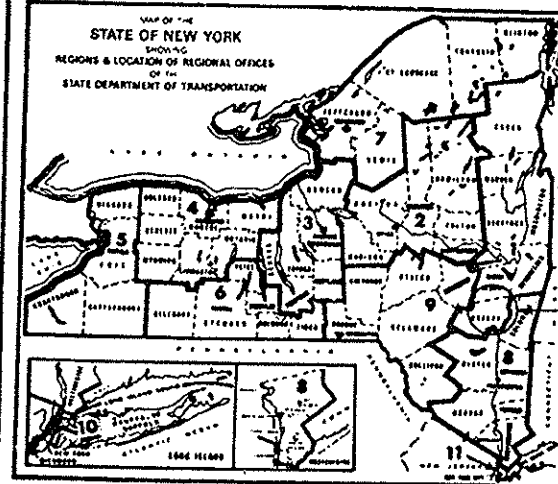


D253419 ~~D253450~~



STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
OFFICE OF ENGINEERING

REHABILITATION OF FOUR BRIDGES ON ROUTES 9W, 23 AND 32
STATE HIGHWAYS 5198, 797, 619 AND 9301

GREENE COUNTY

51 SHEETS

CONTRACT D253⁴¹⁹150

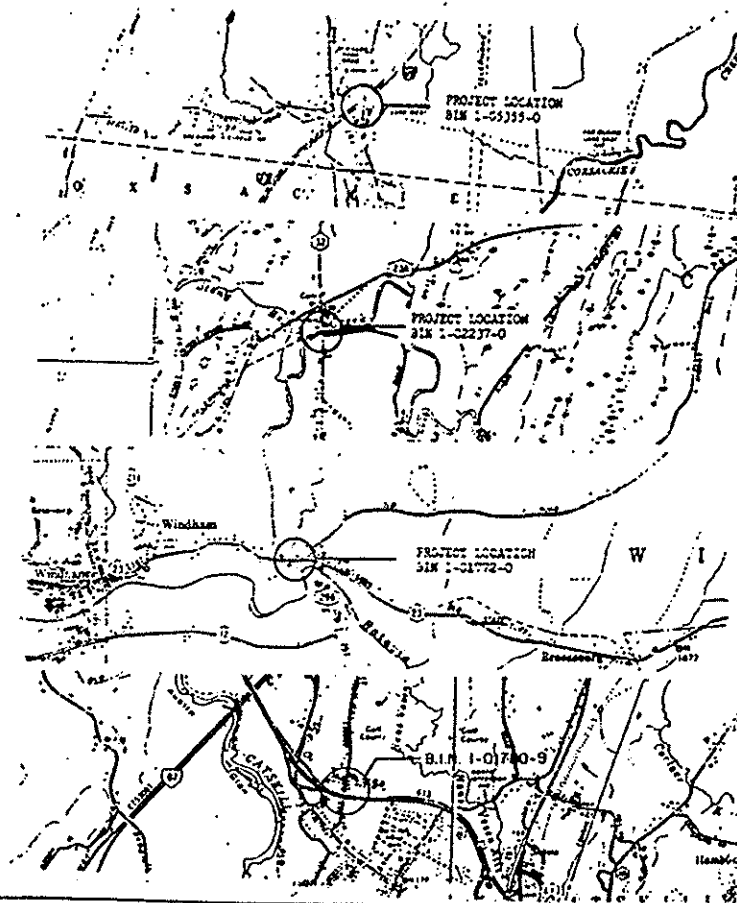
STANDARD SHEETS

606-3R4, 619-1R1, 619-3R3, 619-4R2, 609-2, 609-3

ALL WORK CONTEMPLATED UNDER THIS CONTRACT IS TO BE COVERED BY AND IN CONFORMITY WITH THE SPECIFICATIONS OF JANUARY 2, 1935, AS AMENDED BY ADDENDA NOS. 1 AND 2, EXCEPT AS MODIFIED ON THESE PLANS AND IN THE ITEMIZED PROPOSAL.

THIS PROJECT CONSISTS OF (3) STRUCTURES R.I.N. 1-02235-0 - RTE 30 OVER
I-87 (THRUWAYS), R.I.N. 1-02237-0 - RTE 30 OVER KAPERSILL CREEK AND
R.I.N. 1-01772-0 - RTE 23 OVER NAUVO STREAM. LOCATION IN THE TOWNS OF
NEW BALTIMORE, CATSKILL AND WINDHAM RESPECTIVELY IN GREENE COUNTY.
IN ADDITION, RTE 23 OVER BROOKS LANE, RIM 1-01780-9 HAS BEEN INCLUDED
INTO THIS PROJECT TO REPAIR THE DEFECTIVE JOINTS (WEST BOUND ONLY).

RECORD PLANS



NOTE: ALL REFERENCES TO D263150 WILL BE REPLACED WITH D263419, AS PER CONTRACT ADDENDUM #1

CONTRACTOR'S NAME Beltrove Contr. Co., Inc.
AWARD DATE JUNE 24, 1990
COMPLETION DATE OCTOBER 24, 1991
FINAL ACCEPTANCE DATE April 3, 1992
REGIONAL DIRECTOR John E. Taylor, P.E.
Name
ENGINEER IN CHARGE Thomas D. Jakubowski
Name
FINAL COST TOTAL 1,578,446.84

FISCAL SHARE	COST (\$)
1	1,340,345.66
2	198,137.44
3	39,963.74

NEW YORK STATE DEPARTMENT OF TRANSPORTATION
Approved February 22, 1990

ARUN M. SHIROLE Acting in his capacity as
Director, Structures Division

REVISIONS

RTE 23 OVER BROOKS LANE			
RTE 9W OVER THRUWAY			
RTE 32 OVER KAATERSKILL CREEK			
RTE 23 OVER NAUVO STREAM			
BRIDGE DECK REPAIRS GREENE COUNTY			
FED. ROAD REG. NO.	STATE	SHEET NO.	TOTAL SHEETS
1	N.Y.	1R1	51
FEDERAL AID PROJECT NO.			
CAPITAL PROJECT IDENTIFICATION NO. 1803.26 301 302			

INDEX ON SHEET NO. 2

~~D253150~~ D253419

D2E2440 D2E2150

FED. ROAD DIST. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		291	51
RTE 9W OVER THRUWAY BN 1-05355-0				
RTE 32 OVER KAATERSKILL CREEK BN 1-02237-0				
RTE 23 OVER NAUVO STREAM BN 1-0772-0				
BRIDGE DECK REPAIRS				
GREENE COUNTY				

GENERAL NOTES

STREAM POLLUTION CONTROL

DURING THE COURSE OF CONSTRUCTION THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN SUCH A MANNER TO PREVENT OR REDUCE TO A MINIMUM ANY DAMAGE TO THE STREAM FROM POLLUTION BY DEBRIS, SEDIMENT, OR OTHER FOREIGN MATERIAL, OR FROM MANIPULATION OF EQUIPMENT AND/OR MATERIALS IN OR NEAR THE STREAM. HE SHALL NOT RETURN DIRECTLY TO THE STREAM ANY WATER WHICH HAS BEEN USED FOR WASH PURPOSES OR OTHER SIMILAR OPERATIONS WHICH CAUSE THIS WATER TO BECOME POLLUTED WITH SAND, SLIT, CEMENT, OIL, OR OTHER IMPURITIES. IF HE USES WATER FROM THE STREAM, HE SHALL CONSTRUCT AN INTAKE OR TEMPORARY DAM REQUIRED TO PROTECT AND MAINTAIN WATER RIGHTS AND TO SUSTAIN FISH LIFE DOWNSTREAM.

CLEARING AND GRUBBING

CLEARING AND GRUBBING WHICH MAY BE NECESSARY ABOUT THE JOB SITE TO PROGRESS CONSTRUCTION SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS ITEMS IN THE CONTRACT.

JOINT MATERIAL

THE COST OF ALL JOINT MATERIAL WILL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS ITEMS OF THE CONTRACT, UNLESS OTHERWISE SPECIFIED ON THE PLANS.

REMOVAL OF EXISTING BRIDGE COMPONENTS

THE COST TO REMOVE EXISTING BRIDGE DECK JOINTS SHALL BE INCLUDED IN THE PRICE BID FOR THE DECK REMOVAL ITEM. THE COST TO REMOVE EXISTING SCUPPERS SHALL BE INCLUDED IN THE PRICE BID FOR THE DECK REMOVAL ITEM, UNLESS OTHERWISE SPECIFIED ON THE PLANS.

INDEX		
DESCRIPTION	SHEET NO.	DRAWING NO.
TITLE SHEET	1	GN-1
INDEX - TABLE OF QUANTITIES	2	GN-1, GN-2
GENERAL NOTES	2, 3	GN-1, GN-2
MAINTENANCE AND PROTECTION OF TRAFFIC	4	MP-1
TRAFFIC ROUTING	5 - 13	MP-2 thru MP-10
APPROACH DETAILS	14 - 16	AP-1 thru AP-3
ROUTE 32 PROFILE	17	P-1
STRUCTURE PLANS	18 - 40	1 thru 23
ROUTE 9W OVER THRUWAY	41 - 45	1 thru 5
STRUCTURE PLANS	46 - 50	1 thru 5
ROUTE 23 OVER NAUVO STREAM	51	1
STRUCTURE PLANS	52	1
ROUTE 23 OVER BROOKS LANE	53, 41, 44	1, 3, 1

NOTE: RTE 23 NB STRUCTURE OVER BROOKS LANE BN 1-01780-9 HAS BEEN ADDED TO THIS PROJECT TO CORRECT THE DEFECTIVE JOINTS. SEE SHEET NO. 51 FOR DETAILS.

REVISION IN TABLES

AS-BUILT REVISIONS

SIGNATURE

DATE

GENERAL NOTES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

DRAWING NO. 291 SCALE NONE DATE 12/89 REGION ONE

ESTIMATE OF QUANTITIES

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY	FINAL
01202.02	REMOVAL OF ASBESTOS FROM EXISTING BRIDGE STRUCTURE	LF	750	649.00
202.20	REMOVING OLD BITUMINOUS CONC OVERLAY	SY	2,265	1824.18
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	7	6.29
206.01	STRUCTURE EXCAVATION	CY	38	14.00
206.02	TRENCH AND CULVERT EXCAVATION	CY	29	21.30
206.03	CONDUIT EXCAVATION AND BACKFILL	LF	80	71.00
207.01	GEOTEXTILE BEDDING	SY	180	164.40
304.02	SUBBASE COURSE TYPE 1	CY	7	7.08
403.1701	ASPH CONC - TYPE 6P TOP COURSE (HIGH FRICT) MARSHALL DESIGN	T	363	270.54
407.0101	TACK COAT	GAL	119	77.27
15502.1598	PRESS RELIEF JOINTS IN EXIST CEM CONC PAVEMENT	LF	116	105.10
18502.4602	SEAL LONG & TRANSV JTS IN OVERLAYED APPROACH SLABS	LF	772	1017.15
552.060001	COFFERDAMS	EA	2	0
555.0102	CONC FOR STRUCT CLASS A (PRIMARY STRESS PLACEMENTS)	CY	54	53.80
555.0103	CONC FOR STRUCT CLASS A (APPRT PLACEMENTS)	CY	7	39.78
555.0406	CONC FOR STRS - CLASS E (STR APR SLAB - INT WEAR SURFACE)	SF	957	1361.00
16555.6603	TRANSV SAWCUT GROOVING OF STRUCT SLAB SURFACE	SF	28,545	28,546.00
556.0202	EPOXY-COATED BAR REINFORCE FOR STRUCTURES	LB	20,746	21,822.14
559.01	EPOXY PROTECTIVE COATING	SF	8,569	8,298.90
15565.630201	BRIDGE BEARING RESTORATION	EA	19	19.00
567.21	ARMORED JOINT SYSTEM WITH ELASTOMERIC SEALER	LF	257	258.45
567.31	ARMORED JOINT SYSTEM WITH COMPRESSION SEAL - TYPE A1	LF	35	0
567.32	ARMORED JOINT SYSTEM WITH COMPRESSION SEAL - TYPE A2	LF	35	0
568.10	STEEL BR RAILING (TWO RAIL)	LF	808	802.01
568.32	CEMENT MORTAR PADS	EA	18	18.00
570.070001	ENVIRONMENTAL GROUND PROTECTION	LS	NEC	100.00
15570.120001	DISPOSAL OF PAINT REMOVAL WASTE	CY	23	11.00
18570.800001	MAINT CLEAN & EPOXY PRIMING	LS	NEC	100.00
18570.820001	MAINT PAINT EPOXY INTERMEDIATE COAT	LS	NEC	100.00
18570.840001	MAINT PAINT URETHANE FINISH COAT	LS	NEC	100.00
578.01	BONDED CONC WEARING SURF FOR STRUCTURAL SLABS	SF	19,367	27,804.04
579.01	STRUCT SLAB SCARIFICATION	SF	27,462	26,502.00
579.02	REINF BAR EXPOSURE	SF	6,230	15,817.20
580.01	REMOVAL OF STRUCTURAL CONCRETE	CY	154	161.00
580.04	REMOVAL OF CONC APPROACH SLAB	SF	1,077	1,182.00
580.11	REMOVAL OF CONC BRIDGE PYLONS	EA	8	8.00
581.01	REMOVAL OF BITUMINOUS CONCRETE OVERLAY (BRIDGE)	SF	18,132	18,018.88
581.02	REMOVAL OF CEMENT CONCRETE OVERLAY (BRIDGE)	SF	17,032	16,722.00
582.06	REM OF STRUCT CONC-REPL W/ CLASS D CONC	SF	792	379.07
582.07	REM OF STRUCT CONC -REPL W/ VERT & OVERHD PATCH MATERIAL	SF	404	535.52
584.0102	HIGH DENSITY CONCRETE OVERLAY	SF	1,724	0
584.1102	LATEX MODIFIED CONCRETE OVERLAY	SF	1,724	0
99584.1102	LATEX MODIFIED CONCRETE OVERLAY	SF	8,439	0
584.1201	MICRO-SILICA CONCRETE OVERLAY	SF	1,724	1,173.33
99584.1201	MICRO-SILICA CONCRETE OVERLAY	SF	8,439	8,155.47
585.01	STRUCTURAL LIFTING OPERATIONS TYPE A	EA	19	19.00
585.02	STRUCTURAL LIFTING OPERATIONS TYPE B	EA	1	1.00
586.01	DRILL & GROUT BOLTS OR REINF BARS	LF	257	288.00
15586.19	DRILL & GROUT HIGH STRENGTH ANCHOR BOLTS	LF	267	273.00
587.01	BR RAILING REMOVAL & DISPOSAL	LF	717	715.00
587.02	BR RAILING REMOVAL & STORAGE	LF	55	55.00
587.1002	BR BEAM BRIDGE RAIL TWO RAIL	LF	281	279.08

ESTIMATE OF QUANTITIES

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY	FINAL
606.10	BOX BEAM GUIDE RAILING	LF	649	717.08
606.1401	BOX BEAM G.R. END ASSEMBLY TYPE 1	EA	8	8.00
606.52	RESET BOX BEAM GUIDE RAILING	LF	160	358.67
606.58	RESET BOX BEAM GUIDE RAILING END ASSEMBLY	EA	3	3.00
606.64	REMOVING & STORING BOX BEAM GUIDE RAILING	LF	418	564.00
606.68	REMOVE & STORE BX BEAM GUIDE RAILING END ASSEMBLY	EA	3	3.00
606.71	REMOVING & DISPOSING CABLE GUIDE RAILING	LF	120	140.00
606.72	REMOVING & DISPOSING CORRUGATE BEAM GUIDE RAILING	LF	575	599.00
606.74	REMOVING & DISPOSING BOX BEAM GUIDE RAILING	LF	176	156.00
606.77	REMOVE & DISPOS ANCHOR UNIT / CORR BEAM GD RAIL & WALL BARR	EA	4	4.00
606.78	REMOVE & DISPOSING BOX BEAM GD RAILING END ASSEMBLY	EA	4	4.00
606.91	RESETTING BOX BEAM GUIDE RAIL (NEW POSTS)	LF	162	162.00
609.0302	STONE CURB - BRIDGE (TYPE F1)	LF	660	667.55
609.0504	CONVENTION FORM OR MACH FORMED CONC CURB & GUTTER TYPE BB	LF	120	127.50
619.01	BASIC MAINTENANCE & PROTECTION OF TRAFFIC	LS	NEC	100.00
619.02	CONSTRUCTION SIGNS	LS	NEC	100.00
15619.0303	FLASHING ARROW BOARDS	LS	NEC	100.00
619.0413	TYPE III CONSTRUCTION BARR	LF	462	484.00
619.0502	LIGHTING FOR CONSTRUCTION BARRICADES	LF	462	484.00
10619.0599	LIGHTING FOR TEMP CONC BARRIER	LF	2,760	2280.00
619.13	TEMPORARY TRAFFIC SIGNALS	LS	NEC	100.00
619.17	TEMPORARY CONC BARRIER	LF	2,760	3240.00
15619.1905	WHITE REM REFLECT PAVT STRIPES	LF	7,953	8160.00
15619.1906	YELLOW REM REFLECT PVT STRIPES	LF	6,480	8960.00
15619.6803	TEMP INERTIAL BARRIER MODULE (14008)	EA	6	6.00
15619.6804	TEMP INERTIAL BARRIER MODULE (14008)	EA	8	8.00
15619.6805	TEMP INERTIAL BARRIER MODULE (21008)	EA	4	4.00
15619.9911	REBUILD NEW YORK WORK ZONE SIGN (PANEL FUR BY STATE)	EA	8	4.00
15619.9915	GIVE 'EM A BRAKE WORK ZONE SIGN (FURNISH AND STORE)	EA	8	4.00
620.04	STONE FILLING (MED.UM)	CY	115	93.85
634.03	CONC. CYLINDER CURING BOX	EA	1	1.00
637.05	ENGINEERS OFFICE - TYPE A	NO	8	14.00
15637.15	TELEPHONE ANSWERING DEVICE	EA	1	1.00
15637.30	MICROCOMPUTER SYSTEM	LS	NEC	100.00
640.0102	WHITE PAINT REFLECT PAVT STRIPES	LF	2,490	7647.00
640.0202	YELLOW PAINT REFLECT PAVT STRIPES	LF	2,190	17216.00
01662.6081	INSTALL TELEPHONE CONDUITS	LS	NEC	100.00
01662.6082	INSTALLING TELEPHONE CONDUITS ON STRUCTURE	LS	NEC	100.00
649.04	MOBILIZATION	LS	NEC	100.00
01602.0701	SURFACE PREPARATION, RAPID SET CONCRETE FOR BRIDGE DECK REPAIRS	SA	—	560.00
01602.0702	FURNISH AND PLACE RAPID SET CONCRETE FOR BRIDGE DECK REPAIRS	BAF	—	264.00
01662.60801	INSTALL TELEPHONE CONDUIT	LS	—	100.00
01662.60801	INSTALL TELEPHONE CONDUIT FOR STRUCTURE	LS	—	100.00
750.01	SILICONE REPAIR FOR ANCHOR JOINTS, COMPRESSION LEGS	LF	—	70.00

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	NY.		3	51
RTE 9N OVER THRUWAY				
RTE 32 OVER KAATERSKILL CREEK				
PTE 23 OVER NAUVO STREAM				
BRIDGE DECK REPAIRS				
GREENE COUNTY				

GENERAL NOTES:

DESIGN SPECIFICATION: NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES WITH ALL PROVISIONS IN EFFECT AS OF JUNE, 1988.

LOAD RATINGS: IN ACCORDANCE WITH AASHTO MANUAL FOR MAINTENANCE INSPECTION OF BRIDGES - 1978. INVENTORY AND OPERATING RATINGS AS SHOWN ON THE PLANS.

MATERIAL AND CONSTRUCTION SPECIFICATIONS: STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS NEW YORK STATE DEPARTMENT OF TRANSPORTATION, OFFICE OF ENGINEERING, DATED JANUARY 2, 1985, WITH CURRENT ADDITIONS AND MODIFICATIONS.

WELDING: ALL WELDING SHALL BE IN ACCORDANCE WITH THE 1981 NEW YORK STATE STEEL CONSTRUCTION MANUAL, WITH CURRENT ADDITIONS AND MODIFICATIONS.

RECONSTRUCTION:

- REC. 1 THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT, DUE TO THE NATURE OF RECONSTRUCTION PROJECTS, THE EXACT EXTENT OF RECONSTRUCTION WORK CANNOT ALWAYS BE ACCURATELY DETERMINED PRIOR TO COMMENCEMENT OF WORK. THESE CONTRACT DOCUMENTS HAVE BEEN PREPARED BASED ON FIELD INSPECTIONS AND OTHER INFORMATION AVAILABLE AT THE TIME. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS TO CONSTRUCTION DETAILS AND WORK QUANTITIES. THE CONTRACTOR SHALL PERFORM THE WORK IN ACCORDANCE WITH FIELD CONDITIONS, OR AS ORDERED BY THE ENGINEER IN CHARGE (A.O.B.E.).
- REC. 2 THE CONTRACTOR SHALL PERFORM ALL WORK WITH CARE SO THAT ANY MATERIALS WHICH ARE TO REMAIN IN PLACE, OR WHICH ARE TO REMAIN THE PROPERTY OF THE STATE, WILL NOT BE DAMAGED. IF THE CONTRACTOR DAMAGES ANY MATERIALS WHICH ARE TO REMAIN IN PLACE, OR WHICH ARE TO REMAIN THE PROPERTY OF THE STATE, THE DAMAGED MATERIALS SHALL BE REPAIRED OR REPLACED IN A MANNER SATISFACTORY TO THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.
- REC. 3 WHENEVER ITEMS IN THE CONTRACT REQUIRE MATERIALS TO BE REMOVED AND DISPOSED OF, THE COST OF SUPPLYING A DISPOSAL AREA AND TRANSPORTATION TO THAT AREA SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THOSE ITEMS.
- REC. 4 DURING REMOVAL OPERATIONS, THE CONTRACTOR SHALL NOT BE ALLOWED TO DROP WASTE CONCRETE, DEBRIS AND OTHER MATERIAL TO THE AREA BELOW THE BRIDGE EXCEPT WHERE PLANS SPECIFICALLY PERMIT THE DROPPING OF MATERIAL. PLATFORMS, NETS, SCREENS OR OTHER PROTECTIVE DEVICES SHALL BE USED TO CATCH THE MATERIAL. IF THE ENGINEER DETERMINES THAT ADEQUATE PROTECTION DEVICES ARE NOT BEING EMPLOYED, THE WORK SHALL BE SUSPENDED UNTIL ADEQUATE PROTECTION IS PROVIDED.
- REC. 5 ALL MATERIAL FALLING ON THE AREA BELOW AND ADJACENT TO THE BRIDGE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR, WITHIN 24 HOURS, OR AS ORDERED BY THE ENGINEER IN CHARGE.
- REC. 6 STRUCTURAL SLAB SURVEY:
THE ENGINEER WILL PERFORM A STRUCTURAL SLAB SURVEY TO DETERMINE THE LIMITS OF REINFORCING BAR EXPOSURE.
THE SURVEY WILL BE PERFORMED AFTER THE CONTRACTOR HAS REMOVED THE EXISTING WEARING COURSE AND WATERPROOFING MEMBRANE, IF ONE EXISTS, AND HAS COMPLETED SCARIFICATION OF THE STRUCTURAL SLAB. THE DEPARTMENT WILL REQUIRE ** DAYS FOR THE STRUCTURAL SLAB SURVEY AND IDENTIFICATION OF AREAS DEEP REMOVAL. ** SEE CONTRACT PROPOSAL
AFTER SCARIFICATION OF THE STRUCTURAL SLAB IS COMPLETED, THE CONTRACTOR SHALL LAY OUT AND MARK A GRID SYSTEM ON THE SURFACE OF THE STRUCTURAL SLAB AS SHOWN ON DRAWING NO. 15 THRU .
THE CONTRACTOR SHALL ALSO ESTABLISH ELECTRICAL GROUNDS FOR TEST EQUIPMENT BY REMOVING CONCRETE AROUND REINFORCING BARS AS SHOWN ON DRAWING NO. 16, AT TWO LOCATIONS IN EACH SPAN. THE LOCATION WILL BE DETERMINED BY THE ENGINEER.
THE COST OF LAYING OUT AND MARKING THE GRID SYSTEM SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS ITEMS OF THE CONTRACT.
THE COST OF ESTABLISHING ELECTRICAL GROUNDS SHALL BE INCLUDED IN THE PRICE BID FOR THE REINFORCING BAR EXPOSURE ITEM.
- REC. 7 CONCRETE OVERLAY:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL CROWN LINES, GRADING NEW JOINT INSTALLATIONS, AND LOCATING CHANGES IN SUPERELEVATIONS TO ENSURE REESTABLISHMENT OF EXISTING FEATURES TO THEIR NEW ELEVATIONS. IN ADDITION TO THIS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING ALL SKEWED RAIL PROFILE FINISH GRADES. THE CONTRACTOR IS RESPONSIBLE FOR FINISHED GRADES TO OFFSET CONFLICTS IN DEPTHS OF FINISHED OVERLAY.
- REC. 8 CONCRETE OVERLAY SHALL BE PLACED CONTINUOUSLY OVER THE FULL LENGTH OF EACH SLAB, IN ACCORDANCE WITH THE CONSTRUCTION PHASES SHOWN ON THE PLANS. CONSTRUCTION JOINTS OTHER THAN THE JOINT ESTABLISHED BETWEEN WORK STAGES ARE NOT DESIRABLE AND WILL BE ALLOWED ONLY WITH THE PERMISSION OF THE ENGINEER.
- REC. 9 THE CONTRACTOR MAY, AT HIS OPTION, AND WITH CONCURRENCE OF THE ENGINEER, SUBDIVIDE THE OVERLAY PLACEMENTS IN THOSE LONG SECTIONS WHERE WIDTH OF PLACEMENT IS EXCESSIVE. IF SUCH IS THE OPTION, THEN THE SUCCESSIVE PLACEMENT MAY BE MADE FORTY EIGHT (48) CURING HOURS AFTER THE PRECEDING PLACEMENT PROVIDED THAT:
A. ANY SKEWED RAIL SUPPORTS LOCATED ON A PRECEDING PLACEMENT SHALL BE PLACED ON WOOD PADS: 1'-0" X 1'-0" X 0'-1" MIN. SIZE TO DISTRIBUTE THE LOAD. AND
B. SKEWED RAIL SUPPORTS SHALL NOT BE PLACED PRIOR TO TWENTY FOUR (24) CURING HOURS AFTER THE PRECEDING PLACEMENT HAS BEEN COMPLETED.
- REC. 10 MECHANICAL SCARIFICATION SHALL NOT BE ALLOWED ON A SPAN WHERE THE OVERLAY IS CURING. IN THE CASE OF A CONTINUOUS GIRDER SPAN NO MECHANICAL SCARIFICATION WILL BE ALLOWED ON THAT ENTIRE SPAN WHILE THE OVERLAY IS CURING.
- REC. 11 FOR PARTIAL REMOVAL OF STRUCTURAL SLABS, CHIPPING HAMMERS SHALL NOT EXCEED 45 POUNDS AND ONLY CHISEL BITS SHALL BE USED.
- REC. 12 DURING ALL CONCRETE (RECONSTRUCTION AND OVERLAY) PLACEMENTS, TRAFFIC WILL BE MAINTAINED IN A SINGLE LANE AT A REDUCED SPEED OF 30 MPH.
THIS CONDITION WILL EXIST FROM ONE (1) HOUR BEFORE THE SCHEDULED START OF A CONCRETE PLACEMENT TO FOUR (4) HOURS AFTER THE PLACEMENT IS COMPLETED.
IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACHIEVE AND MAINTAIN THE 30 MPH SPEED LIMIT. IF ADDITIONAL FLAGGERS BEYOND THE MINIMUM SPECIFIED IN THE SPECIAL NOTES (ADDITIONAL FLAGGERS REQUIRED DURING CONCRETE CONSTRUCTION) ARE REQUIRED TO ACHIEVE THE 30 MPH SPEED LIMIT, THEN THEY SHALL BE SUPPLIED BY THE CONTRACTOR.
THE ENGINEER SHALL BE THE SOLE JUDGE THAT TRAFFIC IS BEING MAINTAINED AT 30 MPH.
IF THE ENGINEER DETERMINES THAT TRAFFIC IS EXCEEDING THE REQUIRED 30 MPH SPEED LIMIT, ALL CONCRETE PLACEMENT WILL CEASE UNTIL THE 30 MPH SPEED LIMIT IS OBTAINED.
ANY COSTS FOR ADDITIONAL FLAGGERS TO MEET THIS REQUIREMENT SHALL BE INCLUDED IN THE BID PRICE FOR ITEM 619.01.
- REC. 13 WHERE THE DEPTH OF CONCRETE PLACEMENT EXCEEDS 3 INCHES, INTERNAL VIBRATION WILL BE REQUIRED.
- REC. 14 VARIATIONS IN THE FINISHED PAVEMENT SURFACE IN EXCESS OF 1/8 ABOVE, OR BELOW THE PROPER FINISHED ELEVATION, OR SURFACE IRREGULARITIES OF MORE THAN 1/8 INCH IN 10 FEET SHALL NOT BE ACCEPTED.
- REC. 15 NO CONSTRUCTION OR PUBLIC VEHICULAR TRAFFIC WILL BE ALLOWED ON EXPOSED REINFORCING STEEL, EXCEPT AS DELINEATED UNDER THE SPECIFICATION FOR ITEM 584-3.02 (CONSTRUCTION DETAILS).

REC. 16 OPTIONAL OVERLAY ITEMS: RTE. 23 OVER NAUVO STREAM STRUCTURE

THIS STRUCTURE HAS BEEN DESIGNED USING THE COVER AND PLACEMENT CRITERIA FOR ITEM 584.0102 HIGH DENSITY CONCRETE OVERLAY AS FOLLOWS:

- A. MINIMUM TOTAL COVER (COVER REMAINING OVER REINFORCING BARS AFTER CONCRETE REMOVAL PLUS THICKNESS OF OVERLAY MATERIAL) SHALL BE 2 1/4 INCHES.
- B. MINIMUM THICKNESS OF HIGH DENSITY CONCRETE OVERLAY SHALL BE 2 INCHES. IF THE CONTRACTOR HAS ELECTED TO BID ON ITEM 584.1102 LATEX MODIFIED CONCRETE OVERLAY OR ITEM 584.1201 MICRO-SILICA CONCRETE OVERLAY, THEN THE CONTRACTOR MAY SUBMIT A PROPOSED FINISHED PROFILE TO THE REGIONAL DIRECTOR AT LEAST 2 WEEKS BEFORE THE PLACEMENT OF THE OVERLAY AND SHALL BE BASED ON THE FOLLOWING CRITERIA:
1. MINIMUM TOTAL COVER (COVER REMAINING OVER REINFORCING BARS AFTER CONCRETE REMOVAL PLUS THICKNESS OF OVERLAY MATERIAL) SHALL BE 2 1/4 INCHES.
 2. MINIMUM THICKNESS OF LATEX MODIFIED CONCRETE OVERLAY OR MICRO-SILICA OVERLAY SHALL BE 1 1/2 INCHES.
 3. TRANSITION LENGTHS BETWEEN EXISTING PROFILE AND PROPOSED FINISHED PROFILE SHALL BE OF THE SAME LENGTHS SHOWN ON THE PLANS.
 4. NO OVERLAY MATERIAL SHALL BE PLACED UNTIL THE REGIONAL DIRECTOR HAS APPROVED A SATISFACTORY PROPOSED FINISHED PROFILE.
- C. IF THE CONTRACTOR ELECTS TO USE ITEM 584.1102 LATEX MODIFIED CONCRETE OVERLAY OR 584.1201 MICRO-SILICA CONCRETE OVERLAY AT 1 1/2 INCH THICKNESS, HE SHALL INTERPRET THE BRIDGE JOINT AND SCUPPER MODIFICATION DETAILS TO PROVIDE FOR A 1/2 INCH LOWER PROFILE.

REC. 17 EACH STRUCTURE PAINTED IN THIS CONTRACT SHALL HAVE THE YEAR OF THE CONTRACT PAINTED ON THE STRUCTURE IN 6" LETTERS AT A LOCATION NEAR THE S.I.W. PLATE AS DIRECTED BY THE ENGINEER.

REC. 18 ALL PAVEMENT MARKINGS AFFECTED BY STAGE CONSTRUCTION, UNLESS NOTED SPECIFICALLY ON PLANS, SHALL BE REPLACED USING THE APPROPRIATE REFLECTORIZED PAVEMENT STRIPES, ITEMS 640.0101 AND 640.0201 A.O.B.E..

REC. 19 RESTRICTED HIGHWAY - THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT THIS HIGHWAY WILL BE DESIGNATED AS A RESTRICTED HIGHWAY UNDER THIS CONTRACT.

MAINTENANCE AND PROTECTION OF TRAFFIC:

- M&P. 1 THE CONTRACTOR SHALL SCHEDULE HIS WORK IN ACCORDANCE WITH THE STAGING AND TRAFFIC SEQUENCE SHOWN ON THE PLANS, UNLESS OTHERWISE APPROVED IN WRITING BY THE REGIONAL DIRECTOR.
- M&P. 2 VEHICLES BELONGING TO THE CONTRACTOR, OR THE CONTRACTOR'S EMPLOYEES, SHALL NOT BE PARKED ON THE PAVEMENT OR SHOULDERS OR WITHIN 30 FEET OF THE EDGE OF PAVEMENT ALONG OR ADJACENT TO TRAVEL LANES OPEN TO TRAVEL WITHIN THE PROJECT LIMITS.
- M&P. 3 THE CONTRACTOR SHALL BE REQUIRED TO INSTALL REVOLVING, FLASHING, AMBER LIGHTS ON ALL CONSTRUCTION EQUIPMENT AND SUPERVISORY VEHICLES A.O.B.E..
- M&P. 4 THE CONTRACTOR SHALL BE RESPONSIBLE FOR LIGHTING OF CONSTRUCTION SIGNS FOR NIGHT VISIBILITY DEEMED NECESSARY BY THE ENGINEER. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 619.02.
- M&P. 5 ALL CONTRACTOR'S PERSONNEL THAT ARE WORKING OUTSIDE THE PROTECTION PROVIDED BY THE CONCRETE MEDIAN BARRIER WILL WEAR ORANGE SAFETY VESTS. ALL FLAGGERS SHALL WEAR ORANGE CAPS AT ALL TIMES AND ALSO WEAR ORANGE VESTS WITH WHITE REFLECTORIZED STRIPING FOR ANY HOURS BETWEEN DUSK AND DAWN. DURING THESE SAME HOURS, PORTABLE ILLUMINATION SHALL BE PROVIDED FOR FLAGGERS THAT WILL DUPLICATE DAYLIGHT CONDITIONS, FOR A RADIUS OF NOT LESS THAN 50 FEET.
- M&P. 6 THE CONTRACTOR SHALL USE SCREENING DEVICES ON CONCRETE MEDIAN BARRIER AND/OR PARAPET WALLS ON ALL CONTRACT OPERATIONS DEEMED HAZARDOUS TO THE PUBLIC A.O.B.E. SCREENING SHALL BE ATTACHED SECURELY AND BE CAPABLE OF WITHSTANDING HIGH WIND VELOCITIES PLUS RESTRICTING DUST AND SAND PARTICLES FROM LEAVING THE WORK ZONES.
- M&P. 7 THE COST OF FURNISHING, INSTALLING, MAINTAINING, REMOVING AND DISPOSING OF ALL PLATFORMS, NETS, SCREENS OR OTHER PROTECTIVE DEVICES SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE APPROPRIATE ITEMS OF THE CONTRACT.

AS - BUILT REVISIONS

SIGNATURE _____ DATE _____

GENERAL NOTES

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

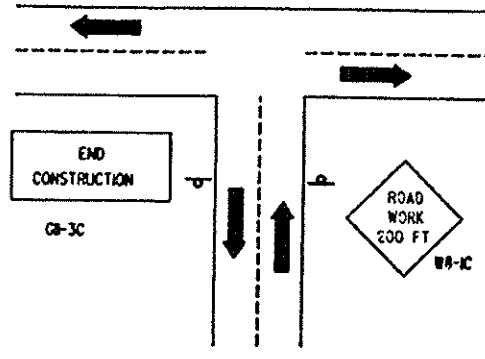
DRAWING NO.	SCALE	DATE	REGION
611-2	NONE	12-89	

DATE _____
CHECKED BY _____
DRAFTED BY _____
REVIEWED BY _____
DESIGNED BY _____
CHECKED BY _____
IN CHARGE OF _____
HC-47-2b (8/88)

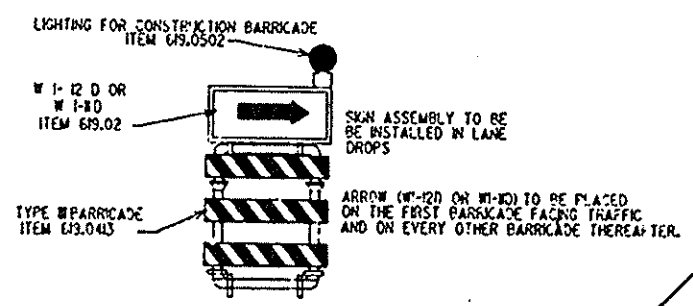
FED. ROAD REC. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		4	51
RTE 9W OVER THRUWAY B.N. I-05355-0				
RTE 32 OVER KAATERSKILL CREEK B.N. I-02237-0				
RTE 23 OVER HAUVO STREAM B.N. I-04772-0				
BRIDGE DECK REPAIRS				
GREENE COUNTY				

MAINTENANCE OF TRAFFIC NOTES:

- TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH ALL THE PROVISIONS OF ITEM 619.01 - BASIC MAINTENANCE AND PROTECTION OF TRAFFIC OR AS AMENDED ON THIS SHEET 619.02 - CONSTRUCTION SIGNS
- REFLECTORIZED PLASTIC DRUM TYPE DELINEATION SHALL BE USED ALONG EMBANKMENTS AND AT OTHER HAZARDOUS LOCATIONS WHERE THE EXISTING GUARDRAIL HAS BEEN REMOVED AND SHALL REMAIN UNTIL SATISFACTORY PROTECTION IS PROVIDED. SPACING OF THE DRUMS SHALL BE CONSISTENT WITH THE CONTRACT DOCUMENTS AND AS ORDERED BY THE ENGINEER.
- THE CONTRACTOR SHALL SCHEDULE HIS CONSTRUCTION OPERATIONS IN A MANNER SO AS TO MINIMIZE THE LENGTH OF TIME WHEN DROP-OFFS ADJACENT TO THE TRAVEL LANE OCCUR.
THE CONTRACTOR SHALL DELINEATE AREAS WHERE THERE IS A DROP-OFF NEAR THE EDGE OF THE TRAVELED WAY AND AREAS ON WHICH IT IS UNSAFE TO TRAVEL.
WHERE THE DROP-OFF IS LESS THAN SIX INCHES, AND WHERE SOFT OR UNSAFE AREAS OCCUR, AN APPROVED DELINEATOR SHALL BE PLACED ALONG THE EDGE OF THE TRAVELED WAY AT INTERVALS OF NOT MORE THAN 200 FEET. WHERE THE DROP-OFF IS BETWEEN 6 INCHES AND 18 INCHES, THE SPACING BETWEEN DELINEATORS SHALL BE REDUCED TO 100 FEET MAXIMUM. WHERE THE DROP-OFF IS GREATER THAN 18 INCHES, A CONTINUOUS DELINEATION CONSISTING OF 2 INCH OR WIDER BRIGHTLY COLORED TAPE, RIBBON, OR OTHER SIMILAR FLEXIBLE MATERIAL AS APPROVED BY THE ENGINEER SHALL BE USED IN ADDITION TO THE INDIVIDUAL DELINEATORS SPACED NOT OVER 50 FEET APART.
*THESE DISTANCES MAY BE REDUCED BY PROJECT ENGINEER IF CONDITIONS WARRANT.
NO DROP-OFF GREATER THAN 6" SHALL REMAIN OVER A WEEKEND OR HOLIDAY. A DROP-OFF IS CONSIDERED ELIMINATED IF TAPERED AWAY BY A 10% 4 SLOPE OR FLATIER.
EXCAVATIONS THAT PRODUCE DROP-OFFS ON BOTH SIDES OF THE TRAVEL WAY AT THE SAME TIME SHALL NOT BE PERMITTED. SHOULDER AREAS SHOULD BE PREPARED TO RECEIVE THE SHOULDER PAVEMENT MATERIAL IMMEDIATELY AHEAD OF THE SHOULDER PAVING OPERATION TO MINIMIZE THE TIME A DROP-OFF EXISTS. NO SHOULDER (W-130) SIGNS SHALL BE ERECTED NO MORE THAN 1/4 MILE APART THROUGHOUT THE PROJECT WHERE A DROP-OFF EXISTS.
- THE COST OF PROVIDING AND MAINTAINING SAFE AND ADEQUATE INGRESS AND EGRESS TO AND FROM INTERSECTING HIGHWAYS, HOMES, AND COMMERCIAL ESTABLISHMENTS AT ALL TIMES TO THE SATISFACTION OF THE ENGINEER, SHALL BE BORNE BY THE CONTRACTOR, EXCEPT THAT ANY TEMPORARY ASPHALT CONCRETE PLACED TO MAINTAIN THIS ACCESS AS DIRECTED BY THE ENGINEER SHALL BE PAID FOR UNDER ITS RESPECTIVE CONTRACT ITEM.
THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR PROVIDING SAFE PEDESTRIAN ACCESS AT ALL TIMES.
- THE CONTRACTOR MAY SUBMIT REVISIONS TO THIS PLAN FOR APPROVAL BUT ANY CHANGE THAT ALTERS THE BASIC CONCEPTS OF THE PLAN MUST BE APPROVED BY THE REGIONAL DIRECTOR OR HIS DESIGNEE.
- THE CONTRACTOR SHALL NOT PARK HIS EQUIPMENT NOR STORE MATERIAL OVERNIGHT WHERE IT IS DEEMED BY THE ENGINEER TO BE A SAFETY HAZARD TO TRAFFIC.
- PRIOR TO ANY REDUCTION IN EXISTING LANE WIDTH (S) THE CONTRACTOR SHALL PROVIDE THE ENGINEER FOURTEEN (14) DAYS NOTICE SO HE MAY INFORM THE REGIONAL PERMIT ENGINEER OF THE WIDTH REDUCTIONS IN A TIMELY MANNER.
- IF THE ENGINEER NOTIFIES THE CONTRACTOR OR HIS SUPERINTENDENT OF ANY HAZARDOUS PRACTICES, ALL OPERATIONS IN THAT AREA SHALL BE DISCONTINUED & IMMEDIATE REMEDIAL ACTION SHALL BE TAKEN TO THE SATISFACTION OF THE ENGINEER BEFORE WORK IS RESUMED.
- THE CONTRACTOR SHALL REMOVE ALL CONFLICTING PAVEMENT MARKINGS, AND COVER ANY CONFLICTING SIGNS COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - BASIC MAINTENANCE AND PROTECTION OF TRAFFIC.
- WHEN THE VISIBILITY OF THE TRAVELING PUBLIC IS RESTRICTED DUE TO WEATHER CONDITIONS AND/OR THE WORK OPERATION COMMENCES PRIOR TO DAWN OR CONTINUES BEYOND DUSK, FLASHING BEACONS AND STEADY BURNING LIGHTS WILL BE PROVIDED BY THE CONTRACTOR AND PLACED AS DIRECTED BY THE ENGINEER. IF A FLAGGING OPERATION IS NECESSARY BEYOND THE DAYLIGHT HOURS, THE FLAGGERS SHALL BE ILLUMINATED BY FLOODLIGHTS.
- THE CONTRACTOR SHALL MAINTAIN AND PROTECT TRAFFIC BY CONDUCTING HIS WORK OPERATIONS SO THAT THE PUBLIC IS SUBJECTED TO A MINIMUM OF DELAY AND HAZARD.
- THE CONTRACTOR SHALL PROVIDE PERSONNEL TO PATROL THE CONTRACT AREA AS NECESSARY TO ENSURE THAT CONDITIONS ON THE SITE ARE ADEQUATE FOR PUBLIC SAFETY AND CONVENIENCE AT ALL TIMES. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - BASIC MAINTENANCE AND PROTECTION OF TRAFFIC.



TYPICAL INTERSECTION
SIGNING
NOT TO SCALE



TYPE III BARRICADE DETAIL
NOT TO SCALE

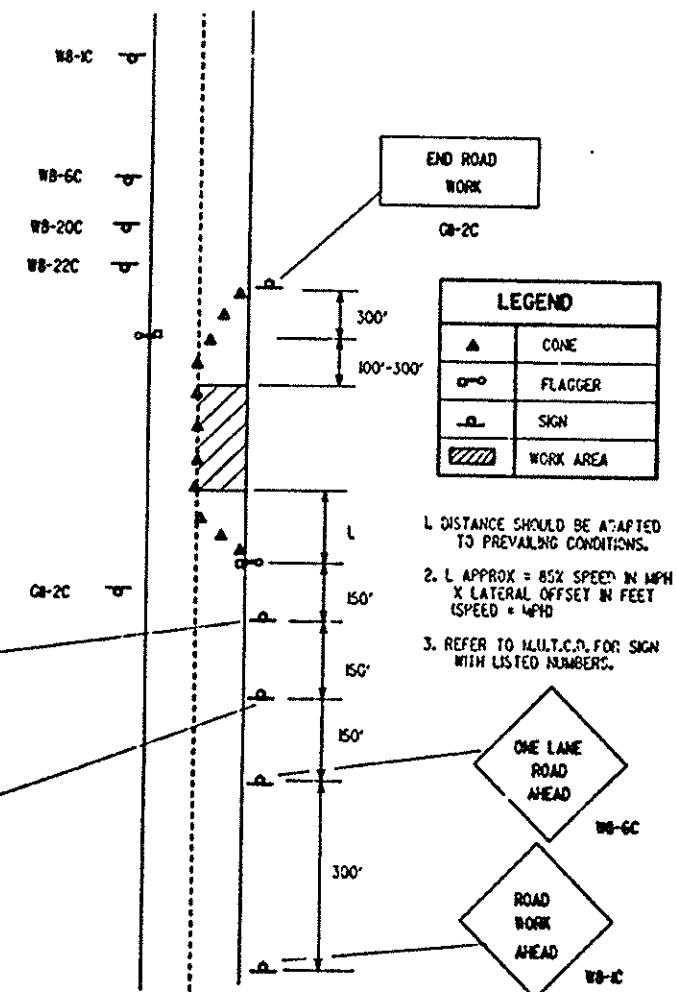
NOTE: TYPE III BARRICADES (ITEM 619.043) SHALL BE LIGHTED (ITEM 619.0502) AS FOLLOWS: THE FIRST BARRICADE FACING TRAFFIC SHALL BE FLASHING AND ALL REMAINING SHALL BE STEADY-BURN.

