

ADDENDUM NO. 1

Dr. Ray Pedestrian Bridge Replacement

Essex County, NY

July 13, 2015

TO ALL HOLDERS OF BIDDING DOCUMENTS:

This Addendum, issued to bid document holders of record, indicates clarifications to the bid documents for the Dr. Ray Pedestrian Bridge Replacement project. All clarifications described herein shall be incorporated into the Contractor's bid proposal. This Addendum is part of the Contract Documents. Adjustments required by each item shall be understood to apply to all document references affected by the clarifications described.

1. **General:** The date and time for receipt of bids for the project has been changed from July 17, 2015 at 2:00 PM **to July 24, 2015 at 2:00 PM.**
2. **General:** A Pre-Bid meeting was held for the project at the site on July 9, 2015 at 9:30 AM. Minutes from the meeting are enclosed and are a part of this Addendum and the Contract Documents.
3. **Regarding Drawing N-1, Earthwork Note 15:** First sentence, DELETE "The Contractor..." and SUBSTITUTE THEREFORE "The Owner...".

END OF ADDENDUM NO. 1
(attachments)

PRE-BID MEETING MINUTES

Report Date: July 13, 2015
Project: Dr. Ray Pedestrian Bridge Replacement

Attending: Carl B. Schoder, PE - Schoder Rivers Assoc.
Kirk Bassarab, PE - Essex Co. DPW
Joseph Leuci - Schoder Rivers Assoc.
Scott Pierce - Bast Hatfield Construction
Rob Montague - D.A. Collins, Inc.
Greg Ball - Harrison & Burrowes, Inc.

Distribution: Via posting on the Essex County Website as a part of Addendum No. 1 for access by all holders of bidding documents.

A scheduled pre-bid meeting was held for the above referenced project on July 9, 2015 at 9:30 AM at the project site. The following items were discussed:

1. Schoder reviewed bidding and construction requirements for the project and similar items as stated in the bidding documents.
2. Pre-trenching for installation of the sheetpile scour protection wall at the south abutment was noted to be acceptable at the discretion of the contractor.
3. The maximum allowable time for de-energizing of the overhead utility lines shall be one (1) period of ten (10) consecutive hours. The lines may be removed by the utility company during this time period if necessary to facilitate truss installation.
4. As a clarification of Bridge and Guide Rail Note 6 on Project Drawing N-1, the bridge rail material shall be powder coat finish, color dark brown. In further clarification of this note, and Detail A on Project Drawing S-4, the hardware and clip angles for attachment of the bridge rail to the bridge truss members shall be uncoated weathering steel.
5. As a clarification of the Riprap Keying Detail on Project Drawing C-4, the indicated minimum riprap layer thickness of 1'-6" shall be changed to 2'-0".
6. Backfill to be placed below the riprap at the front (river side) faces of both abutments shall be on-site excavated material which shall be thoroughly tamped with an excavator bucket during placement.
7. As a clarification of Section 6 on Project Drawing S-4, the note indicating that the asphalt wearing course to be provided by the Owner is incorrect; all asphalt paving work shall be performed by the Contractor.
8. All bidders are advised that repair and replacement work for other bridges owned by the NYS Department of Transportation is underway in the project area which may affect site access for materials and equipment. Costs associated with the need for alternate routes to the project site shall be included in each Bid.
9. No access to the site for construction vehicles, material deliveries and equipment shall be permitted

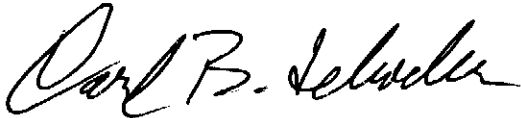
July 13, 2015

from the north (Keene) end of Hulls Falls Road due to traffic restrictions imposed by the County on this section of roadway. Access to the site from the south end of Hulls Falls Road (intersection with NYS Route 73 near Marcy field) is acceptable.

10. Attached to these Minutes is a copy of the original design drawings for the bridge trusses to be utilized for this project. Bidders shall note that these drawings are provided for information only for the Bidders' use in estimating truss weights and rigging requirements for the transport and installation of the trusses at the project site. These drawings shall not be considered to be a part of the Bidding Documents for the project.
11. Attached to Dr. Ray Pedestrian Bridge Replacement is a copy of the Pre-Bid Meeting Attendance Sheet for contact information for the attendees.

The meeting adjourned at 10:30 AM.

Respectfully submitted:

A handwritten signature in black ink, appearing to read "Carl B. Schoder". The signature is fluid and cursive, with the first name "Carl" being more prominent.

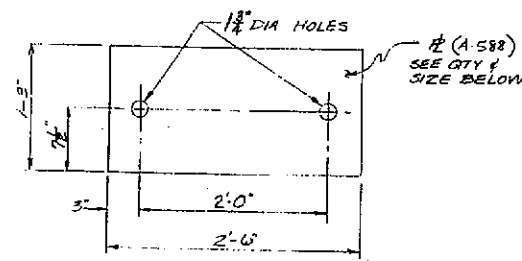
Carl B. Schoder, PE
Principal

PREBID MEETING ATTENDANCE SHEET

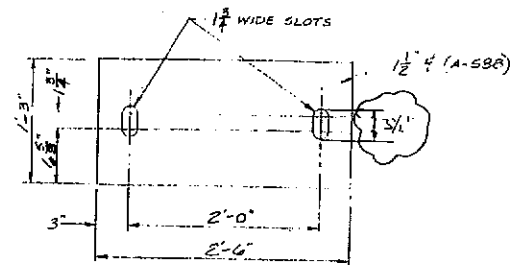
Project: Dr. Ray Pedestrian Bridge Replacement Date: 7/9/15 Job No. 12-474.04

Date: 7/9/15

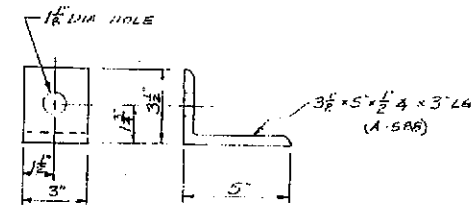
[illegible]



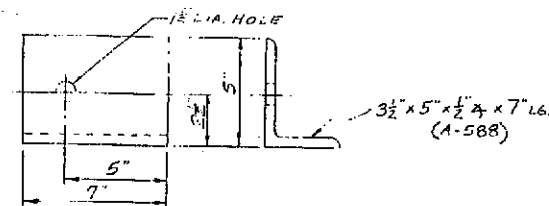
DETAIL BP-3
2 REQ'D @ 1 1/2" R
4 REQ'D @ 3/4" R



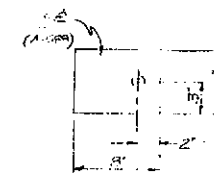
DETAIL BP-4
2 REQ'D



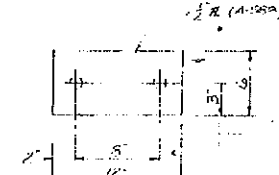
CLIP C-3
22 REQ'D



CLIP C-4
4 REQ'D

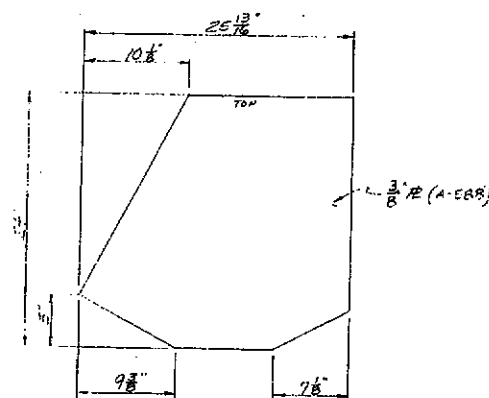


DETAIL C-P-4
1 REQ'D WITH 1 1/2" DIA HOLES
1 REQ'D WITH 1 1/2" WIDE SLOTS

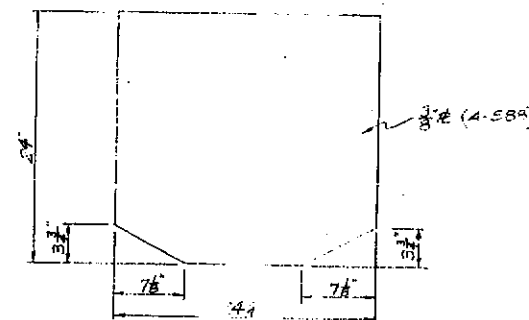


DETAIL C-P-5
1 REQ'D WITH 1 1/2" DIA HOLES
1 REQ'D WITH 1 1/2" WIDE SLOTS

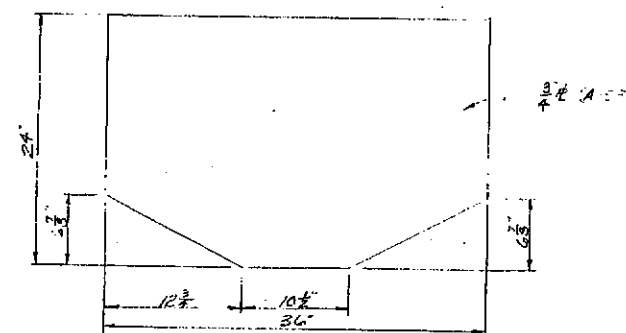
NOTE:
MAKE A SET OF 1/2" THICK NEOPRENE
PADS TO MATCH ABOVE PLATES O.K.



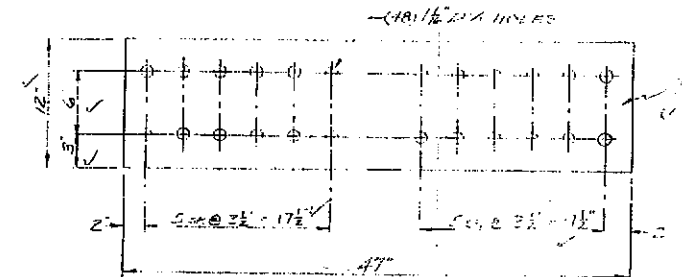
DETAIL P-5
8 REQ'D



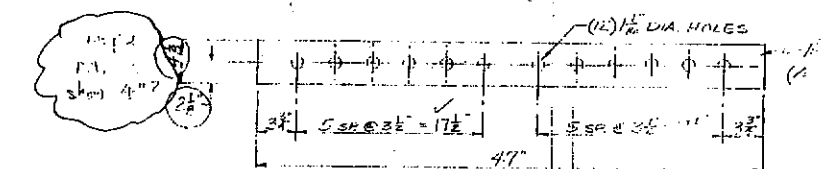
DETAIL P-6
24 REQ'D



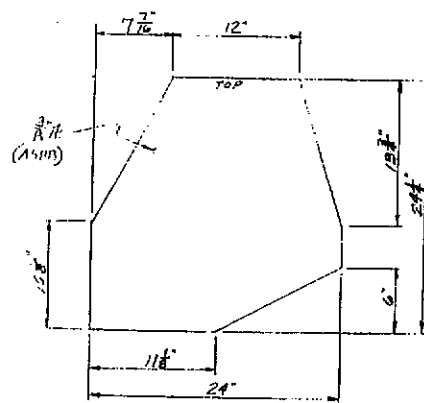
DETAIL P-7
4 REQ'D



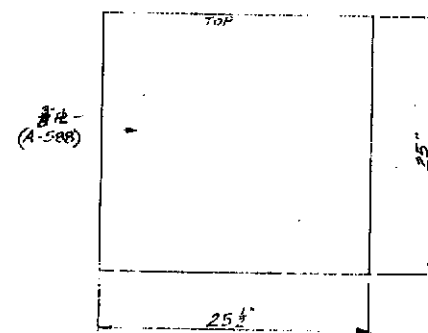
DETAIL P-8
2 REQ'D



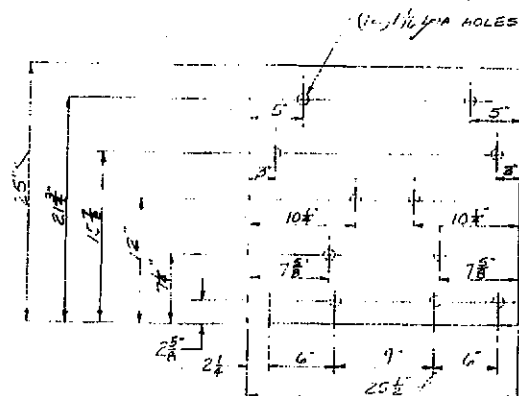
DETAIL P-9
4 REQ'D



DETAIL P-1
8 REQ'D



DETAIL P-2
16 REQ'D



NOTE:
TO BE MATCHED
DRILLED IN SETS
(8 IN 10 3/4" R)

DETAIL P-3 & P-4
16 REQ'D @ 3/8" R (A-588) ✓
16 REQ'D @ 3/4" R (A-588) ✓

STUDY DRAWING KEY

☐ No Exception Taken ☐ All Right

☐ Notes and Remarks ☐ General Notes

This check is only for review of design concept, not for design of the project. The engineer is responsible for confirming and correlating all dimensions and performing his work in a satisfactory manner.

M.J. ENGINEERING, P.C.
CONSULTING ENGINEERS

Date: 11/2/92 By: KPL

MATERIAL CUT TO SIZE
2 REQ'D 3/8" R x 12" x 9 1/2" (A-588)
22 REQ'D 3/8" R x 6" x 3/4" x 10 1/4" (A-588)

REV 1 9-30-92 CHANNEL PLATE DIM. 7/11

GROVE ROAD (C.O. RTE 71R) BRIDGE OVER EAST BRANCH OF AUSABLE RIVER, ESSEX CO.

