



**BUFFALO DIVISION  
PLANS FOR STRUCTURAL STEEL REPAIRS TO IMPACT DAMAGE  
AND VERTICAL CLEARANCE IMPROVEMENTS AT  
SHERIDAN CENTER ROAD (CR 79) BRIDGE OVER NYS THRUWAY (I-90)  
AT MILEPOST 463.45 (BIN 5511490)  
IN CHAUTAUQUA COUNTY  
AND  
STRUCTURAL STEEL REPAIRS TO IMPACT DAMAGE AT  
KENSINGTON EXPRESSWAY (RT 33) BRIDGE OVER NYS THRUWAY (I-90)  
AT MILEPOST 421.57 (BIN 1022859)  
IN ERIE COUNTY**

LOAD RATING TABLE - MP 463.45 BIN 5511490		
CONTROLLING MEMBER	INVENTORY LOAD RATING	OPERATING LOAD RATING
INTERIOR GIRDER	H -	H -
EXTERIOR GIRDER	HS -	HS -

H & HS LOAD RATINGS WERE COMPUTED BY LOAD FACTOR METHOD IN ACCORDANCE WITH THE AASHTO MANUAL FOR BRIDGE EVALUATION - 2018, 3RD EDITION. RATINGS DO NOT INCLUDE PROVISIONS FOR ANY ADDITIONAL WEARING SURFACE

NOTE: MP 421.57 RECEIVING MINOR STEEL REPAIRS. NO CHANGE TO CURRENT LOAD RATING.

<b>TYPE OF CONSTRUCTION:</b>	<u>463.45</u>	<u>421.57</u>
STRUCTURAL STEEL REPAIRS		STRUCTURAL STEEL REPAIRS.
JACK AND RAISE BRIDGE		WORK ZONE TRAFFIC CONTROL
REPLACE BEARINGS		
ASPHALT PAVING		
RESETTING GUIDE RAIL		
WORK ZONE TRAFFIC CONTROL		

**STANDARD SHEETS:**  
THE LATEST REVISIONS OF THE STANDARD SHEETS MAINTAINED BY NYSDOT, WHICH ARE CURRENT ON THE DATE OF ADVERTISEMENT FOR BIDS SHALL BE CONSIDERED TO BE IN EFFECT. ALL PAY ITEMS AND WORK CONTAINED IN THE CONTRACT AND ANY ADDITIONAL PAY ITEMS AND WORK ENCOUNTERED DURING THE COURSE OF THE CONTRACT SHALL BE SUBJECT TO THE APPLICABLE STANDARD SHEET(S) LISTED ON DWG. GN-1 UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.

THE LATEST REVISIONS OF THE NYSTA STANDARD SHEETS MAINTAINED BY THE AUTHORITY, WHICH ARE CURRENT ON THE DATE OF ADVERTISEMENT FOR BIDS, SHALL BE CONSIDERED TO BE IN EFFECT. ALL PAY ITEMS AND WORK CONTAINED IN THE CONTRACT AND ANY ADDITIONAL PAY ITEMS AND WORK ENCOUNTERED DURING THE COURSE OF THE CONTRACT SHALL BE SUBJECT TO THE APPLICABLE STANDARD SHEET(S) UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS. SEE GENERAL NOTES DRAWINGS FOR LISTING.

**BRIDGE MAINTENANCE GUIDELINES**

UPON COMPLETION OF THIS PROJECT, THE BRIDGE STRUCTURES REPAIRED, REHABILITATED OR RECONSTRUCTED HEREUNDER SHALL BE MAINTAINED IN ACCORDANCE WITH THE CURRENT AASHTO MANUAL FOR BRIDGE MAINTENANCE, AND THE NEW YORK STATE THRUWAY AUTHORITY MAINTENANCE DIRECTIVES:

BRIDGE MANAGEMENT PROGRAM MD 05-16, BRIDGE MANAGEMENT ACTIVITIES MD 05-3, AND BRIDGE INSPECTION PROGRAM MD 96-5.

SPECIAL MAINTENANCE REQUIREMENTS: NONE

**NOTES:**  
ALL WORK CONTEMPLATED UNDER THIS CONTRACT IS TO BE COVERED BY AND IN CONFORMITY WITH THE STANDARD SPECIFICATIONS (US CUSTOMARY) REFERENCED IN THE CONTRACT "PROPOSAL" EXCEPT AS MODIFIED BY THESE PLANS OR CHANGES SET FORTH IN THE CONTRACT "PROPOSAL".

**MAINTENANCE JURISDICTION - MP 463.45 (BIN 5511490)**

**100% MUNICIPALITY**  
BRIDGE DECK WEARING COURSE, ROADWAY PAVEMENT, SIDEWALK, SHOULDERS, SLOPES, GUIDE RAILINGS, CURBS AND PAVEMENT MARKINGS

**100% AUTHORITY**  
ENTIRE SUBSTRUCTURE AND ALL SUPERSTRUCTURE ELEMENTS, BRIDGE RAILING, PEDESTRIAN FENCING AND ALL OTHER BRIDGE ELEMENTS NOT LISTED ABOVE.

**MAINTENANCE JURISDICTION - MP 421.57 (BIN 1022859)**

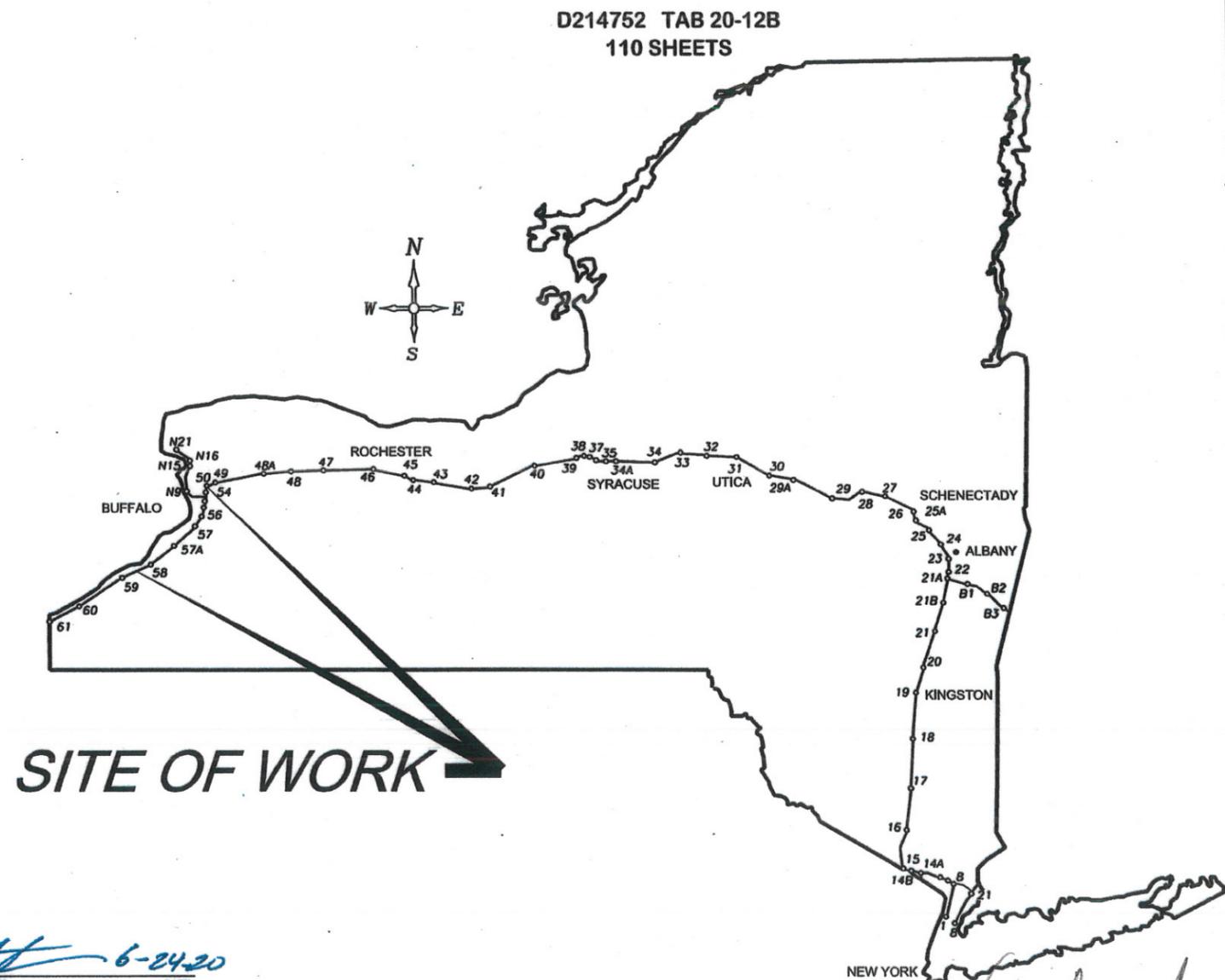
**100% MUNICIPALITY**  
N/A

**NYSDOT**  
WEARING SURFACE (TOP 1" OF THE MONOLITHIC DECK), CURBS, SIDEWALK, BRIDGE RAIL, CHAIN LINK FENCE BRIDGE, JOINTS, CONCRETE MEDIAN BARRIER ON THE BRIDGE, AND ALL APPROACH ELEMENTS INCLUDING PAVEMENT, GUIDE RAIL, SHOULDERS, CONCRETE MEDIAN BARRIER, SIDEWALK & CHAIN LINK FENCE.

**THRUWAY AUTHORITY**  
ALL OTHER BRIDGE ELEMENTS NOT LISTED ABOVE.

DIG SAFELY NEW YORK  
UNDERGROUND FACILITIES PROTECTION ORGANIZATION  
CALL 811

PREPARED AND RECOMMENDED BY  
*Garret W. Hoffmann* DATE 6/23/20  
CHA CONSULTING, INC.  
GARRET W. HOFFMANN, P.E.  
NYS LICENSE NUMBER - 070686  
**CHA**



**SITE OF WORK** →

CONTRACTOR'S NAME:	
AWARD DATE:	
COMPLETION DATE:	
FINAL ACCEPTANCE DATE:	
INSPECTION FIRM'S NAME:	
RESIDENT ENG./EIC:	
FINAL COST TOTAL:	
FISCAL SHARE	COST(\$)
INSPECTION FIRM CONSULTANT STAMP:	

RECOMMENDED BY: *[Signature]* DATE 6-24-20  
DIRECTOR, OFFICE OF DESIGN

RECOMMENDED BY: *[Signature]* DATE 6-24-20  
DIVISION DIRECTOR

RECOMMENDED BY: *[Signature]* DATE 6/24/20  
TRAFFIC ENGINEER

RECOMMENDED BY: *[Signature]* DATE 6/24/2020  
DIRECTOR, OFFICE OF CONSTRUCTION MANAGEMENT

RECOMMENDED BY: *[Signature]* DATE 6/24/20  
DIRECTOR OF MAINTENANCE AND OPERATIONS

APPROVED BY: *[Signature]* DATE 6/29/2020  
CHIEF ENGINEER

REVIEWED BY: *[Signature]*  
PROJECT MANAGER: *Brian K. Dinger*  
BUREAU DIRECTOR: *[Signature]*

FILE NAME = V:\Projects\NY\136292\CA00\MS\MP\_463.45\_Center\_Rd\_91\02\_Bridge\_Hit\_Repairs\_MP\_463.45\_IND-1.dgn  
 DATE/TIME = 7/1/2020  
 USER = 5379  
 DESIGN SUPERVISOR: G. HOFFMANN

CHECKED BY: G. SIEFENBART

DRAFTED BY: S. ISBROCKENET

CHECKED BY: G. EIDENMANN

DESIGNED BY: S. SIDURMARAFT

DESIGN SUPERVISOR: G. HOFFMANN

MP 463.45 SHERIDAN CENTER RD - STEEL REPAIRS & VERTICAL CLEARANCE IMPROVEMENTS		
INDEX OF DRAWINGS		
SHEET No.	DWG. No.	TITLE
1	-	TITLE SHEET
2	IND-1	INDEX OF DRAWINGS & SUMMARY OF QUANTITIES (PER BRIDGE)
3	GN-1	GENERAL NOTES - NYSTA & NYSDOT STANDARD SHEETS
4	GN-2	GENERAL NOTES
MPT DRAWINGS		
5	TCP-1	BRIDGE CLOSURE PLAN & WZTC NOTES
6	TCP-2	DETOUR PLAN
HIGHWAY DRAWINGS		
7-10	PL-1 to PL-4	HIGHWAY PLANS
11-12	PRO-1 to PRO-2	HIGHWAY PROFILES
13	TYP-1	TYPICAL SECTIONS
14	GR-1	GUIDE RAIL TRANSITION DETAILS
STRUCTURAL DRAWINGS		
15	S-1	GENERAL PLAN & ELEVATION
16	S-2	FRAMING PLAN & GIRDER REPAIR ELEVATION
17	S-3	STRONG-BACK DETAILS (1 OF 2)
18	S-4	STRONG-BACK DETAILS (2 OF 2)
19	S-5	STRONG-BACK ANCHOR HOLE LAYOUT PLAN
20	S-6	SPAN 3 - G1 & G5: GIRDER REMOVAL DETAILS
21	S-7	SPAN 3 - G1 & G5: NEW GIRDER ELEVATION & DETAILS
22	S-8	SPAN 3 - G1 & G5: NEW GIRDER DETAILS
23	S-9	SPAN 3 - G1 & G5: GIRDER REPAIR SECTIONS
24	S-10	SPAN 3 - G2: GIRDER REMOVAL DETAILS
25	S-11	SPAN 3 - G2: NEW GIRDER ELEVATION & DETAILS
26	S-12	SPAN 3 - G2: NEW GIRDER DETAILS
27	S-13	SPAN 3 - G2: GIRDER REPAIR SECTIONS
28	S-14	SPAN 3 - G4: GIRDER REPAIR DETAILS
29	S-15	SPAN 2 - G1: GIRDER REMOVAL DETAILS
30	S-16	SPAN 2 - G1: GIRDER REPAIR DETAILS
31	S-17	DIAPHRAGM CONNECTION DETAILS
32	S-18	STEEL PARTS DETAIL S (1 of 3)
33	S-19	STEEL PARTS DETAIL S (2 of 3)
34	S-20	STEEL PARTS DETAIL S (3 of 3)
35	S-21	HEAT STRAIGHTENING DETAILS
36	S-22	JOINT REPL. & BACKWALL MODIFICATION - REMOVAL PLAN
37	S-23	JOINT REPL. & BACKWALL MODIFICATION - REMOVAL SECTIONS
38	S-24	JOINT REPL. & BACKWALL MODIFICATION - REPAIR PLAN
39	S-25	JOINT REPL. & BACKWALL MODIFICATION - REPAIR SECTIONS
40	S-26	BACKWALL EXTENSION & HEADER REINFORCEMENT PLAN
41	S-27	DECK REINFORCEMENT PLAN & SECTION
42	S-28	NE & SW SAFETY WALK TRANSITION - REMOVAL DETAILS
43	S-29	NW & SE SAFETY WALK TRANSITION - REMOVAL DETAILS
44	S-30	NE & SW SAFETY WALK TRANSITION - REPAIR DETAILS
45	S-31	NW & SE SAFETY WALK TRANSITION - REPAIR DETAILS
46	S-32	STRUCTURAL LIFTING PLAN & BEARING REMOVAL DETAILS
47	S-33	STRUCTURAL LIFTING DETAILS
48	S-34	PEDESTAL EXTENSION PLAN & ELEVATION - ABUTMENTS
49	S-35	PEDESTAL EXTENSION REINFORCEMENT DETAILS - ABUTMENTS
50	S-36	PEDESTAL EXTENSION PLAN & ELEVATION - PIERS
51	S-37	PEDESTAL EXTENSION REINFORCEMENT DETAILS - PIERS
52	S-38	BEARING DETAILS (1 OF 2)
53	S-39	BEARING DETAILS (2 OF 2)
54	S-40	BAR LIST AND STEEL WEIGHTS & PAINTING TABLES

ALTERED ON:	AFFIXED ON:
	6/25/2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:
	

MP 421.57 - KENSINGTON EXPY. STEEL REPAIRS		
INDEX OF DRAWINGS		
SHEET No.	DWG. No.	TITLE
55	GN-3	GENERAL NOTES - MP 421.57 (1 OF 2)
56	GN-4	GENERAL NOTES - MP 421.57 (2 OF 2)
STRUCTURAL DRAWINGS		
57	ST-1	GENERAL PLAN & ELEVATION
58	ST-2	FRAMING PLAN & TRANSVERSE SECTION
59	ST-3	SPAN 2 - G1: STRONG-BACK DETAIL S
60	ST-4	SPAN 2 - G1: STRONG-BACK ANCHOR HOLE LAYOUT PLAN
61	ST-5	SPAN 2 - G1: GIRDER REMOVAL DETAILS
62	ST-6	SPAN 2 - G1: GIRDER ELEVATION & STIFFENER DETAILS
63	ST-7	SPAN 2 - G1: NEW GIRDER DETAILS
64	ST-8	SPAN 2 - G1: GIRDER REPAIR SECTIONS
65	ST-9	SPAN 2 - G1: STEEL PARTS DETAILS
66	ST-10	SPAN 2 - G4: REPAIR DETAILS
67	ST-11	SPAN 3 - G1: REPAIR DETAILS
68	ST-12	HEAT STRAIGHTENING DETAILS
DETOUR SIGNING		
69	DTR-1	ROUTE 33 WB TO I-90 WB (SHEET 1 of 2)
70	DTR-2	ROUTE 33 WB TO I-90 WB (SHEET 2 of 2)
71	DTR-3	I-90 EB TO ROUTE 33 WB
WORK ZONE TRAFFIC CONTROL - WESTBOUND TWO-LANE CLOSURE		
72	WZTC-LGD-1	I-90 WB - TWO-LANE CLOSURE - SHEET LEGEND
73	WZTC-1	I-90 WB - TWO-LANE CLOSURE (1 of 11)
74	WZTC-2	I-90 WB - TWO-LANE CLOSURE (2 of 11)
75	WZTC-3	I-90 WB - TWO-LANE CLOSURE (3 of 11)
76	WZTC-4	I-90 WB - TWO-LANE CLOSURE (4 of 11)
77	WZTC-5	I-90 WB - TWO-LANE CLOSURE (5 of 11)
78	WZTC-6	I-90 WB - TWO-LANE CLOSURE (6 of 11)
79	WZTC-7	I-90 WB - TWO-LANE CLOSURE (7 of 11)
80	WZTC-8	I-90 WB - TWO-LANE CLOSURE (8 of 11)
81	WZTC-9	I-90 WB - TWO-LANE CLOSURE (9 of 11)
82	WZTC-10	I-90 WB - TWO-LANE CLOSURE (10 of 11)
83	WZTC-11	I-90 WB - TWO-LANE CLOSURE (11 of 11)
WORK ZONE TRAFFIC CONTROL - WESTBOUND THREE-LANE CLOSURE		
84	WZTC-LGD-2	I-90 WB - THREE-LANE CLOSURE - SHEET LEGEND
85	WZTC-12	I-90 WB - THREE-LANE CLOSURE (1 of 16)
86	WZTC-13	I-90 WB - THREE-LANE CLOSURE (2 of 16)
87	WZTC-14	I-90 WB - THREE-LANE CLOSURE (3 of 16)
88	WZTC-15	I-90 WB - THREE-LANE CLOSURE (4 of 16)
89	WZTC-16	I-90 WB - THREE-LANE CLOSURE (5 of 16)
90	WZTC-17	I-90 WB - THREE-LANE CLOSURE (6 of 16)
91	WZTC-18	I-90 WB - THREE-LANE CLOSURE (7 of 16)
92	WZTC-19	I-90 WB - THREE-LANE CLOSURE (8 of 16)
93	WZTC-20	I-90 WB - THREE-LANE CLOSURE (9 of 16)
94	WZTC-21	I-90 WB - THREE-LANE CLOSURE (10 of 16)
95	WZTC-22	I-90 WB - THREE-LANE CLOSURE (11 of 16)
96	WZTC-23	I-90 WB - THREE-LANE CLOSURE (12 of 16)
97	WZTC-24	I-90 WB - THREE-LANE CLOSURE (13 of 16)
98	WZTC-25	I-90 WB - THREE-LANE CLOSURE (14 of 16)
99	WZTC-26	I-90 WB - THREE-LANE CLOSURE (15 of 16)
100	WZTC-27	I-90 WB - THREE-LANE CLOSURE (16 of 16)
101	WZTC-27A	33 WB FULL RAMP LANE CLOSURE
WORK ZONE TRAFFIC CONTROL - EASTBOUND RIGHT LANE CLOSURE		
102	WZTC-LGD-3	I-90 EB - RIGHT-LANE CLOSURE - SHEET LEGEND
103	WZTC-28	I-90 EB - RIGHT-LANE CLOSURE (1 of 8)
104	WZTC-29	I-90 EB - RIGHT-LANE CLOSURE (2 of 8)
105	WZTC-30	I-90 EB - RIGHT-LANE CLOSURE (3 of 8)
106	WZTC-31	I-90 EB - RIGHT-LANE CLOSURE (4 of 8)
107	WZTC-32	I-90 EB - RIGHT-LANE CLOSURE (5 of 8)
108	WZTC-33	I-90 EB - RIGHT-LANE CLOSURE (6 of 8)
109	WZTC-34	I-90 EB - RIGHT-LANE CLOSURE (7 of 8)
110	WZTC-35	I-90 EB - RIGHT-LANE CLOSURE (8 of 8)

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

SUMMARY OF QUANTITIES (PER BRIDGE)						
Item Number	Description	Unit	MP 463.45	MP 421.57	TOTAL	QUANTITY
			Sheridan Center	Kensington Expressway		
203.02	Unclassified Excavation & Disposal	CY	50		50	
203.24000025	Shoulder Backup Material	TON	200		200	
304.12	Subbase Course, Type 2	CY	40		40	
402.000013	Plant Production Quality Adjustment to HMA Items	QU	28		28	
402.018903	True & Leveling F9, Superpave HMA, 80 Series Compaction	TON	140		140	
402.128203	12.5 F2 Top Course HMA, 80 Series Compaction	TON	220		220	
402.198903	19 F9 Binder Course HMA, 80 Series Compaction	TON	150		150	
402.378903	37.5 F9 Base Course HMA, 80 Series Compaction	TON	50		50	
402.76020008	Cleaning & Sealing Cracks in Hot Mix Asphalt using Hot Applied Sealant	LF	700		700	
407.0103	Straight Tack Coat	GAL	270		270	
490.30	Miscellaneous Cold Milling Of Bituminous Concrete	SY	660		660	
555.0105	Concrete for Structures, Class A (Pedestals)	CY	13		13	
555.09	Concrete for Structures, Class HP (Backwall, Deck & Headers)	CY	48		48	
556.0203	Galvanized Bar Reinforcement for Structures	LB	11,500		11,500	
557.30	Sidewalks and Safetywalks	SY	43		43	
559.16960025	Protective Sealing of Structural Concrete (Coating Type)	SF	4,200		4,200	
559.17960118	Protective Sealing of Structural Concrete for Existing Bridge Deck	SF	3,860		3,860	
564.700001	Structural Steel Replacement, Type 1 - MP 463.45: Span 2, Girder G1	EACH	1		1	
564.700002	Structural Steel Replacement, Type 2 - MP 463.45: Span 3, Girder G1 & G5 Repairs	EACH	2		2	
564.700003	Structural Steel Replacement, Type 2 - MP 463.45: Span 3, Girder G2 Repairs	EACH	1		1	
564.700004	Structural Steel Replacement, Type 4 - MP 463.45: Span 3, Girder G4 Cover Plate	EACH	1		1	
565.700005	Structural Steel Replacement, Type 5 - MP 463.45: Span 3 Diaphragms	EACH	6		6	
564.700006	Structural Steel Replacement, Type 6 - MP 463.45: Strongback Installation	EACH	4		4	
564.700007	Structural Steel Replacement, Type 7 - MP 421.57: Span 2, Girder G1 Repair	EACH		1	1	
564.700008	Structural Steel Replacement, Type 8 - MP 421.57: Span 2, Girder G4 Repair	EACH		1	1	
564.700009	Structural Steel Replacement, Type 9 - MP 421.57: Span 3, Girder G1 Repair	EACH		1	1	
564.700010	Structural Steel Replacement, Type 10 - MP 421.57: Span 2 Strongback Installation	EACH		1	1	
565.2024	Type E.B. Fixed Bearing (169 to 225 kips)	EACH	5		5	
565.2032	Type E.B. Expansion Bearing (56 to 111 kips)	EACH	10		10	
565.2033	Type E.B. Expansion Bearing (112 to 168 kips)	EACH	10		10	
567.51000009	Sealing Existing Bridge Joints	LF	86		86	
570.01	Lead-Exposure Control Plan	LS	NEC	NEC		1
570.02	Medical Testing	D-C	1,500	1,500		3,000
570.03	Personal-Exposure Monitoring Sample Analysis	D-C	2,500	2,500		5,000
570.04	Decontamination Facilities	CAL-WKS	1	1		2
570.160001	Class B Containment - MP 463.45	LS	1		1	
570.160002	Class B Containment - MP 421.57	LS		1	1	
571.05000125	Management and Disposal of Paint Removal Waste w/ Disposal as Hazardous or Non-Hazardous Waste Determined by Testing	LB	250		250	
571.05000225	Management and Disposal of Paint Removal Waste w/ Disposal as Hazardous or Non-Hazardous Waste Determined by Testing	LB		50	50	
572.010001	Structural Steel Paint System: Shop Applied - Sheridan Center Repairs	SF	1,414		1,414	
572.010002	Structural Steel Paint System: Shop Applied - Kensington Expressway Repairs	SF		585	585	
580.01	Removal of Structural Concrete	CY	36		36	
582.06	Removal of Structural Concrete - Replacement with Class D Concrete	SF	110		110	
585.01	Structural Lifting Operations (Type A - MP 463.45 Abutments)	EACH	10		10	
585.02	Structural Lifting Operations (Type B - MP 463.45 Piers)	EACH	15		15	
586.0201	Drilling & Grouting Bolts or Reinf Bars into Concrete (No Pull-out Test)	EACH	720		720	
587.01	Bridge Railing Removal & Disposal	LF	144		144	
587.21	Thrie Beam Bridge Rail - New Post Installation Mounted on Concrete Surfaces	LF	56		56	
604.070501	Altering Drainage Structures	EACH	4		4	
606.2701	Heavy Post Blocked-Out (Mod.) Corrugated Beam Guide Railing	LF	1,020		1,020	
606.7101	Removing and Disposing HPBO (Mod.) Corrugated Beam Guide Rail	LF	1,000		1,000	
606.86	Guide Rail Transition Corrugated Beam to Thrie Beam	EACH	4		4	
619.01	Basic Work Zone Traffic Control	LS	NEC	NEC		1
619.0101	Basic Work Zone Traffic Control (Daily Operations)	LS	NEC	NEC		1
619.04	Type III Construction Barricades	EACH	26	90		116
619.110513	Portable Variable Message Sign (PVMS) Std size - Full Matrix (LED) - Kensington	EACH		2	2	
619.111211	Portable, Variable Message Sign (PVMS) Std Size-Line or Char Matrix (LED)	CAL-WKS	4		4	
619.1711	Temporary Positive Barrier - Category 1 (Pinning Prohibited)	LF	80		80	
619.24	Nighttime Operations	LS		1	1	
625.01	Survey and Stakeout	LS	1		1	
627.50140008	Cutting Pavement	LF	120		120	
637.11000025	Engineer's Field Office - Type 1	MO	9		9	
685.11	White Epoxy ReflectORIZED Pavement Stripes - 20 Mils	LF	1,900		1,900	
685.12	Yellow Epoxy ReflectORIZED Pavement Stripes - 20 Mils	LF	1,700		1,700	
697.02030025	Field Change Order	D-C				See Proposal
698.06	Steel / Iron Price Adjustment	D-C	500	500		1,000
699.04000025	Mobilization (4% Max.)	LS				1

REVISIONS DATE DESCRIPTION BY SYM.				 <b>Thruway Authority</b>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
					LOCATION OF PROJECT MP 463.45 - SHERIDAN CENTER RD, OVER I-90 MP 421.57 - KENSINGTON EXPY. OVER I-90	DATE: JUNE 2020
					TITLE OF DRAWING INDEX OF DRAWINGS & SUMMARY OF QUANTITIES (PER BRIDGE)	DRAWING NUMBER: IND-1

New York State Department of Transportation Standard Sheets

The following NYSDOT standard sheets marked with an "X" apply to this project.

X	SHEET NO.														
	203-01		502-05		606-02		606-33	X	619-01		619-63		646-15		670-03
	203-02		502-06		606-04		606-35	X	619-02		619-64		646-16		680-01
	203-03		502-07		606-05		606-36	X	619-04		619-65		649-02		680-02
	203-04		502-08		606-06		606-37	X	619-10	X	619-66		649-03		680-03
	203-05		502-09		606-07		606-38	X	619-11		624-01		649-04		680-04
	204-01		502-10		606-08		606-40	X	619-12		625-01		655-01		680-05
	209-01		502-11	X	606-09		606-41		619-20		630-01		655-02		680-06
	209-02		502-12		606-10		606-42		619-21		632-01		655-03		680-07
	209-03		502-13		606-11		606-43		619-22		645-01		655-04		680-08
	209-04		502-14		606-13		606-44		619-23		645-02		655-05		680-10
	209-05		502-15		606-14		607-01		619-24		645-03		655-06		680-11
	209-06		554-01		606-15		607-04		619-30		645-05		655-07		680-12
	209-07		554-02		606-19		607-05		619-31		645-06		655-08		680-13
	212-01		601-01		606-20		607-06		619-32		645-07		663-01		680-14
	212-02		603-01		606-21		608-01		619-33		645-09		663-02		680-16
	212-03		603-02		606-22		608-02		619-34		645-10		663-03		680-17
	212-04		603-03		606-24		608-03		619-40		645-11		663-04	X	685-01
	212-05		603-04		606-25		608-07		619-41		645-12		663-05		
X	402-01		603-05		606-27		609-01		619-50		645-14		663-06		
	502-01		604-01		606-28		609-02		619-51		646-11		663-07		
	502-02		604-02		606-29		609-03		619-60		646-12		664-01		
	502-03		605-01		606-31		609-04		619-61		646-13		670-01		
	502-04		606-01		606-32		611-01		619-62		646-14		670-02		

The officially adopted New York State Department of Transportation Standard Sheets book is available on the NYSDOT website at: <https://www.dot.ny.gov/main/business-center/engineering/specifications/busi-e-standards-usc>

New York State Thruway Authority Standard Sheets

The following NYS Thruway Authority standard sheets, marked with an "X" in first column, apply to this project.

X	SHEET NO.	SUBJECT
	TA 201-01	Clearing and Grubbing (Dwg. CG)
X	TA 203-01	Shoulder Backup 1R Projects (Dwg. SB)
	TA 203-02	Slope Flattening Details
	TA 402-01	Highway Pavement Repair Details (Dwg. PRD)
	TA 402-02	Bridge Deck Wearing Course Resurfacing (Dwg. BDR)
	TA 402-03	Overhead Bridge Underclearance Improvement (Dwg. BU)
	TA 603-01	Culvert Extension Details
	TA 605-01	Underdrain Details
X	TA 606-01	Modified Thrie Beam (Mod.) Guiderail (Dwg. GR-1)
	TA 606-02	Modified G2 Corrugated Rail and HPBO Rail Transitions into Existing Corrugated Guiderail Systems (Maintenance Support) (Dwg. GR-3)
	TA 606-03	Corrugated Median Barrier to MG2 Corrugated Beam Guide Railing Transition Detail D (Dwg. GR-4)
	TA 606-04	Box Beam to 42" Single Slope Half Section Concrete Barrier Pier Protection (Dwg. GR-5)
	TA 606-05	HPBO (Mod.) Corrugated Beam to 42" Single Slope Half Section Concrete Barrier Pier Protection (Dwg. GR-6)
	TA 606-06	Typical U-Turn Median Rail Layout and Roadway Transverse Section
	TA 606-07	Modified Thrie Beam Guiderail with Rock Rail
	TA 611-01	Living Snow Fences
X	TA 619-01	Work Zone Traffic Control Tables & Legend
X	TA 619-02	General Work Zone Traffic Control Notes & Channelizing Devices
X	TA 619-03	Shoulder Closure Short-Term or Intermediate-Term Stationary
X	TA 619-04	Shoulder Closure Short-Duration Stationary and Mobile
	TA 619-05	Signing & Delineation for Shoulder Work Spaces with Temporary Concrete Barrier
X	TA 619-06	Work Beyond Shoulder
X	TA 619-07	Be Prepared to Stop and Uneven Lanes Signing
X	TA 619-08	Single Lane Closure Short- or Intermediate-Term Stationary: 65 MPH Zone
	TA 619-09	Double Lane Closure Short- or Intermediate-Term Stationary: 65 MPH Zone
	TA 619-10	Center Lane Closure Short- or Intermediate-Term Stationary: 65 MPH Zone
	TA 619-11	Lane Shift: 65 MPH Zone
X	TA 619-12	Single Lane Closure Short- or Intermediate-Term Stationary: 55 MPH Zone
X	TA 619-13	Double Lane Closure Short- or Intermediate-Term Stationary: 55 MPH Zone
X	TA 619-14	Center Lane Closure Short- or Intermediate-Term Stationary: 55 MPH Zone
	TA 619-15	Lane Shift: 55 MPH Zone
X	TA 619-16	Work Zone Traffic Control at Interchanges, Service Areas and Parking Areas
X	TA 619-17	Work Zone Traffic Control for Miscellaneous Operations
X	TA 619-18	Mobile Lane Closure
X	TA 619-19	Mobile Lane Closure: Narrow Shoulder Area
X	TA 619-20	Short-Duration Lane Closure
X	TA 619-21	Short-Duration Double Lane Closure
	TA 619-22	Work Zone Traffic Control Guide for Pavement Striping Operations
	TA 619-23	Mobile Lane Closure for Pavement Striping Operations
	TA 619-24	Mobile Lane Closure for Pavement Striping Operations: Narrow Shoulder Area
	TA 619-25	Work Zone Traffic Control for Pavement Striping Operations at Interchanges, Service Areas and Parking Areas
	TA 619-26	Temporary Rock Catchment Barrier (Sheets 1-3)
	TA 619-30	New York Division Traffic Management Tables (Sheets 1-26)
	TA 619-31	Albany Division 1,150 Veh/Hr/Lane Traffic Management Tables (Sheets 1-18)
	TA 619-32	Syracuse Division 1,150 Veh/Hr/Lane Traffic Management Tables (Sheets 1-18)
X	TA 619-33	Buffalo Division 1,150 Veh/Hr/Lane Traffic Management Tables (Sheets 1-37)
	TA 619-34	Vacant
	TA 619-35	Albany Division 1,300 Veh/Hr/Lane Traffic Management Tables (Sheets 1-18)
	TA 619-36	Syracuse Division 1,300 Veh/Hr/Lane Traffic Management Tables (Sheets 1-18)
X	TA 619-37	Buffalo Division 1,300 Veh/Hr/Lane Traffic Management Tables (Sheets 1-37)
	TA 625-01	ROW and Survey Markers
	TA 645-01	Wrong Way Deterrence Sign
	TA 646-01	Reference Marker Details (Sheets 1-2)
	TA 670-01	Fiber Optic & Backbone Handhole Relocation Details
	TA 680-01	Inductance Loop Installation
	TA 680-02	Highway Advisory Radio (Sheets 1-9)
	TA 685-01	Pavement Marking Details: Asphalt and Concrete Pavement (Sheets 1-2)
	TA 685-02	Pavement Marking Details: Tapered Acceleration and Deceleration Lanes
	TA 685-03	Toll Island Gore and Crosswalk Striping Details
	TA 685-04	Temporary Pavement Marking Details
	TA 690-01	Loop and Treadle Plan (Sheets 1-2)
	TA 690-02	Toll Lane Slab Reinforcement Plan
	TA 690-03	10 ft Treadle Frame (Sheets 1-2)

Highway Work Type

The marked types & treatments apply to the indicated milepost range(s) below.

MILEPOST FROM:	463.45			
TO:	463.45			
PROJECT TYPE	X	X	X	X
1R Resurfacing				
2R Resurfacing				
3R Rehabilitation				
Reconstruction				
Safety Improvements	X			
Drainage				
Rock Slope Remediation				
Pavement Striping	X			
Other: Approach Overlay	X			
PAVEMENT TREATMENT	X	X	X	X
Isolated Pavement Repairs Only				
Thin Overlay without Milling				
Thin Overlay with Milling				
1" Mill & Inlay without Shoulders				
1" Mill & Inlay with Shoulders				
2" Mill & Inlay without Shoulders				
2" Mill & Inlay with Shoulders				
Mill to Concrete with 4" Overlay				
Mill to Concrete with 4.5" Overlay				
Mill to Concrete with 5" Overlay				
Crack and Seat with Overlay				
Rubblize with Overlay				
Other:				

Structure Work Type

The marked types apply to the indicated milepost(s) below.

MILEPOST:	421.57	463.45		
PROJECT TYPE	X	X	X	X
Bridge Washing				
Scour Protection				
Channel Cleaning				
Railing System				
Protective Screening				
Painting				
Steel Repair	X	X		
Wearing Surface Treatment				
Deck Repairs				
Joint Rehabilitation				
Joint Replacement		X		
Bearing Rehabilitation				
Bearing Replacement		X		
Hanger Pin Replacement				
Security				
Seismic Retrofit				
Substructure Rehabilitation				
Electrical				
Cathodic Protection System				
Fender or Pier Protection System				
Deck Replacement				
Superstructure Replacement				
Bridge Replacement				
Added Bridge (New Location)				
Abandoned Bridge				
Other:				

The officially adopted New York State Thruway Authority Standard Sheets book is available on the Thruway Authority's website at <http://www.thruway.ny.gov/business/contractors/standard-sheets/index.shtml>

REVISIONS			
DATE	DESCRIPTION	BY	SYM.

 <b>NEW YORK STATE OF OPPORTUNITY</b>	 <b>Thruway Authority</b>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
		LOCATION OF PROJECT MP 463.45 - SHERIDAN CENTER RD, OVER I-90 MP 421.57 - KENSINGTON EXPY, OVER I-90	DATE: JUNE 2020
 2300 Main Place Tower Buffalo, NY 14203-3722 716.847.6330 • www.chartrains.com		TITLE OF DRAWING GENERAL NOTES NYSTA & NYSDOT STANDARD SHEETS & WORK TYPE	DRAWING NUMBER: GN-1

FILE NAME = V:\Projects\NY\03\36292\CADD\MSTN\MP\_463.45\_Center\_Road\_Rte 91\03\_Bridge\_Hit\_Repairs\_MP\_463.45\_CN-1.dgn  
 DATE / TIME = 6/26/2020  
 USER = 5379  
 DESIGN SUPERVISOR: G. HOFFMANN  
 DESIGNED BY: S. KINSMAN  
 CHECKED BY: J. HARTWELL  
 DRAFTED BY: J. HARTWELL  
 CHECKED BY: S. SCHUKRAFT

**GENERAL NOTES:**

- DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES (17TH EDITION), AND AS AMENDED BY NEW YORK STATE DEPARTMENT OF TRANSPORTATION BLUE PAGES AND THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION BRIDGE MANUAL, 2019 U.S. CUSTOMARY EDITION.
- CONSTRUCTION AND MATERIAL SPECIFICATIONS: ALL WORK CONTEMPLATED UNDER THIS CONTRACT AS SHOWN ON THESE PLANS AND/OR SPECIFICATIONS AND THE ACCOMPANYING PROPOSAL IS TO BE IN CONFORMITY WITH "STANDARD SPECIFICATIONS" (U.S. CUSTOMARY UNITS), NEW YORK STATE DEPARTMENT OF TRANSPORTATION OFFICE OF ENGINEERING, CURRENT VERSION, WITH ALL CURRENT ADDENDA, & ALL REVISIONS ISSUED BY NYSOT ENGINEERING BULLETINS, DIRECTIVES OR INSTRUCTIONS BEFORE THE FIRST PUBLISH DATE OF THE ADVERTISEMENT FOR THIS CONTRACT, EXCEPT AS AMENDED ON THESE PLANS AND/OR IN THE SPECIFICATIONS IN THE PROJECT PROPOSAL.
- CONCRETE: THE MINIMUM CONCRETE COMPRESSIVE STRENGTH SHALL BE 3,000 PSI AT 28 DAYS.
- REINFORCEMENT: ALL BAR REINFORCEMENT SHALL BE ASTM A615 GRADE 60. WHERE INDICATED, BARS SHALL BE GALVANIZED AND FABRICATED IN ACCORDANCE WITH ASTM A767, AND MEET THE REQUIREMENTS OF NYSOT MATERIAL SPECIFICATION 709-11. ALL WIRE FABRIC REINFORCEMENT SHALL BE ASTM A1064. NO SUBSTITUTIONS WILL BE ALLOWED. WIRE FABRIC SHALL BE GALVANIZED AND FABRICATED IN ACCORDANCE WITH ASTM A767 AND ASTM A123, AND MEET THE REQUIREMENTS OF NYSOT MATERIAL SPECIFICATION 709-02.
- THE CONTRACTOR SHALL VISIT THE SITE BEFORE BIDDING TO FAMILIARIZE HIMSELF WITH THE PRESENT CONDITIONS AND TO JUDGE FOR HIMSELF THE EXTENT AND NATURE OF THE WORK TO BE PERFORMED 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.
- THE CONTRACTOR SHALL EXAMINE AND VERIFY IN THE FIELD, ALL EXISTING CONDITIONS & DIMENSIONS WITH THOSE SHOWN ON THE PLANS. IF FIELD CONDITIONS & DIMENSIONS DIFFER FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL USE THE FIELD CONDITIONS & DIMENSIONS AND MAKE THE APPROPRIATE CHANGES TO THOSE SHOWN ON THE PLANS AS APPROVED BY THE ENGINEER.
- 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 UNIT BID PRICE FOR THE APPROPRIATE ITEMS.
- THE CONTRACTOR SHALL EXERCISE CAUTION AND PERFORM ALL WORK WITH CARE SO THAT ANY MATERIALS WHICH ARE TO REMAIN IN PLACE, OR BE RE-USED, OR WHICH ARE TO REMAIN THE PROPERTY OF THE THRUWAY 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 THRUWAY AUTHORITY, THE DAMAGED MATERIALS SHALL BE REPAIRED OR REPLACED IN A MANNER SATISFACTORY TO THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR, WITH NO ADDITIONAL COST TO THE AUTHORITY.
- THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ALL DAMAGES CAUSED BY HIS OPERATIONS TO THE EXISTING ROADWAYS WHICH ARE NOT INCLUDED AS PART OF THE INTENDED WORK. ALL DAMAGE TO EXISTING ROADWAYS WHICH ARE NOT PART OF THE INTENDED WORK SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER, WITHOUT COST TO THE THRUWAY AUTHORITY.
- ALL WORK SHALL BE LIMITED TO WITHIN THE RIGHTS OF WAY, EASEMENTS, OR LIMITS OF RELEASE.
- WHENEVER ITEMS IN THE CONTRACT REQUIRE MATERIALS TO BE REMOVED AND DISPOSED OF, THE COST OF SUPPLYING A DISPOSAL AREA AND TRANSPORTATION TO THAT AREA SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THOSE ITEMS.
- THIS BRIDGE SHALL BE MAINTAINED IN ACCORDANCE WITH THE GUIDELINES CONTAINED IN THE CURRENT EDITION OF THE AASHTO MAINTENANCE MANUAL FOR ROADWAYS AND BRIDGES.
- UNIT BID PRICES SHALL INCLUDE ANY ADDITIONAL COSTS INCURRED TO MEET U.S. ARMY CORP. OF ENGINEERS, N.Y.S.D.E.C., N.Y.S.D.O.L., U.S.E.P.A., AND O.S.H.A REGULATIONS.
- RECORD PLANS FOR THE EXISTING BRIDGE WILL BE AVAILABLE ON THE THRUWAY AUTHORITY WEBSITE DURING BIDDING PHASE.
- NO DIRECT PAYMENT SHALL BE MADE FOR WORK INDICATED ON THE DRAWINGS OR WITHIN THE SPECIFICATIONS FOR WHICH NO ITEM NUMBER IS INDICATED. THE COST FOR SUCH WORK SHALL BE INCLUDED IN THE VARIOUS ITEMS OF THE CONTRACT.
- THE CONTRACTOR IS ADVISED THAT ADDITIONAL "NOTES" WILL BE FOUND ON SUBSEQUENT SHEETS OF THE CONTRACT PLANS AND SUCH "NOTES", WHILE PERTAINING TO THE SPECIFIC DRAWINGS THEY ARE PLACED ON, ALSO SUPPLEMENT THE GENERAL NOTES LISTED HEREIN.
- THE CONTRACTOR IS REQUIRED TO PROTECT HIS WORKERS IN ACCORDANCE WITH SECTION 107-05 OF THE NYSOT STANDARD SPECIFICATIONS AND SHALL SUBMIT HEALTH AND SAFETY PLAN TO THE ENGINEER PRIOR TO COMMENCING WORK.

THE CONTRACTOR SHALL HAVE AN ENGINEER LICENSED IN THE STATE OF NEW YORK PREPARE AND STAMP PLANS AND ALL CALCULATIONS FOR THE FOLLOWING WORK:

- STRUCTURAL LIFTING PLAN - RAISING & SHORING AT MP 463.45 ONLY

**STEEL & FABRICATION NOTES - MP 463.45:**

- ALL STEEL FABRICATION IS GOVERNED BY, AND SHALL MEET THE REQUIREMENTS OF THE NEW YORK STATE STEEL CONSTRUCTION MANUAL, 4TH EDITION (JANUARY 2018) AND SECTION 564 OF THE STANDARD SPECIFICATIONS EXCEPT AS DIRECTED WITHIN THESE PLANS OR AS ORDERED BY THE ENGINEER.
- SHOP DRAWINGS SHALL BE PREPARED IN ACCORDANCE WITH THE NEW YORK STATE STEEL CONSTRUCTION MANUAL AND SHALL BE SUBMITTED IN ACCORDANCE WITH THE NYSTA PROCEDURE FOR PROCESSING CONTRACTOR SUBMITTALS (430-0-10). SHOP DRAWINGS SHALL BE SUBMITTED IN ENGLISH UNITS OF MEASURE (U.S. CUSTOMARY UNITS). THE WEIGHTS OF ALL COMPONENTS SHALL BE INDICATED ON THE BILL OF MATERIALS WITHIN THE SHOP DRAWINGS.
- NEW STRUCTURAL STEEL: STRUCTURAL STEEL PLATES OR SHAPES SHALL BE ASTM A709 GRADE 50 KSI.
- NO CHARPY V-NOTCH CERTIFICATION IS REQUIRED FOR ANY OF THE NEW STEEL COMPONENTS.
- TEMPORARY STEEL (STRONG-BACKS, CROSS-BEAMS, TEMP. ANCHOR PLATES & SHIMS) MAY BE 36 KSI OR 50 KSI STEEL.
- THE COST OF ALL STRUCTURAL STEEL REMOVAL & DISPOSAL, TORCH CUTTING, ANY LOCALIZED PAINT STRIPPING, WELD REMOVAL AND ALL ACCESS REQUIRED SHALL BE INCLUDED IN THE STEEL REPAIR.
- WHERE HOLES ARE INDICATED, CONNECTIONS SHALL BE MADE WITH 7/8"Ø HIGH-STRENGTH BOLTS UNLESS OTHERWISE SPECIFIED. ALL BOLTS SHALL BE ASTM A325 TYPE 1 (HDC), WITH A563 DH HEAVY HEX NUTS AND (2) - F436 HARDENED WASHERS. ALL HOLES ARE 15/16"Ø U.N.O.
- ALL NUTS, BOLTS, AND WASHERS SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH THE SPECIFICATIONS. ALL BOLTS SHALL BE FULLY TENSIONED IN ACCORDANCE WITH NYSSCM.
- THE COST FOR FIELD DRILLING & INSTALLATION OF ALL BOLTS, NUTS, WASHERS, WELDS AND MISC. SHIM/FILL PLATES SHALL BE INCLUDED IN THE STEEL REPAIR ITEM.
- NEW HOLES IN EXISTING MATERIAL SHALL BE DRILLED USING THE NEW PIECE AS THE TEMPLATE.
- ANY INCIDENTAL FIELD MODIFICATIONS, FIELD TRIMMING, RETROFITS, SHIMMING OR ADJUSTMENTS TO THE EXISTING OR NEW STEEL (EG; COPEs, CUTS, CLIPS, REAMING) NECESSARY TO ENSURE PROPER FIT-UP OF ALL NEW STEEL COMPONENTS SHALL BE INCLUDED IN THE STEEL REPAIR ITEM.
- ADDITIONAL NOTES ARE INCLUDED IN THE APPLICABLE STEEL INSTALLATION OR STEEL REPAIR DRAWINGS.