MODULE ARRANGEMENT	LENGTH	IMPACT SPEED (MPH)											
		20	25	30	35	40	45	50	55	60	65		
(X) 100 LBS		15'	U	1.7	2.0	2.7	3.6	4.4	5.6	--	--	--	--

IMPACT ATTENUATOR DETAIL
NOT TO SCALE

TEMPORARY TRAFFIC SIGNAL NOTES:

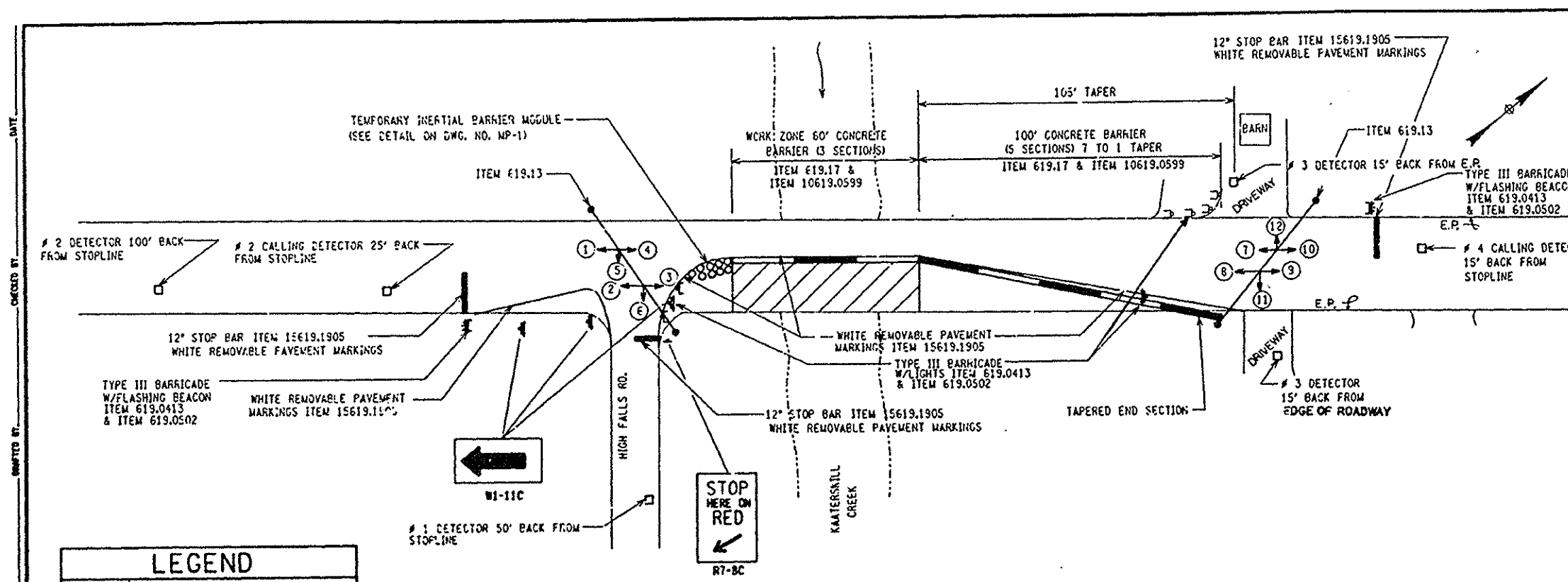
- THE CONTROLLER SHALL BE A 2-PHASE FULL TRAFFIC ACTUATED CONTROLLER WITH REST-IN-RED CAPABILITY OR A 3-PHASE FULL TRAFFIC ACTUATED CONTROLLER.
- 6' X 6' LOOP DETECTORS IF USED SHALL HAVE 5 TURNS
- THE W-12-TC SIGNAL AHEAD SIGNS SHALL HAVE ORANGE REFLECTORIZED BACKGROUND WITH BLACK LEGEND.
- THE SIGNAL SHALL BE SET TO REST IN RED.



TEMPORARY MAINTENANCE & CONSTRUCTION TRAFFIC ROUTING (STAGE D)
TYPICAL SIGNING TWO LANE TWO WAY ROADWAY
NOT TO SCALE

AS-BUILT DRAWING			
SIGNATURE		DATE	
MAINTENANCE & PROTECTION OF TRAFFIC			
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION			
DRAWING NO.	SCALE	DATE	REGION ONE
MP-1	NONE	9/89	

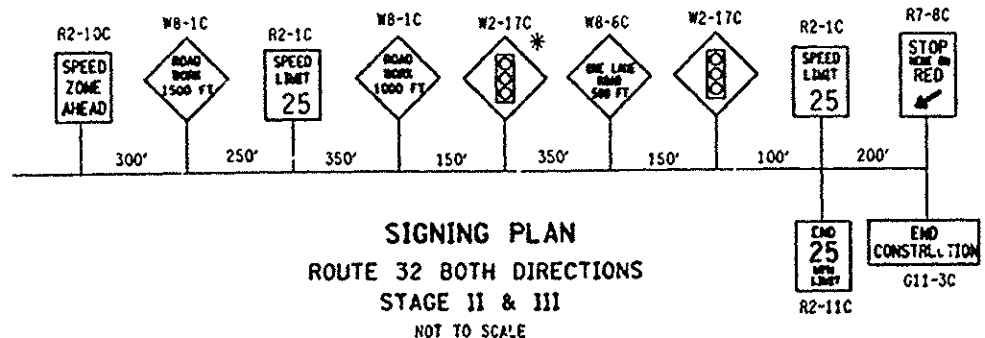
FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		5	51
RTE 9W OVER THRUWAY BIN 1-05355-0				
RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0				
RTE 23 OVER NAUVO STREAM BIN 1-01772-0				
BRIDGE DECK REPAIRS				
GREENE COUNTY				



LEGEND	
	WHITE REMOVABLE PAVEMENT MARKINGS ITEM 15619.1905
	TEMPORARY INERTIAL BARRIER MODULE ITEM 15617.6805
	TYPE III BARRICADE WITH LIGHT ITEM 619.0413 & ITEM 619.0502
	TEMP. CONC. BARRIER WITH LIGHTS 20' C-C ITEMS 619.17 & 15619.0599
	WORK ZONE
	TEMPORARY TRAFFIC SIGNALS ITEM 619.13
	STOP LINE (ITEM 15619.1905)
	PHASE

STAGE II
ROUTE 32/KAATERSKILL CREEK
NOT TO SCALE

PHASE	FACES											
	1	2	3	4	5	6	7	8	9	10	11	12
1	R	R	R	R	G	G	G	G	R	R	R	R
1st CL to 2	R	R	R	R	Y	Y	G	G	R	R	R	R
2nd CL to 2	R	R	R	R	R	R	R	G	G	R	R	R
2	G	G	R	R	R	R	R	R	R	R	R	R
1st CL	Y	Y	R	R	R	R	R	G	G	R	R	R
2nd CL	R	R	R	R	R	R	R	G	G	R	R	R
3rd CL	R	R	R	R	R	R	R	Y	Y	R	R	R
4th CL	R	R	R	R	R	R	R	R	R	R	R	R
3	R	R	G	G	R	R	R	R	R	R	G	G
1st CL to 4	R	R	G	G	R	R	R	R	R	R	Y	Y
2nd CL to 4	R	R	G	G	R	R	R	R	R	R	R	R
4	R	R	G	G	R	R	R	R	R	G	G	R
1st CL	R	R	G	G	R	R	R	R	Y	Y	R	R
2nd CL	R	R	G	G	R	R	R	R	R	R	R	R
3rd CL	R	R	Y	Y	R	R	R	R	R	R	R	R
4th CL	R	R	R	R	R	R	R	R	R	R	R	R



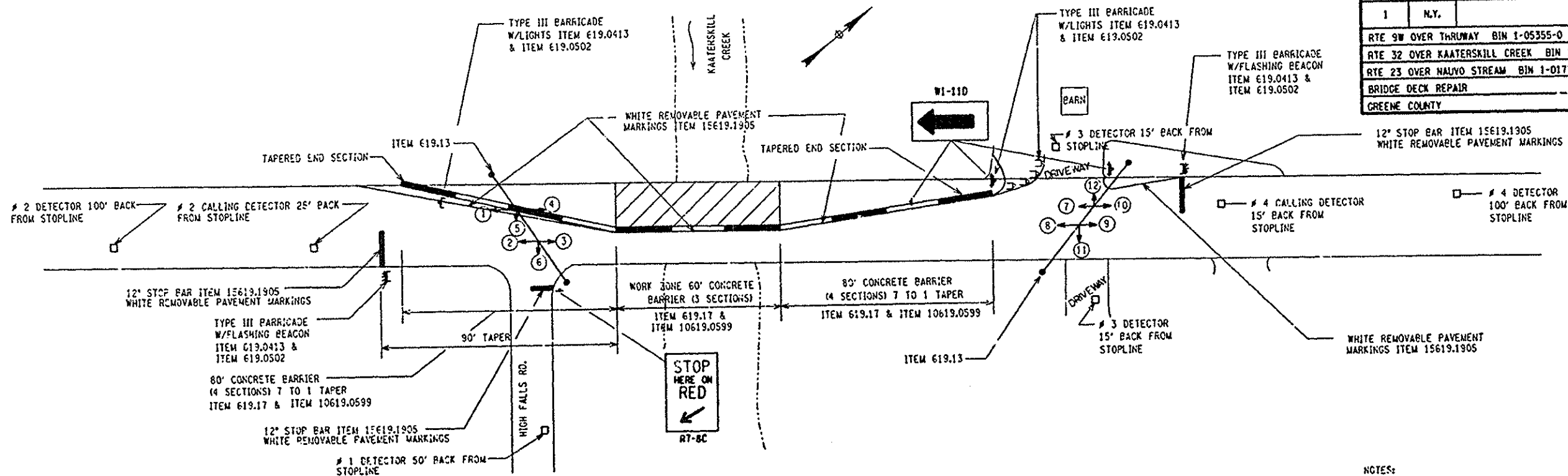
NOTE:
* 2nd W2-17C SIGN TO EXCLUDED FROM S.B. RTE. 32 SIGNING.
N.B. RTE. 32 SIGNING SHALL HAVE FLAPS ON ALL ORANGE SIGNS.

- NOTES:
- 1) TEMPORARY TRAFFIC ROUTING (STAGE I) MAY BE NEEDED TO REMOVE THE EXISTING SAFETY WALK FOR STAGE II TRAFFIC ROUTING (SEE TEMP. TRAFFIC ROUTING SCHEMATIC DWG. MP-1)
 - 2) FOR TYPE III BARRICADE DETAIL SEE DWG. MP-1.
 - 3) FOR TEMPORARY INERTIAL BARRIER MODULE DETAIL SEE DWG. MP-1.
 - 4) FOR TRAFFIC SIGNAL NOTES SEE DWG. MP-1.
 - 5) FOR TYPICAL INTERSECTION SIGNING SEE DWG. MP-1.

B.I.N. 1-02237-0 ROUTE 32 OVER KAATERSKILL CREEK

AS-BUILT REVISIONS	
SIGNATURE	DATE
TRAFFIC ROUTING - STAGE II	
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION	
DRAWING NO. MP-2	SCALE NONE
DATE 9/89	REGION ONE

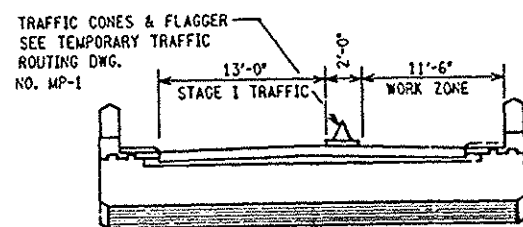
FED. ROAD REC. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		6	51
RTE 9W OVER THRUWAY BIN 1-05355-0				
RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0				
RTE 23 OVER HALVO STREAM BIN 1-01772-0				
BRIDGE DECK REPAIR				
GREENE COUNTY				



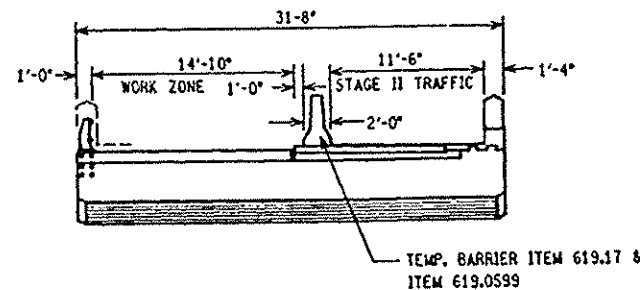
STAGE III
ROUTE 32/KAATERSKILL CREEK
NOT TO SCALE

LEGEND	
	WHITE REMOVABLE PAVEMENT MARKINGS ITEM 15619.1905
	TYPE III BARRICADE WITH LIGHT ITEM 619.0413 & ITEM 619.0502
	TEMP. CONC. BARRIER WITH LIGHTS 20' C-C ITEMS 619.17 & 10619.0599
	WORK ZONE
	TEMPORARY TRAFFIC SIGNALS ITEM 619.13
	STOP LINE (ITEM 15619.1905)
	PHASE

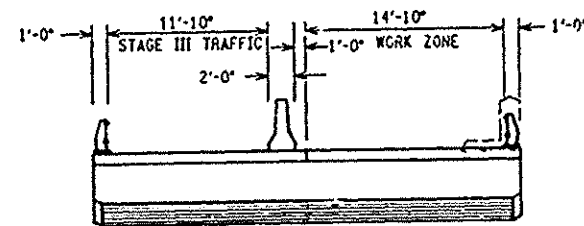
- NOTES:
- 1) FOR TYPE III BARRICADE DETAIL SEE DWG. MP-1.
 - 2) FOR SIGNING PLAN FOR ROUTE 32 SEE DWG. MP-2.
 - 3) FOR TRAFFIC SIGNAL NOTES SEE DWG. MP-1.
 - 4) FOR TYPICAL INTERSECTION SIGNING SEE DWG. MP-1.
 - 5) FOR TRAFFIC SIGNAL TABLE OF OPERATION SEE DWG. MP-2.



CONSTRUCTION STAGE I
NOT TO SCALE



CONSTRUCTION STAGE II
NOT TO SCALE



CONSTRUCTION STAGE III
NOT TO SCALE

B.I.N. 1-02237-0 ROUTE 32 OVER KAATERSKILL CREEK

AS-BUILT REVISIONS	
SIGNATURE	DATE
TRAFFIC ROUTING STAGE III	
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION	
DRAWING NO. MP-3	SCALE NONE
DATE 9/89	REGION ONE

ALL 10,10237180326MPT

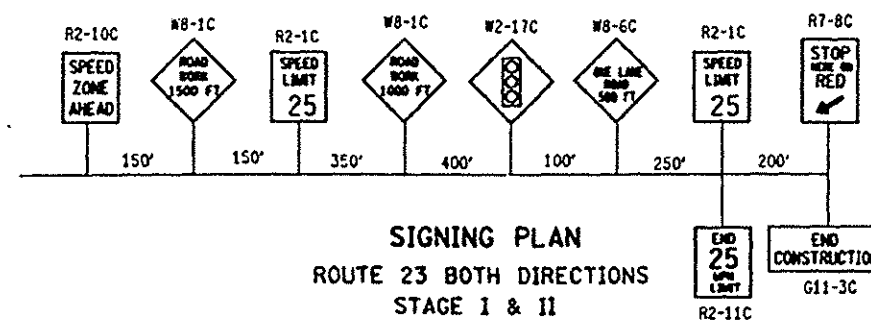


LEGEND	
	WHITE REMOVABLE PAVEMENT MARKINGS ITEM 15619.1905
	TYPE III BARRICADE WITH LIGHT ITEM 619.0413 & ITEM 619.0502
	TEMP. CONC. BARRIER WITH LIGHTS 20' C-C ITEMS 619.17 & 10619.0539
	WORK ZONE
	TEMPORARY TRAFFIC SIGNALS ITEM 619.13
	STOP LINE (ITEM 15619.19C5)
	PHASE

TABLE OF OPERATION											
PHASE	FACES										
	1	2	3	4	5	7	8	9	10	11	
1	R	R	R	R	R	C	G	C	R	R	R
1st CL to 2	R	R	R	R	R	Y	G	G	R	R	R
2st CL to 2	R	R	R	R	R	R	G	C	R	R	R
2	C	G	C	R	R	R	G	C	R	R	R
1st CL	Y	Y	R	R	R	R	G	C	R	R	R
2nd CL	R	R	R	R	R	R	G	C	R	R	R
3rd CL	R	R	R	R	R	R	Y	Y	R	R	R
4th CL	R	R	R	R	R	R	R	R	R	R	R
3	R	R	C	G	C	R	R	R	R	C	G
1st CL to 4	R	R	C	G	C	R	R	R	R	R	Y
2st CL to 4	R	R	C	G	C	R	R	R	R	R	R
4	R	R	C	G	C	R	R	C	G	C	R
1st CL	R	R	C	G	C	R	R	Y	Y	R	R
2nd CL	R	R	C	G	C	R	R	R	R	R	R
3rd CL	R	R	Y	Y	R	R	R	R	R	R	R
4th CL	R	R	R	R	R	R	R	R	R	R	R
EMERG.	C	R	C	G	C	R	R	R	R	R	R

NOTES:

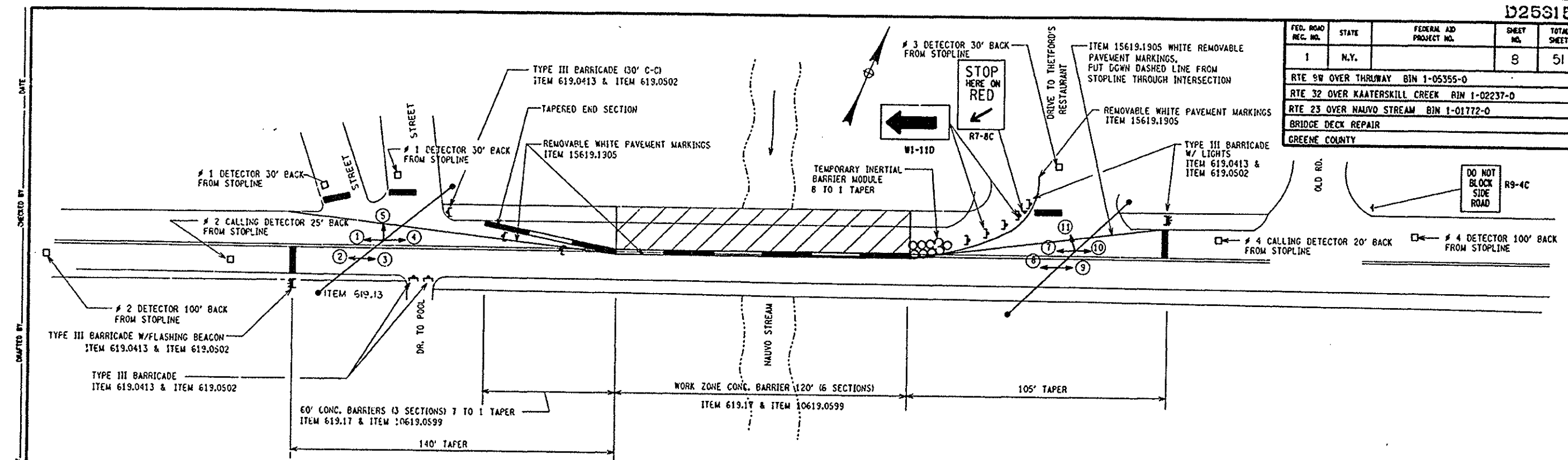
- 1) FOR TYPE III BARRICADE DETAIL SEE DWG. MP-1.
- 2) FOR TRAFFIC SIGNAL NOTES SEE DWG. MP-1.
- 3) FOR TYPICAL INTERSECTION SIGNING SEE DWG. MP-1.



B.I.N. 1-01772-0 ROUTE 23 OVER NAUVO STREAM

AL-ORLY REVISING			
SIGNATURE		DATE	
TRAFFIC ROUTING - STAGE I			
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION			
DRAWING NO. MP-4	SCALE NONE	DATE 9/89	REGION ONE

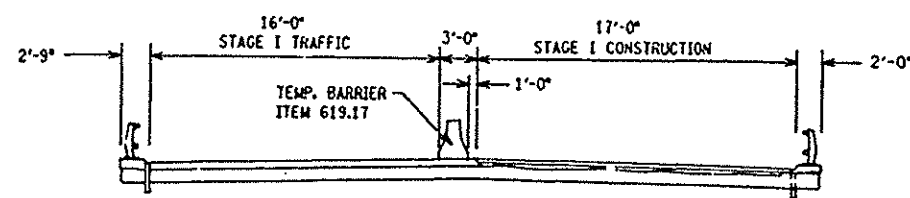
FED. ROAD REC. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		8	51
RTE 9W OVER THRUWAY BIN 1-05355-0				
RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0				
RTE 23 OVER NAUVO STREAM BIN 1-01772-0				
BRIDGE DECK REPAIR				
GREENE COUNTY				



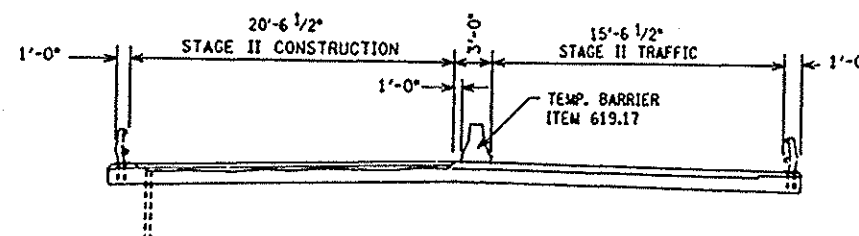
STAGE II
ROUTE 23/NAUVO STREAM CREEK
NOT TO SCALE

LEGEND	
	WHITE REMOVABLE PAVEMENT MARKINGS ITEM 15619.1905
	TEMPORARY INERTIAL BARRIER MODULE ITEM 15617.6805
	TYPE III BARRICADE WITH LIGHT ITEM 619.0413 & ITEM 619.0502
	TEMP. CONC. BARRIER WITH LIGHTS 20' C-C ITEMS 619.17 & 10619.0599
	WORK ZONE
	TEMPORARY TRAFFIC SIGNALS ITEM 619.13
	STOP LINE ITEM 15619.1905
	PHASE

- NOTES:
- 1) FOR TYPE III BARRICADE DETAIL SEE DWG. MP-1.
 - 2) FOR TEMPORARY INERTIAL BARRIER MODULE DETAIL SEE DWG. MP-1.
 - 3) FOR TRAFFIC SIGNAL NOTES SEE DWG. MP-1.
 - 4) FOR TYPICAL INTERSECTION SIGNING SEE DWG. MP-1.
 - 5) FOR SIGNING PLAN FOR ROUTE 23 SEE DWG. MP-4.
 - 6) FOR TRAFFIC SIGNAL TABLE OF OPERATION SEE DWG. MP-4.



CONSTRUCTION STAGE I
NOT TO SCALE

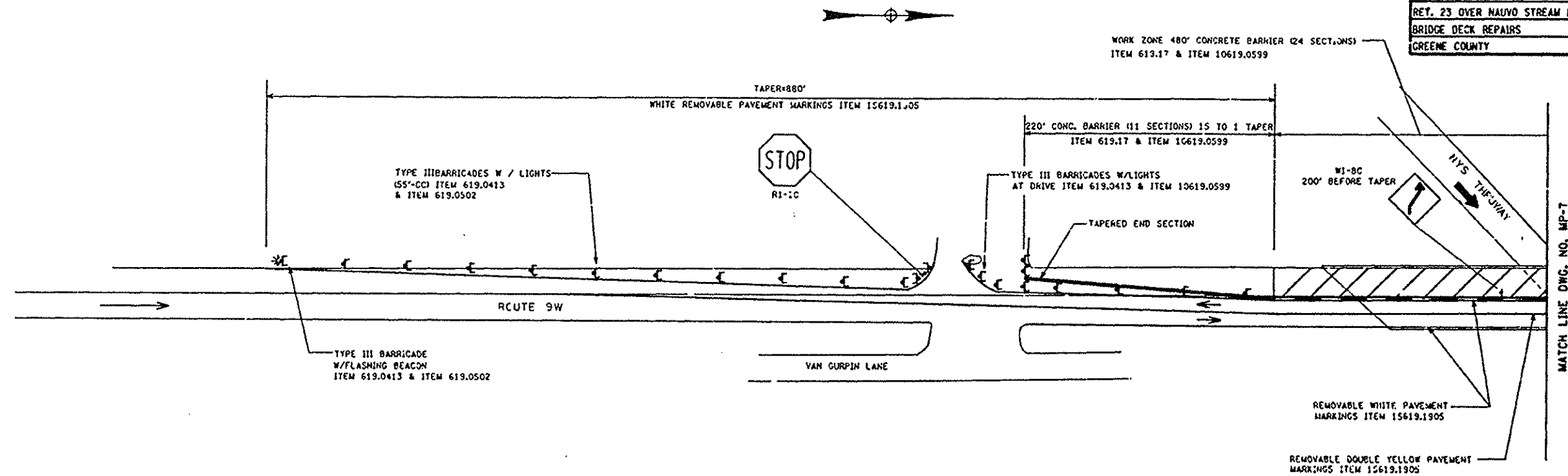


CONSTRUCTION STAGE II
NOT TO SCALE

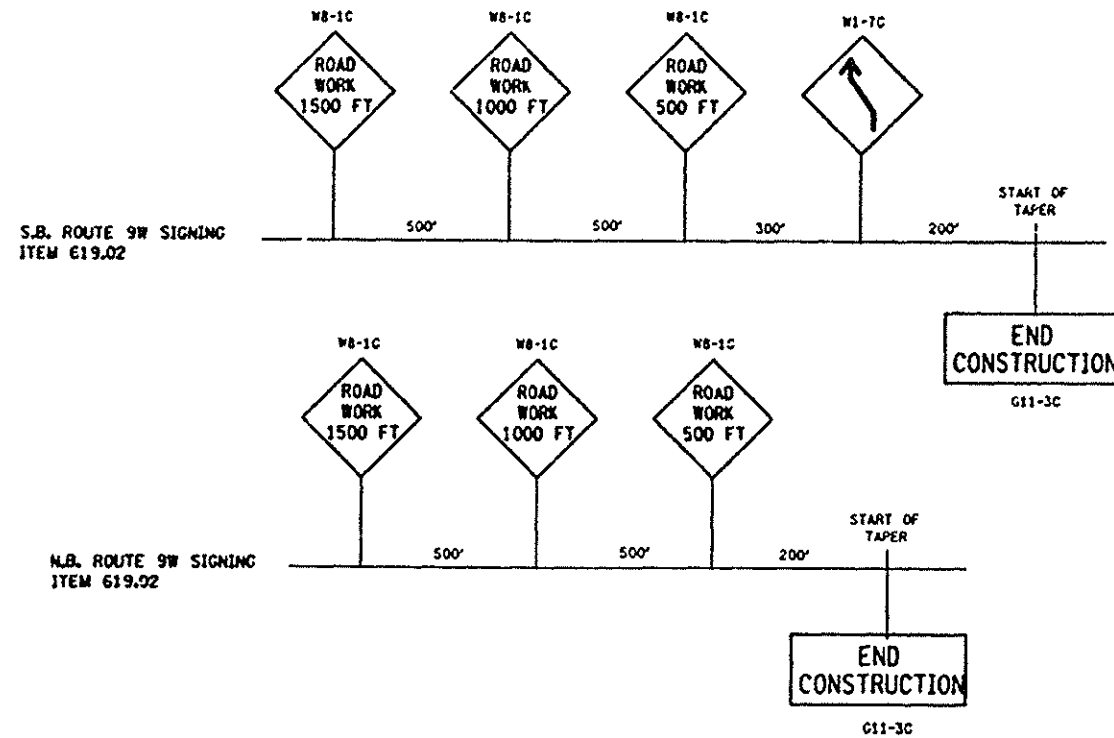
B.I.N. 1-01772-0 ROUTE 23 OVER NAUVO STREAM

AS-BUILT REVISIONS			
SIGNATURE		DATE	
TRAFFIC ROUTING - STAGE II			
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION			
DRAWING NO. MP-5	SCALE NONE	DATE 9.89	REGION ONE

FED. ROAD P.C. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		9	51
RTE. 9W OVER THRUWAY B.I.N. 1-05355-0				
RTE. 32 OVER KAATERSKILL CREEK B.I.N. 1-02237-0				
RTE. 23 OVER NAUVO STREAM B.I.N. 1-01772-0				
BRIDGE DECK REPAIRS				
GREENE COUNTY				



LEGEND	
	REMOVABLE PAVEMENT MARKINGS ITEM 15619.1905 & 15619.1906
	TYPE III BARRICADE WITH LIGHT ITEM 619.0413 & ITEM 619.0502
	TEMP. CONC. BARRIER WITH LIGHTS 20' C-C ITEMS 619.17 & 10619.0599
	WORK ZONE
	TEMPORARY TRAFFIC SIGNALS ITEM 619.13

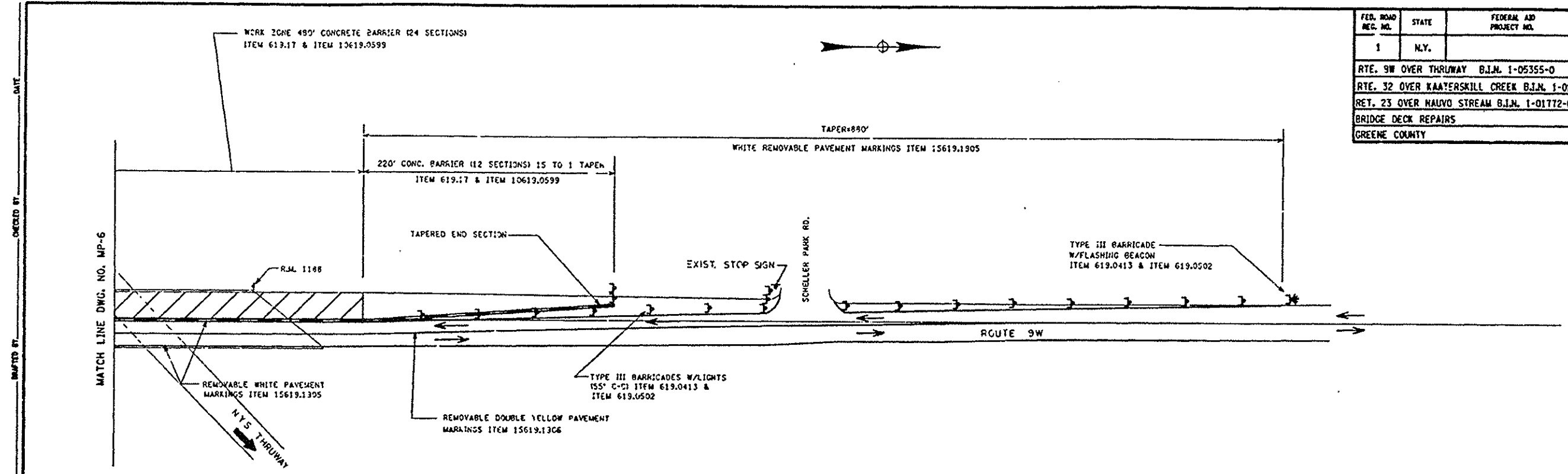


SIGNING PLAN
ROUTE 9W STAGE 1
NOT TO SCALE

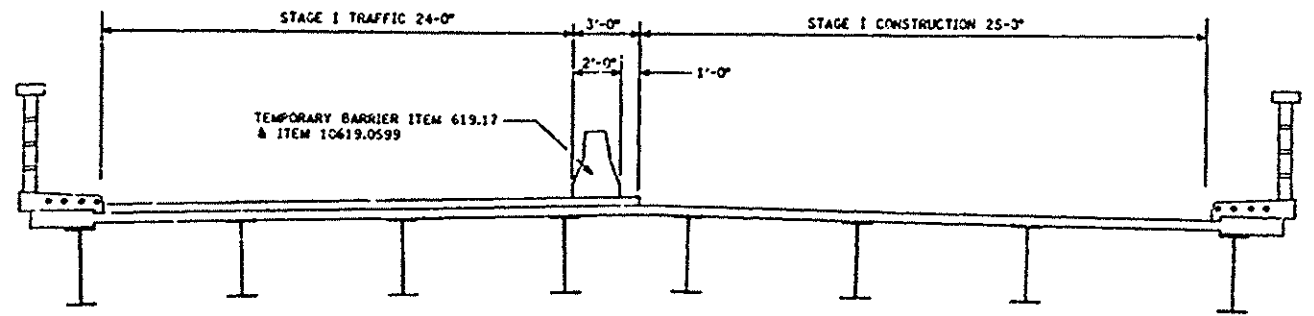
B.I.N. 1-05355-0 RTE. 9W OVER THE THRUWAY

AS-BUILT REVISIONS	
SIGNATURE	DATE
TRAFFIC ROUTING - STAGE I	
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION	
DRAWING NO. MP-6	SCALE NONE
DATE 9/89	REGION ONE

FED. ROAD REC. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		10	51
RTE. 9W OVER THRUWAY B.J.N. 1-05355-0				
RTE. 32 OVER KAAERSKILL CREEK B.J.N. 1-02237-0				
RTE. 23 OVER MALVO STREAM B.J.N. 1-01772-0				
BRIDGE DECK REPAIRS				
GREENE COUNTY				



LEGEND	
	REMOVABLE PAVEMENT MARKINGS ITEM 15619.1305 & 15619.1306
	TYPE III BARRICADE WITH LIGHT ITEM 619.0413 & ITEM 619.0502
	TEMP. CONC. BARRIER WITH LIGHTS 20' C-C ITEMS 619.17 & 15619.0599
	WORK ZONE
	TEMPORARY TRAFFIC SIGNALS ITEM 619.13



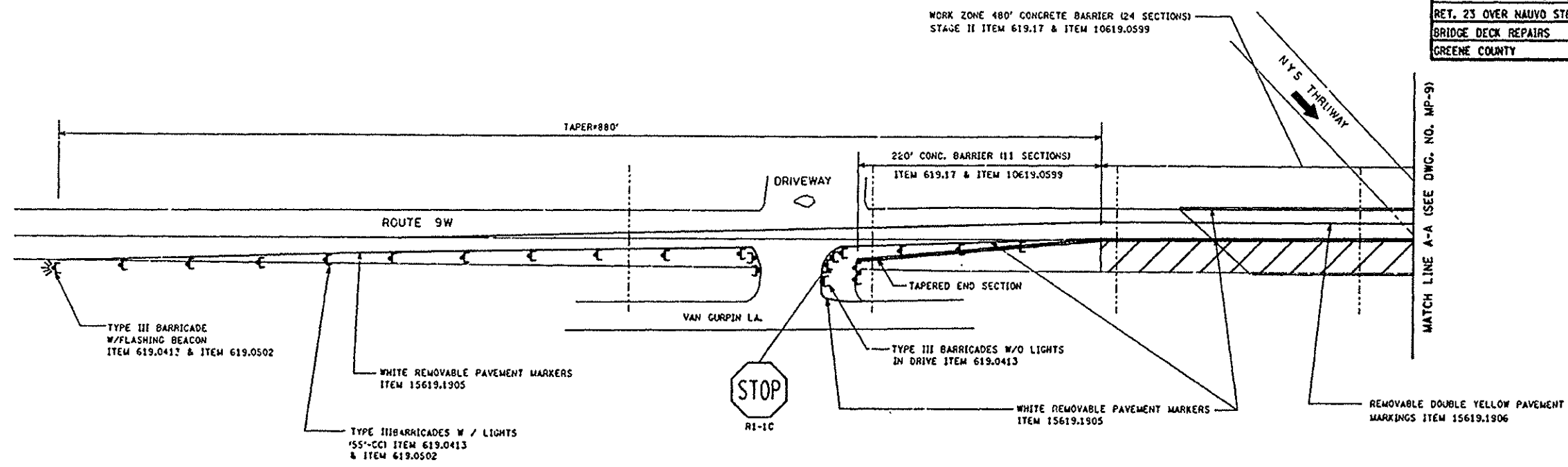
STAGE I
NOT TO SCALE

B.J.N. 1-05355-0 RTE. 9W OVER THE THRUWAY

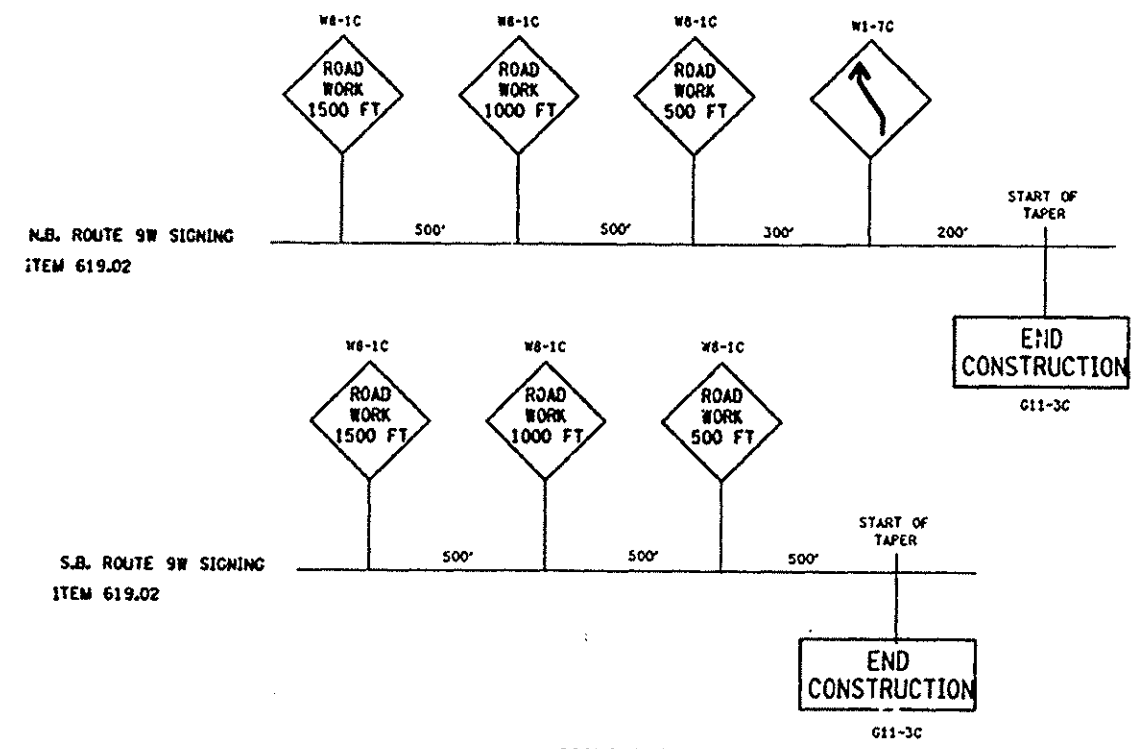
AS-BUILT REVISIONS	
SIGNATURE	DATE
TRAFFIC ROUTING - STAGE I	
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION	
DRAWING NO. MP-7	SCALE NONE
DATE 9/89	REGION ONE

FED. ROAD REC. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		11	51
RTE. 9W OVER THRUWAY B.I.N. 1-05355-0				
RTE. 32 OVER KAATERSKILL CREEK B.I.N. 1-02237-0				
RTE. 23 OVER NAUVO STREAM B.I.N. 1-01772-0				
BRIDGE DECK REPAIRS				
GREENE COUNTY				

DATE
CHECKED BY
DESIGNED BY
ESTIMATED BY
IN CHARGE OF



LEGEND	
	REMOVABLE PAVEMENT MARKINGS ITEM 15619.1905 & 15619.1906
	TYPE III BARRICADE WITH LIGHT ITEM 619.0413 & ITEM 619.0502
	TEMP. CONC. BARRIER WITH LIGHTS 20' C-C ITEMS 619.17 & 10619.0599
	WORK ZONE
	TEMPORARY TRAFFIC SIGNALS ITEM 619.13



SIGHTING PLAN
ROUTE 9W STAGE II
NOT TO SCALE

B.I.N. 1-05355-0 RTE. 9W OVER THE THRUWAY

AS-BUILT REVISIONS	
SIGNATURE	DATE
TRAFFIC ROUTING - STAGE II	
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION	
DRAWING NO. MP-8	SCALE NONE
DATE 9/89	REGION ONE

D258150

FED. ROAD REC. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		12	51

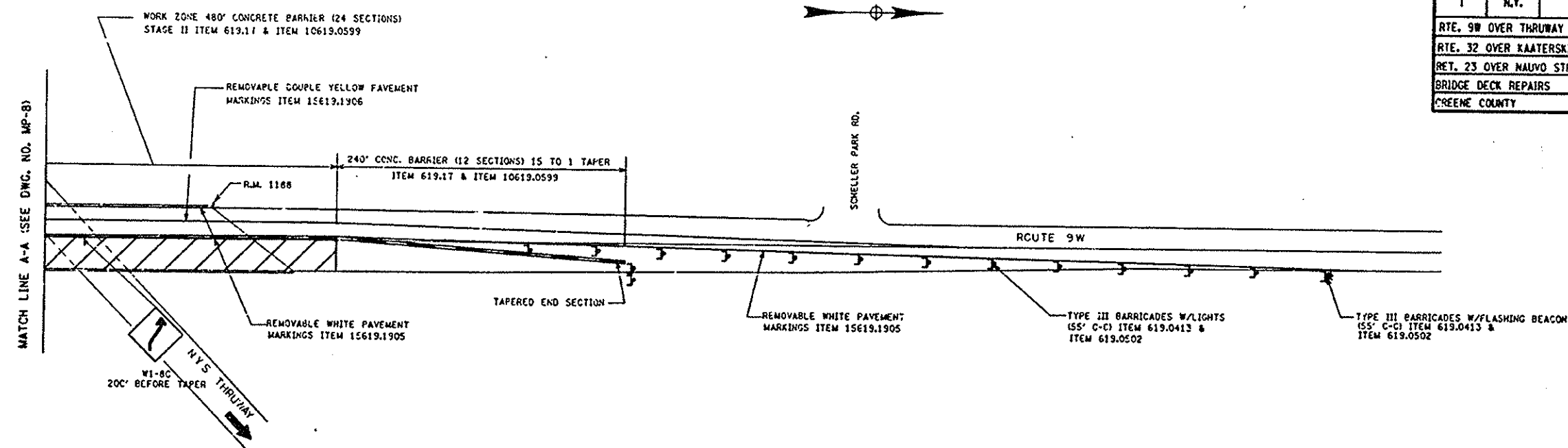
RTE. 9W OVER THRUWAY B.J.N. 1-05355-0

RTE. 32 OVER KAATERSKILL CREEK B.J.N. 1-02237-0

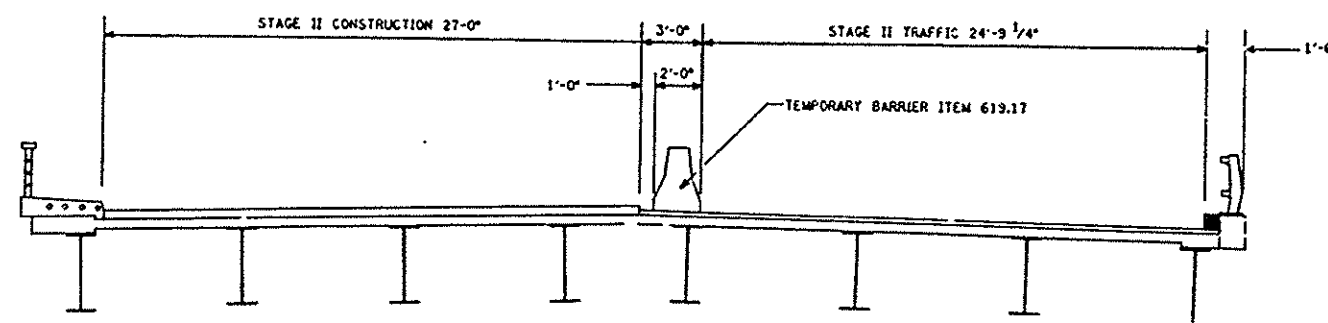
RET. 23 OVER MALVO STREAM B.J.N. 1-01772-0

BRIDGE DECK REPAIRS

GREENE COUNTY



LEGEND	
	REMOVABLE PAVEMENT MARKINGS ITEM 15619.1905 & 15619.1906
	TYPE III BARRICADE WITH LIGHT ITEM 619.0413 & ITEM 619.0502
	TEMP. CONC. BARRIER WITH LIGHTS 20' C-C ITEMS 619.17 & 10619.0599
	WORK ZONE
	TEMPORARY TRAFFIC SIGNALS ITEM 619.13

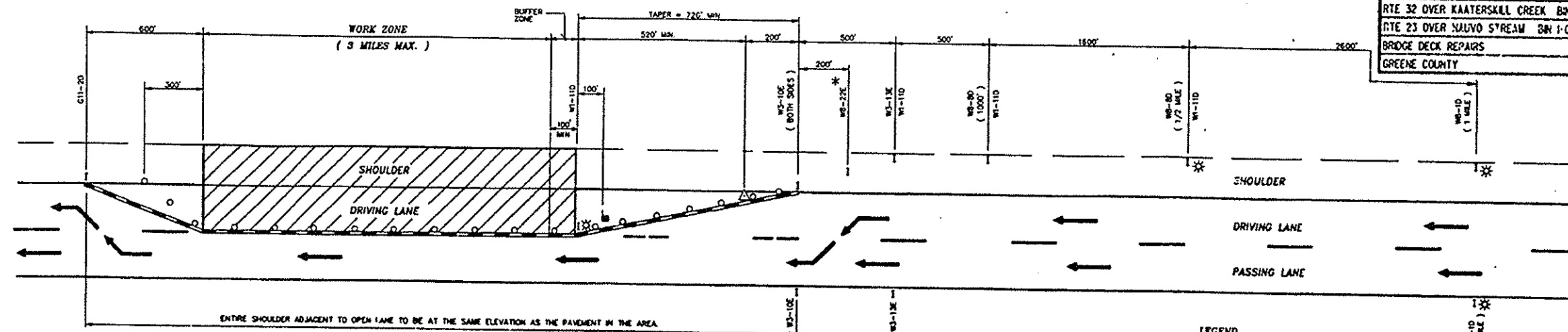
STAGE II
NOT TO SCALE

B.J.N. 1-05355-0 RTE. 9W OVER THE THRUWAY

AS-BUILT REVISIONS	
SIGNATURE	DATE
TRAFFIC ROUTING - STAGE II	
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION	
DRAWING NO. MP-9	SCALE NONE
DATE 9/89	REGION ONE

A118,182,189,326,41

RTE 5W OVER THRUWAY BN 1-03355-0
RTE 32 OVER KAATERSKILL CREEK BN 1-02237-0
RTE 23 OVER NAUVO STREAM BN 1-04722-0
BRIDGE DECK REPAIRS
GREENE COUNTY



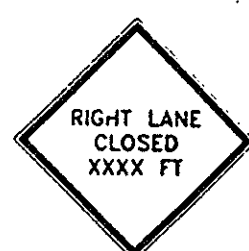
<u>LEGEND</u>	
	EXISTING PAVEMENT MARKINGS (BROKEN OR SOLID)
	REMOVAL OF EXISTING PAVEMENT MARKINGS. (SEE NOTE B)
	TEMPORARY PAVEMENT MARKING FOR CONSTRUCTION. (SEE NOTE B)
	USE ONLY WHEN FLAGGER IS ON DUTY
	TRAFFIC COMES AT 90° INTERVALS ON TAPER, 80° ON TANGENT.
	FLAGGER TYPICAL LOCATION.
	SHOWS
	FLASHING ARROWBOARD
	FLASHING LIGHTS (LOW INTENSITY FOR MONT USE OR A.O.B.E.)



W8-1D
48" x 48"



W8-8D
48" x 48"



W8-8D
48" x 48"



W3-10E
48" x 48"



W1-11D
48" x 24"



W8-22E *
48" x 48"

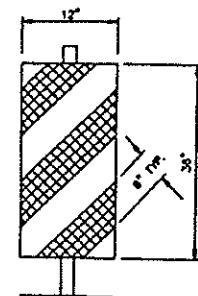


G11-2D
48" x 24"

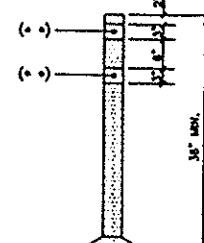


W3-13E
48" x 48"

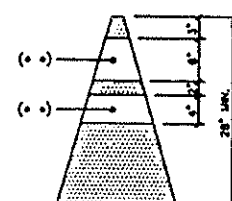
	WHITE REFLECTORIZED SHEETING, CLASS B (3M, 3600 SERIES OR EQUIV.)		NON-REFLECTORIZED ORANGE
	ORANGE REFLECTORIZED SHEETING, CLASS B (3M, 3600 SERIES OR EQUIV.)	(• •)	APPROVED REFLECTORIZED WHITE BAND OR COLLAR (CLASS B OR C) -REQUIRED FOR NIGHT USE.