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

DATE: 9-23-92

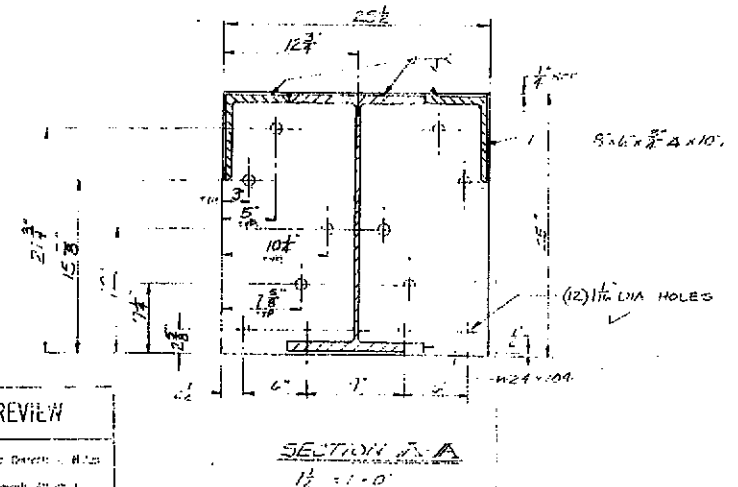
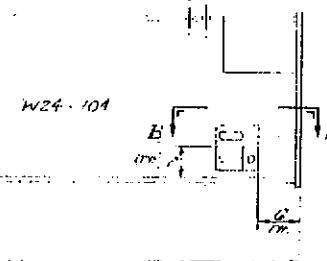
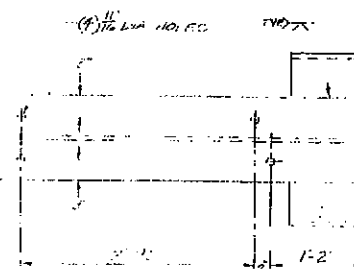
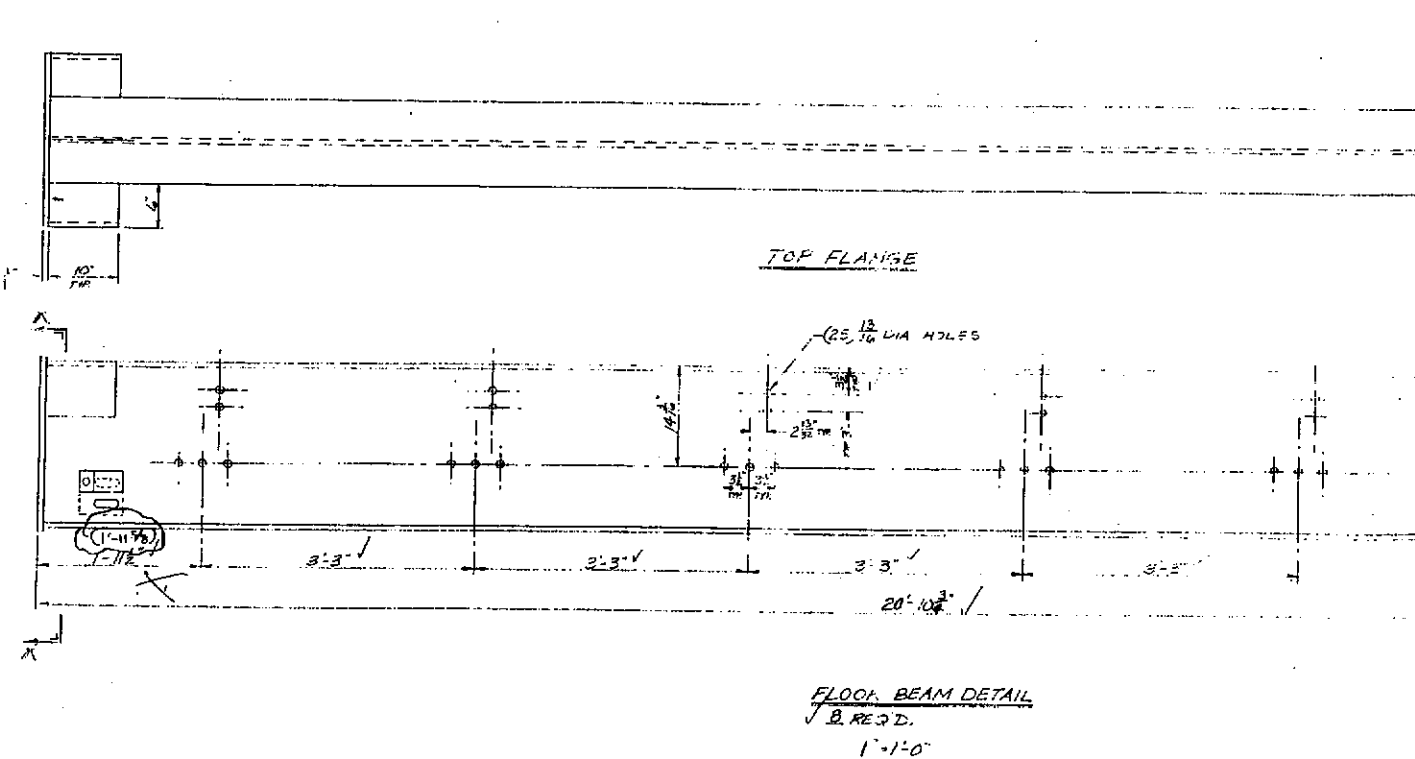
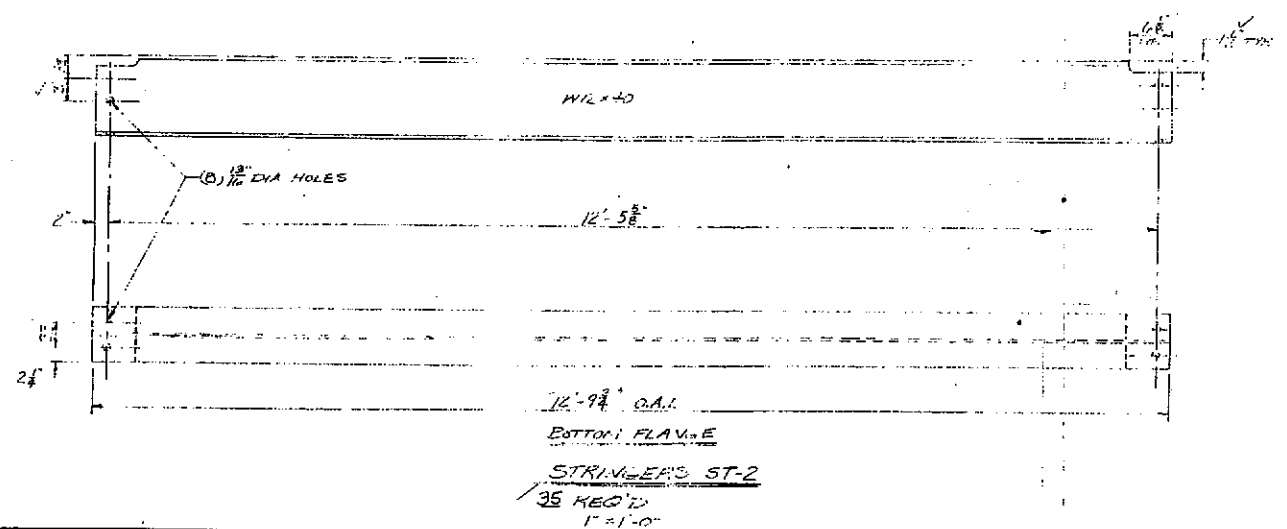
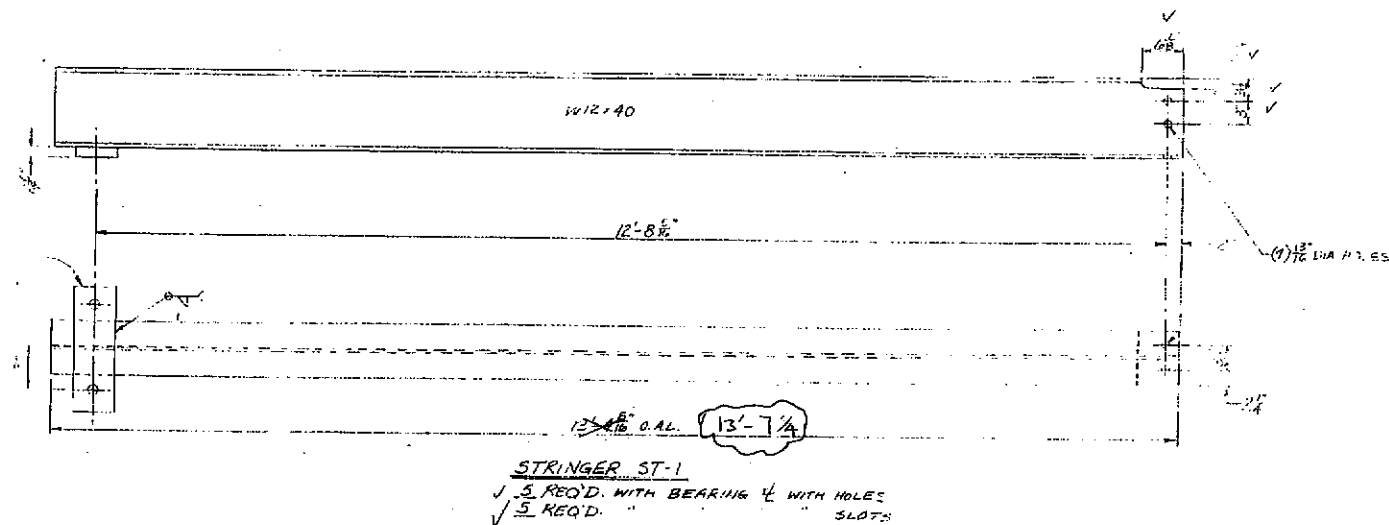
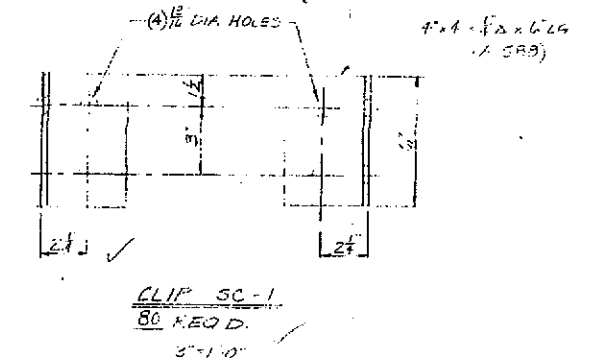
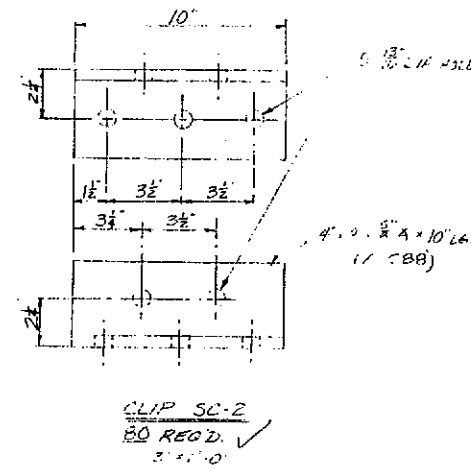
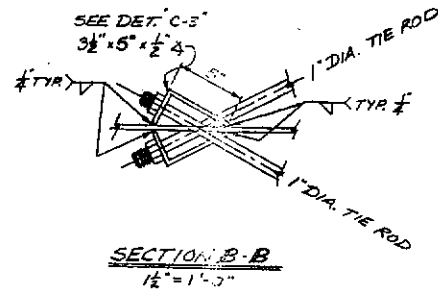
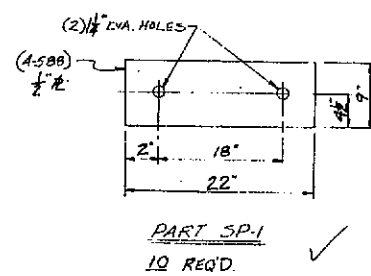
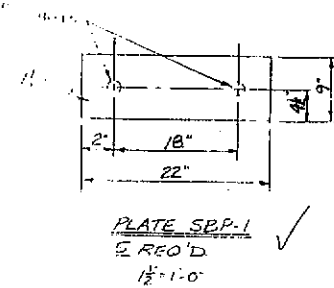
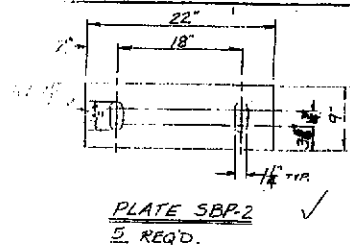
DESIGNED BY: M.H.

CHECKED BY: M.H.

