NEW YORK STATE THRUWAY AUTHORITY

RECORD PLANS

ALBANY DIVISION
PLANS FOR
REHABILITATION OF THE
ROUTE 159 (MARIAVILLE ROAD) BRIDGE
OVER THE THRUWAY (BIN 1038760)
AT
MILEPOST 159.23±
IN
SCHENECTADY COUNTY

37 SHEETS TAA 91-10B

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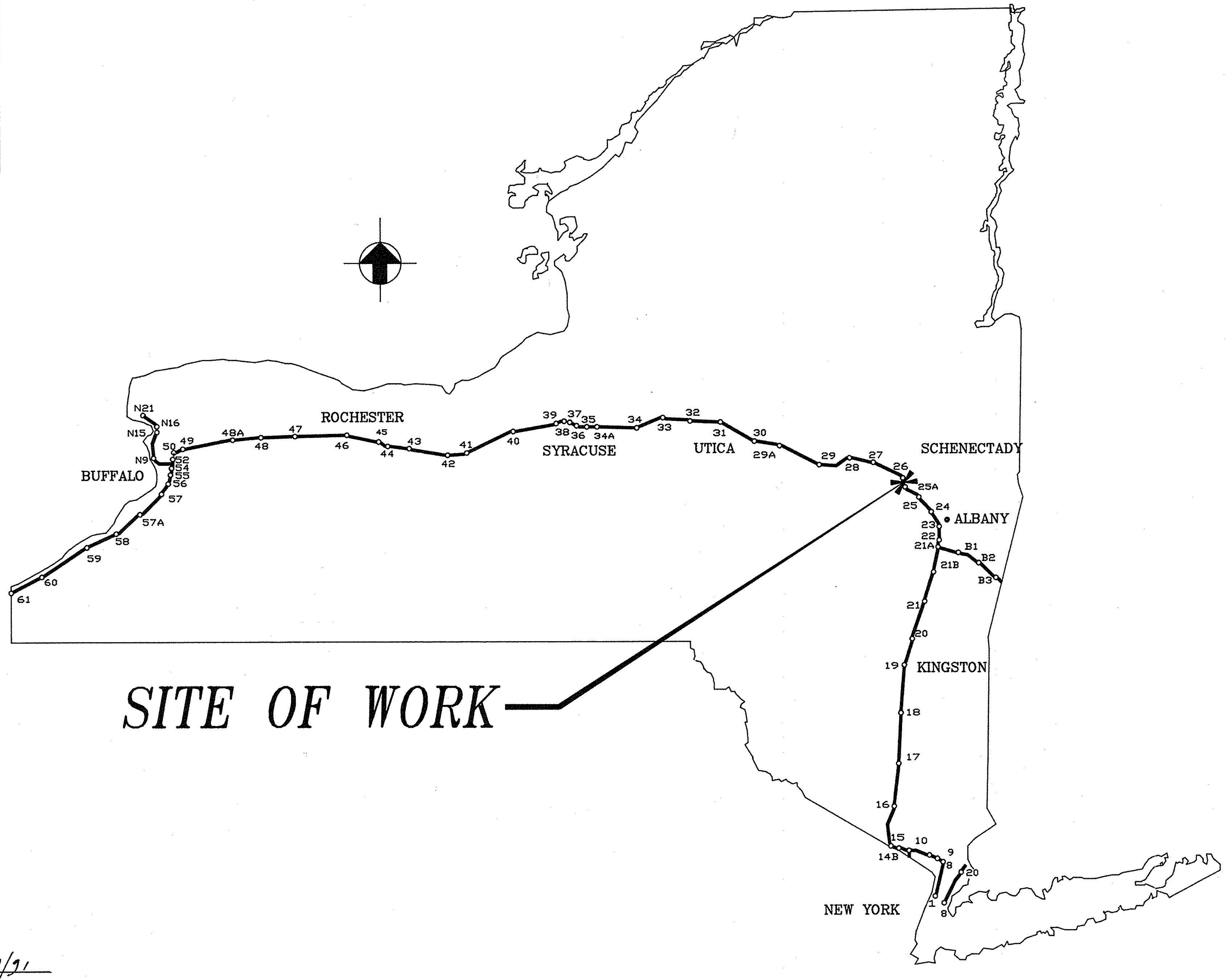
NOTES:

WARNING: IT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER AN ITEM ON THESE PLANS IN ANY WAY. IF ALTERATIONS TO THESE PLANS ARE REQUIRED, THE ALTERATIONS SHALL BE MADE IN ACCORDANCE WITH ARTICLE 145 – SUBSECTION 7209 OF THE NEW YORK STATE EDUCATION LAW.

CHANGES MADE, IF ANY, TO THESE PLANS AND RELATED CONTRACT DOCUMENTS SINCE COMPLETION BY THE CONSULTING ENGINEER MAY BE DETERMINED BY COMPARISON WITH SUCH PREFINAL PLANS AND RELATED DOCUMENTS FILED AT THE THRUWAY DESIGN OFFICE OR THOSE FILED AT THE OFFICE OF THE CONSULTING ENGINEER.

SIGNATURES HEREON HAVE BEEN AFFIXED BY PERSONS ACTING IN THEIR OFFICIAL CAPACITY AS INDICATED.



TYPE OF CONSTRUCTION:

FULL DECK REPLACEMENT, PIER REPLACEMENT, PARTIAL ABUTMENT REPLACEMENT AND REHABILITATION, CLEANING AND PAINTING OF STRUCTURAL STEEL, JOINT REPLACEMENT AND APPROACH WORK.

STANDARD SHEETS:

203-2R1 606–1R2, 606–2R2, 606–3R4, 606–4R1, 606-6R2, 606-7R1 606-15R1, 606–21, 607–2, 609–3, 619–1R1, 619–3R3, 619–R42, 645–13R1.
BDD 79-10

ALL WORK CONTEMPLATED UNDER THIS CONTRACT IS TO BE COVERED BY AND IN CONFORMITY WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS ADOPTED JANUARY 2, 1990 INCLUDING CURRENT ADDITIONS AND MODIFICATIONS. EXCEPT AS MODIFIED ON THESE PLANS AND IN THE PROPOSAL.

BRIDGE MAINTENANCE GUIDELINES

UPON COMPLETION OF THIS PROJECT, THE BRIDGE STRUCTURES REPAIRED, REHABILITATED OR RECONSTRUCTED HEREUNDER SHOULD BE MAINTAINED IN ACCORDANCE WITH THE CURRENT AASHTO MANUAL FOR BRIDGE MAINTENANCE, AND THE NEW YORK STATE THRUWAY AUTHORITY MAINTENANCE DIRECTIVES: GUIDELINES FOR A COMPREHENSIVE MAINTENANCE PROGRAM, MD 90–11, AND BRIDGE INSPECTION, MD 88–7.

SPECIAL MAINTENANCE REQUIREMENTS: NONE

CONTROLLING LOAD RATING VALUES

	INVENTORY	OPERATING
INTERIOR STRINGER, SPAN 1	HS27 (49 TONS)	HS44 (80 TONS)

MAINTENANCE JURISDICTION

PART #	FEATURES TO BE MAINTAINED	AGENCY	AUTHORITY
HIGHWAY 1	PAVEMENT, SHOULDERS, GUIDE RAIL, CURB, STRIPING AND LANDSCAPING	NYSDOT	HIGHWAY LAW SECTION 349-C
BRIDGE 2A	WEARING COURSE (1-1/2" TOP OF 8-1/2" DECK) BRIDGE RAIL, CURBING, SIDEWALK, AND BRIDGE JOINTS, APPROACH SLAB, AND STRIPING.	NYSDOT	HIGHWAY LAW SECTION 349-C
BRIDGE 2B	SUBSTRUCTURE AND ALL SUPERSTRUCTURE FEATURES NOT INCLUDED IN 2A.	NYSTA	PUBLIC AUTHORITY SECTION 349-C
SNOW REMOVAL 3	PAVEMENT	NYSDOT	HIGHWAY LAW SECTION 349-C

REVIEWED BY

THRUWAY AUTHORITY PROGRAM MANAGER

442

CONSULTANT PROJECT ENGINEER Knox W. Tull Jr.

CONTRACTOR'S NAME: LANG-FINN CONSTR. CO. INC.	
AWARD DATE: MAY 31, 1991	
COMPLETION DATE: AUGUST 7, 1992	
FINAL ACCEPTANCE DATE: SEPTEMBER 10, 1992	
INSPECTION FIRM'S NAME: SEAR-BROWN GROUP	
RESIDENT ENG./EIC: MICHAEL C. CIOFFI	
FINAL COST TOTAL: 953,229.84	
FISCAL SHARE	**COST(S)**
N.Y.S. THRUWAY	683,052.50
N.Y.S.D.O.T.	270,177.34

INSPECTION FIRM
CONSULTANT STAMP:
REHABILITATION OF ROUTE 159
(MARIAVILLE RD.) BRIDGE OVER NYS THRUWAY
MILEPOST 159.23, SCHENECTADY CO.
TAA91-10B-D211530-BIN 1038760
CONTRACTOR: LANGE-FINN CONST. CO. INC.
ENGINEER: THE SEAR-BROWN GROUP INC.

APPROVED BY:
2/19/91
REGIONAL DIRECTOR, N.Y.S.D.O.T. DATE

RECOMMENDED BY:
2/19/91
DIRECTOR, DESIGN BUREAU DATE

RECOMMENDED BY:
H Peter
2/20/91
DIRECTOR, TRAFFIC ENGINEERING BUREAU DATE

RECOMMENDED BY:
A Lyle Sutton
2/20/91
DIRECTOR, CONSTRUCTION MANAGEMENT BUREAU DATE

RECOMMENDED BY:
Robert C
2/20/91
CHIEF ENGINEER, MAINTENANCE ENGINEERING DATE

APPROVED BY:
Anthony E. Gregory
2/20/91
CHIEF ENGINEER, ENGINEERING SERVICES DATE

STATE OF NEW YORK
NICHOLAS A. GROSS
LICENSED PROFESSIONAL ENGINEER

PREPARED BY:
CONSULTANT LOGO:

SIGNATURE:
CONSULTANT STAMP:
LICENSED PROFESSIONAL ENGINEER
KNOX W. TULL JR.
No. 058532
STATE OF NEW YORK

GENERAL NOTES

1. DESIGN SPECIFICATIONS: CURRENT NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES WITH ALL INTERIM SPECIFICATIONS AND MODIFICATIONS AND 1981 NEW YORK STATE STEEL CONSTRUCTION MANUAL, INCLUDING CURRENT ADDITIONS AND MODIFICATIONS.

2. MATERIAL AND CONSTRUCTION SPECIFICATIONS: STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, OFFICE OF ENGINEERING, DATED JANUARY 2, 1990 INCLUDING CURRENT ADDITIONS AND MODIFICATIONS.

3. LIVE LOAD: HS20-44 OR TWO (2) 24,000 POUND AXLES SPACED 4'-0" ON CENTER, WHICHEVER GOVERNS.

4. REINFORCING STEEL AND CONCRETE DATA: CONCRETE-MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 3,000 PSI. BAR REINFORCEMENT-ASTM DESIGNATION A615, GRADE 60.

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

6. RECORD PLANS: RECORD PLANS FOR THE EXISTING STRUCTURE WILL BE AVAILABLE TO ALL PROSPECTIVE BIDDERS AT THE THRUWAY HEADQUARTERS IN ALBANY PRIOR TO THE LETTING DATE REFER TO CONTRACT MT53-3

7. THE CONTRACTOR SHALL EXAMINE AND VERIFY IN THE FIELD ALL EXISTING AND GIVEN CONDITIONS AND DIMENSIONS WITH THOSE SHOWN ON THE PLANS. IF FIELD CONDITIONS AND DIMENSIONS DIFFER FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL USE THE FIELD CONDITIONS AND DIMENSIONS AND MAKE THE APPROPRIATE CHANGES TO THOSE SHOWN ON THE PLANS AND AS APPROVED BY THE ENGINEER. THE RESULTS OF THIS CHECK OF CONDITIONS AND DIMENSIONS SHALL BE SO NOTED ON THE DRAWINGS SUBMITTED FOR APPROVAL.

8. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ALL DAMAGES CAUSED BY HIS OPERATIONS TO THE EXISTING STRUCTURE WHICH IS NOT INCLUDED AS PART OF THE INTENDED WORK. ALL DAMAGES TO THE EXISTING STRUCTURE WHICH IS NOT PART OF THE INTENDED WORK SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR WITHOUT COST TO THE AUTHORITY AND TO THE SATISFACTION OF THE ENGINEER.

9. THERE SHALL BE NO CLAIM AGAINST THE AUTHORITY MADE BY THE CONTRACTOR FOR WORK PERTAINING TO MODIFICATIONS AS MAY BE REQUIRED DUE TO ANY DIFFERENCE BETWEEN ACTUAL FIELD CONDITIONS AND THOSE SHOWN BY THE DETAILS AND DIMENSIONS ON THE CONTRACT PLANS. THE CONTRACTOR WILL BE PAID AT THE UNIT BID PRICE FOR THE ACTUAL QUANTITIES OF MATERIALS USED OR FOR THE WORK PERFORMED, AS INDICATED BY THE VARIOUS ITEMS IN THE CONTRACT.

10. THE CONTRACTOR SHOULD NOTE THAT ADDITIONAL WORK MAY BE REQUIRED AS THE CONTRACT PROGRESSES WHICH IS NOT SHOWN OR NOTED ON THE PLANS. THIS WORK SHALL BE PERFORMED BY THE CONTRACTOR AS ORDERED BY THE ENGINEER AND PAYMENT SHALL BE MADE AT THE BID PRICE FOR THE APPROPRIATE ITEMS.

11. THE CONTRACTOR SHALL EXERCISE CARE IN HIS REMOVAL OPERATIONS SO AS NOT TO UNDULY DISTURB UNDERLYING MATERIALS WHICH ARE TO REMAIN IN PLACE. 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 AUTHORITY, 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 AUTHORITY, THE DAMAGED MATERIAL SHALL BE REPAIRED OR REPLACED IN A MANNER SATISFACTORY TO THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.

12. DURING REMOVAL OPERATIONS, THE CONTRACTOR SHALL NOT BE ALLOWED TO DROP WASTE CONCRETE, DEBRIS OR OTHER MATERIAL TO RAILROAD RIGHT-OF-WAY, RIVERS AND ROADWAYS BELOW THE BRIDGE EXCEPT WHERE THE PLANS OR SPECIFICATIONS 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.

13. ALL MATERIAL FALLING ON THE AREA BELOW AND ADJACENT TO THE BRIDGE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR ON A REGULAR RECURRING BASIS.

14. THE COST OF FURNISHING, INSTALLING, MAINTAINING, REMOVING AND DISPOSING OF ALL PLATFORMS, NETS, SCREENS AND OTHER PROTECTIVE DEVICES SHALL BE INCLUDED IN THE UNIT BID PRICE OF THE APPROPRIATE ITEMS OF THE CONTRACT.

15. IT WILL BE THE CONTRACTOR'S OBLIGATION AND RESPONSIBILITY TO USE METHODS AND EQUIPMENT WHICH WILL INSURE THE SATISFACTORY COMPLETION OF THE REQUIRED WORK WITH A MINIMUM OF DELAY.

16. PROTECTION OF THE PUBLIC: THE CONTRACTOR SHALL MAINTAIN AND PROTECT THRUWAY TRAFFIC IN ACCORDANCE WITH ITEM 619.01, THE TRAFFIC CONTROL SHEETS AND PERTINENT PROVISIONS OF THE NEW YORK STATE MANUAL OF TRAFFIC CONTROL DEVICES (1983 EDITION). THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE REQUIREMENTS OF SECTION 107, LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC, OF THE STANDARD SPECIFICATIONS DATED JANUARY 2, 1990 INCLUDING CURRENT ADDITIONS AND MODIFICATIONS.

17. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT NO SEALER WAS APPLIED TO THE STRUCTURAL SLAB WHEN ORIGINALLY CONSTRUCTED OR REHABILITATED. THEREFORE SOME DIFFICULTY MAY BE ENCOUNTERED WHEN REMOVING THE EXISTING WEARING COURSE AND SIDEWALKS FROM THE STRUCTURAL DECK.

18. EXPOSED REINFORCING STEEL WHICH IS TO REMAIN IN THE STRUCTURE SHALL BE PROTECTED FROM DAMAGE, OR OTHERWISE BE REPLACED AT THE CONTRACTOR'S EXPENSE, AND SANDBLAST CLEANED TO THE SATISFACTION OF THE ENGINEER.

19. WHEN PLACING NEW CONCRETE IN CONTACT WITH EXISTING CONCRETE SURFACES, APPLY EPOXY BONDING COMPOUND (ITEM 15555.3502) TO THESE SURFACES AS INDICATED ON THE CONTRACT PLANS. IF BONDING AGENT IS INDICATED, A CEMENT GROUT SLURRY SHALL BE USED AFTER SANDBLASTING THESE SURFACES BUT PRIOR TO PLACEMENT OF THE NEW CONCRETE. NO ADDITIONAL PAYMENT WILL BE MADE FOR THE SLURRY, THE COST OF WHICH SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS CONCRETE ITEMS.

20. ALL EXPOSED EDGES OF CONCRETE ARE TO BE CHAMFERED ONE INCH UNLESS OTHERWISE NOTED.

21. THE TOP OF FLANGE OF THE STRINGERS SHALL BE CLEANED OF ALL CONCRETE RUBBLE, DEBRIS AND LOOSE RUST PRIOR TO POURING THE NEW DECK SLAB REPAIR.

22. IF THE EXISTING STRUCTURE HAS A BRIDGE IDENTIFICATION NUMBER (B.I.N.) PLATE ATTACHED, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE IT BEFORE CONSTRUCTION, STORE IT, AND MOUNT IT ON THE NEW STRUCTURE AFTER CONSTRUCTION IS COMPLETED.

23. ALL SPANS HAVE EXISTING SPIRAL SHEAR CONNECTORS. IN AREAS OF FULL DECK REMOVAL, THE CONTRACTOR SHALL CLEAN THE EXISING SPIRALS AND LEAVE THEM IN PLACE. ALL DAMAGED, DETERIORATED OR MISSING SPIRALS SHALL BE REPLACED WITH TWO (2) STUD SHEAR CONNECTORS FOR EACH PITCH OF SPIRAL. NO PAYMENT WILL BE MADE FOR REPLACEMENT OF SPIRALS DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATIONS. THE CONTRACTOR MAY ELECT TO REMOVE THE EXISTING SPIRAL SHEAR CONNECTORS AND REPLACE THEM WITH EQUIVALENT STUD SHEAR CONNECTORS, REGARDLESS OF THE TYPE OF FORM WORK USED. IF HE ELECTS TO DO SO, THIS OPTION SHALL BE ALLOWED AT NO ADDITIONAL COST TO THE AUTHORITY.

24. ALL DECK FORMS USED SHALL BE REMOVABLE FORMS.

25. 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.

26. SHOP DRAWINGS FOR THE JOINT SYSTEMS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

27. PROTECTIVE SEALER FOR CONCRETE, (HORSEYSET WDE) ITEM 25559.99 SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES EXCEPT THE UNDERSIDE OF THE STRUCTURAL SLAB, AND THE PORTION OF THE SLAB WHICH WILL BE THE ROADWAY PAVEMENT.

28. THE LOAD RATINGS ARE IN ACCORDANCE WITH THE AASHTO "MANUAL FOR MAINTENANCE INSPECTION OF BRIDGES".

29. THE CONTRACTOR IS ADVISED THAT ADDITIONAL "NOTES" WILL BE FOUND ON SUBSEQUENT SHEETS OF THE CONTRACT PLANS AND SUCH "NOTES", WHILE PERTAINNING TO THE SPECIFIC DRAWINGS THEY ARE PLACED ON, ALSO SUPPLEMENT THE GENERAL NOTES LISTED HEREIN.

30. NO PAYMENT WILL BE MADE FOR WORK CALLED FOR BY NOTES ON THE PLANS, IN THE SPECIFICATIONS AND UNDER THE HEADING "GENERAL NOTES" UNLESS PAYMENT IS SPECIFICALLY INDICATED BY ITEM NUMBER. THE COST OF WORK FOR WHICH NO PAYMENT IS INDICATED SHALL BE INCLUDED IN THE UNIT PRICES BID FOR VARIOUS ITEMS OF THIS CONTRACT.

31. CARE SHALL BE TAKEN TO RETAIN NATURAL GROWTH AND PREVENT DAMAGE TO TREES WITHIN AND OUTSIDE THE LIMITS OF CONSTRUCTION AND SPECIFIED WORK AREAS CAUSED BY EQUIPMENT AND MATERIALS. ANY DAMAGE CAUSED TO THIS NATURAL GROWTH SHALL BE RESTORED AT THE EXPENSE OF THE CONTRACTOR AS DIRECTED BY THE ENGINEER.

32. DIMENSIONS OF THE EXISTING STRUCTURES SHOWN ON THESE PLANS ARE FOR GENERAL REFERENCE ONLY. THEY HAVE BEEN TAKEN FROM THE ORIGINAL CONSTRUCTION DRAWINGS AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL TAKE ALL SUCH FIELD MEASUREMENTS AS ARE NECESSARY TO ASSURE PROPER FIT OF THE FINISHED WORK, AND THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY. WHEN SHOP DRAWINGS BASED ON FIELD MEASUREMENTS ARE SUBMITTED FOR APPROVAL, THE FIELD MEASUREMENTS MADE SHALL BE INDICATED ON THE SHOP DRAWINGS SUBMITTED FOR REFERENCE OF THE REVIEWER.

33. PRELIMINARY BRIDGE REHABILITATION REPORTS WHERE PREPARED IN DECEMBER, 1989 BY JACKSON AND TULL, LTD. FOR EACH STRUCTURE. THEY CONTAIN INSPECTION FINDINGS, AND OTHER DATA AND ARE AVAILABLE FOR INSPECTION AT THE MAIN OFFICE OF THE THRUWAY AUTHORITY IN ALBANY.

34. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE AND ADVISE THE AUTHORITY OF THE TYPE, SIZE AND WEIGHT OF ALL VEHICLES HE CAN USE ON THE STRUCTURES DURING CONSTRUCTION BASED ON THE CONDITION OF THE EXISTING STRUCTURES. THIS DETERMINATION SHALL BE MADE BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK EMPLOYED AND PAID BY THE CONTRACTOR.

    THE DETERMINATION BY THIS PROFESSIONAL ENGINEER IS TO BE MADE PRIOR TO THE USE OF ANY VEHICLES ON THE STRUCTURE WITH ALL RESTRICTIONS ENUMERATED BY HIM BEING STRICTLY ADHERED TO.

    IN THE EVENT THE CONTRACTOR'S OR HIS SUBCONTRACTOR'S FORCES FAIL TO COMPLY WITH THE INSTRUCTIONS OF THE PROFESSIONAL ENGINEER FOR THE USE OF ANY VEHICLE, THE WORK SHALL IMMEDIATELY CEASE UNTIL CORRECTIVE PROCEDURES SATISFACTORY TO THE PROFESSIONAL ENGINEER AND THE AUTHORITY ARE EMPLOYED.

    ALL DAMAGES, DIRECT OR INDIRECT, OR WHATEVER NATURE RESULTING FROM THE PERFORMANCE OF THIS WORK OR RESULTING TO THE WORK DURING ITS PROGRESS FROM WHATEVER CAUSE, SHALL BE BORNE AND SUSTAINED BY THE CONTRACTOR.

35. THE CONTRACTOR SHALL BE REQUIRED TO PROTECT HIS WORKERS AT ALL TIMES IN CONFORMANCE WITH APPLICABLE OSHA REGULATIONS.

36. ALL AREAS DISTURBED BY THE CONTRACTOR WITHOUT AUTHORIZATION BY THE ENGINEER SHALL BE RESTORED BY THE CONTRACTOR AT NO EXPENSE TO THE AUTHORITY.

37. THE JULY 1, 1983 NEW YORK STATE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES SHALL BE IN EFFECT FOR THIS PROJECT.

38. WHENEVER ITEMS IN THE CONTRACT REQUIRE MATERIALS TO BE REMOVED AND DISPOSED OF, THE COST OF SUPPLYING A DISPOSAL AREA AND TRANSPORTATION TO THE AREA SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THOSE ITEMS.

39. SHOULDER AREAS DISTURBED BY THE CONTRACTOR, AS PART OF WORK TO BE PERFORMED UNDER THIS CONTRACT SHALL BE RESTORED TO A PLEASING AND ACCEPTABLE CONDITION AS SPECIFIED AND AS SATISFACTORY TO THE ENGINEER. ALL THE DISTURBED GRASS AREAS SHALL BE GRADED IN A MANNER APPROVED BY THE ENGINEER AND SEEDED AS SPECIFIED FOR THE STANDARD SEEDING ITEM. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS ITEMS IN THE CONTRACT AND NO SEPARATE PAYMENT SHALL BE MADE.

40. STRUCTURAL STEEL: THE REPLACEMENT DIAPHRAGMS SHALL BE ASTM A36 UNLESS OTHERWISE NOTED.

41. WELDING: WELDING SHALL CONFORM TO THE 1981 NEW YORK STATE STEEL CONSTRUCTION MANUAL, INCLUDING ADDENDUM NO. 1 ADOPTED APRIL 1, 1984.

42. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL FOR THE BRIDGE RAILINGS, STRIP SEAL JOINTS AND ALL STRUCTURAL STEEL.

43. THE CONTRACTOR IS TO VISIT THE SITE BEFORE BIDDING TO FAMILIARIZE HIMSELF WITH THE PRESENT CONDITION AND TO JUDGE FOR HIMSELF THE EXTENT AND NATURE OF THE WORK TO BE DONE UNDER THIS CONTRACT. NO EXTRA COMPENSATION WILL BE ALLOWED HIM BECAUSE OF HIS FAILURE TO INCLUDE IN HIS BID ALL ITEMS AND MATERIALS WHICH HE IS REQUIRED TO FURNISH IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

44. ALL WORK AREAS AT THE STRUCTURE SHALL BE COMPLETELY FENCED TO PROTECT THE PUBLIC AND PREVENT UNAUTHORIZED ENTRY TO THE SATISFACTION OF THE ENGINEER. THE COST OF THIS WORK IS TO BE INCLUDED IN ITEM 619.01.

45. THE CONTRACTOR, WITH THE PERMISSION OF THE CHIEF ENGINEER OR HIS DESIGNATED REPRESENTATIVE MAY ELECT TO INTRODUCE CONSTRUCTION JOINTS IN THE ABUTMENTS AT LOCATIONS NOT SHOWN ON THE PLANS. THESE CONSTRUCTION JOINTS SHALL BE PROVIDED WITH SHEAR KEYS AND WATERSTOPS. VERTICAL CONSTRUCTION JOINTS INTRODUCED IN THE BACKWALL SHOULD PREFERABLY BE PLACED MIDWAY BETWEEN THE PEDESTALS.

46. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT NO SPOIL AREA IS AVAILABLE FOR THIS CONTRACT WITHIN THE THRUWAY'S RIGHT-OF-WAY THEREFORE, ALL SPOIL MATERIAL (STRUCTURAL CONCRETE, REINFORCING STEEL, BRIDGE RAIL, ETC.) REMOVED FROM THE JOB SITE SHALL BE DISPOSED OF BY THE CONTRACTOR OFF THE AUTHORITY'S PROPERTY. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL AND STATE REGULATIONS THAT APPLY TO THE AREA CHOSEN FOR THE DISPOSAL OF THIS SPOIL MATERIAL.

47. IN THE EVENT THE CONTRACTOR DAMAGES AN EXISTING UTILITY SERVICES CAUSING AN INTERRUPTION IN SAID SERVICE, HE SHALL IMMEDIATELY COMMENCE WORK TO RESTORE SERVICE AND MAY NOT CEASE HIS WORK OPERATION UNTIL SERVICE IS RESTORED.

48. SURFACE OF NEW CONCRETE ON PIERS AND ABUTMENTS TO BE RUBBED UPON REMOVAL OF FORMS TO THE SATISFACTION OF THE ENGINEER. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 25555.01.

49. ALL EMBANKMENTS OF SELECT STRUCTURE FILL, ITEM 203.21, SHALL BE COMPACTED TO 95 PERCENT OF STANDARD PROCTOR MAXIMUM DENSITY AS DEFINED UNDER SUBSECTION 203–3.12 – COMPACTION.

50. EXCAVATION BELOW PLANNED FOOTING ELEVATION WILL NOT BE ALLOWED WITHOUT WRITTEN PERMISSION FROM THE ENGINEER. BACKFILL OF UNAUTHORIZED EXCAVATIONS BELOW OR BEYOND PAYMENT LINES WILL BE AT THE CONTRACTOR'S EXPENSE. BACKFILL MATERIAL WILL BE CONCRETE STRUCTURES CLASS A, ITEM 25555.01, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

51. CARE SHALL BE EXERCISED IN EXCAVATING THE LAST FOOT OF MATERIAL TO AVOID DISTURBING OR SOFTENING WITH WATER THE MATERIAL BELOW THE BOTTOM OF FOOTING ELEVATION. THE EXCAVATION SHALL BE PROGRESSED CONTINUOUSLY TO COMPLETION, THE FOOTING PLACED, FORMS REMOVED AND BACKFILL MATERIAL PLACED AND COMPACTED WITHOUT DELAY.

52. THE CONTRACTOR IS DIRECTED TO THE FACT THAT THE PEDESTALS'S ELEVATIONS MAY HAVE TO BE ADJUSTED TO ACCOMMODATE THE ACTUAL BEARINGS FURNISHED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ANY CHANGES IN THE BEARINGS WHICH MAY AFFECT THE PEDESTAL ELEVATIONS.

53. LOCATION OF UTILITIES, PUBLIC AND/OR PRIVATE, INDICATED AS EXISTING AND/OR TO BE CONSTRUCTED AS SHOWN ON THE PLANS ARE APPROXIMATE ONY. THEIR EXACT LOCATION SHALL BE DETERMINED IN THE FIELD. ADDITIONAL UTILITY LINES, WHETER ABANDONED OR IN SERVICE, MAY EXIST AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT HIS OPERATIONS AND TAKE THE NECESSARY PRECAUTIONS TO PREVENT INTERFERENCE WITH OR DAMAGE TO THESE OR OTHER FACILITIES DURING THE COURSE OF CONSTRUCTION.

NO AS-BUILT REVISIONS

DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITATION OF MARIAVILLE RD.

LOCATION OF PROJECT M.P. 159.23
SCHENECTADY COUNTY

TITLE OF DRAWING

GENERAL NOTES

CONTRACT NUMBER: TAA 91-10 B

DATE: JANUARY 1991

DRAWING NUMBER: 2

JACKSON AND TULL
CHARTERED ENGINEERS

IN CHARGE OF:

DESIGNED BY:

DRAFTED BY:

CHECKED BY:

TCA 301-565-3340

CHECKED BY:

DRAFTED BY:

DESIGNED BY:

IN CHARGE OF:

△1A

ESTIMATE OF QUANTITIES

	ITEM	DESCRIPTION	UNIT	ESTIMATE	FINAL
	203.01	UNCLASSIFIED EXCAVATION AND EMBANKMENT	CY	20.0	0.00
	203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	125.0	58.66
	25203.0203	REMOVING EXISTING ASPHALT PAVEMENT	SY	260.0	273.57
	203.21	SELECT STRUCTURE FILL	CY	170.0	113.73
	206.01	STRUCTURE EXCAVATION	CY	170.0	162.74
	304.03	SUBBASE COURSE TYPE 2	CY	100.0	173.04
	403.13	ASPHALT CONCRETE-TYPE 3 BINDER COURSE	T	41.0	80.94
	403.1701	ASPH CONC - TYPE 6F TOP COURSE (HIGH FRICTION)MARSHALL DESIGN	T	17.0	114.57
	25502.50	SAW CUTTING ASPHALT CONCRETE - (FULL DEPTH)	LF	65.0	145.95
	25502.9916	SAW CUTTING CONCRETE	LF	238.0	613.00
	551.07	CAST-IN-PLACE CONC. PILES	LF	100.0	91.00
	551.09	FURNISHING EQUIPMENT FOR DRIVING PILES	LS	NEC	100.00%
	552.04	TEMP STEEL SHEET PILING	SF	200.0	195.00
	552.05	SAFE OPERATE SHEET PILING (MIN. BID-80 CENTS)	SF	580.0	0.00
△7	25555.01	CONCRETE FOR STRUCTURES, CLASS A	CY	285.0	289.79
	25555.0401	CONC FOR STRS - CLASS E (STR. SLAB-INT W S-BOT FMWK REQ)	SF	8780.0	8,780.00
	25555.0404	CONC FOR STRS - CLASS E (STR APR SLAB - INT WEAR SURFACE)	SF	1040.0	1,319.66
	15555.3502	EPOXY BONDING COMPOUND	GAL	13.0	21.75
	16555.6603	TRANSVERSE SAWCUT GROOVING OF STRUCTURAL SLAB SURFACE	SF	7660.0	8,704.00
△11 △6	556.0202	EPOXY-COATED BAR REINFORCEMENT FOR STRUCTURES	LB	81750.0	85,002.00
	25559.99	PROT. SEALER FOR CONC. (HORSEYSET-WDE)	SF	7700.0	7,729.67
	25564.0601	STRUCT. STEEL (LOCKUP PLATES)	EA	6.0	6.00
	564.701002	STRUCTURAL STEEL REPLACEMENT (DIAPHRAGMS)	EA	30.0	30.00
△8	565.2002	TYPE EB BEARING (101-150 KIPS)	EA	48.0	48.00
	567.35	ARMORED JOINT SYSTEM WITH COMPRESSION SEAL - TYPE A5	LF	90.0	90.00
	568.10	STEEL BR RAILING (TWO RAIL)	LF	515.0	507.00
	25570.0701	ENVIRONMNTL GROUND PROTECTION COLLECTION AND PACKAGING	LS	NEC	100.00%
	25570.7891	TREATMENT & DISPOSAL OF PAINT REMOVAL WASTE	LS	NEC	100.00%
	25570.90	DYE PENETRANT INSPECTION OF EXISTING STRUCTURAL STEEL	EA	16.0	16.00
	25570.91	COMM BLST CLN & REPNT OF STRC. STEEL - EPOXY MASTIC & URETH.	LS	NEC	100.00%
	580.01	REMOVAL OF STRUCTURAL CONCRETE	CY	110.0	102.09
	580.11	REMOVAL OF CONC BRIDGE PYLONS	EA	4.0	4.00
	25580.5104	REMOVAL OF STRUCTURAL SLAB (COMPLETE SLAB-REPLACEMENT)	SY	980.0	973.20
	25580.52	REMOVAL OF CURBS AND SIDEWALKS	CY	50.0	44.30
	25581.5001	REMOVAL OF BRIDGE WEARING COURSE	SY	810.0	805.33
	585.0101	STRUCTURAL LIFTING OPERATIONS TYPE A	EA	12.0	0.00
	585.0201	STRUCTURAL LIFTING OPERATIONS TYPE B	EA	36.0	0.00
	586.01	DRILL & GROUT BOLTS OR REINFORCING BARS	LF	340.0	387.54
	587.01	BR RAILING REMOVAL & DISPOSAL	LF	515.0	490.34
	587.1002	BOX BEAM BRIDGE RAIL TWO RAIL	LF	95.0	93.00

△1A

ESTIMATE OF QUANTITIES

	ITEM	DESCRIPTION	UNIT	ESTIMATE	FINAL
	589.520001	REMOVAL OF EXISTING STEEL	EA	48.0	48.00
	606.10	BOX BEAM GUIDE RAILING	LF	220.0	216.00
	25606.1001	BOX BEAM GUIDE RAILING (ATTACHED TO CONCRETE BARRIER)	LF	126.0	0.00
	606.1401	BOX BEAM GUIDE RAILING END ASSEMBLY TYPE I	EA	2.0	2.00
	25606.17	ANCHORAGE UNIT AT COMPOSITE BEAM GUIDE RAIL TRANSITION	EA	4.0	4.00
△9	606.20	CORRUGATED BEAM GUIDE RAILING	LF	1430.0	1,396.00
△9	606.2001	CORR BEAM GDE RAIL (SHOP CRVD)	LF	90.0	75.00
	606.22	ANCHORAGE UNITS FOR CORRUGATED BEAM GUIDE RAILING	EA	4.0	5.00
	25606.3008	REMOVE AND DISPOSE CONCRETE BARRIER	LF	225.0	225.00
	25606.3202	PRECAST CONC. MEDIAN BARRIER (HALF SECTION)	LF	270.0	0.00
	10606.3299	BACK UP POSTS FOR HALF SECTION CONCRETE BARRIER	EA	27.0	0.00
	15606.4801	I BEAM BACK UP POSTS FOR GUIDE RAILS.	EA	34.0	34.00
	606.52	RESET BOX BEAM GUIDE RAILING	LF	372.0	
	606.53	RESET BOX BEAM MEDIAN BARRIER	LF	72.0	0.00
	606.55	RESET CORR BEAM MALL BARRIER (NEW POSTS)	LF	510.0	558.50
	606.72	REMOVE & DISPOSE CORRUGATED BEAM GUIDE RAILING	LF	1390.0	1,390.00
	606.78	REMOVING AND DISPOSING BOX BEAM G.R. END ASSEMBLY	EA	2.0	1.00
	609.0302	STONE CURB - BRIDGE (TYPE F1)	LF	450.0	452.50
	609.0303	STONE CURB - BRIDGE (TYPE G1)	LF	60.0	63.00
	619.01	BASIC MAINTENANCE & PROTECTION OF TRAFFIC	LS	NEC	100.00%
	619.02	CONSTRUCTION SIGNS	LS	NEC	100.00%
	619.0303	FLASHING ARROW BOARDS	LS	NEC	100.00%
	619.0413	TYPE III CONSTRUCT. BARRICADES	LF	40.0	120.00
	619.0502	LIGHTING FOR CONSTRUCTION BARRICADES	LF	40.0	120.00
	10619.0599	LIGHTING FOR TEMP CONC BARRIER	LF	1240.0	520.00
	619.13	TEMPORARY TRAFFIC SIGNALS	LS	NEC	100.00%
	619.17	TEMPORARY CONC BARRIER	LF	2500.0	2,660.00
△10	25619.1704	CONCRETE BARRIER MARKER	EA	125.0	71.00
	15619.1905	WHITE REMOVABLE REFLECT. PAVEMENT STRIPES	LF	1200.0	2,189.00
	25620.10	REMOVING AND REPLACING DRY STONE PAVING	SF	2660.0	0.00
	25637.060102	ENGINEER'S OFFICE - TYPE B	MOS	17.0	16.25
	640.0202	YELLOW PAINT REFLECTORIZED PAVEMENT STRIPES	LF	1400.0	1,552.00
	25645.4002	YOUR TOLLS AT WORK	EA	2.0	2.00
	647.14	RELOCATING SIGNS SIZE E (OVER 100 SF)	EA	1.0	1.00
	699.04	MOBILIZATION	LS	NEC	100.00
△14	606.81	GUIDE RAIL TRANSITION CORRUGATED TO BOX BEAM	EA		1.00
	900.9110	REMOVE AND RESET STRUCTURAL STEEL AND APPURTENANCES	LS		1.00
△2	901.9110	STONE CURB - TYPE A	LF		45.70
△2	902.9110	APPROACH SLAB / STRUCTURAL DECK TRANSITION JOINT TREATMENT	LS		100.00%
△4	903.9110	ABUTMENT FOOTING DRAINS WITH BACKWALL WEEPS	LS		100.00%
△3	904.9110	WHITE PAINT REFLECTORIZED PAVEMENT STRIPES	LF		1,552.00
△13	905.9110	LIGHT STONE SLOPE PROTECTION	LS		100.00%
△12	906.9110	TRANSITION SECTION BOX BEAM TO PIER	EA		3.00
	907.9110	CREDIT FOR BRIDGE DECK NON-CONFORMANCE	LS		100.00%
	908.9110	MODIFY SUPPORTS FOR EXIT 25A SIGN	LS		100.00%
	909.9110	EROSION CONTROL DEVICES	LS		100.00%
△4	910.9110	ABUTMENT WEEP EXTENSIONS	LS		100.00%
	912.9110	LIQUIDATED DAMAGES	DAY		20.00
	913.9110	ENGINEERING CHARGES	LS		100.00%

WORK TO BE DONE

THE FOLLOWING IS A GENERAL DESCRIPTION OF THE WORK TO BE DONE UNDER THIS CONTRACT. THE LIST IS INTENDED TO GIVE THE CONTRACTOR A GENERAL DESCRIPTION OF THE WORK INVOLVED IN THIS CONTRACT, AND IS NOT A COMPLETE LISTING OF ALL WORK TO BE DONE. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, EVEN THOUGH NOT SPECIFICALLY MENTIONED IN THIS LIST.

1. INSTALL TEMPORARY CONCRETE BARRIERS, CONES, DRUMS, AND CONSTRUCTION SIGNS, ETC. ON THE THRUWAY MAINLINE AS SHOWN ON THE CONTRACT PLANS.
2. DESIGN, ERECT, AND INSTALL TEMPORARY SUPPORTS AND OTHER DEVICES FOR STRUCTURAL LIFTING (TO SUPPORT THE TRAFFIC LOADING) OF THE SUPERSTRUCTURE FOR PIER 2.
3. JACK TO RAISE THE SUPERSTRUCTURE AT PIER 2.
4. REMOVE AND DISPOSE OF ALL OF PIER 2 DOWN TO THE EXISTING FOOTING.
5. CONSTRUCT NEW SOLID PIER 2 INCLUDING THE NEW PEDESTALS, AND INSTALL THE NEW ELASTOMERIC BRIDGE BEARINGS.
6. LOWER THE SUPERSTRUCTURE BACK TO THE NEW PIER 2.
7. REPEAT STEP 2 FOR PIERS 1 AND 3.
8. JACK TO RAISE THE SUPERSTRUCTURES AT PIERS 1 AND 3 SO THAT THE STEEL OF SPANS 2 AND 3 ARE AT THEIR FINAL DESIGN ELEVATION.
9. CONSTRUCT NEW SOLID PIERS 1 AND 3, INCLUDING NEW PEDESTALS, AND INSTALL THE NEW ELASTOMERIC BEARINGS.

   STEPS 10 THROUGH 22 ARE INDEPENDENT OF STEPS 1-8 AND MAY START AS SOON AS THE D.O.T. LANE CLOSURE EAST OF THE BRIDGE IS REMOVED. STEP 23 CANNOT BEGIN UNTIL STEP 8 IS COMPLETE.

10. CONSTRUCT STAGE I LANE CLOSURE WHICH INCLUDES THE INSTALLATION OF CONSTRUCTION SIGNS, TEMPORARY TRAFFIC SIGNALS, TEMPORARY CONCRETE BARRIERS, TEMPORARY PAVEMENT MARKINGS, DRUMS AND BARRICADES.
11. TRANSFER AND MAINTAIN ONE-WAY ALTERNATING TRAFFIC ON THE NORTH SIDE OF THE BRIDGE.
12. REMOVE AND DISPOSE OF EXISTING GUIDE RAILINGS, BRIDGE RAILINGS, AND PYLONS ON SOUTH SIDE OF BRIDGE.
13. INSTALL TEMPORARY STEEL SHEET PILING WHERE SHOWN ON THE CONTRACT PLANS.
14. SAWCUT AND REMOVE ASPHALT CONCRETE ON THE EXISTING ROADWAY TO THE LIMITS SHOWN ON THE CONTRACT PLANS.
15. REMOVE AND DISPOSE OF EXISTING REINFORCED CONCRETE DECK SLAB (SOUTH SIDE) TO THE LIMITS SHOWN.
16. DESIGN, ERECT AND INSTALL TEMPORARY SUPPORTS AND OTHER DEVICES (SOUTH SIDE) FOR STRUCTURAL LIFTING OF THE SUPERSTRUCTURE AT THE ABUTMENTS.
17. RELEASE THE DIAPHRAGMS BETWEEN GIRDER LINE III AND IV AT SPANS 1 AND 4.
18. JACK TO RAISE THE SUPERSTRUCTURE AT THE ABUTMENTS (SOUTH SIDE).
19. REMOVE AND DISPOSE OF PORTIONS OF THE EXISTING ABUTMENTS (SOUTH SIDE) INCLUDING THE WINGWALLSS, CHEEKWALLS, AND BACKWALLS AND PEDESTALS TO THE LIMITS SHOWN.
20. CONSTRUCT NEW PORTIONS OF THE ABUTMENTS (SOUTH SIDE) AS SHOWN ON THE CONTRACT PLANS.
21. SUPPLY AND NEW ELASTOMERIC BEARINGS ON THE ABUTMENTS (SOUTH SIDE).
22. LOWER THE SUPERSTRUCTURE BACK TO THE NEW BEARINGS ON THE ABUTMENTS (SOUTH SIDE).
23. CONSTRUCT NEW DECK SLAB AND APPROACH SLAB (SOUTH SIDE) TO THE LIMITS SHOWN.
24. INSTALL BACKFILL AND CONSTRUCT NEW APPROACH PAVEMENT (SOUTH SIDE).
25. INSTALL NEW BOX BEAM AND CORRUGATED GUIDE RAILING, AND NEW TWO RAIL BRIDGE RAILING (SOUTH SIDE).
26. SET UP STAGE II TRAFFIC MAINTENANCE AND TRANSFER ONE-WAY ALTERNATING TRAFFIC TO THE SOUTH SIDE OF THE STRUCTURE.
27. REPEAT STEPS 12 THROUGH 25 FOR THE NORTH SIDE OF THE STRUCTURE.
28. REMOVE TRAFFIC CONTROL ON MARIAVILLE ROAD, REPLACE PAVEMENT DELINEATION, AND OPEN BRIDGE TO TWO-WAY TRAFFIC.
29. PERFORM ALL REMAINING WORK AS INDICATED ON THE PLANS INCLUDING REPAIR WORK ON THE ABUTMENTS AND CLEANING AND PAINTING STRUCTURAL STEEL.
30. REMOVE AND DISPOSE OF ALL TEMPORARY SUPPORTS AND DECK SHORING.
31. MODIFY THE PIER PROTECTION ON THE THRUWAY AS SHOWN ON THE PLANS.
32. REMOVE TEMPORARY BARRIERS, ETC. ON THE THRUWAY MAINLINE.
33. CLEAN UP.

NICHOLAS A. GR
No. 40723

DATE	DESCRIPTION	BY	SYM.
8/17/92	FINAL QUAN. & 900 ITEMS	P.E.B.	△1A

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT
REHABILITATION OF MARIAVILLE RD. BRIDGE

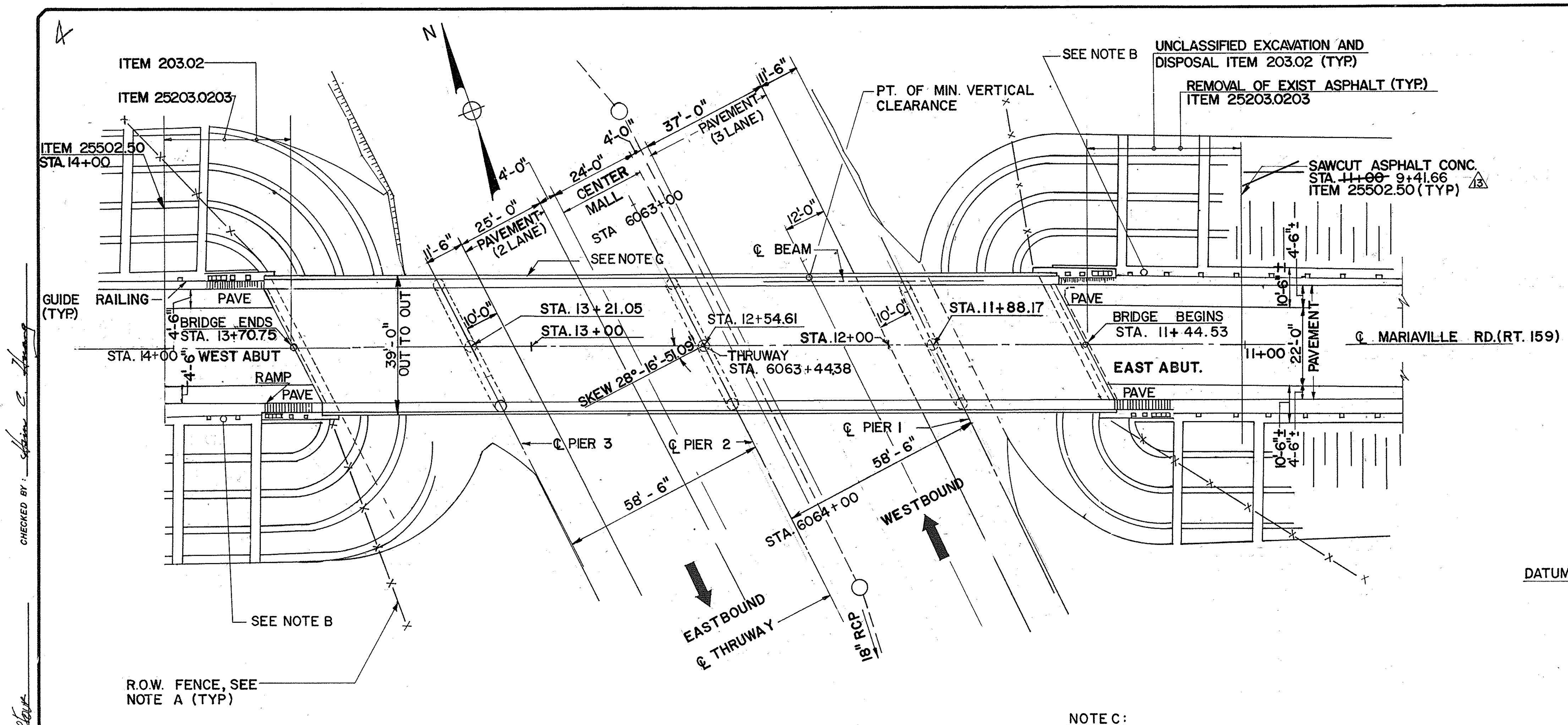
LOCATION OF PROJECT
M.P. 159.23± SCHENECTADY CO.

TITLE OF DRAWING
ESTIMATE OF QUANTITIES & WORK TO BE DONE

CONTRACT NUMBER:
TAA 91-10B

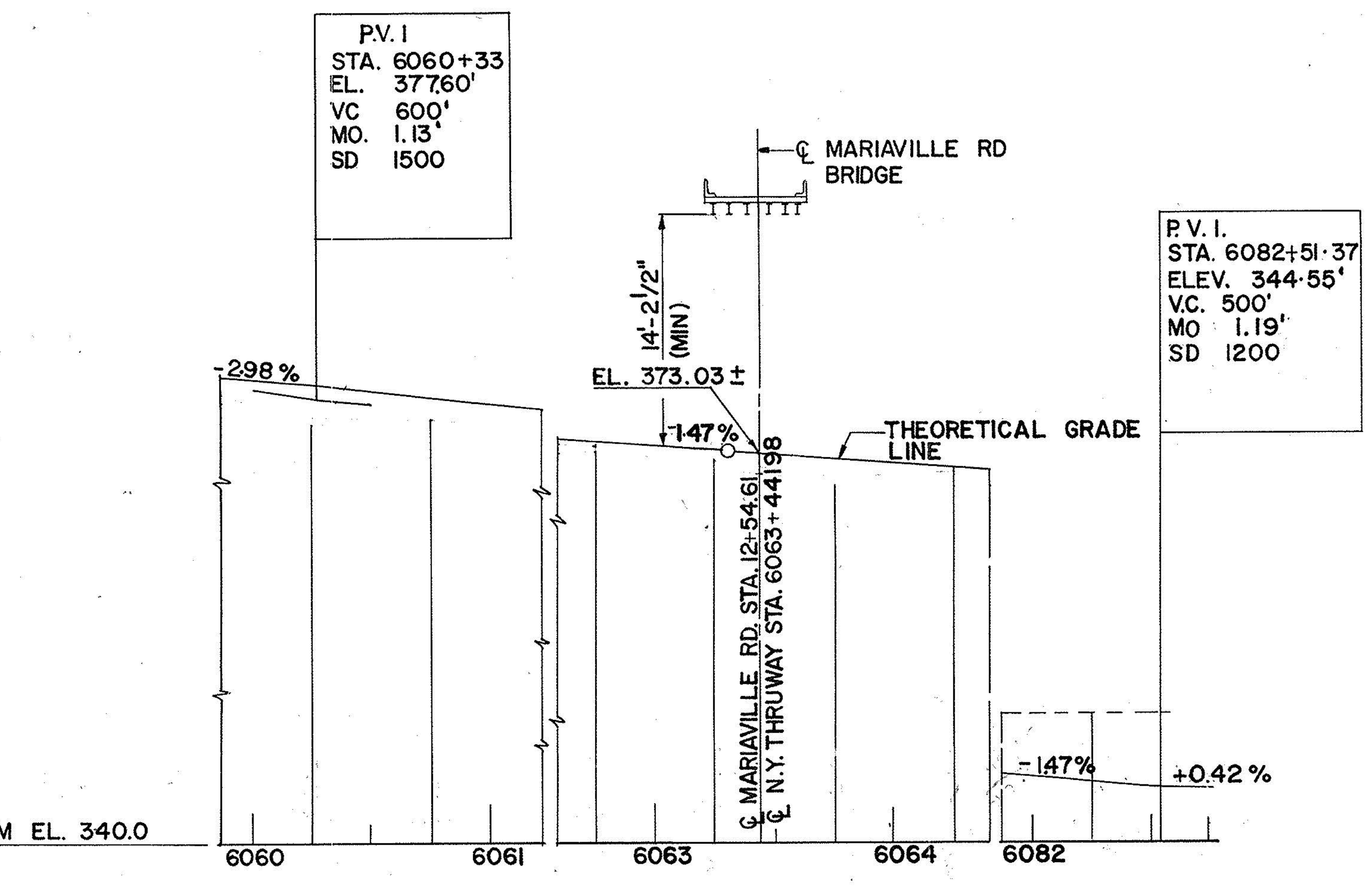
DATE:
2/18/91

DRAWING NUMBER:
3R1



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

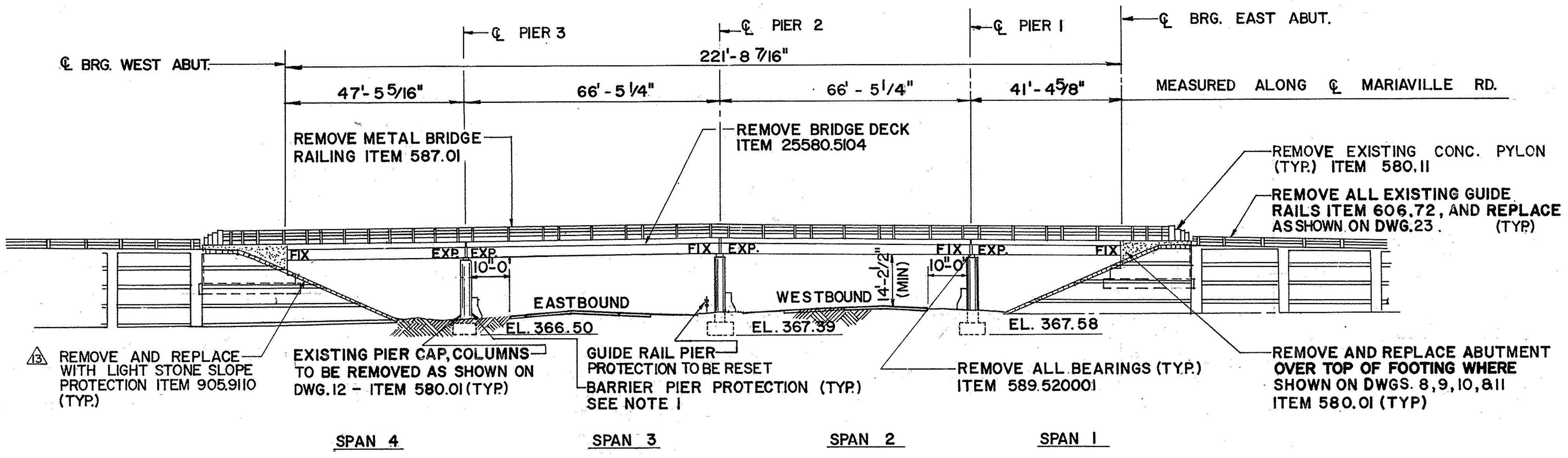
NOTE C:
SIGN MOUNTED ON BRIDGE TO BE REMOVED, REMOUNTED ON TEMPORARY POSTS, AND REINSTALLED. ITEM 25647.30. TEMPORARY INSTALLATION SHALL BE IN ACCORDANCE WITH STANDARD SHEET 645-13R1. LOCATION TO BE A.O.B.E. SEE SIGN INSTALLATION DETAIL SHEET 14



THRUWAY PROFILE
SCALE: HORIZ. 1" = 50'
VERT. 1" = 10'

NOTES:

1. THE CONCRETE BARRIER — PIER PROTECTIONS ALONG ALL PIERS, SHALL BE REMOVED AND DISPOSED UNDER ITEM 25606.3008 (SEE DWG. 26)
2. ALL ELEVATIONS ON THIS SHEET HAVE BEEN TAKEN FROM ORIGINAL DESIGN AS PER RECORD PLANS.
3. FOR EXISTING CROSS SECTION, SEE DWG. 14


℄ PIER 3
℄ PIER 2
℄ PIER 1
℄ BRG. EAST ABUT.
℄ BRG. WEST ABUT.
221'-8 7/16"
47'-5 5/16"
66'-5 1/4"
66'-5 1/4"
41'-4 5/8"
MEASURED ALONG ℄ MARIAVILLE RD.
REMOVE METAL BRIDGE RAILING ITEM 587.01
REMOVE BRIDGE DECK ITEM 25580.5104
REMOVE EXISTING CONC. PYLON (TYP.) ITEM 580.11
REMOVE ALL EXISTING GUIDE RAILS ITEM 606.72, AND REPLACE AS SHOWN ON DWG.23. (TYP.)
FIX
EXP
EXP
10'-0"
FIX
EXP.
14'-2 1/2" (MIN)
FIX
10'-0"
EXP.
FIX
EASTBOUND
WESTBOUND
EL. 366.50
EL. 367.39
EL. 367.58
13 REMOVE AND REPLACE WITH LIGHT STONE SLOPE PROTECTION ITEM 905.9110 (TYP.)
EXISTING PIER CAP, COLUMNS TO BE REMOVED AS SHOWN ON DWG. 12 - ITEM 580.01 (TYP.)
GUIDE RAIL PIER PROTECTION TO BE RESET
BARRIER PIER PROTECTION (TYP.) SEE NOTE 1
REMOVE ALL BEARINGS (TYP.) ITEM 589.520001
REMOVE AND REPLACE ABUTMENT OVER TOP OF FOOTING WHERE SHOWN ON DWGS. 8, 9, 10, & 11 ITEM 580.01 (TYP)
SPAN 4
SPAN 3
SPAN 2
SPAN 1

EXISTING SOUTH ELEVATION
SCALE: 1" = 20'-0"

NOTE A:
EXISTING R.O.W. FENCE MAY BE REMOVED AS ORDERED BY THE ENGINEER TO FACILITATE CONSTRUCTION. FENCE SHALL BE RESET IN ITS ORIGINAL POSITION AS SOON AS POSSIBLE, COST FOR REMOVING AND RESETTING R.O.W. FENCE SHALL BE PAID FOR UNDER VARIOUS ITEMS. SEE (S.S.#607-2)

NOTE B:
ACTIVITIES SHALL BE COORDINATED WITH NIAGARA MOHAWK POWER CORPORATION FOR THE TEMPORARY REMOVAL, STORAGE AND RESETTING OF LIGHTING SUPPORTS, IMMEDIATELY ADJACENT TO THE MARIAVILLE ROAD BRIDGE.

No. 40729

8/17/92	SAWCUT ASPHALT	PEB	13
DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITION OF MARIAVILLE ROAD BRIDGE

LOCATION OF PROJECT
MP 159.23, SCHENECTADY COUNTY

TITLE OF DRAWING
PLAN AND ELEVATION EXISTING

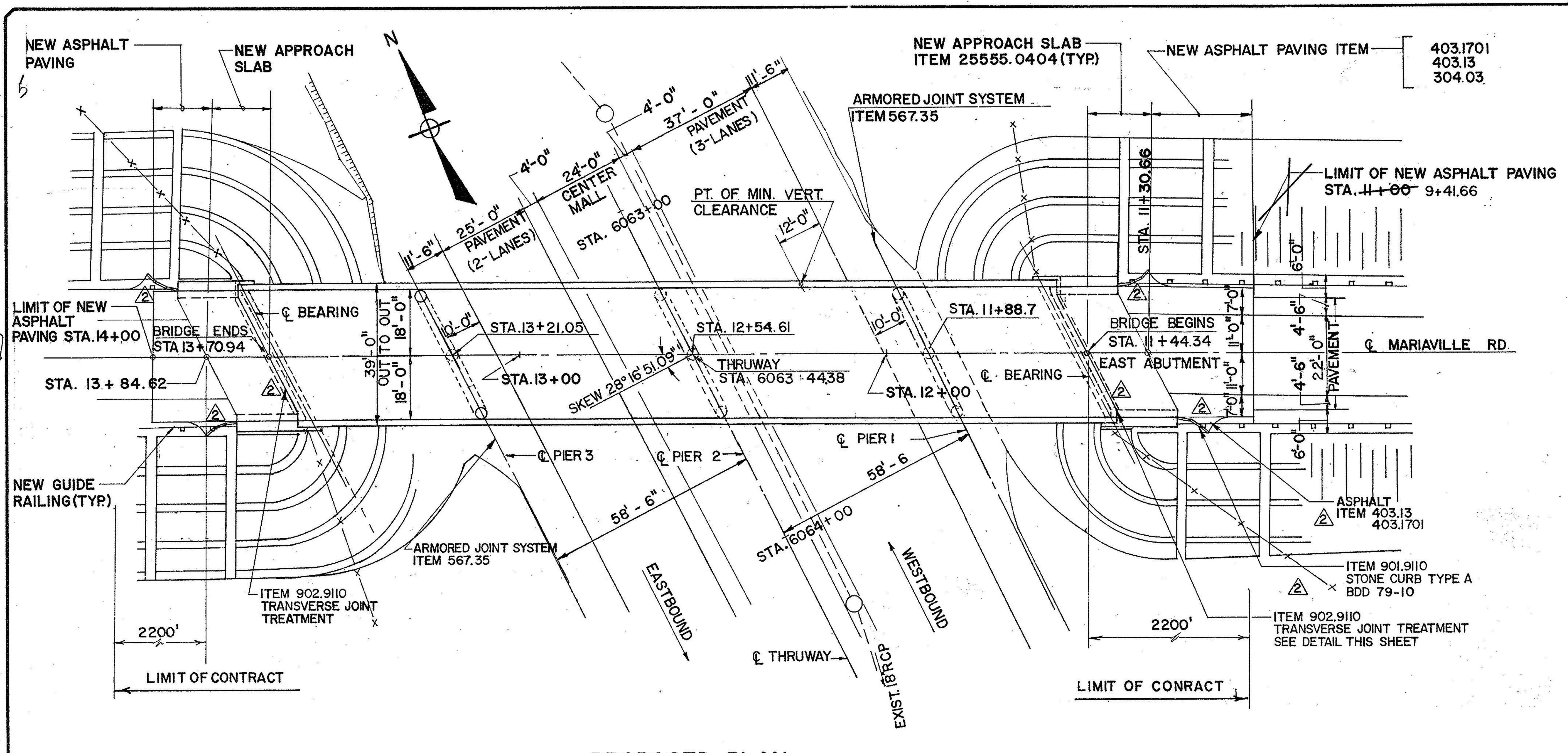
CONTRACT NUMBER: TAA 91 -10B

DATE: APRIL 1990

DRAWING NUMBER: 4R1

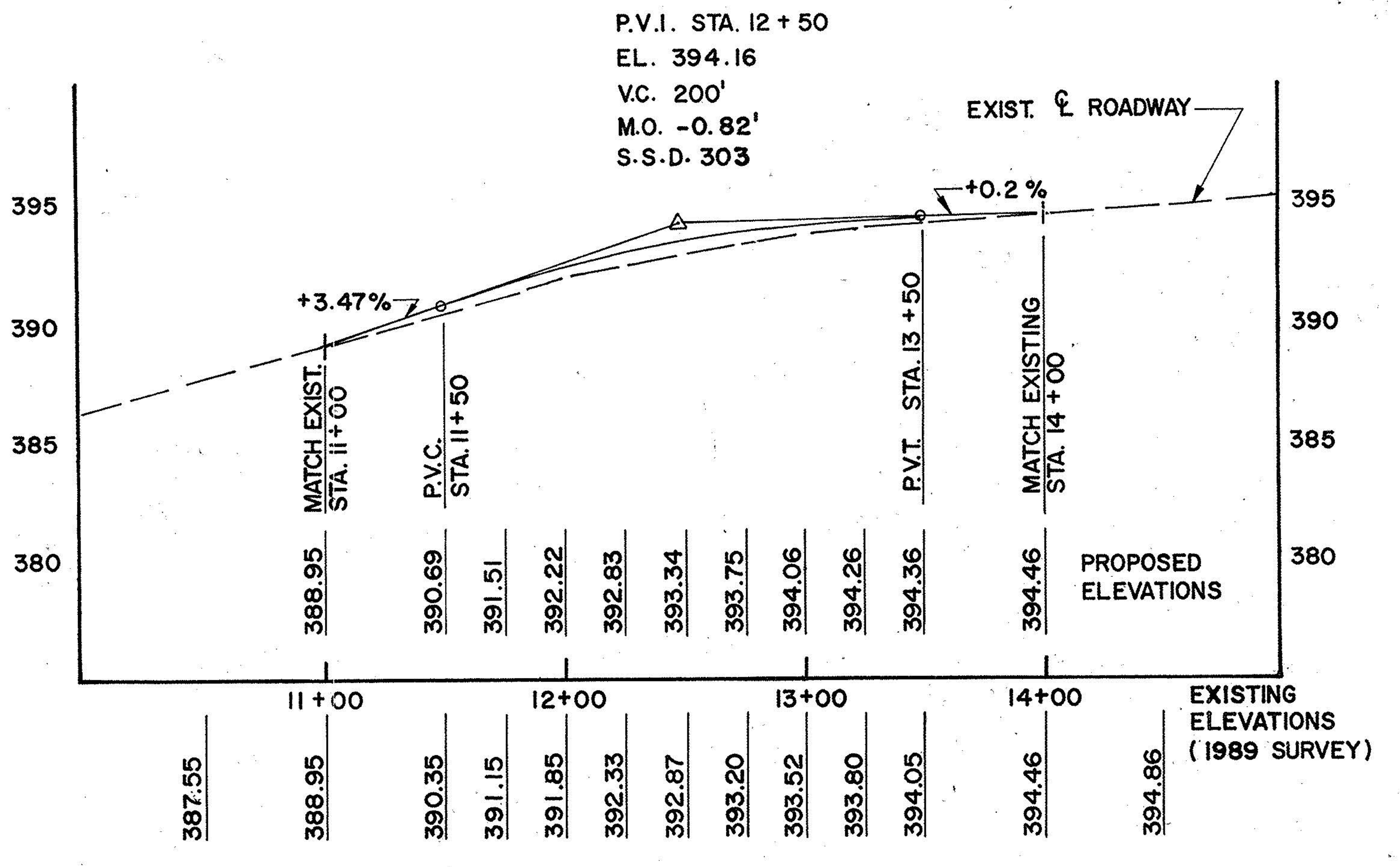
JACKSON AND TULL
CHARTERED ENGINEERS

CHECKED BY:
DRAFTED BY:
DESIGNED BY:
IN CHARGE OF:



PROPOSED PLAN

SCALE: 1" = 20'-0"



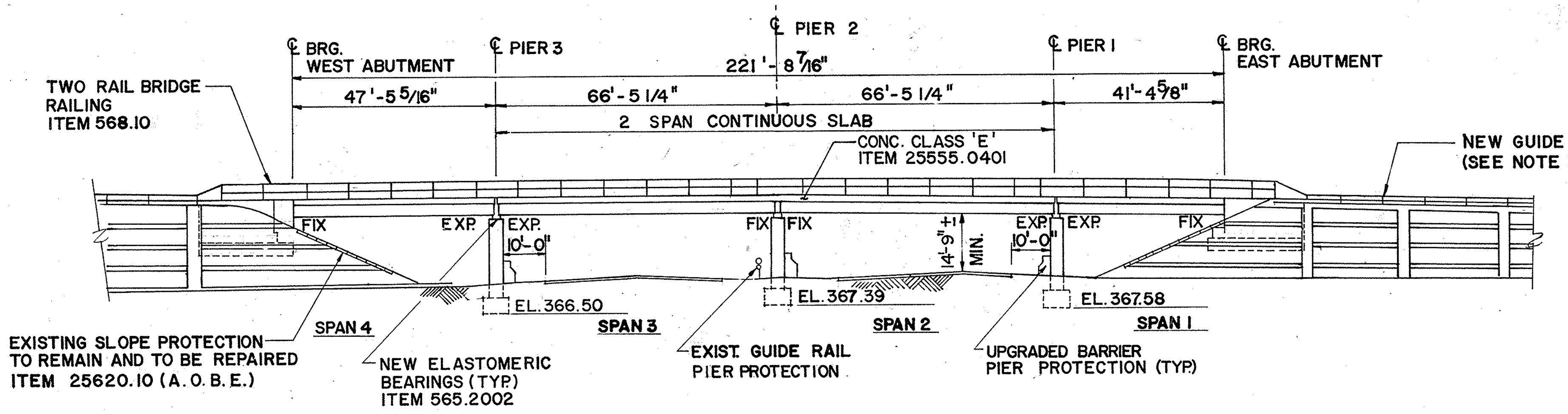
PROPOSED MARIAVILLE ROAD PROFILE

SCALE: HORIZ. 1" = 200'-0"
VERT. 1" = 20'-0"

NOTES:

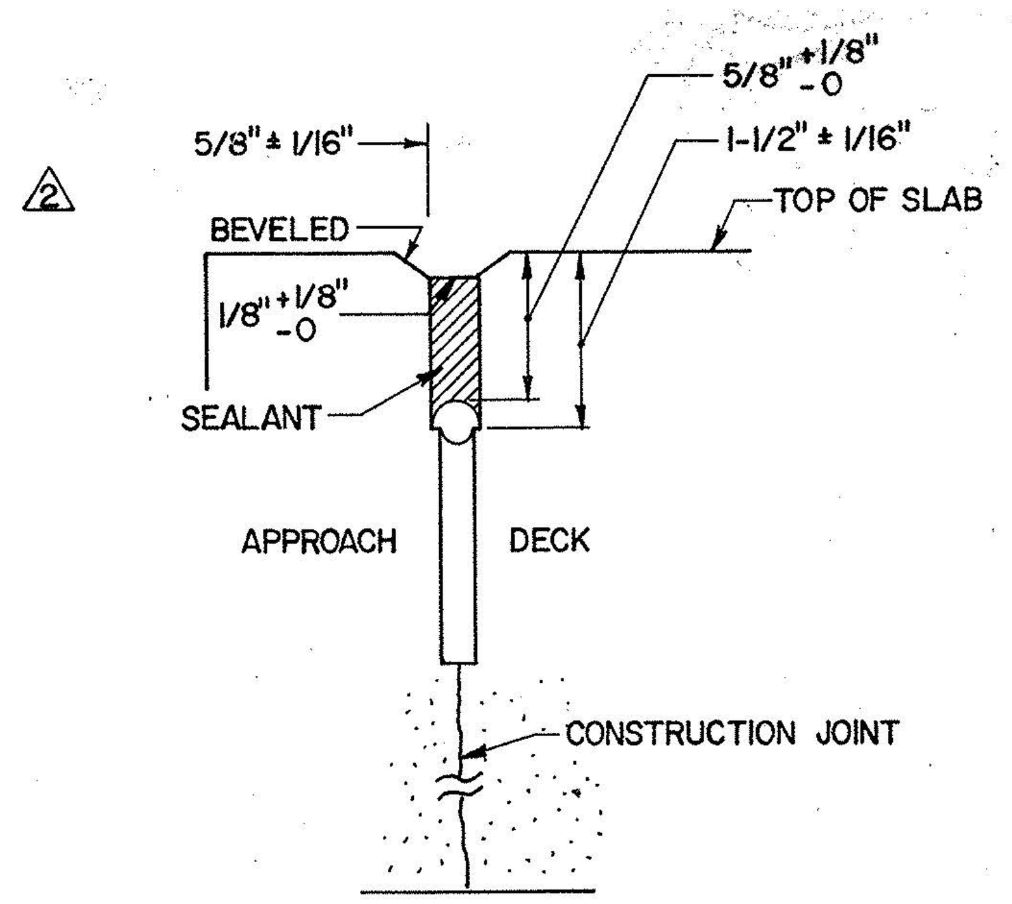
1. FOR GUIDE RAIL AND RAILING PLAN SEE DWG. 19 & 23
2. FOR PROPOSED CROSS SECTION SEE DWG. 14

Nicholas A. Grip No. 40229


℄ BRG. WEST ABUTMENT
℄ PIER 3
℄ PIER 2
℄ PIER 1
℄ BRG. EAST ABUTMENT
221'-8 7/16"
47'-5 5/16"
66'-5 1/4"
66'-5 1/4"
41'-4 5/8"
2 SPAN CONTINUOUS SLAB
TWO RAIL BRIDGE RAILING ITEM 568.10
CONC. CLASS 'E' ITEM 25555.0401
NEW GUIDE RAIL (TYP.) (SEE NOTE 1)
FIX
EXP.
EXP.
10'-0"
FIX
FIX
14'-9" ± MIN.
EXP.
EXP.
10'-0"
FIX
EL. 366.50
EL. 367.39
EL. 367.58
SPAN 4
SPAN 3
SPAN 2
SPAN 1
EXISTING SLOPE PROTECTION TO REMAIN AND TO BE REPAIRED ITEM 25620.10 (A.O.B.E.)
NEW ELASTOMERIC BEARINGS (TYP.) ITEM 565.2002
EXIST. GUIDE RAIL PIER PROTECTION
UPGRADED BARRIER PIER PROTECTION (TYP.)

PROPOSED ELEVATION

SCALE: 1" = 20'-0"



TRANSVERSE JOINTS POURABLE SEALANT

8/17/92	ADDED STONE CURBS & TRNSV. JOINTS	P.E.B.	2
DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT: REHABILITION OF MARIAVILLE ROAD BRIDGE
LOCATION OF PROJECT: MP 159.23, SCHENECTADY COUNTY
TITLE OF DRAWING: PLAN & ELEVATION PROPOSED

CONTRACT NUMBER: TAA 91 - 10B
DATE: APRIL 1990
DRAWING NUMBER: 5R1

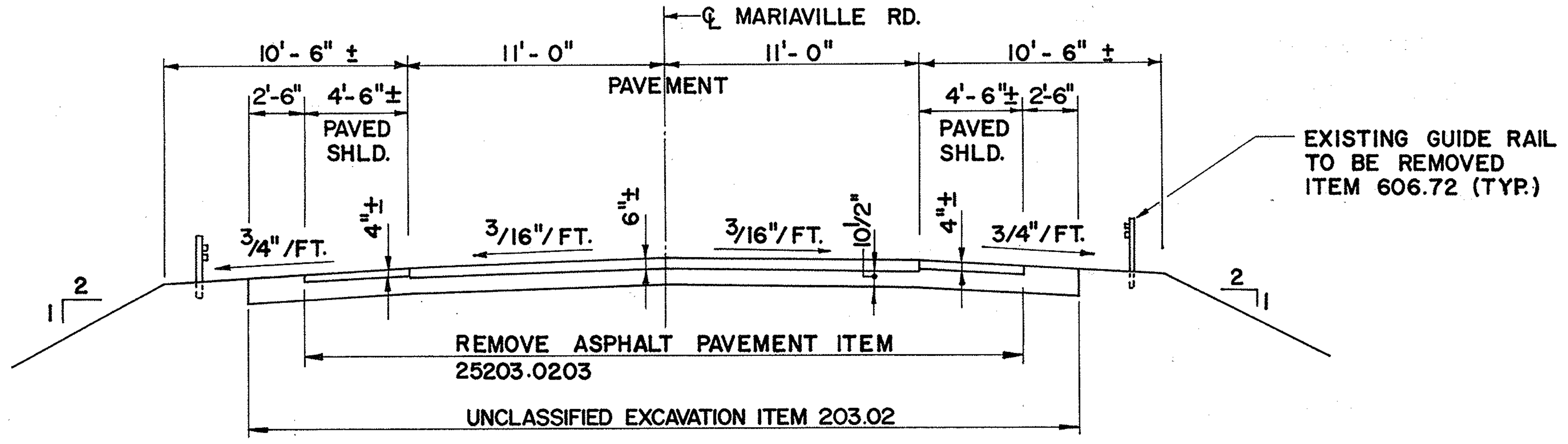
JACKSON AND TULL
CHARTERED ENGINEERS

CHECKED BY:
DRAFTED BY:
DESIGNED BY:
IN CHARGE OF:

TCA 301-585-3340

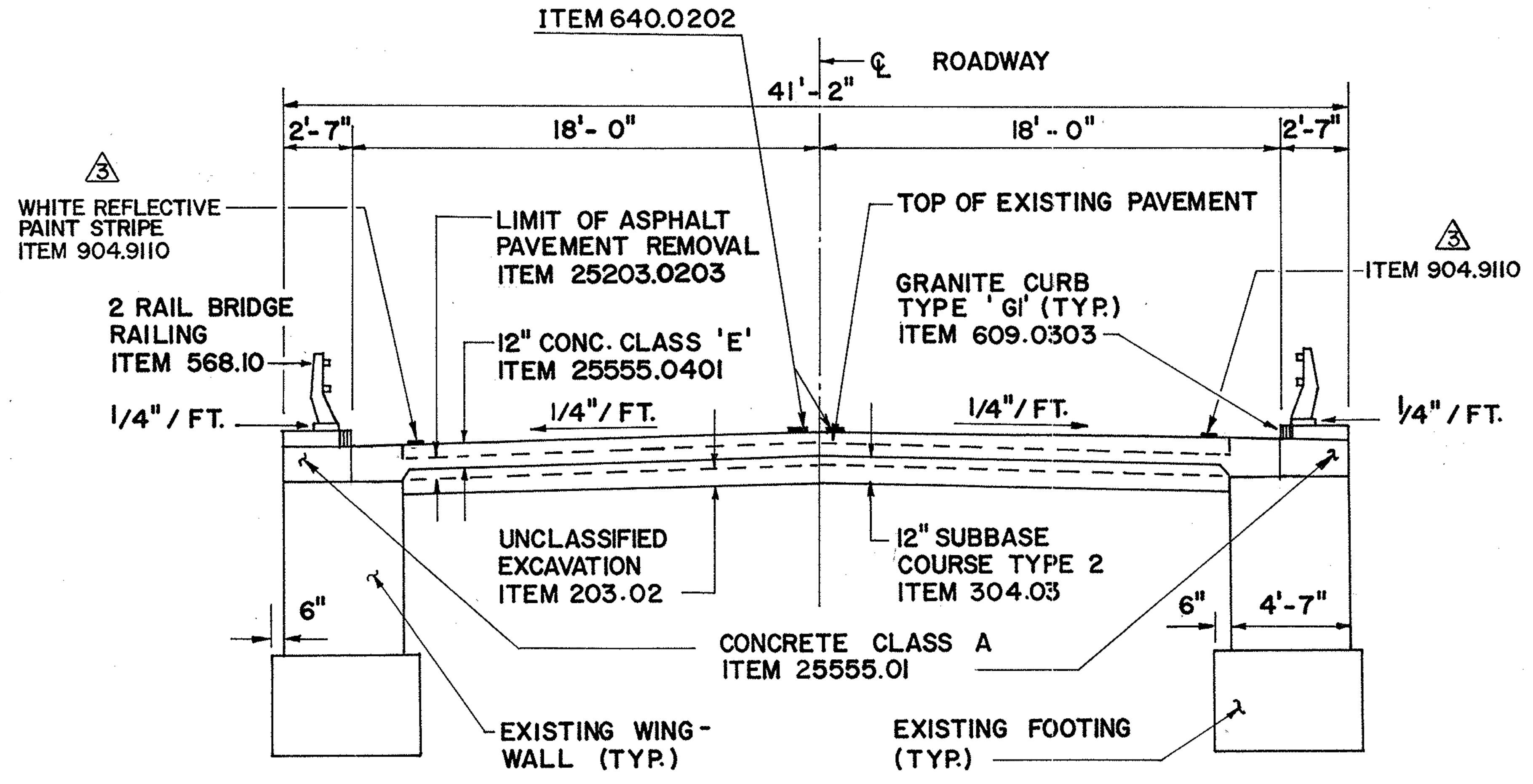
6

6/37



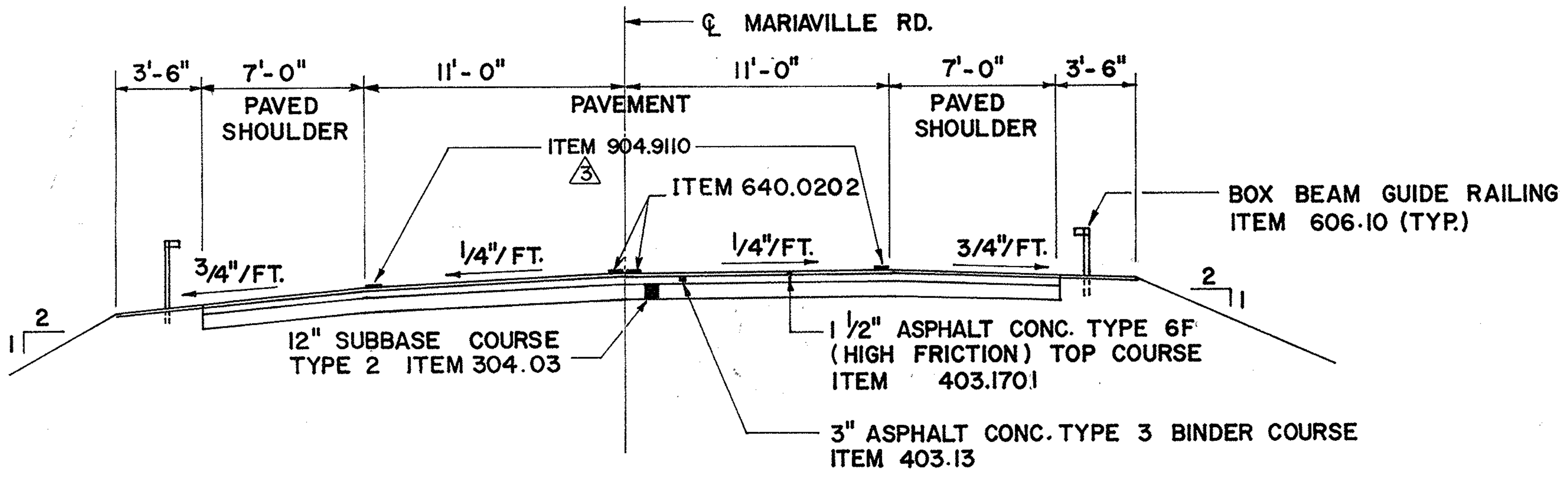
EXISTING SECTION OF APPROACHES

SCALE : 1" = 5'- 0"


ITEM 640.0202
℄ ROADWAY
41'-2"
2'-7"
18'- 0"
18'- 0"
2'-7"
3
WHITE REFLECTIVE PAINT STRIPE ITEM 904.9110
LIMIT OF ASPHALT PAVEMENT REMOVAL ITEM 25203.0203
TOP OF EXISTING PAVEMENT
3
ITEM 904.9110
2 RAIL BRIDGE RAILING ITEM 568.10
12" CONC. CLASS 'E' ITEM 25555.0401
GRANITE CURB TYPE 'GI' (TYP.) ITEM 609.0303
1/4" / FT.
1/4"/FT.
1/4"/FT.
1/4" / FT.
UNCLASSIFIED EXCAVATION ITEM 203.02
12" SUBBASE COURSE TYPE 2 ITEM 304.03
6"
6"
4'-7"
CONCRETE CLASS A ITEM 25555.01
EXISTING WING-WALL (TYP.)
EXISTING FOOTING (TYP.)