**PAINTING NOTES:**

- ASIDE FROM PAINTING REQUIRED FOR THE STEEL REPAIRS, AND AREAS WITHIN AND IMMEDIATELY ADJACENT TO THE REPAIR LIMITS, NO OTHER CLEANING OR PAINTING OF THE STRUCTURAL STEEL IS ANTICIPATED.
- THE COST FOR ALL CLEANING, SURFACE PREPARATION, SHOP PRIMING AND SHOP PAINTING FOR ALL **NEW STEEL** SHALL BE PAID SEPARATELY UNDER ITEM 572.010001.  
  
THE COST FOR ALL CLEANING AND SURFACE PREPARATION OF THE EXISTING STEEL AND THE COST OF TOUCH-UP PAINTING OF BOTH THE EXISTING & NEW STEEL SHALL BE INCLUDED IN THE UNIT PRICE FOR THE APPLICABLE STEEL REPAIR ITEM 564.7000XX.
- EXCEPT WHERE NOTED, PRIOR TO SHIPPING TO THE FIELD, ALL NEW OR REPLACEMENT STRUCTURAL STEEL SHALL BE ABRASIVELY BLAST CLEANED IN ACCORDANCE WITH SSPC SP 10, NEAR WHITE METAL BLAST AND SHALL BE PRE-PRIMED, AFTER SHOP FABRICATION, WITH AN INORGANIC ZINC-RICH PRIMER. ALL DIRT, GREASE AND FOREIGN MATTER SHALL BE CLEANED FROM THE NEW STEEL PRIOR TO APPLICATION OF THE FIELD APPLIED INTERMEDIATE COAT, AND FINISH COAT.
- PAINT SYSTEM MUST BE FROM NYSOT APPROVED LIST, AND APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH THE MANUFACTURER'S CERTIFICATION STATING THAT THE PAINT MEETS THE ABOVE REQUIREMENTS.
- ALL LARGER STEEL REPLACEMENT ELEMENTS SHALL BE 3-COAT PAINTED IN THE SHOP IN ACCORDANCE WITH SECTION 572, WITH THEIR CONTACT SURFACES MASKED & PRIMED ONLY, AS INDICATED ON THESE DRAWINGS.
- ALL OTHER COMPONENTS (FILL PLATES) SHOULD BE SHOP PRIMED ONLY AND FINISH PAINTED IN THE FIELD. THE AREAS REQUIRING FULL SHOP PAINTING, OR SHOP PRIMING ONLY, SHALL BE CLEARLY IDENTIFIED ON THE STEEL SHOP DRAWINGS.
- ALL COATINGS SHALL BE APPLIED IN A NEAT, WORKMANLIKE MANNER. COATINGS SHALL BE APPLIED UNIFORMLY AND SHALL BE FREE OF RUNS, SAGS, DRIPS, OR OTHER DEFECTS. THE INTERMEDIATE EPOXY COAT AND THE URETHANE FINISH COAT MAY BE SHOP-APPLIED BY BRUSH, ROLLER OR SPRAY. THE INORGANIC ZINC PRIMER SHALL BE APPLIED BY SPRAY ONLY.
- FIELD TOUCH-UP OF DAMAGED AREAS OF PRIMER COAT SHALL BE AS DIRECTED BY THE ENGINEER USING A COMPATIBLE, ORGANIC ZINC TOUCH-UP PRIMER.
- GALVANIZED BOLTS USED FOR THE STRUCTURAL STEEL REPAIRS WILL BE REQUIRED TO BE PAINTED IN FIELD.
- ALONG THE CUT LINE, AND AT ALL FIELD WELDED REPAIRS, THE EXISTING PAINTED SURFACES SHALL BE CLEANED & PREPARED IN ACCORDANCE WITH SSPC SP 11 "POWER TOOL CLEANING TO BARE METAL" WITHIN 3 INCHES ON EACH SIDE OF THE CUT LINE, AND THEN PRIMED AFTER WITH AN APPROVED ORGANIC ZINC-RICH PRIMER.
- WHERE NEW MATERIALS IS TO BE BOLTED TO EXISTING MATERIAL, THE EXISTING CONTACT SURFACE SHALL BE CLEANED PER THE REQUIREMENTS OF SSPC SP 11 "POWER TOOL CLEANING TO BARE METAL." THE CONTACT SURFACES SHALL BE COATED WITH THE ORGANIC ZINC-RICH PRIMER PRIOR TO INSTALLATION OF NEW MATERIAL. WHERE NECESSARY, TARPS AND SCREENS WILL BE REQUIRED DURING PAINT REMOVAL OPERATION AND LARGE RUST SCALE WILL NOT BE PERMITTED TO BE DROPPED ON THE ROADWAY.
- FINISH COLOR : (SAGE GREEN), (MATCH EXISTING FADED PAINT)
- TEMP. COMPONENTS (STRONGBACKS, CROSS-BEAMS, RODS, ANCHOR PLATES, ETC.) HAVE NO CLEANING OR PAINTING REQUIREMENTS.

**LEAD PAINT NOTES - MP 463.45:**

- THE BRIDGE WAS CLEANED AND PAINTED IN AUGUST, 2011 TO SSPC-SP10 & SOME AREAS TO SSPC-SP5, AND THUS NO LONGER CONTAINS ANY LEAD PAINT.
- THE CONTRACTOR IS STILL REQUIRED TO USE VACUUM SHROUDED TOOLS TO REDUCE EMISSIONS TO A MINIMUM. THE CONTRACTOR SHALL USE TARPS OR OTHER MEANS TO CONTAIN, AND MINIMIZE EMISSION OF PAINT DUST TO BE PAID UNDER ITEM 570.160001.
- LIMITS AND METHODS FOR REMOVAL OF PAINT AT LOCATIONS OF FASTENER REMOVAL OR FLAME CUTTING SHALL BE AS DESCRIBED IN SUBSECTIONS 202-3.05 AND 574 OF THE STANDARD SPECIFICATIONS. THE COST OF ANY PAINT REMOVAL OR PAINT STRIPPING REQUIRED SHALL BE INCLUDED IN UNIT PRICE OF THE APPLICABLE STRUCTURAL STEEL REPAIR ITEM. PAINT WASTE SHALL BE COLLECTED FOLLOWING THE REQUIREMENTS OF THE ENVIRONMENTAL GROUND PROTECTION, AND PAINT WASTE SHALL BE DISPOSED OF FOLLOWING THE REQUIREMENTS OF SECTION 571 - DISPOSAL OF PAINT REMOVAL WASTE.

**WORK TO BE DONE & GENERAL SEQUENCE OF OPERATIONS - MP 463.45:**

**A. STEEL REPAIRS - 2020 WORK**

- ESTABLISH SIGNED DETOUR, ERECT BARRICADES AND CLOSE SHERIDAN ROAD.
- PLACE HARDWOOD GRILLAGE & DISTRIBUTION PLATE OVER THE EXISTING GIRDER TO BE REPAIRED (IE; SPAN 3 - G1, G2, G5 OR SPAN 2 - G1). LOCATE THE GRILLAGE DIRECTLY OVER PIER 2 & PIER 3 (OR PIER 1 & PIER 2) AS SHOWN ON THE DRAWINGS.
- LAYOUT HOLE LOCATIONS FOR HANGER RODS.
- PLACE STRONG-BACK BEAM ON THE HARDWOOD GRILLAGE & DISTRIBUTION PLATE. WELD STRONG-BACK TO DISTRIBUTION PLATE AND WELD ON THE END BRACING ANGLES AS SHOWN ON THE PLANS.
- SET UP ADVANCED SIGNAGE AND ESTABLISH WB OR EB LANE CLOSURE ON A DAILY AND/OR NIGHTLY BASIS FOR THE WORK BEING PERFORMED THAT SHIFT.
- DRILL HOLES FOR HANGER RODS THROUGH EXISTING DECK FOR ONE OR MORE STRONG-BACKS. INSTALL ALL HANGER RODS & PLATES THROUGH DECK & STRONG-BACK AND TORQUE RODS AS SPECIFIED.
- REMOVE ONLY THE INTERFERING DIAPHRAGMS.
- TORCH CUT AND REMOVE THE DAMAGED WEB & BOTTOM FLANGE FROM THE GIRDER BEING WORKED ON, ONLY OVER THE "FIRST" LANE THAT WAS CLOSED FOR THAT SHIFT. GRIND SMOOTH ALL NICKS AND GOUGES TO SATISFACTION OF ENGINEER.
- SHIFT TRAFFIC TO CLOSE THE OTHER LANE NOT INITIALLY WORKED ON.
- TORCH CUT AND REMOVE THE REMAINDER OF THE DAMAGED WEB & BOTTOM FLANGE FROM THE GIRDER BEING WORKED ON, OVER THE "SECOND" LANE. GRIND SMOOTH ANY NICKS OR GOUGES.
- SET UP A TEMPORARY SUPPORT SYSTEM FOR THE REPLACEMENT GIRDER SEGMENT, SUFFICIENT TO LET TRAFFIC PASS UNDER THE REPLACEMENT GIRDER SEGMENT.
- LIFT, INSTALL & ALIGN THE REPLACEMENT GIRDER SEGMENT. TEMPORARILY SUPPORT BY FORK-LIFT, OR TEMPORARY SUPPORT THROUGH THE DECK, FROM BOTTOM FLANGE SPLICE PLATES, OR TEMPORARY SUPPORT FROM REMAINING GIRDER.
- FIELD DRILL AND INSTALL END WEB SPLICES AND THEN ANY TEMPORARY SUPPORTS CAN BE REMOVED.
- FIELD DRILL AND INSTALL HORIZONTAL WEB SPLICES. FIELD DRILL AND INSTALL BOTTOM FLANGE SPLICES
- AFTER 2 GIRDERS HAVE BEEN REPAIRED, START INSTALLING THE NEW DIAPHRAGMS.
- AFTER REPAIR HAS BEEN ACCEPTED, RELOCATE STRONGBACK TO NEXT GIRDER.
- ALL HOLES THROUGH THE DECK CAN BE FILLED AS YOU GO, OR PREFERABLY ALL HOLES ARE FILLED AT THE END AFTER ALL REPAIRS ARE COMPLETED.
- TOUCH UP PAINT ALL CONNECTIONS OR OTHER DAMAGED PAINT.
- AFTER ALL STEEL REPAIRS ARE APPROVED & ACCEPTED, REMOVE STRONG-BACKS FROM BRIDGE. OPEN BRIDGE TO TRAFFIC.
- THOUGH NOT REQUIRED, THE CONTRACTOR MAY ELECT TO PROVIDE 2 STRONGBACKS AND WORK ON 2 GIRDERS AT A TIME, BUT THOSE GIRDERS CANNOT BE ADJACENT (IE; DON'T WORK ON SPAN 3 - G1 & G2 AT THE SAME TIME, BUT ANY OTHER COMBINATION IS OK).

**B. RAISE BRIDGE, BEARINGS, PEDESTALS, BACKWALL & JOINTS - 2021 WORK**

- REMOVE EXISTING JOINTS AND REMOVE PORTION OF EXISTING BACKWALLS AND REMOVE PORTION OF THE END OF DECK OVER BOTH ABUTMENTS.
- DISCONNECT THRIE-BEAM RAILING AT BOTH ENDS OF THE BRIDGE AND REMOVE EXISTING THRIE-BEAM TRANSITIONS AT ALL 4 QUADRANTS.
- REMOVE / EXCAVATE STONE SLOPE PROTECTION AND EXPOSE ABUTMENT FOOTING [IF NECESSARY]. PLACE COMPACTED STONE BEDDING / LEVELING PAD AT THE PIERS, INSTALL CRIBBING, DISTRIBUTION PLATES AND INSTALL ALL TEMPORARY SHORING COLUMNS AND APPURTENANCES. CONNECT TEMPORARY COLUMNS TO EXISTING GIRDERS AND BRACE COLUMNS TO EACH OTHER OR BRACE COLUMNS AGAINST EXISTING SUBSTRUCTURES AS NEEDED.
- INSTALL JACKING SYSTEM MANIFOLDS, GAUGES IN ACCORDANCE WITH THE CONTRACTOR'S APPROVED JACKING PLAN & PROCEDURE.
- JACK & RAISE THE BRIDGE 8", RAISING ALL GIRDERS SIMULTANEOUS AT ALL SUBSTRUCTURES (SEE DWG. S-32 FOR MORE INFO ON BRIDGE RAISING).
- REMOVE EXISTING BEARINGS & CONNECTION WELDS AT ALL SUBSTRUCTURES.
- HANG NEW BEARINGS FROM GIRDERS AT ALL SUBSTRUCTURES & PRE-INSTALL ANCHOR BOLTS.
- DRILL & GROUT PEDESTAL L-BARS & TIE IN STIRRUP REINFORCEMENT FOR PEDESTALS.
- FORM AND POUR PEDESTALS EXTENSIONS AT ALL SUBSTRUCTURES. AFTER CURE, TRANSFER WEIGHT OF BRIDGE ONTO THE NEW BEARINGS AND PEDESTALS AND REMOVE ALL TEMPORARY SHORING.
- DRILL DOWELS, TIE REINFORCEMENT FORM AND POUR BACKWALL EXTENSIONS AT BOTH ABUTMENTS.
- POUR BACKWALL HEADERS AT BOTH ABUTMENTS.
- DRILL DOWELS, PLACE REINFORCEMENT AND POUR NEW DECK HEADERS/EXTENSIONS.
- POUR SIDEWALK EXTENSIONS / MODIFICATION AT ALL 4 QUADRANTS.
- REMOVE HEAVY-POST, BLOCKED-OUT, CORRUGATED BEAM GUIDE RAIL.
- MILL FOR REBATES AND PAVE BOTH APPROACHES WITH ASPHALT INCREASING PROFILE AT THE BRIDGE 8".
- PLACE SHOULDER BACK-UP MATERIAL.
- INSTALL NEW HEAVY-POST, BLOCKED-OUT CORRUGATED BEAM GUIDE RAIL AT ALL 4 APPROACHES.
- INSTALL NEW RAILING POSTS ON SIDEWALK EXTENSION AND INSTALL NEW THRIE-BEAM TRANSITION AT ALL 4 QUADRANTS.
- SEAL ABUTMENT JOINTS.
- STRIPE PAVEMENT.
- OPEN SHERIDAN CENTER ROAD TO TRAFFIC AND REMOVE DETOUR SIGNS.

**HEAT STRAIGHTENING:**

- ONLY MINOR HEAT STRAIGHTENING IS ANTICIPATED TO BE NEEDED FOR THE STEEL REPAIRS AT MP 463.45, SEE DWG. S-21.
- FOR HEAT STRAIGHTENING NOTES AT MP 421.57, SEE DWG. GN-3.

GENERAL NOTES LISTED ABOVE APPLY TO MP 463.45 & MP 421.57. ALL OTHER NOTES ON THIS SHEET APPLY TO MP 463.45 ONLY. SEE DWG. GN-3 & GN-4 (IN OTHER SET) FOR SITE SPECIFIC GENERAL NOTES FOR MP 421.57

ALTERED ON:	AFFIXED ON:
SIGNATURE:	SIGNATURE:
STAMP:	STAMP:
	6/25/2020



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REVISIONS			
DATE	DESCRIPTION	BY	SYM.



**NEW YORK STATE OF OPPORTUNITY**

**Thruway Authority**



2200 Main Place Tower  
Buffalo, NY 14203-3722  
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TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING GENERAL NOTES	DRAWING NUMBER: GN-2

FILE NAME = V:\Projects\ANY\5\36292\CADD\MSTN\MP\_463.45\_Bridge\_Hit\_Repairs\_MP\_463.45\_GN-2.dgn  
DATE / TIME = 26-JUN-2020 10:57:59  
USER = S. SCHUKRAFT  
DESIGNED BY: S. KINSMAN  
CHECKED BY: G. HOFFMANN  
DRAFTED BY: J. HARTWELL  
CHECKED BY: S. SCHUKRAFT

**GENERAL WORK ZONE TRAFFIC CONTROL**

- A1. WORK ZONE TRAFFIC CONTROL SHALL BE PROVIDED THROUGHOUT THE LENGTH OF THE CONTRACT IN ACCORDANCE WITH THE PROVISIONS OF SECTION 619 - WORK ZONE TRAFFIC CONTROL - OF THE NYS DOT STANDARD SPECIFICATIONS AND THE NYSTA ADDENDUM TO THE STANDARD SPECIFICATIONS, THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND ANY PROVISIONS CONTAINED IN THE CONTRACT DOCUMENTS, AND AS ORDERED BY THE ENGINEER (A.O.B.E.), THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (NATIONAL MUTCD) SHALL BE DEFINED AS THE NATIONAL MUTCD, DECEMBER 2009 EDITION WITH SUPPLEMENTS.
- A2. THE CONTRACT DOCUMENTS AND THE TRAFFIC MAINTENANCE SCHEMES SHOWN IN SECTION 6 OF THE NATIONAL MUTCD ARE CONSIDERED TO BE MINIMUM REQUIREMENTS. ADDITIONAL SIGNS, DELINEATION, AND/OR TRAFFIC CONTROL DEVICES MAY BE REQUIRED AS DETERMINED BY THE ENGINEER. THE COST OF ANY ADDITIONAL DEVICES SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - WORK ZONE TRAFFIC CONTROL.
- A3. THE CONTRACT DOCUMENTS ARE NOT INTENDED TO BE ALL INCLUSIVE, BUT RATHER SERVE AS A GUIDE FOR THE SAFE & EFFICIENT SEQUENCING OF CONSTRUCTION OPERATIONS. THE TRAFFIC CONTROL PLANS PROVIDE FOR THE BASIC REQUIREMENTS & RESTRICTIONS OF THIS CONTRACT, ANY INCIDENTAL ADDITIONS & REVISIONS TO THESE PLANS, AS DIRECTED BY THE ENGINEER, SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - WORK ZONE TRAFFIC CONTROL.
- A4. PRIOR TO THE START OF WORK, THE CONTRACTOR MUST SUBMIT TO THE ENGINEER, IN WRITING, ANY PROPOSED CHANGES TO THE TRAFFIC CONTROL PLANS FOR APPROVAL. ANY CHANGES WHICH ALTER THE BASIC CONCEPT OF THESE PLANS MUST BE APPROVED BY THE ENGINEER.
- A5. IF THE ENGINEER NOTIFIES THE CONTRACTOR OF ANY HAZARDOUS CONSTRUCTION PRACTICES AND/OR CONDITIONS, ALL OPERATIONS IN THAT AREA SHALL BE DISCONTINUED AND IMMEDIATE REMEDIAL ACTION SHALL BE TAKEN TO CORRECT THE SITUATION, TO THE SATISFACTION OF THE ENGINEER, BEFORE WORK IS RESUMED.

**CLOSURE NOTIFICATION**

- B1. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF THREE (3) WEEKS WRITTEN NOTICE TO THE TOWN OF SHERIDAN AND THE THRUWAY'S ENGINEER-IN-CHARGE BEFORE CLOSING SHERIDAN CENTER ROAD SO THAT THE TOWN AND / OR THRUWAY CAN NOTIFY THE LOCAL FIRE, POLICE, SCHOOLS AND AMBULANCE SERVICES SO THAT AFFECTED AGENCIES CAN DEVELOP ALTERNATE ROUTES OR AN EMERGENCY ACCESS PLAN.  
CONTACT: JEFFREY FEINEN, HIGHWAY SUPERINTENDENT  
PHONE: (716) 637-1822 OR (716) 680-5461 (CELL)
- B2. THE CONTRACTOR SHALL PROVIDE A WRITTEN LIST OF INDIVIDUALS RESPONSIBLE FOR EMERGENCY REPAIRS AND EMERGENCY COORDINATION. THIS "CALL OUT" LIST SHALL BE PROVIDED TO THE LOCAL FIRE, POLICE, AND AMBULANCE SERVICES, AND THE ENGINEER. THIS LIST SHALL INCLUDE THE NAME, ADDRESS, AND TELEPHONE NUMBERS OF THE PERSONS AUTHORIZED TO SECURE LABOR, MATERIALS, AND EQUIPMENT FOR EMERGENCY REPAIRS DURING NON-WORKING HOURS.

**DELINEATION AND CHANNELIZATION**

- C1. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR MONITORING THE WORK ZONE. ALL DISLODGED DELINEATION DEVICES AND/OR OBLSCURED PAVEMENT MARKINGS SHALL BE RESET AND/OR RE-MARKED AS REQUIRED, OR A.O.B.E.
- C2. THE CONTRACTOR SHALL NOT MIX DELINEATION DEVICES IN A LINEAR CLOSURE OR TAPER, (I.E., CONES, VERTICAL PANELS, OR DRUMS SHALL NOT BE USED IN THE SAME TAPER OR CLOSURE). HOWEVER, DIFFERENT WORK AREAS WITHIN THE PROJECT LIMITS MAY USE DIFFERENT DELINEATION DEVICES.
- C3. WHEN TYPE III BARRICADES ARE USED NEAR DRIVEWAYS OR INTERSECTIONS, THEY SHALL BE PLACED IN SUCH A WAY AS TO NOT OBLSCURE SIGHT DISTANCE.

**CONSTRUCTION SIGNS**

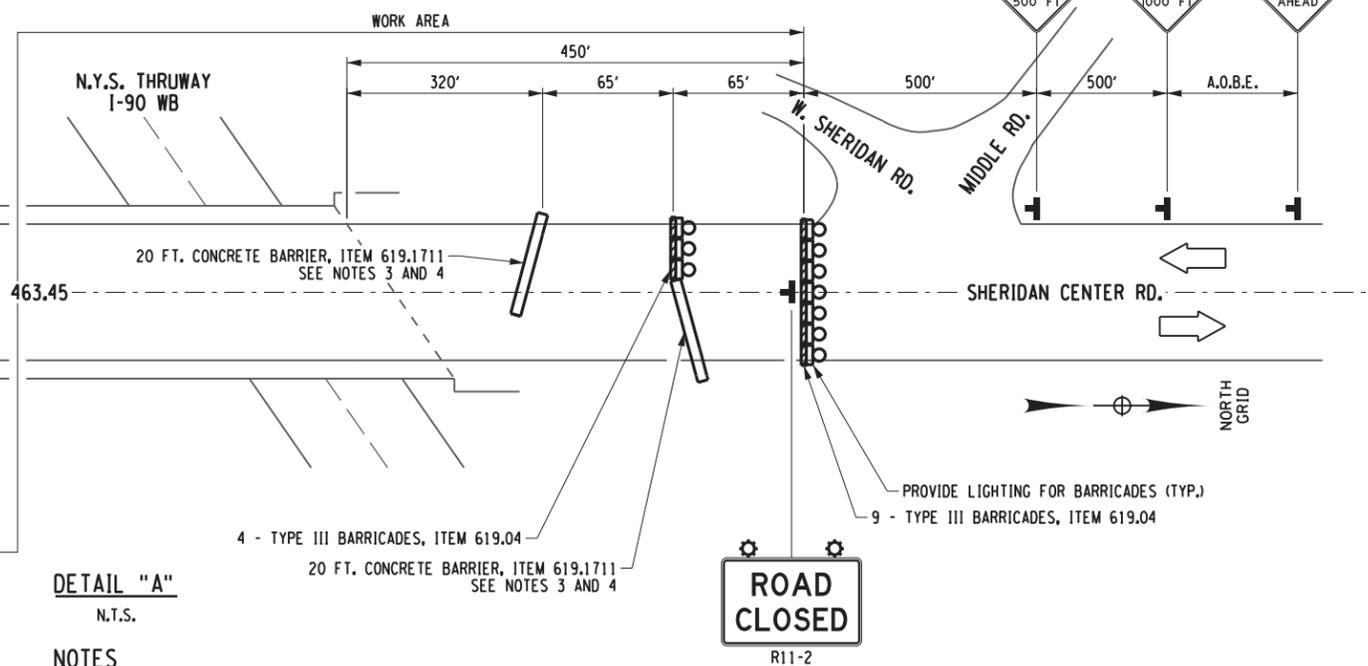
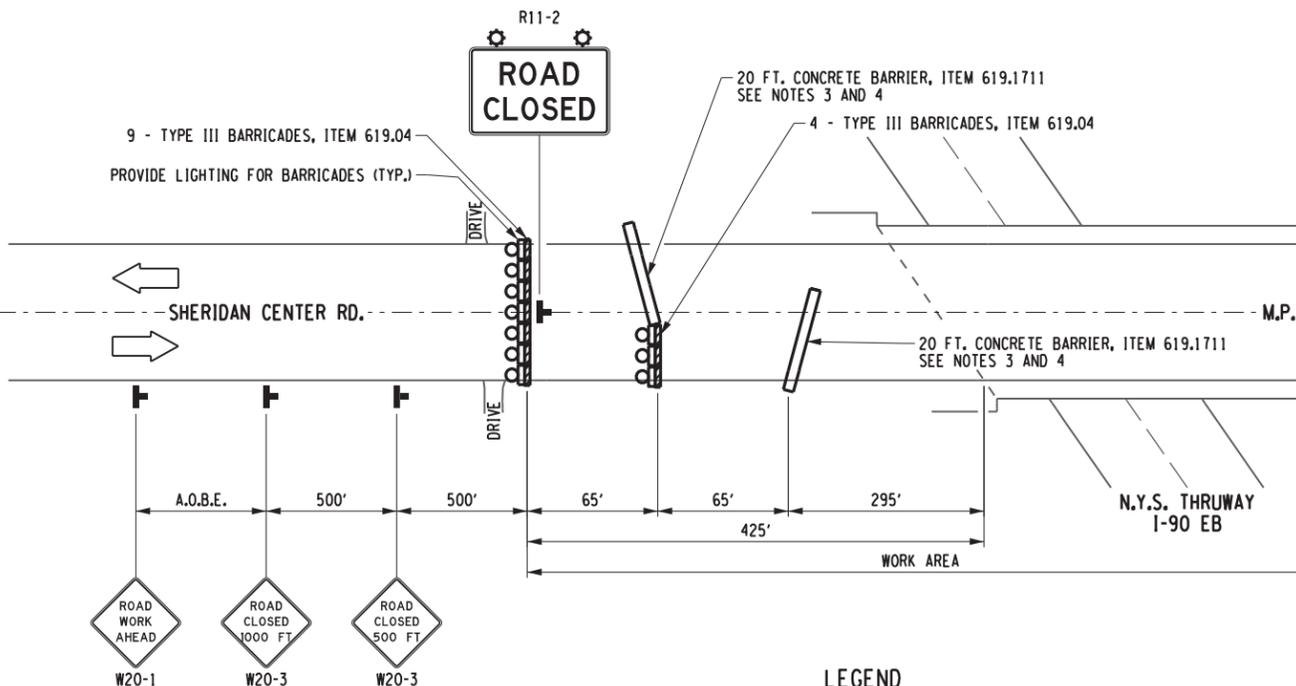
- D1. DIAMOND-SHAPED ADVANCE WARNING SIGNS SHALL BE USED FOR ALL ADVANCE WARNING SIGNS SHOWN IN THE NATIONAL MUTCD. COLOR REQUIREMENTS SHALL BE BLACK TEXT ON ORANGE BACKGROUND. COLOR REQUIREMENTS FOR REGULATORY & GUIDE SIGNS USED FOR CONSTRUCTION SIGNING SHALL BE AS SPECIFIED IN THE NATIONAL MUTCD FOR EACH SIGN, OR AS NOTED ON THE PLANS.
- D2. LONGITUDINAL PLACEMENT OF CONSTRUCTION SIGNS SHALL BE AS SHOWN ON THE TRAFFIC CONTROL PLANS AND AS DIRECTED BY THE ENGINEER. THE LATERAL CLEARANCE FROM THE EDGE OF THE TRAVEL LANE TO THE EDGE OF THE CONSTRUCTION SIGN SHALL BE A MINIMUM OF 3 FEET, AS A.O.B.E. SIGNS SHALL BE PLACED TO PROVIDE OPTIMUM VISIBILITY.
- D3. MOUNTING HEIGHT REQUIREMENTS FOR ALL LONG DURATION CONSTRUCTION SIGNS SHALL BE 7 FEET MINIMUM MEASURED FROM THE GROUND SURFACE TO THE BOTTOM OF THE SIGN. SHORT DURATION CONSTRUCTION SIGNS MAY BE MOUNTED AT A MINIMUM HEIGHT OF 5 FEET, OR A.O.B.E.
- D4. DURING THE PROGRESSION OF CONSTRUCTION, SOME EXISTING SIGNS MAY REQUIRE MINOR RELOCATION DUE TO TEMPORARY PAVEMENT WIDENINGS, SHIFT OF TRAFFIC LANES, OR CHANGE IN THE FLOW OF TRAFFIC. THE COST OF THESE RELOCATIONS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL.
- D5. THE COST OF ALL TEMPORARY CONSTRUCTION SIGNS NECESSARY FOR WORK ZONE TRAFFIC CONTROL AS NOTED IN THE PLANS, STANDARD SPECIFICATIONS, NATIONAL MUTCD, AND A.O.B.E., SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL.
- D6. THE DIMENSIONS OF WORK ZONE TRAFFIC CONTROL SIGNS ARE DESCRIBED IN THE MUTCD. ANY CHANGES TO THE DIMENSIONS SHALL BE APPROVED BY THE REGIONAL DIRECTOR OR BY HIS/HER DESIGNEE.
- D7. SIGN LOCATIONS ARE APPROXIMATE; EXACT LOCATIONS SHALL BE DETERMINED BY THE PROJECT ENGINEER.
- D8. DETOUR SIGNS TO BE MOUNTED ON BREAKAWAY SIGN POSTS. COST TO BE INCLUDED IN THE PRICE BID FOR ITEM 619.01.

**CONSTRUCTION ACTIVITIES**

- E1. NO MATERIAL IS TO BE STORED WITHIN THE CLEAR ROADSIDE AREA OTHER THAN THAT MATERIAL WHICH WILL BE PLACED THAT DAY, WITHOUT THE APPROVAL OF THE ENGINEER. THE CLEAR ROADSIDE AREA IS DEFINED AS THE AREA WITHIN 10 FEET OF THE EDGE OF TRAVEL LANE.
- E2. NO PRIVATE VEHICLES (OWNED BY THE CONTRACTOR'S EMPLOYEES) SHALL BE PARKED ON THRUWAY PROPERTY. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL MARSHALL AT AN OFF-SITE YARD AND TRAVEL TO THE WORK SITE IN CONTRACTOR OWNED WORK VEHICLES.
- E3. CONTRACTOR VEHICLES NOT IN USE SHALL NOT BE PARKED IN THE CLEAR ROADSIDE AREA, OR ANY OTHER LOCATION CONSIDERED BY THE ENGINEER TO BE A HAZARD.
- E4. ALL OPERATIONS, INCLUDING PAVING, ROLLING, GRADING, SUPPLYING OF MATERIAL, AND THE TRAVEL OF SUPERVISORY PERSONNEL THROUGH THE WORK ZONE, AND THE ENTIRE LENGTH OF THE CONTRACT, WILL ALWAYS BE IN THE DIRECTION OF NORMAL TRAFFIC EXCEPT WHERE SPECIFICALLY ALLOWED OTHERWISE BY THE ENGINEER TO PERFORM A PARTICULAR OPERATION.

**NIGHTTIME OPERATIONS NOTES:**

- G1. WORK ZONE TRAFFIC CONTROL FOR NIGHTTIME CONSTRUCTION SHALL BE CONDUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- G2. TO THE EXTENT THAT PROJECT AND TRAFFIC CONDITIONS ALLOW, THE CONTRACTOR SHALL TAKE ADVANTAGE OF DAYLIGHT HOURS BEFORE AND AFTER THE SHIFT TO SETUP & REMOVE TRAFFIC CONTROLS, AS WELL AS MAKE OTHER PREPARATIONS AND CLEANUP WORK.
- G3. ALL ARROW BOARDS USED AT NIGHT SHALL BE PROPERLY DIMMED AS DESCRIBED IN THE MUTCD AND THE STANDARD SPECIFICATIONS TO AVOID GLARE FOR APPROACHING MOTORISTS.
- G4. NIGHTTIME OPERATIONS, INCLUDING LANE CLOSURES OR OBSTRUCTIONS, WILL BE PERMITTED AS NOTED IN THE "SCHEDULE AND SUSPENSION OF WORK" LOCATED IN THE PROPOSAL.
- G5. THE CONTRACTOR SHALL PROVIDE LIGHTING FOR ALL NIGHTTIME OPERATIONS IN ACCORDANCE WITH ITEM 619.24.
- G6. THE CONTRACTOR IS ADVISED THAT ILLUMINATION IS TO BE PROVIDED THROUGHOUT THE ENTIRE AREA OF CONSTRUCTION OPERATIONS, WHICH INCLUDES ALL WORK AREAS OCCUPIED BY THE CONTRACTOR'S PERSONNEL (TRUCK STAGING AREAS, CLEAN OUT AREAS, LAYOUT AND MEASUREMENT AHEAD OF ACTUAL WORK, ETC.). ALL SUCH WORK AREAS ARE TO BE SHOWN ON THE LIGHTING PLAN SUBMITTED TO THE ENGINEER.



**DETAIL "A"**  
N.T.S.

**LEGEND**

- ☒ CONSTRUCTION SIGN (INCLUDED IN THE UNIT PRICE BID FOR ITEM 619.01)
- ⚡ TYPE "B" HIGH-INTENSITY FLASHING BEACON (INCLUDED IN THE UNIT PRICE BID FOR ITEM 619.01)
- ☒ LIGHTING FOR CONSTRUCTION BARRICADES (INCLUDED IN THE UNIT PRICE BID FOR ITEM 619.01)
- ▬ TYPE III BARRICADE (ITEM 619.04)

**NOTES**

1. ALL DIMENSIONS IN FT. UNLESS OTHERWISE NOTED.
2. EXACT SIGN PLACEMENT IS A.O.B.E.
3. THE TEMPORARY CONCRETE BARRIER SHALL BE REPLACED WITH TYPE III BARRICADES WHEN THE DROP-OFF NO LONGER EXISTS.
4. PLACE TEMPORARY CONCRETE BARRIERS AT A 15° ANGLE. BARRIER IS NOT STAKED TO PAVEMENT. AREA BEHIND THE BARRIER MUST REMAIN FREE OF DEBRIS AND PARKED EQUIPMENT TO ASSURE BARRIER DEFLECTION.
5. IT IS INTENDED FOR SHERIDAN CENTER ROAD TO BE CLOSED FOR THE DURATION OF ALL STEEL REPAIRS, FOR BRIDGE JACKING, BEARING REPLACEMENT, JOINT/BACKWALL REPLACEMENT AND ALL PAVING OPERATIONS.

REVISIONS			
DATE	DESCRIPTION	BY	SYM.



TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING BRIDGE CLOSURE PLAN & WORK ZONE TRAFFIC CONTROL NOTES	DRAWING NUMBER: TCP-1

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

ALTERED ON: \_\_\_\_\_ AFFIXED ON: 6/25/2020

SIGNATURE: \_\_\_\_\_ STAMP: \_\_\_\_\_

CHECKED BY: S. SCHUKRAFT  
 DRAFTED BY: J. HARTWELL  
 CHECKED BY: G. HOFFMANN  
 DESIGNED BY: S. KINSMAN  
 DESIGN SUPERVISOR: G. HOFFMANN

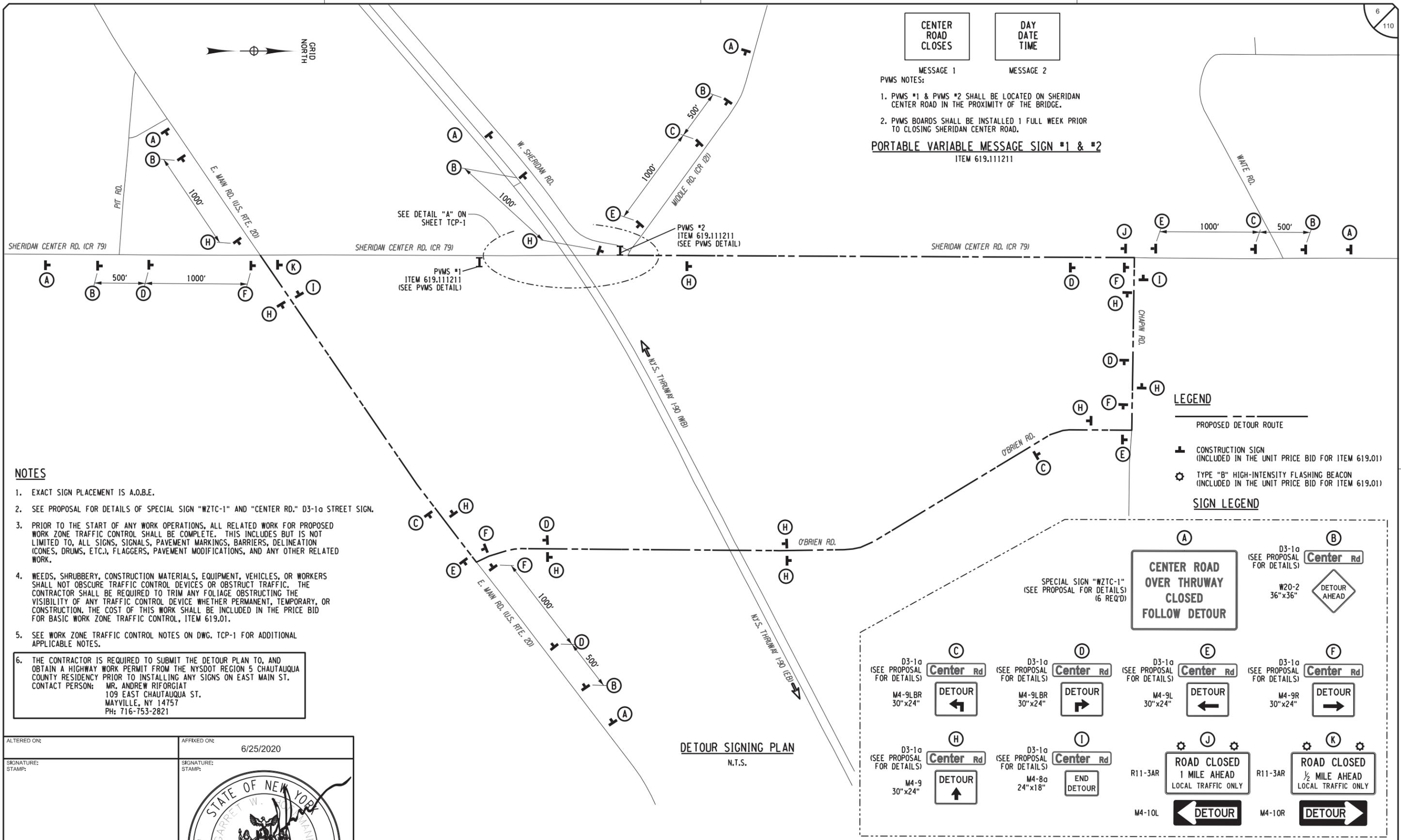
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 DATE/TIME = 26-JUN-2020 10:57:30  
 USER = G. HOFFMANN

**CENTER ROAD CLOSURES**

**DAY DATE TIME**

- MESSAGE 1  
MESSAGE 2
- PVMS NOTES:
1. PVMS #1 & PVMS #2 SHALL BE LOCATED ON SHERIDAN CENTER ROAD IN THE PROXIMITY OF THE BRIDGE.
  2. PVMS BOARDS SHALL BE INSTALLED 1 FULL WEEK PRIOR TO CLOSING SHERIDAN CENTER ROAD.

**PORTABLE VARIABLE MESSAGE SIGN #1 & #2**  
ITEM 619.111211



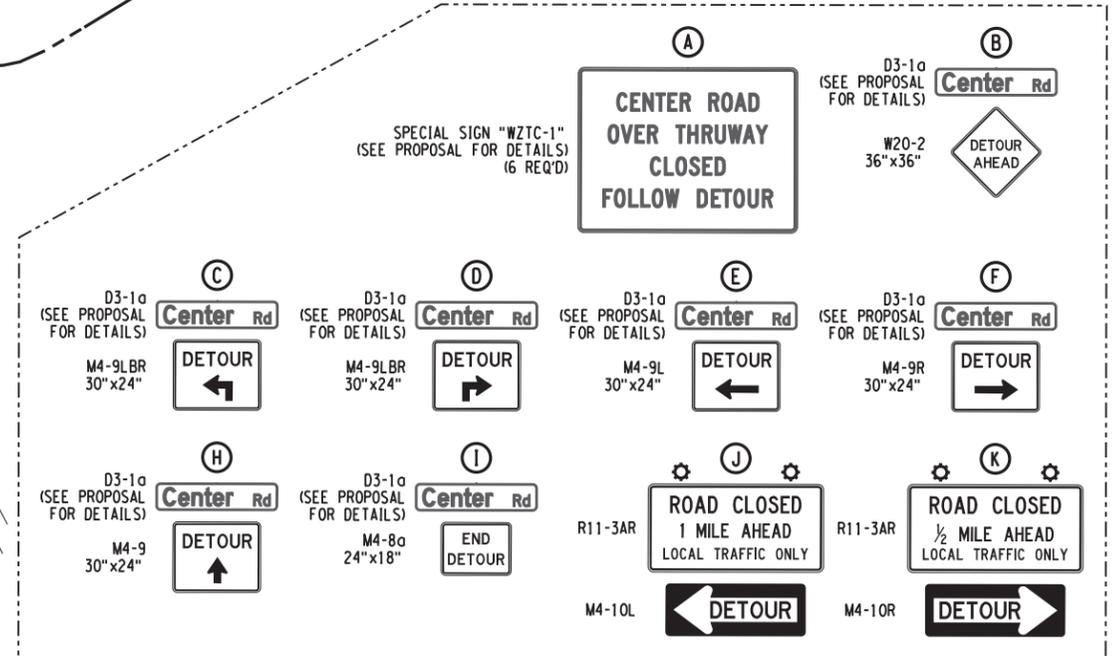
**NOTES**

1. EXACT SIGN PLACEMENT IS A.O.B.E.
2. SEE PROPOSAL FOR DETAILS OF SPECIAL SIGN "WZTC-1" AND "CENTER RD." D3-1a STREET SIGN.
3. PRIOR TO THE START OF ANY WORK OPERATIONS, ALL RELATED WORK FOR PROPOSED WORK ZONE TRAFFIC CONTROL DEVICES OR OBSTRUCT TRAFFIC. THIS INCLUDES BUT IS NOT LIMITED TO, ALL SIGNS, SIGNALS, PAVEMENT MARKINGS, BARRIERS, DELINEATION (CONES, DRUMS, ETC.), FLAGGERS, PAVEMENT MODIFICATIONS, AND ANY OTHER RELATED WORK.
4. WEEDS, SHRUBBERY, CONSTRUCTION MATERIALS, EQUIPMENT, VEHICLES, OR WORKERS SHALL NOT OBSCURE TRAFFIC CONTROL DEVICES OR OBSTRUCT TRAFFIC. THE CONTRACTOR SHALL BE REQUIRED TO TRIM ANY FOLIAGE OBSTRUCTING THE VISIBILITY OF ANY TRAFFIC CONTROL DEVICE WHETHER PERMANENT, TEMPORARY, OR CONSTRUCTION. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR BASIC WORK ZONE TRAFFIC CONTROL, ITEM 619.01.
5. SEE WORK ZONE TRAFFIC CONTROL NOTES ON DWG. TCP-1 FOR ADDITIONAL APPLICABLE NOTES.
6. THE CONTRACTOR IS REQUIRED TO SUBMIT THE DETOUR PLAN TO, AND OBTAIN A HIGHWAY WORK PERMIT FROM THE NYSOT REGION 5 CHAUTAUQUA COUNTY RESIDENCY PRIOR TO INSTALLING ANY SIGNS ON EAST MAIN ST.  
CONTACT PERSON: MR. ANDREW RIFORCIAT  
109 EAST CHAUTAUQUA ST.  
MAYVILLE, NY 14757  
PH: 716-753-2821

**LEGEND**

- PROPOSED DETOUR ROUTE
- CONSTRUCTION SIGN (INCLUDED IN THE UNIT PRICE BID FOR ITEM 619.01)
  - TYPE "B" HIGH-INTENSITY FLASHING BEACON (INCLUDED IN THE UNIT PRICE BID FOR ITEM 619.01)

**SIGN LEGEND**



**DETOUR SIGNING PLAN**  
N.T.S.

ALTERED ON: \_\_\_\_\_ AFFIXED ON: 6/25/2020

SIGNATURE: \_\_\_\_\_ STAMP: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ STAMP: \_\_\_\_\_

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DATE	DESCRIPTION	BY	SYM.