DETAILS - PLATES

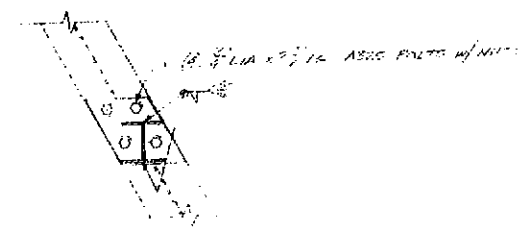
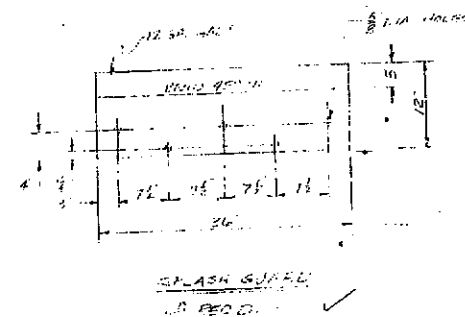
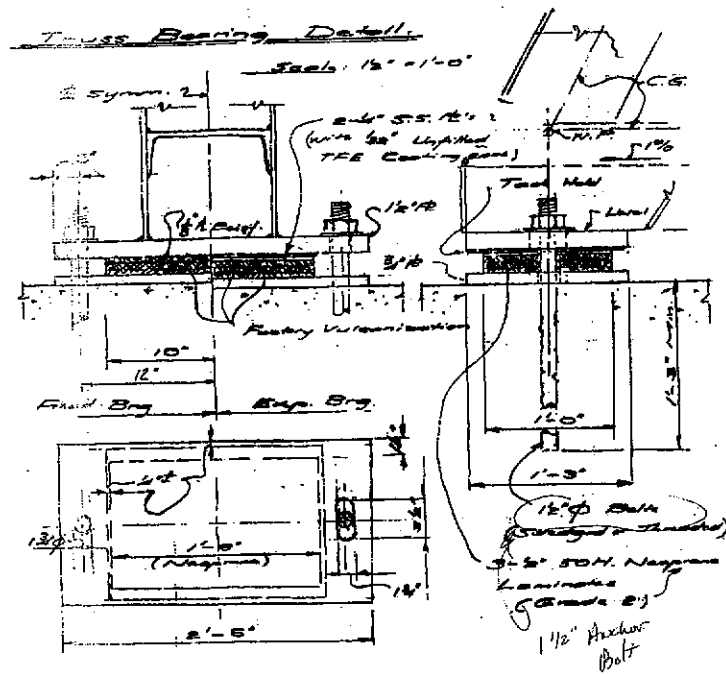
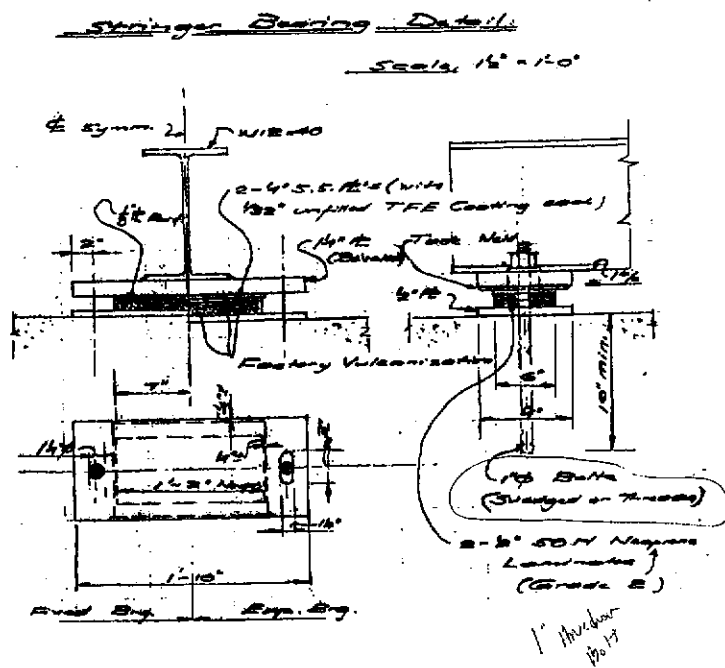
DECKER INC., ELMIRA, N.Y.

704 D.C.

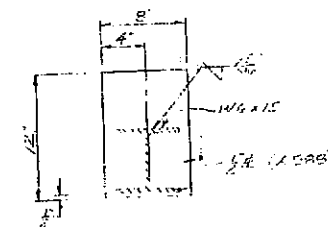


SHOP DRAWING REVIEW	
<input type="checkbox"/> No Exception Taken	<input type="checkbox"/> Major Changes
<input type="checkbox"/> Revise and Resubmit	<input checked="" type="checkbox"/> Comments
This check is only for review of general conformity with the design concept of the project and general compliance with the information given in the contract documents. The contractor is responsible for confirming and controlling all quantities and dimensions and performing his work in a satisfactory manner.	
M.J. ENGINEERING, P.C. CONSULTING ENGINEERS	
11/5/92	By K.L.

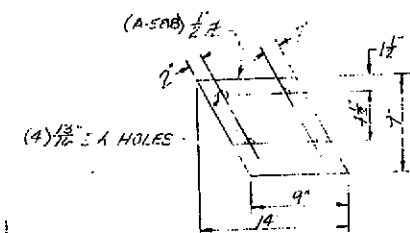
REV. 1 9-30-92 CHANGED DIMS. & P. SIZES	
GROVE ROAD (CO. RTE. 7R) BRIDGE OVER BRANCH OF AUSABLE RIVER, ESSEX CO., N.Y.	
SCALE AS NOTED	APPROVED BY M.L.
DATE 9-22-92	BY M.L.
FL. BEAM & STRINGER DETAILS	
DECKER INC., ELMIRA, N.Y.	704D



SECTION X-X
1'-0"



SECTION Y-Y
1'-0"



BRACKET PLATE
10\"/>

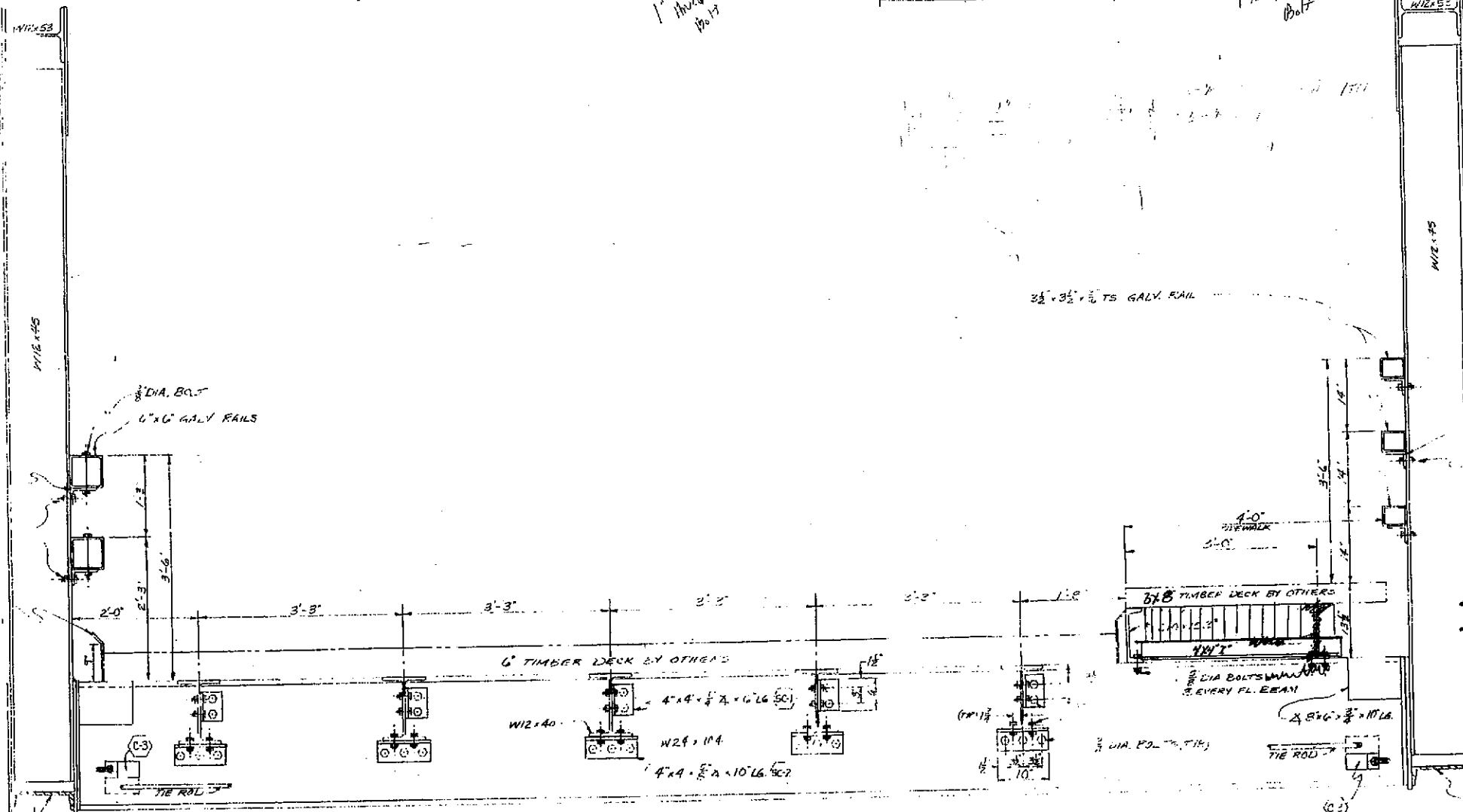
SHOP DRAWING REVIEW

☐ No Exception Taken ☐ Make Corrective Notes
☐ Revise and Resubmit ☒ Comments Attached

This check is only for review of general conformance with the design concept of the project and general construction details. The contractor is responsible for coordinating and correlating all quantities and dimensions and performing his work in a satisfactory manner.

M.J. ENGINEERING, P.C.
CONSULTING ENGINEERS

Date: 11/1/92 By: K.H.L.



CROSS SECTION
1" = 1'-0"

- 1. Check all dimensions and notes for accuracy.
- 2. Check all dimensions and notes for accuracy.
- 3. Check all dimensions and notes for accuracy.

GROVE ROAD (C.R. 30) BRIDGE OVER EAC
BRANCH OF AUSABLE RIVER, ESSEX CO., N.Y.

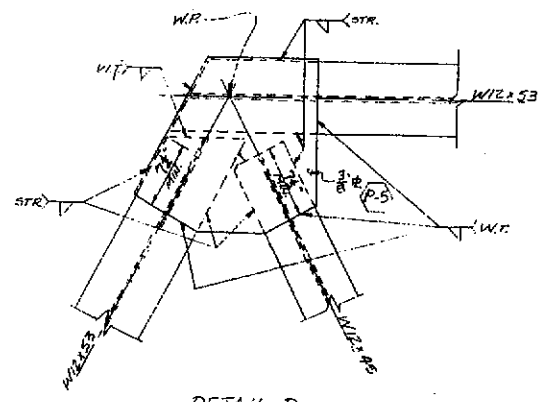
SCALE: AS NOTED
DATE: 9-16-92

SECTION & DETAILS

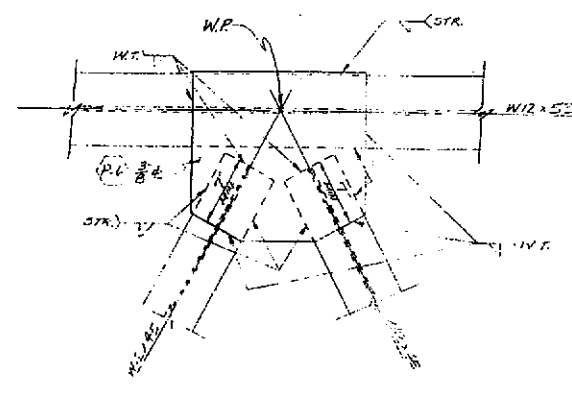
DECKER INC., ELMHURST, N.Y.

NOTES -
 1. Make this drawing for correct dimensions and for correct location, etc.
 2. It shall not be used for construction or for any other purpose without the written consent of Decker, Inc., Elmira, N.Y.
 3. Drawing shall not be used for construction or for any other purpose without the written consent of Decker, Inc., Elmira, N.Y.

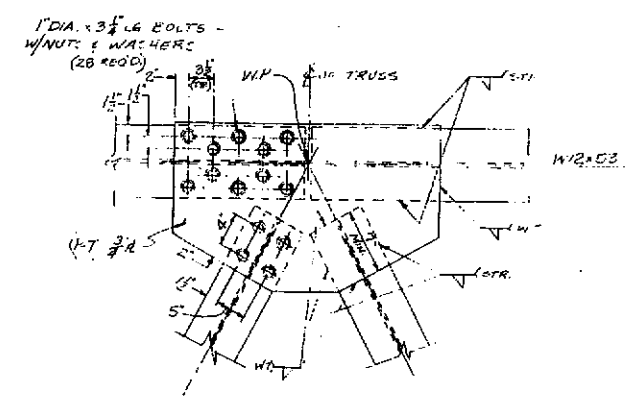
NOTES
 DESIGN LOADING HS20-44 + DEAD LOADING.
 ALL MATERIALS AND METHODS OF INSTALLATION SHALL MEET REQUIREMENTS OF AASHTO SPECIFICATIONS, 14TH EDITION 1981 AND INTERIM.
 STRUCTURAL STEEL SHALL CONFORM TO ASTM A368. (WEATHERING)
 ALL WELDS CLASS "A" CONTINUOUS WITH ELECTRODE CLASS E70 WITH MINIMUM BEAD OF 5/16" FOR ALL STRUCTURAL WELDS-STR. (MAGNETIC PARTICLE TESTING) UNLESS NOTED OTHERWISE. 50% FOR ALL WEATHER TIGHT WELDS-W.T. ALL WELDING PERFORMED IN COMPLIANCE WITH THE BRIDGE WELDING CODE ANSI/AASHTO/AWS D1.5-88.
 ALL BOLTS AND HARDWARE USED IN STEEL ASSEMBLY SHALL BE A325, TYPE 3, UNLESS NOTED OTHERWISE.
 ALL A325 BOLTS SHALL BE TIGHTENED BY THE STANDARD TURN OF NUT METHOD. NUT SHALL BE ROTATED 1/3 TURN (36°) FROM STANDARD TIGHT POSITION.
 GUIDE RAIL AND BRACKETS SHALL BE MINIMUM A36 GALVANIZED.
 SUBSTRUCTURE ADEQUACY INCLUDING SEISMIC CONSIDERATIONS SHALL BE THE RESPONSIBILITY OF THE OWNER.
 N.Y.S. STANDARD NAT'L & CONSTRUCTION SPECIFICATIONS: 1991