PROPOSED SECTION AT ABUTMENT

SCALE : 1" = 5'-0"


℄ MARIAVILLE RD.
3'-6"
7'-0"
11'- 0"
11'-0"
7'-0"
3'-6"
PAVED SHOULDER
PAVEMENT
PAVED SHOULDER
ITEM 904.9110
3
ITEM 640.0202
BOX BEAM GUIDE RAILING ITEM 606.10 (TYP.)
3/4"/FT.
1/4"/FT.
1/4"/FT.
3/4"/FT.
2
1
2
1
12" SUBBASE COURSE TYPE 2 ITEM 304.03
1 1/2" ASPHALT CONC. TYPE 6F (HIGH FRICTION) TOP COURSE ITEM 403.1701
3" ASPHALT CONC. TYPE 3 BINDER COURSE ITEM 403.13

PROPOSED SECTION OF APPROACHES

SCALE : 1" = 5'-0"

IN CHARGE OF : Kim C. Hwang

DESIGNED BY : Fatemeh Nawab

DRAFTED BY : Gerald DeFour

CHECKED BY : Kim C. Hwang

130439

NASSAU SUFFOLK BLUEPRINTING

No. 40729

8/17/92	ADD ITEM 904.9110	P.E.B.	3
DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT **REHABILITATION OF MARIAVILLE RD. BRIDGE**

LOCATION OF PROJECT
MP 159.23, SCHENECTADY COUNTY

TITLE OF DRAWING

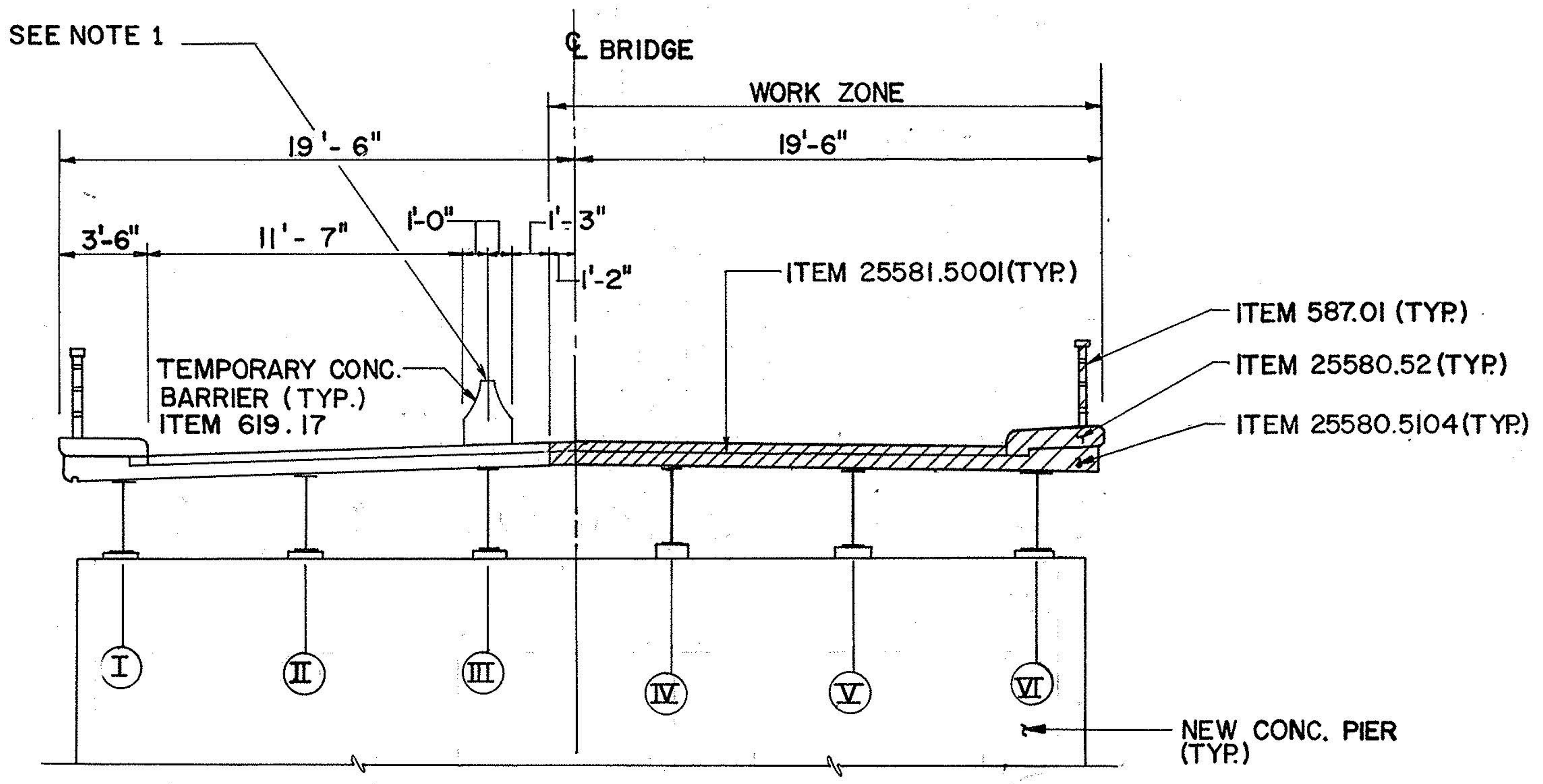
TYPICAL SECTIONS

CONTRACT NUMBER : TAA 91 - 10B

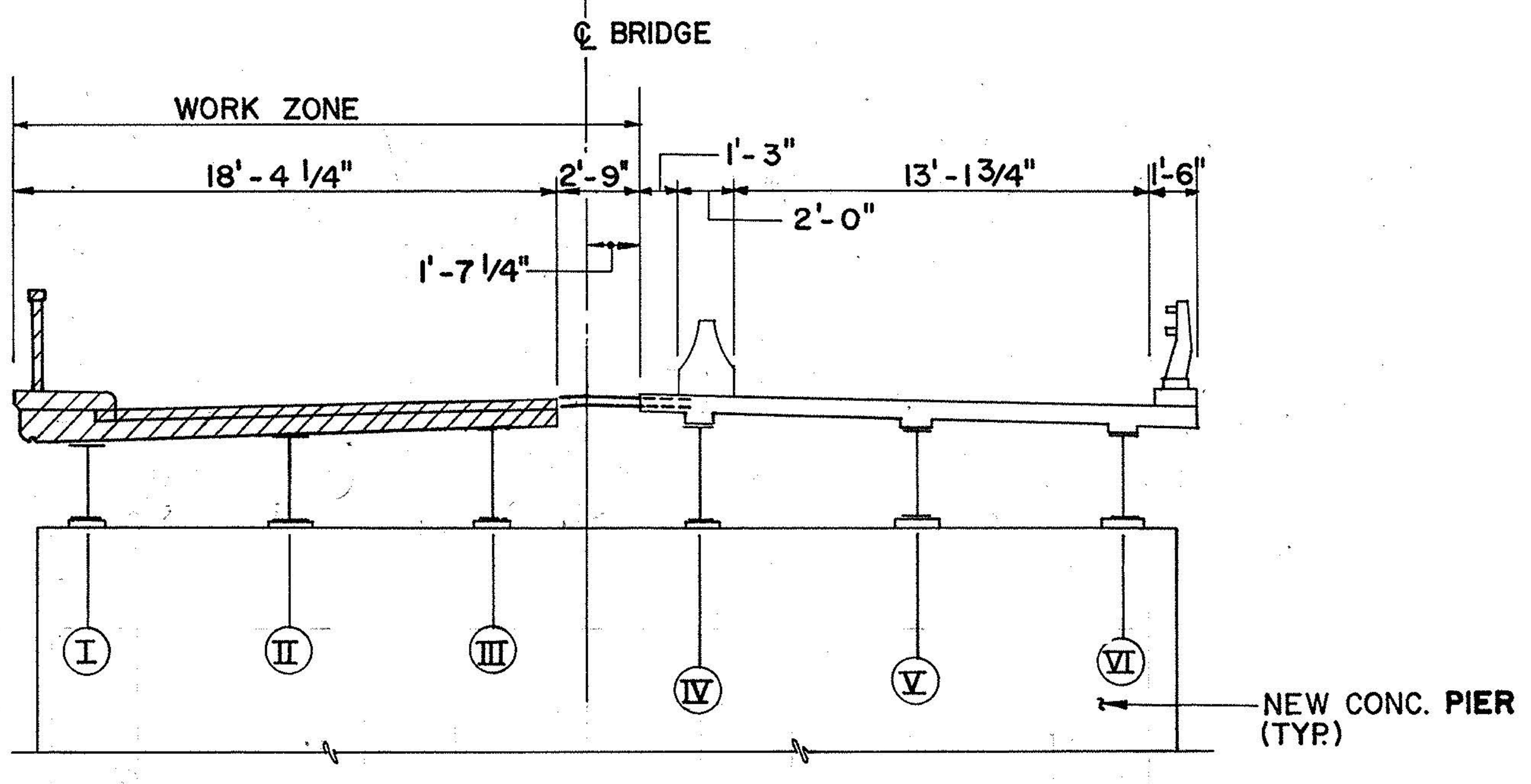
DATE : APRIL 1990

DRAWING NUMBER : 6R1

JACKSON AND TULL
CHARTERED ENGINEERS



DEMOLITION

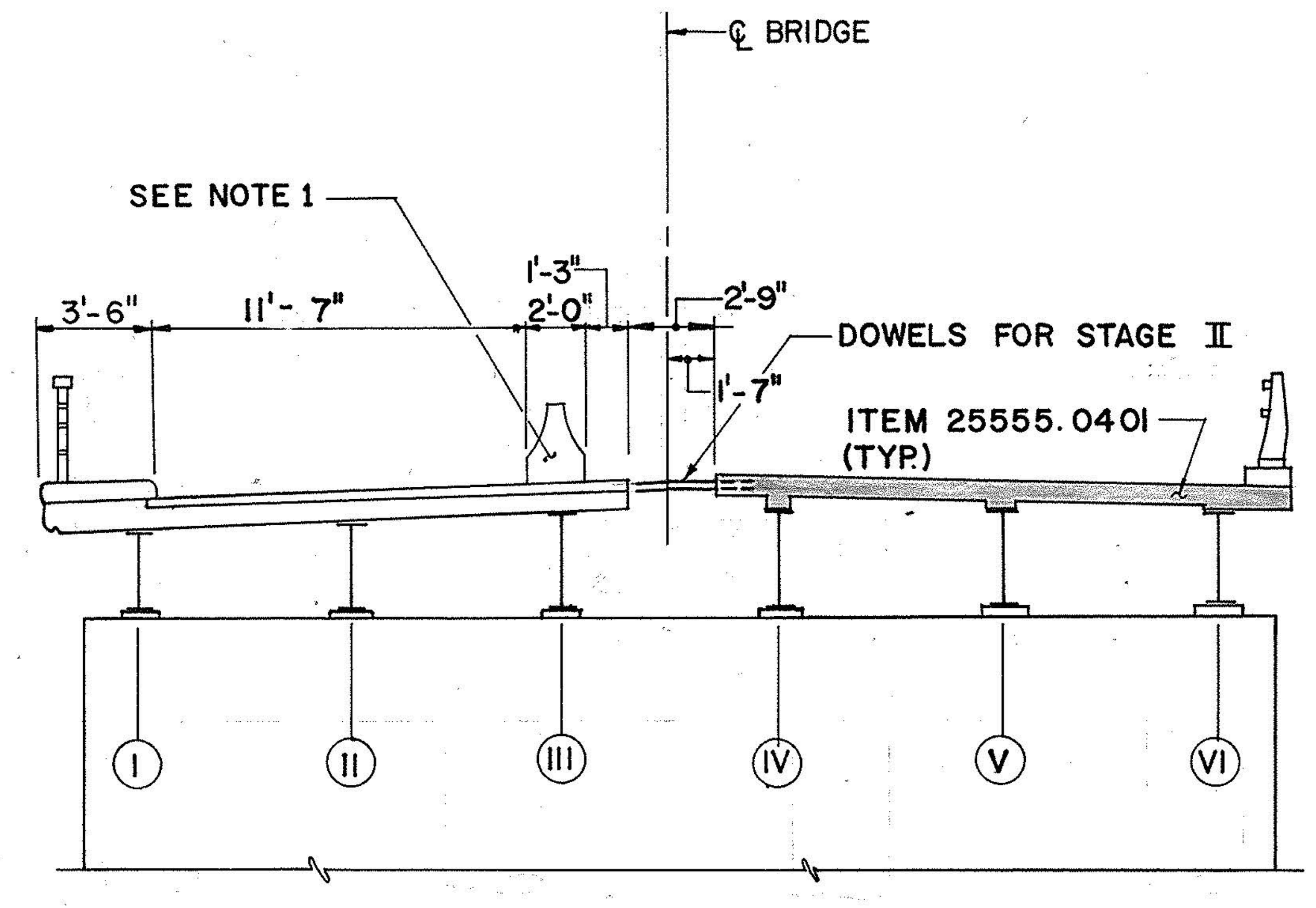


DEMOLITION

LEGEND:

▨ INDICATES REMOVAL OF: BRIDGE WEARING COURSE ITEM 25581.5001, CONC. DECK SLAB ITEM 25580.5104, BRIDGE CURBS & SIDEWALKS ITEM 25580.52, AND BRIDGE RAILING ITEM 587.01.

▩ INDICATES PROPOSED CONC. DECK ITEM 25555.0401.

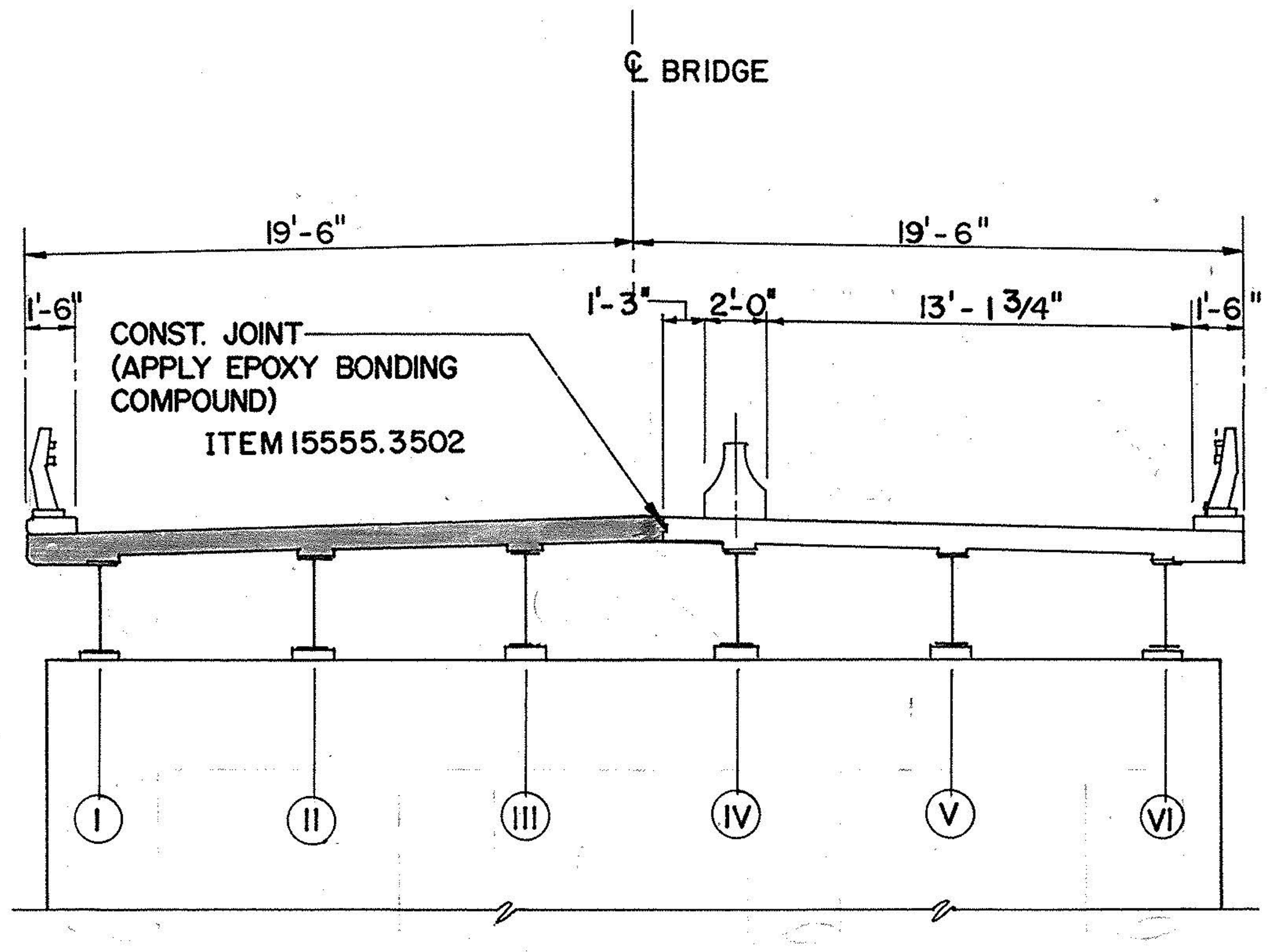


CONSTRUCTION

STAGE I

SCALE: 1" = 5'-0"

NOTE: 1. TEMPORARY CONCRETE BARRIER IN STAGE 1 SHALL BE PINNED TO THE DECK AS PER STD. SH. # 619-3R3



CONSTRUCTION

STAGE II

SCALE: 1" = 5'-0"

NO AS-BUILT REVISIONS

IN CHARGE OF:

DESIGNED BY:

DRAFTED BY:

CHECKED BY:

DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITATION OF MARIAVILLE RD. BRIDGE

LOCATION OF PROJECT
MP. 159.23, SCHENECTADY COUNTY

TITLE OF DRAWING
CONSTRUCTION STAGES

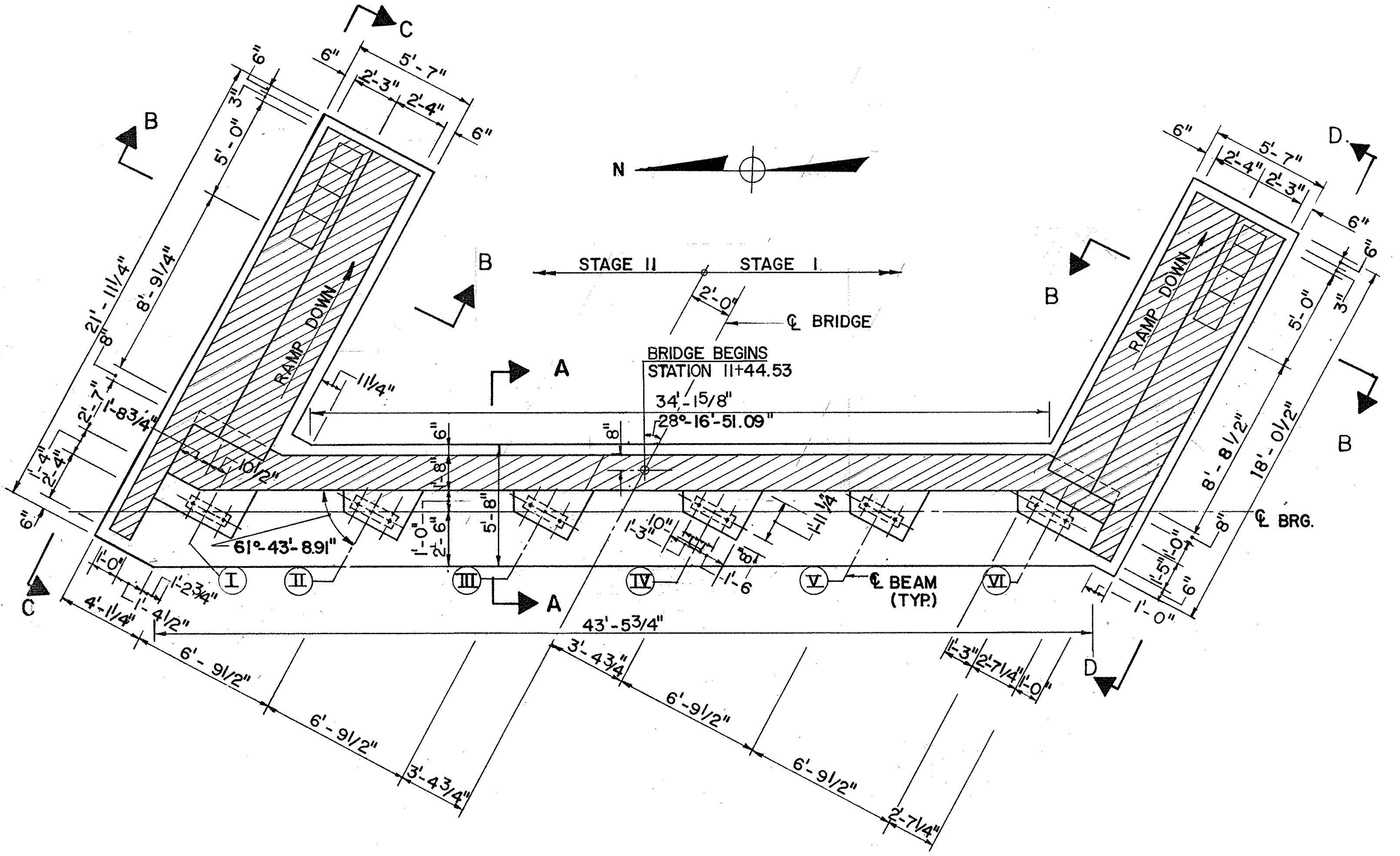
CONTRACT NUMBER:
TAA 91-10B

DATE:
APRIL 1990

DRAWING NUMBER:
7

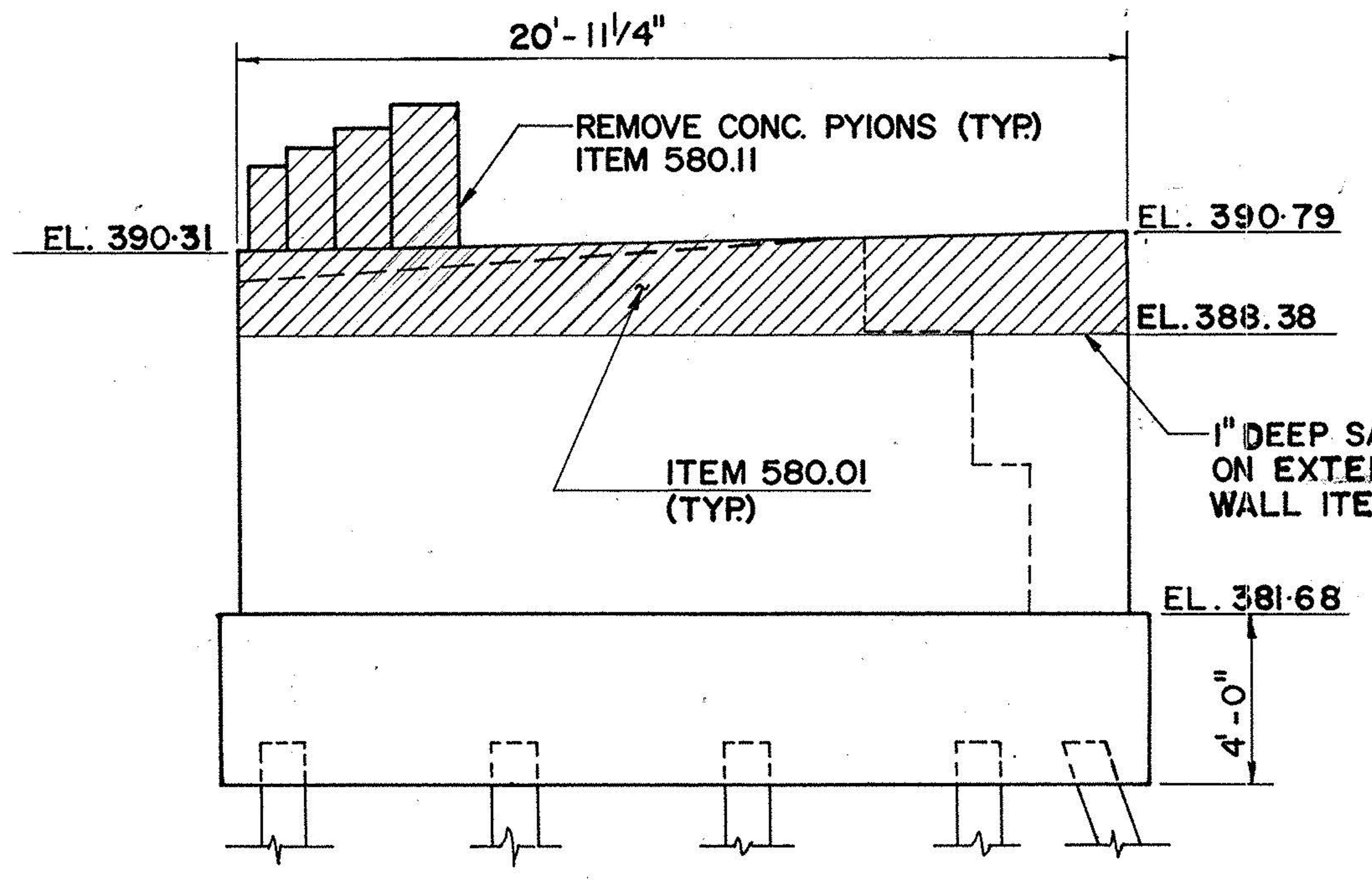
JACKSON AND TULL
CHARTERED ENGINEERS

8



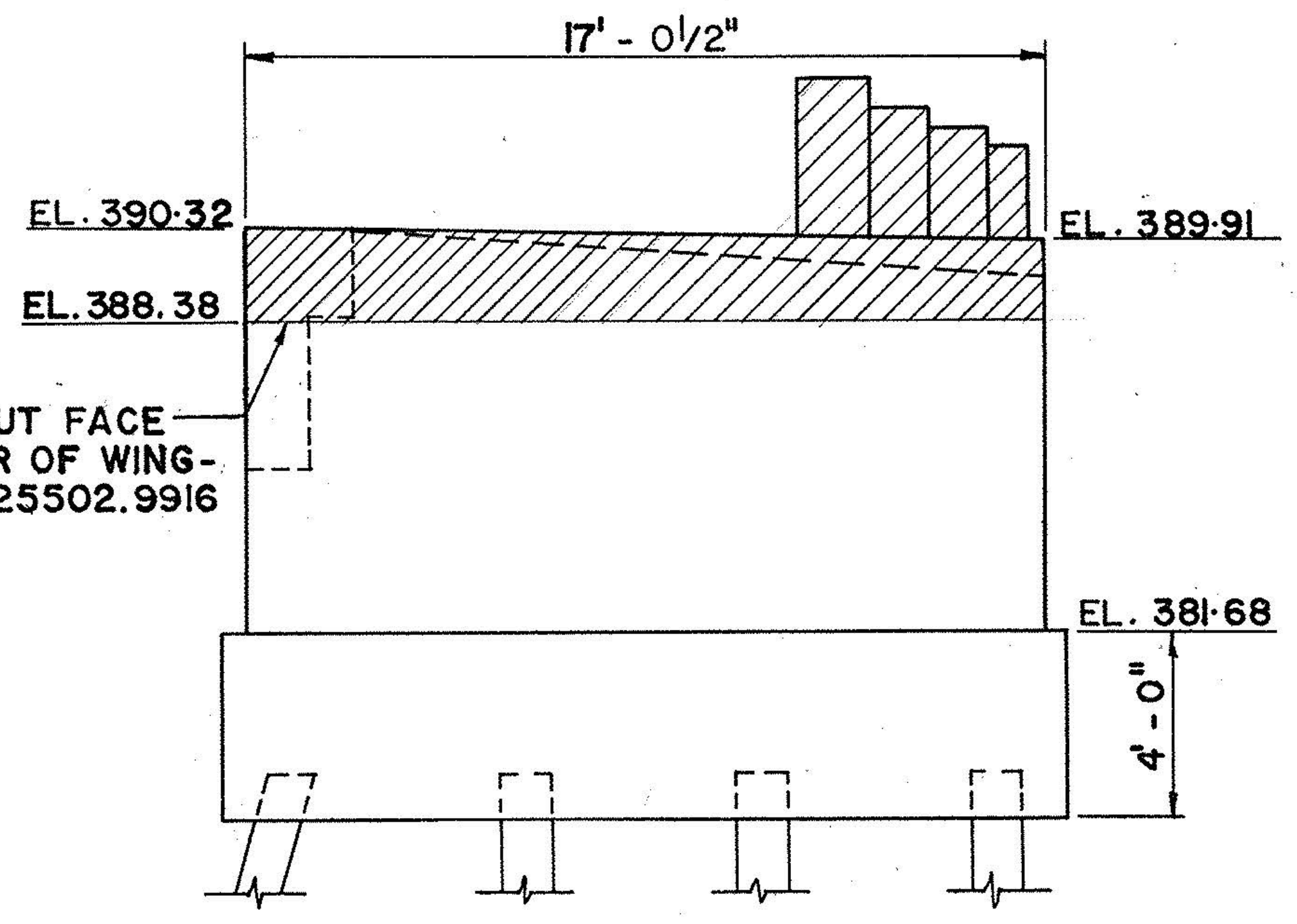
EXISTING PLAN

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



ELEVATION C-C

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

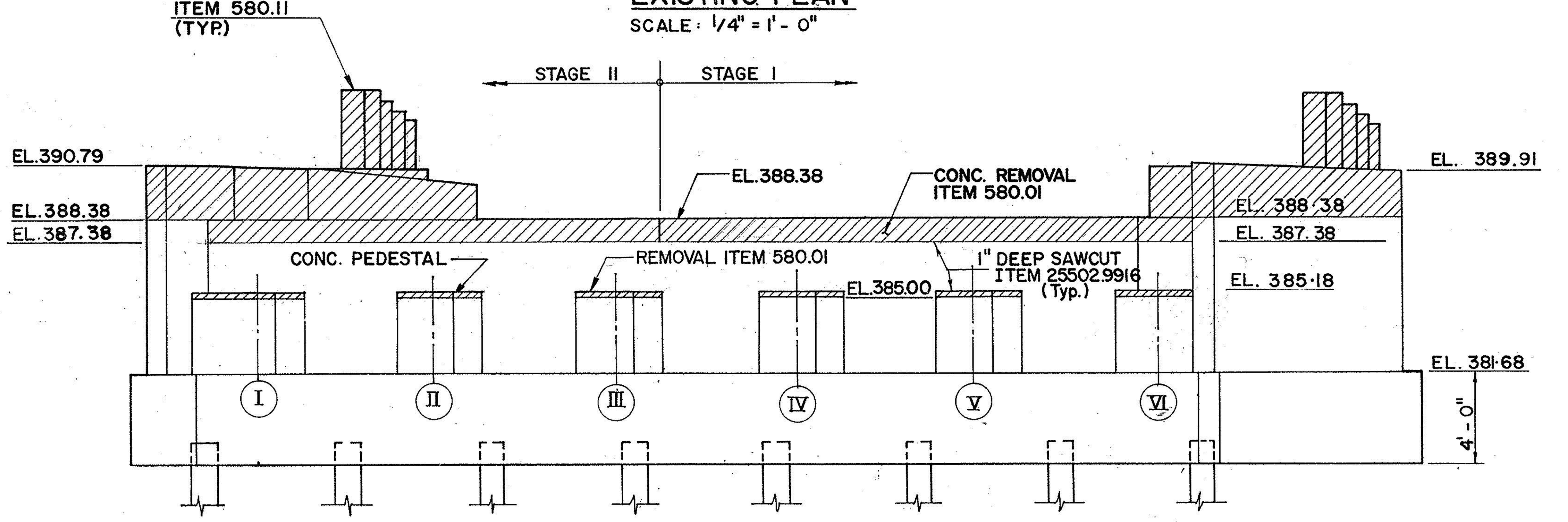


ELEVATION D-D

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

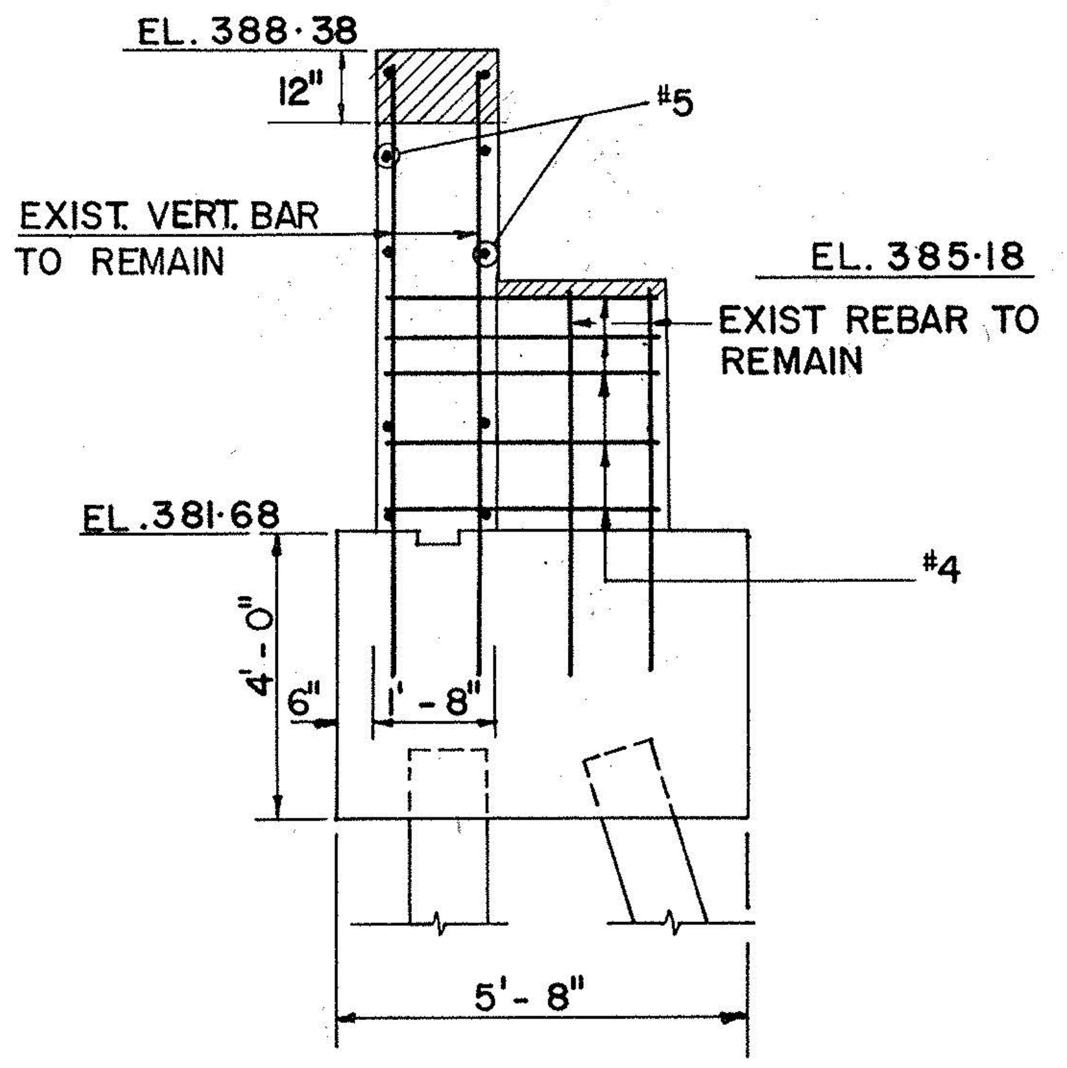
LEGEND:

▨ INDICATES CONC. REMOVAL ITEM 580.01 & CONC. PYLONS REMOVAL ITEM 580.11



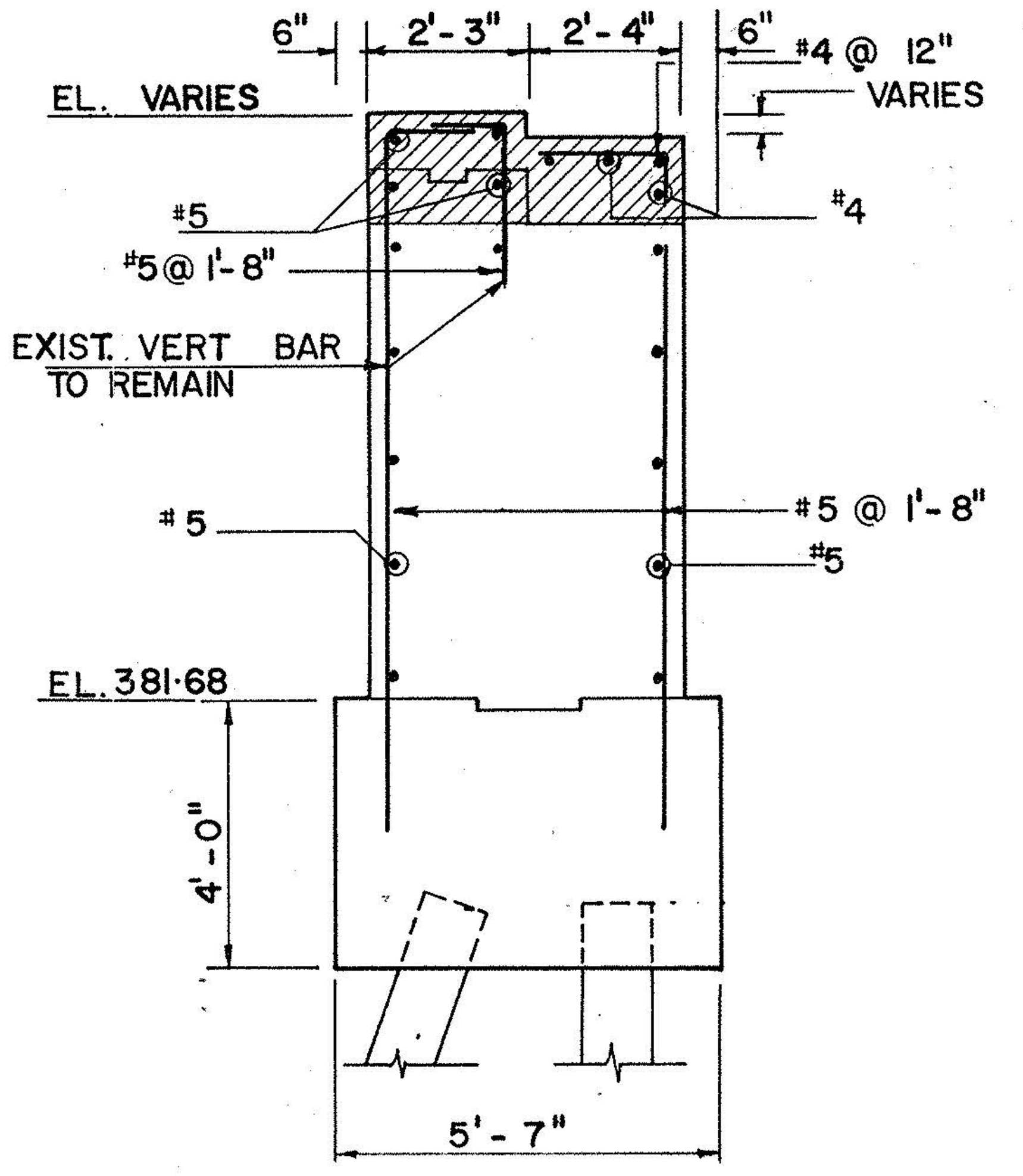
EXISTING ELEVATION

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



SECTION A-A

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



SECTION B-B

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

NO AS-BUILT REVISIONS

DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITION OF MARIAVILLE ROAD BRIDGE

LOCATION OF PROJECT
MP 159.23, SCHENECTADY COUNTY

TITLE OF DRAWING

EAST ABUTMENT EXISTING

CONTRACT NUMBER: TAA 91 -10B

DATE: APRIL 1990

DRAWING NUMBER: 8

JACKSON AND TULL
CHARTERED ENGINEERS

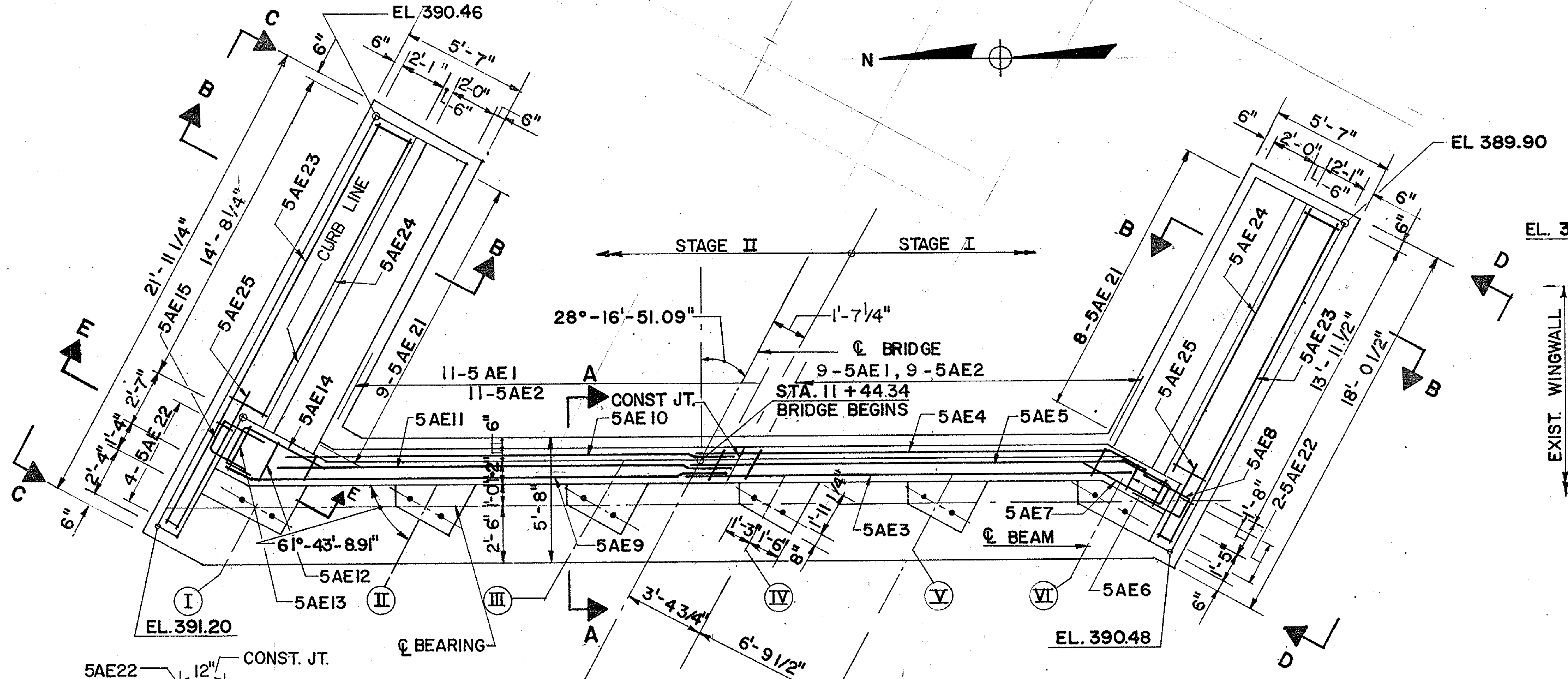
CHECKED BY:

DRAFTED BY:

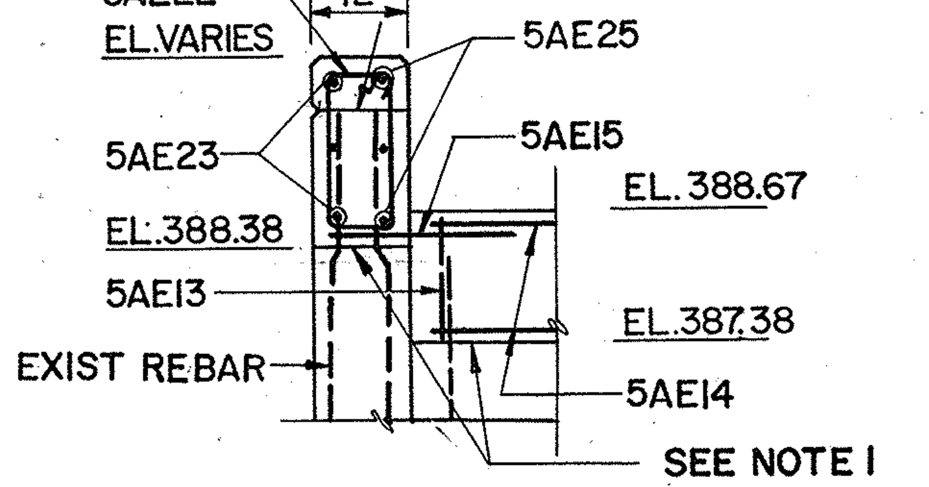
DESIGNED BY:

IN CHARGE OF:

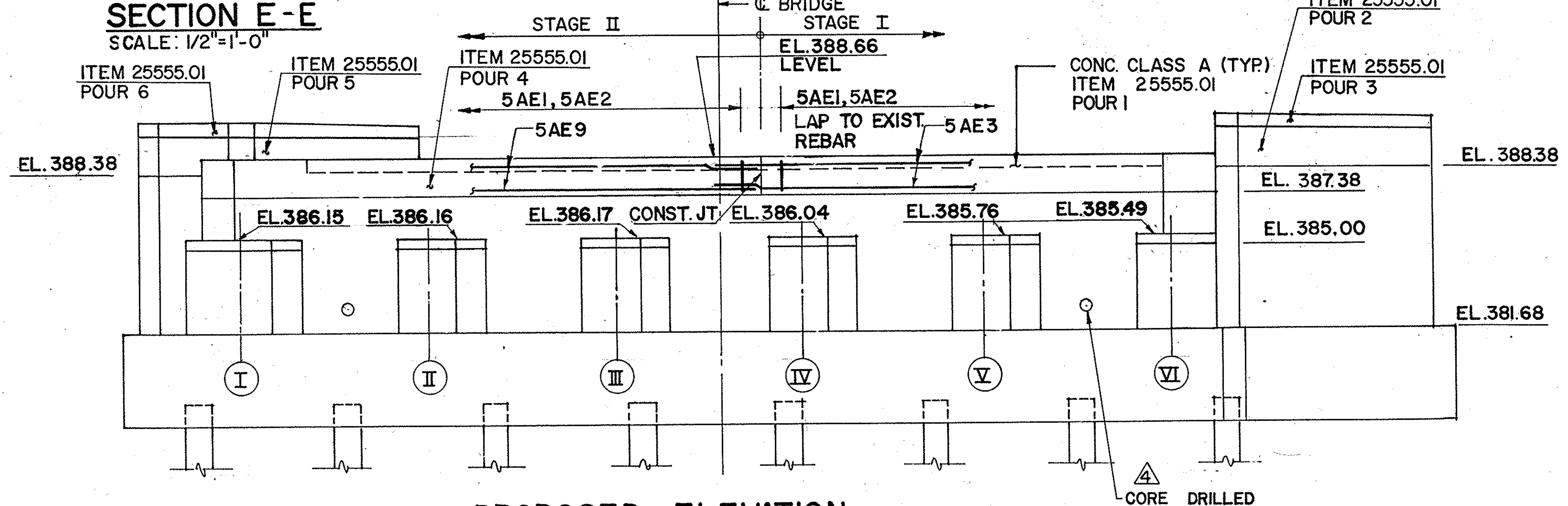
TCA 301-565-3340



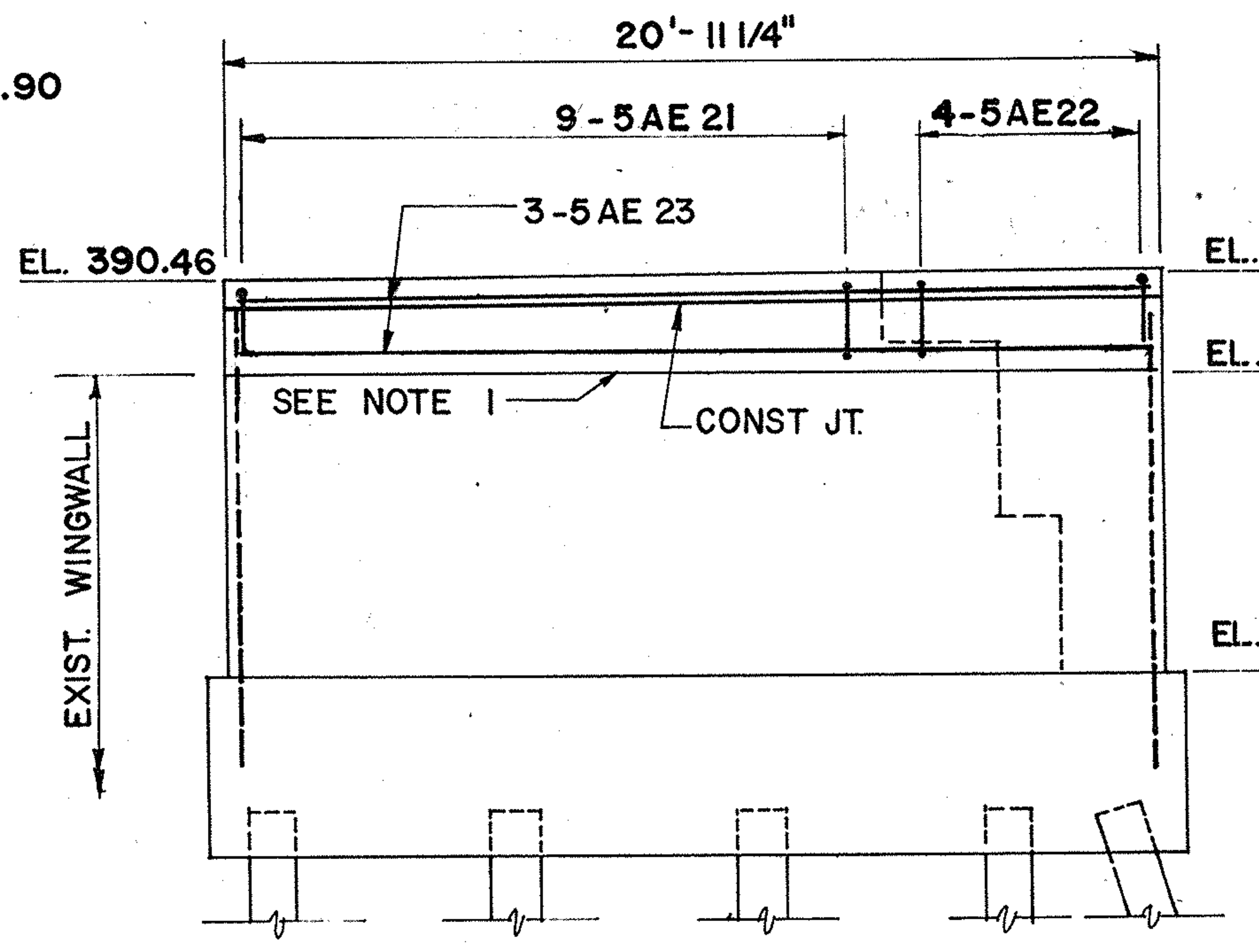
PROPOSED PLAN
SCALE : 1/4" = 1'-0"



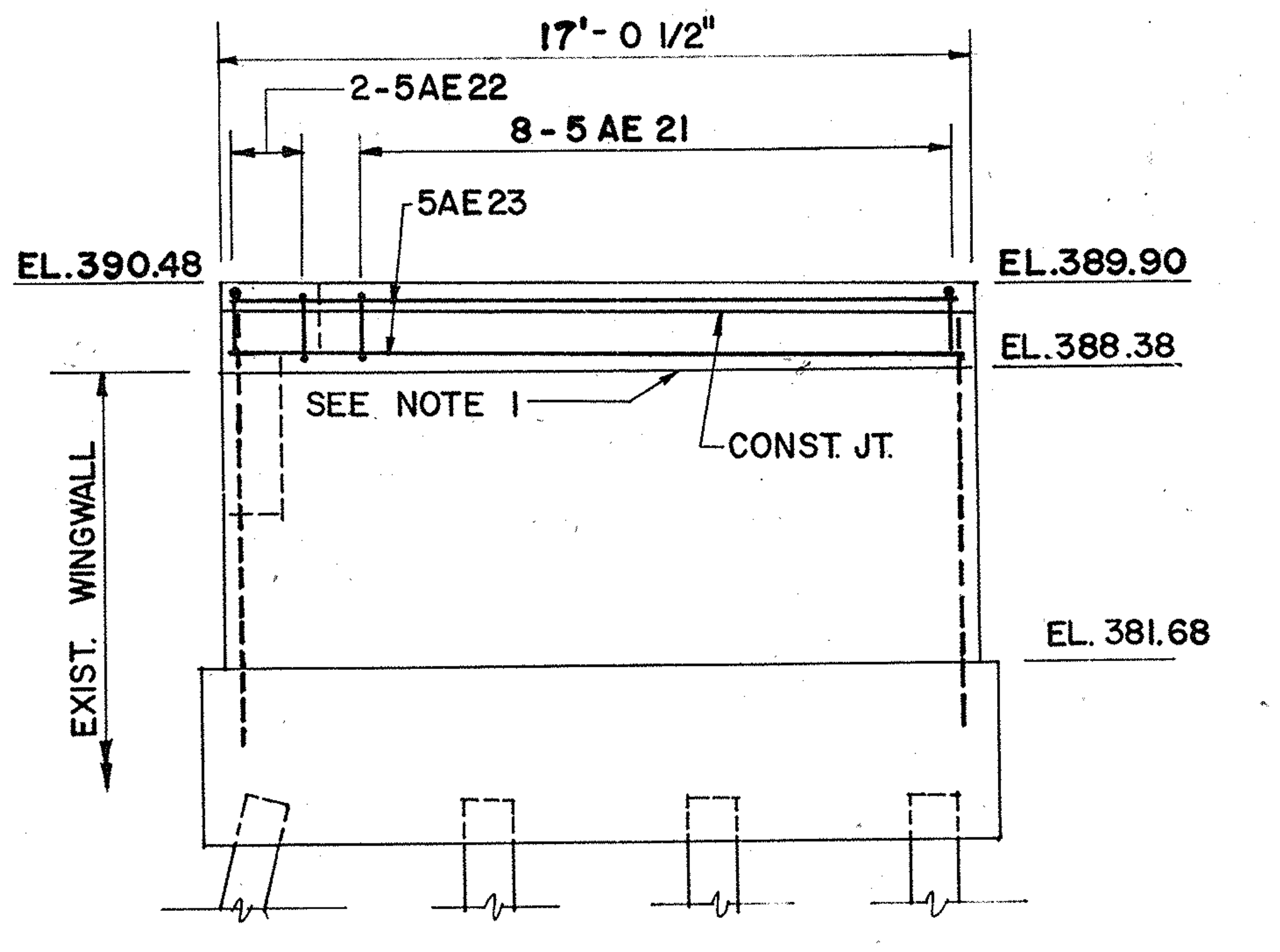
SECTION E-E
SCALE: 1/2" = 1'-0"



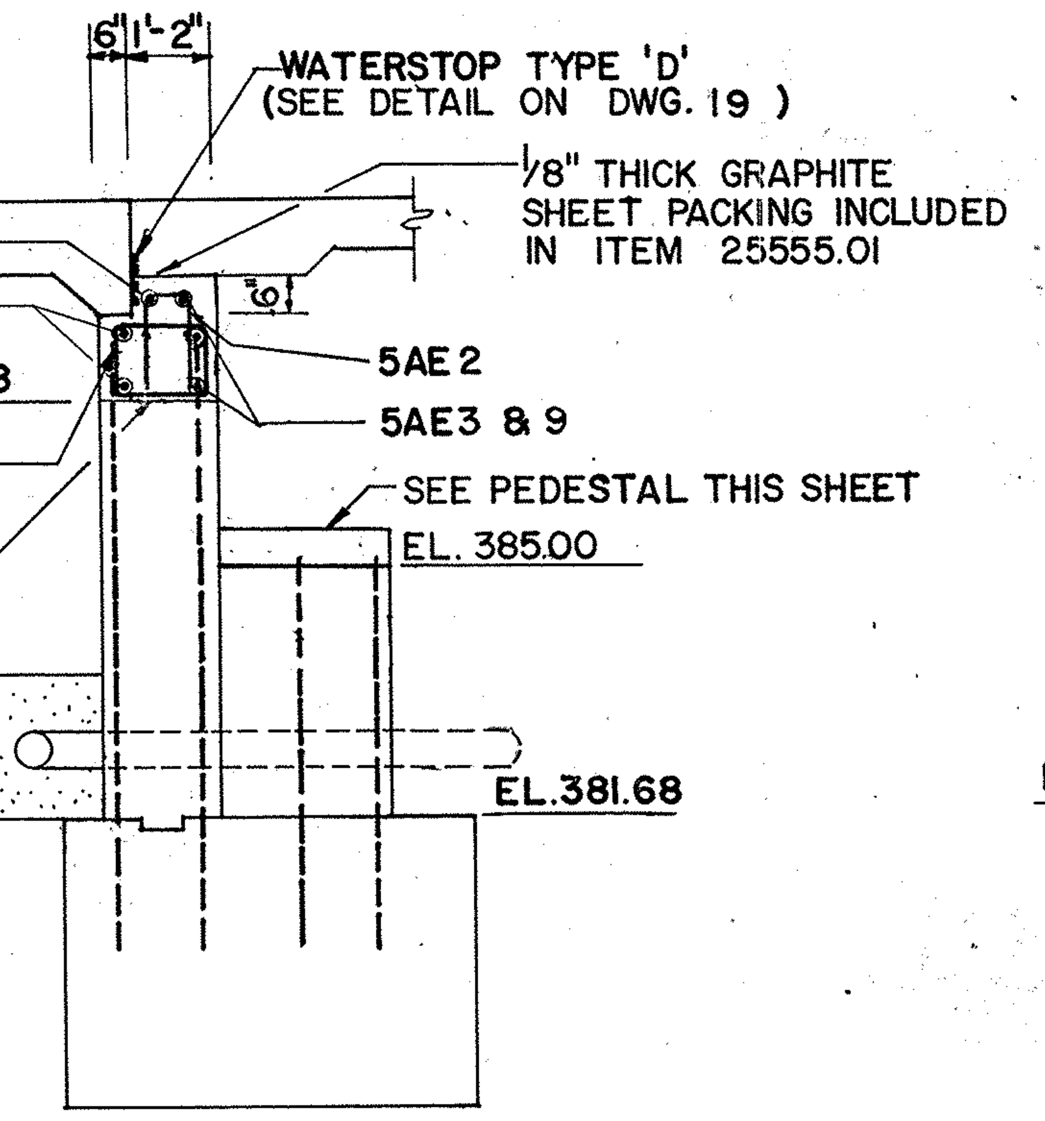
PROPOSED ELEVATION
SCALE : 1/4" = 1'-0"



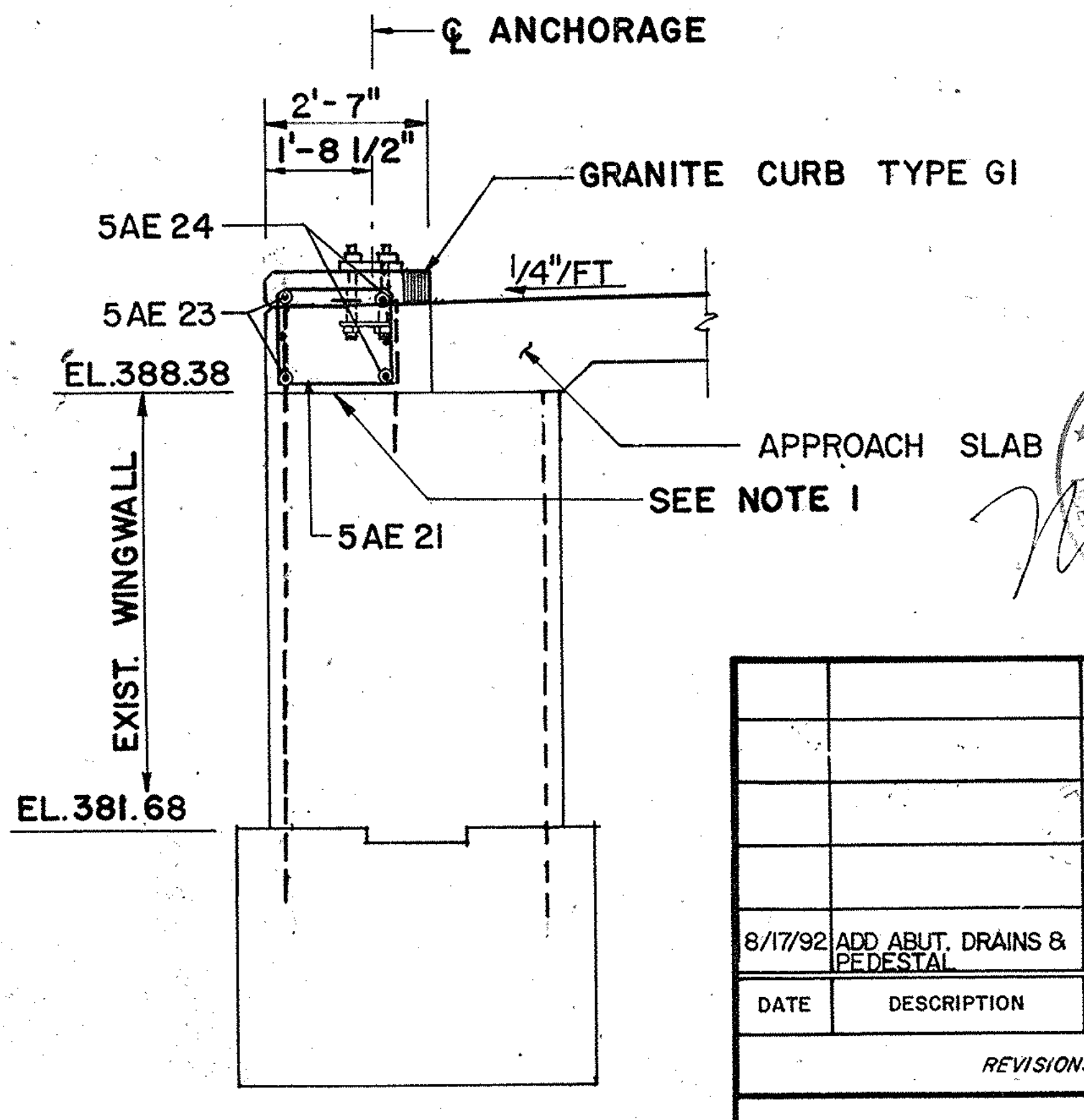
ELEVATION C-C
SCALE : 1/4" = 1'-0"



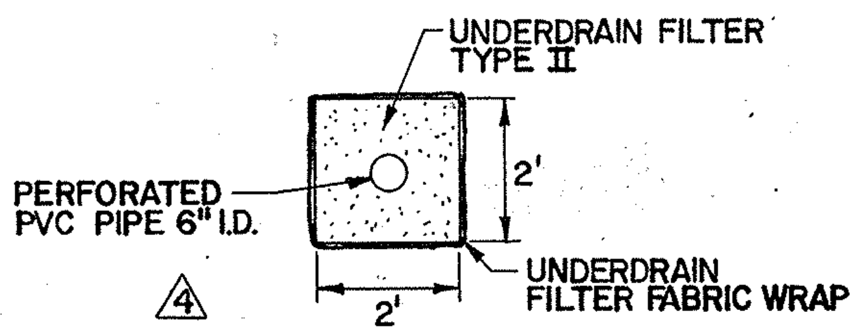
ELEVATION D-D
SCALE : 1/4" = 1'-0"



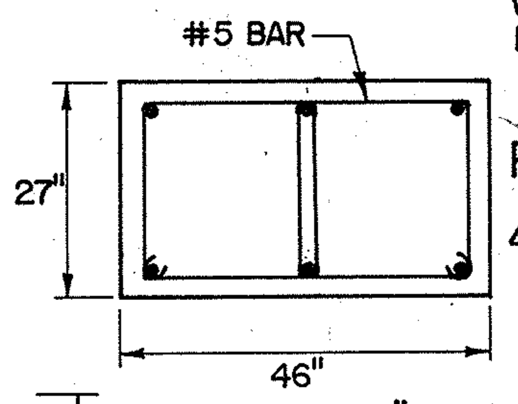
SECTION A-A
SCALE : 3/8" = 1'-0"



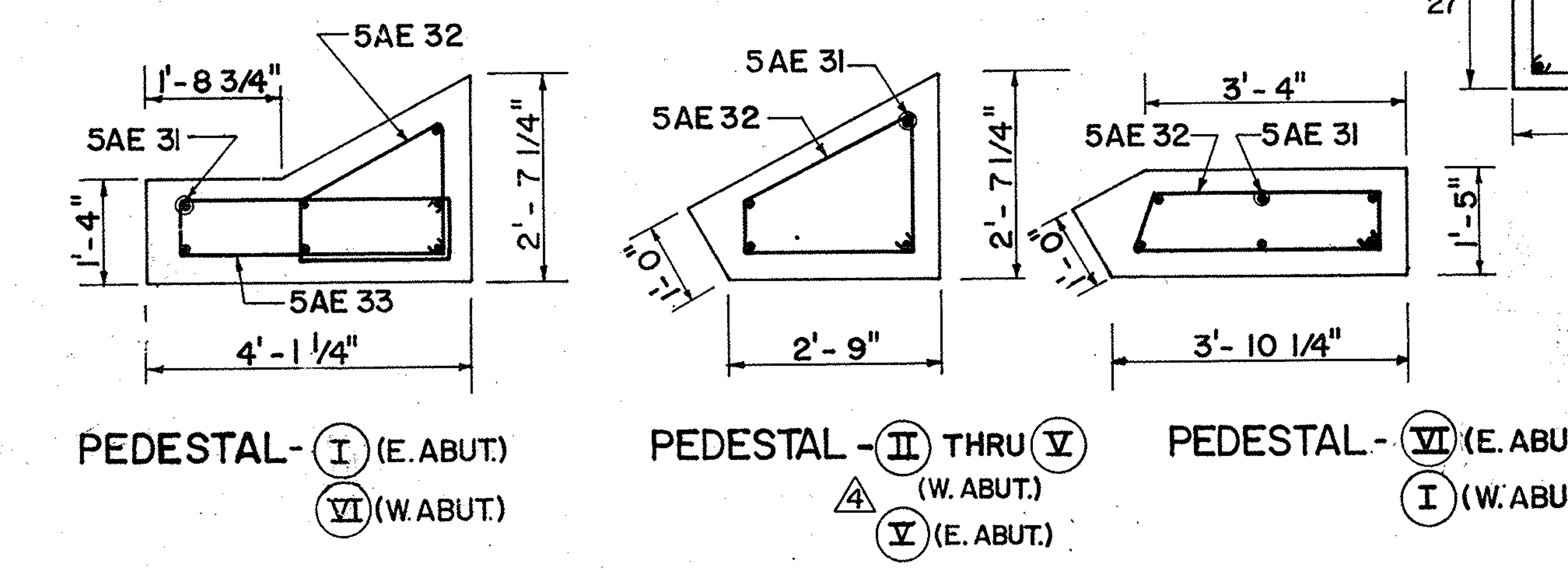
SECTION B-B
SCALE : 3/8" = 1'-0"


UNDERDRAIN FILTER TYPE II
PERFORATED PVC PIPE 6" I.D.
2'
2'
UNDERDRAIN FILTER FABRIC WRAP
4

ABUTMENT DRAIN & WEEPS
SCALE: 3/8" = 1'-0"



PEDESTAL - Ⅱ THRU Ⅳ (E. ABUT.)
4

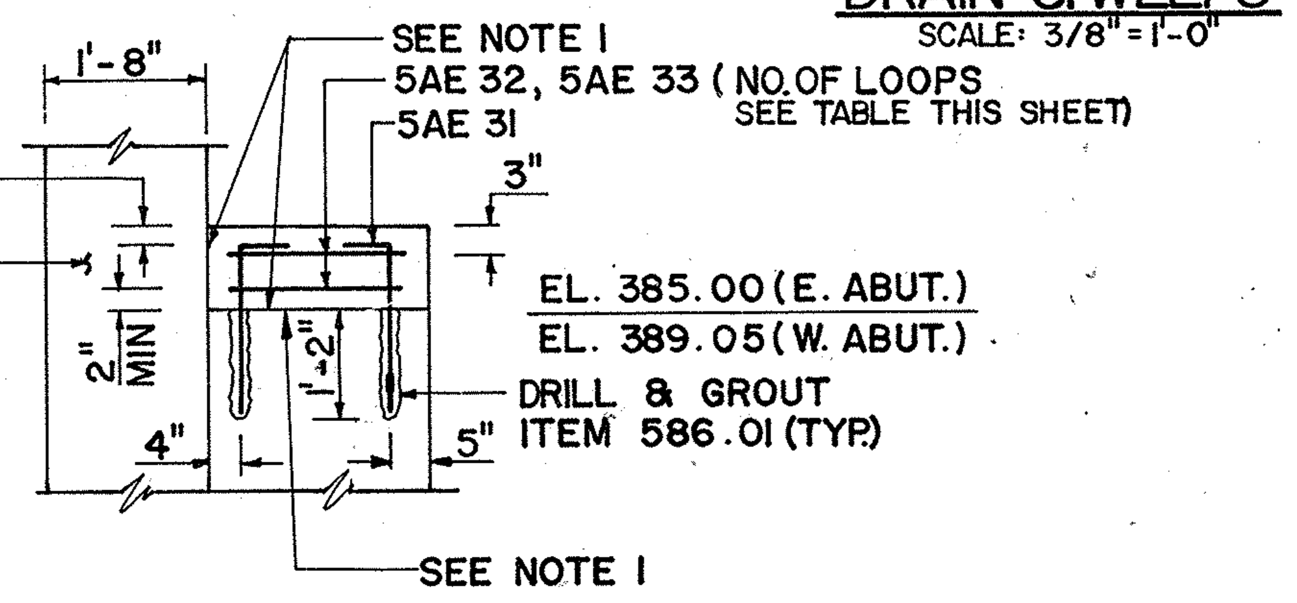


PEDESTAL - Ⅰ (E. ABUT.)
Ⅵ (W. ABUT.)

PEDESTAL - Ⅱ THRU Ⅴ (W. ABUT.)
4 Ⅴ (E. ABUT.)

PEDESTAL - Ⅵ (E. ABUT.)
Ⅰ (W. ABUT.)

PEDESTAL PLAN
SCALE: 1/2" = 1'-0"



PEDESTAL SECTION
SCALE: 1/2" = 1'-0"

NO OF LOOPS OF 5AE32, 5AE33						
	PEDESTAL					
	Ⅰ	Ⅱ	Ⅲ	Ⅳ	Ⅴ	Ⅵ
E.ABUT	3	3	3	3	2	1
W.ABUT	1	2	2	2	2	1

NOTES:
1. SANDBLAST AND APPLY EPOXY BONDING COMPOUND BEFORE PLACING NEW CONC. ITEM 15555.3502
2. FOR BRUSH CURB DETAILS SEE DWG. 16

DATE	DESCRIPTION	BY	SYM.
8/17/92	ADD ABUT. DRAINS & PEDESTAL	P.E.B.	4

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT: REHABILITATION OF MARIAVILLE RD. BRIDGE

LOCATION OF PROJECT: MP. 159.23, SCHENECTADY COUNTY

TITLE OF DRAWING:

EAST ABUTMENT PROPOSED

CONTRACT NUMBER: TAA 91 - 10B

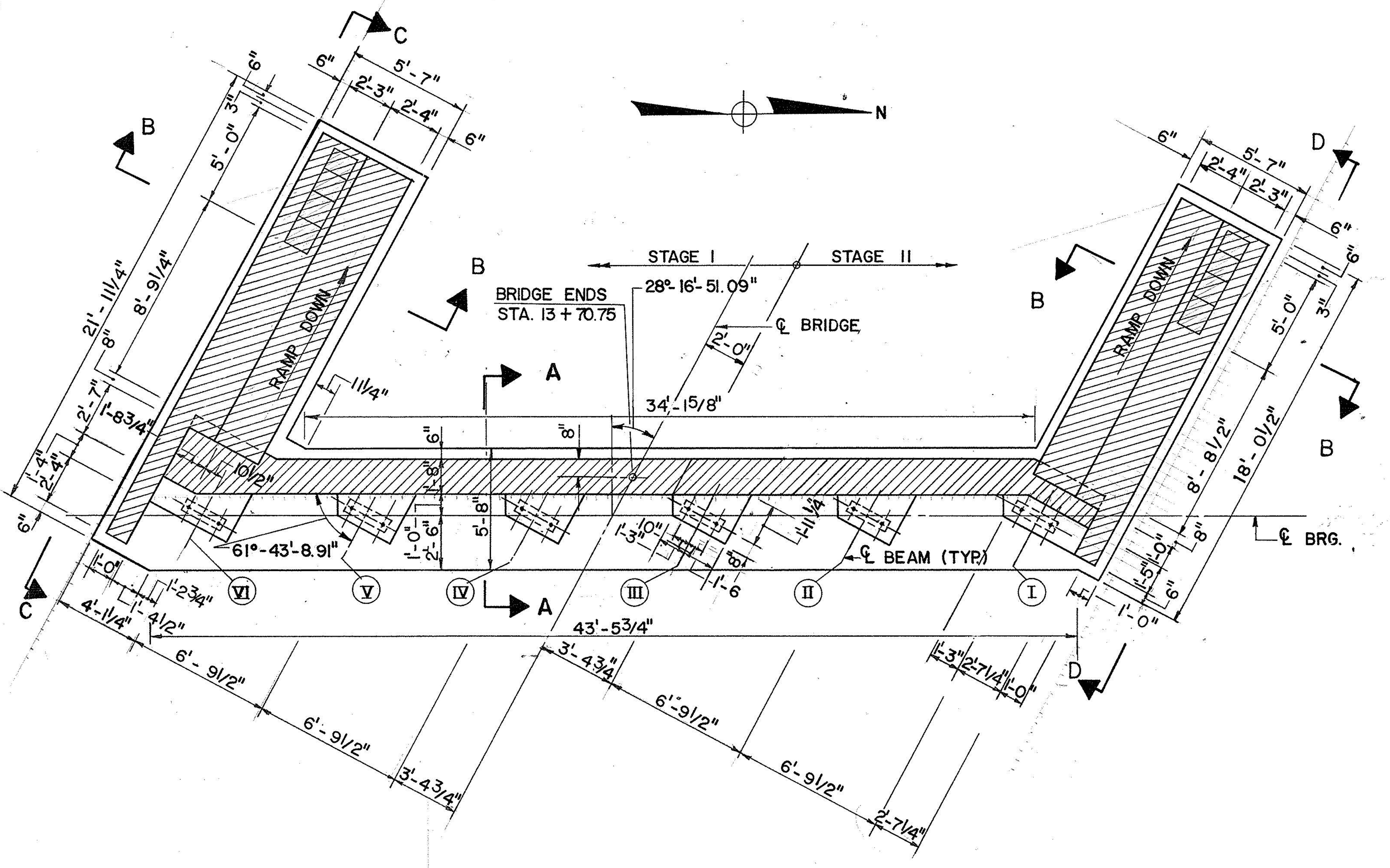
DATE: APRIL 1990

DRAWING NUMBER: 9R1

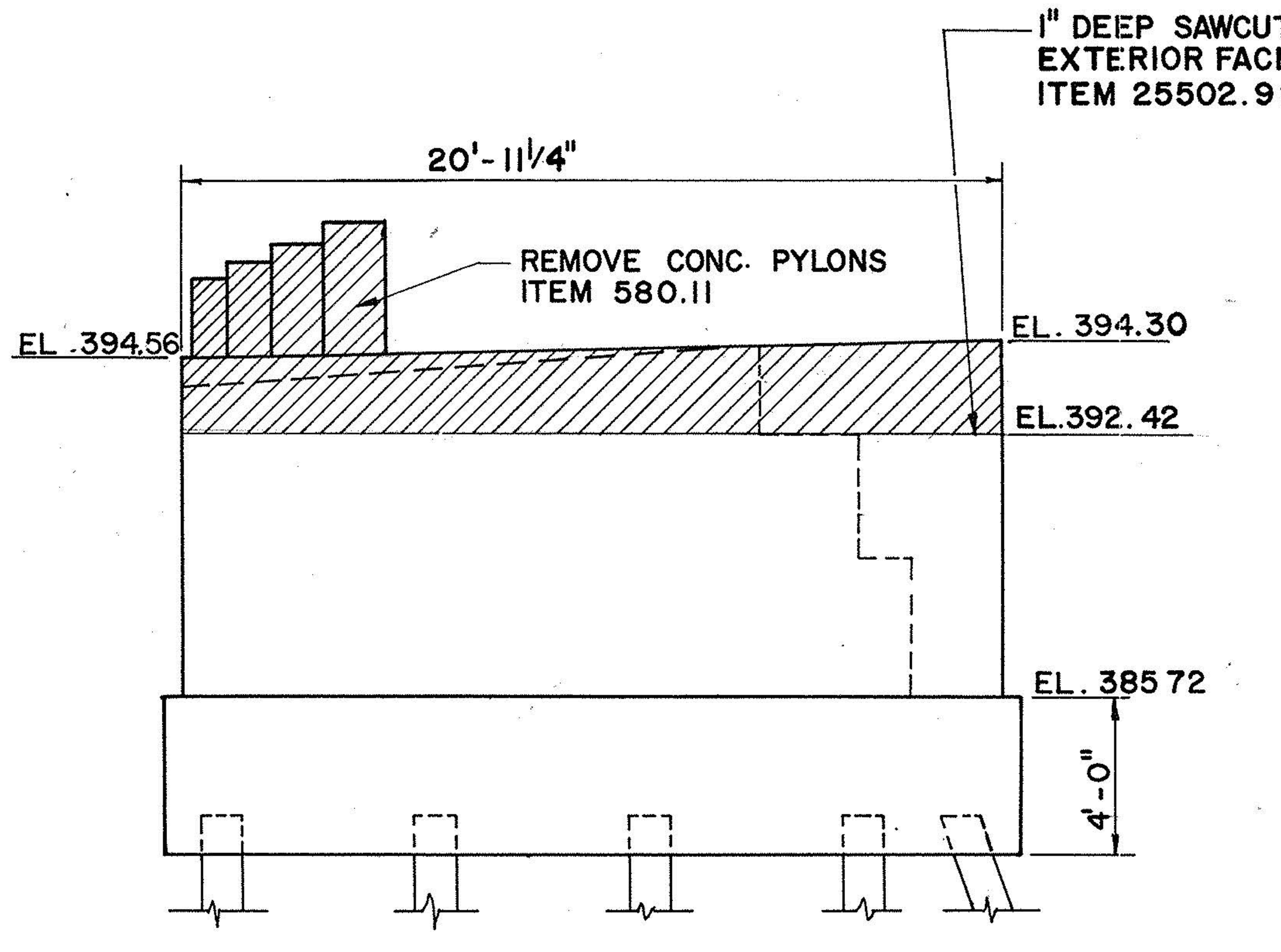
JACKSON AND TULL
CHARTERED ENGINEERS

CHECKED BY:
DRAFTED BY:
DESIGNED BY:
IN CHARGE OF:

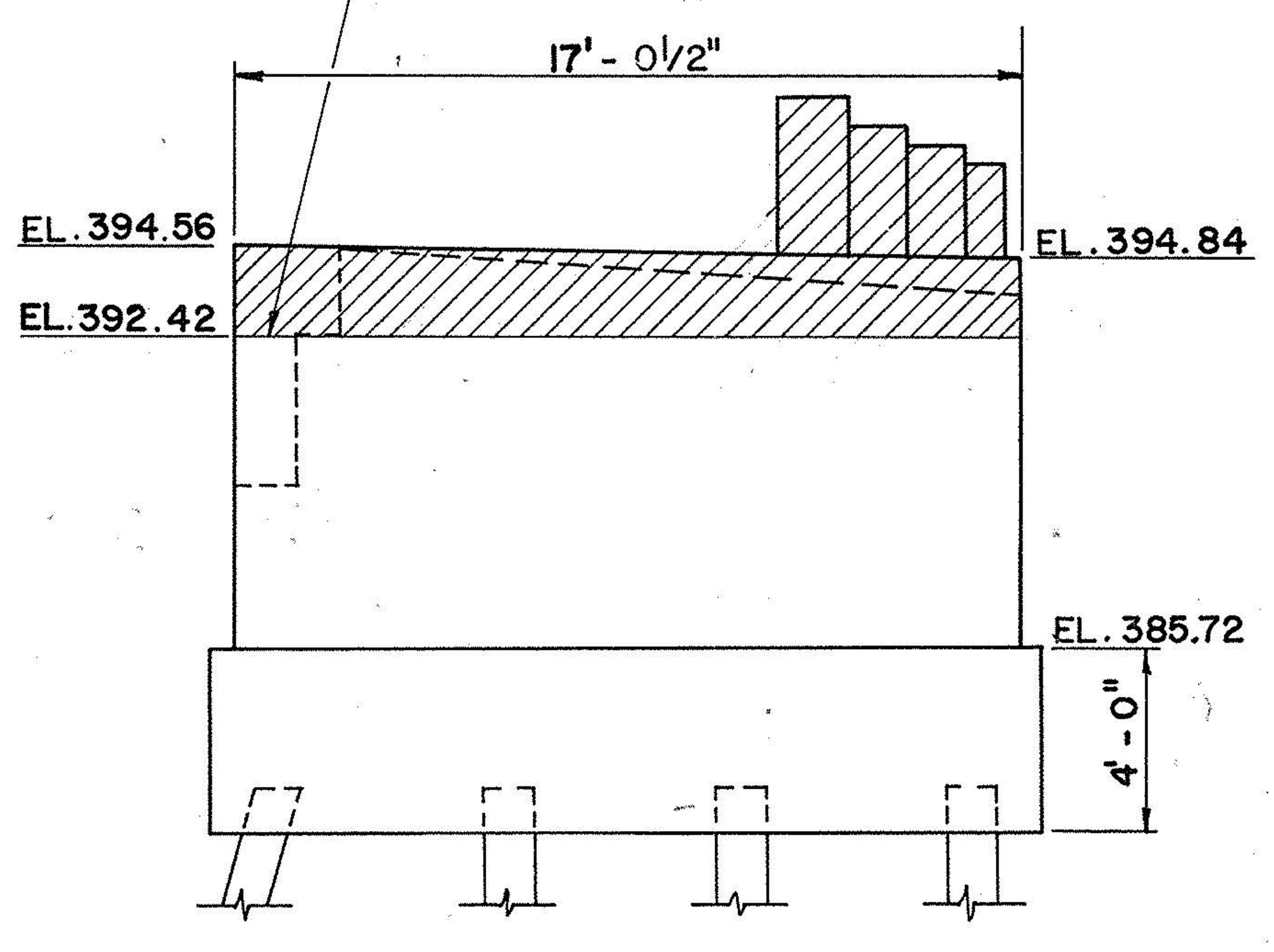
TCA 301-565-3340



EXISTING PLAN
SCALE: 1/4" = 1'-0"

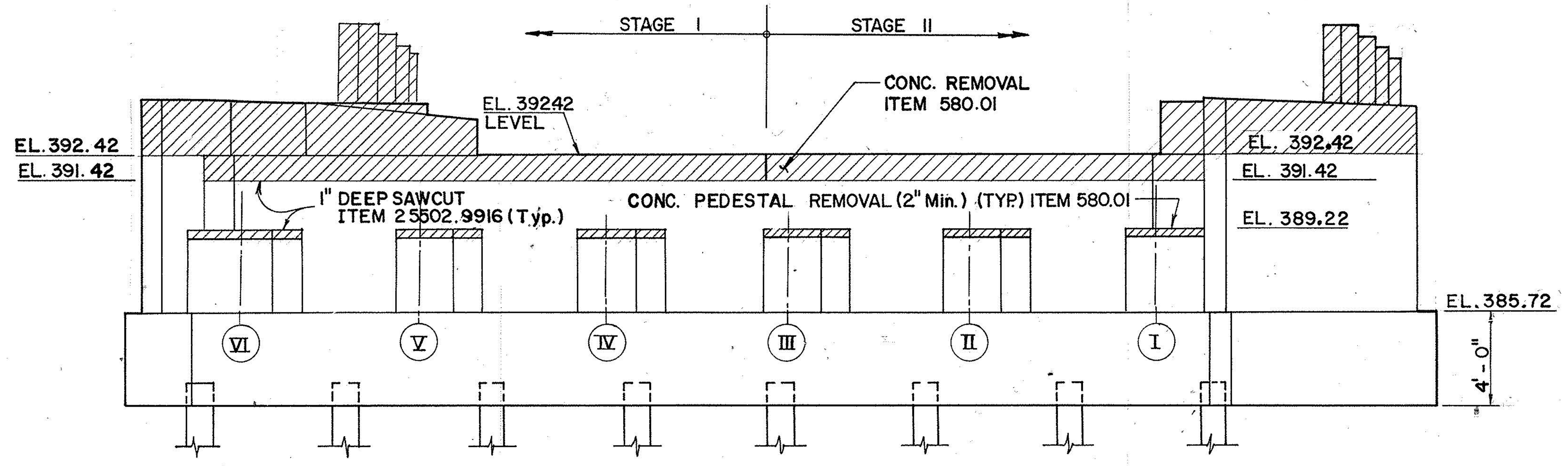

1" DEEP SAWCUTTING CONC. ON EXTERIOR FACE OF WINGWALL ITEM 25502.9916
20'-11 1/4"
REMOVE CONC. PYLONS ITEM 580.11
EL. 394.56
EL. 394.30
EL.392.42
EL. 385.72
4'-0"

ELEVATION C-C
SCALE: 1/4" = 1'-0"

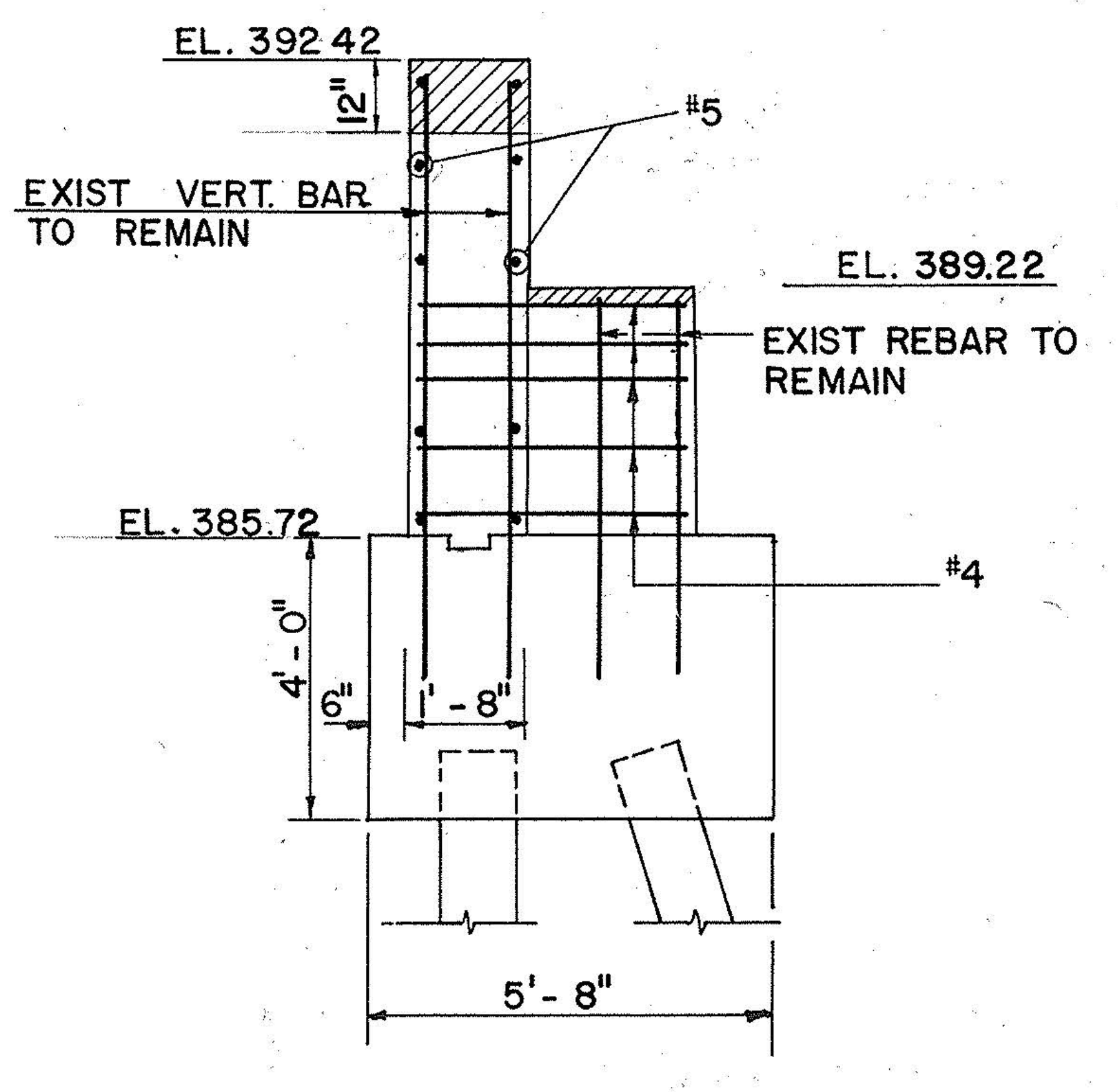


ELEVATION D-D
SCALE: 1/4" = 1'-0"

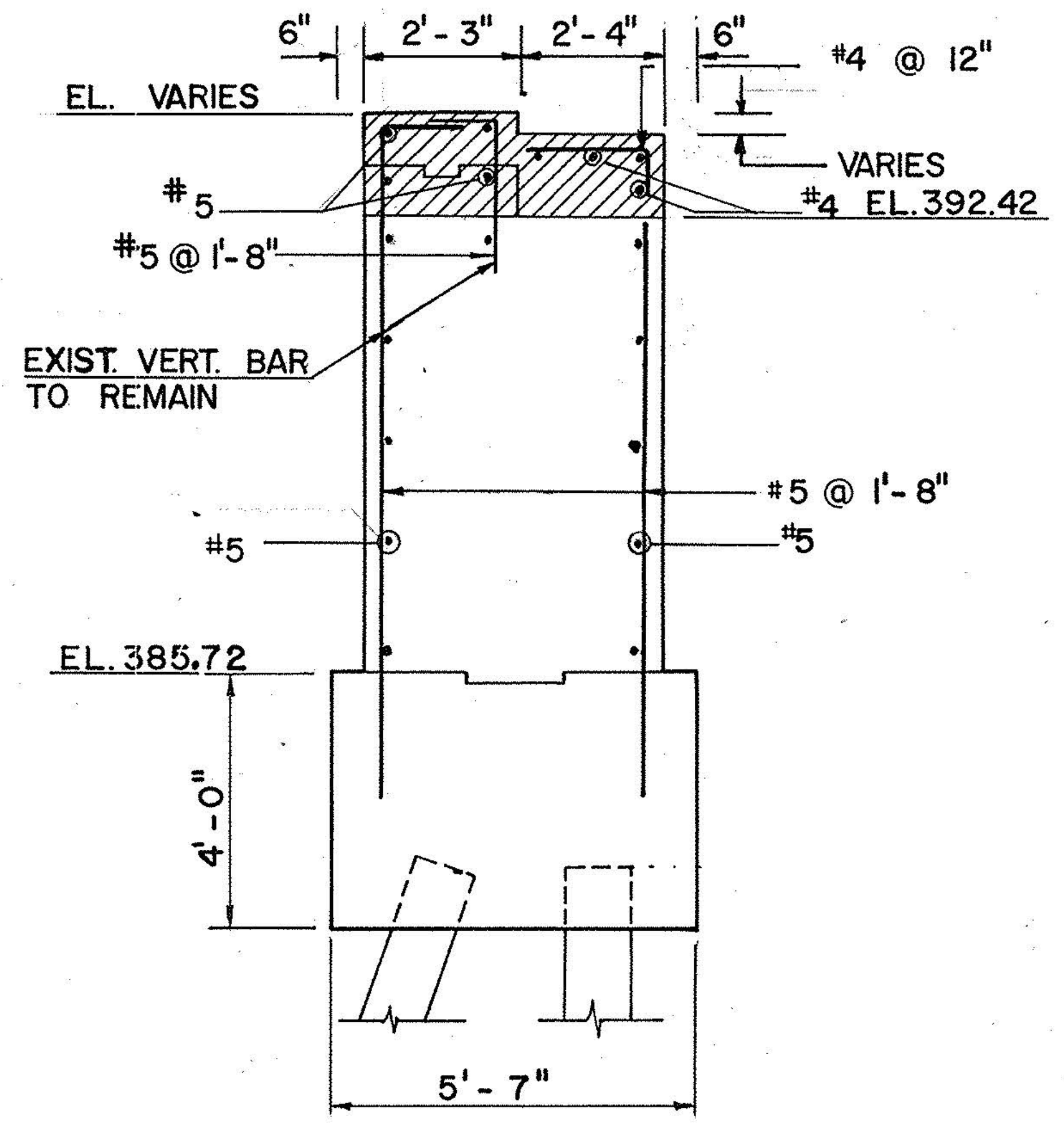
▨ INDICATES REMOVAL OF CONCRETE ITEM 580.01 & CONC. PYLONS ITEM 580.11


STAGE I
STAGE II
EL. 392.42
EL. 391.42
EL. 39242 LEVEL
CONC. REMOVAL ITEM 580.01
1" DEEP SAWCUT ITEM 25502.9916 (Typ.)
CONC. PEDESTAL REMOVAL (2" Min.) (TYP.) ITEM 580.01
EL. 392.42
EL. 391.42
EL. 389.22
EL.385.72
4'-0"
VI
V
IV
III
II
I

EXISTING ELEVATION
SCALE: 1/4" = 1'-0"



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



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

NO AS-BUILT REVISIONS

DATE	DESCRIPTION	BY	SYM.

