I-81 VIADUCT PROJECT - PHASE 1, CONTRACT 2

PIN 3501.91, Contract D900056

DB CONTRACT DOCUMENTS REQUEST FOR PROPOSALS

PART 7

ENGINEERING DATA (PART 1 OF 5)

Draft October 19, 2022

ENGINEERING DATA

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ASBESTOS SURVEY REPORTS

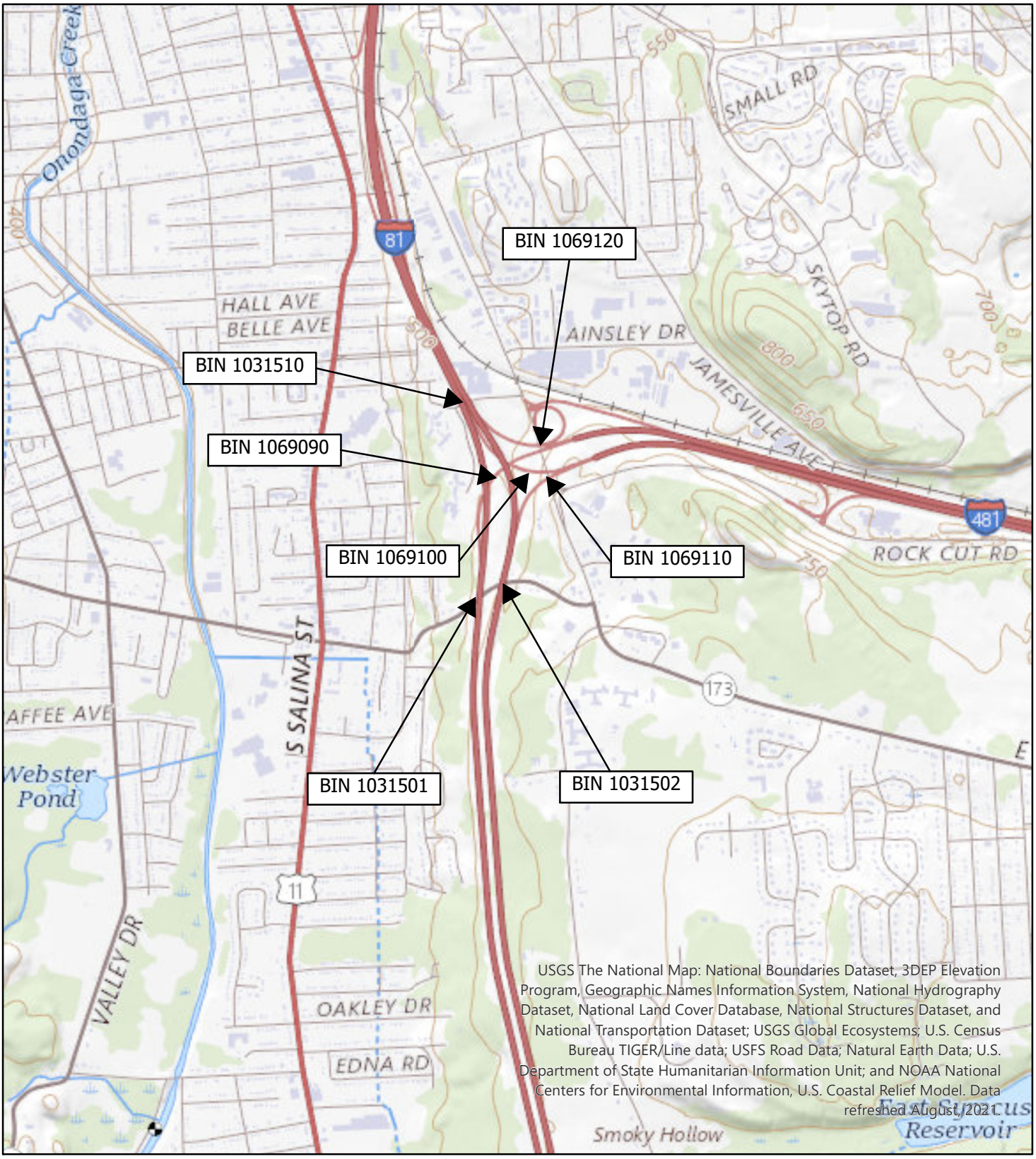
Asbestos Survey Reports

Watts Architects &Engineers
95 Perry Street
Suite 300
Buffalo, NY 14203
120 East Washington Street
Suite 414
Syracuse, NY 13202
325 Gold Street
Suite 701
Brooklyn, NY 11201

BRIDGE ASBESTOS INSPECTION RESULTS

NYSDOT D031085, PIN 3501.60 – I-81 Viaduct Replacement or New Urban Arterial City of Syracuse, Onondaga County

BIN 1031510 – East Glen over Existing I-81
BIN 1069090 – Existing I-481 SB to I-81 SB over Existing I-81 SB
BIN 1069100 – Existing I-81 SB Ramp to I-481 NB over Existing I-81 NB
BIN 1069110 – Brighton Ave over Existing I-481 Ramps from Existing I-81 SB and I-481 NB
BIN 1069120 – Brighton Ave over Existing Ramps from I-481 SB to I-81 NB
BIN 1031502 – I-81 NB over East Seneca Turnpike
BIN 1031501 – Existing I-81 SB over East Seneca Turnpike
BIN 1093561 - I-81 (Former I-481) SB over Manlius Center Road (Route 290)
BIN 1093571 - I-81 (Former I-481) SB over Conrail Railroad
BIN 1093572 - I-81 (Former I-481) NB over Conrail Railroad
BIN 1093562 - I-81 (Former I-481) NB over Manlius Center Road (Route 290)



0 0.17 0.35 0.7 Miles

Watts Architects &Engineers

Project Location Map 1 - Bridge Asbestos Inspections

NYSDOT D031085, I-81 Viaduct Replacement or New Urban Arterial
City of Syracuse, Onondaga County, New York

October 2022

0 0.45 0.9 1.8 Miles

Watts Architects &Engineers

Project Location Map 2 - Bridge Asbestos Inspections

NYSDOT D031085, I-81 Viaduct Replacement or New Urban Arterial
City of Syracuse, Onondaga County, New York

October 2022

BRIDGE REMOVALS

BIN 1031510 – East Glen over Existing I-81
BIN 1069090 – Existing I-481 SB to I-81 SB over Existing I-81 SB
BIN 1069100 – Existing I-81 SB Ramp to I-481 NB over Existing I-81 NB
BIN 1069110 – Brighton Ave over Existing I-481 Ramps from Existing I-81 SB and I-481 NB
BIN 1069120 – Brighton Ave over Existing Ramps from I-481 SB to I-81 NB

Watts
Architects
&Engineers

BIN 1031510

East Glen over Existing I-81

BIN 1031510

Location: East Glen Avenue over Interstate I-81

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**	**67 SQ FT**
210.3411	**Removal and Disposal of Caulking ACM (BV14) – Found in the abutment joint.**	**102.6 LINEAR FT**
210.3411	**Removal and Disposal of Caulking ACM (BV14) – Found around the guiderail base plates.**	**252 LINEAR FT**

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

Watts Inspection Findings (January 2014)

A bridge inspection was completed on 2/24/2014 and the following suspect ACMs were identified and sampled:

- Green bridge paint
- Cloth wrap over foam pipe insulation
- Bituminous seam filler in abutment joint
- **White caulk in abutment joint**
- Bearing pad
- **Compressed asbestos sheet packing**
- Masonry coating
- Beige paint on deck control joint
- Black tar-like filler in deck control joint
- **Grey caulk around guide rail supports**
- Pad below railing supports on repaired wall

Laboratory analysis indicated that the abutment joint caulk, the sheet packing, and the caulk around the guide rail supports sampled by Watts was confirmed positive for asbestos. The other listed materials were not positive for asbestos, per laboratory analytical results.

Review of Historic Plans and Previous Asbestos Survey Information

- The record plans (FIC 64-7, D259742) were reviewed in support of the field survey. The following suspect ACMs were identified:
    - Compressed asbestos sheet packing
    - Caulking compound
    - Bearing pads
    - Pipe insulation/wrap
    - Joint filler
    - Tar paper

- A previous asbestos assessment completed by C&S in 2013 was reviewed in support of this project. The following suspect materials were identified as being sampled for laboratory analysis:
    - Bridge paint
    - **Sheet packing**
    - **Caulking compound found in joints**
    - **Caulking compound associated with guide rail posts**
    - Bearing pads
    - Joint filler
    - Masonry coating
    - Pipe insultation

  Laboratory analysis indicates that the sheet packing, caulking materials was confirmed positive for asbestos.

Watts Architecture & Engineering

BRIDGE ASBESTOS FIELD INSPECTION FORM

BIN Number/Location: 1031510 (Glen Ave over I-81)

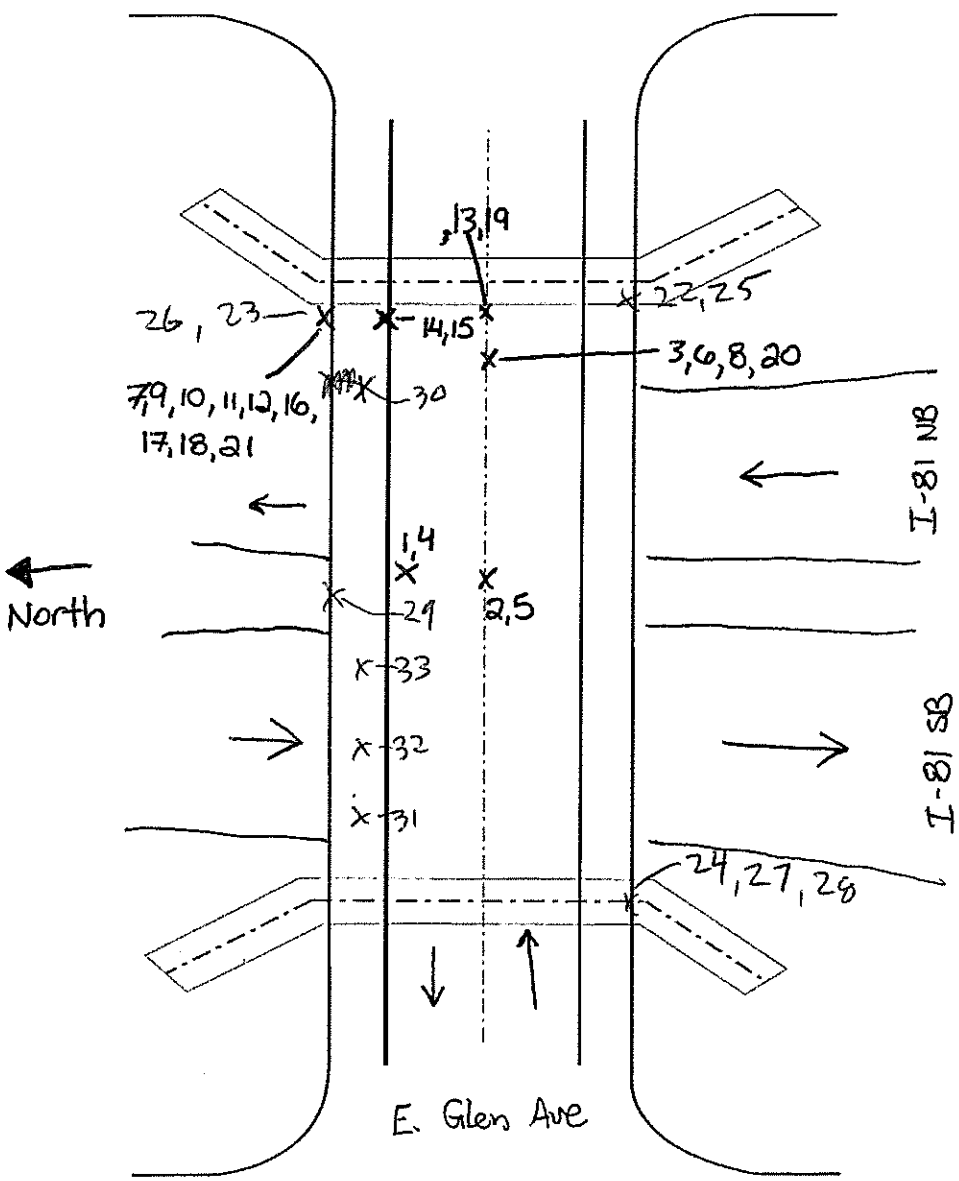
Inspection Date: 2-24-14 topside; 8/13/13 underside

Project Name: : I-81 Viaduct Replacement or New Urban Arterial

PIN Number: PIN: 3501.60, D031085

Inspector(s): Scott Matthews, Jerry Grady

Watts Project No: 13092



SAMPLE LOCATION PLAN VIEW - N.T.S.

Field Inspection Checklist Item	Investigated	Present	Sampled	Samples
Girder Paint	☐	☐	☒	1-3
Truss Paint	☐	☐	☒	
Abutment Coating	☐	☐	☒	19-21
Abutment Caulk	☐	☐	☒	10-12
Abut. Exp. Jt. Filler	☐	☐	☒	
Headwall Sheet Packing	☐	☐	☒	16-18
Bearing Pad	☐	☐	☒	13-15
Transite Pipe	☒	☐	☐	
Pipe Coating/Wtr. Proof	☐	☐	☒	4-6
Scupper Wtr. Proof	☐	☐	☐	
Dum Dum Paint	☐	☐	☐	
Deck ~~Caulk~~ Paint	☐	☐	☒	22,23,2
Deck Exp. Jt. Filler	☐	☐	☒	7-9
Approach Sheet Packing	☐	☐	☐	
Railing Paint	☐	☐	☐	
Railing Caulk	☐	☐	☒	28,29,3
Sidewalk Caulk	☐	☐	☐	
Lighting Pole Caulk	☐	☐	☐	
Masonry Castings	☐	☐	☐	
Miscellaneous Tar	☐	☐	☐	
Utilities	☐	☐	☐	
Other Black tar/caulk filler in control joint	☐	☐	☒	25,26,27
Other Bailing Pad	☐	☐	☒	31,32,33
Other	☐	☐	☐	
Other	☐	☐	☐	
Other	☐	☐	☐	

Notes:
- Abutment exp. joint caulk + filler found
- Sheet packing found
- wrap on foam pipe insulation sampled
- Green bridge paint

AmeriSci Job #: **113121095**

Client Name: Watts Architecture & Engineers

Table I
Summary of Bulk Asbestos Analysis Results
13092; I-81 Through Syracuse Bridge Inspections; Glen Ave Bridge

AmeriSci Sample #	Client Sample#	HG Area	Sample Weight (gram)	Heat Sensitive Organic %	Acid Soluble Inorganic %	Insoluble Non-Asbestos Inorganic %	** Asbestos % by PLM/DS	** Asbestos % by TEM
01	1031510-1	1	0.163	46.2	4.3	49.5	NAD	NAD
Location:	Green Bridge Paint; I-Beam - Near Center Support							
02	1031510-2	1	0.613	23.7	11.5	64.8	NAD	NAD
Location:	Green Bridge Paint; I-Beam - Near Middle Of Northbound Lanes							
03	1031510-3	1	0.199	41.9	5.4	52.8	NAD	NAD
Location:	Green Bridge Paint; 16" Horizontal Pipe - East End							
04	1031510-4	2	----	----	----	----	NAD	NA
Location:	Cloth Wrap Over Foam Pipe Insualtion; 16" Horizontal Pipe - Near Center Support							
05	1031510-5	2	----	----	----	----	NAD	NA
Location:	Cloth Wrap Over Foam Pipe Insualtion; 16" Horizontal Pipe - Middle Of Northbound Lanes							
06	1031510-6	2	----	----	----	----	NAD	NA
Location:	Cloth Wrap Over Foam Pipe Insualtion; 16" Horizontal Pipe - East Side							
07	1031510-7	3	0.202	81.8	12.4	5.8	NAD	Chrysotile Trace
Location:	Bituminous Seam Filler In Abutment Joint; Vertical Joint Of East Abutment - North							
08	1031510-8	3	0.140	72.8	15.7	11.4	NAD	NAD
Location:	Bituminous Seam Filler In Abutment Joint; Vertical Joint Of East Abutment - South							
09	1031510-9	3	0.277	87.0	7.6	5.4	NAD	NAD
Location:	Bituminous Seam Filler In Abutment Joint; Vertical Joint Of East Abutment - North							
10	1031510-10	4	0.600	14.0	59.5	21.2	Chrysotile 5.3	NA
Location:	White Caulk In Abutment Joint; Vertical Joint Of East Abutment - North							
11	1031510-11	4	0.224	12.8	69.4	17.7	NA/PS	NA
Location:	White Caulk In Abutment Joint; Vertical Joint Of East Abutment - North							
12	1031510-12	4	0.314	13.3	68.2	18.5	NA/PS	NA
Location:	White Caulk In Abutment Joint; Vertical Joint Of East Abutment - North							
13	1031510-13	5	0.413	77.3	11.5	11.1	NAD	Chrysotile Trace
Location:	Bearing Pad; East End 2nd Beam From North							
14	1031510-14	5	0.550	82.1	12.3	5.6	NAD	NAD
Location:	Bearing Pad; East End North Beam							
15	1031510-15	5	0.322	90.8	7.4	1.8	NAD	NAD
Location:	Bearing Pad; East End North Beam							
16	1031510-16	6	0.500	13.3	31.4	18.4	Chrysotile 36.9	NA
Location:	Sheet Packing; Northeast Corner Of Bridge							

See Reporting notes on last page

AmeriSci Job #: **113121095**

Client Name: Watts Architecture & Engineers

Table I
Summary of Bulk Asbestos Analysis Results
13092; I-81 Through Syracuse Bridge Inspections; Glen Ave Bridge

AmeriSci Sample #	Client Sample#	HG Area	Sample Weight (gram)	Heat Sensitive Organic %	Acid Soluble Inorganic %	Insoluble Non-Asbestos Inorganic %	** Asbestos % by PLM/DS	** Asbestos % by TEM
17	1031510-17	6	0.429	15.6	19.8	64.6	NA/PS	NA
Location:	Sheet Packing; Northeast Corner Of Bridge							
18	1031510-18	6	0.614	14.3	29.1	56.6	NA/PS	NA
Location:	Sheet Packing; Northeast Corner Of Bridge							
19	1031510-19	7	----	----	----	----	NAD	NA
Location:	Masonry Coating; Abutment Wall East Below Deck							
20	1031510-20	7	----	----	----	----	NAD	NA
Location:	Masonry Coating; South Extent Of East Abutment Wall							
21	1031510-21	7	----	----	----	----	NAD	NA
Location:	Masonry Coating; East Abutment Wall Beneath North Side Of Bridge							

Reviewed by: _____ Date Reviewed: _____ Analyzed By: Jean L. Mayes _____ Date Analyzed: 12/9/2013

Semi-Quantitative Analysis: NAD = no asbestos detected; NA = not analyzed; NA/PS = not analyzed due to positive stop; Trace = <1%;
PLM analysis by EPA 600/M4-82-020 per 40 CFR 763 (NVLAP Lab Code 101904-0) or NY ELAP 198.1 for New York friable samples which includes quantitation of any vermiculite observed (198.6 for NOB samples) (NY ELAP Lab # 10984);
TEM analysis by EPA 600/R-93/116 (not covered by NVLAP Bulk accreditation); or NY ELAP 198.4 for New York NOB samples (NY ELAP Lab # 10984);

** Warning Notes: Consider PLM fiber diameter limitation, only TEM will resolve fibers <0.25 micrometers in diameter. TEM bulk analysis is representative of the fine grained matrix material and may not be representative of non-uniformly dispersed debris, soils or other heterogeneous materials for which a combination PLM/TEM evaluation is recommended; Quantitation for beginning weights of <0.1 grams should be considered as qualitative only.

AmeriSci Richmond
13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800

PLM Bulk Asbestos Report

Watts Architecture & Engineers
Attn: Scott Matthews
2610 S Salina Street

Syracuse, NY 13210

Date Received 12/05/13 **AmeriSci Job #** 113121095
Date Examined 12/06/13 **P.O. #**
ELAP # 10984 **Page** 1 **of** 5
RE: 13092; I-81 Through Syracuse Bridge Inspections; Glen Ave Bridge

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
1031510-1 1	113121095-01	*No*	NAD (by NYS ELAP 198.6) by William M. Dunstan on 12/06/13

Location: Green Bridge Paint; I-Beam - Near Center Support

Analyst Description: Green, Heterogeneous, Non-Fibrous, Bulk Material
Asbestos Types:
Other Material: Non-fibrous 49.5 %
Comment: Heat Sensitive (organic): 46.2%; Acid Soluble (inorganic): 4.3%; Inert (Non-asbestos): 49.5%

1031510-2 1	113121095-02	*No*	NAD (by NYS ELAP 198.6) by William M. Dunstan on 12/06/13

Location: Green Bridge Paint; I-Beam - Near Middle Of Northbound Lanes

Analyst Description: Brown, Heterogeneous, Non-Fibrous, Bulk Material
Asbestos Types:
Other Material: Non-fibrous 64.8 %
Comment: Heat Sensitive (organic): 23.7%; Acid Soluble (inorganic): 11.5%; Inert (Non-asbestos): 64.8%

1031510-3 1	113121095-03	*No*	NAD (by NYS ELAP 198.6) by William M. Dunstan on 12/06/13

Location: Green Bridge Paint; 16" Horizontal Pipe - East End

Analyst Description: Green, Heterogeneous, Non-Fibrous, Bulk Material
Asbestos Types:
Other Material: Non-fibrous 52.8 %
Comment: Heat Sensitive (organic): 41.9%; Acid Soluble (inorganic): 5.4%; Inert (Non-asbestos): 52.8%

1031510-4 2	113121095-04	*No*	NAD (by NYS ELAP 198.1) by William M. Dunstan on 12/06/13

Location: Cloth Wrap Over Foam Pipe Insualtion; 16" Horizontal Pipe - Near Center Support

Analyst Description: Cream, Heterogeneous, Fibrous, Bulk Material
Asbestos Types:
Other Material: Cellulose 85 %, Non-fibrous 15 %

See Reporting notes on last page

PLM Bulk Asbestos Report

13092; I-81 Through Syracuse Bridge Inspections; Glen Ave Bridge

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
1031510-5 2	113121095-05 **Location:** Cloth Wrap Over Foam Pipe Insualtion; 16" Horizontal Pipe - Middle Of Northbound Lanes	***No***	NAD (by NYS ELAP 198.1) by William M. Dunstan on 12/06/13
Analyst Description: Cream, Heterogeneous, Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Cellulose 75 %, Non-fibrous 25 %			
1031510-6 2	113121095-06 **Location:** Cloth Wrap Over Foam Pipe Insualtion; 16" Horizontal Pipe - East Side	***No***	NAD (by NYS ELAP 198.1) by William M. Dunstan on 12/06/13
Analyst Description: Brown, Heterogeneous, Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Cellulose 85 %, Non-fibrous 15 %			
1031510-7 3	113121095-07 **Location:** Bituminous Seam Filler In Abutment Joint; Vertical Joint Of East Abutment - North	***No***	NAD (by NYS ELAP 198.6) by William M. Dunstan on 12/06/13
Analyst Description: Brown, Heterogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 5.9 % **Comment:** Heat Sensitive (organic): 81.8%; Acid Soluble (inorganic): 12.4%; Inert (Non-asbestos): 5.9%			
1031510-8 3	113121095-08 **Location:** Bituminous Seam Filler In Abutment Joint; Vertical Joint Of East Abutment - South	***No***	NAD (by NYS ELAP 198.6) by William M. Dunstan on 12/06/13
Analyst Description: Brown, Heterogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 11.4 % **Comment:** Heat Sensitive (organic): 72.8%; Acid Soluble (inorganic): 15.7%; Inert (Non-asbestos): 11.4%			
1031510-9 3	113121095-09 **Location:** Bituminous Seam Filler In Abutment Joint; Vertical Joint Of East Abutment - North	***No***	NAD (by NYS ELAP 198.6) by William M. Dunstan on 12/06/13
Analyst Description: Brown, Heterogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 5.4 % **Comment:** Heat Sensitive (organic): 87.0%; Acid Soluble (inorganic): 7.6%; Inert (Non-asbestos): 5.4%			

See Reporting notes on last page

PLM Bulk Asbestos Report

13092; I-81 Through Syracuse Bridge Inspections; Glen Ave Bridge

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
1031510-10	113121095-10	***Yes***	5.3 %
4	**Location:** White Caulk In Abutment Joint; Vertical Joint Of East Abutment - North		(by NYS ELAP 198.6) by William M. Dunstan on 12/06/13

Analyst Description: White/Gray, Heterogeneous, Non-Fibrous, Bulk Material
Asbestos Types: Chrysotile 5.3 %
Other Material: Non-fibrous 21.2 %
Comment: Heat Sensitive (organic): 14.0%; Acid Soluble (inorganic): 59.5%; Inert (Non-asbestos): 21.2%

1031510-11	113121095-11		NA/PS
4	**Location:** White Caulk In Abutment Joint; Vertical Joint Of East Abutment - North		

Analyst Description: Bulk Material
Asbestos Types:
Other Material:
Comment: Heat Sensitive (organic): 12.8%; Acid Soluble (inorganic): 69.4%; Inert (Non-asbestos): 17.7%

1031510-12	113121095-12		NA/PS
4	**Location:** White Caulk In Abutment Joint; Vertical Joint Of East Abutment - North		

Analyst Description: Bulk Material
Asbestos Types:
Other Material:
Comment: Heat Sensitive (organic): 13.3%; Acid Soluble (inorganic): 68.2%; Inert (Non-asbestos): 18.5%

1031510-13	113121095-13	***No***	NAD
5	**Location:** Bearing Pad; East End 2nd Beam From North		(by NYS ELAP 198.6) by William M. Dunstan on 12/06/13

Analyst Description: Brown/Tan, Heterogeneous, Non-Fibrous, Bulk Material
Asbestos Types:
Other Material: Non-fibrous 11.2 %
Comment: Heat Sensitive (organic): 77.3%; Acid Soluble (inorganic): 11.5%; Inert (Non-asbestos): 11.2%

1031510-14	113121095-14	***No***	NAD
5	**Location:** Bearing Pad; East End North Beam		(by NYS ELAP 198.6) by William M. Dunstan on 12/06/13

Analyst Description: Green/Brown, Heterogeneous, Non-Fibrous, Bulk Material
Asbestos Types:
Other Material: Non-fibrous 5.6 %
Comment: Heat Sensitive (organic): 82.1%; Acid Soluble (inorganic): 12.3%; Inert (Non-asbestos): 5.6%

See Reporting notes on last page

PLM Bulk Asbestos Report

13092; I-81 Through Syracuse Bridge Inspections; Glen Ave Bridge

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
1031510-15 5	113121095-15 **Location:** Bearing Pad; East End North Beam	***No***	NAD (by NYS ELAP 198.6) by William M. Dunstan on 12/06/13

Analyst Description: Green/Brown, Heterogeneous, Non-Fibrous, Bulk Material
Asbestos Types:
Other Material: Non-fibrous 1.8 %
Comment: Heat Sensitive (organic): 90.8%; Acid Soluble (inorganic): 7.4%; Inert (Non-asbestos): 1.8%

1031510-16 6	113121095-16 **Location:** Sheet Packing; Northeast Corner Of Bridge	***Yes***	36.9 % (by NYS ELAP 198.6) by William M. Dunstan on 12/06/13

Analyst Description: Brown, Heterogeneous, Non-Fibrous, Bulk Material
Asbestos Types: Chrysotile 36.9 %
Other Material: Non-fibrous 18.4 %
Comment: Heat Sensitive (organic): 13.3%; Acid Soluble (inorganic): 31.4%; Inert (Non-asbestos): 18.4%

1031510-17 6	113121095-17 **Location:** Sheet Packing; Northeast Corner Of Bridge		NA/PS

Analyst Description: Bulk Material
Asbestos Types:
Other Material:
Comment: Heat Sensitive (organic): 15.6%; Acid Soluble (inorganic): 19.8%; Inert (Non-asbestos): 64.6%

1031510-18 6	113121095-18 **Location:** Sheet Packing; Northeast Corner Of Bridge		NA/PS

Analyst Description: Bulk Material
Asbestos Types:
Other Material:
Comment: Heat Sensitive (organic): 14.3%; Acid Soluble (inorganic): 29.1%; Inert (Non-asbestos): 56.6%

1031510-19 7	113121095-19 **Location:** Masonry Coating; Abutment Wall East Below Deck	***No***	NAD (by NYS ELAP 198.1) by William M. Dunstan on 12/06/13

Analyst Description: Gray, Heterogeneous, Non-Fibrous, Cementitious, Bulk Material
Asbestos Types:
Other Material: Non-fibrous 100 %

See Reporting notes on last page

PLM Bulk Asbestos Report

13092; I-81 Through Syracuse Bridge Inspections; Glen Ave Bridge

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
1031510-20 7	113121095-20 **Location:** Masonry Coating; South Extent Of East Abutment Wall	***No***	NAD (by NYS ELAP 198.1) by William M. Dunstan on 12/06/13
Analyst Description: Gray, Heterogeneous, Non-Fibrous, Cementitious, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
1031510-21 7	113121095-21 **Location:** Masonry Coating; East Abutment Wall Beneath North Side Of Bridge	***No***	NAD (by NYS ELAP 198.1) by William M. Dunstan on 12/06/13
Analyst Description: Gray, Heterogeneous, Non-Fibrous, Cementitious, Bulk Material **Asbestos Types:** **Other Material:** Non-fibrous 100 %			

Reporting Notes:

Analyzed by: William M. Dunstan W. M. Dunstan Date 12/6/13

*NAD = no asbestos detected, Detection Limit <1%, Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; "Present" or NVA = "No Visible Asbestos" are observations made during a qualitative analysis; NA = not analyzed; NA/PS = not analyzed / positive stop; PLM Bulk Asbestos Analysis by EPA 600//M4-82-020 per 40 CFR 763 (NVLAP Lab Code 101904-0) and ELAP PLM Analysis Protocol 198.1 for New York friable samples which includes quantitation of any vermiculite observed (198.6 for NOB samples) or EPA 400 pt ct by EPA 600/M4-82-020 (NYSDOH ELAP Lab # 10984); CA ELAP Lab # 2508; Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the laboratory. This PLM report relates ONLY to the items tested.

Reviewed By:_____

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:	141400875
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:	03/03/14 10:00 AM
Analysis Date:	3/9/2014
Collected:	2/24/2014

Project: **13092 / I-81 Viaduct Replacement or New Urban Renewal: BIN 1031510 Glenn Ave.**

Test Report:Asbestos Analysis of Bulk Material

Test	Analyzed Date	Color	Non Asbestos Fibrous	Non Asbestos Non-Fibrous	Asbestos
Sample ID 1031510-22 *141400875-0001*		**Description**	beige paint on control joints, deckside		
		Homogeneity	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	3/7/2014	Gray /Tan			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	3/9/2014	Gray /Tan			**None Detected**
Sample ID 1031510-23 *141400875-0002*		**Description**	beige paint on control joints, deckside		
		Homogeneity	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	3/7/2014	Gray /Tan			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	3/9/2014	Gray /Tan			**None Detected**
Sample ID 1031510-24 *141400875-0003*		**Description**	beige paint on control joints, deckside		
		Homogeneity	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	3/7/2014	Gray /Tan			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	3/9/2014	Gray /Tan			**None Detected**
Sample ID 1031510-25 *141400875-0004*		**Description**	black tar-like filler in control joints		
		Homogeneity	Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	3/7/2014	Black			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	3/9/2014	Black			**None Detected**
Sample ID 1031510-26 *141400875-0005*		**Description**	black tar-like filler in control joints		
		Homogeneity	Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	3/7/2014	Black			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	3/9/2014	Black			**None Detected**

Initial Report From 03/10/2014 09:15:47

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:	141400875
CustomerID:	WATT50A
CustomerPO:	
ProjectID:	

Test Report:Asbestos Analysis of Bulk Material

Test		Color	Fibrous	Non Asbestos Non-Fibrous	Asbestos
Sample ID 1031510-27 *141400875-0006*		**Description**	black tar-like filler in control joints		
		Homogeneity	Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	3/7/2014	Black			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	3/9/2014	Black			**None Detected**
Sample ID 1031510-28 *141400875-0007*		**Description**	gray caulk around railing supports		
		Homogeneity	Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	3/7/2014	Gray			**1.4% Chrysotile**
					1.4% Total
TEM NYS 198.4 NOB	3/9/2014				**Not Analyzed**
Sample ID 1031510-29 *141400875-0008*		**Description**	gray caulk around railing supports		
		Homogeneity	Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	3/7/2014	Gray			**1.1% Chrysotile**
					1.1% Total
TEM NYS 198.4 NOB	3/9/2014				**Not Analyzed**
Sample ID 1031510-30 *141400875-0009*		**Description**	gray caulk around railing supports		
		Homogeneity	Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	3/7/2014	Gray			**2.2% Chrysotile**
					2.2% Total
TEM NYS 198.4 NOB	3/9/2014				**Not Analyzed**
Sample ID 1031510-31 *141400875-0010*		**Description**	pad below railing supports on repaired wall		
		Homogeneity	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	3/7/2014	Brown			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	3/9/2014	Brown			**None Detected**
Sample ID 1031510-32 *141400875-0011*		**Description**	pad below railing supports on repaired wall		
		Homogeneity	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	3/7/2014	Brown			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	3/9/2014	Brown			**None Detected**

Initial Report From 03/10/2014 09:15:47

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:	141400875
CustomerID:	WATT50A
CustomerPO:	
ProjectID:	

Test Report:Asbestos Analysis of Bulk Material

Test		Color	Fibrous	Non Asbestos Non-Fibrous	Asbestos
Sample ID	1031510-33	**Description**	pad below railing supports on repaired wall		
	141400875-0012	**Homogeneity**	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	3/7/2014	Brown			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	3/9/2014	Brown			**None Detected**

Analyst(s)
Rachel Giese

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 03/10/2014 09:15:47

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

113121095

Date: 8/13/13

Client: C&S Companies / NYS DOT

Watts Project No.: 13092

Project: I-81 through Syracuse Bridge Inspections

Turnaround Requested: ____ 3 Hr. ____ 48 Hr.

Building / Location: Glen Ave Bridge

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

Sample Number	Material Description	Sample Location	Laboratory Results PLM	Laboratory Results TEM
1031510- 1	Green Bridge Paint	I-Beam - near center support		
1031510- 2	Green Bridge Paint	I-Beam - near middle of northbound lanes		
1031510- 3	Green Bridge Paint	16" horizontal pipe - east end		
1031510- 4	Cloth Wrap over Foam Pipe Insulation	16" horizontal pipe - near center support		
1031510- 5	Cloth Wrap over Foam Pipe Insulation	16" horizontal pipe - middle of northbound lanes		
1031510- 6	Cloth Wrap over Foam Pipe Insulation	16" horizontal pipe - east side		
1031510- 7	Bituminous Seam Filler in Abutment Joint	Vertical joint of east abutment - north		
1031510- 8	Bituminous Seam Filler in Abutment Joint	Vertical joint of east abutment - south		
1031510- 9	Bituminous Seam Filler in Abutment Joint	Vertical joint of east abutment - north		
1031510- 10	White Caulk in Abutment Joint	Vertical joint of east abutment - north		
1031510- 11	White Caulk in Abutment Joint	Vertical joint of east abutment - north		
1031510- 12	White Caulk in Abutment Joint	Vertical joint of east abutment - north		

Sampled By: Scott Matthews Date: 8/13/2013 Received By: ____ Date: ____

Relinquished By: Scott Matthews to Fedex Date: 12-4-13 Received By: ____ Date: ____

RECEIVED DEC 05 2013 By

Comments: Positive Stop Anywhere in Series

H:\2013\13092 NYSDOT I-81 Viaduct\10. Env Data and Env Assessment\10.f. Asbestos-Lead-PCB Assessment\BIN 1031510\Field Investigation\1031510 - Glen Ave Bridge.xls
12/4/2013

113121095

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

Page: 2 of 2
Date: 8/13/13

Client: C&S Companies / NYS DOT
Watts Project No.: 13092
Project: I-81 through Syracuse Bridge Inspections
Turnaround Requested: ____ 3 Hr. ____ 48 Hr.
Building / Location: Glen Ave Bridge
Analysis Requested: ____ 6 Hr. ____ 72 Hr.
Contact: Scott Matthews at (315) 443-8611
PLM X TEM X
____ 12 Hr. X 5 Day
24 Hr. ____ 6-10 Day
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

Sample Number	Material Description	Sample Location	Laboratory Results	
			PLM	TEM
1031510- 13	Bearing Pad	East end 2nd beam from north		
1031510- 14	Bearing Pad	East end north beam		
1031510- 15	Bearing Pad	East end north beam		
1031510- 16	Sheet packing	Northeast corner of bridge		
1031510- 17	Sheet packing	Northeast corner of bridge		
1031510- 18	Sheet packing	Northeast corner of bridge		
1031510- 19	Masonry Coating	Abutment wall east below deck		
1031510- 20	Masonry Coating	South extent of east abutment wall		
1031510- 21	Masonry Coating	East abutment wall beneath north side of bridge		

Sampled By: Scott Matthews Date: 8/13/2013 Received By: Date:

Relinquished By: Scott Matthews to Fedex Date: 12-4-13 Received By: Date:

RECEIVED DEC 05 2013 By PCa

Comments: Positive Stop Anywhere in Series

141400875

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

Page: 1 of 1
Date: 2-24-14

Client: Parsons Engineering
Project: I-81 Viaduct Replacement or New Urban Renewal
Building / Location: BIN 1031510 Glenn Ave
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

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/1 week~~
24 Hr. ___ 6-10 Day

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

Sample Number	Material Description	Sample Location	Laboratory Results PLM	Laboratory Results TEM
1031510 - 22	Beige paint on control joint - deckside	SE corner		
23	" " "	NE corner		
24	" " "	SW corner		
25	Black tar-like filler in control joint	SE corner		
26	" " "	NE corner		
27	" " "	SW corner		
28	Grey caulk around railing supports	SW corner		
29	" " "	Northside - center		
30	" " "	Northeast ~~over~~ 7th support from east end		
31	Pad below railing supports on repaired wall	Northside - West end of Rail wall repair		
32	" " "	Northside - Center of repaired wall		
33	" " "	Northside - East end of repaired wall		

Sampled By: Scott Matthews Date: 2-20-14
Relinquished By: Scott Matthews to FedEx Date: 2-20-14
Received By: RECEIVED Date: FX
Received By: MAR 0 3 2014 Date: 10AM
BY:
Comments:

C:\Documents and Settings\smatthews\Desktop\BulkForm.xls
2/24/2014

OrderID: 141400875

Watts
Architects
&Engineers

BIN 1031510 Inspection Photos

East Glen over Existing I-81

Photo 1

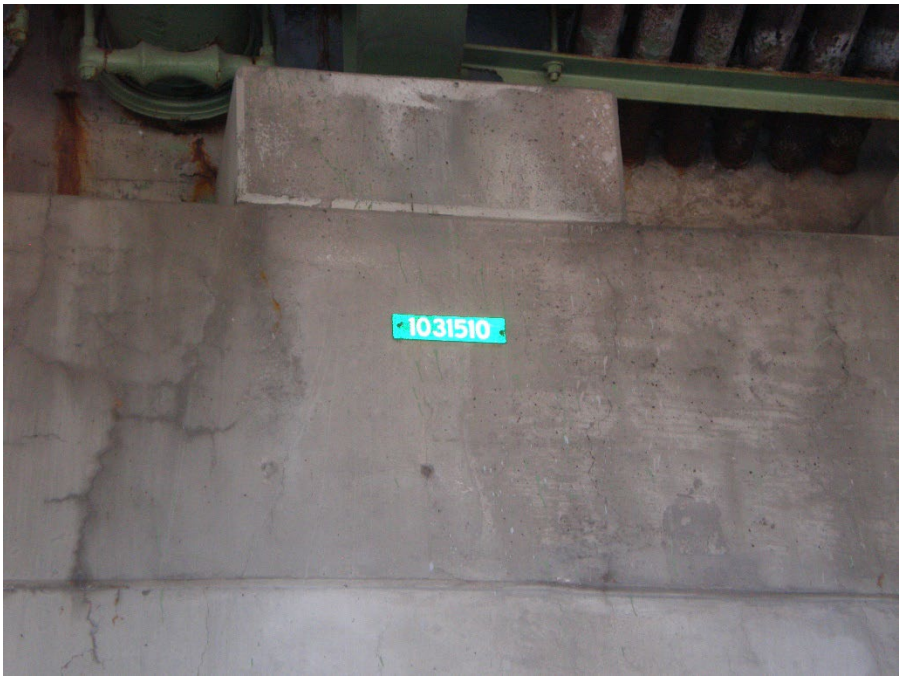


Photo 2

Photo 3

Photo 4

Photo 5

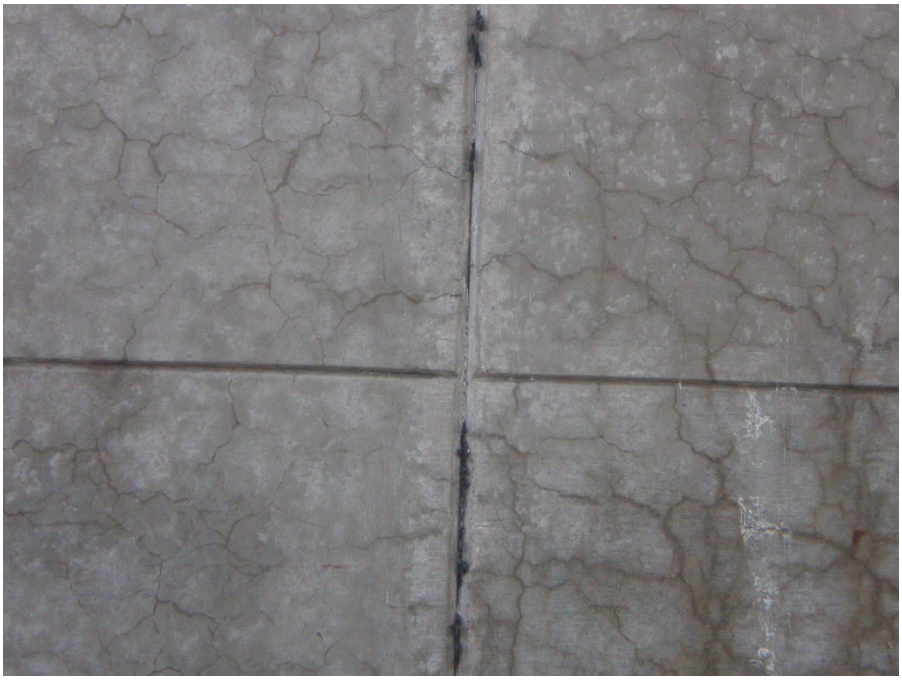
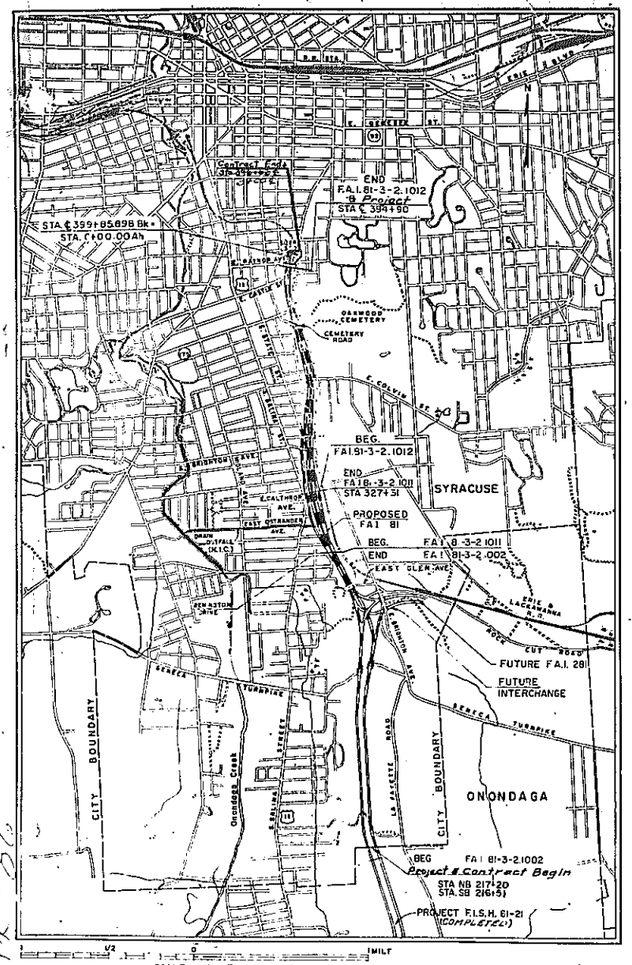


Photo 6

Photo 7

F.I.C. 64-7



VICINITY MAP

APPROX. LOCATION INTERSTATE TOURING ROUTE 81 FROM SYRACUSE SOUTH CITY LINE TO SIZER STREET

DESIGN TRAFFIC DATA

HIGHWAY OR CROSSROAD	CLASS	1975 D.H.	DESIGN SPEED (M.P.H.)	STOPPING SIGHT DISTANCE (FT.)
FAI 81, SOUTH OF FUTURE FAI 281	RURAL CLASS II	2100	70	600
NORTH OF FUTURE FAI 281	URBAN CLASS I	3100	60	475
EAST GLEN AVE.	U-7 (Mod)	13	30	200
E. BRIGHTON AVE. EAST OF FAI 81	U-7	550	30	200
E. BRIGHTON AVE. WEST OF FAI 81	U-6	800	30	200
EAST BRIGHTON AVE.	U-6	690	30	200
E. COLVIN ST.	U-5	1020	30	200
E. CASTLE ST.	U-7	350	30	200

STATE OF NEW YORK
DEPARTMENT OF PUBLIC WORKS
DIVISION OF CONSTRUCTION

PLANS FOR CONSTRUCTING WITH FEDERAL AID, THE

INTERSTATE ROUTE 505
(Syracuse City Line to Sizer Street)

From Station 58 216+51 to Station ~~396+82~~ 399+00, a length of ~~3.37~~ 3.44 miles (Plus 1.55 miles of Access) in the City of Syracuse

289 SHEETS — F.A. PROJECT No. I-81-2(80) — CONTRACT No. F.I.C. 64-7

ONONDAGA COUNTY

RECORD PLANS

* Total sheets increased from 289 to 290 by addition of sheet No. 10A.

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-81-2(80)	1R	289*

INTERSTATE ROUTE 505
SYRACUSE CITY LINE TO SIZER STREET

TYPE OF CONSTRUCTION

Main Line:
- Cement Concrete — 2.06 Miles
- Asphalt Concrete, Type 2A — 1.28 Miles
- Miscellaneous Work — 0.03 Mile

Access:
- Cement Concrete — 0.58 Mile
- Asphalt Concrete, Type 2A — 0.97 Mile

Including

H.G.S., Interstate over Seneca Turnpike
- N.B. 3 Span, Comp. I Beam, 204.0' Total
- S.B. 4 Span, Comp. I Beam, 274.3' Total

H.G.S., E. Glen Ave. over Interstate
- 2 Span, Comp. I Beam, 156.1' Total

H.G.S., Interstate over E. Calthrop Ave.
- 3 Span, Comp. I Beam, 145.9' Total

H.G.S., Interstate over E. Brighton Ave.
- 3 Span, Comp. I Beam, 203.0' Total

H.G.S., Interstate over E. Colvin St.
- 1 Span, Comp. I Beam, 65.2' Total

H.G.S., Interstate over E. Castle St.
- 3 Span, Comp. I Beam, 157.7' Total

STANDARD STRUCTURE SHEETS

50-34, 51-13A, 55-7E, 58-60, 59-48D1, 59-48D2, 61-7ESR1, 61-11, 61-45A, 61-48G, 61-48H, 61-62A, 61-62BR, 62-4, 62-6, 62-11C, 62-43B, 62-45B, 62-48X, 63-1, 63-3, 63-3A, 63-7, 63-8, 63-9HB, 63-10, 63-11W, 63-11X, 63-17, 63-19, 63-19A, 63-41, 63-43A, 63-45, 63-48A, 63-48B, 63-48C, 63-48E, 63-48F, 63-48J, 63-49, 63-52, 63-53, 63-61, 63-62C

All work contemplated under this contract to be covered by and in conformity with the specifications adopted January 2, 1962 except as modified on these plans and in the Itemized Proposal.

FOR THE CITY OF SYRACUSE

APPROVED BY: Carl R. Maar
CARL R. MAAR, CITY ENGINEER — 1-22 1964

APPROVED BY: COMMON COUNCIL CITY OF SYRACUSE — 1/22/64 1964

Date of Contract	April 27, 1964
Date Work Started	March 30, 1964
Date Completed	December 30, 1965
Date Accepted	December 30, 1965
Contract Amount	$7,245,905.74

District Engineer	E.E. Towlson
Contractor	D.W. Winkelman Co. Inc.
Engineer in charge	A.W. Fleming
Guide Railing, Galv. steel, std. sheet	Elderlee, Inc.
Box Beam Median Barrier	Elderlee, Inc.
Galvanized Steel Beam Mall Barrier	Elderlee, Inc.

Contract No.	Type Base	Road	Length Feet	Length Miles	Width	S.Y. of Pavt.	Depth
F.I.C. 64-7	Cement Concrete (12" gravel base)	S.B. Lane	10,337.85	1.995	24+36	32,132.29	9"
		N.B. Lane	10,536.56	1.958	24+36	32,379.29	9"
		Ramps	4,056.40	0.768	14+15	6,040.90	9"
		Calthrop Ave.	1,191.8	0.226	28-38	2,420.07	9"
	Asphalt Concrete (8" concrete foundation) (12" gravel base)	S.B. Lane	6,342.40	1.201	36-38	25,471.44	2½"
		N.B. Lane	6,326.90	1.198	36-38	25,425.04	2½"
		Ramps	3,402.35	0.644	12-24	11,921.88	2½"
		S. State Street	508.40	0.096	30-44	1,185.02	2½"
		E. Brighton Avenue	442.70	0.084	25-48	2,239.42	

Site of Work

Materials	Location	Co
Natural	Rosendale	Centu
Portland	Jamesville, N.Y.	Alpha
Portland	Oswego N.Y.	Huro
Long Joints	Buffalo N.Y.	Acme Highway Prod.
Trans Joints	Buffalo N.Y.	Acme Highway Prod.
Pav't Mesh	Donora, Pa.	U.S. Steel Corp.
Sand	Fulton, N.Y.	Massaro, Inc.
Stone	Jamesville N.Y.	Salvay Process Co
Sand	Homer, N.Y.	Concrete Materials

Type of Joints - SAWED & FORMED

A review of pages E1-E15 for BIN 1031510 identified the following as suspect materials:
- Asbestos Sheetpacking on pages E1 and E8
- Tar Paper on footings of piers on pages E4 and E9
- Caulking Compound on page E8
- Cotton/Stitched Paper Piping Cord on pages E8 and E14
- Cork Joint Filler on pages E8 and E14
- Bearing Pads on pages E9 and E11
- Pipe Insulation on page E11

WORKS .1964
of Engineer .1964
V. J. BURNS — Dep. Chief Engineer
Approved Feb. 3 .1964
JOHN J. RAYMOND — Asst. Deputy Chief Engineer

MAINTENANCE OF TRAFFIC
Traffic will be maintained by the Contractor under Item 76 (Req. B) during construction.

PREPARED PURSUANT TO THE HIGHWAY LAW AND RECOMMENDED BY:
EARLE E. TOWLSON, DISTRICT ENGINEER, DISTRICT NO. 3 — 2 Jan. 1964

PREPARED AND RECOMMENDED BY LEONARD S. WEGMAN CO. — N.Y.S. P.E. LIC. 23287 — DATE 12-9-63

DRAWN BY: G.K. — CHECKED BY: J.K. HYLAN — REVIEWED BY: H.B.K. — DATE

LEONARD S. WEGMAN CO. ENGINEERS, 235 EAST 45 STREET NEW YORK — SCALE AS NOTED — DWG. NO. FF-1

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
DIVISION ENGINEER — DATE

F.I.C. 64-7

F.I.C. 64-7

BIN 1031510

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-81-2(80)	148R	289

INTERSTATE ROUTE 505
SYRACUSE CITY LINE TO SIZER STREET

ESTIMATED QUANTITIES

ESTIMATED QUANTITIES FOR BRIDGE

ITEM	DESCRIPTION	UNIT	QUANTITIES NEAT	QUANTITIES PROPOSAL	USED
2EF-B	SELECTED GRANULAR FILL	C. Y.	805	900	837.8
2UF	UNDERDRAIN FILTER	C. Y.	11	15	11.2
5	TRENCH, CULVERT AND BRIDGE EXCAVATION	C. Y.	1,100	1,100	1057.8
11H-8	PERFORATED CORRUGATED METAL PIPE UNDERDRAIN (8" DIAMETER) 16 Ga.	L. F.	149	150	140.00
11-13	ROUND CORRUGATED METAL PIPE (18" DIAMETER) 16 Ga.	L. F.	33	40	40.00
15-~~2A~~ 2	PORTLAND CEMENT, TYPE-~~2A~~ 2	BBL.	1,255	1,260	1,358.19
15N	NATURAL ~~CEMENT, TYPE N~~	BBL.	129	130	—
18	CLASS A CONCRETE FOR STRUCTURES	C. Y.	98	100	101.62
18M	CLASS A CONCRETE FOR STRUCTURES (MONOLITHIC BRIDGE SLABS WITH INTEGRAL WEARING SURFACES)	C. Y.	140	140	146.09
20	CLASS B CONCRETE FOR STRUCTURES	C. Y.	667	670	643.40
24A	BAGGED SCREENED AGGREGATE	C. Y.	101	110	98.48
28	BAR REINFORCEMENT FOR STRUCTURES	LB.	103,000	103,000	104,138.00
28C	SHEAR CONNECTORS	L. F.	755	760	763.40
29	STRUCTURAL STEEL	LB.	199,000	199,000	188,771.00
30F	FRAMES AND GRATES - FABRICATED	S. F.	16	20	15.0
37AL-1	ALUMINUM RAILING (1 RAIL)	L. F.	336	340	335.60
61	BITUMINOUS MATERIAL	GAL.	120	120	140.00
83TX	TEMPORARY SHEET PILING	S. F.	4,300	4,300	1,312.00
95S	STONE CURB (GRANITE), TYPE S	L.F.	330	330	329.20
95SA	STONE CURB (GRANITE), END SECTION, TYPE A	EACH	4	4	4.00
121	TOPSOIL PLACED FROM STOCKPILES	C. Y.	8	10	8.00
123	SEEDING	ACRE	0.1	0.1	0.10
352XA	RUBBER JOINT MATERIAL	GAL.	3	3	10.00
36JD	EPOXY PROTECTIVE COATING FOR CONCRETE	S.F.	843	850	490.00
[illegible]	[illegible]	Lb			16.00

ESTIMATED QUANTITIES FOR GAS WORK

ITEM	DESCRIPTION	UNIT	QUANTITIES (NEAT)
801	INSTALL CONCRETE INSERTS AND 20" DIA. SLEEVES FOR 12" O. D. GAS MAIN.	L. S.	NEC.

ESTIMATED QUANTITIES FOR WATER WORK

ITEM	DESCRIPTION	UNIT	QUANTITIES (NEAT)
15-2A	PORTLAND CEMENT, TYPE 2A	BBL.	5
18	CLASS A CONCRETE FOR STRUCTURES	C.Y.	3
28	BAR REINFORCEMENT FOR STRUCTURES	LB.	500
510	FURNISH AND INSTALL 3" THICK INSULATION FOR 8.625" O.D. WATER MAIN	LF	158
701	FURNISH AND INSTALL 8.625" O.D. STEEL PIPE WATER MAIN	LF	158

GENERAL NOTES

1. WHEREVER REFERENCE IS MADE TO A DRAWING NUMBER PERTAINING TO THE STRUCTURE, IT REFERS TO THE NUMBER SHOWN IN THE BOTTOM TITLE BOX.
2. DESIGN SPECIFICATIONS AASHO 1961 MODIFIED;
   LIVE LOAD: H20-S16-44;
   FUTURE PAVING ALLOWANCE: 20 POUNDS PER SQ. FT.
3. MATERIAL AND CONSTRUCTION SPECIFICATIONS: SPECIFICATIONS OF NEW YORK STATE DEPARTMENT OF PUBLIC WORKS DATED JANUARY 2, 1962 WITH CURRENT ADDITIONS AND MODIFICATIONS.
4. 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.
5. THE COST OF FURNISHING AND INSTALLING THE COMPRESSED ASBESTOS SHEET PACKING, AND ALL JOINT MATERIAL, EXCEPT RUBBER JOINT MATERIAL, WILL BE PAID FOR UNDER THE VARIOUS ITEMS OF THE CONTRACT.
6. THE COST OF FURNISHING AND PLACING WATER USED FOR SELECTED GRANULAR FILL WILL BE PAID FOR UNDER ITEM IW AND IWA OF THE HIGHWAY PORTION OF THE CONTRACT.
7. FOR IDENTIFICATION PLATE DETAILS SEE STANDARD SHEET 63-41.
8. CONSTRUCTION JOINTS, OTHER THAN THOSE SHOWN, WILL NOT BE PERMITTED WITHOUT WRITTEN PERMISSION OF THE DEPUTY CHIEF ENGINEER (BRIDGES).
9. CONCRETE AND CEMENT ITEMS:

DESCRIPTION	ITEM NO.	TYPE OF CEMENT
ABUTMENTS AND WINGWALLS	20	2A + N
PIER FOOTINGS	20	2A + N
PIER COLUMNS, CAP BEAMS AND PEDESTALS	18	2A
SAFETY WALK, SIDEWALK AND PARAPET	18	2A
STRUCTURAL SLAB	18M	2A
ABUTMENT HEADERS	18M	2A

10. REINFORCEMENT:
    ALL REINFORCEMENT IS BAR REINFORCEMENT FOR STRUCTURES, ITEM 28.
    ALL SPLICES SHALL HAVE A MINIMUM LAP OF 20 BAR DIAMETERS.
    EMBEDMENT OF ALL BARS SHALL BE A MINIMUM OF 30 BAR DIAMETERS.
    BAR BENDING DIAGRAMS, BAR SCHEDULE NOTES AND TYPICAL 180° HOOK DETAIL ARE SHOWN ON DRAWING NO. E-10
11. CHAMFERS:
    ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED WITH 3/4" x 3/4" BEVELS UNLESS OTHERWISE SPECIFIED.
12. WORKING POINTS:
    ALL WORKING POINTS DESIGNATED AS W.P. #1 TO W.P. #5 ARE PRIMARY WORKING POINTS.
    W.P. #6 TO W.P. #15 ARE SECONDARY WORKING POINTS. THE STATIONS OF THE PRIMARY WORKING POINTS ARE SHOWN ON DRAWING NO. E-2 THE SECONDARY WORKING POINTS ARE TIED BY DISTANCES AND BEARINGS TO THE PRIMARY WORKING POINTS.

SUPERSTRUCTURE NOTES

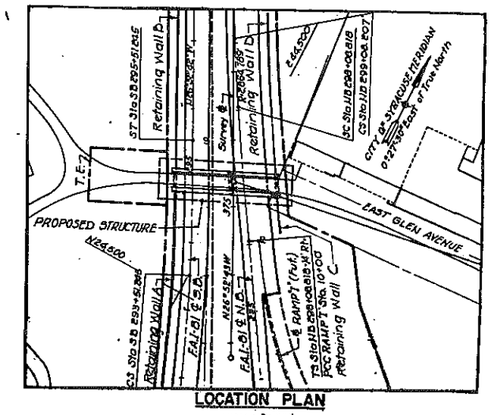
1. ALL BEARINGS ARE TO BE FIELD WELDED TO BEAMS.
2. SAFETY WALK AND SIDEWALK SHALL NOT BE SCORED.
3. ALL STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF A. S. T. M. DESIGNATION A7 UNLESS OTHERWISE NOTED.
   STEEL BASE METAL TO BE WELDED SHALL CONFORM TO THE REQUIREMENTS OF A. S. T. M. DESIGNATION A-373.
   HIGH STRENGTH BOLTS, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF A. S. T. M. DESIGNATION A-325.
   ALL STRUCTURAL STEEL, REGARDLESS OF TYPE, WILL BE PAID FOR UNDER ITEM 29.
   STRUCTURAL STEEL, A. S. T. M. DESIGNATION A36-62T MAY BE USED AS A SUBSTITUTE FOR A7 OR A373. WHERE SUCH A36-62T STEEL IS TO BE WELDED, MINIMUM PREHEAT AND INTERPASS TEMPERATURES SHALL BE MAINTAINED FOR WELDING IN ACCORDANCE WITH THE FOLLOWING TABLES:

THICKNESS OF THICKEST PART AT POINT OF WELDING	MINIMUM PREHEAT AND INTERPASS TEMPERATURES
TO 1" INCL.	NONE*
OVER 1" TO 2" INCL.	50°F *
OVER 2"	150°F

   *WHEN BASE METAL TEMPERATURES ARE BELOW 32°F PREHEAT BASE METAL TO AT LEAST 70°F AND MAINTAIN DURING WELDING.
   WHERE SUCH A36-62T STEEL IS TO BE WELDED, LOW HYDROGEN TYPE ELECTRODES, CONFORMING TO A. W. S. - A. S. T. M. SPECIFICATION FOR MILD STEEL ARC WELDING ELECTRODES, CLASSIFICATION E7015, E7016 & E7018.
4. TO INSURE UNIFORM GRADES FOR THE SURFACE OF ROADWAY UNDER DEAD LOAD, AFTER ALL SUPERSTRUCTURE STEEL HAS BEEN ERECTED AND BRACED IN ITS FINAL POSITION, ELEVATION SHALL BE TAKEN ON THE TOP OF THE STEEL AT THE CENTER LINE OF WEB AT EACH CENTER LINE 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 WILL BE EQUAL TO THE DIFFERENCE IN ELEVATION BETWEEN THE BOTTOM OF SLAB ELEVATIONS AND THE TOP OF STEEL ELEVATIONS PLUS THE DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD.
5. IF THE CONTRACTOR ELECTS TO USE CORRUGATED METAL FORMS FOR THE STRUCTURAL SLAB, THE DETAILS OF THESE FORMS SHALL BE SUBMITTED TO THE DEPUTY CHIEF ENGINEER (BRIDGES) FOR APPROVAL, PRIOR TO THEIR USE. THE CONTRACTOR'S ATTENTION IS DIRECTED TO ADDITIONAL NOTES APPEARING IN THE PROPOSAL RELATIVE TO CORRUGATED METAL FORMS.
6. UNLESS OTHERWISE SHOWN, THE MINIMUM CONCRETE COVER FOR REINFORCING STEEL IN THE SUPERSTRUCTURE SHALL BE AS FOLLOWS:

BRIDGE SLAB - TOP OF SLAB	2"
BRIDGE SLAB - BOTTOM OF SLAB	1"
BRIDGE SLAB - EXTERIOR FACE	2-1/2"
EXTERIOR FACE OF PARAPET	2-3/4"
INTERIOR FACE OF PARAPET	2"

7. MAROON PRIMER, ITEM M18B, WILL NOT BE APPROVED FOR USE ON THIS CONTRACT.
8. FILLET WELDING ACROSS FLANGES WHICH CARRY TENSILE STRESSES SHALL ONLY BE PERFORMED WITH THE MINIMUM PREHEAT OF 200°F.
9. Concrete Surface Treatment as specified on page 200 N. Y. S. Specifications Jan. 2, 1962. shall not be used in this contract.



LOCATION PLAN
SCALE: 1" = 100'

INDEX OF PLANS

E-1 ESTIMATED QUANTITIES AND GENERAL NOTES
E-2 GRADING AND LAYOUT PLAN
E-3 PAVING PLAN, PROFILES AND APPROACH SECTION
E-4 SOUTH ELEVATION AND LONGITUDINAL SECTION
E-5 ABUTMENTS
E-6 ABUTMENT DETAILS I
E-7 ABUTMENT DETAILS II
E-8 DETAILS OF JOINTS AND CATCH BASIN
E-9 PIER
E-10 REINFORCEMENT BENDING DIAGRAMS AND SUBSTRUCTURE BAR SCHEDULES
E-11 BRIDGE CROSS SECTION AND FRAMING PLAN
E-12 SUPERSTRUCTURE DETAILS
E-13 RAILING ELEVATIONS
E-14 RAILING, PARAPET & CURB DETAILS
E-15 SLAB REINFORCEMENT AND BAR SCHEDULE

Calls out asbestos sheetpacking

SUBSTRUCTURE NOTES

1. TOP OF BACKWALLS ON WHICH ASBESTOS SHEET PACKING IS TO BE PLACED SHALL BE STEEL TROWEL FINISHED.
2. 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.
3. EPOXY PROTECTIVE COATING FOR CONCRETE SHALL BE APPLIED TO THE FOLLOWING SURFACES:
   ABUTMENTS - ALL EXPOSED PEDESTAL SURFACES, BRIDGE SEATS, EXPOSED VERTICAL SURFACES OF BACKWALL AND CURTAIN WALLS FACING THE SUPERSTRUCTURE.
   PIERS - ALL PEDESTAL SURFACES AND THE TOP SURFACES OF PIER BETWEEN PEDESTALS INCLUDING THE EDGE CHAMFER AT TOP EDGE OF PIER.
4. FOR DESIGN PURPOSES THE FOUNDATION PRESSURE OF BOTH ABUTMENTS DOES NOT EXCEED 2.0 TONS PER SQUARE FOOT, THE FOUNDATION PRESSURE OF PIERS DOES NOT EXCEED 2.0 TONS PER SQUARE FOOT.
5. ITEM 83TX TO BE USED ONLY WHERE DEPTH OF EXCAVATION EXCEEDS 5 FEET.
6. UNLESS OTHERWISE SHOWN, THE MINIMUM CONCRETE COVER FOR REINFORCING STEEL IN THE SUBSTRUCTURE SHALL BE AS FOLLOWS:

FOOTINGS (INCLUDING UNFORMED BOTTOM)	3"
WALLS ABOVE FOOTINGS	2"
BEAMS AND COLUMNS OF PIERS	2"

PREPARED AND RECOMMENDED BY
LEONARD S. WEGMAN CO.
BY Leonard S. Wegman
* N.Y.S. P.E. LIC. 23287 DATE 12-9-63

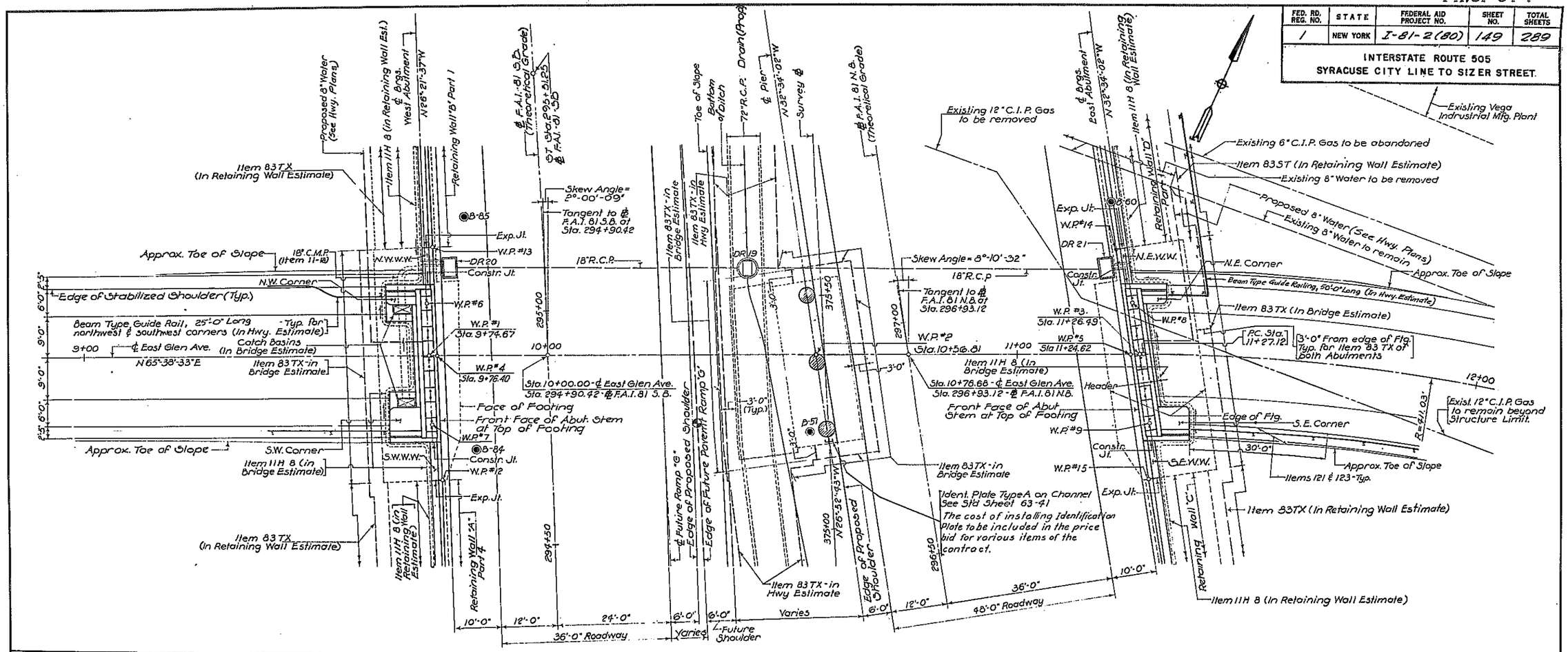
EAST GLEN AVENUE OVER F.A.I. 81
ESTIMATED QUANTITIES AND GENERAL NOTES

DRAWN BY: B.B.	CHECKED BY: H.R.	LEONARD S. WEGMAN CO. ENGINEERS 235 EAST 45TH STREET, NEW YORK 17, N.Y.	SCALE NOTED
REVIEWED BY: [illegible]	DATE 12-9-63		DWG. NO. E-1

COLLYER PRESS INC. BROOKLYN 11, N.Y. REPORTS NO. 8000

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-81-2(80)	149	289

INTERSTATE ROUTE 505
SYRACUSE CITY LINE TO SIZER STREET.



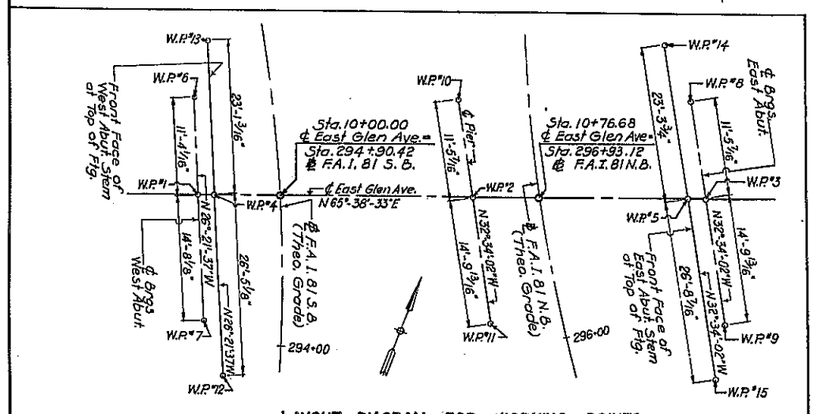
GRADING AND LAYOUT PLAN

Scale: 1" = 10'-0"

B: Location of Boring

P: Point of Min. Vertical Clearance

DR: Drainage Structure



LAYOUT DIAGRAM FOR WORKING POINTS

N.T.S.

Note: See "Grading & Layout Plan" for Station of Working Points: #1 thru #5

NOTES:

1. GRADING AND LAYOUT PLAN SHOWN WITH BRIDGE SUPERSTRUCTURE AND CAP BEAM OF PIER REMOVED.
2. FOR ADDITIONAL DRAINAGE DETAILS AND INFORMATION SEE HIGHWAY PLANS.
3. UNLESS OTHERWISE NOTED, ALL DRAINAGE STRUCTURES AND PIPES SHALL BE INCLUDED IN HWY. ESTIMATE.

PREPARED AND RECOMMENDED BY LEONARD S. WEGMAN CO.
BY Nelson Leonard Wegman
N.Y.S. P.E. LIC. 23287 DATE 12-9-65

EAST GLEN AVENUE OVER F.A.I. 81

GRADING AND LAYOUT PLAN

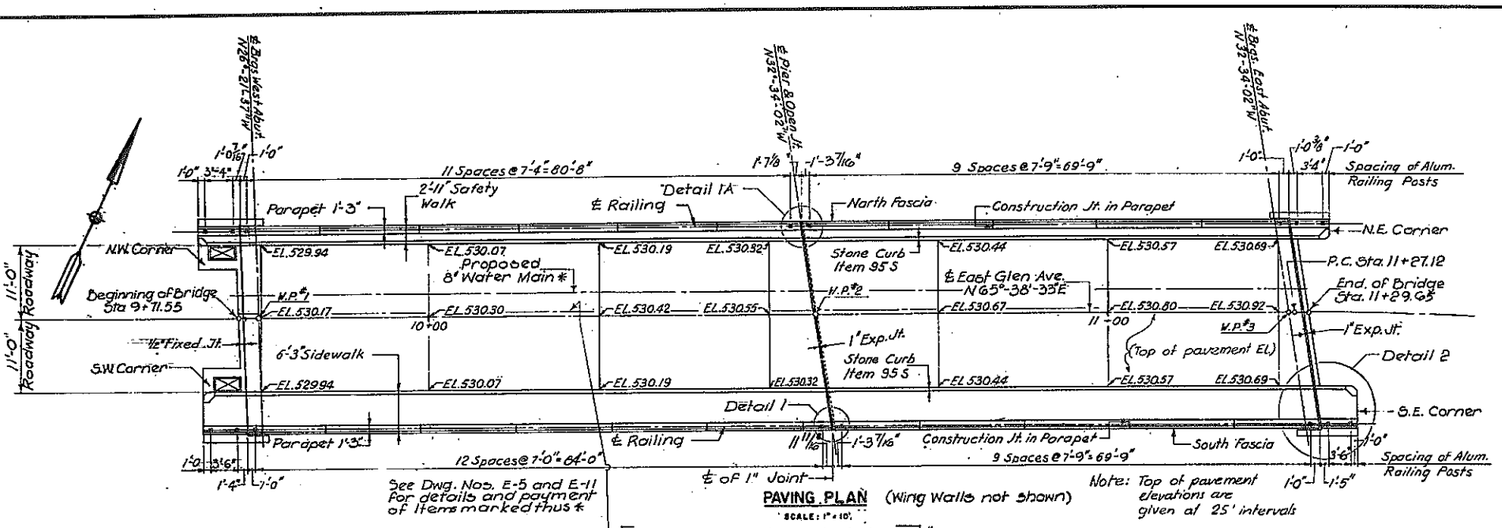
DRAWN BY:	CHECKED BY:	LEONARD S. WEGMAN CO. ENGINEERS	SCALE AS NOTED
HL	FG		
REVIEWED BY:	DATE	236 EAST 48TH STREET, NEW YORK 17, N.Y.	DWG. NO. E-2
	12-9-65		

GRAVIA PRINT, INC., BROOKLYN 17, N. Y. REPRODUCE NO. 40661

F.I.C. 64-7

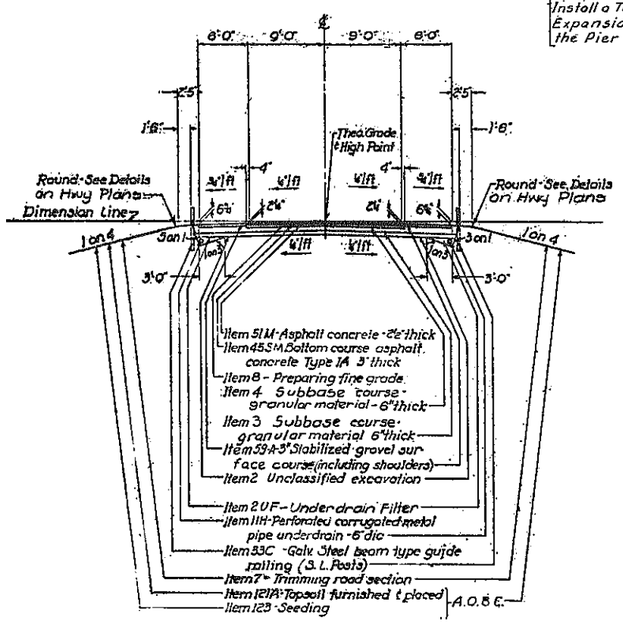
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-81-2 (80)	150	289

INTERSTATE ROUTE 505
SYRACUSE CITY LINE TO SIZER STREET



PAVING PLAN (Wing Walls not shown)
SCALE: 1" = 10'

Note: Top of pavement elevations are given at 25' intervals



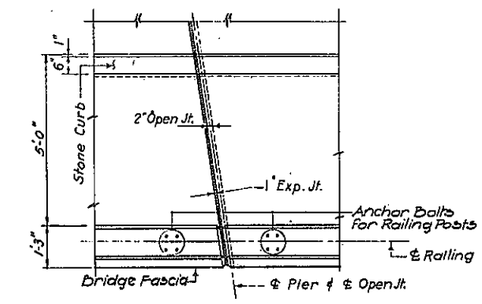
TYPICAL ROADWAY SECTION

(EAST GLEN AVENUE)

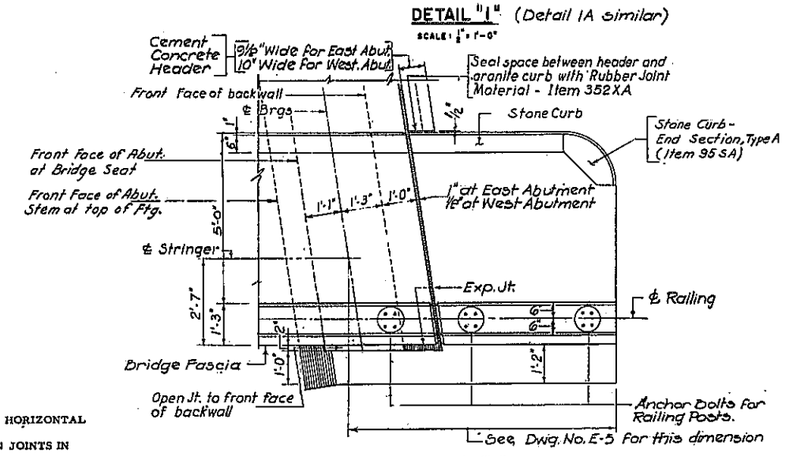
UNLESS OTHERWISE SPECIFIED ALL ITEMS SHOWN ON "TYPICAL ROADWAY SECTION" ARE INCLUDED IN HIGHWAY ESTIMATE.

NOTES:

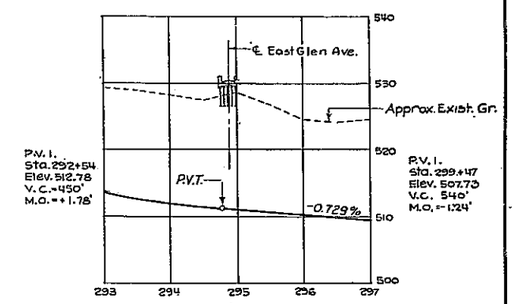
1. ALL DIMENSIONS SHOWN ON PAVING PLAN ARE HORIZONTAL DIMENSIONS.
2. FOR LOCATION AND DETAILS OF CONSTRUCTION JOINTS IN PARAPET, SEE DWG. NOS. E-13 AND E-14.
3. SEE DWG. NO. E-8 FOR ADDITIONAL JOINT AND CATCH BASIN DETAILS.
4. SEE DWG. NO. E-14 FOR RAILING, PARAPET AND CURB DETAILS.
5. FOR LOCATION OF RAILING POSTS AND RAILING DETAILS SEE DWG. NOS. E-13 AND E-14.
6. SEE "LONGITUDINAL SECTION" ON DWG. NO. E-4 FOR ROADWAY SECTION OF F. A. I. -81



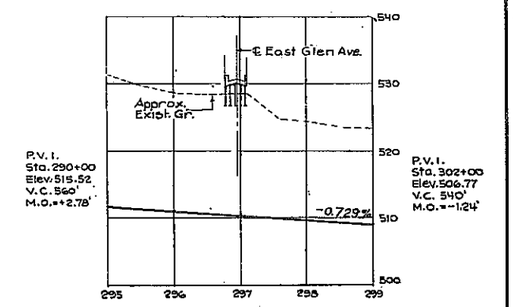
DETAIL "1" (Detail 1A similar)
SCALE: ½" = 1'-0"



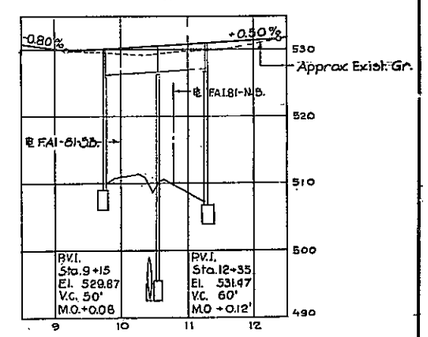
DETAIL "2"
SCALE: ½" = 1'-0"
(Typical partial plan of Expansion Joint at Abutment - S.E. Corner shown, other corners similar)



F.A.I. 81 S.B



F.A.I. 81 N.B.



EAST GLEN AVENUE
PROFILES
SCALES: VERTICAL 1" = 10' HORIZONTAL 1" = 100'

EAST GLEN AVENUE OVER F.A.I. 81
PAVING PLAN, PROFILES AND APPROACH SECTION

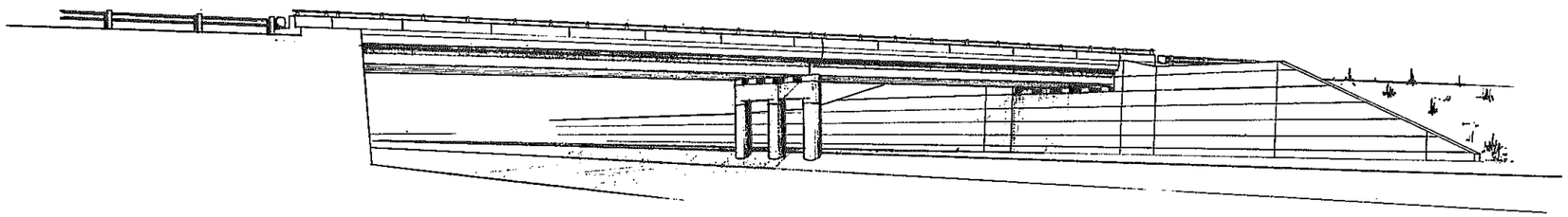
PREPARED AND RECOMMENDED BY LEONARD S. WEGMAN CO.
BY Hubert Chandler
N.Y.S. P.E. LIC. 25287 DATE 12-9-63

DRAWN BY: AK-BB	CHECKED BY: FG-AB	LEONARD S. WEGMAN CO. ENGINEERS 235 EAST 45TH STREET, NEW YORK 17, N.Y.	SCALE AS NOTED
REVIEWED BY: Ewy Hall	DATE 12-9-63		DWG. NO. E-3

F.I.C. 64-7

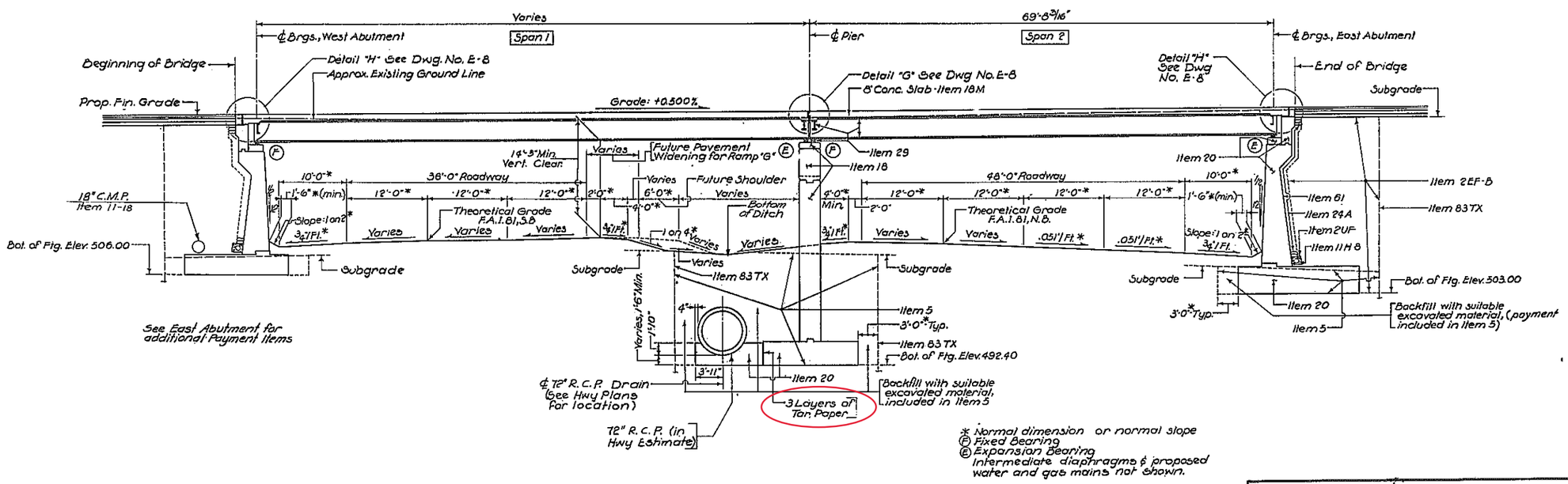
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-81-2(80)	151	289

INTERSTATE ROUTE 505
SYRACUSE CITY LINE TO SIZER STREET



SOUTH ELEVATION

SCALE: 1" = 10'



* Normal dimension or normal slope
(F) Fixed Bearing
(E) Expansion Bearing
Intermediate diaphragms & proposed water and gas mains not shown.

LONGITUDINAL SECTION

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

PREPARED AND RECOMMENDED BY LEONARD S. WEGMAN CO.
BY [signature]
N.Y.S. P.E. LIC. 23287 DATE 12-9-63

EAST GLEN AVENUE OVER F.A.I. 81
SOUTH ELEVATION AND LONGITUDINAL SECTION

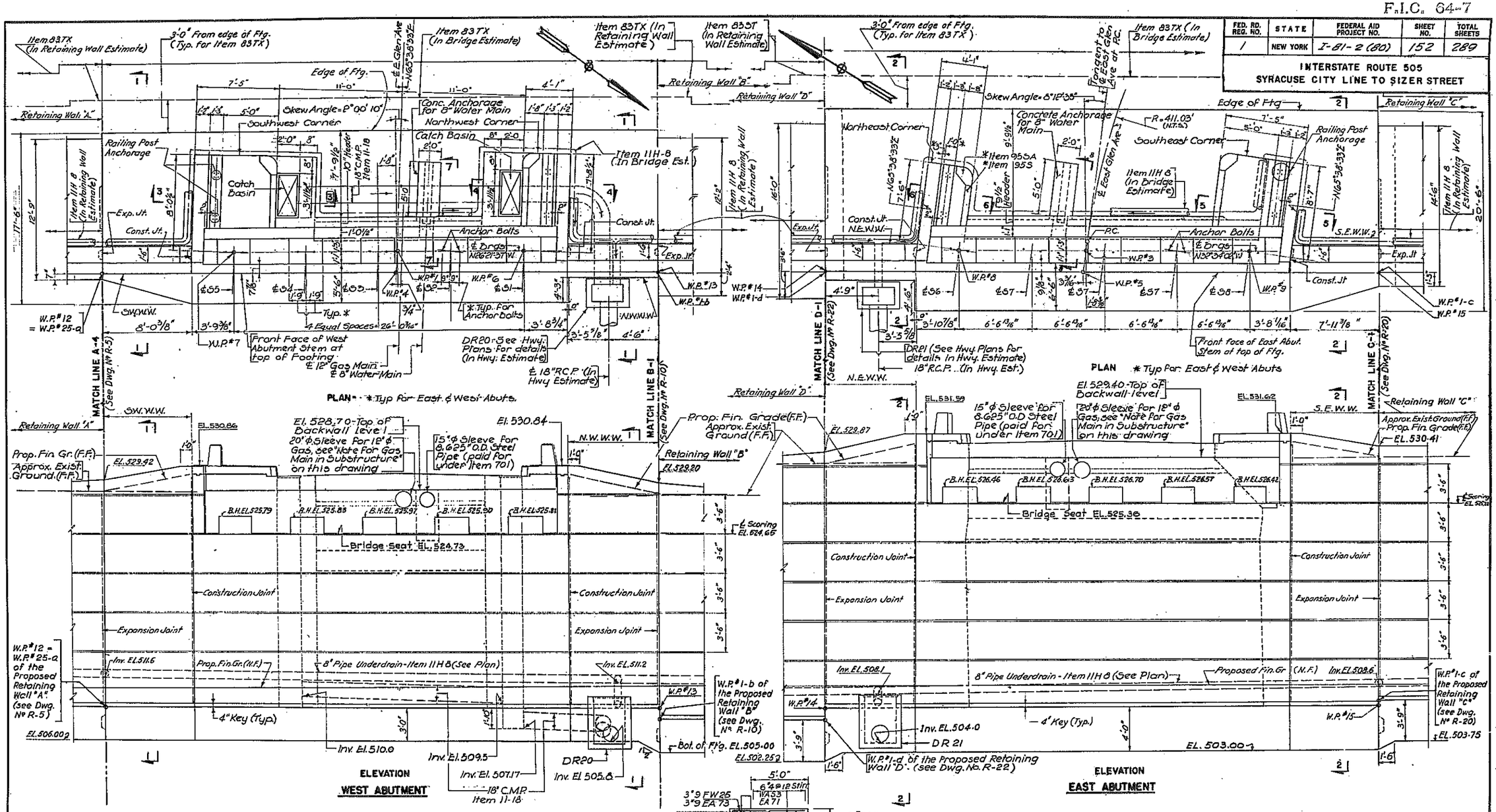
DRAWN BY: HL	CHECKED BY: FG	LEONARD S. WEGMAN CO. ENGINEERS 235 EAST 45TH STREET, NEW YORK 17, N.Y.	SCALE AS NOTED
REVIEWED BY: [signature]	DATE 12-9-63		DWG. NO. E-4

ORLYIE PRESS, INC., BROOKLYN 17, N.Y. REPRODUCE NO. 600M

F.I.C. 64-7

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-81-2 (80)	152	289

INTERSTATE ROUTE 505
SYRACUSE CITY LINE TO SIZER STREET



NOTES:
1. FOR SUBSTRUCTURE NOTES SEE DWG. NO. E-1
2. SEE DWG. NO. E-7 FOR SECTIONS 1-1 THROUGH 6-6 & TYPICAL ABUTMENT SECTIONS.
3. DETAILS OF JOINTS AND CATCH BASIN ARE SHOWN ON DWG. NO. E-8
4. ADDITIONAL PAYMENT ITEMS AND LIMITS FOR ABUTMENTS AND WINGWALLS ARE SHOWN ON DWG. NOS. E-2, E-4 & E-7.
5. SEE DWG. NOS. E-13 & E-14 FOR SPACING OF RAILING POSTS AND RAILING DETAILS.

NOTE FOR GAS MAIN IN SUBSTRUCTURE:
SLEEVES SHALL BE FURNISHED BY NIAGARA MOHAWK POWER CO. AND INSTALLED BY CONTRACTOR. COST OF INSTALLATION TO BE PAID FOR UNDER ITEM 801.

PREPARED AND RECOMMENDED BY LEONARD S. WEGMAN CO.
BY Leonard S. Wegman
N.Y.S. P.E. LIC. (23287) DATE 12-9-63

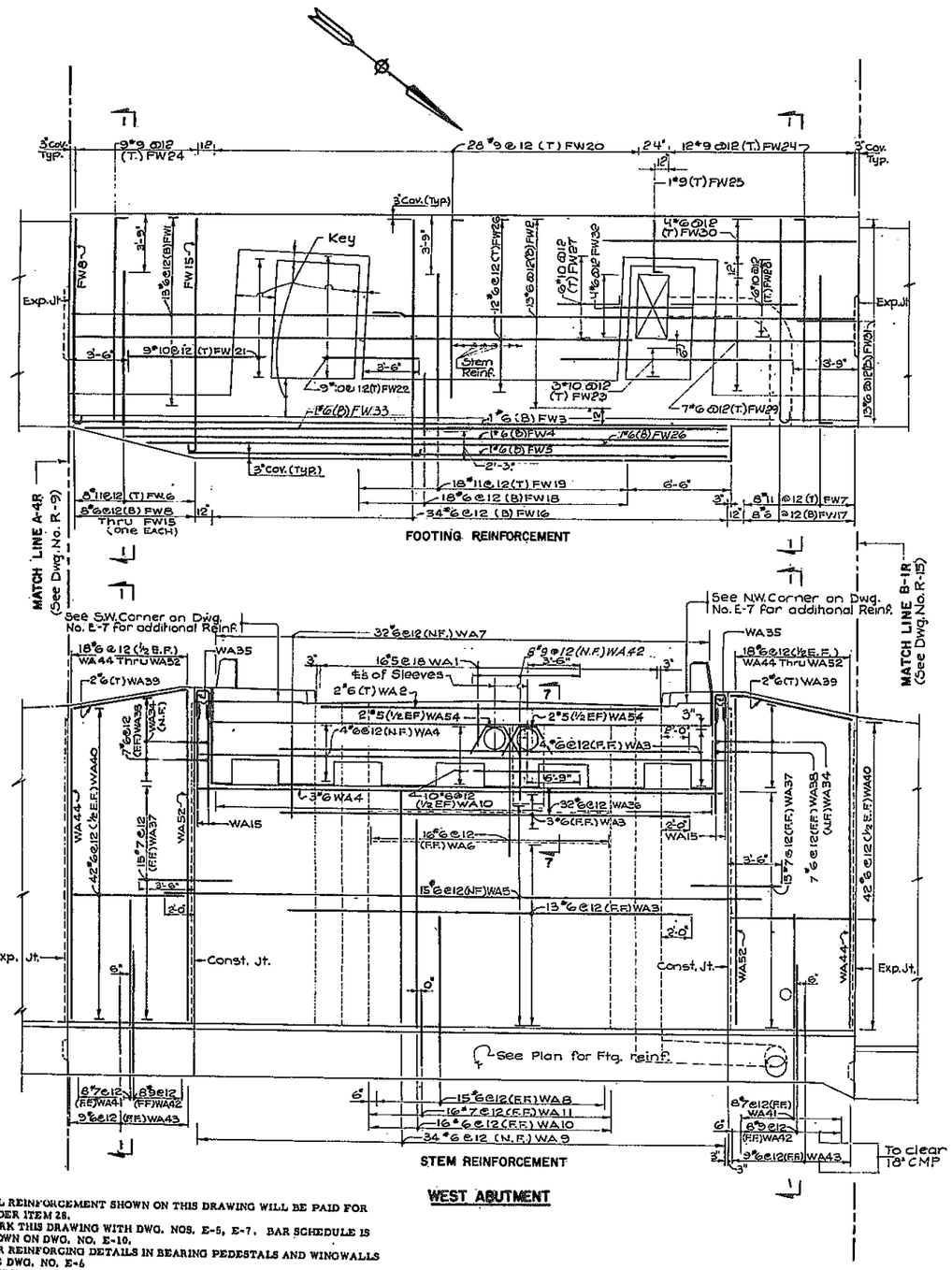
EAST GLEN AVENUE OVER F.A.I. 81
ABUTMENTS

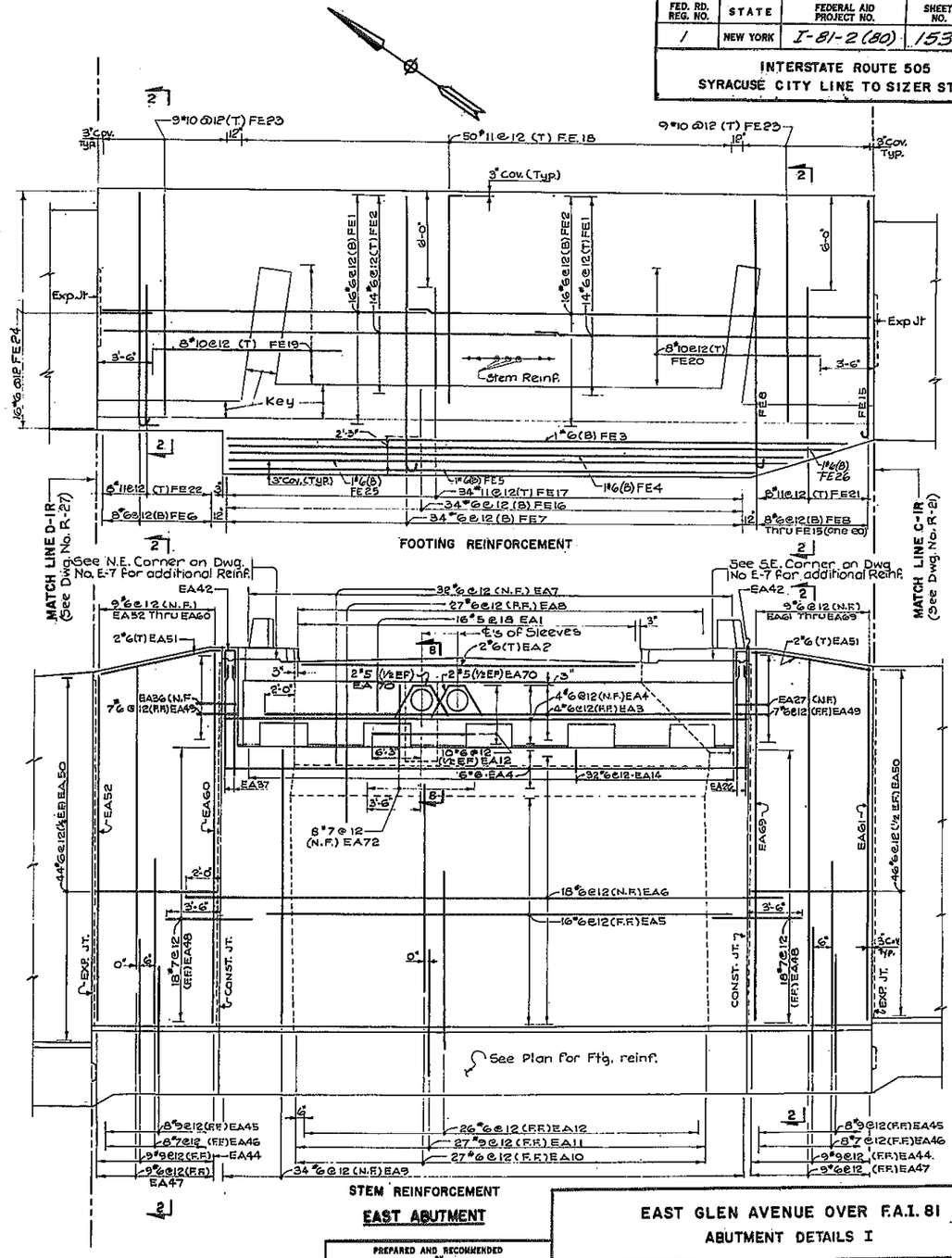
DRAWN BY:	CHECKED BY:	LEONARD S. WEGMAN CO. ENGINEERS	SCALE 1/4" = 1'-0"
BB HG	JC EF	235 EAST 45TH STREET, NEW YORK 17, N.Y.	DWG. NO. E-5
REVIEWED BY:	DATE		
	12-9-63		

F.I.C. 64-7

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-81-2(80)	153	289

INTERSTATE ROUTE 505
SYRACUSE CITY LINE TO SIZER STREET





NOTES:
1. ALL REINFORCEMENT SHOWN ON THIS DRAWING WILL BE PAID FOR UNDER ITEM 28.
2. WORK THIS DRAWING WITH DWG. NOS. E-5, E-7. BAR SCHEDULE IS SHOWN ON DWG. NO. E-10.
3. FOR REINFORCING DETAILS IN BEARING PEDESTALS AND WINGWALLS SEE DWG. NO. E-6
4. SECTIONS 1-1 & 2-2 ARE SHOWN ON DWG. NO. E-7.
5. SECTIONS 7-7 & 8-8 ARE SHOWN ON DWG. NO. E-5

PREPARED AND RECOMMENDED BY LEONARD S. WEGMAN CO.
BY Robert Leonard Wegman
N.Y.S. P.E. LIC. 23287 DATE 12-9-63

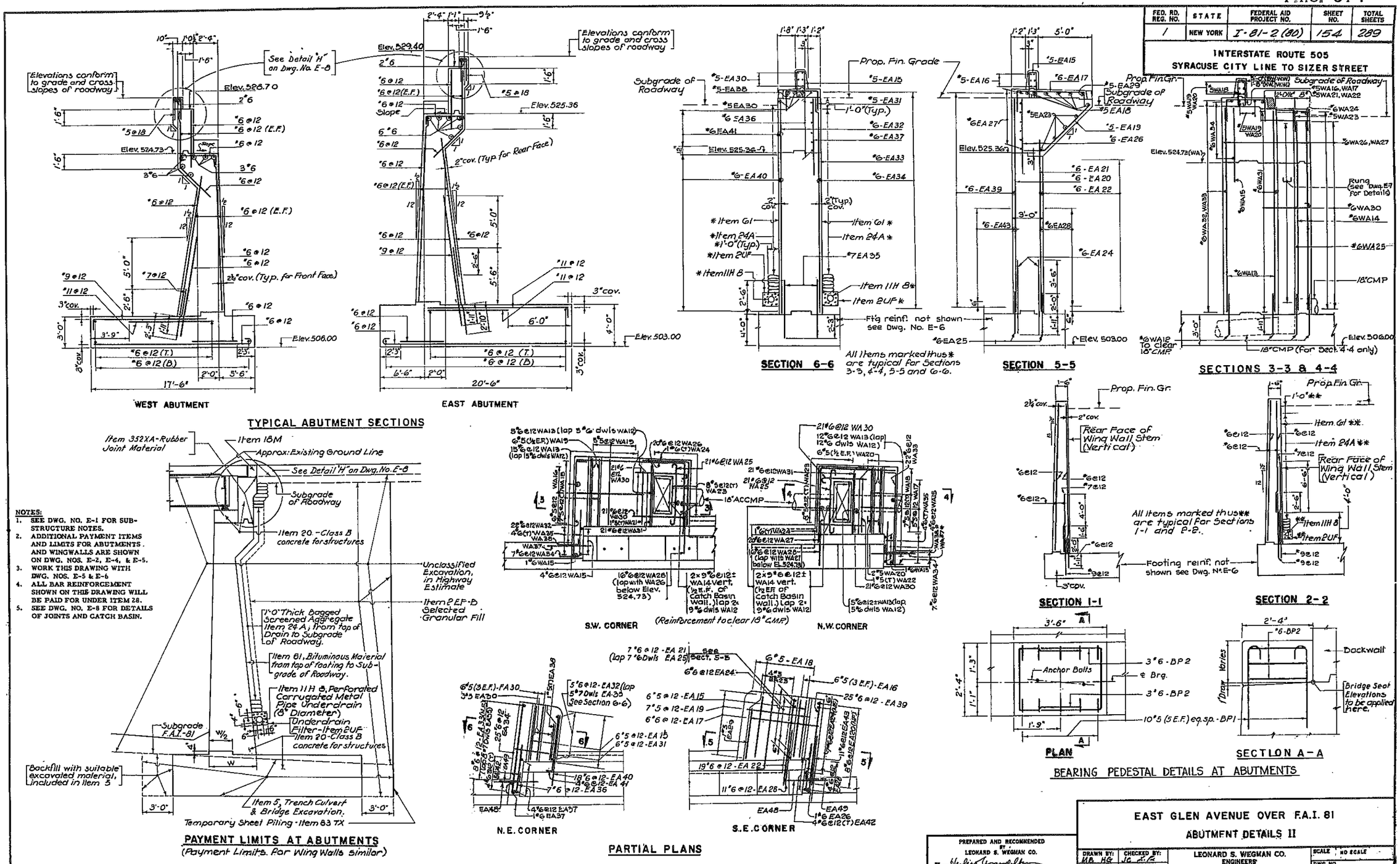
EAST GLEN AVENUE OVER F.A.I. 81
ABUTMENT DETAILS I

DRAWN BY: MB HG	CHECKED BY: JC	LEONARD S. WEGMAN CO. ENGINEERS 235 EAST 45TH STREET, NEW YORK 17, N.Y.	SCALE NO SCALE
REVIEWED BY:	DATE 12-9-63		DWG. NO. E-6

F.I.C. 64-7

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-81-2(80)	154	289

INTERSTATE ROUTE 505
SYRACUSE CITY LINE TO SIZER STREET



NOTES:
1. SEE DWG. NO. E-1 FOR SUBSTRUCTURE NOTES.
2. ADDITIONAL PAYMENT ITEMS AND LIMITS FOR ABUTMENTS AND WINGWALLS ARE SHOWN ON DWG. NOS. E-2, E-4, & E-5.
3. WORK THIS DRAWING WITH DWG. NOS. E-5 & E-6
4. ALL BAR REINFORCEMENT SHOWN ON THIS DRAWING WILL BE PAID FOR UNDER ITEM 28.
5. SEE DWG. NO. E-8 FOR DETAILS OF JOINTS AND CATCH BASIN.

PREPARED AND RECOMMENDED BY LEONARD S. WEGMAN CO.
BY Walter Wendelken
N.Y.S.P.E. LIC. 23287 DATE 12-9-63

EAST GLEN AVENUE OVER F.A.I. 81

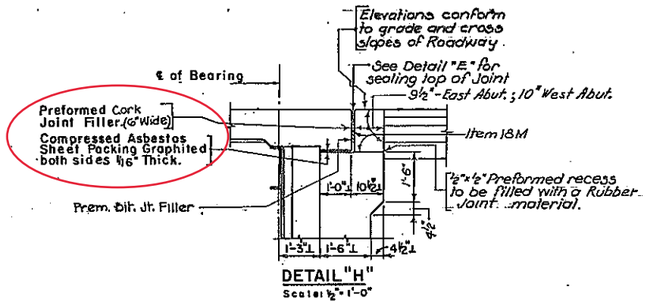
ABUTMENT DETAILS II

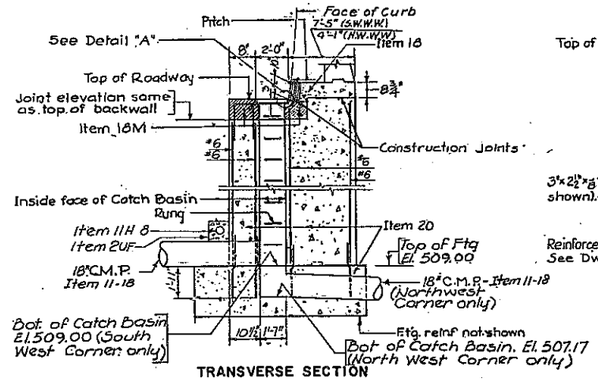
DRAWN BY: MR HG	CHECKED BY: JC JK	LEONARD S. WEGMAN CO. ENGINEERS 235 EAST 46TH STREET, NEW YORK 17, N.Y.	SCALE 1" NO SCALE
REVIEWED BY: Wendelken	DATE 12-9-63		DWG. NO. E-7

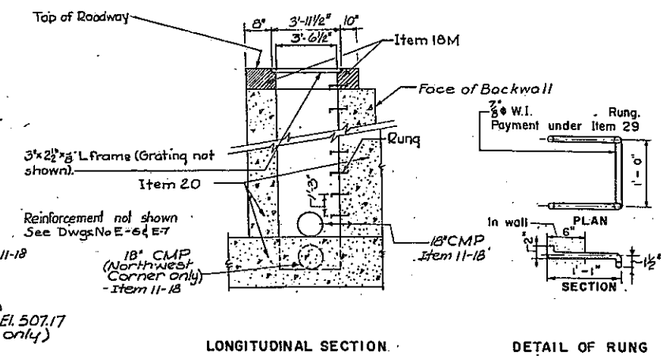
F.I.C. 64-7

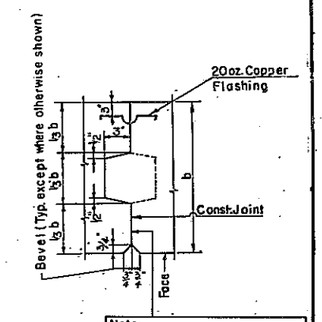
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-81-2 (80)	155	269

INTERSTATE ROUTE 505
SYRACUSE CITY LINE TO SIZER STREET



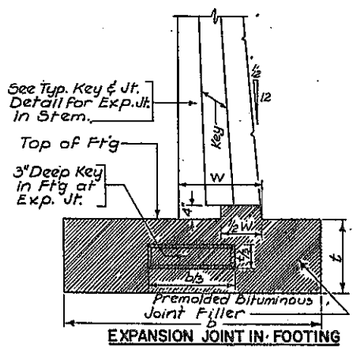


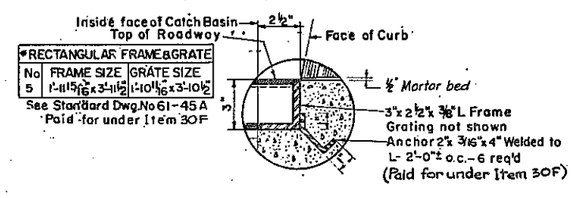




Note:
Reinforcement is to pass through construction joint.
Reinforcement not shown.

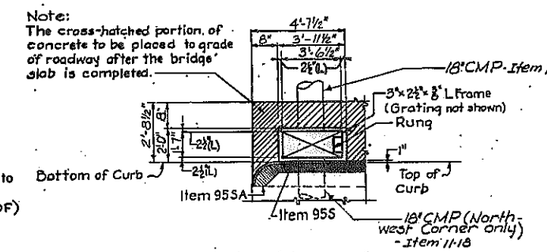
TYPICAL KEY AND JOINT DETAIL FOR VERTICAL CONSTRUCTION JOINT IN STEM
no scale



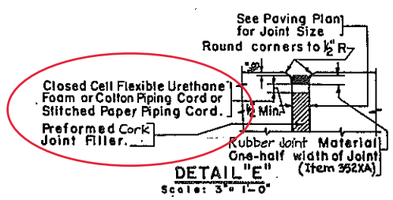


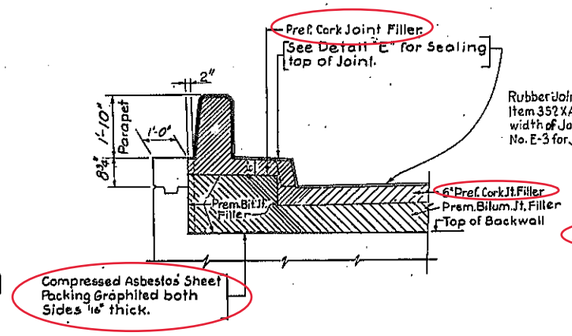
RECTANGULAR FRAME & GRATE		
No	FRAME SIZE	GRATE SIZE
5	1'-11 15/16" x 3'-11½"	1'-10 11/16" x 3'-10½"

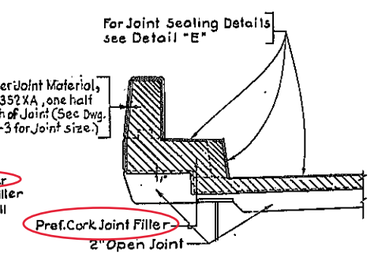
See Standard Dwg. No 61-45A
Paid for under Item 30F



CATCH BASIN DETAILS
NO SCALE





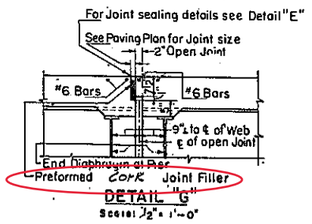


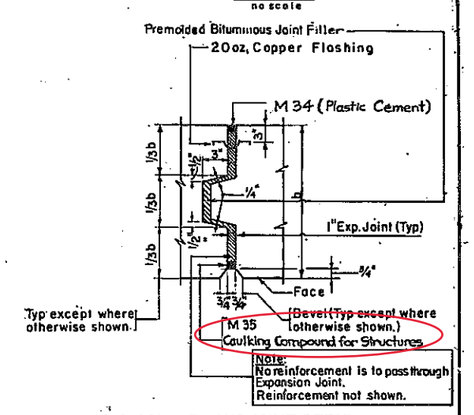
AT ABUTMENT

AT PIER

See Dwg. No. E-3 for Additional Joint Details.

TRANSVERSE SECTIONS ALONG JOINT
N.T.S.





TYPICAL KEY AND JOINT DETAIL FOR VERTICAL EXPANSION JOINT IN STEM
NO SCALE

PREPARED AND RECOMMENDED BY LEONARD S. WEGMAN CO.
BY Walter Leonard Wegman
N.Y.S. P.E. LIC. 23287 DATE 12-9-68

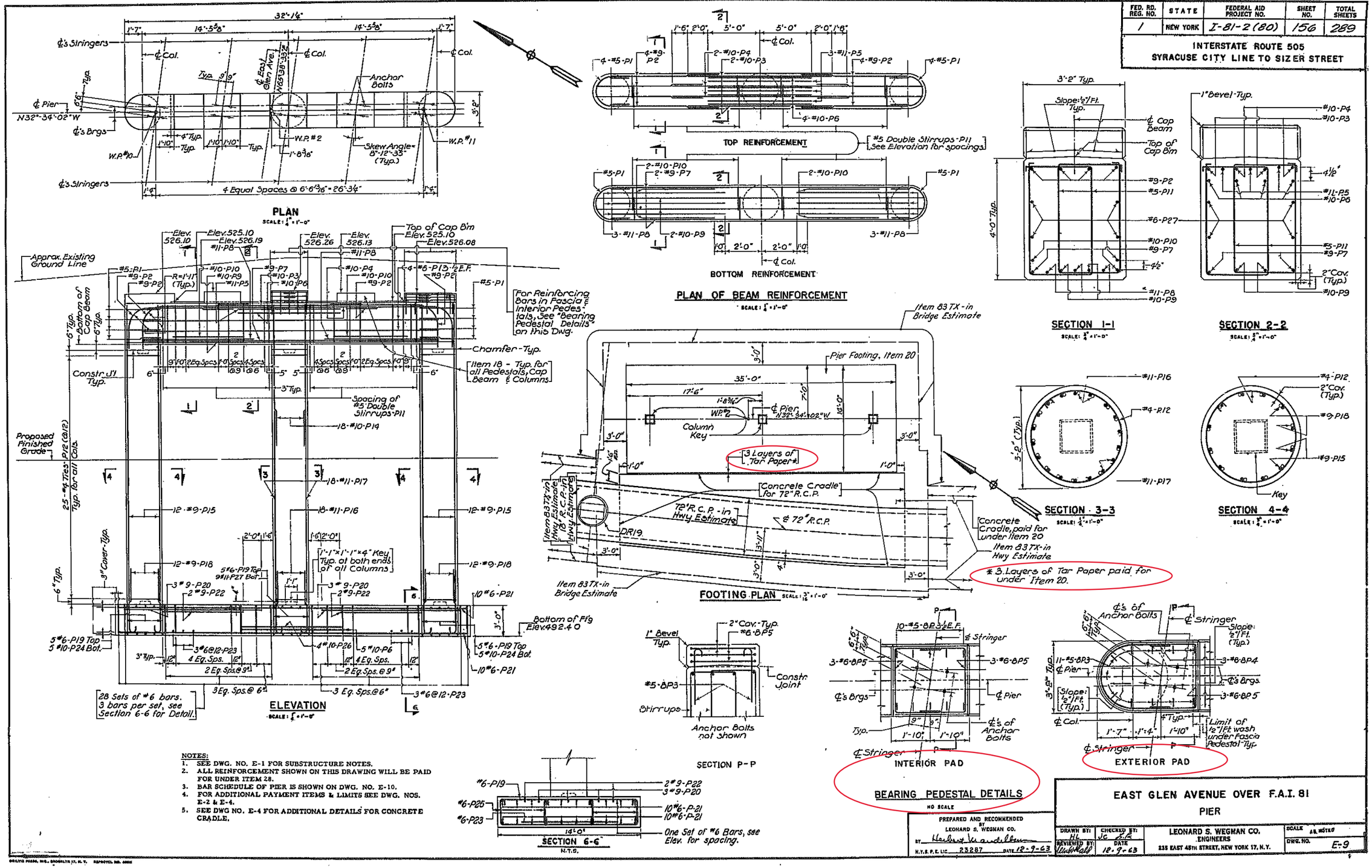
EAST GLEN AVENUE OVER F.A.I. 81
DETAILS OF JOINTS AND CATCH BASIN

DRAWN BY: B.E.	CHECKED BY: H.G.	LEONARD S. WEGMAN CO. ENGINEERS 235 EAST 45th STREET, NEW YORK	SCALE AS NOTED
REVIEWED BY:	DATE 12-9-68		DWG. NO. E-8

F.I.C. 64-7

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-81-2 (80)	156	289

INTERSTATE ROUTE 505
SYRACUSE CITY LINE TO SIZER STREET



NOTES:
1. SEE DWG. NO. E-1 FOR SUBSTRUCTURE NOTES.
2. ALL REINFORCEMENT SHOWN ON THIS DRAWING WILL BE PAID FOR UNDER ITEM 28.
3. BAR SCHEDULE OF PIER IS SHOWN ON DWG. NO. E-10.
4. FOR ADDITIONAL PAYMENT ITEMS & LIMITS SEE DWG. NOS. E-2 & E-4.
5. SEE DWG NO. E-4 FOR ADDITIONAL DETAILS FOR CONCRETE CRADLE.