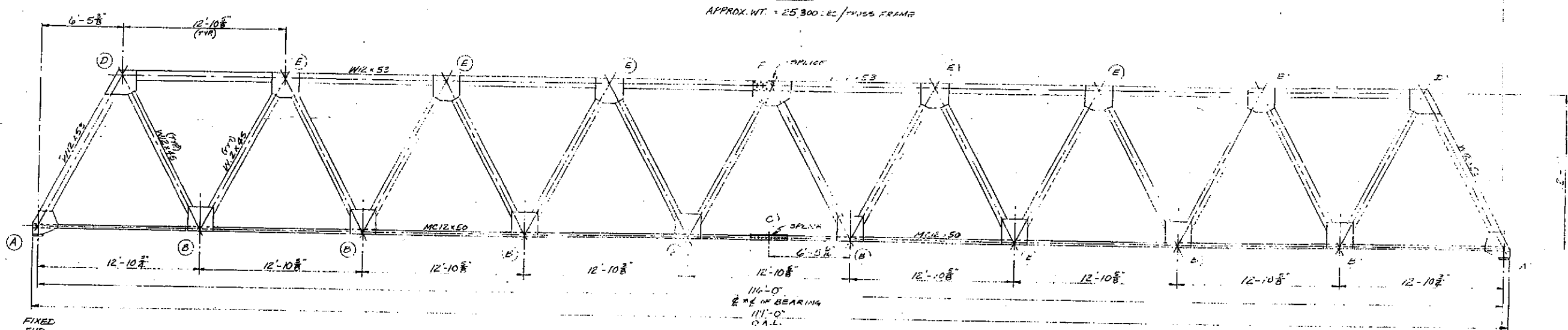
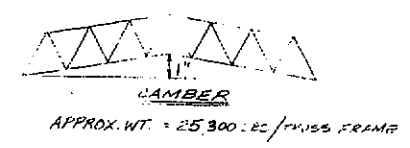
DETAIL-D
 1'-1'-0"



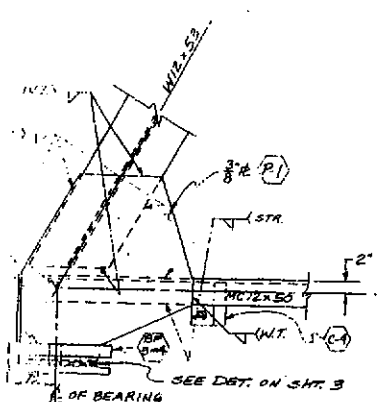
DETAIL-E
 1'-1'-0"



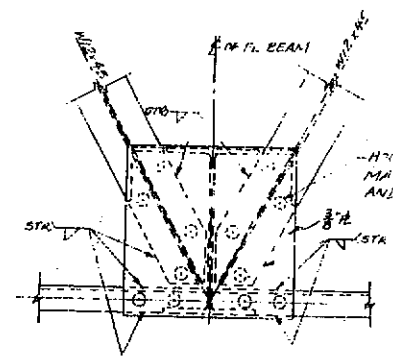
DETAIL-F
 1'-1'-0"



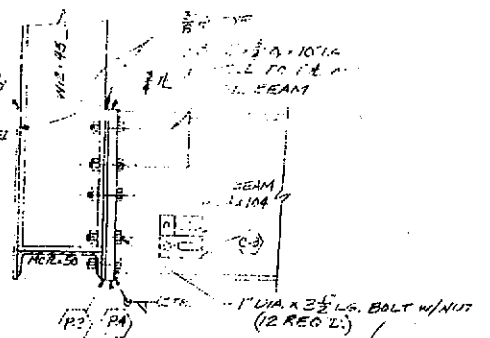
ASSEMBLY
 1'-1'-0"



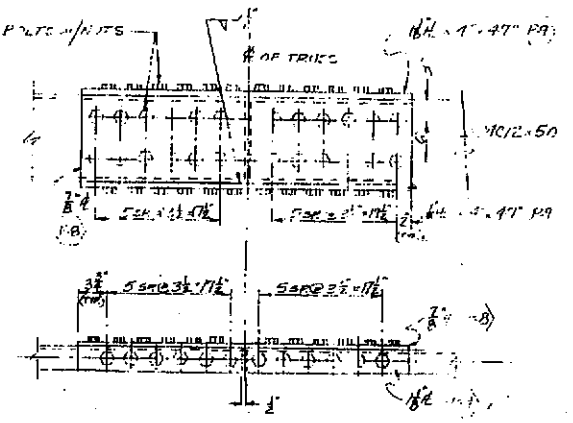
DETAIL-A
 1'-1'-0"



DETAIL-B
 1'-1'-0"



DETAIL-C
 1'-1'-0"



DETAIL-D
 1'-1'-0"

SHOP DRAWING REVIEW

☒ No Exception Taken ☐ Make Exceptions Noted
☐ Revise and Resubmit ☐ Comments Attached

This check is only for review of general conformity with the design concept of the project and general compliance with the information given in the contract documents. The engineer is responsible for confirming and correlating all quantities and dimensions and performing his work in a satisfactory manner.

M.J. ENGINEERING, P.C.
 CONSULTING ENGINEERS

Date 11/3/92 By KVL

REV. 1 7-30-72 CHANGED CHANNEL SIZE 72

GROVE ROAD CO. RTE. 90 BRIDGE OVER EAST BRANCH OF AUSABLE RIVER, ESSEX CO., N.Y.

AS NOTED
 7-6-92

TRUSS ASSEMBLY & DETAILS

DECKER INC., ELMIRA, N.Y.

ESSEX COUNTY HIGHWAY DEPARTMENT

ELIZABETHTOWN, NEW YORK

REHABILITATION OF

GROVE ROAD (CO. RTE. 9R) BRIDGE

44.439370N, 73.674880W

JAY (T) , ESSEX (C) , N.Y.

BIN 3-30209-0

CONTRACT NO.5-92A & NO.5-92B

JUNE 1992

LIST OF DRAWINGS

SHEET NUMBER	TITLES
1	COVER SHEET
2	EXISTING BRIDGE
3	PROPOSED BRIDGE SECTION PLAN & DETAILS
4	ROADWAY & PROFILE
5	TRUSS BRIDGE DETAIL
6	PROPOSED SUBSTRUCTURE PLAN & REINFORCEMENT
7	ABUTMENT REINFORCEMENT REHABILITATION & FRAMING DETAILS
8	EXISTING ABUTMENT REPAIR DETAILS

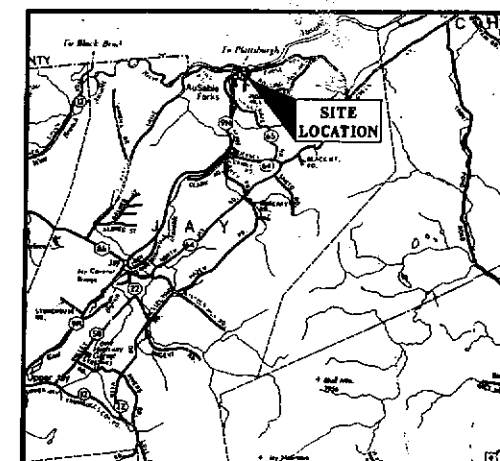
PROJECT BREAKDOWN

The project has been broken into three (3) tasks, as described below:

- I. Contract 5-92A
This task includes: construction of north and south abutments, repairs of existing abutments, setting anchor bolts for truss bearings and stringers and setting backwall angle.
- II. Contract 5-92B
This task includes supplying all steel elements of the bridge, including trusses, floor beams, stringers, sewage force main supports, support beams for sidewalk, bearing plates, bridge railing and railing clips, bolts for field connections, and all necessary items to complete the bridge structure, except decking.
- III. This task would be completed by the Owner, and it essentially includes:
 - temporary relocation of force main;
 - dismantling of existing bridge, including force main on the bridge;
 - erecting bridge, installing decking and rails;
 - reconstruction of approaches.

Bids may be submitted for Contract 5-92A or Contract 5-92B or both, giving bid price for each contract separately. Bids for each contract will be evaluated independent of the other, and two separate contracts will be awarded to the most qualified bidder/bidders.

All bidders are to indicate the contract/contracts number for which they are bidding on their bid envelope.



SITE LOCATION PLAN
SCALE: N.T.S.

COUNTY SUPERINTENDENT OF HIGHWAYS

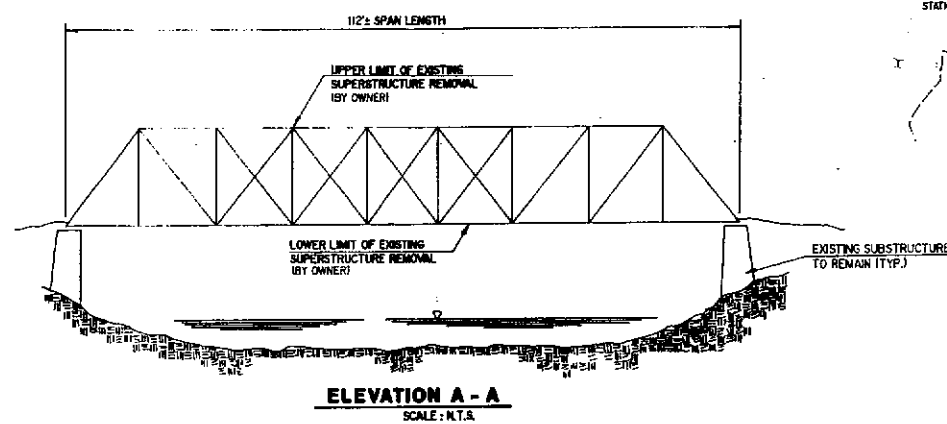
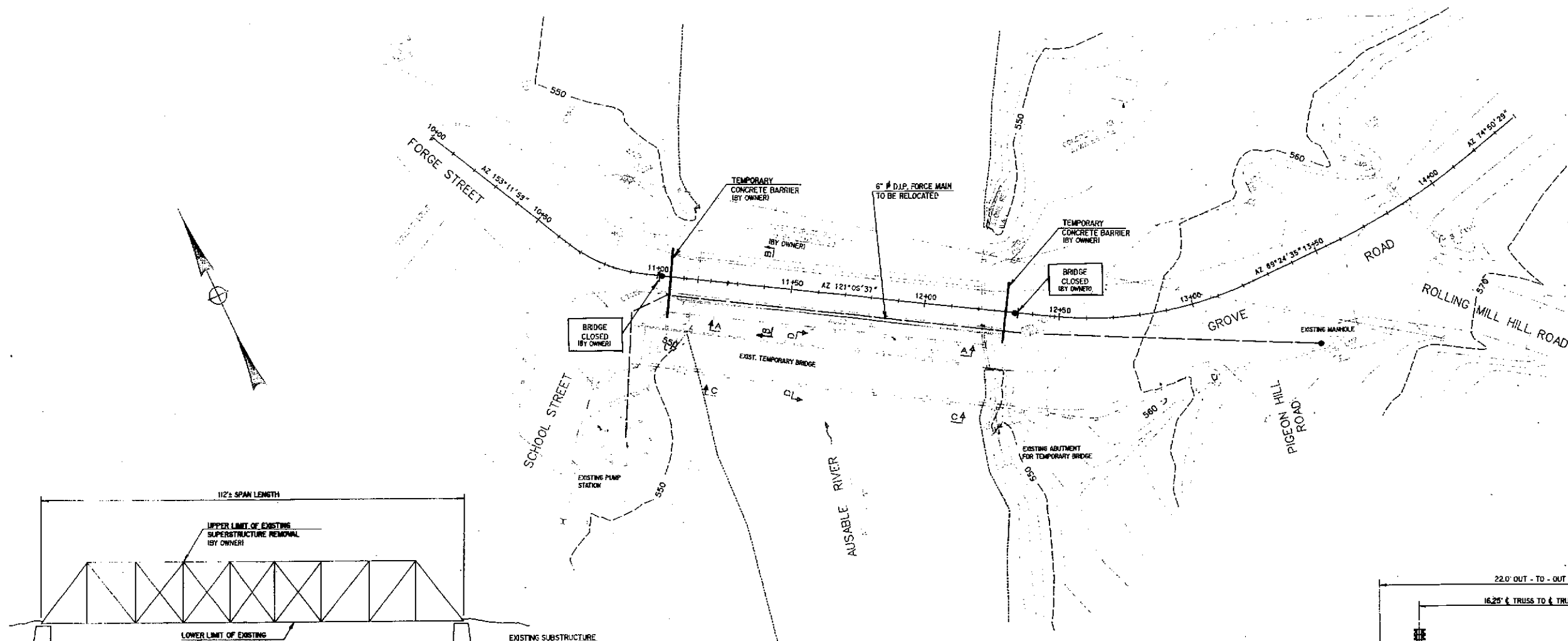
MALCOLM L. ALFORD

Bu 118

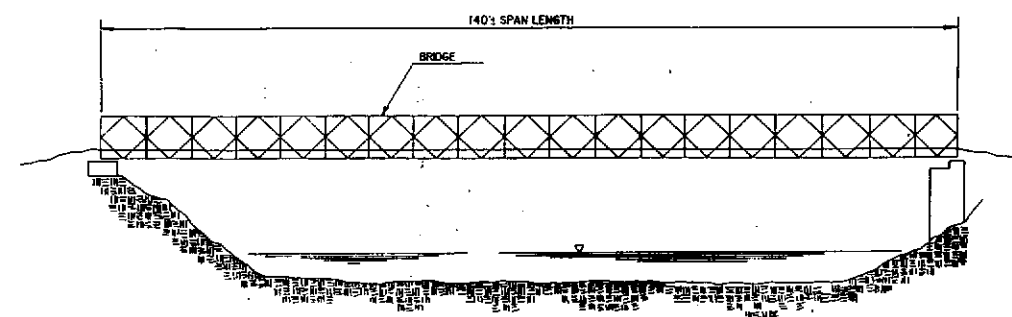
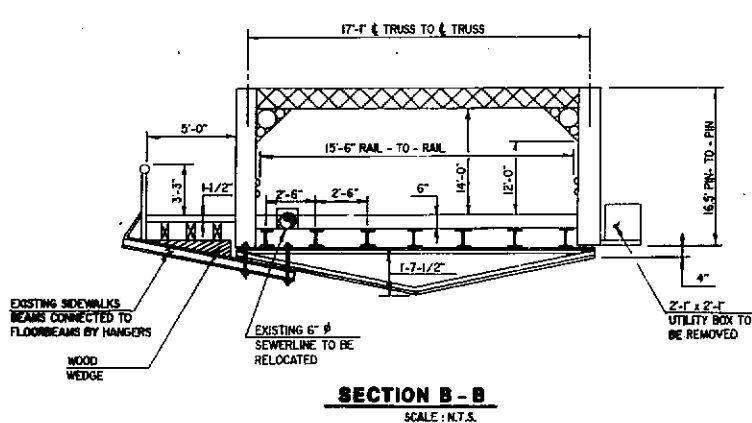
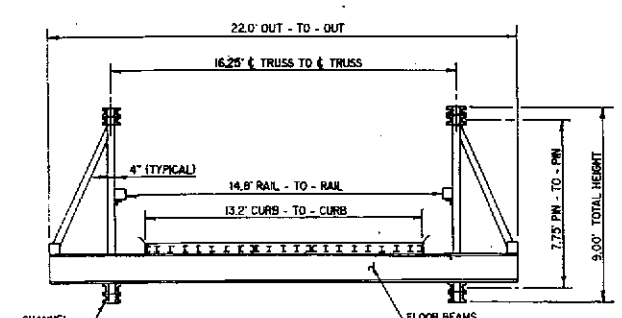
M.J. ENGINEERING, P.C.
CONSULTING ENGINEERS
1533 CRESCENT ROAD CLIFTON PARK, N.Y.