REVISIONS

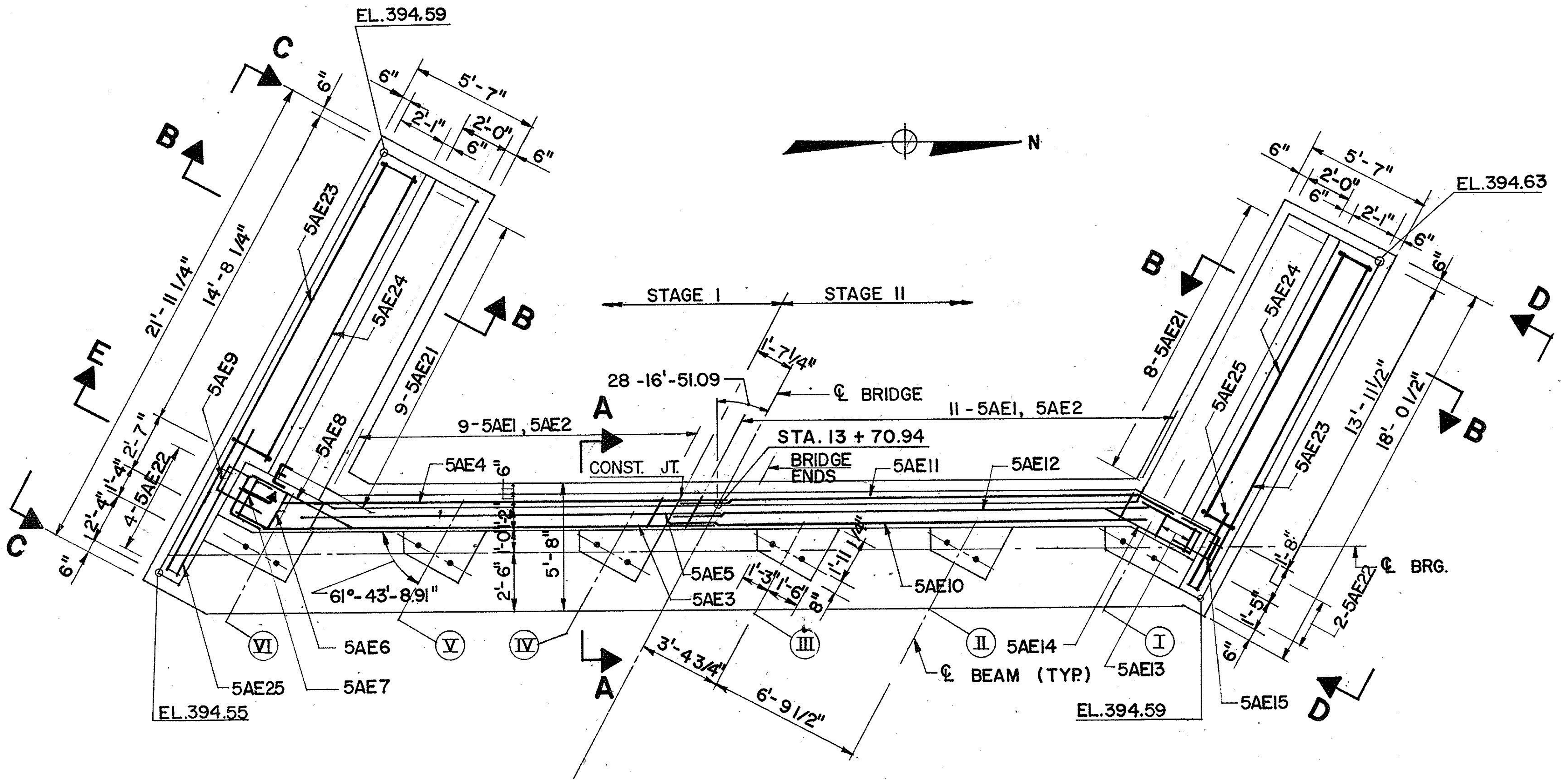
NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITATION OF MARIAVILLE ROAD BRIDGE
LOCATION OF PROJECT MP. 159.23 SCHENECTADY COUNTY
TITLE OF DRAWING WEST ABUTMENT EXISTING

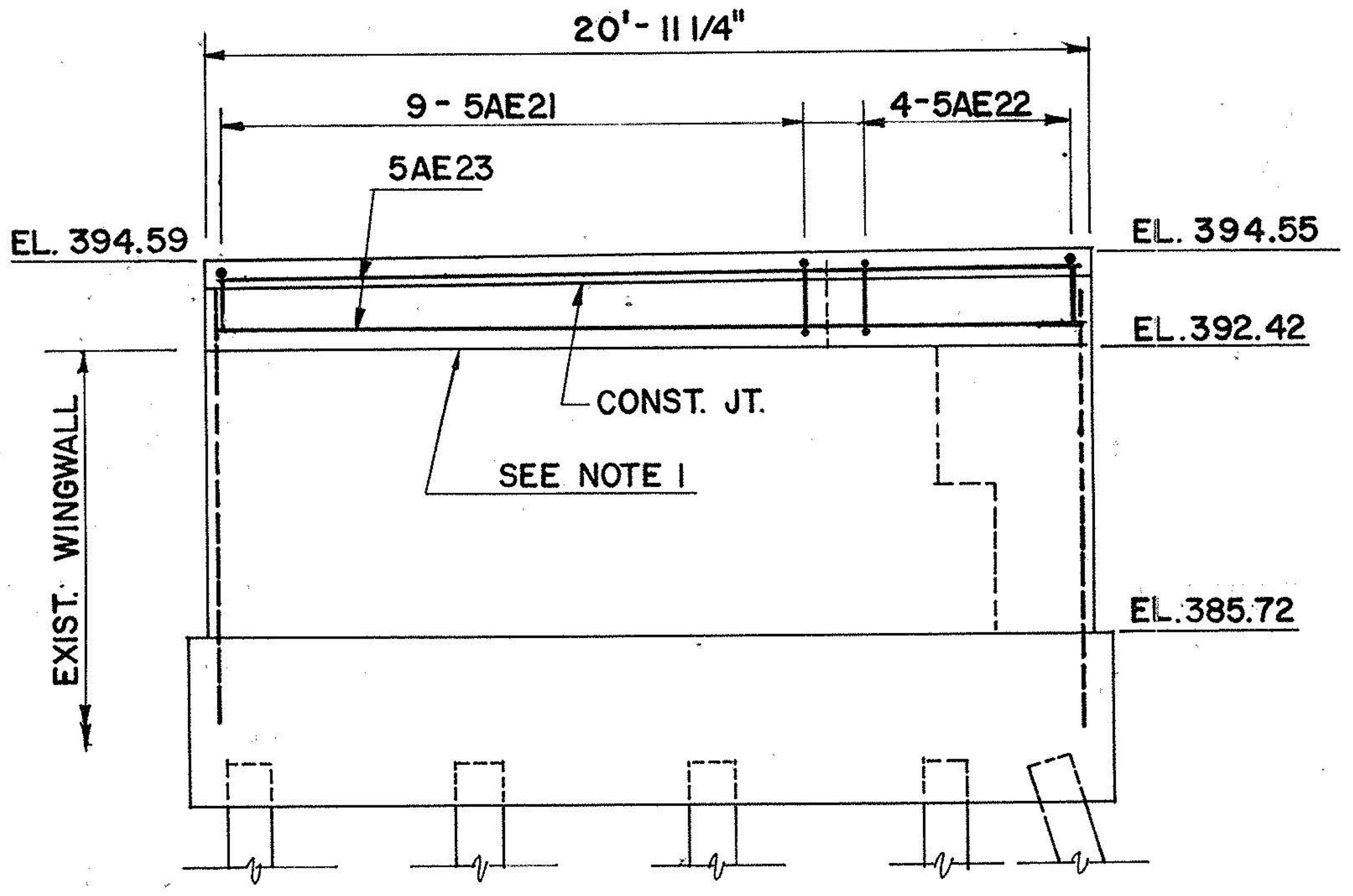
CONTRACT NUMBER: TAA 91-10B
DATE: APRIL 1990
DRAWING NUMBER: 10

JACKSON AND TULL
CHARTERED ENGINEERS

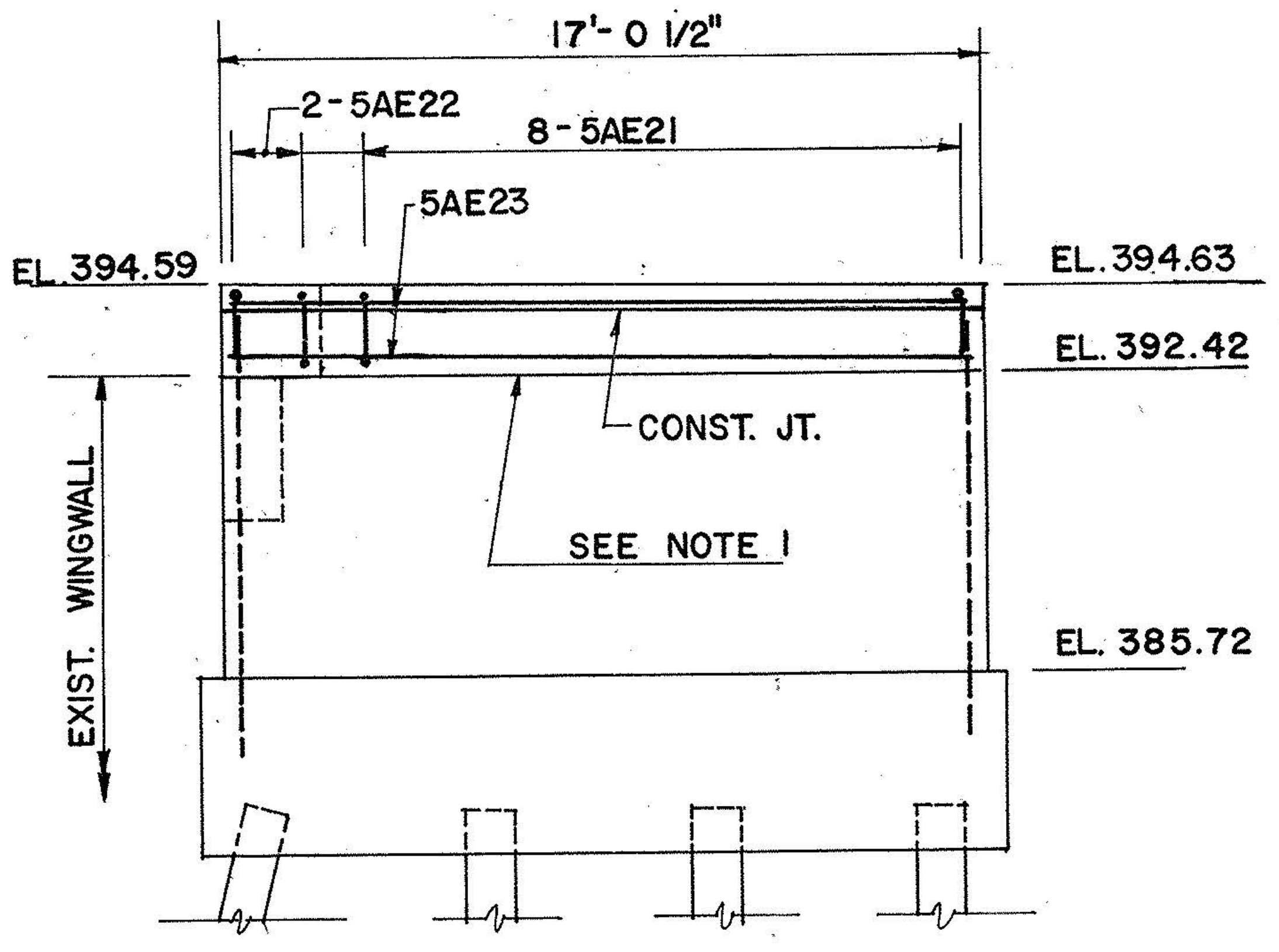
IN CHARGE OF:
DESIGNED BY:
DRAFTED BY:
CHECKED BY:



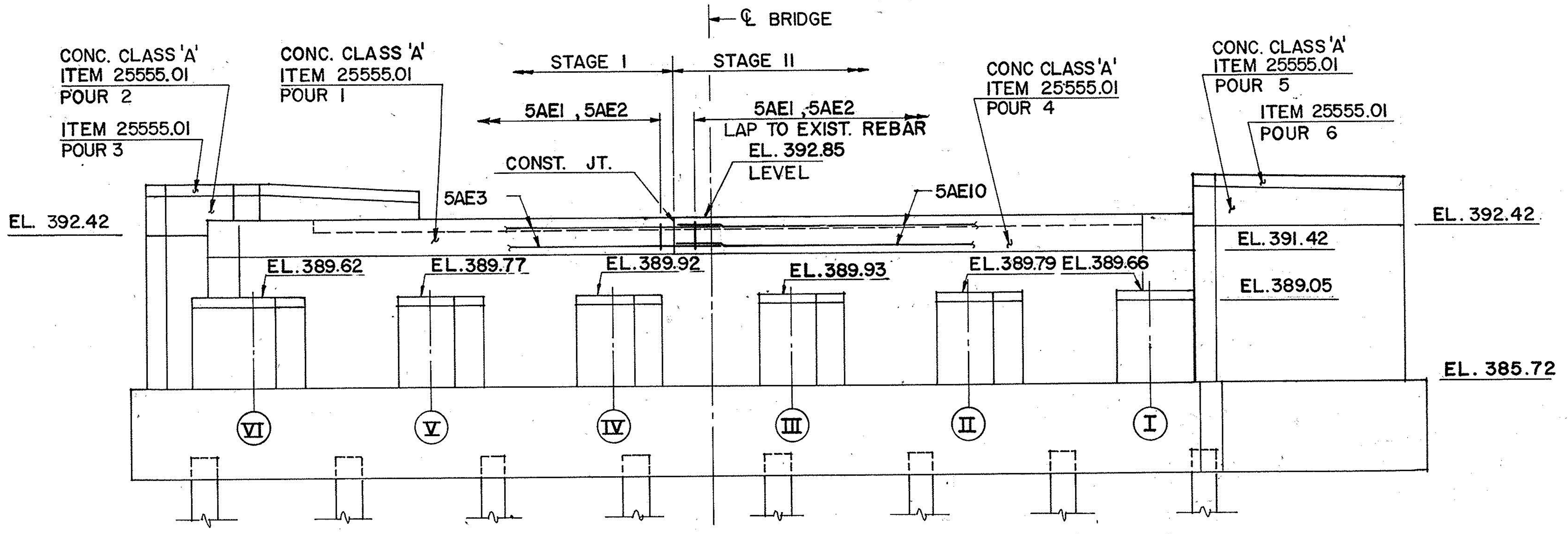
PROPOSED PLAN
SCALE : 1/4" = 1'-0"



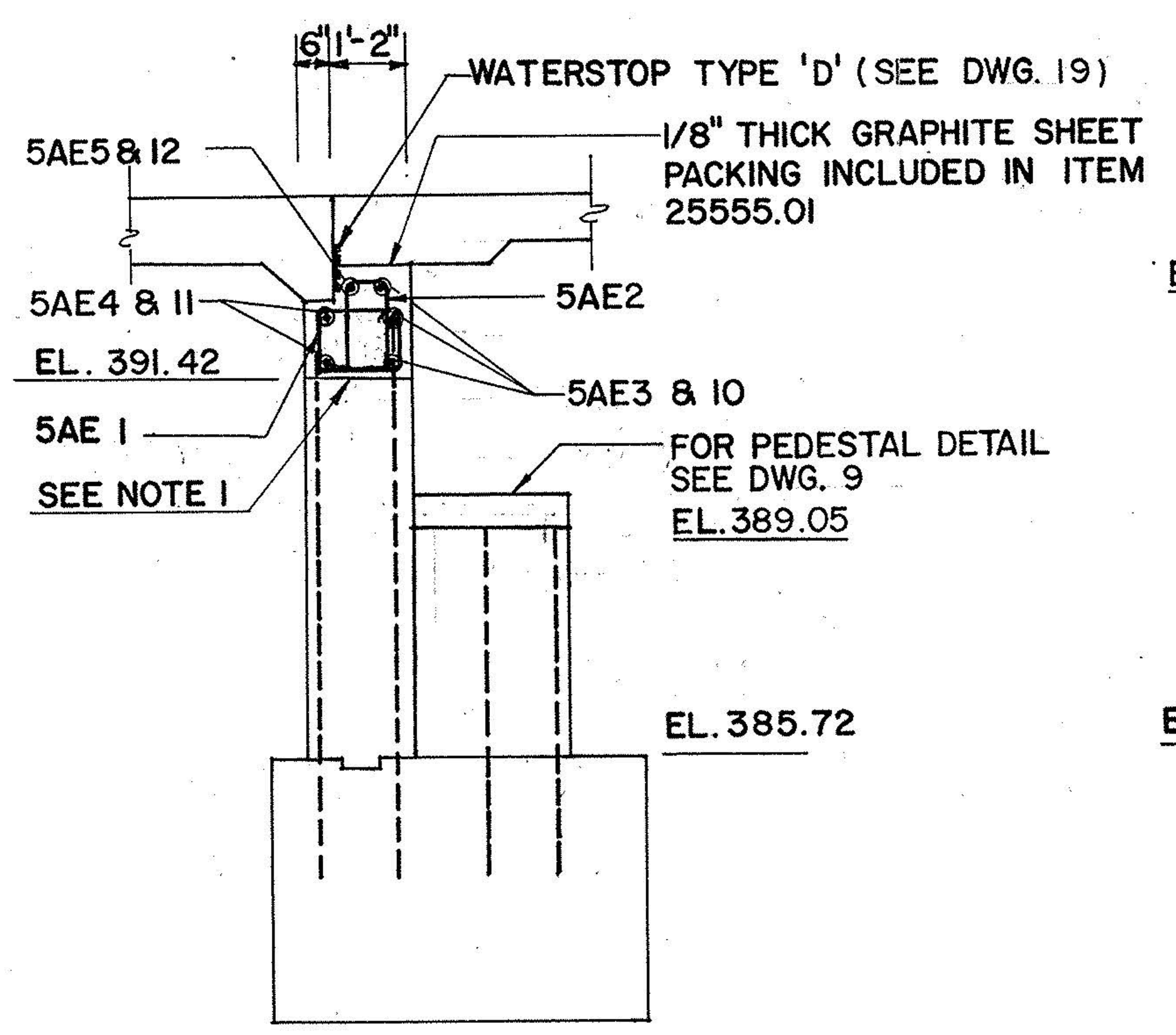
ELEVATION C-C
SCALE : 1/4" = 1'-0"



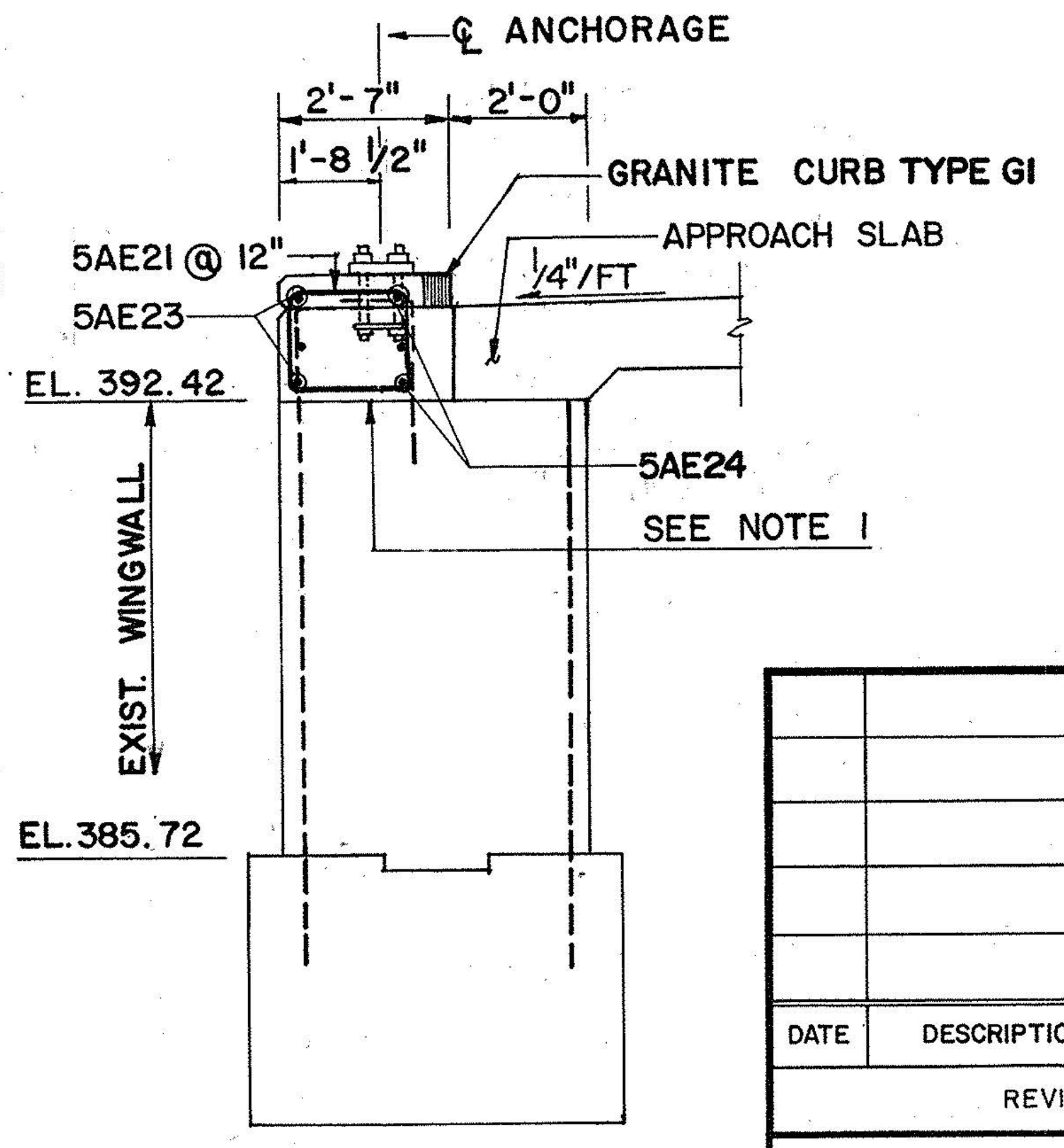
ELEVATION D-D
SCALE : 1/4" = 1'-0"



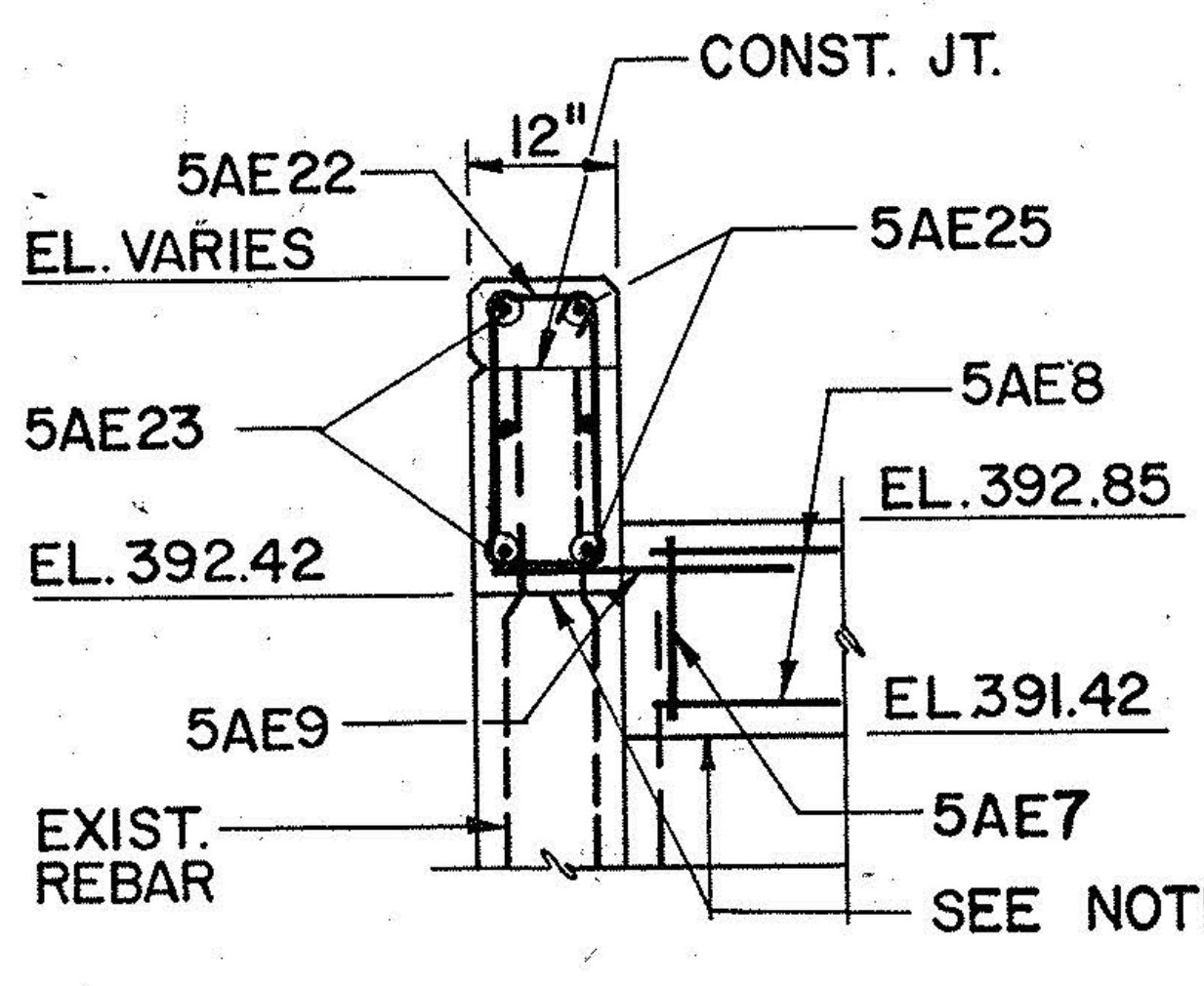
PROPOSED ELEVATION
SCALE : 1/4" = 1'-0"


6"
1'-2"
WATERSTOP TYPE 'D' (SEE DWG. 19)
1/8" THICK GRAPHITE SHEET PACKING INCLUDED IN ITEM 25555.01
5AE5 & 12
5AE4 & 11
5AE2
EL. 391.42
5AE3 & 10
5AE 1
SEE NOTE 1
FOR PEDESTAL DETAIL SEE DWG. 9
EL. 389.05
EL. 385.72

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



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



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

NOTES:

1. SANDBLAST AND APPLY EPOXY BONDING COMPOUND BEFORE PLACING NEW CONC. ITEM 15555.3502.
2. FOR BRUSH CURB DETAILS SEE DWG. 16.

NO AS-BUILT REVISIONS

DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITATION OF MARIAVILLE RD. BRIDGE

LOCATION OF PROJECT
MP. 159.23, SCHENECTADY COUNTY

TITLE OF DRAWING
WEST ABUTMENT
PROPOSED

CONTRACT NUMBER: TAA 91 - 10B

DATE: APRIL 1990

DRAWING NUMBER: 11

JACKSON AND TULL
CHARTERED ENGINEERS

CHECKED BY:

DRAFTED BY:

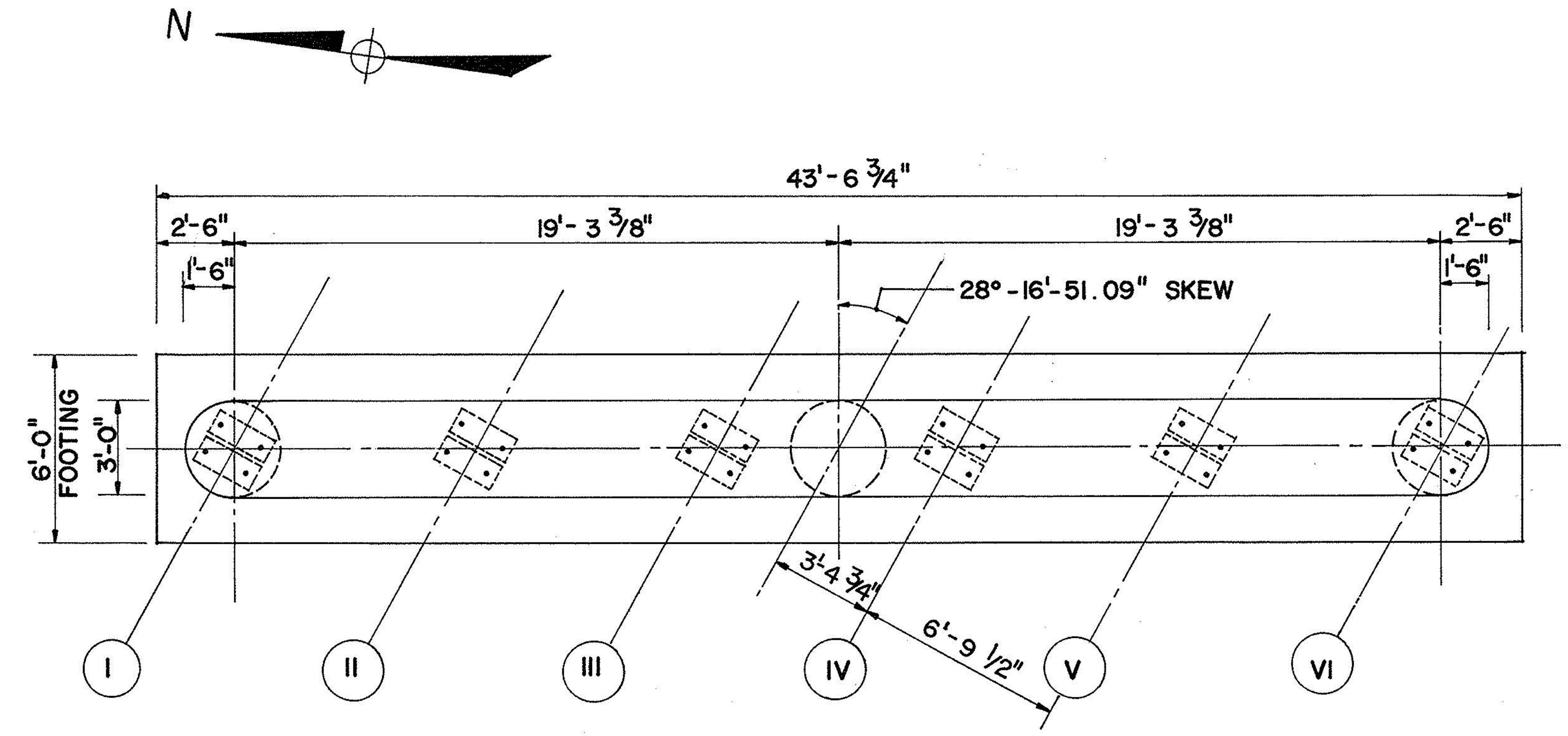
DESIGNED BY:

IN CHARGE OF:

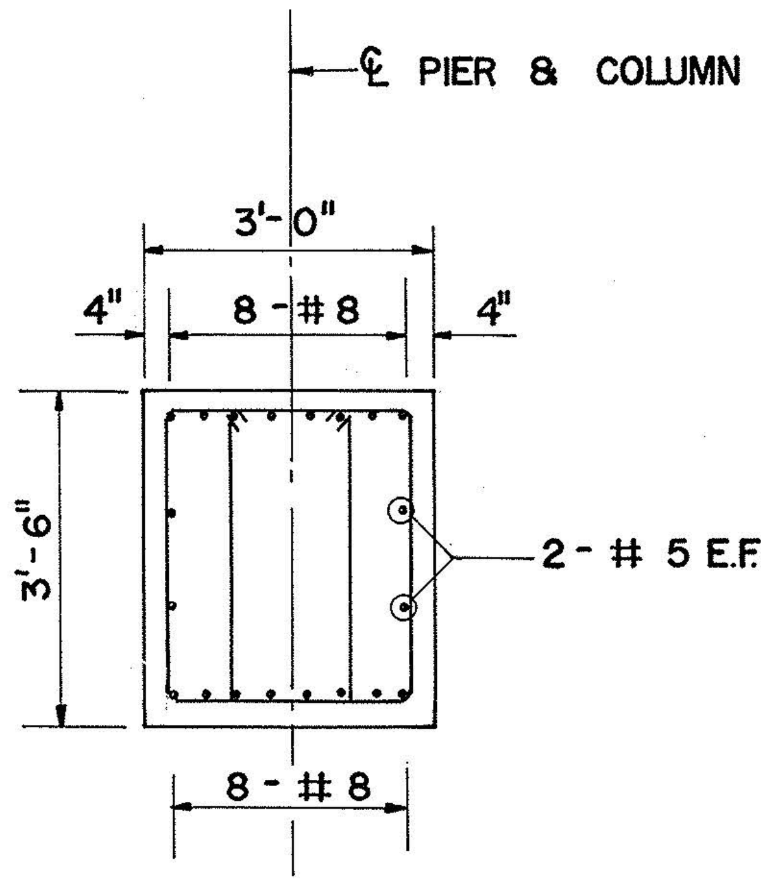
TCA 301-565-3340

12

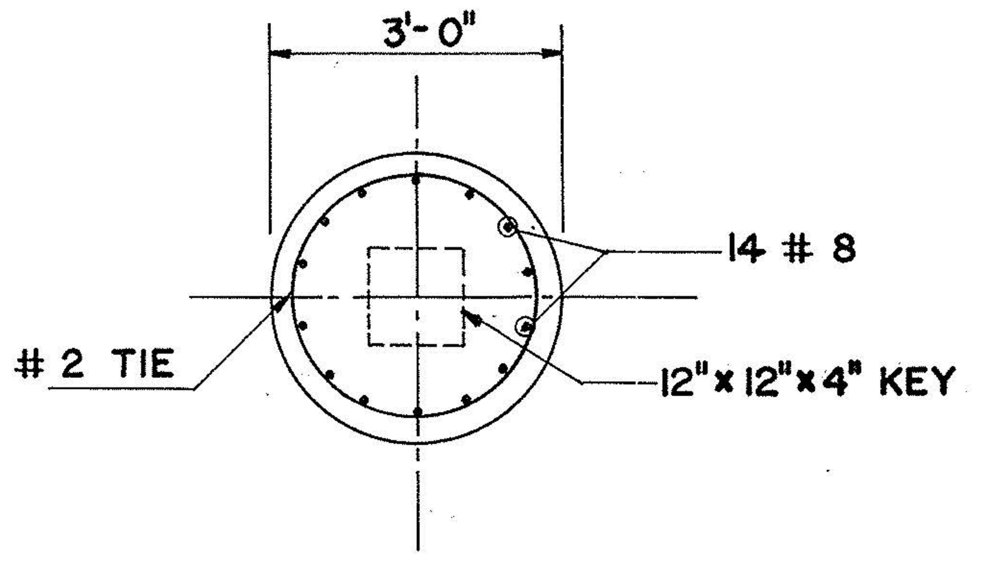
12/37



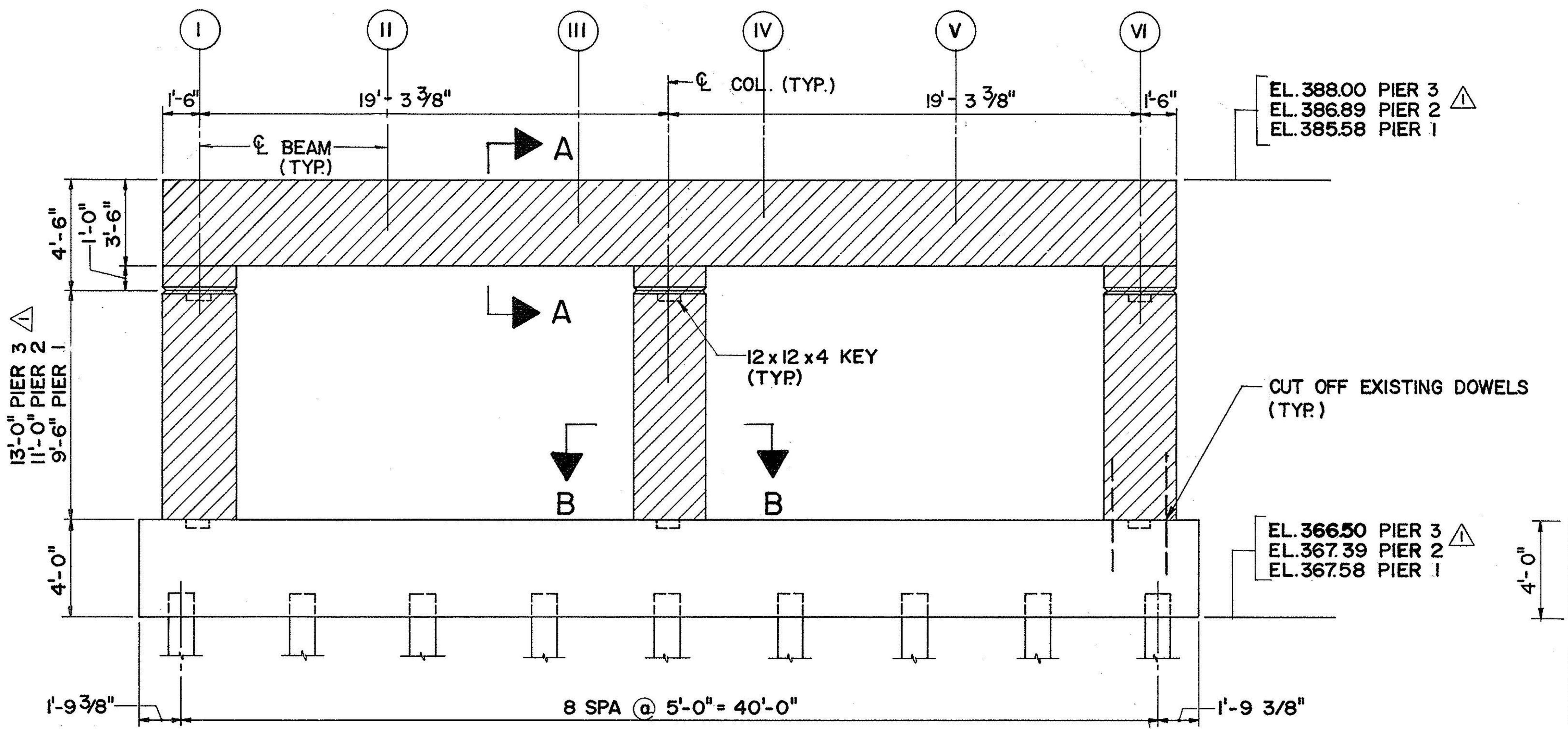
PIER PLAN
SCALE : 1/4" = 1'-0"

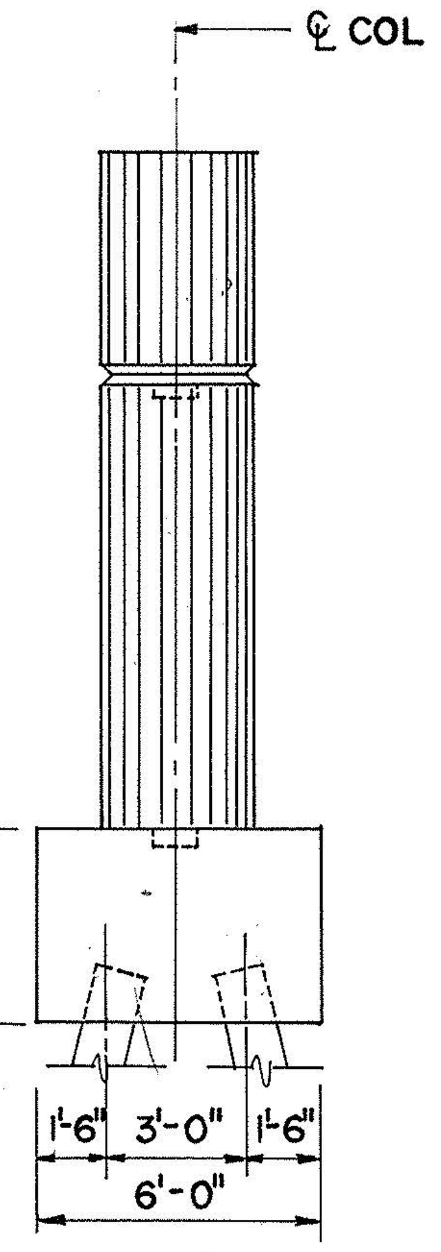


SECTION A-A
SCALE : 1/2" = 1'-0"



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





ELEVATION – PIERS 1 THRU 3
SCALE: 1/4" = 1'-0"

LEGEND

▨ INDICATES REMOVAL OF CONCRETE ITEM 580.01

STRUCTURAL LIFTING NOTES : ITEM 585.0101 & ITEM 585.0201

1. THE EXISTING SUPERSTRUCTURE SHALL BE JACKED AND ALL THE STEEL STRINGERS ON THE PIER BE TEMPORARILY SUPPORTED DURING THE REPLACEMENT OF THE PIER.
2. THE CONTRACTOR SHALL SUBMIT A JACKING SCHEDULE AND SEQUENCE OF OPERATIONS TO THE ENGINEER FOR APPROVAL BEFORE THE START OF ANY WORK. DURING LIFTING OPERATIONS, HE SHALL SECURE APPROVAL OF THE ENGINEER BEFORE PROCEEDING TO ANY NEW PHASE OF WORK.
3. THE CONTRACTOR SHALL SUBMIT A SHORING SCHEME DESIGNED, DETAILED AND STAMPED BY A LICENSED PROFESSIONAL ENGINEER COMPLETE WITH JACKING PROCEDURE AND CALCULATIONS.
4. THE GIRDERS ALONG ANY LINE OF BEARING SHALL BE LIFTED SMOOTHLY AND EVENLY TO AVOID STRUCTURAL DAMAGE.
5. THE BLOCKING (SHIMS, BOLSTERS, CRIBBING, ETC.) USED TO TRANSFER THE LOAD FROM THE JACKING GIRDER SHALL BE PLACED ON BOTH SIDES OF THE JACKING DEVICES.
6. AFTER THE PIER HAS BEEN RECONSTRUCTED AND THE SUPERSTRUCTURE LOWERED ONTO THE BEARINGS, THE TEMPORARY SUPPORT SHALL BE REMOVED IMMEDIATELY. THE AREA SHALL THEN BE RESTORED TO ORIGINAL CONDITION.
7. FOR THE ASSESSMENT OF THE JACKING LOADS, REFER TO DWG. 18 , WHICH SHOWS THE BEARING LOADS FOR THE STRINGERS.

NO AS-BUILT REVISIONS

7/91	PIER NO. CHANGE	R DIETLEIN	⚠1

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITATION OF MARIAVILLE RD. BRIDGE

LOCATION OF PROJECT
MP 159.23, SCHENECTADY COUNTY

TITLE OF DRAWING
PIER ELEVATION & DETAILS EXISTING

CONTRACT NUMBER: TAA 91 - 10 B

DATE: APRIL 1990

DRAWING NUMBER: 12

JACKSON AND TULL
CHARTERED ENGINEERS

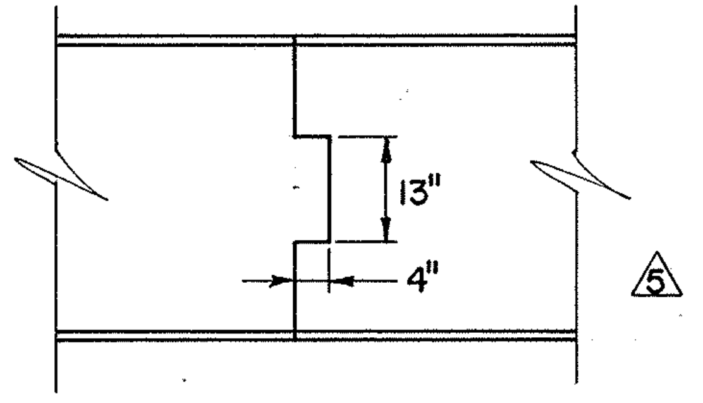
CHECKED BY :

DRAFTED BY :

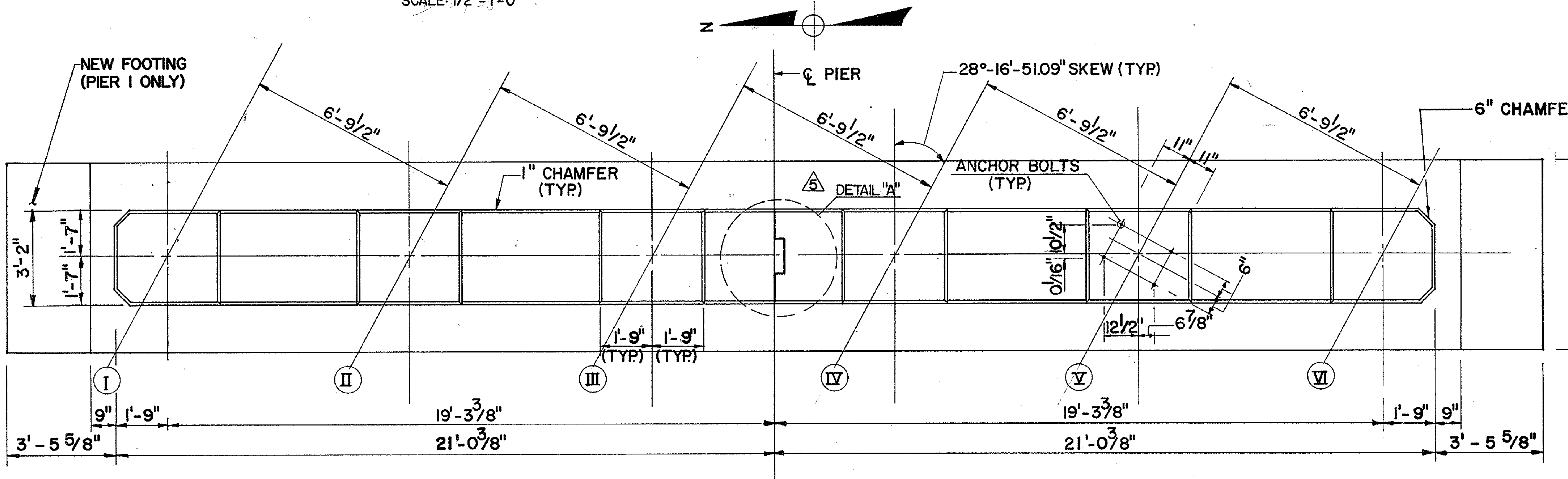
DESIGNED BY :

IN CHARGE OF :

TCA 301-565-3340

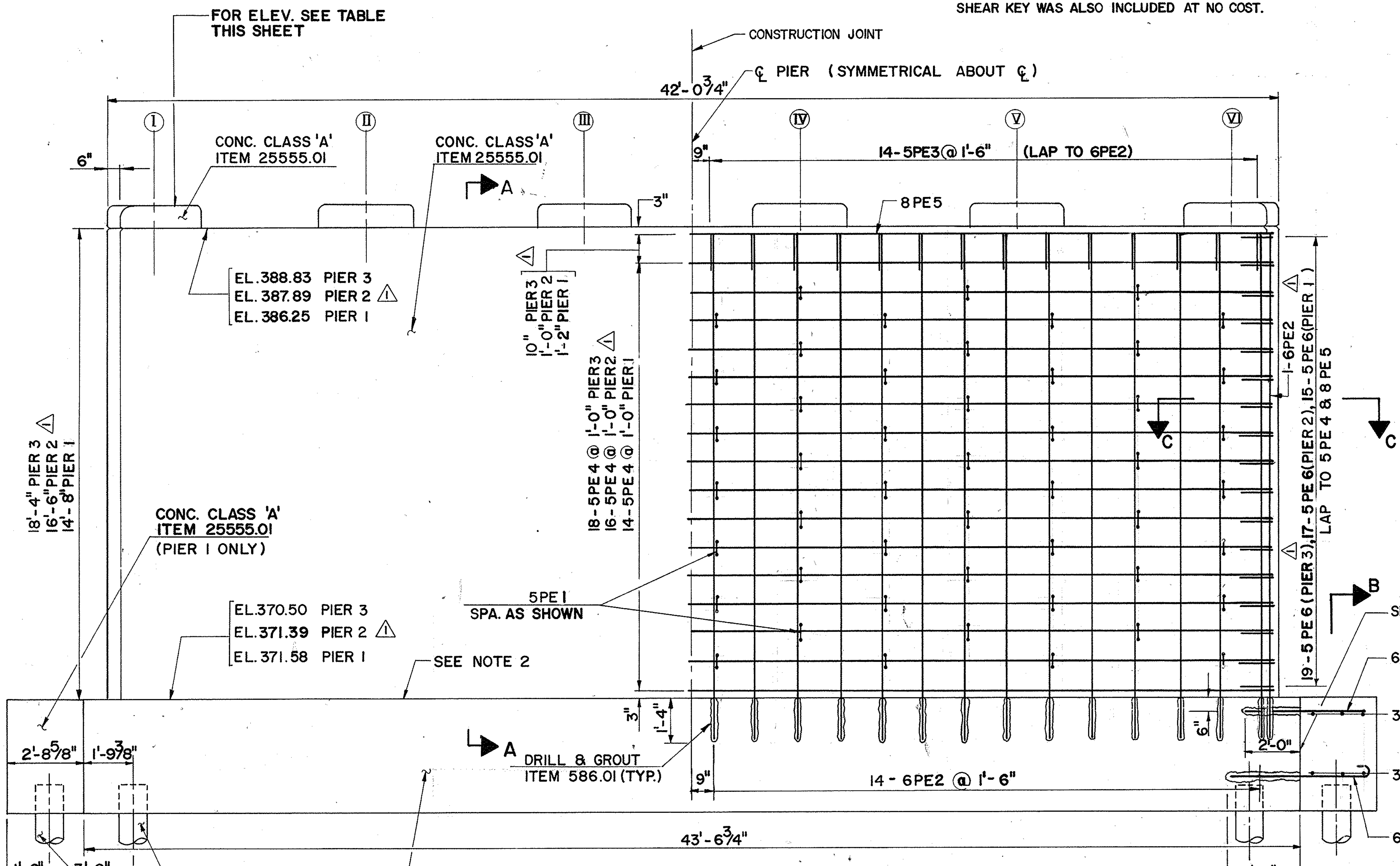


KEY (DETAIL "A")
SCALE: 1/2" = 1'-0"

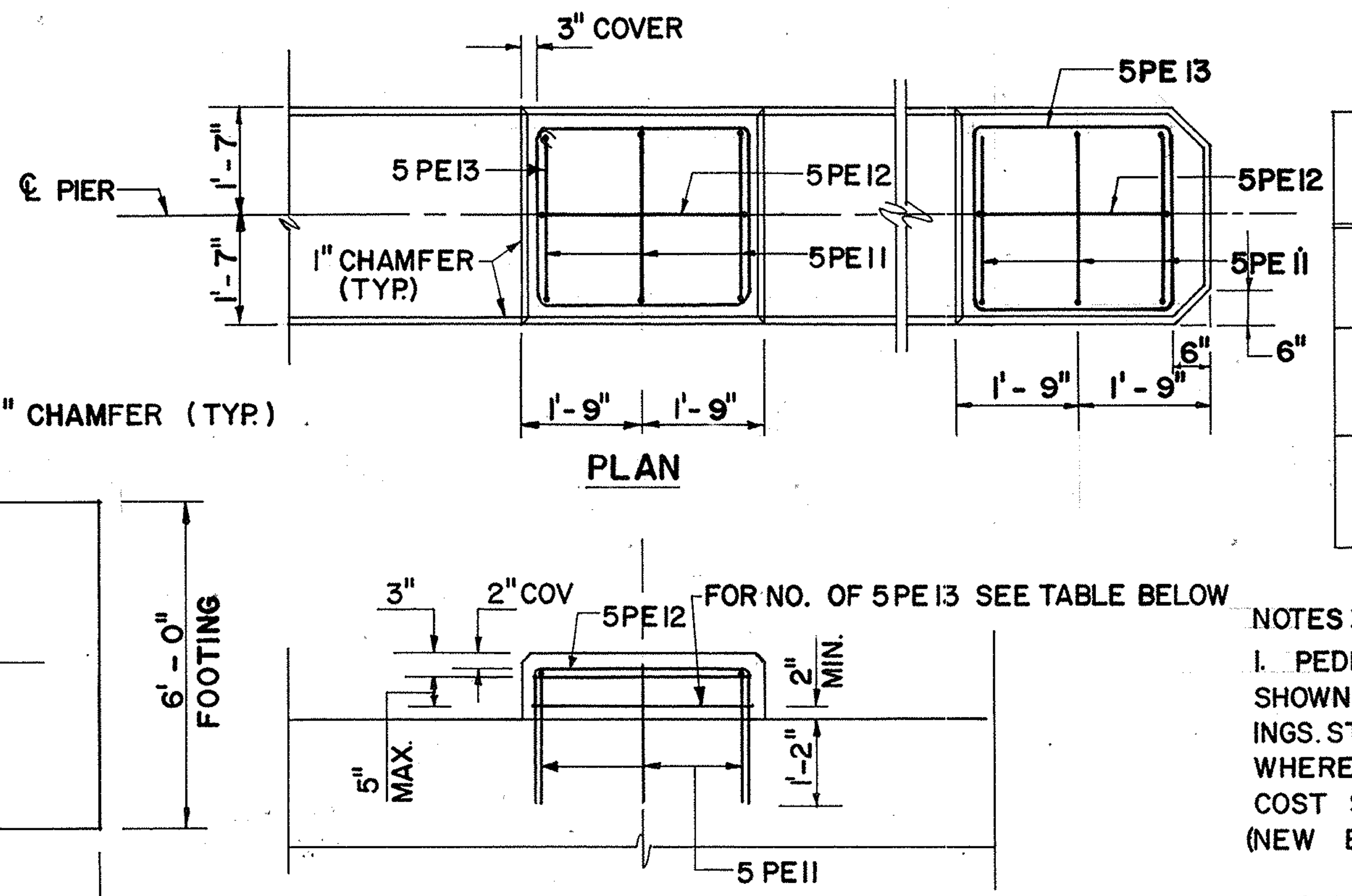


PIER PLAN
SCALE: 3/8" = 1'-0"

5 NOTE: AT THE CONTRACTORS OPTION PIERS 1-3 WERE CONSTRUCTED IN TWO STAGES (HALF LENGTH EACH). REBAR LAP SPLICE LENGTHS: #8 BARS 40", #5 BARS 18" WERE INCLUDED AT NO COST TO THE AUTHORITY. A SHEAR KEY WAS ALSO INCLUDED AT NO COST.



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



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

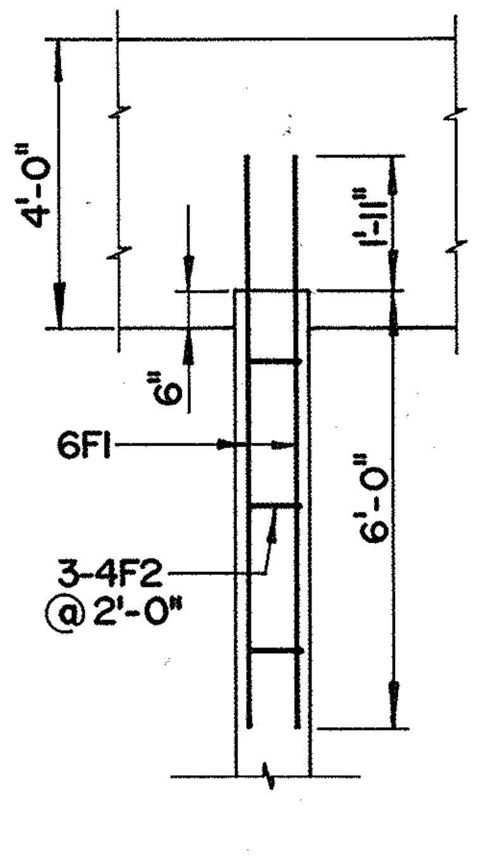
NO. OF LOOPS OF 5PE13

	PEDESTAL					
	Ⅰ	Ⅱ	Ⅲ	Ⅳ	Ⅴ	Ⅵ
1 PIER 3	1	2	2	2	1	1
PIER 2	2	3	3	3	2	1
PIER 1	3	3	3	3	2	1

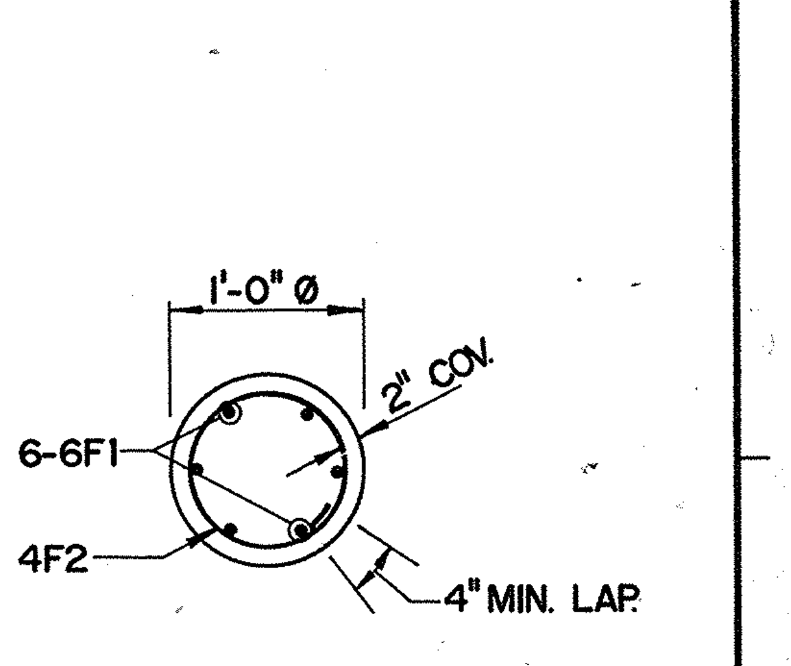
PIER	SPAN	ELEVATION AT BOTTOM OF MASONRY PLATE FOR BEARING.					
		Ⅰ	Ⅱ	Ⅲ	Ⅳ	Ⅴ	Ⅵ
3	4	389.54	389.66	389.78	389.75	389.58	389.41
	3	389.52	389.64	389.76	389.73	389.56	389.39
2	3	388.82	388.90	388.98	388.91	388.70	388.49
	2	388.81	388.89	388.96	388.90	388.68	388.47
1	2	387.40	387.44	387.48	387.37	387.12	386.86
	1	387.39	387.43	387.46	387.35	387.10	386.85

NOTES:

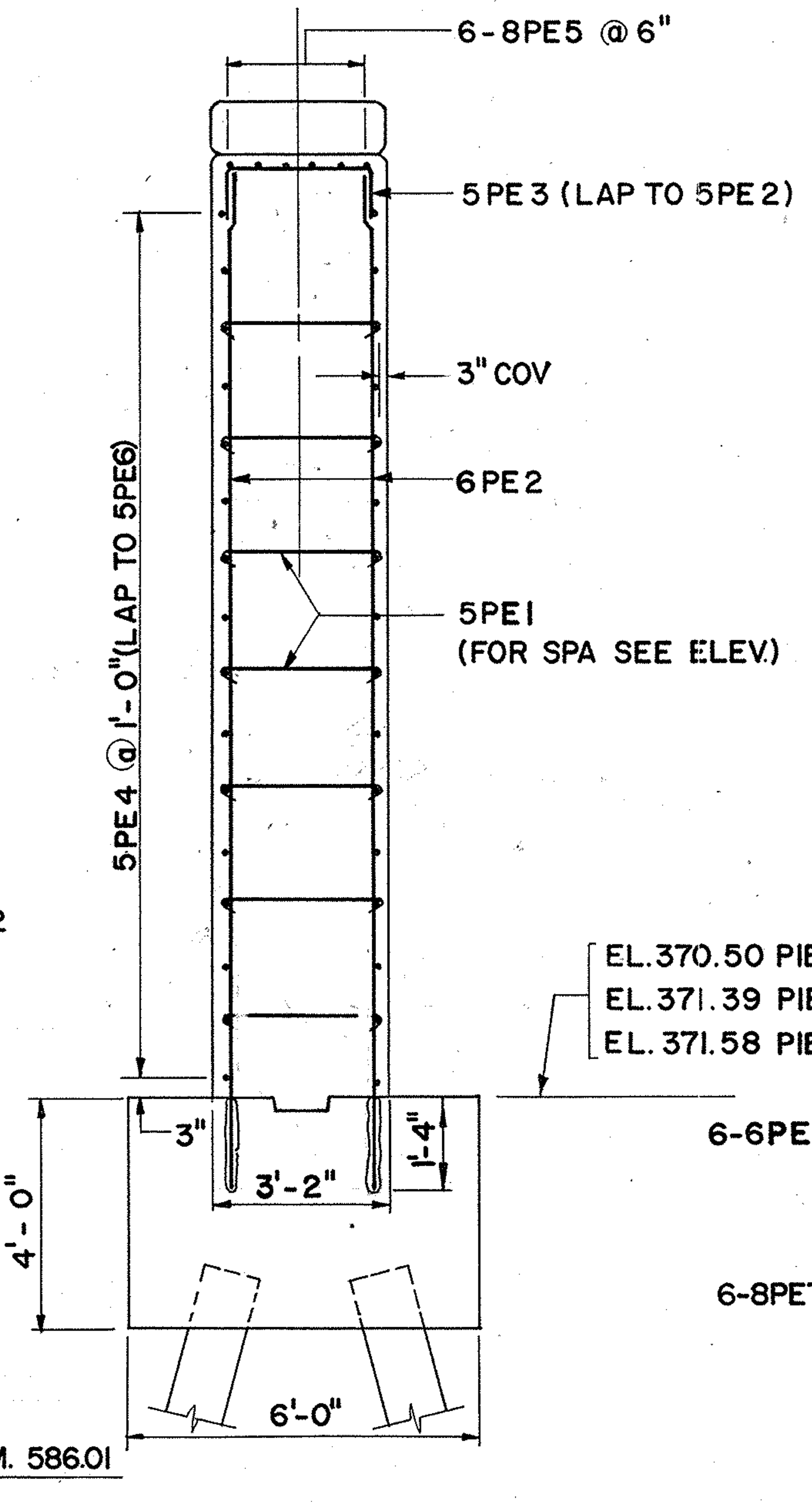
1. PEDESTALS SHALL BE CONSTRUCTED AT THE ELEVATIONS SHOWN FOR THE MASONRY PLATES FOR THE LOW SIDE BEARINGS. STEEL SHIM PLATES SHALL BE PROVIDED AT LOCATIONS WHERE REQUIRED FOR THE HIGH SIDE BEARINGS AND THE COST SHALL BE INCLUDED IN THE PAYMENT ITEM 565.2002 (NEW ELASTOMERIC BEARINGS)
2. SANDBLAST AND EPOXY BOUNDING COMPOUND BEFORE PLACING NEW CONCRETE ITEM 15555.3502
3. THE CAPACITY OF THE CAST-IN-PLACE CONC. PILE SHALL BE NO LESS THAN 30 TON PER PILE. ESTIMATED LENGTH OF PILE IS 25 FEET.



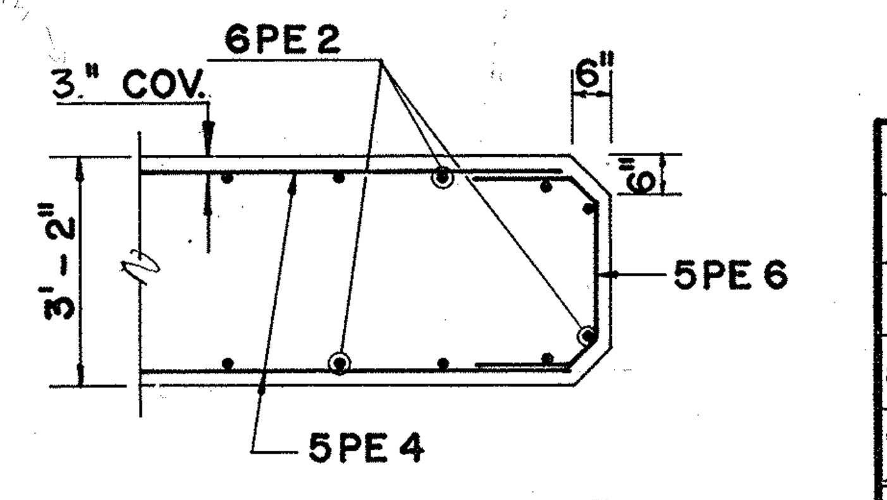
CAST-IN-PLACE CONC. PILE
SCALE: 1/4" = 1'-0"



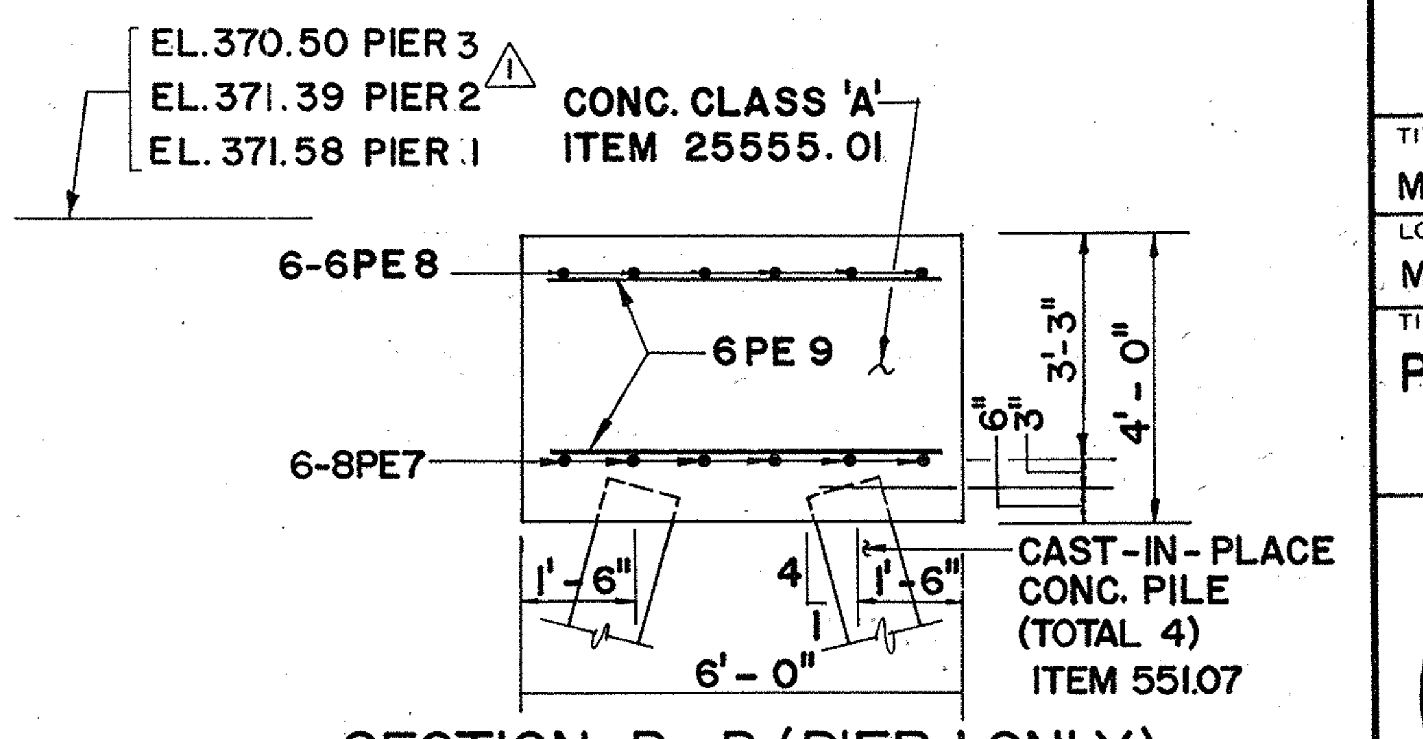
PILE SECTION
SCALE: 1" = 1'-0"



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



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



SECTION B-B (PIER I ONLY)
SCALE: 3/8" = 1'-0"

JACKSON AND TULL
CHARTERED ENGINEERS

DATE	DESCRIPTION	BY	SYM
8/17/92	PIER KEY	P.E.B.	5
7/91	PIER NO. CHANGE	R. DIETLEIN	1

REVISIONS

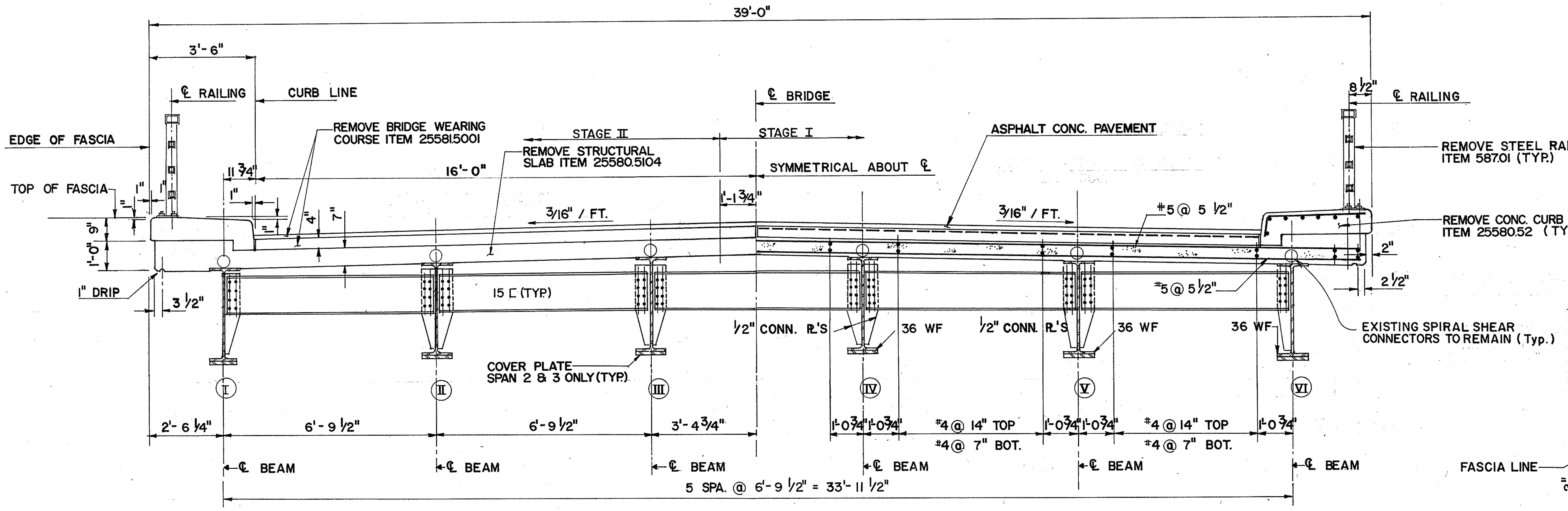
NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITATION OF MARIAVILLE RD. BRIDGE
LOCATION OF PROJECT MP 159.23, SCHENECTADY COUNTY
TITLE OF DRAWING PIER ELEVATION & DETAILS PROPOSED

CONTRACT NUMBER: TAA 91-10B
DATE: APRIL 1990
DRAWING NUMBER: 13R1

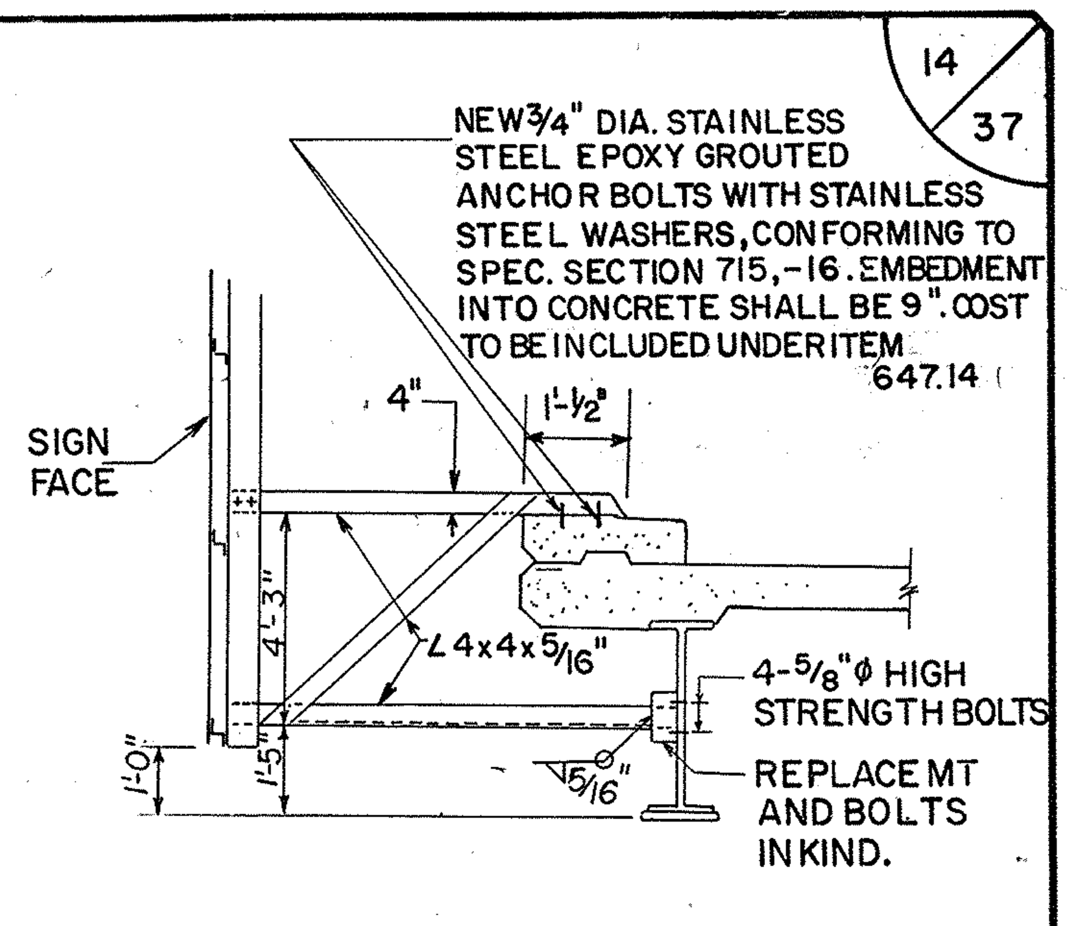
IN CHARGE OF:
DESIGNED BY:
DRAFTED BY:
CHECKED BY:

TCA 301-565-3340



EXISTING CROSS SECTION

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

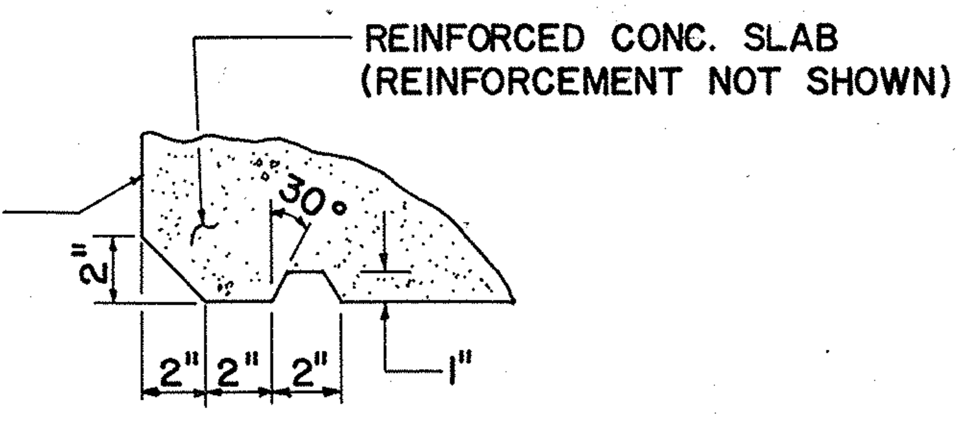

NEW 3/4" DIA. STAINLESS STEEL EPOXY GROUTED ANCHOR BOLTS WITH STAINLESS STEEL WASHERS, CONFORMING TO SPEC. SECTION 715,-16. EMBEDMENT INTO CONCRETE SHALL BE 9". COST TO BE INCLUDED UNDER ITEM 647.14
SIGN FACE
4"
1'-1/2"
4'-3"
∠4x4x5/16"
4-5/8"ϕ HIGH STRENGTH BOLTS
1'-0"
1'-5"
5/16"
REPLACEMT AND BOLTS IN KIND.

