
SOUTHBOUND BIN: 1093571	SOUTH SIDE OF PIER 8	1	1
	SOUTH SIDE OF PIER 10	1	——
	SOUTH SIDE OF PIER 11	1	——
	SOUTH SIDE OF PIER 12	1	——
	SOUTH SIDE OF PIER 13	1	——
	SOUTH SIDE OF PIER 14	1	——
NORTHBOUND BIN: 1093572	SOUTH SIDE OF PIER 8	1	1
	SOUTH SIDE OF PIER 9	1	1
	SOUTH SIDE OF PIER 10	1	——
	SOUTH SIDE OF PIER 11	1	——
	SOUTH SIDE OF PIER 12	1	——
	SOUTH SIDE OF PIER 13	1	——
	SOUTH SIDE OF PIER 14	1	——
TOTALS		13	3



DETAIL A (PROPOSED)
NOT TO SCALE



SECTION W-W
NOT TO SCALE



DETAIL B (PROPOSED)
NOT TO SCALE

LIST OF ITEMS USED:

ITEM 590.01M - VERT. ADJUSTMENT OF BRIDGE DRAINAGE DEVICES (EA)

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

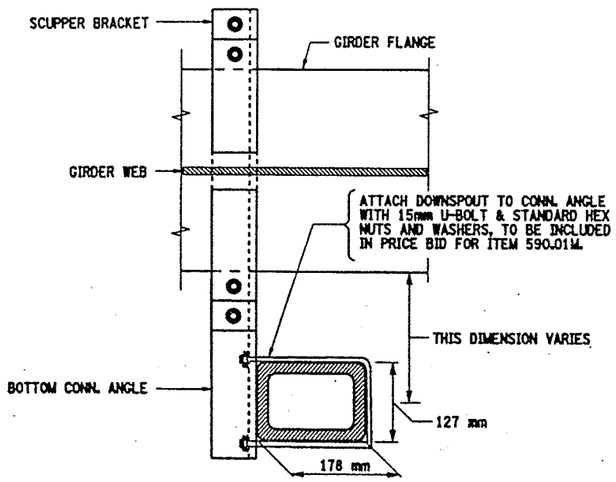
INTERSTATE 481 NB AND SB
OVER
CSX RAILROAD YARD
SCUPPER EXTENSIONS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.DS1	3	10/02	D017-6

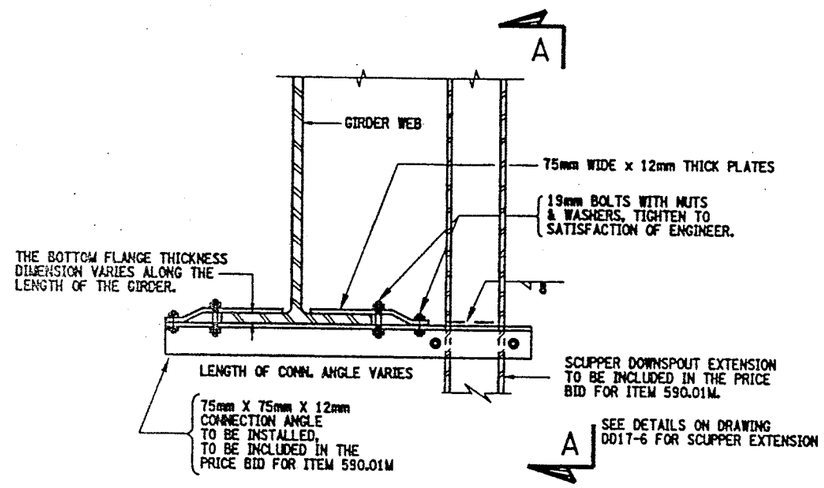
FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	295	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 | B.I.N. 1093571 & 1093572



PROPOSED SCUPPER BRACKET DETAILS
PLAN VIEW

SCALE 1:10

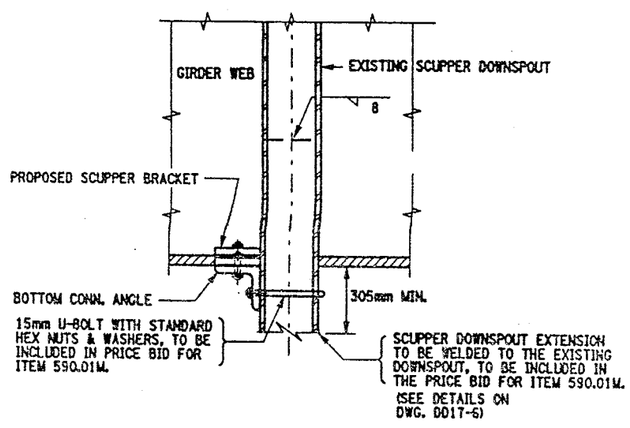


PROPOSED SCUPPER BRACKET DETAILS

SCALE 1:10

NOTES

1. AN APPROVED TYPE OF REMOVABLE DIFFUSER SHALL BE INSTALLED ON ALL OPEN-ENDED SCUPPERS, COST TO BE INCLUDE IN THE PRICE BID FOR ITEM 590.01M.
2. EVERY OPEN DRAINAGE SCUPPER DOWNSPOUT SHALL BE EXTENDED TO 305mm MINIMUM, BELOW THE BOTTOM FLANGE. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 590.01M.
3. ALL PROPOSED BRACKETS AND CONNECTION HARDWARE SHALL BE FABRICATED FROM ASTM A36M STEEL.
4. ALL PROPOSED BRACKETS SHALL BE SHOP PAINTED PRIOR TO INSTALLATION COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 590.01 M (DOWNSPOUT EXCLUDED).
5. NO WELDING TO, OR CUTTING OF, OR DRILLING INTO ANY STRUCTURAL STEEL WILL BE ALLOWED.
6. SCUPPER EXTENSION SHALL BE GALVANIZED IN ACCORDANCE WITH N.Y.S. STD. SPECIFICATIONS SUBSECTION 719-01.



PROPOSED SCUPPER BRACKET DETAILS
SECTION A-A

SCALE 1:10

LIST OF ITEMS USED:

ITEM 590.01M - VERTICAL ADJUSTMENT OF BRIDGE DRAINAGE DEVICES (EA)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE | DATE

INTERSTATE 481 NB AND SB
OVER
CSX RAILROAD YARD
SCUPPER EXTENSIONS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.DS1	3	10/02	D017-7

CHECKED BY
DRAFTED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	296	432

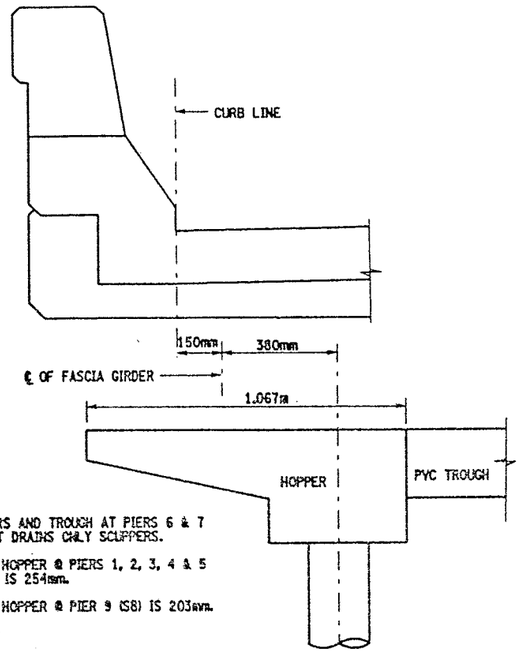
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)

VARIOUS BRIDGES ON INTERSTATE 481

TOWNS OF DEWITT AND CICERO

ONONDAGA COUNTY

P.I.N. 305613 | B.I.N. 1093571 & 1093572



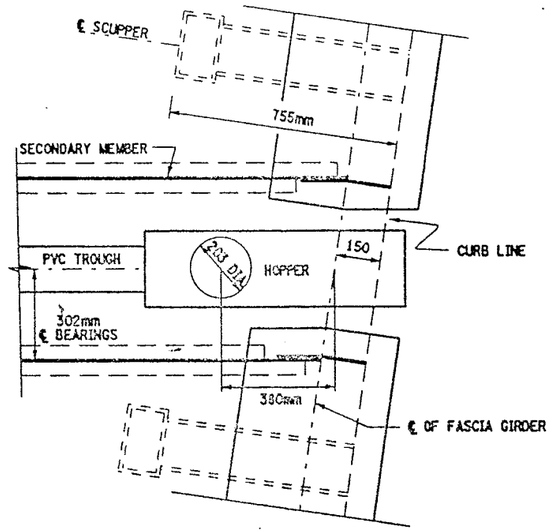
NO HOPPERS AND TROUGH AT PIERS 6 & 7 DOWNSPOUT DRAINS ONLY SCUPPERS.

WIDTH OF HOPPER @ PIERS 1, 2, 3, 4 & 5 (NB & SB) IS 254mm.

WIDTH OF HOPPER @ PIER 9 (SB) IS 203mm.

DRAINAGE SYSTEM HOPPER DETAIL
ELEVATION VIEW

NOT TO SCALE



PLAN VIEW OF DRAINAGE DETAIL

NOT TO SCALE

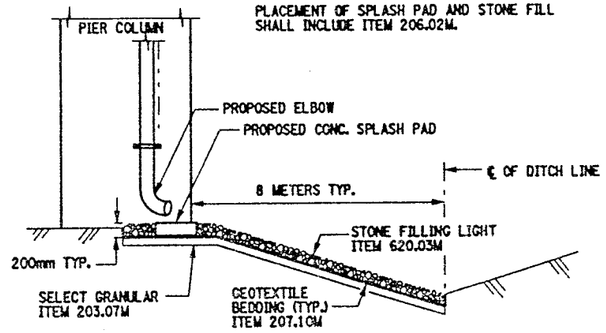
NOTES:

SPLASH PAD & STONE FILLING TO BE PLACED AT EACH MODIFIED DOWNSPOUT LOCATION (PIER'S 2 & 3). STONE FILL SHALL BE PLACED FROM SPLASH PAD TO ℄ OF DITCH LINE.

TYPICAL WIDTH OF STONE FILLING 900mm.

PROPOSED STONE FILL SLOPE TO MATCH EXISTING SLOPE.

PLACEMENT OF SPLASH PAD AND STONE FILL SHALL INCLUDE ITEM 206.02M.



MISC. SPLASH PAD AND STONE FILL DETAIL

NOT TO SCALE

CLEAN DRAINAGE SYSTEM NOTE:

THE FOLLOWING CLOSED DRAINAGE SYSTEMS SHALL BE CLEANED UNDER THIS CONTRACT.

BIN 1093571 - PIERS 1, 2, 3, 4, 5, 6 & 9
BIN 1093572 - PIERS 1, 2, 3, 4, 5 & 6

NOTE, PIER #6 (BOTH STRUCTURES) THE TYPE OF BRIDGE JOINT IS AN ARMORED JOINT WITH COMPRESSION SEAL. THE DOWNSPOUTS ARE CONNECTED TO THE BRIDGE SCUPPERS.

THE CLEANING OF THE EXISTING DRAINAGE SYSTEM (ITEM 203.18M) SHALL BE FROM HOPPER (FASCIA GIRDER) TO HOPPER (FASCIA GIRDER) AND SHALL INCLUDE THE PVC TROUGH AND THE ENTIRE DOWNSPOUT SYSTEM (DIA. OF DOWNSPOUTS VARY) FROM HOPPERS TO OUTLET. REFER TO DWG. NO. D017-1 THRU DWG. NO. D017-4 FOR DRAINAGE DETAILS AND PROPOSED MODIFICATIONS TO PIER DOWNSPOUTS.

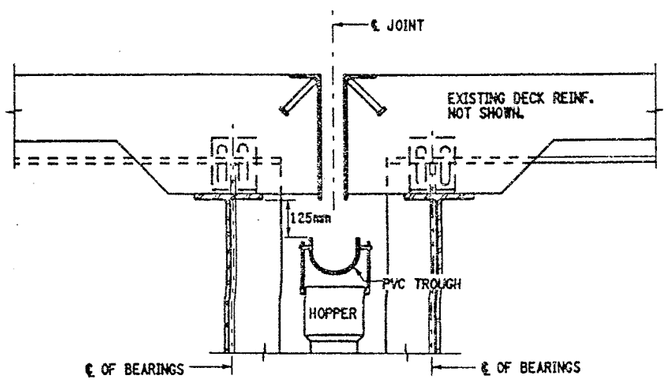
FOR QUANTITIES OF ITEMS SEE DRAINAGE RUN TABLE ON DRAWING NO. D017-3.

CONTRACTOR SHALL TAKE CARE WHEN PERFORMING CLEANING OPERATION NOT TO DAMAGE THE EXISTING DRAINAGE SYSTEM. ANY DAMAGE CAUSED BY CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AS DEEMED NECESSARY BY THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.

DRAINAGE RUN TABLE ON DWG. NO. D017-3, THE DRAINAGE TROUGHS ARE DIVIDED AT MID-POINT OF PIER.

SEE ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 FOR EXISTING PIER ELEVATIONS.

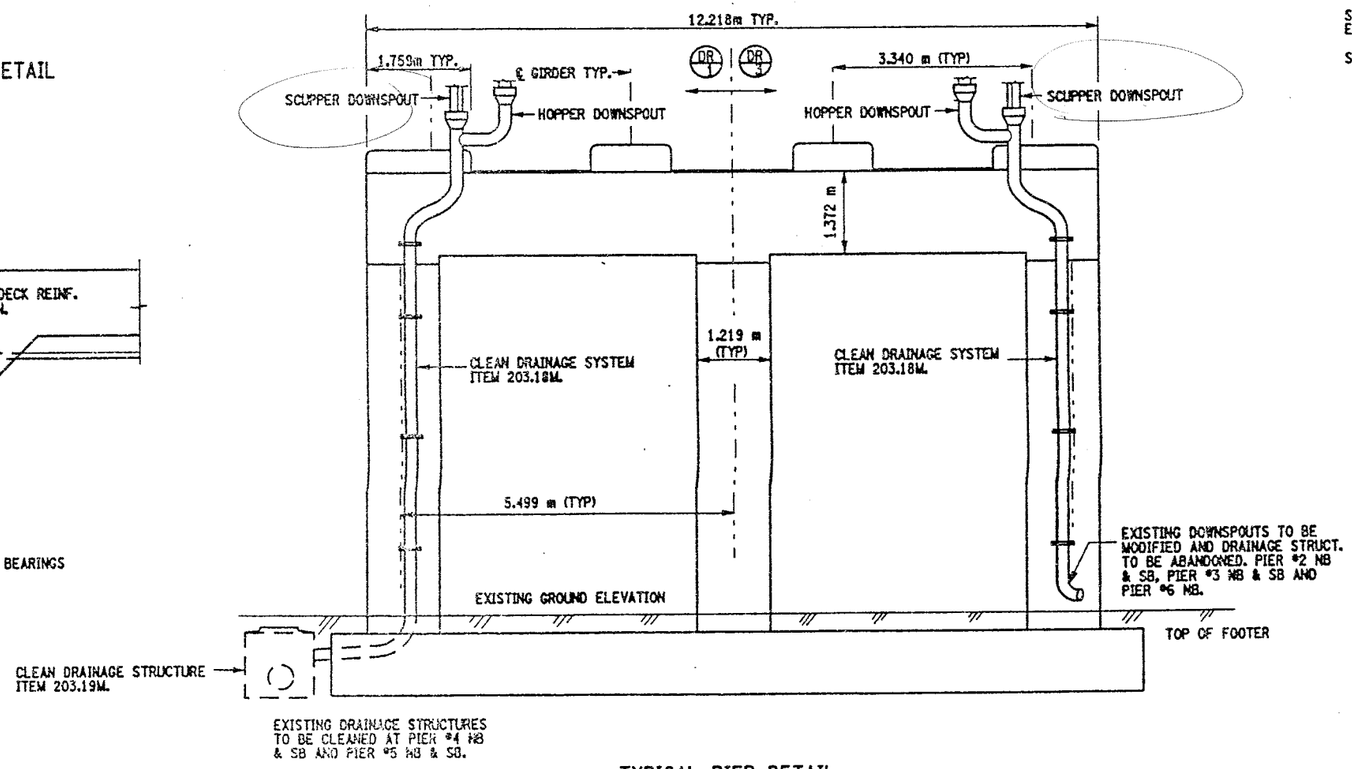
SEE DRAWING NO. D017-4 FOR PROPOSED PIER DOWNSPOUT DETAILS.



EXISTING PIER
OPEN JOINT TYPICAL

BIN 1093571 - PIERS 1, 2, 3, 4, 5 & 9
BIN 1093572 - PIERS 1, 2, 3, 4 & 5

NOT TO SCALE



TYPICAL PIER DETAIL

NOT TO SCALE

ITEMS USED:

ITEM 203.07M - SELECT GRANULAR FILL, (CM)
ITEM 207.10M - GEOTEXILE BEDDING, (SM)
ITEM 203.18M - CLEAN CLOSED DRAINAGE SYSTEMS (M)
ITEM 203.19M - CLEAN DRAINAGE STRUCTURES & MANHOLES (EA)
ITEM 620.03M - STONE FILL, LIGHT, (CM)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE | DATE

INTERSTATE 481 OVER CSX RR YARD

DRAINAGE CLEANING DETAILS

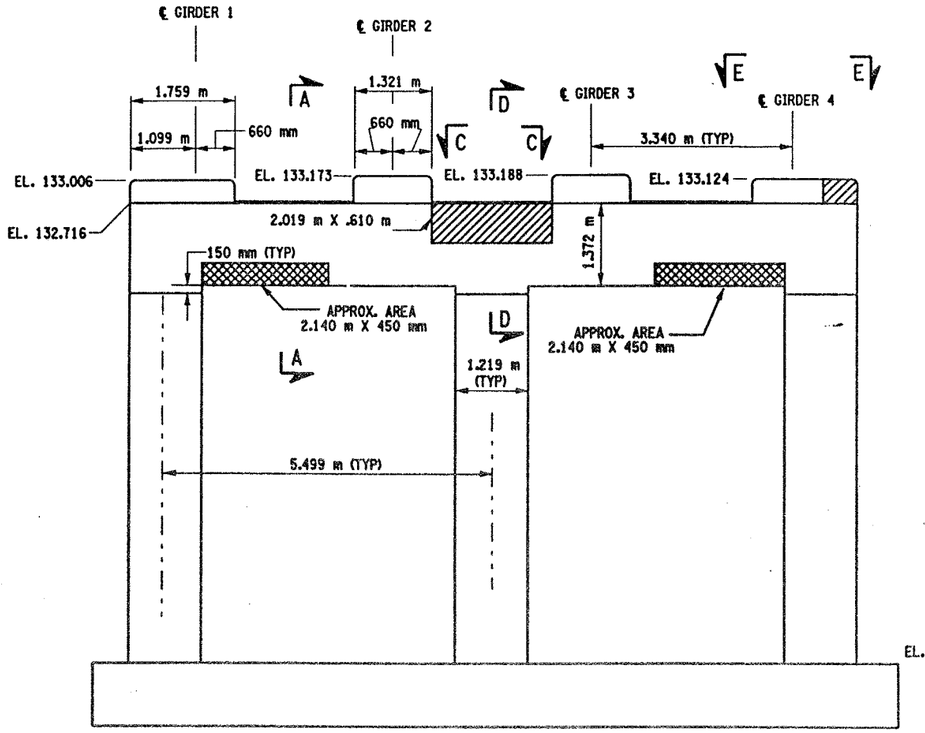
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.DS1	3	10/02	D017-8

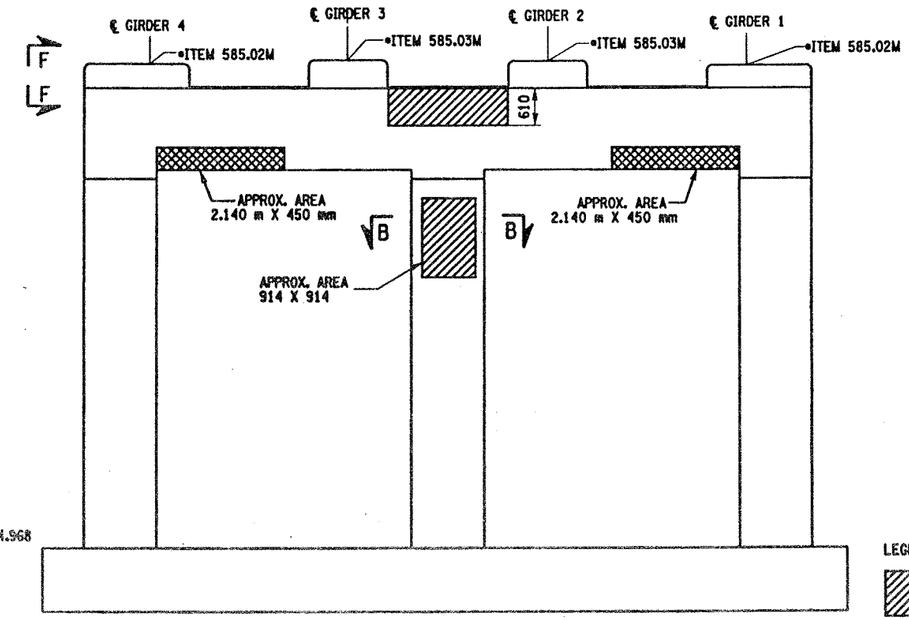
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____ ESTIMATED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	297	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093571



PIER 1 - FRONT FACE (LOOKING NORTH)
BIN 1093571
SCALE: 1 TO 50



PIER 1- BACK FACE (LOOKING SOUTH)
BIN 1093571
SCALE: 1 TO 50

NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS.
8. SEE DWG. PR17-2S FOR SECTIONS A-A, B-B, D-D, E-E AND F-F.
9. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND ITEM 582.07M.
10. CONTRACTOR SHALL REMOVE DEBRIS FROM TOP OF PEDESTALS AND TOP OF CAP BEAM. COST TO BE INCLUDED IN THE PRICE BID FOR VARIOUS OTHER ITEMS OF CONTRACT.

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE. (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)

JACKING NOTES:

THE METHOD OF LIFTING SHALL BE APPROVED BY THE DEPUTY CHEIF ENGINEER (STRUCTURES), DSES, TWO WEEKS PRIOR TO THE START OF THE WORK.

NO LIFTING WILL BE ALLOWED UNTIL ALL TEMPORARY SUPPORTS ARE SECURED.

WHEN POSSIBLE, THERE WILL BE NO LIVE LOAD DURING LIFTING.

LIFTING SHALL BE CONFINED TO ONE END OF A SPAN AT ANY ONE TIME.

IF THE CONTRACTOR ELECTS TO LIFT ONLY ONE GIRDER AT A TIME PER PIER (TO A MAXIMUM OF 3 mm TO REMOVE LOAD FROM BEARING), NO VEHICULAR TRAFFIC RESTRICTIONS WILL BE REQUIRED AS STATED IN THE SPECIFICATION SECTION 585-STRUCTURAL LIFTING OPERATIONS.

WHERE THE CONTRACTOR IS REQUIRED TO PERFORM BEARING RESTORATION (SEE BR-11) AS WELL AS CONCRETE REPAIRS REQUIRING STRUCTURAL LIFTING, ONLY ONE STRUCTURAL LIFTING PAYMENT WILL BE MADE.

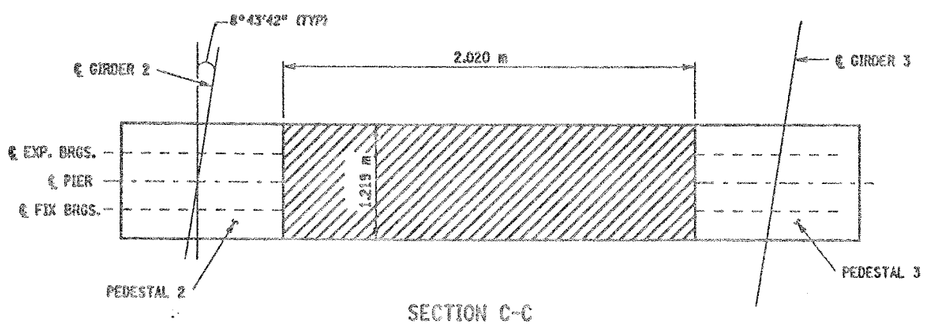
• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT

BRIDGE BEARING RESTORATION NOTES:

1. BRIDGE BEARING RESTORATION ITEM 15565.4302M SHALL INCLUDE ALL DESIGNATED WORK AS PER THE SPECIFICATION.
2. STRUCTURAL LIFTING SHALL BE USED WITH ALL EXPANSION BEARING RESTORATION.
3. IF THE CONTRACTOR ELECTS TO LIFT ONLY ONE GIRDER AT A TIME PER SPAN (TO A MAXIMUM OF 3 mm TO REMOVE LOAD FROM BEARINGS), NO VEHICULAR TRAFFIC RESTRICTIONS WILL BE REQUIRED AS STATED IN SPECIFICATIONS SECTON 585-STRUCTURAL LIFTING OPERATIONS.
4. BEARING RESTORATION SHALL AS A MINIMUM, AND IN ALL CASES INCLUDE REPLACEMENT OF BRONZE PLATE.
5. FIXED BEARING TO BE CLEANED IN PLACE. DO NOT DISASSEMBLE.



SECTION C-C
NOT TO SCALE

LIST OF ITEMS USED:

ITEM 15565.4302M	- BRIDGE BEARING RESTORATION (EA)
ITEM 582.05M	- REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M	- REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVERHEAD PATCH MATERIAL (SM)
ITEM 585.02M	- STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M	- STRUCTURAL LIFTING OPERATION - TYPE C (EA)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 SB
OVER
CSX RAILROAD YARD
PIER 1

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P1A	3	10/02	PR17-1S

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	298	432

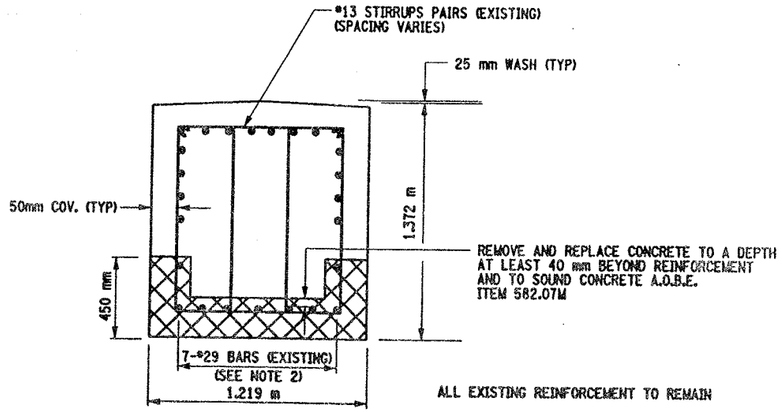
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)

VARIOUS BRIDGES ON INTERSTATE 481

TOWNS OF DEWITT AND CICERO

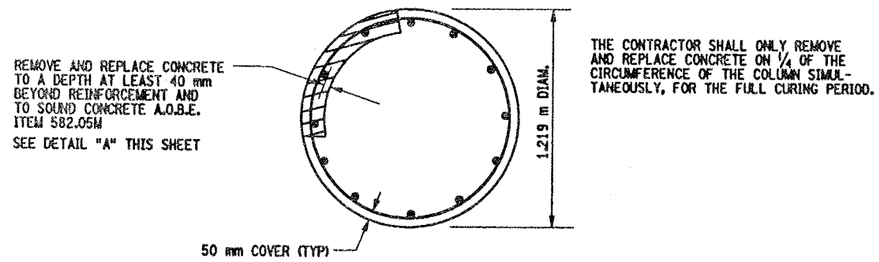
ONONDAGA COUNTY

P.I.N. 305613 | B.I.N. 1093571



SECTION A-A

NOT TO SCALE



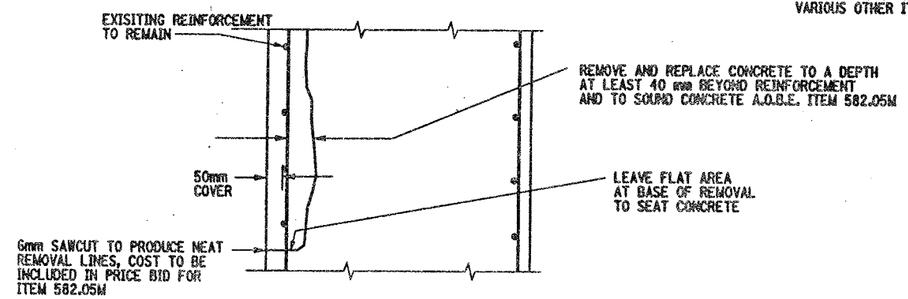
THE CONTRACTOR SHALL ONLY REMOVE AND REPLACE CONCRETE ON 1/4 OF THE CIRCUMFERENCE OF THE COLUMN SIMULTANEOUSLY, FOR THE FULL CURING PERIOD.

SECTION B-B

NOT TO SCALE

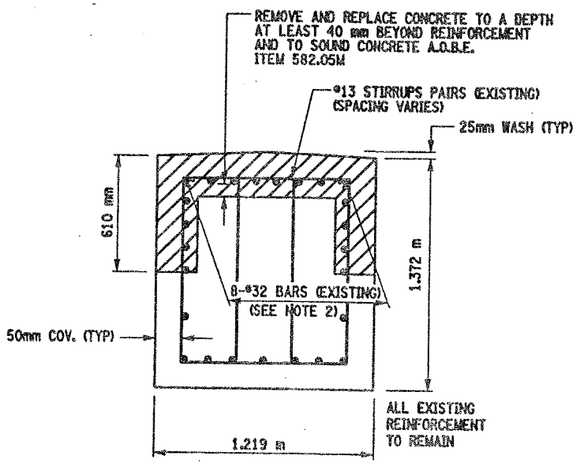
NOTES:

1. ALL CONCRETE REMOVAL OPERATIONS SHALL INCLUDE SAW CUTTING TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN PRICE BID FOR THE APPROPRIATE REMOVAL ITEM.
2. THE REINFORCEMENT SHOWN IS TYPICAL FOR PIER #1. THE NUMBER AND OR SIZE OF REINFORCEMENT IN OTHER PIERS MAY VARY.
3. CONTRACTOR SHALL REMOVE DEBRIS FROM TOP OF PEDESTALS AND TOP OF CAP BEAM. COST TO BE INCLUDED IN THE PRICE BID FOR VARIOUS OTHER ITEMS OF CONTRACT.
4. CONTRACTOR SHALL REMOVE DEBRIS FROM TOP OF PEDESTALS AND TOP OF CAP BEAM. COST TO BE INCLUDED IN THE PRICE BID FOR VARIOUS OTHER ITEMS OF CONTRACT.



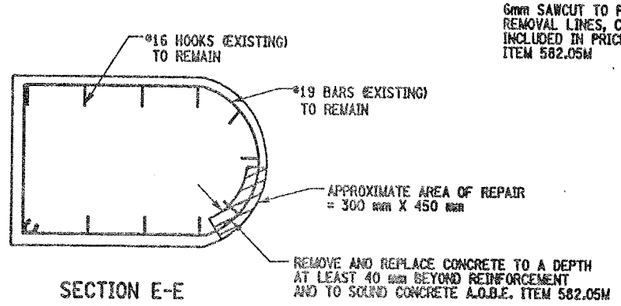
DETAIL "A"

NOT TO SCALE



SECTION D-D

NOT TO SCALE



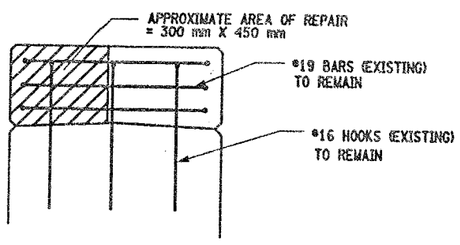
SECTION E-E

NOT TO SCALE

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE. (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVERHEAD PATCH MATERIAL. (SM)



SECTION F-F

NOT TO SCALE

LIST OF ITEMS USED:

ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L (SM)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE | DATE

INTERSTATE 481 SB
OVER
CSX RAILROAD YARD
PIER 1

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P1A	3	10/02	PR17-2S

CHECKED BY

DRAFTED BY

ESTIMATED BY

CHECKED BY

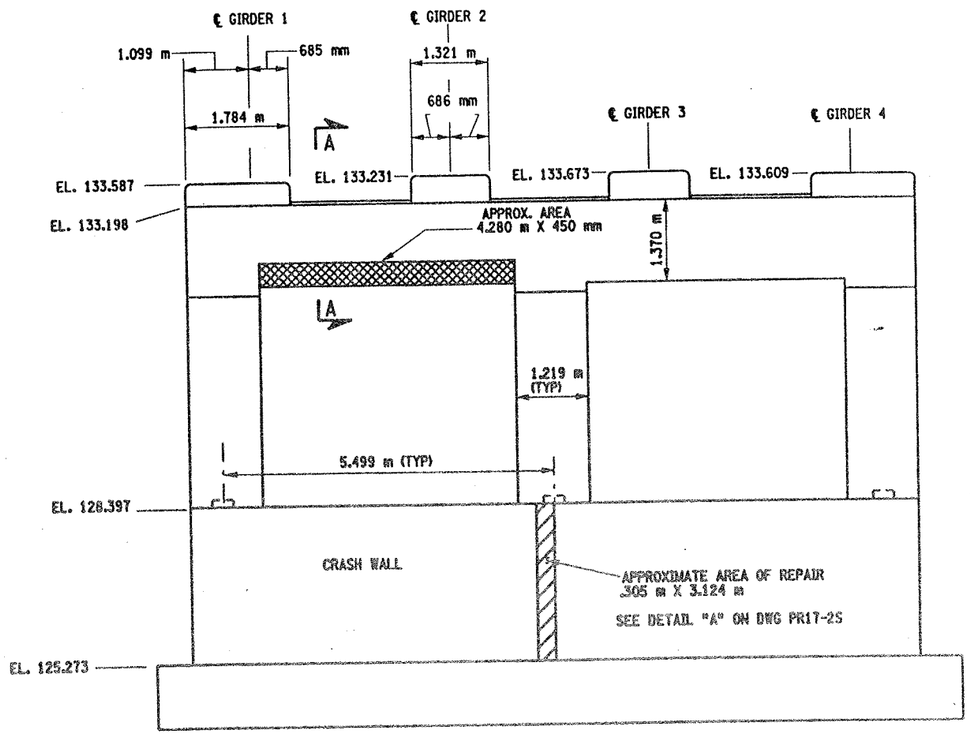
DESIGNED BY

JOB MANAGER

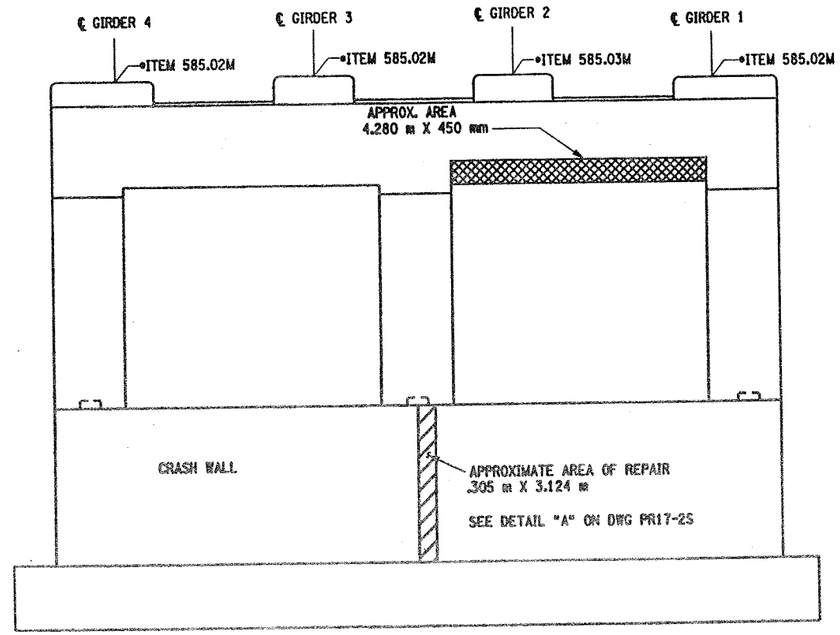
DESIGN SUPERVISOR

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	299	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093571



PIER 2 - FRONT FACE (LOOKING NORTH)
BIN 1093571
SCALE: 1 TO 50



PIER 2- BACK FACE (LOOKING SOUTH)
BIN 1093571
SCALE: 1 TO 50

NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS), SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS. SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES.
8. SEE DWG. PR17-2S FOR SECTION A-A AND DETAIL "A".
9. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND ITEM 582.07M.
10. FOR JACKING NOTES SEE DWG. PR17-1S
11. CONTRACTOR WHALL REMOVE DEBRIS FROM TOP OF PEDESTALS AND TOP OF CAP BEAM. COST TO BE INCLUDED IN THE PRICE BE FOR VARIOUS OTHER ITEMS OF CONTRACT.

• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)

LIST OF ITEMS USED

ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 SB
OVER
CSX RAILROAD YARD
PIER 2

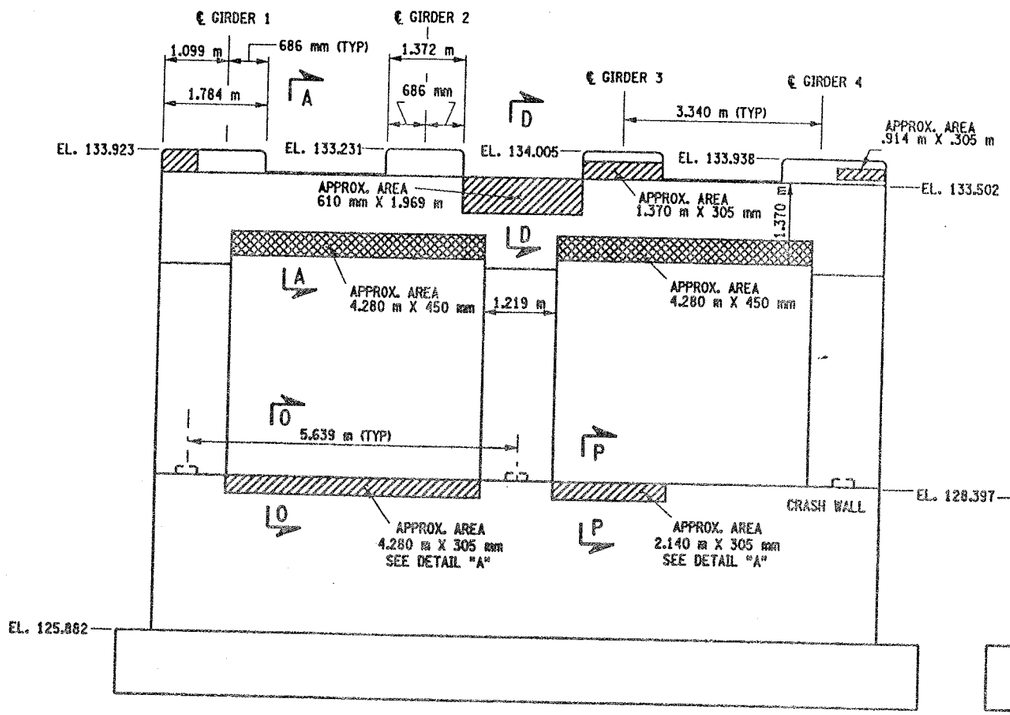
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AEJP2A	3	10/02	PR17-3S

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	300	432

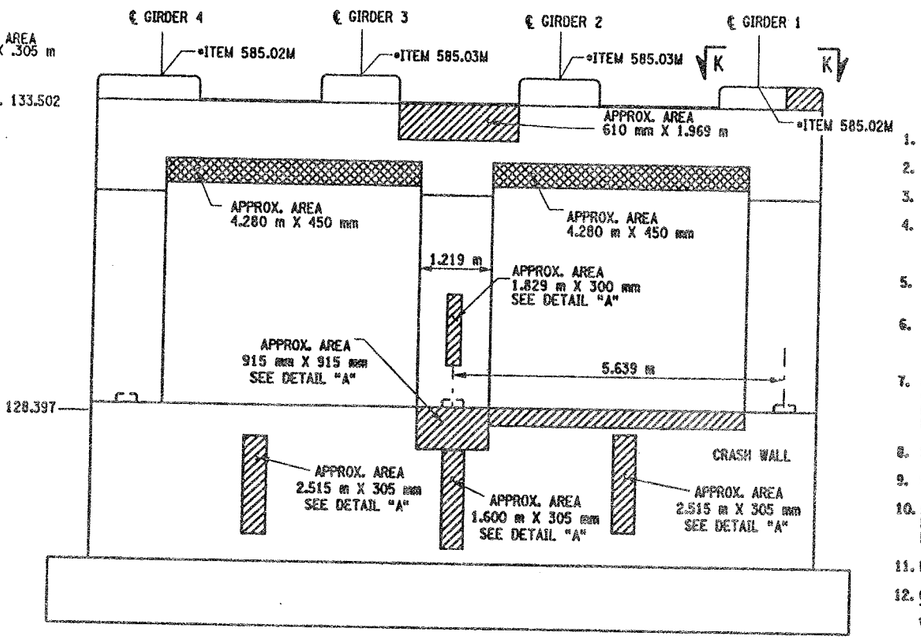
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 | B.I.N. 1093571



PIER 3 - FRONT FACE (LOOKING NORTH)

BIN 1093571

SCALE: 1 TO 50



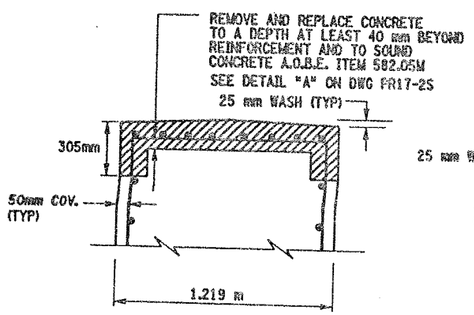
PIER 3 - BACK FACE (LOOKING SOUTH)

BIN 1093571

SCALE: 1 TO 50

NOTES:

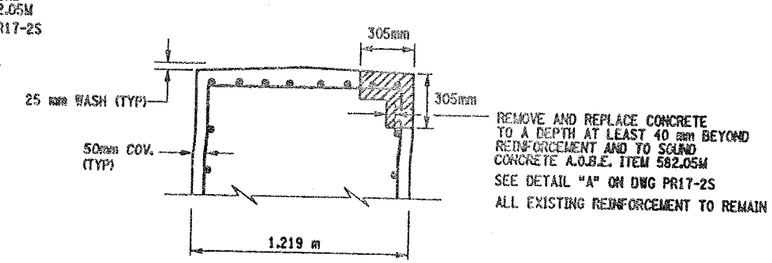
1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG BR-10 & BR-11 FOR BEARING RESTORATION DETAILS. SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES.
8. SEE DWG. PR17-2S FOR SECTIONS A-A, D-D AND DETAIL "A".
9. SEE DWG. PR17-2N FOR SECTION K-K.
10. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND ITEM 582.07M.
11. FOR JACKING NOTES SEE DWG. PR17-1S.
12. CONTRACTOR SHALL REMOVE DEBRIS FROM TOP OF PEDISTALS AND TOP OF CAPBEAM. COST TO BE INCLUDED IN THE PRICE BID FOR VARIOUS OTHER ITEMS OF CONTRACT.



ALL EXISTING REINFORCEMENT TO REMAIN

SECTION O-O

NOT TO SCALE



SECTION P-P

NOT TO SCALE

• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

D.L. = 100 MT
L.L. = 50 MT
TOTAL = 150 MT

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVERHEAD PATCH MATERIAL. (SM)

LIST OF ITEMS USED:

ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE | DATE

INTERSTATE 481 SB
OVER
CSX RAIROAD YARD
PIER 3

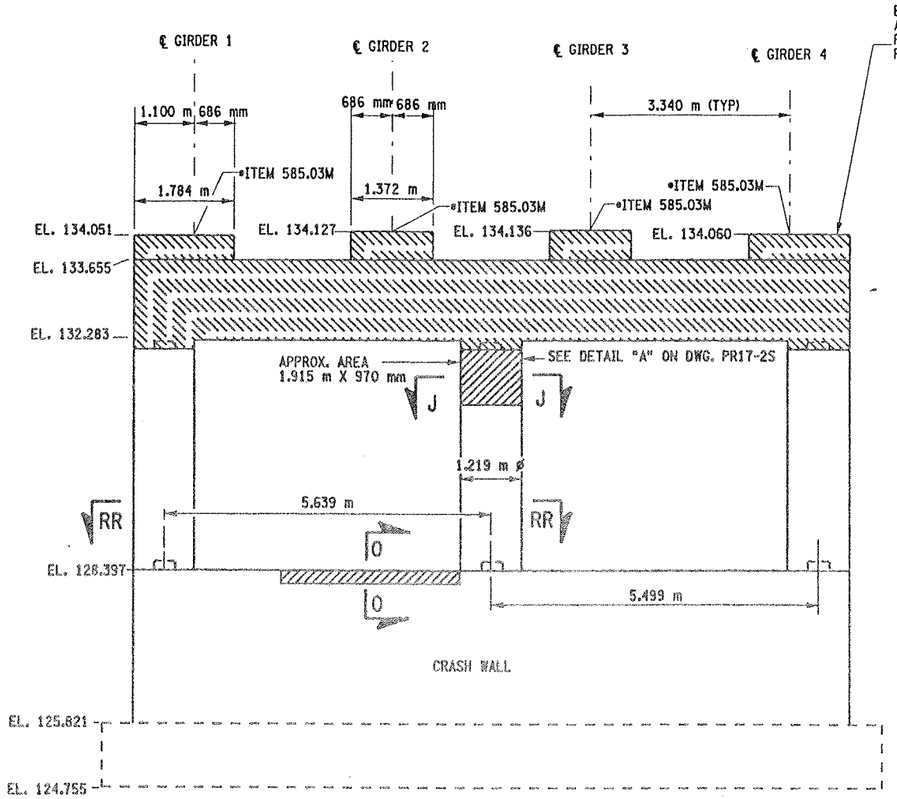
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P3A	3	10/02	PR17-4S

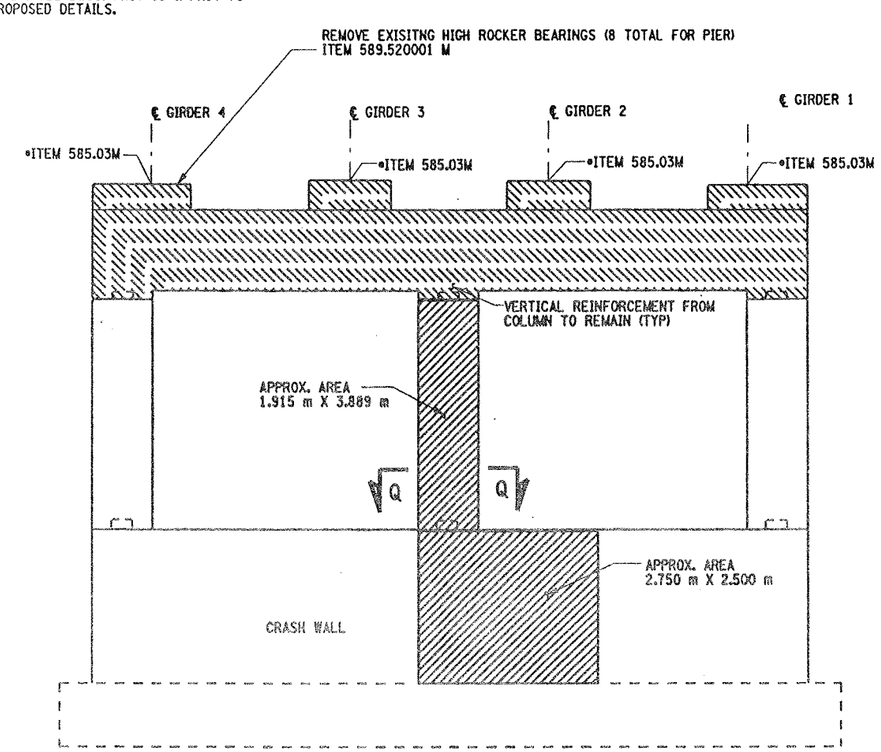
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	301	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093571



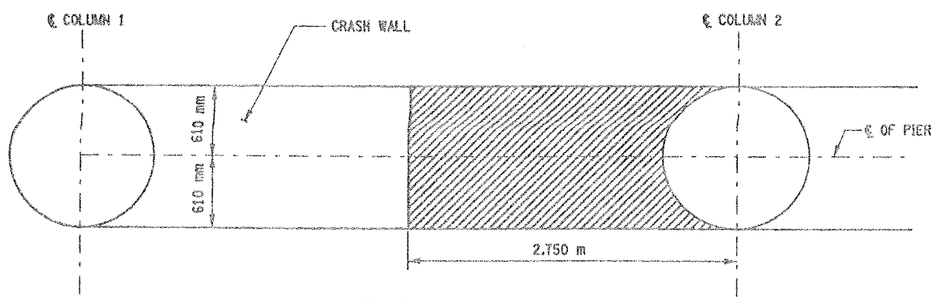
PIER 4 - FRONT FACE (LOOKING NORTH)
BIN 1093571 REMOVAL
SCALE: 1 TO 50



PIER 4 - BACKFACE (LOOKING SOUTH)
BIN 1093571 REMOVAL
SCALE: 1 TO 50

NOTES:

1. ALL REINFORCEMENT TO REMAIN, (EXCEPT PEDESTAL REINFORCEMENT AND CAPBEAM REINFORCEMENT). THE VERTICAL REINFORCEMENT IN THE CAPBEAMS-ORIGINATING FROM THE COLUMNS SHALL REMAIN.
2. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
3. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
4. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
5. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND ENGINEER PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
6. SEE DWG. PR17-4N FOR SECTION Q-Q.
7. SEE DWG. PR17-2N FOR SECTION J-J.
8. SEE DWG. PR17-4S FOR SECTION O-O.
9. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND ITEM 582.07M.
10. FOR JACKING NOTES SEE DWG. PR17-1S
11. CONTRACTOR SHALL REMOVE DEBRIS FROM TOP OF PEDESTALS AND TOP OF CAP BEAM. COST TO BE INCLUDED IN THE PRICE BID FOR VARIOUS OTHER ITEMS OF CONTRACT.
12. SEE BR-1 AND BR-2 FOR BEARING TABLE AND BEARING DETAILS.



SECTION RR-RR
SCALE 1:25

• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

D.L. = 100 MT
L.L. = 50 MT
TOTAL = 150 MT

LIST OF ITEMS USED:

ITEM 580.01M - REMOVAL OF STRUCTURAL CONCRETE (CM)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)
ITEM 589.520001M - REMOVAL OF EXISTING STEEL (EA)

LEGEND:

REPAIR: ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE (CM)

REPLACEMENT: ITEM 580.01M - REMOVAL OF STRUCTURAL CONCRETE - (CM) (COMPLETE REMOVAL)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 SB
OVER
CSX RAILROAD YARD
PIER 4
REMOVAL DETAILS

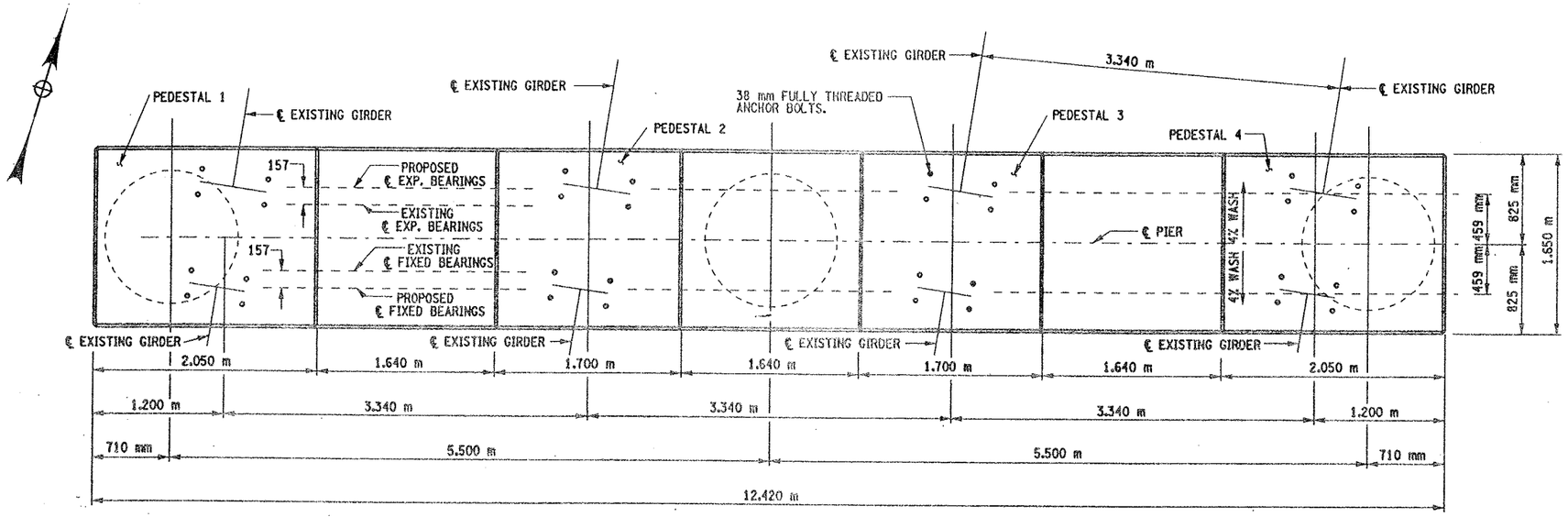
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P4A	3	10/02	PR17-5S

CHECKED BY
DRAFTED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	302	432

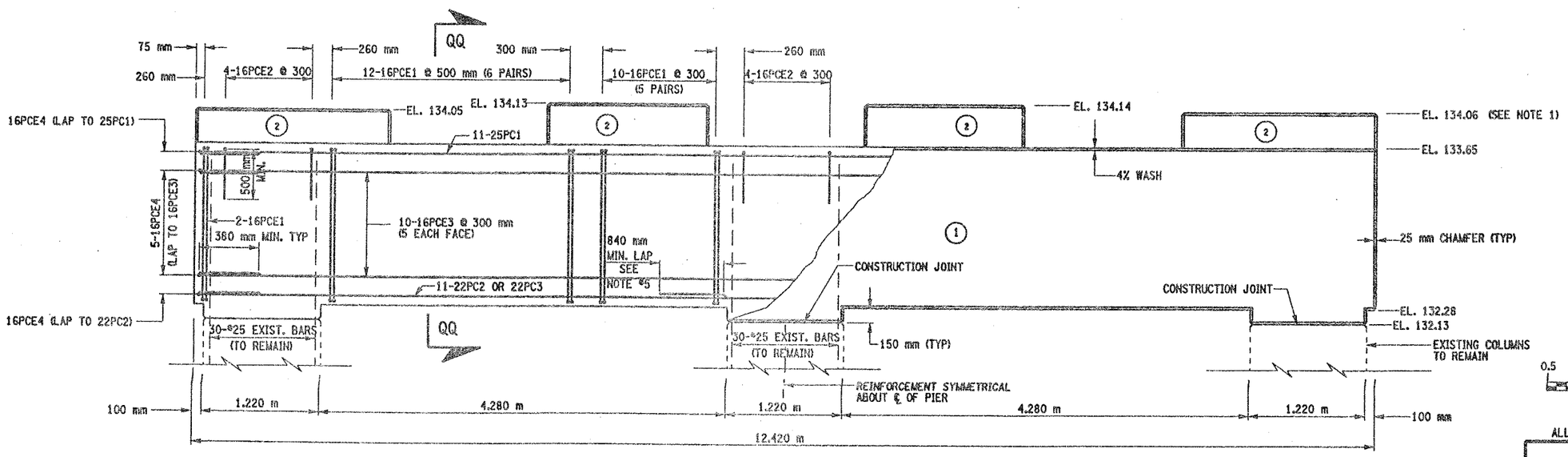
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
COUNTY OF ONONDAGA
P.I.N. 305613 | B.I.N. 1093571



PROPOSED PLAN
SCALE 1:25

NOTES:

1. THESE ELEVATIONS MAY HAVE TO BE ADJUSTED TO ACCOMMODATE THE ACTUAL BEARINGS FURNISHED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ANY CHANGES IN THE BEARINGS WHICH MAY AFFECT THE PEDESTAL ELEVATIONS OR DIMENSIONS.
2. SEE DWG PR17-7S FOR ANCHOR BOLT LAYOUT, PEDESTAL REINFORCEMENT DETAILS, SECTION QQ-QQ, AND CHAMFER DETAIL.
3. SEE DWG. NO. BL-6 FOR BAR LIST AND BAR BENDING DIAGRAMS.
4. SEE BR-1 AND BR-2 FOR BEARING DETAILS.
5. REINF. BAR LAPS, IF REQUIRED SHALL BE STAGGERED SO NO MORE THAN 50% OF THE BARS ARE LAPPED AT ANY ONE LOCATION.



(NO.) INDICATES CONCRETE PLACEMENT NUMBER

PROPOSED ELEVATION
SCALE 1:25

0.5 0 0.5 1 1.5 2 2.5 m
SCALE

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 SB
OVER
CSX RAILROAD YARD
PIER 4

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

CONCRETE TABLE (m^3)		
PLACEMENT	QUANTITY	ITEM NO.
1	5.46	555.09M
2	28.60	555.09M

LIST OF ITEMS USED:

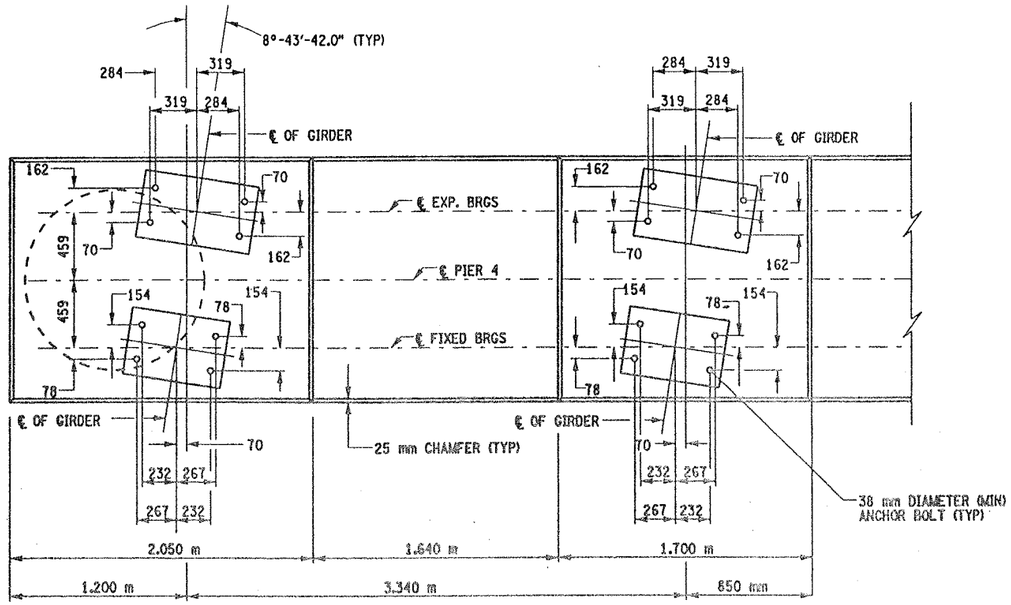
ITEM 555.09M - CONCRETE FOR STRUCTURES, CLASS HP (CM)
ITEM 556.0201M - UNCOATED BAR REINFORCEMENT FOR CONCRETE STRUC. (KG)
ITEM 556.0202M - EPOXY-COATED BAR REINFORCEMENT FOR STRUC. (KG)

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P4A	3	10/02	PR17-6S

DESIGN SUPERVISOR ___ JOB MANAGER ___ DESIGNED BY ___ CHECKED BY ___ ESTIMATED BY ___ DRAFTED BY ___ CHECKED BY ___

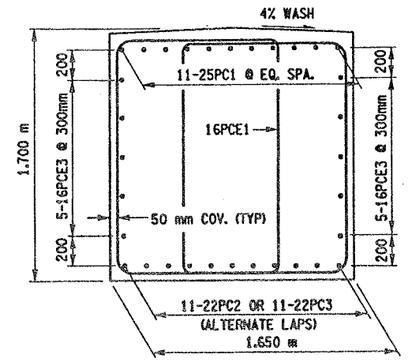
FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	303	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
COUNTY OF ONONDAGA
P.I.N. 305613 B.I.N. 1093571



ANCHOR BOLT LAYOUT

SCALE 1:20

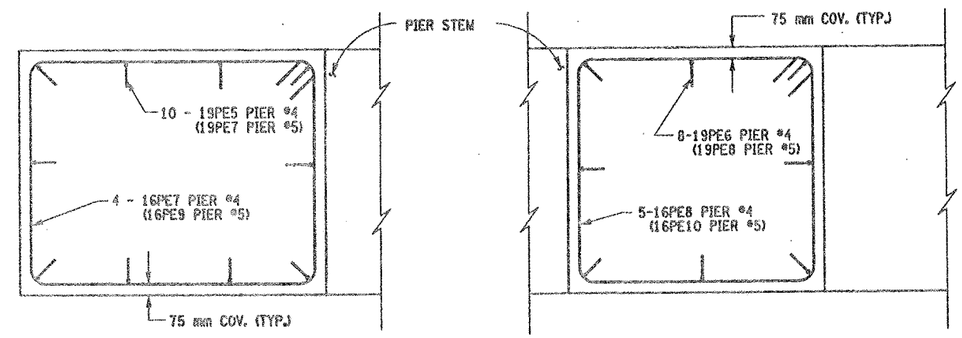


SECTION QQ-QQ

SCALE 1 TO 20

NOTES:

1. SEE DWG. NO. BL-6 FOR BAR LIST AND BAR BENDING DIAGRAM.
2. CONTRACTOR SHALL REMOVE DEBRIS FROM TOP OF PEDESTALS AND TOP OF CAP BEAM. COST TO BE INCLUDED IN THE PRICE BID FOR VARIOUS OTHER ITEMS OF CONTRACT.
3. SEE BR-1 AND BR-2 FOR BEARING DETAILS.
4. SAME BAR MARKS SHALL APPLY FOR BOTH PIERS.

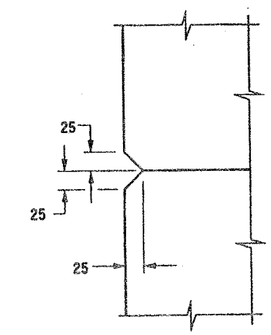


PEDESTALS 1 & 4

PEDESTALS 2 & 3

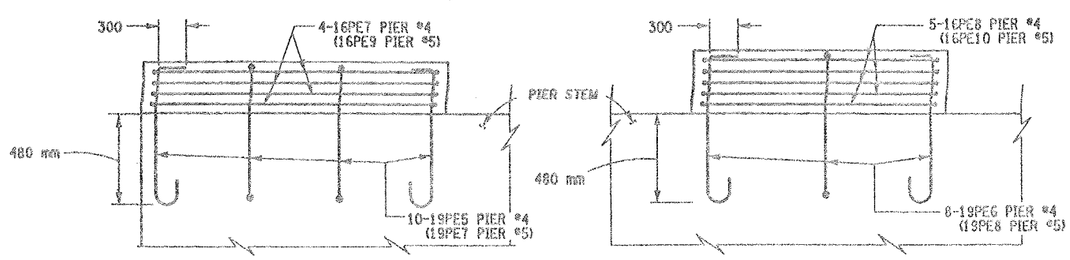
PEDESTAL REINFORCEMENT (PLAN)

SCALE 1:20



CHAMFER DETAIL

NOT TO SCALE



PEDESTALS 1
(PEDESTAL 4 SIMILAR)

PEDESTALS 2 & 3

PEDESTAL REINFORCEMENT (ELEVATION)

SCALE 1:20

LIST OF ITEMS USED:

ITEM 555.09M - CONCRETE FOR STRUCTURES, CLASS HP (CM)
ITEM 555.0201M - UNCOATED BAR REINFORCEMENT FOR CONCRETE STRUC. (KG)
ITEM 555.0202M - EPOXY-COATED BAR REINFORCEMENT FOR STRUC. (KG)
ITEM 580.01M - REMOVAL OF STRUCTURAL CONCRETE (CM)

0.5 0 0.5 1 1.5 2 m
SCALE

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 SB
OVER
CSX RAILROAD YARD
PIERS 4 & 5

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P4A	3	10/02	PR17-7S

CHECKED BY
DRAFTED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	304	432

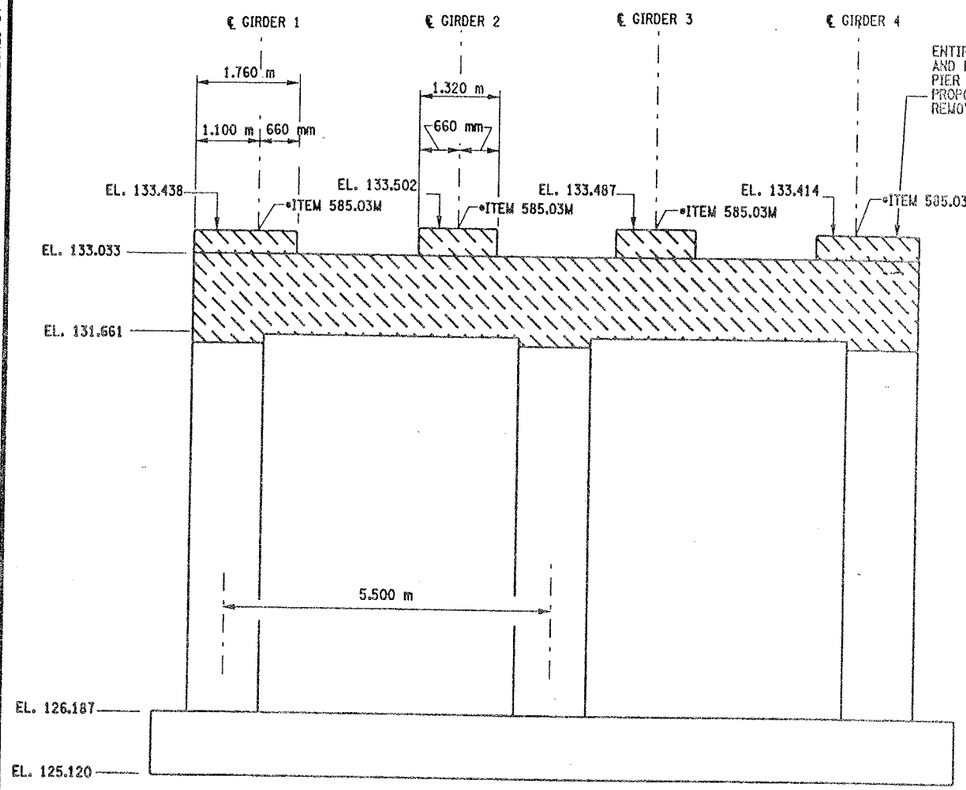
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)

VARIOUS BRIDGES ON INTERSTATE 481

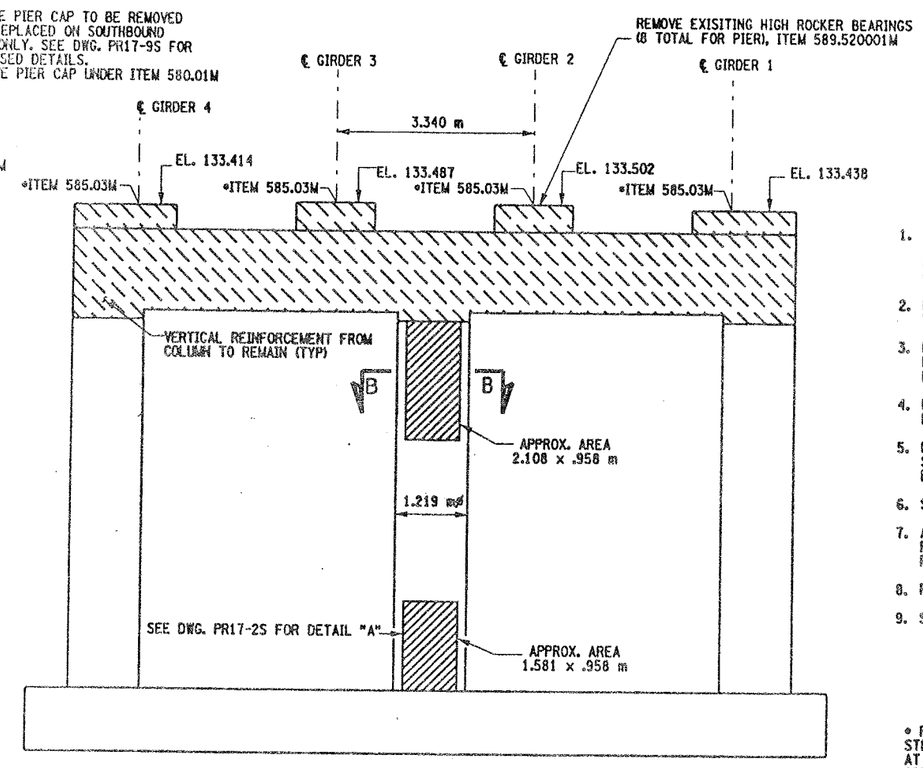
TOWNS OF DEWITT AND CICERO

ONONDAGA COUNTY

P.I.N. 305613 | B.I.N. 1093571



PIER 5 - FRONT FACE (LOOKING NORTH)
BIN 1093571 (REMOVAL)
SCALE: 1 TO 50



PIER 5 - BACK FACE (LOOKING SOUTH)
BIN 1093571 (REMOVAL)
SCALE: 1 TO 50

NOTES:

1. ALL REINFORCEMENT TO REMAIN, (EXCEPT PEDESTAL REINFORCEMENT AND CAPBEAM REINFORCEMENT). THE VERTICAL REINFORCEMENT IN THE CAPBEAMS-ORIGINATING FROM THE COLUMNS SHALL REMAIN.
2. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
3. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
4. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
5. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND ENGINEER PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
6. SEE DWG. PR17-2S FOR SECTION B-B AND DETAIL "A".
7. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND ITEM 582.07M
8. FOR JACKING LOADS SEE DWG. PR17-1S
9. SEE BR-1 AND BR-2 FOR BEARING TABLE AND BEARING DETAIL

* PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

D.L. = 100 MT
L.L. = 50 MT
TOTAL = 150 MT

LEGEND:

REPAIR: ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE (CM)

REPLACEMENT: *ITEM 580.01M - REMOVAL OF STRUCTURAL* CONCRETE - (CM) (COMPLETE REMOVAL)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

LIST OF ITEMS USED:

ITEM 580.01M - REMOVAL OF STRUCTURAL CONCRETE (CM)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATION - TYPE C (EACH)
ITEM 589.520001M - REMOVAL OF EXISITING STEEL (EACH)

AS BUILT REVISIONS

SIGNATURE | DATE

INTERSTATE 481 SB
OVER
CSX RAILROAD YARD
PIER 5

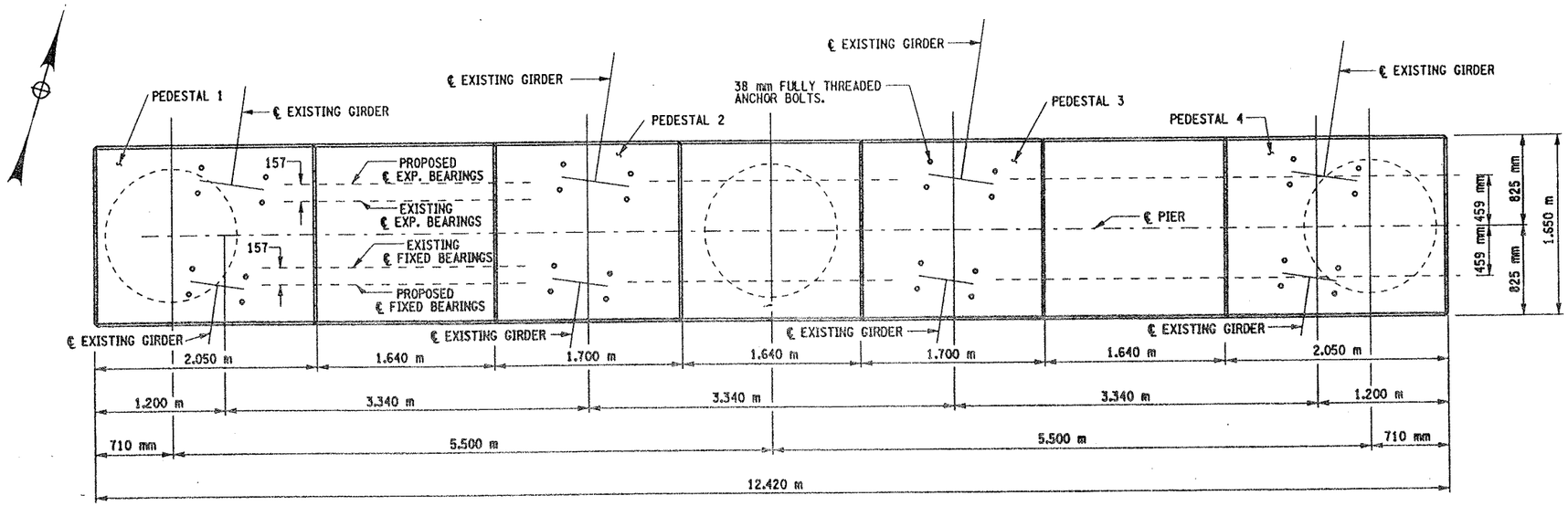
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P5A	3	10/02	PR17-8S

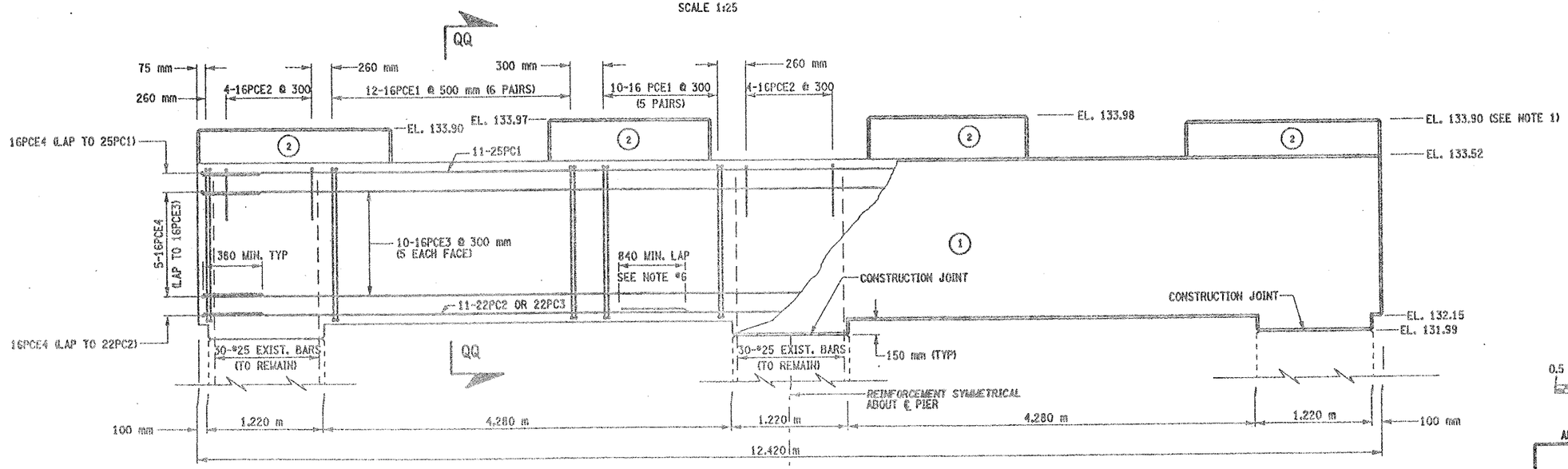
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____ ESTIMATED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	305	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
COUNTY OF ONONDAGA
P.I.N. 305613 B.I.N. 1093571



PROPOSED
PLAN
SCALE 1:25



(NO.) INDICATES CONCRETE PLACEMENT NUMBER

PROPOSED
ELEVATION
SCALE 1:25

NOTES:

1. THESE ELEVATIONS MAY HAVE TO BE ADJUSTED TO ACCOMMODATE THE ACTUAL BEARINGS FURNISHED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ANY CHANGES IN THE BEARINGS WHICH MAY AFFECT THE PEDESTAL ELEVATIONS OR DIMENSIONS.
2. SEE DWG. NO. PR17-7S FOR ANCHOR BOLT LAYOUT, PEDESTAL REINFORCEMENT DETAIL AND SECTION Q-Q FOR CHAMFER DETAIL.
3. SEE DWG. NO. BL-6 FOR BARLIST AND BAR BENDING DIAGRAMS.
4. SEE BR-1 AND BR-2 FOR BEARING DETAILS.
5. CONTRACTOR SHALL REMOVE DEBRIS FROM TOP OF PEDESTALS AND TOP OF CAP BEAM. COST TO BE INCLUDED IN THE PRICE BID FOR VARIOUS OTHER ITEMS OF CONTRACT.
6. REINFORCING BAR LAPS, IF REQUIRED, SHALL BE STAGGERED SO THAT NO MORE THAN 50% OF THE BARS ARE LAPPED AT ANY ONE LOCATION.

0.5 0 0.5 1 1.5 2 2.5 m
SCALE

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 SB
OVER
CSX RAILROAD YARD
PIER 5

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P5A	3	10/02	PR17-9S

CONCRETE TABLE (m^3)

PLACEMENT	QUANTITY	ITEM NO.
1	5.12	555.09M
2	28.60	555.09M

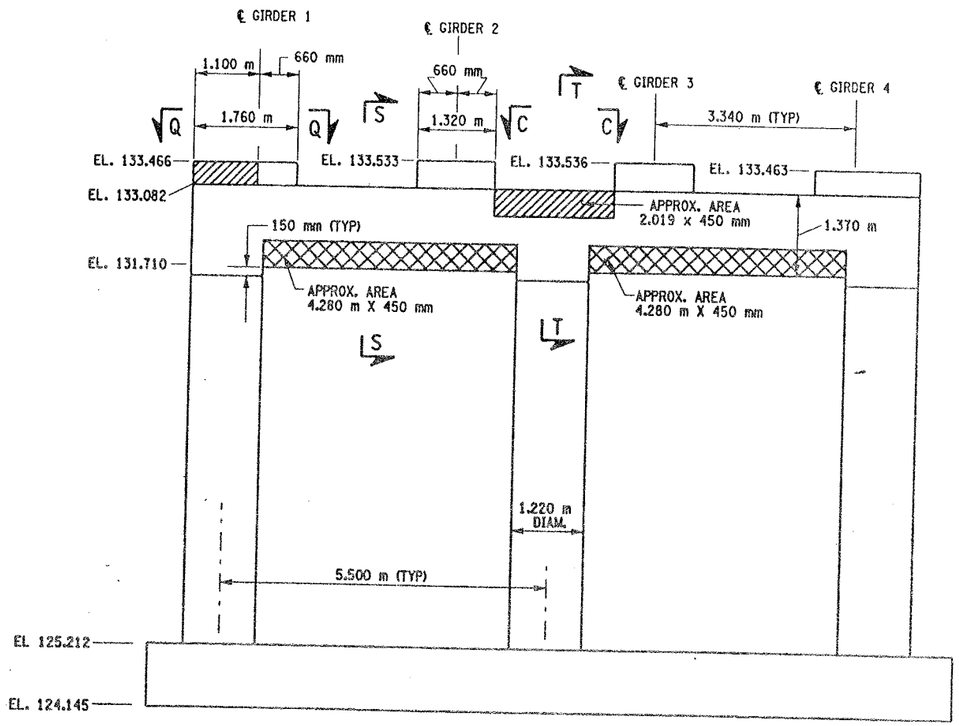
LIST OF ITEMS USED:

ITEM 555.09M - CONCRETE FOR STRUCTURES, CLASS HP (CM)
ITEM 556.0201M - UNCOATED BAR REINFORCEMENT FOR CONCRETE STRUC. (KG)
ITEM 556.0202M - EPOXY-COATED BAR REINFORCEMENT FOR STRUC. (KG)

CHECKED BY
DRAFTED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	306	432

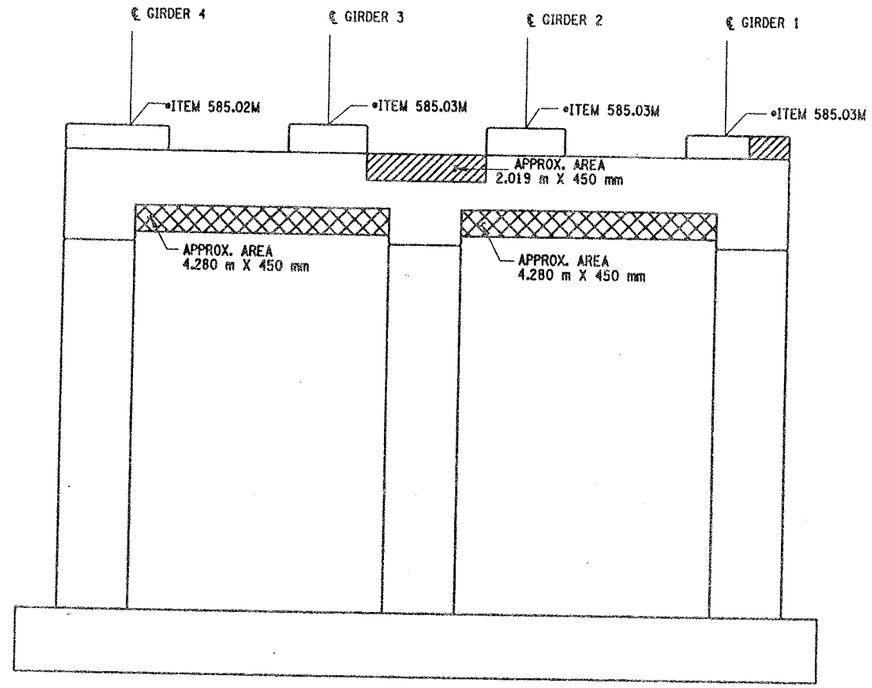
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093571



PIER 6 - FRONT FACE (LOOKING NORTH)

BIN 1093571

SCALE: 1 TO 50



PIER 6- BACK FACE (LOOKING SOUTH)

BIN 1093571

SCALE: 1 TO 50

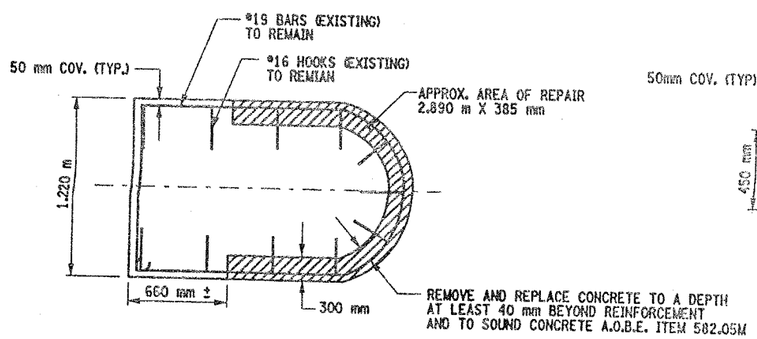
NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND ENGINEER PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS. SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES.
8. SEE DWG. PR17-1S FOR SECTION C-C.
9. SEE DWG. PR17-5N FOR SECTION T-T.
10. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND 582.07M.
11. FOR JACKING NOTES SEE DWG PR17-1S.

• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

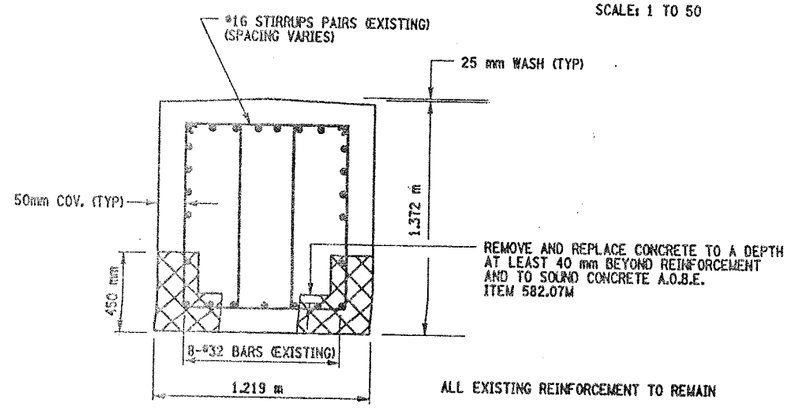
JACKING LOADS:

D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT



SECTION Q-Q

NOT TO SCALE



ALL EXISTING REINFORCEMENT TO REMAIN

SECTION S-S

NOT TO SCALE

LIST OF ITEMS USED:

ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT.L (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 SB
OVER
CSX RAILROAD YARD
PIER 6

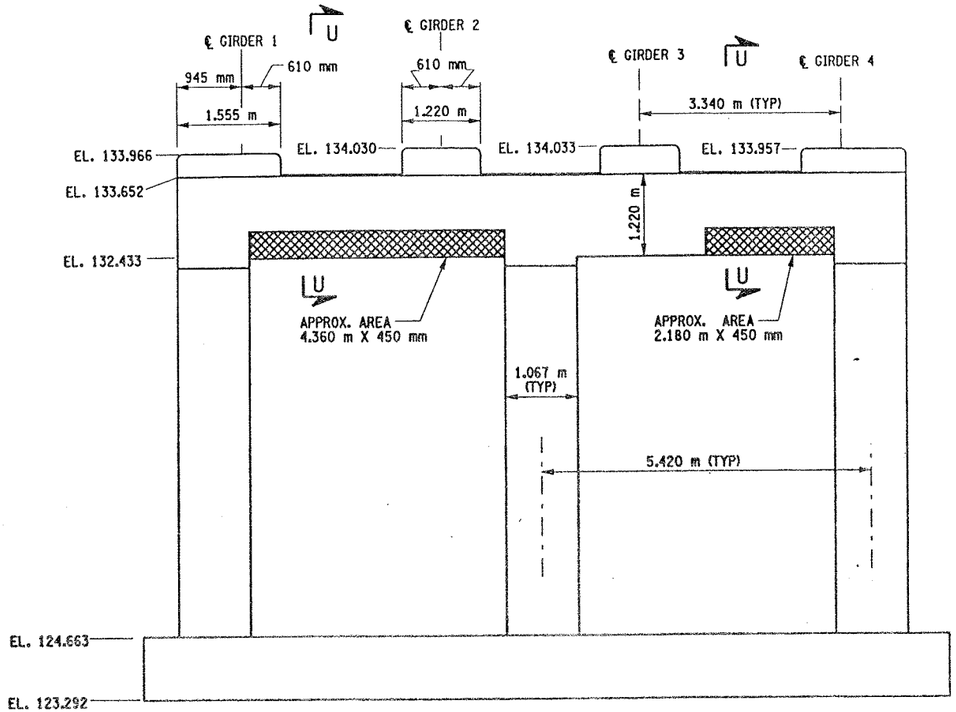
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P6A	3	10/02	PR17-10S

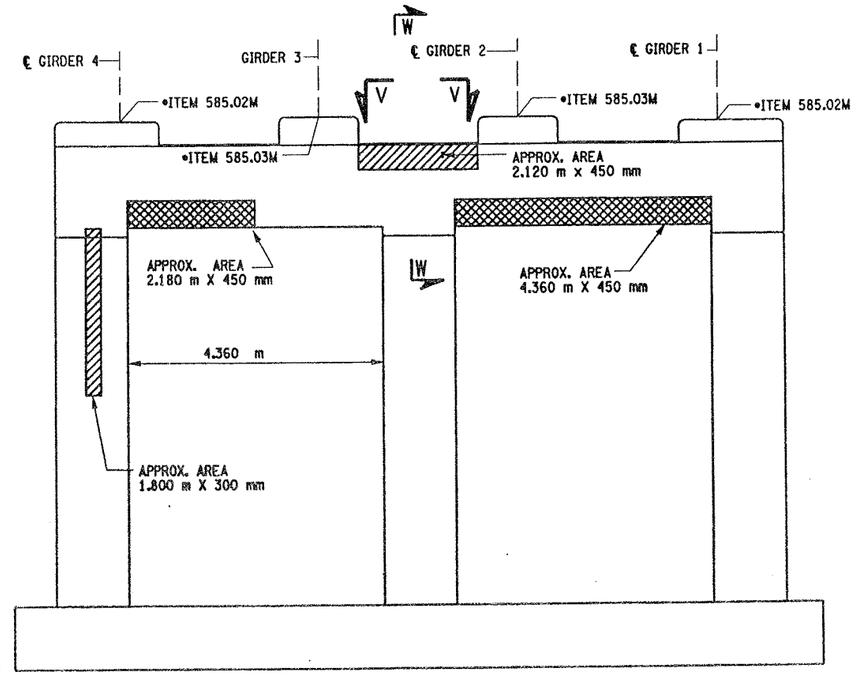
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	307	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093571



PIER 7 - FRONT FACE LOOKING NORTH
BIN 1093571
SCALE: 1 TO 50



PIER 7 - BACK FACE LOOKING SOUTH
BIN 1093571
SCALE: 1 TO 50

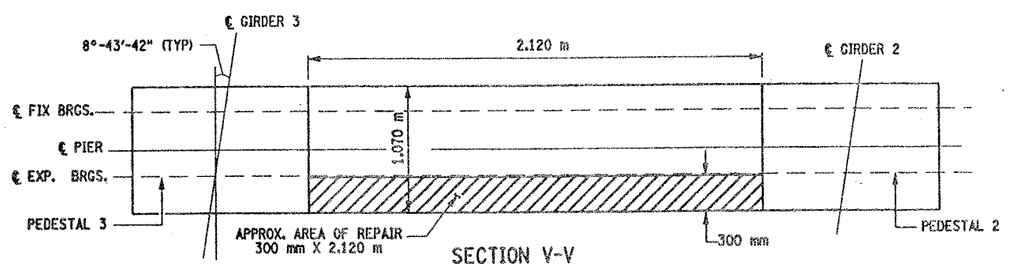
NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE. A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES. SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS.
8. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND 582.07M.
9. FOR JACKING NOTES SEE DWG PR17-1S.

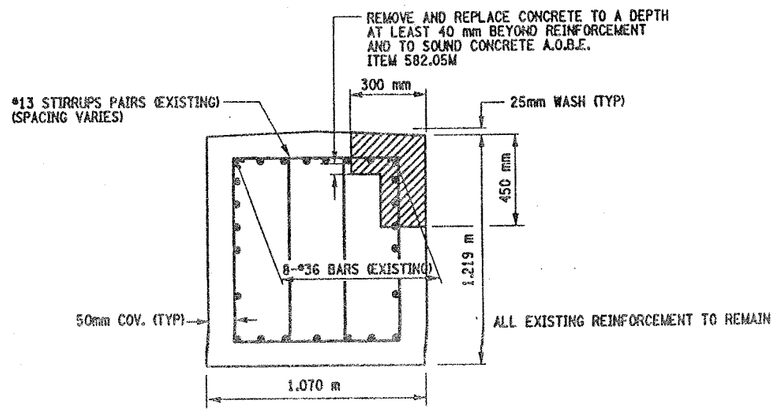
• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

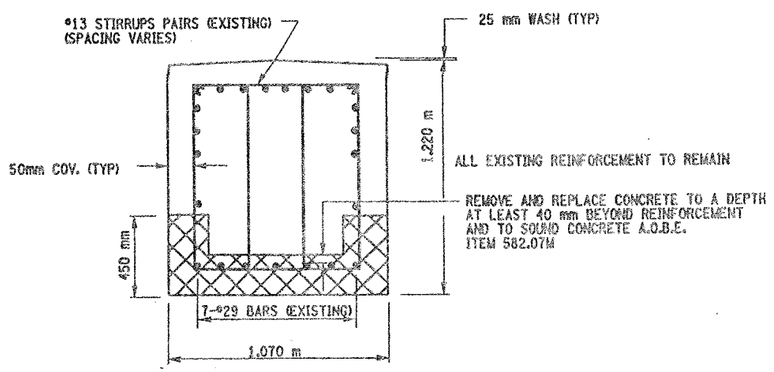
D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT



SECTION V-V
NOT TO SCALE



SECTION W-W
NOT TO SCALE



SECTION U-U
NOT TO SCALE

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)

LIST OF ITEMS USED:

ITEM 15565.4302M - BRIDGE BEARING RESTORATION
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT.L (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

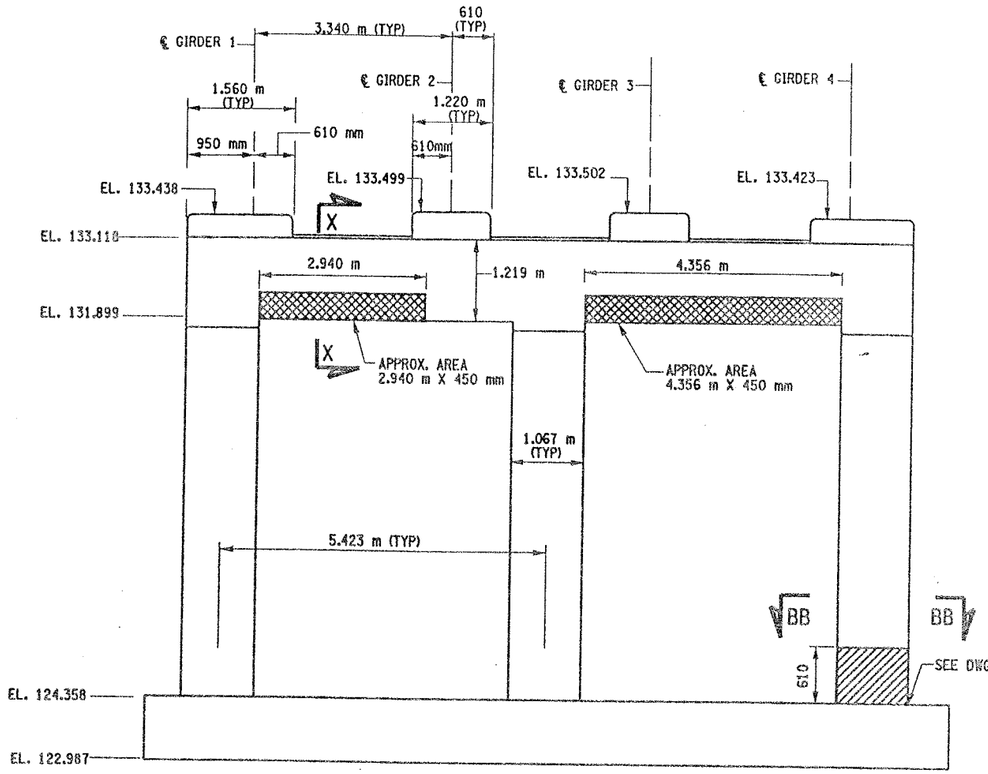
SIGNATURE DATE

INTERSTATE 481 SB
OVER
CSX RAILROAD YARD
PIER 7

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P7A	3	10/02	PR17-11S

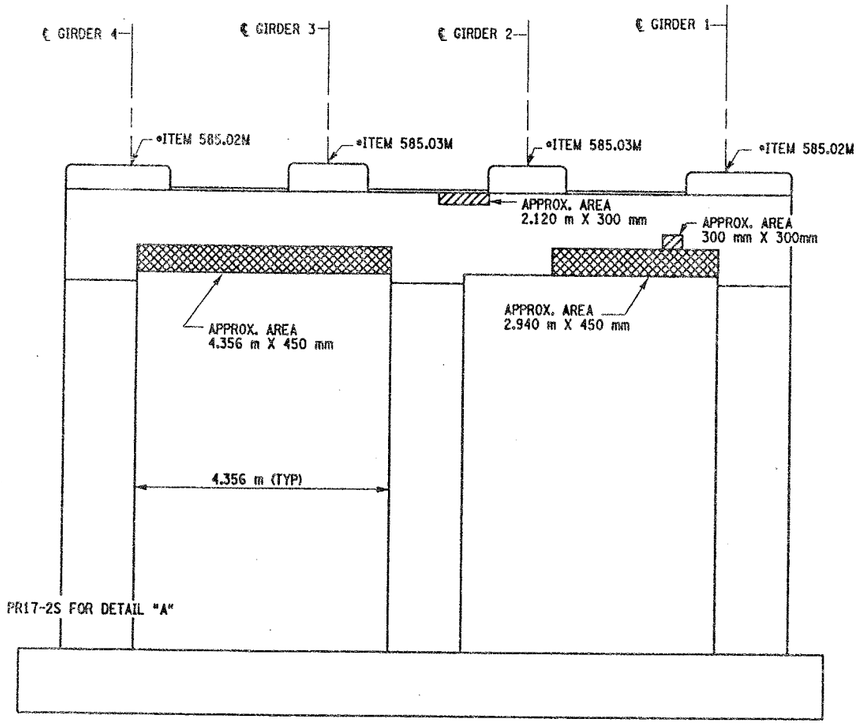
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____



PIER 8 - FRONT FACE (LOOKING NORTH)

BIN 1093571

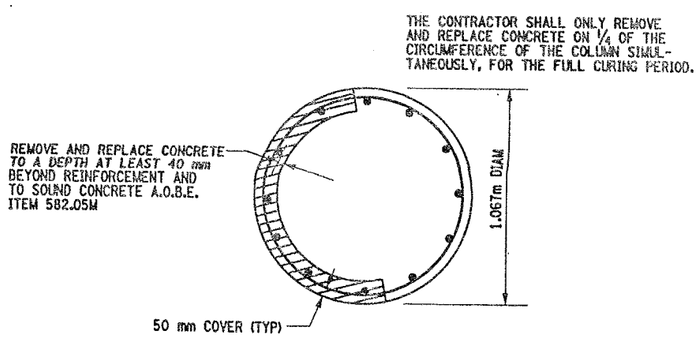
SCALE: 1 TO 50



PIER 8 - BACK FACE (LOOKING SOUTH)

BIN 1093571

SCALE: 1 TO 50



SECTION BB-BB

NOT TO SCALE

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	308	432

BRIDGE REHABILITATION PROJECT (ELELMENT SPECIFIC)

VARIOUS BRIDGES ON INTERSTATE 481

TOWNS OF DEWITT AND CICERO

ONONDAGA COUNTY

P.I.N. 305613 | B.I.N. 1093571

NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. TO-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND ENGINEER PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. SEE DWG. PR17-7N FOR SECTIONS X-X.
8. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND ITEM 582.07M.
9. FOR JACKING NOTES SEE DWG. PR17-1S
10. CONTRACTOR SHALL REMOVE DEBRIS FROM TOP OF PEDESTALS AND TOP OF CAP BEAM. COST TO BE INCLUDED IN THE PRICE BID FOR VARIOUS OTHER ITEMS OF THE CONTRACT.