PREPARED AND RECOMMENDED BY LEONARD S. WEGMAN CO.
BY Herbert Vandelbur
N.Y.S.P.E. LIC. 23287 DATE 12-9-63

EAST GLEN AVENUE OVER F.A.I. 81
PIER

DRAWN BY: HL	CHECKED BY: JC	LEONARD S. WEGMAN CO. ENGINEERS 235 EAST 45TH STREET, NEW YORK 17, N.Y.	SCALE AS NOTED
REVIEWED BY:	DATE 12-9-63		DWG. NO. E-9

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-81-2(80)	157	289

INTERSTATE ROUTE 505
SYRACUSE CITY LINE TO SIZER STREET

BAR SCHEDULES

WEST ABUTMENT

MARK	SIZE	NO. REQ'D	LENGTH	TYPE	A	B	C	D	G	H	K	LOCATION
FW 1	#6	13	20'-9"	STR								2
FW 2	#6	13	30'-0"	STR								2
FW 3	#6	1	41'-6"	STR								2
FW 4	#6	1	37'-6"	STR								2
FW 5	#6	1	33'-6"	STR								2
FW 6	#11	8	9'-8"	STR								2
FW 7	#11	8	9'-10"	10			9'-3"	0'-9"				2
FW 8	#6	1	13'-8"	1	0'-8"	13'-0"						2
FW 9	#6	1	13'-11"	1	0'-8"	13'-3"						2
FW 10	#6	1	14'-2"	1	0'-8"	13'-6"						2
FW 11	#6	1	14'-5"	1	0'-8"	13'-9"						2
FW 12	#6	1	14'-8"	1	0'-8"	14'-0"						2
FW 13	#6	1	14'-11"	1	0'-8"	14'-3"						2
FW 14	#6	1	15'-2"	1	0'-8"	14'-6"						2
FW 15	#6	1	15'-5"	1	0'-8"	14'-9"						2
FW 16	#6	34	17'-8"	1	0'-8"	17'-0"						2
FW 17	#6	8	13'-5"	1	0'-8"	12'-9"						2
FW 18	#6	18	[illegible]'-9"	STR								2
FW 19	#11	18	8'-3"	STR								2
FW 20	#9	28	11'-8"	10			11'-1"	0'-9"				2
FW 21	#10	9	8'-0"	STR								2
FW 22	#10	9	6'-3"	STR								2
FW 23	#10	9	14'-0"	STR								2
FW 24	#9	21	13'-4"	10			12'-9"	0'-9"				2
FW 25	#9	4	3'-10"	10			3'-3"	0'-9"				2
FW 26	#6	13	35'-4"	STR								2
FW 27	#10	6	5'-1"	10			4'-6"	0'-9"				2
FW 28	#10	6	7'-0"	STR								2
FW 29	#6	7	11'-6"	STR								2
FW 30	#6	4	15'-9"	STR								2
FW 32	#6	4	6'-0"	STR								2
WA 1	#5	16	4'-8"	2		2'-2"	0'-6"	2'-2"				3
WA 2	#6	2	21'-6"	STR								3
WA 3	#6	20	26'-0"	STR								3
WA 4	#6	7	33'-0"	STR								3
WA 5	#6	15	38'-0"	STR								3
WA 6	#6	16	9'-6"	3		4'-0"	5'-6"			2'-10"	2'-10"	3
WA 7	#6	32	5'-6"	STR								3
WA 8	#6	15	9'-5"	STR								2,3
WA 9	#6	34	14'-11"	STR								3
WA 10	#6	26	13'-6"	STR								3
WA 11	#7	19	4'-9"	STR								2,3
WA 12	#6	73	3'-11"	STR								2,3
WA 13	#6	37	20'-8"	STR								3
WA 14	#6	36	19'-5"	STR								3
WA 15	#6	10	7'-0"	STR								3
WA 16	#5	6	10'-7"	2		2'-2"	6'-5"	2'-2"				3
WA 17	#5	5	7'-3"	2		2'-2"	3'-1"	2'-2"				3
WA 18	#5	14	6'-4"	2	0'-7"	2'-4"	0'-8"	2'-4"	0'-7"			3
WA 19	#5	11	5'-5"	STR								3
WA 20	#5	8	4'-11"	STR								3
WA 21	#5	1	4'-8"	STR								3
WA 22	#5	1	4'-6"	STR								3
WA 23	#5	16	8'-8"	2		2'-3"	0'-4"	2'-3"				3
WA 24	#6	2	7'-10"	2		3'-0"	4'-11"					3
WA 25	#6	42	6'-4"	1	0'-8"	5'-0"			0'-8"			3
WA 26	#6	20	15'-6"	2		9'-7"	6'-2"					3
WA 27	#6	20	12'-4"	2		6'-3"	6'-2"					3
WA 28	#6	32	3'-6"	STR								2,3
WA 30	#6	84	4'-10"	1	0'-8"	4'-2"						3
WA 31	#6	42	5'-2"	STR								3
WA 32	#6	22	9'-7"	2		1'-3"	6'-5"					3
WA 33	#6	22	9'-4"	2		1'-3"	8'-2"					3
WA 34	#6	14	6'-8"	2		2'-0"	4'-9"					3
WA 35	#6	8	4'-6"	2		2'-0"	0'-8"	2'-0"				3
WA 36	#6	32	5'-4"	15	0'-8"	3'-6"	1'-3"					3
WA 37	#7	30	5'-9"	STR								3
WA 38	#6	14	2'-8"	2		2'-0"	0'-9"					3
WA 39	#6	4	7'-7"	3		0'-9"	6'-10"			0'-9"	0'-2"	3
WA 40	#6	87	7'-6"	STR								3
WA 41	#7	16	7'-6"	STR								3
WA 42	#9	24	6'-3"	STR								3
WA 43	#6	18	3'-11"	STR								3
WA 44	#6	4	19'-9"	STR								3
WA 45	#6	4	19'-11"	STR								3
WA 46	#6	4	20'-3"	STR								3
WA 47	#6	4	20'-3"	STR								3

WEST ABUTMENT

MARK	SIZE	NO. REQ'D	LENGTH	TYPE	A	B	C	D	G	E	K	LOCATION
WA 48	#6	4	20'-5"	STR								3
WA 49	#6	4	20'-8"	STR								3
WA 50	#6	4	20'-10"	STR								3
WA 51	#6	4	21'-0"	STR								3
WA 52	#6	4	21'-2"	STR								3
BP 1	#5	50	3'-3"	1	0'-7"	2'-8"						4
BP 2	#6	30	6'-0"	2		2'-2"	1'-10"	2'-2"				4
EW 33	#6	2	39'-6"	STR								2
WA 53	#4	6	14'-0"	7	0'-6"	1'-7"	5'-1"	1'-7"	0'-6"	5'-1"		3
WA 54	#5	4	8'-0"	14	-		4'-0"			2'-0"	2'-10"	3

EAST ABUTMENT

MARK	SIZE	NO. REQ'D	LENGTH	TYPE	A	B	C	D	G	H	K	LOCATION
FE 1	#6	30	21'-3"	STR								2
FE 2	#6	30	30'-0"	STR								2
FE 3	#6	1	40'-9"	STR								2
FE 4	#6	1	37'-3"	STR								2
FE 5	#6	1	33'-9"	STR								2
FE 6	#6	8	15'-11"	1	0'-8"	15'-3"						2
FE 7	#6	34	20'-8"	1	0'-8"	20'-0"						2
FE 8	#6	1	18'-2"	1	0'-8"	17'-6"						2
FE 9	#6	1	17'-11"	1	0'-8"	17'-3"						2
FE 10	#6	1	17'-7"	1	0'-8"	16'-11"						2
FE 11	#6	1	17'-4"	1	0'-8"	16'-8"						2
FE 12	#6	1	17'-0"	1	0'-8"	16'-4"						2
FE 13	#6	1	16'-9"	1	0'-8"	16'-1"						2
FE 14	#6	1	16'-5"	1	0'-8"	15'-9"						2
FE 15	#6	1	16'-2"	1	0'-8"	15'-6"						2
FE 16	#6	34	5'-6"	STR								2
FE 17	#11	34	7'-8"	STR								2
FE 18	#11	30	14'-0"	10			13'-5"	0'-9"				2
FE 19	#10	8	12'-0"	STR								2
FE 20	#10	8	10'-0"	STR								2
FE 21	#11	8	9'-8"	STR								2
FE 22	#11	8	10'-1"	10			9'-6"	0'-9"				2
FE 23	#10	18	15'-10"	10			15'-3"	0'-9"				2
EA 1	#5	16	4'-7"	2		2'-2"	5"	2'-2"				3
EA 2	#6	2	21'-9"	STR								3
EA 3	#6	4	30'-0"	STR								3
EA 4	#6	10	33'-6"	STR								3
EA 5	#6	16	30'-9"	STR								3
EA 6	#6	18	38'-3"	STR								3
EA 7	#6	32	5'-6"	STR								3
EA 8	#6	27	9'-6"	3		4'-0"	5'-6"			2'-10"	2'-10"	3
EA 9	#6	34	17'-8"	STR								3
EA 10	#6	27	13'-3"	STR								3
EA 11	#9	27	8'-4"	STR								2,3
EA 12	#6	36	12'-5"	STR								3
EA 14	#6	32	5'-4"	15	0'-8"	3'-6"	1'-3"					3
EA 15	#5	12	6'-4"	2	0'-7"	2'-4"	0'-8"	2'-4"	0'-7"			3
EA 16	#5	6	5'-6"	STR								3
EA 17	#6	6	9'-11"	2		2'-2"	6'-5"	1'-6"				3
EA 18	#5	6	5'-6"	STR								3
EA 19	#5	7	8'-2"	3		2'-0"	6'-2"			4'-3"		3
EA 20	#6	8	23'-5"	STR								3
EA 21	#6	7	19'-9"	STR								3
EA 22	#6	19	8'-6"	STR								3
EA 23	#5	4	7'-8"	3		1'-0"	6'-9"			0'-1"	1'-0"	3
EA 24	#6	13	7'-5"	STR								2,3
EA 25	#6	15	3'-11"	STR								2,3
EA 26	#6	8	7'-0"	STR								3
EA 27	#6	7	6'-8"	10		2'-0"	4'-9"			0'-2"	2'-0"	3
EA 28	#6	11	5'-0"	STR								3
EA 29	#5	1	4'-9"	STR								3
EA 30	#5	9	5'-0"	STR								3
EA 31	#5	6	7'-3"	2		2'-2"	3'-1"	2'-2"				3
EA 32	#6	5	23'-3"	STR								3
EA 33	#6	8	23'-5"	STR								3
EA 34	#6	25	8'-6"	STR								3
EA 35	#7	18	4'-9"	STR								2,3
EA 36	#6	7	6'-6"	3		2'-0"	4'-9"			0'-2"		3
EA 37	#6	5	7'-0"	STR								3
EA 38	#6	1	3'-6"	STR								3
EA 39	#6	25	8'-6"	STR								3
EA 40	#6	18	7'-0"	STR								3
EA 41	#6	4	6'-2"	2		0'-9"	5'-6"					3
EA 42	#6	8	6'-2"	2		1'-10"	0'-8"	1'-10"				3

EAST ABUTMENT

MARK	SIZE	NO. REQ'D	LENGTH	TYPE	A	B	C	D	G	E	K	LOCATION
EA 43	#6	11	6'-0"	STR								3
EA 44	#9	18	9'-4"	STR								2,3
EA 45	#9	16	6'-10"	STR								2,3
EA 46	#7	16	10'-6"	STR								3
EA 47	#6	18	19'-3"	STR								3
EA 48	#7	36	5'-9"	STR								3
EA 49	#6	14	2'-8"	2		0'-9"	2'-0"					3
EA 50	#6	90	7'-6"	STR								3
EA 51	#6	4	7'-7"	3		0'-9"	6'-10"			0'-9"	0'-2"	3
EA 52	#6	1	22'-3"	STR								3
EA 53	#6	1	22'-5"	STR								3
EA 54	#6	1	22'-8"	STR								3
EA 55	#6	1	22'-11"	STR								3
EA 56	#6	1	23'-2"	STR								3
EA 57	#6	1	23'-4"	STR								3
EA 58	#6	1	23'-6"	STR								3
EA 59	#6	1	23'-9"	STR								3
EA 60	#6	1	23'-11"	STR								3
EA 61	#6	1	22'-9"	STR								3
EA 62	#6	1	22'-11"	STR								3
EA 63	#6	1	23'-2"	STR								3
EA 64	#6	1	23'-4"	STR								3
EA 65	#6	1	23'-6"	STR								3
EA 66	#6	1	23'-8"	STR								3
EA 67	#6	1	23'-10"	STR								3
EA 68	#6	1	24'-0"	STR								3
EA 69	#6	1	24'-1"	STR								3
BP 1	#5	50	3'-3"	1	0'-7"	2'-8"						4
BP 2	#6	30	6'-0"	2		2'-2"	1'-10"	2'-2"				4
FE 25	#6	1	37'-3"	STR								2
FE 26	#6	1	39'-0"	STR								2
EA 70	#5	4	8'-0"	14			4'-0"			2'-0"	2'-10"	3
EA 71	#4	6	14'-0"	7	0'-6"	1'-7"	5'-1"	1'-7"	0'-6"	5'-1"		3
EA 72	#7	8	6'-0"	STR								3
EA 73	#9	3	3'-10"	10			3'-3"	0'-9"				3

PIER

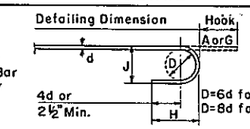
MARK	SIZE	NO. REQ'D	LENGTH	TYPE	A	B	C	D	E	G	R	LOCATION
P 1	#5	8	7'-9"	5		1'-8"	4'-5"	1'-8"			1'-5"	5
P 2	#9	8	13'-10"	6		2'-3"	3'-0"	8'-7"			1'-11"	5
P 3	#10	2	14'-0"	STR								5
P 4	#10	2	17'-0"	STR								5
P 5	#11	3	10'-0"	STR								5
P 6	#10	9	10'-0"	STR								2,5
P 7	#9	2	29'-0"	STR								5
P 8	#11	6	12'-6"	STR								5
P 9	#10	2	31'-8"	STR								5
P 10	#10	4	8'-6"	STR								5
P 11	#5	56	11'-9"	7	0'-4"	2'-0"	3'-8"	2'-0"	3'-8"	0'-4"		5
P 12	#4	75	9'-11"	8	0'-6"		8'-11"			0'-4"	1'-5"	1
P 13	#6	4	29'-0"	STR								5
P 14	#10	18	13'-9"	STR								1
P 15	#9	24	29'-6"	STR								1
P 16	#11	18	8'-0"	1	1'-7"	6'-5"						1,2
P 17	#11	18	19'-0"	STR								1
P 18	#9	24	7'-0"	1	1'-3"	5'-9"						1,2
P 19	#6	43	13'-6"	STR								2
P 20	#9	6	13'-0"	STR								2
P 21	#6	20	34'-6"	STR								2
P 22	#9	4	7'-10"	STR								2
P 23	#6	6	10'-0"	STR								2
P 24	#10	10	16'-4"	1	1'-5"	13'-6"				1'-5"		2
P 25	#6	56	15'-2"	2	0'-8"	2'-6"	9'-0"	2'-6"		0'-8"		2
P 26	#10	4	10'-0"	STR								2
P 27	#11	9	16'-8"	1	1'-7"	13'-6"				1'-7"		2
EP 4	#6	6	8'-11"	5			4'-5"	2'-3"			1'-5"	4
EP 5	#6	24	8'-0"	2		2'-7"	3'-0"	2'-7"				4
EP 3	#5	52	3'-0"	1	0'-7"	2'-5"						4

LOCATION
1 COLUMN
2 FOOTING
3 SEAT
4 BEARING PAD
5 CAP BEAM

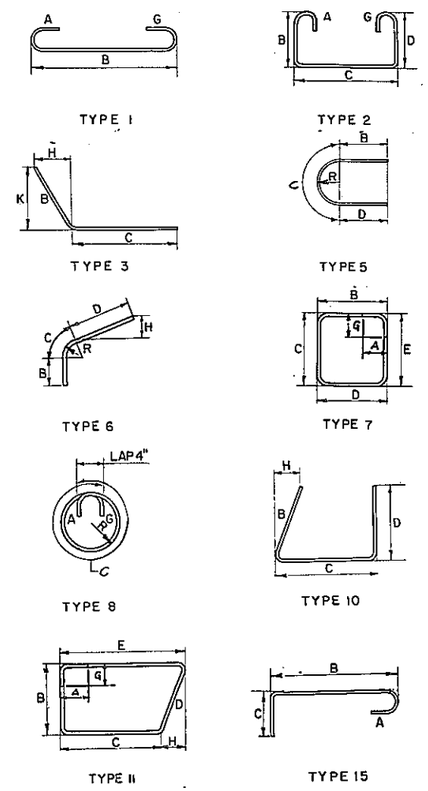
NOTES:
1. ALL BAR REINFORCEMENT SHOWN ON THIS DRAWING SHALL BE PAID FOR UNDER ITEM 28.
2. WORK THIS DRAWING WITH DWG. NOS. E-6, E-7 & E-9.

TYPICAL 180° HOOK DETAIL

BAR SCHEDULE NOTES
1. All Dimensions in the Bar Schedule are out to out of Bar
2. Dimensions Omitted in Bar Schedule are Zero



BAR SIZE	DIA. INCH	J	APPROX. H	BAR SIZE	DIA. INCH	J	APPROX. H
#4	0.500	4"	4½"	#8	1.000	10"	9"
#5	0.625	5"	5"	#9	1.128	11¼"	10¼"
#6	0.750	6"	6"	#10	1.270	1'-0½"	11¼"
#7	0.875	7"	7"	#11	1.410	1'-2"	1'-0¾"



BAR BENDING DIAGRAMS

PREPARED AND RECOMMENDED BY LEONARD S. WEGMAN CO.
BY [signature]
N.Y.S. P.E. LIC. 23287 DATE 12-9-63

EAST GLEN AVENUE OVER F.A.I. 81
REINFORCEMENT BENDING DIAGRAMS
AND SUBSTRUCTURE BAR SCHEDULES

DRAWN BY: HG	CHECKED BY: J.C. H.B.	LEONARD S. WEGMAN CO. ENGINEERS 235 EAST 45TH STREET, NEW YORK 17, N.Y.	SCALE NO SCALE
REVIEWED BY: [signature]	DATE 12-9-63		DWG. NO. E-10

GOLTZE PRESS, INC., BROOKLYN 17, N.Y. REPORTS NO. 4068

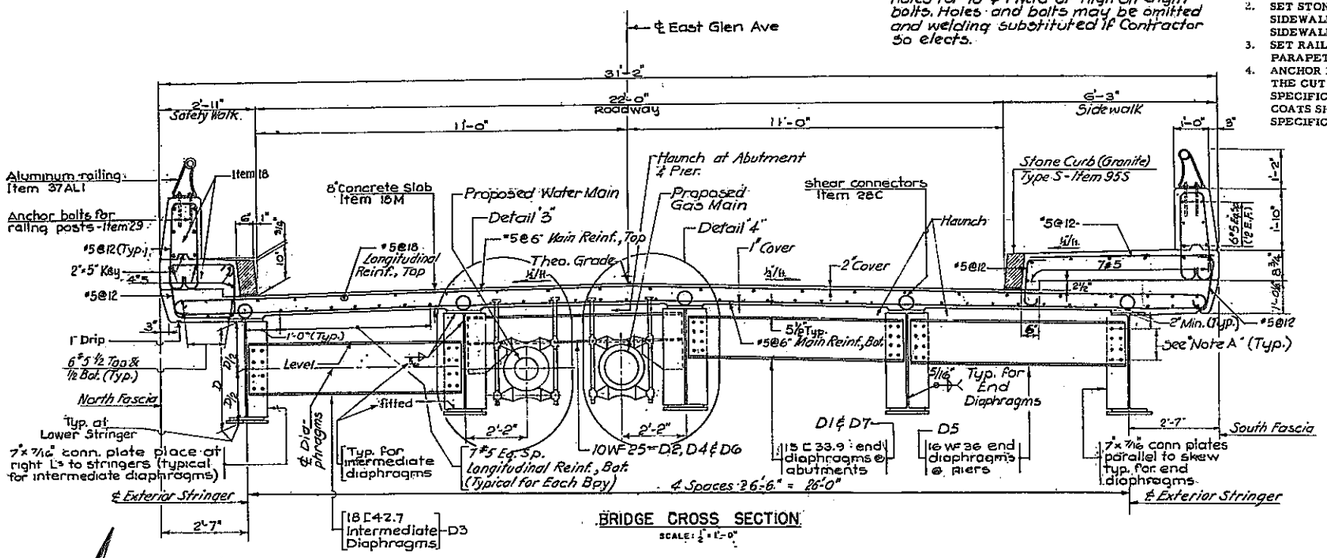
F.I.C. 64-7

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-81-2 (80)	158	289

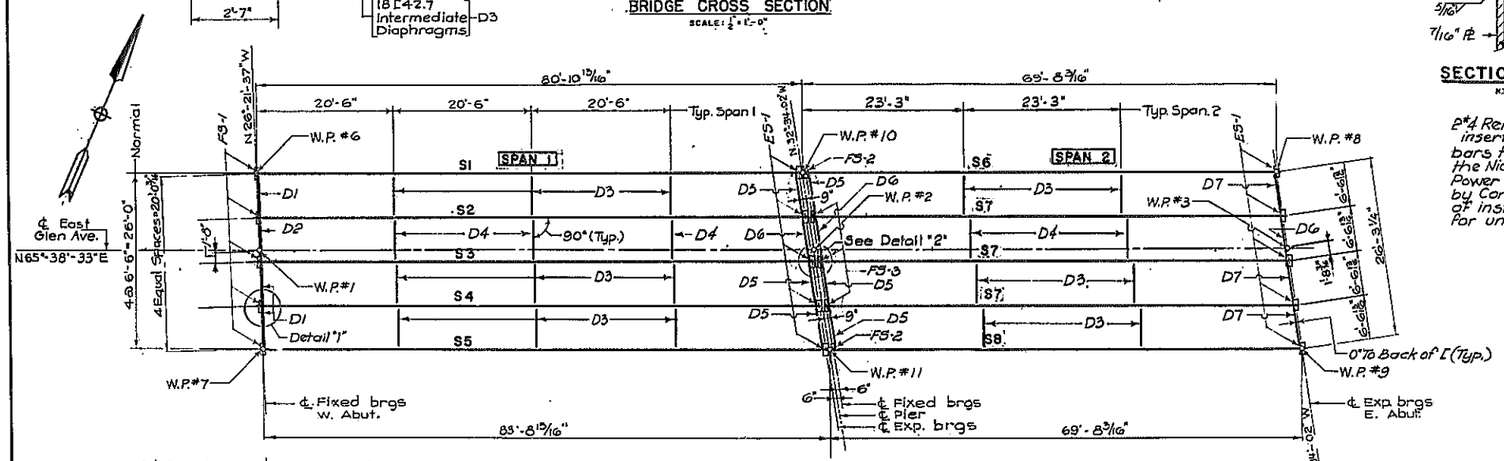
INTERSTATE ROUTE 505
SYRACUSE CITY LINE TO SIZER STREET

Note A
Holes for 7/8" ϕ rivets or high strength bolts. Holes and bolts may be omitted and welding substituted if Contractor so elects.

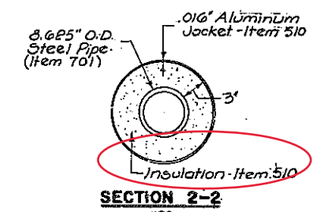
CONSTRUCTION PROCEDURE
1. POUR SLAB
2. SET STONE CURBS (GRANITE) AND POUR SAFETY WALK AND SIDEWALK TO PROPER LINE AND GRADE. SAFETY WALK AND SIDEWALK NOT TO BE SCORED.
3. SET RAILING ANCHOR BOLTS BY MEANS OF TEMPLATE AND POUR PARAPET. ERECT RAILING.
4. ANCHOR BOLTS SHALL BE CUT OFF 1/8 ABOVE NUT & PEENED. THE CUT TOPS SHALL BE PAINTED AS REQUIRED BY THE SPECIFICATIONS FOR M18A, EXCEPT THAT THE FINAL TWO (2) COATS SHALL BE ALUMINUM PAINT COMPLYING WITH THE SPECIFICATIONS FOR M18J.



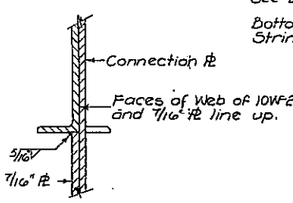
BRIDGE CROSS SECTION
SCALE: 1/4" = 1'-0"



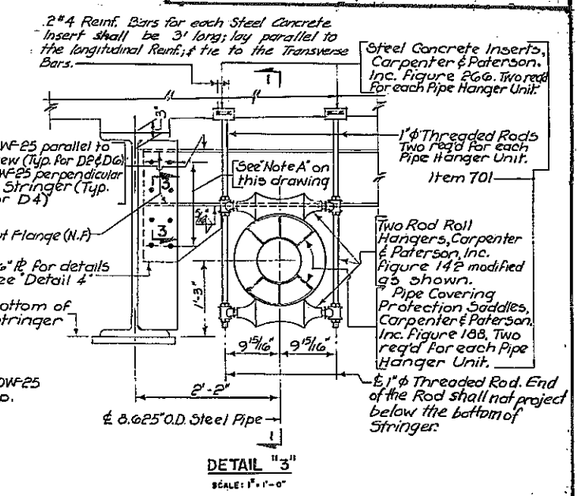
FRAMING PLAN
SCALE: 1" = 10'



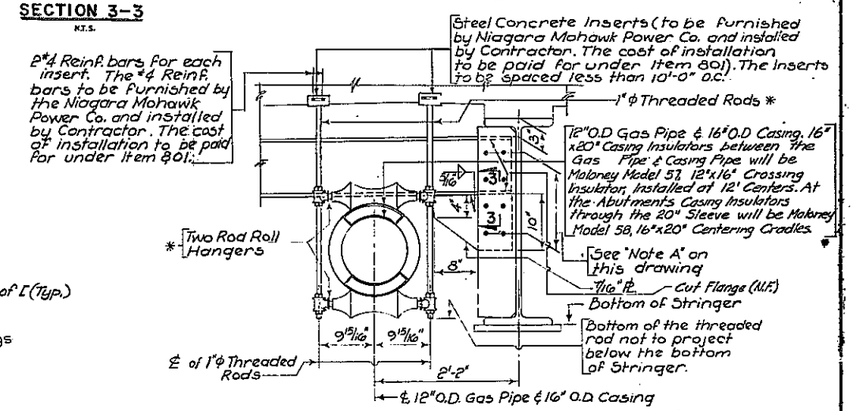
SECTION 2-2
N.T.S.



SECTION 3-3
N.T.S.

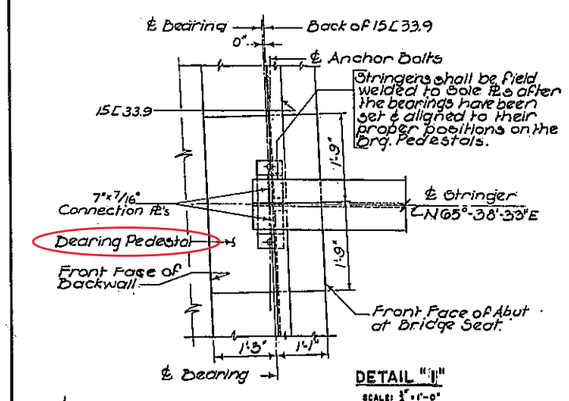


DETAIL "3"
SCALE: 1" = 1'-0"



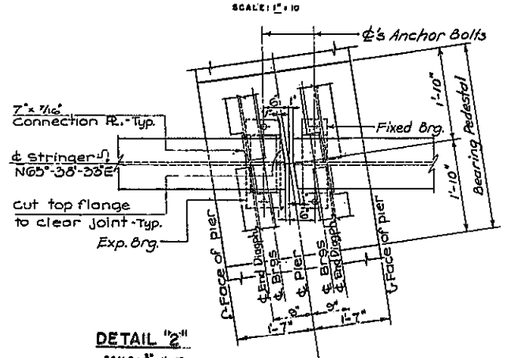
All items marked thus * to be furnished and installed by Niagara Mohawk Power Co. (Not in Bridge Estimate)

DETAIL "4"
SCALE: 1" = 1'-0"



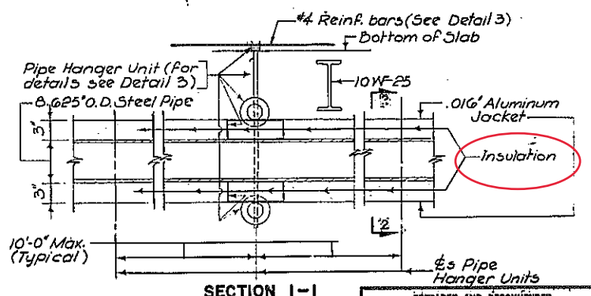
DETAIL "1"
SCALE: 1/4" = 1'-0"

TYPICAL PARTIAL PLAN FOR STRINGERS AND END DIAPHRAGMS AT ABUTMENTS (WEST ABUT. SHOWN, EAST ABUT. SIMILAR).



DETAIL "2"
SCALE: 1/4" = 1'-0"

TYPICAL PARTIAL PLAN FOR STRINGERS AND END DIAPHRAGMS AT PIER.



SECTION 1-1
N.T.S.

NOTES:
1. SEE DWG. NO. E-1 FOR SUPERSTRUCTURE NOTES.
2. SEE DWG. NO. E-14 FOR RAILING, PARAPET, SAFETY WALK AND CURB DETAILS.
3. FS-1, FS-2, FS-3 & ES-1 ARE BEARING MARKS. SEE DWG. NO. E-12 FOR BEARING DETAILS.
4. S1, S2, S3 . . . ARE STRINGER MARKS. SEE DWG. NO. E-12 FOR STRINGER DETAILS.
5. ALL STRINGERS ARE PARALLEL TO ℄ EAST GLEN AVE.
6. UNLESS OTHERWISE NOTED ALL STEEL SHOWN ON THIS DRAWING WILL BE PAID FOR UNDER ITEM 29.
7. ALL BAR REINFORCEMENT SHOWN ON THIS DRAWING WILL BE PAID FOR UNDER ITEM 28, UNLESS OTHERWISE SPECIFIED

PREPARED AND RECOMMENDED BY LEONARD S. WEGMAN CO.
BY Hubert L. Anderson
N.Y.S. P.E. LIC. 23287 DATE 12-9-63

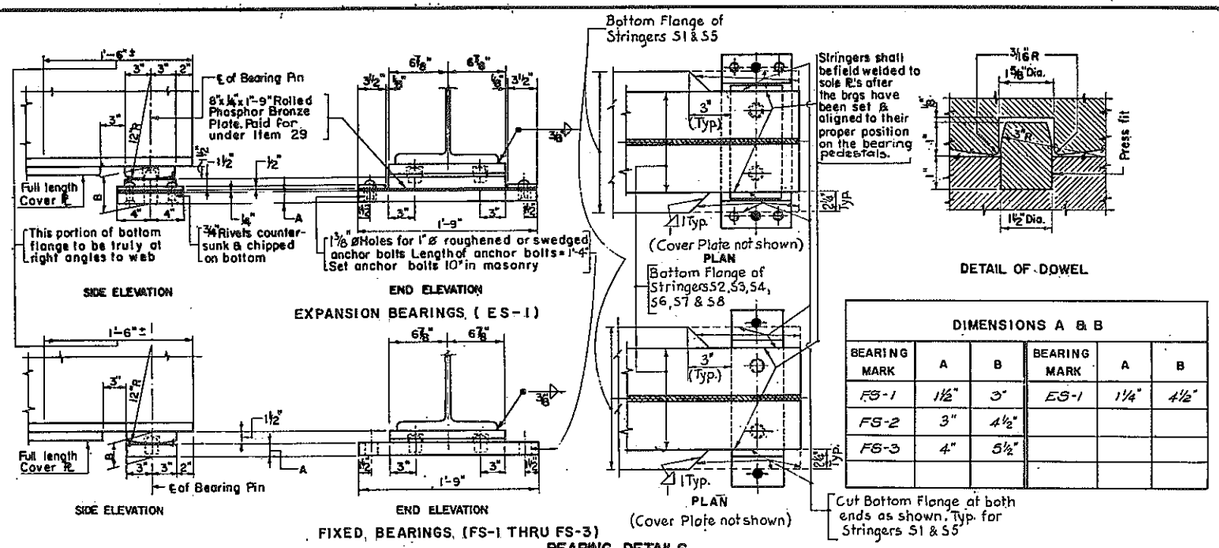
EAST GLEN AVENUE OVER F.A.I. 81
BRIDGE CROSS SECTION AND FRAMING PLAN

DRAWN BY:	CHECKED BY:	LEONARD S. WEGMAN CO. ENGINEERS 235 EAST 45th STREET, NEW YORK	SCALE AS NOTED
BB	JC		
REVIEWED BY:	DATE		DWG. NO. E-11
Hubert L. Anderson	12-9-63		

F.I.C. 64-7

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-81-2(80)	159	289

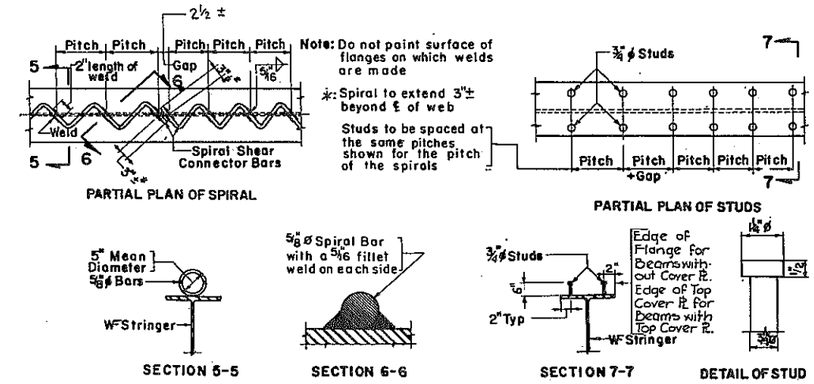
INTERSTATE ROUTE 505
SYRACUSE CITY LINE TO SIZER STREET



BEARING DETAILS

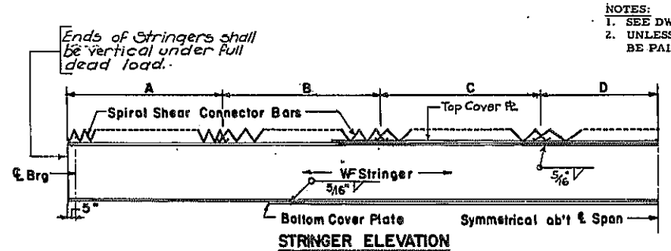
DIMENSIONS A & B					
BEARING MARK	A	B	BEARING MARK	A	B
FS-1	1 1/2"	3"	ES-1	1 1/4"	4 1/2"
FS-2	3"	4 1/2"			
FS-3	4"	5 1/2"			

NOTES:
1. SEE DWG. NO. E-1 FOR SUPERSTRUCTURE NOTES.
2. UNLESS OTHERWISE NOTED ALL STEEL SHOWN ON THIS DRAWING SHALL BE PAID FOR UNDER ITEM 29

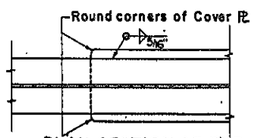


Note: Studs to be used if Contractor so elects.

DETAIL OF SHEAR CONNECTOR
(Item 28C)



STRINGER ELEVATION



PLAN SECTION AT END OF COVER PLATE

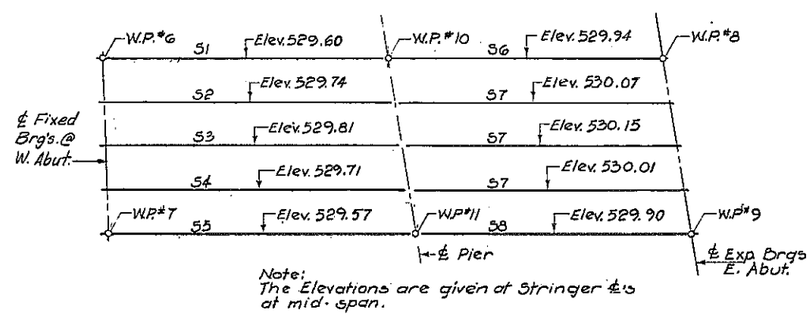
NOTES:
1. THE CONTRACTOR'S ATTENTION IS CALLED TO THE POSSIBILITY OF INTERFERENCE BETWEEN THE REINFORCING STEEL IN THE SLAB AND THE BEAM SPIRALS. TO AVOID THIS INTERFERENCE THE BAR SPACING MAY BE VARIED 1" ± WITH THE UNDERSTANDING THAT THE REQUIRED AREA OF STEEL WILL BE PLACED IN EACH 5' ±. EVEN THEN SOME BARS MAY HAVE TO BE THREADED THROUGH ONE OR MORE SPIRALS.
2. SPECIAL PRECAUTIONS MUST BE EXERCISED WHERE WELDING CROSSES EDGE OF FLANGE TO AVOID ANY POSSIBILITY OF "UNDERCUT" OR NICKS IN EDGE OF FLANGE.

STRINGER SCHEDULE

STRINGER MARK	HORIZONTAL DISTANCE C. TO C. BEARINGS	NUMBER REQ'D	SIZE OF STRINGER	COVER PLATE	SPIRAL SHEAR CONNECTOR BARS (5/8" ø) A	PITCH	B	PITCH	C	PITCH	D	PITCH	CAMBER (inches) (See Note "A") ①	②	③	④
S1	80'-4 13/16"	1	36WF230	Bot. 20"x7/8"x F.L.	8'-0"	6"	8'-2"	7"	8'-0"	8"	BAL.	9"	1/2	2 1/4	—	2 1/4
S2	81'-1 1/8"	1	36WF194	Top 8"x1/2"x36'-0" Bot. 18"x1 1/2"x64'-0"	7'-11"	5"	8'-0"	6"	8'-1 1/2"	7 1/2"	BAL.	9"	5/8	2 3/8	—	2 3/8
S3	81'-9 7/8"	1	36WF194	Top 8"x1/2"x36'-0" Bot. 18"x1 1/2"x66'-0"	7'-11"	5"	8'-0"	6"	8'-1 1/2"	7 1/2"	BAL.	9"	5/8	2 3/8	—	2 3/8
S4	82'-6 3/8"	1	36WF194	Top 8"x1/2"x37'-0" Bot. 18"x1 1/2"x65'-0"	7'-11"	5"	8'-0"	6"	8'-1 1/2"	7 1/2"	BAL.	9"	5/8	2 3/8	—	2 3/8
S5	83'-2 15/16"	1	36WF230	Top 10"x1/2"x44'-0" Bot. 20"x7/8"x F.L.	8'-0"	6"	8'-1 1/2"	6 1/2"	8'-1 1/2"	7 1/2"	BAL.	9 1/2"	5/8	2 5/8	—	2 5/8
S6	69'-2 3/16"	1	36WF160	Bot. 16"x1"x F.L.	8'-0"	6"	8'-2"	7"	8'-0"	8"	BAL.	9 1/2"	1/4	1 1/2	—	1 1/2
S7	69'-2 3/16"	3	36WF150	Bot. 16"x7/8"x 53'-0"	7'-9 1/2"	5 1/2"	8'-0"	6"	8'-1 1/2"	7 1/2"	BAL.	9"	3/8	1 1/2	—	1 1/2
S8	69'-2 3/16"	1	36WF170	Bot. 16"x1"x F.L.	7'-9 1/2"	5 1/2"	8'-0"	6"	8'-1 1/2"	7 1/2"	BAL.	9"	1/4	1 5/8	—	1 5/8

F.L. = Full Length
BAL. = Balance
Bot. = Bottom

NOTE "A"
① CAMBER DUE TO STEEL WEIGHT ALONE
② TOTAL DEAD LOAD CAMBER (20 PSF FUTURE PAVING ALLOWANCE NOT INCLUDED).
③ VERTICAL CURVE ORDINATE.
④ TOTAL CAMBER = TOTAL DEAD LOAD CAMBER + VERTICAL CURVE ORDINATE.



THEORETICAL ELEVATIONS AT TOPS OF HAUNCHES AFTER STEEL ERECTION
N.T.S.

EAST GLEN AVENUE OVER F.A.I. 81
SUPERSTRUCTURE DETAILS

PREPARED AND RECOMMENDED BY LEONARD S. WEGMAN CO.
BY [signature]
N.Y.S. P.E. LIC. 23287 DATE 12-9-63

DRAWN BY: BC BB | CHECKED BY: JC JE
REVIEWED BY: [signature] | DATE 12-9-63

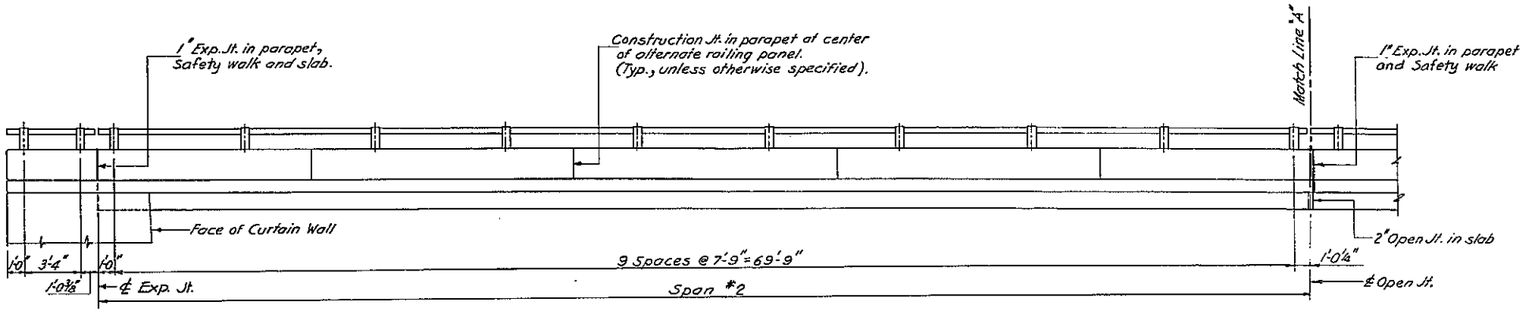
LEONARD S. WEGMAN CO.
ENGINEERS
235 EAST 45th STREET, NEW YORK 17, N.Y.

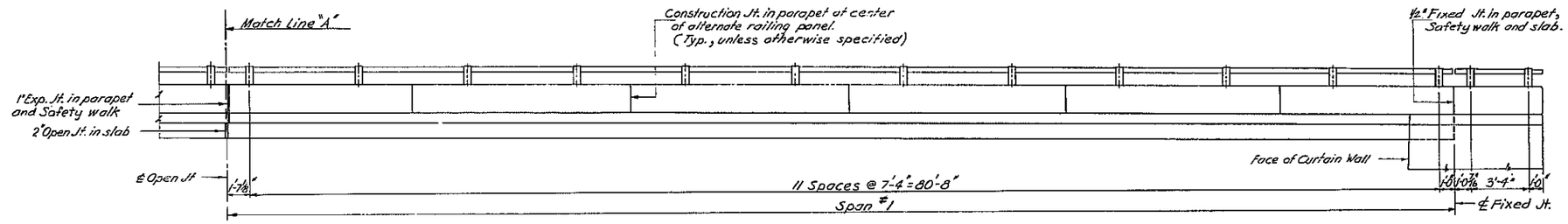
SCALE NO SCALE
DWG. NO. E-12

F.I.C. 64-7

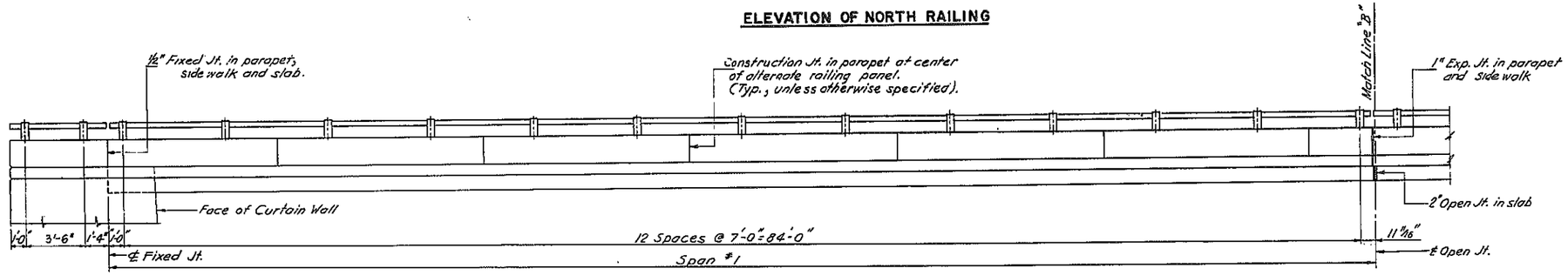
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-81-2(80)	160	289

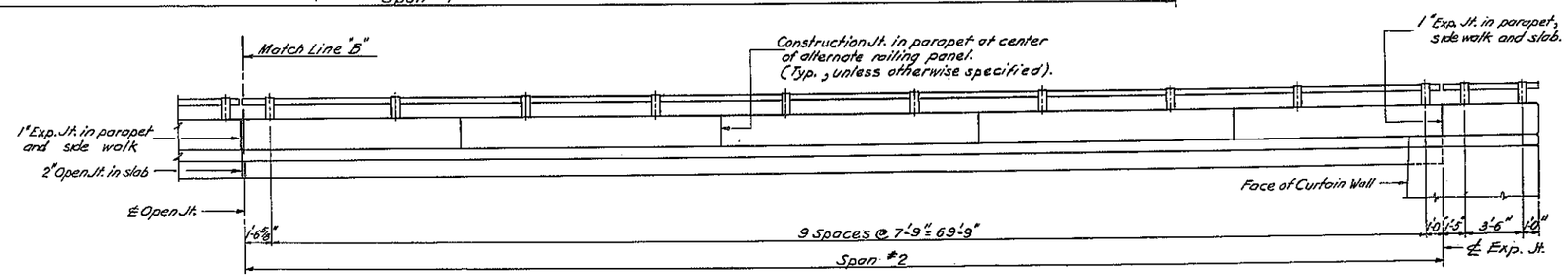
INTERSTATE ROUTE 505
SYRACUSE CITY LINE TO SIZER STREET





ELEVATION OF NORTH RAILING





ELEVATION OF SOUTH RAILING

NOTES:
1. ALL DIMENSIONS SHOWN ON THIS DRAWING ARE HORIZONTAL DIMENSIONS.
2. RAILING POSTS SHALL BE PLACED PERPENDICULAR TO THE TOP OF PARAPET. POST SPACINGS ARE SHOWN BY HORIZONTAL DIMENSIONS BETWEEN CENTERLINES OF POSTS AT TOP OF PARAPET.
3. SEE DWG. NO. E-14 FOR RAILING DETAILS.

PREPARED AND RECOMMENDED BY LEONARD S. WEGMAN CO.
BY Herbert L. Wallace
N.Y.S. P.E. LIC. DATE 12-9-68

EAST GLEN AVENUE OVER F.A.I.81

RAILING ELEVATIONS

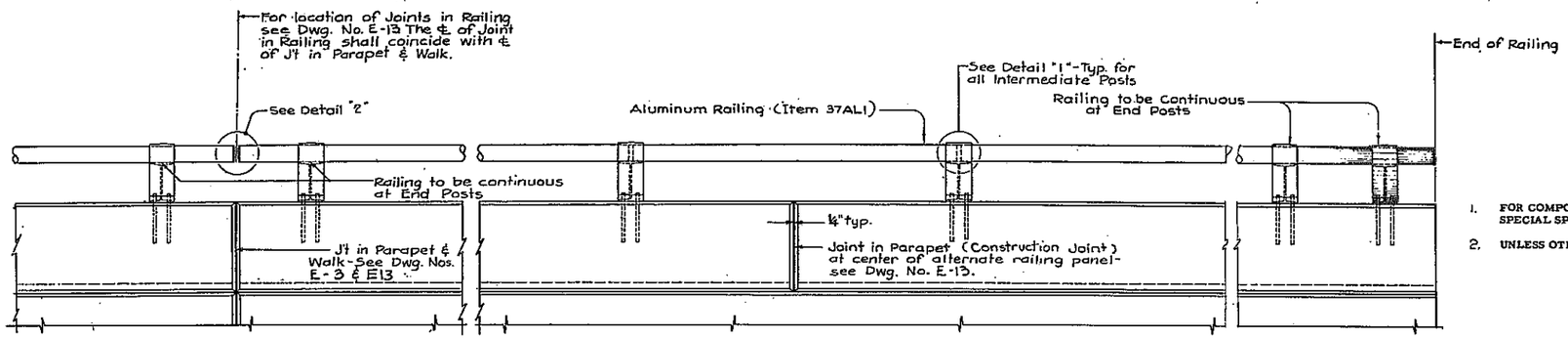
DRAWN BY:	CHECKED BY:	LEONARD S. WEGMAN CO. ENGINEERS 225 EAST 45th STREET, NEW YORK 17, N.Y.	SCALE 1/4" = 1'-0"
AK	FG		
REVIEWED BY:	DATE		DWG. NO. E-13
	12-9-68		

F.I.C. 64-7

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-81-2 (80)	161	289

INTERSTATE ROUTE 505

SYRACUSE CITY LINE TO SIZER STREET



PARTIAL ELEVATION OF RAILING AND PARAPET

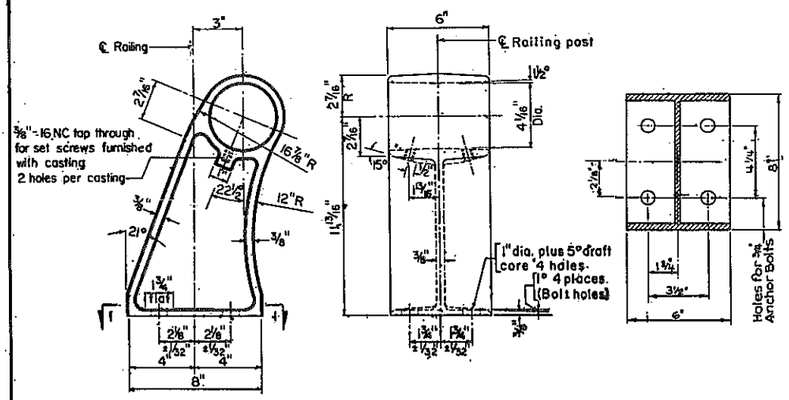
SCALE: 3/4" = 1'-0"

RAILING NOTES

1. FOR COMPOSITION OF ALUMINUM ALLOY POSTS, RAILS, SET SCREWS AND SHIMS SEE SPECIAL SPECIFICATION FOR ITEM 37AL1
2. UNLESS OTHERWISE SPECIFIED THE FOLLOWING REQUIREMENTS SHALL BE MAINTAINED

   DRAFT ANGLES = 3°
   CORNER RADII = 1/8"
   FILLETS = 1/2"R
   CASTING TOLERANCES = ± 1/16"
   WALL THICKNESS = ± 1/32"
   GATES RISERS AND SEAMS TRIMMED FLUSH

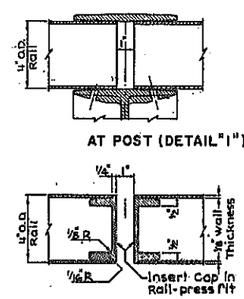
3. BEVELED CAST ALUMINUM SHIMS MAY BE REQUIRED TO OBTAIN PROPER ALIGNMENT. THE COST OF FURNISHING AND PLACING THESE SHIMS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE RAILING ITEMS.
4. ALL RAILING POSTS OF THE SINGLE RAIL TYPE RAILING SHALL BE SET PERPENDICULAR TO THE TOP OF THE PARAPET.
5. RAILINGS ARE TO BE ERECTED SO THAT THE RAIL IS PARALLEL TO THE TOP OF THE PARAPET AND THE POSTS ARE PERPENDICULAR TO THE TOP OF THE PARAPET. SINCE THE FINISHED RAILINGS MUST MEET ALL REQUIREMENTS OF FIT, ALINEMENT AND GRADE TO THE FULL SATISFACTION OF THE ENGINEER IT IS SUGGESTED THAT COMPLETE FIELD MEASUREMENTS BE MADE BEFORE ANY SHOP FABRICATION WORK IS PERFORMED. ANCHOR BOLTS, NUTS AND WASHERS FOR THE RAILING WILL BE PAID FOR UNDER STRUCTURAL STEEL - ITEM 29



SIDE ELEVATION — FRONT ELEVATION — SECTION 1-1

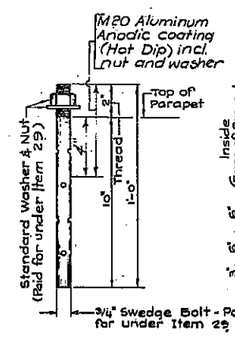
RAILING POST DETAILS

SCALE: 3/4" = 1'-0"



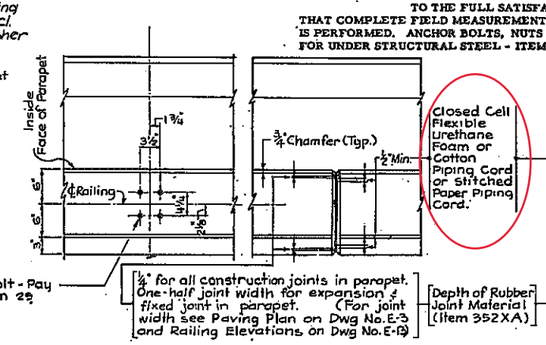
RAILING JOINT DETAILS

SCALE: 3" = 1'-0"



RAILING ANCHOR BOLT DETAIL

SCALE: 3" = 1'-0"

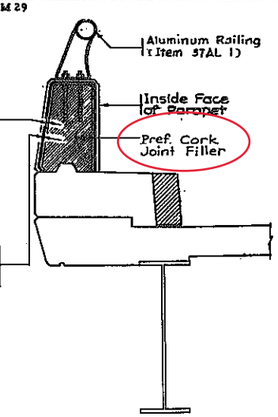


AT RAILING POST — AT JOINT IN PARAPET

PLAN OF PARAPET AND SAFETY WALK

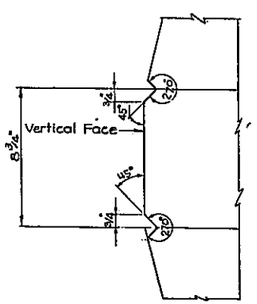
(SHOWN WITH RAILING REMOVED)

SCALE: 1" = 1'-0"



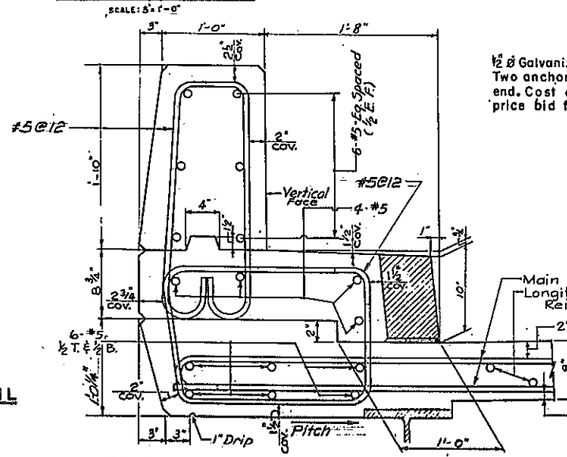
SECTION THRU PARAPET AT JOINT IN PARAPET

SCALE: 3/4" = 1'-0"



FASCIA SCORING DETAIL

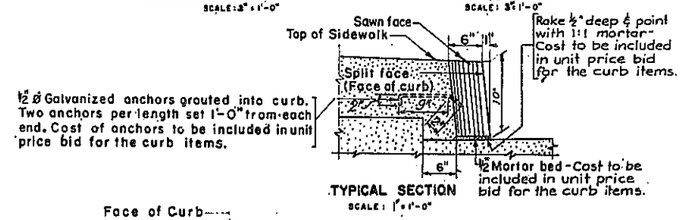
SCALE: 3" = 1'-0"



PARAPET & SAFETY WALK REINFORCEMENT DETAIL

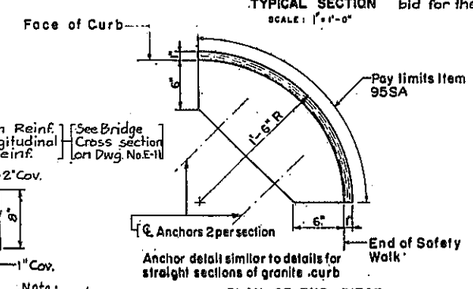
SCALE: 1" = 1'-0"

Note: See Bridge Cross Section on Dwg. No. E-11 for Sidewalk Reinforcement



TYPICAL SECTION

SCALE: 1" = 1'-0"



PLAN OF END PIECE

SCALE: 1" = 1'-0"

GRANITE CURB DETAILS

PREPARED AND RECOMMENDED BY LEONARD S. WEGMAN CO.
BY Helen Lena Belle
N.Y.S. P.E. LIC. 23287 DATE 12-9-63

EAST GLEN AVENUE OVER F.A.I. 81
RAILING, PARAPET & CURB DETAILS

DRAWN BY:	CHECKED BY:	LEONARD S. WEGMAN CO. ENGINEERS	SCALE: AS NOTED
BE MB	JC	235 EAST 45TH STREET, NEW YORK 17, N.Y.	DWG. NO. E-14
REVIEWED BY:	DATE		
	12-9-63		

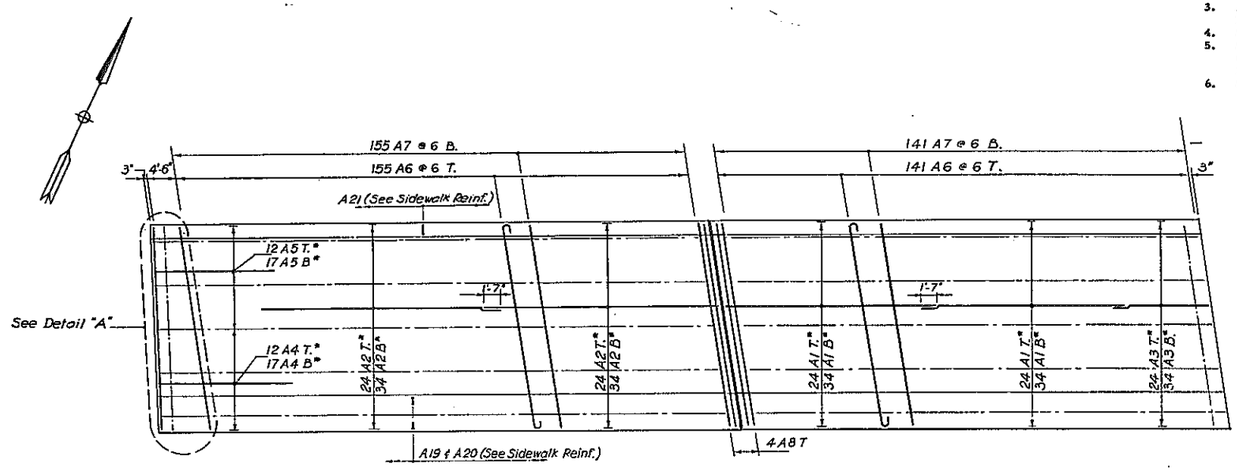
F.I.C. 64-7

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NEW YORK	I-81-2 (80)	162	289

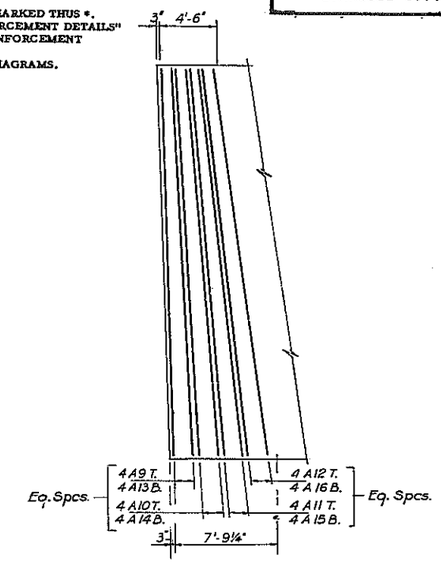
INTERSTATE ROUTE 505
SYRACUSE CITY LINE TO SIZER STREET

NOTES:

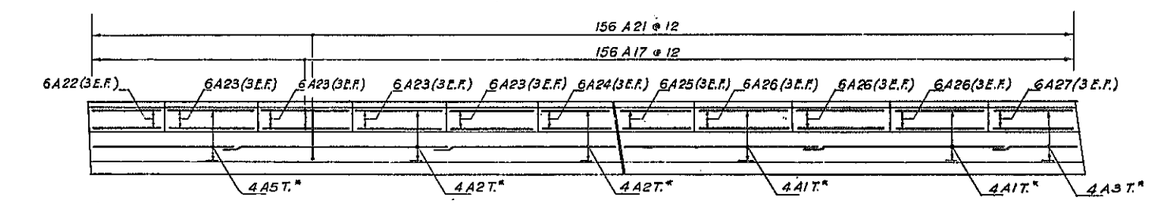
1. SEE DWG. NO. E-1 FOR SUPERSTRUCTURE NOTES.
2. CONCRETE USED FOR BRIDGE SLAB SHALL BE PAID FOR UNDER ITEM 18M, CONCRETE USED FOR SIDEWALK, SAFETY WALK AND PARAPETS SHALL BE PAID FOR UNDER ITEM 18.
3. ALL BAR REINFORCEMENT SHALL BE PAID FOR UNDER ITEM 28.
4. SEE BRIDGE CROSS SECTION FOR BARS MARKED THUS *.
5. SEE "PARAPET & SAFETY WALK REINFORCEMENT DETAILS" ON DWG. NO. E-14 FOR ADDITIONAL REINFORCEMENT PLACEMENT DETAILS.
6. SEE DWG. NO. E-10 FOR BAR BENDING DIAGRAMS.



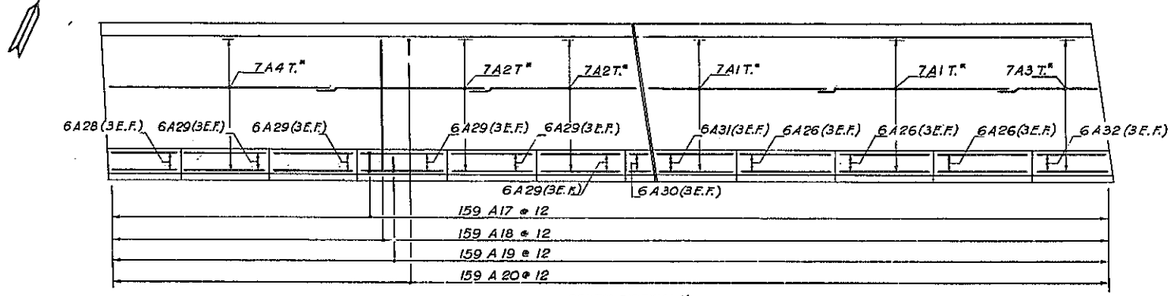
SLAB REINFORCEMENT PLACEMENT DIAGRAM



DETAIL "A"



NORTH SIDEWALK



SOUTH SIDEWALK

SIDEWALK REINFORCEMENT PLACEMENT DIAGRAM

SLAB BAR SCHEDULE

Mark	Size	No. Reqd	Length	Type	A	B	C	D	F	G	H	Location
A1	#5	138	30'-0"	Str.								①
A2	↓	138	35'-0"	Str.								↓
A3		69	15'-0"	Str.								
A4		36	15'-8"	Str.								
A5		35	18'-0"	Str.								①②
A6	↓	296	31'-9"	1	0'-7"	30'-7"				0'-7"		①
A7	#5	296	30'-7"	Str.								↓
A8	#6	4	31'-0"	Str.								
A9	#5	4	31'-6"	1	0'-7"	30'-4"				0'-7"		
A10	↓	4	31'-7"	1	0'-7"	30'-5"				0'-7"		
A11		4	31'-8"	1	0'-7"	30'-6"				0'-7"		
A12		4	31'-9"	1	0'-7"	30'-7"				0'-7"		
A13		4	30'-4"	Str.								
A14		4	30'-5"	Str.								
A15		4	30'-6"	Str.								
A16		4	30'-7"	Str.								①
A17		315	6'-2"	2	0'-7"	2'-3"	0'-8"	2'-3"		0'-7"		②③
A18		159	6'-4"	Str.								②
A19		159	2'-7"	2	0'-7"	1'-4"	0'-9"					①②
A20		159	2'-6"	2	0'-7"	1'-3"	0'-9"					①②
A21		156	7'-5"	11	0'-7"	1'-4"	1'-10"	1'-5"	2'-0"	0'-7"	0'-2"	①②
A22		6	11'-6"	Str.								③
A23		24	14'-2"	Str.								↓
A24		6	12'-0"	Str.								
A25		6	11'-10"	Str.								
A26		36	14'-10"	Str.								
A27		6	12'-0"	Str.								
A28		6	11'-0"	Str.								
A29		30	13'-6"	Str.								
A30		6	3'-11"	Str.								
A31	↓	6	12'-2"	Str.								↓
A32	#5	6	12'-8"	Str.								③

Location
① Slab
② Sidewalk
③ Parapet

PREPARED AND RECOMMENDED BY
LEONARD S. WEGMAN CO.
BY [signature]
N.Y.S. P.E. LIC. 23287 DATE 12-9-63

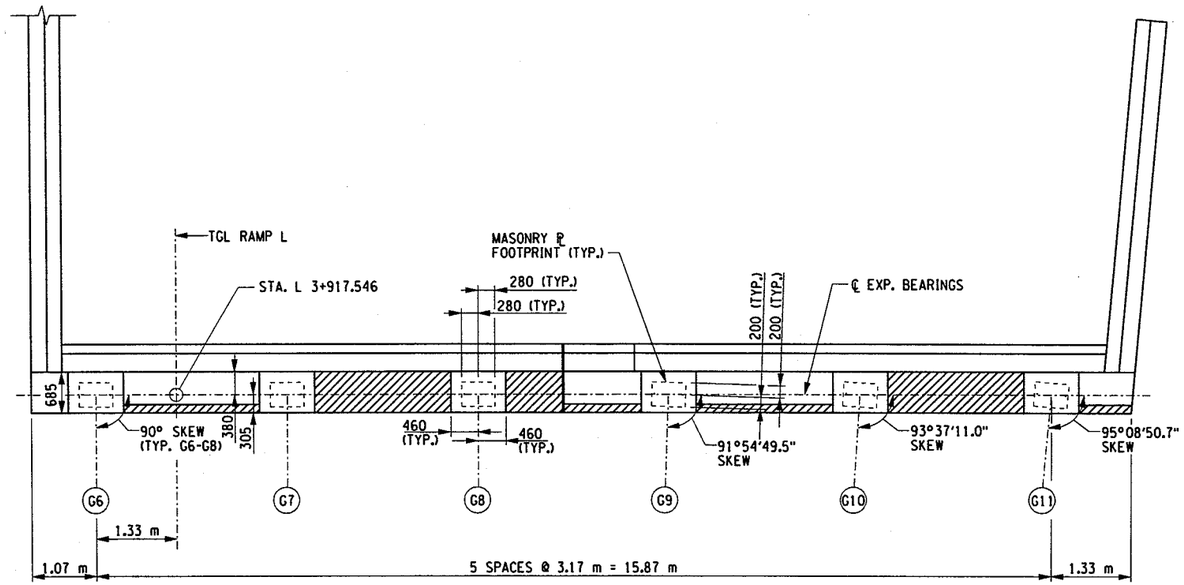
EAST GLEN AVENUE OVER F.A.I. 81
SLAB REINFORCEMENT AND BAR SCHEDULE

DRAWN BY: HG BB	CHECKED BY: JC	LEONARD S. WEGMAN CO. ENGINEERS 235 EAST 45TH STREET, NEW YORK 17, N.Y.	SCALE NO SCALE
REVIEWED BY: [signature]	DATE 12-9-63		DWG. NO. E-15

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259742	532	788

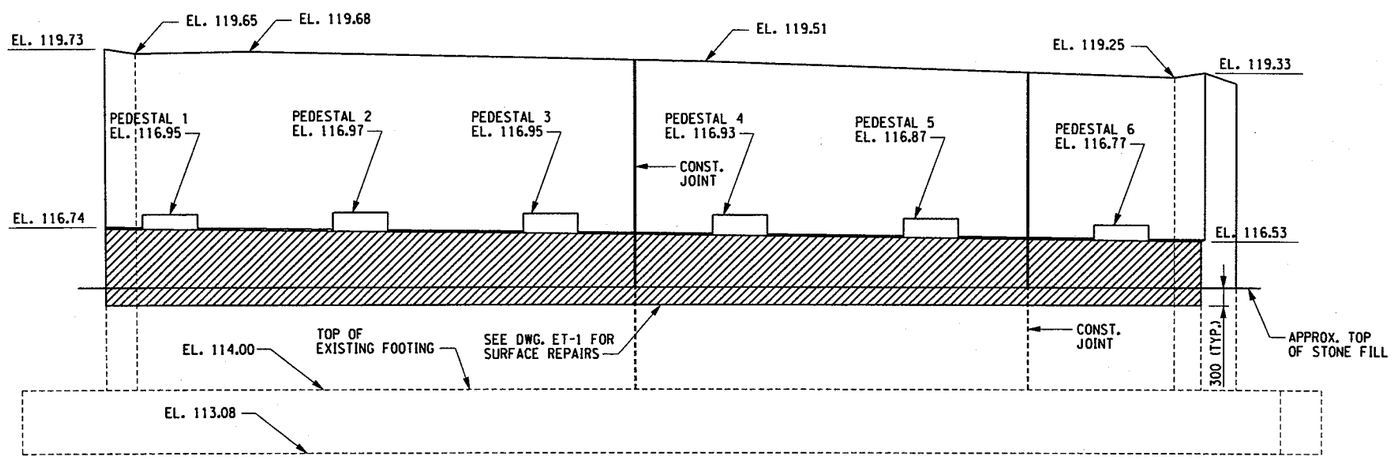
INTERSTATE ROUTE 505: OSWEGO BLVD. FIC 57 - 11P
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATES 81 & 690
CITY OF SYRACUSE
ONONDAGA COUNTY
P.I.N. 3804.66 B.I.N. 1027390

Reviewed on 1-23-14 by GA.
ACM sheet packing - page 3 and 5.
ACM caulking compound - pages 3 and 5.
Believe this material has already been removed.



NORTH ABUTMENT
PLAN

TABLE - ITEM 11555.8198 M	
ELEMENT	QUANTITY (M)
STEM	9.1



NORTH ABUTMENT
SOUTH FACE ELEVATION

1 0 1 2 3 4 5 m

TABLE - ITEM 582.05 M	
ELEMENT	QUANTITY (CM)
BRIDGE SEAT	0.5
STEM	3.0

NOTES:

1. ALL AREAS SHOWN FOR CONCRETE REMOVAL ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE BY CONTRACTOR AND EIC.
2. CONCRETE REMOVAL TO LIMITS SHOWN INCLUDES SOUND CONCRETE AROUND THE PERIMETER OF THE DETERIORATED CONCRETE A.O.B.E
3. WHEN REMOVING EXISTING CONCRETE, SAWCUT 5 mm MIN. TO PRODUCE NEAT REMOVAL LINES. ANY COST TO BE INCLUDED IN THE BID PRICE FOR ITEM 582.05 M.
4. ELEVATIONS ARE GIVEN FOR REFERENCE ONLY.
5. REFER TO CONTRACT D250095 FOR ORIGINAL CONSTRUCTION DETAILS.
6. FOR CONCRETE REPAIR DETAILS, SEE DWG. BR-1.
7. RESTORE TO ORIGINAL DIMENSIONS.
8. PEDESTALS NUMBERED FROM WEST TO EAST.
9. CRACKS IN STEM WILL BE REPAIRED AS ORDERED BY EIC BY INJECTION GROUTING METHOD UNDER ITEM 11555.8198 M.
10. PERFORM EXPANSION MULTI-ROTATIONAL BEARING MAINTENANCE BLAST CLEANING TO BEARINGS NO. 1-6, (ITEM 16570.76 M). SEE DWG. BR-9.

LIST OF ITEMS USED:

ITEM 11555.8198 M - CRACK REPAIR (3 mm OR WIDER) BY INJECTION OF PORTLAND CEMENT GROUT AS ORDERED BY EIC (M)

ITEM 18559.1696 M - PROTECTIVE SEALING OF STRUCTURAL CONCRETE (SM)

ITEM 16570.76 M - LOCAL VACUUM CONTAINED CLEANING STRUCT STEEL - IRREGULAR SURFACES (SM)

ITEM 582.05 M - REMOVAL OF STRUCTURAL CONCRETE REPLACEMENT WITH CLASS A CONCRETE (CM)

LEGEND

AREA OF PROPOSED WORK:
ITEM 582.05 M - REMOVAL OF STRUCT. CONCRETE, REPLACE WITH CLASS A CONCRETE (CM). REMOVAL OF CONCRETE SHALL BE AT LEAST 40 mm BEHIND REINFORCEMENT.

B.I.N. 1027390

SPECIAL NOTE: ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED.

AS BUILT REVISIONS

SIGNATURE DATE

COUNTY ROAD 137 TO INTERSTATE 81 (RAMP L)
OVER
STATE ROUTE 370 AND BIKEWAY
NORTH ABUTMENT
PLAN AND ELEVATION

POPLi CONSULTING ENGINEERS & SURVEYORS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

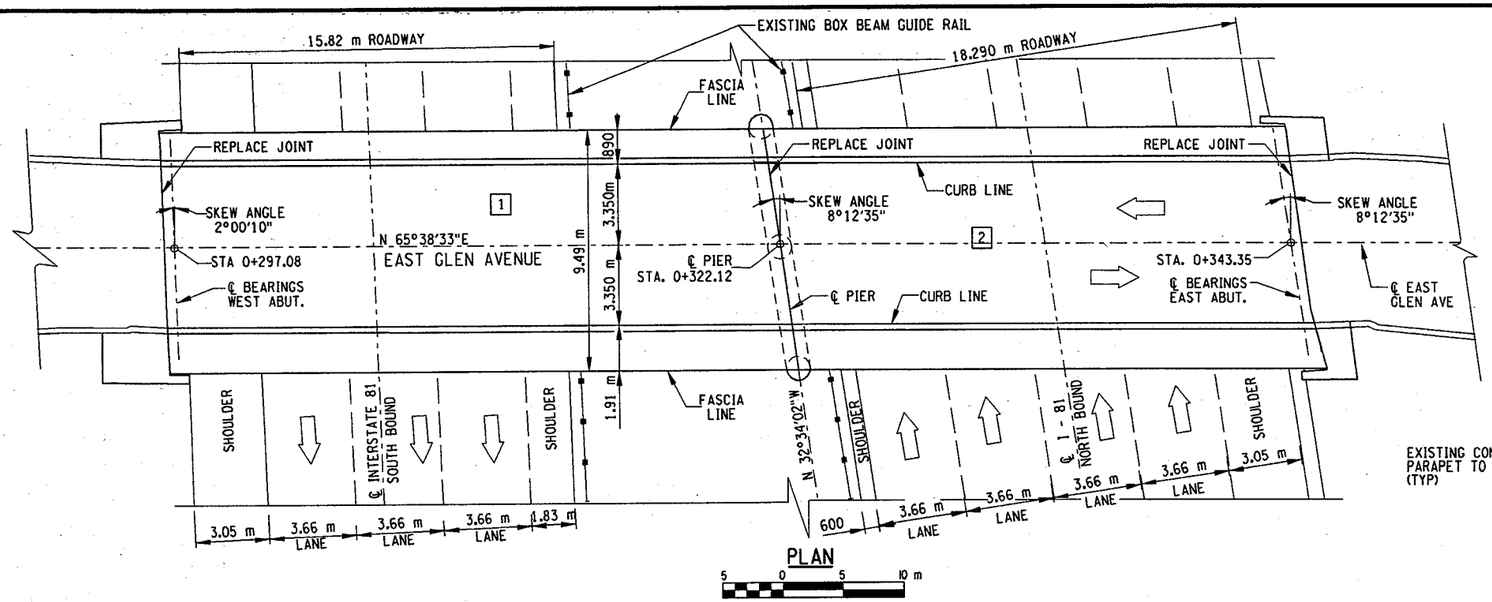
FILENAME	REGION	DATE	DRAWING NO.
380466AB_AEA	3	OCT. 2004	ST1-4

DESIGN SUPERVISOR OPP JOB MANAGER SDK DESIGNED BY APT CHECKED BY SDK ESTIMATED BY GDH DRAFTED BY APT CHECKED BY SDK

FILE NAME = ••SYTIME•• •TIME••
DATE/TIME = ••DATE••
USER = ••USER

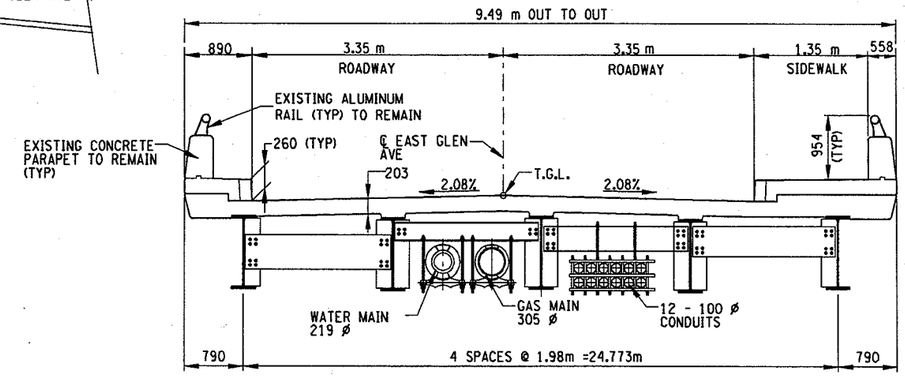
FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259742	533	788

INTERSTATE ROUTE 505, SYRACUSE CITY LINE TO SIZER STREET
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATES 81 & 690
CITY OF SYRACUSE
ONONDAGA COUNTY
P.I.N. 3804.66 | B.I.N. 1031510



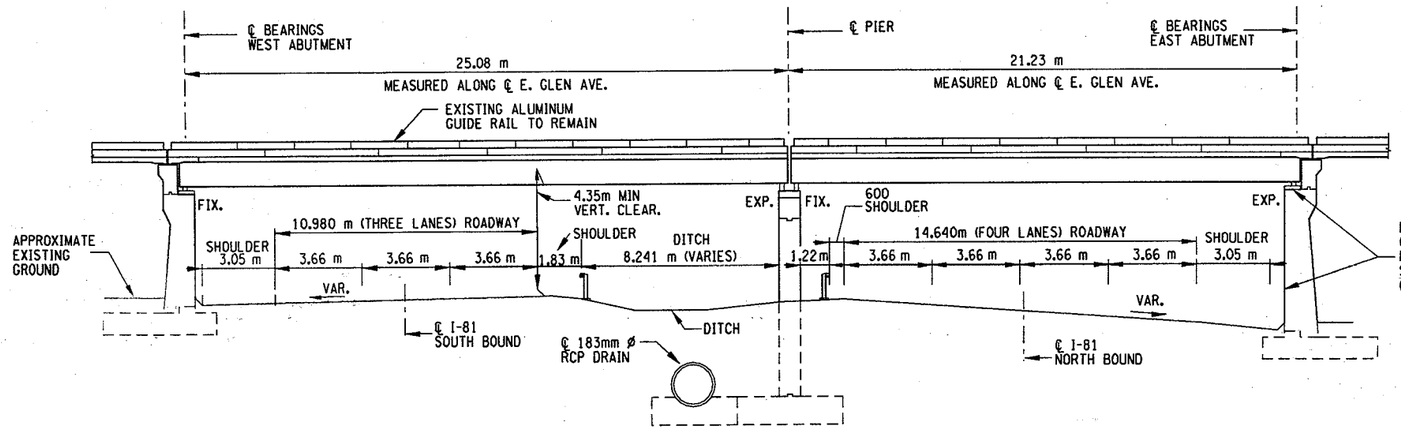
PLAN

5 0 5 10 m



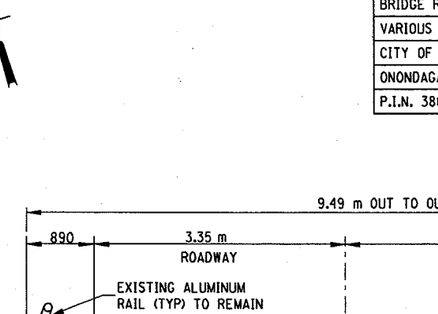
TYPICAL BRIDGE SECTION

0.4 0 1 2 m



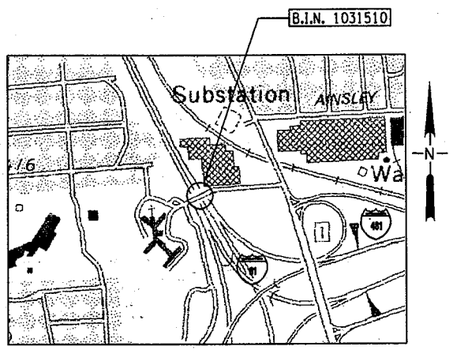
ELEVATION

5 0 5 10 m



EAST GLEN AVE. PROFILE

NTS



LOCATION MAP
SYRACUSE WEST QUADRANGLE

SCALE: 1:24000

ELEMENT SPECIFIC WORK TO BE DONE ON BIN 1031510:

1. ESTABLISH MP&T SCHEMES.
2. PLACE NEW ARMORLESS DECK JOINTS (REPLACE 3-FILLED ELASTIC JOINT SEAL IN KIND)
3. PERFORM CONCRETE DETERIORATION REPAIRS FOR THE FOLLOWING SUBSTRUCTURE ELEMENTS:
   - WEST ABUTMENT-PEDESTAL 1, BACKWALL AND STEM
   - PIER 1- COLUMNS, CAP BEAMS AND PEDS, (STR. LIFT. REQ'D)
   - EAST ABUTMENT - PEDESTAL 1, BACKWALL AND STEM
4. CRACKS IN PIER CAP BEAMS AND COLUMNS WILL BE REPAIRED WITH INJECTION GROUTING.
5. PERFORM LOW STEEL EXPANSION BEARING RESTORATIONS AT THE FOLLOWING LOCATIONS:
   - EAST ABUTMENT BEARINGS NOS. 1 - 5
   - PIER 1 - SPAN 1 - BEARING NOS. 1 - 5

   RESTORATION WORK SHALL INCLUDE THE FOLLOWING ITEMS:
   (1) STRUCTURAL LIFTING UNDER LIVE LOAD
   (2) REPLACEMENT OF BRONZE EXP. BEARING PLATE
   (3) COMMERCIAL BLAST CLEAN TO NEAR WHITE FINISH
   (4) MAINTENANCE PAINTING
   (5) BEARING LUBRICATION
6. PERFORM LOW STEEL FIX BEARING RESTORATIONS AT THE FOLLOWING LOCATIONS:
   - WEST ABUTMENT BEARINGS NOS. 1 - 5
   - PIER 1 - SPAN 2 - BEARING NOS. 1 - 5

   RESTORATION WORK SHALL INCLUDE THE FOLLOWING ITEMS:
   (1) STRUCTURAL LIFTING UNDER LIVE LOAD
   (2) COMMERCIAL BLAST CLEAN TO NEAR WHITE FINISH
   (3) MAINTENANCE PAINTING
   (4) BEARING LUBRICATION
7. APPLY CONCRETE PROTECTIVE SEALER TO ALL EXPOSED SUBSTRUCTURE AREAS.
8. COLUMN DETERIORATION EXTENDS TO THE GROUND AT PIER NO. 1 - COLUMN 2 AND EAST ABUTMENT. THEREFORE, ASPHALT SHOULDER AND DITCH WORK IS REQUIRED AT BASE OF STRUCTURES

NOTES:

STRUCTURAL LIFTING SHALL BE IN PLACE PRIOR TO SUBSTRUCTURE WORK AT NOTED LOCATIONS AND REMAIN UNTIL ITS COMPLETION.

CONTRACTOR SHALL COORDINATE WITH ALL UTILITY OWNERS AS NEEDED TO MAKE REPAIRS TO THE SUBSTRUCTURES.

NO DECORATIVE FINISHES WILL BE INSTALLED UNDER THIS CONTRACT.

ALL JOINT WORK AND EXPANSION RELIEF REPAIRS SHALL BE COMPLETED PRIOR TO ANY STRUCTURAL LIFTING OR BEARING WORK.

C&S Engineers, Inc.
SYRACUSE • BUFFALO • BINGHAMTON

B.I.N. 1031510

SPECIAL NOTE: ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED.

AS BUILT REVISIONS

SIGNATURE DATE

EAST GLEN AVENUE
OVER
INTERSTATE 81

PLAN, ELEVATION & TYPICAL SECTION

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

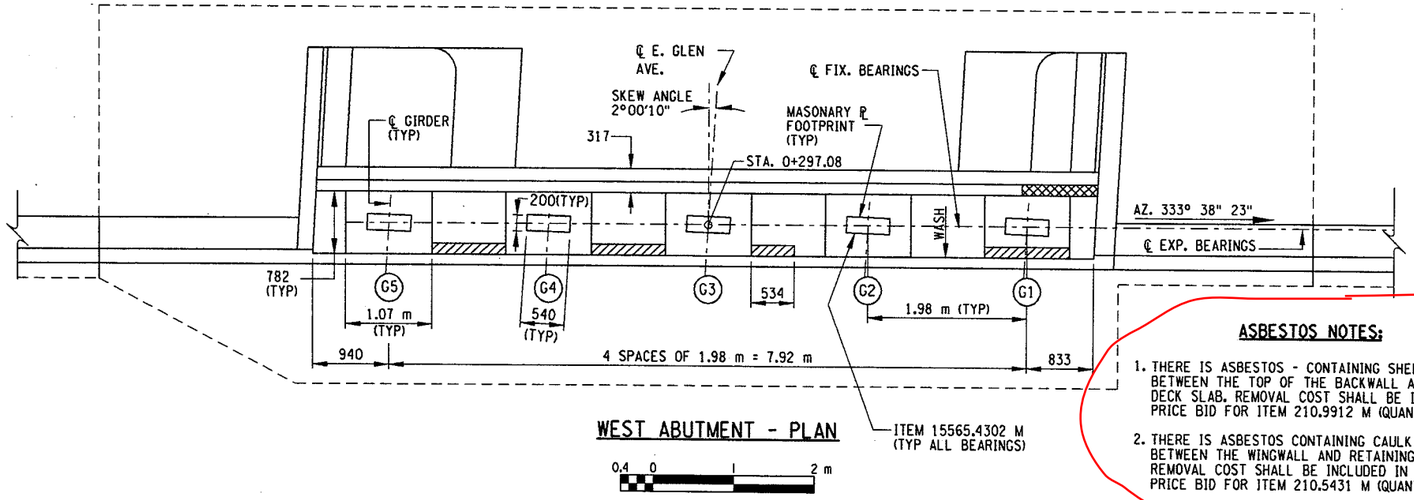
FILENAME	REGION	DATE	DRAWING NO.
380466BB_G1A	3	OCT 2004	ST2-1

DESIGN SUPERVISOR JRF ESTIMATED BY LBO DRAFTED BY DJW CHECKED BY LBO DESIGNED BY TAS CHECKED BY LBO JOB MANAGER PWW

USER = davidw

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259742	534	788

INTERSTATE ROUTE 505, SYRACUSE CITY LINE TO SIZER STREET
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATES 81 & 690
CITY OF SYRACUSE
ONONDAGA COUNTY
P.I.N. 3804.66 B.I.N. 1031510



WEST ABUTMENT - PLAN

ASBESTOS NOTES:

1. THERE IS ASBESTOS - CONTAINING SHEET PACKING LOCATED BETWEEN THE TOP OF THE BACKWALL AND THE BOTTOM OF DECK SLAB. REMOVAL COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 210.9912 M (QUANTITY = 0.12 SM)
2. THERE IS ASBESTOS CONTAINING CAULK COMPOUND BETWEEN THE WINGWALL AND RETAINING WALL. REMOVAL COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 210.5431 M (QUANTITY = 3.65 M)

TABLE - ITEM 582.07 M

ELEMENT	QUANTITY (SM)
BACKWALL	0.25

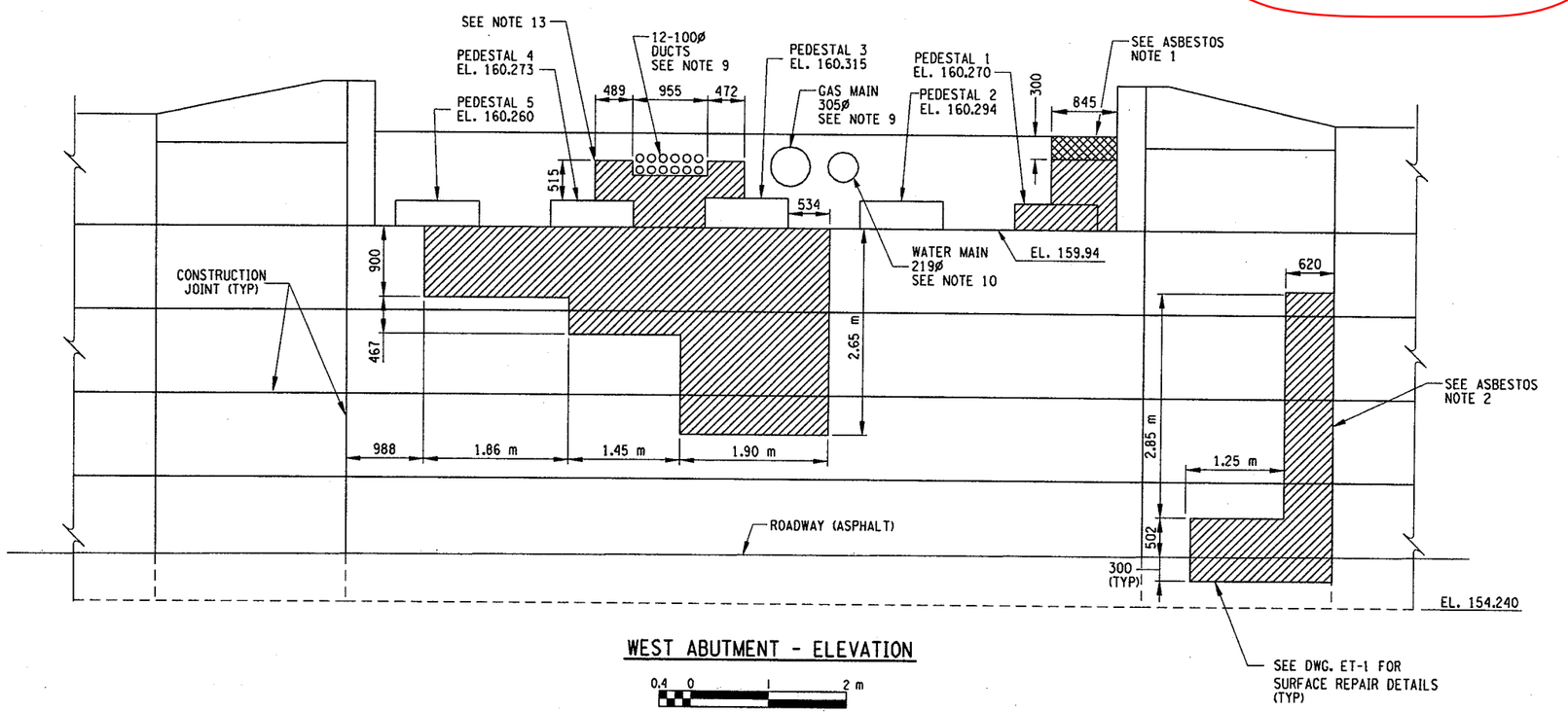
TABLE - ITEM 582.05 M

ELEMENT	QUANTITY (CM)
STEM	1.21
PEDESTAL	0.05
CHEEKWALL	0.46
BACKWALL	0.23

TABLE OF STRUCTURAL LIFTING * (JACKING LOADS)

LOCATION	ITEM	QTY (EA)	DL (KN)	LL (KN)	TOTAL (KN)
PED. 1-5 EXP.	585.02 M	5	271	258	529

* STRUCTURAL LIFTING FROM ABUTMENT SEAT SHALL BE IN PLACE PRIOR TO BEARING RESTORATION WORK.



WEST ABUTMENT - ELEVATION

LIST OF ITEMS USED:

ITEM 18559.1696 M - PROTECTIVE SEALING OF STRUCTURAL CONCRETE, (SM)
ITEM 210.5431 M - REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING CAULKING (BV12) (M)
ITEM 210.9912 M - REMOVAL AND DISPOSAL OF MISC. ASBESTOS CONTAINING MATERIALS (BV12) (SM)
ITEM 582.05 M - REMOVAL OF STRUCTURAL CONCRETE REPLACEMENT WITH CLASS A CONCRETE (CM)
ITEM 582.07 M - REMOVAL OF STRUCTURAL CONCRETE REPLACEMENT WITH VERTICAL AND OVERHEAD PATCH MATERIAL (SM)
ITEM 15565.4302 M - BRIDGE BEARING RESTORATION (EA)
ITEM 585.02 M - STRUCTURAL LIFTING OPERATIONS - TYPE B -(EA) (LIFTING FROM ABUTMENT SEAT)
ITEM 10564.11 M - REMOVE, STORE AND RESET DIAPHRAGMS ON STRUCTURE (EA)

LEGEND:

AREA OF PROPOSED WORK; ITEM 582.05 M REMOVAL OF STRUCTURAL CONCRETE AT LEAST 40-mm BEHIND REINFORCEMENT REPLACE WITH CLASS A CONCRETE

AREA OF PROPOSED WORK; ITEM 582.07 M REMOVAL OF STRUCTURAL CONCRETE-AT LEAST 40 mm BEHIND REINFORCEMENT REPLACE WITH VERTICAL AND OVERHEAD PATCH MATERIAL.

NOTES:

1. ALL AREAS SHOWN FOR CONCRETE REMOVAL ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND EIC.
2. CONCRETE REMOVAL TO LIMITS SHOWN INCLUDES SOUND CONCRETE AROUND THE PERIMETER OF THE DETERIORATED CONCRETE, A.O.B.E.
3. WHEN REMOVING EXISTING CONCRETE, SAWCUT 5 mm MIN. TO PRODUCE NEAT REMOVAL LINES. ANY COST TO BE INCLUDED IN THE BID PRICE FOR ITEM 582.05 M OR 582.07 M.
4. ELEVATIONS ARE GIVEN FOR REFERENCE ONLY.
5. REFER TO CONTRACT F.I.C. 64-7 FOR ORIGINAL CONSTRUCTION DETAILS.
6. FOR CONCRETE REPAIR DETAILS SEE DWG. NO. BR-1.
7. RESTORE TO ORIGINAL DIMENSIONS.
8. PEDESTALS NUMBERED FROM NORTH TO SOUTH.
9. CONTRACTOR SHALL VERIFY LOCATION OF UTILITIES PRIOR TO COMMENCING CONCRETE REPAIR WORK IN THE BACKWALL.
10. STRUCTURAL LIFTING OPERATIONS FOR BEARING RESTORATION (ITEM 585.02 M - TYPE B LIFTING FROM ABUTMENT SEAT) SEE DWG. NO. TSL-1.
11. PERFORM LOW SLIDER EXPANSION BEARING RESTORATION TO BEARING NOS. 1-5 (ITEM 15565.4302 M) SEE DWG. NO. BR-5
12. SEE DWG. NO. BR-2 FOR DETAILS FOR PLACEMENT OF GALVANIC ANODES IN PEDESTAL REPAIR AREA.
13. THE CONTRACTOR SHALL REMOVE AND REINSTALL THE END DIAPHRAGM AS NEEDED FOR ACCESS TO THIS REPAIR AREA LOCATED ON THE BACKWALL. THE COST TO BE INCLUDED UNDER ITEM 10564.11 M.

B.I.N. 1031510

SPECIAL NOTE: ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED.

AS BUILT REVISIONS

SIGNATURE DATE

EAST GLEN AVENUE OVER INTERSTATE 81

WEST ABUTMENT

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

C&S Engineers, Inc. SYRACUSE • BUFFALO • BINGHAMTON

FILENAME	REGION	DATE	DRAWING NO.
380466BB_A1A	3	OCT 2004	ST2-2

DESIGN SUPERVISOR PWW JOB MANAGER TAS DESIGNED BY LBO CHECKED BY LBO DRAFTED BY DJW CHECKED BY LBO ESTIMATED BY JRF CHECKED BY LBO

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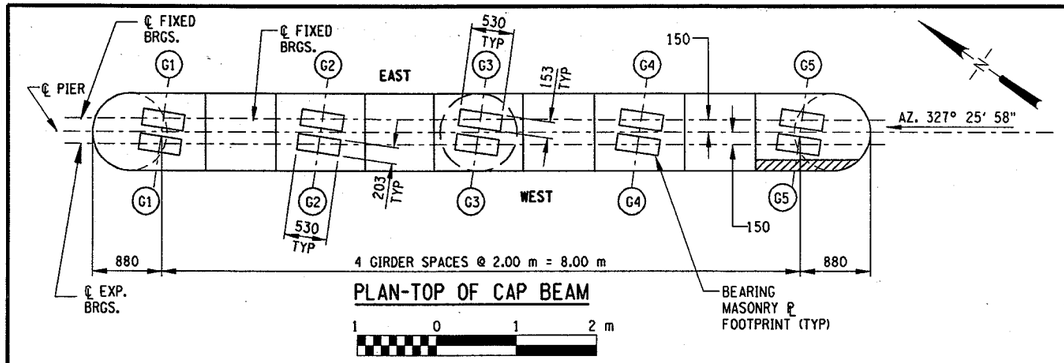
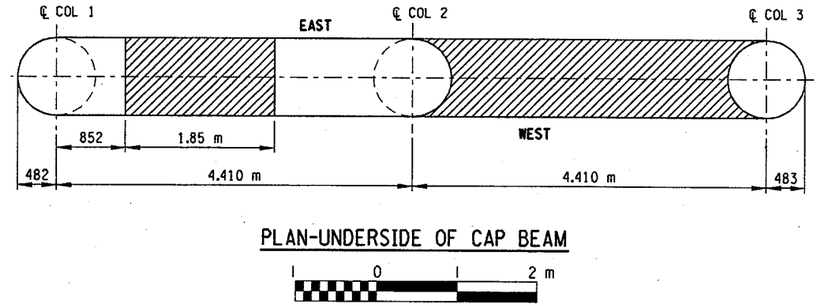
USER = davidw

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259742	535	788

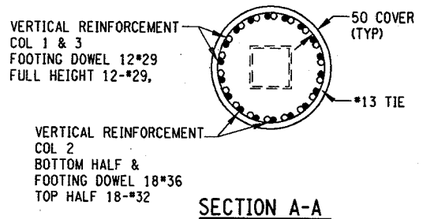
INTERSTATE ROUTE 505, SYRACUSE CITY LINE TO SIZER STREET
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATES 81 & 690
CITY OF SYRACUSE
ONONDAGA COUNTY
P.I.N. 3804.66 B.I.N. 1031510



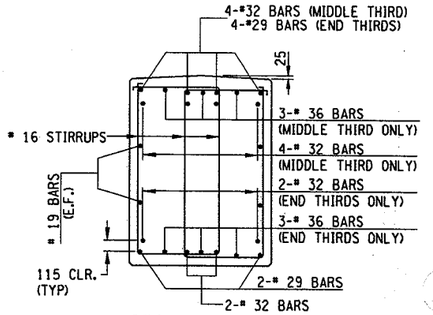
PLAN-TOP OF CAP BEAM



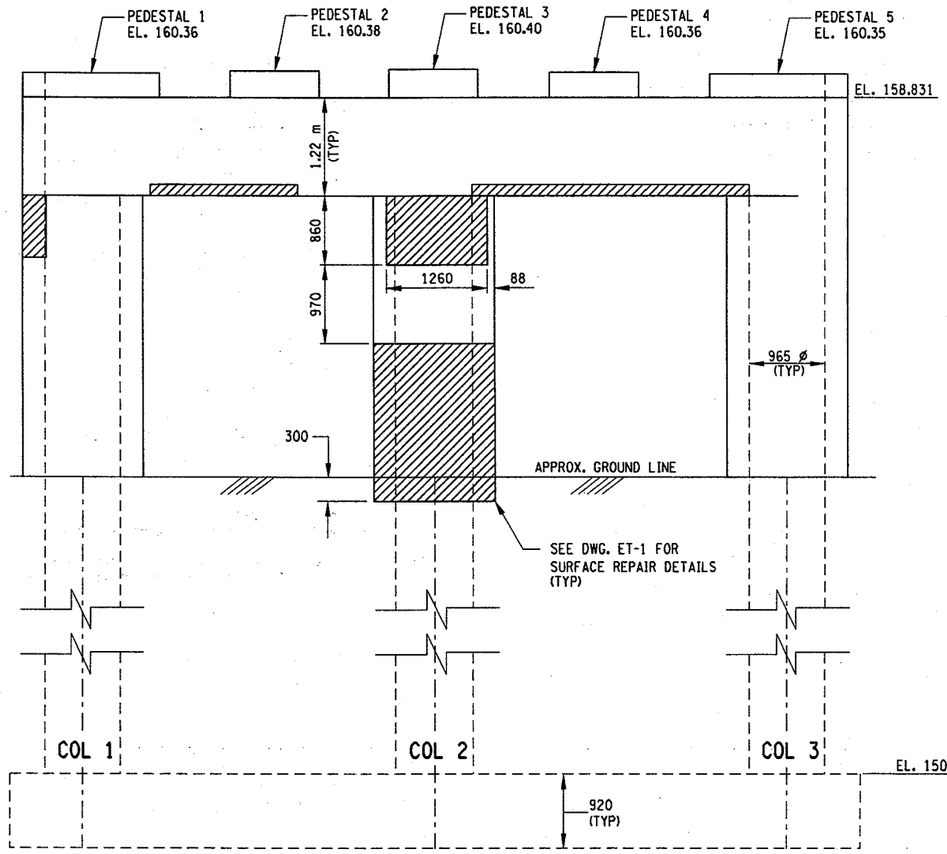
PLAN-UNDERSIDE OF CAP BEAM



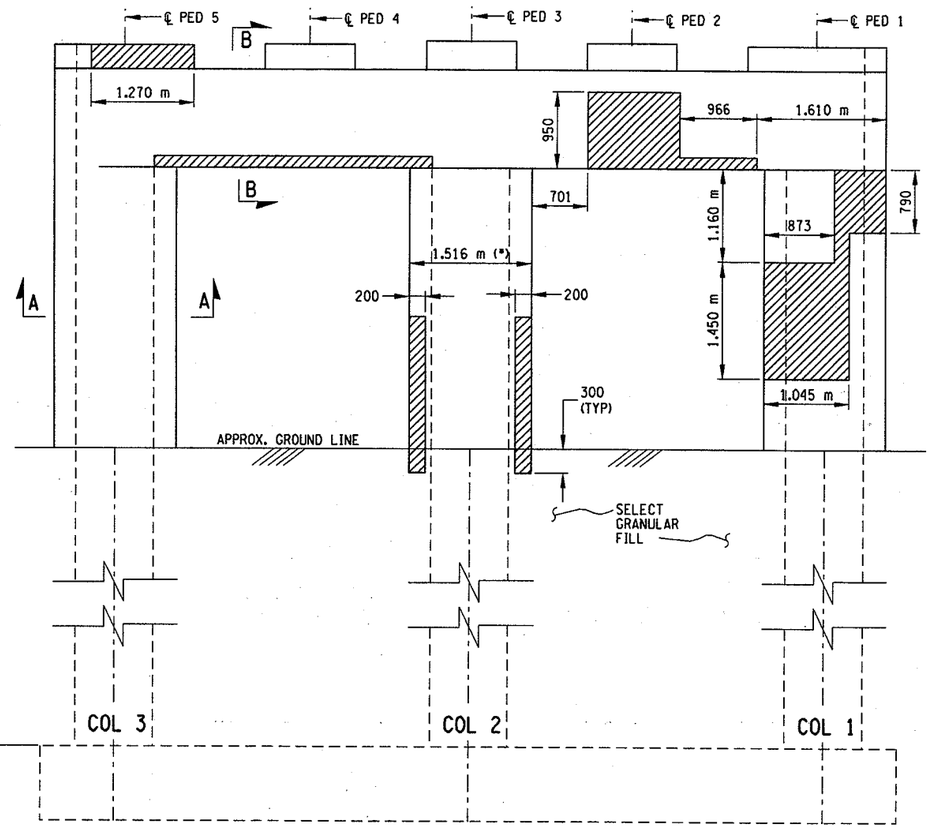
SECTION A-A
NTS



SECTION B-B
NTS



WEST FACE ELEVATION



EAST FACE ELEVATION

TABLE OF STRUCTURAL LIFTING (JACKING LOADS) *					
LOCATION	ITEM	QTY (EA)	DL (KN)	LL+I (KN)	TOTAL (KN)
PED. 1-5 FIX.	585.03 M	5	271	258	529
PED. 1-5 EXP.	585.03 M	5	271	258	529

* STRUCTURAL LIFTING FROM FOOTING SHALL BE IN PLACE PRIOR TO CONCRETE REPAIRS TO PIER.

TABLE - ITEM 582.05 M	
ELEMENT	QUANTITY (CM)
PEDESTAL	0.05
PIER	1.91

TABLE - ITEM 11555.8198 M	
PIER	3.2 m

NOTES:

1. ALL AREAS SHOWN FOR CONCRETE REMOVAL ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND EIC.
2. CONCRETE REMOVAL TO LIMITS SHOWN INCLUDES SOUND CONCRETE AROUND THE PERIMETER OF THE DETERIORATED CONCRETE, A.O.B.E.
3. WHEN REMOVING EXISTING CONCRETE, SAWCUT 5 mm MIN. TO PRODUCE NEAT REMOVAL LINES. ANY COST TO BE INCLUDED IN THE BID PRICE FOR ITEM 582.05 M.
4. ELEVATIONS ARE GIVEN FOR REFERENCE ONLY.
5. REFER TO CONTRACT FIC 64-7 FOR ORIGINAL CONSTRUCTION DETAILS.
6. FOR REMOVAL DETAILS SEE DWG. BR-1.
7. RESTORE TO ORIGINAL DIMENSIONS.
8. PEDESTALS NUMBERED FROM NORTH TO SOUTH.
9. STRUCTURAL LIFTING OPERATIONS FOR BEARING RESTORATION AND CONCRETE REPAIRS (ITEM 585.03M-TYPE C LIFTING FROM FOOTING). SEE DWG NO. TSL-1.
10. PERFORM EXPANSION BEARING RESTORATION TO BEARING NOS. 1 - 5 (EXP.), (ITEM 15565.4302 M). SEE DWG NO. BR-5, FIXED BEARING RESTORATION TO BEARINGS NO. 1 - 5.
11. NO DECORATIVE FINISHES WILL BE INSTALLED UNDER THIS CONTRACT.
12. SEE DWG. NO. BR-2 FOR DETAILS OF PLACEMENT OF GALVANIC ANODES IN PEDESTAL REPAIR AREAS.
13. CRACKS IN PIER COLUMNS AND CAPBEAM WILL BE REPAIRED WITH INJECTION GROUTING AOBE.

LIST OF ITEMS USED:

ITEM 11555.8198 M - CRACK REPAIR (3 mm OR WIDER) BY INJECTION OF PORTLAND CEMENT GROUT (m).
ITEM 18559.1696 M - PROTECTIVE SEALING OF STRUCTURAL CONCRETE, (SM)
ITEM 15565.4302 M - BRIDGE BEARING RESTORATION (EA)
ITEM 582.05 M - REMOVAL OF STRUCTURAL CONCRETE - REPLACEMENT WITH CLASS A CONCRETE (CM)
ITEM 585.03 M - STRUCTURAL LIFTING OPERATIONS - TYPE C - (EA) (LIFTING FROM FOOTING)

LEGEND:

AREA OF PROPOSED WORK; ITEM 582.05 M REMOVAL OF STRUCTURAL CONCRETE-AT LEAST 40 mm BEHIND REINFORCEMENT REPLACE WITH CLASS A CONCRETE.

(*) NOTE:

THE WIDTH OF THE PIER COLUMN SHOWN IN ELEVATION REPRESENTS THE FLATTENED AREA OF ½ THE CIRCUMFERENCE OF THE COLUMN

SPECIAL NOTE: ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED.

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SPECIAL NOTE: ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED.

AS BUILT REVISIONS

SIGNATURE DATE

EAST GLEN AVENUE OVER INTERSTATE 81

PIER 1

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

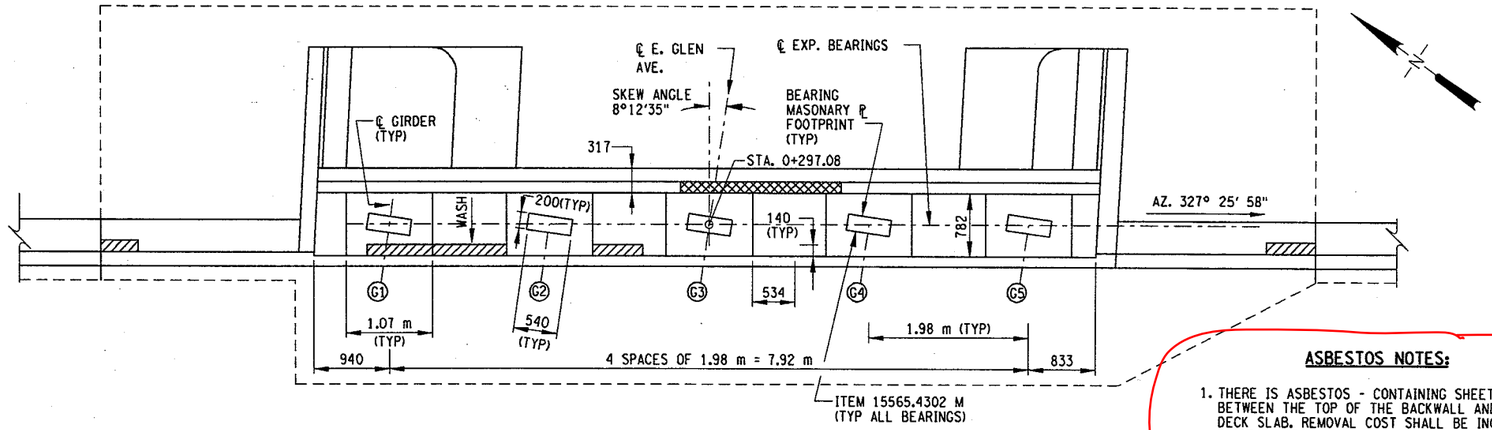
FILENAME	REGION	DATE	DRAWING NO.
380466BB_P1A	3	OCT 2004	ST2-3

DESIGN SUPERVISOR PWW JOB MANAGER TAS DESIGNED BY LBO CHECKED BY DJW DRAFTED BY LBO ESTIMATED BY JRF CHECKED BY LBO

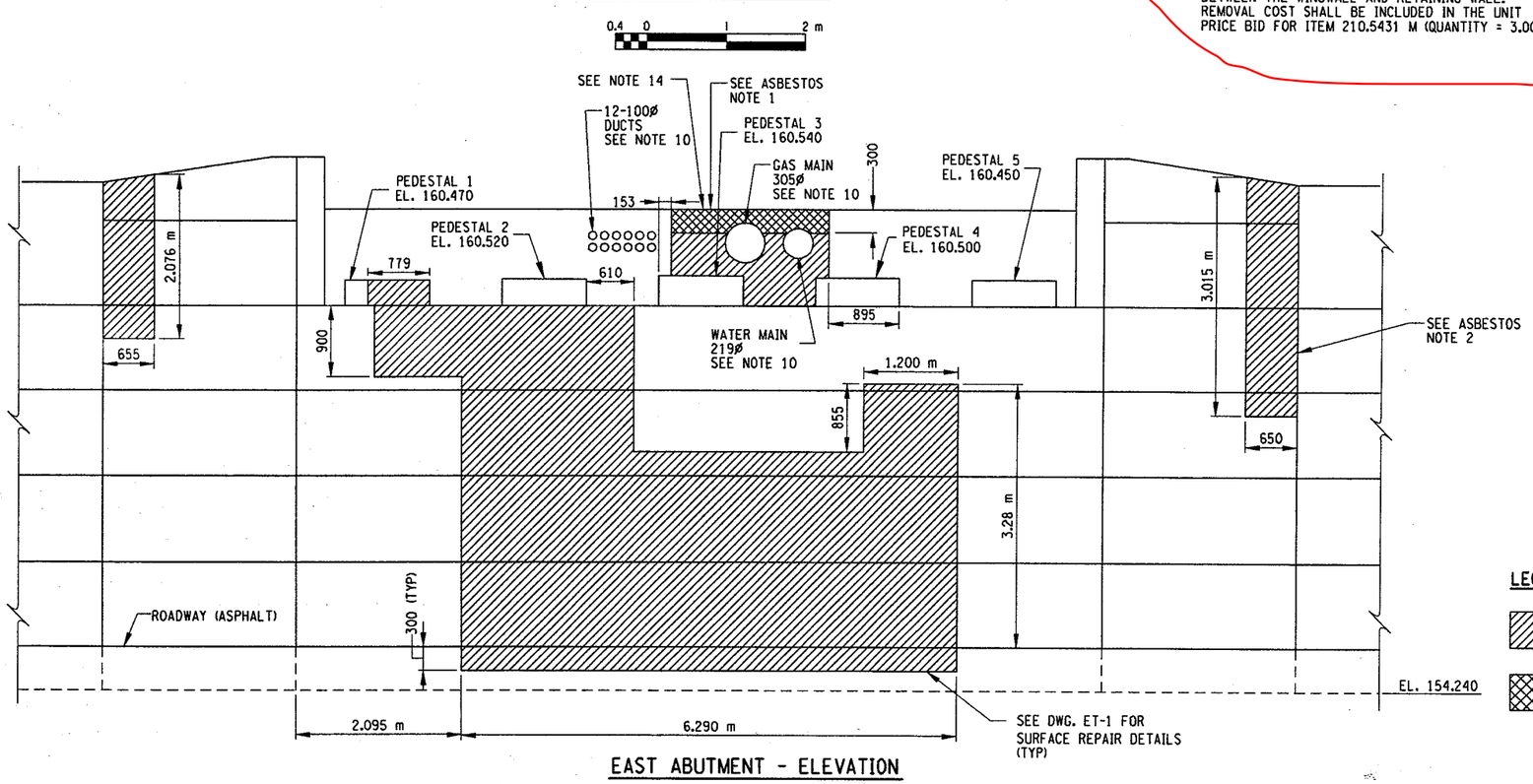
USER = davidw

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259742	536	788

INTERSTATE ROUTE 505, SYRACUSE CITY LINE TO SIZER STREET
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATES 81 & 690
CITY OF SYRACUSE
ONONDAGA COUNTY
P.I.N. 3804.66 B.I.N. 1031510



EAST ABUTMENT - PLAN



EAST ABUTMENT - ELEVATION

0.4 0 2 m

TABLE - ITEM 582.07 M	
ELEMENT	QUANTITY (SM)
BACKWALL	0.60

TABLE - ITEM 11555.8198 M	
ELEMENT	QUANTITY (M)
BACKWALL	1.5

TABLE - ITEM 582.05 M	
ELEMENT	QUANTITY (CM)
STEM	3.25
PEDESTAL	0.03
CHEEKWALL	0.46
BACKWALL	0.20

ASBESTOS NOTES:

1. THERE IS ASBESTOS - CONTAINING SHEET PACKING LOCATED BETWEEN THE TOP OF THE BACKWALL AND THE BOTTOM OF DECK SLAB. REMOVAL COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 210.9912 M (QUANTITY = 0.28 SM)
2. THERE IS ASBESTOS CONTAINING CAULK COMPOUND BETWEEN THE WINGWALL AND RETAINING WALL. REMOVAL COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 210.5431 M (QUANTITY = 3.00 SM)

TABLE OF STRUCTURAL LIFTING * (JACKING LOADS)

LOCATION	ITEM	QTY (EA)	DL (KN)	LL (KN)	TOTAL (KN)
PED. 1-5 EXP.	585.02 M	5	271	258	529

* STRUCTURAL LIFTING FROM ABUTMENT SEAT SHALL BE IN PLACE PRIOR TO BEARING RESTORATION WORK.

LIST OF ITEMS USED:

ITEM 11555.8198 M - CRACK REPAIR (3 mm OR WIDER) BY INJECTION OF PORTLAND CEMENT GROUT (m) AS ORDERED BY EIC

ITEM 210.5431 M - REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING CAULKING (BV12) (M)

ITEM 210.9912 M - REMOVAL AND DISPOSAL OF MISC. ASBESTOS CONTAINING MATERIALS (BV12) (SM)

ITEM 18559.1696 M - PROTECTIVE SEALING OF STRUCTURAL CONCRETE, (SM)

ITEM 582.05 M - REMOVAL OF STRUCTURAL CONCRETE REPLACEMENT WITH CLASS A CONCRETE (CM)

ITEM 582.07 M - REMOVAL OF STRUCTURAL CONCRETE REPLACEMENT WITH VERTICAL AND OVERHEAD PATCH MATERIAL (SM).

ITEM 15565.4302 M - BRIDGE BEARING RESTORATION (EA)

ITEM 585.02 M - STRUCTURAL LIFTING OPERATIONS - TYPE B -(EA) (LIFTING FROM ABUTMENT SEAT)

ITEM 10564.11 M - REMOVE, STORE AND RESET DIAPHRAGMS ON STRUCTURE (EA)

LEGEND:

AREA OF PROPOSED WORK; ITEM 582.05 M
REMOVAL OF STRUCTURAL CONCRETE AT LEAST 40-mm BEHIND REINFORCEMENT REPLACE WITH CLASS A CONCRETE

AREA OF PROPOSED WORK; ITEM 582.07 M
REMOVAL OF STRUCTURAL CONCRETE-AT LEAST 40 mm BEHIND REINFORCEMENT REPLACE WITH VERTICAL AND OVERHEAD PATCH MATERIAL

B.I.N. 1031510

SPECIAL NOTE: ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED.