**Thruway Authority**

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING DETOUR PLAN	DRAWING NUMBER: TCP-2

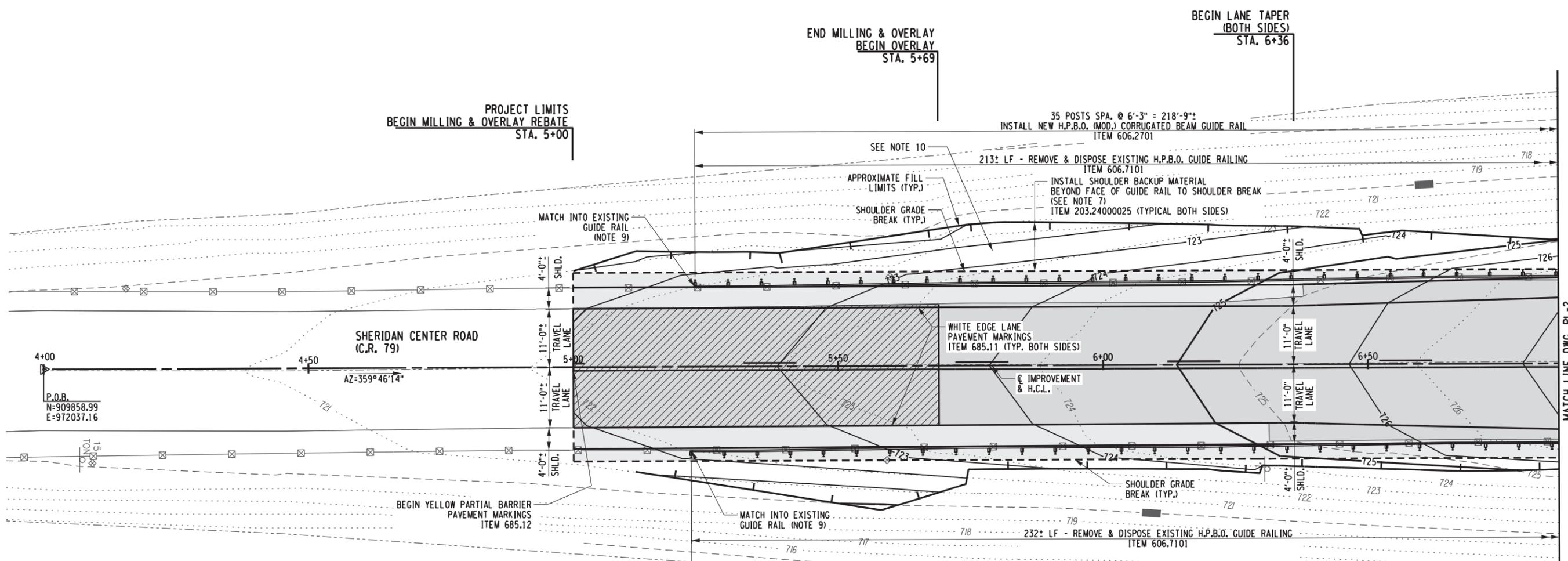
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 DATE/TIME = 26-JUN-2020 10:58:10  
 USER = GHOFFMANN

CHECKED BY: S. SCHUKRAFT  
 DRAFTED BY: J. HARTWELL  
 CHECKED BY: G. HOFFMANN  
 DESIGNED BY: S. KINSMAN  
 DESIGN SUPERVISOR: G. HOFFMANN



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DRAFTED BY: J. HARTWELL  
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DESIGNED BY: S. KINSMAN  
DESIGN SUPERVISOR: G. HOFFMANN

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DATE/TIME = 26-JUN-2020 10:53:19  
USER = G. HOFFMANN



**NOTES FOR PLAN SHEETS:**

- REFER TO TYPICAL SECTIONS ON DWG. TYP-1 FOR ADDITIONAL INFORMATION.
- EXISTING H.P.B.O. CORRUGATED BEAM GUIDE RAIL TO BE REMOVED UNDER ITEM 606.7101 AND INSTALL NEW H.P.B.O. CORRUGATED BEAM GUIDE RAIL WITH 12" BLOCKOUTS UNDER ITEM 606.2701.
- CONTRACTOR SHALL WARP/CHANNELIZE PROPOSED ASPHALT SHOULDER BETWEEN EXISTING DRAINAGE INLET AND BRIDGE SAFETY WALK IN ORDER FOR SURFACE WATER ALONG SAFETY WALK CURB TO POSITIVELY DRAIN TO DRAINAGE STRUCTURE INLET.  
CONTRACTOR SHALL ALSO ADJUST/RAISE FRAME AND GRATE ON EXISTING DRAINAGE STRUCTURES TO PROPOSED GRADE. ALL ELEVATION ADJUSTMENTS TO FRAME AND GRATES ARE TAKEN AT CENTER OF FRAME AND GRATE, SEE BELOW FOR LOCATIONS. ALL COSTS TO BE INCLUDED IN ITEM 604.070501. (REFER TO DWG. PRO-1 FOR DETAILS)  
SW DI - STA. 7+38, 15.6' LT.; PROPOSED T.F. ELEV. = 728.18' (RAISE 0.07')  
SE DI - STA. 7+55, 13.9' RT.; PROPOSED T.F. ELEV. = 728.68' (RAISE 0.18')  
NW DI - STA. 10+65, 13.9' LT.; PROPOSED T.F. ELEV. = 728.96' (RAISE 0.38')  
NE DI - STA. 10+81.5, 15.3' RT.; PROPOSED T.F. ELEV. = 728.41' (RAISE 0.26')
- TRANSITIONING CORRUGATED THRIE BEAM GUIDE RAIL TO H.P.B.O. CORRUGATED BEAM GUIDE RAIL, THE CONTRACTOR SHALL ASSUME THAT NEW THRIE BEAM RAIL WILL REPLACE THE EXISTING THRIE BEAM RAIL WITHIN THE TRANSITION. THE CONTRACTOR MAY REINSTALL THE 7" TRANSITION SECTION. ALL COSTS FOR TRANSITION WORK SHALL BE INCLUDED IN ITEMS 606.86 & 587.20. (REFER TO DWG. GR-1 FOR ADDITIONAL DETAILS.)
- HORIZONTAL DATUM IS REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM WESTERN ZONE, NAD 83.  
VERTICAL DATUM IS REFERENCED TO THE NAVD 88 VERTICAL DATUM.  
CONTROL BASELINE POINTS NOT SHOWN IN PLANS. TWO CONTROL POINTS USED FOR BASEMAPPING ARE LOCATED IN THE NORTHWEST QUADRANT OF THE BRIDGE ON THE WESTBOUND SHOULDER OF THE MAINLINE THRUWAY I-90. SEE CONTROL POINT INFORMATION BELOW.  
CONTROL POINT #1    CONTROL POINT #2  
MAG. NAIL            MAG. NAIL  
N 910398.84        N 910324.33  
E 971988.319      E 971873.96  
ELEV. 712.36        ELEV. 712.80  
ONE BENCHMARK IS SHOWN FOR THE PROJECT, IS ON DWG. PL-2. IT IS A CHISELED SQUARE ON THE SE CORNER OF THE WINGWALL. ELEVATION IS 729.36.
- SURVEY CONTROL IS PROVIDED FOR THE CONTRACTORS' HIGHWAY APPROACH WORK, UP TO THE BRIDGE ONLY. HORIZONTAL & VERTICAL SURVEY CONTROL FOR IS NEEDED TO PROPERLY RAISE THE PROFILE AND MAINTAIN THE PROPOSED ALIGNMENT. HORIZONTAL & VERTICAL CONTROL IS NOT NEEDED FOR THE STRUCTURAL WORK SINCE THE BRIDGE RAISE IS INDEPENDENT OF THE HIGHWAY WORK. THE DIMENSIONS SHOWN ON STRUCTURAL DRAWINGS ARE REFERENCED TO COMPONENTS ON THE EXISTING BRIDGE, AND CAN BE MEASURED WITHOUT SURVEY. MOST ELEVATIONS SHOWN OF THE STRUCTURAL DRAWINGS ARE APPROXIMATE AND ONCE THE BRIDGE IS RAISED 8", THE VERTICAL CONTROL CAN SIMPLY BE MATCHING THE EXISTING WEARING SURFACE ELEVATIONS AND EXISTING SAFETYWALK ELEVATIONS, AND MAKING ADJUSTMENTS TO ACCOUNT FOR ROADWAY PROFILE SLOPE FOR ELEVATIONS AWAY FROM THE DECK CUT. ALL SURVEY WORK WILL BE PAID UNDER ITEM 625.01.
- FILL MATERIAL BEYOND BREAK IN SHOULDER SHALL ALSO BE SHOULDER BACKUP MATERIAL.
- FOR WORK RELATED TO THE REPAIRS & RAISING OF THE SUPERSTRUCTURE, AND MODIFICATIONS TO THE EXISTING SUBSTRUCTURES, SEE DWGS. S-1 TO S-40.
- MATCH INTO EXISTING HBPO CORRUGATED BEAM GUIDE RAIL AND ADJUST A RAIL LENGTH BY FIELD DRILLING AND INSTALLING NEW BOLTS TO TIE INTO EXISTING. CUT AN EXISTING W-BEAM RAIL AS NEEDED OR PROVIDE A PARTIAL LENGTH SEGMENT AS NEEDED, COST TO BE INCLUDED IN ITEM 606.2701. POST SPACING SHALL NOT EXCEED 6'-3". SEE NYSDOT STANDARD SHEET 606-09.
- NO WIDESPREAD CLEARING & GRUBBING IS REQUIRED. WHERE WARRANTED, REMOVE ANY BRUSH OR HIGH GRASS INSOFAR AS NEEDED TO PROPERLY PLACE & COMPACT THE SHOULDER BACK UP MATERIAL TO THE LIMITS SHOWN ON THE PLANS. NO SEPARATE PAYMENT, COST IS CONSIDERED INCIDENTAL AND SHALL BE INCLUDED IN THE SHOULDER BACKUP ITEM 203.240000245.

**LEGEND**

	MILL & OVERLAY REBATE
	PROPOSED OVERLAY
	PROPOSED SHOULDER BACKUP MATERIAL ITEM 203.24000025

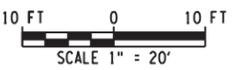
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**Thruway Authority**

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LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING HIGHWAY PLAN (1 OF 4)	DRAWING NUMBER: PL-1

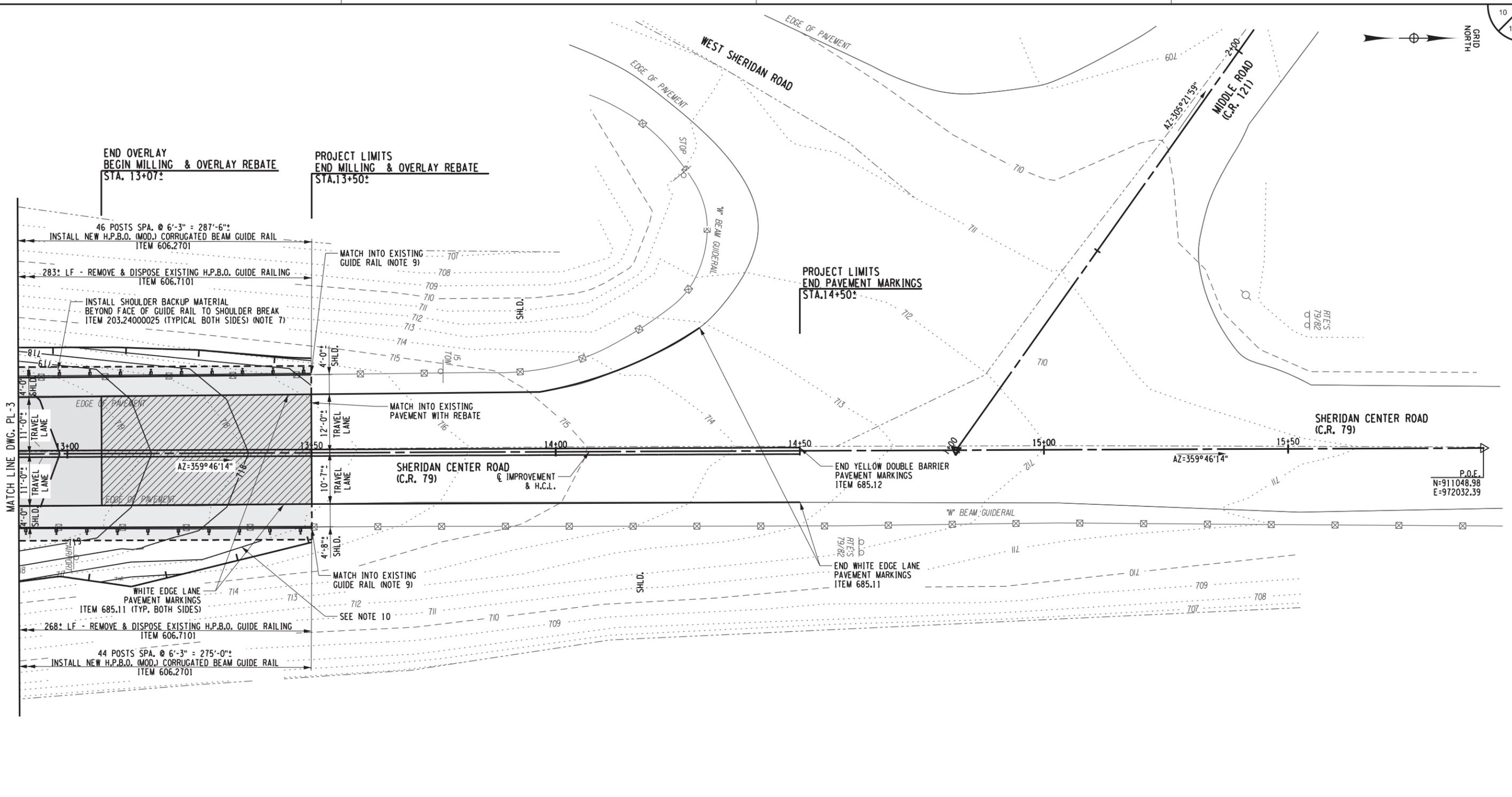






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 DESIGNED BY: S. KINSMAN



ALTERED ON:	AFFIXED ON: 6/25/2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

**Garrett W. Hoffmann**  
 No. 070686  
 PROFESSIONAL ENGINEER

NOTE:  
FOR NOTES, SEE DWG. PL-1.

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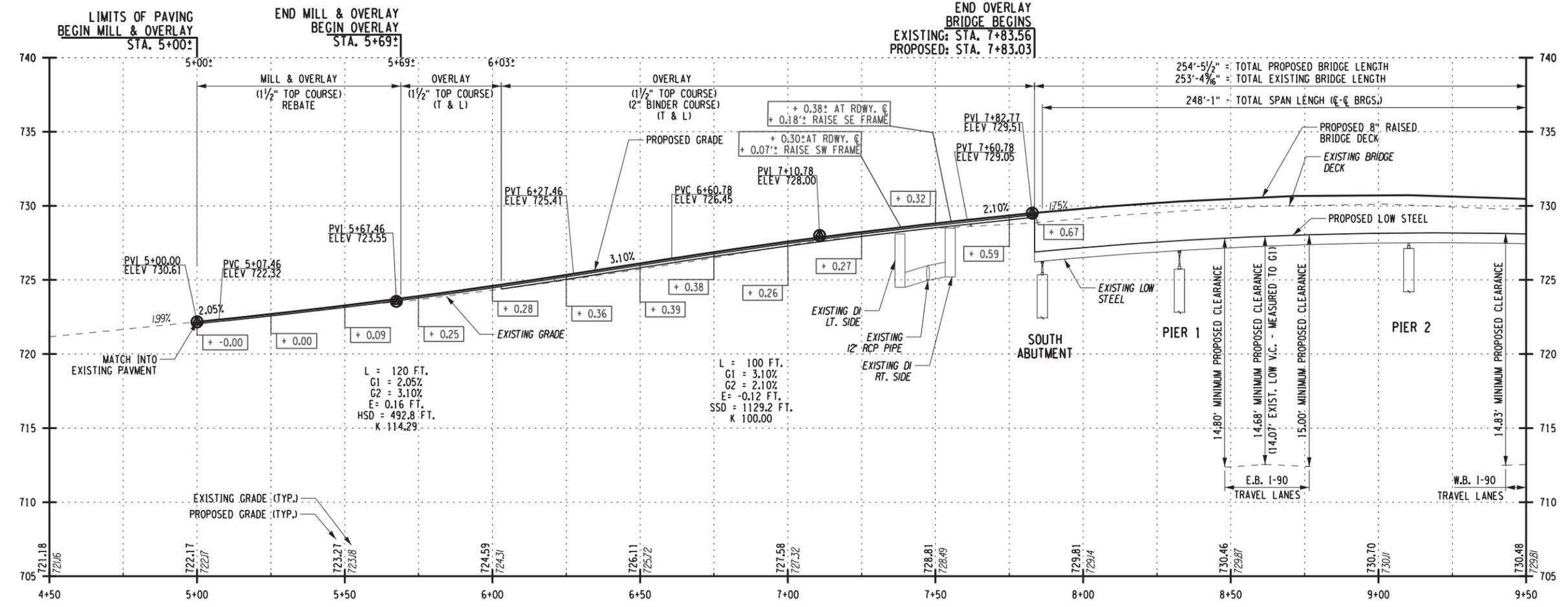
REVISIONS			
DATE	DESCRIPTION	BY	SYMBOL

**Thruway Authority**

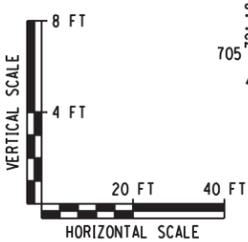
LEGEND	
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<span style="display: inline-block; width: 15px; height: 10px; background-color: gray; border: 1px solid black;"></span>	PROPOSED OVERLAY
<span style="display: inline-block; width: 15px; height: 10px; background-color: lightgray; border: 1px solid black;"></span>	PROPOSED SHOULDER BACKUP MATERIAL ITEM 203.24000025



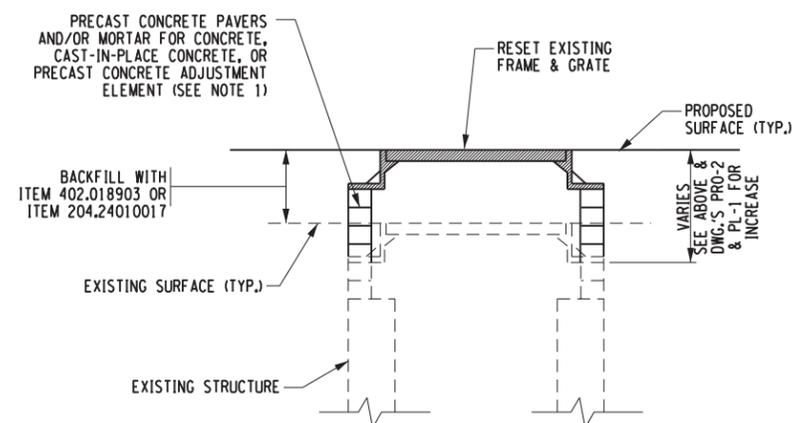
TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING HIGHWAY PLAN (4 OF 4)	DRAWING NUMBER: PL-4



SHERIDAN CENTER ROAD PROFILE



**KEY**  
 + X.XX INDICATES DIFFERENCE BETWEEN PROPOSED AND EXISTING GRADES AT C  
 (T & L) TRUING AND LEVELING COURSE ITEM 402.018903



1. A MINIMUM OF 6" PRECAST CONCRETE PAVERS AND MORTAR FOR CONCRETE, OR MAXIMUM OF 2" OF MORTAR FOR CONCRETE ALONE SHALL BE USED FOR FRAME AND GRATE ADJUSTMENT. FOR ADJUSTMENTS GREATER THAN 6", AND NOT TO EXCEED 12", CAST-IN-PLACE CONCRETE OR A PRECAST CONCRETE ADJUSTMENT ELEMENT SHALL BE USED. A MAXIMUM OF 2" OF MORTAR FOR CONCRETE SHALL BE ALLOWED ON BOTH THE TOP AND BOTTOM OF THE PRECAST DEVICES.

**ALTERING INLETS - 4 EACH**  
 RAISE FRAME & GRATE  
 ALL COSTS TO COMPLETE WORK TO BE INCLUDED IN ITEM 604.070501  
 N.T.S.

FILE NAME = V:\Projects\ANY\K5\36292\CADD\NSTN\MP\_463.45\_Center Road. Rte 9\1\11.Bridge Hit Repairs.MP\_463.45\_PRO-1.dgn  
 DATE/TIME = 26-JUN-2020 10:52:11  
 USER = G. HOFFMANN  
 DESIGN SUPERVISOR: G. HOFFMANN  
 DESIGNED BY: S. KINSMAN  
 CHECKED BY: G. HOFFMANN  
 DRAFTED BY: J. HARTWELL  
 CHECKED BY: S. SCHUKRAFT

ALTERED ON:	AFFIXED ON: 6/25/2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REVISIONS			
DATE	DESCRIPTION	BY	SYM.

 <b>Thruway Authority</b>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
	LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
	TITLE OF DRAWING HIGHWAY PROFILE (1 OF 2)	DRAWING NUMBER: PRO-1

FILE NAME = V:\Projects\NY\K5\36292\CADD\MS\TN\MP\_463.45\_Center Road\_Rte 91\12.Bridge Hit Repairs\_MP\_463.45\_PRO-2.dgn  
 DATE/TIME = 26-JUN-2020 10:58:30  
 USER = GHOFFMANN

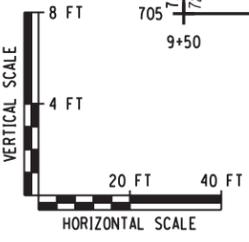
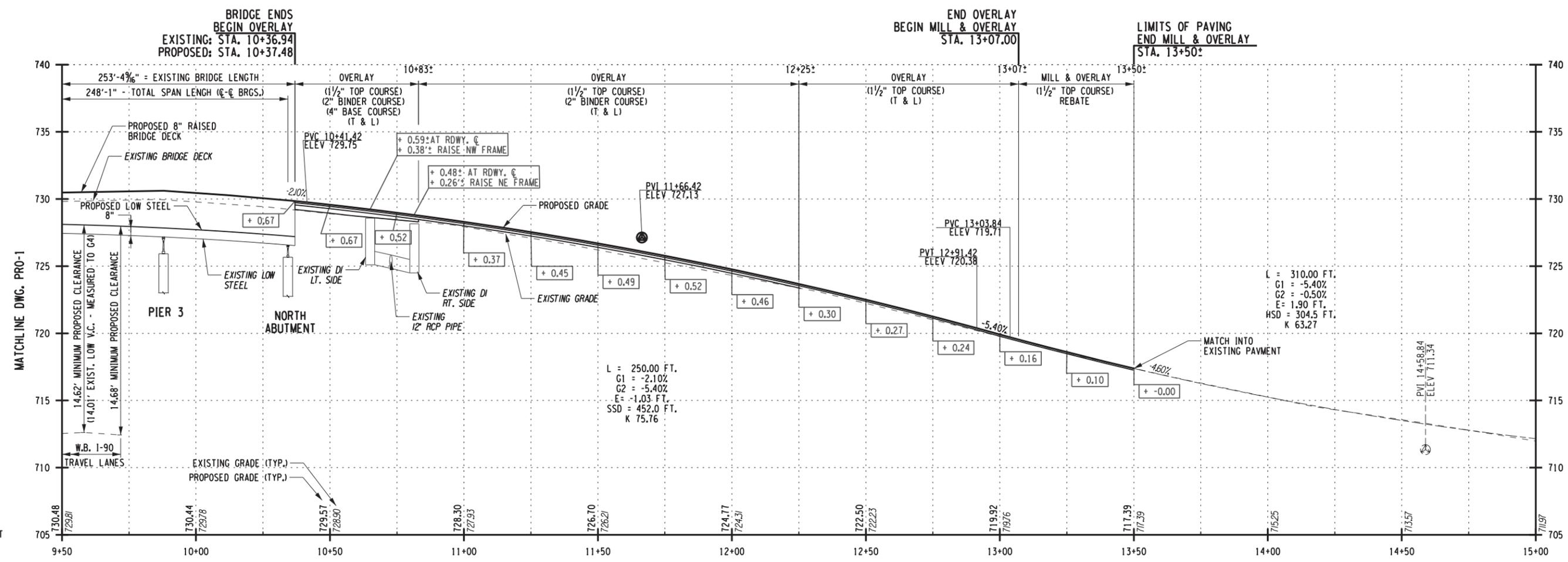
CHECKED BY: S. SCHUKRAFT

DRAFTED BY: J. HARTWELL

CHECKED BY: G. HOFFMANN

DESIGNED BY: S. KINSMAN

DESIGN SUPERVISOR: G. HOFFMANN



**KEY**  
 + X.XX INDICATES DIFFERENCE BETWEEN PROPOSED AND EXISTING GRADES  
 (T & L) TRUING AND LEVELING COURSE ITEM 402.018903

**SHERIDAN CENTER ROAD PROFILE**

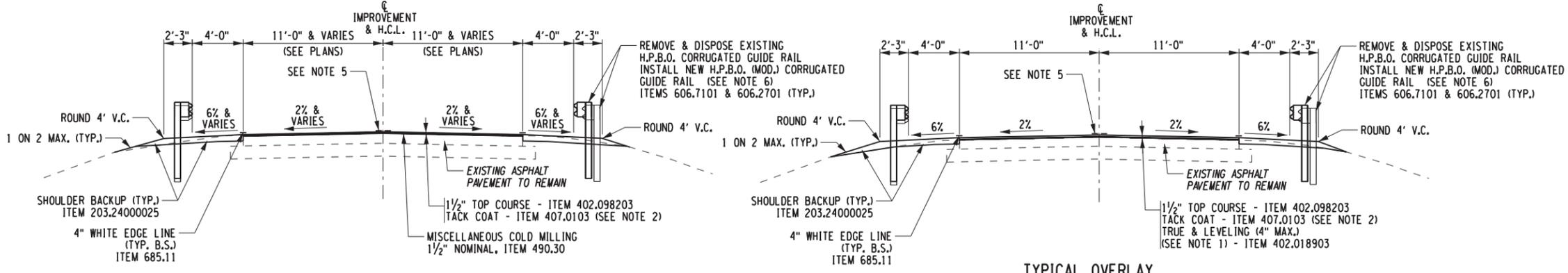
ALTERED ON:	AFFIXED ON: 6/25/2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYMBOL

 <b>Thruway Authority</b>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
	LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
	TITLE OF DRAWING HIGHWAY PROFILE (2 OF 2)	DRAWING NUMBER: PRO-2

- NOTES:**
1. IN ORDER TO ACHIEVE DESIRED PROFILE & CROSS-SLOPE, TRUING AND LEVELING WILL BE REQUIRED, ITEM 402.018903. (SEE PROFILE FOR APPROXIMATE LIMITS)
  2. PLACE TACK COAT, ITEM 407.0103 BETWEEN ALL EXISTING AND PROPOSED ASPHALT SURFACES.
  3. MAXIMUM ROLLOVER BETWEEN SHOULDER AND TRAVEL LANE SHALL BE LIMITED TO 8%.
  4. FOR LOCATION AND PAYMENT INFORMATION FOR HIGHWAY RAIL & TRANSITION, SEE HIGHWAY PLANS (DWG'S. PL-1 TO PL-4) & GUIDE RAIL DETAILS (DWG. GR-1.)
  5. INSTALL 4" YELLOW PARTIAL BARRIER PAVEMENT MARKINGS FROM STA. 5+00 TO 7+83. INSTALL 4" YELLOW DOUBLE BARRIER PAVEMENT MARKINGS FROM STA. 7+83 TO STA. 14+50. REFER TO PLANS FOR ADDITIONAL INFORMATION.
  6. REFER TO NYSDOT STANDARD SHEET(S) 606-09 FOR ADDITIONAL INFORMATION ON H.P.B.O. CORRUGATED BEAM GUIDE RAIL.
  7. TRANSITION PROPOSED CROSS-SLOPE TO MATCH EXISTING BRIDGE CROSS-SLOPE. (SEE CROSS-SLOPE TABLE BELOW FOR GUIDANCE.)

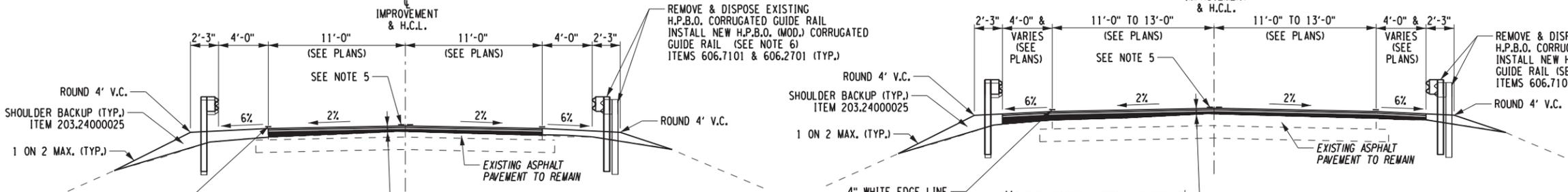


**TYPICAL MILL & OVERLAY**

N.T.S.  
STA. 5+00: TO STA. 5+69:  
STA. 13+07: TO STA. 13+50:

**TYPICAL OVERLAY**

N.T.S.  
STA. 5+69: TO STA. 6+03:  
STA. 12+25: TO STA. 13+07:

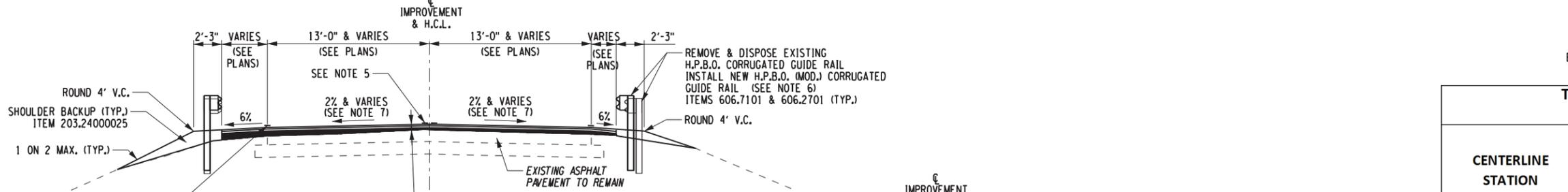


**TYPICAL OVERLAY**

N.T.S.  
STA. 6+03: TO STA. 6+36:  
STA. 11+95: TO STA. 12+25:

**TYPICAL OVERLAY**

N.T.S.  
STA. 6+36: TO STA. 7+08:  
STA. 11+45: TO STA. 11+95:



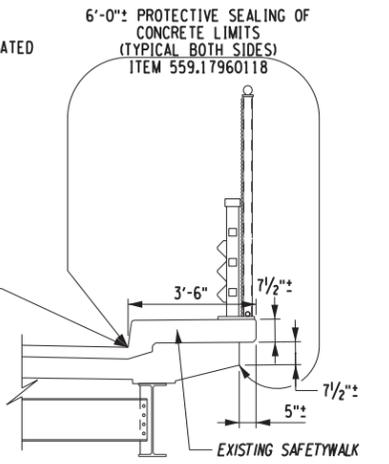
**TYPICAL OVERLAY**

N.T.S.  
STA. 7+08: TO STA. 7+83:  
STA. 10+83: TO STA. 11+45:

**TYPICAL OVERLAY**

**TYPICAL OVERLAY**

N.T.S.  
STA. 10+36: TO STA. 10+83:



**TYPICAL BRIDGE WORK DETAIL**

EAST SIDE SAFETY WALK SHOWN, SIMILAR FOR WEST SIDE SAFETY WALK  
N.T.S.

**TYPICAL SECTION CROSS-SLOPE TABLE**

**TRAVEL LANES & SHOULDERS**

CENTERLINE STATION		LEFT SHOULDER	LEFT TRAVEL LANE	RIGHT TRAVEL LANE	RIGHT SHOULDER
		CENTERLINE OF IMPROVEMENT H.C.L. & T.G.L.			
FROM	TO	CROSS-SLOPES		CROSS-SLOPES	
5+00	5+69	8.2% TO 6.0%	3.0% TO 2.0%	-3.6% TO -2.0%	-4.1% TO -6.0%
5+69	7+30	6.0%	2.0%	-2.0%	-6.0%
7+30	7+60	6.0%	2.0% TO 0.90%	-2.0% TO -0.90%	-6.0%
7+60	SOUTH BRIDGE JNT.	-	0.9%	-0.9%	-6.0% TO VARIES
SOUTH BRIDGE JNT.	NORTH BRIDGE JNT.	-	VARIES	VARIES	-
NORTH BRIDGE JNT.	10+80	VARIES TO 6.0%	0.8% TO 2.0%	-1.4% TO 2.0%	-
10+80	13+07	6.0%	2.0% TO -2.0%	-2.0% TO -2.0%	-6.0%
13+07	13+50	6.0% TO 9.1%	2.0% TO 3.5%	-2.0% TO -2.7%	-6.0% TO -7.2%

**NOTES:**  
-NEGATIVE INDICATES GRADE SLOPES DOWN FROM LEFT TO RIGHT.  
"- " INDICATES NO SHOULDER CROSS-SLOPE WITHIN CURB-TO-CURB OF BRIDGE.

CHECKED BY: S. SCHUKRAFT  
DRAFTED BY: J. HARTWELL  
CHECKED BY: G. HOFFMANN  
DESIGNED BY: S. KINSMAN  
DESIGN SUPERVISOR: G. HOFFMANN

ALTERED ON: \_\_\_\_\_ AFFIXED ON: 6/25/2020

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**REVISIONS**

DATE	DESCRIPTION	BY	SYM.

**NEW YORK STATE OF OPPORTUNITY**

**Thruway Authority**

**CHA**

2300 Main Place Tower  
Buffalo, NY 14202-3722  
716.847.8330 • www.cha.com/contracts

TITLE OF PROJECT: STEEL REPAIRS TO IMPACT DAMAGE  
LOCATION OF PROJECT: MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90  
TITLE OF DRAWING: TYPICAL SECTIONS

CONTRACT NUMBER: TAB 20-12B  
DATE: JUNE 2020  
DRAWING NUMBER: TYP-1

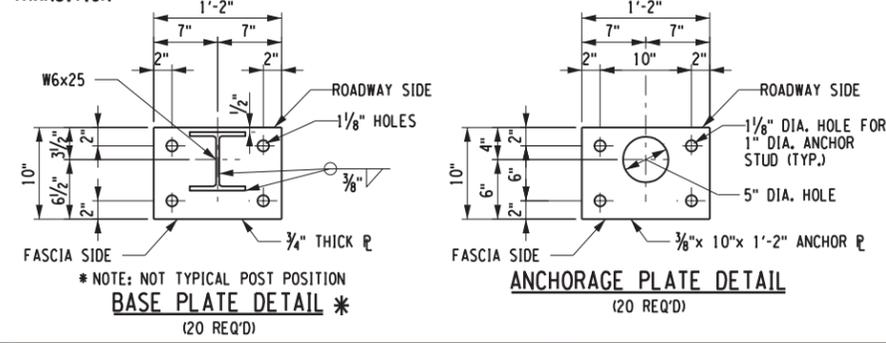
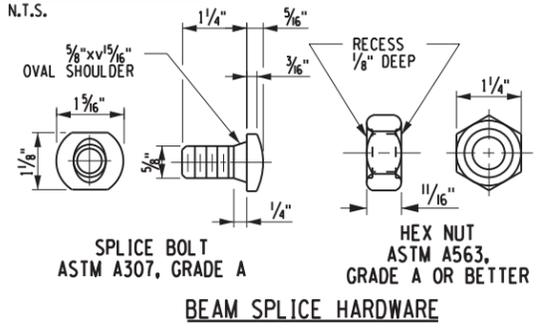
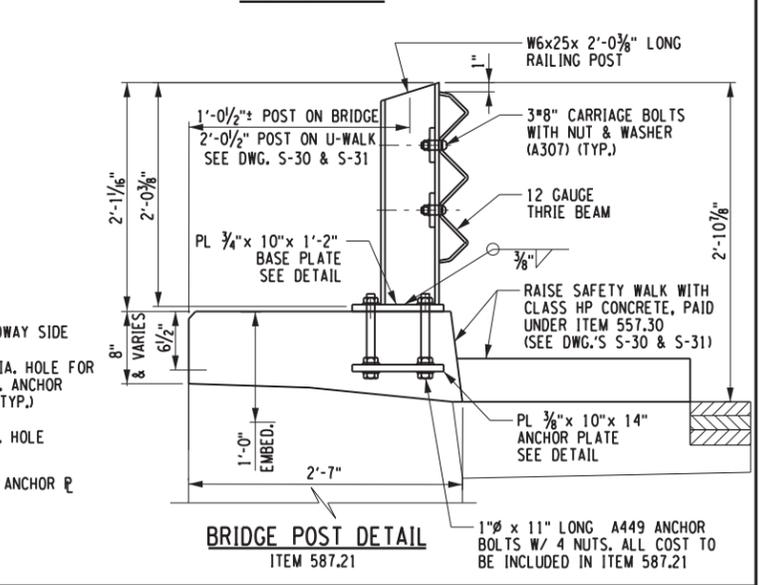
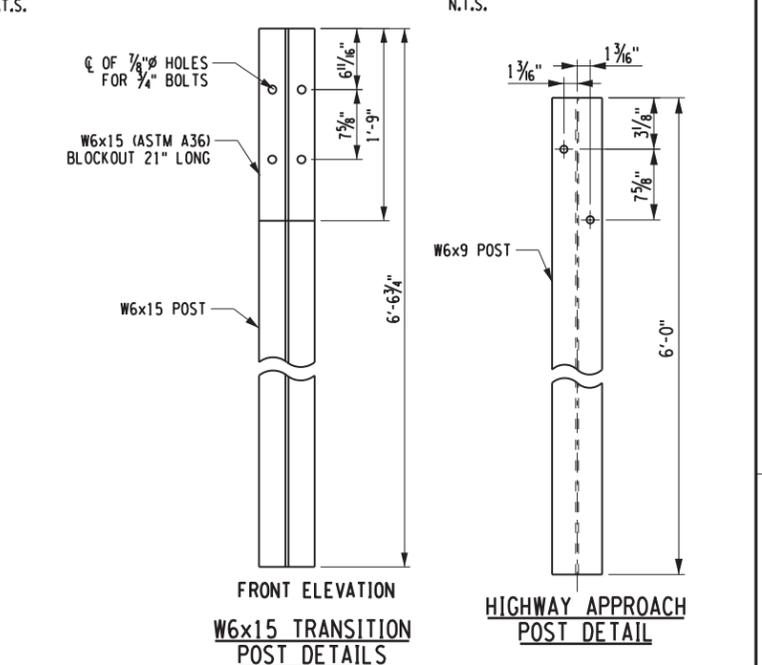
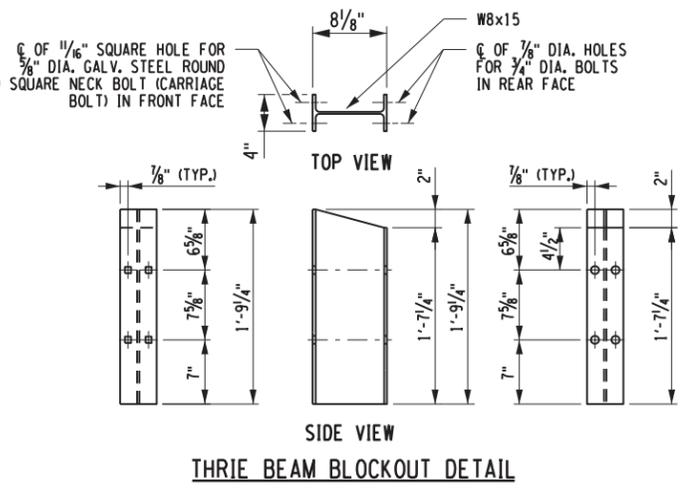
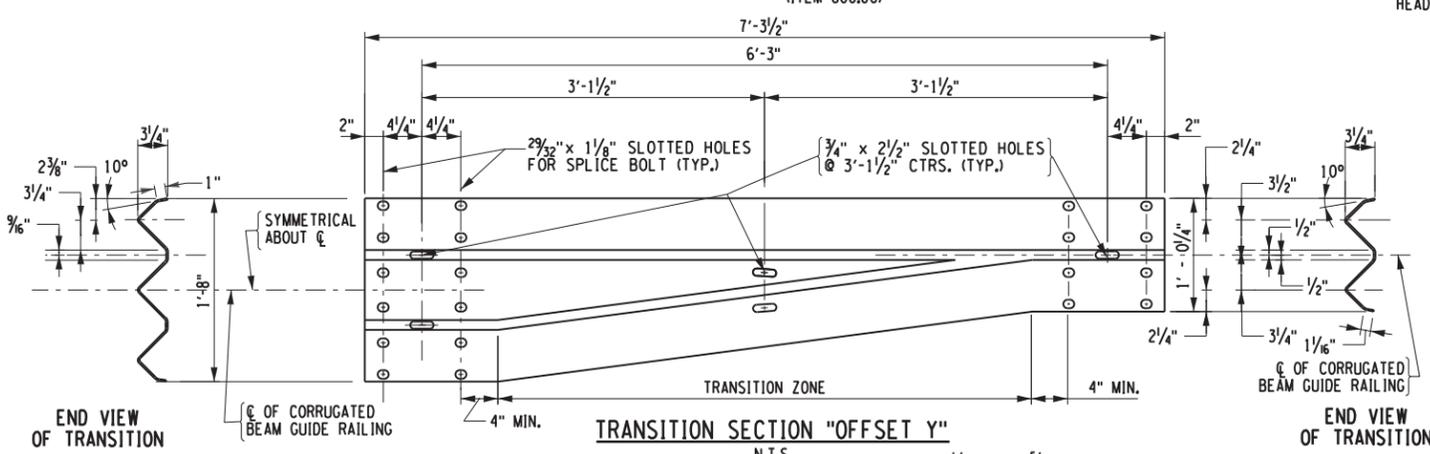
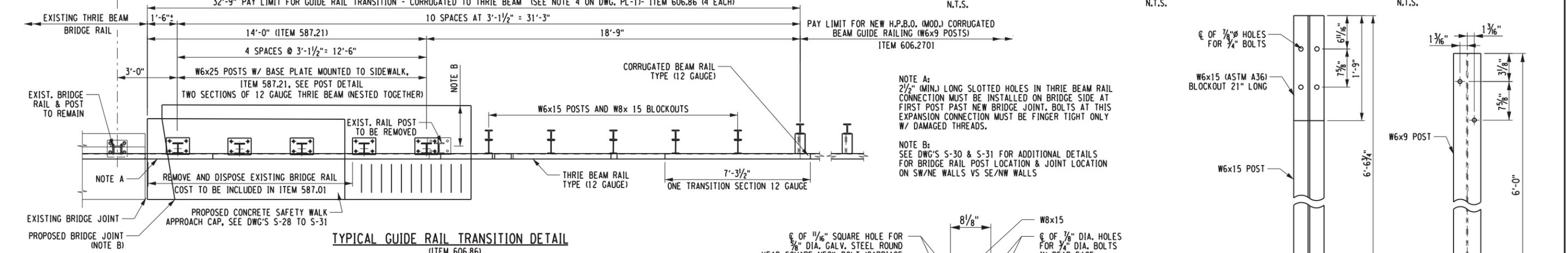
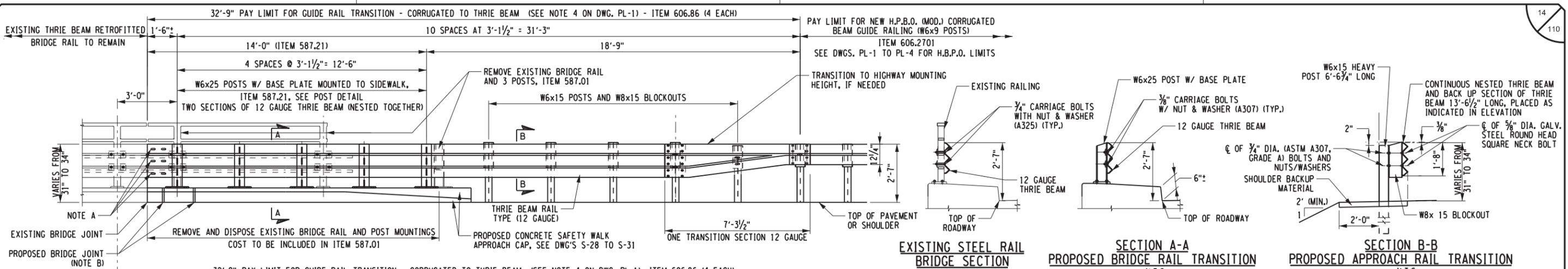
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DRAFTED BY: J. HARTWELL

CHECKED BY: G. HOFFMANN

CHECKED BY: S. KINSMAN

DESIGN SUPERVISOR: G. HOFFMANN



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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

**NEW YORK STATE OF OPPORTUNITY**

**Thruway Authority**

**CHA**

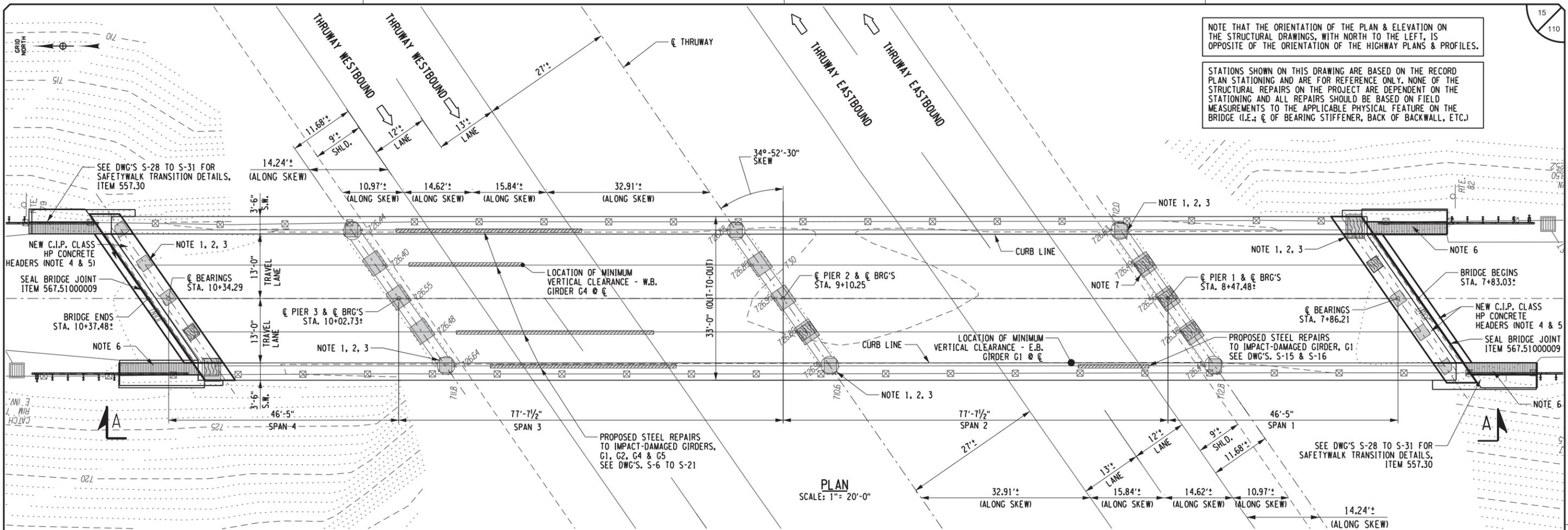
TITLE OF PROJECT: STEEL REPAIRS TO IMPACT DAMAGE  
 LOCATION OF PROJECT: MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90  
 TITLE OF DRAWING: GUIDE RAIL TRANSITION DETAILS

CONTRACT NUMBER: TAB 20-12B  
 DATE: JUNE 2020  
 DRAWING NUMBER: GR-1

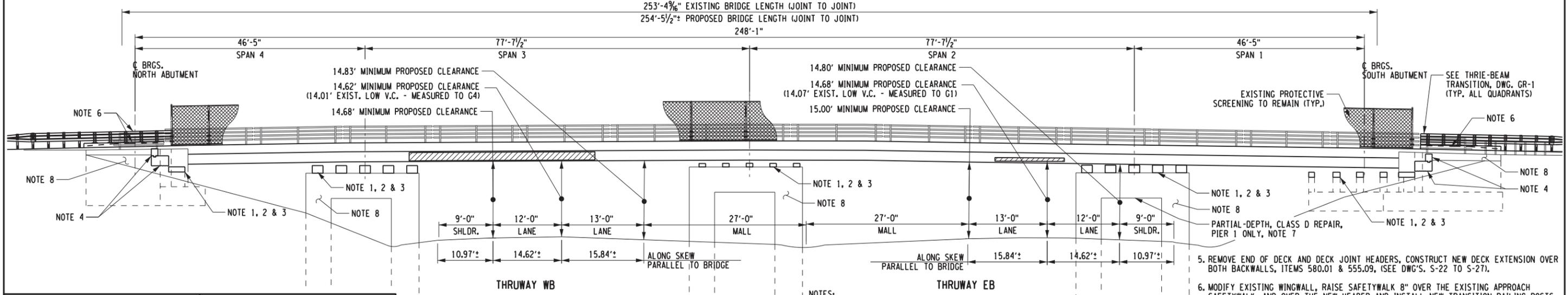
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 DATE/TIME = 26-JUN-2020 10:58:11  
 USER = G. HOFFMANN

NOTE THAT THE ORIENTATION OF THE PLAN & ELEVATION ON THE STRUCTURAL DRAWINGS, WITH NORTH TO THE LEFT, IS OPPOSITE OF THE ORIENTATION OF THE HIGHWAY PLANS & PROFILES.

STATIONS SHOWN ON THIS DRAWING ARE BASED ON THE RECORD PLAN STATIONING AND ARE FOR REFERENCE ONLY. NONE OF THE STRUCTURAL REPAIRS ON THE PROJECT ARE DEPENDENT ON THE STATIONING AND ALL REPAIRS SHOULD BE BASED ON FIELD MEASUREMENTS TO THE APPLICABLE PHYSICAL FEATURE ON THE BRIDGE (I.E.:  $\phi$  OF BEARING STIFFENER, BACK OF BACKWALL, ETC.)



PLAN  
SCALE: 1" = 20'-0"



WEST ELEVATION A-A  
SCALE: 1" = 20'-0"

- NOTES:
- INSTALL TEMPORARY SHORING COLUMNS OR OTHER SUPPORTS, JACK AND RAISE THE BRIDGE 8" AT ALL 5 SUBSTRUCTURES, ITEMS 585.01 & 585.02, (SEE DWG'S. S-32 & S-33).
  - REMOVE & REPLACE EXISTING BEARINGS, TYP. ALL 3 PIERS & BOTH ABUTMENTS, (SEE DWG'S. S-38 & S-39).
  - EXTEND ALL 5 PEDESTALS AT ALL SUBSTRUCTURES WITH CLASS A CONCRETE, ITEM 555.0105, (SEE DWG'S. S-34 TO S-37).
  - REMOVE, RECONSTRUCT & RAISE ABUTMENT BACKWALL AND JOINT HEADER, ITEMS 580.01 & 555.09, (SEE DWG'S. S-22 TO S-25).

- REMOVE END OF DECK AND DECK JOINT HEADERS, CONSTRUCT NEW DECK EXTENSION OVER BOTH BACKWALLS, ITEMS 580.01 & 555.09, (SEE DWG'S. S-22 TO S-27).
- MODIFY EXISTING WINGWALL, RAISE SAFETYWALK 8" OVER THE EXISTING APPROACH SAFETYWALK, AND OVER THE NEW HEADER AND INSTALL NEW TRANSITION RAILING POSTS, ITEMS 557.30 & 587.21, (SEE DWG'S. S-28 TO S-31 & GR-1).
- AS DIRECTED BY ENGINEER, REMOVE EXISTING LOOSE, SPALLED, DELAMINATED OR OTHERWISE UNSOUND COVER CONCRETE FROM UNDERSIDE OF CAP BEAM, FULLY EXPOSE BOTTOM MAT OF REINFORCEMENT AND CONSTRUCT CLASS D PARTIAL-DEPTH REPAIR, ITEM 582.06, APPROX. 110 SF, PIER 1 ONLY.
- THOROUGHLY CLEAN SURFACES OF ALL SUBSTRUCTURES AND APPLY COATING TYPE SEALER TO ALL EXPOSED SURFACES AT ALL 5 SUBSTRUCTURES, EXCEPT DON'T COAT THE BOTTOM OF PIER CAP BEAMS, ITEM 559.16960025.