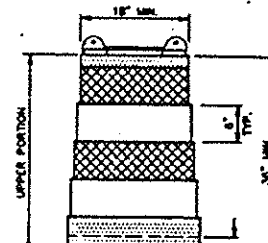
VERTICAL PANEL



TUBULAR MARKER



CONE



PLASTIC DRUM

TRAFFIC CONTROL DEVICES

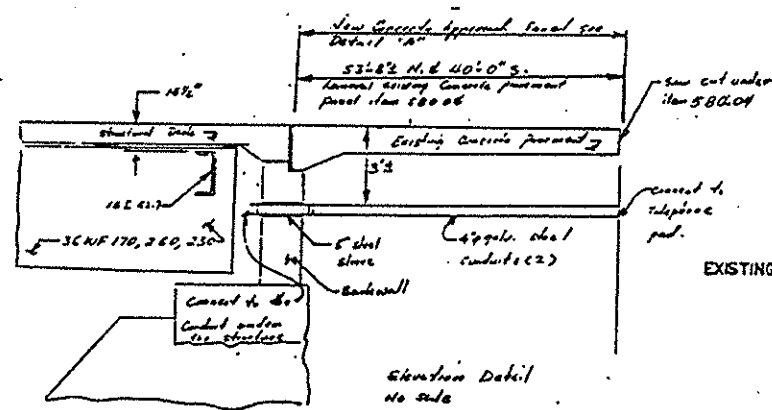
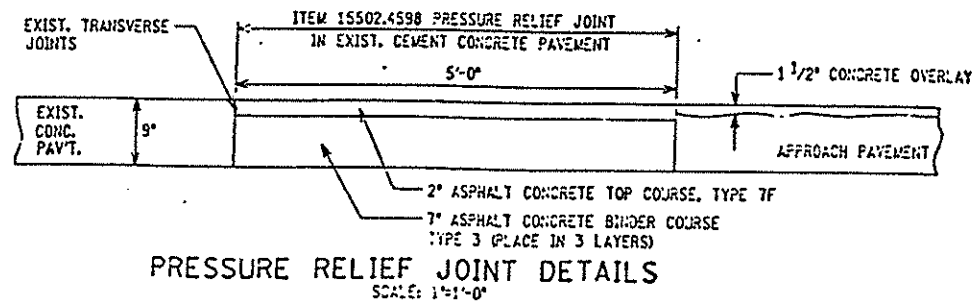
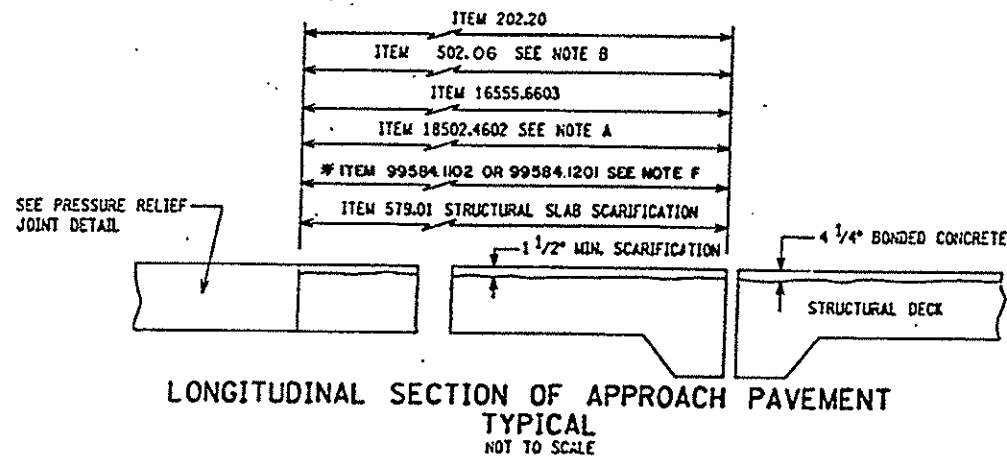
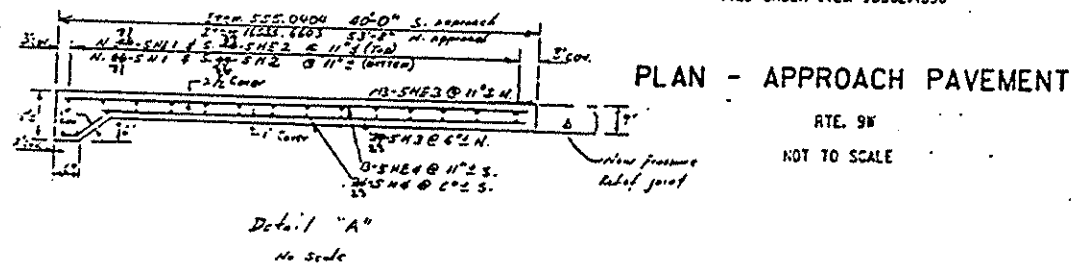
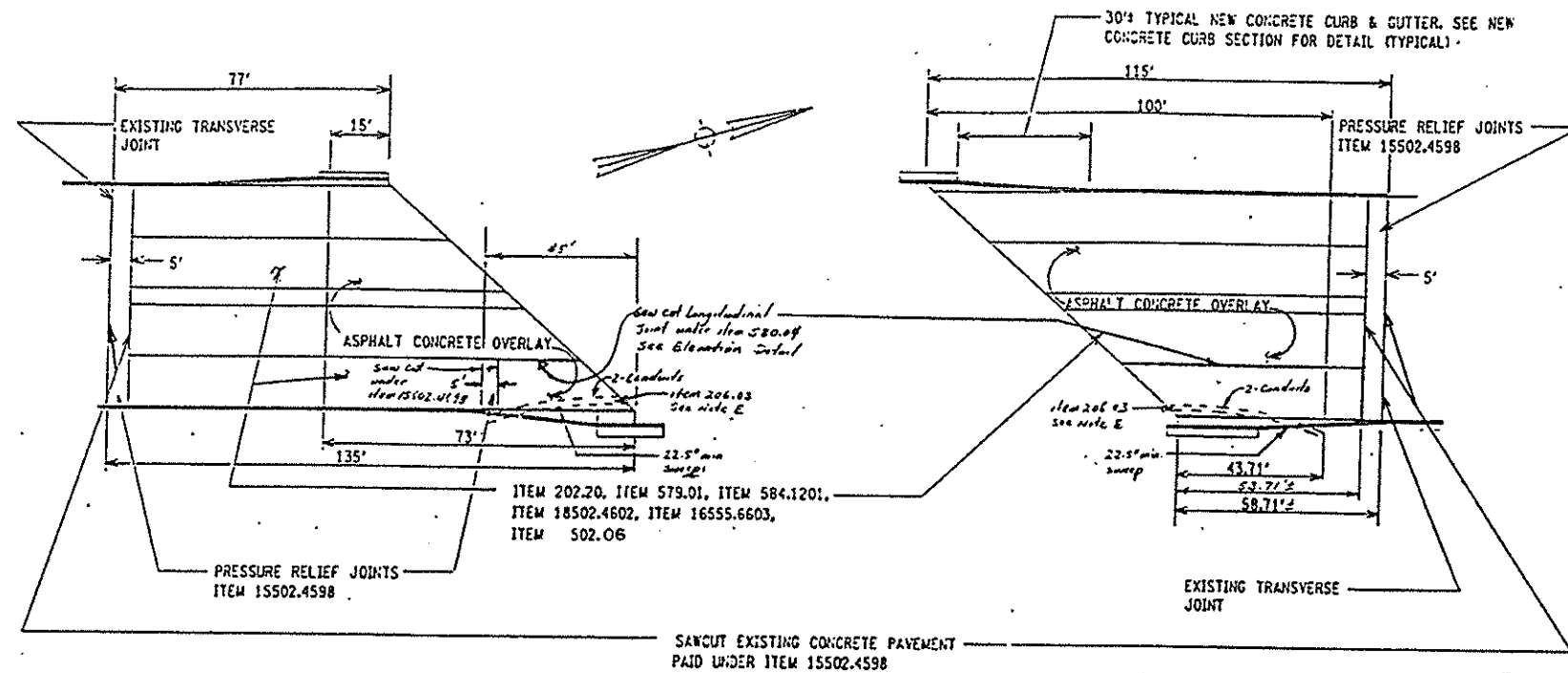
NOTES:

1. ALL SIGNS MAY BE FOUND IN THE NEW YORK STATE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL "B" SERIES SIGNS SHALL BE BLACK ON ORANGE. ALL REFLECTORIZED SIGN BACKGROUNDS SHALL BE CLASS "B" REFLECTIVE SHEETING.
 2. SIGN SUPPORTS SHALL RESIST OVERTURNING IN WINDS AND PROVIDE A MINIMUM MOUNTING HEIGHT OF 5 FEET TO THE SIGN. ALL SIGNS SHALL BE PLACED AT OR AS NEAR AS PRACTICABLE TO THE LOCATIONS SHOWN. LATERAL PLACEMENT OF SIGNS SHALL CONFORM TO SECTIONS 201.3 AND/OR 301.2 OF THE MUTCD.
 3. FLAGGERS ARE TO BE PROVIDED AND LOCATED IN THE PATTERN AS DIRECTED BY THE ENGINEER. WHEN USED, A W-122 SIGN SHALL BE PLACED NOT CLOSER THAN 500 FEET NOR FURTHER THAN 2600 FEET AHEAD OF THE FLAGGER.
 4. ALL FLASHING LIGHTS SHOWN ON THIS SHEET SHALL BE PLACED IN OPERATION FROM 1/2 HOUR AFTER SUNSET TO 1/2 HOUR BEFORE SUNRISE OR AS ORDERED BY THE ENGINEER.
 5. FLASHING ARROWBOARDS SHALL CONFORM TO SECTION 204.4.3 OF THE MUTCD. THE MINIMUM SIZE SHALL BE TYPE C (6" X 48") FULL ARROW FLASH. NO CHEVRONS NOR SEQUENTIAL ARROW FLASH WILL BE ALLOWED.
 6. THESE PLANS SHALL BE MODIFIED TO LEFT-LANE CLOSURE(S) BY CHANGING SIGNS W1-110 TO W1-120, W8-80 TO W8-70, W8-110 TO W8-100, W3-120 TO W3-85 AND W3-120 TO W3-122.
 7. THE TRAFFIC SUPERVISOR WILL APPROVE THE LOCATION OF ALL TRAFFIC CONTROL DEVICES PRIOR TO USE, AND WILL REVIEW THE PROPOSED TRAFFIC CONTROL PATTERNS (FOR PRECISE DEVICE POSITIONING) PRIOR TO INSTALLATION.
 8. EXISTING PAVEMENT MARKINGS SHALL BE MAINTAINED BY THE CONTRACTOR WITHIN THE PROJECT LIMITS. IF THE CONTRACTOR'S OPERATION IN ANY WORK ZONE WILL EXCEED A PERIOD OF 2 WEEKS, OR IF DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL REMOVE PORTIONS OF THE EXISTING MARKINGS AND INSTALL TEMPORARY MARKINGS AS DETAILED ON THIS SHEET. TEMPORARY MARKINGS SHALL BE IN ACCORDANCE WITH THE MUTCD, CONTRACT PLANS AND/OR PROPOSAL.
- WHEN ALL WORK IS COMPLETED IN THE WORK ZONE, OR AS DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL REMOVE THE TEMPORARY MARKINGS AND RESTORE THE EXISTING MARKINGS.
9. IF THE CONTRACTOR'S OPERATION IN ANY WORK ZONE WILL EXCEED FOUR DAYS, OR EXTEND INTO A WEEKEND, OR IF ORDERED BY THE ENGINEER, DRUMS SHALL BE SUBSTITUTED FOR CONES IN AN ASSOCIATED TRAFFIC PATTERNS. THE DRUMS SHALL BE SPACED AT 70 FOOT INTERVALS ON TAPERS AND 120 FOOT INTERVALS ON THE ADJACENT SECTIONS OF ADJACENT (NOTE: DRUMS MAY BE SUBSTITUTED FOR CONES AT ANY TIME PROVIDED THE ADJACENT MAXIMUM IS NOT EXCEEDED). VERTICAL DRUMS AND/OR TUBULAR MARKERS MAY BE SUBSTITUTED FOR CONES WITH THE APPROVAL OF THE ENGINEER.

2/9/90		
DATE	DESCRIPTION	BY
NEWISONS		
NEW YORK STATE THRUWAY AUTHORITY DEPARTMENT OF TRANSPORTATION AND INFRASTRUCTURE 800 SOUTHERN BLVD., ALBANY, N.Y. 12208		
TITLE OF PROJECT		
LOCATION OF PROJECT		
TITLE OF DRAWING		
TWO LANE THRUWAY TRAFFIC CONTROL PLAN		
	CONTRACT NUMBER	
	DATE	
	DRAWING NUMBER	

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		14R1	51
RTE. 9W OVER THRUWAY B.I.N. 1-05355-0				
RTE. 32 OVER KAATERSKILL CREEK B.I.N. 1-02237-0				
RTE. 23 OVER NAUYO STREAM B.I.N. 1-01772-0				
BRIDGE DECK REPAIRS				
GREENE COUNTY				

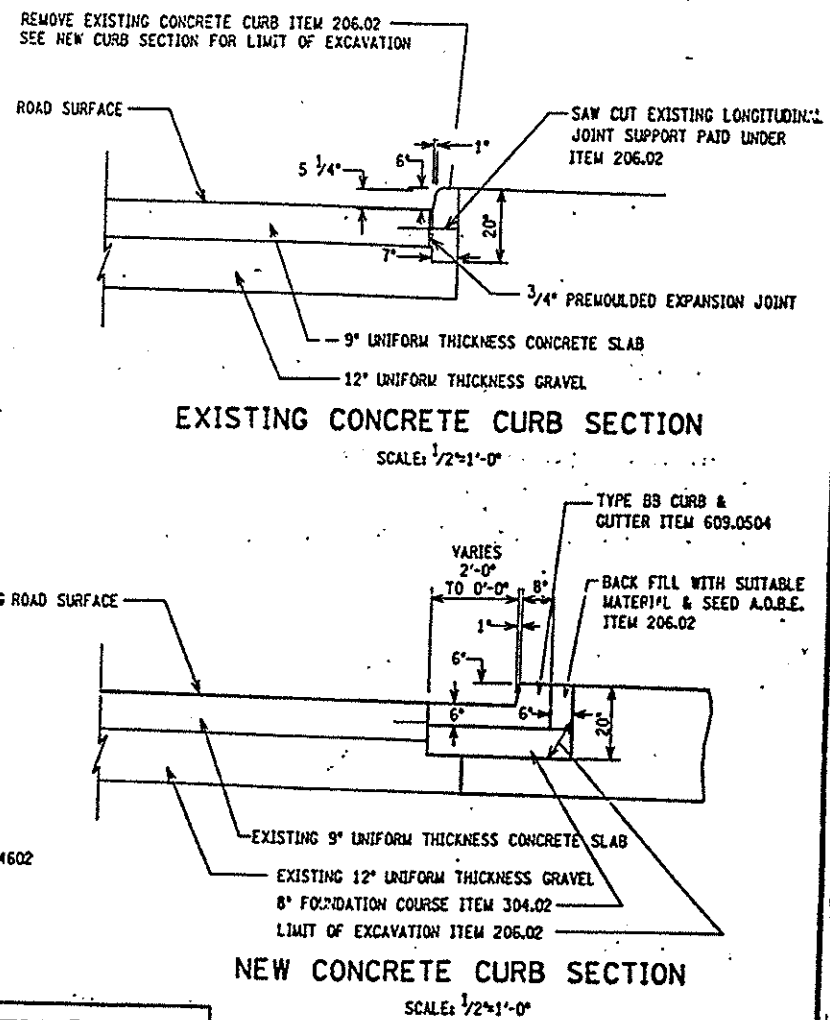
MARKING	LENGTH	TYP. INT.	A	B	C	D	E
North approach panel							
SH-1 12' 11" 1/2" 1st.	200	874					
SH-1 12' 11" 1/2" 1st.	200	874					
SH-2 12' 11" 1/2" 1st.	200	874					
SH-3 12' 11" 1/2" 1st.	200	874					
SH-4 12' 11" 1/2" 1st.	200	874					
SH-5 12' 11" 1/2" 1st.	200	874					
SH-6 12' 11" 1/2" 1st.	200	874					
SH-7 12' 11" 1/2" 1st.	200	874					
SH-8 12' 11" 1/2" 1st.	200	874					
SH-9 12' 11" 1/2" 1st.	200	874					
SH-10 12' 11" 1/2" 1st.	200	874					
SH-11 12' 11" 1/2" 1st.	200	874					
SH-12 12' 11" 1/2" 1st.	200	874					
SH-13 12' 11" 1/2" 1st.	200	874					
SH-14 12' 11" 1/2" 1st.	200	874					
SH-15 12' 11" 1/2" 1st.	200	874					
SH-16 12' 11" 1/2" 1st.	200	874					
SH-17 12' 11" 1/2" 1st.	200	874					
SH-18 12' 11" 1/2" 1st.	200	874					
SH-19 12' 11" 1/2" 1st.	200	874					
SH-20 12' 11" 1/2" 1st.	200	874					
SH-21 12' 11" 1/2" 1st.	200	874					
SH-22 12' 11" 1/2" 1st.	200	874					
SH-23 12' 11" 1/2" 1st.	200	874					
SH-24 12' 11" 1/2" 1st.	200	874					
SH-25 12' 11" 1/2" 1st.	200	874					
SH-26 12' 11" 1/2" 1st.	200	874					
SH-27 12' 11" 1/2" 1st.	200	874					
SH-28 12' 11" 1/2" 1st.	200	874					
SH-29 12' 11" 1/2" 1st.	200	874					
SH-30 12' 11" 1/2" 1st.	200	874					
SH-31 12' 11" 1/2" 1st.	200	874					
SH-32 12' 11" 1/2" 1st.	200	874					
SH-33 12' 11" 1/2" 1st.	200	874					
SH-34 12' 11" 1/2" 1st.	200	874					
SH-35 12' 11" 1/2" 1st.	200	874					
SH-36 12' 11" 1/2" 1st.	200	874					
SH-37 12' 11" 1/2" 1st.	200	874					
SH-38 12' 11" 1/2" 1st.	200	874					
SH-39 12' 11" 1/2" 1st.	200	874					
SH-40 12' 11" 1/2" 1st.	200	874					
SH-41 12' 11" 1/2" 1st.	200	874					
SH-42 12' 11" 1/2" 1st.	200	874					
SH-43 12' 11" 1/2" 1st.	200	874					
SH-44 12' 11" 1/2" 1st.	200	874					
SH-45 12' 11" 1/2" 1st.	200	874					
SH-46 12' 11" 1/2" 1st.	200	874					
SH-47 12' 11" 1/2" 1st.	200	874					
SH-48 12' 11" 1/2" 1st.	200	874					
SH-49 12' 11" 1/2" 1st.	200	874					
SH-50 12' 11" 1/2" 1st.	200	874					
SH-51 12' 11" 1/2" 1st.	200	874					
SH-52 12' 11" 1/2" 1st.	200	874					
SH-53 12' 11" 1/2" 1st.	200	874					
SH-54 12' 11" 1/2" 1st.	200	874					
SH-55 12' 11" 1/2" 1st.	200	874					
SH-56 12' 11" 1/2" 1st.	200	874					
SH-57 12' 11" 1/2" 1st.	200	874					
SH-58 12' 11" 1/2" 1st.	200	874					
SH-59 12' 11" 1/2" 1st.	200	874					
SH-60 12' 11" 1/2" 1st.	200	874					
SH-61 12' 11" 1/2" 1st.	200	874					
SH-62 12' 11" 1/2" 1st.	200	874					
SH-63 12' 11" 1/2" 1st.	200	874					
SH-64 12' 11" 1/2" 1st.	200	874					
SH-65 12' 11" 1/2" 1st.	200	874					
SH-66 12' 11" 1/2" 1st.	200	874					
SH-67 12' 11" 1/2" 1st.	200	874					
SH-68 12' 11" 1/2" 1st.	200	874					
SH-69 12' 11" 1/2" 1st.	200	874					
SH-70 12' 11" 1/2" 1st.	200	874					
SH-71 12' 11" 1/2" 1st.	200	874					
SH-72 12' 11" 1/2" 1st.	200	874					
SH-73 12' 11" 1/2" 1st.	200	874					
SH-74 12' 11" 1/2" 1st.	200	874					
SH-75 12' 11" 1/2" 1st.	200	874					
SH-76 12' 11" 1/2" 1st.	200	874					
SH-77 12' 11" 1/2" 1st.	200	874					
SH-78 12' 11" 1/2" 1st.	200	874					
SH-79 12' 11" 1/2" 1st.	200	874					
SH-80 12' 11" 1/2" 1st.	200	874					
SH-81 12' 11" 1/2" 1st.	200	874					
SH-82 12' 11" 1/2" 1st.	200	874					
SH-83 12' 11" 1/2" 1st.	200	874					
SH-84 12' 11" 1/2" 1st.	200	874					
SH-85 12' 11" 1/2" 1st.	200	874					
SH-86 12' 11" 1/2" 1st.	200	874					
SH-87 12' 11" 1/2" 1st.	200	874					
SH-88 12' 11" 1/2" 1st.	200	874					
SH-89 12' 11" 1/2" 1st.	200	874					
SH-90 12' 11" 1/2" 1st.	200	874					
SH-91 12' 11" 1/2" 1st.	200	874					
SH-92 12' 11" 1/2" 1st.	200	874					
SH-93 12' 11" 1/2" 1st.	200	874					
SH-94 12' 11" 1/2" 1st.	200	874					
SH-95 12' 11" 1/2" 1st.	200	874					
SH-96 12' 11" 1/2" 1st.	200	874					
SH-97 12' 11" 1/2" 1st.	200	874					
SH-98 12' 11" 1/2" 1st.	200	874					
SH-99 12' 11" 1/2" 1st.	200	874					
SH-100 12' 11" 1/2" 1st.	200	874					



- NOTES:
- LONGITUDINAL & TRANSVERSE JOINTS SHALL BE SAW CUT AND REESTABLISHED AT ALL EXISTING LOCATIONS AFTER OVERLAY. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 18502.4602
 - EXISTING CONCRETE PAVEMENT APPROACH SHALL BE REPAIRED A.O.B.E. UNDER ITEM 502.06 PRIOR TO OVERLAY THE DECK AND THE APPROACH.
 - THE LENGTH AND DEPTH OF RECONSTRUCTION FOR THE HIGHWAY APPROACHES WILL VARY ACCORDING TO FIELD CONDITIONS. THE FINISHED SURFACE SHALL BE ESTABLISHED TRUE TO LINE AND GRADE TO PRODUCE A SATISFACTORY RIDING QUALITY A.O.B.E.
 - SEE DWG AP-3 FOR GRADE RAIL DETAILS.
 - UTILITY CONDUITS ARE TO BE LOCATED A.O.B.E. IN ACCORDANCE WITH FIELD CONDITION.
 - SEE SPECIAL NOTE IN PROPOSAL CONCERNING OPTIONAL APPROACH OVERLAYS AT THIS LOCATION.

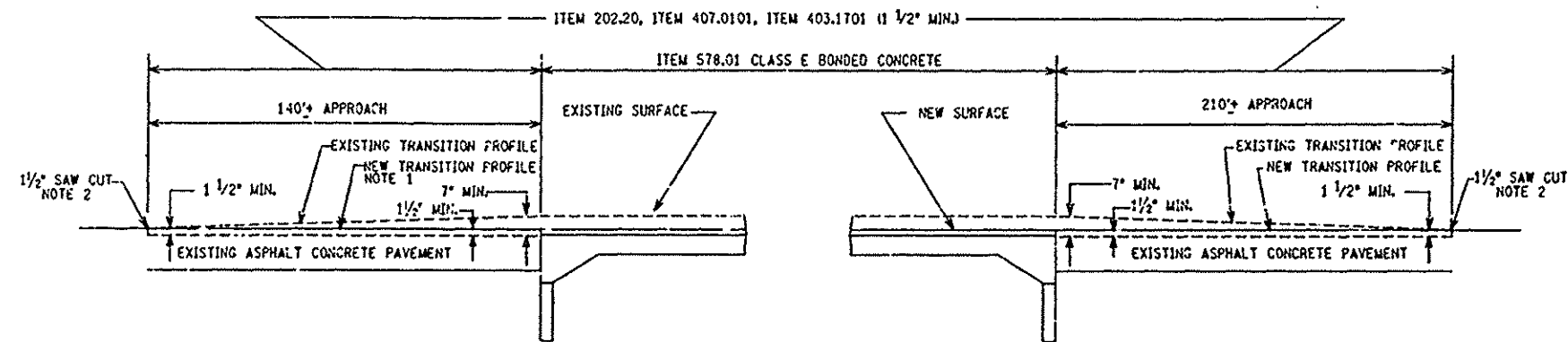
REVISIONS

ITEM NO.	DESCRIPTION
202.20	REMOVE BITUMINOUS CONCRETE OVERLAY
206.02	TRENCH AND CULVERT EXCAVATION
502.06	CEMENT CONCRETE PAVEMENT, UNREINFORCED, CLASS 'C'
15502.4598	PRESSURE RELIEF JOINTS IN EXISTING CEMENT CONCRETE
18502.4602	SEAL LONGITUDINAL AND TRANSVERSE JOINTS IN OVERLAYED APPROACH SLABS
16555.6603	TRANSVERSE SAWCUT GROOVING OF STRUCTURAL SLAB SURFACE
579.01	STRUCTURAL SLAB SCARIFICATION
*99584.1201	MICRO-SILICA CONCRETE OVERLAY
609.0504	CONVENTIONAL FORM AND MACHINE FORM CONCRETE CURB AND CUTTER TYPE BB
206.03	CONDUIT EXCAVATION AND BACK FILL
556.0202	EPOXY-COATED BAR REINFORCEMENT
580.04	REMOVAL OF CONCRETE APPROACH SLAB
555.0404	CONCRETE FOR STRUCTURES, CLASS 'E'



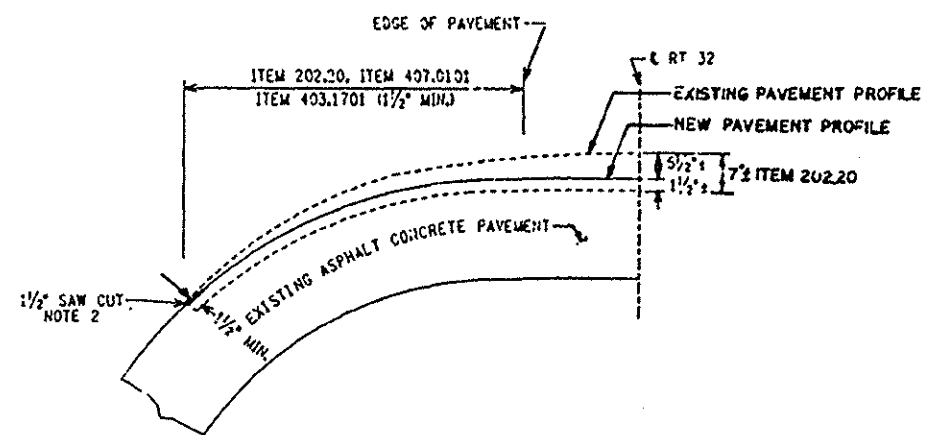
AS-BUILT REVISIONS			
SIGNATURE		DATE	
ROUTE 9W APPROACH DETAILS			
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION			
DRAWING NO. AP-1	SCALE AS SHOWN	DATE 12/89	REGION ONE

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		15	51
RTE. 9W OVER THRUWAY B.I.N. 1-05355-0				
RTE. 32 OVER KAATERSKILL CREEK B.I.N. 1-02237-0				
RTE. 23 OVER NAUVO STREAM B.I.N. 1-01772-0				
BRIDGE DECK REPAIRS				
GREENE COUNTY				



APPROACH TRANSITION PROFILE

RT. 32 OVER KAATERSKILL
NOT TO SCALE



HIGH FALLS RD. PROFILE

NOT TO SCALE

ITEM NO.	DESCRIPTION
202.20	REMOVE BITUMINOUS CONCRETE OVERLAY
403.1701	ASPHALT CONCRETE TYPE 6F TOP COURSE (HIGH FRICTION)
407.0101	TACK COAT
578.01	BONDED CONCRETE WEARING SURFACE FOR STRUCTURAL SLABS

NOTES:

1. THE LENGTH AND DEPTH OF RECONSTRUCTION FOR THE HIGHWAY APPROACHES WILL VARY ACCORDING TO FIELD CONDITIONS. THE FINISHED SURFACE SHALL BE ESTABLISHED TRUE TO LINE AND GRADE TO PRODUCE A SATISFACTORY RIDING QUALITY A.O.B.E..
2. NO DIRECT PAYMENT WILL BE MADE FOR THIS WORK. THE COST IS TO BE INCLUDED IN THE PRICE BID FOR ITEM 202.20
3. SEE DWG NO. P-1 FOR THE PROFILES WITH ELEVATIONS.
4. SEE DWG NO. AP-3 FOR GUIDE RAIL DETAILS.

AS-BUILT REVISIONS

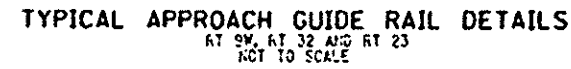
SIGNATURE

DATE

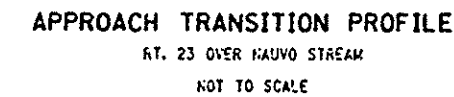
ROUTE 32 APPROACH DETAILS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION

DRAWING NO.	SCALE	DATE	REGION ONE
AP-2	NONE	12/89	



CURB REMOVAL & RESTORATION DETAILS
RT. 2^N OVER MAJNO STREAM
NOT TO SCALE

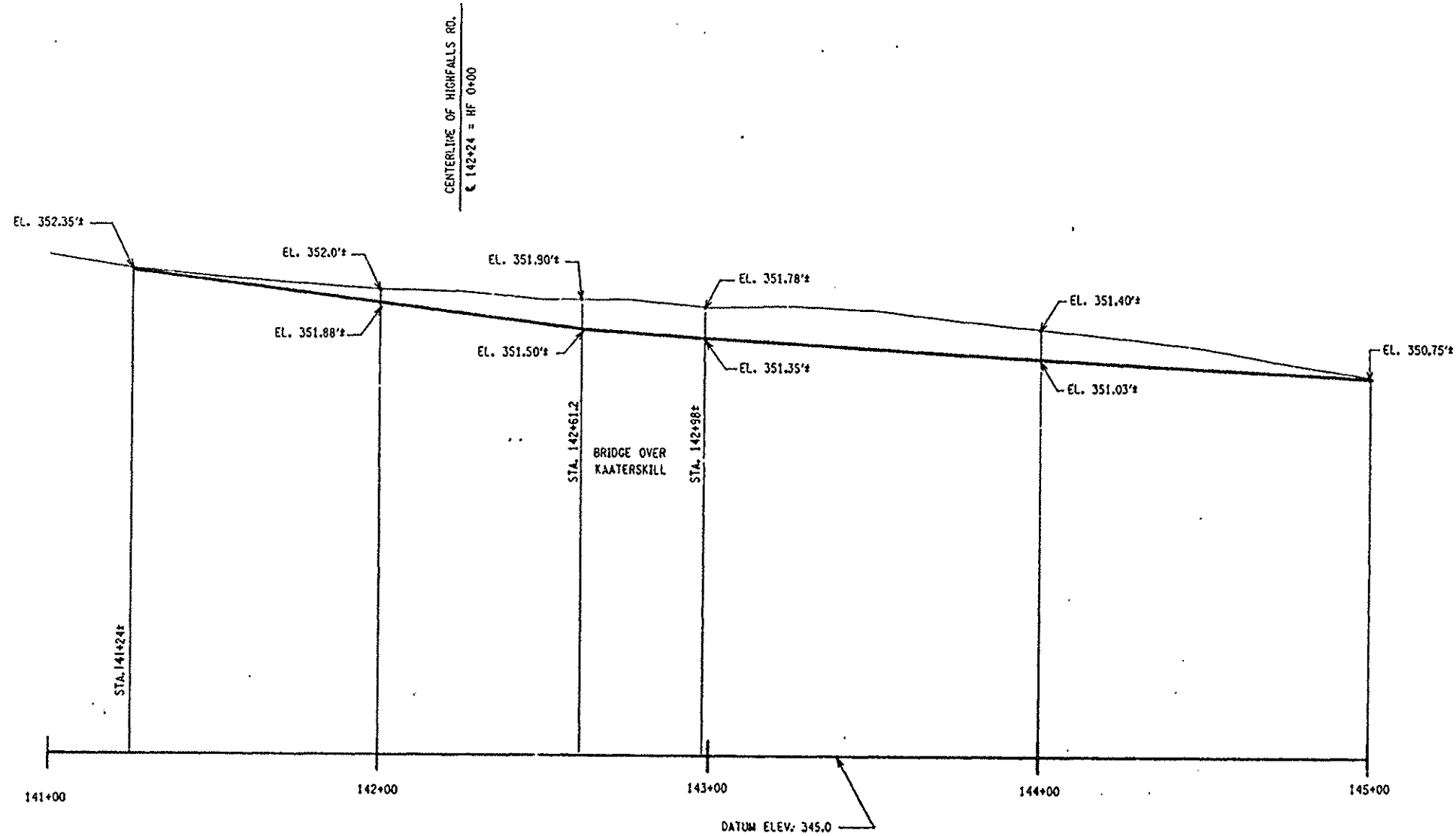


NOTES:

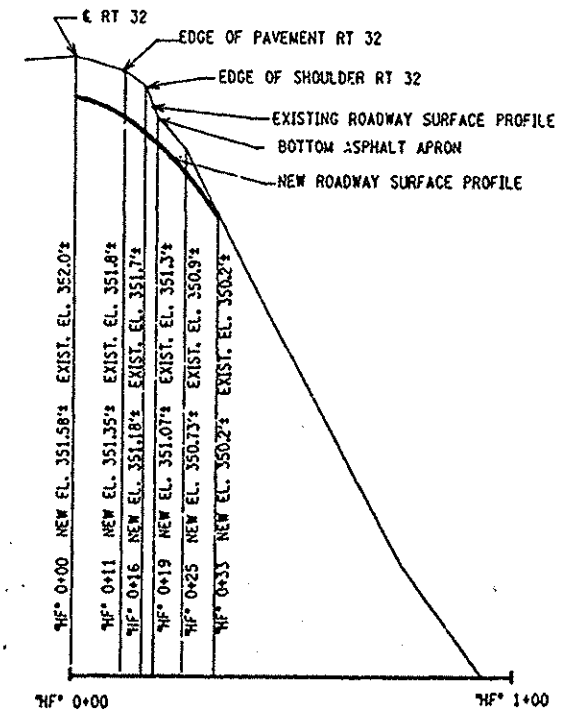
1. THE CONTRACTOR SHALL BACK FILL THE AREA WITH SUITABLE MATERIAL AFTER APPROACH CURBS ARE REMOVED AND EXCAVATE ANY EXCESS SOIL TO PROVIDE POSITIVE DRAINAGE FOR RUNOFF. THE AREA WITHIN THE BACK FILL AND EXCAVATION SHALL BE SEEDED A.O.B.E. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 203.02
2. THE LENGTH AND DEPTH OF RECONSTRUCTION FOR THE HIGHWAY APPROACHES WILL VARY ACCORDING TO FIELD CONDITIONS. THE FINISHED SURFACE SHALL BE ESTABLISHED TRUE TO LIME AND GRADE TO PRODUCE A SATISFACTORY RIDING QUALITY A.O.B.E.

AS-BUILT REVISIONS			
SIGNATURE		DATE	
RT 23 APPROACH DETAILS			
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION			
DRAWING NO. AP-3	SCALE NONE	DATE 12/89	REGION ONE

FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		17	51
RTE. 9W OVER THRUWAY B.I.N. 1-05355-0				
RTE. 32 OVER KAATERSKILL CREEK B.I.N. 1-02237-0				
RTE. 23 OVER NAUVO STREAM B.I.N. 1-01772-0				
BRIDGE DECK REPAIRS				
GREENE COUNTY				



RTE. 32 TRANSITION PROFILE
SCALE: H 1"=20'
V 1"=10'



HIGH FALLS ROAD TRANSITION PROFILE
SCALE: H 1"=20'
V 1"=10'

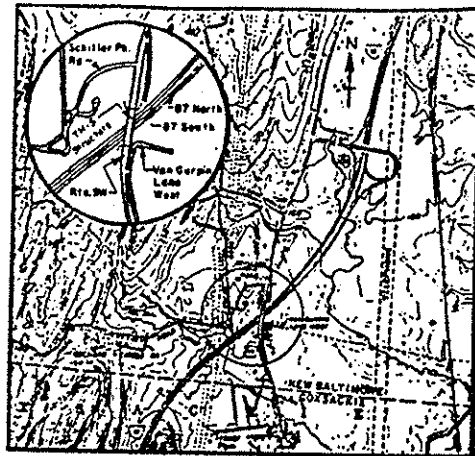
NOTES:

1. THE CONTRACTOR SHALL VERIFY THE ELEVATIONS IN THE FIELD BEFORE REMOVING ASPHALT CONCRETE AT APPROACH AND RESURFACING THE APPROACH A.O.B.E. COST TO BE INCLUDED IN THE PRICE BID FOR THE VARIOUS APPROACH ITEMS.

AS-BUILT REVISIONS	
SIGNATURE	DATE
ROUTE 32 PROFILE	
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION	
DRAWING NO. P-1	SCALE AS SHOWN
DATE 12/89	REGION ONE

FED. RD. DIST. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		18	51

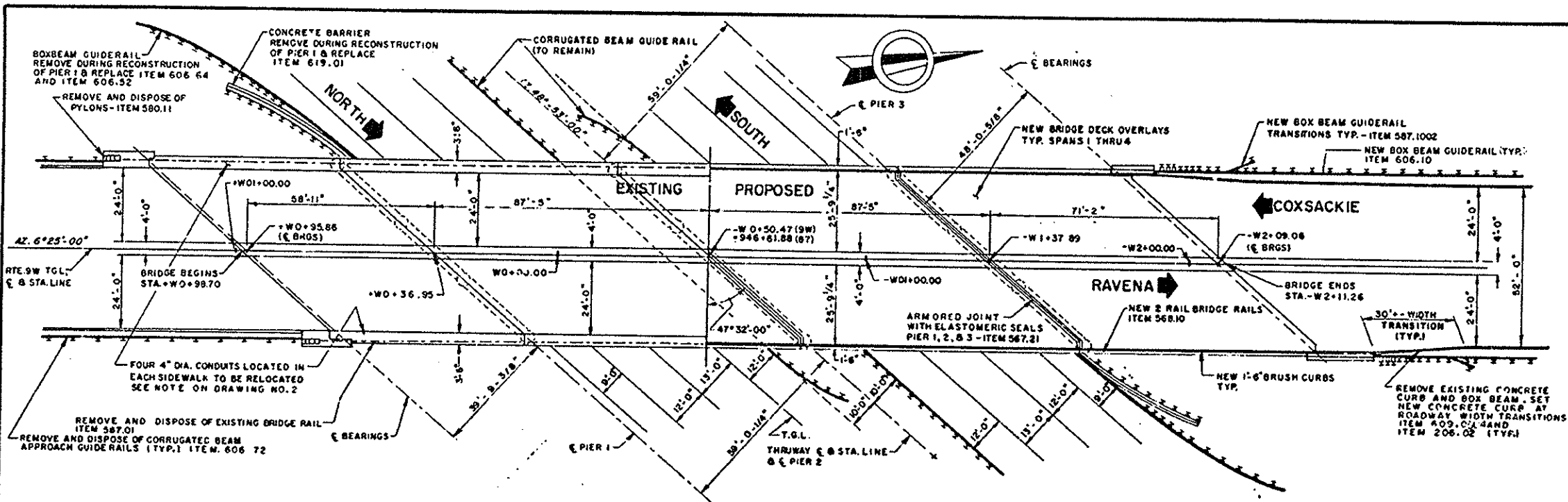
RTE 9W OVER THRUWAY BIN 1-05355-0
 RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0
 RTE 23 OVER MAHOY STREAM BIN 1-01772-0
 BRIDGE DECK REPAIRS
 GREENE CO.
 CAPITAL PROJECT IDENTIFICATION NO. 1803.26



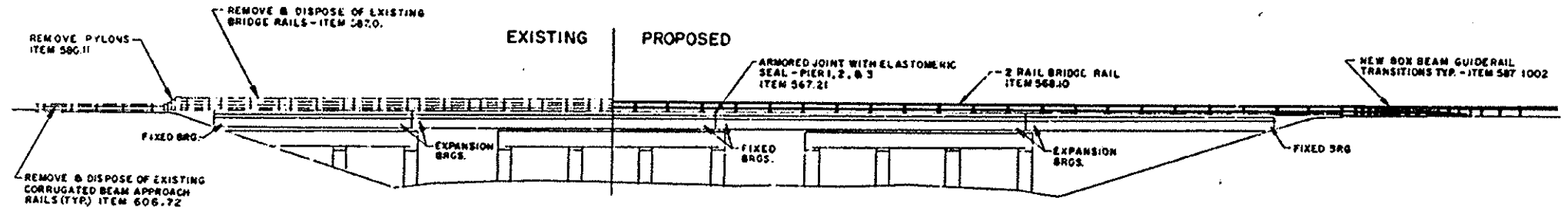
RAVENA QUADRANGLE
LOCATION MAP
1" = 2000'

Index of Drawings

- | Draw. No. | Description |
|-----------|--|
| 1. | General Plan, Elevation, Profiles and Sections |
| 2. | Sections |
| 3. | Estimate of Quantities and Notes |
| 4. | South Abutment |
| 5. | North Abutment |
| 6. | Pier 1 Rehabilitation |
| 7. | Pier 2 Rehabilitation |
| 8. | Pier 3 Rehabilitation |
| 9. | Pier 4 Rehabilitation |
| 10. | Pier 5 Rehabilitation |
| 11. | Transverse Section |
| 12. | Bridge Rail Layout and U-Well Details |
| 13. | Overlay and Wingwall Reinforcement |
| 14. | Structural Lifting Details |
| 15. | Grid Layout for Potential Tests |
| 16. | Structural Slab Repair Preparation Details |
| 17. | Existing Joint at Pier |
| 18. | Armored Joint at Pier |
| 19. | Details of Armored Joint System with Elastomeric Seals |
| 20. | Steel Bridge Railing - Two Rail |
| 21. | Steel Bridge Railing - Two Rail |
| 22. | BAR LIST ONE |
| 23. | BAR LIST TWO |

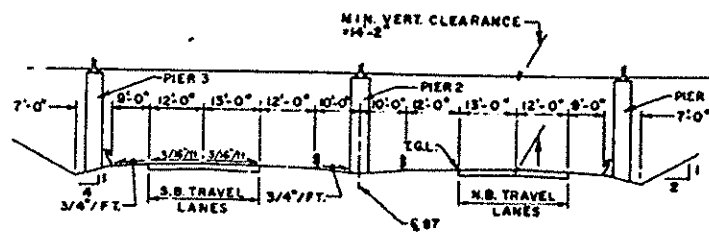


EXISTING & PROPOSED PLAN
1" = 20'-0"

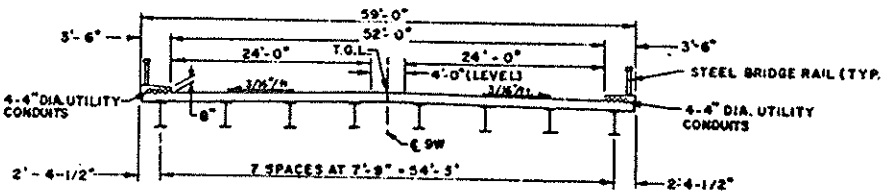


EXISTING & PROPOSED ELEVATION
1" = 20'-0"

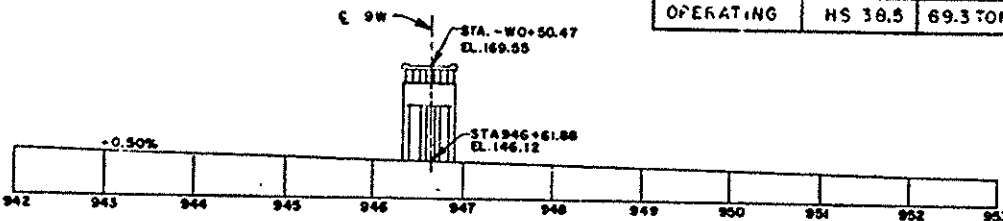
LOAD RATING (WORKING STRESS)			
INVENTORY	HS 23.2	41.8 TONS	
OPERATING	HS 30.5	69.3 TONS	



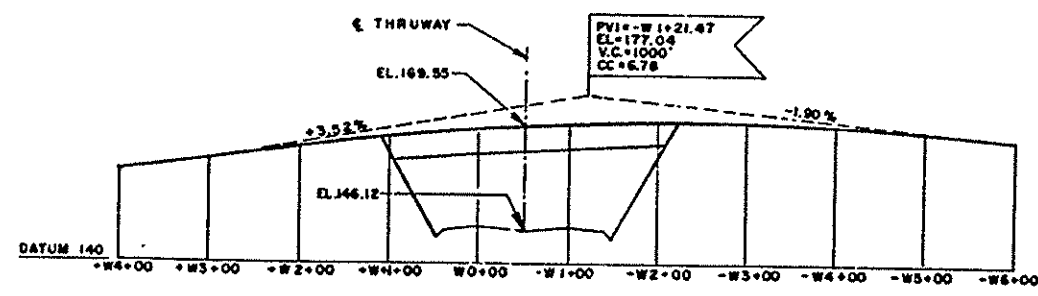
THRUWAY SECTION UNDER BRIDGE
NO SCALE



EXISTING TRANSVERSE SECTION
NO SCALE



THRUWAY PROFILE
NO SCALE



ROUTE 9W PROFILE
NO SCALE

B.I.N.1053550

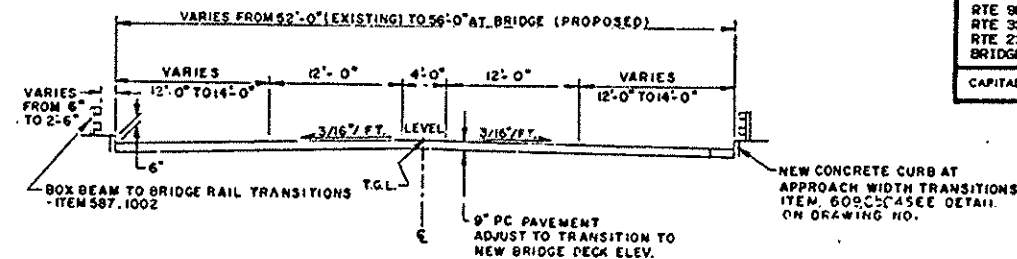
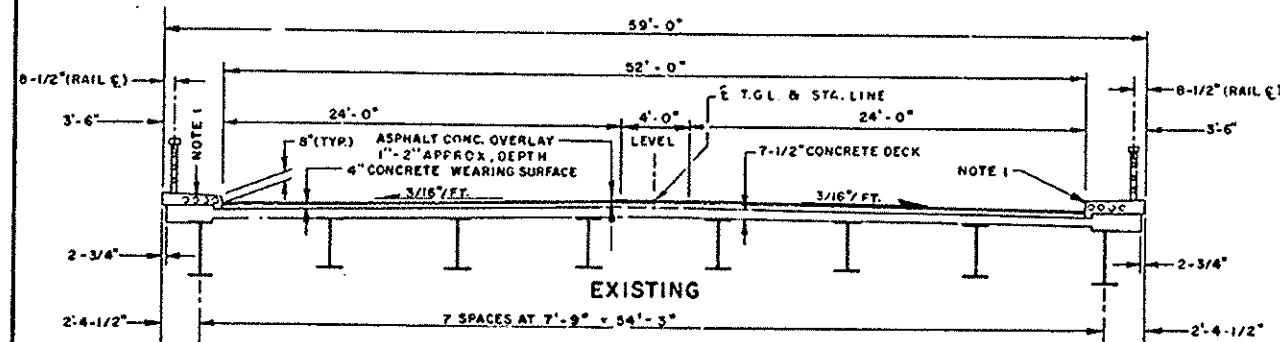
STATE OF NEW YORK
 DEPARTMENT OF TRANSPORTATION
 STRUCTURES DESIGN AND CONSTRUCTION DIVISION
ROUTE 9W OVER THE THRUWAY
GENERAL PLAN, ELEVATION
PROFILES & SECTIONS

PROJ. ENGR. A. MALIK	DATE MADE 11/89
SQUAD J. J. J.	DRAWING NO. 1 OF 23

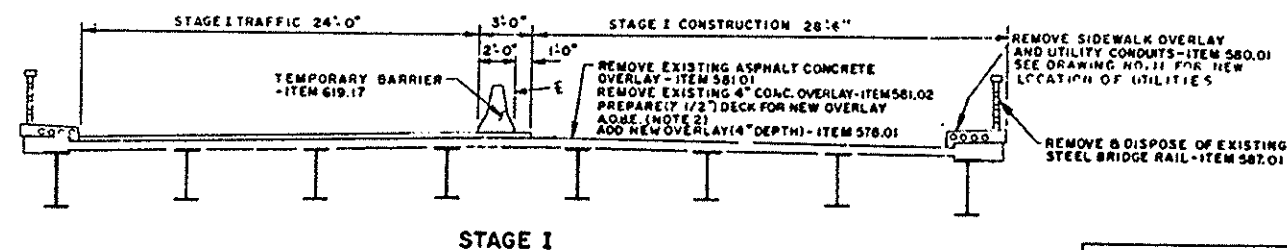
DESIGNED BY: J. B. Adams
 CHECKED BY: J. P. G. G. G.
 DETAILED BY: J. P. G. G. G.
 CHECKED BY: J. P. G. G. G.