NOTES:

1. ALL AREAS SHOWN FOR CONCRETE REMOVAL ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND EIC.
2. CONCRETE REMOVAL TO LIMITS SHOWN INCLUDES SOUND CONCRETE AROUND THE PERIMETER OF THE DETERIORATED CONCRETE, A.O.B.E.
3. WHEN REMOVING EXISTING CONCRETE, SAWCUT 5 mm MIN. TO PRODUCE NEAT REMOVAL LINES. ANY COST TO BE INCLUDED IN THE BID PRICE FOR ITEM 582.05 M OR 582.07 M.
4. ELEVATIONS ARE GIVEN FOR REFERENCE ONLY.
5. REFER TO CONTRACT F.I.C. 64-7 FOR ORIGINAL CONSTRUCTION DETAILS.
6. FOR CONCRETE REPAIR DETAILS SEE DWG. NO. BR-1.
7. RESTORE TO ORIGINAL DIMENSIONS.
8. PEDESTALS NUMBERED FROM NORTH TO SOUTH.
9. CRACKS IN BACKWALL WILL BE REPAIRED AS ORDERED BY EIC BY INJECTION GROUTING METHOD UNDER ITEM 11555.8198 M.
10. CONTRACTOR SHALL VERIFY LOCATION OF UTILITIES PRIOR TO COMMENCING CONCRETE REPAIR WORK IN THE BACKWALL.
11. STRUCTURAL LIFTING OPERATIONS FOR BEARING RESTORATION (ITEM 585.02 M - TYPE B LIFTING FROM ABUTMENT SEAT) SEE DWG. NO. TSL-1.
12. PERFORM LOW SLIDER EXPANSION BEARING RESTORATION TO BEARING NOS. 1-5 (ITEM 15565.4302 M) SEE DWG. NO. BR-5.
13. SEE DWG. NO. BR-2 FOR DETAILS FOR PLACEMENT OF GALVANIC ANODES IN PEDESTAL REPAIR AREA.
14. THE CONTRACTOR SHALL REMOVE AND REINSTALL THE END DIAPHRAGM AS NEEDED FOR ACCESS TO THIS REPAIR AREA LOCATED ON THE BACKWALL. THE COST TO BE INCLUDED UNDER ITEM 10564.11 M

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AS BUILT REVISIONS

SIGNATURE DATE

EAST GLEN AVENUE OVER INTERSTATE 81

EAST ABUTMENT

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
380466BB_A2A	3	OCT 2004	ST2-4

DESIGN SUPERVISOR PWW JOB MANAGER TAS DESIGNED BY LBO CHECKED BY DJW DRAFTED BY LBO ESTIMATED BY JRF CHECKED BY LBO

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DATE/TIME = 11/8/2004 1:19 PM
USER = davidw

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259742	537	788

INTERSTATE ROUTE 505 ONONDAGA INTERCHANGE
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATES 81 & 690
CITY OF SYRACUSE
ONONDAGA COUNTY
P.I.N. 3804.66 | B.I.N. 1031529

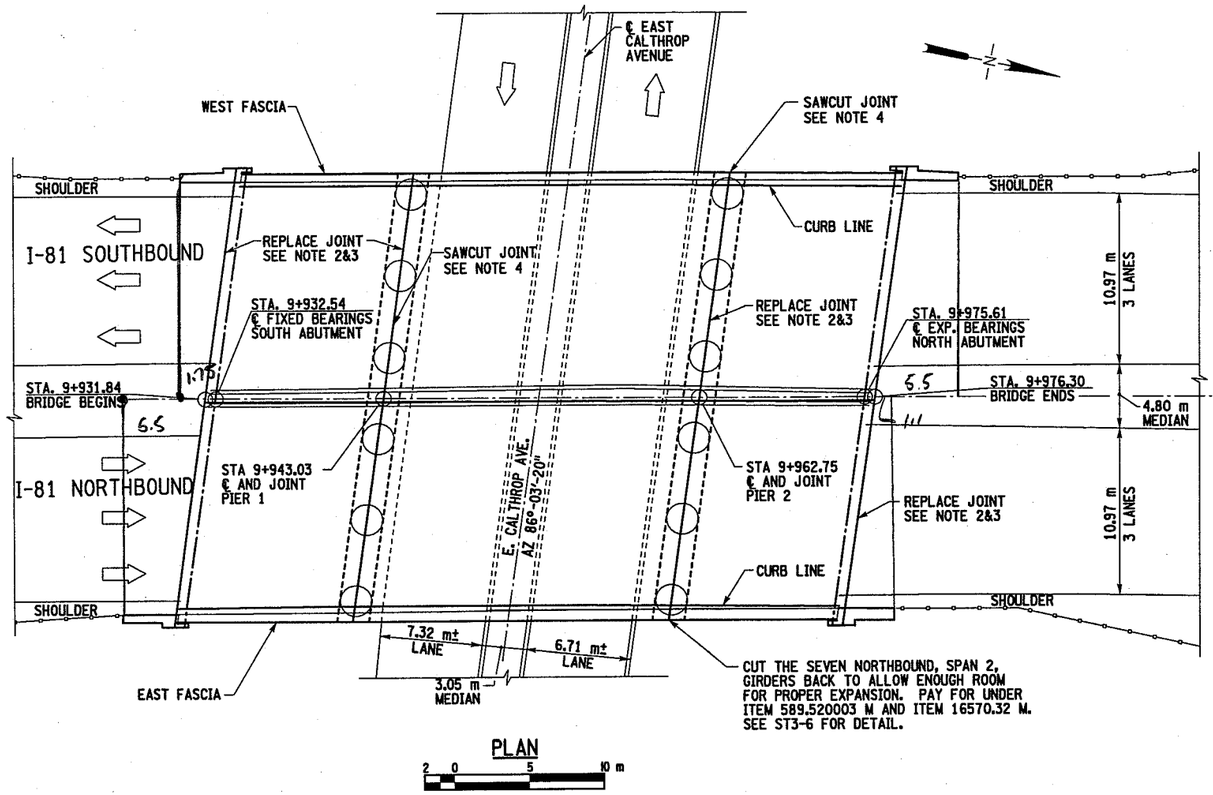
NOTES:

STRUCTURAL LIFTING SHALL BE IN PLACE PRIOR TO SUBSTRUCTURE WORK AT NOTED LOCATIONS AND REMAIN UNTIL ITS COMPLETION.

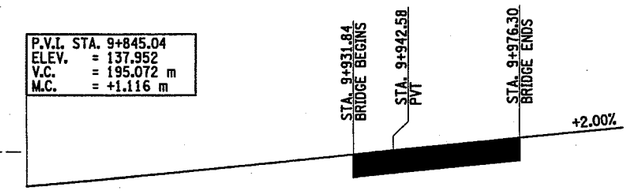
CONTRACTOR SHALL COORDINATE WITH NIAGARA MOHAWK TO REMOVE AND REINSTALL LIGHT FIXTURES AND CONDUITS TO MAKE NEEDED REPAIRS TO THE SUBSTRUCTURES.

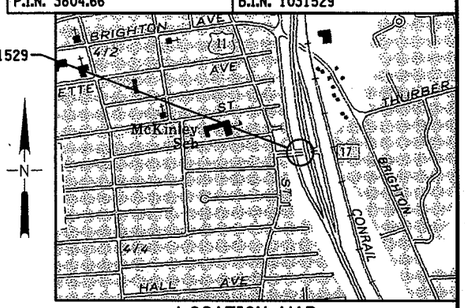
NO DECORATIVE FINISHES WILL BE INSTALLED UNDER THIS CONTRACT.

ALL JOINT WORK AND EXPANSION RELIEF REPAIRS SHALL BE COMPLETED PRIOR TO ANY STRUCTURAL LIFTING OR BEARING WORK.



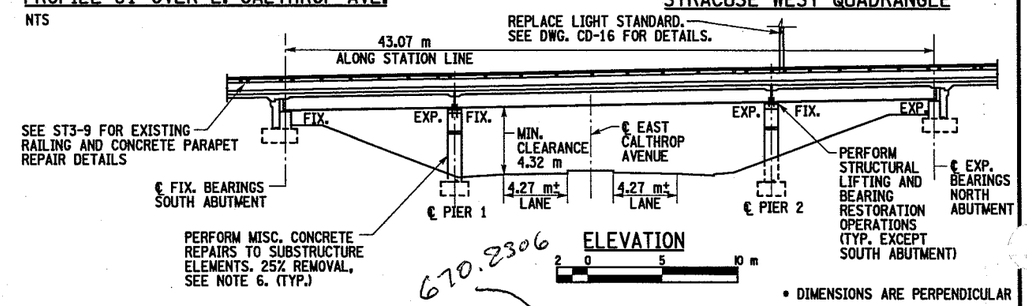
PLAN





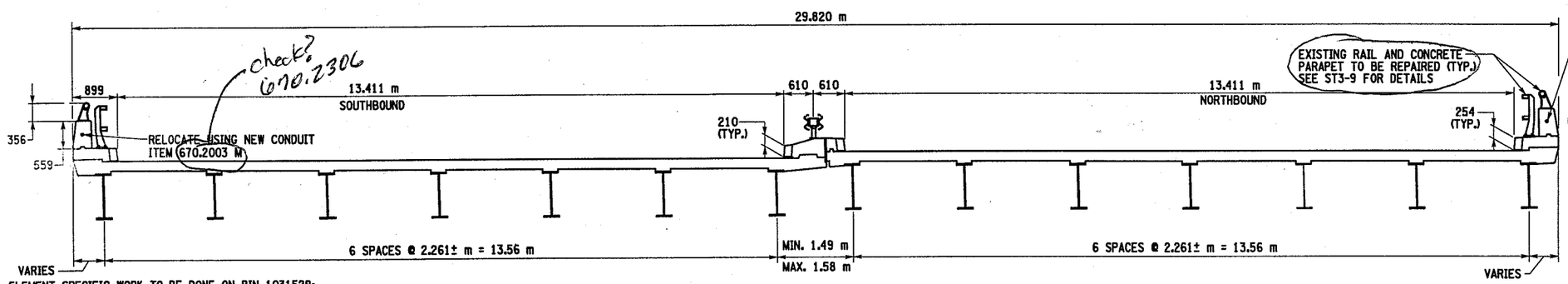
LOCATION MAP
SYRACUSE WEST QUADRANGLE

PROFILE 81 OVER E. CALTHROP AVE.
NTS



ELEVATION

• DIMENSIONS ARE PERPENDICULAR



TYPICAL BRIDGE SECTION

APPROXIMATE LOCATION OF EXISTING 50 mm ø CONDUIT. WEST PARAPET SIMILAR. RELOCATE USING NEW CONDUIT ITEM 670.2003 M. SEE NOTE 5 & CD-1 (TYP.)

13. APPLY CONCRETE PROTECTIVE SEALER TO ALL EXPOSED SUBSTRUCTURE AND PARAPET AREAS.

14. PERFORM CONCRETE REPAIRS FOR PARAPETS AND INSTALL LIGHTING CONDUIT AND CONDUCTOR ALONG BACK EDGE OF PARAPET AND CAST IRON JUNCTION BOXES AT EACH LIGHT STANDARD IN ORDER TO MAINTAIN HIGHWAY LIGHTING AFTER THE PARAPET SECTIONS HAVE BEEN CUT.

15. COLUMN AND STEM REPAIR AREAS EXTEND PAST EXISTING GRADE AND THEREFORE, CONCRETE PAVING BLOCKS AND ASPHALT WORK IS REQUIRED AT THE BASE OF THE COLUMNS FOR THE FOLLOWING SUBSTRUCTURES:
- PIER 1, 2
- NORTH ABUTMENT

16. SEE DWG. BR-2 FOR DETAILS FOR PLACEMENT OF GALVANIC ANODES IN PEDESTAL REPAIR AREAS, ITEM 16582.99 M.

SPECIAL NOTE: ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED

B.I.N. 1031529

ELEMENT SPECIFIC WORK TO BE DONE ON BIN 1031529:

1. ESTABLISH M&PT SCHEMES.

2. REMOVE ARMORED COMPRESSION SEAL JOINTS AT THE FOLLOWING LOCATIONS:
   - SOUTH ABUTMENT
   - PIER 1
   - PIER 2
   - NORTH ABUTMENT

3. INSTALL NEW ARMORLESS BRIDGE JOINT SYSTEM AT THE FOLLOWING LOCATIONS:
   - SOUTH ABUTMENT
   - PIER 1
   - PIER 2
   - NORTH ABUTMENT

4. SAWCUT CONCRETE TO PROVIDE ADEQUATE SPACE FOR PROPER EXPANSION AND CONTRACTION OF THE PROPOSED JOINTS, ITEM 02520.20 M.
   - PIER 1
   - PIER 2

5. CONTRACTOR SHALL COORDINATE RELOCATION OF CONDUIT & REPLACEMENT OF LIGHT STANDARDS WITH NIAGARA MOHAWK.

6. PERFORM CONCRETE REPAIRS FOR THE FOLLOWING SUBSTRUCTURE ELEMENTS:
   - SOUTH ABUTMENT - BACKWALL, PEDESTALS
   - PIER 1 - CAP BEAM, COLUMNS, AND PEDESTALS
   - PIER 2 - CAP BEAM, COLUMNS, AND PEDESTALS (STRUCTURAL LIFTING REQUIRED)
   - NORTH ABUTMENT - BACKWALL, PEDESTALS

   UNSUPPORTED COLUMNS, CAP BEAMS OR PEDESTALS WILL BE REPAIRED ONLY 25% AT A TIME.

7. REMOVE AND REPLACE PEDESTAL IN KIND AT THE FOLLOWING LOCATIONS:
   - PIER 1 - PEDESTAL 1
   - PIER 2 - PEDESTAL 2
   - NORTH ABUTMENT - PEDESTAL 12

8. REPAIR CRACKS IN THE SUBSTRUCTURES WITH INJECTION GROUTING.

9. ALL BEARINGS THAT DO NOT RECEIVE RESTORATION SHALL RECEIVE MAINTENANCE PAINTING AND LUBRICATION, TIGHTEN NUTS ON ANCHOR BOLTS AS NECESSARY.

10. REPLACE APPROXIMATELY 8 SM OF CONCRETE PAVING BLOCKS AT THE TOP RIGHT OF THE BEGIN ABUTMENT

11. PERFORM LOW STEEL FIXED BEARING RESTORATION AT THE FOLLOWING LOCATION:
   - PIER 1 - BEARINGS 1 - 14
   - PIER 2 - BEARINGS 1 - 14

   RESTORATION WORK SHALL INCLUDE THE FOLLOWING ITEMS:
   (1) STRUCTURAL LIFTING UNDER LIVE LOAD
   (2) REPLACEMENT OF SHEARED ANCHOR BOLTS AS NEEDED (IF PEDESTAL IS NOT SCHEDULED FOR REPLACEMENT, REMOVE TOP 150 mm OF CONCRETE PEDESTAL, ITEM 580.01 M AND ITEM 555.09 M)
   (3) COMMERCIAL BLAST CLEAN TO NEAR WHITE FINISH
   (4) MAINTENANCE PAINTING
   (5) BEARING LUBRICATION
   NOTE: FIXED BEARINGS SHALL NOT BE DISASSEMBLED UNLESS A.O.B.E.

12. PERFORM LOW STEEL EXPANSION BEARING RESTORATIONS AT THE FOLLOWING LOCATIONS:
   - PIER 1 - BEARINGS 1 - 14
   - PIER 2 - BEARINGS 1 - 14
   - NORTH ABUTMENT - BEARINGS 1 - 14

   RESTORATION WORK SHALL INCLUDE THE FOLLOWING ITEMS:
   (1) STRUCTURAL LIFTING UNDER LIVE LOAD
   (2) REPLACEMENT OF BRONZE EXP. BEARING PLATE
   (3) COMMERCIAL BLAST CLEAN TO NEAR WHITE FINISH
   (4) MAINTENANCE PAINTING
   (5) BEARING LUBRICATION

Stantec

AS BUILT REVISIONS

SIGNATURE | DATE

INTERSTATE 81
OVER
E. CALTHROP AVE.

PLAN, ELEVATION AND TYPICAL SECTION

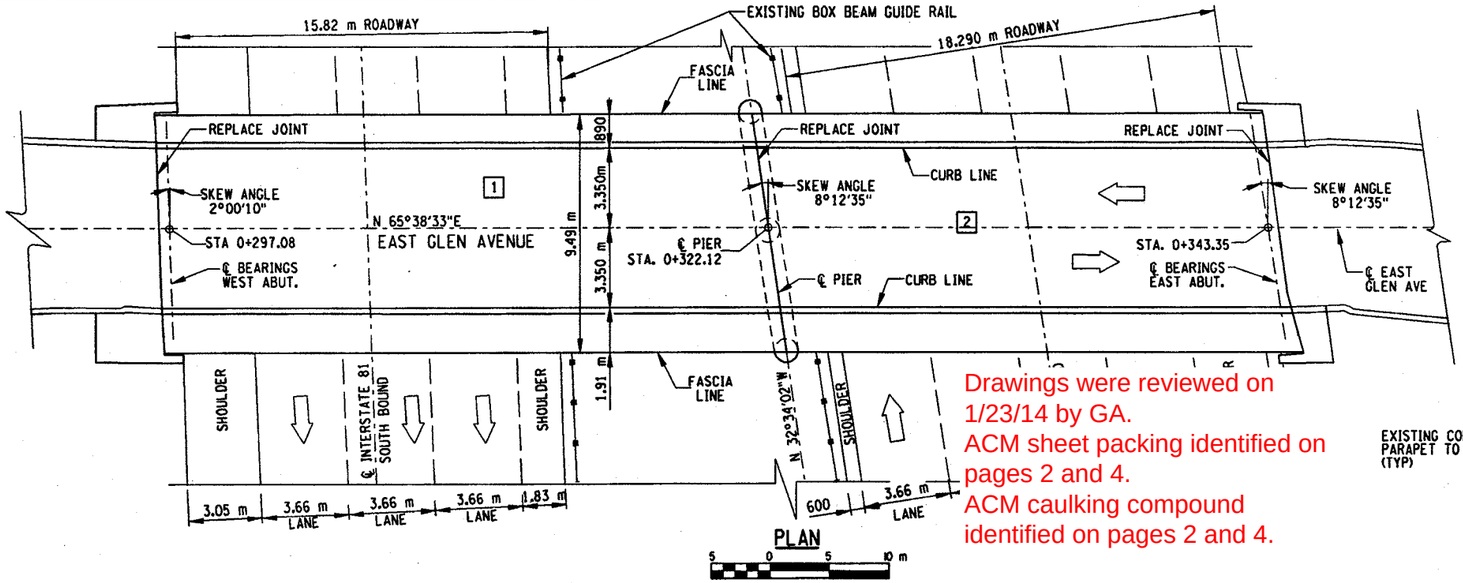
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
380466CB_G1A	3	OCT. 2004	ST3-1

DESIGN SUPERVISOR RON NORTHROP JOB MANAGER RON NORTHROP DESIGNED BY LOWELL LINGO CHECKED BY LOWELL LINGO DRAFTED BY RJ LAMPHEAR CHECKED BY LOWELL LINGO ESTIMATED BY LOWELL LINGO CHECKED BY RON NORTHROP

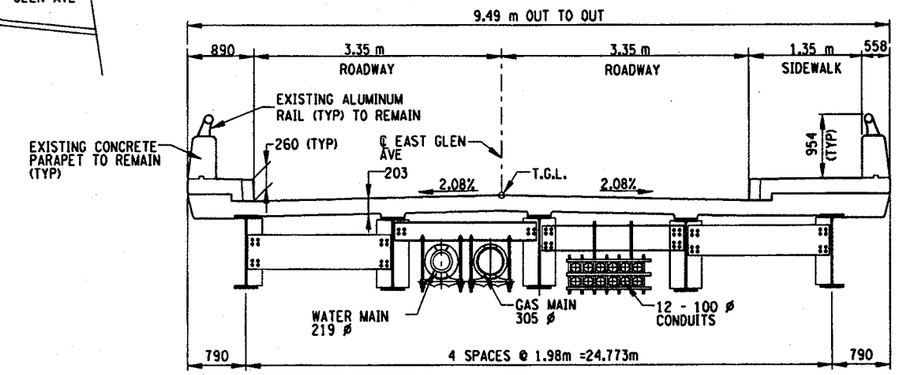
FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259742	533	788

INTERSTATE ROUTE 505, SYRACUSE CITY LINE TO SIZER STREET
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATES 81 & 690
CITY OF SYRACUSE
ONONDAGA COUNTY
P.I.N. 3804.66 B.I.N. 1031510

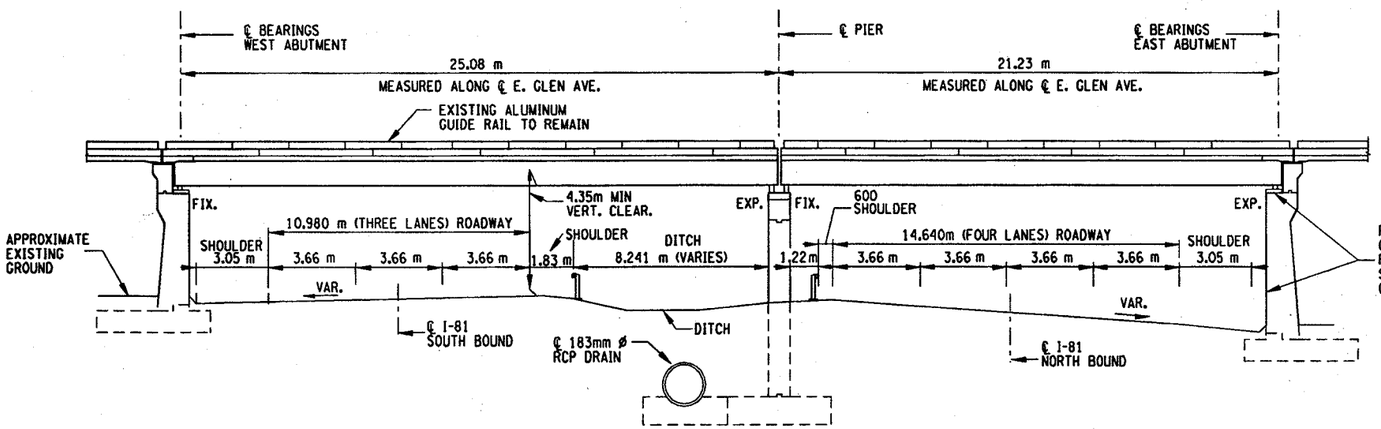


PLAN

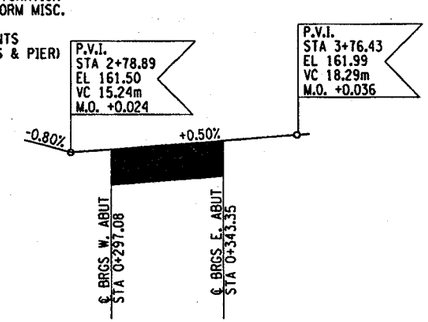
Drawings were reviewed on 1/23/14 by GA.
ACM sheet packing identified on pages 2 and 4.
ACM caulking compound identified on pages 2 and 4.



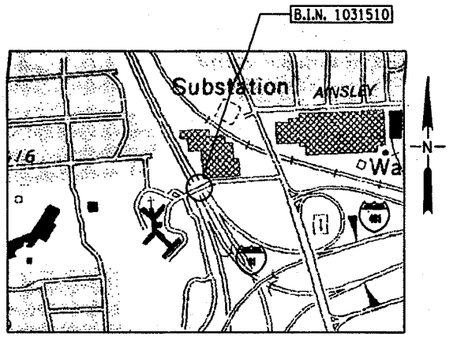
TYPICAL BRIDGE SECTION



ELEVATION



EAST GLEN AVE. PROFILE
NTS



LOCATION MAP
SYRACUSE WEST QUADRANGLE
SCALE: 1:24000

ELEMENT SPECIFIC WORK TO BE DONE ON BIN 1031510:

1. ESTABLISH MP&T SCHEMES.
2. PLACE NEW ARMORLESS DECK JOINTS (REPLACE 3-FILLED ELASTIC JOINT SEAL IN KIND)
3. PERFORM CONCRETE DETERIORATION REPAIRS FOR THE FOLLOWING SUBSTRUCTURE ELEMENTS:
   - WEST ABUTMENT-PEDESTAL 1, BACKWALL AND STEM
   - PIER 1- COLUMNS, CAP BEAMS AND PEDS, (STR. LIFT. REQ'D)
   - EAST ABUTMENT - PEDESTAL 1, BACKWALL AND STEM
4. CRACKS IN PIER CAP BEAMS AND COLUMNS WILL BE REPAIRED WITH INJECTION GROUTING.
5. PERFORM LOW STEEL EXPANSION BEARING RESTORATIONS AT THE FOLLOWING LOCATIONS:
   - EAST ABUTMENT BEARINGS NOS. 1 - 5
   - PIER 1 - SPAN 1 - BEARING NOS. 1 - 5

   RESTORATION WORK SHALL INCLUDE THE FOLLOWING ITEMS:
   (1) STRUCTURAL LIFTING UNDER LIVE LOAD
   (2) REPLACEMENT OF BRONZE EXP. BEARING PLATE
   (3) COMMERCIAL BLAST CLEAN TO NEAR WHITE FINISH
   (4) MAINTENANCE PAINTING
   (5) BEARING LUBRICATION
6. PERFORM LOW STEEL FIX BEARING RESTORATIONS AT THE FOLLOWING LOCATIONS:
   - WEST ABUTMENT BEARINGS NOS. 1 - 5
   - PIER 1 - SPAN 2 - BEARING NOS. 1 - 5

   RESTORATION WORK SHALL INCLUDE THE FOLLOWING ITEMS:
   (1) STRUCTURAL LIFTING UNDER LIVE LOAD
   (2) COMMERCIAL BLAST CLEAN TO NEAR WHITE FINISH
   (3) MAINTENANCE PAINTING
   (4) BEARING LUBRICATION
7. APPLY CONCRETE PROTECTIVE SEALER TO ALL EXPOSED SUBSTRUCTURE AREAS.
8. COLUMN DETERIORATION EXTENDS TO THE GROUND AT PIER NO. 1 - COLUMN 2 AND EAST ABUTMENT. THEREFORE, ASPHALT SHOULDER AND DITCH WORK IS REQUIRED AT BASE OF STRUCTURES

NOTES:

STRUCTURAL LIFTING SHALL BE IN PLACE PRIOR TO SUBSTRUCTURE WORK AT NOTED LOCATIONS AND REMAIN UNTIL ITS COMPLETION.

CONTRACTOR SHALL COORDINATE WITH ALL UTILITY OWNERS AS NEEDED TO MAKE REPAIRS TO THE SUBSTRUCTURES.

NO DECORATIVE FINISHES WILL BE INSTALLED UNDER THIS CONTRACT.

ALL JOINT WORK AND EXPANSION RELIEF REPAIRS SHALL BE COMPLETED PRIOR TO ANY STRUCTURAL LIFTING OR BEARING WORK.

C&S Engineers, Inc.
SYRACUSE • BUFFALO • BINGHAMTON

B.I.N. 1031510

SPECIAL NOTE: ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED.

AS BUILT REVISIONS

SIGNATURE DATE

EAST GLEN AVENUE
OVER
INTERSTATE 81

PLAN, ELEVATION & TYPICAL SECTION

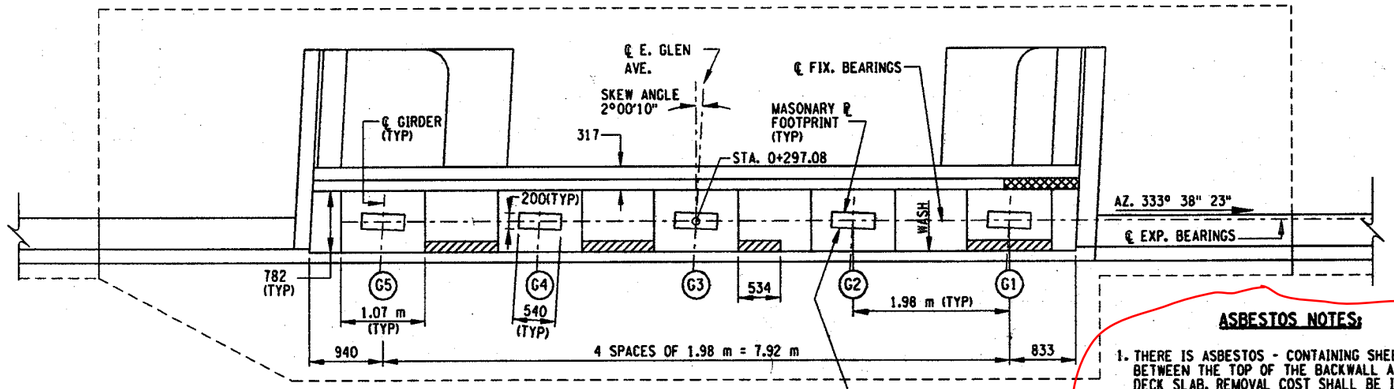
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
3804668B_G1A	3	OCT 2004	ST2-1

DESIGN SUPERVISOR PWW JOB MANAGER TAS DESIGNED BY LBO CHECKED BY DJW DRAFTED BY LBO ESTIMATED BY JRF CHECKED BY LBO

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259742	534	788

INTERSTATE ROUTE 505, SYRACUSE CITY LINE TO SIZER STREET
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATES 81 & 690
CITY OF SYRACUSE
ONONDAGA COUNTY
P.I.N. 3804.66 B.I.N. 1031510



WEST ABUTMENT - PLAN

0.4 0 1 2 m

ASBESTOS NOTES:

1. THERE IS ASBESTOS - CONTAINING SHEET PACKING LOCATED BETWEEN THE TOP OF THE BACKWALL AND THE BOTTOM OF DECK SLAB. REMOVAL COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 210.9912 M (QUANTITY = 0.12 SM)
2. THERE IS ASBESTOS CONTAINING CAULK COMPOUND BETWEEN THE WINGWALL AND RETAINING WALL. REMOVAL COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 210.5431 M (QUANTITY = 3.65 M)

TABLE - ITEM 582.07 M

ELEMENT	QUANTITY (SM)
BACKWALL	0.25

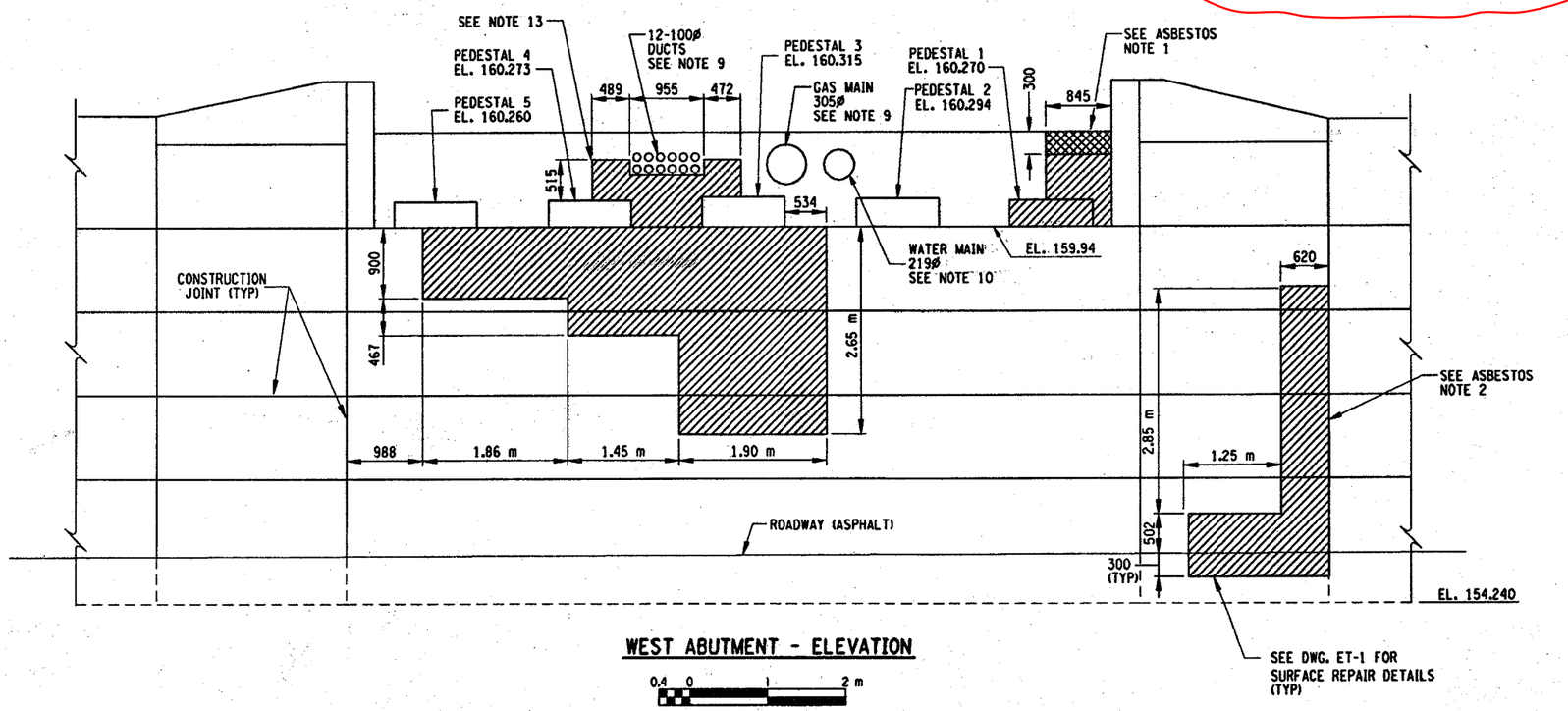
TABLE - ITEM 582.05 M

ELEMENT	QUANTITY (CM)
STEM	1.21
PEDESTAL	0.05
CHEEKWALL	0.46
BACKWALL	0.23

TABLE OF STRUCTURAL LIFTING * (JACKING LOADS)

LOCATION	ITEM	QTY (EA)	DL (KN)	LL (KN)	TOTAL (KN)
PED. 1-5 EXP.	585.02 M	5	271	258	529

* STRUCTURAL LIFTING FROM ABUTMENT SEAT SHALL BE IN PLACE PRIOR TO BEARING RESTORATION WORK.



WEST ABUTMENT - ELEVATION

0.4 0 1 2 m

LIST OF ITEMS USED:

ITEM 18559.1696 M - PROTECTIVE SEALING OF STRUCTURAL CONCRETE, (SM)
ITEM 210.5431 M - REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING CAULKING (BV12) (M)
ITEM 210.9912 M - REMOVAL AND DISPOSAL OF MISC. ASBESTOS CONTAINING MATERIALS (BV12) (SM)
ITEM 582.05 M - REMOVAL OF STRUCTURAL CONCRETE REPLACEMENT WITH CLASS A CONCRETE (CM)
ITEM 582.07 M - REMOVAL OF STRUCTURAL CONCRETE REPLACEMENT WITH VERTICAL AND OVERHEAD PATCH MATERIAL (SM)
ITEM 15565.4302 M - BRIDGE BEARING RESTORATION (EA)
ITEM 585.02 M - STRUCTURAL LIFTING OPERATIONS - TYPE B -(EA) (LIFTING FROM ABUTMENT SEAT)
ITEM 10564.11 M - REMOVE, STORE AND RESET DIAPHRAGMS ON STRUCTURE (EA)

LEGEND:

AREA OF PROPOSED WORK; ITEM 582.05 M REMOVAL OF STRUCTURAL CONCRETE AT LEAST 40-mm BEHIND REINFORCEMENT REPLACE WITH CLASS A CONCRETE

AREA OF PROPOSED WORK; ITEM 582.07 M REMOVAL OF STRUCTURAL CONCRETE-AT LEAST 40 mm BEHIND REINFORCEMENT REPLACE WITH VERTICAL AND OVERHEAD PATCH MATERIAL.

NOTES:

1. ALL AREAS SHOWN FOR CONCRETE REMOVAL ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND EIC.
2. CONCRETE REMOVAL TO LIMITS SHOWN INCLUDES SOUND CONCRETE AROUND THE PERIMETER OF THE DETERIORATED CONCRETE, A.O.B.E.
3. WHEN REMOVING EXISTING CONCRETE, SAWCUT 5 mm MIN. TO PRODUCE NEAT REMOVAL LINES. ANY COST TO BE INCLUDED IN THE BID PRICE FOR ITEM 582.05 M OR 582.07 M.
4. ELEVATIONS ARE GIVEN FOR REFERENCE ONLY.
5. REFER TO CONTRACT F.I.C. 64-7 FOR ORIGINAL CONSTRUCTION DETAILS.
6. FOR CONCRETE REPAIR DETAILS SEE DWG. NO. BR-1.
7. RESTORE TO ORIGINAL DIMENSIONS.
8. PEDESTALS NUMBERED FROM NORTH TO SOUTH.
9. CONTRACTOR SHALL VERIFY LOCATION OF UTILITIES PRIOR TO COMMENCING CONCRETE REPAIR WORK IN THE BACKWALL.
10. STRUCTURAL LIFTING OPERATIONS FOR BEARING RESTORATION (ITEM 585.02 M - TYPE B LIFTING FROM ABUTMENT SEAT) SEE DWG. NO. TSL-1.
11. PERFORM LOW SLIDER EXPANSION BEARING RESTORATION TO BEARING NOS. 1-5 (ITEM 15565.4302 M) SEE DWG. NO. BR-5
12. SEE DWG. NO. BR-2 FOR DETAILS FOR PLACEMENT OF GALVANIC ANODES IN PEDESTAL REPAIR AREA.
13. THE CONTRACTOR SHALL REMOVE AND REINSTALL THE END DIAPHRAGM AS NEEDED FOR ACCESS TO THIS REPAIR AREA LOCATED ON THE BACKWALL. THE COST TO BE INCLUDED UNDER ITEM 10564.11 M.

C&S Engineers, Inc. SYRACUSE • BUFFALO • BINGHAMTON

B.I.N. 1031510

SPECIAL NOTE: ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED.

AS BUILT REVISIONS

SIGNATURE DATE

EAST GLEN AVENUE OVER INTERSTATE 81

WEST ABUTMENT

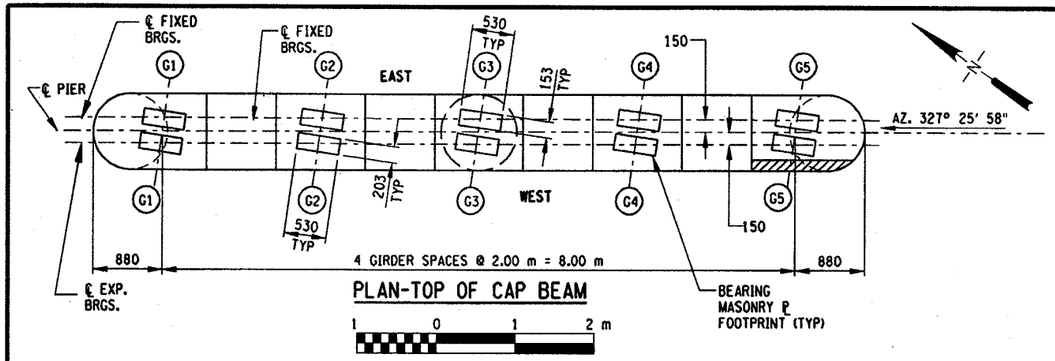
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
380466BB_A1A	3	OCT 2004	ST2-2

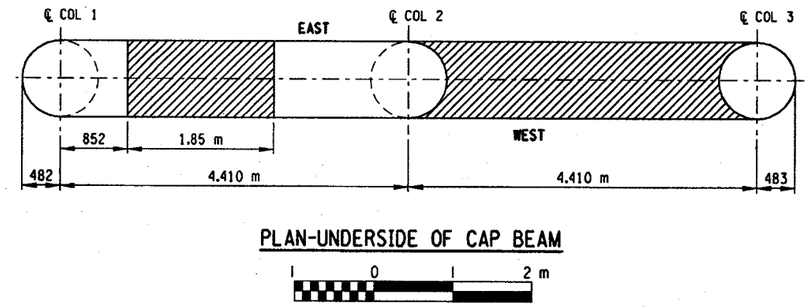
ESTIMATED BY LBO DRAFTED BY DJW CHECKED BY LBO DESIGNED BY LBO CHECKED BY JRF JOB MANAGER TAS DESIGN SUPERVISOR PNW

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259742	535	788

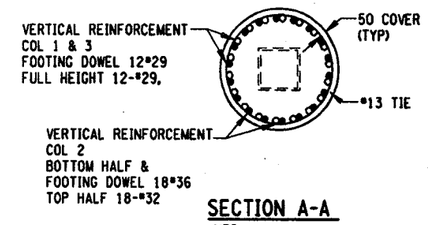
INTERSTATE ROUTE 505, SYRACUSE CITY LINE TO SIZER STREET
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATES 81 & 690
CITY OF SYRACUSE
ONONDAGA COUNTY
P.I.N. 3804.66 | B.I.N. 1031510



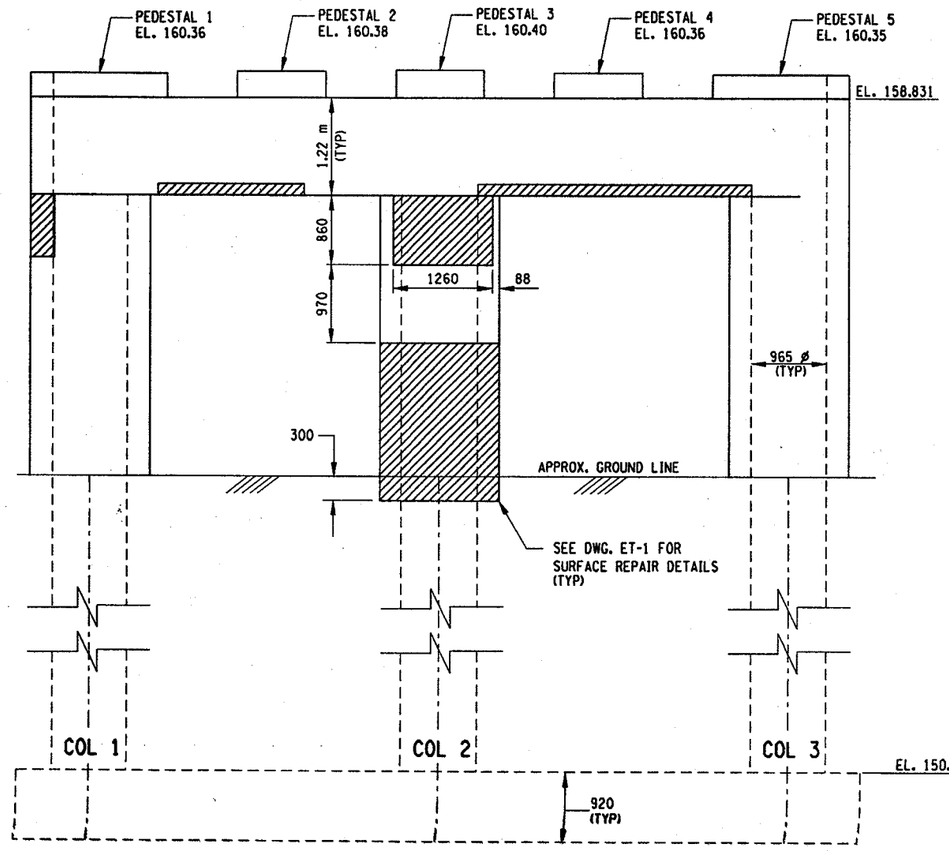
PLAN-TOP OF CAP BEAM



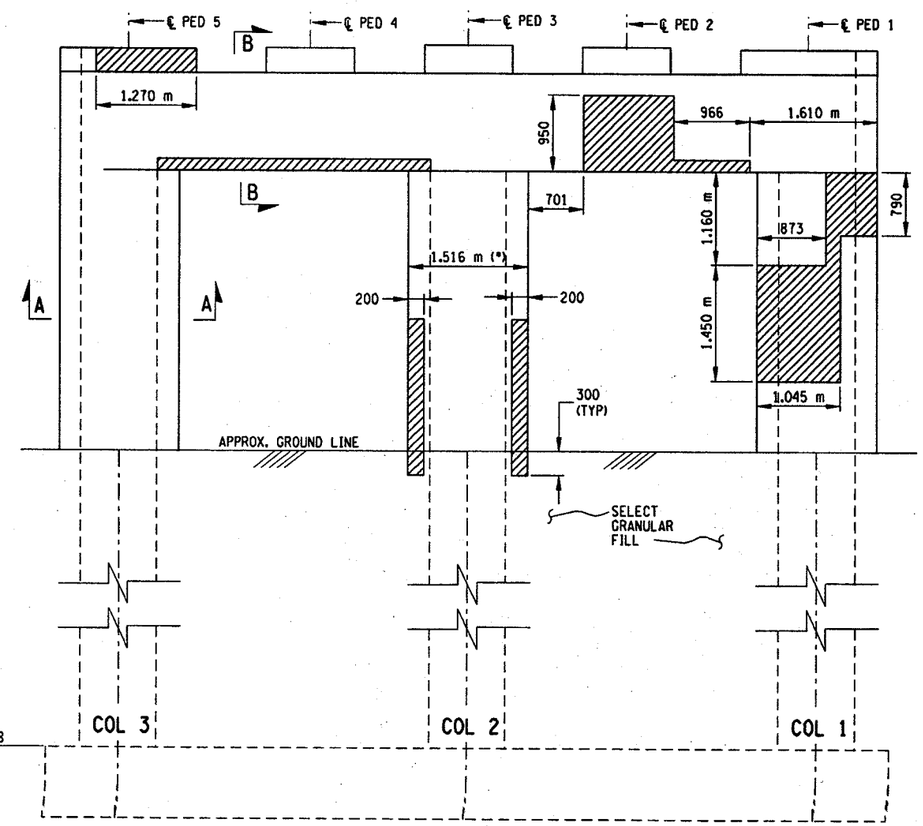
PLAN-UNDERSIDE OF CAP BEAM



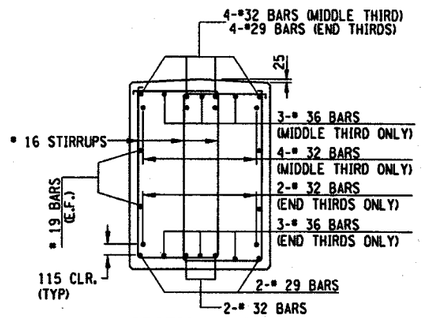
SECTION A-A
NTS



WEST FACE ELEVATION
1 0 1 2 m



EAST FACE ELEVATION
1 0 1 2 m



SECTION B-B
NTS

TABLE OF STRUCTURAL LIFTING (JACKING LOADS) *

LOCATION	ITEM	QTY (EA)	DL (KN)	LL+I (KN)	TOTAL (KN)
PED. 1-5 FIX.	585.03 M	5	271	258	529
PED. 1-5 EXP.	585.03 M	5	271	258	529

* STRUCTURAL LIFTING FROM FOOTING SHALL BE IN PLACE PRIOR TO CONCRETE REPAIRS TO PIER.

TABLE - ITEM 582.05 M

ELEMENT	QUANTITY (CM)
PEDESTAL	0.05
PIER	1.91

TABLE - ITEM 11555.8198 M

PIER	3.2 m

NOTES:

1. ALL AREAS SHOWN FOR CONCRETE REMOVAL ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND EIC.
2. CONCRETE REMOVAL TO LIMITS SHOWN INCLUDES SOUND CONCRETE AROUND THE PERIMETER OF THE DETERIORATED CONCRETE, A.O.B.E.
3. WHEN REMOVING EXISTING CONCRETE, SAWCUT 5 mm MIN. TO PRODUCE NEAT REMOVAL LINES. ANY COST TO BE INCLUDED IN THE BID PRICE FOR ITEM 582.05 M.
4. ELEVATIONS ARE GIVEN FOR REFERENCE ONLY.
5. REFER TO CONTRACT FIC 64-7 FOR ORIGINAL CONSTRUCTION DETAILS.
6. FOR REMOVAL DETAILS SEE DWG. BR-1.
7. RESTORE TO ORIGINAL DIMENSIONS.
8. PEDESTALS NUMBERED FROM NORTH TO SOUTH.
9. STRUCTURAL LIFTING OPERATIONS FOR BEARING RESTORATION AND CONCRETE REPAIRS (ITEM 585.03M-TYPE C LIFTING FROM FOOTING). SEE DWG NO. TSL-1.
10. PERFORM EXPANSION BEARING RESTORATION TO BEARING NOS. 1 - 5 (EXP.), (ITEM 15565.4302 M). SEE DWG NO. BR-5, FIXED BEARING RESTORATION TO BEARINGS NO. 1 - 5.
11. NO DECORATIVE FINISHES WILL BE INSTALLED UNDER THIS CONTRACT.
12. SEE DWG. NO. BR-2 FOR DETAILS OF PLACEMENT OF GALVANIC ANODES IN PEDESTAL REPAIR AREAS.
13. CRACKS IN PIER COLUMNS AND CAPBEAM WILL BE REPAIRED WITH INJECTION GROUTING AOBE.

LIST OF ITEMS USED:

ITEM 11555.8198 M - CRACK REPAIR (3 mm OR WIDER) BY INJECTION OF PORTLAND CEMENT GROUT (m).
ITEM 18559.1696 M - PROTECTIVE SEALING OF STRUCTURAL CONCRETE, (SM)
ITEM 15565.4302 M - BRIDGE BEARING RESTORATION (EA)
ITEM 582.05 M - REMOVAL OF STRUCTURAL CONCRETE - REPLACEMENT WITH CLASS A CONCRETE (CM)
ITEM 585.03 M - STRUCTURAL LIFTING OPERATIONS - TYPE C - (EA) (LIFTING FROM FOOTING)

LEGEND:

AREA OF PROPOSED WORK; ITEM 582.05 M REMOVAL OF STRUCTURAL CONCRETE-AT LEAST 40 mm BEHIND REINFORCEMENT REPLACE WITH CLASS A CONCRETE.

(*) NOTE:

THE WIDTH OF THE PIER COLUMN SHOWN IN ELEVATION REPRESENTS THE FLATTENED AREA OF ½ THE CIRCUMFERENCE OF THE COLUMN

SPECIAL NOTE: ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED.

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B.I.N. 1031510

SPECIAL NOTE: ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED.

AS BUILT REVISIONS

SIGNATURE DATE

EAST GLEN AVENUE OVER INTERSTATE 81

PIER 1

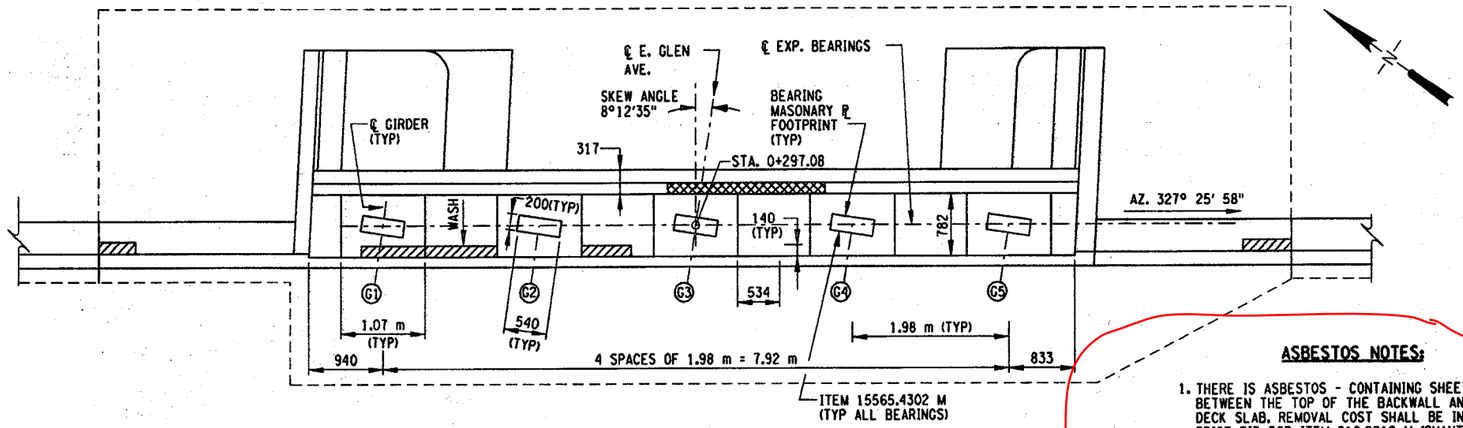
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
3804668B_P1A	3	OCT 2004	ST2-3

DESIGN SUPERVISOR PMW JOB MANAGER TAS DESIGNED BY LBO CHECKED BY JRF ESTIMATED BY LBO DRAFTED BY DJW CHECKED BY LBO

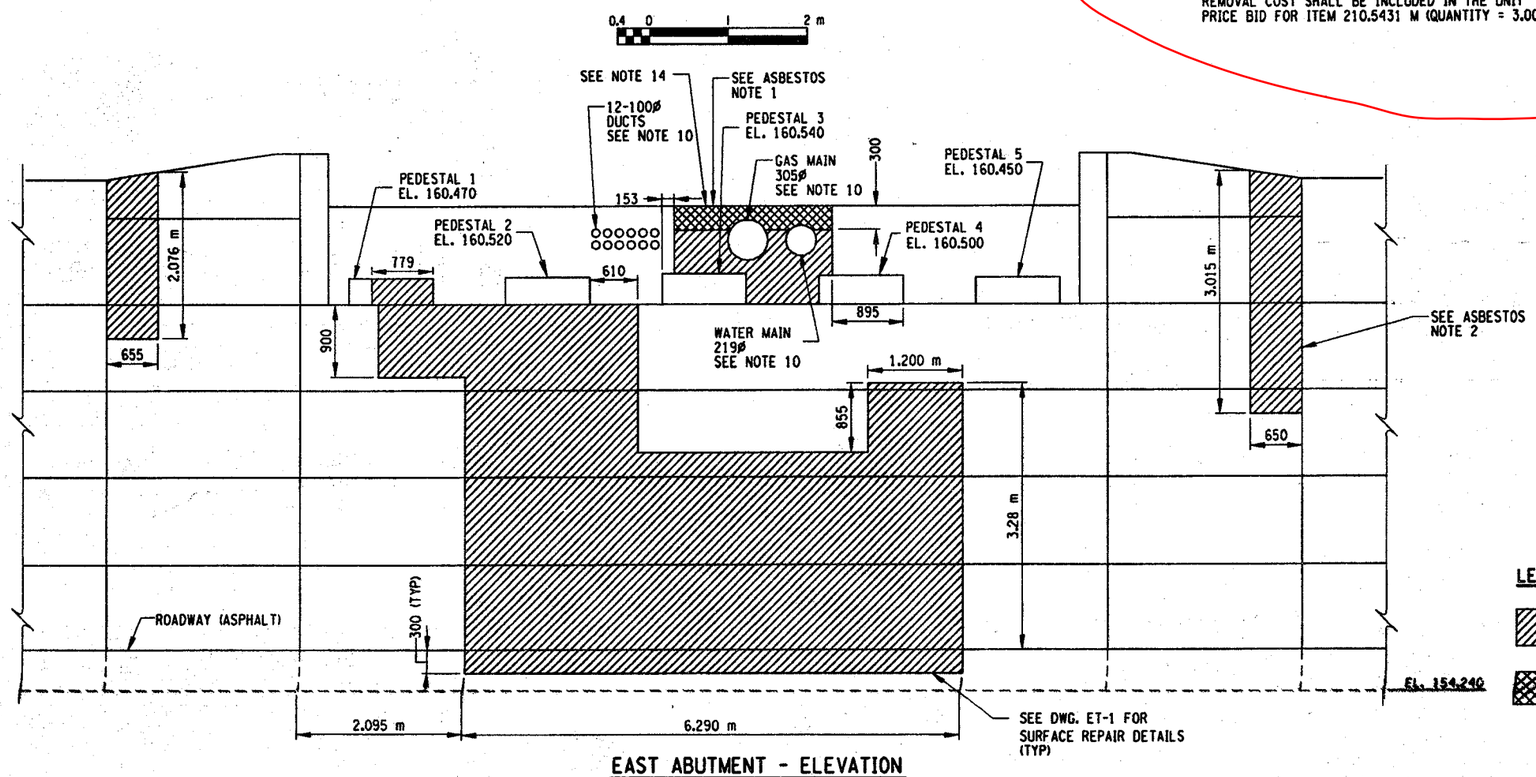
FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259742	536	788

INTERSTATE ROUTE 505, SYRACUSE CITY LINE TO SIZER STREET
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATES 81 & 690
CITY OF SYRACUSE
ONONDAGA COUNTY
P.I.N. 3804.66 B.I.N. 1031510



EAST ABUTMENT - PLAN

0.4 0 1 2 m



EAST ABUTMENT - ELEVATION

0.4 0 2 m

TABLE - ITEM 582.07 M	
ELEMENT	QUANTITY (SM)
BACKWALL	0.60

TABLE - ITEM 11555.8198 M	
ELEMENT	QUANTITY (M)
BACKWALL	1.5

TABLE - ITEM 582.05 M	
ELEMENT	QUANTITY (CM)
STEM	3.25
PEDESTAL	0.03
CHEEKWALL	0.46
BACKWALL	0.20

ASBESTOS NOTES:

1. THERE IS ASBESTOS - CONTAINING SHEET PACKING LOCATED BETWEEN THE TOP OF THE BACKWALL AND THE BOTTOM OF DECK SLAB. REMOVAL COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 210.9912 M (QUANTITY = 0.28 SM)
2. THERE IS ASBESTOS CONTAINING CAULK COMPOUND BETWEEN THE WINGWALL AND RETAINING WALL. REMOVAL COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 210.5431 M (QUANTITY = 3.00 SM)

TABLE OF STRUCTURAL LIFTING * (JACKING LOADS)					
LOCATION	ITEM	QTY (EA)	DL (KN)	LL (KN)	TOTAL (KN)
PED. 1-5 EXP.	585.02 M	5	271	258	529

* STRUCTURAL LIFTING FROM ABUTMENT SEAT SHALL BE IN PLACE PRIOR TO BEARING RESTORATION WORK.

LIST OF ITEMS USED:

ITEM 11555.8198 M - CRACK REPAIR (3 mm OR WIDER) BY INJECTION OF PORTLAND CEMENT GROUT (m) AS ORDERED BY EIC

ITEM 210.5431 M - REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING CAULKING (BV12) (M)

ITEM 210.9912 M - REMOVAL AND DISPOSAL OF MISC. ASBESTOS CONTAINING MATERIALS (BV12) (SM)

ITEM 18559.1696 M - PROTECTIVE SEALING OF STRUCTURAL CONCRETE, (SM)

ITEM 582.05 M - REMOVAL OF STRUCTURAL CONCRETE REPLACEMENT WITH CLASS A CONCRETE (CM)

ITEM 582.07 M - REMOVAL OF STRUCTURAL CONCRETE REPLACEMENT WITH VERTICAL AND OVERHEAD PATCH MATERIAL (SM).

ITEM 15565.4302 M - BRIDGE BEARING RESTORATION (EA)

ITEM 585.02 M - STRUCTURAL LIFTING OPERATIONS - TYPE B -(EA) (LIFTING FROM ABUTMENT SEAT)

ITEM 10564.11 M - REMOVE, STORE AND RESET DIAPHRAGMS ON STRUCTURE (EA)

LEGEND:

AREA OF PROPOSED WORK; ITEM 582.05 M
REMOVAL OF STRUCTURAL CONCRETE AT LEAST 40-mm BEHIND REINFORCEMENT REPLACE WITH CLASS A CONCRETE

AREA OF PROPOSED WORK; ITEM 582.07 M
REMOVAL OF STRUCTURAL CONCRETE AT LEAST 40 mm BEHIND REINFORCEMENT REPLACE WITH VERTICAL AND OVERHEAD PATCH MATERIAL

B.I.N. 1031510

SPECIAL NOTE: ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED.

NOTES:

1. ALL AREAS SHOWN FOR CONCRETE REMOVAL ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND EIC.
2. CONCRETE REMOVAL TO LIMITS SHOWN INCLUDES SOUND CONCRETE AROUND THE PERIMETER OF THE DETERIORATED CONCRETE, A.O.B.E.
3. WHEN REMOVING EXISTING CONCRETE, SAWCUT 5 mm MIN. TO PRODUCE NEAT REMOVAL LINES. ANY COST TO BE INCLUDED IN THE BID PRICE FOR ITEM 582.05 M OR 582.07 M.
4. ELEVATIONS ARE GIVEN FOR REFERENCE ONLY.
5. REFER TO CONTRACT F.I.C. 64-7 FOR ORIGINAL CONSTRUCTION DETAILS.
6. FOR CONCRETE REPAIR DETAILS SEE DWG. NO. BR-1.
7. RESTORE TO ORIGINAL DIMENSIONS.
8. PEDESTALS NUMBERED FROM NORTH TO SOUTH.
9. CRACKS IN BACKWALL WILL BE REPAIRED AS ORDERED BY EIC BY INJECTION GROUTING METHOD UNDER ITEM 11555.8198 M.
10. CONTRACTOR SHALL VERIFY LOCATION OF UTILITIES PRIOR TO COMMENCING CONCRETE REPAIR WORK IN THE BACKWALL.
11. STRUCTURAL LIFTING OPERATIONS FOR BEARING RESTORATION (ITEM 585.02 M - TYPE B LIFTING FROM ABUTMENT SEAT) SEE DWG. NO. TSL-1.
12. PERFORM LOW SLIDER EXPANSION BEARING RESTORATION TO BEARING NOS. 1-5 (ITEM 15565.4302 M) SEE DWG. NO. BR-5.
13. SEE DWG. NO. BR-2 FOR DETAILS FOR PLACEMENT OF GALVANIC ANODES IN PEDESTAL REPAIR AREA.
14. THE CONTRACTOR SHALL REMOVE AND REINSTALL THE END DIAPHRAGM AS NEEDED FOR ACCESS TO THIS REPAIR AREA LOCATED ON THE BACKWALL. THE COST TO BE INCLUDED UNDER ITEM 10564.11 M

C&S Engineers, Inc. SYRACUSE • BUFFALO • BINGHAMTON

AS BUILT REVISIONS

SIGNATURE DATE

EAST GLEN AVENUE OVER INTERSTATE 81

EAST ABUTMENT

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
380466BB_A2A	3	OCT 2004	ST2-4

ESTIMATED BY LBO DRAFTED BY DJW CHECKED BY LBO DESIGNED BY TAS JOB MANAGER PNW CHECKED BY JRF DESIGN SUPERVISOR

C&S Engineers, Inc.
Syracuse Hancock International Airport
Syracuse, NY 13212
phone 315-455-2000
fax 315-455-9667
www.cscos.com

TECHNICAL MEMORANDUM

TO: FILE (190.222.003)

FROM: Bryan A. Bayer, Asbestos Abatement Project Designer
NYSDOH Certificate Number AH 01-17258

DATE: AUGUST 9, 2013

RE: NEW YORK STATE DEPARTMENT OF TRANSPORTATION
Interstate 81 & Interstate 690 Element Specific Bridge Work
PIN 3804.66, BIN 1031510

This memorandum documents an asbestos screening conducted for the proposed Interstate 81 & Interstate 690 Element Specific Bridge Work Project at BIN 1031510. This screening was limited to assessing the potential presence of asbestos-containing materials (ACMs) that could be disturbed during work for this project. It does not include a screening of the entire structure.

SCREENING PROCEDURES

A walkover of the structure was completed on June 6, 2002 to visually assess the possible presence of ACMs. Only those areas readily accessible are included in the visual assessment.

Available drawings of the structure were reviewed. The New York State Department of Transportation (NYSDOT) provided the drawings listed below:

- *Interstate Route 505, Syracuse City Line to Sizer Street*, prepared by Leonard S. Wegman Co. Engineers dated December 9, 1963. The federal aid number for these drawings is I-81-2 (80), Contract# F.I.C. 64-7.

Lastly, a review of the *Asbestos Sampling Survey, BIN 1-03151-0 East Glen Avenue over Interstate Route I-81* (hereinafter referred to as "Survey"), occurred as well.

SCREENING RESULTS

The screening revealed the following materials that are suspect ACM:

Bridge Paint: This material was observed on steel girders, bearings, conduits, pipes, etc. and could contain asbestos and lead. The paint was tested as part of the Survey, and it was determined that the bridge paint did not contain asbestos. According to a memo received from the New York State Department of Transportation on March 7, 2002 (post-Survey), this structure could contain ACM containing paint.

Caulking Compound: This material was noticed at the vertical control joints in the abutments and retaining walls of this structure. In addition, caulk could be seen in various locations at

joints in the parapet wall. This material was also observed between the cheekwall and bridge deck, as well as within the sidewalk of the structure. According to the Survey, caulking compound was sampled and determined to contain asbestos. In addition and according to the Survey, asbestos containing caulking compound exists beneath the guide rail posts of this structure.

Bearing Pads: The bearings, and specifically the bearing pads, were reviewed during the site walkover. These materials are generally located under the masonry plate of the bearing at each bridge bearing. Bearing pads were tested as part of the Survey and found to be non-ACM.

Joint Filler: This material was observed at the vertical control joints in the abutments and retaining walls of this structure, as well as in the parapet wall at the abutment/bridge deck joint. This material was sampled as part of the Survey, and found to be non-ACM.

Sheet Packing: It appeared as if sheet packing was used on top of the backwall at each abutment. This material was tested as part of the Survey and found to contain asbestos.

Masonry Coating: This material was used on the abutments, pedestals, bridge seats, and backwall at this structure. This material was tested as part of the Survey, and found to be non-ACM.

Pipe Wrap: Several conduits traverse the length of the structure. It appears as if the water line found under the structure has an insulation wrap around it. The pipe wrap's composition could not be determined in the field. The Survey did not include sampling this material.

Conduits: As previously mentioned, several conduits traverse the length of the bridge. Based on a review of the drawings, the conduits are not transite (asbestos containing) pipe.

Watts
Architects
&Engineers

BIN 1069090

Existing I-481 SB to I-81 SB over Existing I-81 SB

BIN 1069090
Location: I-481 WB to I-81 SB Ramp over I-81
NYSDOT D031085 PIN 3501.60 - I-81 Viaduct Replacement or New Urban Arterial
City of Syracuse, Onondaga County
Bridge Asbestos Assessment Results

No asbestos containing materials have been identified on this bridge.

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

Watts Inspection Findings (January 2014)
A bridge inspection was completed on 1/30/2014 and the following suspect ACMs were identified and sampled:

- Green bridge paint
- Bearing pad
- White ring around steel bearing
- Grey masonry paint on lower part of abutment
- Hard white rail inside expansion joint

The sampled materials were not positive for asbestos, per laboratory analytical results.

Review of Historic Plans and Previous Asbestos Survey Information
Record plans were reviewed in support of the field survey.

- Contract D95942 (dated 1975) – Mastic duct sealant and Type D waterstop were identified. NYSDOT no longer considers Type D waterstop a suspect material.
- Contract D256745 (dated 1995) – No suspect ACM was identified.
- Contract D259742 (dated 2004) - No suspect ACM was identified.
- An assessment of previous documentation was conducted by C&S in 2013 and identified bearing pads, bridge paint, masonry paint/coatings, and canvas duck as suspect materials.

No additional suspect ACM sampling has been identified for BIN 1069090.

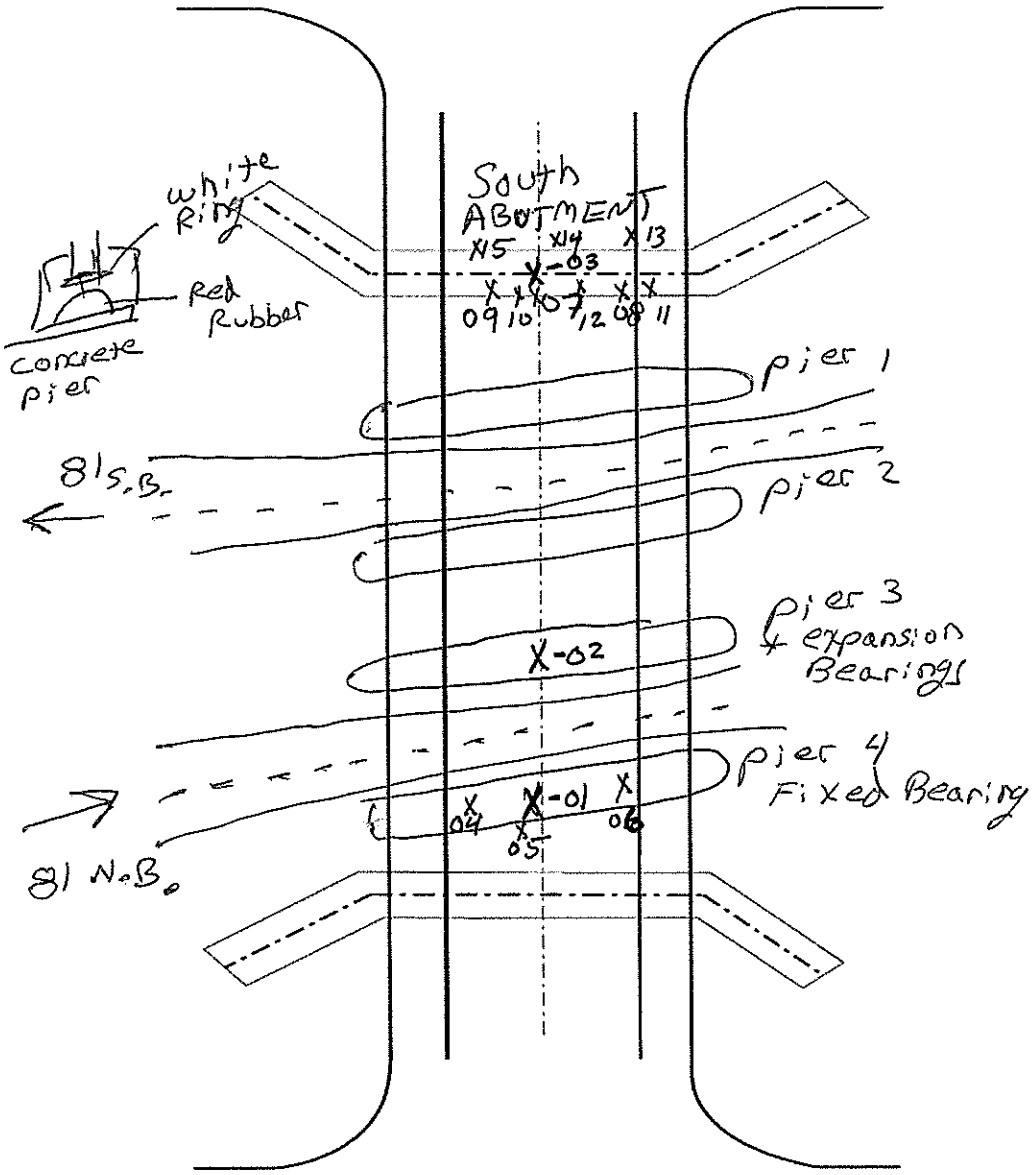
Watts Architecture & Engineering

BRIDGE ASBESTOS FIELD INSPECTION FORM

BIN Number/Location: BIN 1069090, I-481 S.B. onto 81 S.B. **Inspection Date:** 01/30/~~13~~ 14

Project Name: : I-81 Viaduct Replacement or New Urban Arterial **PIN Number:** PIN: 3501.60, D031085

Inspector(s): Edward Jones **Watts Project No:** 13092



SAMPLE LOCATION PLAN VIEW - N.T.S.

Field Inspection Checklist Item	Investigated (N/A)	Present	Sampled	
Girder Paint YES	☐	☒	☒	1-3
Truss Paint YES same	☐	☒	☒	
Abutment Coating NO	☒	☐	☐	
Abutment ~~Caulk~~ Paint	☒	☐	☒	10-12
Abut. Exp. Jt. Filler Hard Rubber	☒	☐	☐	
Headwall Sheet Packing	☒	☐	☐	
Bearing Pad YES	☐	☐	☒	4-6
Transite Pipe NO	☒	☐	☐	
Pipe Coating/Wtr. Proof NO	☒	☐	☐	
Scupper Wtr. Proof NO	☒	☐	☐	
Dum Dum Paint	☒	☐	☐	
Deck Caulk none	☒	☐	☐	
Deck Exp. Jt. Filler Rubber	☒	☐	☐	
Approach Sheet Packing	☒	☐	☐	
Railing Paint NONE none	☒	☐	☐	
Railing Caulk none	☒	☐	☐	
Sidewalk Caulk none	☒	☐	☐	
Lighting Pole Caulk none	☒	☐	☐	
Masonry Castings none	☒	☐	☐	
Miscellaneous Tar none	☒	☐	☐	
Utilities	☐	☐	☐	
Other white ring ground	☐	☐	☒	7-9
Other Bearing	☐	☐	☐	
Other Hard white rail in	☐	☐	☒	13-15
Other exp. joint	☐	☐	☐	
Other	☐	☐	☐	

Notes: pier 4, Fixed Bearings have bearing pads
pier 3 is expansion Bearings no PADS
South ABUTMENT has expansion Bearings, no PADS
checked Deck Surfaces NO visible CAULKS
Hard Rubber EXPANSION JOINTS all seams
NO sheet PACKING at South ABUTMENT

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:	141400427
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:	02/04/14 10:00 AM
Analysis Date:	2/9/2014
Collected:	1/30/2014

Project: **13092 - 181 Viaduct Replacement or New Urban Arterial Bin 1069090 - I-481 SB Onto 81 SB**

Test Report:Asbestos Analysis of Bulk Material

Test	Analyzed Date	Color	Non Asbestos Fibrous	Non Asbestos Non-Fibrous	Asbestos
Sample ID 1069090-01 *141400427-0001*		**Description**	green bridge paint, below deck		
		Homogeneity	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	2/7/2014	Brown /Green			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	2/9/2014	Brown /Green			**None Detected**
Sample ID 1069090-02 *141400427-0002*		**Description**	green bridge paint, below deck		
		Homogeneity	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	2/7/2014	Brown /Green			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	2/9/2014	Brown /Green			**None Detected**
Sample ID 1069090-03 *141400427-0003*		**Description**	green bridge paint, below deck		
		Homogeneity	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	2/7/2014	Brown			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	2/9/2014	Brown			**None Detected**
Sample ID 1069090-04 *141400427-0004*		**Description**	pier bearing pad		
		Homogeneity	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	2/7/2014	Green /Rust			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	2/9/2014	Green /Rust			**None Detected**
Sample ID 1069090-05 *141400427-0005*		**Description**	pier bearing pad		
		Homogeneity	Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	2/7/2014	Green /Rust			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	2/9/2014	Green /Rust			**None Detected**

Initial Report From 02/11/2014 08:58:38

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:	141400427
CustomerID:	WATT50A
CustomerPO:	
ProjectID:	

Test Report:Asbestos Analysis of Bulk Material

Test		Color	Fibrous	Non Asbestos Non-Fibrous	Asbestos
Sample ID 1069090-06 *141400427-0006*		**Description** **Homogeneity**	pier bearing pad Heterogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	2/7/2014	Green /Rust			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	2/9/2014	Green /Rust			**None Detected**
Sample ID 1069090-07 *141400427-0007*		**Description** **Homogeneity**	white ring around steel bearing, abutment		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	2/7/2014				**Insufficient Material**
TEM NYS 198.4 NOB	2/9/2014				**Not Analyzed**
Sample ID 1069090-08 *141400427-0008*		**Description** **Homogeneity**	white ring around steel bearing, abutment Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	2/7/2014	Gray			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	2/9/2014	Gray			**None Detected**
Sample ID 1069090-09 *141400427-0009*		**Description** **Homogeneity**	white ring around steel bearing, abutment		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	2/7/2014				**Insufficient Material**
TEM NYS 198.4 NOB	2/9/2014				**Not Analyzed**
Sample ID 1069090-10 *141400427-0010*		**Description** **Homogeneity**	thin gray paint on masonry, at abutment Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	2/7/2014	Gray			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	2/9/2014	Gray			**None Detected**
Sample ID 1069090-11 *141400427-0011*		**Description** **Homogeneity**	thin gray paint on masonry, at abutment Homogeneous		
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	2/7/2014	Gray			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	2/9/2014	Gray			**None Detected**

Initial Report From 02/11/2014 08:58:38

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:	141400427
CustomerID:	WATT50A
CustomerPO:	
ProjectID:	

Test Report:Asbestos Analysis of Bulk Material

Test		Color	Fibrous	Non Asbestos Non-Fibrous	Asbestos
Sample ID 1069090-12 *141400427-0012*		**Description** thin gray paint on masonry, at abutment **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable					**Not Analyzed**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB	2/7/2014	Gray			**Inconclusive: None Detected**
TEM NYS 198.4 NOB	2/9/2014	Gray			**None Detected**
Sample ID 1069090-13 *141400427-0013*		**Description** hard white rail, inside expansion slot, at bearing **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	2/11/2014	White		100.00% Non-fibrous (other)	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**
Sample ID 1069090-14 *141400427-0014*		**Description** hard white rail, inside expansion slot, at bearing **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	2/11/2014	White		100.00% Non-fibrous (other)	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**
Sample ID 1069090-15 *141400427-0015*		**Description** hard white rail, inside expansion slot, at bearing **Homogeneity** Homogeneous			
PLM NYS 198.1 Friable	2/11/2014	White		100.00% Non-fibrous (other)	**None Detected**
PLM NYS 198.6 VCM					**Not Analyzed**
PLM NYS 198.6 NOB					**Not Analyzed**
TEM NYS 198.4 NOB					**Not Analyzed**

Analyst(s)
Rachel Giese
Rhonda McGee
Tom Hanes

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 02/11/2014 08:58:38

141400427

WATTS ARCHITECTURE & ENGINEERING, P.C.
ASBESTOS BULK SAMPLE CHAIN-OF-CUSTODY

Page: 1 of 2
Date: 01/30/14

Client: C&S / DOT
Project: I81 Viaduct Replacement or New Urban Arterial
Building / Location: BIN 1069090, I-481 SB onto 81 SB.
Contact: Scott Matthews at (315) 443-8611
Email Preliminary Results to: smatthews@watts-ae.com
Mail Invoice to: Accounts Payable, Watts Architecture & Engineering, P.C., 95 Perry Street, Buffalo, NY 14203

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~~ 1 week
24 Hr. ___ 6-10 Day TAT As per client A.D 2/4/14

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

Sample Number	Material Description	Sample Location	Laboratory Results PLM	Laboratory Results TEM
1069090-01	Green Bridge PAINT, Below Deck	pier 4, Beam AT Bearing 4		
1069090-02	Green Bridge PAINT, Below Deck	pier 3, Beam at Expansion Bearing 4		
1069090-03	Green Bridge PAINT, Below Deck	South ABUTment, middle Bearing		
1069090-04	pier Bearing PAD	pier 4, [redacted] Bearing 3		
1069090-05	pier Bearing PAD	pier 4, Bearing 4		
1069090-06	pier Bearing PAD	pier 4, Bearing 5		
1069090-07	white Ring around steel Bearing, ABUTment	South ABUTment, center expansion Bearing		
1069090-08	white Ring around steel Bearing, ABUTment	South ABUTment, expansion Bearing 2 From EAST		
1069090-09	white Ring around steel Bearing, ABUTment	South ABUTment, expansion Bearing 5 From EAST		
1069090-10	Thin Gray Paint on Masonry, at Abutment	South Abutment, By Bearing #4 [redacted]		
1069090-11	Thin Gray paint on masonry, at Abutment	South Abutment, By Bearing #2		
1069090-12	Thin Gray paint on masonry, at Abutment	South ABUTment, By Bearing #3		

Sampled By: Scott Matthews/Ed Jones Date: 01/30/14 Received By: RECEIVED FEB 04 2014 BY: 10a Date:
Relinquished By: Scott Matthews to FedEx Date: 2-3-14 Received By: Date:
Comments: FedX

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12/2/2013

OrderID: 141400875

OrderID: 141400427

1414 0427

WATTS ARCHITECTURE & ENGINEERING, P.C.
ASBESTOS BULK SAMPLE CHAIN-OF-CUSTODY

Page: 2 of 2
Date: 01/30/13

Client: C&S / DOT
Project: I81 Viaduct Replacement or New Urban Arterial
Building / Location: BIN 1069090, I-481 S.B. onto 81 S.B.
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~~ 1 week
24 Hr. ____ 6-10 Day As per client
A.D 2/4/14

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

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

Sample Number	Material Description	Sample Location	Laboratory Results PLM	Laboratory Results TEM
1069090-13	Hard white Rail, inside expansion slot, at Bearing	South Abutment, expansion Bearing 2		
1069090-14	Hard white Rail, inside expansion slot, at Bearing	South Abutment, expansion Bearing 3		
1069090-15	Hard white Rail, inside expansion slot, at Bearing	South Abutment, expansion Bearing 4		

Sampled By: Scott Matthews / Ed Jones Date: 01/14/14 Received By: RECEIVED Date:
Relinquished By: Scott Matthews to FedEx Date: 2-3-14 Received By: FEB 04 2014 Date:
Comments: BY: 109 Fed x

C:\Documents and Settings\smatthews\Desktop\BulkForm.xls
12/2/2013

Watts
Architects
&Engineers

BIN 1069090 Inspection Photos

Existing I-481 SB to I-81 SB over Existing I-81 SB

Photo 1

Photo 2

Photo 3

Photo 4

Photo 5

Photo 6

BIN 1069090

FOREST INTERCHANGE

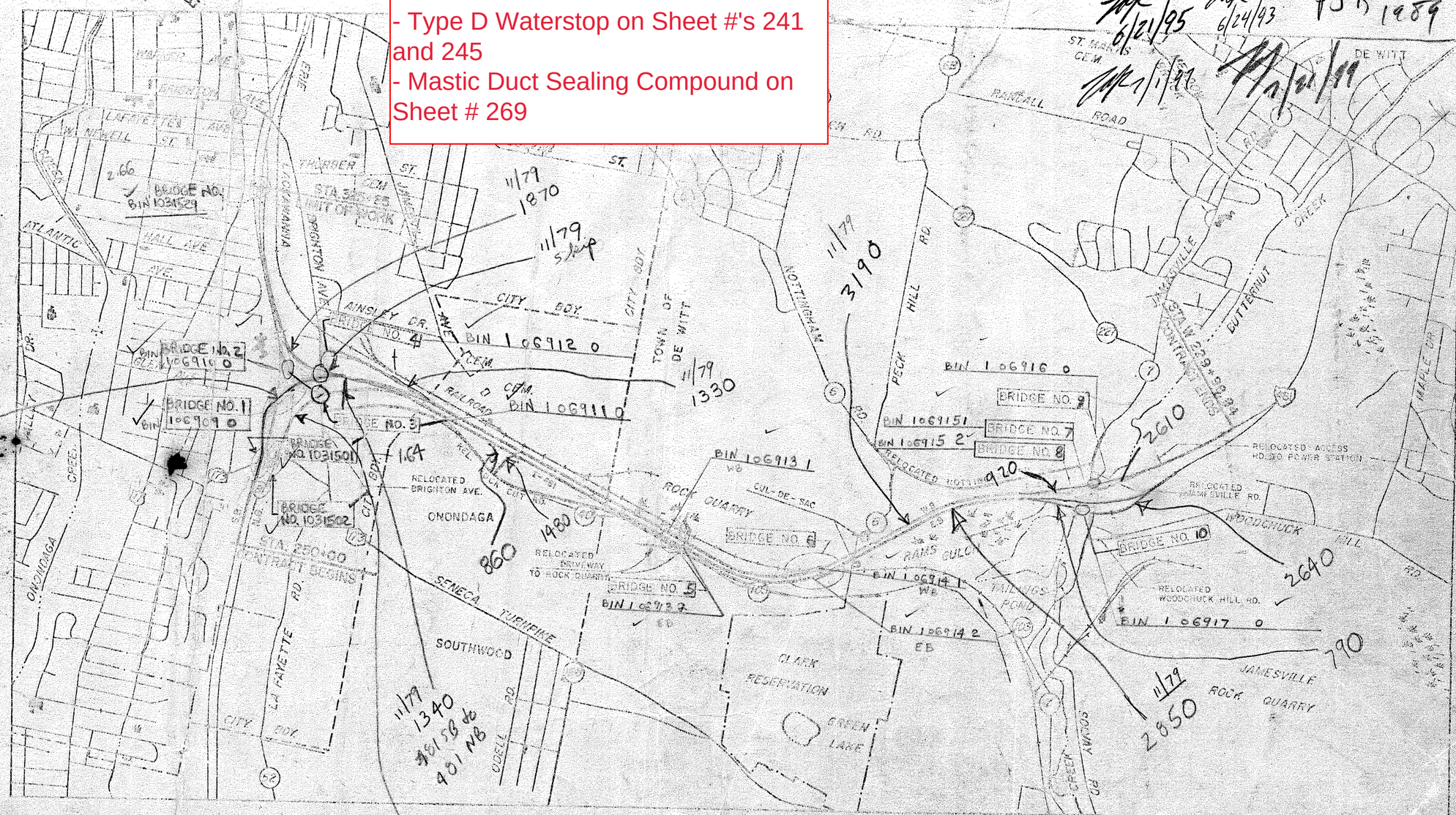
BIN 1069090
Date -
Team Leader J. Dessing

Record plans were reviewed on 3/21/14 by GA. The following suspect materials were identified:
- Type D Waterstop on Sheet #'s 241 and 245
- Mastic Duct Sealing Compound on Sheet # 269

FED. ROAD REG. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-70-401-2(73) I-401-5(12)(123)	1973	225	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

D86042



Date 12/1/75

CAPITAL PROJECT IDENTIFICATION NO. 30.1.00

225

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-STU-481-2(74) I-STU-481-2(128)	226	

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	BRIDGE NO.1 BIN 1 06909 0					BRIDGE NO.2 BIN 1 06910 0				
			SUBSTRUCTURE ESTIMATED	SUPERSTRUCTURE ESTIMATED	MISCELLANEOUS ESTIMATED	TOTAL ESTIMATED	FINAL	SUBSTRUCTURE ESTIMATED	SUPERSTRUCTURE ESTIMATED	MISCELLANEOUS ESTIMATED	TOTAL ESTIMATED	FINAL
203.21	SELECT STRUCTURE FILL	C.Y.	-	-	2762.0	2762.0		-	-	1413.0	1413.0	
206.04	STRUCTURE EXCAVATION	C.Y.	1100.0	-	-	1100.0		1381.0	-	-	1381.0	
567.31	ARMORED JOINT SYSTEM W/COMPRESSION SEAL TYPE A7	L.F.	-	-	-	-		-	45.0	-	45.0	
567.36	ARMORED JOINT SYSTEM W/COMPRESSION SEAL TYPE A6	L.F.	-	-	-	-		-	135.0	-	135.0	
567.01	ELASTOMERIC EXPANSION JOINT SYSTEM TYPE 200	L.F.	-	33.0	-	33.0		-	-	-	-	
567.03	ELASTOMERIC EXPANSION JOINT SYSTEM TYPE 400	L.F.	-	33.0	-	33.0		-	-	-	-	
567.04	ELASTOMERIC EXPANSION JOINT SYSTEM TYPE 650	L.F.	-	33.0	-	33.0		-	-	-	-	
601.01	CLASS A CONCRETE FOR STRUCTURES	C.Y.	326.0	29.0	-	355.0		99.0	12.0	-	111.0	
601.02	CLASS B CONCRETE FOR STRUCTURES (CLASS A OPTIONAL)	C.Y.	811.0	-	-	811.0		1046.0	-	-	1046.0	
601.0307	CLASS A CONCRETE FOR STRUCTURES (MONOLITHIC SLAB-BOTTOM FORMWORK REQUIRED)	S.F.	-	25187.0	-	25187.0		-	14738.0	-	14738.0	
601.0301	CLASS A CONCRETE FOR STRUCTURES (REINFORCED MONOLITHIC APPROACH SLAB)	S.F.	-	-	2057.0	2057.0		-	-	2996.0	2996.0	
602.02	BAR REINFORCEMENT FOR STRUCTURES	LB.	127373.0	172095.0	14130.0	313598.0		80834.0	79341.0	15901.0	180076.0	
602.03	STUD SHEAR CONNECTORS FOR BRIDGES	EACH	-	2785.0	-	2785.0		-	2286.0	-	2286.0	
605.0702	STEEL PIPE UNDERDRAIN SEMI-CIRCULAR (4 5/8 IN DIAM) OR PERFORATED CORRUGATED (6 IN DIAM)	L.F.	-	-	226.0	226.0		-	-	370.0	370.0	
605.11	UNDERDRAIN FILTER TYPE C	C.Y.	-	-	118.0	118.0		-	-	269.0	269.0	
609.0203	STONE CURB-GRANITE(TYPE C)	L.F.	-	-	171.0	171.0		-	-	168.0	168.0	
609.0302	STONE CURB-BRIDGE(TYPE F1)	L.F.	-	1575.0	-	1575.0		-	669.0	-	669.0	
609.0303	STONE CURB-BRIDGE(TYPE G1)	L.F.	149.0	-	-	149.0		281.0	-	-	281.0	
611.01	SODDING	S.Y.	-	-	90.0	90.0		-	-	24.0	24.0	
615.03	WATERING PLANTS AND SOD	M GAL	-	-	1.8	1.8		-	-	0.2	0.2	
616.01	STRUCTURAL STEEL	LB.	-	1748120.0		1748120.0		139081.0	608834.0	-	747915.0	
620.09	CONCRETE BLOCK PAVING	S.Y.	-	-	1556.0	1556.0		-	-	1401.0	1401.0	
621.01	EPOXY PROTECTIVE COATING	S.F.	1485.0	-	-	1485.0		1635.0	-	-	1635.0	
622.01	BITUMINOUS MATERIAL	S.F.	2960.0	-	-	2960.0		5550.0	-	-	5550.0	
628.0503	SAFE OPERATION SHEET PILING	S.F.	-	-	-	-		2946.0	-	-	2946.0	
635.0701	CLEANING AND PRIMING NEW STRUCTURAL STEEL	L.S.	-	NEC.	-	NEC.		-	-	-	-	
635.0702	CLEANING AND PRIMING NEW STRUCTURAL STEEL	L.S.	-	-	-	-		NEC.	NEC.	-	NEC.	
635.0801	PAINTING NEW STRUCTURAL STEEL	L.S.	-	NEC.	-	NEC.		-	-	-	-	
635.0802	PAINTING NEW STRUCTURAL STEEL	L.S.	-	-	-	-		NEC.	NEC.	-	NEC.	
636.31	BRIDGE BEARINGS TYPE CE (EXPANSION WITH PTFE)	EACH	-	-	-	-		-	21.0	-	21.0	
636.32	BRIDGE BEARINGS TYPE CF (FIXED WITH PTFE)	EACH	-	-	-	-		-	7.0	-	7.0	
03636.9999	SPHERICAL BRIDGE BEARINGS TYPE CE1(EXP W/PTFE)	EACH	-	20.0	-	20.0		-	-	-	-	
03636.9998	SPHERICAL BRIDGE BEARINGS TYPE CE2(EXP W/PTFE)	EACH	-	5.0	-	5.0		-	-	-	-	
03636.9997	SPHERICAL BRIDGE BEARINGS TYPE CE3(EXP W/PTFE)	EACH	-	-	-	-		1.0	-	-	1.0	
03636.9996	SPHERICAL BRIDGE BEARINGS TYPE CF1(FIXED W/PTFE)	EACH	-	10.0	-	10.0		-	-	-	-	
03636.9995	SPHERICAL BRIDGE BEARINGS TYPE CF2(FIXED W/PTFE)	EACH	-	-	-	-		1.0	-	-	1.0	
03636.9994	SPHERICAL BRIDGE BEARINGS TYPE CF3(FIXED W/PTFE)	EACH	-	-	-	-		-	7.0	-	7.0	
642.10	STEEL BRIDGE RAILING (TWO RAIL)	L.F.	156.0	1579.0	-	1735.0		294.0	669.0	-	963.0	
670.2003	2" GALVANIZED STEEL CONDUIT	L.F.	91.0	783.0	-	874.0		188.0	327.0	-	515.0	

INTERSTATE ROUTE 481
BRIDGE QUANTITIES

Prepared and recommended GOODKIND & O'DEA, INC. Consulting Engineers Date 12/1/75

DWG. NO.	SCALE	DATE	
BQ-1		Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

1069090

D050042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IC-81-2(74) I-UI-81-2(28)	227	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	BRIDGE NO.3 BIN 1 06911 0 SUBSTRUCTURE ESTIMATED	SUPERSTRUCTURE ESTIMATED	MISCELLANEOUS ESTIMATED	TOTAL ESTIMATED	FINAL	BRIDGE NO.4 BIN 1 06912 0 SUBSTRUCTURE ESTIMATED	SUPERSTRUCTURE ESTIMATED	MISCELLANEOUS ESTIMATED	TOTAL ESTIMATED	FINAL
203.21	SELECT STRUCTURE FILL	C.Y.	-	-	3455.0	3455.0		-	-	2597.0	2597.0	
206.01	STRUCTURE EXCAVATION	C.Y.	10100.0	-	-	10100.0		3478.0	-	-	3478.0	
567.02	ELASTOMERIC EXPANSION JOINT SYSTEM TYPE 250	L.F.	-	100.0	-	100.0		-	88.0	-	88.0	
567.31	ARMORED JOINT SYSTEM W/COMPRESSION SEAL TYPE A1	L.F.	-	100.0		100.0		-	88.0	-	88.0	
601.01	CLASS A CONCRETE FOR STRUCTURES	C.Y.	17.0	25.0	-	42.0		15.0	24.0	-	39.0	
601.02	CLASS B CONCRETE FOR STRUCTURES (CLASS A OPTIONAL)	C.Y.	2063.0	-	-	2063.0		1725.0	-	-	1725.0	
601.0301	CLASS A CONCRETE FOR STRUCTURES (MONOLITHIC SLAB-BOTTOM FORMWORK REQUIRED)	S.F.	-	18797.0	-	18797.0			15810.0	-	15810.0	
601.0303	CLASS A CONCRETE FOR STRUCTURES (REINFORCED MONOLITHIC APPROACH SLAB)	S.F.	-	-	7314.0	7314.0		-	-	6437.0	6437.0	
602.02	BAR REINFORCEMENT FOR STRUCTURES	LB.	115191.0	125709.0	48676.0	289576.0		106455.0	112742.0	42905.0	262102.0	
602.03	STUD SHEAR CONNECTORS FOR BRIDGES	EACH	-	2090.0	-	2090.0		-	1820	-	1820.0	
605.0702	STEEL PIPE UNDERDRAIN SEMI-CIRCULAR (4 5/8 IN DIAM) OR PERFORATED CORRUGATED (6 IN DIAM)	L.F.	-	-	455.0	455.0		-	-	455.0	455.0	
605.11	UNDERDRAIN FILTER TYPE C	C.Y.	-	-	500.0	500.0		-	-	422.0	422.0	
609.0302	STONE CURB-BRIDGE(TYPE F1)	L.F.	-	378.0	-	378.0		-	362.0	-	362.0	
609.0303	STONE CURB-BRIDGE(TYPE G1)	L.F.	56.0	-	-	56.0		84.0	-	-	84.0	
616.01	STRUCTURAL STEEL	LB.	-	1331160.0	-	1331160.0		-	1056684.0	-	1056684.0	
620.09	CONCRETE BLOCK PAVING	S.Y.	-	-	848.0	848.0		-	-	681.0	681.0	
621.01	EPOXY PROTECTIVE COATING	S.F.	2975.0	-	-	2975.0		2550.0	-	-	2550.0	
622.01	BITUMINOUS MATERIAL	S.F.	10110.0	-	-	10110.0		8377.0	-	-	8377.0	
628.0503	SAFE OPERATION SHEET PILING	S.F.	16535.0	-	-	16535.0		13090.0	-	-	13090.0	
635.0703	CLEANING AND PRIMING NEW STRUCTURAL STEEL	L.S.	-	NEC.	-	NEC.		-	-	-	-	
635.0704	CLEANING AND PRIMING NEW STRUCTURAL STEEL	L.S.	-	-	-	-		-	NEC.	-	NEC.	
635.0803	PAINTING NEW STRUCTURAL STEEL	L.S.	-	NEC.	-	NEC.		-	-	-	-	
635.0804	PAINTING NEW STRUCTURAL STEEL	L.S.	-	-	-	-		-	NEC.	-	NEC.	
636.04	BRIDGE BEARINGS TYPE AE 4 (HIGH STEEL EXPANSION)	EACH	-	11.0	-	11.0		-	10.0	-	10.0	
636.14	BRIDGE BEARINGS TYPE AF 4 (HIGH STEEL FIXED)	EACH	-	11.0	-	11.0		-	10.0	-	10.0	
642.10	STEEL BRIDGE RAILING (TWO RAIL)	L.F.	63.0	189.0	-	252.0		90.0	181.0	-	271.0	
642.11	STEEL BRIDGE RAILING (FOUR RAIL)	L.F.	171.0	179.0	-	350.0		119.0	181.0	-	300.0	
03660.0412	FURNISH & INSTALL 12'' DIA(NOM) STEEL WATER MAIN	L.F.	-	-	187.0	187.0		-	-	179.0	179.0	
03660.0424	FURNISH & INSTALL 24'' DIA(NOM) STEEL WATER MAIN	L.F.	-	-	187.0	187.0		-	-	179.0	179.0	
03660.1906	FURNISH & INSTALL 3'' THICK INSULATION FOR 12'' DIA(NOM) WATER MAIN	L.F.	-	-	191.0	191.0		-	-	182.0	182.0	
03660.1911	FURNISH & INSTALL 3'' THICK INSULATION FOR 24'' DIA(NOM) WATER MAIN	L.F.	-	-	191.0	191.0		-	-	182.0	182.0	
670.2003	2'' GALVANIZED STEEL CONDUIT	L.F.	217.0	378.0	-	595.0		225.0	362.0	-	587.0	
680.0301	STEEL TRAFFIC SIGNAL POLE-ANCHOR BASE	EACH	-	1.0	-	1.0		-	-	-	-	
680.0412	MAST ARMS	EACH	-	1.0	-	1.0		-	-	-	-	
680.1006	CONDUIT - 2 IN DIAM	L.F.	-	170.0	-	170.0		-	-	-	-	

INTERSTATE ROUTE 481
BRIDGE QUANTITIES

Prepared and recommended: GOODKIND & O'HEA, INC. Consulting Engineers Date 14/75

DWG. NO	SCALE	DATE	GOODKIND & O'HEA, INC. CONSULTING ENGINEERS
BQ-2		Nov 1975	

SUMMARY OF QUANTITIES

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(179) I-IM-481-2(186)	228	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

ITEM NO.	DESCRIPTION	UNIT	BRIDGE NO. 5 - WESTBOUND 1 06913 1					BRIDGE NO. 5 - EASTBOUND BIN 1 06913 2				
			SUBSTRUCTURE ESTIMATED	SUPERSTRUCTURE ESTIMATED	MISCELLANEOUS ESTIMATED	TOTAL ESTIMATED	FINAL	SUBSTRUCTURE ESTIMATED	SUPERSTRUCUTRE ESTIMATED	MISCELLANEOUS ESTIMATED	TOTAL ESTIMATED	FINAL
203.21	SELECT STRUCTURE FILL	C.Y.	-	-	5075.0	5075.0		-	-	5075.0	5075.0	
567.31	ARMORED JOINT SYSTEM W/COMPRESSION SEAL TYPE A1	L.F.	-	44.0	-	44.0		-	44.0	-	44.0	
567.35	ARMORED JOINT SYSTEM W/COMPRESSION SEAL TYPE A5	L.F.	-	44.0	-	44.0		-	44.0	-	44.0	
601.01	CLASS A CONCRETE FOR STRUCTURES	C.Y.	5.0	4.0	-	9.0		5.0	4.0	-	9.0	
601.02	CLASS B CONCRETE FOR STRUCTURES (CLASS A OPTIONAL)	C.Y.	615.0	-	-	615.0		625.0	-	-	625.0	
601.0301	CLASS A CONCRETE FOR STRUCTURES (MONOLITHIC SLAB-BOTTOM FORMWORK REQUIRED)	S.F.	-	4424.0	-	4424.0		-	4424.0	-	4424.0	
601.0303	CLASS A CONCRETE FOR STRUCTURES (REINFORCED MONOLITHIC APPROACH SLAB)	S.F.	-	-	2670.0	2670.0		-	-	2670.0	2670.0	
602.02	BAR REINFORCEMENT FOR STRUCTURES	LB.	32988.0	26730.0	17634.0	77352.0		33188.0	26730.0	17720.0	77638.0	
602.03	STUD SHEAR CONNECTORS FOR BRIDGES	EACH	-	1200.0	-	1200.0		-	1200.0	-	1200.0	
605.0702	STEEL PIPE UNDERDRAIN SEMI-CIRCULAR (4 5/8 IN DIAM) OR PERFORATED CORRUGATED (6 IN DIAM)	L.F.	-	-	254.0	254.0		-	-	254.0	254.0	
605.11	UNDERDRAIN FILTER TYPE C	C.Y.	-	-	176.0	176.0		-	-	183.0	183.0	
609.0203	STONE CURB-GRANITE(TYPE C)	L.F.	-	-	159.0	159.0		-	-	159.0	159.0	
609.0302	STONE CURB-BRIDGE(TYPE F1)	L.F.	-	206.0	-	206.0		-	206.0	-	206.0	
609.0303	STONE CURB-BRIDGE(TYPE G1)	L.F.	67.0	-	-	67.0		67.0	-	-	67.0	
612.01	SODDING	S.Y.	-	-	131.0	131.0		-	-	97.0	97.0	
615.03	WATERING PLANTS AND SOD	M GAL	-	-	2.5	2.5		-	-	1.9	1.9	
616.01	STRUCTURAL STEEL	LB.	-	154494.0	-	154494.0		-	154494.0	-	154494.0	
620.09	CONCRETE BLOCK PAVING	S.Y.	-	-	245.0	245.0		-	-	245.0	245.0	
621.31	EPOXY PROTECTIVE COATING	S.F.	555.0	-	-	555.0		555.0	-	-	555.0	
622.01	BITUMINOUS MATERIAL	S.F.	3485.0	-	-	3485.0		3600.0	-	-	3600.0	
635.0705	CLEANING AND PRIMING NEW STRUCTURAL STEEL	L.S.	-	-	-	-		-	NEC.	-	NEC	
635.0706	CLEANING AND PRIMING NEW STRUCTURAL STEEL	L.S.	-	NEC.	-	NEC.		-	-	-	-	
635.0805	PAINTING NEW STRUCTURAL STEEL	L.S.	-	-	-	-		-	NEC.	-	NEC.	
635.0806	PAINTING NEW STRUCTURAL STEEL	L.S.	-	NEC.	-	NEC		-	-	-	-	
636.21	BRIDGE BEARINGS TYPE BE (LOW STEEL EXPANSION)	EACH	-	6.0	-	6.0		-	6.0	-	6.0	
636.22	BRIDGE BEARINGS TYPE BF (LOW STEEL FIXED)	EACH	-	6.0	-	6.0		-	6.0	-	6.0	
642.10	STEEL BRIDGE RAILING (TWO RAIL)	L.F.	70.0	201.0	-	271.0		70.0	201.0	-	271.0	

INTERSTATE ROUTE 481
BRIDGE QUANTITIES

Prepared and recommended
GOODKIND & O'DEA, INC. Consulting Engineers
Date 14 of 15

DWG. NO.	SCALE	DATE	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS
BQ-3		NOV. 1975	

1069090

D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(24) I-UI-81-2(28)	[illegible]	[illegible]

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	BRIDGE NO.6 EASTBOUND BIN 1 06914 2					BRIDGE NO.6 WESTBOUND BIN 1 06914 1				
			SUBSTRUCTURE ESTIMATED	SUPERSTRUCTURE ESTIMATED	MISCELLANEOUS ESTIMATED	TOTAL ESTIMATED	FINAL	SUBSTRUCTURE ESTIMATED	SUPERSTRUCTURE ESTIMATED	MISCELLANEOUS ESTIMATED	TOTAL ESTIMATED	FINAL
203.08	SELECT GRANULAR FILL SLOPE PROTECTION	C.Y.	-	-	360.0	360.0		-	-	363.0	363.0	
203.21	SELECT STRUCTURE FILL	C.Y.	-	-	5112.0	5112.0		-	-	13700.0	13700.0	
206.01	STRUCTURE EXCAVATION	C.Y.	534.0	-	-	534.0		661.0	-	-	661.0	
567.02	ELASTOMERIC EXPANSION JOINT SYSTEM TYPE 250	L.F.	-	45.0	-	45.0		-	45.0	-	45.0	
567.04	ELASTOMERIC EXPANSION JOINT SYSTEM TYPE 650	L.F.	-	45.0	-	45.0		-	45.0	-	45.0	
601.01	CLASS A CONCRETE FOR STRUCTURES	C.Y.	315.0	23.0	-	338.0		324.0	23.0	-	347.0	
601.02	CLASS B CONCRETE FOR STRUCTURES (CLASS A OPTIONAL)	C.Y.	728.0	-	-	728.0		1135.0	-	-	1135.0	
601.0301	CLASS A CONCRETE FOR STRUCTURES (MONOLITHIC SLAB-BOTTOM FORMWORK REQUIRED)	S.F.	-	26802.0	-	26802.0		-	26437.0	-	26437.0	
601.0303	CLASS A CONCRETE FOR STRUCTURES (REINFORCED MONOLITHIC APPROACH SLAB)	S.F.	-	-	2746.0	2746.0		-	-	2849.0	2849.0	
602.02	BAR REINFORCEMENT FOR STRUCTURES	LB.	189284.0	248646.0	18331.0	456261.0		215929.0	245463.0	18891.0	480283.0	
602.03	STUD SHEAR CONNECTORS FOR BRIDGES	EACH	-	2199.0	-	2199.0		-	2163.0	-	2163.0	
605.0702	STEEL PIPE UNDERDRAIN SEMI-CIRCULAR (4 5/8 IN DIAM) OR PERFORATED CORRUGATED (6 IN DIAM)	L.F.	-	-	240.0	240.0		-	-	358.0	358.0	
605.11	UNDERDRAIN FILTER TYPE C	C.Y.	-	-	135.0	135.0		-	-	254.0	254.0	
609.0203	STONE CURB-GRANITE(TYPE C)	L.F.	-	-	342.0	342.0		-	-	144.0	144.0	
609.0302	STONE CURB-BRIDGE(TYPE F1)	L.F.	-	1220.0	-	1220.0		-	1204.0	-	1204.0	
609.0303	STONE CURB-BRIDGE(TYPE G1)	L.F.	144.0	-	-	144.0		241.0	-	-	241.0	
612.01	SODDING	S.Y.	-	-	125.0	125.0		-	-	153.0	153.0	
615.03	WATERING PLANTS AND SOD	M GAL	-	-	0.6	0.6		-	-	0.8	0.8	
616.01	STRUCTURAL STEEL	LB.	-	1599550.0	-	1599550.0		-	1584190.0	-	1584190.0	
621.01	EPOXY PROTECTIVE COATING	S.F.	3112.0	-	-	3112.0		3082.0	-	-	3082.0	
622.01	BITUMINOUS MATERIAL	S.F.	2760.0	-	-	2760.0		4656.0	-	-	4656.0	
624.04	TEMPORARY STEEL SHEET PILING	S.F.	1565.0	-	-	1565.0		1849.0	-	-	1849.0	
626.0503	SAFE OPERATION SHEET PILING	S.F.	798.0	-	-	798.0		750.0	-	-	750.0	
15635.2501	CLEANING CONTROLLED OXIDIZING STRUCTURAL STEEL	L.S.	-	NEC.	-	NEC.		-	NEC.	-	NEC.	
03636.9946	SPHERICAL BRIDGE BEARINGS TYPE CE4 (EXP W/PTFE)	EACH	-	10.0	-	10.0		-	10.0	-	10.0	
03636.9945	SPHERICAL BRIDGE BEARINGS TYPE CE5 (EXP W/PTFE)	EACH	-	5.0	-	5.0		-	5.0	-	5.0	
03636.9947	SPHERICAL BRIDGE BEARINGS TYPE CF4 (FIXED W/PTFE)	EACH	-	5.0	-	5.0		-	5.0	-	5.0	
642.10	STEEL BRIDGE RAILING (TWO RAIL)	L.F.	158.0	1220.0	-	1378.0		255.0	1204.0	-	1459.0	

In Charge of A.P. Bonanno
Designed by R. Brown
Design Checked by J. Gobis
Detailed by C. Martinez
Detail Checked by [illegible]

Proposed and recommended
GOUGHKIND & O'DEA, INC.
Consulting Engineers

Date 12/1/75

INTERSTATE ROUTE 481
BRIDGE QUANTITIES

DWG. NO.	SCALE	DATE	
BQ-4		NOV. 1975	GOUGHKIND & O'DEA, INC. CONSULTING ENGINEERS

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IC-481-2(74) I-UL-81-2(126)	630	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	BRIDGE NO. 7 BIN 1 06915 1					BRIDGE NO. 8 BIN 1 06915 2				
			SUBSTRUCTURE ESTIMATED	SUPERSTRUCTURE ESTIMATED	MISCELLANEOUS ESTIMATED	TOTAL ESTIMATED	FINAL	SUBSTRUCTURE ESTIMATED	SUPERSTRUCUTRE ESTIMATED	MISCELLANEOUS ESTIMATED	TOTAL ESTIMATED	FINAL
203.21	SELECT STRUCTURE FILL	C.Y.	-	-	3023.0	3023.0		-	-	2320.0	2320.0	
567.01	ELASTOMERIC EXPANSION JOINT SYSTEM TYPE 200	L.F.	-	87.0	-	87.0		-	87.0	-	87.0	
601.01	CLASS A CONCRETE FOR STRUCTURES	C.Y.	50.0	11.0	-	61.0		46.0	10.0	-	56.0	
601.02	CLASS B CONCRETE FOR STRUCTURES (CLASS A OPTIONAL)	C.Y.	531.0	-	-	531.0		405.0	-	-	405.0	
601.0301	CLASS A CONCRETE FOR STRUCTURES (MONOLITHIC SLAB-BOTTOM FORMWORK REQUIRED)	S.F.	-	12487.0	-	12487.0		-	12176.0	-	12176.0	
601.0303	CLASS A CONCRETE FOR STRUCTURES (REINFORCED MONOLITHIC APPROACH SLAB)	S.F.	-	-	2670.0	2670.0		-	-	2548.0	2548.0	
602.02	BAR REINFORCEMENT FOR STRUCTURES	LB.	55099.0	83919.0	17676.0	156694.0		45136.0	82245.0	16799.0	144180.0	
602.03	STUD SHEAR CONNECTORS FOR BRIDGES	EACH	-	1216.0	-	1216.0		-	1178.0	-	1178.0	
605.0702	STEEL PIPE UNDERDRAIN SEMI-CIRCULAR (6 1/8 IN DIAM) OR PERFORATED CORRUGATED (6 IN DIAM)	L.F.	-	-	190.0	190.0		-	-	170.0	170.0	
605.11	UNDERDRAIN FILTER TYPE C	C.Y.	-	-	136.0	136.0		-	-	86.0	86.0	
609.0203	STONE CURB-GRANITE(TYPE C)	L.F.	-	-	182.0	182.0		-	-	162.0	162.0	
609.0302	STONE CURB-BRIDGE(TYPE F1)	L.F.	-	569.0	-	569.0		-	553.0	-	553.0	
609.0303	STONE CURB-BRIDGE(TYPE G1)	L.F.	97.0	-	-	97.0		80.0	-	-	80.0	
612.01	SODDING	S.Y.	-	-	52.0	52.0		-	-	65.0	65.0	
615.03	WATERING PLANTS AND SOD	M GAL	-	-	1.0	1.0		-	-	1.3	1.3	
616.01	STRUCTURAL STEEL	LB.	-	712504.0	-	712504.0		-	694965.0	-	694965.0	
620.09	CONCRETE BLOCK PAVING	S.Y.	-	-	535.0	535.0		-	-	520.0	520.0	
621.01	EPOXY PROTECTIVE COATING	S.F.	1592.0	-	-	1592.0		1648.0	-	-	1648.0	
627.01	BITUMINOUS MATERIAL	S.F.	3135.0	-	-	3135.0		2098.0	-	-	2098.0	
629.02	STEEL BEARING TEST PILES	L.F.	200.0	-	-	200.0		300.0	-	-	300.0	
629.05	STEEL BEARING PILES	L.F.	2770.0	-	-	2770.0		3822.0	-	-	3822.0	
629.06	SPLICES FOR STEEL BEARING PILES	EACH	23.0	-	-	23.0		19.0	-	-	19.0	
629.09	FURNISHING EQUIPMENT FOR DRIVING PILES	L.S.	NEC.	-	-	NEC.		NEC.	-	-	NEC.	
635.0707	CLEANING AND PRIMING NEW STRUCTURAL STEEL	L.S.	-	NEC.	-	NEC.		-	-	-	-	
635.0708	CLEANING AND PRIMING NEW STRUCTURAL STEEL	L.S.	-	-	-	-		-	NEC.	-	NEC.	
635.0807	PAINTING NEW STRUCTURAL STEEL	L.S.	-	NEC.	-	NEC.		-	-	-	-	
635.0808	PAINTING NEW STRUCTURAL STEEL	L.S.	-	-	-	-		-	NEC.	-	NEC	
636.31	BRIDGE BEARINGS TYPE CE (EXPANSION WITH PTFE)	EACH	-	12.0	-	12.0		-	12.0	-	12.0	
636.32	BRIDGE BEARINGS TYPE CF (FIXED WITH PTFE)	EACH	-	6.0	-	6.0		-	6.0	-	6.0	
642.10	STEEL BRIDGE RAILING (TWO RAIL)	L.F.	107.0	568.0	-	675.0		90.0	554.0	-	644.0	

INTERSTATE ROUTE 481
BRIDGE QUANTITIES

Proposed and recommended
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

DWG. NO.	SCALE	DATE	
BQ-5		Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

1069090

D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IM-481-2(74) I-UI-81-2(26)	231	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	BRIDGE NO. 9 BIN 1 06916 0					BRIDGE NO. 10 BIN 1 06917 0				
			SUBSTRUCTURE	SUPERSTRUCTURE	MISCELLANEOUS	TOTAL		SUBSTRUCTURE	SUPERSTRUCUTRE	MISCELLANEOUS	TOTAL	
			ESTIMATED	ESTIMATED	ESTIMATED	ESTIMATED	FINAL	ESTIMATED	ESTIMATED	ESTIMATED	ESTIMATED	FINAL
203.21	SELECT STRUCTURE FILL	C.Y.	5549.0	-	-	5549.0		1504.0	-	-	1504.0	
206.01	STRUCTURE EXCAVATION	C.Y.	4594.0	-		4594.0		874.0	-	-	874.0	
601.01	CLASS A CONCRETE FOR STRUCTURES	C.Y.	2384.0	-		2384.0		419.0	-	-	419.0	
601.02	CLASS B CONCRETE FOR STRUCTURES (CLASS A OPTIONAL)	C.Y.	242.0	-	-	242.0		225.0	-	-	225.0	
602.02	BAR REINFORCEMENT FOR STRUCTURES	LB.	333628.0	-	-	333628.0		87293.0	-	-	87293.0	
605.0702	STEEL PIPE UNDERDRAIN SEMI- IRCULAR (4 5/8 IN DIAM) OR PERFORATED CORRUGATED (6 IN DIAM)	L.F.	89.0	-	-	89.0		100.0	-	-	100.0	
605.11	UNDERDRAIN FILTER TYPE C	C.Y.	57.0	-	-	57.0		87.0	-	-	87.0	
612.01	SODDING	S.Y.	-	-	84.0	84.0		-	-	83.0	83.0	
615.03	WATERING PLANTS AND SOD	M GAL	-	-	1.7	1.7		-	-	1.7	1.7	
622.01	BITUMINOUS MATERIAL	S.F.	19968.0	-	-	19968.0		6218.0	-	-	6218.0	
528.0503	SAFE OPERATION SHEET PILING	S.F.	12472.0	-	-	12472.0		5026.0	-	-	5026.0	

In Charge of H.D. Spencer
Designed by J.R. BROWN
Design Checked by J. GOSS
Detailed by C. MORTINEZ
Detail Checked by Samuel Ocasio

Prepared and recommended
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

INTERSTATE ROUTE 481
BRIDGE QUANTITIES

DWG. NO.	SCALE	DATE	
BQ-6		Nov 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IC-481-2(74) I-IC-481-2(126)	232	1

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	BRIDGE NO. 1031501 (SB) SUBSTRUCTURE ESTIMATED	SUPERSTRUCTURE ESTIMATED	MISCELLANEOUS ESTIMATED	TOTAL ESTIMATED	FINAL	BRIDGE NO. 1031502 (NB) SUBSTRUCTURE ESTIMATED	SUPERSTRUCUTRE ESTIMATED	MISCELLANEOUS ESTIMATED	TOTAL ESTIMATED	FINAL
203.21	SELECT STRUCTURE FILL	C.Y.	—	—	372.0	372.0		—	—	—	—	
206.01	STRUCTURE EXCAVATION	C.Y.	838.0	—	—	838.0		—	—	—	—	
567.01	ELASTOMERIC EXPANSION JOINT SYSTEM-TYPE 200	L.F.	—	374.0	—	374.0		—	—	—	—	
580.01	REMOVAL OF STRUCTURAL CONCRETE	C.Y.	22.0	115.0	15.0	152.0		4.0	31.0	—	35.0	
587.01	BRIDGE RAILING REMOVAL AND DISPOSAL	L.F.	58.0	547.0	—	605.0		48.0	407.0	—	455.0	
601.01	CLASS A CONCRETE FOR STRUCTURES	C.Y.	94.0	7.0	—	101.0		—	—	—	—	
601.02	CLASS B CONCRETE FOR STRUCTURES (CLASS A OPTIONAL)	C.Y.	170.0	—	—	170.0		—	—	—	—	
601.0301	CLASS A CONCRETE FOR STRUCTURES (MONOLITHIC SLAB-BOTTOM FORMWORK REQUIRED)	S.F.	—	5985.0	—	5985.0		—	—	—	—	
601.0303	CLASS A CONCRETE FOR STRUCTURES (REINFORCED MONOLITHIC APPROACH SLAB)	S.F.	—	—	2332.0	2332.0		—	—	—	—	
03601.05	INSTALL JOINT SEALER IN SAWED RECESS	L.F.	—	—	—	—		—	153.0	—	153.0	
03601.9990	LATEX MODIFIED CONCRETE OVERLAY	S.F.	149.0	12877.0	—	13026.0		—	—	—	—	
602.02	BAR REINFORCEMENT FOR STRUCTURES	LB.	28257.0	41652.0	16570.0	86479.0		—	—	—	—	
602.03	STUD SHEAR CONNECTORS FOR BRIDGES	EACH	—	632.0	—	632.0		—	—	—	—	
605.0702	STEEL PIPE UNDERDRAIN SEMI-CIRCULAR (4 5/8 IN DIAM) OR PERFORATED CORRUGATED (6 IN DIAM)	L.F.	—	—	81.0	81.0		—	—	—	—	
605.11	UNDERDRAIN FILTER TYPE C	C.Y.	—	—	19.0	19.0		—	—	—	—	
609.0203	STONE CURB-GRANITE(TYPE C)	L.F.	—	—	160.0	160.0		—	—	160.0	160.0	
609.0302	STONE CURB-BRIDGE(TYPE F1)	L.F.	—	270.0	—	270.0		—	—	—	—	
609.0303	STONE CURB-BRIDGE(TYPE G1)	L.F.	25.0	—	—	25.0		—	—	—	—	
609.15	RESETTING OLD CURB	L.F.	—	13.0	—	13.0		—	—	—	—	
616.01	STRUCTURAL STEEL	LB.	—	178215.0	—	178215.0		—	—	—	—	
620.09	CONCRETE BLOCK PAVING	S.Y.	—	—	412.0	412.0		—	—	—	—	
621.01	EPOXY PROTECTIVE COATING	S.F.	2015.0	—	—	2015.0		—	—	—	—	
622.01	BITUMINOUS MATERIAL	S.F.	509.0	—	—	509.0		—	—	—	—	
628.04	TEMPORARY STEEL SHEET PILING	S.F.	278.0	—	—	278.0		—	—	—	—	
628.0503	SAFE OPERATION SHEET PILING	S.F.	2595.0	—	—	2595.0		—	—	—	—	
635.0709	CLEANING AND PRIMING NEW STRUCTURAL STEEL	L.S.	—	NEC.	—	NEC.		—	—	—	—	
635.0809	PAINTING NEW STRUCTURAL STEEL	L.S.	—	NEC.	—	NEC.		—	—	—	—	
635.0901	MAINTENANCE CLEANING AND PRIMING OF STRUCT STEEL	L.S.	—	NEC.	—	NEC.		—	—	—	—	
635.0902	MAINTENANCE CLEANING AND PRIMING OF STRUCT STEEL	L.S.	—	—	—	—		—	NEC.	—	NEC.	
635.1001	MAINTENANCE PAINTING OF STRUCTURAL STEEL	L.S.	—	NEC.	—	NEC.		—	NEC.	—	NEC.	
635.1002	MAINTENANCE PAINTING OF STRUCTURAL STEEL	L.S.	—	—	—	—		—	—	—	—	
636.22	BRIDGE BEARINGS TYPE BF (LOW STEEL FIXED)	EACH	—	12.0	—	12.0		—	—	—	—	
636.21	BRIDGE BEARINGS TYPE BE (LOW STEEL EXPANSION)	EACH	—	13.0	—	13.0		—	—	—	—	
15636.4301	BRIDGE BEARING RESTORATION	EACH	—	—	—	—		—	1.0	—	1.0	
642.10	STEEL BRIDGE RAILING (TWO RAIL)	L.F.	69.0	542.0	—	611.0		48.0	407.0	—	455.0	
642.30	EPOXY MORTAR PADS	GAL.	9.0	12.0	—	21.0		2.0	12.0	—	14.0	
03643.3090	MECHANICAL SCARIFICATION OF STRUCTURAL SLABS	S.F.	—	20255.0	—	20255.0		—	—	—	—	
03643.3091	MANUAL REMOVAL OF STRUCTURAL SLAB CONCRETE	S.F.	—	1200.0	—	1200.0		—	—	—	—	
15643.3502	EPOXY BONDING COMPOUND	GAL	5.0	9.0	3.0	17.0		—	—	—	—	
15643.4402	DRILLING AND GROUTING REINF.BARS OR ANCHOR BOLTS	L.F.	297.0	244.0	37.0	578.0		50.0	[illegible]	134.0	434.0	
*670.1001	ALUM.LIGHT STAN.30' MTG.HT. 4'-15' BRACKET	EACH	—	1.0	—	1.0		—	—	—	—	
04643.9999	REMOVAL OF EXISTING STRUCTURAL STEEL	LB.	—	275.0	—	275.0		—	—	—	—	
15659.04	REMOVAL AND REPLACEMENT OF STRUCTURAL CONCRETE	C.Y.	—	—	—	—		2.0	—	—	2.0	
07659.05	REMOVAL OF STRUCT.CONC. AND REPLACEMENT W/MORTAR	S.F.	10.0	—	—	10.0		—	—	—	—	
670.2003	2" GALVANIZED STEEL CONDUIT	L.F.	33.0	273.0	—	306.0		—	—	—	—	
*15606.9999	TEMPORARY GUIDE RAIL FOR STRUCTURES	L.F.	—	—	649.0	649.0		—	—	—	—	
* 619.14	TIMBER CURB	L.F.	—	—	780.0	780.0		—	—	456.0	456.0	

* ITEM NUMBERS ARE OUT OF SEQUENCE

INTERSTATE ROUTE 481
BRIDGE QUANTITIES

Prepared and recommended
D. O'Dea
GOODKIND & O'DEA, INC. Consulting Engineers

Date 12/1/75

DWG. NO.	SCALE	DATE	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS
BQ-7		NOV 1975	

1069090

D060042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-TC-481-2(74) I-UL-81-2(129)	233	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

GENERAL NOTES

1. DESIGN SPECIFICATIONS: CURRENT NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
2. LIVE LOAD: HS20-44 OR TWO 24,000-lb. AXLES SPACED 4' - 0" ON CENTERS FOR BRIDGES 1,2,5,6,7,8,9,10,18 AND 1031501. HS20-44 FOR BRIDGES 3 AND 4.
3. MATERIAL AND CONSTRUCTION SPECIFICATIONS: SPECIFICATIONS OF NEW YORK STATE DEPARTMENT OF TRANSPORTATION DATED JANUARY 2, 1973, WITH CURRENT ADDITIONS AND MODIFICATIONS.
4. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE SPECIAL NOTES FOR THESE STRUCTURES 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 STRUCTURES AND WHICH SPECIFIES CERTAIN REQUIREMENTS RELATIVE TO CONSTRUCTION.
5. THE COST OF FURNISHING AND PLACING WATER USED FOR SELECT STRUCTURE FILL (ITEM 203.21) WILL BE PAID FOR UNDER ITEM 203.15 AND 203.16 OF THE HIGHWAY PORTION OF THE CONTRACT.
6. THE COST OF FURNISHING AND PLACING WATER USED FOR SOD GUTTERS WILL BE PAID FOR UNDER ITEM 615.03 INCLUDED IN THE BRIDGE ESTIMATE.
7. THE COST OF ALL JOINT MATERIAL WILL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS ITEMS OF THE CONTRACT, EXCEPT AS OTHERWISE SPECIFIED.
8. ALL CONCRETE ANCHOR STUDS WHICH ARE ATTACHED TO THE VARIOUS STEEL DETAILS SHALL MEET THE REQUIREMENTS LISTED IN SUBSECTION 709-05, 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.
9. CONCRETE ITEMS

DESCRIPTION	ITEM NO.
MASS CONCRETE-ABUTMENTS AND RETAINING WALLS	601.02
PIER FOOTINGS	601.02
PIER COLUMNS, CAPS AND BEAMS	601.01
MONOLITHIC SLABS	601.0301
SIDEWALKS (SUPERSTRUCTURE AND SUBSTRUCTURE)	601.01
SAFETY WALKS, ABUTMENT HEADERS, SUPERSTRUCTURE AND SUBSTRUCTURE	601.01
APPROACH SLABS	601.0301
CULVERTS	601.01

ALL CONCRETE SHALL HAVE ENTRAINED AIR IN ACCORDANCE WITH THE SPECIFICATIONS.