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)

• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT

LIST OF ITEMS USED:

ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE | DATE

INTERSTATE 481 SB
OVER
CSX RAILROAD
PIER 8

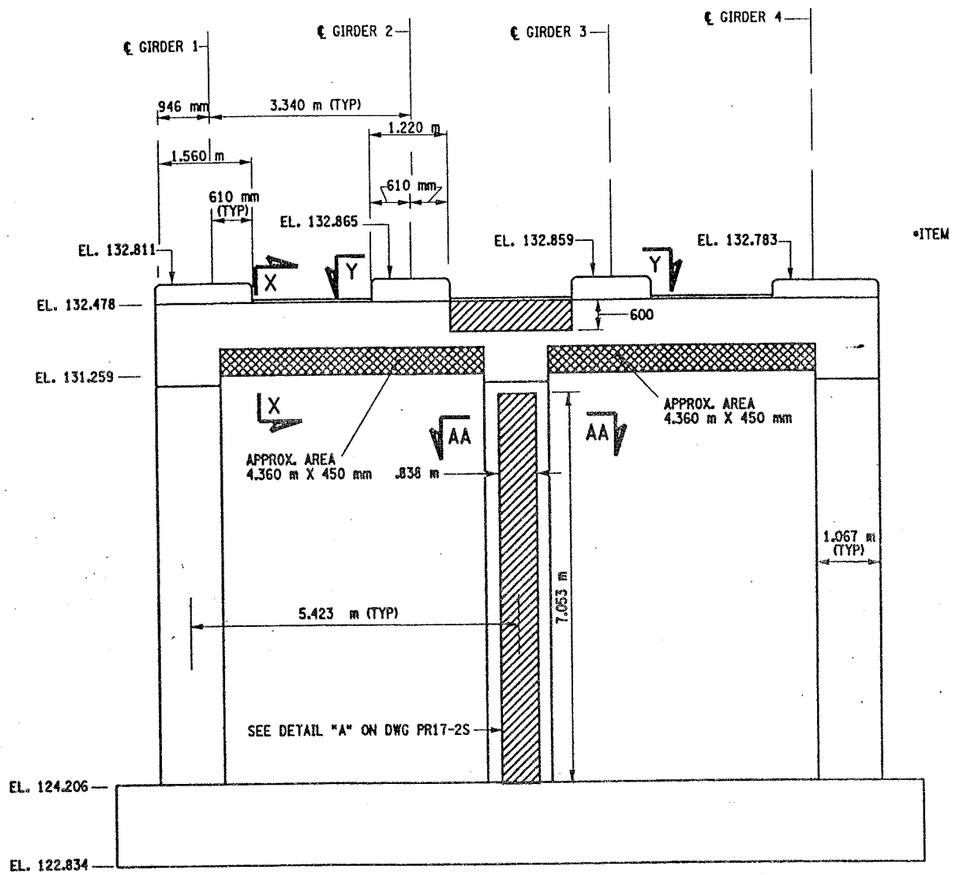
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P8A	3	10/02	PR17-12S

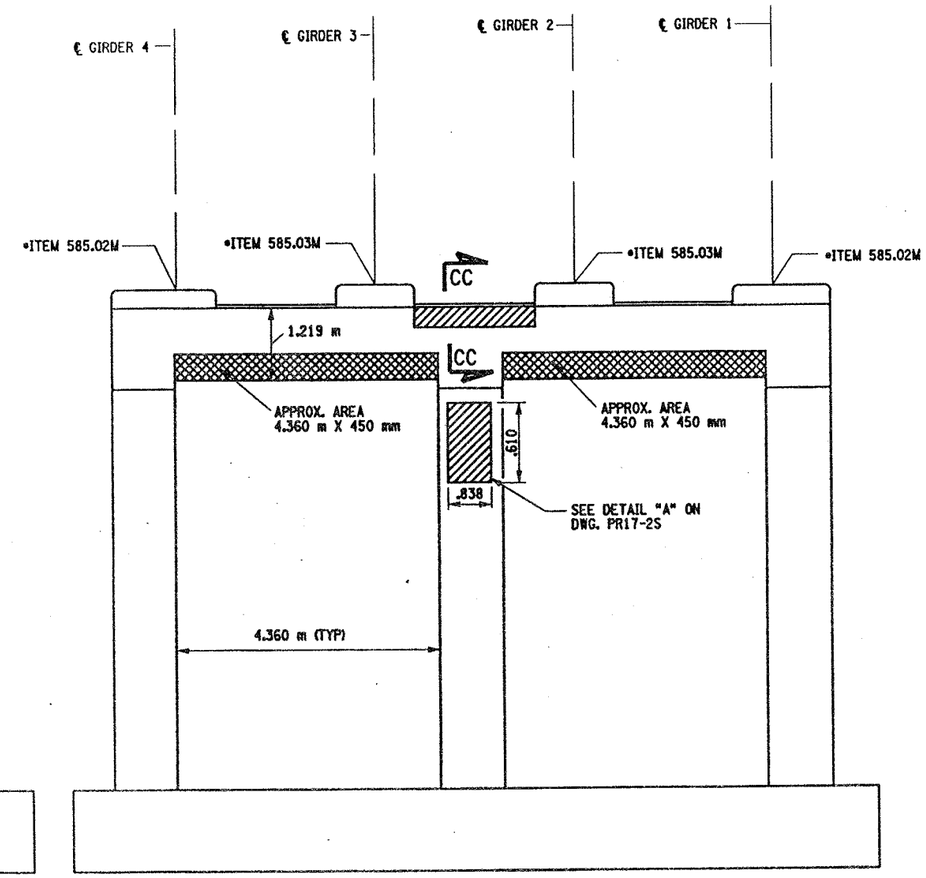
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	309	432

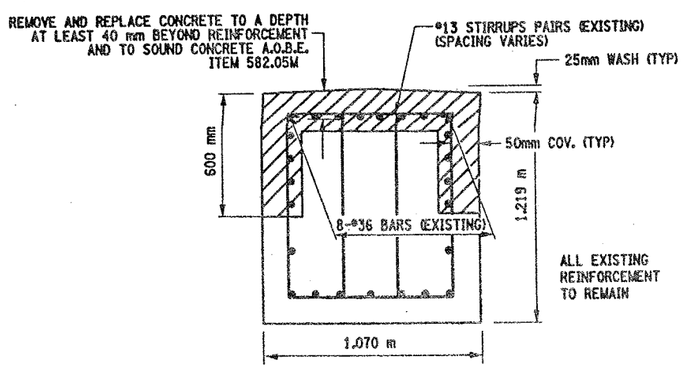
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093571



PIER 9 - FRONT FACE (LOOKING NORTH)
BIN 1093571
SCALE: 1 TO 50



PIER 9 - BACK FACE (LOOKING SOUTH)
BIN 1093571
SCALE: 1 TO 50



SECTION CC-CC
NOT TO SCALE

NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES. SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS.
8. SEE DWG. PR17-7N FOR SECTIONS AA-AA, Y-Y AND X-X.
9. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND 582.07M.
10. FOR JACKING NOTES SEE DWG PR17-1S
11. CONTRACTOR SHALL REMOVE DEBRIS FROM TOP OF CAP BEAM. COST TO BE INCLUDED IN THE PRICE BID FOR VARIOUS OTHER ITEMS OF CONTRACT.

• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE. (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)

LIST OF ITEMS USED:

ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L. (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 SB
OVER
CSX RAILROAD YARD
PIER 9

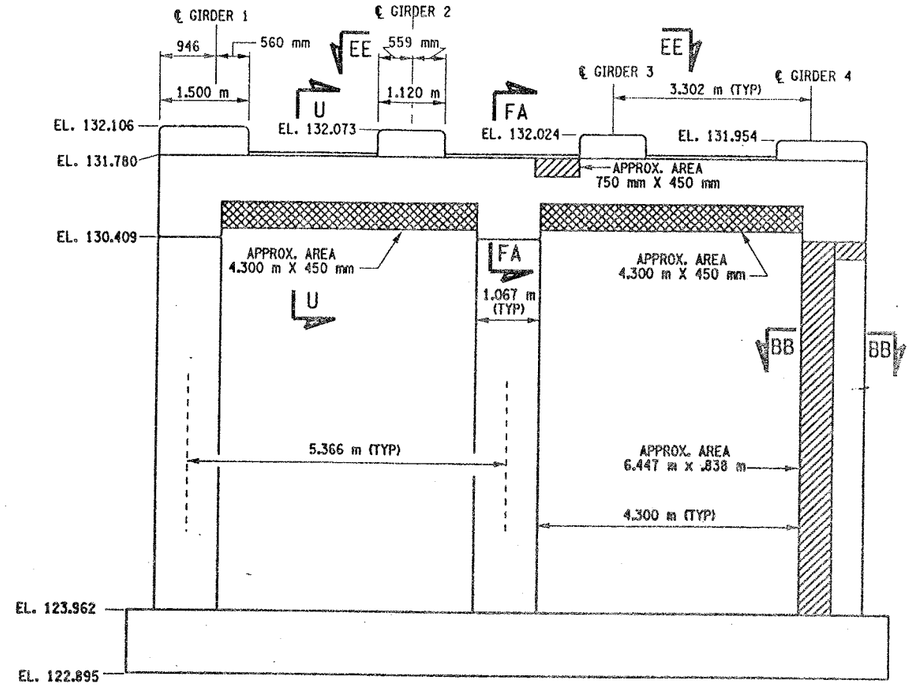
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P9A	3	10/02	PR17-13S

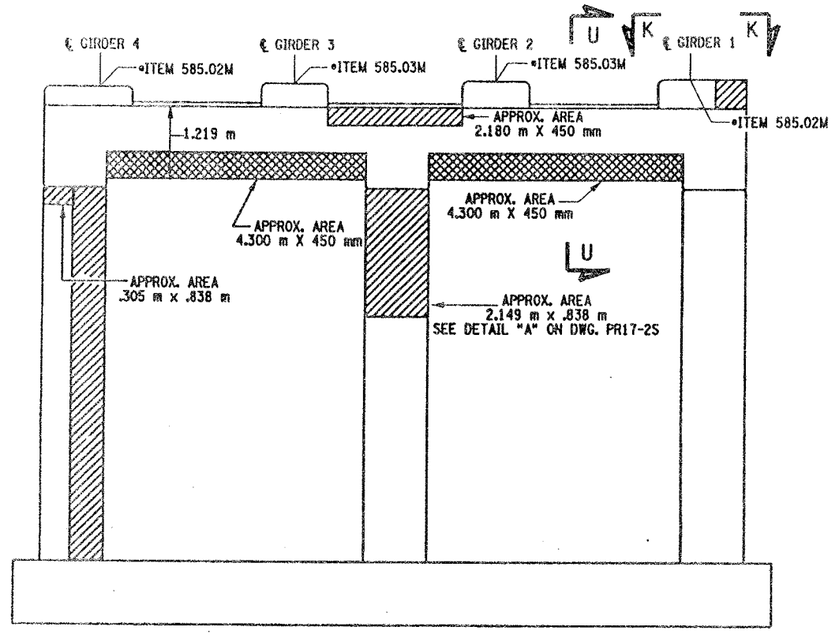
CHECKED BY
DRAFTED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	310	432

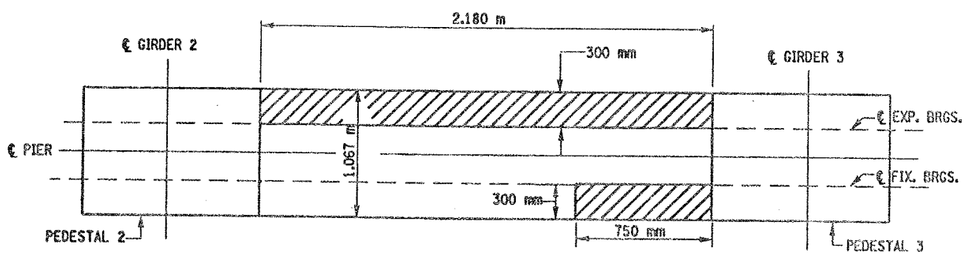
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093571



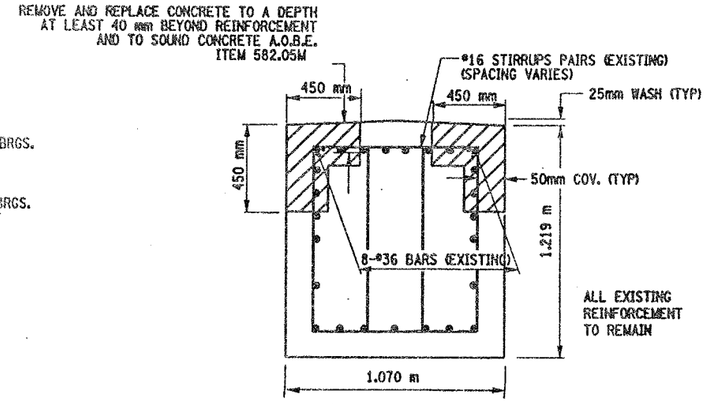
PIER 10 - FRONT FACE (LOOKING NORTH)
BIN 1093571
SCALE: 1 TO 50



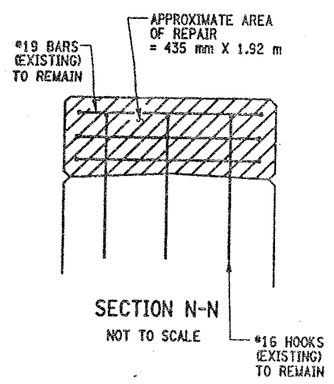
PIER 10 - BACK FACE (LOOKING SOUTH)
BIN 1093571
SCALE: 1 TO 50



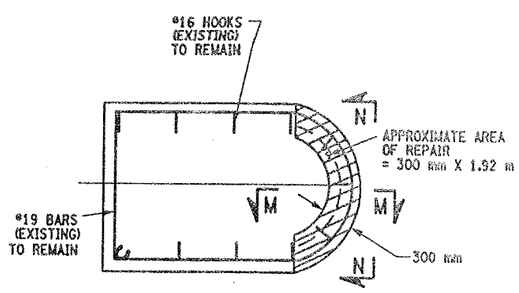
SECTION EE-EE
NOT TO SCALE



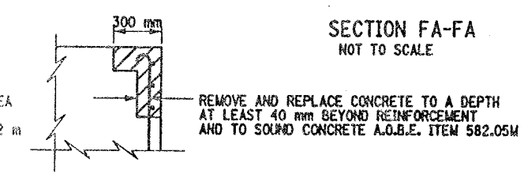
SECTION FA-FA
NOT TO SCALE



SECTION N-N
NOT TO SCALE



SECTION K-K
NOT TO SCALE



SECTION M-M
NOT TO SCALE

LIST OF ITEMS USED:

ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES. SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS.
8. SEE DWG. PR17-12S FOR SECTION BB-BB.
9. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND 582.07M.
10. FOR JACKING NOTES SEE DWG PR17-1S.
11. SEE DWG. PR-17-11S FOR SECTION U-U.

• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

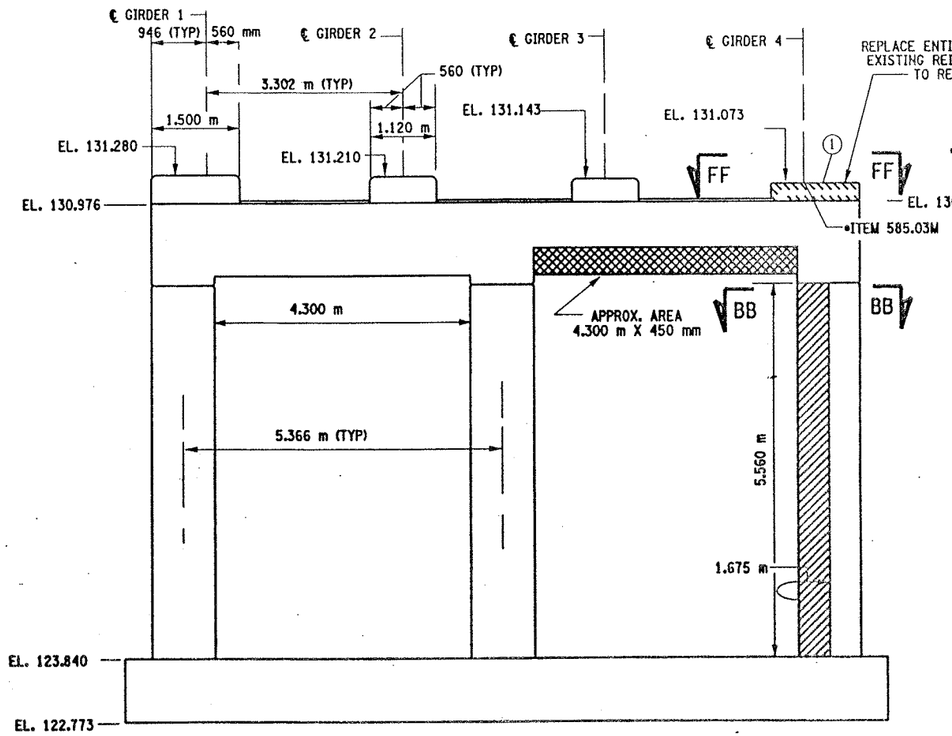
SIGNATURE DATE

INTERSTATE 481 SB
OVER
CSX RAILROAD YARD
PIER 10

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

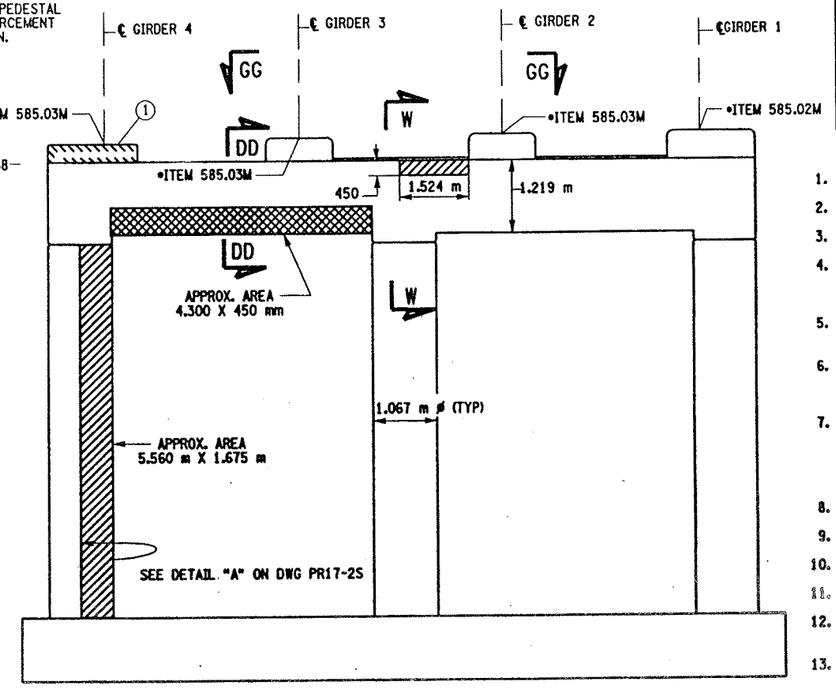
FILENAME	REGION	DATE	DRAWING NO.
305613AE.P10	3	10/02	PR17-14S

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____



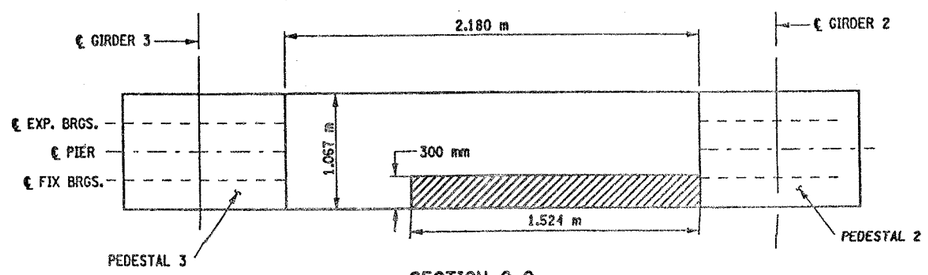
PIER 11 - FRONT FACE (LOOKING NORTH)
BIN 1093571

SCALE: 1 TO 50



PIER 11 - BACK FACE (LOOKING SOUTH)
BIN 1093571

SCALE: 1 TO 50



SECTION G-G

NOT TO SCALE

CONCRETE TABLE (m³)		
PLACEMENT	QUANTITY	ITEM NO.
1	0.49	555.0105M

① INDICATES CONCRETE PLACEMENT NUMBER

LIST OF ITEMS USED

ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 555.0105M - CONCRETE FOR STRUCTURES, CLASS A (CM)
ITEM 580.01M - REMOVAL OF STRUCTURAL CONCRETE (CM)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L. (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE (EA)

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	311	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093571

NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. TO-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES. SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS.
8. SEE DWG. PR17-12S FOR SECTION BB-BB.
9. SEE DWG PR17-10N FOR SECTION DD-DD.
10. SEE DWG PR17-11N FOR SECTION FF-FF.
11. SEE DWG. PR17-11S FOR SECTION W-W.
12. PEDESTAL 4 SHALL BE REPLACED TO EXISITING DIMENSIONS, ITEM 555.0105 M.
13. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND ITEM 582.07M.
14. FOR JACKING NOTES SEE DWG. PR17-1S

• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE. (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)

ITEM 580.01 M - REMOVAL OF STRUCTURAL CONCRETE. (CM) AND ITEM 555.0105 M - CONCRETE FOR STRUCTURES CLASS A. (CM)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 SB
OVER
CSX RAILROAD YARD
PIER 11

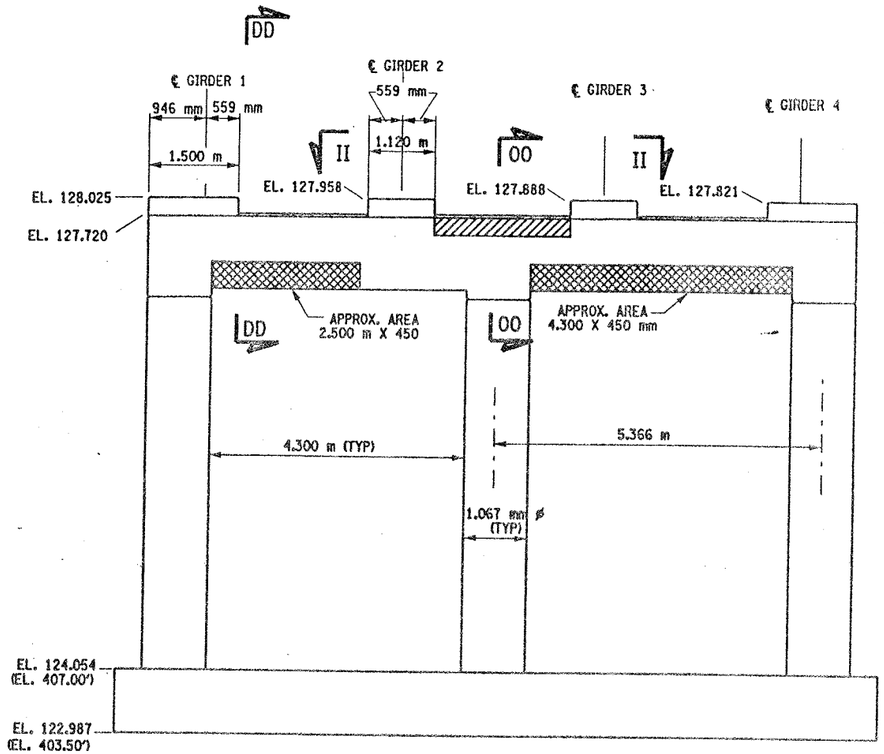
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P11	3	10/02	PR17-15S

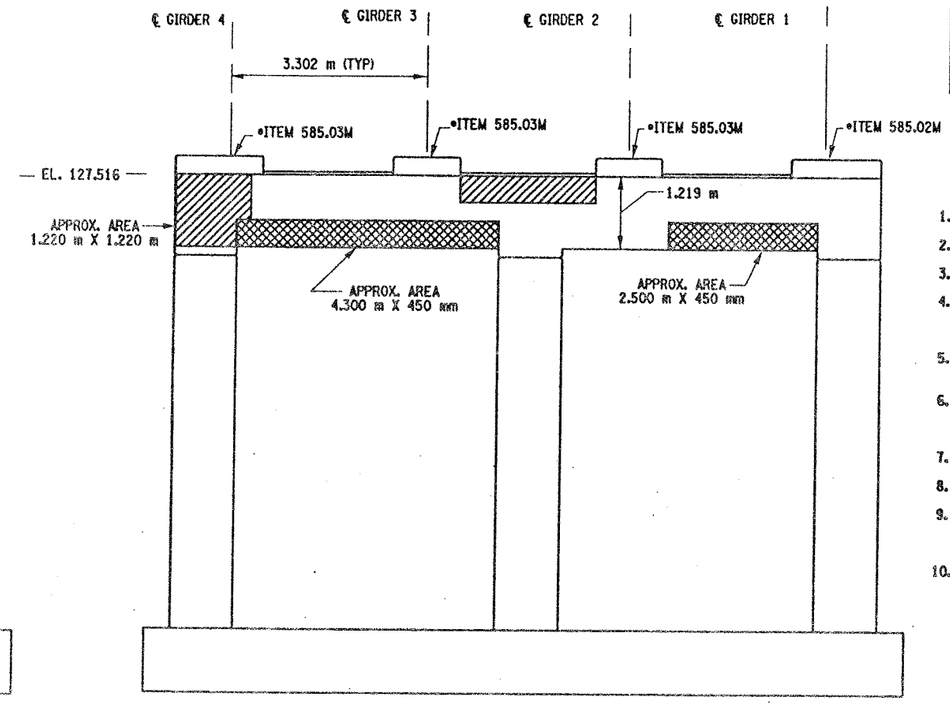
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____ ESTIMATED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	314	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093571



PIER 14 - FRONT FACE (LOOKING NORTH)
BIN 1093571
SCALE: 1 TO 50



PIER 14 - BACK FACE (LOOKING SOUTH)
BIN 1093571
SCALE: 1 TO 50

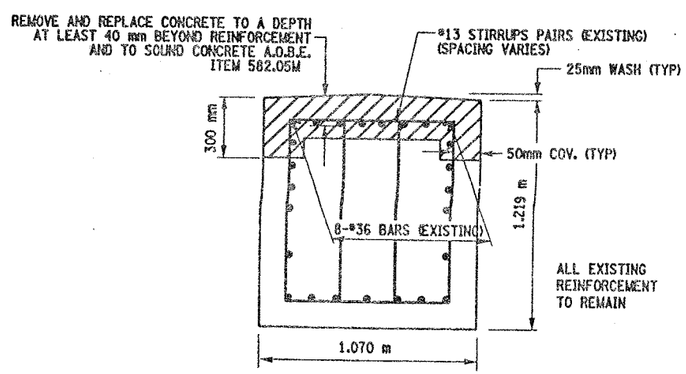
NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. SEE DWG. PR17-10N FOR SECTION DD-DD.
8. SEE DWG. PR17-16S FOR SECTION II-II.
9. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND 582.07M.
10. FOR JACKING NOTES SEE DWG PR17-1S.

• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT



SECTION 00-00
NOT TO SCALE

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE. (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVERHEAD PATCH MATERIAL. (SM)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

LIST OF ITEMS USED:

ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 SB
OVER
CSX RAILROAD YARD
PIER 14

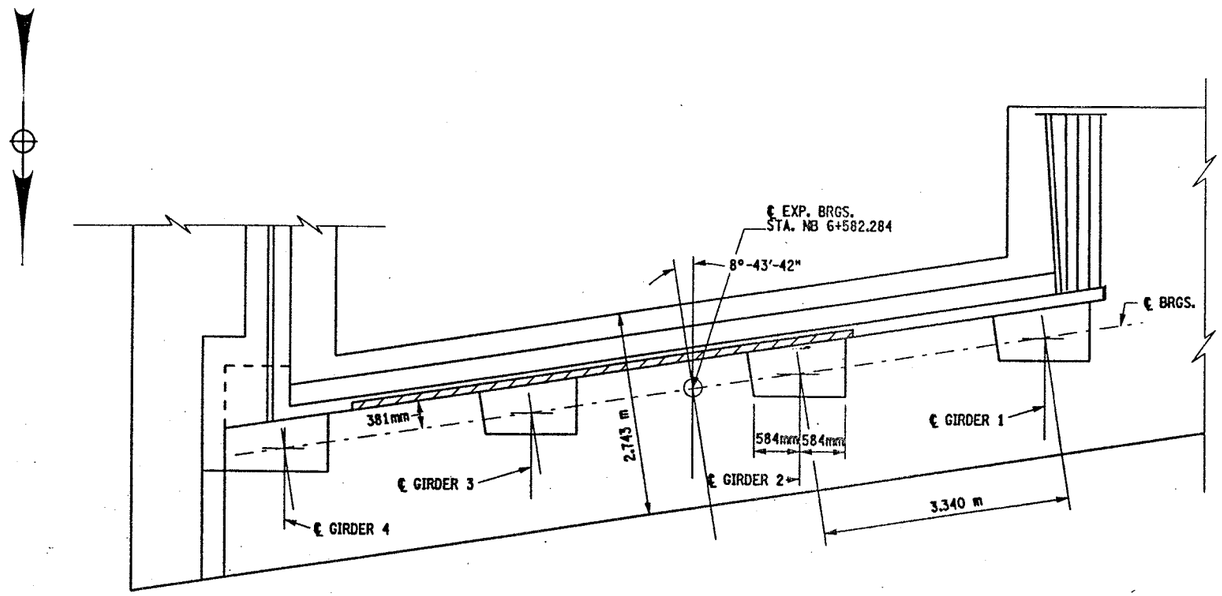
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P14	3	10/02	PR17-18S

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	315	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWN OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093572



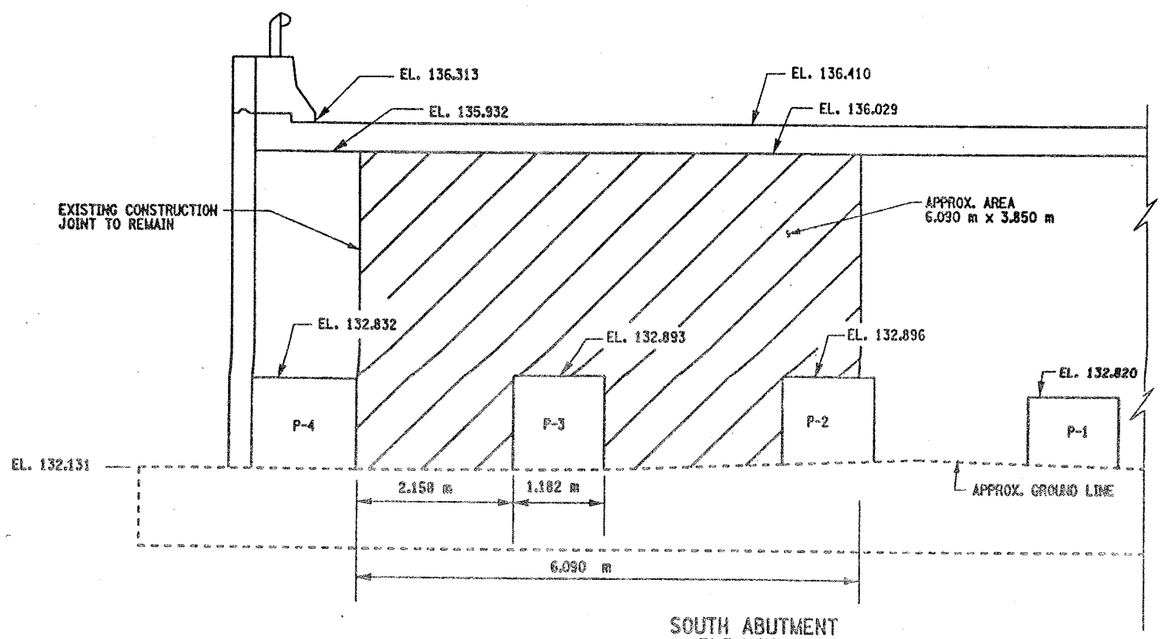
SOUTH ABUTMENT
PLAN

SCALE 1:40

NOTES:

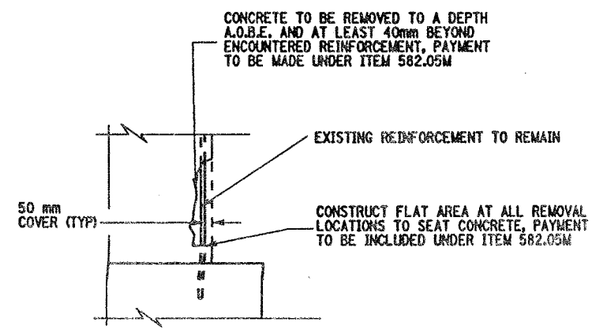
1. ALL DIMENSIONS SHOWN FOR CONCRETE REMOVAL ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND EIC.
2. REMOVE CONCRETE TO LIMITS SHOWN AS WELL AS TO SOUND CONCRETE, A.O.B.E.
3. WHEN REMOVING EXISTING CONCRETE, SAWCUT 5 mm MIN. TO PRODUCE NEAT REMOVAL LINES. ANY COST TO BE
4. INCLUDED IN THE BID PRICE FOR ITEM 582.05M.
5. ALL EXISTING REINFORCEMENT TO REMAIN.
6. ELEVATIONS ARE GIVEN FOR QUANTITY ESTIMATES ONLY.
7. REFER TO CONTRACT D250094 FOR ORIGINAL CONSTRUCTION DETAILS.

AREAS OF PROPOSED WORK: ITEM 582.05M
REMOVAL OF STRUCTURAL CONCRETE-
REPLACEMENT WITH CLASS A CONCRETE (CM)



SOUTH ABUTMENT
ELEVATION

SCALE 1:40



REMOVAL DETAIL
NOT TO SCALE

LIST OF ITEMS USED:

ITEM 582.05M - REMOVE STRUCTURAL CONCRETE WITH CLASS A CONCRETE (CM)

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB
OVER
CSX RAILROAD
SOUTH ABUTMENT

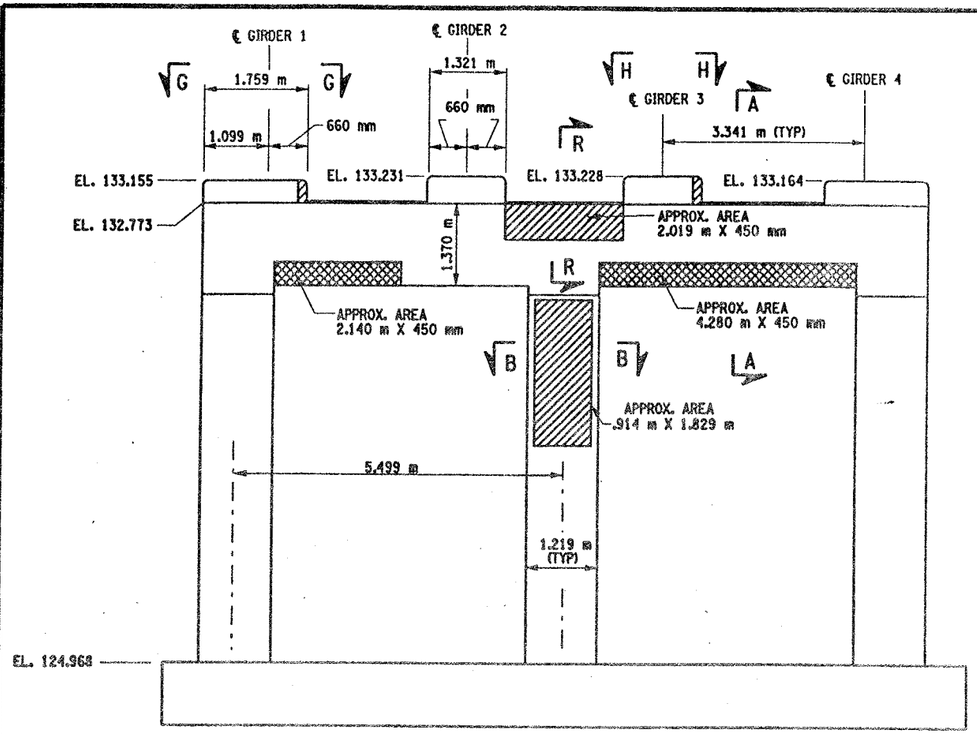
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.A1B	3	10/02	AB17-1

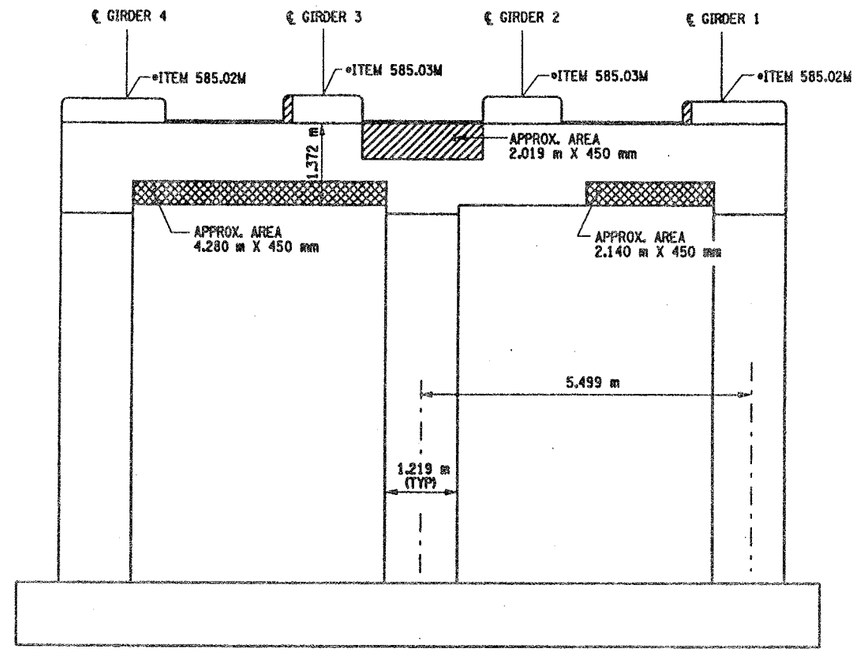
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	316	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093572



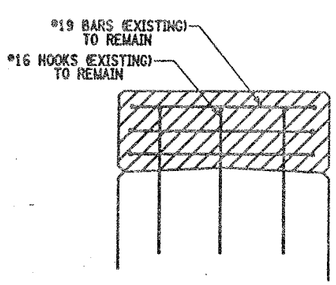
PIER 1 - FRONT FACE (LOOKING NORTH)
BIN 1093572
SCALE: 1 TO 50



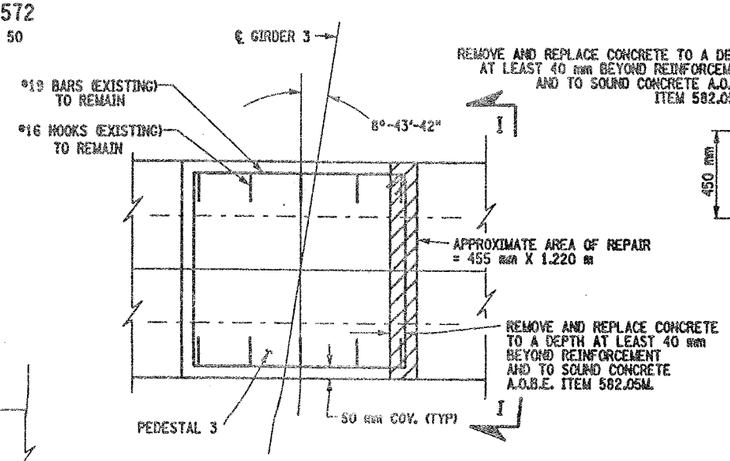
PIER 1- BACK FACE (LOOKING SOUTH)
BIN 1093572
SCALE: 1 TO 50

NOTES:

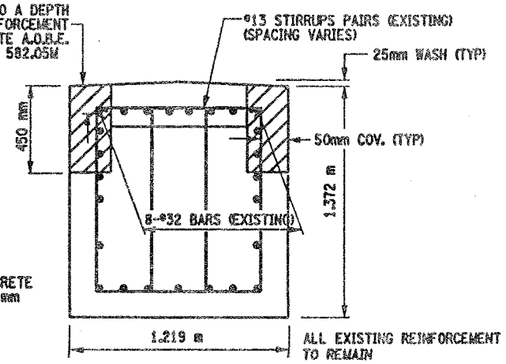
1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS. SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES.
8. FOR SECTION A-A AND B-B SEE DWG. PR17-2S.
9. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND ITEM 582.07M
10. CONTRACTOR SHALL REMOVE DEBRIS FROM TOP OF PEDESTALS AND TOP OF CAP BEAM. COST TO BE INCLUDED IN THE PRICE BID FOR VARIOUS OTHER ITEMS OF CONTRACT.
11. FOR JACKING NOTES SEE DWG. PR17-1S.



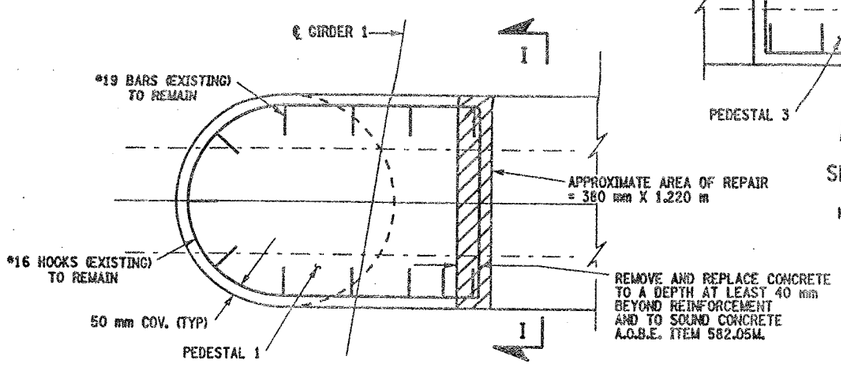
SECTION I-I
NOT TO SCALE



SECTION H-H
NOT TO SCALE



SECTION R-R
NOT TO SCALE



SECTION G-G
NOT TO SCALE

• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVERHEAD PATCH MATERIAL. (SM)

LIST OF ITEMS USED:

ITEM 15565.4302 - BRIDGE BEARING RESTORATION
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L. (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB
OVER
CSX RAILROAD YARD
PIER 1

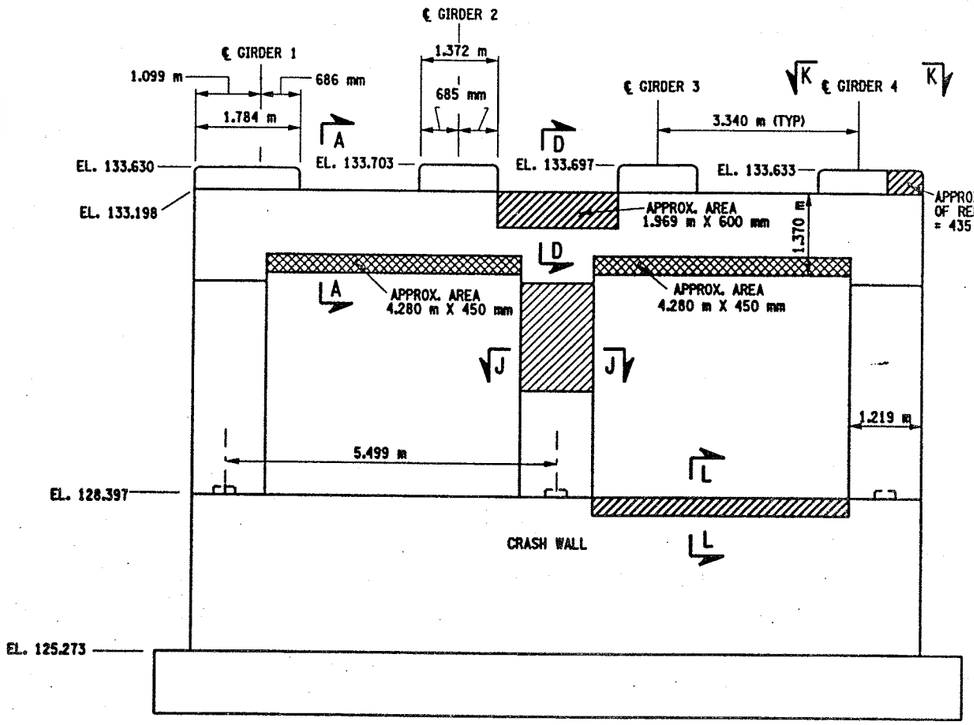
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P1A	3	10/02	PR17-1N

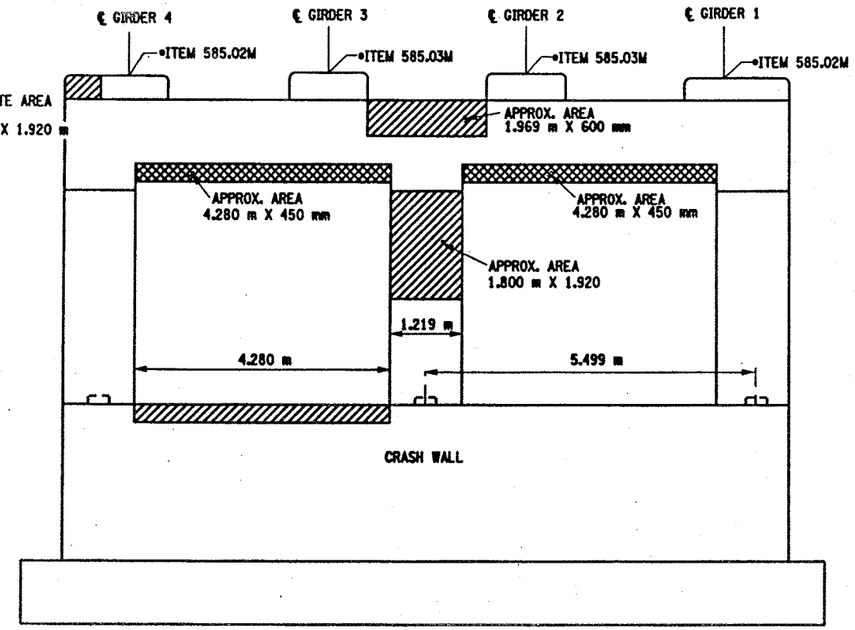
ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ DESIGNED BY ____ CHECKED BY ____ JOB MANAGER ____ DESIGN SUPERVISOR ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	317	432

BRIDGE REHABILITAITON PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093572



PIER 2 - FRONT FACE (LOOKING NORTH)
BIN 1093572
SCALE: 1 TO 50



PIER 2- BACK FACE (LOOKING SOUTH)
BIN 1093572
SCALE: 1 TO 50

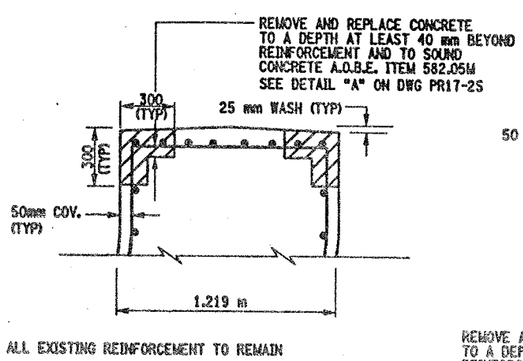
NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS. SEE DWG PR17-1S FOR BEARING RESTORATION NOTES.
8. SEE DWG. PR17-2S FOR SECTION A-A, D-D AND DETAIL "A".
9. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PROCE BID FOR ITEM 582.05M AND ITEM 582.07M.
10. FOR JACKING NOTES SEE DWG. PR17-1S
11. CONTRACTOR SHALL REMOVE DEBRIS FROM TOP OF PEDESTALS AND TOP OF CAP BEAM. COST TO BE INCLUDED IN THE PRICE BID FOR VARIOUS OTHER ITEMS OF CONTRACT.

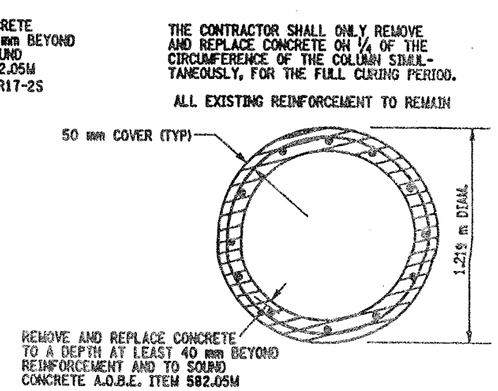
• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

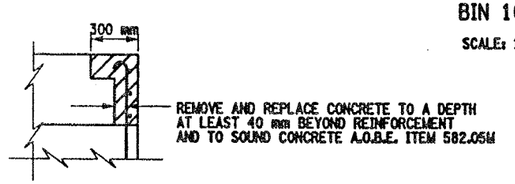
D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT



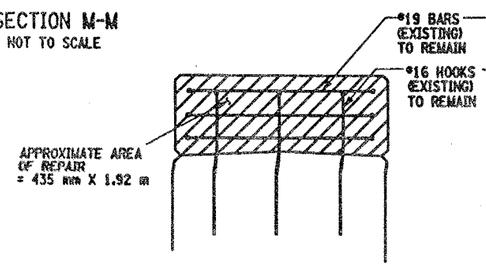
SECTION L-L
NOT TO SCALE



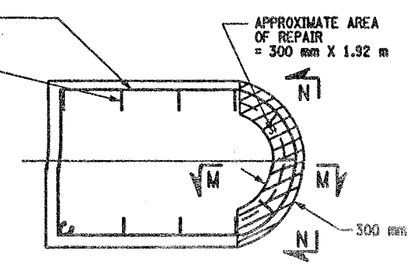
SECTION J-J
NOT TO SCALE



SECTION M-M
NOT TO SCALE



SECTION N-N
NOT TO SCALE



SECTION K-K
NOT TO SCALE

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)

LIST OF ITEMS USED:

ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB
OVER
CSX RAILROAD YARD
PIER 2

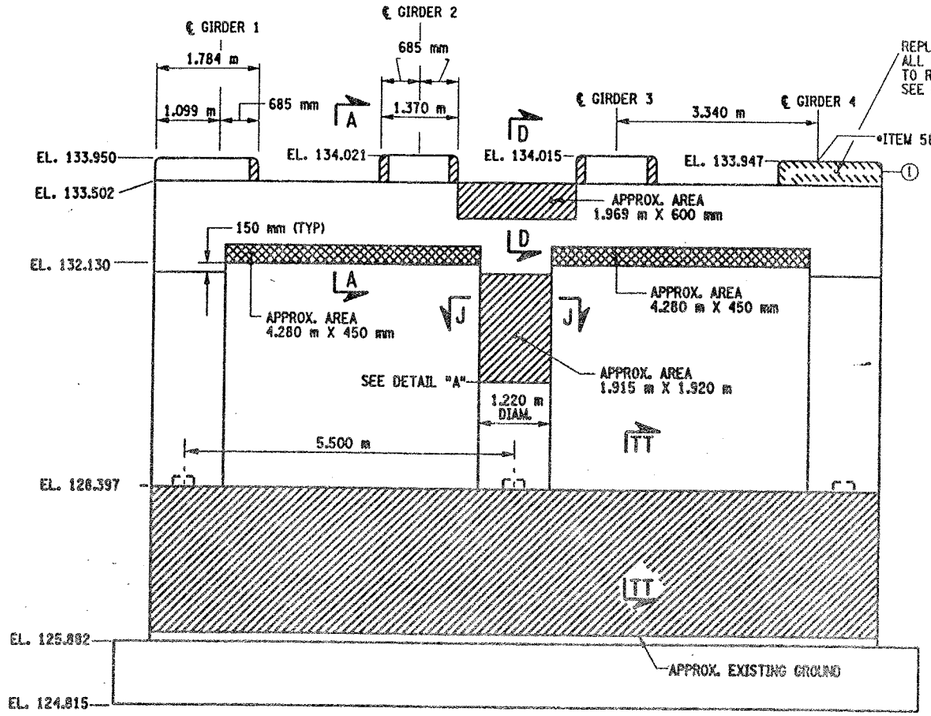
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P2A	3	10/02	PR17-2N

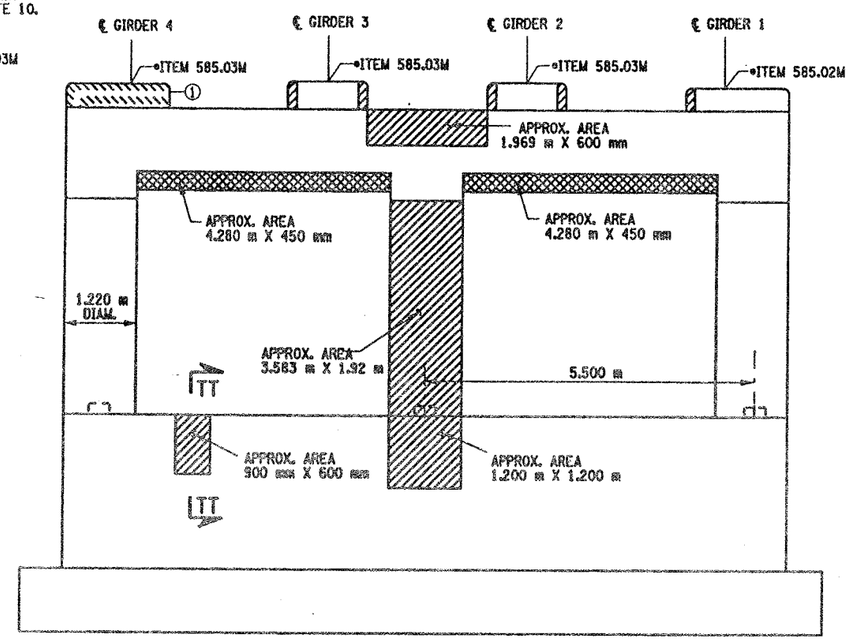
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	318	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093572

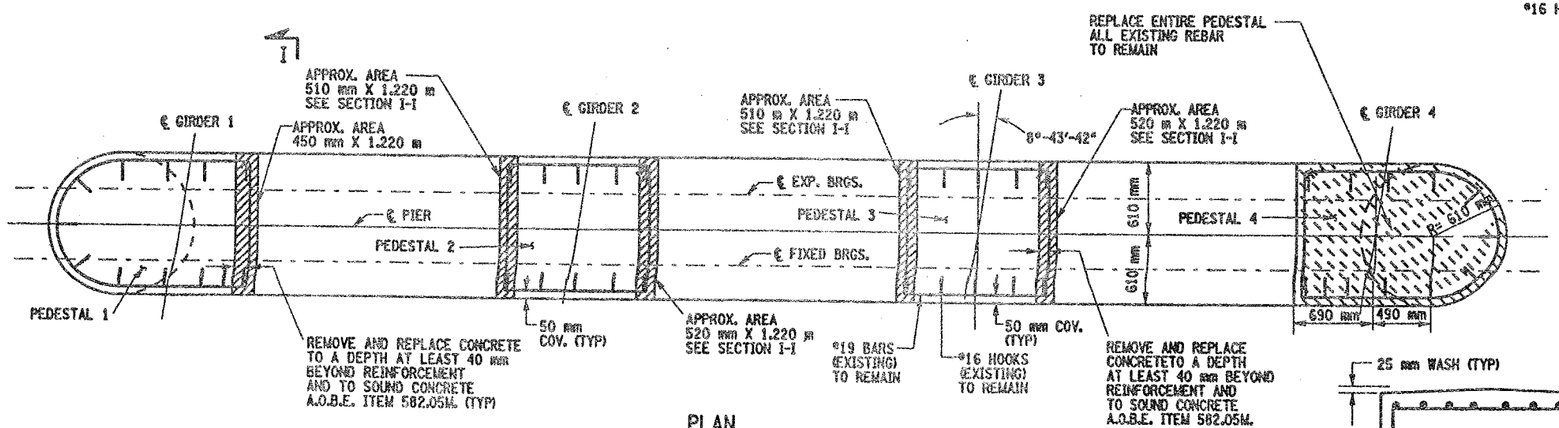


PIER 3 - FRONT FACE (LOOKING NORTH)
BIN 1093572
SCALE: 1 TO 50

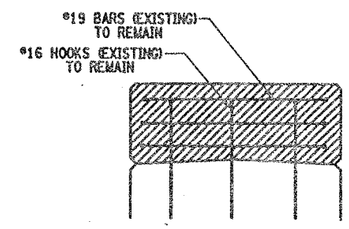


PIER 3 - BACK FACE (LOOKING SOUTH)
BIN 1093572
SCALE: 1 TO 50

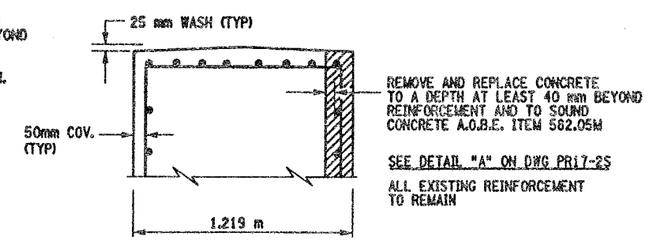
○— INDICATES CONCRETE PLACEMENT NUMBER



PLAN
SCALE: 1 TO 25



SECTION I-I
NOT TO SCALE



SECTION TT-TT
NOT TO SCALE

CONCRETE TABLE (m^3)		
PLACEMENT	QUANTITY	ITEM NO.
1	0.90	555.0105M

LIST OF ITEMS USED:

ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 555.0105M - CONCRETE FOR STRUCTURES CLASS A (CM)
ITEM 580.01M - REMOVAL OF STRUCTURAL CONCRETE (CM)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS), SEE DWG BR-10 & BR-11 FOR BEARING RESTORATION DETAILS. SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES.
8. SEE DWG. PR17-2S FOR SECTIONS A-A, D-D AND DETAIL "A"
9. SEE DWG. PR17-2N FOR SECTION J-J
10. PEDESTAL 4 SHALL BE REPLACED TO EXISTING DIMENSIONS. ITEM 555.0105 M
11. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND ITEM 582.07M.
12. FOR JACKING NOTES SEE DWG. PR17-1S
13. CONTRACTOR SHALL REMOVE DEBRIS FROM TOP OF PEDESTALS AND TOP OF CAPBEAM. COST TO BE INCLUDED IN THE PRICE BID FOR VARIOUS OTHER ITEMS OF CONTRACT.

• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

D.L. = 100 MT
L.L. = 50 MT
TOTAL = 150 MT

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)

ITEM 580.01 M - REMOVAL OF STRUCTURAL CONCRETE. (CM) AND ITEM 555.0105 M - CONCRETE FOR STRUCTURES CLASS A. (CM)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB
OVER
CSX RAILROAD YARD
PIER 3

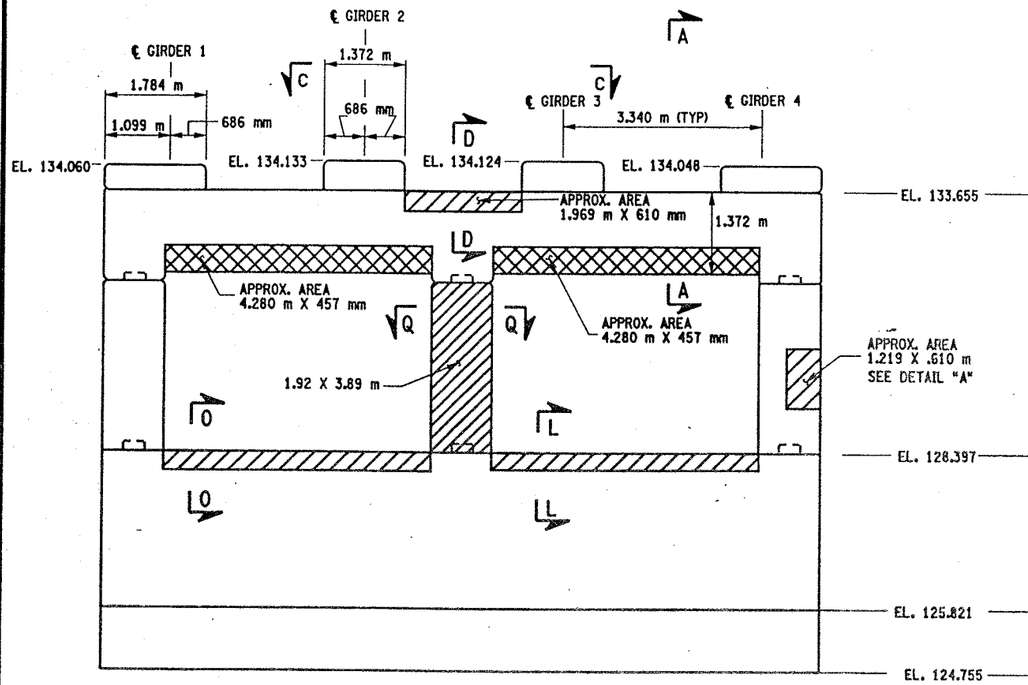
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P3A	3	10/02	PR17-3N

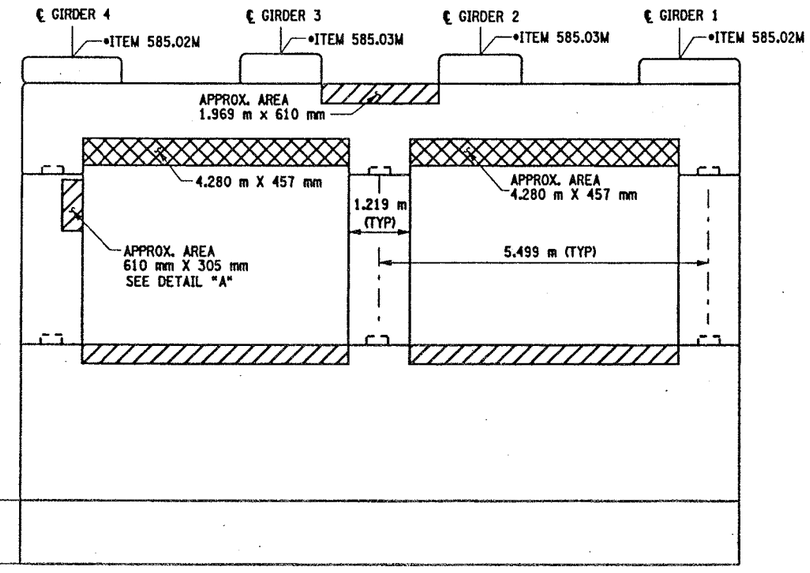
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	319	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093572



PIER 4 - FRONT FACE (LOOKING NORTH)
BIN 1093572
SCALE: 1 TO 50



PIER 4 - BACK FACE (LOOKING SOUTH)
BIN 1093572
SCALE: 1 TO 50

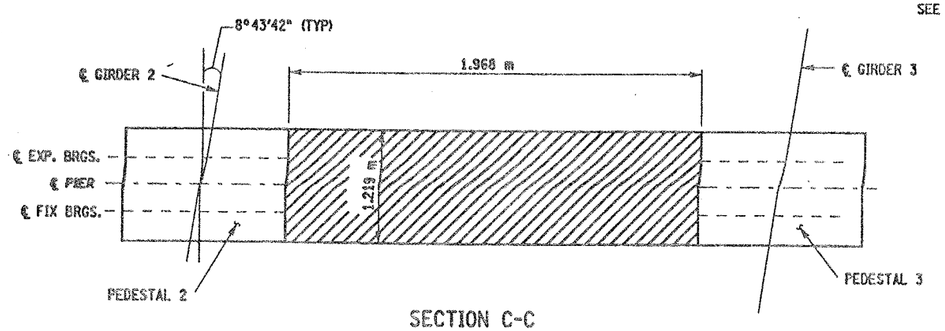
NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND ENGINEER PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. BR-10 AND BR-11 FOR BEARING RESTORATION DETAILS. SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES.
8. SEE DWG. PR17-2S FOR SECTIONS A-A, D-D AND DETAIL "A".
9. SEE DWG. PR17-4S FOR SECTION O-O.
10. SEE DWG. PR17-2N FOR SECTION L-L.
11. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LILNES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND ITEM 582.07M.
12. FOR JACKING NOTES SEE DWG PR17-1S.
13. CONTRACTOR SHALL REMOVE DEBRIS FROM TOP OF PEDESTALS AND TOP OF CAP BEAM. COST TO BE INCLUDED IN THE PRICE BID FOR VARIOUS OTHER ITEMS OF CONTRACT.

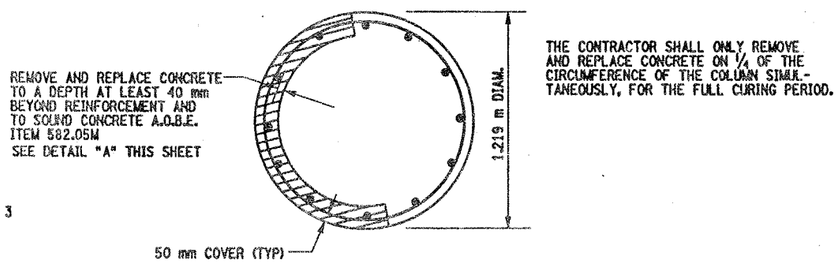
• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

D.L. = 100 MT
L.L. = 50 MT
TOTAL = 150 MT



SECTION C-C
NOT TO SCALE



THE CONTRACTOR SHALL ONLY REMOVE AND REPLACE CONCRETE ON 1/4 OF THE CIRCUMFERENCE OF THE COLUMN SIMULTANEOUSLY, FOR THE FULL CURING PERIOD.

SECTION Q-Q
NOT TO SCALE

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONC. REPLACE WITH CLASS A CONCRETE (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVERHEAD PATCH MATERIAL. (SM)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

LIST OF ITEMS USED:

ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/VERT. OVERHEAD PATCH MAT.L (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB
OVER
CSX RAILROAD
PIER 4

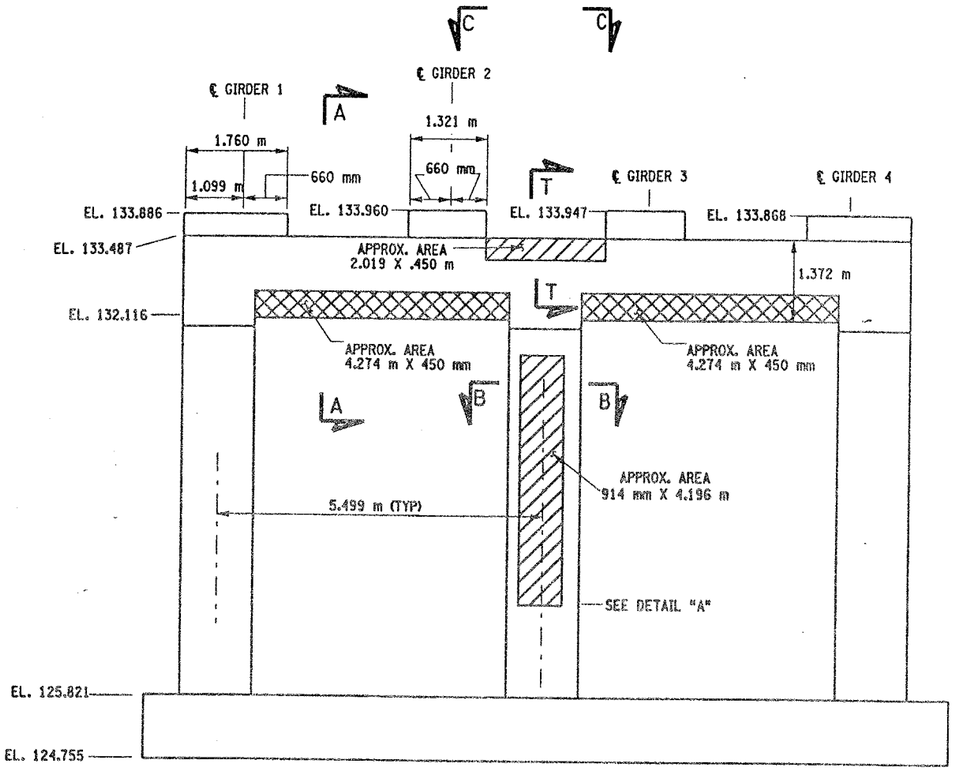
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P4A	3	10/02	PR17-4N

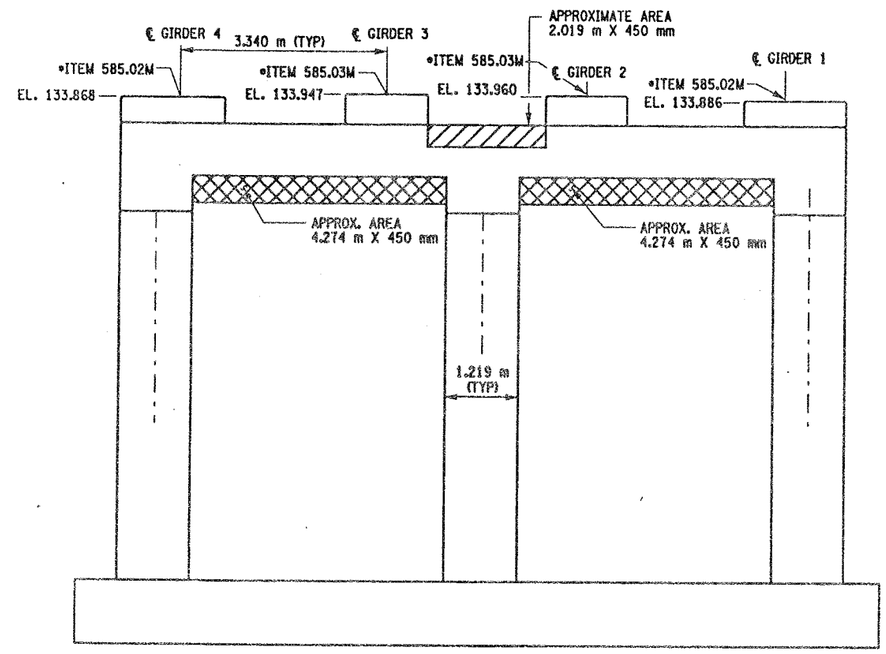
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	320	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 | B.I.N. 1093572



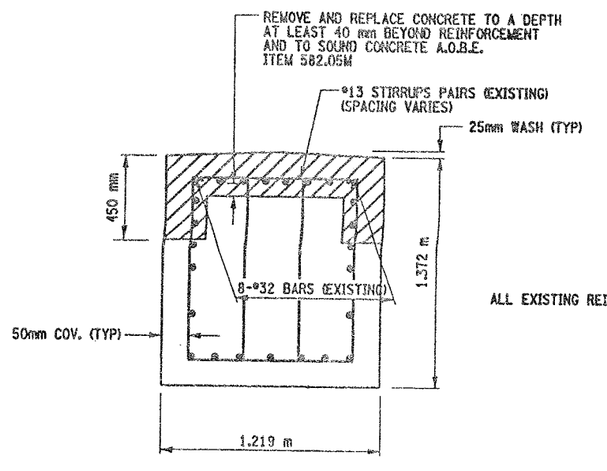
PIER 5 - FRONT FACE (LOOKING NORTH)
BIN 1093572
SCALE: 1 TO 50



PIER 5 - BACK FACE (LOOKING SOUTH)
BIN 1093572
SCALE: 1 TO 50

NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND ENGINEER PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS. SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES.
8. SEE DWG. PR17-2S FOR SECTION A-A AND B-B AND DETAIL "A".
9. SEE DWG PR17-1S FOR SECTION C-C.
10. ALL CONCRET REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND ITEM 582.07M.
11. FOR JACKING NOTES SEE DWG. PR17-1S.
12. CONTRACTOR SHALL REMOVE DEBRIS FROM TOP OF CAP BEAM. COST TO BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS OF CONTRACT.



SECTION T-T
NOT TO SCALE

ALL EXISTING REINFORCEMENT TO REMAIN

• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

D.L. = 100 MT
L.L. = 50 MT
TOTAL = 150 MT

LIST OF ITEMS USED:
ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE | DATE

INTERSTATE 481 NB
OVER
CSX RAILROAD YARD
PIER 5

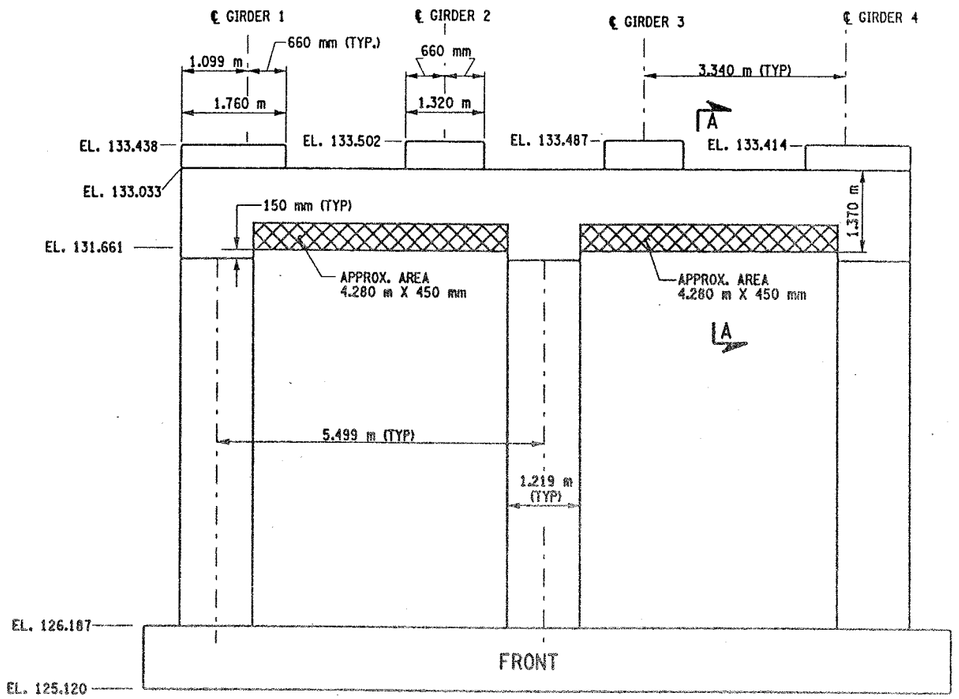
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P5A	3	10/02	PR17-5N

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	321	432

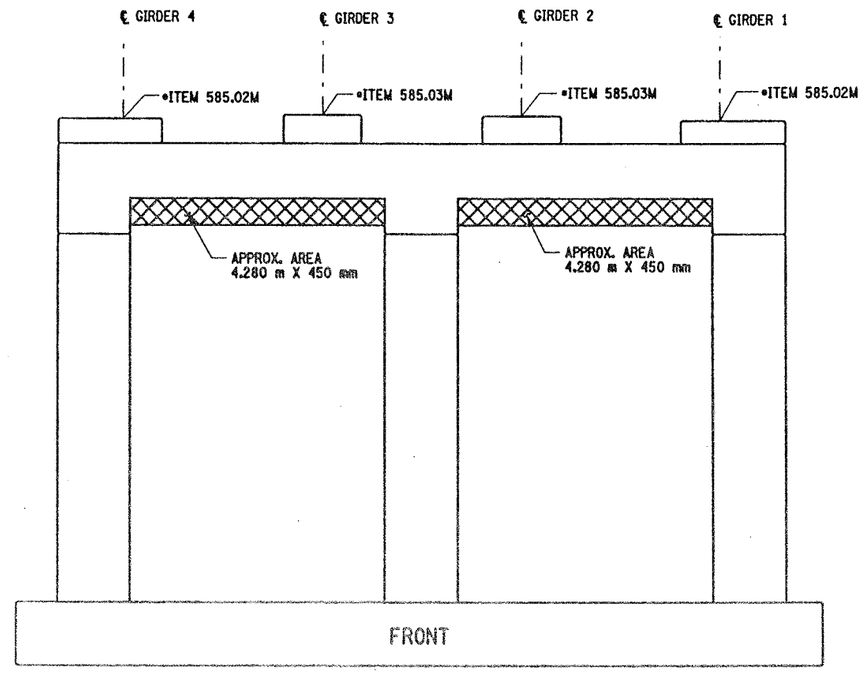
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093572



PIER 6 -FRONT FACE (LOOKING NORTH)

BIN 1093572

SCALE: 1 TO 50



PIER 6 BACK FACE (LOOKING SOUTH)

BIN 1093572

SCALE: 1 TO 50

NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND ENGINEER PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS. SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES.
8. SEE DWG. PR17-2S FOR SECTION "A-A".
9. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND 582.07M.
10. FOR JACKING NOTES SEE DWG. PR17-1S.

• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT

LEGEND

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVERHEAD PATCH MATERIAL. (SM)

LIST OF ITEMS USED:

ITEM 15565.4302M- BRIDGE BEARING RESTORATION (EA)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L. (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB
OVER
CSX RAILROAD YARD
PIER 6

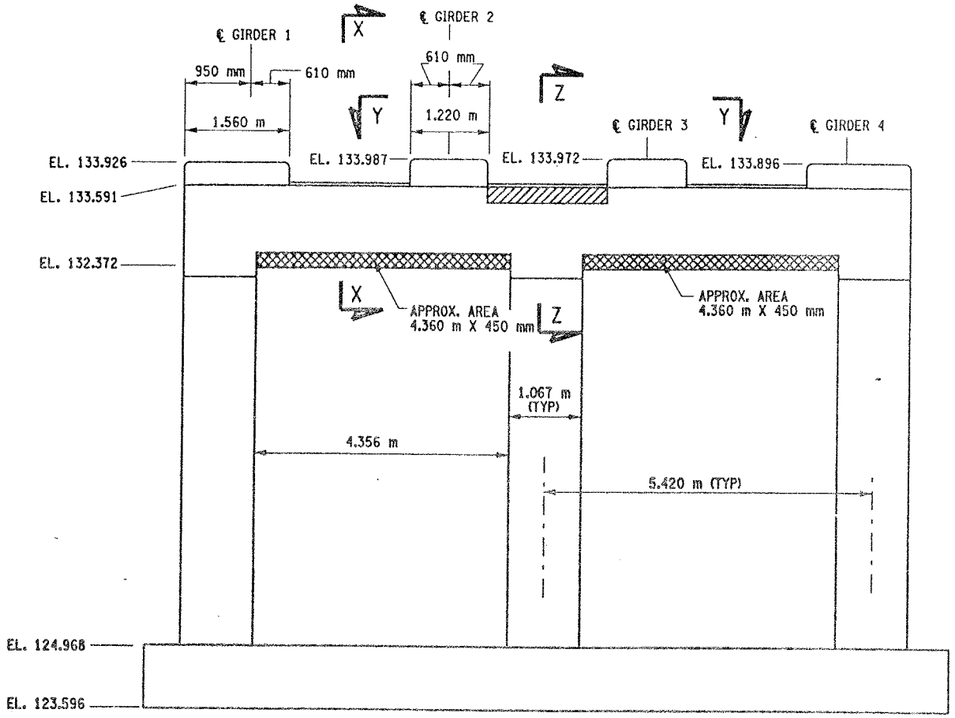
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P6A	3	10/02	PR17-6N

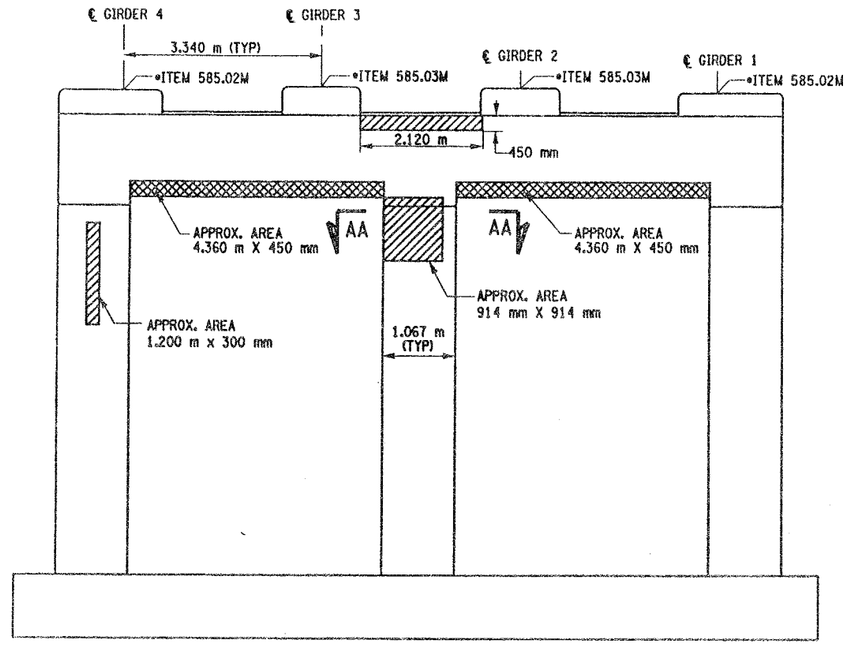
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	322	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093572



PIER 7 - FRONT FACE (LOOKING NORTH)
BIN 1093572
SCALE: 1 TO 50



PIER 7 - BACK FACE (LOOKING SOUTH)
BIN 1093572
SCALE: 1 TO 50

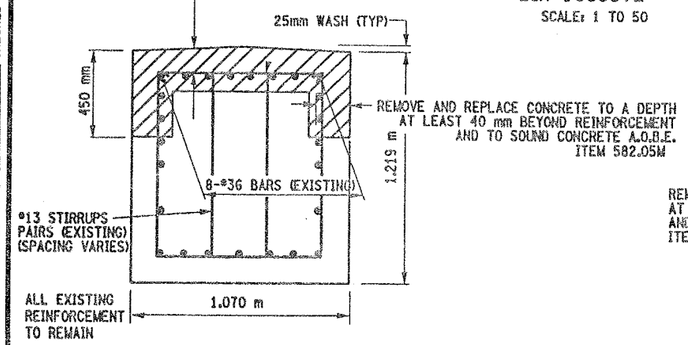
NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES. SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS.
8. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND 582.07M.
9. FOR JACKING NOTES SEE DWG PR17-1S.

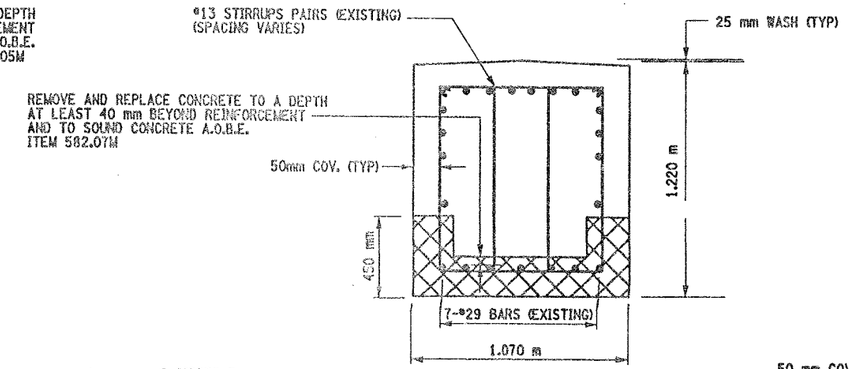
• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT

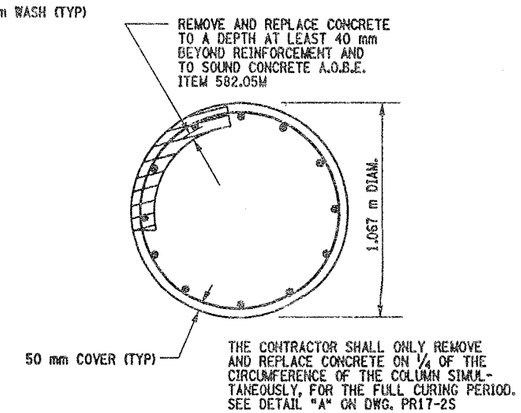


SECTION Z-Z
NOT TO SCALE



ALL EXISTING REINFORCEMENT TO REMAIN

SECTION X-X
NOT TO SCALE



SECTION AA-AA

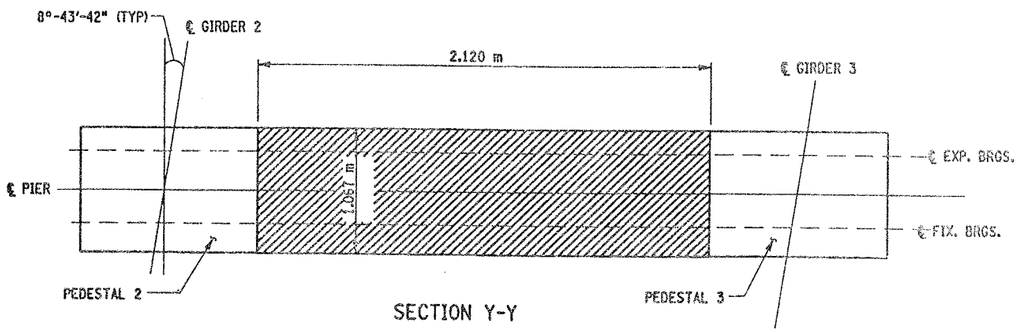
NOT TO SCALE

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE. (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVERHEAD PATCH MATERIAL. (SM)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED



SECTION Y-Y
NOT TO SCALE

LIST OF ITEMS USED:

ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB
OVER
CSX RAILROAD YARD
PIER 7

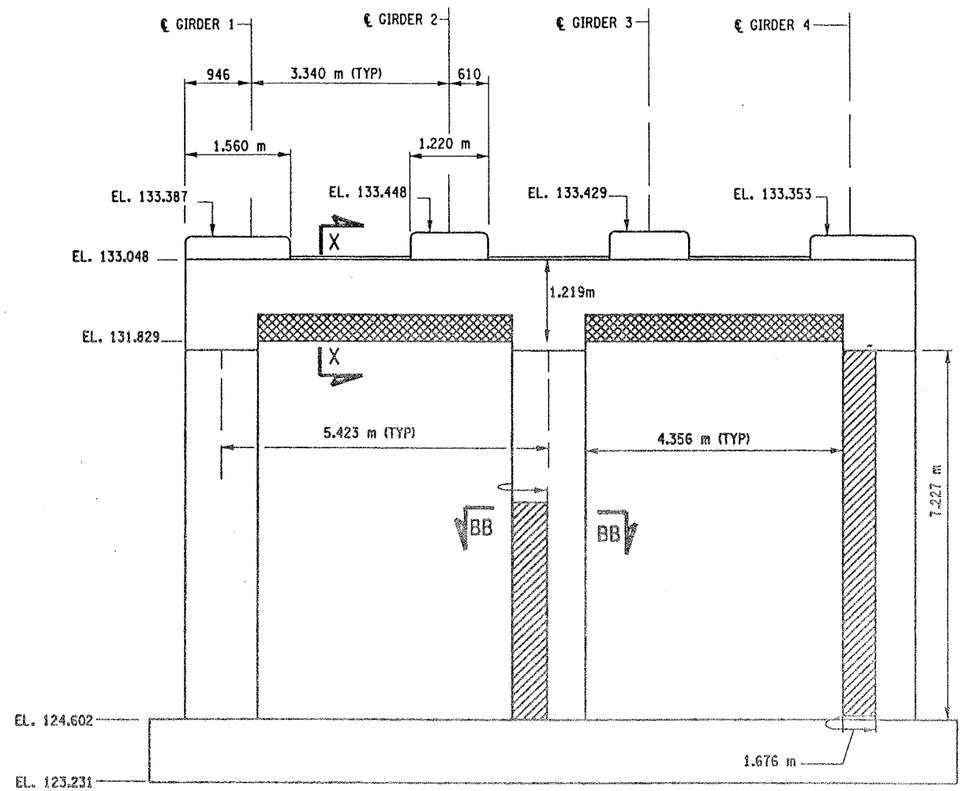
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.PTA	3	10/02	PR17-7N

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	323	432

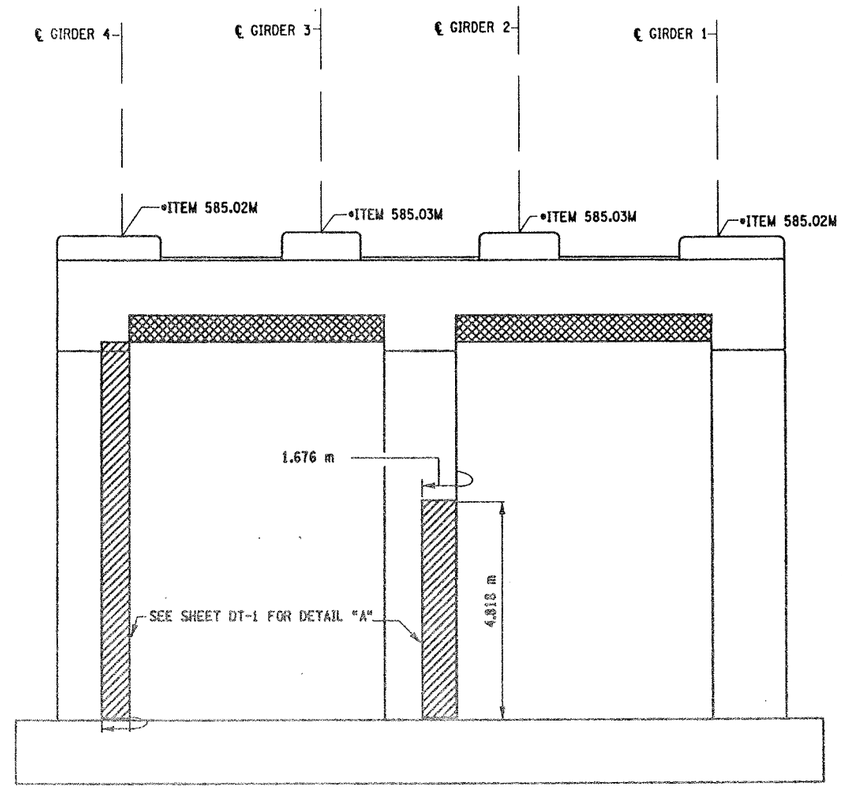
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093572



PIER 8 - FRONT FACE (LOOKING NORTH)

BIN 1093572

SCALE: 1 TO 50



PIER 8 - BACK FACE (LOOKING SOUTH)

BIN 1093572

SCALE: 1 TO 50

NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND ENGINEER PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS. SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES.
8. SEE DWG. PR17-12S FOR SECTION BB-BB.
9. SEE DWG. PR17-7N FOR SECTION X-X.
10. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND 582.07M.
11. FOR JACKING NOTES SEE DWG PR17-1S.

* PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVERHEAD PATCH MATERIAL. (SM)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

LIST OF ITEMS USED:

ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MATL. (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

AS BUILT REVISIONS

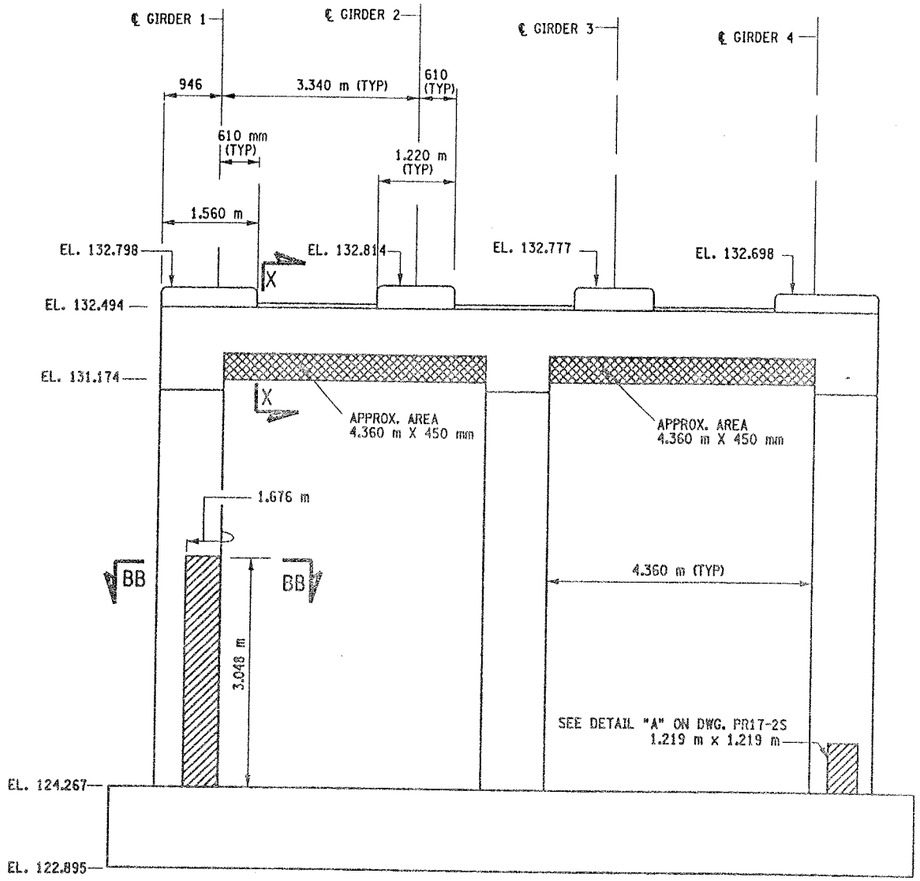
SIGNATURE DATE

INTERSTATE 481 NB
OVER
CSX RAILROAD YARD
PIER 8

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P8A	3	10/02	PR17-8N

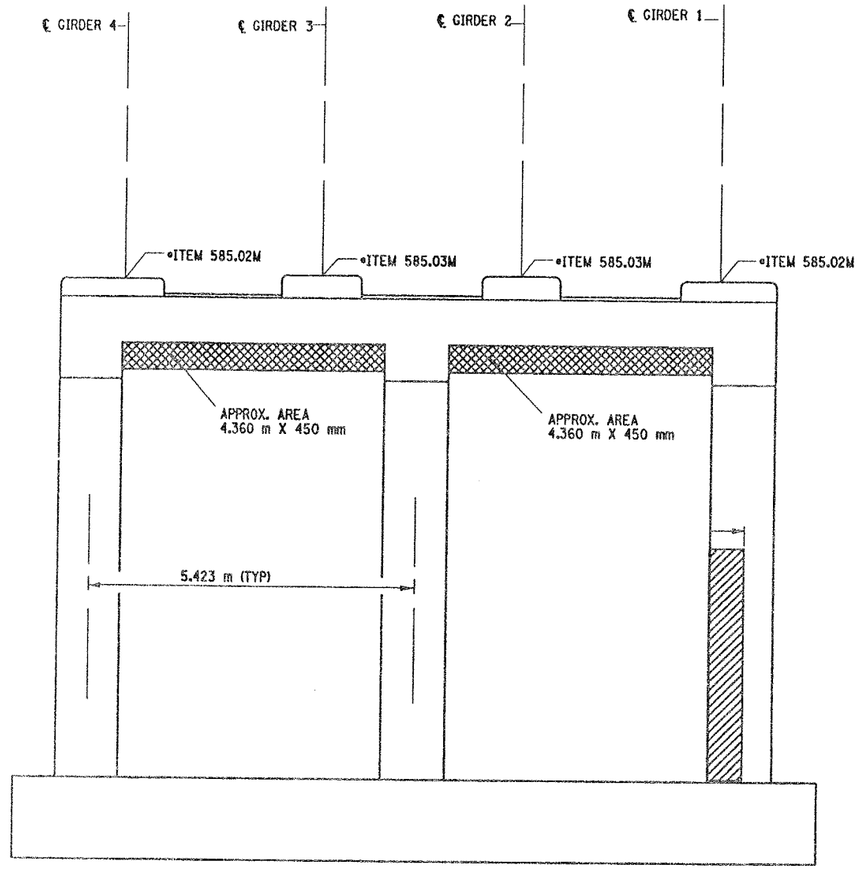
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____



PIER 9 - FRONT FACE (LOOKING NORTH)

BIN 1093572

SCALE: 1 TO 50



PIER 9 - BACK FACE (LOOKING SOUTH)

BIN 1093572

SCALE: 1 TO 50

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	324	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)

VARIOUS BRIDGES ON INTERSTATE 481

TOWNS OF DEWITT AND CICERO

ONONDAGA COUNTY

P.I.N. 305613 | B.I.N. 1093572

NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. PR-1S FOR BEARING RESTORATION NOTES. SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS.
8. SEE DWG. PR17- 12S FOR SECTION BB-BB.
9. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND 582.07M.
10. FOR JACKING NOTES SEE DWG PR17-1S
11. SEE DWG. PR17-7N FOR SECTION X - X.

• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE. (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)

LIST OF ITEMS USED:

ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT.L (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE ROUTE 481 NB
OVER CSX RAILROAD YARD
PIER 9

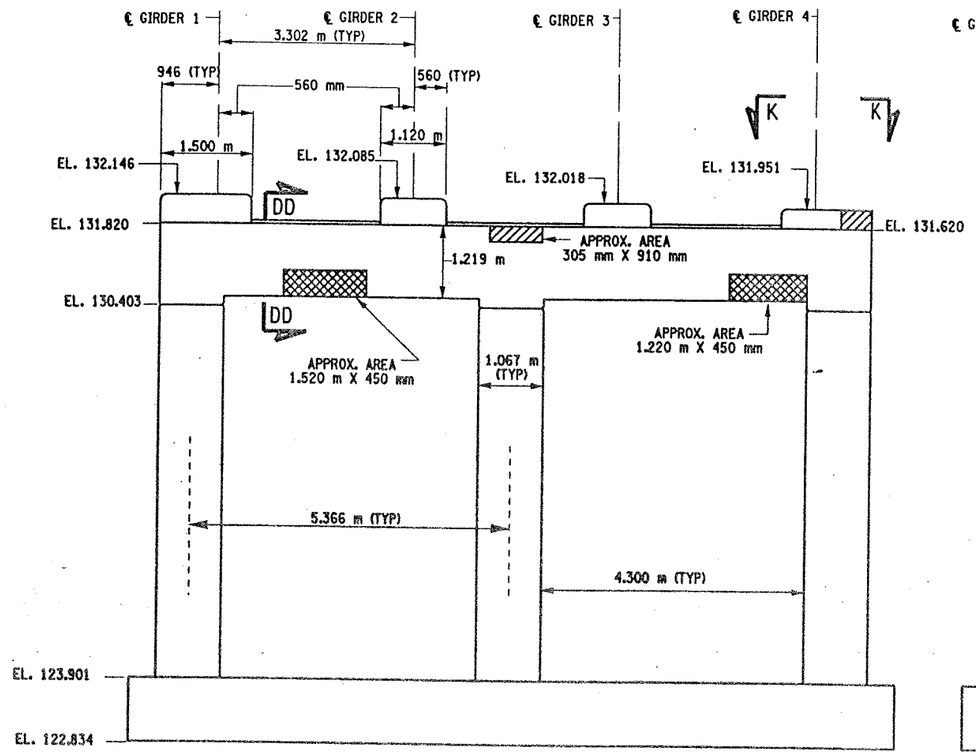
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P9A	3	10/02	PR17-9N

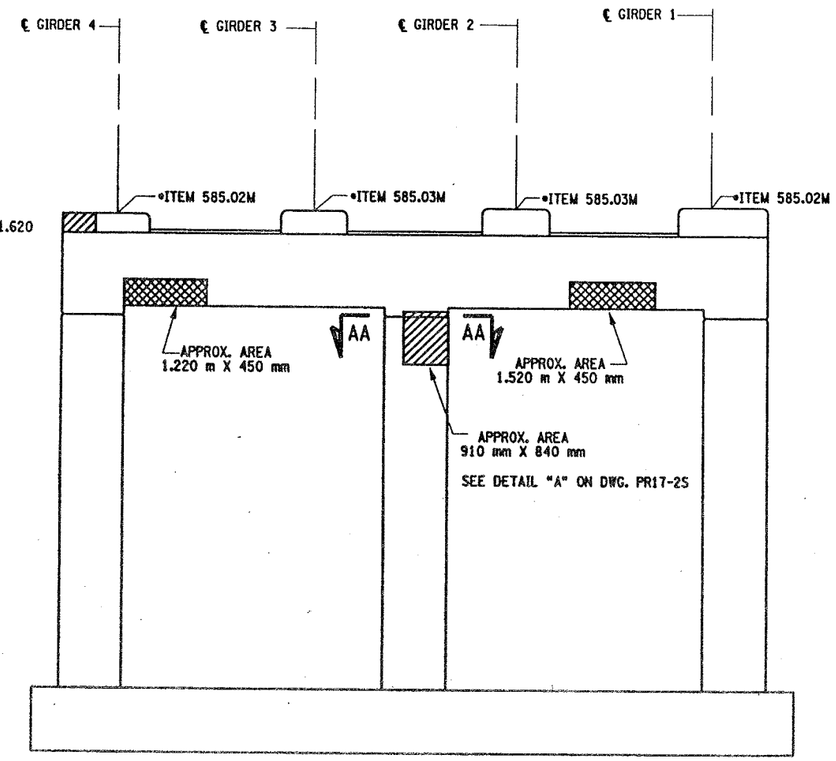
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	325	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093572



PIER 10 - FRONT FACE (LOOKING NORTH)
BIN 1093572
SCALE: 1 TO 50



PIER 10 - BACK FACE (LOOKING SOUTH)
BIN 1093572
SCALE: 1 TO 50

NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES. SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS.
8. FOR SECTION AA-AA SEE DWG. PR17-7N.
9. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND ITEM 582.07M.
10. FOR JACKING NOTES SEE DWG PR17-1S.

• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

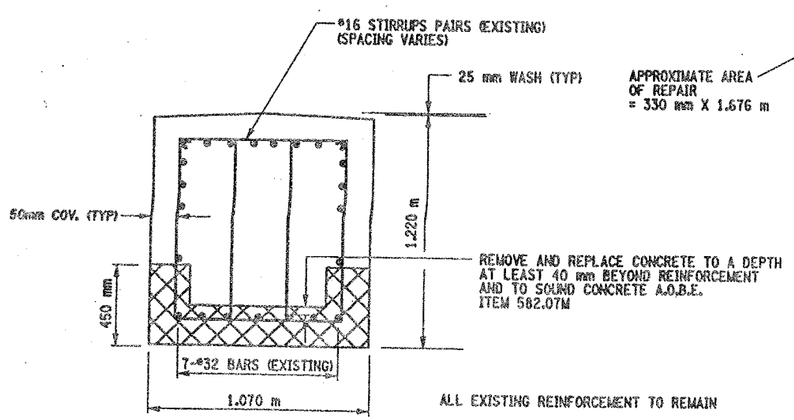
JACKING LOADS:

D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT

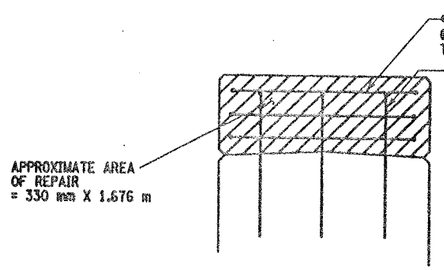
LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE (CM)

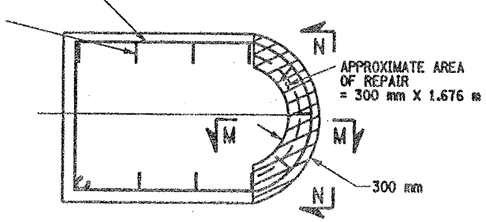
ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)



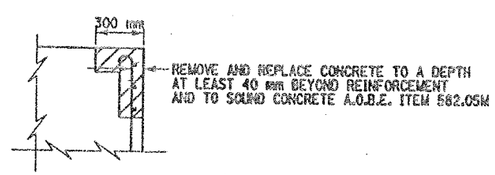
SECTION DD-DD
NOT TO SCALE



SECTION N-N
NOT TO SCALE



SECTION K-K
NOT TO SCALE



SECTION M-M
NOT TO SCALE

LIST OF ITEMS USED:

ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L. (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB
OVER
CSX RAILROAD YARD
PIER 10

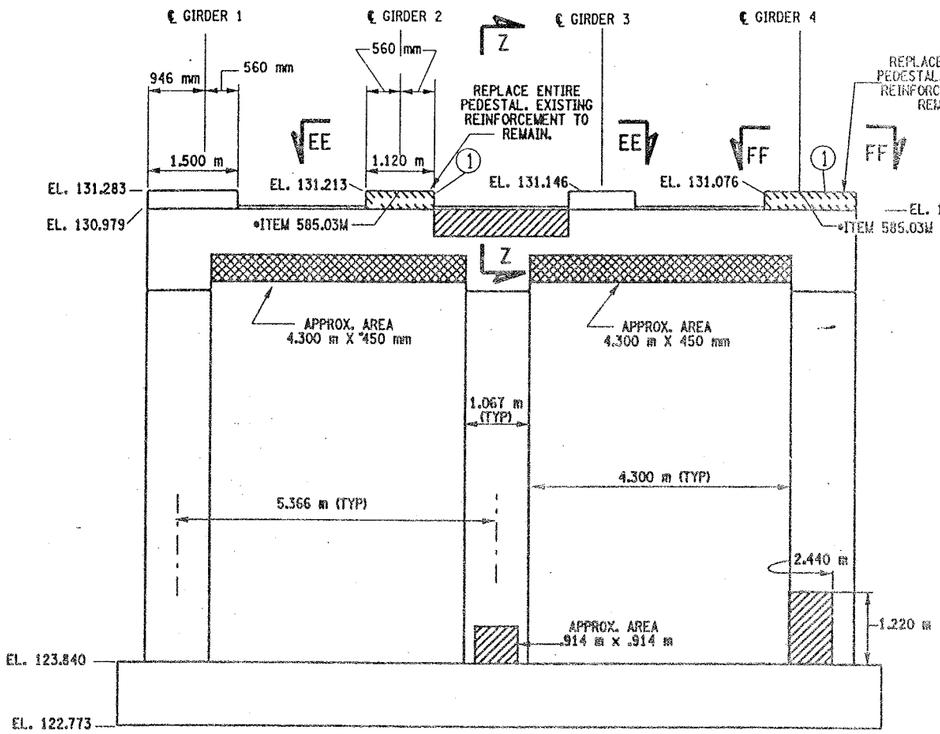
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P10	3	10/02	PR17-10N

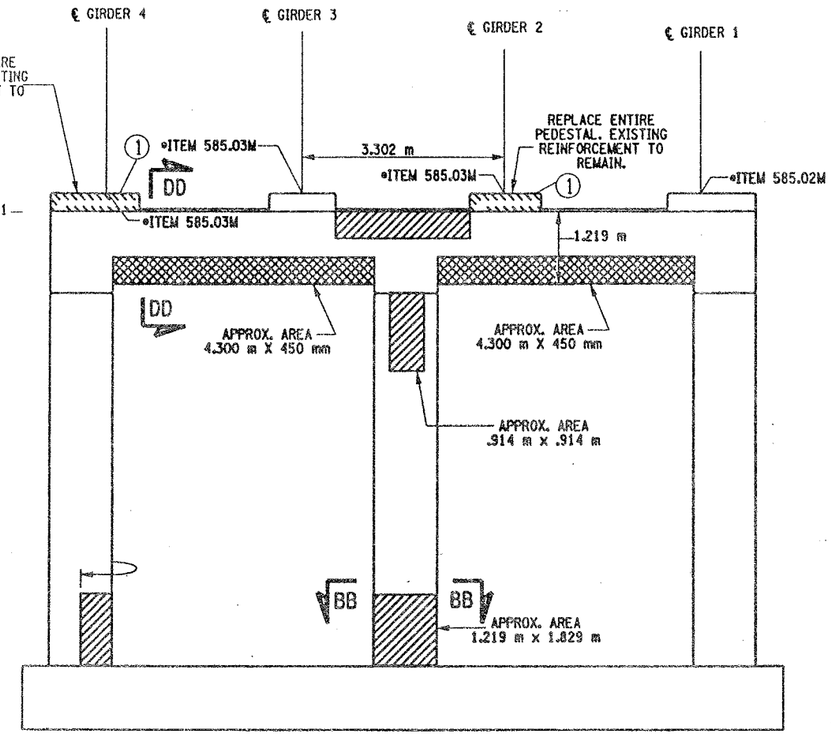
CHECKED BY
DRAFTED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	326	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 | B.I.N. 1093572

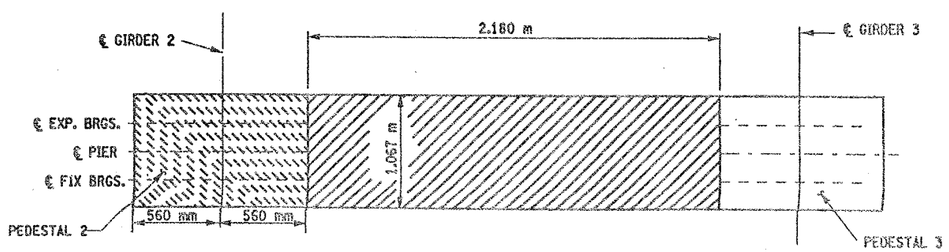


PIER 11 - FRONT FACE (LOOKING NORTH)
BIN 1093572
SCALE: 1 TO 50

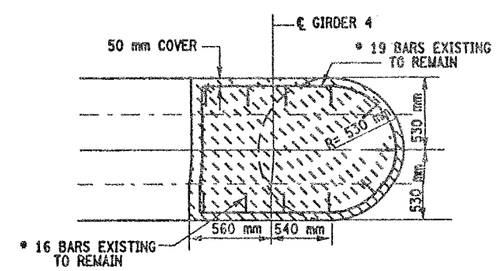


PIER 11- BACK FACE (LOOKING SOUTH)
BIN 1093572
SCALE: 1 TO 50

(1) INDICATES CONCRETE PLACEMENT NUMBER



SECTION EE-EE
NOT TO SCALE



SECTION FF-FF
NOT TO SCALE

CONCRETE TABLE (m³)		
PLACEMENT	QUANTITY	ITEM NO.
1	0.80	555.0105M

LIST OF ITEMS USED

ITEM 555.0105M - CONCRETE FOR STRUCTURES, CLASS A (CM)
ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 580.01M - REMOVAL OF STRUCTURAL CONCRETE (CM)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES. SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS.
8. SEE DWG PR17-10N FOR SECTION DD-DD.
9. SEE DWG. PR17-12S FOR SECTION BB-BB.
10. SEE DWG. PR17-7N FOR SECTION Z-Z.
11. PEDESTALS 2 AND 4 SHALL BE REPLACED TO EXISTING DIMENSIONS. ITEM 555.0105 M
12. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND ITEM 582.07M.
13. FOR JACKING NOTES SEE DWG PR17-1S.

• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT

LEGEND:

- ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE. (CM)
- ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)
- ITEM 580.01 M - REMOVAL OF STRUCTURAL CONCRETE. (CM) AND ITEM 555.0105 M - CONCRETE FOR STRUCTURES CLASS A. (CM)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB
OVER
CSX RAILROAD YARD
PIER 11

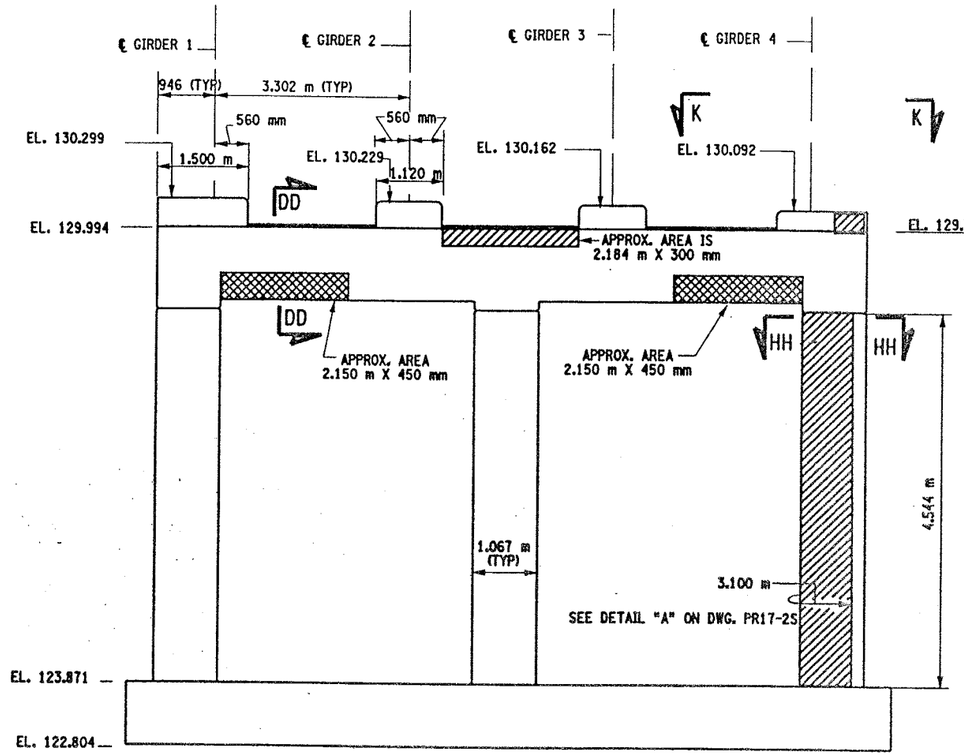
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P11	3	10/02	PR17-11N

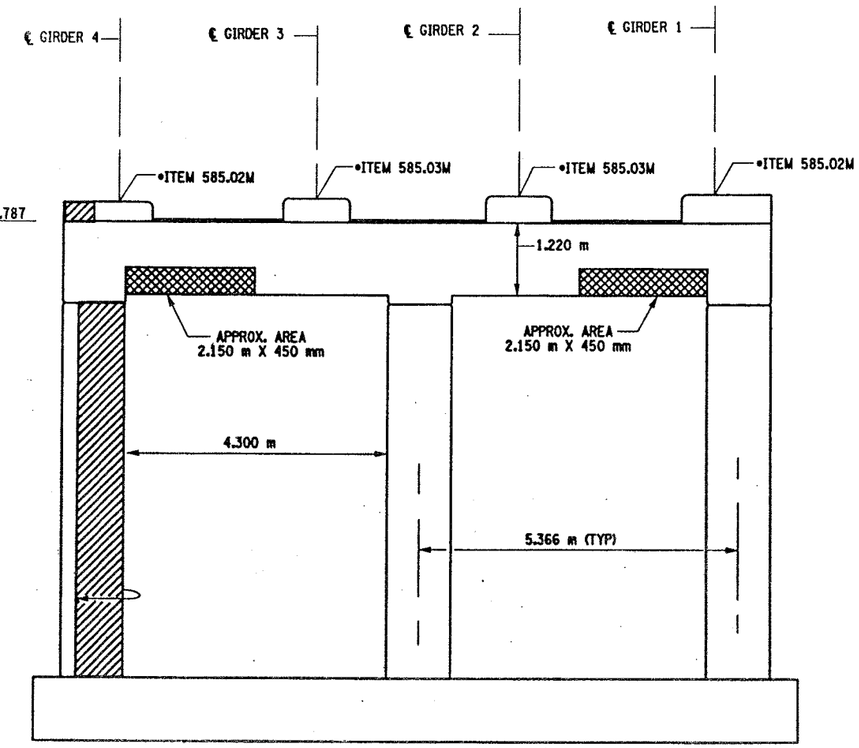
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	327	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093572



PIER 12 - FRONT FACE (LOOKING NORTH)
BIN 1093572
SCALE: 1 TO 50



PIER 12 - BACK FACE (LOOKING SOUTH)
BIN 1093572
SCALE: 1 TO 50

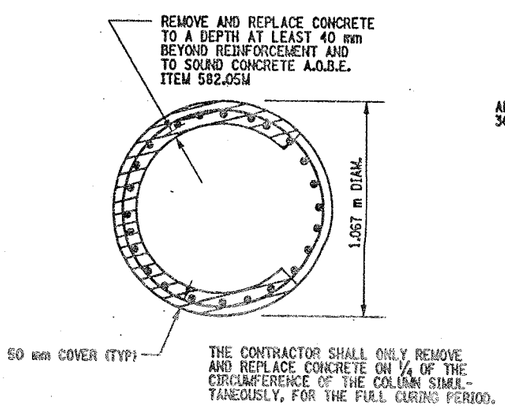
NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES. SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS.
8. SEE DWG PR17-10N FOR SECTION DD-DD.
9. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND 582.07M.
10. FOR JACKING NOTES SEE DWG PR17-1S.

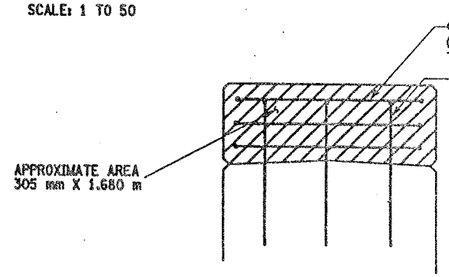
• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

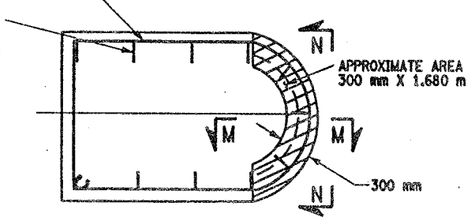
D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT



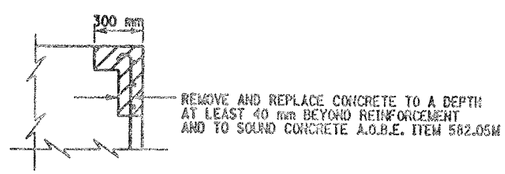
SECTION HH-HH
NOT TO SCALE



SECTION N-N
NOT TO SCALE



SECTION K-K
NOT TO SCALE



SECTION M-M
NOT TO SCALE

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE. (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)

LIST OF ITEMS USED:

ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB
OVER
CSX RAILROAD YARD
PIER 12

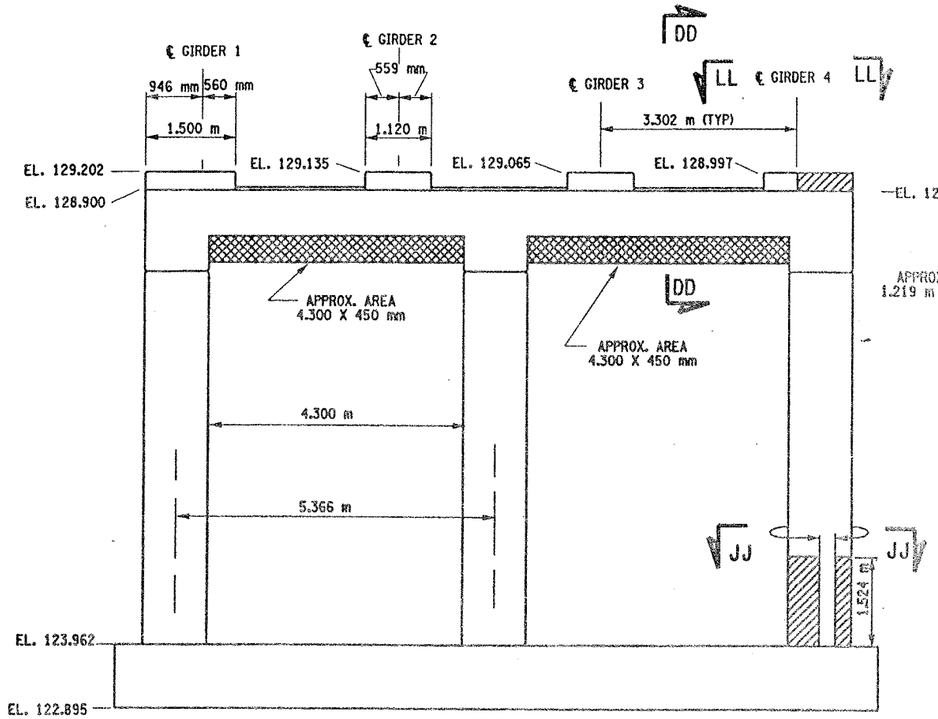
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P12	3	10/02	PR17-12N

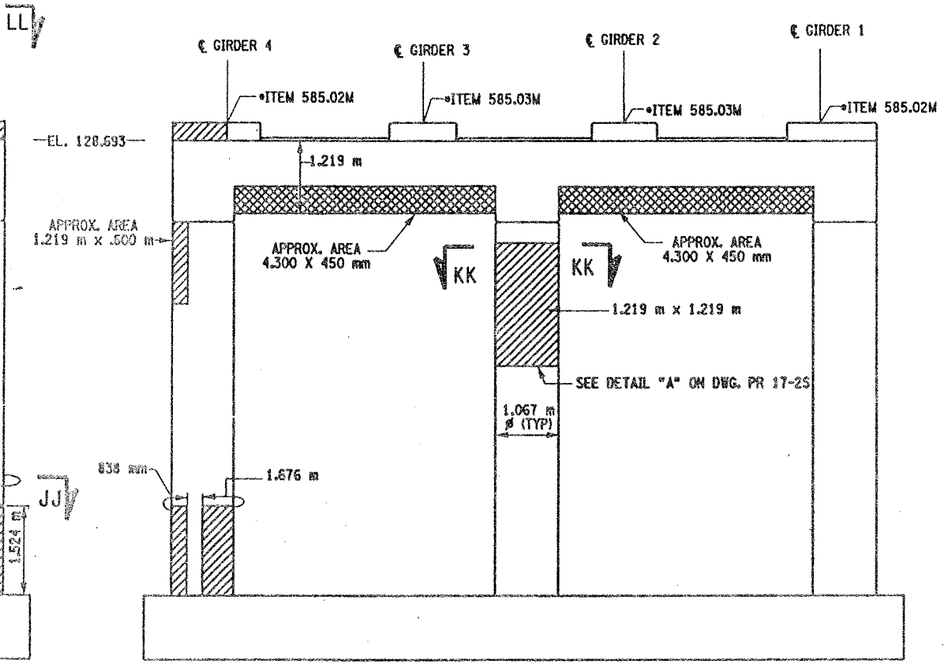
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	328	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093572



PIER 13 - FRONT FACE (LOOKING NORTH)
BIN 1093572
SCALE: 1 TO 50



PIER 13- BACK FACE (LOOKING SOUTH)
BIN 1093572
SCALE: 1 TO 50

NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
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6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES. SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS.
8. SEE DWG. PR 17-10N FOR SECTION DD-DD.
9. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND 582.07M.
10. FOR JACKING NOTES SEE DWG PR17-1S.

• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

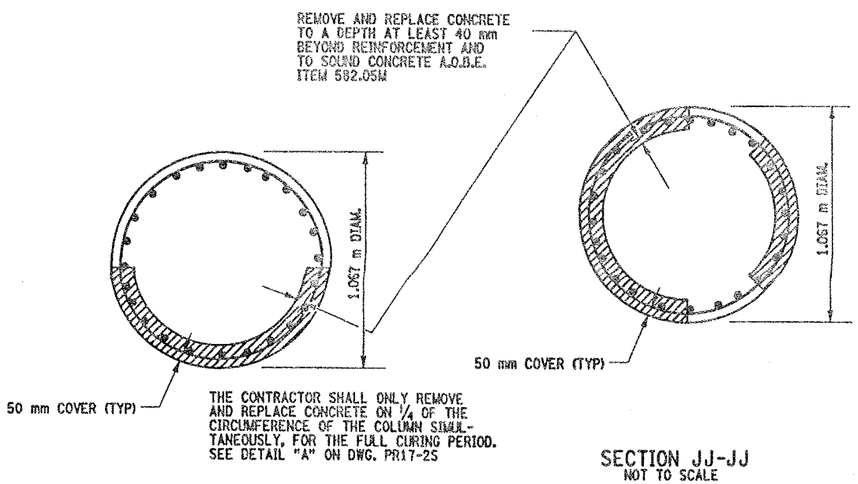
JACKING LOADS:

D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT

LEGEND:

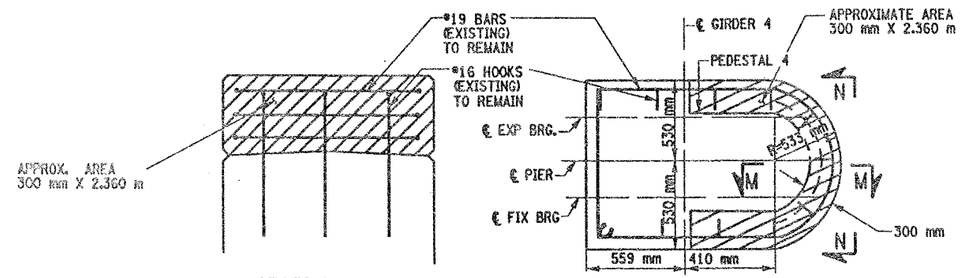
ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE. (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)



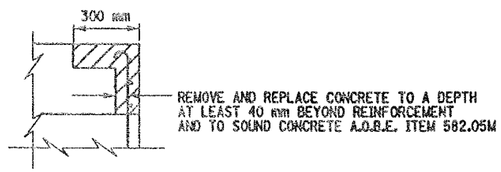
SECTION KK-KK
NOT TO SCALE

SECTION JJ-JJ
NOT TO SCALE



SECTION N-N
NOT TO SCALE

SECTION LL- LL
NOT TO SCALE



SECTION M-M
NOT TO SCALE

LIST OF ITEMS USED:

ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT.L (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB
OVER
CSX RAILROAD YARD
PIER 13

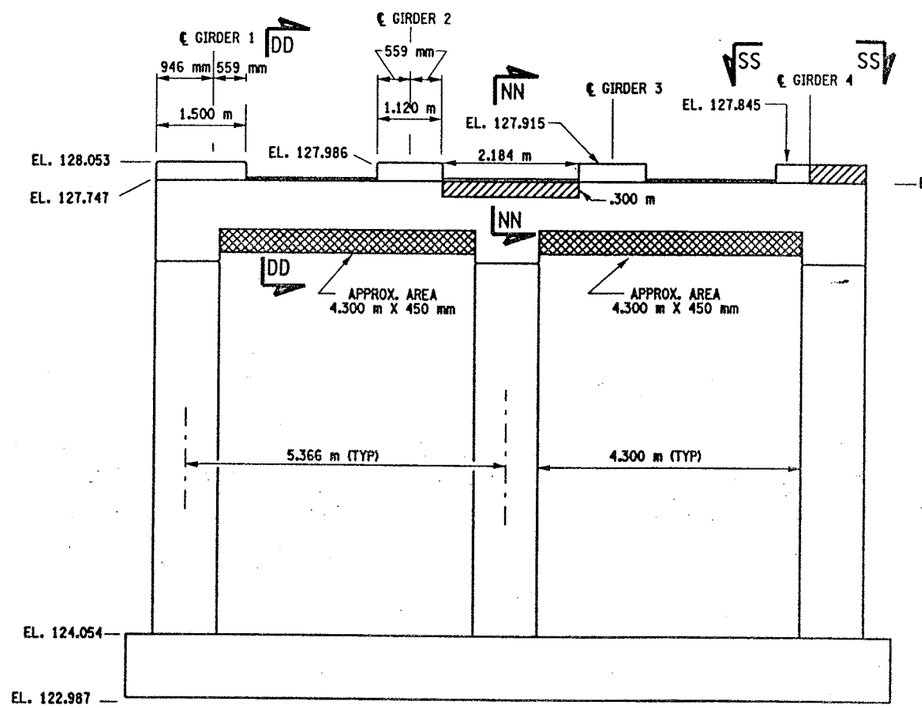
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P13	3	10/02	PR17-13N

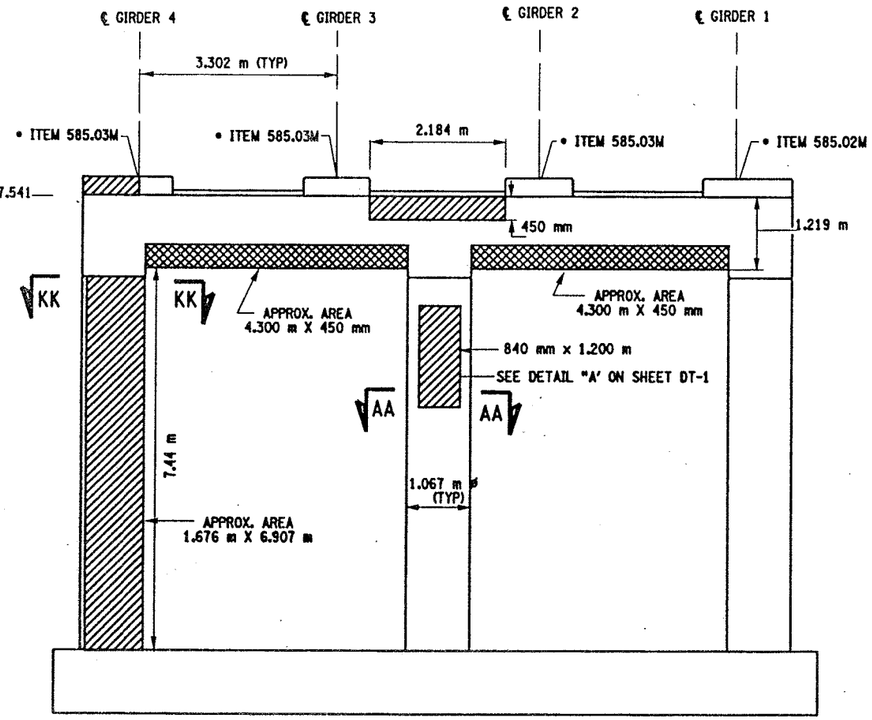
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	329	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093572



PIER 14 - FRONT FACE (LOOKING NORTH)
BIN 1093572
SCALE: 1 TO 50



PIER 14 - BACK FACE (LOOKING SOUTH)
BIN 1093572
SCALE: 1 TO 50

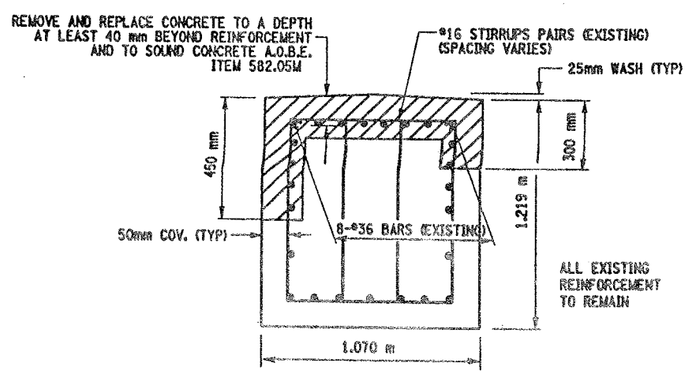
NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES. SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS.
8. SEE DWG. PR17-10N FOR SECTION DD-DD.
9. SEE DWG. PR17-7N FOR SECTION AA-AA.
10. SEE DWG. PR17-13N FOR SECTION KK-KK.
11. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND ITEM 582.07M.
12. FOR JACKING NOTES SEE DWG PR17-1S.

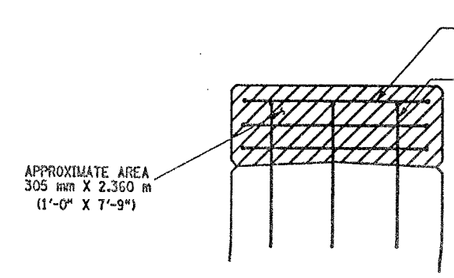
• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

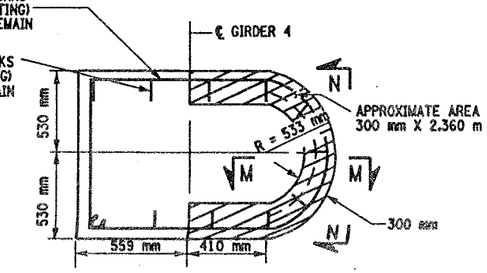
D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT



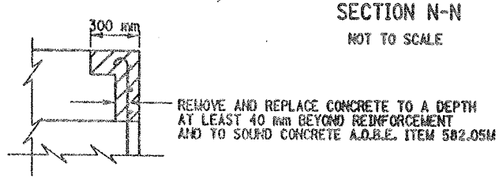
SECTION NN-NN
NOT TO SCALE



SECTION N-N
NOT TO SCALE



SECTION SS-SS
NOT TO SCALE



SECTION M-M
NOT TO SCALE

LIST OF ITEMS USED:

ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L. (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE. (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB
OVER
CSX RAILROAD YARD
PIER 14

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P14	3	10/02	PR17-14N

CHECKED BY
DRAFTED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	330	432

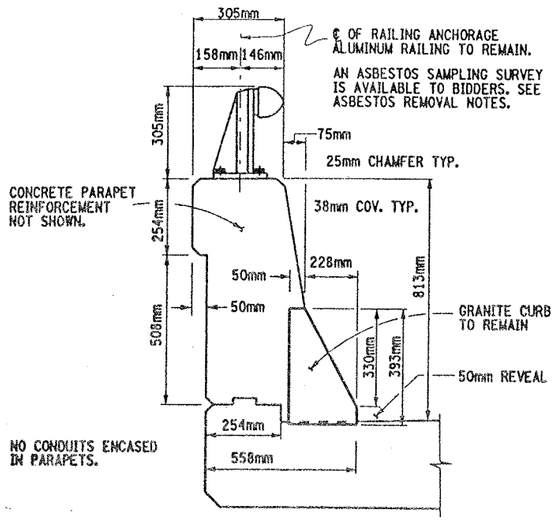
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)

VARIOUS BRIDGES ON INTERSTATE 481

TOWNS OF DEWITT AND CICERO

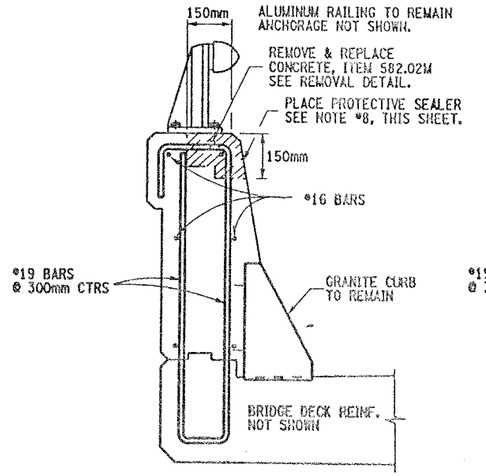
ONONDAGA COUNTY

P.I.N. 305613 B.I.N. 1093571 & 1093572



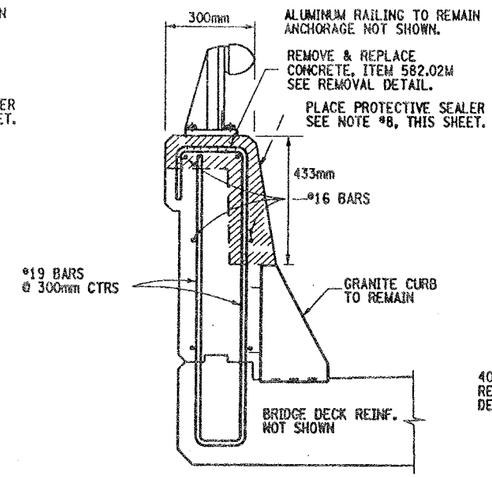
TYPICAL SECTION THRU SUPERSTRUCTURE
PARAPET CONCRETE DETAILS

NOT TO SCALE



(I) REPAIR DETAILS
150mmX150mm TOP

NOT TO SCALE



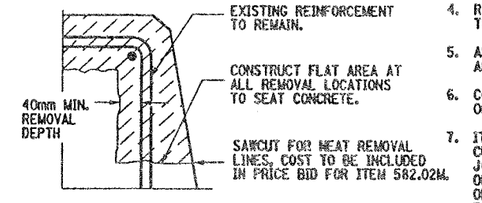
(II) REPAIR DETAILS
FULL TOP & FRONT FACE

NOT TO SCALE

CONCRETE REMOVAL NOTES:

REMOVE ALL DETERIORATED CONCRETE TO SOUND CONCRETE AND AT LEAST 40mm BEYOND ENCOUNTERED REINFORCEMENT BARS, AOBE. PAYMENT TO BE PAID UNDER ITEM 582.05M.

CONCRETE REMOVAL, SAWCUT 6mm DEPTH MINIMUM TO PRODUCE NEAT REMOVAL LINES, ALL COSTS SHALL BE INCLUDED IN PRICE BID FOR ITEM 582.05M.

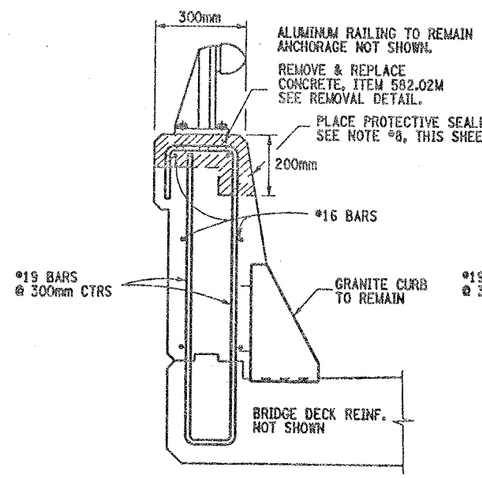


TYPICAL REMOVAL DETAIL

NOT TO SCALE

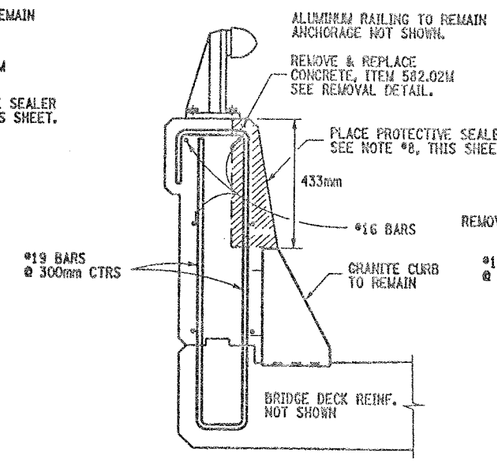
CONCRETE PARAPET REPAIR NOTES:

1. ALUMINUM RAILING TO REMAIN, ANCHORAGE NOT SHOWN.
2. EXISTING PARAPET REINFORCEMENT TO REMAIN.
3. GRANITE CURB TO REMAIN, ANCHOR BARS NOT SHOWN.
4. REMOVAL OF CONCRETE TO LIMITS SHOWN, AOBE. SEE TYPICAL REMOVAL DETAIL, THIS SHEET.
5. ALL DIMENSIONS SHOWN FOR CONCRETE REMOVAL ARE APPROXIMATE AND SHALL BE FIELD VERIFIED.
6. CONTRACTOR SHALL RESTORE CONCRETE PARAPET TO ORIGINAL DIMENSIONS.
7. IT IS DESIRABLE TO RETAIN ALL EXISTING GRANITE CURB, BUT AT SOME LOCATIONS ADJACENT TO THE JOINT BLOCK-OUTS IT MAY BE NECESSARY TO REPLACE OR REPAIR THE SECTION OF CURB, TO THE SATISFACTION OF THE ENGINEER. COST TO BE INCLUDE IN PRICE BID FOR ITEM 582.05M.
8. AFTER PARAPET REPAIRS ARE COMPLETED AND SUFFICIENT CURE TIME AS DECIDED BY ENGINEER, APPLY A COATING TYPE PROTECTIVE SEALERS WHICH MEETS MATERIAL SPECIFICATION 717-04. THIS PROTECTIVE SEALER SHALL BE APPLIED TO THE FRONT FACE AND TOP OF ALL PARAPETS (REPAIRED AREAS & ORIGINAL AREAS) TO ENSURE A UNIFORMED APPEARANCE. COST OF THIS SEALER TO BE INCLUDED IN PRICE BID FOR ITEM 18559.1696 M.



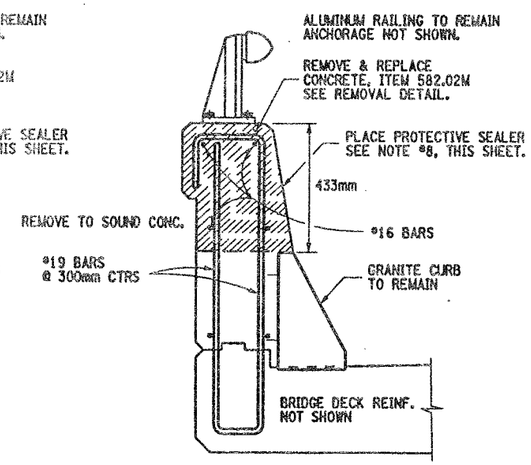
(III) REPAIR DETAILS
FULL TOP & 200mm FACE

NOT TO SCALE



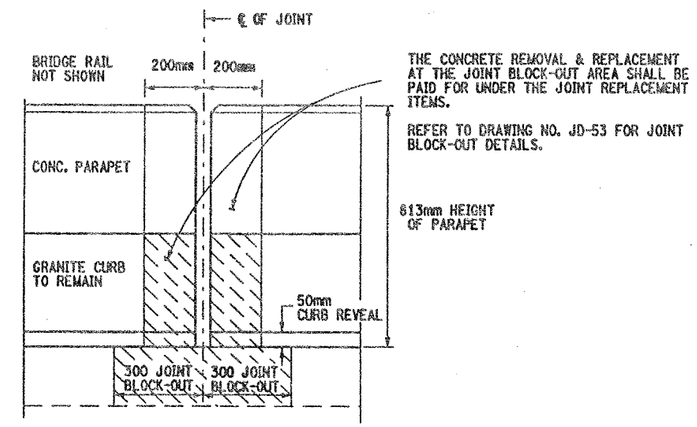
(IV) REPAIR DETAILS
FRONT FACE

NOT TO SCALE



(V) REPAIR DETAILS
FULL SECTION

NOT TO SCALE



THE CONCRETE REMOVAL & REPLACEMENT AT THE JOINT BLOCK-OUT AREA SHALL BE PAID FOR UNDER THE JOINT REPLACEMENT ITEMS.

REFER TO DRAWING NO. JD-53 FOR JOINT BLOCK-OUT DETAILS.

FRONT FACE PARAPET CONCRETE DETAIL
SHOWS TYPICAL CONC. REMOVAL AT JOINT

NOT TO SCALE

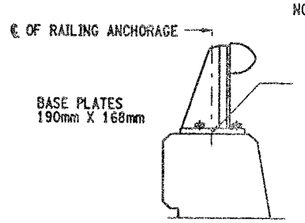
ASBESTOS MATERIAL REMOVAL NOTES:

THE REMOVAL OF ALL ASBESTOS CONTAINING CAULK (ITEM 210.5433M) SHALL BE COMPLETED PRIOR TO COMMENCEMENT OF ANY PARAPET REPAIR WORK.

THIS REMOVAL OF THE ASBESTOS CAULK SHALL BE PERFORMED AT EACH BRIDGE RAIL BASE PLATE ON BOTH N.B. & S.B. BRIDGES. (REMOVE ASBESTOS CALKING AT ALL RAIL BASE PLATES BOTH BRIDGES)

AFTER COMPLETION OF THE PARAPET REPAIRS INSTALL A CAULKING COMPOUND AROUND THE BASE PLATES OF THE RAILING WHICH MEETS MATERIAL SPECIF. 705-06 AND IS ACCEPTABLE TO THE ENGINEER. PAID UNDER ITEM 210.5433M.

REFER TO ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 FOR RAIL LAY-OUT DETAILS.



REMOVE EXISTING GRAY ASBESTOS CAULKING COMPOUND AT THE ALUMINUM RAILING BASE PLATES, IT IS ASSUMED THAT THE CAULK COMPOUND IS SURROUNDING (PERIMETER) THE RAILING BASE PLATES. THIS PERIMETER REMOVAL OPERATION SHALL BE PERFORM AT EACH RAILING BASE PLATE ON BOTH STRUCTURES.

HOWEVER, SOME CAULK MATERIAL MAY BE FOUND UNDER THE RAILING BASE PLATES. THIS CAULKING COMPOUND UNDER THE BASE PLATES SHALL BE REMOVED ONLY AT LOCATIONS WHERE THE PARAPET CONCRETE REPAIRS WILL DISTURB THE MATERIAL (REMOVAL AS ENCOUNTERED).

ALL COSTS TO BE PAID UNDER ITEM 210.5433M. SEE ASBESTOS MATERIAL REMOVAL NOTES, THIS SHEET.

TYPICAL BRIDGE RAIL DETAIL

NOT TO SCALE

ITEMS USED:

ITEM 582.05M	- REMOVAL OF STRUCTURAL CONCRETE REPLACE WITH CLASS "A" CONCRETE (CM)
ITEM 210.5433M	- REMOVAL & DISPOSAL OF ASBESTOS CONTAINING CAULK (BV 12) (L.S)
ITEM 18559.1696M	- PROTECTIVE SEALING OF STRUCTURAL CONCRETE (SM)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 OVER CSX RR YARD

PARAPET REPAIR DETAILS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AB.R1A	3	10/02	PW17-1

ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	331	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093571 & 1093572

PARAPET REPAIR TABLE (ITEM 582.05M)

BIN 1093571	STATION TO STATION	RIGHT SIDE (EAST)	LEFT SIDE (WEST)	REMARKS
SPAN 1	6+626.288 TO 6+627.588	1.300m		(I) REPAIR PROCEDURE
	6+653.795 TO 6+654.495	.700m		(V) REPLACE FULL SECTION
	6+653.595 TO 6+654.495		.900m	(V) REPLACE FULL SECTION
SPAN 2	6+654.895 TO 6+655.505	.600m		(V) REPLACE FULL SECTION
	6+654.895 TO 6+655.505		.600m	(V) REPLACE FULL SECTION
	6+654.895 TO 6+664.895	10.000m		(I) REPAIR PROCEDURE
	6+669.995 TO 6+673.695	3.700m		(I) REPAIR PROCEDURE
SPAN 3	6+731.266 TO 6+735.466	4.200m		(I) REPAIR PROCEDURE
	6+753.266 TO 6+754.266	1.000m		(V) REPLACE FULL SECTION
	6+753.266 TO 6+754.266		1.000m	(V) REPLACE FULL SECTION
SPAN 4	6+754.666 TO 6+755.666	1.000m		(V) REPLACE FULL SECTION
	6+760.466 TO 6+769.866		9.400m	(I) REPAIR PROCEDURE
	6+760.666 TO 6+778.966	18.300m		(I) REPAIR PROCEDURE*
	6+790.116 TO 6+791.616		1.500m	(I) REPAIR PROCEDURE (BACKFACE)
	6+789.316 TO 6+801.316	12.000m		(I) REPAIR PROCEDURE
	6+794.116 TO 6+803.616		9.500m	(III) REPAIR PROCEDURE
	6+813.616 TO 6+814.616	1.000m		(V) REPLACE FULL SECTION
	6+813.616 TO 6+814.616		1.000m	(IV) REPAIR PROCEDURE
SPAN 5	6+815.016 TO 6+816.016	1.000m		(V) REPLACE FULL SECTION
	6+823.166 TO 6+871.166	48.000m		(I) REPAIR PROCEDURE
	6+870.966 TO 6+874.966	4.000m		(V) REPLACE FULL SECTION
SPAN 6	6+875.366 TO 6+876.366	1.000m		(V) REPLACE FULL SECTION
	6+875.366 TO 6+895.366		20.000m	(IV) REPAIR PROCEDURE
	6+875.317 TO 6+935.317	60.000m		(III) REPAIR PROCEDURE
	6+908.317 TO 6+914.317		6.000m	(IV) REPAIR PROCEDURE
	6+920.517 TO 6+928.517		8.000m	(IV) REPAIR PROCEDURE
	6+923.317 TO 6+935.317		12.000m	(IV) REPAIR PROCEDURE
SPAN 7	6+935.717 TO 6+947.217	11.500m		(IV) REPAIR PROCEDURE
	6+949.917 TO 6+951.417	1.500m		(I) REPAIR PROCEDURE
	6+952.112 TO 6+967.112		15.000m	(IV) REPAIR PROCEDURE
	6+967.012 TO 6+969.612	2.600m		(IV) REPAIR PROCEDURE
SPAN 8	6+973.512 TO 7+010.907	37.400m		(I) REPAIR PROCEDURE
	6+981.907 TO 6+990.407		8.500m	(IV) REPAIR PROCEDURE
	6+996.907 TO 7+010.907		14.000m	(IV) REPAIR PROCEDURE
SPAN 9	7+011.307 TO 7+048.702		37.400m	(II) REPAIR PROCEDURE
SPAN 10	7+070.325 TO 7+074.325		4.000m	(IV) REPAIR PROCEDURE
SPAN 11	7+091.825 TO 7+098.825	7.000m		(I) REPAIR PROCEDURE
	7+102.525 TO 7+106.025	3.500m		(I) REPAIR PROCEDURE
	7+100.325 TO 7+108.325		8.000m	(I) REPAIR PROCEDURE
	7+109.325 TO 7+110.825	1.500m		(I) REPAIR PROCEDURE
	7+112.725 TO 7+128.725		16.000m	(I) REPAIR PROCEDURE
	7+114.825 TO 7+117.825	3.000m		(I) REPAIR PROCEDURE
SPAN 12	7+129.125 TO 7+166.825		37.700m	(II) REPAIR PROCEDURE
	7+131.925 TO 7+137.925	6.000m		(III) REPAIR PROCEDURE
	7+158.025 TO 7+159.525	1.500m		(III) REPAIR PROCEDURE
SPAN 13	7+167.225 TO 7+204.925	37.700m		(I) REPAIR PROCEDURE
	7+172.225 TO 7+184.225		12.000m	(I) REPAIR PROCEDURE
	7+189.925 TO 7+204.925		15.000m	(I) REPAIR PROCEDURE
SPAN 14	7+205.325 TO 7+243.025	37.700m		(I) REPAIR PROCEDURE
	7+205.325 TO 7+243.025		37.700m	(III) REPAIR PROCEDURE
SPAN 15	7+243.425 TO 7+281.530		38.100m	(II) REPAIR PROCEDURE
	7+248.530 TO 7+254.330	5.800m		(III) REPAIR PROCEDURE
	7+257.430 TO 7+262.030	4.600m		(I) REPAIR PROCEDURE
	7+265.030 TO 7+266.530	1.500m		(I) REPAIR PROCEDURE
	7+268.230 TO 7+271.730	3.500m		(I) REPAIR PROCEDURE

* FULL SECTION REPLACEMENT AS DIRECTED BY ENGINEER TO INCLUDE IF NECESSITY, REPLACEMENT OR REPAIR OF THE GRANITE CURB. ALL COST TO BE INCLUDED IN BID PRICE FOR ITEM 582.05M.

(BACKFACE) INDICATES REPAIR AREA IS ON THE OUTSIDE OR BACKFACE OF PARAPET. CAUTION MUST BE TAKEN WHEN WORKING OVER R.R. TRACKS.

PARAPET REPAIR TABLE (ITEM 582.05M)

BIN 1093572	STATION TO STATION	RIGHT SIDE (EAST)	LEFT SIDE (WEST)	REMARKS
SPAN 1	6+578.084 TO 6+582.084	4.000m		(I) REPAIR PROCEDURE
	6+592.589 TO 6+594.789	2.200m		(I) REPAIR PROCEDURE
	6+593.884 TO 6+600.884		7.000m	(I) REPAIR PROCEDURE (BACKFACE)
	6+597.489 TO 6+599.489	2.000m		(I) REPAIR PROCEDURE
	6+600.581 TO 6+608.297	7.700m		(I) REPAIR PROCEDURE
	6+602.697 TO 6+608.297		5.600m	(I) REPAIR PROCEDURE (BACKFACE)
SPAN 2	6+608.697 TO 6+620.197		11.500m	(I) REPAIR PROCEDURE (BACKFACE)
	6+639.497 TO 6+641.497		2.000m	(I) REPAIR PROCEDURE (BACKFACE)
	6+646.997 TO 6+653.497		6.500m	(I) REPAIR PROCEDURE (BACKFACE)
SPAN 3	6+662.597 TO 6+664.597		2.000m	(II) REPAIR PROCEDURE
	6+676.097 TO 6+684.097	8.000m		(I) REPAIR PROCEDURE
	6+697.097 TO 6+698.097	1.000m		(I) REPAIR PROCEDURE
	6+707.070 TO 6+708.070	1.000m		(V) REPLACE FULL SECTION *
	6+707.070 TO 6+708.070		1.000m	(V) REPLACE FULL SECTION *
SPAN 4	6+708.470 TO 6+709.470	1.000m		(V) REPLACE FULL SECTION
	6+715.570 TO 6+757.070	41.500m		(I) REPAIR PROCEDURE
	6+719.070 TO 6+728.070		9.000m	(I) REPAIR PROCEDURE
	6+750.420 TO 6+768.420		18.000m	(III) REPAIR PROCEDURE
	6+767.420 TO 6+768.420		1.000m	(V) REPLACE FULL SECTION
SPAN 5	6+768.820 TO 6+770.320	1.500m		(V) REPLACE FULL SECTION
	6+773.120 TO 6+786.120	13.000m		(I) REPAIR PROCEDURE
	6+778.920 TO 6+783.220		4.300m	(I) REPAIR PROCEDURE
	6+799.620 TO 6+802.120		2.500m	(I) REPAIR PROCEDURE
	6+804.620 TO 6+815.620	11.000m		(I) REPAIR PROCEDURE
	6+826.771 TO 6+828.771		2.000m	(V) REPLACE FULL SECTION
SPAN 6	6+829.171 TO 6+830.171	1.000m		(V) REPLACE FULL SECTION
	6+829.171 TO 6+830.171		1.000m	(V) REPLACE FULL SECTION
	6+830.171 TO 6+888.771		58.600m	(II) REPAIR PROCEDURE
	6+846.971 TO 6+849.971	3.000m		(I) REPAIR PROCEDURE
	6+855.621 TO 6+889.121	33.500m		(I) REPAIR PROCEDURE
SPAN 7	6+889.126 TO 6+926.916	37.400m		(I) REPAIR PROCEDURE
	6+892.221 TO 6+897.521		5.300m	(I) REPAIR PROCEDURE
	6+903.321 TO 6+907.621		4.300m	(I) REPAIR PROCEDURE
	6+909.721 TO 6+911.721		2.000m	(I) REPAIR PROCEDURE
	6+916.916 TO 6+926.916		10.000m	(III) REPAIR PROCEDURE
SPAN 8	6+927.316 TO 6+964.712	37.400m		(IV) REPAIR PROCEDURE
SPAN 9	6+965.112 TO 6+996.112	31.000m		(I) REPAIR PROCEDURE
SPAN 10	7+014.602 TO 7+023.602		9.000m	(II) REPAIR PROCEDURE
	7+020.302 TO 7+040.302	20.000m		(II) REPAIR PROCEDURE
SPAN 11	7+044.302 TO 7+046.302		2.000m	(I) REPAIR PROCEDURE
	7+060.397 TO 7+067.697	7.300m		(I) REPAIR PROCEDURE
SPAN 12	7+099.892 TO 7+101.892	2.000m		(I) REPAIR PROCEDURE
SPAN 13	7+119.492 TO 7+125.492		6.000m	(I) REPAIR PROCEDURE
	7+168.283 TO 7+186.283		18.000m	(I) REPAIR PROCEDURE
	7+168.983 TO 7+191.483	22.500m		(I) REPAIR PROCEDURE
SPAN 14	7+171.093 TO 7+191.483	20.400m		(I) REPAIR PROCEDURE
	7+165.783 TO 7+179.283		13.500m	(I) REPAIR PROCEDURE
SPAN 15	7+197.883 TO 7+199.883		2.000m	(I) REPAIR PROCEDURE
	7+198.283 TO 7+229.683	31.400m		(I) REPAIR PROCEDURE

GENERAL NOTES:

WORK ADJACENT TO JOINT BLOCK-OUT (200mm) SHALL BE INCLUDED IN THE BRIDGE JOINT REPLACEMENT ITEMS. SEE DRAWING NO. JD-53 FOR JOINT BLOCK-OUT REMOVAL DETAILS.

SOME REPAIRS ARE ON THE BACK FACE OF THE PARAPETS SOME OF THIS WORK MAY BE OVER THE RAIL ROAD TRACKS.

REFER TO DRAWING NO. PW17-1 FOR CONCRETE REMOVAL DETAILS AND NOTES.

STATIONING AND DIMENSIONS SHOWN FOR CONCRETE REMOVAL ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY CONTRACTOR AND ENGINEER.

REFER TO RECONSTRUCTION NOTES ON DRAWING NO. GN-1.

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481
OVER
CSX RAILROAD YARD

TABLE OF PARAPET REPAIRS

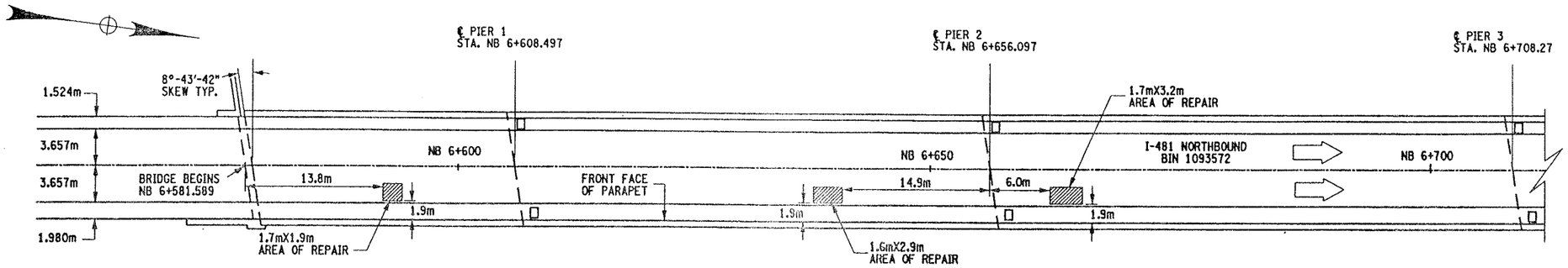
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

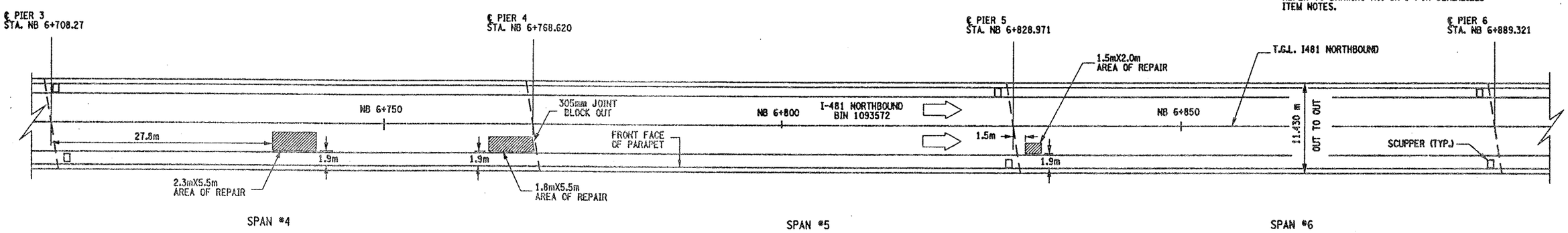
FILENAME	REGION	DATE	DRAWING NO.
305613AB.R1A	3	10/02	PW17-2

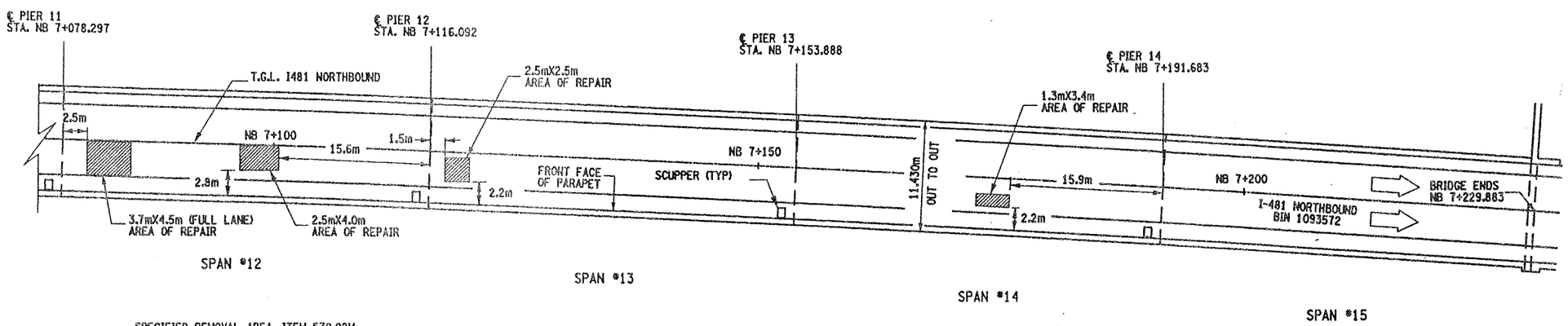
ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	332	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 | B.I.N. 1093572







PLAN VIEW OF SPOT DECK REPAIRS

NOT TO SCALE

GENERAL NOTES:

THIS WORK ONLY PERTAINS TO BIN 1093572 NB.

THE AREAS SHOWN ARE THE RESULTS OF FIELD INVESTIGATIONS AND ARE ONLY APPROXIMATE. THE ACTUAL LIMITS SHALL BE AS DIRECTED BY ENGINEER.

NO FULL DEPTH SLAB REPAIRS ARE EXPECTED AT THESE LOCATIONS.

REFER TO DRAWING NO. GN-1 FOR SERIALIZED ITEM NOTES.

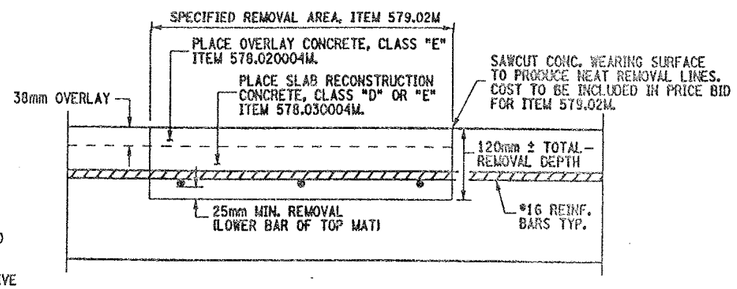
REMOVAL NOTES:

ORIGINAL BRIDGE DECK 203mm MONOLITHIC SLAB. A 38mm CONC. OVERLAY HAS BEEN ADDED.

THESE LOCATIONS ARE CURRENTLY FILLED WITH ASPHALT (BLACKTOP). DEPTH OF ASPHALT IS UNKNOWN, ESTIMATED AT @ 38mm. THE REMOVAL OF THE ASPHALT AND CONCRETE TO LIMITS SHOWN TO BE PAID UNDER ITEM 579.02M.

REMOVE CONCRETE TO LIMITS SHOWN AND TO SOUND CONCRETE, AS ORDER BY ENGINEER.

ALL AREAS THAT ARE REPAIRED SHALL ALSO RECEIVE ITEM 558.01 - TRANSVERSE SAWCUT GROOVING AND ITEM 18559.1896M - PROTECTIVE SEALING.



CROSS SECTION VIEW THROUGH REPAIR LOCATION

NOT TO SCALE

ITEMS USED:

ITEM 558.01M - TRANSVERSE SAWCUT GROOVING (SM)
ITEM 18559.1896M - PROTECTIVE SEALING FOR STRUCT. CONC. (SM)
ITEM 578.020004M - OVERLAY CONCRETE, CLASS "E" (SM)
ITEM 578.030004M - SLAB RECONSTRUCTION CONCRETE, CLASS "D" OR "E" (SM)
ITEM 579.02M - REINFORCING BAR EXPOSURE (SM)

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE | DATE

INTERSTATE 481
OVER
CSX RAILROAD YARD
BRIDGE DECK REPAIRS

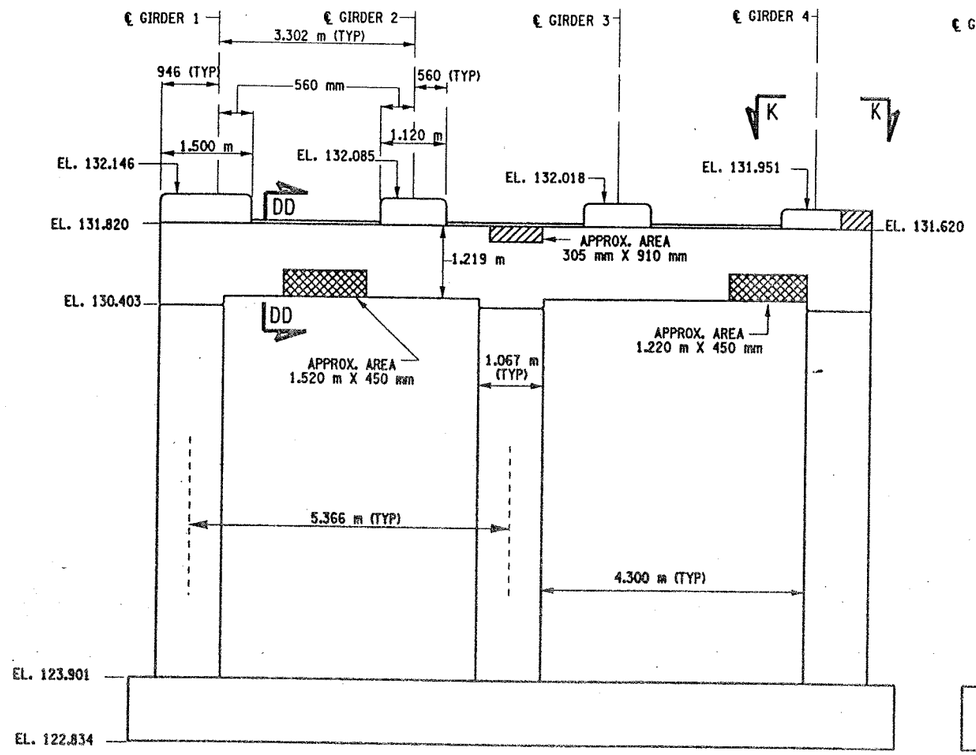
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AB.R1A	3	10/02	DR17-1

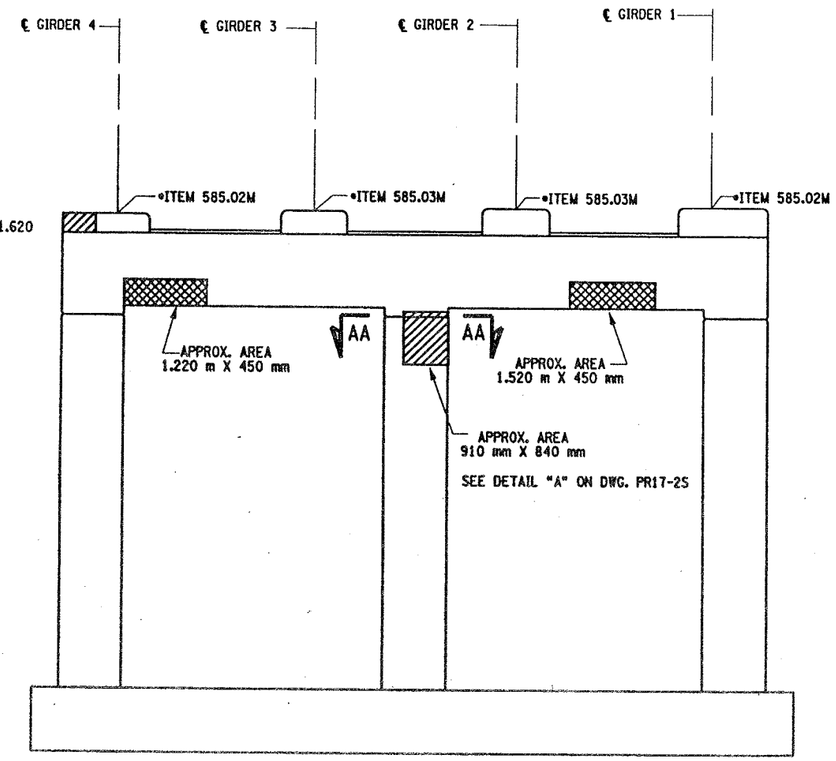
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	325	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093572



PIER 10 - FRONT FACE (LOOKING NORTH)
BIN 1093572
SCALE: 1 TO 50



PIER 10 - BACK FACE (LOOKING SOUTH)
BIN 1093572
SCALE: 1 TO 50

NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES. SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS.
8. FOR SECTION AA-AA SEE DWG. PR17-7N.
9. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND ITEM 582.07M.
10. FOR JACKING NOTES SEE DWG PR17-1S.

• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

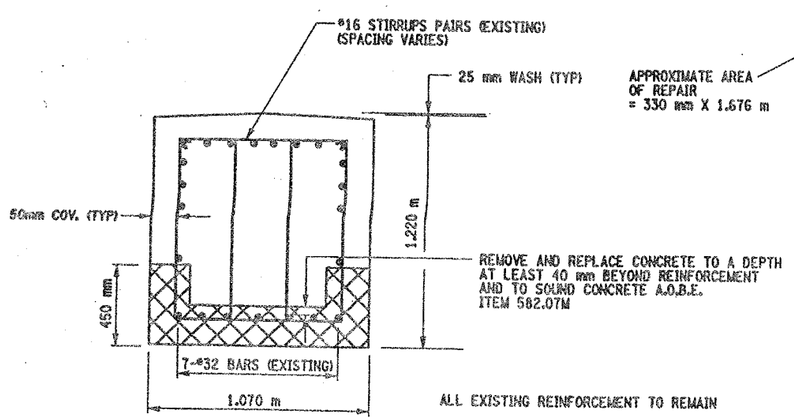
JACKING LOADS:

D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT

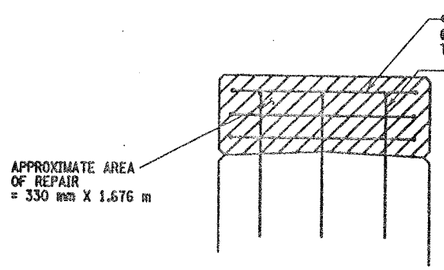
LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE (CM)

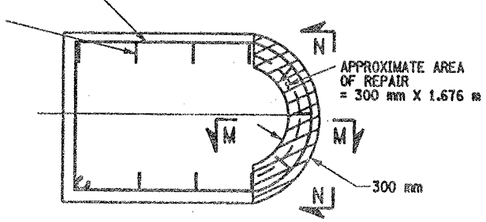
ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)



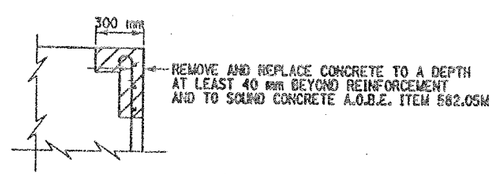
SECTION DD-DD
NOT TO SCALE



SECTION N-N
NOT TO SCALE



SECTION K-K
NOT TO SCALE



SECTION M-M
NOT TO SCALE

LIST OF ITEMS USED:

ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L. (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB
OVER
CSX RAILROAD YARD
PIER 10

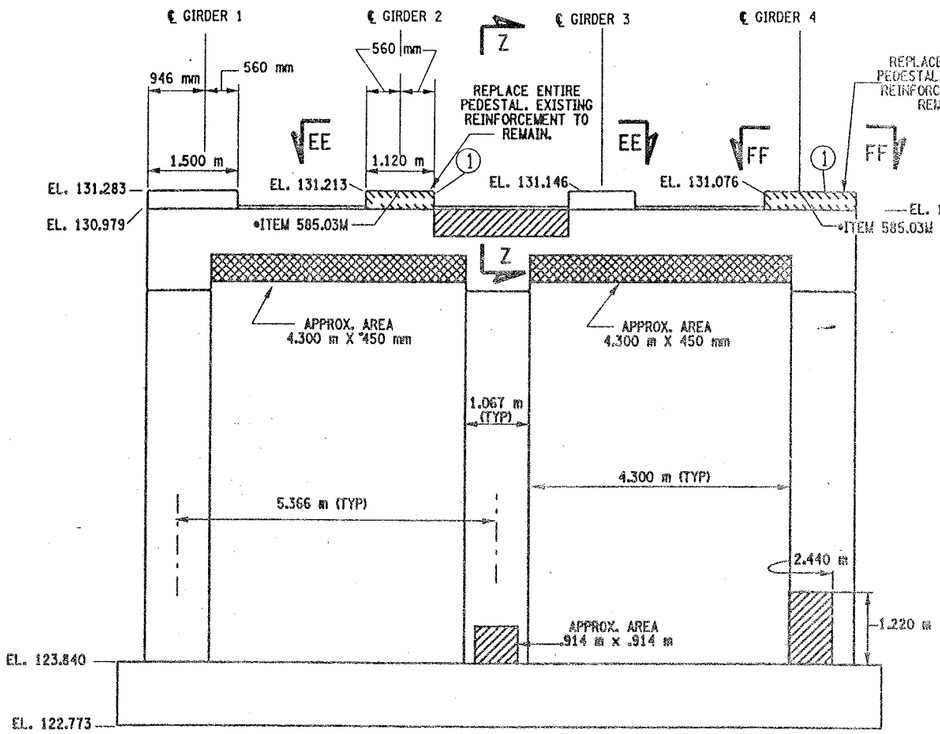
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P10	3	10/02	PR17-10N

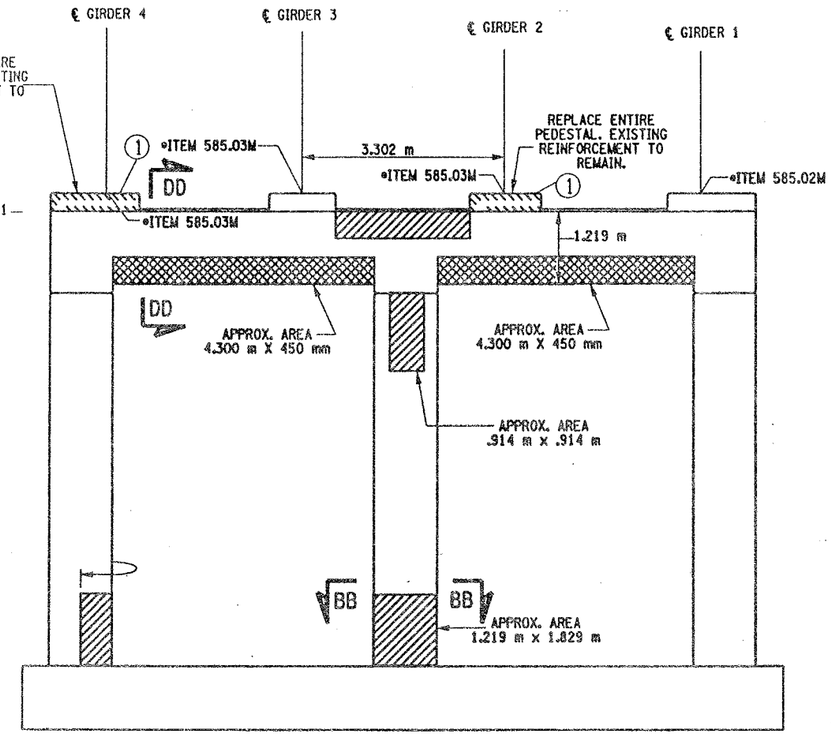
CHECKED BY
DRAFTED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	326	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 | B.I.N. 1093572

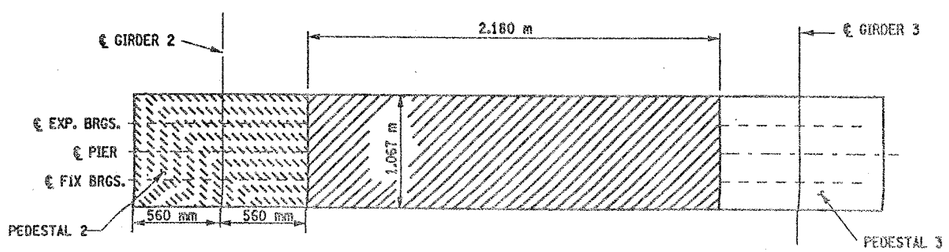


PIER 11 - FRONT FACE (LOOKING NORTH)
BIN 1093572
SCALE: 1 TO 50

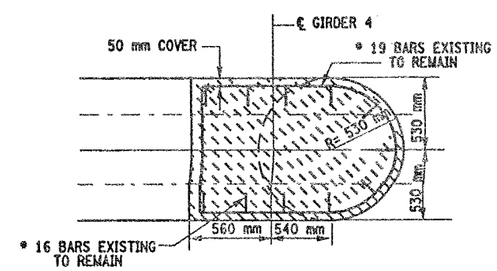


PIER 11- BACK FACE (LOOKING SOUTH)
BIN 1093572
SCALE: 1 TO 50

(1) INDICATES CONCRETE PLACEMENT NUMBER



SECTION EE-EE
NOT TO SCALE



SECTION FF-FF
NOT TO SCALE

CONCRETE TABLE (m³)		
PLACEMENT	QUANTITY	ITEM NO.
1	0.80	555.0105M

LIST OF ITEMS USED

ITEM 555.0105M - CONCRETE FOR STRUCTURES, CLASS A (CM)
ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 580.01M - REMOVAL OF STRUCTURAL CONCRETE (CM)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES. SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS.
8. SEE DWG PR17-10N FOR SECTION DD-DD.
9. SEE DWG. PR17-12S FOR SECTION BB-BB.
10. SEE DWG. PR17-7N FOR SECTION Z-Z.
11. PEDESTALS 2 AND 4 SHALL BE REPLACED TO EXISTING DIMENSIONS. ITEM 555.0105 M
12. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND ITEM 582.07M.
13. FOR JACKING NOTES SEE DWG PR17-1S.

• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT

LEGEND:

- ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE. (CM)
- ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)
- ITEM 580.01 M - REMOVAL OF STRUCTURAL CONCRETE. (CM) AND ITEM 555.0105 M - CONCRETE FOR STRUCTURES CLASS A. (CM)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB
OVER
CSX RAILROAD YARD
PIER 11

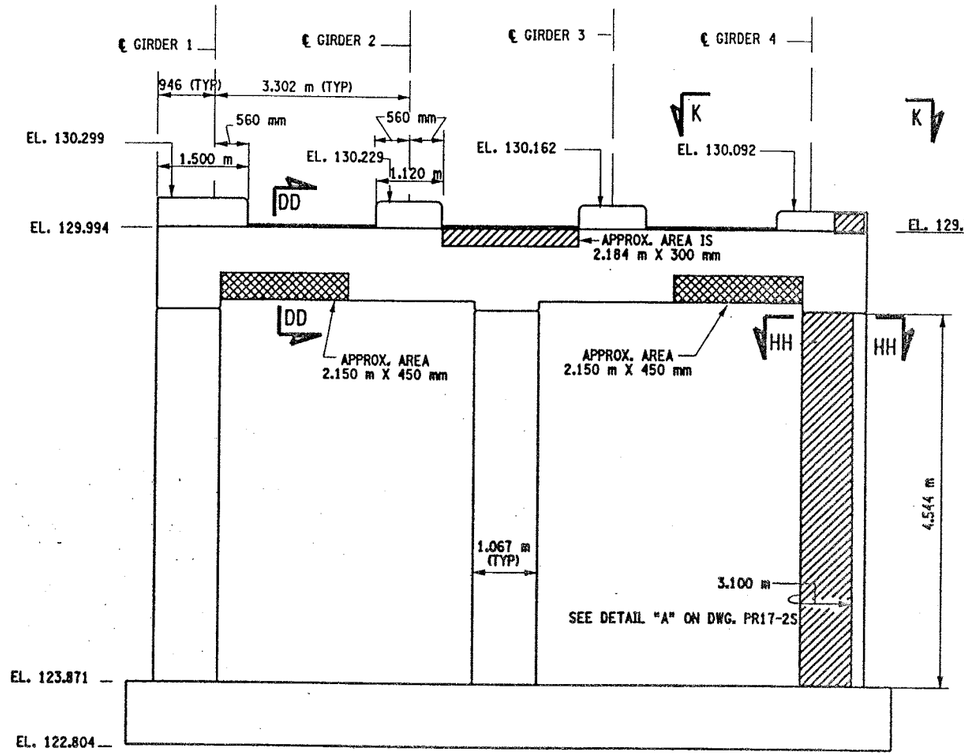
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P11	3	10/02	PR17-11N

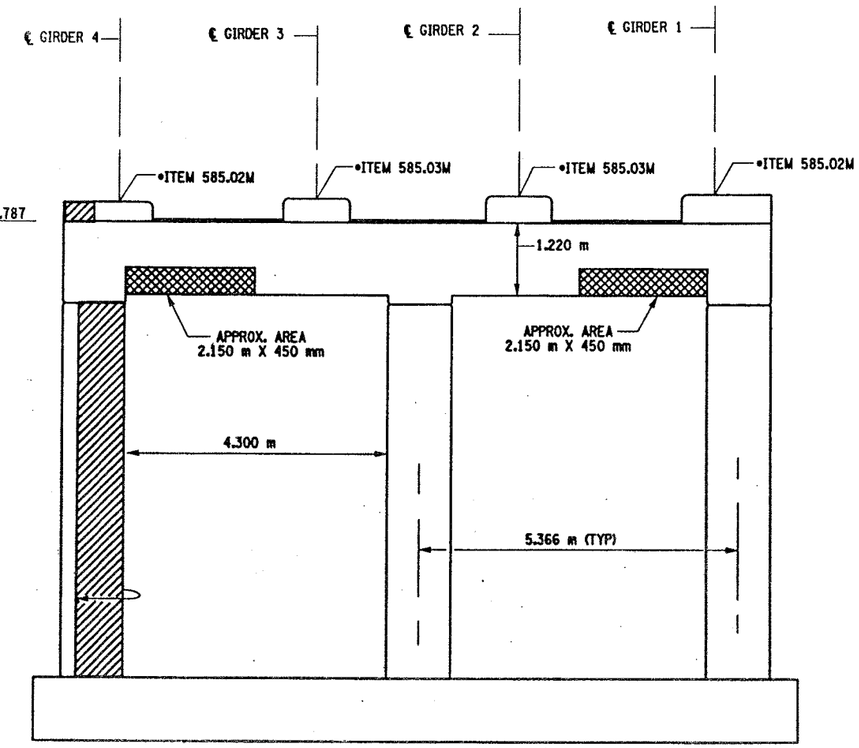
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	327	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093572



PIER 12 - FRONT FACE (LOOKING NORTH)
BIN 1093572
SCALE: 1 TO 50



PIER 12 - BACK FACE (LOOKING SOUTH)
BIN 1093572
SCALE: 1 TO 50

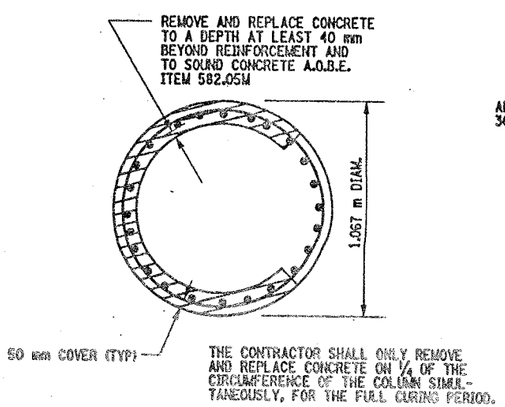
NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES. SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS.
8. SEE DWG PR17-10N FOR SECTION DD-DD.
9. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND 582.07M.
10. FOR JACKING NOTES SEE DWG PR17-1S.

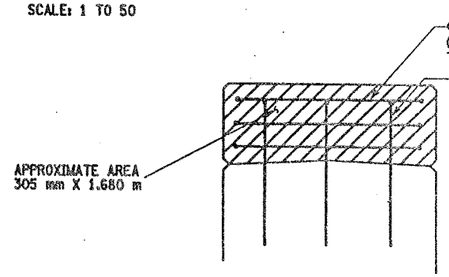
• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

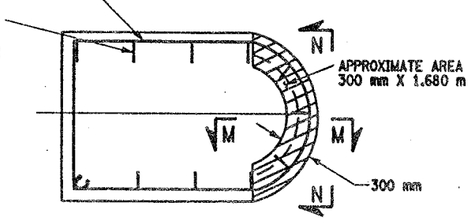
D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT



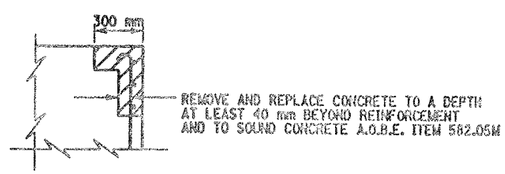
SECTION HH-HH
NOT TO SCALE



SECTION N-N
NOT TO SCALE



SECTION K-K
NOT TO SCALE



SECTION M-M
NOT TO SCALE

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE. (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)

LIST OF ITEMS USED:

ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB
OVER
CSX RAILROAD YARD
PIER 12

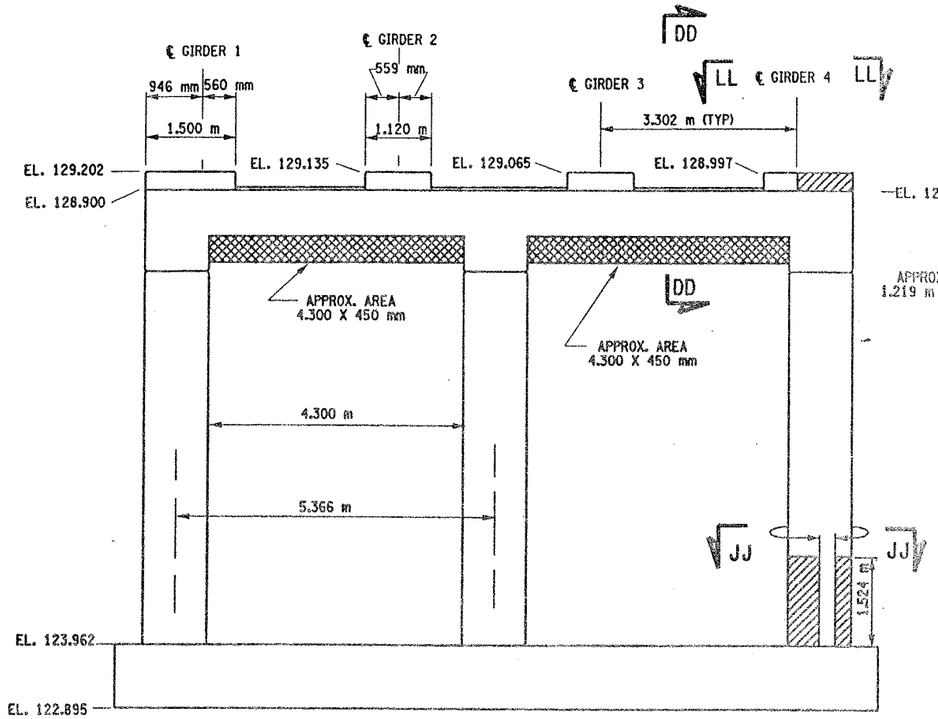
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P12	3	10/02	PR17-12N

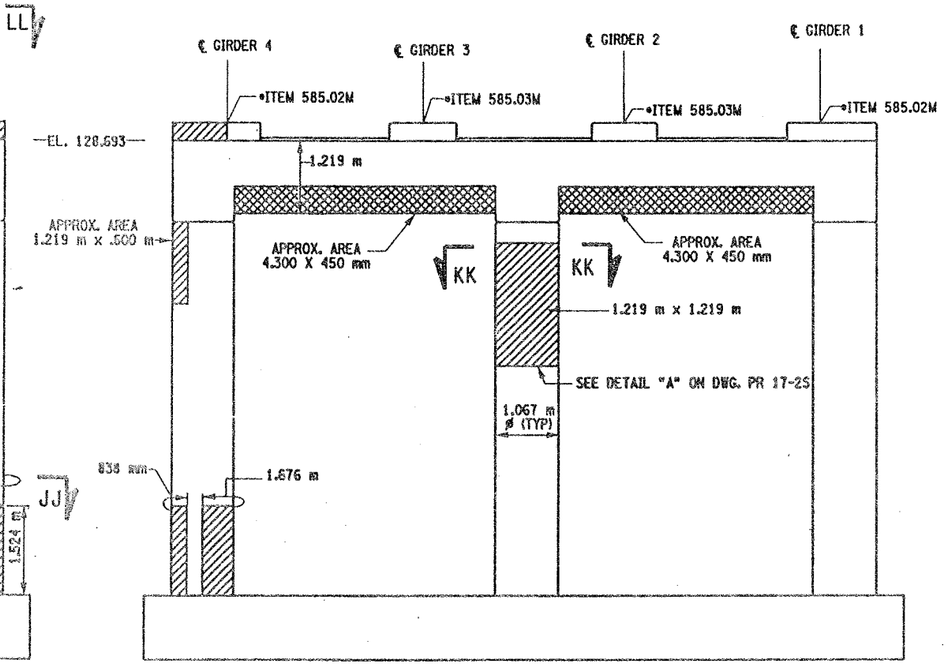
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	328	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093572



PIER 13 - FRONT FACE (LOOKING NORTH)
BIN 1093572
SCALE: 1 TO 50



PIER 13- BACK FACE (LOOKING SOUTH)
BIN 1093572
SCALE: 1 TO 50

NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
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8. SEE DWG. PR 17-10N FOR SECTION DD-DD.
9. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND 582.07M.
10. FOR JACKING NOTES SEE DWG PR17-1S.

• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

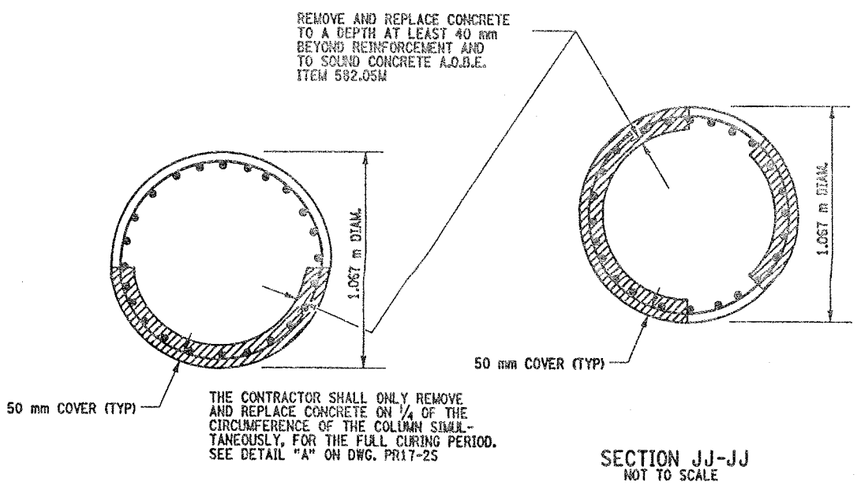
JACKING LOADS:

D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT

LEGEND:

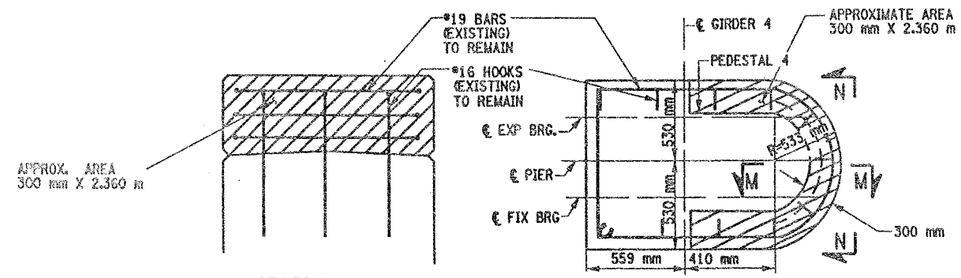
ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE. (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)



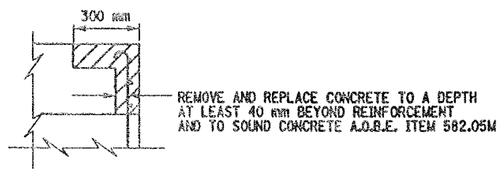
SECTION KK-KK
NOT TO SCALE

SECTION JJ-JJ
NOT TO SCALE



SECTION N-N
NOT TO SCALE

SECTION LL- LL
NOT TO SCALE



SECTION M-M
NOT TO SCALE

LIST OF ITEMS USED:

ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT.L (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB
OVER
CSX RAILROAD YARD
PIER 13

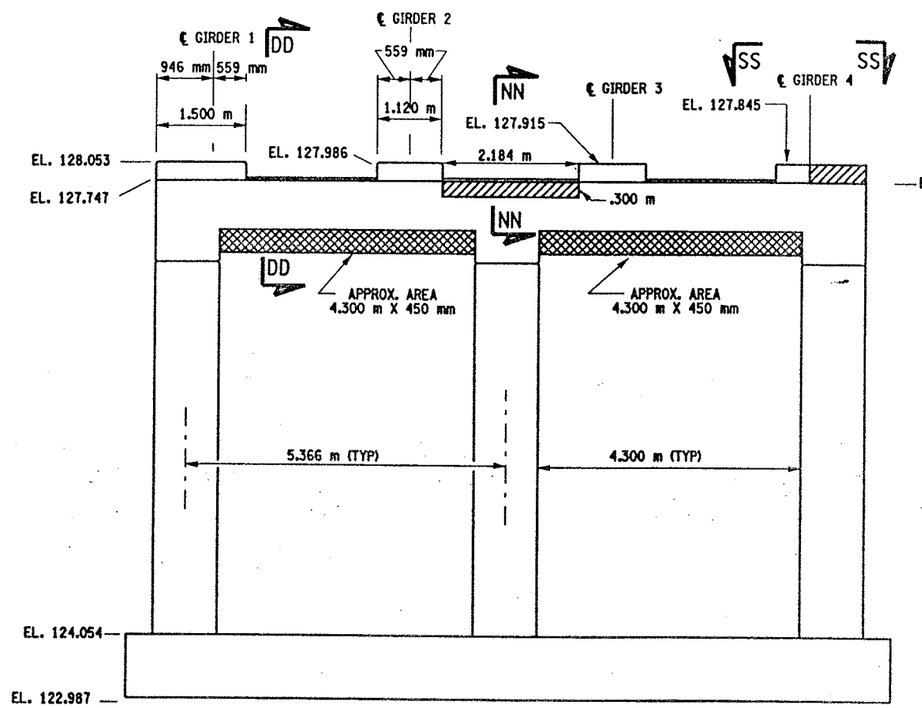
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P13	3	10/02	PR17-13N

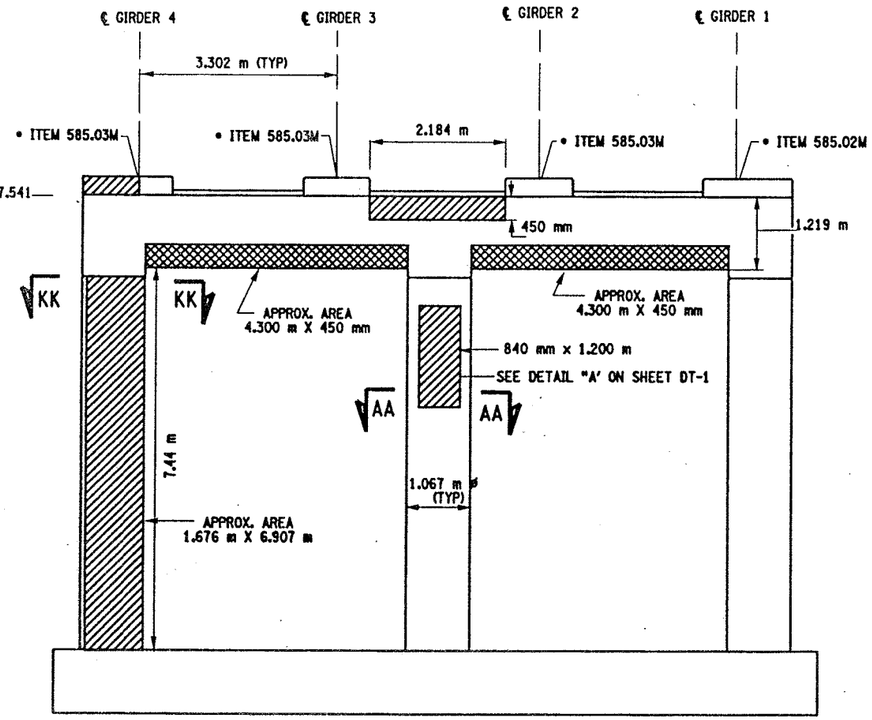
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	329	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093572



PIER 14 - FRONT FACE (LOOKING NORTH)
BIN 1093572
SCALE: 1 TO 50



PIER 14 - BACK FACE (LOOKING SOUTH)
BIN 1093572
SCALE: 1 TO 50

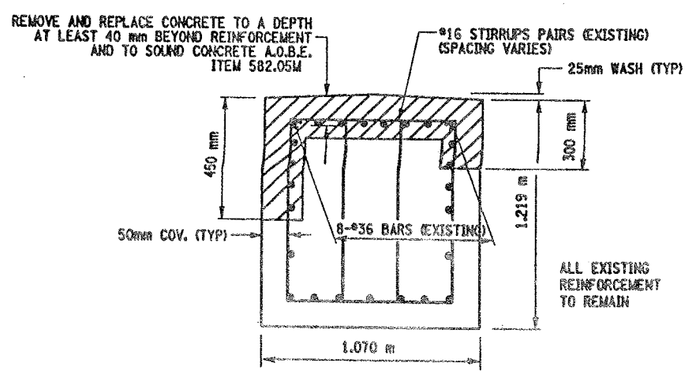
NOTES:

1. ALL REINFORCEMENT TO REMAIN.
2. RESTORE TO ORIGINAL DIMENSIONS.
3. PEDESTALS NUMERICALLY NUMBERED FROM WEST TO EAST.
4. FOR THE CONCRETE REPAIR AREAS, THE CONCRETE SHALL BE REMOVED TO AT LEAST 40mm MIN. BEYOND THE ENCOUNTERED REINFORCEMENT AND TO SOUND CONCRETE, A.O.B.E.
5. ELEVATIONS SHOWN ARE FROM ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 AND ARE FOR REFERENCE ONLY.
6. REMOVAL DIMENSIONS SHOWN ON PLANS ARE ESTIMATED AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING OF REMOVAL OPERATIONS A.O.B.E.
7. PERFORM BEARING RESTORATION TO ALL EXPANSION BEARINGS (TO INCLUDE RESETTING OF UNDEREXTENDED OR OVEREXTENDED BEARINGS). SEE DWG. PR17-1S FOR BEARING RESTORATION NOTES. SEE DWG. BR-10 & BR-11 FOR BEARING RESTORATION DETAILS.
8. SEE DWG. PR17-10N FOR SECTION DD-DD.
9. SEE DWG. PR17-7N FOR SECTION AA-AA.
10. SEE DWG. PR17-13N FOR SECTION KK-KK.
11. ALL CONCRETE REMOVAL SHALL BE SAWCUT TO PRODUCE NEAT REMOVAL LINES. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 582.05M AND ITEM 582.07M.
12. FOR JACKING NOTES SEE DWG PR17-1S.

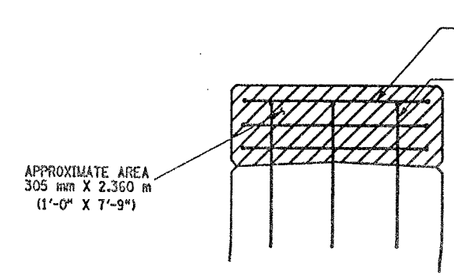
• PERFORM STRUCTURAL LIFTING UNDER ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (LIFTING AT A PIER) OR ITEM 585.03M - STRUCTURAL LIFTING OPERATIONS - TYPE C (LIFTING AT A PIER WHERE THE CONTRACTOR SHALL BE REQUIRED TO LIFT OFF THE FOOTING AND/OR GROUND LEVEL.

JACKING LOADS:

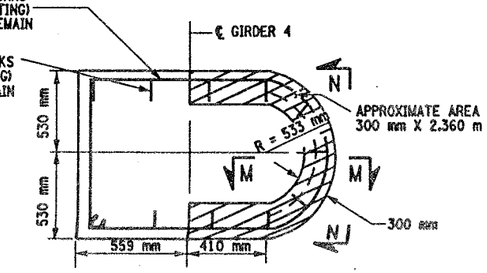
D.L. = 75 MT
L.L. = 50 MT
TOTAL = 125 MT



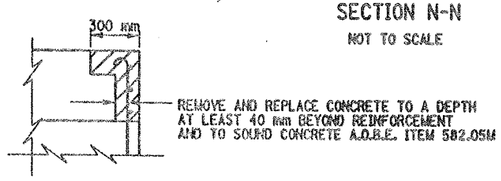
SECTION NN-NN
NOT TO SCALE



SECTION N-N
NOT TO SCALE



SECTION SS-SS
NOT TO SCALE



SECTION M-M
NOT TO SCALE

LIST OF ITEMS USED:

ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)
ITEM 582.05M - REM. OF STRUC. CONC. - REPLACE WITH CLASS A CONCRETE (CM)
ITEM 582.07M - REM. OF STRUC. CONC. - REPL. W/ VERT. OVERHEAD PATCH MAT'L. (SM)
ITEM 585.02M - STRUCTURAL LIFTING OPERATIONS - TYPE B (EA)
ITEM 585.03M - STRUCTURAL LIFTING OPERATION - TYPE C (EA)

LEGEND:

ITEM 582.05M - REMOVAL OF STRUCTURAL CONCRETE- REPLACE WITH CLASS A CONCRETE. (CM)

ITEM 582.07M - REMOVAL OF STRUCTURAL CONCRETE - REPLACE WITH VERTICAL OVER-HEAD PATCH MATERIAL. (SM)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB
OVER
CSX RAILROAD YARD
PIER 14

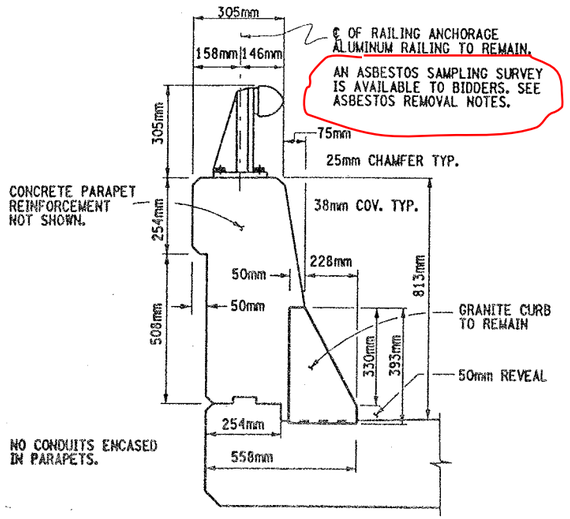
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.P14	3	10/02	PR17-14N

CHECKED BY
DRAFTED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

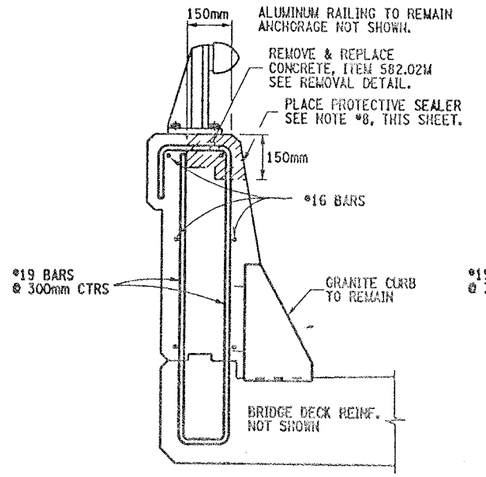
FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	330	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093571 & 1093572



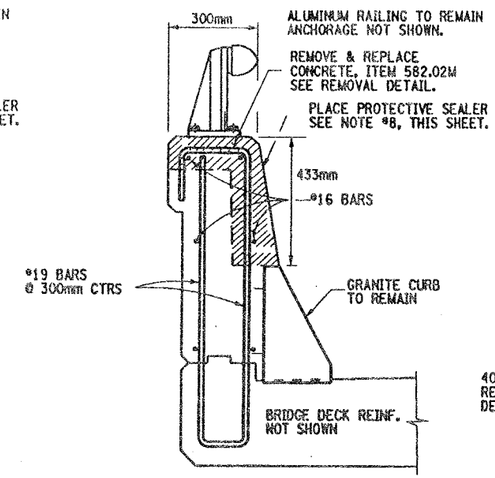
TYPICAL SECTION THRU SUPERSTRUCTURE
PARAPET CONCRETE DETAILS

NOT TO SCALE



(I) REPAIR DETAILS
150mmX150mm TOP

NOT TO SCALE



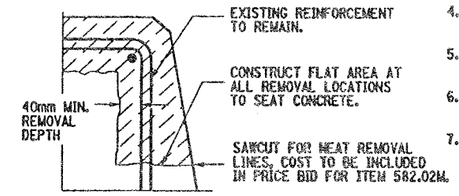
(II) REPAIR DETAILS
FULL TOP & FRONT FACE

NOT TO SCALE

CONCRETE REMOVAL NOTES:

REMOVE ALL DETERIORATED CONCRETE TO SOUND CONCRETE AND AT LEAST 40mm BEYOND ENCOUNTERED REINFORCEMENT BARS, AOBE. PAYMENT TO BE PAID UNDER ITEM 582.05M.

CONCRETE REMOVAL, SAWCUT 6mm DEPTH MINIMUM TO PRODUCE NEAT REMOVAL LINES, ALL COSTS SHALL BE INCLUDED IN PRICE BID FOR ITEM 582.05M.

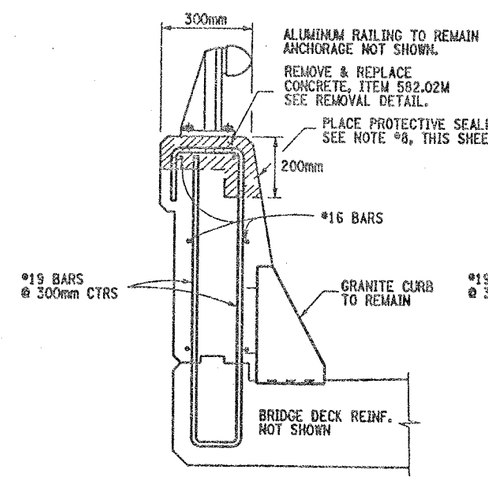


TYPICAL REMOVAL DETAIL

NOT TO SCALE

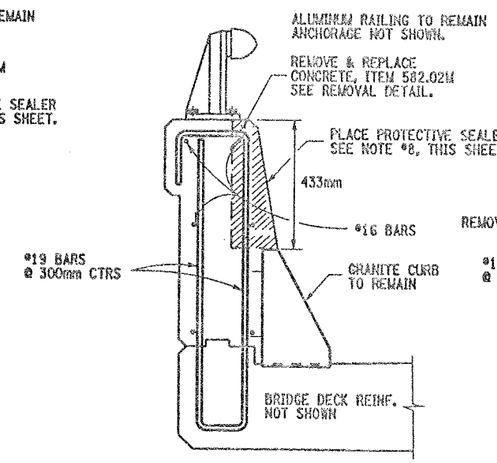
CONCRETE PARAPET REPAIR NOTES:

1. ALUMINUM RAILING TO REMAIN, ANCHORAGE NOT SHOWN.
2. EXISTING PARAPET REINFORCEMENT TO REMAIN.
3. GRANITE CURB TO REMAIN, ANCHOR BARS NOT SHOWN.
4. REMOVAL OF CONCRETE TO LIMITS SHOWN, AOBE. SEE TYPICAL REMOVAL DETAIL, THIS SHEET.
5. ALL DIMENSIONS SHOWN FOR CONCRETE REMOVAL ARE APPROXIMATE AND SHALL BE FIELD VERIFIED.
6. CONTRACTOR SHALL RESTORE CONCRETE PARAPET TO ORIGINAL DIMENSIONS.
7. IT IS DESIRABLE TO RETAIN ALL EXISTING GRANITE CURB, BUT AT SOME LOCATIONS ADJACENT TO THE JOINT BLOCK-OUTS IT MAY BE NECESSARY TO REPLACE OR REPAIR THE SECTION OF CURB, TO THE SATISFACTION OF THE ENGINEER. COST TO BE INCLUDE IN PRICE BID FOR ITEM 582.05M.
8. AFTER PARAPET REPAIRS ARE COMPLETED AND SUFFICIENT CURE TIME AS DECIDED BY ENGINEER, APPLY A COATING TYPE PROTECTIVE SEALERS WHICH MEETS MATERIAL SPECIFICATION 717-04. THIS PROTECTIVE SEALER SHALL BE APPLIED TO THE FRONT FACE AND TOP OF ALL PARAPETS (REPAIRED AREAS & ORIGINAL AREAS) TO ENSURE A UNIFORMED APPEARANCE. COST OF THIS SEALER TO BE INCLUDED IN PRICE BID FOR ITEM 18559.1696 M.



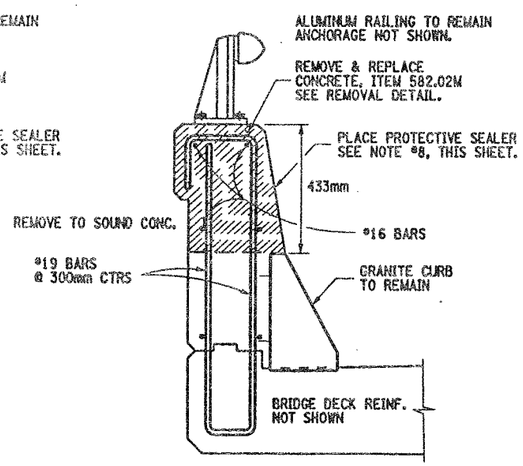
(III) REPAIR DETAILS
FULL TOP & 200mm FACE

NOT TO SCALE



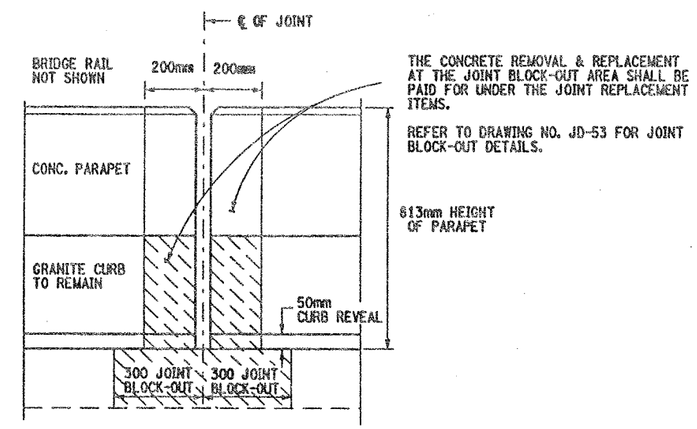
(IV) REPAIR DETAILS
FRONT FACE

NOT TO SCALE



(V) REPAIR DETAILS
FULL SECTION

NOT TO SCALE



THE CONCRETE REMOVAL & REPLACEMENT AT THE JOINT BLOCK-OUT AREA SHALL BE PAID FOR UNDER THE JOINT REPLACEMENT ITEMS.

REFER TO DRAWING NO. JD-53 FOR JOINT BLOCK-OUT DETAILS.

FRONT FACE PARAPET CONCRETE DETAIL
SHOWS TYPICAL CONC. REMOVAL AT JOINT

NOT TO SCALE

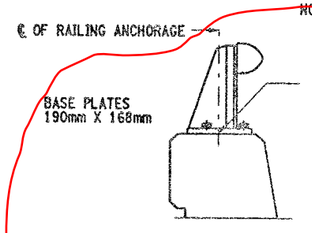
ASBESTOS MATERIAL REMOVAL NOTES:

THE REMOVAL OF ALL ASBESTOS CONTAINING CAULK (ITEM 210.5433M) SHALL BE COMPLETED PRIOR TO COMMENCEMENT OF ANY PARAPET REPAIR WORK.

THIS REMOVAL OF THE ASBESTOS CAULK SHALL BE PERFORMED AT EACH BRIDGE RAIL BASE PLATE ON BOTH N.B. & S.B. BRIDGES. (REMOVE ASBESTOS CALKING AT ALL RAIL BASE PLATES BOTH BRIDGES)

AFTER COMPLETION OF THE PARAPET REPAIRS INSTALL A CAULKING COMPOUND AROUND THE BASE PLATES OF THE RAILING WHICH MEETS MATERIAL SPECIF. 705-06 AND IS ACCEPTABLE TO THE ENGINEER. PAID UNDER ITEM 210.5433M.

REFER TO ORIGINAL CONTRACT PLANS F.I.S.H. 70-7 FOR RAIL LAY-OUT DETAILS.



REMOVE EXISTING GRAY ASBESTOS CAULKING COMPOUND AT THE ALUMINUM RAILING BASE PLATES, IT IS ASSUMED THAT THE CAULK COMPOUND IS SURROUNDING (PERIMETER) THE RAILING BASE PLATES. THIS PERIMETER REMOVAL OPERATION SHALL BE PERFORM AT EACH RAILING BASE PLATE ON BOTH STRUCTURES.

HOWEVER, SOME CAULK MATERIAL MAY BE FOUND UNDER THE RAILING BASE PLATES. THIS CAULKING COMPOUND UNDER THE BASE PLATES SHALL BE REMOVED ONLY AT LOCATIONS WHERE THE PARAPET CONCRETE REPAIRS WILL DISTURB THE MATERIAL (REMOVAL AS ENCOUNTERED).

ALL COSTS TO BE PAID UNDER ITEM 210.5433M. SEE ASBESTOS MATERIAL REMOVAL NOTES, THIS SHEET.

TYPICAL BRIDGE RAIL DETAIL

NOT TO SCALE

ITEMS USED:

ITEM 582.05M	- REMOVAL OF STRUCTURAL CONCRETE REPLACE WITH CLASS "A" CONCRETE (CM)
ITEM 210.5433M	- REMOVAL & DISPOSAL OF ASBESTOS CONTAINING CAULK (BV 12) (L.S)
ITEM 18559.1696M	- PROTECTIVE SEALING OF STRUCTURAL CONCRETE (SM)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 OVER CSX RR YARD

PARAPET REPAIR DETAILS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AB.R1A	3	10/02	PW17-1

ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	331	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093571 & 1093572

PARAPET REPAIR TABLE (ITEM 582.05M)

BIN 1093571	STATION TO STATION	RIGHT SIDE (EAST)	LEFT SIDE (WEST)	REMARKS
SPAN 1	6+626.288 TO 6+627.588	1.300m		(I) REPAIR PROCEDURE
	6+653.795 TO 6+654.495	.700m		(V) REPLACE FULL SECTION
	6+653.595 TO 6+654.495		.900m	(V) REPLACE FULL SECTION
SPAN 2	6+654.895 TO 6+655.505	.600m		(V) REPLACE FULL SECTION
	6+654.895 TO 6+655.505		.600m	(V) REPLACE FULL SECTION
	6+654.895 TO 6+664.895	10.000m		(I) REPAIR PROCEDURE
	6+669.995 TO 6+673.695	3.700m		(I) REPAIR PROCEDURE
SPAN 3	6+731.266 TO 6+735.466	4.200m		(I) REPAIR PROCEDURE
	6+753.266 TO 6+754.266	1.000m		(V) REPLACE FULL SECTION
	6+753.266 TO 6+754.266		1.000m	(V) REPLACE FULL SECTION
SPAN 4	6+754.666 TO 6+755.666	1.000m		(V) REPLACE FULL SECTION
	6+760.466 TO 6+769.866		9.400m	(I) REPAIR PROCEDURE
	6+760.666 TO 6+778.966	18.300m		(I) REPAIR PROCEDURE*
	6+790.116 TO 6+791.616		1.500m	(I) REPAIR PROCEDURE (BACKFACE)
	6+789.316 TO 6+801.316	12.000m		(I) REPAIR PROCEDURE
	6+794.116 TO 6+803.616		9.500m	(III) REPAIR PROCEDURE
	6+813.616 TO 6+814.616	1.000m		(V) REPLACE FULL SECTION
	6+813.616 TO 6+814.616		1.000m	(IV) REPAIR PROCEDURE
SPAN 5	6+815.016 TO 6+816.016	1.000m		(V) REPLACE FULL SECTION
	6+823.166 TO 6+871.166	48.000m		(I) REPAIR PROCEDURE
	6+870.966 TO 6+874.966	4.000m		(V) REPLACE FULL SECTION
SPAN 6	6+875.366 TO 6+876.366	1.000m		(V) REPLACE FULL SECTION
	6+875.366 TO 6+895.366		20.000m	(IV) REPAIR PROCEDURE
	6+875.317 TO 6+935.317	60.000m		(III) REPAIR PROCEDURE
	6+908.317 TO 6+914.317		6.000m	(IV) REPAIR PROCEDURE
	6+920.517 TO 6+928.517		8.000m	(IV) REPAIR PROCEDURE
	6+923.317 TO 6+935.317		12.000m	(IV) REPAIR PROCEDURE
SPAN 7	6+935.717 TO 6+947.217	11.500m		(IV) REPAIR PROCEDURE
	6+949.917 TO 6+951.417	1.500m		(I) REPAIR PROCEDURE
	6+952.112 TO 6+967.112		15.000m	(IV) REPAIR PROCEDURE
	6+967.012 TO 6+969.612	2.600m		(IV) REPAIR PROCEDURE
SPAN 8	6+973.512 TO 7+010.907	37.400m		(I) REPAIR PROCEDURE
	6+981.907 TO 6+990.407		8.500m	(IV) REPAIR PROCEDURE
	6+996.907 TO 7+010.907		14.000m	(IV) REPAIR PROCEDURE
SPAN 9	7+011.307 TO 7+048.702		37.400m	(II) REPAIR PROCEDURE
SPAN 10	7+070.325 TO 7+074.325		4.000m	(IV) REPAIR PROCEDURE
SPAN 11	7+091.825 TO 7+098.825	7.000m		(I) REPAIR PROCEDURE
	7+102.525 TO 7+106.025	3.500m		(I) REPAIR PROCEDURE
	7+100.325 TO 7+108.325		8.000m	(I) REPAIR PROCEDURE
	7+109.325 TO 7+110.825	1.500m		(I) REPAIR PROCEDURE
	7+112.725 TO 7+128.725		16.000m	(I) REPAIR PROCEDURE
	7+114.825 TO 7+117.825	3.000m		(I) REPAIR PROCEDURE
SPAN 12	7+129.125 TO 7+166.825		37.700m	(II) REPAIR PROCEDURE
	7+131.925 TO 7+137.925	6.000m		(III) REPAIR PROCEDURE
	7+158.025 TO 7+159.525	1.500m		(III) REPAIR PROCEDURE
SPAN 13	7+167.225 TO 7+204.925	37.700m		(I) REPAIR PROCEDURE
	7+172.225 TO 7+184.225		12.000m	(I) REPAIR PROCEDURE
	7+189.925 TO 7+204.925		15.000m	(I) REPAIR PROCEDURE
SPAN 14	7+205.325 TO 7+243.025	37.700m		(I) REPAIR PROCEDURE
	7+205.325 TO 7+243.025		37.700m	(III) REPAIR PROCEDURE
SPAN 15	7+243.425 TO 7+281.530		38.100m	(II) REPAIR PROCEDURE
	7+248.530 TO 7+254.330	5.800m		(III) REPAIR PROCEDURE
	7+257.430 TO 7+262.030	4.600m		(I) REPAIR PROCEDURE
	7+265.030 TO 7+266.530	1.500m		(I) REPAIR PROCEDURE
	7+268.230 TO 7+271.730	3.500m		(I) REPAIR PROCEDURE

* FULL SECTION REPLACEMENT AS DIRECTED BY ENGINEER TO INCLUDE IF NECESSITY, REPLACEMENT OR REPAIR OF THE GRANITE CURB. ALL COST TO BE INCLUDED IN BID PRICE FOR ITEM 582.05M.

(BACKFACE) INDICATES REPAIR AREA IS ON THE OUTSIDE OR BACKFACE OF PARAPET. CAUTION MUST BE TAKEN WHEN WORKING OVER R.R. TRACKS.

PARAPET REPAIR TABLE (ITEM 582.05M)

BIN 1093572	STATION TO STATION	RIGHT SIDE (EAST)	LEFT SIDE (WEST)	REMARKS
SPAN 1	6+578.084 TO 6+582.084	4.000m		(I) REPAIR PROCEDURE
	6+592.589 TO 6+594.789	2.200m		(I) REPAIR PROCEDURE
	6+593.884 TO 6+600.884		7.000m	(I) REPAIR PROCEDURE (BACKFACE)
	6+597.489 TO 6+599.489	2.000m		(I) REPAIR PROCEDURE
	6+600.581 TO 6+608.297	7.700m		(I) REPAIR PROCEDURE
	6+602.697 TO 6+608.297		5.600m	(I) REPAIR PROCEDURE (BACKFACE)
SPAN 2	6+608.697 TO 6+620.197		11.500m	(I) REPAIR PROCEDURE (BACKFACE)
	6+639.497 TO 6+641.497		2.000m	(I) REPAIR PROCEDURE (BACKFACE)
	6+646.997 TO 6+653.497		6.500m	(I) REPAIR PROCEDURE (BACKFACE)
SPAN 3	6+662.597 TO 6+664.597		2.000m	(II) REPAIR PROCEDURE
	6+676.097 TO 6+684.097	8.000m		(I) REPAIR PROCEDURE
	6+697.097 TO 6+698.097	1.000m		(I) REPAIR PROCEDURE
	6+707.070 TO 6+708.070	1.000m		(V) REPLACE FULL SECTION *
	6+707.070 TO 6+708.070		1.000m	(V) REPLACE FULL SECTION *
SPAN 4	6+708.470 TO 6+709.470	1.000m		(V) REPLACE FULL SECTION
	6+715.570 TO 6+757.070	41.500m		(I) REPAIR PROCEDURE
	6+719.070 TO 6+728.070		9.000m	(I) REPAIR PROCEDURE
	6+750.420 TO 6+768.420		18.000m	(III) REPAIR PROCEDURE
	6+767.420 TO 6+768.420		1.000m	(V) REPLACE FULL SECTION
SPAN 5	6+768.820 TO 6+770.320	1.500m		(V) REPLACE FULL SECTION
	6+773.120 TO 6+786.120	13.000m		(I) REPAIR PROCEDURE
	6+778.920 TO 6+783.220		4.300m	(I) REPAIR PROCEDURE
	6+799.620 TO 6+802.120		2.500m	(I) REPAIR PROCEDURE
	6+804.620 TO 6+815.620	11.000m		(I) REPAIR PROCEDURE
	6+826.771 TO 6+828.771		2.000m	(V) REPLACE FULL SECTION
SPAN 6	6+829.171 TO 6+830.171	1.000m		(V) REPLACE FULL SECTION
	6+829.171 TO 6+830.171		1.000m	(V) REPLACE FULL SECTION
	6+830.171 TO 6+888.771		58.600m	(II) REPAIR PROCEDURE
	6+846.971 TO 6+849.971	3.000m		(I) REPAIR PROCEDURE
	6+855.621 TO 6+889.121	33.500m		(I) REPAIR PROCEDURE
SPAN 7	6+889.126 TO 6+926.916	37.400m		(I) REPAIR PROCEDURE
	6+892.221 TO 6+897.521		5.300m	(I) REPAIR PROCEDURE
	6+903.321 TO 6+907.621		4.300m	(I) REPAIR PROCEDURE
	6+909.721 TO 6+911.721		2.000m	(I) REPAIR PROCEDURE
	6+916.916 TO 6+926.916		10.000m	(III) REPAIR PROCEDURE
SPAN 8	6+927.316 TO 6+964.712	37.400m		(IV) REPAIR PROCEDURE
SPAN 9	6+965.112 TO 6+996.112	31.000m		(I) REPAIR PROCEDURE
SPAN 10	7+014.602 TO 7+023.602		9.000m	(II) REPAIR PROCEDURE
	7+020.302 TO 7+040.302	20.000m		(II) REPAIR PROCEDURE
SPAN 11	7+044.302 TO 7+046.302		2.000m	(I) REPAIR PROCEDURE
	7+060.397 TO 7+067.697	7.300m		(I) REPAIR PROCEDURE
SPAN 12	7+099.892 TO 7+101.892	2.000m		(I) REPAIR PROCEDURE
SPAN 13	7+119.492 TO 7+125.492		6.000m	(I) REPAIR PROCEDURE
	7+168.283 TO 7+186.283		18.000m	(I) REPAIR PROCEDURE
	7+168.983 TO 7+191.483	22.500m		(I) REPAIR PROCEDURE
SPAN 14	7+171.093 TO 7+191.483	20.400m		(I) REPAIR PROCEDURE
	7+165.783 TO 7+179.283		13.500m	(I) REPAIR PROCEDURE
SPAN 15	7+197.883 TO 7+199.883		2.000m	(I) REPAIR PROCEDURE
	7+198.283 TO 7+229.683	31.400m		(I) REPAIR PROCEDURE

GENERAL NOTES:

WORK ADJACENT TO JOINT BLOCK-OUT (200mm) SHALL BE INCLUDED IN THE BRIDGE JOINT REPLACEMENT ITEMS. SEE DRAWING NO. JD-53 FOR JOINT BLOCK-OUT REMOVAL DETAILS.

SOME REPAIRS ARE ON THE BACK FACE OF THE PARAPETS SOME OF THIS WORK MAY BE OVER THE RAIL ROAD TRACKS.

REFER TO DRAWING NO. PW17-1 FOR CONCRETE REMOVAL DETAILS AND NOTES.

STATIONING AND DIMENSIONS SHOWN FOR CONCRETE REMOVAL ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY CONTRACTOR AND ENGINEER.

REFER TO RECONSTRUCTION NOTES ON DRAWING NO. GN-1.

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481
OVER
CSX RAILROAD YARD

TABLE OF PARAPET REPAIRS

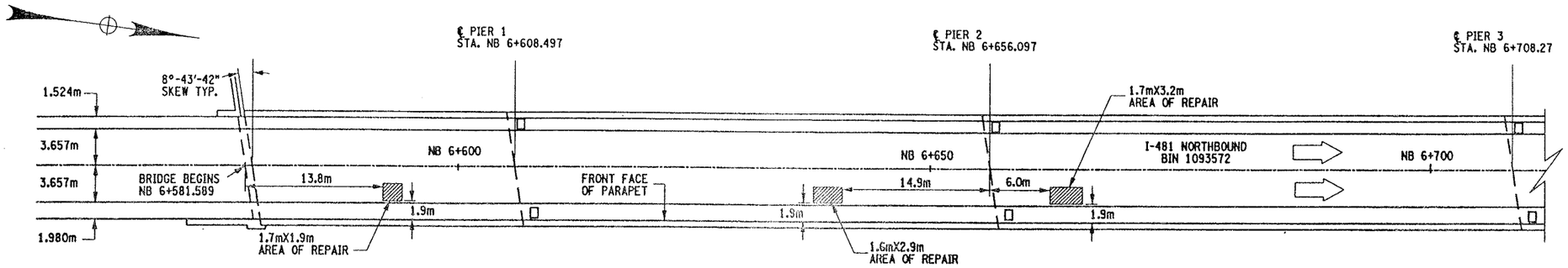
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

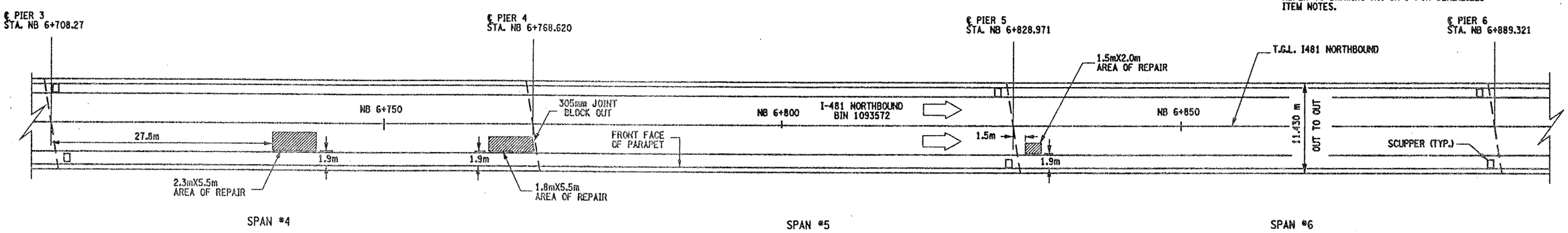
FILENAME	REGION	DATE	DRAWING NO.
305613AB.R1A	3	10/02	PW17-2

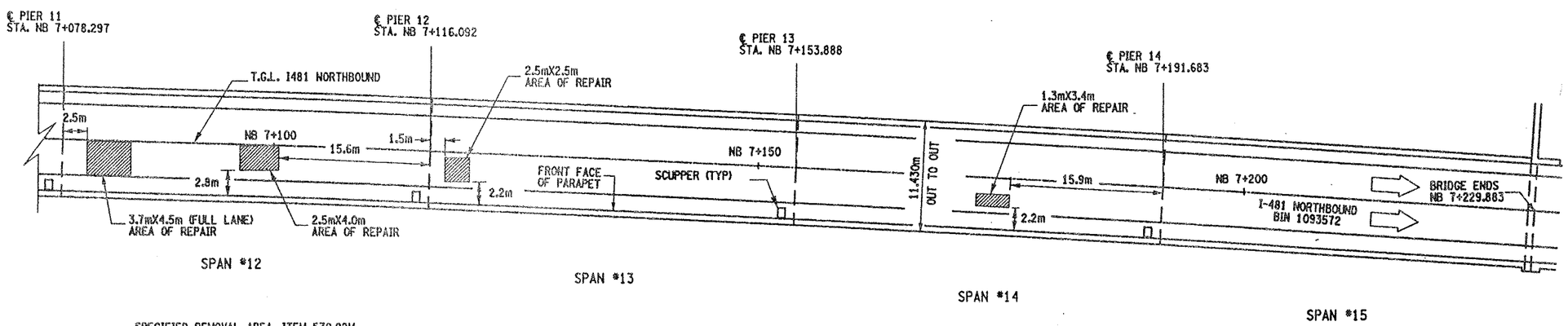
ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	332	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 | B.I.N. 1093572







PLAN VIEW OF SPOT DECK REPAIRS

NOT TO SCALE

GENERAL NOTES:

THIS WORK ONLY PERTAINS TO BIN 1093572 NB.

THE AREAS SHOWN ARE THE RESULTS OF FIELD INVESTIGATIONS AND ARE ONLY APPROXIMATE. THE ACTUAL LIMITS SHALL BE AS DIRECTED BY ENGINEER.

NO FULL DEPTH SLAB REPAIRS ARE EXPECTED AT THESE LOCATIONS.

REFER TO DRAWING NO. GN-1 FOR SERIALIZED ITEM NOTES.

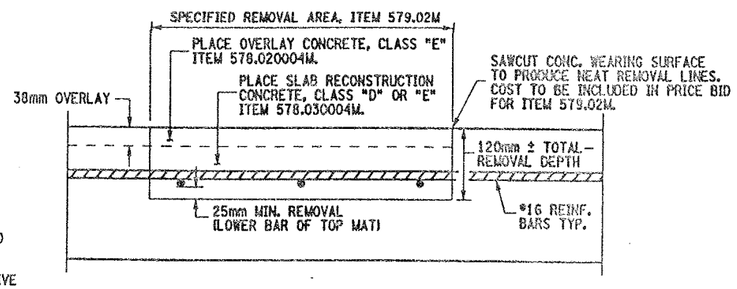
REMOVAL NOTES:

ORIGINAL BRIDGE DECK 203mm MONOLITHIC SLAB. A 38mm CONC. OVERLAY HAS BEEN ADDED.

THESE LOCATIONS ARE CURRENTLY FILLED WITH ASPHALT (BLACKTOP). DEPTH OF ASPHALT IS UNKNOWN, ESTIMATED AT @ 38mm. THE REMOVAL OF THE ASPHALT AND CONCRETE TO LIMITS SHOWN TO BE PAID UNDER ITEM 579.02M.

REMOVE CONCRETE TO LIMITS SHOWN AND TO SOUND CONCRETE, AS ORDER BY ENGINEER.

ALL AREAS THAT ARE REPAIRED SHALL ALSO RECEIVE ITEM 558.01 - TRANSVERSE SAWCUT GROOVING AND ITEM 18559.1896M - PROTECTIVE SEALING.



CROSS SECTION VIEW THROUGH REPAIR LOCATION

NOT TO SCALE

ITEMS USED:

ITEM 558.01M - TRANSVERSE SAWCUT GROOVING (SM)
ITEM 18559.1896M - PROTECTIVE SEALING FOR STRUCT. CONC. (SM)
ITEM 578.020004M - OVERLAY CONCRETE, CLASS "E" (SM)
ITEM 578.030004M - SLAB RECONSTRUCTION CONCRETE, CLASS "D" OR "E" (SM)
ITEM 579.02M - REINFORCING BAR EXPOSURE (SM)

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE | DATE

INTERSTATE 481
OVER
CSX RAILROAD YARD
BRIDGE DECK REPAIRS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AB.R1A	3	10/02	DR17-1

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

10935 71

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	341	432

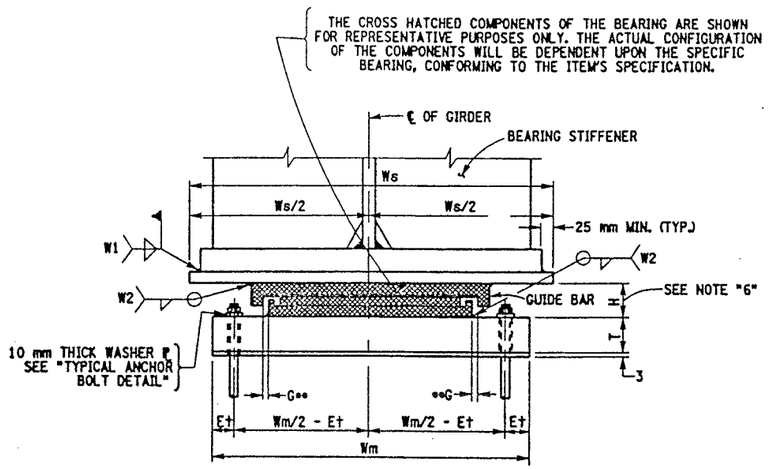
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)

VARIOUS BRIDGES ON INTERSTATE 481

TOWNS OF DEWITT AND CICERO

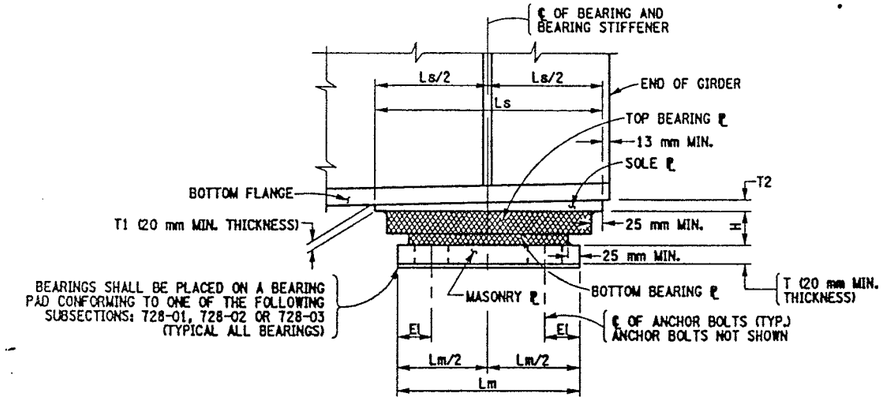
ONONDAGA COUNTY

P.I.N. 305613 | B.I.N. VARIOUS



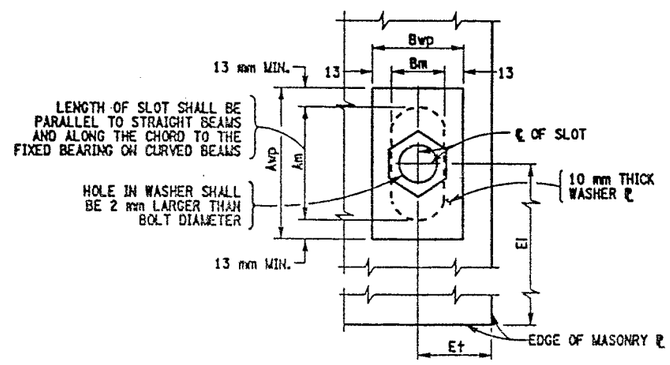
FRONT VIEW WITH ANCHOR BOLTS UNDER SOLE PLATE

NOT TO SCALE



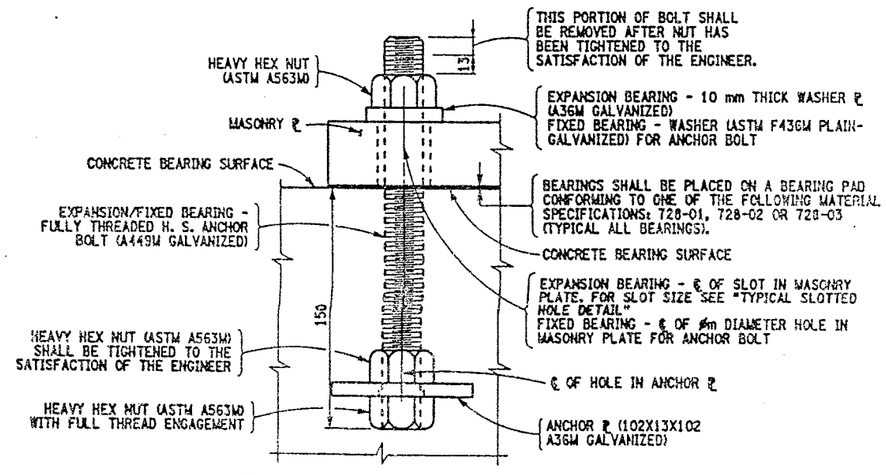
SIDE VIEW AT END OF GIRDER

NOT TO SCALE



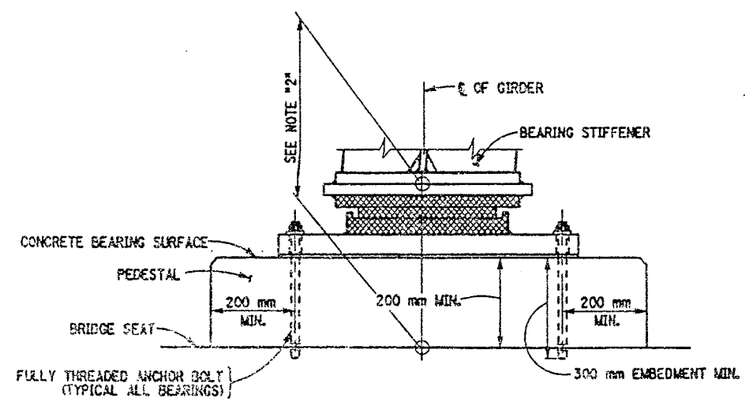
TYPICAL ANCHOR BOLT DETAIL

NOT TO SCALE



OPTIONAL ANCHOR BOLT DETAIL WITH ANCHOR PLATE ON NEW PEDESTALS

NOT TO SCALE



TYPICAL PEDESTAL DETAIL FIXED BEARING SHOWN - EXPANSION BEARING SIMILAR

NOT TO SCALE

NOTES:

THE CONTRACTOR SHALL SUPPLY MULTI-ROTATIONAL STRUCTURAL BRIDGE BEARINGS CONFORMING TO THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 565 AND SUBJECT TO THE FOLLOWING CONDITIONS:

1. THE BEARING DEVICES SUPPLIED SHALL BE CAPABLE OF TRANSMITTING THE LOADS AND MOVEMENT SHOWN ON THESE PLANS.
2. THE DIMENSION "H" IN THE BEARING TABLE REPRESENTS THE ASSUMED TOTAL HEIGHT OF BEARING MECHANISM BETWEEN THE SOLE PLATE AND MASONRY PLATE USED BY THE DESIGNER TO ESTABLISH THE PEDESTAL ELEVATIONS. THE MINIMUM PEDESTAL HEIGHT SHALL NOT BE CHANGED WITHOUT WRITTEN APPROVAL OF THE DEPUTY CHIEF ENGINEER (STRUCTURES).
3. MASONRY PLATES ARE TO BE DESIGNED. THE MINIMUM CONCRETE EDGE DISTANCE SHALL BE 75 mm AND THE MINIMUM ANCHOR BOLT COVER SHALL BE 200 mm.
4. THE BEARING DEVICE, MASONRY PLATE, SOLE PLATE, ANCHOR BOLTS, NUTS, WASHER PLATES AND BEARING PAD SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BEARING ITEMS.
5. ALL EXPANSION BEARINGS SHALL HAVE A MAXIMUM FRICTION COEFFICIENT OF 3%.
6. IF THE ANCHOR BOLTS ARE SET UNDER THE SOLE PLATE, A MINIMUM CLEARANCE EQUAL TO TWO TIMES THE THICKNESS OF ANCHOR NUT PLUS 25 mm SHALL BE MAINTAINED BETWEEN THE TOP OF MASONRY PLATE AND BOTTOM OF THE SOLE PLATE.
7. ALL STEEL SHALL CONFORM TO ASTM A588M.
8. ALL METAL COMPONENTS OF THE BEARING SYSTEM WHICH ARE LIABLE TO COME INTO CONTACT DURING THE TRANSLATION SHALL HAVE A TEFLON SLIDING SURFACE FINISH.
9. ALL STEEL FABRICATION SHALL CONFORM TO THE PROVISIONS OF THE LATEST EDITION OF THE NEW YORK STATE STEEL CONSTRUCTION MANUAL.

WHENEVER JACKING OF THE SUPERSTRUCTURE IS NEEDED TO RESET THE BEARINGS, THE CONTRACTOR SHALL SUBMIT A JACKING SEQUENCE TO THE E.I.C. FOR APPROVAL.

LIST OF ITEMS USED:

ITEM 565.1522M - TYPE M.R. EXPANSION BEARING (1001 TO 2000KN) (EA)
ITEM 565.1722M - TYPE M.R. FIXED BEARING (1001 TO 2000KN) (EA)

*ONE WAY LONGITUDINAL MOVEMENT IS THE MAXIMUM ONE WAY MOVEMENT (EXPANSION OR CONTRACTION) OF THE SUPERSTRUCTURE WHEN BEARINGS ARE SET @ 20°C PLUS 25 MILLIMETERS OF TOLERANCE.

**ON WIDE STRUCTURES AND ON CURVED STRUCTURES PROVISIONS SHALL BE MADE FOR LIMITED LATERAL MOVEMENT.

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE | DATE

MULTI ROTATIONAL BEARINGS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.M1A	3	10/02	BR-1

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	342	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)

VARIOUS BRIDGES ON INTERSTATE 481

TOWNS OF DEWITT AND CICERO

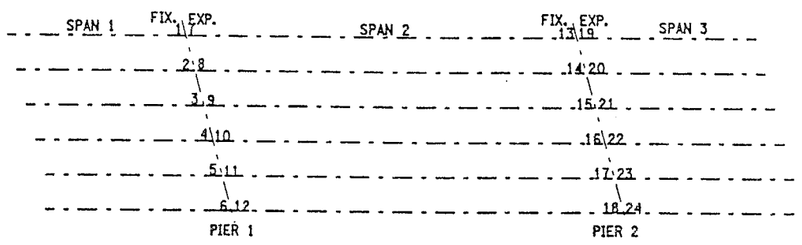
ONONDAGA COUNTY

P.I.N. 305613 B.I.N. VARIOUS

BEARING TABLE

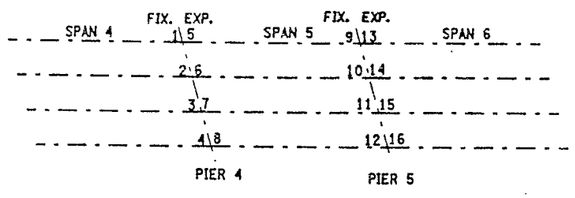
BIN	LOCATION	FIX./ EXP.	ITEM NO.	QUAN. REQ'D.	CAPACITY (KN) VERT.	CAPACITY (KN) HORZ.	*ONE WAY LONGIT. MOVEMENT	**(G) GUIDE CLEARANCE	MASONRY ℄ Lm	Wm	T	Et	El	Am	Bm	WASHER ℄ Awp	Bwp	SOLE ℄ Ls	Ws	T1	T2	BRG. H	ANCHOR BOLTS ø	BOLTS/BRG.	WELD SIZE W1	W2
1093571	PIER 4 @ 5 & 8 - PIER 5 @ 13 & 16	EXP.	565.1522M	4	1 556.8	295.79	63 mm		445	770	35	80	110	78	48	104	74	545	815	30	30	162	38	4	8	8
1093571	PIER 4 @ 6 & 7 - PIER 5 @ 14 & 15	EXP.	565.1522M	4	1 556.8	295.79	63 mm		445	770	35	80	110	78	48	104	74	545	660	30	30	162	38	4	8	8
1093571	PIER 4 @ 1 & 4 - PIER 5 @ 9 & 12	FIX.	565.1722M	4	1 556.8	295.79	-		445	665	62	80	110	-	-	-	-	395	815	60	60	104	38	4	8	8
1093571	PIER 4 @ 2, 3 - PIER 5 @ 10 & 11	FIX.	565.1722M	4	1 556.8	295.79	-		445	665	62	80	110	-	-	-	-	395	660	60	60	104	38	4	8	8
1002131	PIER 1 @ 1 & 8	FIX.	565.1722M	2	333.6	63.38	-		260	530	65	50	84	-	-	-	-	240	360	45	45	76	25	4	8	8
1002131	PIER 1 @ 2 - 7	FIX.	565.1722M	6	333.6	63.38	-		260	530	40	50	84	-	-	-	-	240	360	20	20	76	25	4	8	8
1002131	PIER 1 @ 9 - 16	EXP.	565.1522M	8	444.8	84.51	42 mm		260	530	40	50	84	65	35	91	61	360	360	20	20	115	25	4	8	8
1002131	PIER 2 @ 17 & 24	FIX.	565.1722M	2	444.8	84.51	-		280	530	51	50	84	-	-	-	-	260	360	20	20	84	25	4	8	8
1002131	PIER 2 @ 18 - 23	FIX.	565.1722M	6	444.8	84.51	-		280	530	40	50	84	-	-	-	-	260	360	20	20	84	25	4	8	8
1002131	PIER 2 @ 25 - 32	EXP.	565.1522M	8	333.6	63.38	33 mm		280	530	40	50	84	65	35	91	61	340	360	20	20	107	25	4	8	8
1002132	PIER 1 @ 1 & 6	FIX.	565.1722M	2	333.6	63.38	-		250	560	64	50	84	-	-	-	-	250	360	44	44	76	25	4	8	8
1002132	PIER 1 @ 2 - 5	FIX.	565.1722M	4	333.6	63.38	-		250	560	40	50	84	-	-	-	-	250	360	20	20	76	25	4	8	8
1002132	PIER 1 @ 7 - 12	EXP.	565.1522M	6	667.2	126.77	42 mm		304	670	40	50	84	65	35	91	61	400	500	20	20	123	25	4	8	8
1002132	PIER 2 @ 13 - 18	FIX.	565.1722M	6	667.2	126.77	-		304	670	40	50	84	-	-	-	-	300	500	20	20	86	25	4	8	8
1002132	PIER 2 @ 19 & 24	EXP.	565.1522M	2	333.6	63.38	33 mm		270	560	50	50	84	65	35	91	61	350	360	30	30	107	25	4	8	8
1002132	PIER 2 @ 20 - 23	EXP.	565.1522M	4	333.6	63.38	33 mm		270	560	40	50	84	65	35	91	61	350	360	20	20	107	25	4	8	8

T2 IS UPSTATION OF T1.



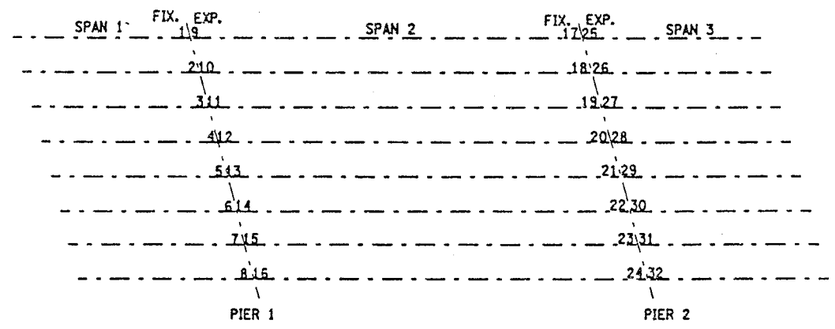
BEARING LOCATION SCHEMATIC

BIN 1002132



BEARING LOCATION SCHEMATIC

BIN 1093571



BEARING LOCATION SCHEMATIC

BIN 1002131

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

MULTI ROTATIONAL BEARINGS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AE.M1A	3	10/02	BR-2

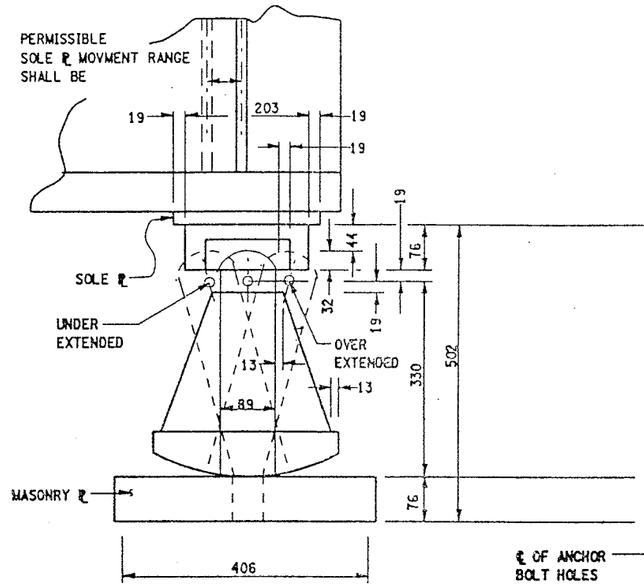
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

1093572

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	350	432

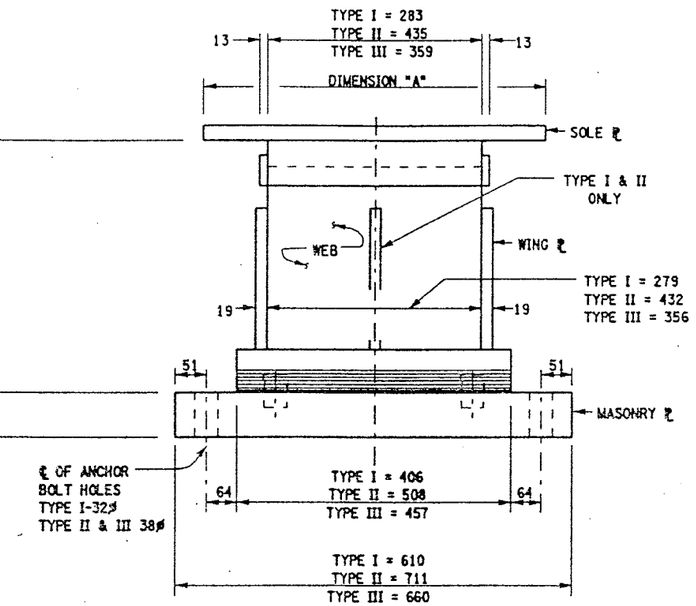
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093571 & 1093572

PIER	SPAN-GIRDER	EXP. BRG. TYPE	SOLE ℄-DIM. "A"
SB-P1	2 - ALL	III	584
SB-P3	4 - 1&4	II	813
SB-P3	4 - 2&3	II	660
SB-P6	7 - 1&4	II	508
SB-P6	7 - 2&3	I	610
SB-P7	8 - 1&4	I	635
SB-P7	8 - 2&3	I	610
SB-P9	10 - ALL	I	660
SB-P10	11 - 1&4	I	635
SB-P10	11 - 2&3	I	610
SB-P11	12 - 1&4	I	635
SB-P11	12 - 2&3	I	610
SB-P13	14 - 1&4	I	635
SB-P13	14 - 2&3	I	610
NB-P1	1 - ALL	III	584
NB-P2	3 - 1&4	III	762
NB-P2	3 - 2&3	III	711
NB-P3	4 - 1&4	II	813
NB-P3	4 - 2&3	II	660
NB-P4	5 - 1&4	II	813
NB-P4	5 - 2&3	II	660
NB-P6	7 - 1&4	II	508
NB-P6	7 - 2&3	II	610
NB-P7	8 - 1&4	II	635
NB-P7	8 - 2&3	I	610
NB-P8	9 - 1&4	I	635
NB-P8	9 - 2&3	I	610
NB-P10	11 - 1&4	I	635
NB-P10	11 - 2&3	I	610
NB-P11	12 - 1&4	I	635
NB-P11	12 - 2&3	I	610



SIDE ELEVATION

NOT TO SCALE



END ELEVATION

NOT TO SCALE

EXISTING HIGH ROCKER EXPANSION BEARING
BIN 1093571 & BIN 1093572

BRIDGE BEARING RESTORATION NOTES:

1. BRIDGE BEARING RESTORATION ITEM 15565.4302M SHALL INCLUDE ALL DESIGNATED WORK AS PER THE SPECIFICATION.
2. STRUCTURAL LIFTING SHALL BE USED WITH ALL EXPANSION BEARING RESTORATION.
3. IF THE CONTRACTOR ELECTS TO LIFT ONLY ONE GIRDER AT A TIME PER SPAN (TO A MAXIMUM OF 3 mm TO REMOVE LOAD FROM BEARINGS), NO VEHICULAR TRAFFIC RESTRICTIONS WILL BE REQUIRED AS STATED IN SPECIFICATIONS SECTON 585-STRUCTURAL LIFTING OPERATIONS.
4. BEARING RESTORATION SHALL AS A MINIMUM, AND IN ALL CASES INCLUDE REPLACEMENT OF BRONZE PLATE.
5. FIXED BEARING TO BE CLEANED IN PLACE. DO NOT DISASSEMBLE.
6. ON BINS 1093571 & 1093572, BRIDGE BEARING RESTORATION ITEM 15564.4302M FOR THE HIGH ROCKER BEARINGS SHALL INCLUDE ONLY THOSE BEARINGS SHOWN ON DWG BR-11 WHICH ARE EITHER OVER EXTENDED OR UNDER EXTENDED MORE THAN 5° FROM WHAT SHOULD BE ANTICIPATED FOR THE AMBIENT TEMPERATURE. THOSE EXPANSION BEARINGS WHICH ARE BEING RESTORED SHALL BE RESET TO ORIGINAL SPECIFICATIONS.

JACKING NOTES:

THE METHOD OF LIFTING SHALL BE APPROVED BY THE DEPUTY CHEIF ENGINEER (STRUCTURES), DSES, TWO WEEKS PRIOR TO THE START OF THE WORK.

NO LIFTING WILL BE ALLOWED UNTIL ALL TEMPORARY SUPPORTS ARE SECURED.

WHEN POSSIBLE, THERE WILL BE NO LIVE LOAD DURING LIFTING.

LIFTING SHALL BE CONFINED TO ONE END OF A SPAN AT ANY ONE TIME.

IF THE CONTRACTOR ELECTS TO LIFT ONLY ONE GIRDER AT A TIME PER PIER (TO A MAXIMUM OF 3 mm TO REMOVE LOAD FROM BEARING), NO VEHICULAR TRAFFIC RESTRICTIONS WILL BE REQUIRED AS STATED IN THE SPECIFICATION SECTION 585-STRUCTURAL LIFTING OPERATIONS.

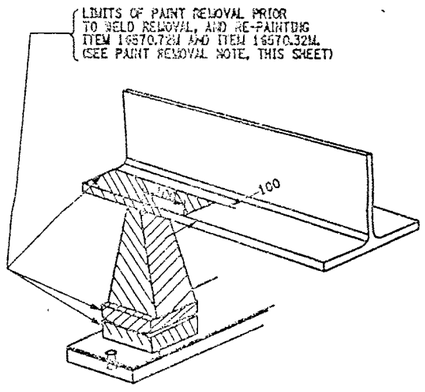
ITEM CLARIFICATION NOTE:

ITEM 589.52NNNNM, REMOVAL OF EXISTING STEEL IS A SERIALIZED ITEM AND THE FOLLOWING PAY ITEMS SHALL BE INCORPORATED BY BRIDGE:
BIN 1093571 SB SHALL USE ITEM 589.520001M
BIN 1093572 NB SHALL USE ITEM 589.520002M

ITEM 571.01NNNNM - THE TREATMENT AND DISPOSAL OF PAINT REMOVAL WASTE IS A SERIALIZED ITEM AND THE FOLLOWING PAY ITEMS SHALL BE INCORPORATED BY BRIDGE:
BIN 1093571 SB SHALL USE ITEM 571.010001M
BIN 1093572 NB SHALL USE ITEM 571.010002M

ITEM 570.10NNNNM - ENVIRONMENTAL GROUND PROTECTION IS A SERIALIZED ITEM AND THE FOLLOWING PAY ITEMS SHALL BE INCORPORATED BY BRIDGE.
BIN 1093571 SB SHALL USE ITEM 570.090001M
BIN 1093572 NB SHALL USE ITEM 570.090002M

ITEM 570.09NNNNM - ENVIRONMENTAL WATER PROTECTION IS A SERIALIZED ITEM AND THE FOLLOWING PAY ITEMS SHALL BE INCORPORATED BY BRIDGE
BIN 1093571 SB SHALL USE ITEM 570.100001M
BIN 1093572 NB SHALL USE ITEM 570.100002M



PAINT REMOVAL DETAIL

SCALE: 1 TO 5

PAINT REMOVAL NOTE:

1. IN CONJUNCTION WITH THE USE OF ITEM 16570.32M AND ITEM 16570.76M. ITEM 571.01NNNNM - TREATMENT & DISPOSAL OF PAINT REMOVAL WASTE AND EITHER ITEM 570.10NNNNM - ENVIRONMENTAL GROUND PROTECTION OR ITEM 570.09NNNNM - ENVIRONMENTAL WATER PROTECTION SHALL ALSO BE INCORPORATED DURING THE PAINT REMOVAL OPERATIONS.
2. ALL NEW PARTS INSTALLED AT THIS LOCATION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 15565.4302. THE CONTRACTOR WILL BE PAID FOR A QUANTITY OF ONE FOR ALL NEW MATERIALS AT THIS LOCATION.
3. ALL EXISTING SURFACES SHALL BE CLEANED AND LUBRICATED TO ENSURE FREE MOVEMENT, ITEM 15565.4302M.

LIST OF ITEMS USED:

ITEM 571.010001M - TREATMENT AND DISPOSAL OF PAINT REMOVAL WASTE (CM)
ITEM 571.010002M - TREATMENT AND DISPOSAL OF PAINT REMOVAL WASTE (CM)
ITEM 15565.4302M - BRIDGE BEARING RESTORATION (EA)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 SB & NB
OVER
CSX RAILROAD
BEARING RESTORATION DETAILS

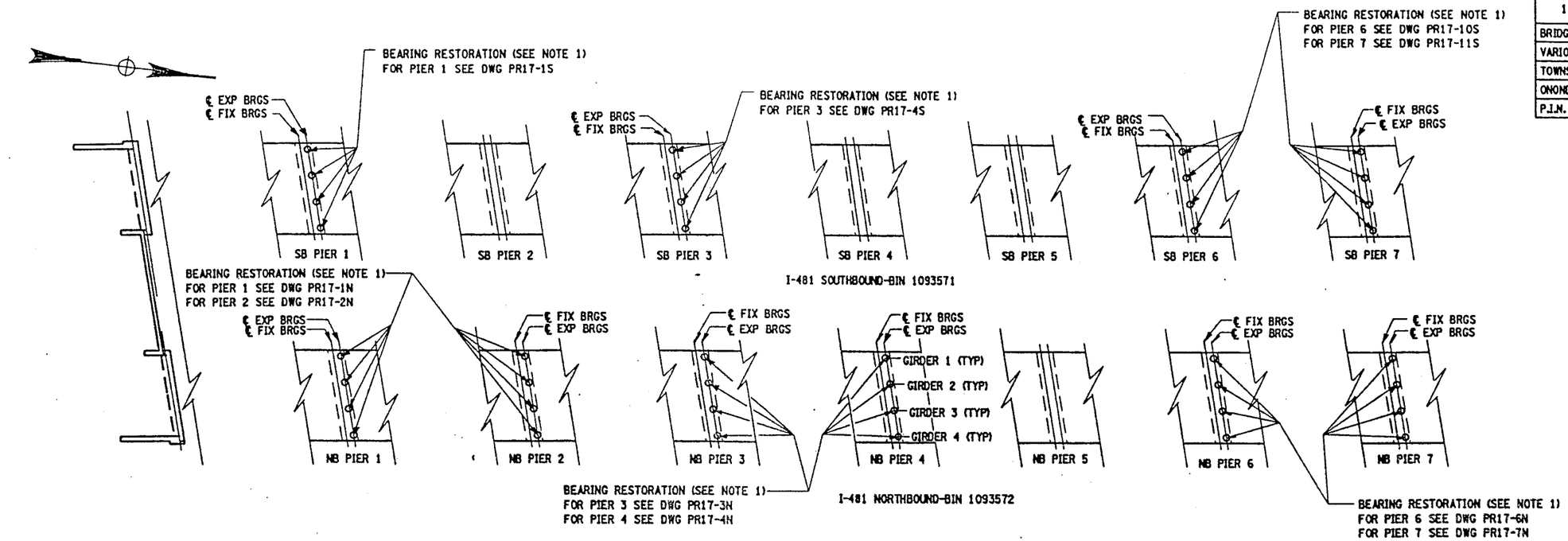
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

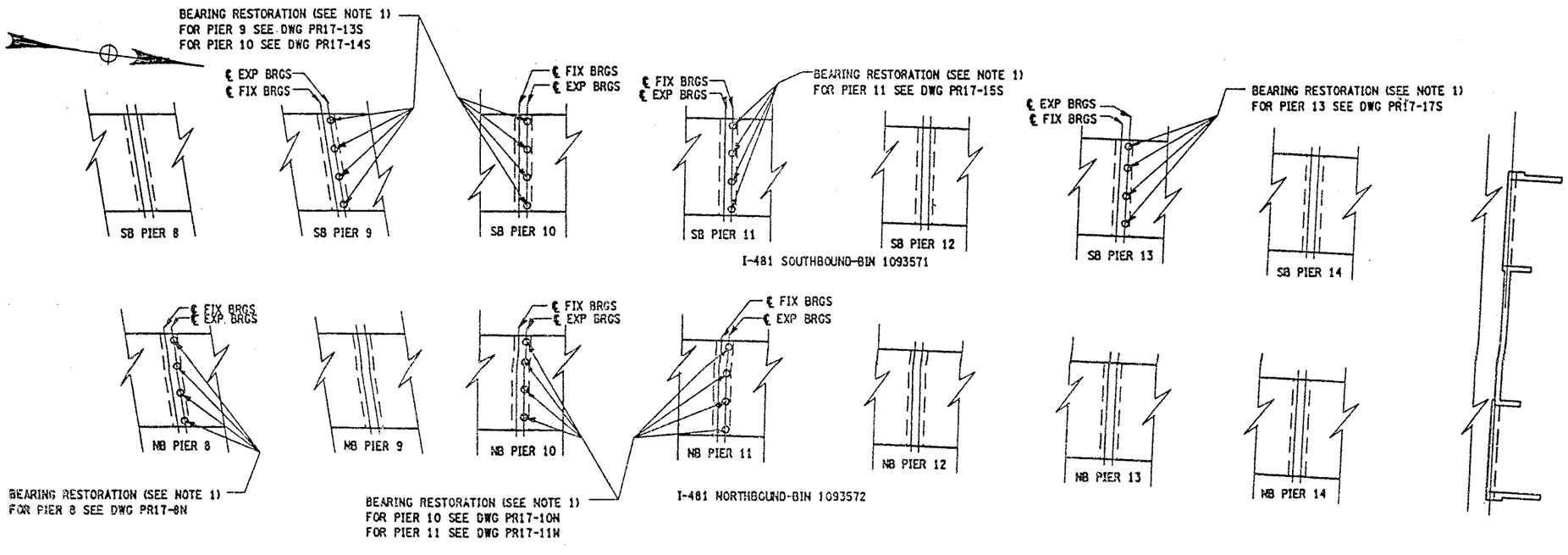
FILENAME	REGION	DATE	DRAWING NO.
305613ZZJM1A	3	10/02	BR-10

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	351	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 | B.I.N. 1093571 & 1093572





BRIDGE PLAN SCHEMATIC
SCALE 1:300

NOTES

1. BRIDGE BEARING RESTORATION ITEM 15565.4302M AND EITHER STRUCTURAL LIFTING OPERATION -(TYPE B) ITEM 585.02M OR STRUCTURAL LIFTING OPERATION -(TYPE C) ITEM 585.03M

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE | DATE

INTERSTATE 481 SB & NB
OVER
CSX RAILROAD

BEARING RESTORATION DETAILS
BRIDGE PLAN SCHEMATIC

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613ZZM1A	3	10/02	BR-11

DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ ESTIMATED BY ____ DRAFTED BY ____ CHECKED BY ____ CHECKED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	364	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 | B.I.N. ALL BINS

BRIDGE JOINT TABLE

B.I.N. NUMBER	JOINT LOCATION	JOINT SKEW	SPAN(S) LENGTH FOR JOINT (METERS)	JOINT BEND LOCAT'N RT	JOINT BEND LOCAT'N LT	EXISTING JOINT TYPE	PROPOSED JOINT TYPE	CURB TO CURB DISTANCE (METERS) (SEE NOTES)	FASCIA & MEDIAN LENGTH (METERS) LT/RT	TOTAL LENGTH (METERS)	JOINT ITEM NUMBER(S)	DRAWING NUMBER SECT VIEW	DRAWING NUMBER PLAN VIEW	DRAWING NUMBER FASCIA DETAIL
1093572	SOUTH ABUT.	8°-43'-42"	26.212	N	N	ACJ/ADA	MOD-1	10.330	.616/.616	11.562	566.01M	JD-55	JD-53	JD-56
	PIER 1	8°-43'-42"	46.939	N	N	OPEN	NONE	10.330	.616/.616	11.562	—	JD-56	—	—
	PIER 2	8°-43'-42"	51.511	N	N	OPEN	NONE	10.330	.616/.616	11.562	—	JD-56	—	—
	PIER 3	8°-43'-42"	59.740	N	N	OPEN	NONE	10.330	.616/.616	11.562	—	—	—	—
	PIER 4	8°-43'-42"	59.740	N	N	OPEN	NONE	10.330	.616/.616	11.562	—	—	—	—
	PIER 5	8°-43'-42"	59.740	N	N	OPEN	NONE	10.330	.616/.616	11.562	—	—	—	—
	PIER 6	8°-43'-42"	37.490	N	N	ACJ	MOD-1	10.330	.616/.616	11.562	566.01M	JD-55	JD-54	JD-56
	PIER 7	8°-43'-42"	37.490	N	N	ACJ	MOD-1	10.330	.616/.616	11.562	566.01M	JD-55	JD-54	JD-56
	PIER 8	8°-43'-42"	37.490	N	N	ACJ	MOD-1	10.330	.616/.616	11.562	566.01M	JD-55	JD-54	JD-56
	PIER 9	8°-43'-42"	37.490	N	N	ACJ	MOD-1	10.330	.616/.616	11.562	566.01M	JD-55	JD-54	JD-56
	PIER 10	0°-00'-00"	37.490	N	N	ACJ	MOD-1	10.210	.610/.610	11.562	566.01M	JD-55	JD-54	JD-56
	PIER 11	0°-00'-00"	37.490	N	N	ACJ	MOD-1	10.210	.610/.610	11.430	566.01M	JD-55	JD-54	JD-56
	PIER 12	0°-00'-00"	37.490	N	N	ACJ	MOD-1	10.210	.610/.610	11.430	566.01M	JD-55	JD-54	JD-56
	PIER 13	0°-00'-00"	37.490	N	N	ACJ	MOD-1	10.210	.610/.610	11.430	566.01M	JD-55	JD-54	JD-56
	PIER 14	0°-00'-00"	37.490	N	N	ACJ	MOD-1	10.210	.610/.610	11.430	566.01M	JD-55	JD-54	JD-56
	NORTH ABUT.	0°-00'-00'	—	N	N	ADA	RADA	10.210	.610/.610	11.430	—	JD-55	JD-54	JD-56
1093671	SOUTH ABUT.	10°-12'-45"	—	N	N	ADA	RADA	15.795	.464/.464	16.724	—	JD-58	JD-57	JD-59
	NORTH ABUT.	10°-12'-45"	34.747	N	N	ACJ/ADA	MAC-5	15.795	.464/.464	16.724	567.35M	JD-58	JD-57	JD-59
1093672	SOUTH ABUT.	10°-12'-45"	—	N	N	ADA	RADA	15.795	.464/.464	16.724	—	JD-58	JD-57	JD-59
	NORTH ABUT.	10°-12'-45"	34.747	N	N	ACJ/ADA	MAC-5	15.795	.464/.464	16.724	567.35M	JD-58	JD-57	JD-59

LEGEND

EXISTING JOINT TYPE:

ACJ = ARMORED COMPRESSION JOINT SYSTEM
MOD = MODULAR JOINT SYSTEM
MAC = MODIFIED ARMORED COMPRESSION SYSTEM (NO HORIZ. ARMORING ANGLE)
ADA = ARMORED DECK ANGLE
SS = STRIP SEAL JOINT
OPEN = OPEN JOINT

PROPOSED JOINT TYPE:

MAC-1 = MOD. ARM./COMP. SEAL JT. SYS. (A-1)
MAC-2 = MOD. ARM./COMP. SEAL JT. SYS. (A-2)
MAC-5 = MOD. ARM./COMP. SEAL JT. SYS. (A-5)
MAC-6 = MOD. ARM./COMP. SEAL JT. SYS. (A-6)
RCS = REPLACE EXISTING COMPRESSION SEAL
RADA = REMOVE ARMOR DECK ANGLE
MOD-1 = MODULAR JT. SYS. (ONE-CELL)
MOD-2 = MODULAR JT. SYS. (TWO-CELL)

JOINT BEND LOCATION:

N = NO BENDS
CRB = CURB LINE
PAV'T = PAVEMENT

GENERAL NOTES:

- ALL MEASUREMENTS SHALL BE FIELD VERIFIED.
- CURB TO CURB LENGTHS ARE MEASURED ALONG ℄ OF JOINT.
- MULTIPLE DIMENSIONS ARE SHOWN LOOKING UP-STATION, LEFT TO RIGHT.
- ALL DIMENSIONS ARE SHOWN IN METERS.

INFORMATIONAL NOTES:

BIN 1093572

CLEAN EXISTING DRAINAGE SYSTEMS AT OPEN JOINTS (OPEN JOINTS TO REMAIN). AS SHOWN ON CONTRACT PLANS OR AS DIRECTED BY THE ENGINEER.

FOR JOINT DETAILS REFER TO THE FOLLOWING DRAWINGS:

DWG. NO. JD-1 - MODIFIED ARMORED COMPRESSION SEAL JOINT SYSTEM.
DWG. NO. JD-24 - ONE-CELL MODULAR JOINT SYSTEM.
DWG. NO. JD-25 - TWO-CELL MODULAR JOINT SYSTEM.

LIST OF BRIDGE JOINT ITEMS USED:

ITEM 566.01M - MODULAR EXP. JOINT SYSTEM ONE-CELL (m)
ITEM 566.02M - MODULAR EXP. JOINT SYSTEM TWO-CELL (m)
ITEM 567.31M - MODIFIED ARMORED JOINT SYSTEM W/ COMP. SEAL TYPE A1 (m)
ITEM 567.32M - MODIFIED ARMORED JOINT SYSTEM W/ COMP. SEAL TYPE A2 (m)
ITEM 567.35M - MODIFIED ARMORED JOINT SYSTEM W/ COMP. SEAL TYPE A5 (m)
ITEM 567.36M - MODIFIED ARMORED JOINT SYSTEM W/ COMP. SEAL TYPE A6 (m)
ITEM 16567.640001M - REPLACE COMPRESSION SEAL FOR EXISTING BRDGE JOINTS (m)

ALL DIMENSIONS ARE IN m UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 VARIOUS BRIDGES

BRIDGE JOINT TABLE

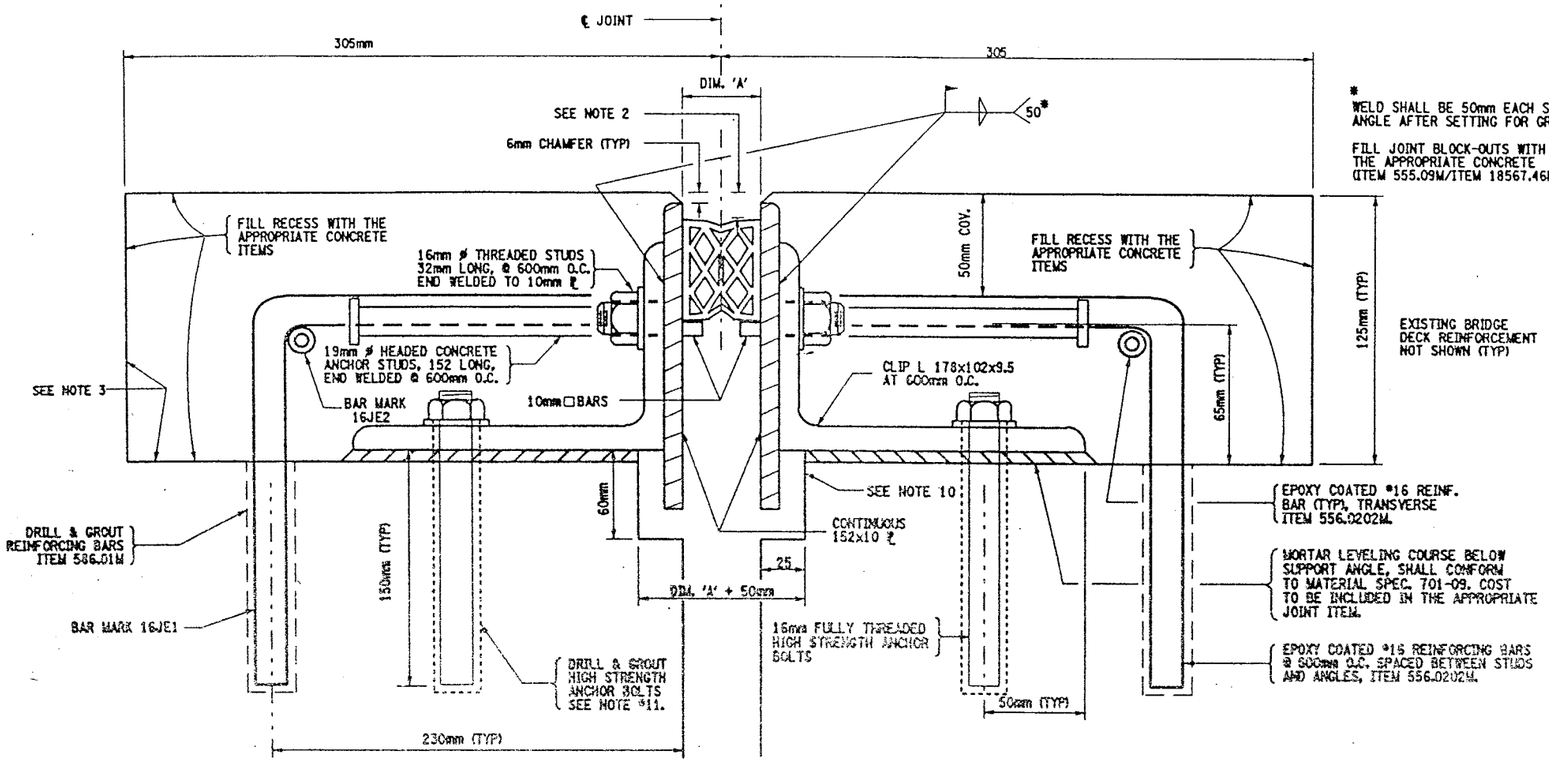
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AJ.JA1	3	10/02	JT-4

CHECKED BY
DRAFTED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	365	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. ALL BIN'S



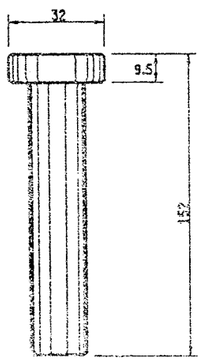
* WELD SHALL BE 50mm EACH SIDE OF ANGLE AFTER SETTING FOR GRADE

FILL JOINT BLOCK-OUTS WITH THE APPROPRIATE CONCRETE (ITEM 555.09M/ITEM 18567.46M)

MODIFIED ARMORED COMPRESSION JOINT DETAIL

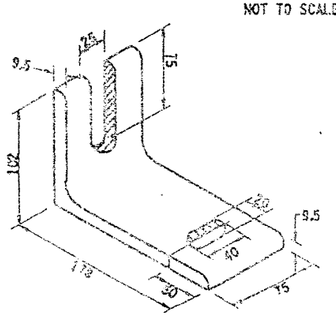
FOR INSTALLATION LOCATIONS SEE JOINT TABLE

NOT TO SCALE



DETAIL OF HEADED CONCRETE ANCHOR STUD

NOT TO SCALE

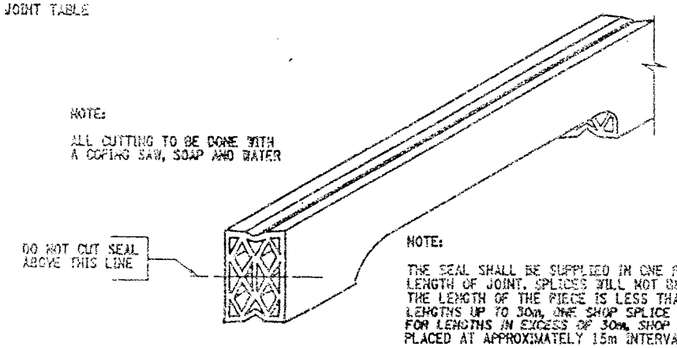


DETAIL OF CLIP ANGLE

NOT TO SCALE

NOTE:

ALL CUTTING TO BE DONE WITH A COPING SAW, SOAP AND WATER



NOTE:

THE SEAL SHALL BE SUPPLIED IN ONE PIECE FOR THE FULL LENGTH OF JOINT. SPLICES WILL NOT BE PERMITTED WHEN THE LENGTH OF THE PIECE IS LESS THAN 15m. FOR LENGTHS UP TO 30m, ONE SHOP SPLICE WILL BE PERMITTED. FOR LENGTHS IN EXCESS OF 30m, SHOP SPLICES MAY BE PLACED AT APPROXIMATELY 15m INTERVALS.

DETAIL FOR CUTTING SEAL

NOT TO SCALE

GENERAL NOTES:

1. THE TEMPERATURE OF THE BRIDGE MUST BE TAKEN ON THE STRUCTURAL STEEL SURFACE TO DETERMINE THE TEMPERATURE CORRECTION FOR THE JOINT OPENINGS.
2. THIS DEPTH SHALL BE INDICATED ON THE SHOP DRAWINGS AND SHALL BE SUCH THAT WHEN THE SEAL IS COMPRESSED TO 50% OF ITS NORMAL WIDTH, THE TOP OF THE SEAL SHALL BE NOT LESS THAN 6mm NOR MORE THAN 19mm BELOW THE TOP OF THE ROADWAY.
3. RECESSES RECEIVING ITEM 555.09M. AFTER SURFACE PREPARATION, THOROUGHLY WET THE CONCRETE SURFACE AND ALL POROUS SURFACES TO BE IN CONTACT WITH NEW CONCRETE, FOR 12 HOURS. NOTE THE USE OF MATERIAL SPECIF. 705-22 PORTLAND CEMENT MORTAR BONDING GROUT HAS BEEN ELIMINATED, SEE INSERT IN PROJECT PROPOSAL.
4. A WATER-TIGHT INTEGRITY TEST SHALL BE PERFORMED BY THE CONTRACTOR AT ALL COMPRESSION SEAL JOINT INSTALLATIONS. THE FOLLOWING TEST PARAMETERS SHALL BE INCORPORATED IN THE TEST:
   1. A 15 MINUTE MINIMUM PERIOD OF STANDING WATER, WITH A 25mm MINIMUM DEPTH SHALL BE USED.
   2. IN ADDITION, IN LOCATIONS OF COPED AREAS OF THE SEAL, BENDS, ETC., WATER PRESSURE SHALL BE APPLIED, TO THE SATISFACTION OF THE E.I.C FOR A 15 MINUTE PERIOD.
   3. LIMITS OF TEST AREA SHALL BE FROM FACE OF CURB TO FACE OF CURB ON THE DECK SURFACE.
5. NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR THE JOINT IF, IN THE OPINION OF THE ENGINEER, THE INSTALLED JOINT LEAKS WITHIN THE 15 MINUTE TEST PERIOD.
6. PRIOR TO THE START OF WORK AT EACH JOINT, THE CONTRACTOR SHALL SUBMIT A WRITTEN PLAN FOR THE SPECIFICS OF THE TESTING, INCLUDING CONTAINMENT OF THE WATER AND THE METHOD TO BE USED FOR ACCESS BY THE E.I.C. TO THE BOTTOM OF THE JOINT BEING TESTED.
7. THE COST OF ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED FOR THE TESTING WHICH INCLUDES, BUT IS NOT LIMITED TO:
   1. A CONTAINMENT SYSTEM FOR THE TEST WATER.
   2. PROVISIONS FOR E.I.C. ACCESS TO THE BOTTOM OF THE JOINT.

   SHALL BE INCLUDED IN THE PRICE BID FOR THE RESPECTIVE JOINT ITEMS.
8. THE COST OF ALL LABOR, EQUIPMENT, AND MATERIALS TO INSTALL THE NEW JOINT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE APPROPRIATE JOINT ITEM.
9. MORTAR LEVELING COURSE SHALL CONFORM TO MATERIAL SPECIFICATION 701-09 AND SHALL BE INCLUDED IN THE PRICE BID FOR THE APPROPRIATE JOINT ITEM.
10. THE DIMENSIONS OF THE REMOVAL AREA UNDER THE 152x10 PLATES ARE SHOWN TO ALLOW SPACE FOR THE PLATES TO REST FREELY. IF THERE IS ALREADY ADEQUATE SPACE, NO CONCRETE REMOVAL OR REPLACEMENT IS REQUIRED IN THIS AREA.
11. 16 mm ø ASTM A325M ANCHOR BOLT TO BE DRILLED AND GROUTED IN PLACE IN ACCORDANCE WITH THE REQUIREMENTS OF SUB-SECTION 586-3.02. GROUTING MATERIALS SHALL BE IN ACCORDANCE WITH MATERIALS SUB-SECTION 701-07 ANCHORING MATERIALS-CHEMICALLY CURING. HOLES TO BE DRILLED TO THE DIAMETER AND DEPTH RECOMMENDED BY THE MANUFACTURER OF THE GROUTING MATERIAL (MIN. DEPTH OF 150 mm). THE COST OF THE ANCHORS, INCLUDING DRILLING AND GROUTING, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE APPROPRIATE JOINT SYSTEM ITEM.
12. IT IS DESIRABLE TO HAVE THE ARMORED JOINT WITH ITS COMPRESSION SEAL ASSEMBLED IN THE SHOP AND DELIVERED TO THE JOB SITE ALL SET FOR INSTALLATION IN ITS PREFORMED RECESS IN THE STRUCTURAL SLAB. IN CASES WHERE THE ARMORED JOINT CANNOT BE ASSEMBLED IN THE SHOP, DUE TO ITS EXCESSIVE LENGTH CAUSING SHIPPING PROBLEMS, THE JOINT SHALL BE SEALED WITH THE COMPRESSION SEAL BEFORE THE STRUCTURE IS OPENED TO TRAFFIC INCLUDING CONSTRUCTION TRAFFIC, AND BEFORE DIS CONTINUING OPERATIONS WHEN WORK IS SUSPENDED DURING THE WINTER.

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

EPOXY POLYSULFIDE GROUT NOTE:

CONTRACTOR MAY WITH THE APPROVAL OF THE ENGINEER USE MATERIAL SPECIFICATION 721-03 EPOXY POLYSULFIDE GROUT, AT THE RECESSES, INSTEAD OF THE 12 HOUR CONTINUOUS PREWETTING REQUIREMENTS (PROJECT PROPOSAL). CONTRACTOR MUST ENSURE PROPER CONSTRUCTION PRACTICES ARE FOLLOWED WHEN USING THIS GROUT. THE USE OF EPOXY POLYSULFIDE GROUT SHALL BE AT NO ADDITIONAL COST TO THE STATE.