CHECKED BY: S. SCHUKRAFT  
 DRAFTED BY: J. HARTWELL  
 CHECKED BY: G. HOFFMANN  
 DESIGNED BY: S. KINSMAN  
 DESIGN SUPERVISOR: G. HOFFMANN

FILE NAME = V:\Projects\ANY\K5\36292\CADD\MS\TN\MP\_463.45\_Center Road\_Rte 91\15.Bridge Hit Repairs\_MP\_463.45\_S-1.dgn  
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 USER = G379

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	6/25/2020
SIGNATURE:	SIGNATURE:
STAMP:	STAMP:

STATE OF NEW YORK  
GABRIEL W. HOFFMANN  
LICENSED PROFESSIONAL ENGINEER  
No. 070686

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NEW YORK STATE OF OPPORTUNITY

**Thruway Authority**

TITLE OF PROJECT: STEEL REPAIRS TO IMPACT DAMAGE

LOCATION OF PROJECT: MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90

TITLE OF DRAWING: GENERAL PLAN & ELEVATION

CONTRACT NUMBER: TAB 20-12B

DATE: JUNE 2020

DRAWING NUMBER: S-1

CHECKED BY: S. SCHUKRAFT

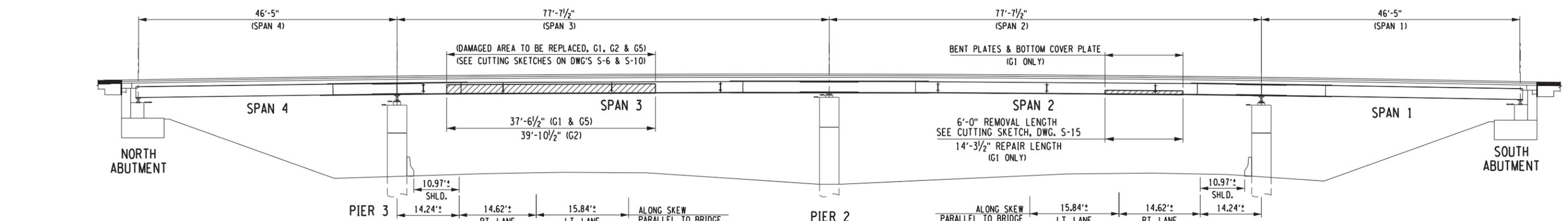
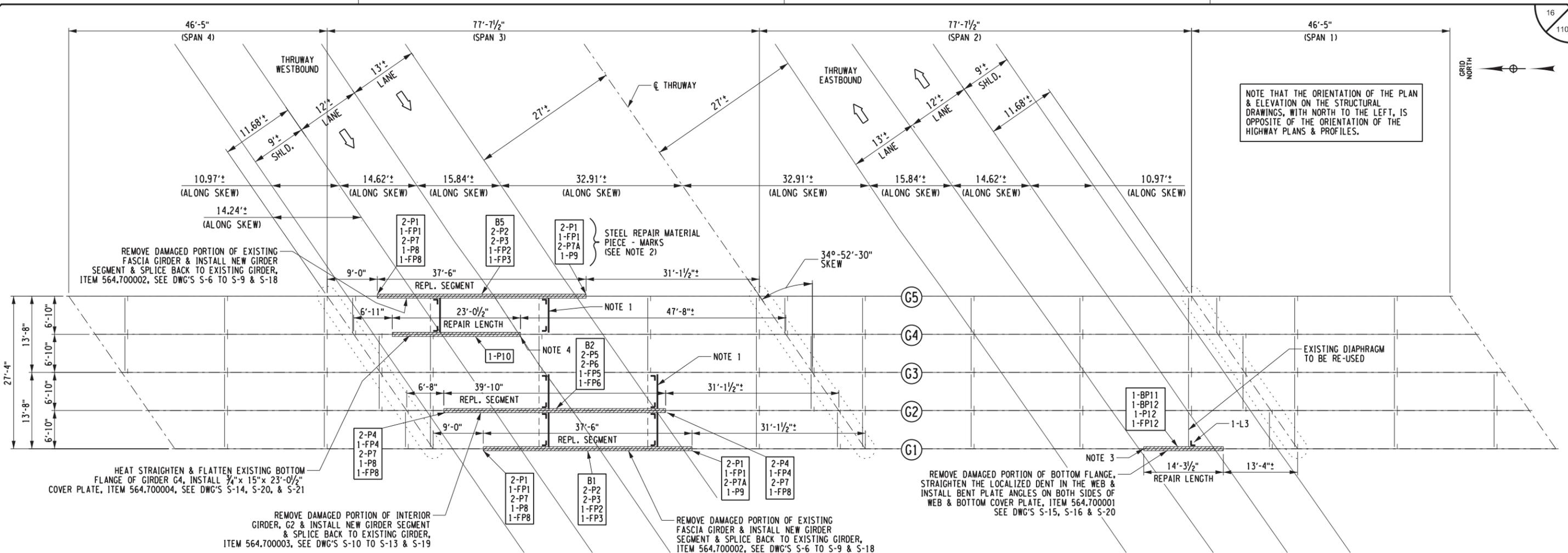
DRAFTED BY: J. HARTWELL

CHECKED BY: G. HOFFMANN

DESIGNED BY: S. KINSMAN

DESIGN SUPERVISOR: G. HOFFMANN

NOTE THAT THE ORIENTATION OF THE PLAN & ELEVATION ON THE STRUCTURAL DRAWINGS, WITH NORTH TO THE LEFT, IS OPPOSITE OF THE ORIENTATION OF THE HIGHWAY PLANS & PROFILES.



- NOTES:**
1. REMOVE AND REPLACE 6 DAMAGED DIAPHRAGMS, ITEM 564.700005. SEE DWG. S-17 FOR LOCATION & DETAILS.
  2. CONTRACTOR / FABRICATOR / DETAILER IS FREE TO USE PIECE-MARKING SYSTEM SHOWN ON THESE PLANS OR USE ALTERNATE PIECE-MARKING SYSTEM. IF USING ALTERNATE PIECE-MARKS, SHOP DRAWINGS MUST PROVIDE A LISTING OF REFERENCE MARKS & REFERENCE DRAWINGS AND MUST IDENTIFY THE SPAN / GIRDER LOCATION OF EACH PIECE ON THE INDIVIDUAL PARTS DRAWING.
  3. SPAN 2, GIRDER G1 REPAIR STOP SHORT OF EB C, AND IT IS INTENDED TO COMPLETE THIS REPAIR USING ONLY EB RIGHT LANE CLOSURES.
  4. SPAN 3, GIRDER G4 REPAIR EXTENDS JUST PAST THE WB C, IT IS INTENDED TO COMPLETE 95% OF THE G4 REPAIR WITH WB RIGHT LANE CLOSURES, BUT 1 OR 2 EB LEFT LANE CLOSURES WILL BE NEEDED TO DRILL THE LAST 2 OF 4 BOLTS.
  5. SPAN 3 GIRDER, G1, G2 & G5 REPAIRS EXTEND ACROSS BOTH LANES AND WILL REQUIRE MULTIPLE RIGHT LANE AND LEFT LANE CLOSURES TO COMPLETE THE REPAIRS.

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TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING FRAMING PLAN & GIRDER REPAIR ELEVATION	DRAWING NUMBER: S-2

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USER = G. HOFFMANN

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 USER = S. SCHUKRAFT

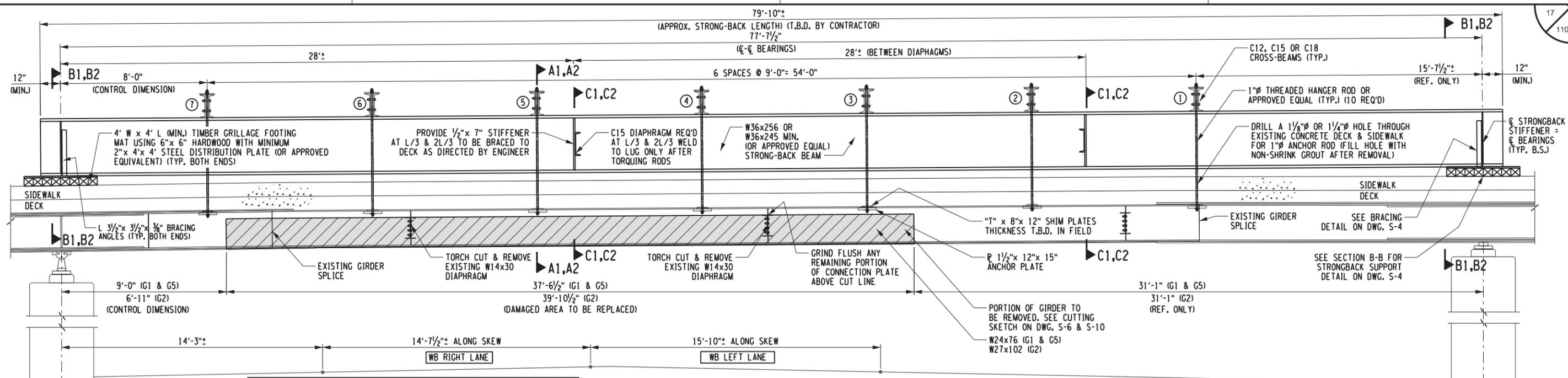
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DRAFTED BY: J. HARTWELL

CHECKED BY: G. HOFFMANN

DESIGNED BY: S. KINSMAN

DESIGN SUPERVISOR: G. HOFFMANN



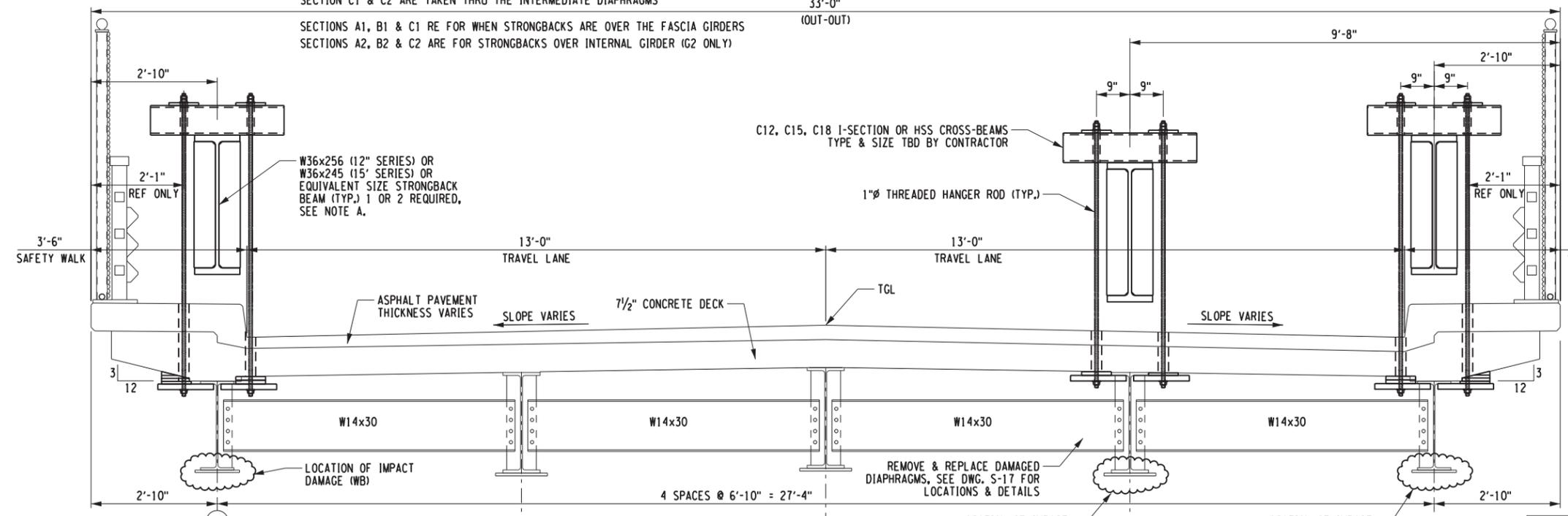
SEE DWG. S-4 FOR SECTIONS A1, A2, B1, B2, C1, C2

**GIRDER ELEVATION - SPAN 3**  
 FASCIA GIRDER SHOWN, INTERIOR GIRDER SIMILAR (LOOKING EAST)

SECTIONS A1 & A2 ARE TAKEN THRU THE HANGER RODS & WALERS  
 SECTIONS B1 & B2 ARE TAKEN THRU THE END SUPPORT GRILLAGE & END BRACING  
 SECTION C1 & C2 ARE TAKEN THRU THE INTERMEDIATE DIAPHRAGMS

33'-0" (OUT-OUT)

SECTIONS A1, B1 & C1 RE FOR WHEN STRONGBACKS ARE OVER THE FASCIA GIRDERS  
 SECTIONS A2, B2 & C2 ARE FOR STRONGBACKS OVER INTERNAL GIRDER (G2 ONLY)



**TRANSVERSE SECTION**  
 (LOOKING SOUTH)

A STRONGBACK IS ALSO REQUIRED FOR REPAIR OF SPAN 2 GIRDER G1, SIMILAR TO THAT SHOWN

ITEM 564.700006 - 4 EACH

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**LOADING LIMITATIONS**

- CONTRACTOR SHALL NOT USE ANY HEAVY EQUIPMENT OVER 20 TONS ON SPAN 3 UNTIL DAMAGED INTERIOR GIRDER, G2 HAS BEEN FULLY REPAIRED (A.O.B.E.).
  - FOR SPAN 3, G2 ONLY, WHILE STRONGBACK IS IN PLACE & EXISTING INTERIOR GIRDER IS CUT OUT, CONTRACTOR SHALL NOT DRIVE TRUCKS OR EQUIPMENT GREATER THAN 5 TONS ACROSS SPAN 3 UNLESS AUTHORIZED BY ENGINEER.
  - NO LOADING RESTRICTION IS NEEDED WITH RESPECT TO THE DAMAGE ON FASCIA GIRDERS G1 & G5 IN EITHER SPAN 2 OR SPAN 3.
  - THE WEIGHT OF THE STRONGBACK WILL BE APPROXIMATELY 20,000 LB. (10 TONS). STRONGBACKS FOR SPAN 3 MAY BE LIFTED INTO PLACE BY USING A CRANE SITUATED ON SPAN 2 OR SPAN 4, OR MAY BE DRAGGED ACROSS SPAN 2 AND THEN LIFTED ONTO THE WOOD GRILLAGES AT BOTH ENDS BY SMALL BOOM TRUCK OR OTHER EQUIPMENT, LOCATED ON SPANS 2 & 4.
- NO RESTRICTION OR LIMITATION IS NEEDED FOR PLACING THE STRONGBACK ON SPAN 2, GIRDER G1.

**REPAIR SEQUENCE - IF USING 2 STRONGBACKS:**

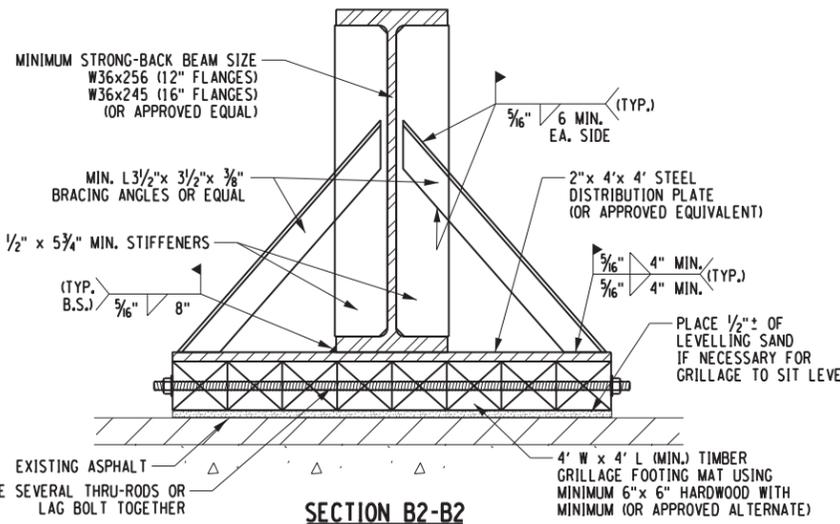
- SPAN 3 (WB) G1 & G5 TOGETHER
- SPAN 3 (WB) G2 & SPAN 2 (EB) G1 TOGETHER

	FASCIA GIRDER G1 & G5	INTERIOR GIRDER G2
APPROX. WEIGHT OF STRONGBACK BEAM	19 TO 23 KIPS	19 TO 23 KIPS
STRONGBACK DEAD LOAD REACTION (INCL. SELF WEIGHT)	70 KIPS	50 KIPS
EACH HANGER ROD CARRIES	6 TO 8 KIPS	4 TO 6 KIPS
WEIGHT OF SCRAP GIRDER TO BE REMOVED (EACH GIRDER)	2,863 LB	4,122 LB
REQUIRED PRE-LOAD/TORQUE PER ROD	7 KIPS 75 FT-LB	4.5 KIPS 50 FT-LB

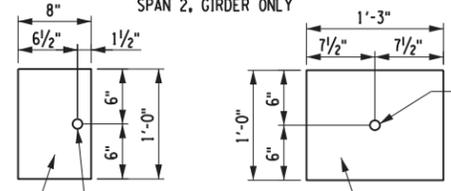
REVISIONS			
DATE	DESCRIPTION	BY	SYM.



TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING STRONGBACK DETAILS (1 OF 2)	DRAWING NUMBER: S-3

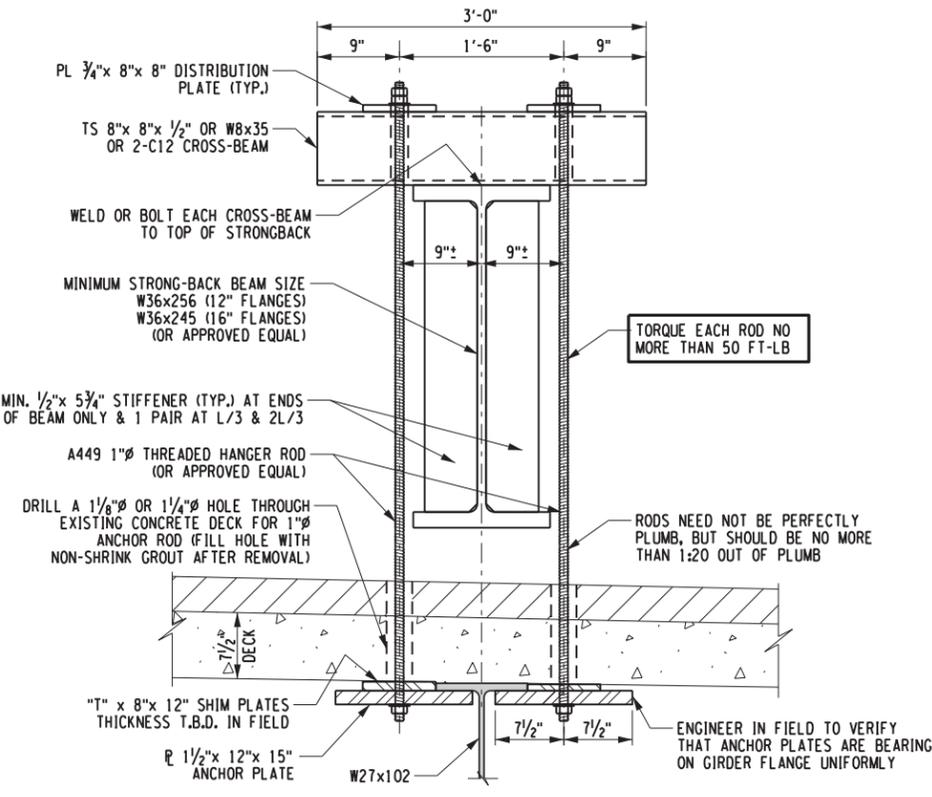


**SECTION B2-B2**  
**SUPPORT & END BRACING FOR STRONG-BACK**  
(TYP. BOTH ENDS OF SPAN)  
SPAN 2, GIRDER ONLY

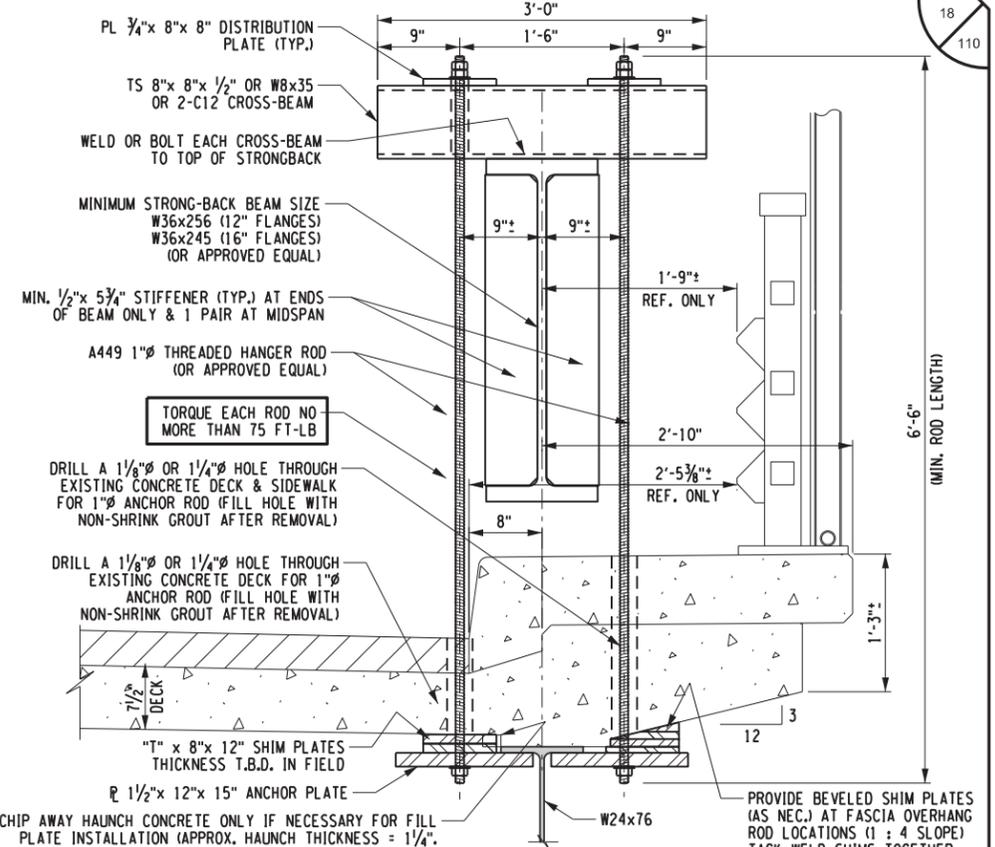


**SHIM PLATE**  
(VARIOUS SIZES REQUIRED)  
PROVIDE SUFFICIENT NUMBER OF 1\", 3/4\", 1/2\", 3/8\", 1/8\"/>

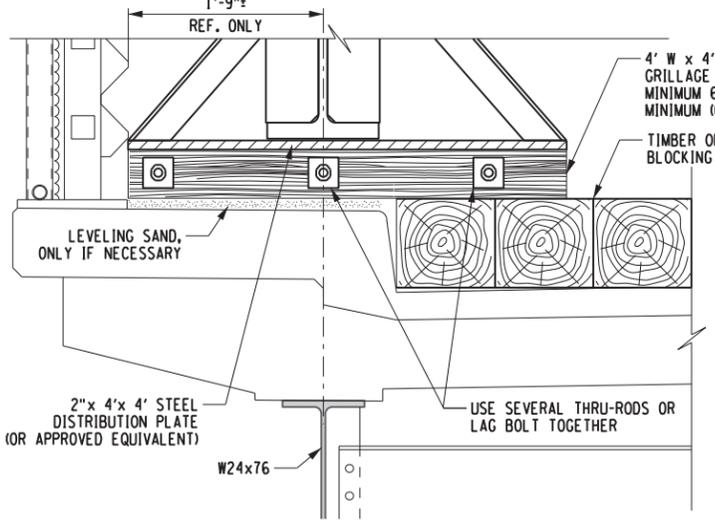
**ANCHOR PLATE**  
14 REQ'D EACH BEAM  
76.5 LB./EA



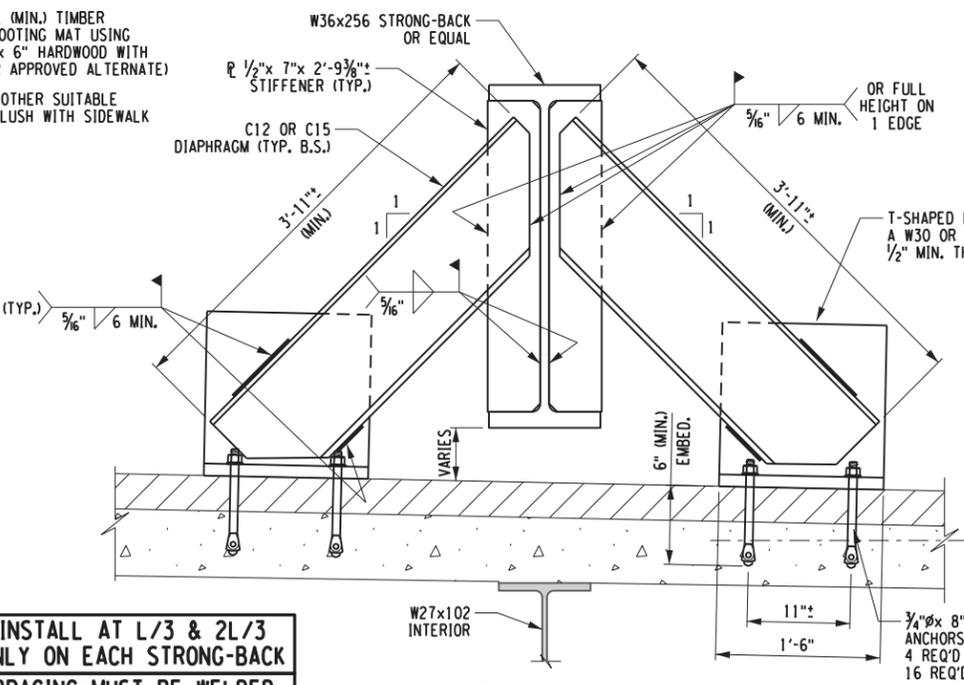
**SECTION A2-A2**  
**TYPICAL INSTALLATION THROUGH DECK**  
(AT GIRDER G2 ONLY)



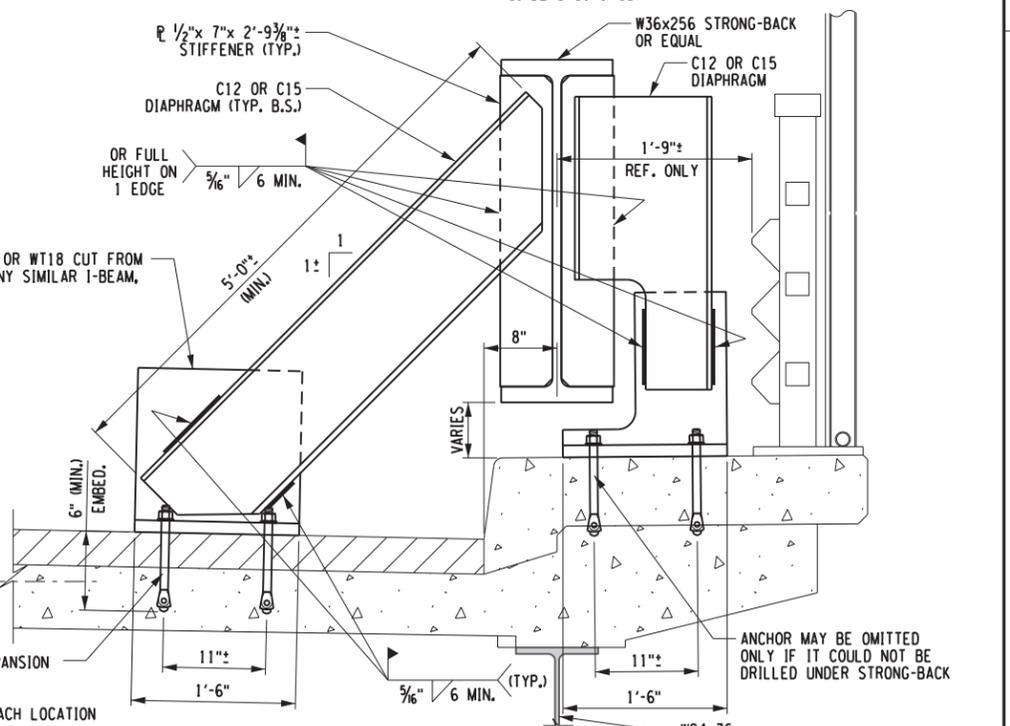
**SECTION A1-A1**  
**TYPICAL INSTALLATION THROUGH SAFETYWALK & DECK**  
(AT GIRDERS G1 & G5)



**SECTION B1-B1**  
(END SUPPORT ON SIDEWALK)



**SECTION C2-C2**  
**MID-SPAN BRACING DETAIL - ON DECK**  
(AT GIRDER G2 ONLY)



**SECTION C1-C1**  
**MID-SPAN BRACING DETAIL - ON SAFETYWALK**  
(AT GIRDERS G1 & G5)

**INSTALL AT L/3 & 2L/3 ONLY ON EACH STRONG-BACK**  
**BRACING MUST BE WELDED AFTER TENSIONING ALL RODS**

**ITEM 564.70006 - 4 EACH**

CHECKED BY: S. SCHUKRAFT  
DRAFTED BY: J. HARTWELL  
CHECKED BY: G. HOFFMANN  
DESIGNED BY: S. KINSMAN  
DESIGN SUPERVISOR: G. HOFFMANN



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REVISIONS			
DATE	DESCRIPTION	BY	SYM.



TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING STRONG-BACK DETAILS (2 OF 2)	DRAWING NUMBER: S-4

FILE NAME = V:\Projects\ANY\K5\36292\CADD\MSTN.MP\_463.45\_Center Road - Rte 91\18.Bridge Hit Repairs.MP\_463.45\_S-4.dgn  
DATE/TIME = 26-JUN-2020 10:52:30  
USER = G. HOFFMANN

CHECKED BY: S. SCHUKRAFT

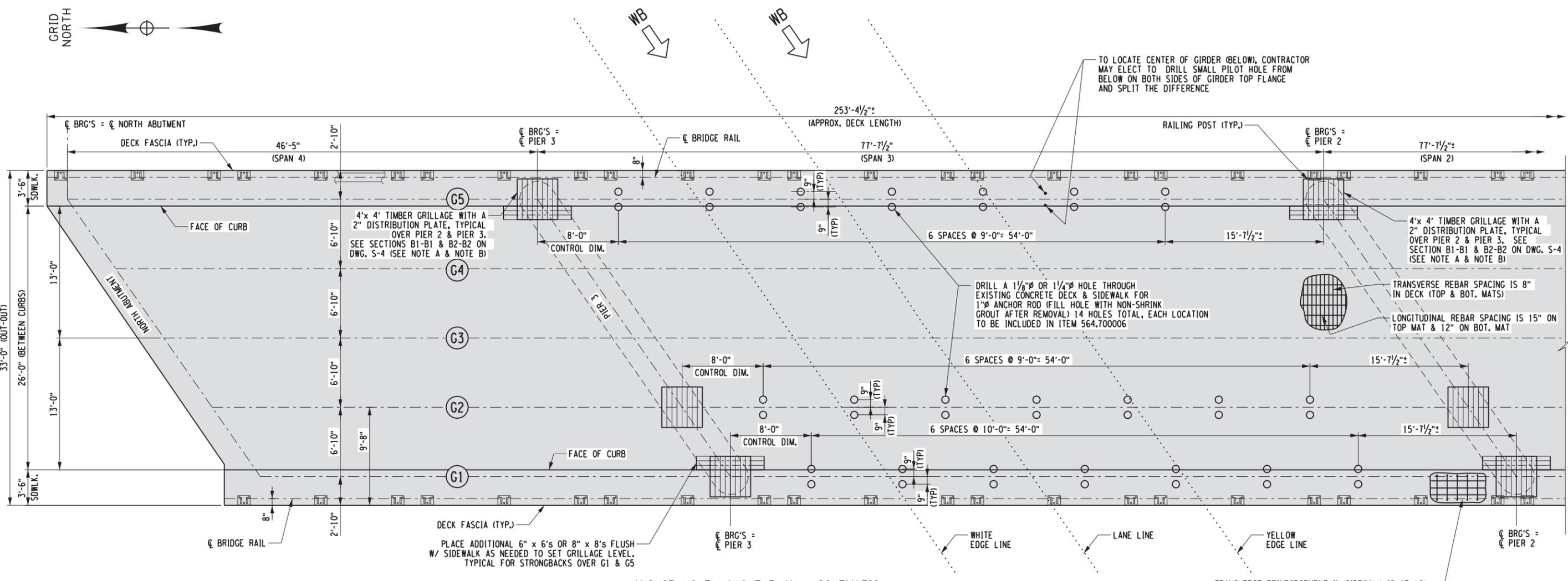
DRAFTED BY: J. HARTWELL

CHECKED BY: G. HOFFMANN

DESIGNED BY: S. KINSMAN

DESIGN SUPERVISOR: G. HOFFMANN

FILE NAME = V:\Projects\ANY\K5\36292\CADD\NSTN\MP\_463.45\_S-5.dgn  
DATE/TIME = 26-JUN-2020 10:53:19  
USER = 6379



ANCHOR HOLE LAYOUT PLAN - SCHEMATIC  
N.T.S.

**NOTE A**  
FOR STRONG-BACKS OVER FASCIA GIRDERS G1 & G5, GRILLAGE NEEDS TO BE CONSTRUCTED HALF ON THE SAFETYWALK AND HALF ON ROADWAY SURFACE. SEE SECTION B1-B1 ON DWG S-4

**NOTE B**  
CENTER THE TIMBER GRILLAGE OVER THE G GIRDER WHERE IT COINCIDES WITH THE G PIER

**STRONG-BACKS REQUIRED FOR REPAIRS AT SPAN 3, G1, G2 & G5, AND SPAN 2, G1 ONLY**

FOR SPAN 2, GIRDER G1 STRONG-BACK, HOLE LOCATIONS/SPACING IS THE SAME AS SHOWN FOR SPAN 3, G1, EXCEPT 8'-0" CONTROL DIMENSION IS TO BE MEASURED FROM PIER 1 (HOLE PATTERN IS MIRRORED)

14 HOLES REQUIRED PER EACH STRONG-BACK LOCATION, 56 TOTAL.

APPROXIMATELY 4 ANCHOR HOLES FOR EACH STRONG-BACK WILL NEED TO BE DRILLED DURING A RIGHT LANE CLOSURE AND 4 HOLES FOR EACH STRONG-BACK NEED TO BE DRILLED DURING A LEFT LANE CLOSURE.

ITEM 564.700006

ALTERED ON:	AFFIXED ON: 6/25/2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

GARRET W. HOFFMANN  
EXCELSIOR  
No. 070686  
PROFESSIONAL ENGINEER

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REVISIONS			
DATE	DESCRIPTION	BY	SYM.

<p><b>Thruway Authority</b></p>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
	LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
	TITLE OF DRAWING STRONG-BACK ANCHOR HOLE LAYOUT PLAN	DRAWING NUMBER: S-5

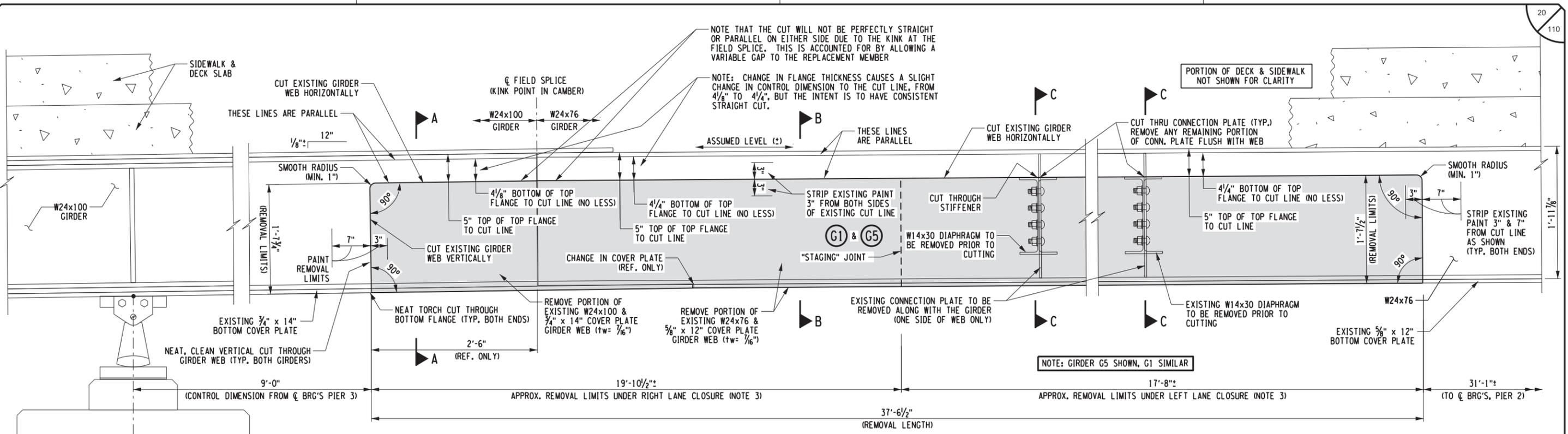
CHECKED BY: S. SCHUKRAFT

DRAFTED BY: J. HARTWELL

CHECKED BY: G. HOFFMANN

DESIGNED BY: S. KINSMAN

DESIGN SUPERVISOR: G. HOFFMANN



**FASCIA GIRDER REMOVAL DETAIL - CUTTING SKETCH**

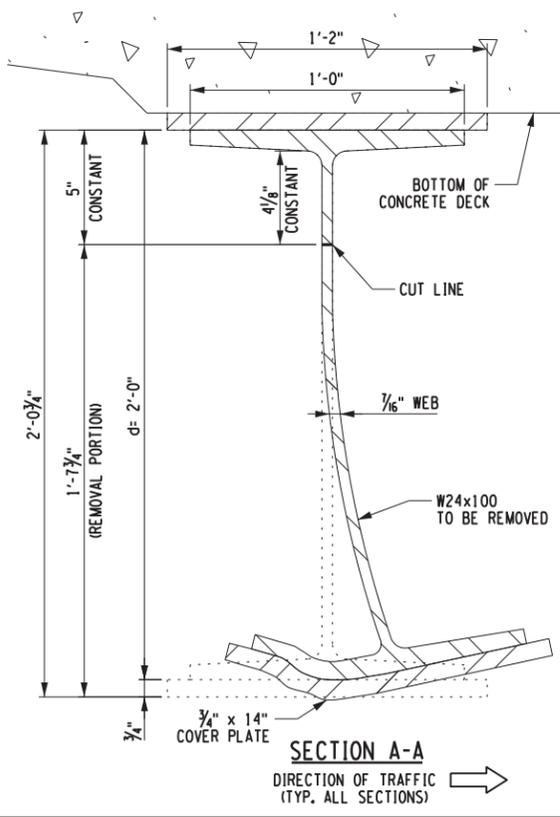
(LOOKING EAST IN WB LANES)  
(TYP. FOR GIRDERS G1 & G5 - SPAN 3 ONLY)  
WEIGHT OF SCRAP GIRDER REMOVED = 2,863± LB.

☉ BRG.  
(PIER 3)

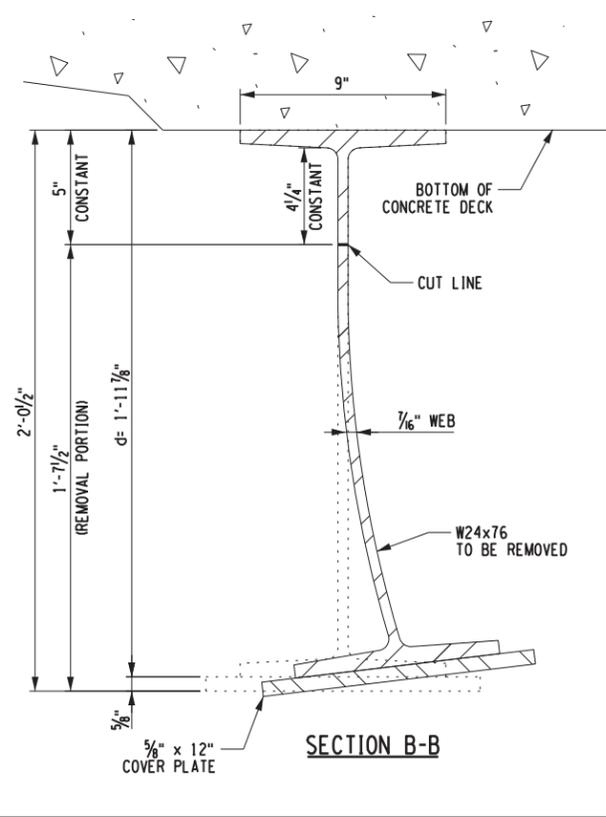
COST OF PAINT STRIPPING, TORCH CUTTING, STEEL REMOVAL & GRINDING SMOOTH TO BE INCLUDED IN ITEM 564.700002

NOTE: GIRDERS HAVE SLIGHTLY TAPERED FLANGES (5% SLOPE)

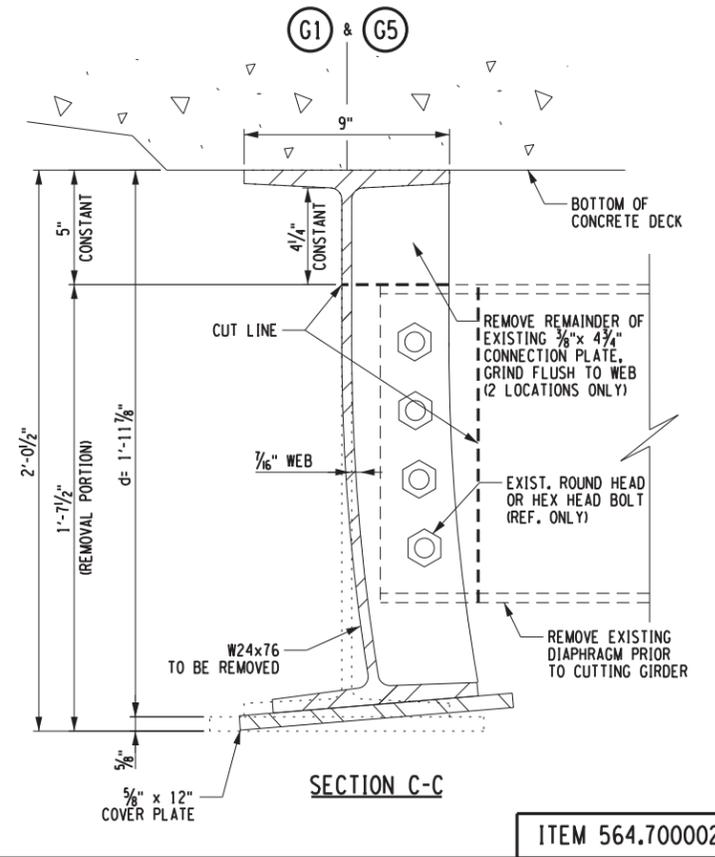
- NOTES:
1. PRIOR TO BEGINNING ANY REPAIR PROCEDURES, THE EXISTING PAINT SHALL BE REMOVED AS SHOWN ABOVE IN ACCORDANCE WITH THE NOTES PROVIDED IN THE GENERAL NOTES.
  2. ALL LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO COMPLETE THE STRUCTURAL STEEL REPAIRS, INCLUDING PAINT REMOVAL AND PAINT TOUCH-UP, SHALL BE INCLUDED UNDER THE STEEL REPAIR ITEM 564.700002.
  3. DIMENSIONS SHOWN ARE APPROXIMATE & FOR REFERENCE ONLY. EXACT LENGTH OF THE "FIRST" GIRDER SEGMENT TO BE REMOVED UNDER RIGHT OR LEFT LANE CLOSURES TO BE DETERMINED IN FIELD.



**SECTION A-A**  
DIRECTION OF TRAFFIC (TYP. ALL SECTIONS)



**SECTION B-B**



**SECTION C-C**

ITEM 564.700002

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.