10. REINFORCING BARS SHALL BE LAPPED AS INDICATED ON THE PLANS.
11. THE MINIMUM COVER FOR REINFORCEMENT SHALL BE AS FOLLOWS:

TOP BARS IN SLABS WITH INTEGRAL WEARING SURFACES (BRIDGES 1 THRU 8)	3 1/4 IN.
TOP BARS IN SLAB WITH SEPARATE WEARING SURFACE (BRIDGE 1031501)	1 IN.
BOTTOM BARS IN DECK SLAB	1 IN.
BEAMS AND COLUMNS	2 IN.
WALLS AND PIERS ABOVE FOOTINGS	2 IN.
FOOTINGS	3 IN.
FACE OF CULVERTS IN CONTACT WITH EARTH	2 IN.
BOTTOM OF BOTTOM SLAB OF CULVERT	3 IN.
BOTTOM OF TOP SLAB OF CULVERTS	1 1/2 IN.
TOP OF SIDEWALK SLABS	1 1/2 IN.
PEDESTAL	2 IN.

12. ALL EXPOSED EDGES OF CONCRETE ARE TO BE CHAMFERED 1" UNLESS NOTED OTHERWISE ON THE PLANS.
13. EPOXY BONDING COMPOUND ITEM 15643.3502 SHALL BE APPLIED TO ALL EXISTING CONCRETE SURFACES IN CONTACT WITH NEW CONCRETE CONSTRUCTION.

SUBSTRUCTURE NOTES

1. FOR FOUNDATION PRESSURES AT ABUTMENTS AND PIERS AND PILE NOTES, SEE PLANS OF INDIVIDUAL STRUCTURES.
2. ALL SOD, TOPSOIL AND UNSUITABLE MATERIAL UNDER THE SUBSTRUCTURE EMBANKMENT SHALL BE REMOVED AS SPECIFIED UNDER SECTION 203, EXCAVATION AND EMBANKMENT, AND REPLACED BY THE SAME ITEM AS THE LAYER OF EMBANKMENT ADJACENT AND ABOVE AS SHOWN ON THE PLANS.
3. ALL EMBANKMENTS OF SELECT STRUCTURE FILL, ITEM 203.21 SHALL BE COMPACTED TO A MINIMUM DRY DENSITY OF 100 PERCENT OF MAXIMUM DENSITY AS DEFINED UNDER SUBSECTION 203-3.12 - COMPACTION.
   HOWEVER, WHERE PILES ARE TO BE PLACED THROUGH THE EMBANKMENT AT BRIDGES 7 AND 8, A MINIMUM DRY INTENSITY OF 95 PERCENT OF THE MAXIMUM DENSITY WILL BE REQUIRED.
4. 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 (STRUCTURES).
5. THE INSTALLATION OF SELECT STRUCTURE FILL, ITEM 203.21, AS SHOWN ON THE STRUCTURAL PLANS, SHALL BE COMPLETED IMMEDIATELY FOLLOWING THE COMPLETION OF ABUTMENTS OR WALLS.
6. BITUMINOUS MATERIAL, ITEM 622.01 SHALL BE APPLIED TO THE BACKS OF ALL ABUTMENTS AND WINGWALLS ABOVE TOP OF FOOTINGS WHERE FILL IS IN CONTACT WITH THE WALLS.*
7. EPOXY PROTECTIVE COATING FOR CONCRETE, ITEM 621.01, SHALL BE APPLIED TO THE FOLLOWING SURFACES:

   ABUTMENTS ALL EXPOSED PEDESTAL SURFACES, BRIDGE SEATS, INCLUDING THE AREA UNDER THE BEARINGS, EXPOSED VERTICAL SURFACES OF BACKWALL AND CURTAIN WALLS FACING THE SUPERSTRUCTURE.

   SOLID PIERS BRIDGE 1 - 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.

   PIERS WITH COLUMNS BRIDGES 2,6,7,8 AND 1031501 - TOP AND SIDES OF PIER BEAMS AND PEDESTALS INCLUDING THE SURFACES UNDER THE BEARINGS.
8. THE USE OF FIBER FORMS FOR THE PIER COLUMNS ON BRIDGE 1031501 WILL BE PERMITTED ONLY IF THE INTERIOR SURFACE OF THE FORMS HAS BEEN TREATED IN SUCH A MANNER AS TO PREVENT HELICAL CORRUGATION MARKS ON THE FINISHED CONCRETE SURFACE. FORMS ARE NOT TO BE REMOVED IN A MANNER THAT WILL DAMAGE THE CONCRETE.
9. EXISTING SUBSTRUCTURES SHALL BE REMOVED TO WITHIN THE LIMITS SHOWN ON THE PLANS FOR BRIDGE 1031501 UNDER ITEM 580.01 IN THE BRIDGE QUANTITIES.
10. THE CONTRACTOR, WITH THE PERMISSION OF THE DEPUTY CHIEF ENGINEER (STRUCTURES), MAY ELECT TO INTRODUCE CONSTRUCTION JOINTS IN THE ABUTMENTS AT LOCATIONS NOT SHOWN ON THE PLANS. WHERE AESTHETIC FINISHES ARE DETAILED ON THE PLANS, THE JOINTS SHALL BE LOCATED WITHIN THE GROOVES AS SHOWN ON THE PLANS. THESE CONSTRUCTION JOINTS SHALL BE PROVIDED WITH SHEAR KEYS AND WATERSTOPS. VERTICAL CONSTRUCTION JOINTS INTRODUCED IN THE BACKWALL SHOULD PREFERABLY BE PLACED MIDWAY BETWEEN THE PEDESTALS.
11. ALL VERTICAL JOINTS IN WALLS IN CONTACT WITH EARTH SHALL HAVE TYPE D WATERSTOPS.
12. ALL CURBS ON WINGWALLS TO BE TYPE S-1, ITEM 609.0303.

* FOR LIMITS AT CULVERTS, SEE PAY LIMIT DETAILS ON BRIDGES 9 & 10.

SUPERSTRUCTURE NOTES

1. AFTER ALL SUPERSTRUCTURE BEAMS HAVE BEEN ERECTED, ELEVATIONS SHALL BE TAKEN ON THE TOP OF THE BEAM 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 BEAM ELEVATIONS SUBTRACT THE DEFLECTIONS DUE TO SLAB AND SUPERIMPOSED DEAD LOAD. SUBTRACT THIS RESULT FROM THE LISTED BOTTOM OF SLAB ELEVATION.
2. THE STRUCTURAL SLAB ON BRIDGES 1,2,6,7 AND 8 SHALL BE FORMED WITH PERMANENT CORRUGATED METAL FORMS.
   THE STRUCTURAL SLAB ON BRIDGES 3,4,5 AND 1031501 SHALL BE FORMED WITH REMOVABLE FORMS.
3. 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 CONNECTION PLATES TO FIT OR BY CUTTING THE CONNECTION PLATES 1/8 INCH SHORT AND THEN PLACING THE CONNECTION PLATE TIGHTLY AGAINST THE TENSION FLANGE AND WELDING THE OPPOSITE END TO THE COMPRESSION FLANGE. FITTED CONNECTION PLATES SHALL NOT BE DRIVEN IN PLACE WITH SUFFICIENT FORCE TO DISTORT THE FLANGE, WEB OR CONNECTION PLATES.
4. 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.
5. BEARING STIFFENERS FOR THE GIRDERS ON BRIDGES 3,4 AND 5 SHALL BE FILLET WELDED TO THE WEB, SHALL BE EITHER FILLET WELDED OR TIGHTLY FITTED TO THE TOP FLANGE, AND SHALL BE EITHER WELDED TO THE BOTTOM FLANGE WITH A FULL PENETRATION GROOVE WELD OR MILLED TO BEAR AGAINST THE BOTTOM FLANGE.
6. BEARING STIFFENERS FOR THE GIRDERS ON BRIDGE 2 SHALL BE FILLET WELDED TO THE WEB, SHALL BE EITHER FILLET WELDED OR TIGHTLY FITTED TO THE TOP FLANGE, AND SHALL BE WELDED TO THE BOTTOM FLANGE WITH A FULL PENETRATION GROOVE WELD.
7. BEARING STIFFENERS FOR THE GIRDERS ON BRIDGES 1,6,7 AND 8 SHALL BE FILLET WELDED TO THE WEB AND SHALL BE WELDED TO THE BOTTOM FLANGE WITH A FULL PENETRATION GROOVE WELD. WHERE THE TOP FLANGE IS IN COMPRESSION, THE BEARING STIFFENER MAY BE EITHER FILLET WELDED TO THE TOP FLANGE OR TIGHTLY FITTED TO THE TOP FLANGE. WHERE THE TOP FLANGE IS IN TENSION, THE BEARING STIFFENER SHALL BE PLACED TIGHT AGAINST THE TOP FLANGE WITHOUT THE FILLET WELD.
8. THE ENDS OF ALL GIRDERS AND BEAMS AND THE BEARING STIFFENERS SHALL BE VERTICAL. ALL INTERMEDIATE TRANSVERSE STIFFENERS MAY BE PLACED PERPENDICULAR TO THE TOP FLANGE.
9. ALL ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF 1973 MATERIAL SPECIFICATION 719-01.
10. ALL SURFACES OF STRUCTURAL STEEL MEMBERS, EXCEPT FOR BRIDGE NO. 6, INCLUDING SURFACES WHICH ARE EMBEDDED OR IN CONTACT WITH CAST OR PNEUMATICALLY PROJECTED CONCRETE, SHALL BE PAINTED EXCEPT THOSE PORTIONS OF THE SURFACE WHERE WELDING IS TO BE PERFORMED, SUCH AS THE PORTIONS OF THE TOP FLANGE OF STRINGERS WHERE STUD SHEAR CONNECTORS ARE TO BE ATTACHED BY WELDING.
11. MACHINE-FINISHED SLIDING SURFACES IN CONTACT SHALL RECEIVE ONE COAT OF ANY COMMON FIBROUS AUTOMOTIVE GREASE AS SOON AS MACHINING IS COMPLETE. THE CONTACTING SURFACE OF THE ROLLED COPPER ALLOY PLATE SHALL ALSO BE COATED WITH GREASE. THE CONTRACTOR SHALL MAINTAIN ALL PROTECTIVE COATINGS TO PREVENT CORROSION. ALL PROTECTIVE COATINGS APPLIED IN THE SHOP SHALL BE REMOVED IMMEDIATELY PRIOR TO ASSEMBLY OF THE MEMBERS IN THE FIELD. WHEN THE PROTECTIVE COATING IS REMOVED, THE MEMBERS SHALL BE THOROUGHLY CLEANED AND THEN COATED WITH AUTOMOTIVE GREASE BEFORE ASSEMBLY.

(CONTINUED ON DWG. NO CD-2)

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS
BRIDGE NOTES - I

In Charge of [illegible]
Designed by J.P. Eustigneo
Design Checked by E. Goldberg
Detailed by M. Brif
Detail Checked by [illegible]

Recommended and Approved: [illegible] Date 12/1/75
Greenhorne & O'Mara, Inc. Consulting Engineers

DWG. NO.	SCALE	DATE	GREENHORNE & O'MARA, INC. CONSULTING ENGINEERS
CD-1		NOV 1975	

SUPERSTRUCTURE NOTES CONT'D.

12. WHEN BOLTED CONNECTIONS ARE SHOWN, BOLTS SHALL BE 7/8 INCHES DIAMETER HIGH STRENGTH BOLTS UNLESS OTHERWISE SPECIFIED. AT THE OPTION OF THE CONTRACTOR, CONNECTIONS TO VERTICAL CONNECTION PLATES OR BEARING STIFFENERS MAY BE MADE WITH CONTINUOUS 5/16" FILLET WELDS ALONG BOTH VERTICAL EDGES OF THE FAYING SURFACES. ANY OPEN HOLES USED FOR ERECTION PURPOSES SHALL BE FILLED WITH BOLTS WHICH NEED NOT BE HIGH-STRENGTH BOLTS. ALL CONNECTIONS TO THE LATERAL GUSSET PLATES SHALL BE MADE WITH 7/8"ϕ HIGH-STRENGTH BOLTS AS DETAILED.

13. CARE SHALL BE TAKEN WHEN WELDING GUSSET PLATES TO THE FLANGES OF PLATE GIRDERS, ESPECIALLY AT THE START AND END OF THE FILLET WELDS, TO INSURE COMPLETE FUSION AT THE ROOT AND THAT WELD CRATERS ARE PROPERLY FILLED. THE MATERIALS TO BE WELDED SHALL BE PREHEATED TO A MINIMUM OF 250°.

14. CROSS FRAMES MAY BE FABRICATED TO FIT THE GIRDERS IN THEIR ERECTED POSITION AND CAMBERED SHAPE, BUT DEFLECTED VERTICALLY UNDER THE DEAD LOAD OF THE STEEL WORK ONLY.

15. SHIM PLATES MAY BE USED IN THE CONNECTION BETWEEN THE TOP OR BOTTOM STRUTS OF THE CROSS FRAMES AND THE TOP OR BOTTOM GUSSET PLATES. TAPERED OR FLAT SHIM PLATES MAY BE USED IN THE CONNECTION BETWEEN SKEWED DIAPHRAGMS AND THE BEARING STIFFENERS OR STIFFENER CONNECTION PLATES. VARIABLE THICKNESSES OF SHIM PLATES MAY BE USED. THE MINIMUM THICKNESS OF SHIM PLATE SHALL BE 1/8" WITH A MAXIMUM NUMBER OF THREE SHIM PLATES PERMITTED AT ANY CONNECTION. THE TOTAL THICKNESS OF ALL SHIM PLATES USED AT ANY CONNECTION SHALL NOT EXCEED 1". SHIM PLATES HAVE THE DIMENSIONS OF THE FAYING SURFACE. THE SHIM MATERIAL SHALL CONFORM TO ASTM DESIGNATION A36, EXCEPT THAT ON UNPAINTED STRUCTURES THE SHIM MATERIAL SHALL CONFORM TO ASTM DESIGNATION A588. NO ADDITIONAL PAYMENT WILL BE MADE FOR FURNISHING AND PLACING THE SHIM PLATES.

THE CONTRACTOR MAY PLACE DIAPHRAGMS ON EITHER SIDE OF THE BEARING STIFFENERS OR STIFFENER CONNECTION PLATES AS NECESSARY TO CORRECT DIAPHRAGM ALIGNMENT PROVIDED THERE WILL BE NO INTERFERENCE WITH OTHER STRUCTURAL DETAILS.

16. ALL STEEL BEARINGS SHALL BE FIELD WELDED TO THE GIRDERS.

NOTES 17 THRU 20 APPLY TO THE A588 STEEL USED FOR BRIDGES 2 AND 6.

17. FLAME CUT EDGES: THE CONTRACTOR SHALL TAKE STEPS TO INSURE THAT THE FLAME-CUT EDGES OF MAIN MATERIAL SUBJECT TO TENSILE STRESSES ARE NOT AIR HARDENED BY THE CUTTING PROCESS. THIS MAY BE ACHIEVED BY PREHEATING, POST-HEATING OR CONTROL OF THE BURNING PROCESS. FLAME-CUT EDGES FOUND TO HAVE A ROCKWELL HARDNESS VALUE OF RC30 OR GREATER WILL BE CONSIDERED UNACCEPTABLE. A PORTABLE ROCKWELL HARDNESS TESTER WILL BE EMPLOYED BY THE INSPECTOR TO DETERMINE CONFORMANCE WITH THESE REQUIREMENTS. UNACCEPTABLY HARD SURFACES SHALL BE REMOVED BY GRINDING OR MACHINING.

18. TACK WELDS: THERE SHALL BE NO TACK WELDING ON STEEL THAT IS NOT PREHEATED TO THE MINIMUM SPECIFIED PREHEAT AND INTERPASS TEMPERATURE REQUIRED FOR THIS STRUCTURE UNLESS THE TACK WELD AND ADJACENT HEAT-AFFECTED ZONE IS COMPLETELY REMELTED AND INCORPORATED IN THE SUBSEQUENT SEMIAUTOMATIC OR AUTOMATIC WELD. ALL TEMPORARY TACK WELDS THAT ARE NOT REMELTED AND INCORPORATED INTO A PERMANENT WELD SHALL BE REMOVED BY GRINDING. THE AREAS WHERE THE TACK WELDS ARE REMOVED WILL BE MAGNETIC-PARTICLE INSPECTED BY THE CONTRACTOR. THE COST OF THIS INSPECTION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THIS ITEM. HARDNESS TESTS OF THESE AREAS MAY ALSO BE PERFORMED BY THE INSPECTOR.

ALUMINUM PROBES SHALL BE USED ON ALL MAGNETIC-PARTICLE INSPECTION EQUIPMENT. EQUIPMENT WITH COPPER PROBES WILL NOT BE PERMITTED.

19. MINIMUM HEAT INPUT: THE WELDING PROCEDURE USED SHALL PRODUCE THE FOLLOWING MINIMUM HEAT INPUT VALUES:

FOR MATERIAL FROM 3/8" TO 3/4" IN THICKNESS INCL.	35 KILOJOULES PER IN.
MATERIAL OVER 3/4" IN THICKNESS	50 KILOJOULES PER IN.

HEAT INPUT VALUES SHALL BE CALCULATED BY THE CONTRACTOR FOR ALL PROPOSED WELDING PROCEDURES AND SUBMITTED TO THE DEPUTY CHIEF ENGINEER (STRUCTURES) FOR APPROVAL.

20. MINIMUM PREHEAT AND INTERPASS TEMPERATURE

THICKNESS OF THICKEST PART AT POINT OF WELDING - INCHES	
TO 3/4" INCLUSIVE	100°
OVER 3/4" TO 1-1/2" INCL.	200°
OVER 1-1/2" TO 2-1/2" INCL.	300°
OVER 2-1/2"	350°

NOTES 21 AND 22 APPLY TO THE UNPAINTED STEEL USED FOR BRIDGE 6.

21. WELDING PROCEDURES

MANUAL SHIELDED METAL-ARC PROCESS:

ALL MANUAL SHIELDED METAL-ARC WELDING SHALL BE DONE USING AWS A5.5 CLASSIFICATION E8018-C3 OR E8016-C3 ELECTRODES.

ALL MANUAL WELDING ELECTRODES SHALL BE FURNISHED IN HERMETICALLY SEALED CONTAINERS AND SHALL BE DRIED FOR AT LEAST TWO HOURS MINIMUM AND EIGHT HOURS MAXIMUM BETWEEN 500° AND 550° F. BEFORE THEY ARE USED. AFTER DRYING, ELECTRODES SHALL BE PLACED IN A STORAGE OVEN HELD AT A TEMPERATURE OF AT LEAST 250° F. UNTIL USED IN THE WORK.

ELECTRODES NOT USED WITHIN TWO HOURS FROM THE TIME THEY ARE REMOVED FROM THE DRYING OR STORAGE OVEN SHALL BE DISCARDED. RE-DRYING OF ELECTRODES WILL NOT BE PERMITTED.

SEMIAUTOMATIC AND AUTOMATIC PROCESSES:

ALL SEMIAUTOMATIC AND AUTOMATIC WELDING PROCEDURES WILL BE SUBJECT TO THE APPROVAL OF THE DEPUTY CHIEF ENGINEER. (STRUCTURES). IT WILL NOT BE NECESSARY TO MATCH THE CHEMISTRY OF THE A588 STEEL FOR SINGLE PASS FILLET WELDS MADE BY THE SUBMERGED ARC PROCESS. THE CONTRACTOR WILL HAVE THE OPTION OF USING STANDARD MILD STEEL ELECTRODE WELDING PROCEDURES FOR GROOVE WELDS, PROVIDED THE COVER PASSES OF SUCH WELDS ARE MADE WITH FILLER METAL THAT HAS ACCEPTABLE WEATHERING CHEMISTRY AS DETERMINED BY THE DEPUTY CHIEF ENGINEER. (STRUCTURES). E8018-C3 OR E8016-C3 ELECTRODES ARE ACCEPTABLE.

22. ANY OPEN HOLES USED FOR ERECTION PURPOSES SHALL BE FILLED WITH ASTM A325 TYPE 3 BOLTS.

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS

BRIDGE NOTES II

Prepared and recommended: Date 12/1/75
GOODKIND & O'HEA, INC. Consulting Engineers

DWG. NO.	SCALE	DATE	
CD-2		Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

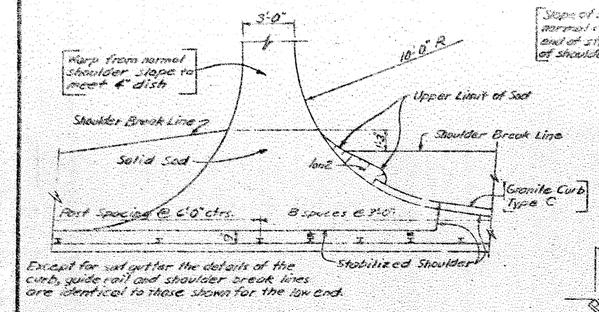
Detail Checked by

1069090

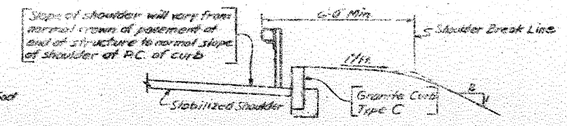
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(74) I-VI-81-2(126)	235	571

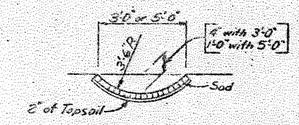
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



TYPE I SHOULDER - HIGH END



SECTION A'-A'



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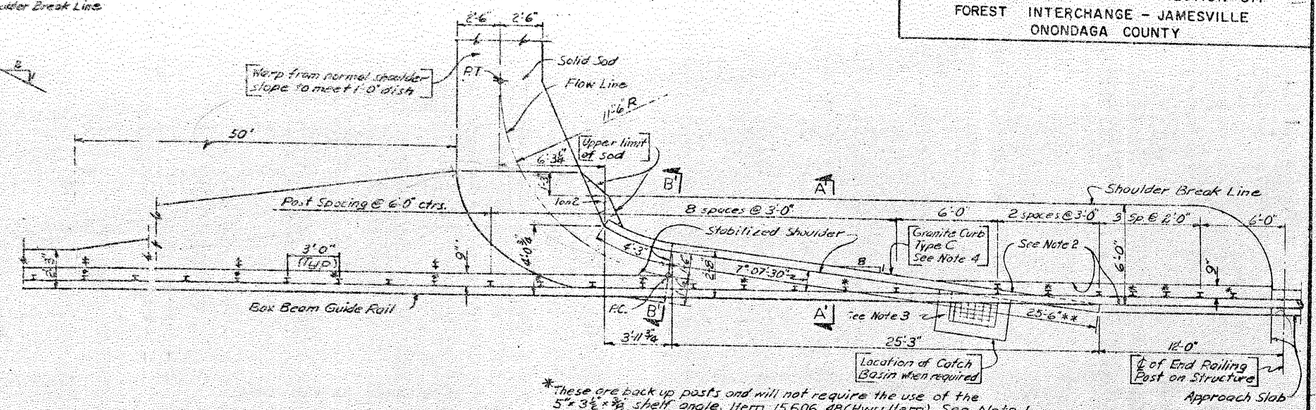


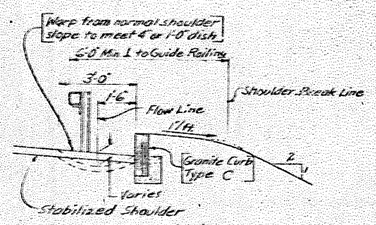
*These are back up posts and will not require the use of the 5"x 3½"x ⅜" shelf angle. Item 15606.48(Hwy Item). See Note 1.

TYPE I SHOULDER - FULL WIDENING WITH BRUSH CURB - LOW END

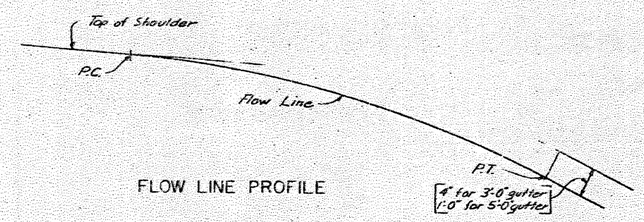
BRIDGE 1	NORTHEAST AND SOUTHWEST WINGWALL		
	NORTHWEST WINGWALL	SEE NOTE 6	
BRIDGE 2	NORTHEAST WINGWALL	SEE NOTE 6	
BRIDGE 5	SOUTHWEST WINGWALL	SEE NOTE 5	
	NORTHWEST WINGWALL	SEE NOTE 5	
BRIDGE 6	SOUTHEAST WINGWALL	(EASTBOUND)	SEE NOTE 5
	NORTHEAST WINGWALL	(WESTBOUND)	SEE NOTE 5
	NORTHWEST WINGWALL	(WESTBOUND)	SEE NOTE 5
BRIDGE 7	SOUTHEAST WINGWALL	SEE NOTE 5	
	NORTHEAST WINGWALL	SEE NOTE 5	
BRIDGE 8	SOUTHEAST WINGWALL	SEE NOTE 5	
	NORTHEAST WINGWALL	SEE NOTE 6	
BRIDGE 1031501	NORTHEAST WINGWALL	SEE NOTE 6	
	NORTHWEST WINGWALL	SEE NOTE 6	

BRIDGE 3	SOUTHEAST WINGWALL	(GUIDERAIL ONLY)
	NORTHEAST WINGWALL	(GUIDERAIL ONLY)
	NORTHWEST WINGWALL	(GUIDERAIL ONLY)
BRIDGE 4	SOUTHEAST WINGWALL	(GUIDERAIL ONLY)
	SOUTHWEST WINGWALL	(GUIDERAIL ONLY)

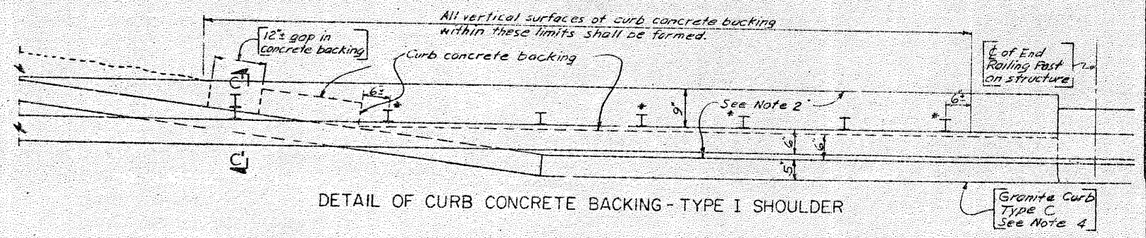
‡ BACK UP POSTS ARE CONTINUOUS BETWEEN BRIDGES 3 AND 4 ON THE WEST SIDE OF BRIGHTON AVE.



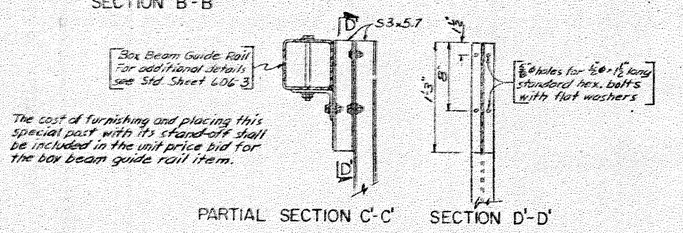
SECTION B'-B'



FLOW LINE PROFILE



DETAIL OF CURB CONCRETE BACKING - TYPE I SHOULDER



The cost of furnishing and placing this special post with its stand-off shall be included in the unit price bid for the box beam guide rail item.

PARTIAL SECTION C'-C' SECTION D'-D'

NOTES:

1. BACK-UP POSTS SHALL BE OMITTED ON THE TRAILING OR OFF END OF A ONE-WAY OPERATION.
2. PAVE THIS AREA WITH THE SAME MATERIAL AS IN STABILIZED SHOULDER. PAYMENT WILL BE MADE UNDER THE STABILIZED SHOULDER ITEM.
3. FOR DETAILS OF CATCH BASIN, SEE APPROACH PLANS.
4. DETAILS OF GRANITE CURB, TYPE C, ARE SHOWN ON STANDARD SHEET 609-1.
5. FOR GUIDE RAIL TRANSITIONS, BOX BEAM TO CABLE, SEE DWG. NO. CD-6.
6. FOR GUIDE RAIL TRANSITIONS, BOX BEAM TO CORRUGATED BEAM, SEE DWG. NO. CD-7.

REFERENCE:

FOR LOCATION OF SOD GUTTERS, SEE INDIVIDUAL BRIDGES.

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS

DRAINAGE AND APPROACH DETAILS

Prepared and recommended Date 12/1/75
GOODKIND & O'DEA, INC. Consulting Engineers

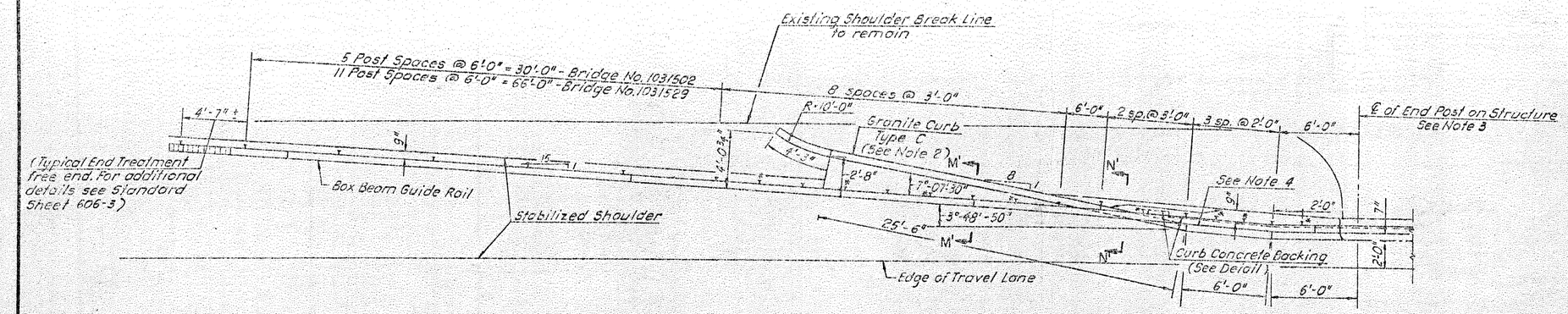
DWG. NO.	SCALE	DATE	
CD-3	Not to Scale	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

In Charge of Design by S. Gore
Designed by S. Gore
Design Checked by R. Bloomquist
Detailed by R. Schlegel
Detail Checked by R. Schlegel

D95042

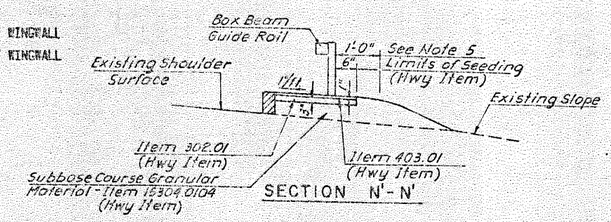
FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(174) I-81-2(126)	[illegible]	[illegible]

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



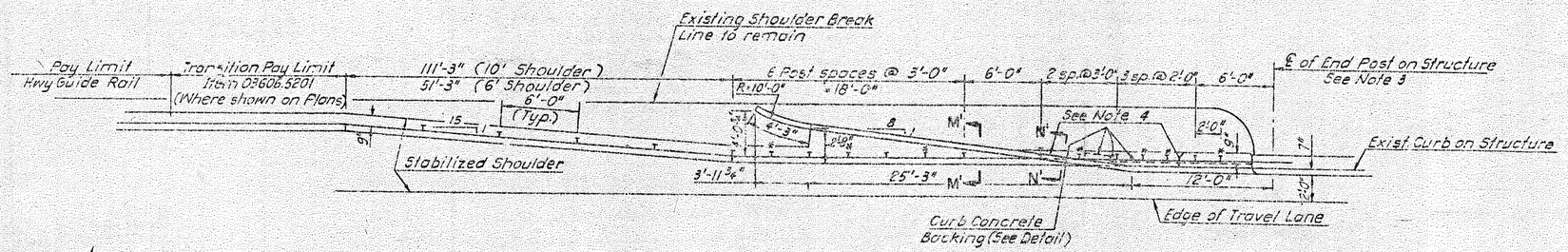
NOTES:
* These are Back-up Posts - Item 15606.48 Hwy Item and will not require the use of the 5"x3½"x⅜" shelf angle. See Note 1.

BRIDGE 1031502 NORTHEAST WINGWALL
BRIDGE 1031529 SOUTHEAST WINGWALL



SECTION N'-N'

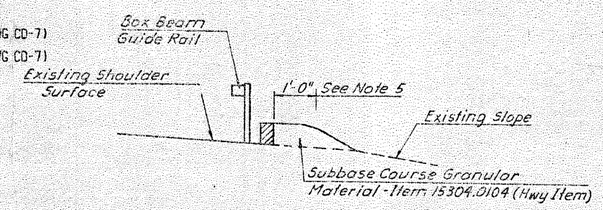
NOTES:
1. Back-up Posts shall be omitted on the trailing or off end of a one-way operation.
2. Details of Granite Curb, Type C are shown on Standard Sheet 609-1 (Item 609.0203)
3. New Steel Bridge Railing will be placed on Bridge 1031529 by others.
4. Pave this area with the same material as in Stabilized Shoulder. Payment will be made under Stabilized Shoulder Item.
5. Reduce this dimension as necessary so that slope will meet existing slope smoothly. A.O.B.E.



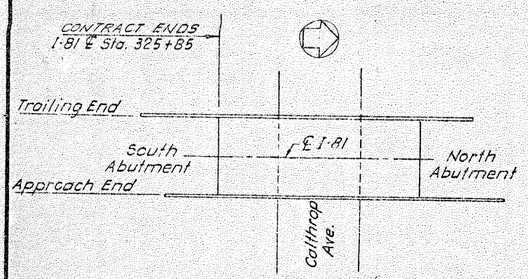
REFERENCES:
1. For Detail of Curb Concrete Backing, see Sh. CD-3.

BRIDGE 1031502 SOUTHWEST WINGWALL (SEE DWG CD-7)
SOUTHEAST WINGWALL (SEE DWG CD-7)
NORTHWEST WINGWALL
BRIDGE 1031529 SOUTHWEST WINGWALL

TYPE II SHOULDER - BRUSH CURB



SECTION M'-M'



BRIDGE NO. 1031529 LAYOUT PLAN

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS

DRAINAGE AND APPROACH DETAILS

Prepared and recommended Date 12/11/75
GOODKIND & O'DEA, INC. Consulting Engineers

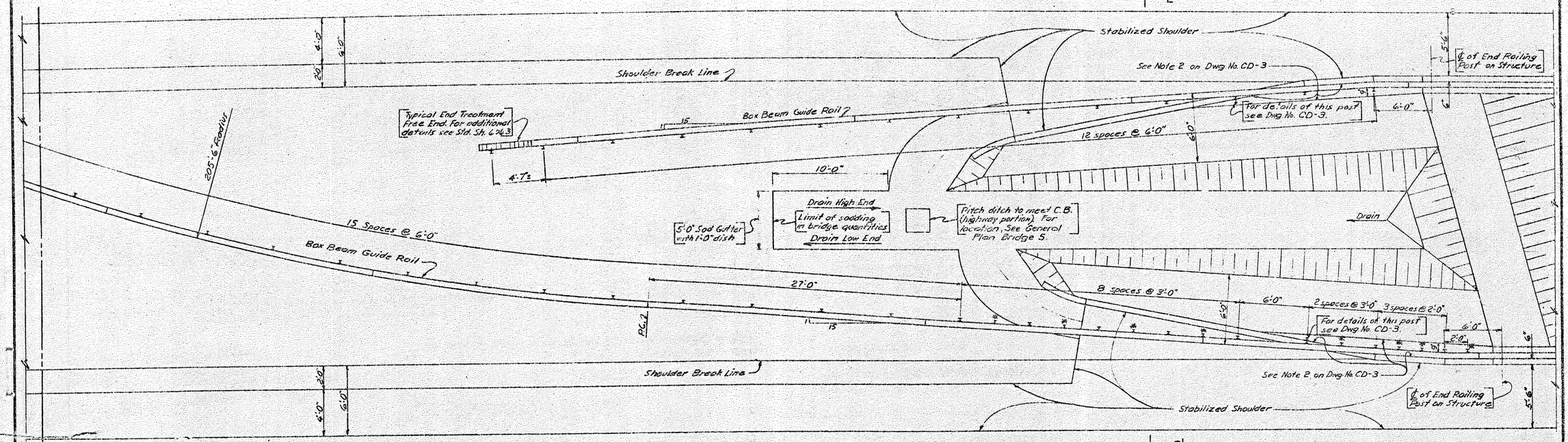
DWG. NO.	SCALE	DATE	
CD-3A	No. to scale	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

1069090

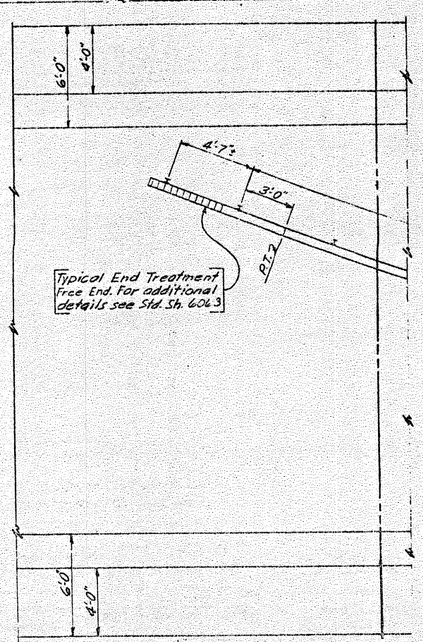
D95042

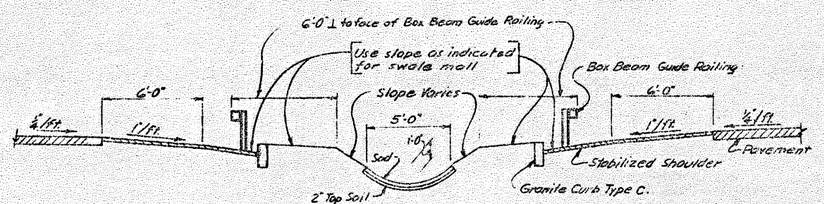
FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(74) I-IM-81-2(25)	237	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



PLAN OF SWALE MALL - LOW END
BRIDGE 5 WEST ABUTMENT





SECTION E'-E'

* THESE ARE BACK-UP POSTS AND WILL NOT REQUIRE THE USE OF THE 5" X 3 1/2" X 3/8" SHELF ANGLE.

NOTE:

EXCEPT FOR SOD GUTTER, THE DETAILS AT BRIDGE 5 EAST ABUTMENT WILL BE IDENTICAL TO THOSE FOR THE LOW END. FOR THE SOD GUTTER, SEE PARTIAL PLAN HIGH END DWG. NO. CD-5.

In Charge of: A. L. Bandzuchova
Designed by: W. S. Gates
Design Checked by: J. P. Buongiorno
Detailed by: R. Shepko
Detail Checked by: [illegible]

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS

DRAINAGE AND APPROACH DETAILS

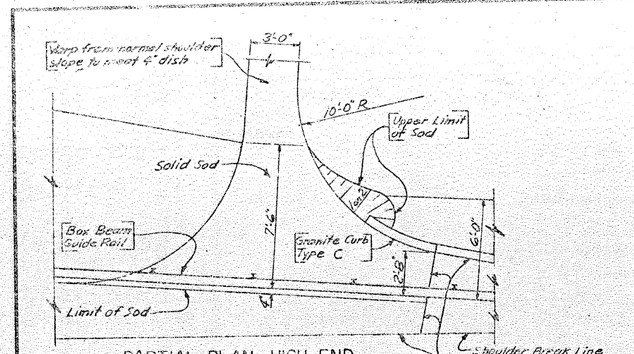
Prepared and recommended: Donald Goldberg
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

DWG. NO.	SCALE	DATE	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS
CD-4	Not to Scale	Nov. 1975	

D95042

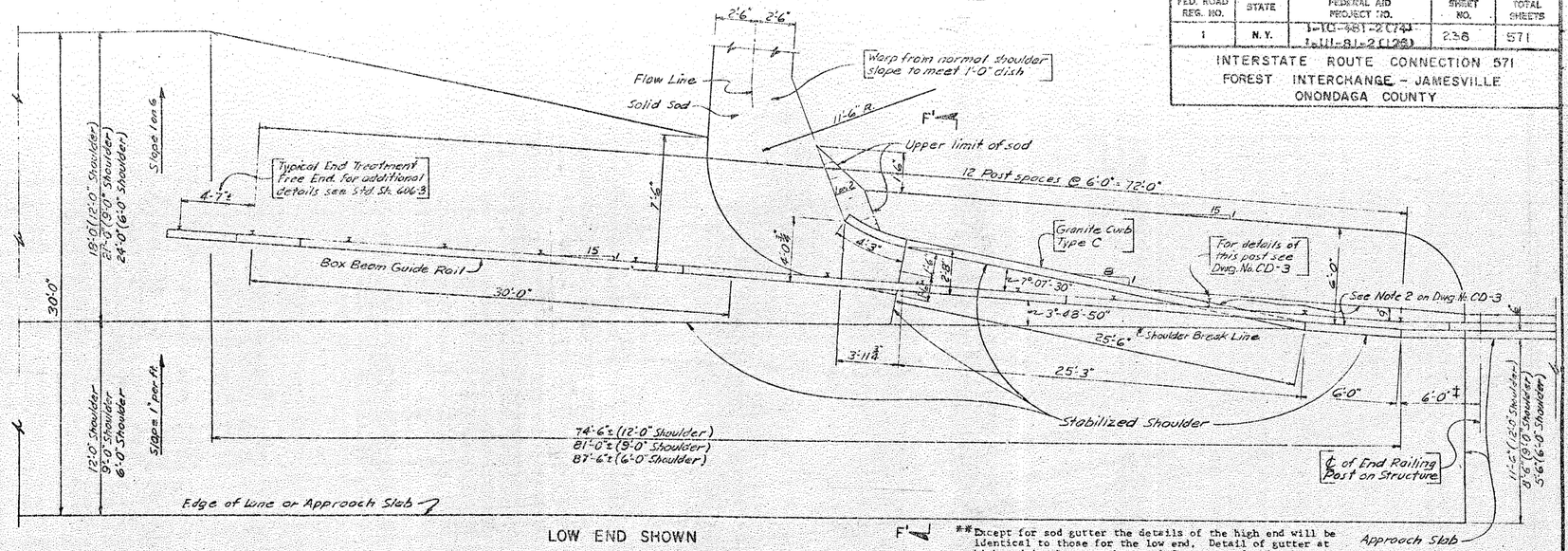
FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IC-481-2(74) I-IM-81-2(126)	236	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



PARTIAL PLAN - HIGH END

Note: Back-up posts may be required and are not shown on this partial plan.



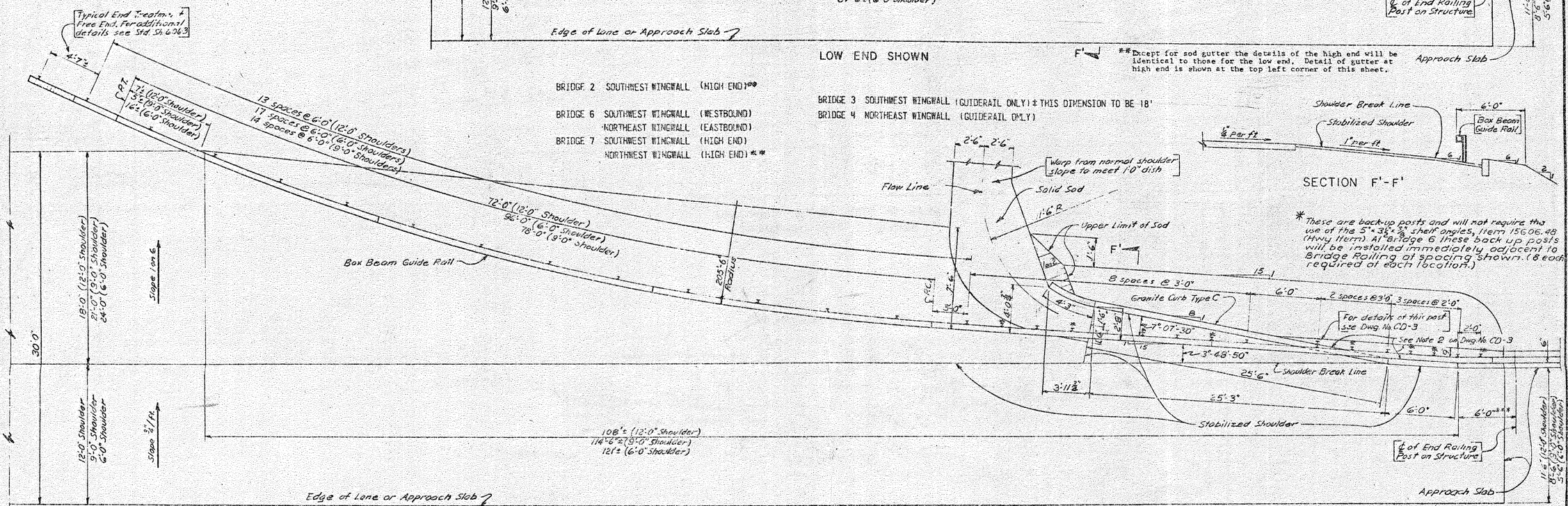
LOW END SHOWN

**Except for sod gutter the details of the high end will be identical to those for the low end. Detail of gutter at high end is shown at the top left corner of this sheet.

BRIDGE 2 SOUTHWEST WINGWALL (HIGH END)**

BRIDGE 6 SOUTHWEST WINGWALL (WESTBOUND)
NORTHEAST WINGWALL (EASTBOUND)
BRIDGE 7 SOUTHWEST WINGWALL (HIGH END)
NORTHWEST WINGWALL (HIGH END) * **

BRIDGE 3 SOUTHWEST WINGWALL (GUIDERAIL ONLY) ‡ THIS DIMENSION TO BE 18'
BRIDGE 4 NORTHEAST WINGWALL (GUIDERAIL ONLY)



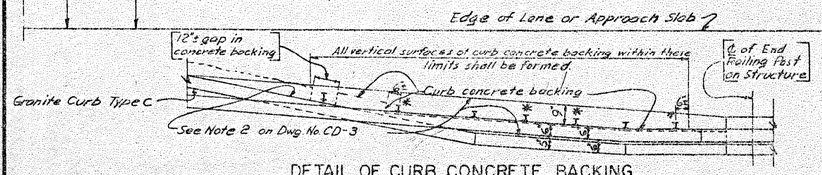
SECTION F'-F'

* These are back-up posts and will not require the use of the 5" x 3½" x ⅜" shelf angles, Item 156.06.48 (Hwy Item). At Bridge 6 these back up posts will be installed immediately adjacent to Bridge Railing at spacing shown. (8 each required at each location.)

LOW END SHOWN

BRIDGE 2 NORTHWEST WINGWALL
BRIDGE 1 SOUTHEAST WINGWALL
BRIDGE 8 SOUTHWEST WINGWALL
NORTHWEST WINGWALL (HIGH END) * **
BRIDGE 6 NORTHWEST WINGWALL (EASTBOUND)***THIS DIMENSION TO BE 200'-0"
SOUTHEAST WINGWALL (WESTBOUND)***THIS DIMENSION TO BE 230'-0"
BRIDGE 4 NORTHWEST WINGWALL (GUIDERAIL ONLY)

REFERENCE:
FOR LOCATION OF SOD GUTTERS, SEE INDIVIDUAL BRIDGES.



DETAIL OF CURB CONCRETE BACKING

Prepared and recommended GOODKIND & O'DEA, INC. Consulting Engineers Date 11/1/75

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS

DRAINAGE AND APPROACH DETAILS

DWG. NO.	SCALE	DATE	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS
CD-5	Not to Scale	Nov. 1975	

Drawn by J. T. Drongowski
Detailed by R. Shields
Detail Checked by

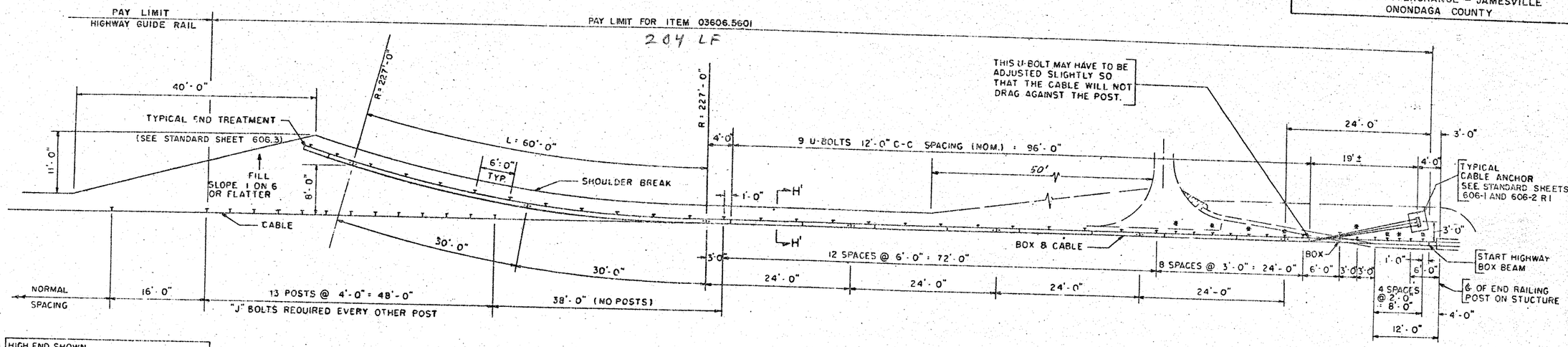
1069090

D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IQ-481-2(74) I-UI-81-2(126)	239	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE – JAMESVILLE
ONONDAGA COUNTY

* BACK UP POSTS NO CONNECTION TO BOX BEAM

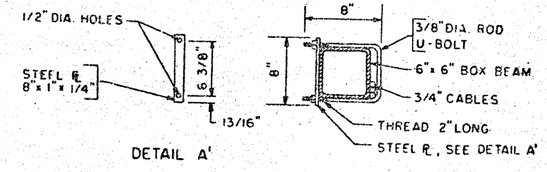


HIGH END SHOWN
EXCEPT FOR SOD GUTTER THE DETAILS OF THE CURB, GUIDERAIL AND SHOULDER BREAK LINES ARE IDENTICAL FOR THE LOW END.

BOX - CABLE TRANSITION (TYPE A)

ITEM 03606.5601

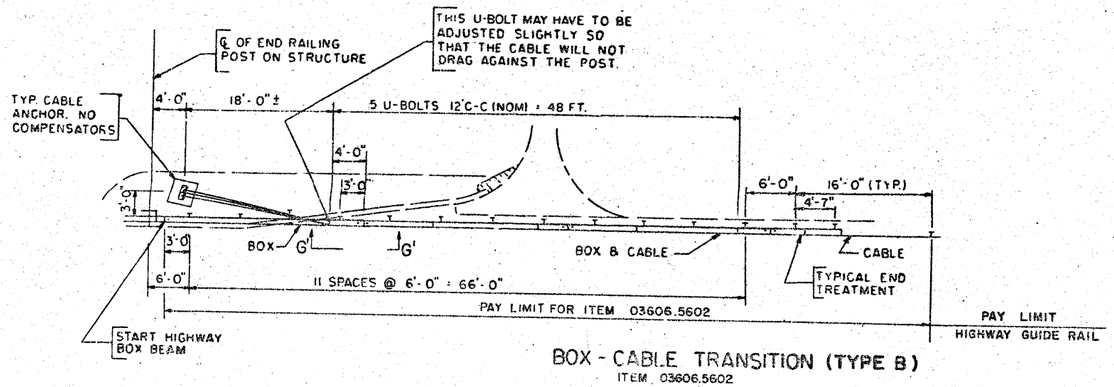
BRIDGE 5 NORTHEAST WINGWALL
SOUTHWEST WINGWALL
BRIDGE 6 NORTHEAST WINGWALL (WESTBOUND)
SOUTHWEST WINGWALL (EASTBOUND)
BRIDGE 7 NORTHEAST WINGWALL
SOUTHEAST WINGWALL



DETAIL A'

SECTION H'-H'

48
38
1
93
24
204'

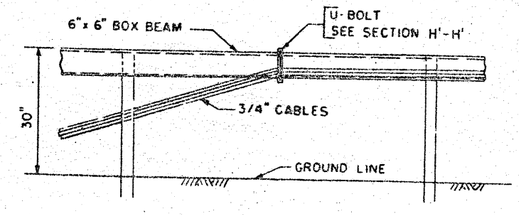


BOX - CABLE TRANSITION (TYPE B)

ITEM 03606.5602

BRIDGE 5 NORTHWEST WINGWALL
SOUTHEAST WINGWALL
BRIDGE 6 NORTHWEST WINGWALL (WESTBOUND)
SOUTHEAST WINGWALL (EASTBOUND)

BRIDGE 8 NORTHEAST WINGWALL
SOUTHEAST WINGWALL



ELEVATION G'-G'

In Charge of R.P. Bongiorno
Designed by J.S. Goes
Design Checked by J.P. Buongiorno
Detailed by R. Shipley
Detail Checked by

Prepared and recommended
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS

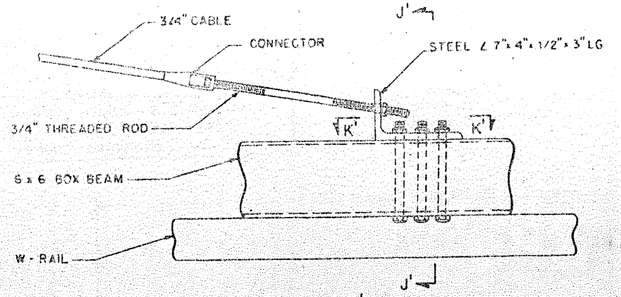
GUIDE RAIL TRANSITIONS
BOX BEAM TO CABLE

DWG. NO.	SCALE	DATE	
CD-6	Not to Scale	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

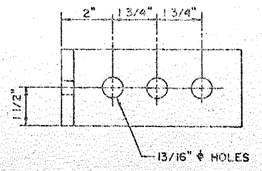
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(74) I-UI-81-2(26)	240	571

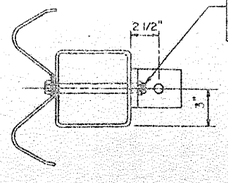
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



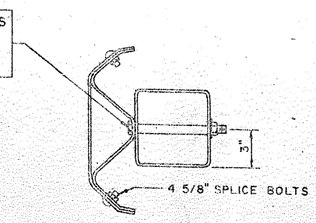
DETAIL C'



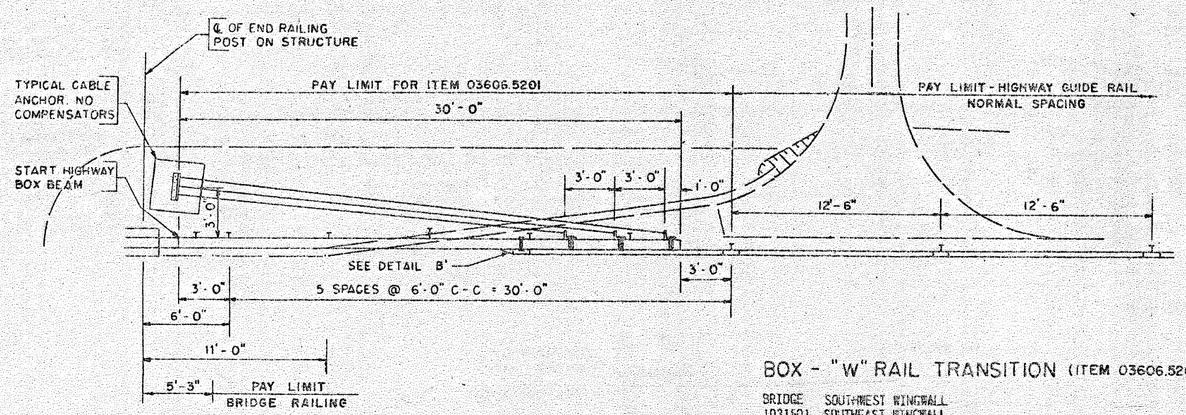
SECTION K'-K'



SECTION J'-J'

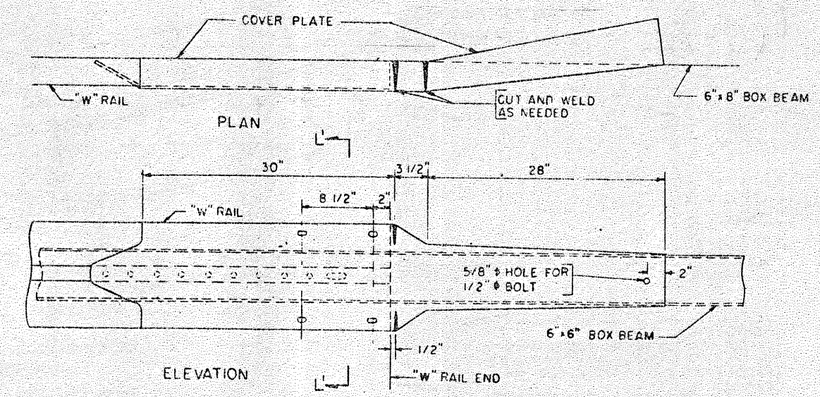


SECTION L'-L'



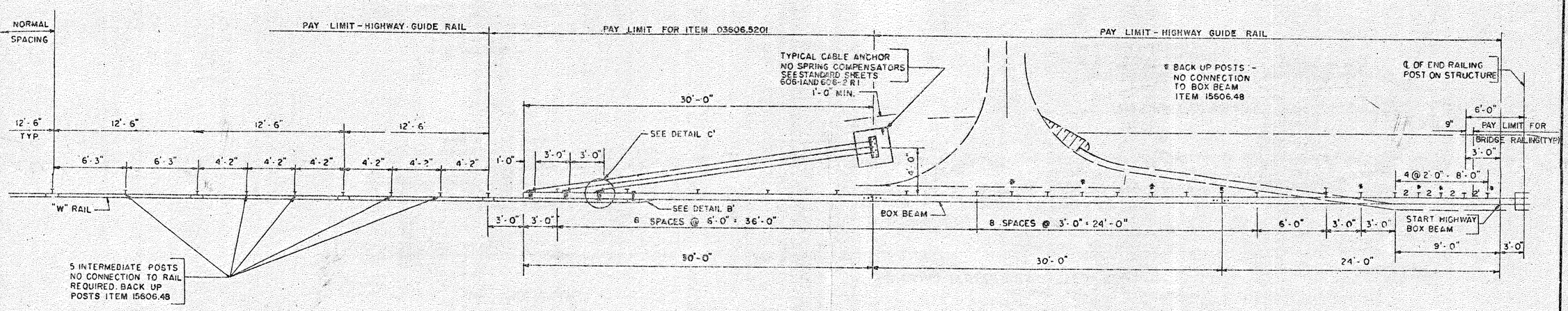
BOX - "W" RAIL TRANSITION (ITEM 03606.5201)

BRIDGE SOUTHWEST WINGWALL
1031501 SOUTHEAST WINGWALL
BRIDGE 1 NORTHWEST WINGWALL



"W" RAIL COVER PLATE FOR TRANSITIONING TO BOX BEAM

DETAIL B'



HIGH END SHOWN - EXCEPT FOR SOD GUTTER, THE DETAILS OF THE CURB, GUIDERAIL AND SHOULDER BREAK LINES ARE IDENTICAL FOR THE LOW END

BOX - "W" RAIL TRANSITION (ITEM 03606.5201)

BRIDGE 2 NORTHEAST WINGWALL

BRIDGE NORTHWEST WINGWALL
1031501 NORTHEAST WINGWALL
BRIDGE SOUTHWEST WINGWALL (FOR TRANSITION ONLY
1031502 SOUTHEAST WINGWALL ALSO SEE DWG CD-3A)

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS

GUIDE RAIL TRANSITIONS
BOX BEAM TO CORRUGATED BEAM

Prepared and recommended Date 12/1/75
GOODKIND & O'DEA, INC. Consulting Engineers

DWG. NO.	SCALE	DATE	
CD-7	Not to Scale	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

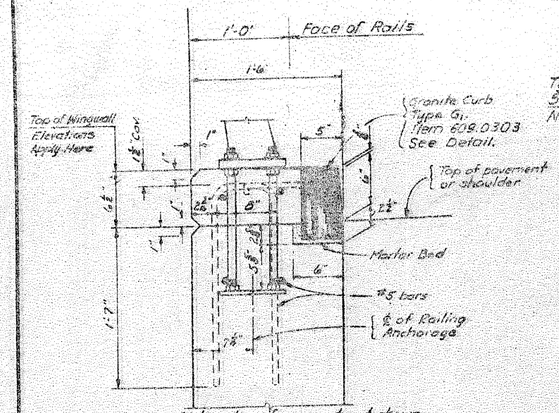
Drawn by [illegible] Date [illegible]
Detail Checked by [illegible]

1069090

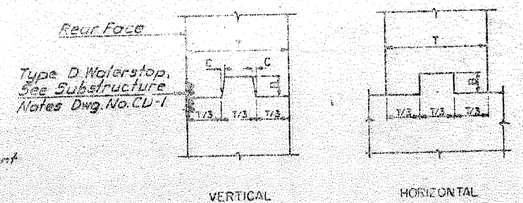
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IU-481-2(74) I-III-81-2(126)	241	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE – JAMESVILLE
ONONDAGA COUNTY



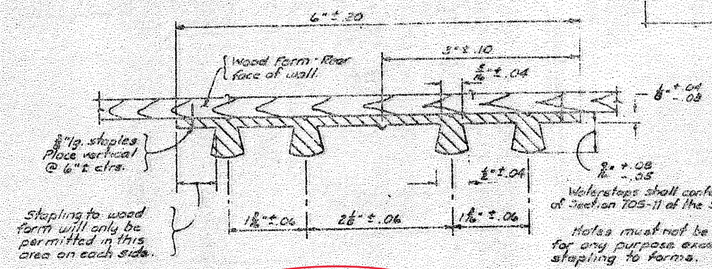
TOP OF WINGWALL DETAIL
Scale 1½"=1'-0"



KEYWAY DETAILS
No Scale

CONSTRUCTION & CONTRACTION JOINTS		
C	G	T/3
1/4"	1 1/2"	to 6"
1/2"	3 1/2"	6" to 10"
3/4"	5 1/2"	over 10"

Note:
All Keys should begin and end 1'-0"± from the edge of pour as indicated below.



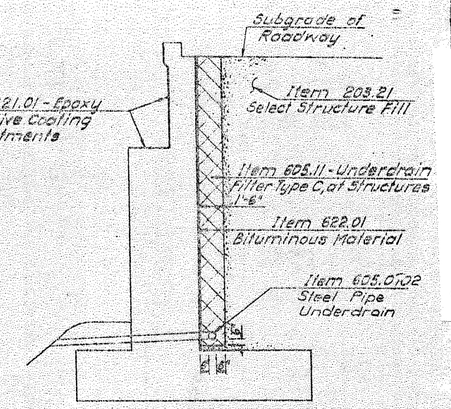
TYPE D WATERSTOP
Full Scale

Waterstops shall conform to the requirements of Section 705-11 of the Specifications.

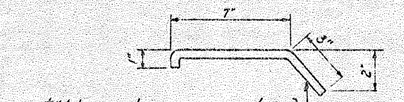
Holes must not be made in waterstop for any purpose except as required for stapling to forms.

Type D Waterstop shall be light gray in color.

The cost of furnishing and placing waterstops shall be included in the unit price bid for the concrete items.

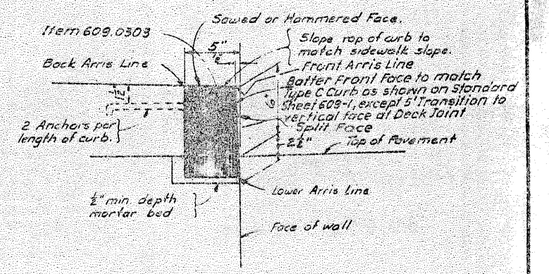


PAY LIMITS
Not to scale

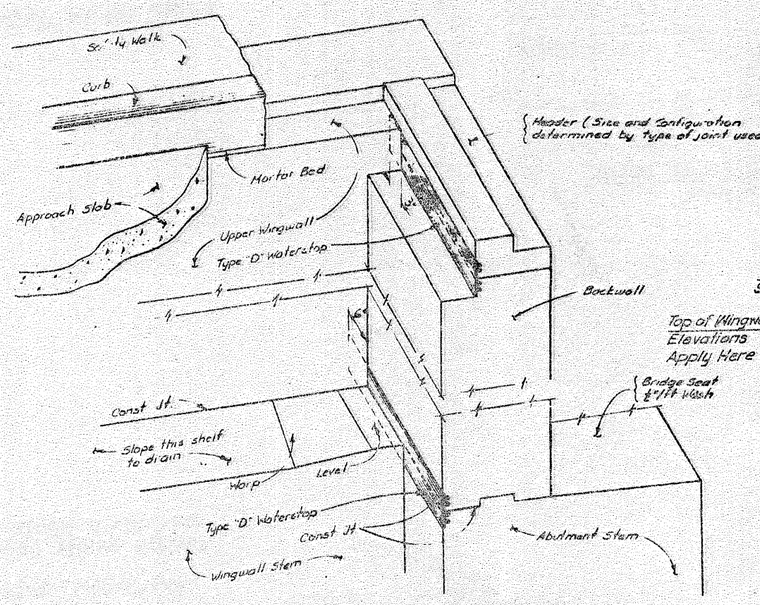


½"ϕ bar meeting requirements of Section 709-01 and galvanized in accordance with Section 719-01 of the Specifications (To be included in cost of various curb items.)

DETAIL OF ANCHOR BAR
No Scale

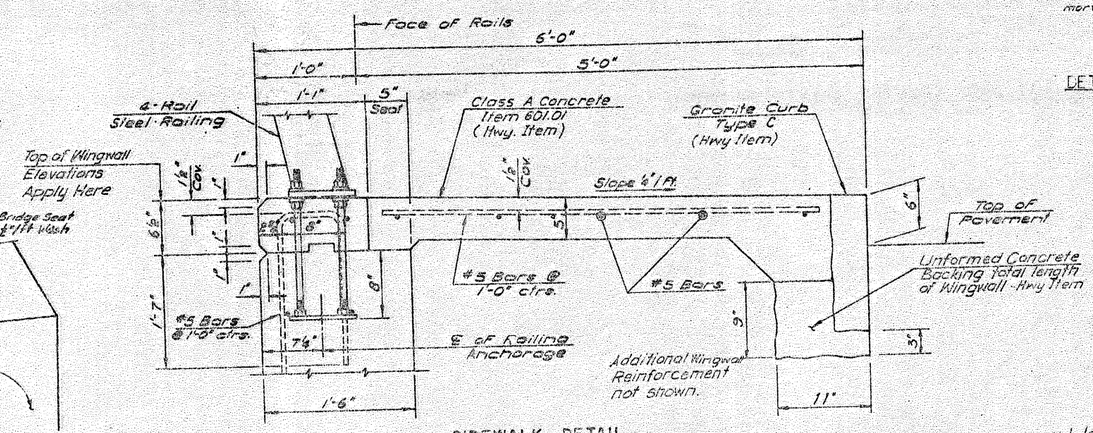


DETAIL OF GRANITE CURB-TYPE G1
No Scale



Header (Size and Configuration determined by type of joint used)

WATERSTOP LOCATION DETAIL



SIDEWALK DETAIL
Scale: 1½"=1'-0"

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS

SUBSTRUCTURE DETAILS

Proposed and recommended Date 1-4-1975
GOSSWIND & O'DEA, INC. Consulting Engineers

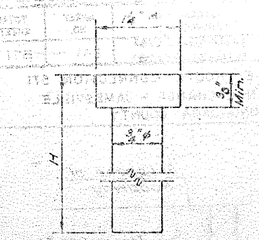
DWG. NO.	SCALE	DATE	GOSSWIND & O'DEA, INC. CONSULTING ENGINEERS
CD-8	As Noted	Nov. 1975	

In Charge of
Designed by J.S. Gibb
Design Checked by J.B. Buongiorno
Detailed by T. Corff
Detail Checked by

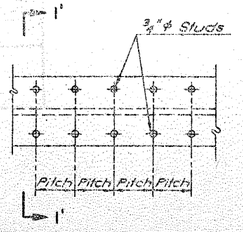
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2 (174) I-VI-81-2 (126)	242	571

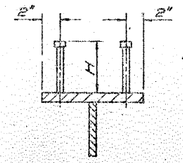
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



STUD DETAIL



PARTIAL PLAN OF STUDS



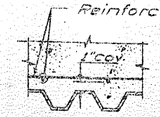
SECTION 1'-1'

NOTE:
Transverse Superstructure reinforcing steel is not to be cut, but shall be fitted around the studs.

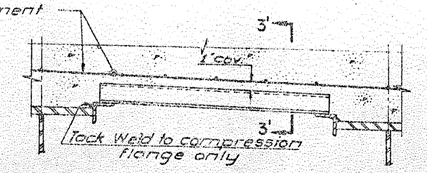
BRIDGE	H
1,6,7,8	4"
2,3,4,5	6"
103/501	

SHEAR CONNECTOR DETAILS
Not to Scale

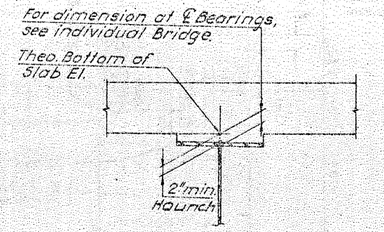
NOTE:
Cost of Forms and Supports to be included in the price bid for Item 601.0301.



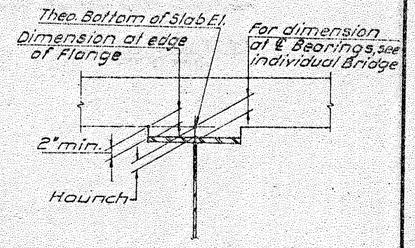
SECTION 3'-3'



STAY IN PLACE FORMS DETAILS
Not to Scale

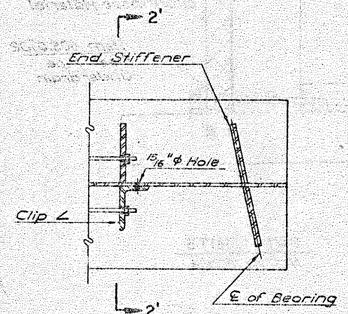


FLANGE UNDER 16"

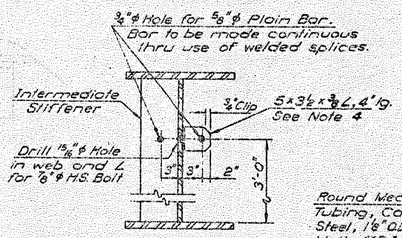


FLANGE 16" & OVER

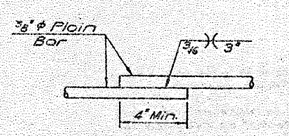
GIRDER HAUNCH DETAIL
Scale: 1" = 1'-0"



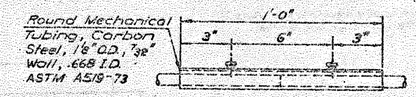
PARTIAL PLAN - SKEW UP TO 30°



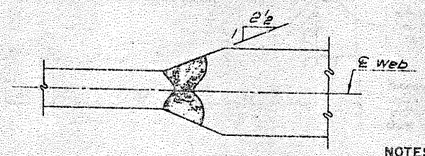
SECTION 2'-2'



WELDED SPLICE DETAIL

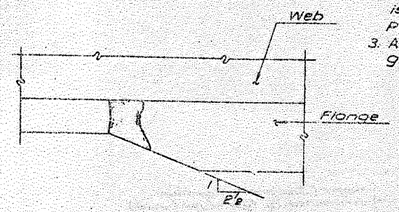


SPLICE COUPLING

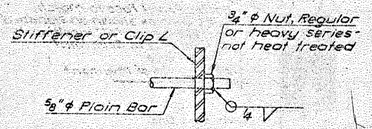


WEB SHOP SPLICE DETAIL
Not to Scale

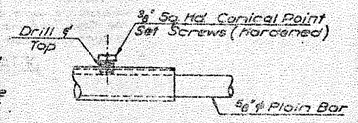
NOTES:
1. Groove may be of any permitted or qualified type and detail.
2. Transition slope shown is the maximum permitted.
3. All shop welds to be ground smooth.



FLANGE SHOP SPLICE DETAIL
Not to Scale



END CONNECTION DETAIL



DETAIL AT CAP SCREW

NOTES:
1. Handrail shall be placed thru Stiffeners on both sides of Interior Stringers and thru stiffeners on inside face of Fascia Stringers.
2. The cost of furnishing and placing the bar, bar splices, 3/4" nuts, H.S. Bolts and Clip Angles shall be paid for under Item 616.01.
3. Use handrail when web depth is 48" or greater.
4. Use Clip Angle between stiffeners if stiffener spacing is 8'-0" or greater.

DETAILS FOR SHOP ERECTED SAFETY HANDRAIL
Not to Scale

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS

STRUCTURAL STEEL

Prepared and recommended Date 12/1/75
GOODKIND & O'DEA, INC. Consulting Engineers

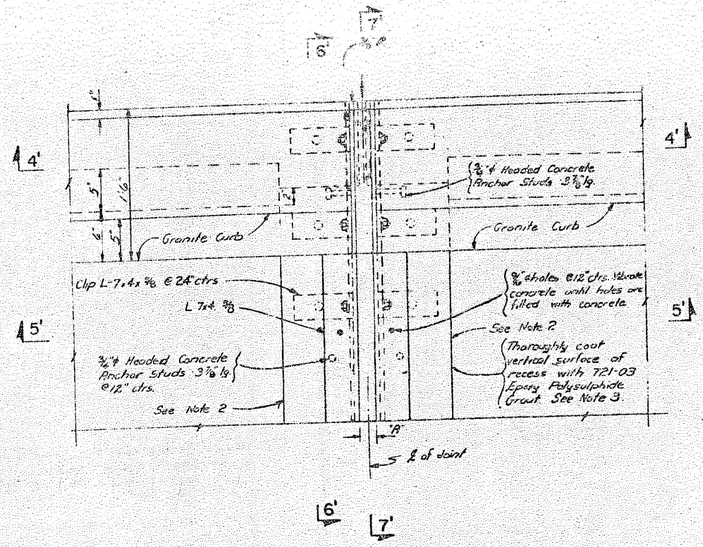
DWG. NO.	SCALE	DATE	
CD-9	As Noted	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

1069090

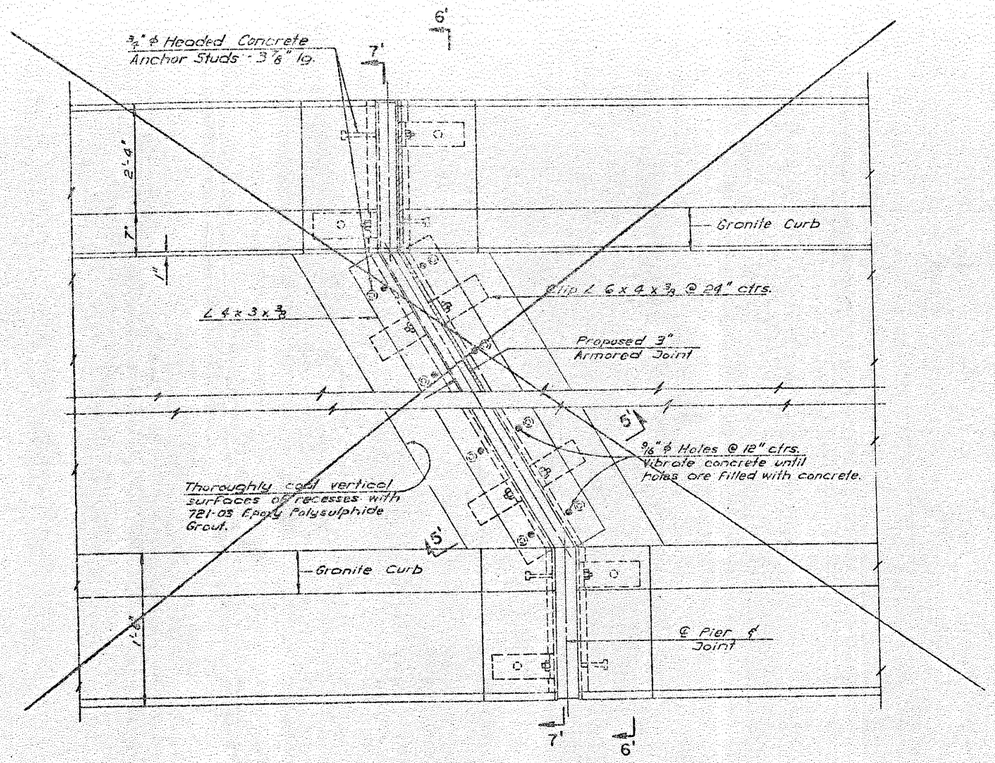
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(174) I-BR-481-2(126)	243	571

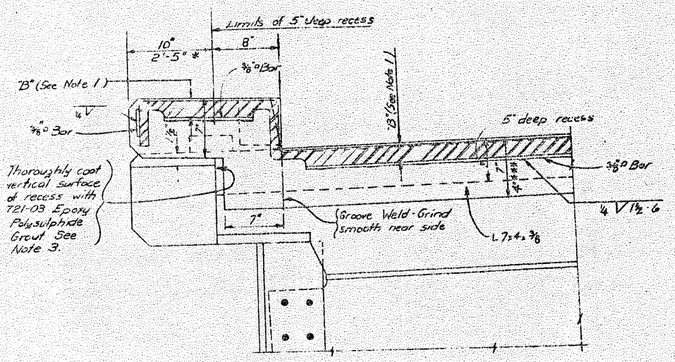
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



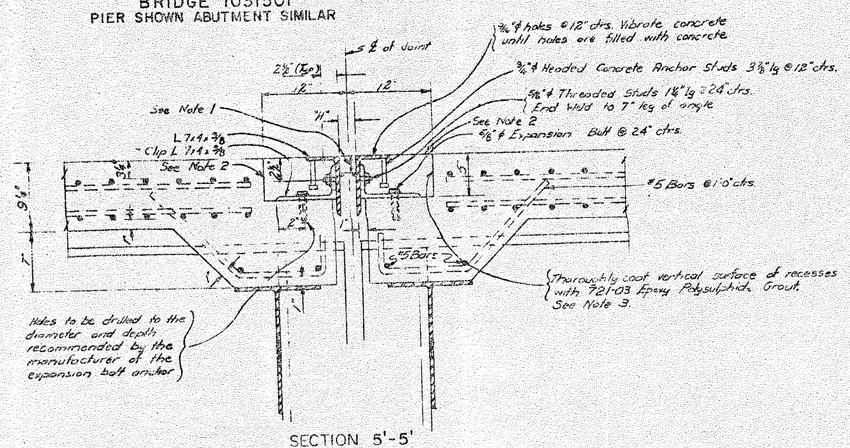
BRIDGE 2



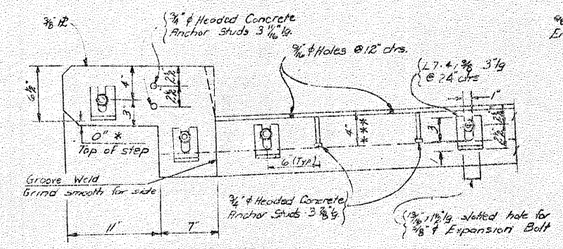
BRIDGE 1031501
PIER SHOWN ABUTMENT SIMILAR



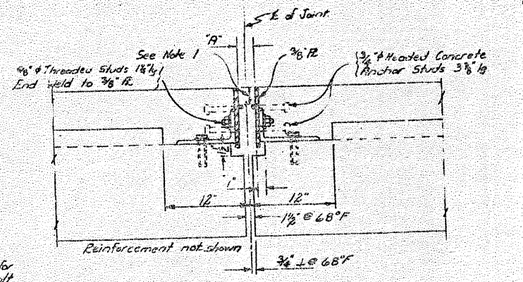
SECTION 7'-7'



SECTION 5'-5'



SECTION 6'-6'
STEEL ONLY SHOWN



SECTION 4'-4'

REFERENCE:

1. For Notes and Dimension "A", See Dwg. No. CD-11.

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS

DETAILS OF SEALED ARMORED JOINT TYPE A AT PIER

Proposed and recommended Date 12/1/75
GOODKIND & O'DEA, INC. Consulting Engineers

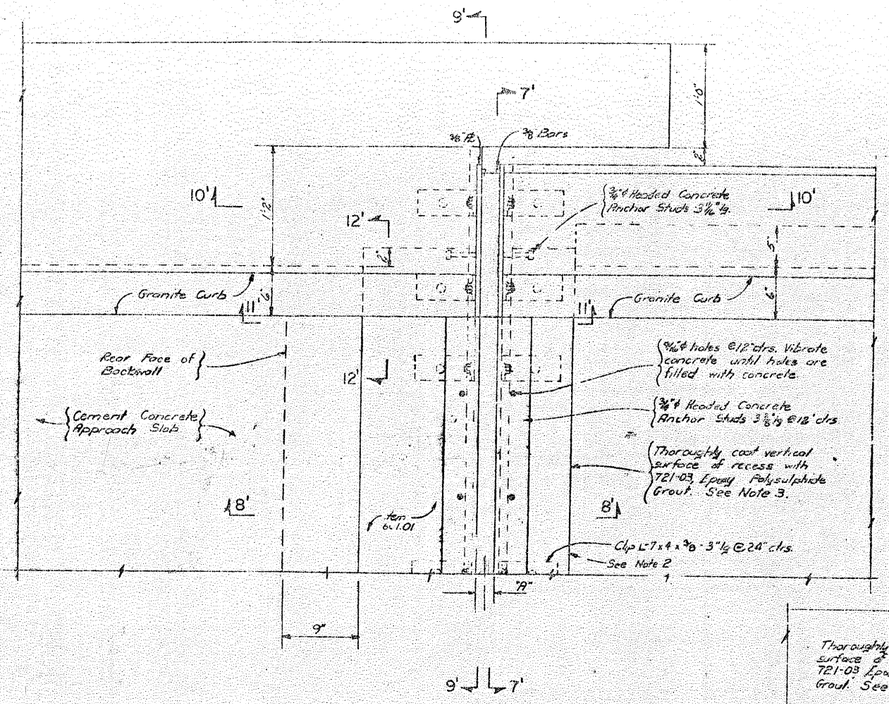
DWG. NO.	SCALE	DATE	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS
CD-10	Not to Scale	Nov. 1975	

In Charge of J.P. Bruckner
Designed by J.S. Gallagher
Design Checked by R. Shipolo
Detailed by R. Shipolo
Detail Checked by [illegible]

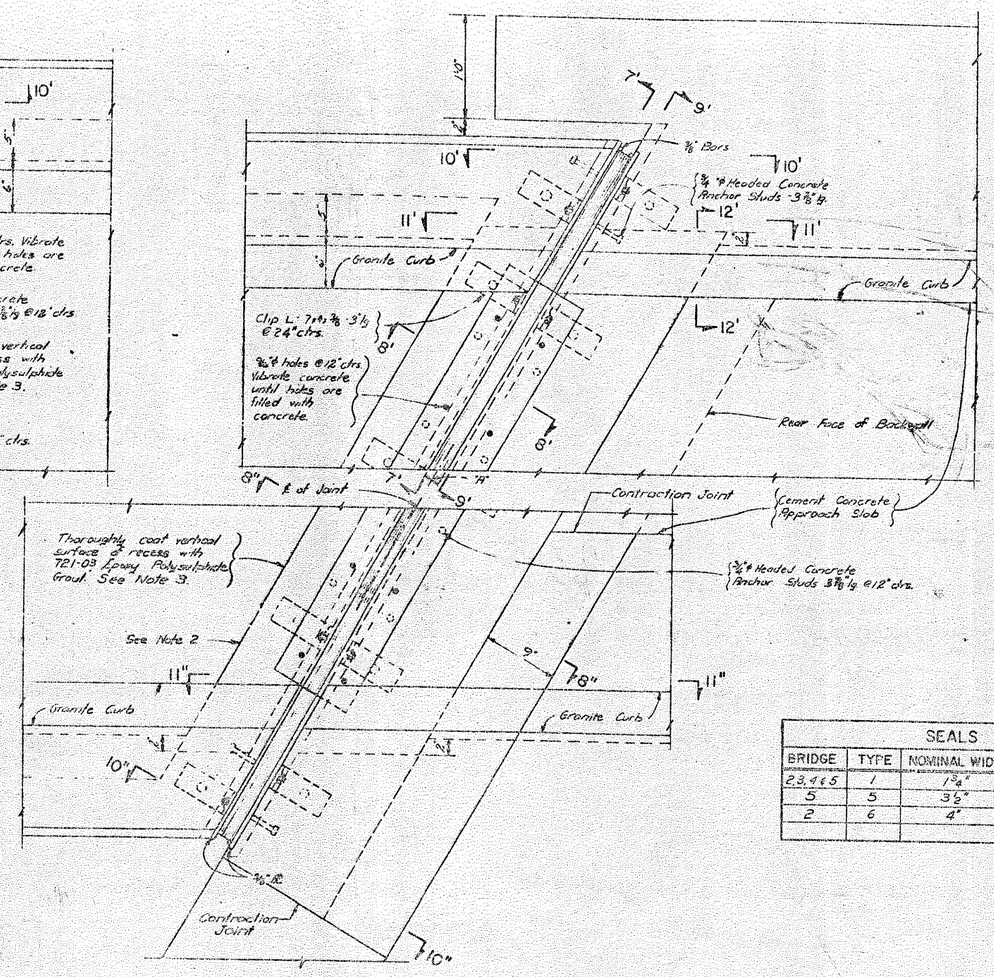
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-4ST-2(74) I-IM-81-2(26)	244	571

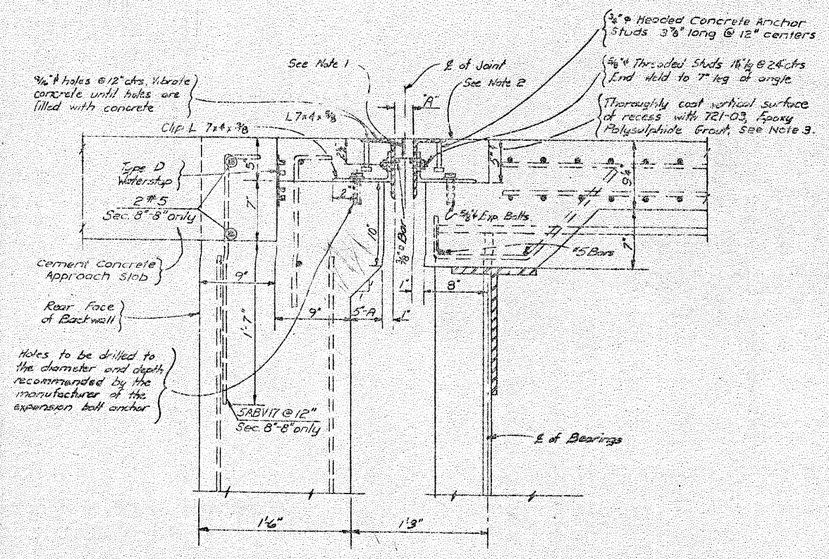
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



BRIDGES 2,3 AND 4



BRIDGES 5



SECTION 8'-8'
" 8"-8"

NOTES:

1. THIS DEPTH SHALL BE INDICATED ON THE SHOP DRAWINGS AND SHALL BE SUCH SO THAT WHEN THE SEAL IS COMPRESSED TO 50% OF ITS NORMAL WIDTH, THE TOP OF SEAL SHALL BE NOT LESS THAN 1/4" NOR MORE THAN 3/4" BELOW THE TOP OF ROADWAY.

2. CONCRETE IN RECESSES ON SUPERSTRUCTURES PROVIDED FOR INSTALLING THE SEALED ARMORED JOINTS SHALL COMPLY WITH THE SPECIFICATIONS FOR CLASS A CONCRETE FOR STRUCTURE (MONOLITHIC BRIDGE SLAB) EXCEPT THAT MACHINE FINISHING WILL NOT BE REQUIRED. NO ADDITIONAL PAYMENT WILL BE MADE FOR FURNISHING AND PLACING THIS CONCRETE AS THIS QUANTITY LIES WITHIN THE LIMITS OF THE AREA TO BE PAID FOR UNDER THE ITEM CLASS A CONCRETE FOR STRUCTURES (MONOLITHIC BRIDGE SLAB).

3. THE COST OF FURNISHING AND PLACING THE EPOXY POLYSULPHIDE GROUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CLASS A CONCRETE FOR STRUCTURES (MONOLITHIC BRIDGE SLAB).

4. IT IS DESIRABLE TO HAVE THE ARMORED JOINT WITH ITS PREFORMED ELASTIC JOINT SEALER 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 PREFORMED ELASTIC JOINT SEALER BEFORE THE STRUCTURE IS OPENED TO TRAFFIC, INCLUDING CONSTRUCTION TRAFFIC, AND BEFORE DISCONTINUING OPERATION WHEN WORK IS SUSPENDED DURING THE WINTER.

5. THE CONCRETE IN RECESSES AND HEADERS ON BRIDGE 1031501 SHALL BE LATEX MODIFIED CONCRETE AND SHALL BE PAID FOR UNDER THE ITEM "LATEX MODIFIED CONCRETE OVERLAY".

SEALS				SEALED ARMORED JOINT	
BRIDGE	TYPE	NOMINAL WIDTH	DIM. "A" @68°F	TYPE	END CONDITION
2,3,4&5	1	1 3/4"	1"	A1	Fixed Bearing
5	5	3 1/2"	2 1/16"	A5	Expansion Bearing
2	6	4"	2 3/8"	A6	Expansion Bearing

REFERENCES:

1. For Detail of Headed Concrete Anchor Studs and Sections 9'-9', 10'-10', 10"-10", 11"-11", 11'-11' and 12'-12', See Dwg. No. CD-12.
2. For Section 7'-7', See Dwg. No. CD-10.

Prepared and recommended Date 12/1/75
GOODKIND & O'DEA, INC. Consulting Engineers

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS

DETAILS OF SEALED ARMORED JOINT TYPE A AT ABUTMENT-I

DWG. NO.	SCALE	DATE	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS
CD-11	Not to Scale	Nov. 1975	

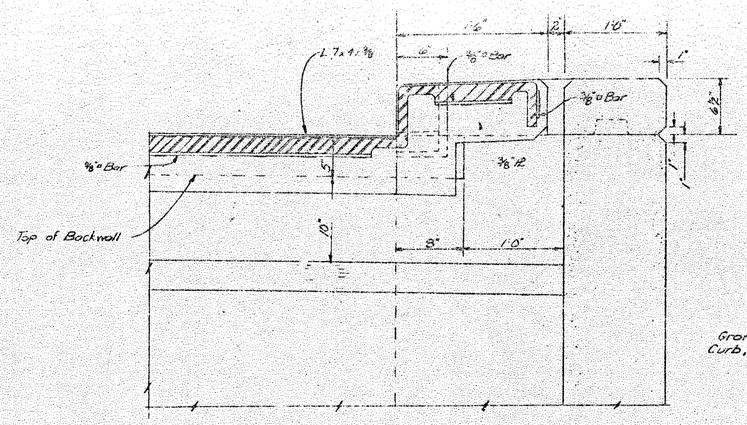
Detail Checked by

1069090

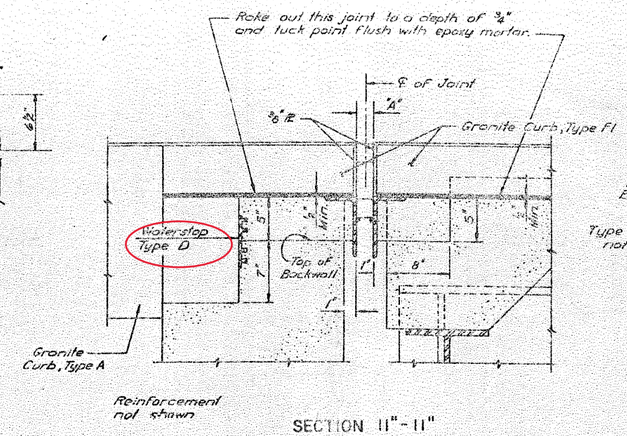
D85042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IO-4ST-2(74) I-UI-81-2(128)	245	571

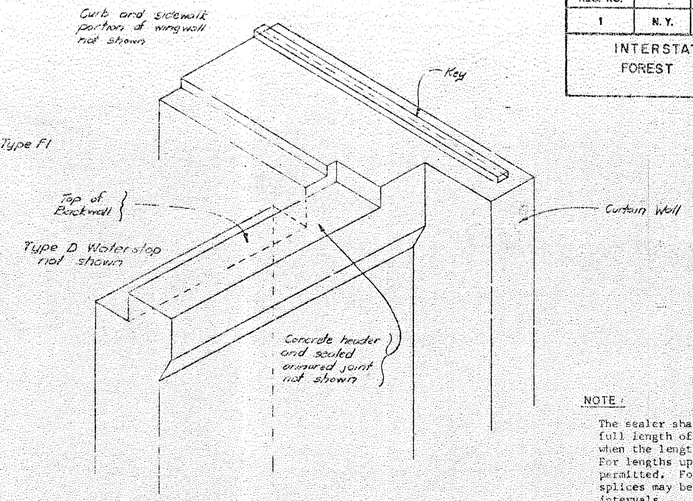
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



SECTION 9'-9'



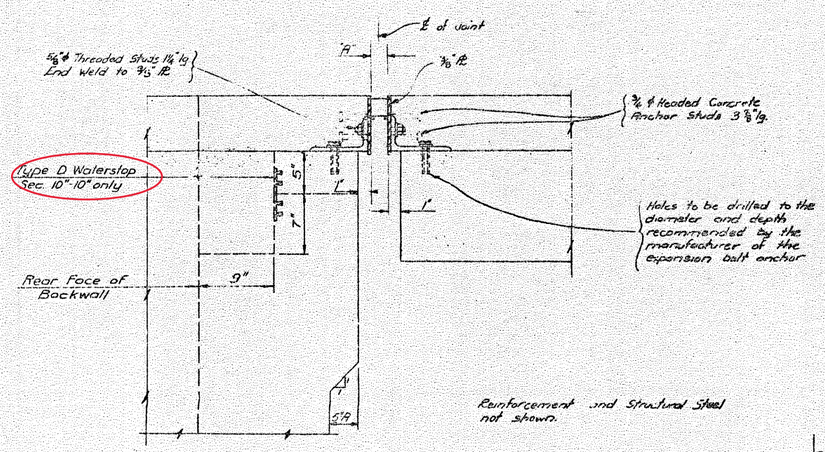
SECTION 11"-11"



PARTIAL ISOMETRIC OF ABUTMENT

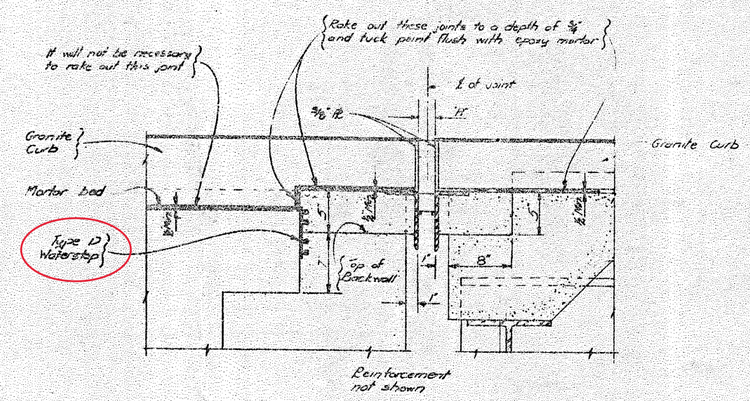
NOTE:

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

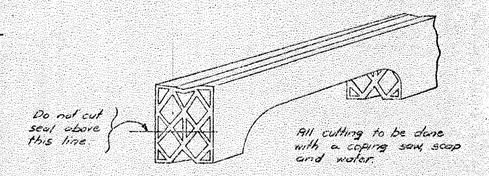


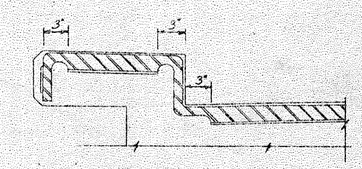
Reinforcement and Structural Steel not shown.

SECTION 10'-10'
" 10"-10" (Dashed Lines)

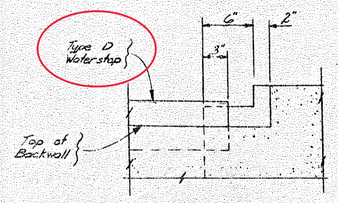


SECTION 11'-11'

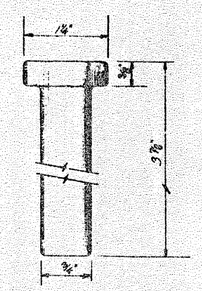




DETAIL FOR CUTTING AND BENDING SEAL



SECTION 12'-12'



DETAIL OF HEADED CONCRETE ANCHOR STUD

In Charge of: [illegible]
Designed by: W.S. Gass
Design Checked by: J.P. Buongiorno
Sketched by: R. Skiepko
Detail Checked by: [illegible]

Prepared and recommended [signature]
GOODKIND & O'DEA, INC. Consulting Engineers
Date 11/1/75

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS

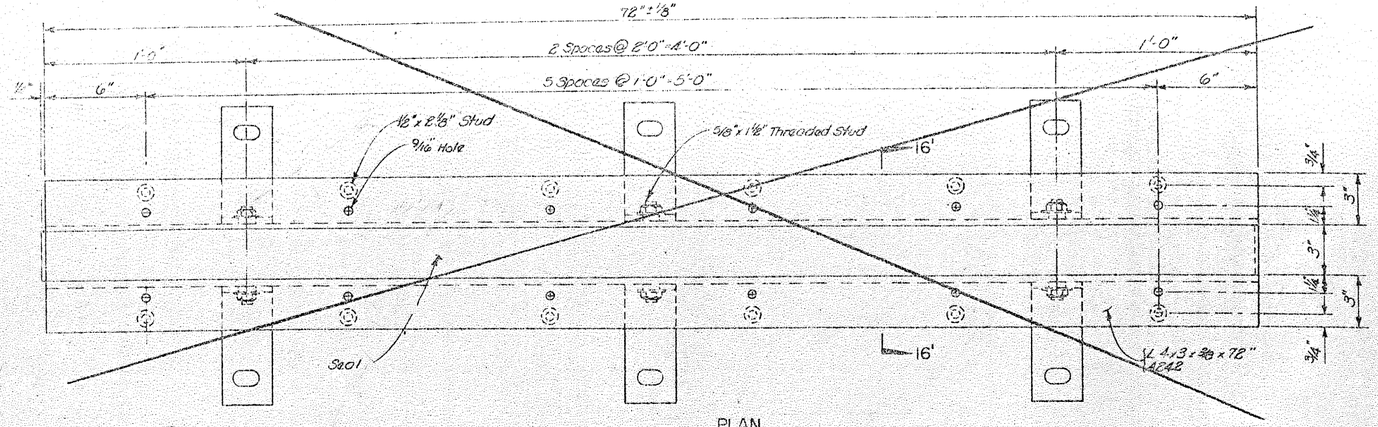
DETAILS OF SEALED ARMORED JOINT TYPE A AT ABUTMENT-II

DWG. NO	SCALE	DATE	
CD-12	Not to Scale	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

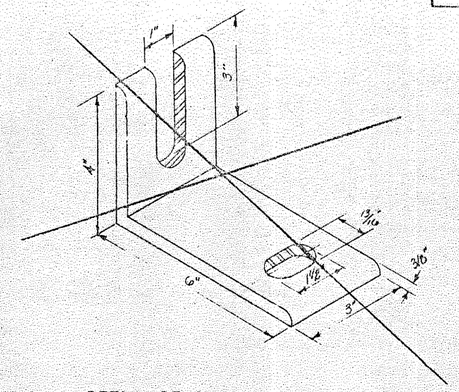
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(74) I-III-81-2(126)	246	571

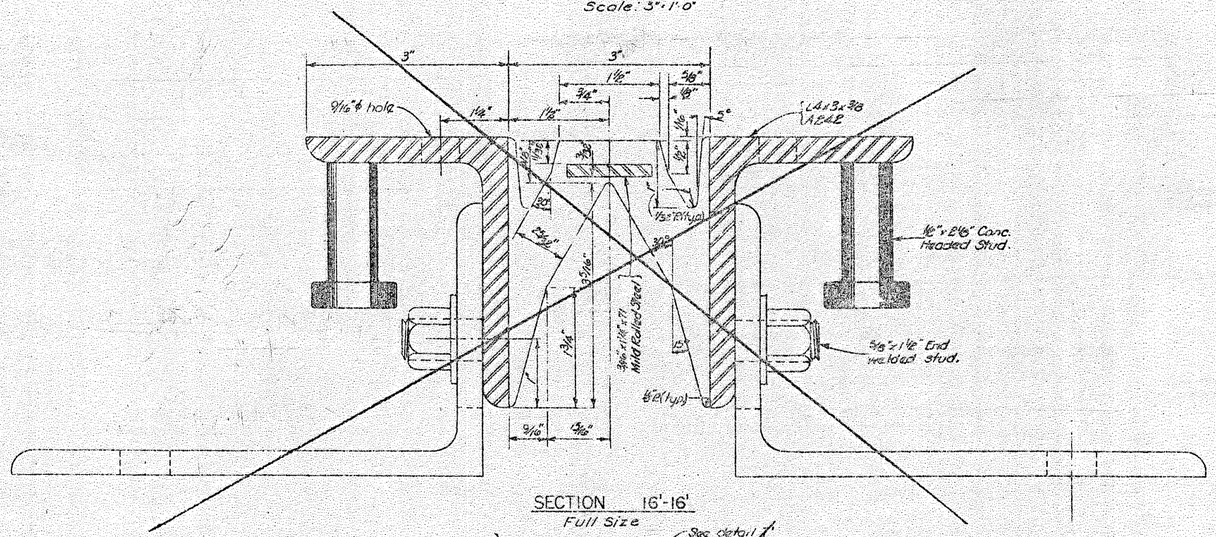
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



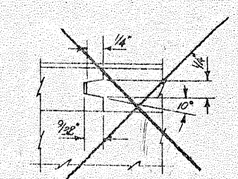
PLAN
Scale: 3" = 1'-0"



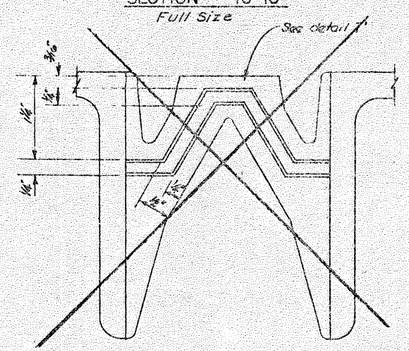
DETAIL OF CLIP ANGLE
Half Size



SECTION 16'-16'
Full Size



DETAIL 7'
Full Size



DETAIL OF TONGUE AND GROOVE
Full Size

BRIDGE 1031501

Prepared and recommended Date 12-4-75
GOODKIND & O'DEA, INC. Consulting Engineers

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS

DETAILS OF SEALED ARMORED JOINT

DWG. NO.	SCALE	DATE	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS
CD-13	As Noted	Nov. 1975	

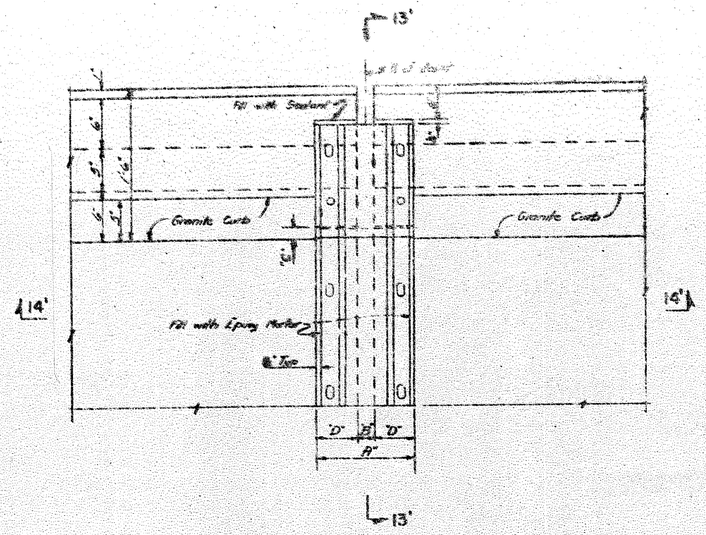
Drafted by
Draft Checked by

1069090

D95042

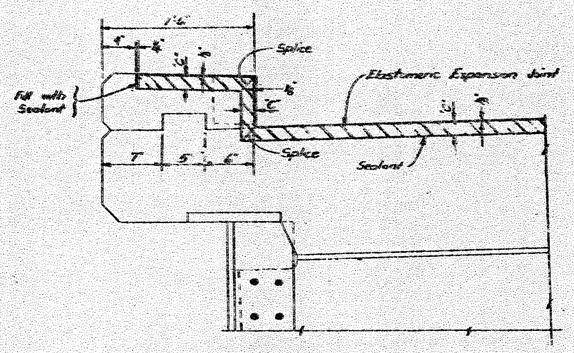
FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(74) I-III-81-2(126)	247	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

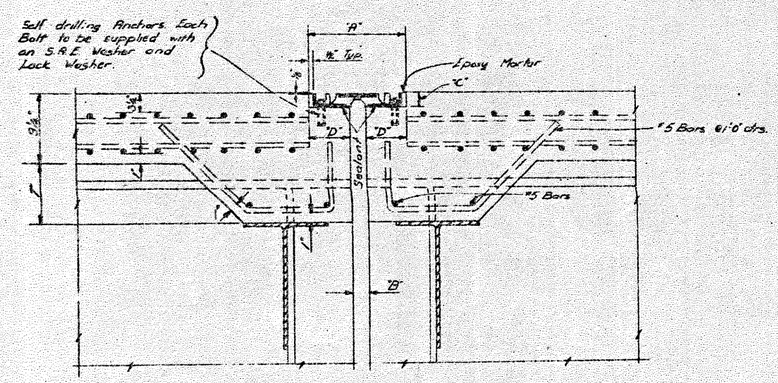


BRIDGE I

Note:
For details of Bridge 1021601, see drawing No. 18 of that Bridge.



SECTION 13'-13'



SECTION 14'-14'

SEALS						SIZE OF ANCHOR BOLTS
TYPE	CONDITION	"A" @ 68°	"B" @ 68°	"C"	"D"	
200	Spans up to 171'-0"	11 1/16"	1 3/16"	1 3/16"	4 3/16"	1/2" ϕ
250	Spans over 171'-0" to 214'-0"	14 7/16"	1 9/16"	2"	6 1/8"	5/8" ϕ
400	Spans over 214'-0" to 328'-0"	23 3/8"	2 1/8"	2 5/16"	10 1/2"	3/4" ϕ
650	Spans over 328'-0" to 356'-0"	28"	3"	3 3/16"	12 1/2"	7/8" ϕ

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS

ELASTOMERIC
EXPANSION JOINT AT PIER

Prepared and recommended: Donald Goodkind
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

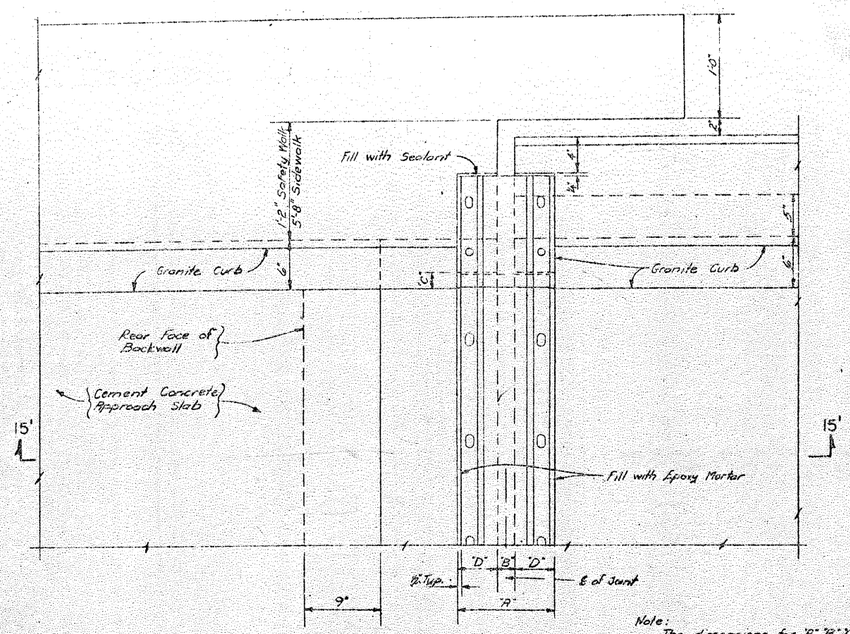
DWG. NO.	SCALE	DATE	
CO-14	Not to Scale	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

In charge of: [illegible]
Designed by: J. S. Gess
Design Checked by: R. Bodnarchuk
Detailed by: R. Sinnello
Detail Checked by: [illegible]

D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(74) I-IM-81-2(128)	248	571

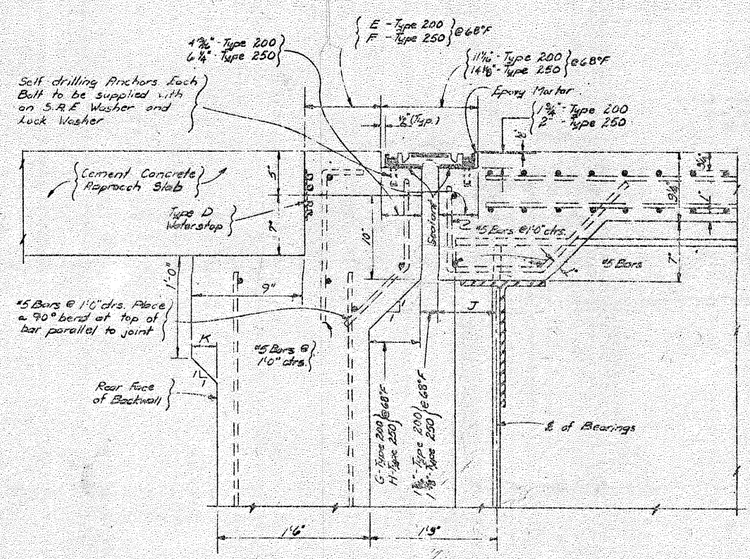
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



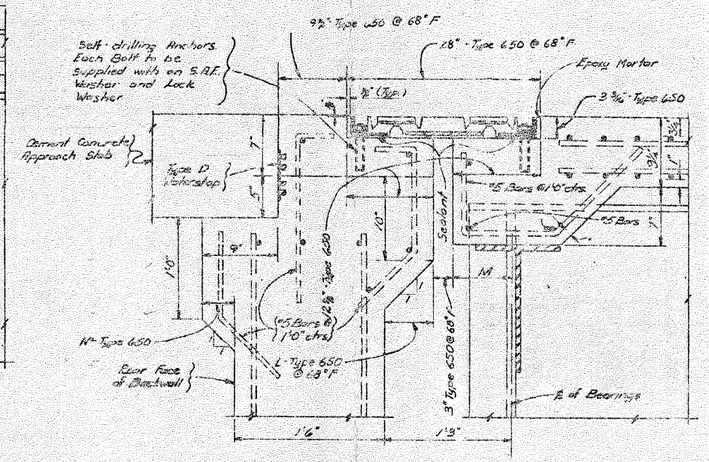
BRIDGES 1,3,4,6,7 AND 8

Note: For details of Bridge 103150 see drawing No. 18 of that Bridge.

Note: The dimensions for "A", "B", "C", and "D" are given in a table on Dwg. No. CD-14. These dimensions are also shown on the various "Section 15'-15'" shown below.