SIGN INSTALLATION DETAIL

N.T.S.

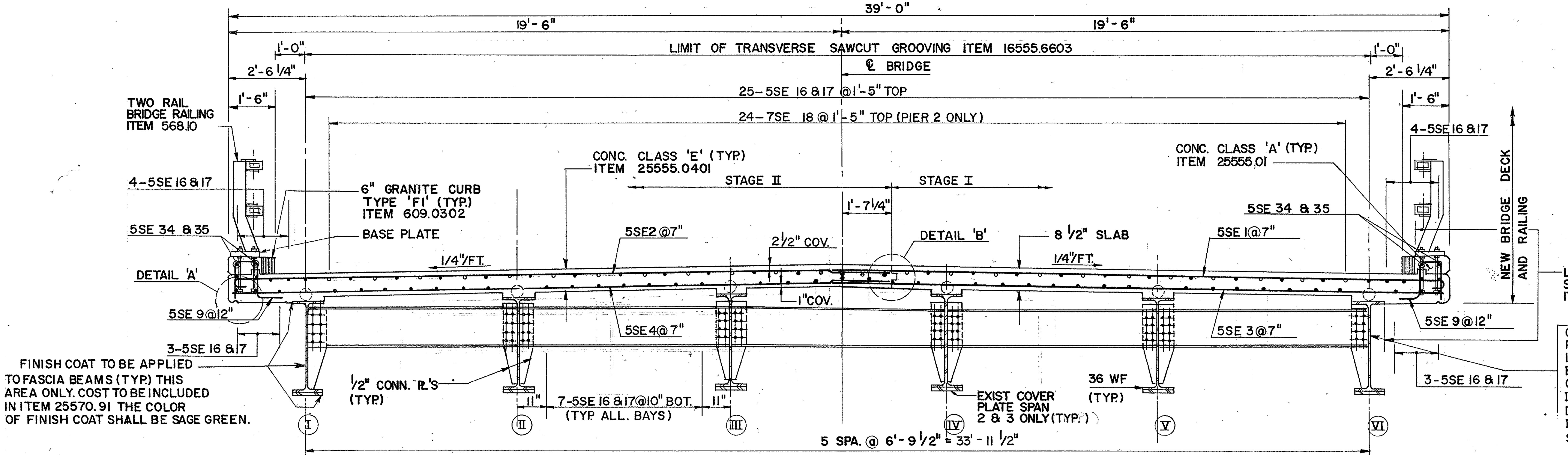
SPECIAL NOTE

The sign to be removed and replaced from the west fascia of the Mariaville Road Bridge is to be temporarily remounted on the ground at a location behind the Temporary Concrete Barrier A.O.B.E. For installation guidelines, see Standard Sheet 647-13R1. Cost to be included in the price bid for Item 647.14.



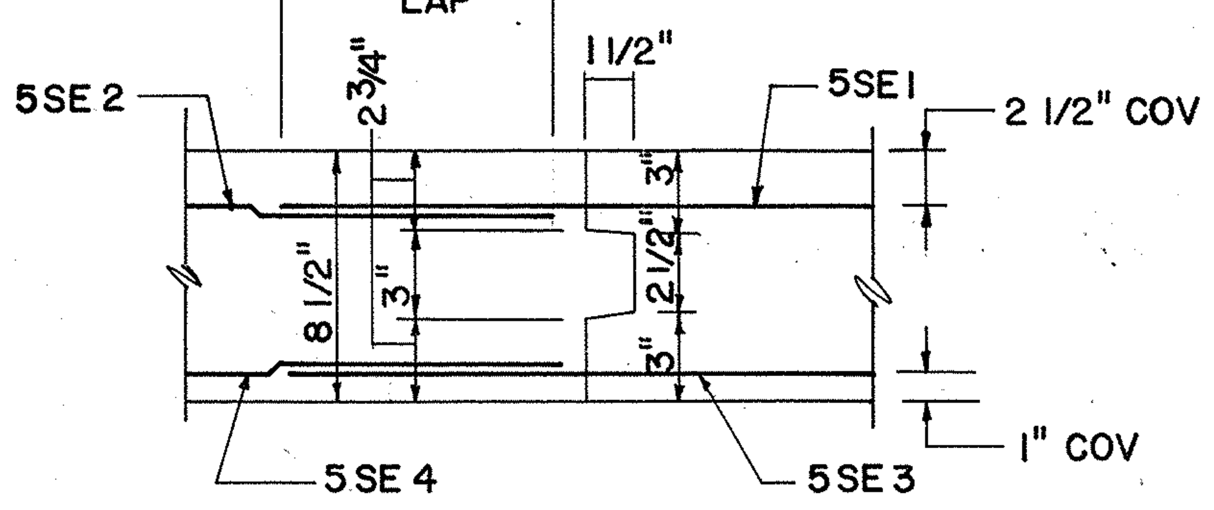
DETAIL 'A'

N.T.S.


39'-0"
19'-6"
19'-6"
1'-0"
LIMIT OF TRANSVERSE SAWCUT GROOVING ITEM 16555.6603
1'-0"
2'-6 1/4"
℄ BRIDGE
2'-6 1/4"
1'-6"
25-5SE 16 & 17 @ 1'-5" TOP
1'-6"
TWO RAIL BRIDGE RAILING ITEM 568.10
24-7SE 18 @ 1'-5" TOP (PIER 2 ONLY)
4-5SE 16 & 17
CONC. CLASS 'E' (TYP.) ITEM 25555.0401
CONC. CLASS 'A' (TYP.) ITEM 25555.01
STAGE II
STAGE I
4-5SE 16 & 17
6" GRANITE CURB TYPE 'FI' (TYP.) ITEM 609.0302
1'-7 1/4"
5SE 34 & 35
5SE 34 & 35
BASE PLATE
5SE2 @ 7"
2 1/2" COV.
DETAIL 'B'
8 1/2" SLAB
5SE 1 @ 7"
NEW BRIDGE DECK AND RAILING
1/4"/FT.
1/4"/FT.
DETAIL 'A'
1" COV.
LIMIT OF PROTECTIVE SEALER FOR CONC. (TYP.) ITEM 25559.99
5SE 9 @ 12"
5SE4 @ 7"
5SE 3 @ 7"
5SE 9 @ 12"
3-5SE 16 & 17
3-5SE 16 & 17
COMMERCIAL BLAST CLEANING & PAINTING OF STRUCTURAL STEEL ITEM 25570.91
ENVIROMENTAL GROUND PROTECTION COLLECTION & PACKING. ITEM 25570.0701.
DISPOSAL OF PAINT REMOVAL WASTE ITEM 25570.7891 (TYP. OF ALL STRUCTURAL STEEL)
FINISH COAT TO BE APPLIED TO FASCIA BEAMS (TYP.) THIS AREA ONLY. COST TO BE INCLUDED IN ITEM 25570.91 THE COLOR OF FINISH COAT SHALL BE SAGE GREEN.
1/2" CONN. PL'S (TYP.)
11"
7-5SE 16 & 17 @ 10" BOT. (TYP ALL BAYS)
11"
EXIST COVER PLATE SPAN 2 & 3 ONLY (TYP.)
36 WF (TYP.)
I
II
III
IV
V
VI
5 SPA. @ 6'-9 1/2" = 33'-11 1/2"

PROPOSED CROSS SECTION

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



KEY (DETAIL 'B')

N.T.S.

NOTES:

1. THE REBAR MARKS SHOWN ARE FOR SPAN 2 AND SPAN 3 ONLY.
2. FOR TWO RAIL STEEL RAILING ANCHORAGE DETAIL, SEE DWG. 16

NO AS-BUILT REVISIONS

DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITATION OF MARIAVILLE RD. BRIDGE

LOCATION OF PROJECT
MP. 159.23, SCHENECTADY COUNTY

TITLE OF DRAWING
CROSS SECTION
EXISTING & PROPOSED

CONTRACT NUMBER: TAA 91 - 10B

DATE: APRIL 1990

DRAWING NUMBER: 14

JACKSON AND TULL
CHARTERED ENGINEERS

CHECKED BY:

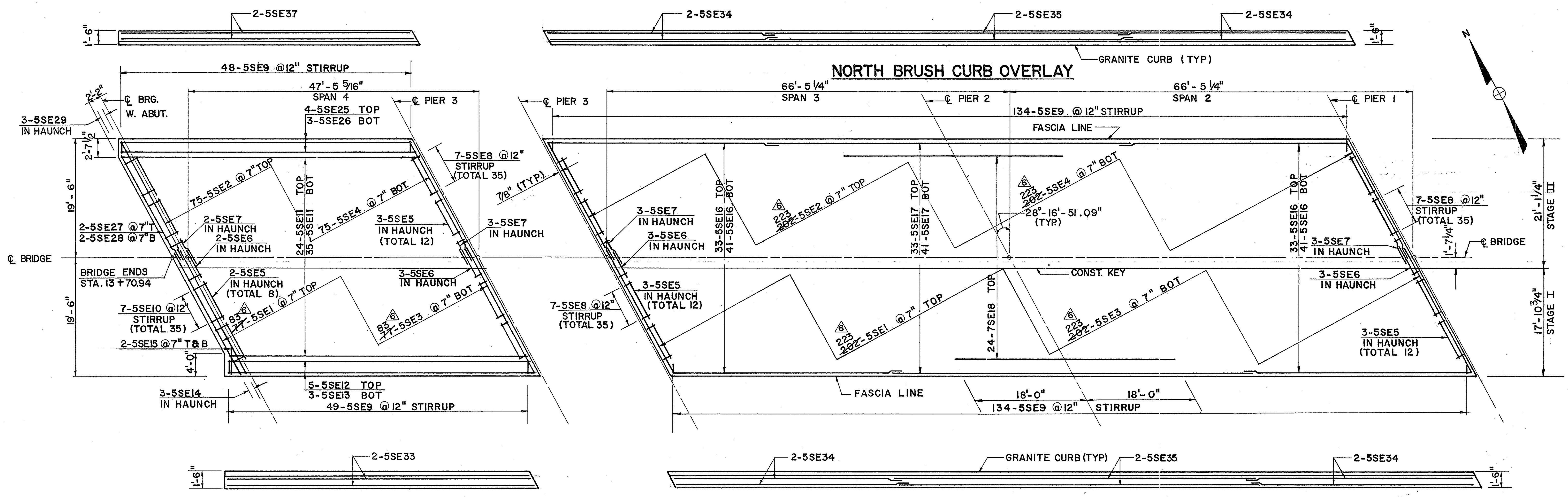
DRAFTED BY:

DESIGNED BY:

IN CHARGE OF:

TCA 301-585-3340

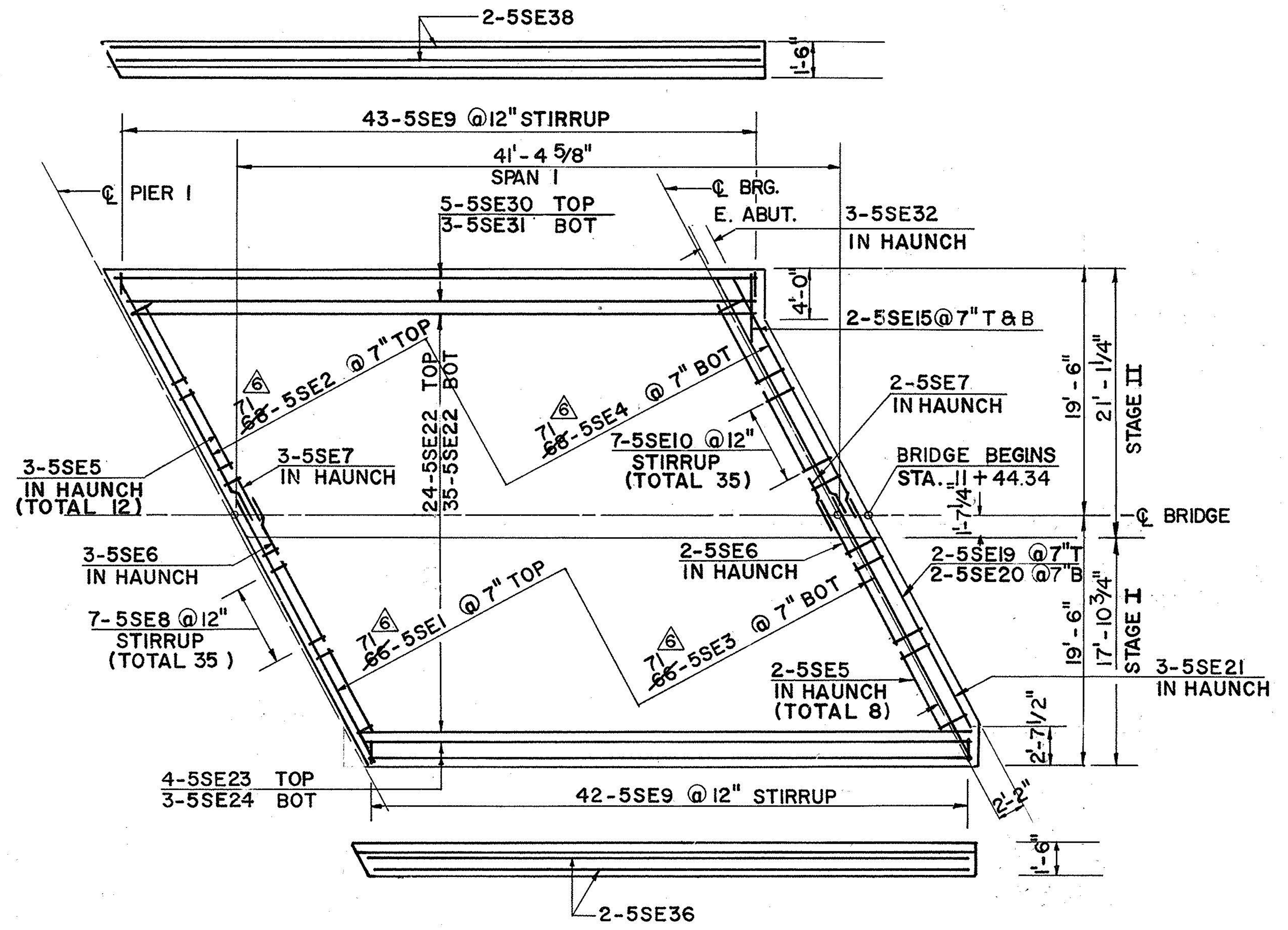
15

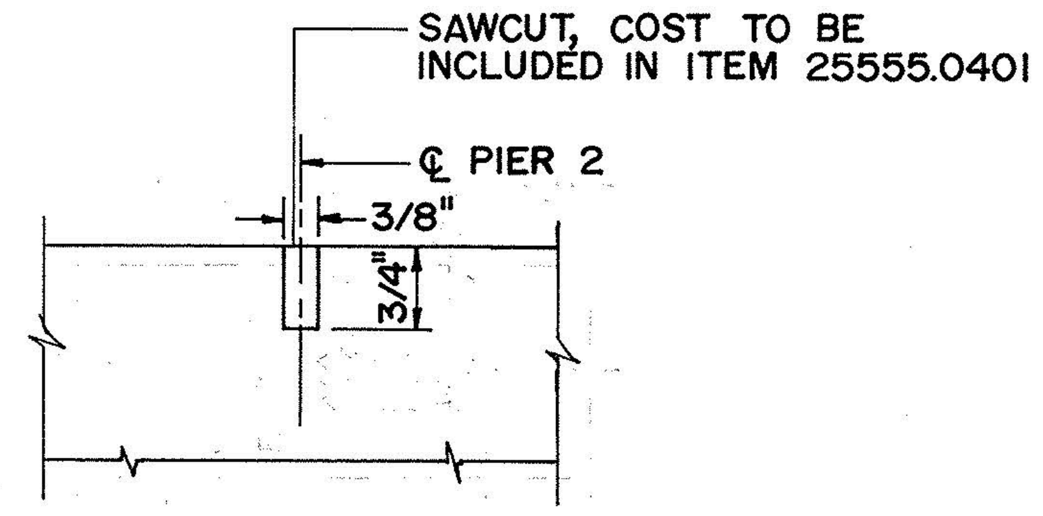


SOUTH BRUSH CURB OVERLAY

SLAB PLAN

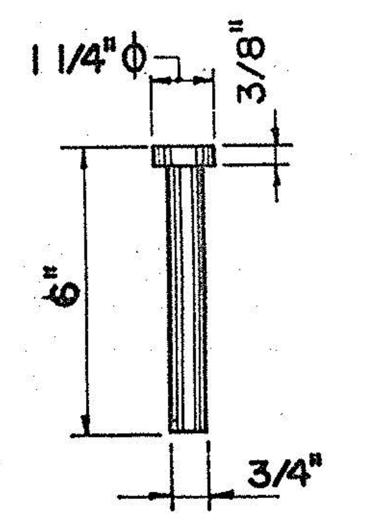
SCALE: 1/8" = 1'-0"





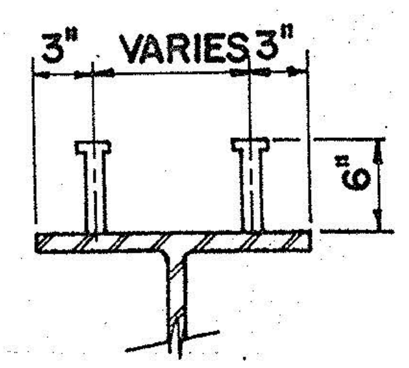
TYPICAL LONGITUDINAL SECTION AT PIER 2

N. T. S.



STUD DETAIL

N.T.S.



STUD SHEAR CONNECTOR DETAIL

N.T.S

No. 40729

8/17/92	REINFORCING BARS	P.E.B.	6
DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITATION OF MARIAVILLE RD. BRIDGE

LOCATION OF PROJECT MP 159.23, SCHENECTADY COUNTY

TITLE OF DRAWING

DECK SLAB PLAN PROPOSED

CONTRACT NUMBER TAA 91-10B

DATE APRIL 1990

DRAWING NUMBER: 15RI

JACKSON AND TULL
CHARTERED ENGINEERS

CHECKED BY:

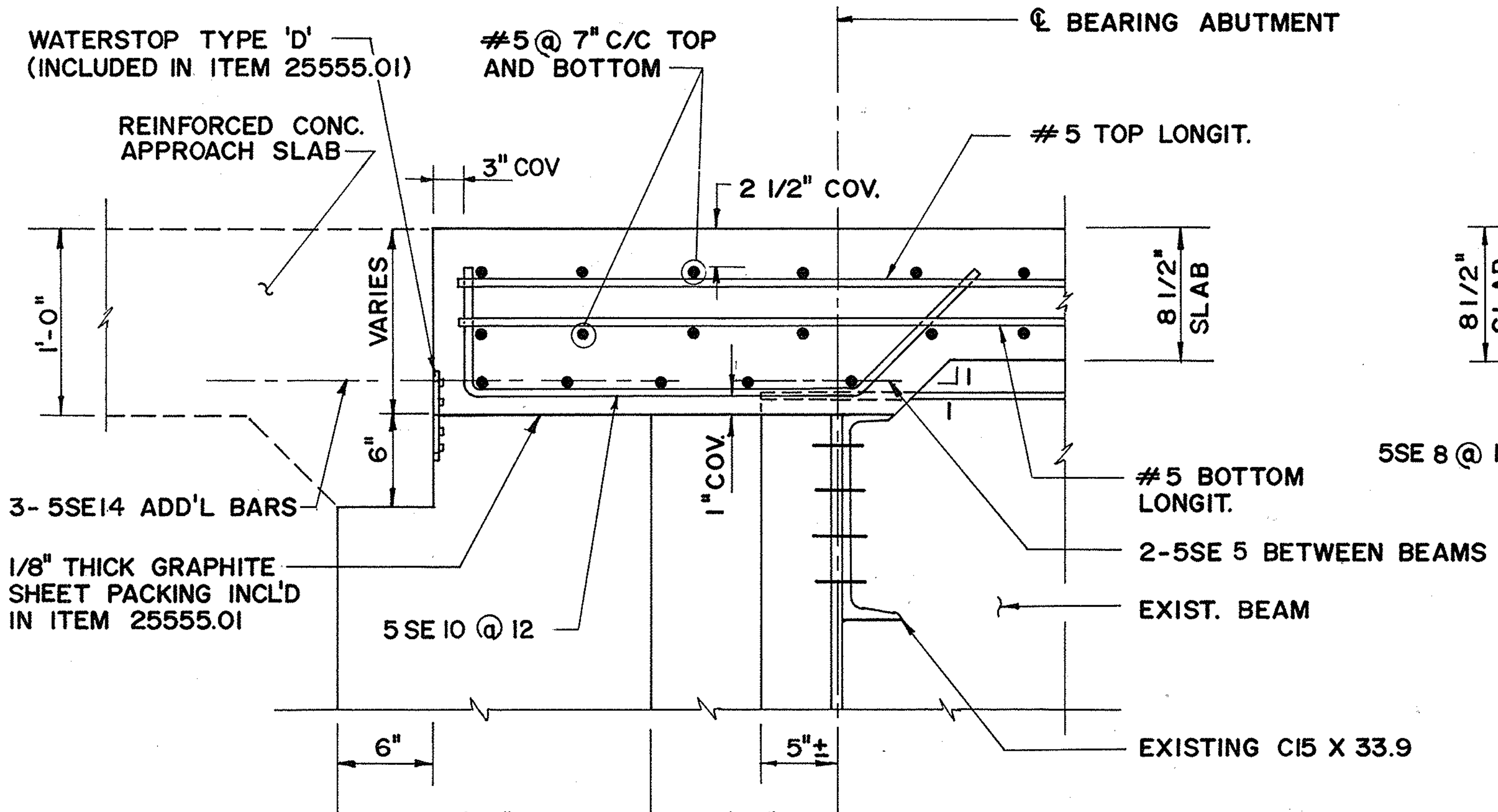
DRAFTED BY:

DESIGNED BY:

IN CHARGE OF:

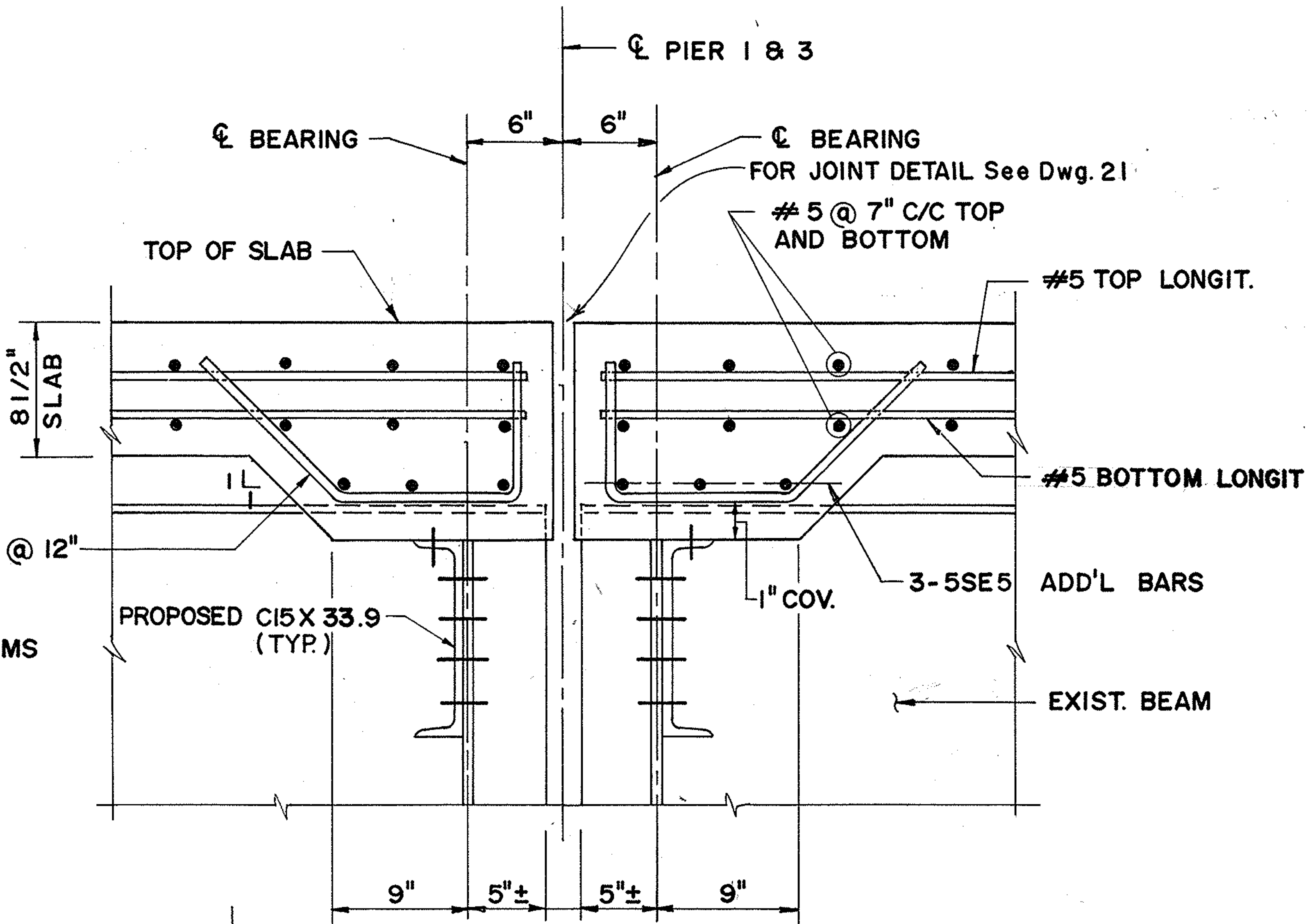
16

16/37



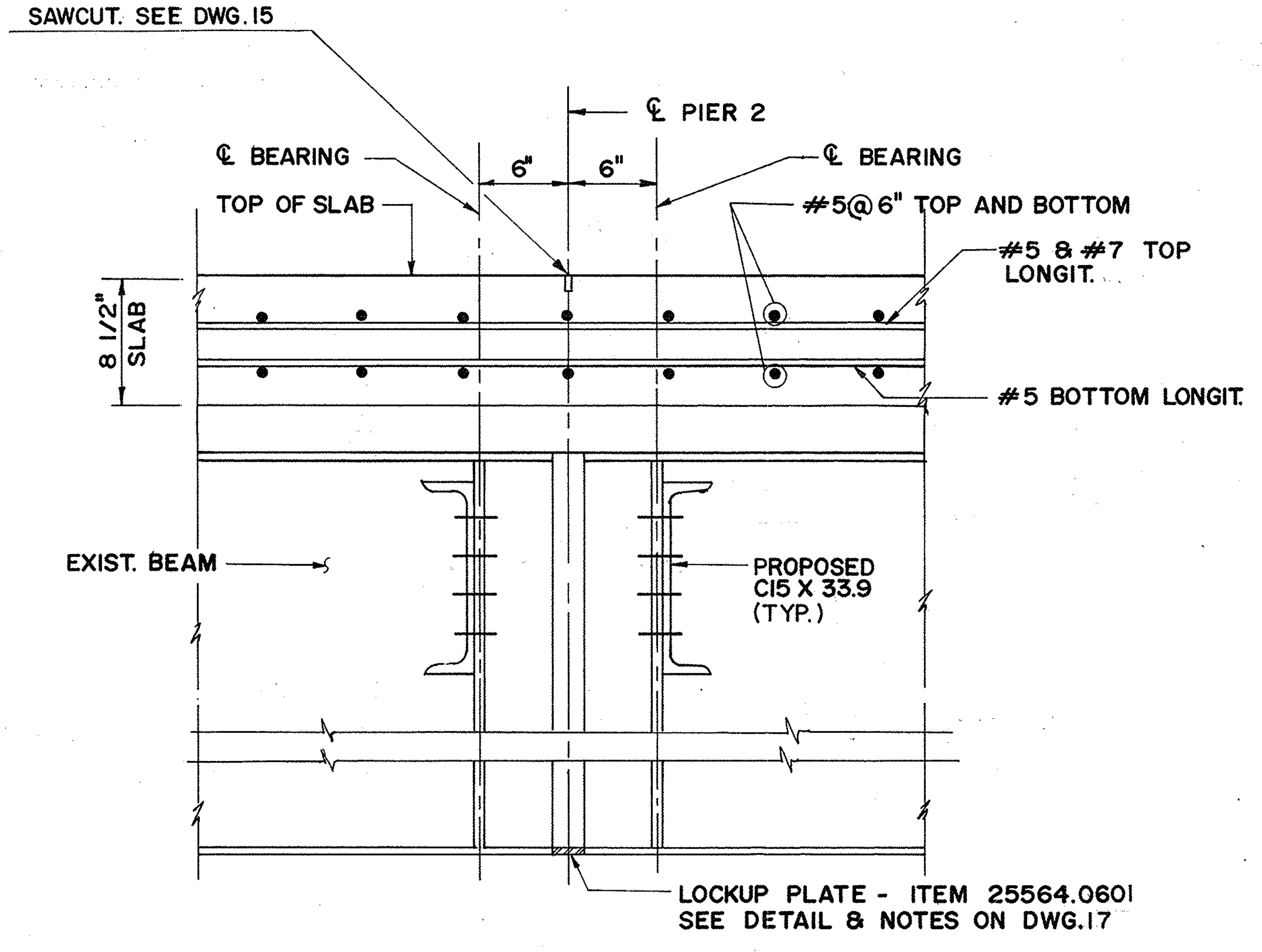
TYPICAL END SECTION OF DECK AT ABUTMENTS

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



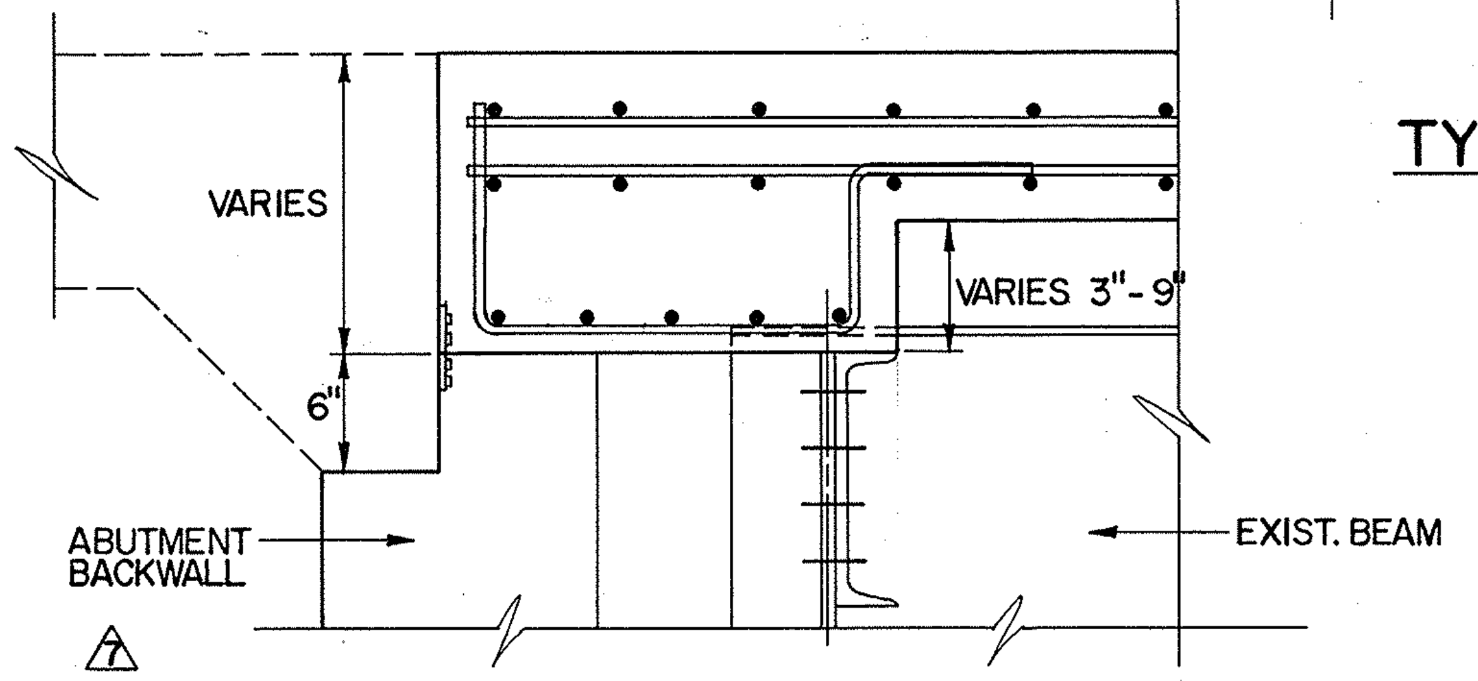
TYPICAL END SECTION OF DECK AT PIERS 1 & 3

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



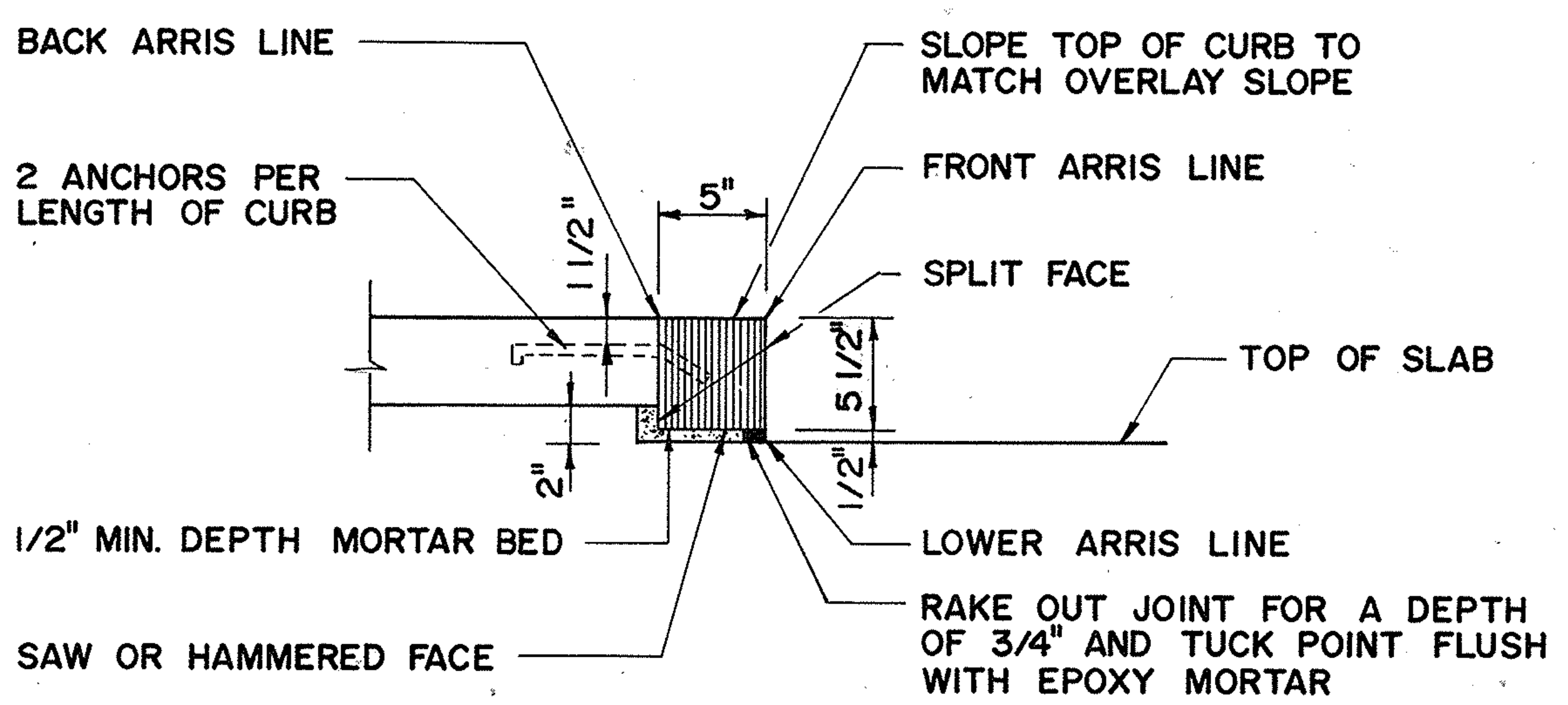
TYPICAL SECTION OF DECK AT PIER 2

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



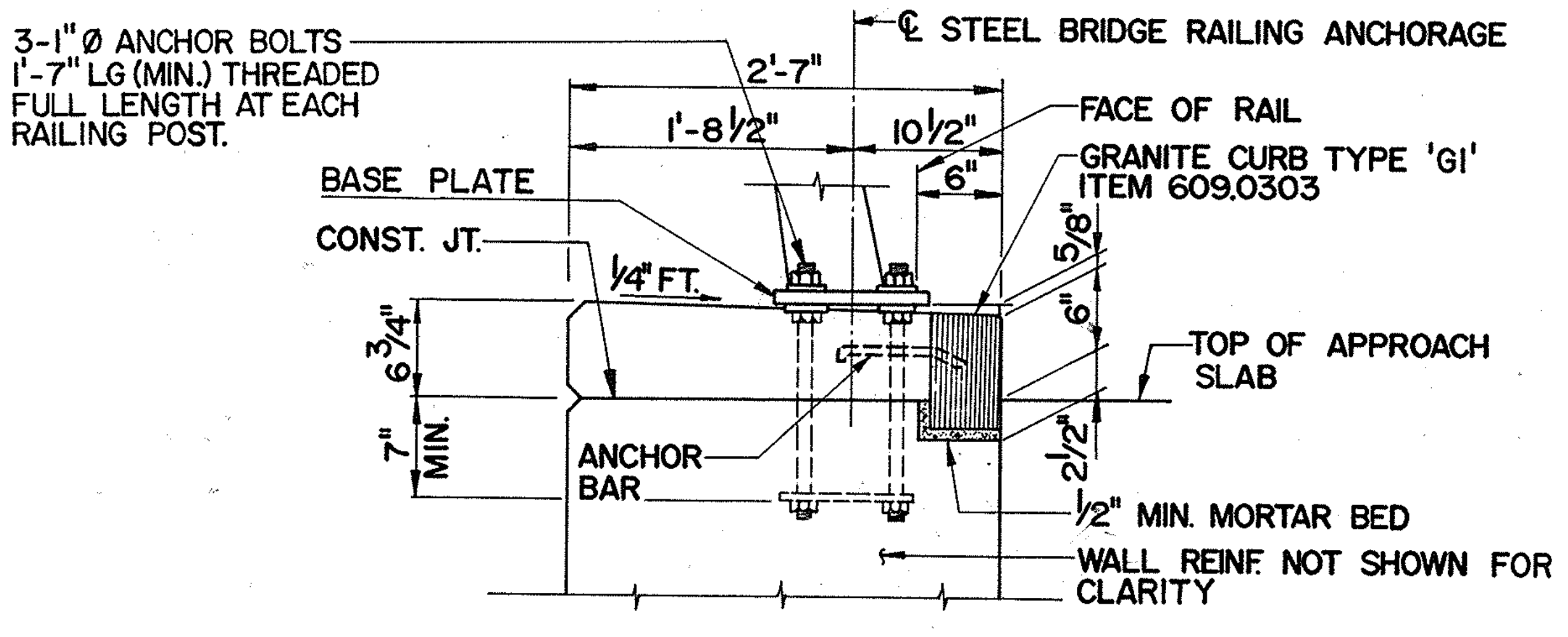
END HAUNCH AT N.E. QUADRANT

N.T.S.


BACK ARRIS LINE
SLOPE TOP OF CURB TO MATCH OVERLAY SLOPE
2 ANCHORS PER LENGTH OF CURB
5"
1 1/2"
FRONT ARRIS LINE
SPLIT FACE
TOP OF SLAB
5 1/2"
2"
1/2"
1/2" MIN. DEPTH MORTAR BED
LOWER ARRIS LINE
RAKE OUT JOINT FOR A DEPTH OF 3/4" AND TUCK POINT FLUSH WITH EPOXY MORTAR
SAW OR HAMMERED FACE

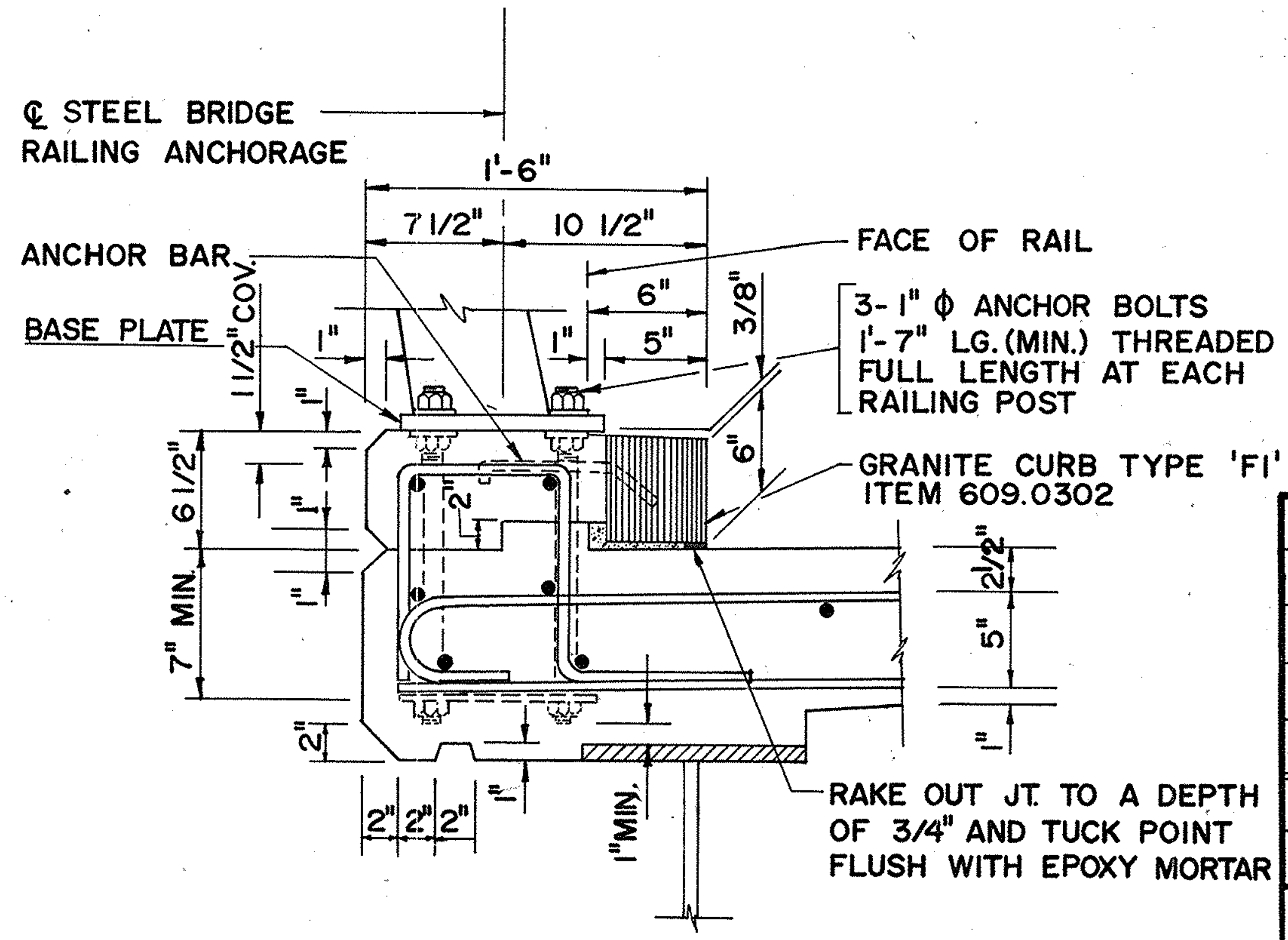
DETAIL OF GRANITE CURB - TYPE F1

N.T.S.


3-1" Ø ANCHOR BOLTS 1'-7" LG (MIN.) THREADED FULL LENGTH AT EACH RAILING POST.
℄ STEEL BRIDGE RAILING ANCHORAGE
2'-7"
1'-8 1/2"
10 1/2"
FACE OF RAIL
BASE PLATE
GRANITE CURB TYPE 'G1' ITEM 609.0303
6"
CONST. JT.
1/4" FT.
5/8"
6"
6 3/4"
7" MIN.
TOP OF APPROACH SLAB
ANCHOR BAR
2 1/2"
1/2" MIN. MORTAR BED
WALL REINF. NOT SHOWN FOR CLARITY

TWO RAIL STEEL RAILING ON BRUSH CURB (AT ABUTMENT)

SCALE 1"=1'-0"

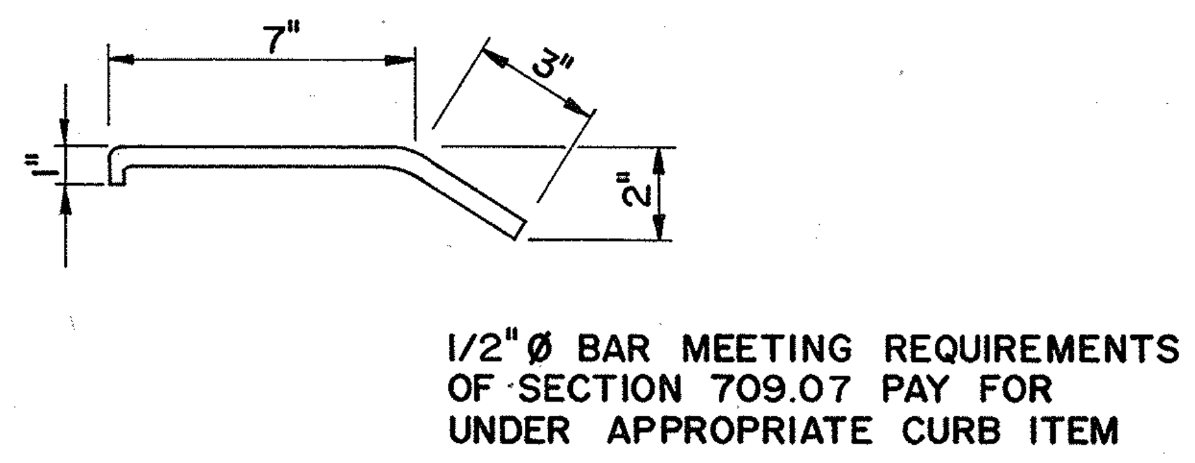

℄ STEEL BRIDGE RAILING ANCHORAGE
1'-6"
7 1/2"
10 1/2"
ANCHOR BAR
FACE OF RAIL
6"
5"
3/8"
BASE PLATE
1 1/2" COV.
1"
1"
3-1" Ø ANCHOR BOLTS 1'-7" LG. (MIN.) THREADED FULL LENGTH AT EACH RAILING POST
6"
6 1/2"
7" MIN.
2"
GRANITE CURB TYPE 'F1' ITEM 609.0302
2 1/2"
5"
2"
2"
2"
2"
1"
1" MIN.
RAKE OUT JT. TO A DEPTH OF 3/4" AND TUCK POINT FLUSH WITH EPOXY MORTAR

TWO RAIL STEEL RAILING ON BRUSH CURB TYPE V (AT STRUCTURES)

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

NOTE:

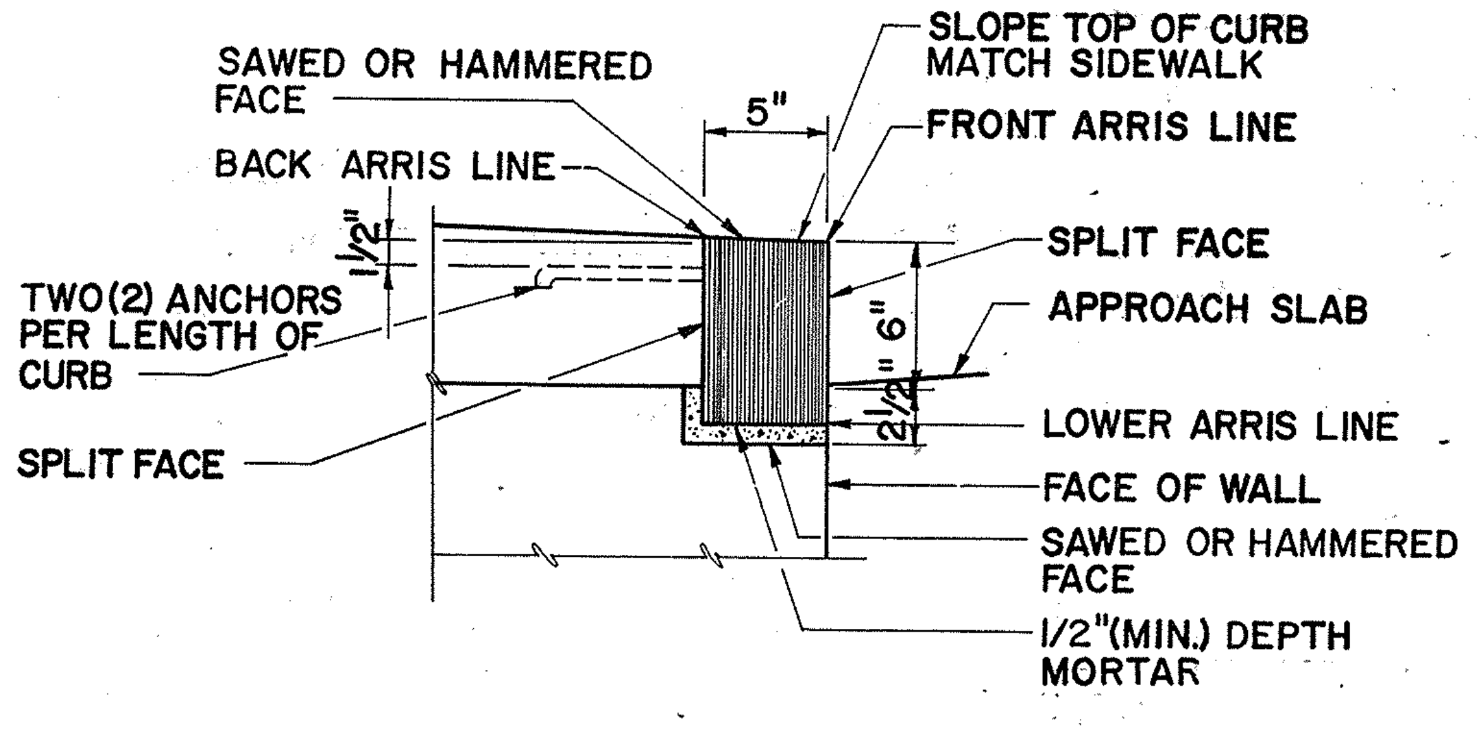
1. FOR EXPANSION JOINT DETAILS SEE DWG. 21.



1/2" Ø BAR MEETING REQUIREMENTS OF SECTION 709.07 PAY FOR UNDER APPROPRIATE CURB ITEM

ANCHOR BAR DETAIL

N.T.S.



DETAIL OF GRANITE CURB TYPE G1

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

8/17/92	END HAUNCH DETAIL	P.E.B.	7
DATE	DESCRIPTION	BY	SYM

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITATION OF MARIAVILLE RD. BRIDGE

LOCATION OF PROJECT MP 159.23, SCHENECTADY COUNTY

TITLE OF DRAWING

DECK SECTIONS AND DETAILS

CONTRACT NUMBER: TAA 91-10B

DATE: APRIL 1990

DRAWING NUMBER: 16R1

No. 40729

JACKSON AND TULL
CHARTERED ENGINEERS

CHECKED BY:

DRAFTED BY:

DESIGNED BY:

151056 IN CHARGE OF

TCA 301-565-3340

LEGEND:

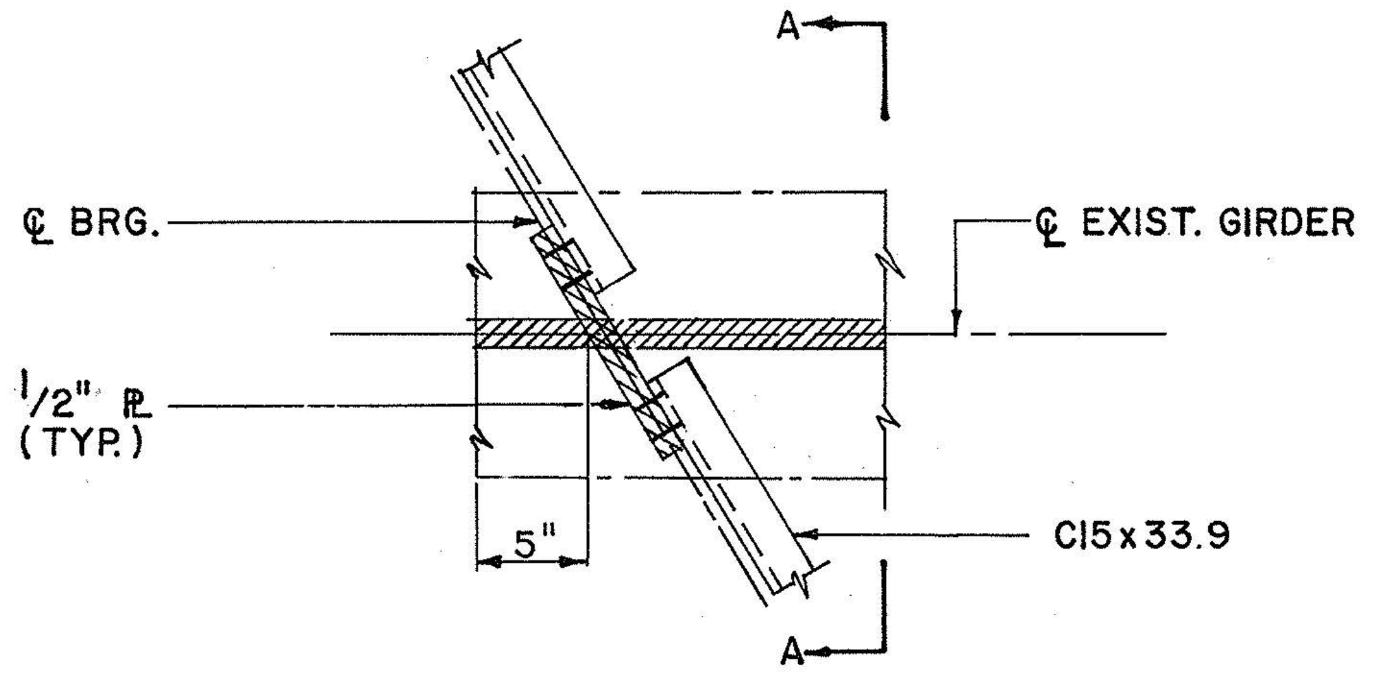
△ INDICATES C15X33.9 PROPOSED DIAPHRAGM, ITEM 564.701002 INCLUDING REPLACEMENT OF CONNECTION PLATE ON BOTH SIDES. FOR CONNECTION DETAIL, SEE DETAIL 'A' THIS DWG.

FRAMING PLAN (EXIST. & PROPOSED)

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

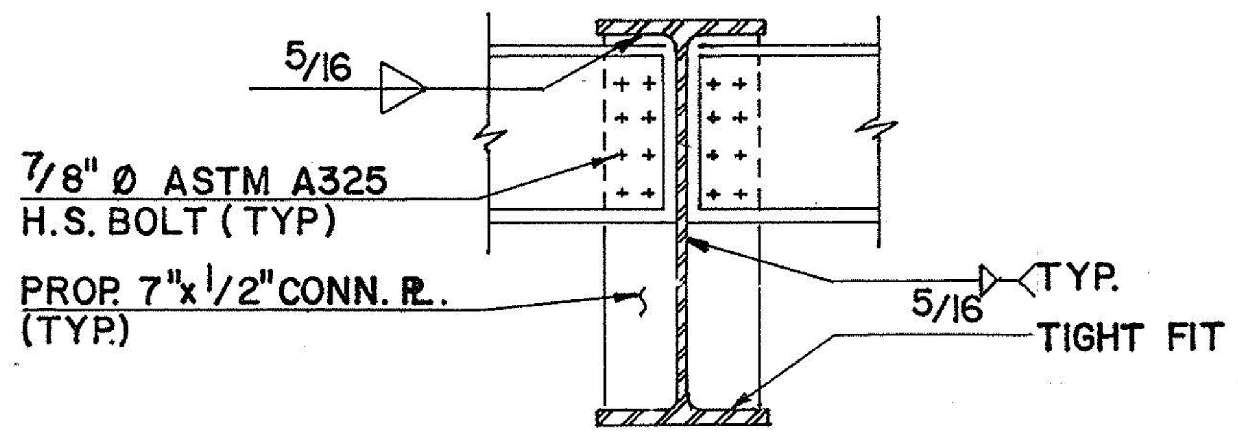
NOTES:

1. ALL PROPOSED BOLTS SHALL BE 7/8" Ø ASTM A325 H.S BOLTS. PAID FOR UNDER ITEM 564.701002.
2. ALL PROPOSED DIAPHRAGM STEEL SHALL BE ASTM A36
3. THE LOCATIONS OF PROPOSED DIAPHRAGMS SHALL MATCH THOSE OF THE EXISTING DIAPHRAGMS WHICH ARE TO BE REMOVED. THE REMOVAL IS TO PAID FOR UNDER VARIOUS ITEMS IN THE CONTRACT.



DETAIL "A"

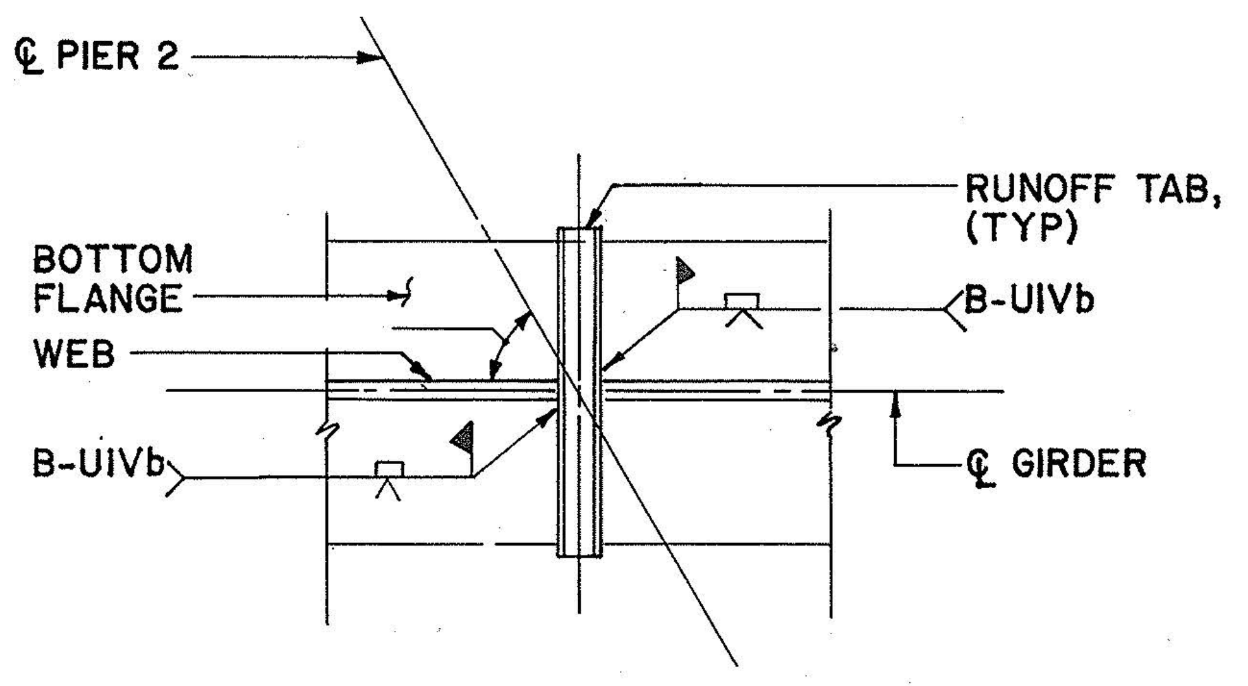
PROPOSED END DIAPHRAGM (TYP)
N.T.S.



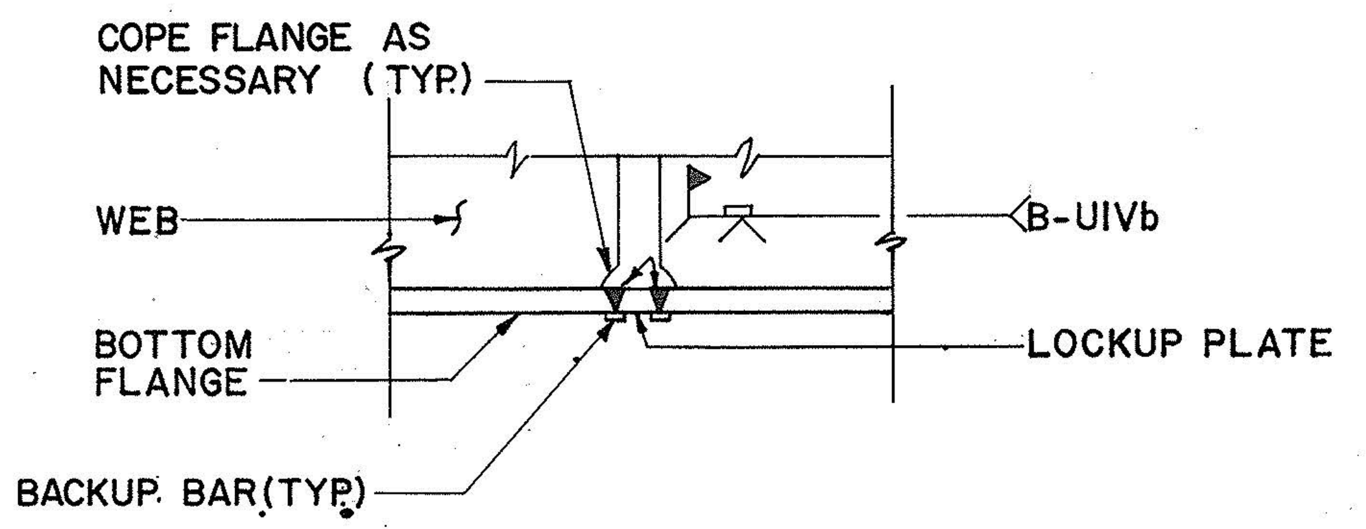
SECTION A-A

N.T.S

C.P.G.W. = COMPLETE PENETRATION GROOVE WELD
M.B. = MILL TO BEAR



PLAN



ELEVATION

LOCKUP PLATE

N.T.S

NOTE: LOCKUP PLATE

1. MAKE LOCKUP PLATE FULL WIDTH OF BOTTOM FLANGE. PROVIDE RUN-OFF TABS AS REQUIRED FOR WELDING. REMOVE AFTER WELDING AND GRIND SMOOTH
2. THE LOCKUP PLATE THICKNESS SHALL MATCH THE THICKNESS OF THE BEAM FLANGES AND THE WIDTH SHALL MATCH THE DISTANCE BETWEEN THE ENDS OF THE STRINGERS AT THE TIME OF INSTALLATION CONTRACTOR TO MEASURE IN FIELD
3. THE LOCKUP PLATES MUST BE INSTALLED AFTER THE NEW STRUCTURAL SLAB, ASPHALTIC WEARING SURFACE, AND BRIDGE RAIL, ETC. HAVE BEEN INSTALLED BUT PRIOR TO THE OPENING TO TRAFFIC.
4. ALL TACK WELDS TO BACK UP BARS AND RUN OFF TABS IN PLACE SHALL BE MADE WITHIN THE JOINT PREPARATION. NO TACK WELDS SHALL BE ALLOWED ON THE OUTSIDE OF BACK UP BARS AND RUNOFF.
5. LOCKUP PLATES SHALL BE PROVIDED FOR ALL FASCIA & INTERIOR GIRDERS OVER PIER 2 AND PAID FOR UNDER ITEM 25564.0601

NO AS-BUILT REVISIONS

JACKSON AND TULL
CHARTERED ENGINEERS

DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITATION OF
MARIAVILLE RD. BRIDGE

LOCATION OF PROJECT
MP 159.23, SCHENECTADY COUNTY

TITLE OF DRAWING
STEEL FRAMING
PLAN AND DETAILS

CONTRACT NUMBER:
TAA 91 -10B

DATE:
APRIL 1990

DRAWING NUMBER:
17

CHECKED BY: Hsin C. Huang

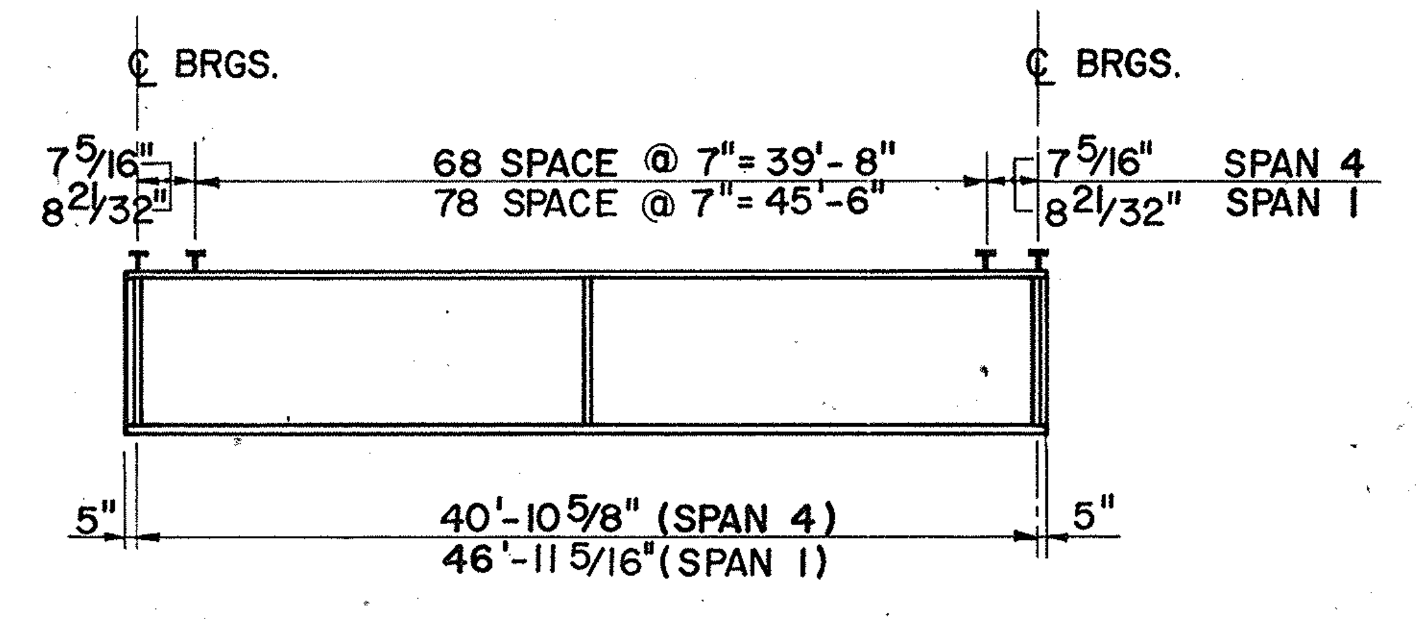
DRAFTED BY:

DESIGNED BY: Fatemeh Navab

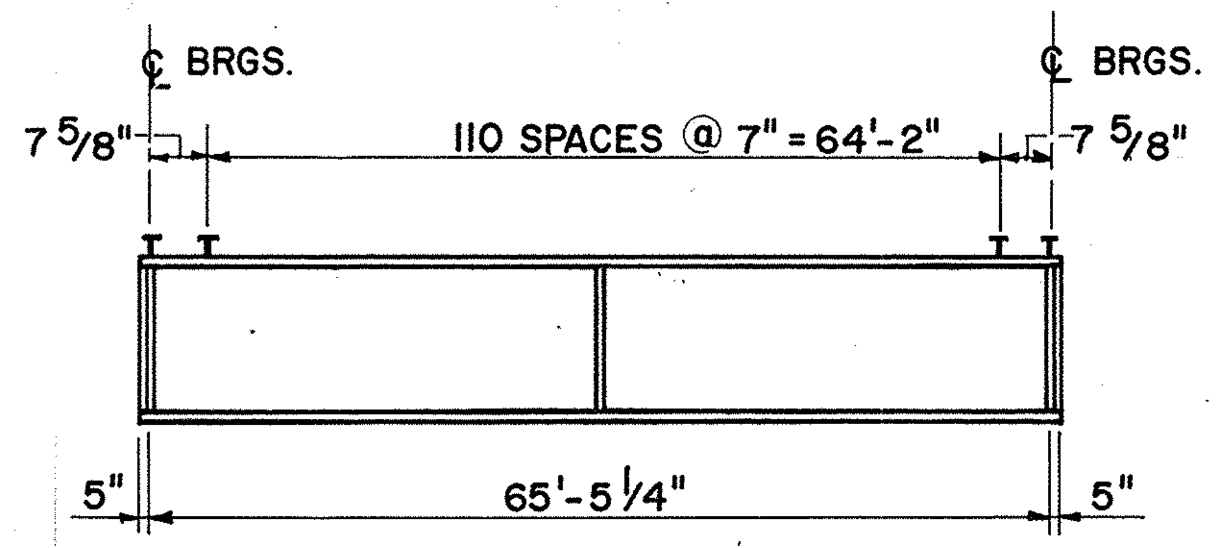
IN CHARGE OF: Hsin C. Huang

18

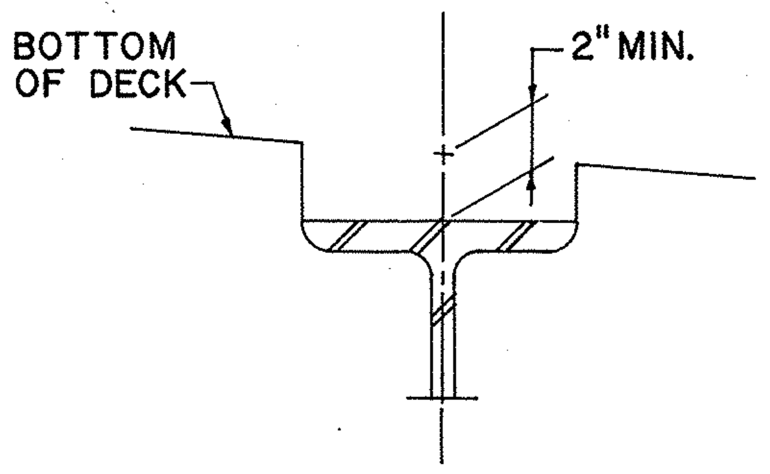
HAUNCH TABLE		SPAN 4			SPAN 3			SPAN 2			SPAN 1		
		℄ BRGS.	MID SPAN	℄ BRGS.	℄ BRGS.	MID SPAN	℄ BRGS.	℄ BRGS.	MID SPAN	℄ BRGS.	℄ BRGS.	MID SPAN	℄ BRGS.
GIRDER I	Ⓐ REQ'D. BOTTOM OF SLAB ELEVATION	393.36	393.31	393.23	393.23	392.97	392.53	392.52	391.90	391.11	391.08	390.50	389.84
	Ⓑ TOP OF STEEL ELEV. (FIELD MEAS.)												
	Ⓒ = Ⓐ - Ⓑ												
	Ⓓ CONCRETE + S.D.L. DEFLECTION	—	0.03	—	—	0.08	—	—	0.08	—	—	0.02	—
	Ⓔ DEPTH OF HAUNCH REQ'D = Ⓒ+Ⓓ (FT.)												
GIRDER II	Ⓐ REQ'D. BOTTOM OF SLAB ELEVATION	393.49	393.44	393.35	393.35	393.07	392.61	392.60	391.96	391.15	391.12	390.52	389.86
	Ⓑ TOP OF STEEL ELEV. (FIELD MEAS.)												
	Ⓒ = Ⓐ - Ⓑ												
	Ⓓ CONCRETE + S.D.L. DEFLECTION	—	0.03	—	—	0.08	—	—	0.08	—	—	0.02	—
	Ⓔ DEPTH OF HAUNCH REQ'D = Ⓒ+Ⓓ (FT.)												
GIRDER III	Ⓐ REQ'D. BOTTOM OF SLAB ELEVATION	393.62	393.57	393.47	393.46	393.16	392.69	392.67	392.02	391.19	391.16	390.55	389.87
	Ⓑ TOP OF STEEL ELEV. (FIELD MEAS.)												
	Ⓒ = Ⓐ - Ⓑ												
	Ⓓ CONCRETE + S.D.L. DEFLECTION	—	0.03	—	—	0.08	—	—	0.08	—	—	0.02	—
	Ⓔ DEPTH OF HAUNCH REQ'D.= Ⓒ+Ⓓ (FT.)												
GIRDER IV	Ⓐ REQ'D. BOTTOM OF SLAB ELEVATION	393.62	393.56	393.45	393.44	393.12	392.62	392.60	391.93	391.08	391.05	390.42	389.73
	Ⓑ TOP OF STEEL ELEV. (FIELD MEAS.)												
	Ⓒ = Ⓐ - Ⓑ												
	Ⓓ CONCRETE + S.D.L. DEFLECTION	—	0.03	—	—	0.08	—	—	0.08	—	—	0.02	—
	Ⓔ DEPTH OF HAUNCH REQ'D. = Ⓒ+Ⓓ (FT.)												
GIRDER V	A REQ'D.BOTTOM OF SLAB ELEVATION	393.47	393.41	393.28	393.27	392.93	392.41	392.39	391.70	390.83	390.80	390.16	389.46
	Ⓑ TOP OF STEEL ELEV. (FIELD MEAS.)												
	Ⓒ = Ⓐ - Ⓑ												
	Ⓓ CONCRETE + S.D.L. DEFLECTION	—	0.03	—	—	0.08	—	—	0.08	—	—	0.02	—
	Ⓔ DEPTH OF HAUNCH REQ'D. = Ⓒ + Ⓓ (FT.)												
GIRDER VI	Ⓐ REQ'D.BOTTOM OF SLAB ELEVATION	393.32	393.25	393.11	393.10	392.74	392.20	392.18	391.46	390.57	390.54	389.89	389.19
	Ⓑ TOP OF STEEL ELEV. (FIELD MEAS.)												
	Ⓒ = Ⓐ - Ⓑ												
	Ⓓ CONCRETE + S.D.L. DEFLECTION	—	0.03	—	—	0.08	—	—	0.08	—	—	0.02	—
	Ⓔ DEPTH OF HAUNCH REQ'D. = Ⓒ + Ⓓ (FT.)												



PROPOSED STUD LAYOUT FOR SPANS 1 & 4 EXISTING GIRDERS



PROPOSED STUD LAYOUT FOR SPAN 2 & 3 EXISTING GIRDERS



HAUNCH DETAIL

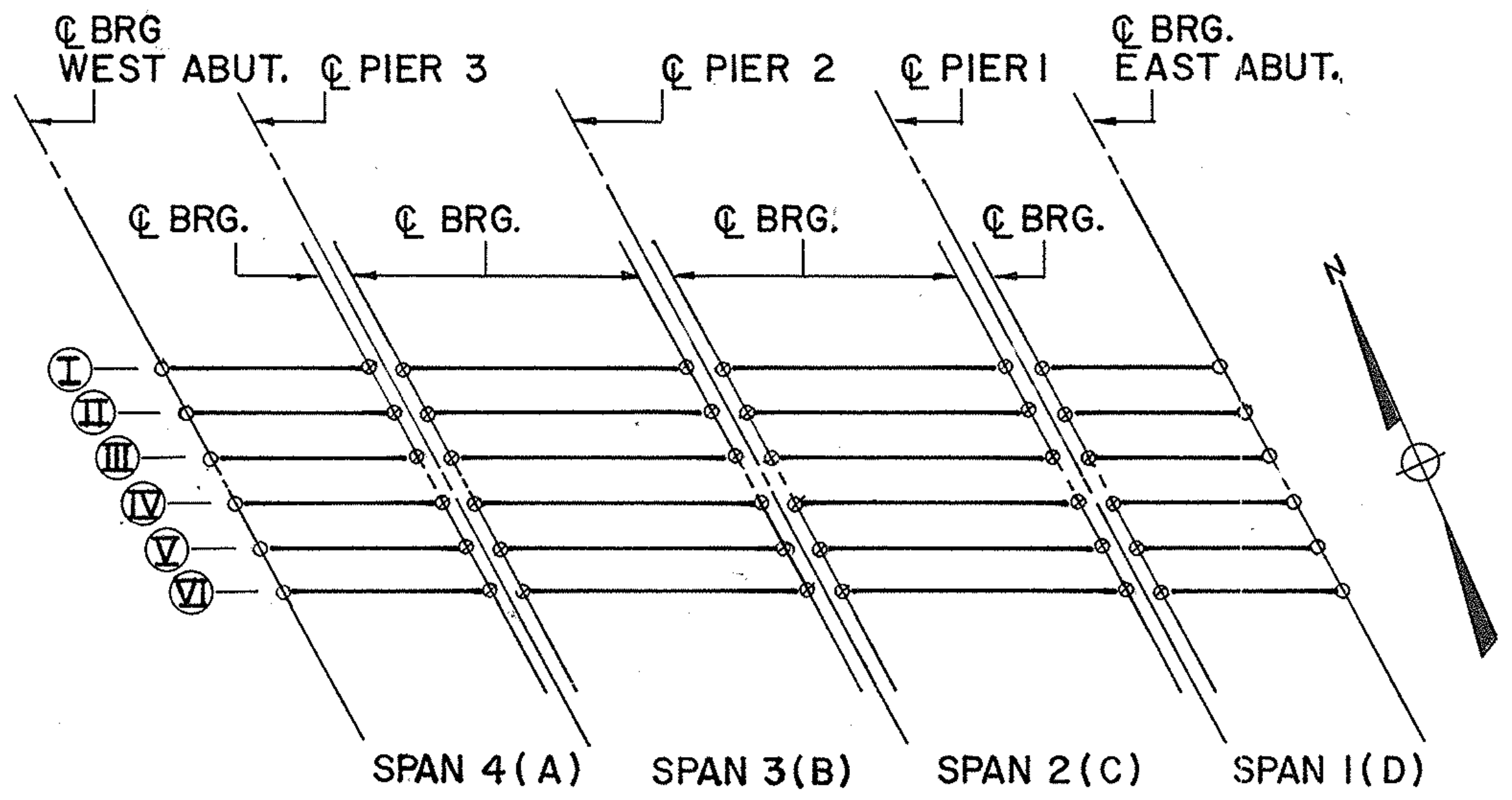
N.T.S.

JACKING LOAD (KIPS)									
GIRDER	LOAD	WEST ABUT.	PIER 3		PIER 2		PIER 1		EAST ABUT.
			SPAN 4 (A)	SPAN 3 (B)	SPAN 3 (B)	SPAN 2 (C)	SPAN 2 (C)	SPAN 1 (D)	
I & VI	D.L.	4.06	21.73	32.33	32.33	32.33	32.33	18.93	3.54
	S.D.L.	—	9.74	13.58	13.58	13.58	13.58	8.48	—
	L.L.+I	—	44.38	46.47	46.47	46.47	46.47	43.05	—
	TOTAL	4.06	75.85	92.38	92.38	92.38	92.38	70.46	3.54
II TO V	D.L	4.06	18.80	28.36	28.36	28.36	28.36	16.38	3.54
	S.D.L.	—	9.74	13.58	13.58	13.58	13.58	8.48	—
	L.L.+I	—	45.96	48.10	48.10	48.10	48.10	44.56	—
	TOTAL	4.06	74.50	90.04	90.04	90.04	90.04	69.42	3.54

NOTE:

D.L. DENOTES CONCRETE SLAB AND STEEL FRAME FOR JACKING POINTS AT PIERS OR THE STEEL FRAME FOR JACKING POINTS AT ABUTMENTS
S.D.L. DENOTES EXISTING WEARING SURFACE AND SIDEWALKS W/RAILING

L.L.+I DENOTES LIVE LOAD AND IMPACT LOAD



PLAN OF LIFTING POINTS AND GIRDER LAYOUT

N.T.S.

NOTES:
- ○ - DENOTES LIFT POINT-STRUCTURAL LIFTING OPERATION TYPE A ITEM 585.0101 (JACKING STEEL FRAME ONLY)
- ⊗ - DENOTES LIFT POINT-STRUCTURAL LIFTING OPERATION TYPE B ITEM 585.0201 (JACKING AGAINST TRAFFIC LOADING)
- - FOR JACKING LOADS SEE TABLE THIS SHEET.