TITLE OF PROJECT  
STEEL REPAIRS TO IMPACT DAMAGE

LOCATION OF PROJECT  
MP 463.45 BIN 5511490  
SHERIDAN CENTER RD. OVER I-90

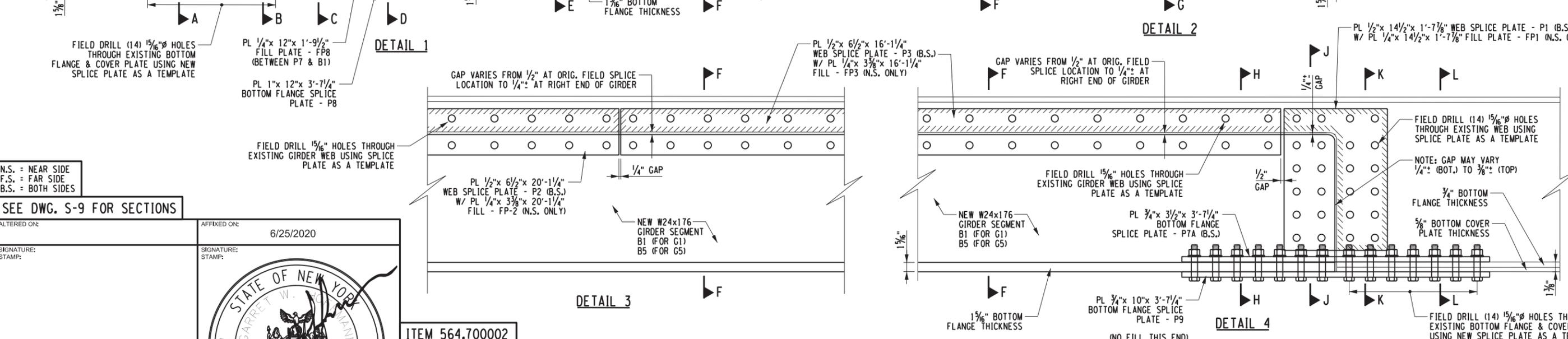
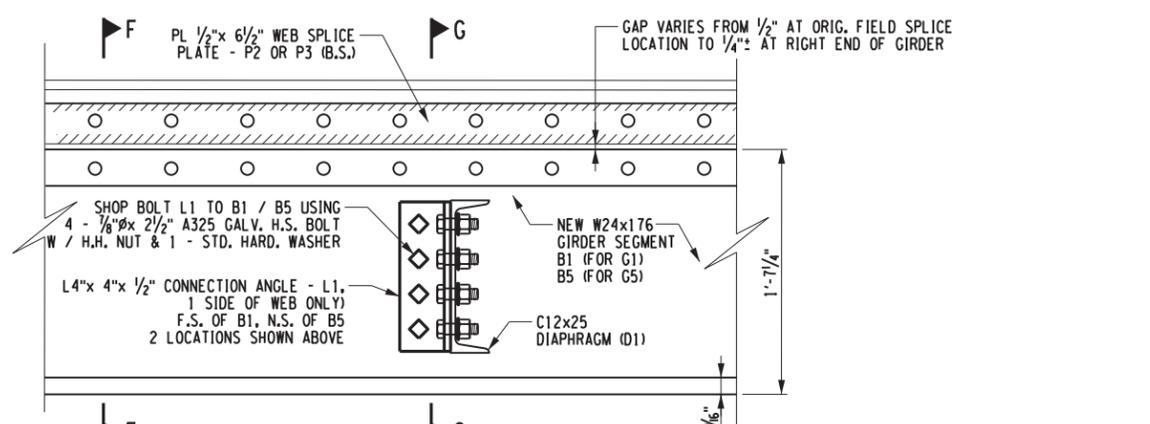
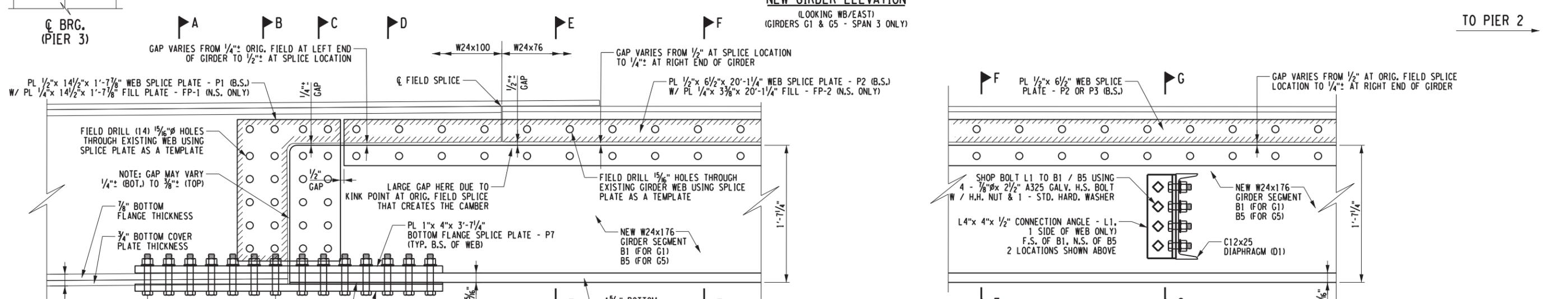
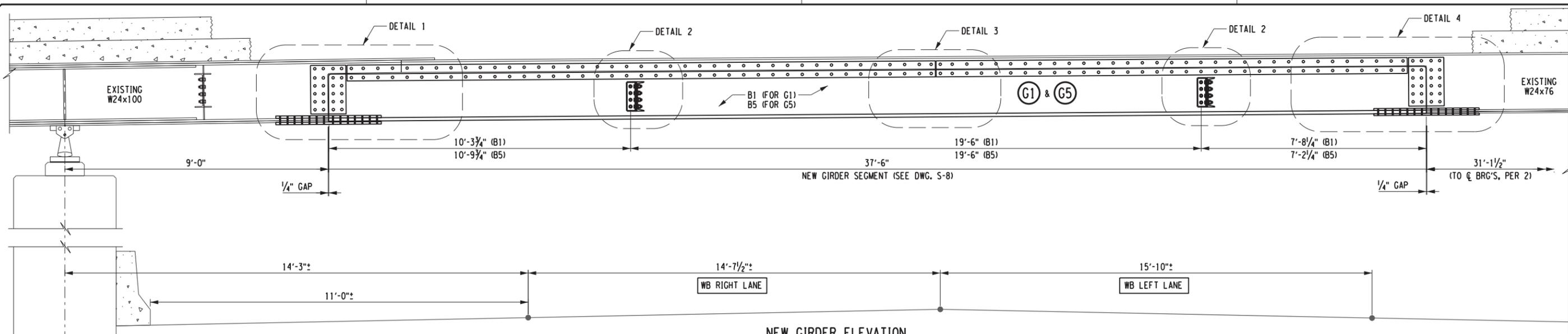
TITLE OF DRAWING  
SPAN 3 - G1 & G5  
GIRDER REMOVAL DETAILS

CONTRACT NUMBER:  
TAB 20-12B

DATE:  
JUNE 2020

DRAWING NUMBER:  
S-6





N.S. = NEAR SIDE  
F.S. = FAR SIDE  
B.S. = BOTH SIDES

SEE DWG. S-9 FOR SECTIONS

ALTERED ON:	AFFIXED ON:
SIGNATURE:	SIGNATURE:
STAMP:	STAMP:



ITEM 564.700002

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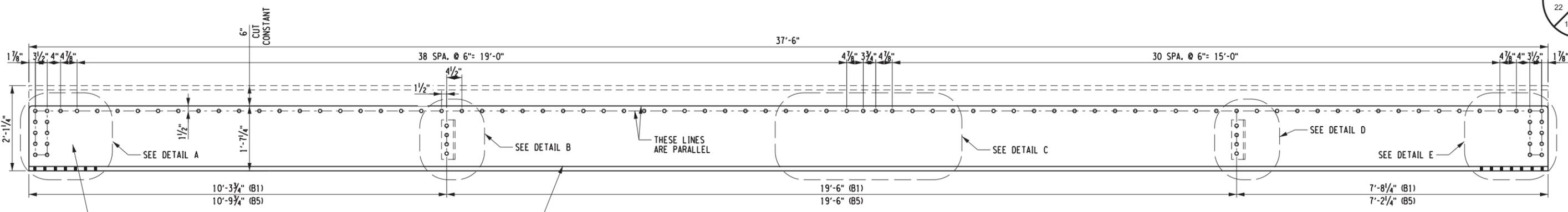
REVISIONS			
DATE	DESCRIPTION	BY	SYM.



TITLE OF PROJECT	STEEL REPAIRS TO IMPACT DAMAGE
LOCATION OF PROJECT	MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90
TITLE OF DRAWING	SPAN 3 - G1 & G5 NEW GIRDER ELEVATION & DETAILS

CONTRACT NUMBER:	TAB 20-12B
DATE:	JUNE 2020
DRAWING NUMBER:	S-7

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 DATE/TIME = 26-JUN-2020 10:57:30  
 USER = G. HOFFMANN  
 DESIGN SUPERVISOR: G. HOFFMANN  
 CHECKED BY: S. KINSMAN  
 DRAFTED BY: J. HARTWELL  
 CHECKED BY: S. SCHUKRAFT



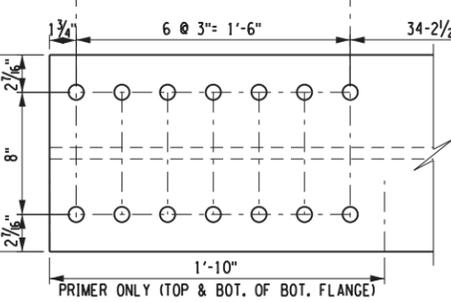
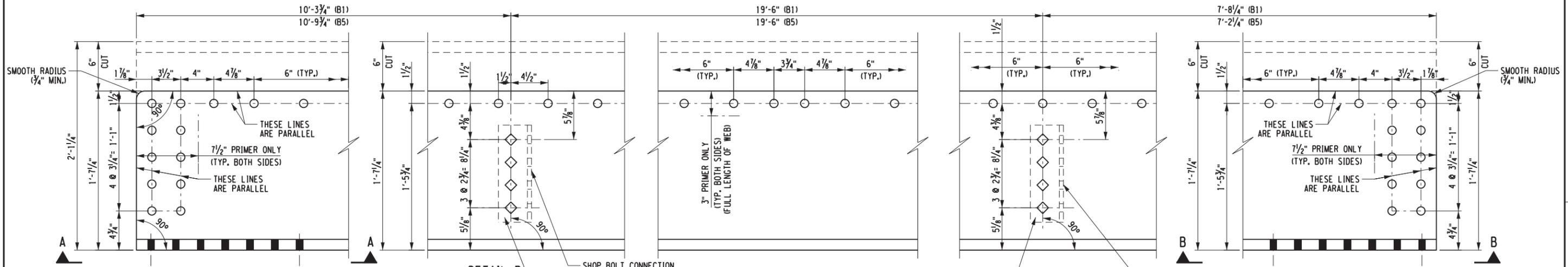
MARK THIS END "NORTH"

ALL HOLES TO BE 15/16" Ø  
ALL HOLES TO BE PRE-DRILLED

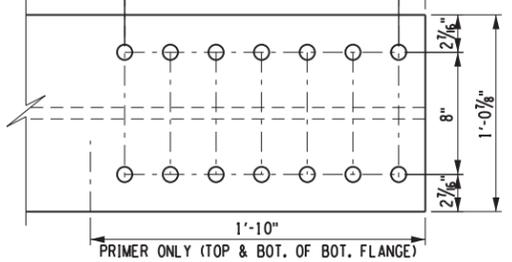
NEW GIRDER CUT FROM A W24x176 Mk. B1 OR B5

**NEW GIRDER DETAIL - B1, B5**  
(LOOKING EAST)  
W24x176 x 37'-6"  
(2 REQ'D AS SHOWN OR NOTED)  
(3,933# LB./EA. AS FABRICATED)

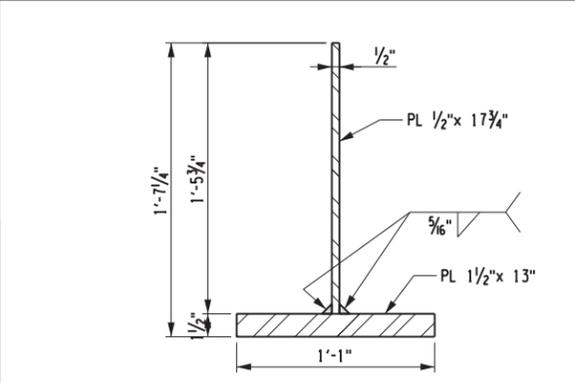
**NOTE TO FABRICATOR:**  
IF W24x176 BEAMS COME WITH A NATURAL CAMBER, CUT THIS T-SECTION WITH NATURAL CAMBER UPWARD



**BOTTOM FLANGE VIEW A-A**  
(NORTH END)



**BOTTOM FLANGE VIEW B-B**  
(SOUTH END)



**ALTERNATE WELDED PLATE GIRDER SECTION**

- NOTES:**
1. THE CONTRACTOR / FABRICATOR / ERECTOR MAY ELECT TO SUBSTITUTE A WELDED PLATE GIRDER FOR USE AS THE REPLACEMENT GIRDER SEGMENT IN LIEU OF PROCURING, AND CUTTING DOWN THE W24x176 SHOWN FOR Mks B1, B2 & B5.
  2. THE CONTRACTOR MAY ELECT TO MAKE THIS SUBSTITUTION IN THE EVENT THAT THE UNAVAILABILITY OF A SUFFICIENT LENGTH OF W24x176 MAKES IT DIFFICULT TO MEET THE PROPOSED SCHEDULE.
  3. THE CONTRACTOR MAY ALSO ELECT TO MAKE THIS SUBSTITUTION TO ELIMINATE ALL THE 1/4" FILL PLATES ON THE EXISTING WEB OF ALL 3 GIRDERS AND ALSO ELIMINATE THE 1/4" BOTTOM FLANGE FILLS ON BOTH ENDS OF GIRDER G2.
  4. THE T-SHAPED PLATE GIRDER SUBSTITUTION WOULD NEED TO BE FABRICATED IN STRICT ACCORDANCE WITH THE NYS STEEL CONSTRUCTION MANUAL, WITH SPECIAL ATTENTION TO THE WARPAGE AND TILT REQUIREMENTS AND DEVIATION FROM FLATNESS REQUIREMENTS FOUND IN SECTION 12.
  5. FABRICATOR SHALL NOTE THE POTENTIAL FOR THE WEB TO WARP DURING WELDING OF A LONG, SLENDER T-SHAPED SECTION, AND SHALL TAKE ANY MEASURES NECESSARY TO MINIMIZE ANY WEB DISTORTION & WARPING, AND TO MAINTAIN THE PERPENDICULARITY OF THE PLATES.

CHECKED BY: S. SCHUKRAFT  
 DRAFTED BY: J. HARTWELL  
 CHECKED BY: G. HOFFMANN  
 DESIGNED BY: S. KINSMAN  
 DESIGN SUPERVISOR: G. HOFFMANN

FILE NAME = V:\Projects\ANY\K5\36292\CADD\MSTN\MP\_463.45\_S-8.dgn  
 DATE / TIME = 26-JUN-2020  
 USER = 6379

ALTERED ON:	AFFIXED ON: 6/25/2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING SPAN 3 - G1 & G5 NEW GIRDER DETAILS	DRAWING NUMBER: S-8

ITEM 564.700002

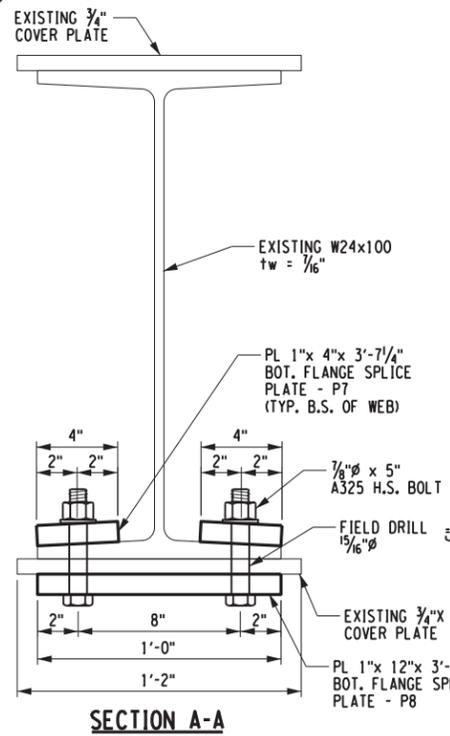
CHECKED BY: S. SCHUKRAFT

DRAFTED BY: J. HARTWELL

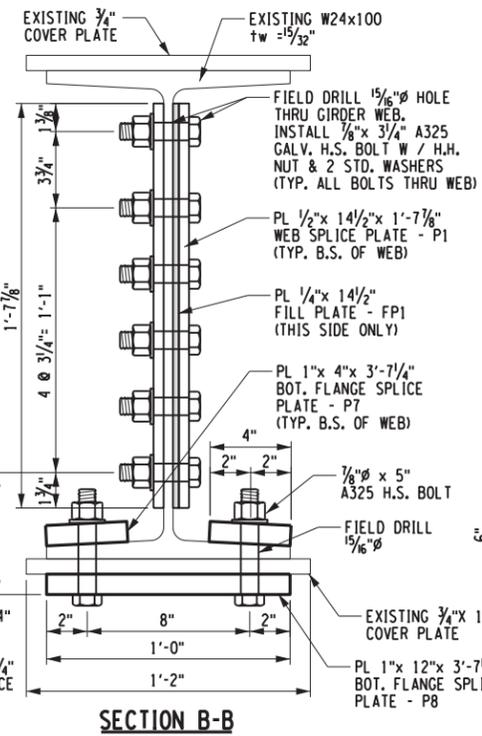
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DESIGNED BY: S. KINSMAN

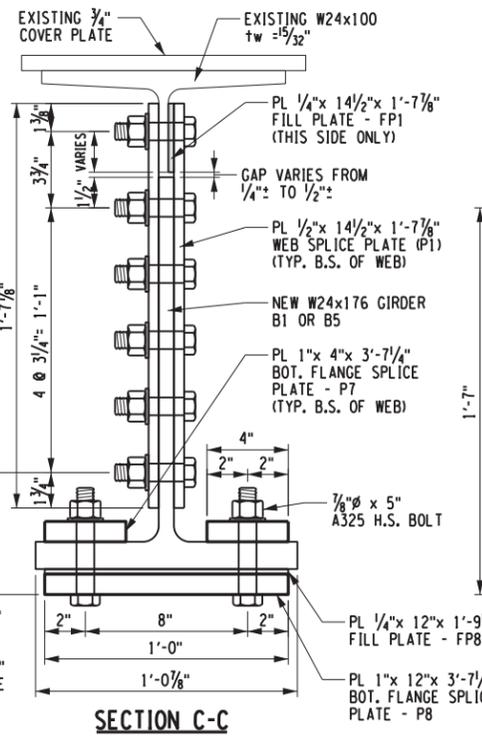
DESIGN SUPERVISOR: G. HOFFMANN



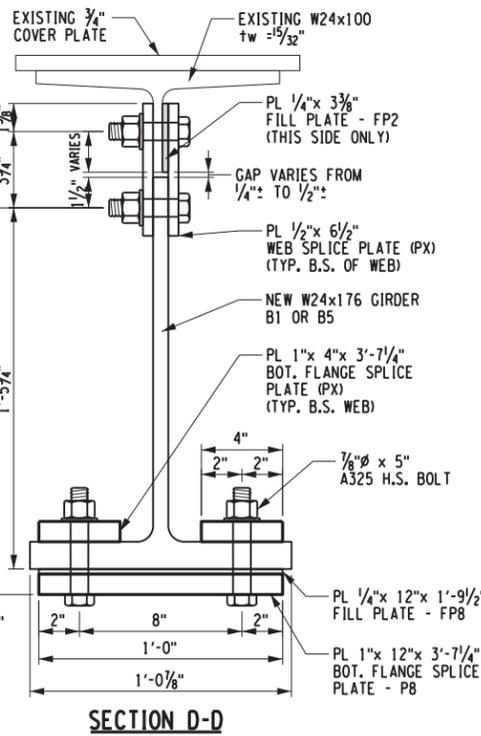
SECTION A-A



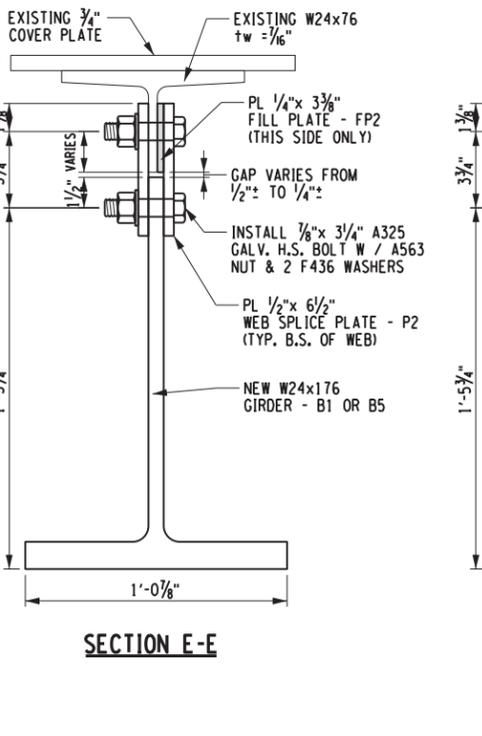
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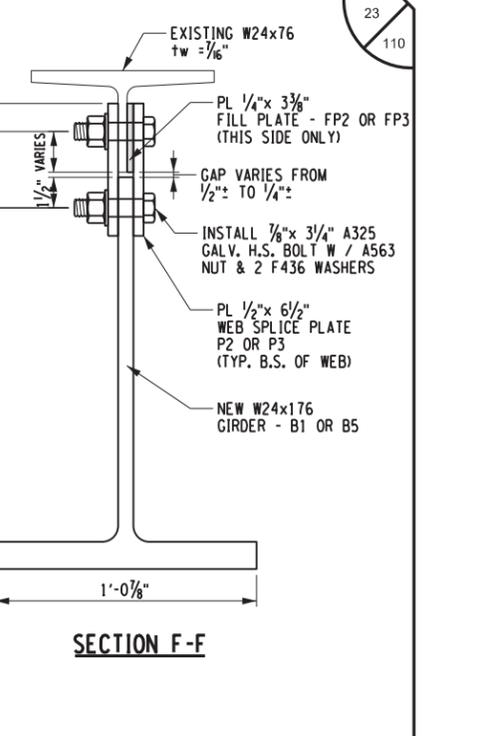
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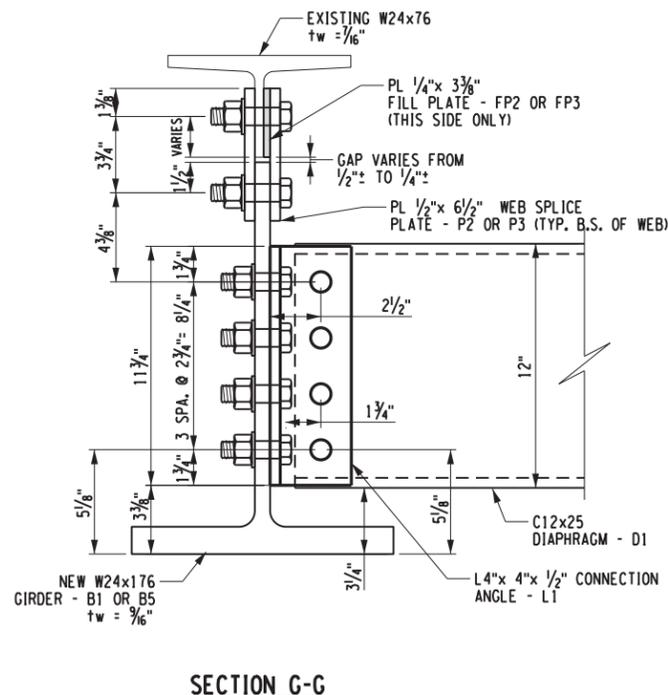
SECTION D-D



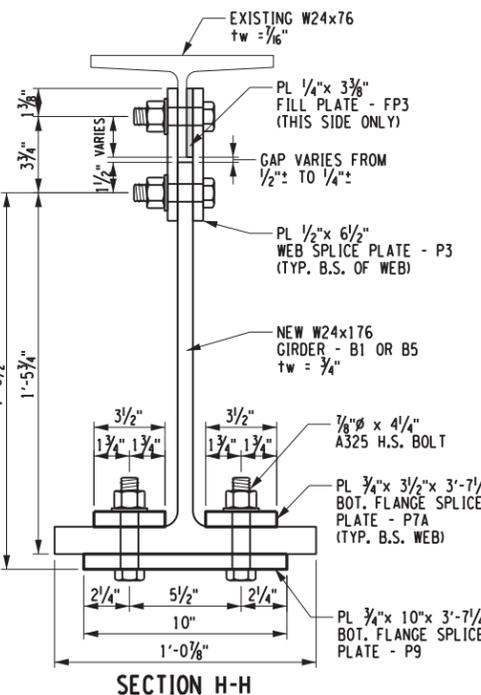
SECTION E-E



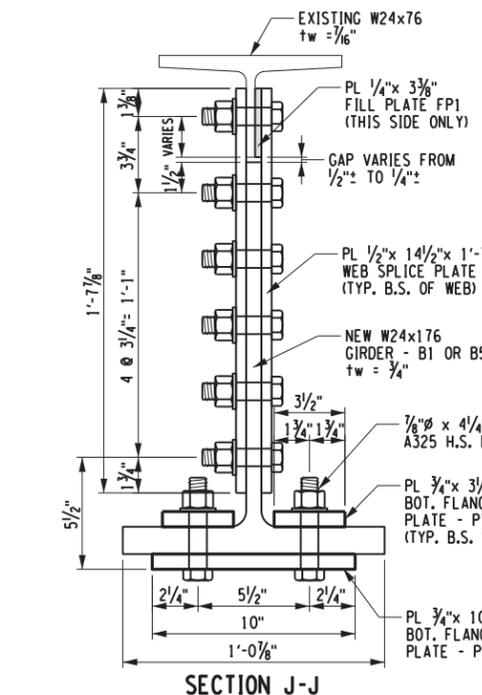
SECTION F-F



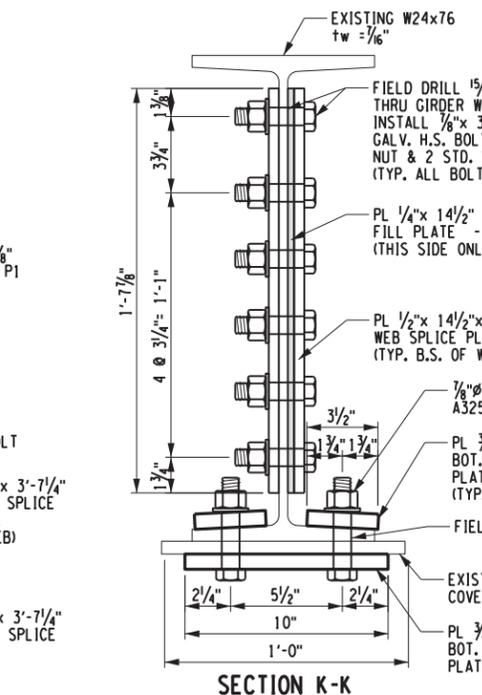
SECTION G-G



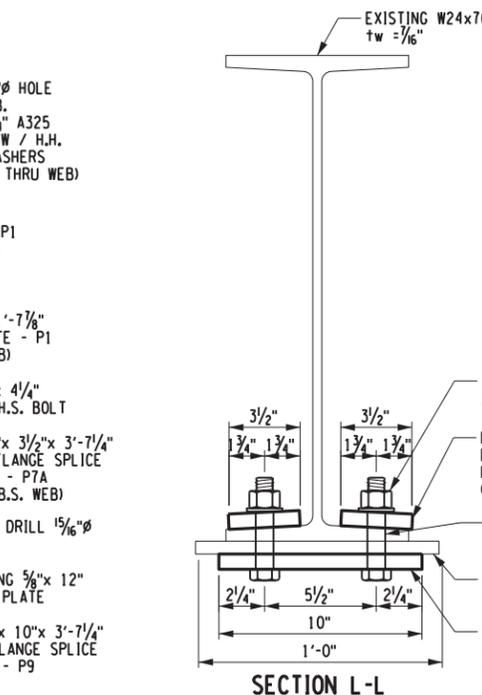
SECTION H-H



SECTION J-J



SECTION K-K



SECTION L-L

REQUIRED BOLTS - SPAN 3, G1 & G5 REPAIRS (FOR INFORMATION ONLY ONLY)

LOCATION	GRIP	LENGTH	NO. REQ'D	FIELD-DRILL HOLES
VERTICAL WEB SPLICES	1-11/16"	3/8" x 3 3/4"	24 x 2 = 48	14 x 2 = 28
HORIZONTAL WEB SPLICE	1-11/16"	3/8" x 3 3/4"	148	74
BOT FL SPLICE - EXIST. W24x100	3-9/16"	7/8" x 5"	28	14
BOT FL SPLICE - EXIST. W24x76	2-13/16"	7/8" x 4 1/4"	28	14
DIAPH. TO CONN. ANGLE - L1	7/8"	3/8" x 2 1/4"	4 x 2 = 8	-
DIA. CONN. ANGLE TO NEW W24	1-1/4"	3/8" x 2 1/4"	4 x 2 = 8	-
BOLT COUNT IN TABLE IS FOR G1 ONLY.			TOTAL G1 = 268 BOLTS	130 F.D. HOLES
G1 & G5 BOLT COUNT & LENGTHS ARE SAME			TOTAL G5 = 268 BOLTS	130 F.D. HOLES

N.S. = NEAR SIDE  
F.S. = FAR SIDE  
B.S. = BOTH SIDES

ALL HOLES TO BE 15/16" FOR 7/8" GALV. BOLTS

ALL BOLTS TO BE 7/8" A325 H.S. BOLTS W/ A563 HEAVY HEX NUTS & 2 - F436, STD. HARDENED WASHERS. ALL NUTS & BOLTS TO BE HOT DIPPED GALVANIZED

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.



TITLE OF PROJECT  
STEEL REPAIRS TO IMPACT DAMAGE

LOCATION OF PROJECT  
MP 463.45 BIN 5511490  
SHERIDAN CENTER RD. OVER I-90

TITLE OF DRAWING  
SPAN 3 - G1 & G5  
GIRDER REPAIR SECTIONS

ITEM 564.700002

CONTRACT NUMBER:  
TAB 20-12B

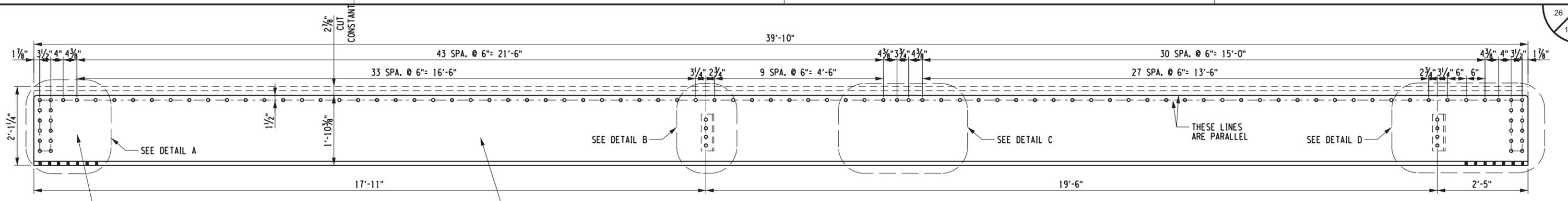
DATE:  
JUNE 2020

DRAWING NUMBER:  
S-9







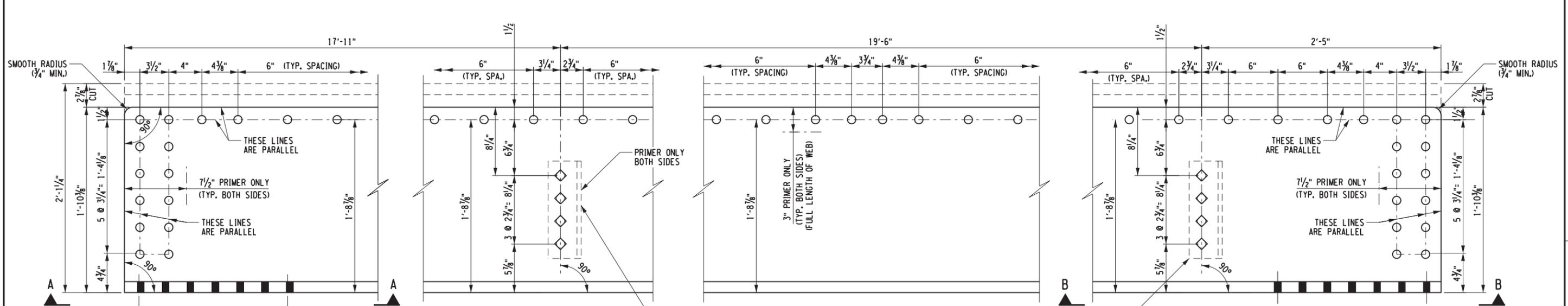


ALL HOLES TO BE 15/16" Ø  
ALL HOLES TO BE PRE-DRILLED

NEW GIRDER CUT FROM A W24x176 Mk. B2

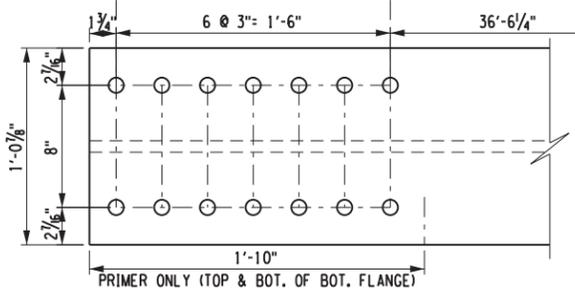
**NEW GIRDER DETAIL - B2**  
(LOOKING EAST)  
W24x176 x 39'-10"  
(1 REQ'D)  
(4,343 LB./EA. AS FABRICATED)

**NOTE TO FABRICATOR:**  
IF W24x176 BEAMS COME WITH A NATURAL CAMBER, CUT THIS T-SECTION WITH NATURAL CAMBER UPWARD

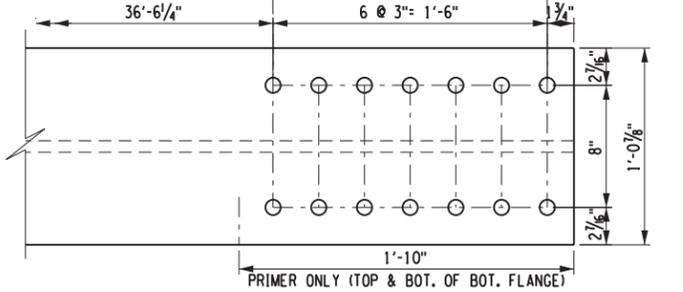


SHOP BOLT CONNECTION ANGLES TO GIRDER WEB  
L1 - FAR SIDE  
L2 - NEAR SIDE  
1/8" Ø x 3" GALV. H.S. BOLTS

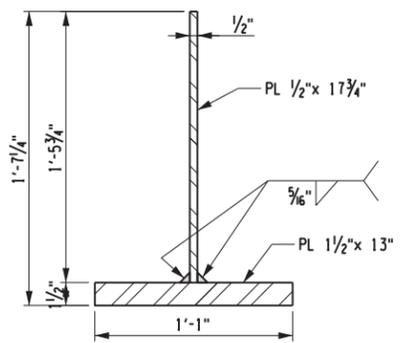
SHOP BOLT CONNECTION ANGLES TO GIRDER WEB  
L1 - FAR SIDE  
L2 - NEAR SIDE  
1/8" Ø x 3" GALV. H.S. BOLTS



**BOTTOM FLANGE VIEW A-A**  
(NORTH END)



**BOTTOM FLANGE VIEW B-B**  
(SOUTH END)



**ALTERNATE WELDED PLATE GIRDER SECTION**

**NOTES:**

1. THE CONTRACTOR / FABRICATOR / ERECTOR MAY ELECT TO SUBSTITUTE A WELDED PLATE GIRDER FOR USE AS THE REPLACEMENT GIRDER SEGMENT IN LIEU OF PROCURING, AND CUTTING DOWN THE W24x176 SHOWN FOR Mks B1, B2 & B5.
2. THE CONTRACTOR MAY ELECT TO MAKE THIS SUBSTITUTION IN THE EVENT THAT THE UNAVAILABILITY OF A SUFFICIENT LENGTH OF W24x176 MAKES IT DIFFICULT TO MEET THE PROPOSED SCHEDULE.
3. THE CONTRACTOR MAY ALSO ELECT TO MAKE THIS SUBSTITUTION TO ELIMINATE ALL THE 1/4" FILL PLATES ON THE EXISTING WEB OF ALL 3 GIRDERS AND ALSO ELIMINATE THE 1/4" BOTTOM FLANGE FILLS ON BOTH ENDS OF GIRDER G2.
4. THE T-SHAPED PLATE GIRDER SUBSTITUTION WOULD NEED TO BE FABRICATED IN STRICT ACCORDANCE WITH THE NYS STEEL CONSTRUCTION MANUAL, WITH SPECIAL ATTENTION TO THE WARPAGE AND TILT REQUIREMENTS AND DEVIATION FROM FLATNESS REQUIREMENTS FOUND IN SECTION 12.
5. FABRICATOR SHALL NOTE THE POTENTIAL FOR THE WEB TO WARP DURING WELDING OF A LONG, SLENDER T-SHAPED SECTION, AND SHALL TAKE ANY MEASURES NECESSARY TO MINIMIZE ANY WEB DISTORTION & WARPING, AND TO MAINTAIN THE PERPENDICULARITY OF THE PLATES.

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.



**Thruway Authority**



TITLE OF PROJECT  
STEEL REPAIRS TO IMPACT DAMAGE  
LOCATION OF PROJECT  
MP 463.45 BIN 5511490  
SHERIDAN CENTER RD. OVER I-90  
TITLE OF DRAWING  
SPAN 3 - G2  
NEW GIRDER DETAILS

ITEM 564.700003  
CONTRACT NUMBER:  
TAB 20-12B  
DATE:  
JUNE 2020  
DRAWING NUMBER:  
S-12



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 DATE/TIME = 26-JUN-2020 10:52:12  
 USER = S. SCHUKRAFT  
 CHECKED BY: S. SCHUKRAFT  
 DRAFTED BY: J. HARTWELL  
 CHECKED BY: G. HOFFMANN  
 DESIGNED BY: S. KINSMAN  
 DESIGN SUPERVISOR: G. HOFFMANN

ALTERED ON: 6/25/2020

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AFFIXED ON: 6/25/2020

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CHECKED BY: S. SCHUKRAFT

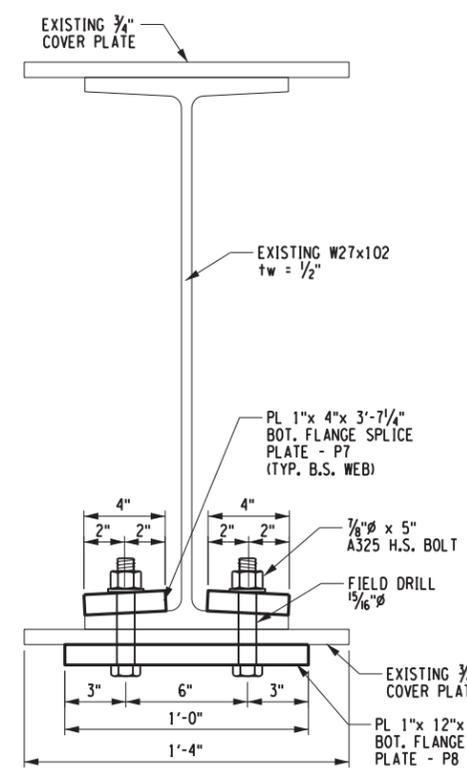
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CHECKED BY: G. HOFFMANN

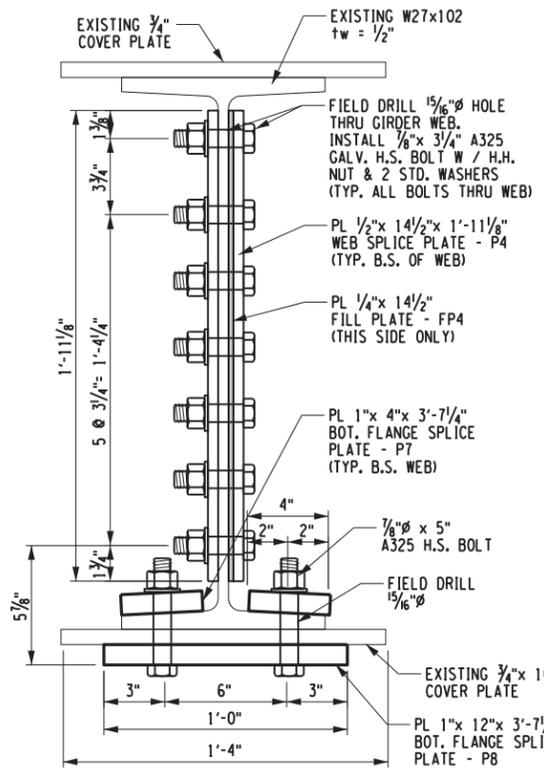
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DESIGN SUPERVISOR: G. HOFFMANN

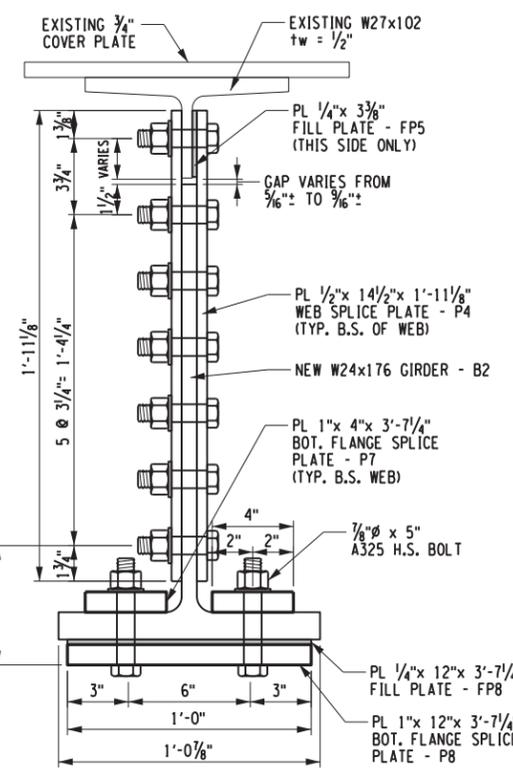
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DATE/TIME = 26-JUN-2020  
USER = 6379



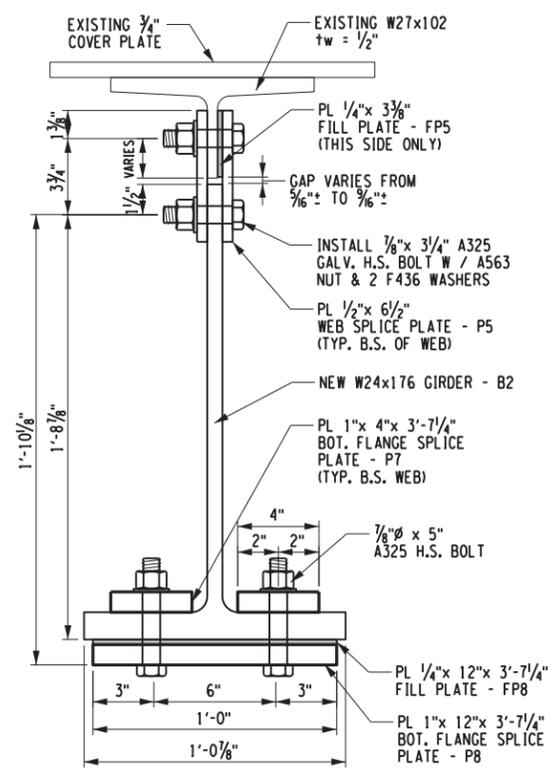
SECTION A-A



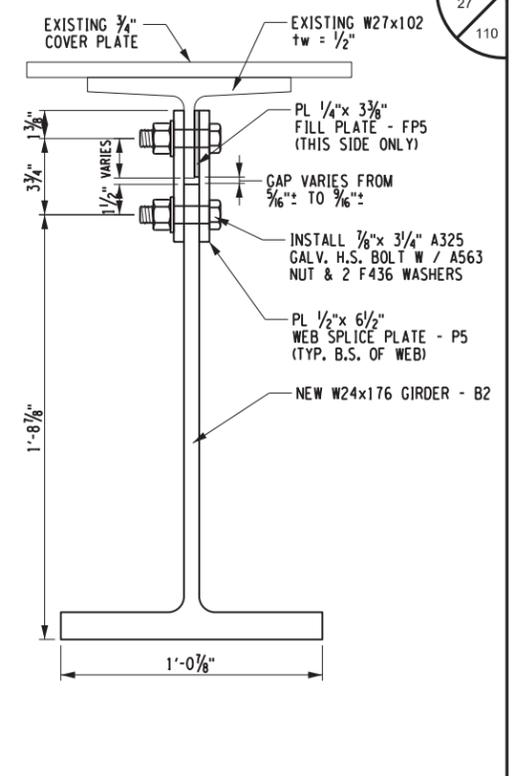
SECTION B-B



SECTION C-C



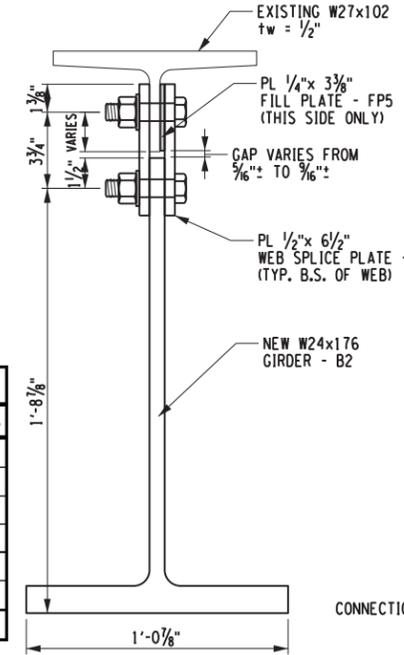
SECTION D-D



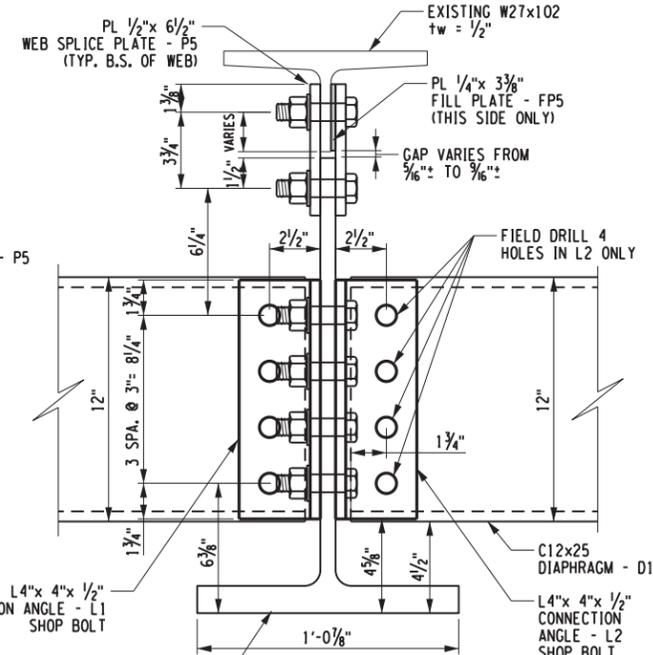
SECTION E-E

ALL HOLES TO BE 15/16" Ø FOR 7/8" Ø GALV. BOLTS  
ALL BOLTS TO BE 7/8" Ø A325 H.S. BOLTS W/ A563 HEAVY HEX NUTS & 2 - F436, STD. HARDENED WASHERS. ALL NUTS & BOLTS TO BE HOT DIPPED GALVANIZED

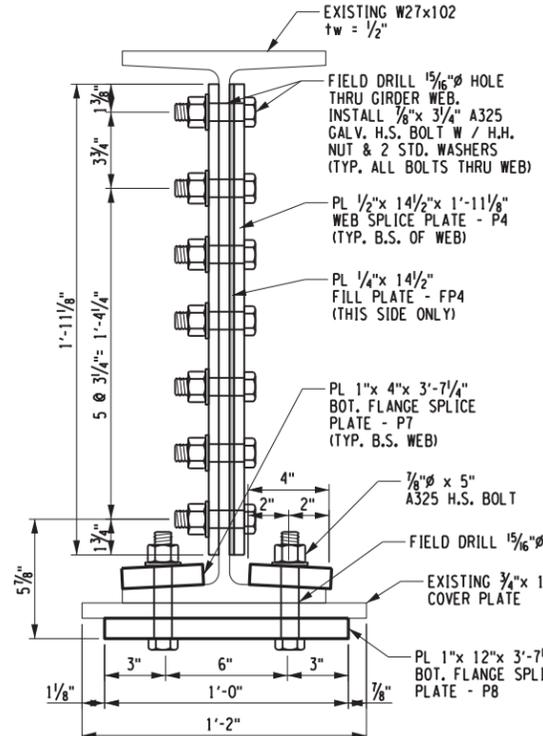
REQUIRED BOLTS - SPAN 3, G2 REPAIR (FOR INFORMATION ONLY)				
LOCATION	GRIP	LENGTH	NO. REQ'D	FIELD-DRILL HOLES
VERTICAL WEB SPLICES	1-3/4"	7/8" x 3 3/4"	28 x 2 = 56	16 x 2 = 32
HORIZONTAL WEB SPLICE	1-3/4"	7/8" x 3 3/4"	158	79
BOTTOM FLANGE SPLICES	3-9/16"	7/8" x 5"	28 x 2 = 56	28
DIAPHRAGM TO CONN. ANGLE - L1 / L2	7/8"	7/8" x 2 1/4"	4 x 8 = 32	6 x 4 = 24
DIA. CONN. ANGLES TO NEW W24	1-3/4"	7/8" x 3"	4 x 2 = 8	-
DIA. CONN. ANG. L2 TO EXIST. G3 / G4	1"	7/8" x 2 1/2"	4 x 4 = 16	16
TOTAL =			326 BOLTS	179 F.D. HOLES



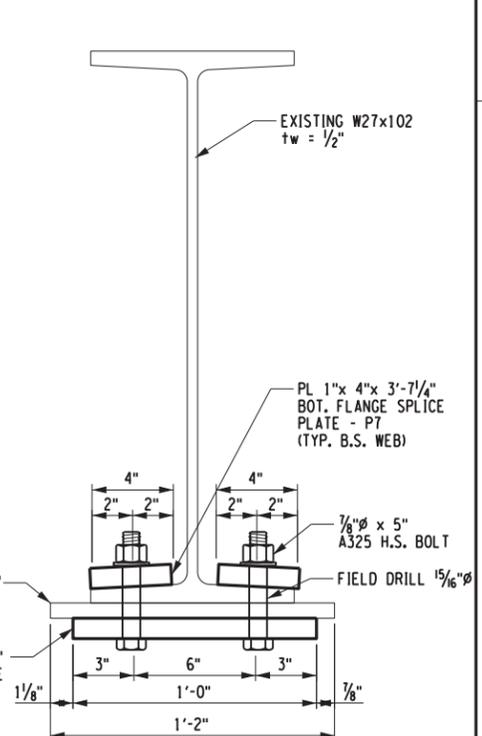
SECTION F-F



SECTION G-G



SECTION H-H



SECTION J-J

N.S. = NEAR SIDE  
F.S. = FAR SIDE  
B.S. = BOTH SIDES

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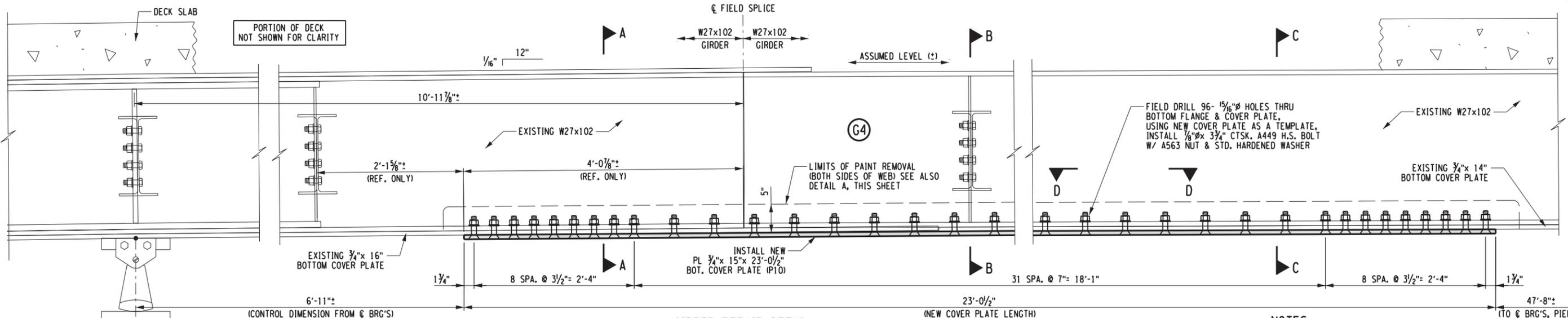


REVISIONS			
DATE	DESCRIPTION	BY	SYM.