SECTION 15'-15' TYPES 200 & 250



SECTION 15'-15' TYPE 650

DIMENSIONS AT JOINT (IN)									
BRIDGE	E	F	G	H	J	K	L	M	N
1	8 3/4	—	4 9/16	—	9	0	3	9	10
3	10 3/4	9 1/8	6 9/16	6 3/8	7	0	—	—	—
4	10 3/4	9 1/8	6 9/16	6 3/8	7	0	—	—	—
6	—	10 1/8	—	4 3/8	9	3	0	12	13
7	10 3/4	—	6 9/16	—	7	0	—	—	—
8	10 3/4	—	6 9/16	—	7	0	—	—	—

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS

ELASTOMERIC EXPANSION JOINT
AT ABUTMENT

Prepared and recommended
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/15

DWG. NO.	SCALE	DATE	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS
CD-15	Not to Scale	Nov. 1975	

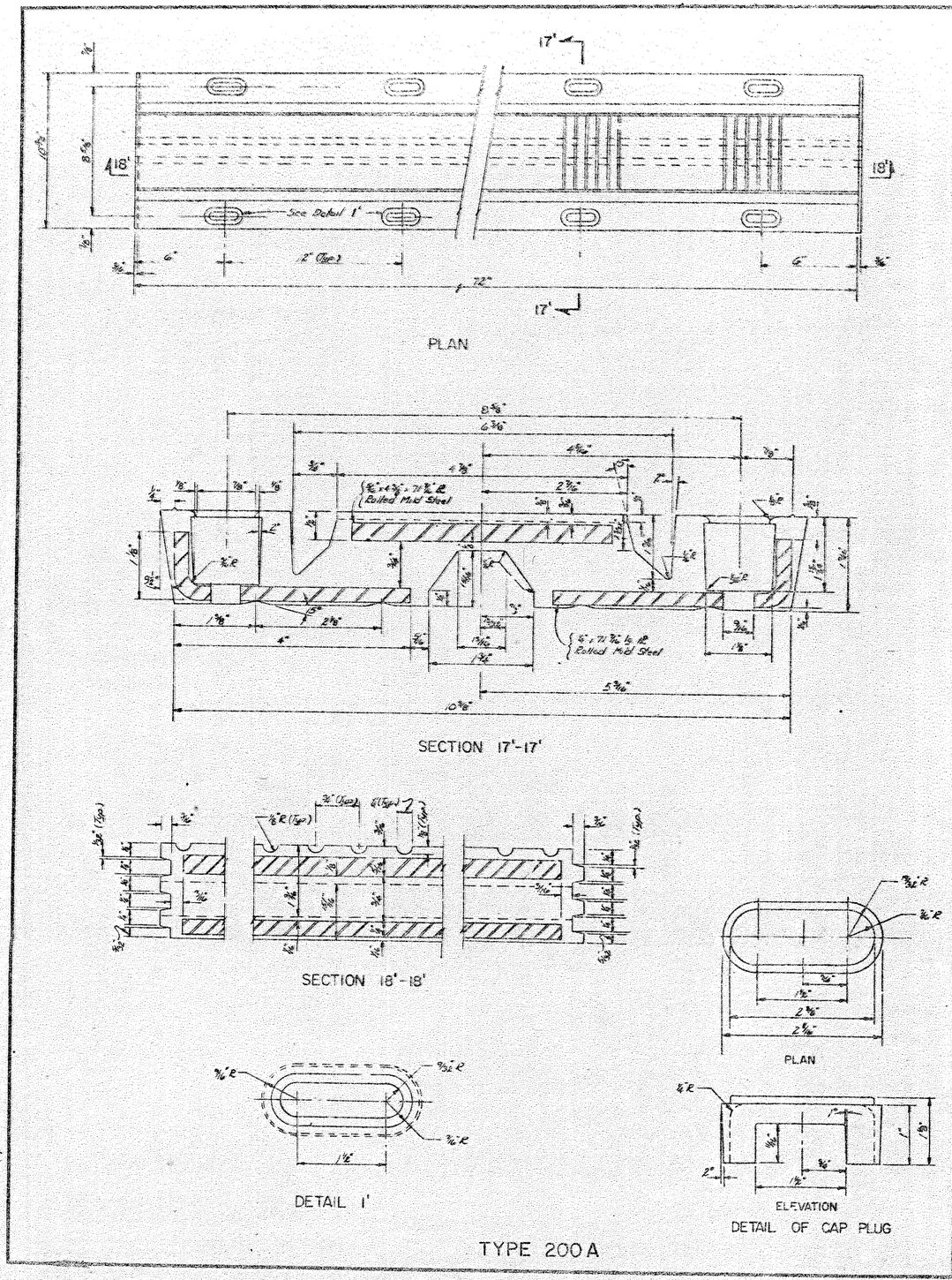
Drawn by R. Shepard
Detail Checked by

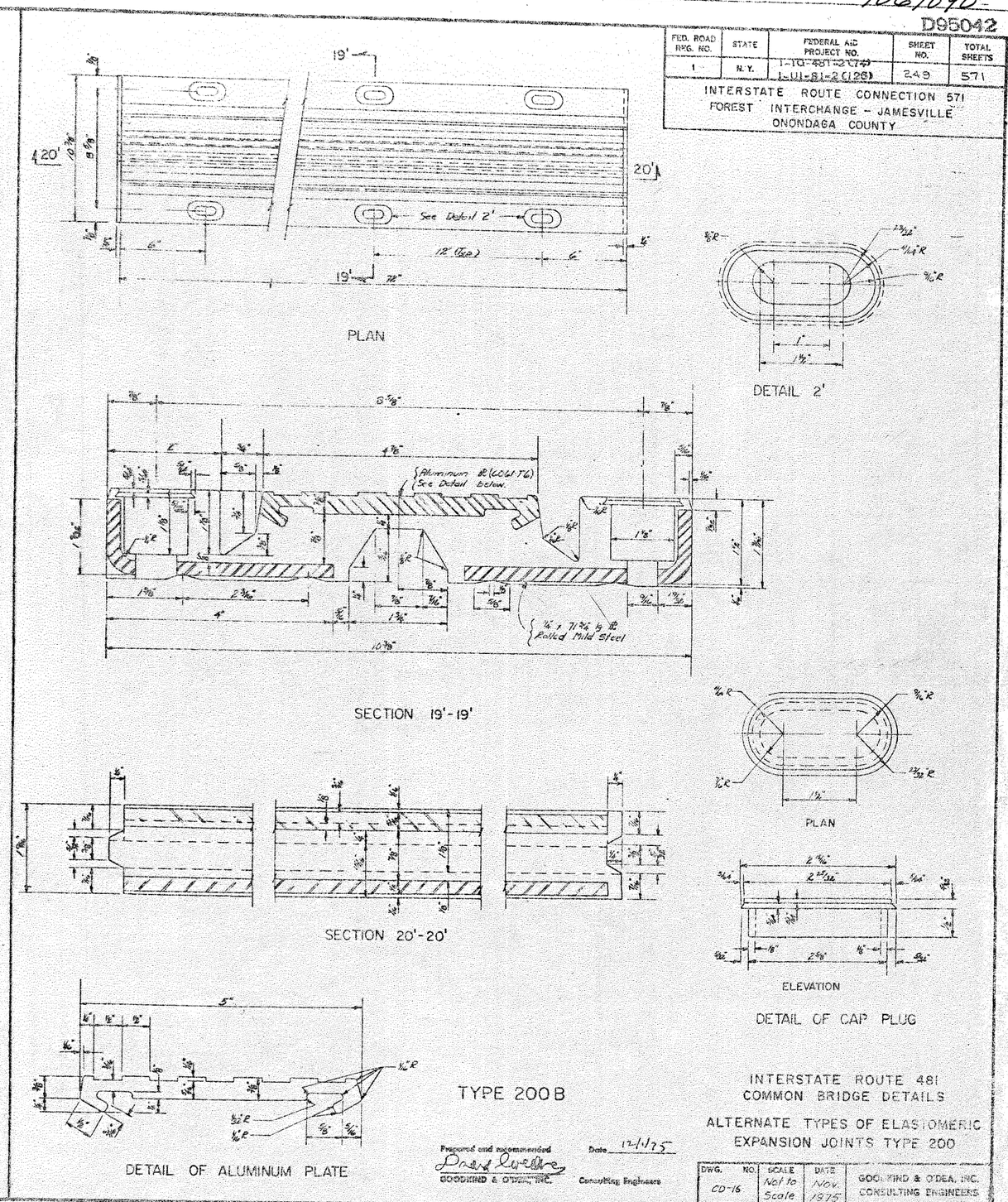
1069090

D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IU-481-2(74) I-IU-81-2(126)	249	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY





In Charge of Design
Designed by
Details Checked by
Details by
Detail Checked by

Prepared and recommended
GOODKIND & O'DEA, INC.
Consulting Engineers

Date 12/1/75

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS

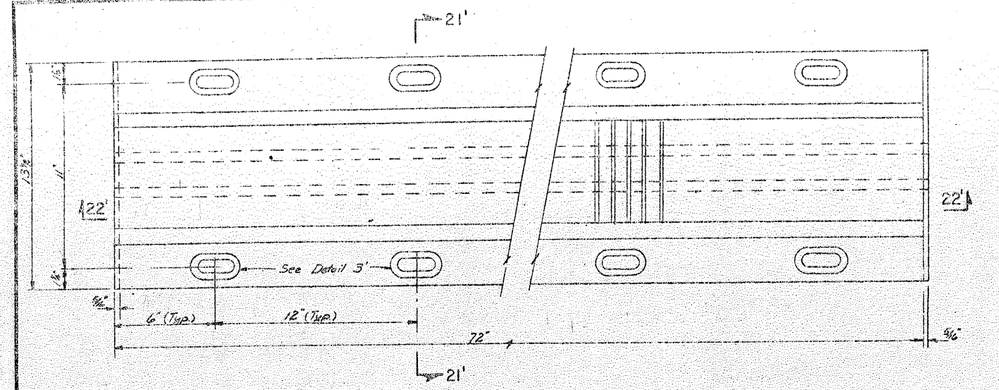
ALTERNATE TYPES OF ELASTOMERIC EXPANSION JOINTS TYPE 200

DWG. NO.	SCALE	DATE	
CD-16	Not to Scale	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

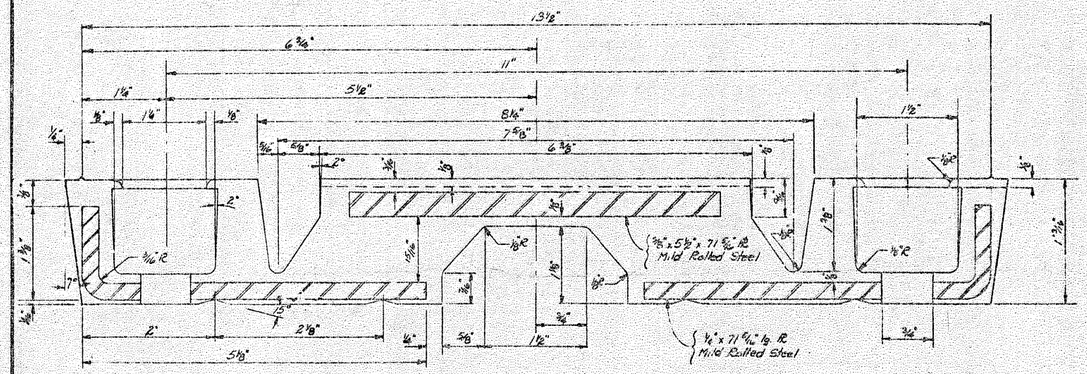
D05042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N. Y.	I-IM-481-2(74) I-IM-481-2(26)	250	571

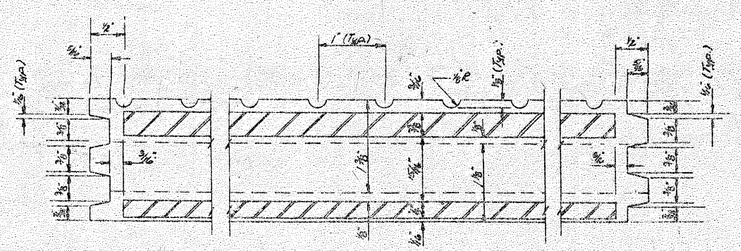
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



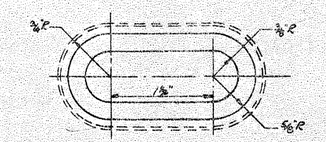
PLAN



SECTION 21'-21'

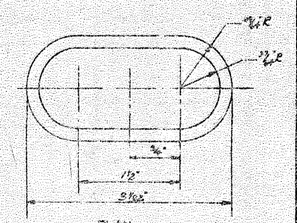


SECTION 22'-22'

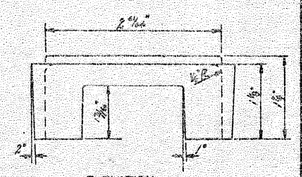


DETAIL 3'

TYPE 250 A

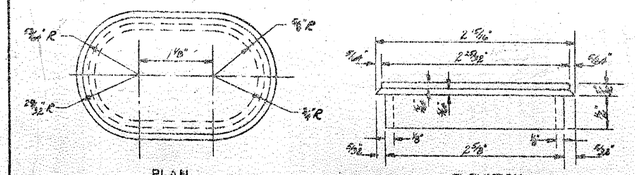


PLAN



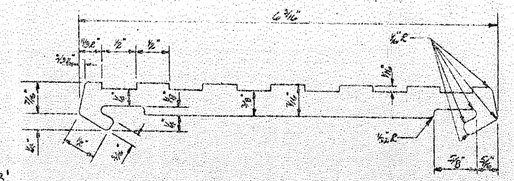
ELEVATION

DETAIL OF CAP PLUG

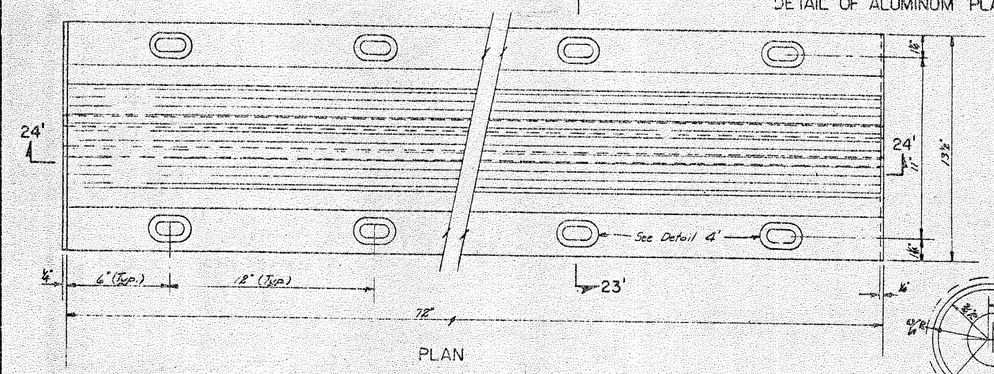


PLAN

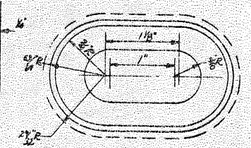
ELEVATION



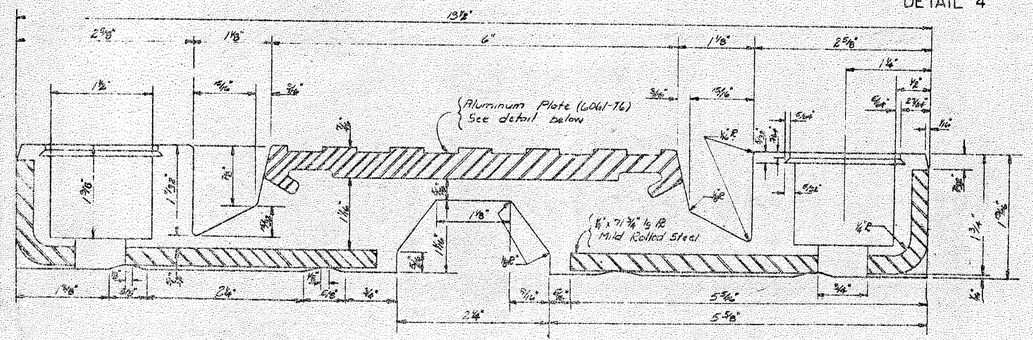
DETAIL OF ALUMINUM PLATE



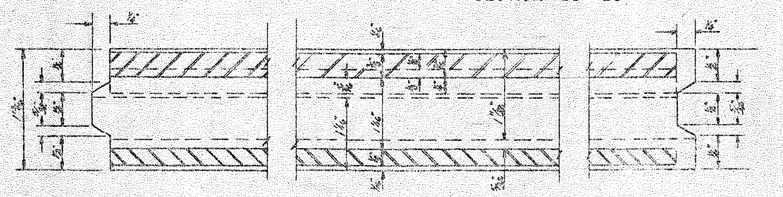
PLAN



DETAIL 4'



SECTION 23'-23'



SECTION 24'-24'

TYPE 250 B

Prepared and recommended: GOODKIND & O'DEA, INC. Consulting Engineers

Date 12/4/75

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS

ALTERNATE TYPES OF ELASTOMERIC EXPANSION JOINTS TYPE 250

DWG. NO.	SCALE	DATE	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS
CD-17	1" to scale	Nov. 1975	

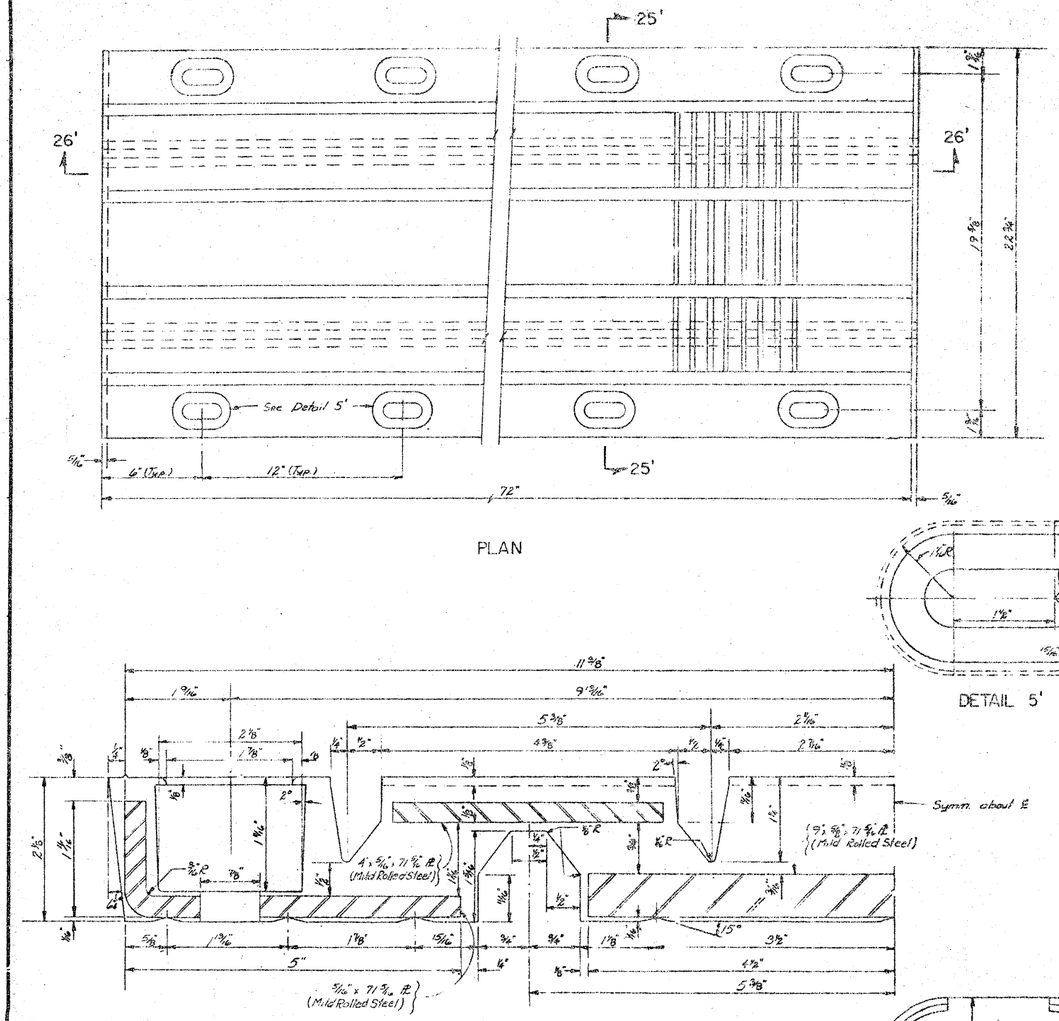
Detailed by R. Sheehy
Detail Checked by [illegible]

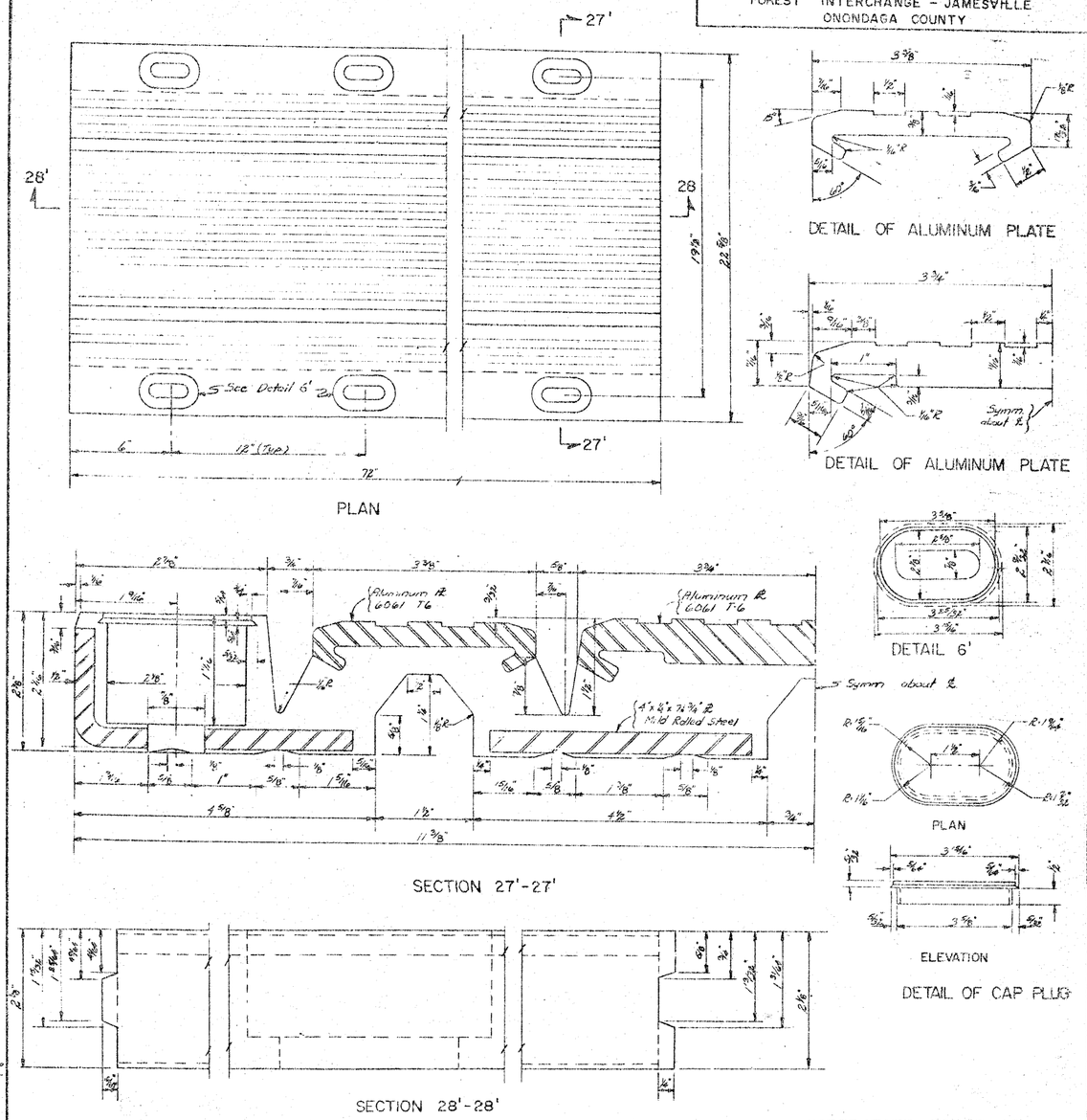
1069090

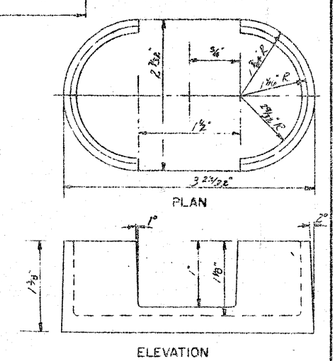
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N. Y.	I-IG-481-2(74) I-UI-81-2(126)	251	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY







In Charge of W. Bonczkowski
Designed by J. S. Goss
Design Checked by J. P. Bujongiorno
Detailed by R. Skiepko
Detail Checked by W. J. Nickerson

Prepared and recommended
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS

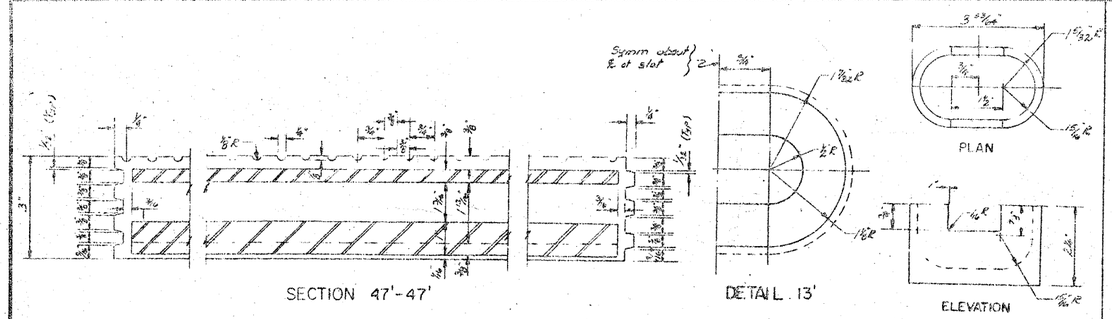
ALTERNATE TYPES OF ELASTOMERIC EXPANSION JOINTS TYPE 400

DWG. NO.	SCALE	DATE	
CO-18	Not to Scale	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(74) I-UI-81-2(126)	252	571

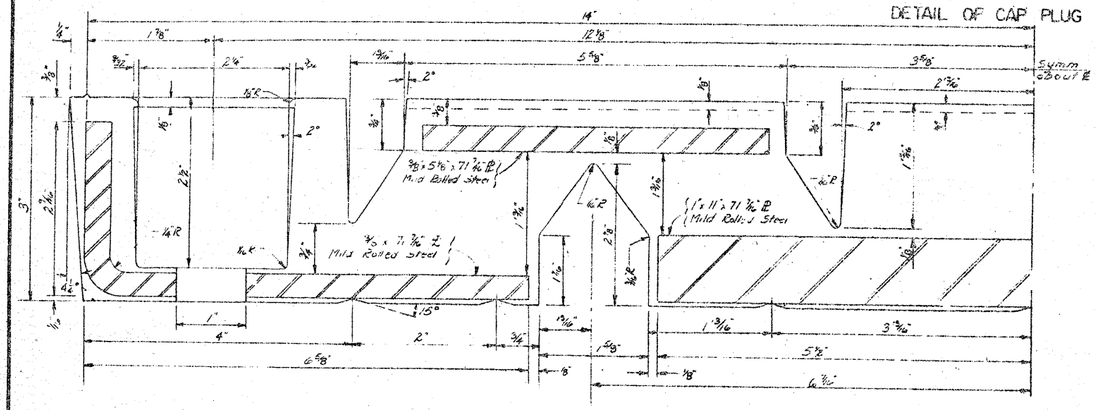
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



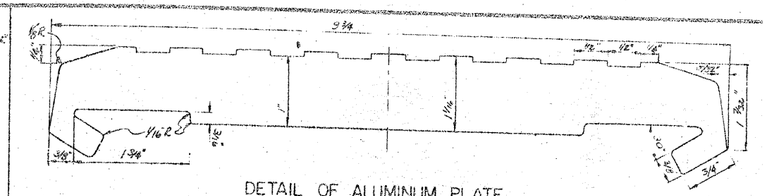
SECTION 47'-47'

DETAIL 13'

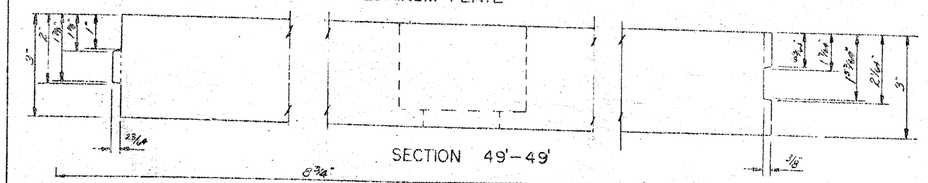
DETAIL OF CAP PLUG



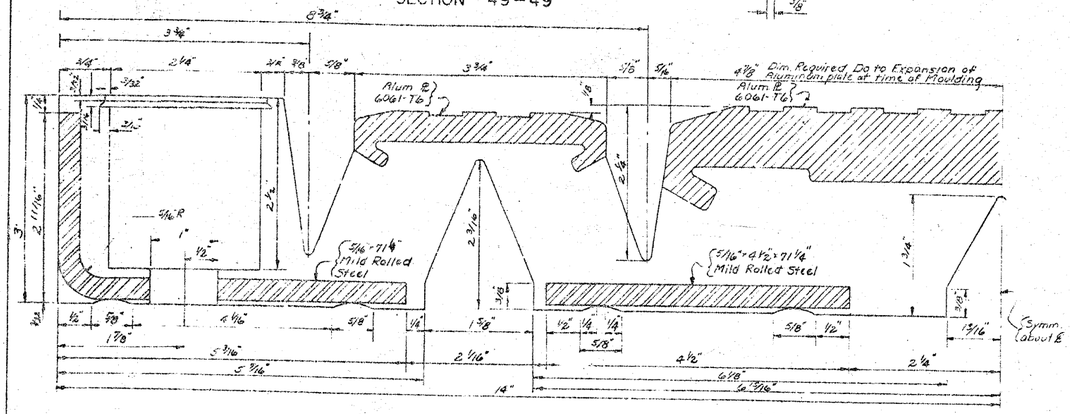
SECTION 46'-46'



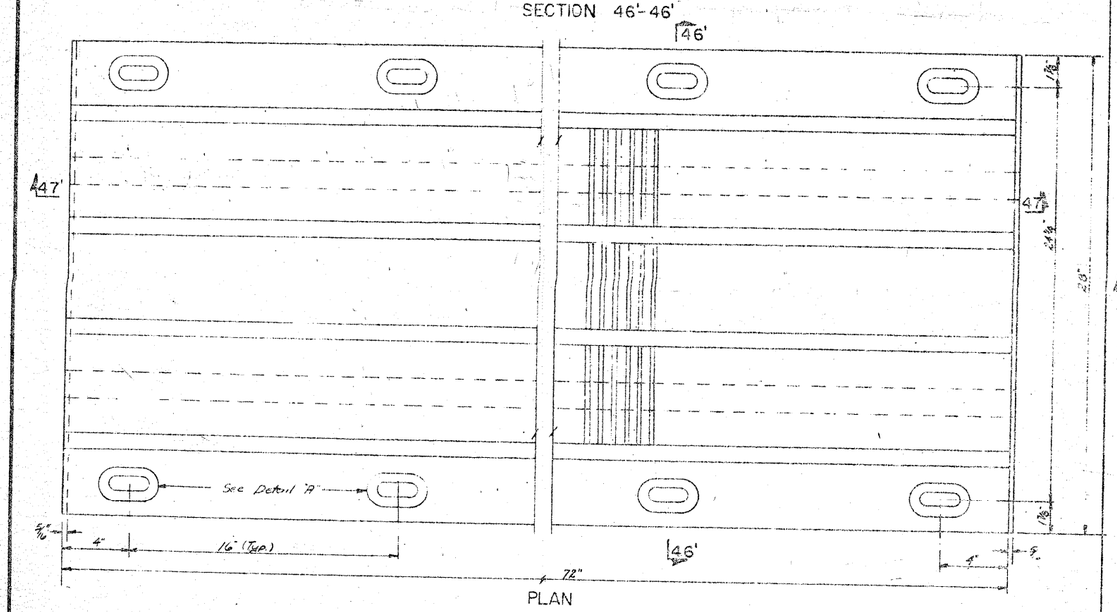
DETAIL OF ALUMINUM PLATE



SECTION 49'-49'

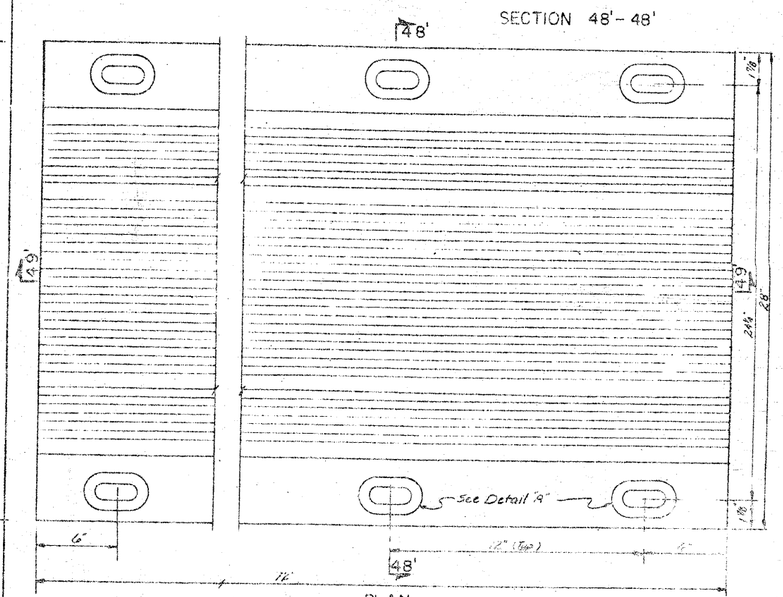


SECTION 48'-48'



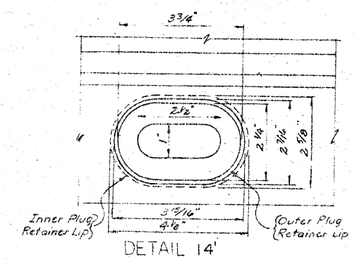
PLAN

TYPE 650 A

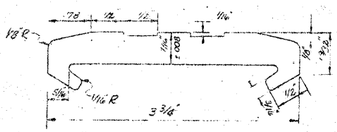


PLAN

TYPE 650 B



DETAIL 14'



DETAIL OF ALUMINUM PLATE

Proposed and recommended
GOODKIND & O'DEA, INC.
Date 1/17/75
Consulting Engineers

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS

ALTERNATE TYPES OF ELASTOMERIC EXPANSION JOINTS TYPE 650

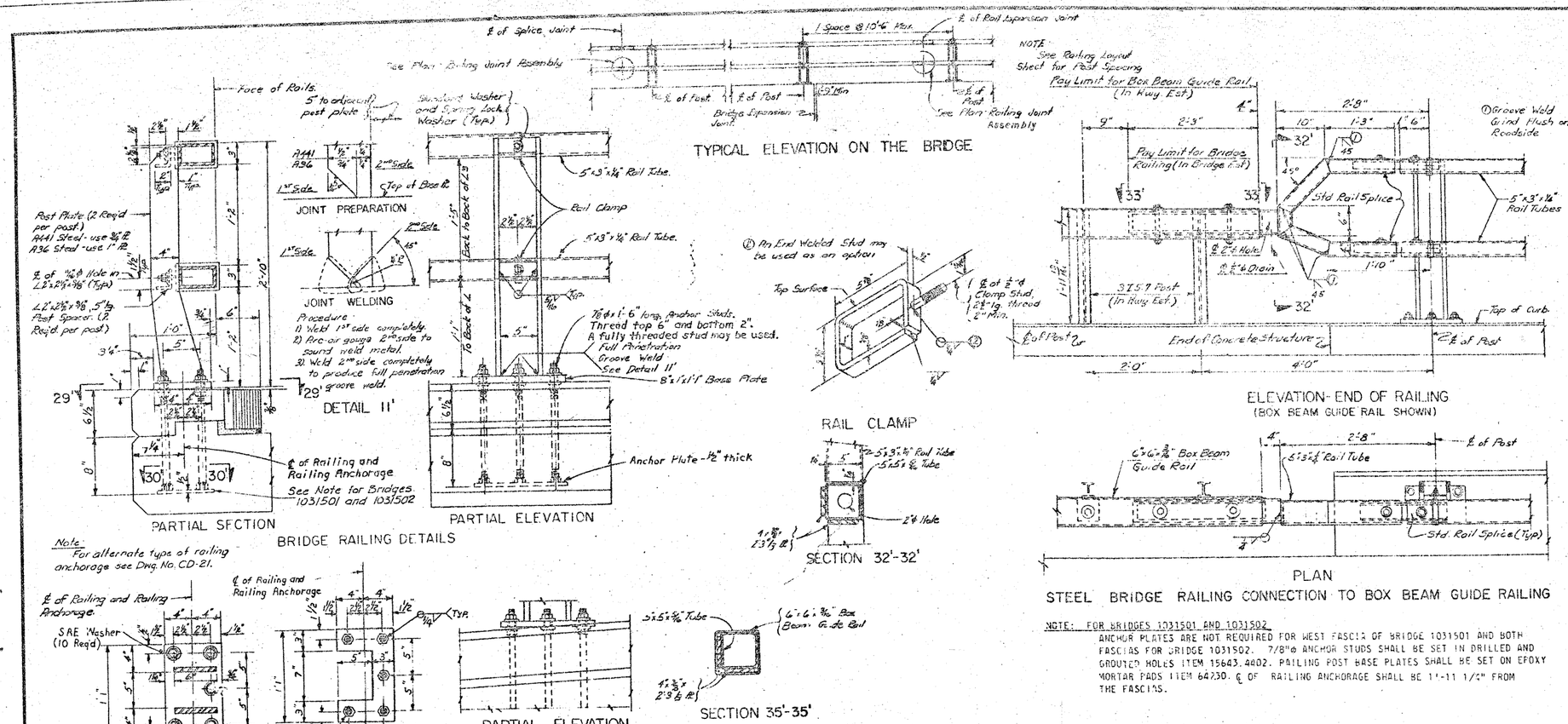
DWG. NO.	SCALE	DATE	
CD-8A	Not to Scale	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

1069090

D85042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IQ-481-2(74) I-IU-81-2(26)	253	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



NOTES.

ALL RAILING IS TO BE FABRICATED AND ERECTED SO THAT THE RAILS ARE PARALLEL TO EACH OTHER AND TO THE SIDEWALK AND SO THAT THE POSTS ARE TRULY VERTICAL.

THE BASE PLATES SHALL BE PERPENDICULAR TO THE POST UNLESS OTHERWISE NOTED. WHEN THE RAILING IS TO BE PLACED ON A PREFORMED SURFACE, THE BASE PLATE MAY BE PARALLEL TO THE GRADE OR MAY BE PERPENDICULAR TO THE POST AND MADE LEVEL BY THE USE OF BEVELED SHIMS.

TUBULAR STEEL RAILS, RAIL CLAMP ASSEMBLIES INCLUDING STUDS, NUTS AND WASHERS, POSTS, POST WEBS IF REQUIRED, POST SPACERS, BASE PLATES, RAILING JOINT ASSEMBLIES AND ANY NECESSARY SHIMS AND ALUMINUM CAULKING COMPOUND, SHALL BE PAID FOR UNDER THE RAILING ITEM.

ANCHOR STUDS, NUTS, WASHERS AND ANCHOR PLATES, SHALL BE PAID FOR UNDER THE RAILING ITEM.

AFTER THE ANCHOR STUD NUTS HAVE BEEN PLACED AND TIGHTENED TO THE SATISFACTION OF THE ENGINEER, THE STUDS SHALL BE FLAME CUT OFF 1/8 INCH ABOVE THE NUT AND THE FIRST THREAD ABOVE THE NUT SHALL BE DAMAGED.

RAILS SHALL SPAN A MINIMUM OF 3 POSTS. IF THIS IS IMPOSSIBLE, THE ABSOLUTE MINIMUM SHALL BE TWO POSTS WITH ONE OF THESE POSTS BEING A SPECIAL POST.

MATERIALS USED IN THE MANUFACTURE OF THIS RAILING SHALL CONFORM TO THE REQUIREMENT AND/OR SPECIFICATIONS LISTED BELOW.

RAIL TUBES - ASTM DESIGNATION A500 GRADE B OR A501.
RAIL CLAMPS AND END CAPS - ASTM DESIGNATION A36.
CLAMP STUDS, NUTS AND WASHERS - ASTM DESIGNATION A307.
CHANNEL RAIL SPLICES - ASTM DESIGNATION A36.
TUBULAR RAIL SPLICES - ASTM DESIGNATION A500 GRADE B OF A501.
SPLICE PLATES - ASTM DESIGNATION A36.
3/4" POST PLATES - ASTM DESIGNATION A441.
1" POST PLATES - ASTM DESIGNATION A36.
POST SPACERS - ASTM DESIGNATION A36 OR 1020.
BASE PLATES - SAME AS POST PLATE MATERIAL.
SPLICE BOLTS, NUTS AND WASHERS - ASTM DESIGNATION A307.
ANCHOR STUDS - ASTM DESIGNATION A449.
NUTS AND WASHERS FOR ANCHOR STUDS - ASTM DESIGN. A325.
ANCHOR PLATES - ASTM DESIGNATION A36.
POST WEB PLATES (IF REQUIRED) - SAME AS POST PLATE MATERIAL.
PLATE SHIMS - ASTM DESIGNATION A36.
BEVELED SHIMS - MATERIAL SPECIFICATION 715-09.
GALVANIZED RAILING - ALL COMPONENTS OF THE RAILING INCLUDING ANCHOR STUDS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH MATERIAL SPECIFICATION 719-01. ANCHOR STUDS SHALL HAVE A CLASS 2A THREAD FIT PRIOR TO GALVANIZING. THE CUT PORTION OF THE ANCHOR STUDS SHALL BE GIVEN ONE FIELD COAT OF DULL ORANGE PRIMER AND TWO FIELD COATS OF READY-MIXED ALUMINUM PAINT CONFORMING TO THE REQUIREMENTS OF MATERIAL SPECIFICATION 708-03 AND 708-08 IN THAT ORDER.

ALL BOLTS SHALL HAVE A CLASS 2A THREAD FIT PRIOR TO GALVANIZING.

GRIND ALL EDGES OF POST PLATES AND BASE PLATES SO THAT ALL SHARP EDGES ARE REMOVED.

RAILING POST SHALL BE ERECTED TO PROPER LINE AND GRADE BEFORE CONCRETE UNDER POST AND IN BACK OF GRANITE CURB IS POURED.

WHEN THE RAILING IS TO BE PLACED ON A PREFORMED SURFACE, THE BOTTOM OF POST OR SHIM (WHICHEVER SURFACE WILL BE IN DIRECT CONTACT WITH THE PREFORMED SURFACE) SHALL BE GIVEN A COATING OF ALUMINUM CAULKING COMPOUND JUST PRIOR TO THE INSTALLATION OF THE POST.

UNLESS COVERED BY OTHER SPECIFICATIONS, ALL DIMENSIONS RELATED TO THE FABRICATION OF THE STEEL RAILING SHALL HAVE A TOLERANCE OF ± 1/16".

NOTE: FOR BRIDGES 1031501 AND 1031502
ANCHOR PLATES ARE NOT REQUIRED FOR WEST FASCIA OF BRIDGE 1031501 AND BOTH FASCIAS FOR BRIDGE 1031502. 7/8" ϕ ANCHOR STUDS SHALL BE SET IN DRILLED AND GROUTED HOLES ITEM 15643.4402. RAILING POST BASE PLATES SHALL BE SET ON EPOXY MORTAR PADS ITEM 64730. ℄ OF RAILING ANCHORAGE SHALL BE 1'-11 1/2" FROM THE FASCIAS.

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS

STEEL BRIDGE RAILING - TWO RAIL

Prepared and recommended GOODKIND & O'DEA, INC. Consulting Engineers Date 12/1/75

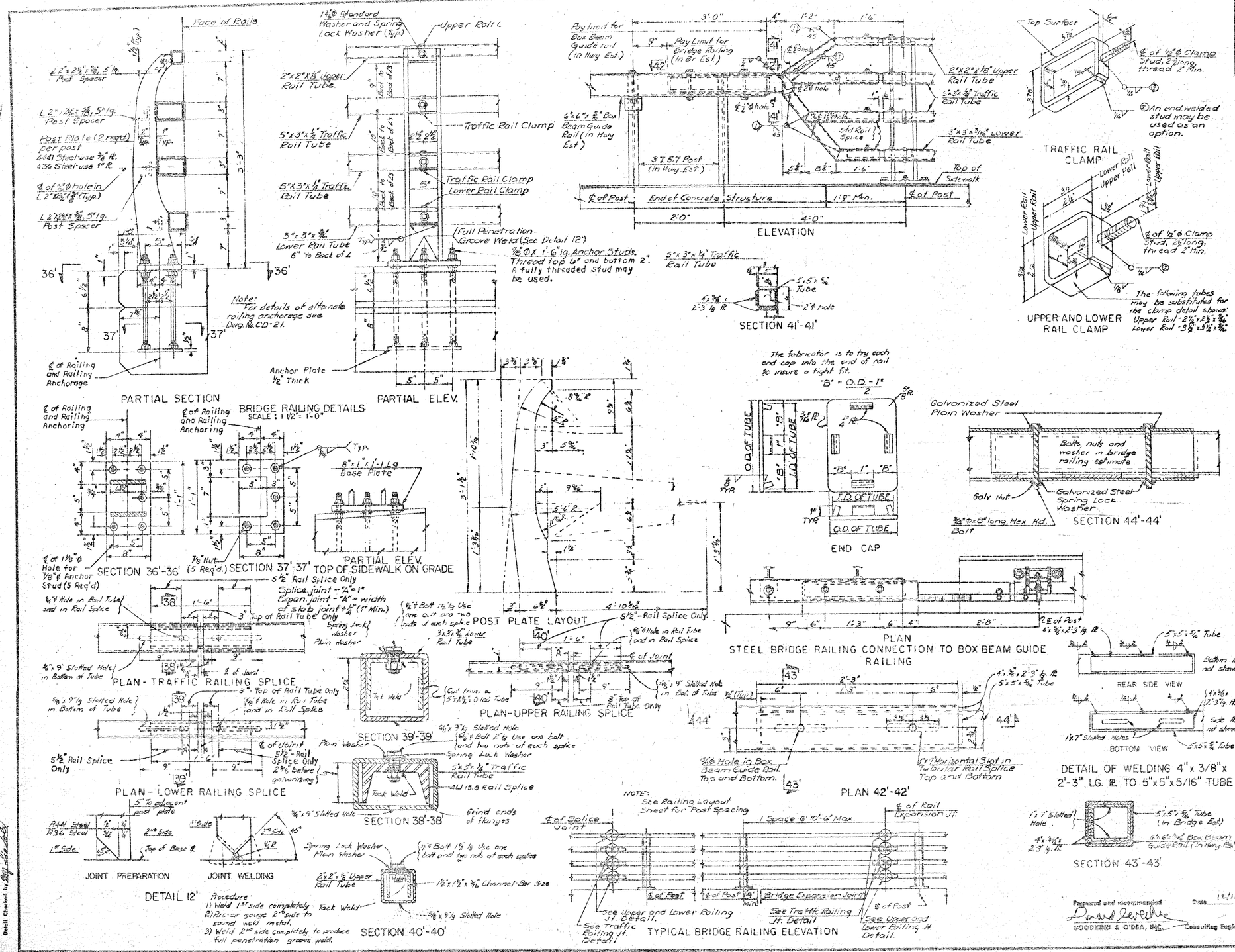
DWG. NO.	SCALE	DATE	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS
CD-19	Not to Scale	NOV. 1975	

In Charge of J. S. Gross
Designed by J. P. Buongiorno
Design Checked by
Detailed by R. Skeeing
Detail Checked by

D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IC-481-2 (78) I-UI-81-2 (28)	254	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



NOTES:

ALL RAILING IS TO BE FABRICATED AND ERECTED SO THAT THE RAILS ARE PARALLEL TO EACH OTHER AND TO THE TOP OF GURB OR SIDEWALK AND SO THAT THE POSTS ARE TRULY VERTICAL.

THE BASE PLATES SHALL BE PERPENDICULAR TO THE POSTS UNLESS OTHERWISE NOTED. WHEN THE RAILING IS TO BE PLACED ON A PREFORMED SURFACE, THE BASE PLATES MAY BE PARALLEL TO THE GRADE OR MAY BE PERPENDICULAR TO THE POST AND MADE LEVEL BY THE USE OF BEVELED SHIMS.

TUBULAR STEEL RAILS, RAIL CLAMP ASSEMBLIES INCLUDING STUDS, NUTS AND WASHERS, POSTS, POST SPACERS, BASE PLATES, RAIL END CAPS, RAILING SPLICES AND ANY NECESSARY SHIMS AND ALUMINUM CAULKING COMPOUND SHALL BE PAID FOR UNDER THE RAILING ITEM.

ANCHOR STUDS, NUTS, WASHERS AND ANCHOR PLATES SHALL BE PAID FOR UNDER THE RAILING ITEM.

AFTER THE ANCHOR STUD NUTS HAVE BEEN PLACED AND TIGHTENED TO THE SATISFACTION OF THE ENGINEER, THE STUDS SHALL BE FLAME CUT OFF 1/8 INCH ABOVE THE NUT AND THE FIRST THREAD ABOVE THE NUT SHALL BE DAMAGED.

RAIL SHALL SPAN A MINIMUM OF 2 POSTS.

MATERIALS USED IN THE MANUFACTURE OF THIS RAILING SHALL CONFORM TO THE REQUIREMENTS AND/OR SPECIFICATIONS LISTED BELOW.

RAIL TUBES - ASTM DESIGNATION A500 GRADE B OR A501.

RAIL CLAMPS - ASTM DESIGNATION A36.

CLAMP STUDS, NUTS AND WASHERS - ASTM DESIGNATION A307.

RAIL END CAPS - ASTM DESIGNATION A36.

CHANNEL RAIL SPLICES - ASTM DESIGNATION A36.

TUBULAR RAIL SPLICES - ASTM DESIGNATION A500 GRADE B OR A501.

SPLICE PLATES - ASTM DESIGNATION A36.

3/4" POST PLATES - ASTM DESIGNATION A441.

1" POST PLATES - ASTM DESIGNATION A36.

POST SPACERS - ASTM DESIGNATION A36 OR 1020.

BASE PLATES - SAME AS POST PLATE MATERIAL.

SPLICE BOLTS, NUTS AND WASHERS - ASTM DESIGNATION A307.

ANCHOR STUDS - ASTM DESIGNATION A449.

NUTS & WASHER FOR ANCHOR STUDS - ASTM DESIGN A325.

ANCHOR PLATES - ASTM DESIGNATION A36.

BEVELED SHIMS - MATERIAL SPECIFICATION 715-09.

GALVANIZED RAILING - ALL COMPONENTS OF THE RAILING INCLUDING ANCHOR STUDS, NUTS AND WASHERS, SHALL BE GALVANIZED IN ACCORDANCE WITH MATERIAL SPECIFICATION 719-01 ANCHOR STUDS SHALL HAVE A CLASS 2A THREAD FIT PRIOR TO GALVANIZING. THE CUT PORTION OF THE ANCHOR STUDS SHALL BE GIVEN ONE FIELD COAT OF DULL ORANGE PRIMER AND TWO FIELD COATS OF READY-MIXED ALUMINUM PAINT CONFORMING TO THE REQUIREMENTS OF MATERIAL SPECIFICATIONS 708-03 AND 708-08 IN THAT ORDER. ALL BOLTS SHALL HAVE A CLASS 2A THREAD FIT PRIOR TO GALVANIZING

GRIND ALL EDGES OF POST PLATES AND BASE PLATES SO THAT ALL SHARP EDGES ARE REMOVED.

RAILING POST SHALL BE ERECTED TO PROPER LINE AND GRADE BEFORE CONCRETE UNDER POST AND IN BACK OF GRANITE CURB IS POURED.

WHEN THE RAILING IS TO BE PLACED ON A PREFORMED SURFACE, THE BOTTOM OF POST OR SHIM (WHICHEVER SURFACE WILL BE IN DIRECT CONTACT WITH THE PREFORMED SURFACE), SHALL BE GIVEN A COATING OF ALUMINUM CAULKING COMPOUND JUST PRIOR TO THE INSTALLATION OF THE POST.

UNLESS COVERED BY OTHER SPECIFICATIONS, ALL DIMENSIONS RELATED TO THE FABRICATION OF THE STEEL RAILING SHALL HAVE A TOLERANCE OF ±1/16".

INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS

STEEL BRIDGE RAILING - FOUR RAIL

Prepared and recommended — Date 12/1/75
GOODKIND & O'DEA, INC. — Consulting Engineers

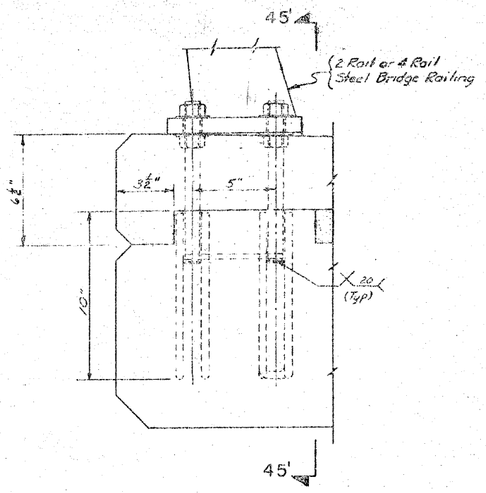
DWG. NO.	SCALE	DATE	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS
CD-20	Not to Scale	Nov. 1975	

1069090

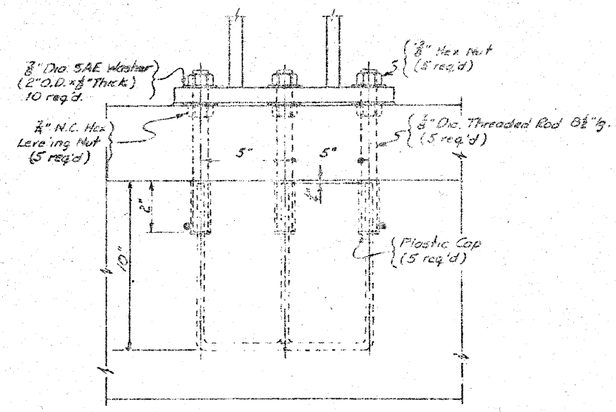
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(74) I-UI-81-2(129)	255	571

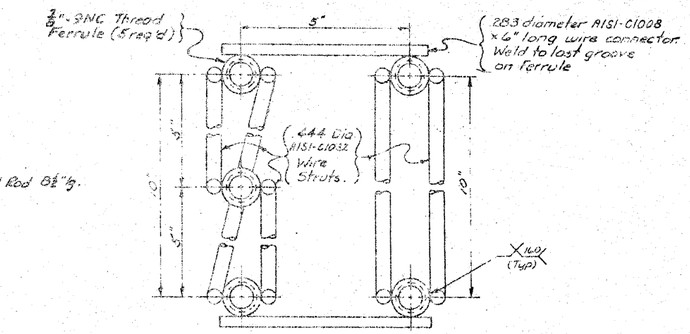
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



SECTION THRU SIDEWALK
Scale 3" = 1'-0"



SECTION 45'-45'
Scale 3" = 1'-0"



PLAN OF
ANCHORAGE ASSEMBLY
Scale 6" = 1'-0"

Note:
The reinforcement in the sidewalk and fascia is not shown.

In Charge of
Designed by
Design Checked by
Detailed by
Detail Checked by

Proposed and recommended
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/4/75

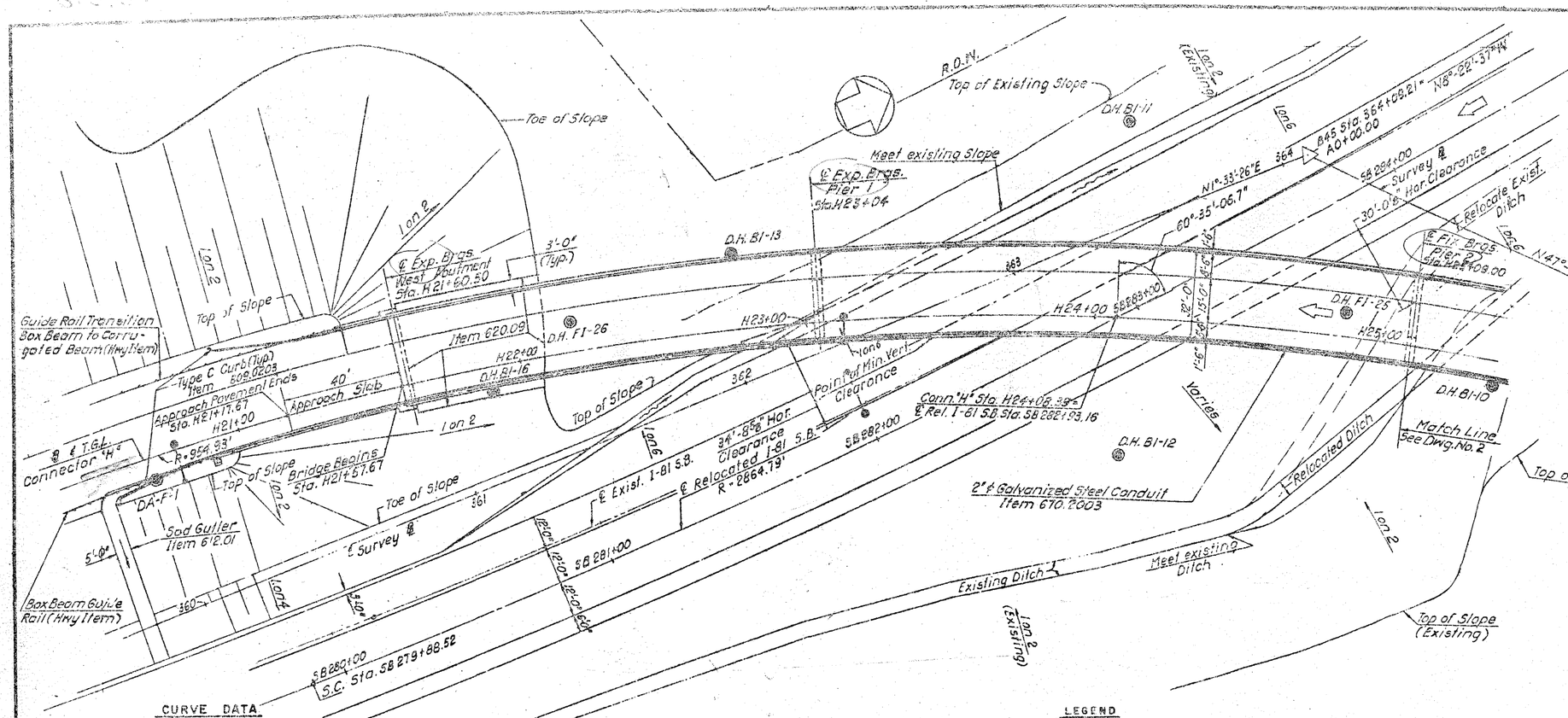
INTERSTATE ROUTE 481
COMMON BRIDGE DETAILS
ALTERNATE RAILING ANCHORAGE ASSEMBLY DETAILS

DWG. NO.	SCALE	DATE	
CD-21	As Noted	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

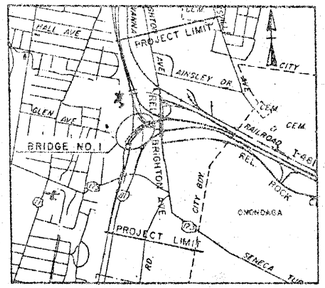
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(76) I-IM-81-2(108)	256	571

INTERSTATE ROUTE CONNECTION 5TI.
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



PLAN
Scale: 1" = 20'

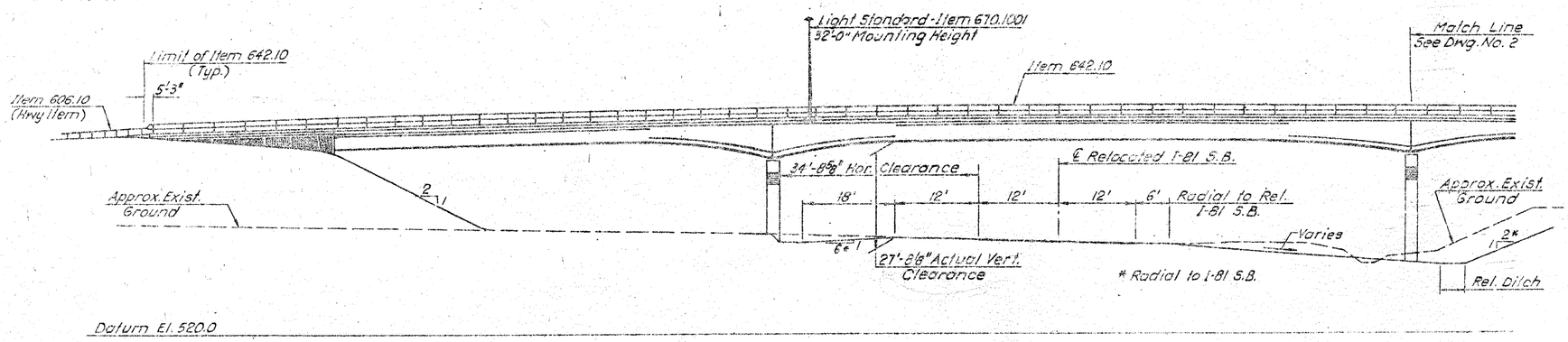


LOCATION PLAN
Scale: 1" = 2000'

CURVE DATA

Conn. "H"	℄ Rel. & Exist. I-81 S.B.
R = 954.930'	R = 2864.789'
T = 759.132'	T = 679.825'
Δ = 76°-59'-00"	Δ = 26°-41'-56.9
L = 1282.778'	L = 1334.956'
D = 6°-00'-00"	D = 2°-00'-00"

LEGEND
- Location of Drill Hole
- Lighting Pull Box
- Light Standard



* Radial to I-81 S.B.

ELEVATION
Scale: 1" = 20'

REFERENCES:
1. For Index of Drawings, see Dwg. No. 5
2. For Typical Deck Cross Section, see Dwg. No. 32
3. For crossfalls of Relocated I-81 S.B., see Approach Section, Dwg. No. 5
4. For Approach Pavement Dimensions, see Approach Sections, Dwg. No. 5

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
GENERAL PLAN AND ELEVATION I

	Date	Revision
In Charge of: H.P. Bunkhouse		
Designed by: J. Murtiber		
Design Checked by: H.W. Valentine		
Detailed by: N. Kon Blongskun		
Detail Checked by: M.J. Sebel		

Prepared and recommended: Donald Sorensen
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

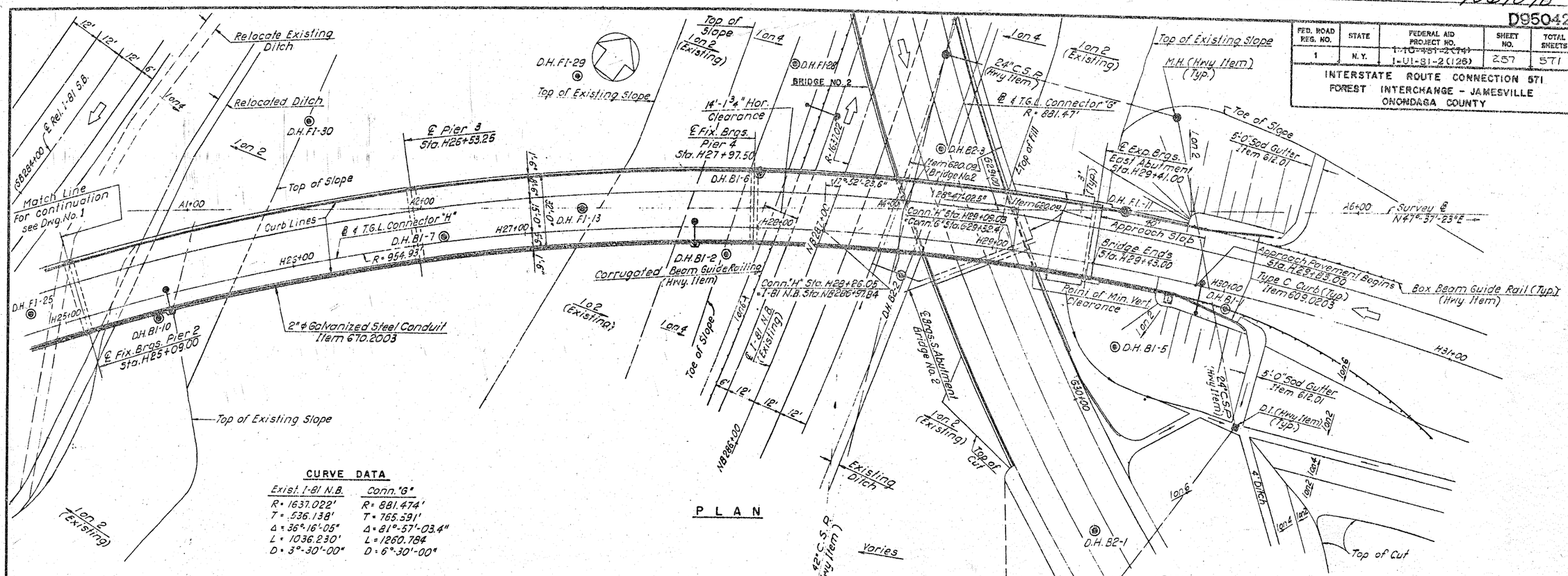
DWG. NO.	SCALE	DATE	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS
1	As noted	Nov 1975	

1069090

D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	~~I-IG-4-81-2(74)~~ I-UI-81-2(126)	257	571

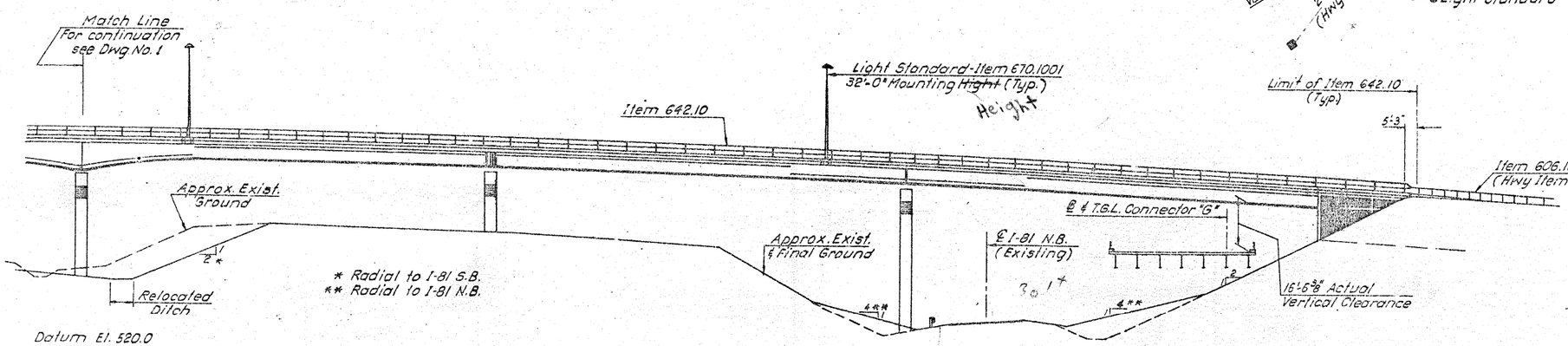
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



PLAN

CURVE DATA

Exist. I-81 N.B.	Conn. "G"
R = 1637.022'	R = 881.474'
T = 536.138'	T = 765.591'
Δ = 36°-16'-05"	Δ = 81°-57'-03.4"
L = 1036.230'	L = 1260.784
D = 3°-30'-00"	D = 6°-30'-00"



ELEVATION

REFERENCES:
1. For Typical Deck Cross Section, see Dwg. No. 32.
2. For Curve Data for Conn. "H", see Dwg. No. 1
3. For crossfalls of I-81 S.B., see Approach Sections, Dwg. No. 5.

BIN 1 06909 0

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
GENERAL PLAN AND ELEVATION II

In Charge of J.J. Quackenbush
Designed by D. Mumber
Design Checked by H.N. Valentine
Detailed by W. Konbiansky
Detail Checked by W.J. Zeller

Date	Revision

Prepared and recommended Date 12/1/75
GOODKIND & O'HEA, INC. Consulting Engineers

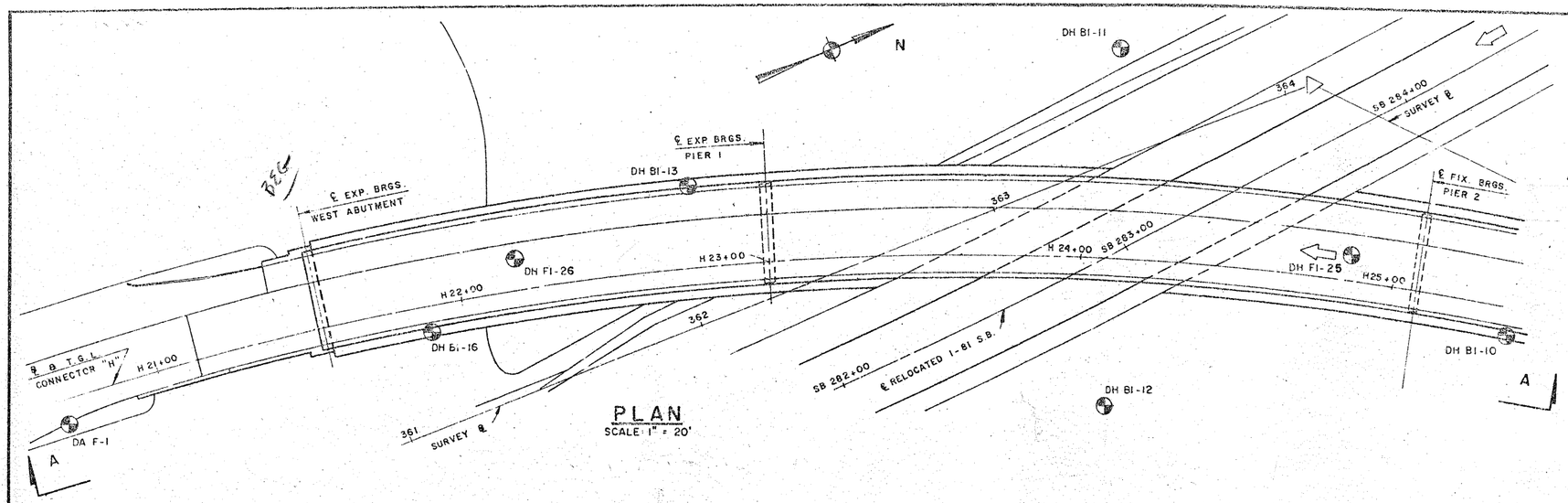
DWG. NO.	SCALE	DATE	GOODKIND & O'HEA, INC. CONSULTING ENGINEERS
2	1" = 20'	Nov. 1975	

D95042

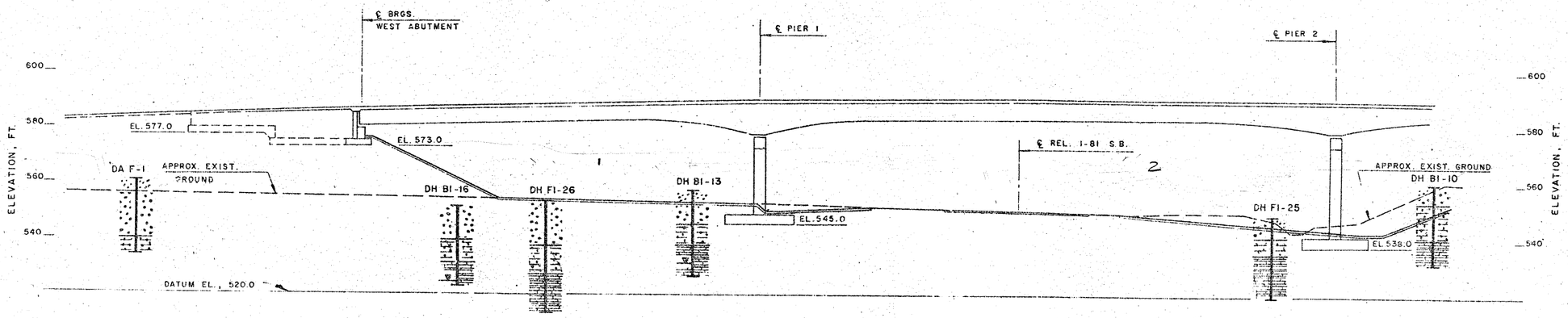
FED. RD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK	I-IG-481-2(74) I-UI-81-2(126)	258	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE

CAPITAL PROJECT IDENTIFICATION NO. 3007.00 - 111



PLAN
SCALE: 1" = 20'



SECTION A-A
(BORINGS PROJECTED TO SECTION LINE)
SCALE: 1" = 20'

NOTE:
1) NO GROUND WATER WAS OBSERVED EXCEPT IN DRILL HOLES BI-13 AND BI-16.
2) DRILL HOLES BI-11, BI-12, FI-30, FI-28, FI-29 AND BI-5 ARE NOT SHOWN IN PROFILE DUE TO THEIR LARGE OFFSET FROM THE SECTION.

REFERENCE PLANS

Preliminary Structure Plans Used for Analysis were

Prepared By: GOODKIND & O'DEA, INC., CONSULTING ENGINEERS

Scale: 1" = 20' Date: 4-25-74

Prepared By: Wallace W. Sanfrey
Drawn By: F. Agostino
Dwg. Reviewed By: J. Mani
Checked By: R. Houghton

SM 39a (12/74)

GENERAL NOTES

The subsurface explorations shown hereon were made between December, 1968 and January, 1974 by the Regional Soils Section.
1) General soil and rock (where encountered) strata descriptions and indicated boundaries are based on an engineering interpretation of all available subsurface information by the Soil Mechanics Bureau and may not necessarily reflect the actual variation in subsurface conditions between borings and samples. Detailed data and field interpretations of conditions encountered in individual borings are shown on the subsurface exploration logs.
2) The observed water levels and/or conditions indicated on the subsurface profiles are as recorded at the time of exploration. These water levels and/or conditions may vary considerably, with time, according to the prevailing climate, rainfall or other factors and are otherwise dependent on the duration of and methods used in the explorations program.
3) Sound engineering judgment was exercised in preparing the subsurface information presented hereon. This information was prepared and is intended for State design and estimate purposes only. Its presentation on the plans or elsewhere is for the purpose of providing intended users with access to the same information available to the State. This subsurface information interpretation is presented in good faith and is not intended as a substitute for personal investigation, independent interpretations or judgment of the Contractor.
4) All structure details shown hereon are for illustrative purposes only and may not be indicative of the final design conditions shown in the contract plans.
5) Footing elevations shown are as indicated at the time of this drawing's preparation.

LEGEND

The following tables summarize the descriptive information used on this profile.

Density (Non Plastic Soils)	No. of blows per foot of penetration of 2 inch O.D. sampler using a 300lb drop hammer, 18 inch fall.
Very Loose	0-3
Loose	3-8
Medium Compact	8-20
Compact	20-35
Very Compact	over 35
Consistency (Plastic Soils)	
Very Soft	0-2
Soft	2-6
Firm	6-12
Stiff	12-20
Hard	over 20

System For Describing Estimated Amounts of Soil Component Materials

Word Designation	Percentage Range of Soil Component in Stratum
Primary component is capitalized	50 or more
and	40 to 50
some	10 to 40
trace	10 or less

SYMBOLS

DRILL HOLE — DH

OBSERVED WATER LEVEL

Loose BROWN SILT, some Sand, with a trace of Clay, Gravel and Organic Material

Partially DECOMPOSED SHALE
Very Compact BROWN SAND, some Silt and Gravel, with a trace of Clay

LIMESTONE

REVISION 1 — 12/17/74 S.W. WINGWALL FOOTING STEPPED TO EL. 577.0

FOR CONTINUATION OF STRUCTURE, SEE DRAWING NO. 3 SM 1840 B

APPROVED June 13 1974
L. H. Moore
DIRECTOR
SOIL MECHANICS BUREAU

REGION NO. 3
COUNTY ONONDAGA
DWG. NO. 3 SM 1840 A

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION

GENERAL SUBSURFACE PROFILE FOR BR. NO. 1, CONNECTOR "H" OVER CONNECTOR "G" & I-81

Dwg. No. 3

DRAWING NO. 1 OF 2

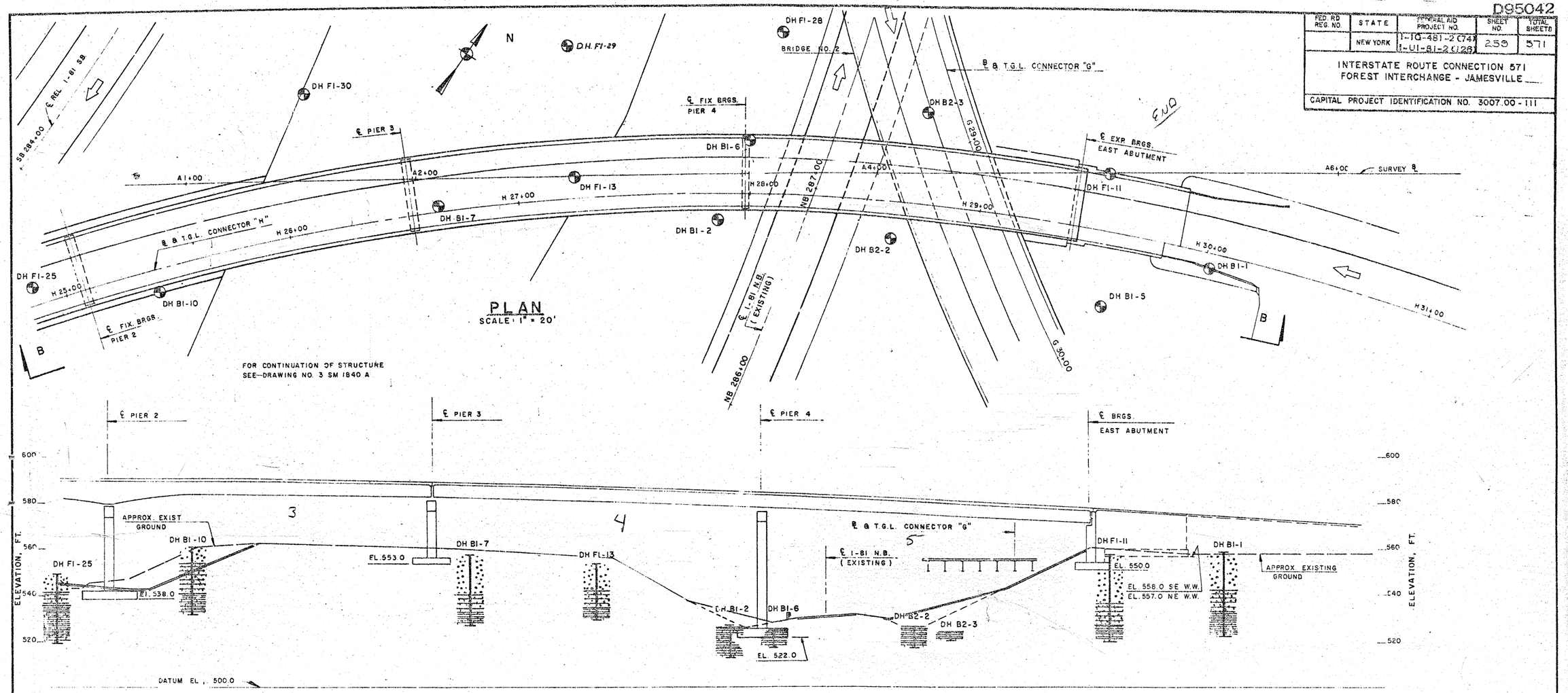
1069090

D95042

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK	I-IG-481-2 (74) I-UI-81-2 (126)	258	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE

CAPITAL PROJECT IDENTIFICATION NO. 3007.00 - 111



NOTE
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2) DRILL HOLES BI-11, BI-12, FI-30, FI-28, FI-29 AND BI-5 ARE NOT SHOWN IN PROFILE DUE TO THEIR LARGE OFFSET FROM THE SECTION.

PLAN
SCALE: 1" = 20'

SECTION B-B
(BORINGS PROJECTED TO SECTION LINE)
SCALE: 1" = 20'

REFERENCE PLANS

Preliminary Structure Plans Used for Analysis were

Prepared By: GOODKIND & O'DEA, INC., CONSULTING ENGINEERS

Scale: 1" = 20' Date: 4 - 25 - 74

Prepared By: Wallace W. Rempson
Drawn By: F. Agostino
Dwg. Reviewed By: J. Main
Checked By: F. Hayes

GENERAL NOTES

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3) Sound engineering judgment was exercised in preparing the subsurface information presented hereon. This information was prepared and is intended for State design and estimate purposes only. Its presentation on the plans or elsewhere is for the purpose of providing intended users with access to the same information available to the State. This subsurface information interpretation is presented in good faith and is not intended as a substitute for personal investigation, independent interpretations or judgment of the Contractor.
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LEGEND

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trace	10 or less

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DRILL HOLE — DH

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Loose BROWN SILT, some Sand, with a trace of Clay, Gravel and Organic Material

Partially DECOMPOSED SHALE
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LIMESTONE

APPROVED June 13 1974
L. H. Moore
DIRECTOR
SOIL MECHANICS BUREAU

REGION NO. 3
COUNTY ONONDAGA
DWG. NO. 3 SM 1840 B

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION

GENERAL SUBSURFACE PROFILE FOR BR. NO. 1, CONNECTOR "H" OVER CONNECTOR "G" & I-81

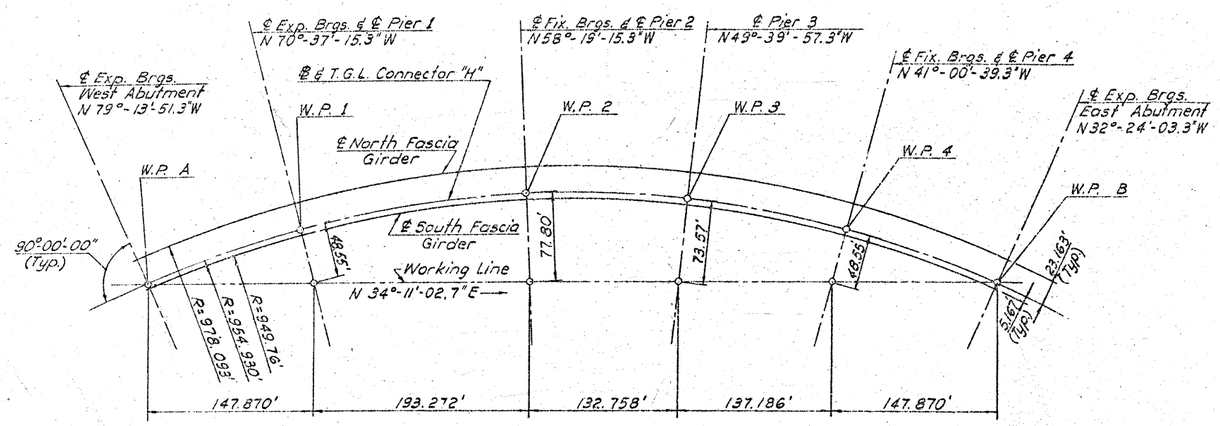
Dwg. No. 4

DRAWING NO 2 OF 2

D05042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	~~I-IG-481-2(74)~~ I-UI-81-2(128)	260	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



WORKING POINT LAYOUT
Not to Scale

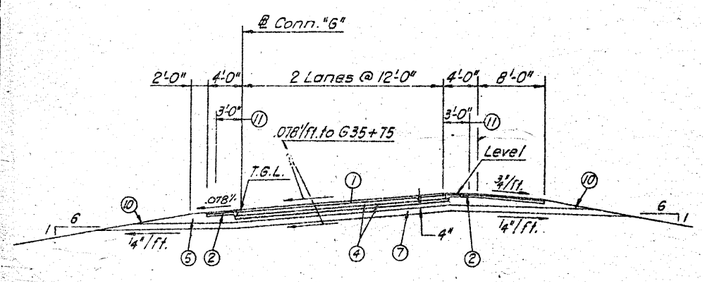
W.P.	COORDINATES NORTH	COORDINATES EAST	STATIONING
A	1095303.429	619835.888	H21+60.500
1	1095441.861	619873.173	H23+04.000
2	1095626.491	619961.352	H25+09.000
3	1095743.071	620046.073	H26+53.250
4	1095845.574	620147.372	H27+97.500
B	1095931.265	620262.310	H29+41.000

INDEX OF DRAWINGS

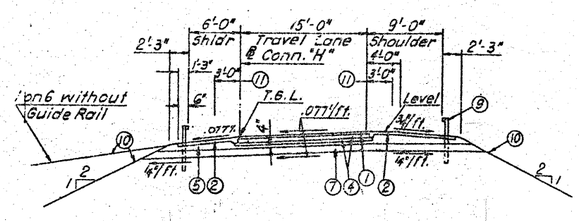
DWG. NO.	TITLE
1-2	GENERAL PLAN AND ELEVATION I-11
3-4	GENERAL SUBSURFACE PROFILE I-11
5	WORKING POINT LAYOUT AND APPROACH SECTIONS
6	PROFILES
7	LONGITUDINAL SECTIONS
8	EMBANKMENT PLAN
9	EMBANKMENT SECTIONS
10	WEST ABUTMENT
11	SOUTHWEST WINGWALL
12	WEST ABUTMENT SECTIONS AND REINFORCING DETAILS
13	WEST ABUTMENT FOOTING & STEM REINFORCING DETAILS
14	EAST AB[illegible]ENT
15	EAST AB[illegible]ENT WINGWALLS
16	EAST ABUTMENT SECTIONS AND REINFORCING DETAILS
17	EAST ABUTMENT FOOTING & STEM REINFORCING DETAILS
18	PIER 1
19	PIER 2
20	PIER 3
21	PIER 4
22	PIER FOOTING REINFORCING & PEDESTAL DETAILS
23	FRAMING PLAN - SPANS 1,2 & 3
24	GIRDER DETAILS - SPANS 1,2 & 3
25	FRAMING PLAN & GIRDER DETAILS - SPANS 4&5
26	BEARING DETAILS
27	FRAMING DETAILS
28	FIELD SPLICE DETAILS
29	CAMBER AND DESIGN MOMENT TABLES
30	HAUNCH & DESIGN LOAD TABLES - SPANS 1,2 & 3
31	HAUNCH & DESIGN LOAD TABLES - SPANS 4 & 5
32	DECK SLAB DETAILS
33	DECK PLAN - SPANS 1, 2 & 3
34	DECK PLAN - SPANS 4 & 5 AND APPROACH SLABS
35	RAILING LAYOUT
36 TO 41	BAR LISTS
BQ-1	BRIDGE QUANTITIES
CD-1 & CD-2	BRIDGE NOTES
CD-3 & CD-5	DRAINAGE AND APPROACH DETAILS
CD-6	BOX BEAM TO CABLE TRANSITION
CD-8	SUBSTRUCTURE DETAILS
CD-9	STRUCTURAL STEEL
CD-14	ELASTOMERIC EXPANSION JOINT AT PIER
CD-15	ELASTOMERIC EXPANSION JOINT AT ABUTMENT
CD-16	ALTERNATE TYPES OF ELASTOMERIC EXPANSION
CD-18	JOINTS TYPES 200 & 400
CD-19	STEEL BRIDGE RAILING-TWO RAIL
CD-21	ALTERNATE RAILING ANCHORING ASSEMBLY DETAILS

KEY TO HIGHWAY ITEMS

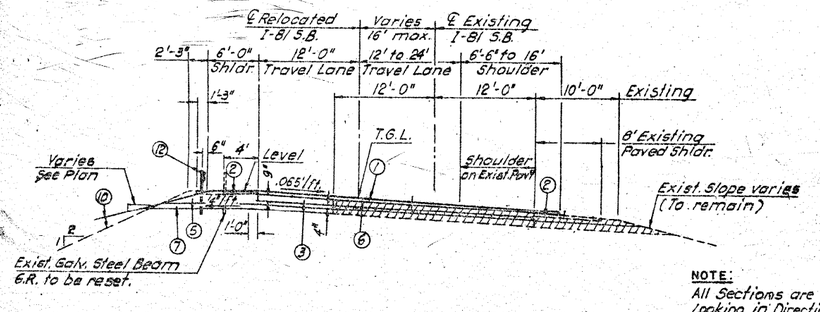
1	ITEM 403.02	ASPHALT CONCRETE - TYPE 1AF TOP (HIGH FRICTION) - 1" TH.
	ITEM 403.05	TYPE 1A BINDER - 1 1/2" TH.
2	ITEM 403.01	ASPHALT CONCRETE - TYPE 1A TOP 1" TH.
	ITEM 302.01	BITUMINOUS STABILIZED COURSE 3" TH.
3	ITEM 502.01	CEMENT CONCRETE PAVEMENT
4	ITEM 403.07	ASPHALT CONCRETE - TYPE 1A BASE 8" TH. (2-4" TH. COURSES)
5	ITEM 15304.0104	SUBBASE COURSE-SELECT GRANULAR MATERIAL
6	ITEM 403.08	ASPHALT CONCRETE-TRUING & LEVELING COURSE
7	ITEM 15304.0103	SUBBASE COURSE-GRANULAR MATERIAL 8" THICK
8	ITEM 606.20	CORRUGATED BEAM GUIDE RAILING
9	ITEM 606.10	BOX - BEAM GUIDE RAILING
10	ITEM 610.02	SEEDING
11	ITEM 410.03	BITUMINOUS SURFACE TREATMENT
12	ITEM 03606.4002	RESET CORRUGATED BEAM TYPE GUIDE RAILING ON NEW I BEAM POSTS



CONNECTOR "G" APPROACH SECTION
Scale: 1/8" = 1'-0"

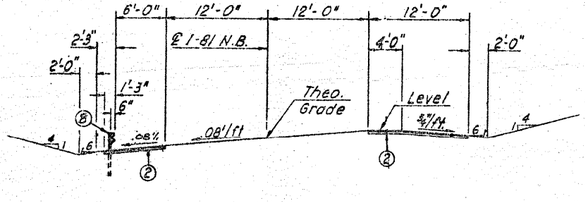


CONNECTOR "H" APPROACH SECTION
Scale: 1/8" = 1'-0"



RELOCATED I-81 S.B. APPROACH SECTION
Scale: 1/8" = 1'-0"

NOTE:
All Sections are drawn Looking in Direction of Travel.



EXISTING I-81 N.B. APPROACH SECTION
Scale: 1/8" = 1'-0"

REFERENCES:
For Roadway Profiles, see Dwg. No. 6.

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
WORKING POINT LAYOUT
AND APPROACH SECTIONS

Prepared and recommended
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

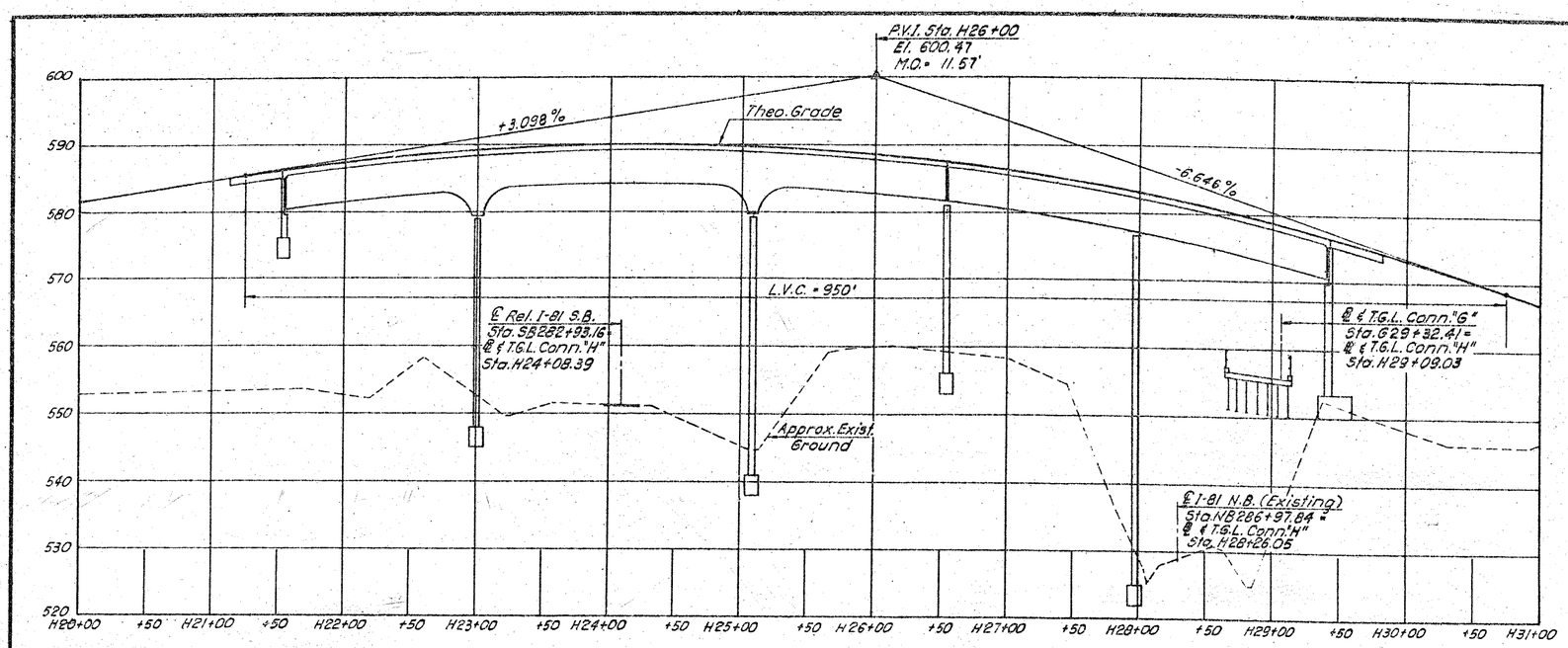
DWG. NO.	SCALE	DATE	
5	As noted	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

1069090

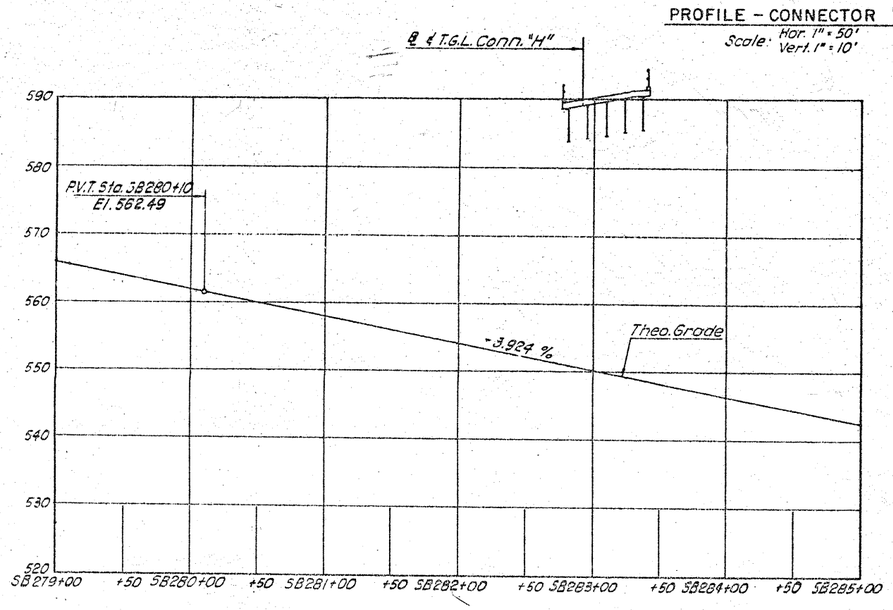
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N. Y.	I-IU-081-2(74) I-IU-81-2(108)	261	571

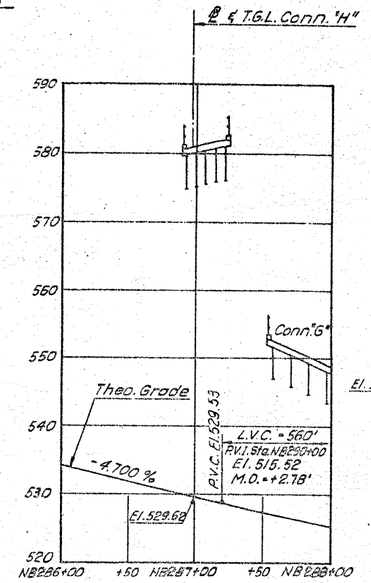
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



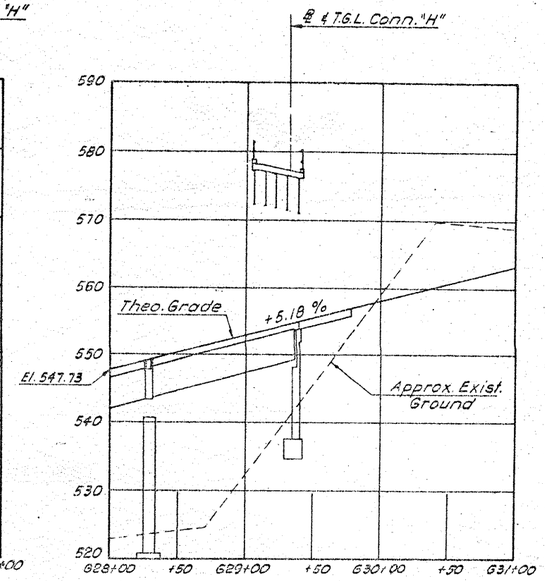
PROFILE - CONNECTOR "H"
Scale: Hor. 1" = 50' Vert. 1" = 10'



PROFILE - RELOCATED I-81 S.B.
Scale: Hor. 1" = 50' Vert. 1" = 10'



PROFILE - EXISTING I-81 N.B.
Scale: Hor. 1" = 50' Vert. 1" = 10'



PROFILE - CONNECTOR "G"
Scale: Hor. 1" = 50' Vert. 1" = 10'

REFERENCES:
1. For Working Points Layout and Roadway Approach Sections, see Dwg. No. 5

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
PROFILES

In Charge of	J.P. Dunnigan
Designed by	H.N. Valentine
Design Checked by	J. Goss
Detailed by	N. Korbiakiewicz
Detail Checked by	[illegible]

Date	Revision

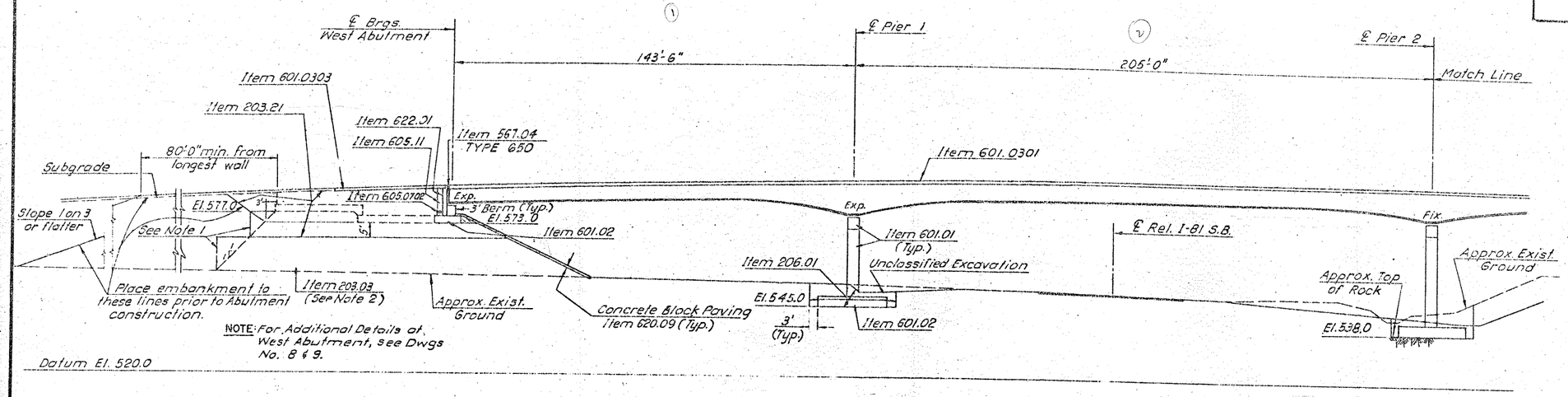
Prepared and recommended: J. Dewellis
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

DWG. NO.	SCALE	DATE	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS
6	As noted	Nov. 1975	

D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N. Y.	~~I-IU-481-2(74)~~ I-UI-81-2(128)	262	571

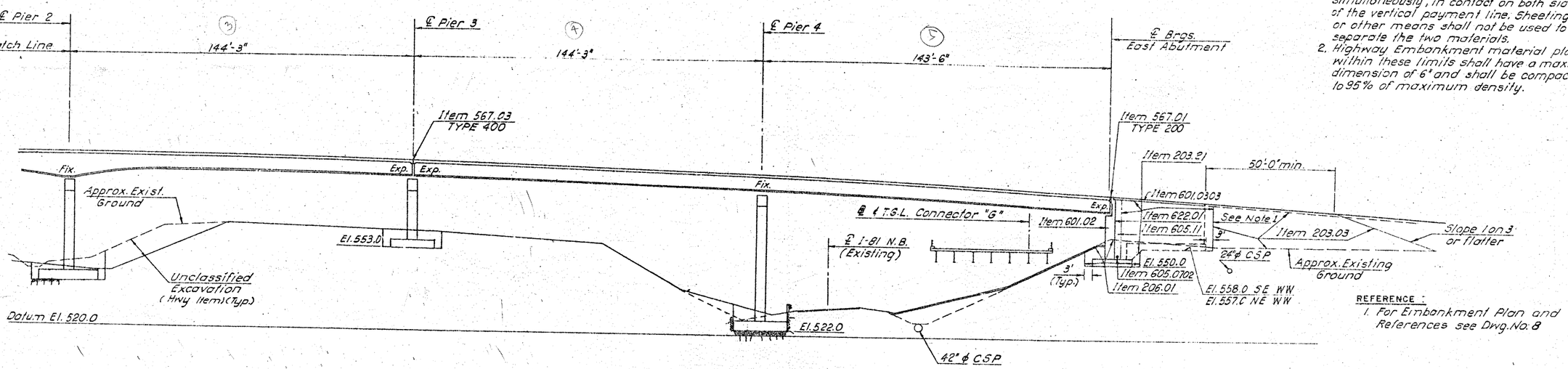
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



LONGITUDINAL SECTION

EMBANKMENT NOTES:

1. Items 203.03 & 203.21 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.
2. Highway Embankment material placed within these limits shall have a maximum dimension of 6" and shall be compacted to 95% of maximum density.



LONGITUDINAL SECTION

REFERENCE:

1. For Embankment Plan and References see Dwg. No. 8

BRIDGE NO. 1

CONNECTOR "H" OVER
CONNECTOR "G" AND I-81

LONGITUDINAL SECTIONS

	Date	Revision
In Charge of J. Mauriziano		
Designed by H. W. Valentine		
Design Checked by J. Gaeb		
Detailed by W. Kowalonsky		
Detail Checked by [illegible]		

Prepared and recommended [signature] Date 12/1/75
GOODKIND & O'DEA, INC. Consulting Engineers

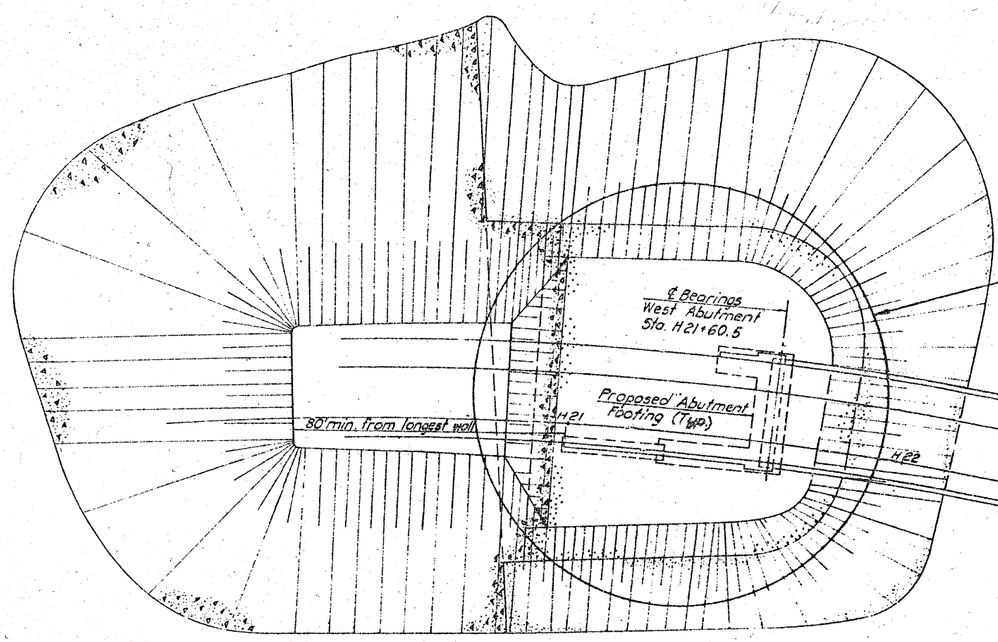
DWG. NO.	SCALE	DATE	
7	1"=20'	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

1069090

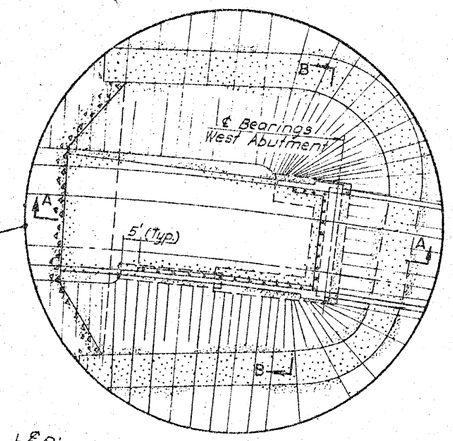
D065042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N. Y.	I-IG-481-2(74) I-UL-81-2(126)	263	571

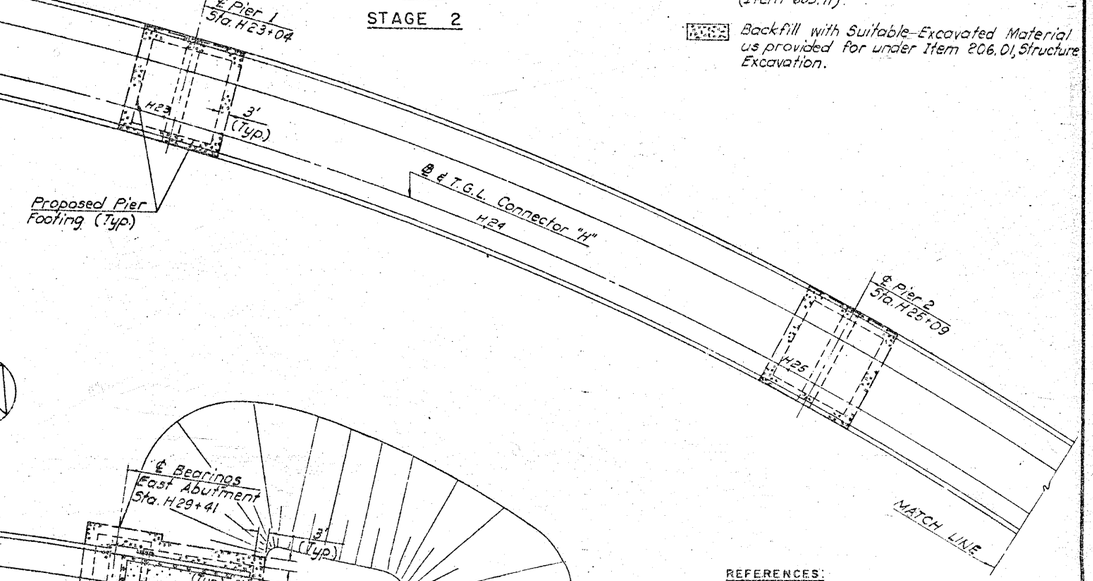
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

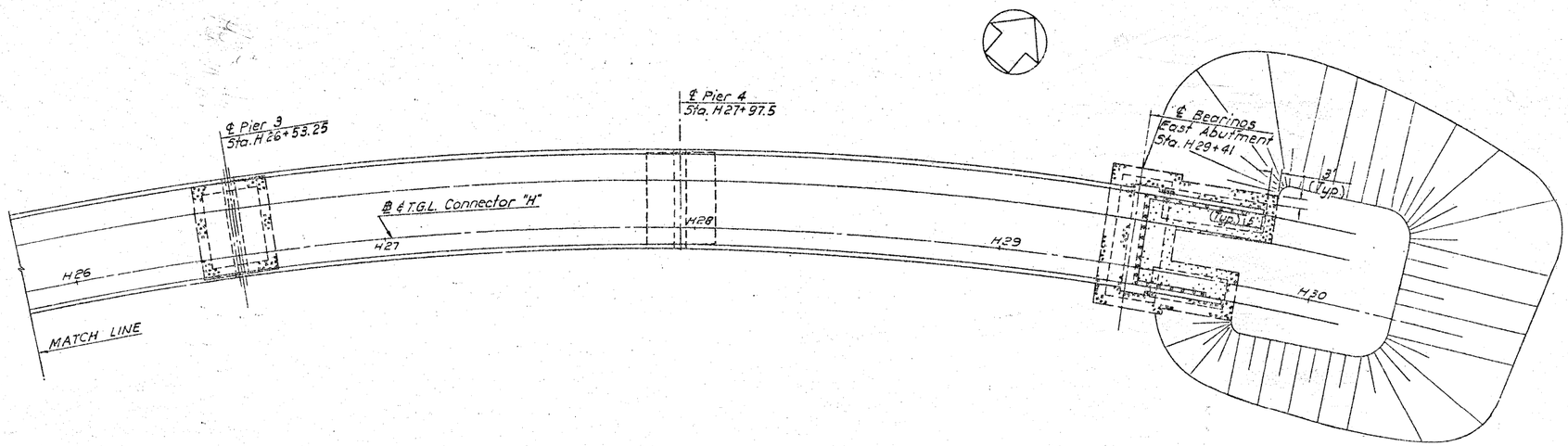


STAGE 1
(See Note 1)



STAGE 2





LEGEND:

- Highway Embankment Material (Item 203.03) (Hwy Item)
- Highway Embankment Material 6" Top Size (Item 203.03) (Hwy Item)
- Select Structure Fill-Bridges (Item 203.21)
- Underdrain Filter Type C at Structures (Item 605.11)
- Backfill with Suitable-Excavated Material as provided for under Item 206.01, Structure Excavation.

REFERENCES:

1. For Subsurface Profile, see Dwg. Nos. 3 & 4.
2. For Longitudinal Sections, see Dwg. No. 7.
3. For Embankment Sections and Note 1, see Dwg. No. 9.
4. For Sections A-A and B-B, see Dwg. No. 9.

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81

EMBANKMENT PLAN

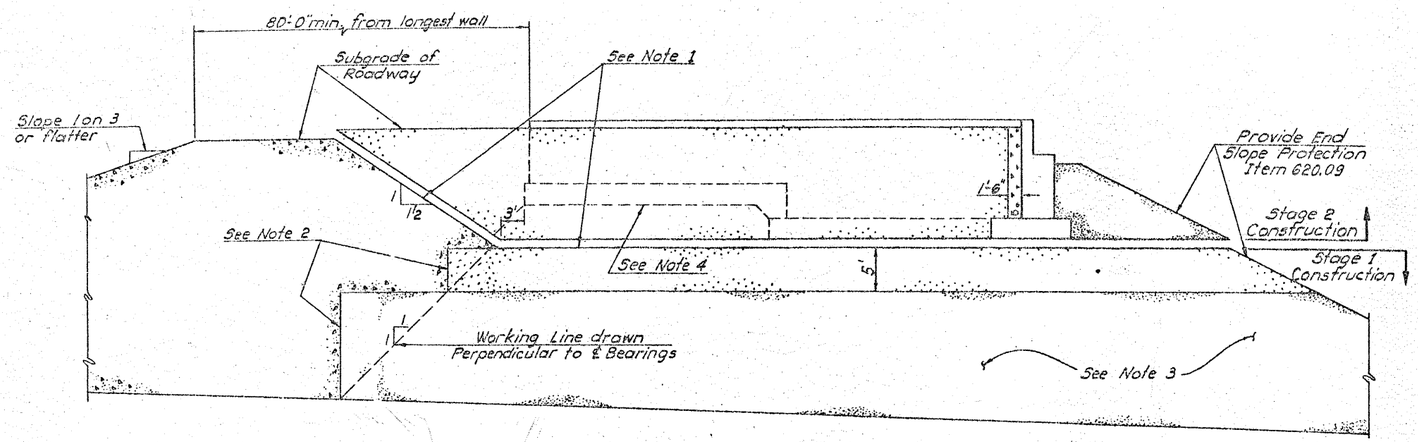
In Charge of J. J. Dwyer
Designed by J. F. Cogan
Design Checked by W. Rush
Detailed by L. Volkert
Detail Checked by

Prepared and recommended
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

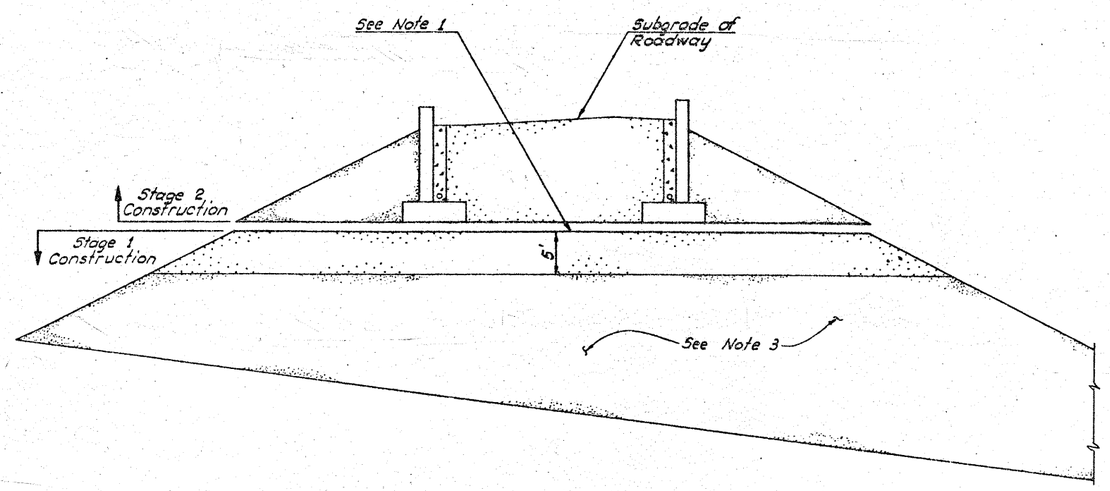
DWG. NO.	SCALE	DATE	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS
8	1"=20'	Nov. 1975	

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-1G-48T-2(74) I-UI-81-2(128)	264	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



SECTION A-A



SECTION B-B

NOTES:

1. The embankment shall be built to the subgrade of roadway excluding the abutment area and a one month waiting period shall be observed prior to the construction of West Abutment.
2. Item 203.03 and Item 203.21 shall be placed simultaneously in contact on both sides of the vertical payment line. Sheeting or other material shall not be used to separate the two materials.
3. Highway embankment material placed within these limits shall have maximum dimension of 6 inches and shall be compacted to 95% of maximum density. Quantity to be included in Highway Estimate.
4. Highway embankment place to this Line prior to Wingwall Construction.

REFERENCES:

1. For Embankment Plan and Legend see Dwg. No. 8.
2. For Subsurface Profile, see Dwg Nos 3 & 4.

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
EMBANKMENT SECTIONS

Prepared and recommended
GOODKIND & O'DEA, INC.
Consulting Engineers
Date 12/1/75

DWG. NO.	SCALE	DATE	
9	1/8"=1'-0"	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

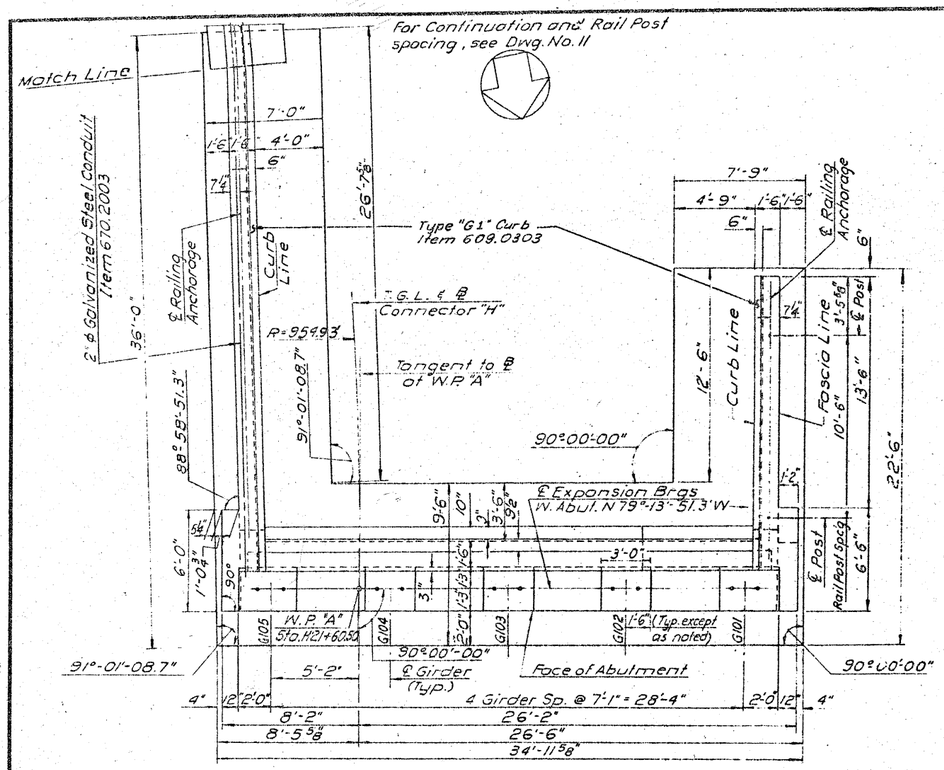
Detailed by L. Ito/ROT
Detail Checked by

1069090

D95042

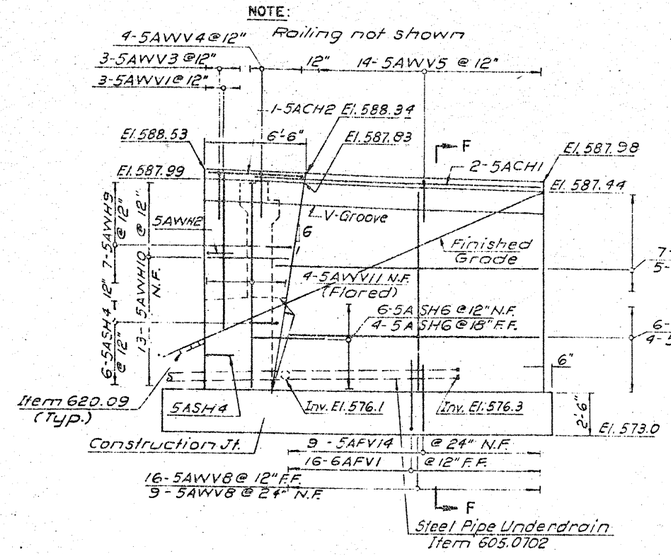
FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N. Y.	I-IU-481-2(74) I-IU-81-2(126)	265	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

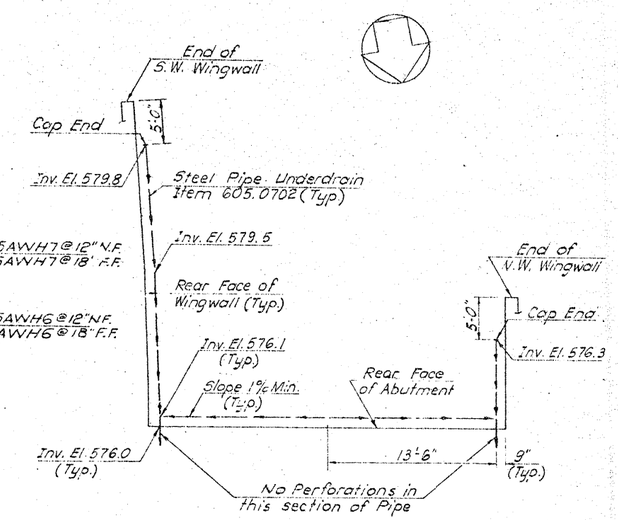


PLAN
Scale: 4" = 1'-0"

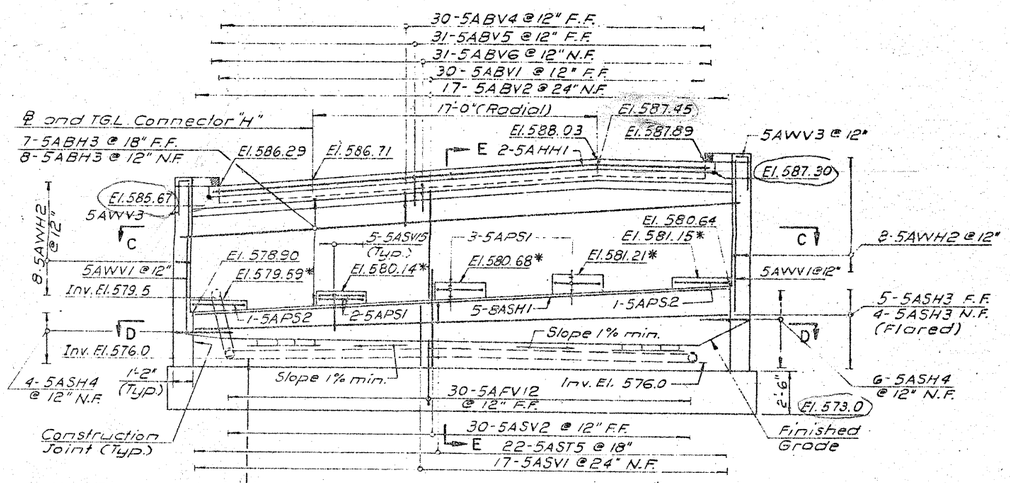
NOTE:
Railing not shown



N.W. WINGWALL ELEVATION
Scale: 4" = 1'-0"



UNDERDRAIN PLAN AND FLOW DIAGRAM
Not to Scale

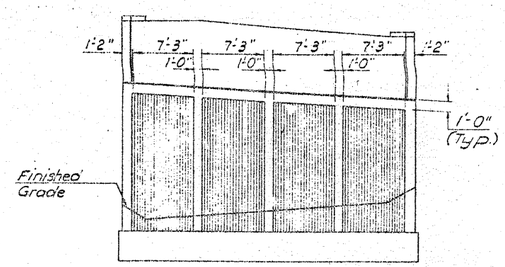


ELEVATION
Scale: 4" = 1'-0"

NOTES:
Invert Elevations shown, are at Front Face of Abutment.
Bridge Seat Elevations shown, are at Front Face of Backwall.