NO AS-BUILT REVISIONS

JACKSON AND TULL
CHARTERED ENGINEERS

DATE	DESCRIPTION	BY	SYM.
REVISIONS			

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

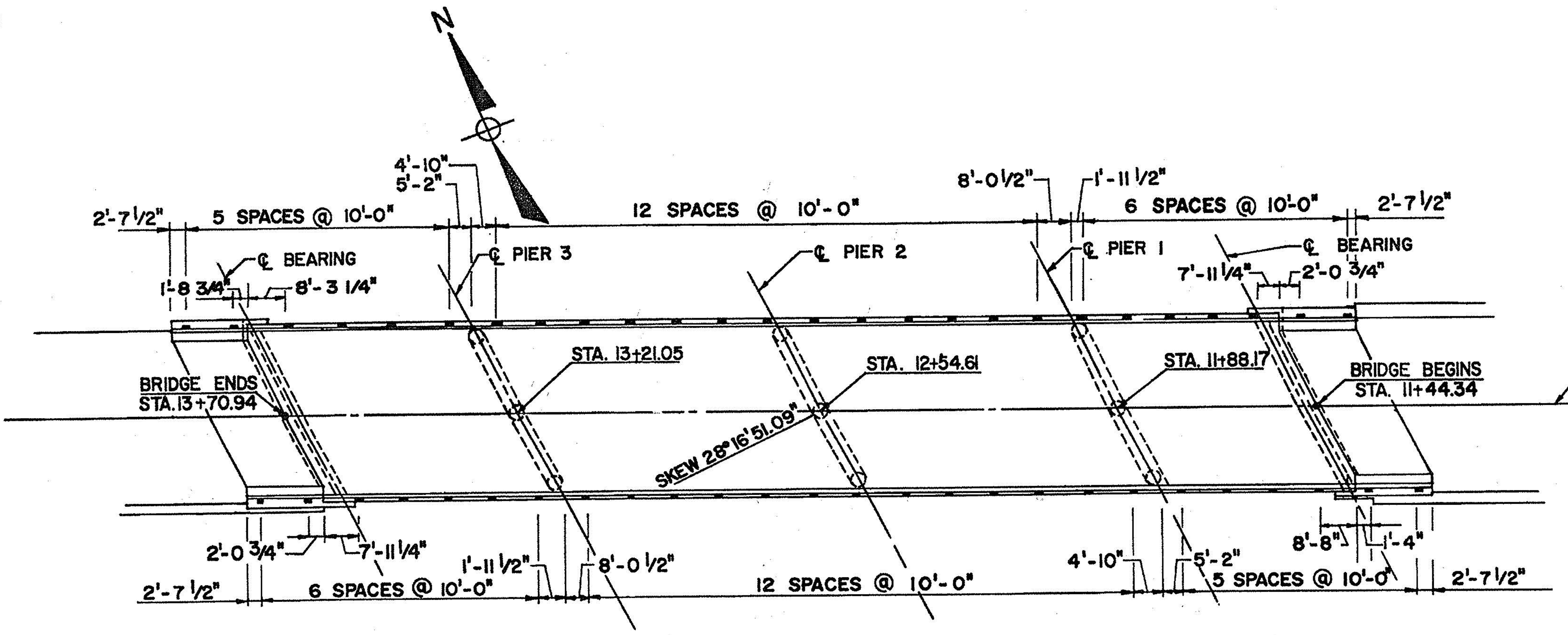
TITLE OF PROJECT REHABILITATION OF MARIAVILLE ROAD BRIDGE
LOCATION OF PROJECT MP 159.23, SCHENECTADY COUNTY
TITLE OF DRAWING
HAUNCH TABLE AND JACKING LOAD TABLE
CONTRACT NUMBER TAA 91 - 10B
DATE: APRIL 1990
DRAWING NUMBER 18

IN CHARGE OF:
DESIGNED BY:
DRAFTED BY:
CHECKED BY:

TCA 301-565-3340

19

19/37

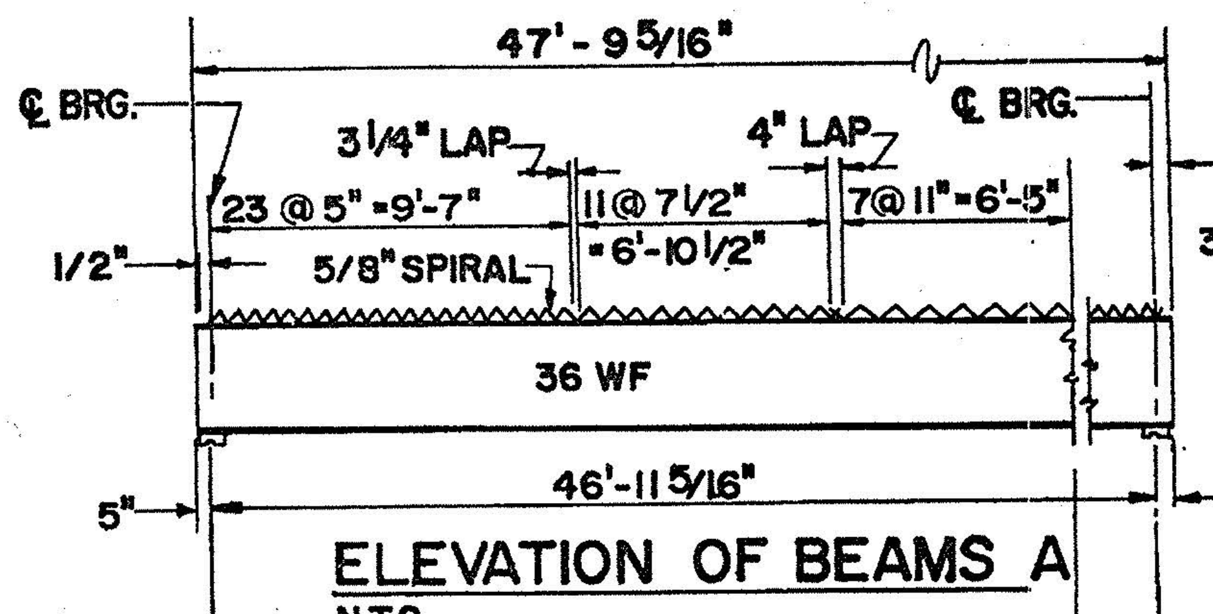


BRIDGE RAILING PLAN

N.T.S.

NOTE:

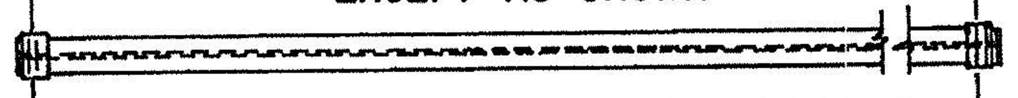
1. FOR APPROACH GUIDE RAIL PLAN SEE DWG. 23.
2. DYE PENETRANT INSPECTION IS REQUIRED FOR EXISTING STRUCTURAL STEEL: ALL ENDS OF COVER PLATES (BEAMS B2,B3,B4,B5 & C2,C3,C4,C5). ITEM 25570.90



ELEVATION OF BEAMS A

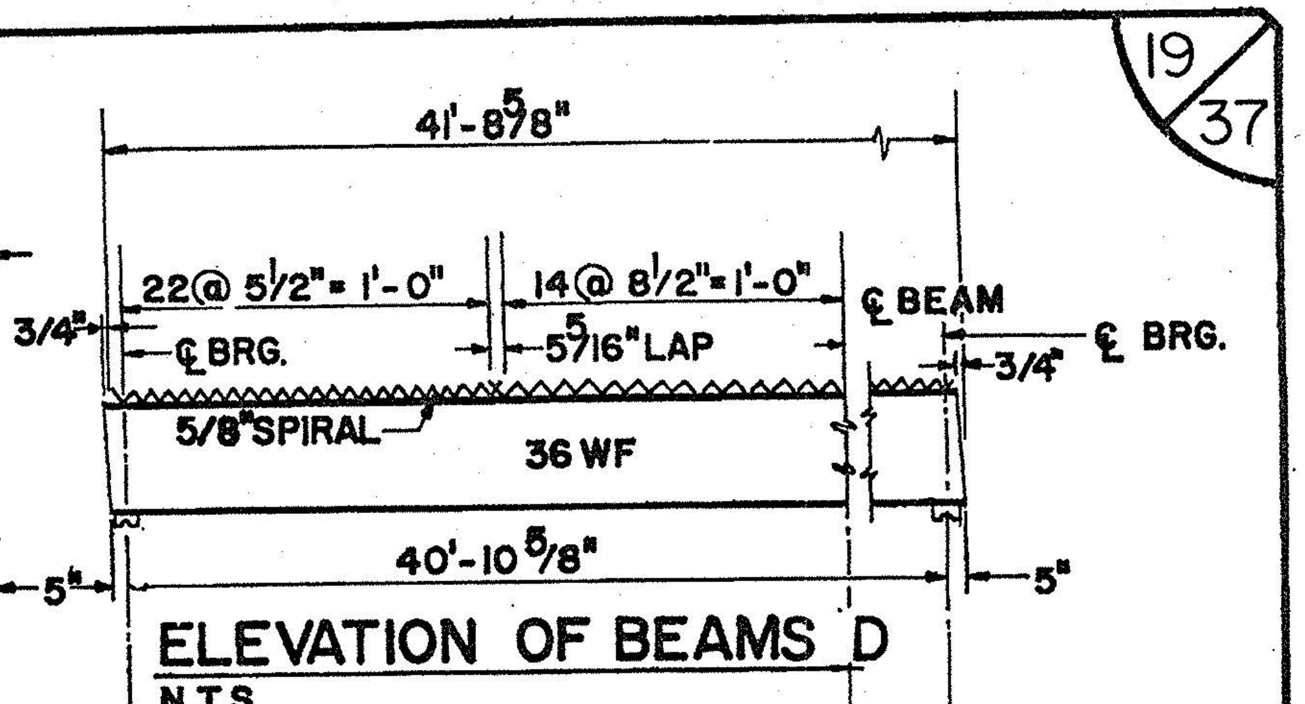
N.T.S

SYMMETRICAL ABOUT ℄ EXCEPT AS SHOWN



BOTTOM PLAN OF BEAMS A

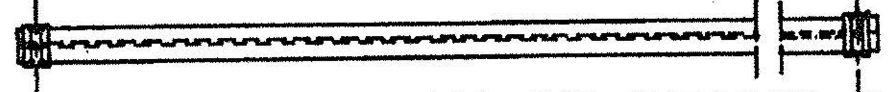
N.T.S



ELEVATION OF BEAMS D

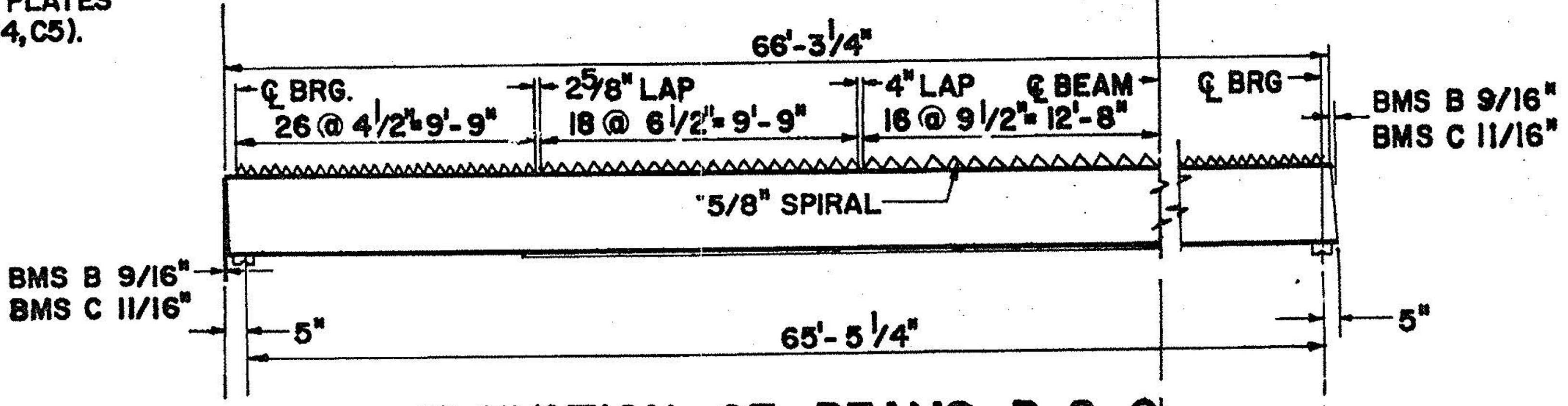
N.T.S

SYMMETRICAL ABOUT ℄ EXCEPT AS SHOWN



BOTTOM PLAN OF BEAMS D

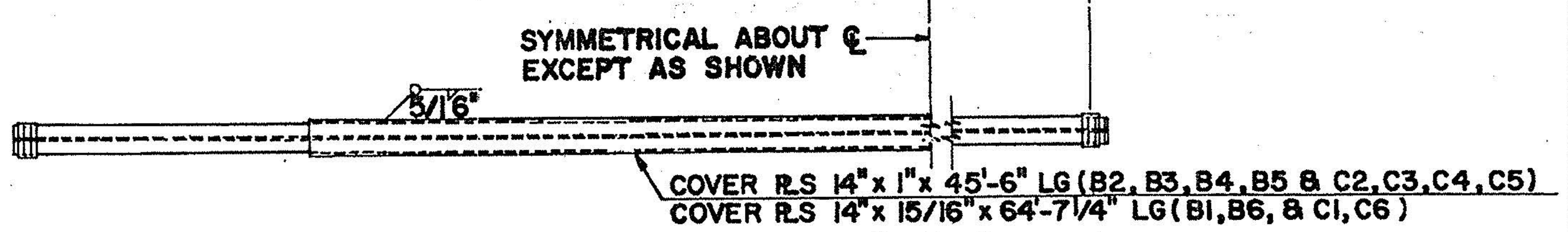
N.T.S



ELEVATION OF BEAMS B & C

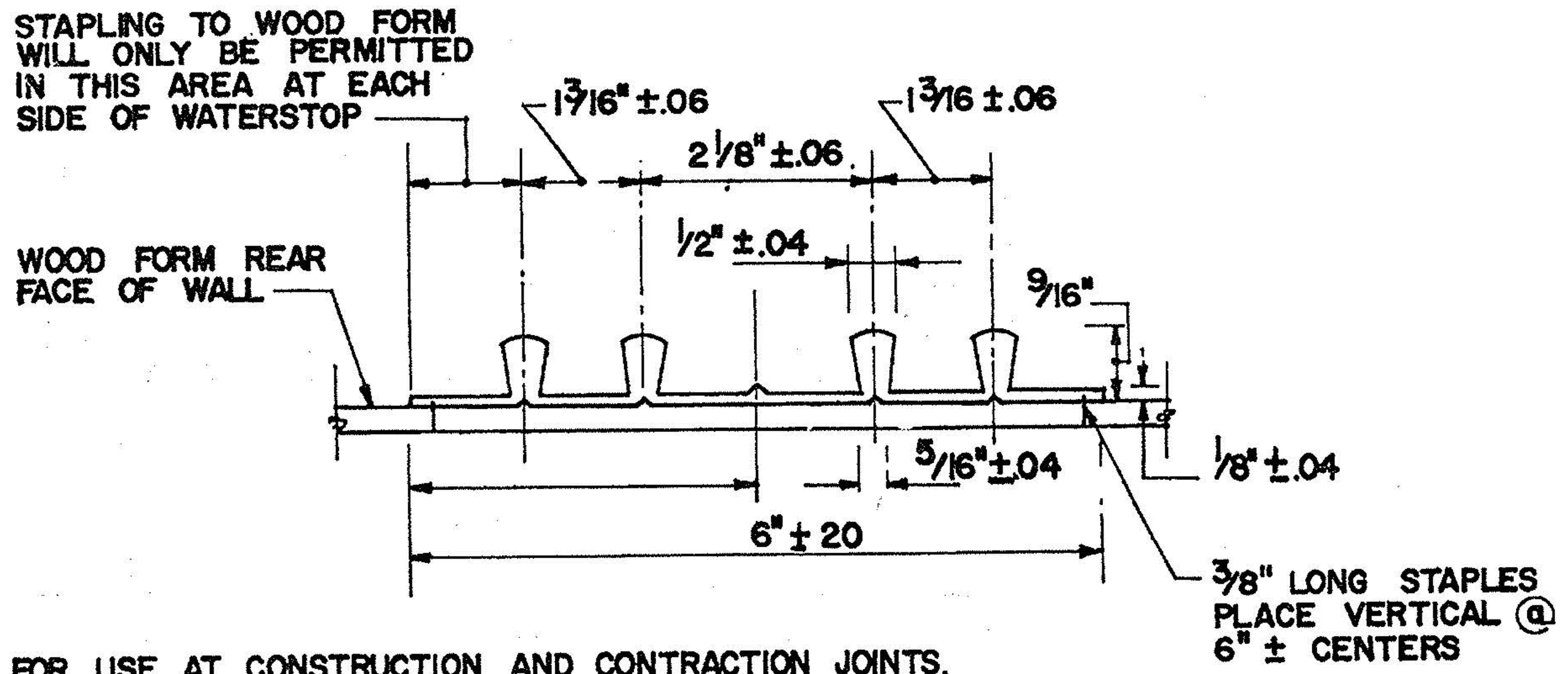
N.T.S.

SYMMETRICAL ABOUT ℄ EXCEPT AS SHOWN


3/16"
COVER R.S 14" x 1" x 45'-6" LG (B2, B3, B4, B5 & C2, C3, C4, C5)
COVER R.S 14" x 15/16" x 64'-7 1/4" LG (B1, B6, & C1, C6)

BOTTOM PLAN OF BEAMS B & C

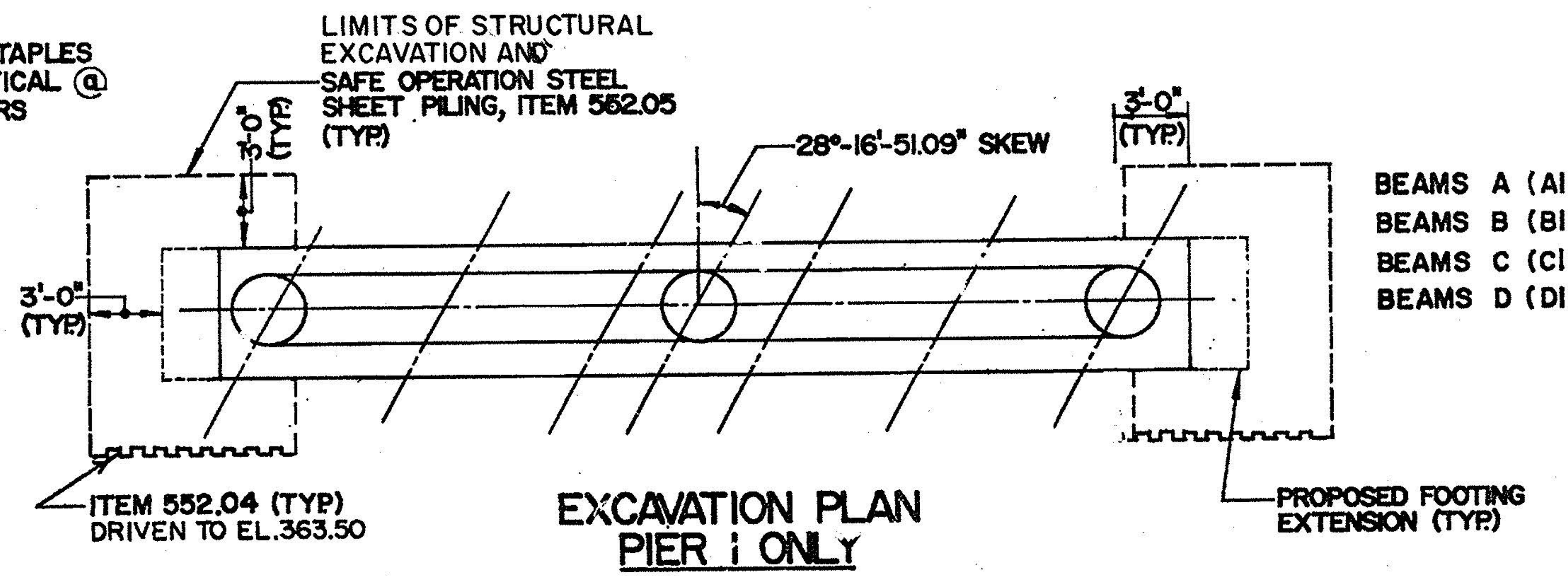
N.T.S


STAPLING TO WOOD FORM WILL ONLY BE PERMITTED IN THIS AREA AT EACH SIDE OF WATERSTOP
1 3/16" ±.06
1 3/16 ±.06
2 1/8" ±.06
1/2" ±.04
WOOD FORM REAR FACE OF WALL
9/16"
5/16" ±.04
1/8" ±.04
6" ± 20
3/8" LONG STAPLES PLACE VERTICAL @ 6" ± CENTERS

NOTE: FOR USE AT CONSTRUCTION AND CONTRACTION JOINTS. HOLES MUST NOT BE MADE IN WATERSTOP FOR ANY PURPOSE, EXCEPT AS REQUIRED FOR STAPLING TO FORMS. TYPE 'D' WATERSTOP SHALL BE LIGHT GRAY, IN COLOR. COST TO BE INCLUDED IN ITEM 25555.01

TYPE "D" WATERSTOP

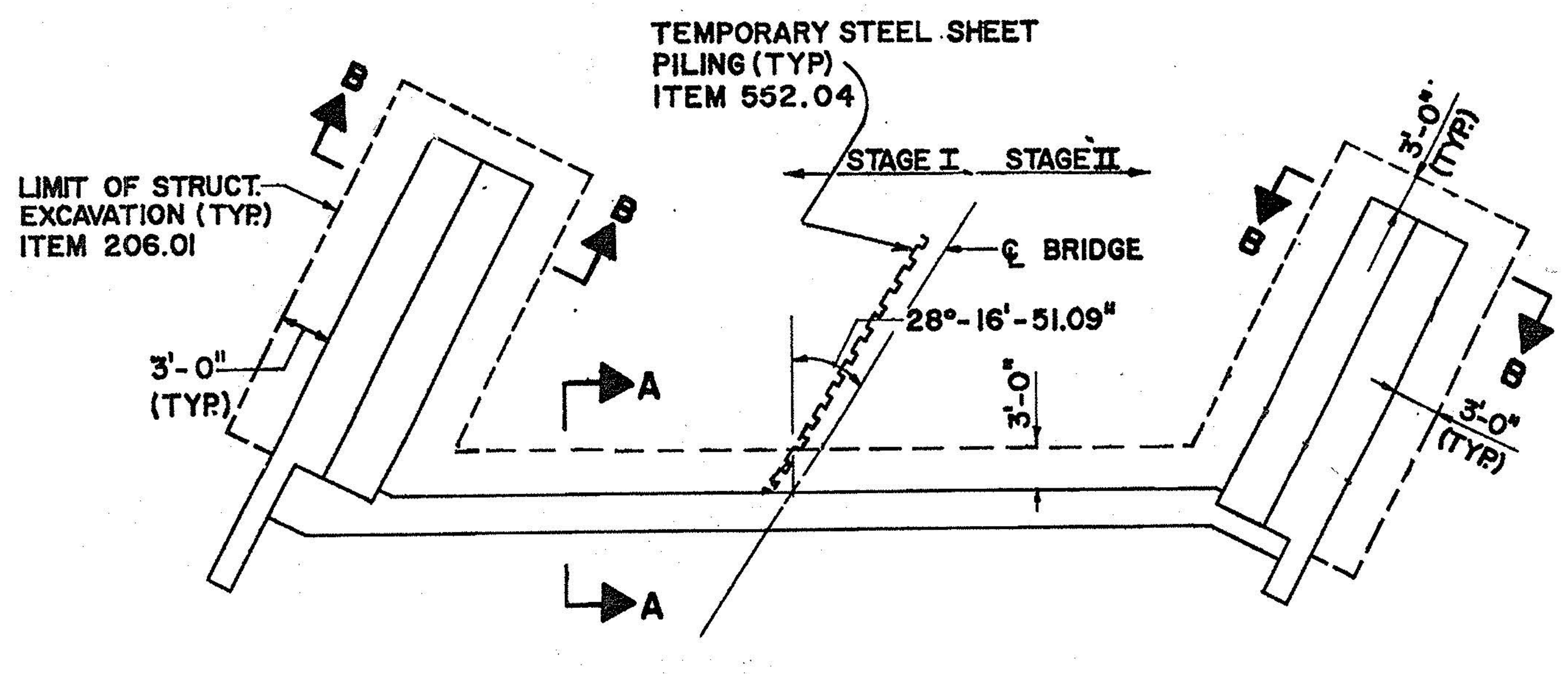
N.T.S.


LIMITS OF STRUCTURAL EXCAVATION AND SAFE OPERATION STEEL SHEET PILING, ITEM 552.05 (TYP)
3'-0" (TYP)
28°-16'-51.09" SKEW
3'-0" (TYP)
3'-0" (TYP)
ITEM 552.04 (TYP) DRIVEN TO EL.363.50
PROPOSED FOOTING EXTENSION (TYP)

EXCAVATION PLAN PIER 1 ONLY

N.T.S.

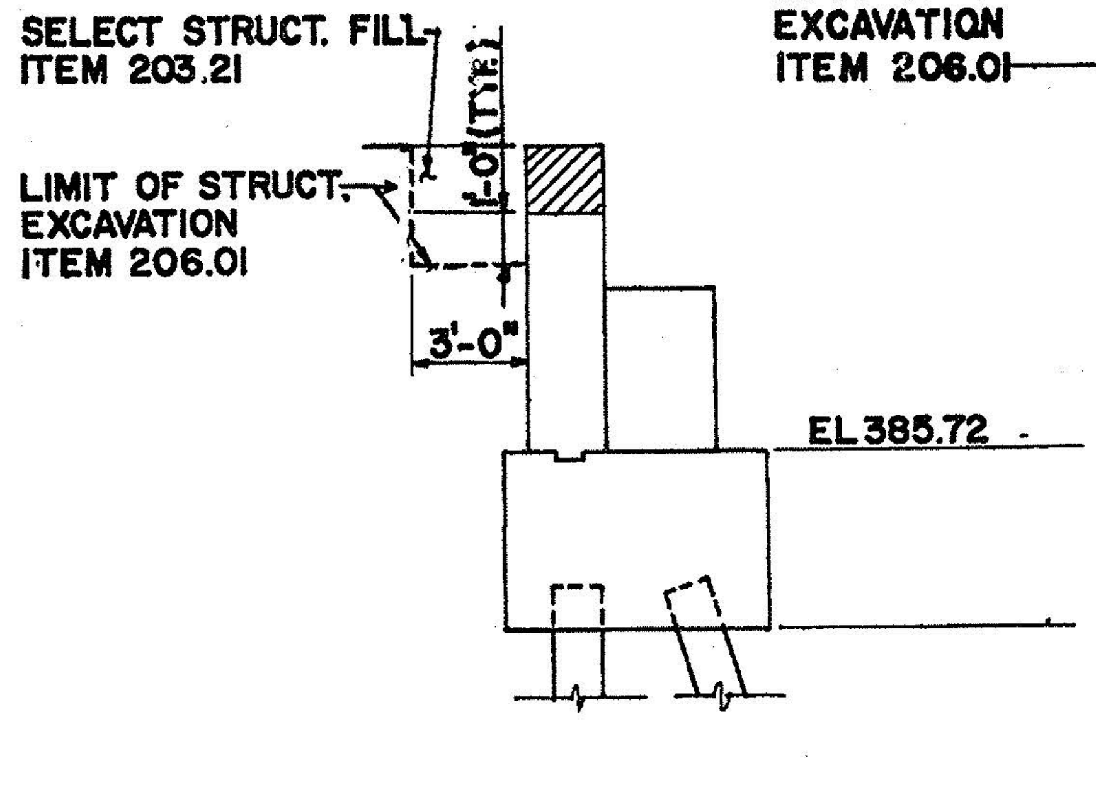
BEAMS A (A1 THRU A6) CORRESPOND TO SPAN 4
BEAMS B (B1 THRU B6) CORRESPOND TO SPAN 3
BEAMS C (C1 THRU C6) CORRESPOND TO SPAN 2
BEAMS D (D1 THRU D6) CORRESPOND TO SPAN 1


TEMPORARY STEEL SHEET PILING (TYP) ITEM 552.04
LIMIT OF STRUCT. EXCAVATION (TYP) ITEM 206.01
B
B
STAGE I
STAGE II
℄ BRIDGE
28°-16'-51.09"
3'-0" (TYP)
3'-0" (TYP)
3'-0"
A
3'-0" (TYP)
B
B
A

EXCAVATION PLAN - WEST ABUTMENT

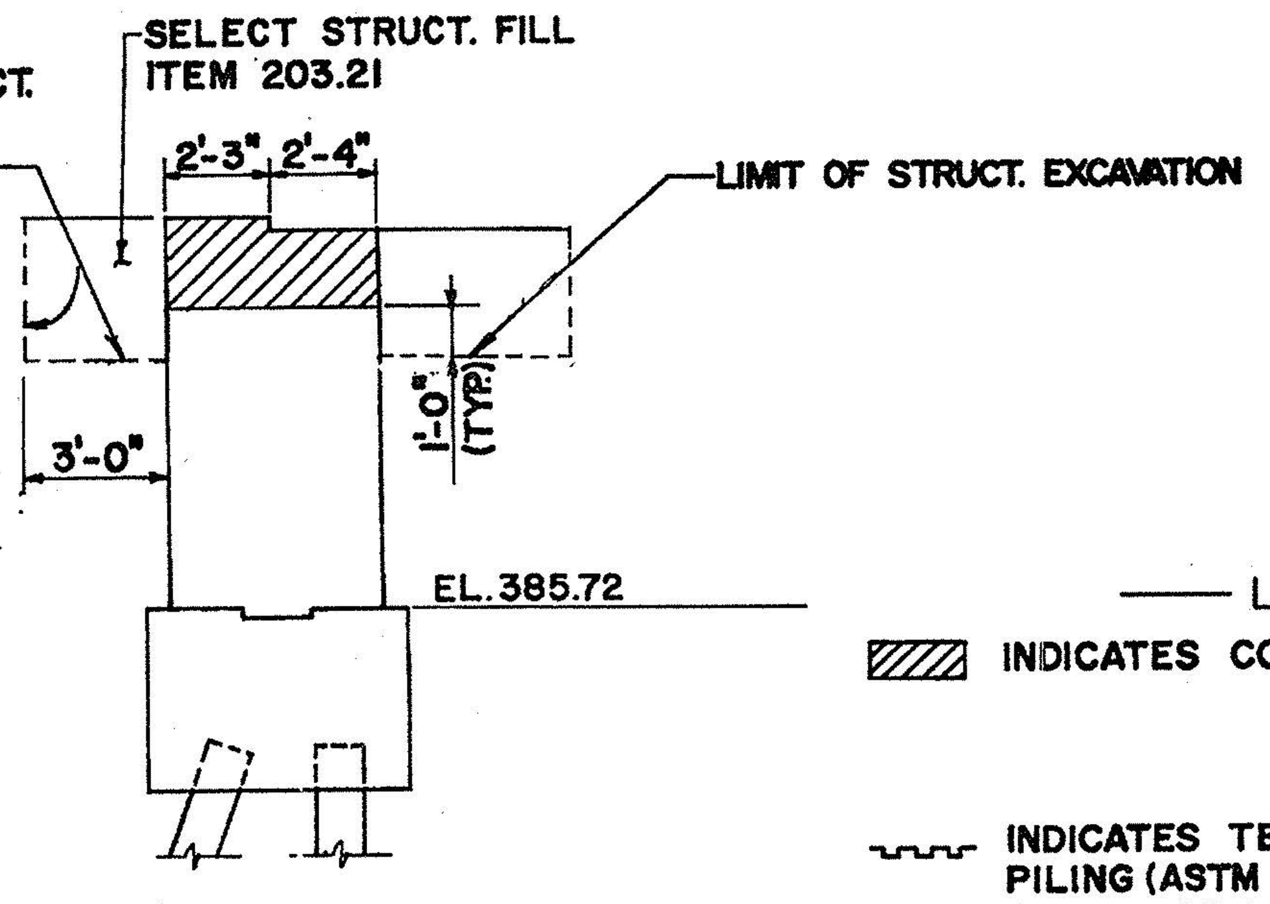
(EAST ABUTMENT SIMILAR)

N.T.S


SELECT STRUCT. FILL ITEM 203.21
1'-0" (TYP)
LIMIT OF STRUCT. EXCAVATION ITEM 206.01
3'-0"
EL.385.72

SECTION A-A

N.T.S


LIMIT OF STRUCT. EXCAVATION ITEM 206.01
SELECT STRUCT. FILL ITEM 203.21
2'-3"
2'-4"
LIMIT OF STRUCT. EXCAVATION
1'-0" (TYP)
3'-0"
EL.385.72

SECTION B-B

N.T.S

— LEGEND —

▨ INDICATES CONC. REMOVAL ITEM 580.01

﹏ INDICATES TEMPORARY STEEL SHEET PILING (ASTM A572, GR. 50), ITEM 552.04 (S_{min} = 14.3 in^3, T_{min} = 3/8 in) CUTOFF ELEV. 383.0

NO AS-BUILT REVISIONS

JACKSON AND TULL
CHARTERED ENGINEERS

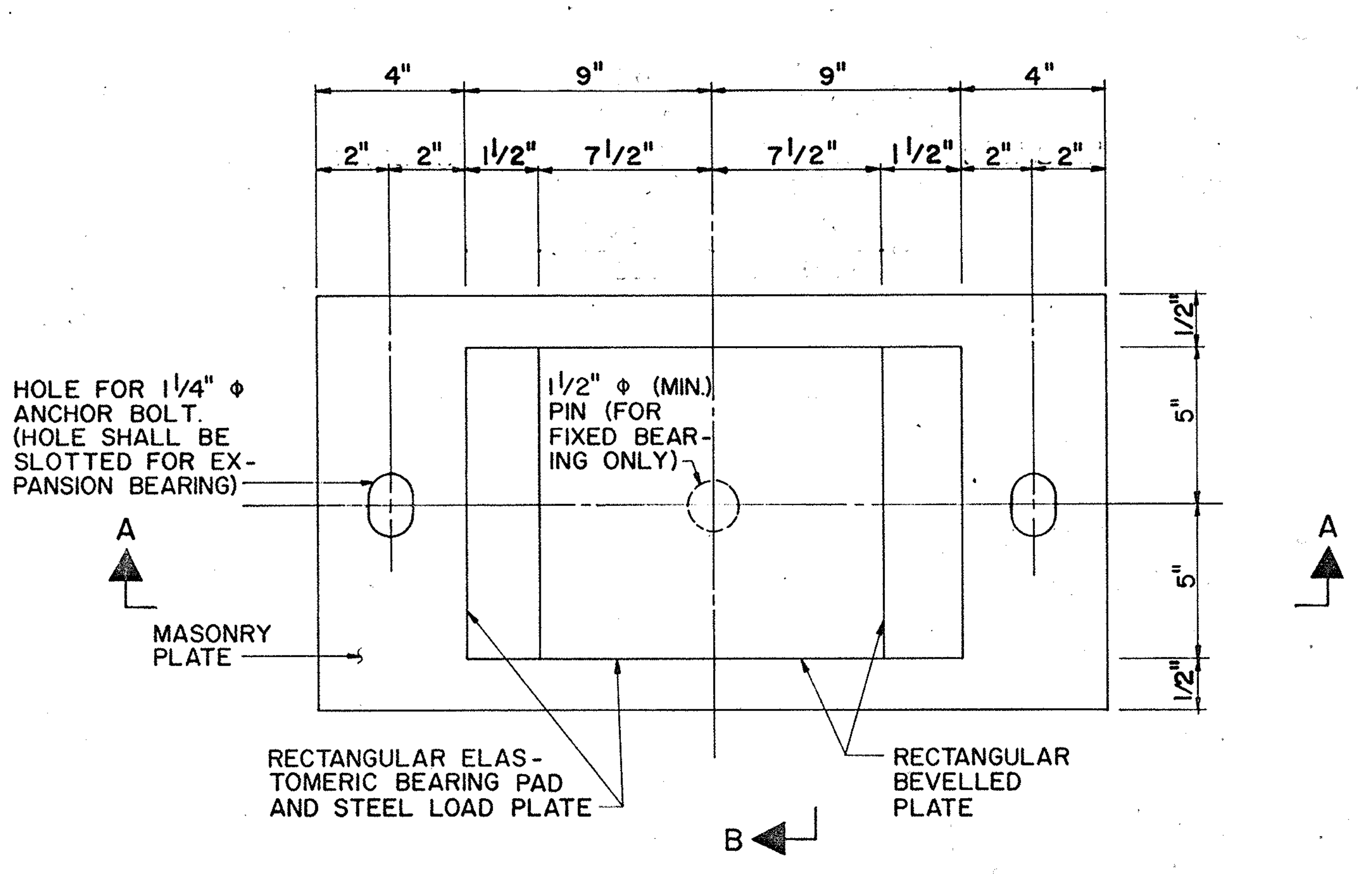
DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

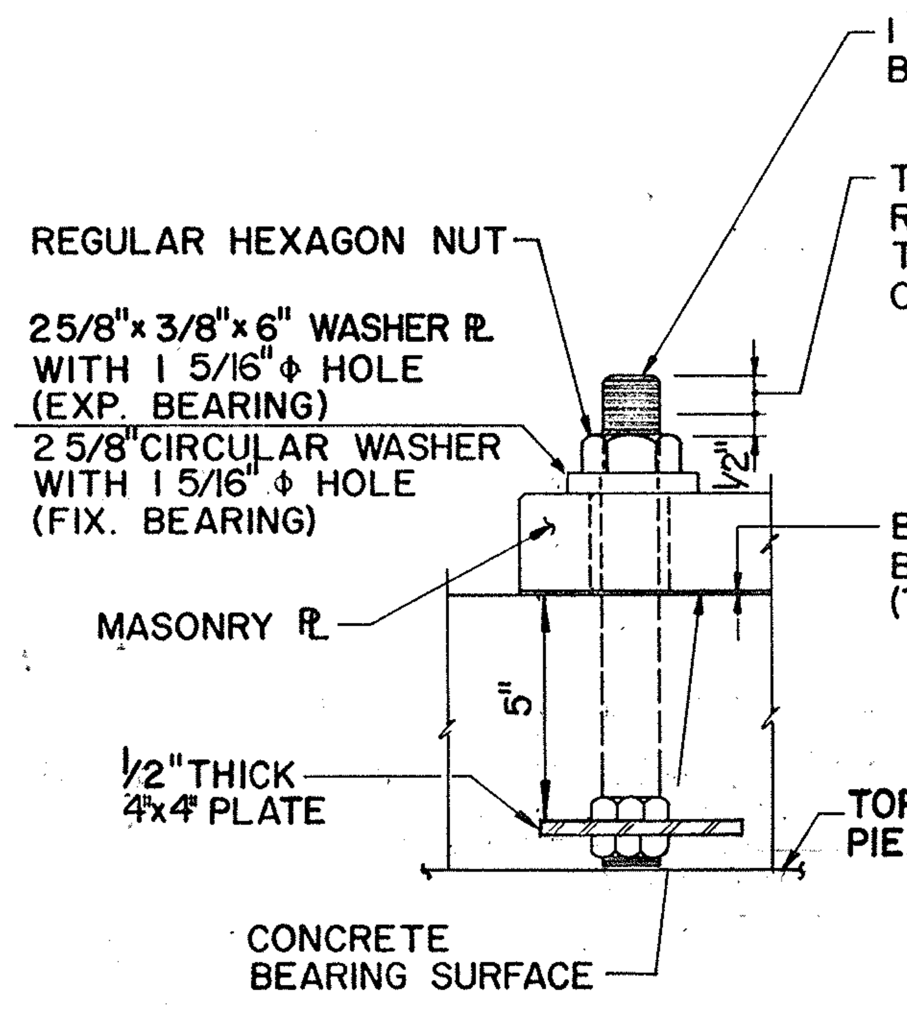
TITLE OF PROJECT: REHABILITATION OF MARIAVILLE ROAD BRIDGE
LOCATION OF PROJECT: MP 159.23, SCHENECTADY COUNTY
TITLE OF DRAWING: BRIDGE RAILING AND MISCELANEOUS DETAILS
CONTRACT NUMBER: TAA 91-10B
DATE: APRIL 1990
DRAWING NUMBER: 19

CHECKED BY:
DRAFTED BY:
DESIGNED BY:
IN CHARGE OF:


B
4"
9"
9"
4"
2"
2"
1 1/2"
7 1/2"
7 1/2"
1 1/2"
2"
2"
1/2"
5"
5"
1/2"
HOLE FOR 1 1/4" Φ ANCHOR BOLT. (HOLE SHALL BE SLOTTED FOR EXPANSION BEARING)
1 1/2" Φ (MIN.) PIN (FOR FIXED BEARING ONLY)
A
A
MASONRY PLATE
RECTANGULAR ELASTOMERIC BEARING PAD AND STEEL LOAD PLATE
RECTANGULAR BEVELLED PLATE
B

NOTE:
GIRDER NOT SHOWN

TYPICAL RECTANGULAR BEARING PLAN
N.T.S.

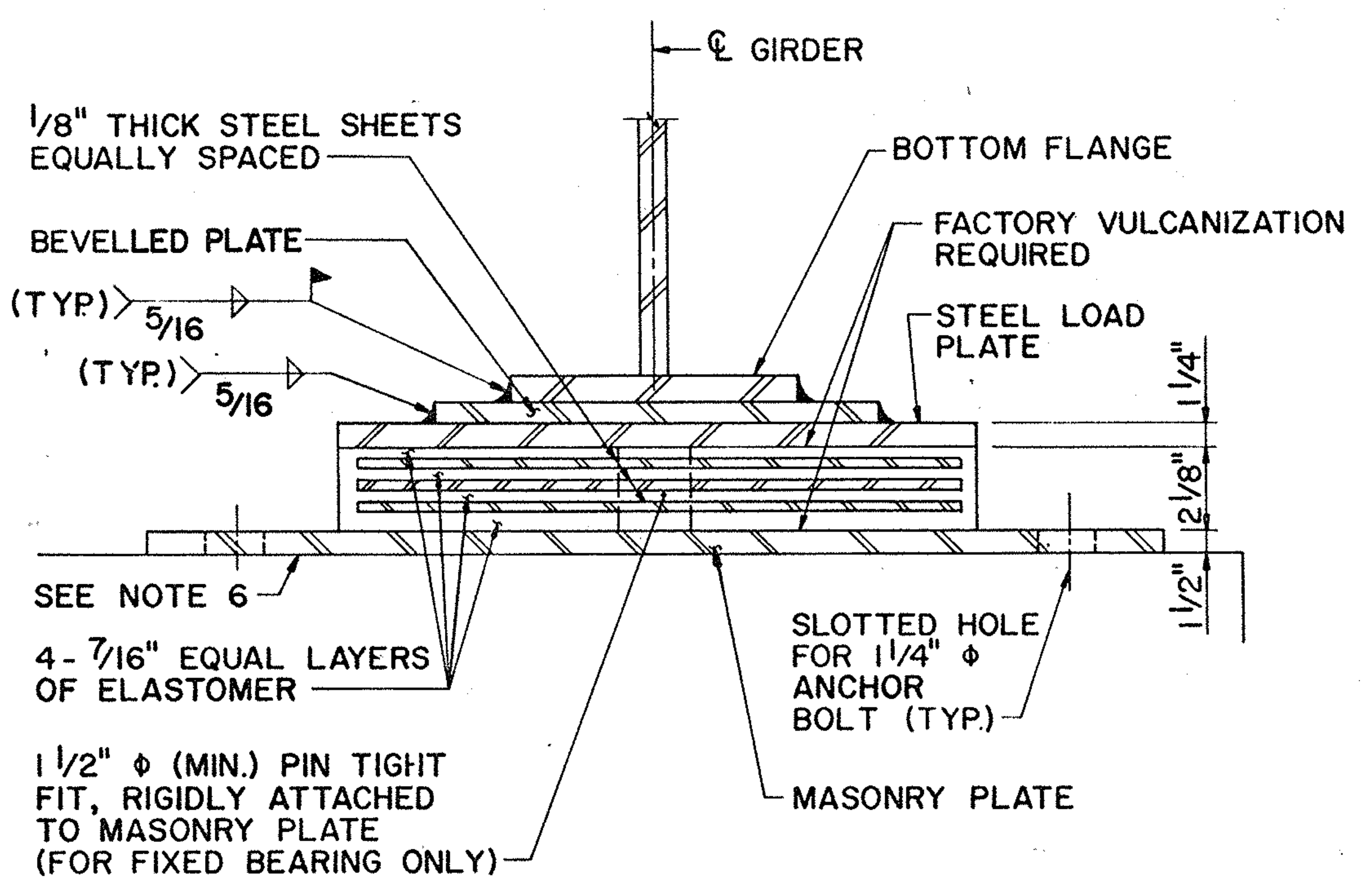

1 1/4" Φ (MIN.) FULLY THREADED ANCHOR BOLT - 12" LONG
THIS PORTION OF BOLT SHALL BE REMOVED AFTER NUT HAS BEEN TIGHTENED TO THE SATISFACTION OF THE ENGINEER
REGULAR HEXAGON NUT
2 5/8"x 3/8"x 6" WASHER ℞ WITH 1 5/16" Φ HOLE (EXP. BEARING)
2 5/8" CIRCULAR WASHER WITH 1 5/16" Φ HOLE (FIX. BEARING)
1/2"
BEARINGS SHALL BE PLACED ON A BEARING PAD CONFORMING TO 728-02 (TYP. ALL BEARINGS)
MASONRY ℞
5"
1/2" THICK 4"x4" PLATE
TOP OF PIER
CONCRETE BEARING SURFACE

NOTE:
ANCHOR BOLTS, WASHERS AND NUTS SHALL MEET THE REQUIREMENTS OF § 723-60. THEY SHALL BE GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF MATERIAL SPECIFICATION 719-01, "GALVANIZED COATINGS AND REPAIR METHODS." THEIR COST (INCLUDING GALVANIZING) AND THE COST OF WASHER PLATES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BEARING ITEMS.

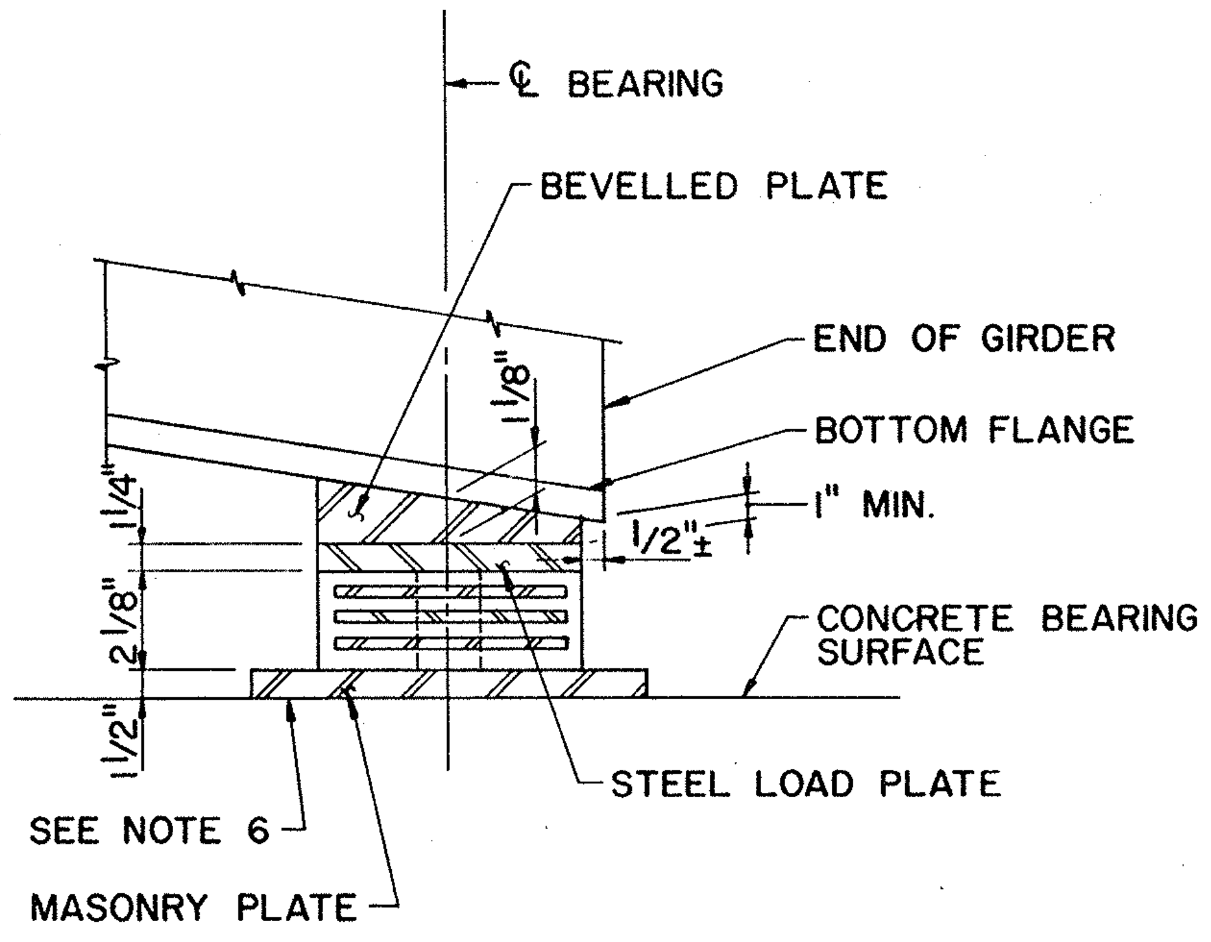
ANCHOR BOLT DETAIL FOR ALL BEARINGS
N.T.S.

NOTES:

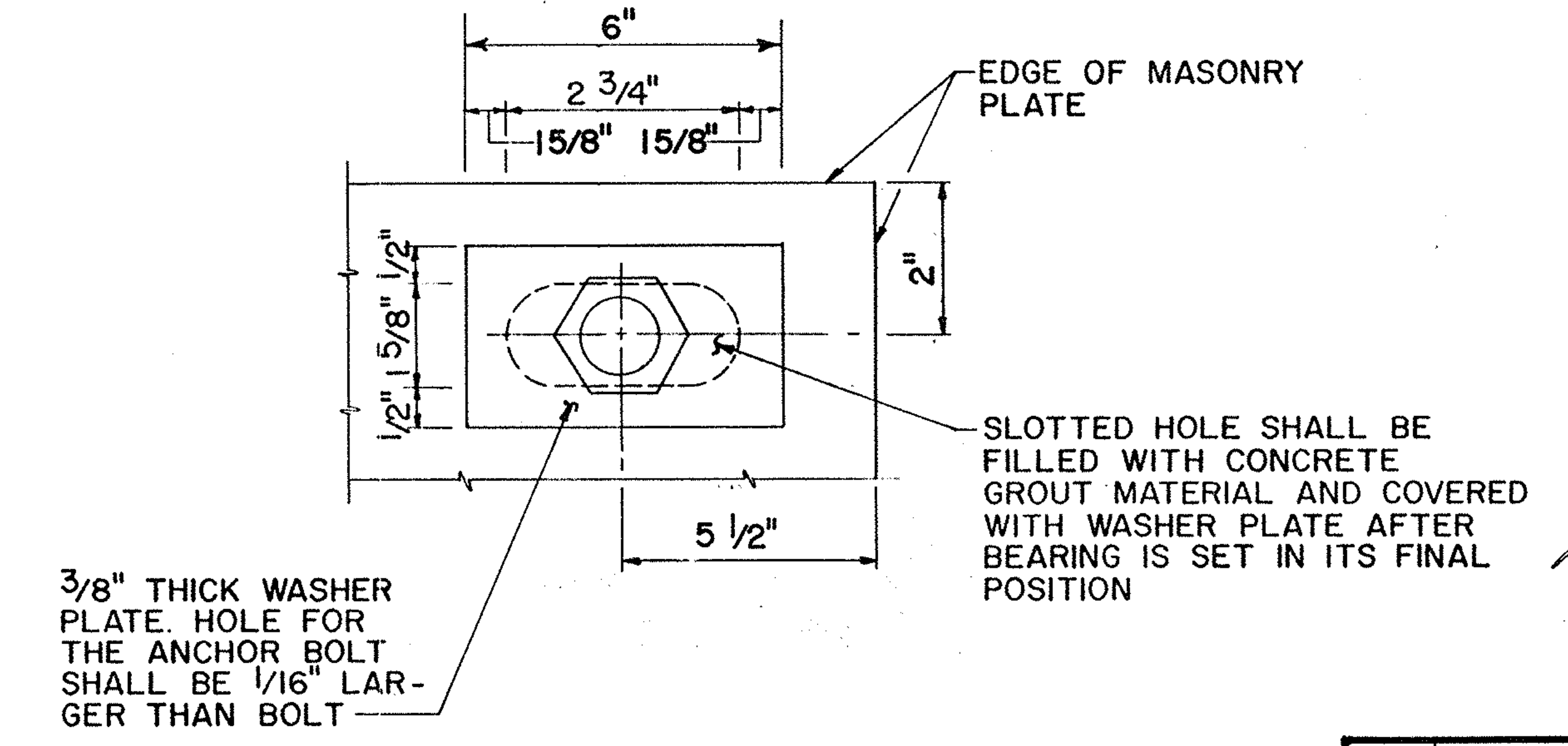
1. THE BEARINGS ARE DESIGNED SO THAT THE SUPERSTRUCTURE MAY BE ERECTED WHEN THE AMBIENT AIR TEMPERATURE IS WITHIN THE RANGE 40°F TO 90°F.
2. THE HARDNESS (SHORE 'A' DUROMETER) OF THE ELASTOMETER MATERIAL SHALL BE 50±10.
3. CONCRETE SURFACES UNDER THE BEARINGS SHALL CONFORM TO SECTION 565-3.02 "CONCRETE BEARING SURFACE PREPARATION" OF THE NEW YORK STATE STANDARD SPECIFICATIONS.
4. THE CONTINUOUS WELD CONNECTING THE LOAD PLATE TO THE BOTTOM FLANGE (OR SOLE PLATE) SHALL BE ALLOWED TO COOL AFTER EACH PASS. HOWEVER, THE TEMPERATURE OF THE STEEL ADJACENT TO THE ELASTOMER SHALL NOT EXCEED 200°F. TEMPERATURE SHALL BE CONTROLLED BY WELDING PROCEDURES AND TEMPERATURE INDICATING CRAYONS OR OTHER DEVICES APPROVED BY THE ENGINEER.
5. THE COST FOR THE BEARINGS SHALL BE PAID FOR UNDER ITEM 565.2002. ALL MATERIAL AND WORK SHALL CONFORM TO THE SPECIFICATIONS FOR THE ABOVE ITEM.
6. SHIM PLATE MAY BE REQUIRED FOR HIGH SIDE BEARINGS. **COST TO BE INCLUDED IN ITEM 565.2002**


℄ GIRDER
1/8" THICK STEEL SHEETS EQUALLY SPACED
BOTTOM FLANGE
BEVELLED PLATE
FACTORY VULCANIZATION REQUIRED
(TYP.) 5/16
(TYP.) 5/16
STEEL LOAD PLATE
1 1/4"
2 1/8"
1/2"
SEE NOTE 6
4 - 7/16" EQUAL LAYERS OF ELASTOMER
SLOTTED HOLE FOR 1 1/4" Φ ANCHOR BOLT (TYP.)
1 1/2" Φ (MIN.) PIN TIGHT FIT, RIGIDLY ATTACHED TO MASONRY PLATE (FOR FIXED BEARING ONLY)
MASONRY PLATE

SECTION A-A
N.T.S.



SECTION B-B
N.T.S.

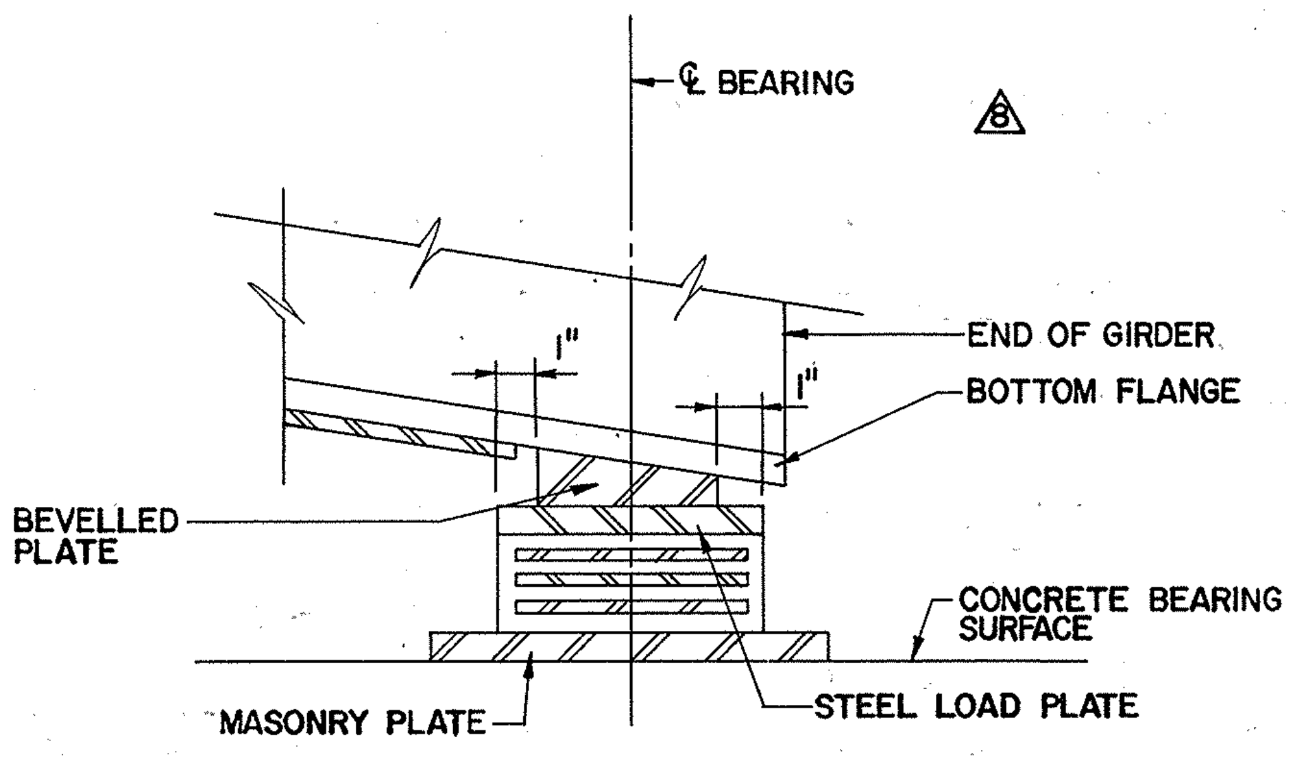

6"
2 3/4"
15/8"
15/8"
EDGE OF MASONRY PLATE
2"
1/2"
1 5/8"
1/2"
5 1/2"
SLOTTED HOLE SHALL BE FILLED WITH CONCRETE GROUT MATERIAL AND COVERED WITH WASHER PLATE AFTER BEARING IS SET IN ITS FINAL POSITION
3/8" THICK WASHER PLATE. HOLE FOR THE ANCHOR BOLT SHALL BE 1/16" LARGER THAN BOLT

No. 40729

TYPICAL ANCHOR BOLT DETAIL
(FOR EXPANSION BEARING ONLY)
N.T.S.

MAXIMUM DESIGN REACTIONS (KIPS)				
LOCATION	BEARING	DL + SDL	LL + I	TOTAL
PIER	EXPANSION	42.8	47.1	89.9
	FIXED	44.5	58.5	103.0
ABUTMENT	FIXED	29.7	46.0	75.7

TABLE OF MAX. DESIGN REACTIONS FOR MARIAVILLE RD. BRIDGE



FASCIA BEAMS-SPANS 2 & 3
N.T.S

BEVEL PLATE TABLE 8

BEARING	T_h	T_l
EAST ABUTMENT	1-1/4"	1"
PIER 1	1-1/4"	1"
PIER 2	1-1/4"	1-1/8"
PIER 3	NO BEVEL REQUIRED	
WEST ABUTMENT	NO BEVEL REQUIRED	

8/17/92	BEVEL PLATE	P.E.B.	8
DATE	DESCRIPTION	BY	SYM

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

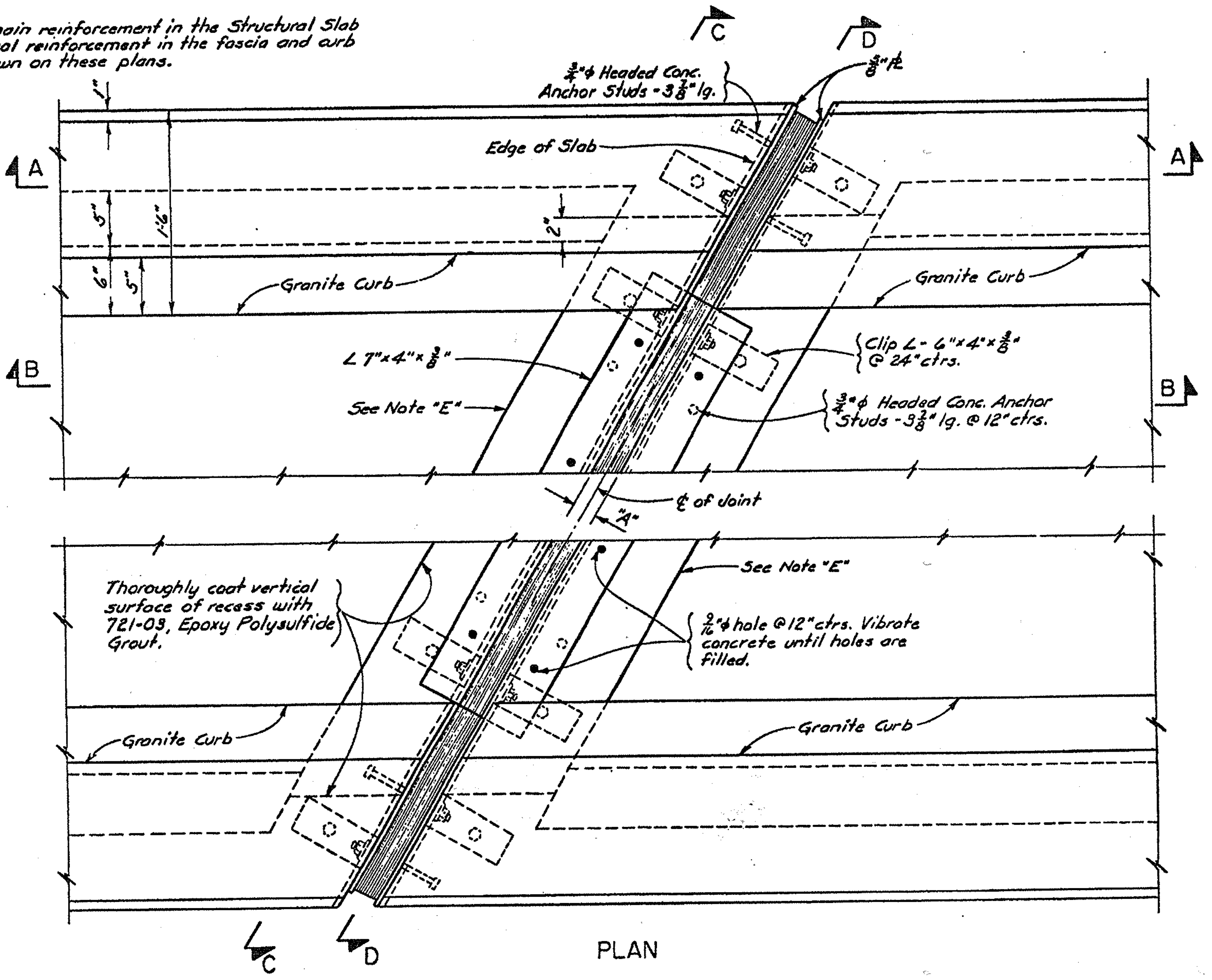
TITLE OF PROJECT: REHABILITATION OF MARIAVILLE ROAD BRIDGE
LOCATION OF PROJECT: M.P. 159.23 SCHENECTADY COUNTY
TITLE OF DRAWING: **ELASTOMERIC BEARING DETAILS**
CONTRACT NUMBER: TAA 91 - 10 B
DATE: APRIL 1990
DRAWING NUMBER: 20 R1

JACKSON AND TULL
CHARTERED ENGINEERS

CHECKED BY:
DRAFTED BY:
DESIGNED BY:
IN CHARGE OF:

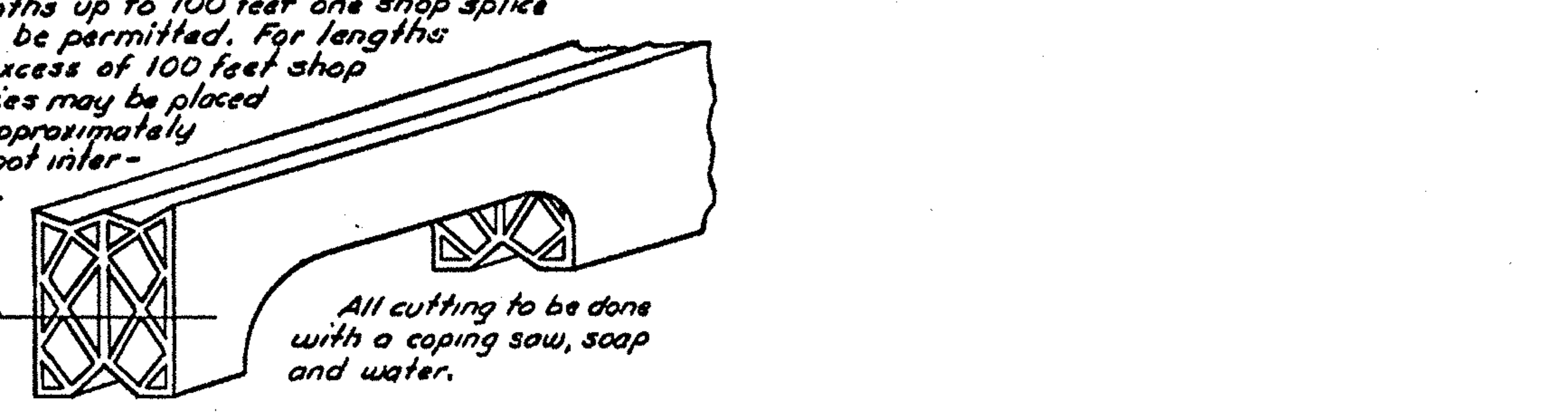
21

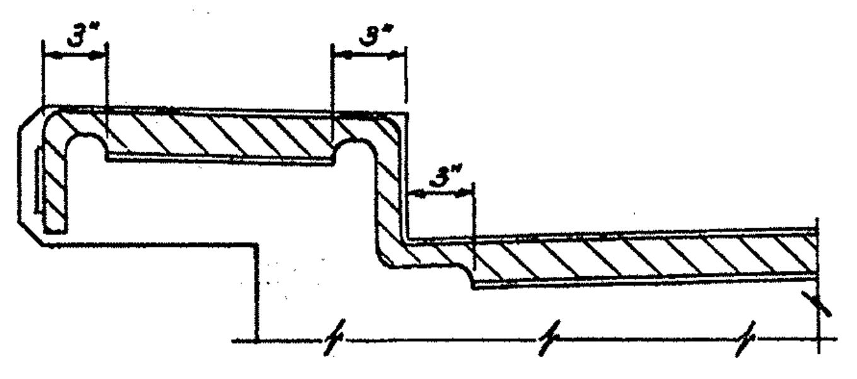
Note:
The main reinforcement in the Structural Slab and the usual reinforcement in the fascia and curb are not shown on these plans.


C
D
¾"ϕ Headed Conc. Anchor Studs - 3⅞" lg.
⅜" PL
Edge of Slab
A
A
1"
5"
1'-6"
6"
5"
2"
Granite Curb
Granite Curb
B
B
∠ 7"×4"×⅜"
Clip ∠ - 6"×4"×⅜" @ 24" ctrs.
See Note "E"
¾"ϕ Headed Conc. Anchor Studs - 3⅞" lg. @ 12" ctrs.
℄ of Joint
"A"
See Note "E"
Thoroughly coat vertical surface of recess with 721-03, Epoxy Polysulfide Grout.
9/16"ϕ hole @ 12" ctrs. Vibrate concrete until holes are filled.
Granite Curb
Granite Curb
C
D

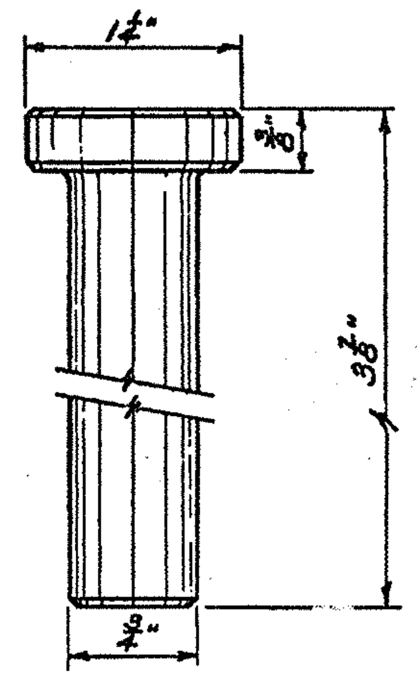
PLAN

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

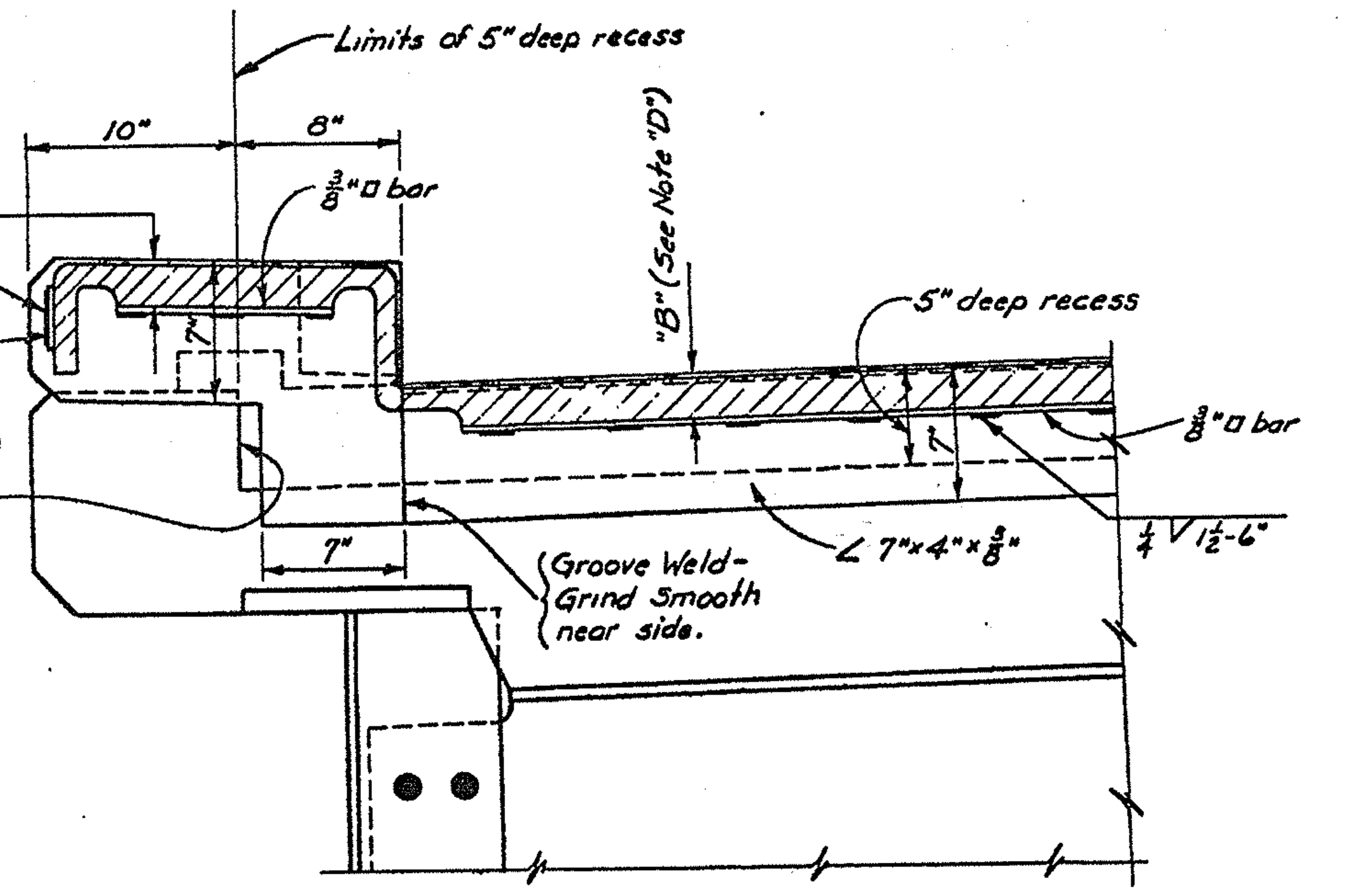

Do not cut seal above this line.
All cutting to be done with a coping saw, soap and water.



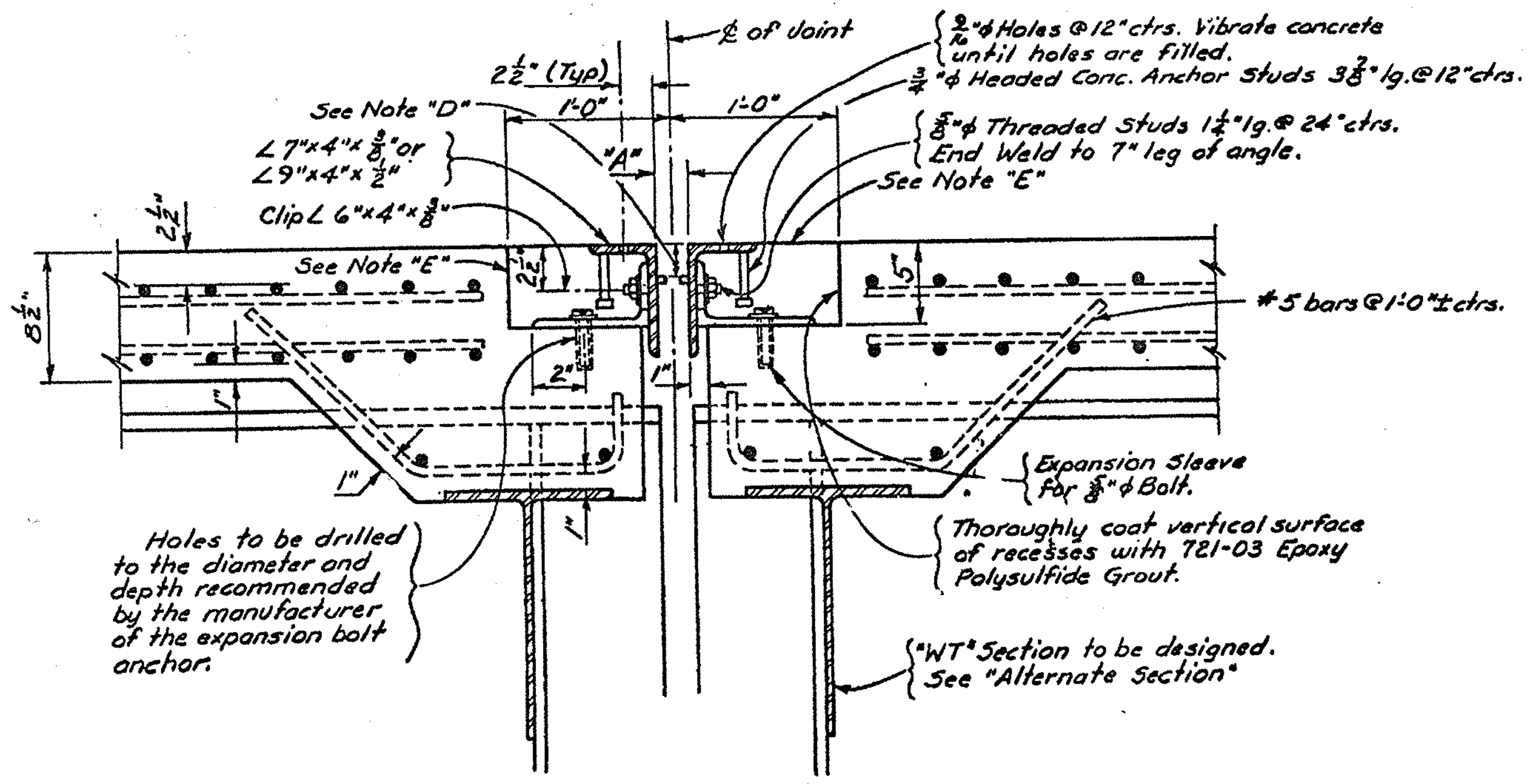
DETAIL FOR CUTTING AND BENDING SEAL



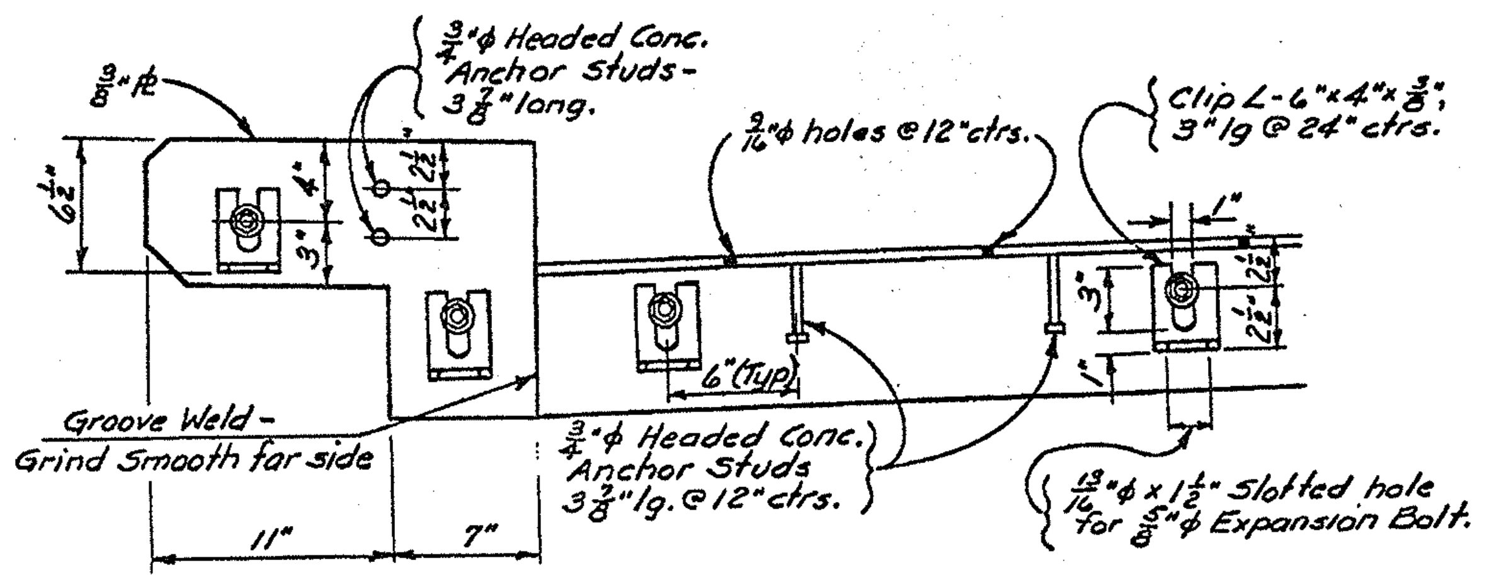
DETAIL OF HEADED CONCRETE ANCHOR STUD



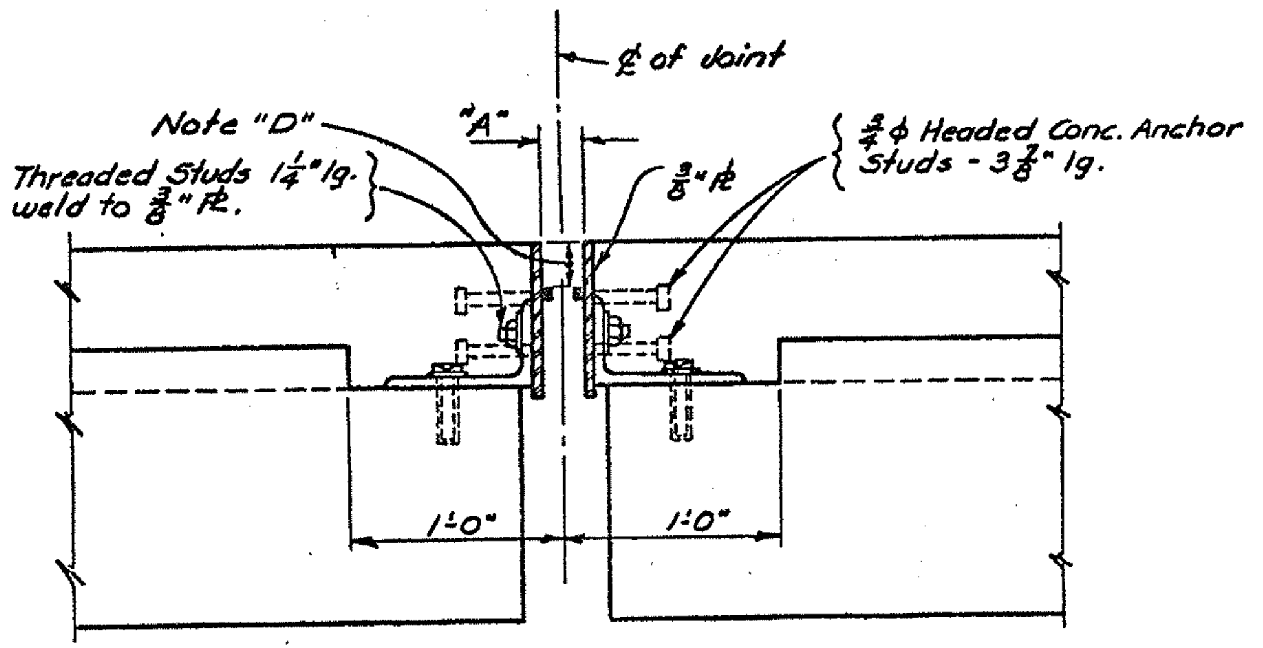
SECTION D-D


℄ of Joint
9/16"ϕ Holes @ 12" ctrs. Vibrate concrete until holes are filled.
2½" (Typ)
¾"ϕ Headed Conc. Anchor Studs 3⅞" lg. @ 12" ctrs.
See Note "D"
1'-0"
1'-0"
⅝"ϕ Threaded Studs 1¼" lg. @ 24" ctrs. End Weld to 7" leg of angle.
∠ 7"×4"×⅜" or ∠ 9"×4"×½"
"A"
See Note "E"
Clip ∠ 6"×4"×⅜"
2½"
See Note "E"
2½"
5"
8½"
#5 bars @ 1'-0" ± ctrs.
2"
1"
1"
1"
Expansion Sleeve for ⅝"ϕ Bolt.
Holes to be drilled to the diameter and depth recommended by the manufacturer of the expansion bolt anchor.
Thoroughly coat vertical surface of recesses with 721-03 Epoxy Polysulfide Grout.
"WT" Section to be designed. See "Alternate Section"

SECTION B-B


⅜" PL
¾"ϕ Headed Conc. Anchor Studs - 3⅞" long.
9/16"ϕ holes @ 12" ctrs.
Clip ∠ - 6"×4"×⅜", 3" lg @ 24" ctrs.
6½"
4"
3"
2½"
2½"
1"
3"
2½"
2½"
1"
6" (Typ)
Groove Weld - Grind Smooth far side
¾"ϕ Headed Conc. Anchor Studs 3⅞" lg. @ 12" ctrs.
13/16"ϕ × 1½" Slotted hole for ⅝"ϕ Expansion Bolt.
11"
7"

SECTION C-C
(ONLY THE STEEL SHOWN)


℄ of Joint
Note "D"
"A"
⅝"ϕ Threaded Studs 1¼" lg. End weld to ⅜" PL.
⅜" PL
¾"ϕ Headed Conc. Anchor Studs - 3⅞" lg.
1'-0"
1'-0"

Reinforcement not shown.

SECTION A-A

Note "D"
This depth shall be indicated on the shop drawings and shall be such that when the seal is compressed to 50% of its normal width the top of the seal shall be not less than ¼" nor more than ¾" below the top of roadway.

Note "E"
Concrete in recesses on superstructures provided for installing the Armored Joint System shall comply with the Specifications for the current slab 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.

Note: It is desirable to have the Armored Joint with its Compression Seal assembled in the shop and delivered to the job site all set for installation in its preformed recess in the structural slab. In cases where the Armored Joint cannot be assembled in the shop, due to its excessive length causing shipping problems, the joint shall be sealed with the Compression Seal before the structure is opened to traffic, including construction traffic, and before discontinuing operation when work is suspended during the Winter.