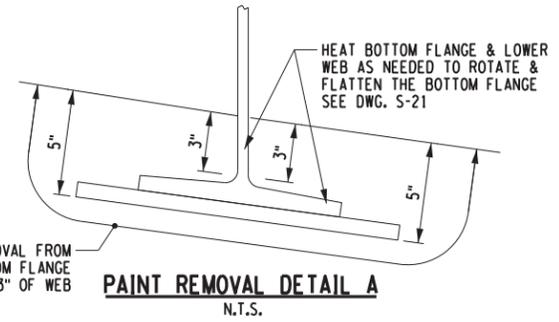
TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE		CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90		DATE: JUNE 2020
TITLE OF DRAWING SPAN 3 - G2 GIRDER REPAIR SECTIONS		DRAWING NUMBER: S-13

ITEM 564.700003



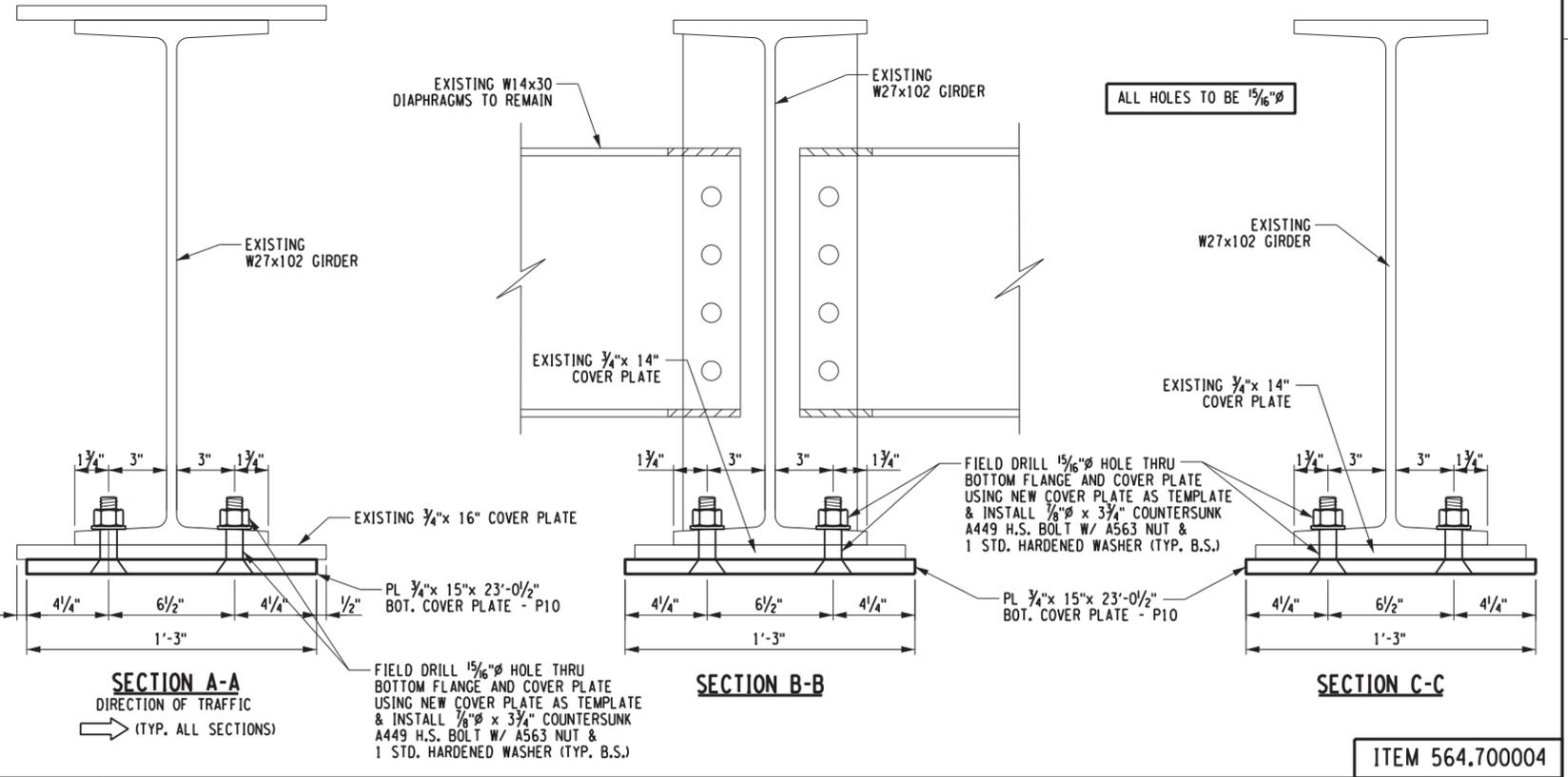
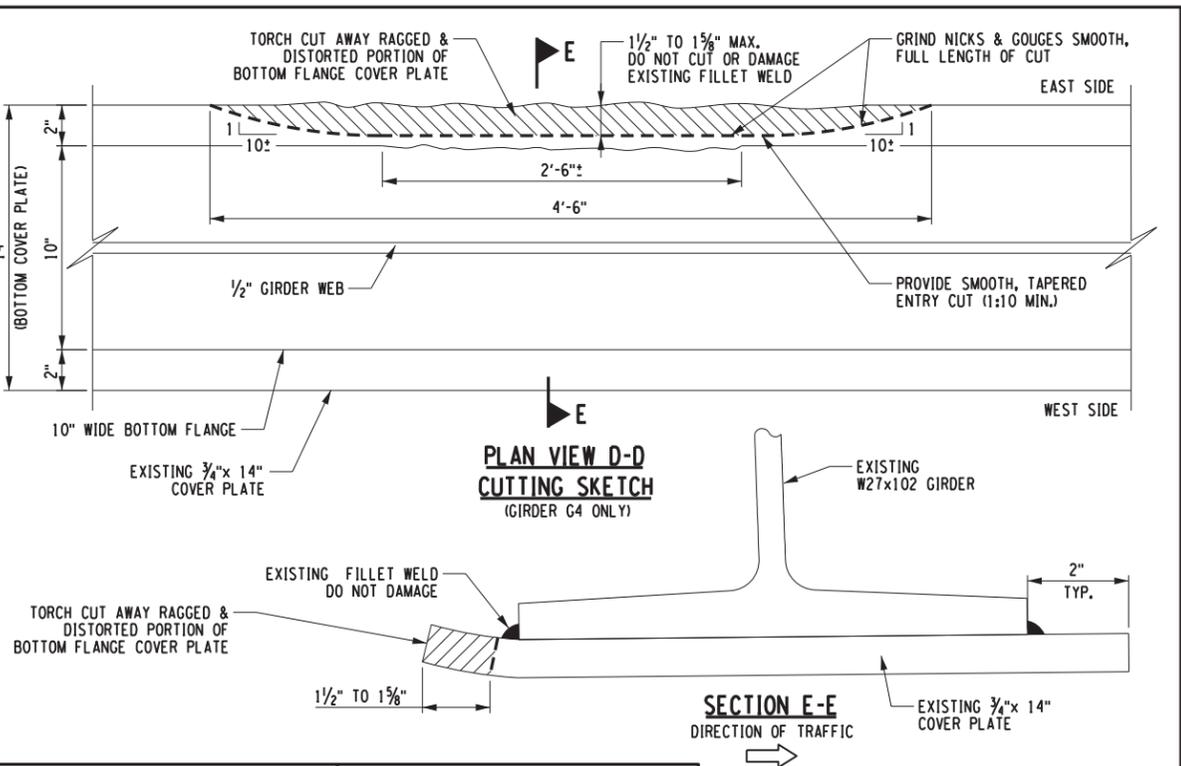
SEE DWG. S-20 FOR STEEL PARTS DETAILS  
\*REQ'D BOLTS: 1/8" x 3 3/4" CTSK - 96 EACH

**GIRDER REPAIR DETAIL**  
(LOOKING EAST/WB LANE)  
(GIRDER G4 - SPAN 3 ONLY)



- NOTES:**
1. PRIOR TO BEGINNING ANY REPAIR PROCEDURES, THE EXISTING PAINT SHALL BE REMOVED AS SHOWN IN DETAIL A ON THIS SHEET AND ACCORDANCE WITH THE NOTES PROVIDED IN THE GENERAL NOTES.
  2. ALL LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO COMPLETE REPAIRS TO STRUCTURAL STEEL INCLUDING PAINT REMOVAL, TORCH CUTTING, GRINDING & INCIDENTAL HEAT STRAIGHTENING SHALL BE INCLUDED UNDER THE STEEL REPAIR ITEM 564.700004.
  3. IT IS ANTICIPATED THAT PAINT REMOVAL & PLATE INSTALLATION CAN BE ACCOMPLISHED PRIMARILY USING RIGHT LANE & RIGHT SHOULDER CLOSURES. A LEFT LANE CLOSURE IS NOT ANTICIPATED, EXCEPT THE LAST 4 OR 6 BOLTS MAY EXTEND PAST C, AND INTO THE LEFT LANE, THUS MAY REQUIRE A LEFT LANE CLOSURE TO DRILL THOSE HOLES.

\* BOLTS FOR THIS REPAIR SHALL BE A449, COUNTERSUNK W/ A563 HEAVY HEX NUT & 1 STD. WASHER, COUNTERSUNK BOLTS NEED NOT BE GALVANIZED IF UNAVAILABLE DOMESTICALLY.



ITEM 564.700004

ITEM 564.700004

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.



TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING SPAN 3 - G4 GIRDER REPAIR DETAILS	DRAWING NUMBER: S-14



AFFIXED ON: 6/25/2020

ALTERED ON:

SIGNATURE:  
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SIGNATURE:  
STAMP:

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DATE/TIME = 26-JUN-2020 10:58:10  
USER = S. SCHUKRAFT

CHECKED BY: S. SCHUKRAFT  
DRAFTED BY: J. HARTWELL  
DESIGNED BY: G. HOFFMANN  
DESIGN SUPERVISOR: G. HOFFMANN

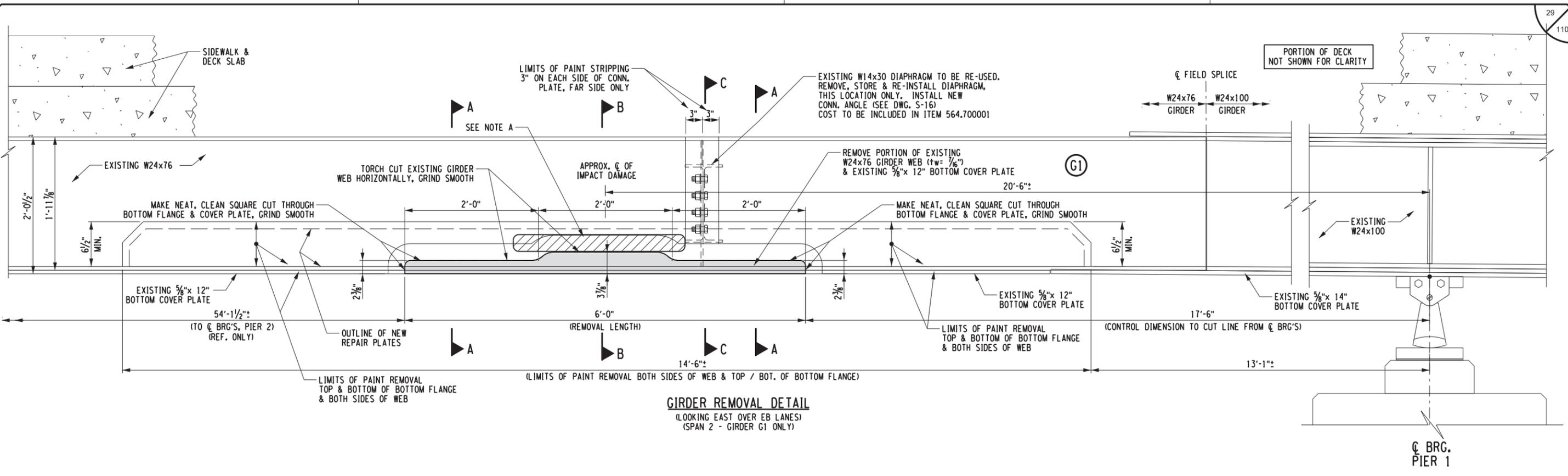
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DRAFTED BY: J. HARTWELL

CHECKED BY: G. HOFFMANN

DESIGNED BY: S. KINSMAN

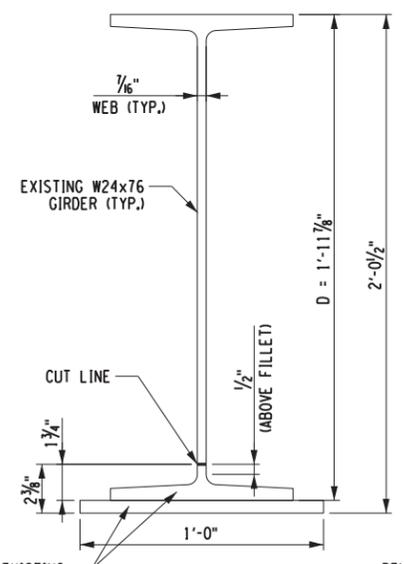
DESIGN SUPERVISOR: G. HOFFMANN



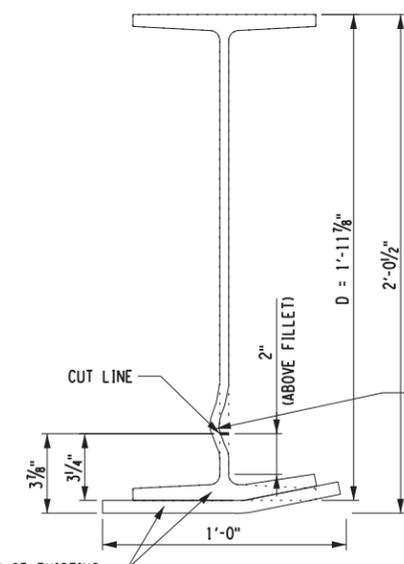
**GIRDER REMOVAL DETAIL**  
(LOOKING EAST OVER EB LANES)  
(SPAN 2 - GIRDER G1 ONLY)

COST OF PAINT STRIPPING, TORCH CUTTING, STEEL REMOVAL & GRINDING SMOOTH TO BE INCLUDED IN ITEM 564.700001

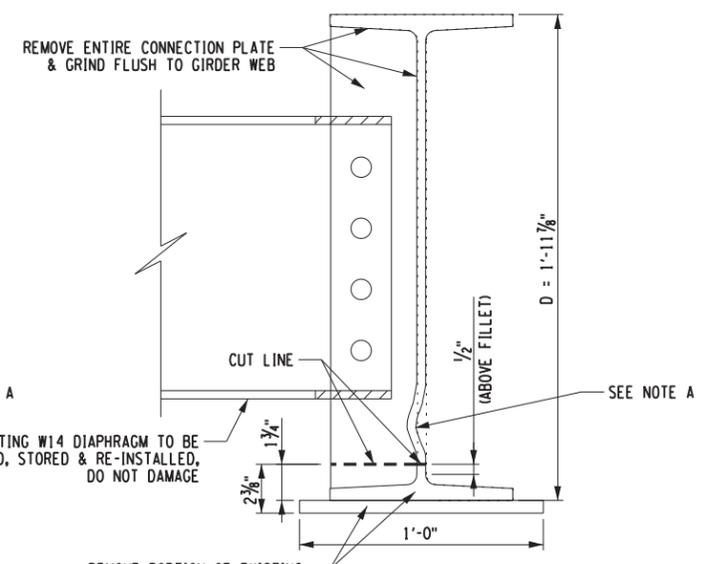
- NOTES:
1. PRIOR TO BEGINNING ANY REPAIR PROCEDURES, THE EXISTING PAINT SHALL BE REMOVED AS SHOWN ABOVE IN ACCORDANCE WITH THE NOTES PROVIDED IN THE GENERAL NOTES.
  2. ALL LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO COMPLETE THE STRUCTURAL STEEL REPAIRS, INCLUDING PAINT REMOVAL AND PAINT TOUCH-UP, SHALL BE INCLUDED UNDER THE STEEL REPAIR ITEM 564.700001.



**SECTION A-A**  
DIRECTION OF TRAFFIC



**SECTION B-B**  
DIRECTION OF TRAFFIC



**SECTION C-C**  
DIRECTION OF TRAFFIC

**NOTE A:**  
AFTER CUTTING OUT THE MAJORITY OF THE DISTORTION, HEAT STRAIGHTEN & FLATTEN ANY REMAINING DISTORTION IN THE LOWER PORTION OF EXISTING GIRDER WEB, BUT ONLY INsofar AS NEEDED TO ALLOW PROPER FIT UP NEW BENT PLATE REPAIRS.

HEAT FLATTENING OF THE G1 WEB IS ONLY ANTICIPATED TO BE NEEDED FOR THE LOWER 3" TO 4" OF THE WEB AND FOR ONLY 5' TO 6' LENGTH.

SEE DWG. S-16 FOR REPAIR DETAILS & SECTIONS  
SEE DWG. S-20 FOR STEEL PARTS DETAILS

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.



**Thruway Authority**



TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING SPAN 2 - G1 GIRDER REMOVAL DETAILS	DRAWING NUMBER: S-15

ITEM 564.700001

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USER = G. HOFFMANN



CHECKED BY: S. SCHUKRAFT

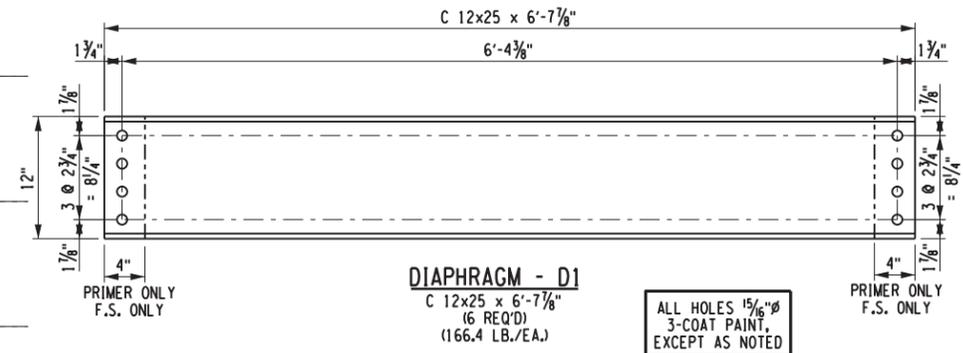
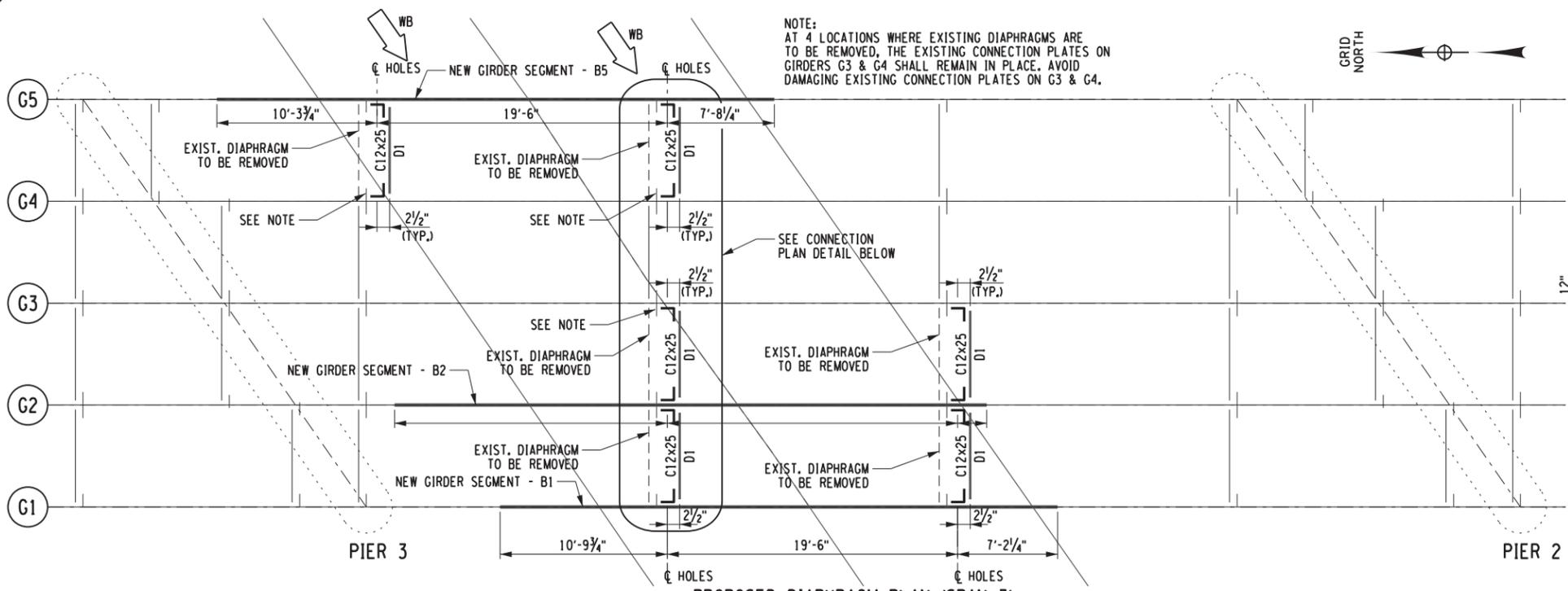
DRAFTED BY: J. HARTWELL

CHECKED BY: G. HOFFMANN

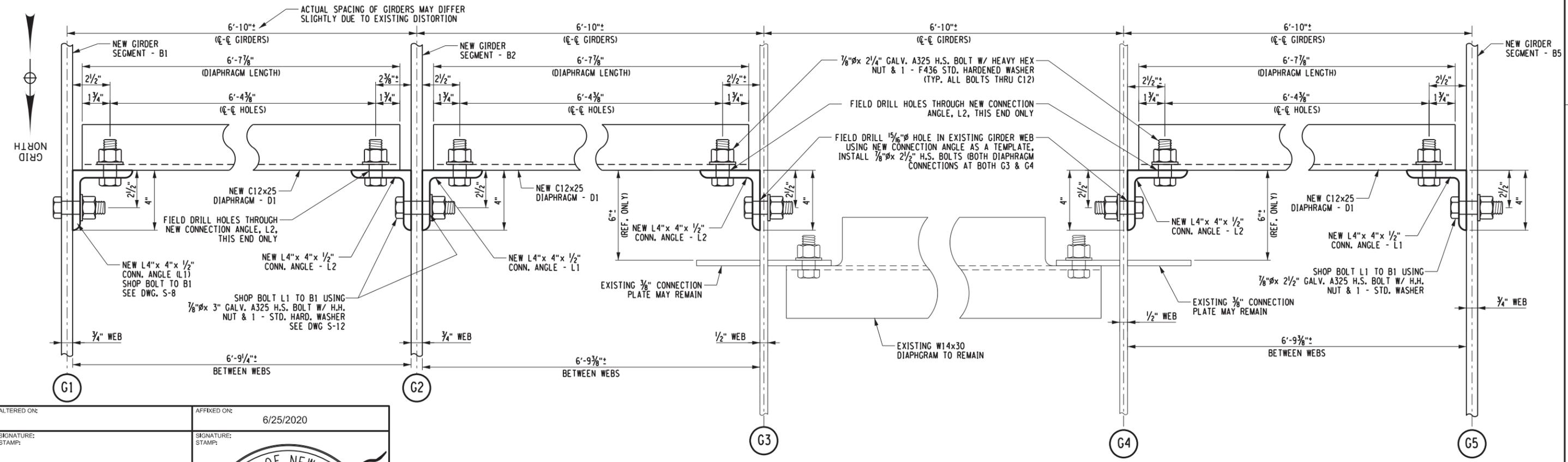
DESIGNED BY: S. KINSMAN

DESIGN SUPERVISOR: G. HOFFMANN

NOTE:  
AT 4 LOCATIONS WHERE EXISTING DIAPHRAGMS ARE TO BE REMOVED, THE EXISTING CONNECTION PLATES ON GIRDERS G3 & G4 SHALL REMAIN IN PLACE. AVOID DAMAGING EXISTING CONNECTION PLATES ON G3 & G4.



ALL HOLES 1 5/16" Ø  
3-COAT PAINT,  
EXCEPT AS NOTED



ALL HOLES TO BE 1 5/16" Ø FOR 3/8" Ø GALV. BOLTS

ALL BOLTS TO BE 3/8" Ø A325 H.S. BOLTS W/ A563 HEAVY HEX NUTS & 2 - F436, STD. HARDENED WASHERS. ALL NUTS & BOLTS TO BE HOT DIPPED GALVANIZED

ITEM 564.700005

ALTERED ON:	AFFIXED ON: 6/25/2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.



TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING DIAPHRAGM CONNECTION DETAILS	DRAWING NUMBER: S-17



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USER = SJK

CHECKED BY: S. SCHUKRAFT

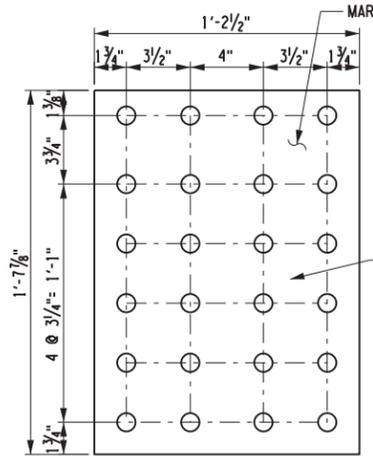
DRAFTED BY: J. HARTWELL

CHECKED BY: G. HOFFMANN

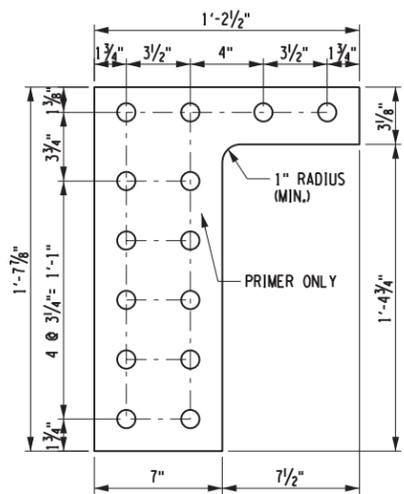
DESIGNED BY: S. KINSIMAN

DESIGN SUPERVISOR: G. HOFFMANN

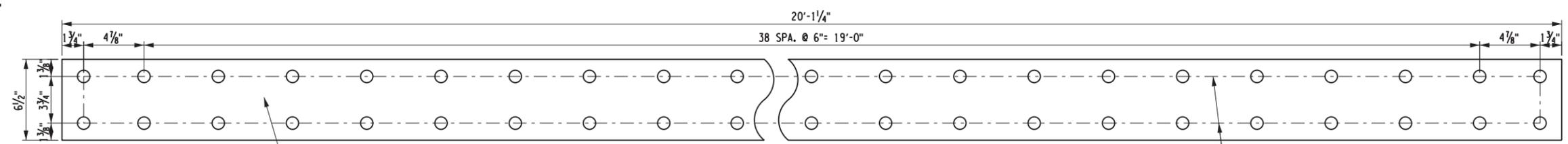
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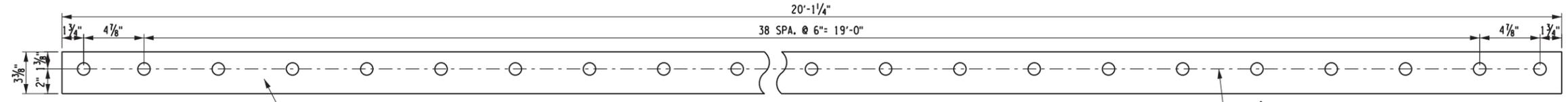
**WEB SPLICE PLATE - P1**  
PL 1/2" x 1 1/2" x 1'-7 1/8"  
(8 REQ'D TOTAL)  
(4 REQ'D FOR G1 & 4 REQ'D FOR G5)  
(41 LB./EA.)



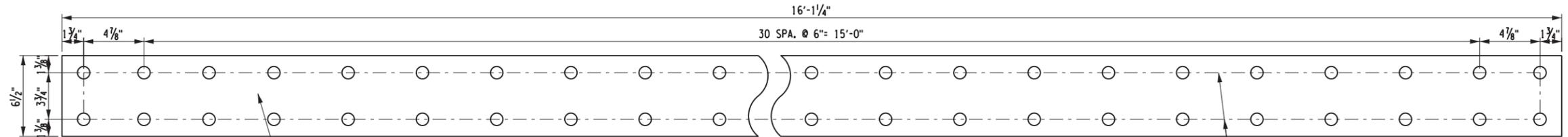
**WEB FILL PLATE - FP1**  
PL 1/4" x 1 1/2" x 1'-7 1/8"  
(4 REQ'D TOTAL)  
(2 REQ'D FOR G1 & 2 REQ'D FOR G5)  
(11.7 LB./EA.)



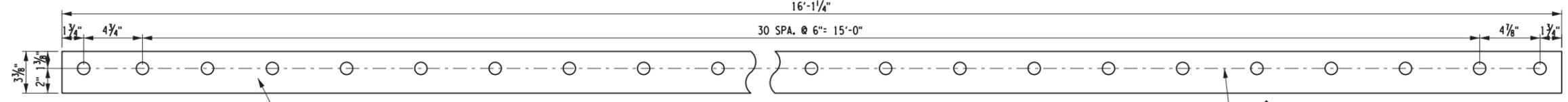
**WEB SPLICE PLATE - P2**  
PL 1/2" x 6 1/2" x 20'-1 1/4"  
(4 REQ'D TOTAL)  
(2 REQ'D FOR G1 & 2 REQ'D FOR G5)  
(222.3 LB./EA.)



**WEB FILL PLATE - FP2**  
PL 1/4" x 3 3/8" x 20'-1 1/4"  
(2 REQ'D TOTAL)  
(1 REQ'D FOR G1 & 1 REQ'D FOR G5)  
(57.7 LB./EA.)



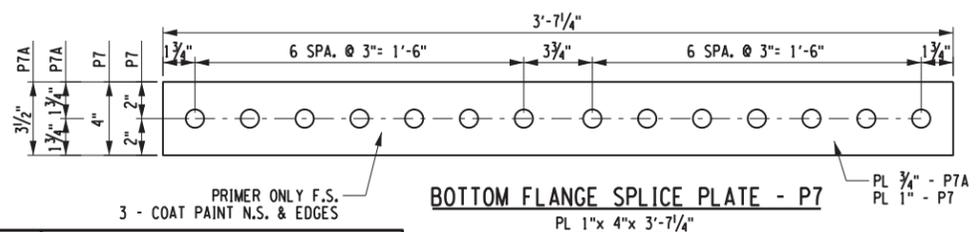
**WEB SPLICE PLATE - P3**  
PL 1/2" x 6 1/2" x 16'-1 1/4"  
(4 REQ'D TOTAL)  
(2 REQ'D FOR G1 & 2 REQ'D FOR G5)  
(178.1 LB./EA.)



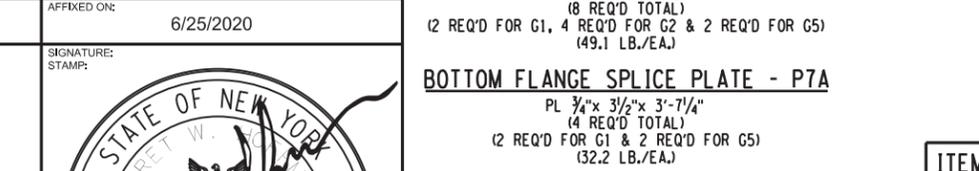
**WEB FILL PLATE - FP3**  
PL 1/4" x 3 3/8" x 16'-1 1/4"  
(2 REQ'D TOTAL)  
(1 REQ'D FOR G1 & 1 REQ'D FOR G5)  
(46.2 LB./EA.)

**ITEM 564.700002**  
**SPAN 3, GIRDER G1 & G5**

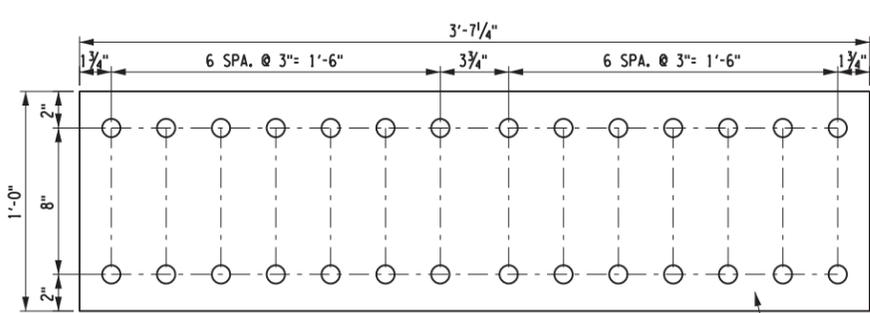
N.S. = NEAR SIDE  
F.S. = FAR SIDE  
B.S. = BOTH SIDES



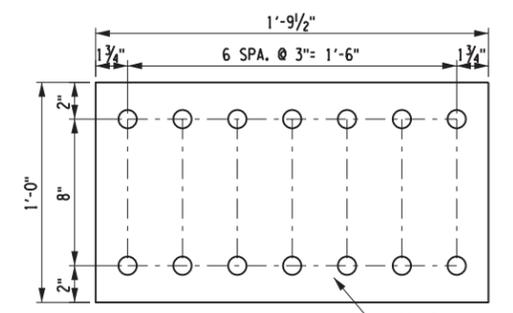
**BOTTOM FLANGE SPLICE PLATE - P7**  
PL 1" x 4" x 3'-7 1/4"  
(8 REQ'D TOTAL)  
(2 REQ'D FOR G1, 4 REQ'D FOR G2 & 2 REQ'D FOR G5)  
(49.1 LB./EA.)



**BOTTOM FLANGE SPLICE PLATE - P7A**  
PL 3/4" x 3 1/2" x 3'-7 1/4"  
(4 REQ'D TOTAL)  
(2 REQ'D FOR G1 & 2 REQ'D FOR G5)  
(32.2 LB./EA.)



**BOTTOM FLANGE SPLICE PLATE - P8**  
PL 1" x 12" x 3'-7 1/4"  
(4 REQ'D TOTAL)  
(1 REQ'D FOR G1, 2 REQ'D FOR G2 & 1 REQ'D FOR G5)  
(147.2 LB./EA.)



**FILL PLATE - FP8**  
PL 1/4" x 12" x 1'-9 1/2"  
(4 REQ'D TOTAL)  
(1 EA. FOR G1 & G5)  
(2 REQ'D FOR G2)  
(18.3 LB./EA.)

**ITEM 564.700002**  
**ITEM 564.700003**

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REVISIONS			
DATE	DESCRIPTION	BY	SYM.



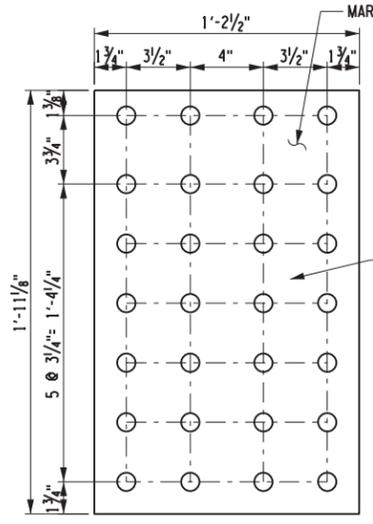
TITLE OF PROJECT  
STEEL REPAIRS TO IMPACT DAMAGE  
LOCATION OF PROJECT  
MP 463.45 BIN 5511490  
SHERIDAN CENTER RD. OVER I-90  
TITLE OF DRAWING  
STEEL PARTS DETAILS  
(1 OF 3)

CONTRACT NUMBER:  
TAB 20-12B  
DATE:  
JUNE 2020  
DRAWING NUMBER:  
S-18

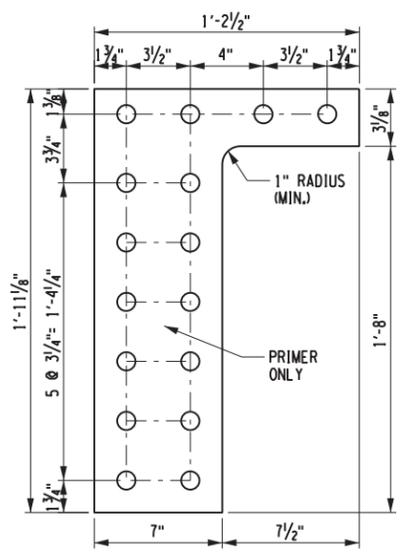


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DATE/TIME = 26-JUN-2020 10:52:15  
USER = S. SCHUKRAFT

CHECKED BY: S. SCHUKRAFT  
DRAFTED BY: J. HARTWELL  
CHECKED BY: G. HOFFMANN  
DESIGNED BY: S. KINSMAN  
DESIGN SUPERVISOR: G. HOFFMANN



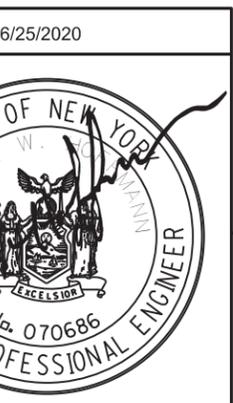
**WEB SPLICE PLATE - P4**  
PL 1/2"x 14 1/2"x 1'-11 1/8"  
(4 REQ'D FOR G2)  
(47.5 LB./EA.)



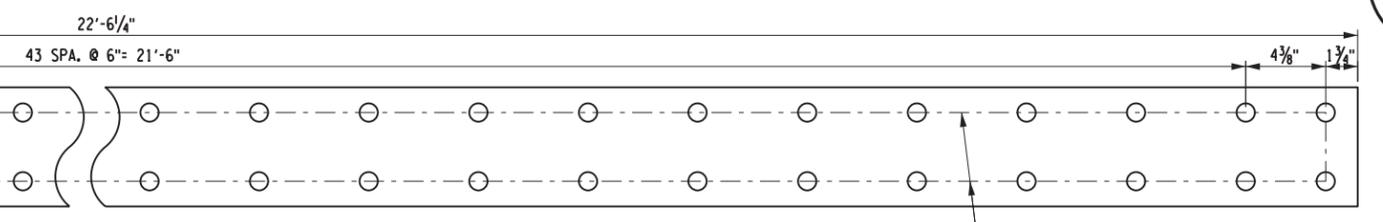
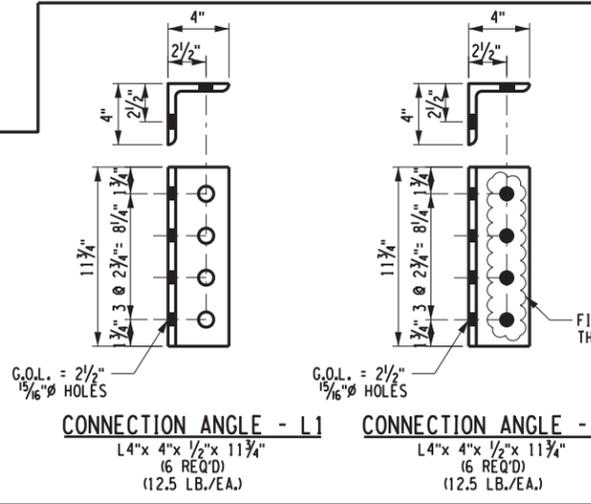
**WEB FILL PLATE - FP4**  
PL 1/4"x 14 1/2"x 1'-11 1/8"  
(2 REQ'D FOR G2)  
(13.3 LB./EA.)

**ITEM 564.700003**  
**SPAN 3, GIRDER G2**

N.S. = NEAR SIDE  
F.S. = FAR SIDE  
B.S. = BOTH SIDES

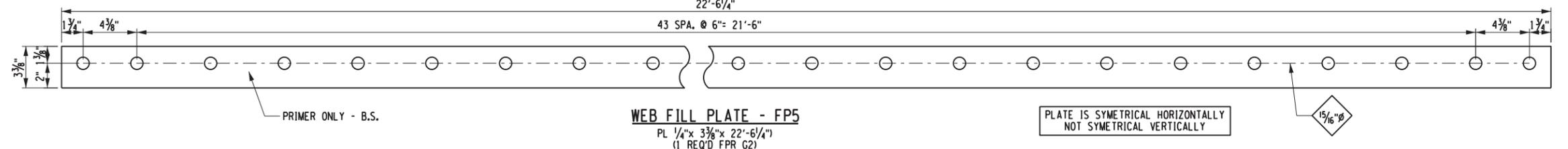


IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



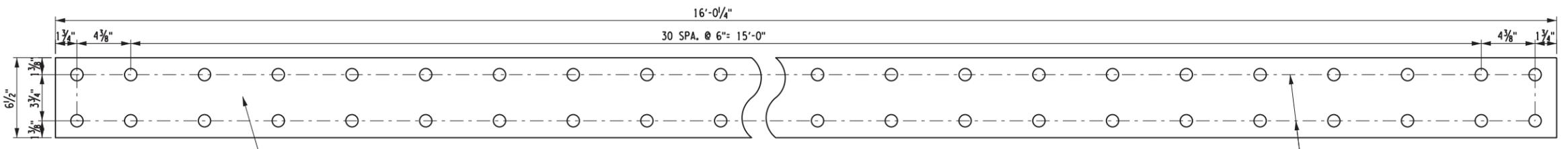
**WEB SPLICE PLATE - P5**  
PL 1/2"x 6 1/2"x 22'-6 1/4"  
(2 REQ'D FOR G2)  
(249.1 LB./EA.)

PLATE IS SYMETRICAL BOTH WAYS



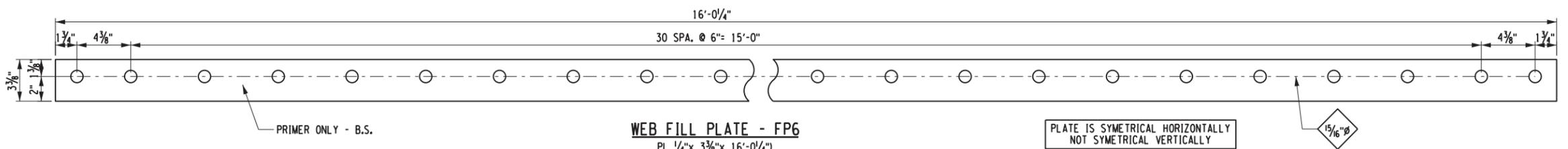
**WEB FILL PLATE - FP5**  
PL 1/4"x 3 3/8"x 22'-6 1/4"  
(1 REQ'D FPR G2)  
(64.7 LB.)

PLATE IS SYMETRICAL HORIZONTALLY  
NOT SYMETRICAL VERTICALLY



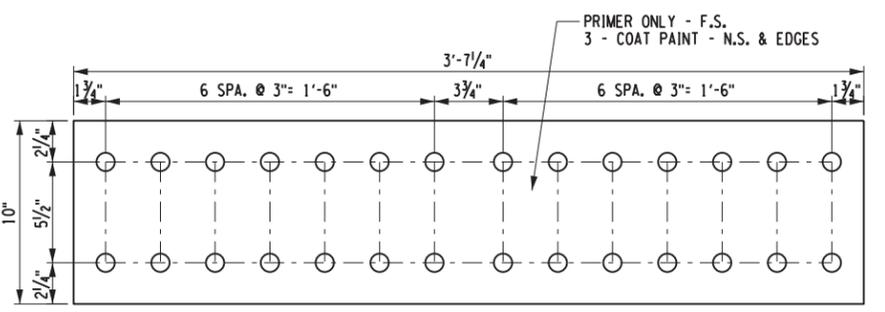
**WEB SPLICE PLATE - P6**  
PL 1/2"x 6 1/2"x 16'-0 1/4"  
(2 REQ'D FOR G2)  
(177.2 LB./EA.)

PLATE IS SYMETRICAL BOTH WAYS

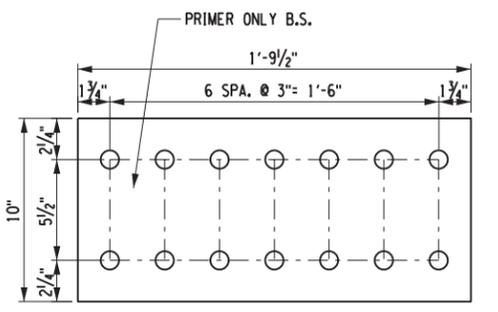


**WEB FILL PLATE - FP6**  
PL 1/4"x 3 3/8"x 16'-0 1/4"  
(1 REQ'D FPR G2)  
(46 LB.)

PLATE IS SYMETRICAL HORIZONTALLY  
NOT SYMETRICAL VERTICALLY



**BOTTOM FLANGE SPLICE PLATE - P9**  
PL 3/4"x 10"x 3'-7 1/4"  
(2 REQ'D TOTAL)  
(1 REQ'D FOR G1, 1 REQ'D FOR G5)  
(92.0 LB./EA.)



**FILL PLATE - FP9\***  
PL 1/4"x 10"x 1'-9 1/2"  
(2 REQ'D)  
(15.2 LB./EA.)

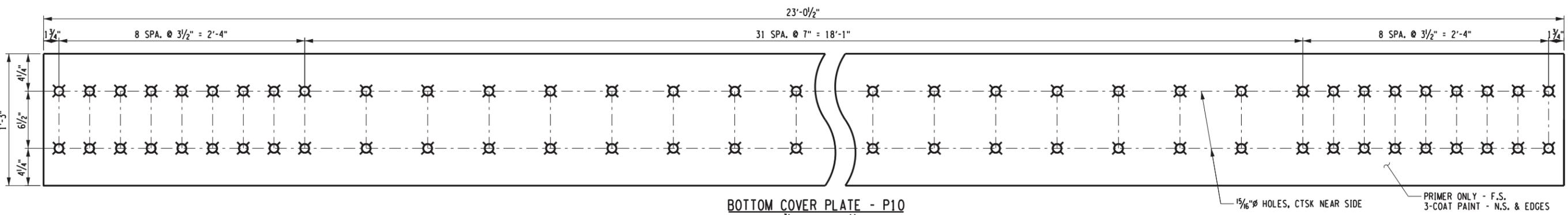
\* THIS FILL PLATE IS ONLY NEEDED AT SOUTH END OF G1 & G5, AND ONLY IF USING THE ALTERNATE WELDED PLATE GIRDER SECTION IS USED, AND THIS ALL OTHER FILLS WILL NOT BE NEEDED.

REVISIONS			
DATE	DESCRIPTION	BY	SYM.