30209



PLAN
SCALE: 1" = 20'-0"



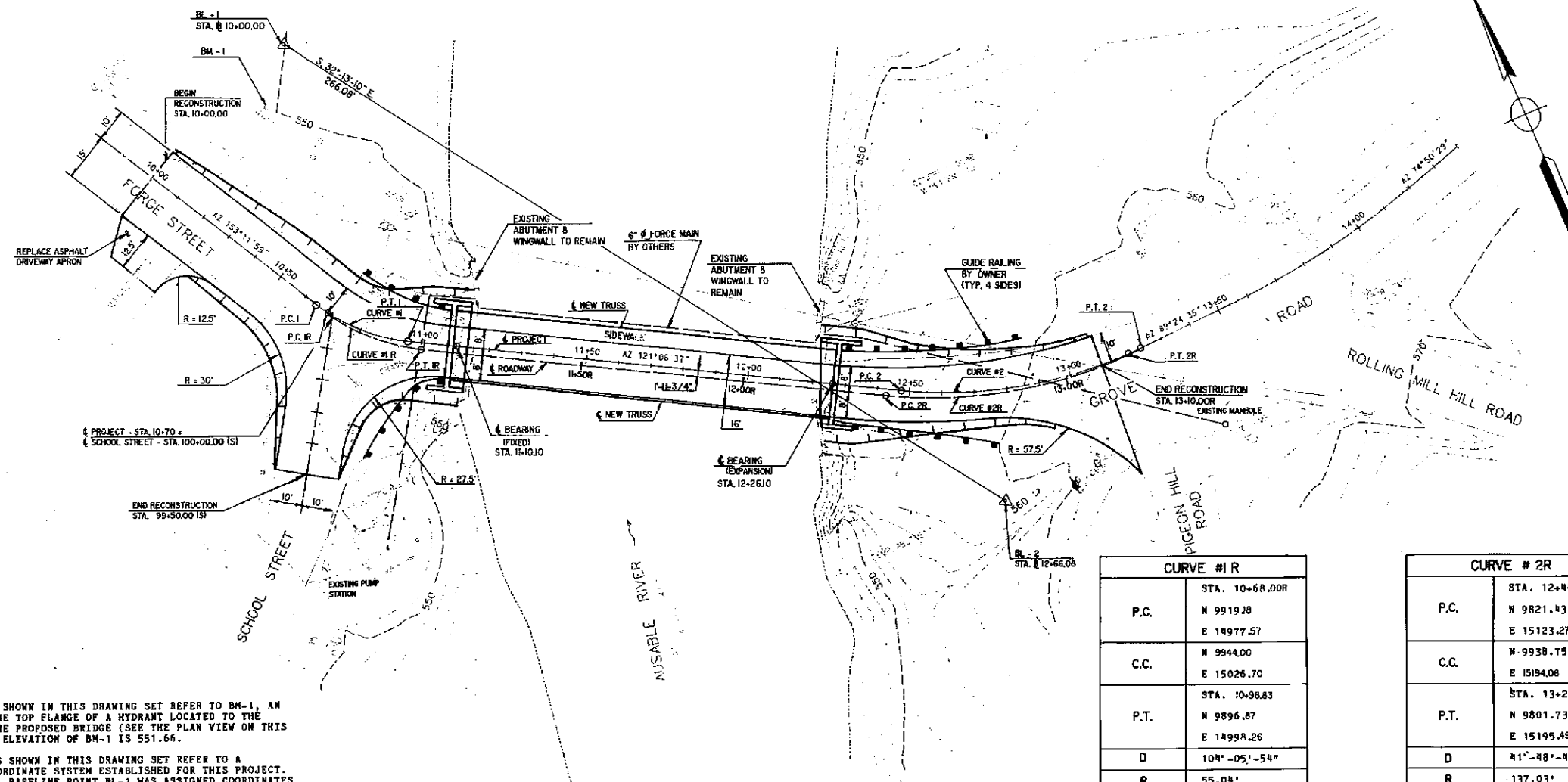
				ESSEX COUNTY HIGHWAY DEPARTMENT	
				HCR 1 BOX 327 ROUTE 9	
				ELIZABETHTOWN NEW YORK 12932	
				REHABILITATION OF	
				GROVE ROAD (CR 9R) BRIDGE	
				GROVE ROAD OVER AUSABLE RIVER	
				JAY (T) ESSEX (C) N.Y.	
				BIN 3-30209-0	
				CONTRACT NO. 5-92	
				SHEET TITLE:	
				EXISTING BRIDGE & SECTIONS	
				M.J. ENGINEERING, P.C.	
				CONSULTING ENGINEERS	
				1533 CRESCENT ROAD CLIFTON PARK, NEW YORK 12065	
DATE	DRAWN BY: WAT/GA	CHECKED BY: K.P.L.	SHEET		
				NO. 1 OF 8	
	SCALE: AS SHOWN	DATE: JULY 10, 1992			

CURVE #1	
P.C.	STA. 10+64.27 N 9922.51 E 14975.89
C.C.	N 9947.32 E 15025.02
P.T.	STA. 10+95.10 N 9900.20 E 14996.58
D	104°-05'-54"
R	55.04'
Δ	32°-05'-22"
L	30.83'
T	15.83'
P.L.	N 9908.38 E 14983.03

CURVE #2	
P.C.	STA. 12+47.47 N 9821.47 E 15127.04
C.C.	N 9938.79 E 15197.84
P.T.	STA. 13+23.29 N 9801.77 E 15199.26
D	41°-48'-45"
R	137.03'
Δ	31°-42'-02"
L	75.82'
T	38.91'
P.L.	N 9801.37 E 15160.35

NOTES:

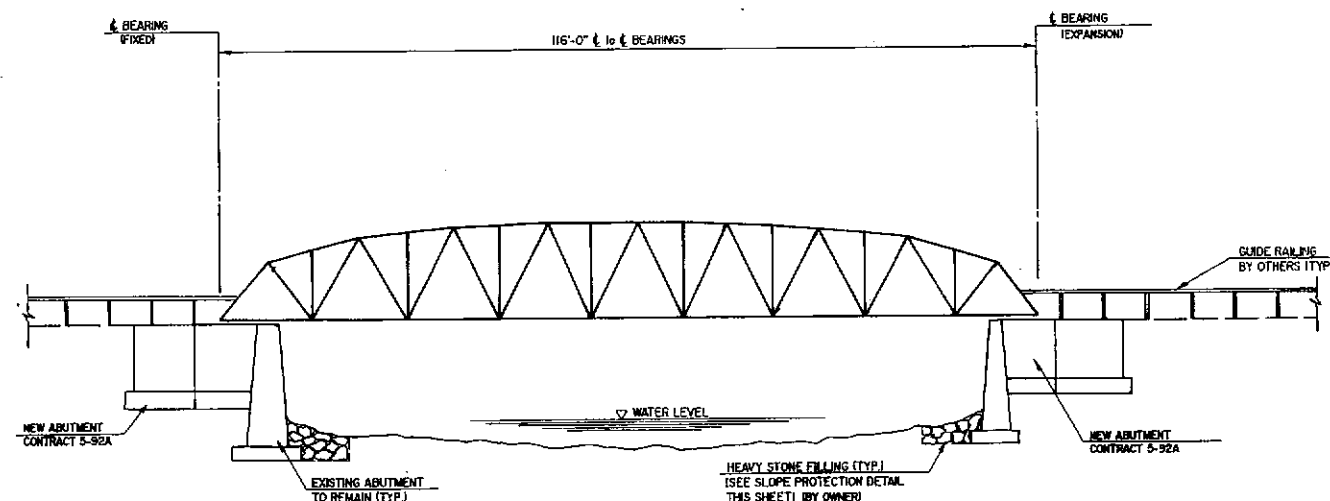
1. ALL ELEVATIONS SHOWN IN THIS DRAWING SET REFER TO BM-1, AN "X" CUT INTO THE TOP FLANGE OF A HYDRANT LOCATED TO THE NORTHWEST OF THE PROPOSED BRIDGE (SEE THE PLAN VIEW ON THIS DRAWING). THE ELEVATION OF BM-1 IS 551.66.
2. ALL COORDINATES SHOWN IN THIS DRAWING SET REFER TO A RECTANGULAR COORDINATE SYSTEM ESTABLISHED FOR THIS PROJECT. IN THAT SYSTEM, BASELINE POINT BL-1 WAS ASSIGNED COORDINATES OF N 10,000.00 AND E 15,000.00; BASELINE POINT BL-2'S CALCULATED COORDINATES ARE N 9,774.89 AND E 15,141.86. BOTH BASELINE POINTS CONSIST OF A PK NAIL DRIVEN INTO ASPHALT AND PAINTED ORANGE.
3. RECONSTRUCTION OF FORGE STREET, SCHOOL STREET AND GROVE ROAD SHALL BE PERFORMED BY OWNER.



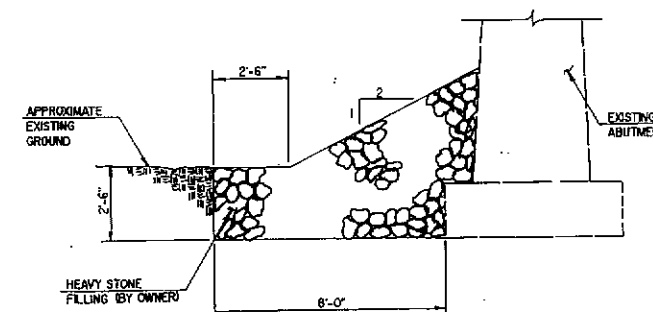
PLAN VIEW
SCALE: 1" = 20'-0"

CURVE #1R	
P.C.	STA. 10+68.00R N 9919.18 E 14977.57
C.C.	N 9944.00 E 15026.70
P.T.	STA. 10+98.83 N 9896.87 E 14999.26
D	104°-05'-54"
R	55.04'
Δ	32°-05'-22"
L	30.83'
T	15.83'
P.L.	N 99045.05 E 14984.71

CURVE #2R	
P.C.	STA. 12+44.84R N 9821.43 E 15123.27
C.C.	N 9938.75 E 15194.08
P.T.	STA. 13+20.65R N 9801.73 E 15195.49
D	41°-48'-45"
R	137.03'
Δ	31°-42'-02"
L	75.82'
T	38.91'
P.L.	N 9801.33 E 15156.58



ELEVATION
SCALE: N.T.S.



STONE FILLING DETAIL
SCALE: N.T.S.