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

SEALS		
TYPE	NOMINAL WIDTH	DIM "A" AT 68° F
5	3½"	2⅛"

NO AS-BUILT REVISIONS

DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITATION OF
MARIAVILLE ROAD BRIDGE

LOCATION OF PROJECT
MP 159.23 SCHENECTADY COUNTY

TITLE OF DRAWING
EXPANSION JOINTS
PLAN, ELEVATION AND DETAILS

CONTRACT NUMBER:
TAA 91-10B

DATE:
MAY 1990

DRAWING NUMBER:
21

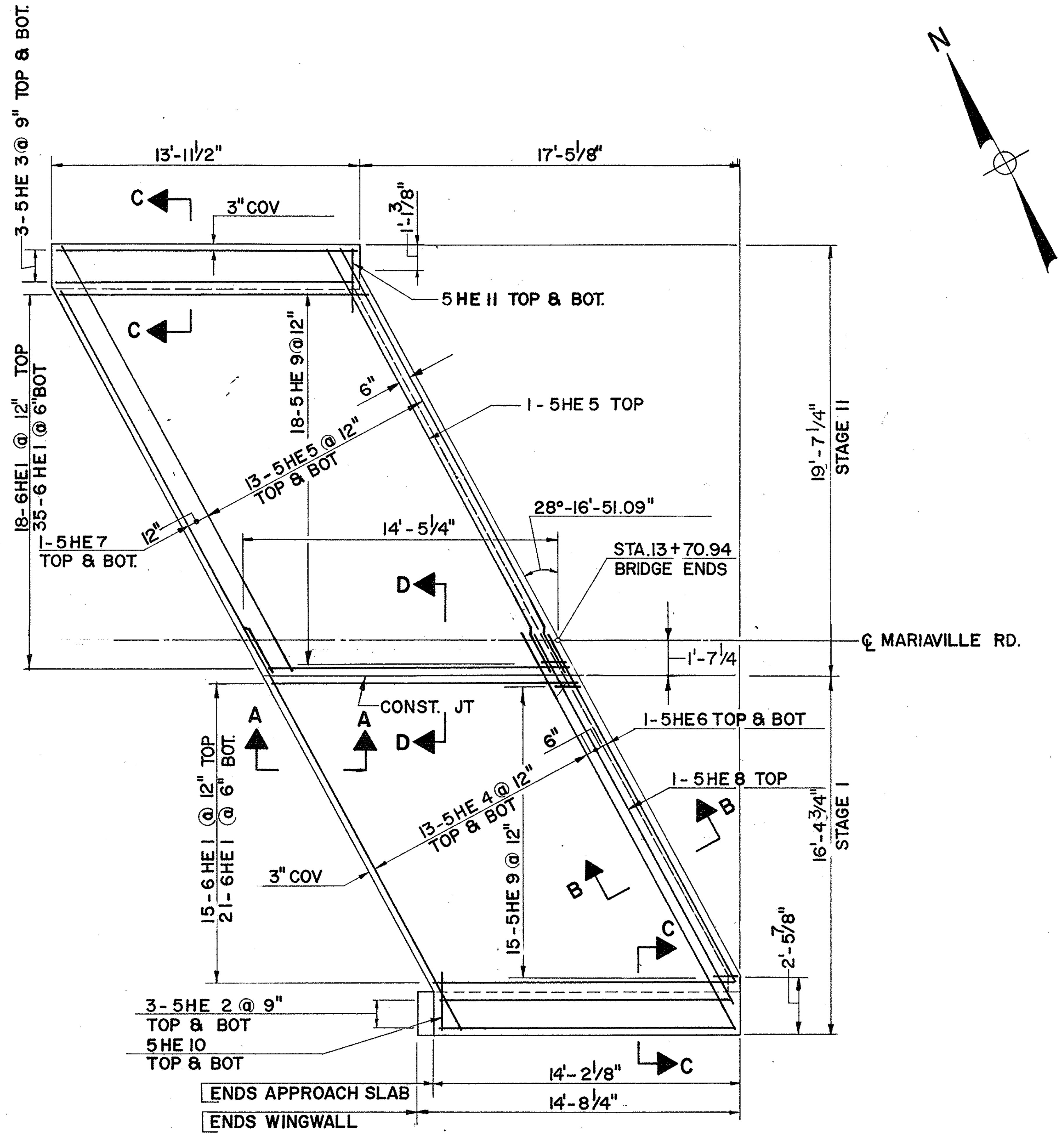
CHECKED BY:

DRAFTED BY:

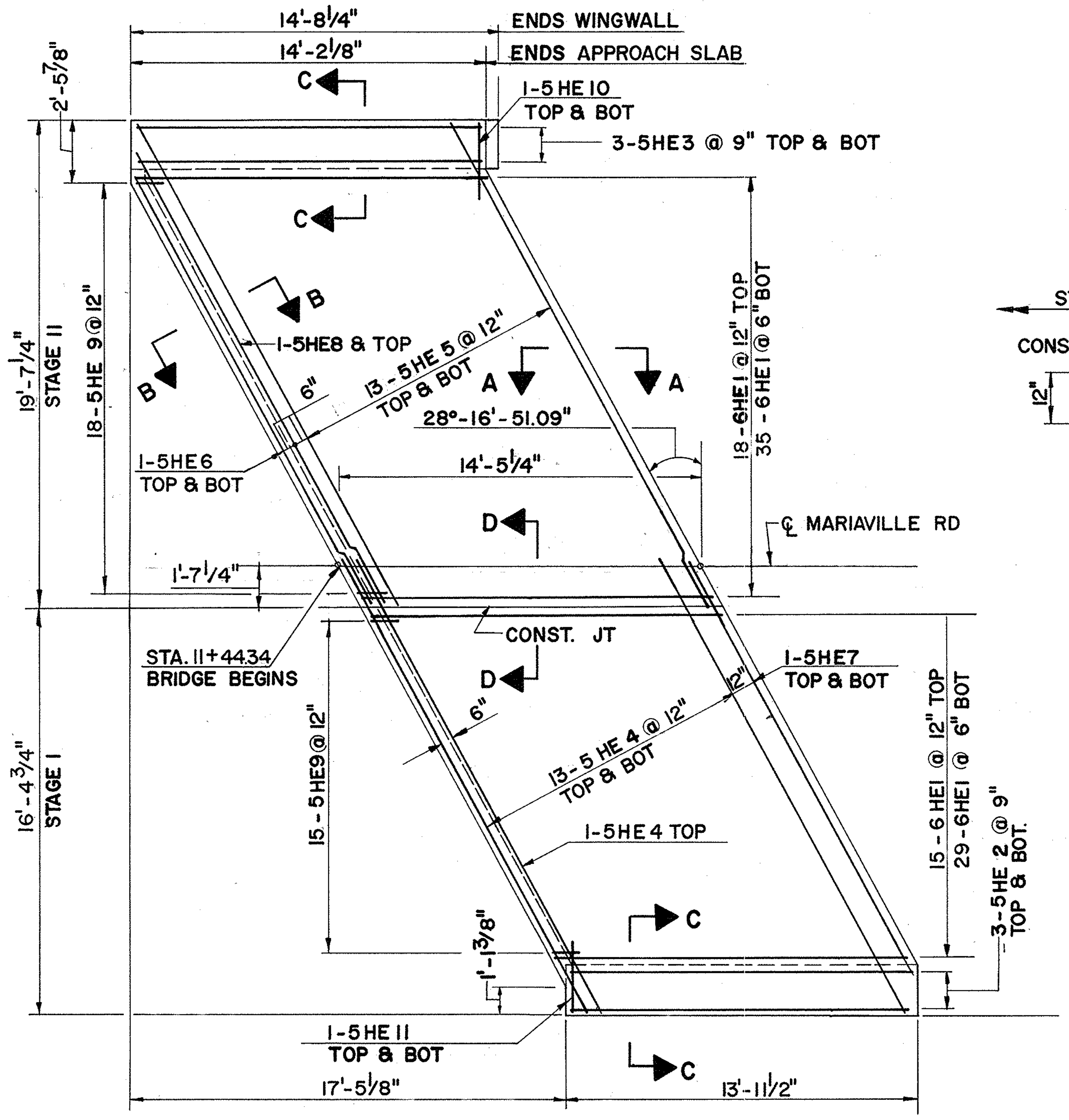
DESIGNED BY:

IN CHARGE OF:

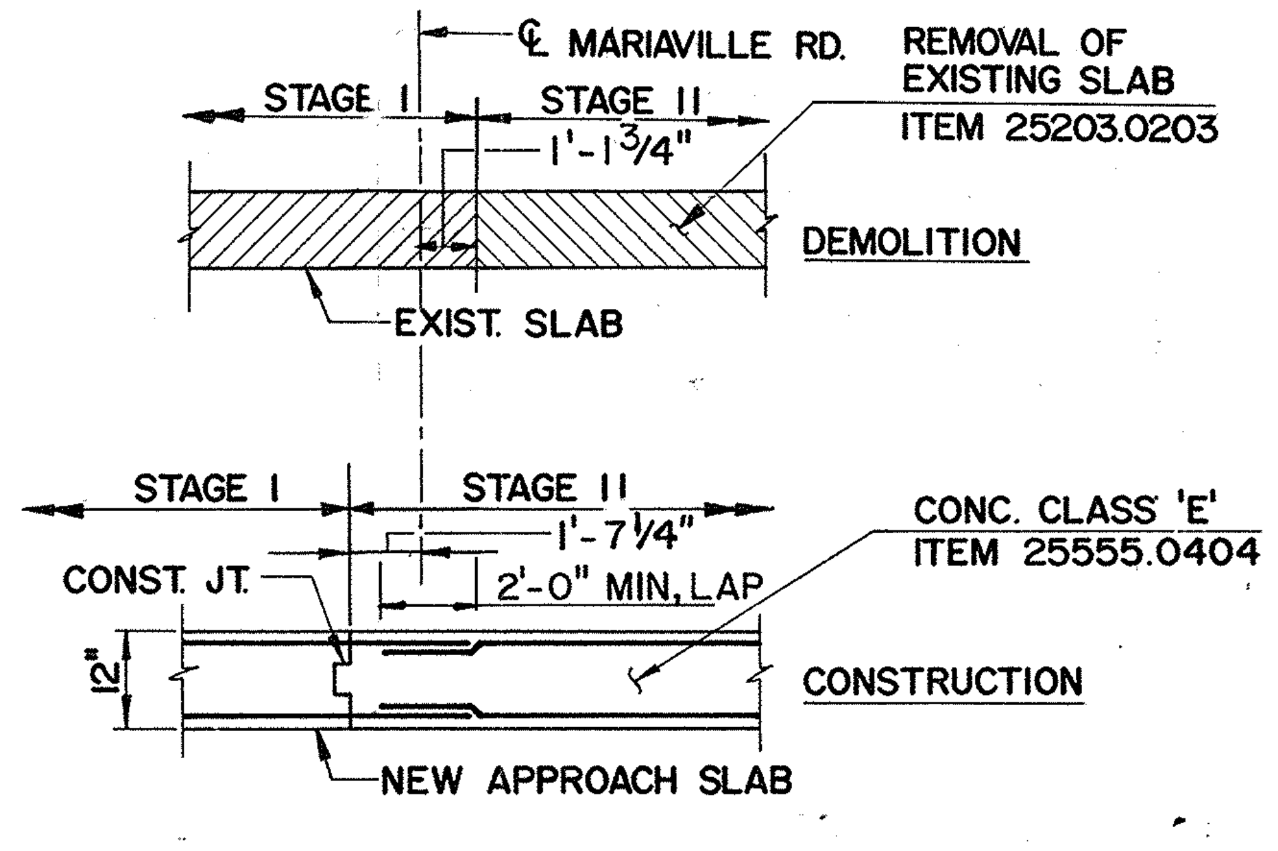
22



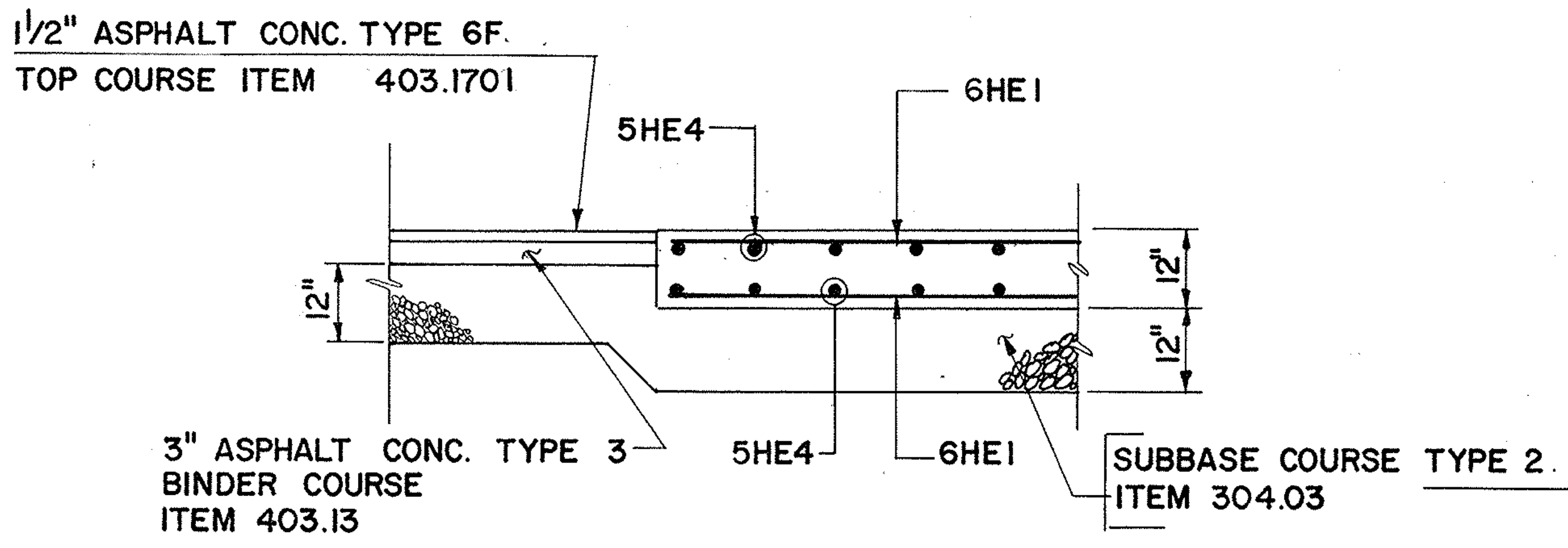
APPROACH SLAB AT WEST ABUTMENT
SCALE: 1/4"=1'-0"



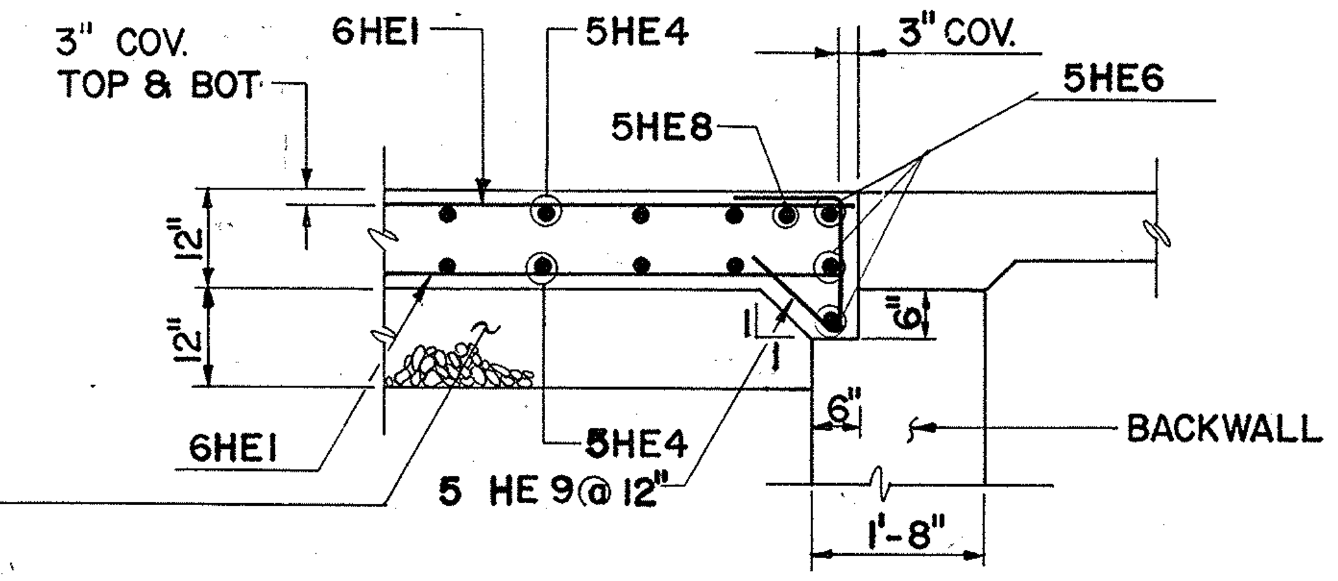
APPROACH SLAB AT EAST ABUTMENT
SCALE: 1/4"=1'-0



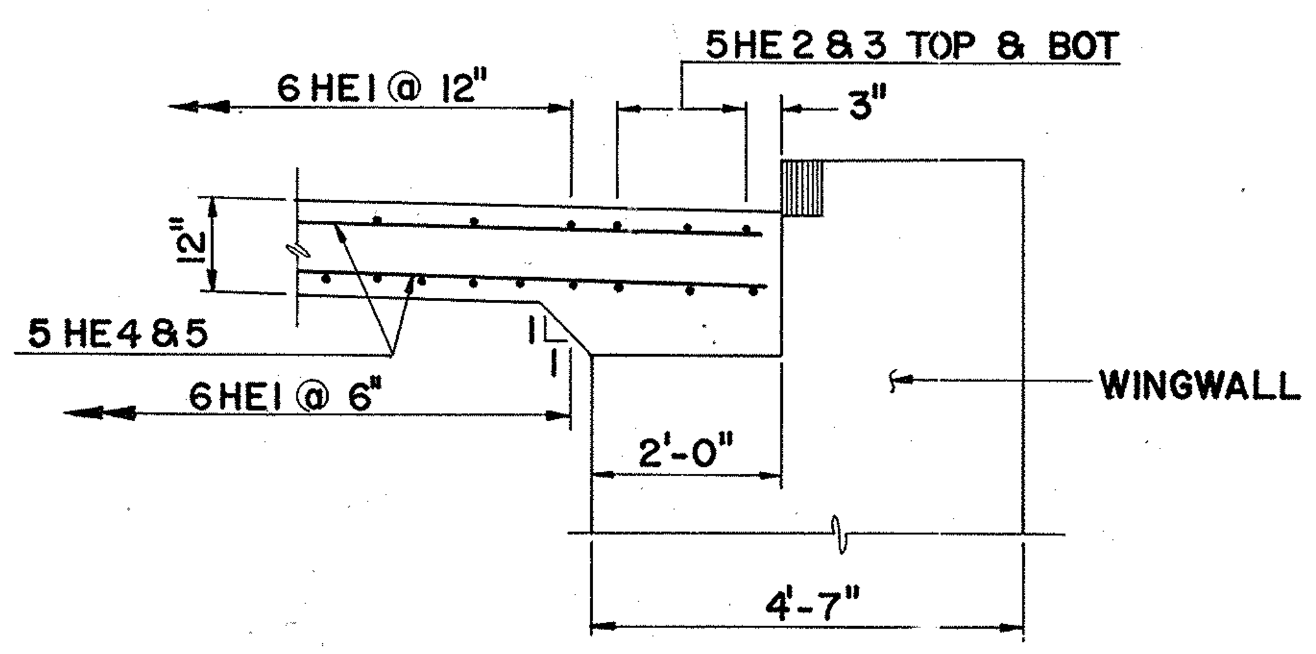
SECTION D-D
N.T.S.



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



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



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

NO AS-BUILT REVISIONS

DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITATION OF MARIAVILLE RD. BRIDGE

LOCATION OF PROJECT MP 159.23, SCHENECTADY COUNTY

TITLE OF DRAWING

APPROACH SLAB

CONTRACT NUMBER TAA 91-10B

DATE: APRIL 1990

DRAWING NUMBER: 22

JACKSON AND TULL
CHARTERED ENGINEERS

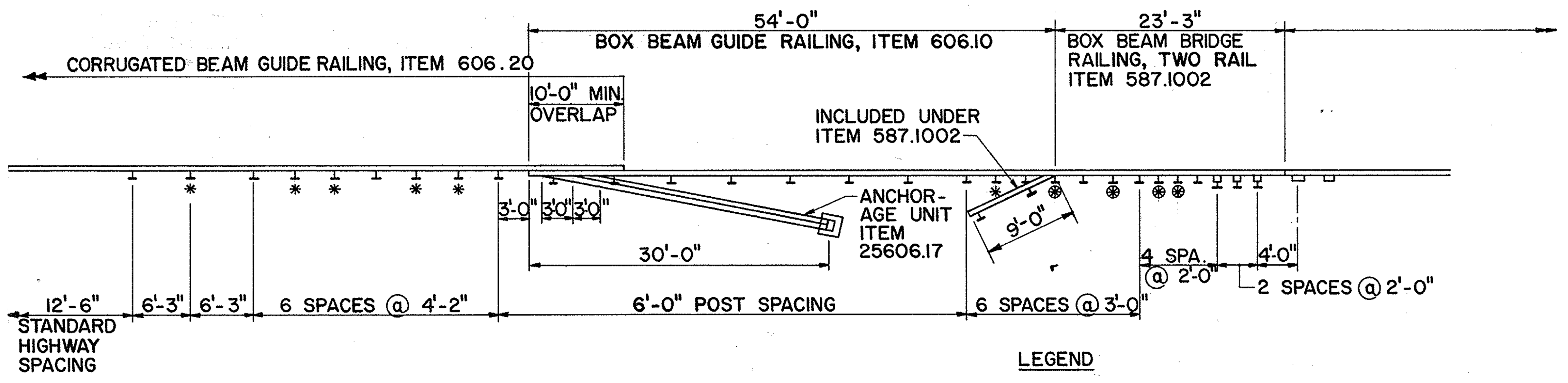
CHECKED BY:

DRAFTED BY:

DESIGNED BY:

IN CHARGE OF:

TCA 301-565-3340


CORRUGATED BEAM GUIDE RAILING ANCHORAGE UNIT ITEM 606.22
N.E. & S.E. APPROACH
CORRUGATED BEAM GUIDE RAILING, ITEM 606.20
54'-0"
BOX BEAM GUIDE RAILING, ITEM 606.10
10'-0" MIN. OVERLAP
23'-3"
BOX BEAM BRIDGE RAILING, TWO RAIL ITEM 587.1002
INCLUDED UNDER ITEM 587.1002
ANCHOR-AGE UNIT ITEM 25606.17
3'-0"
3'-0"
3'-0"
30'-0"
9'-0"
4 SPA. @ 2'-0"
4'-0"
2 SPACES @ 2'-0"
12'-6"
STANDARD HIGHWAY SPACING
6'-3"
6'-3"
6 SPACES @ 4'-2"
6'-0" POST SPACING
6 SPACES @ 3'-0"

LEGEND

* INDICATES BACK-UP POSTS ITEM 15606.4801

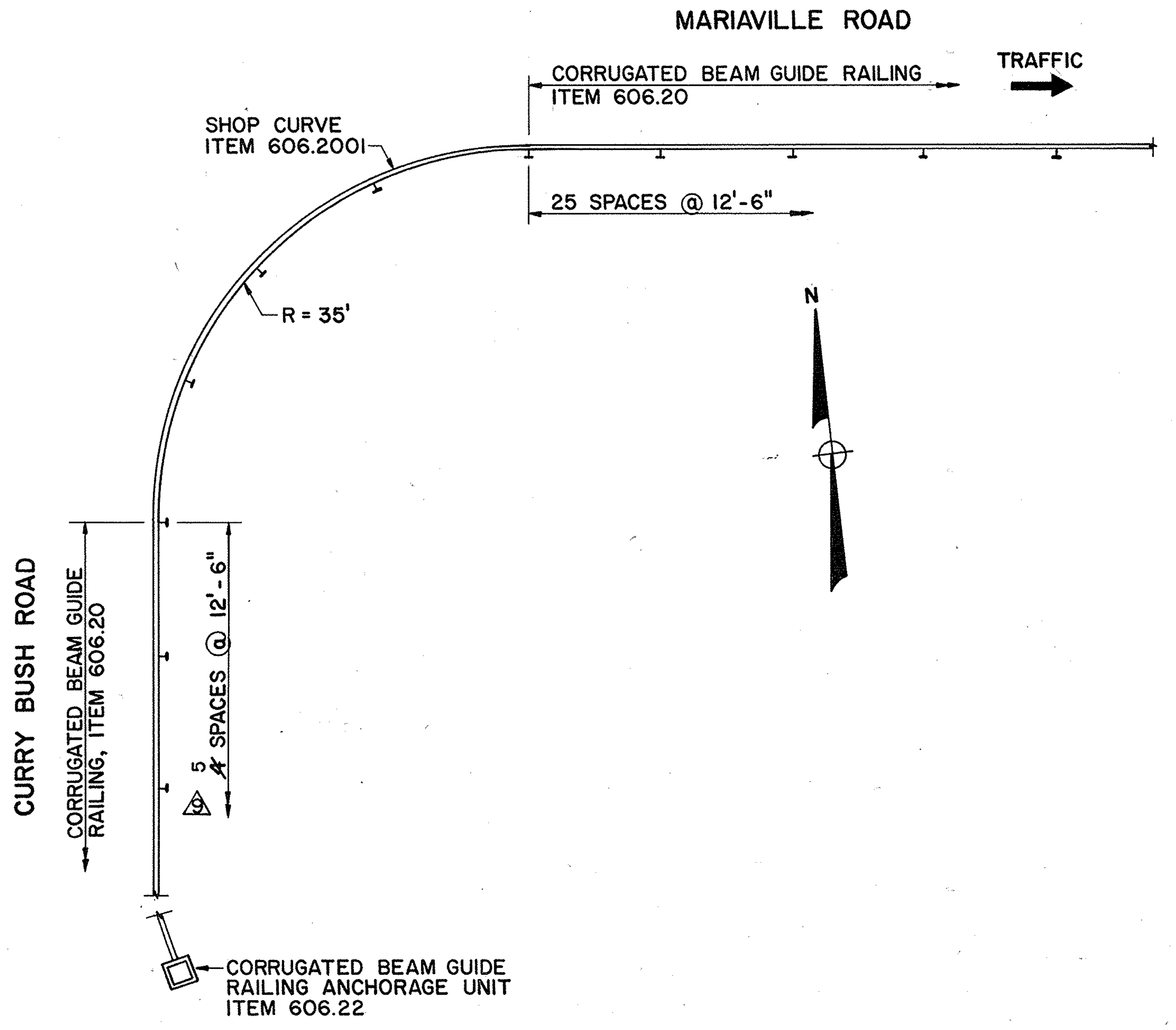
⊛ INDICATES BACK-UP POSTS INCLUDED UNDER ITEM 587.1002

PROPOSED GUIDE RAILING PLAN (Mariaville)

SCALE: 1" = 1'-0"

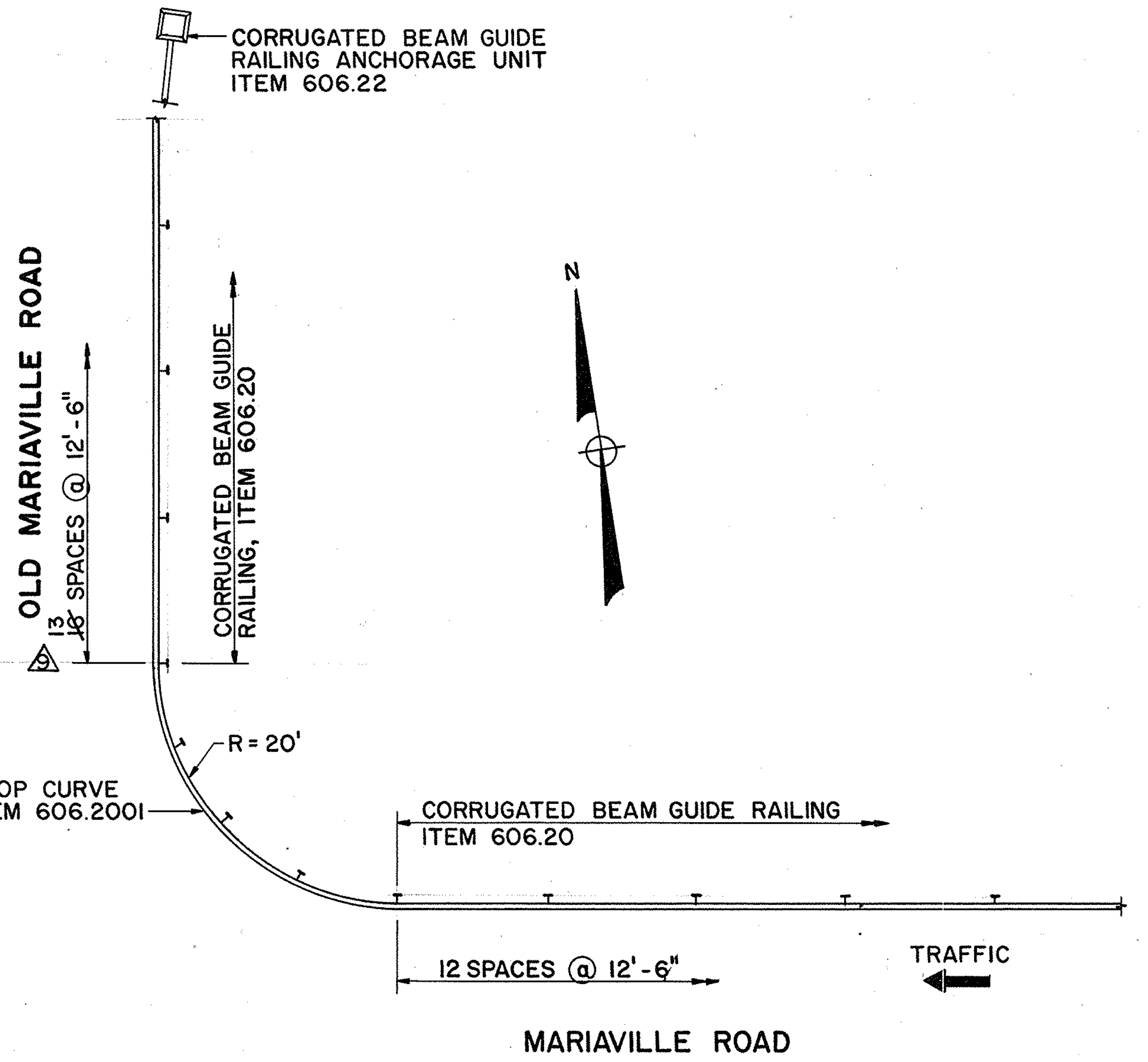
LENGTH OF PROPOSED CORRUGATED BEAM GUIDE RAIL

	N.E. CORNER	N.W. CORNER		S.E. CORNER	SW. CORNER	
	606.20	606.20	606.2001	606.20	606.20	606.2001
9 MARIAVILLE	145'-0" ~~163'-0"~~	370'-0" ~~400'-6"~~	25'-0" ~~33'-0"~~	465'-6" ~~450'-6"~~	415'-6" ~~413'-0"~~	50'-0" ~~57'-0"~~


MARIAVILLE ROAD
CORRUGATED BEAM GUIDE RAILING ITEM 606.20
TRAFFIC
SHOP CURVE ITEM 606.2001
25 SPACES @ 12'-6"
R = 35'
N
CURRY BUSH ROAD
CORRUGATED BEAM GUIDE RAILING, ITEM 606.20
5 ~~4~~ SPACES @ 12'-6"
9
CORRUGATED BEAM GUIDE RAILING ANCHORAGE UNIT ITEM 606.22

S.W. CORNER MARIAVILLE ROAD

SCALE: 1" = 10'-0"


CORRUGATED BEAM GUIDE RAILING ANCHORAGE UNIT ITEM 606.22
OLD MARIAVILLE ROAD
13 ~~18~~ SPACES @ 12'-6"
9
CORRUGATED BEAM GUIDE RAILING, ITEM 606.20
N
R = 20'
SHOP CURVE ITEM 606.2001
CORRUGATED BEAM GUIDE RAILING ITEM 606.20
12 SPACES @ 12'-6"
TRAFFIC
MARIAVILLE ROAD

N.W. CORNER MARIAVILLE ROAD

SCALE: 1" = 10'-0"

NICHOLAS A. GROSS
No. 40729

8/17/92	GUIDE RAIL DIMENS.	P.E.B.	9
DATE	DESCRIPTION	BY	SYM.

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITATION OF MARIAVILLE ROAD BRIDGE

LOCATION OF PROJECT
M.P. 159.23, SCHENECTADY COUNTY

TITLE OF DRAWING

APPROACH GUIDE RAIL PLAN

CONTRACT NUMBER:
TAA 91-10B

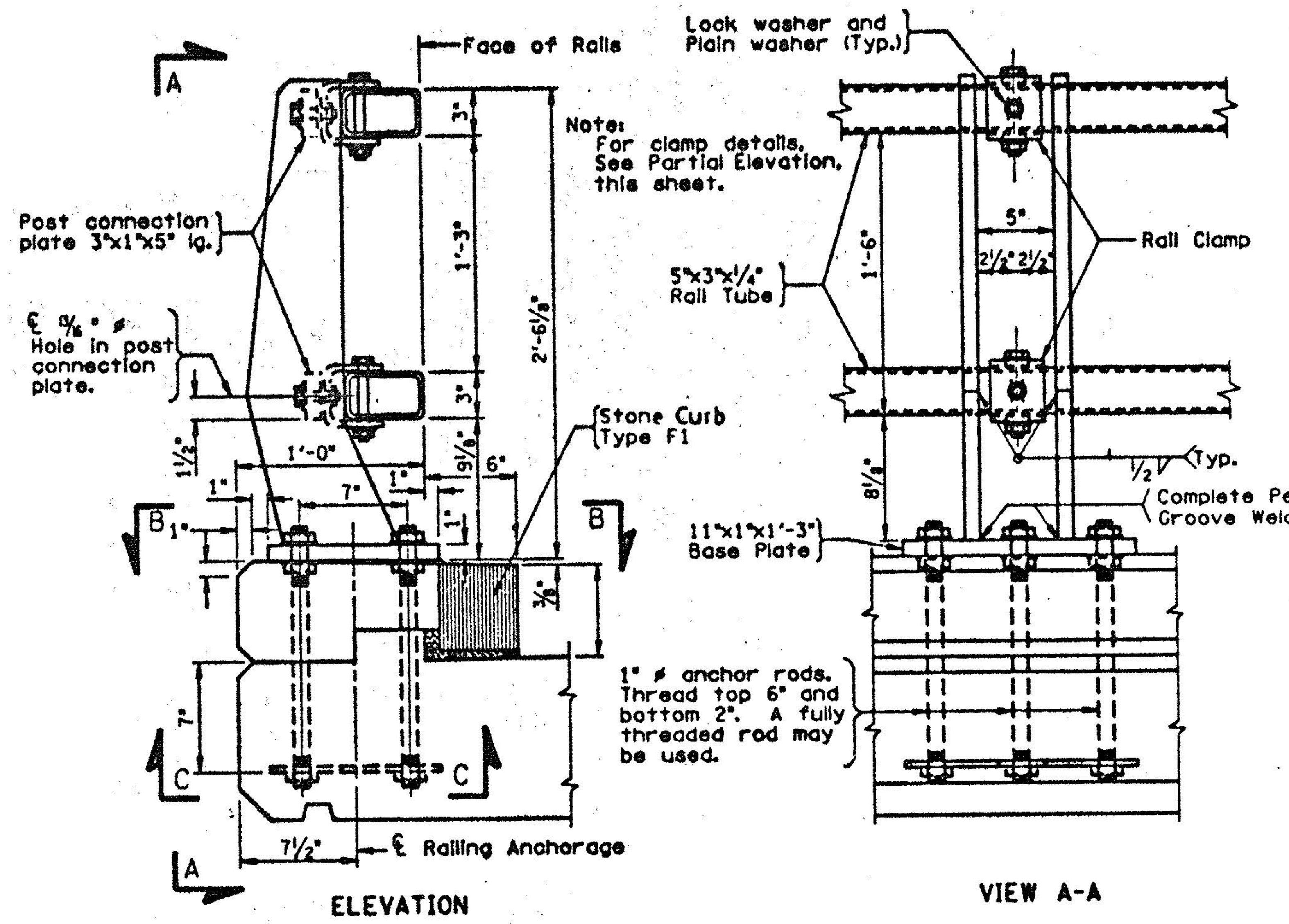
DATE:
APRIL 1990

DRAWING NUMBER:
23R1

JACKSON AND TULL
CHARTERED ENGINEERS

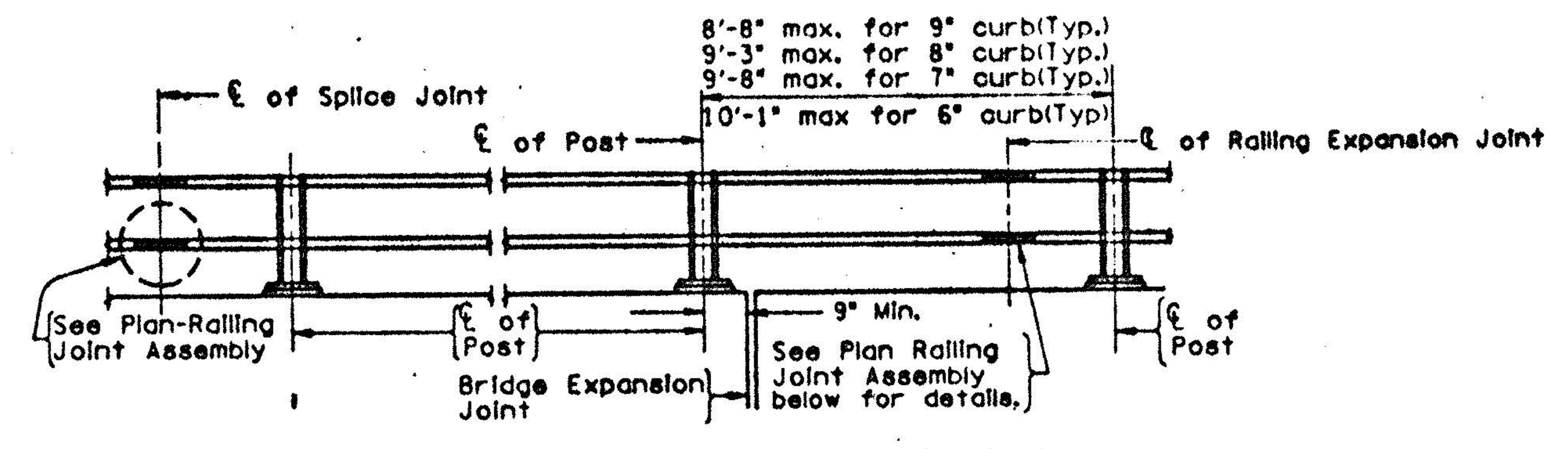
CHECKED BY:
DRAFTED BY
DESIGNED BY:
IN CHARGE OF:
151956

TCA 301-565-3340

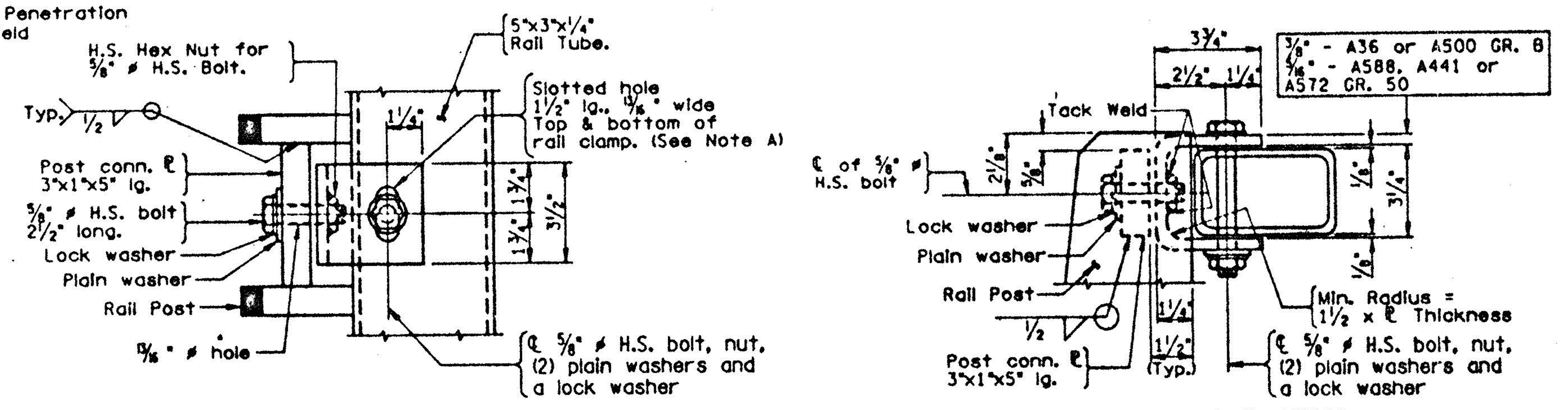

A
Face of Rails
Post connection plate 3"x1"x5" lg.
℄ 13/16" ø Hole in post connection plate.
Note: For clamp details, See Partial Elevation, this sheet.
3"
1'-3"
2'-6⅛"
3"
Stone Curb Type F1
1½"
1'-0"
9⅛"
6"
1"
7"
1"
B
B
¾"
7"
C
C
7½"
℄ Railing Anchorage
A
ELEVATION
Lock washer and Plain washer (Typ.)
5"
2½" 2½"
Rail Clamp
1'-6"
5"x3"x¼" Rail Tube
8⅛"
½" Typ.
Complete Penetration Groove Weld
11"x1"x1'-3" Base Plate
1" ø anchor rods. Thread top 6" and bottom 2". A fully threaded rod may be used.
VIEW A-A

BRIDGE RAILING DETAILS

Note:
Reinforcement not shown


8'-8" max. for 9" curb(Typ.)
9'-3" max. for 8" curb(Typ.)
9'-8" max. for 7" curb(Typ.)
10'-1" max for 6" curb(Typ)
℄ of Splice Joint
℄ of Post
℄ of Railing Expansion Joint
See Plan-Railing Joint Assembly
℄ of Post
Bridge Expansion Joint
9" Min.
See Plan Railing Joint Assembly below for details.
℄ of Post

TYPICAL ELEVATION ON THE BRIDGE


H.S. Hex Nut for ⅝" ø H.S. Bolt.
Typ. ½
Post conn. ℘ 3"x1"x5" lg.
⅝" ø H.S. bolt 2½" long.
Lock washer
Plain washer
Rail Post
13/16" ø hole
5"x3"x¼" Rail Tube.
Slotted hole 1½" lg., 13/16" wide Top & bottom of rail clamp. (See Note A)
1¼"
1⅞"
1⅞"
3½"
℄ ⅝" ø H.S. bolt, nut, (2) plain washers and a lock washer
PARTIAL PLAN VIEW
3¾"
2½" 1¼"
⅜" - A36 or A500 GR. B
5/16" - A588, A441 or A572 GR. 50
Tack Weld
℄ of ⅝" ø H.S. bolt
2⅛"
⅞"
⅛"
3¼"
⅛"
Lock washer
Plain washer
Rail Post
½
Post conn. ℘ 3"x1"x5" lg.
1¼"
1½" (Typ.)
Min. Radius = 1½ x ℘ Thickness
℄ ⅝" ø H.S. bolt, nut, (2) plain washers and a lock washer
PARTIAL ELEVATION

TYPICAL BRIDGE RAIL CONNECTION

Note A:
The 13/16" ø 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 13/16" ø 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.

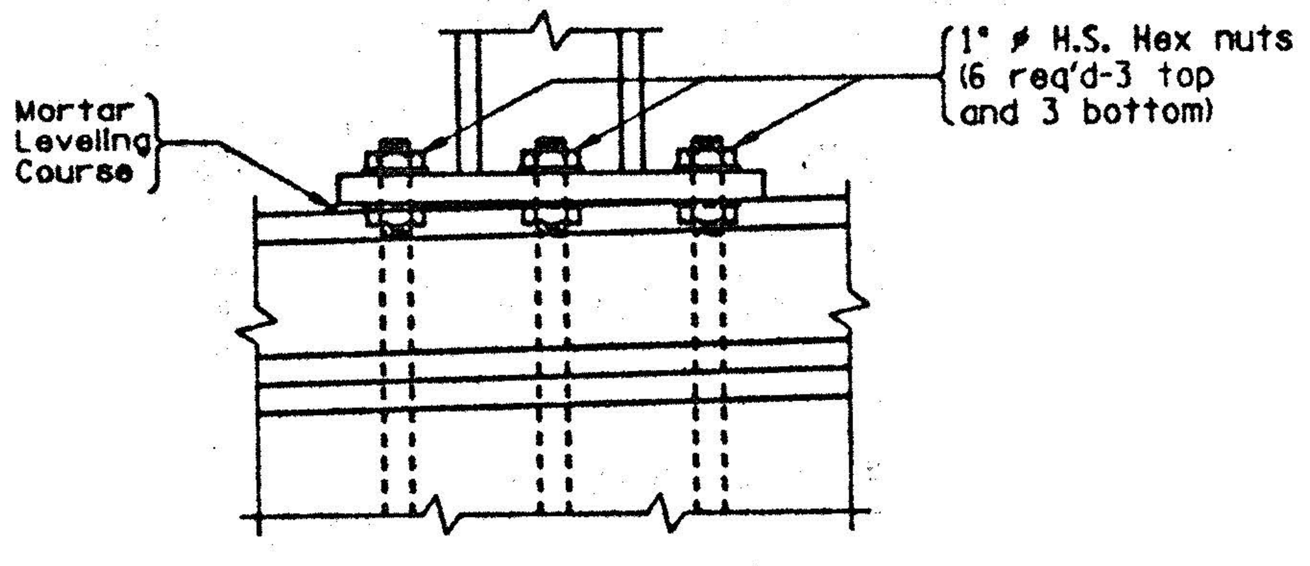
Anchor rods, nuts, washers and anchor plates shall be paid for under the railing item.

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.

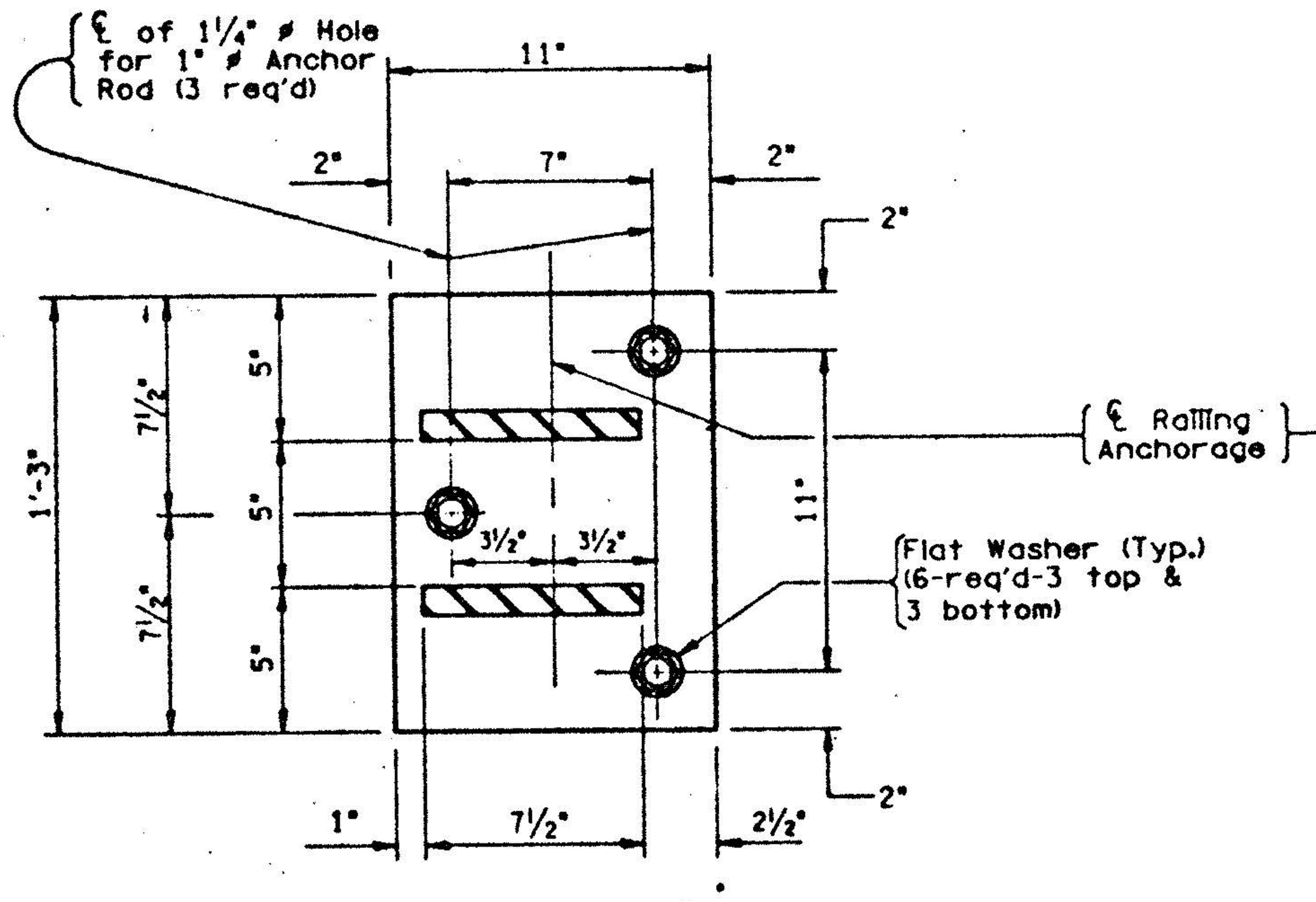
Rails shall span a minimum of 3 posts. If this is impossible, the absolute minimum shall be two posts with one of these posts being a special post, unless waived by DCES.

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.

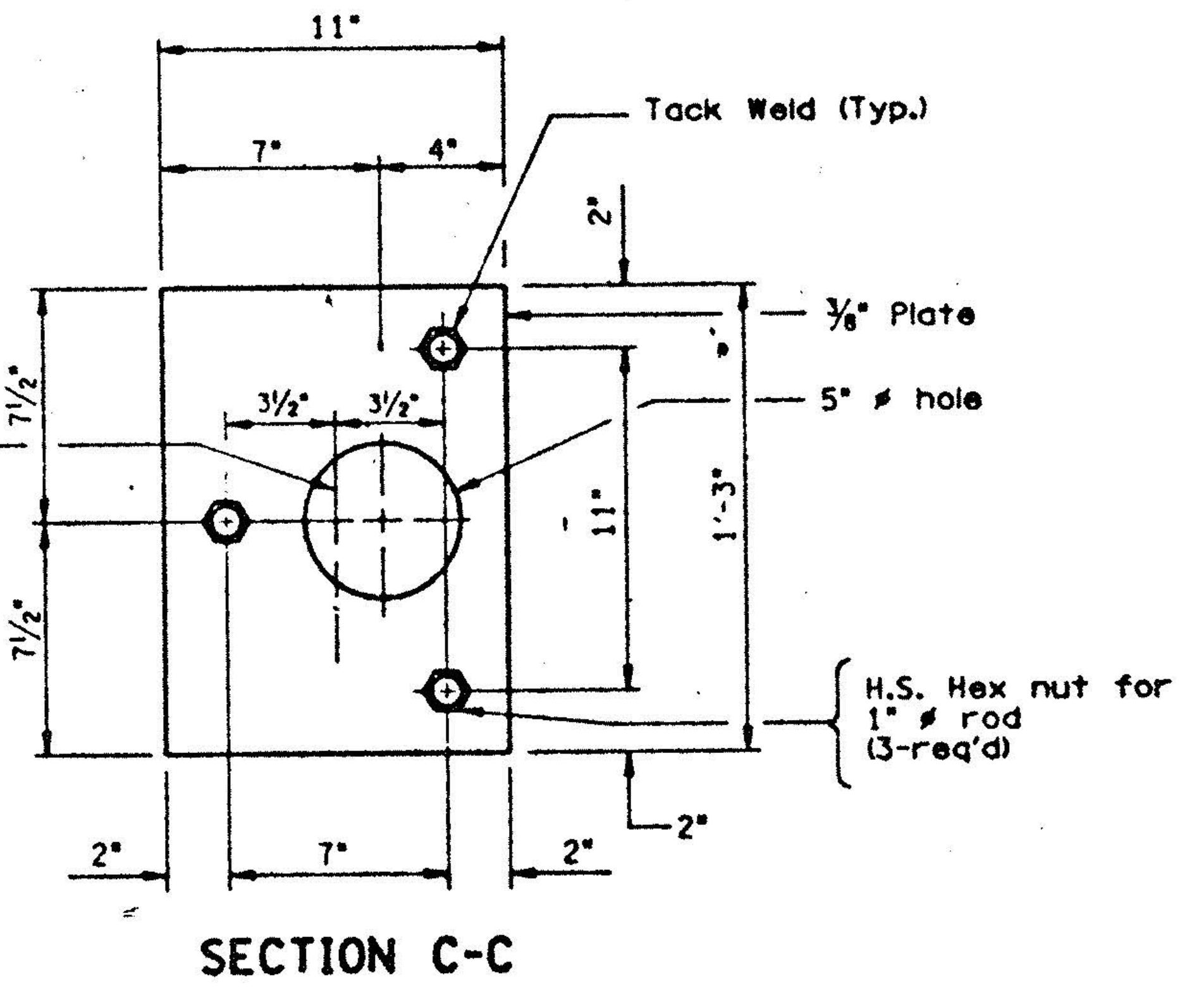
The hole for the bolt connecting the tube and the clamp shall be located in the tube so that the tube will bear against the post plates when in final position.



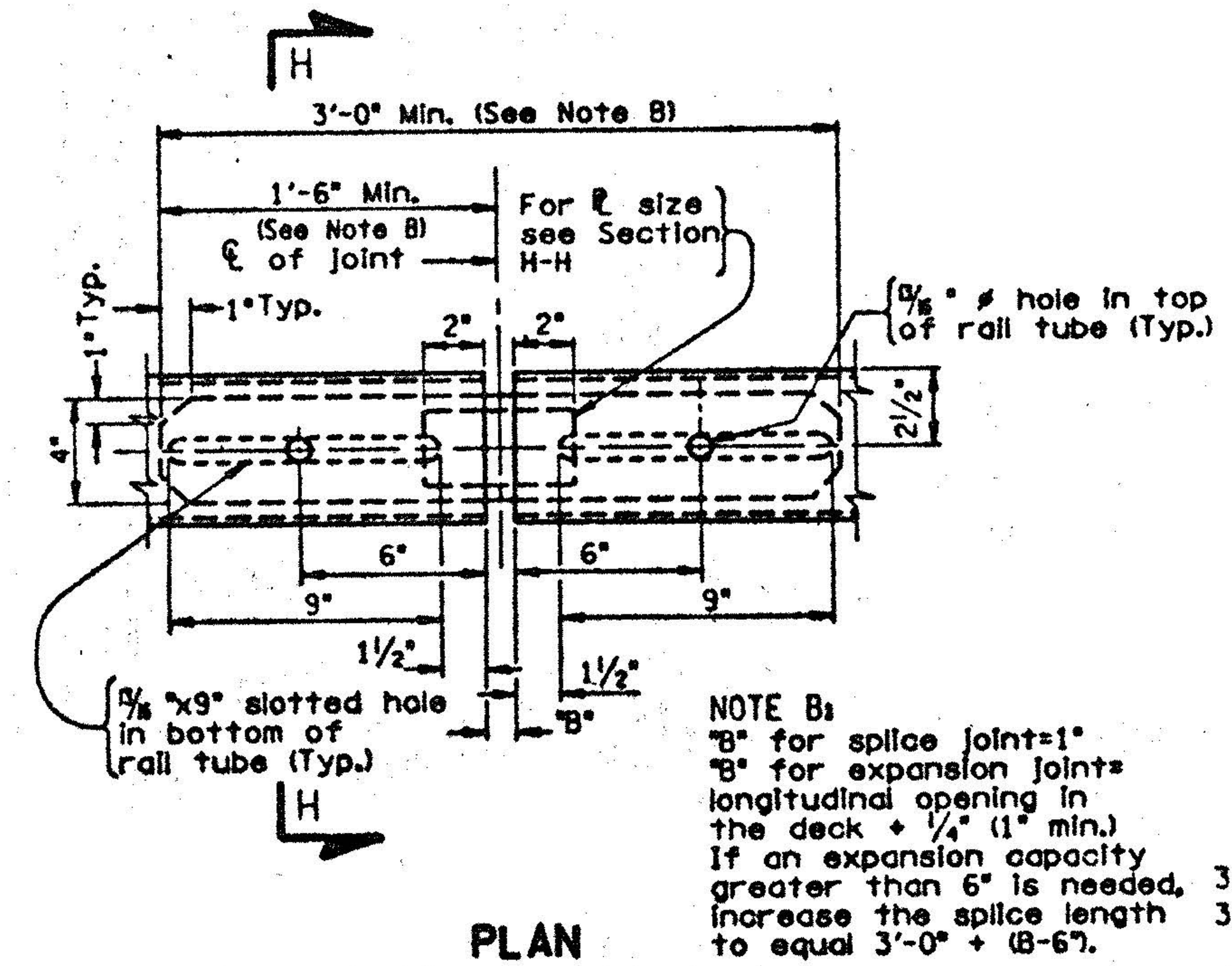
PARTIAL ELEVATION
TOP OF SIDEWALK ON GRADE


℄ of 1¼" ø Hole for 1" ø Anchor Rod (3 req'd)
11"
2"
7"
2"
2"
1'-3"
7½"
7½"
5"
5"
5"
3½"
3½"
11"
℄ Railing Anchorage
Flat Washer (Typ.) (6-req'd-3 top & 3 bottom)
1"
7½"
2½"
2"

SECTION B-B

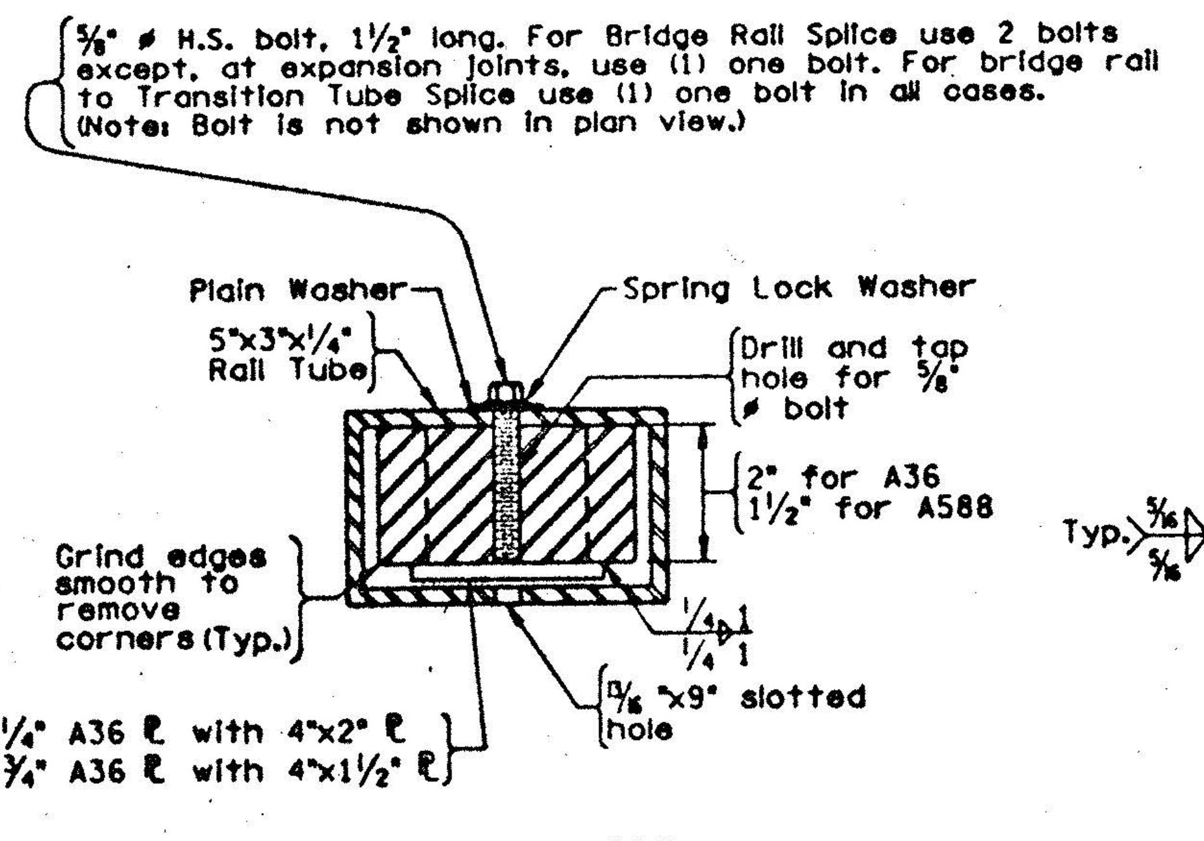


SECTION C-C

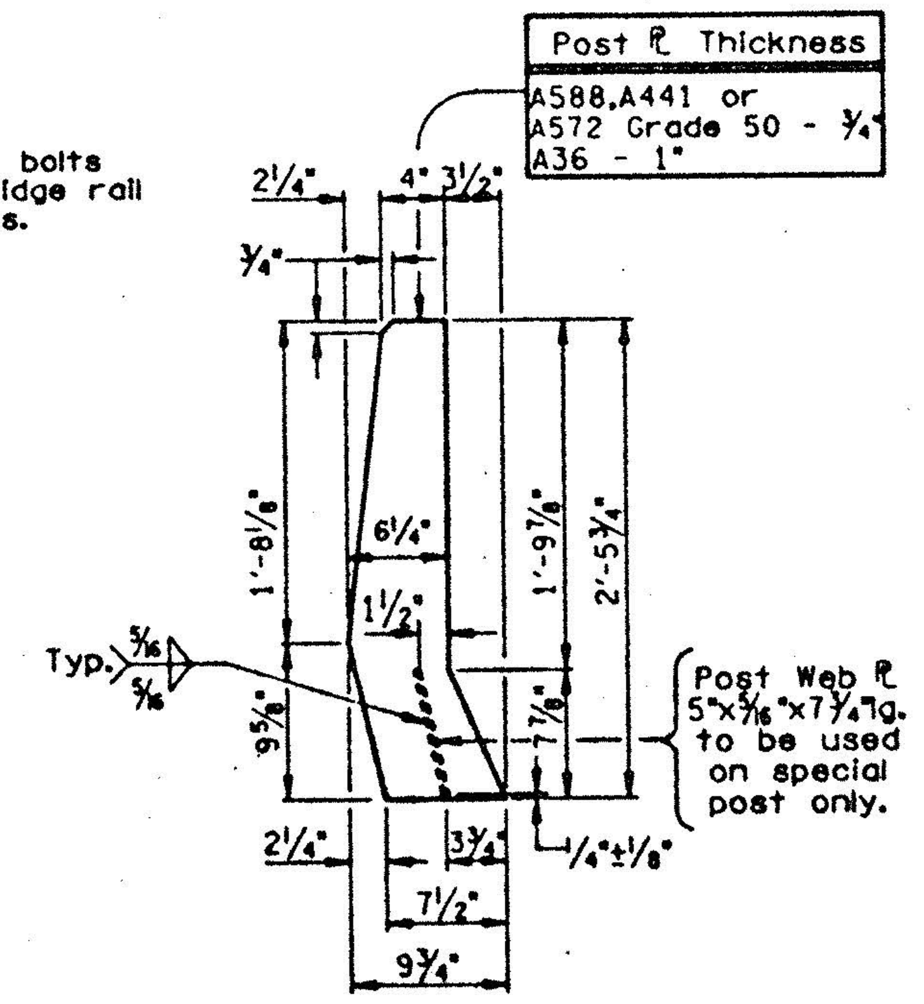

H
3'-0" Min. (See Note B)
1'-6" Min. (See Note B)
℄ of Joint
For ℘ size see Section H-H
1"Typ.
2"
2"
13/16" ø hole in top of rail tube (Typ.)
1" Typ.
4"
2½"
6"
6"
9"
9"
1½"
1½"
"B"
13/16"x9" slotted hole in bottom of rail tube (Typ.)
H

NOTE B:
"B" for splice joint=1"
"B" for expansion joint= longitudinal opening in the deck + ¼" (1" min.)
If an expansion capacity greater than 6" is needed, increase the splice length to equal 3'-0" + (B-6").

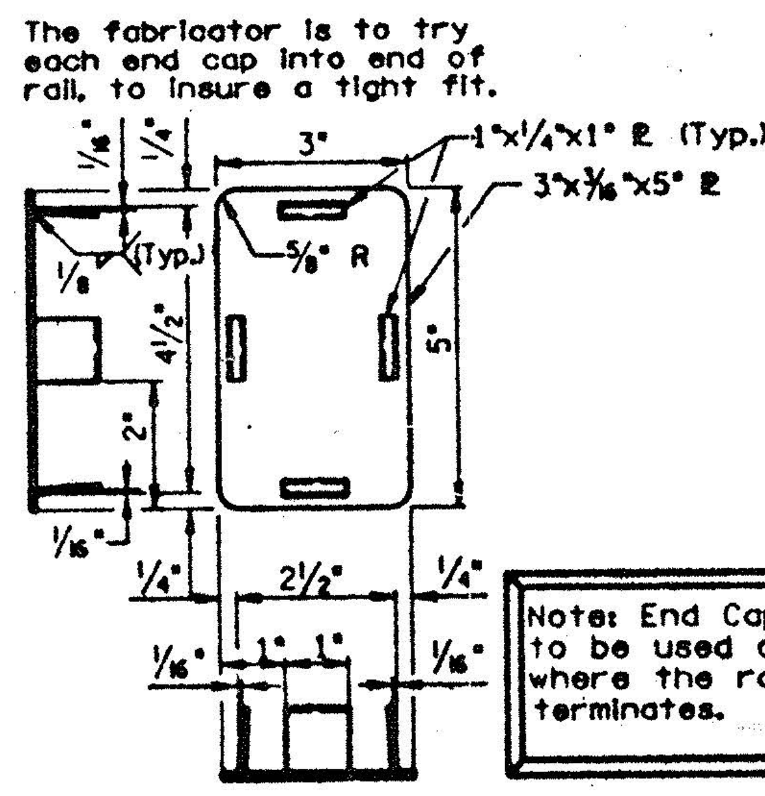
PLAN
RAILING JOINT ASSEMBLY


⅝" ø H.S. bolt, 1½" long. For Bridge Rail Splice use 2 bolts except, at expansion joints, use (1) one bolt. For bridge rail to Transition Tube Splice use (1) one bolt in all cases. (Note: Bolt is not shown in plan view.)
Plain Washer
Spring Lock Washer
5"x3"x¼" Rail Tube
Drill and tap hole for ⅝" ø bolt
2" for A36
1½" for A588
Grind edges smooth to remove corners (Typ.)
¼
1
13/16"x9" slotted hole
3½"x¼" A36 ℘ with 4"x2" ℘
3½"x¾" A36 ℘ with 4"x1½" ℘

RAIL SPLICE
SECTION H-H



POST PLATE


The fabricator is to try each end cap into end of rail, to insure a tight fit.
3"
1"x¼"x1" ℘ (Typ.)
3"x⅜"x5" ℘
⅛"
⅝" R
(Typ.)
4½"
5"
2"
⅛"
¼"
2½"
¼"
⅛"
1"
1"
⅛"

Note: End Caps are to be used only where the rail terminates.

DETAIL OF END CAP

NO AS-BUILT REVISIONS

JACKSON AND TULL
CHARTERED ENGINEERS

DATE	DESCRIPTION	BY	SYM

REVISIONS

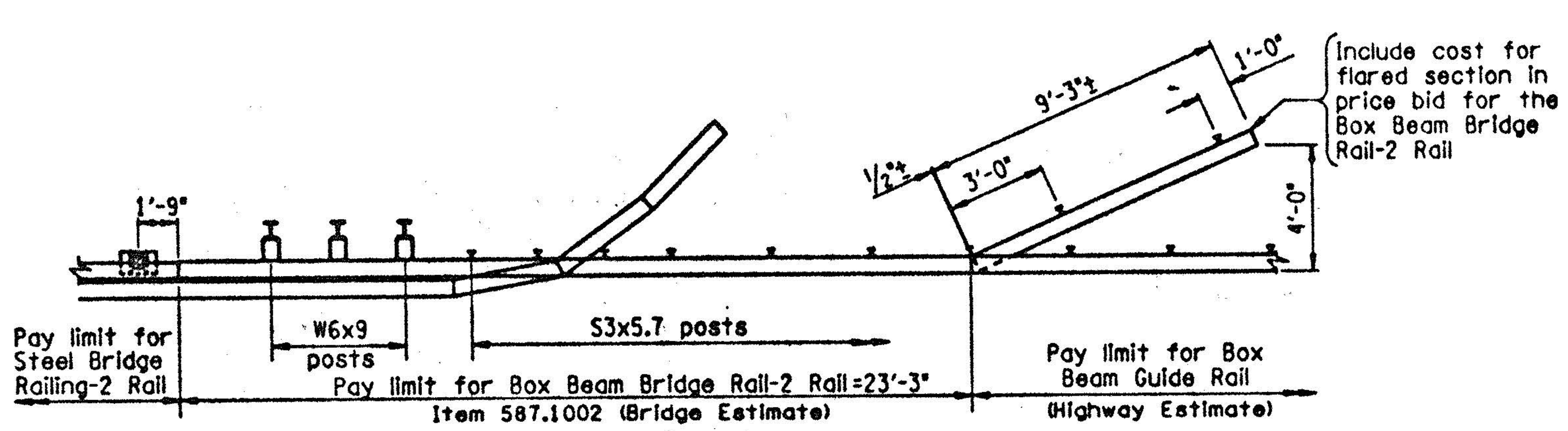
NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITATION OF MARIAVILLE ROAD BRIDGE
LOCATION OF PROJECT
MP 159.23, SCHENECTADY COUNTY
TITLE OF DRAWING
STEEL BRIDGE
RAILING-TWO RAIL

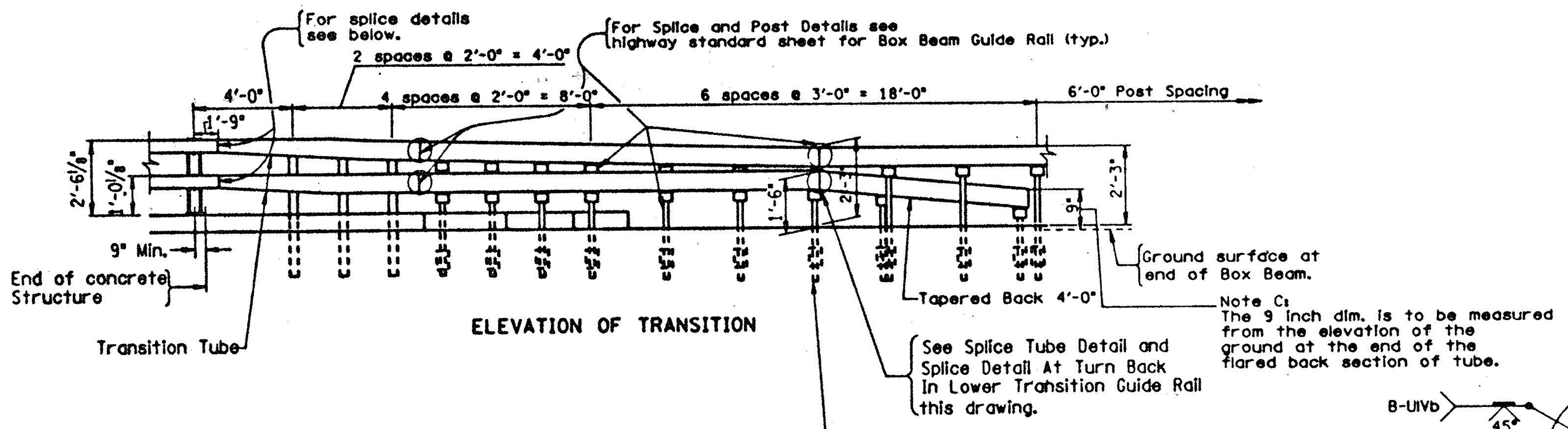
CONTRACT NUMBER:
TAA 91-10B
DATE:
APRIL 1990
DRAWING NUMBER:
24

IN CHARGE OF
DESIGNED BY:
DRAFTED BY:
CHECKED BY:

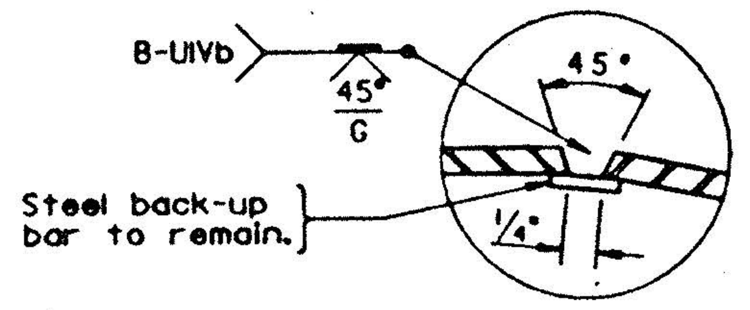
26


1'-9"
W6x9 posts
S3x5.7 posts
1/2"±
3'-0"
9'-3"±
1'-0"
4'-0"
Include cost for flared section in price bid for the Box Beam Bridge Rail-2 Rail
Pay limit for Steel Bridge Railing-2 Rail
Pay limit for Box Beam Bridge Rail-2 Rail=23'-3"
Item 587.1002 (Bridge Estimate)
Pay limit for Box Beam Guide Rail
(Highway Estimate)

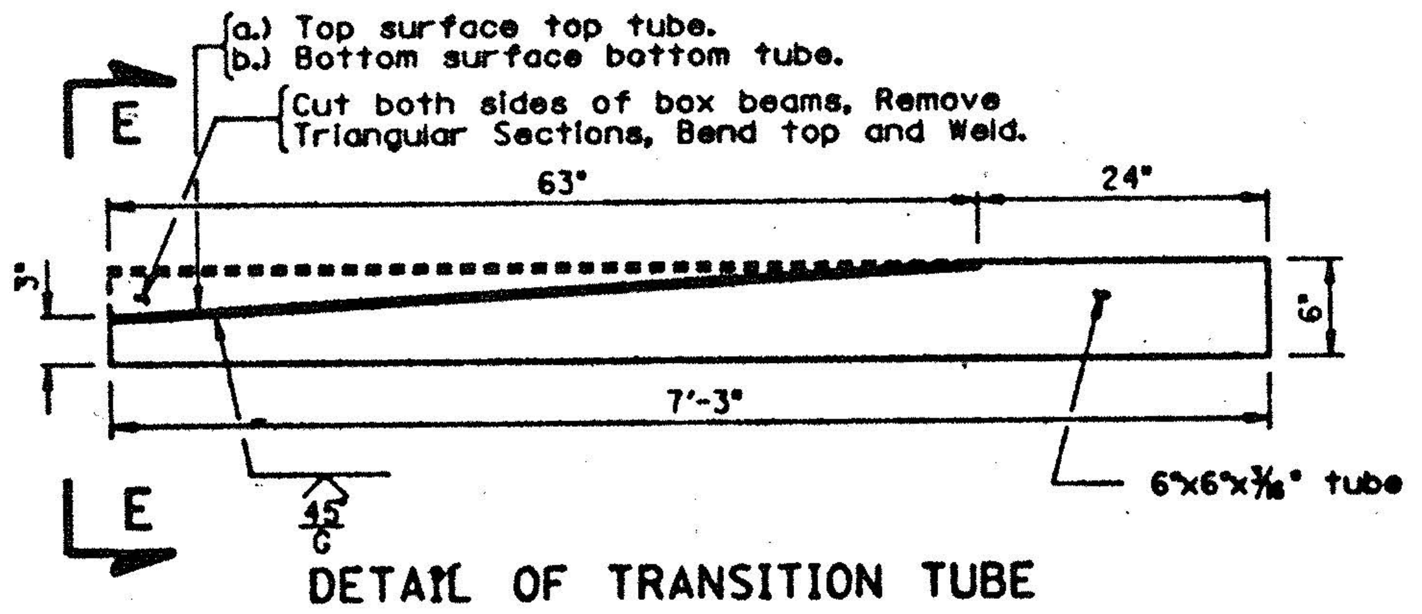
PLAN
BOX-BEAM-TO-BRIDGE-RAIL TRANSITION


For splice details see below.
For Splice and Post Details see highway standard sheet for Box Beam Guide Rail (typ.)
2 spaces @ 2'-0" = 4'-0"
4'-0"
4 spaces @ 2'-0" = 8'-0"
6 spaces @ 3'-0" = 18'-0"
6'-0" Post Spacing
1'-9"
2'-6 1/8"
1'-0 1/8"
1'-6"
2'-3"
9"
9" Min.
End of concrete Structure
Transition Tube
Tapered Back 4'-0"
Ground surface at end of Box Beam.
Note C:
The 9 inch dim. is to be measured from the elevation of the ground at the end of the flared back section of tube.
See Splice Tube Detail and Splice Detail At Turn Back In Lower Transition Guide Rail this drawing.
Shelf angle not req'd for top rail at this post only. Include cost for this post in price bid for the Box Beam Bridge Rail-2 Rail.

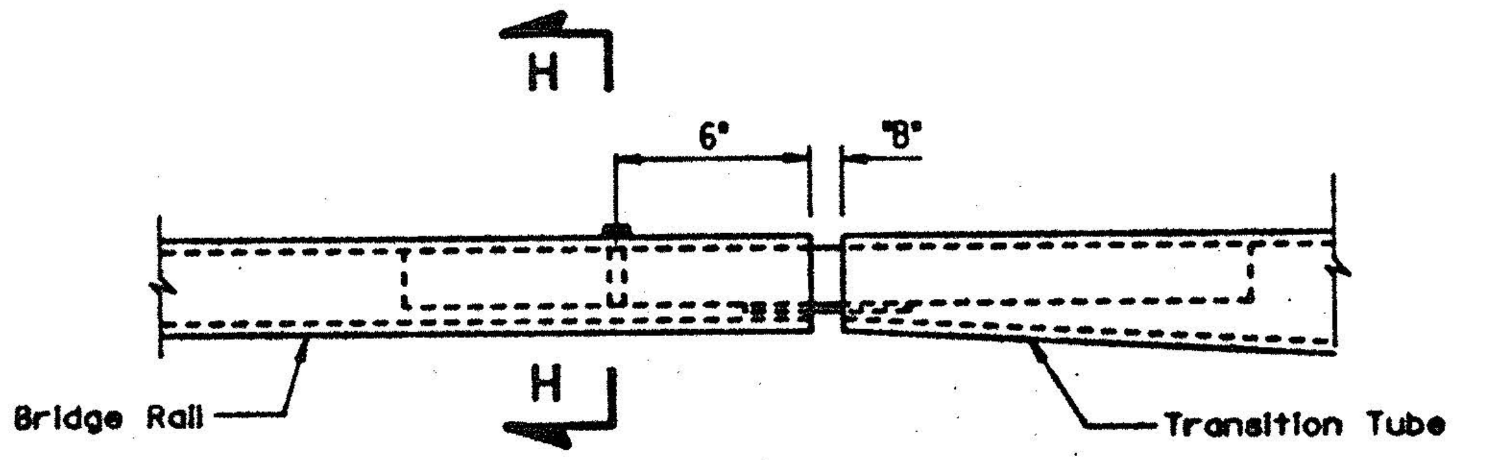
ELEVATION OF TRANSITION



WELD DETAIL FOR SPLICE TUBE

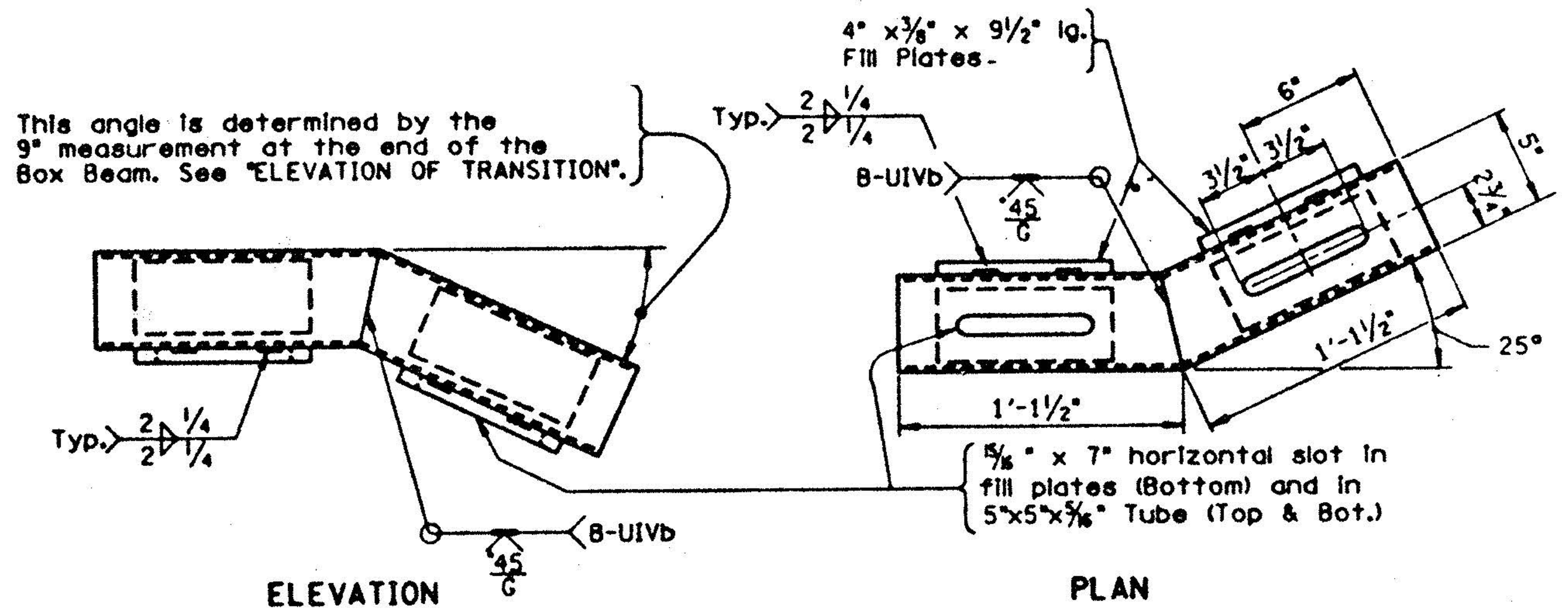

a.) Top surface top tube.
b.) Bottom surface bottom tube.
Cut both sides of box beams. Remove Triangular Sections. Bend top and Weld.
E
63"
24"
3"
6"
7'-3"
45
G
6"x6"x3/16" tube
E

DETAIL OF TRANSITION TUBE

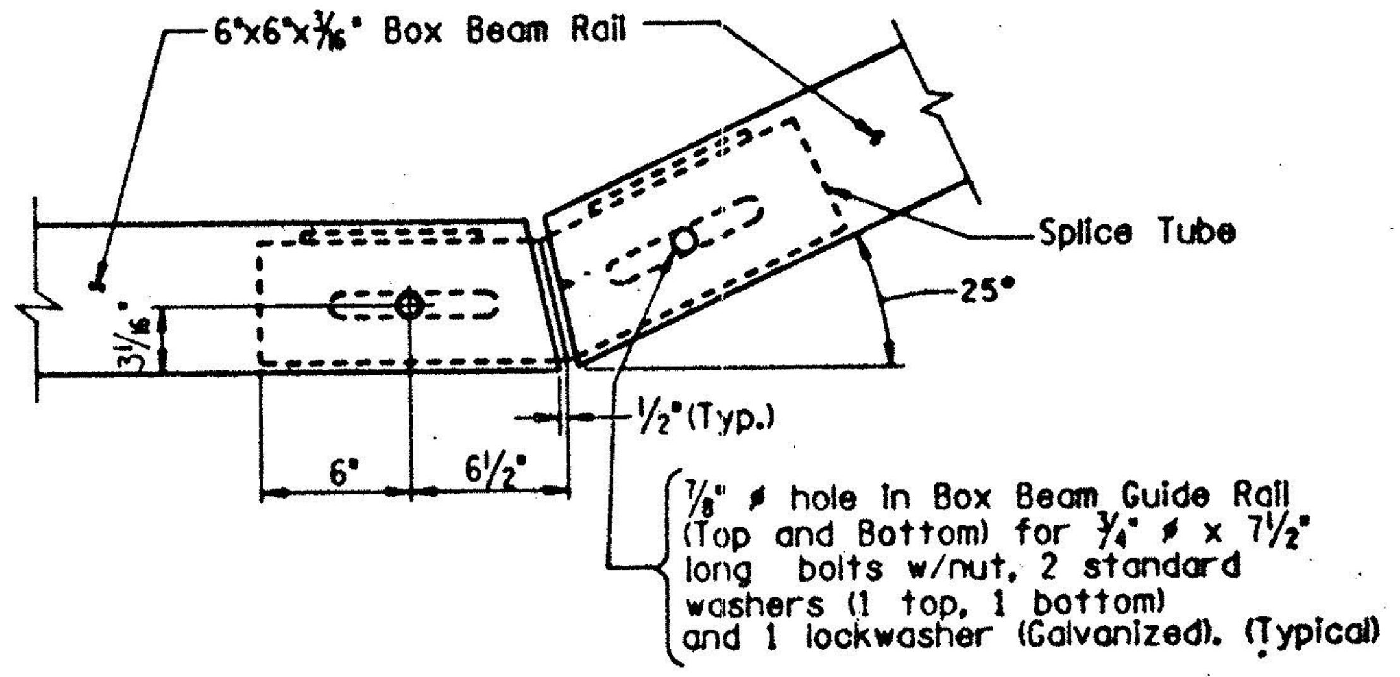


ELEVATION VIEW OF BRIDGE RAIL TO TRANSITION BOX BEAM SPLICE

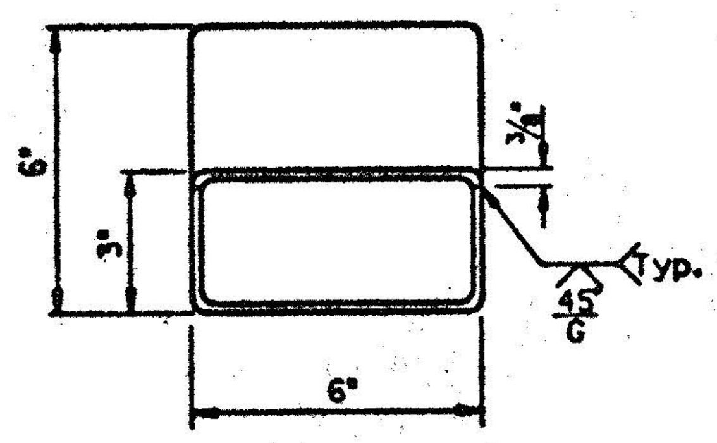
(For Section H-H see Dwg. No. 24.)