D253150

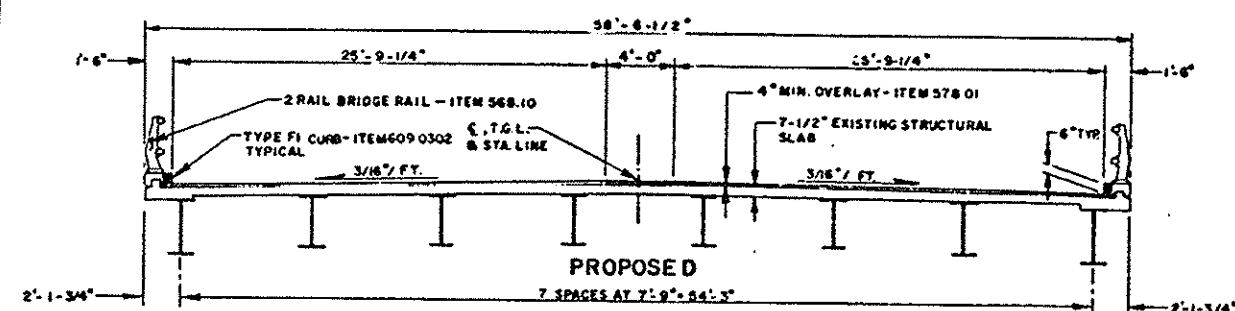
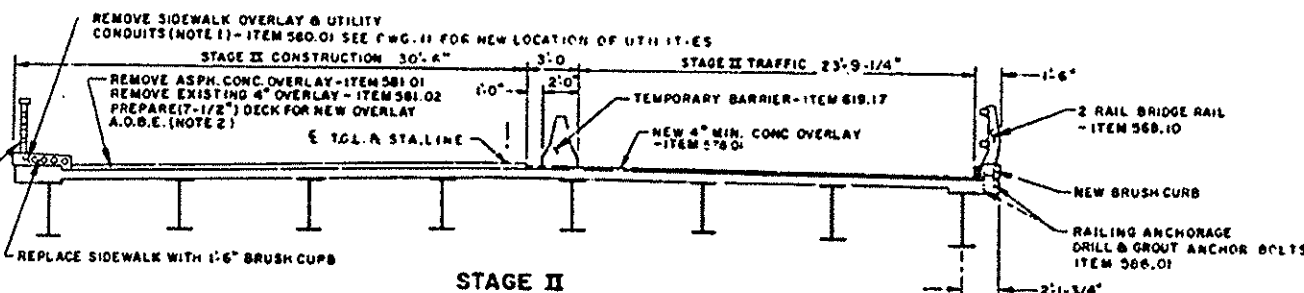
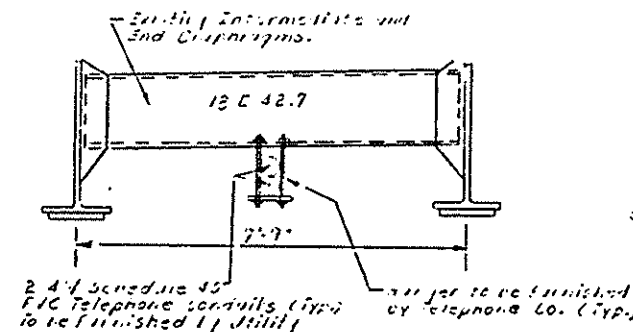
FED. RD. DIST. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		191	51
RTE 9W OVER THRUWAY BIN 1-05355-0 RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0 RTE 23 OVER MALVO STREAM BIN 1-01772-0 BRIDGE DECK REPAIRS GREENE CO. CAPITAL PROJECT IDENTIFICATION NO. 1803 26				



APPROACH SECTION
NO SCALE



These conduits contain asbestos and will be removed and disposed of in accordance with Special Specification, Item



TRANSVERSE SECTIONS
3/16" = 1'-0"

NOTES

1. New Structural Steel for Utility Supports to be ASTM A36. Cost to be included in Price Bid for Item 01662.6052.1 01662.6081.001. Install Telephone Conduits on Structure. Estimated weight of Steel = 3175 lbs.
2. All new Structural Steel for Utility Supports is to be painted to the same requirements as the existing steel. Cost to be included in the Utility Item.
3. Cost of field drilling holes in existing steel for utility supports is to be included in the Utility Item.
4. Expansion Joints in Conduits are to be located adjacent to Piers 1, 2 and 3 (3 per conduit).
5. UTILITY CONDUITS SHALL BE HUNG UNDER BRIDGE & UTILITIES RELOCATED BEFORE CONSTRUCTION STAGE I BEGINS.
6. AFTER THE EXISTING 4" CONCRETE (WEARING SURFACE) DECK OVERLAY IS REMOVED (ITEM 581.02), THE SURFACE OF THE REMAINING 7-1/2" STRUCTURAL SLAB WILL BE SCARIFIED (ITEM 579.01). A STRUCTURAL SLAB SURVEY WILL THEN BE MADE TO DETERMINE THE LIMITS OF REINFORCEMENT EXPOSURE (ITEM 579.02).
7. THE CONTRACTOR SHOULD MEET WITH THE UTILITY OWNERS TO WORK OUT A PLAN & SCHEDULE FOR INSTALLING HANGERS AND UTILITIES UNDER THE BRIDGE PRIOR TO STAGE I CONSTRUCTION. ANY PLAN AGREED UPON BETWEEN CONTRACTOR & UTILITY COMPANY SHOULD BE SUBMITTED TO THRUWAY AUTHORITY AND DEPT. OF TRANSPORTATION STRUCTURES DIVISION DIRECTOR OR HIS DESIGNEE FOR APPROVAL.
8. WORKS ON SAFETY WALK AND UTILITY RELOCATION CAN NOT BE PROCEED UNTIL ALL THE NECESSARY ASBESTOS REMOVAL VARIANCES HAS BEEN FINALIZED AND APPROVED.
9. THE TWO CONDUITS USED BY THE STATE TELEPHONE COMPANY ON THE EAST SIDE OF THE BRIDGE ARE TO BE RELOCATED. ALL OTHER CONDUITS ON THE BRIDGE HAVE BEEN ABANDONED.

B.I.N. 1053550

STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN AND CONSTRUCTION DIVISION	
ROUTE 9W OVER THE THRUWAY	
SECTIONS	
PROJ. ENG. A. MALIK	DATE MADE 11/89
SQUAD 01/2/89	DRAWING NO. 2 OF 23

REVISIONS

DESIGNED BY: C. P. Malik

CHECKED BY: C. P. Malik

DESIGNED BY: C. P. Malik

DESIGNED BY: C. P. Malik

ESTIMATE OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED	FINAL
276.01	STRUCTURE EXCAVATION	CY	3.9	14.00
555.0102	CONCRETE FOR STRUCTURES, CLASS A (PRIMARY STRESS PLACEMENTS)	CY	5.1	53.80
555.0103	CONCRETE FOR STRUCTURES, CLASS A (MAINTENANCE PLACEMENTS)	CY	5.5	34.78
1255.0003	TRANSVERSE SAWCUT GROOVING OF STRUCTURAL SLAB SURFACE	SF	15,972	16,908.00
556.0202	EPOXY-COATED BAR REINFORCEMENT FOR STRUCTURES	LB	13,714	21,822.34
559.01	EPOXY PROTECTIVE COATING	SF	2,300	8091.40
1555.4302	BRIDGE BEARING RESTORATION	EA	17	19.00
FF7.21	ARMORED JOINT SYSTEM WITH ELASTOMERIC SEALER	LF	257	256.15
FF8.12	STEEL BRIDGE RAILING (TWO RAIL)	LF	671	670.65
570.0701	ENVIRONMENTAL GROUND PROTECTION	LS	NCC.	100.00
1570.11001	DISPOSAL OF PAINT REMOVAL WASTE	CY	2.5	11.00
1570.8201	MAINTENANCE CLEANING AND EPOXY PRIMER	LS	NCC.	100.00
18570.8301	MAINTENANCE PAINTING EPOXY INTERMEDIATE COAT	LS	NCC.	100.00
18570.8401	MAINTENANCE PAINTING URETHANE FINISH COAT	LS	NCC.	100.00
578.01	BOISED CONCRETE WEARING SURFACE FOR STRUCTURAL SLABS	SF	15,120	32,601.00
579.01	STRUCTURAL SLAB SCARIFICATION	SF	16,270	24,772.00
579.02	REINFORCING BAR EXPOSURE	SF	5510	15,683.00
580.01	REMOVAL OF STRUCTURAL CONCRETE	CY	150	100.52
580.11	REMOVAL OF CONCRETE BRIDGE PYLONS	EA	4	4.00
581.01	REMOVAL OF BITUMINOUS CONCRETE OVERLAY (PAVING)	SF	16,120	15,860.00
581.02	REMOVAL OF CEMENT CONCRETE OVERLAY (PAVING)	SF	16,120	15,552.00
582.06	REMOVAL OF STRUCTURAL CONCRETE - REPLACEMENT WITH CLASS D CONCRETE	SF	792	379.07
582.07	REMOVAL OF STRUCT CONCRETE REPLACED WITH VENT & OVERHEAD PATCHING MATERIAL	SF	404	535.52
585.01	STRUCTURAL LIFTING OPERATIONS TYPE A	EA	13	19.00
585.02	STRUCTURAL LIFTING OPERATIONS TYPE B	EA	1	1.00
586.01	DRILL & SHOUT BOLTS OR REINFORCING BARS	LF	257	288.00
1586.19	DRILLING & GROUTING OF HIGH STRENGTH ANCHOR BOLTS	LF	213	219.00
587.01	BRIDGE RAILING REMOVAL & DISPOSAL	LF	651	647.00
587.1002	BOX BEAM BRIDGE RAIL TWO RAIL	LF	92	93.00
589.0302	STONE CURB - BRIDGE (TYPE F1)	LF	671	663.55
519.01	BASIC MAINTENANCE & PROTECTION OF TRAFFIC	LS	NCC.	100.00
519.02	CONSTRUCTION SIGNS	LS	NCC.	100.00
519.17	TEMPORARY CONCRETE BARRIER	LF	422	2,338.90
534.03	CONCRETE CYLINDER CURING BOX	EA	1	1.00
537.05	ENGINEERS OFFICE - TYPE A	HO	NCC.	14.00
539.04	MOBILIZATION	LS	NCC.	100.00

GENERAL NOTES

Design Specifications: New York State Department of Transportation Standard Specifications for Highway Bridges with 22 provisions in effect as of August 1993.

Live Loads HS20-44.

Material and Construction Specifications: Standard Specifications, Construction and Materials, New York State Department of Transportation, Office of Engineering, dated January 2, 1993 with current additions and modifications.

The cost of all joint material will be included in the unit prices bid for the various items of the Contract, unless otherwise specified on the Plans.

Plans of the existing structure are available for inspection at the Office of the Regional Director.

RECONSTRUCTION NOTES

The Contractor's attention is directed to the fact that, due to the nature of RECONSTRUCTION projects, the exact extent of RECONSTRUCTION work cannot always be accurately determined prior to the commencement of work. These Contract Documents have been prepared based on field inspection and other information available at the time. Actual field conditions may require modifications to construction details and work quantities. The Contractor shall perform the work in accordance with field conditions.

The Contractor shall perform all work with care so that any materials which are to remain in place, or which are to remain the property of the State, will not be damaged. If the Contractor damages any materials which are to remain in place, or which are to remain the property of the State, the damaged materials shall be repaired or replaced in a manner satisfactory to the Engineer at the expense of the Contractor.

Whenever items in the Contract require materials to be removed and disposed of, the cost of supplying a disposal area and transportation to that area shall be included in the unit prices bid for those items.

During removal operations, the Contractor shall not be allowed to drop waste concrete, debris and other material to the area below the bridge except where the plans specifically permit the dropping of material. Platforms, nets, screens or other protective devices shall be used to catch the material. If the Engineer determines that adequate protective devices are not being employed, the work shall be suspended until adequate protection is provided.

All material falling on the area below and adjacent to the bridge shall be removed and disposed of by the Contractor.

The cost of furnishing, installing, maintaining, removing and disposing of all platforms, nets, screens or other protective devices shall be included in the unit prices bid for the appropriate items of the Contract.

The details on Drawing Nos. 4-10 indicate the spots, scales and cracks noted on a field inspection by STATE forces. All of the major areas of spalling, scaling and cracking, known to exist at the time of Contract preparation have been shown to indicate the approximate extent of deterioration that will have to be repaired by the Contractor.

Areas of concrete deterioration shall be repaired using Item 582.06 - Removal of Structural Concrete - Replacement with Class D Concrete, or Item 582.07 - Removal of Structural Concrete - Replacement with Vertical and Overhead Patching Material as shown on the Plans or as ordered by the Engineer.

The Contractor shall be responsible for the design of temporary structural supports required for the reconstruction of portions of Pier 1 as shown on the Drawings. Plans shall be submitted to the Engineer for approval.

All concrete surfaces receiving new concrete shall be sandblasted. Just prior to the application of new concrete, the surfaces shall be air cleared, wet down and coated with a thin coating of 1:1 mortar or neat cement paste thoroughly brushed into the surface. It will not be necessary to brush the mortar into surfaces made inaccessible by mesh or closely spaced reinforcement when so determined by the Engineer. There will be no separate payment for this work. The cost shall be included in the unit prices bid for the various concrete items in the Contract.

The structural steel for this bridge shall be completely painted with sage green color paint, Munsell Book Notation 7.5 GY 5/4.

FED. RD. REC. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		2041	51
RTE 9W OVER THRUWAY BIN 1-05355-0 RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0 RTE 23 OVER HAUVO STREAM BIN 1-01772-0 BRIDGE DECK REPAIRS GREENE CO. CAPITAL PROJECT IDENTIFICATION NO. 1803.26				

All concrete removed under Item 579.02 is to be replaced and an additional minimum overlay depth above the original deck slab surface is to be provided in accordance with the specifications for the overlay. Minimum concrete cover is to be 2 1/4".

Concrete overlay shall be placed continuously over the full length of the slab, in accordance with the construction phases shown on the plans. Construction joints other than the joint established between work stages are not desirable and will be allowed only with the permission of the Engineer.

STRUCTURAL SLAB SURVEY

The Engineer will perform a structural slab survey to determine the limits of reinforcing bar exposure.

This survey will be performed after the contractor has removed the existing wearing course and waterproofing membrane, if any exists, and has completed scarification of the structural slab.

After scarification of the structural slab is completed, the contractor shall lay out and mark a grid system on the surface of the structural slab as shown on Drawing 1.

The Contractor shall also establish electrical grounds for test equipment by removing concrete around reinforcing bars as shown on Drawing 1 at two locations in each span. The location will be determined by the Engineer.

The cost of laying out and marking the grid system shall be included in the price bid for various items of the contract.

The cost of establishing grounds shall be included in the price bid for various items of the contract.

It is estimated that 35% of the deck surface area will require reinforcing bar exposure.

All slab reinforcing steel is to be retained in place.

Epoxy Protective Coating, Item 559.01, shall be applied to the following surfaces:

Abutments: All exposed pedestal surfaces, bridge seats, including the area under the bearings, exposed vertical surfaces of tankwall, and curbside walls facing the superstructure.

Piers With Columns:

The entire pier beam and pedestals, including the surfaces under the bearings of the reconstructed portion of Pier 1, and all pier columns.

Decks: All fascia surfaces.

Traffic shall be maintained at all times concurrent with the work. For traffic routines refer to applicable plans.

If the structure has a Bridge Identification Number (BIN) Plate attached, it shall be the Contractor's responsibility to protect it during construction or remove and remount it after construction is completed.

For details of Profile Transition see approach plans.

REVISIONS

STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN AND CONSTRUCTION DIVISION	
ROUTE 9W OVER THE THRUWAY	
ESTIMATE OF QUANTITIES AND NOTES	
PROJ. ENG. A.J. MALE	DATE MADE 11/99
SQUAD A.P. YAMMOTT	DRAWING NO. 3 OF 23

DESIGN CHECKED BY: J. A. MALE

L.C. KOSZAL

REVIEW BY:

DESIGN CHECKED BY:

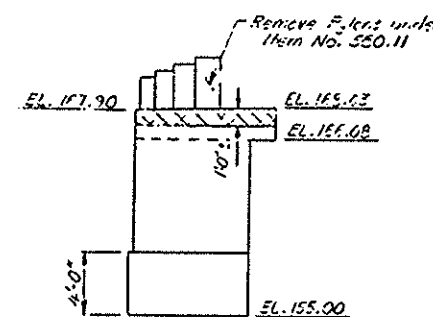
DESIGNED BY:

D253150

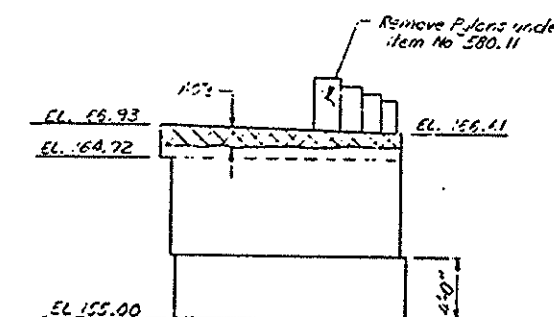
FED. RD. DIST. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		21A1	51
RTE 9W OVER THRUWAY BIN 1-05355-0 RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0 RTE 23 OVER NAUVO STEAM BIN 1-01772-0 BRIDGE DECK REPAIRS GREENE CO. CAPITAL PROJECT IDENTIFICATION NO 1803.26				

Concrete to be removed under Item No. 550.01

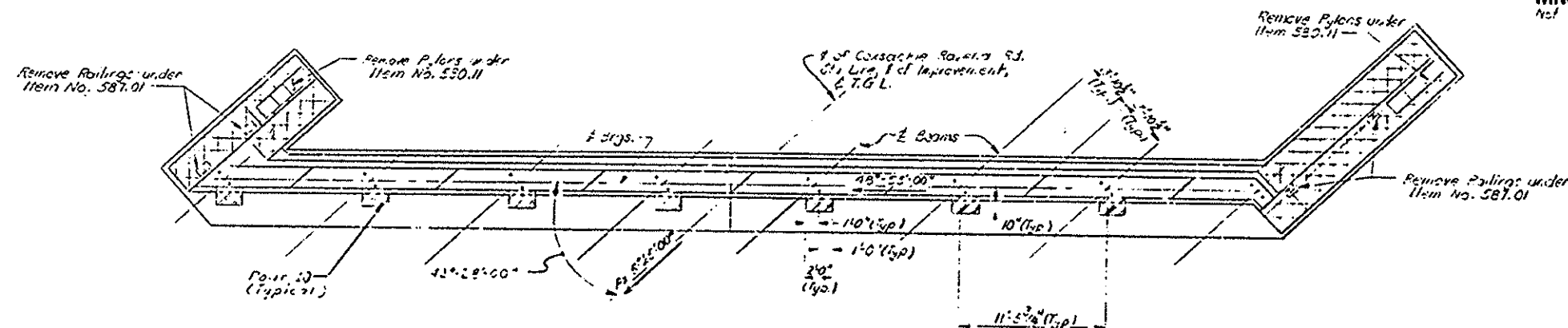
Class A Concrete to be added under Item No. 555.0103



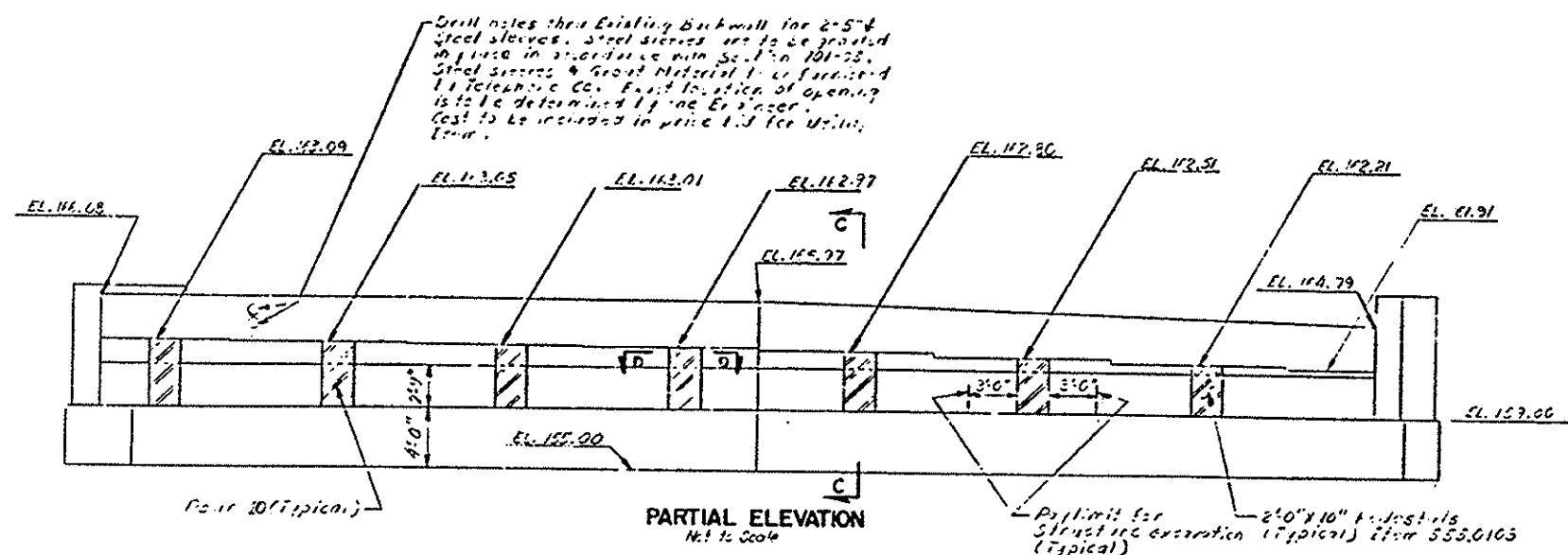
ELEVATION-SOUTHEAST
WINGWALL
Not to Scale



ELEVATION-SOUTHWEST
WINGWALL
Not to Scale



PLAN
Not to Scale



PARTIAL ELEVATION
Not to Scale

NOTE:

For Principal reinforcement see Section C-C and D-D Drawing No. 5.
For details of Alteration of Wingwalls see Drawing No. 12.

CONCRETE TABLE (ITEM 555.0103)	
FEDESTALS-POUR 10	0.34 C.Y.

REVISIONS

STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN AND CONSTRUCTION DIVISION	
ROUTE 9W OVER THE THRUWAY	
SOUTH ABUTMENT	
PROJ. ENG. A. H. MALIK SIGNED: <i>A. H. Malik</i>	DATE MADE 11/00 DRAWING NO. 4 OF 23

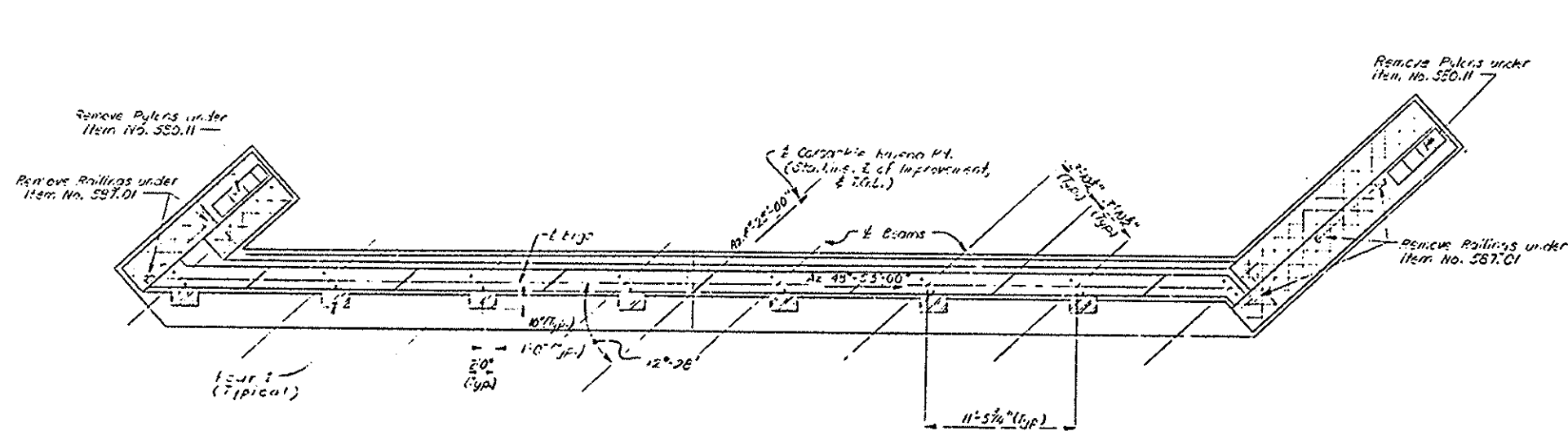
DESIGNED BY: *A. H. Malik*
 CHECKED BY: *A. H. Malik*
 DATE: 11/00

D253150

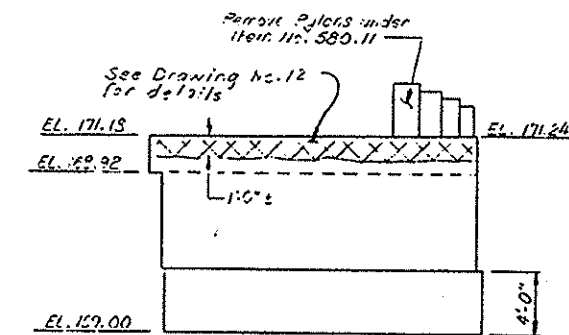
FED. RD. PROJ. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		22 R1	51
RTE 9W OVER THRUWAY BIN 1-05355-0 RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0 RTE 29 OVER NAUVO STREAM BIN 1-01772-0 BRIDGE DECK REPAIRS GREENE CO. CAPITAL PROJECT IDENTIFICATION NO. 1803.26				

Concrete to be removed under item No. 580.01

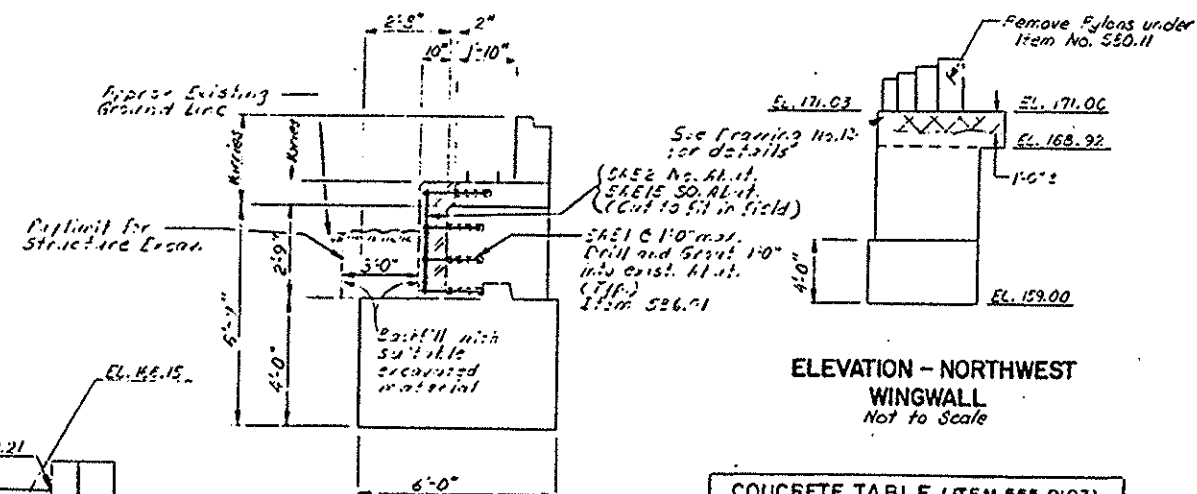
Class A concrete to be added under item 555.0103



PLAN
Not to Scale



ELEVATION - NORTHEAST
WINGWALL
Not to Scale

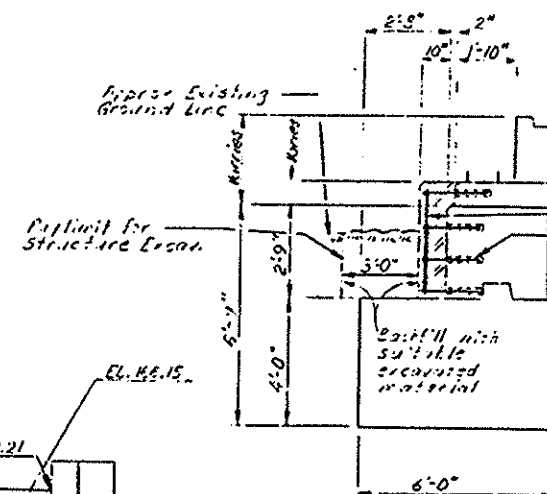


ELEVATION - NORTHWEST
WINGWALL
Not to Scale

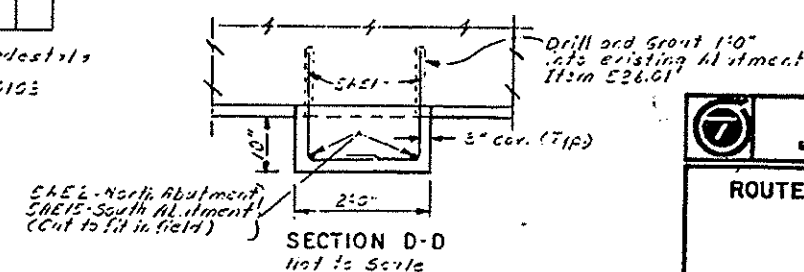
CONCRETE TABLE (ITEM 555.0103)	
PEDESTALS-POUR 1	0.88 1.45 C.Y.

REVISIONS

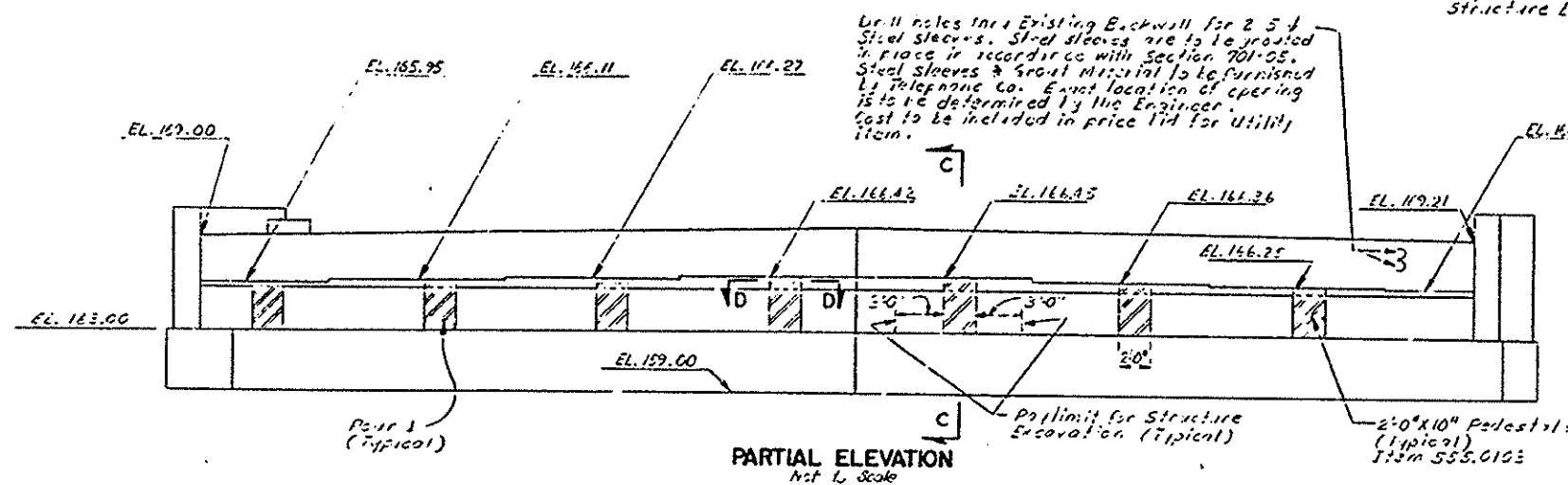
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN AND CONSTRUCTION DIVISION	
ROUTE 9W OVER THE THRUWAY	
NORTH ABUTMENT	
PROJ. ENG. A.H. MALIK	DATE MADE 11/89
SQUAD AP 2/2/89	DRAWING NO. 5 OF 23



SECTION C-C
Not to Scale



SECTION D-D
Not to Scale



PARTIAL ELEVATION
Not to Scale

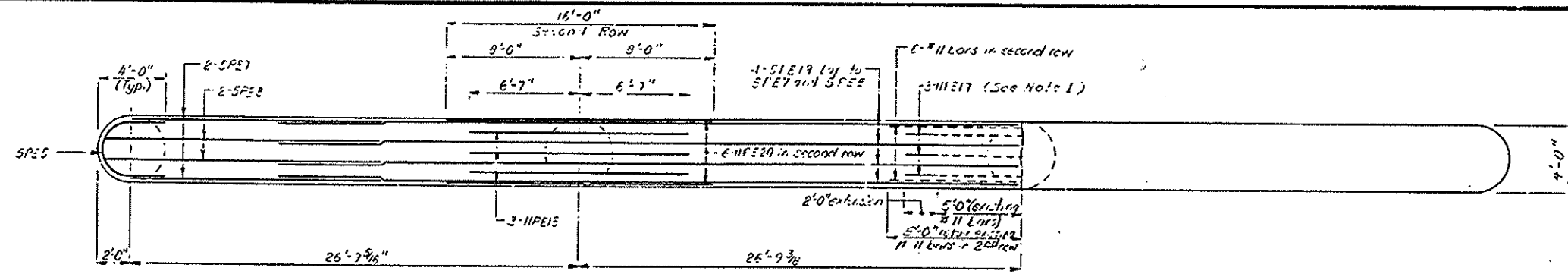
DETAIL CHECKED BY J.B. Baker

DESIGN CHECKED BY J.B. Baker

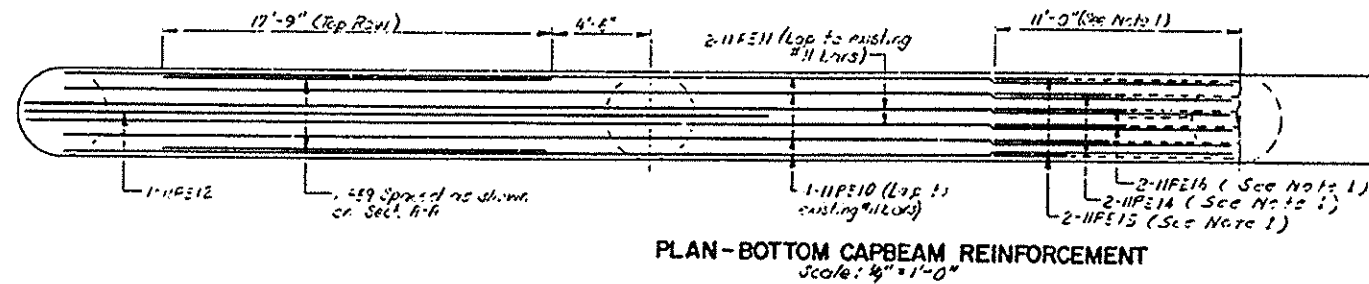
DESIGN CHECKED BY J.B. Baker

DESIGN CHECKED BY J.B. Baker

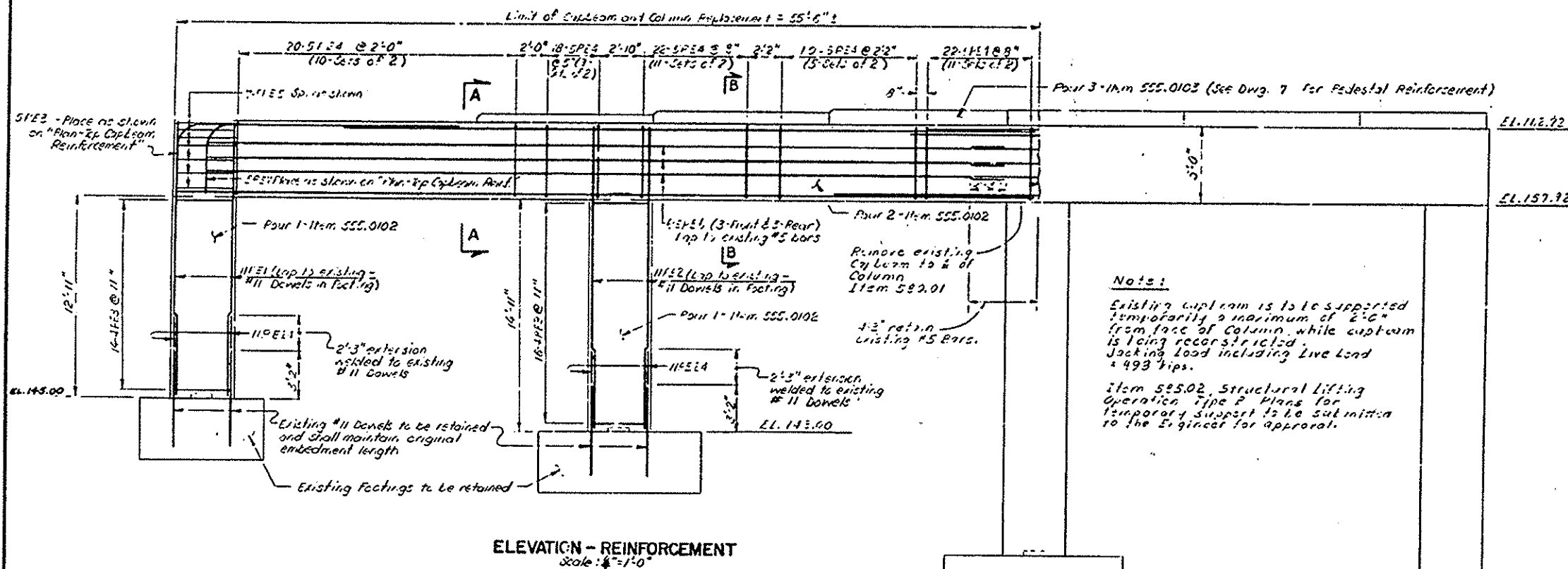
D253150.



PLAN-TOP CAPBEAM REINFORCEMENT
Scale: $\frac{1}{4}'' = 1'-0''$



PLAN-BOTTOM CAPBEAM REINFORCEMENT
Scale: $\frac{1}{4}'' = 1'-0''$



ELEVATION - REINFORCEMENT
Scale: $\frac{1}{4}'' = 1'-0''$

FED. RD. DIST. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		23R1	51

RTE 9W OVER THRUWAY BIN 1-05355-0
RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0
RTE 29 OVER NAUVO STREAM BIN 1-01772-0
BRIDGE DECK REPAIRS
GREENE CO.
CAPITAL PROJECT IDENTIFICATION NO. 1503.26



PIER 1 CONCRETE TABLE (C.Y.)		
ITEM NO.	555.0102	555.0103
POUR 1	12.96	—
POUR 2	41.10	—
POUR 3	—	3.38
TOTAL C.Y.	54.06	3.38

- 11PE14, 11PE15, 11PE16, 11PE17 bars are to be welded to existing bars in order to achieve a 11'-0" extension beyond & of column.
- All welded extensions to #11 bars shall be in accordance with current New York State Steel Construction Manual.
- Unless shown cover on bar reinforcement shall be 2".
- Existing columns to be removed shall be paid for under item 585.01.
- For Sections A-A and B-B see Drawing 7.

Notes:

Existing capbeam is to be supported temporarily a maximum of 2'-6" from face of column while capbeam is being reconstructed. Jacking load including live load is 493 kips.

Item 585.02, Structural Lifting Operation, Type 2 Plans for temporary support is to be submitted to the Engineer for approval.

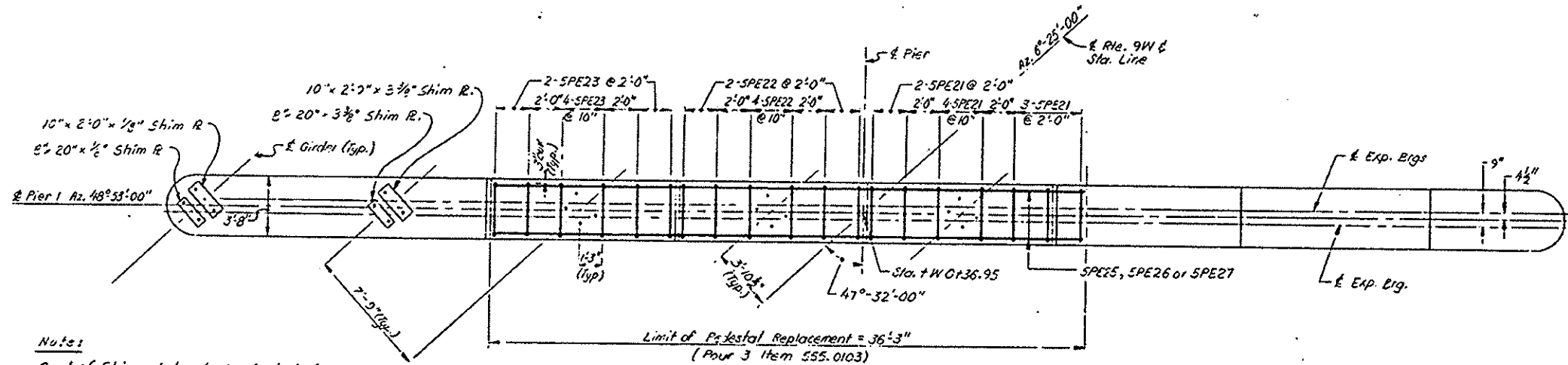
REVISIONS

STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN AND CONSTRUCTION DIVISION	
ROUTE 9W OVER THE THRUWAY	
PIER 1 RECONSTRUCTION	
PROJ. ENG. H.H. Malik	DATE MADE 11/89
SQUAD C.P. Yarnall	DRAWING NO. 6 OF 23

D253150

FED. RD. PROJ. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		24	51

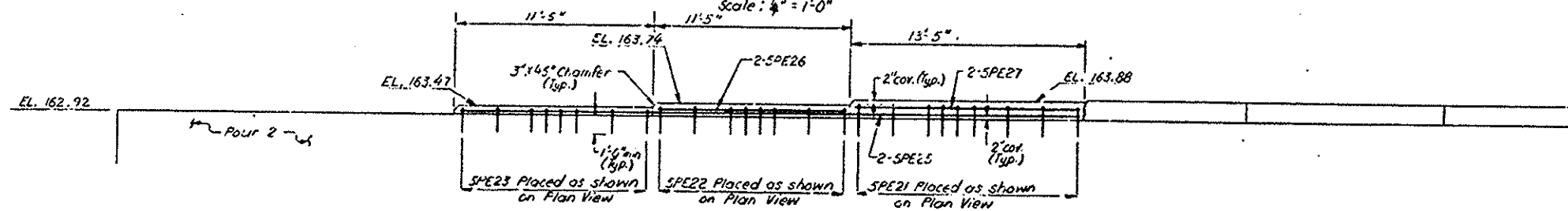
RTE 9W OVER THRUWAY BIN 1-05355-0
 RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0
 RTE 23 OVER NAUVO STREAM BIN 1-01772-0
 BRIDGE DECK REPAIRS
 GREENE CO.
 CAPITAL PROJECT IDENTIFICATION NO. 1803.26



Notes:
 Cost of Shim plates to be included
 in Bearing Restoration
 Item 15565.4 = 02.

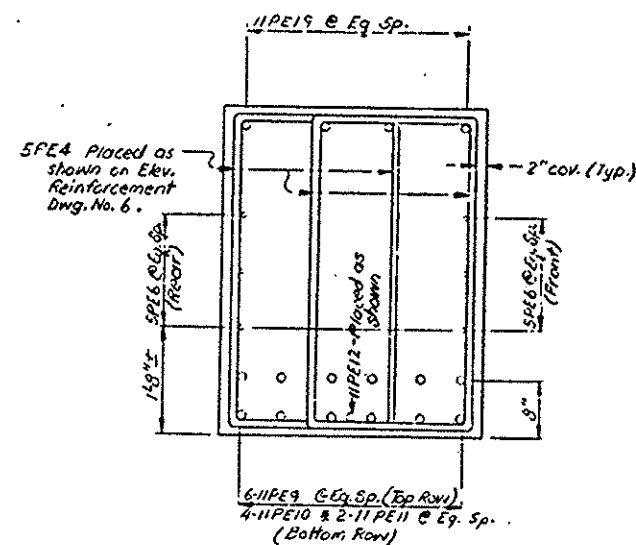
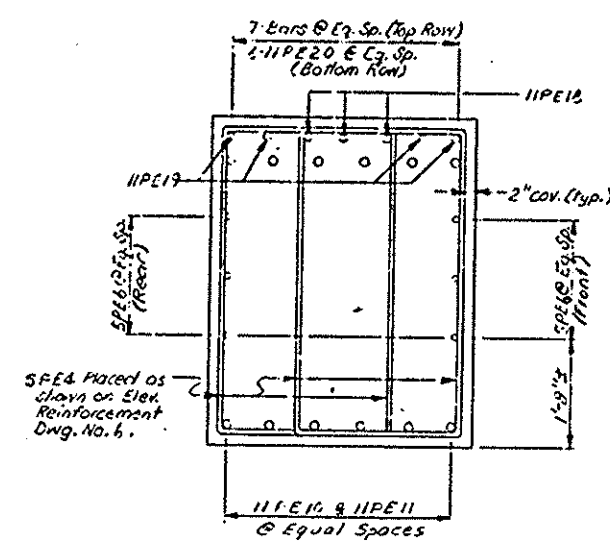
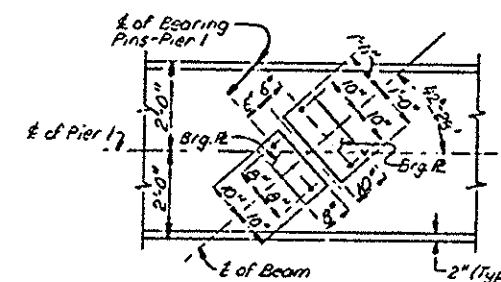
PLAN - PEDESTAL REINFORCEMENT

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



ELEVATION - PEDESTAL REINFORCEMENT

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

SECTION A-A
Scale: 1/4" = 1'-0"SECTION B-B
Scale: 1/4" = 1'-0"BEARING ANCHORAGE
LAYOUT
Scale: 1/2" = 1'-0"

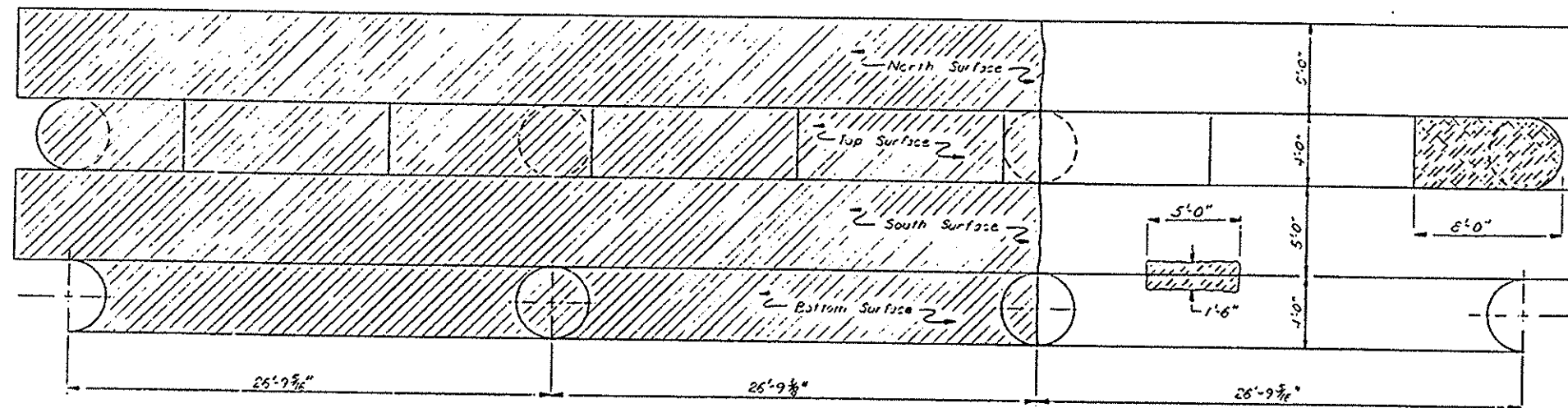
For location of Sections A-A & B-B see
 Dwg. No. 6.