* The West Abutment Pedestals shall be constructed to their plan elevations only after the abutment has been backfilled to the Subgrade of Roadway.

587.45
- 573.00
14.45



AESTHETIC TREATMENT AT ABUTMENTS
Scale: 1/8" = 1'-0"

REFERENCES:
1. For Additional References, see Dwg. No. 14.
2. For Footing Reinforcing Plan, Stem Sections and Concrete Item Numbers and Quantities for Specific Pours, see Dwg No. 13.
3. For Bar List and Reinforcing in Specific Pours see Dwg No. 36.
4. For Abutment and Wall Sections, Header Detail, Anchor Bolt Layout and Pedestal Detail, see Dwg No. 12.
5. For Anchor Bolt Detail see Dwg No. 26
6. For Aesthetic Treatment of Wingwall and V-Groove Detail, see Dwg No. 11
7. For Detail of Aesthetic Treatment see Dwg No. 19.
8. For Sections C-C and D-D, see Dwg. No. 13.
9. For Sections E-E & F-F see Dwg No. 12
10. For Railing Post Spacing see Dwg. No. 35.

BRIDGE NO. 1

CONNECTOR "H" OVER
CONNECTOR "G" AND I-81

WEST ABUTMENT

In Charge of: [illegible]
Designed by: W.H. Yoshuine
Design Checked by: C.A. Gorski
Detailed by: A.S. Kopp
Detail Checked by: [illegible]

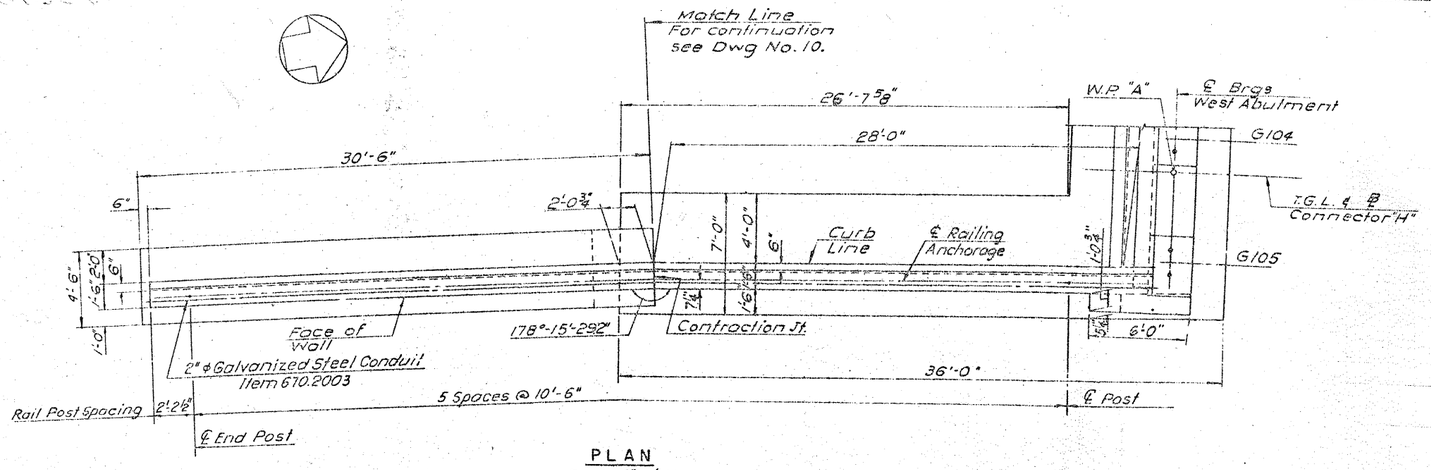
Prepared and recommended: [illegible]
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

DWG. NO.	SCALE	DATE	
10	As noted	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

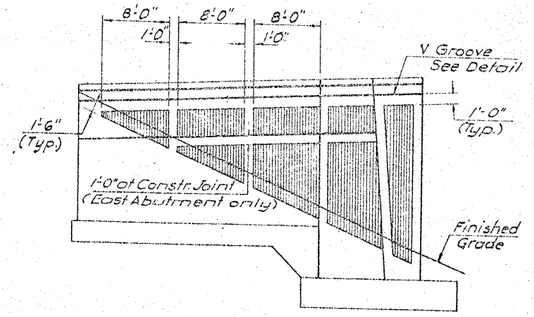
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	~~I-IG-481-2(174)~~ I-UI-81-2(126)	266	571

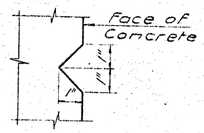
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



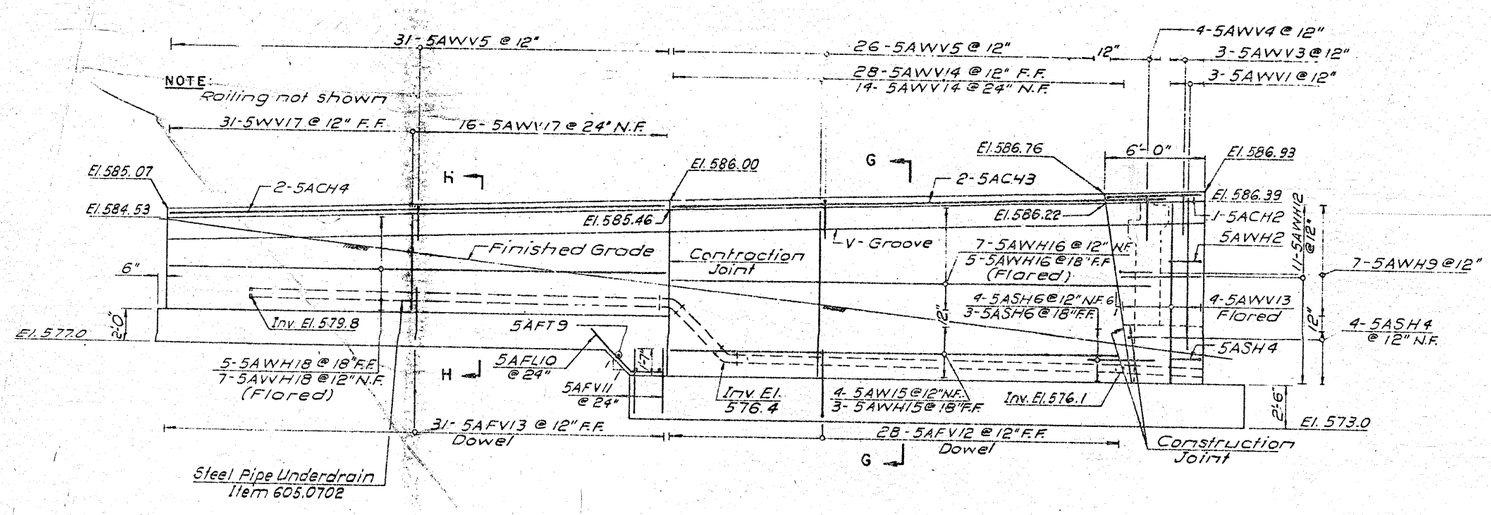
PLAN
Scale: 1/4" = 1'-0"



AESTHETIC TREATMENT AT WINGWALLS
Scale: 1/8" = 1'-0"



V GROOVE DETAIL
Scale: 3/8" = 1"



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

REFERENCES:

1. For Underdrain Plan, Flow Diagram and Additional References, see Dwg. No. 10.
2. For Bar List, see Dwg. No. 36.
3. For Aesthetic Treatment of Abutment, see Dwg. No. 10.
4. For Detail of Aesthetic Treatment, see Dwg. No. 19.
5. For Sections G-G & H-H see Dwg. No. 12.

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
SOUTHWEST WINGWALL

Prepared and recommended
GOODKIND & O'DEA, INC.
Consulting Engineers
Date 12/1/75

DWG. NO.	SCALE	DATE	
11	As noted	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

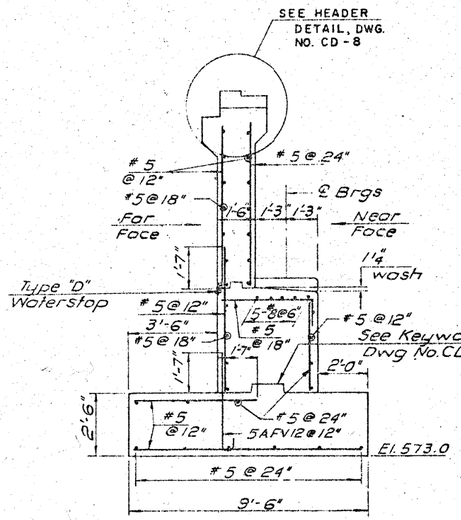
Detailed by A. Centofanti
Detail Checked by

1069090

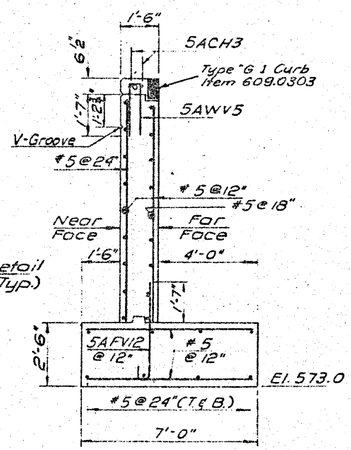
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IQ-481-2(74) I-UI-81-2(128)	267	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE – JAMESVILLE
ONONDAGA COUNTY

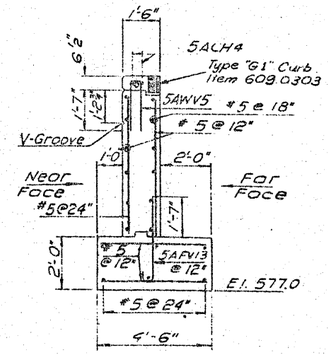


SECTION E-E
Scale: 3/8" = 1'-0"

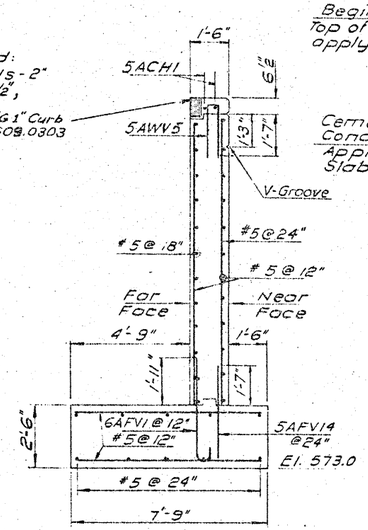


SECTION G-G
Scale: 3/8" = 1'-0"

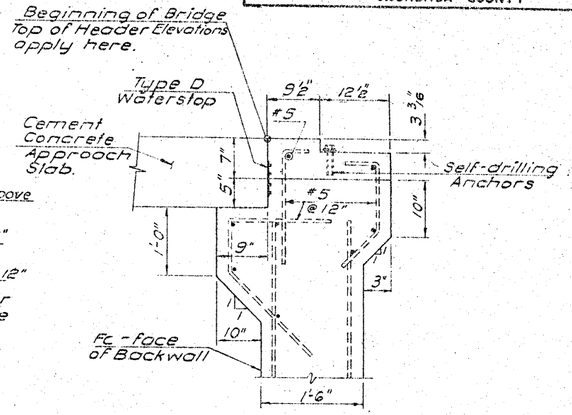
NOTE:
The following cover shall be used:
For Face Walls - 2", Near Face Walls - 2" except at Aesthetic Treatment - 3½", Footings - 3".



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

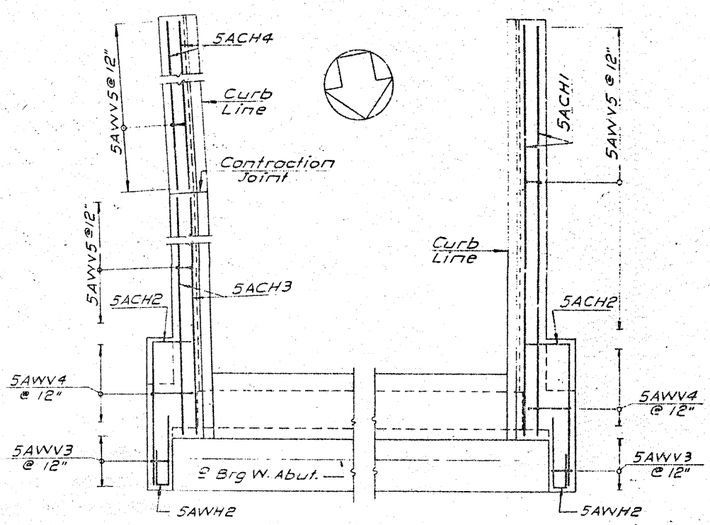


SECTION F-F
Scale: 3/8" = 1'-0"

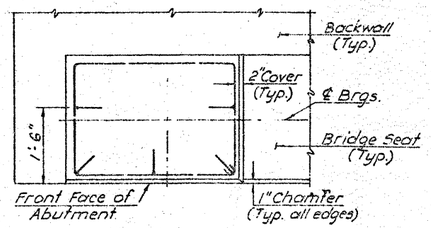


HEADER DETAIL
Scale: 1" = 1'-0"

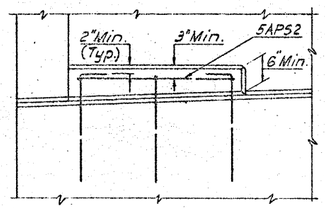
NOTE:
For design purposes, the Maximum Bearing Pressure for the Abutment and Walls does not exceed 2.5 Tons per square foot.



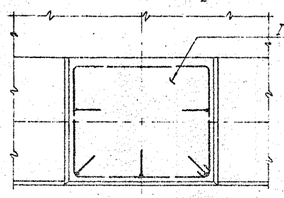
SAFETY WALK REINFORCING PLAN
Scale: 3/8" = 1'-0"



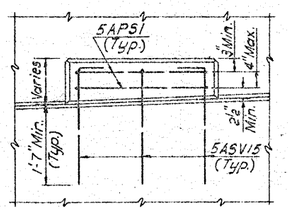
PLAN



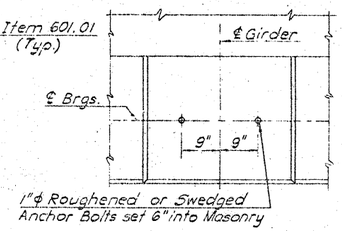
ELEVATION
FASCIA PEDESTAL
Scale: 3/4" = 1'-0"



PLAN



ELEVATION
INTERIOR PEDESTAL
Scale: 3/4" = 1'-0"



ANCHOR BOLT LAYOUT
Scale: 3/4" = 1'-0"

REFERENCES:
1. For Abutment References, see Dwg. Nos. 10 & 11.
2. For Elastomeric Expansion Joint Details, see Dwg. No. CD-15.
3. For Abutment Footing Reinforcing, see Dwg. No. 13.
4. For Bar Lists, see Dwg. No. 36.

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
WEST ABUTMENT SECTIONS
AND REINFORCING DETAILS

Prepared and recommended
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

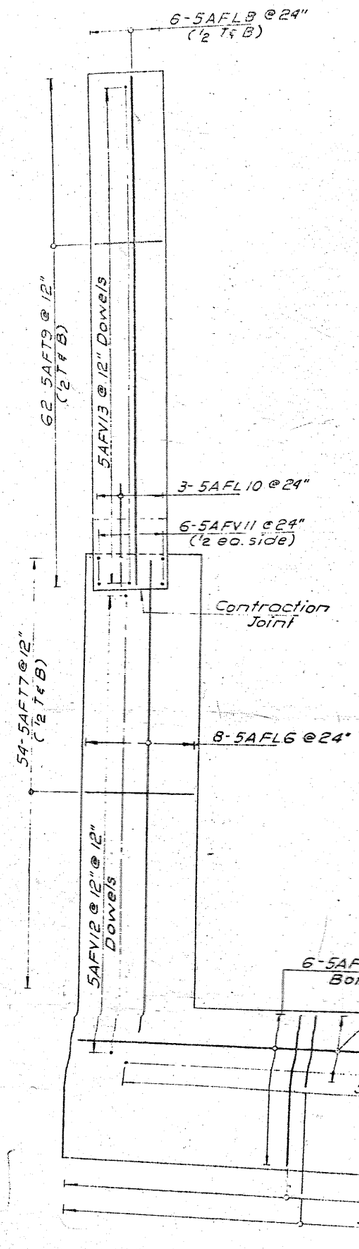
DWG. NO.	SCALE	DATE	
12	As noted	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

In Charge of
Designed by H. Wolstine
Design Checked by J. A. Glass
Detailed by A. Cerrato
Detail Checked by L. V.

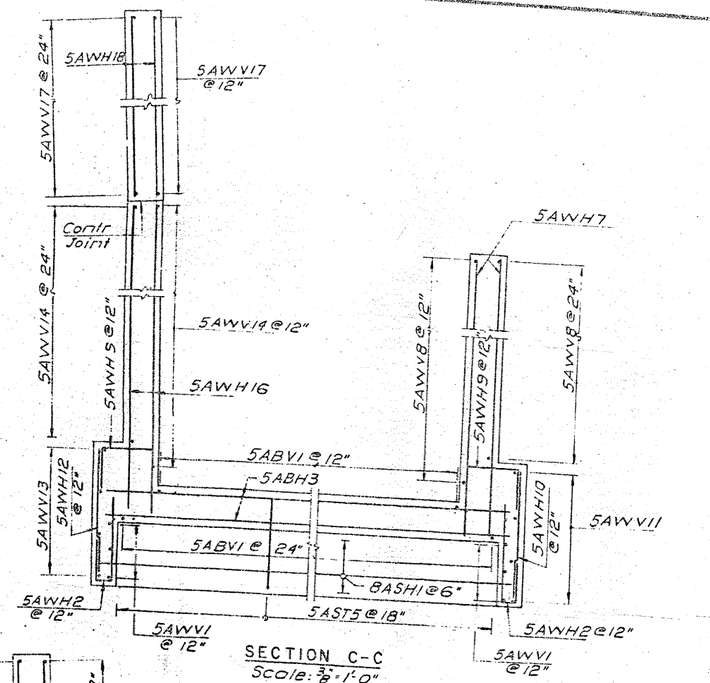
FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N. Y.	I-IG-081-2(74) I-UI-81-2(28)	268	571

D85042

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



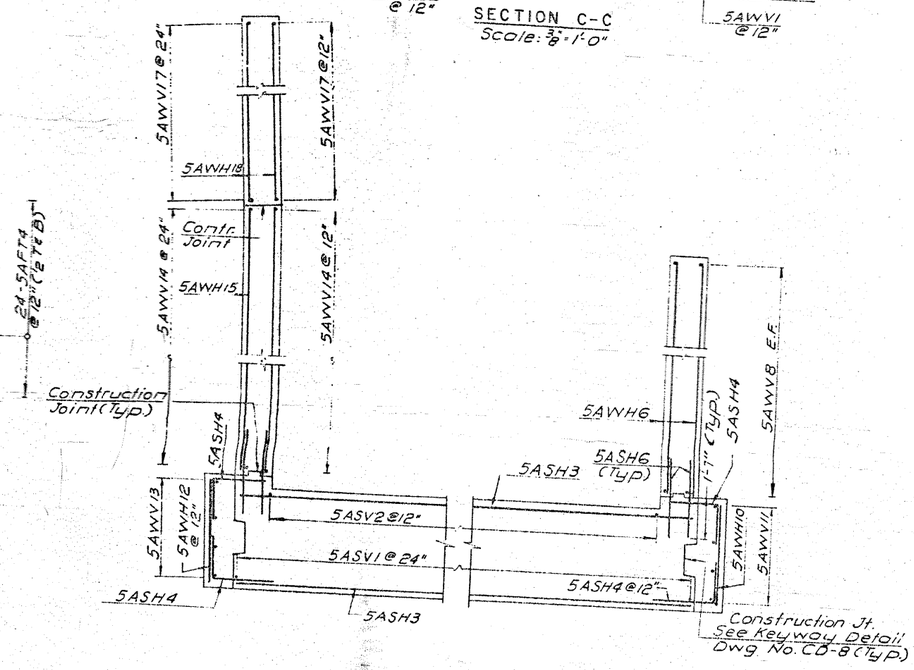
FOOTING REINFORCING PLAN
Scale: 1/4" = 1'-0"



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

CONCRETE POUR TABLE (C.Y.)		
POUR	ITEM 601.01	ITEM 601.02
Footing	—	68.97
Abutment Stem	—	60.70
Backwall, Wingwalls	—	15.47
Pedestals	1.06	—
Abutment Header	0.92	—
N.W. Safety Walk	0.39	—
S.W. Safety Walk	1.30	—

NOTE:
The quantity of Cheekwall Concrete is included in the Backwall and upper Wingwall pour.



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

REFERENCES:
For Abutment References, see Dwg. Nos. 10 & 11.

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
WEST ABUTMENT FOOTING
AND STEM REINFORCING DETAILS

Prepared and recommended
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

DWG. NO.	SCALE	DATE	
13	As noted	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

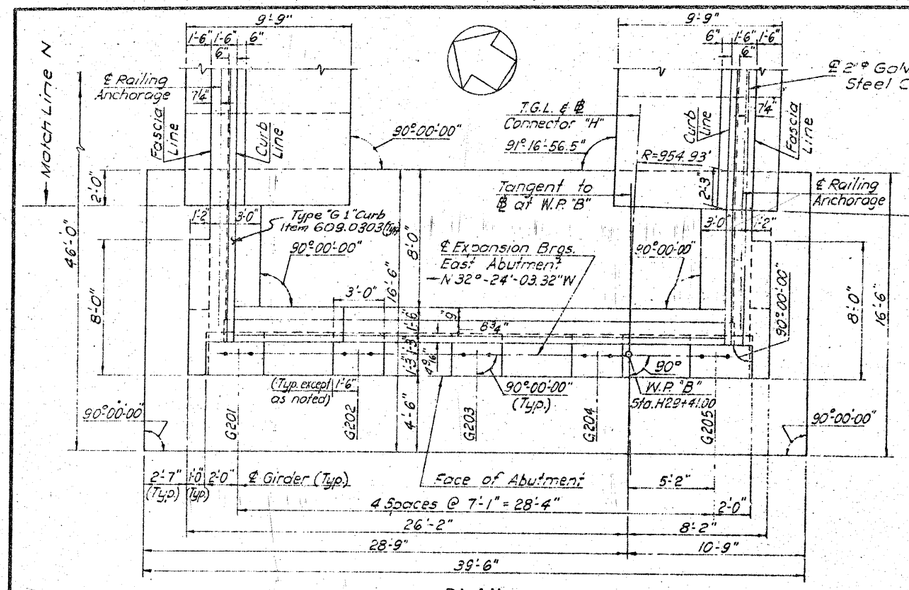
Drawn by
Detail Checked by

1069096

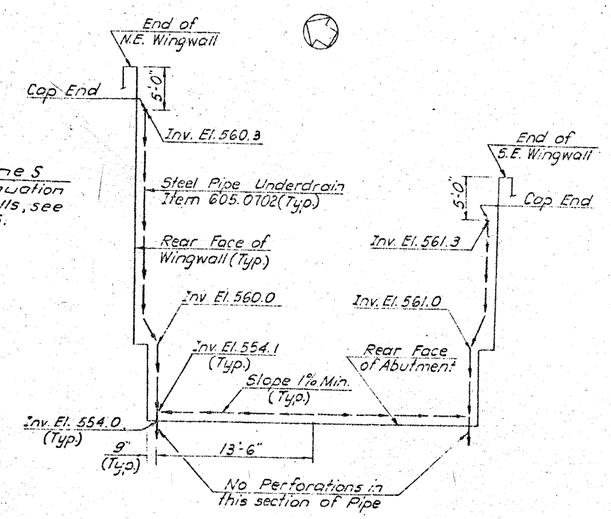
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	~~I-IC-4ST-2(74)~~ I-VI-8J-2(128)	268	571

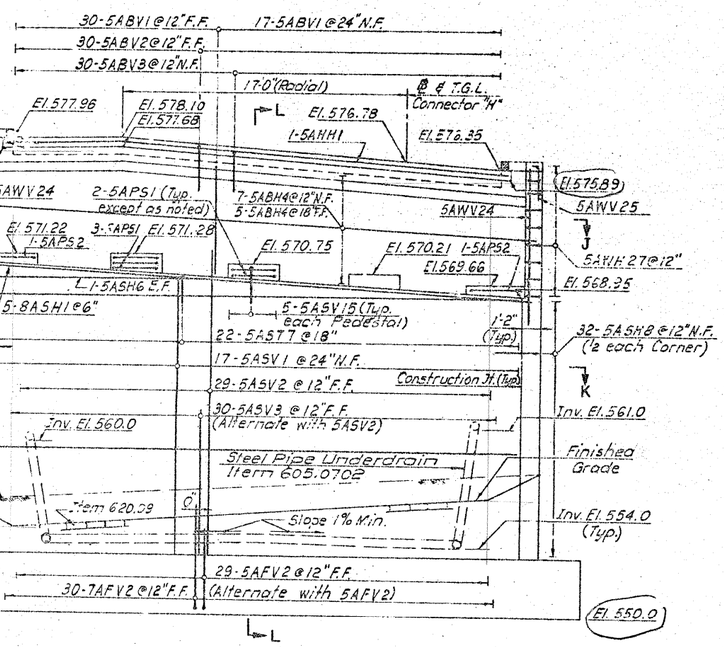
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



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



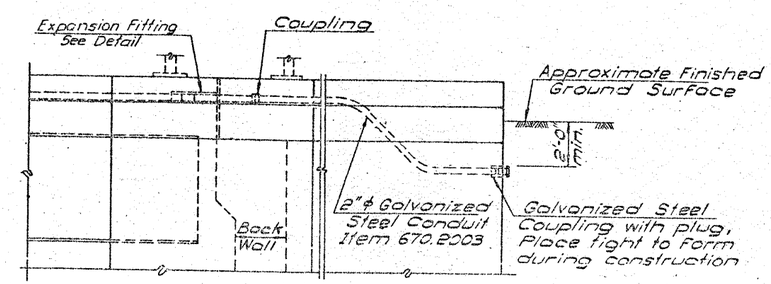
UNDERDRAIN PLAN AND FLOW DIAGRAM
Not to Scale



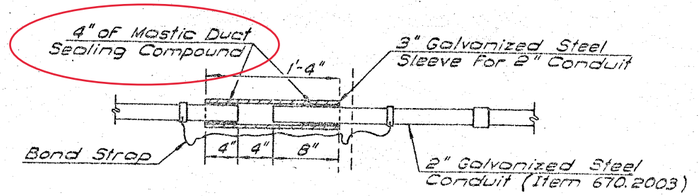
ELEVATION
Scale: 1/4" = 1'-0"

577.53
+575.89
1153.42
576.71
2 | 1153.42

576.71 AVE
- 550.00
26.71



ELEVATION AT ABUTMENT
Not to Scale



EXPANSION FITTING DETAIL
Scale: 1 1/2" = 1'-0"

NOTE:
Bond Strap for 2" Conduit .375" x .05 Soft Copper Strip or #6 A.G.W.G. Copper equivalent attached by clamp, exothermic weld or wrapped securely and soldered. Cost of galvanized steel sleeve, sealing compound and ground connector to be included in the unit price bid for conduit.

REFERENCES:
1. For Working Point Layout, see Dwg. No. 5.
2. For Beginning and End of Bridge Stations, see Dwg. Nos. 1 & 2.
3. For Approach Slab Details, see Dwg. No. 34.
4. For Details of Bearings and Anchor Bolts, see Dwg. No. 26.
5. For Rail Post Spacing, see Dwg. No. 35.
6. For Details of Pay Limits, Keyways, Waterstop, Top of Wingwall and Granite Curb, see Dwg. No. CD-8.
7. For Reinforcement Quantities in Specific Pours, see Bar Lists Dwg. No. 37.
8. For General Substructure Notes, see Dwg. No. CD-1.
9. For East Abutment Plan and Reinforcing Sections, see Dwg. No. 17.
10. For Additional East Abutment Details, see Dwg. No. 15.
11. For Anchor Bolt Layout and Pedestal Details, see Dwg. No. 12.
12. For Concrete Item Numbers and Quantities in Specific Pours, see Dwg. No. 17.
13. For Aesthetic Treatment of Abutment, see Dwg. No. 10.
14. For Sections J-J and K-K, see Dwg. No. 17. For Section L-L, see Dwg. No. 16.

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
EAST ABUTMENT

In Charge of: [illegible]
Designed by: S. D. Crosbell
Design Checked by: H. H. Valentine
Detailed by: L. Volkoff
Detail Checked by: [illegible]

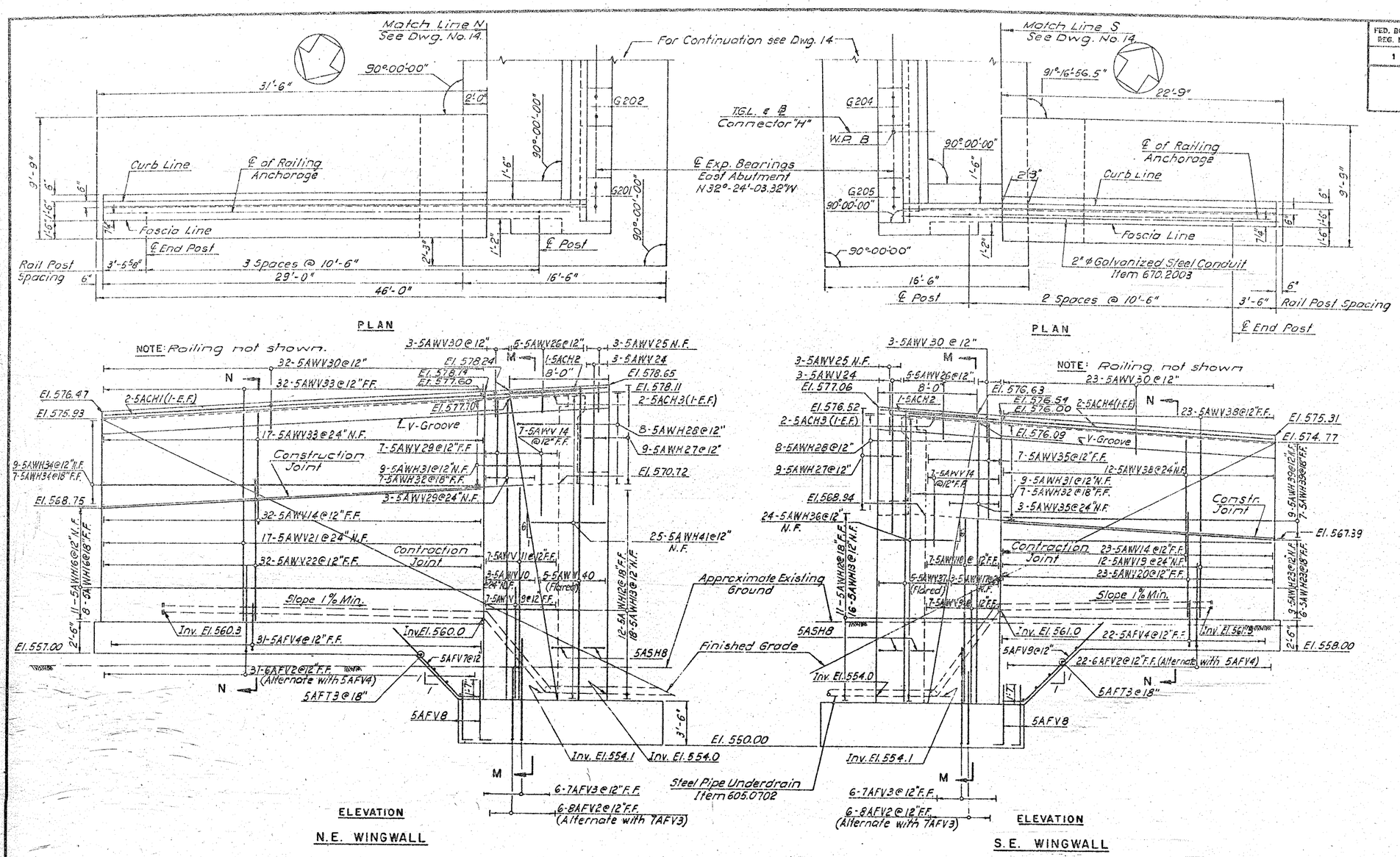
Prepared and recommended: [illegible]
GOODKIND & O'DEA, INC.
Consulting Engineers
Date 12/1/75

DWG. NO.	SCALE	DATE	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS
14	As noted	Nov. 1975	

D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IU-481-2(174) I-III-81-2(128)	270	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



REFERENCES:

1. For Footing Reinforcing Details, see Dwg. No. 17.
2. For Underdrain Plan and Flow Diagram, see Dwg. No. 14.
3. For Wall Sections, see Dwg. No. 16.
4. For Additional Abutment References, see Dwg. No. 14.
5. For Aesthetic Treatment of Wingwalls, see Dwg. No. 11.

BRIDGE NO. 1

CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
EAST ABUTMENT WINGWALLS

Prepared and recommended
GOODKIND & O'DEA, INC.
Consulting Engineers
Date 12/1/75

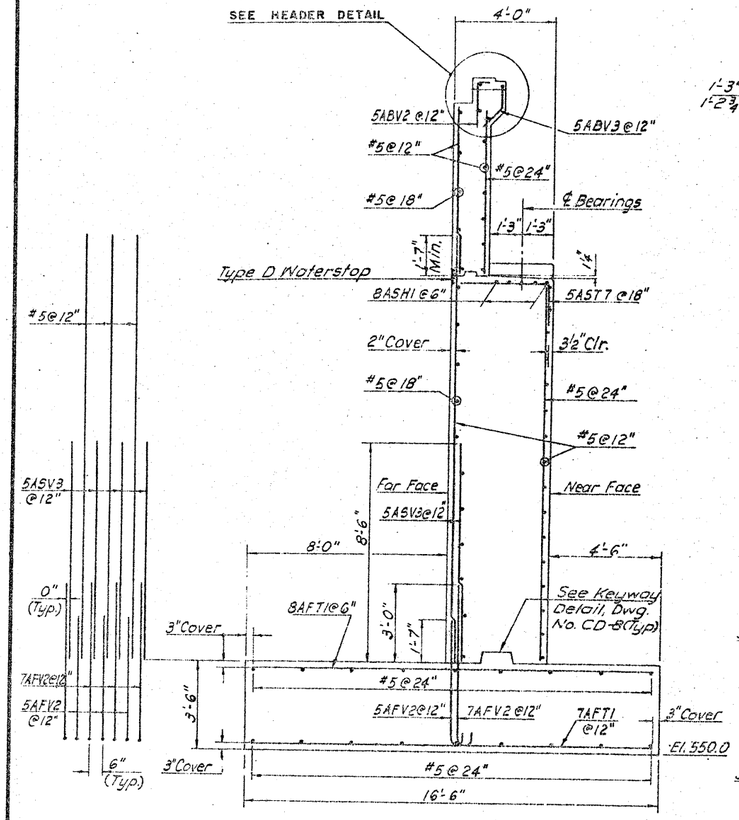
DWG. NO.	SCALE	DATE	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS
15	1/4"=1'-0"	Nov. 1975	

1069090

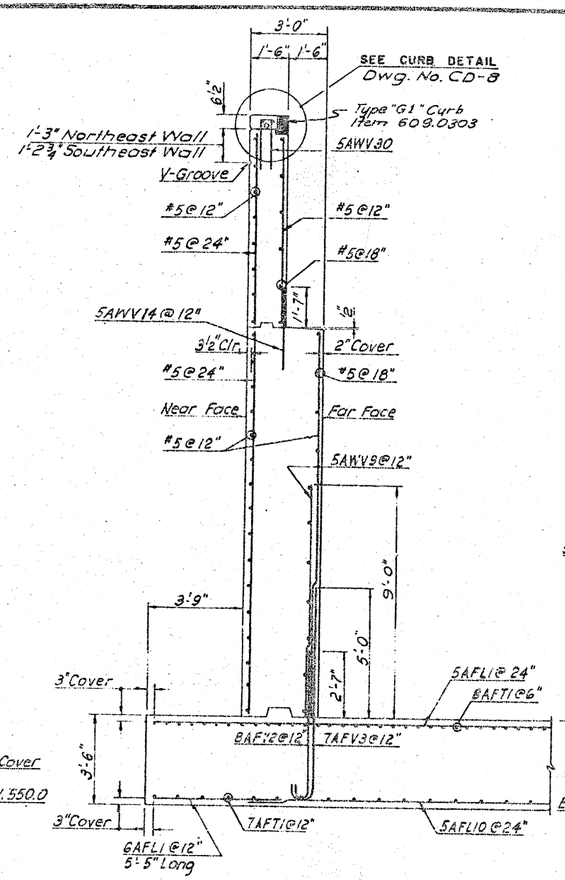
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(74) I-VI-81-2(128)	271	571

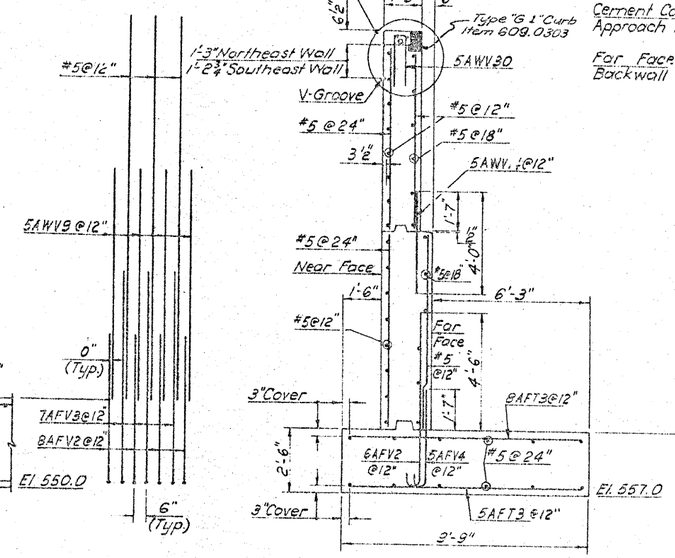
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



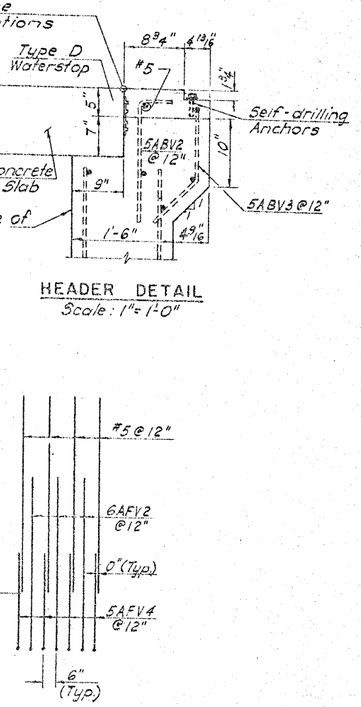
SECTION L-L
Scale: 3/8" = 1'-0"



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



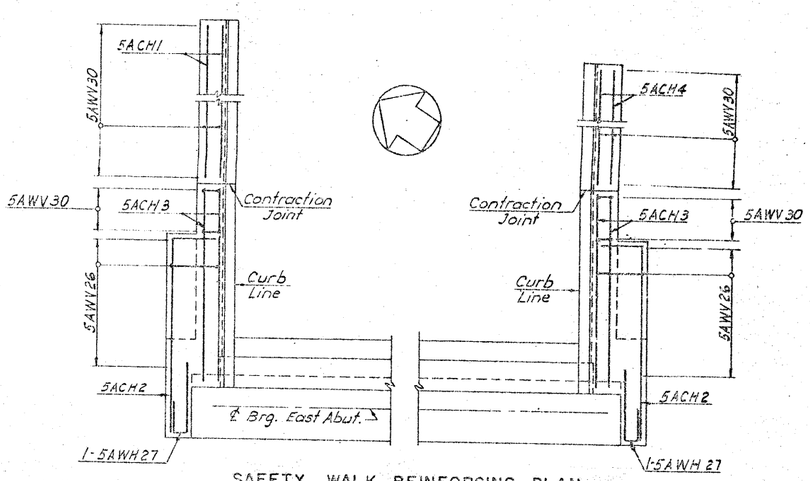
SECTION N-N
Scale: 3/8" = 1'-0"



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

NOTE:
For design purposes, the maximum Bearing Pressure for the Abutment and Walls does not exceed 2.5 Tons per square foot.

REFERENCES:
1. For Additional Abutment References, see Dwg. Nos. 14 & 15.
2. For Elastomeric Joint Details, see Dwg. No. CD-15.
3. For Footing Reinforcing, see Dwg. No. 17.
4. For Bar Lists, see Dwg. No. 37.



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

In Charge of: H. W. Gentine
Designed by: H. W. Gentine
Design Checked by: W. Rugh
Detailed by: L. Yokoi
Detail Checked by: [illegible]

Prepared and recommended: [signature]
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

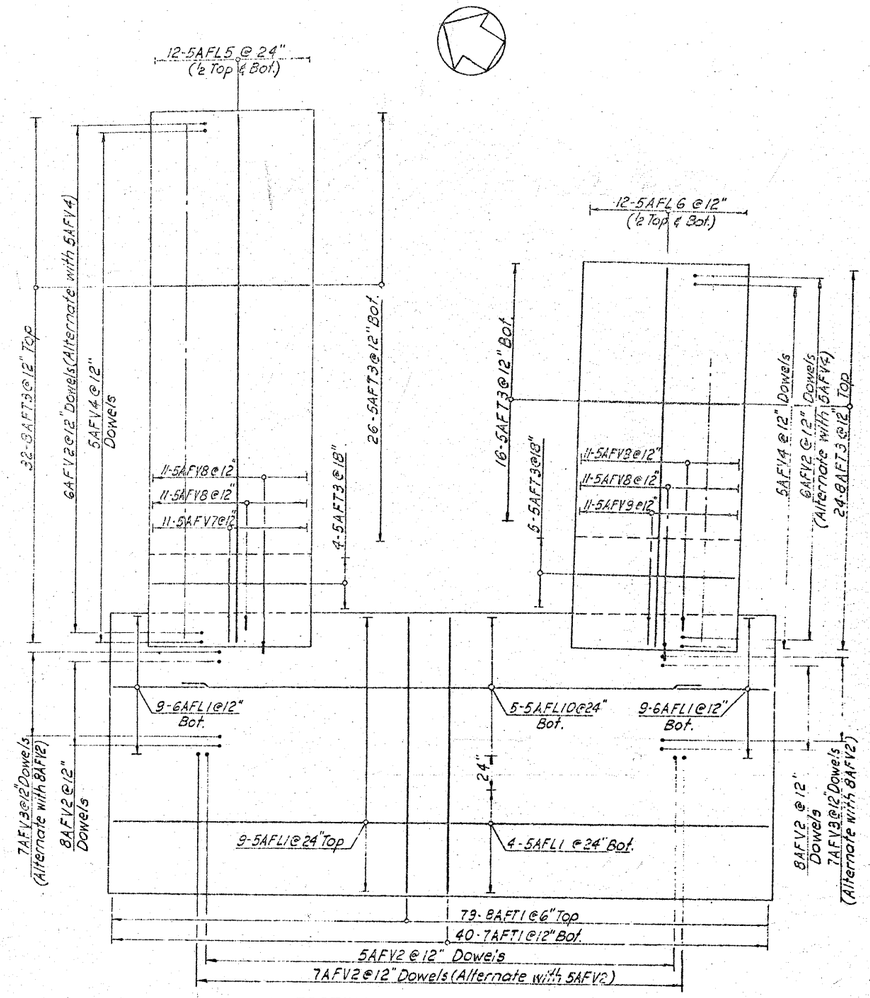
BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
EAST ABUTMENT SECTIONS
AND REINFORCING DETAILS

DWG. NO.	SCALE	DATE	
16	As noted	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

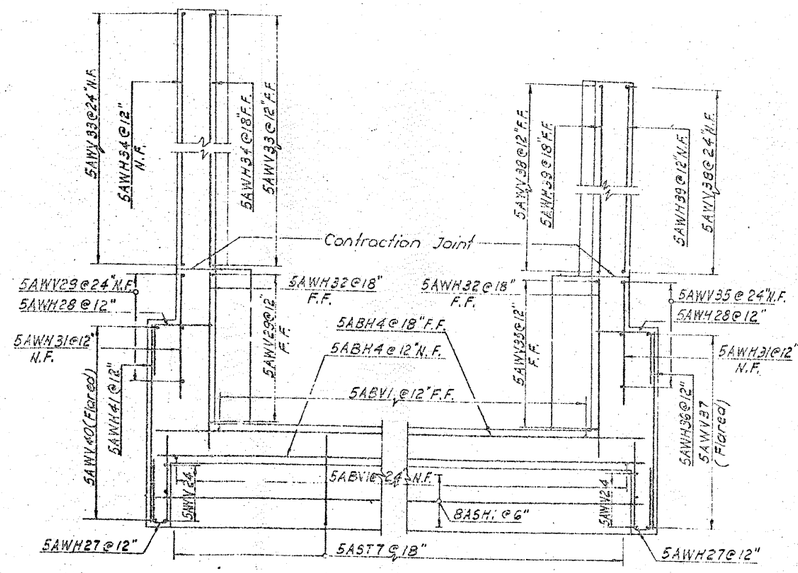
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-081-2(74) I-IU-81-2(128)	272	571

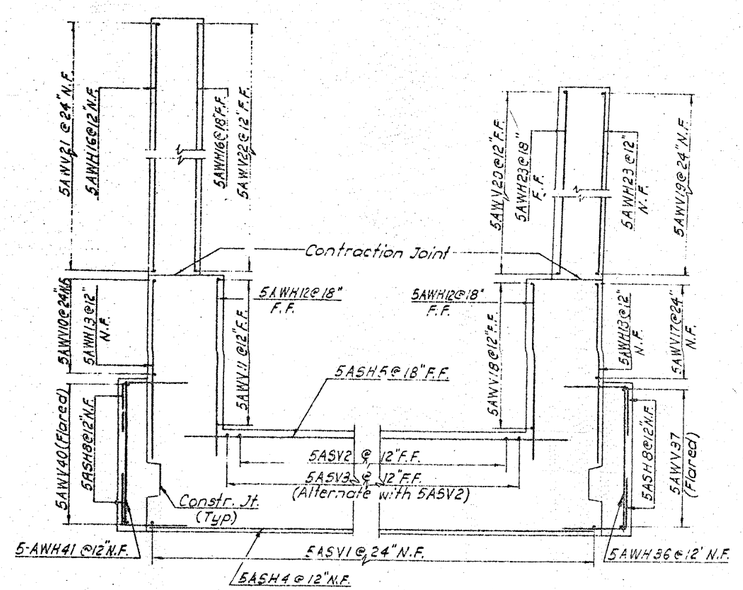
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



FOOTING REINFORCING PLAN
Scale: ¼" = 1'-0"



SECTION J-J
Scale: ⅜" = 1'-0"



SECTION K-K
Scale: ⅜" = 1'-0"

CONCRETE POUR TABLE (C.Y.)

POUR	ITEM 601.01	ITEM 601.02
Footing	---	146.72
Abutment & Wingwalls Stem	---	133.18
Backwall & Upper Wingwalls	---	64.07
Pedestals	1.06	---
Abutment Header	0.56	---
N.E. Safety Walk	0.85	---
S.E. Safety Walk	0.65	---

NOTE:
The quantity of Cheekwall Concrete is included in the Backwall and upper Wingwall pour.

REFERENCES:
1. For Additional Abutment References, see Dwg. No. 15.
2. For Bar Lists, see Dwg. No 37.

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
EAST ABUTMENT FOOTING
AND STEM REINFORCING DETAILS

Prepared and recommended
GOODKIND & O'DEA, INC.
Date 12/1/75
Consulting Engineers

DWG. NO.	SCALE	DATE	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS
17	As noted	Nov. 1975	

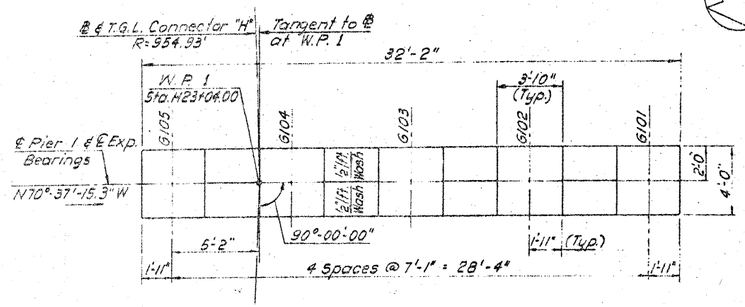
Design Checked by B. Tarbell
Detailed by L. Yokoyama
Detail Checked by [illegible]

1069090

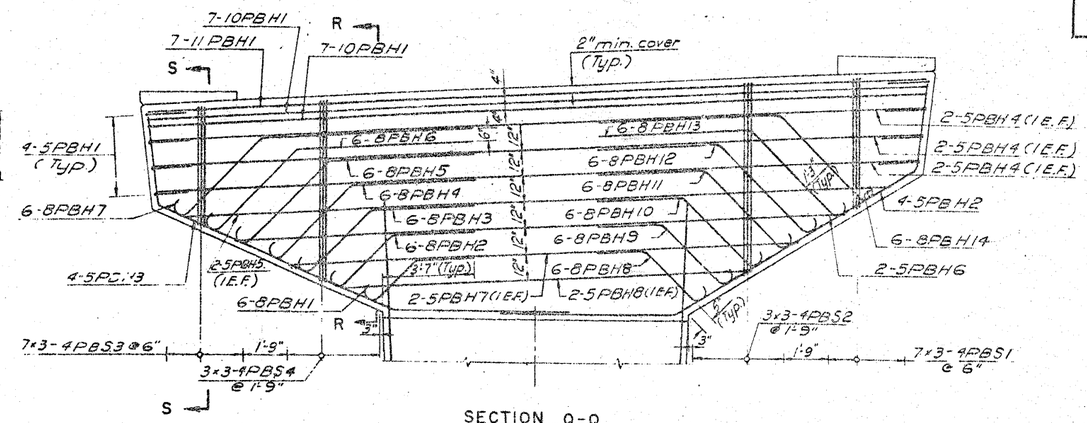
D095042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N. Y.	~~I-TO-481-2(79)~~ I-UI-81-2(129)	273	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

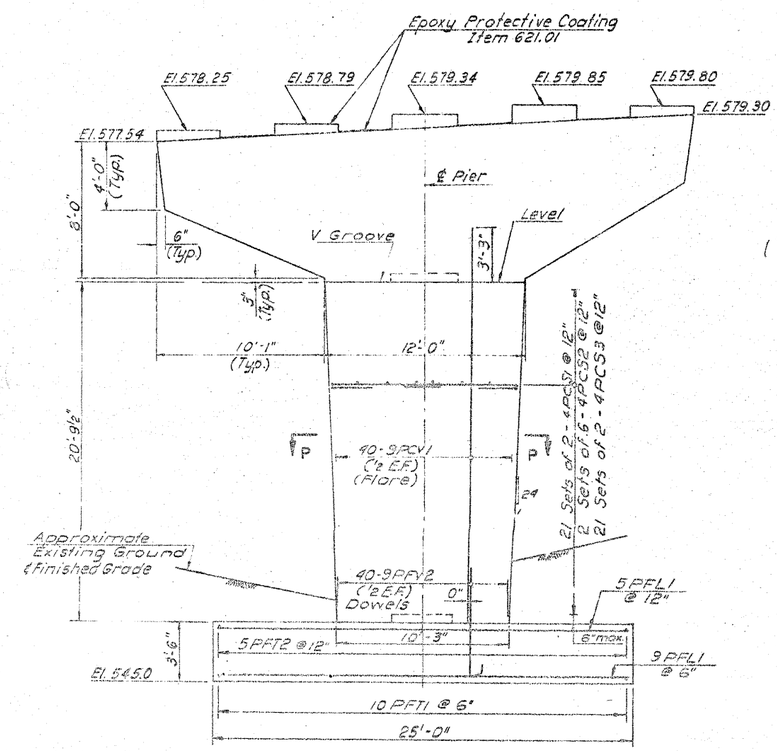


CAP PLAN
Scale: 1/4" = 1'-0"



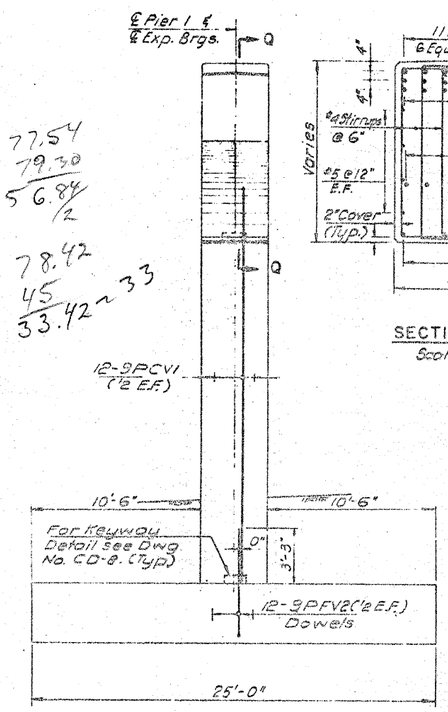
SECTION Q-Q
Scale: 3/8" = 1'-0"

CONCRETE POUR TABLE (CUBIC YARDS)		
POUR	ITEM 601.01	ITEM 601.02
Footing	———	81.10
Column	34.28	———
Cap	35.27	———
Pedestals	2.25	———

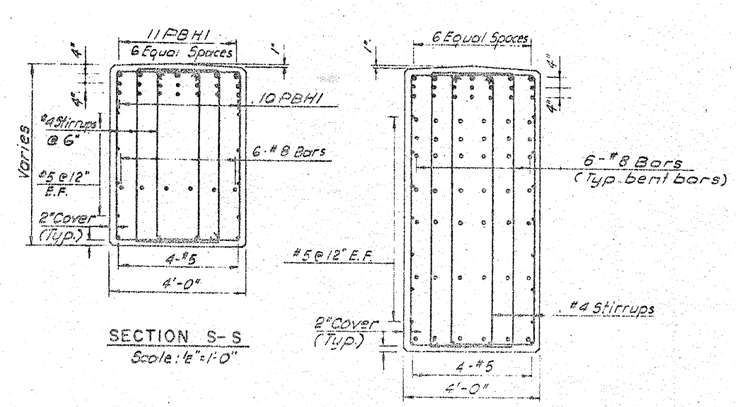


ELEVATION
Scale: 1/4" = 1'-0"
(Looking in Direction of Travel)

77.54
79.30
156.84/2
78.42
45
33.42 ~ 33

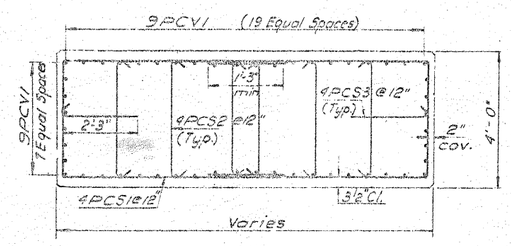


END ELEVATION
Scale: 1/4" = 1'-0"



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

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



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

REFERENCES:
1. For Working Point Layout, see Dwg. No. 5.
2. For General Substructure Notes, see Dwg. No. CD-1.
3. For Anchor Bolt Layout, Footing Plan, Pedestal Details and Pay Limits, see Dwg. No. 22.
4. For Details of Bearings and Anchor Bolts see Dwg. No. 26.
5. For Aesthetic Treatment of Piers see Dwg. No. 19.
6. For Bar List and Reinforcing in Specific Pours see Dwg. Nos 38 & 39

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
PIER 1

In Charge of [illegible]
Designed by [illegible]
Design Checked by [illegible]
Detailed by [illegible]
Detail Checked by [illegible]

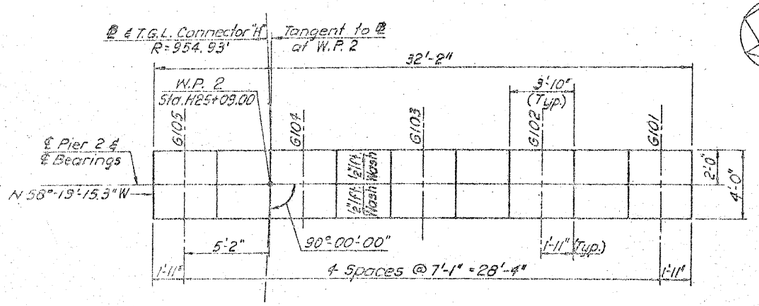
Prepared and recommended [signature]
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

DWG. NO.	SCALE	DATE	
18	As noted	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

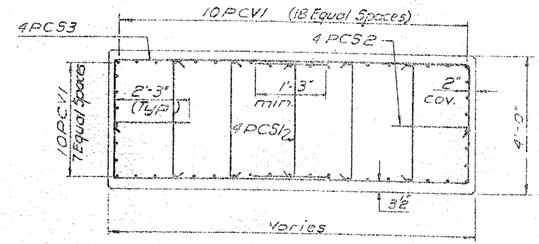
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(74) I-VI-81-2(28)	274	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

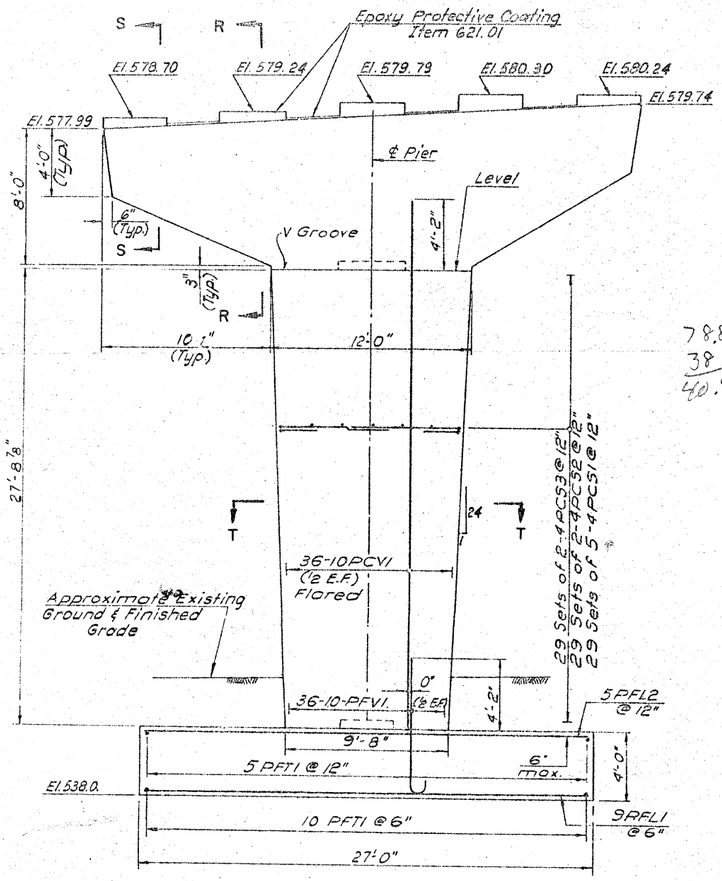


CAP PLAN
Scale: 1/4" = 1'-0"



SECTION T-T
Scale: 1/2" = 1'-0"

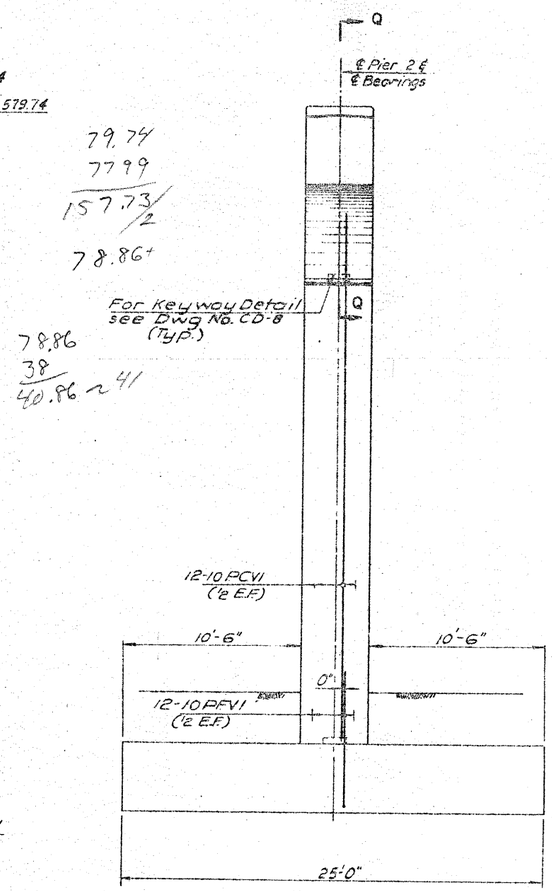
CONCRETE POUR TABLE (CUBIC YARDS)		
POUR	ITEM 601.01	ITEM 601.02
Footing	—	100.07
Column	44.54	—
Cap	35.27	—
Pedestals	22.5	—



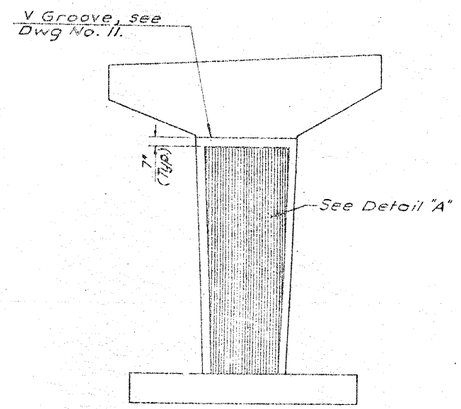
ELEVATION
Scale: 1/4" = 1'-0"
(Looking in Direction of Travel)

79.74
79.99
157.73/2
78.86+

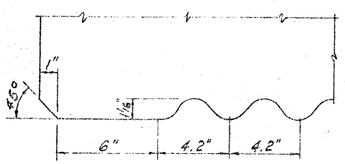
78.86
38
40.86 ≈ 41



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



AESTHETIC TREATMENT AT PIERS
Not to Scale



DETAIL "A"
Scale: 1" = 4"

REFERENCES:
1. For Additional References, see Dwg. No. 18.
2. For Bar Lists, see Dwg. No. 38
3. For Pier Cap Reinforcing and Sections Q-Q, R-R and S-S see Dwg. No. 18.

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
PIER 2

Proposed and recommended
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

DWG. NO.	SCALE	DATE	
19	As noted	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

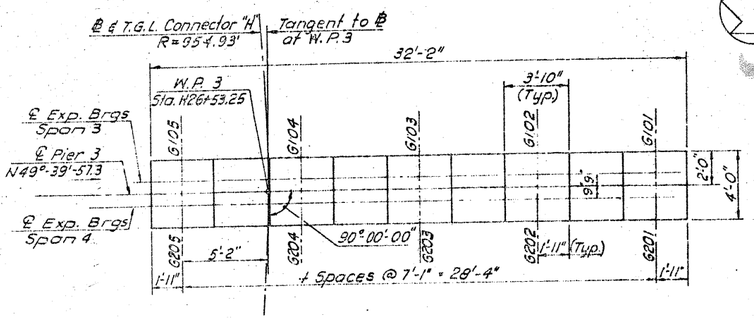
Design Checked by J.A. Wozzu
Detailed by L.V.A.
Detail Checked by [illegible]

1069090

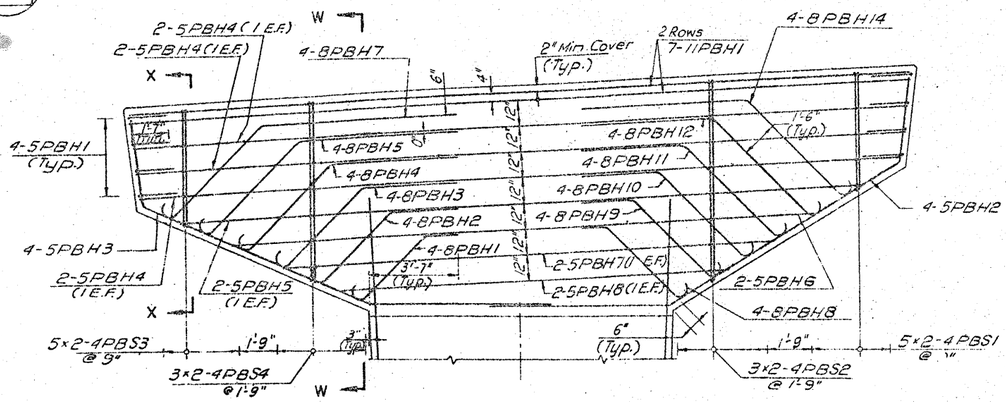
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IC-481-2(74) I-IU-81-2(126)	275	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

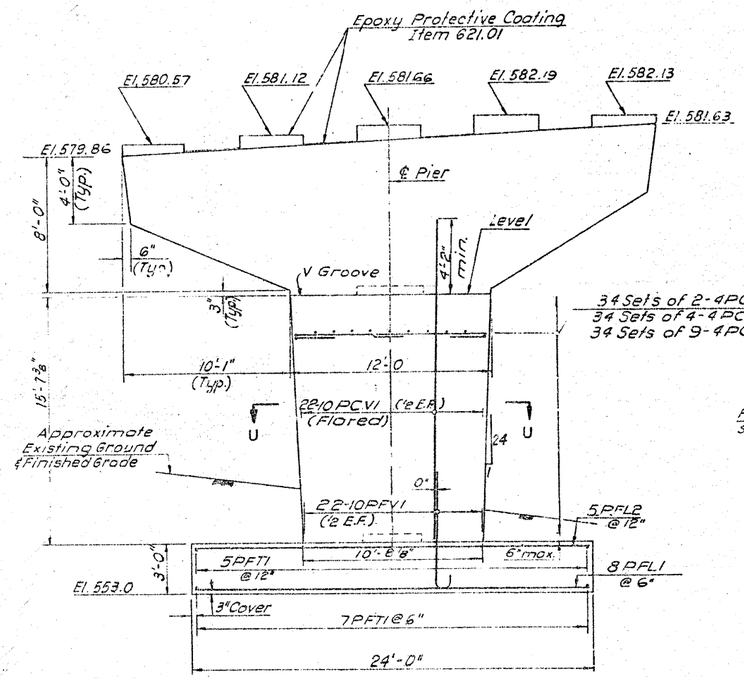


CAP PLAN
Scale: 4" = 1'-0"

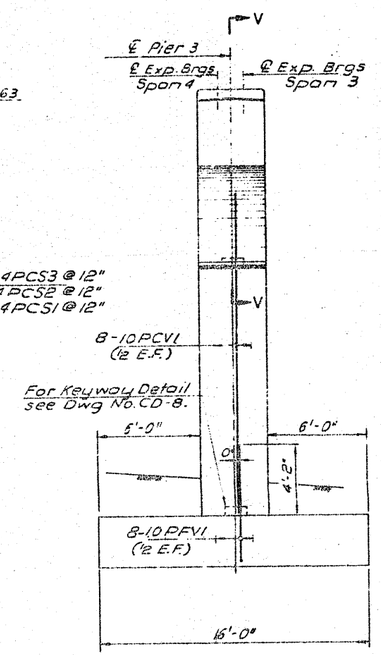


SECTION V-V
Scale: 3/8" = 1'-0"

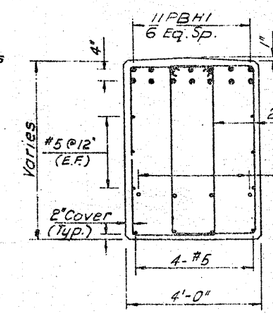
CONCRETE POUR TABLE (CUBIC YARDS)		
POUR	ITEM 601.01	ITEM 601.02
Footing	——	42.75
Column	26.23	——
Cap	35.27	——
Pedestals	2.25	——



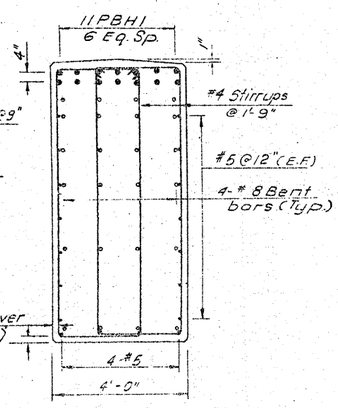
ELEVATION
Scale: 1/4" = 1'-0"
(Looking in Direction of Travel)



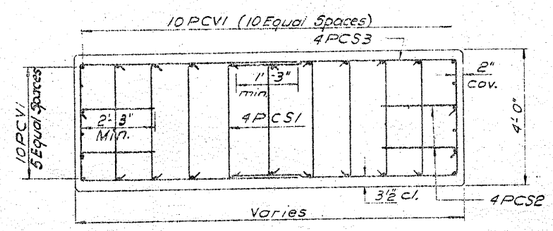
END ELEVATION
Scale: 1/4" = 1'-0"



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



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



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

REFERENCES:
1. For Additional References, see Dwg. No. 18.
2. For Bar Lists, see Dwg. No. 39.

79.86
81.13
160.99/2 = 80.49
53
27.49 ~ 27

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
PIER 3

In Charge of J. D. Gerstenberger
Designed by B. D. Tisbell
Design Checked by J. A. Glazy
Detailed by L. V. Kirk
Detail Checked by [illegible]

Prepared and recommended J. D. Gerstenberger
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

DWG. NO.	SCALE	DATE	
20	As noted	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

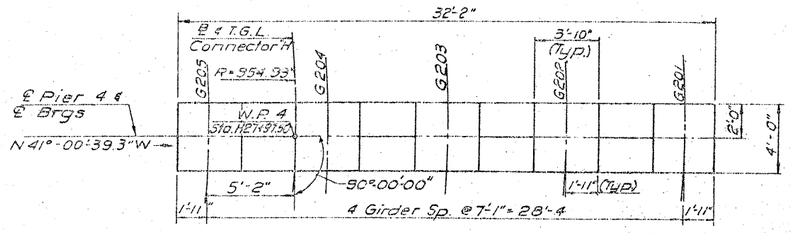
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(74) I-IG-81-2(126)	276	571

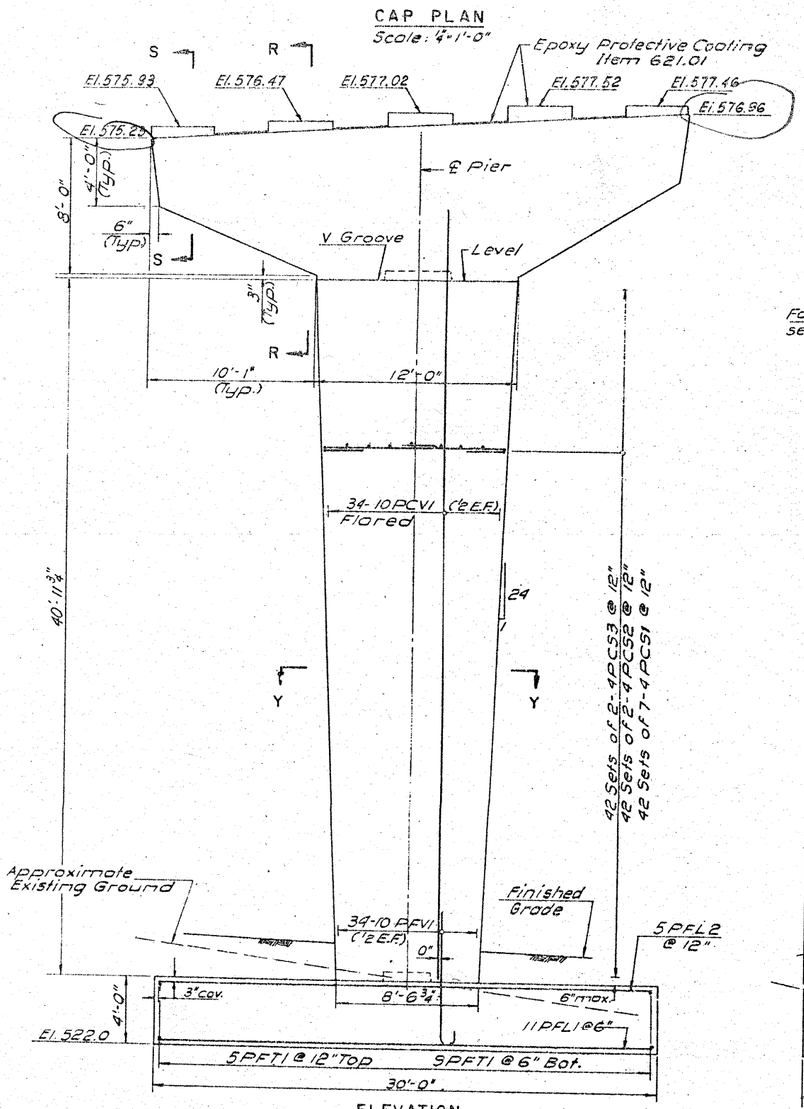
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

5 75.23
5 76.96
152.19/2

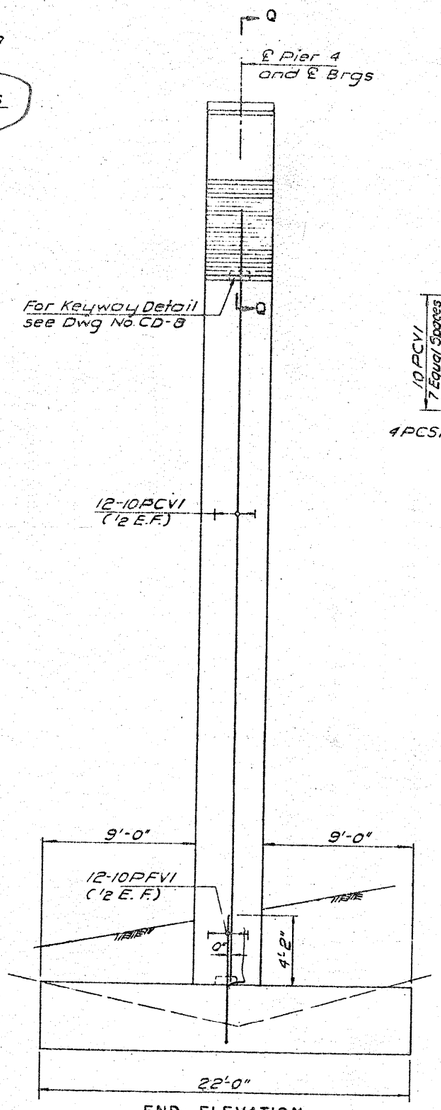
76.1
22.
54



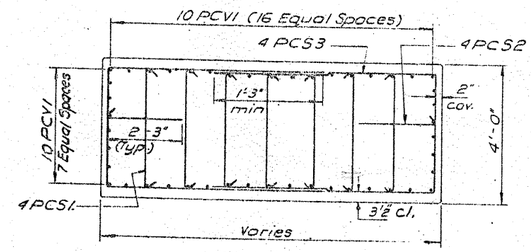
CAP PLAN
Scale: 1/4"=1'-0"



ELEVATION
Scale: 1/4"=1'-0"
(Looking in Direction of Travel)



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



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

CONCRETE POUR TABLE
(CUBIC YARDS)

POUR	ITEM 601.01	ITEM 601.02
Footing	—	97.84
Column	62.44	—
Cap	35.27	—
Pedestals	2.25	—

REFERENCES:

1. For Additional References see Dwg No. 18
2. For Bar Lists see Dwg No. 39.
3. For Pier Cap Reinforcing and Sections Q-Q, R-R and S-S see Dwg No. 18

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
PIER 4

Prepared and recommended
GOODKIND & O'DEA, INC.
Consulting Engineers
Date 12/1/75

DWG. NO.	SCALE	DATE	
21	As noted	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

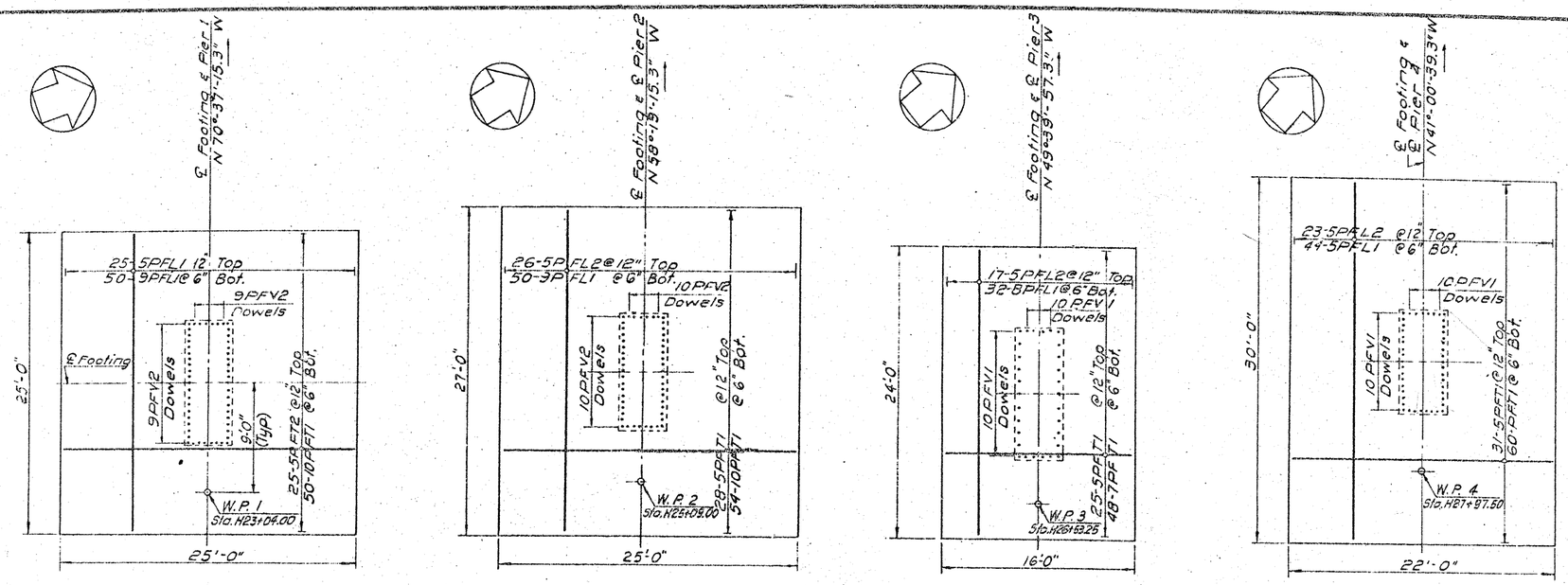
Design Checked by B.C. Frisbell
Detailed by A.C.E.L.V.
Detail Checked by

1069090

D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(74) I-III-81-2(126)	277	571

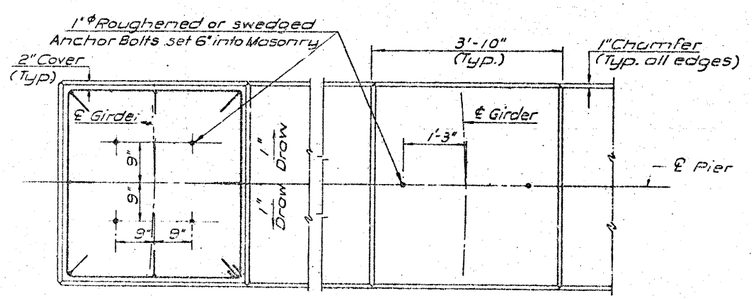
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



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

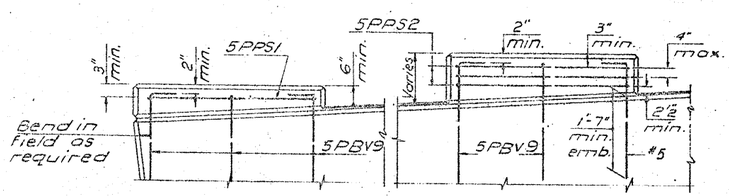
NOTE:
For design purposes all Pier Footings are designed for a maximum allowable bearing pressure of 2.5 tons per square foot.

REFERENCES:
1. For Additional References, see Dwg. No. 18.
2. For Bar Lists, see Dwg. Nos. 38 & 39.



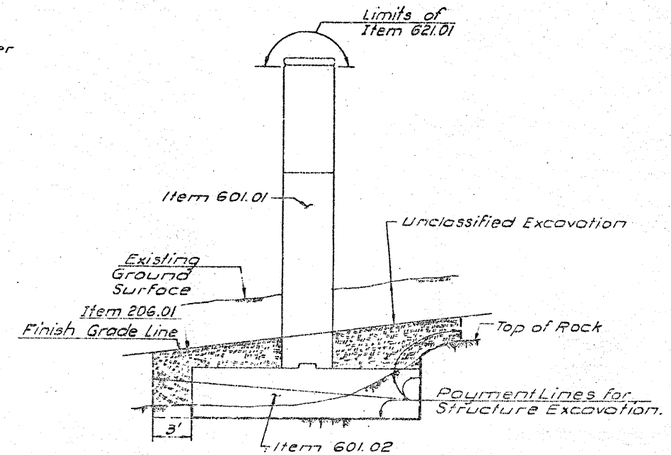
PIER 3 PIERS 1,2 & 4

PLAN AND ANCHOR BOLT LAYOUT
Scale: 3/4"=1'-0"



ELEVATION
FASCIA PEDESTAL
Scale: 3/4"=1'-0"

ELEVATION
INTERIOR PEDESTAL
Scale: 3/4"=1'-0"



PAY LIMITS
Not to Scale

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
PIER FOOTING REINFORCING
AND PEDESTAL DETAILS

Prepared and recommended D. Goodkind Date 12/1/75
GOODKIND & O'DEA, INC. Consulting Engineers

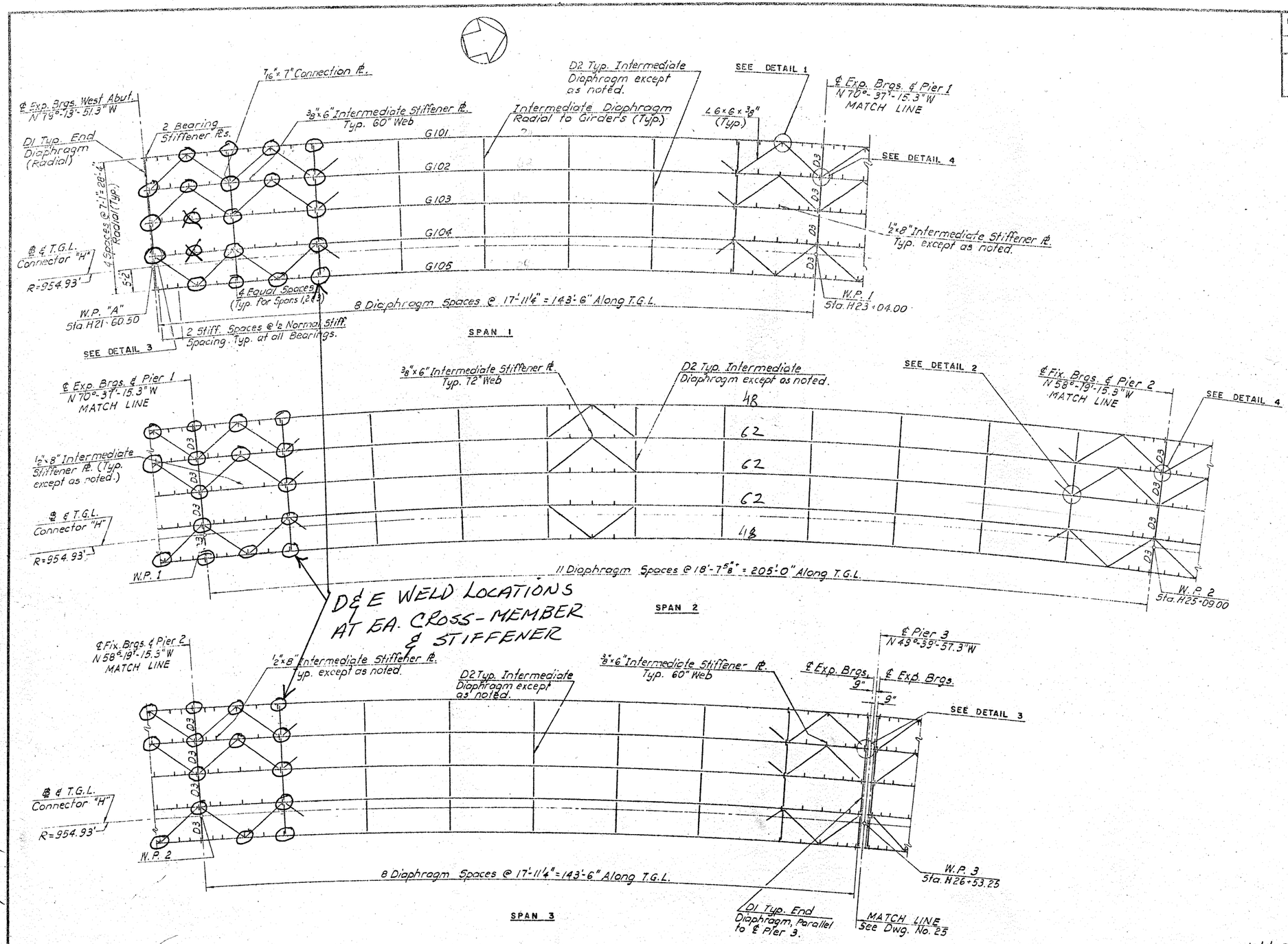
DWG. NO.	SCALE	DATE	
22	As noted	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

In Charge of H. Valentine
Designed by H. Valentine
Design Checked by R.D. Crissell
Detailed by A. Cerfeld & L.V.
Detail Checked by

D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IU-481-2(78) I-IU-81-2(128)	278	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



REFERENCES:

1. For Working Point Layout, see Dwg. No. 5.
2. For Anchor Bolt Layout, see Dwg. Nos. 12 & 22.
3. For Deck Cross Section, Fascia, Haunch, Curb and Lighting Details, see Dwg. No. 32.
4. For Diaphragm Details, see Dwg. No. 27.
5. For Bearing Details, see Dwg. No. 26.
6. For Field Splice Details, see Dwg. No. 28.
7. For Elastomeric Joint Details, see Dwgs. No. CD-14 & 15.
8. For Structural Steel Details, see Dwg. No. CD-9.
9. For General Superstructure Notes, see Dwg. Nos. CD-1 & CD-2.
10. For Additional Details, see Dwg. Nos. 24 & 25.
11. For Design Moments and Cambers, see Dwg. No. 29.
12. For Locations of Elastomeric Joints, see Dwg. No. 7.
13. For Details 1 through 4, see Dwg. No. 27.

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
FRAMING PLAN
SPANS 1, 2 & 3

Prepared and recommended
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

DWG. NO.	SCALE	DATE	
23	1"=10'	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

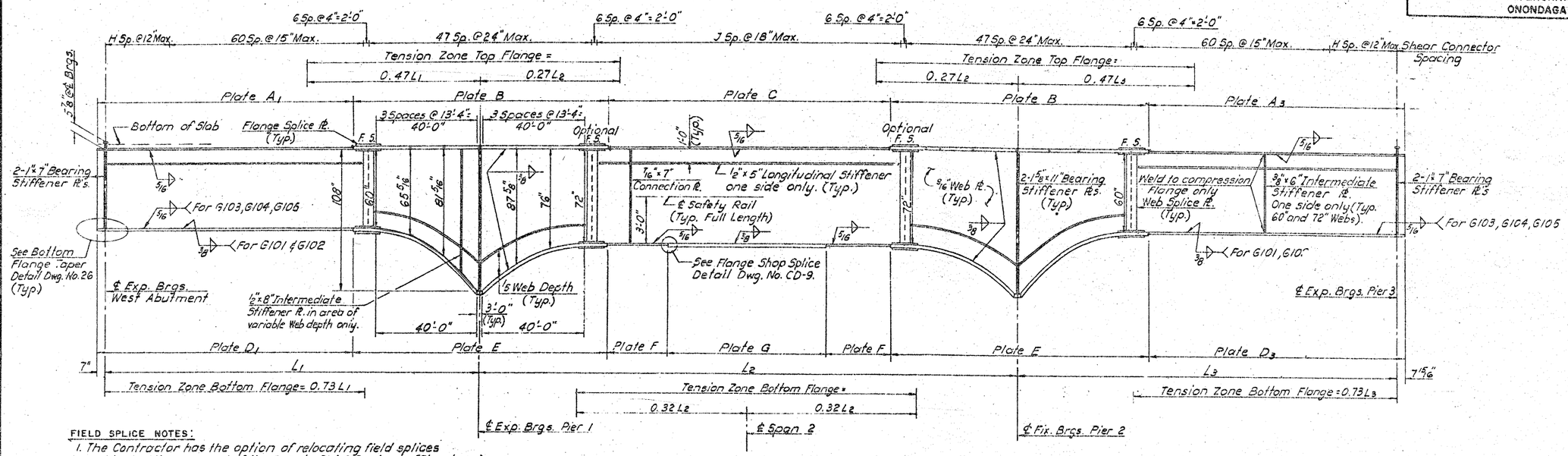
Design Checked by L. A. GIOZZA
Detailed by L. VOLKOFF
Detail Checked by

1069090

D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2 (74) I-UI-81-2 (126)	279	57

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



GIRDER ELEVATION
Not to Scale

FIELD SPLICE NOTES:

1. The Contractor has the option of relocating field splices subject to the approval of the Deputy Chief Engineer (Structures) as required by Article 102.4.4 of the New York State Steel Construction Manual.
2. There will be no payment made by the State for additional splice plat. ?. bolts, nuts, washers or any increase in thickness of webs or flanges made necessary by relocated or additional field splices requested by the contractor.

NOTES:

1. Girder Webs and Flanges, Stiffeners, Connection Pl's and Diaphragms shall conform to current A.S.T.M. Designation A36.
2. Symbol "F.S." indicates location of Field Splice.

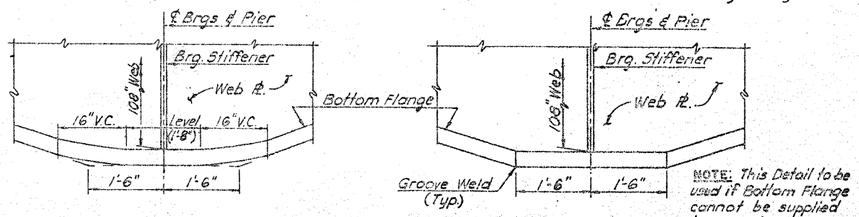
GIRDER SCHEDULE

MARK	SPAN LENGTHS C/C BEARINGS L1	L2	L3	RADIUS (FEET)	FLANGE PLATES A1 AND A3 SIZE	LENGTH	B SIZE	LENGTH	C SIZE	LENGTH	D1 AND D3 SIZE	LENGTH	E SIZE	LENGTH	F SIZE	LENGTH	G SIZE	LENGTH	SHEAR STUDS H	J	ADDITIONAL FLANGE LENGTHS A1 AND D1	A3 AND D3	C
G101	146'-11 3/4"	209'-11 5/8"	147'-0"	978.096	1 1/4" X 24"	*	2" X 24"	94'-0"	1 1/4" X 24"	*	1 1/2" X 24"	*	2" X 24"	94'-0"	1 1/4" X 24"	27'-6"	1 3/4" X 24"	60'-11 5/8"	20	79	100'-6 3/4"	100'-7 15/16"	115'-11 5/8"
G102	145'-11"	208'-5 3/8"	145'-11 1/8"	971.013	1 1/4" X 24"	*	2" X 24"	94'-0"	1 1/4" X 24"	*	1 1/2" X 24"	*	2" X 24"	94'-0"	1 1/4" X 24"	27'-6"	1 3/4" X 24"	59'-5 3/8"	19	79	99'-6"	99'-7 1/16"	114'-5 3/8"
G103	144'-10 1/4"	206'-11 1/8"	144'-10 3/8"	963.930	1" X 24"	*	1 5/8" X 24"	94'-0"	1" X 24"	*	1 1/4" X 24"	*	1 5/8" X 24"	94'-0"	1" X 24"	27'-6"	1 1/2" X 24"	57'-11 1/8"	18	77	98'-5 1/4"	98'-6" 5/16"	112'-11 1/8"
G104	143'-9 1/2"	205'-5"	143'-9 1/2"	956.846	1" X 24"	*	1 5/8" X 24"	94'-0"	1" X 24"	*	1 1/4" X 24"	*	1 5/8" X 24"	94'-0"	1" X 24"	26'-6"	1 1/2" X 24"	56'-5" 58'-5"	17	77	97'-4 1/2"	97'-5 7/16"	111'-5"
G105	142'-8 5/8"	203'-10 3/4"	142'-8 5/8"	949.763	1" X 24"	*	1 5/8" X 24"	94'-0"	1" X 24"	*	1 1/4" X 24"	*	1 5/8" X 24"	94'-0"	1" X 24"	26'-6"	1 1/2" X 24"	56'-10 3/4"	16	75	96'-3 5/8"	96'-4 9/16"	109'-10 3/4"

* See Additional Flange Lengths Table.

REFERENCES:

1. For References, see Dwg. No. 23.



NOTE: This Detail to be used if Bottom Flange cannot be supplied in one piece.

DETAILS OF BOTTOM FLANGE AT GIRDER HAUNCHES
Scale: ¾" = 1'-0"

NOTES:

THE CURVATURE SHOWN ON THE FLANGE, AS DETAILED, MAY BE OBTAINED BY BENDING THE FLANGE WHILE AT A TEMPERATURE OF BETWEEN 1000° F. AND 1200° F. HEATING SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF THE NEW YORK STATE SPECIFICATION FOR HEAT-CURVING AND CAMBERING OF ROLLED BEAMS AND WELDED PLATE GIRDERS. APPROPRIATE ADJUSTMENT TO THE DEPTH OF THE WEB MUST BE MADE.

AFTER BENDING THE FLANGE TO THE REQUIRED CURVATURE, THE CONTRACTOR SHALL INSPECT ALL SURFACES NEAR THE BENDS FOR INDICATIONS OF CRACKING BY THE MAGNETIC PARTICLE METHOD. THE COST FOR THE MAGNETIC PARTICLE INSPECTION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE STEEL.

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
GIRDER DETAILS SPANS 1, 2 & 3

Prepared and recommended
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

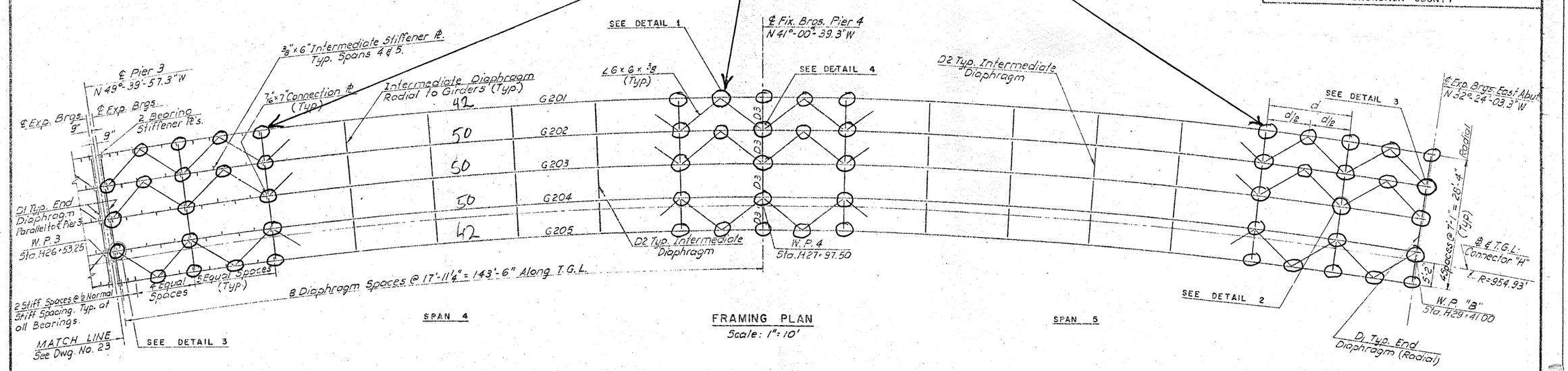
DWG. NO.	SCALE	DATE	
24	As noted	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

D95042

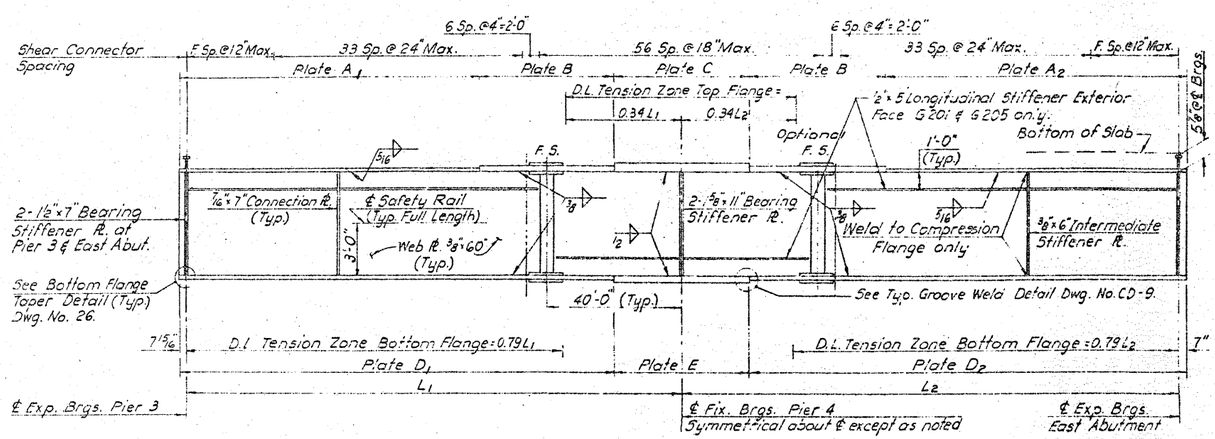
FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IUI-4ST-2(74) I-UI-81-2(126)	280	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

D & E WELD LOCATIONS AT EA. CROSS-MEMBER & STIFFENER

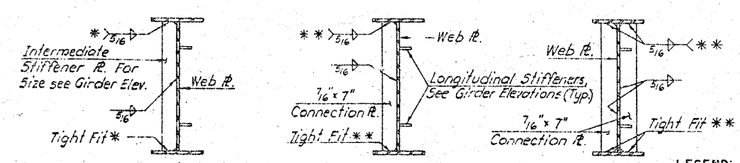


FRAMING PLAN
Scale: 1" = 10'



GIRDER ELEVATION
Not to Scale

NOTES:
1. Girder Webs and Flanges, Stiffeners, Connection Plates and Diaphragms shall conform to current ASTM Designation A-36.
2. Symbol "F.S." indicates location of Field Splice.

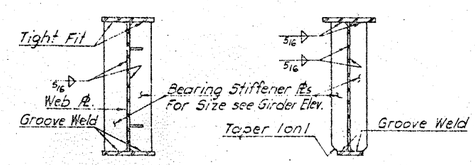


INTERMEDIATE STIFFENER

FASCIA CONNECTION PLATES

INTERIOR CONNECTION PLATES

LEGEND:
* - Tight Fit in Tension Zone; Weld in Compression Zone. See Girder Elevations for limits of Tension Zones.
** - See Superstructure Notes 3 & 4, Dwg. No. CD-1.



BEARING STIFFENERS AT PIERS 1, 2 & 4

BEARING STIFFENERS AT ABUTMENTS AND PIER 3

GIRDER SECTIONS
Not to Scale

REFERENCES:
1. For Additional References, see Dwg. No. 23.
2. For Details 1 through 4, see Dwg. No. 27.
3. For Field Splice Notes, see Dwg. No. 24

GIRDER SCHEDULE

MARK	SPAN LENGTH C/C BEARINGS L1	SPAN LENGTH C/C BEARINGS L2	RADIUS (FEET)	PLATE A SIZE	PLATE A A1	PLATE A A2	PLATE B SIZE	PLATE B LENGTH	PLATE C SIZE	PLATE C LENGTH	PLATE D SIZE	PLATE D D1	PLATE D D2	PLATE E SIZE	PLATE E LENGTH	SHEAR STUDS F
G201	147'-0"	146'-11 3/4"	978.096	1 1/8" x 24"	87'-7 15/16"	87'-6 3/4"	1 3/4" X 24"	40'-0"	3" X 24"	40'-0"	1 3/4" X 24"	127'-7 15/16"	127'-6 3/4"	3" x 24"	40'-0"	37
G202	145'-11 1/8"	145'-11"	971.013	1 1/8" x 24"	86'-7 1/16"	86'-6"	1 3/4" X 24"	40'-0"	3" X 24"	40'-0"	1 3/4" X 24"	126'-7 1/16"	126'-6"	3" x 24"	40'-0"	36
G203	144'-10 3/8"	144'-10 1/4"	963.930	1" x 24"	85'-6 5/16"	85'-5 1/4"	1 1/2" X 24"	40'-0"	2 1/2" X 24"	40'-0"	1 1/2" X 24"	125'-6 5/16"	125'-5 1/4"	2 1/2" x 24"	40'-0"	35
G204	143'-9 1/2"	143'-9 1/2"	956.846	1" x 24"	84'-5 7/16"	84'-4 1/2"	1 1/2" X 24"	40'-0"	2 1/2" X 24"	40'-0"	1 1/2" X 24"	124'-6 5/16"	124'-4 1/2"	2 1/2" x 24"	40'-0"	34
G205	142'-8 5/8"	142'-8 5/8"	949.763	1" x 24"	83'-4 9/16"	83'-3 5/8"	1 1/2" X 24"	40'-0"	2 1/2" X 24"	40'-0"	1 1/2" X 24"	123'-4 9/16"	123'-3 5/8"	2 1/2" x 24"	40'-0"	33

124'-5 7/16"

Prepared and recommended
GOODKIND & O'DEA, INC.
Consulting Engineers
Date 12/1/75

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
FRAMING PLAN
AND GIRDER DETAILS SPANS 4 & 5

DWG. NO.	SCALE	DATE	
25	As noted	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

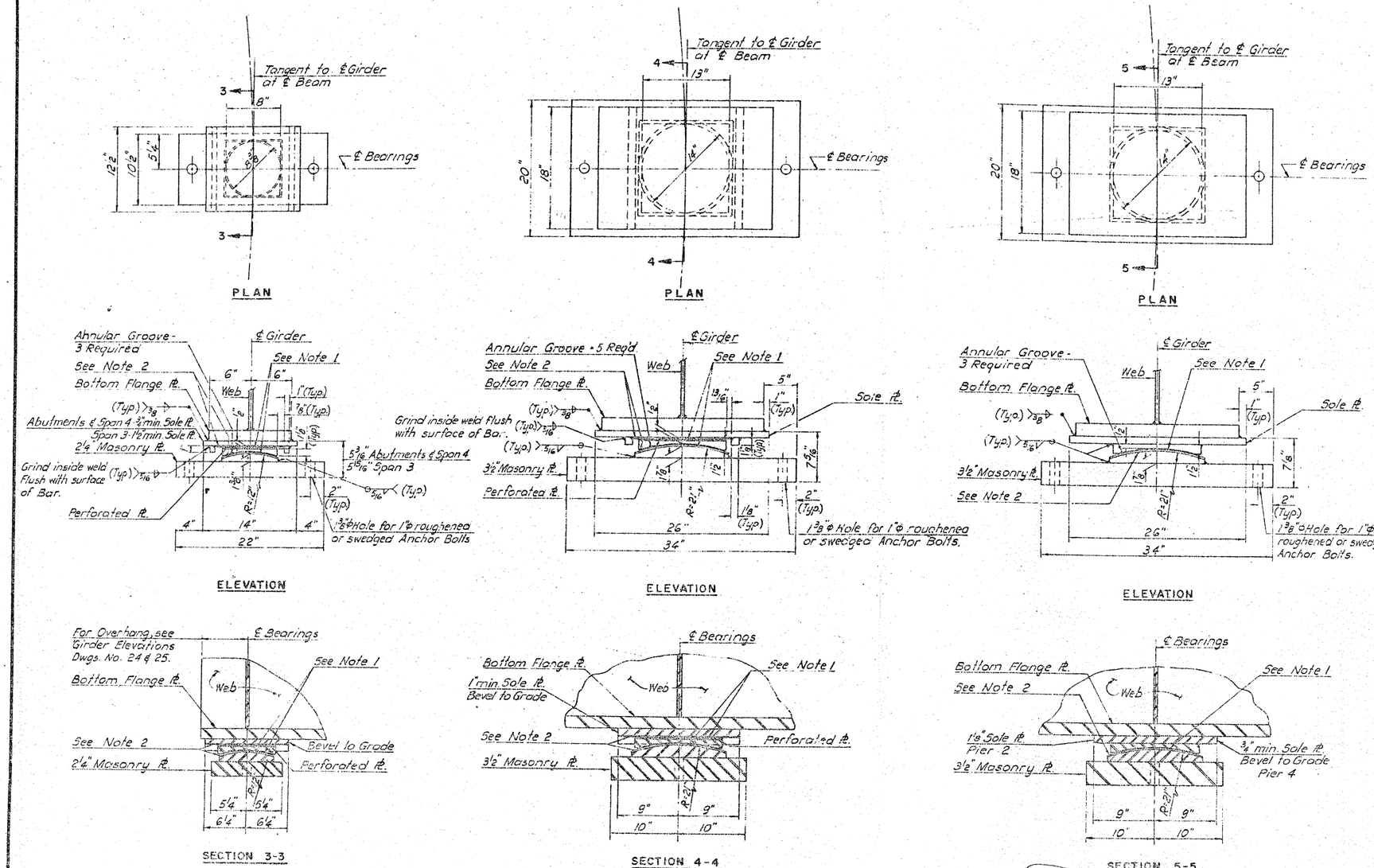
Design Checked by J.A. Olszta
Detailed by L. Yokoff
Detail Checked by [illegible]

1069090

D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(74) I-VI-81-2(126)	281	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



NOTE 1

PTFE WOVEN FIBER MAT AND PERFORATED STEEL PLATE ATTACHED TO TOP OF STEEL PLATE; PTFE WOVEN FIBER MAT ATTACHED TO BOTTOM OF STEEL PLATE.

a. PTFE - THIS MATERIAL (POLYTETRAFLUOROETHYLENE) SHALL BE IN THE FORM OF A WOVEN FIBER MAT. THE WOVEN MAT SHALL HAVE A BEARING SURFACE OF 100% TFE FIBERS. THIS MATERIAL SHALL BE RESISTANT TO ACIDS, ALKALIES AND PETROLEUM PRODUCTS, STABLE AT TEMPERATURES FROM -200°F. TO +350°F., NON-FLAMABLE AND NON-ABSORBING OF WATER.
PTFE WOVEN FIBER MAT SHALL BE INTERLOCKED TO THE PERFORATED STEEL PLATE OR ANNULAR GROOVES OF THE STEEL PLATE IN SUCH MANNER SO AS TO BE ABLE WITHSTAND 20% OF THE APPLIED BEARING LOAD IN THE SHEAR PLANE.

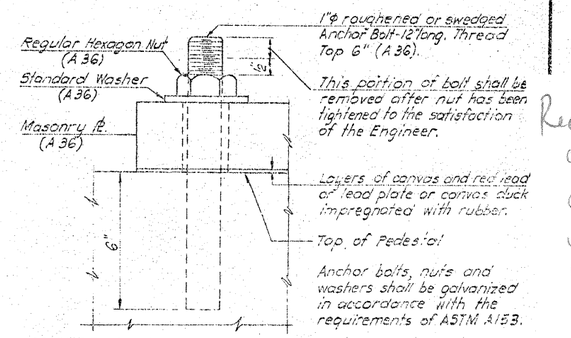
b. PERFORATED STEEL PLATE - THIS PLATE SHALL BE 16 GAGE, TYPE 1020 STEEL, WITH 1/4" OPEN SQUARE HOLES LAID OUT IN A GRID AT 1/2" CENTERS. THE PERFORATED STEEL PLATE SHALL BE SPOT WELDED TO THE STEEL SUBSTRATE BY USING A TIME CONTROLLED ARC PRODUCED BY THE TUNGSTEN INERT GAS PROCESS USING ARGON SHIELDING GAS. WELDS SHALL BE SPACED UNIFORMLY OVER THE PERFORATED PLATE SO AS TO BE ABLE TO WITHSTAND 20% OF THE APPLIED BEARING LOAD IN THE SHEAR PLANE. THE STEEL SUBSTRATE SHALL BE PREHEATED TO 250°F. BEFORE WELDING. THE INTERPASS TEMPERATURE SHALL BE MAINTAINED AT 250°F. AFTER WELDING THE WELDS SHALL BE GROUND FLUSH.

NOTE 2

STAINLESS STEEL PLATES ATTACHED TO THE SOLE PLATE AND [illegible] PLATE. THE STAINLESS STEEL PLATE SHALL BE 16 GAGE, TYPE 304L STAINLESS AND MAY BE ATTACHED TO THE STEEL SUBSTRATE BY EITHER WELDING OR USING AN EPOXY BONDING COMPOUND AS INDICATED BELOW. THE SURFACE OF STAINLESS STEEL PLATES IN CONTACT WITH THE PTFE SHALL HAVE A TYPE 2B FINISH AND SHALL BE PASSIVATED.

a. WELDING - THE STAINLESS STEEL PLATE SHALL BE SPOT WELDED TO THE STEEL SUBSTRATE BY USING A TIME CONTROLLED ARC PRODUCED BY THE TUNGSTEN INERT GAS PROCESS USING ARGON SHIELDING GAS. USE A TYPE ER309L ELECTRODE. WELDS SHALL BE SPACED UNIFORMLY OVER THE ENTIRE AREA OF THE STAINLESS STEEL PLATE SO AS TO BE ABLE TO WITHSTAND 20% OF THE APPLIED BEARING LOAD IN THE SHEAR PLANE. THE STEEL SUBSTRATE SHALL BE PREHEATED TO 250°F. BEFORE WELDING. THE INTERPASS TEMPERATURE SHALL BE MAINTAINED AT 250°F. AFTER WELDING THE WELDS SHALL BE GROUND FLUSH AND FINISHED TO A MAXIMUM SURFACE ROUGHNESS OF 20 MICRO INCHES.

The spherical surfaces of stainless steel may be fabricated with a weld overlay of stainless on structural steel. The overlay will be a minimum of .070" thick and have a finish of 20 micro inches. The chemical composition of the surface shall equal or exceed that of type 304 stainless.



ANCHOR BOLT DETAIL FOR ALL BEARINGS
Item 03636
Not to Scale

Red lead or lead canvas under bearings

NOTE:
Steel in Bearings shall conform to current ASTM Designation A-36 unless noted otherwise.

All bearings shall be fabricated and assembled at one location. Bearings shall be inspected at the work site by the Engineer prior to the beginning of any installation work. If the Engineer determines that any bearing does not conform to the requirements of the Contract Documents, the bearing in question shall not be allowed to be incorporated in the work. It shall be removed from the work site by the Contractor. Any bearing so removed shall be replaced with a suitable bearing, by the Contractor, at no cost to the State. Any replacement bearing shall be subject to the foregoing requirements. The Contractor is hereby notified that this does not effect, in any manner, subsection 636-2.03 Mill and Shop Inspection of the Standard Specifications of 1973.

REFERENCES:
1. For Additional References, see Dwg. No. 23.
2. For Location of Bearings, see Dwg. Nos. 23 & 25.

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
BEARING DETAILS

Bearings installed are different from design Plans

Prepared and recommended: GOODKIND & O'DEA, INC. Consulting Engineers Date 12/1/75

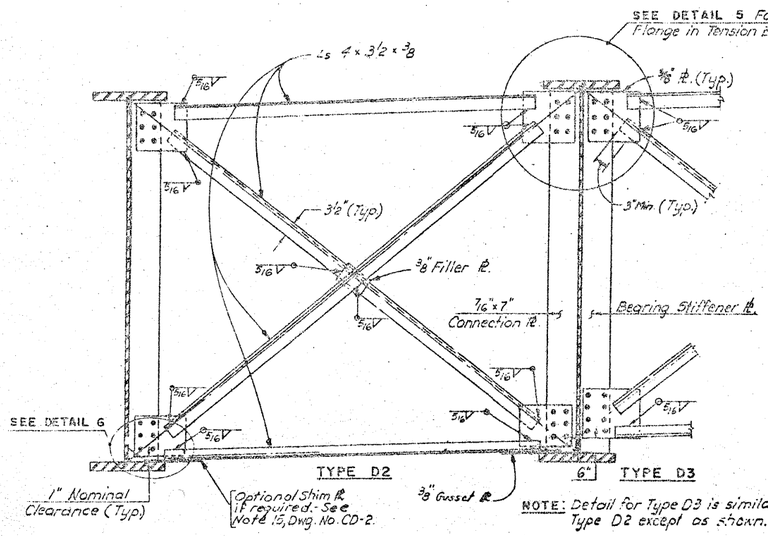
DWG. NO.	SCALE	DATE	
26	As noted	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

In Charge of: [illegible]
Designed by: H. Valentine
Design Checked by: J. Dickey
Detailed by: L. Volkoff
Detail Checked by: [illegible]

D85042

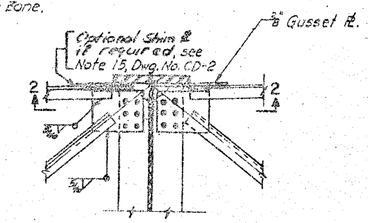
FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-VI-81-2(126)	282	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



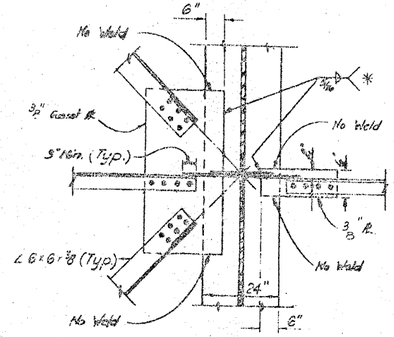
NOTE: Detail for Type D3 is similar to Type D2 except as shown.

INTERMEDIATE DIAPHRAGM D2 & D3
Not to Scale

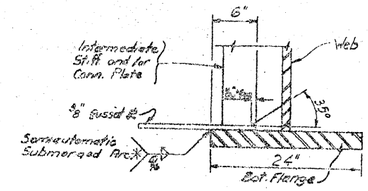


DETAIL 5
Not to Scale

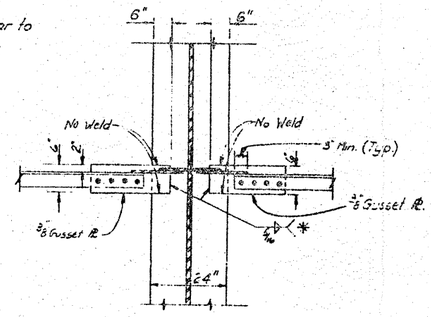
NOTE A:
Detail 5 will only be used where tension stresses (based on dead load only) occur in the top flange.



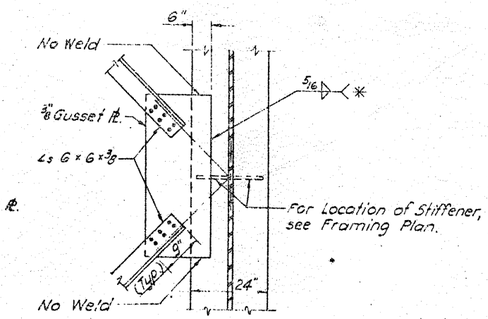
DETAIL 2
Not to Scale



DETAIL 6
Not to Scale

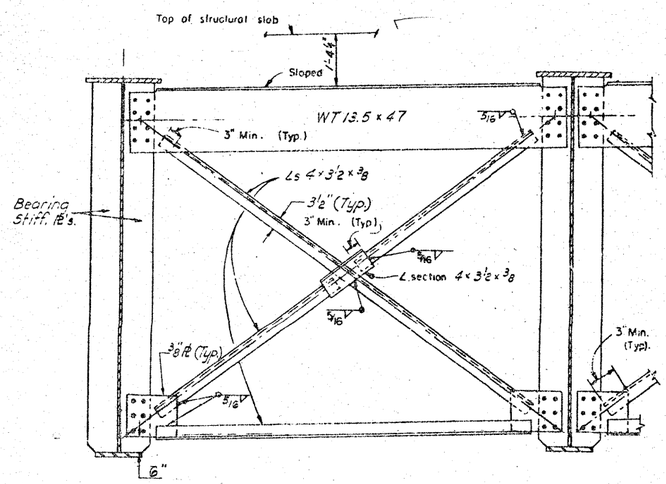


SECTION 2-2
Not to Scale

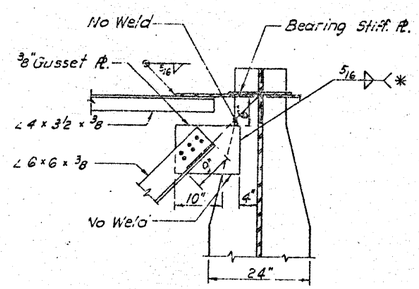


DETAIL 1
Not to Scale

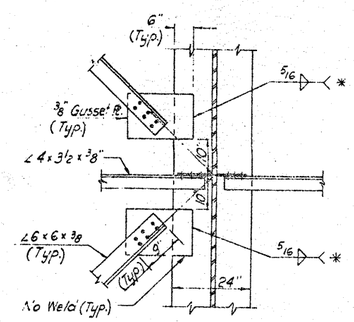
E



END DIAPHRAGM D1
Not to Scale



DETAIL 3
Abutments and Pier 3
Not to Scale



DETAIL 4
(Piers 1, 2 and 4)
Not to Scale

* See Note 13, Dwg. No. CD-2

REFERENCES:
1. For Additional References, see Dwg. No. 23.
2. For Location of Diaphragms, see Dwg. Nos. 23 & 25.