SEALS (mm)			ARMORED JOINT SYSTEM	
TYPE	NOMINAL WIDTH	DIM. "A" @ 20°C.	TYPE	END CONDITION
1	44	25	A1	Fixed End Only
2	51	30	A2	Exp. up to 18 m
3	64	38	A3	Exp. over 18 m to 23 m
4	76	44	A4	Exp. over 23 m to 27 m
5	89	52	A5	Exp. over 27 m to 38 m
6	102	60	A6	Exp. over 38 m to 46 m

Maximum Skew Limits: Fixed End - No Limit
Exp. End - 45° A2 thru A6

LIST OF ITEMS USED:

ITEM 555.09M - STRUCT. CONCRETE, CLASS "HP" (CM)
ITEM 556.0202M - EPOXY COATED BAR REINF. FOR STRUCT. (Kg)
ITEM 567.31M - MOD. ARMORED JOINT SYSTEM W/ COMP. SEAL TYPE A1 (m)
ITEM 567.32M - MOD. ARMORED JOINT SYSTEM W/ COMP. SEAL TYPE A2 (m)
ITEM 567.35M - MOD. ARMORED JOINT SYSTEM W/ COMP. SEAL TYPE A5 (m)
ITEM 567.36M - MOD. ARMORED JOINT SYSTEM W/ COMP. SEAL TYPE A6 (m)
ITEM 18567.46M - ELASTOMERIC CONC. FOR BRIDGE JT. SYSTEMS (M)
ITEM 586.01M - DRILL & GROUT REINF. BARS (mm)

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481

COMPRESSION SEAL JOINT DETAILS

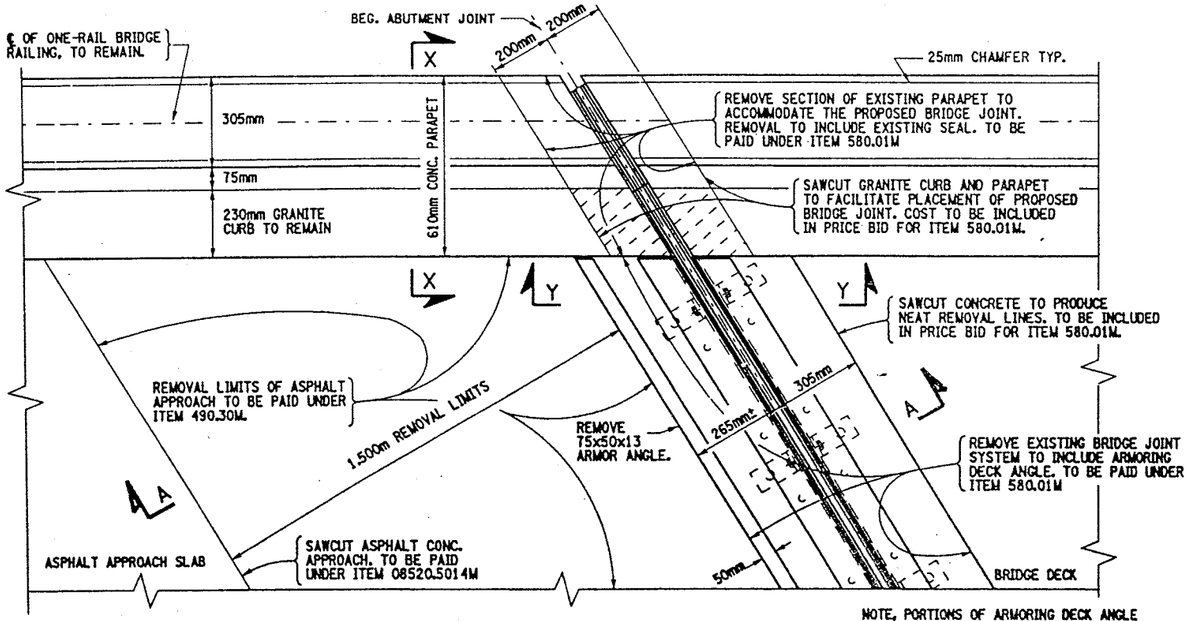
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AJJA1	3	10/02	JD-1

CHECKED BY ____ DRAFTED BY ____ ESTIMATED BY ____ CHECKED BY ____ DESIGNED BY ____ JOB MANAGER ____ DESIGN SUPERVISOR ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	417	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 | B.I.N. 1093571 & 1093572

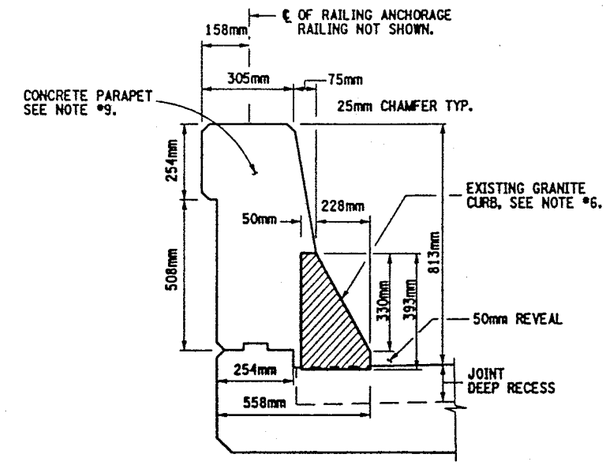


EXISTING BEG. ABUTMENT JOINT PLAN VIEW

BIN 1093571 - SOUTH ABUT.
BIN 1093572 - SOUTH ABUT.

NOT TO SCALE

NOTE, PORTIONS OF ARMORING DECK ANGLE AT BIN 1093572 NB SOUTH ABUT. HAS BEEN REMOVED BY STATE MAINT. FORCES.

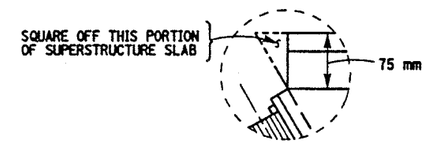


SECTION X-X
PARAPET CONCRETE REMOVAL DETAIL

NOT TO SCALE

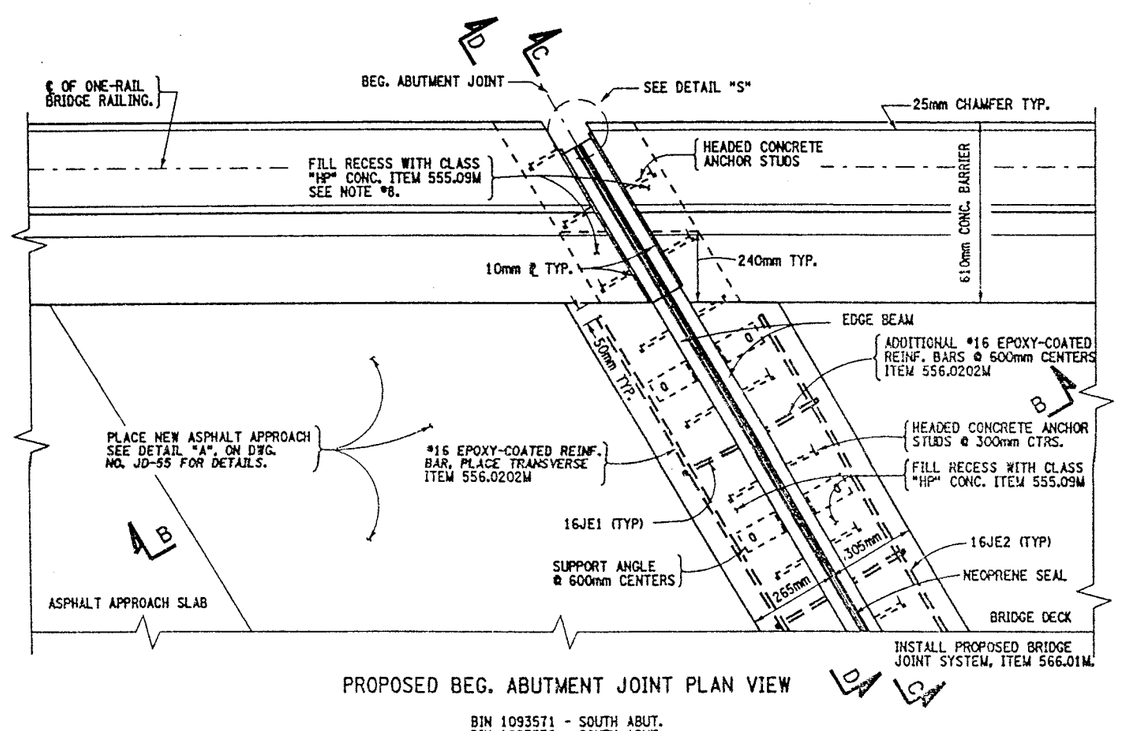
NOTES:

1. REMOVAL OF ARMORING DECK ANGLE SHALL BE FROM CURB TO CURB.
2. FOR SECTION VIEWS SEE DWG. NO. JD-55 & JD-56.
3. FOR ADDITIONAL INFORMATION REFER TO DWG. NO. JT-3 & JT-4. ALSO SEE ORIGINAL CONTRACT NUMBER FISH 70-7 AND CONTRACT NUMBER D251436 FOR PREVIOUS WORK.
4. THE EXISTING BRIDGE JOINTS BUTT UP TO PARAPET. THE SEAL THRU THE PARAPET IS PLACED SEPARATE.
5. LEFT SIDE OF DECK SHOWN, RIGHT SIDE IDENTICAL.
6. SAW CUTTING OF CONCRETE AND GRANITE CURB SHALL BE INCLUDED IN PRICE BID FOR ITEM 580.01M.
7. REFER TO DWG. NO. JD-24 FOR ONE-CELL MODULAR JOINT SYSTEM DETAILS AND NOTES.
8. FILL RECESS AT PARAPET WITH CLASS "HP" CONCRETE RESTORE TO ORIGINAL DIMENSIONS.
9. REMOVAL DIMENSIONS AT PARAPETS MAY BE INCREASED TO EMCOMPASS ANY DETERIORATED CONCRETE ADJACENT TO THE JOINT BLOCK-OUT AREA, AOBE.
10. FOR SKEW ANGLES SEE NOTE *8, ON DWG. NO. JD-54.



DETAIL "S"

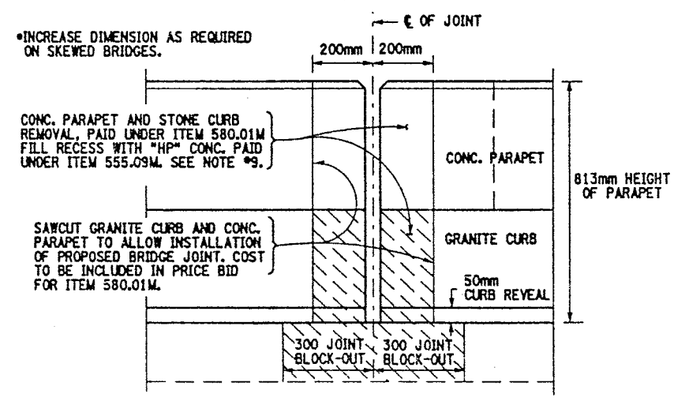
NOT TO SCALE



PROPOSED BEG. ABUTMENT JOINT PLAN VIEW

BIN 1093571 - SOUTH ABUT.
BIN 1093572 - SOUTH ABUT.

NOT TO SCALE



SECTION Y-Y
PARAPET CONCRETE REMOVAL DETAIL

NOT TO SCALE

WORK TO BE DONE:

BIN 1093571 SB

- REMOVE ARMORING DECK ANGLE AND REPLACE BRIDGE JOINT AT BEGINNING ABUTMENT.
- REPAIR CONC. HEADERS AT PIERS 1, 2 & 9.
- CLEAN DRAINAGE SYSTEM AT PIERS 1, 2, 3, 4, 5 & 9.
- REPLACE BRIDGE JOINTS AT PIERS 6, 7, 8, 10, 11, 12, 13 & 14.
- REMOVE ARMORING DECK ANGLE AT END ABUTMENT.

BIN 1093572 NB

- REMOVE ARMORING DECK ANGLE AND REPLACE BRIDGE JOINT AT BEGINNING ABUTMENT.
- REPAIR CONC. HEADERS AT PIERS 1 & 2.
- CLEAN DRAINAGE SYSTEM AT PIERS 1, 2, 3, 4 & 5.
- REPLACE BRIDGE JOINTS AT PIERS 6, 7, 8, 9, 10, 11, 12, 13, & 14.
- REMOVE ARMORING DECK ANGLE AT END ABUTMENT.

ITEMS USED:

ITEM 490.30M	- MISC. COLD MILLING OF BIT. CONC. (SM)
ITEM 08520.5014M	- SAWCUTTING BIT. CONC. (M)
ITEM 555.09M	- STRUCT. CONCRETE, CLASS "HP" (CM)
ITEM 556.0202M	- EPOXY-COATED BAR REINFORCEMENT FOR STRUCT. (Kg)
ITEM 566.01M	- MODULAR EXP. JOINT SYSTEM ONE-CELL (M)
ITEM 580.01M	- REMOVAL OF STRUCT. CONCRETE (CM)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE | DATE

INTERSTATE 481 SB & NB
OVER
CSX RAILROAD YARD
BRIDGE JOINT DETAILS

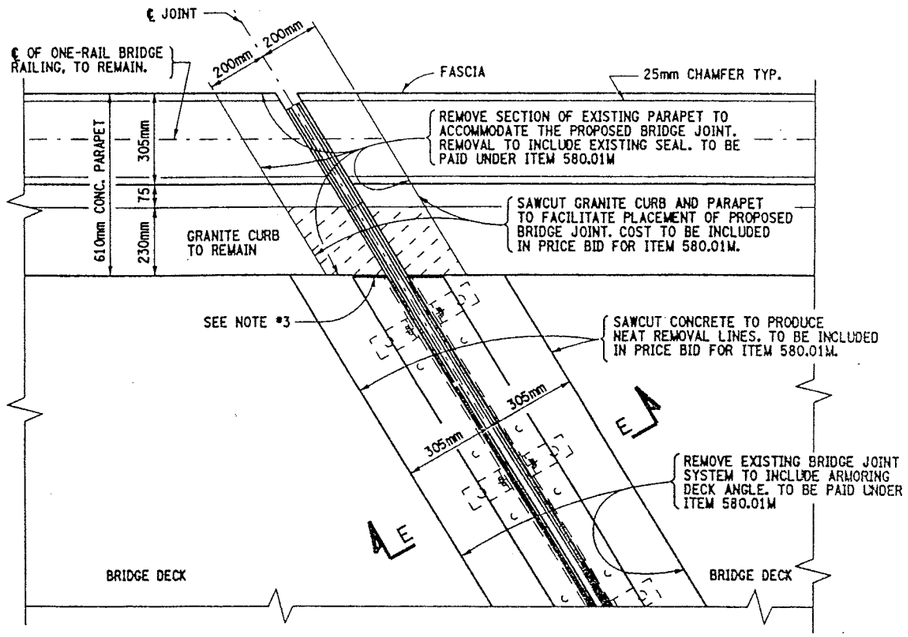
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AJJA1	3	10/02	JD-53

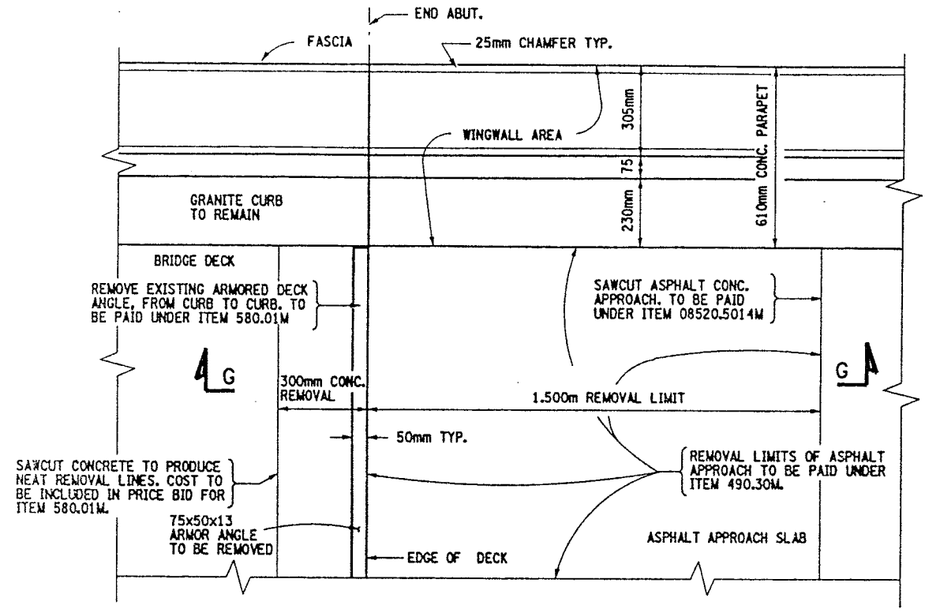
DESIGN SUPERVISOR ____ JOB MANAGER ____ DESIGNED BY ____ CHECKED BY ____ DRAFTED BY ____ CHECKED BY ____ ESTIMATED BY ____

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	418	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 | B.I.N. 1093571 & 1093572



EXISTING PIER JOINT PLAN VIEW
BIN 1093571 - PIERS 6, 7, 8, 10, 11, 12, 13 & 14
BIN 1093572 - PIERS 6, 7, 8, 9, 10, 11, 12, 13 & 14
NOT TO SCALE

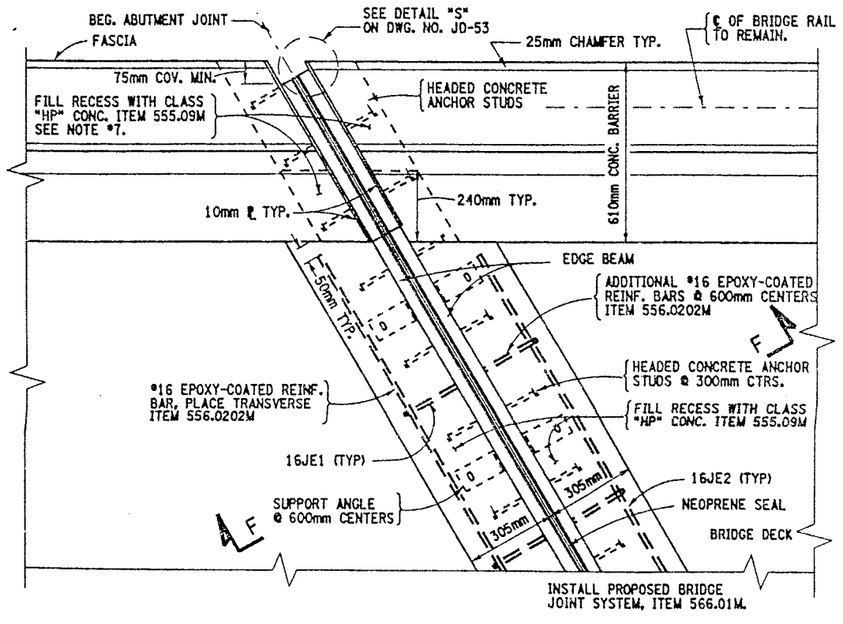


EXISTING END ABUTMENT PLAN VIEW
BIN 1093571 - NORTH ABUTMENT
BIN 1093572 - NORTH ABUTMENT
NOT TO SCALE

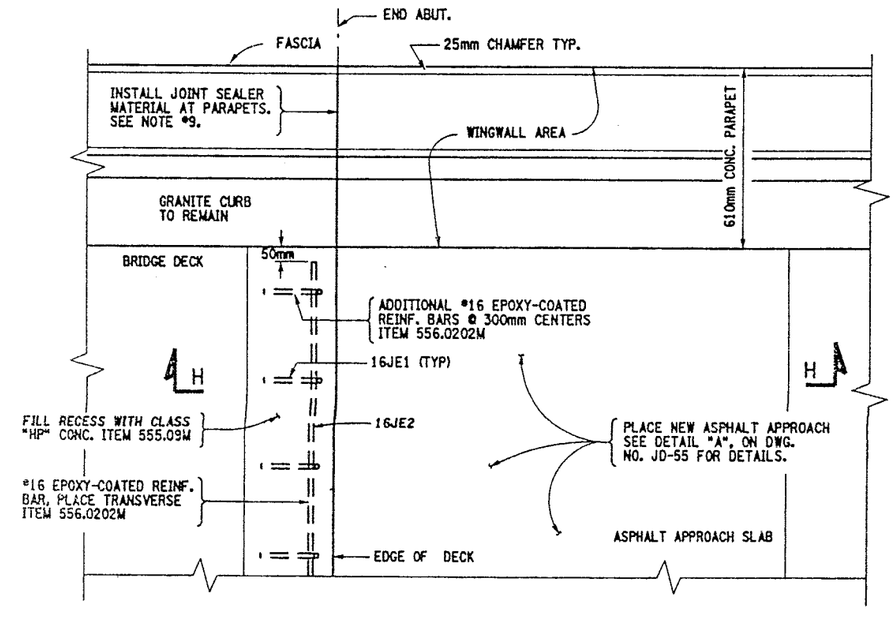
NOTES:

1. FOR SECTION VIEWS SEE DWG. NO. JD-55 & JD-56.
2. FOR ADDITIONAL INFORMATION REFER TO DWG. NO. JT-3 & JT-4. ALSO SEE ORIGINAL CONTRACT NUMBER FISH 70-7 AND CONTRACT NUMBER D251436 FOR PREVIOUS WORK.
3. THE EXISTING JOINTS AND ARMORING DECK ANGLES BUTT UP TO PARAPET. THE SEAL THRU THE PARAPET IS PLACED SEPARATE.
4. LEFT SIDE OF DECK SHOWN, RIGHT SIDE IDENTICAL.
5. SAW CUTTING OF CONCRETE AND GRANITE CURB SHALL BE INCLUDED IN PRICE BID FOR ITEM 580.01M.
6. REFER TO DWG. NO. JD-24 FOR SINGLE CELL MODULAR JOINT DETAILS AND NOTES.
7. FILL RECESS AT PARAPET WITH CLASS "HP" CONCRETE RESTORE TO ORIGINAL DIMENSIONS.
8. BOTH STRUCTURES HAVE THE FOLLOWING SKEW ANGLES:

   BEGINNING ABUTMENT THROUGH PIER #9 HAVE A SKEW ANGLE OF 8°-43'-42". PIER #10 THROUGH END ABUTMENT HAVE A SKEW ANGLE OF 0°-0'-0".
9. THE INSTALLATION OF NEW JOINT SEALER MATERIAL AT END ABUTMENT PARAPETS SHALL MEET STANDARD SPECIF. 705-06. THE AREA SHALL BE CLEANED PRIOR TO PLACEMENT, TO THE SATISFACTION OF THE ENGINEER. COSTS TO BE INCLUDED IN PRICE BID FOR ITEM 555.09M.



PROPOSED PIER JOINT PLAN VIEW
BIN 1093571 - PIERS 6, 7, 8, 10, 11, 12, 13 & 14
BIN 1093572 - PIERS 6, 7, 8, 9, 10, 11, 12, 13 & 14
NOT TO SCALE



PROPOSED END ABUTMENT PLAN VIEW
BIN 1093571 - NORTH ABUTMENT
BIN 1093572 - NORTH ABUTMENT
NOT TO SCALE

ITEMS USED:

ITEM 490.30M	- MISC. COLD MILLING OF BIT. CONC. (SM)
ITEM 08520.5014M	- SAWCUTTING BIT. CONC. (M)
ITEM 555.09M	- STRUCT. CONCRETE, CLASS "HP" (CM)
ITEM 556.0202M	- EPOXY-COATED BAR REINFORCEMENT FOR STRUCT. (Kg)
ITEM 566.01M	- MODULAR EXP. JOINT SYSTEM ONE-CELL (M)
ITEM 580.01M	- REMOVAL OF STRUCT. CONCRETE (CM)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB & SB
OVER
CSX RAILROAD YARD
BRIDGE JOINT DETAILS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AJJA1	3	10/02	JD-54

CHECKED BY
DRAFTED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	419	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
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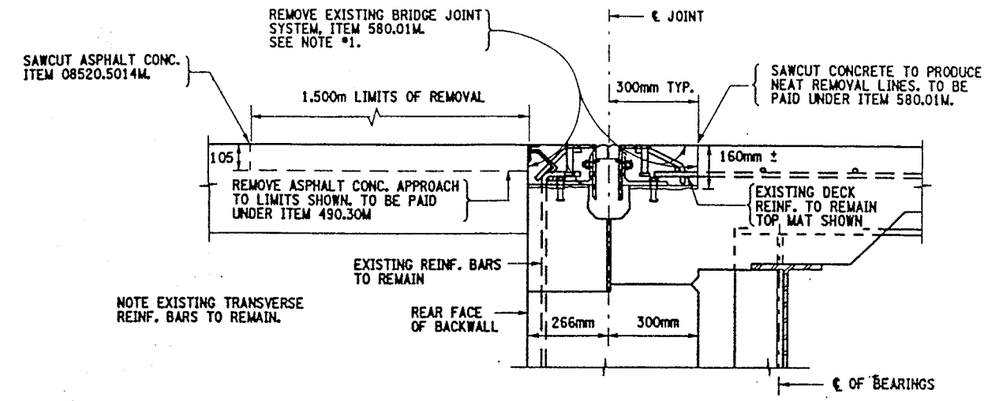
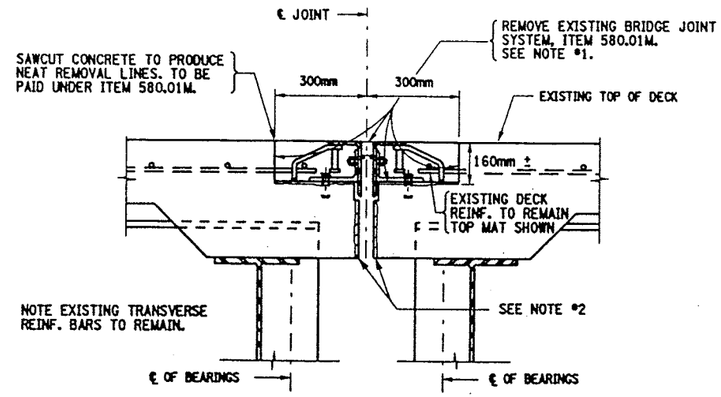
P.I.N. 305613 B.I.N. 1093571 & 1093572



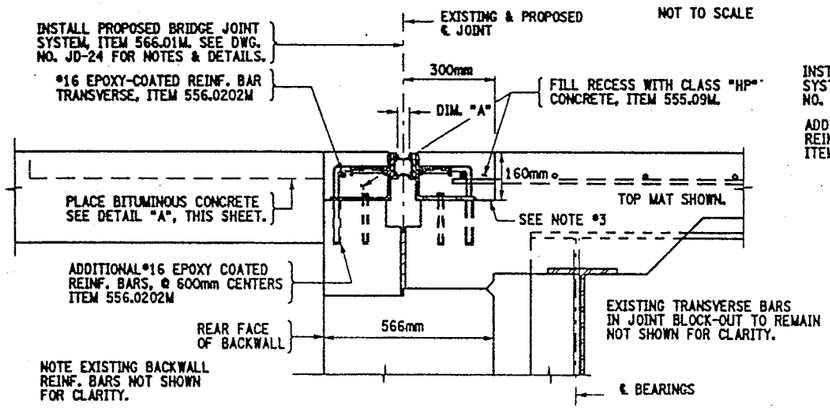
SECTION A-A
EXISTING BEGINNING ABUTMENT JOINT
BIN 1093571 - SOUTH ABUT.
BIN 1093572 - SOUTH ABUT.
NOT TO SCALE



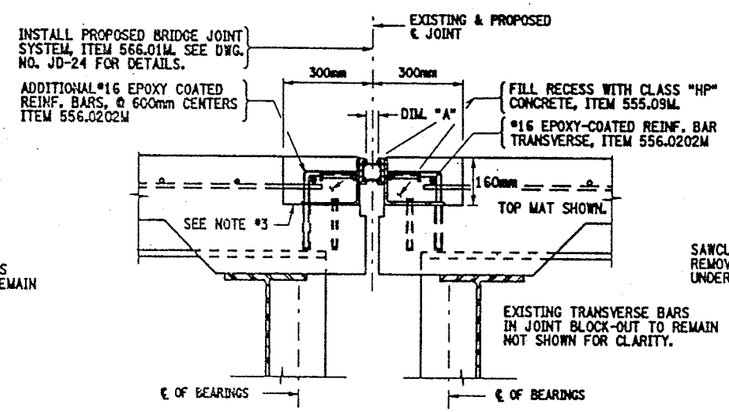
SECTION E-E
EXISTING PIER JOINT TYPICAL
BIN 1093571 - PIERS 6, 7, 8, 10, 11, 12, 13 & 14
BIN 1093572 - PIERS 6, 7, 8, 9, 10, 11, 12, 13 & 14
NOT TO SCALE

NOTES:

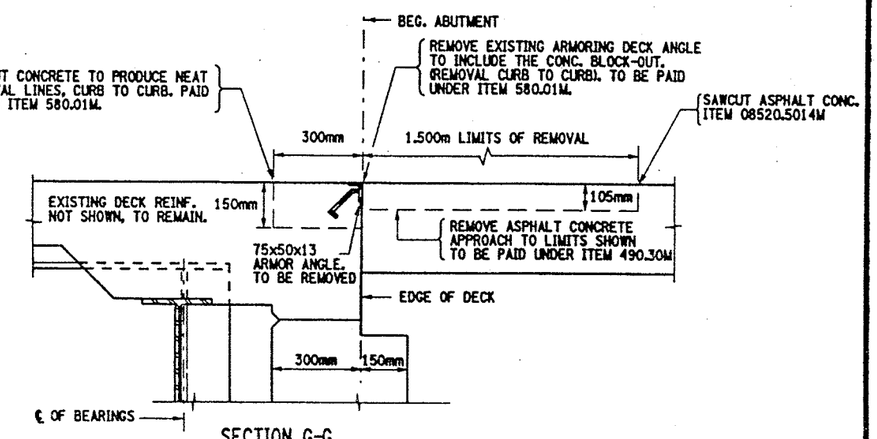
1. REMOVAL OF THE EXISTING BRIDGE JOINT SYSTEM TO LIMITS SHOWN OR AS DIRECTED BY ENGINEER. REMOVAL SHALL INCLUDE ANY ARMORING DECK ANGLE AND ANY ADDITIONAL REBAR WHICH IS WELDED TO THE SEGMENT ANGLE AND THE ORIGINAL REINFORCEMENT. COST TO BE INCLUDED IN PRICE BID FOR ITEM 580.01M.
2. REMOVAL OF A PORTION OF THE BRIDGE DECK MAY BE NECESSARY TO ALLOW FOR EXPANSION OF BRIDGE, AOBE. SEE SECTION VIEW ON DWG. NO. JD-24. COST TO BE INCLUDED IN PRICE BID FOR ITEM 580.01M.
3. RECESSES RECEIVING ITEM 555.09M, AFTER SURFACE PREPARATION, THOROUGHLY WET THE CONCRETE SURFACES AND ALL POROUS SURFACES TO BE IN CONTACT WITH NEW CONCRETE FOR 12 HOURS. NOTE, THE USE OF MATERIAL SPECIF. T05-22 PORTLAND CEMENT MORTAR BONDING GROUT HAS BEEN ELIMINATED, (PROJECT PROPOSAL).
4. ACTUAL BRIDGE JOINT BLOCK-OUT DIMENSIONS MAY VARY. REMOVAL LIMITS SHALL BE TO EXISTING BLOCK-OUT LOCATIONS, OR AS DIRECTED BY THE ENGINEER.
5. PROPOSED PARTIAL PLAN VIEWS, SEE DWG. NO. JD-53 & JD-54.
6. ALL SURFACES OF HMA SHALL BE CLEANED AND TACK-COATED PRIOR TO HMA PLACEMENT. ALL COSTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 407.01M.
7. ANY USE OF SUPERPAVE HMA ITEMS SHALL INCLUDE THE APPROPRIATE PLANT PRODUCTION QUALITY ADJUSTMENT ITEMS.



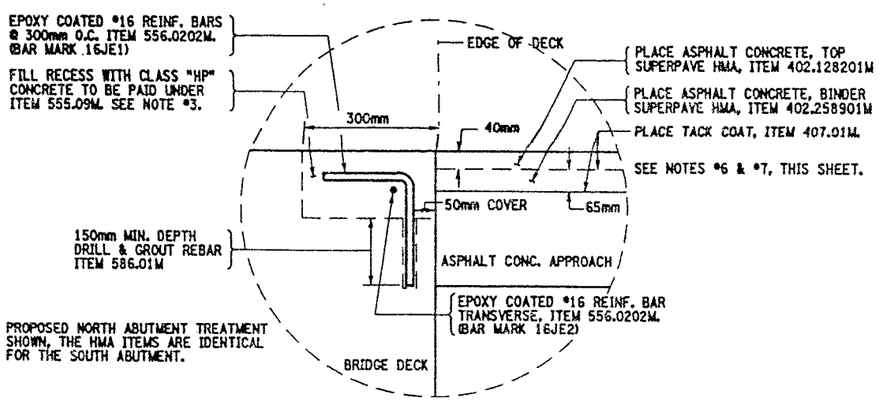
SECTION B-B
PROPOSED BEGINNING ABUTMENT JOINT
BIN 1093571 - SOUTH ABUT.
BIN 1093572 - SOUTH ABUT.
NOT TO SCALE



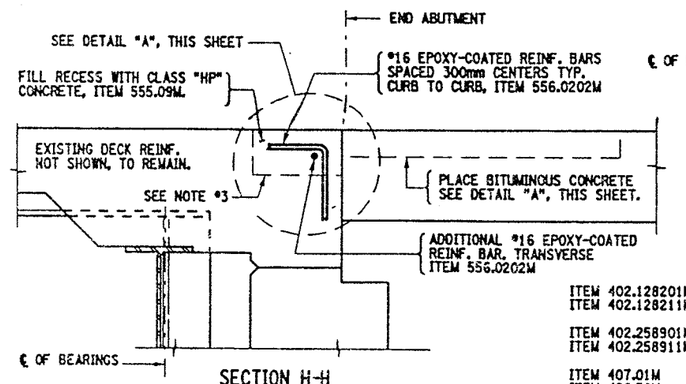
SECTION F-F
PROPOSED PIER JOINT TYPICAL
BIN 1093571 - PIERS 6, 7, 8, 10, 11, 12, 13 & 14
BIN 1093572 - PIERS 6, 7, 8, 9, 10, 11, 12, 13 & 14
NOT TO SCALE



SECTION G-G
EXISTING BEG. ABUTMENT JOINT
BIN 1093571 - NORTH ABUTMENT
BIN 1093572 - NORTH ABUTMENT
NOT TO SCALE



DETAIL "A"
NOT TO SCALE



SECTION H-H
PROPOSED END ABUTMENT JOINT
BIN 1093571 - NORTH ABUTMENT
BIN 1093572 - NORTH ABUTMENT
NOT TO SCALE

ITEMS USED:

ITEM 402.128201M	- SUPERPAVE HMA F2, 12.5mm (MT)
ITEM 402.128211M	- PLANT PRODUCTION QUALITY ADJUSTMENT TO 402.128201M (QU)
ITEM 402.258901M	- SUPERPAVE HMA F9, 25.0mm (MT)
ITEM 402.258911M	- PLANT PRODUCTION QUALITY ADJUSTMENT TO 402.258901M (QU)
ITEM 407.01M	- TACK COAT (L)
ITEM 490.30M	- MISC. COLD MILL OF BITUMINOUS CONC. (SM)
ITEM 08520.5014M	- SAWCUTTING BIT. CONC. (M)
ITEM 555.09M	- STRUCT. CONCRETE, CLASS "HP" (CM)
ITEM 556.0202M	- EPOXY-COATED BAR REINF. FOR STRUCT. (KG)
ITEM 566.01M	- MOD. EXP. JOINT SYSTEM ONE-CELL (M)
ITEM 580.01M	- REMOVAL OF STRUCT. CONCRETE (CM)
ITEM 586.01M	- DRILL & GROUT REINF. BARS (MM)

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB & SB
OVER
CSX RAILROAD YARD
BRIDGE JOINT DETAILS

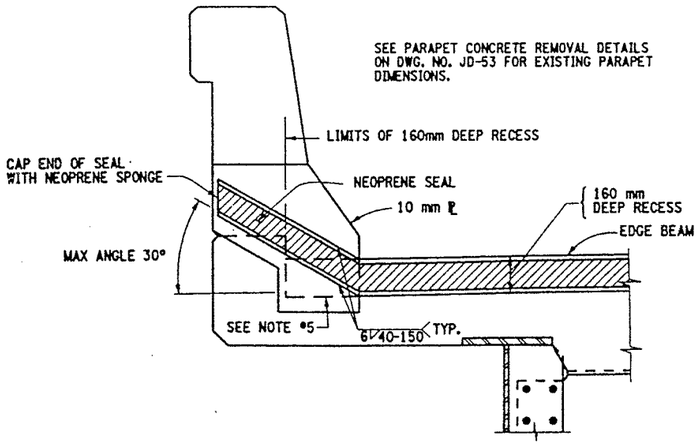
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AJJA1	3	10/02	JD-55

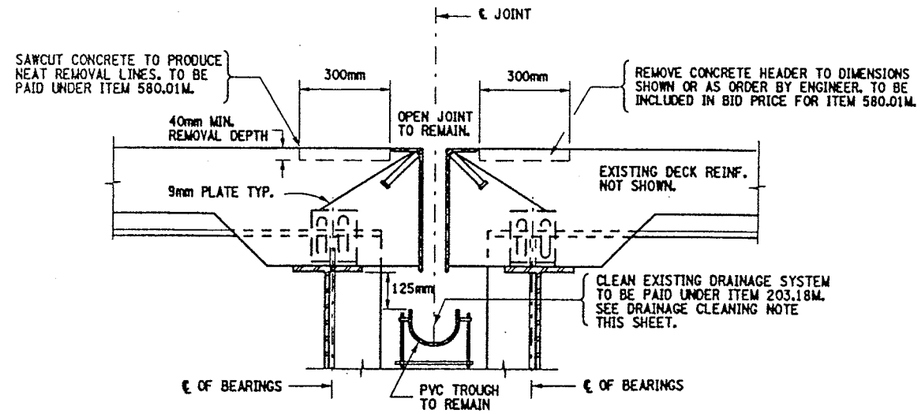
CHECKED BY
DRAFTED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY
JOB MANAGER
DESIGN SUPERVISOR

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259214	420	432

BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATE 481
TOWNS OF DEWITT AND CICERO
ONONDAGA COUNTY
P.I.N. 305613 B.I.N. 1093571 & 1093572



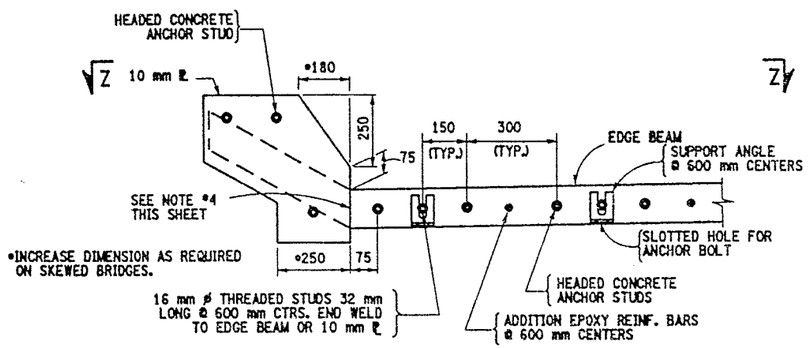
PROPOSED SEAL PLACEMENT TYPICAL
SECTION C-C (CONCRETE TRAFFIC BARRIER)
NOT TO SCALE



EXISTING OPEN JOINT AT PIERS
(REPAIRS TO OPEN JOINT HEADERS)

BIN 1093571 - PIERS 1, 2, & 9
BIN 1093572 - PIERS 1 & 2

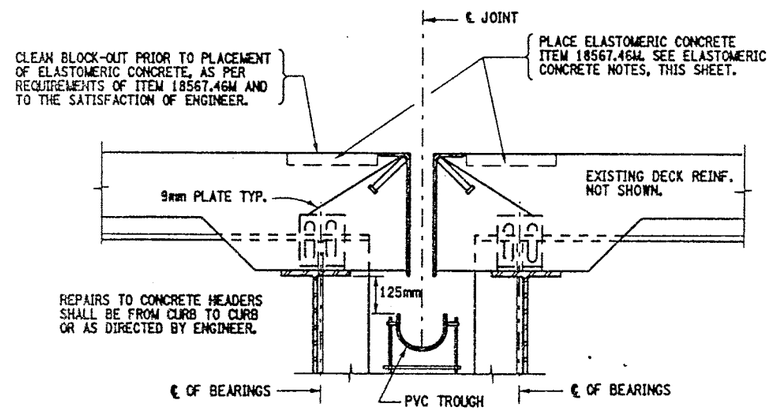
NOT TO SCALE



PROPOSED STEEL PLATE TYPICAL
SECTION D-D (CONCRETE TRAFFIC BARRIER)

(ONLY THE STEEL SHOWN)

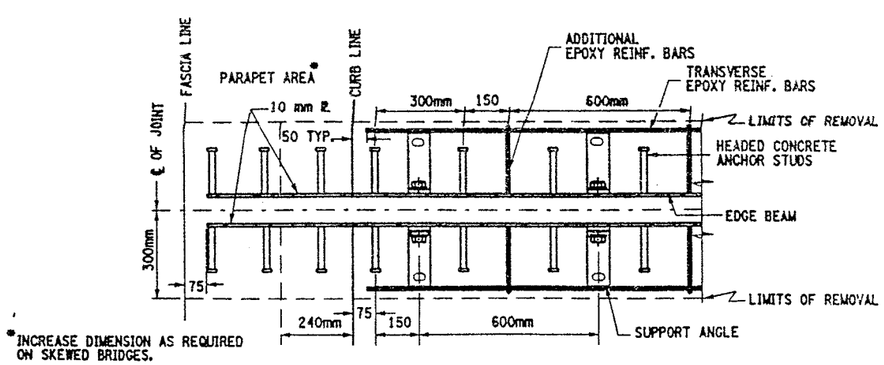
NOT TO SCALE



PROPOSED OPEN JOINT AT PIERS
(REPAIRS TO OPEN JOINT HEADERS)

BIN 1093571 - PIERS 1, 2, & 9
BIN 1093572 - PIERS 1 & 2

NOT TO SCALE



PLAN VIEW OF STEEL ℞ SECTION Z-Z
TYPICAL SPACING FOR SINGLE CELL

NOT TO SCALE

NOTES:

1. ALL NOTES & DETAILS ON DWG. NO. JD-24 SHALL APPLY.
2. REFER TO DWG. NO. JD-53 & JD-54 FOR PROPOSED PARTIAL PLAN VIEWS.
3. FOR CALCULATION OF "J" DIMENSION REFER TO DWG. NO. JD-24.
4. ALL WELDS SHALL BE GROUND SMOOTH TO THE SATISFACTION OF THE ENGINEER, ON SEAL CONTACT SIDE OF EDGE BEAM.
5. RECESSES RECEIVING ITEM 555.09M, AFTER SURFACE PREPARATION, THOROUGHLY WET THE CONCRETE SURFACES AND ALL POROUS SURFACES TO BE IN CONTACT WITH NEW CONCRETE FOR 12 HOURS. NOTE, THE USE OF MATERIAL SPECIF. 705-22 PORTLAND CEMENT MORTAR BONDING GROUT HAS BEEN ELIMINATED. (PROJECT PROPOSAL).

CLEAN DRAINAGE SYSTEM NOTE:

THE FOLLOWING CLOSED DRAINAGE SYSTEMS SHALL BE CLEANED UNDER THIS CONTRACT.

BIN 1093571 - PIERS 1, 2, 3, 4, 5, & 9
BIN 1093572 - PIERS 1, 2, 3, 4, 5 & 6

NOTE, AT PIER #6 THE TYPE OF BRIDGE JOINT IS AN ARMORED JOINT WITH COMPRESSION SEAL. THE DOWNSPOUTS ARE CONNECTED TO THE BRIDGE SCUPPERS.

THE CLEANING OF THE EXISTING DRAINAGE SYSTEM (ITEM 203.18M) SHALL BE FROM HOPPER (FASCIA GIRDER) TO HOPPER (FASCIA GIRDER) AND SHALL INCLUDE THE PVC TROUGH AND THE ENTIRE DOWNSPOUT SYSTEM (DIA. OF DOWNSPOUTS VARY) FROM HOPPERS TO OUTLET. REFER TO DWG. NO. DD17-1 THRU DWG. NO. DD17-4 FOR DRAINAGE DETAILS AND PROPOSED MODIFICATIONS TO PIER DOWNSPOUTS.

FOR ESTIMATING THE QUANTITY FOR ITEM 203.18M. THE FOLLOWING INFORMATION IS ASSUMED:

BIN 1093571 - PIERS 1, 2, 3, 4, 5, & 9
(256 METERS TOTAL)

BIN 1093572 - PIERS 1, 2, 3, 4,5 & 6
(269 METERS TOTAL)

CONTRACTOR SHALL TAKE CARE WHEN PERFORMING CLEANING OPERATION NOT TO DAMAGE THE EXISTING DRAINAGE SYSTEM. ANY DAMAGE CAUSED BY CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AS DEEMED NECESSARY BY THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.

ELASTOMERIC CONCRETE NOTE:

1. AN EXPERIENCED TECHNICAL REPRESENTATIVE EMPLOYED BY THE MANUFACTURER OF THE ELASTOMERIC CONCRETE SHALL BE PRESENT DURING ALL PHASES OF SUBSTRATE PREPARATION AND MATERIAL PLACEMENT.
2. THE WATERTIGHT INTEGRITY TEST SHALL NOT BE REQUIRED FOR THE OPEN JOINT HEADER REPAIRS, WHERE ELASTOMERIC CONCRETE (ITEM 18567.46M) IS USED, FOR THESE TWO STRUCTURES ONLY.
3. THE REMOVAL DIMENSIONS MAY BE ADJUSTED TO ENSURE THAT ALL DETERIORATED CONCRETE ADJACENT TO THE JOINT AREA IS ENCOMPASS, MORE.

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE NOTED

ITEMS USED:

ITEM 203.18M - CLEAN CLOSED DRAINAGE SYSTEMS (M)
ITEM 18567.46M - ELASTOMERIC CONCRETE FOR BRIDGE JOINT SYSTEMS (M)
ITEM 580.01M - REMOVAL OF STRUCT. CONCRETE (CM)

AS BUILT REVISIONS

SIGNATURE DATE

INTERSTATE 481 NB & SB
OVER
CSX RAILROAD YARD

BRIDGE JOINT DETAILS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
305613AJJA1	3	10/02	JD-56

DESIGN SUPERVISOR ___ JOB MANAGER ___ DESIGNED BY ___ CHECKED BY ___ DRAFTED BY ___ CHECKED BY ___ ESTIMATED BY ___

Asbestos Sampling Survey

Location:

BIN 1-09357-1
Interstate Route 481 South Bound over Conrail

Prepared for:

New York State
Department of Transportation

PIN 3804.00.101

LaBella Project No. 97132

May, 1998

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I.	Project Summary	1
II.	Site Description	1
III.	Inspection Procedures	1
IV.	Results	2
Certification		2

Figures and Table

I. Project Summary

In accordance with conditions of Term Agreement D010010, LaBella Associates, P.C. conducted an asbestos sampling survey of the Interstate Route 481 South Bound Bridge over Conrail. Based on laboratory analyses of bulk samples collected, the following materials were determined to contain asbestos:

BIN 1-09357-1 Interstate Route 481 South Bound over Conrail

Type of Material	Estimated Amount
Sheet Packing	7 Square Meters
Caulking Compound	37.4 Linear Meters

II. Site Description

The Site is located in Onondaga County, New York. For the purpose of this report, the Site consists of the Interstate Route 481 South Bound Bridge over Conrail (See attached FIGURE 1 - Site Location Map).

III. Inspection Procedures

The following procedures were used to obtain the data for this Report:

A. A review of record drawings supplied by Region 3 personnel and a visual inspection of the subject structure were conducted to identify potential visible/accessible sources of asbestos-containing materials. Observations and notes were made to provide a description of the structure, and an estimate of the approximate amount, length, or area of ACM present.

B. Physical or operational constraints which might affect the removal of the ACM were identified and reported.

C. Bulk samples of suspected ACM were collected during the site inspection of the subject structure. Samples were taken from each homogeneous area that may contain ACM.

D. Samples were submitted for analysis. Preliminary PLM analyses of NOB materials were performed by LaBella Laboratories, a NYSDOH approved laboratory, to determine the presence and percentage of asbestos in each sample. TEM analyses of NOB materials, if necessary, were performed by EMSL Analytical, Inc. or New York Testing Laboratories, Inc.

E. Lab results were used to determine the approximate location, type, and amount of the verified ACM.

F. A drawing of the structure at the Site was created, in order to show sample locations and the approximate locations and amounts of confirmed ACM observed in accessible locations.

Only accessible areas were inspected. Inaccessible areas, such as areas within the bridge or the approaches to the bridge were not included in this inspection. No investigation was conducted by LaBella Associates to determine the presence of underground utilities on or in the immediate vicinity of the Site. Actual sample locations are shown in the attached FIGURE 2. Results of bulk sample analyses are tabulated in the attached TABLE.

IV. Results

BIN 1-09357-1 Interstate Route 481 South Bound over Conrail

Sheet Packing

Asbestos-containing sheet packing is located between the tops of the abutments and the deck slab at both ends of the bridge. Most of this material is presently covered by the bridge deck, although the edges of this sheet packing are exposed and visible at various locations.

It is estimated that the total amount of this asbestos-containing sheet packing material on the bridge is approximately 7 square meters. This estimate is based on field measurements taken at the time of the site visit.

The approximate locations of this asbestos-containing sheet packing are shown in FIGURE 2.

Caulking Compound

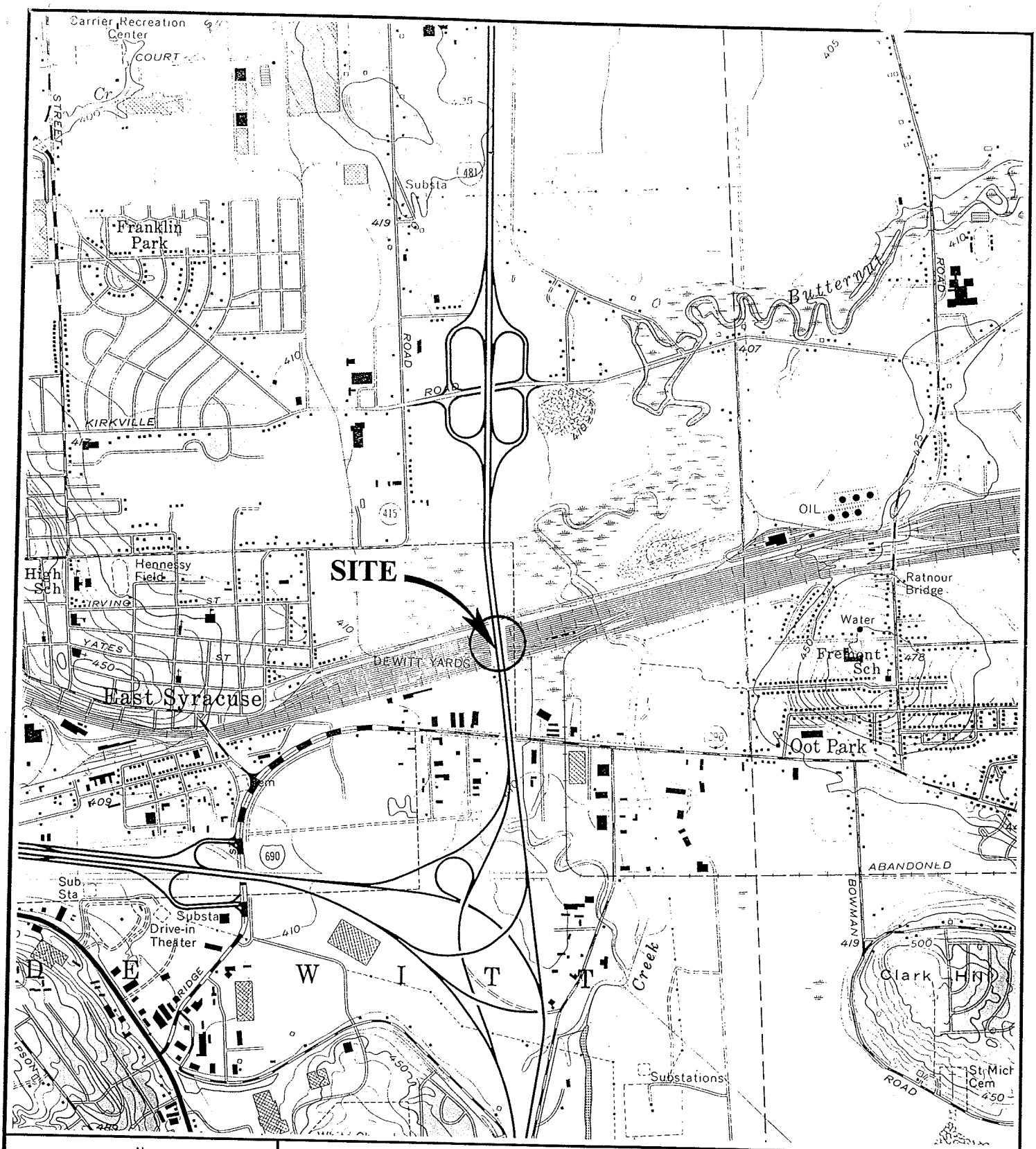
Asbestos-containing caulking compound is located around some of the guide rail base plates on both parapets on the bridge. It is estimated that the total amount of this caulking compound is approximately 37.4 linear meters. This estimate is based on field measurements taken at the time of the site visit.

The approximate locations of this material are shown in the attached FIGURE 2. Analytical results of bulk samples collected are summarized in the attached TABLE.

Certification

LaBella Associates, P.C. certifies the accuracy of this report, to the best of our knowledge, based on the information collected as described in the Inspection Procedures Section of this investigation.

Figures & Table



N

SCALE: 1" = 2000'

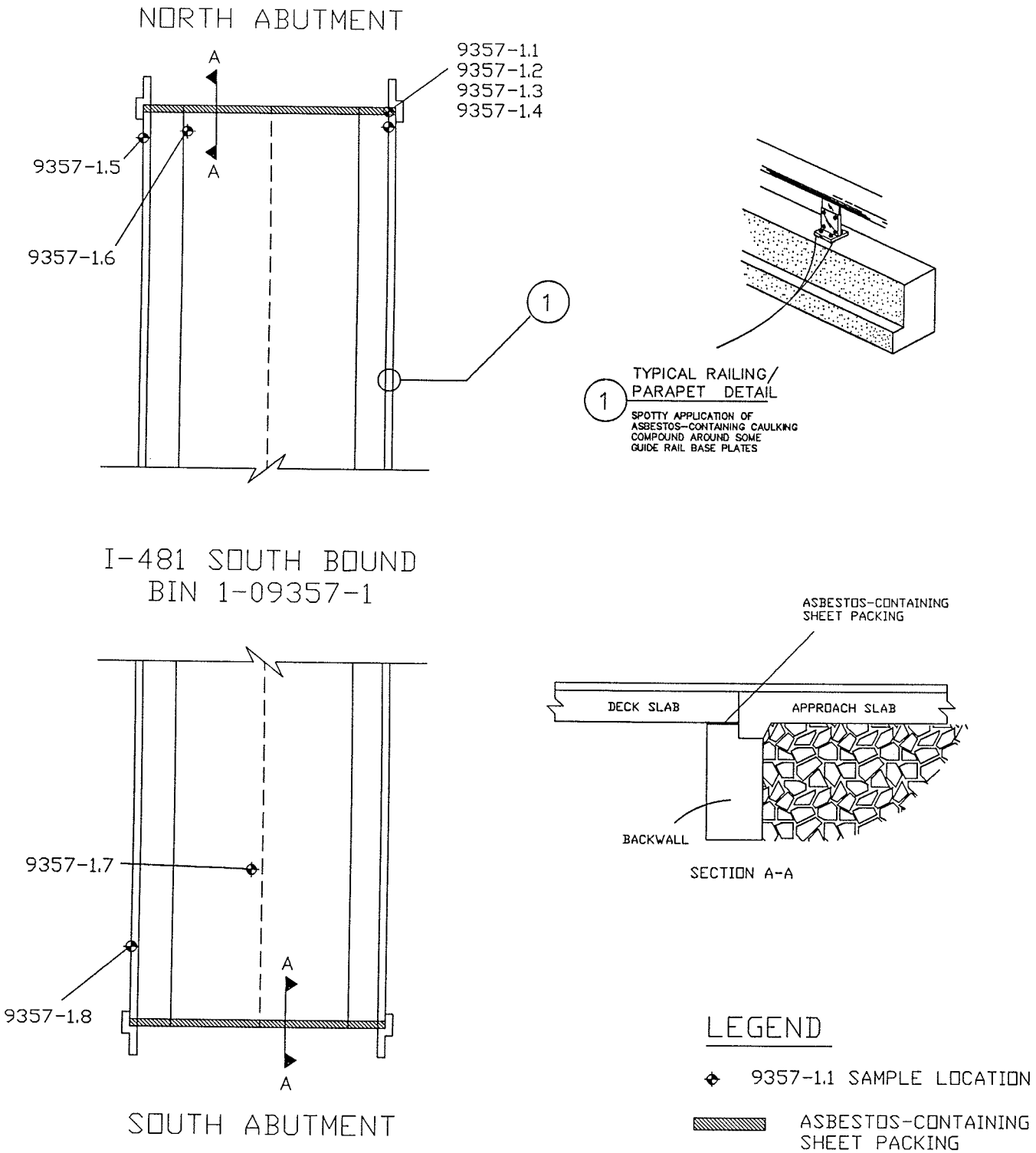
FIGURE 1
Site Location Map

I-481 SOUTH BOUND OVER CONRAIL

BIN 1-09357-1

LABELLA

PROJECT NO. 97132



NORTH	PROJECT TITLE: ASBESTOS SAMPLING SURVEY 16 BRIDGES, ONONDAGA COUNTY, NEW YORK	PROJECT NO. 97132 PIN 3804.00.101
	FIGURE 2: I-481 SOUTH BOUND OVER CONRAIL BIN 1-09357-1 SAMPLE LOCATIONS AND CONFIRMED ACM	NOT TO SCALE DATE: MAY, 1998

Bulk Sample Results Table

Asbestos Sampling Survey
BIN 1-09357-1
Interstate Route 481 South Bound over Conrail
Onondaga County, New York
LaBella Project # 97132
PIN 3804.00.101

Sample #	Sample Location	Type of Material	Results % Asbestos	Amount of Material	Specification Item No.
9357-1.1	**North End of Bridge Between Deck & Abutment**	**Sheet Packing**	**40 % Chrysotile**	**7 Square Meters**	**15202.0627 (M)**
9357-1.2	North End of Bridge Between Deck & Wing Wall	Joint Filler	None Detected	N/A	N/A
9357-1.3	North End of Bridge Beneath Bearing	Bearing Pad	None Detected	N/A	N/A
9357-1.4	North End of Bridge on Abutment	Masonry Coating	None Detected	N/A	N/A
9357-1.5	North End of Bridge, on West I-Beam	Green Paint	None Detected	N/A	N/A
9357-1.6	North End of Bridge, on Inside I-Beam	Green Paint	None Detected	N/A	N/A
9357-1.7	South End of Bridge, on Ground Under 2nd Span	Green Paint	None Detected	N/A	N/A
9357-1.8	**South End of Bridge, at Base of Guide Rail**	**Gray Caulk**	**4 % Chrysotile**	**37.4 Linear Meters**	**15202.0629 (M)**

Watts
Architects
&Engineers

BIN 1093572

I-81 (Former I-481) NB over Conrail Railroad

BIN 1093572

Location: I-481 NB over CSX Railroad Yard

NYSDOT D031085 PIN 3501.60 - I-81 Viaduct Replacement or New Urban Arterial

City of Syracuse, Onondaga County

Bridge Asbestos Assessment Results

Asbestos containing materials have been identified on this bridge.

ITEM	DESCRIPTION	QUANTITY
210.481201	Removal and Disposal of Miscellaneous ACM (BV14) – Sheet Packing	76 SQ FT
210.3413	Removal and Disposal of Caulking ACM (BV14) – (Found around the guiderail base plates. Material was to have been removed during the 2002 rehabilitation project. Remaining quantity is unknown but should be minor.)	LUMP SUM
210.481202	Removal and Disposal of Miscellaneous ACM (BV14) – Bituminous Joint Filler (Assumed to be ACM based on record plan review.)	47 SQ FT

The following summarizes the results of the most recent asbestos survey and record plan review.

Watts Inspection Findings (February/March 2014)

A bridge inspection was completed on 2/10/2014 and 3/19/2014 and the following suspect ACMs were identified and sampled:

- Bearing pad
- Sheet packing
- Green bridge paint
- Off-while/Grey masonry paint
- Vinyl drain pipe
- Beige paint on deck sidewalls

Laboratory analysis indicated that the sheet packing sampled by Watts was confirmed positive for asbestos. Watts could not find any guiderail base plate caulk during our inspection.

Review of Bridge Record Plans

The record plans (FISH 70-7, D251438, D259214) were reviewed in support of the field survey. The following suspect ACMs were identified:

- Compressed asbestos sheet packing
- Bituminous joint filler
- Caulking compound (Indicates that this material [150 linear feet] is to be removed based on the reviewed rehabilitation plans dated 2002. Small amounts may still remain under some railing base plates).

Asbestos Survey Results

A previous asbestos survey competed by LaBella in 1998 was reviewed in support of this project.

- Bridge paint
- Compressed asbestos sheet packing
- Caulking compound (Guide rail base plates)
- Joint filler
- Masonry coating
- Bearing pad

Laboratory analysis indicated that the sheet packing and guiderail caulk was confirmed positive for asbestos.

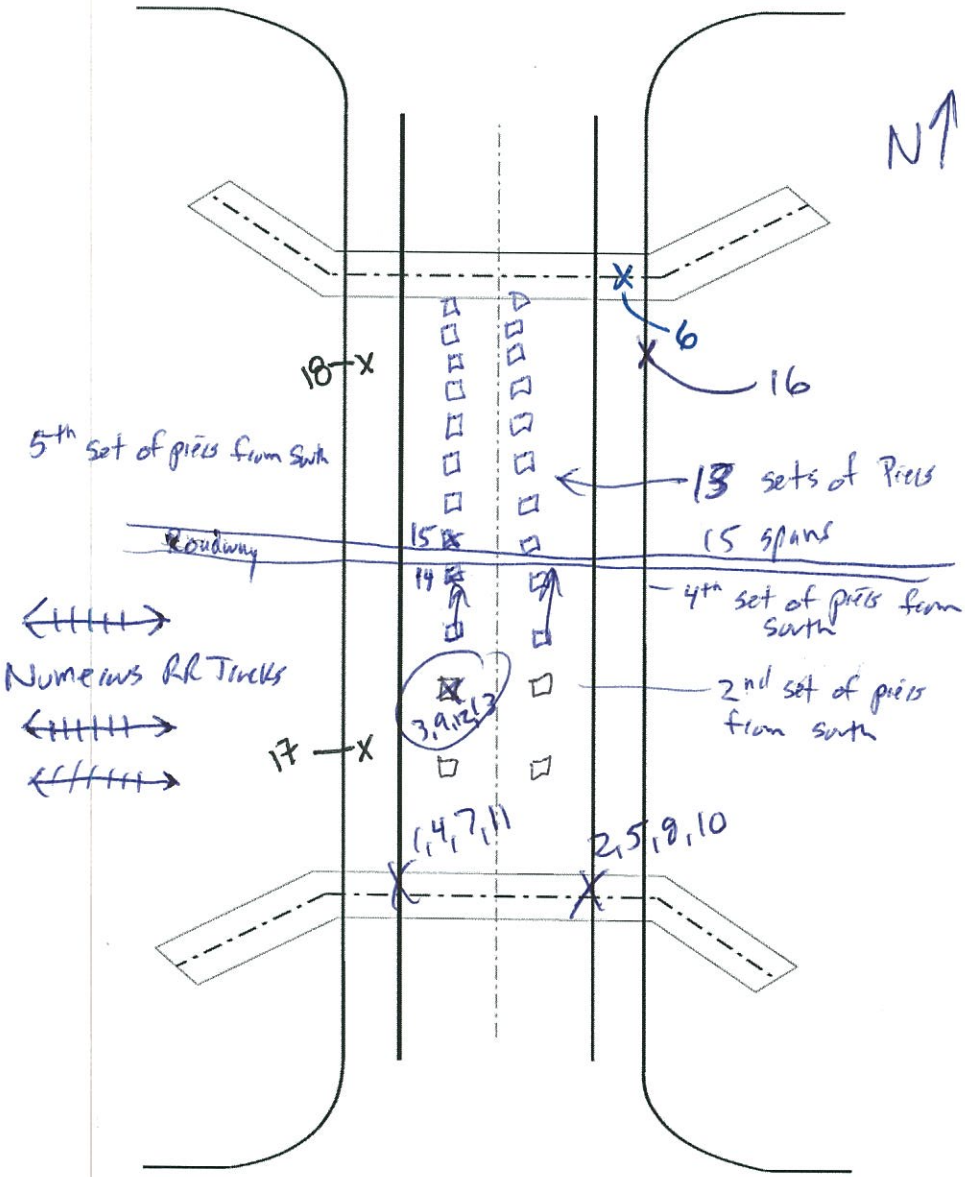
Watts Architecture & Engineering

BRIDGE ASBESTOS FIELD INSPECTION FORM

BIN Number/Location: 1093572 481 NB over RR Yard **Inspection Date:** 3-19-14 2-10-14

Project Name: : I-81 Viaduct Replacement or New Urban Arterial **PIN Number:** PIN: 3501.60, D031085

Inspector(s): S. Matthews **Watts Project No:** 13092



SAMPLE LOCATION PLAN VIEW - N.T.S.

Field Inspection Checklist Item	Investigated	Present	Sampled
Girder Paint	☐	☐	☒
Truss Paint	☐	☐	☒
Abutment Coating Paint	☐	☐	☒
Abutment Caulk	☐	☐	☒ see 3571
Abut. Exp. Jt. Filler	☒	☐	☐
Headwall Sheet Packing	☐	☐	☒
Bearing Pad	☐	☐	☒
Transite Pipe	☒	☐	☐
Pipe Coating/Wtr. Proof	☒	☐	☐
Scupper Wtr. Proof	☒	☐	☐
Dum Dum Paint	☒	☐	☐
Deck Caulk	☐	☐	☒
Deck Exp. Jt. Filler	☒	☐	☐
Approach Sheet Packing	☒	☐	☐
Railing Paint	☒	☐	☐
Railing Caulk	☒	☐	☐
Sidewalk Caulk	☒	☐	☐
Lighting Pole Caulk	☒	☐	☐
Masonry Castings	☒	☐	☐
Miscellaneous Tar	☒	☐	☐
Utilities	☒	☐	☐
Other Vinyl pipe	☒	☐	☒
Other	☐	☐	☐
Other	☐	☐	☐
Other	☐	☐	☐
Other	☐	☐	☐

Notes: Deck has rubber expansion joints, no other caulks identified.
Abutments have sheet packing.
Samples girder paint, masonry paint, and bearing pads.
Bridge inspected over numerous days.

EMSL Analytical, Inc.
490 Rowley Road, Depew, NY 14043
Phone/Fax: (716) 651-0030 / (716) 651-0394
http://www.EMSL.com buffalolab@emsl.com

EMSL Order:	141401420
CustomerID:	WATT50A
CustomerPO:	
ProjectID:	

Attn: **Scott Matthews**
Watts Architecture & Engineering
2610 Salina Street
Syracuse, NY 13205

Phone:	(315) 443-8611
Fax:	(315) 443-8605
Received:	04/04/14 12:00 PM
Analysis Date:	4/11/2014
Collected:	2/10/2014

Project: **13092 / I-81 Viaduct Replacement or New Urban Renewal, BIN 1093572 (481 NB Over CSX RR Yard)**

Test Report:Asbestos Analysis of Bulk Material

Test	Analyzed Date	Color	Non Asbestos Fibrous	Non Asbestos Non-Fibrous	Asbestos
Sample ID 1093572-1 *141401420-0001*		**Description** **Homogeneity**	bearing pad Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Brown /Green			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Brown /Green			**None Detected**
Sample ID 1093572-2 *141401420-0002*		**Description** **Homogeneity**	bearing pad Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Brown			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Brown			**None Detected**
Sample ID 1093572-3 *141401420-0003*		**Description** **Homogeneity**	bearing pad Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Brown			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Brown			**None Detected**
Sample ID 1093572-4 *141401420-0004*		**Description** **Homogeneity**	sheet packing Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Black			**9.9% Chrysotile** **9.9% Total**
TEM NYS 198.4 NOB	4/11/2014				**Not Analyzed**
Sample ID 1093572-5 *141401420-0005*		**Description** **Homogeneity**	sheet packing		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014				**Positive Stop (Not Analyzed)**
TEM NYS 198.4 NOB	4/11/2014				**Not Analyzed**

Initial Report From 04/11/2014 09:10:41

EMSL Analytical, Inc.
490 Rowley Road, Depew, NY 14043
Phone/Fax: (716) 651-0030 / (716) 651-0394
http://www.EMSL.com buffalolab@emsl.com

EMSL Order:	141401420
CustomerID:	WATT50A
CustomerPO:	
ProjectID:	

Test Report:Asbestos Analysis of Bulk Material

Test		Color	Non Asbestos Fibrous	Non-Fibrous	Asbestos
Sample ID 1093572-6 *141401420-0006*		**Description** **Homogeneity**	sheet packing		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014				**Positive Stop (Not Analyzed)**
TEM NYS 198.4 NOB	4/11/2014				**Not Analyzed**
Sample ID 1093572-7 *141401420-0007*		**Description** **Homogeneity**	green girder paint Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Green			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Green			**None Detected**
Sample ID 1093572-8 *141401420-0008*		**Description** **Homogeneity**	green girder paint Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Green			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Green			**None Detected**
Sample ID 1093572-9 *141401420-0009*		**Description** **Homogeneity**	green girder paint Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Green			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Green			**None Detected**
Sample ID 1093572-10 *141401420-0010*		**Description** **Homogeneity**	off-white/grey masonry paint Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Gray /White			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Gray /White			**None Detected**
Sample ID 1093572-11 *141401420-0011*		**Description** **Homogeneity**	off-white/grey masonry paint Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Gray /White			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Gray /White			**None Detected**

Initial Report From 04/11/2014 09:10:41

EMSL Analytical, Inc.
490 Rowley Road, Depew, NY 14043
Phone/Fax: (716) 651-0030 / (716) 651-0394
http://www.EMSL.com buffalolab@emsl.com

EMSL Order:	141401420
CustomerID:	WATT50A
CustomerPO:	
ProjectID:	

Test Report:Asbestos Analysis of Bulk Material

Test			Color	Fibrous	Non Asbestos Non-Fibrous	Asbestos
Sample ID	1093572-12		**Description**	off-white/grey masonry paint		
	141401420-0012		**Homogeneity**	Homogeneous		
PLM NYS 198.1 Friable						**Not Analyzed**
PLM NYS 198.6 VCM						**Not Analyzed**
PLM NYS 198.6 NOB		4/8/2014	Gray /White			**Inconclusive: None Detected**
TEM NYS 198.4 NOB		4/11/2014	Gray /White			**None Detected**
Sample ID	1093572-13		**Description**	vinyl drain pipe		
	141401420-0013		**Homogeneity**			
PLM NYS 198.1 Friable						**Not Analyzed**
PLM NYS 198.6 VCM						**Not Analyzed**
PLM NYS 198.6 NOB		4/8/2014				**Insufficient Residue**
Final Residue <1% of original subsample – Non-ACM						
TEM NYS 198.4 NOB		4/11/2014				**Insufficient Residue**
Sample ID	1093572-14		**Description**	vinyl drain pipe		
	141401420-0014		**Homogeneity**			
PLM NYS 198.1 Friable						**Not Analyzed**
PLM NYS 198.6 VCM						**Not Analyzed**
PLM NYS 198.6 NOB		4/8/2014				**Insufficient Residue**
Final Residue <1% of original subsample – Non-ACM						
TEM NYS 198.4 NOB		4/11/2014				**Insufficient Residue**
Sample ID	1093572-15		**Description**	vinyl drain pipe		
	141401420-0015		**Homogeneity**	Homogeneous		
PLM NYS 198.1 Friable						**Not Analyzed**
PLM NYS 198.6 VCM						**Not Analyzed**
PLM NYS 198.6 NOB		4/8/2014	Brown			**Inconclusive: None Detected**
TEM NYS 198.4 NOB		4/11/2014	Brown			**None Detected**
Sample ID	1093572-16		**Description**	beige paint on deck sidewalls		
	141401420-0016		**Homogeneity**	Homogeneous		
PLM NYS 198.1 Friable						**Not Analyzed**
PLM NYS 198.6 VCM						**Not Analyzed**
PLM NYS 198.6 NOB		4/8/2014	Beige			**Inconclusive: None Detected**
TEM NYS 198.4 NOB		4/11/2014	Beige			**None Detected**
Sample ID	1093572-17		**Description**	beige paint on deck sidewalls		
	141401420-0017		**Homogeneity**	Homogeneous		
PLM NYS 198.1 Friable						**Not Analyzed**
PLM NYS 198.6 VCM						**Not Analyzed**
PLM NYS 198.6 NOB		4/8/2014	Beige			**Inconclusive: None Detected**
TEM NYS 198.4 NOB		4/11/2014	Beige			**None Detected**

Initial Report From 04/11/2014 09:10:41

EMSL Analytical, Inc.
490 Rowley Road, Depew, NY 14043
Phone/Fax: (716) 651-0030 / (716) 651-0394
http://www.EMSL.com buffalolab@emsl.com

EMSL Order:	141401420
CustomerID:	WATT50A
CustomerPO:	
ProjectID:	

Test Report:Asbestos Analysis of Bulk Material

Test		Color	Fibrous	Non-Fibrous	Asbestos
			Non Asbestos		
Sample ID	1093572-18	**Description**	beige paint on deck sidewalls		
	141401420-0018	**Homogeneity**	Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	4/8/2014	Beige			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	4/11/2014	Beige			**None Detected**

Analyst(s)
Rachel Giese
Rhonda McGee

Rhonda McGee, Laboratory Manager
or other approved signatory

NOB = Non Friable Organically Bound N/A = Not Applicable VCM = Vermiculite Containing Material

-In New York State, TEM is currently the only method that can be used to determine if NOB materials can be considered or treated as non-asbestos containing.
All samples examined for the presence of vermiculite when analyzed via NYS 198.1.
-NYS Guidelines for Vermiculite containing samples are available at http://www.wadsworth.org/labcert/elapcert/forms/VermiculiteInterimGuidance_Rev070913.pdf
EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples were received in good condition unless otherwise noted.
This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. This report may contain data that is not covered by the NVLAP accreditation.

Samples analyzed by EMSL Analytical, Inc. Depew, NY NYS ELAP 11606

Initial Report From 04/11/2014 09:10:41

14140142O

WATTS ARCHITECTURE & ENGINEERING
ASBESTOS BULK SAMPLE CHAIN-OF-CUSTODY

Page: 1 of 2
Date: 2/10/14

Client: Parsons Engineering
Project: I-81 Viaduct Replacement or New Urban Arterial
Building / Location: BIN 1093572 (481 NB over CSX RR Yard)
Contact: Scott Matthews at (315) 443-8611
Email Preliminary Results to: smatthews@watts-ae.com

Watts Project No.: 13092
Turnaround Requested: ___ 3 Hr. ___ 48 Hr.
Analysis Requested: ___ 6 Hr. ___ 72 Hr.
PLM X TEM X ___ 12 Hr. ~~X 5 Day~~
___ 24 Hr. ___ 6-10 Day

Mail Invoice to: Accounts Payable
Watts Architecture & Engineering
95 Perry Street, Buffalo, NY 14203

Mail Report to: Scott Matthews
Watts Architecture & Engineering
2610 S Salina Street, Syracuse, NY 13210

as per Scott
1 Week
4/4/14

Sample Number	Material Description	Sample Location	Laboratory Results PLM	Laboratory Results TEM
1093572- 1	Bearing pad	South end / west		
2	Bearing pad	South end / weast		
3	Bearing pad	2nd pier from south end		
4	Sheet packing	South end / west		
5	Sheet packing	South end / weast		
6	Sheet packing	North end / east		
7	Green girder paint	South end / west		
8	Green girder paint	South end / weast		
9	Green girder paint	2nd pier from south end		
10	Off-white/grey masonry paint	South end abutment wall / ease		
11	Off-white/grey masonry paint	South end abutment wall / west		
12	Off-white/grey masonry paint	2nd pier from south end		

Sampled By: Scott Matthews Date: 3/19/2014 Received By: _____ Date: FX 12pm
Relinquished By: Scott Matthews to Fedex Date: 4/3/2014 Received By: _____ Date: _____
Comments: Positive Stop Anywhere in Series

RECEIVED
APR 04 2014
BY: [signature]

C:\Documents and Settings\wkoch\Desktop\Blanks\Blank Asbestos COC
4/3/2014

141401420

Page: ~~1~~ 2 of 2 4/04/14

Date: 2/10/14

WATTS ARCHITECTURE & ENGINEERING
ASBESTOS BULK SAMPLE CHAIN-OF-CUSTODY

Client: Parsons Engineering

Project: I-81 Viaduct Replacement or New Urban Arterial

Building / Location: BIN 1093572 (481 NB over CSX RR Yard)

Contact: Scott Matthews at (315) 443-8611

Email Preliminary Results to: smatthews@watts-ae.com

Mail Invoice to: Accounts Payable
Watts Architecture & Engineering
95 Perry Street, Buffalo, NY 14203

Mail Report to: Scott Matthews
Watts Architecture & Engineering
2610 S Salina Street, Syracuse, NY 13210

Watts Project No.: 13092

Turnaround Requested: ___ 3 Hr. ___ 48 Hr.

Analysis Requested: ___ 6 Hr. ___ 72 Hr.

PLM X TEM X ___ 12 Hr. X 5 Day

___ 24 Hr. ___ 6-10 Day

4/4/14

asper Scott

1 Week

Sample Number	Material Description	Sample Location	Laboratory Results PLM	Laboratory Results TEM
1093572- 13	Vinyl drain pipe	2nd pier from south		
14	Vinyl drain pipe	4th pier from south		
15	Vinyl drain pipe	5th pier from south		
16	Beige paint on deck sidewalls	Northeast corner		
17	Beige paint on deck sidewalls	Southwest corner		
18	Beige paint on deck sidewalls	Northwest corner		

RECEIVED APR 04 2014 BY

Sampled By: Scott Matthews Date: 3/19/2014 Received By: Date: 12pm

Relinquished By: Scott Matthews to Fedex Date: 4/3/2014 Received By: Date:

Comments: Positive Stop Anywhere in Series

C:\Documents and Settings\wkoch\Desktop\Blanks\Blank Asbestos COC
4/3/2014

OrderID: 141400853

Watts
Architects
&Engineers

BIN 1093572 Inspection Photos

I-81 (Former I-481) NB over Conrail Railroad

Photo 1

Photo 2

Photo 3

Photo 4

Photo 5

Photo 6

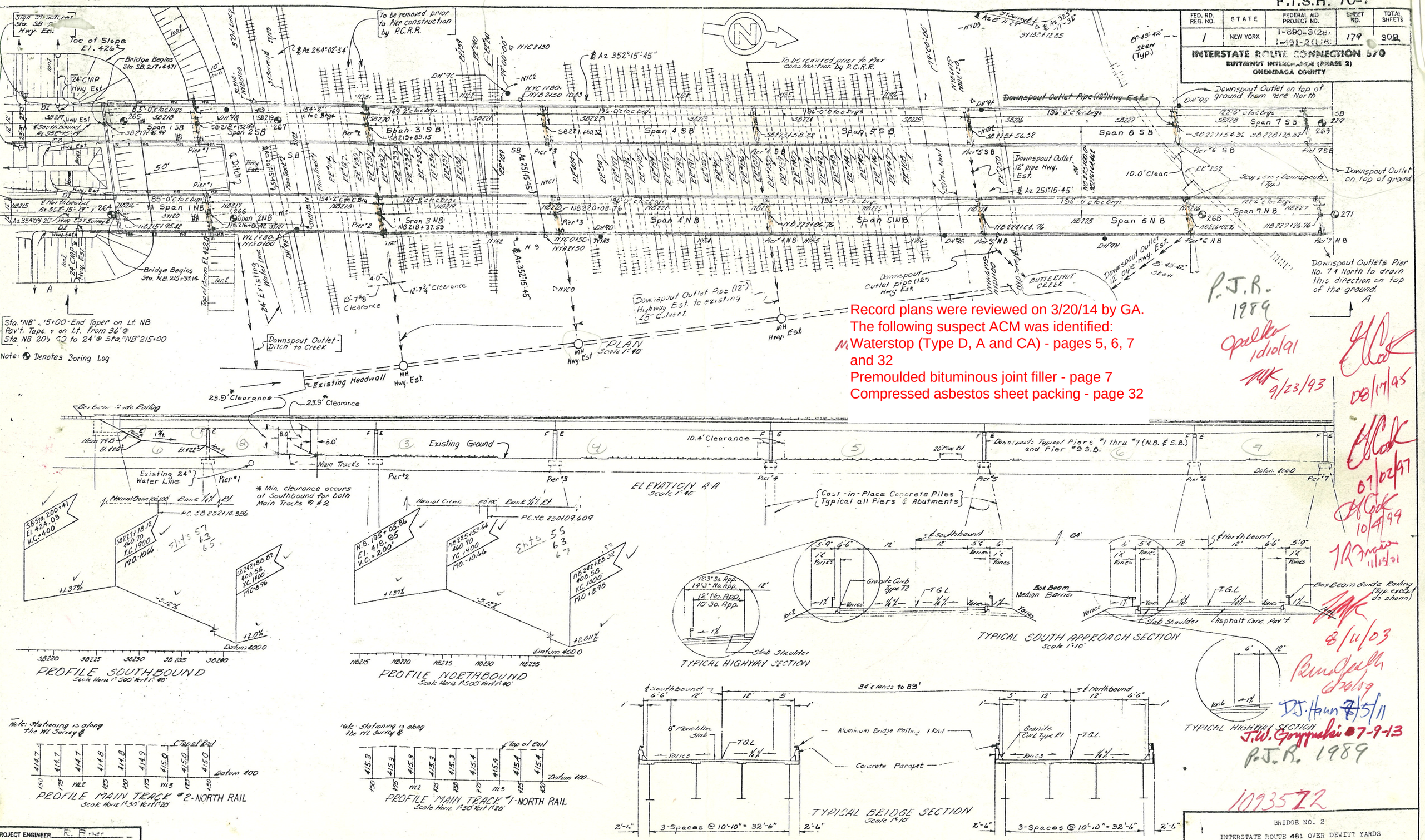
Photo 7

Photo 8

F.I.S.H. 70-7

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(28) I-481-2(18)	179	302

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



Record plans were reviewed on 3/20/14 by GA.
The following suspect ACM was identified:
M Waterstop (Type D, A and CA) - pages 5, 6, 7 and 32
Premoulded bituminous joint filler - page 7
Compressed asbestos sheet packing - page 32

P.J.R. 1989
Opalka 1/10/91
MK 9/23/93
08/17/95
07/02/97
10/4/99
TR Moore 11/14/01
8/11/03
Rmd Gallo 2/2/09
D.J. Haun 7/5/11
J.W. Gryppaki 07-9-13
P.J.R. 1989
1093572

PROJECT ENGINEER R. Parker
IN CHARGE OF F. Eckel
DESIGNED BY
DESIGN CHECKED BY
DETAILED BY H.F. Raffa
DETAIL CHECKED BY A.E. Rembodt

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

LAYOUT

DRAWING NO. 1 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-81-2(38) I-81-2(16)	181	309

INTERSTATE ROUTE CONNECTION 570
DUTCHER ... INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

GENERAL NOTES

G1 - Design Specifications AASHO 1969 modified and current American Welding Society modified. The stresses assumed for design purposes conform to 1969 AASHO Specifications with the 28 day concrete stress (f'c) = 3000 psi minimum.

L.L. HS20-44 or two 24,000 lb. axles spaced 4'-0" on centers.

G2 - Material and Construction Specifications: Specifications of N.Y.S. Department of Public Works dated January 2, 1962 with current additions and modifications.

G3 - The Contractor's attention is directed to the Special Notes for this structure which appear in the proposal. Particular attention should be given to the foundation note which briefly outlines the anticipated subsurface conditions at the site of the structure and which specifies certain requirements relative to construction.

G4 - The cost of furnishing and placing water used for ~~molding and~~ selected granular fill will be paid for under Item 1W and 1WA of the highway portion of the contract.

G5 - Reinforcing bars shall be lapped a minimum of 24 diameters.

G6 - The cost of all joint material will be included in the price bid for the various items of the contract.

G7 - All concrete anchor studs which are attached to the various steel details shall meet the requirements listed in paragraph 5, Construction Details, of Item 29B-Stud Shear Connectors. Payment for furnishing and placing the concrete anchors will be included in the unit price bid for the item to which the anchors are attached.

G8 - Due to the incompatability of the caulking compound with the premoulded bituminous joint filler, a layer of an approved type of pressure-sensitive release tape shall be placed between these materials.

The contractor may elect to change the layout of diaphragms from that shown on the contract plans. Placement of the diaphragms parallel with the skew (in line, not staggered) will be permitted. The stiffener locations may be altered to accommodate the revised diaphragm layout, but the spacing of stiffeners shown on the plans shall not be exceeded. Diaphragm spacing shall not exceed 25 feet.

CONCRETE ITEMS AND CEMENT

Description	Item No.		Type of Cement
All footings	20		2
Abutment pedestals, backwalls and wingwalls	20		2
Abutment headers and parapets	18		2
Pier columns, beams, pedestals, and crash walls	18		2
Monolithic slab	18MA		2
Parapet (Superstructure & Substructure)	18		2
Cast-in-Place Concrete Piles	85C		2

All concrete shall have entrained air in accordance with the specifications.

PROJECT ENGINEER R. Paquel
IN CHARGE OF F. Eckert
DESIGNED BY
DESIGN CHECKED BY
DETAILED BY
DETAIL CHECKED BY

SUPERSTRUCTURE NOTES

Sup 1 - After all superstructure steel has been erected, elevations shall be taken on the top of the steel at the centerline of web, at each centerline of bearing, center of the span and at other locations where theoretical bottom of the slab elevations are indicated on the plans.

The depth of haunch required to position the slab forms is obtained as follows. From the measured top of steel elevations subtract the deflections due to slab and superimposed dead load. Subtract this result from the listed bottom of slab elevation.

Sup 2 - All bearings are to be field welded to beams or girders.

Sup 3 - The Structural Slab on this structure shall be formed with permanent corrugated metal forms for concrete decks.

Sup 4 - All connection plates used in pairs shall be welded to the web and be placed paint tight against both flanges. This may be accomplished by cutting the stiffeners to fit or by cutting the stiffeners 1/8 inch short and then placing the stiffener tightly against the tension flange and welding the opposite end to the compression flange. Fitted stiffeners shall not be driven in place with sufficient force to distort the flange, web or stiffeners.

Sup 5 - All intermediate stiffeners and/or connection plates used singly on one side only or staggered on both sides shall be placed paint tight against the flange which is in tension under dead load and welded to the web and flange which is in compression.

Sup 6 - All bearing stiffeners shall be fillet welded to the web and top flange and groove welded or milled to bear to the bottom flange.

Sup 7 - All intermediate transverse stiffeners and connection plates shall be vertical unless otherwise approved by the Deputy Chief Engineer (Design).

Sup 8 - All bearing stiffeners and the ends of all girders shall be vertical.

Sup 9 - All anchor bolts shall be galvanized in accordance with the requirements of Material Specification M19.

Sup 10 - Structural steel members which are imbedded or in contact with cast or pneumatically projected concrete shall not be painted.

Sup 11 - Machine finished sliding surfaces in contact shall receive in the shop one coat of a hot mixture of white lead and tallow as provided for in the specifications under Part II, Section 3A, Painting. This shop coat of white lead and tallow shall be removed immediately prior to the assembly of the member in the field. All other machine finished surfaces shall be given one shop coat of paint.

Sup 12 - Wherever Modified A441 Steel is used, the flux for submerged arc welding shall be dried in ovens at 500°F. to 550°F. for at least two hours and stored in ovens held at 250°F. or more. Flux not used within 4 hours after removal from a drying or storage oven shall be redried before use.

Minimum preheat and Interpass Temperatures shall be as follows:

Thickness of Thickest Part at Point of Welding in Inches	
To 3/4, inclusive	70°F.
Over 3/4 to 1 1/2, inclusive	100°F.
Over 1 1/2 to 2 1/2, inclusive	175°F.
Over 2 1/2	250°F.

INDEX OF DRAWINGS

DRAWING NO.	CONTENTS	DRAWING NO.	CONTENTS
1	Layout	39	Joint sealer, waterstops, and trough
2	Layout	40	Approach shoulder details
3	Notes and estimate of quant.	41	Approach shoulder details
4	Earthwork	42	Bearings
5	South Abutment	43	Bearings
6	South Abutment	44	Bar list #1
7	North Abutment	45	Bar list #2
8	North Abutment	46	Bar list #3
9	Pier 1	47	Bar list #4
10	Piers 2, 3 and 4	48	Bar list #5
11	Piers 5 and 6	49	Bar list #6
12	Piers 7, 8 and 9 NBL	50	Bar list #7
13	Pier 9 SBL		
14	Pier 10		
15	Piers 11 and 12		
16	Piers 13 and 14		
17	Span 1		
18	Span 1		
19	Spans 2, 3, 4, 5 and 6		
20	Span 3		
21	Spans 6, 7 and 8		
22	Spans 4, 5 and 6		
23	Spans 7, 8 and 9		
24	Spans 7, 8 and 9		
25	Span 10		
26	Span 10		
27	Spans 11 thru 15 SB		
28	Spans 11 thru 15 SB		
29	Spans 11 thru 15 NB		
30	Spans 11 thru 15 NB		
31	Finger joint		
32	Downspout details		
33	Miscellaneous Details		
34	Miscellaneous Details		
35	Concrete parapet		
36	Railing details		
37	Railing layout 1		
38	Railing layout 2		

ESTIMATE OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	TOTAL NEAT	TOTAL PROPOSAL	FINAL
2EF-B	Selected Granular Fill	C.Y.	8,000	8,000	
2UF	Underdrain Filter	C.Y.	20	20	
5B	Structure Excavation	C.Y.	4,950	4,950	
11HG	Perforated Corrugated Metal Pipe	L.F.	410	410	
	Underdrain - 6" Dia				
13DE-6	Downspouts - 6" Dia.	L.F.	56	60	
13DE-8	Downspouts - 8" Dia.	L.F.	794	800	
18	Class A Concrete for Structures	C.Y.	2,512	2,520	
18MA	Class A Concrete for Structures	S.F.	158,700	158,700	
20	Class B Concrete for Structures	C.Y.	2,211	2220	
24A	Bagged Screened Aggregate	C.Y.	110	110	
28	Bar Reinforcement for Structures	Lb.	2,110,000	2,110,000	
28B	Stud Shear Connectors	Ea.	30,160	30,160	
29	Structural Steel	Lb.	7,508,000	7,508,000	
37M(1)	Aluminum Bridge Railing (One Rail)	L.F.	8,680	8,680	
61	Bituminous Material	Gal.	168	170	
79B	Concrete Block Paving	S.Y.	1,130	1130	
83S	Steel Sheet Piling	S.F.	7,700	7,700	
83TAS	Temporary Sheet Piling	S.F.	18,800	18,800	
85C	Cast-in-Place Concrete Piles	L.F.	75,200	75,200	
87	Furnishing Equipment for Driving Piles	L.S.	Nec.	Nec	
94SBW	Stone Curb - (Granite)	L.F.	9,050	9,050	
101C	Drainage Trough	L.F.	320	320	
124	Sodding	S.Y.	210	210	
363J	Epoxy Protective Coating for Concrete	S.F.	9,150	9,150	
1WPS	Watering Plants and Sod	M/Gal.	4	4	

Note -
Where Item 13DC or Item 13DD appear on these drawings, the specifications for Item 13DE-6 and 13DE-8 shall apply.
Six inch diameter downspouts shall be paid for under Item 13DE-6
Eight inch diameter downspouts shall be paid for under Item 13DE-8

ITEM 29

Type of Steel	Weight
A.S.T.M. Designation A36	1,917,000
" " A441	4,673,000
" " A441 Modified	1,378,500
" " A242	39,500
Total	7,508,000

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS
GENERAL NOTES
ESTIMATE OF QUANTITIES TABLE
DRAWING NO. 3 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-681-2(118)	182	300

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

SUBSTRUCTURE NOTES

All sod, topsoil and unsuitable material under the substructure embankment shall be removed as specified under the General Excavation Specifications and replaced by the same item as the layer of embankment adjacent and above as shown on the plans.

All embankments of Selected Granular Fill, Item 2EF-B and Selected Fill (Bridge Foundation) Item 2VJ-D shall be compacted to a minimum dry density of 100% of Maximum Density as defined under "h. Embankments" of the General Excavation Specifications. However, where piles are to be placed through the embankment, a minimum dry density of 90% of the Maximum Density will be required.

The Contractor shall place and compact all fill for bridges between the final toes of slope in accordance with the plans and specifications in a manner satisfactory to the Deputy Chief Engineer (Design).

Top of backwalls on which asbestos sheet packing is to be placed shall be steel trowel finished.

Bituminous Material, Item 61, shall be applied to the backs of all abutments and wingwalls above top of footings, where fill is in contact with the walls.

Epoxy Protective Coating for Concrete shall be applied to the following surfaces:

Abutments - All exposed pedestal surfaces, including the area under the bearings, exposed vertical surfaces of backwall and curtain walls facing the superstructure.

Piers - All pedestal surfaces including the area under the bearings, and the top surface of pier between pedestals including the edge chamfer at top edge of pier.

The use of fibre forms will be permitted only if the interior surface of the forms have been treated in such a manner as to prevent helical corrugation marks on the finished concrete surface.

All exposed construction joints and exposed edges of concrete shall be chamfered one inch.

The embankment for the South Abutment has been constructed to subgrade elevation under a previous contract.

The embankment for the North Abutment shall be constructed to the bottom of footing elevation and allowed to stand for a period of time satisfactory to the Deputy Chief Engineer (Structures) prior to driving piles and proceeding with abutment construction.

A six month waiting period is required after backfilling behind North Abutment prior to placing approach pavement at north end of bridge.

Items 2 and 2EF-B and Items 2 and 2VJ-D shall be placed simultaneously, in contact, on both sides of the vertical payment line. Sheeting or other means shall not be used to separate the two materials.

The installation of Selected Fill, Item 2EF-B at the North Abutment, or backfill at the South Abutment as shown on the structural plans, shall be completed immediately following the completion of abutments or walls.

All abutments and piers for this structure are to be supported on cast-in-place concrete piles.

For design purposes the pile load does not exceed 35 tons per pile.