Reinforcement Bars SPE21, SPE22 & SPE23
 originate in Pour 2

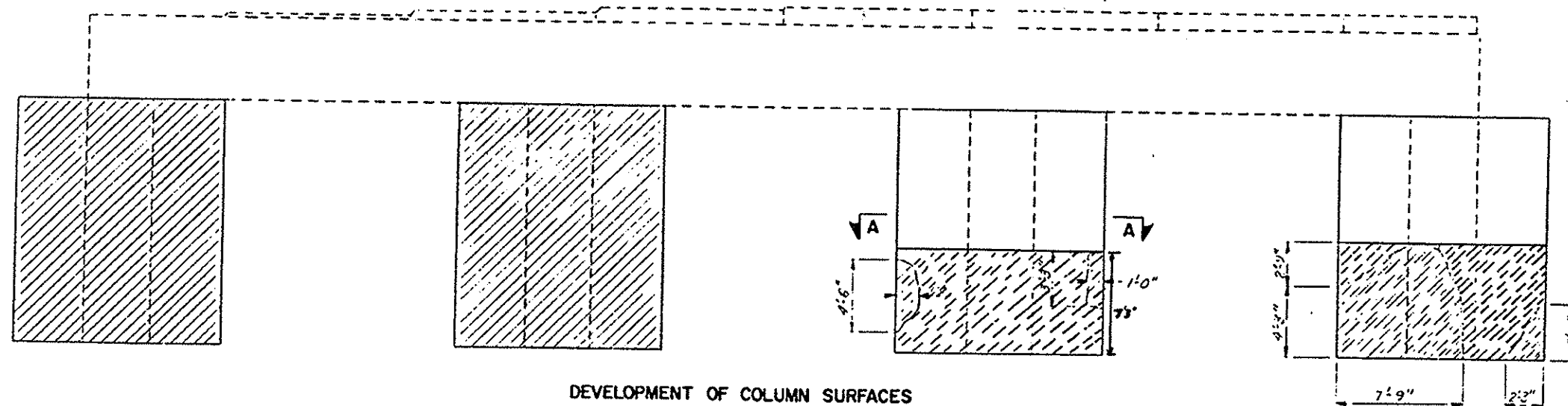
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN AND CONSTRUCTION DIVISION	
ROUTE 9W OVER THE THRUWAY	
PEDESTAL RECONSTRUCTION AND SECTIONS	
PROJ. ENG. A.H. MALIK	DATE MADE 11/29
SQUAD 7 P 4	DRAWING NO. 7 OF 23

D253150

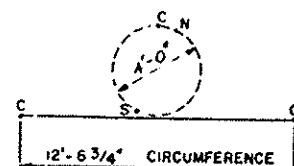
FED. RD. DIST. NO.	STATE	FEDERAL AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		25 RI	51
RTE 9W OVER THRUWAY B1N 1-05355-0 RTE 32 OVER KAATERSKILL CREEK B1N 1-02237-0 RTE 23 OVER NAUVO STREAM B1N 1-01772-0 BRIDGE DECK REPAIRS				GREENE CO.
CAPITAL PROJECT IDENTIFICATION NO. 1503.26				



DEVELOPMENT OF CAP BEAM SURFACES
Scale: $\frac{1}{4}" = 1'-0"$



DEVELOPMENT OF COLUMN SURFACES
Scale: $\frac{1}{4}" = 1'-0"$



SECTION A-A



Limit of Item 582.06 Removal of Structural Concrete and Replacement with Class D Concrete.

Limit of Item 582.07 Removal of Structural Concrete and Replacement with vertical & overhead patching material.

Concrete to be removed under Item 582.01 and replaced with Item 582.0102, Concrete for Structures, Class A.

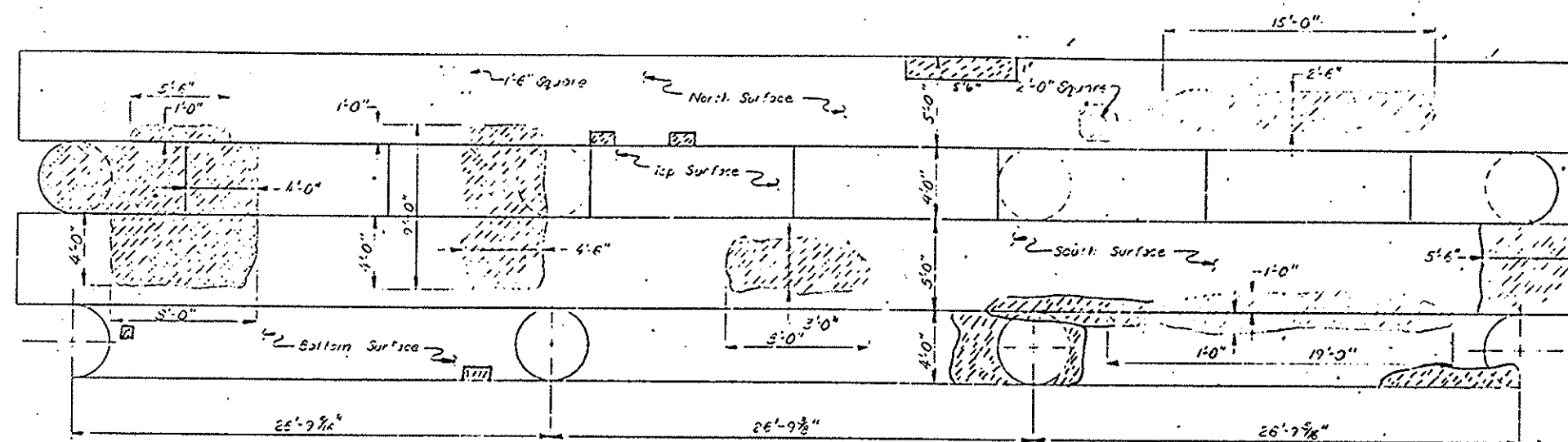
Note:
See Drawing 6 for Pier Reconstruction.
See Drawing 14 for Bearing Restoration locations.

REVISIONS

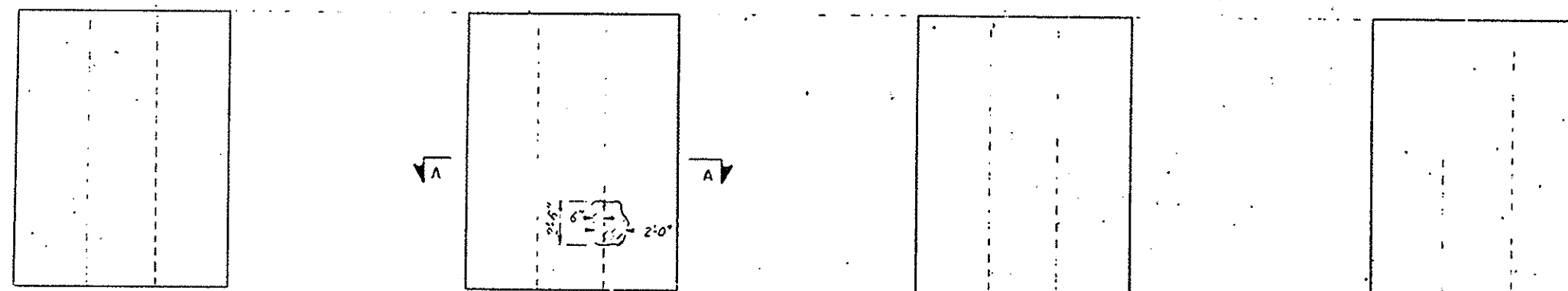
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN AND CONSTRUCTION DIVISION	
ROUTE 9W OVER THE THRUWAY	
PIER 1 REHABILITATION	
PROJ. ENG. A. M. MALIK	DATE MADE 11/80
SQUAD A.P. YOUNG	DRAWING NO. 8 OF 23

71

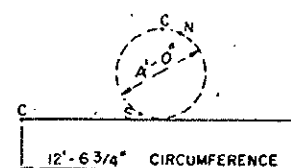
FED NO REQ NO	STATE	FEDERAL AID PROJECT NO.	SHEET NO	TOTAL SHEETS
	NEW YORK		25 RI	51
RTE 9M OVER THURWAY BIN 1-05355-0 RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0 RTE OVER NAUVO STREAM BIN 1-01772-0 BRIDGE DECK REPAIRS				
CAPITAL PROJECT IDENTIFICATION NO 1903.26				



DEVELOPMENT OF CAP BEAM SURFACES
Scale: $\frac{1}{8}'' = 1'-0''$



DEVELOPMENT OF COLUMN SURFACES



SECTION A-A



Limit of Item - 582.01 Removal of Structural Concrete and replacement with vertical & overhead patching material.

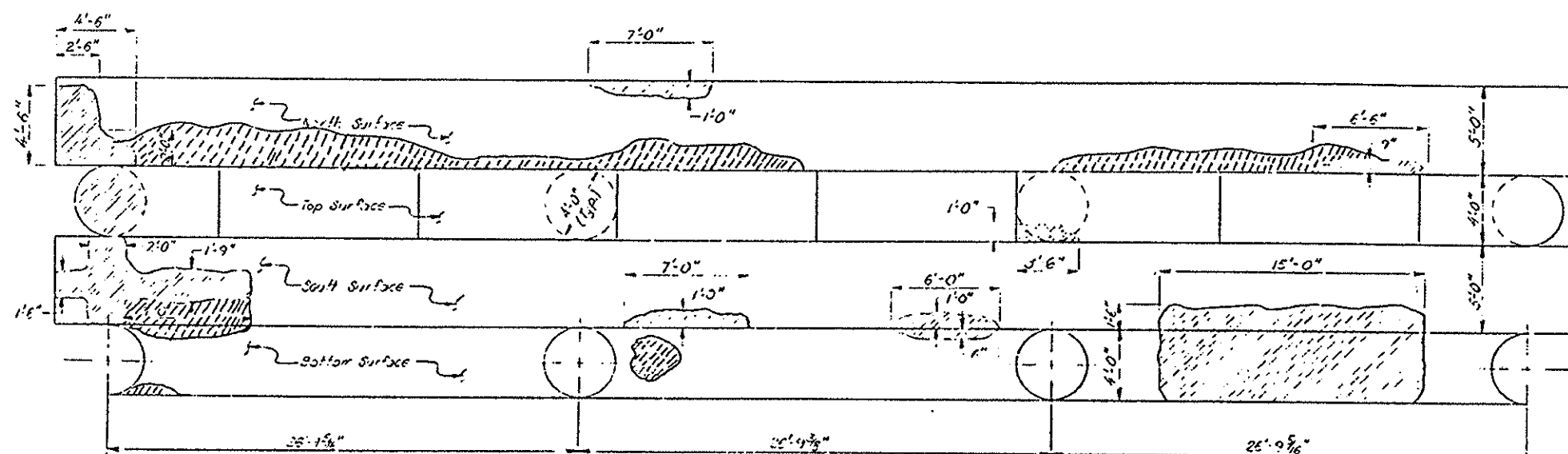
☐ Limit of Item 22204 Summary of Structural Concrete and Reinforcement with Class D Concrete.

Note: See Drawing 11 for Sealing Restoration Locations.

REVISIONS

	STATE OF NEW YORK
	DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN AND CONSTRUCTION DIVISION
ROUTE 9W OVER THE THRUWAY	
PIER 2 REHABILITATION	
PROJECT NO. A.H. MALIK	DATE MADE 11/69
SQUAD 1016	DRAWING NO. 9 OF 23

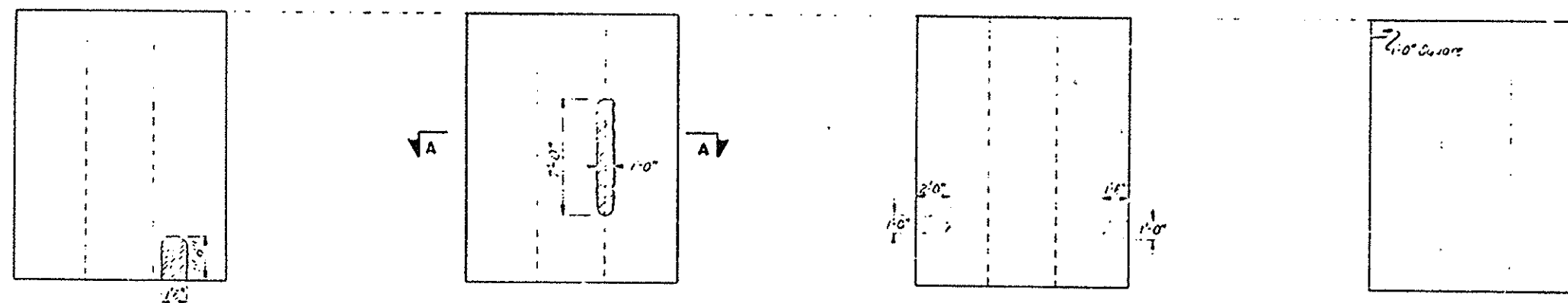
FED. RD. NO. 10	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		27A	51
RTE 9M OVER THRUWAY BIN 1-05355-0 OVER KAATERSHWH 1-02237-0 RTE 23 OVER NAUVO STREAM BIN 1-01772-0 BRIDGE DECK REPAIRS				
GREENE CO.				
CAPITAL PROJECT IDENTIFICATION NO 1203.26				



DEVELOPMENT OF CAP BEAM SURFACES
Scale: $\frac{1}{4}" = 1'-0"$

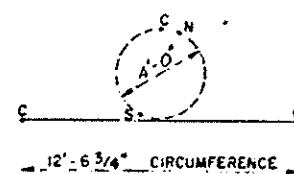
Limits of Item 532.07 - Removal of Structural
Concrete and Replacement with Vertical &
Overhead partition material.

Limit of Item 252.06 = removal of
Structural Concrete and Replacement
with Class C Concrete.



DEVELOPMENT OF COLUMN SURFACES
Scale: $\frac{1}{4}'' = 1'-0''$

Note: See Drawing 14 for Bearing Restoration Locations.



SECTION A-A

REVISIONS

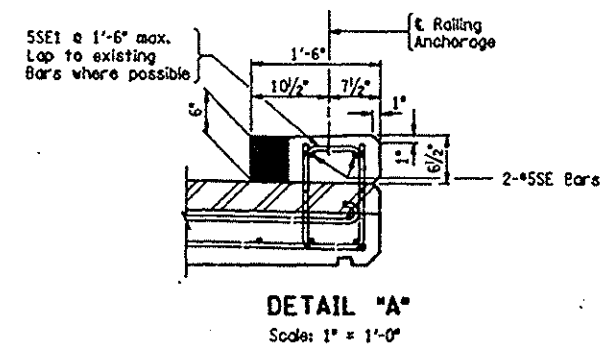
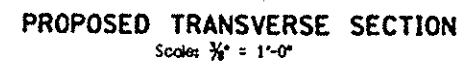
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN AND CONSTRUCTION DIVISION

ROUTE 9W OVER THE THRUWAY

PIER 3 REHABILITATION

PROJECT ENG. A H. MOLIK	DATE MADE 11/89
SQUAD 1 P 4	DRAWING NO. 10 OF 30

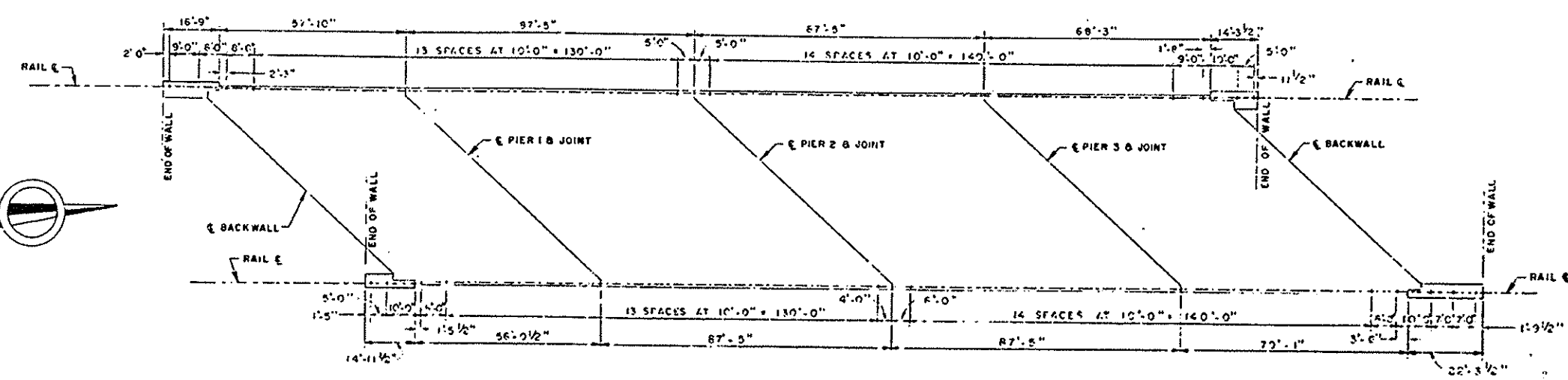
DESIGNED BY _____ DESIGN CHECKED BY _____ DETAILED BY _____ OFFICE CHECKED BY _____



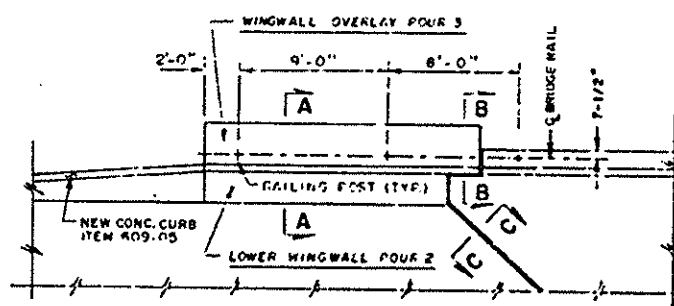
	STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN AND CONSTRUCTION DIVISION	
	ROUTE 9W OVER THE THRUWAY	
TRANSVERSE SECTION		
PROJ. ENR. A. J. MALK	DATE MADE 11/69	
SOLMD A. P. TAMMOTT	DRAWING NO. 11 OF 23	

FED. RD. DIST. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		29/1	51
RTE 9W OVER THRUWAY BIN 1-05355-0 RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0 RTE 23 OVER HAVING STREAM BIN 1-01772-0 BRIDGE DECK REPAIRS GREENE CO. CAPITAL PROJECT IDENTIFICATION NO. 1803.26				

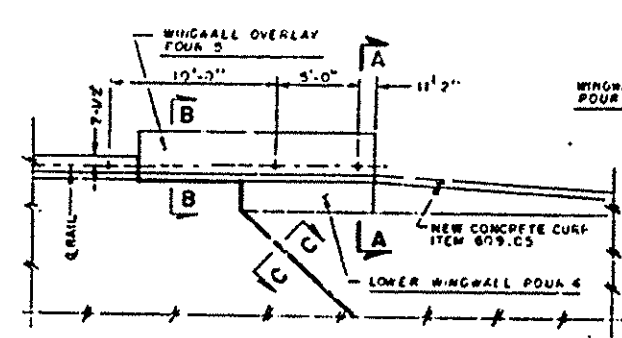
CONCRETE TABLE C.Y.	
WINGWALLS	
ITEM 555.0103	
POUR 2	2.77
POUR 3	0.69
POUR 4	1.96
POUR 5	0.69
POUR 6	2.00
POUR 7	0.61
POUR 8	2.77
POUR 9	0.69



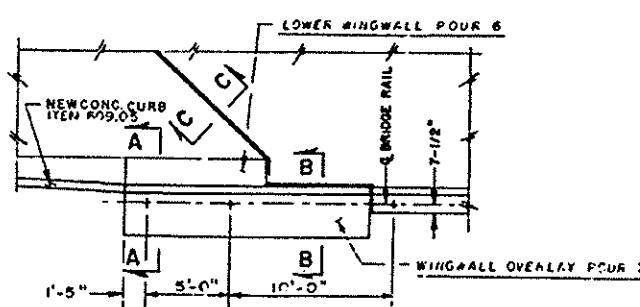
BRIDGE RAILING POST LAYOUT
NOT TO SCALE



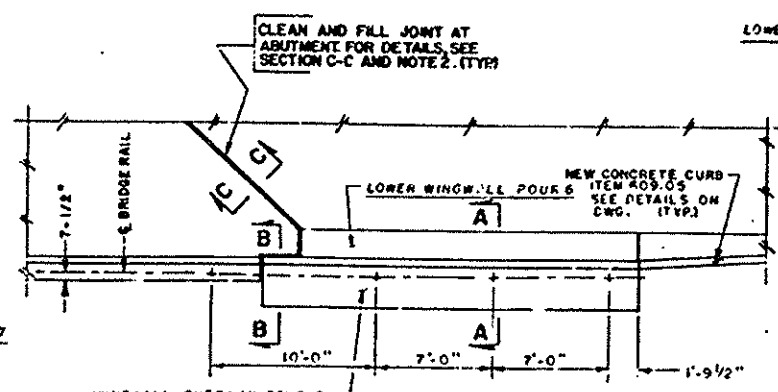
SOUTHWEST CORNER
3/16" = 1'-0"



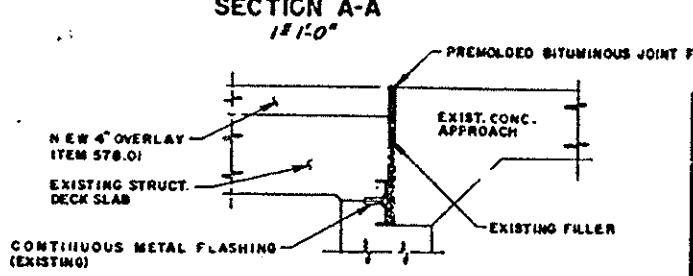
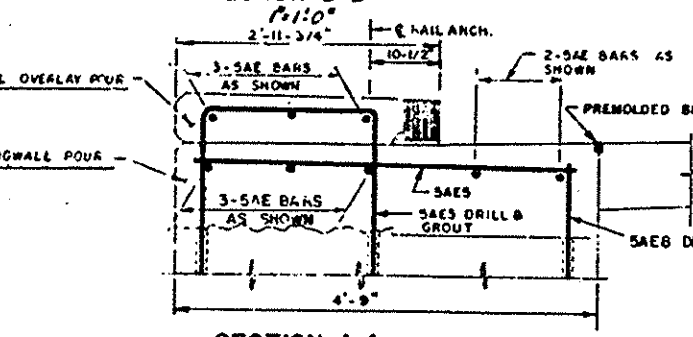
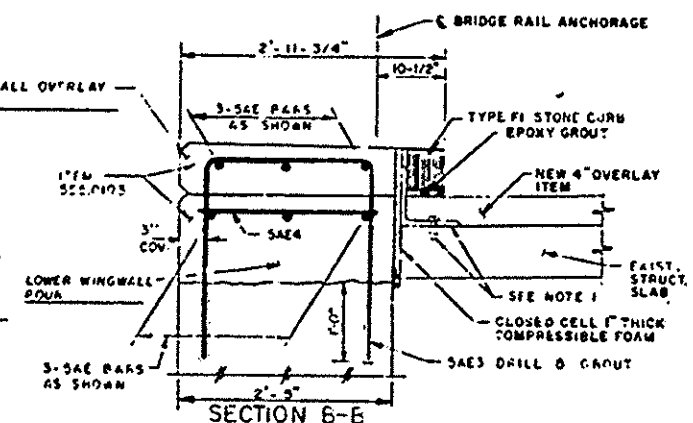
NORTHWEST CORNER
3/16" = 1'-0"



SOUTHEAST CORNER
3/16" = 1'-0"



NORTHEAST CORNER
3/16" = 1'-0"



NOTES

- NOTE 1
3/8" BENT PLATE TO BE SECURED TO STRUCTURAL SLAB WITH 3 #8" EXPANSION ANCHORS. (ELIMINATED BY NO STEELWORK)
COST TO BE INCLUDED IN CONCRETE ITEMS.
- NOTE 2
EXISTING DETERIORATED JOINT MATERIAL IS TO BE REMOVED TO LEVEL OF SOUND MATERIAL. JOINT RECESS IS TO BE CLEANED AND FILLED WITH PREMOLDED BITUMINOUS JOINT FILLER TO 3/4" BELOW LEVEL OF NEW OVERLAY. FILL TOP 1 1/2" WITH 3/4" DEEP RECESS WITH COLD APPLIED SEALER. FEDERAL MATERIAL SPECIFICATION SS-5-CO195-B ELASTOMERIC POLYMER TYPE TAO COMPONENT COLD APPLIED. PLACE IN CLEAN AIR BLOWN HOTCH.
- NOTE 3
FOR WINGWALL REINFORCEMENT PLAN, SEE DWG. 13.
- NOTE 4
FOR DETAIL OF BRIDGE RAILING ANCHORAGE AT WING WALLS SEE DRAWING NO. 19.

NO REVISIONS

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN AND CONSTRUCTION DIVISION

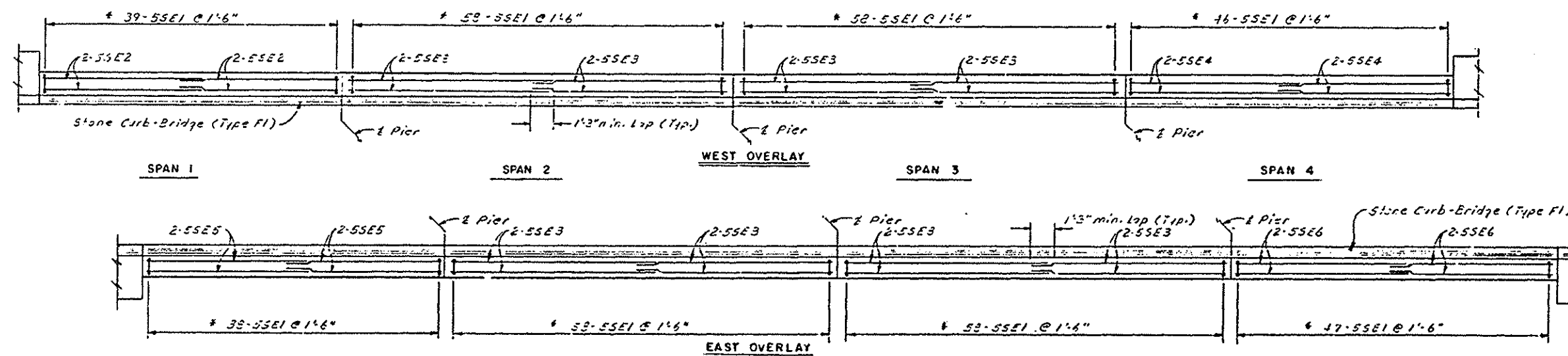
ROUTE 9W OVER THE THRUWAY
BRIDGE RAIL LAYOUT
and
U-WALL DETAILS

PROJ. ENG. A. H. MALIK DATE MADE 11/89
SQUAD CIP DRAWING NO 12 OF 25

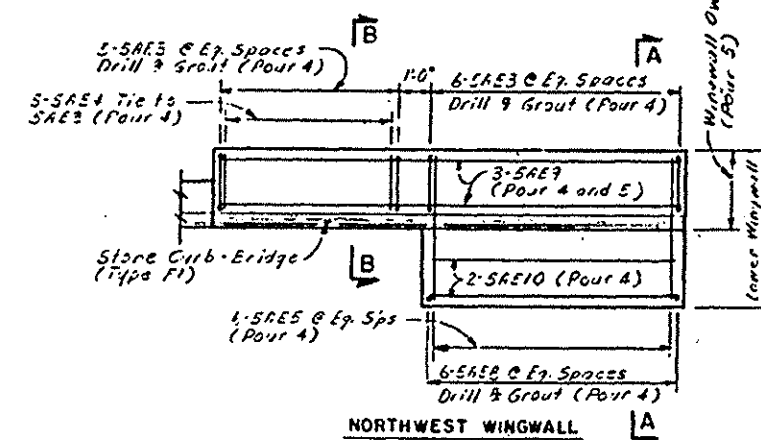
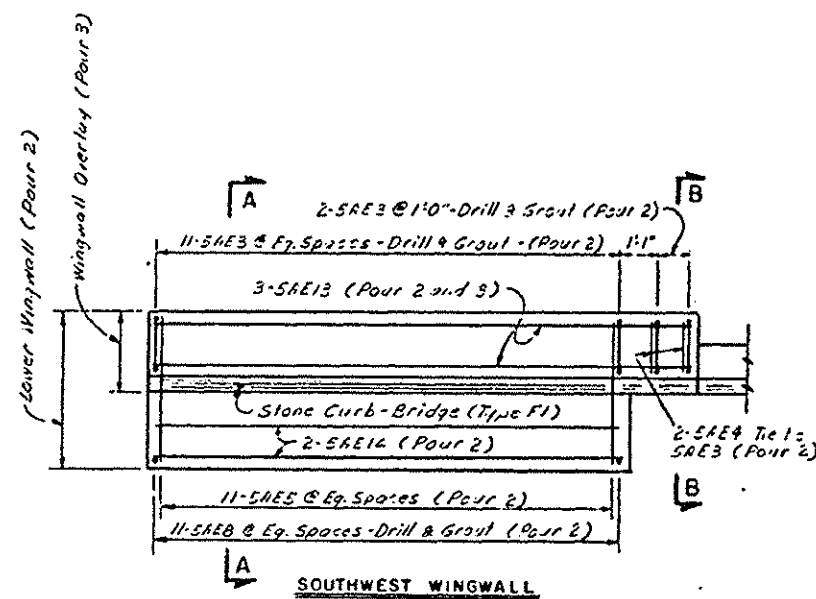
DESIGNED BY: J. P. Hillier
DETAIL CHECKED BY: J. P. Hillier
DESIGN CHECKED BY: J. P. Hillier

FED. RD. REG. NO.	STATE	FEDERAL PROJ. NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		30	51

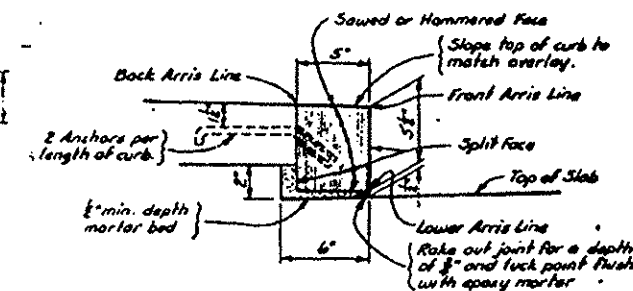
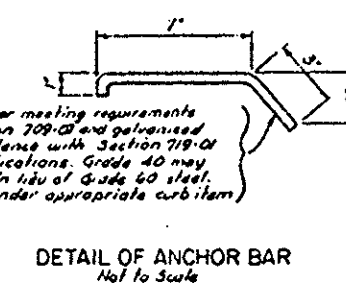
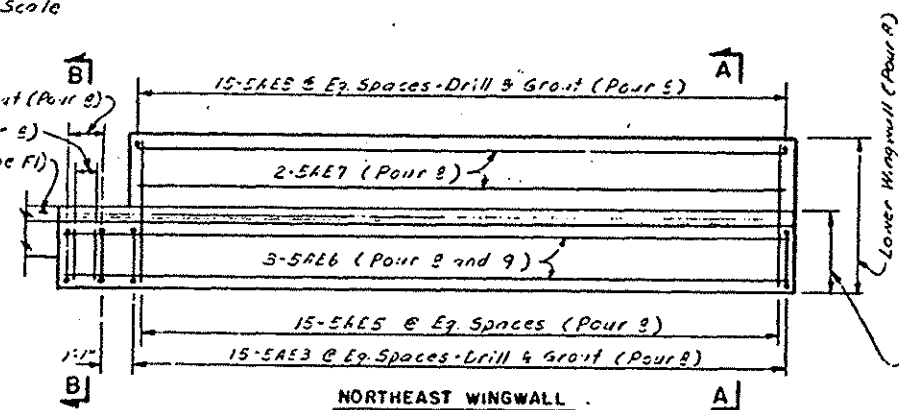
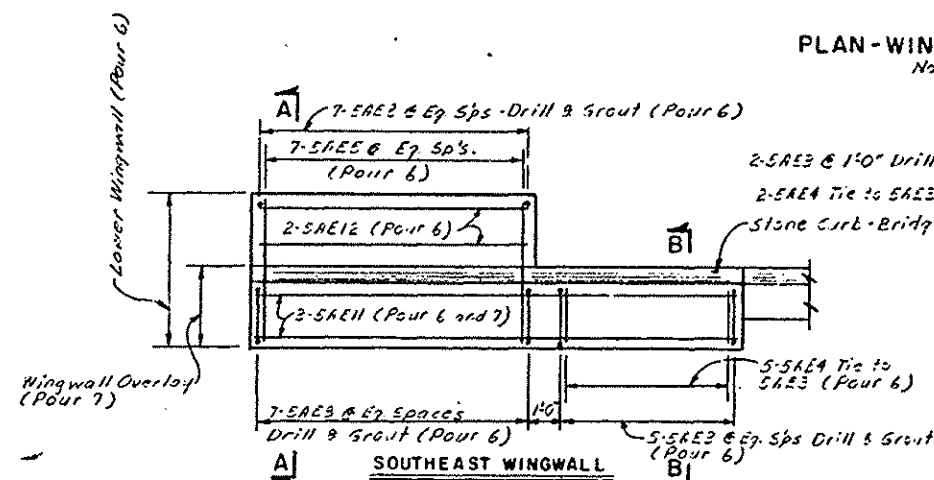
RTE 9W OVER THRUWAY B1M 1-05355-0
 RTE 32 OVER KAATERSKILL CREEK B1M 1-02237-0
 RTE 23 OVER NAUVO STREAM B1M 1-01772-0
 BRIDGE DECK REPAIRS
 GREENE CO.
 CAPITAL PROJECT IDENTIFICATION NO.



PLAN - SUPERSTRUCTURE OVERLAY REINFORCEMENT
Not to Scale

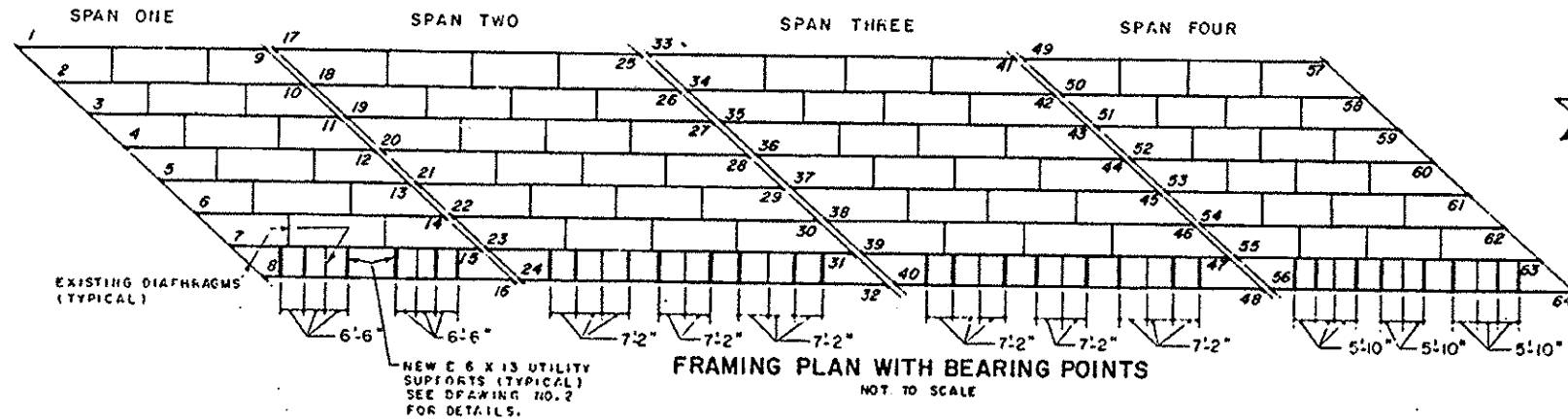


PLAN - WINGWALL REINFORCEMENT
Not to Scale



Note:
For Sections A-A, B-B and Concrete Talle (Wingwalls) see Drawing No. 12.

STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN AND CONSTRUCTION DIVISION	
ROUTE 9W OVER THE THRUWAY	
OVERLAY & WINGWALL REINFORCEMENT	
PROJ. ENG. A. H. Malik	DATE MADE 11/69
SQUAD J. D. G. [Signature]	DRAWING NO. 13 OF 23



FED. RD. PROJ. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		31	51
RTE 9W OVER THRUWAY BIN 1-05355-0 RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0 RTE 23 OVER HAHNO STREAM BIN 1-01772-0 BRIDGE DECK REPAIRS GREENE CO. CAPITAL PROJECT IDENTIFICATION NO. 1803.26				

NOTES:

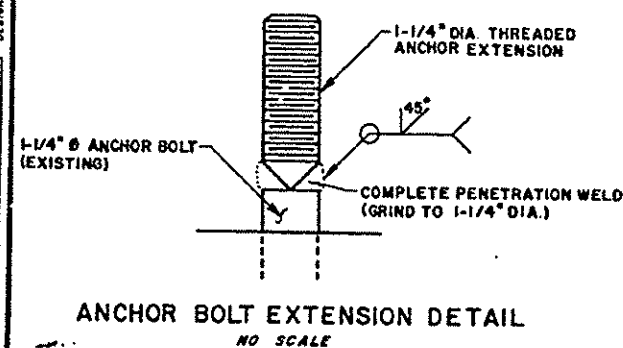
1. PIER AND SPAN NUMBERING SEQUENCE OPPOSES STATIONING (THIS REFLECTS ORIGINAL CONTRACT PLANS)

STRUCTURAL LIFTING NOTES:

- A. SUPPORT SUPERSTRUCTURE AT POINTS 9 THRU 14, & 17 THRU 22, DURING PIER 1 REHAB/REPLACEMENT STRUCTURAL LIFTING OPERATION, TYPE A ITEM 585.01. BEARINGS TO BE CLEANED, RESTORED AND PAINTED AT THESE LOCATIONS UNDER ITEM 15565.4302.
- B. JACK SUPERSTRUCTURE AND CLEAN, RESTORE & PAINT BEARINGS AT POINTS 23, 24, 31, 35, 39, 41 & 49. JACKING TO BE PAID FOR UNDER ITEM 585.01. BEARING RESTORATION UNDER ITEM 15565.4302.
- C. EXISTING ANCHOR BOLTS FOUND TO BE BENT OR DETERIORATED SHALL BE REPAIRED A.O.B.E.
- D. SEE ANCHOR BOLT EXTENSION DETAIL BELOW.

LOADS AT BEARING POINTS											
POINT	D.L.	L.L.	POINT	D.L.	L.L.	POINT	D.L.	L.L.	POINT	D.L.	L.L.
1	29	51	17	49	52	33	49	52	49	37	52
2	33	55	18	55	56	34	55	56	50	43	56
3			19			35			51		
4			20			36			52		
5			21			37			53		
6			22			38			54		
7			23			39			55		
8	29	51	24	49	52	40	49	52	56	37	52
9	29	51	25	49	52	41	49	52	57	37	52
10	33	55	26	55	56	42	55	56	58	43	56
11			27			43			59		
12			28			44			60		
13			29			45			61		
14			30			46			62		
15			31			47			63		
16	29	51	32	49	52	48	49	52	64	37	52

NOTE
LOADS ARE IN KIPS



STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN AND CONSTRUCTION DIVISION	
ROUTE 9W OVER THE THRUWAY	
STRUCTURAL LIFTING DETAILS	
PROJ. ENG. A. H. Malik	DATE MADE 11/09
SQUAD AP	DRAWING NO. 19 OF 23

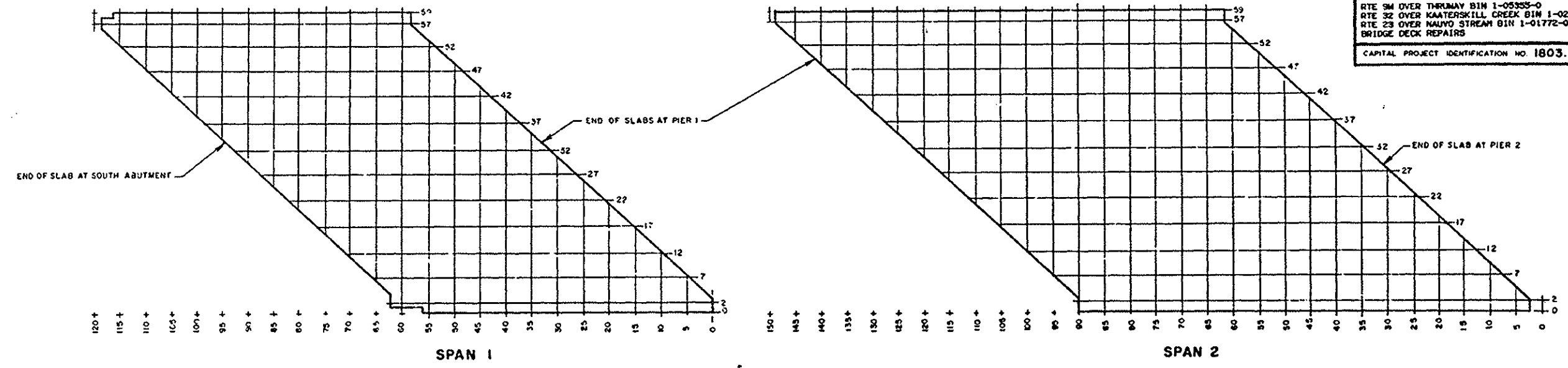
DETAIL CHECKED BY: D. A. V.

DESIGNED BY: J. P. Wilkey

DESIGN CHECKED BY:

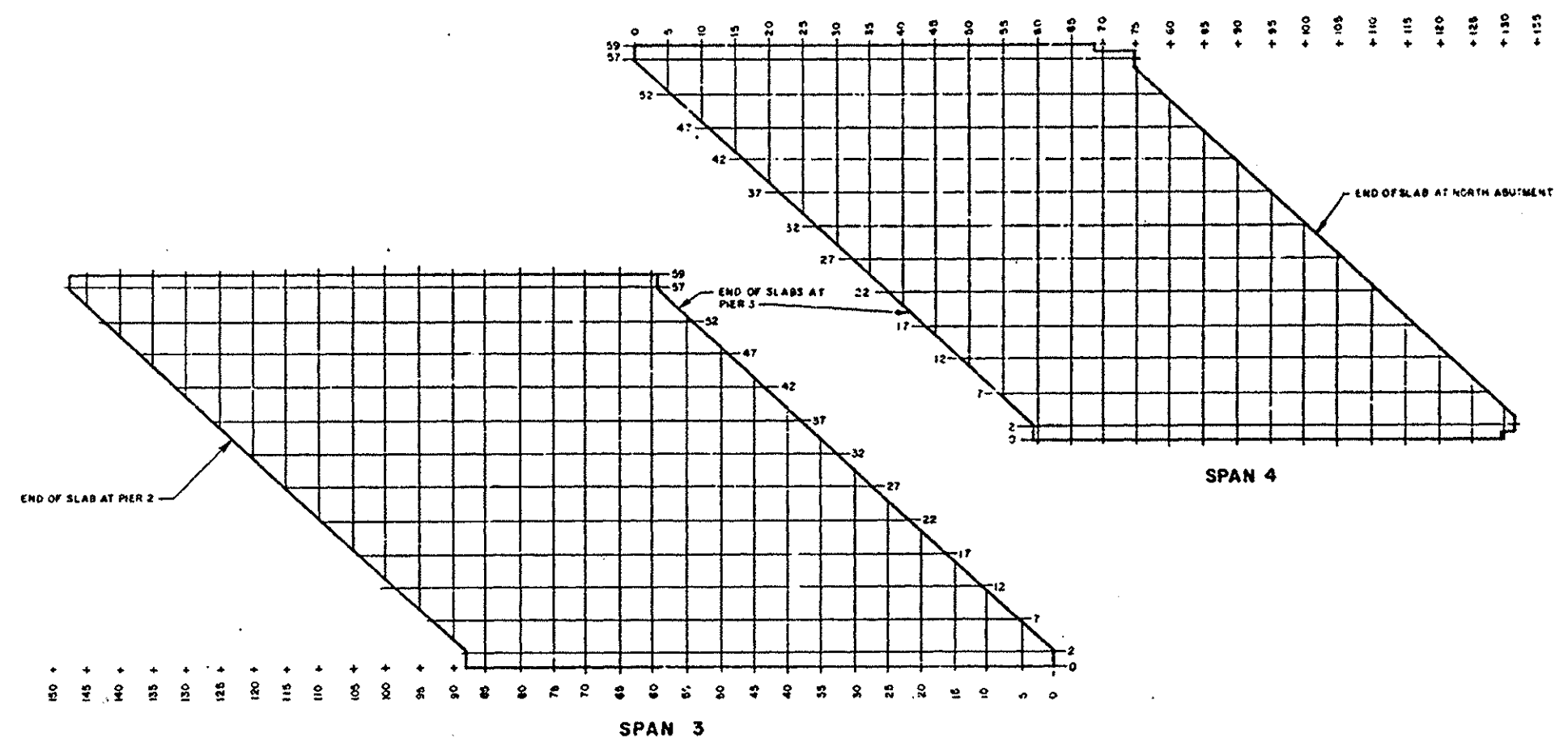
DESIGNED BY:

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		32	51
RTE 9W OVER THRUWAY BIN 1-05355-0 RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0 RTE 29 OVER KALUVO STREAM BIN 1-01772-0 BRIDGE DECK REPAIRS GREENE CO. CAPITAL PROJECT IDENTIFICATION NO. 1803.26				



NOTE
GRID DIMENSIONS ARE IN FEET

- NOTE:
1. PIER NUMBER SEQUENCE OPPOSES STATIONING (THIS REFLECTS ORIGINAL CONTRACT PLAN)
 2. SEE STRUCTURAL SLAB SURVEY NOTE ON DRAWING A.D. 3

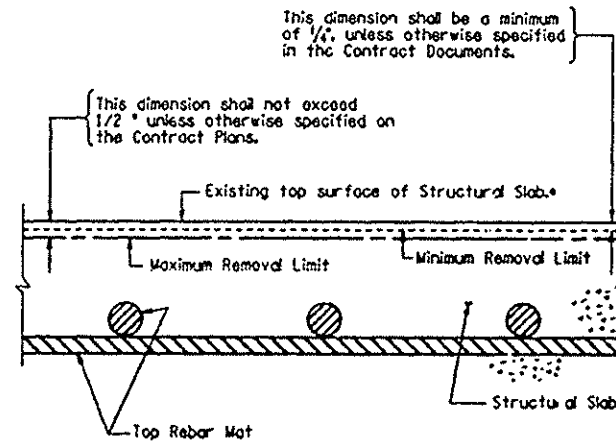


STRUCTURAL SLAB POTENTIAL TEST GRID LAYOUT
3/32" = 1'-0"

STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN AND CONSTRUCTION DIVISION	
ROUTE 9W OVER THE THRUWAY GRID LAYOUT FOR POTENTIAL TESTS	
PROJ. ENG. A. H. Malik SQUAD AP	DATE MADE 11/69 DRAWING NO. 15 OF 23

DESIGNED BY: [Signature] CHECKED BY: [Signature] DATE: 11/69
 DRAWING NO. 15 OF 23

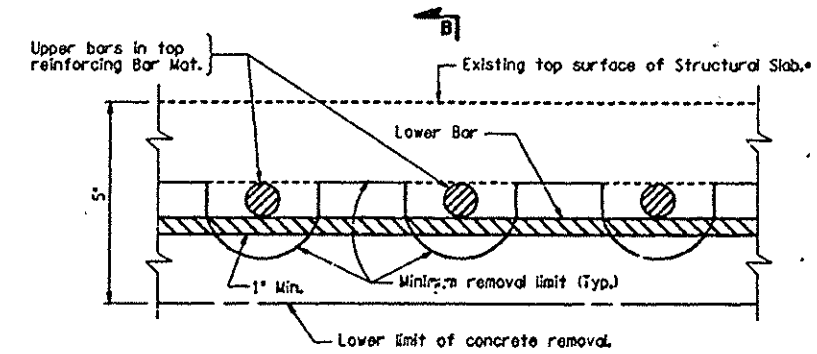
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		33	51
RTE 9W OVER THRUWAY BIN 1-05355-0 RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0 RTE 23 OVER MAURO STREAM BIN 1-01772-0 BRIDGE DECK REPAIRS GREENE CO. CAPITAL PROJECT IDENTIFICATION NO. 1803.26				



• - Shown Theoretically
 { Partial section of Structural Slab showing limits
 of "Scarification of Structural Slab." }

SCARIFICATION DETAIL

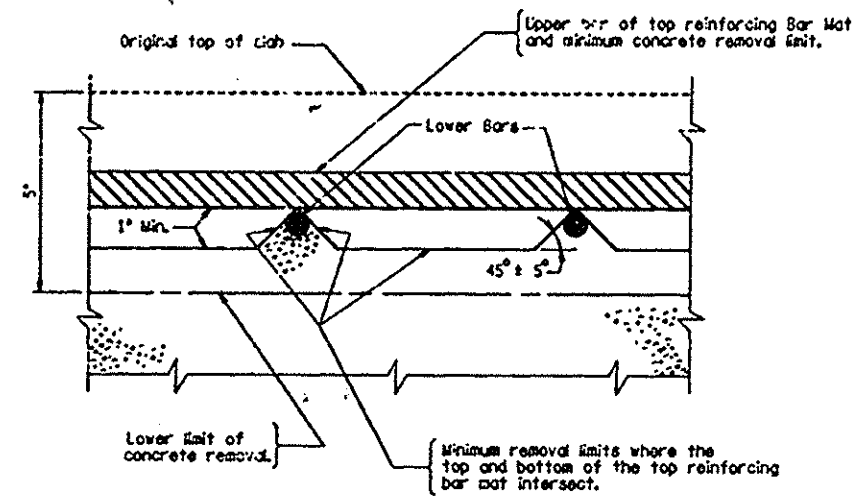
Not To Scale



• Shown theoretically for the following conditions:
 After Scarification is completed under a separate item.
 (Applies where a separate Scarification item for partial
 removal of the rebar cover is included in the contract.)