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
FRAMING DETAILS

Proposed and recommended
GOODKIND & O'DEA, INC.
Consulting Engineers
Date 12/1/75

DWG. NO.	SCALE	DATE	
27	As noted	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

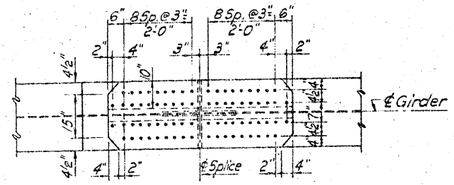
Drawn Checked by J. A. Gurkey
Detailed by E. Lopopolo
Detail Checked by

1069090

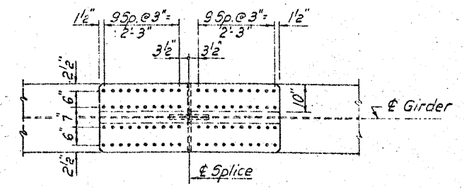
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N. Y.	I-IG-4S1-2(74) I-UI-81-2(126)	283	571

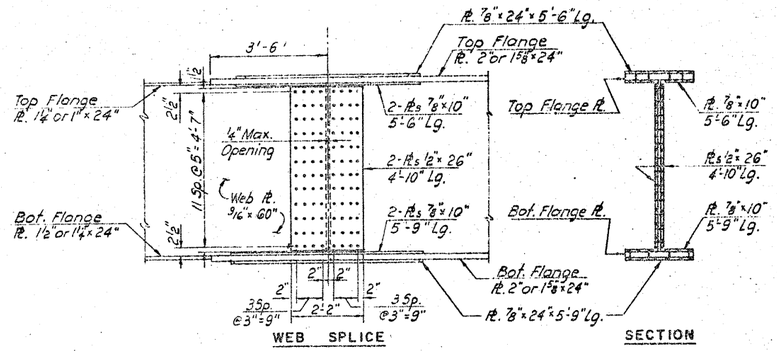
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



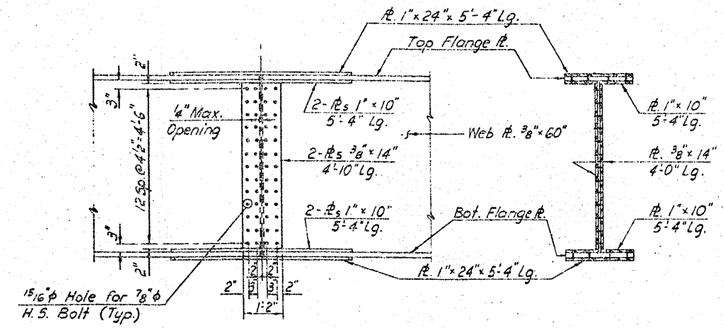
TOP FLANGE



TOP & BOTTOM FLANGE

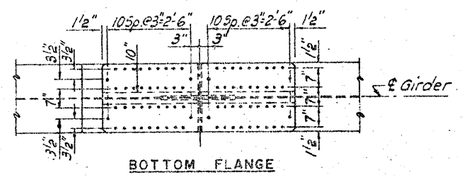


WEB SPLICE SECTION



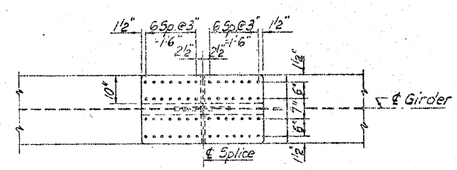
WEB SPLICE SECTION

SPANS 4 & 5
Scale: ½"=1'-0"

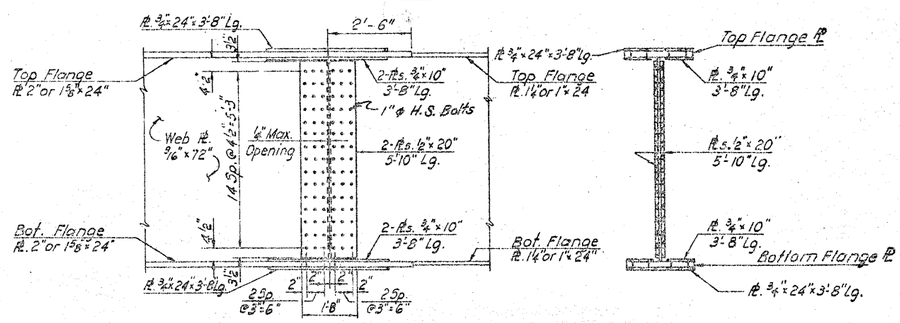


BOTTOM FLANGE

SPANS 1 & 3
Scale: ½"=1'-0"



TOP & BOTTOM FLANGE



WEB SPLICE SECTION

SPAN 2
Scale: ½"=1'-0"

REFERENCES:
1. For Additional References, see Dwg. No. 23.
2. For Location of Splices, see Dwg. Nos. 23 & 25.

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
FIELD SPLICE DETAILS

In Charge of: L. Pfauser
Designed by: M. W. Valentine
Design Checked by: J. Nuttall
Detailed by: L. Yalkoff
Detail Checked by: [illegible]

Prepared and recommended: [illegible]
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

DWG. NO.	SCALE	DATE	
28	As noted	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-TQ-481-2(74) I-UI-81-2(126)	284	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

SPANS 1, 2 AND 3

MOMENT, SHEAR AND TORQUE TABLE

	LOCATION		℄ BRG'S WEST ABUT.	0.13L1	0.25L1	0.38L1	0.5L1	D.L. INFL. POINT	0.63L1	0.75L1	0.88L1	℄ BRG'S PIER 1*	0.09L2	0.18L2	D.L. INFL. POINT	0.27L2	0.36L2	0.45L2	0.55L2
GIRDERS 101 & 102	DL	MOMENT	---	1018.0	1529.0	1527.0	1014.0	---	-80.0	-1588.0	-3452.0	-5831.0	-3191.0	-1070.0	---	624.0	1801.0	2408.0	2408.0
		SHEAR	68.7	55.8	28.1	-28.1	-55.3	-79.6	-82.1	-106.2	-133.2	140.8	140.8	112.1	98.0	88.8	59.2	29.0	29.0
		TORQUE	3.1	11.0	14.2	14.2	10.8	-5.2	-5.4	-20.5	-38.6	-46.2	-24.0	-17.5	-13.2*	10.0	19.6	23.4	23.4
	SDL	MOMENT	---	136.0	208.0	211.0	149.0	35.5	26.0	-181.0	-423.0	-718.0	-379.0	-96.0	-61.0	130.0	286.0	366.0	366.0
		SHEAR	9.1	7.4	3.9	-3.6	-7.2	-10.4	-10.5	-13.6	-17.0	18.4	18.4	14.8	13.0	11.8	8.2	4.2	4.2
		TORQUE	0.4	1.4	1.9	2.0	1.6	-1.0	-1.0	-2.4	-4.7	-5.7	-4.7	-1.8	-1.2	1.8	3.1	3.5	3.5
	LL+	MOMENT	---	894.0	1539.0	1880.0	1913.0	1672.0	1652.0	1130.0	522.0	0.0	123.0	833.0	950.0	1567.0	2164.0	2460.0	2460.0
		SHEAR	59.8	41.0	25.7	25.6	0.0	0.0	0.0	0.0	0.0	76.0	75.6	58.8	50.8	45.6	30.8	9.5	9.5
		TORQUE	12.5	17.0	19.9	18.6	14.2	8.0	7.9	7.2	-0.2	0.0	0.7	18.1	18.9	23.2	24.9	23.4	23.4
	LL-	MOMENT	---	283.0	563.0	837.0	1101.0	1331.0	1350.0	1570.0	1805.0	2928.0	1527.0	950.0	951.0	956.0	944.0	920.0	920.0
		SHEAR	-76.6	-39.7	-31.1	-22.0	-36.7	-48.5	-49.7	-59.6	-65.5	-76.0	0.0	0.0	0.0	-47.9	-36.3	-23.2	23.2
		TORQUE	7.4	9.3	10.7	11.2	10.9	11.0	11.0	14.5	19.1	23.7	11.2	13.9	13.6	12.2	10.3	8.4	8.4

	LOCATION		℄ BRG'S WEST ABUT.	0.13L1	0.25L1	0.38 L1	0.5L1	0.63L1	D.L. INFL. POINT	0.75L1	0.88L1	℄ BRGS. PIER 1*	0.09L2	0.18L2	D.L. INFL. POINT	0.27L2	0.36L2	0.45L2	0.55L2
GIRDERS 103, 104 & 105	DL	MOMENT	---	830.0	1237.0	1259.0	910.0	162.0	---	-1143.0	-2812.0	-4934.0	-2617.0	-834.0	---	466.0	1325.0	1769.0	1769.0
		SHEAR	58.6	45.0	23.5	-21.4	-43.4	-67.0	-76.4	-92.2	-124.4	125.2	125.2	95.3	79.9	68.6	45.7	23.6	23.6
		TORQUE	2.5	8.8	11.5	11.7	9.6	3.8	1.3	-15.8	-32.8	-40.4	-33.2	-13.7	-10.1	7.3	14.4	17.2	17.2
	SDL	MOMENT	---	116.0	176.0	183.0	143.0	52.0	28.1	-121.0	-331.0	-599.0	-302.0	-70.0	-39.0	103.0	221.0	280.0	280.0
		SHEAR	7.8	6.3	3.3	-2.6	-5.6	-8.6	-9.8	-11.8	-16.1	16.3	16.3	12.3	10.5	9.2	6.2	3.2	3.2
		TORQUE	0.3	1.2	1.6	1.5	1.5	0.8	0.5	-1.7	-3.9	-4.8	-3.9	-1.4	-0.9	1.4	2.4	2.7	2.7
	LL+	MOMENT	---	665.0	1107.0	1320.0	1316.0	1112.0	1058.0	724.0	173.0	0.0	145.0	632.0	752.0	1185.0	1549.0	1727.0	1727.0
		SHEAR	53.7	22.5	15.6	13.4	0.0	0.0	0.0	0.0	0.0	8.7	56.9	30.4	27.0	24.1	22.4	30.8	30.8
		TORQUE	10.9	8.5	9.4	11.4	12.5	11.2	9.6	4.8	-1.0	0.0	1.2	3.9	5.0	9.6	13.9	16.5	16.5
	LL-	MOMENT	---	117.0	239.0	370.0	514.0	675.0	707.0	864.0	1172.0	2094.0	1063.0	649.0	634.0	568.0	505.0	462.0	462.0
		SHEAR	-7.0	10.8	-12.8	-18.0	-28.0	-28.4	-37.4	-52.6	-67.3	-83.0	0.0	0.0	0.0	-6.4	-24.3	-9.8	-9.8
		TORQUE	5.9	0.0	1.3	3.0	5.0	7.4	7.6	8.8	13.8	18.9	7.6	4.8	4.7	4.6	4.5	4.5	4.5

L.L. MOMENTS, SHEARS AND TORQUES INCLUDE IMPACT. ALL SPANS, MOMENTS AND TORQUE ARE EXPRESSED AS FOOT KIPS. SHEARS ARE EXPRESSED AS KIPS.

CAMBER TABLE (ft.)

	LOCATION	℄ BRG'S WEST ABUT.	0.13L1	0.25L1	0.38L1	0.50L1	D.L. INFL. POINT	0.63L1	0.75L1	0.88L1	℄ BRGS. PIER 1*	0.09L2	0.18L2	D.L. INFL. POINT	0.27L2	0.36L2	0.45L2	0.55L2
GIRDER 101	STEEL	0.0	0.02	0.04	0.04	0.03	0.02	0.02	0.0	0.0	0.0	0.02	0.04	0.06	0.07	0.10	0.11	0.11
	CONC. SLAB	0.0	0.05	[illegible]	0.08	0.07	0.03	0.03	0.0	0.0	0.0	0.03	0.08	0.12	0.14	0.20	0.23	0.23
	S.D.L.	0.0	0.01	0.01	0.01	0.01	0.01	0.01	0.0	0.0	0.0	0.01	0.02	0.03	0.03	0.03	0.04	0.04
	VERTICAL CURVE	0.0	0.44	0.84	1.21	1.55	1.84	1.85	2.12	2.36	2.56	2.74	2.89	2.99	2.99	3.06	3.10	3.10
	TOTAL	0.0	0.52	0.97	1.34	1.66	1.90	1.91	2.12	2.36	2.56	2.80	3.03	3.19	3.23	3.39	3.48	3.48

	LOCATION	℄ BRG'S WEST ABUT.	0.13L1	0.25L1	0.38L1	0.50L1	0.63L1	D.L. INFL. POINT	0.75L1	0.88L1	℄ BRG'S PIER 1*	0.09L2	0.18L2	D.L. INFL. POINT	0.27L2	0.36L2	0.45L2	0.55L2
GIRDER 102	STEEL	0.0	0.02	0.04	0.04	0.03	0.02	0.02	0.00	0.00	0.00	0.01	0.04	0.05	0.06	0.09	0.10	0.10
	CONC. SLAB	0.0	0.05	0.08	0.09	0.07	0.04	0.04	0.01	0.00	0.00	0.03	0.08	0.11	0.14	0.19	0.21	0.21
	S.D.L.	0.0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.03	0.04	0.04
	VERTICAL CURVE	0.0	0.44	0.84	1.21	1.55	1.85	1.86	2.12	2.36	2.56	2.74	2.89	2.99	2.99	3.06	3.10	3.10
	TOTAL	0.0	0.52	0.97	1.35	1.66	1.92	1.93	2.13	2.36	2.56	2.79	3.02	3.17	3.21	3.37	3.45	3.45
GIRDER 103	STEEL	0.0	0.02	0.04	0.04	0.04	0.02	0.02	0.01	0.00	0.00	0.01	0.03	0.05	0.06	0.08	0.09	0.09
	CONC. SLAB	0.0	0.05	0.09	0.09	0.08	0.04	0.04	0.01	0.00	0.00	0.03	0.07	0.11	0.13	0.18	0.20	0.20
	S.D.L.	0.0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.03	0.03	0.03
	VERTICAL CURVE	0.0	0.44	0.84	1.21	1.55	1.85	1.88	2.12	2.36	2.56	2.74	2.89	2.99	2.99	3.06	3.10	3.10
	TOTAL	0.0	0.52	0.98	1.35	1.68	1.92	1.95	2.14	2.36	2.56	2.79	3.00	3.17	3.20	3.35	3.42	3.42
GIRDER 104	STEEL	0.0	0.02	0.04	0.04	0.04	0.02	0.02	0.01	0.00	0.00	0.01	0.03	0.05	0.05	0.07	0.09	0.09
	CONC. SLAB	0.0	0.05	0.09	0.10	0.08	0.05	0.05	0.02	0.00	0.00	0.02	0.07	0.10	0.12	0.17	0.19	0.19
	S.D.L.	0.0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.03	0.03	0.03
	VERTICAL CURVE	0.0	0.44	0.84	1.21	1.55	1.85	1.89	2.12	2.36	2.56	2.74	2.89	2.99	2.99	3.06	3.10	3.10
	TOTAL	0.0	0.52	0.98	1.36	1.68	1.93	1.97	2.15	2.36	2.56	2.77	3.00	3.16	3.18	3.33	3.41	3.41
GIRDER 105	STEEL	0.0	0.02	0.04	0.04	0.04	0.02	0.02	0.01	0.00	0.00	0.01	0.03	0.04	0.05	0.07	0.08	0.08
	CONC. SLAB	0.0	0.05	0.09	0.10	0.09	0.05	0.05	0.02	0.00	0.00	0.02	0.06	0.09	0.11	0.15	0.18	0.18
	S.D.L.	0.0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.02	0.03	0.03
	VERTICAL CURVE	0.0	0.44	0.84	1.21	1.55	1.85	1.90	2.12	2.36	2.56	2.74	2.88	2.99	2.99	3.06	3.10	3.10
	TOTAL	0.0	0.52	0.98	1.36	1.69	1.93	1.98	2.15	2.36	2.56	2.77	2.98	3.14	3.17	3.30	3.39	3.39

SPANS 4 AND 5

MOMENT, SHEAR AND TORQUE TABLE

	LOCATION		℄ BRGS PIER 3	0.13L4	0.25L4	0.38L4	0.50L4	0.63L4	D.L. INFL. POINT	0.75L4	0.88L4	℄ BRGS PIER 4*
GIRDERS 201 & 202	DL	MOMENT	---	1172.0	1863.0	2031.0	1560.0	764.0	---	-618.0	-2397.0	-4585.0
		SHEAR	75.8	63.8	37.6	-20.2	-48.8	-15.2	-91.3	-96.8	-109.8	-144.0
		TORQUE	3.8	13.2	18.0	18.5	16.8	19.0	-1.9	-11.4	-28.6	-35.8
	SDL	MOMENT	---	164.0	262.0	290.0	247.0	133.0	34.1	-46.0	-280.0	-560.0
		SHEAR	10.7	8.9	5.3	-2.4	-6.2	-9.7	-12.0	-12.8	-14.8	-18.5
		TORQUE	0.6	1.9	2.5	2.5	2.4	1.7	0.1	-1.2	-3.4	-4.3
	LL+	MOMENT	---	852.0	1456.0	1760.0	1758.0	1463.0	1154.0	902.0	168.0	0.0
		SHEAR	63.2	21.5	6.5	0.0	0.0	0.0	49.1	0.0	0.0	45.9
		TORQUE	11.5	15.7	18.2	16.9	12.5	6.2	2.3	-0.8	1.2	0.0
	LL-	MOMENT	---	160.0	318.0	473.0	662.0	762.0	833.0	890.0	998.0	2060.0
		SHEAR	-13.9	-9.6	-9.5	-9.4	-25.0	-39.6	-7.8	-52.4	-42.4	-45.9
		TORQUE	5.2	2.7	0.8	1.2	3.7	6.6	8.3	9.7	12.9	17.2
GIRDERS 203, 204 & 205	DL	MOMENT	---	977.0	1515.0	1644.0	1369.0	686.0	---	-417.0	-1937.0	-3883.0
		SHEAR	66.3	53.7	30.0	-15.2	-37.7	-60.9	-79.6	-83.9	-107.5	-125.0
		TORQUE	3.1	10.9	14.6	15.0	13.7	8.6	-2.8	-8.7	-24.3	-30.3
	SDL	MOMENT	---	136.0	216.0	239.0	207.0	120.0	24.9	-24.0	-220.0	-470.0
		SHEAR	9.1	7.5	4.4	-1.8	-4.8	-7.9	-10.3	-10.8	-13.8	-16.5
		TORQUE	0.5	1.6	2.1	2.1	2.0	1.4	-0.1	-0.9	-2.8	-3.6
	LL+	MOMENT	---	664.0	1107.0	1322.0	1217.0	1117.0	851.0	714.0	150.0	0.0
		SHEAR	54.6	14.7	3.3	0.0	0.0	0.0	0.0	0.0	0.0	57.5
		TORQUE	9.0	4.1	8.6	11.5	11.7	11.3	8.7	7.4	0.8	0.0
	LL-	MOMENT	---	77.0	157.0	243.0	337.0	440.0	516.0	556.0	688.0	1693.0
		SHEAR	-8.7	-4.9	-5.3	-9.5	-17.5	-31.5	-33.8	-34.5	-40.8	-57.5
		TORQUE	3.3	1.5	2.2	2.7	3.2	3.8	4.1	4.3	8.2	13.1

CAMBER TABLE (ft.)

	LOCATION	℄ BRGS PIER 3	0.13L4	0.25L4	0.38L4	0.50L4	0.63L4	DL INFL. POINT	0.75L4	0.88L4	℄ BRGS PIER 4*
GIRDER 201	STEEL	0.0	0.04	0.06	0.08	0.07	0.05	0.04	0.03	0.01	0.0
	CONC. SLAB	0.0	0.08	0.14	0.17	0.16	0.11	0.08	0.06	0.02	0.0
	S.D.L.	0.0	0.01	0.02	0.03	0.02	0.02	0.01	0.01	0.00	0.0
	VERTICAL CURVE	0.0	0.25	0.46	0.64	0.79	0.91	0.96	0.99	1.04	1.06
	TOTAL	0.0	0.38	0.68	0.92	1.04	1.09	1.09	1.09	1.07	1.06
GIRDER 202	STEEL	0.0	0.03	0.06	0.07	0.07	0.05	0.04	0.03	0.01	0.0
	CONC. SLAB	0.0	0.08	0.14	0.16	0.15	0.11	0.08	0.06	0.02	0.0
	S.D.L.	0.0	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.0
	VERTICAL CURVE	0.0	0.25	0.46	0.64	0.79	0.91	0.97	0.99	1.04	1.06
	TOTAL	0.0	0.37	0.68	0.89	1.03	1.09	1.10	1.09	1.07	1.06
GIRDER 203	STEEL	0.0	0.03	0.06	0.07	0.06	0.05	0.03	0.03	0.01	0.0
	CONC. SLAB	0.0	0.07	0.13	0.15	0.14	0.11	0.08	0.06	0.02	0.0
	S.D.L.	0.0	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.0
	VERTICAL CURVE	0.0	0.25	0.46	0.64	0.79	0.91	0.97	0.99	1.04	1.06
	TOTAL	0.0	0.36	0.67	0.88	1.01	1.09	1.09	1.09	1.07	1.06
GIRDER 204	STEEL	0.0	0.03	0.05	0.06	0.06	0.04	0.03	0.02	0.01	0.0
	CONC. SLAB	0.0	0.07	0.12	0.15	0.14	0.10	0.07	0.06	0.02	0.0
	S.D.L.	0.0	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.0
	VERTICAL CURVE	0.0	0.25	0.46	0.64	0.79	0.91	0.97	0.99	1.04	1.06
	TOTAL	0.0	0.36	0.65	0.87	1.01	1.07	1.08	1.08	1.07	1.06
GIRDER 205	STEEL	0.0	0.03	0.05	0.06	0.05	0.04	0.03	0.02	0.01	0.0
	CONC. SLAB	0.0	0.07	0.11	0.14	0.13	0.10	0.07	0.05	0.02	0.0
	S.D.L.	0.0	0.01	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.0
	VERTICAL CURVE	0.0	0.25	0.46	0.64	0.79	0.91	0.97	0.99	1.04	1.06
	TOTAL	0.0	0.36	0.64	0.86	0.99	1.06	1.08	1.07	1.07	1.06

CAMBER TABLE NOTES

1. THE TOTAL CAMBER AS TABULATED IS ASSUMED TO BE MEASURED VERTICALLY TO THE TOP OF FULL CAMBER WEB FROM A STRAIGHT LINE DRAWN FROM THE INTERSECTION OF TOP OF WEB AND CENTERLINE OF BEARINGS AT ONE END OF THE GIRDER TO THE INTERSECTION OF TOP OF WEB AND CENTERLINE OF BEARINGS AT THE OTHER END OF THE GIRDER.
2. THE CAMBER LABELED "STEEL" IN THE TABLE IS CAMBER REQUIRED IN THE GIRDER TO OFFSET THE DEFLECTION DUE TO THE DEAD LOAD WEIGHT OF THE STEEL IN THE GIRDER.
3. THE CAMBER LABELED "CONCRETE SLAB" IN THE TABLE IS THE CAMBER REQUIRED IN THE GIRDER TO OFFSET THE DEFLECTION DUE TO THE DEAD LOAD WEIGHT OF THE CONCRETE SLAB, AND S.I.P. FORMS.
4. THE CAMBER LABELED "SDL" IN THE TABLE IS THE CAMBER REQUIRED IN THE GIRDER TO OFFSET THE DEFLECTION DUE TO THE WEIGHT OF THE SUPERIMPOSED DEAD LOAD, THAT IS, THE CURB, SIDEWALK, RAILING AND FUTURE WEARING SURFACE.
5. THE CAMBER LABELED "VERTICAL CURVE" IN THE TABLE IS THE CAMBER REQUIRED IN THE GIRDER TO FOLLOW THE VERTICAL CURVE.
6. CAMBERS LISTED IN THE TABLE ARE UPWARD CAMBERS.

REFERENCES:

1. For Girder Layout Plan - Spans 1, 2 & 3, and Load Tables, see Dwg. No. 30.
2. For Girder Layout Plan - Spans 4 & 5, see Dwg. No. 31.

NOTES:

DESIGN LOADS AND CAMBERS ARE SYMMETRICAL ABOUT MIDSPAN OF SPAN 2 FOR GIRDERS 101 THRU 105 AND ABOUT THE CENTER LINE OF BEARINGS OF PIER 4 FOR GIRDERS 201 THRU 205.

* SHEARS AT PIERS 1, 2 AND 4 ARE FOR ONE SPAN ONLY. DOUBLE THESE VALUES FOR DEAD LOAD AND SUPERIMPOSED DEAD LOAD REACTIONS

BRIDGE NO. 1

CONNECTOR "H" OVER
CONNECTOR "G" AND I-81

CAMBER AND DESIGN MOMENT TABLES

Prepared and recommended D. Goodkind — GOODKIND & O'DEA, INC. Consulting Engineers

Date 12/1/75

DWG. NO.	SCALE	DATE	
29	No Scale	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

Design Checked by J.A. Gigizzy
Detailed by L. Volkoff
Detail Checked by [illegible]

1069090

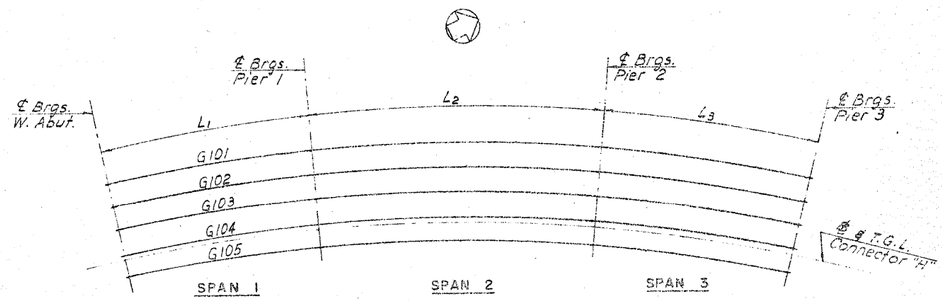
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IQ-481-2(74) I-UI-81-2(126)	285	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

HAUNCH TABLE

	LOCATION	℄ BRGS WEST ABUT.	0.13L1	0.25L1	0.38L1	0.50L1	D.L. INFL. POINT	0.63L1	0.75L1	0.88L1	℄ BRGS PIER 1	0.09L2	0.18L2	D.L. INFL POINT	027L2	0.36L2	0.45L2	0.55L2	0.64L2	0.73L2	D.L. INFL. POINT	0.82L2	0.91L2	℄ BRGS PIER 2	0.13L3	0.25L3	0.38L3	D.L. INFL. POINT	0.50L3	0.63L3	0.75L3	0.88L3	℄ BRGS PIER 3
GIRDER 101	(A) REQD BOTTOM OF SLAB ELEVATION	587.20	587.67	588.11	588.52	588.90	589.21	589.24	589.55	589.82	590.07	590.28	590.47	590.56	590.61	590.72	590.80	590.84	590.84	590.81	590.79	590.74	590.64	590.50	590.33	590.13	589.90	589.88	589.63	589.35	589.00	588.63	588.23
	(B) TOP OF STEEL ELEV (FIELD MEAS)																																
	(C) = (A) - (B)																																
	(D) CONCRETE + S.D.L. DEFLECTION	0.00	0.06	0.09	0.09	0.08	0.04	0.04	0.00	0.00	0.00	0.04	0.10	0.14	0.17	0.23	0.27	0.27	0.23	0.17	0.14	0.10	0.04	0.00	0.00	0.00	0.04	0.04	0.08	0.09	0.09	0.06	0.00
	(E) DEPTH OF HAUNCH REQD=(C)+(D)FT																																
GIRDER 102	LOCATION	℄ BRGS WEST ABUT	0.13L1	0.25L1	0.38L1	0.50L1	0.63L1	D.L. INFL. POINT	0.75L1	0.88L1	℄ BRGS PIER 1	0.09L2	0.18L2	D.L. INFL POINT	0.27L2	0.36L2	0.45L2	0.55L2	0.64L2	0.73L2	D.L. INFL. POINT	0.82L2	0.91L2	℄ BRGS PIER 2	0.13L3	0.25L3	D.L. INFL. POINT	0.38L3	0.50L3	0.63L3	0.75L3	0.88L3	℄ BRGS PIER 3
	(A) REQD BOTTOM OF SLAB ELEVATION	587.26	587.75	588.17	588.58	588.95	589.30	589.30	589.61	589.86	590.12	590.34	590.52	590.62	590.67	590.78	590.85	590.89	590.91	590.87	590.84	590.80	590.69	590.56	590.39	590.19	589.96	589.95	589.69	589.39	589.06	588.69	588.29
	(B) TOP OF STEEL ELEV (FIELD MEAS)																																
	(C) = (A) - (B)																																
	(D) CONCRETE + S.D.L. DEFLECTION	0.00	0.06	0.09	0.10	0.08	0.05	0.05	0.01	0.00	0.00	0.04	0.09	0.13	0.16	0.22	0.25	0.25	0.22	0.16	0.13	0.09	0.04	0.00	0.00	0.01	0.05	0.05	0.08	0.10	0.09	0.06	0.00
	(E) DEPTH OF HAUNCH REQD=(C)+(D)FT																																
GIRDER 103	(A) REQD BOTTOM OF SLAB ELEVATION	586.71	587.19	587.63	588.03	588.41	588.75	588.77	589.06	589.34	589.58	589.80	589.98	590.08	590.12	590.23	590.31	590.35	590.35	590.32	590.30	590.25	590.15	590.01	589.84	589.64	589.42	589.41	589.14	588.84	588.51	588.15	587.75
	(B) TOP OF STEEL ELEV (FIELD MEAS)																																
	(C) = (A) - (B)																																
	(D) CONCRETE + S.D.L. DEFLECTION	0.00	0.06	0.10	0.10	0.09	0.05	0.05	0.01	0.00	0.00	0.04	0.08	0.13	0.15	0.21	0.23	0.23	0.21	0.15	0.13	0.08	0.04	0.00	0.00	0.01	0.05	0.05	0.09	0.10	0.10	0.06	0.00
	(E) DEPTH OF HAUNCH REQD=(C)+(D)FT																																
GIRDER 104	(A) REQD BOTTOM OF SLAB ELEVATION	586.47	586.64	587.08	587.49	587.86	588.21	588.24	588.51	588.75	589.03	589.25	589.43	589.53	589.56	589.60	589.76	589.80	589.81	589.77	589.75	589.71	589.60	589.46	589.30	589.10	588.89	588.86	588.60	588.30	587.97	587.60	587.20
	(B) TOP OF STEEL ELEV (FIELD MEAS)																																
	(C) = (A) - (B)																																
	(D) CONCRETE + S.D.L. DEFLECTION	0.00	0.06	0.10	0.11	0.09	0.06	0.06	0.02	0.00	0.00	0.02	0.08	0.12	0.14	0.20	0.22	0.22	0.20	0.14	0.12	0.08	0.02	0.00	0.00	0.02	0.06	0.06	0.09	0.11	0.10	0.06	0.00
	(E) DEPTH OF HAUNCH REQD=(C)+(D)FT																																
GIRDER 105	(A) REQD BOTTOM OF SLAB ELEVATION	585.62	586.10	586.54	586.94	587.32	587.66	587.71	587.97	588.25	588.49	588.71	588.89	588.99	589.03	589.14	589.22	589.26	589.24	589.23	589.21	589.16	589.06	588.92	588.75	588.55	588.35	588.32	588.05	587.75	587.42	587.05	586.66
	(B) TOP OF STEEL ELEV (FIELD MEAS)																																
	(C) = (A) - (B)																																
	(D) CONCRETE + S.D.L. DEFLECTION	0.00	0.06	0.10	0.11	0.10	0.06	0.06	0.02	0.00	0.00	0.02	0.07	0.11	0.13	0.17	0.21	0.21	0.17	0.13	0.11	0.07	0.02	0.00	0.00	0.02	0.06	0.06	0.10	0.11	0.10	0.06	0.00
	(E) DEPTH OF HAUNCH REQD=(C)+(D)FT																																



GIRDER LAYOUT PLAN
Not to Scale

DESIGN LOAD TABLE / GIRDER

	UNIT	LOAD/FT GIRDERS 101 102	LOAD/FT GIRDERS 103,104 & 105
DEAD LOAD	SLAB	.819	.819
	HAUNCH	.075	.075
	GIRDER	.386	.346
	S.I.P. FORMS	.113	.113
	DIAPHRAGMS	.072	.073
	TOTAL	1.465	1.426
SDL	RAILING	.015	.015
	PARAPET	.045	.045
	FUTURE W.S.	.116	.116
	TOTAL	.176	.176

ASSUMED LIVE LOAD-HS 20-44 OR
TWO 24,000 lb AXLES SPACED 4'-0" ON CENTERS

REFERENCES:
1. For Haunch and Design Load Tables, Spans 4 & 5, see Dwg. No. 31
2. For Haunch Details, see Dwg. No. CD-9

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81

HAUNCH AND DESIGN LOAD TABLES
SPANS 1, 2 & 3

Prepared and recommended
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

DWG. NO.	SCALE	DATE	
30	As noted	Nov 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

In Charge of
Designed by J.B.S. Chiplett
Design Checked by H.W. Valentine
Detailed by L. Volkoff
Detail Checked by

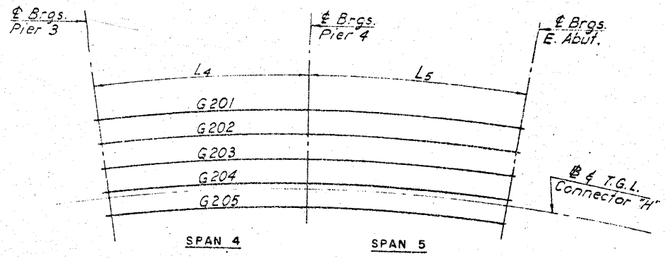
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(74) I-III-81-2(128)	286	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

HAUNCH TABLE

	LOCATION	℄ BRGS PIER 3	0.13L4	0.25L4	0.38L4	0.50L4	0.63L4	DL INFL POINT	0.75L4	0.88L4	℄ BRGS. PIER 4	0.13L	0.25L	DL INFL POINT	0.38L	0.50L	0.63L	0.75L	0.88L	℄ BRGS. EAST ABUT
GIRDER 201	(A) REQD BOTTOM OF SLAB ELEVATION	588.20	587.77	587.38	586.80	586.27	585.70	585.37	585.10	584.47	583.80	583.11	582.39	582.04	581.61	580.84	579.96	579.32	578.22	577.29
	(B) TOP OF STEEL ELEV (FIELD MEAS)																			
	(C) = (A) - (B)																			
	(D) CONCRETE + S.D.L. DEFLECTION	0.00	0.09	0.18	0.20	0.18	0.13	0.09	0.07	0.02	0.00	0.02	0.07	0.09	0.13	0.18	0.20	0.16	0.09	0.00
	(E) DEPTH OF HAUNCH REQD=(C)+(D)FT																			
GIRDER 202	(A) REQD BOTTOM OF SLAB ELEVATION	588.26	587.82	587.38	586.86	586.32	585.76	585.40	585.16	584.53	583.86	583.16	582.43	582.13	581.67	580.87	580.04	579.18	577.26	577.35
	(B) TOP OF STEEL ELEV (FIELD MEAS)																			
	(C) = (A) - (B)																			
	(D) CONCRETE + S.D.L. DEFLECTION	0.00	0.09	0.16	0.18	0.17	0.13	0.09	0.07	0.02	0.00	0.02	0.07	0.09	0.13	0.17	0.18	0.16	0.09	0.00
	(E) DEPTH OF HAUNCH REQD=(C)+(D)FT																			
GIRDER 203	(A) REQD BOTTOM OF SLAB ELEVATION	587.71	587.28	586.81	586.31	585.78	585.21	584.84	584.61	583.97	583.32	582.72	582.19	581.80	581.42	580.33	579.50	578.63	577.74	576.81
	(B) TOP OF STEEL ELEV (FIELD MEAS)																			
	(C) = (A) - (B)																			
	(D) CONCRETE + S.D.L. DEFLECTION	0.00	0.08	0.15	0.17	0.16	0.13	0.09	0.07	0.02	0.00	0.02	0.07	0.09	0.13	0.16	0.17	0.15	0.08	0.00
	(E) DEPTH OF HAUNCH REQD=(C)+(D)FT																			
GIRDER 204	(A) REQD BOTTOM OF SLAB ELEVATION	587.17	586.73	586.27	585.77	585.23	584.67	584.29	584.07	583.44	582.77	582.07	581.34	581.07	580.58	579.78	578.95	578.09	577.19	576.26
	(B) TOP OF STEEL ELEV (FIELD MEAS)																			
	(C) = (A) - (B)																			
	(D) CONCRETE + S.D.L. DEFLECTION	0.00	0.08	0.14	0.17	0.16	0.12	0.08	0.07	0.02	0.00	0.02	0.07	0.08	0.12	0.16	0.17	0.14	0.08	0.00
	(E) DEPTH OF HAUNCH REQD=(C)+(D)FT																			
GIRDER 205	(A) REQD BOTTOM OF SLAB ELEVATION	586.62	586.19	585.72	585.22	584.69	584.12	583.75	583.52	582.89	582.22	581.53	580.80	580.54	580.03	579.23	578.40	577.56	576.65	575.72
	(B) TOP OF STEEL ELEV (FIELD MEAS)																			
	(C) = (A) - (B)																			
	(D) CONCRETE + S.D.L. DEFLECTION	0.00	0.08	0.13	0.16	0.15	0.11	0.08	0.06	0.02	0.00	0.02	0.06	0.08	0.11	0.15	0.16	0.13	0.08	0.00
	(E) DEPTH OF HAUNCH REQD=(C)+(D)FT																			



GIRDER LAYOUT PLAN
Not to Scale

DESIGN LOAD TABLE / GIRDER

	UNIT	LOAD/FT GIRDERS 201, 202	LOAD/FT GIRDERS 203, 204 & 205
DEAD LOAD	SLAB	.819	.819
	HAUNCH	.075	.075
	GIRDER	.348	.316
	S.I.P. FORMS	.113	.113
	DIAPHRAGMS	.067	.068
	TOTAL	1.422	1.391
SDL	RAILING	.015	.015
	PARAPET	.045	.045
	FUTURE W.S.	.116	.116
	TOTAL	.176	.176

ASSUMED LIVE LOAD-HS 20-44 OR
TWO 24,000 lb AXLES SPACED 4'-0" ON CENTERS

REFERENCES:

1. For Haunch and Design Load Tables, Spans 1, 2 & 3, see Dwg No 30.
2. For Haunch Details, see Dwg.No.CD-9.

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81

HAUNCH AND DESIGN LOAD TABLES
SPANS 4 & 5

Prepared and recommended
GOODKIND & O'DEA, INC.
Consulting Engineers
Date 12/1/75

DWG. NO.	SCALE	DATE	
31	As noted	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

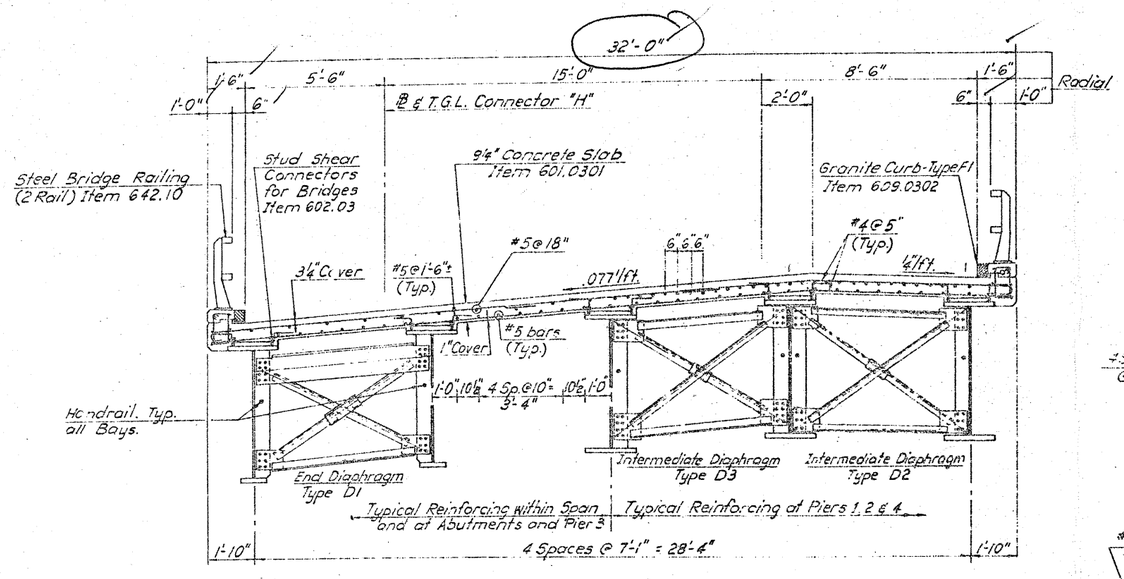
Design Checked by F. H. Valentine
Detailed by L. Volkoff
Detail Checked by

1069090

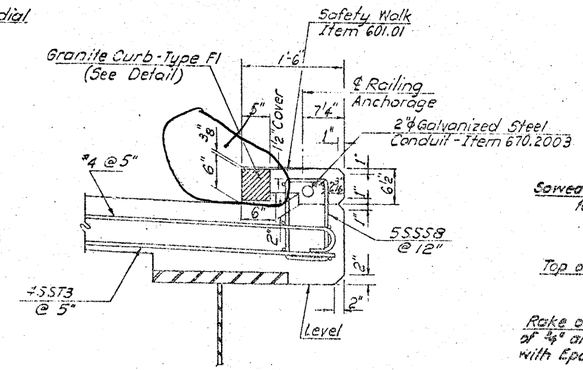
D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(74) I-VI-81-2(128)	287	571

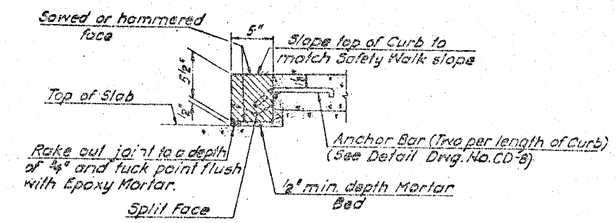
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



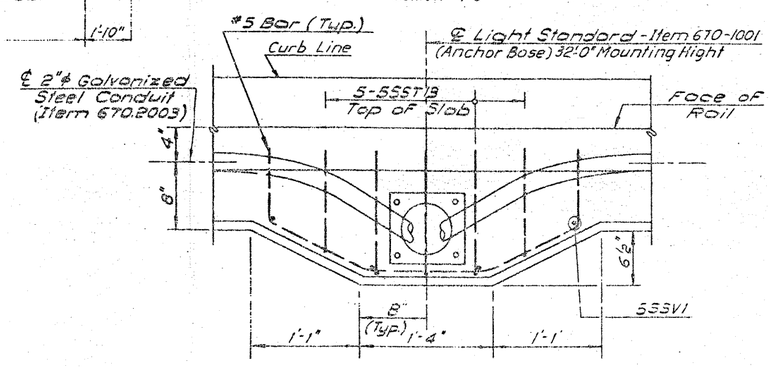
TYPICAL CROSS SECTION
(Looking in Direction of Travel)
Scale: ⅜" = 1'-0"



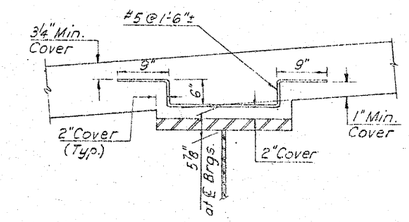
FASCIA DETAIL
Scale: 1" = 1'-0"



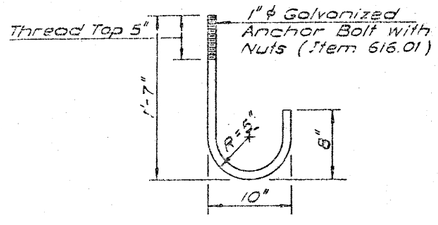
DETAIL OF GRANITE CURB-TYPE F1
Scale: 1½" = 1'-0"



PLAN



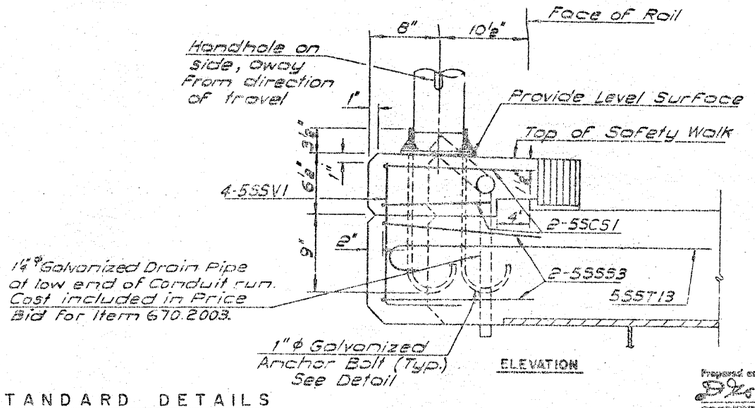
REINFORCED GIRDER HAUNCH DETAIL
Scale: 1" = 1'-0"



ANCHOR BOLT DETAIL

REFERENCES:

1. For Additional References, see Dwg. No. 23.
2. For Deck Plans, see Dwg. Nos. 33 & 34.
3. For Rail Post spacing, see Dwg. No. 35.



ELEVATION

NOTES:

1. The Contractor shall set Anchor Bolts for Light Standards within an 11½" Bolt Circle.
2. Nuts and washers to be galvanized. Finishing and installation shall be paid for under Item 610.1003.

LIGHT STANDARD DETAILS
Scale: 1½" = 1'-0"

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
DECK SLAB DETAILS

In Charge of: J. Pomeroy
Designed by: J. Pomeroy
Detail Checked by: F.H. Valentine
Detailed by: L. Yolkoff
Detail Checked by: [illegible]

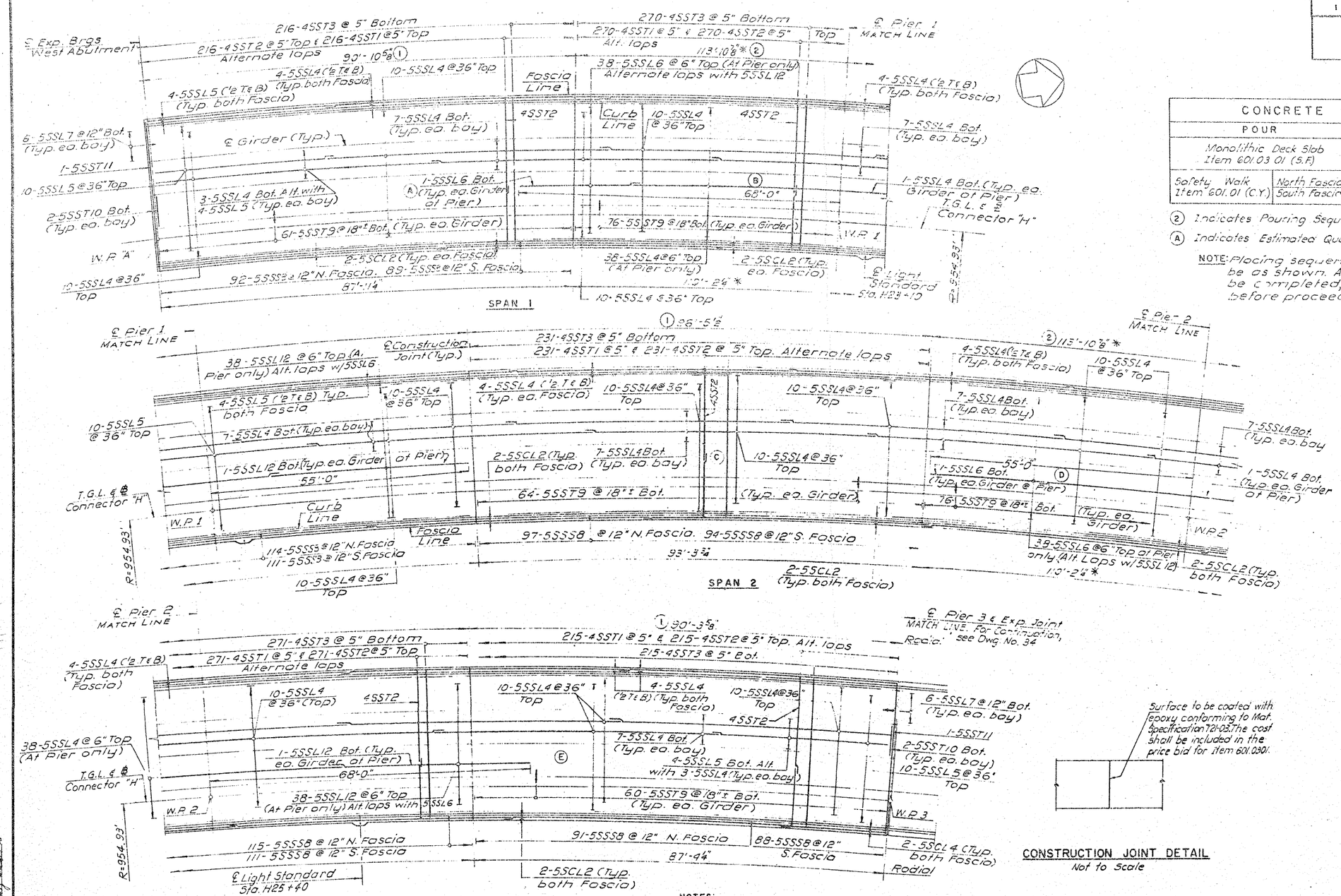
Prepared and recommended: [signature]
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

DWG. NO.	SCALE	DATE	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS
32	As noted	Nov. 1975	

D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-4ST-2(74) I-IG-81-2(129)	288	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



CONCRETE POUR TABLE						
POUR		A	B	C	D	E
Monolithic Deck Slab Item 601.03.01 (S.F.)		286.12	358.86	303.6.3	358.86	284.2.5
Safety Walk Item 601.01 (C.Y.)	North Fascia	1.65	2.06	1.76	2.06	1.63
	South Fascia	1.59	2.03	1.70	2.03	1.59

(2) Indicates Pouring Sequence

(A) Indicates Estimated Quantity of Pour.

NOTE: Placing sequence for deck concrete shall be as shown. All No. 1 placements shall be completed, not necessarily simultaneously, before proceeding with No. 2 placements.

Surface to be coated with epoxy conforming to Mat. Specification 721-03. The cost shall be included in the price bid for Item 601.0301.

CONSTRUCTION JOINT DETAIL
Not to Scale

NOTES:
1. Dimensions are measured along Fascia Lines.
2. Dimensions marked "*" are symmetrical about ℄ Pier.

REFERENCES:
1. For Beginning and End of Bridge Stations, see Dwg. Nos. 1 & 2.
2. For Joint Details, see Dwg. Nos. CD-14 & CD-15.
3. For Fascia, Haunch and Curb Details, see Dwg. No. 32.
4. For Reinforcement Quantities in Specific Pours, see Bar Lists Dwg. Nos. 40 & 41.
5. For Approach Slab Plan, see Dwg. No. 34.
6. For Locations of Elastomeric Joints, see Dwg. No. 7.
7. For Typical Cross Section see Dwg. No. 32.
8. For Detail of Conduit at Deck Joint at Pier 3, see Expansion Fitting Detail Dwg. No. 14.

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
DECK PLAN SPANS 1, 2 & 3

Prepared and recommended
GOODKIND & O'DEA, INC.
Consulting Engineers
Date 12/1/75

DWG. NO.	SCALE	DATE	
33	1"=10'	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

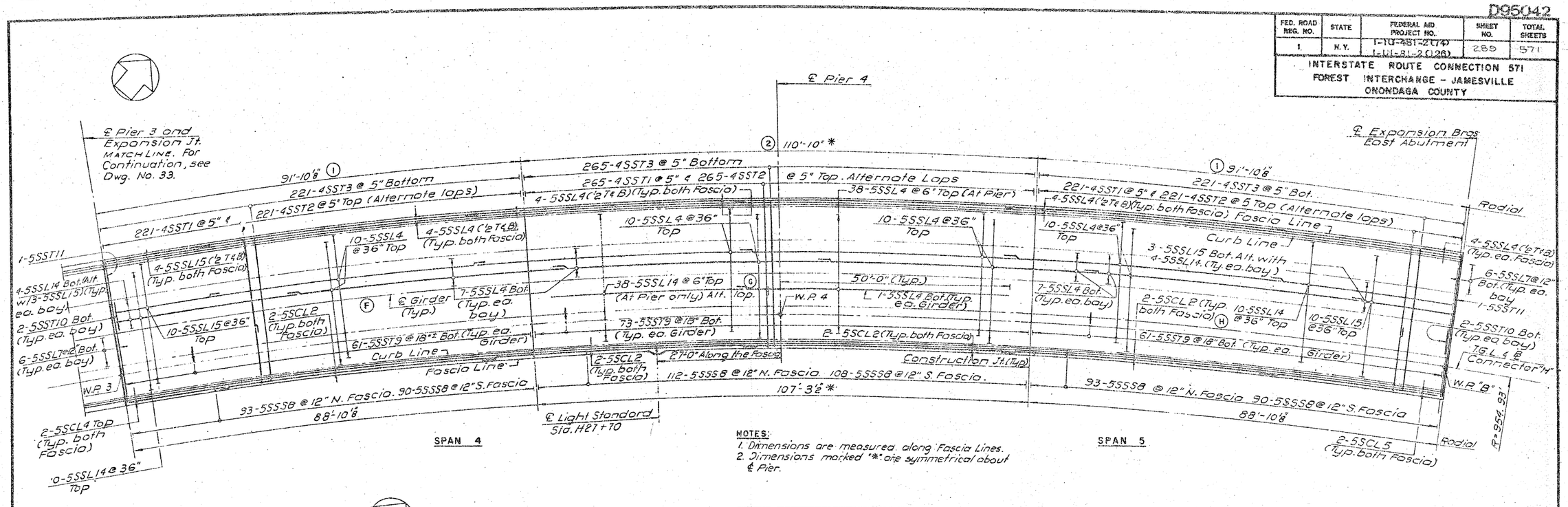
Design Checked by J. MUNOZ
Detailed by A.C.E.L.V.
Detail Checked by

1069090

D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IU-481-2(74) I-IU-81-2(126)	289	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY



NOTES:
1. Dimensions are measured along Fascia Lines.
2. Dimensions marked "*" are symmetrical about ℄ Pier.

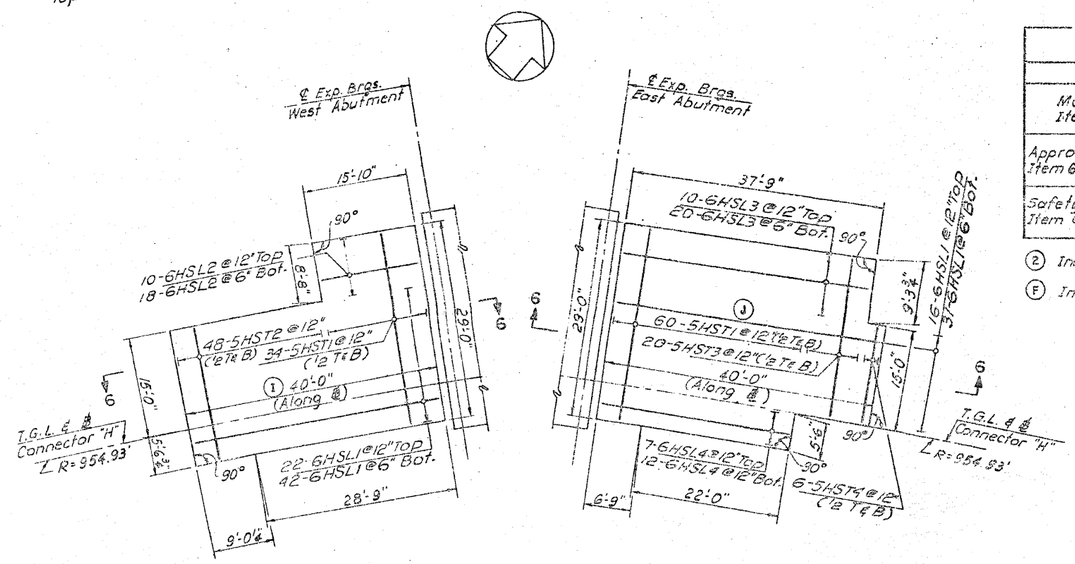
CONCRETE POUR TABLE						
POUR		F	G	H	I	J
Monolithic Deck Slab Item 601.0301 (S.F.)		2891.0	3491.3	2891.0	—	—
Approach Slabs Item 601.0303 (S.F.)	West	—	—	—	947.0	—
	East	—	—	—	—	1110.0
Safety Walk Item 601.01 (C.Y.)	North Fascia	1.67	2.01	1.67	—	—
	South Fascia	1.61	1.97	1.61	—	—

② Indicates Pouring Sequence.

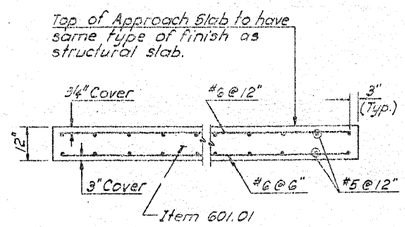
Ⓕ Indicates Estimated Quantity of Pour.

NOTE: Placing sequence for deck concrete shall be as shown. All No. 1 placements shall be completed, not necessarily simultaneously, before proceeding with No. 2 placements.

REFERENCES:
1. For Beginning and End of Bridge Stations see Dwg. Nos. 1 & 2.
2. For Joint Details, see Dwg. Nos. CD-14 & CD-15.
3. For Reinforcement Quantities in Specific Pours, see Bar Lists Dwg. Nos. 40 & 41.
5. For Locations of Elastomeric Joints, see Dwg. No. 7.
6. For Construction Joint Detail, see Dwg. No. 33.
7. For Typical Cross Section see Dwg. No. 32.



APPROACH SLAB PLAN



SECTION 6-6
Scale: 1" = 1'-0"

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
DECK PLAN SPANS 4 & 5
AND APPROACH SLABS

Prepared and recommended: GOODKIND & O'HEA, INC. Consulting Engineers
Date 12/1/75

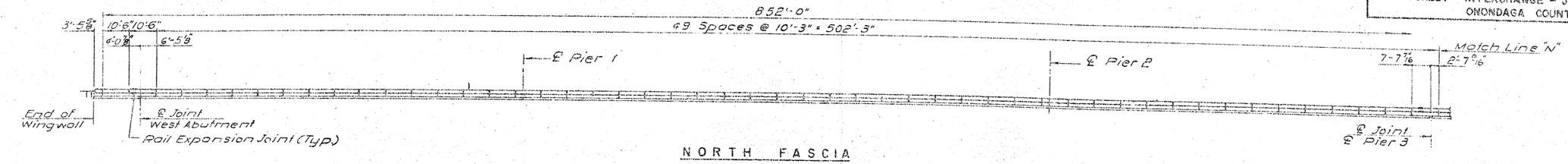
DWG. NO.	SCALE	DATE	
34	1" = 10' & as noted	Nov. 1975	GOODKIND & O'HEA, INC. CONSULTING ENGINEERS

In Charge
Designed by
Design Checked by
Detailed by
Detail Checked by

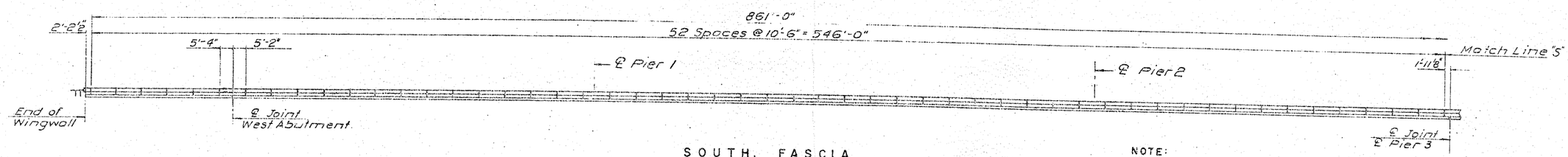
D96042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(74) I-IIL-81-2(126)	290	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

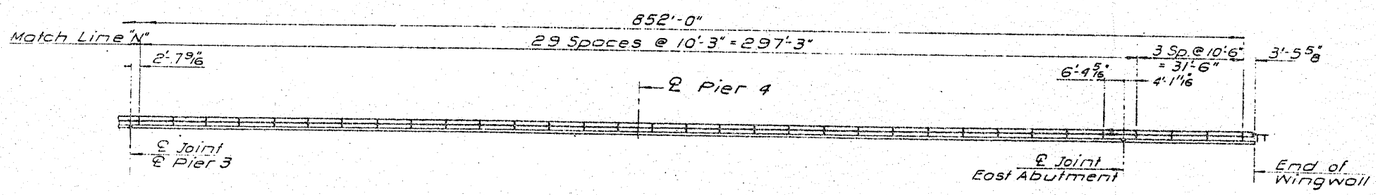


NORTH FASCIA

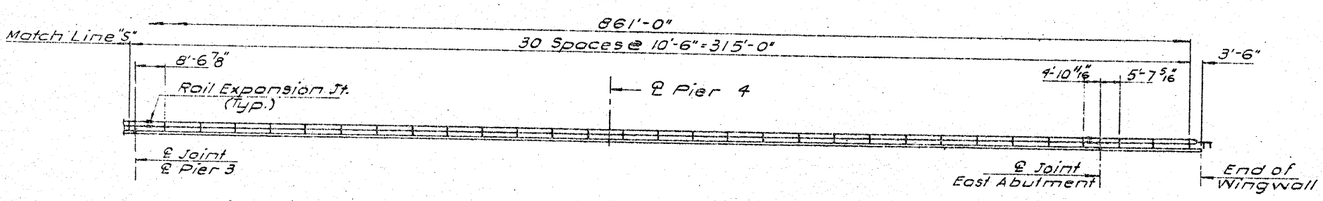


SOUTH FASCIA

NOTE:
All railing dimensions are measured along ℄ Railing Anchorage.



NORTH FASCIA



SOUTH FASCIA

REFERENCES:
1. For Railing Details, see Dwg. No. CD-19
2. For General Superstructure Notes, see Dwg. Nos. CD-1 & CD-2.

BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
RAILING LAYOUT

Proposed and recommended
GOODKIND & O'DEA, INC.
Consulting Engineers
Date 14.1.75

DWG. NO.	SCALE	DATE	
35	1"=20'	Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

Design Checked by H. W. Valentine
Detailed by Kenfield
Detail Checked by [illegible]

1069090

D95042

FED. ROAD REG. NO	STATE	FEDERAL AID PROJECT NO	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-10-481-2(74) I-01-81-2(28)	291	571

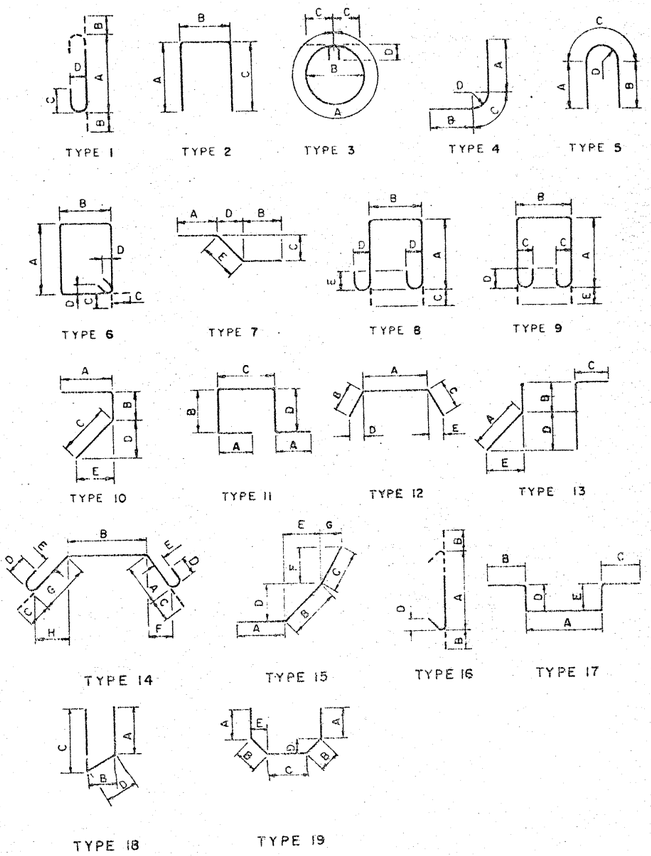
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

MARK	SIZE	TYPE	LENGTH	NO	A	B	C	D	E	REMARKS
WEST ABUTMENT										
FOOTING										
5AFL1	5	STR	34-5	9						LONG T&B
5AFY2	5	STR	9-0	36						TRANS BOT
5AFT3	5	STR	4-10	36						TRANS TOP
5AFT4	5	STR	7-3	24						TRANS T&B
5AFL5	5	STR	14-0	10						LONG T&B
5AFL6	5	STR	28-0	8						LONG T&B
5AFT7	5	STR	6-6	54						TRANS T&B
5AFL8	5	STR	30-0	6						LONG T&B
5AFL9	5	STR	4-0	62						LONG T&B
5AFL10	5	10	5-2	3	--	1-8	3-6	2-6	2-6	LONG STEP
5AFV11	5	STR	3-10	6						VERT STEP
5AFV12	5	1	4-5	18	3-10	0-7	0-5	0-5		VERT DOWEL
5AFV13	5	1	3-9	31	3-2	0-7	0-5	0-5		VERT DOWEL
5AFV14	5	STR	3-10	9						VERT DOWEL
6AFV1	6	1	4-10	16	4-2	0-8	0-6	0-6		VERT DOWEL
SUBTOTAL THIS POUR				2797 LBS.						
ABUTMENT STEM										
5ASV1	5	STR	3-0 TO 4-11	17						VERT NF
5ASV2	5	STR	5-4 TO 7-0	30						VERT FF
5ASH3	5	STR	31-8	9						HORIZ EF
5ASH4	5	2	4-3	20	2-9	1-7	--			HORIZ CORNER
5ASH5	5	2	5-2	22	3-8	1-7				TRANS SEAT
5ASH6	5	STR	4-2	17						HORIZ DOWELS
5ASV15	5	2	3-1	25	2-8	0-6	--			VERT PEDESTAL
5ASH1	8	STR	31-9	5						HORIZ SEAT
SUBTOTAL THIS POUR				1347 LBS.						
BACKWALL, WINGWALLS & CURTAIN WALL										
5ABV1	5	STR	6-2	30						VERT FF
5ABV2	5	STR	6-10	17						VERT NF
5ABH3	5	STR	33-10	15						HORIZ EF
5ABV4	5	10	3-9	30	1-4	0-9	1-9	1-2.5	1-2.5	VERT FF
5ABV5	5	2	2-1	30	1-9	0-5				VERT FF
5ABV6	5	10	2-7	30	0-6	1-0	1-2	0-10	0-10	VERT NF
5AWV1	5	STR	9-6	6						VERT CKWL FF
5AWH2	5	2	6-0	16	3-11	0-8	1-7			HORIZ CKWL
5AWV3	5	2	2-7	6	2-1	0-7	--			VERT CKWL NF
5AWV4	5	2	5-9	8	2-1	1-9	2-1			VERT CURT W
5AWV5	5	2	6-2	71	2-9	0-8	2-9			VERT TOP
5AWH6	5	STR	14-10	10						HORIZ EF
5AWH7	5	STR	17-3	12						HORIZ EF
5AWV8	5	STR	11-9	25						VERT EF
5AWH9	5	2	3-4	14	1-10	1-7	--			HORIZ CURT W
5AWH10	5	STR	3-8 TO 5-8	13						HORIZ CURT W
5AWH11	5	STR	12-9	4						VERT CURT W
5AWH12	5	STR	3-10 TO 5-8	11						HORIZ CURT W
5AWH13	5	STR	11-3	4						VERT CURT W
5AWH14	5	STR	9-7	42						VERT EF
5AWH15	5	STR	26-11	7						HORIZ EF
5AWH16	5	STR	29-2	12						HORIZ EF
5AWV17	5	STR	5-2	47						VERT EF
5AWH18	5	STR	28-8	12						HORIZ EF
SUBTOTAL THIS POUR				4324 LBS.						

MARK	SIZE	TYPE	LENGTH	NO	A	B	C	D	E	REMARKS
WEST ABUTMENT										
PEDESTALS										
5APS1	5	6	11-3	8	3-2	2-2	0-5.5	0-3.7		HORIZ STIRRUP
5APS2	5	6	10-3	2	2-8	2-2	0-5.5	0-3.7		HORIZ STIRRUP
SUBTOTAL THIS POUR				115 LBS.						
BACKWALL HEADER										
5AHH1	5	STR	29-9	2						HORIZ
SUBTOTAL THIS POUR				62 LBS.						
NW SAFETY WALK										
5ACH1	5	STR	17-4	2						HORIZ
5ACH2	5	2	7-5	1	5-8	1-10	--			HORIZ
5AWH2	5	2	6-0	1	3-11	0-8	1-7			HORIZ
SUBTOTAL THIS POUR				50 LBS.						
SW SAFETY WALK										
5ACH2	5	2	7-5	1	5-8	1-10	--			HORIZ
5ACH3	5	STR	29-0	2						HORIZ
5ACH4	5	STR	29-8	2						HORIZ
5AWH2	5	2	6-0	1	3-11	0-8	1-7			
SUBTOTAL THIS POUR				136 LBS.						

BAR BENDING DIAGRAMS

ALL DIMENSIONS ARE OUT TO OUT OF BARS



BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
WEST ABUTMENT
BAR LIST

Prepared and recommended
GOODKIND & O'DEA, INC.
Consulting Engineers

Date 12/1/75

DWG. NO.	SCALE	DATE	
36		Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

In Charge of
Designed by H.W. Valentine
Design Checked by J.A. Giozzi
Detailed by A. Conley
Detail Checked by

D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IC-48T-2(74) I-UI-81-2(129)	292	571

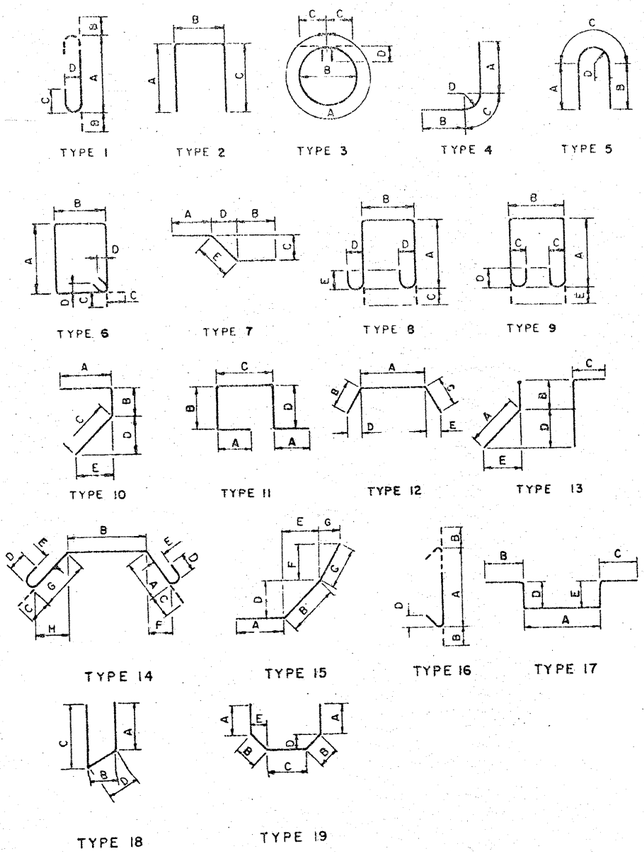
INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

MARK	SIZE	TYPE	LENGTH	NO	A	B	C	D	E	F	REMARKS
EAST ABUTMENT											
FOOTING											
5AFL1	5	STR	39-0	9							LONG TOP & BOT
5AFV2	5	1	5-5	29	4-10	0-7	0-5	0-5			DOWELS FF
5AFT3	5	STR	9-3	51							TRANS TOP & BOT & STEP
5AFV4	5	1	3-8	53	3-1	0-7	0-5	0-5			DOWELS FF
5AFL5	5	STR	31-1	12							LONG TOP & BOT
5AFL6	5	STR	22-3	12							LONG TOP & BOT
5AFV7	5	15	9-2	11	1-6	7-8	--	5-6	5-6		VERT IN STEP
5AFV8	5	2	4-10	44	4-10	0-1	--				DOWELS IN STEP
5AFV9	5	15	10-6	11	1-6	9-0	--	6-6	6-6		VERT IN STEP
6AFL1	6	STR	39-0	9							LONG BOT
6AFV2	6	1	7-5	53	6-9	0-8	0-6	0-6			DOWELS FF
7AFT1	7	STR	16-0	40							TRANS BOT
7AFV2	7	1	7-1	30	6-3	0-10	0-7	0-7			DOWELS FF
7AFV3	7	1	9-1	12	8-3	0-10	0-7	0-7			DOWELS FF
8AFT1	8	STR	16-0	79							TRANS TOP
8AFV2	8	1	6-9	12	5-10	0-11	0-8	0-8			DOWELS FF
8AFT3	8	STR	9-3	56							TRANS TOP
9AFL1	9	STR	39-0	8							LONG TOP
SUBTOTAL THIS POUR				11458 LBS.							
STEM											
5ASV1	5	STR	15-2 TO 17-1	17							VERT NF
5ASV2	5	STR	17-0 TO 19-5	29							VERT FF
5ASV3	5	STR	8-6	30							VERT FF
5ASH4	5	STR	32-0	16							HORIZ NF
5ASH5	5	STR	29-2	11							HORIZ FF
5ASH6	5	STR	11-6	2							HORIZ EF
5AST7	5	2	5-2	22	3-8	1-7	--				BRIDGE SEAT
5ASH8	5	2	4-6	66	2-7	2-0	--				CORNER NF
5AVV9	5	STR	9-0	14							VERT FF
5AWV10	5	STR	16-9	3							VERT EF
5AWV11	5	STR	16-9 TO 17-0	7							VERT FF
5AWH12	5	STR	7-5	23							HORIZ FF
5AWH13	5	STR	7-0	34							HORIZ NF
5AWV14	5	STR	4-0	69							DOWELS FF
5AWV15	5	2	2-10	25	2-6.5	0-5	--				VERT PEDESTAL
5AWH16	5	STR	30-8	19							HORIZ EF
5AWV17	5	STR	14-10	3							VERT NF
5AWV18	5	STR	14-9 TO 15-2	7							VERT FF
5AWV19	5	STR	6-9 TO 7-10	12							VERT NF
5AWV20	5	STR	6-9 TO 7-10	23							VERT FF
5AWV21	5	STR	9-1 TO 10-8	17							VERT NF
5AWV22	5	STR	9-1 TO 10-8	32							VERT FF HORIZ EF
5AWH23	5	STR	21-11	15							BRIDGE SEAT
8ASH1	8	STR	33-0	5							
SUBTOTAL THIS POUR				5842 LBS.							

MARK	SIZE	TYPE	LENGTH	NO	A	B	C	D	E	F	REMARKS
EAST ABUTMENT											
BACKWALL & UPPER WINGWALLS											
5ABV1	5	STR	6-0	47							VERT EF
5ABV2	5	2	2-2	30	1-9	0-6	--				VERT FF
5ABV3	5	13	2-9	30	1-1	0-11	0-10	0-9.4	0-9.4		VERT NF
5ABH4	5	STR	34-0	12							HORIZ EF
5AWV24	5	STR	9-0	6							VERT CKWL
5AWV25	5	2	2-7	6	2-0	0-8	--				VERT CKWL
5AWV26	5	2	6-10	10	2-7	1-10	2-7				TOP OF CURTAIN WALL
5AWH27	5	2	6-0	16	3-6	0-8	2-0				HORIZ CURTAIN WALL
5AWH28	5	2	4-4	16	2-5	2-0	--				HORIZ CKWL
5AWV29	5	STR	7-0	10							VERT EF
5AWV30	5	2	4-6	61	2-0	0-8	2-0				TOP OF WALL
5AWH31	5	STR	4-10	18							HORIZ NF
5AWH32	5	STR	7-2	14							HORIZ EF
5AWV33	5	STR	7-0	49							VERT EF
5AWH34	5	STR	30-8	16							HORIZ EF
5AWV35	5	STR	7-1	10							VERT EF
5AWH36	5	STR	3-10 TO 7-8	24							HORIZ CURTAIN WALL
5AWV37	5	STR	23-4 TO 23-5	5							VERT CURTAIN WALL
5AWV38	5	STR	7-2	35							VERT EF
5AWH39	5	STR	21-11	16							HORIZ EF
5AWV40	5	STR	26-9 TO 24-1	5							VERT CURTAIN WALL
5AWH41	5	STR	3-6 TO 7-8	25							HORIZ CURTAIN WALL
SUBTOTAL THIS POUR				3853 LBS.							
PEDESTALS											
5APS1	5	6	10-3	7	2-8	2-2	0-5.5	0-3.7			PEDESTAL STIRRUPS
5APS2	5	6	11-3	2	3-2	2-2	0-5.5	0-3.7			PEDESTAL STIRRUPS
SUBTOTAL THIS POUR				98 LBS.							
BACKWALL HEADER											
5AHH1	5	STR	31-0	1							LONG HEADER
SUBTOTAL THIS POUR				32 LBS.							
NE SAFETY WALK											
5ACH1	5	STR	30-9	2							LONG TOP
5ACH2	5	2	9-5	1	7-8	1-10	--				HORIZ TOP
5ACH3	5	STR	7-8	2							LONG TOP
5AWH27	5	2	6-0	1	3-6	0-8	2-0				HORIZ CORNER
SUBTOTAL THIS POUR				96 LBS.							
SE SAFETY WALK											
5ACH2	5	2	9-5	1	7-8	1-10	--				HORIZ TOP
5ACH3	5	STR	9-6	2							LONG TOP
5ACH4	5	STR	22-0	2							LONG TOP
5AWH27	5	2	6-0	1	3-6	0-8	2-0				HORIZ CORNER
SUBTOTAL THIS POUR				82 LBS.							

BAR BENDING DIAGRAMS

ALL DIMENSIONS ARE OUT TO OUT OF BARS



BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
EAST ABUTMENT
BAR LIST

Prepared and recommended
GOODKIND & O'DEA, INC.
Consulting Engineers
Date 11/1/75

DWG. NO.	SCALE	DATE	
37		Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

Detailed by L. Volkoff
Detail Checked by F. Yeen

1069090

D95042

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-4B1-2(74) I-UI-81-2(126)	293	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

PIER NO 1

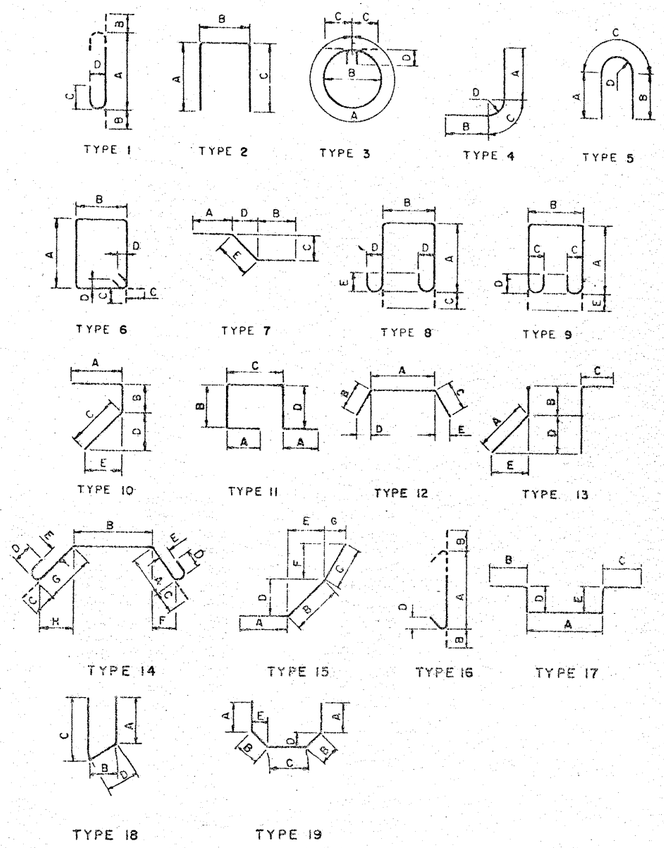
MARK	SIZE	TYPE	LENGTH	NO	A	B	C	D	E	F	G	REMARKS
FOOTING												
5PFL1	5	STR	24-6	25								LONG TOP
5PFT2	5	STR	24-6	25								TRANS TOP
9PFL1	9	STR	24-6	50								LONG BOT
9PFV2	9	1	7-9	52	6-6	1-3	0-10.3	0-11.3				VERT DOWEL
10PFT1	10	STR	24-6	50								TRANS BOT
SUBTOTAL THIS POUR				12084 LBS.								
COLUMN												
4PCS1	4	16	4-2	126	3-5	0-4.5	0-3					HORIZ TIES
4PCS2	4	16	2-8	42	2-3	0-4.5	0-3					HORIZ TIES
4PCS3	4	2	16-3	42	6-6	3-5	6-6					HORIZ TIES
9PCV1	9	STR	24-1	52								VERT
SUBTOTAL THIS POUR				5139 LBS.								
CAP												
4PBS1	4	6	13-9 TO 16-11	21	4-1 TO 5-8	2-6.5 TO 2-6.5	0-4.5 TO 0-4.5	0-3 TO 0-3				VERT STIRRUP
4PBS2	4	6	18-11 TO 22-9	9	6-8 TO 8-7	2-6.5 TO 2-6.5	0-4.5 TO 0-4.5	0-3 TO 0-3				VERT STIRRUP
4PBS3	4	6	13-9 TO 16-7	21	4-1 TO 5-6	2-6.5 TO 2-6.5	0-4.5 TO 0-4.5	0-3 TO 0-3				VERT STIRRUP
4PBS4	4	6	18-3 TO 21-7	9	6-4 TO 8-0	2-6.5 TO 2-6.5	0-4.5 TO 0-4.5	0-3 TO 0-3				VERT STIRRUP
5PBH1	5	2	7-6	8	2-0	3-8	2-0					HORIZ ENDS
5PBH2	5	15	21-3	4	6-8	11-0	3-7	5-8	9-4	3-7	0-5.5	HORIZ
5PBH3	5	15	20-4	4	6-8	10-1	3-7	3-10.5	9-4	3-7	0-5.5	HORIZ
5PBH4	5	STR	31-0	6								HORIZ EF
5PBH5	5	STR	28-9	2								HORIZ EF
5PBH6	5	STR	25-0	2								HORIZ EF
5PBH7	5	STR	21-0	2								HORIZ EF
5PBH8	5	STR	17-0	2								HORIZ EF
5PBV9	5	2	2-11	40	2-6	0-6	--					VERT
8PBH1	8	14	5-7	6	2-9	1-11	0-11	0-8	0-8	2-0.1		HORIZ BENT
8PBH2	8	14	7-0	6	3-5	2-8	0-11	0-8	0-8	2-6		HORIZ BENT
8PBH3	8	14	8-4	6	3-11	3-6	0-11	0-8	0-8	2-11		HORIZ BENT
8PBH4	8	14	9-10	6	4-7	4-4	0-11	0-8	0-8	3-4.5		HORIZ BENT
8PBH5	8	14	11-4	6	5-4	5-1	0-11	0-8	0-8	3-10.5		HORIZ BENT
8PBH6	8	14	12-6	6	5-2	6-5	0-11	0-8	0-8	3-10		HORIZ BENT
8PBH7	8	14	13-8	6	4-11	7-10	0-11	0-8	0-8	3-8		HORIZ BENT
8PBH8	8	14	5-10	6	3-4	1-7	0-11	0-8	0-8	2-3.5		HORIZ BENT
8PBH9	8	14	7-1	6	3-10	2-4	0-11	0-8	0-8	2-6		HORIZ BENT
8PBH10	8	14	8-4	6	4-4	3-1	0-11	0-8	0-8	2-11		HORIZ BENT
8PBH11	8	14	9-8	6	4-11	3-10	0-11	0-8	0-8	3-3		HORIZ BENT
8PBH12	8	14	10-11	6	5-5	4-7	0-11	0-8	0-8	3-7		HORIZ BENT
8PBH13	8	14	11-10	6	5-2	5-9	0-11	0-8	0-8	3-6		HORIZ BENT
8PBH14	8	14	13-0	6	5-1	7-0	0-11	0-8	0-8	3-5		HORIZ BENT
10PBH1	10	STR	31-7	14								HORIZ TOP
11PBH1	11	STR	31-9	7								HORIZ TOP
SUBTOTAL THIS POUR				6661 LBS.								
PEDESTALS												
5PPS1	5	6	14-0	7	3-8	3-6						HORIZ STIRRUP
SUBTOTAL THIS POUR				102 LBS.								

PIER NO 2

MARK	SIZE	TYPE	LENGTH	NO	A	B	C	D	E	F	G	REMARKS
FOOTING												
5PFT1	5	STR	24-6	28								TRANS TOP
5PFL2	5	STR	26-6	26								LONG TOP
9PFL1	9	STR	26-6	50								LONG BOT
10PFT1	10	STR	24-6	54								TRANS BOT
10PFV2	10	1	9-4	50	7-11	1-5	0-11.4	1-0.8				VERT DOWEL
SUBTOTAL THIS POUR				13640 LBS.								
COLUMN												
4PCS1	4	16	4-2	145	3-5	0-4.5	--	0-3				HORIZ TIES
4PCS2	4	16	2-8	58	2-3	0-4.5	--	0-3				HORIZ TIES
4PCS3	4	2	16-2	58	6-5.5	3-5	6-5.5					HORIZ TIES
10PCV1	10	STR	31-11	50								VERT
SUBTOTAL THIS POUR				8000 LBS.								
CAP												
4PBS1	4	6	13-9 TO 16-11	21	4-1 TO 5-8	2-6.5 TO 2-6.5	0-4.5 TO 0-4.5	0-3 TO 0-3				VERT STIRRUP
4PBS2	4	6	18-11 TO 22-9	9	6-8 TO 8-7	2-6.5 TO 2-6.5	0-4.5 TO 0-4.5	0-3 TO 0-3				VERT STIRRUP
4PBS3	4	6	13-9 TO 16-7	21	4-1 TO 5-6	2-6.5 TO 2-6.5	0-4.5 TO 0-4.5	0-3 TO 0-3				VERT STIRRUP
4PBS4	4	6	18-3 TO 21-7	9	6-4 TO 8-0	2-6.5 TO 2-6.5	0-4.5 TO 0-4.5	0-3 TO 0-3				VERT STIRRUP
5PBH1	5	2	7-6	8	2-0	3-8	2-0					HORIZ ENDS
5PBH2	5	15	21-3	4	6-8	11-0	3-7	5-8	9-4	3-7	0-5.5	HORIZ
5PBH3	5	15	20-4	4	6-8	10-1	3-7	3-10.5	9-4	3-7	0-5.5	HORIZ
5PBH4	5	STR	31-0	6								HORIZ EF
5PBH5	5	STR	28-9	2								HORIZ EF
5PBH6	5	STR	25-0	2								HORIZ EF
5PBH7	5	STR	21-0	2								HORIZ EF
5PBH8	5	STR	17-0	2								HORIZ EF
5PBV9	5	2	2-11	40	2-6	0-6	--					VERT
8PBH1	8	14	5-7	6	2-9	1-11	0-11	0-8	0-8	2-0.1		HORIZ BENT
8PBH2	8	14	7-0	6	3-5	2-8	0-11	0-8	0-8	2-6		HORIZ BENT
8PBH3	8	14	8-4	6	3-11	3-6	0-11	0-8	0-8	2-11		HORIZ BENT
8PBH4	8	14	9-10	6	4-7	4-4	0-11	0-8	0-8	3-4.5		HORIZ BENT
8PBH5	8	14	11-4	6	5-4	5-1	0-11	0-8	0-8	3-10.5		HORIZ BENT
8PBH6	8	14	12-6	6	5-2	6-5	0-11	0-8	0-8	3-10		HORIZ BENT
8PBH7	8	14	13-8	6	4-11	7-10	0-11	0-8	0-8	3-8		HORIZ BENT
8PBH8	8	14	5-10	6	3-4	1-7	0-11	0-8	0-8	2-3.5		HORIZ BENT
8PBH9	8	14	7-1	6	3-10	2-4	0-11	0-8	0-8	2-6		HORIZ BENT
8PBH10	8	14	8-4	6	4-4	3-1	0-11	0-8	0-8	2-11		HORIZ BENT
8PBH11	8	14	9-8	6	4-11	3-10	0-11	0-8	0-8	3-3		HORIZ BENT
8PBH12	8	14	10-11	6	5-5	4-7	0-11	0-8	0-8	3-7		HORIZ BENT
8PBH13	8	14	11-10	6	5-2	5-9	0-11	0-8	0-8	3-6		HORIZ BENT
8PBH14	8	14	13-0	6	5-1	7-0	0-11	0-8	0-8	3-5		HORIZ BENT
10PBH1	10	STR	31-7	14								HORIZ TOP
11PBH1	11	STR	31-9	7								HORIZ TOP
SUBTOTAL THIS POUR				6661 LBS.								
PEDESTALS												
5PPS1	5	6	14-11	2	3-8	3-6	0-5.5	0-3.8				HORIZ STIRRUP
5PPS2	5	6	14-11	6	3-8	3-6	0-5.5	0-3.8				HORIZ STIRRUP
SUBTOTAL THIS POUR				124 LBS.								

BAR BENDING DIAGRAMS

ALL DIMENSIONS ARE OUT TO OUT OF BARS



BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
PIER 1 & 2
BAR LIST

Prepared and recommended
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

DWG. NO	SCALE	DATE	
38		Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

In Charge of P. Bhargava
Designed by J.B.O. Crisbell
Design Checked by J.A. Grozny
Detailed by A.C. & F.H.W.Y.
Detail Checked by C.L. & H.W.Y.

D95042

FED. ROAD REG. NO	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(74) I-UI-81-2(126)	284	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

PIER NO 3

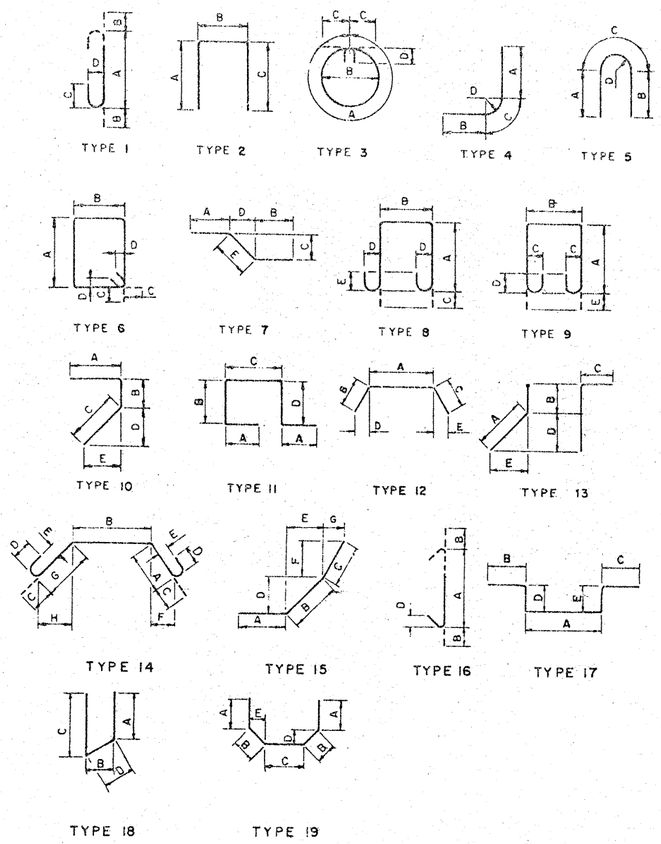
MARK	SIZE	TYPE	LENGTH	NO	A	B	C	D	E	F	G	REMARKS
FOOTING												
5PFT1	5	STR	15-6	25								TRANS TOP
5PFL2	5	STR	23-6	17								LONG TOP
7PFT1	7	STR	15-6	48								TRANS BOT
8PFL1	8	STR	23-6	32								LONG BOT
10PFV1	10	1	8-4	30	6-11	1-5	0-11.4	1-0.8				VERT DOWEL
SUBTOTAL THIS POUR				5426 LBS.								
COLUMN												
4PCS1	4	16	4-2	153	3-5	0-4.5	--	0-3				HORIZ TIES
4PCS2	4	16	2-8	68	2-3	0-4.5	--	0-3				HORIZ TIES
4PCS3	4	2	16-2	34	6-5.5	3-5	6-5.5					HORIZ TIES
10PCV1	10	STR	19-9	30								VERT
SUBTOTAL THIS POUR				3464 LBS.								
CAP												
4PBS1	4	6	13-9 TO 16-11	10	4-1 TO 5-8	2-6.5 TO 2-6.5	0-4.5 TO 0-4.5	0-3 TO 0-3				VERT STIRRUP
4PBS2	4	6	18-11 TO 22-9	6	6-8 TO 8-7	2-6.5 TO 2-6.5	0-4.5 TO 0-4.5	0-3 TO 0-3				VERT STIRRUP
4PBS3	4	6	13-9 TO 16-7	10	4-1 TO 5-6	2-6.5 TO 2-6.5	0-4.5 TO 0-4.5	0-3 TO 0-3				VERT STIRRUP
4PBS4	4	6	18-3 TO 21-7	6	6-4 TO 8-0	2-6.5 TO 2-6.5	0-4.5 TO 0-4.5	0-3 TO 0-3				VERT STIRRUP
5PBH1	5	2	7-6	8	2-0	3-8	2-0					HORIZ ENDS
5PBH2	5	15	21-3	4	6-8	11-0	3-7	5-8	9-4	3-7	0-5.5	HORIZ
5PBH3	5	15	20-4	4	6-8	10-1	3-7	3-10.5	9-4	3-7	0-5.5	HORIZ
5PBH4	5	STR	31-0	6								HORIZ EF
5PBH5	5	STR	28-9	2								HORIZ EF
5PBH6	5	STR	25-0	2								HORIZ EF
5PBH7	5	STR	21-0	2								HORIZ EF
5PBH8	5	STR	17-0	2								HORIZ EF
5PBV9	5	2	2-11	40	2-6	0-6	--					VERT
8PBH1	8	14	5-7	4	2-9	1-11	0-11	0-8	0-8	2-0.1		HORIZ BENT
8PBH2	8	14	7-0	4	3-5	2-8	0-11	0-8	0-8	2-6		HORIZ BENT
8PBH3	8	14	8-4	4	3-11	3-6	0-11	0-8	0-8	2-11		HORIZ BENT
8PBH4	8	14	9-10	4	4-7	4-4	0-11	0-8	0-8	3-4.5		HORIZ BENT
8PBH5	8	14	11-4	4	5-4	5-1	0-11	0-8	0-8	3-10.5		HORIZ BENT
8PBH7	8	14	13-8	4	4-11	7-10	0-11	0-8	0-8	3-8		HORIZ BENT
8PBH8	8	14	5-10	4	3-4	1-7	0-11	0-8	0-8	2-3.5		HORIZ BENT
8PBH9	8	14	7-1	4	3-10	2-4	0-11	0-8	0-8	2-6		HORIZ BENT
8PBH10	8	14	8-4	4	4-4	3-1	0-11	0-8	0-8	2-11		HORIZ BENT
8PBH11	8	14	9-8	4	4-11	3-10	0-11	0-8	0-8	3-3		HORIZ BENT
8PBH12	8	14	10-11	4	5-5	4-7	0-11	0-8	0-8	3-7		HORIZ BENT
8PBH14	8	14	13-0	4	5-1	7-0	0-11	0-8	0-8	3-5		HORIZ BENT
11PBH1	11	STR	31-9	14								HORIZ TOP
SUBTOTAL THIS POUR				4653 LBS.								
PEDESTALS												
5PPS1	5	6	14-11	2	3-8	3-6	0-5.5	0-3.8				HORIZ STIRRUP
5PPS2	5	6	14-11	6	3-8	3-6	0-5.5	0-3.8				HORIZ STIRRUP
SUBTOTAL THIS POUR				124 LBS.								

PIER NO 4

MARK	SIZE	TYPE	LENGTH	NO	A	B	C	D	E	F	G	REMARKS
FOOTING												
5PFT1	5	STR	21-6	31								TRANS TOP
5PFL2	5	STR	29-6	23								LONG TOP
9PFT1	9	STR	21-6	60								TRANS TOP
10PFV1	10	1	9-4	46	7-11	1-5	0-11.4	1-0.8				VERT DOWEL
11PFL1	11	STR	29-6	44								LONG BOT
SUBTOTAL THIS POUR				14532 LBS.								
COLUMN												
4PCS1	4	16	4-2	204	3-5	0-4.5	--	0-3				HORIZ TIES
4PCS2	4	16	2-8	84	2-3	0-4.5	--	0-3				HORIZ TIES
4PCS3	4	2	16-2	84	6-5.5	3-5	6-5.5					HORIZ TIES
10PCV1	10	STR	45-2	46								VERT
SUBTOTAL THIS POUR				10815 LBS.								
CAP												
4PBS1	4	6	13-9 TO 16-11	21	4-1 TO 5-8	2-6.5 TO 2-6.5	0-4.5 TO 0-4.5	0-3 TO 0-3				VERT STIRRUP
4PBS2	4	6	18-11 TO 22-9	9	6-8 TO 8-7	2-6.5 TO 2-6.5	0-4.5 TO 0-4.5	0-3 TO 0-3				VERT STIRRUP
4PBS3	4	6	13-9 TO 16-7	21	4-1 TO 5-6	2-6.5 TO 2-6.5	0-4.5 TO 0-4.5	0-3 TO 0-3				VERT STIRRUP
4PBS4	4	6	18-3 TO 21-7	9	6-4 TO 8-0	2-6.5 TO 2-6.5	0-4.5 TO 0-4.5	0-3 TO 0-3				VERT STIRRUP
5PBH1	5	2	7-6	8	2-0	3-8	2-0					HORIZ ENDS
5PBH2	5	15	21-3	4	6-8	11-0	3-7	5-8	9-4	3-7	0-5.5	HORIZ
5PBH3	5	15	20-4	4	6-8	10-1	3-7	3-10.5	9-4	3-7	0-5.5	HORIZ
5PBH4	5	STR	31-0	6								HORIZ EF
5PBH5	5	STR	28-9	2								HORIZ EF
5PBH6	5	STR	25-0	2								HORIZ EF
5PBH7	5	STR	21-0	2								HORIZ EF
5PBH8	5	STR	17-0	2								HORIZ EF
5PBV9	5	2	2-11	40	2-6	0-6	--					VERT
8PBH1	8	14	5-7	6	2-9	1-11	0-11	0-8	0-8	2-0.1		HORIZ BENT
8PBH2	8	14	7-0	6	3-5	2-8	0-11	0-8	0-8	2-6		HORIZ BENT
8PBH3	8	14	8-4	6	3-11	3-6	0-11	0-8	0-8	2-11		HORIZ BENT
8PBH4	8	14	9-10	6	4-7	4-4	0-11	0-8	0-8	3-4.5		HORIZ BENT
8PBH5	8	14	11-4	6	5-4	5-1	0-11	0-8	0-8	3-10.5		HORIZ BENT
8PBH6	8	14	12-6	6	5-2	6-5	0-11	0-8	0-8	3-10		HORIZ BENT
8PBH7	8	14	13-8	6	4-11	7-10	0-11	0-8	0-8	3-8		HORIZ BENT
8PBH8	8	14	5-10	6	3-4	1-7	0-11	0-8	0-8	2-3.5		HORIZ BENT
8PBH9	8	14	7-1	6	3-10	2-4	0-11	0-8	0-8	2-6		HORIZ BENT
8PBH10	8	14	8-4	6	4-4	3-1	0-11	0-8	0-8	2-11		HORIZ BENT
8PBH11	8	14	9-8	6	4-11	3-10	0-11	0-8	0-8	3-3		HORIZ BENT
8PBH12	8	14	10-11	6	5-5	4-7	0-11	0-8	0-8	3-7		HORIZ BENT
8PBH13	8	14	11-10	6	5-2	5-9	0-11	0-8	0-8	3-6		HORIZ BENT
8PBH14	8	14	13-0	6	5-1	7-0	0-11	0-8	0-8	3-5		HORIZ BENT
10PBH1	10	STR	31-7	14								HORIZ TOP
11PBH1	11	STR	31-9	7								HORIZ TOP
SUBTOTAL THIS POUR				6661 LBS.								
PEDESTALS												
5PPS1	5	6	14-11	2	3-8	3-6	0-5.5	0-3.8				HORIZ STIRRUP
5PPS2	5	6	14-11	5	3-8	3-6	0-5.5	0-3.8				HORIZ STIRRUP
SUBTOTAL THIS POUR				109 LBS.								

BAR BENDING DIAGRAMS

ALL DIMENSIONS ARE OUT TO OUT OF BARS



BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
PIER 3 & 4
BAR LIST

Prepared and recommended
D. Sweeney
GOODKIND & O'DEA, INC. Consulting Engineers
Date 12/1/75

DWG. NO.	SCALE	DATE	
39		Nov 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

Checked by
Detail Checked by L. Volkoff

1069090

D095042

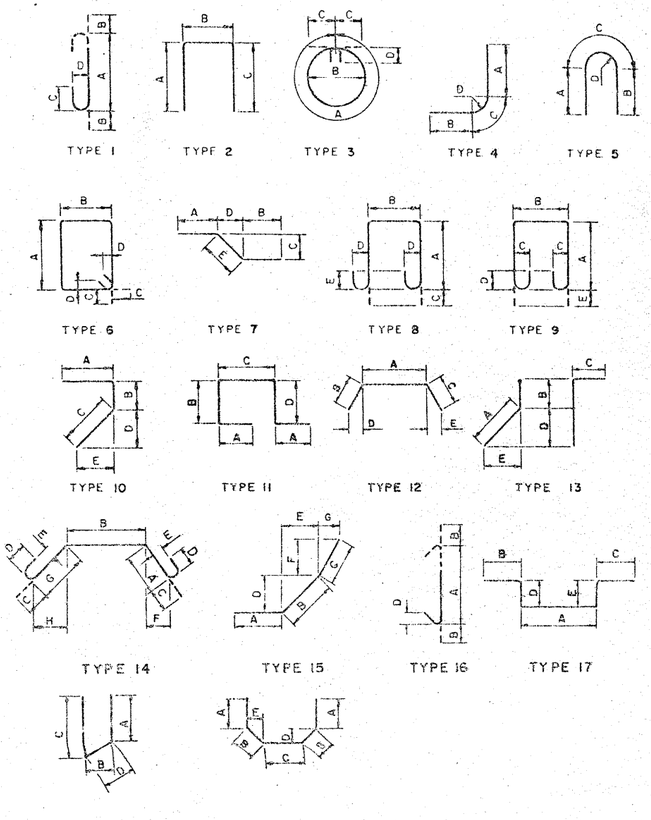
FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IG-481-2(74) I-IIL-81-2(126)	295	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

MARK	SIZE	TYPE	LENGTH	NO	A	B	C	D	E	F	REMARKS
DECK SLAB - SPANS 1,2 & 3											
DECK POUR A											
4SST1	4	1	21-3	216	20-1	0-6	0-4	0-4			TRANS TOP
4SST2	4	1	14-4	216	13-2	0-6	0-4	0-4			TRANS TOP
4SST3	4	STR	31-8	216							TRANS BOT
5SSL4	5	STR	60-0	106							LONG T&B
5SSL5	5	STR	37-7	34							LONG T&B
5SSL6	5	STR	24-7	19							PIER T&B
5SSL7	5	10	4-2	24	1-0	0-9	1-0	0-8.5	0-8.5		END HAUNCH
5SSS8	5	6	2-6	181	1-3	0-10	0-5.5	0-3.3			CURB TIE
5SST9	5	17	4-2	305	1-8	0-9	0-9	0-6	0-6		GIRDER HAUNCH
5SST10	5	STR	4-9	8							TRANS END
5SST11	5	STR	31-8	1							TRANS END
5SSL12	5	STR	41-7	24							PIER T&B
SUBTOTAL THIS POUR				21172 LBS.							
SAFETY WALK POUR A NORTH											
5SCL2	5	STR	60-0	4							LONG CURB
SUBTOTAL THIS POUR				250 LBS.							
SAFETY WALK POUR A SOUTH											
5SCL2	5	STR	60-0	4							LONG CURB
SUBTOTAL THIS POUR				250 LBS.							
DECK POUR B											
4SST1	4	1	21-3	270	20-1	0-6	0-4	0-4			TRANS TOP
4SST2	4	1	14-4	270	13-2	0-6	0-4	0-4			TRANS TOP
4SST3	4	STR	31-8	270							TRANS BOT
5SSV1	5	2	2-2	4	1-3	1-0	--				LIGHT STAN
5SSS3	5	19	4-3	2	0-8	1-0	1-3	0-5	0-11		LIGHT STAN
5SSL4	5	STR	60-0	99							LONG T&B
5SSL6	5	STR	24-7	24							PIER T&B
5SSS8	5	6	2-6	225	1-3	0-10	0-5.5	0-3.3			CURB TIES
5SST9	5	17	4-2	380	1-8	0-9	0-9	0-6	0-6		GIRDER HAUNCH
5SSL12	5	STR	41-7	19							PIER T&B
5SST13	5	1	3-8	5	2-3	0-7	0-5	0-5			LIGHT STAN
SUBTOTAL THIS POUR				22039 LBS.							
SAFETY WALK POUR B NORTH											
5SCL2	5	STR	60-0	2							LONG CURB
SUBTOTAL THIS POUR				125 LBS.							
SAFETY WALK POUR B SOUTH											
5SCS1	5	19	4-3	2	0-8	1-0	1-3	0-5	0-11		LIGHT STAN
5SCL2	5	STR	60-0	2							LONG CURB
SUBTOTAL THIS POUR				134 LBS.							
DECK POUR C											
4SST1	4	1	21-3	231	20-1	0-6	0-4	0-4			TRANS TOP
4SST2	4	1	14-4	231	13-2	0-6	0-4	0-4			TRANS TOP
4SST3	4	STR	31-8	231							TRANS BOT
5SSL4	5	STR	60-0	168							LONG T&B
5SSS8	5	6	2-6	191	1-3	0-10	0-5.5	0-3.3			CURB TIE
5SST9	5	17	4-2	320	1-8	0-9	0-9	0-6	0-6		GIRDER HAUNCH
SUBTOTAL THIS POUR				22758 LBS.							
SAFETY WALK POUR C NORTH											
5SCL2	5	STR	60-0	4							LONG CURB
SUBTOTAL THIS POUR				250 LBS.							
SAFETY WALK POUR C SOUTH											
5SCL2	5	STR	60-0	4							LONG CURB
SUBTOTAL THIS POUR				250 LBS.							
DECK POUR D											
4SST1	4	1	20-1	271	20-1						TRANS TOP
4SST2	4	1	13-2	271	13-2						TRANS TOP
4SST3	4	STR	31-8	271							TRANS BOT
5SSV1	5	2	2-2	4	1-3	1-0	--				LIGHT STAN
5SSS3	5	19	4-3	2	0-8	1-0	1-3	0-5	0-11		LIGHT STAN
5SSL4	5	STR	60-0	99							LONG T&B
5SSL6	5	STR	24-7	19							PIER T&B
5SSS8	5	6	2-6	226	1-3	0-10	0-5.5	0-3.3			CURB TIE
5SST9	5	17	4-2	380	1-8	0-9	0-9	0-6	0-6		GIRDER HAUNCH
5SSL12	5	STR	41-7	24							PIER T&B
5SST13	5	1	3-8	5	2-3	0-7	0-5	0-5			LIGHT STAN
SUBTOTAL THIS POUR				21753 LBS.							
SAFETY WALK POUR D NORTH											
5SCL2	5	STR	60-0	2							LONG CURB
SUBTOTAL THIS POUR				125 LBS.							
SAFETY WALK POUR D SOUTH											
5SCS1	5	19	4-3	2	0-8	1-0	1-3	0-5	0-11		LIGHT STAN
5SCL2	5	STR	60-0	2							LONG CURB
SUBTOTAL THIS POUR				134 LBS.							
DECK POUR E											
4SST1	4	1	21-3	215	20-1	0-6	0-4	0-4			TRANS TOP
4SST2	4	1	14-4	215	13-2	0-6	0-4	0-4			TRANS TOP
4SST5	4	STR	31-8	213							TRANS BOT
5SSL4	5	STR	60-0	74							LONG T&B
5SSL5	5	STR	37-7	26							LONG T&B
5SSL6	5	STR	24-7	24							PIER T&B
5SSL7	5	10	4-2	24	1-0	0-9	1-0	0-8.5	0-8.5		END HAUNCH
5SSS8	5	6	2-6	179	1-3	0-10	0-5.5	0-3.3			CURB TIE
5SST9	5	17	4-2	300	1-8	0-9	0-9	0-6	0-6		GIRDER HAUNCH
5SST10	5	STR	4-9	8							TRANS END
5SST11	5	STR	31-8	1							TRANS END
5SSL12	5	STR	41-7	19							PIER T&B
SUBTOTAL THIS POUR				18653 LBS.							
SAFETY WALK POUR E NORTH											
5SCL2	5	STR	60-0	2							LONG CURB
5SCL4	5	STR	37-7	2							LONG CURB
SUBTOTAL THIS POUR				204 LBS.							
SAFETY WALK POUR E SOUTH											
5SCL2	5	STR	60-0	2							LONG CURB
5SCL4	5	STR	37-7	2							LONG CURB
SUBTOTAL THIS POUR				204 LBS.							
DECK SLAB SPANS 4 & 5											
DECK POUR F											
4SST1	4	1	21-3	221	20-1	0-6	0-4	0-4			TRANS TOP
4SST2	4	1	14-4	221	13-2	0-6	0-4	0-4			TRANS TOP
4SST3	4	STR	31-8	221							TRANS BOT
5SSL4	5	STR	60-0	104							LONG T&B
5SSL7	5	10	4-2	24	1-0	0-9	1-0	0-8.5	0-8.5		END HAUNCH
5SSS8	5	6	2-8	183	1-3	1-0	0-5.5	0-3.3			CURB TIE
5SST9	5	17	4-2	305	1-8	0-9	0-9	0-6	0-6		GIRDER HAUNCH
5SST10	5	STR	4-9	8							TRANS END
5SST11	5	STR	31-8	1							TRANS END
5SSL14	5	STR	40-0	26							LONG T&B
5SSL15	5	STR	22-5	34							LONG T&B
SUBTOTAL THIS POUR				20327 LBS.							
SAFETY WALK POUR F NORTH											
5SCL2	5	STR	60-0	4							LONG CURB
5SCL4	5	STR	22-5	2							LONG CURB
SUBTOTAL THIS POUR				297 LBS.							
SAFETY WALK POUR F SOUTH											
5SCL2	5	STR	60-0	4							LONG CURB
5SCL4	5	STR	22-5	2							LONG CURB
SUBTOTAL THIS POUR				297 LBS.							
DECK POUR G											
4SST1	4	1	21-3	265	20-1	0-6	0-4	0-4			TRANS TOP
4SST2	4	1	14-4	265	13-2	0-6	0-4	0-4			TRANS TOP
4SST3	4	STR	31-8	265							TRANS BOT
5SSV1	5	2	2-2	4	1-3	1-0	--				LIGHT STAN
5SSS3	5	19	4-3	2	0-8	1-0	1-3	0-5	0-11		LIGHT STAN
5SSL4	5	STR	60-0	127							LONG T&B
5SSS8	5	6	2-8	220	1-3	1-0	0-5.5	0-3.3			CURB TIE
5SSY9	5	17	4-2	365	1-8	0-9	0-9	0-6	0-6		GIRDER HAUNCH
5SSL12	5	STR	41-7	43							LONG T&B
5SST13	5	1	3-8	5	2-3	0-7	0-5	0-5			LIGHT STAN
SUBTOTAL THIS POUR				23953 LBS.							

BAR BENDING DIAGRAMS

ALL DIMENSIONS ARE OUT TO OUT OF BARS



BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81
DECK SLAB, SPANS 1,2&3
BAR LIST

Prepared and recommended
GOODKIND & O'DEA, INC.
Consulting Engineers

Date 12/1/75

DWG. NO.	SCALE	DATE	
40		Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

In Charge of
Designed by H.W. Valentine
Design Checked by B.D. Crissell
Detailed by R. Brown
Detail Checked by

D95042

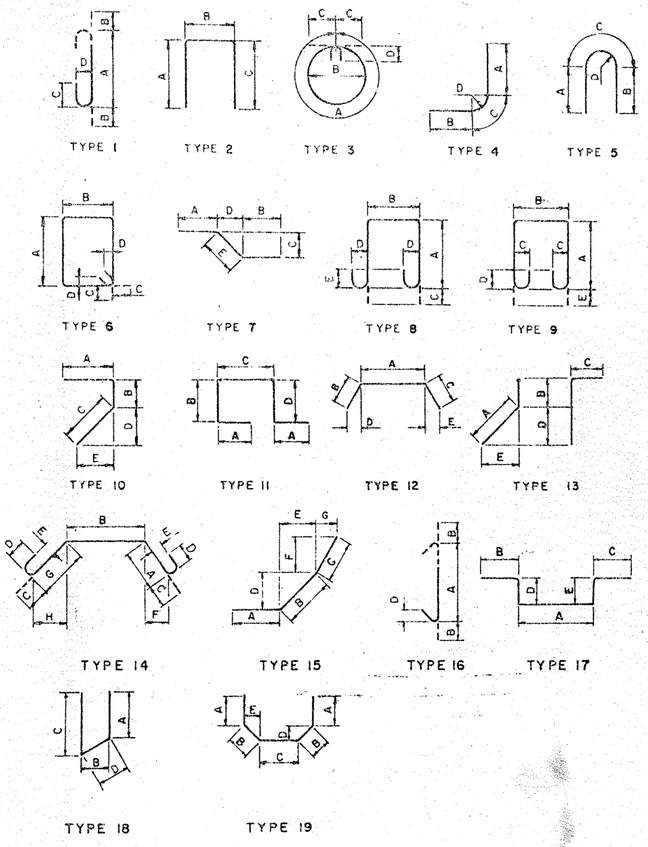
FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	I-IO-481-2(74) I-UI-81-2(128)	236	571

INTERSTATE ROUTE CONNECTION 571
FOREST INTERCHANGE - JAMESVILLE
ONONDAGA COUNTY

MARK	SIZE	TYPE	LENGTH	NO	A	B	C	D	E	F	REMARKS
DECK SLAB SPANS 4 & 5											
SAFETY WALK POUR G NORTH											
5SCL2	5	STR	60-0	2							LONG CURB
SUBTOTAL THIS POUR					125 LBS.						
SAFETY WALK POUR G SOUTH											
5SCS1	5	19	4-3	2	0-8	1-0	1-3	0-5	0-11		LIGHT STAN
5SCL2	5	STR	60-0	2							LONG CURB
SUBTOTAL THIS POUR					134 LBS.						
DECK POUR H											
4SST1	4	1	21-3	221	20-1	0-6	0-4	0-4			LONG TOP
4SST2	4	1	14-4	221	13-2	0-6	0-4	0-4			LONG TOP
4SST3	4	STR	31-8	221							LONG BOT
5SSL4	5	STR	60-0	64							LONG T&B
5SSL7	5	10	4-2	24	1-0	0-9	1-0	0-8.5	0-8.5		END HAUNCH
5SSS8	5	6	2-8	183	1-3	1-0	0-5.5	0-3.3			CURB TIE
5SST9	5	17	4-2	305	1-8	0-9	0-9	0-6	0-6		GIRDER HAUNCH
5SST10	5	STR	4-9	8							TRANS END
5SST11	5	STR	31-8	1							TRANS END
5SSL14	5	STR	40-0	34							LONG T&B
5SSL15	5	STR	22-5	26							LONG T&B
SUBTOTAL THIS POUR					17971 LBS.						
SAFETY WALK POUR H NORTH											
5SCL2	5	STR	60-0	4							LONG CURB
5SCL5	5	STR	40-0	2							LONG CURB
SUBTOTAL THIS POUR					334 LBS.						
SAFETY WALK POUR H SOUTH											
5SCL2	5	STR	60-0	4							LONG CURB
5SCL5	5	STR	40-0	2							LONG CURB
SUBTOTAL THIS POUR					334 LBS.						
WEST APPROACH SLAB											
5HST1	5	STR	28-6	34							TRANS T&B
5HST2	5	STR	19-10	50							TRANS T&B
6HSL1	6	STR	39-6	64							LONG T&B
6HSL2	6	STR	15-4	28							LONG T&B
SUBTOTAL THIS POUR					6487 LBS.						
EAST APPROACH SLAB											
5HST1	5	STR	28-6	60							TRANS T&B
5HST3	5	STR	23-9	20							TRANS T&B
5HST4	5	STR	14-6	6							TRANS T&B
6HSL1	6	STR	39-6	47							LONG T&B
6HSL3	6	STR	37-3	30							LONG T&B
6HSL4	6	STR	28-3	19							LONG T&B
SUBTOTAL THIS POUR					7643 LBS.						

BAR BENDING DIAGRAMS

ALL DIMENSIONS ARE OUT TO OUT OF BARS



BRIDGE NO. 1
CONNECTOR "H" OVER
CONNECTOR "G" AND I-81

BAR LIST

Prepared and recommended
GOODKIND & O'DEA, INC. Consulting Engineers
Date 11/1/75

DWG. NO.	SCALE	DATE	
41		Nov. 1975	GOODKIND & O'DEA, INC. CONSULTING ENGINEERS

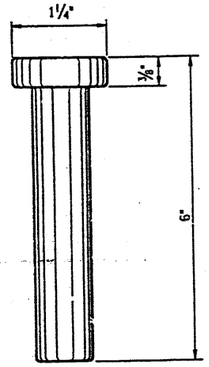
Detail Checked by

D256745

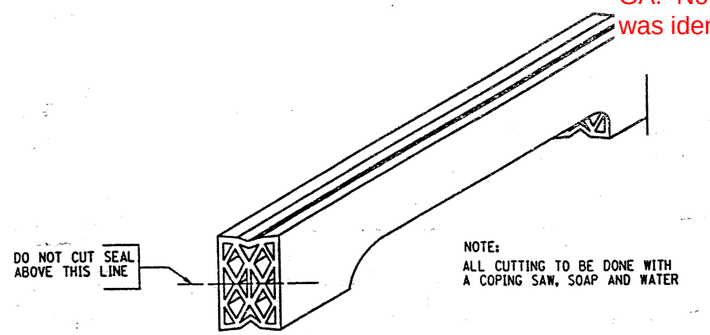
FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		66	72

INTERSTATE JOINT REPLACEMENT PROJECT
ONONDAGA COUNTY
P.I.N. 3803.63

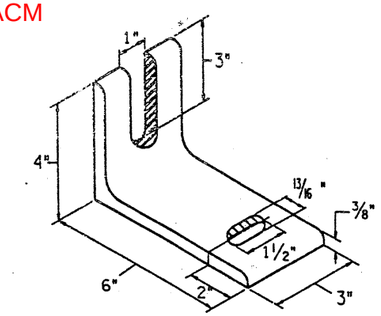
Record plans were reviewed on 3/20/14 by GA. No suspect ACM was identified.