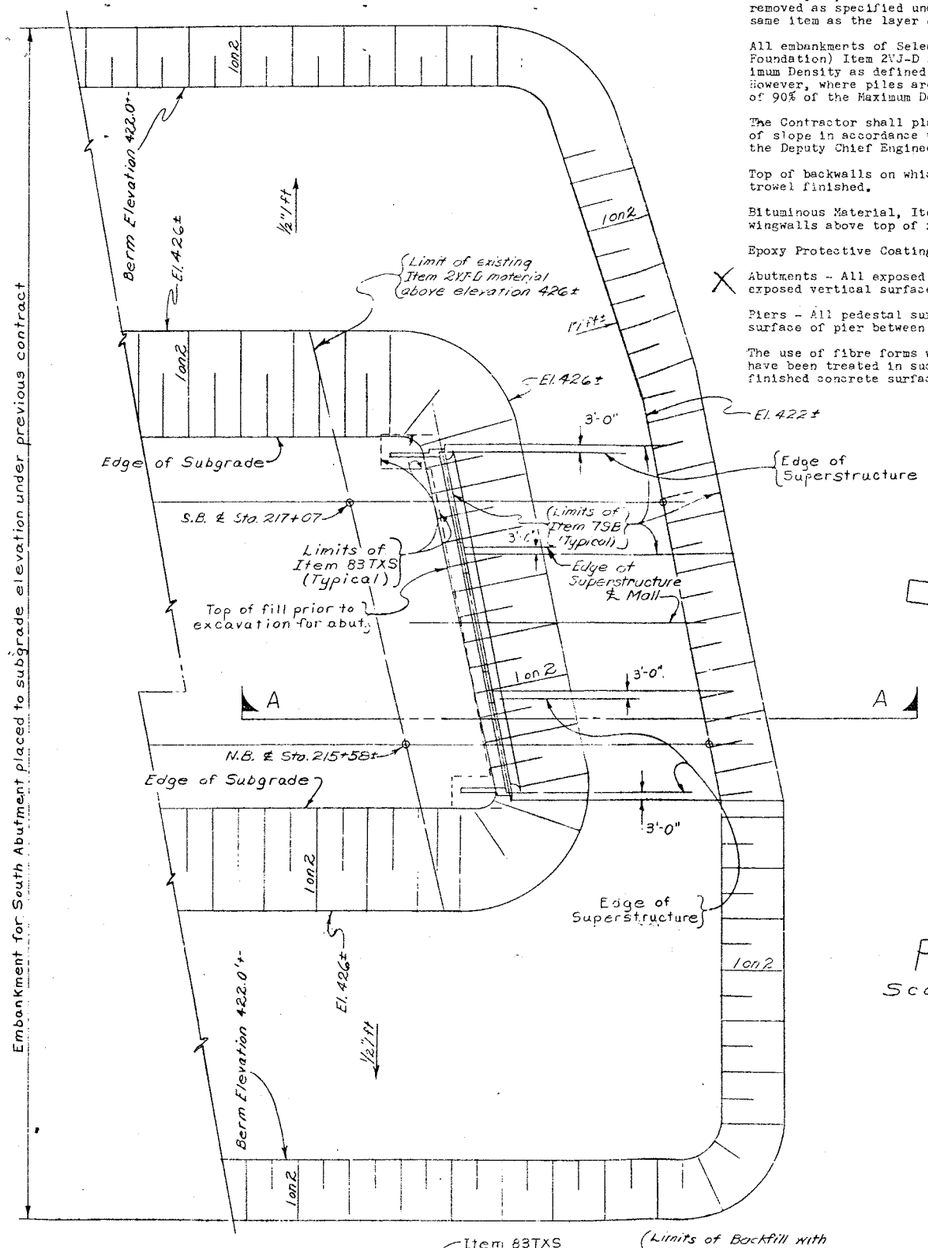
Estimated length of cast-in-place concrete piles:

South Abutment = 75 Feet

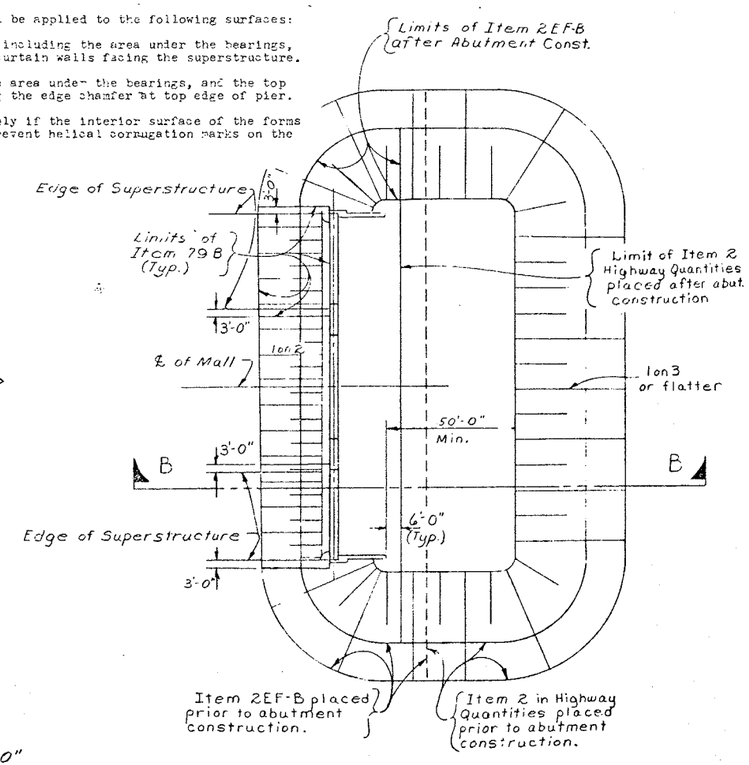
Pier 1	S.B. = 55		Pier 9	S.B. = 70	
	N.B. = 80			N.B. = 70	
Pier 2	S.B. = 55		Pier 10	S.B. = 70	
	N.B. = 80			N.B. = 65	
Pier 3	S.B. = 60		Pier 11	S.B. = 65	
	N.B. = 65			N.B. = 65	
Pier 4	S.B. = 70		Pier 12	S.B. = 65	
	N.B. = 70			N.B. = 65	
Pier 5	S.B. = 75		Pier 13	S.B. = 55	
	N.B. = 80			N.B. = 65	
Pier 6	S.B. = 80		Pier 14	S.B. = 80	
	N.B. = 50			N.B. = 50*	
Pier 7	S.B. = 80				
	N.B. = 80		North Abutment = 65		
Pier 8	S.B. = 70				
	N.B. = 70				

* Pier #14 N.B. has an existing 48" diameter water main in close proximity. The water main is to be relocated under this contract. See Drawing 2.

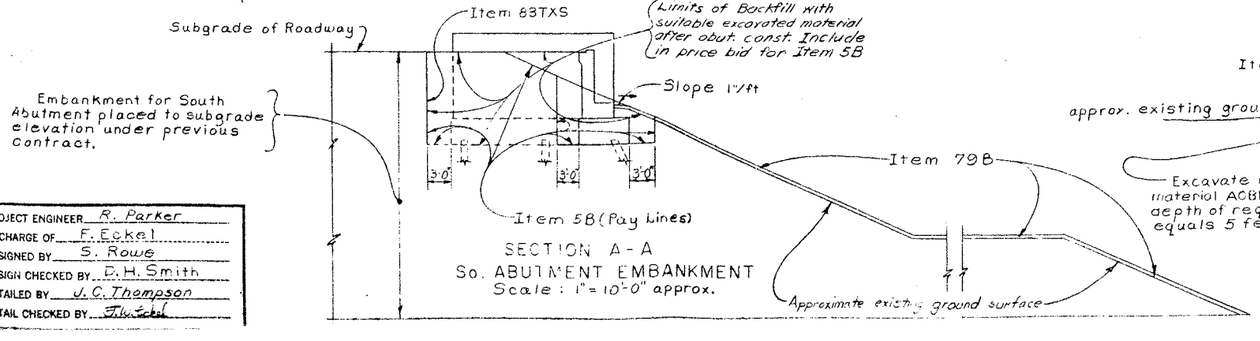
It is anticipated that difficult driving of piles through the South Abutment embankment may be encountered and it may be necessary to utilize mechanical equipment for removing consolidated material from the location of the piles. This may be accomplished by various types of earth augers, well drilling equipment or other devices to remove the consolidated material to permit the piles to be driven to the desired depth or required resistance without distortion.



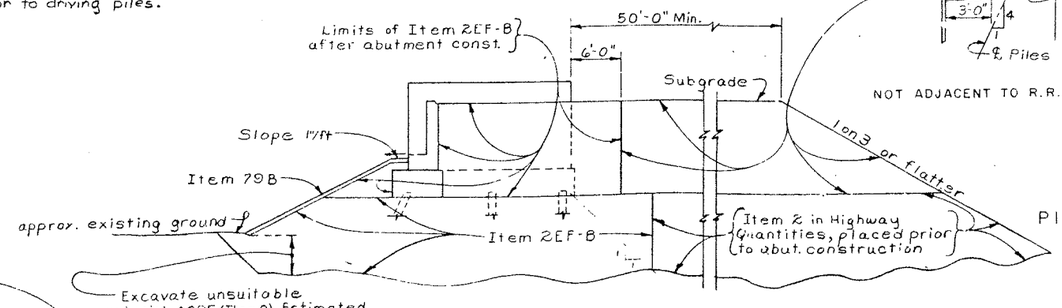
PLAN
Scale: 1" = 30'-0"



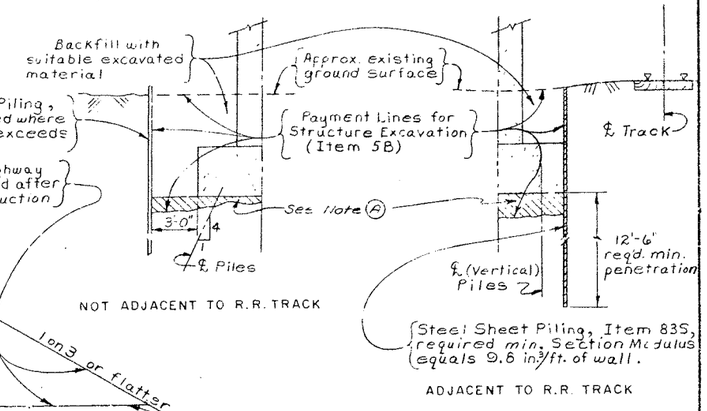
Note (A)
Remove any unsuitable material encountered below bottom of pier footing AOBE. Estimated depth of unsuitable material = 0 to 2 feet. Backfill to bottom of footing elevation with compacted Item 2 EF-B prior to driving piles.



SECTION A-A
So. ABUTMENT EMBANKMENT
Scale: 1" = 10'-0" approx.



SECTION B-B
No. ABUTMENT EMBANKMENT
Scale: 1" = 10'-0" approx.



PIER EXCAVATION
Scale: 3/16" = 1'-0"

PROJECT ENGINEER	R. Parker
IN CHARGE OF	F. Eckel
DESIGNED BY	S. Rowe
DESIGN CHECKED BY	D.H. Smith
DETAILED BY	J.C. Thompson
DETAIL CHECKED BY	[illegible]

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

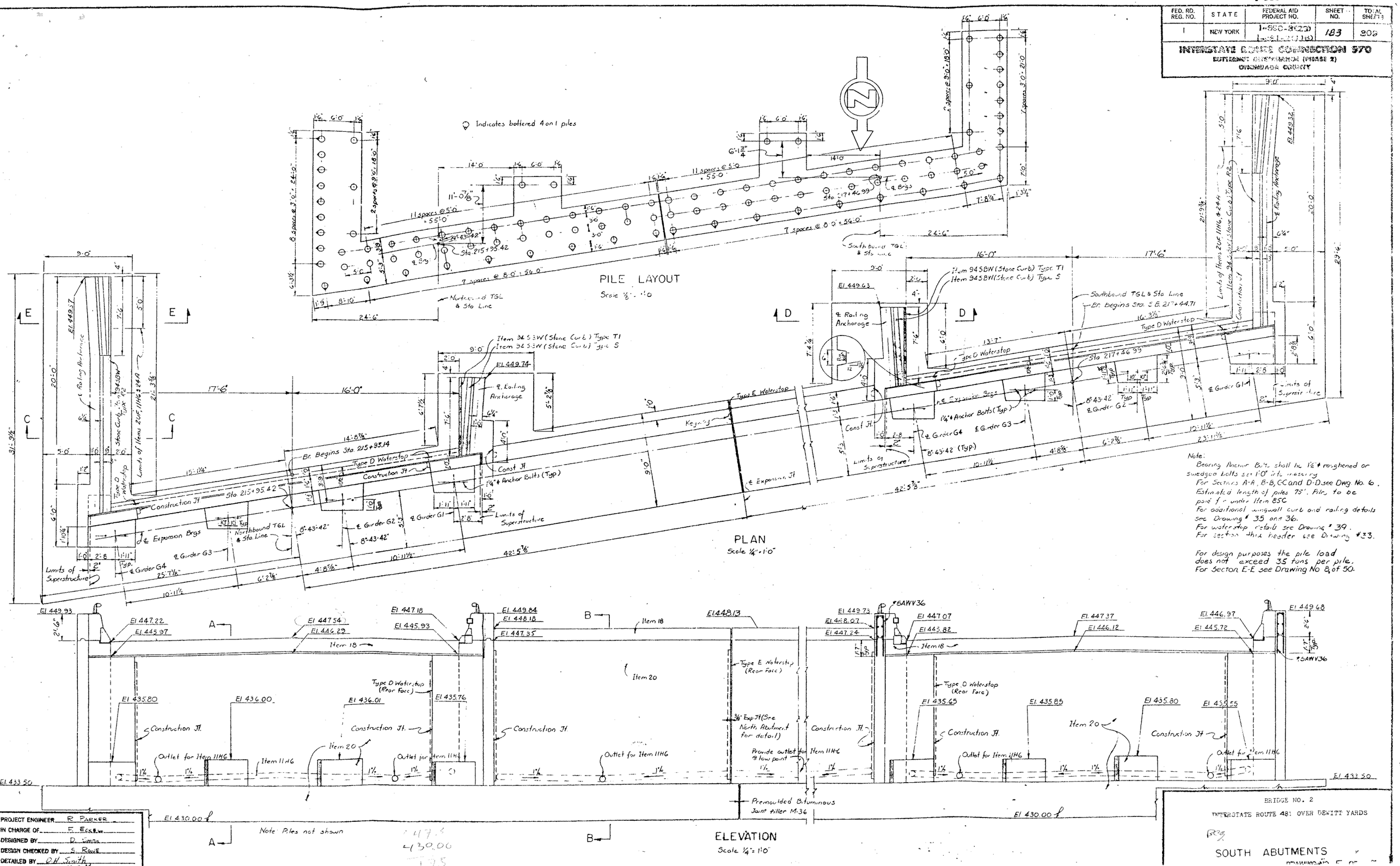
EARTHWORK

DRAWING NO. 4 OF 50

F.I.S.H. 70-7

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(23) I-481-2(116)	183	209

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



Note:
Bearing Anchor Bolts shall be 1¼" ϕ roughened or swedged bolts set 1'-0" into masonry.
For Sections A-A, B-B, C-C and D-D see Dwg. No. 6.
Estimated length of piles 75'. Piles to be paid for under Item 85C.
For additional wingwall curb and railing details see Drawing # 35 and 36.
For waterstop details see Drawing # 39.
For section thru header see Drawing #33.

For design purposes the pile load does not exceed 35 tons per pile.
For Sector E-E see Drawing No 8 of 50.

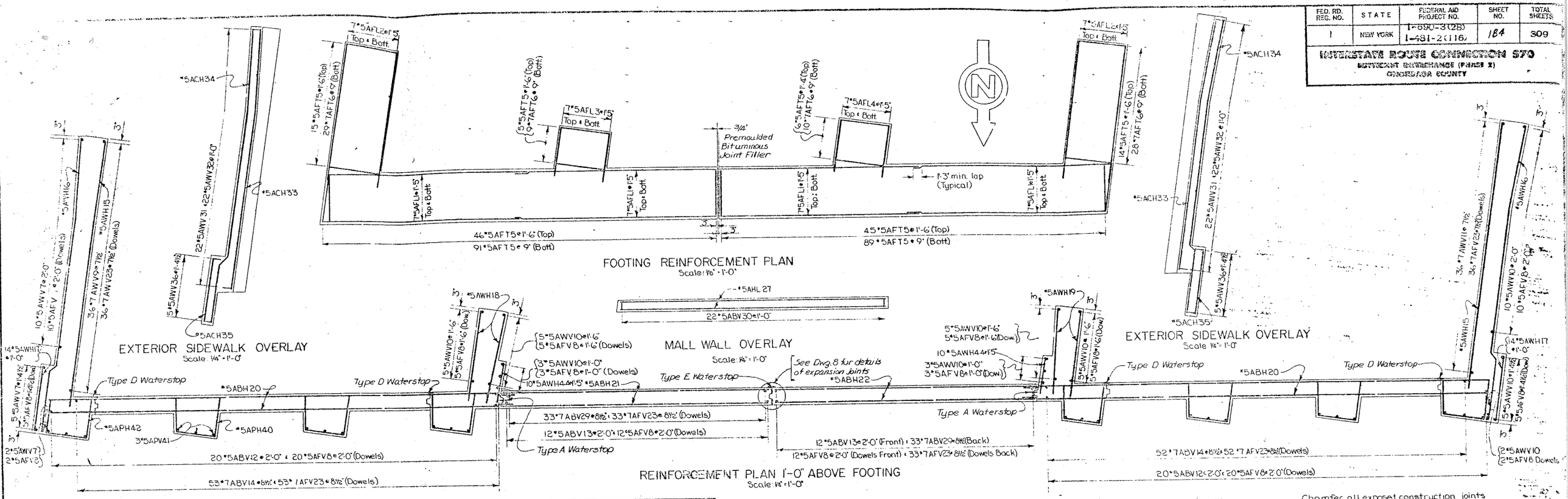
PROJECT ENGINEER	R. Parker
IN CHARGE OF	F. Eckert
DESIGNED BY	D. Smith
DESIGN CHECKED BY	S. Rowe
DETAILED BY	O.H. Smith
DETAIL CHECKED BY	W.G. Tyrrell

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

SOUTH ABUTMENTS

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-890-3(28) I-481-2(116)	184	309

INTERSTATE ROUTE CONNECTION 570
BUTTERMILK INTERCHANGE (PHASE X)
ONONDAGA COUNTY



PROJECT ENGINEER R. L. Parker
IN CHARGE OF F. Eckel
DESIGNED BY D. H. Smith
DESIGN CHECKED BY F. W. Eckel
DETAILED BY J. F. Darcy
DETAIL CHECKED BY

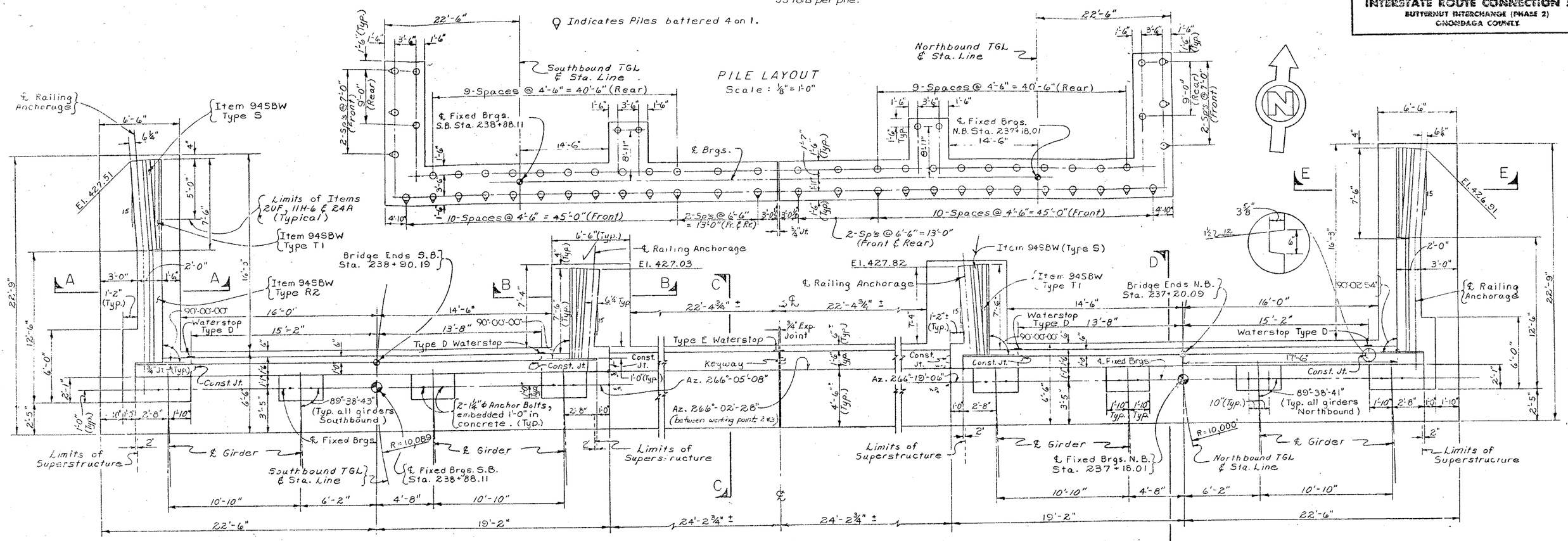
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS
SOUTH ABUTMENT DETAILS

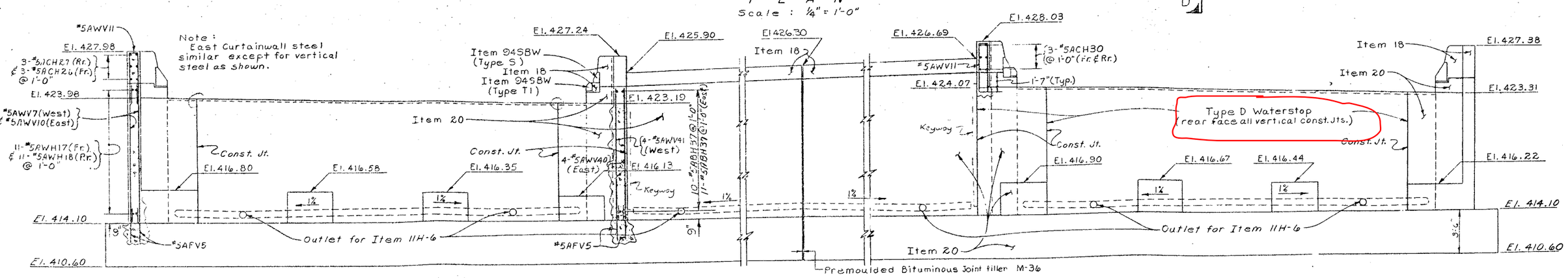
DRAWING NO. 6 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(28) I-481-2(11b)	185	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

Piles to be Cast-in-Place Concrete Piles, Item 85C
Estimated length of pile = 65 feet
For design purposes the pile load does not exceed 35 tons per pile.

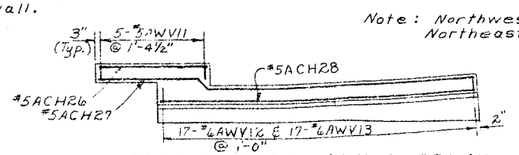




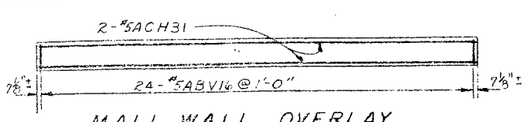
ELEVATION
Scale : 1/4" = 1'-0"

Note: Piles not shown in Elevation. Omit perforations in Item 11H-6 extension thru wall.

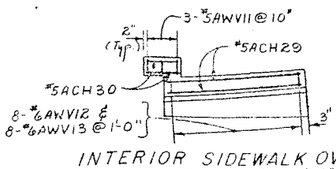
Note: Northwest overlays shown, Northeast similar by opposite hand.



EXTERIOR SIDEWALK OVERLAY
Scale : 1/4" = 1'-0"



MALL WALL OVERLAY
Scale : 1/4" = 1'-0"



INTERIOR SIDEWALK OVERLAY
Scale: 1/4" = 1'-0"

PROJECT ENGINEER R. Parker
IN CHARGE OF E. Eckel
DESIGNED BY K. H. W. & Kaul
DESIGN CHECKED BY J. B. Sherman
DETAILED BY J. C. Thompson
DETAIL CHECKED BY D. H. South

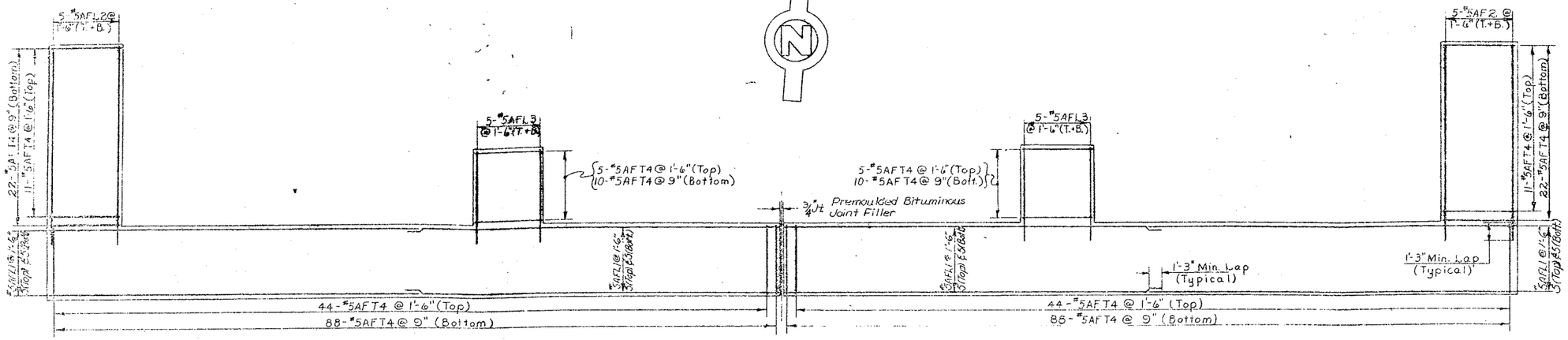
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

NORTH ABUTMENTS

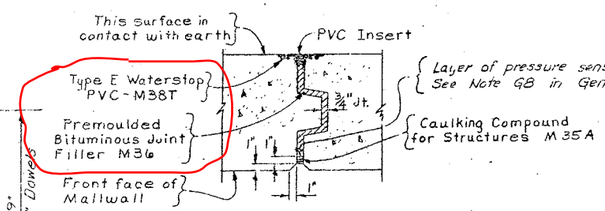
DRAWING NO. 7 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-8 (28) I-481-2 (18)	186	307

INTERSTATE ROUTE CONSTRUCTION 690
DUTCHNOT RUTENBARK (PHASE 2)
ONONDAGA COUNTY

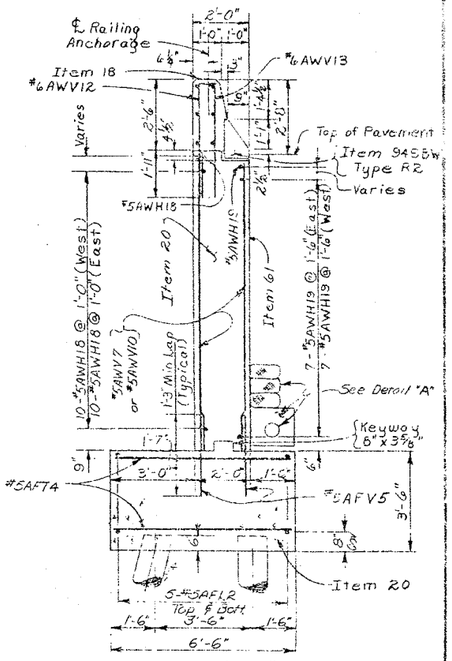


FOOTING REINFORCEMENT PLAN
Scale: 3/16" = 1'-0"

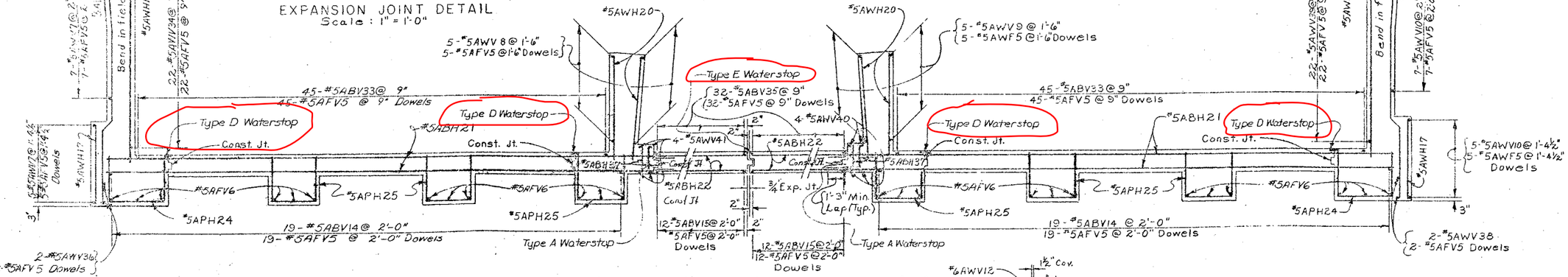


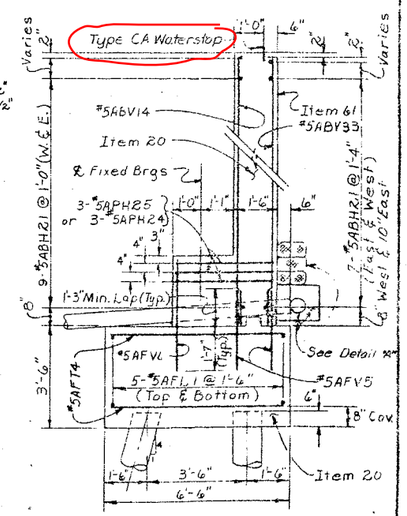
EXPANSION JOINT DETAIL
Scale: 1" = 1'-0"

REINFORCEMENT PLAN 1'-0" ABOVE FOOTING
Scale: 1/4" = 1'-0"

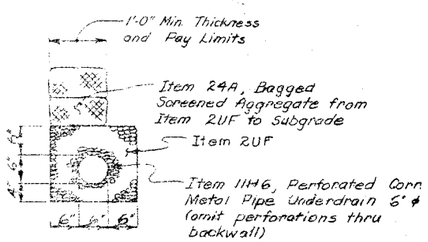


SECTION "A-A"
Scale: 3/16" = 1'-0"

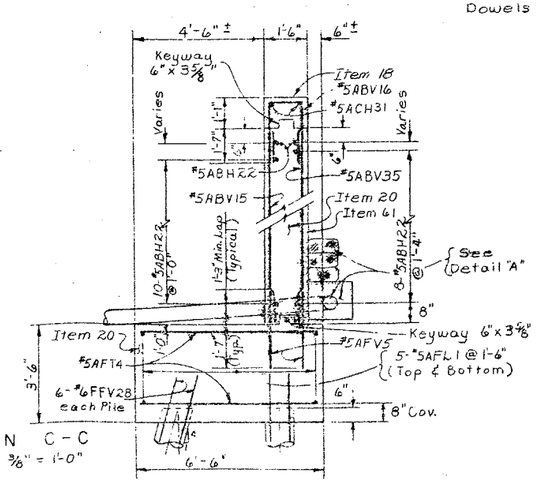




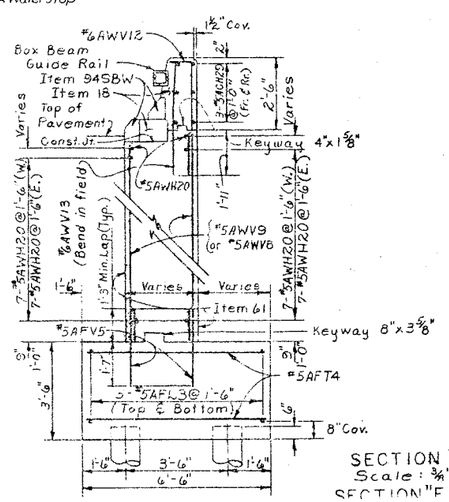
SECTION D-D
Scale: 3/8" = 1'-0"



DETAIL "A"
Scale: 3/16" = 1'-0"



SECTION C-C
Scale: 3/8" = 1'-0"



SECTION "B-B"
Scale: 3/8" = 1'-0"
SECTION "E-F" (Similar except for Bar No's and Piles)

Notes:-

See Drawing # 39 for Waterstops.

All footing reinforcement shall have a min. cover of 3" unless otherwise noted.

All other reinforcement shall have a min. cover of 2" unless otherwise noted

All exposed construction joints shall be chamfered one inch

All exposed corners shall be chamfered one inch.

PROJECT ENGINEER	A. Parker
IN CHARGE OF	T. E. Kelly
DESIGNED BY	K. Wachter
DESIGN CHECKED BY	V. Hall & H. Sherman
DETAILED BY	J. Dunwant & J. C. T.
DETAIL CHECKED BY	C. H. Smith

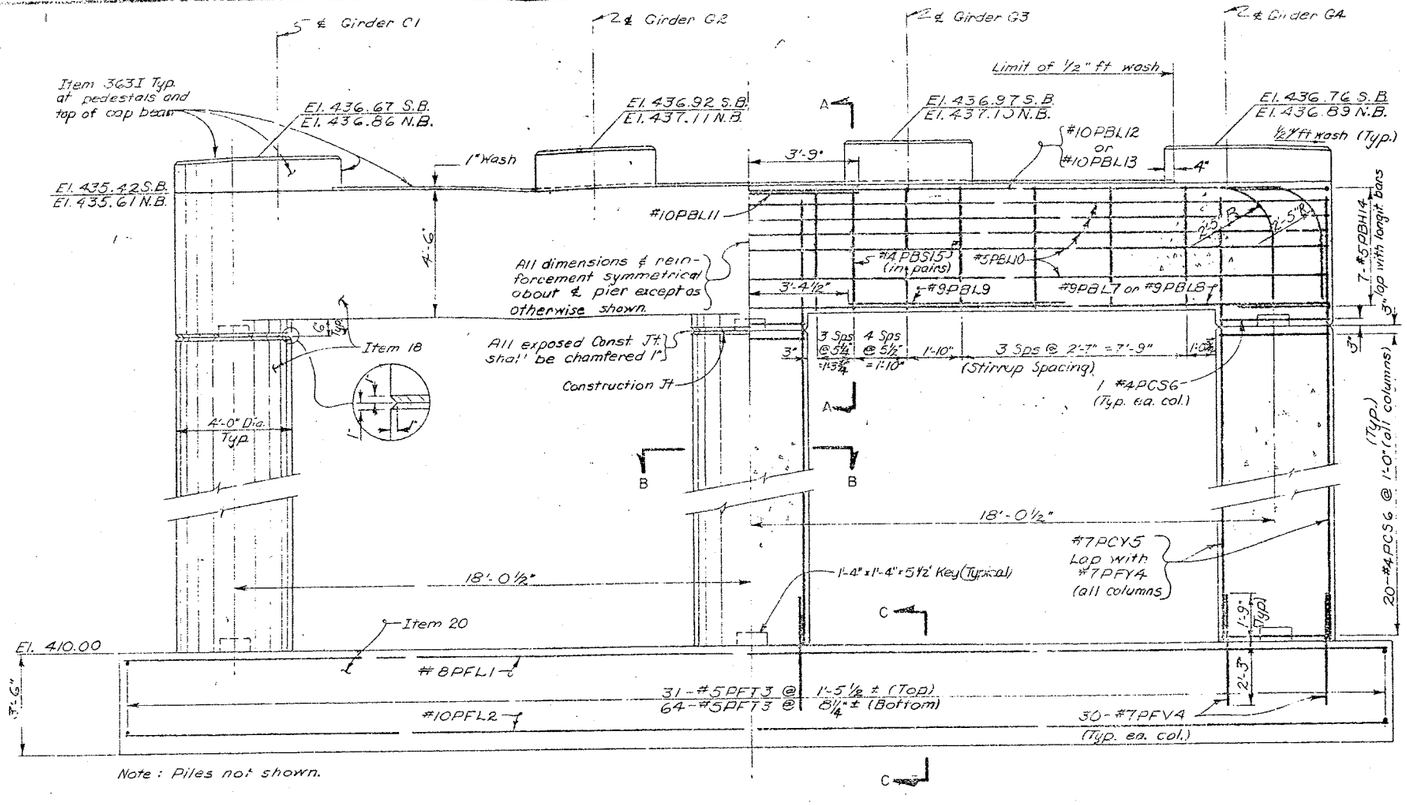
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

NORTH ABUTMENT DETAILS

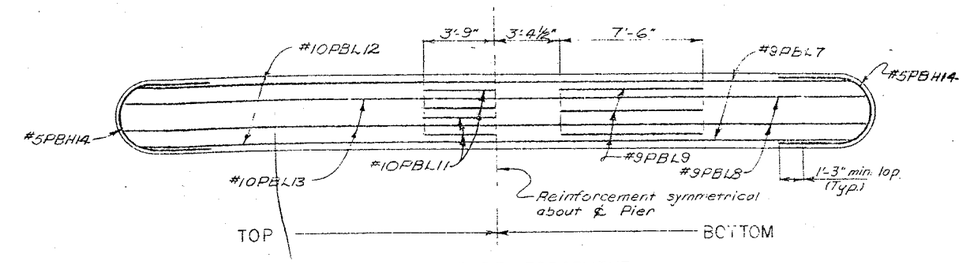
DRAWING NO. 8 OF 5

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	~~(F-030-3(26))~~ I-481-2(116)	187	309

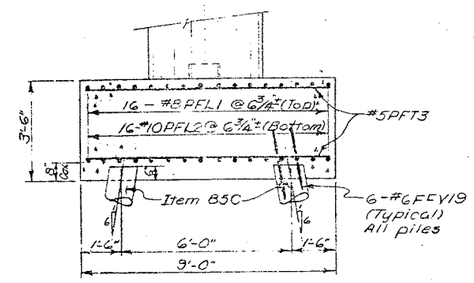
INTERSTATE ROUTE CONSTRUCTION 570
* DEWITT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



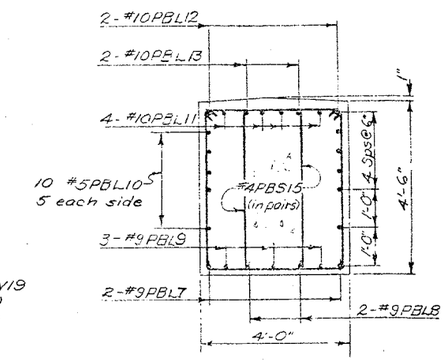
ELEVATION
Scale: 3/8" = 1'-0"



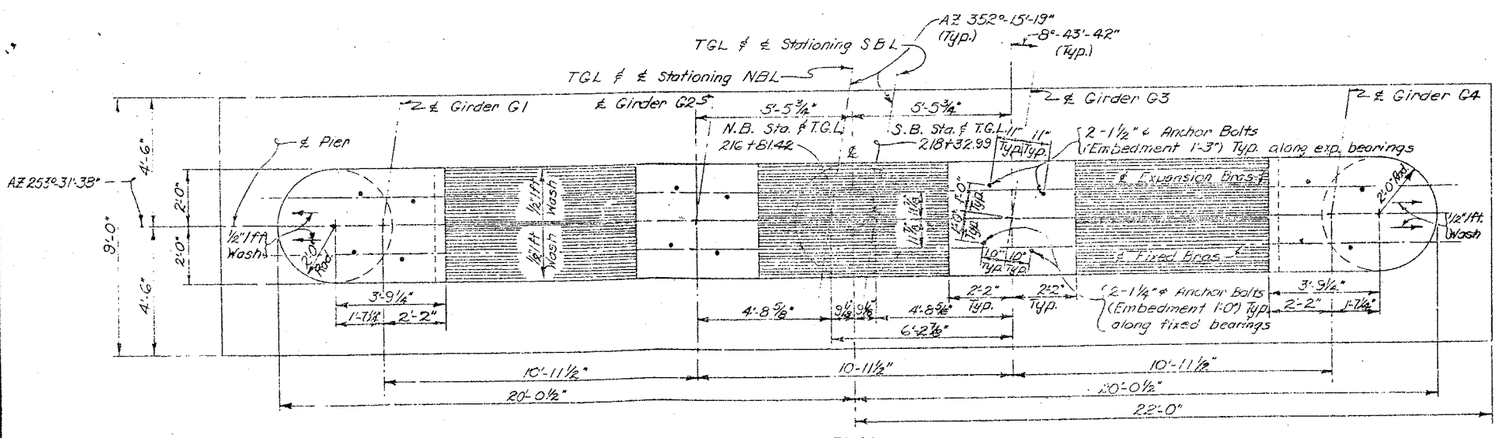
PIER CAP REINFORCEMENT
Scale: 1/4" = 1'-0"



SECTION C-C
Scale: 3/8" = 1'-0"

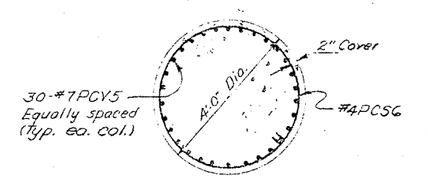


SECTION A-A
Scale: 1/2" = 1'-0"



PLAN
Scale: 3/16" = 1'-0"

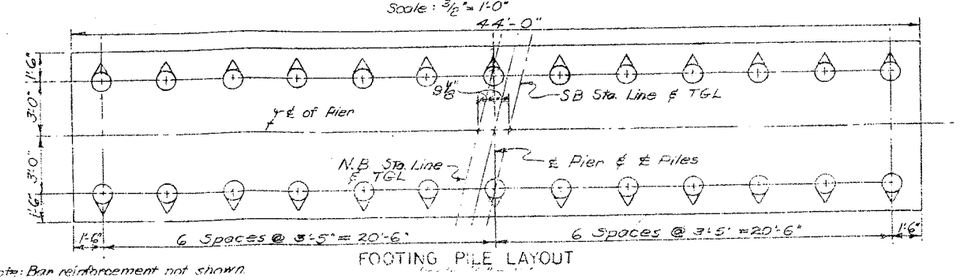
SECTION D-D
Scale: 1/2" = 1'-0"



SECTION B-B
Scale: 1/2" = 1'-0"

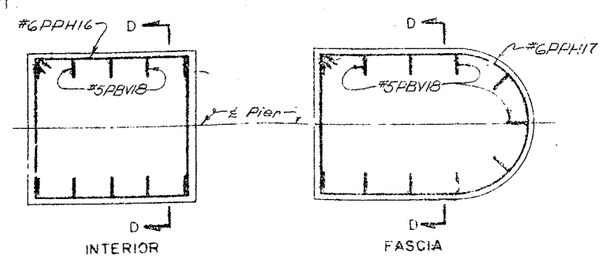
Notes:
All footing reinforcement shall have a min. cover of 3" unless otherwise shown.
All other reinforcement shall have a min. cover of 2" unless otherwise shown.
Estimated length of cast-in-place concrete piles = 55' Southbound and 60' Northbound.
For design purposes the pile load does not exceed 35 tons per pile.
For details of pile reinforcement see Drawing No. 42

Indicates battered piles (6 on 1)



FOOTING PILE LAYOUT

Note: Bar reinforcement not shown.



PEDESTALS
Scale: 1/2" = 1'-0"

PROJECT ENGINEER	R. L. Parker
IN CHARGE OF	F. Eckel
DESIGNED BY	N. A. Tolkes
DESIGN CHECKED BY	F. Thimble
DETAILED BY	J. Thomas
DETAIL CHECKED BY	W. C. Stevens

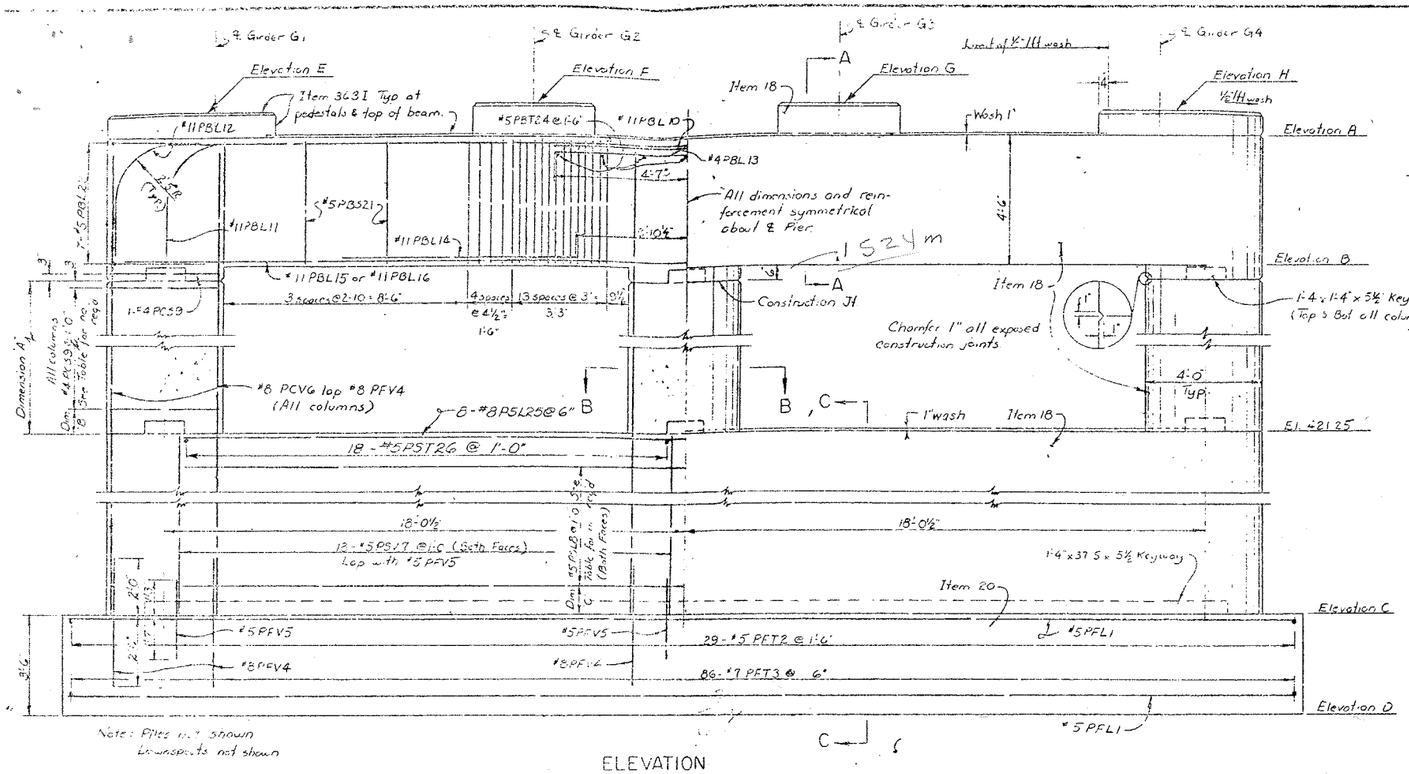
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

PIER 1 (NB & SB)

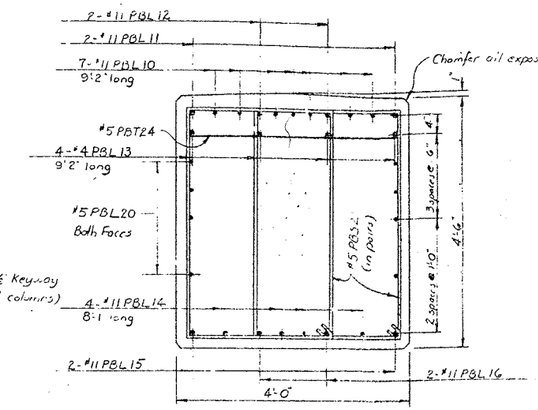
DRAWING NO. 3 [illegible]

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-530-8(26) I-481-2(116)	188	309

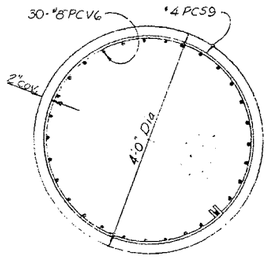
INTERSTATE ROUTE CONNECTION 570
DEWITT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



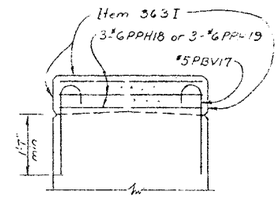
ELEVATION
Scale 3/16" = 1'-0"



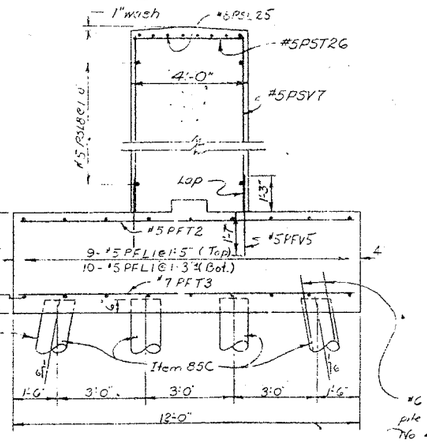
SECTION A-A
Scale 3/4" = 1'-0"



SECTION B-B
Scale 3/4" = 1'-0"



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



SECTION C C
Scale 3/8" = 1'-0"

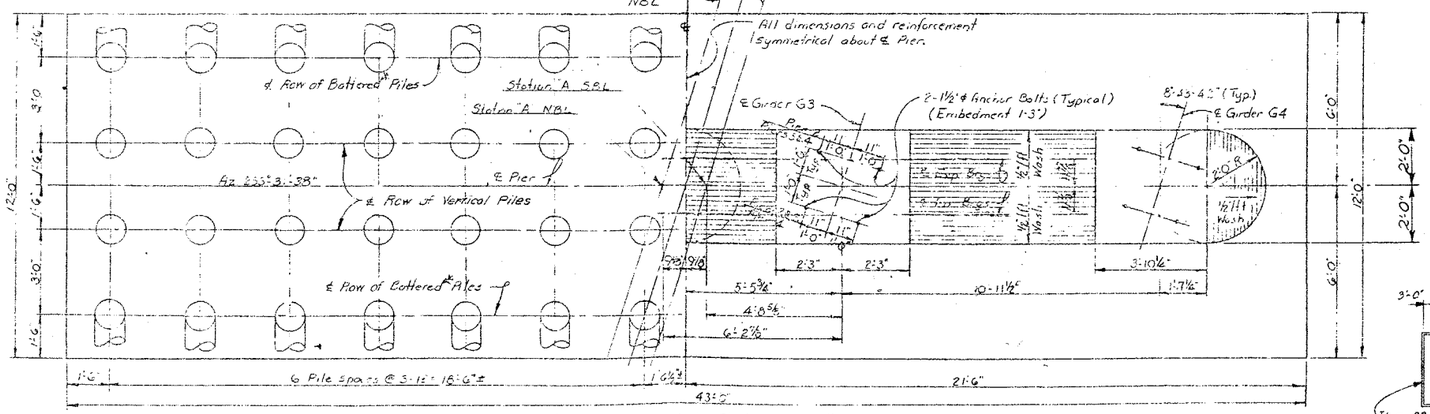
Battered Pile shown. Do not batter piles adjacent to Steel Sheet Piling, Item 83S

Note All footing reinforcement shall have a min. cover of 3" unless otherwise shown.
All other reinforcement shall have a min cover of 2" unless otherwise shown.
Estimated length of cast-in-place concrete piles Pier #2 SB 55' long, Pier #2 NB & Pier #3 SB 60' long, Pier #3 NB 65' long, & Pier #4 NB & SB 70' long
For design purposes the pile load does not exceed 35 tons/pile.

Downspouts to be paid for under Item 13DE Each hopper to be drained by one downspout attached to each exterior column See drawing #32 for details

*6 FFV23 For details of pile reinforcement see Drawing No 42

STATION "A"	NBL	SBL
PIER 2	218+37.59	219+89.15
PIER 3	220+08.76	221+60.32
PIER 4	222+06.76	223+58.32

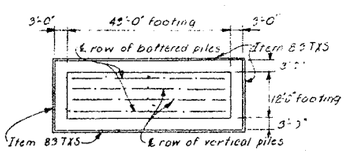


FOOTING PILE LAYOUT
Scale 3/8" = 1'-0"

* Piles adjacent to Steel Sheet Piling shall not be battered.

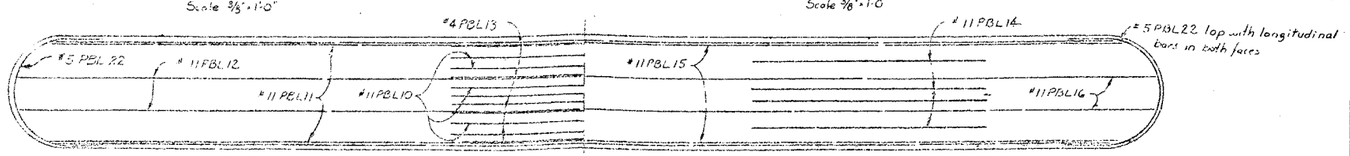
PLAN
Scale 3/8" = 1'-0"

PIER DATA						
DESCRIPTION	NORTHBOUND			SOUTHBOUND		
	PIER 2	PIER 3	PIER 4	PIER 2	PIER 3	PIER 4
ELEVATION A	437.00	438.00	438.50	437.00	438.00	438.50
" B	432.50	433.50	434.00	432.50	433.50	434.00
" C	411.00	413.00	412.80	411.00	413.00	412.80
" D	407.50	409.50	409.30	407.50	409.50	409.30
" E	438.42	439.47	439.83	438.28	439.38	439.80
" F	438.66	439.70	440.09	438.52	439.61	440.05
" G	438.64	439.68	440.04	438.56	439.65	440.08
" H	438.43	439.46	439.79	438.35	439.43	439.83
DIM A	10.75'	11.75'	12.25'	10.75'	11.75'	12.25'
" B	6"	6"	1'-0"	6"	6	1'-0"
NO. PCS9 per col.	12	13	13	12	13	13
DIM C	1'-0"	1'-0"	3"	1'-0"	1'-0"	3"
NO. PSL8 per pier	20	16	18	20	16	18

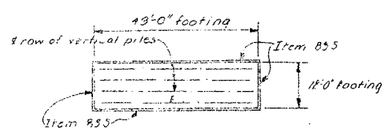


PIERS 3 SB & 3 NB

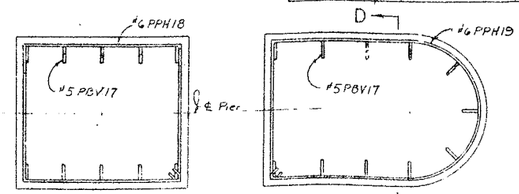
For details of Steel Sheet Piling, Item 83S, see Drawing No 4.



PIER CAP REINFORCEMENT
Scale 3/8" = 1'-0"



PIERS 2 & 4 SB, 2 & 4 NB



INTERIOR
FASCIA
PEDESTALS
Scale 1/2" = 1'-0"

PROJECT ENGINEER
IN CHARGE OF
DESIGNED BY
DESIGN CHECKED BY
DETAILED BY
DETAILS CHECKED BY

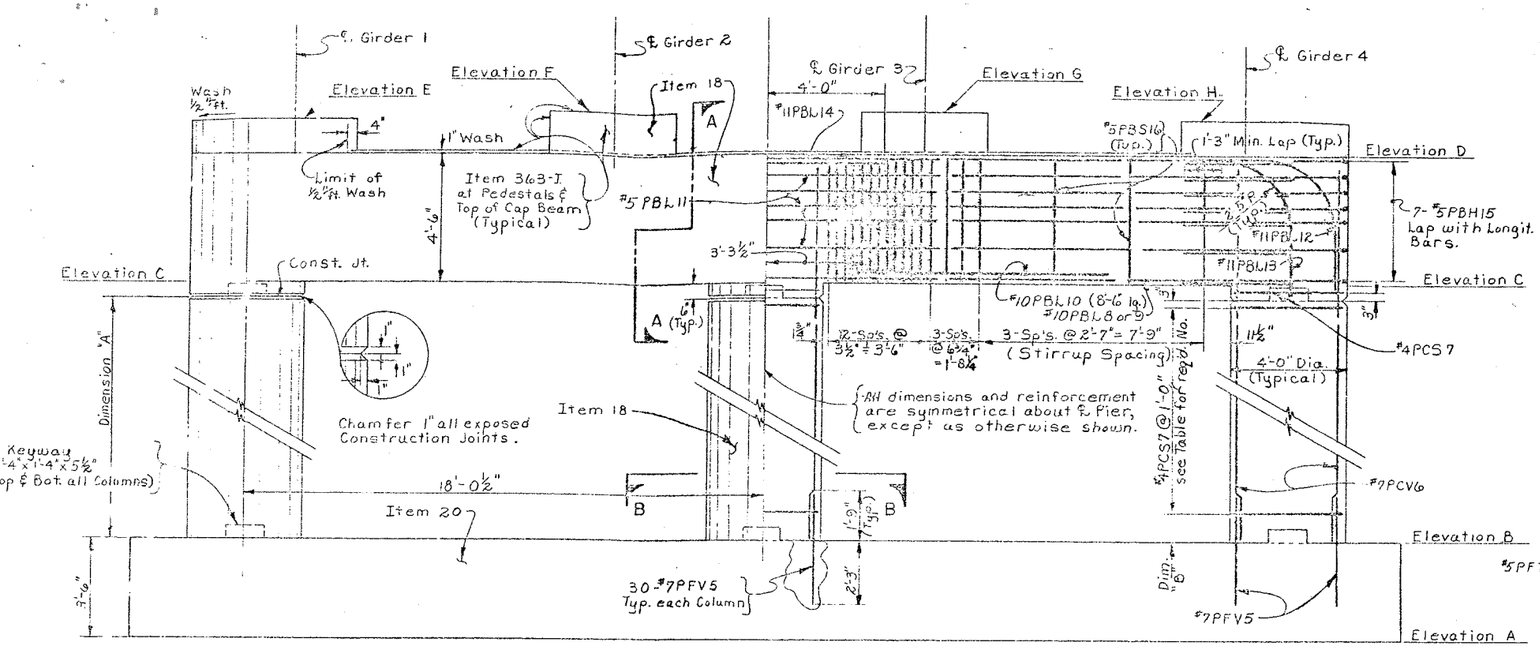
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

PIERS #2, #3, #4 (NB & SB)

DRAWING NO. 10 OF 30

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK	I-681-3(1) 1-681-2(116)	189	308

INTERSTATE ROUTE CONNECTION 570
RUTTSHUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



Notes:

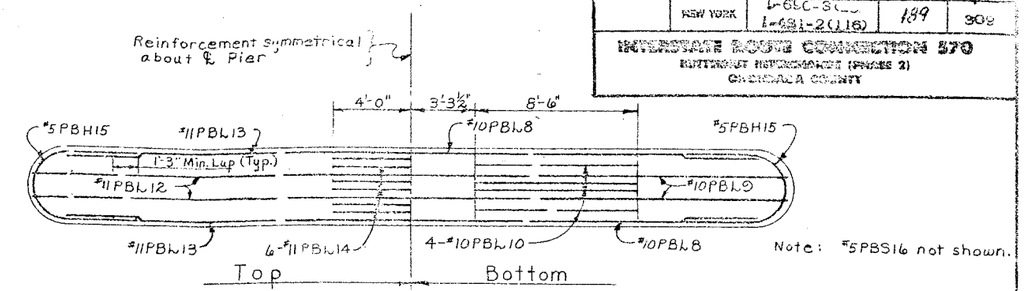
Piles and Downspouts not shown.
Footing reinforcement not shown.

ELEVATION
Scale: ⅜"=1'-0"

Notes:

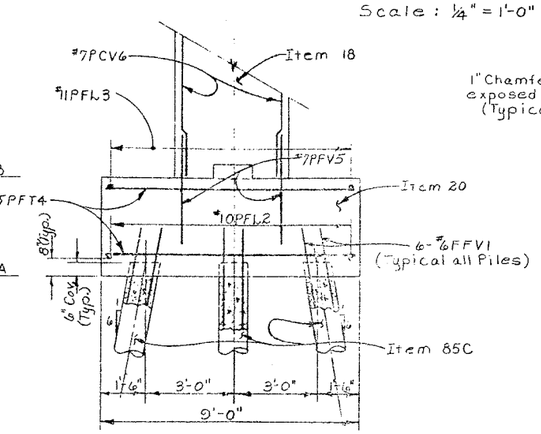
All footing reinforcement shall have a minimum cover of 3" unless otherwise shown.

All other reinforcement shall have a minimum cover of 2" unless otherwise shown.

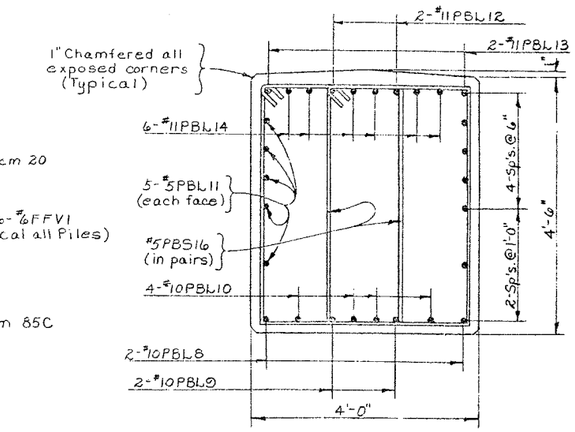


Note: #5PBS16 not shown.

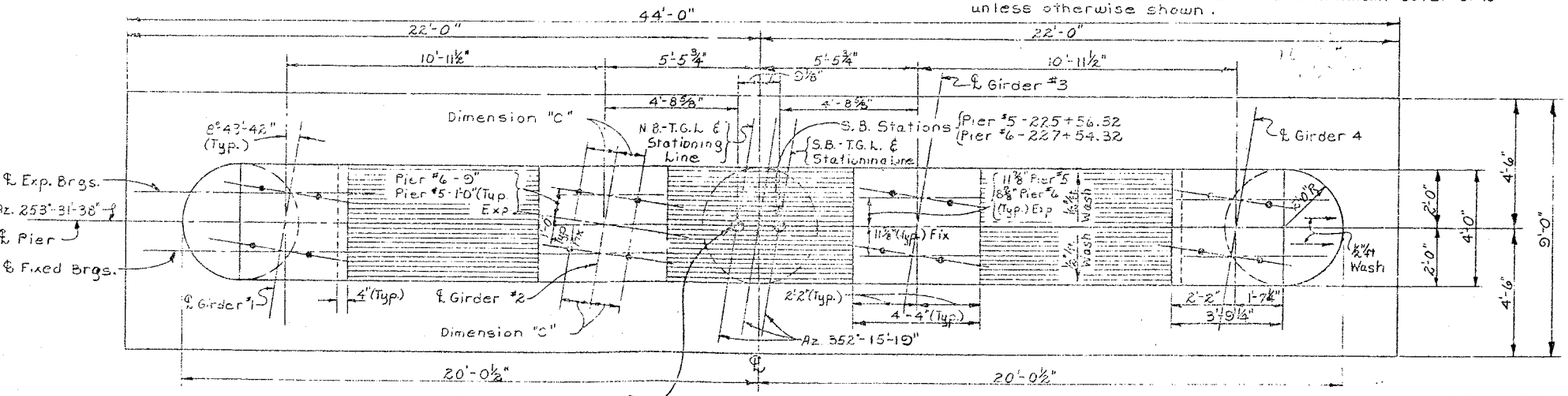
PIER CAP REINFORCEMENT
Scale: ¼"=1'-0"



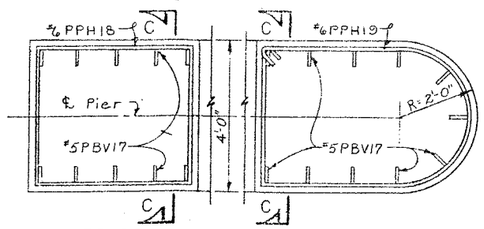
END SECTION
Scale: ⅜"=1'-0"



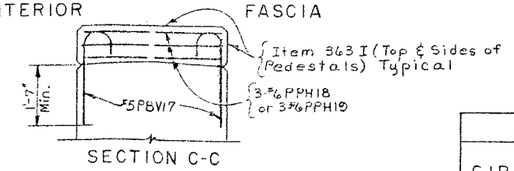
SECTION A-A
Scale: ¾"=1'-0"



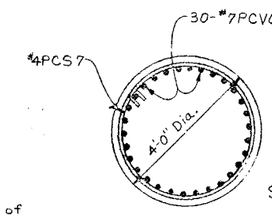
PLAN
Scale: ⅜"=1'-0"



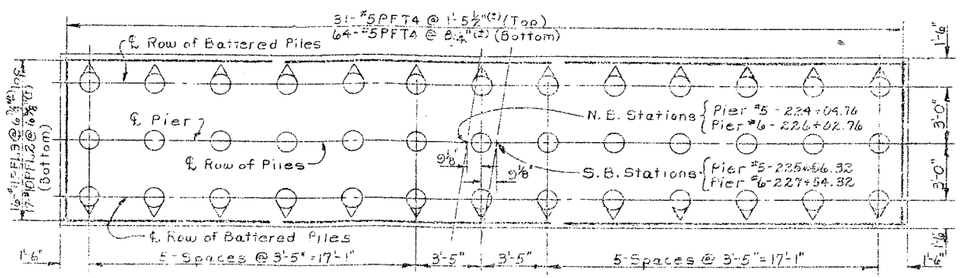
PEDESTAL REINFORCEMENT
Scale: ½"=1'-0"



SECTION C-C



SECTION B-B
Scale: ½"=1'-0"



FOOTING REINFORCEMENT PLAN & PILE LAYOUT
Scale: ¼"=1'-0"

Indicates Piles Battered 6 on 1

Estimated length of Cast-in-Place Piles:

Pier #5 S.B. = 75'
Pier #5 N.B. = 60'
Pier #6 S.B. = 80'
Pier #6 N.B. = 80'

Note:

For Design Purposes the pile load does not exceed 35 Tons per Pile.

PIER DATA				
DESCRIPTION	PIER No. 5		PIER No. 6	
	N.B.	S.B.	N.B.	S.B.
ELEVATION A	409.30	409.30	410.50	407.30
" " B	412.80	412.80	414.00	410.80
" " C	433.45	433.55	431.96	432.12
" " D	437.95	438.05	436.46	436.62
" " E	439.26	439.30	437.79	437.88
" " F	439.50	439.54	438.00	438.10
" " G	439.46	439.56	437.95	438.11
" " H	439.20	439.30	437.71	437.87
DIM. A	20'-2"	20'-3"	17'-5½"	20'-10"
DIM. B	11"	1'-0"	3"	7"
NO. HOOPS	21	21	19	22

ANCHOR BOLT DATA							
GIRDER		PIER NO. 5 S.B. & N.B.			PIER NO. 6 N.B. & S.B.		
		ϕ BOLT	REQ'D. EMBED.	DIM. C	ϕ BOLT	REQ'D. EMBED.	DIM. C
FIXED BRGS.	G1	1½"	1'-3"	1'-0"	1½"	1'-3"	1'-0"
	G2	1½"	1'-3"	1'-0"	1½"	1'-3"	1'-0"
	G3	1½"	1'-3"	1'-0"	1½"	1'-3"	1'-0"
	G4	1½"	1'-3"	1'-0"	1½"	1'-3"	1'-0"
EXP BRGS.	G1	1½"	1'-3"	1'-0"	1½"	1'-3"	1'-0"
	G2	1½"	1'-3"	1'-0"	1¼"	1'-0"	10"
	G3	1½"	1'-3"	1'-0"	1¼"	1'-0"	10"
	G4	1½"	1'-3"	1'-0"	1½"	1'-3"	1'-0"

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

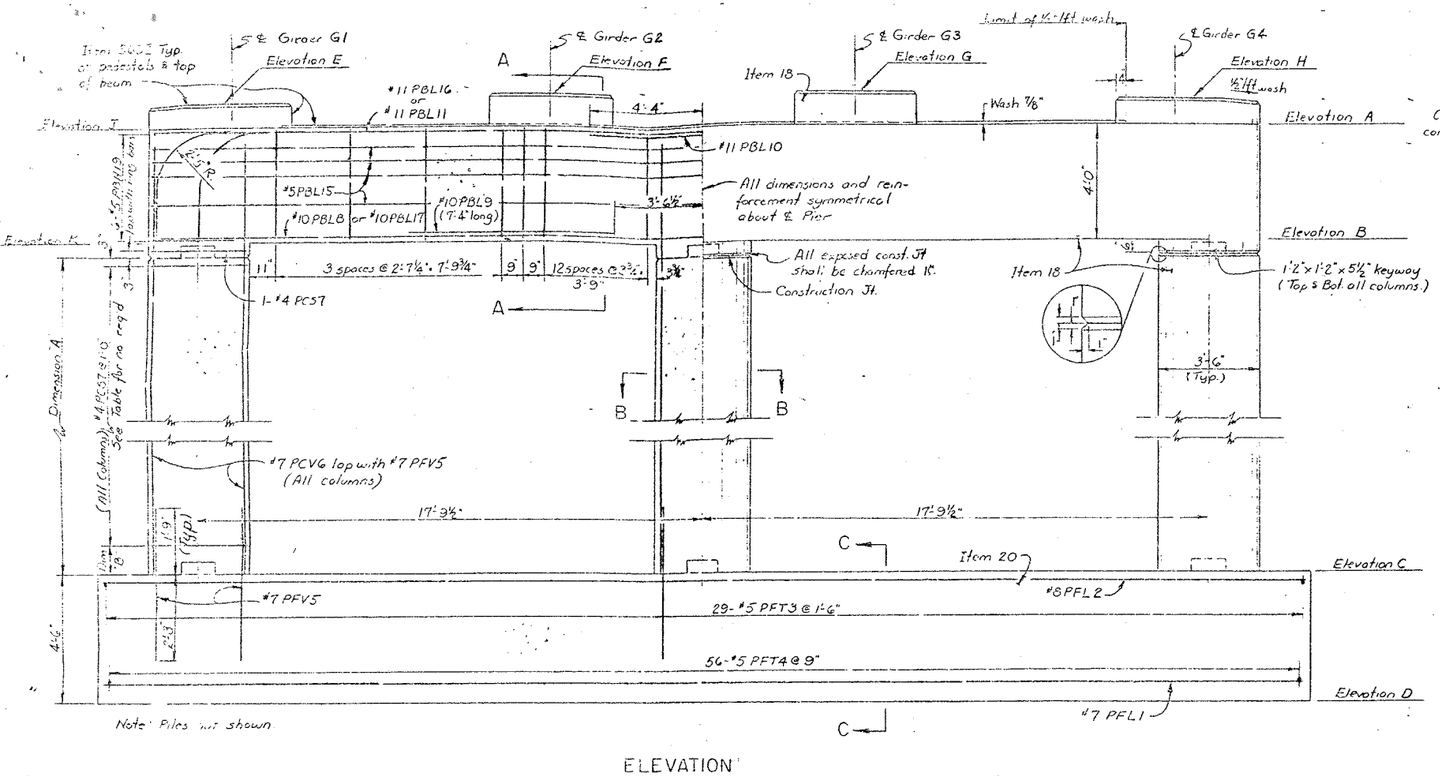
PIERS 5 & 6 (N.B. & S.B.)

DRAWING NO. 11 OF 50

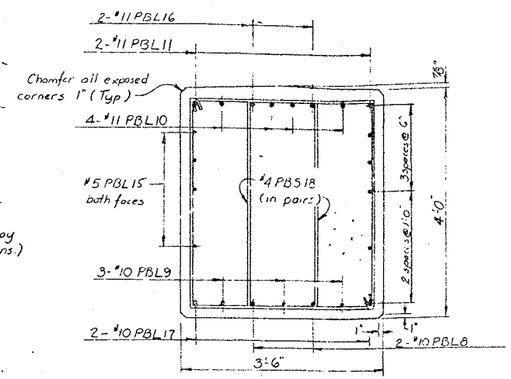
PROJECT ENGINEER P. Parker
CHARGE OF I. Eckel
DESIGNED BY J. D. Tumbas
DESIGN CHECKED BY N. J. Toppuzis
DETAILED BY J. C. Thompson
DETAIL CHECKED BY W. J. Spencer

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-680-3(28) I-481-2(116)	170	570

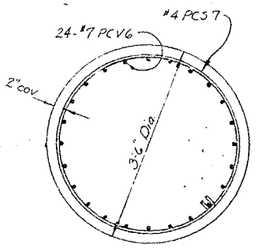
STRUCTURE NO. 3301170
CONTRACT DRAWING (FORM 2)
ORANGE COUNTY



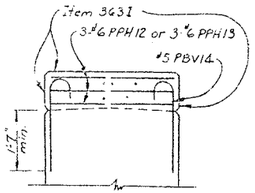
ELEVATION
Scale 3/8"=1'-0"



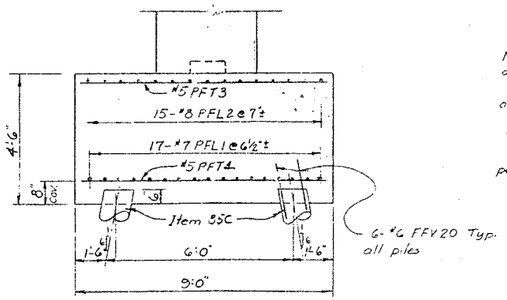
SECTION A-A
Scale 3/4"=1'-0"



SECTION B-B
Scale 3/4"=1'-0"



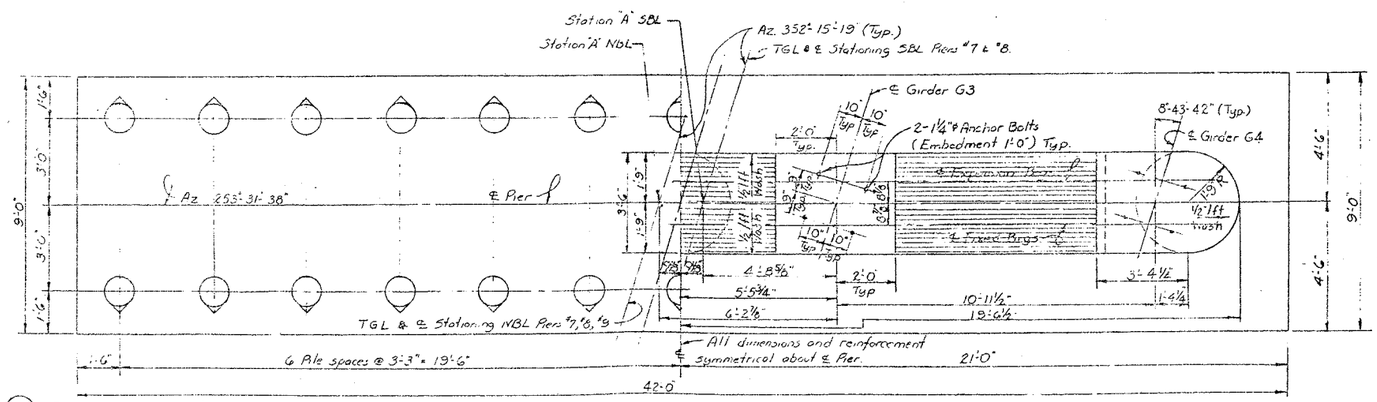
SECTION D-D
Scale ½"=1'-0"



SECTION C-C
Scale 3/8"=1'-0"

Note. All footing reinforcement shall have a min. cover of 3" unless otherwise shown.
All other reinforcement shall have a min. cover of 2" unless otherwise shown.
Estimated length of cast-in-place concrete piles = 80' at Pier 7 NB & SB, 70' at Pier 8 NB & SB and Pier 9 NB
For design purposes the pile load does not exceed 35 tons per pile.

For details of pile reinforcement see Drawing No. 42



Indicates battered piles. (4 on 1)

FOOTING PILE LAYOUT
Scale 3/8"=1'-0"

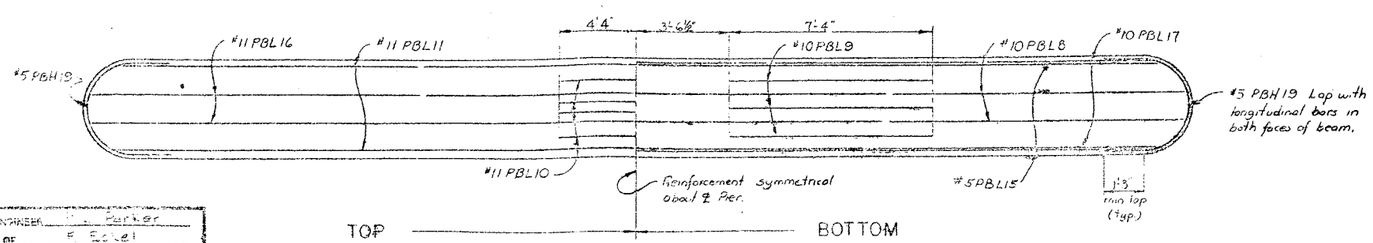
PLAN
Scale 3/8"=1'-0"

STATION "A"

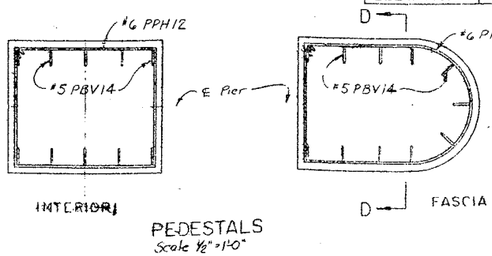
	NBL	SBL
PIER 7	227+26.76	228+78.32
PIER 8	228+50.76	230+02.32
PIER 9	229+74.76	

PIER DATA

DESCRIPTION	NORTHBOUND PIER 7	NORTHBOUND PIER 8	NORTHBOUND PIER 9	SOUTHBOUND PIER 7	SOUTHBOUND PIER 8
ELEVATION A	438.29	436.51	434.36	438.49	436.74
" B	434.29	432.51	430.36	434.49	432.74
" C	410.00	408.80	407.70	409.00	408.00
" D	405.50	404.30	403.20	404.50	403.50
" E	439.39	437.62	435.69	439.52	437.79
" F	439.59	437.82	435.74	439.73	437.99
" G	439.54	437.76	435.62	439.74	438.00
" H	439.29	437.51	435.36	439.49	437.74
DIM A	23.79	23.21	22.16	24.99	24.24
" B	6½"	11½"	11"	9"	1'-0"
NO. HOOPS	24	23	22	25	24
ELEVATION J	438.29	436.51	434.69	438.49	436.74
ELEVATION K	434.29	432.51	430.69	434.49	432.74



PIER CAP REINFORCEMENT
Scale 3/8"=1'-0"



PEDESTALS
Scale ½"=1'-0"

PROJECT ENGINEER: L. Parker
IN CHARGE OF: F. Fogel
REVIEWED BY: E. Howe
DESIGN ENGINEER: L. A. Torres
CHECKED BY: [illegible]
DRAWN BY: S. Pierce

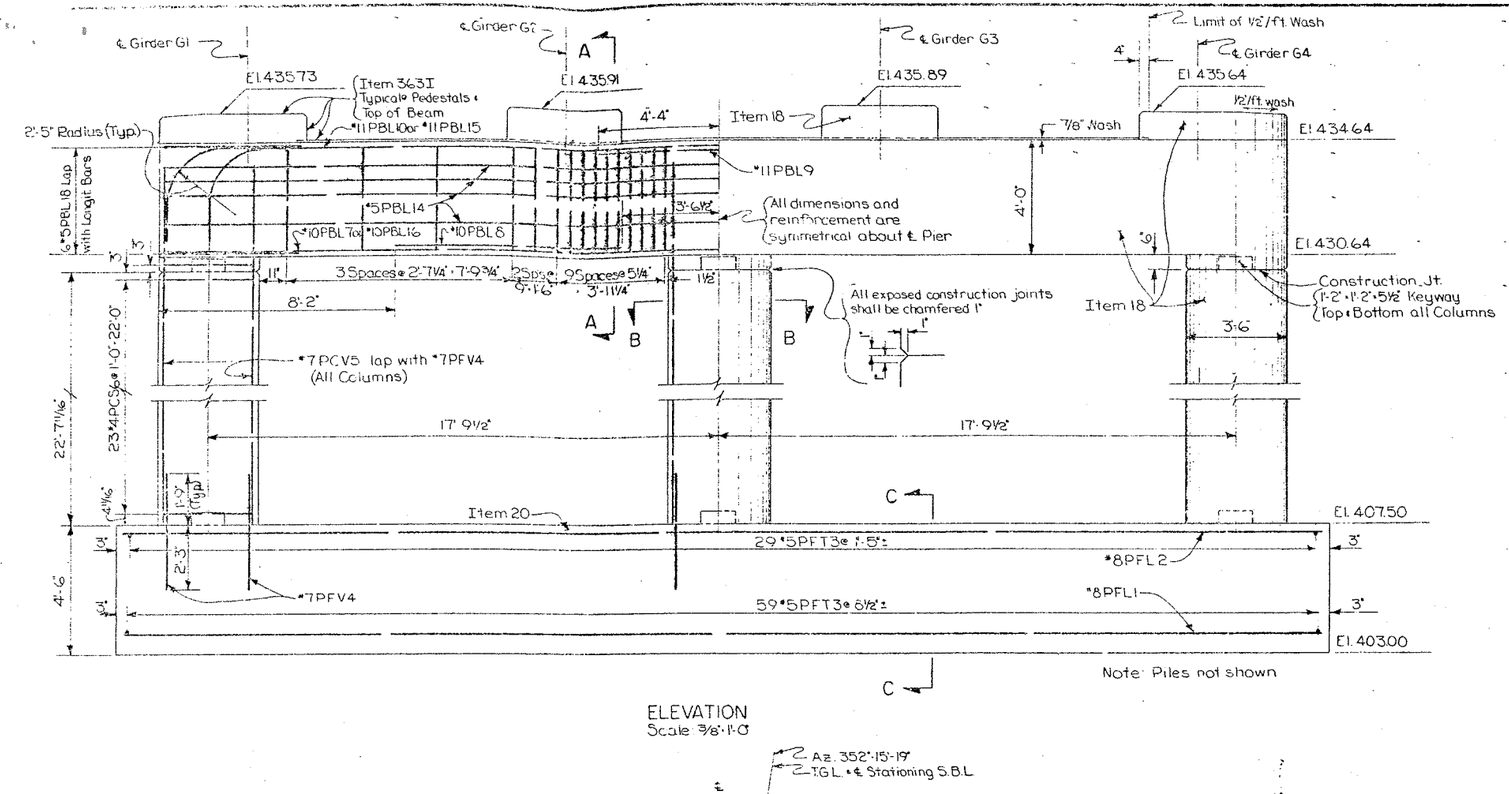
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

PIERS 7 & 8 NBL & SBL, PIER 9 NBL
DRAWING NO. 12 OF 50

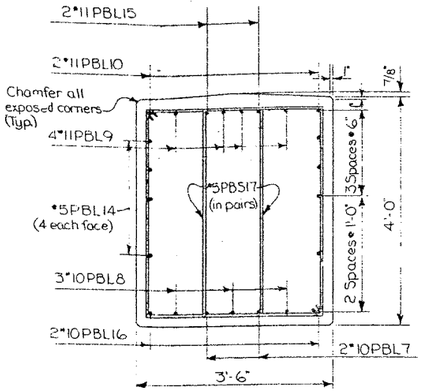
F.I.S.H. 70-7

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-090C-8(28) I-431-2(116)	191	309

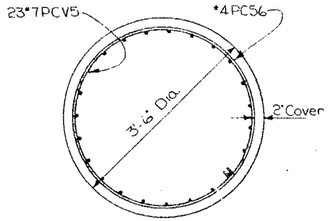
INTERSTATE ROUTE CONNECTION 570
BUFFALO INTERCHANGE (PHASE 2)
CHEMUNG COUNTY



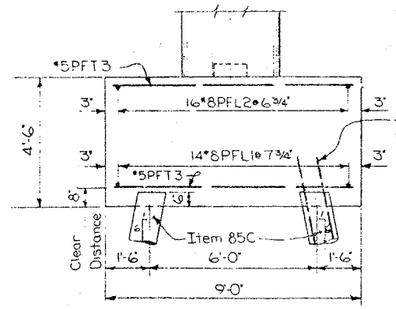
ELEVATION
Scale: 3/8" = 1'-0"



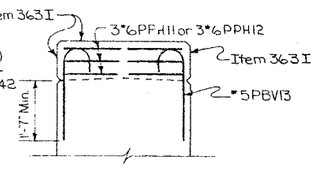
SECTION A-A
Scale: 3/4" = 1'-0"



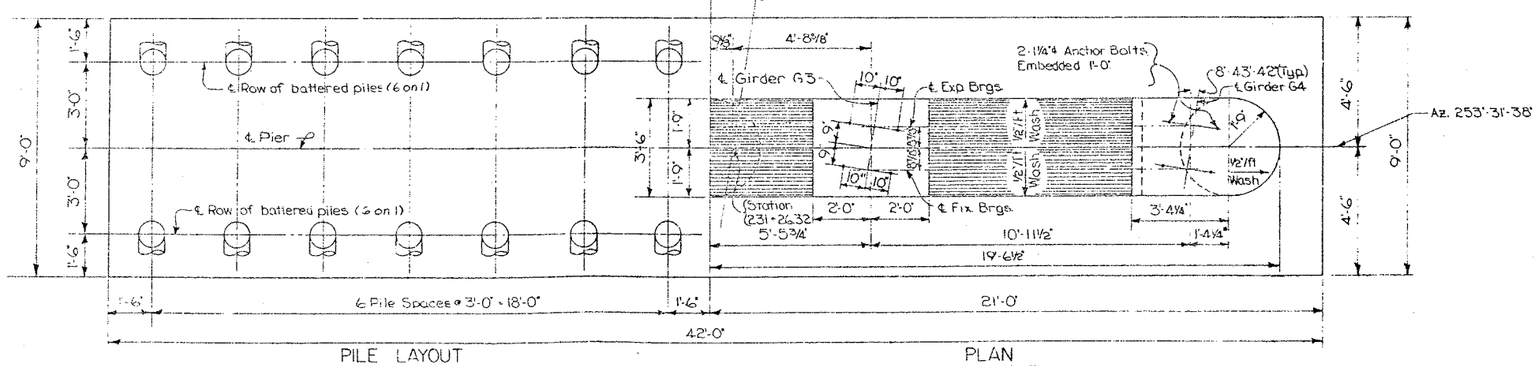
SECTION B-B
Scale: 3/4" = 1'-0"



SECTION C-C
Scale: 3/8" = 1'-0"



SECTION D-D
Scale: ½" = 1'-0"

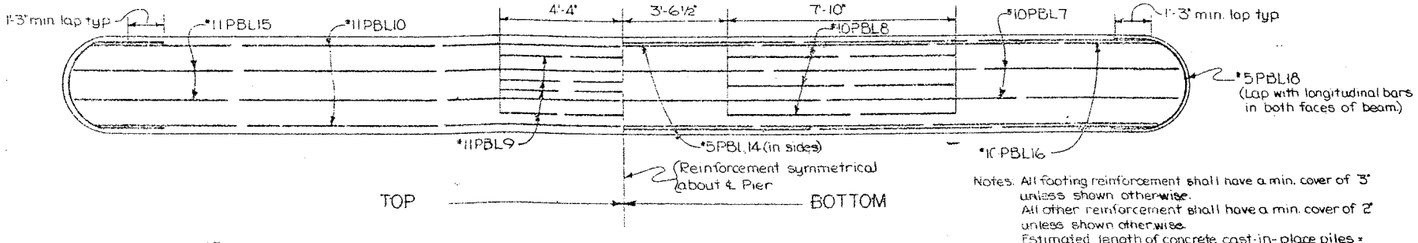


PILE LAYOUT
Scale: 3/8" = 1'-0"

PLAN
Scale: 3/8" = 1'-0"

INTERIOR

PEDESTALS
Scale: ½" = 1'-0"



PIER CAP REINFORCEMENT
Scale: 3/8" = 1'-0"

Notes: All footing reinforcement shall have a min. cover of 3" unless shown otherwise.
All other reinforcement shall have a min. cover of 2" unless shown otherwise.
Estimated length of concrete cast-in-place piles = 70'. For design purposes the pile load does not exceed 35 tons per pile.

PROJECT ENGINEER E. L. Parker
IN CHARGE OF F. Eckel
DESIGNED BY S. Rowe
DESIGN CHECKED BY N. A. Toppres
DETAILED BY J. Darcy
DETAIL CHECKED BY S. Rowe

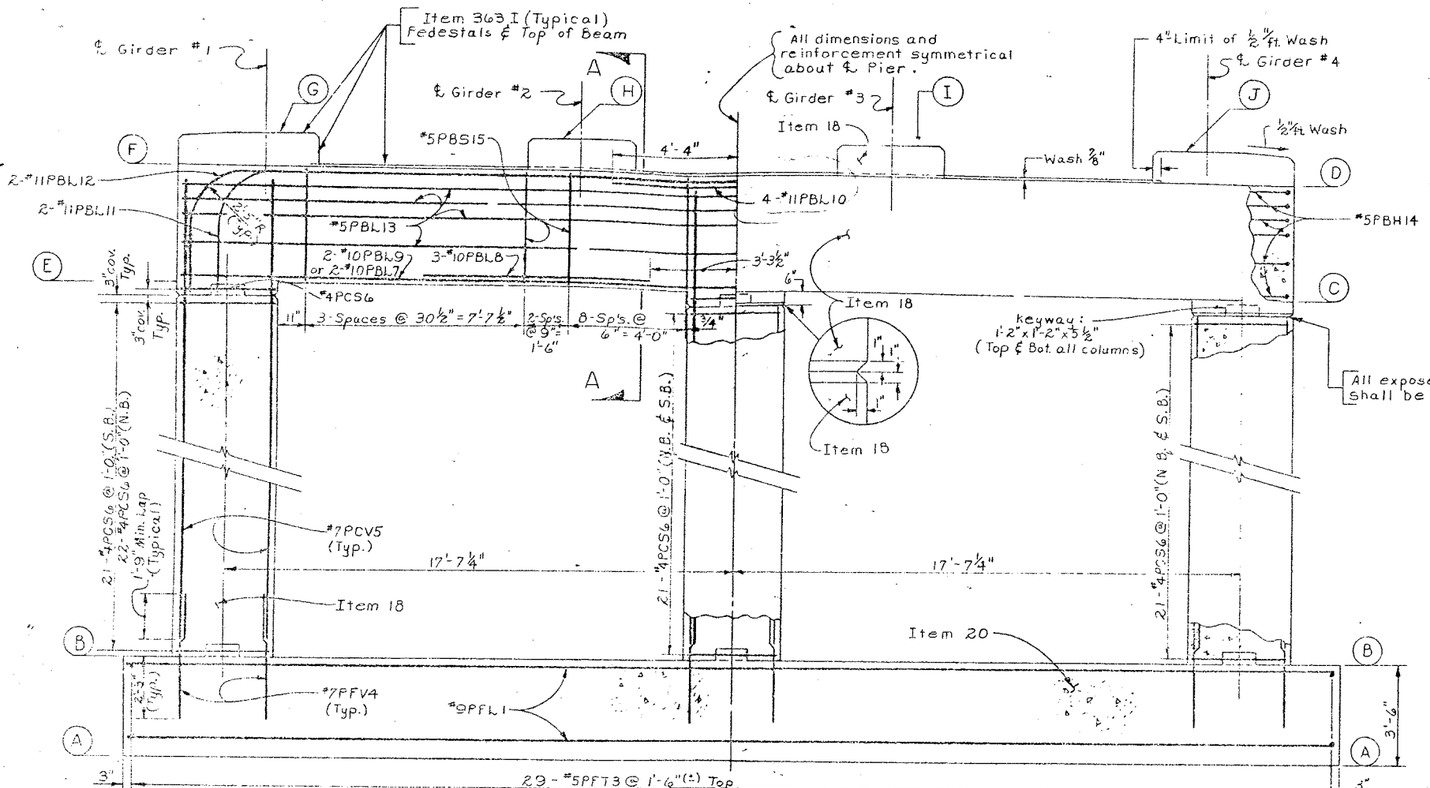
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

PIER 9 (SB)

DRAWING NO. 13 OF 50

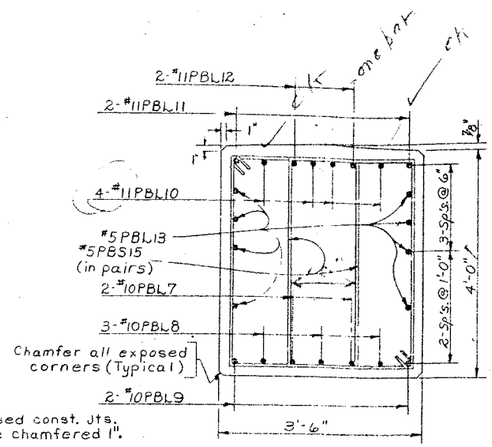
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	F-690-3(28) 481-2(116)	192	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

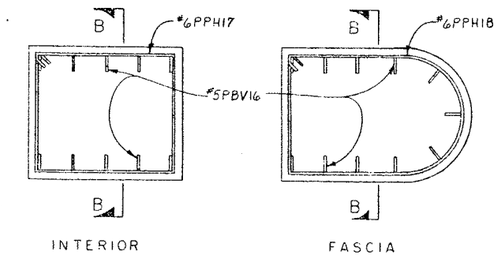


Note: Piles not shown in Elevation.

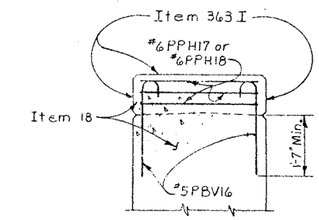
ELEVATION
Scale: ⅜" = 1'-0"



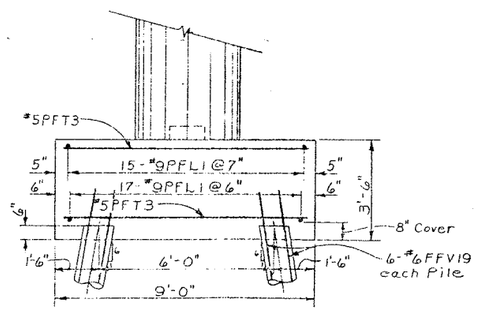
SECTION A-A
Scale: ¾" = 1'-0"



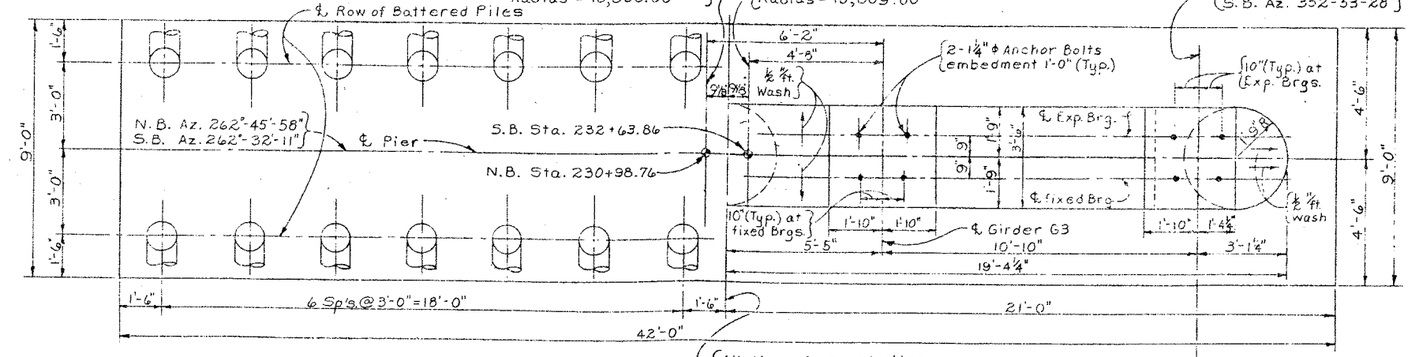
PEDESTAL REINFORCEMENT
Scale: ½" = 1'-0"



SECTION B-B
Scale: ½" = 1'-0"

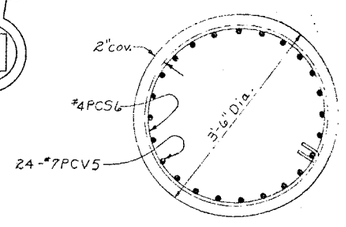


END VIEW
Scale: ⅜" = 1'-0"



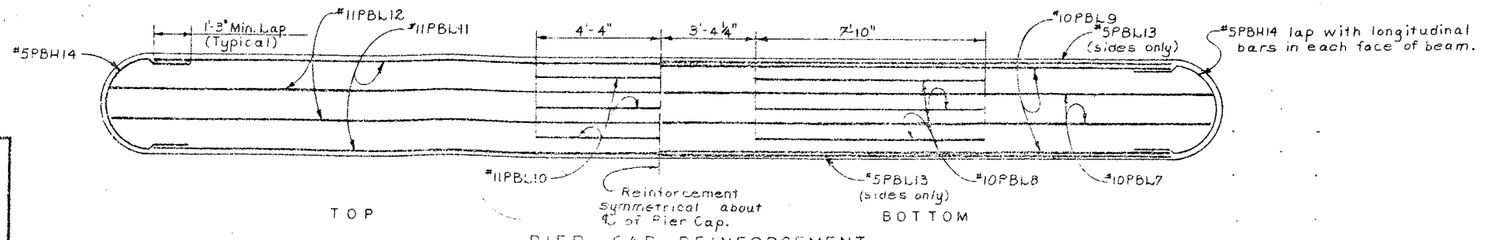
PILE LAYOUT
Scale: ⅜" = 1'-0"

PLAN
Scale: ⅜" = 1'-0"



TYPICAL COLUMN SECTION
Scale: ¾" = 1'-0"

Notes:
All footing reinforcement shall have a min. cover of 3" unless otherwise shown.
All other reinforcement shall have a min. cover of 2" unless otherwise shown.
Estimated length of Cast-in-Place concrete piles = 70'-0" S.B. & 65'-0" N.B.
For Design Purposes the pile load does not exceed 35 Tons per Pile.
For details of Cast-in-Place Piles see Dwg. #42.