REINFORCING BAR EXPOSURE TOP BAR OF UPPER MAT ONLY

Not To Scale



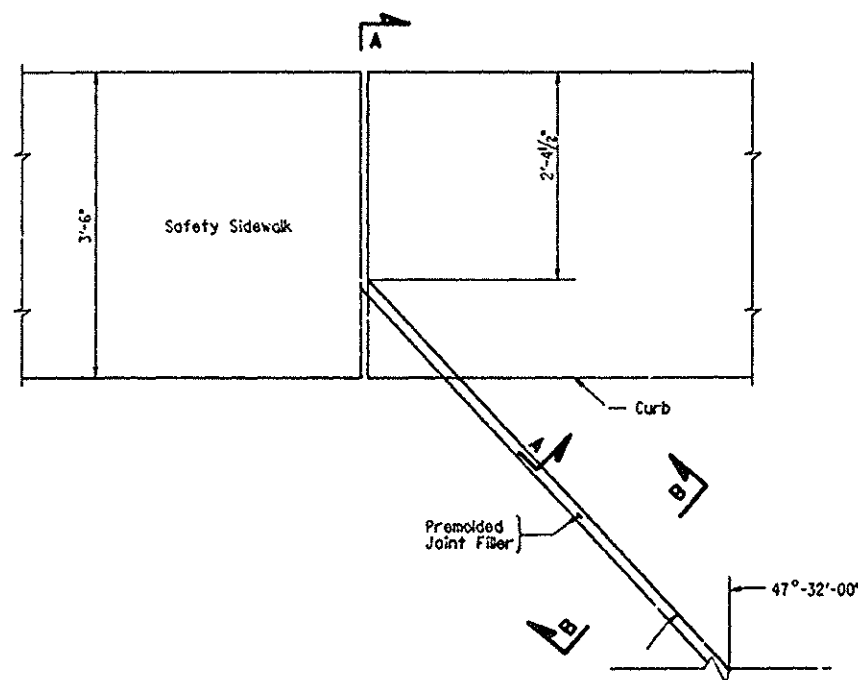
REINFORCING BAR EXPOSURE TOP BAR OF UPPER MAT ONLY SECTION B-B

Not To Scale

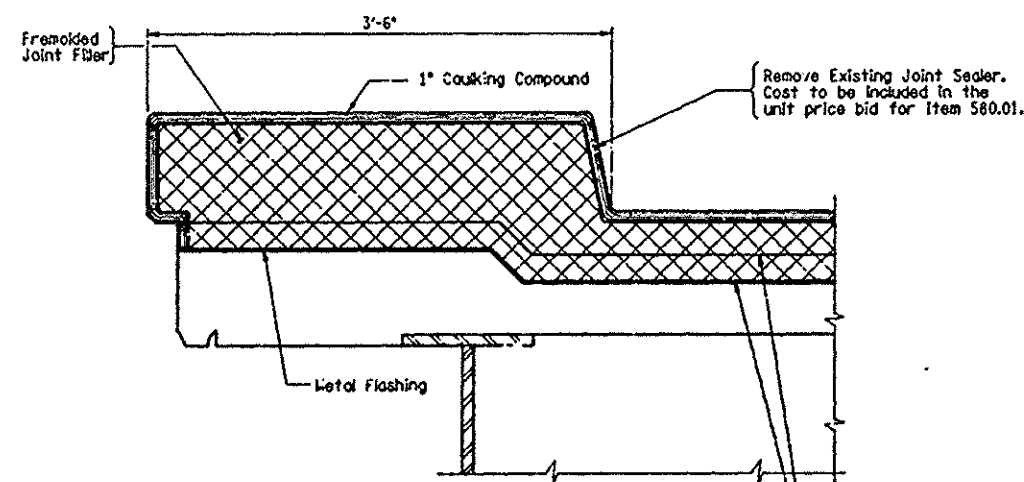
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN AND CONSTRUCTION DIVISION	
ROUTE 9W OVER THE THRUWAY	
STRUCTURAL SLAB REPAIR PREPARATION DETAILS	
PROJ. ENG. A.J. MUEK	DATE MADE 11/89
SQUAD A.P. J...	DRAWING NO. 16 OF 23

DESIGNED BY: C. LEBLANC
 CHECKED BY: J. LEBLANC
 DRAWN BY: J. LEBLANC
 SCALE: 1/4" = 1'-0"

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		34	51
RTE 9W OVER THRUWAY BIN 1-05355-0 RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0 RTE 23 OVER NAUVO STREAM BIN 1-01772-0 BRIDGE DECK REPAIRS				
				GREENE CO.
CAPITAL PROJECT IDENTIFICATION NO. 1803.26				

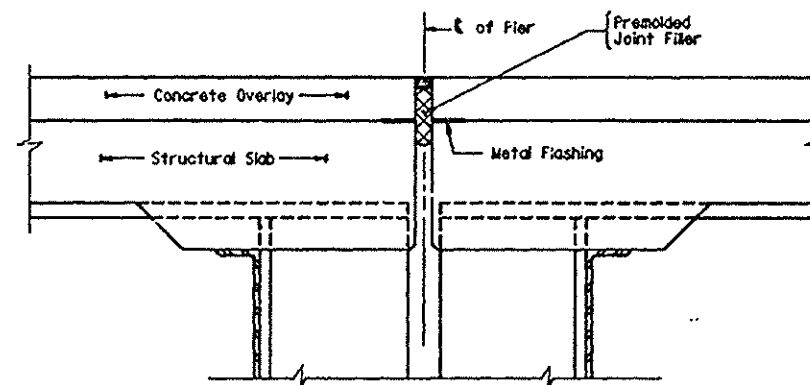


EXISTING PARTIAL PLAN AT PIER
Scale: 1" = 1'-0"



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

Remove premolded joint filler and metal flashing. Cost to be included in the unit price bid for Item 580.01.

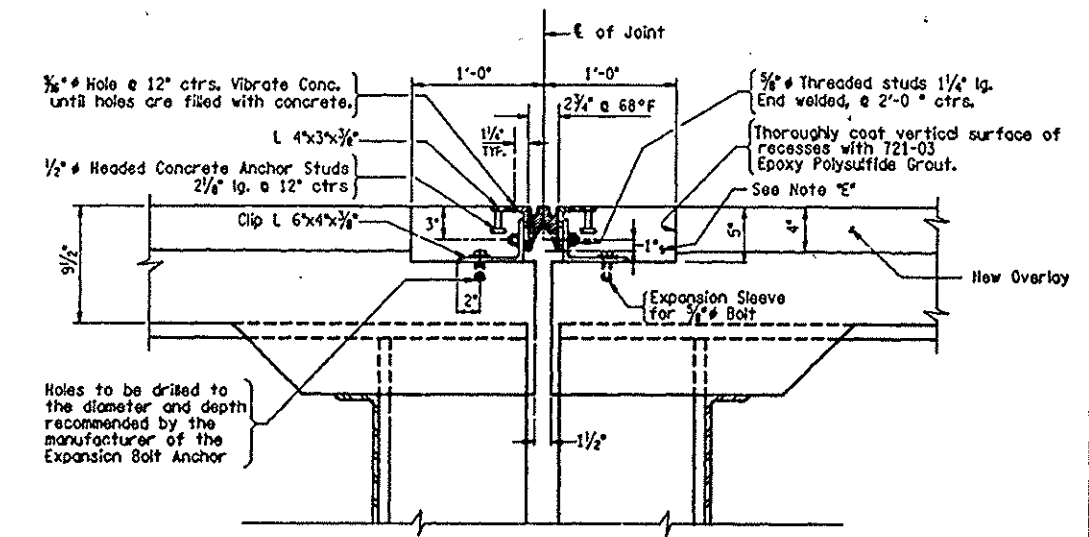
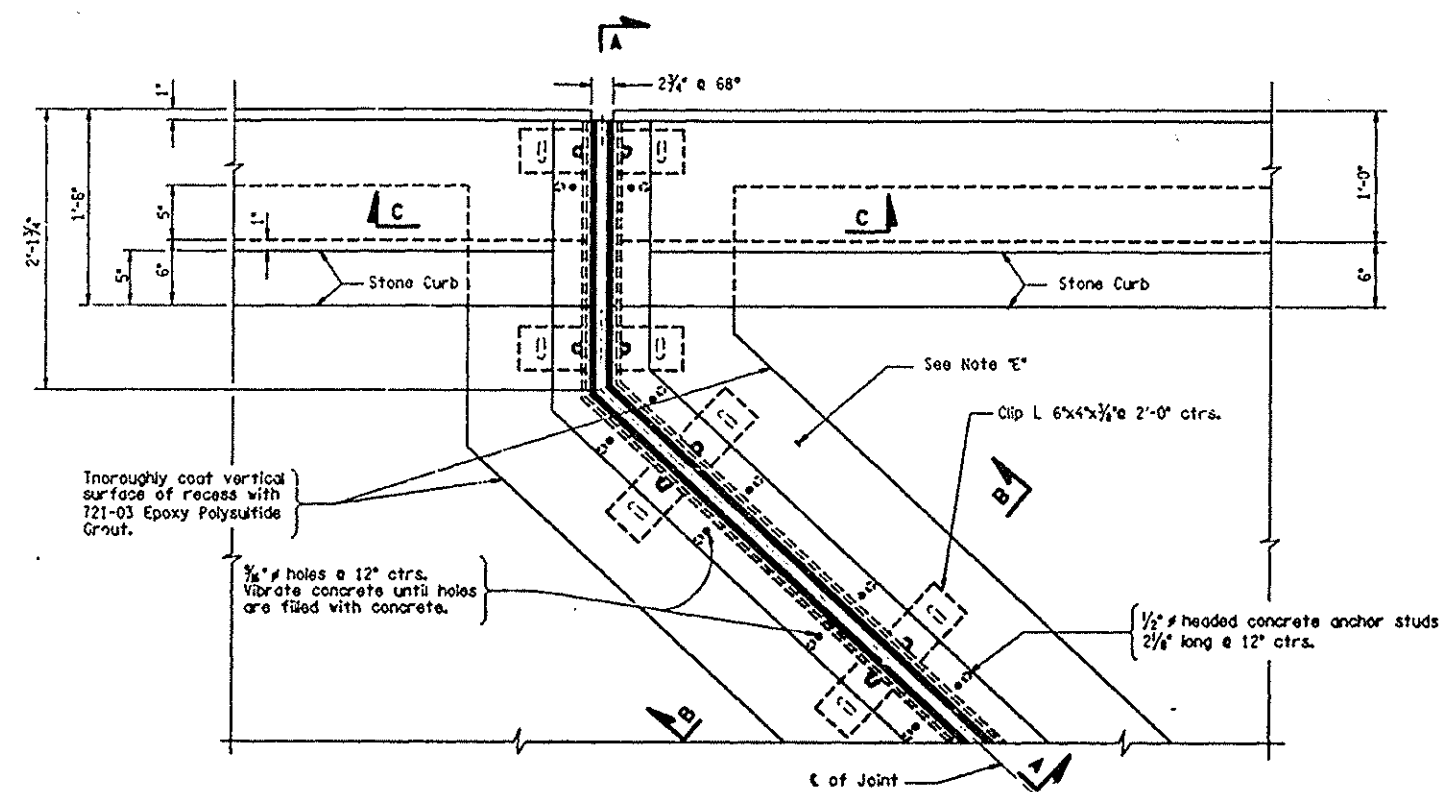


SECTION B-B
Scale: 1/2" = 1'-0"

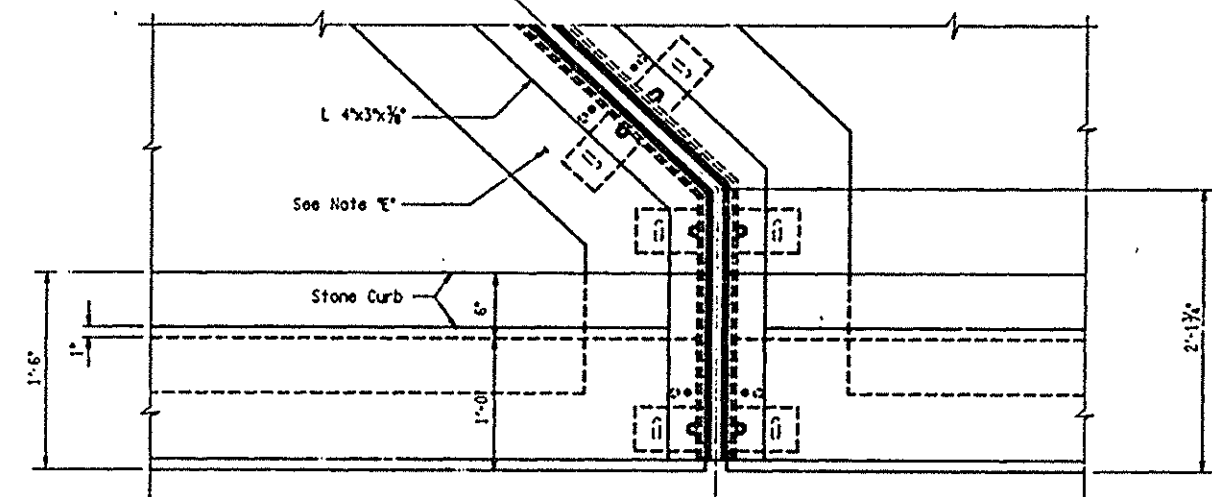
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN AND CONSTRUCTION DIVISION	
ROUTE 9W OVER THE THRUWAY	
EXISTING JOINT AT PIER	
PROJ. ENG. A.M. WALKER	DATE MADE 11/89
SOUND A.P. JENNINGS	DRAWING NO. 17 OF 23

DESIGNED BY: C. LEONARD
CHECKED BY: C. LEONARD
DETAILS BY: C. LEONARD
REVIEWED BY: C. LEONARD

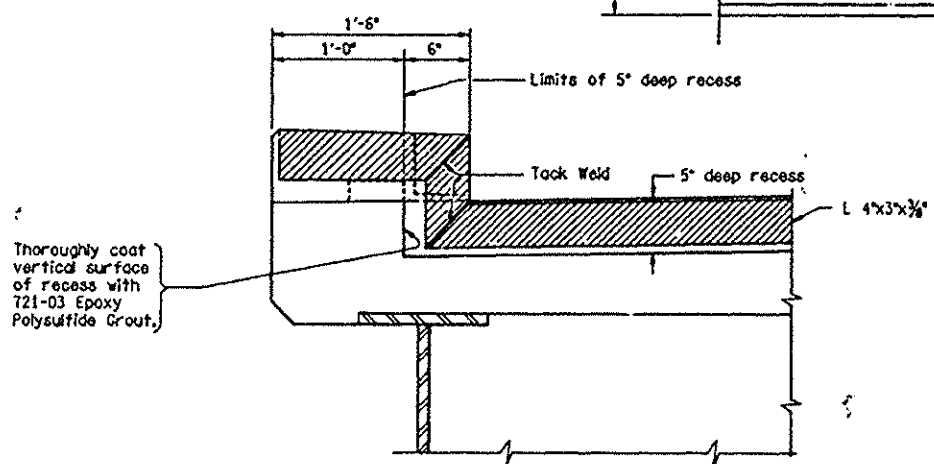
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		35	51
RTE 9W OVER THRUWAY BIN 1-05355-0 RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0 RTE 23 OVER NAUVO STREAM BIN 1-01772-0 BRIDGE DECK REPAIRS GREENE CO. CAPITAL PROJECT IDENTIFICATION NO. 1803.26				



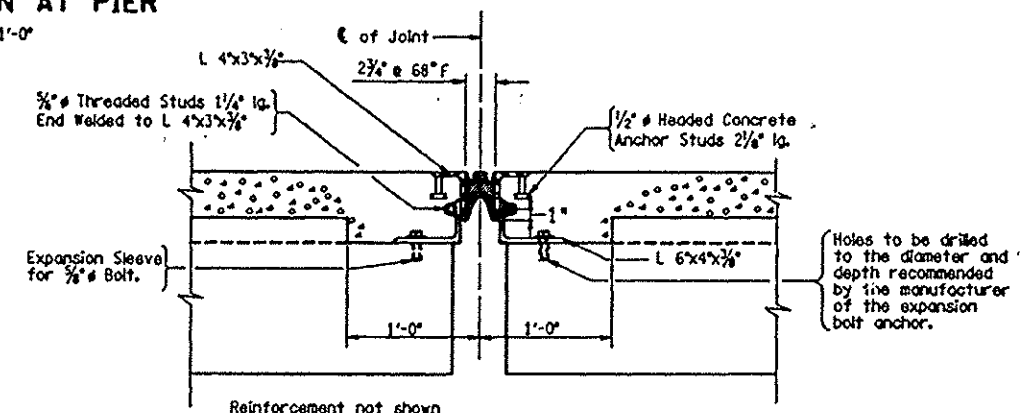
SECTION B-B
Scale: 1 1/2" = 1'-0"



PROPOSED PLAN AT PIER
Scale: 1 1/2" = 1'-0"



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



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

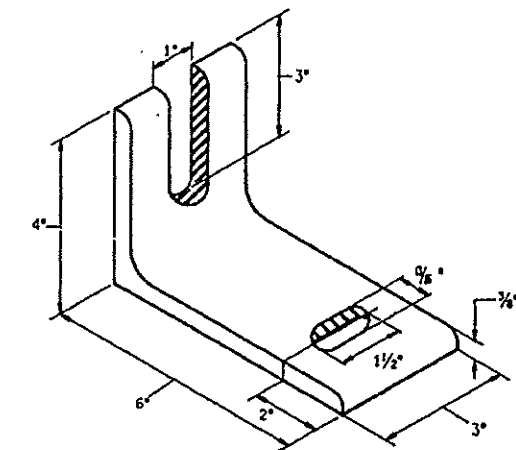
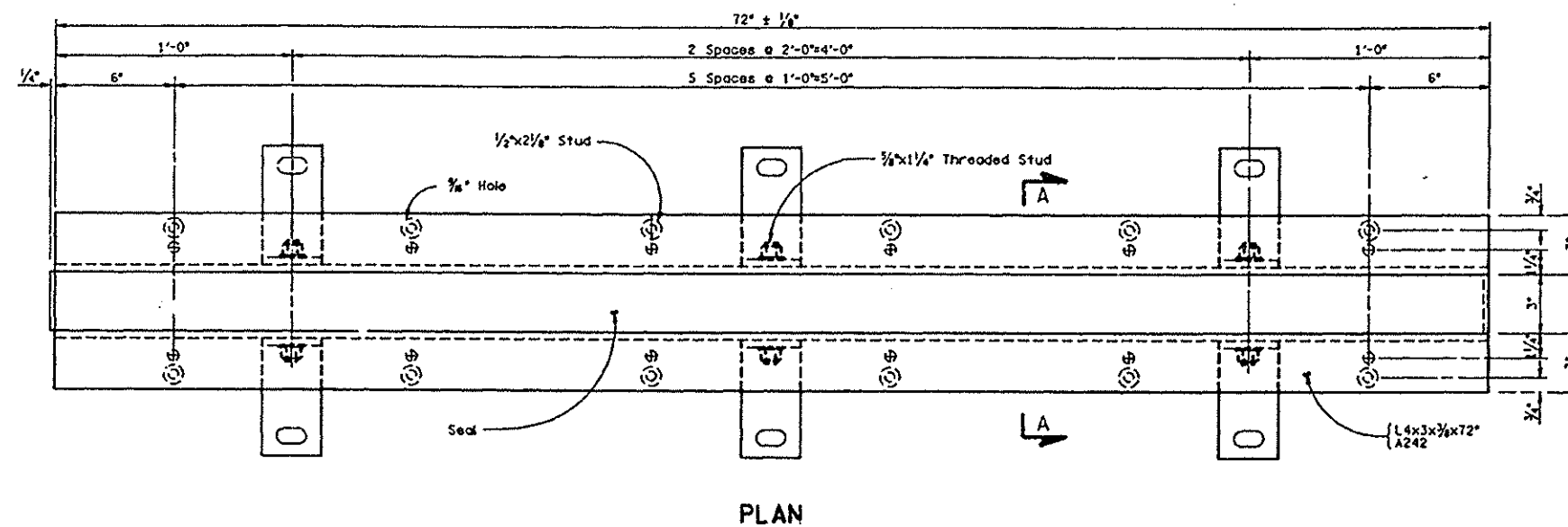
Note E's
Concrete in recesses on superstructures provided for installing the Armored Joint System shall comply with the Specifications for the current overlay item, except that machine finishing will not be required. No additional payment will be made for furnishing and placing this concrete as this quantity lies within the limits of the area to be paid for under the item.

The cost of furnishing and placing the Epoxy Polysulfide Grout shall be included in the unit price bid for the overlay item.

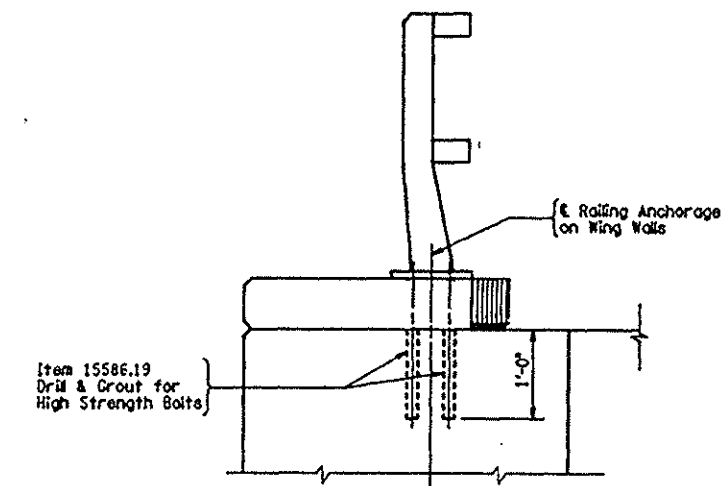
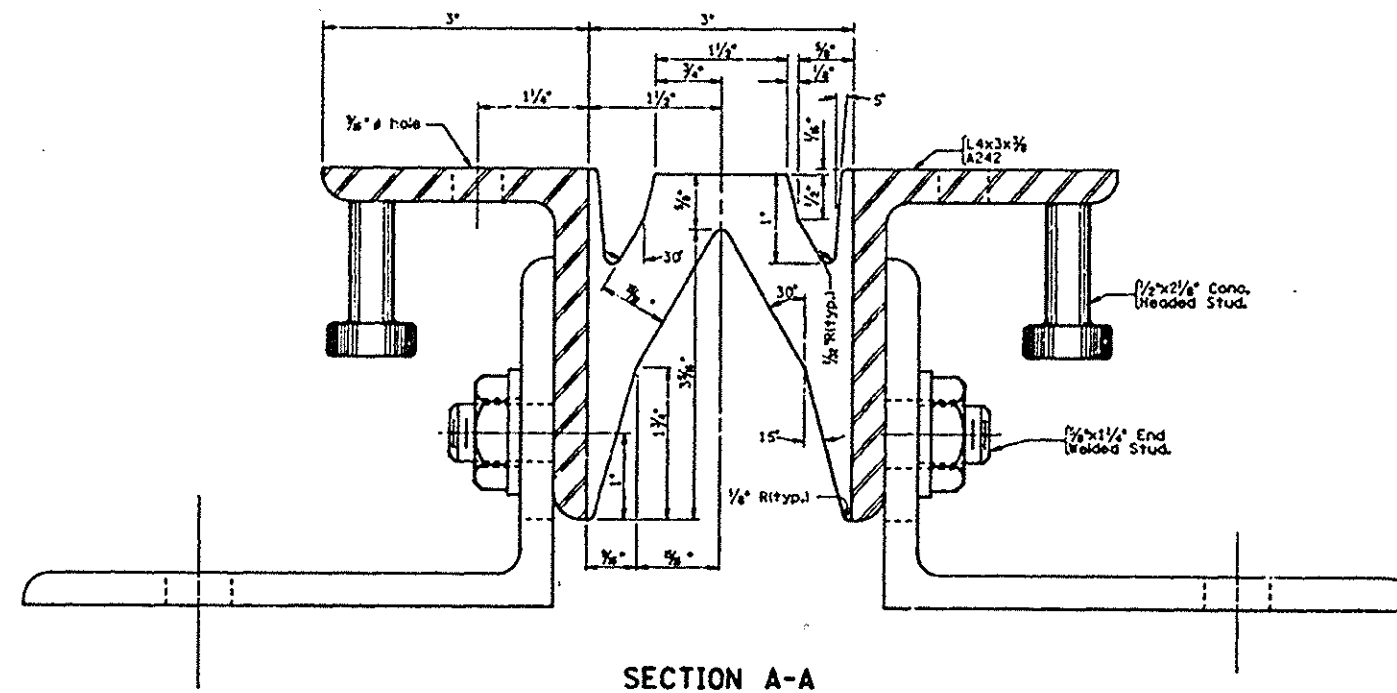
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN AND CONSTRUCTION DIVISION	
ROUTE 9W OVER THE THRUWAY	
ARMORED JOINT AT PIER	
PROJ. ENG. A.M. HALL	DATE MADE 11/89
SOUND A.P. [Signature]	DRAWING NO. 18 OF 23

DESIGN CHECKED BY: [Signature] DATE: 11/89
DETAILS BY: [Signature] DATE: 11/89
REVIEWED BY: [Signature] DATE: 11/89

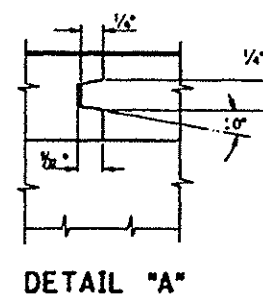
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		36	51
RTE 304 OVER THURWAY BIL 1-05355-0 RTE 202 OVER KAATERS BIL 1-02237-0 RTE 23 OVER MAUVO STRZAN BIL 1-01772-0 BRIDGE DECK REPAIRS				
GREENE CO.				
CAPITAL PROJECT IDENTIFICATION NO. 180326				



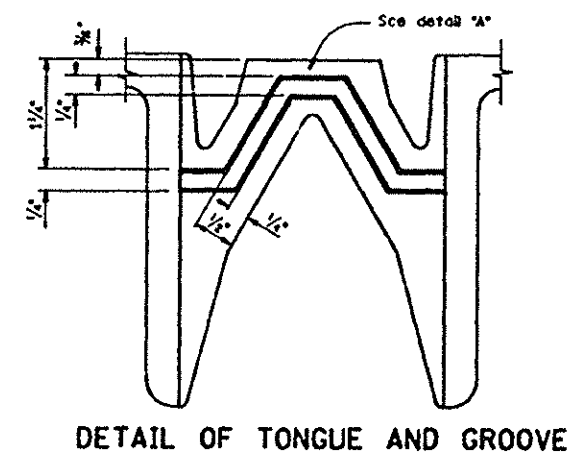
DETAIL OF CLIP ANGLE (A36)



BRIDGE RAILING ANCHORAGE AT
WING WALLS



DETAIL "A"



DETAIL OF TONGUE AND GROOVE

	STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN AND CONSTRUCTION DIVISION	
	ROUTE 9W OVER THE THRUWAY DETAILS OF ARMORED JOINT SYSTEM WITH ELASTOMERIC SEALER	
PROJ. ENG. A.J. HARRIS	DATE MADE 11/89	
DRAWN G.F. JENNIFER	DRAWING NO. 19 OF 23	



Note A:
The $\frac{1}{8}$ " hole in the tube may be drilled in the shop or in the field. If field drilled, the galvanizing shall be repaired according to Section 719 of the New York State Standard Specifications. A $\frac{1}{8}$ " hole may be substituted for the slotted hole in the clamp.



NOTES:

All railing is to be fabricated and erected so that the rails are parallel to each other and 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 (1:1 ratio cement to sand) mortar.

Tubular steel rails, rail clamp assemblies, nuts and washers, posts, post webs, if required, post spacers, base plates and railing joint assemblies, and any necessary shims and mortar leveling course shall be paid for under the railing item.

Anchor rods, nuts, washers and anchor plates shall be paid for under the railing item.

After the anchor rod nuts have been placed and tightened to the satisfaction of the Engineer, the rods shall be flame cut off one (1) inch above the nut, and the first three threads above the nut shall be damaged, as ordered by the Engineer.

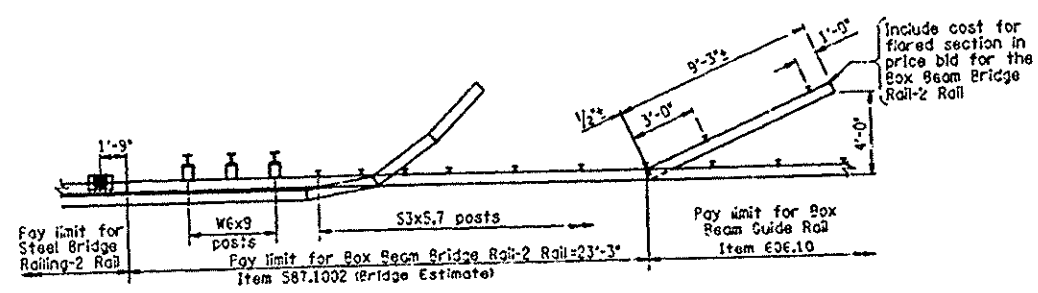
Rolls shall span a minimum of 3 posts. If this is impossible, the absolute minimum shall be two posts with one of these posts being a special post, unless waived by DCEs.

If the end of the bolts connecting the clamp to the post connection plate bear against the tube when in the final position, additional plain washers shall be added to prevent the end of the bolt from bearing against the tube.

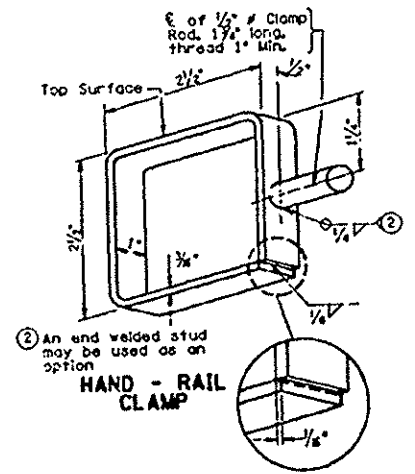
The hole for the bolt connecting the tube and the clamp shall be located in the tube so that the tube will bear against the post plates when in final position.

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		38	51

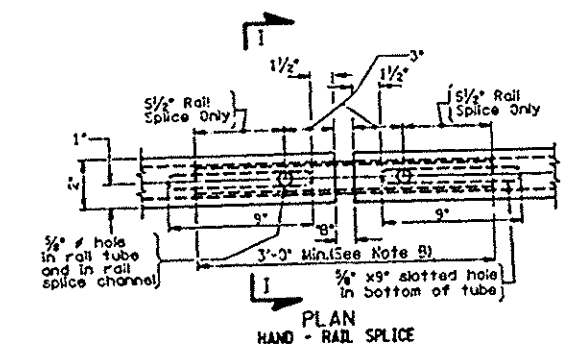
RTE 9W OVER THRUWAY BIN 1-05355-0
 RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0
 RTE 23 OVER NAUVO STREAM BIN 1-01772-0
 BRIDGE DECK REPAIRS GREENE CO.
 CAPITAL PROJECT IDENTIFICATION NO. 1803.28



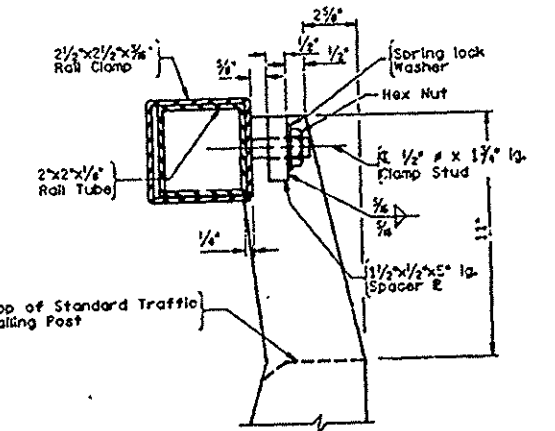
PLAN
BOX-BEAM-TO-BRIDGE-RAIL TRANSITION



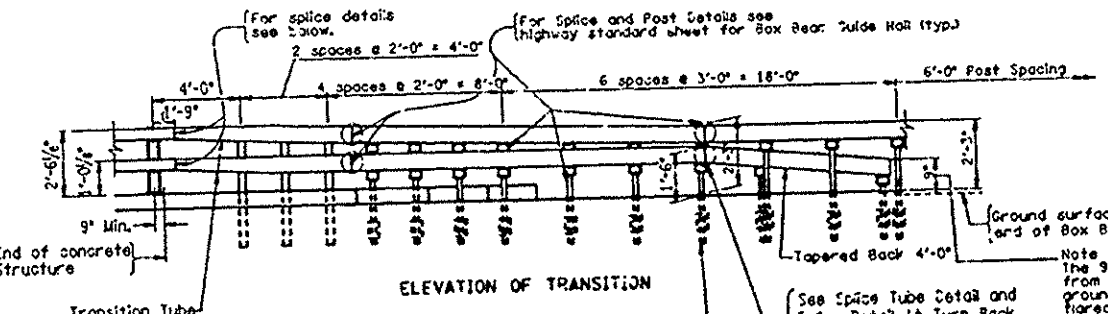
HAND - RAIL CLAMP



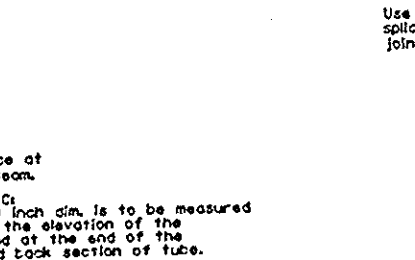
PLAN
HAND - RAIL SPLICE



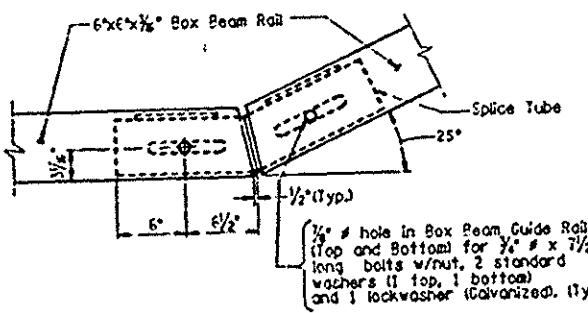
DETAIL 'B'
HAND - RAIL DETAIL



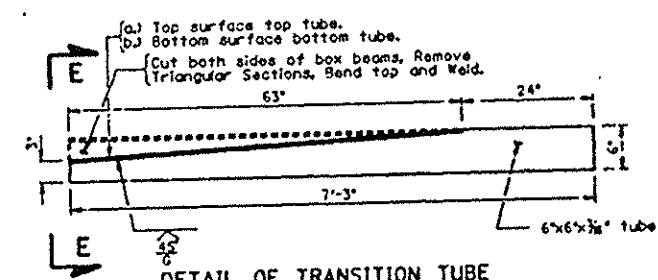
ELEVATION OF TRANSITION



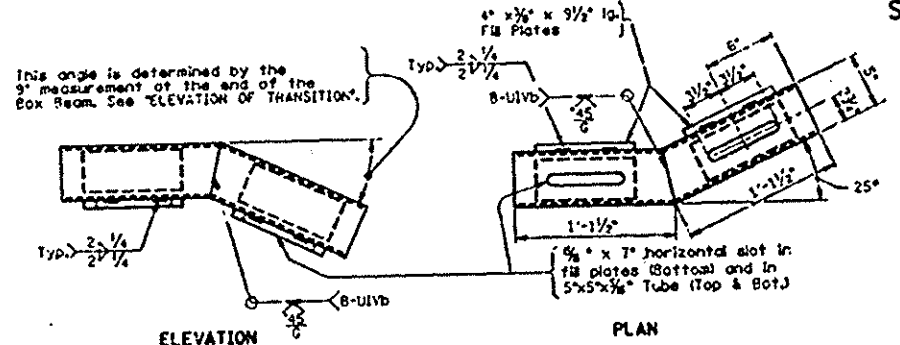
WELD DETAIL FOR
SPLICE TUBE



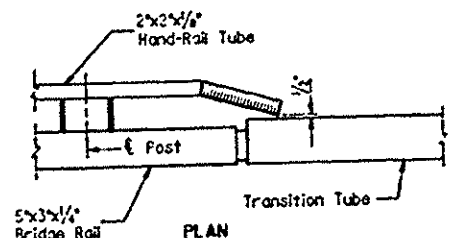
SPLICE DETAIL AT TURN BACK IN
LOWER TRANSITION GUIDE RAIL



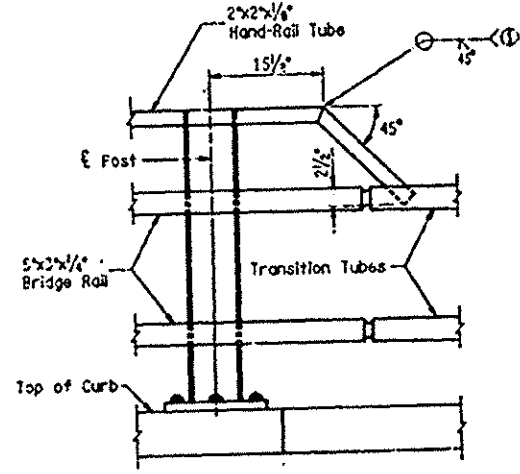
DETAIL OF TRANSITION TUBE



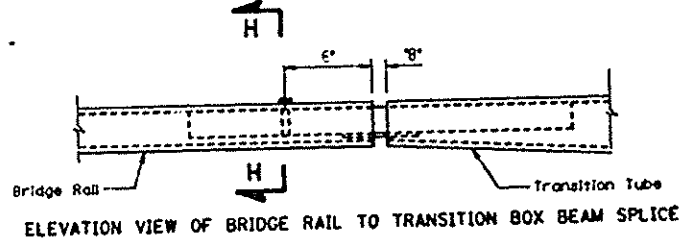
ELEVATION
SPLICE TUBE DETAIL



PLAN
DETAIL OF HAND - RAIL TRANSITION

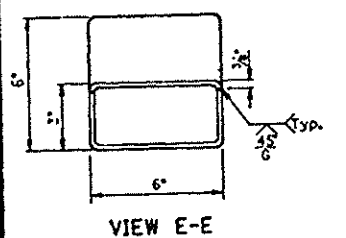


ELEVATION

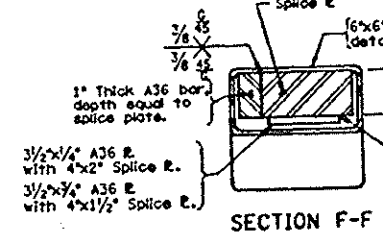


ELEVATION VIEW OF BRIDGE RAIL TO TRANSITION BOX BEAM SPLICE

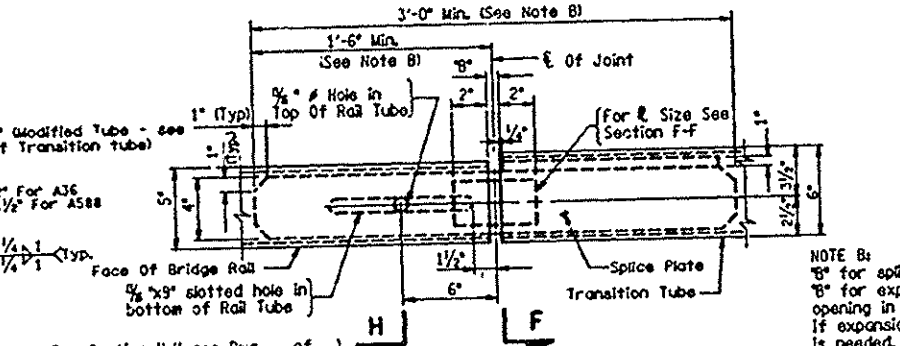
(For Section H-H see Dwg. No. J)



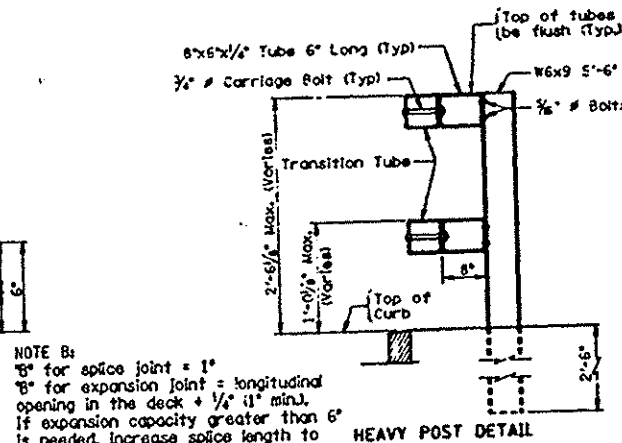
VIEW E-E



SECTION F-F



PLAN - TRANSITION TUBE JOINT ASSEMBLY



HEAVY POST DETAIL

NOTE B:
 "B" for splice joint = 1"
 "B" for expansion joint = longitudinal opening in the deck + 1/2" (1" min).
 If expansion capacity greater than 6" is needed, increase splice length to equal 3'-0" + (B-F).

STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION	
ROUTE 9W OVER THE THRUWAY	
STEEL BRIDGE RAILING TWO RAIL	
PROJ. ENG. A. R. HALL	DATE MADE 11/89
SCALE	DRAWING NO. 21 OF 23

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		39R1	51
RTE 9W OVER THRUWAY BIN 1-05955-0 RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0 RTE 23 OVER MAJNO STREAM BIN 1-01772-0 BRIDGE DECK REPAIRS GREENE CO. CAPITAL PROJECT IDENTIFICATION NO. 1803.26				

EXPLANATION OF BAR MARKS

FIRST OR FIRST AND SECOND CHARACTER INDICATE SIZE OF BAR
FIRST ALPHABETIC CHARACTER INDICATES STRUCTURE UNIT
IF FOLLOWED BY LETTER "E" BAR IS EPOXY COATED
REMAINDER IS SEQUENTIAL LISTING OF BAR MARKS

- STRUCTURE UNIT
- A - ABUTMENT
 - C - CULVERT
 - F - FOUNDATION PILE
 - H - HIGHWAY APPROACH SLAB
 - P - PIER
 - R - RIGID FRAME, ARCH
 - S - SUPERSTRUCTURE
 - W - WALL (ISOLATED)

REVISION IN TABLES

STATE OF NEW YORK

DEPARTMENT OF TRANSPORTATION

STRUCTURES DESIGN AND CONSTRUCTION DIVISION

ROUTE 9W OVER THE THRUWAY

BARLIST ONE

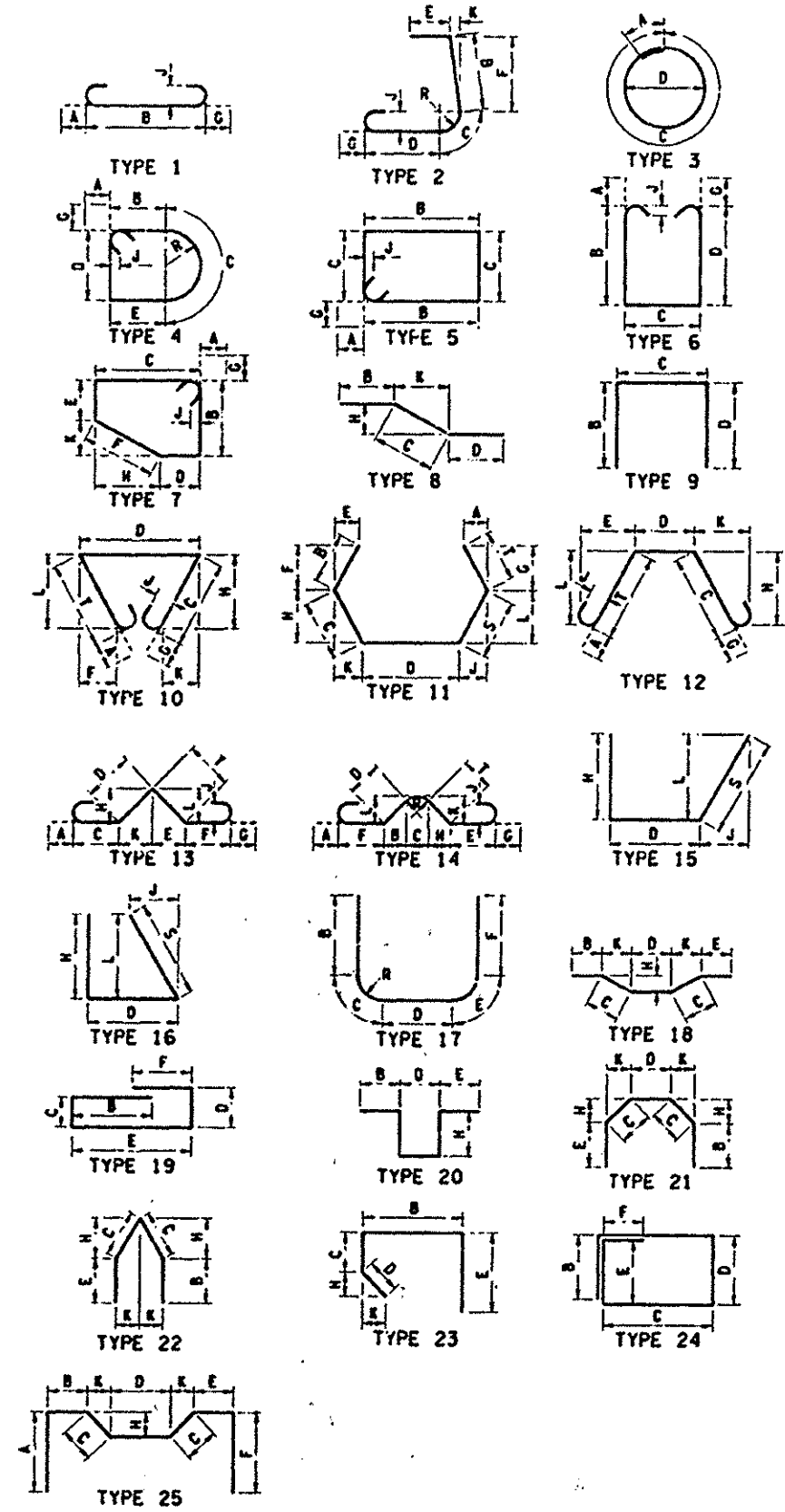
PROJ. ENG. A. H. Mott/K

SQUAD A.P. YAMOTTI

DATE MADE 11/89

DRAWING NO. 22 OF 23

BAR BENDING DIAGRAMS



BAR BENDING DIAGRAMS

ALL BAR DIMENSIONS OUT TO OUT UNLESS OTHERWISE INDICATED

MARK	NO.	LENGTH	TYPE	WEIGHT	A	B	C	D	E	F	G	H	J	K	L	R	S	T
NORTH ABUTMENT																		
PEDESTALS																		
FOUR 1																		
SAE1	56	2-8	9	176		1-7	1-1	0										
SAE2	14	3-3	STR	47														
SUBTOTAL	EPOXY BARS			203	THIS FOUR													
SOUTHWEST WINGWALL - STAGE 1																		
FOUR 2																		
SAE3	13	6-7	9	89		2-4	1-11	2-4										
SAE4	2	2-1	STR	4														
SAE5	11	4-4	STR	50														
SAE8	11	1-10	STR	21														
SAE13	3	16-5	STR	51														
SAE14	2	14-4	STR	30														
SUBTOTAL	EPOXY BARS			245	THIS FOUR													
FOUR 3																		
SAE13	3	16-5	STR	51														
SUBTOTAL	EPOXY BARS			51	THIS FOUR													
NORTHWEST WINGWALL - STAGE 1																		
FOUR 4																		
SAE3	11	6-7	9	76		2-4	1-11	2-4										
SAE4	5	2-1	STR	11														
SAE5	6	4-4	STR	27														
SAE8	6	1-10	STR	11														
SAE9	3	13-11	STR	44														
SAE10	2	7-7	STR	16														
SUBTOTAL	EPOXY BARS			105	THIS FOUR													
FOUR 5																		
SAE9	3	13-11	STR	44														
SUBTOTAL	EPOXY BARS			44	THIS FOUR													
SOUTHEAST WINGWALL - STAGE 2																		
FOUR 6																		
SAE3	12	4-0	9	80		2-4	1-11	2-4										
SAE4	5	2-1	STR	11														
SAE5	7	4-1	STR	30														
SAE8	7	1-10	STR	13														
SAE11	3	14-6	STR	45														
SAE12	2	8-4	STR	17														
SUBTOTAL	EPOXY BARS			142	THIS FOUR													
FOUR 7																		
SAE11	3	14-6	STR	45														
SUBTOTAL	EPOXY BARS			45	THIS FOUR													
NORTHEAST WINGWALL - STAGE 2																		
FOUR 8																		
SAE3	16	6-7	9	106		2-4	1-11	2-4										
SAE4	3	2-1	STR	4														
SAE5	15	4-3	STR	67														
SAE6	3	21-11	STR	69														
SAE7	2	19-10	STR	41														

DESIGN CHECKED BY: [Signature] DATE: 11/89

CAD: [Signature] DATE: 11/89

DETAIL CHECKED BY: [Signature] DATE: 11/89

DESIGN CHECKED BY: *W. A. D. Jr.*
CADD
REVIEWED BY:
DESIGNED BY:

MARK	NO.	LENGTH	TYPE	WEIGHT	A	B	C	D	E	F	G	H	J	K	L	R	S	T
SAE8	15	1-0	STR	16														
		1-10	STR	28														
SUBTOTAL	EPOXY BARS			306														
				328														
FOUR 9																		
SAE6	3	21-11	STR	69														
SUBTOTAL	EPOXY BARS			69														
SOUTH ABUTMENT																		
FEDESTALS																		
FOUR 10																		
SAF1	56	2-8	9	155		1-7	1-1	0										
SAE15	14	3-10	STR	56														
SUBTOTAL	EPOXY BARS			212														
PIER 1																		
COLUMNS - FOUR 1																		
11PE1	19	17-9	STR	1792														
11PE2	19	19-9	STR	1994														
4PE3	30	11-8	3	234	0-4		11-0	2-6			0-4		0-5					
11PE24	30	2-3	STR	454														
SUBTOTAL	EPOXY BARS			4020														
				4444														
CAP BEAM - FOUR 2																		
SPE4	92	15-4	5	1471	0-6	4-8	2-6				0-6		0-4					
SPE5	7	9-9	17	11		2-0	2-11	0	2-11	2-0						1-10		
SPE6	6	51-7	STR	323														
SPE7	2	20-5	2	43		14-10	2-4	3-3	0	14-10	0		0	0		1-6		
SPE8	2	22-3	2	46		16-8	2-4	3-3	0	16-8	0		0	0		1-6		
11PE9	6	17-9	STR	566														
11PE10	4	53-4	STR	1133														
11PE11	2	55-1	STR	585														
11PE12	1	34-0	STR	181														
11PE14	2	5-1	STR	54														
11PE15	2	3-1	STR	33														
11PE16	2	5-6	STR	58														
11PE17	3	2-0	STR	38														
11PE18	3	13-2	STR	210														
11PE19	4	44-6	STR	946														
11PE20	6	16-0	STR	510														
SPE21	9	6-10	9	64		1-10	3-2	1-10										
SPE22	8	6-6	9	54		1-8	3-2	1-8										
SPE23	8	6-0	9	50		1-5	3-2	1-5										
SUBTOTAL	EPOXY BARS			6398														
				6430														
DOWNL EXTENSIONS				626														
FEDESTALS - FOUR 3																		
SPE25	2	35-9	STR	75														
SPE26	2	10-11	STR	23														
SPE27	2	12-11	STR	27														
SUBTOTAL	EPOXY BARS			125														
SUPERSTRUCTURE OVERLAYS																		
WEST OVERLAY - STAGE 1																		
SPAN 1																		
SSE1	39	1-6	9	86		0-7	0-10	0-7										
SSE2	4	29-2	STR	122														
SUBTOTAL	EPOXY BARS			208														
				203														

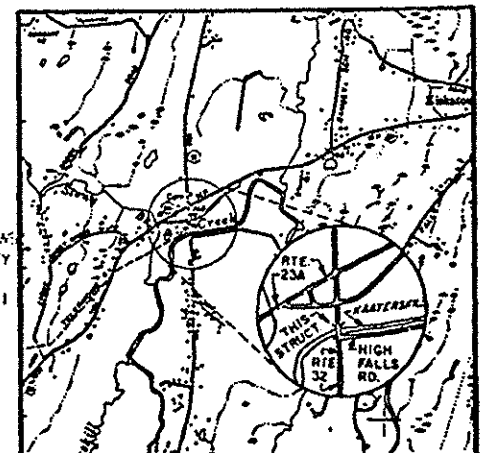
MARK	NO.	LENGTH	TYPE	WEIGHT	A	B	C	D	E	F	G	H	J	K	L	R	S	T
SPAN 2																		
SSE1	58	1-6	9	123		0-7	0-10	0-7										
SSE3	4	43-9	STR	183														
SUBTOTAL	EPOXY BARS			306														
				304														
SPAN 3																		
SSE1	58	1-6	9	122		0-7	0-10	0-7										
SSE3	4	43-9	STR	183														
SUBTOTAL	EPOXY BARS			305														
				304														
SPAN 4																		
SSE1	58	1-6	9	122		0-7	0-10	0-7										
SSE4	4	30-5	STR	144														
SUBTOTAL	EPOXY BARS			266														
				260														
EAST OVERLAY - STAGE 2																		
SPAN 1																		
SSE1	37	1-6	9	77		0-7	0-10	0-7										
SSE5	4	28-9	STR	120														
SUBTOTAL	EPOXY BARS			197														
				179														
SPAN 2																		
SSE1	58	1-6	9	121		0-7	0-10	0-7										
SSE3	4	43-9	STR	183														
SUBTOTAL	EPOXY BARS			304														
SPAN 3																		
SSE1	58	1-6	9	121		0-7	0-10	0-7										
SSE3	4	43-9	STR	183														
SUBTOTAL	EPOXY BARS			304														
SPAN 4																		
SSE1	58	1-6	9	121		0-7	0-10	0-7										
SSE6	4	35-4	STR	147														
SUBTOTAL	EPOXY BARS			268														
				260														
TOTAL	EPOXY BARS			2162														
				2162														
TOTAL	EPOXY BARS			12611														
				12611														
TOTAL	EPOXY BARS			14838														
				14838														
CRACK REPAIR - North Approach - Stage 1																		
#5	9	2-0	STR	18.8														
CRACK REPAIR - South Approach - Stage 1																		
#6	13	2-0	STR	22.1														

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		1001	51
RTE 9W OVER THRUWAY BIN 1-05355-0 RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0 RTE 23 OVER NALVO STREAM BIN 1-01772-0 BRIDGE DECK REPAIRS GREENE CO. CAPITAL PROJECT IDENTIFICATION NO. 1803.26				

REVISION IN TABLES

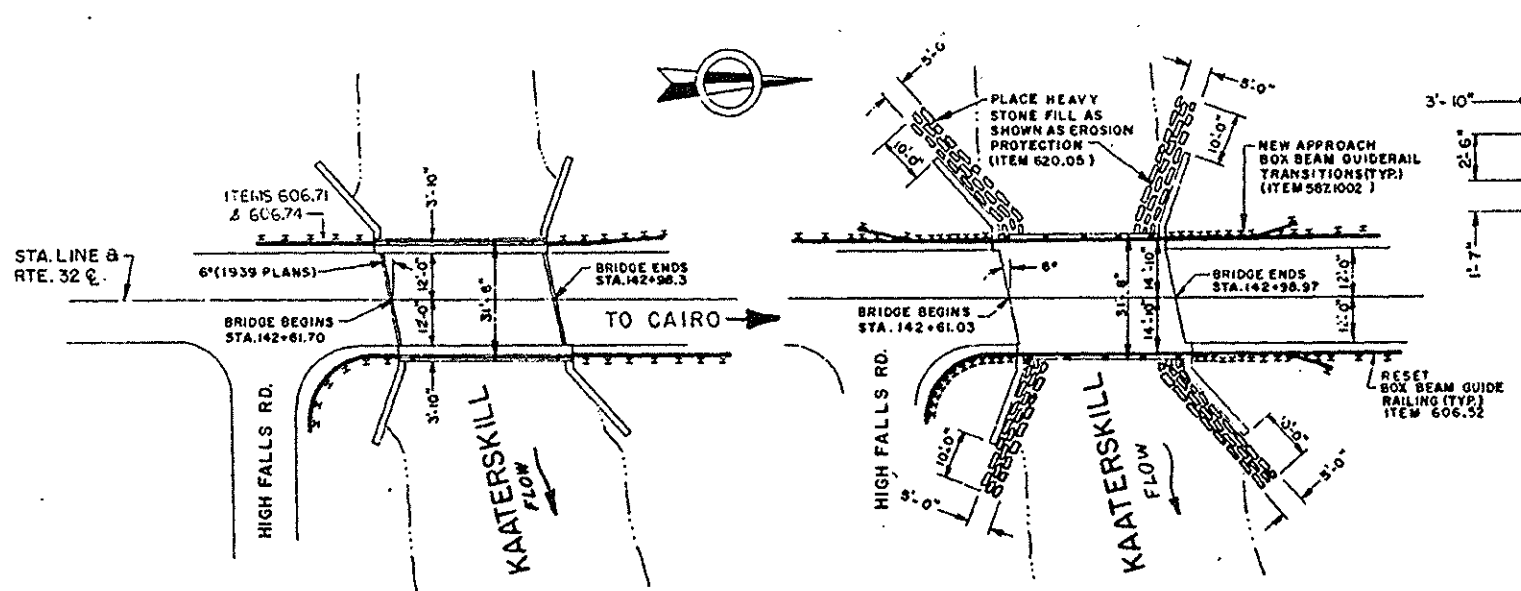
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN AND CONSTRUCTION DIVISION	
ROUTE 9W OVER THE THRUWAY	
BARLIST TWO	
PROJ. ENG. A.H. MULLIK	DATE MADE 11/89
SOLID A.P. YAMOTTI	DRAWING NO. 23 OF 237.23

FED. RD. DIST. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		41	51
RTE 32 OVER THRUWAY BIN 1-05355-0 RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0 RTE 23 OVER HALL'S STREAM BIN 1-01772-0 BRIDGE DECK REPAIRS GREENE CO. CAPITAL PROJECT IDENTIFICATION NO. 1803.26				



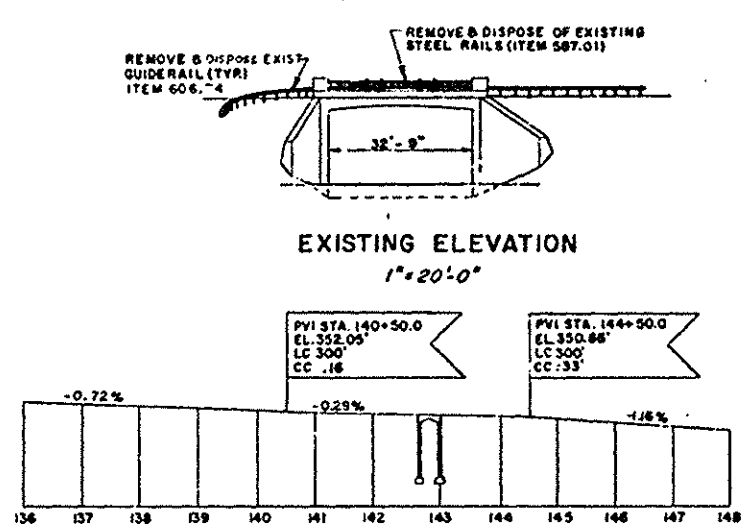
CEMENTON QUADRANGLE
LOCATION MAP
1" = 2000'

Index of Drawings	
Dwg. No.	Description
1.	General Plans, Elevations and Sections
2.	Estimate of Quantities and Notes
3.	Transverse Section and Superstructure Plan
4.	Miscellaneous Details
5.	Steel Bridge Rail - Two Rail



EXISTING PLAN
1" = 20'-0"

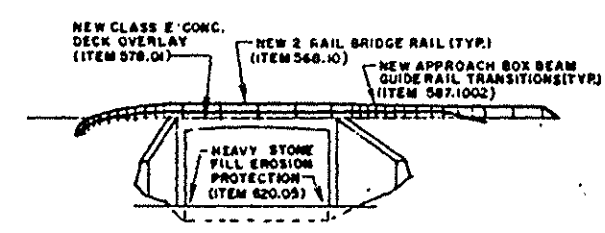
PROPOSED PLAN
1" = 20'-0"



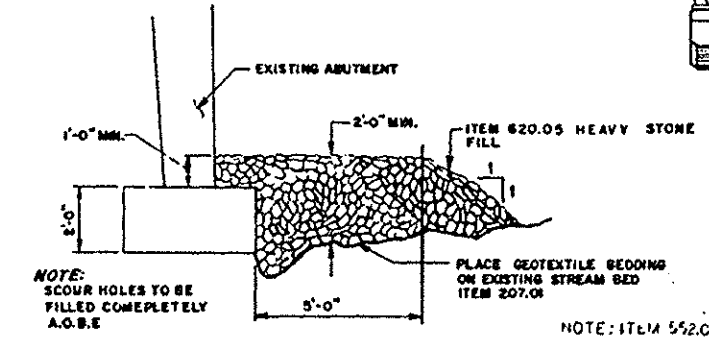
EXISTING ELEVATION
1" = 20'-0"

1939 CONSTRUCTION PROFILE
No Scale

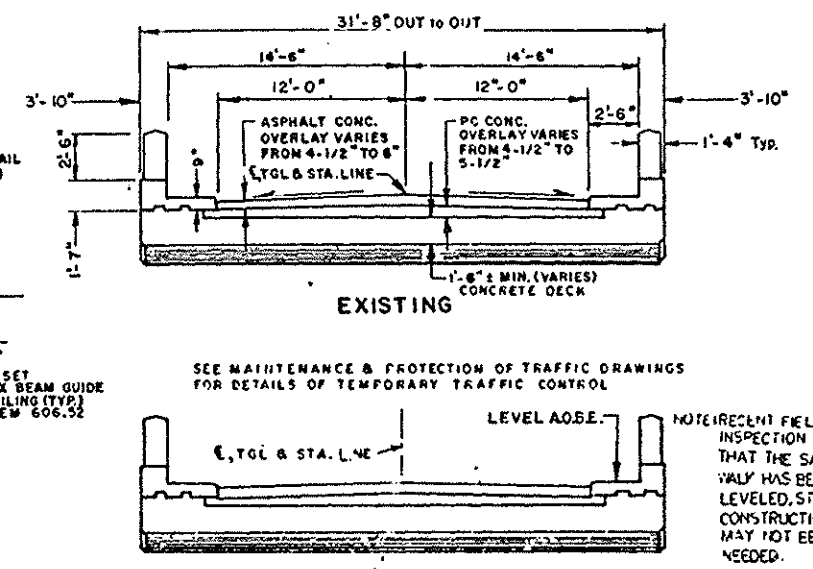
LOAD RATING (LOAD FACTOR)		
INVENTORY	HS 26	47 TONS
OPERATING	HS 43	77 TONS



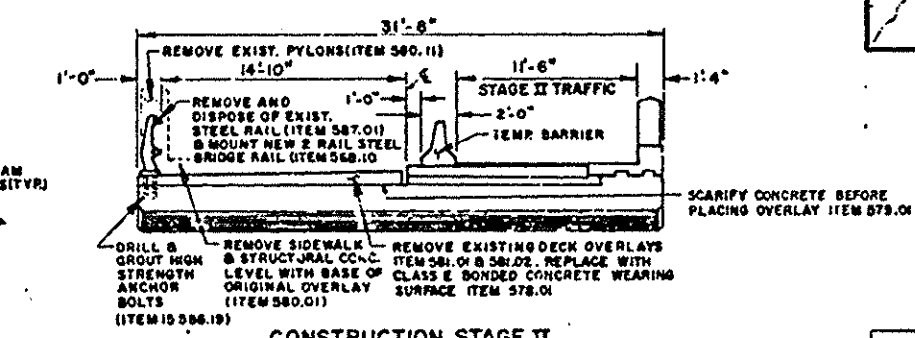
PROPOSED ELEVATION
1" = 20'-0"



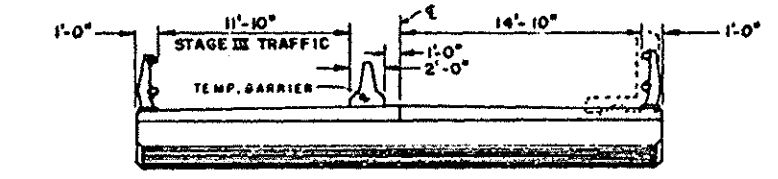
TYPICAL STONE FILL DETAIL
AT ABUTMENTS
SCALE: 3/8" = 1'-0"



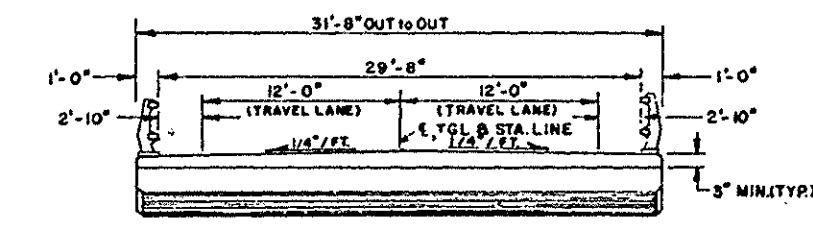
CONSTRUCTION STAGE I SEE NOTE 1



CONSTRUCTION STAGE II



CONSTRUCTION STAGE III
(SIMILAR TO STAGE II ABOVE)



PROPOSED

TRANSVERSE SECTIONS
1/4" = 1'-0"

NOTE: ITEM 552.04 SHOULD BE USED IF NEEDED A.O.B.E. TO PROVIDE THE ENVIRONMENTAL PROTECTION OF THE STREAM FOR SCOUR PROTECTION OPERATION.

B.I.N. 1022370

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN AND CONSTRUCTION DIVISION

ROUTE 32 OVER THE KAATERSKILL
GENERAL PLANS,
ELEVATIONS, & SECTIONS

PROJ. ENG. A. MALIK	DATE MADE 11/89
SQUAD AP 401/100	DRAWING NO. 1 OF 5

DESIGNED BY: AP 401/100
DETAIL CHECKED BY: B. ALAN
DETAILED BY: G. HILL

[illegible]

GENERAL NOTES

Design Specifications: New York State Department of Transportation Standard Specifications for Highway Bridges with all provisions in effect as of Sept. 1989.

Material and Construction Specifications: Standard Specifications, Construction and Materials, New York State Department of Transportation, Office of Engineering, dated January 2, 1985 with current additions and modifications.

Plans of the existing Structure are available for inspection at the Office of the Regional Director.

Live Load: HS20-44.

The Load Ratings are in accordance with the AASHTO Manual for Maintenance Inspection of Bridges 1983.

RECONSTRUCTION NOTES

The Contractor's attention is directed to the fact that, due to the nature of RECONSTRUCTION projects, the exact extent of RECONSTRUCTION work cannot always be accurately determined prior to the commencement of work. These Contract Documents have been prepared based on field inspection and other information available at the time. Actual field conditions may require modifications to construction details and work quantities. The Contractor shall perform the work in accordance with field conditions.

The Contractor shall perform all work with care so that any materials which are to remain in place, which are to remain the property of the State, will not be damaged. If the Contractor damages any materials which are to remain in place, or which are to remain the property of the State, the damaged materials shall be repaired or replaced in a manner satisfactory to the Engineer at the expense of the Contractor.

Whenever items in the Contract require materials to be removed and disposed of, the cost of supplying a disposal area and transportation to that area shall be included in the unit prices bid for those items.

During removal operations, the Contractor shall not be allowed to drop waste concrete, debris and other material to the area below the bridge except where the plans specifically permit the dropping of material. Platforms, nets, screens or other protective devices may be used to catch the material. If the Engineer determines that adequate protective devices are not being employed, the work shall be suspended until adequate protection is provided.

All material falling on the area below and adjacent to the bridge shall be removed and disposed of by the Contractor.

The cost of furnishing, installing, maintaining, removing and disposing of all platforms, nets, screens or other protective devices shall be included in the unit prices bid for the appropriate items of the Contract.

Concrete overlay shall be placed continuously over the full length of the slab, in accordance with the construction phases shown on the plans. Construction joints other than the joint attached between work are not desirable and will be allowed only with the permission of the Engineer.

Mechanical scarification shall not be allowed on a span where the overlay is curing.

Where the depth of concrete placement exceeds 3 inches, internal vibration will be required.

All reinforcing steel is to be retained in place.

The engineer will determine the limits of reinforcing bar exposure after the contractor has removed the existing wearing courses and waterproofing membrane, if one exists, and has completed scarification of the structural slab. Reinforcing bars shall be exposed in accordance with the provisions of Item 559.02, no more than 1/4 of the total number of reinforcing bars in either direction shall be exposed at one time. It is estimated that 25% of the deck surface area will require reinforcing bar exposure.

Traffic shall be maintained at all times concurrent with the work. For traffic routines refer to applicable plans.

Epoxy Protective Coating, Item 559.01, shall be applied to the following surfaces:

Deck = All Fascia Surfaces.

If the structure has a Bridge Identification Number (B.I.N.) Plate attached, it shall be the Contractor's responsibility to protect it during construction or remove and re-mount it after construction is completed.

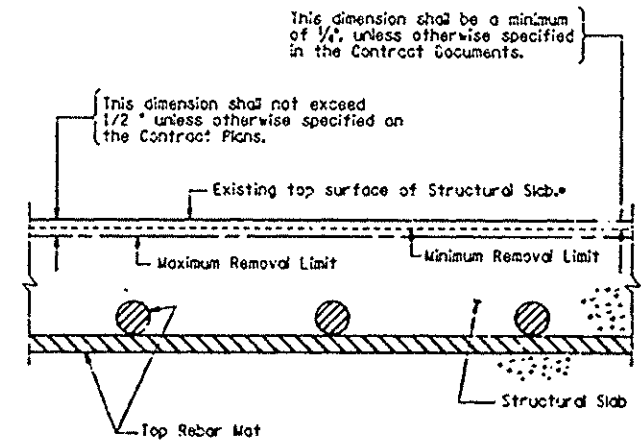
For details of Profile Transition, See Approach Plans.

	STATE OF NEW YORK	
	DEPARTMENT OF TRANSPORTATION	
STRUCTURES DESIGN AND CONSTRUCTION DIVISION		
ROUTE 32 OVER THE KAATERSKILL		
ESTIMATE OF QUANTITIES AND NOTES		
PROJ. ENG. A.M. MAIER	DATE MADE 11/89	
SOUND <i>C.N. Smith</i>	DRAWING NO. 2 OF 2	

-  CONCRETE TO BE REMOVED
UNDER ITEM 580.01
-  OVERLAYS TO BE REMOVED
UNDER ITEMS 581.01 AND 581.02
-  BONDED CONCRETE WEARING SURFACE FOR
STRUCTURAL SLABS ITEM 578.01

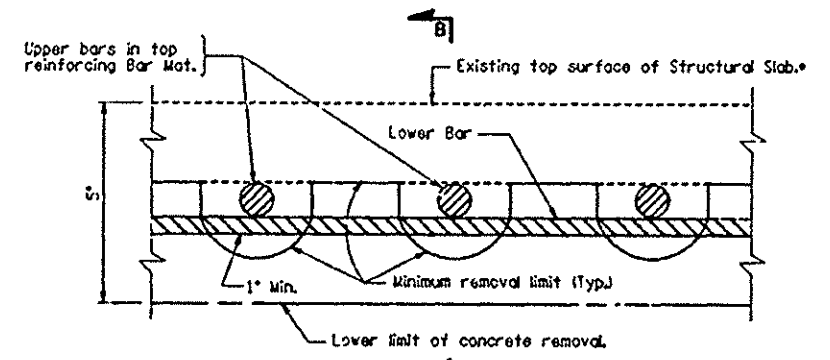


FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		44	51
CAPITAL PROJECT IDENTIFICATION NO. 1803.26				

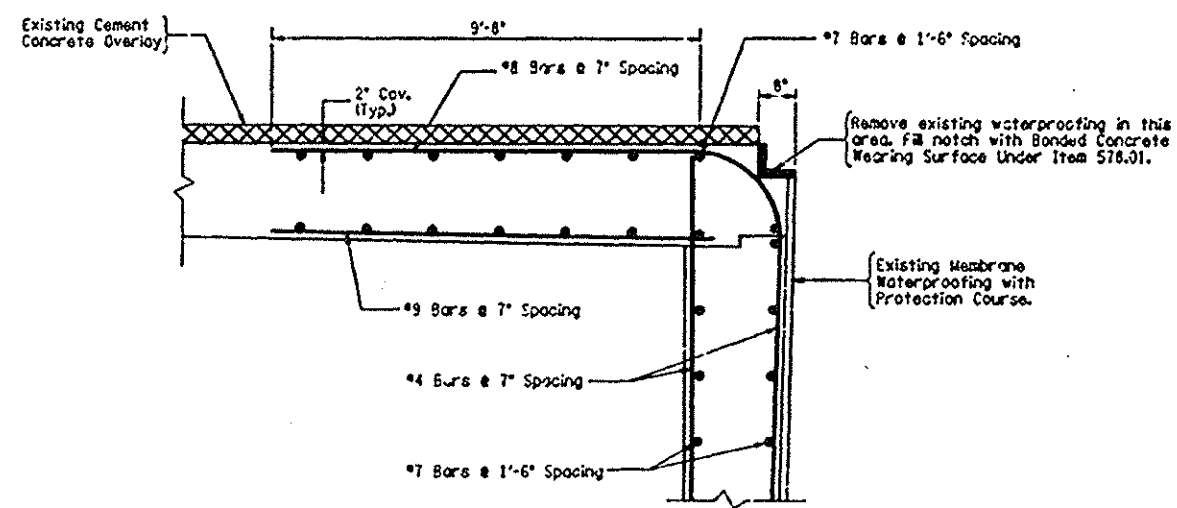


* - Shown Theoretically
 Partial section of Structural Slab showing limits of "Scarification of Structural Slabs."

SCARIFICATION DETAIL
 Not To Scale

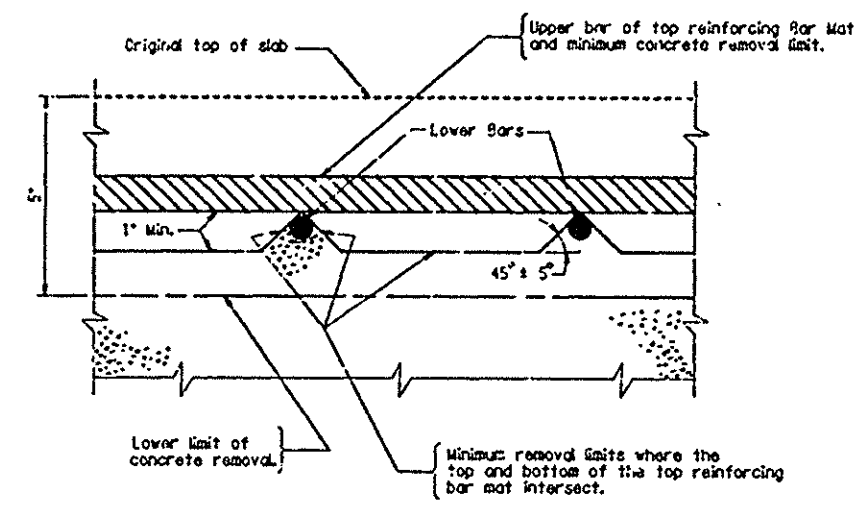


**REINFORCING BAR EXPOSURE
 TOP BAR OF UPPER MAT ONLY**
 Not To Scale



Note: Existing Bituminous Concrete Overlays not shown.

SECTION A-A
 Not To Scale

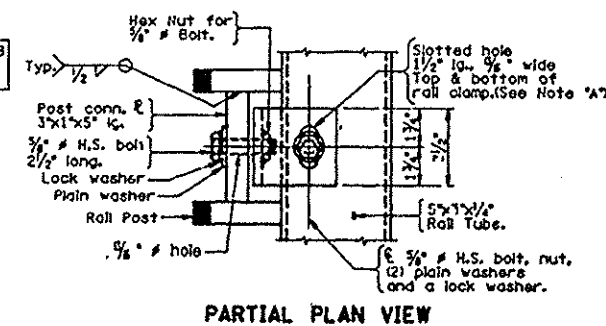
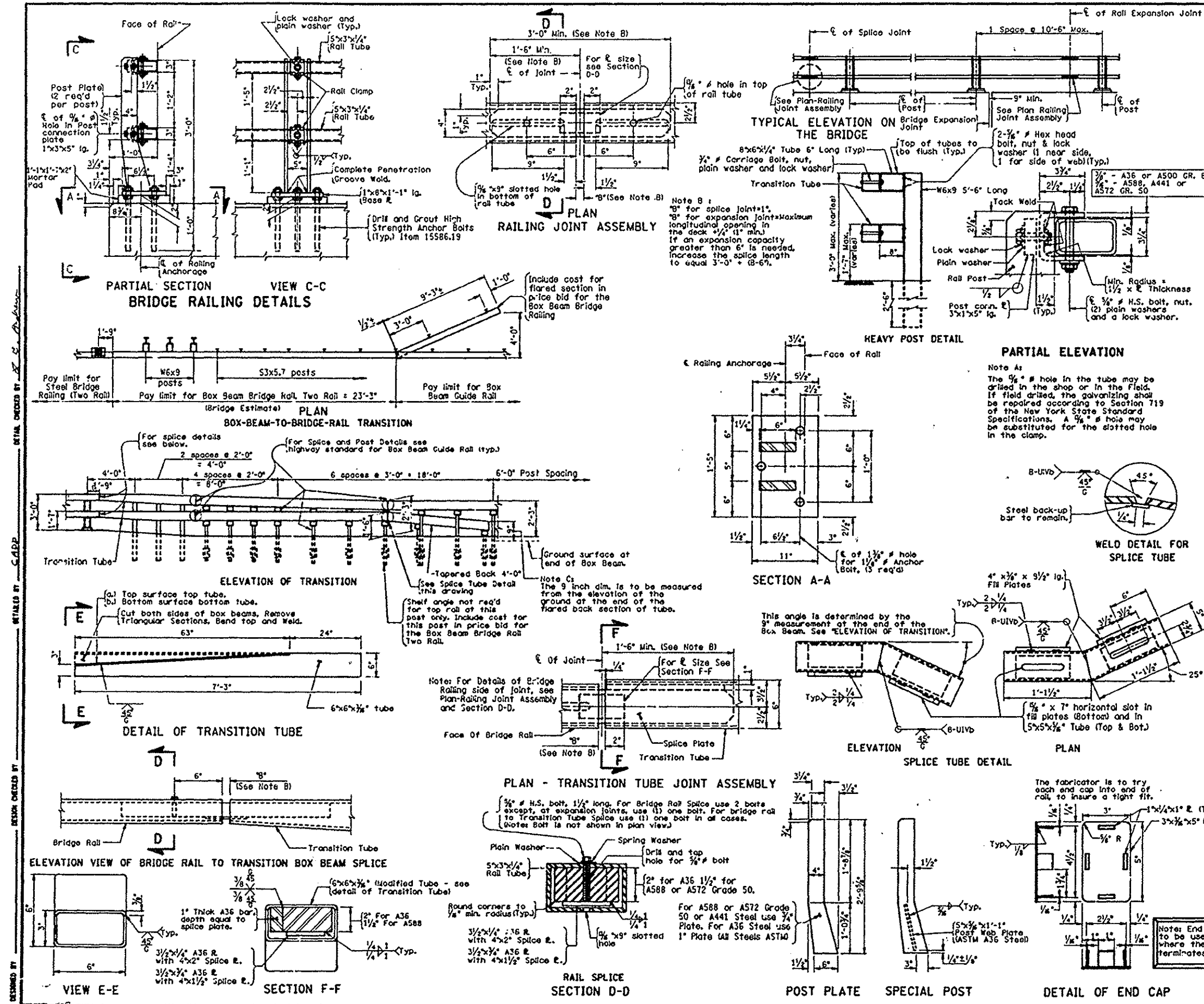


**REINFORCING BAR EXPOSURE
 TOP BAR OF UPPER MAT ONLY
 SECTION B-B**
 Not To Scale

STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN AND CONSTRUCTION DIVISION	
ROUTE 32 OVER THE KAATERSKILL	
MISCELLANEOUS DETAILS	
PROJ. ENG. A.B. BAKER	DATE MADE 11/69
SEAL [Signature]	DRAWING NO. 4 OF 5

DESIGNED BY
 CHECKED BY
 DETAIL CHECKED BY
 C. LAMERS

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		45	51
RTE 9M OVER THURWAY BIN 1-05355-0 RTE 32 OVER WATERSKILL CREEK BIN 1-02297-0 RTE 3 OVER NAUVO STREAM BIN 1-01772-0 BRIDGE DECK REPAIRS				
GREENE CO.				
CAPITAL PROJECT IDENTIFICATION NO. 1803.25				

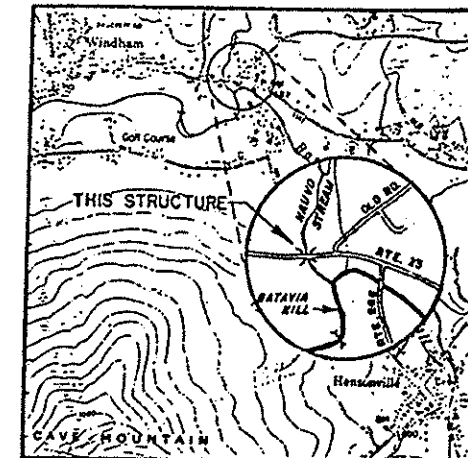


- NOTES:
1. All railing is to be fabricated and erected so that the rails are parallel to each other and the posts are truly vertical.
 2. The Base Plates shall be perpendicular to the post unless otherwise noted.
 3. Tubular steel rails, rail clamp assemblies, nuts and washers, posts, post webs (if required) post spacers, base plates and railing joint assemblies shall be paid for under the railing item. The mortar pad shall be paid for under its own item.
 4. Anchor studs, nuts, washers and anchor plates shall be paid for under the railing item.
 5. After the anchor stud nuts have been placed and tightened to the satisfaction of the Engineer, the studs shall be flame cut off one (1) inch above the nut and the first three threads above the nut shall be damaged, as ordered by the Engineer.
 6. Rails shall span a minimum of 3 posts unless it is impossible. If it is impossible, the absolute minimum shall be two posts with one of these posts being a special post, unless waived by D.C.E.S.
 7. Rail posts shall be erected to proper line and grade before the mortar pad under the post is poured unless otherwise indicated on the Contract Plans.
 8. If the end of the bolts connecting the clamp to the post connection plate bear against the tube when in the final position additional plain washers shall be added to prevent the end of the bolt from bearing against the tube.
 9. The hole for the bolt connecting the tube and the clamp shall be located in the tube so that the tube will bear against the post plates when in final position.
- The Contractors attention is called to the railing base plate which has been modified from the normal base plate.

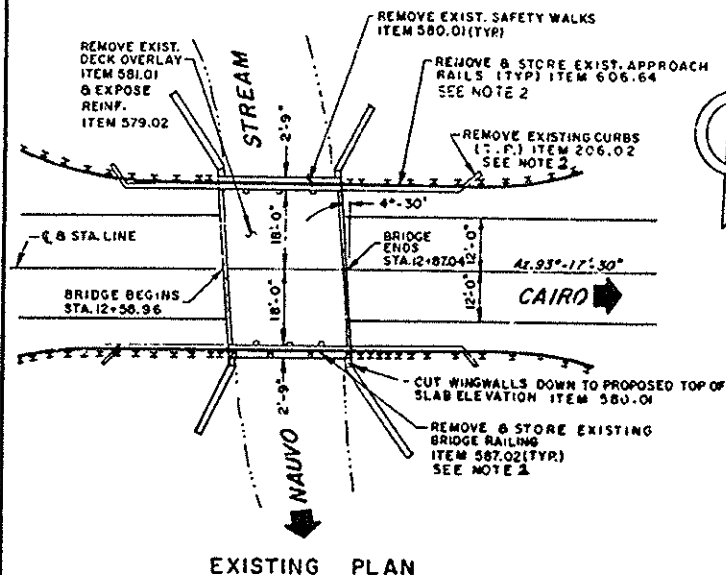
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION	
ROUTE 32 OVER THE KAATERSKILL CREEK	
STEEL BRIDGE RAIL - 2 RAIL	
PROJ. ENG. A.M. MALKIN	DATE MADE 11/89
SQUAD G.P. [signature]	DRAWING NO. 5 OF 5

FED. RD. DIST. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		46	51

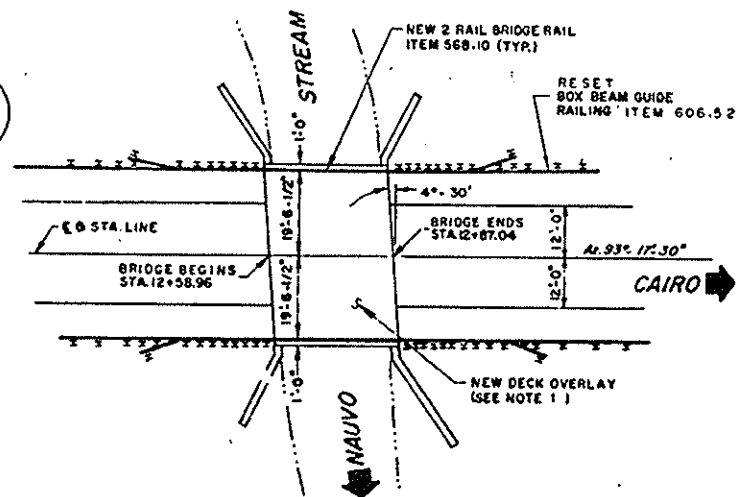
RTE 9M OVER THURMAY BIN 1-05355-0
 RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0
 RTE 23 OVER NAUVO STREAM BIN 1-01772-0
 BRIDGE DECK REPAIRS
 CAPITAL PROJECT IDENTIFICATION NO. 1803.26



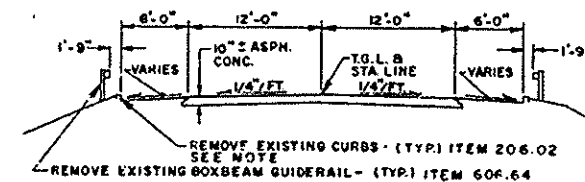
HENSONVILLE QUADRANGLE
 LOCATION MAP
 1" = 2000'



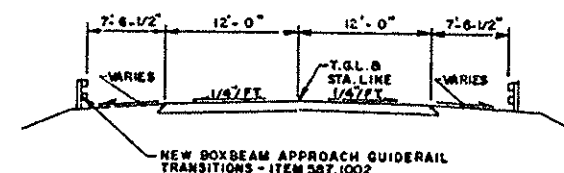
EXISTING PLAN



PROPOSED PLAN



EXISTING



PROPOSED

EXISTING & PROPOSED APPROACH SECTION

No Scale

NOTE 2: EXISTING BRIDGE RAILING, CURBS AND ANY REMOVED AND UNUSED PORTION OF APPROACH BOX BEAM GUIDE RAILING SHOULD BE STORED BY THE CONTRACTOR IN AN ACCESSIBLE APPROVED LOCATION. WHEN THE SALVAGED MATERIALS ARE AVAILABLE FOR PICK UP, THE ENGINEER SHOULD COORDINATE THE OPERATION AND NOTIFY REGION ONE BRIDGE MAINTENANCE ENGINEER TO REMOVE THE MATERIALS FROM THE WORK SITE. PAYMENT FOR THIS WORK SHOULD BE MADE UNDER THEIR RESPECTIVE ITEMS.

NOTES:

- THE CONTRACTOR HAS FOLLOWING OVERLAY OPTIONS:
- ITEM 584.002 - HIGH DENSITY CONCRETE OVERLAY 2" MIN.
- ITEM 584.102 - LATEX MODIFIED CONCRETE OVERLAY 1-1/2" MIN.
- ITEM 584.201 - MICRO SILICA CONCRETE OVERLAY 1-1/2" MIN.

Index of Drawings

Fig. No.

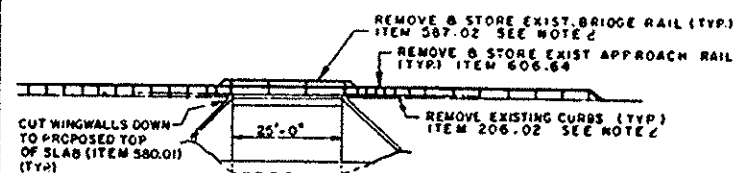
- General Plan, Elevation and Sections
- Estimate of Quantities and Notes
- Transverse Section and Superstructure Plan
- Miscellaneous Details
- Steel Bridge Rail - Two Rail

B.I.N. 1017720

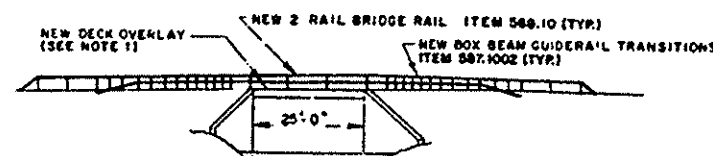
STATE OF NEW YORK
 DEPARTMENT OF TRANSPORTATION
 STRUCTURES DESIGN AND CONSTRUCTION DIVISION

ROUTE 23 OVER THE NAUVO STREAM GENERAL PLAN ELEVATION & SECTIONS

PROJ. ENG. A. MALIK DATE MADE 11/89
 DRAWDING NO. 1 OF 5

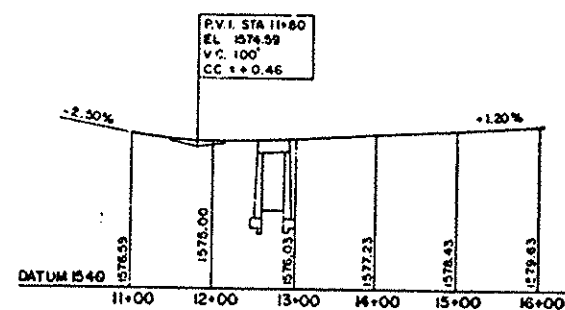


EXISTING ELEVATION

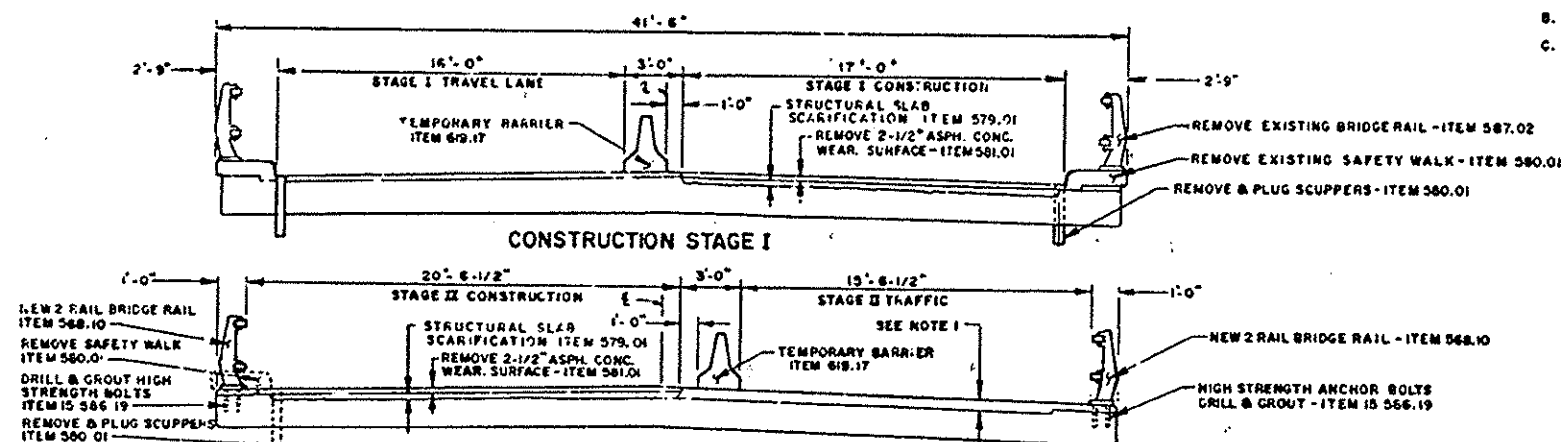


PROPOSED ELEVATION

EXISTING & PROPOSED PLAN & ELEVATION 1" = 20'-0"

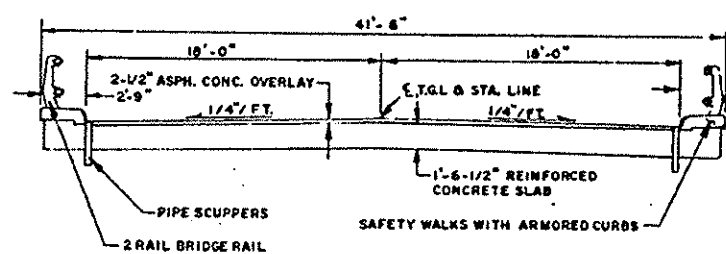


ROUTE 23 PROFILE
 No Scale



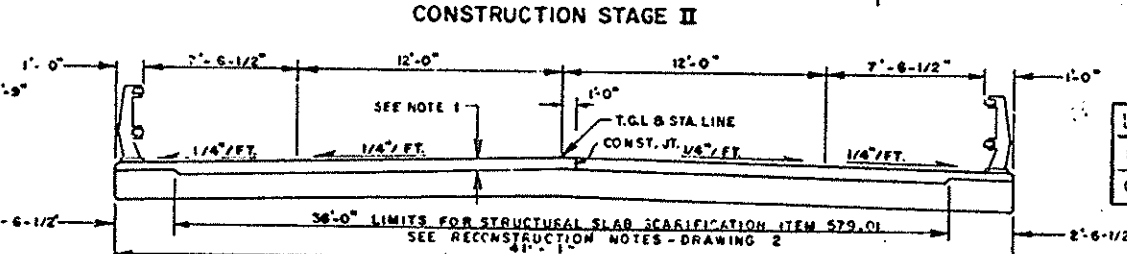
CONSTRUCTION STAGE I

CONSTRUCTION STAGE II



EXISTING TRANSVERSE SECTION

3/16" = 1'-0"



PROPOSED TRANSVERSE SECTIONS

1/4" = 1'-0"

LOAD RATING (WORKING STRESS)		
INVENTORY	HS 21	38 TONS
OPERATING	HS 36	65 TONS

DETAIL CHECKED BY: J. P. K. K. K.