ESSEX COUNTY HIGHWAY DEPARTMENT
HCR 1 BOX 327 ROUTE 9
ELIZABETHTOWN NEW YORK 12932

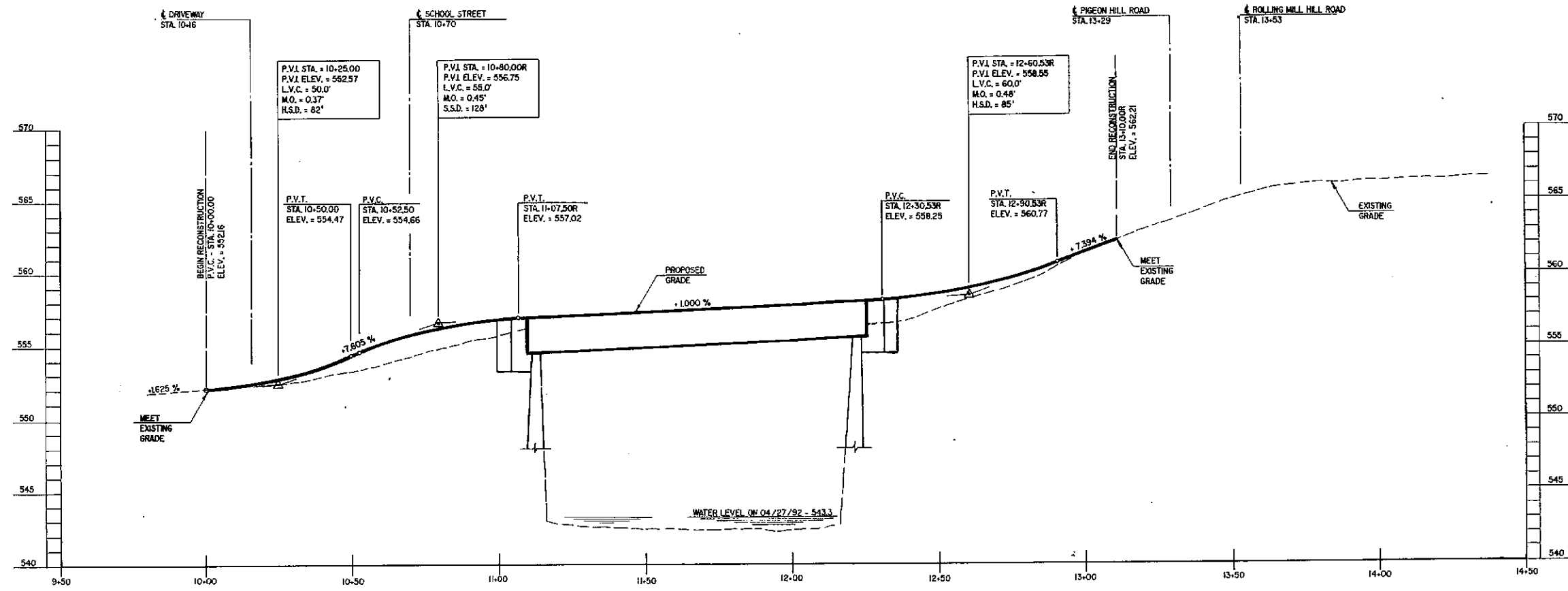
REHABILITATION OF
GROVE ROAD (CO. RTE 9R) BRIDGE
GROVE ROAD (CO. RTE 9R) OVER EAST BRANCH OF AUSABLE RIVER
JAY (T), ESSEX (C), N.Y.

BIN 3-30209-0 CONTRACT NO. 5-92

SHEET TITLE:
PROPOSED BRIDGE SECTION
PLAN & DETAIL

M.J. ENGINEERING, P.C.
CONSULTING ENGINEERS
1533 CRESCENT ROAD CLIFTON PARK, NEW YORK 12065

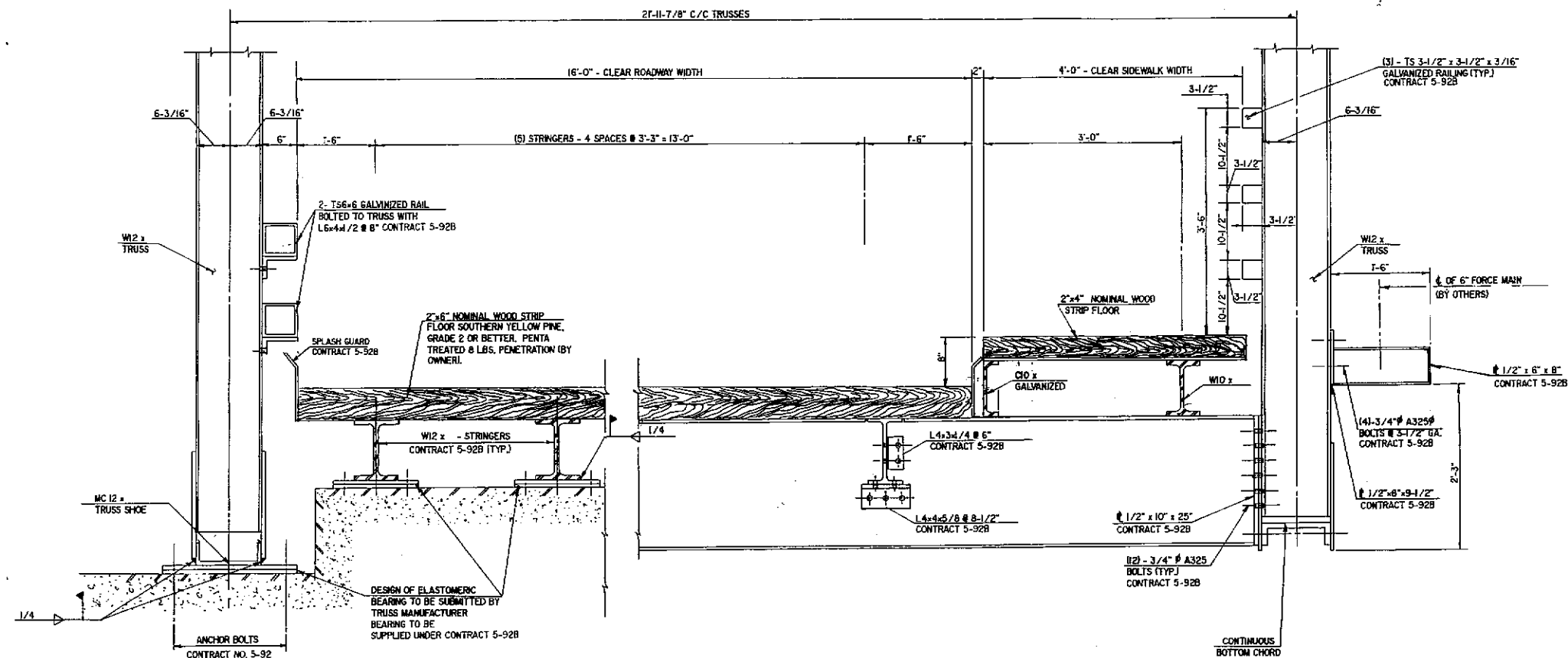
DATE: 7/10/92 DRAWN BY: WJH/TGA CHECKED BY: KPL. SHEET NO. 3 OF 8



ROADWAY & PROFILE

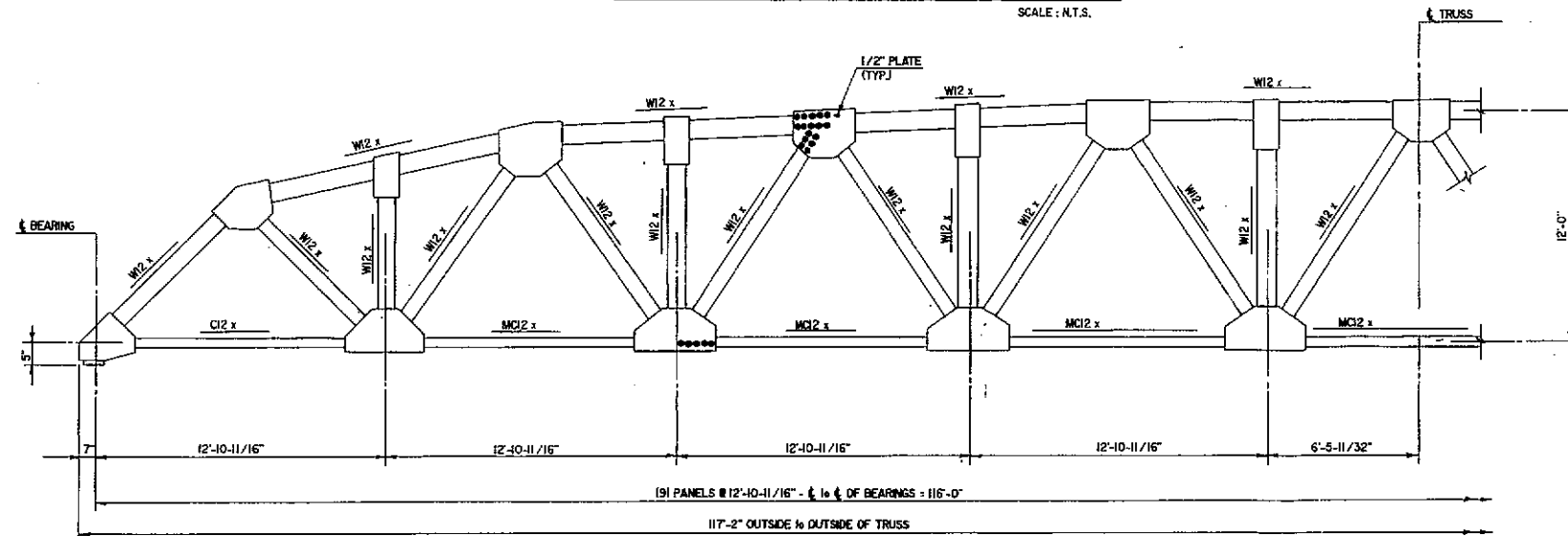
SCALE: HORIZONTAL 1" = 20'-0"
VERTICAL 1" = 4'-0"

<div style="display: flex; flex-direction: column; align-items: center;"> <div>REVISIONS</div> <table border="1"> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </table> </div>																						ESSEX COUNTY HIGHWAY DEPARTMENT HCR 1 BOX 327 ROUTE 9 ELIZABETHTOWN NEW YORK 12932	
REHABILITATION OF GROVE ROAD (CO. RTE 9R) BRIDGE <small>GROVE ROAD (CO. RTE 9R) OVER EAST BRANCH OF AUSABLE RIVER</small> JAY (T), ESSEX (C), N.Y.																							
BIN 3-30209-0 CONTRACT NO. 5-92 SHEET TITLE:																							
ROADWAY & PROFILE		M.J. ENGINEERING, P.C. CONSULTING ENGINEERS 1533 CRESCENT ROAD CLIFTON PARK, N.Y.																					
DATE	DRAWN BY: G.J.W.	CHECKED BY: E.A.D.	SHEET NO.: 4 OF 8																				
	SCALE: AS SHOWN	DATE: JULY 10, 1992																					



SECTION VIEW - TRUSS BRIDGE DETAIL

SCALE: N.T.S.

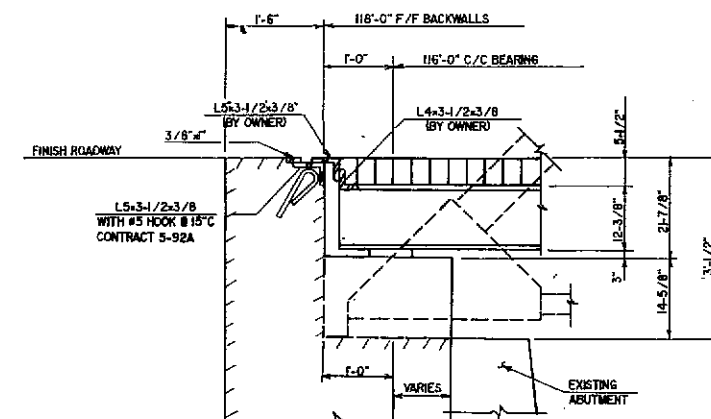


ELEVATION - TRUSS BRIDGE DETAIL

SCALE: N.T.S.

GENERAL NOTES

1. BRIDGE TRUSSES TO BE WELDED EXCEPT FIELD JOINTS WHICH WILL BE BOLTED.
2. BRIDGE DESIGNED IN COMPLIANCE WITH AASHTO-HS-25 LOADING.
3. ALL SUPERSTRUCTURE STRUCTURAL STEEL ASTM A-588 WEATHERING TYPE "UNPAINTED."
4. ALL WELDING PERFORMED IN COMPLIANCE WITH AMERICAN WELDING SOCIETY SPECIFICATIONS AND ACCOMPLISHED WITH ELECTRODE CLASS E80XX.
5. 2" x 6" NOMINAL WOOD STRIP FLOOR, SOUTHERN YELLOW PINE, GRADE NO. 2 OR BETTER, PENTA TREATED @ LBS. PENETRATION (BY OWNER).
6. WELD MEMBERS TO GUSSET PLATES WITH MINIMUM 1/4 INCH FILLET WELDS AT EACH END OF EACH MEMBER. WELD STRUCTURAL SHAPES IN AND ABOUT AND ALL AROUND GUSSET PLATES AT EACH JOINT.
7. ALL GUSSET PLATES 3/8 INCH THICK EXCEPT AS NOTED, WITH SUFFICIENT FLAT AREAS TO RESIST STRESSES AND SO SHAPED TO PRODUCE AN AESTHETIC ARCHITECTURAL APPEARANCE.
8. ALL FIELD CONNECTIONS SHALL BE BOLTED. SUBMIT DESIGN AND DETAILS OF ALL FIELD CONNECTIONS.
9. TIGHTENING OF BOLTS TO BE IN ACCORDANCE WITH AISC AND AASHTO STANDARDS.



ABUTMENT DETAIL

SCALE: N.T.S.