PIER CAP REINFORCEMENT

ELEVATIONS		
LOCATION	SOUTHBOUND	NORTHBOUND
A	403.20	403.00
B	406.70	406.50
C	427.85	427.83
D	431.85	431.83
E	428.35	428.48
F	432.35	432.48
G	433.42	433.55
H	433.31	433.35
I	433.15	433.13
J	432.92	432.91

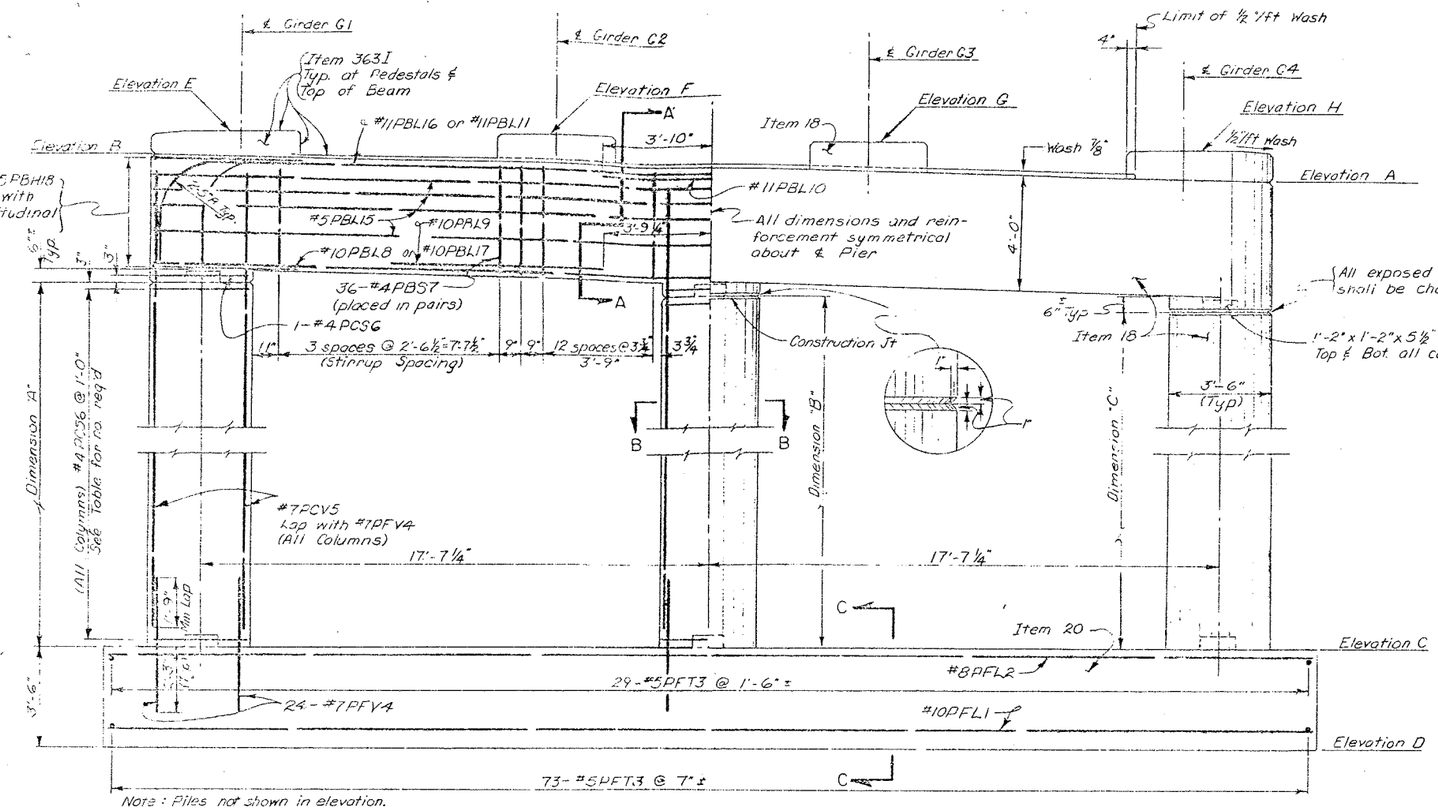
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

PIER 10 (SB & NB)

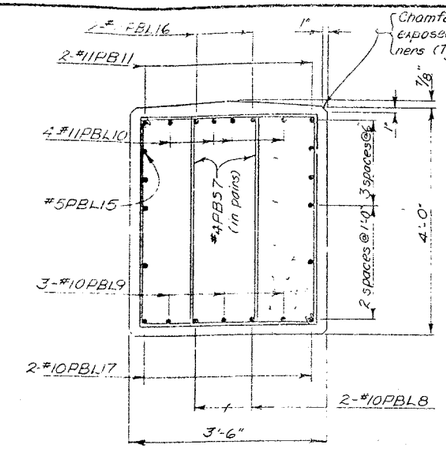
PROJECT ENGINEER R. Parker
CHARGE OF F. Eckel
DESIGNED BY S. Rowe
DESIGN CHECKED BY N. A. Tappses
DETAILED BY J. C. Thompson
DETAIL CHECKED BY [illegible]

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(28) I-481-2(116)	193	309

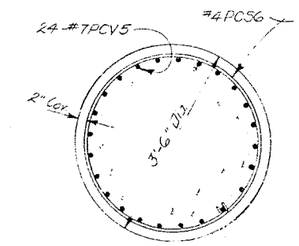
INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



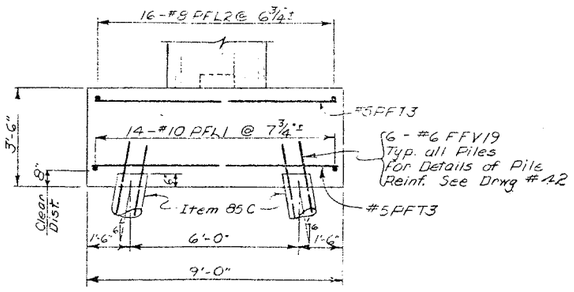
ELEVATION
Scale: 3/16"=1'-0"



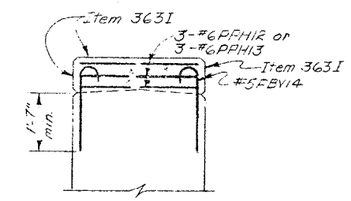
SECTION A-A
Scale: 3/4"=1'-0"



SECTION B-B
Scale: 3/4"=1'-0"
Typical all columns

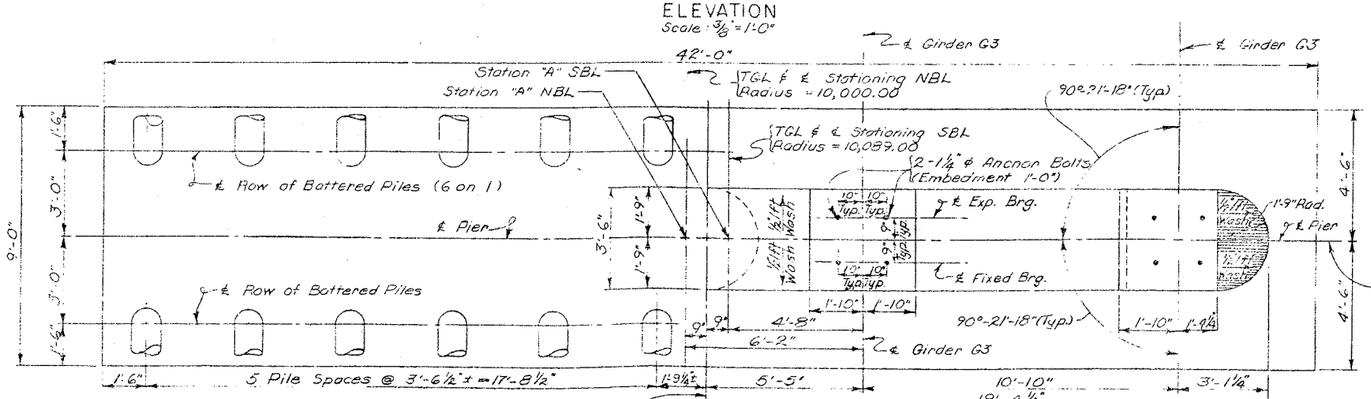


SECTION C-C
Scale: 3/8"=1'-0"



SECTION D-D
Scale: 1/2"=1'-0"

Note: All footing reinforcement shall have a min. cover of 3" unless otherwise shown.
All other reinforcement shall have a min. cover of 2" unless otherwise shown.
Estimated length of Cast-In-Place Concrete Piles = 65' at Piers 11 & 12 NB & SB.
For design purposes the Pile Load does not exceed 35 Tons Per Pile.

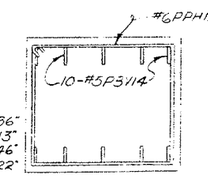


FOOTING PILE LAYOUT
Scale: 3/8"=1'-0"

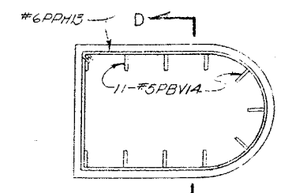
(All dimensions & reinforcement symmetrical about ℄ Pier

PLAN
Scale: 3/16"=1'-0"

Pier 11 NB AZ 263°-28'-36"
Pier 12 NB AZ 263°-11'-13"
Pier 11 SB AZ 263°-14'-46"
Pier 12 SB AZ 263°-57'-22"

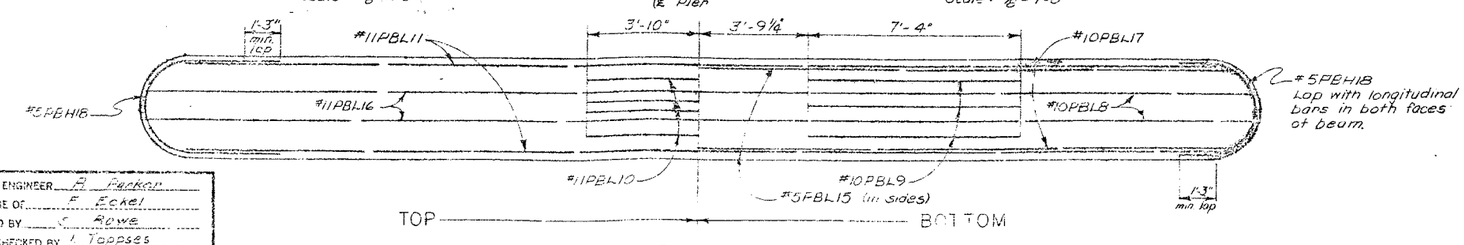


INTERIOR



FASCIA

PEDESTALS
Scale: 1/2"=1'-0"



PIER CAP REINFORCEMENT
Scale: 3/8"=1'-0"

PIER DATA

DESCRIPTION		NORTHBOUND PIER 11	NORTHBOUND PIER 12	SOUTHBOUND PIER 11	SOUTHBOUND PIER 12
ELEVATION	A	429.04	425.81	429.03	425.77
"	B	429.72	426.49	429.71	426.44
"	C	406.30	406.40	406.30	406.40
"	D	402.80	402.90	402.80	402.90
"	E	430.72	427.49	430.71	427.45
"	F	430.49	427.26	430.48	427.22
"	G	430.27	427.04	430.26	427.00
"	H	430.04	426.81	430.03	426.77
DIM "A"		18.92	15.59	18.91	15.54
"B"		18.58	15.25	18.57	15.21
"C"		18.24	14.91	18.23	14.87
NO. HOOPS		19 Per Col.	16 Per Col.	19 Per Col.	16 Per Col.
STATION "A"		232+22.76	233+46.76	233+88.86	235+13.86

PROJECT ENGINEER R. Parker
CHARGE OF F. Eckel
DESIGNED BY K. Rowe
DESIGN CHECKED BY L. Toppses
DETAILED BY J. Duncant
DETAIL CHECKED BY [illegible]

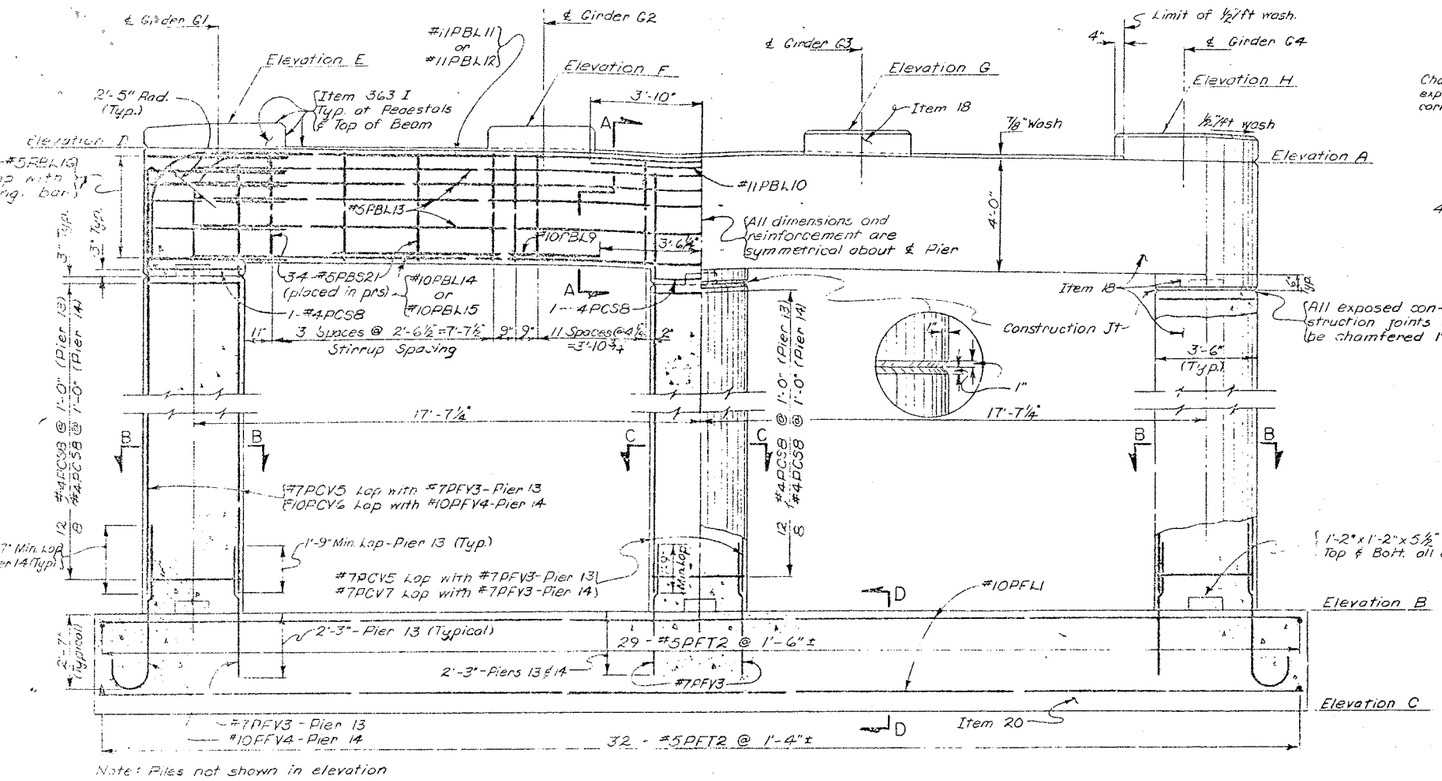
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

PIERS 11 & 12 (N.B. & S.B.)

DRAWING NO. 15 OF 50

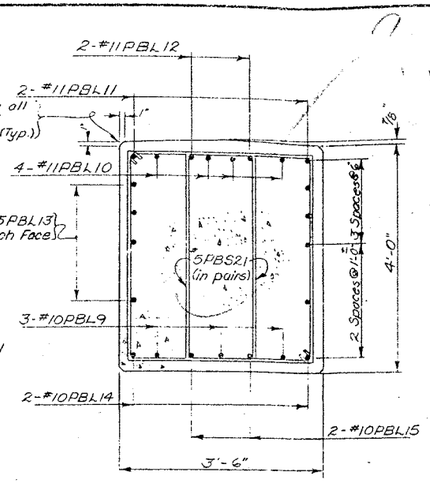
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-590-3(28) I-481-2(116)	194	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

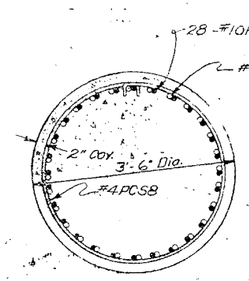


Note: Piles not shown in elevation

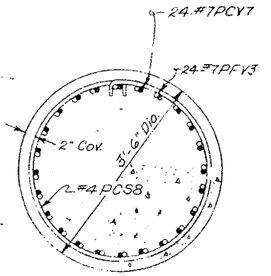
ELEVATION
Scale: 3/8" = 1'-0"



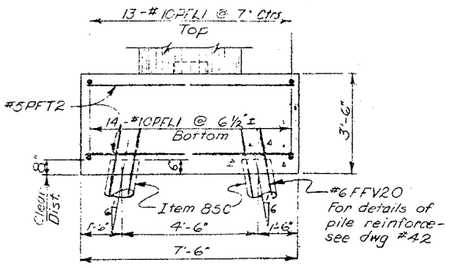
SECTION A-A
Scale: 3/4" = 1'-0"



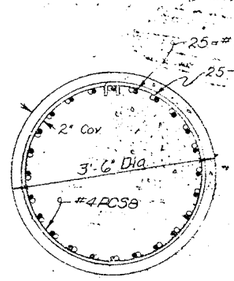
SECTION B-B, PIER 14
Scale: 3/4" = 1'-0"



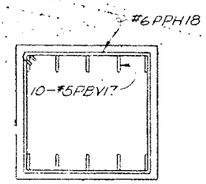
SECTION C-C, PIER 14
Scale: 3/4" = 1'-0"



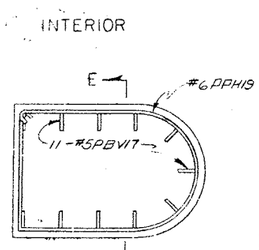
SECTION D-D
Scale: 3/8" = 1'-0"



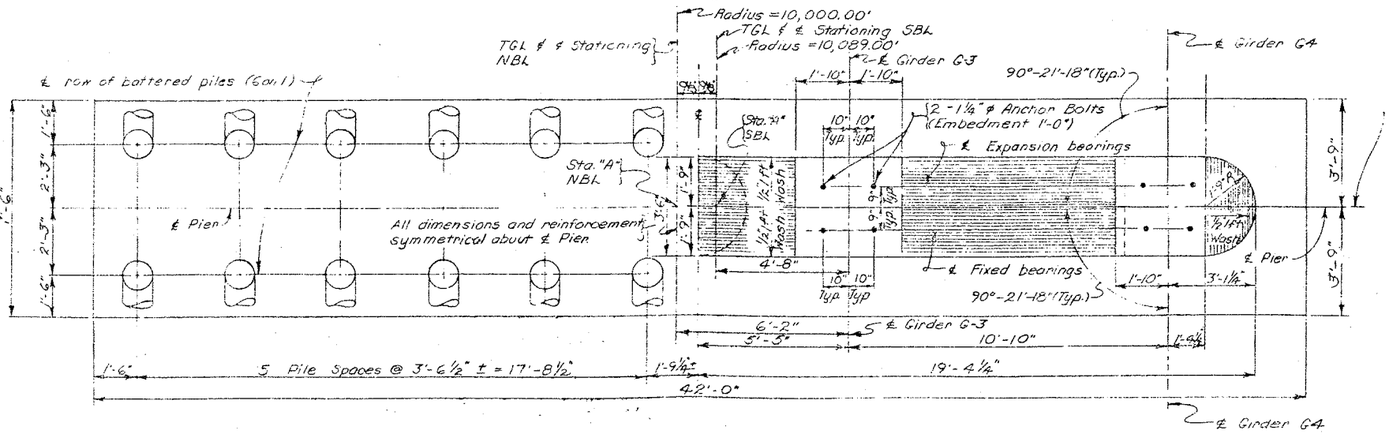
SECTION B-B & C-C, PIER 13
Scale: 3/4" = 1'-0"

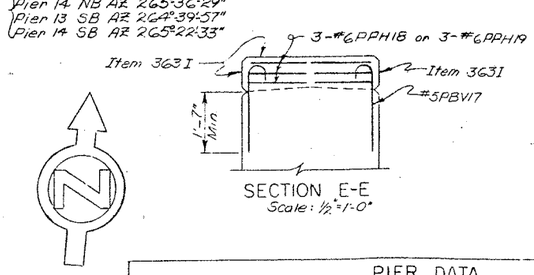


INTERIOR



FASCIA PEDESTALS
Scale: 1/2" = 1'-0"





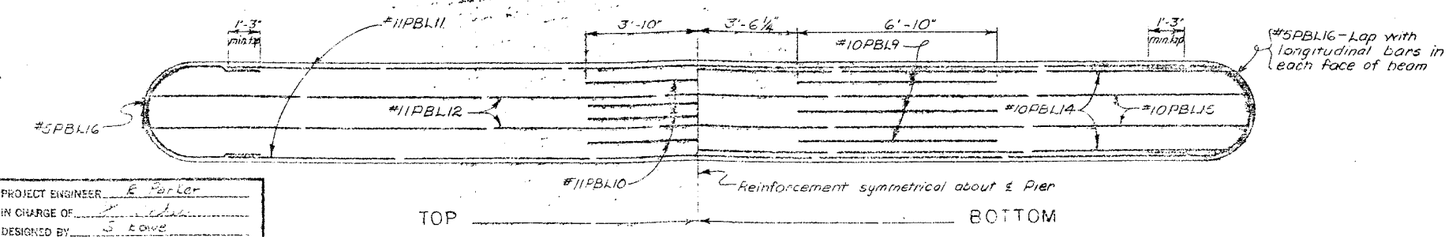
SECTION E-E
Scale: 1/2" = 1'-0"

STATION "A"		
PIER	NBL	SBL
#13	234+70.76	236+38.86
#14	235+94.76	237+63.86

PIER DATA				
DESCRIPTION	NORTHBOUND		SOUTHBOUND	
	PIER 13	PIER 14	PIER 13	PIER 14
ELEVATION A	422.22	418.44	422.14	418.36
" B	406.70	407.00	406.70	407.00
" C	403.20	403.50	403.20	403.50
" D	422.90	419.12	422.81	419.03
" E	423.89	420.12	423.81	420.03
" F	423.67	419.90	423.59	419.81
" G	423.44	419.67	423.36	419.58
" H	423.22	419.44	423.14	419.36

Note:
All footing reinforcement shall have a min. cover of 3" unless otherwise shown.
All other reinforcement shall have a min. cover of 2" unless otherwise shown.
Estimated length of Cast-in-Place Concrete Piles = 65' Pier 13 SB, 60' Pier 13 NB & 60' Piers 14 NB & SB

For design purposes the pile load does not exceed 35 tons per pile.



PIER CAP REINFORCEMENT
Scale: 3/8" = 1'-0"

PROJECT ENGINEER E. Porter
IN CHARGE OF
DESIGNED BY S. Lowe
DESIGN CHECKED BY
DETAILED BY
DETAIL CHECKED BY

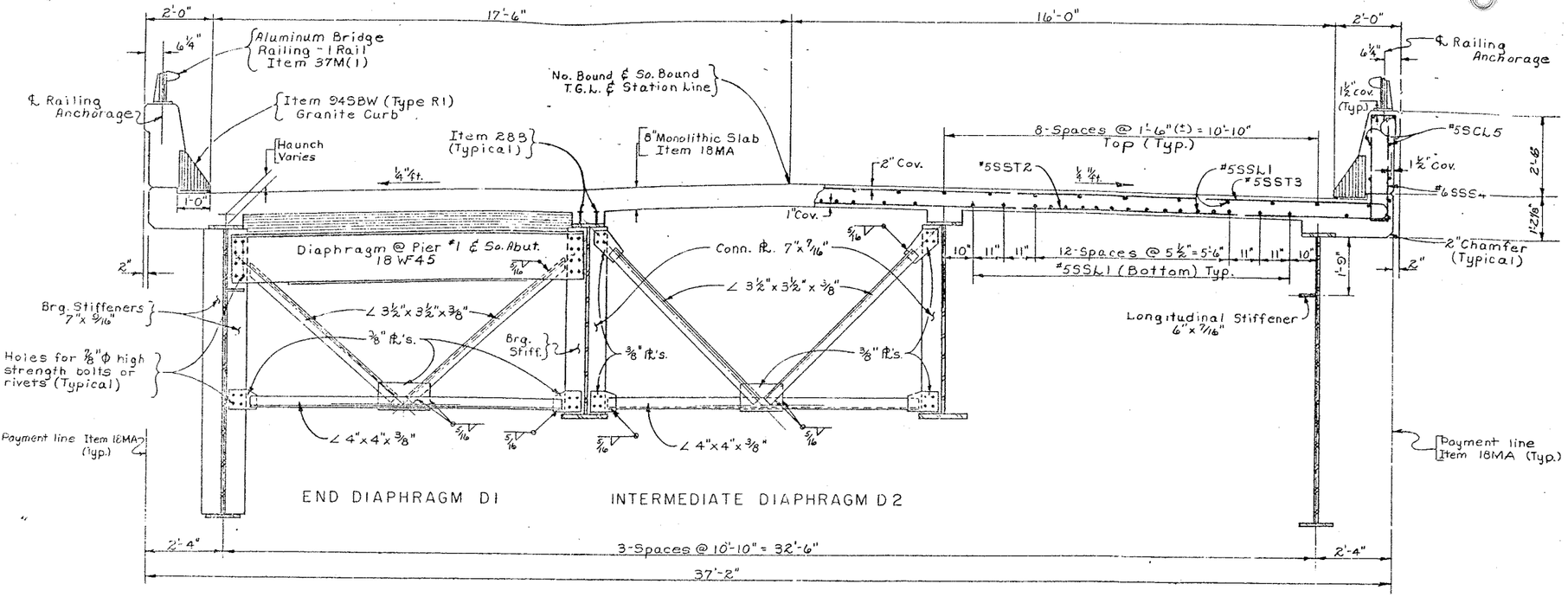
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

PIERS #13 & #14 (NB & SB)

DRAWING NO. 16 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(23) I-481-2(116)	195	309

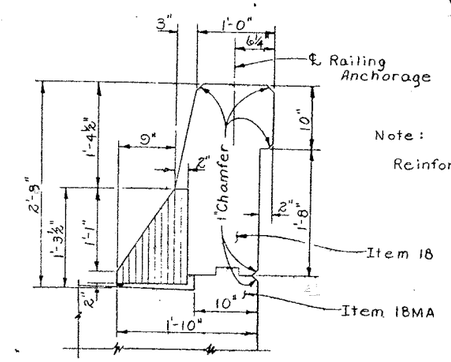
INTERSTATE ROUTE CONNECTION 570
BUTTERMILK INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



TRANSVERSE SECTION
Scale: ½" = 1'-0"

Note:

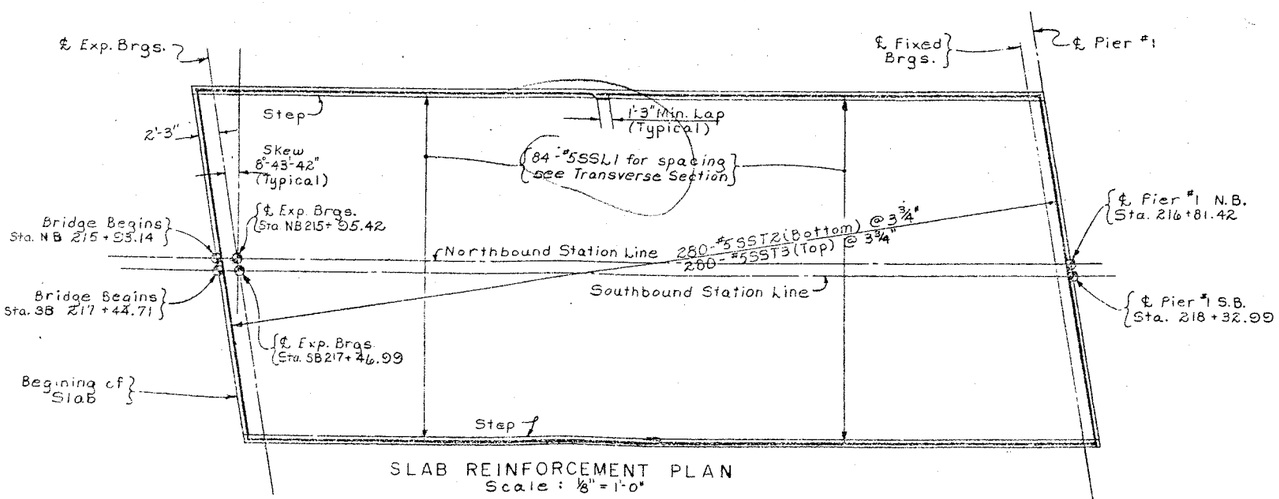
South Bound Lane looking up station.
North Bound Lane looking down station.



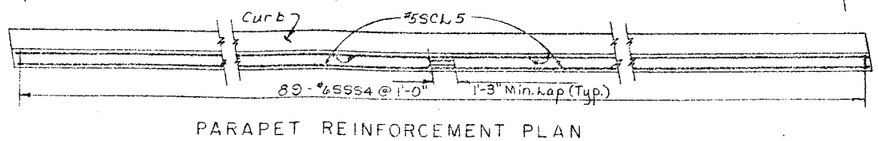
PARAPET DETAIL
Scale: 1" = 1'-0"

Note:

Reinforcement not shown.



SLAB REINFORCEMENT PLAN
Scale: ⅛" = 1'-0"



PARAPET REINFORCEMENT PLAN
Scale: ¼" = 1'-0"

Notes:

Holes for ⅞" ϕ rivets or high strength bolts may be omitted and welding substituted if contractor so elects. When the contractor elects to substitute the welded connection for the bolted connection shown, the amount of welding used shall be equivalent in strength to the bolts removed.

For details of Railing, Railing Anchorage and Granite Curbs see Dwg. # 35 & 36.

For Joint Details see Dwg. # 33.

PROJECT ENGINEER R. Parker
IN CHARGE OF F. Fekal
DESIGNED BY N. Toppses
DESIGN CHECKED BY R. Thimple
DETAILED BY J. C. Thompson
DETAIL CHECKED BY [illegible]

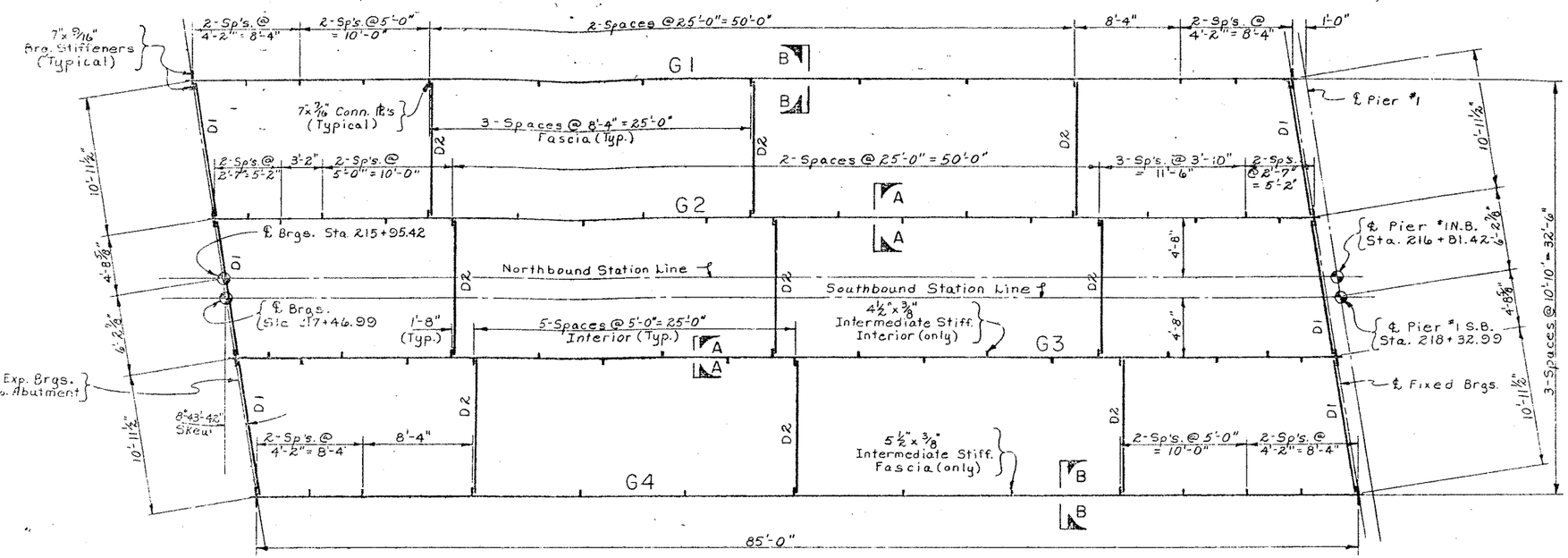
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

TRANSVERSE SECTION & SLAB PLAN
SPAN 1 N.B. & S.B.

DRAWING NO. 17 OF 50

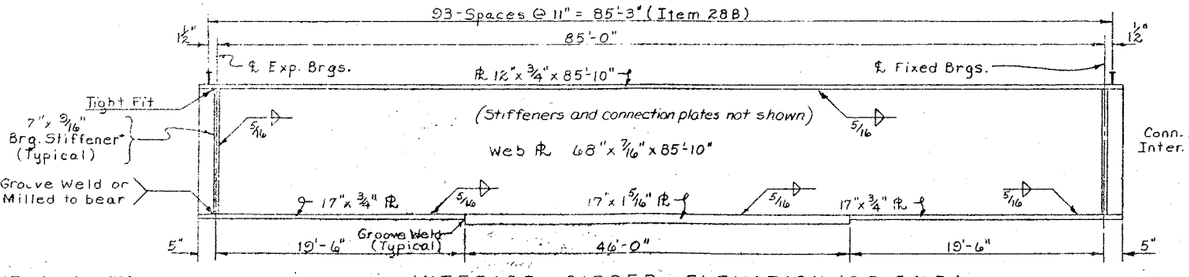
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
11	NEW YORK	I-690-8(28) I-481-2(16)	196	322

INTERSTATE ROUTE CONNECTION 570
BUFFALO INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



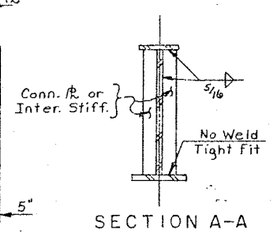
see Transverse Section for Diaphragms.

STEEL LAYOUT (S.B. & N.B.)
Scale : 3/16" = 1'-0"

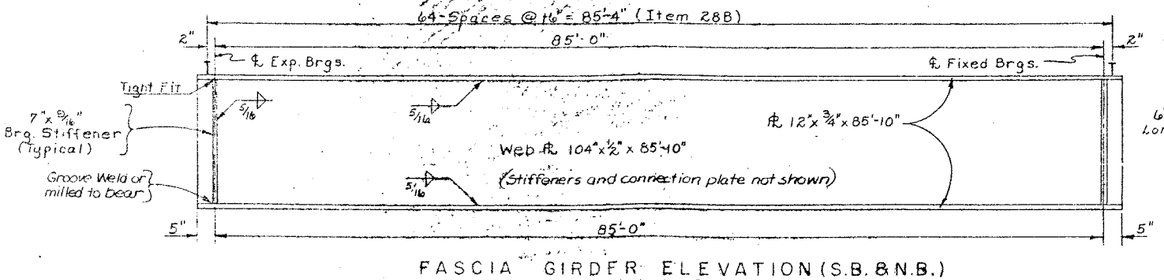


INTERIOR GIRDER ELEVATION (S.B. & N.B.)
Not to Scale

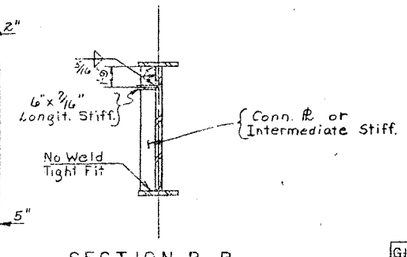
*Two bearing stiffeners required at each end of girder.



SECTION A-A
Not to Scale



FASCIA GIRDER ELEVATION (S.B. & N.B.)
Not to Scale



SECTION B-B
Not to Scale

Notes :

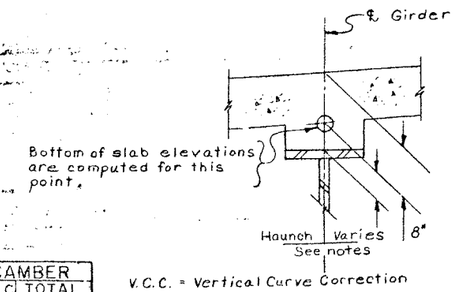
Web and flanges shall be ASTM designation A36 steel.

Stiffeners, Connection Plates, Diaphragm and Gusset Plates shall be ASTM designation A36 steel.

For Bearing Details see Drawing No's. 42 & 43.

Stud Shear Connectors shall be 6" high and placed in pairs. See Drawing No. 42 for additional details.

For Height of Haunch see Table of Haunch Heights Drawing No. 34.



V.C.C. = Vertical Curve Correction

S.D.L. = Superimposed Dead Load, includes weight of railing.

		THEO. BOTTOM OF SLAB ELEVATIONS			DEFLECTIONS (FT.)				CAMBER		
									V.C.C.	TOTAL	
GIRDER	SPAN	℄ Exp. Brgs.	℄ Span	℄ Fix. Brgs.	STEEL	SLAB	SDL	TOTAL	(ft.)	(ft.)	(in.)
G1 N.B.	1	446.55	447.12	447.65	.01	.03	.01	.05	.02	.07	3/8
G2 N.B.	1	446.80	447.40	447.90	.02	.08	.02	.12	.02	.14	1 11/16
G3 N.B.	1	446.79	447.36	447.89	.02	.08	.02	.12	.02	.14	1 11/16
G4 N.B.	1	446.59	447.16	447.68	.01	.03	.01	.05	.08	.07	7/8
G1 S.B.	1	446.34	446.92	447.46	.01	.03	.01	.05	.02	.07	3/8
G2 S.B.	1	446.59	447.17	447.71	.02	.08	.02	.12	.02	.14	1 11/16
G3 S.B.	1	446.64	447.22	447.76	.02	.08	.02	.12	.02	.14	1 11/16
G4 S.B.	1	446.44	447.02	447.55	.01	.03	.01	.05	.02	.07	7/8

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

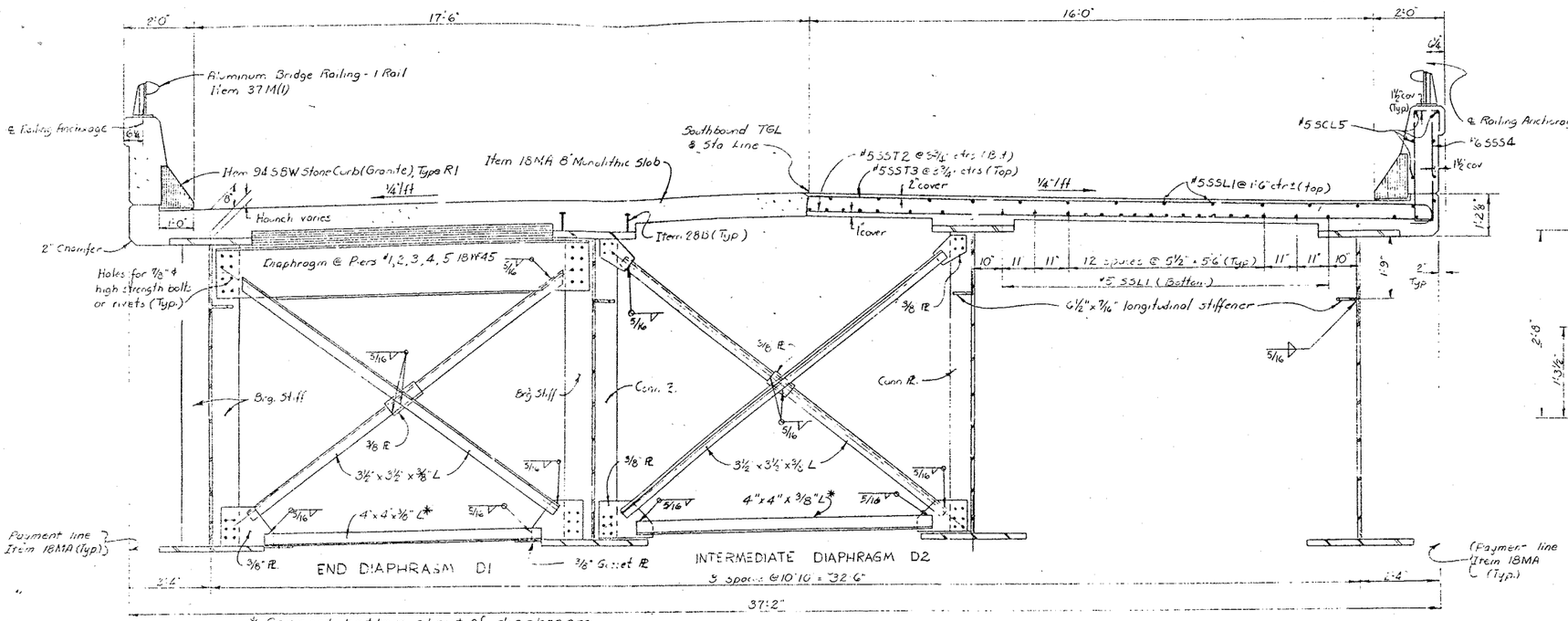
SPAN 1 (S.B. & N.B.)

DRAWING NO. 18 OF 52

PROJECT ENGINEER F. Parker
IN CHARGE OF F. Fekel
DESIGNED BY N. Toepsee
DESIGN CHECKED BY N. Tamule
DETAILED BY J. C. Thompson
DETAIL CHECKED BY [illegible]

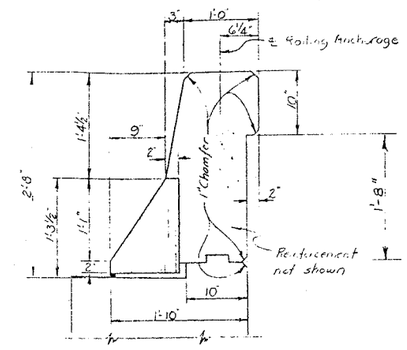
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	~~F-880-3(29)~~ I-481-2(116)	197	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



TRANSVERSE SECTION (SPANS 2,3,4,5 & 6)
Scale 1/2" = 1'-0"

Note: Southbound Lane looking up station shown. Northbound Lane looking down station similar



PARAPET DETAIL
Scale 1" = 1'-0"

Note: Holes for 7/8" ϕ high strength bolts or rivets may be omitted and welding substituted if the contractor so elects. When the contractor elects to substitute the welded connection for the bolted connection shown, the amount of welding used shall be equivalent in strength to the bolts omitted.

For parapet railing details see drawing no. 35 & 36

For granite curb details see drawing no. 35

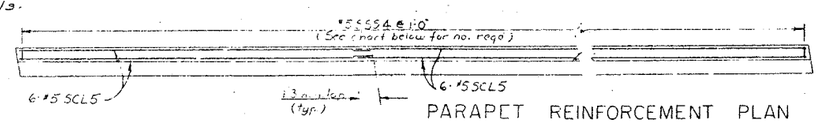
Steel meeting the minimum requirements of A.S.T.M. Designations A36 shall be used for all intermediate stiffeners, longitudinal stiffeners, connection plates, bearing stiffeners, diaphragm, bracing, & thru lateral bracing (except gusset plates), through support angles, finger joint support plates and open armored joint support plates at the south end of span 2.

Finger joint plates, vertical side plates, and deflector plates at finger joints, and armoring angles and side plates at open joint at south end of span 2 shall be corrosion resistant steel A.S.T.M. Designation A242.

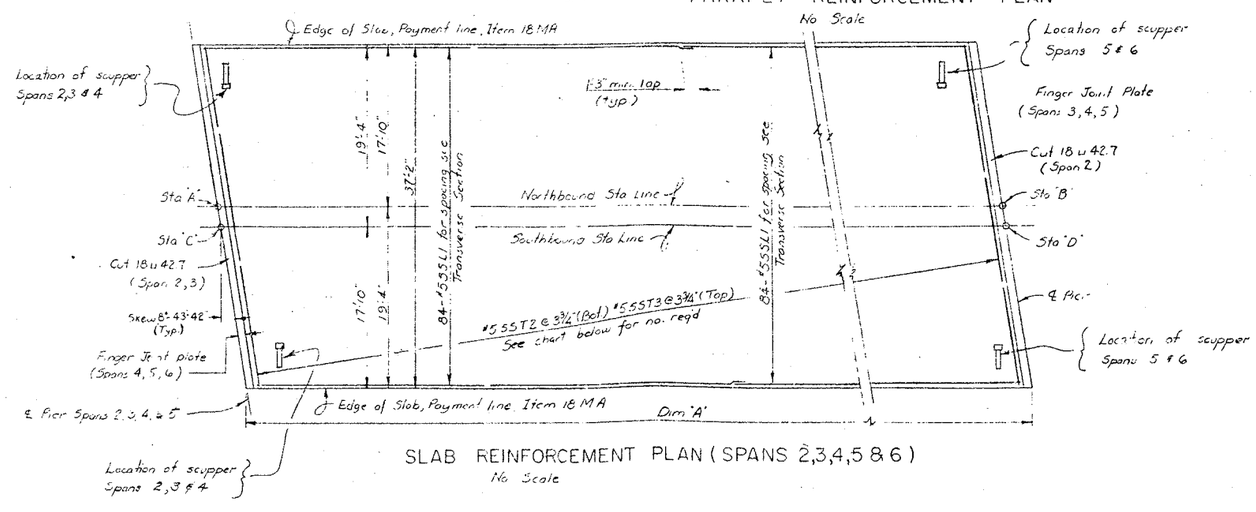
The webs of the girders shall be A.S.T.M. Designation A441.

See details of individual spans for type of steel to be used in girder flanges and bottom lateral gusset plates.

* Connect bottom strut of diaphragm to horizontal gusset plate in bays where there are bottom laterals. Connect bottom strut of diaphragm to vertical gusset plates in bays where there are no bottom laterals.



PARAPET REINFORCEMENT PLAN
No Scale



SLAB REINFORCEMENT PLAN (SPANS 2,3,4,5 & 6)
No Scale

PROJECT ENGINEER E. Farber
IN CHARGE OF E. Farber
DESIGNED BY E. Farber
DESIGN CHECKED BY A. Tarpess
DETAILED BY C.H. Smith
DETAIL CHECKED BY [illegible]

SPAN	DIM "A"	STA. A	STA. B	STA. C	STA. D	SST2 & SST3 NO. REQ'D	SSS4 NO. REQ'D
2	150'-2" SB & NB	214+81.42	216+37.59	218+32.99	219+89.15	497	157
3	171'-2" SB & NB	218+37.59	220+08.76	219+89.15	221+60.32	544	172
4	198'-0" SB & NB	220+08.76	222+06.76	221+60.32	223+58.32	629	198
5	198'-0" SB & NB	222+06.76	224+04.76	223+58.32	225+56.32	629	198
6	198'-0" SB & NB	224+04.76	226+02.76	225+56.32	227+54.32	629	198

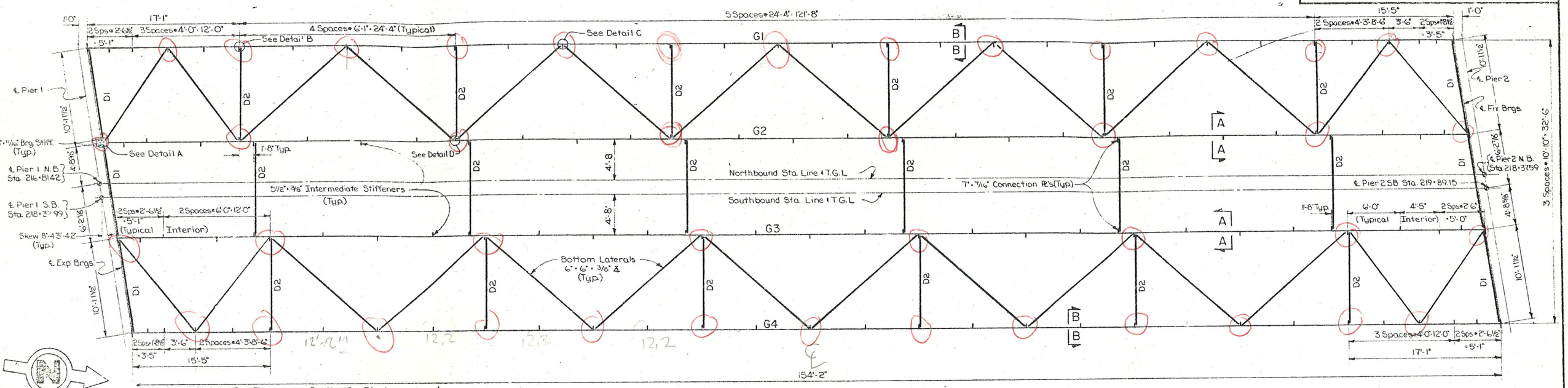
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

TRANSVERSE SECTION & SLAB PLAN
SPANS 2,3,4,5 & 6 NB & SB

DRAWING NO. 19 OF 50

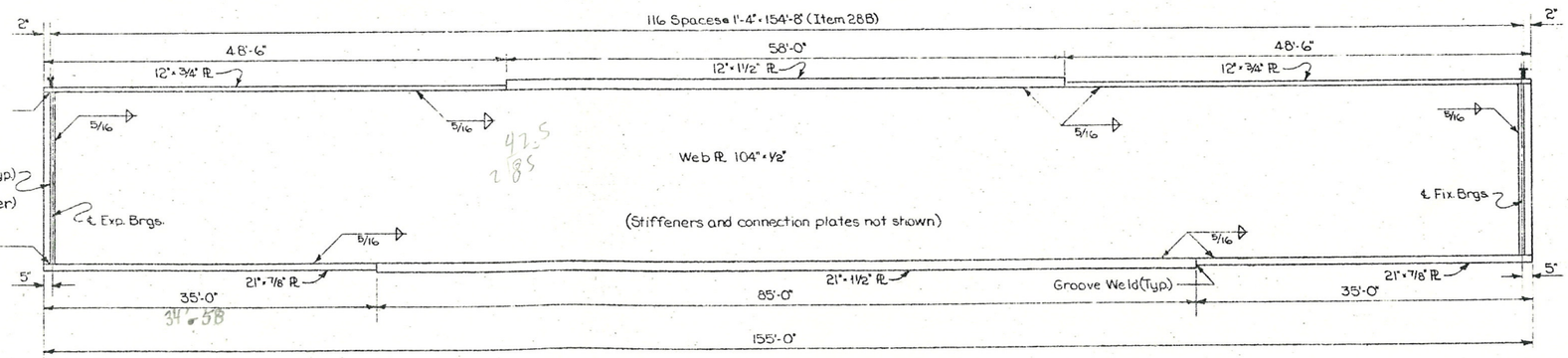
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-535-3(28) I-481-2(116)	198	300

INTERSTATE ROUTE CONSTRUCTION 570
SUPERIOR STRUCTURE (PHASE 2)
ONONDAGA COUNTY

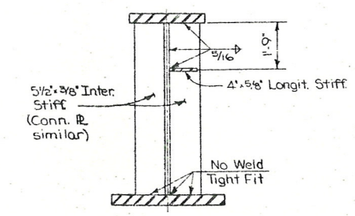


Notes: See Transverse Section for Diaphragms and Lateral Bracing.
See Drawing No. 22 for Cross Lateral Bracing Details A, B, C & D.

STEEL FRAMING PLAN NB & SB
Scale: 3/16" = 1'-0"



FASCIA & INTERIOR GIRDER ELEVATION NB & SB
Not to Scale

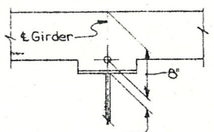


SECTION A-A
Not to Scale

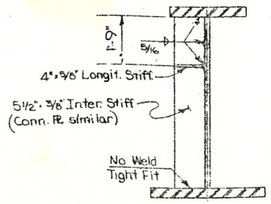
Notes:
Web and flanges shall be A.S.T.M. designation A441 Steel.
Stiffeners, connection plates, diaphragms, lateral bracing and gusset plates shall be A.S.T.M. designation A36 Steel.
For details of bearings see Dwg. No. 42 & 43.
Stud Shear Connectors shall be 6" high.

GIRDER	SPAN	THEO. BOTTOM OF SLAB ELEVATIONS ℄ EXP BRGS.	℄ SPAN	℄ FIX. BRGS.	DEFLECTIONS (FT.) STEEL	SLAB	SDL.	TOT.	CAMBER V.C.C. (FT.)	TOTAL (FT.)	(IN.)
G1 NB	2	447.67	448.52	449.28	.08	.16	.07	.31	.07	.38	4 9/16
G2 NB	2	447.92	448.76	449.47	.08	.24	.07	.39	.07	.46	5 1/8
G3 NB	2	447.91	448.75	449.45	.08	.24	.07	.39	.07	.46	5 1/2
G4 NB	2	447.70	448.54	449.24	.08	.16	.07	.31	.07	.38	4 9/16
G1 SB	2	447.48	448.35	449.08	.08	.16	.07	.31	.07	.38	4 9/16
G2 SB	2	447.73	448.60	449.32	.08	.24	.07	.39	.07	.46	5 1/2
G3 SB	2	447.78	448.65	449.37	.08	.24	.07	.39	.07	.46	5 1/2
G4 SB	2	447.58	448.44	449.16	.08	.16	.07	.31	.07	.38	4 9/16

V.C.C. - Vertical Curve Correction
S.D.L. - Superimposed Dead Load, includes weight of railing.



For haunch see Haunch Table Dwg. No. 34.



SECTION B-B
Not to Scale

BRIDGE NO. 2
INTERSTATE ROUTE 381 OVER DEWITT YARDS

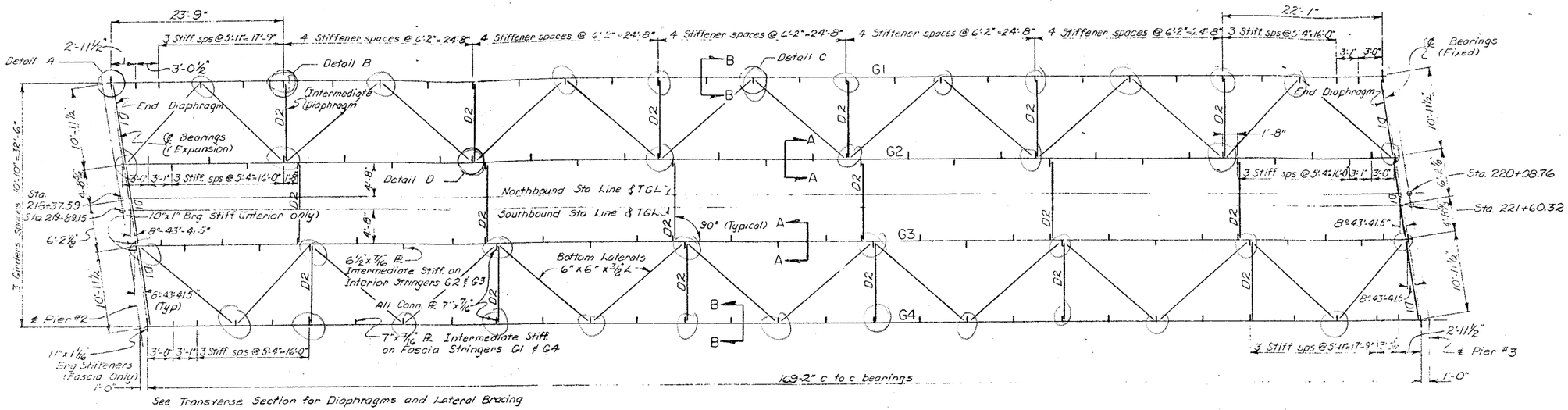
SPAN 2 FRAMING PLAN

DRAWING NO. 20 OF 50

PROJECT ENGINEER R. L. Parker
IN CHARGE OF F. Eckel
DESIGNED BY N. P. Tsoposes
DESIGN CHECKED BY R. Thimble
DETAILED BY J. F. Darcy
FINAL CHECKED BY [illegible]

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(28) I-481-2(116)	199	309

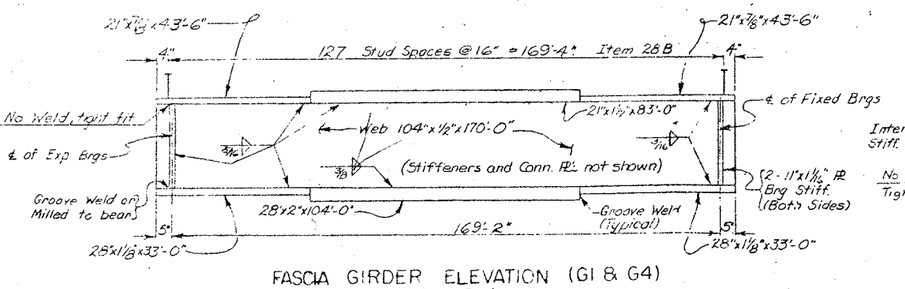
INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



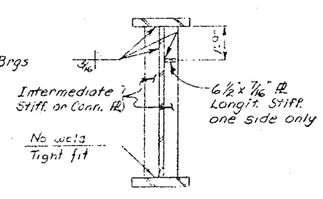
STEEL LAYOUT (SPAN #3 NB & SB)
Scale 1/8" = 1'-0"

Note: Stud Shear Connectors shall be 6" high.

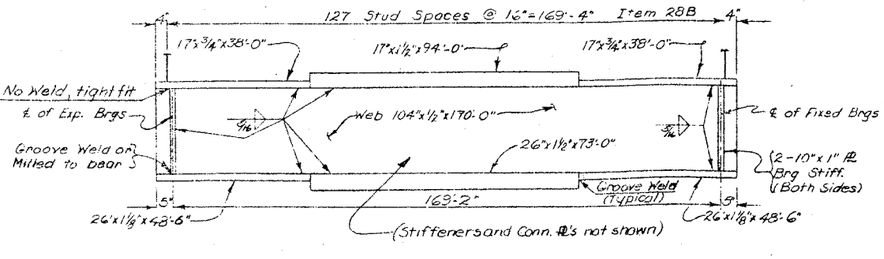
For Bearings Details see Drawing # 42 and 43
For Joint Details see Drawing # 31
For Trough Details see Drawing # 39



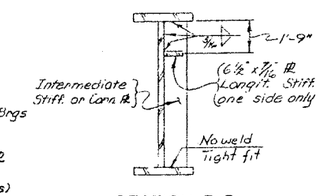
FASCIA GIRDER ELEVATION (G1 & G4)
Not to Scale



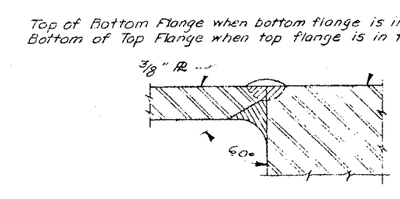
SECTION A-A
Not to Scale
Note: All Conn. Plates 7"x7/16"



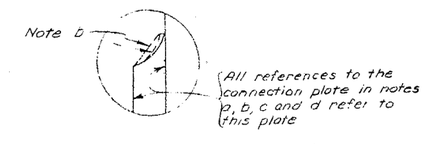
INTERIOR GIRDER ELEVATION (G2 & G3)
Not to Scale



SECTION B-B
Not to Scale
Note: All Conn. Plates 7"x7/16"

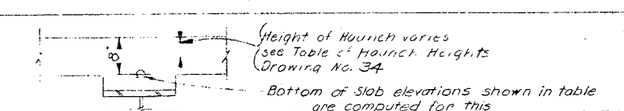


DETAIL #1



DETAIL #2

LATERAL BRACING DETAILS
Not to Scale



GIRDER	NORTHBOUND THEO. BOT. OF SLAB EL.			SOUTHBOUND THEO. BOT. OF SLAB EL.			DL DEFLECTION STEEL (FT.)	SLAB (FT.)	S.D.L. (FT.)	TOTAL (FT.)	CAMBER V.C.C. (FT.)	TOTAL (FT.)	(IN.)
SPAN 3	℄ SO. BRG	℄ SPAN	℄ NO. BRG	℄ SO. BRG	℄ SPAN	℄ NO. BRG							
G1	449.24	449.95	450.29	449.10	449.74	450.20	.11	.15	.11	.37	.08	.45	5 3/8
G2	449.48	450.09	450.52	449.34	449.97	450.44	.12	.29	.04	.45	.08	.53	6 3/8
G3	449.46	450.07	450.50	449.39	450.02	450.48	.12	.29	.04	.45	.08	.53	6 3/8
G4	449.25	449.85	450.28	449.18	449.80	450.26	.11	.15	.11	.37	.08	.45	5 3/8

S.D.L. = superimposed dead load, includes weight of parapet and railing.
V.C.C. = vertical curve correction

Note:

a. The connection plate shall be prepared and welded as a single bevel groove weld as shown in Detail #1. It shall then be Air Carbon-Arc gauged from the second side into sound weld metal and then welded as detailed. All welding shall be in the flat or "downhand" position.

b. The plate may be of any shape that will provide often welding, cutting, and finish grinding a smooth transition from the flange edge at a minimum radius of 12".

c. Both the connection plate and flange are to be the same type of steel.

d. Field welding to the connection plate will not be permitted.

The webs, flanges and gusset plates for bottom lateral bracing for the Span 3 girders shall be A.S.T.M. Designation A441 steel. Stiffeners, diaphragms, bearings, and bottom lateral bracing (except gusset plates) shall be A.S.T.M. A36 steel.

For additional details of bottom lateral bracing see drawing No. 22

PROJECT ENGINEER: A. PARKER
IN CHARGE OF: F. D. ECKEL
DESIGNED BY: S. FANE
DESIGN CHECKED BY: K. JARSKI
DETAILED BY: Mr. Dunnell
DETAIL CHECKED BY: Carl Smith

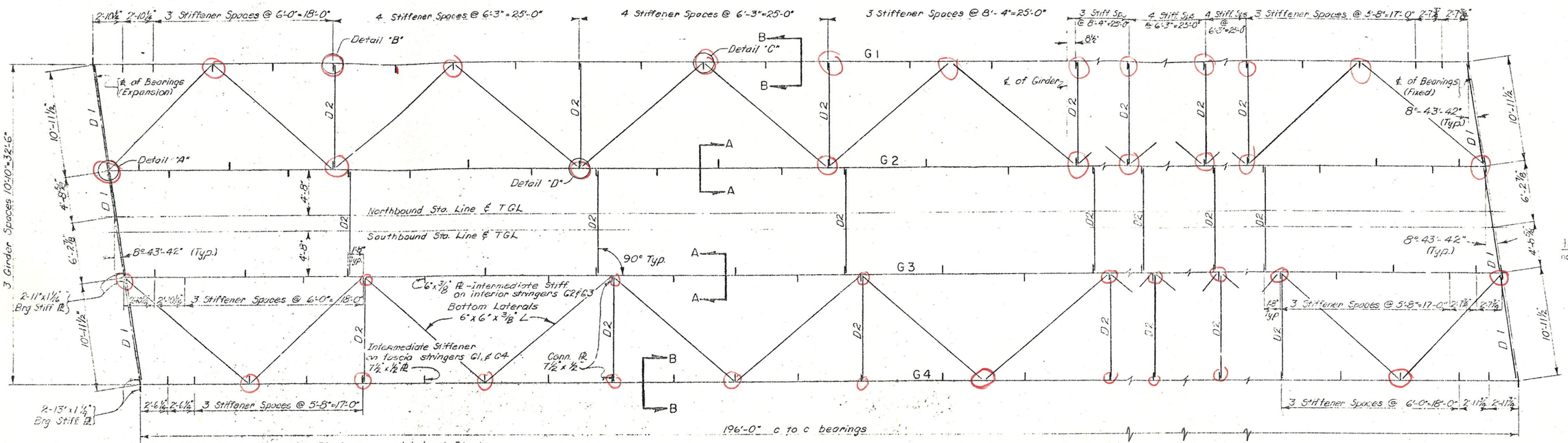
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

SPAN 3

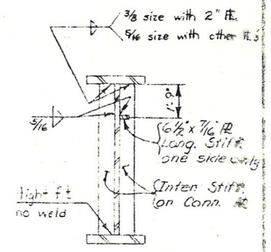
DRAWING NO. 21 OF 30

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-090-S(28) I-481-2(116)	200	309

INTERSTATE ROUTE 690 OVER DEWITT YARDS
SOUTHBOUND ROADWAY (PHASE 2)
ONONDAGA COUNTY

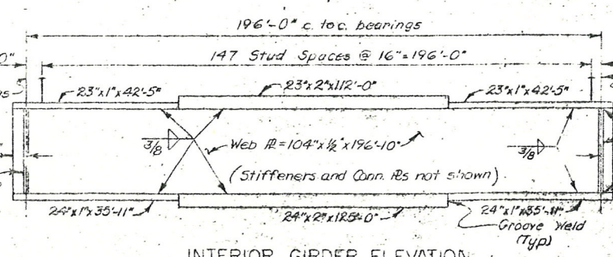


STEEL LAYOUT — SPANS 4, 5 & 6 (NB & SB)
Scale: 3/16" = 1'-0"

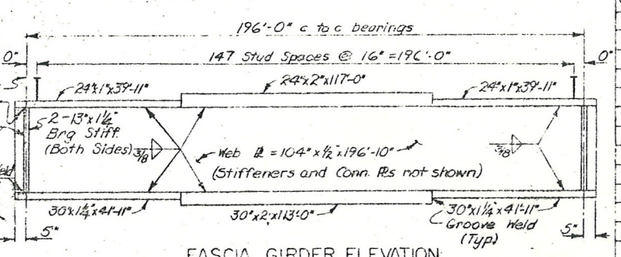


SECTION A-A
Not to Scale

All Connection ℞'s 7½" x ½"

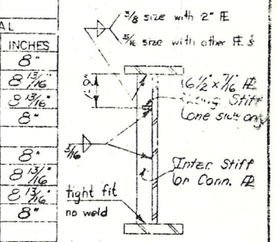


INTERIOR GIRDER ELEVATION
Not to Scale



FASCIA GIRDER ELEVATION
Not to Scale

GIRDER	SOUTHBOUND THEO. BOT. OF SLAB EL.			NORTHBOUND THEO. BOT. OF SLAB EL.			DL DEFLECTION (FT)				CAMBER		
	℄ SO. BRG	℄ SPAN	℄ NO. BRG	℄ SO. BRG	℄ SPAN	℄ NO. BRG	STEEL	SLAB	SDL	TOTAL DL	VCC (FT)	TOTAL FEET	TOTAL INCHES
SPAN 4													
G1	450.21	450.54	450.63	450.30	450.59	450.66	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"
G2	450.45	450.77	450.86	450.53	450.82	450.89	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8 13/16"
G3	450.48	450.80	450.89	450.51	450.80	450.85	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8 13/16"
G4	450.27	450.58	450.67	450.29	450.57	450.63	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"
SPAN 5													
G1	450.63	450.50	450.14	450.66	450.50	450.10	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"
G2	450.86	450.72	450.36	450.89	450.72	450.32	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8 13/16"
G3	450.89	450.75	450.38	450.85	450.68	450.28	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8 13/16"
G4	450.66	450.52	450.15	450.63	450.45	450.05	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"
SPAN 6													
G1	450.13'	449.54'	448.72	450.09	449.47	448.62	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"
G2	450.35	449.75	448.93	450.31	449.68	448.83	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8 13/16"
G3	450.37	449.77	448.94	450.27	449.64	448.78	0.178'	0.378'	0.062'	0.618'	0.113'	0.731'	8 13/16"
G4	450.14	449.53	448.70	450.04	449.40	448.54	0.172'	0.212'	0.168'	0.552'	0.113'	0.665'	8"



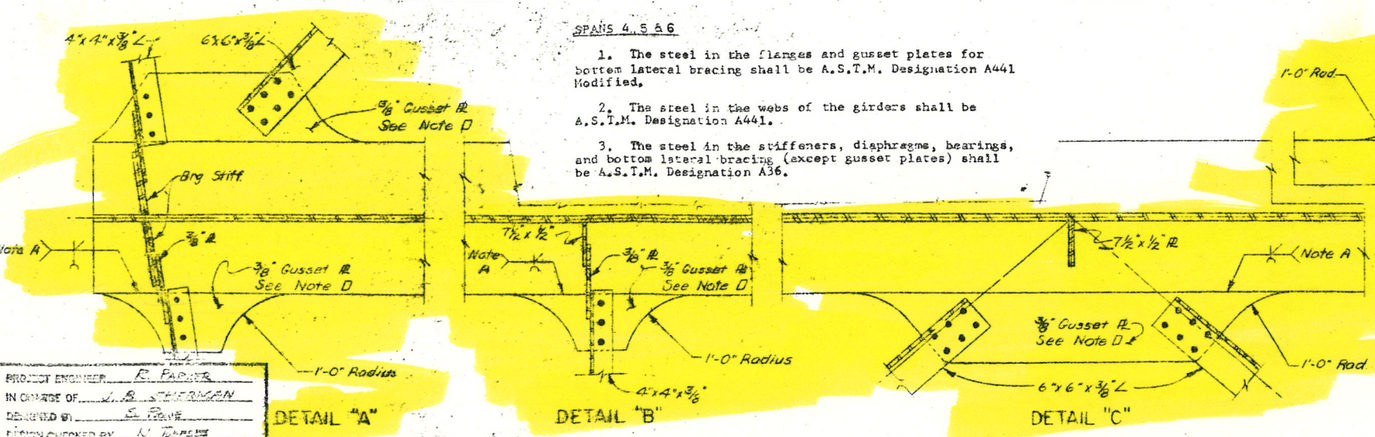
SECTION B-B
Not to Scale

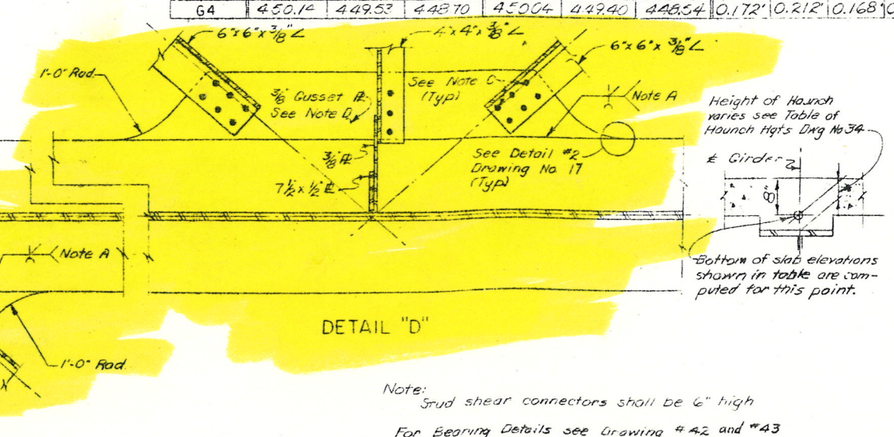
SPANS 4, 5 & 6

1. The steel in the flanges and gusset plates for bottom lateral bracing shall be A.S.T.M. Designation A441 Modified.

2. The steel in the webs of the girders shall be A.S.T.M. Designation A441.

3. The steel in the stiffeners, diaphragms, bearings, and bottom lateral bracing (except gusset plates) shall be A.S.T.M. Designation A36.





Note:
A. The connection plate shall be prepared and welded as a single bevel groove weld as shown in Detail #1. It shall then be Air Carbon-Arc gouged from the second side into sound weld metal and then welded as detailed. All welding shall be in the flat or "downhand" position.
B. The plate may be of any shape that will provide after welding, cutting, and finish grinding a smooth transition from the flange edge on a minimum radius of 12".
C. Lateral bracing shall be attached to gusset plates with ⅞" ϕ high strength bolts. Field welding will not be permitted.
D. The gusset plate shall be the same type of steel as the flange to which it is welded.

Note:
Stud shear connectors shall be 6" high

For Bearing Details see Drawing #42 and #43
For Joint Details see Drawing #31
For Trough Details see Drawing #39

PROJECT ENGINEER	R. Parker
IN CHARGE OF	L. B. Thirman
DESIGNED BY	S. Grove
FORMS CHECKED BY	N. Tarsese
ATTENUED BY	Otto d'Emanuele
[illegible] BY	D. H. Smith

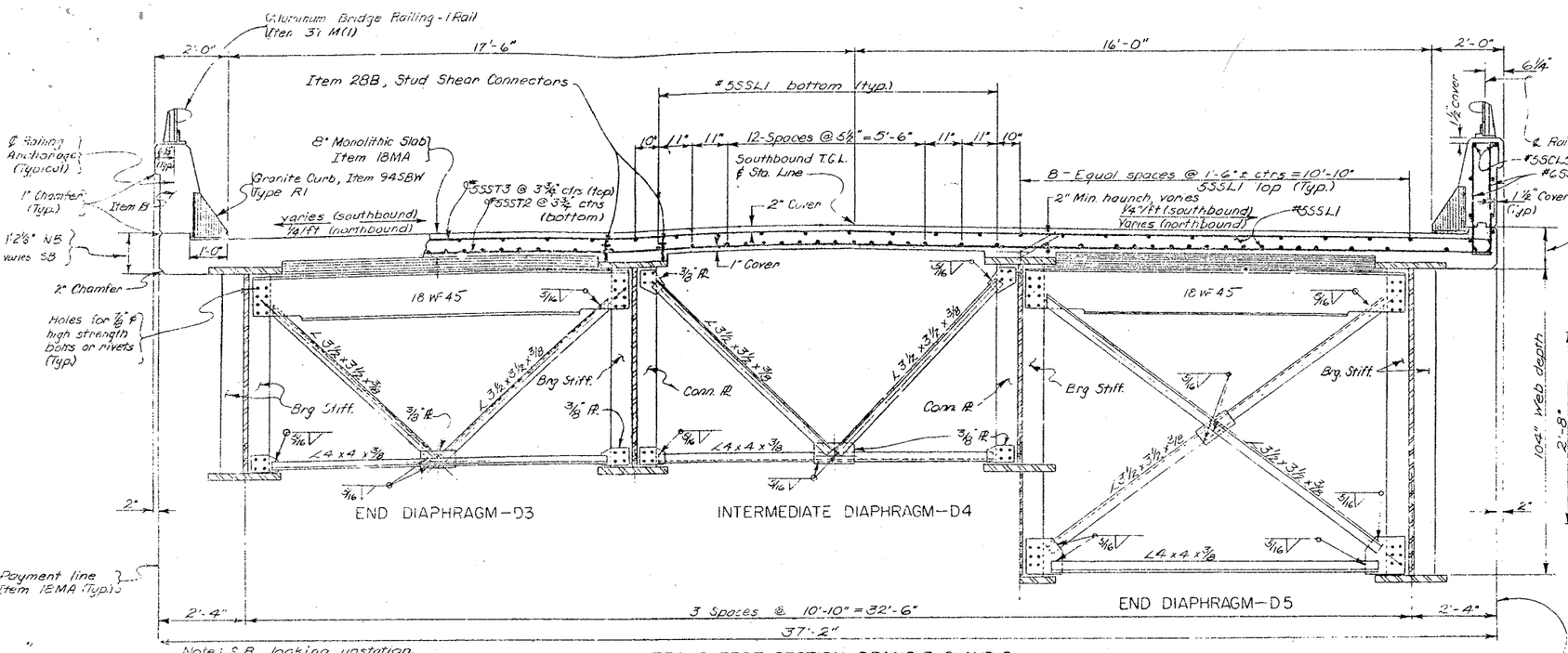
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

SPANS 4, 5 & 6

DRAWING NO. 22 OF 50

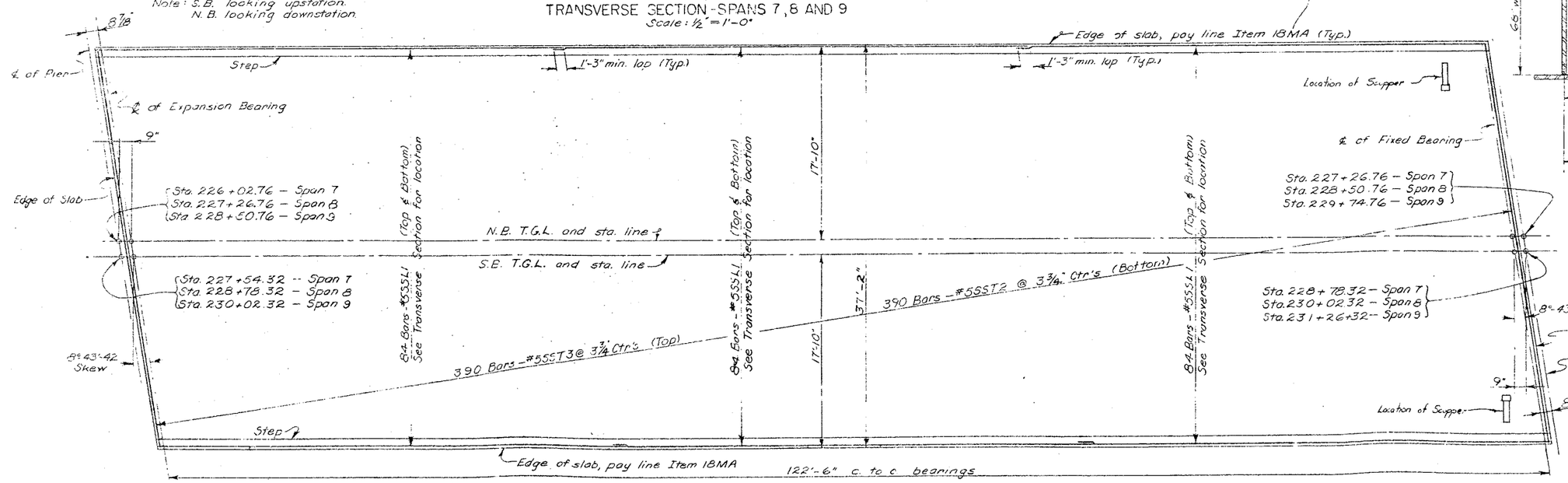
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(28) I-481-2(16)	201	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



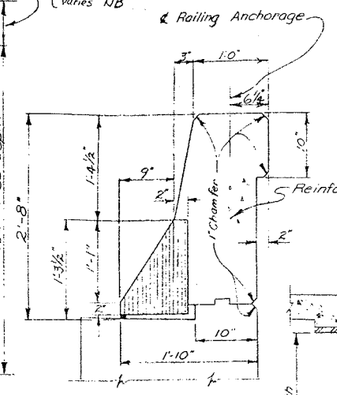
Note: S.B. looking upstation.
N.B. looking downstation.

TRANSVERSE SECTION - SPANS 7, 8 AND 9
Scale: ½" = 1'-0"

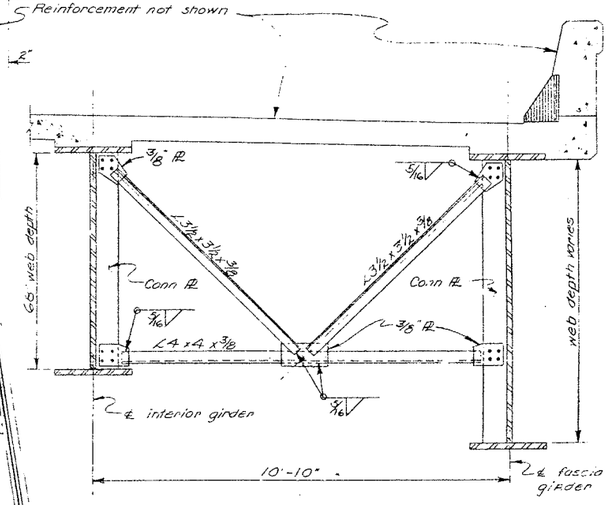


Note
Transverse reinforcement shall be placed parallel to skew.

SLAB REINFORCEMENT PLAN, SPANS 7, 8 AND 9
Scale: 3/16" = 1'-0"



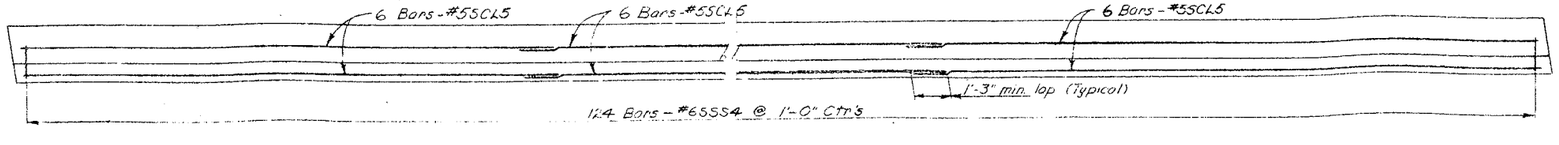
PARAPET DETAIL
Scale 1" = 1'-0"



INTERMEDIATE DIAPHRAGM-D6
Scale: ½" = 1'-0"

Note: Holes for ⅞" ϕ high strength bolts or rivets may be omitted and welding substituted if the contractor so elects. When the contractor elects to substitute the welded connection for the bolted connection shown, the amount of welding used shall be equivalent in strength to the bolts omitted.

For detail of Railing see Drawing #36



PARAPET REINFORCEMENT PLAN
Not to Scale

PROJECT ENGINEER F. Parker
IN CHARGE OF J.B. Sherman
DESIGNED BY [illegible]
DESIGN CHECKED BY [illegible]
DETAILED BY [illegible]
DETAIL CHECKED BY [illegible]

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

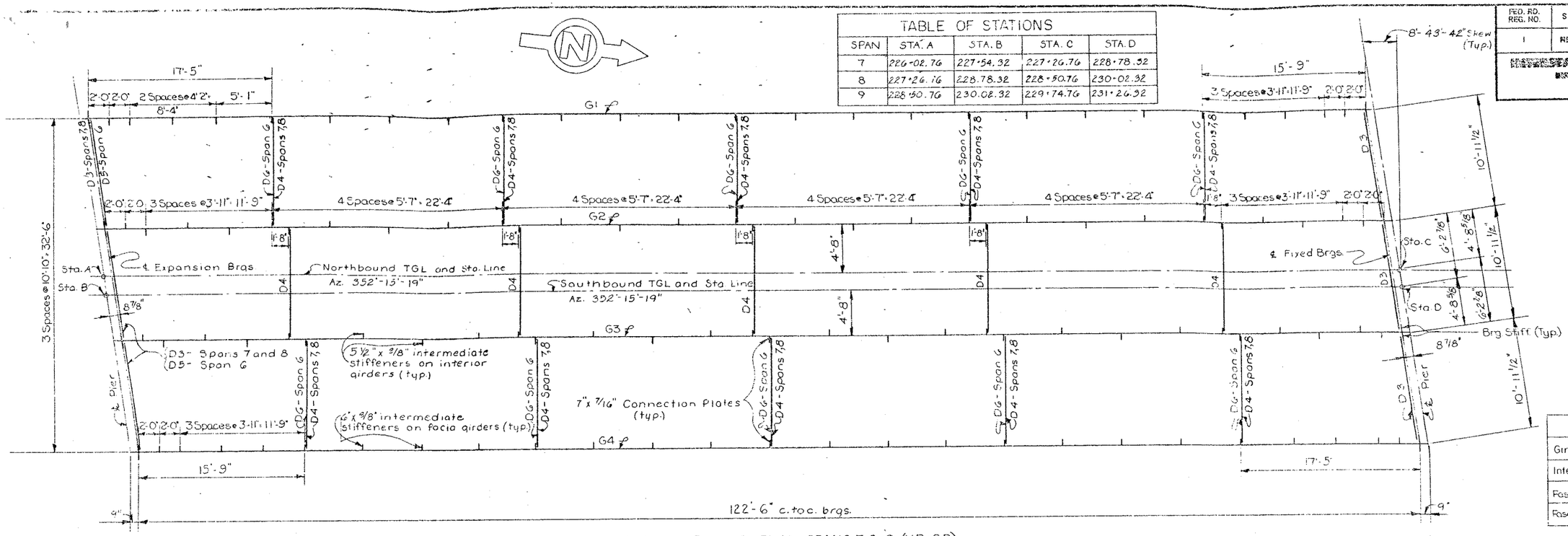
SPANS 7, 8 & 9

DRAWING NO. 23 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-880-3(28) I-481-2(116)	202	309

INTERSTATE ROUTE CONSTRUCTION 370
INTERCHANGE (PIERS 2)
ONONDAGA COUNTY

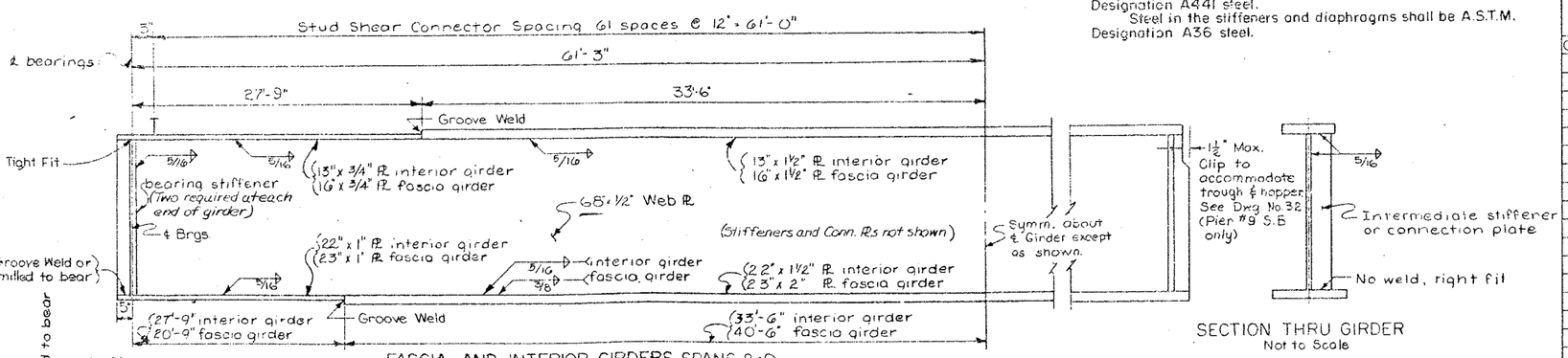
TABLE OF STATIONS				
SPAN	STA. A	STA. B	STA. C	STA. D
7	226+02.76	227+54.32	227+26.76	228+78.32
8	227+26.76	228.78.32	228+50.76	230+02.32
9	228+50.76	230.02.32	229+74.76	231+26.32



STEEL FRAMING PLAN SPANS 7, 8 & 9 (NB & SB)
Scale: 3/16" = 1'-0"

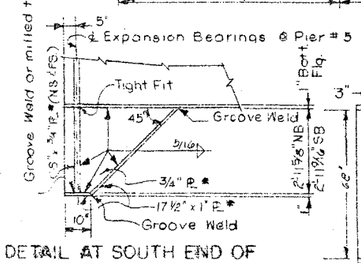
BEARING STIFFENER SIZES	
Girder	Size of each plate (2 plates @ each end of girder)
Interior spans 7,8 & 9	8" x 3/4"
Fascia span 7	8" x 3/4"
Fascia spans 8 & 9	9" x 7/8"

Steel in the girder webs and flanges shall be A.S.T.M. Designation A441 steel.
Steel in the stiffeners and diaphragms shall be A.S.T.M. Designation A36 steel.

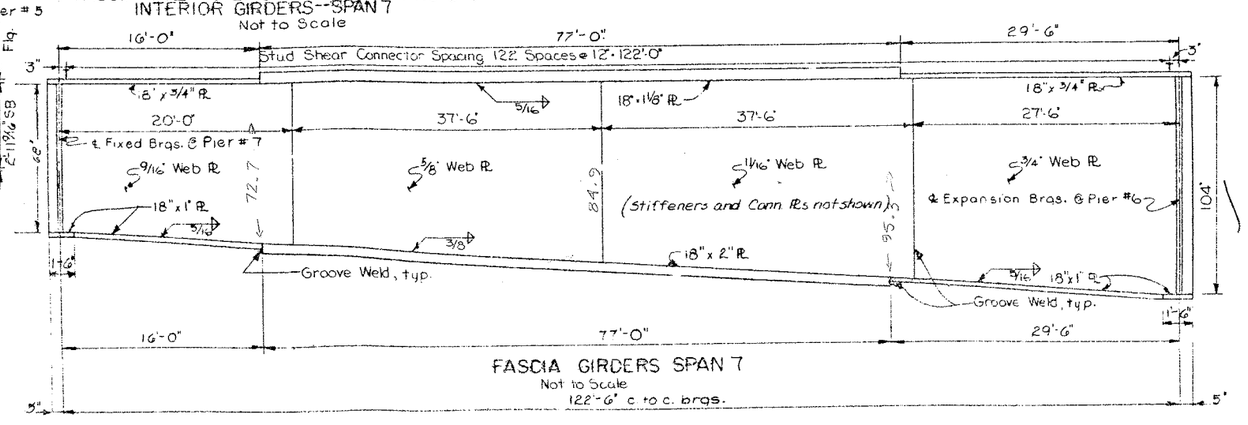


FASCIA AND INTERIOR GIRDERS SPANS 8 & 9
INTERIOR GIRDERS--SPAN 7
Not to Scale

SECTION THRU GIRDER
Not to Scale



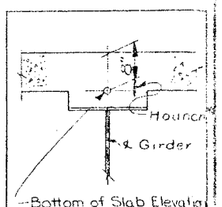
DETAIL AT SOUTH END OF INTERIOR STRINGERS--SPAN 7
Scale 3/8" = 1'-0"
* A441 Steel



FASCIA GIRDERS SPAN 7
Not to Scale
122'-6" c to c. brgs.

BOTTOM OF SLAB ELEVATIONS

NORTHBOUND					SOUTHBOUND				
GIRDER	SPAN	℄ EXP BRGS	℄ SPAN	℄ FIX BRGS	GIRDER	SPAN	℄ EXP BRGS	℄ SPAN	℄ FIX BRGS
G1	7	448.60	447.95	447.22	G1	7	448.70	448.07	447.35
G2	7	448.61	448.16	447.42	G2	7	448.91	448.28	447.56
G3	7	448.77	448.11	447.37	G3	7	448.93	448.29	447.57
G4	7	448.52	447.87	447.12	G4	7	448.68	448.05	447.32
G1	8	447.20	446.37	445.45	G1	8	447.33	446.52	445.63
G2	8	447.40	446.57	445.65	G2	8	447.54	446.73	445.83
G3	8	447.35	446.52	445.59	G3	8	447.55	446.73	445.83
G4	8	447.10	446.27	445.34	G4	8	447.30	446.48	445.58
G1	9	445.43	444.42	443.33	G1	9	445.60	444.61	443.67
G2	9	445.63	444.62	443.38	G2	9	445.80	444.81	443.74
G3	9	445.57	444.56	443.46	G3	9	445.81	444.81	443.73
G4	9	445.32	444.30	443.20	G4	9	445.56	444.56	443.48



Bottom of Slab Elevations shown in table are computed for this point.

*Height of Haunch varies See Table of Haunch Heights on Drawing No. 34

	GIRDER	SPAN	DEFLECTIONS STEEL (FT.)	SLAB (FT.)	SDL. (FT.)	TOTAL (FT.)	CAMBER VCC (FT.)	TOTAL (FT.)	(IN.)
NB AND SB	G1	7	.05	.09	.06	.20	.04	.24	2 7/8
	G2	7	.08	.24	.03	.35	.04	.31	4 5/8
	G3	7	.08	.24	.03	.35	.04	.39	4 5/8
	G4	7	.05	.09	.06	.20	.04	.24	2 7/8
	G1	8	.07	.12	.08	.27	.04	.31	3 3/4
	G2	8	.08	.24	.03	.35	.04	.39	4 5/8
	G3	8	.08	.24	.03	.35	.04	.39	4 5/8
	G4	8	.07	.12	.08	.27	.04	.31	3 3/4
SB	G1	9	.07	.12	.08	.27	.02	.29	3 1/2
	G2	9	.08	.24	.03	.35	.03	.38	4 1/2
	G3	9	.08	.24	.03	.35	.04	.39	4 5/8
	G4	9	.07	.12	.08	.27	.04	.31	3 3/4
NB	G1	9	.07	.12	.08	.27	-.06	.21	2 1/2
	G2	9	.08	.24	.03	.35	.01	.36	4 3/8
	G3	9	.08	.24	.03	.35	.04	.39	4 5/8
	G4	9	.07	.12	.08	.27	.04	.31	3 3/4

V.C.C. = Vertical Curve Camber
S.D.L. = Superimposed dead load, includes the weight of sidewalk & railing.