DETAIL OF HEADED CONCRETE ANCHOR STUD



DETAIL FOR CUTTING SEAL

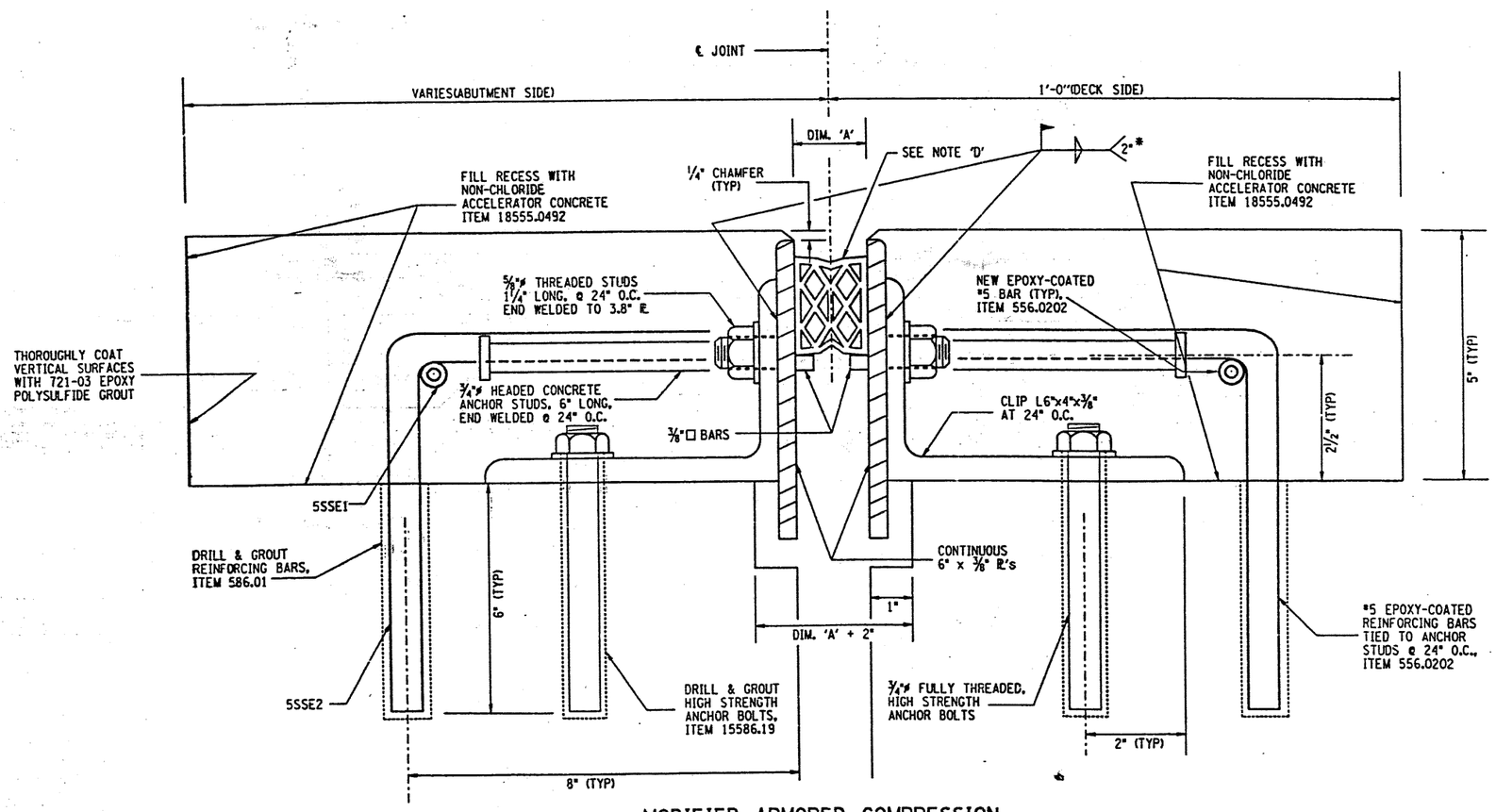


DETAIL OF CLIP ANGLE

SEALS			ARMORED JOINT SYSTEM	
TYPE	NOMINAL WIDTH	DIM. "A" @ 68°F.	TYPE	END CONDITION
1	1¾"	1"	A1	FIXED END ONLY
2	2"	1 3/16"	A2	EXP. UP TO 60'-0"
3	2½"	1½"	A3	EXP. OVER 60'-0" TO 75'-0"
4	3"	1¾"	A4	EXP. OVER 75'-0" TO 90'-0"
5	3½"	2 1/16"	A5	EXP. OVER 90'-0" TO 125'-0"

MAXIMUM SKEW LIMITS: FIXED END - NO LIMIT
EXP. END - 45° A2 THRU A6
30° A7 & A8

NOTE "D"
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 NO LESS THAN ¼" NOR MORE THAN ¾" BELOW THE TOP OF THE ROADWAY.



MODIFIED ARMORED COMPRESSION JOINT DETAIL

* WELD SHALL BE 2" EACH SIDE OF ANGLE AFTER SETTING FOR GRADE

NOTES:

THE TEMPERATURE OF THE BRIDGE MUST BE TAKEN ON THE TOP SURFACE OF THE BRIDGE DECK TO DETERMINE THE TEMPERATURE CORRECTION FOR THE JOINT OPENINGS.

THE COMPRESSION SEAL SHALL BE FIELD INSTALLED IN ONE PLACE FOR THE FULL LENGTH OF THE JOINT.

THE BAR LIST IS LOCATED ON DWG. J-11.

WHEREVER STONE CURB IS REMOVED, IT SHALL BE REPLACED WITH NON-CHLORIDE ACCELERATOR CONCRETE TO ITS ORIGINAL DIMENSIONS, ITEM 18555.0492.

THE COST TO CUT AND REMOVE BRIDGE CURBING SHALL BE INCLUDED IN PRICE BID FOR ITEM 580.01.

THE COST OF EPOXY-POLYSULFIDE GROUT SHALL BE INCLUDED IN PRICE BID FOR THE RESPECTIVE ADJACENT CONCRETE ITEM.

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 ONE INCH 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 ENGINEER, FOR A 15 MINUTE PERIOD.
3. LIMITS OF TEST AREA SHALL BE FROM FACE OF CURB (PARAPET) TO FACE OF CURB (PARAPET) ON THE DECK SURFACE.

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.

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 TEST WATER WITHIN THE WORK ZONE, AND THE METHOD TO BE USED FOR ACCESS BY THE E.I.C. TO THE BOTTOM OF THE JOINT BEING TESTED.

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.

BIN 1069090

AS-BUILT REVISIONS

SIGNATURE DATE

MISC. DETAILS
COMPRESSION SEAL JOINTS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

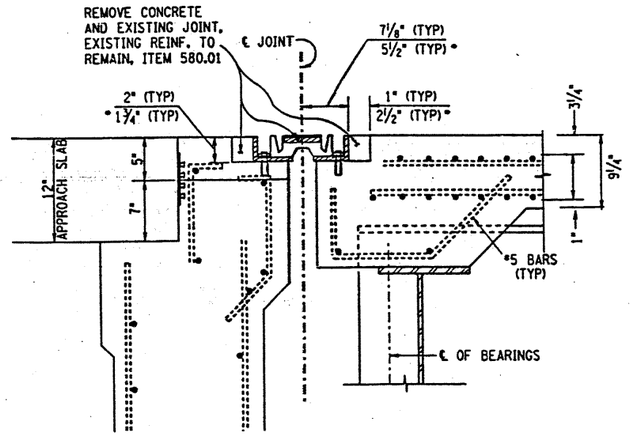
DRAWING NO.	SCALE	DATE	REGION	SHEET NO.
J-10	NONE	7/95	3	66

DATE ___ CHECKED BY ___ DRAFTED BY CADD ESTIMATED BY ___ CHECKED BY ___ DESIGNED BY ___ CHANGE OF ___

D256745

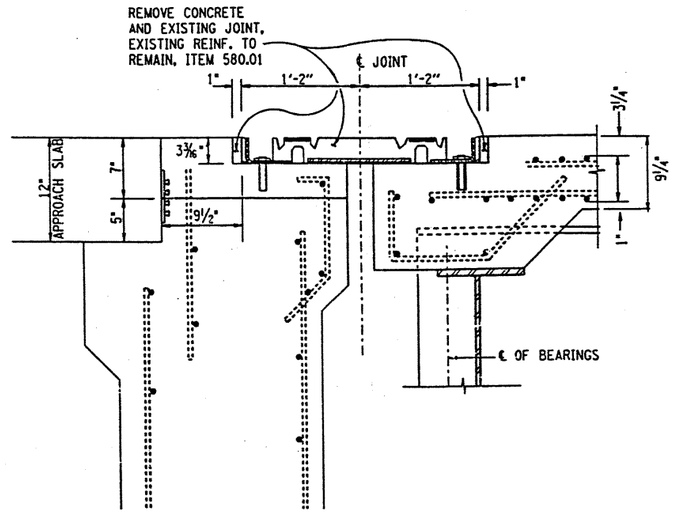
FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		65	72

INTERSTATE JOINT REPLACEMENT PROJECT
ONONDAGA COUNTY
P.I.N. 3803.63



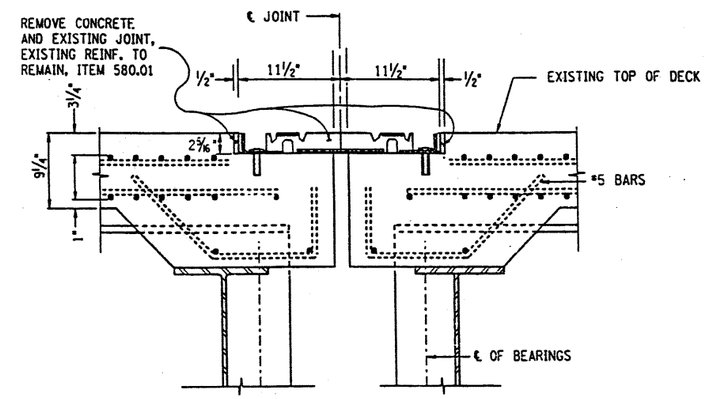
EXISTING ABUTMENT JOINT

BIN 1069090 - NORTH ABUT
* BIN 1069141 - EAST ABUT
* BIN 1069142 - EAST ABUT
BIN 1069151 - BOTH ABUTS
BIN 1069152 - BOTH ABUTS



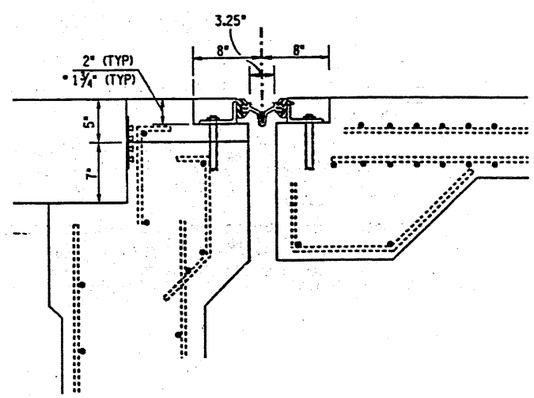
EXISTING ABUTMENT JOINT

BIN 1069090 - SOUTH ABUT
BIN 1069141 - WEST ABUT
BIN 1069142 - WEST ABUT



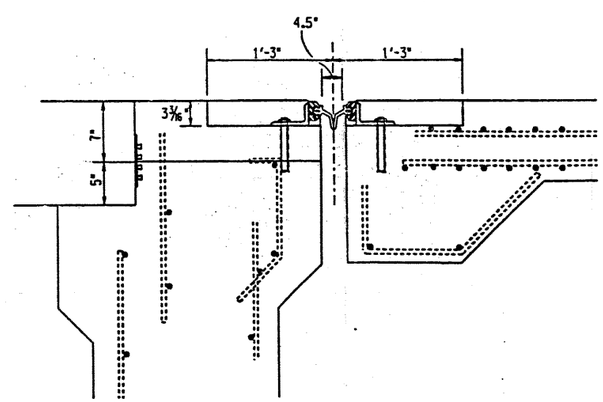
EXISTING PIER JOINT

BIN 1069090 - PIER 3



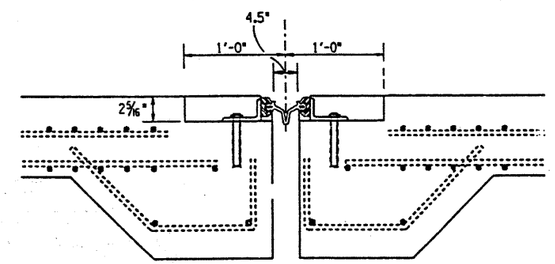
PROPOSED ABUTMENT JOINT

BIN 1069090 - NORTH ABUT
* BIN 1069141 - EAST ABUT
* BIN 1069142 - EAST ABUT
BIN 1069151 - BOTH ABUTS
BIN 1069152 - BOTH ABUTS



PROPOSED ABUTMENT JOINT

BIN 1069090 - SOUTH ABUT
BIN 1069141 - WEST ABUT
BIN 1069142 - WEST ABUT



PROPOSED PIER JOINT

BIN 1069090 - PIER 3

AS-BUILT REVISIONS

SIGNATURE DATE

JOINT REPLACEMENT DETAILS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

DRAWING NO.	SCALE	DATE	REGION	SHEET NO.
J-9	NONE	7/95	3	65

DATE
CHECKED BY
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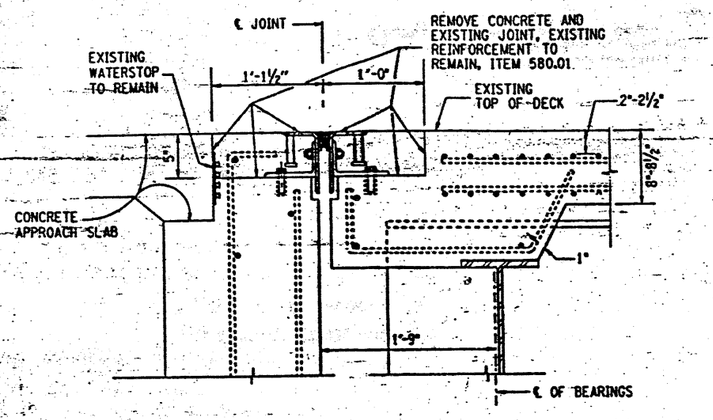
ESTIMATED BY
CHECKED BY
DESIGNED BY
IN CHARGE OF

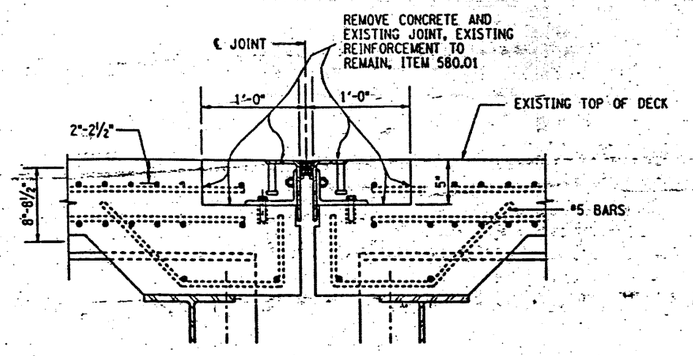
D256745

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		60	72

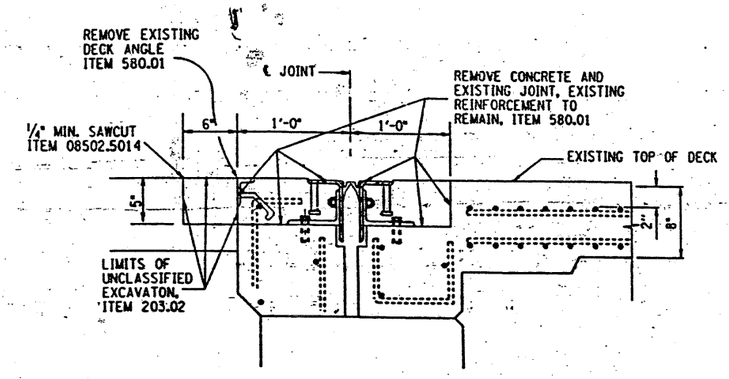
INTERSTATE JOINT REPLACEMENT PROJECT
ONONDAGA COUNTY
P.I.N. 3803.63



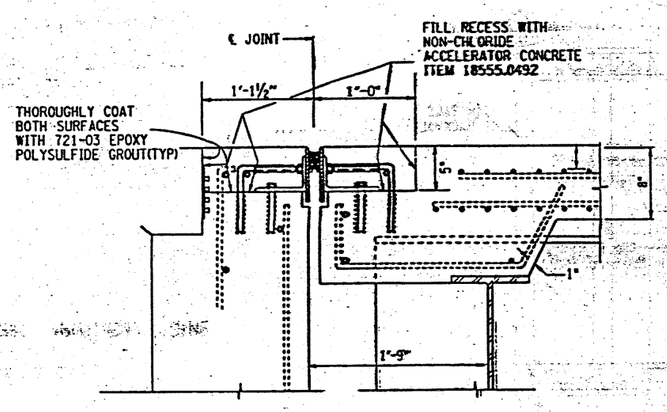
EXISTING ABUTMENT JOINT
BIN 1031639 - BOTH ABUTS
BIN 1031701 - BOTH ABUTS
BIN 1031702 - BOTH ABUTS



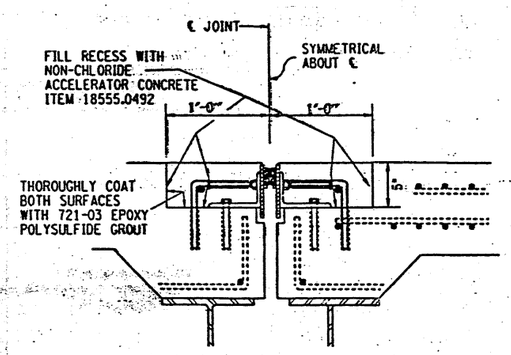
EXISTING PIER JOINT
BIN 1031639 - PIERS 1-8
BIN 1031701 - PIERS 1-2
BIN 1031702 - PIERS 1-2



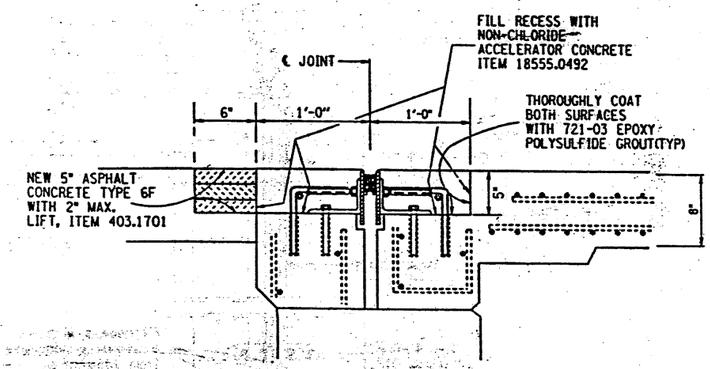
EXISTING ABUTMENT JOINT
BIN 1049649 - BOTH ABUTS
BIN 1049659 - EAST ABUT



PROPOSED ABUTMENT JOINT
BIN 1031639 - BOTH ABUTS
BIN 1031701 - BOTH ABUTS
BIN 1031702 - BOTH ABUTS



PROPOSED PIER JOINT
BIN 1031639 - PIERS 1-8
BIN 1031701 - PIERS 1-2
BIN 1031702 - PIERS 1-2



PROPOSED ABUTMENT JOINT
BIN 1049649 - BOTH ABUTS
BIN 1049659 - EAST ABUT

AS-BUILT REVISIONS

SIGNATURE DATE

JOINT REPLACEMENT DETAILS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

DRAWING NO.	SCALE	DATE	REGION	SHEET NO.
J-4	NONE	7/95	3	60

DATE
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IN CHARGE OF

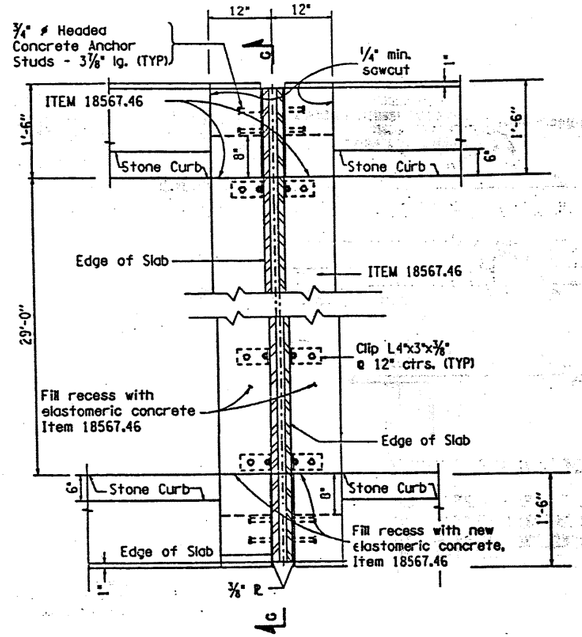
D256745

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		59	72

INTERSTATE JOINT REPLACEMENT PROJECT
ONONDAGA COUNTY
P.I.N. 3803.63

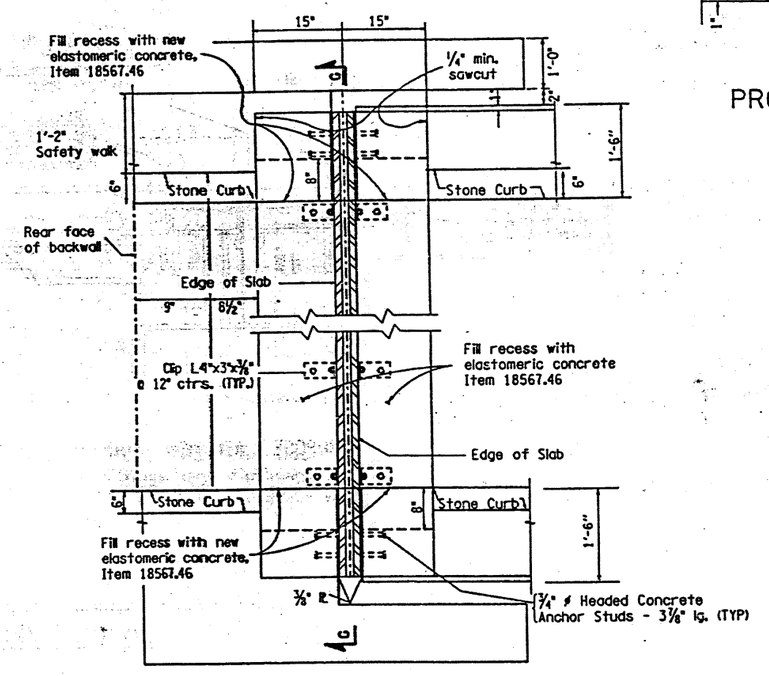
Note:
The main reinforcement in the Structural Slab and the usual reinforcement in the fascia and curb are not shown on these plans.

NOTES:
FOR CROSS SECTION VIEWS OF JOINTS, SEE DWGS. J-4 TO J-9
FOR SECTION G-G, SEE DWG J-12
FOR MEDIAN DETAILS, SEE DWG J-13



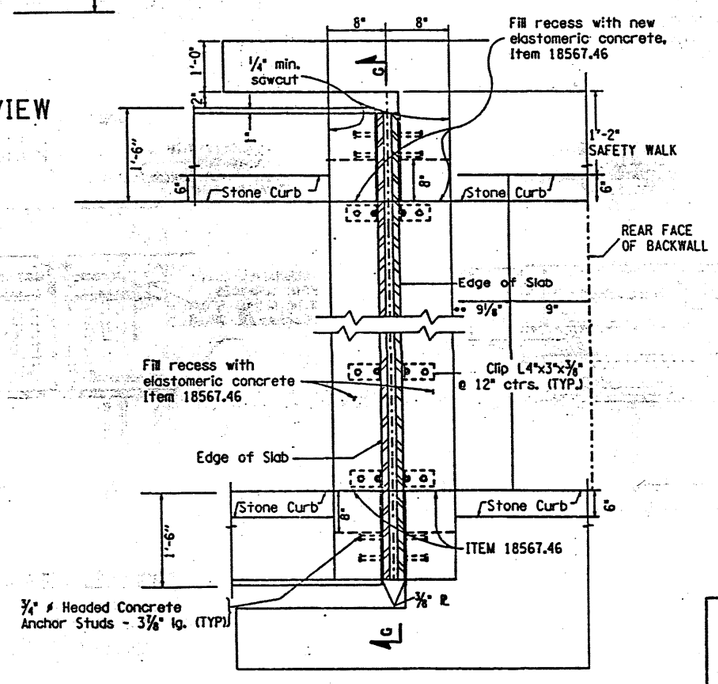
PROPOSED PIER PLAN VIEW

BIN 1069090 - PIER 3



PROPOSED ABUTMENT PLAN VIEW

BIN 1069090 - SOUTH ABUT
BIN 1069141 - WEST ABUT
BIN 1069142 - WEST ABUT



PROPOSED ABUTMENT PLAN VIEW

BIN 1069090 - NORTH ABUT
••BIN 1069141 - EAST ABUT
••BIN 1069142 - EAST ABUT
BIN 1069151 - BOTH ABUTS
BIN 1069152 - BOTH ABUTS

••THIS DIMENSION IS 10⅛" FOR THESE BRIDGES

AS-BUILT REVISIONS

SIGNATURE DATE

STRIP SEAL DETAILS
PLAN VIEWS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

DRAWING NO.	SCALE	DATE		SHEET NO.
J-3	NONE	7/95	REGION 3	59

DATE
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FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		5	72

INTERSTATE JOINT REPLACEMENT PROJECT
ONONDAGA COUNTY
PIN 3803.63

QUANITY ESTIMATE BY STRUCTURE

ITEM NO	DESCRIPTION	UNIT	1053969		1064691		1064692		1069090		1069141		1069142		1069151		1069152		1071341		1071342		1093530	
			EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL	EST.	FINAL
403.1701	ASPHALT CONCRETE-TYPE 6F TOP COURSE (HIGH FRICTION) MARSHALL DESIGN	TON	2		1		1		—		—		—		—		—		—		—		1	
407.0101	TACK COAT	GAL.	1		1		1		—		—		—		—		—		—		—		1	
08502.5014	SAWCUT EXISTING PAVEMENT	L.F.	261		420		420		210		187		187		187		187		569		892		129	
18555.0492	CEMENT CONC. W/ NON-CHLORIDE ACCELERATOR FOR FULL DEPTH SLAB REPL.	S.F.	202		354		354		—		—		—		—		—		106		—		106	
556.0202	EPOXY-COATED BAR REINFORCEMENT FOR STRUCTURES	LB.	409		676		676		—		—		—		—		—		191		—		208	
16567.26	ARMORED JOINT SYSTEM WITH PRE-FORMED ELASTIC STRIP SEAL	L.F.	—		—		—		111		92		92		92		92		—		—		—	
567.31	ARMORED JOINT SYSTEM WITH COMPRESSION SEAL-TYPE A1	L.F.	—		69		69		—		—		—		—		—		—		—		—	
567.32	ARMORED JOINT SYSTEM WITH COMPRESSION SEAL-TYPE A2	L.F.	—		—		—		—		—		—		—		—		—		—		—	
567.33	ARMORED JOINT SYSTEM WITH COMPRESSION SEAL-TYPE A3	L.F.	128		—		—		—		—		—		—		—		—		—		—	
567.34	ARMORED JOINT SYSTEM WITH COMPRESSION SEAL-TYPE A4	L.F.	—		138		138		—		—		—		—		—		—		—		—	
567.35	ARMORED JOINT SYSTEM WITH COMPRESSION SEAL-TYPE A5	L.F.	—		—		—		—		—		—		—		—		59		—		64	
11567.9302	REPLACING MODULAR SEAL FOR EXISTING BRIDGE JOINTS-TYPE2 (MULTIPLE CELLS)	L.F.	—		—		—		—		—		—		—		—		—		72		—	
18567.46	ELASTOMERIC CONCRETE FOR BRIDGE JOINT SYSTEMS	L.F.	—		—		—		102		92		92		92		92		217		442		—	
580.01	REMOVAL OF STRUCTURAL CONCRETE	C.Y.	4.0		7.0		7.0		2.0		2.0		2.0		1.0		1.0		8.0		9.0		2.0	
586.01	DRILLING AND GROUTING BOLTS, OR REINFORCING BARS	L.F.	57		96		96		—		—		—		—		—		27		—		29	
15586.19	DRILLING OF HIGH STRENGTH ANCHOR BOLTS	L.F.	117		102		102		—		—		—		—		—		—		—		31	
619.01	MAINTENANCE AND PROTECTION OF TRAFFIC	L.S.	NEC		NEC		NEC		NEC		NEC		NEC		NEC		NEC		NEC		NEC		NEC	
15619.0201	CONSTRUCTION SIGNS	L.S.	NEC		NEC		NEC		NEC		NEC		NEC		NEC		NEC		NEC		NEC		NEC	
619.0303	FLASHING ARROW BOARDS	L.S.	NEC		NEC		NEC		NEC		NEC		NEC		NEC		NEC		NEC		NEC		NEC	
619.0413	TYPE III CONSTRUCTION BARRICADE	L.F.	—		—		72		36		—		—		—		—		—		72		—	
619.0502	LIGHTING FOR CONSTRUCTION BARRICADES	L.F.	—		—		72		36		—		—		—		—		—		72		—	
15619.6730	LIGHTING FOR NIGHTTIME OPERATIONS	L.S.	NEC		NEC		NEC		NEC		NEC		NEC		NEC		NEC		NEC		NEC		NEC	
634.03	CONCRETE CYLINDER CURING BOX	EA.	—		—		—		—		—		—		—		—		—		—		—	
03634.0402	MOBILE TELEPHONE SERVICE	MO.	—		—		—		—		—		—		—		—		—		—		—	
15634.040291	MESSAGE UNIT CHARGE FOR MOBILE PHONE	LS.	—		—		—		—		—		—		—		—		—		—		—	
14634.1002	PORTABLE VARIBLE MESSAGE DISPLAY UNIT	EA.	—		—		—		—		—		—		—		—		—		—		—	
637.0601	ENGINEER'S OFFICE - TYPE B	EA.	—		—		—		—		—		—		—		—		—		—		—	
15637.3401	MICRO COMPUTER	EA.	—		—		—		—		—		—		—		—		—		—		—	
697.01	INTERIM PAYMENTS	L.S.	—		—		—		—		—		—		—		—		—		—		—	
699.040001	MOBILIZATION	L.S.	NEC		NEC		NEC		NEC		NEC		NEC		NEC		NEC		NEC		NEC		NEC	

AS-BUILT REVISIONS

SIGNATURE DATE

QUANTITY BY STRUCTURE -II

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

DRAWING NO.	SCALE	DATE		SHEET NO.
OS-2	NONE	7/95	REGION 3	5

DATE
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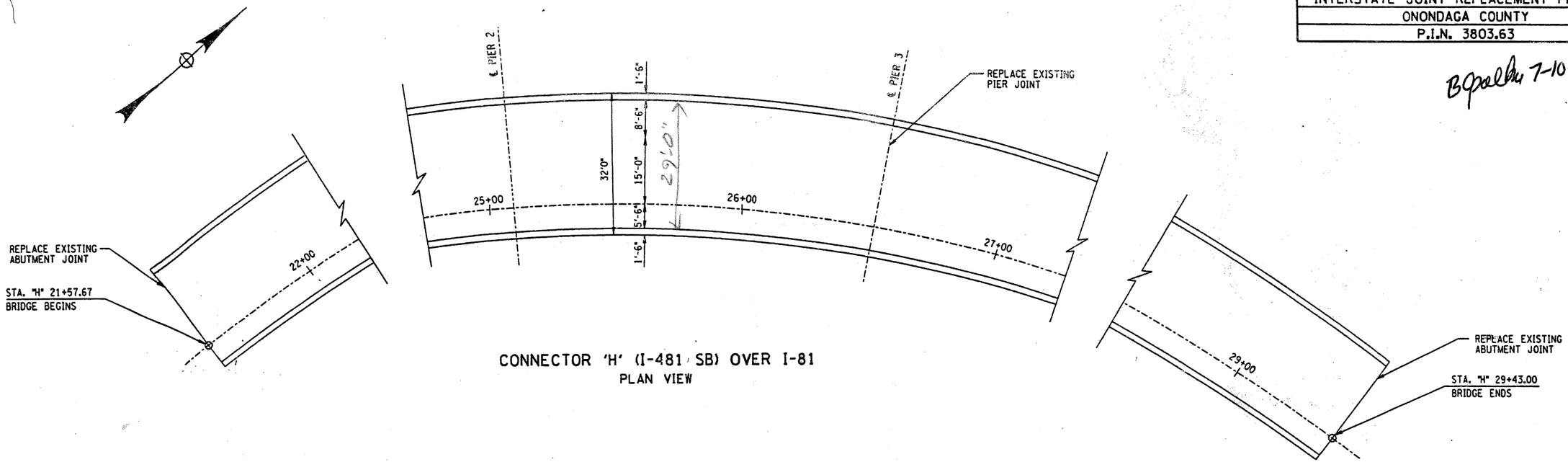
DESIGNED BY
IN CHARGE OF

D256745

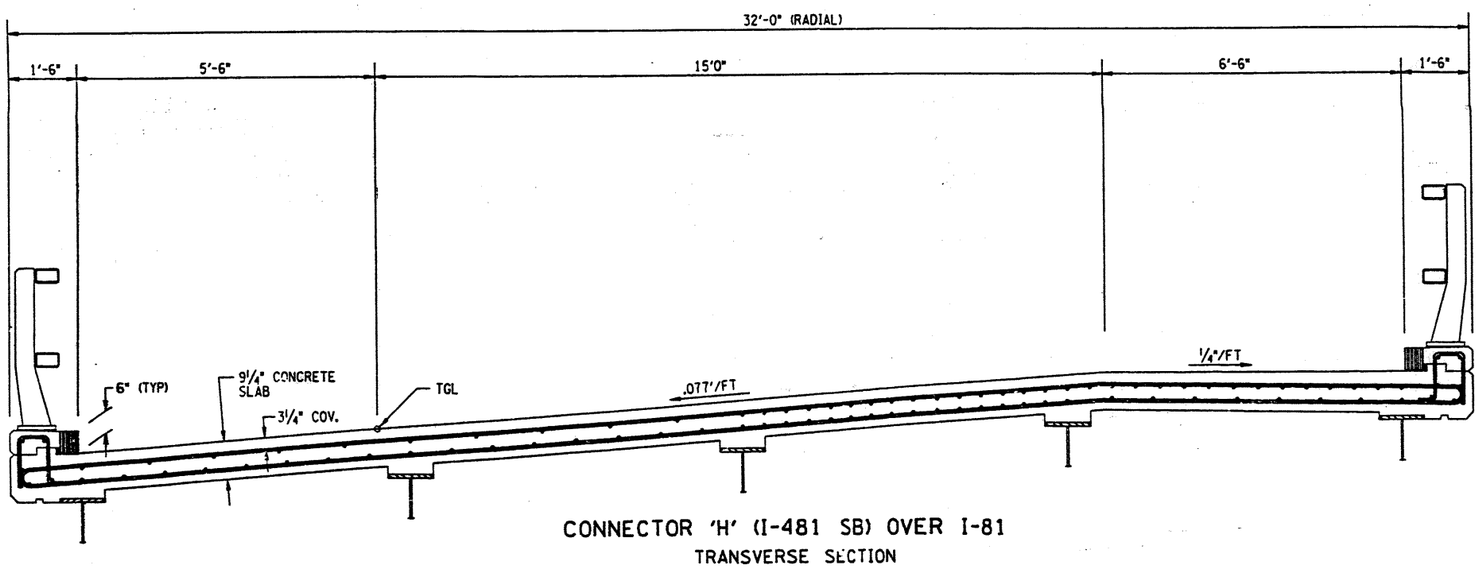
FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		46	72

INTERSTATE JOINT REPLACEMENT PROJECT
ONONDAGA COUNTY
P.I.N. 3803.63

B Goelkn 7-10-01



CONNECTOR 'H' (I-481 SB) OVER I-81
PLAN VIEW



CONNECTOR 'H' (I-481 SB) OVER I-81
TRANSVERSE SECTION

NOTE:
FOR JOINT INFORMATION SEE DWG. JT-1 TO DWG. JT-3

NOT MODIFIED

BIN 1069090

AS-BUILT REVISIONS

Completion 11-30-96

SIGNATURE DATE

PLAN & CROSS SECTION
BIN 1069090

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

DRAWING NO.	SCALE	DATE	REGION	SHEET NO.
B-12	NONE	7/95	3	46

DATE
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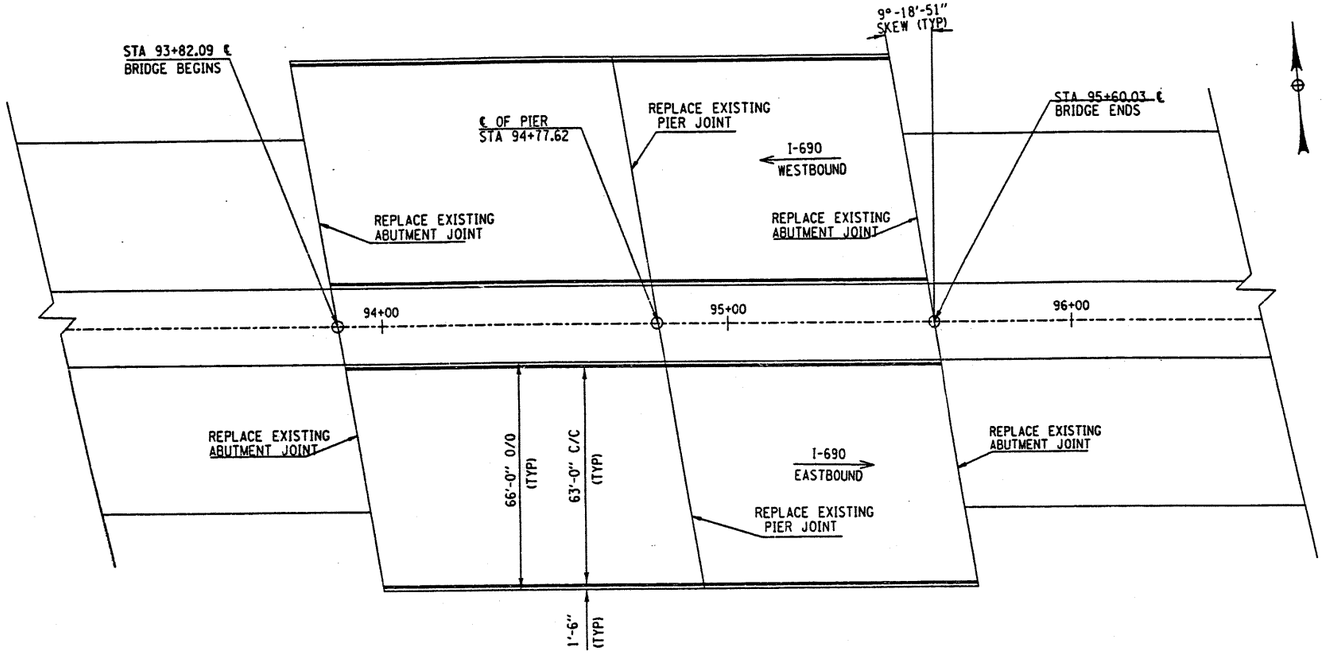
IN CHARGE OF

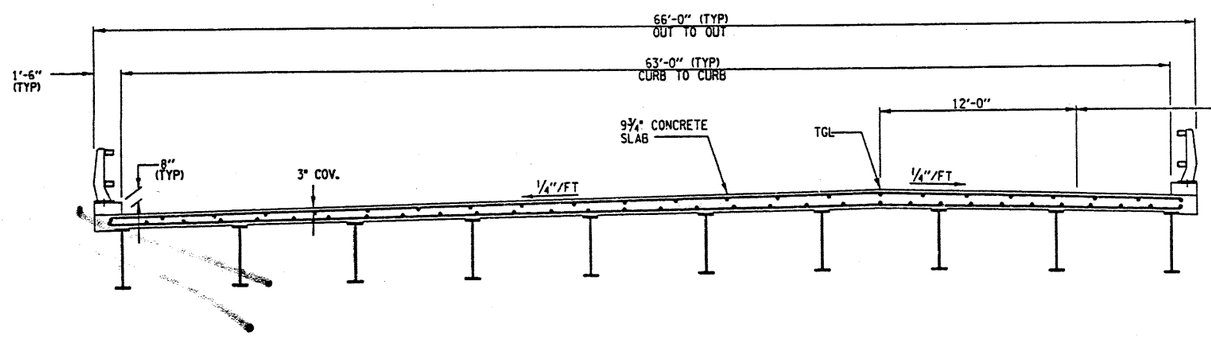
FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		45	72

INTERSTATE JOINT REPLACEMENT PROJECT
ONONDAGA COUNTY
P.I.N. 3803.63

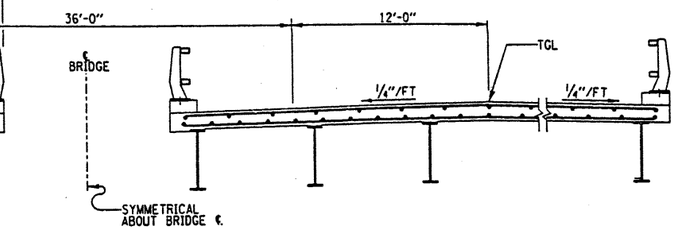


I-690 OVER BRIDGE ST
PLAN VIEW

NOTE:
FOR JOINT INFORMATION
SEE DWG. JT-1 TO DWG. JT-3



I-690 OVER BRIDGE ST
TRANSVERSE SECTION - WESTBOUND LANE



I-690 OVER BRIDGE ST
TRANSVERSE SECTION - EASTBOUND LANE

BIN 1064691 & BIN 1064692

BIN 1064691
BIN 1064692

AS-BUILT REVISIONS

SIGNATURE DATE

PLAN & CROSS SECTION
BIN 1064691, BIN 1064692

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

DRAWING NO.	SCALE	DATE	REGION	SHEET NO.
B-11	NONE	7/95	3	45

DATE
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DESIGNED BY
IN CHARGE OF

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		55	72

INTERSTATE JOINT REPLACEMENT PROJECT
ONONDAGA COUNTY
P.I.N. 3803.63

BRIDGE JOINT TABLE

B.I.N. NUMBER	JOINT LOCATION	JOINT SKEW	SPAN(S) LENGTH FOR JOINT	JOINT BEND LOCAT'N RT	JOINT BEND LOCAT'N LT	EXIST. JOINT TYPE	PROPOSED JOINT TYPE	CURB TO CURB DISTANCE (SEE NOTES)	FASCIA/ MEDIAN LENGTH	TOTAL LENGTH	ITEM NUMBER	DRAWING NUMBER SECT VIEW	DRAWING NUMBER PLAN VIEW	DRAWING NUMBER FASCIA DETAIL
1051149	WEST ABUT	17°-04'-56"	——	N	N	ACF	A-1 MAC	49.61	4.0	107	567.31	J-6	J-1	J-11
	EAST ABUT	17°-04'-56"	77	N	N	ACX	A-4 MAC	49.61	4.0	107	567.34	J-6	J-1	J-11
1051159	WEST ABUT	14°-17'-09"	——	N	N	ACF	A-1 MAC	48.93	4.0	107	567.31	J-6	J-1	J-11
	EAST ABUT	14°-17'-09"	72	N	N	ACX	A-3 MAC	48.93	4.0	107	567.34	J-6	J-1	J-11
1053881	SOUTH ABUT	38°-38'-29"	——	N	N	ACF	A-1 MAC	35.24	9.0	45	567.31	J-6	J-1	J-11
1053969	EAST ABUT	7°-49'-22"	64	N/N	N/N	ACX	A-3 MAC	56.40/57.30	7.0/3.0	124	567.33	J-6	J-2	J-11
1064691	WEST ABUT	9°-18'-51"	——	N	N	ACF	A-1 MAC	63.84	5.0	69	567.31	J-6	J-1	J-11
	PIER 1	9°-18'-51"	88	N	N	ACX	A-4 MAC	63.84	5.0	69	567.34	J-5	J-2	J-11
	EAST ABUT	9°-18'-51"	79	N	N	ACX	A-4 MAC	63.84	5.0	69	567.34	J-6	J-1	J-11
1064692	WEST ABUT	9°-18'-51"	——	N	N	ACF	A-1 MAC	63.84	5.0	69	567.31	J-6	J-1	J-11
	PIER 1	9°-18'-51"	88	N	N	ACX	A-4 MAC	63.84	5.0	69	567.34	J-5	J-2	J-11
	EAST ABUT	9°-18'-51"	79	N	N	ACX	A-4 MAC	63.84	5.0	69	567.34	J-6	J-1	J-11
1069090	SOUTH ABUT	——	349	N	N	WF	S400 STP	29.00	5.0	34	16567.26	J-9	J-3	J-12
	PIER 3	——	289	N	N	WF	S400 STP	29.00	5.0	34	16567.26	J-9	J-3	J-12
	NORTH ABUT	——	144	N	N	WF	S300 STP	29.00	5.0	34	16567.26	J-9	J-3	J-12
1069141	WEST ABUT	——	422	N	N	WF	S400 STP	41.00	5.0	46	16567.26	J-9	J-3	J-12
	EAST ABUT	——	188	N	N	WF	S300 STP	41.00	5.0	46	16567.26	J-9	J-3	J-12
1069142	WEST ABUT	——	422	N	N	WF	S400 STP	41.00	5.0	46	16567.26	J-9	J-3	J-12
	EAST ABUT	——	188	N	N	WF	S300 STP	41.00	5.0	46	16567.26	J-9	J-3	J-12
1069151	WEST ABUT	——	142	N	N	WF	S300 STP	41.00	5.0	46	16567.26	J-9	J-3	J-12
	EAST ABUT	——	142	N	N	WF	S300 STP	41.00	5.0	46	16567.26	J-9	J-3	J-12
1069152	WEST ABUT	——	137	N	N	WF	S300 STP	41.00	5.0	46	16567.26	J-9	J-3	J-12
	EAST ABUT	——	137	N	N	WF	S300 STP	41.00	5.0	46	16567.26	J-9	J-3	J-12
1071341	SOUTH ABUT	——	165	N	N	ACX	A-5 MAC	54.17	5.0	59	567.35	J-7	J-1	J-11
	PIER 3	——	625	N	N	MOD2	——	54.17	——	——	——	J-8	J-2	——
	PIER 6	——	545	N	N	MOD2	——	54.17	——	——	——	J-8	J-2	——
	PIER 9	——	375	N	N	MOD3	——	54.17	——	——	——	J-8	J-2	——
	NORTH ABUT	——	205	N	N	ACX	——	54.17	——	——	——	J-7	J-2	——

LEGEND

EXISTING JOINT TYPE

ACE = ARMORED COMPRESSION-ELASTOMERIC
ACF = ARMORED COMPRESSION-FIXED
ACX = ARMORED COMPRESSSION-EXPANSION
MOD2 = MODULAR EXPANSION TYPE II
MOD3 = MODULAR EXPANSION TYPE III
WF = WABO-FLEX

PROPOSED JOINT TYPE

A-'X' MAC = MODIFIED ARMORED COMPRESSION SEAL

S'X'00 STP = STRIP SEAL JOINT

JOINT BEND LOCATION

N = NO BENDS
CRB = CURB LINE
PAV'T = PAVEMENT

NOTES:

- ALL MEASUREMENTS TO 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 FEET

AS-BUILT REVISIONS

SIGNATURE DATE

BRIDGE JOINT TABLE-2

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

DRAWING NO.	SCALE*	DATE	REGION	SHEET NO.
JT-2	NONE	6/95	3	55

DATE
CHECKED BY
DRAFTED BY CADD 3803.63tbdel
CHECKED BY
ESTIMATED BY
CHECKED BY
DESIGNED BY
IN CHARGE OF

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259742	655	788

INTERSTATE ROUTE 505 ONONDAGA INTERCHANGE
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATES 81 & 690
CITY OF SYRACUSE
ONONDAGA COUNTY
P.I.N. 3804.66 B.I.N. 1069090

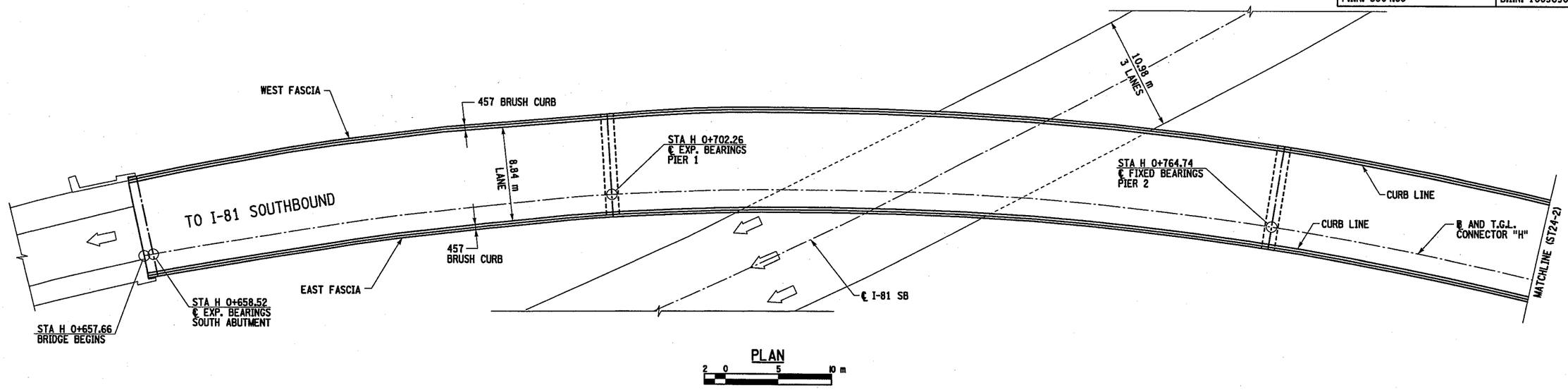
NOTES:

STRUCTURAL LIFTING SHALL BE IN PLACE PRIOR TO SUBSTRUCTURE WORK AT NOTED LOCATIONS AND REMAIN UNTIL ITS COMPLETION.

NO DECORATIVE FINISHES WILL BE INSTALLED UNDER THIS CONTRACT.

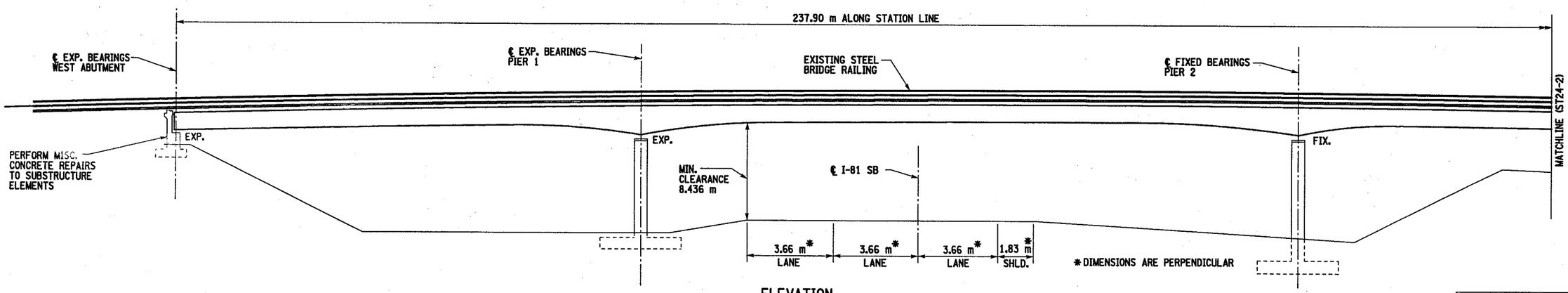
LIGHTING STANDARDS HAVE BEEN REMOVED AND WILL NOT BE REPLACED.

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



PLAN

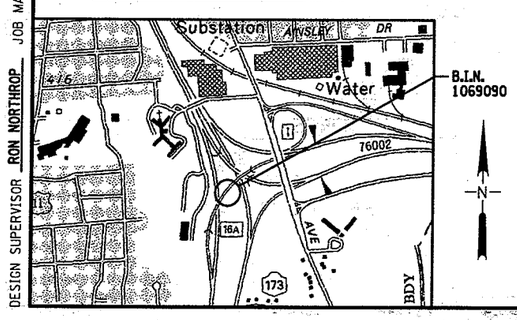
2 0 5 10 m



ELEVATION

2 0 5 10 m

LOCATION MAP
SYRACUSE WEST QUADRANGLE



ELEMENT SPECIFIC WORK TO BE DONE ON BIN 1069090:

1. ESTABLISH M&PT SCHEMES.
2. PERFORM CONCRETE REPAIRS FOR THE FOLLOWING SUBSTRUCTURE ELEMENTS:
   - SOUTH ABUTMENT - STEM
   - PIER 3 - PEDESTALS, CAP BEAM
   - NORTH ABUTMENT - BACKWALL, STEM
3. REPAIR CRACKS IN THE SUBSTRUCTURES WITH INJECTION GROUTING.
4. ALL BEARINGS THAT DO NOT RECEIVE RESTORATION SHALL RECEIVE MAINTENANCE PAINTING AND LUBRICATION, TIGHTEN NUTS ON ANCHOR BOLTS AS NECESSARY.
5. APPLY CONCRETE PROTECTIVE SEALER TO ALL EXPOSED SUBSTRUCTURE AREAS.
6. STEM REPAIR AREAS EXTEND PAST EXISTING GRADE AND THEREFORE, CONCRETE PAVING BLOCK WORK IS REQUIRED AT THE BASE OF THE FOLLOWING SUBSTRUCTURES:
   - SOUTH ABUTMENT
   - NORTH ABUTMENT
7. SEE DWG. BR-2 FOR DETAILS FOR PLACEMENT OF GALVANIC ANODES IN PEDESTAL REPAIR AREAS, ITEM 16582.99 M.

Stantec

B.I.N. 1069090

SPECIAL NOTE: ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

CONNECTOR "H"
OVER
CONNECTOR "G" AND I-81

PLAN AND ELEVATION (1 OF 2)

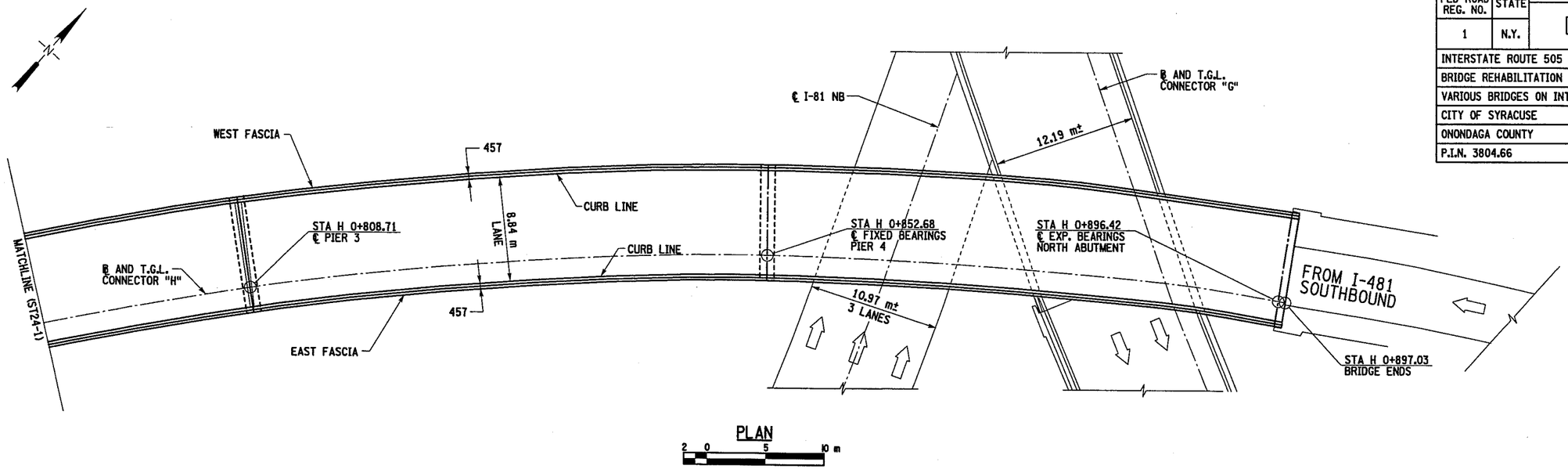
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
380439XB_G1A	3	OCT. 2004	ST24-1

DESIGN SUPERVISOR RON NORTHROP JOB MANAGER RON NORTHROP DESIGNED BY LOWELL LINGO CHECKED BY LOWELL LINGO ESTIMATED BY LOWELL LINGO DRAFTED BY RJ LAMPHEAR CHECKED BY LOWELL LINGO

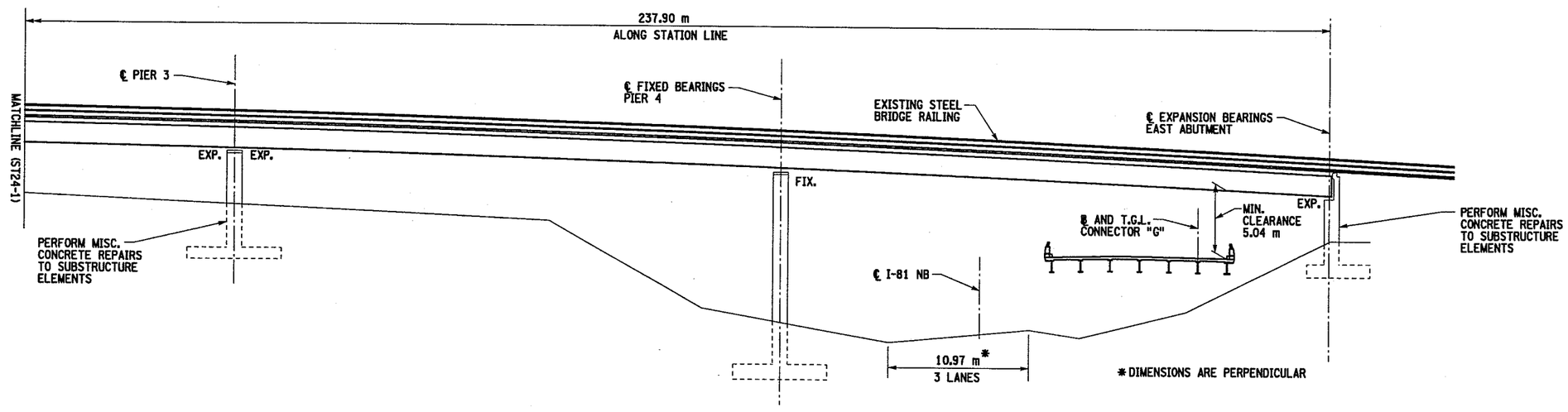
FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259742	656	788

INTERSTATE ROUTE 505 ONONDAGA INTERCHANGE
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATES 81 & 690
CITY OF SYRACUSE
ONONDAGA COUNTY
P.I.N. 3804.66 B.I.N. 1069090



PLAN

2 0 5 10 m



ELEVATION

2 0 5 10 m

B.I.N. 1069090

SPECIAL NOTE: ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

CONNECTOR "H"
OVER
CONNECTOR "G" AND I-81

PLAN AND ELEVATION (2 OF 2)

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

Stantec

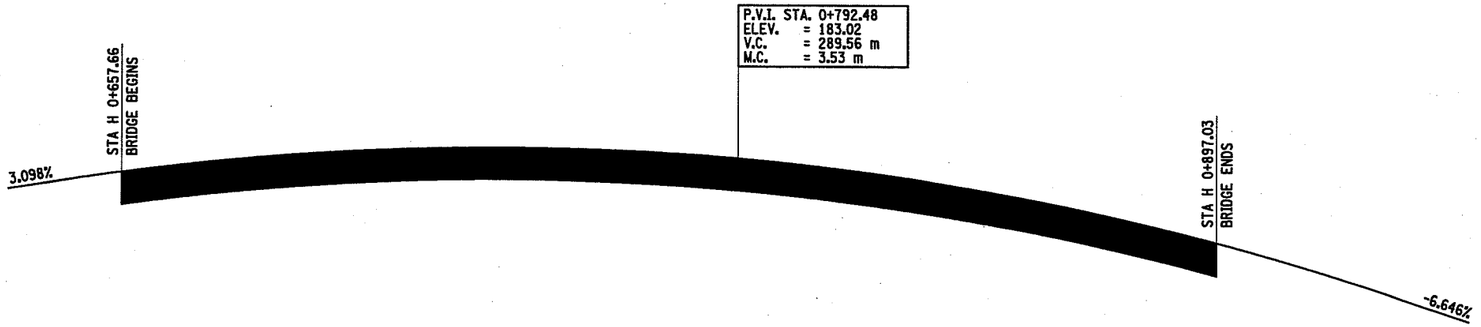
FILENAME	REGION	DATE	DRAWING NO.
380439XB_G1B	3	OCT. 2004	ST24-2

DESIGN SUPERVISOR NORTHROP JOB MANAGER RON NORTHROP DESIGNED BY LOWELL LINGO CHECKED BY RON NORTHROP ESTIMATED BY LOWELL LINGO DRAFTED BY RJ LAMPHEAR CHECKED BY LOWELL LINGO

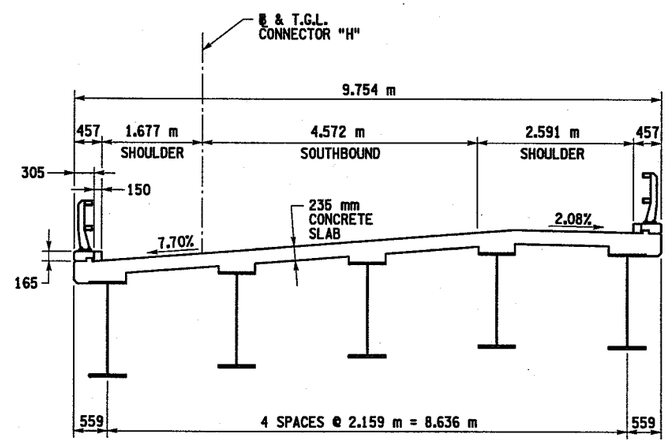
FILE NAME = **SYTIME**
DATE/TIME = **DATE** **TIME**
USER = **USER**

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259742	657	788

INTERSTATE ROUTE 505 ONONDAGA INTERCHANGE
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATES 81 & 690
CITY OF SYRACUSE
ONONDAGA COUNTY
P.I.N. 3804.66 | B.I.N. 1069090



PROFILE CONNECTOR "H" OVER CONNECTOR "G" AND I-81
NTS



TYPICAL BRIDGE SECTION
0.5 0 1 2 3 m

B.I.N. 1069090

SPECIAL NOTE: ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

CONNECTOR "H"
OVER
CONNECTOR "G" AND I-81

TYPICAL SECTION AND PROFILE

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

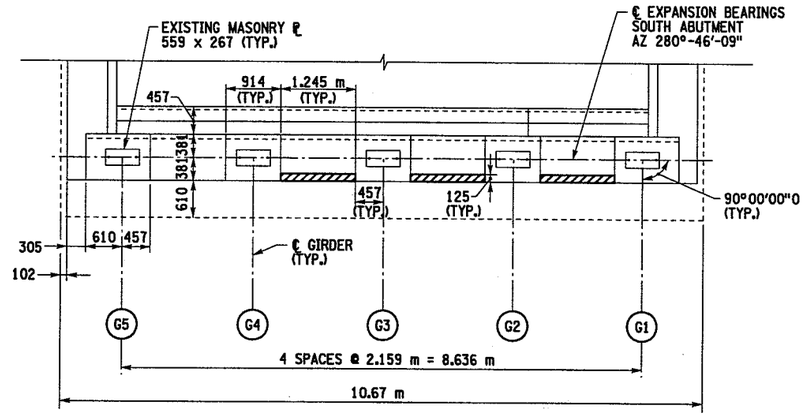
Stantec

FILENAME	REGION	DATE	DRAWING NO.
380466XB_G1C	3	OCT. 2004	ST24-3

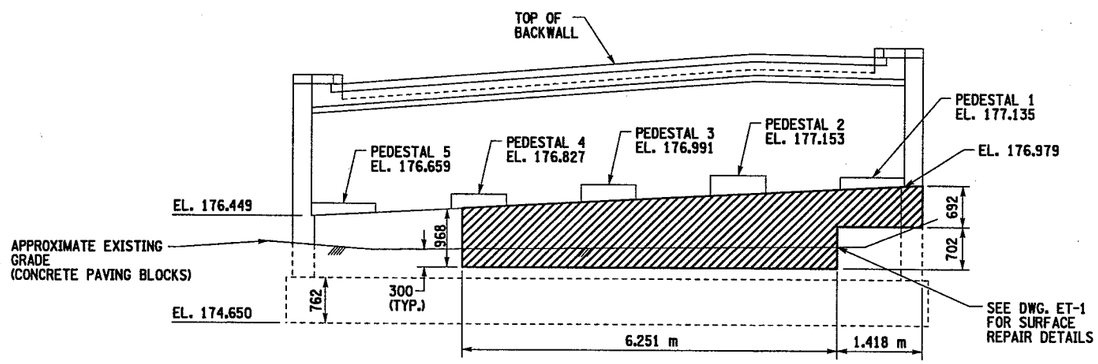
DESIGN SUPERVISOR RON NORTHROP JOB MANAGER RON NORTHROP DESIGNED BY LOWELL LINGO CHECKED BY LOWELL LINGO ESTIMATED BY LOWELL LINGO DRAFTED BY RJ LAMPHEAR CHECKED BY LOWELL LINGO

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259742	658	788

INTERSTATE ROUTE 505 ONONDAGA INTERCHANGE
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATES 81 & 690
CITY OF SYRACUSE
ONONDAGA COUNTY
P.I.N. 3804.66 B.I.N. 1069090



SOUTH ABUTMENT - PLAN



SOUTH ABUTMENT - ELEVATION

TABLE - ITEM 582.05 M	
ELEMENT	QUANTITY (CM)
PEDESTAL	0.0
ABUTMENT	1.1

TABLE - ITEM 11555.8198 M	
ELEMENT	QUANTITY (M)
ABUTMENT	0.0

LIST OF ITEMS USED:

ITEM 11555.8198 M - CRACK REPAIR (3 mm OR WIDER) BY INJECTION OF PORTLAND CEMENT GROUT, (M)

ITEM 18559.1696 M - PROTECTIVE SEALING OF STRUCTURAL CONCRETE, (SM)

ITEM 16570.32 M - LOCALIZED PAINTING OF BARE STRUCTURAL STEEL, (SM)

ITEM 16570.76 M - LOCAL VACUUM CONTAINED CLEANING STRUCTURAL STEEL - IRREGULAR SUFRACES, (SM)

ITEM 582.05 M - REMOVAL OF STRUCTURAL CONCRETE REPLACEMENT WITH CLASS A CONCRETE, (CM)

LEGEND:

AREA OF PROPOSED WORK; ITEM 582.05 M REMOVAL OF STRUCTURAL CONCRETE TO AT LEAST 40 mm BEHIND REINFORCEMENT- REPLACE WITH CLASS A CONCRETE.

NOTES:

1. ALL DIMENSIONS SHOWN FOR CONCRETE REMOVAL ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND EIC.
2. ALL DIMENSIONS SHOWN FOR EXISTING ABUTMENT ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND EIC.
3. CONCRETE REMOVAL TO LIMITS SHOWN INCLUDES SOUND CONCRETE AROUND THE PERIMETER OF THE DETERIORATED CONCRETE, A.O.B.E.
4. WHEN REMOVING EXISTING CONCRETE, SAWCUT 5 mm MIN. TO PRODUCE NEAT REMOVAL LINES. ANY COST TO BE INCLUDED IN THE BID PRICE FOR ITEM 582.05 M.
5. ELEVATIONS ARE GIVEN FOR REFERENCE ONLY.
6. FOR REMOVAL DETAILS SEE DWG. BR-1.
7. RESTORE TO ORIGINAL DIMENSIONS.
8. PEDESTALS NUMBERED FROM WEST TO EAST.
9. NO DECORATIVE FINISHES WILL BE INSTALLED UNDER THIS CONTRACT.
10. REFER TO CONTRACT F.I.C. 65-28 FOR ORIGINAL CONSTRUCTION DETAILS.
11. ALL BEARINGS THAT DO NOT RECEIVE RESTORATION SHALL RECEIVE MAINTENANCE PAINTING AND LUBRICATION, TIGHTEN NUTS ON ANCHOR BOLTS AS NECESSARY.
12. SEE DWG. BR-2 FOR DETAILS FOR PLACEMENT OF GALVANIC ANODES IN PEDESTAL AREAS.

0.5 0 1 2 3 m

Stantec

B.I.N. 1069090

SPECIAL NOTE: ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED

AS BUILT REVISIONS

SIGNATURE DATE

CONNECTOR "H"
OVER
CONNECTOR "G" AND I-81

SOUTH ABUTMENT

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

FILENAME	REGION	DATE	DRAWING NO.
380466XB_A1A	3	OCT. 2004	ST24-4

DESIGN SUPERVISOR RON NORTHROP JOB MANAGER RON NORTHROP DESIGNED BY LOWELL LINGO CHECKED BY LOWELL LINGO DRAFTED BY RJ LAMPHEAR CHECKED BY LOWELL LINGO ESTIMATED BY LOWELL LINGO CHECKED BY RON NORTHROP

FILE NAME = ••SYTIME••
DATE/TIME = ••DATE•• ••TIME••
USER = ••USER

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259742	659	788

INTERSTATE ROUTE 505 ONONDAGA INTERCHANGE

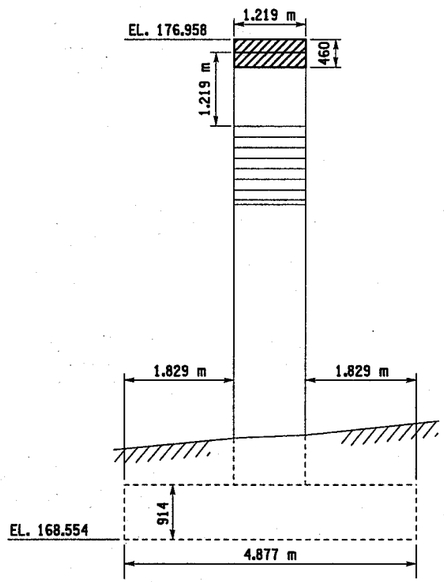
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)

VARIOUS BRIDGES ON INTERSTATES 81 & 690

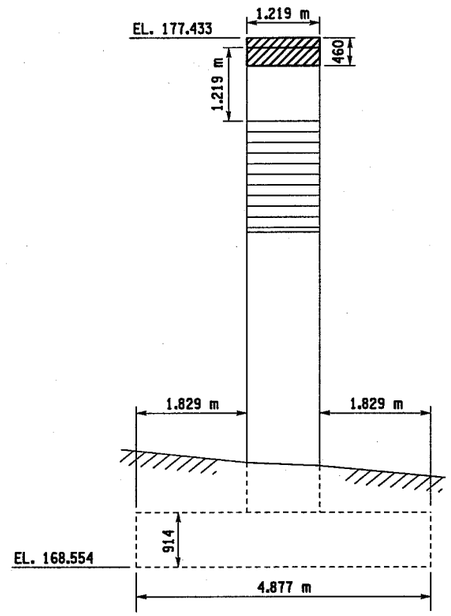
CITY OF SYRACUSE

ONONDAGA COUNTY

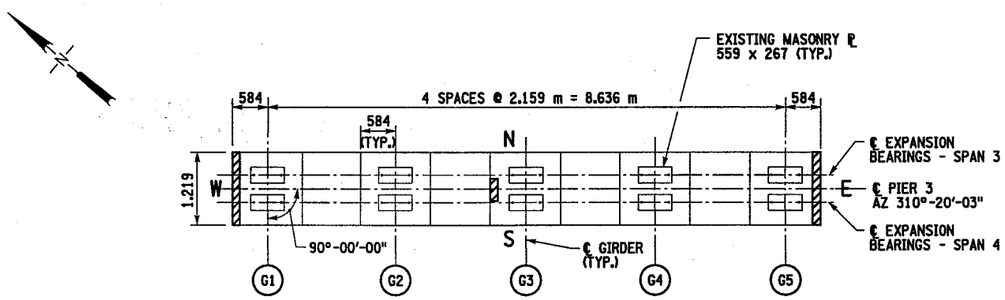
P.I.N. 3804.66 | B.I.N. 1069090



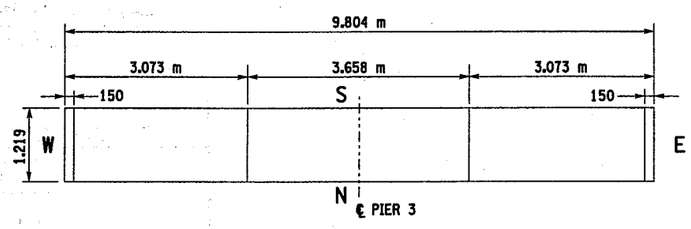
PIER 3 - LEFT



PIER 3 - RIGHT



PIER 3 - TOP OF CAP BEAM PLAN



PIER 3 - UNDERSIDE OF CAP BEAM PLAN

LIST OF ITEMS USED:

ITEM 11555.8198 M - CRACK REPAIR (3 mm OR WIDER) BY INJECTION OF PORTLAND CEMENT GROUT, (M)

ITEM 18559.1696 M - PROTECTIVE SEALING OF STRUCTURAL CONCRETE, (SM)

ITEM 16570.32 M - LOCALIZED PAINTING OF BARE STRUCTURAL STEEL, (SM)

ITEM 16570.76 M - LOCAL VACUUM CONTAINED CLEANING STRUCTURAL STEEL - IRREGULAR SUFRACES, (SM)

ITEM 582.05 M - REMOVAL OF STRUCTURAL CONCRETE REPLACEMENT WITH CLASS A CONCRETE, (CM)

LEGEND:

AREA OF PROPOSED WORK; ITEM 582.05 M REMOVAL OF STRUCTURAL CONCRETE TO AT LEAST 40 mm BEHIND REINFORCEMENT-REPLACE WITH CLASS A CONCRETE.

NOTES:

1. ALL DIMENSIONS SHOWN FOR CONCRETE REMOVAL ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND EIC.
2. ALL DIMENSIONS SHOWN FOR EXISTING ABUTMENT ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND EIC.
3. CONCRETE REMOVAL TO LIMITS SHOWN INCLUDES SOUND CONCRETE AROUND THE PERIMETER OF THE DETERIORATED CONCRETE, A.O.B.E.
4. WHEN REMOVING EXISTING CONCRETE, SAWCUT 5 mm MIN. TO PRODUCE NEAT REMOVAL LINES. ANY COST TO BE INCLUDED IN THE BID PRICE FOR ITEM 582.05 M.
5. ELEVATIONS ARE GIVEN FOR REFERENCE ONLY.
6. FOR REMOVAL DETAILS SEE DWG. BR-1.
7. RESTORE TO ORIGINAL DIMENSIONS.
8. PEDESTALS NUMBERED FROM WEST TO EAST.
9. NO DECORATIVE FINISHES WILL BE INSTALLED UNDER THIS CONTRACT.
10. REFER TO CONTRACT F.I.C. 65-28 FOR ORIGINAL CONSTRUCTION DETAILS.
11. ALL BEARINGS THAT DO NOT RECEIVE RESTORATION SHALL RECEIVE MAINTENANCE PAINTING AND LUBRICATION, TIGHTEN NUTS ON ANCHOR BOLTS AS NECESSARY.
12. SEE DWG. BR-2 FOR DETAILS FOR PLACEMENT OF GALVANIC ANODES IN PEDESTAL AREAS.

SPECIAL NOTE: ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED

B.I.N. 1069090

AS BUILT REVISIONS

SIGNATURE | DATE

CONNECTOR "H"
OVER
CONNECTOR "G" AND I-81

PIER 3 (1 OF 2)

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

0.5 0 1 2 3 m

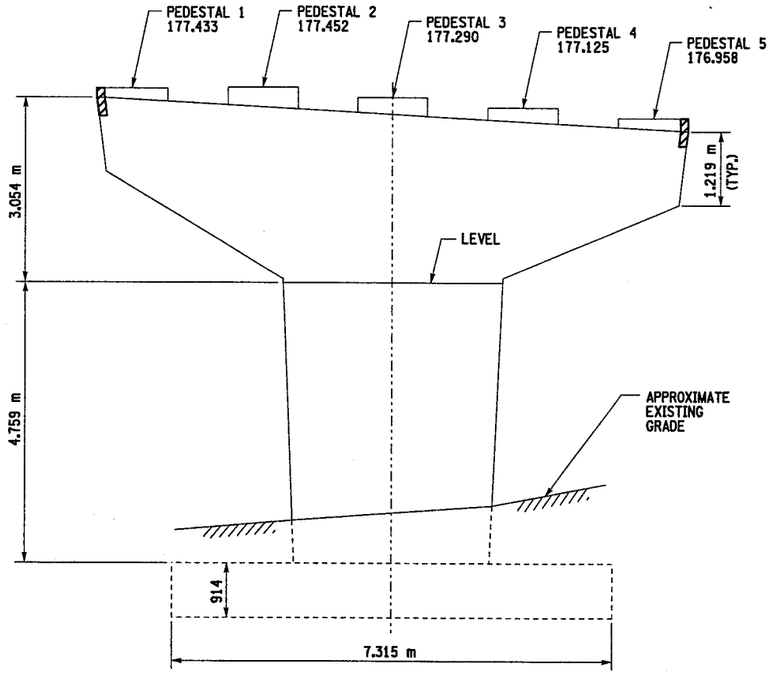
Stantec

FILENAME	REGION	DATE	DRAWING NO.
380466XB_P1A	3	OCT. 2004	ST24-5

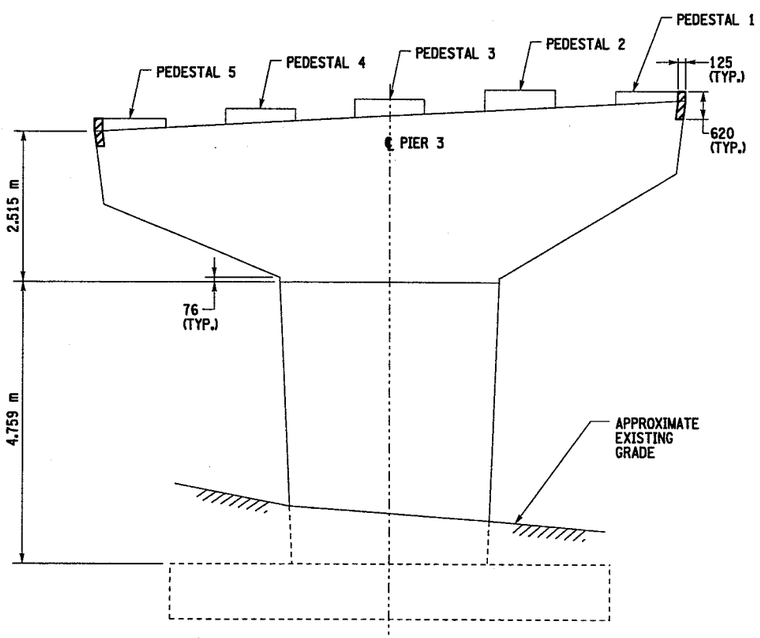
DESIGN SUPERVISOR RON NORTHROP JOB MANAGER RON NORTHROP DESIGNED BY LOWELL LINGO CHECKED BY LOWELL LINGO ESTIMATED BY LOWELL LINGO DRAFTED BY RJ LAMPHEAR CHECKED BY LOWELL LINGO

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259742	660	788

INTERSTATE ROUTE 505 ONONDAGA INTERCHANGE
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATES 81 & 690
CITY OF SYRACUSE
ONONDAGA COUNTY
P.I.N. 3804.66 B.I.N. 1069090



PIER 3 - SOUTH SIDE



PIER 3 - NORTH SIDE

TABLE - ITEM 582.05 M	
ELEMENT	QUANTITY (CM)
PEDESTAL	0.1
PIER	0.1

TABLE - ITEM 11555.8198 M	
ELEMENT	QUANTITY (M)
PIER	3.0

LIST OF ITEMS USED:

ITEM 11555.8198 M - CRACK REPAIR (3 mm OR WIDER) BY INJECTION OF PORTLAND CEMENT GROUT, (M)

ITEM 18559.1696 M - PROTECTIVE SEALING OF STRUCTURAL CONCRETE, (SM)

ITEM 16570.32 M - LOCALIZED PAINTING OF BARE STRUCTURAL STEEL, (SM)

ITEM 16570.76 M - LOCAL VACUUM CONTAINED CLEANING STRUCTURAL STEEL - IRREGULAR SUFRACES, (SM)

ITEM 582.05 M - REMOVAL OF STRUCTURAL CONCRETE REPLACEMENT WITH CLASS A CONCRETE, (CM)

LEGEND:

AREA OF PROPOSED WORK; ITEM 582.05 M REMOVAL OF STRUCTURAL CONCRETE TO AT LEAST 40 mm BEHIND REINFORCEMENT- REPLACE WITH CLASS A CONCRETE.

NOTES:

1. SEE ST24-5 FOR ADDITIONAL NOTES

SPECIAL NOTE: ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED

B.I.N. 1069090

AS BUILT REVISIONS

SIGNATURE DATE

CONNECTOR "H"
OVER
CONNECTOR "G" AND I-81
PIER 3 (2 OF 2)

0.5 0 1 2 3 m

Stantec

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

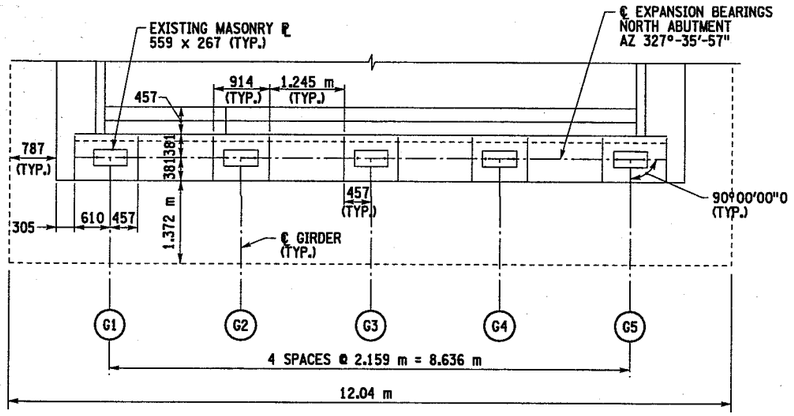
FILENAME	REGION	DATE	DRAWING NO.
380466XB_P1B	3	OCT. 2004	ST24-6

DESIGN SUPERVISOR RON NORTHROP JOB MANAGER RON NORTHROP DESIGNED BY LOWELL LINGO CHECKED BY LOWELL LINGO DRAFTED BY RJ LAMPHEAR CHECKED BY LOWELL LINGO ESTIMATED BY LOWELL LINGO CHECKED BY RON NORTHROP

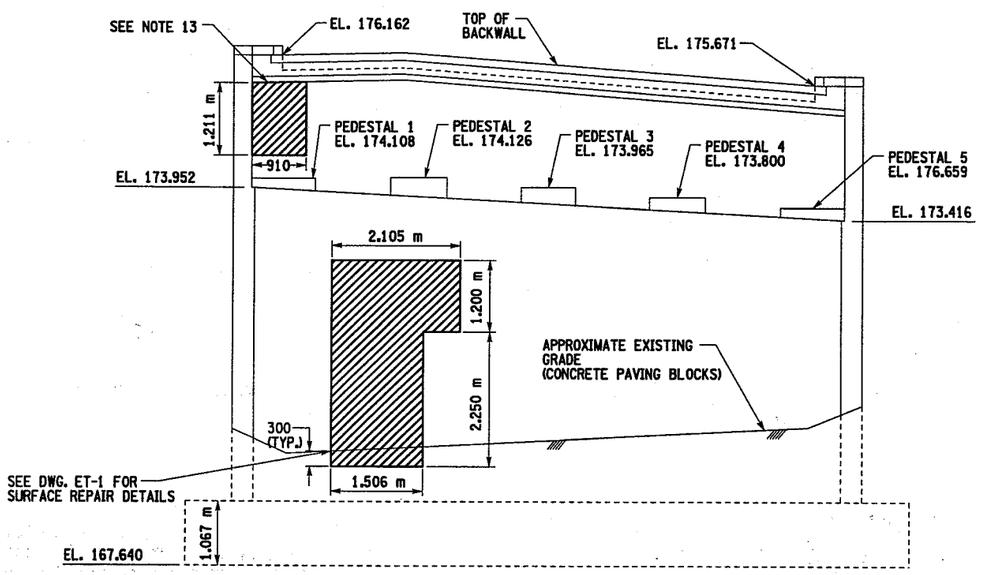
FILE NAME = $$SYTIME$$
DATE/TIME = $$DATE$$ $$TIME$$
USER = $$USER

FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259742	661	788

INTERSTATE ROUTE 505 ONONDAGA INTERCHANGE
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATES 81 & 690
CITY OF SYRACUSE
ONONDAGA COUNTY
P.I.N. 3804.66 B.I.N. 1069090



NORTH ABUTMENT - PLAN



NORTH ABUTMENT - ELEVATION

TABLE - ITEM 582.05 M	
ELEMENT	QUANTITY (CM)
PEDESTAL	0.0
ABUTMENT	0.8
BACKWALL	0.2

TABLE - ITEM 11555.8198 M	
ELEMENT	QUANTITY (M)
ABUTMENT	0.0

LIST OF ITEMS USED:

ITEM 11555.8198 M - CRACK REPAIR (3 mm OR WIDER) BY INJECTION OF PORTLAND CEMENT GROUT, (M)

ITEM 18559.1696 M - PROTECTIVE SEALING OF STRUCTURAL CONCRETE, (SM)

ITEM 16570.32 M - LOCALIZED PAINTING OF BARE STRUCTURAL STEEL, (SM)

ITEM 16570.76 M - LOCAL VACUUM CONTAINED CLEANING STRUCTURAL STEEL - IRREGULAR SUFRACES, (SM)

ITEM 582.05 M - REMOVAL OF STRUCTURAL CONCRETE REPLACEMENT WITH CLASS A CONCRETE, (CM)

ITEM 10564.11 M - REMOVE, STORE AND RESET DIAPHRAGMS ON STRUCTURE (EA)

LEGEND:

AREA OF PROPOSED WORK; ITEM 582.05 M REMOVAL OF STRUCTURAL CONCRETE TO AT LEAST 40 mm BEHIND REINFORCEMENT- REPLACE WITH CLASS A CONCRETE.

NOTES:

1. ALL DIMENSIONS SHOWN FOR CONCRETE REMOVAL ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND EIC.
2. ALL DIMENSIONS SHOWN FOR EXISTING ABUTMENT ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND EIC.
3. CONCRETE REMOVAL TO LIMITS SHOWN INCLUDES SOUND CONCRETE AROUND THE PERIMETER OF THE DETERIORATED CONCRETE, A.O.B.E.
4. WHEN REMOVING EXISTING CONCRETE, SAWCUT 5 mm MIN. TO PRODUCE NEAT REMOVAL LINES. ANY COST TO BE INCLUDED IN THE BID PRICE FOR ITEM 582.05 M.
5. ELEVATIONS ARE GIVEN FOR REFERENCE ONLY.
6. FOR REMOVAL DETAILS SEE DWG. BR-1.
7. RESTORE TO ORIGINAL DIMENSIONS.
8. PEDESTALS NUMBERED FROM WEST TO EAST.
9. NO DECORATIVE FINISHES WILL BE INSTALLED UNDER THIS CONTRACT.
10. REFER TO CONTRACT F.I.C. 65-28 FOR ORIGINAL CONSTRUCTION DETAILS.
11. ALL BEARINGS THAT DO NOT RECEIVE RESTORATION SHALL RECEIVE MAINTENANCE PAINTING AND LUBRICATION, TIGHTEN NUTS ON ANCHOR BOLTS AS NECESSARY.
12. SEE DWG. BR-2 FOR DETAILS FOR PLACEMENT OF GALVANIC ANODES IN PEDESTAL AREAS.
13. THE CONTRACTOR SHALL REMOVE AND REINSTALL THE END DIAPHRAGM FOR ACCESS TO THIS REPAIR AREA LOCATED ON THE BACKWALL. TO BE PAID UNDER ITEM 10564.11 M.

SPECIAL NOTE: ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED

B.I.N. 1069090

AS BUILT REVISIONS

SIGNATURE DATE

CONNECTOR "H"
OVER
CONNECTOR "G" AND I-81

NORTH ABUTMENT

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

0.5 0 1 2 3 m

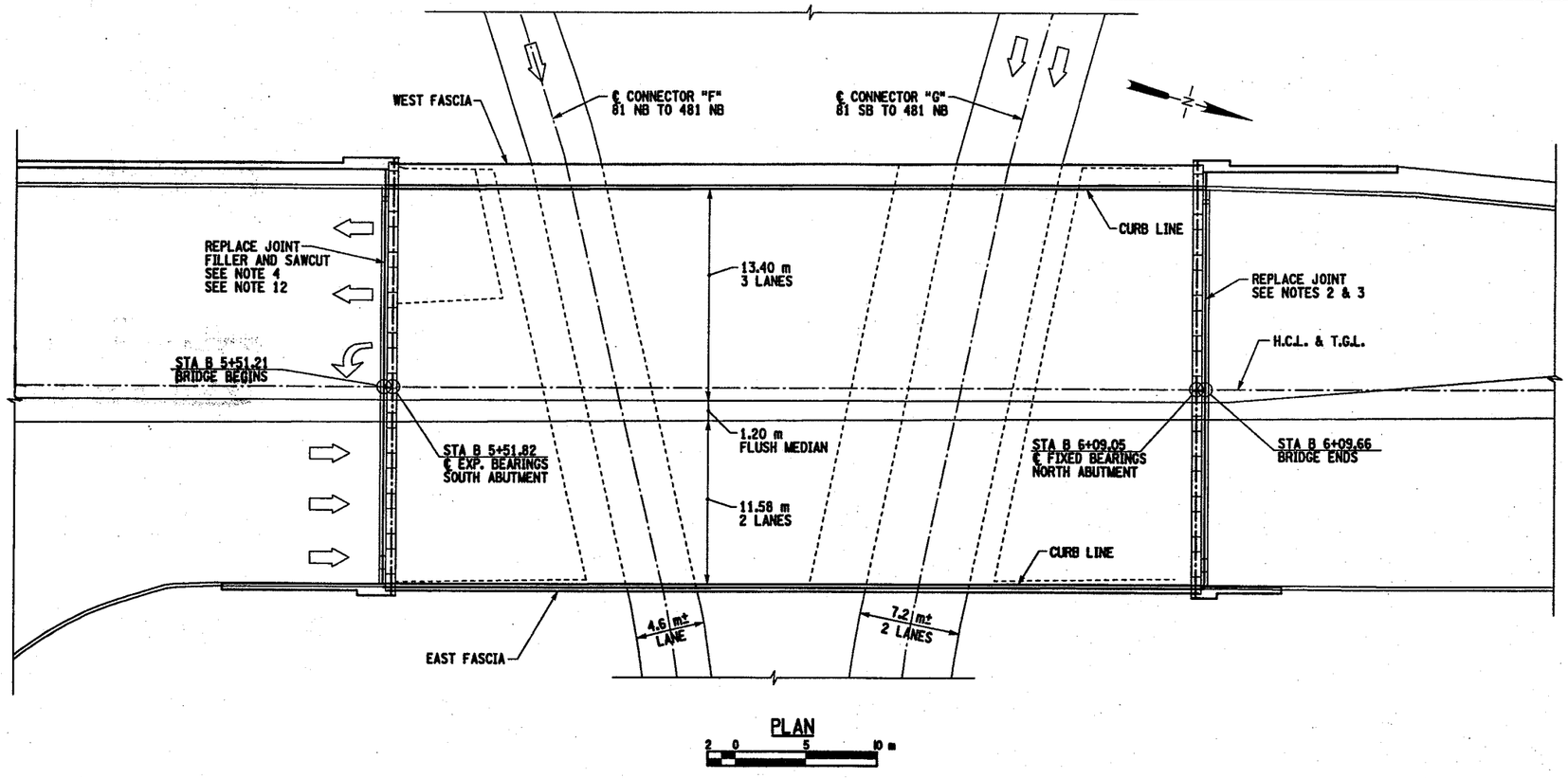
Stantec

FILENAME	REGION	DATE	DRAWING NO.
380466XB_A1B	3	OCT. 2004	ST24-7

DESIGN SUPERVISOR RON NORTHROP JOB MANAGER RON NORTHROP DESIGNED BY LOWELL LINGO CHECKED BY LOWELL LINGO ESTIMATED BY LOWELL LINGO DRAFTED BY RJ LAMPHEAR CHECKED BY RON NORTHROP

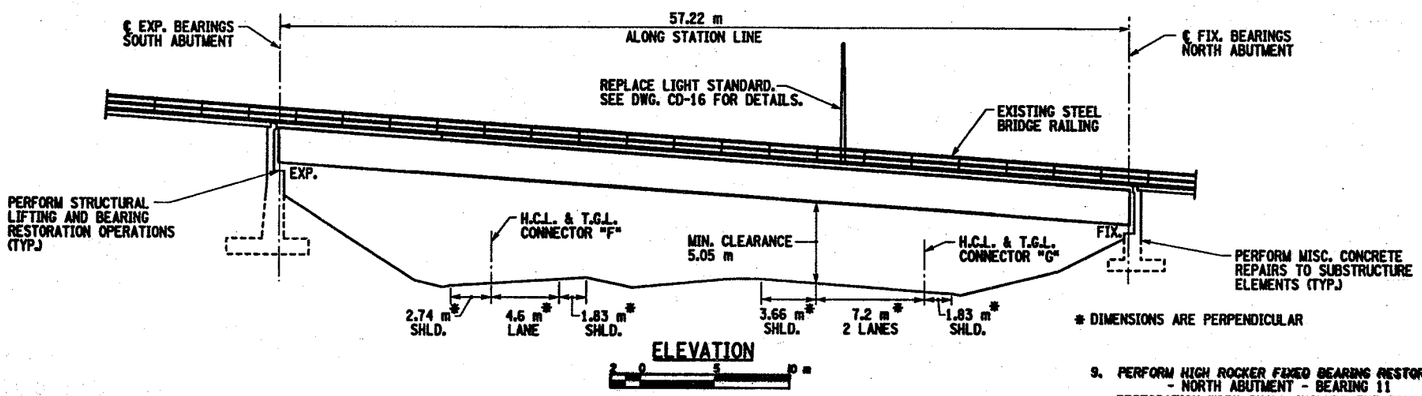
FED ROAD REG. NO.	STATE	CONTRACT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.	D259742	662	788

INTERSTATE ROUTE 505 ONONDAGA INTERCHANGE
BRIDGE REHABILITATION PROJECT (ELEMENT SPECIFIC)
VARIOUS BRIDGES ON INTERSTATES 81 & 690
CITY OF SYRACUSE
ONONDAGA COUNTY
P.I.N. 3804.66 B.I.N. 1069110



PLAN

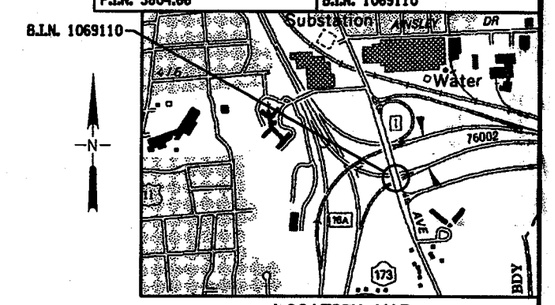
2 0 5 10 m



ELEVATION

2 0 5 10 m

* DIMENSIONS ARE PERPENDICULAR



LOCATION MAP
SYRACUSE WEST QUADRANGLE

NOTES:

STRUCTURAL LIFTING SHALL BE IN PLACE PRIOR TO SUBSTRUCTURE WORK AT NOTED LOCATIONS AND REMAIN UNTIL ITS COMPLETION.

CONTRACTOR SHALL COORDINATE WITH NIAGARA MOHAWK TO REMOVE AND REINSTALL LIGHT FIXTURES AND CONDUITS.

NO DECORATIVE FINISHES WILL BE INSTALLED UNDER THIS CONTRACT.

ALL JOINT WORK AND EXPANSION RELIEF REPAIRS SHALL BE COMPLETED PRIOR TO ANY STRUCTURAL LIFTING OR BEARING WORK.

SPECIAL NOTE: ALL DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED

ELEMENT SPECIFIC WORK TO BE DONE ON BIN 1069110:

1. ESTABLISH M&PT SCHEMES.
2. REMOVE ARMORED COMPRESSION SEAL JOINTS AT THE FOLLOWING LOCATION:
   - NORTH ABUTMENT
3. INSTALL NEW ARMORLESS BRIDGE JOINT SYSTEM AT THE FOLLOWING LOCATION:
   - NORTH ABUTMENT
4. REPAIR ARMORLESS EXPANSION JOINT AT SOUTH ABUTMENT. REMOVE AND REPLACE SEAL COMPLETELY.
5. PERFORM CONCRETE REPAIRS FOR THE FOLLOWING SUBSTRUCTURE ELEMENTS:
   - SOUTH ABUTMENT - BACKWALL
   - NORTH ABUTMENT - BACKWALL, PEDESTAL
6. REMOVE AND REPLACE PEDESTALS IN KIND AT THE FOLLOWING LOCATION:
   - NORTH ABUTMENT - PEDESTAL 11
6. CRACKS IN THE SUBSTRUCTURES WILL BE REPAIRED WITH INJECTION GROUTING.
7. ALL BEARINGS THAT DO NOT RECEIVE RESTORATION SHALL RECEIVE MAINTENANCE PAINTING AND LUBRICATION, TIGHTEN NUTS ON ANCHOR BOLTS AS NECESSARY.
8. PERFORM HIGH ROCKER EXPANSION BEARING RESTORATION AT THE FOLLOWING LOCATION:
   - SOUTH ABUTMENT - BEARINGS 1 - 11
   RESTORATION WORK SHALL INCLUDE THE FOLLOWING ITEMS:
   (1) STRUCTURAL LIFTING UNDER LIVE LOAD
   (2) UNFREEZE BEARING ROCKER, MILL BEARINGS AND ADD SPACER ℙ
   (3) RESET BEARING
   (IF NEEDED BY CUTTING SOLE ℙ WELDS FROM GIRDER FLANGE)
   (4) COMMERCIAL BLAST CLEAN TO NEAR WHITE FINISH
   (5) MAINTENANCE PAINTING
   (6) BEARING LUBRICATION
9. PERFORM HIGH ROCKER FIXED BEARING RESTORATION AT THE FOLLOWING LOCATIONS:
   - NORTH ABUTMENT - BEARING 11
   RESTORATION WORK SHALL INCLUDE THE FOLLOWING ITEMS:
   (1) STRUCTURAL LIFTING UNDER LIVE LOAD
   (2) COMMERCIAL BLAST CLEAN TO NEAR WHITE FINISH
   (3) MAINTENANCE PAINTING
   (4) BEARING LUBRICATION
   NOTE: FIXED BEARINGS SHALL BE DISASSEMBLED UNLESS A.O.B.E.
10. APPLY CONCRETE PROTECTIVE SEALER TO ALL EXPOSED SUBSTRUCTURE AREAS.
11. SEE DWG. BR-2 FOR DETAILS FOR PLACEMENT OF GALVANIC ANODES IN PEDESTAL REPAIR AREAS, ITEM 16582.99 M.
12. SAWCUT STRUCTURAL DECK TO PROVIDE ADEQUATE SPACE FOR PROPER EXPANSION AND CONTRACTION OF PROPOSED JOINTS. (ITEM 02520.20 M)
   - SOUTH ABUTMENT - E. BRUSH CURB & W. SIDEWALK
13. RELOCATE CONDUIT DUE TO SAWCUTTING, SEE CD-11.
14. CONTRACTOR SHALL COORDINATE RELOCATION OF CONDUIT AND REPLACEMENT OF LIGHT STANDARDS WITH NIAGARA MOHAWK.

B.I.N. 1069110

AS BUILT REVISIONS

SIGNATURE DATE

BRIGHTON AVENUE
OVER
CONNECTORS "F" & "G"

PLAN AND ELEVATION

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

Stantec

FILENAME	REGION	DATE	DRAWING NO.
380466YB_G1A	3	OCT. 2004	#ST25-1

DESIGN SUPERVISOR RON NORTHROP JOB MANAGER RON NORTHROP DESIGNED BY LOWELL LINGO CHECKED BY LOWELL LINGO DRAFTED BY RJ LAMPHEAR CHECKED BY LOWELL LINGO ESTIMATED BY LOWELL LINGO CHECKED BY RON NORTHROP

C&S Engineers, Inc.
Syracuse Hancock International Airport
Syracuse, NY 13212
phone 315-455-2000
fax 315-455-9667
www.cscos.com

TECHNICAL MEMORANDUM

TO: FILE (190.222.001.3905)

FROM: Bryan A. Bayer, Asbestos Abatement Project Designer
NYSDOH Certificate Number AH 01-17258

DATE: AUGUST 9, 2013

RE: NEW YORK STATE DEPARTMENT OF TRANSPORTATION
Interstate 81 & Interstate 690 Element Specific Bridge Work
PIN 3804.39.111, BIN 1069090

This memorandum documents an asbestos screening conducted for the proposed Interstate 81 & Interstate 690 Element Specific Bridge Work Project at BIN 1069090. This screening was limited to assessing the potential presence of asbestos-containing materials (ACMs) that could be disturbed during work for this project. It does not include a screening of the entire structure.

SCREENING PROCEDURES

First, a walkover of the structure was completed on May 24, 2002 to visually assess the possible presence of ACMs.

Available drawings of the structure were reviewed. The New York State Department of Transportation (NYSDOT) provided the following drawings:

- *Interstate Route Connection 571 Forest Interchange – Jamesville, Onondaga County* prepared by Goodkind & O'Dea, Inc. Consulting Engineers dated November 1975. The contract number for these drawings is D95042.

- *Interstate Joint Replacement Project, Onondaga County, P.I.N. 3803.63* prepared by NYSDOT dated July 1995. The contract number for these drawings is D256745.

SCREENING RESULTS

The screening revealed the following materials that are suspect ACM:

Bridge Paint: This material was observed on steel girders, bearings, conduits, pipes, etc. and could contain asbestos and lead. According to a memo received from the NYSDOT on March 7, 2002 (post-Survey), this structure could contain ACM containing paint.

Bearing Pads: Bearing pads are generally located under the masonry plate of each bridge bearing. Based on a review of the drawings, the bearing pads could be lead containing. It is our opinion that the bearings pads be tested for both asbestos and lead content.

Masonry Coating: This material was used on the abutments, pedestals, bridge seats, and backwall at this structure.

Canvas Duck: This material was specified for use in the above-mentioned drawings between the bearings and pedestals.

Red Lead: According to the drawings, this material was used between the bearing and pedestal. Evidence of this material was not noticed in the field, however it may not be visible as it could be concealed by the bearings.

Masonry Paint: Several colors of paint were noticed on the abutments for this structure.

Foam Board: This material was noticed within the structural deck joints.

Watts
Architects
&Engineers

BIN 1069100

Existing I-81 SB Ramp to I-481 NB over Existing I-81 NB

BIN 1069100
Location: I-81 SB to I-481 EB over I-81 NB
NYSDOT D031085 PIN 3501.60 - I-81 Viaduct Replacement or New Urban Arterial
City of Syracuse, Onondaga County
Bridge Asbestos Assessment Results

No asbestos containing materials have been identified on this bridge.

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

<u>Watts Inspection Findings (August 2013)</u>
A bridge inspection was completed on 1/30/2014 and the following suspect ACMs were identified and sampled:

- Bearing pad
- Green bridge paint
- Masonry paint

The sampled materials were not positive for asbestos, per laboratory analytical results.

<u>Review of Historic Plans</u>
Record plans were reviewed in support of the field survey.

- Contract D95042 (dated 1975) – Type D waterstop was identified. NYSDOT no longer considers Type D waterstop a suspect material.

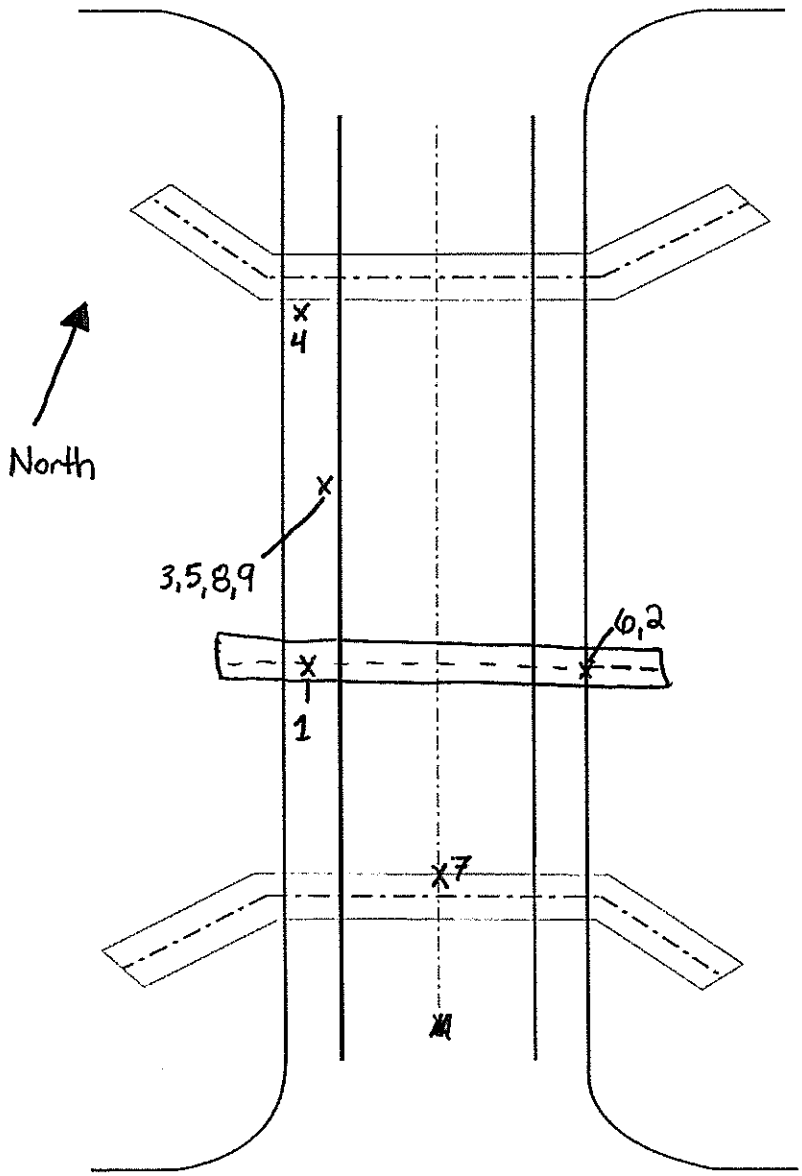
No additional suspect ACM sampling has been identified for BIN 1069100.

Watts Architecture & Engineering

BRIDGE ASBESTOS FIELD INSPECTION FORM

BIN Number/Location: 1069100 (481 E. over I-81 N.)
Project Name: : I-81 Viaduct Replacement or New Urban Arterial
Inspector(s): Scott Matthews, Jerry Grady

Inspection Date: 8/12/13
PIN Number: PIN: 3501.60, D031085
Watts Project No: 13092



SAMPLE LOCATION PLAN VIEW - N.T.S.

Field Inspection Checklist Item	Investigated	Present	Sampled	
Girder Paint	☐	☐	☒	4-6
Truss Paint	☐	☐	☒	
Abutment Coating	☐	☐	☒	7-9
Abutment Caulk	☒	☐	☐	
Abut. Exp. Jt. Filler	☒	☐	☐	
Headwall Sheet Packing	☒	☐	☐	
Bearing Pad	☐	☐	☒	1-3
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	☐	☐	☐	
Other	☐	☐	☐	
Other	☐	☐	☐	
Other	☐	☐	☐	
Other	☐	☐	☐	

Notes:
- No sheet packing
- Green bridge paint
- Grey masonry paint
- No suspect ACMs on deck

AmeriSci Job #: **113121090**

Client Name: Watts Architecture & Engineers

Table I
Summary of Bulk Asbestos Analysis Results

13092; I-81 Through Syracuse Bridge Inspections; 81 Southbound @ 481 Eastbound

AmeriSci Sample #	Client Sample#	HG Area	Sample Weight (gram)	Heat Sensitive Organic %	Acid Soluble Inorganic %	Insoluble Non-Asbestos Inorganic %	** Asbestos % by PLM/DS	** Asbestos % by TEM
01	1069100-1	1	0.285	76.5	12.3	11.1	NAD	NAD
Location:	Bearing Pad; Top Of 3rd Pier Below Ramp West Of I-81 Northbound							
02	1069100-2	1	0.465	72.3	9.6	18.1	NAD	NAD
Location:	Bearing Pad; Top Of Pier East Of I-81 Northbound							
03	1069100-3	1	0.455	47.8	12.6	39.7	NAD	NAD
Location:	Bearing Pad; Top Of 2nd Pier Below Ramp West Of I-81 Northbound							
04	1069100-4	2	0.302	29.5	18.2	52.3	NAD	NAD
Location:	Green Bridge Paint; North End Of Bridge At Abutment							
05	1069100-5	2	0.231	34.1	4.2	61.7	NAD	NAD
Location:	Green Bridge Paint; Top Of 2nd Pier From North End							
06	1069100-6	2	0.140	27.5	30.4	42.2	NAD	NAD
Location:	Green Bridge Paint; Top Of Pier East Of I-81 Northbound							
07	1069100-7	3	----	----	----	----	NAD	NA
Location:	Masonry Coating; Pier Below Ramp West Of I-81 Northbound							
08	1069100-8	3	----	----	----	----	NAD	NA
Location:	Masonry Coating; Top Of 2nd Pier Below Ramp West Of I-81 Northbound							
09	1069100-9	3	----	----	----	----	NAD	NA
Location:	Masonry Coating; Top Of 2nd Pier Below Ramp West Of I-81 Northbound							

Reviewed by: _____ Date Reviewed: _____ Analyzed By: Jean L. Mayes _____ Date Analyzed: 12/6/2013

Semi-Quantitative Analysis: NAD = no asbestos detected; NA = not analyzed; NA/PS = not analyzed due to positive stop; Trace = <1%;
PLM analysis by EPA 600/M4-82-020 per 40 CFR 763 (NVLAP Lab Code 101904-0) or NY ELAP 198.1 for New York friable samples which includes quantitation of any vermiculite observed (198.6 for NOB samples) (NY ELAP Lab # 10984);
TEM analysis by EPA 600/R-93/116 (not covered by NVLAP Bulk accreditation); or NY ELAP 198.4 for New York NOB samples (NY ELAP Lab # 10984);

** Warning Notes: Consider PLM fiber diameter limitation, only TEM will resolve fibers <0.25 micrometers in diameter. TEM bulk analysis is representative of the fine grained matrix material and may not be representative of non-uniformly dispersed debris, soils or other heterogeneous materials for which a combination PLM/TEM evaluation is recommended; Quantitation for beginning weights of <0.1 grams should be considered as qualitative only.

AmeriSci Richmond
13635 GENITO ROAD
MIDLOTHIAN, VIRGINIA 23112
TEL: (804) 763-1200 • FAX: (804) 763-1800

PLM Bulk Asbestos Report

Watts Architecture & Engineers
Attn: Scott Matthews
2610 S Salina Street

Syracuse, NY 13210

Date Received 12/05/13 **AmeriSci Job #** 113121090
Date Examined 12/06/13 **P.O. #**
ELAP # 10984 **Page** 1 **of** 3
RE: 13092; I-81 Through Syracuse Bridge Inspections; 81 Southbound @ 481 Eastbound

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
1069100-1 1	113121090-01 **Location:** Bearing Pad; Top Of 3rd Pier Below Ramp West Of I-81 Northbound	***No***	NAD (by NYS ELAP 198.6) by David W. Ralbovsky on 12/06/13

Analyst Description: Brown, Heterogeneous, Non-Fibrous, Bulk Material
Asbestos Types:
Other Material: Non-Asbestos 11.1 %
Comment: Heat Sensitive (organic): 76.5%; Acid Soluble (inorganic): 12.3%; Inert (Non-asbestos): 11.1%

1069100-2 1	113121090-02 **Location:** Bearing Pad; Top Of Pier East Of I-81 Northbound	***No***	NAD (by NYS ELAP 198.6) by David W. Ralbovsky on 12/06/13

Analyst Description: Brown, Heterogeneous, Non-Fibrous, Bulk Material
Asbestos Types:
Other Material: Non-Asbestos 18.1 %
Comment: Heat Sensitive (organic): 72.3%; Acid Soluble (inorganic): 9.6%; Inert (Non-asbestos): 18.1%

1069100-3 1	113121090-03 **Location:** Bearing Pad; Top Of 2nd Pier Below Ramp West Of I-81 Northbound	***No***	NAD (by NYS ELAP 198.6) by David W. Ralbovsky on 12/06/13

Analyst Description: Brown, Heterogeneous, Non-Fibrous, Bulk Material
Asbestos Types:
Other Material: Non-Asbestos 39.7 %
Comment: Heat Sensitive (organic): 47.8%; Acid Soluble (inorganic): 12.6%; Inert (Non-asbestos): 39.7%

1069100-4 2	113121090-04 **Location:** Green Bridge Paint; North End Of Bridge At Abutment	***No***	NAD (by NYS ELAP 198.6) by David W. Ralbovsky on 12/06/13

Analyst Description: Green, Heterogeneous, Non-Fibrous, Bulk Material
Asbestos Types:
Other Material: Wollastonite Trace, Non-Asbestos 52.3 %
Comment: Heat Sensitive (organic): 29.5%; Acid Soluble (inorganic): 18.2%; Inert (Non-asbestos): 52.3%

See Reporting notes on last page

PLM Bulk Asbestos Report

13092; I-81 Through Syracuse Bridge Inspections; 81 Southbound @ 481 Eastbound

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
1069100-5 2	113121090-05 **Location:** Green Bridge Paint; Top Of 2nd Pier From North End	***No***	NAD (by NYS ELAP 198.6) by David W. Ralbovsky on 12/06/13

Analyst Description: Green, Heterogeneous, Non-Fibrous, Bulk Material
Asbestos Types:
Other Material: Non-Asbestos 61.7 %
Comment: Heat Sensitive (organic): 34.1%; Acid Soluble (inorganic): 4.2%; Inert (Non-asbestos): 61.7%

1069100-6 2	113121090-06 **Location:** Green Bridge Paint; Top Of Pier East Of I-81 Northbound	***No***	NAD (by NYS ELAP 198.6) by David W. Ralbovsky on 12/06/13

Analyst Description: Green, Heterogeneous, Non-Fibrous, Bulk Material
Asbestos Types:
Other Material: Non-Asbestos 42.2 %
Comment: Heat Sensitive (organic): 27.5%; Acid Soluble (inorganic): 30.4%; Inert (Non-asbestos): 42.2%

1069100-7 3	113121090-07 **Location:** Masonry Coating; Pier Below Ramp West Of I-81 Northbound	***No***	NAD (by NYS ELAP 198.1) by David W. Ralbovsky on 12/06/13

Analyst Description: Gray, Heterogeneous, Non-Fibrous, Bulk Material
Asbestos Types:
Other Material: Non-fibrous 100 %

1069100-8 3	113121090-08 **Location:** Masonry Coating; Top Of 2nd Pier Below Ramp West Of I-81 Northbound	***No***	NAD (by NYS ELAP 198.1) by David W. Ralbovsky on 12/06/13

Analyst Description: Gray, Heterogeneous, Non-Fibrous, Bulk Material
Asbestos Types:
Other Material: Non-fibrous 100 %

1069100-9 3	113121090-09 **Location:** Masonry Coating; Top Of 2nd Pier Below Ramp West Of I-81 Northbound	***No***	NAD (by NYS ELAP 198.1) by David W. Ralbovsky on 12/06/13

Analyst Description: Gray, Heterogeneous, Non-Fibrous, Bulk Material
Asbestos Types:
Other Material: Non-fibrous 100 %

See Reporting notes on last page

PLM Bulk Asbestos Report

13092; I-81 Through Syracuse Bridge Inspections; 81 Southbound @ 481 Eastbound

---

Reporting Notes:

Analyzed by: David W. Ralbovsky David W. Ralbovsky Date 12/06/13

*NAD = no asbestos detected, Detection Limit <1%, Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; "Present" or NVA = "No Visible Asbestos" are observations made during a qualitative analysis; NA = not analyzed; NA/PS = not analyzed / positive stop; PLM Bulk Asbestos Analysis by EPA 600//M4-82-020 per 40 CFR 763 (NVLAP Lab Code 101904-0) and ELAP PLM Analysis Protocol 198.1 for New York friable samples which includes quantitation of any vermiculite observed (198.6 for NOB samples) or EPA 400 pt ct by EPA 600/M4-82-020 (NYSDOH ELAP Lab # 10984); CA ELAP Lab # 2508; Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the laboratory. This PLM report relates ONLY to the items tested.

Reviewed By:_____

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

113121090

Page: 1 of 1
Date: 8/12/13

Client: C&S Companies / NYS DOT
Project: I-81 through Syracuse Bridge Inspections
Building / Location: 81 Southbound @ 481 Eastbound
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

Sample Number	Material Description	Sample Location	Laboratory Results	
			PLM	TEM
1069100- 1	Bearing Pad	Top of 3rd pier below ramp west of I-81 Northbound		
1069100- 2	Bearing Pad	Top of pier east of I-81 Northbound		
1069100- 3	Bearing Pad	Top of 2nd pier below ramp west of I-81 Northbound		
1069100- 4	Green Bridge Paint	North end of bridge at abutment		
1069100- 5	Green Bridge Paint	Top of 2nd pier from North end		
1069100- 6	Green Bridge Paint	Top of pier east of I-81 Northbound		
1069100- 7	Masonry Coating	Pier below ramp west of I-81 Northbound		
1069100- 8	Masonry Coating	Top of 2nd pier below ramp west of I-81 Northbound		
1069100- 9	Masonry Coating	Top of 2nd pier below ramp west of I-81 Northbound		

RECEIVED
DEC 05 2013
By

Sampled By: Scott Matthews Date: 8/12/2013 Received By: ___ Date: ___
Relinquished By: Scott Matthews to Fedex Date: 12-4-13 Received By: ___ Date: ___

Comments: Positive Stop Anywhere in Series

H:\2013\13092 NYSDOT I-81 Viaduct\10. Env Data and Env Assessment\10.f. Asbestos-Lead-PCB Assessment\Priority One Bridges\BIN 1069100\Field Investigation\1069100 - 81SB @ 481 EB.xls
12/4/2013

Watts
Architects
&Engineers

BIN 1069100 Inspection Photos

Existing I-81 SB Ramp to I-481 NB over Existing I-81 NB

Photo 1

Photo 2

Photo 3

Photo 4

Photo 5