**ITEM 564.700002**  
**SPAN 2, G1 & G5**

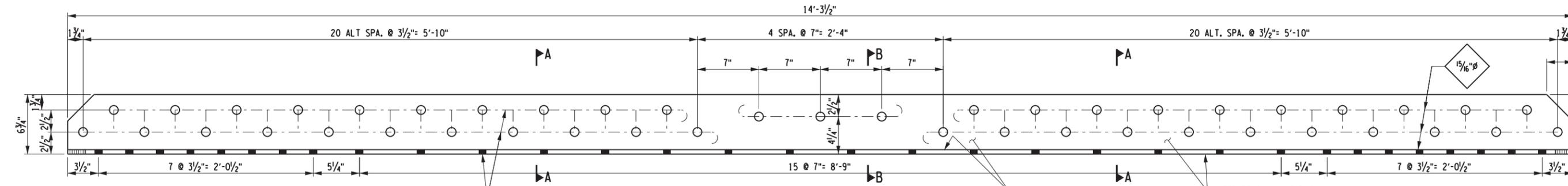


TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING STEEL PARTS DETAILS (2 OF 3)	DRAWING NUMBER: S-19



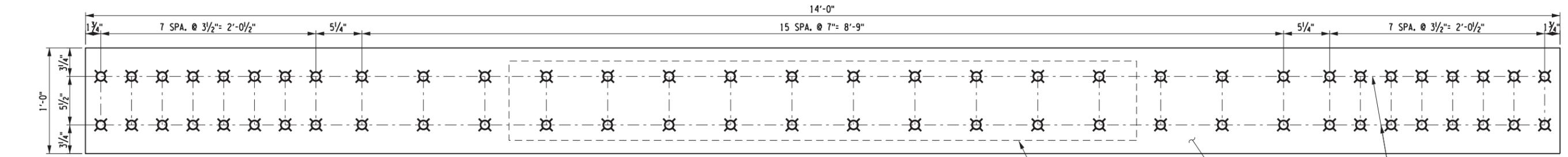
**BOTTOM COVER PLATE - P10**  
 PL 3/4" x 15" x 23'-0 1/2"  
 (1 REQ'D FOR SPAN 3 - G4)  
 (882.1 LB./EACH)

ITEM 564.70004



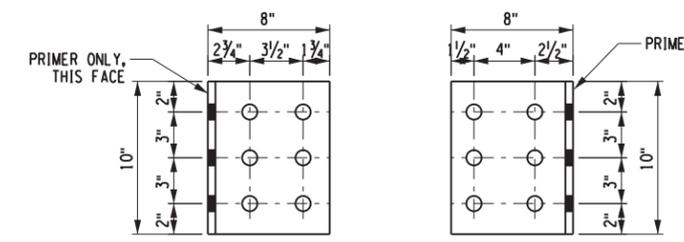
**BENT REPAIR PLATE - BP11 & BP12**  
 PL 1/2" x 10 1/2" x 14'-3 1/2"  
 (2 REQ'D FOR SPAN 2 - G1)  
 (BP11 AS SHOWN, PIECE IS SYMMETRICAL)  
 (BP12 WITHOUT HOLES)  
 (255.3 LB./EACH)

HOLES TO BE SHOP DRILLED IN MARK BP11 ONLY  
 CONTRACTOR MAY ELECT TO PRE-DRILL THE VERTICAL  
 LEG OF PIECE - MARK BP12 AT HIS OPTION.  
 DO NOT PRE-DRILL HORIZONTAL LEG OF BP12

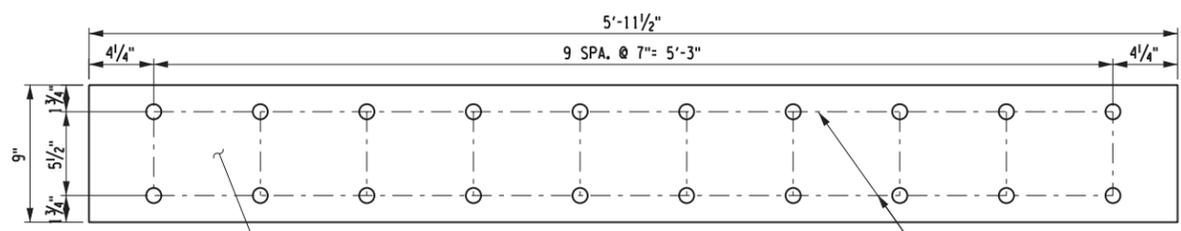


**BOTTOM COVER PLATE - P12**  
 PL 3/4" x 12" x 14'-0"  
 (1 REQ'D FOR SPAN 2 - G1)  
 (428.8 LB./EACH)

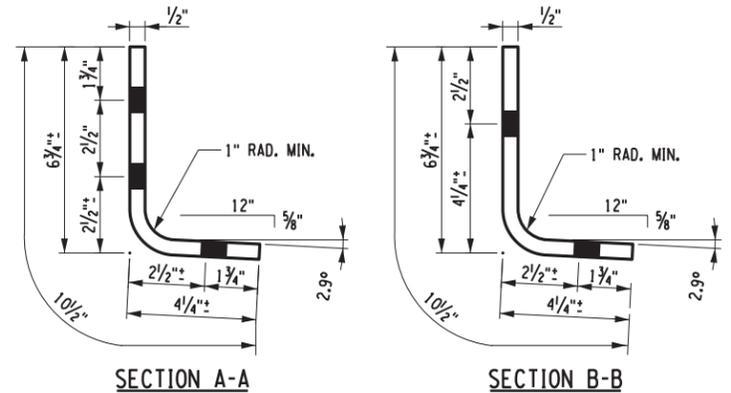
PRIMER ONLY - F.S.\*  
 3-COAT PAINT - N.S. & EDGES  
 \*EXCEPT AVOID PAINTING  
 IN CTSK HOLES



**CONNECTION ANGLE - L3**  
 L 8" x 8" x 1/2" x 0'-10"  
 (1 REQ'D FOR G1 - SPAN 2)  
 22 LB.



**FILL PLATE - FP12**  
 PL 1 1/4" x 9" x 5'-11 1/2"  
 (1 REQ'D FOR SPAN 2 - G1)  
 (228.1 LB./EACH)



DRILL HOLES PRIOR TO BENDING PLATE

ITEM 564.70001

CHECKED BY: S. SCHUKRAFT  
 DRAFTED BY: J. HARTWELL  
 CHECKED BY: G. HOFFMANN  
 DESIGNED BY: S. KINSMAN  
 DESIGN SUPERVISOR: G. HOFFMANN

FILE NAME = V:\Projects\ANY\K5\36292\CADD\MSTN\MP\_463.45\_S-20.dgn  
 DATE/TIME = 26-JUN-2020 10:57:59  
 USER =

ALTERED ON:	AFFIXED ON: 6/25/2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REVISIONS			
DATE	DESCRIPTION	BY	SYM.

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING STEEL PARTS DETAILS (3 OF 3)	DRAWING NUMBER: S-20

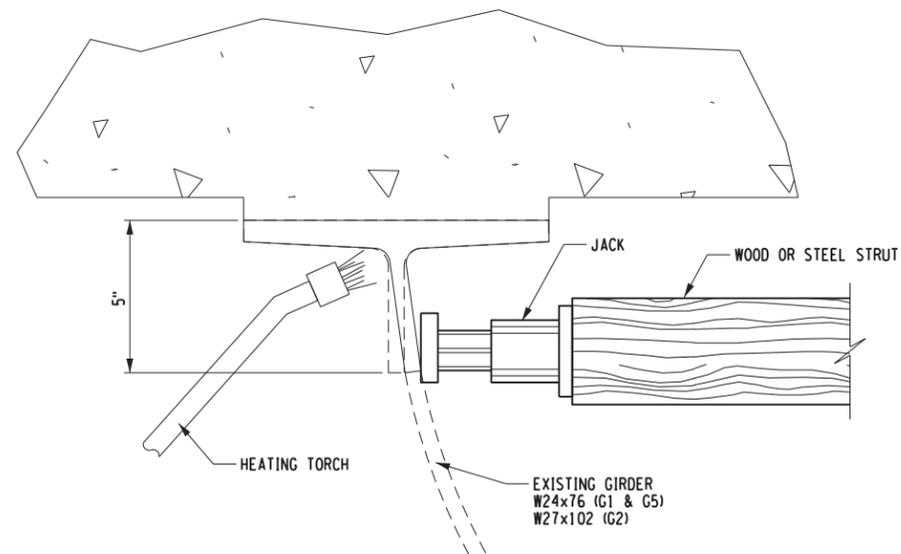
CHECKED BY: S. SCHUKRAFT

DRAFTED BY: J. HARTWELL

CHECKED BY: G. HOFFMANN

DESIGNED BY: S. KINSMAN

DESIGN SUPERVISOR: G. HOFFMANN

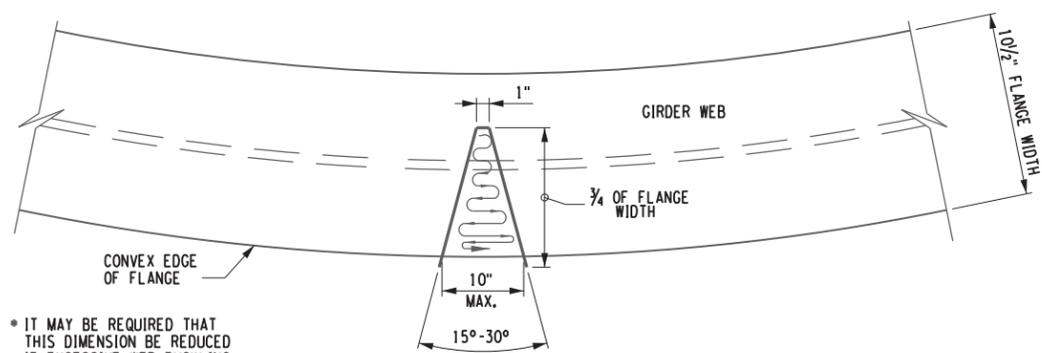


**OPTIONAL HEAT STRAIGHTENING OF WEBS**  
(SPAN 2 - G1, G2, G5 IF REQ'D)

**NOTE:**  
IT IS ANTICIPATED THAT THE MAJORITY OF THE LENGTH OF ALL 3 AFFECTED GIRDERS (G1, G2 & G4) WILL NOT REQUIRE HEAT STRAIGHTENING AND THAT THE WEB WILL BE BENT BACK TO PLUMB AS THE BOLTS ARE TIGHTENED FROM BOTH ENDS STARTING AT THE LESS DISTORTED AREAS.

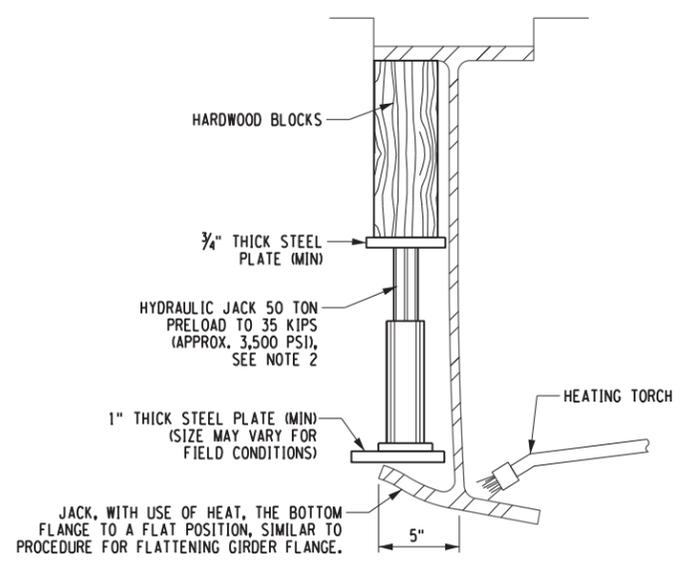
USE THIS DETAIL ONLY WHEN THE WEB IS MORE THAN 3/8" OUT OF PLUMB IN 4", WHERE SIGNIFICANTLY DISTORTED & BADLY OUT OF PLUMB, THE REMAINING 4" OF THE WEB SHOULD BE HEAT STRAIGHTENED AS SHOWN, ONLY INSOFAR AS NECESSARY TO ALLOW FIT-UP OF NEW BEAM SEGMENT AND SPLICE PLATES WITHOUT RELYING TOO MUCH ON CRANKING THE BOLTS TO "BRUTE FORCE" OR COLD WORK THE DISTORTION OUT OF THE WEB.

IF IT BECOMES NECESSARY AND/OR USED, THE COST OF ANY HEAT STRAIGHTENING IS TO BE INCLUDED IN THE APPLICABLE STEEL REPAIR ITEM.

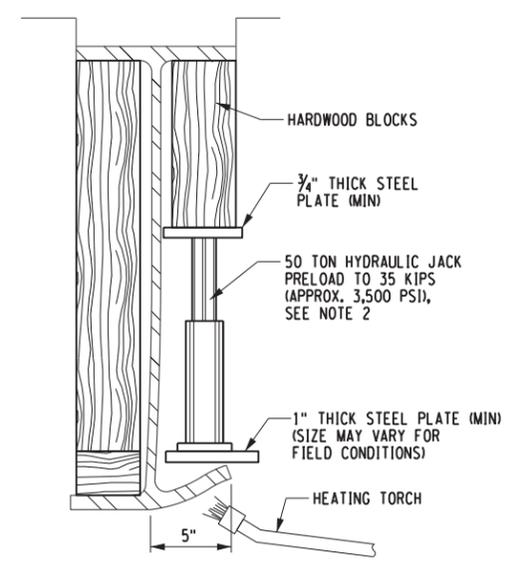


**TYPICAL VEE HEATING PATTERN & PROGRESSION OF HEATING TORCH**  
N.T.S.

\* IT MAY BE REQUIRED THAT THIS DIMENSION BE REDUCED IF EXCESSIVE WEB BUCKLING OCCURS.

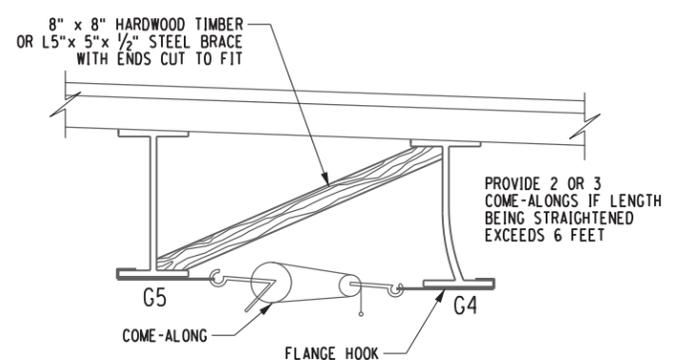


**PROCEDURE FOR REMOVING GIRDER FLANGE TILT**  
SPAN 3 - G4 ONLY  
N.T.S.



**PROCEDURE FOR FLATTENING FLANGE AT IMPACT AREA**  
SPAN 3 - G4 ONLY  
N.T.S.

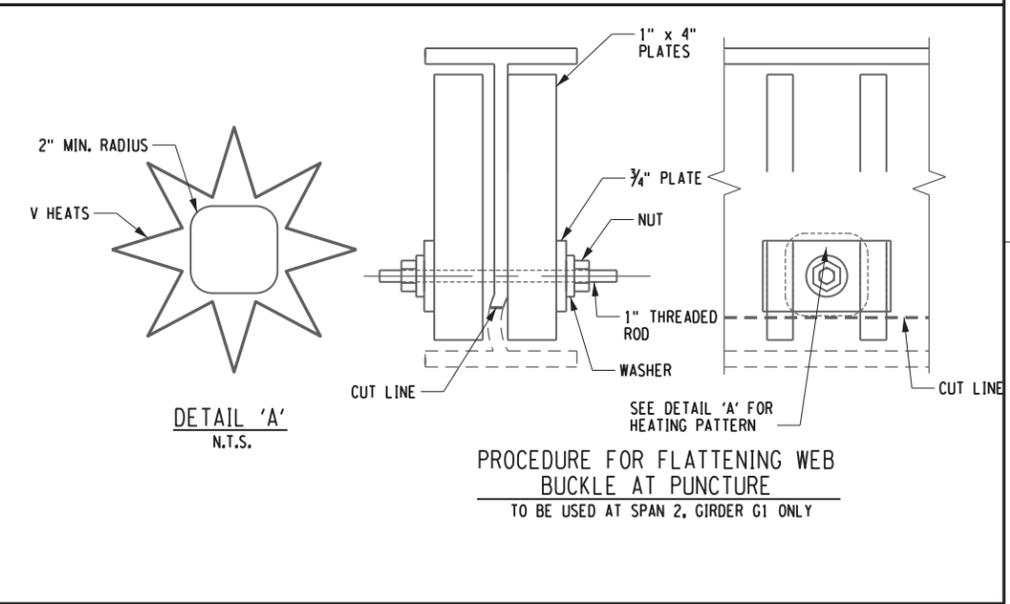
- HEAT STRAIGHTENING PROCEDURES :**
1. POSITION ONE OR MORE JACKING FIXTURES OVER THE DEFORMED AREA OF THE FLANGE AS SHOWN.
  2. PUMP THE JACK TO PROVIDE A PRELOAD BENDING STRESS NOT TO EXCEED 20,000 PSI OR ABOUT 35 KIPS PER JACK. CONTRACTOR SHALL PROVIDE A MAXIMUM DISPLACEMENT DIMENSION AND JACKING PRESSURE, BASED ON SIZE OF ACTUAL JACK USED.
  3. HEAT THE PERIMETER OF THE DEFORMATION TO A TEMPERATURE OF BETWEEN 1100° AND 1150° F. USE TEMPERATURE INDICATING CRAYONS TO VERIFY TEMPERATURE.
  4. MAINTAIN PRESSURE ON THE JACK AS THE STEEL COOLS.
  5. REPEAT STEPS 2 THRU 4 UNTIL THE DEFORMATION IS FLATTENED.
  6. VISUALLY INSPECT THE BASE METAL FOR A DISTANCE OF ONE FOOT BEYOND EACH END OF THE FLATTENED AREA. REPORT ANY CRACKS TO THE NEW YORK STATE THRUWAY AUTHORITY'S METALS ENGINEERING UNIT.
  7. MAGNETIC PARTICLE TEST THE REPAIRED AREA IN ACCORDANCE WITH SECTION 18 OF THE NYS STEEL CONSTRUCTION MANUAL USING THE YOKE TECHNIQUE TO TEST IN THE AC OUTPUT MODE. REPORT ANY CRACK IN ACCORDANCE WITH STEP 6.



**STRAIGHTENING OF BOTTOM FLANGE SWEEP**  
SPAN 3 - G4 ONLY\*  
N.T.S.

\* INCIDENTAL HEATING AND STRAIGHTENING OF SPAN 3, G4 TO REMOVE A PORTION OF THE SWEEP MAY BE REQUIRED, SUCH TO BETTER ALIGN THE NEW COVER PLATE, BUT ONLY INSOFAR AS NEEDED TO ALLOW FOR PROPER FIT-UP & BOLTING OF THE NEW COVER PLATE.

- HEATING NOTES:**
- VEE HEATS**
1. THE INITIAL SEQUENCE OF HEATS SHALL BE APPLIED TO THE CONVEX SIDE OF THE BENT MEMBER AT THE POINT OF IMPACT.
  2. HEATING PATTERNS SHALL BE LOCATED AND SPACED BY THE CONTRACTOR TO SUIT FIELD CONDITIONS.
  3. WHEN AN APPLIED PRELOAD IS USED, ADJUSTMENT TO THE JACKING DEVICES OR COME-ALONGS SHALL NOT BE MADE UNTIL THE STEEL HAS COOLED TO 200°F.
  4. WHEN THE DAMAGED FLANGE IS GREATER THAN 1 INCH IN THICKNESS OR A COVER PLATE IS ATTACHED TO THE DAMAGED FLANGE, HEAT SHALL BE APPLIED TO THE TOP AND BOTTOM OF THE DAMAGED MEMBER (S) USING TWO TORCHES SIMULTANEOUSLY.
  5. IN GENERAL HEATING SHALL BE PERFORMED USING SINGLE ORIFICE TORCHES. THE CONTRACTOR SHALL SELECT TIP SIZES BASED UPON FIELD CONDITIONS WHICH WILL PROMOTE HEATING EFFICIENCY AND PREVENT UNNECESSARY DISTORTION. SEE SUGGESTED TORCH TIPS FOR VARIOUS MATERIAL THICKNESS.
  6. BEGINNING AT THE TRUNCATED END OF THE TRIANGLE, BRING THE STEEL TO A TEMPERATURE BETWEEN 1100°F. AND 1150°F. AS RAPIDLY AS POSSIBLE. HEATING SHOULD PROGRESS SLOWLY TOWARDS THE BASE OF THE TRIANGLE IN A SERPENTINE PATTERN. ONCE HEATING BEGINS TO PROGRESS TOWARDS THE BASE OF THE PATTERN, THE HEATING TORCH SHALL NOT RETURN TO THE APEX OF THE TRIANGLE.



**PROCEDURE FOR FLATTENING WEB BUCKLE AT PUNCTURE**  
TO BE USED AT SPAN 2, GIRDER G1 ONLY

- LINE HEAT, STRIP HEATS, SPOT HEATS**
1. WHEN REQUIRED, THE CONTRACTOR SHALL USE LINE HEATS, STRIP HEATS, SPOT HEATS IN CONJUNCTION WITH VEE HEATS TO HEAT STRAIGHTEN MEMBERS.
  2. ALL LINE HEATING SHALL BE PERFORMED USING SINGLE ORIFICE TORCH TIPS.
  3. TORCH TIP SIZE SHALL BE SELECTED BY THE CONTRACTOR TO PROMOTE HEATING EFFICIENCY AND PREVENT DISTORTION. SEE SUGGESTED TORCH TIPS FOR VARIOUS MATERIAL THICKNESS.
  4. HEATING PATTERNS AND LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR TO SUIT FIELD CONDITIONS.
  5. THE STEEL SHALL BE BROUGHT TO A TEMPERATURE OF BETWEEN 1100°F. AND 1150°F. AS QUICKLY AS POSSIBLE. ONCE AN AREA HAS BEEN HEATED THE TORCH SHALL NOT RETURN TO THE AREA.

NO OTHER HEAT STRAIGHTENING OF SPAN 2 GIRDER G1 IS REQUIRED  
ALL DAMAGE WILL BE CUT OUT

ALL HEAT STRAIGHTENING COSTS SHALL BE INCLUDED IN ITEMS 564.700001 & 564.700004 IF, AND AS APPLICABLE

ALTERED ON:	AFFIXED ON: 6/25/2020
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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

 <b>Thruway Authority</b>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
	LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
	TITLE OF DRAWING HEAT STRAIGHTENING DETAILS	DRAWING NUMBER: S-21
	<small>2300 Main Place Tower Buffalo, NY 14202-3722 716.847.6330 • www.cha.com/nys</small>	

FILE NAME = V:\Projects\NY\536292\CADD\NSTN\MP\_463.45\_Center Road. Rte 91\35\_Bridge Hit Repairs\_MP\_463.45\_S-21.dgn  
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USER = G. HOFFMANN







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 USER = S. SCHUKRAFT

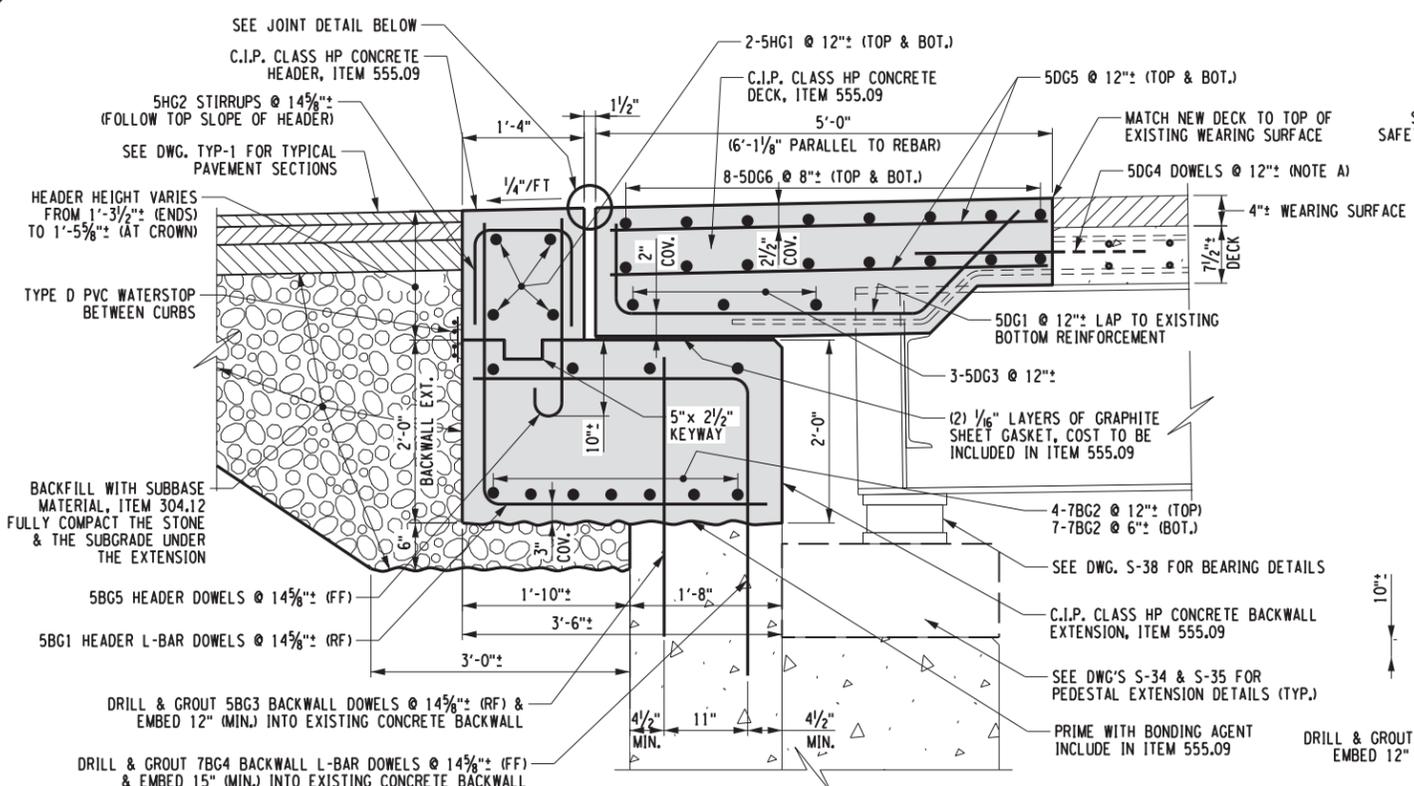
CHECKED BY: S. SCHUKRAFT

DRAFTED BY: J. HARTWELL

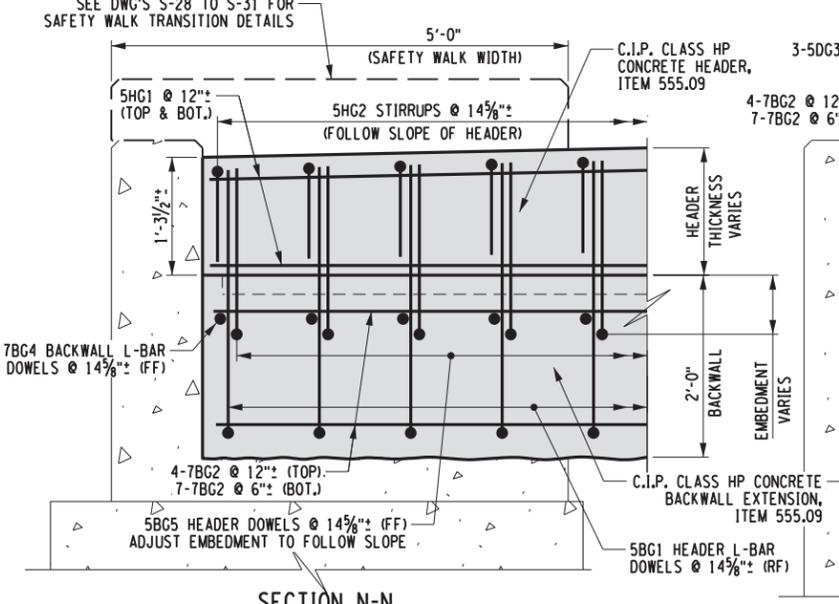
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DESIGNED BY: S. KINSMAN

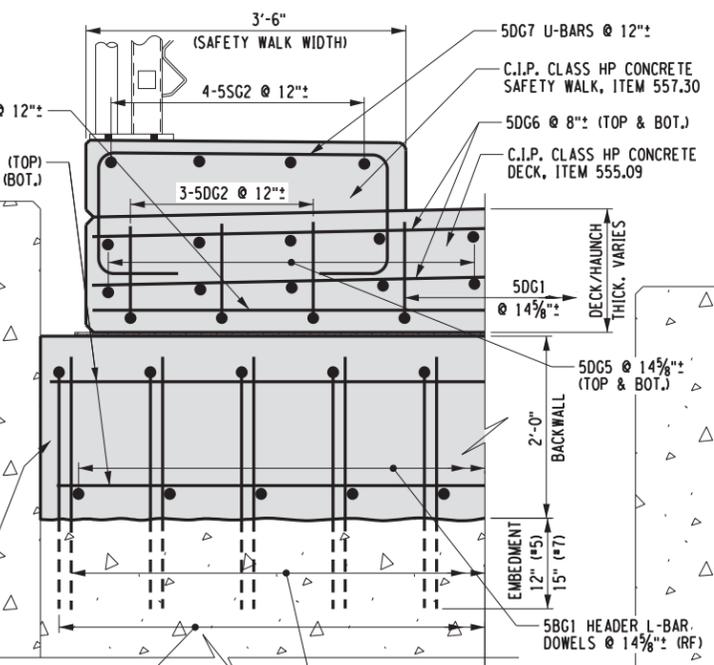
DESIGN SUPERVISOR: G. HOFFMANN



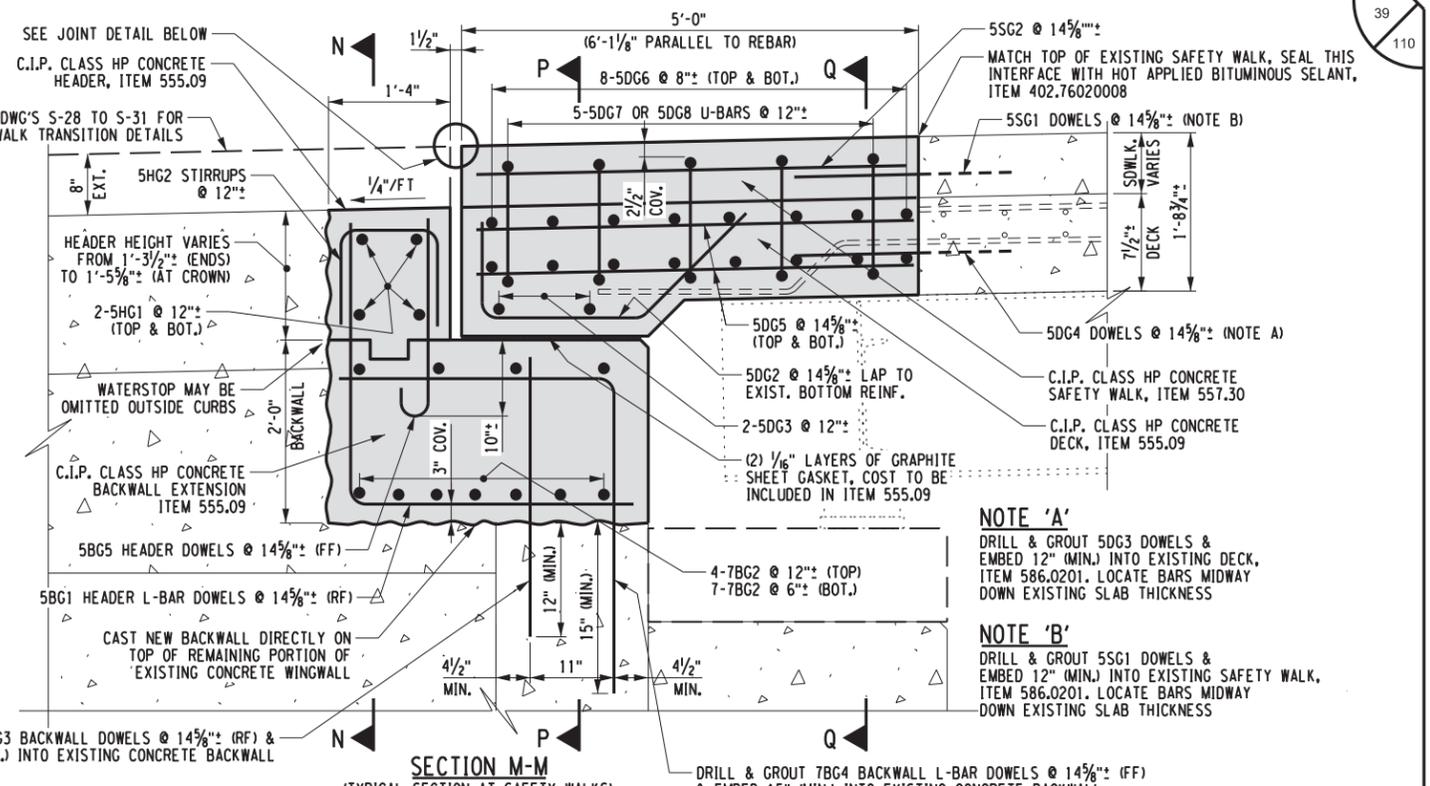
**SECTION L-L**  
(TYPICAL SECTION BETWEEN CURBS)



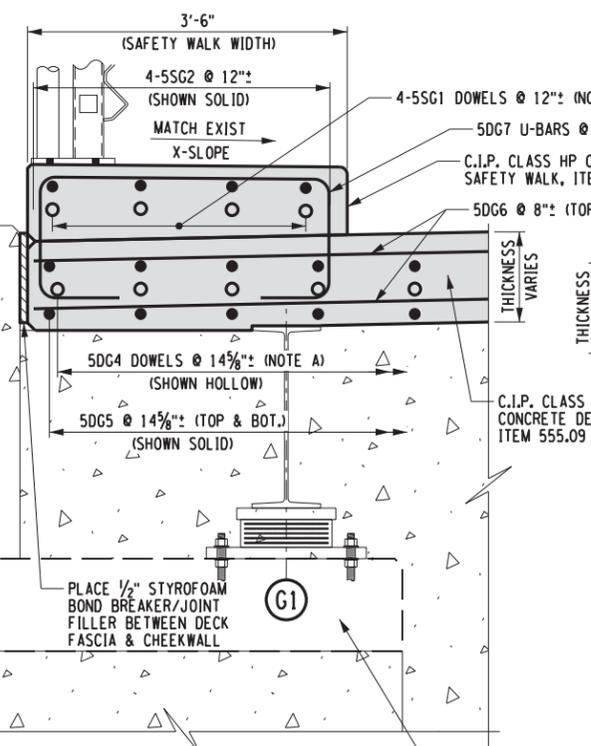
**SECTION N-N**



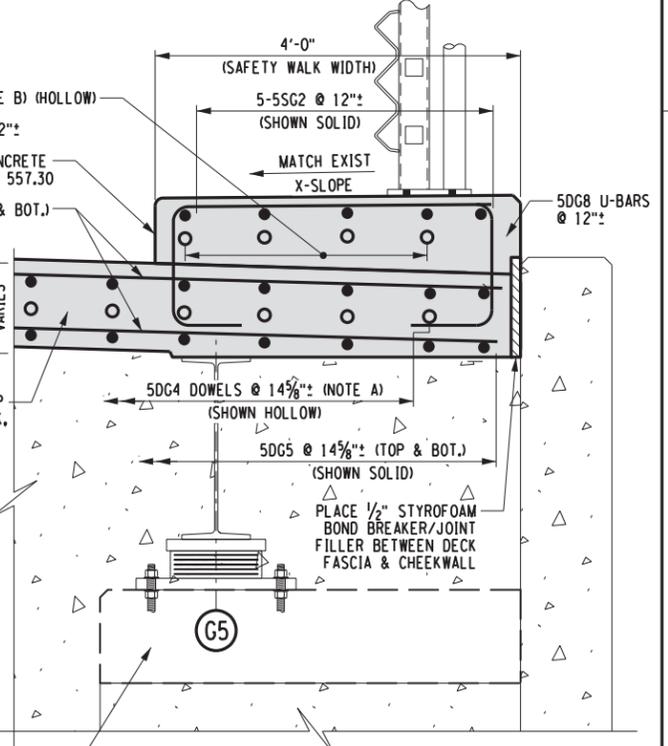
**SECTION P-P**



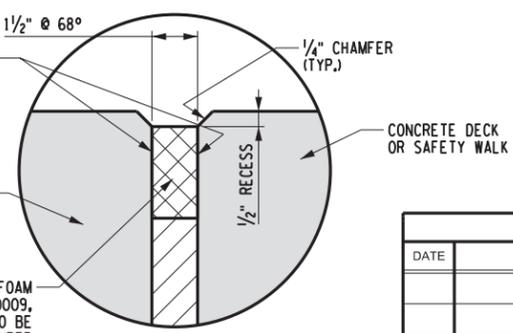
**SECTION M-M**  
(TYPICAL SECTION AT SAFETY WALKS)



**SECTION Q-Q**



**SECTION R-R**



**JOINT DETAIL**  
N.T.S.

**REBAR NOTE**  
 ALL TRANSVERSE REINFORCEMENT IN BACKWALL EXTENSION AND DECK IS SPACED AT 12" MEASURED PERPENDICULAR TO THE BAR ORIENTATION, BUT IS SPACED AT 14" MEASURED ALONG THE LENGTH OF THE BACKWALL.

ALTERED ON: \_\_\_\_\_ AFFIXED ON: 6/25/2020

SIGNATURE: \_\_\_\_\_ STAMP: \_\_\_\_\_

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

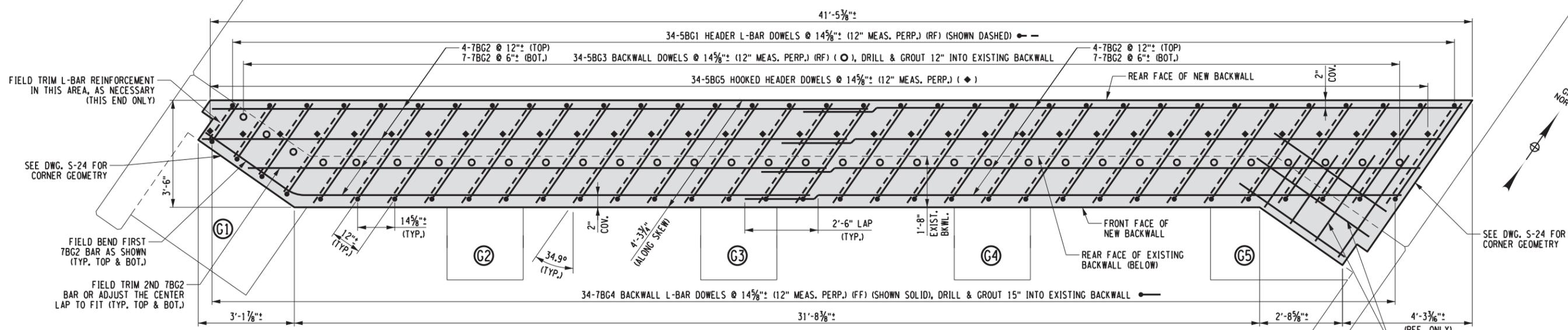
**NEW YORK STATE OF OPPORTUNITY**

**Thruway Authority**

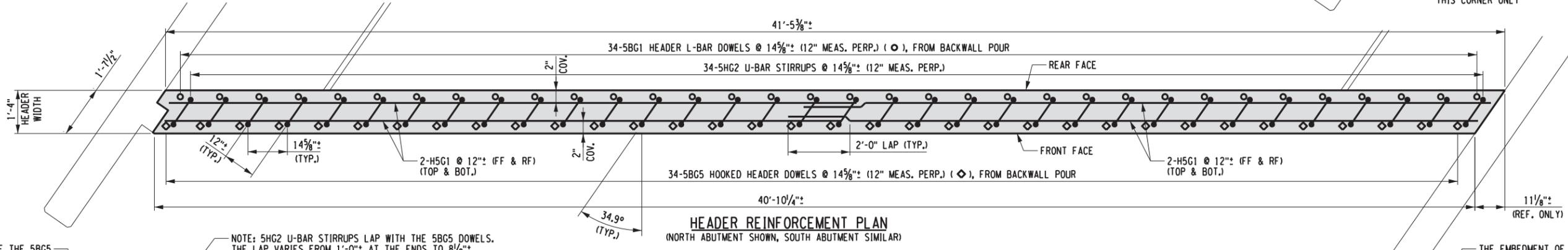
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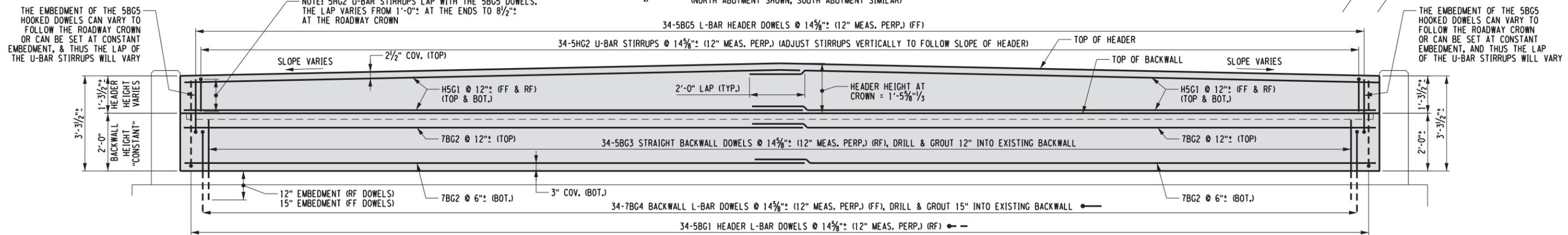
TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING JOINT REPLACEMENT & BACKWALL MODIFICATION REPAIR SECTIONS	DRAWING NUMBER: S-25



**BACKWALL EXTENSION REINFORCEMENT PLAN**  
(NORTH ABUTMENT SHOWN, SOUTH ABUTMENT SIMILAR)



**HEADER REINFORCEMENT PLAN**  
(NORTH ABUTMENT SHOWN, SOUTH ABUTMENT SIMILAR)



**BACKWALL EXTENSION & HEADER REINFORCEMENT ELEVATION**  
(NORTH ABUTMENT SHOWN, SOUTH ABUTMENT SIMILAR)

**REBAR NOTE**  
ALL TRANSVERSE REINFORCEMENT IN BACKWALL EXTENSION AND DECK IS SPACED AT 12\"/>

CHECKED BY: S. SCHUKRAFT  
 DRAFTED BY: J. HARTWELL  
 CHECKED BY: G. HOFFMANN  
 DESIGNED BY: S. KINSMAN  
 DESIGN SUPERVISOR: G. HOFFMANN

FILE NAME = V:\Projects\ANY\K5\36292\CADD\MSTN\MP\_463.45\_S-26.dgn  
 DATE/TIME = 26-JUN-2020 10:58:30  
 USER = G. HOFFMANN

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DATE	DESCRIPTION	BY	SYM.



**TITLE OF PROJECT**  
STEEL REPAIRS TO IMPACT DAMAGE

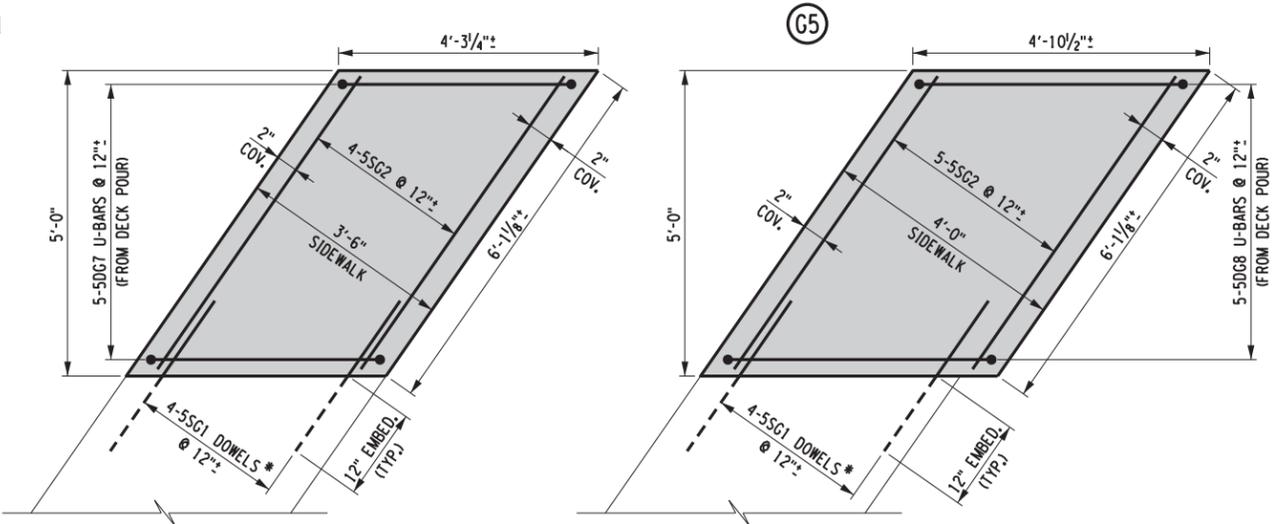
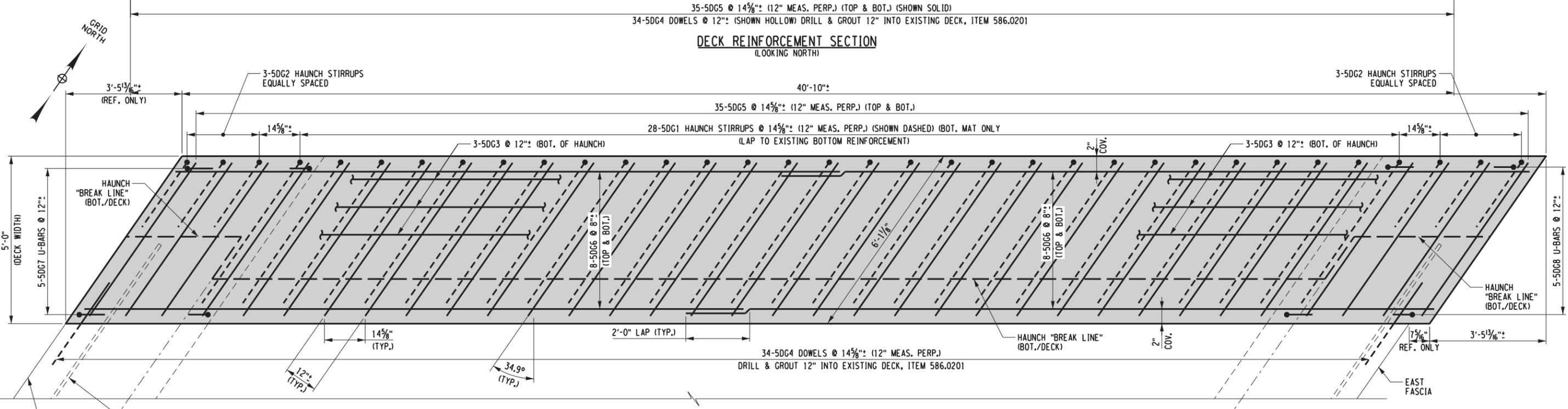
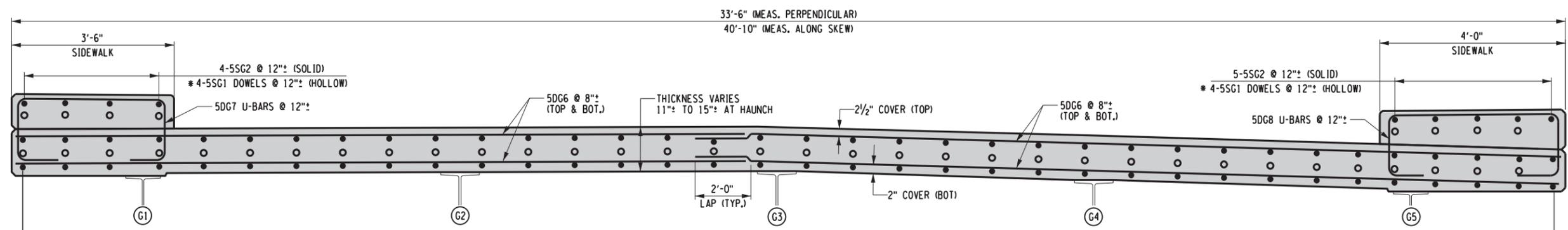
**LOCATION OF PROJECT**  
MP 463.45 BIN 5511490  
SHERIDAN CENTER RD. OVER I-90

**TITLE OF DRAWING**  
BACKWALL EXTENSION & HEADER REINFORCEMENT PLAN

**CONTRACT NUMBER:**  
TAB 20-12B

**DATE:**  
JUNE 2020

**DRAWING NUMBER:**  
S-26



NORTH END SHOWN  
SOUTH END SIMILAR

**REBAR NOTE**  
ALL TRANSVERSE REINFORCEMENT IN BACKWALL EXTENSION AND DECK IS SPACED AT 12\"/>

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 CHECKED BY: G. HOFFMANN  
 DESIGNED BY: S. KINSMAN  
 DESIGN SUPERVISOR: G. HOFFMANN

FILE NAME = V:\Projects\ANY\K5\36292\CADD\MSTN.WP\_463.45\_Center Road\_Rte 91\1.1\_Bridge Hit Repairs\_MP\_463.45\_S-27.dgn  
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 USER = G. HOFFMANN

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SIGNATURE: STAMP:	SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

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TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING DECK REINFORCEMENT PLAN & SECTION	DRAWING NUMBER: S-27

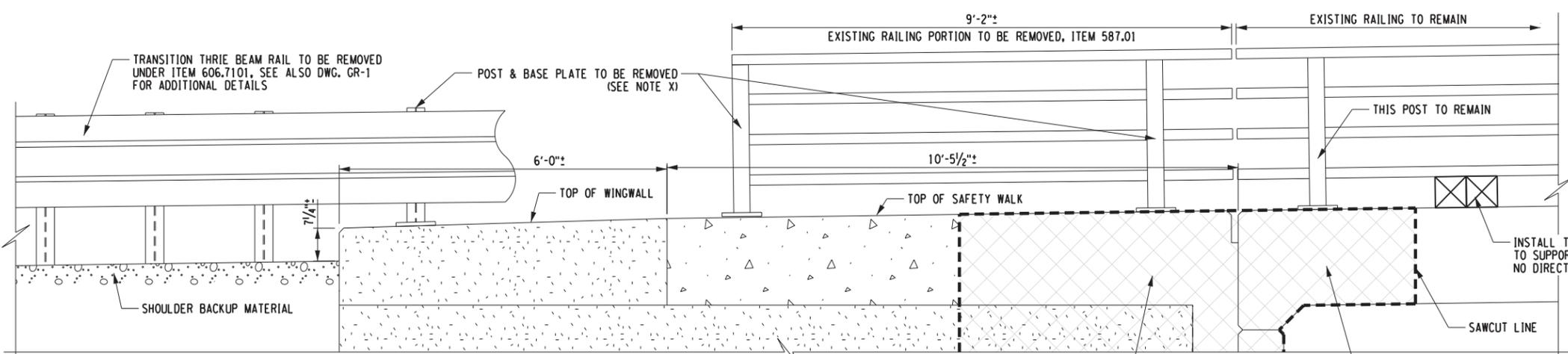
CHECKED BY: S. SCHUKRAFT

DRAFTED BY: J. HARTWELL

CHECKED BY: G. HOFFMANN

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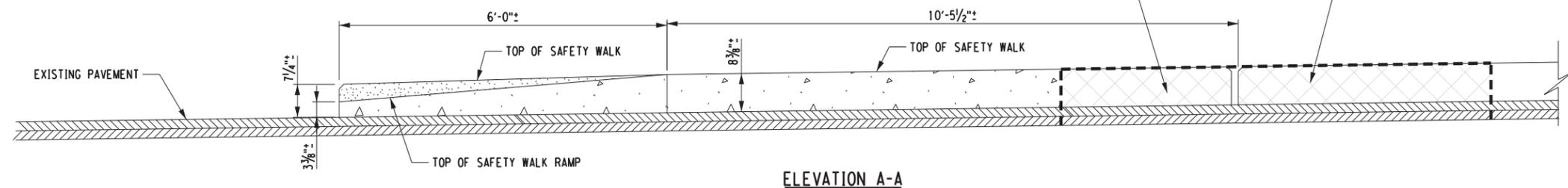
DESIGN SUPERVISOR: G. HOFFMANN



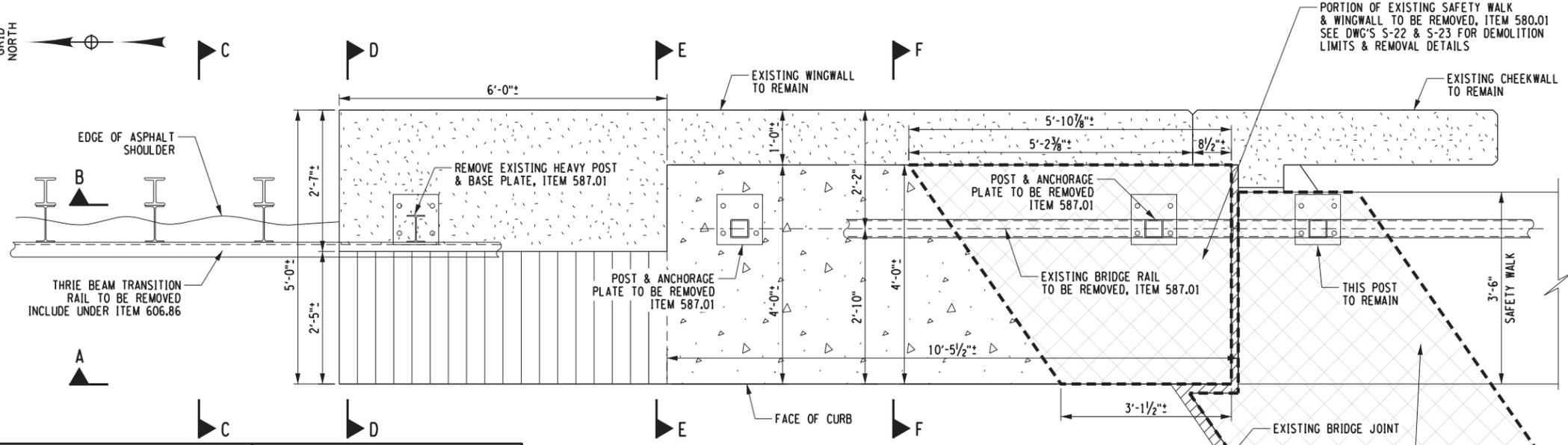
**NOTE X:**  
NO NEED TO GRIND ANCHOR BOLTS FLUSH, SAFETY WALK GETS EXTENDED.