* ALL ANCHOR BOLTS FOR BEARINGS ARE TO BE INSTALLED UNDER CONTRACT 5-92 A

ESSEX COUNTY HIGHWAY DEPARTMENT
HCR 1 BOX 327 ROUTE 9
ELIZABETHTOWN NEW YORK 12932

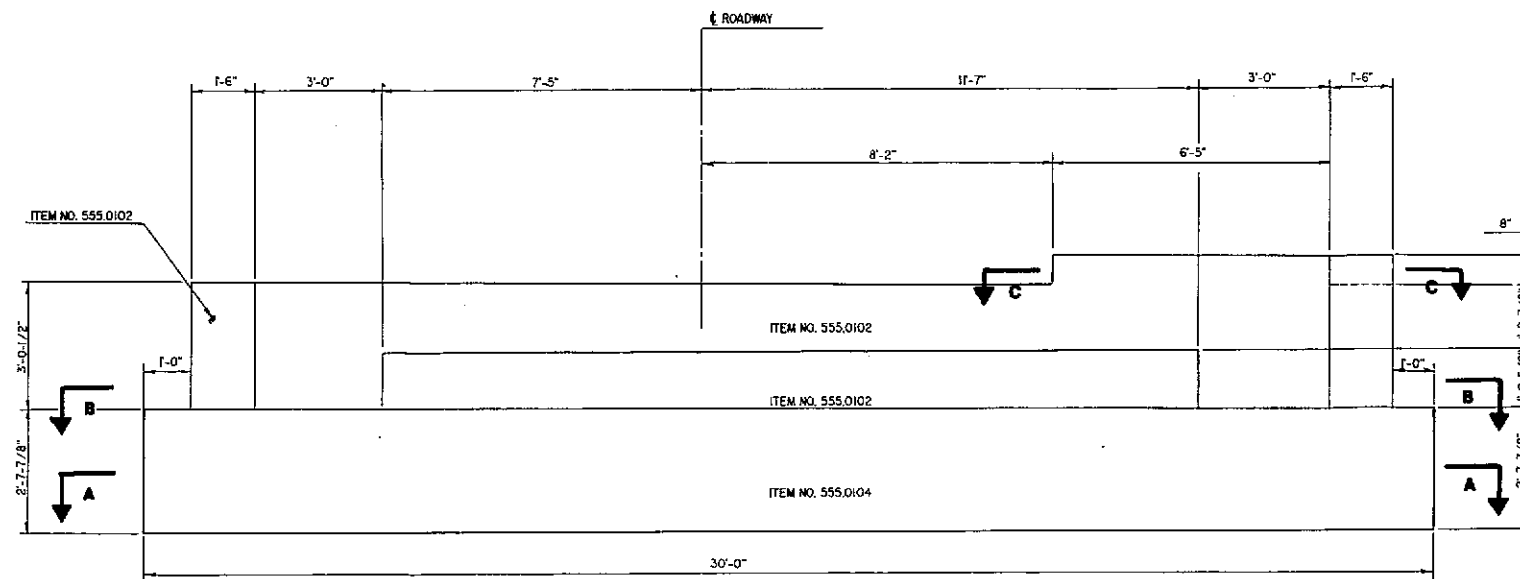
REHABILITATION OF
GROVE ROAD (CO. RTE 9R) BRIDGE
GROVE ROAD (CO. RTE 9R) OVER EAST BRANCH OF AUSABLE RIVER
JAY (T), ESSEX (C), N.Y.

BIN 3-30209-0 CONTRACT NO. 5-92

SHEET TITLE:
TRUSS BRIDGE DETAIL

M.J. ENGINEERING, P.C.
CONSULTING ENGINEERS
1533 CRESCENT ROAD CLIFTON PARK, N.Y.

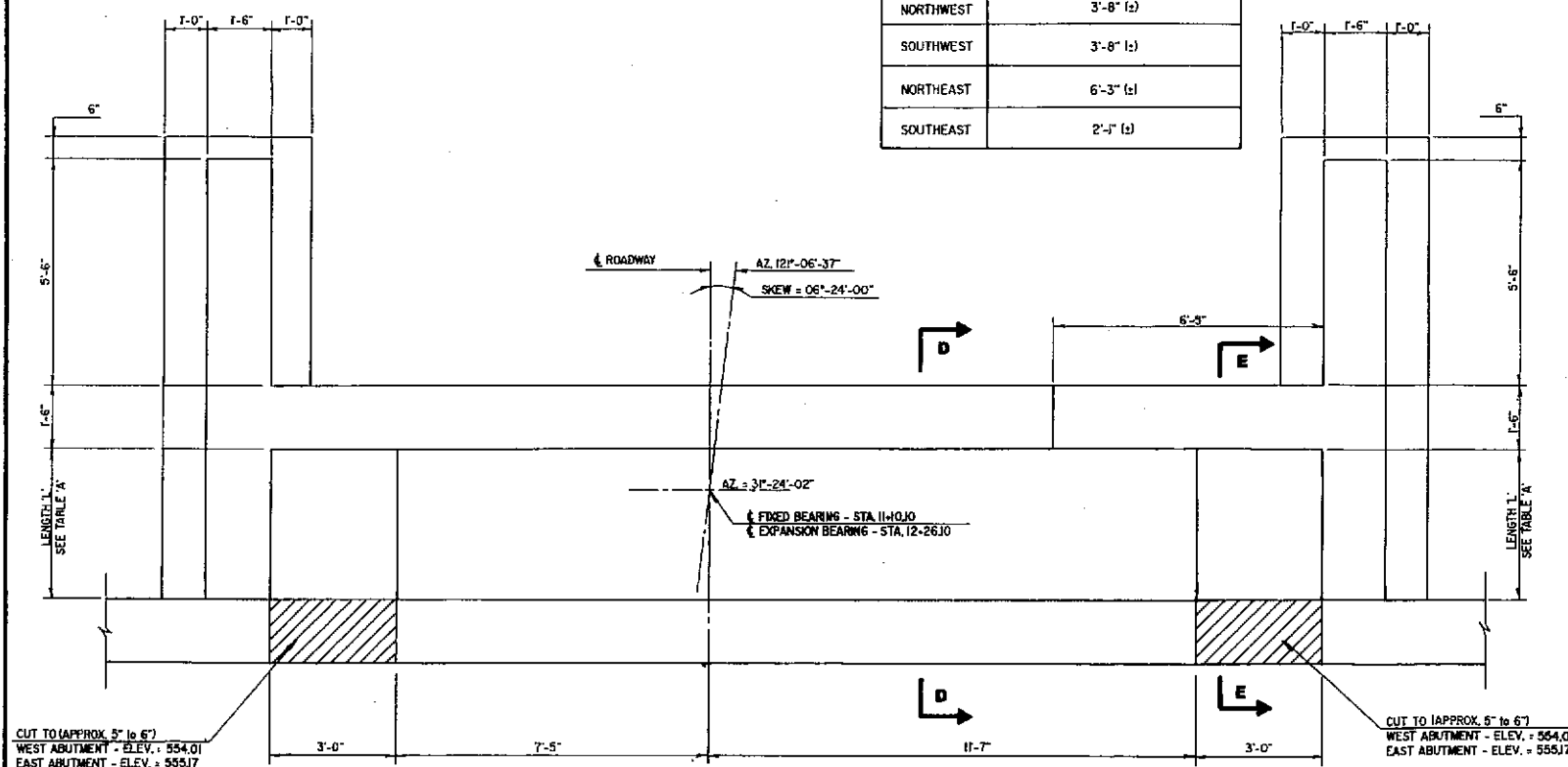
DRAWN BY: G.J.W. CHECKED BY: K.P.L. SHEET NO. 5 OF 8
SCALE: AS SHOWN DATE: 7/14/92



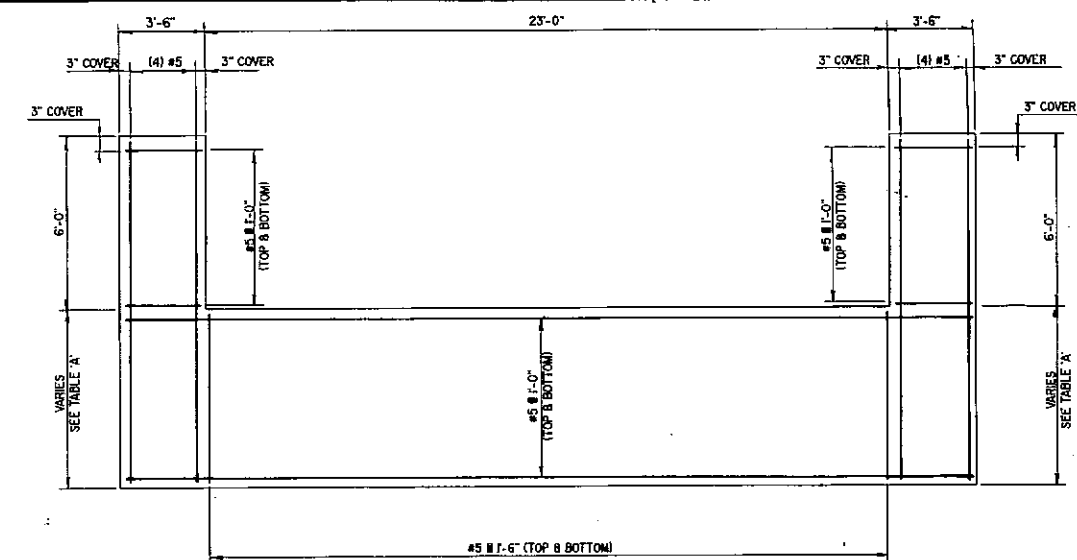
ELEVATION - WEST ABUTMENT
(EAST ABUTMENT SIMILAR) SCALE: N.T.S.

TABLE 'A'

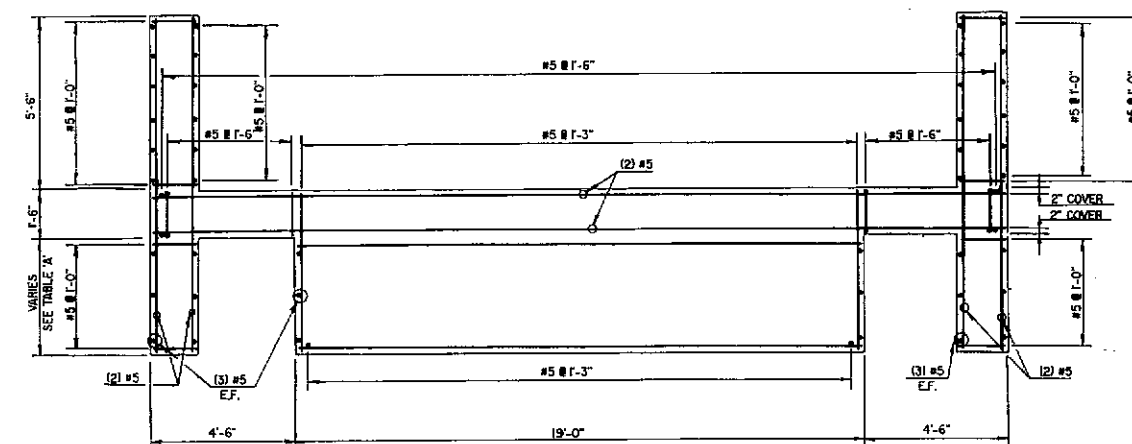
LOCATION	LENGTH 'L'
NORTHWEST	3'-8" (2)
SOUTHWEST	3'-8" (2)
NORTHEAST	6'-3" (2)
SOUTHEAST	2'-1" (2)



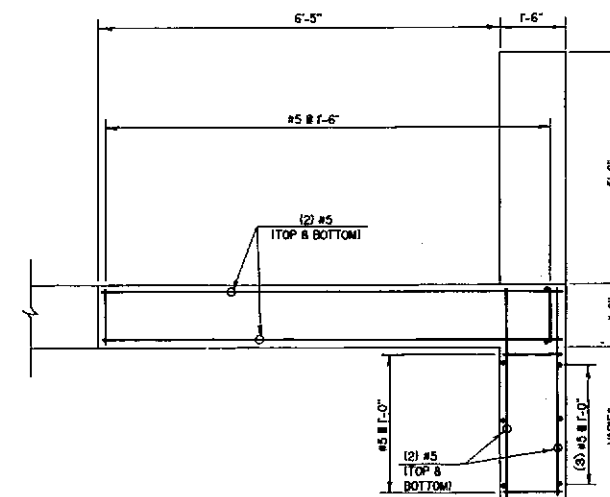
PLAN - WEST ABUTMENT
(EAST ABUTMENT SIMILAR) SCALE: N.T.S.
(SEE DRAWING NO. 7 FOR SECTIONS D - D & E - E.)



SECTION A - A
FOOTING REINFORCEMENT PLAN
SCALE: N.T.S.



SECTION B - B
STEM REINFORCEMENT PLAN
SCALE: N.T.S.



SECTION C - C
BACKWALL & UPPER CHEEK WALL
SCALE: N.T.S.

ESSEX COUNTY HIGHWAY DEPARTMENT HCR 1 BOX 327 ROUTE 9 ELIZABETHTOWN NEW YORK 12932			
REHABILITATION OF GROVE ROAD (CO. RTE 9R) BRIDGE GROVE ROAD (CO. RTE 9R) OVER EAST BRANCH OF AUSABLE RIVER JAY (T), ESSEX (C), N.Y. BIN 3-30209-0 CONTRACT NO. 5-92			
PROPOSED SUBSTRUCTURE PLAN & REINFORCEMENT			
M. J. ENGINEERING, P. C. CONSULTING ENGINEERS 1533 CRESCENT ROAD, CLIFTON PARK, N.Y.			
REVISIONS DATE	DRAWN BY: G.J.W. SCALE: AS SHOWN	CHECKED BY: K.P.L. DATE: JULY 10, 1992	SHEET NO.: 6 OF 8



LEGEND

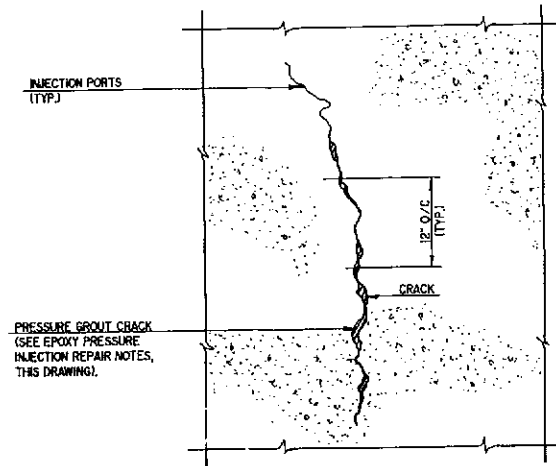
	DETERIORATED AREA
	CRACKED AREA



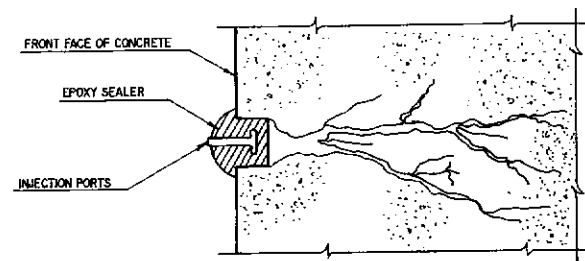
- NOTES:**
1. ALL PLACEMENTS OF SELECT STRUCTURE FILL, ITEM 203.21, SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR MAXIMUM DENSITY.
 2. THE INSTALLATION OF SELECT STRUCTURE FILL, ITEM 203.21, SHALL BE DONE IMMEDIATELY FOLLOWING THE COMPLETION OF THE CURING PERIOD FOR THE ABUTMENT AND WALLS.
 3. ALL BAR REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60, AND SHALL CONFORM TO THE REQUIREMENTS OF ITEM 556.0202 - EPOXY COATED BAR REINFORCEMENT FOR STRUCTURES.
 4. ALL FOOTING REINFORCEMENT SHALL HAVE A COVER OF 3" UNLESS SHOWN OTHERWISE. ALL OTHER REINFORCEMENT SHALL HAVE A COVER OF 2" UNLESS SHOWN OTHERWISE.
 5. EPOXY PROTECTIVE COATING FOR CONCRETE, ITEM 559.01, SHALL BE APPLIED TO THE BRIDGE SEATS, INCLUDING THE AREA UNDER THE BEARINGS. IT SHALL ALSO BE APPLIED TO THE EXPOSED VERTICAL SURFACE OF BACKFALL.
 6. MATERIAL AND CONSTRUCTION SPECIFICATIONS: "STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS," NEW YORK STATE DEPARTMENT OF TRANSPORTATION, DESIGN AND CONSTRUCTION DIVISION, DATED JANUARY 2, 1990, WITH CURRENT ADDITIONS AND MODIFICATIONS.