DESIGNED BY: J. P. K. K. K.

DESIGNED BY: J. P. K. K. K.

DESIGNED BY: J. P. K. K. K.

[illegible]

GENERAL NOTES

Material and Construction Specifications, Standard Specifications, Construction and Materials, New York State Department of Transportation, Office of Engineering, dated January 2, 1985 with current additions and modifications.

The Load Ratings are in accordance with the AASHTO Manual for Maintenance Inspection of Bridges - 1983.

The Contractor's attention is directed to the fact that, due to the nature of RECONSTRUCTION projects, the exact extent of RECONSTRUCTION work cannot always be accurately determined prior to the commencement of work. These Contract Documents have been prepared based on field inspection and other information available at the time. Actual field conditions may require modification to construction status and work quantities. The Contractor shall perform the work in accordance with field conditions.

Whenever items in the Contract require materials to be removed and disposed of, the cost of supplying a disposal area and transportation to that area shall be included in the unit prices bid for those items.

During removal operations, the Contractor shall not be allowed to drop waste concrete, debris and other material to the area below the bridge or onto the plans specifically permit the dropping of material. Plaster, concrete, or other material protective devices shall be used to catch the material if the Engineer determines that adequate protective devices are not being employed, the work shall be suspended until adequate protection is provided.

The cost of furnishing, installing, maintaining, removing and disposing of all platforms, nets, screens or other protective devices shall be included in the unit prices bid for the appropriate items of the Contract.

Where top bars exist in the slab (approximately the end 2'-0" of the span) the top bar of the upper mat of reinforcing steel is to be exposed as shown on Dwg. 4 under Item 579.02. The remainder of the Structural Slab is to be scarified under Item 579.01.

All concrete removed under Item 579.02 is to be replaced and an additional minimum overlay depth above the original deck slab surface is to be provided in accordance with the specifications for the overlay option that is selected. Minimum concrete cover is to be 2 1/4".

Concrete overlay shall be placed continuously over the full length of the slab, in accordance with the construction phases shown on the plans. Construction joints other than the joint established between work stages are not desirable and will be allowed only with the permission of the Engineer.

Traffic shall be maintained at all times concurrent with the work.
For traffic routines refer to applicable plans.

Epoxy Protective Coating, Item 559.01, shall be applied to the following surfaces:

Abutments = Top of Wingwalls where cut to level of new overlay.

Deck = All Fascia Surfaces.

If the structure has a Bridge Identification Number (B.I.N.) Plate attached, it shall be the Contractor's responsibility to protect it during construction or remove and remount it after construction is completed.

For Details of Profile Transition see Approach Plans.

REVISIONS

ROUTE 23 OVER THE NAUVO STREAM

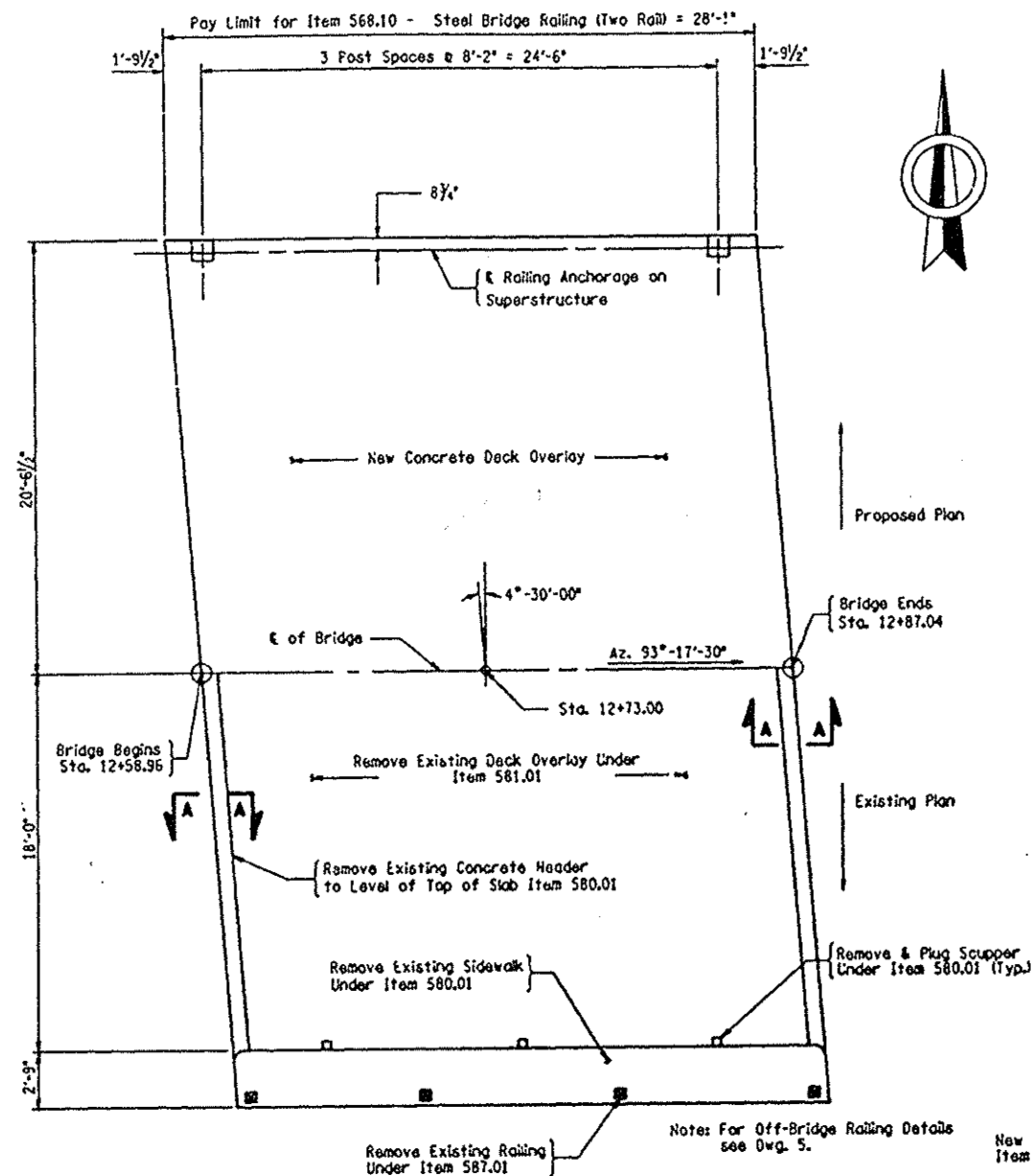
ESTIMATE OF QUANTITIES AND NOTES

PROJ. ENG. A.J. MAHER	DATE MADE 11/89
SOLNS. <i>APR 89</i>	DRAWING NO. 2 OF 2

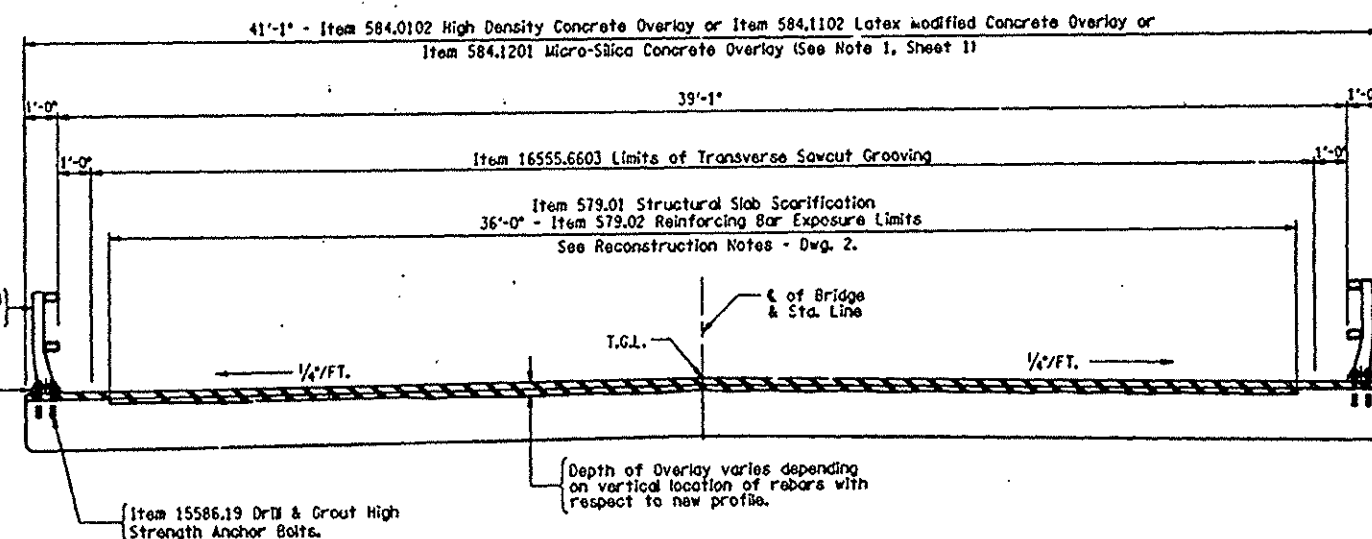
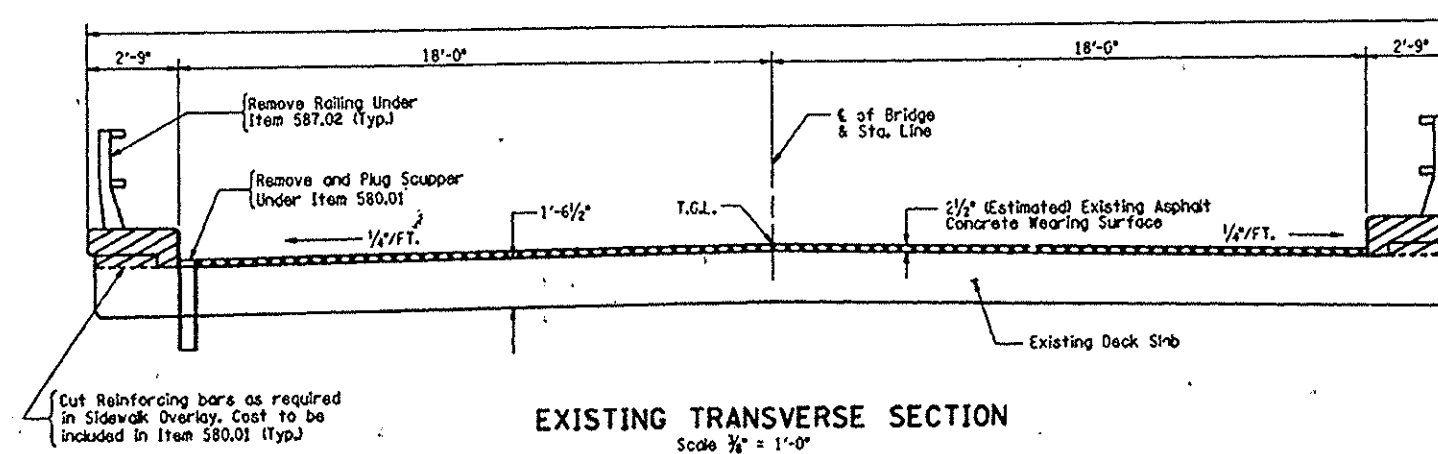
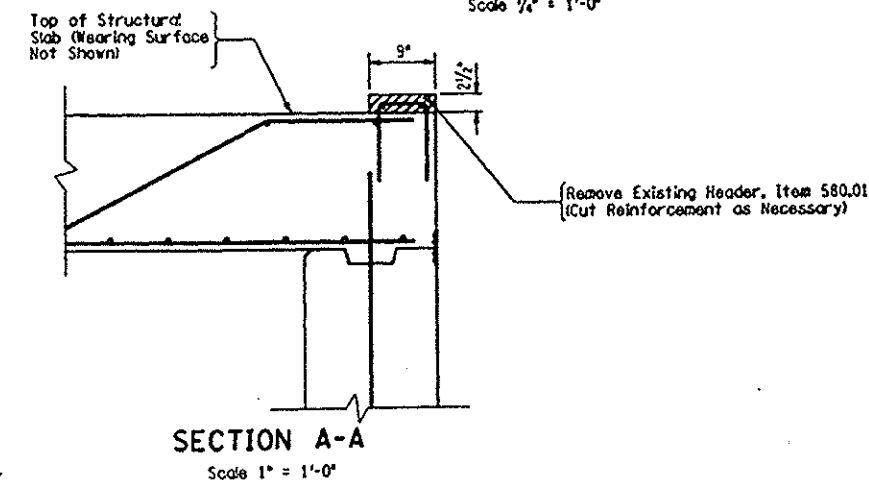
FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		45	51

RTE 9M OVER THRUWAY BIN 1-05355-0	
RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0	
RTE 23 OVER NAUVO STREAM BIN 1-01772-0	
BRIDGE DECK REPAIRS	GREENE CO.
CAPITAL PROJECT IDENTIFICATION NO. 1805.26	

- CONCRETE TO BE REMOVED UNDER ITEM 580.01
- BITUMINOUS CONCRETE OVERLAY TO BE REMOVED UNDER ITEM 581.01
- OPTIONAL HIGH DENSITY CONCRETE OVERLAY, ITEM 584.0102
LATEX MODIFIED CONCRETE OVERLAY, ITEM 584.1102
OR MICRO-SILICA CONCRETE OVERLAY, ITEM 584.1201



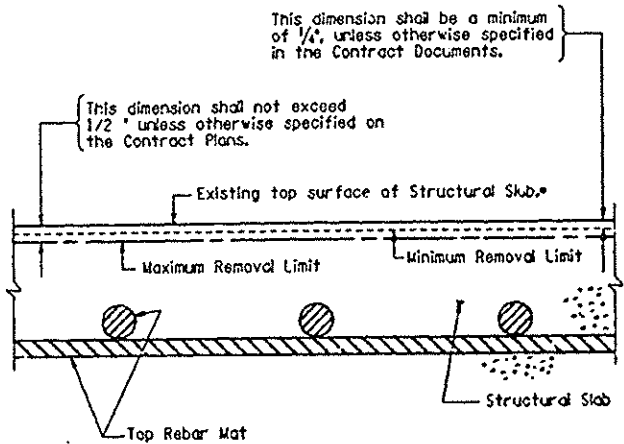
PLAN AND RAILING LAYOUT
Scale 1/4" = 1'-0"



PROPOSED TRANSVERSE SECTION
Scale 1/4" = 1'-0"

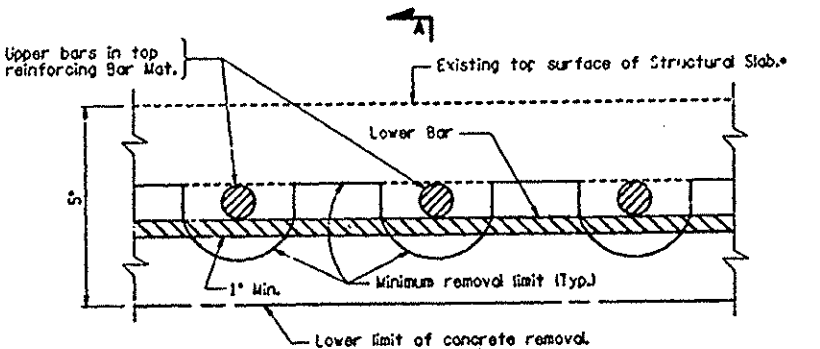
STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN AND CONSTRUCTION DIVISION	
ROUTE 23 OVER THE NAUVO STREAM	
TRANSVERSE SECTION AND SUPERSTRUCTURE PLAN	
PROJ. ENG. A.J. MALE	DATE MADE 11/89
DRAWN BY J.D. [Signature]	DRAWING NO. 3 OF 5

FED. RD. REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		49	51
RTE 30 OVER THRUWAY BIN 1-05355-0 RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0 RTE 23 OVER NAUVO STREAM BIN 1-01772-0 BRIDGE DECK REPAIRS				
GREENE CO.				
CAPITAL PROJECT IDENTIFICATION NO. 180326				



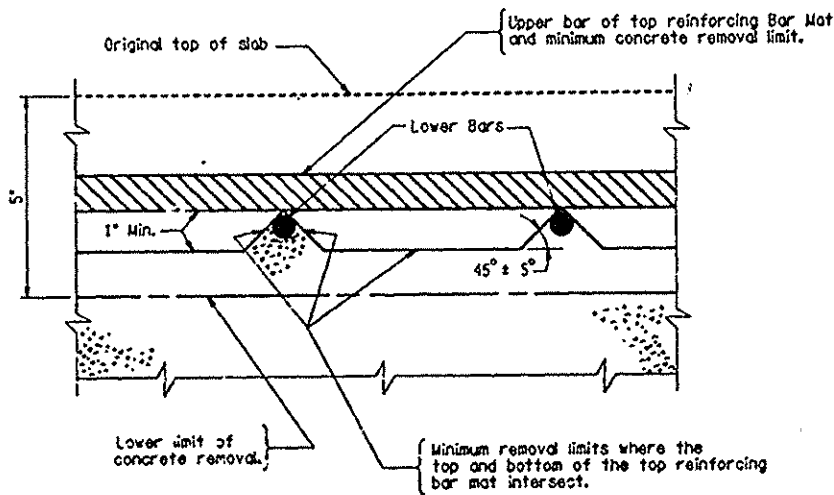
• - Shown Theoretically
(Partial section of Structural Slab showing limits of Scarification of Structural Slabs.)

SCARIFICATION DETAIL
Not To Scale



• Shown theoretically for the following conditions:
After Scarification is completed under a separate item. Applies where a separate Scarification item for partial removal of the rebar cover is included in the contract.

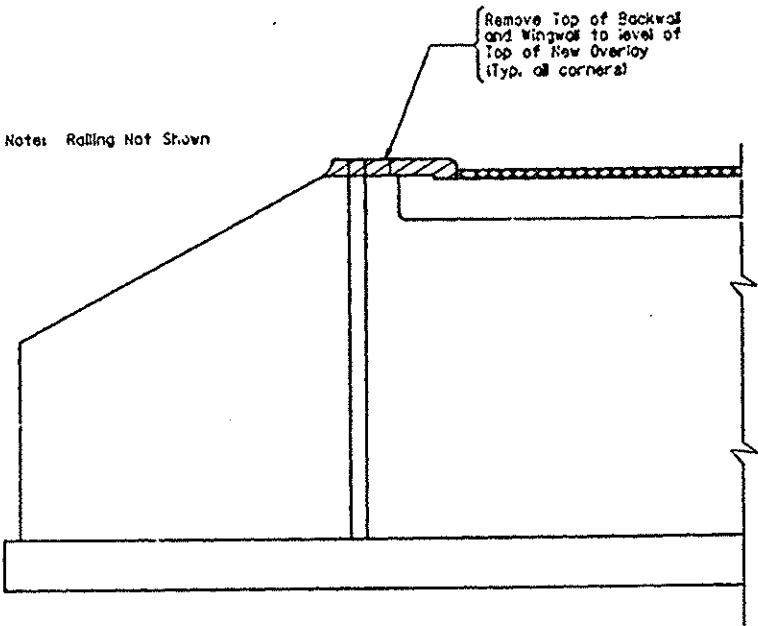
REINFORCING BAR EXPOSURE
TOP BAR OF UPPER MAT ONLY
Not To Scale



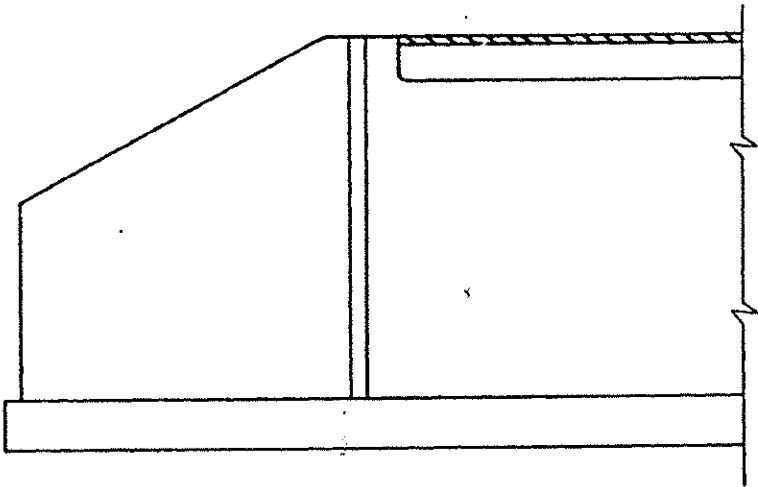
REINFORCING BAR EXPOSURE
TOP BAR OF UPPER MAT ONLY
SECTION A-A
Not To Scale

Notes: The exposed top of remaining concrete at wingwalls (under hatched area) shall receive an application of mortar to render the surface smooth. Prior to application of mortar the surface shall be sandblasted clean and thoroughly wet down. Payment for this work to be included in Item 580.01.

- CONCRETE TO BE REMOVED UNDER ITEM 580.01
- BITUMINOUS CONCRETE OVERLAY TO BE REMOVED UNDER ITEM 581.01
- OPTIONAL HIGH DENSITY CONCRETE OVERLAY, ITEM 584.0102
LATEX MODIFIED CONCRETE OVERLAY, ITEM 584.1102
OR MICRO-SILICA CONCRETE OVERLAY, ITEM 584.1201



EXISTING ABUTMENT DETAIL
Not To Scale



PROPOSED ABUTMENT DETAIL
Not To Scale

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN AND CONSTRUCTION DIVISION

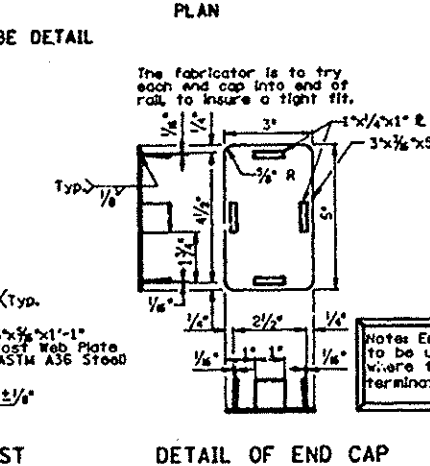
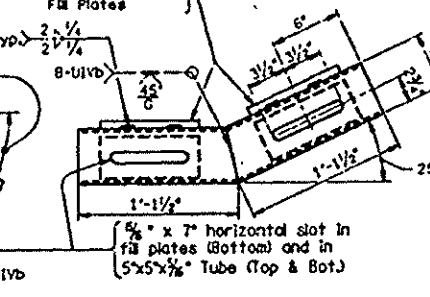
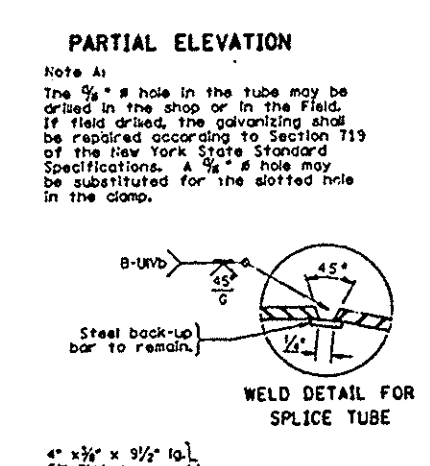
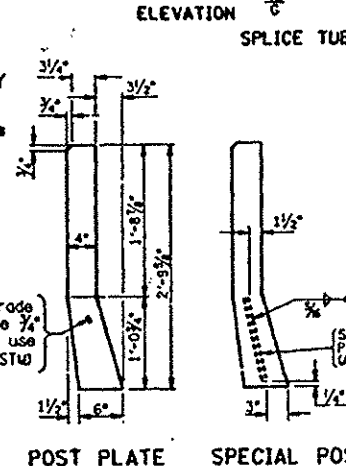
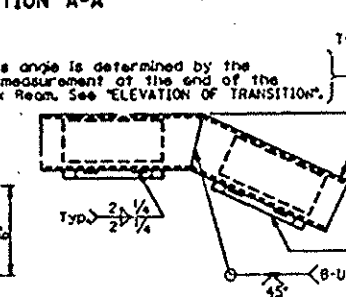
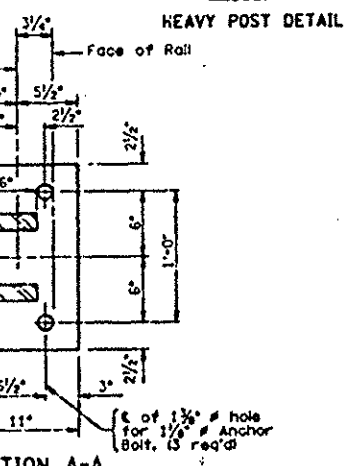
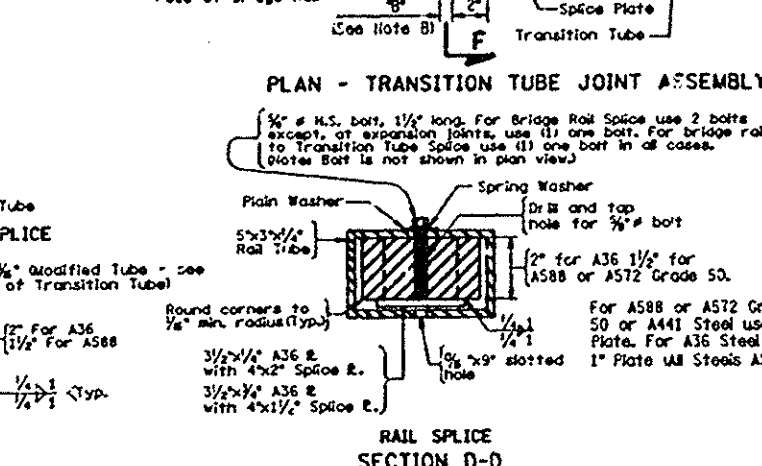
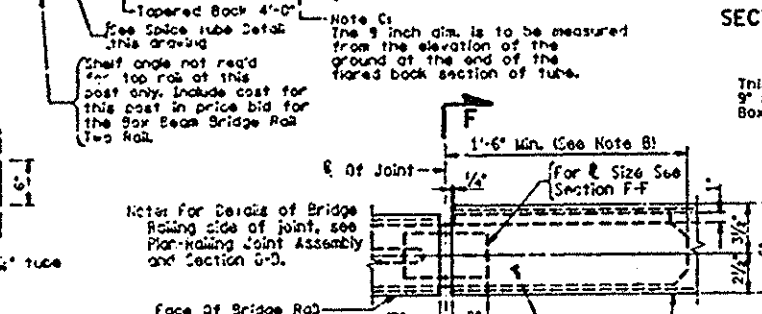
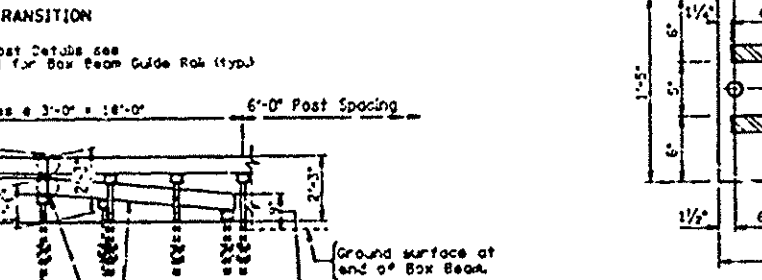
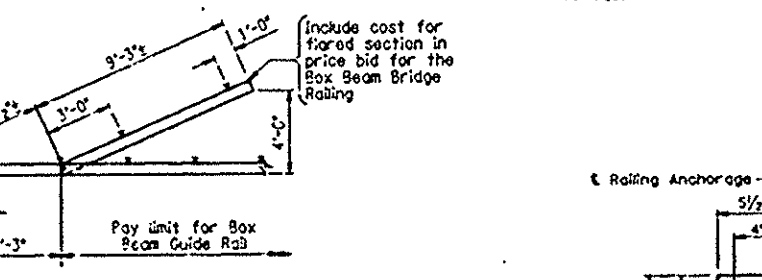
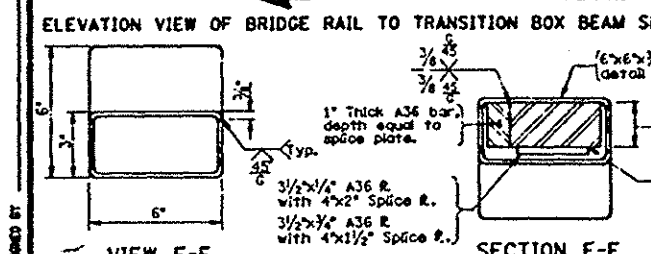
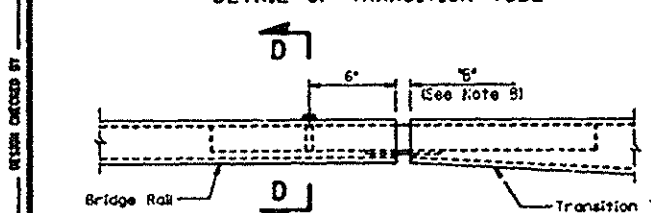
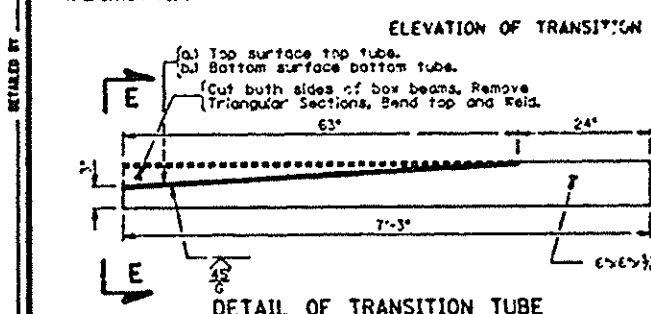
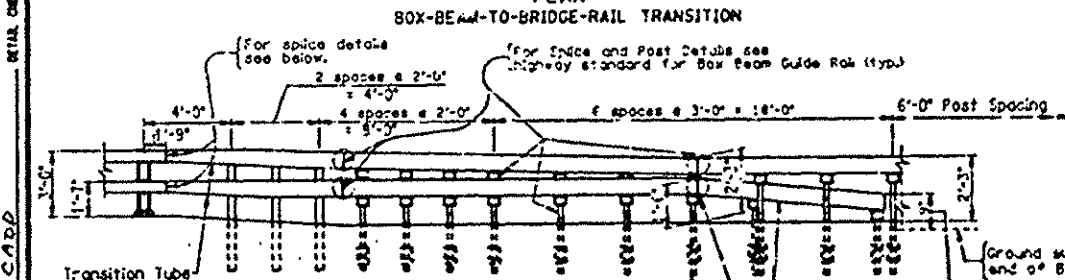
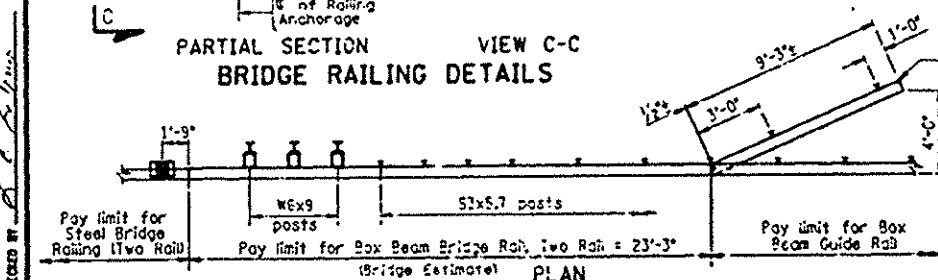
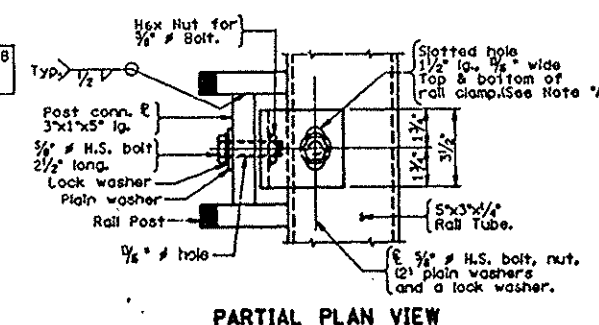
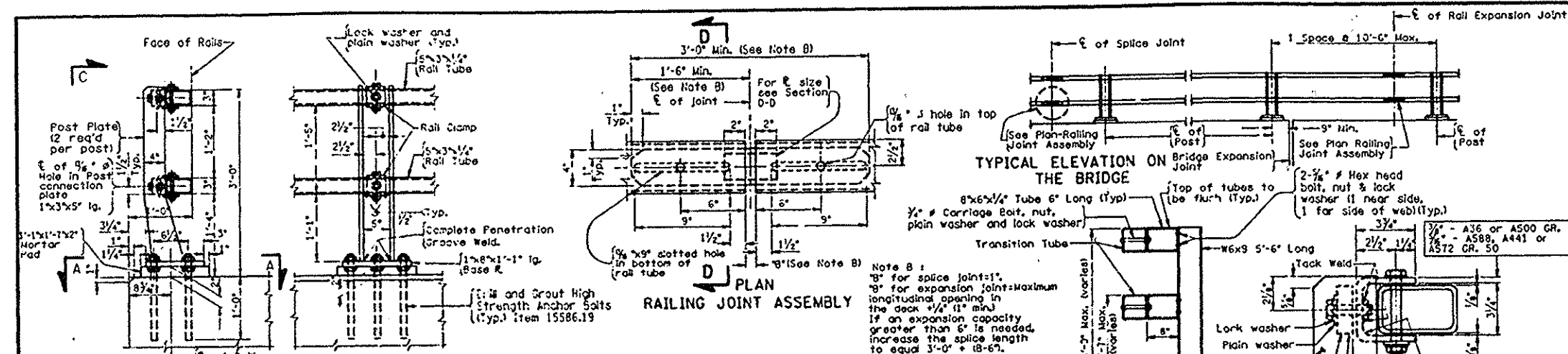
ROUTE 23 OVER THE NAUVO STREAM

MISCELLANEOUS DETAILS

PROJ. ENG. AAL/MLR
DRAWN A.P. [signature]

DATE MADE 11/89
DRAWING NO. 4 OF 5

FED. RD. REC. NO.	STATE	FEDERAL A _W PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		50	51
RTE 9W OVER THRUWAY BIN 1-05355-0 RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0 RTE 23 OVER WALSH STREAM BIN 1-0172-0 BRIDGE DECK REPAIRS				
GREENE CO.				
CAPITAL PROJECT IDENTIFICATION NO. 180326				

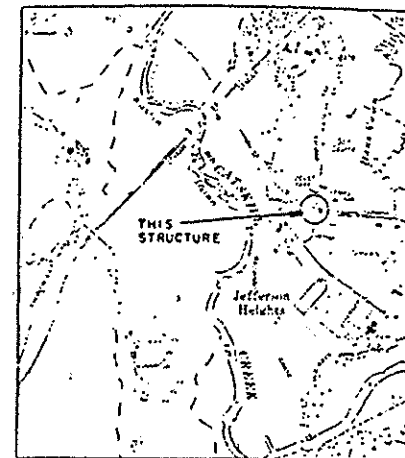


1. All railing is to be fabricated and erected so that the rails are parallel to each other and the posts are truly vertical.
2. The Base Plates shall be perpendicular to the post unless otherwise noted.
3. Tubular steel rails, rail clamp assemblies, nuts and washers, posts, post caps if required post spacers, base plates and railing joint assemblies shall be paid for under the railing item. The mortar pad shall be paid for under its own item.
4. Anchor studs, nuts, washers and anchor plates shall be paid for under the railing item.
5. After the anchor stud nuts have been placed and tightened to the satisfaction of the Engineer, the studs shall be flame cut off one (1) inch above the nut and the first three threads above the nut shall be damaged, as ordered by the Engineer.
6. Rails shall span a minimum of 3 posts unless it is impossible. If it is impossible, the absolute minimum shall be two posts with one of these posts being a special post, unless waived by D.C.E.S.
7. Rail posts shall be erected to proper line and grade before the mortar pad under the post is poured unless otherwise indicated on the Contract Plans.
8. If the end of the bolts connecting the clamp to the post connection plate bear against the tube when in the final position additional plain washers shall be added to prevent the end of the bolt from bearing against the tube.
9. The hole for the bolt connecting the tube and the clamp shall be located in the tube so that the tube will bear against the post plates when in final position.

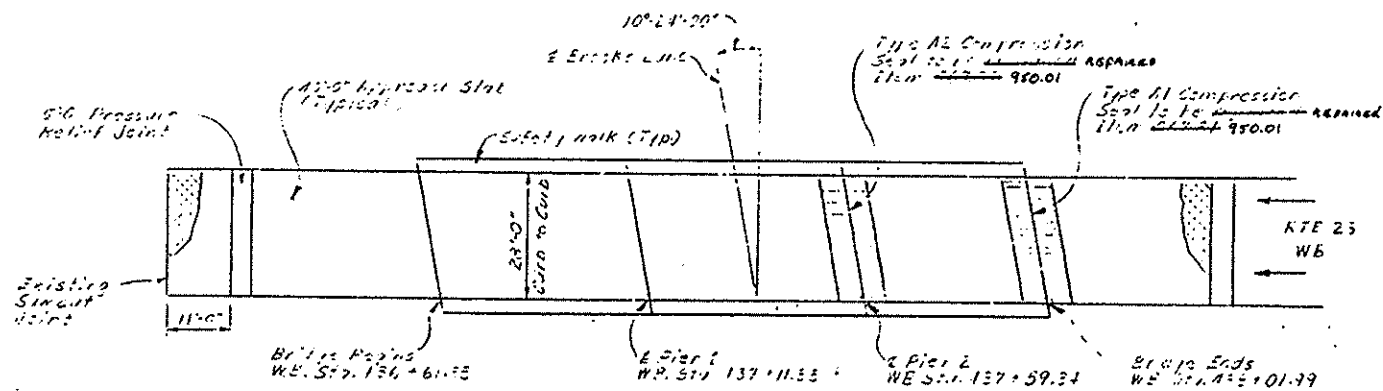
The Contractors attention is called to the railing base plate which has been modified from the normal base plate.

STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION	
ROUTE 23 OVER NAUVO STREAM	
STEEL BRIDGE RAIL - 2 RAIL	
PROJ. ENG. <u>A.W. WALSH</u>	DATE MADE <u>11/89</u>
SCALE <u>1" = 20'</u>	DRAWING NO. <u>5</u> OF <u>5</u>

FED. RD. DIST. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	NEW YORK		51	51
RTE 34 OVER THURWAY BIN 1-05355-0 RTE 32 OVER KAATERSKILL CREEK BIN 1-02237-0 RTE 23 OVER NAUJO STREAM BIN 1-01772-0 BRIDGE DECK REPAIRS GREENE CO.				
CAPITAL PROJECT IDENTIFICATION NO. 1803.26				



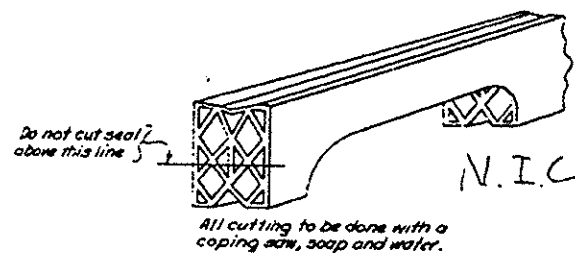
LOCATION MAP
CEMENTON QUADRANGLE
SCALE 1" = 2000'



PLAN
Not to Scale

Indicates areas of new concrete overlay. For details see Typical Section Thru New Joint.

Indicates approximate areas where high concrete pavement elevation is to be reduced approximately 12 inch grinding, A.O.B.E. Item 581.01. Mechanical scarifiers or pneumatic rammers will not be allowed. 01502.0701



DETAIL FOR CUTTING AND BENDING SEAL
Not to Scale

The seal 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 30 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.

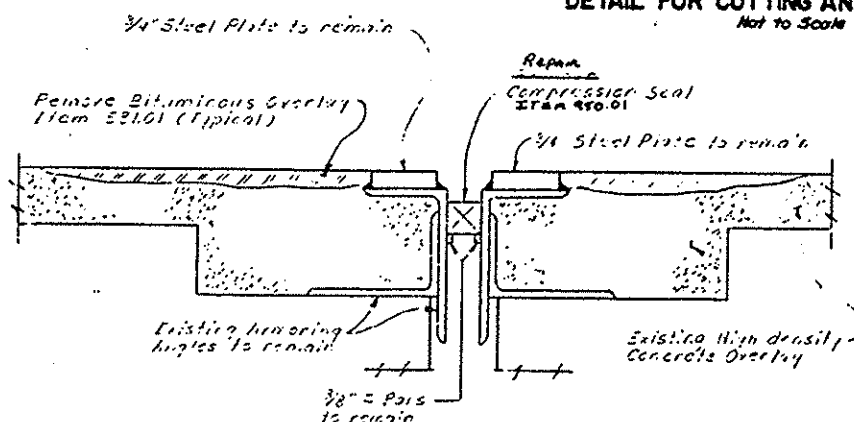
ITEM NO	DESCRIPTION	UNIT	ESTIMATED	FINAL
567.31	ARMORED JOINT SYSTEM WITH COMPRESSION SEAL - TYPE A1	LF	35	0
567.32	ARMORED JOINT SYSTEM WITH COMPRESSION SEAL - TYPE A2	LF	35	0
579.01	STRUCTURAL SLAB SCARIFICATION	SF	810	810.00
581.01	REMOVAL OF BITUMINOUS CONCRETE OVERLAY (BRIDGE)	SF	143	348.00
# 584.0102	HIGH DENSITY CONCRETE OVERLAY	SF	570	0
# 584.1102	LATEX MODIFIED CONCRETE OVERLAY	SF	570	0
# 584.1201	MICRO SILICA CONCRETE OVERLAY	SF	570	0
619.01	BASIC MAINTENANCE & PROTECTION OF TRAFFIC	LS	NCC	100.00
01502.0701	SURFACE PREPARATION - GRINDING AND CLEANING FOR BRIDGE DECK REPAIR	SF	700	810.00
01502.0702	PAVING LUMPY PATCH SET CONCRETE FOR BRIDGE DECK REPAIRS	REG	272	244.00
750.01	SILICONE REPAIR FOR Joints - COMPRESSION SEALS	LF	70	70.00

* Indicates optional item.

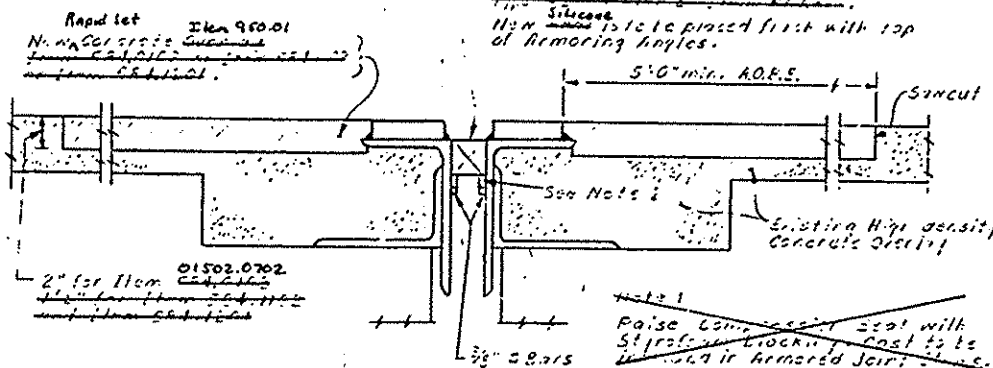
4. THE CONTRACTOR'S ATTENTION IS CALLED TO THE USE OF THE OPTIONAL CONCRETE OVERLAY ITEMS. ONLY ONE OPTION IS TO BE BID. DEPTH OF CONCRETE REMOVAL AND THICKNESS OF NEW OVERLAY PLACED DEPENDS ON THE OPTION SELECTED BY THE CONTRACTOR.

5. THE EXISTING COMPRESSION SEALS IN THE JOINTS AT THE EAST ABUTMENT AND PIER 2 ARE TO BE REMOVED AND REPLACED UNDER ITEM 567.31 AND 567.32. THE EXISTING ARMORING ANGLES AND STEEL SHIM PLATES ARE TO REMAIN. THE ARMORING ANGLES SHALL BE BLAST CLEANED IN ACCORDANCE WITH SECTION 567-2.03 B OF THE STANDARD SPECIFICATIONS. THE NEW COMPRESSION SEAL SHALL BE FULLY BONDED TO THE ARMORING ANGLES IN ACCORDANCE WITH SECTION 567-2.03 OF THE STANDARD SPECIFICATIONS.

6. THE AREAS INDICATED WHERE HIGH CONCRETE PAVEMENT ELEVATION EXISTS SHALL BE REDUCED BY GRINDING A.O.B.E.. MECHANICAL SCARIFIERS OR PNEUMATIC RAMPERS WILL NOT BE ALLOWED. PAYMENT WILL BE MADE UNDER ITEM 579.01, STRUCTURAL SLAB SCARIFICATION ON A SQUARE FOOT BASIS OF PAVEMENT AREA GROUND.



TYPICAL SECTION THRU EXISTING JOINT
Not to Scale



TYPICAL SECTION THRU NEW JOINT
Not to Scale

REVISIONS

NOTES

- FOR MAINTENANCE & PROTECTION OF TRAFFIC DETAILS, SEE HIGHWAY PLANS.
- EXISTING ASPHALT PATCHES NEAR JOINTS ARE TO BE REMOVED UNDER ITEM 581.01 REMOVAL OF BITUMINOUS CONCRETE OVERLAY.

- EXISTING CONCRETE OVERLAY AT THE EAST ABUTMENT AND PIER 2 JOINT IS TO BE REMOVED A MINIMUM OF 5 FEET FROM THE JOINTS IN BOTH DIRECTIONS UNDER ITEM 579.01, STRUCTURAL SLAB SCARIFICATION. THIS REMOVAL MAY BE EXTENDED BY THE ENGINEER IN ORDER TO PROVIDE A SMOOTH TOP OF PAVEMENT PROFILE AFTER THE NEW OVERLAY IS PLACED. MECHANICAL SCARIFIERS AND PNEUMATIC RAMPERS AS PERMITTED UNDER ITEM 579.01 WILL BE ALLOWED IN THESE AREAS.

STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN AND CONSTRUCTION DIVISION	
ROUTE 23 OVER BROOKS LANE JOINT AND DECK REPAIRS	
PROJ. ENG. A.H. MOIR	DATE MADE 11/89
SQUAD C.D. GUNTER	DRAWING NO. 1 OF 1