This angle is determined by the 9" measurement at the end of the Box Beam. See "ELEVATION OF TRANSITION".
4" x 3/8" x 9 1/2" lg. Fill Plates.
Typ.
2 1/4
2 1/4
B-UIVb
45
G
6"
3 1/2"
3 1/2"
2 1/2"
5"
1'-1 1/2"
1'-1 1/2"
25°
5/8" x 7" horizontal slot in fill plates (Bottom) and in 5"x5"x3/16" Tube (Top & Bot.)
ELEVATION
PLAN

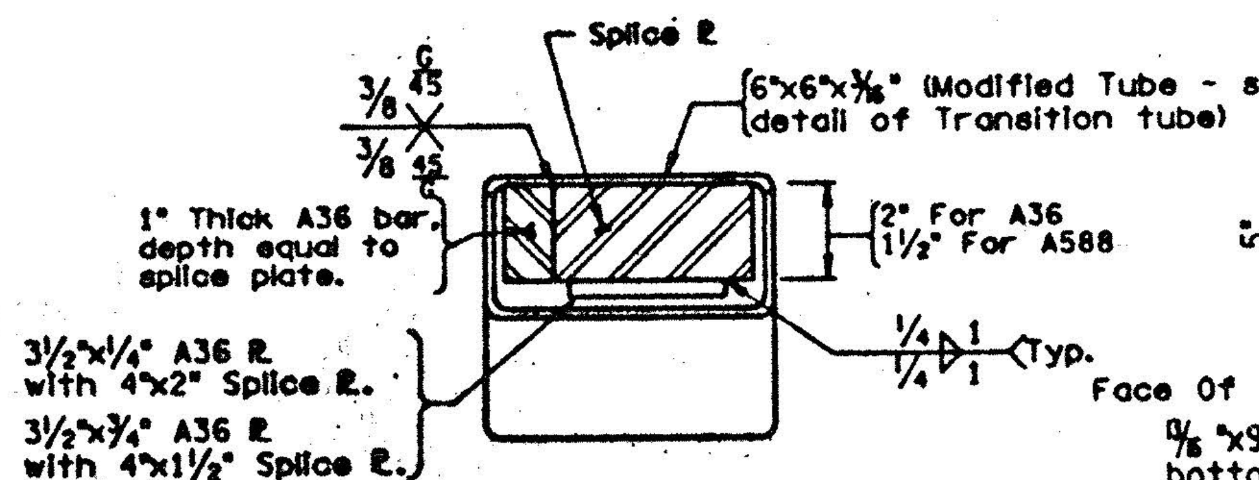
SPLICE TUBE DETAIL


6"x6"x3/16" Box Beam Rail
Splice Tube
25°
3 1/8"
6"
6 1/2"
1/2"(Typ.)
7/8" ⌀ hole in Box Beam Guide Rail (Top and Bottom) for 3/4" ⌀ x 7 1/2" long bolts w/nut, 2 standard washers (1 top, 1 bottom) and 1 lockwasher (Galvanized). (Typical)

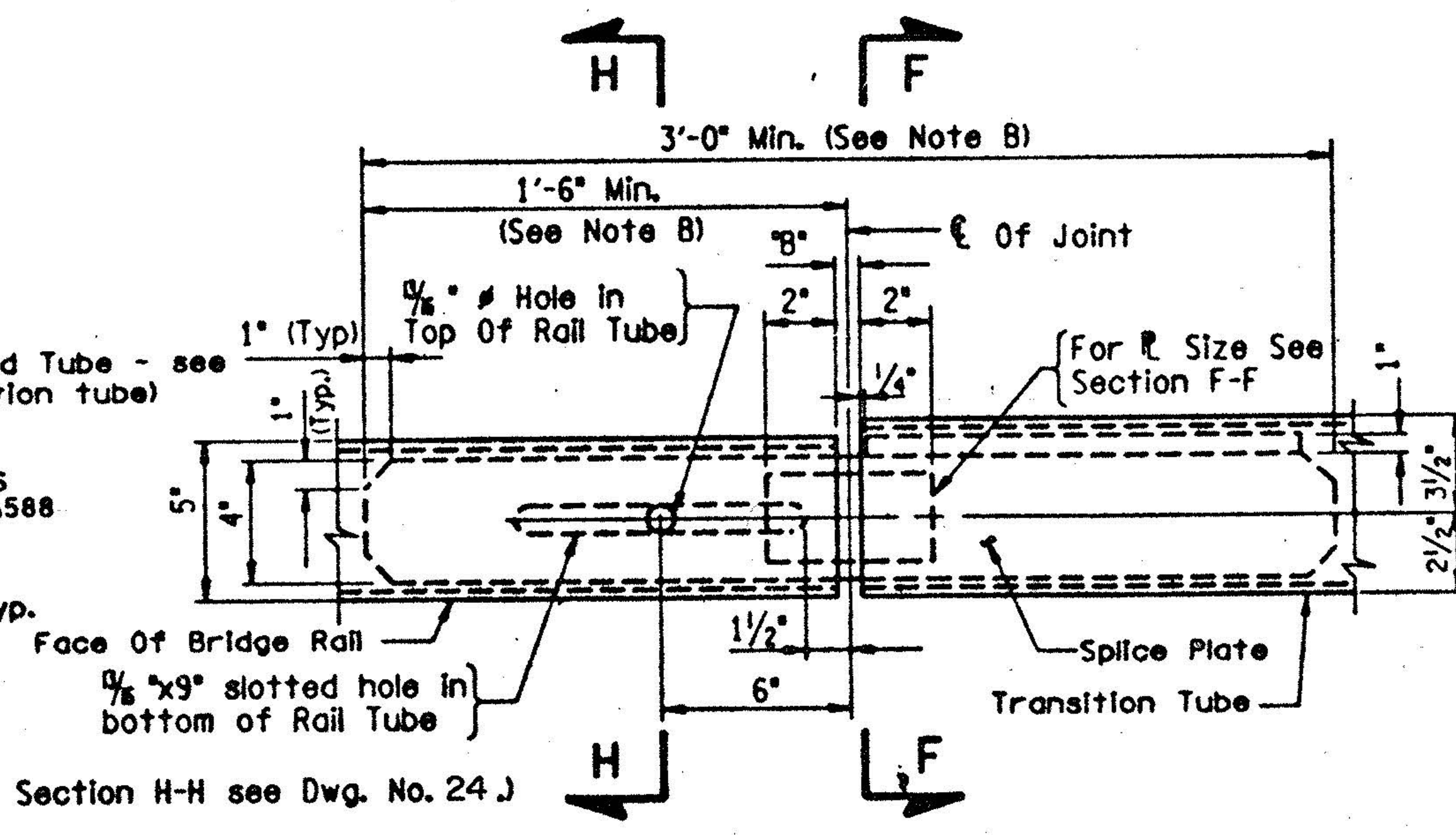
SPLICE DETAIL AT TURN BACK IN LOWER TRANSITION GUIDE RAIL



VIEW E-E


Splice ℄
3/8 45 G
3/8 45
6"x6"x3/16" (Modified Tube - see detail of Transition tube)
1" Thick A36 bar, depth equal to splice plate.
2" For A36
1 1/2" For A588
3 1/2"x1/4" A36 ℄ with 4"x2" Splice ℄.
3 1/2"x3/4" A36 ℄ with 4"x1 1/2" Splice ℄.
1/4 1
1/4 1
Typ.

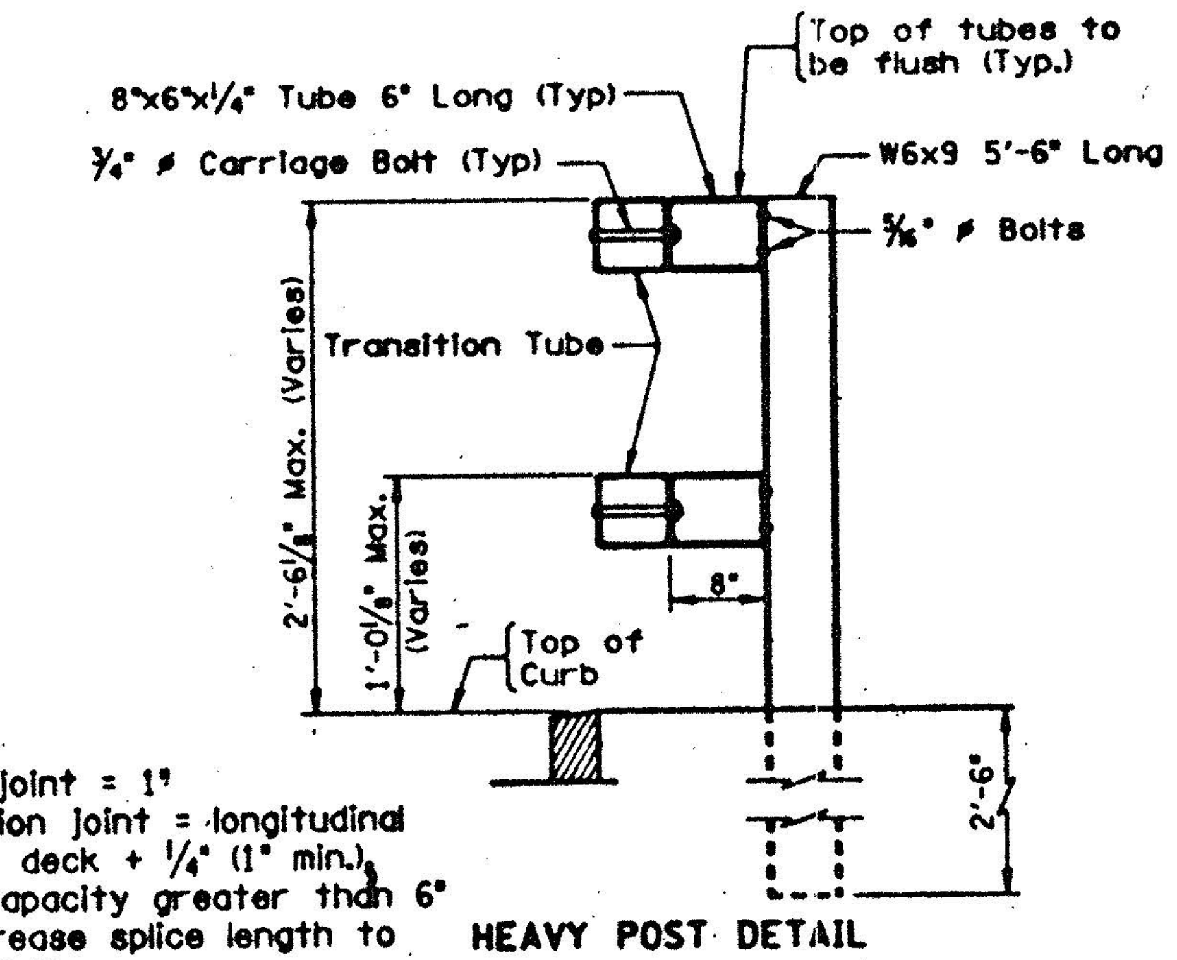
SECTION F-F



(For Section H-H see Dwg. No. 24.)

PLAN - TRANSITION TUBE JOINT ASSEMBLY

NOTE B:
"B" for splice joint = 1"
"B" for expansion joint = longitudinal opening in the deck + 1/4" (1" min.)
If expansion capacity greater than 6" is needed, increase splice length to equal 3'-0" + (B-6).



HEAVY POST DETAIL

NO AS-BUILT REVISIONS

DATE	DESCRIPTION	BY	SYM

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITATION OF MARIAVILLE ROAD BRIDGE

LOCATION OF PROJECT MP 159.23, SCHENECTADY COUNTY

TITLE OF DRAWING STEEL BRIDGE RAILING-TWO RAIL

CONTRACT NUMBER: TAA 91-10B

DATE: APRIL 1990

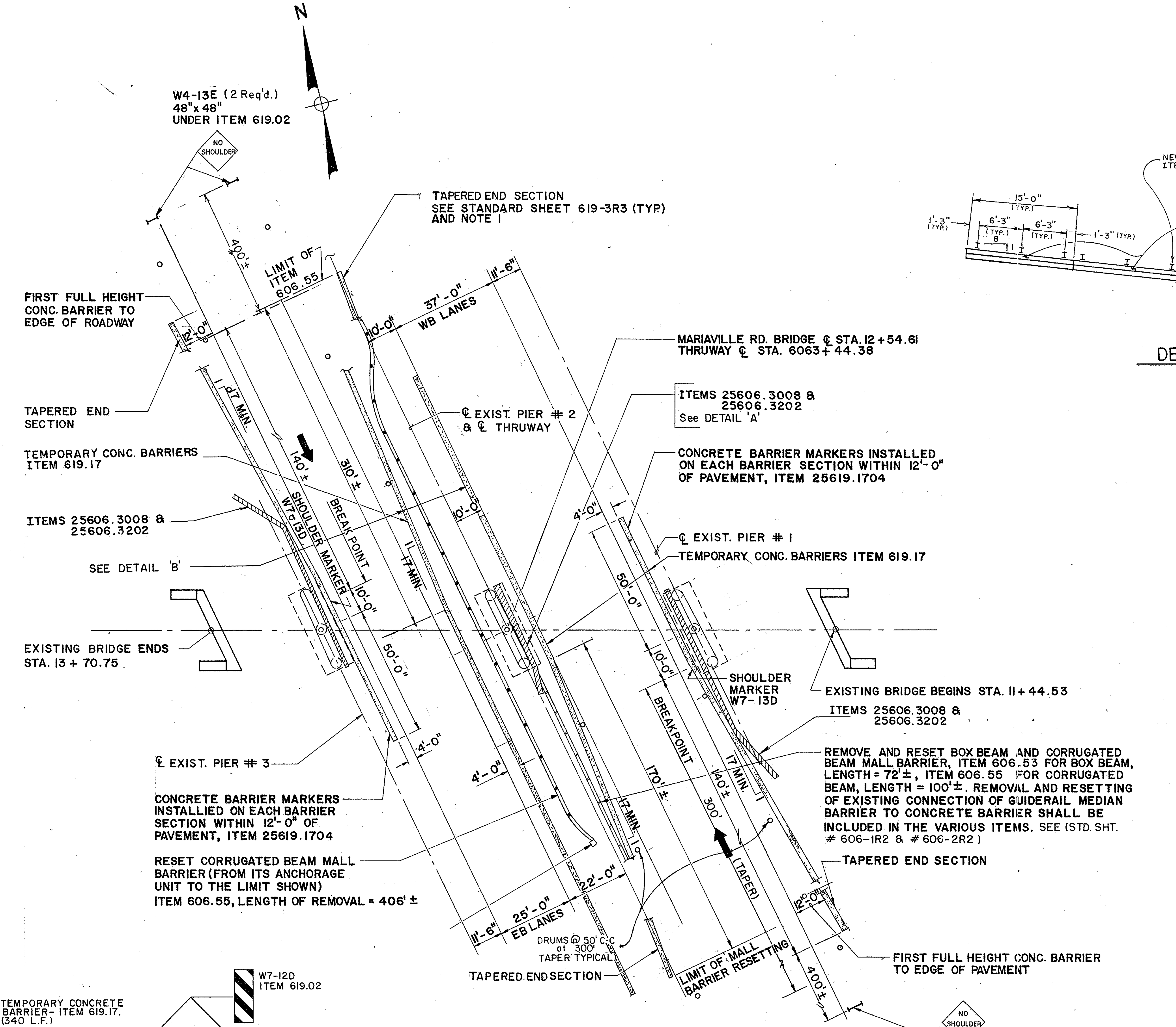
DRAWING NUMBER: 25

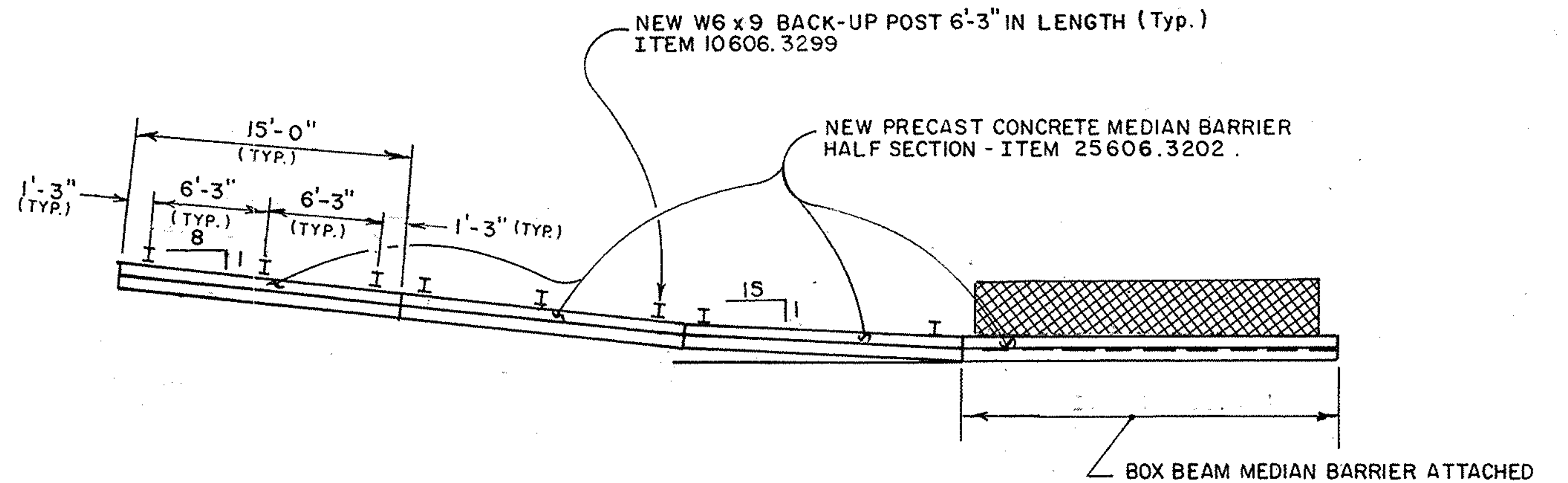
JACKSON AND TULL
CHARTERED ENGINEERS

CHECKED BY:
DRAFTED BY:
DESIGNED BY:
IN CHARGE OF:

TCA 301-565-3340

26

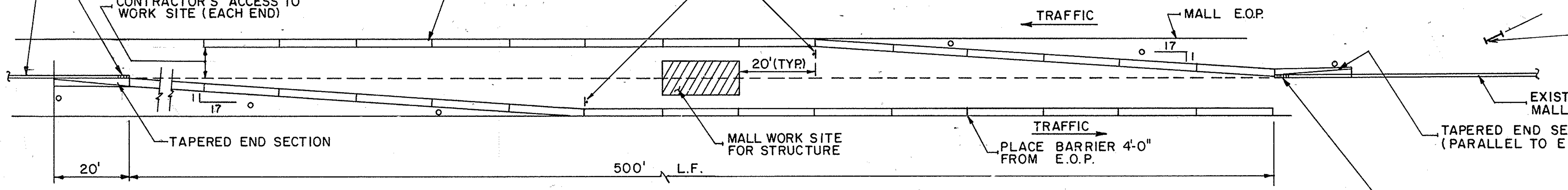

N
W4-13E (2 Req'd.)
48" x 48"
UNDER ITEM 619.02
NO SHOULDER
400'±
LIMIT OF ITEM 606.55
TAPERED END SECTION
SEE STANDARD SHEET 619-3R3 (TYP)
AND NOTE 1
FIRST FULL HEIGHT CONC. BARRIER TO EDGE OF ROADWAY
12'-0"
10'-0"
37'-0" WB LANES
11'-6"
MARIAVILLE RD. BRIDGE ℄ STA. 12 + 54.61
THRUWAY ℄ STA. 6063 + 44.38
TAPERED END SECTION
ITEMS 25606.3008 & 25606.3202
See DETAIL 'A'
1 17 MIN.
℄ EXIST. PIER # 2 & ℄ THRUWAY
TEMPORARY CONC. BARRIERS ITEM 619.17
140'±
310'±
W7-13D SHOULDER MARKER
BREAKPOINT
CONCRETE BARRIER MARKERS INSTALLED ON EACH BARRIER SECTION WITHIN 12'-0" OF PAVEMENT, ITEM 25619.1704
ITEMS 25606.3008 & 25606.3202
10'-0"
4'-0"
17 MIN.
SEE DETAIL 'B'
10'-0"
℄ EXIST. PIER # 1
TEMPORARY CONC. BARRIERS ITEM 619.17
50'-0"
50'-0"
EXISTING BRIDGE ENDS STA. 13 + 70.75
10'-0"
SHOULDER MARKER W7-13D
EXISTING BRIDGE BEGINS STA. 11 + 44.53
BREAKPOINT
ITEMS 25606.3008 & 25606.3202
4'-0"
℄ EXIST. PIER # 3
4'-0"
170'±
17 MIN.
140'±
REMOVE AND RESET BOX BEAM AND CORRUGATED BEAM MALL BARRIER, ITEM 606.53 FOR BOX BEAM, LENGTH = 72'±, ITEM 606.55 FOR CORRUGATED BEAM, LENGTH = 100'±. REMOVAL AND RESETTING OF EXISTING CONNECTION OF GUIDERAIL MEDIAN BARRIER TO CONCRETE BARRIER SHALL BE INCLUDED IN THE VARIOUS ITEMS. SEE (STD. SHT. # 606-1R2 & # 606-2R2)
CONCRETE BARRIER MARKERS INSTALLIED ON EACH BARRIER SECTION WITHIN 12'-0" OF PAVEMENT, ITEM 25619.1704
17 MIN.
300'
RESET CORRUGATED BEAM MALL BARRIER (FROM ITS ANCHORAGE UNIT TO THE LIMIT SHOWN)
ITEM 606.55, LENGTH OF REMOVAL = 406'±
(TAPER)
TAPERED END SECTION
22'-0"
12'-0"
11'-6"
25'-0" EB LANES
DRUMS @ 50' C.C. at 300' TAPER TYPICAL
LIMIT OF MALL BARRIER RESETTING
FIRST FULL HEIGHT CONC. BARRIER TO EDGE OF PAVEMENT
TAPERED END SECTION
400'±
NO SHOULDER
W4-13E (2 Req'd.)
48" x 48"
UNDER ITEM 619.02


NEW W6 x 9 BACK-UP POST 6'-3" IN LENGTH (Typ.)
ITEM 10606.3299
NEW PRECAST CONCRETE MEDIAN BARRIER HALF SECTION - ITEM 25606.3202
15'-0" (TYP.)
1'-3" (TYP.)
6'-3" (TYP.)
6'-3" (TYP.)
1'-3" (TYP.)
8
1
15
1
BOX BEAM MEDIAN BARRIER ATTACHED TO CONCRETE BARRIER. PAID FOR UNDER ITEM 25606.1001

DETAIL 'A'

NOTES:

1. TEMPORARY CONCRETE BARRIER TRANSITION SECTION IN MALL AREA SHALL TERMINATE TO MEET EXISTING CORRUGATED BEAM MALL BARRIER, WHERE TRANSITION SECTION MEETS CORRUGATED BEAM MALL BARRIER, FIVE (5) BACKUP POSTS SHALL BE REQUIRED, PAID FOR UNDER ITEM 15606.4801.
2. FOR SKEW ANGLE OF ROADWAY, SEE PLAN AND ELEVATION
3. CONCRETE PIER PROTECTION TO BE RESET AND UPGRADED AS SHOWN ON DWG. 32


W7-12D
ITEM 619.02
EXISTING CORR. BEAM MALL BARRIER
BARRIER CONNECTION
TEMPORARY CONCRETE BARRIER- ITEM 619.17. (340 L.F.)
CONTRACTOR'S ACCESS TO WORK SITE (EACH END)
TRAFFIC
MALL E.O.P.
17
1
20'(TYP)
1
17
TAPERED END SECTION
MALL WORK SITE FOR STRUCTURE
TRAFFIC
PLACE BARRIER 4'-0" FROM E.O.P.
EXISTING CORR. BEAM MALL BARRIER
TAPERED END SECTION (PARALLEL TO E.O.P.) TYP.
20'
500' L.F.

NOTE:
SHOULDER CLOSURES TO BE LEFT IN PLACE AT COMPLETION OF WORK TO PROTECT STRUCTURE UNTIL COMPLETION OF PROPOSED MALL BARRIER.

MALL SHOULDER CLOSURES
FOR STRUCTURE-
DETAIL 'B'
N.T.S.

CONNECT EXISTING MALL BARRIER TO FULL HEIGHT PORTION OF TAPERED END SECTION WITH 3/4" ⌀ THRU BOLTS (8 REQ). TYPICAL EACH APPROACH. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 619.17.

THRUWAY SHOULDER CLOSURE PLAN
N.T.S.

NO AS-BUILT REVISIONS

DATE	DESCRIPTION	BY	SYM.
REVISIONS			

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT **REHABILITATION OF MARIAVILLE ROAD BRIDGE**
LOCATION OF PROJECT
MP 159.23, SCHENECTADY COUNTY
TITLE OF DRAWING
THRUWAY SHOULDER CLOSURE PLAN

CONTRACT NUMBER
TAA - 91 - 10B
DATE:
APRIL 1990
DRAWING NUMBER:
26

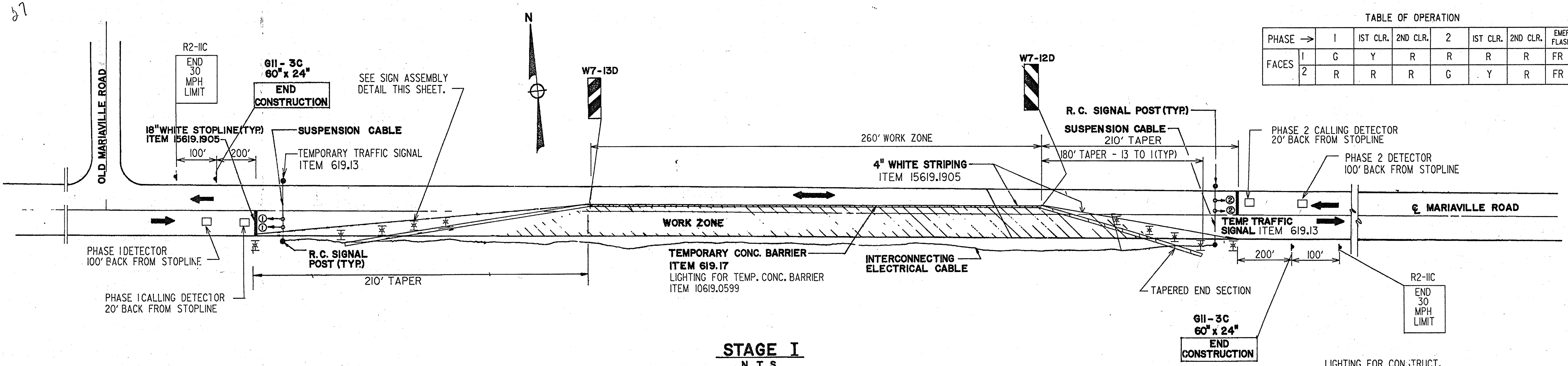
JACKSON AND TULL
CHARTERED ENGINEERS

IN CHARGE OF:
DESIGNED BY:
DRAFTED BY:
CHECKED BY:

27

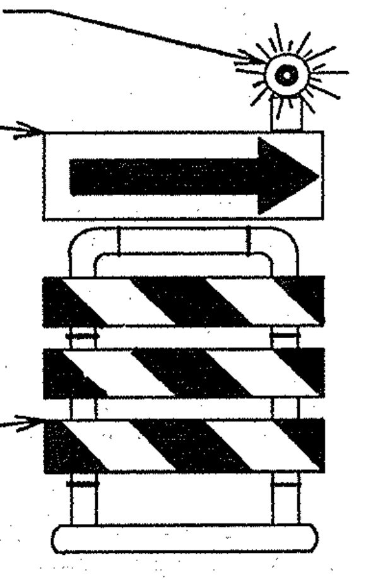
TABLE OF OPERATION

PHASE →		1	1ST CLR.	2ND CLR.	2	1ST CLR.	2ND CLR.	EMER. FLASH
FACES	1	G	Y	R	R	R	R	FR
	2	R	R	R	G	Y	R	FR



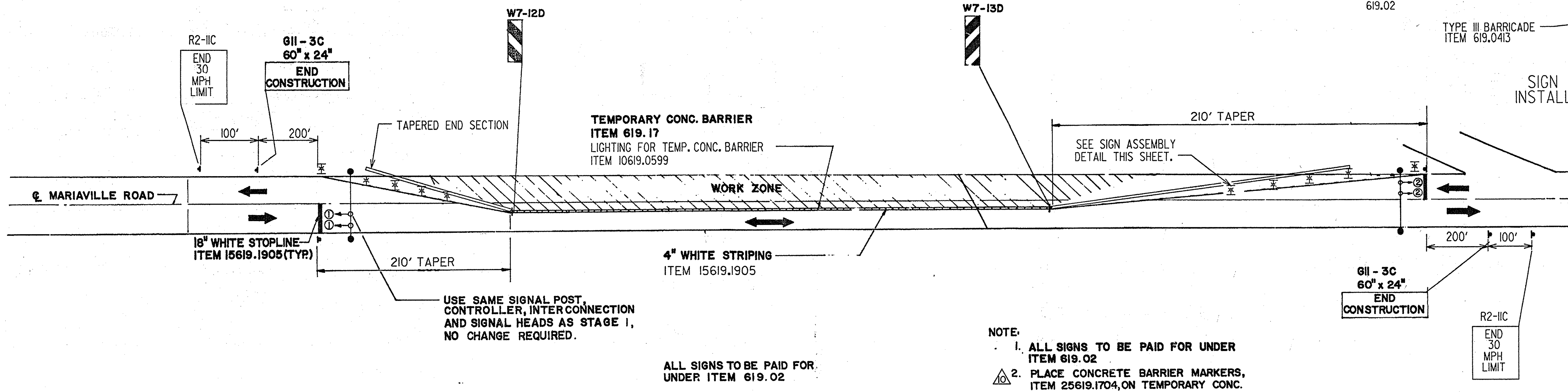
STAGE I

N. T. S.


LIGHTING FOR CONSTRUCT. BARRICADE, ITEM 619.0502.
ARROW (W1-12D OR W1-11D) TO BE INCLUDED ON THE FIRST BARRICADE FACING TRAFFIC AND EVERY OTHER BARRICADE IN LANE DROP THEREAFTER. COST TO BE INCLUDED IN ITEM 619.02
TYPE III BARRICADE
ITEM 619.0413

SIGN ASSEMBLY TO BE INSTALLED AT LANE DROPS

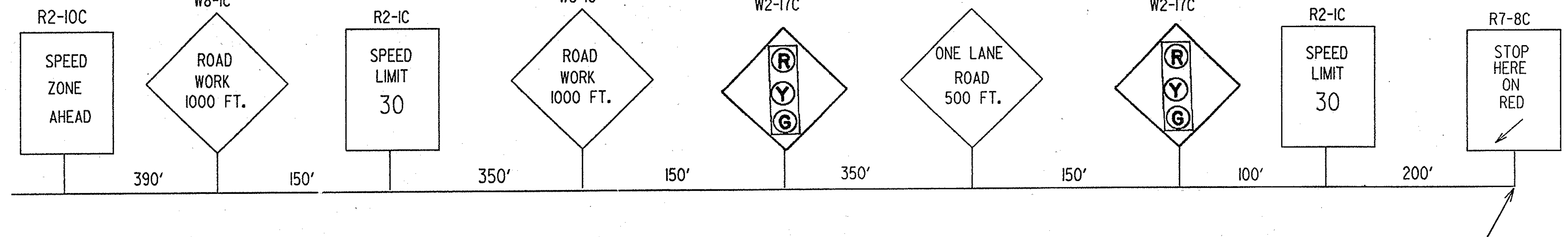
NOT TO SCALE



ALL SIGNS TO BE PAID FOR UNDER ITEM 619.02

STAGE II

N. T. S.



APPROACH SIGN LAYOUT

NOTE:

1. **ALL SIGNS TO BE PAID FOR UNDER ITEM 619.02**
2. **PLACE CONCRETE BARRIER MARKERS, ITEM 25619.1704, ON TEMPORARY CONC. BARRIERS ~~20~~ 40 FEET APART. (STAGE I & II)** (10)
3. THE CONTROLLER SHALL BE A 2-PHASE FULL TRAFFIC ACTUATED CONTROLLER WITH REST-IN-RED CAPABILITY OR A 3-PHASE FULL TRAFFIC ACTUATED CONTROLLER.
4. 6' X 6' LOOP DETECTORS IF USED SHALL HAVE 5 TURNS.
5. THE W2-17C SIGNAL AHEAD SIGNS SHALL HAVE ORANGE REFLECTORIZED BACKGROUND WITH BLACK LEGEND.
6. THE SIGNAL SHALL BE SET TO REST IN RED.
7. SIGN AND SIGNAL LAYOUT SHALL BE THE SAME FOR STAGE I AND STAGE II.
8. 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 OF REGION 1 OF THE DEPARTMENT OF TRANSPORTATION OR HIS DESIGNEE.
9. THE CONTRACTOR SHALL REMOVE ALL CONFLICTING PAVEMENT MARKINGS. COST TO COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 619.01
10. TYPE III BARRICADES SHALL BE LIGHTED AS FOLLOWS: THE FIRST BARRICADE FACING TRAFFIC SHALL BE FLASHING AND ALL REMAINING SHALL BE STEADY-BURN.
11. FOR THE TIMING OF THE TRAFFIC LIGHTS, CALL THE DOT REGIONAL TRAFFIC ENGINEER AT 518-474-6377 JUST BEFORE INSTALLATION.

No. 40729

DATE	DESCRIPTION	BY	SYM.
8/17/92	NOTE 2	P.E.B.	(10)
5/15/90	DOT REVISIONS	R.A. DIETLEIN	

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT **REHABILITION OF MARIAVILLE ROAD BRIDGE**

LOCATION OF PROJECT **MP. 159.23 SCHENECTADY COUNTY**

TITLE OF DRAWING

MAINTENANCE OF TRAFFIC

CONTRACT NUMBER: TAA 91-10B

DATE: APRIL 1990

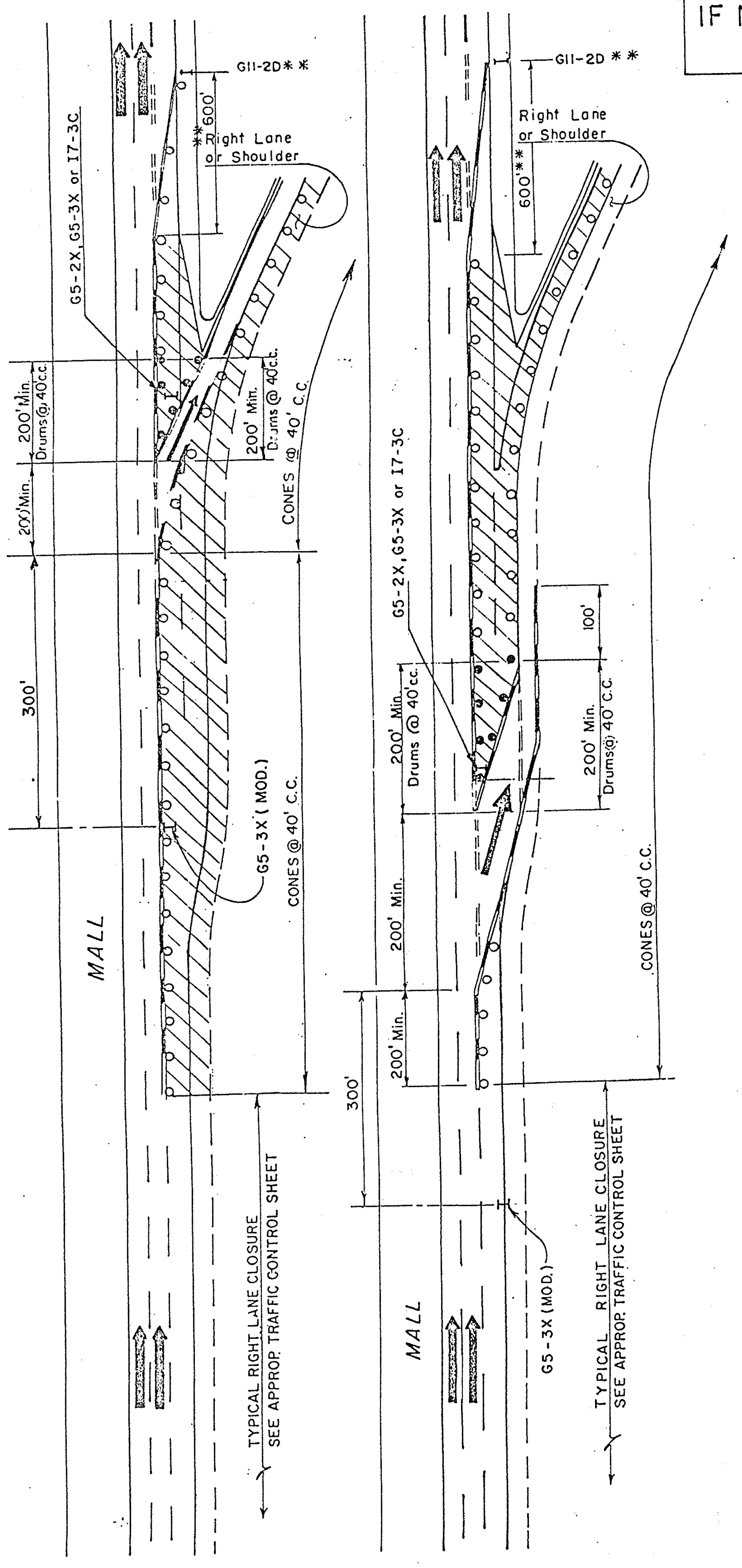
DRAWING NUMBER: 27R1

JACKSON AND TULL
CHARTERED ENGINEERS

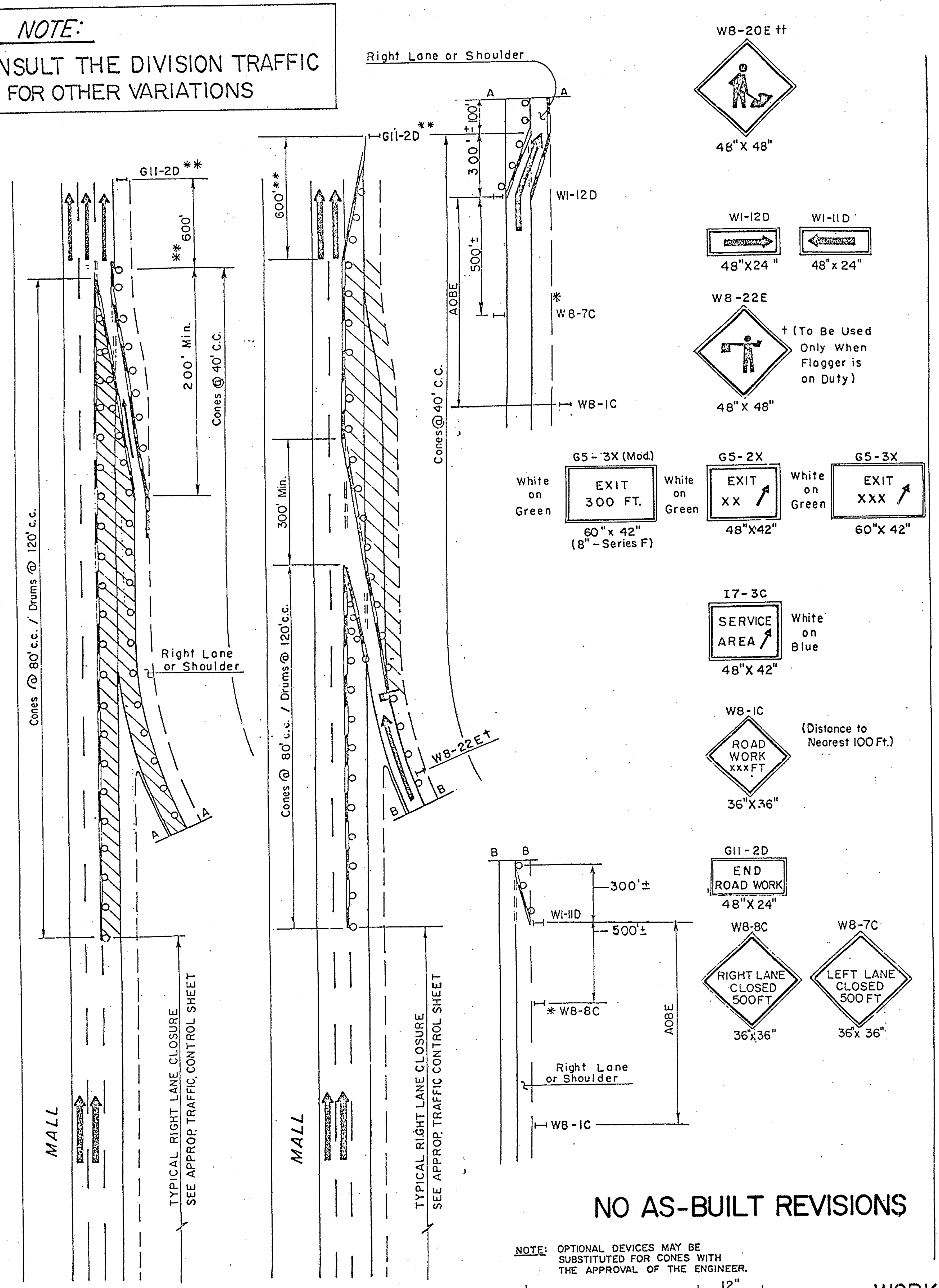
IN CHARGE OF:
DESIGNED BY:
DRAFTED BY:
CHECKED BY:

28

NOTE:
IF NECESSARY, CONSULT THE DIVISION TRAFFIC SUPERVISOR FOR OTHER VARIATIONS

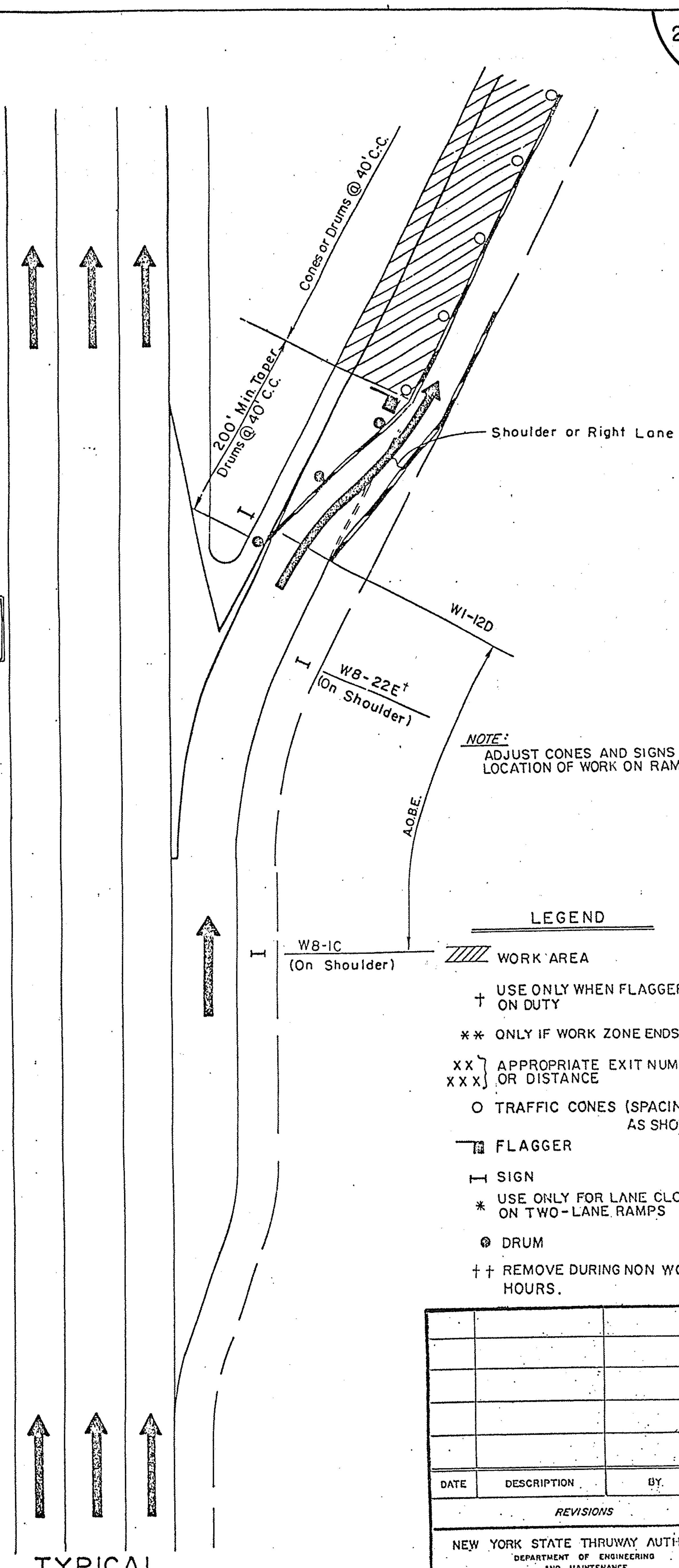


TYPICAL DECELERATION LANE



TYPICAL ACCELERATION LANE

NO AS-BUILT REVISIONS



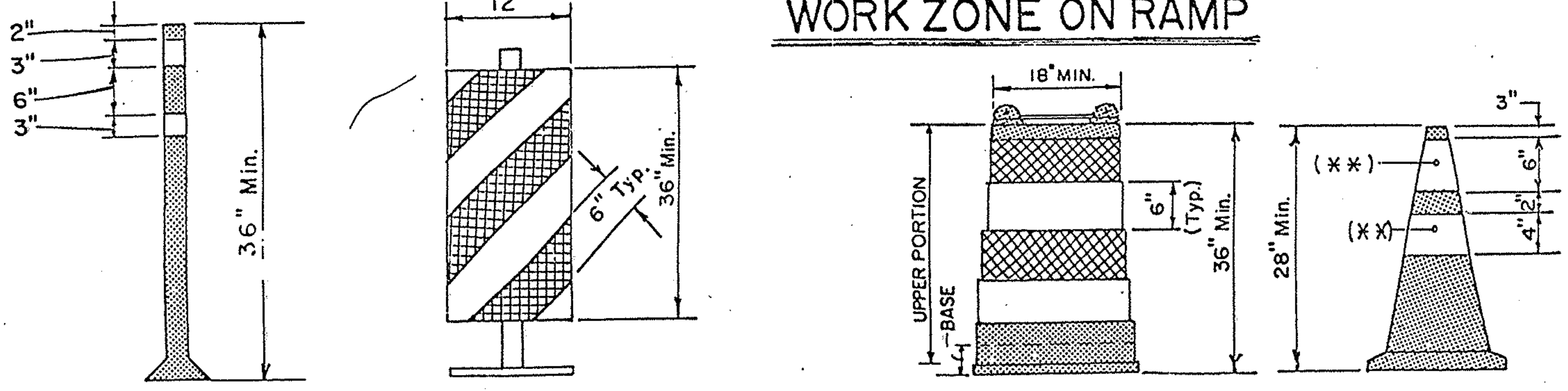
NOTE:
ADJUST CONES AND SIGNS TO LOCATION OF WORK ON RAMP

TYPICAL WORK ZONE ON RAMP

LEGEND

▨	WORK AREA
†	USE ONLY WHEN FLAGGER IS ON DUTY
**	ONLY IF WORK ZONE ENDS HERE
XX / XXX	APPROPRIATE EXIT NUMBER OR DISTANCE
○	TRAFFIC CONES (SPACING - AS SHOWN)
	FLAGGER
⊢	SIGN
*	USE ONLY FOR LANE CLOSURE ON TWO-LANE RAMPS
●	DRUM
††	REMOVE DURING NON WORK HOURS.

NOTE: OPTIONAL DEVICES MAY BE SUBSTITUTED FOR CONES WITH THE APPROVAL OF THE ENGINEER.



TUBULAR MARKER — VERTICAL PANEL

(OPTIONAL DEVICES)

PLASTIC DRUM — CONE

TRAFFIC CONTROL DEVICES

Dwg. No. 23-2-8-DT

LEGEND

□	WHITE REFLECTORIZED SHEETING, CLASS B (3M, 3800 SERIES or EQUAL)
▩	ORANGE REFLECTORIZED SHEETING, CLASS B (3M, 3800 SERIES or EQUAL)
▒	NON-REFLECTORIZED ORANGE
(**)	APPROVED REFLECTORIZED WHITE BAND or COLLAR (CLASS B or C) - REQUIRED FOR NIGHT USE.

LEGEND

═══	EXISTING PAVEMENT MARKINGS (BROKEN OR SOLID)
═══	REMOVAL OF EXISTING PAVEMENT MARKINGS DURING CONSTRUCTION
═══	TEMPORARY PAVEMENT MARKING FOR CONSTRUCTION (SEE NOTE A)

NOTE-A
EXISTING PAVEMENT MARKINGS SHALL BE MAINTAINED BY THE CONTRACTOR WITHIN PROJECT LIMITS. IF CONTRACTORS OPERATIONS IN ANY WORK ZONE WILL EXCEED A PERIOD OF 2 WEEKS OR AS DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL COMPLETELY REMOVE PORTIONS OF EXISTING MARKINGS AND INSTALL TEMPORARY MARKINGS AS DETAILED ABOVE. TEMPORARY MARKINGS SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. 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.

CHECKED BY:
DRAFTED BY:
DESIGNED BY:
IN CHARGE OF:

DATE	DESCRIPTION	BY.	SYM.

REVISIONS

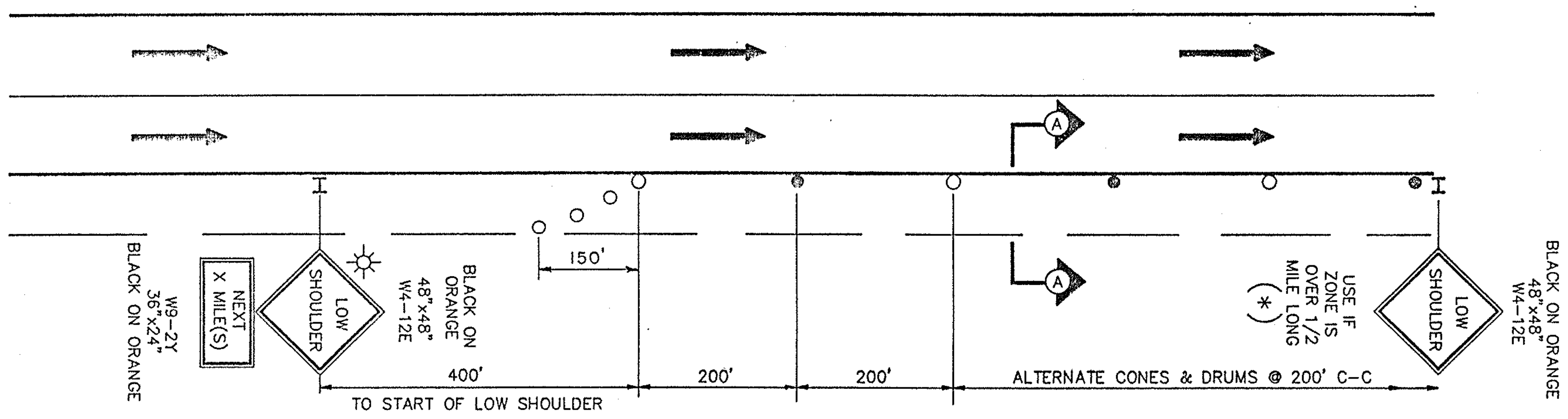
NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT **REHABILITATION OF MARIAVILLE ROAD BRIDGE**
LOCATION OF PROJECT
MP 159.23, SCHENECTADY COUNTY
TITLE OF DRAWING
TRAFFIC CONTROL AT INTERCHANGES, SERVICE AREAS and PARKING AREAS

CONTRACT NUMBER: TAA 91-10B
DATE: 6/27/90
DRAWING NUMBER: 28

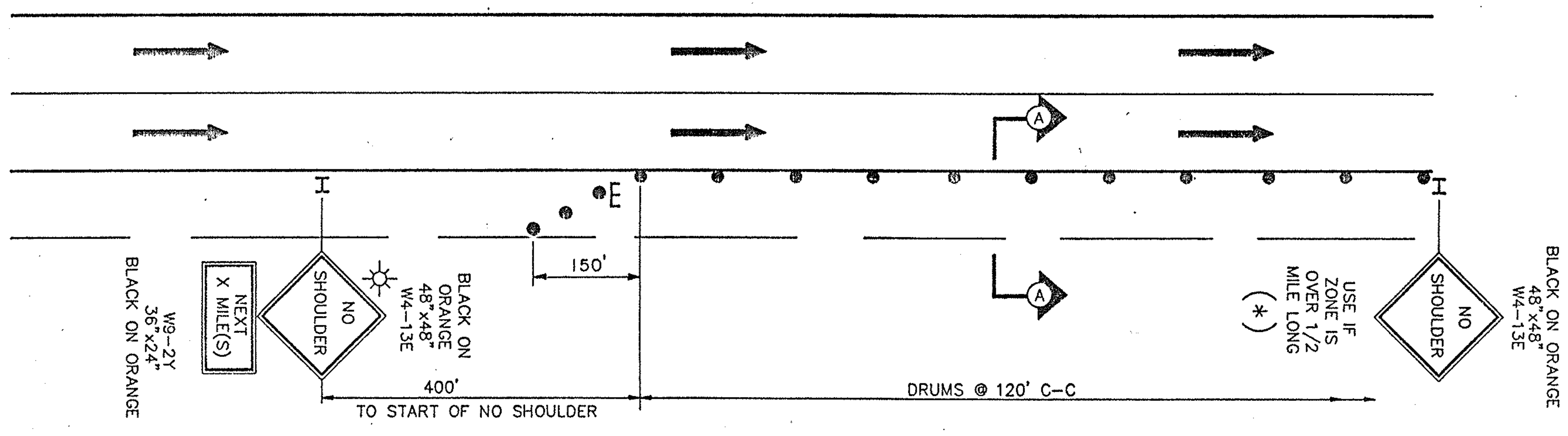
Current 1-1-90

29

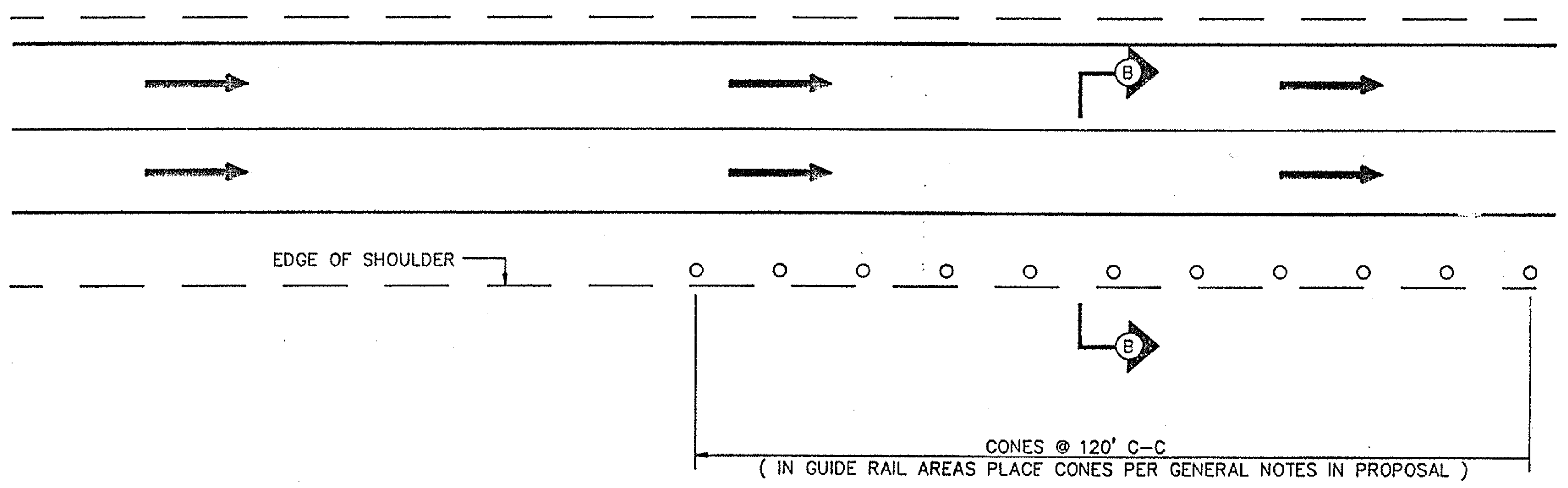


TRAFFIC CONTROL PLAN IN AREAS WITH A SHOULDER DROP OF 1 1/2 INCHES TO 4 INCHES

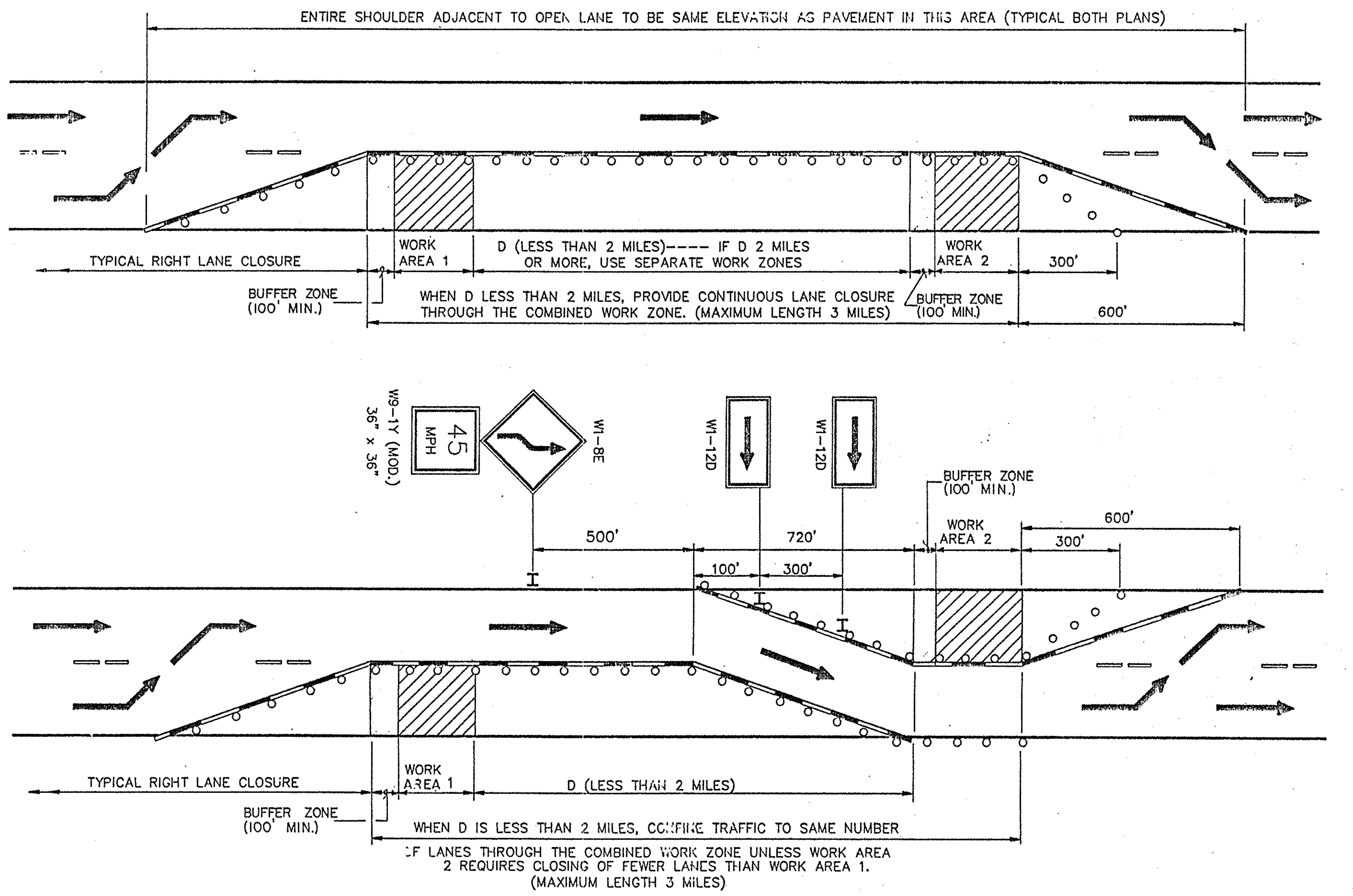
(*) W9-2Y SIGN IS REQUIRED UNLESS WITHIN 1000' OF END OF SECTION



TRAFFIC CONTROL PLAN IN AREAS WITH A SHOULDER DROP OF MORE THAN 4 INCHES AND LESS THAN 18 INCHES


B
EDGE OF SHOULDER
CONES @ 120' C-C
(IN GUIDE RAIL AREAS PLACE CONES PER GENERAL NOTES IN PROPOSAL)

TRAFFIC CONTROL PLAN IN AREAS WITH FINAL PAVEMENT COURSE PLACED AND PERMANENT PAVEMENT DELINEATION INSTALLED WITH DROP AT EDGE OF SHOULDER


ENTIRE SHOULDER ADJACENT TO OPEN LANE TO BE SAME ELEVATION AS PAVEMENT IN THIS AREA (TYPICAL BOTH PLANS)
TYPICAL RIGHT LANE CLOSURE
WORK AREA 1
D (LESS THAN 2 MILES)---- IF D 2 MILES OR MORE, USE SEPARATE WORK ZONES
WORK AREA 2
300'
BUFFER ZONE (100' MIN.)
WHEN D LESS THAN 2 MILES, PROVIDE CONTINUOUS LANE CLOSURE THROUGH THE COMBINED WORK ZONE. (MAXIMUM LENGTH 3 MILES)
BUFFER ZONE (100' MIN.)
600'
W9-1Y (MOD.)
36" x 36"
45 MPH
W1-8E
W1-12D
W1-12D
BUFFER ZONE (100' MIN.)
500'
720'
100'
300'
WORK AREA 2
600'
300'
TYPICAL RIGHT LANE CLOSURE
WORK AREA 1
D (LESS THAN 2 MILES)
BUFFER ZONE (100' MIN.)
WHEN D IS LESS THAN 2 MILES, CONFINE TRAFFIC TO SAME NUMBER OF LANES THROUGH THE COMBINED WORK ZONE UNLESS WORK AREA 2 REQUIRES CLOSING OF FEWER LANES THAN WORK AREA 1.
(MAXIMUM LENGTH 3 MILES)

SUCCESSIVE WORK ZONES - TWO LANE SECTIONS

(THREE LANE SIMILAR)

LEGEND

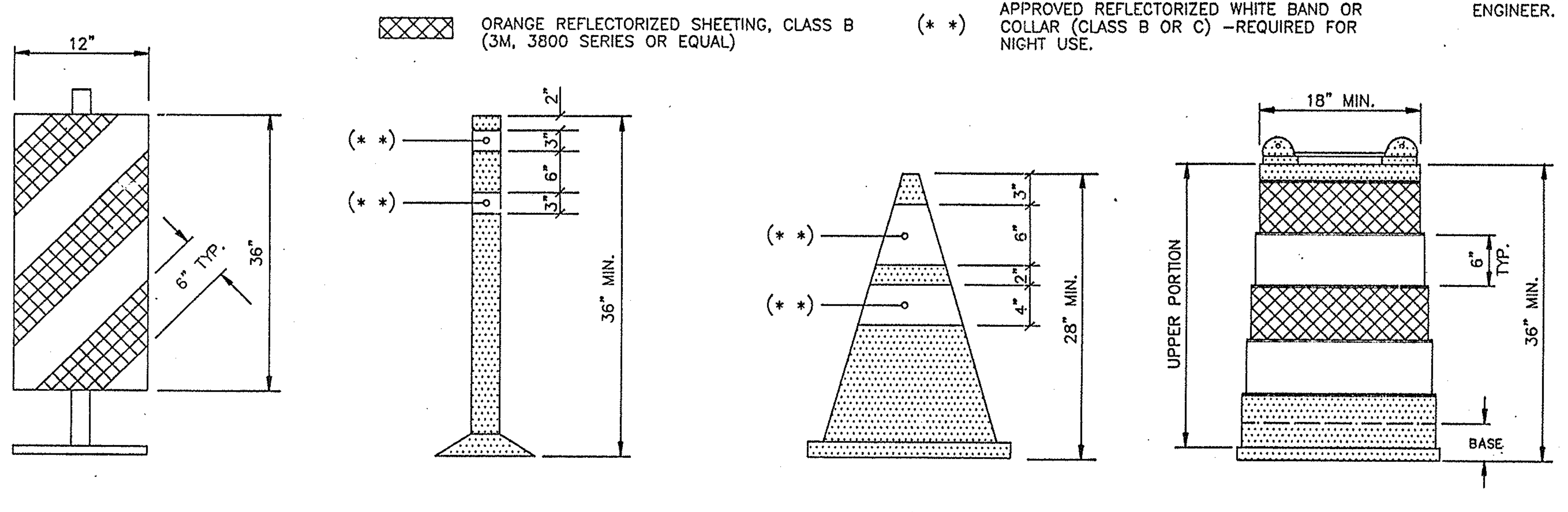
☐ WHITE REFLECTORIZED SHEETING, CLASS B (3M, 3800 SERIES OR EQUAL)

▩ ORANGE REFLECTORIZED SHEETING, CLASS B (3M, 3800 SERIES OR EQUAL)

▒ NON-REFLECTORIZED ORANGE

(* *) APPROVED REFLECTORIZED WHITE BAND OR COLLAR (CLASS B OR C) -REQUIRED FOR NIGHT USE.

(+) OPTIONAL DEVICES MAY BE SUBSTITUTED FOR CONES WITH THE APPROVAL OF THE ENGINEER.



VERTICAL PANEL

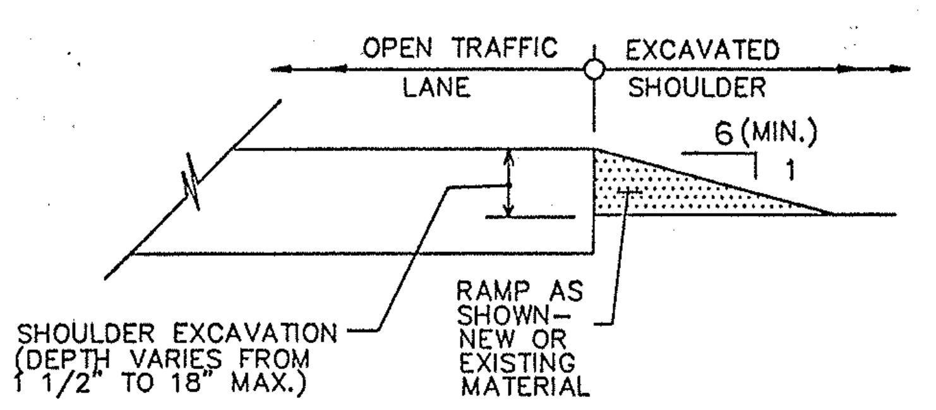
TUBULAR MARKER

CONE

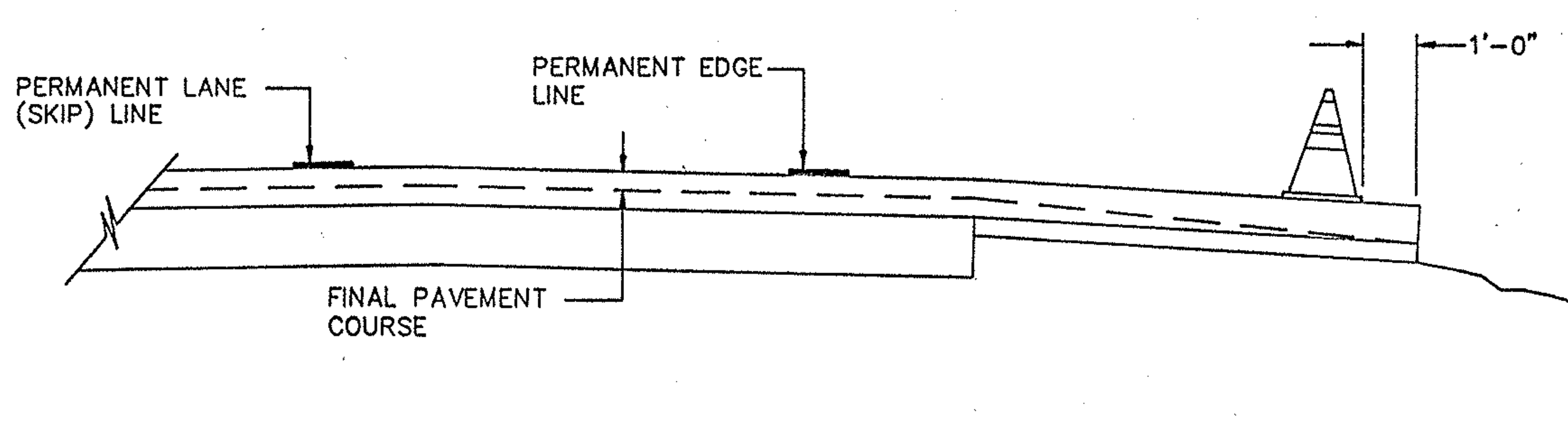
PLASTIC DRUM

(OPTIONAL DEVICES) (+)

TRAFFIC CONTROL DEVICES


OPEN TRAFFIC LANE
EXCAVATED SHOULDER
6 (MIN.)
1
SHOULDER EXCAVATION (DEPTH VARIES FROM 1 1/2" TO 18" MAX.)
RAMP AS SHOWN-NEW OR EXISTING MATERIAL

SECTION A-A



SECTION B-B

(AREAS WITHOUT SHOULDER BACK-UP INSTALLED)

NOTE "A"

EXISTING PAVEMENT MARKINGS SHALL BE MAINTAINED BY THE CONTRACTOR WITHIN PROJECT LIMITS. IF CONTRACTOR"S OPERATIONS IN ANY WORK ZONE WILL EXCEED A PERIOD OF 2 WEEKS, OR AS DIRECTED BY THE ENGINEER, CONTRACTOR SHALL COMPLETELY REMOVE PORTIONS OF EXISTING MARKINGS AND INSTALL TEMPORARY MARKINGS AS DETAILED ABOVE. TEMPORARY MARKINGS SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

WHEN ALL WORK IS TO BE COMPLETED IN THE WORK ZONE, OR AS DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL REMOVE THE TEMPORARY MARKINGS AND RESTORE THE EXISTING MARKINGS.

NOTES FOR SHOULDER EXCAVATION PROTECTION:

THE DISTANCE BETWEEN THE W4-12E OR W4-13E SIGNS SHALL NOT EXCEED ONE HALF MILE. USE W9-2Y ON FIRST SIGN TO NEAREST HALF MILE WHEN THE AREA BEING PROTECTED EXCEEDS ONE HALF MILE IN LENGTH. ONLY THE LEFT OR RIGHT SHOULDER MAY BE WORKED ON AT ONE TIME.

DRUMS AND CONES SHALL BE PLACED AND MAINTAINED SO THAT AT LEAST TWO THIRDS OF THEIR HEIGHT IS EXPOSED ABOVE THE PAVEMENT.

IF THE DEPTH OF EXCAVATION EXCEEDS 18" THE ADJACENT LANE SHALL REMAIN CLOSED.

TYPICAL PLAN FOR RIGHT SHOULDER SHOWN. LEFT SHOULDER PROTECTION IS SAME DETAIL.

EXCAVATED SHOULDER TO BE RAMPED DOWN (SECTION A-A) DURING NON-WORK HOURS.

LEGEND

○ TRAFFIC CONE

● DRUM

☼ FLASHING LIGHT, LOW INTENSITY, FOR NIGHT USE OR A.O.B.E.

┌┬┐ TYPE III BREAKAWAY BARRICADES

I SIGN (ALL "W" SERIES SIGNS TO BE BLACK ON ORANGE)

▭ ▭ REMOVAL OF EXISTING PAVEMENT MARKINGS DURING CONSTRUCTION

━ TEMPORARY PAVEMENT MARKING FOR CONSTRUCTION (SEE NOTE A)

NO AS-BUILT REVISIONS

DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITATION OF MARIAVILLE ROAD BRIDGE

LOCATION OF PROJECT
M.P.159.23, SCHENECTADY COUNTY

TITLE OF DRAWING
THRUWAY TRAFFIC PLANS
FOR MISCELLANEOUS
OPERATIONS

CONTRACT NUMBER: TAA 91-10B

DATE: 6/27/90

DRAWING NUMBER: 29

IN CHARGE OF:

DESIGNED BY:

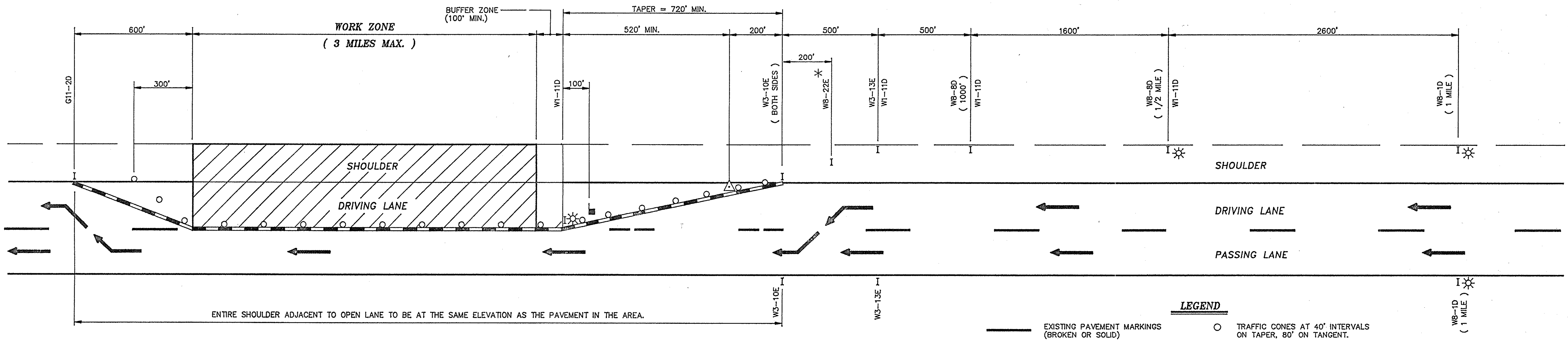
DRAFTED BY:

CHECKED BY:

X Current 1-1-90

30

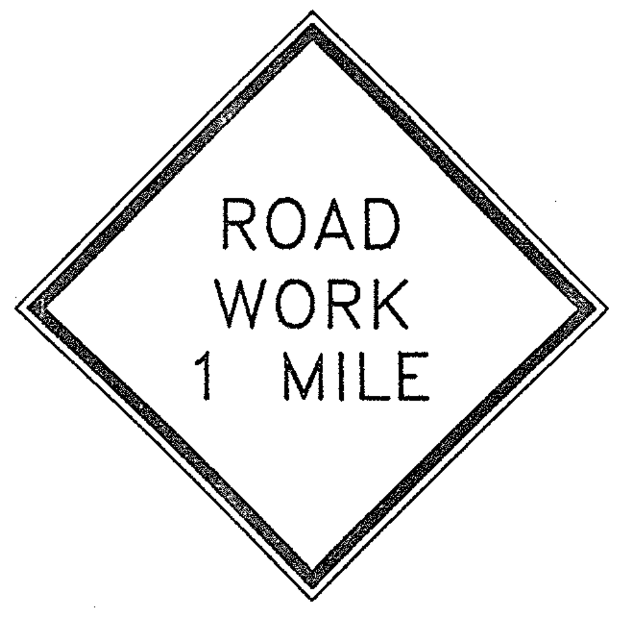
30/37



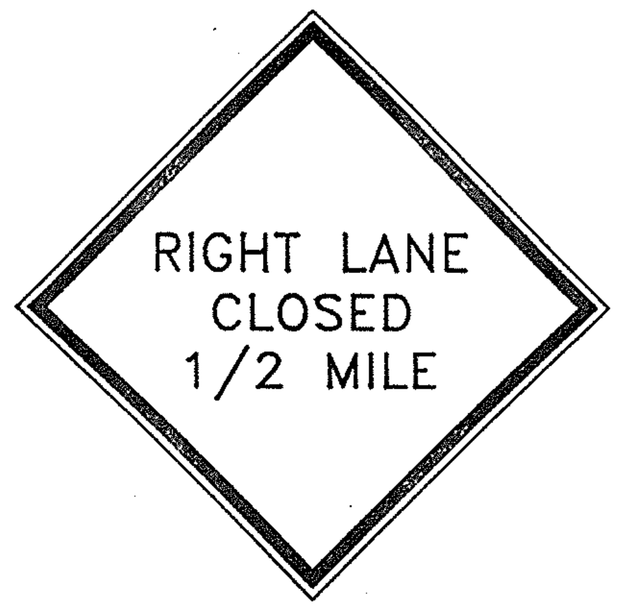
PLAN

LEGEND

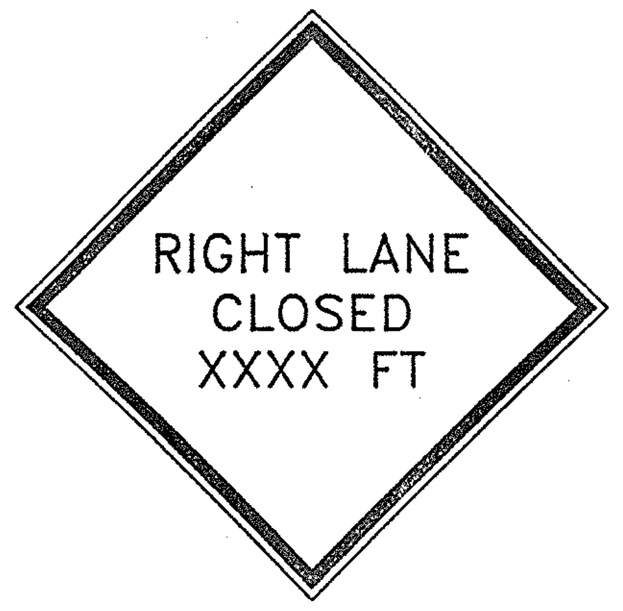
▬	EXISTING PAVEMENT MARKINGS (BROKEN OR SOLID)	○	TRAFFIC CONES AT 40' INTERVALS ON TAPER, 80' ON TANGENT.
— —	REMOVAL OF EXISTING PAVEMENT MARKINGS. (SEE NOTE 8)	▙	FLAGGER, TYPICAL LOCATION.
▬▭▬	TEMPORARY PAVEMENT MARKING FOR CONSTRUCTION (SEE NOTE 8)	I	SIGNS
*	USE ONLY WHEN FLAGGER IS ON DUTY	△	FLASHING ARROWBOARD
		☼	FLASHING LIGHTS (LOW INTENSITY FOR NIGHT USE OR A.O.B.E.)