				ESSEX COUNTY HIGHWAY DEPARTMENT HCR 1 BOX 327 ROUTE 9 ELIZABETHTOWN NEW YORK 12932	
				REHABILITATION OF GROVE ROAD (CO. RTE 9R) BRIDGE GROVE ROAD (CO. RTE 9R) OVER EAST BRANCH OF AUSABLE RIVER JAY (T), ESSEX (C), N.Y.	
		REVISIONS 		BIN 3-30209-0 CONTRACT NO. 5-92	
				SHEET TITLE: ABUTMENT REINFORCEMENT, REHABILITATION & FRAMING DETAILS	
				M. J. ENGINEERING, P. C. CONSULTING ENGINEERS 1533 CRESCENT ROAD, CLIFTON PARK, N.Y.	
		DATE	DRAWN BY: E.J.W. CHECKED BY: K.P.L. SHEET		
			SCALE: AS SHOWN DATE: JULY 10, 1992 NO.: 7 OF 8		



ELEVATION

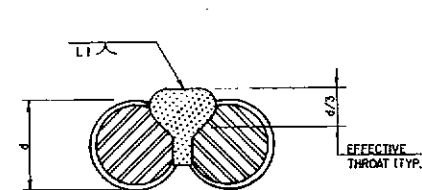


SECTION THROUGH INJECTION PORT

CRACKED SURFACE REPAIR

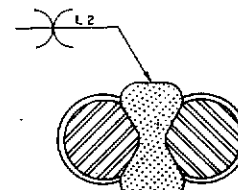
SCALE: N.T.S.

MINIMUM WELD LENGTHS		
BAR SIZE	SINGLE FLARE V-GROOVE WELD	DOUBLE FLARE V-GROOVE WELD
5	4"	2-1/2"
6	4-1/2"	2-3/4"
7	5"	3"
8	5-1/2"	3-1/4"
9	6"	3-1/2"



SINGLE FLARE V-GROOVE WELD

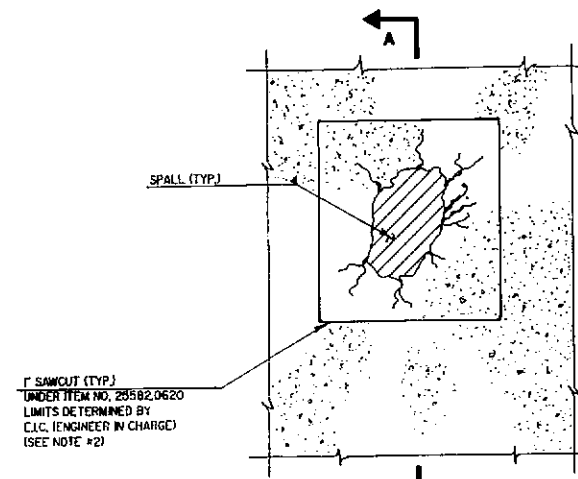
d = REINFORCING BAR DIAMETER



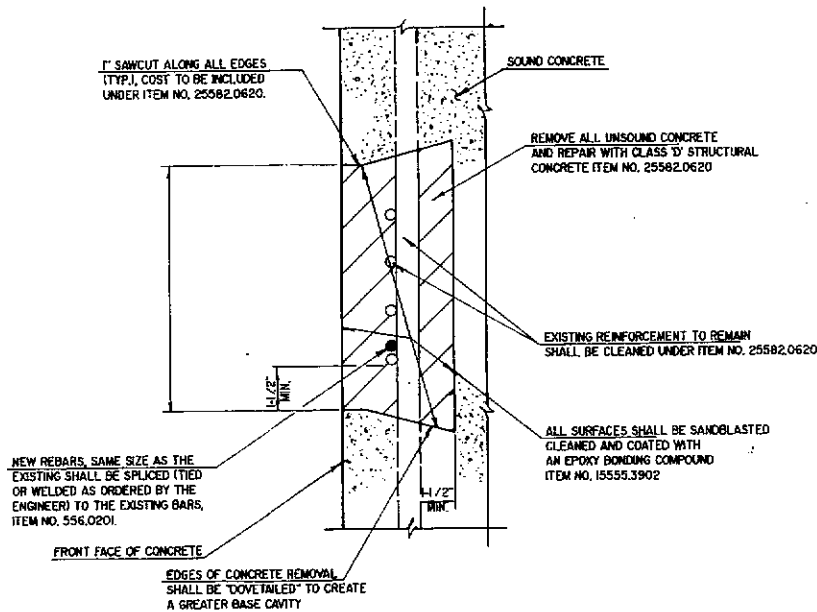
DOUBLE FLARE V-GROOVE WELD

LAPPED WELDED SPICE

SCALE: N.T.S.



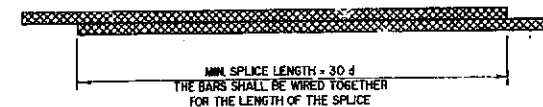
ELEVATION



SECTION A - A

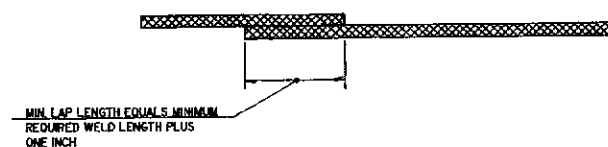
CONCRETE SURFACE REPAIR

SCALE: N.T.S.



LAPPED TIED SPICE

SCALE: N.T.S.



PLAN - WELDED SPICE

SCALE: N.T.S.

CONTRACT 5-92A

CONCRETE REPAIR NOTES

- SUBSTRUCTURE DETERIORATION REQUIRING REPAIR AS INDICATED ON THE PLANS HAS BEEN DETERMINED BY A FIELD INSPECTION. ALL OF THE MAJOR AREAS KNOWN TO EXIST AT THE TIME HAVE BEEN SHOWN TO INDICATE THE APPROXIMATE EXTENT OF DETERIORATION THAT WILL HAVE TO BE REPAIRED BY THE CONTRACTOR.
- THE ANTICIPATED EXTENT OF CONCRETE REPAIR HAS BEEN INDICATED ON THE CONTRACT PLANS. THE E.I.C. SHALL EXAMINE THE SUBSTRUCTURE CONCRETE AND ESTABLISH THOSE AREAS OF REPAIR TO BE MADE WITH CLASS "D" CONCRETE. THE EXTENT OF CONCRETE REPAIR TO BE MADE SHALL BE DETERMINED BY THE E.I.C.
- DETERIORATED REINFORCEMENT, AS DETERMINED BY THE E.I.C., SHALL BE REPLACED WITH ITEM 555.0202 AND HAVE MINIMUM LAP OF 30 BAR DIAMETERS, OR A WELDED SPICE SHALL BE PROVIDED (SEE WELDED SPICE DETAILS, THIS DRAWING). IF WELDED, WELDERS SHALL BE QUALIFIED IN ACCORDANCE WITH THE "NEW YORK STATE STEEL CONSTRUCTION MANUAL." FOR WELDING DETAILS, SEE SECTION 7 OF THE "NEW YORK STATE CONSTRUCTION MANUAL."
- IMMEDIATELY PRIOR TO THE APPLICATION OF NEW CONCRETE, THE SURFACES SHALL BE SANDBLAST CLEANED IN ACCORDANCE WITH THE SPECIFICATIONS AND COATED WITH EPOXY BONDING COMPOUND. IT WILL NOT BE NECESSARY TO BRUSH COMPOUND INTO SURFACES MADE INACCESSIBLE BY CLOSELY SPACED REINFORCEMENT WHEN SO DETERMINED BY THE ENGINEER. COST SHALL BE INCLUDED UNDER ITEM 15555.3502.
- AT ALL CONCRETE REMOVAL LOCATIONS, THE MINIMUM DEPTH OF REMOVAL SHALL BE A DEPTH NO LESS THAN 1-1/2" FROM THE REARMOIST POINT OF EXPOSED REINFORCEMENT BAR, OR TO SOUND CONCRETE, WHICHEVER IS GREATER.
- WHERE CONCRETE REMOVAL AND REPLACEMENT NECESSITATES CREATION OF A CONSTRUCTION JOINT BETWEEN SUCCESSIVE CONCRETE PLACEMENT, FULL DEPTH CONCRETE REMOVAL SHALL EXTEND A MINIMUM OF ONE FOOT BEYOND THE LIMIT OF THE FIRST CONCRETE PLACEMENT. THIS CLEAR SPACE WILL MINIMIZE THE NEGATIVE IMPACT OF THE ADJACENT CONCRETE REMOVAL OPERATION ON THE RECENTLY COMPLETED REPAIR.
- IN SEQUENCING WORK, THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING:
 - CONCRETE REMOVAL MAY NOT BEGIN AT A LOCATION IMMEDIATELY ADJACENT TO A COMPLETED REPAIR UNTIL A MINIMUM OF 7 CURING DAYS HAS PASSED.
- DURING THE TIME THE STRUCTURAL DECK CONCRETE POUR IS STARTED UNTIL A MINIMUM OF 7 CURING DAYS HAS PASSED, THERE SHALL BE NO CONCRETE REMOVAL WORK. THERE MAY BE CONCRETE REPLACEMENT A.O.B.E.

EPOXY PRESSURE INJECTION REPAIR NOTES

- ROUTE OUT CRACKS TO 1/4 IN. WIDE X 1/2 IN. DEEP, AND CLEAR CAVITY BY HIGH-PRESSURE AIR BLASTING, VACUUMING, OR OTHER METHODS SATISFACTORY TO THE E.I.C. (UNDER ITEM 25555.3570).
- DRILL HOLES 12 IN. O.C. ALONG THE CRACKS AND INSTALL INJECTION PORTS WITH EPOXY REPAIR PASTE (ITEMS 25555.3570 AND 25555.3571).
- SEAL THE SURFACE OF THE CRACKS BETWEEN INJECTION PORTS WITH EPOXY REPAIR PASTE (ITEMS 25555.3570 AND 25555.3571).
- INJECT WATER THROUGH THE PORTS TO FLUSH OUT ALL THE DEFECTS AND DEBRIS IN THE CRACKS (ITEM 25555.3570).
- DRY THE INNER SURFACES OF THE CRACKS USING HOT-AIR JET.
- INJECT "LOW VISCOSITY INJECTION EPOXY" AT PRESSURES UP TO 40 PSI UNTIL BACKFLOW AT ADJACENT PORTS IS ESTABLISHED.

FOR VERTICAL CRACKS, INJECTION SHOULD BE STARTED AT THE LOWERMOST PORT AND CONTINUED UNTIL FLOW IS OBSERVED OUT OF THE NEXT HIGHER PORT. WHEN THIS IS ESTABLISHED, THE LOWEST PORT SHALL BE SEALED AND THE INJECTION MOVED TO THE UPPER PORT. THIS PROCEDURE SHALL BE CONTINUED UNTIL ALL PORTS HAVE BEEN INJECTED AND FLOW ESTABLISHED AMONG THEM (ITEM 25555.3570 AND 25555.3571).

ESSEX COUNTY HIGHWAY DEPARTMENT
HCR 1 BOX 327 ROUTE 9
ELIZABETHTOWN NEW YORK 12932

REHABILITATION OF
GROVE ROAD (CO. RTE 9R) BRIDGE
GROVE ROAD (CO. RTE 9R) OVER EAST BRANCH OF AUSABLE RIVER
JAY (T), ESSEX (C), N.Y.

BIN 3-30209-0 CONTRACT NO. 5-92

SHEET TITLE:

EXISTING ABUTMENT REPAIR DETAIL

M. J. ENGINEERING, P. C.
CONSULTING ENGINEERS
1533 CRESCENT ROAD, CLIFTON PARK, N.Y.

DATE: DRAWN BY: G.J.W. CHECKED BY: K.P.L. SHEET NO. 1 OF 8
SCALE: AS SHOWN DATE: JULY 10, 1992