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DE-WITT YARDS

SPANS 7, 8 & 9 (NB & SB)

2929

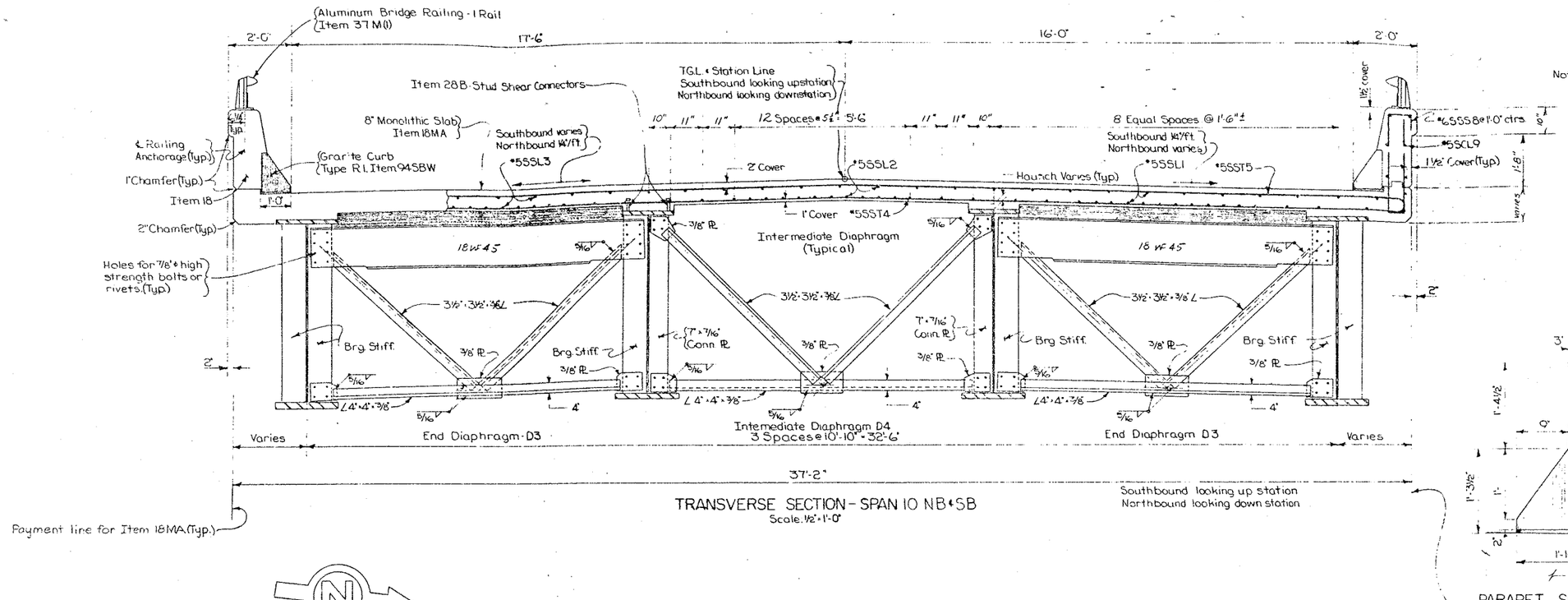
DRAWING NO. 24 OF 50

PROJECT ENGINEER R. L. Parker
IN CHARGE OF J. B. Sherman
DESIGNED BY [illegible]
DESIGN CHECKED BY [illegible]
DETAILED BY J. F. Dorey & N. L. Gallner
DETAIL CHECKED BY [illegible]

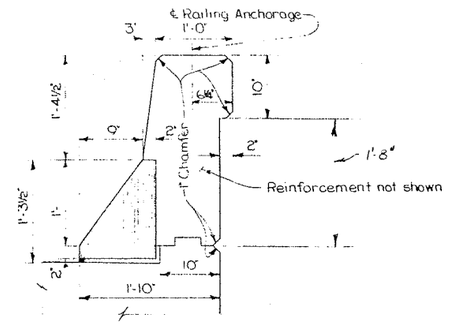
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(28) I-481-2(116)	203	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

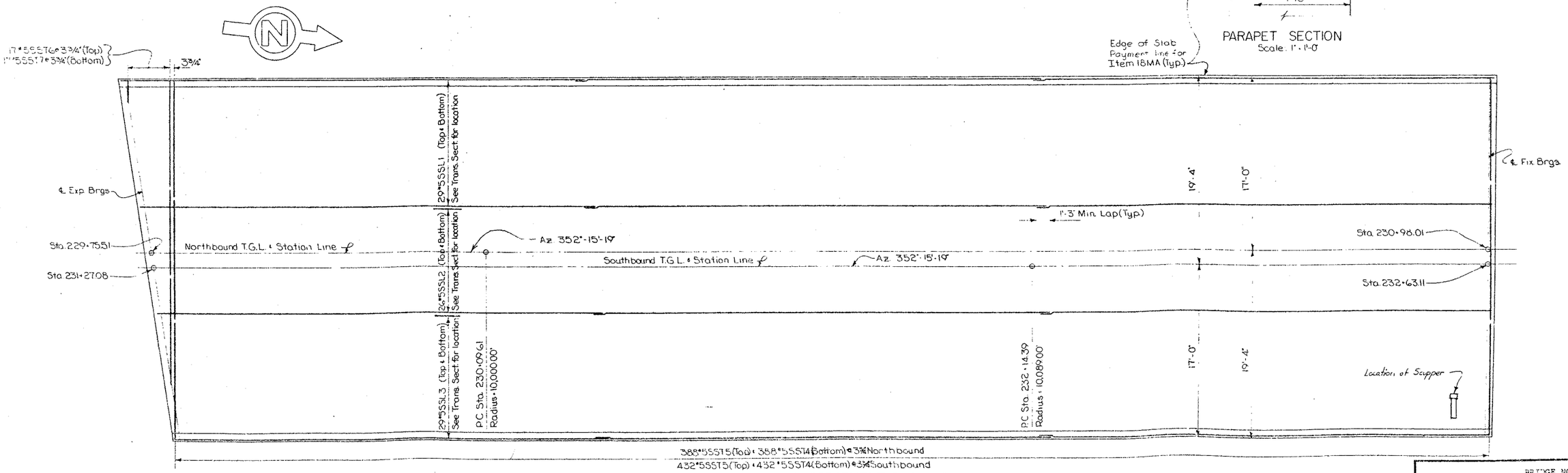
Notes: Holes for 7/8" ϕ rivets or high strength bolts may be omitted and welding substituted if the Contractor so elects. When the Contractor elects to substitute the welded connection for the bolted connection shown, the amount of welding used shall be equivalent in strength to the bolts removed.
For details of railing see Dwg No. 36.



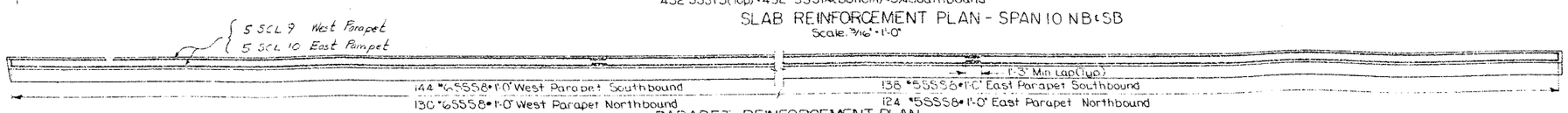
TRANSVERSE SECTION - SPAN 10 NB & SB
Scale: ½" = 1'-0"



PARAPET SECTION
Scale: 1" = 1'-0"



SLAB REINFORCEMENT PLAN - SPAN 10 NB & SB
Scale: 3/16" = 1'-0"



PARAPET REINFORCEMENT PLAN
Scale: 3/16" = 1'-0"

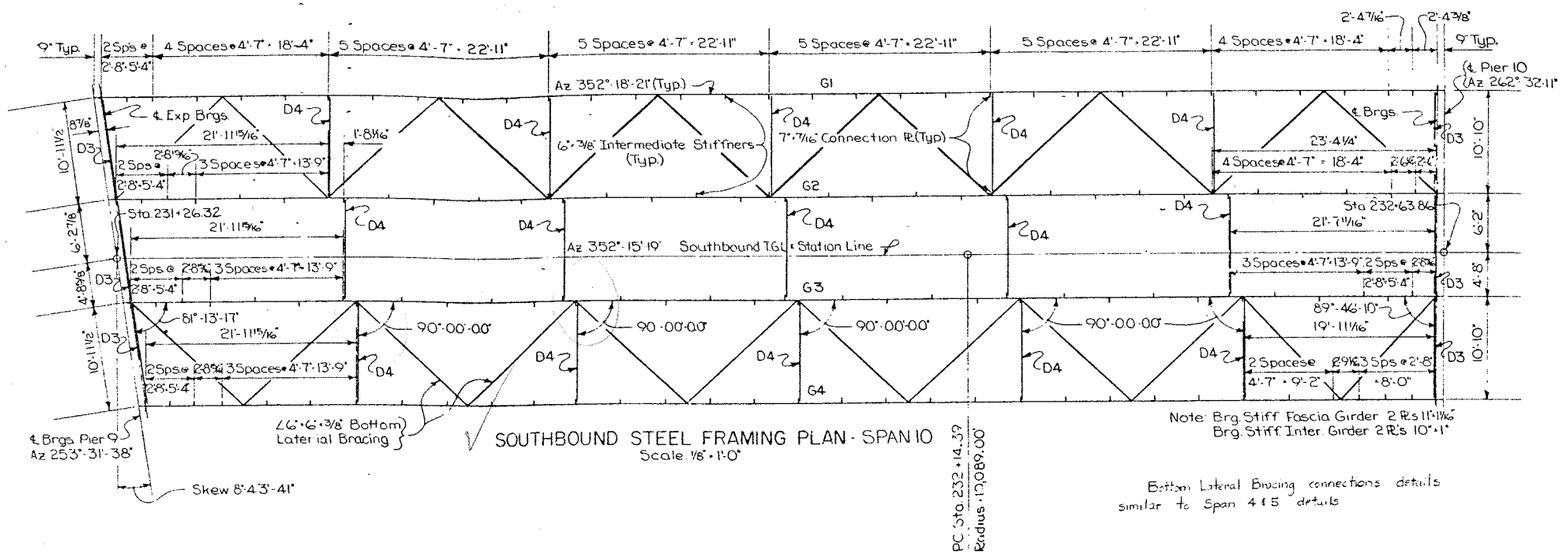
PROJECT ENGINEER E. L. Parker
IN CHARGE OF F. Eckel
DESIGNED BY S. Rowe
DESIGN CHECKED BY N. Toppses
DETAILED BY J. F. Darcy
DETAIL CHECKED BY [illegible]

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS
SPAN 10 NB & SB

DRAWING NO. 25 OF 5[illegible]

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(28) I-481-2(16)	204	509

INTERSTATE ROUTE CONNECTION 690
BUTTERMILK CREEK BRIDGE (BRIDGE 2)
ONONDAGA COUNTY



SOUTHBOUND STEEL FRAMING PLAN - SPAN 10
Scale 1/8" = 1'-0"

Bottom Lateral Bracing connections details similar to Span 4 & 5 details

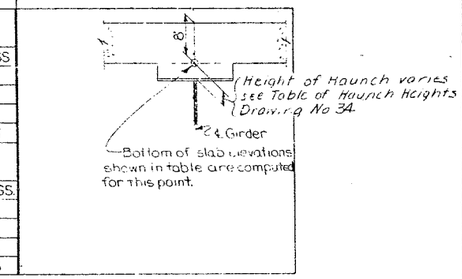
BOTTOM OF SLAB ELEVATIONS

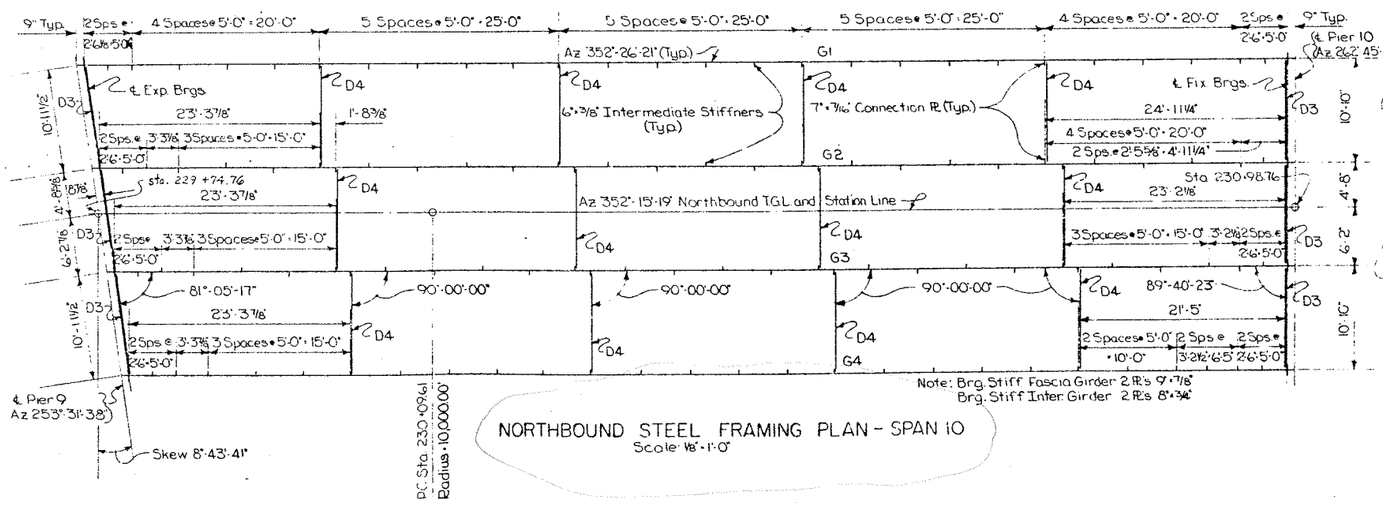
SOUTHBOUND

GIRDER	SPAN	℄ EXP. BRGS.	℄ SPAN	℄ FIX. BRGS.
G1	10	443.54	442.46	441.26
G2	10	443.72	442.49	441.15
G3	10	443.70	442.40	440.99
G4	10	443.45	442.16	440.77

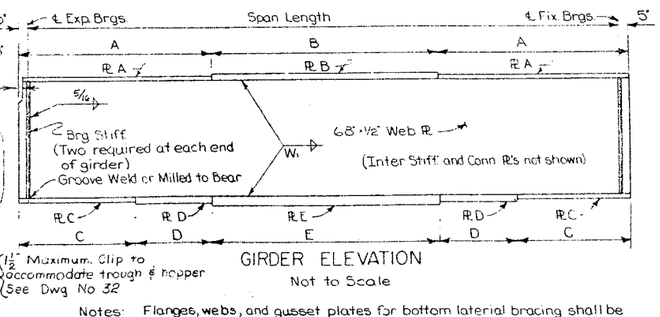
NORTHBOUND

GIRDER	SPAN	℄ EXP. BRGS.	℄ SPAN	℄ FIX. BRGS.
G1	10	443.50	442.49	441.39
G2	10	443.56	442.42	441.19
G3	10	443.43	442.24	440.98
G4	10	443.17	442.00	440.75

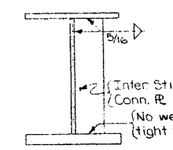




NORTHBOUND STEEL FRAMING PLAN - SPAN 10
Scale 1/8" = 1'-0"



GIRDER ELEVATION
Not to Scale



TYPICAL SECTION
Not to Scale

Notes: Flanges, webs, and gusset plates for bottom lateral bracing shall be A.S.T.M. Designation A441 Steel.
Diaphragms, stiffeners, bearings, and bottom lateral bracing (except gusset plates) shall be A.S.T.M. Designation A36 Steel.

WELD SIZE TABLE

Thickness of Flange	W1 Size of fillet weld joining web to flange
1 1/2" and under	5/16"
over 1 1/2" to 2 1/4"	3/8"
over 2 1/4"	1/2"

SPAN 10 GIRDER TABLE

	GIRDER	SPAN LENGTH ℄ TO ℄ BRGS.	FLANGE PLATE SIZES Pl A	Pl B	Pl C	Pl D	Pl E	FLANGE PLATE LENGTHS A	B	C	D	E
Southbound	G1	138'-8 13/16"	23" x 1"	23" x 1 1/2"	24" x 1"	24" x 2"	24" x 2 1/2"	36'-9 7/16"	66'-0"	20'-3 7/16"	19'-0"	61'-0"
	G2	137'-0 3/16"	19" x 7/8"	19" x 1 1/2"	24" x 1"	None	24" x 2"	32'-11 1/16"	72'-0"	23'-5 1/16"	0	91'-0"
	G3	135'-3 5/8"	19" x 7/8"	19" x 1 1/2"	24" x 1"	None	24" x 2"	32'-0 9/16"	72'-0"	22'-6 9/16"	0	91'-0"
	G4	133'-7"	23" x 1"	23" x 1 1/2"	24" x 1"	24" x 2"	24" x 2 1/2"	34'-2 1/2"	66'-0"	17'-8 1/2"	19'-0"	61'-0"
Northbound	G1	125'-0 1/4"	17" x 3/4"	17" x 1 1/2"	24" x 1"	None	24" x 2"	28'-11 1/8"	68'-0"	21'-5 1/8"	0	83'-0"
	G2	123'-3 1/8"	14" x 3/4"	14" x 1 1/2"	23" x 1"	None	23" x 1 1/2"	27'-6 9/16"	69'-0"	28'-0 9/16"	0	68'-0"
	G3	121'-6"	14" x 3/4"	14" x 1 1/2"	23" x 1"	None	23" x 1 1/2"	26'-8"	69'-0"	27'-2"	0	68'-0"
	G4	119'-8 7/8"	17" x 3/4"	17" x 1 1/2"	24" x 1"	None	24" x 2"	26'-3 7/16"	68'-0"	18'-9 7/16"	0	83'-0"

	DEFLECTIONS (FT) STEEL	CONC.	S.D.L.	TOTAL	CAMBER V.C.C. (FT.)	TOTAL (FEET)	TOTAL (INCHES)	STUD SHEAR CONNECTOR SPACING
G1	0.10	0.15	0.11	0.36	.06	0.42'	5"	138 Spaces @ 12" = 138'-0"
G2	0.11	0.28	0.04	0.43	.06	0.49	5 7/8"	137 Spaces @ 12" = 137'-0"
G3	0.10	0.27	0.04	0.41	.05	0.46	5 1/2"	135 Spaces @ 12" = 135'-0"
G4	0.09	0.13	0.09	0.31	.05	0.36	4 3/8"	133 Spaces @ 12" = 133'-0"
G1	0.07	0.12	0.09	0.28	.05	0.33	4"	125 Spaces @ 12" = 125'-0"
G2	0.08	0.24	0.03	0.35	.05	0.40	4 3/4"	123 Spaces @ 12" = 123'-0"
G3	0.07	0.23	0.03	0.33	.04	0.37	4 1/2"	121 Spaces @ 12" = 121'-0"
G4	0.06	0.10	0.08	0.24	.04	0.28	3 3/8"	119 Spaces @ 12" = 119'-0"

G4	33.54	17.24
G1	28.51	21.01
G2	27.13	27.63
G3	26.25	26.75
G4	25.8698	18.3698

S.D.L. = superimposed dead load, includes weight of railing and parapet.
V.C.C. = vertical curve correction

PROJECT ENGINEER R. L. Parker
IN CHARGE OF F. Eckel
DESIGNED BY S. Rave
DESIGN CHECKED BY Toppse & Smith
DETAILED BY J. F. Darcy
DETAIL CHECKED BY [illegible]

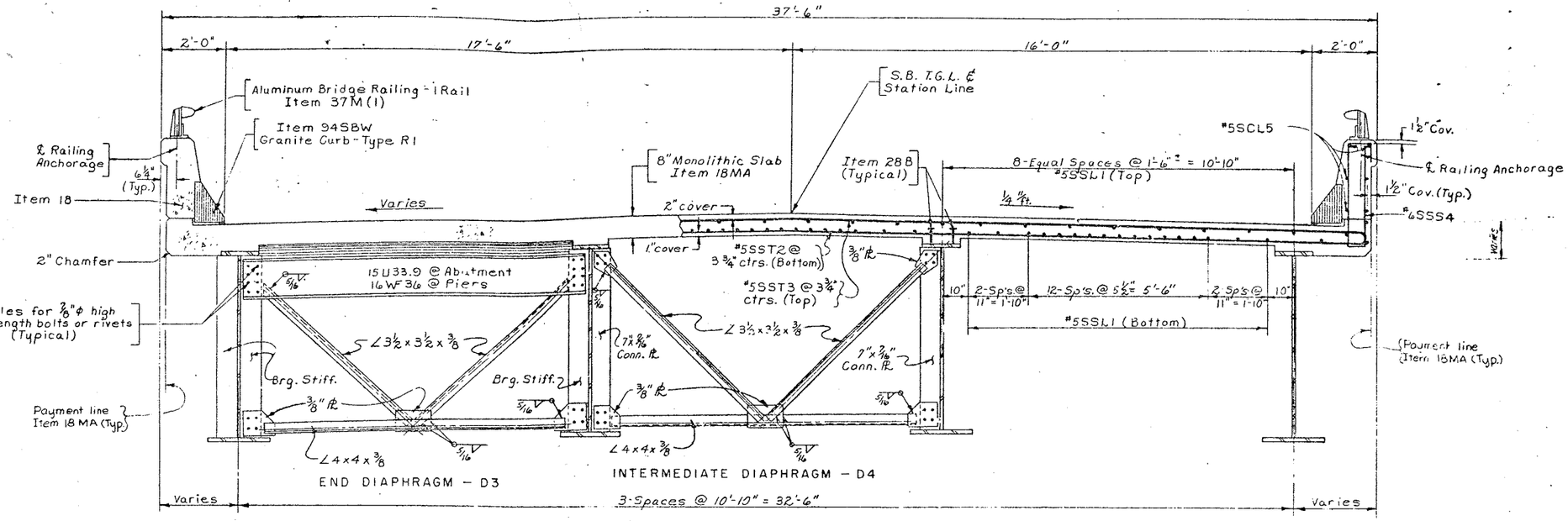
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

SPAN 10 NB & SB

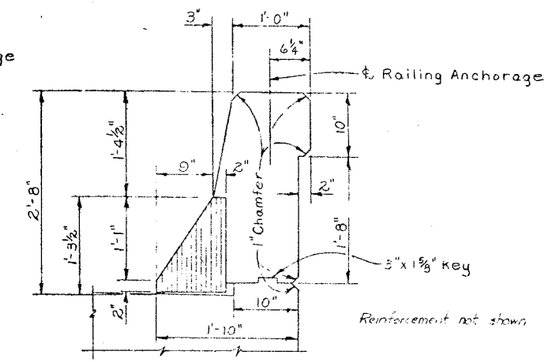
DRAWING NO. 26 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-88(1-9)(13) I-481-1-2(116)	205	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



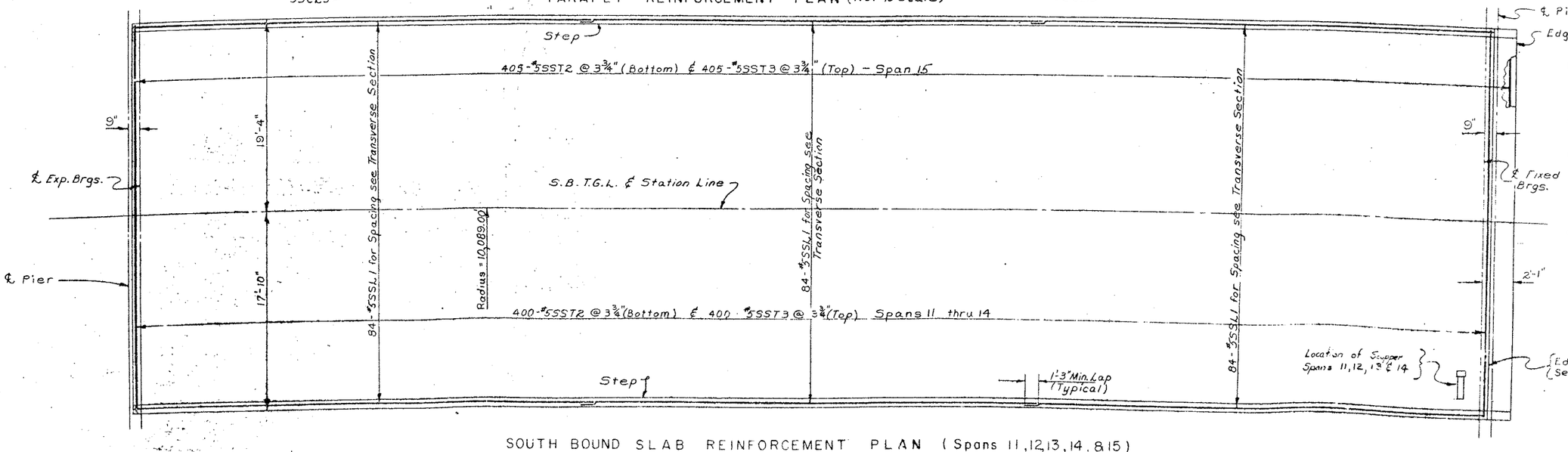
TRANSVERSE SECTION SOUTHBOUND SPANS 11,12,13,14 & 15
Scale: ½" = 1'-0"



PARAPET DETAIL
Scale: 1" = 1'-0"

Note: East parapet shown, West parapet similar by rotation.

PARAPET REINFORCEMENT PLAN (Not to Scale)



Notes:

Holes for ⅞"ϕ rivets or high strength bolts may be omitted and welding substituted if contractor so elects. When the contractor elects to substitute the welded connection for the bolted connection shown, the amount of welding used shall be equivalent in strength to the bolts removed.

For details of Railing, Railing Anchorage and Granite Curbs see Dwgs. #35 and 36. For Joint Details see Dwg. #33 & 34.

SOUTH BOUND SLAB REINFORCEMENT PLAN (Spans 11,12,13,14 & 15)
Scale: 3/16" = 1'-0"

PROJECT ENGINEER R. Parker
IN CHARGE OF J. B. Sherman
DESIGNED BY D. H. Smith
DESIGN CHECKED BY S. Rowe
DETAILED BY J. C. Thompson
DETAIL CHECKED BY [illegible]

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

SPANS 11 THRU 15 SOUTHBOUND

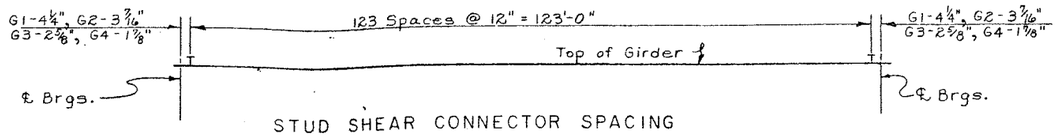
DRAWING NO. 37 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO	TOTAL SHEETS
1	NEW YORK	I-690-3(28) I-481 2(118)	206	309

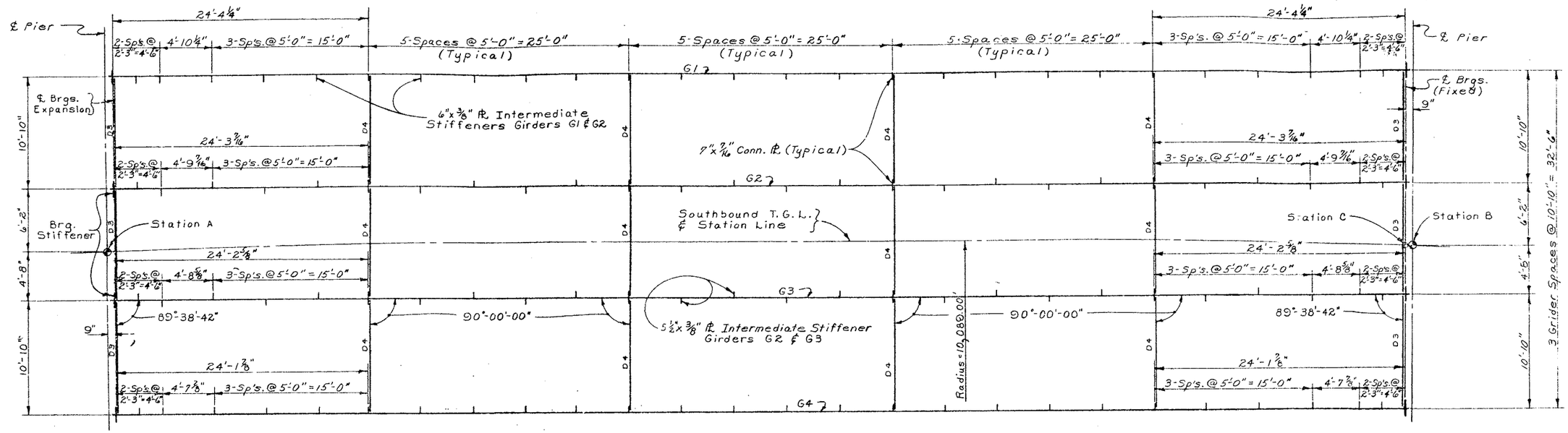
INTERSTATE ROUTE CONNECTION STG
DEWITT YARD (PHASE X)
ONONDAGA COUNTY

TABLE OF STATIONS

SPAN	STATION "A" STATION	STATION "A" ℄	STATION "B" STATION	STATION "B" ℄	STATION "C" STATION	STATION "C" ℄
11 S.B.	232+63.86	℄ Pier #9 S.B.	233+88.86	℄ Pier #10 S.B.	—	—
12 S.B.	233+88.86	℄ Pier #10 S.B.	235+13.86	℄ Pier #11 S.B.	—	—
13 S.B.	235+13.86	℄ Pier #11 S.B.	236+38.86	℄ Pier #12 S.B.	—	—
14 S.B.	236+38.86	℄ Pier #12 S.B.	237+63.86	℄ Pier #13 S.B.	—	—
15 S.B.	237+63.86	℄ Pier #13 S.B.	—	—	238+88.11	℄ Fixed Brgs No. Abut. (S.B.)



STUD SHEAR CONNECTOR SPACING
Not to Scale



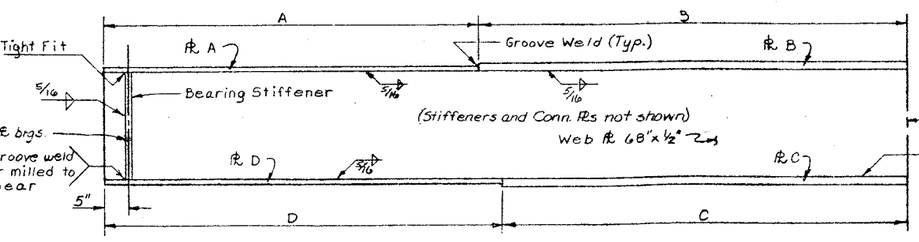
Note:
See Transverse Section for Diaphragms.

STEEL FRAMING PLAN (SPANS 11, 12, 13, 14 & 15 SOUTHBOUND)
Scale: 3/16" = 1'-0"

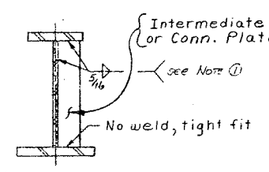
Notes:

Web and flanges shall be A.S.T.M. designation A441 Steel.

Stiffeners, connection plates, and diaphragms shall be A.S.T.M. designation A36 Steel.



GIRDER ELEVATION
Not to Scale



TYPICAL SECTION
Not to Scale

Note ①: Where connection plates are used in pairs, the fillet weld at top of stiffener is optional. See Note "Sup 4" in the Superstructure Notes.

THEO. BOTTOM OF SLAB ELEV. (Southbound)

GIRDER	SPAN	℄ So. Brg.	℄ Span	℄ No. Brg.
G1	11	441.24	440.03	438.56
G2	11	441.12	439.30	438.33
G3	11	440.96	439.58	438.11
G4	11	440.74	439.35	437.88
G1	12	438.52	436.95	435.30
G2	12	438.29	436.73	435.07
G3	12	438.07	436.50	434.85
G4	12	437.84	436.27	434.62
G1	13	435.66	433.51	431.67
G2	13	435.03	433.28	431.45
G3	13	434.81	433.06	431.22
G4	13	434.58	432.83	431.00
G1	14	431.63	429.72	427.89
G2	14	431.40	429.49	427.66
G3	14	431.18	429.26	427.44
G4	14	430.95	429.04	427.21
G1	15	427.85	426.16	424.62
G2	15	427.62	425.93	424.39
G3	15	427.40	425.71	424.16
G4	15	427.17	425.48	423.94

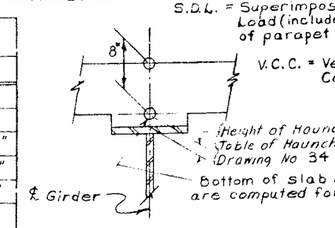
SPAN	GIRDER	DEFLECTIONS (ft.) STEEL	SLAB	SDL	TOTAL	CAMBER VCC (ft)	TOTAL (ft)	TOTAL (in.)
Spans 11, 12 & 13 (S.B.)	G1 and G4	.07	.12	.08	.27	.04	.31	3¾
	G2 and G3	.08	.24	.03	.35	.04	.39	4⅝
Span 14 (S.B.)	G1 and G4	.07	.12	.08	.27	.05	.22	2⅝
	G2 and G3	.08	.24	.03	.35	-.05	.30	3⅝
Span 15 (S.B.)	G1 and G4	.07	.12	.08	.27	-.07	.20	2⅜
	G2 and G3	.08	.24	.03	.35	-.07	.28	3⅜

S.D.L. = Superimposed Dead Load (includes weight of parapet and railing.)

V.C.C. = Vertical Curve Correction

TABLE OF AZIMUTHS

LOCATION	AZIMUTHS
℄ Pier #10 (S.B.)	262°-32'-11"
℄ Pier #11 (S.B.)	263°-14'-46"
℄ Pier #12 (S.B.)	263°-57'-22"
℄ Pier #13 (S.B.)	264°-39'-57"
℄ Pier #14 (S.B.)	265°-22'-33"
℄ Fixed Brgs. @ North Abut. (S.B.)	266°-05'-08"
℄ Girders, Span 11 (SB)	352°-53'-28"
℄ Girders, Span 12 (S.B.)	353°-36'-04"
℄ Girders, Span 13 (S.B.)	354°-18'-40"
℄ Girders, Span 14 (S.B.)	355°-01'-15"
℄ Girders, Span 15 (S.B.)	355°-43'-51"



SOUTHBOUND GIRDER TABLE — SPANS 11 thru 15

GIRDER	SPAN C. to C. BRGS.	FLANGE SIZES PL A	PL B	PL C	PL D	FLANGE DIMENSIONS A	B	C	D	Brg. Stiffener 2-PLs. required each end of Girder	Intermediate Stiffener Size
G1	123'-8½"	16"x¾"	16"x1⅛"	23"x2"	23"x1"	28'-9¼"	33'-6"	40'-6"	21'-5¼"	9"x⅞"	6"x⅜"
G2	123'-6 15/16"	13"x¾"	13"x1½"	22"x1½"	22"x1"	28'-8 7/16"	33'-6"	33'-6"	28'-8 7/16"	8"x¾"	5½"x⅜"
G3	123'-5 5/16"	13"x¾"	13"x1½"	22"x1½"	22"x1"	28'-7⅝"	33'-6"	33'-6"	28'-7⅝"	8"x¾"	5½"x⅜"
G4	123'-3 11/16"	16"x¾"	16"x1½"	23"x2"	23"x1"	28'-6⅞"	33'-6"	40'-6"	21'-6⅞"	9"x⅞"	6"x⅜"

PROJECT ENGINEER R. Parker
IN CHARGE OF J. B. Sherman
DESIGNED BY N. J. Toppses
DESIGN CHECKED BY S. Rowe
DETAILED BY J. C. Thompson
DETAIL CHECKED BY [illegible]

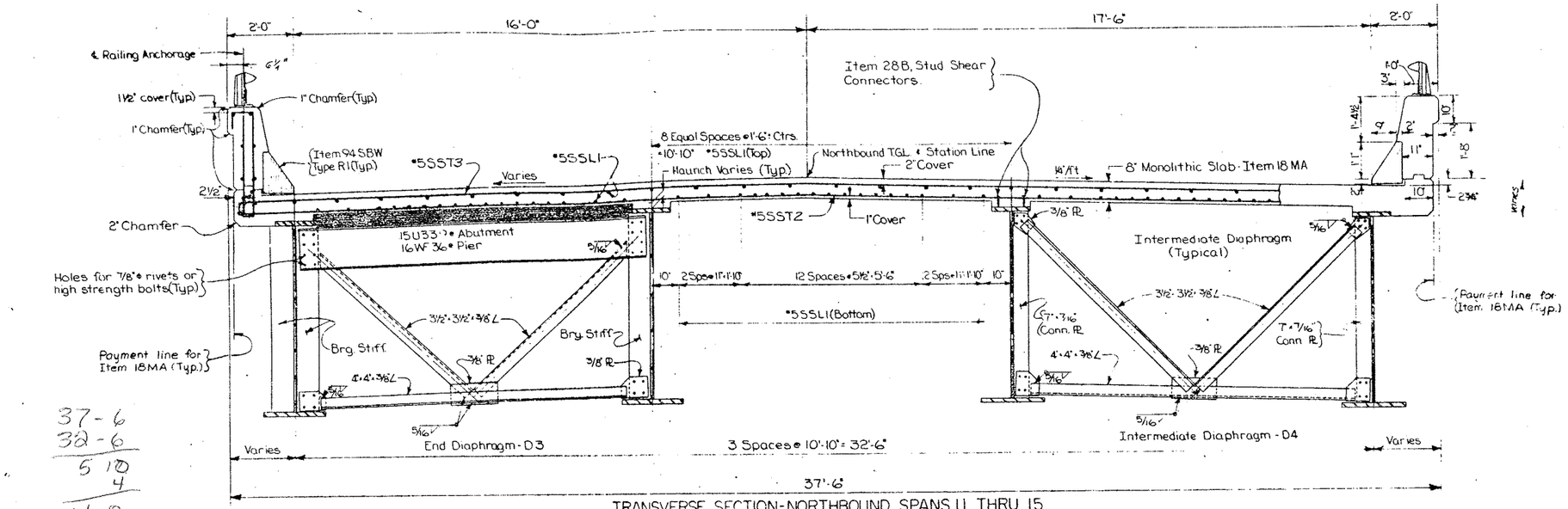
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

SPANS 11 THRU 15 SOUTHBOUND

DRAWING NO. 28 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(28) I-481-2(1)(2)	207	309

INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

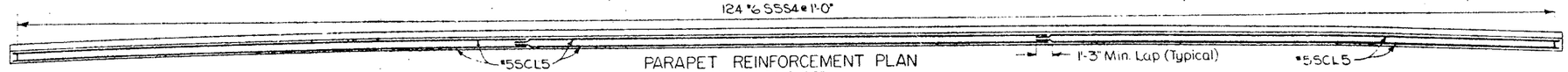


TRANSVERSE SECTION - NORTHBOUND SPANS 11 THRU 15
Scale ½" = 1'-0"

37-6
32-6
5 10
4
4-8
2-4

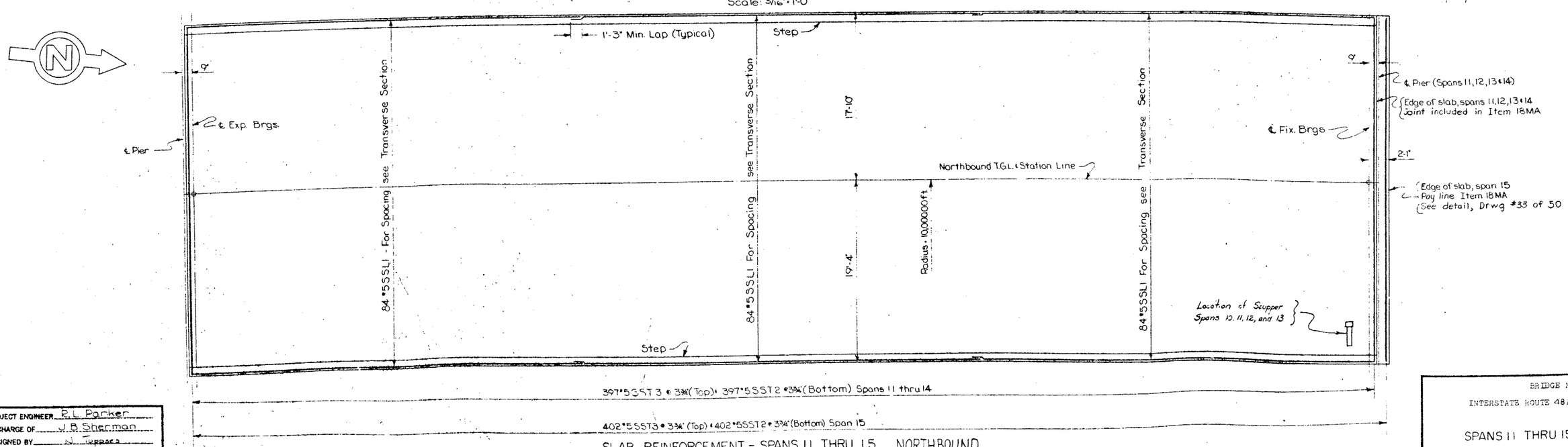
Notes:
Holes for 7/8" ϕ rivets or high strength bolts may be omitted and welding substituted if the contractor so elects. When the contractor elects to substitute the Welded Connection for the Bolted Connection shown, the amount of welding used shall be equivalent in strength to the bolts removed.

For details of Railing, Railing Anchorage, Granite Curbs and Joint Details, See Misc Detail Sheets.



PARAPET REINFORCEMENT PLAN
Scale: 3/16" = 1'-0"

Note: West parapet shown
East parapet similar



SLAB REINFORCEMENT - SPANS 11 THRU 15 NORTHBOUND
Scale 3/16" = 1'-0"

PROJECT ENGINEER R. L. Parker
IN CHARGE OF J. B. Sherman
DESIGNED BY N. Tepper
DESIGN CHECKED BY R. Smith
DETAILED BY J. F. Darcy
DETAIL CHECKED BY J. W. Eble

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

SPANS 11 THRU 15 NORTHBOUND

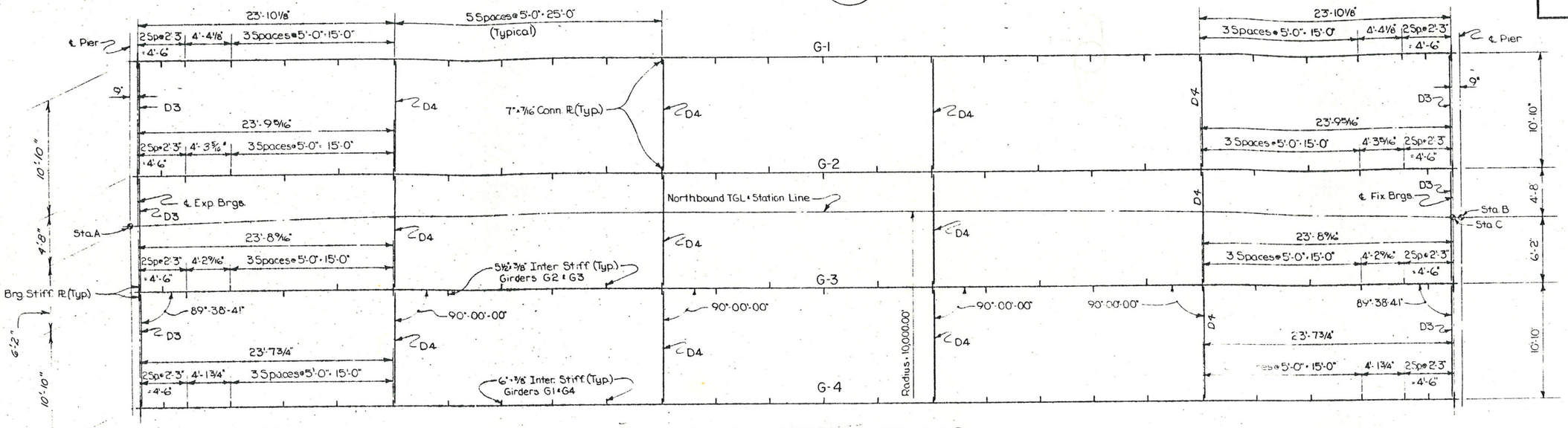
DRAWING NO. 29 OF 50

F.I.S.H. 70-7

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-890-3(23) I-481-2(113)	208	309

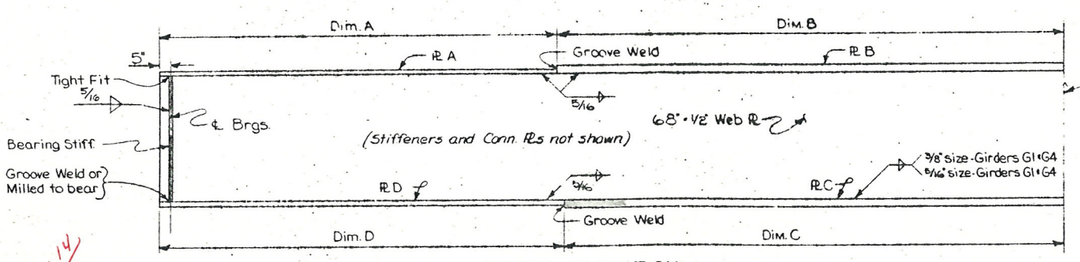
INTERSTATE ROUTE CONNECTION 570
BURTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY

345-5584

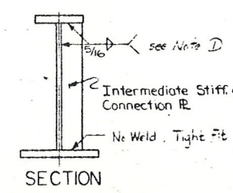


STEEL FRAMING PLAN – SPANS 11 THRU 15 N.B.
Scale: 3/16" = 1'-0"

TABLE OF AZIMUTHS	
LOCATION	AZIMUTH
℄ Pier #10 N.B.	262°-45'-57"
℄ Pier #11 N.B.	263°-28'-36"
℄ Pier #12 N.B.	264°-11'-13"
℄ Pier #13 N.B.	264°-53'-51"
℄ Pier #14 N.B.	265°-36'-28"
℄ Fixed Bearings @ North Abutment N.B.	266°-19'-06"
℄ girders, Span 11 N.B.	353°-07'-17"
℄ girders, Span 12 N.B.	353°-49'-55"
℄ girders, Span 13 N.B.	354°-32'-32"
℄ girders, Span 14 N.B.	355°-15'-10"
℄ girders, Span 15 N.B.	355°-57'-47"

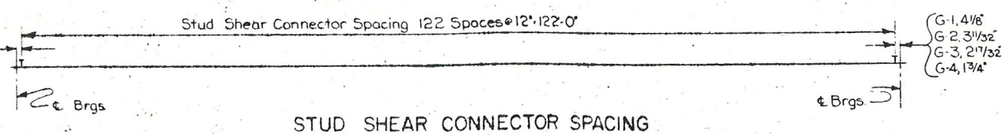


GIRDER ELEVATION
Not to Scale



SECTION

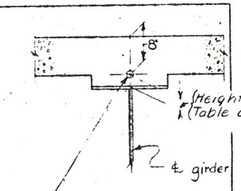
Web and flanges shall be A.S.T.M. Designation A441 Steel. Stiffeners, connection plates and diaphragms shall be A.S.T.M. Designation A36 Steel.



STUD SHEAR CONNECTOR SPACING
Not to Scale

Note ①: Where connection plates are used in pairs, the fillet weld at top of stiffener is optional. See Note "Sup 4" in the Superstructure Notes.

BOTTOM OF SLAB ELEVATIONS NORTHBOUND				
GIRDER	SPAN	℄ EXP. BRGS.	℄ SPAN	℄ FIX. BRGS.
G-1	11	441.36	440.02	438.57
G-2	11	441.16	439.80	438.34
G-3	11	440.94	439.57	438.12
G-4	11	440.72	439.34	437.89
G-1	12	438.53	436.98	435.34
G-2	12	438.30	436.75	435.12
G-3	12	438.08	436.52	434.89
G-4	12	437.85	436.30	434.66
G-1	13	435.30	433.57	431.75
G-2	13	435.07	433.34	431.53
G-3	13	434.85	433.12	431.30
G-4	13	434.62	432.89	431.08
G-1	14	431.71	429.80	427.98
G-2	14	431.48	429.57	427.75
G-3	14	431.26	429.34	427.53
G-4	14	431.03	429.12	427.30
G-1	15	427.93	426.25	424.71
G-2	15	427.71	426.02	424.48
G-3	15	427.48	425.80	424.26
G-4	15	427.26	425.57	424.03



Elevations shown in table are computed for this point.

NORTHBOUND GIRDER TABLE – SPANS 10 THRU 14										
GIRDER	SPAN LENGTH ℄ TO ℄ BEARINGS	FLANGE SIZE PL A	PL B	PL C	PL D	FLANGE DIMENSIONS A	B	C	D	BEARING STIFF. 2 PLs Required at each end of girder	INTERMEDIATE STIFFENER SIZE
G1	122'-8 5/16"	16" x 3/4"	16" x 1 1/2"	23" x 2"	23" x 1"	23'-3 1/8"	33'-6"	40'-6"	21'-3 1/8"	9" x 7/8"	6" x 3/8"
G2	122'-6 11/16"	13" x 3/4"	13" x 1 1/2"	22" x 1 1/2"	22" x 1"	28'-2 7/8"	33'-6"	33'-6"	28'-2 7/8"	8" x 3/4"	5 1/2" x 3/8"
G3	122'-5 1/16"	13" x 3/4"	13" x 1 1/2"	22" x 1 1/2"	22" x 1"	28'-1 9/16"	33'-6"	33'-6"	28'-1 9/16"	8" x 3/4"	5 1/2" x 3/8"
G4	122'-3 7/16"	16" x 3/4"	16" x 1 1/2"	23" x 2"	23" x 1"	28'-0 3/4"	33'-6"	40'-6"	21'-0 3/4"	9" x 7/8"	6" x 3/8"

PROJECT ENGINEER	R. L. Porter		
IN CHARGE OF	J. B. Sherman		
DESIGNED BY	J. Tarasek	27.84	20.84
DESIGN CHECKED BY	D. Smith	27.78	27.84
DETAILED BY	J. F. Darcy	27.71	
DETAIL CHECKED BY	J. W. Fabel		

DEFLECTIONS (FT.)						CAMBER		
SPAN	GIRDER	STEEL	SLAB	S.D.L.	TOTAL	V.C.C. (FT.)	TOTAL FT.	TOTAL IN.
Spans 11, 12 & 13 Northbound	G1 & G4	.07	.12	.08	.27	.04	.31	3 3/4"
	G2 & G3	.08	.24	.03	.35	.04	.39	4 5/8"
Span 14 Northbound	G1 & G4	.07	.12	.08	.27	-.04	.23	2 3/4"
	G2 & G3	.08	.24	.03	.35	-.04	.31	3 3/4"
Span 15 Northbound	G1 & G4	.07	.12	.08	.27	-.07	.20	2 3/8"
	G2 & G3	.08	.24	.03	.35	-.07	.28	3 3/8"

V.C.C. - Vertical Curve Camber
S.D.L. (Superimposed Dead Load) - Includes weight of parapet & railing.

TABLE OF STATIONS						
SPAN	STATION A		STATION B		STATION C	
	STATION	℄	STATION	℄	STATION	℄
11 (NB)	230+98.76	℄ Pier #10 (NB)	232+22.76	℄ Pier #11 (NB)	—	—
12 (NB)	232+22.76	℄ Pier #11 (NB)	233+46.76	℄ Pier #12 (NB)	—	—
13 (NB)	233+46.76	℄ Pier #12 (NB)	234+70.76	℄ Pier #13 (NB)	—	—
14 (NB)	234+70.76	℄ Pier #13 (NB)	235+94.76	℄ Pier #14 (NB)	—	—
15 (NB)	235+94.76	℄ Pier #14 (NB)	—	—	237+18.01	℄ Fix. Brgs. N.A. (NB)

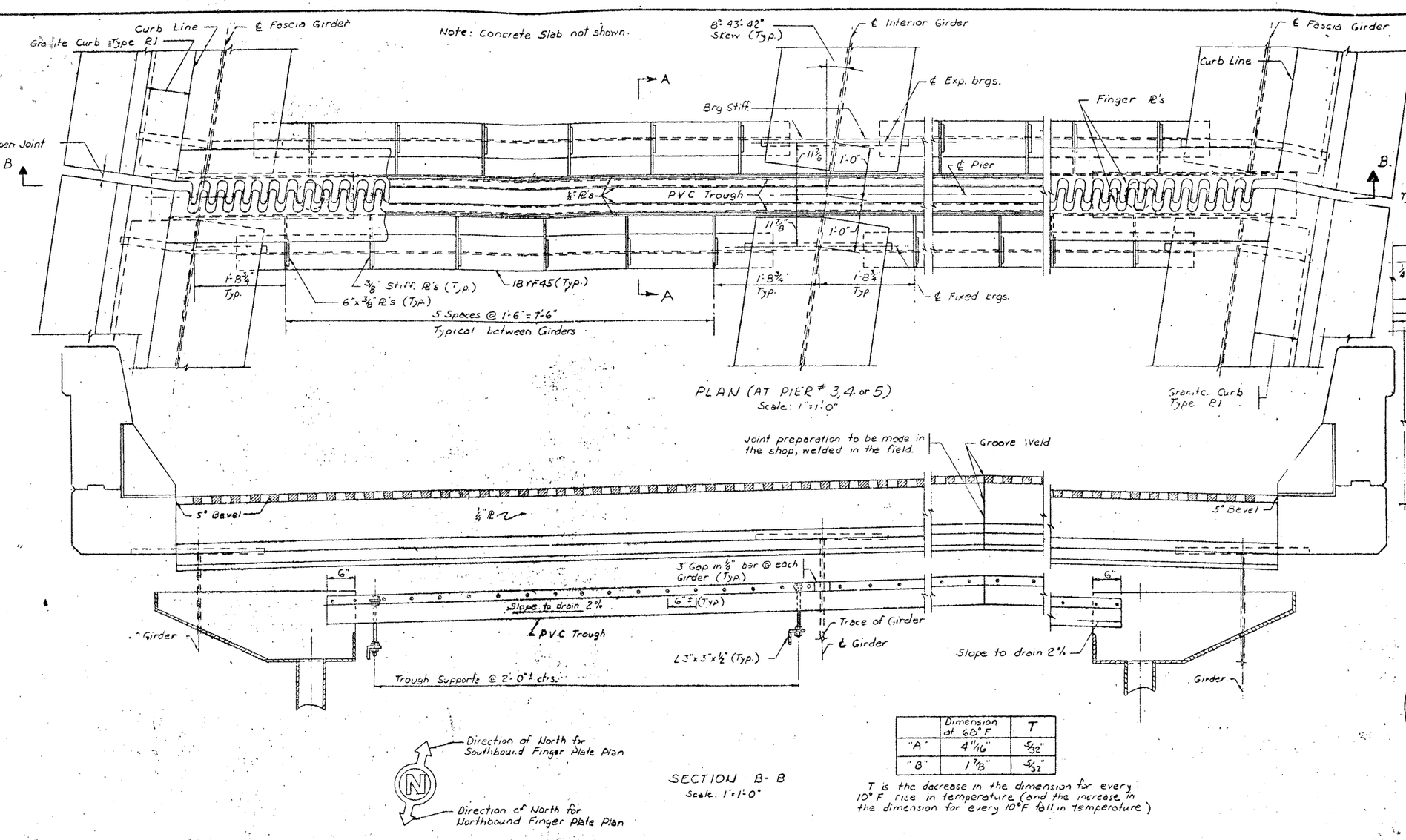
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

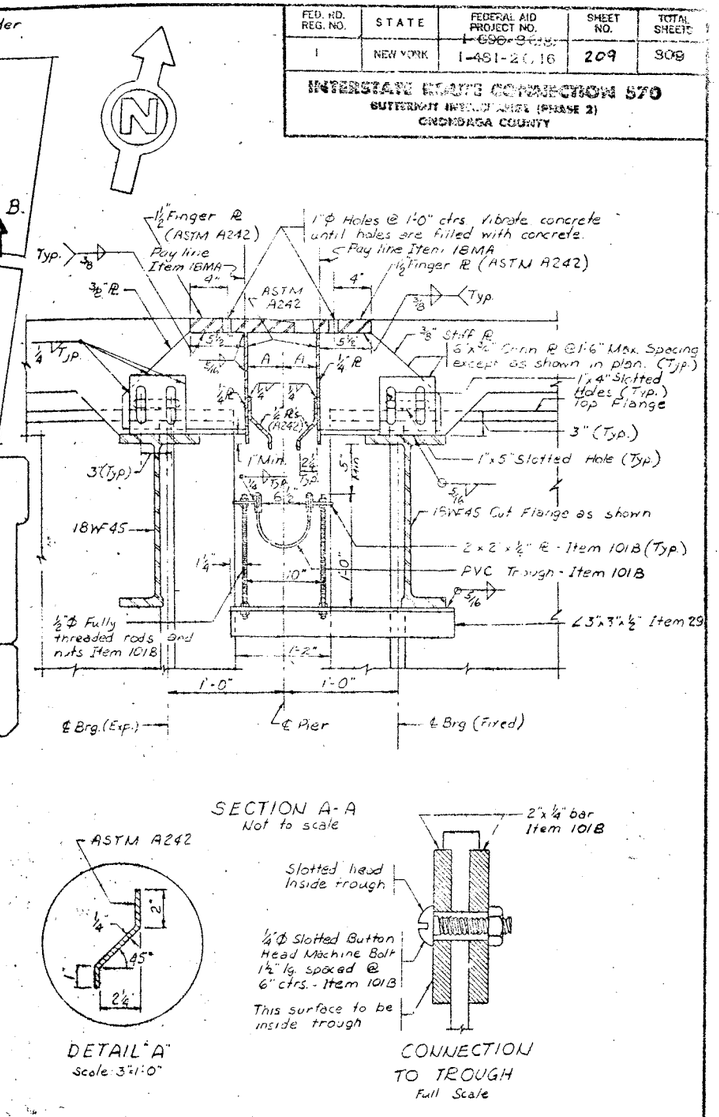
SPANS 11 THRU 15 NORTHBOUND

DRAWING NO. 30 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	~~I-690-3(43)~~ I-481-2(16)	209	308

INTERSTATE ROUTE 690 CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY





	Dimension at 68° F	T
"A"	4 11/16"	5/32"
"B"	1 7/8"	5/32"

T is the decrease in the dimension for every 10° F rise in temperature (and the increase in the dimension for every 10° F fall in temperature)

SECTION B-B
Scale: 1" = 1'-0"

Direction of North for Southbound Finger Plate Plan

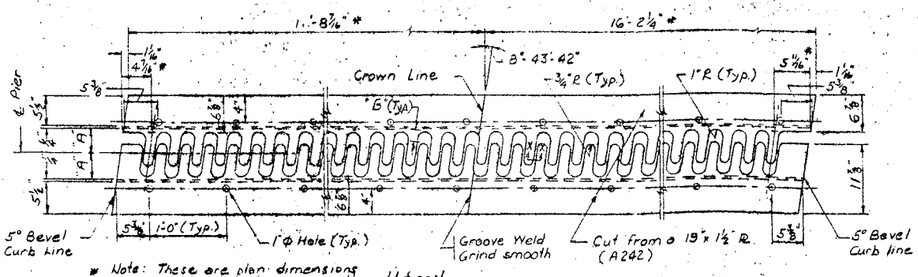
Direction of North for Northbound Finger Plate Plan

SECTION A-A
Not to scale

DETAIL "A"
Scale: 3" = 1'-0"

CONNECTION TO TROUGH
Full Scale

NOTES:
Finger R's shall follow slope and grade of roadway. All steel shall be Item 29 unless otherwise indicated.
The 1/2" finger plates, the 1/4" vertical side plates, and 1/4" bent deflector plates shall be corrosion resistant steel A.S.T.M. Designation A242.

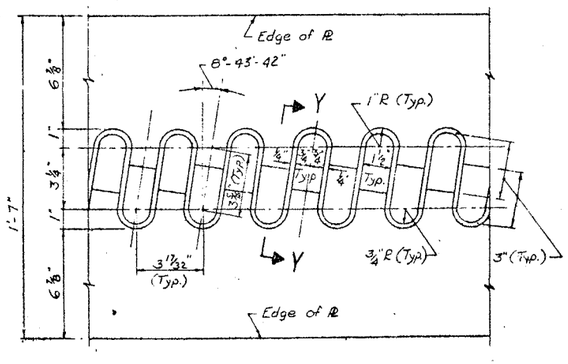


* Note: These are plan dimensions and do not take into account the additional length needed due to the cross slope and profile of the roadway.

FINGER PLATE PLAN
Scale: 1" = 1'-0"

SECTION X-X
No Scale

SECTION Y-Y
No Scale



FINGER DETAIL
Scale: 3" = 1'-0"

PROJECT ENGINEER R. Parker
IN CHARGE OF V. Sherman
DESIGNED BY N.A. Toppses
DESIGN CHECKED BY F. Eckel
DETAILED BY N.A. Toppses
DETAIL CHECKED BY J. Kutcal

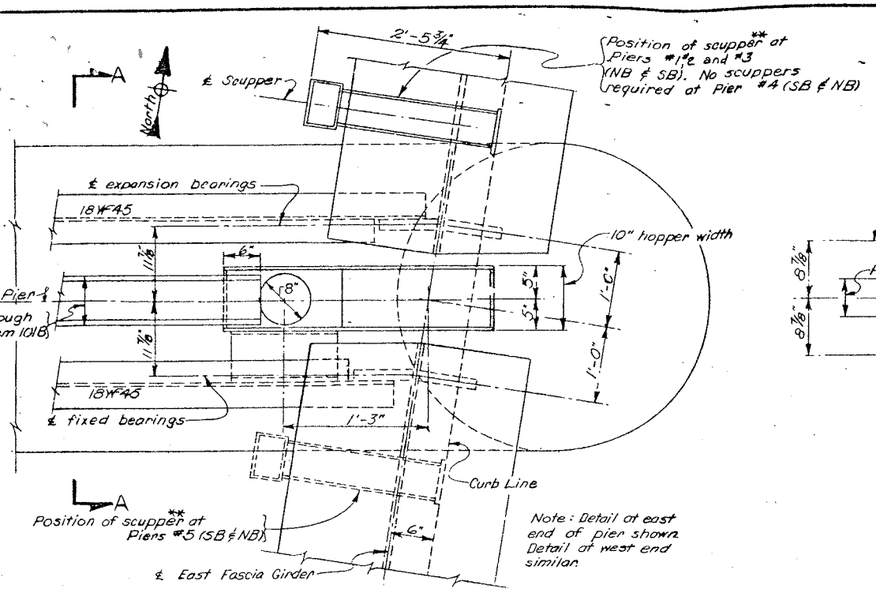
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

FINGER JOINT AT PIERS 3,4 & 5

DRAWING NO. 31 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-690-3(23) I-481-2(116)	210	309

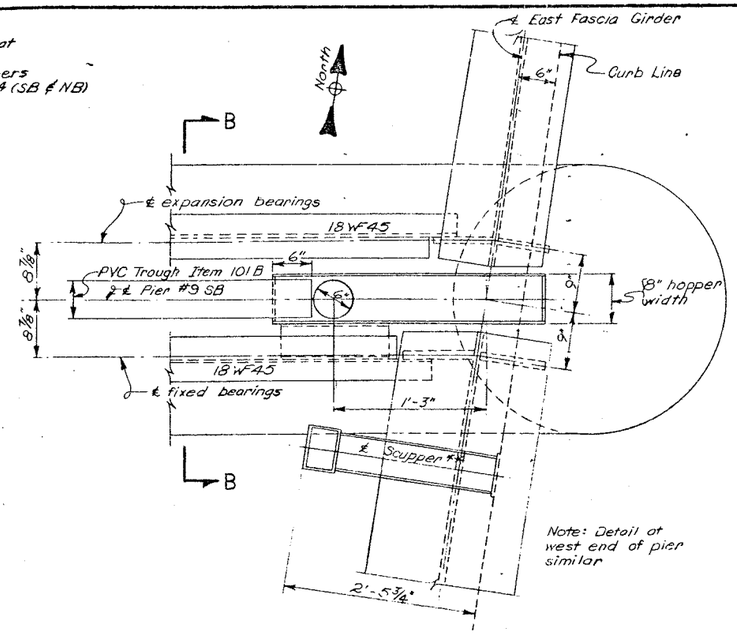
INTERSTATE ROUTE CONNECTION 570
BUTTERNUT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



Note: Detail at east end of pier shown. Detail at west end similar.

PLAN AT EAST END, PIERS 1,2,3,4 & 5 (NB & SB)

Scale: 1" = 1'-0"



Note: Detail at west end of pier similar

PLAN AT EAST END OF PIER #9 SOUTHBOUND

Scale: 1" = 1'-0"

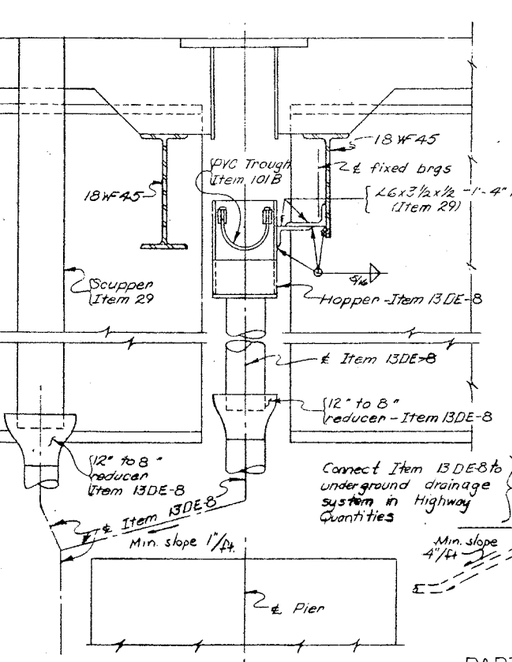
** Adjust exact location of scuppers which drain into downspouts systems so as to accommodate the location of the downspouts.
Adjust exact location of scuppers which drain directly onto the ground so as not to spill on piers or onto diaphragms

Hoppers and downspouts (including all necessary pipe supports, hangers, and fittings) shall be paid for under Item 13DE-6 & Item 13DE-8.

Hopper shall be fabricated from steel plates, 3/8 inch thick, A.S.T.M. Designation A36 Steel. Hopper shall be galvanized after fabrication is complete in accordance with M19.

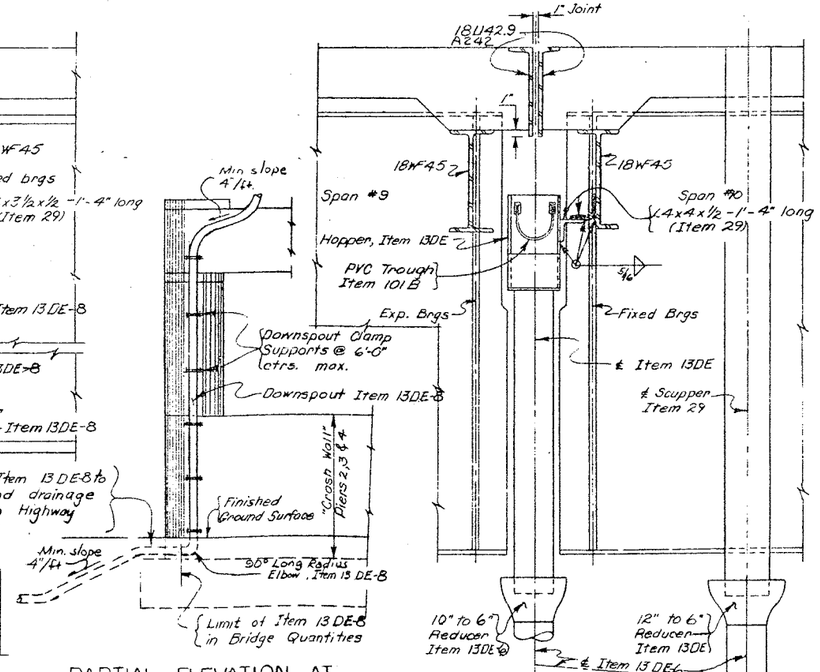
All bends in downspouts will be long radius bends. All indicated slopes on horizontal pipe runs will be the minimum allowed, and the long radius bends will be fabricated to take this slope into account. All costs involved will be included in the price bid for Item 13DE-6 & Item 13DE-8

PIER NO.	JOINTS: EXP. JT. SEALED WITH PREFORMED JOINT SEALER	JOINTS: OPEN JOINT WITH HOPPER AND TROUGH	JOINTS: FINGER JOINT WITH HOPPER AND TROUGH	SCUPPER **	DOWNSPOUT
1		✓		(East & West curb lines North side of Pier)	✓ (8" dia)
2		✓		(East & West curb lines North side of Pier)	✓ (8" dia)
3			✓	(East & West curb lines North side of Pier)	✓ (8" dia)
4			✓	None	✓ (8" dia.)
5			✓	(East & West curb lines South side of Pier)	✓ (8" dia)
6	✓			(East & West curb lines South side of Pier)	✓ (8" dia)
7	✓			(East & West curb lines South side of Pier)	✓ (8" dia.)
8	✓			(East & West curb lines South side of Pier)	
9	NB only	SB only		(East & West curb lines South side of Pier	SB only (6" dia.)
10	✓			(East curb line only South side of Pier)	
11	✓			(East curb line only South side of pier)	
12	✓			(East curb line only South side of pier)	
13	✓			(East curb line only South side of pier)	
14	✓			(East curb line only South side of pier)	



SECTION A-A

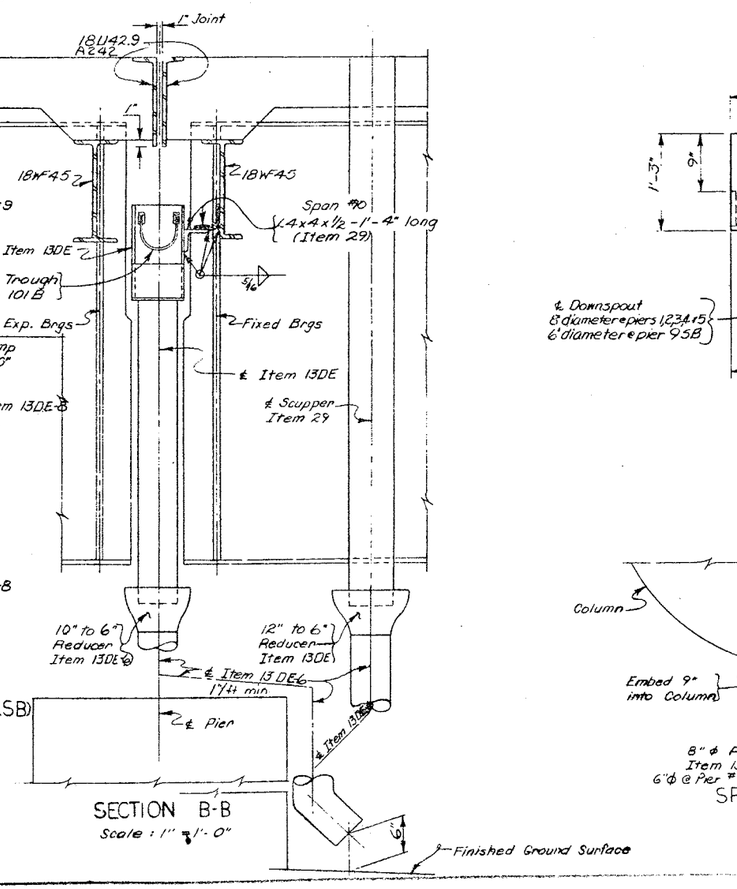
Scale: 1" = 1'-0"



PARTIAL ELEVATION AT PIERS 1,2,3,4,5*,6 & 7 (NB & SB)

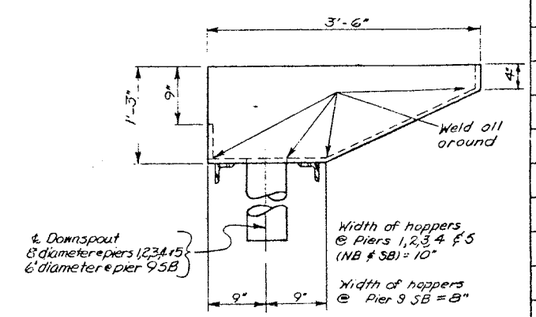
Scale: 3/16" = 1'-0"

*No Hopper at Piers #6 & #7 Downspout drains only the scupper.



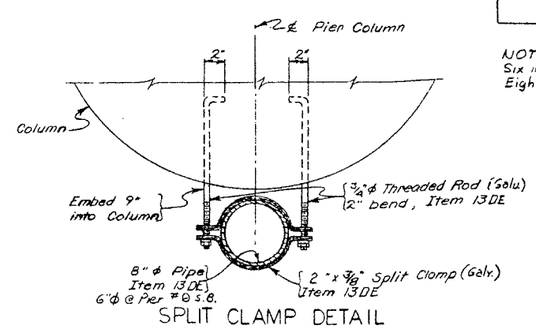
SECTION B-B

Scale: 1" = 1'-0"



HOPPER ELEVATION

Scale: 1" = 1'-0"



SPLIT CLAMP DETAIL

Scale: 1½" = 1'-0"

NOTES:
Six inch diameter downspouts shall be paid for under Item 13 DE-6
Eight inch diameter downspouts shall be paid for under Item 13 DE-8

PROJECT ENGINEER R. Parker
IN CHARGE OF F.W. Eckel
DESIGNED BY
DESIGN CHECKED BY
DETAILED BY J. Dunnant
DETAIL CHECKED BY F.W. Eckel

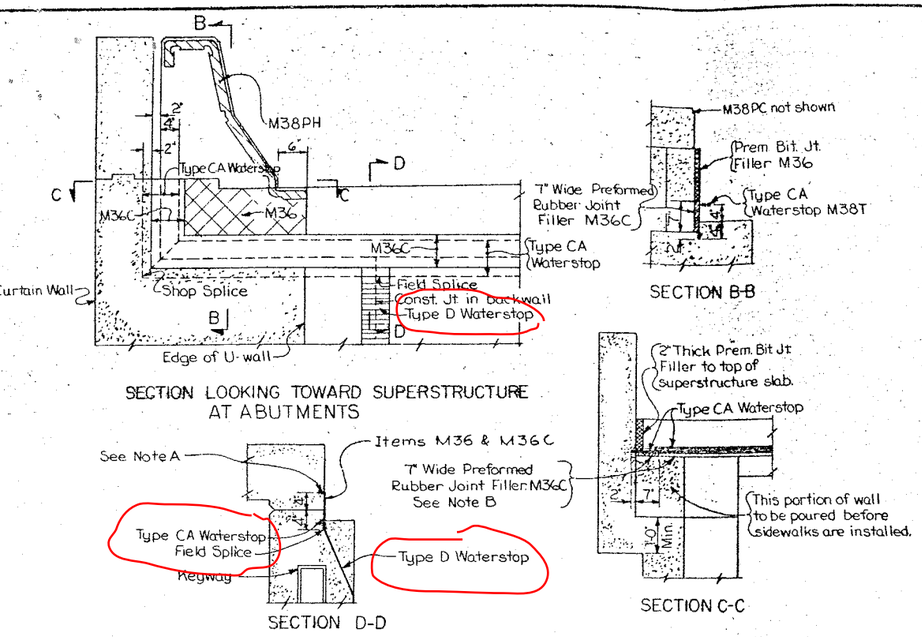
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

DOWNSPOUT DETAILS

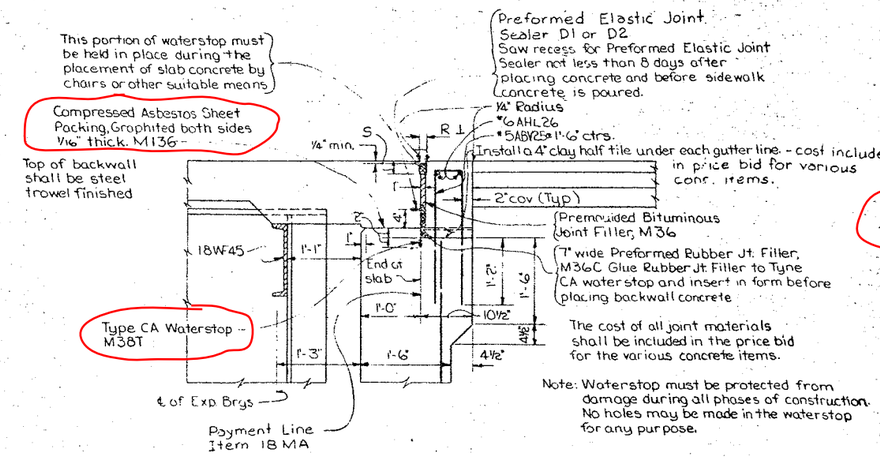
DRAWING NO. 32 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-081-8(18)	211	309

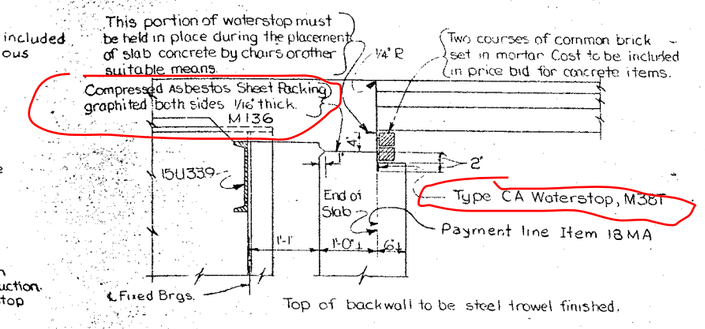
INTERSTATE ROUTE CONNECTION 570
BETTERMENT INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



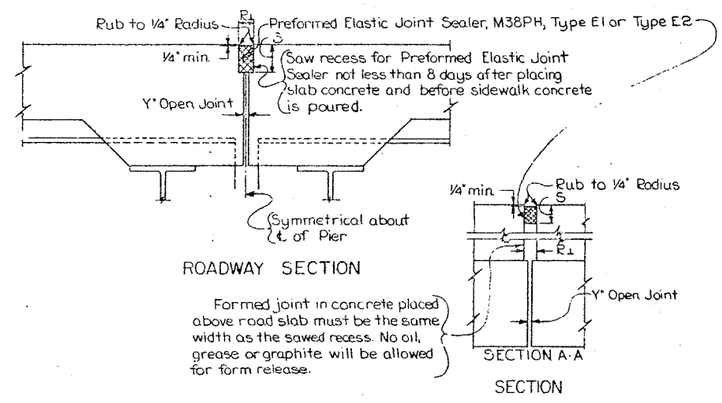
INSTALLATION OF WATER STOPS AT ABUTMENTS
Not to Scale



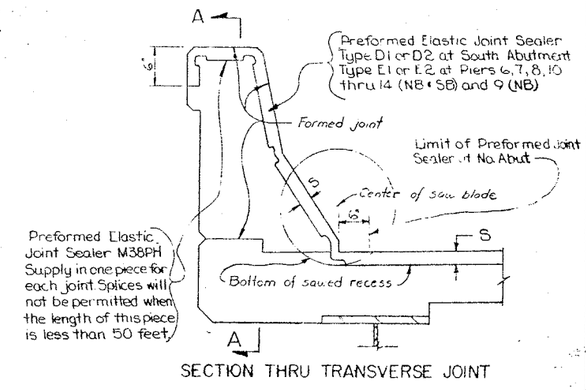
EXPANSION JOINT AT SOUTH ABUTMENT
Not to Scale



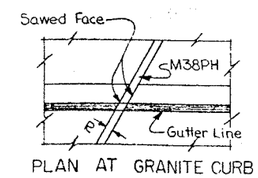
FIXED JOINT AT NORTH ABUTMENT
Not to Scale



EXPANSION JOINT AT PIERS #6, #7, #8, #10 THRU #14 (NB & SB) & #9 (NB)
Not to Scale



SECTION THRU TRANSVERSE JOINT



PLAN AT GRANITE CURB

PARAPET DETAILS FOR PREFORMED ELASTIC JOINT SEALER
Not to Scale

JOINT DIMENSIONS				
Preformed Elastic Joint Sealer	R	S	Y	T
Type E1	1 7/8"	4 1/8"	3/4"	3/32"
Type E2	1 7/8"	3 3/4"	3/4"	3/32"
Type D1	1 5/8"	3 3/8"	1"	3/64"
Type D2	1 5/8"	3 3/8"	1"	3/64"

Notes:
'R' dimension is measured at 68° F.
'T' is the amount that 'R' must be decreased for every 10° rise in temperature or increased for every 10° fall in temperature.

Notes. A) This portion of waterstop must be held in place during the placement of slab concrete by chairs or other suitable means.
B) Glue Rubber Joint Filler to Type CA Waterstop with an approved type of commercial cement and insert in form before placing backwall concrete.
Exposed waterstop must be protected from damage by suitable means during all phases of construction. No holes may be made in the waterstop for any purpose.
The cost of all joint materials shall be included in the price bid for the various concrete items.
All splices shall be thermal splices. Method for field splicing waterstops shall be approved by Deputy Chief Engineer, Design.

PROJECT ENGINEER R. L. Parker
IN CHARGE OF J. B. Sherman
DESIGNED BY
DESIGN CHECKED BY
DETAILED BY J. F. Darcy
DETAIL CHECKED BY J. W. Todd

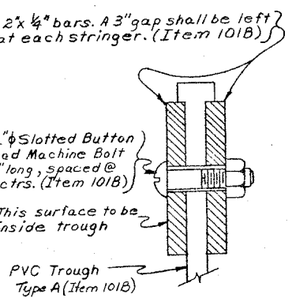
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

MISCELLANEOUS DETAILS.

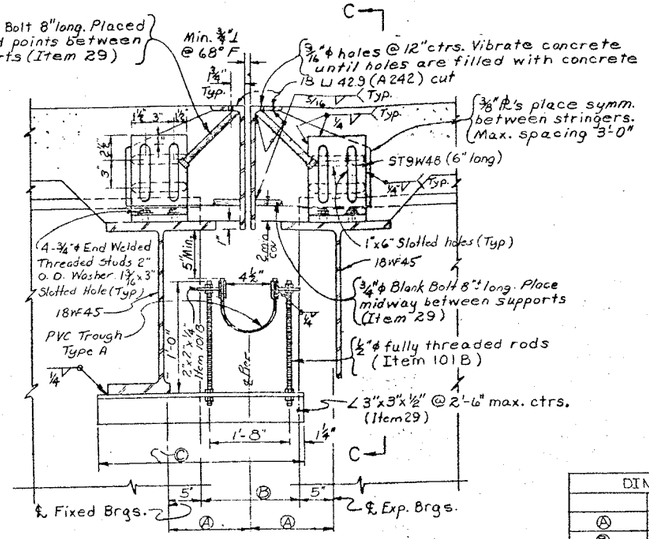
DRAWING NO. 33 OF 50

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-890-3(29) I-481-A(118)	212	309

INTERSTATE ROUTE 481 IN CONNECTION WITH
INTERHOUSE INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



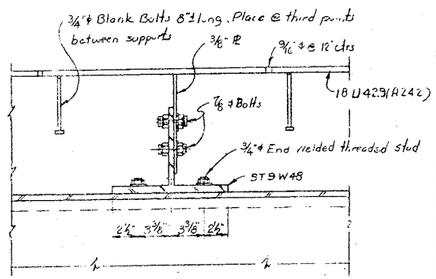
CONNECTION TO TROUGH
Not to Scale



OPEN JOINT AT PIERS #9SB, #1 & 2 NB & SB
Not to Scale

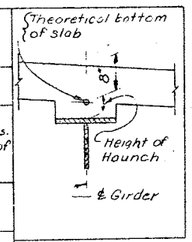
DIMENSION TABLE		
	#1&2 NB·SB	#9SB
Ⓐ	1'-0"	9"
Ⓑ	1'-2"	8"
Ⓒ	2'-0"	1'-9"

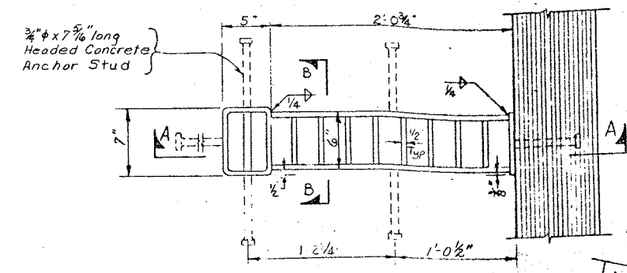
Note:
¾"ϕ end welded headed studs, 8" ± long, may be substituted for the ¾"ϕ Blank Bolts.



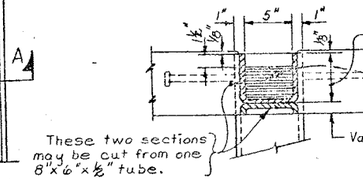
SECTION C-C
No Scale

TABLE OF HAUNCH HEIGHTS (AT ENDS OF GIRDERS)			
GIRDER		Height of Haunch	
		@ ℄ exp. brgs. (South end of Girder)	@ ℄ fix. brgs. (North End of Girder)
Span 1 (SB & NB)	Fascias (G1 & G4)	3½"	3½"
	Interiors (G2 & G3)	3½"	3½"
Spans 2 (SB & NB)	Fascias (G1 & G4)	3½"	3½"
	Interiors (G2 & G3)	3½"	3½"
Span 3 (SB & NB)	Fascias (G1 & G4)	3⅜"	3⅜"
	Interiors (G2 & G3)	3½"	3½"
Spans 4, 5 & 6 (SB & NB)	Fascias (G1 & G4)	3¼"	3¼"
	Interiors (G2 & G3)	3¼"	3¼"
Spans 7, 8 & 9 (SB & NB)	Fascias (G1 & G4)	3⅛"	3½"
	Interiors (G2 & G3)	3½"	3½"
Span 10 (Southbound)	Fascias (G1 & G4)	3¼"	3¼"
	Interiors (G2 & G3)	3⅜"	3⅜"
Span 10 (Northbound)	Fascias (G1 & G4)	3½"	3½"
	Interiors (G2 & G3)	3½"	3½"
Spans 11 to 15 S.B. & N.B.	Fascias (G1 & G4)	3½"	3½"
	Interiors (G2 & G3)	3½"	3½"

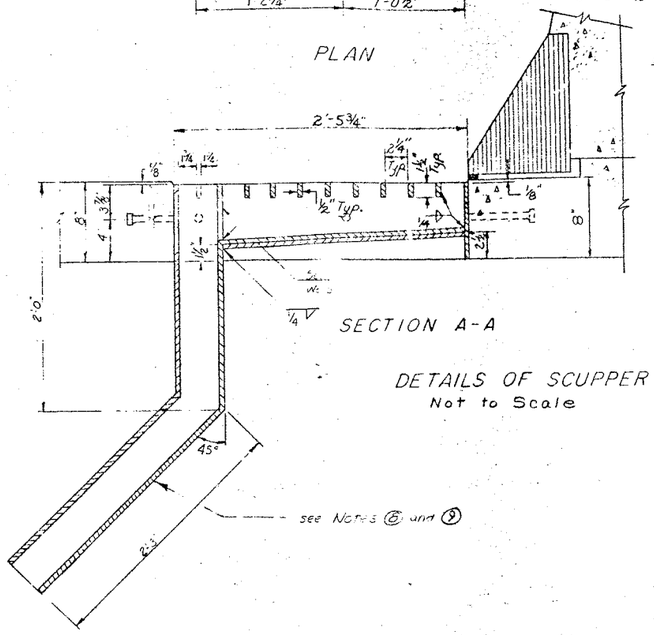




PLAN



SECTION B-B



SECTION A-A

DETAILS OF SCUPPER
Not to Scale

Notes:
1. Material in Scupper - ½" thick.
2. Tubes - ASTM designation A500 grade A.
3. Plates or Bars - ASTM designation A36.
4. Anchor Studs - ASTM designation A108, grade designation 1015 or 1020.
5. Scupper shall be galvanized after fabrication is complete in accordance with M19.
6. Place top of Scupper on same slope as top of pavement.
7. Scupper shall be paid for under Item 29.
8. Scupper Outlet Detail shown is for use at scuppers adjacent to Piers #6 (S.B. & N.B.), #9 (N.B.), and #10 thru #14 (S.B. & N.B.).
9. Extend Scupper Outlet Tube vertically downward to Downspout (Item 13DE) at scuppers adjacent to Piers #1, 2, 3, 5, 6, 7 (all S.B. & N.B.) and Pier #9 (S.B.).
10. Adjust exact location of scuppers which drain into downspout system so as to accommodate the location of the downspouts.
11. Adjust exact location of scuppers which drain directly onto the ground so as not to spill on piers or onto steel diaphragms.

PROJECT ENGINEER R. Parker
IN CHARGE OF J.B. Sherman
DESIGNED BY S. Rouse
DESIGN CHECKED BY N.A. Toppses
DETAILED BY J.C. Thompson
DETAIL CHECKED BY J.W. Eal

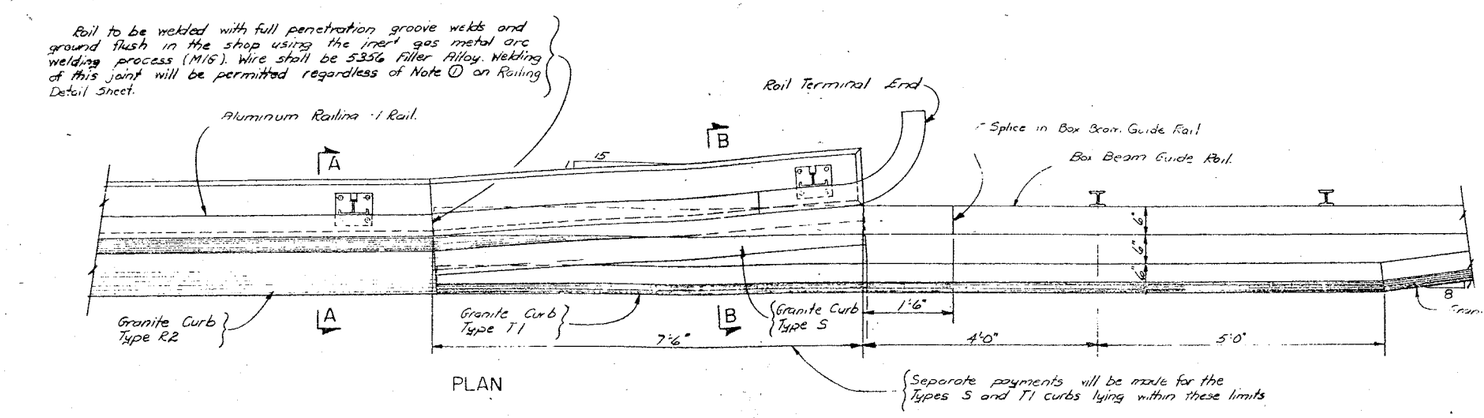
BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

MISCELLANEOUS DETAILS

DRAWING NO. 34 OF 5[illegible]

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-590-3(28) I-481-2(116)	213	329

INTERSTATE ROUTE CONNECTION 570
BUTTERMILK INTERCHANGE (PHASE 2)
ONONDAGA COUNTY



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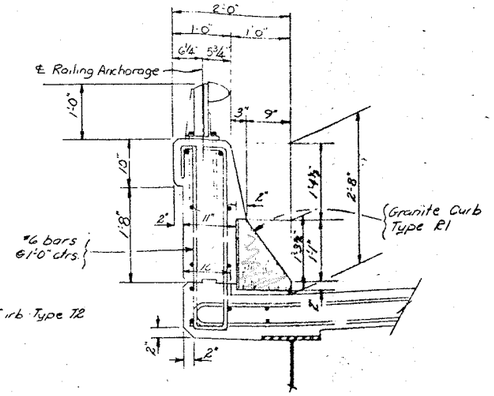
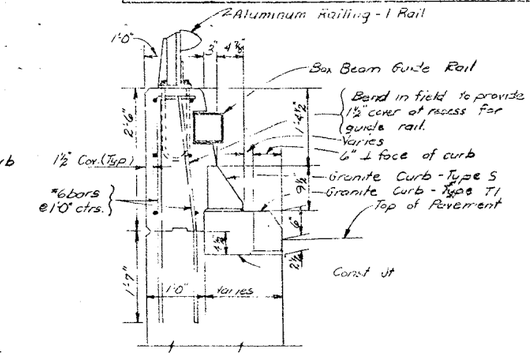
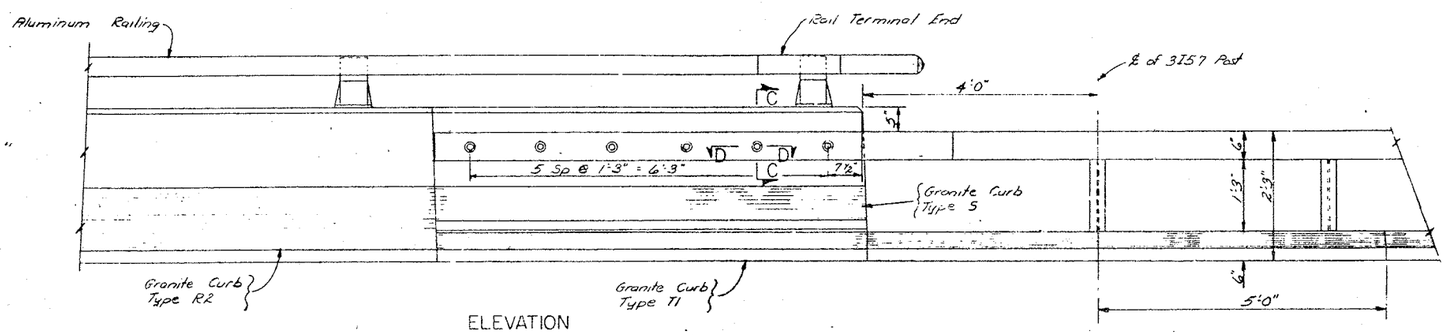


SECTION THRU SUPERSTRUCTURE

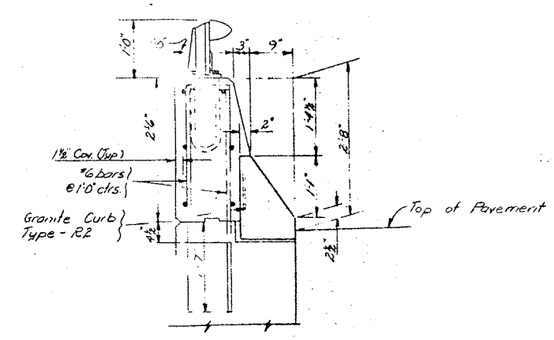


SECTION B-B

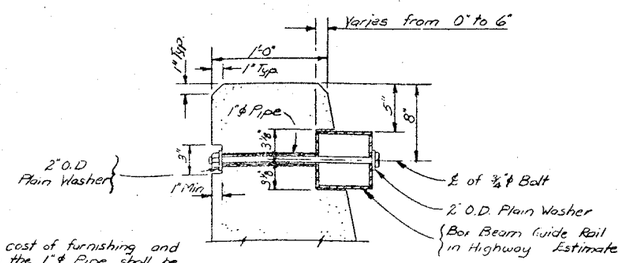
All chamfers shown on this sheet are 1" unless otherwise indicated.



ELEVATION



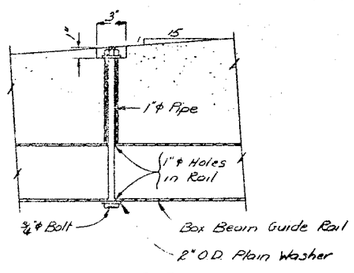
SECTION A-A



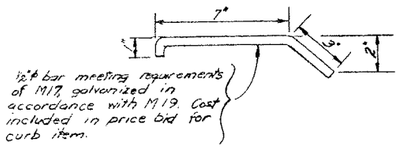
The cost of furnishing and placing the 1" ϕ Pipe shall be included in the unit price bid for the concrete in the parapet.

The cost of furnishing and placing the ¾" ϕ Bolts with their nuts and washers shall be included in the Box Beam Guide Rail Item.

SECTION C-C

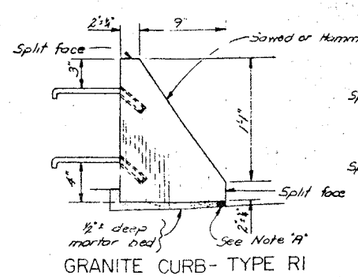


SECTION D-D

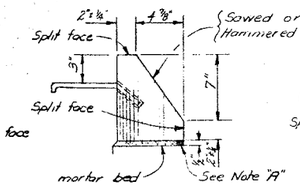


ANCHOR BAR

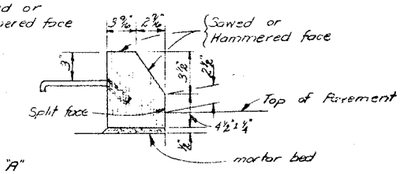
Note A:
Rake out joint to a depth of ¾" and tuck point flush with expoxy mortar.



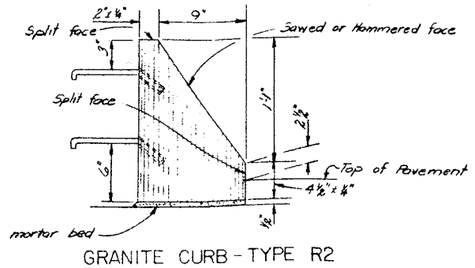
GRANITE CURB - TYPE R1



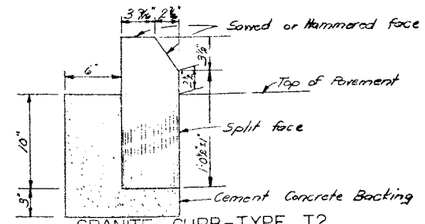
GRANITE CURB-TYPE S



GRANITE CURB-TYPE T1



GRANITE CURB - TYPE R2



GRANITE CURB-TYPE T2

BRIDGE NO. 2
INTERSTATE ROUTE 481 OVER DEWITT YARDS

CONCRETE PARAPET

DRAWING NO. 35 OF 50

DETAILED BY Vince Kazakovich
DETAIL CHECKED BY D Granoff 1/1/68
Rev: D Smith