W8-1D
48" x 48"



W8-8D
48" x 48"



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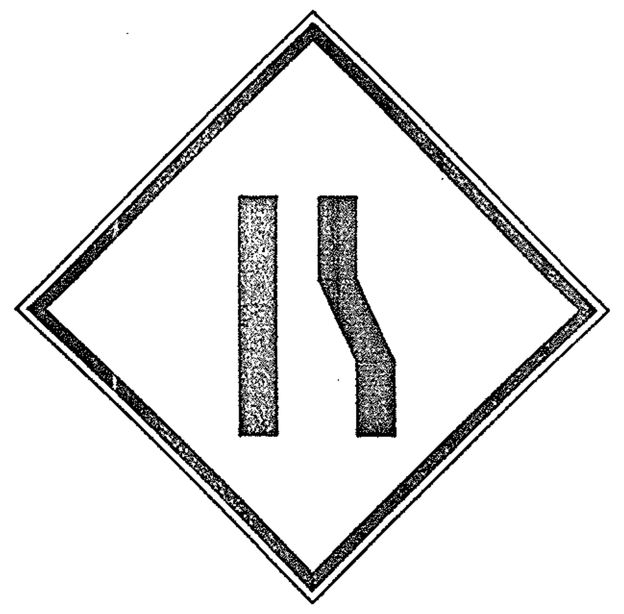
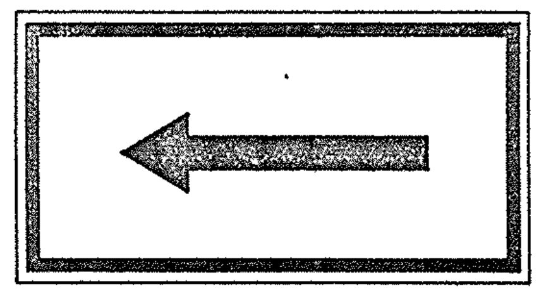
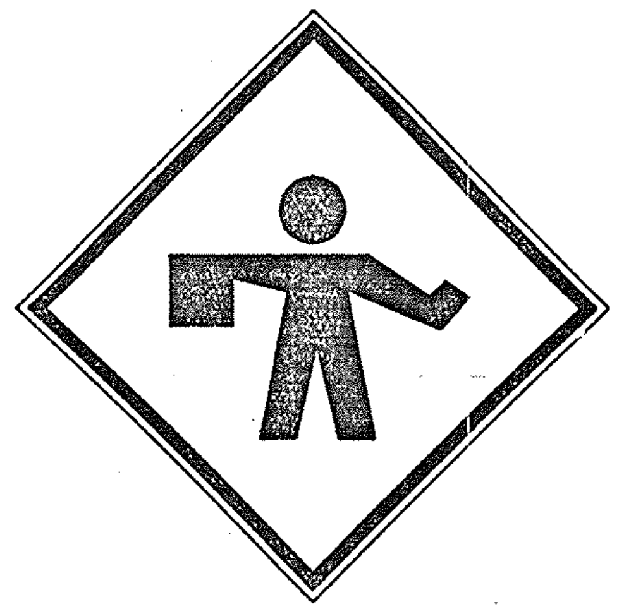
48" x 48"



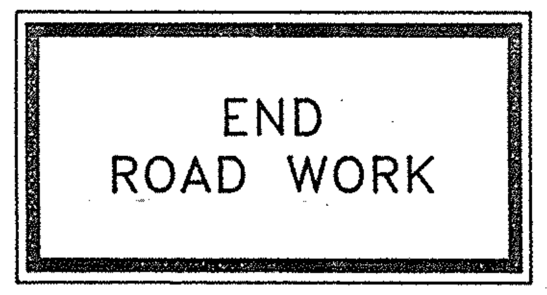
W3-10E
48" x 48"



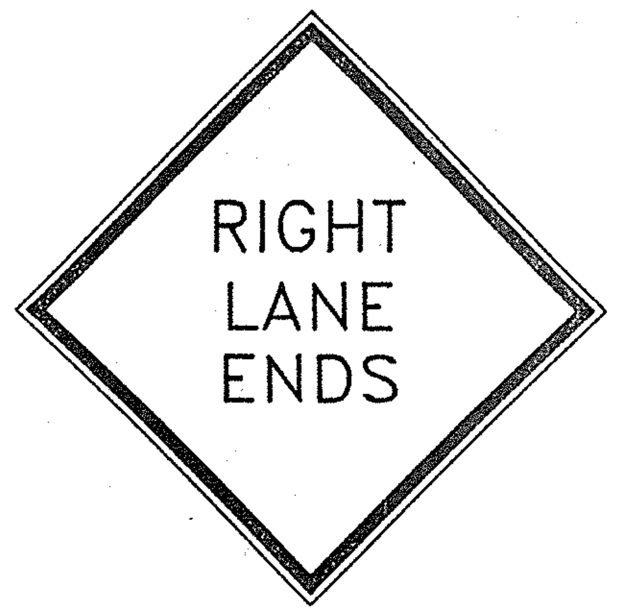
W1-11D
48" x 24"



W8-22E *
48" x 48"



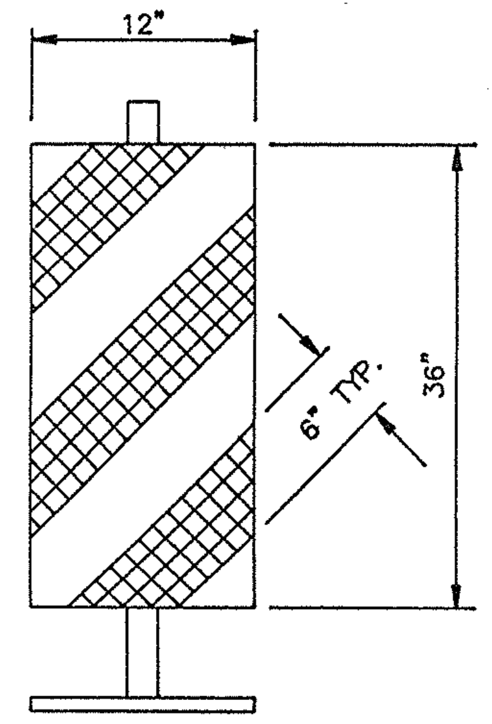
G11-2D
48" x 24"



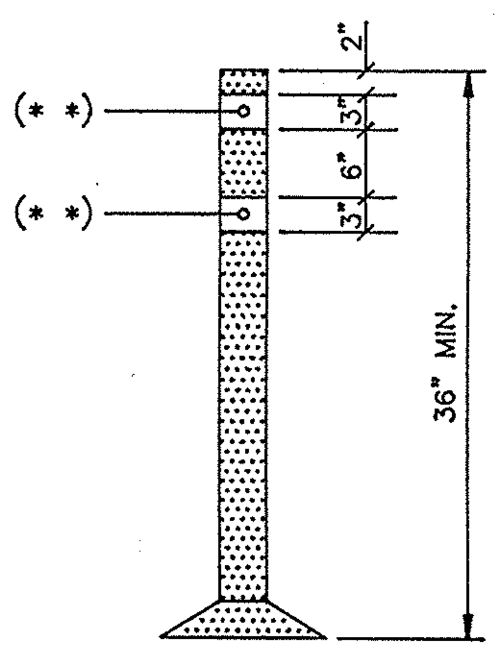
W3-13E
48" x 48"

LEGEND

▭	WHITE REFLECTORIZED SHEETING, CLASS B (3M, 3800 SERIES OR EQUAL)	░	NON-REFLECTORIZED ORANGE
▨	ORANGE REFLECTORIZED SHEETING, CLASS B (3M, 3800 SERIES OR EQUAL)	(* *)	APPROVED REFLECTORIZED WHITE BAND OR COLLAR (CLASS B OR C) -REQUIRED FOR NIGHT USE.

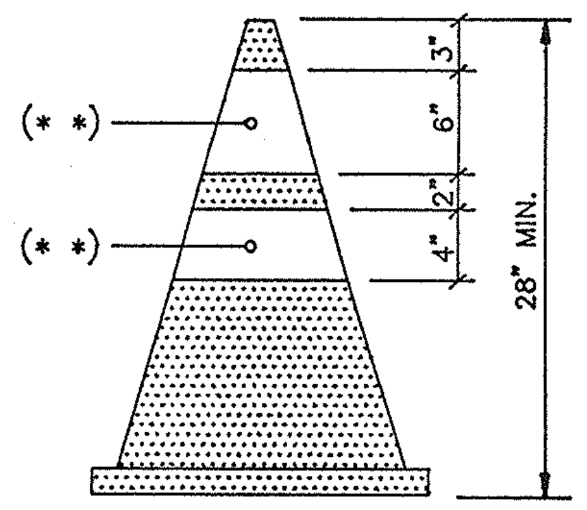


VERTICAL PANEL

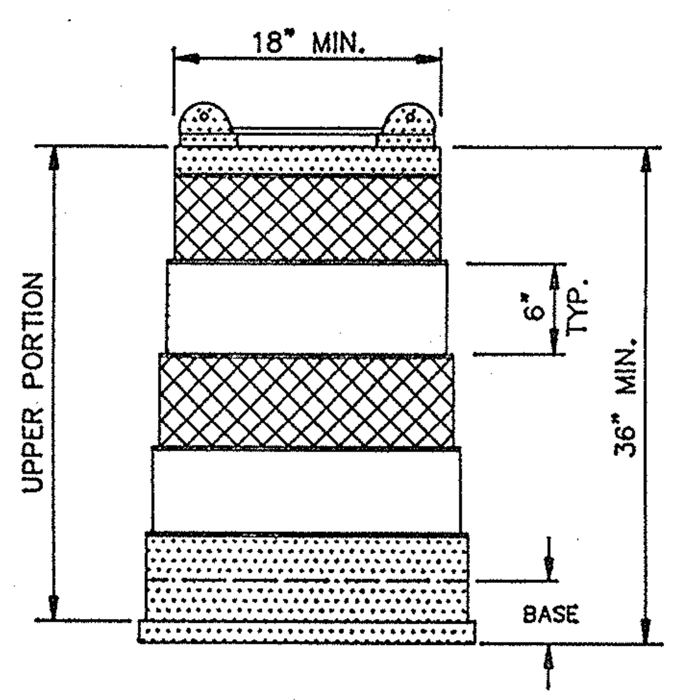


TUBULAR MARKER

(OPTIONAL DEVICES)



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 "W" 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 4 FEET TO THE SIGN BOTTOM. SIGNS SHALL BE PLACED AT OR AS NEAR AS PRACTICABLE TO THE LOCATIONS SHOWN. LATERAL PLACEMENT OF SIGNS SHALL CONFORM TO SECTIONS 201.5 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 W8-22E SIGN WILL 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 294.45 OF THE MUTCD. THE MINIMUM SIZE SHALL BE TYPE C (96" 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 W1-11D TO W1-12D, W8-8D TO W8-7D, W8-11D TO W8-10D, W3-10E TO W3-9E AND W3-13E TO W3-12E.
7. THE TRAFFIC SUPERVISOR WILL APPROVE THE CONDITION OF ALL TRAFFIC CONTROL DEVICES PRIOR TO USE, AND WILL REVIEW THE PROPOSED TRAFFIC CONTROL PATTERN (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 OPERATIONS IN ANY WORK ZONE WILL EXCEED A PERIOD OF 2 WEEKS, OR IF DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL COMPLETELY 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 THE ASSOCIATED TRAFFIC PATTERN. THE DRUMS SHALL BE SPACED AT 70 FOOT INTERVALS ON TAPERS AND 120 FOOT INTERVALS ON TANGENT SECTIONS, OR A.O.B.E. (NOTE - DRUMS MAY BE SUBSTITUTED FOR CONES AT ANY TIME PROVIDED THE ABOVE MAXIMUM SPACING IS MAINTAINED). VERTICAL PANELS AND/OR TUBULAR MARKERS MAY BE SUBSTITUTED FOR CONES WITH THE APPROVAL OF THE ENGINEER.

NO AS-BUILT REVISIONS

DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT **REHABILITATION OF MARIAVILLE ROAD BRIDGE**

LOCATION OF PROJECT
M.P. 159.23, SCHENECTADY COUNTY

TITLE OF DRAWING
TWO LANE THRUWAY
TRAFFIC CONTROL PLAN

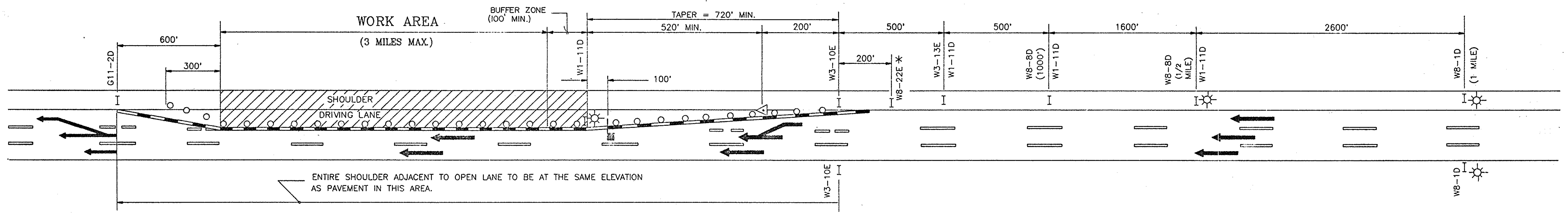
CONTRACT NUMBER: TAA 91-10B

DATE: 6/27/90

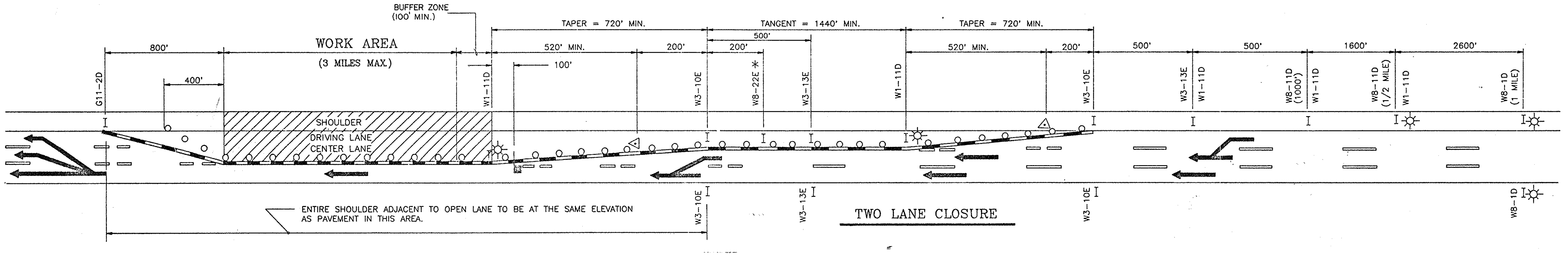
DRAWING NUMBER: 30

CHECKED BY:
DRAFTED BY:
DESIGNED BY:
IN CHARGE OF:

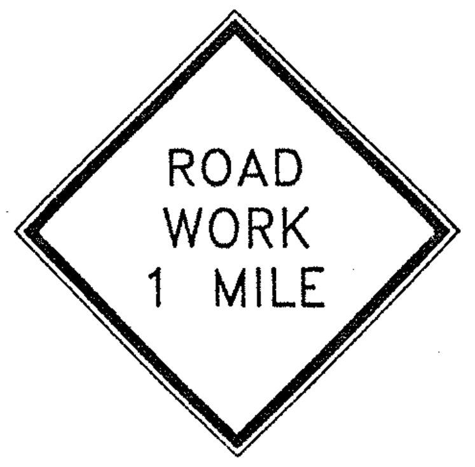
22 x 34
printed 10/95



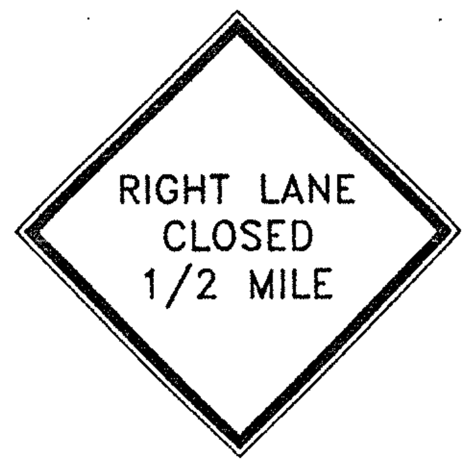
SINGLE LANE CLOSURE



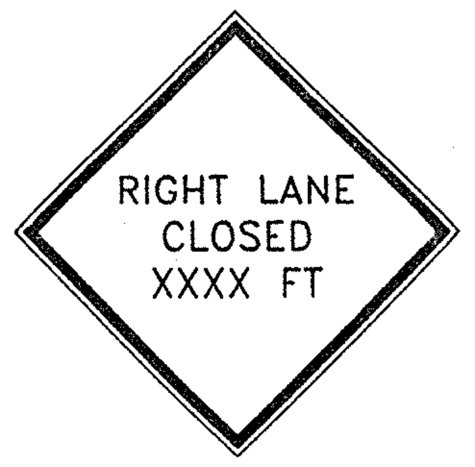
TWO LANE CLOSURE



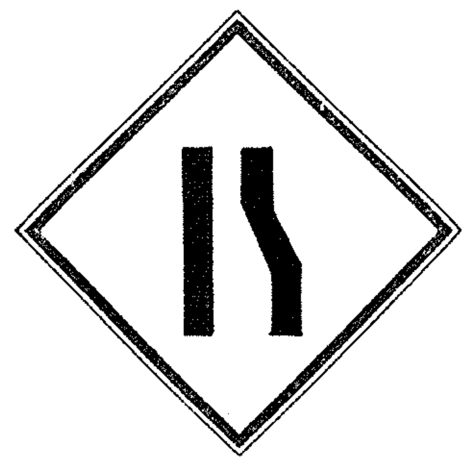
W8-1D
48" x 48"



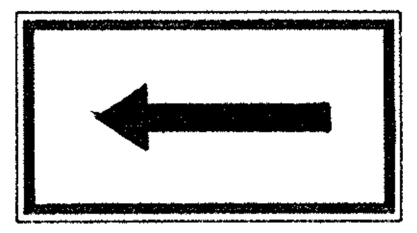
W8-8D
48" x 48"



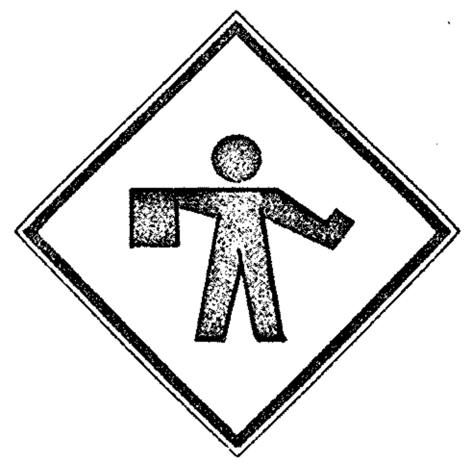
W8-8D
48" x 48"



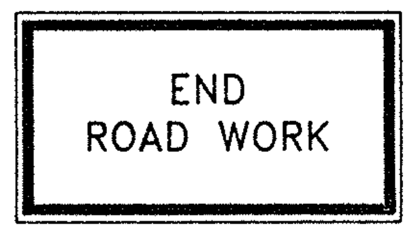
W3-10E
48" x 48"



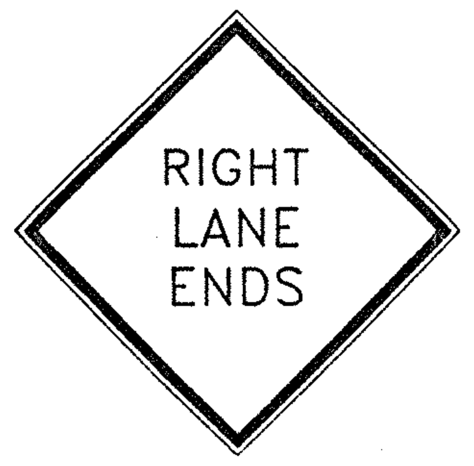
W1-11D
48" x 24"



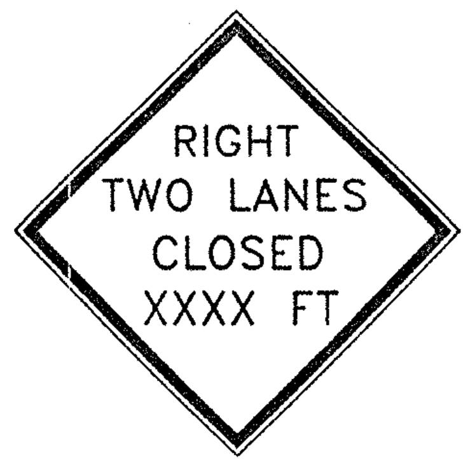
W8-22E *
48" x 48"



G11-2D
48" x 24"



W3-13E
48" x 48"



W8-11D
48" x 48"

LEGEND

═══	EXISTING PAVEMENT MARKINGS (BROKEN OR SOLID)
═ ═	REMOVAL OF EXISTING PAVEMENT MARKINGS. (SEE NOTE 8)
▬	TEMPORARY PAVEMENT MARKING FOR CONSTRUCTION (SEE NOTE 8)
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○	TRAFFIC CONES AT 40' INTERVALS ON TAPER, 80' ON TANGENT.
▙	FLAGGER, TYPICAL LOCATION.
I	SIGNS
△	FLASHING ARROWBOARD
☼	FLASHING LIGHTS (LOW INTENSITY FOR NIGHT USE OR A.O.B.E.)

2/9/90

LEGEND

☐	WHITE REFLECTORIZED SHEETING, CLASS B (3M, 3800 SERIES OR EQUAL)
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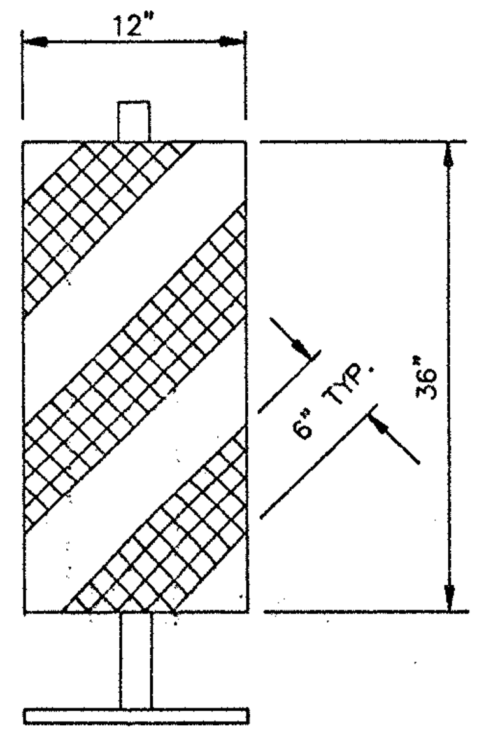
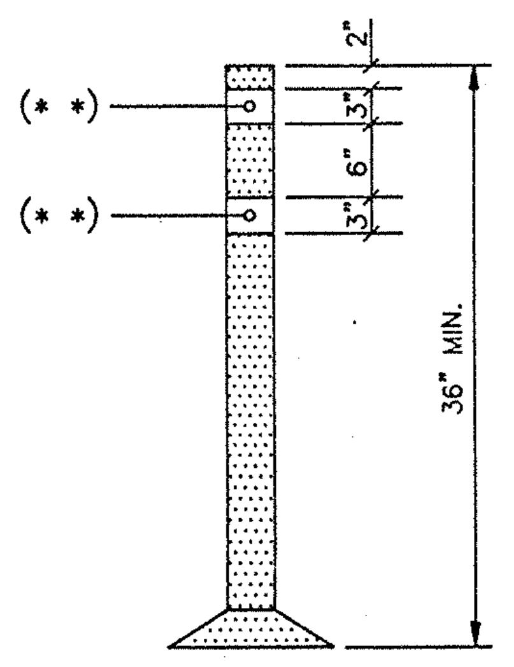
░	NON-REFLECTORIZED ORANGE
(* *)	APPROVED REFLECTORIZED WHITE BAND OR COLLAR (CLASS B OR C) -REQUIRED FOR NIGHT USE.

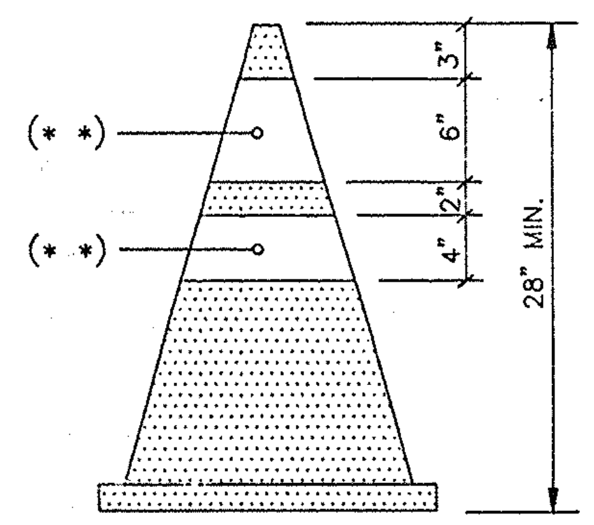


VERTICAL PANEL

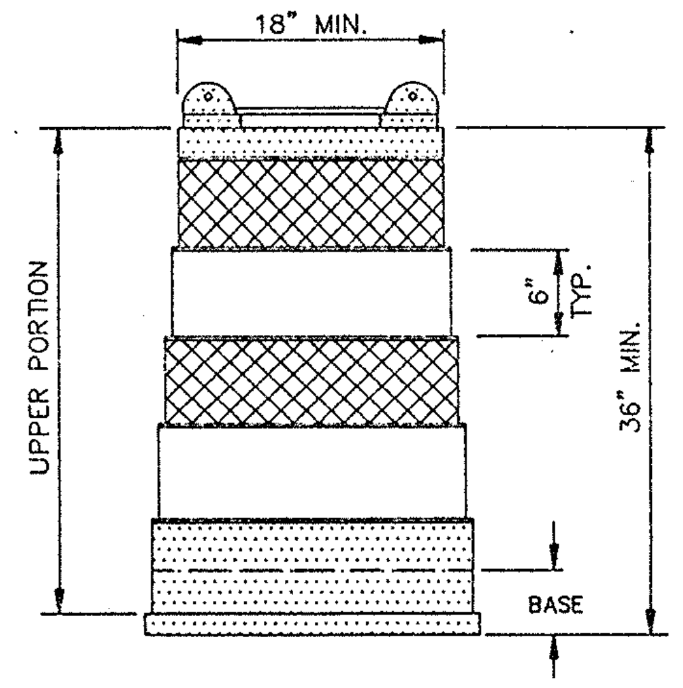


TUBULAR MARKER

(OPTIONAL DEVICES)



CONE



PLASTIC DRUM

TRAFFIC CONTROL DEVICES

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NO AS-BUILT
REVISIONS

JACKSON AND TULL
CHARTERED ENGINEERS

DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT: **REHABILITATION OF MARIAVILLE ROAD BRIDGE**

LOCATION OF PROJECT
MP 159.23, SCHENECTADY COUNTY

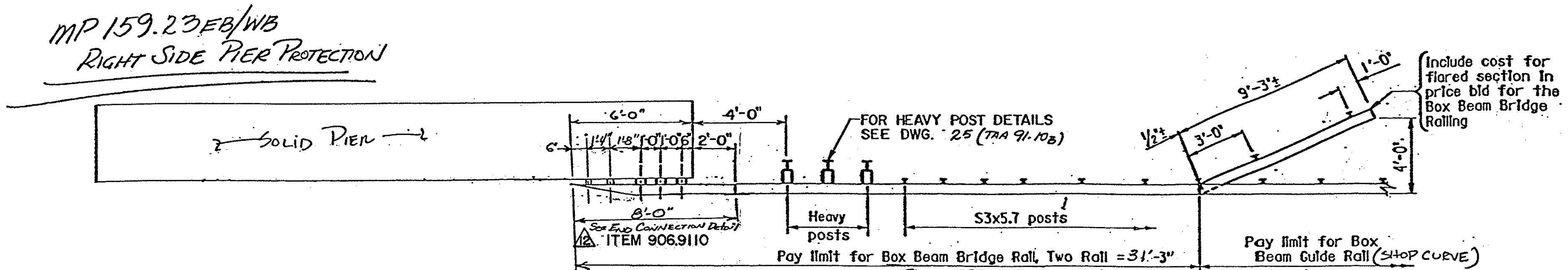
TITLE OF DRAWING
THREE LANE THRUWAY
TRAFFIC CONTROL PLAN

CONTRACT NUMBER: TAA 91-10B
DATE: APRIL 1990
DRAWING NUMBER: 31

IN CHARGE OF: H Peter Gustafson
DESIGNED BY:
DRAFTED BY:
CHECKED BY: Wayne Dietz

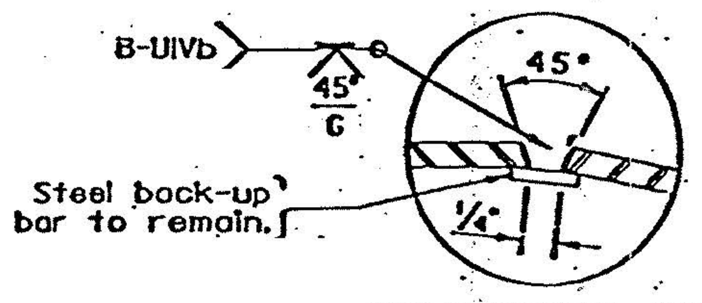
TAA 91-10B

MP 159.23 EB/WB
RIGHT SIDE PIER PROTECTION

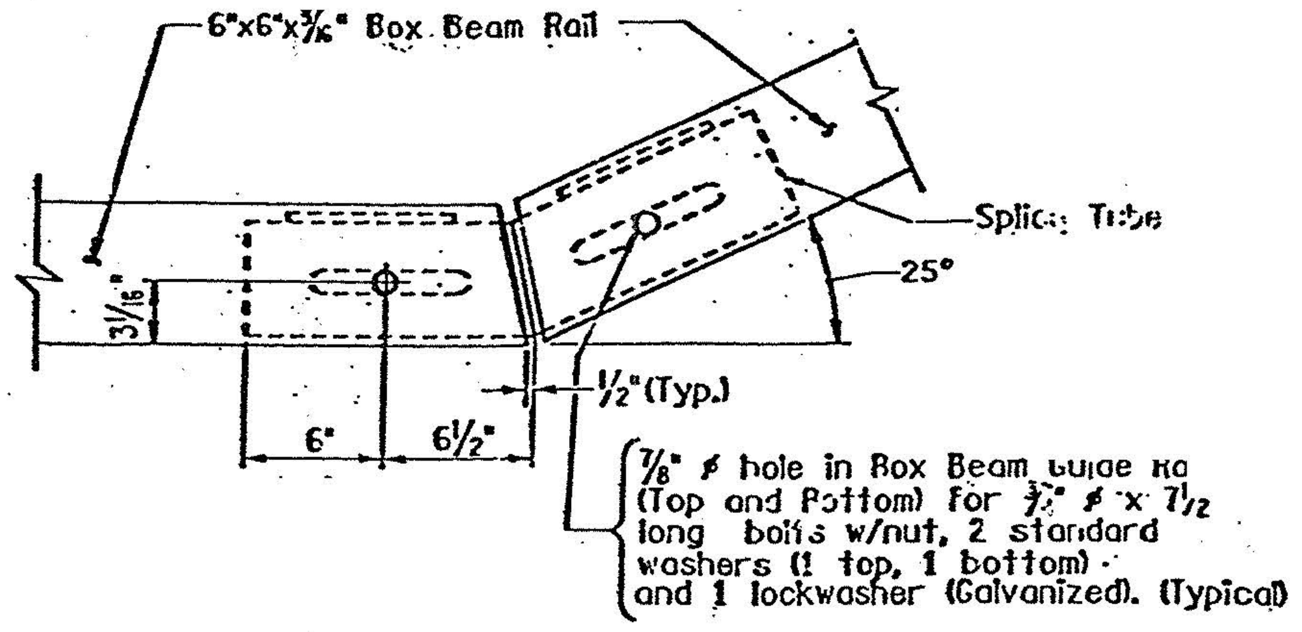

SOLID PIER
6'-0"
4'-0"
6"
1'-4"
1'-8"
1'-0"
1'-0"
6"
2'-0"
8'-0"
See End Connection Detail
12 ITEM 906.9110
FOR HEAVY POST DETAILS SEE DWG. 25 (TAA 91-10B)
Heavy posts
S3x5.7 posts
1/2"±
3'-0"
9'-3"±
1'-0"
4'-0"
Include cost for flared section in price bid for the Box Beam Bridge Railing
Pay limit for Box Beam Bridge Rail, Two Rail = 31'-3"
Item 587.1002
Pay limit for Box Beam Guide Rail (SHOP CURVE)
18' - Item 606.10
72' - Item 606.11
1ea. - Item 606.1401

PLAN
BOX-BEAM-TO-BRIDGE-RAIL TRANSITION
N.T.S.

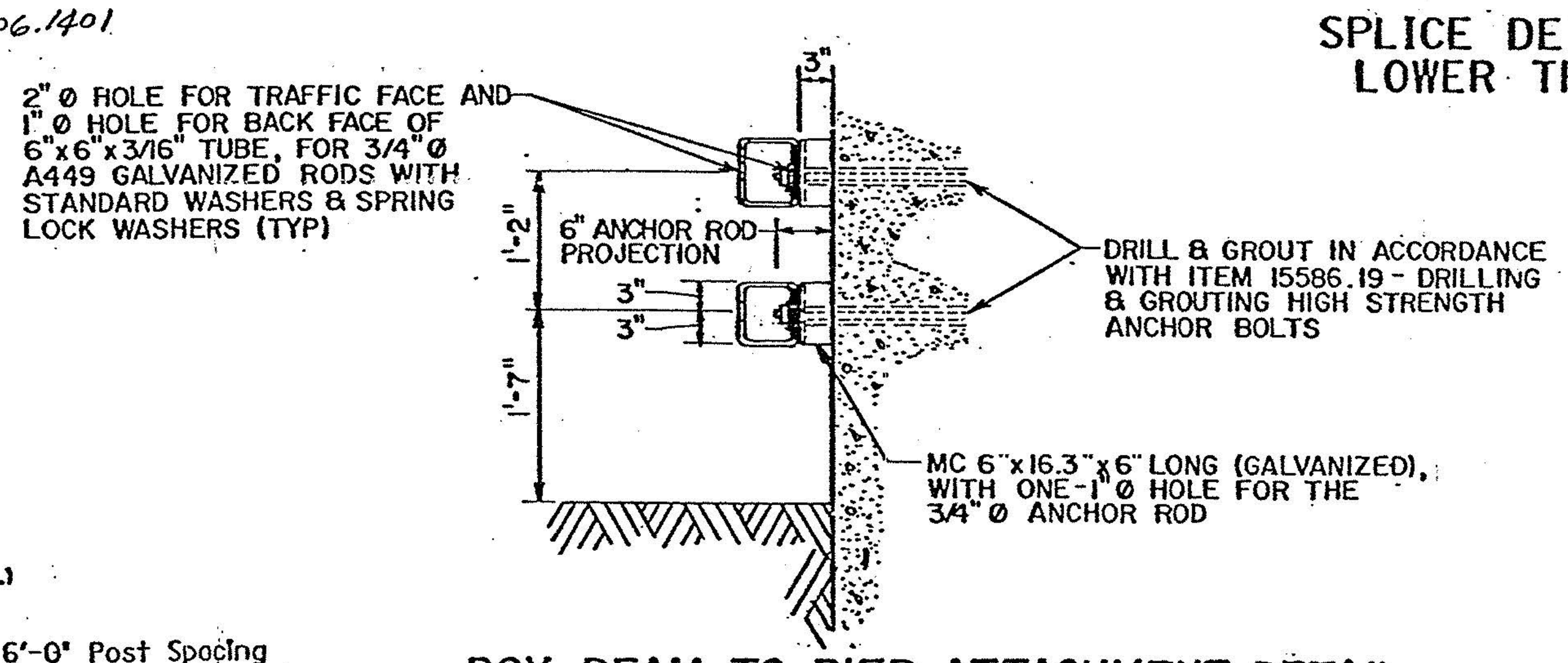
Note: Median Pier Connection and Transition of Box Beam Bridge Rail, Two Rail similar but opposite hand.



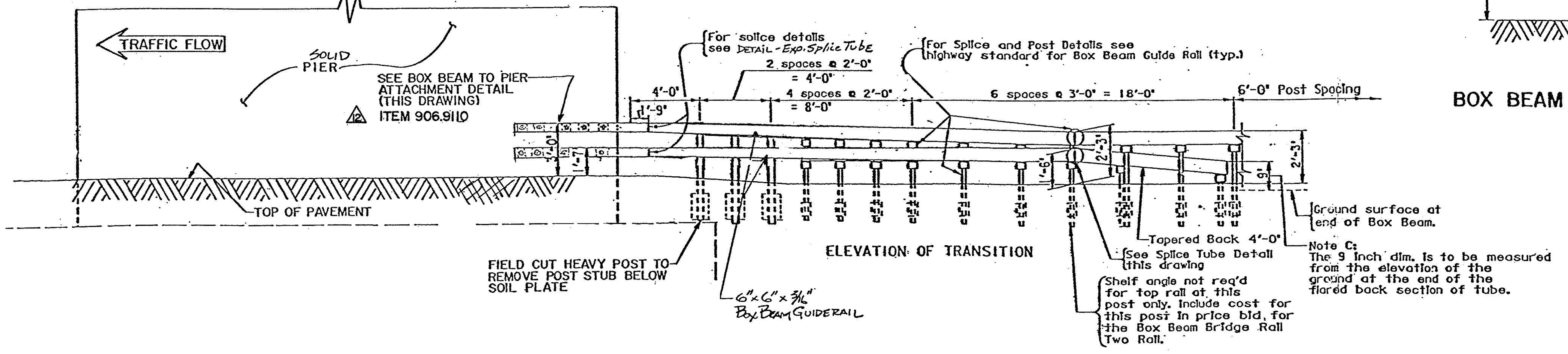
WELD DETAIL FOR SPLICE TUBE
N.T.S.


6"x6"x3/16" Box Beam Rail
Splice Tube
25°
3 1/16"
6"
6 1/2"
1/2"(Typ.)
7/8" ⌀ hole in Box Beam Guide Rail (Top and Bottom) for 3/4" ⌀ x 7 1/2 long bolts w/nut, 2 standard washers (1 top, 1 bottom) and 1 lockwasher (Galvanized). (Typical)

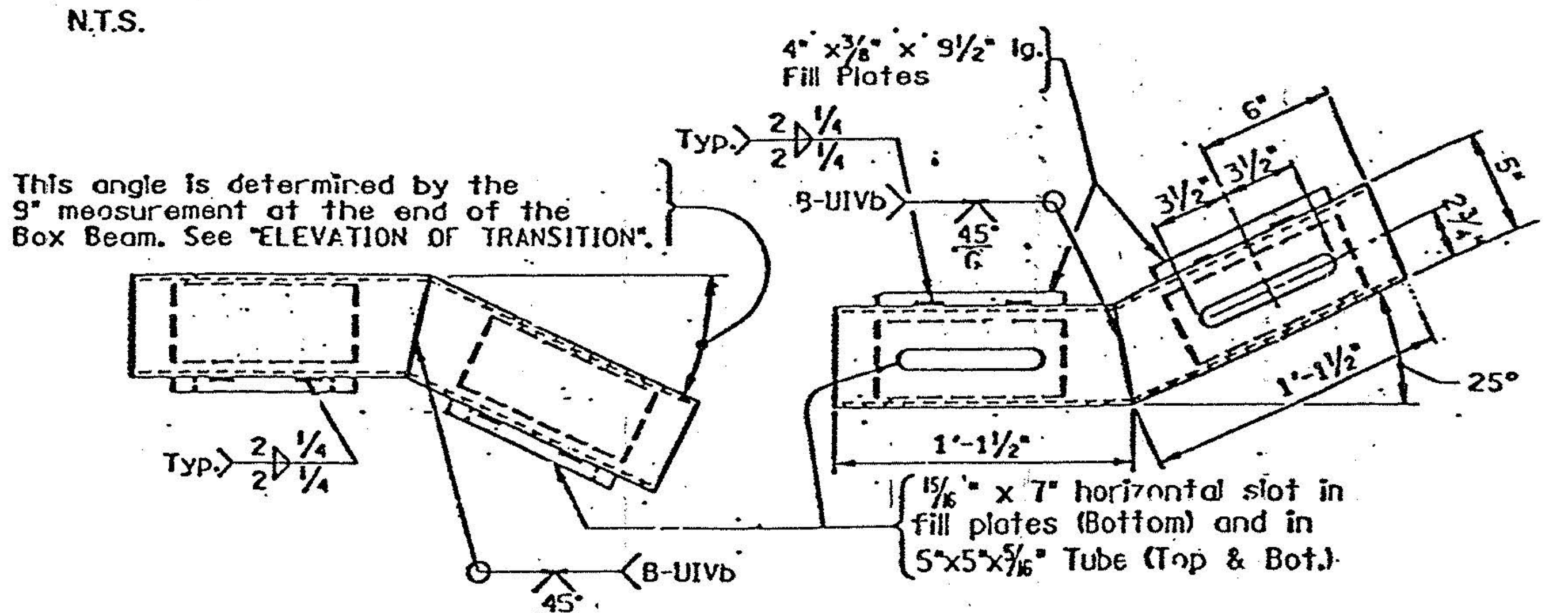
SPLICE DETAIL AT TURN BACK IN LOWER TRANSITION GUIDE RAIL
N.T.S.


2" ⌀ HOLE FOR TRAFFIC FACE AND 1" ⌀ HOLE FOR BACK FACE OF 6"x6"x3/16" TUBE, FOR 3/4" ⌀ A449 GALVANIZED RODS WITH STANDARD WASHERS & SPRING LOCK WASHERS (TYP)
3"
1'-2"
6" ANCHOR ROD PROJECTION
3"
3"
1'-7"
DRILL & GROUT IN ACCORDANCE WITH ITEM 15586.19 - DRILLING & GROUTING HIGH STRENGTH ANCHOR BOLTS
MC 6"x16.3"x6" LONG (GALVANIZED), WITH ONE-1" ⌀ HOLE FOR THE 3/4" ⌀ ANCHOR ROD

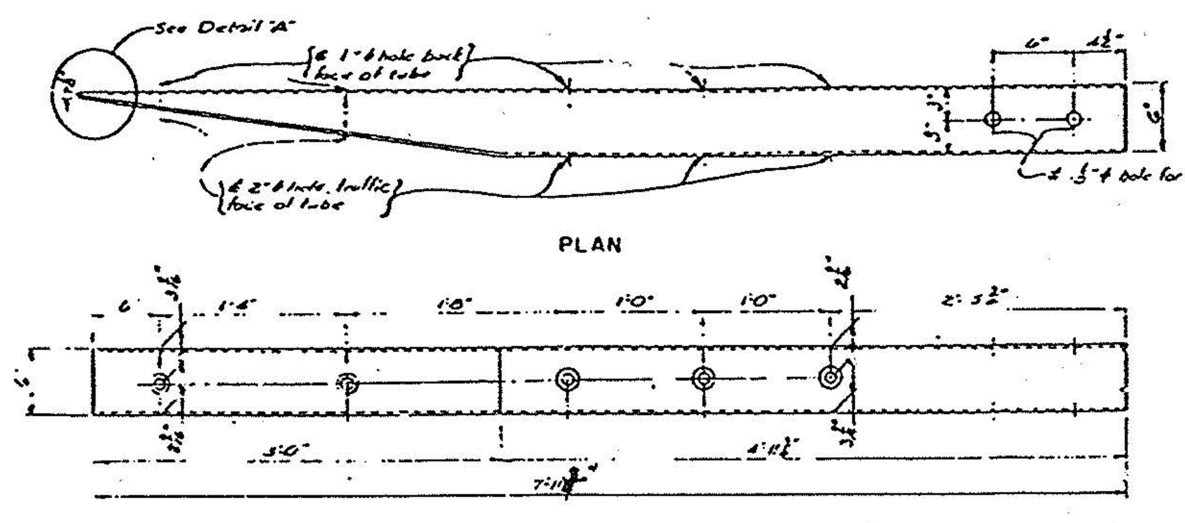
BOX BEAM TO PIER ATTACHMENT DETAIL
N.T.S.


TRAFFIC FLOW
SOLID PIER
SEE BOX BEAM TO PIER ATTACHMENT DETAIL (THIS DRAWING)
12 ITEM 906.9110
TOP OF PAVEMENT
For splice details see DETAIL - Exp. Splice Tube
For Splice and Post Details see highway standard for Box Beam Guide Rail (typ.)
2 spaces @ 2'-0" = 4'-0"
4'-0"
1'-9"
4 spaces @ 2'-0" = 8'-0"
6 spaces @ 3'-0" = 18'-0"
6'-0" Post Spacing
1'-0"
1'-7"
1'-6"
2'-3"
2'-3"
9"
Ground surface at end of Box Beam.
Tapered Back 4'-0"
Note C:
The 9 inch dim. is to be measured from the elevation of the ground at the end of the flared back section of tube.
See Splice Tube Detail this drawing
Shelf angle not req'd for top rail at this post only. Include cost for this post in price bid, for the Box Beam Bridge Rail Two Rail.
FIELD CUT HEAVY POST TO REMOVE POST STUB BELOW SOIL PLATE
6"x6"x3/16" Box Beam Guiderail

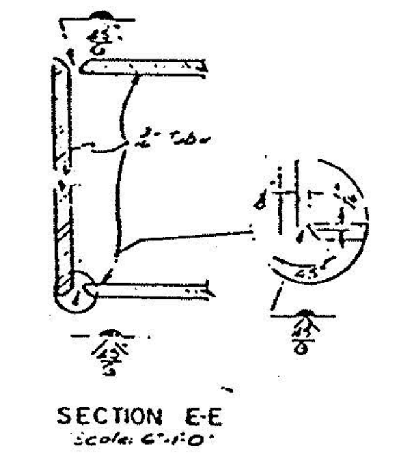
ELEVATION OF TRANSITION


4"x3/8"x9 1/2" lg. Fill Plates
Typ.
2
1/4
2
1/4
B-UIVb
45°
G
This angle is determined by the 9" measurement at the end of the Box Beam. See "ELEVATION OF TRANSITION".
6"
3 1/2"
3 1/2"
5"
2 3/4"
1'-1 1/2"
1'-1 1/2"
25°
15/16" x 7" horizontal slot in fill plates (Bottom) and in 5"x5"x5/16" Tube (Top & Bot.)
ELEVATION
PLAN

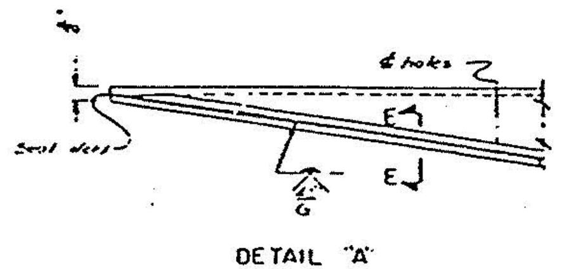
SPLICE TUBE DETAIL



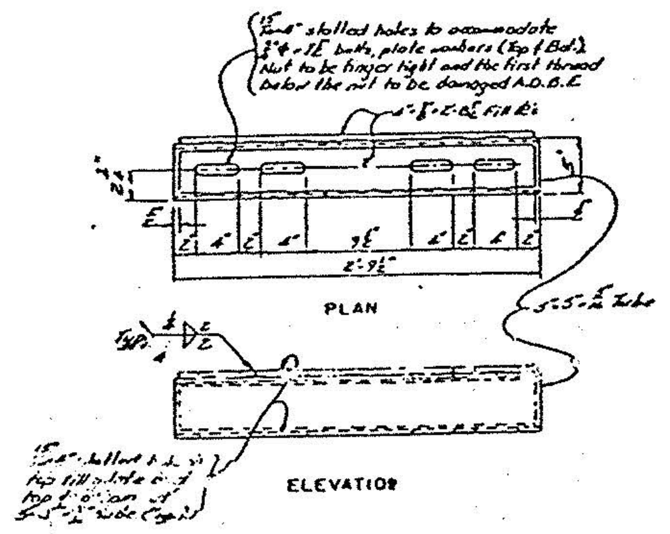
-DETAIL-
END CONN FOR GUIDE RAIL



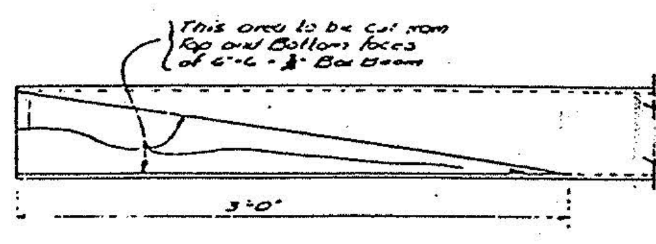
SECTION E-E



DETAIL "A"

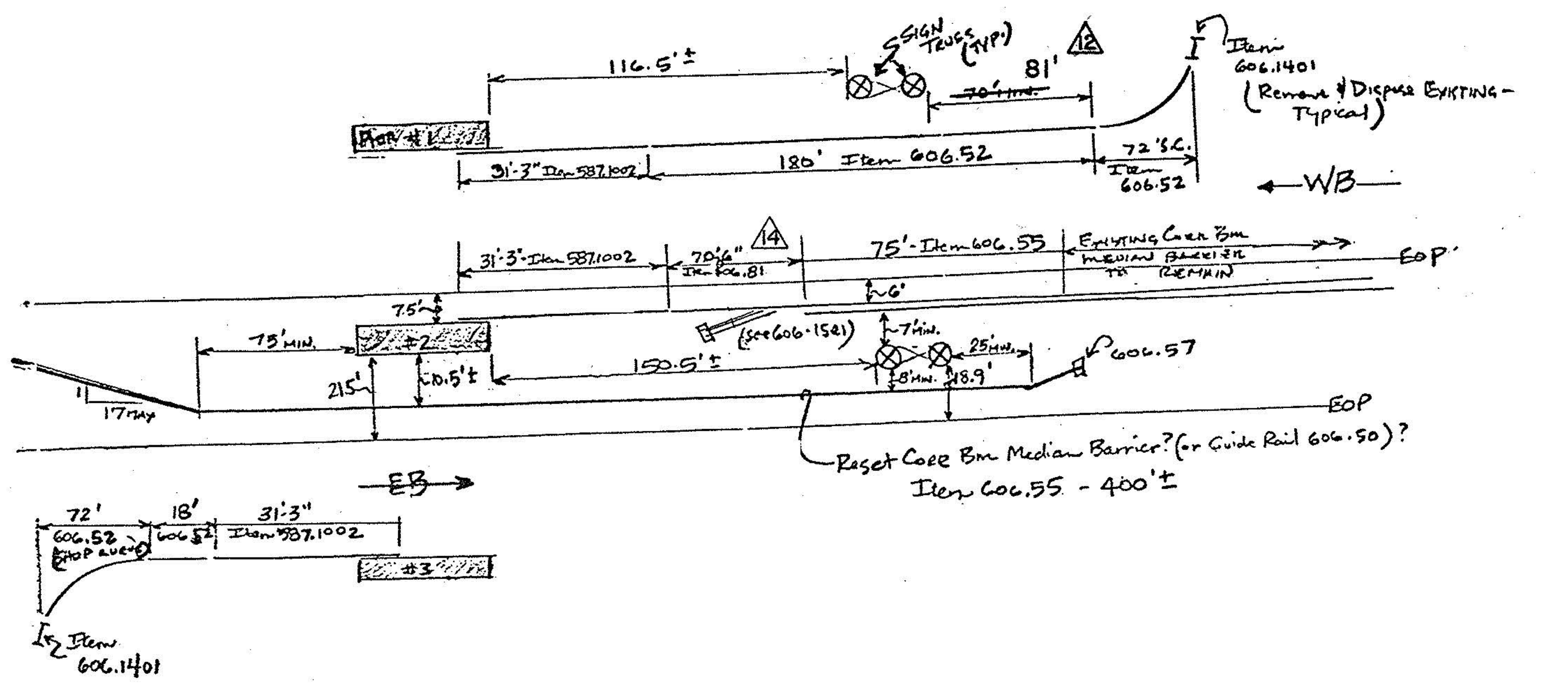


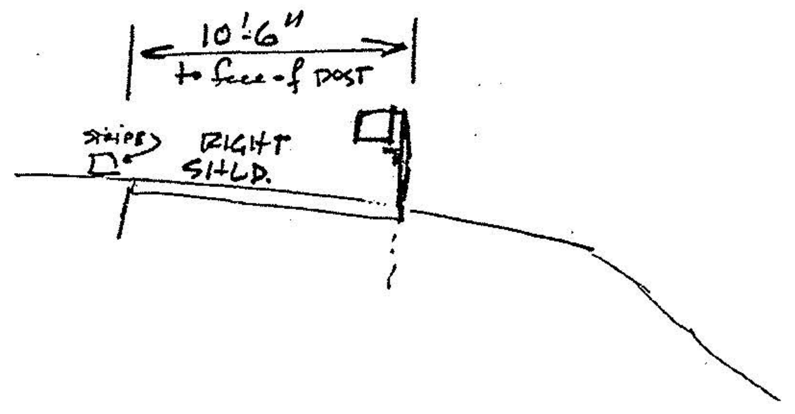
EXPANSION SPLICE TUBE DETAIL



CUT DETAIL END CONN.

GUIDE RAIL LAYOUT





8/17/92	ITEM 606.81	P.E.B.	14
8/17/92	ITEM 906.9110	P.E.B.	12
DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITATION OF MARIAVILLE RD. BRIDGE

LOCATION OF PROJECT M.P. 59.23
SCHENECTADY COUNTY

TITLE OF DRAWING
PROPOSED SHOULDER
PIER PROTECTION
MODIFICATION

CONTRACT NUMBER: TAA 91-10B
DATE: 6/27/90
DRAWING NUMBER: 32RI

MARK	NO.	LENGTH	TYPE	WEIGHT	A	B	C	D	E	F	G	H	J	K	L	R	S	T
STAGE I																		
EAST ABUTMENT																		
BACKWALL																		
5AE1	9	4'-10"	5	45	6"	1'-5"	6"				6"		4"					
5AE2	9	3'-0"	9	28		1'-1"	10"	1'-1"										
5AE3	3	20'-9"	STR.	65														
5AE4	2	21'-0"	8	44		19'-0"	2'-0"	0				1'-0"		1'-9"				
5AE5	1	20'-3"	STR.	21														
5AE6	2	5'-4"	5	11	6"	1'-3"	11"				6"		4"					
5AE7	2	7'-6"	9	16		2'-4"	1'-3"	3'-11"										
5AE8	1	5'-8"	9	6		2'-3"	1'-2"	2'-3"										
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~240~~ 236 LBS △1														
WINGWALL																		
5AE21	8	*7'-5"	5	62	6"	1'-10"	1'-2" TO 1'-7"				6"		4"					
5AE22	2	5'-8"	5	12	6"	8"	1'-8"				6"		4"					
5AE23	3	16'-8"	STR.	52														
5AE24	3	13'-8"	STR.	43														
5AE25	3	3'-9"	STR.	12														
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~180~~ 181 LBS △1														
PEDESTAL -(IV)																		
5AE31	4	2'-7"	9	11		7"	2'-0"	0										
5AE32	3	7'-10"	7	25	6"	1'-9"	2'-1"	0	8"	2'-4"	6"	2'-1"	4"	1'-1"				
PEDESTAL -(V)																		
5AE31	4	2'-4"	9	10		7"	1'-9"	0										
5AE32	2	7'-10"	7	16	6"	1'-9"	2'-1"	0	8"	2'-4"	6"	2'-1"	4"	1'-1"				
PEDESTAL -(VI)																		
5AE31	6	2'-1"	9	13		7"	1'-6"	0										
5AE32	1	8'-6"	7	9	6"	3'-2"	9"	0	2'-9"	10"	6"	9"	4"	5"				
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~80~~ 84 LBS △1														
STAGE II																		
EAST ABUTMENT																		
BACKWALL																		
5AE1	11	4'-10"	5	55	6"	1'-5"	6"				6"		4"					
5AE2	11	3'-0"	9	34		1'-1"	10"	1'-1"										
5AE9	3	22'-10"	8	71		21'-6"	1'-4"	0				9"		1'-2"				
5AE10	2	20'-3"	STR.	42														
5AE11	1	20'-3"	STR.	21														
5AE12	1	6'-10"	5	7	6"	2'-0"	11"				6"		4"					
5AE13	1	7'-2"	5	7	6"	2'-2"	11"				6"		4"					
5AE14	2	8'-3"	9	17		1'-4"	2'-2"	4'-9"										
5AE15	1	6'-3"	9	7		2'-3"	1'-9"	2'-3"										
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~260~~ 261 LBS △1														

* AVERAGE LENGTH

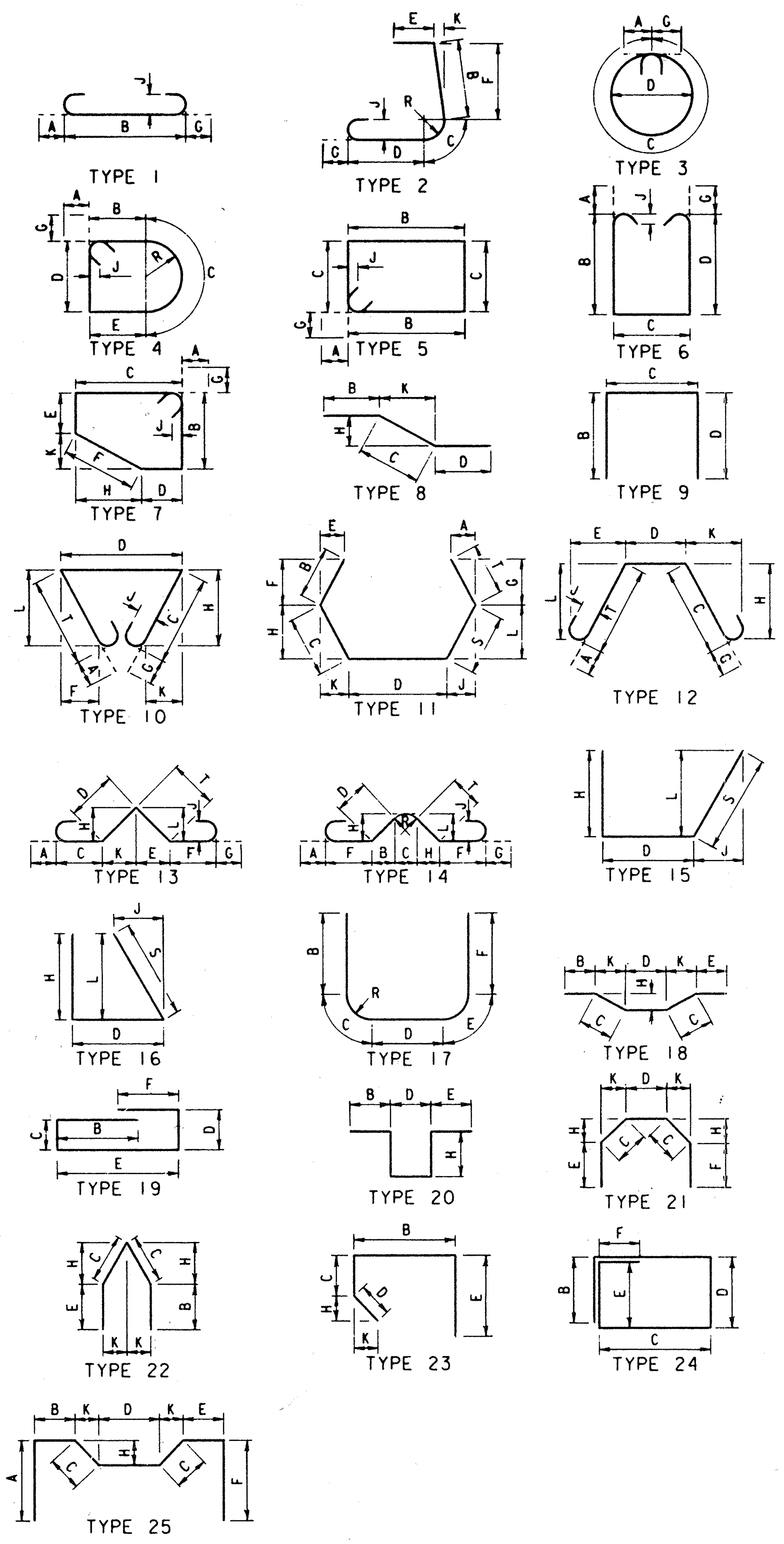
CHECKED BY:

DRAFTED BY

DESIGNED BY:

IN CHARGE OF:

BAR BENDING DIAGRAMS



BAR BENDING DIAGRAMS

ALL BAR DIMENSIONS OUT TO OUT UNLESS OTHERWISE INDICATED.

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. ITEM 556.0202

STRUCTURE UNIT

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

NICHOLAS A. GRO[illegible]
No. 40729

DATE	DESCRIPTION	BY	SYM.
8/17/92	TABLE SUBTOTALS	P.E.B.	△1

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITATION OF MARIAVILLE RD. BRIDGE

LOCATION OF PROJECT
MP 159.23, SCHENECTADY COUNTY

TITLE OF DRAWING
BAR LIST
1 OF 5

CONTRACT NUMBER:
TAA 91-10B

DATE:
APRIL 1990

DRAWING NUMBER:
33R1

JACKSON AND TULL
CHARTERED ENGINEERS

TCA 301-565-3340

34

MARK	NO.	LENGTH	TYPE	WEIGHT	A	B	C	D	E	F	G	H	J	K	L	R	S	T
STAGE II																		
EAST ABUTMENT (CONT.)																		
WINGWALL																		
5AE21	9	*8'-8"	5	81	6"	1'-10"	1'-9"10 2'-3"				6"		4"					
5AE22	4	7'-2"	5	30	6"	8"	2'-5"				6"		4"					
5AE23	3	20'-7"	STR.	64														
5AE24	3	14'-4"	STR.	45														
5AE25	3	7'-0"	STR.	22														
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~240~~ 242 LBS △II														
PEDESTAL -(I)																		
5AE31	7	2'-9"	9	20		7"	2'-2"	0										
5AE32	3	7'-8"	7	24	6"	1'-9"	2'-0"	0	8"	2'-3"	6"	2'-0"	4"	1'-1"				
5AE33	3	9'-2"	5	29	6"	3'-5"	8"				6"		4"					
PEDESTAL -(II)																		
5AE31	4	2'-9"	9	11		7"	2'-2"	0										
5AE32	3	7'-10"	7	25	6"	1'-9"	2'-1"	0	8"	2'-4"	6"	2'-1"	4"	1'-1"				
PEDESTAL -(III)																		
5AE31	4	2'-9"	9	11		7"	2'-2"	0										
5AE32	3	7'-10"	7	25	6"	1'-9"	2'-1"	0	8"	2'-4"	6"	2'-1"	4"	1'-1"				
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~150~~ 145 LBS △II														
STAGE I																		
WEST ABUTMENT																		
BACKWALL																		
5AE1	9	5'-0"	5	47	6"	1'-5"	7"				6"		4"					
5AE2	9	3'-2"	9	30		1'-2"	10"	1'-2"										
5AE3	3	22'-6"	8	70		21'-2"	1'-4"	0				9"		1'-2"				
5AE4	2	19'-11"	STR.	42														
5AE5	1	19'-11"	STR.	21														
5AE6	1	7'-0"	5	7	6"	2'-0"	1'-0"				6"		4"					
5AE7	1	7'-4"	5	8	6"	2'-2"	1'-0"				6"		4"					
5AE8	2	8'-3"	9	17		1'-4"	2'-2"	4'-9"										
5AE9	1	6'-3"	9	7		2'-3"	1'-9"	2'-3"										
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~250~~ 249 LBS △II														
WINGWALL																		
5AE21	9	8'-4"	5	78	6"	1'-10"	1'-10"				6"		4"					
5AE22	4	6'-0"	5	25	6"	8"	1'-10"				6"		4"					
5AE23	3	20'-7"	STR.	64														
5AE24	3	14'-4"	STR.	45														
5AE25	3	7'-0"	STR.	22														
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~230~~ 234 LBS △II														

* AVERAGE LENGTH

MARK	NO.	LENGTH	TYPE	WEIGHT	A	B	C	D	E	F	G	H	J	K	L	R	S	T
STAGE I																		
WEST ABUTMENT (CONT.)																		
PEDESTAL -(IV)																		
5AE31	4	2'-5"	9	10		7"	1'-10"	0										
5AE32	2	7'-10"	7	16	6"	1'-9"	2'-1"	0	8"	2'-4"	6"	2'-1"	4"	1'-1"				
PEDESTAL -(V)																		
5AE31	4	2'-3"	9	9		7"	1'-8"	0										
5AE32	2	7'-10"	7	16	6"	1'-9"	2'-1"	0	8"	2'-4"	6"	2'-1"	4"	1'-1"				
PEDESTAL -(VI)																		
5AE31	7	2'-2"	9	16		7"	1'-7"	0										
5AE32	1	7'-8"	7	8	6"	1'-9"	2'-0"	0	8"	2'-3"	6"	2'-0"	4"	1'-1"				
5AE33	1	9'-2"	5	10	6"	3'-5"	8"				6"		4"					
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~90~~ 85 LBS △II														
STAGE II																		
WEST ABUTMENT																		
BACKWALL																		
5AE1	11	5'-0"	5	57	6"	1'-5"	7"				6"		4"					
5AE2	11	3'-2"	9	36		1'-2"	10"	1'-2"										
5AE10	3	21'-1"	STR.	66														
5AE11	2	21'-4	8	44		19'-4"	2'-0"	0				1'-0"		1'-9"				
5AE12	1	20'-7"	STR.	21			1											
5AE13	2	5'-6"	5	11	6"	1'-3"	1'-0"				6"		4"					
5AE14	2	7'-6"	9	16		2'-4"	1'-3"	3'-11"										
5AE15	1	5'-8"	9	6		2'-3"	1'-2"	2'-3"										
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~260~~ 257 LBS △II														
WINGWALL																		
5AE21	8	8'-4"	5	70	6"	1'-10"	1'-10"			6"		4"						
5AE22	2	6'-0"	5	13	6"	8"	1'-10"			6"		4"						
5AE23	3	16'-8"	STR.	52														
5AE24	3	13'-8"	STR.	43														
5AE25	3	3'-9"	STR.	12														
				SUBTOTAL EPOXY COATED BARS THIS POUR 190 LBS														
PEDESTAL -(I)																		
5AE31	6	2'-2"	9	14		7"	1'-7"	0										
5AE32	1	8'-6"	7	9	6"	3'-2"	9"	0	2'-9"	10"	6"	9"	4"	5"				
PEDESTAL -(II)																		
5AE31	4	2'-4"	9	10		7"	1'-9"	0										
5AE32	2	7'-10"	7	16	6"	1'-9"	2'-1"	0	8"	2'-4"	6"	2'-1"	4"	1'-1"				
PEDESTAL -(III)																		
5AE31	4	2'-5"	9	10		7"	1'-10"	0										
5AE32	2	7'-10"	7	16	6"	1'-9"	2'-1"	0	8"	2'-4"	6"	2'-1"	4"	1'-1"				
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~80~~ 75 LBS △II														

IN CHARGE OF:

DESIGNED BY:

DRAFTED BY:

CHECKED BY:

No. 40729

DATE	DESCRIPTION	BY	SYM.
8/17/92	TABLE SUBTOTALS	P.E.B.	△II

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITATION OF MARIAVILLE RD. BRIDGE

LOCATION OF PROJECT MP 159.23, SCHENECTADY COUNTY

TITLE OF DRAWING

BAR LIST
2 OF 5

CONTRACT NUMBER: TAA 91-10B

DATE: APRIL 1990

DRAWING NUMBER: 34R1

JACKSON AND TULL
CHARTERED ENGINEERS

TCA 301-565-3340

35

MARK	NO.	LENGTH	TYPE	WEIGHT	A	B	C	D	E	F	G	H	J	K	L	R	S	T
PIERS																		
PIER ~~1~~3																		
WALL																		
5PE1 ✓	112	3'-8"	1	447	6"	2'-8"					6"		4"					
6PE2	60	19'-4"	STR.	1742														
5PE3 ✓	28	5'-7"	9	168		1'-6"	2'-7"	1'-6"										
5PE4	36	40'-8"	STR.	1527														
8PE5	6	42'-6"	1	681	11"	40'-8"					11"		8"					
5PE6 ✓	38	5'-10"	21	235			5"	2'-0"	1'-6"	1'-6"		3½"		3½"				
8PE7	12 ~~6~~	6'-1"	1	194 ~~97~~	0	5'-2"					11"		8"					
6PE8	12 ~~6~~	4'-5"	STR	80 ~~40~~														
6PE9	12 ~~6~~	5'-7"	STR	100 ~~50~~														
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~4,990~~ 5,174 LBS.														
PEDESTAL -(I)																		
5PE11	3	6'-1"	9	19		1'-9"	2'-7"	1'-9"										
5PE12	1	6'-1"	9	7		1'-9"	2'-7"	1'-9"										
5PE13	1	11'-8"	5	12	6"	2'-8"	2'-8"				6"		4"					
PEDESTAL -(II)																		
5PE11	3	6'-3"	9	20		1'-10"	2'-7"	1'-10"										
5PE12	1	6'-7"	9	7		1'-10"	2'-11"	1'-10"										
5PE13	2	12'-4"	5	26	6"	2'-8"	3'-0"				6"		4"					
PEDESTAL -(III)																		
5PE11	3	6'-5"	9	20		1'-11"	2'-7"	1'-11"										
5PE12	1	6'-9"	9	7		1'-11"	2'-11"	1'-11"										
5PE13	2	12'-4"	5	26	6"	2'-8"	3'-0"				6"		4"					
PEDESTAL -(IV)																		
5PE11	3	6'-5"	9	20		1'-11"	2'-7"	1'-11"										
5PE12	1	6'-9"	9	7		1'-11"	2'-11"	1'-11"										
5PE13	2	12-4"	5	26	6"	2'-8"	3'-0"				6"		4"					
PEDESTAL -(V)																		
5PE11	3	6'-1"	9	19		1'-9"	2'-7"	1'-9"										
5PE12	1	6'-5"	9	7		1'-9"	2'-11"	1'-9"										
5PE13	1	12'-4"	5	13	6"	2'-8"	3'-0"				6"		4"					
PEDESTAL -(VI)																		
5PE11	3	5'-9"	9	18		1'-7"	2'-7"	1'-7"										
5PE12	1	5'-9"	9	6		1'-7"	2'-7"	1'-7"										
5PE13	1	11'-8"	5	12	6"	2'-8"	2'-8"				6"		4"					
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~270~~ 272 LBS														
CONC. PILE																		
*6F1	24	7'-11"	STR	286														
*4F2	12	2'-7"	3	21			2'-1"	8"										
				SUBTOTAL UNCOATED BARS THIS POUR ~~310~~ 307 LBS														
PIER 2																		
WALL																		
5PE1 ✓	98	3'-8"	1	391	6"	2'-8"					6"		4"					
6PE2	60	17'-6"	STR.	1577														
5PE3 ✓	28	5'-7"	9	168		1'-6"	2'-7"	1'-6"										
5PE4	32	40'-8"	STR.	1357														
8PE5	6	42'-6"	1	681	11"	40'-8"					11"		8"					
5PE6 ✓	34	5'-10"	21	210			5"	2'-0"	1'-6"	1'-6"		3½"		3½"				
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~4,380~~ 4,384 LBS.														

* THE COST OF REBAR INCLUDED IN CONC. PILE, ITEM 551.07

MARK	NO.	LENGTH	TYPE	WEIGHT	A	B	C	D	E	F	G	H	J	K	L	R	S	T
PIERS																		
PIER 2 (CONT.)																		
PEDESTAL -(I)																		
5PE11	3	6'-5"	9	20		1'-11"	2'-7"	1'-11"										
5PE12	1	6'-5"	9	7		1'-11"	2'-7"	1'-11"										
5PE13	2	11'-8"	5	24	6"	2'-8"	2'-8"				6"		4"					
PEDESTAL -(II)																		
5PE11	3	6'-7"	9	21		2'-0"	2'-7"	2'-0"										
5PE12	1	6'-11"	9	7		2'-0"	2'-11"	2'-0"										
5PE13	3	12'-4"	5	39	6"	2'-8"	3'-0"				6"		4"					
PEDESTAL -(III)																		
5PE11	3	6'-9"	9	21		2'-1"	2'-7"	2'-1"										
5PE12	1	7'-1"	9	7		2'-1"	2'-11"	2'-1"										
5PE13	3	12'-4"	5	39	6"	2'-8"	3'-0"				6"		4"					
PEDESTAL -(IV)																		
5PE11	3	6'-7"	9	21		2'-0"	2'-7"	2'-0"										
5PE12	1	6'-11"	9	7		2'-0"	2'-11"	2'-0"										
5PE13	3	12'-4"	5	39	6"	2'-8"	3'-0"				6"		4"					
PEDESTAL -(V)																		
5PE11	3	6'-3"	9	20		1'-10"	2'-7"	1'-10"										
5PE12	1	6'-7"	9	7		1'-10"	2'-11"	1'-10"										
5PE13	2	12'-4"	5	26	6"	2'-8"	3'-0"				6"		4"					
PEDESTAL -(VI)																		
5PE11	3	5'-9"	9	18		1'-7"	2'-7"	1'-7"										
5PE12	1	5'-9"	9	6		1'-7"	2'-7"	1'-7"										
5PE13	1	11'-8"	5	12	6"	2'-8"	2'-8"				6"		4"					
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~340~~ 341 LBS.														
PIER 3																		
WALL																		
5PE1 ✓	84	3'-8"	1	336	6"	2'-8"					6"		4"					
6PE2	60	15'-8"	STR.	1412														
5PE3 ✓	28	5'-7"	9	168		1'-6"	2'-7"	1'-6"										
5PE4	28	40'-8"	STR.	1188														
8PE5	6	42-6"	1	681	11"	40'-8"					11"		8"					
5PE6 ✓	30	5'-10"	21	185			5"	2'-0"	1'-6"	1'-6"		3½"		3½"				
				SUBTOTAL EPOXY COATED BARS THIS POUR 3,970 LBS.														

CHECKED BY:

DRAFTED BY:

DESIGNED BY:

IN CHARGE OF:

DATE	DESCRIPTION	BY	SYM.
8/17/92	TABLE SUBTOTALS	P.E.B.	△

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITATION OF MARIAVILLE RD. BRIDGE

LOCATION OF PROJECT
MP 159.23, SCHENECTADY COUNTY

TITLE OF DRAWING

BAR LIST
3 OF 5

CONTRACT NUMBER
TAA 91-10B

DATE:
APRIL 1990

DRAWING NUMBER:
35R1

JACKSON AND TULL
CHARTERED ENGINEERS

36

MARK	NO.	LENGTH	TYPE	WEIGHT	A	B	C	D	E	F	G	H	J	K	L	R	S	T
PIERS																		
PIER ~~3~~1 (CONT.)																		
PEDESTAL-Ⓘ																		
5PE11	3	6'-11"	9	22		2'-2"	2'-7"	2'-2"										
5PE12	1	6'-11"	9	7		2'-2"	2'-7"	2'-2"										
5PE13	3	11'-8"	5	37	6"	2'-8"	2'-8"				6"		4"					
PEDESTAL-(II)																		
5PE11	3	6'-11"	9	22		2'-2"	2'-7"	2'-2"										
5PE12	1	7'-3"	9	8		2'-2"	2'-11"	2'-2"										
5PE13	3	12'-4"	5	39	6"	2'-8"	3'-0"				6"		4"					
PEDESTAL-(III)																		
5PE11	3	7'-1"	9	22		2'-3"	2'-7"	2'-3"										
5PE12	1	7'-5"	9	8		2'-3"	2'-11"	2'-3"										
5PE13	3	12'-4"	5	39	6"	2'-8"	3'-0"				6"		4"					
PEDESTAL-(IV)																		
5PE11	3	6'-11"	9	22		2'-2"	2'-7"	2'-2"										
5PE12	1	7'-3"	9	8		2'-2"	2'-11"	2'-2"										
5PE13	3	12'-4"	5	39	6"	2'-8"	3'-0"				6"		4"					
PEDESTAL-Ⓥ																		
5PE11	3	6'-5"	9	20		1'-11"	2'-7"	1'-11"										
5PE12	1	6'-9"	9	7		1'-11"	2'-11"	1'-11"										
5PE13	2	12-4"	5	26	6"	2'-8"	3'-0"				6"		4"					
PEDESTAL-(VI)																		
5PE11	3	5'-11"	9	19		1'-8"	2'-7"	1'-8"										
5PE12	1	5'-11"	9	6		1'-8"	2'-7"	1'-8"										
5PE13	1	11'-8"	5	12	6"	2'-8"	2'-8"				6"		4"					
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~360~~ 363 LBS														
DECK SLAB																		
STAGE-1																		
SPAN 4																		
5SE1	83 ~~77~~	23'-3"	1	2013 ~~1867~~	7"	22'-8"					0		5"					
5SE3	83 ~~77~~	22'-8"	STR.	1963 ~~1821~~														
5SE5	8 ~~10~~	7'-3"	STR.	61 ~~76~~														
5SE6	5	4'-4"	STR.	23														
5SE8	16	2'-11"	15	49				11"				10"	10"		10"		1'-2"	
5SE9	49	3'-9"	20	192		0		9"	1'-0"			1'-0"						
5SE10	16	4'-7"	15	76				2'-7"				10"	10"		10"		1'-2"	
5SE11	26	49'-5"	STR.	1340														
5SE12	5	*49'-8"	STR.	259	LENGTH VARIES FROM 50'-0" TO 51'-4"													
5SE13	3	*49'-11"	STR.	156	LENGTH VARIES FROM 50'-6" TO 51'-4"													
5SE14	3	22'-8"	STR.	71														
5SE15	4	4'-6"	STR.	19														
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~5950~~ 6222 LBS														
SPAN 2 AND SPAN 3																		
5SE1	223 ~~202~~	23'-3"	1	5408 ~~4898~~	7"	22'-8"					0		5"					
5SE3	223 ~~202~~	22'-8"	STR.	5273 ~~4776~~														
5SE5	12	7'-3"	STR.	91														
5SE6	6	4'-4"	STR.	27														
5SE8	32	2'-11"	15	97				11"				10"	10"		10"		1'-2"	
5SE9	134	3'-9"	20	524		0		9"	1'-0"			1'-0"						
5SE16	68	38'-3"	STR.	2713														
5SE17	34	60'-0"	STR.	2128														
7SE18	11	36'-0"	STR.	809														
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~16,060~~ 17,070 LBS														

MARK	NO.	LENGTH	TYPE	WEIGHT	A	B	C	D	E	F	G	H	J	K	L	R	S	T
DECK SLAB																		
STAGE-1 (CONT.)																		
SPAN 1																		
5SE1	71 ~~66~~	23'-3"	1	1722 ~~1600~~	7"	22'-8"					0		5"					
5SE3	71 ~~66~~	22'-8"	STR.	1679 ~~1561~~														
5SE5	10	7'-3"	STR.	76														
5SE6	5	4'-4"	STR.	23														
5SE8	16	2'-11"	15	49				11"				10"	10"		10"		1'-2"	
5SE9	42	3'-9"	20	164		0		9"	1'-0"			1'-0"						
5SE10	16	4'-7"	15	76				2'-7"				10"	10"		10"		1'-2"	
5SE19	2	*20'-11"	STR.	44	LENGTH VARIES FROM 20'-3" TO 21'-7"													
5SE20	2	*20'-11"	STR.	44	LENGTH VARIES FROM 20'-3" TO 21'-7"													
5SE21	3	*21'-6"	STR.	67	LENGTH VARIES FROM 20'-3" TO 22'-8"													
5SE22	27	43'-4"	STR.	1220														
5SE23	4	*42'-7"	STR.	178	LENGTH VARIES FROM 42'-1" TO 43'-1"													
5SE24	3	*42'-6"	STR.	133	LENGTH VARIES FROM 42'-1" TO 42'-11"													
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~5240~~ 5475 LBS														
BRUSH CURB																		
5SE33	2	*51'-6"	STR.	107	LENGTH VARIES FROM 51'-4" TO 51'-8"													
5SE34	4	38'-3"	STR.	160														
5SE35	2	60'-0"	STR.	125														
5SE36	2	*42-3"	STR.	88	LENGTH VARIES FROM 42'-1" TO 42'-5"													
				SUBTOTAL EPOXY COATED BARS THIS POUR 480 LBS														
STAGE-II																		
SPAN 4																		
5SE2	83 ~~75~~	23'-10"	1	2063 ~~1864~~	7"	23'-3"					0		5"					
5SE4	83 ~~75~~	23'-3"	STR.	2013 ~~1819~~														
5SE5	8 ~~10~~	7'-3"	STR.	61 ~~76~~														
5SE7	5	5'-0"	STR.	26														
5SE8	19	2'-11"	15	58				11"				10"	10"		10"		1'-2"	
5SE9	48	3'-9"	20	188		0		9"	1'-0"			1'-0"						
5SE10	19	4'-7"	15	91				2'-7"				10"	10"		10"		1'-2"	
5SE11	33	49'-5"	STR.	1701														
5SE25	4	*48'-8"	STR.	203	LENGTH VARIES FROM 48'-2" TO 49'-2"													
5SE26	3	*48'-7"	STR.	152	LENGTH VARIES FROM 48'-2" TO 49'-0"													
5SE27	2	*21'-6"	STR.	45	LENGTH VARIES FROM 20'-10" TO 22'-2"													
5SE28	2	*21'-6"	STR.	45	LENGTH VARIES FROM 20'-10" TO 22'-2"													
5SE29	3	*22'-1"	STR.	69	LENGTH VARIES FROM 20'-10" TO 23'-3"													
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~6340~~ 6715 LBS														

No. 40729

DATE	DESCRIPTION	BY	SYM.
8/17/92	TABLE SUBTOTALS	P.E.B.	11

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
AND MAINTENANCE
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT REHABILITATION OF MARIAVILLE RD. BRIDGE

LOCATION OF PROJECT
MP 159.23, SCHENECTADY COUNTY

TITLE OF DRAWING

BAR LIST
4 OF 5

CONTRACT NUMBER
TAA 91 - 10B

DATE:
APRIL 1990

DRAWING NUMBER:
36R1

JACKSON AND TULL
CHARTERED ENGINEERS

CHECKED BY:

DRAFTED BY:

DESIGNED BY:

IN CHARGE OF:

TCA 301-565-3340

MARK	NO.	LENGTH	TYPE	WEIGHT	A	B	C	D	E	F	G	H	J	K	L	R	S	T
DECK SLAB																		
STAGE-II (CONT.)																		
SPAN 2 AND SPAN 3				△15														
5SE2	~~202~~ 223	23'-10"	1	~~5021~~ 5543	7"	23'-3"					0		5"					
5SE4	~~202~~ 223	23'-3"	STR.	~~4898~~ 5408														
5SE5	12	7'-3"	STR.	91														
5SE7	6	5'-0"	STR.	31														
5SE8	38	2'-11"	15	116				11"				10"	10"		10"		1'-2"	
5SE9	134	3'-9"	20	524		0		9"	1'-0"			1'-0"						
5SE16	80	38'-3"	STR.	3192														
5SE17	40	60'-0"	STR.	2503														
7SE18	13	36'-0"	STR.	957														
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~17330~~ 18,365 LBS △11														
SPAN 1				△15														
5SE2	~~68~~ 71	23'-10"	1	~~1690~~ 1765	7"	23'-3"					0		5"					
5SE4	~~68~~ 71	23'-3"	STR.	~~1649~~ 1722														
5SE5	10	7'-3"	STR.	76														
5SE7	5	5'-0"	STR.	26														
5SE8	19	2'-11"	15	58				11"				10"	10"		10"		1'-2"	
5SE9	43	3'-9"	20	168		0		9"	1'-0"			1'-0"						
5SE10	19	4'-7"	15	91				2'-7"				10"	10"		10"		1'-2"	
5SE15	4	4'-6"	STR.	19														
5SE22	32	43'-4"	STR.	1446														
5SE30	5	*44-7"	STR.	232	LENGTH VARIES FROM 43'-11" TO 45'-3"													
5SE31	3	*44'-10"	STR.	140	LENGTH VARIES FROM 44'-5" TO 45'-3"													
5SE32	3	23'-3"	STR.	73														
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~5670~~ 5816 LBS △11														
BRUSH CURB																		
5SE34	4	38'-3"	STR.	160														
5SE35	2	60'-0"	STR.	125														
5SE37	2	*48'-8"	STR.	102	LENGTH VARIES FROM 48'-6" TO 48'-10"													
5SE38	2	*45'-1"	STR.	94	LENGTH VARIES FROM 44'-11" TO 45'-3"													
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~480~~ 481 LBS △11														
APPROACH SLAB																		
APPROACH SLAB AT WEST ABUTMENT																		
STAGE-I																		
6HE1	44	13'-11"	STR.	920														
5HE2	6	13'-9"	STR.	86														
5HE4	26	21'-0"	STR.	569														
5HE6	3	18'-6"	STR.	58														
5HE8	1	19'-8"	STR.	21														
5HE9	15	4'-0"	16	63				1'-1"				1'-6"	1'-0"		1'-0"		1'-5"	
5HE10	2	3'-6"	STR.	7														
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~1,720~~ 1724 LBS. △11														

MARK	NO.	LENGTH	TYPE	WEIGHT	A	B	C	D	E	F	G	H	J	K	L	R	S	T
APPROACH SLAB																		
APPROACH SLAB AT WEST ABUTMENT (CONT.)																		
STAGE-II																		
6HE1	53	13'-11"	STR.	1108														
5HE3	6	13'-6"	STR.	84														
5HE5	28	21'-6"	STR.	628														
5HE7	2	19'-5"	STR.	41														
5HE9	18	4'-0"	16	75				1'-1"				1'-6"	1'-0"		1'-0"		1'-5"	
5HE11	2	3'-0"	STR.	6														
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~1,940~~ 1942 LBS. △11														
APPROACH SLAB AT EAST ABUTMENT																		
STAGE-I																		
6HE1	44	13'-11"	STR.	920														
5HE2	6	13'-6"	STR.	84														
5HE4	28	21'-0"	STR.	613														
5HE7	2	18'-6"	STR.	39														
5HE9	15	4'-0"	16	63				1'-1"				1'-6"	1'-0"		1'-0"		1'-5"	
5HE11	2	3'-0"	STR.	6														
				SUBTOTAL EPOXY COATED BARS THIS POUR ~~1,730~~ 1725 LBS. △11														
STAGE-II																		
6HE1	53	13'-11"	STR.	1108														
5HE3	6	13'-9"	STR.	86														
5HE5	26	21'-6"	STR.	583														
5HE6	3	19'-4"	STR.	60														
5HE8	1	20'-5"	STR.	21														
5HE9	18	4'-0"	16	75				1'-1"				1'-6"	1'-0"		1'-0"		1'-5"	
5HE10	2	3'-6"	STR.	7														
				SUBTOTAL EPOXY COATED BARS THIS POUR 1,940 LBS.														

CHECKED BY:

DRAFTED BY:

DESIGNED BY:

IN CHARGE OF:

NICHOLAS A. GROSS
No. 40729

DATE	DESCRIPTION	BY	SYM.
8/17/92	TABLE SUBTOTALS	P.E.B.	△11

REVISIONS

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BAR LIST
5 OF 5

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JACKSON AND TULL
CHARTERED ENGINEERS