**ELEVATION B-B**

PORTION OF EXISTING SAFETY WALK & WINGWALL TO BE REMOVED, ITEM 580.01 SEE DWG'S S-22 & S-23 FOR DEMOLITION LIMITS & REMOVAL DETAILS



**ELEVATION A-A**

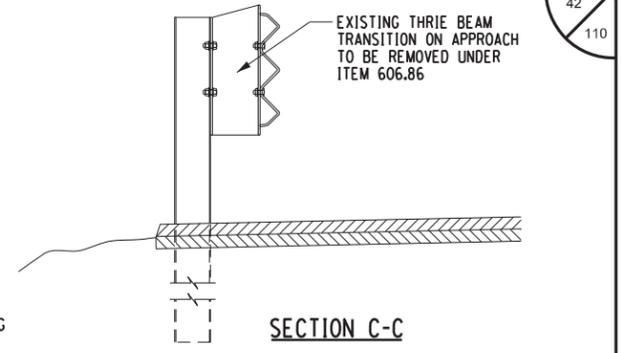


**SAFETY WALK TRANSITION PLAN**

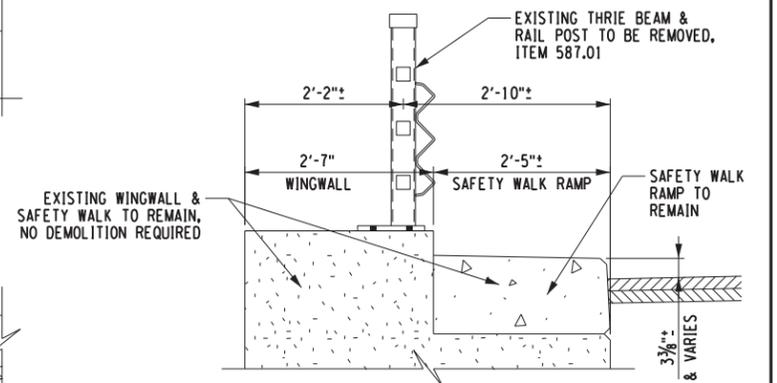
(NORTHEAST SAFETY WALK SHOWN, SOUTHWEST SAFETY WALK SIMILAR)

**EXISTING CONDITION**

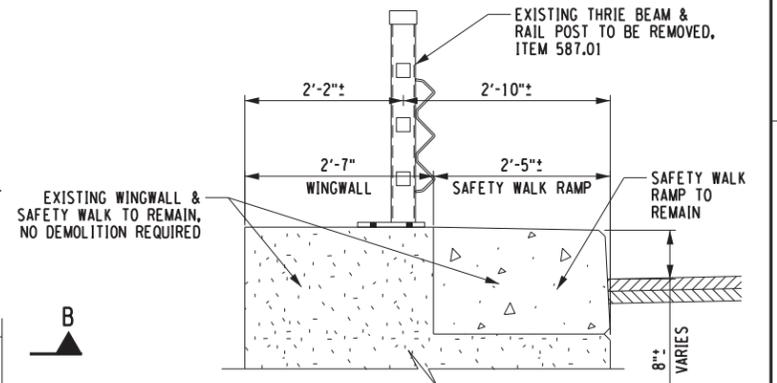
PORTION OF EXISTING DECK & SAFETY WALK TO BE REMOVED, ITEM 580.01 SEE DWG'S S-22 & S-23 FOR ADDITIONAL REMOVAL DETAILS



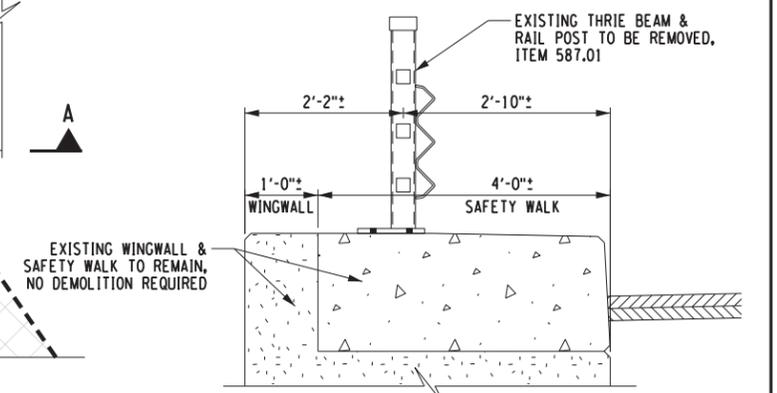
**SECTION C-C**



**SECTION D-D**



**SECTION E-E**



**SECTION F-F**

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

 <b>Thruway Authority</b>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
	LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
	TITLE OF DRAWING NE & SW SAFETY WALK TRANSITION REMOVAL DETAILS	DRAWING NUMBER: S-28

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 USER = S. KINSMAN

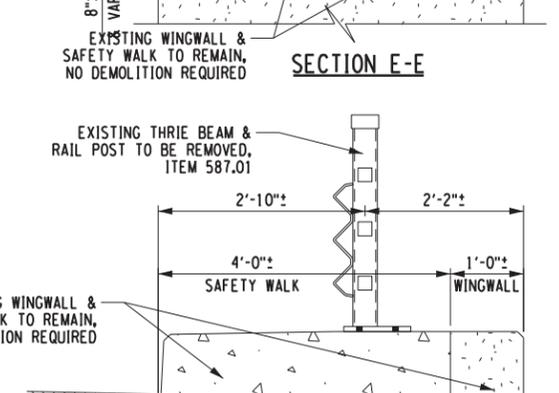
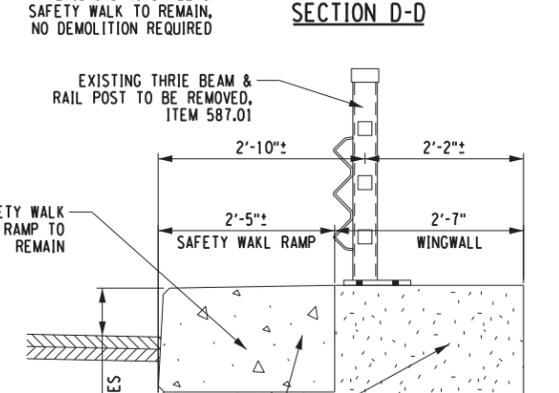
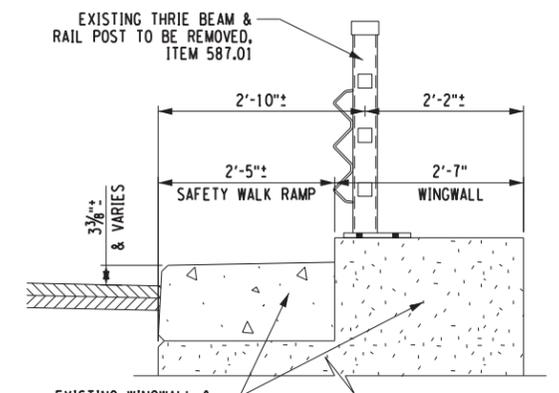
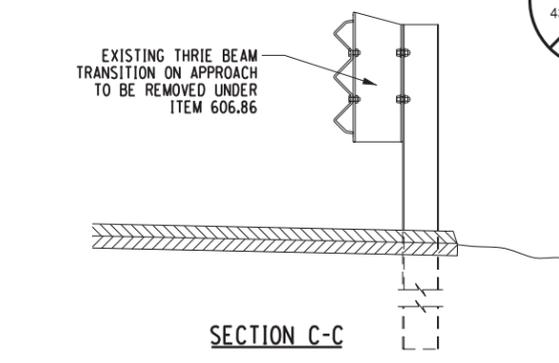
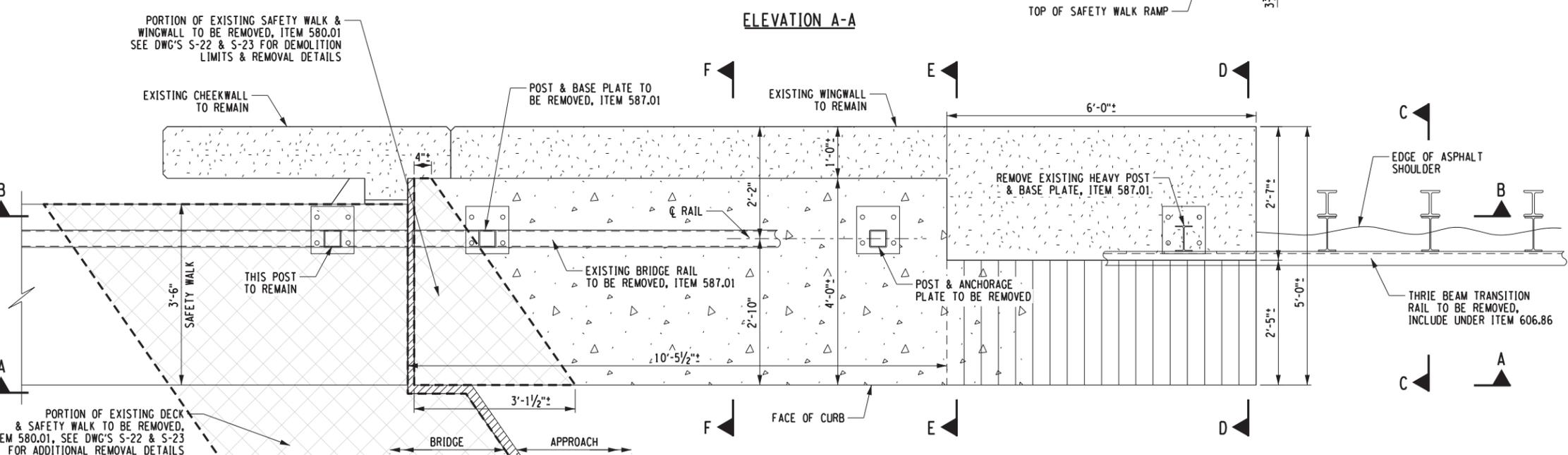
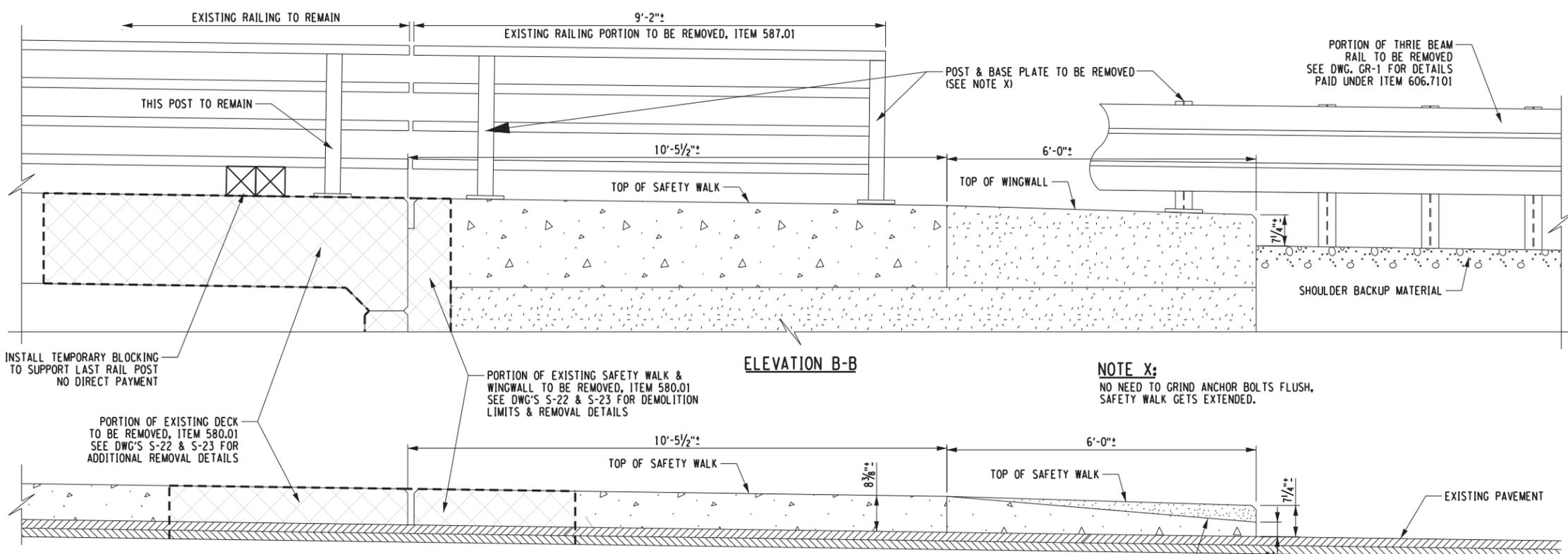
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DRAFTED BY: J. HARTWELL

CHECKED BY: G. HOFFMANN

DESIGNED BY: S. KINSMAN

DESIGN SUPERVISOR: G. HOFFMANN



**SAFETY WALK TRANSITION PLAN**  
(NORTHWEST SAFETY WALK SHOWN, SOUTHEAST SAFETY WALK SIMILAR)

(NORTHWEST SAFETY WALK SHOWN, SOUTHEAST SAFETY WALK SIMILAR)

**EXISTING CONDITION**

ALTERED ON:	AFFIXED ON: 6/25/2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

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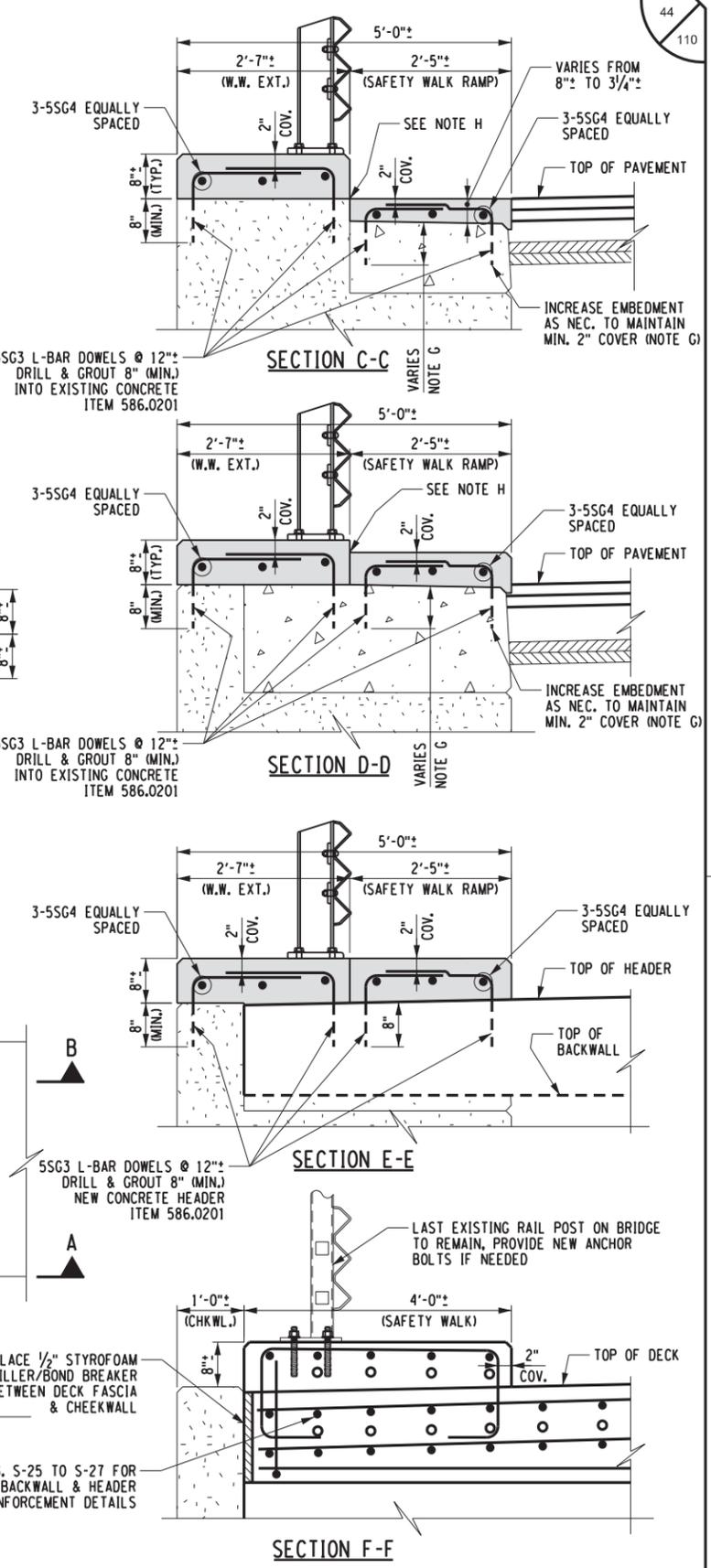
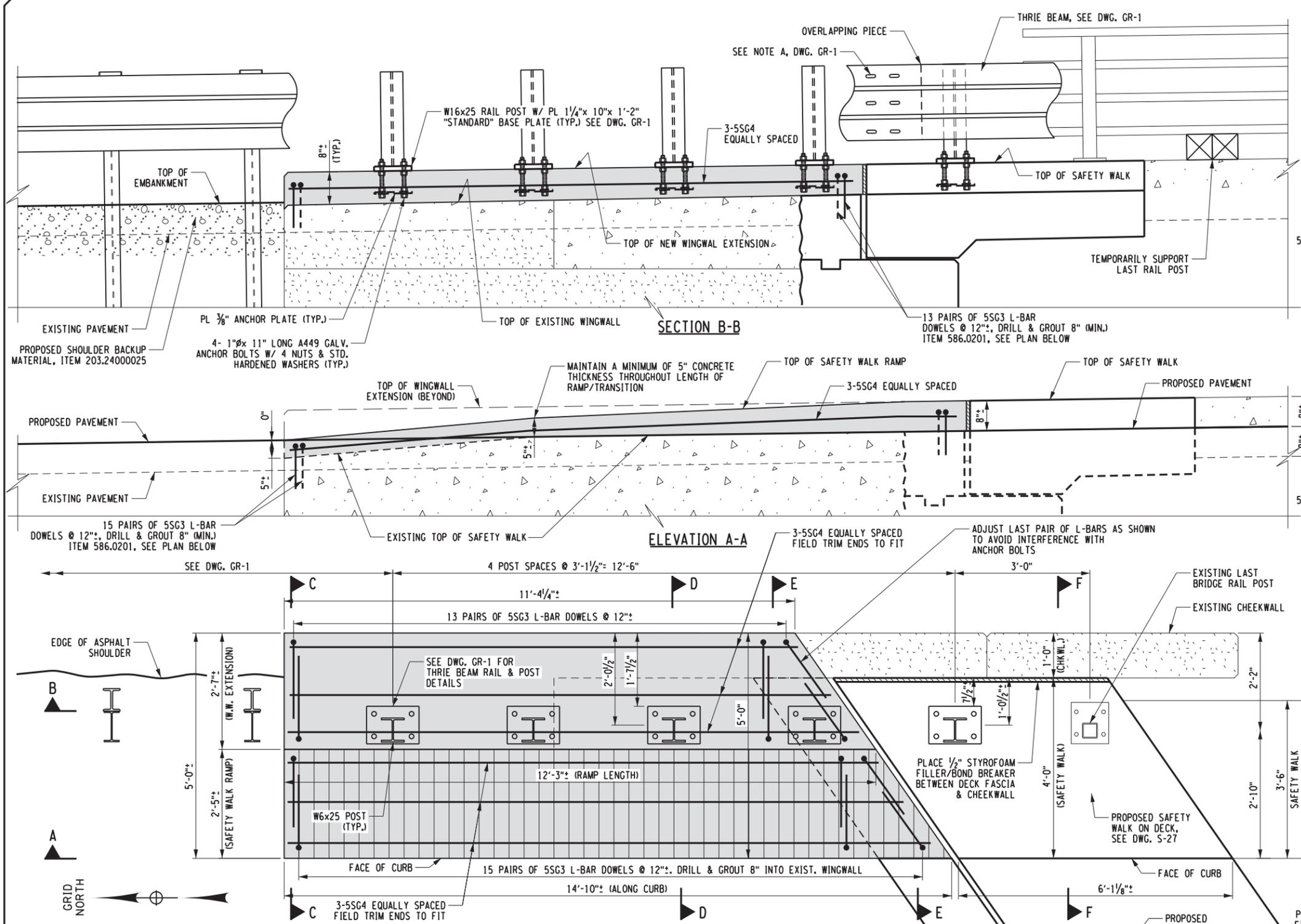
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TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING NW & SE SAFETY WALK TRANSITION REMOVAL DETAILS	DRAWING NUMBER: S-29

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**SAFETY WALK TRANSITION PLAN**  
(NORTHEAST SAFETY WALK SHOWN, SOUTHWEST SAFETY WALK SIMILAR)

**PROPOSED REPAIR**

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**NOTE G:**  
ON THE RAMP ONLY (<8"), INCREASE DRILLING DEPTH FOR 5SG3 L-BARS FROM 8" TO 11" AS NEEDED TO MAINTAIN SUFFICIENT COVER TO LEG OF L-BAR

**NOTE H:**  
SEAL COLD JOINT WITH APPROVED SEALANT OR CAULK, INCLUDE IN ITEM 557.30

REVISIONS			
DATE	DESCRIPTION	BY	SYM.

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TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING NE & SW SAFETY WALK TRANSITION REPAIR DETAILS	DRAWING NUMBER: S-30

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 USER = G. HOFFMANN  
 DESIGN SUPERVISOR: G. HOFFMANN  
 CHECKED BY: S. KINSMAN  
 DRAFTED BY: J. HARTWELL  
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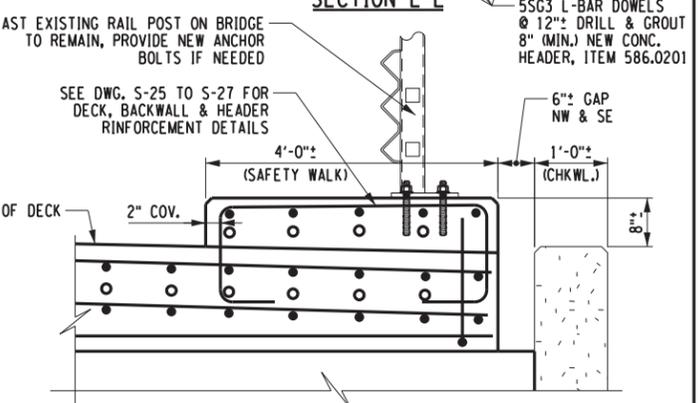
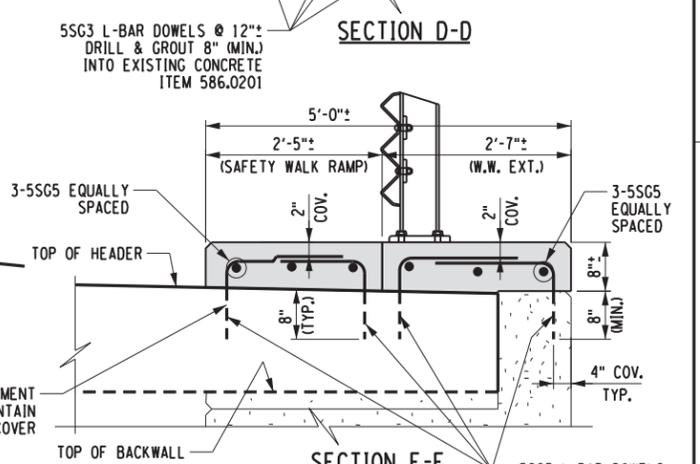
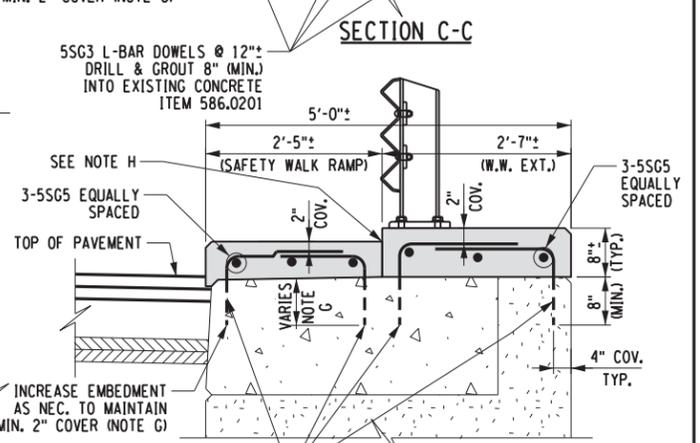
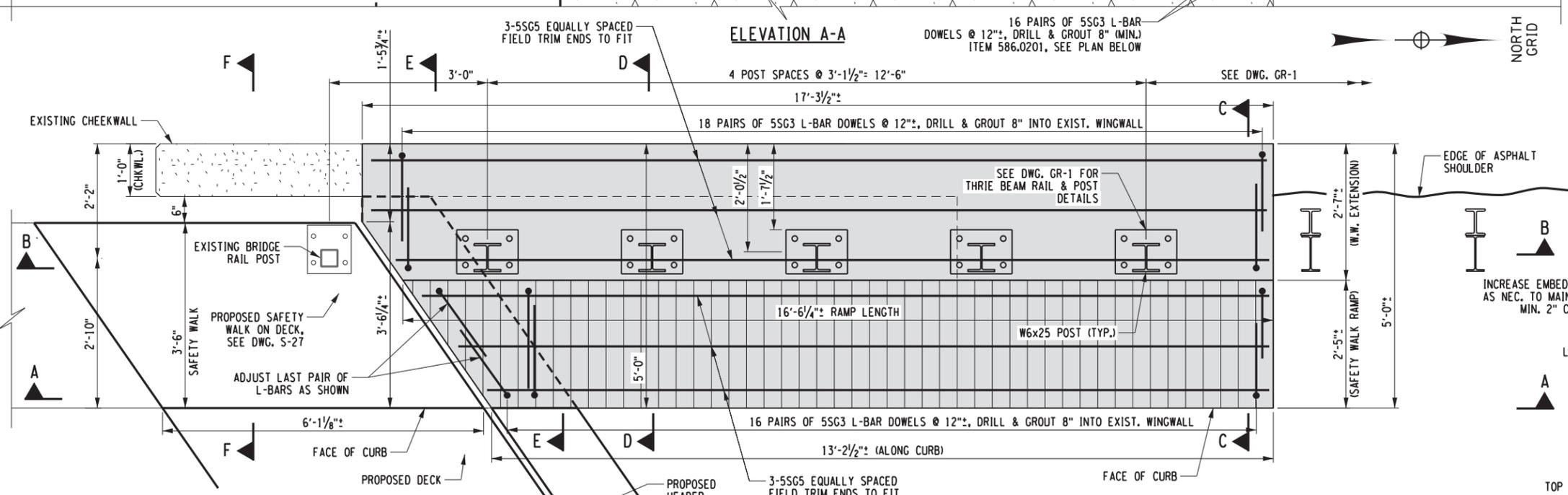
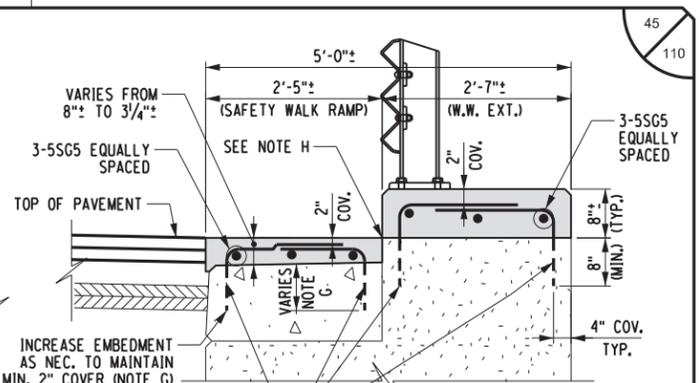
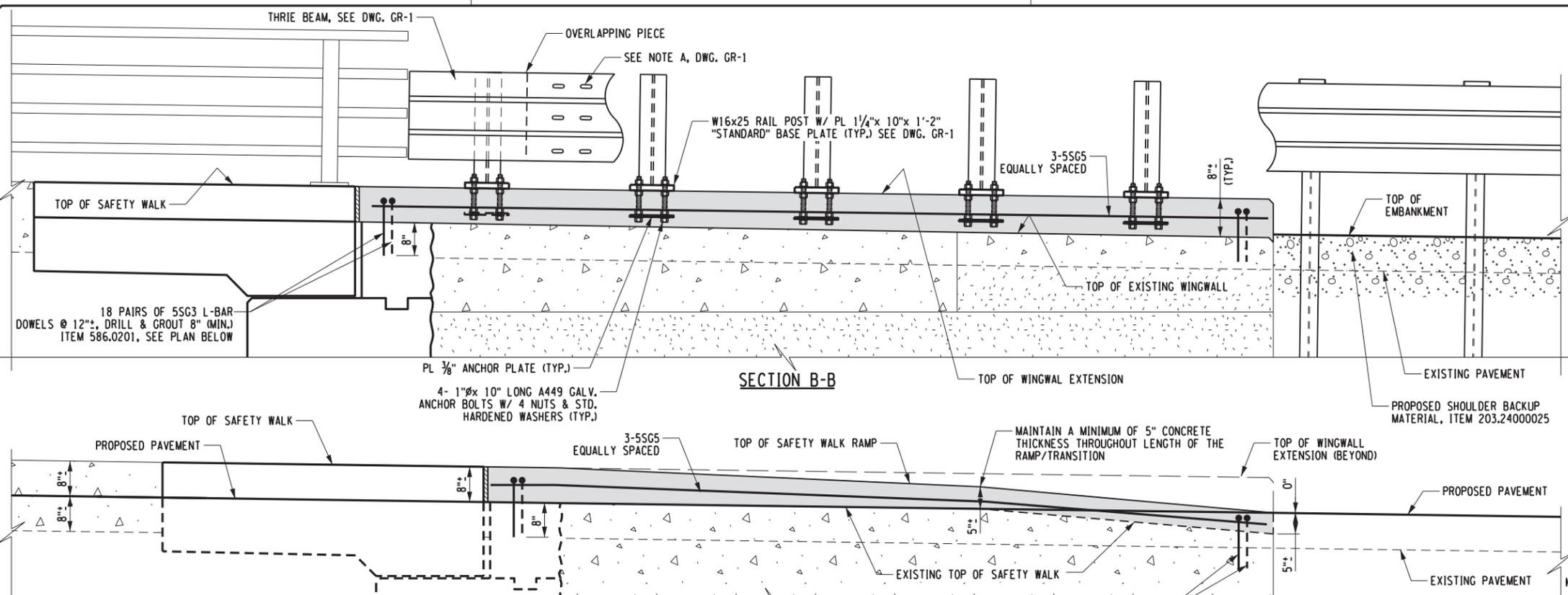
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DRAFTED BY: J. HARTWELL

CHECKED BY: G. HOFFMANN

CHECKED BY: S. KINSMAN

DESIGN SUPERVISOR: G. HOFFMANN



**SAFETY WALK TRANSITION PLAN**  
(NORTHWEST SAFETY WALK SHOWN, SOUTHEAST SAFETY WALK SIMILAR)

**PROPOSED REPAIR**

**NOTE G:**  
ON THE RAMP ONLY (<8"), INCREASE DRILLING DEPTH FOR 5SG3 L-BARS FROM 8" TO 11" AS NEEDED TO MAINTAIN SUFFICIENT COVER TO LEG OF L-BAR

**NOTE H:**  
SEAL COLD JOINT WITH APPROVED SEALANT OR CAULK, INCLUDE IN ITEM 557.30

ALTERED ON: \_\_\_\_\_ AFFIXED ON: 6/25/2020

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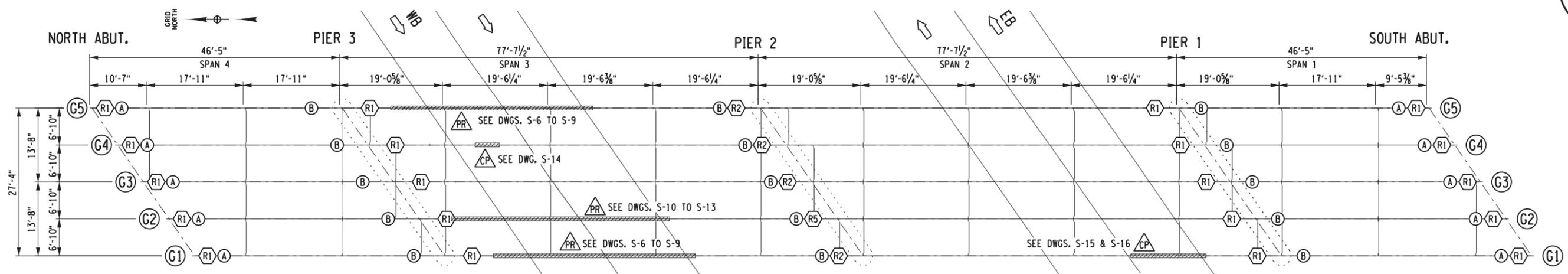
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TITLE OF PROJECT: STEEL REPAIRS TO IMPACT DAMAGE  
LOCATION OF PROJECT: MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90  
TITLE OF DRAWING: NW & SE SAFETY WALK TRANSITION REPAIR DETAILS

CONTRACT NUMBER: TAB 20-12B  
DATE: JUNE 2020  
DRAWING NUMBER: S-31

FILE NAME = V:\Projects\ANY\K5\36292\CADD\MSTN\MP\_463.45\_Bridge Hit Repairs\_MP\_463.45\_S-31.dgn  
DATE/TIME = 26-JUN-2020 10:58:30  
USER = G. HOFFMANN



**JACKING NOTES:**

- A FORMAL JACKING PROCEDURE & WORKING DRAWINGS ARE REQUIRED TO BE SUBMITTED TO THE ENGINEER TWO WEEKS PRIOR TO SCHEDULING THE LIFTING. NO STRUCTURAL LIFTING SHALL COMMENCE UNTIL THE JACKING PROCEDURE IS APPROVED. IN ADDITION, PRIOR TO PERFORMING ANY JACKING, THE SUPERINTENDENT IN CHARGE OF JACKING SHALL REVIEW THE ENTIRE JACKING PROCEDURE WITH THE ENGINEER IN THE FIELD, WHICH SHALL INCLUDE DISCUSSION OF ALL JACKING EQUIPMENT AND OPERATIONS, SEQUENCE OF JACKING, METHOD OF SHORING, INCLUDING ANY INTERMEDIATE STEPS.
- THE PURPOSE OF THE JACKING IS TO REMOVE AND REPLACE THE BEARINGS AT BOTH ABUTMENTS & PIERS AND ALSO TO PERMIT PEDESTAL EXTENSIONS.
- JACKS AND/OR SHORING MAY BE LOCATED DIRECTLY UNDER THE GIRDERS WITHOUT ADDITIONAL STIFFENING, AS LONG AS THE JACKING SOLE PLATES & SHORING SOLE PLATES ARE THICK ENOUGH TO DISTRIBUTE THE LOAD WITHOUT CAUSING ANY LOCAL DISTORTION TO THE FLANGE OR WEB, OTHERWISE A TEMPORARY WOOD OR PERMANENT STEEL BEARING STIFFENER SHALL BE REQUIRED.
- DUE TO THE PEDESTAL EXTENSIONS, THERE WILL NOT BE ROOM FOR THE SHORING ON THE PEDESTALS, THUS THE SHORING WILL NEED TO BE LOCATED JUST IN FRONT OF THE ABUTMENT & PIERS AND/OR SUPPORTED ON CRIBBING ON THE ABUTMENT FOOTING OR PIER CAP BEAM.
- THE CONTRACTOR MAY ELECT TO LOCATE THE JACKS AND/OR SHORING DIRECTLY UNDER THE GIRDERS, JACKING FROM THE GROUND BELOW, OR UNDER NEW JACKING DIAPHRAGMS SUPPORTED ON THE BRIDGE SEAT. NOTE THAT THE END X-FRAMES AND EXISTING DIAPHRAGMS HAVE INSUFFICIENT CAPACITY AND WILL REQUIRE SIGNIFICANT STRENGTHENING (BY ADDING A JACKING STRUT/TRANSFER BEAM) TO PERMIT LIFTING THE BRIDGE WEIGHT USING THE END DIAPHRAGMS.
- THE CONTRACTOR, OR HIS ENGINEER SHALL ULTIMATELY DETERMINE THE JACKING & SHORING LOADS TO BE USED BASED ON THE LEVEL OF CONSTRUCTION ACTIVITY ANTICIPATED CONCURRENT WITH THE BRIDGE BEING SHORED. UNDER NO CIRCUMSTANCE, SHALL THE CONTRACTOR DRIVE HEAVY EQUIPMENT (e.g. DUMP TRUCKS, CONCRETE TRUCKS) ONTO THE BRIDGE WHILE THE GIRDERS AT EITHER ABUTMENT OR PIER ARE IN A RAISED POSITION, AND ONLY SUPPORTED BY HYDRAULIC JACKS. ALL RAISED GIRDERS SHALL BE FULLY SHORED IN ACCORDANCE WITH THE APPROVED JACKING PROCEDURE PRIOR TO DRIVING HEAVY EQUIPMENT ON THE BRIDGE.

**BRIDGE RAISING & SHORING NOTES:**

- IT IS THE INTENTION OF THIS PROJECT TO RAISE THE BRIDGE 8" EXACTLY, RAISING AND SHORING ALL 5 GIRDERS AT ALL 5 SUBSTRUCTURES.
- IT IS STRONGLY RECOMMENDED THAT ALL 5 GIRDERS AT ALL 5 SUBSTRUCTURES BE RAISED SIMULTANEOUSLY, AND AS SUCH, THE CONTRACTOR WOULD NEED TO SUPPLY 25 JACKS, 5 MANIFOLDS, 15 SHORING COLUMNS & 10 STUB COLUMNS.
- ADDITIONAL JACKS MAY BE REQUIRED IF USING 2 JACKS PER COLUMN, DEPENDING ON THE METHOD OF JACKING / SHORING.
- ALL JACKS AT A SUBSTRUCTURE SHALL BE CONTROLLED BY A SINGLE MANIFOLD AND/OR SINGLE PRESSURE GAUGE TO ENSURE UNIFORM LIFTING, EXCEPT IT IS NOTED THAT THE FASCIA GIRDERS CARRY CONSIDERABLY LARGER DEAD LOADS AND THUS THE FASCIA GIRDERS WILL REQUIRE GREATER JACKING PRESSURE TO OBTAIN THE SAME RAISE AND TO ENSURE THAT ALL GIRDERS ARE RAISED UNIFORMLY.
- PROVIDE A CERTIFIED PRESSURE GAUGE AT EACH SUBSTRUCTURE (5 REQUIRED), UNLESS JACKING EACH SUBSTRUCTURE SEPARATELY.
- RAISE ALL GIRDERS AT ALL 5 LOCATIONS SIMULTANEOUSLY, THUS THERE MUST BE COMPETENT PERSONNEL AT ALL 5 SUBSTRUCTURES THAT ARE IN COMMUNICATION WITH EACH OTHER.
- IF NOT RAISED SIMULTANEOUS, RAISE ONE SUBSTRUCTURE NO MORE THAN 1" AT A TIME PRIOR TO THE ADJACENT SUBSTRUCTURE BEING RAISED. IE, PIER 1 MUST STAY WITHIN 1" OF PIER 2 & SOUTH ABUT; PIER 2 MUST STAY WITHIN 1" OF PIER 1 & PIER 3.
- THE USE OF TRANSFER BEAMS OR BASE BEAMS AT THE GIRDER LEVEL OR GROUND LEVEL MAY BE EMPLOYED TO REDUCE THE NUMBER OF SHORING POSTS OR REDUCE THE NUMBER OF JACKS REQUIRED.
- GIRDERS AT ANY SUBSTRUCTURE UNIT SHALL BE RAISED SIMULTANEOUS, USING JACKS OF THE SAME SIZE AND USING A MANIFOLD TO MAINTAIN THE SAME PRESSURE IN EACH JACK. IF JACKING ANY GIRDER SEPARATE, TO AVOID DAMAGING THE DECK OR DIAPHRAGMS, ABSOLUTELY NO GIRDER MAY BE RAISED ANY MORE THAN 1/8" HIGHER THAN AN ADJACENT GIRDER.
- USE 1" OR 2" THICK SHIMS FOR EACH INTERMEDIATE JACKING STEP UNTIL THE 8" RAISE IS ACHIEVED. PRIOR TO JACKING, RECORD ALL CLEAR DISTANCE FROM BRIDGE SEAT TO BOTTOM OF STEEL IN A TABLE AND PROVIDE A METHOD OF MONITORING THE CURRENT INCREASE / RAISE OF ALL BEARINGS DURING THE JACKING OPERATION.
- IF USING JACKING BOXES OR JACKING HOUSES, NARROW SHIMS UNDER THE FLANGES WILL NOT BE PERMITTED BECAUSE THE TOTAL RAISE IS 8" AND AN 8" STACK OF NARROW SHIMS WILL BE UNSTABLE. MINIMUM SHIM WIDTH SHOULD BE 6" UNDER EACH SUPPORTING PORTION, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- ONCE THE BRIDGE IS RAISED ALL SHIM STACKS UNDER SHORING COLUMNS MUST BE TACKED TOGETHER
- BRACE THE COLUMNS TO EACH OTHER OR TO THE BRIDGE SEAT OR FOOTING OR CHEEKWALL TO PREVENT SIDESWAY OR TRANSLATION.
- BRIDGE MUST BE CLOSED TO TRAFFIC PRIOR TO ANY JACKING.
- IT IS RECOMMENDED TO PERFORM BOTH SOUTH & NORTH PARTIAL BACKWALL DEMOLITIONS PRIOR TO JACKING TO ELIMINATE ANY JOINT RESTRAINT. IMMEDIATELY PRIOR TO JACKING, CUT FREE THE ANCHOR BOLTS OR BEARING WELDS TO REDUCE THE BEARING RESTRAINT.
- CONTRACTOR MAY PERFORM THE STEEL REPAIRS PRIOR TO JACKING, OR AFTER PEDESTALS ARE CONSTRUCTED, BUT THE STEEL REPAIRS CANNOT OCCUR DURING JACKING OR WHILE THE BRIDGE IS PARTIALLY RAISED.

**FRAMING & LIFTING PLAN**

SCALE: 1" = 20'-0"

**PAYMENT NOTES:**

- 25 BEARINGS WILL BE REMOVED AND 25 BEARINGS WILL BE INSTALLED.
- THE COST OF BEARING REMOVAL SHALL BE INCLUDED IN THE STRUCTURAL LIFTING ITEMS:
 

SOUTH ABUTMENT:	585.01	5 EACH
PIER 1:	585.02	5 EACH
PIER 2:	585.02	5 EACH
PIER 3:	585.02	5 EACH
NORTH ABUTMENT:	585.01	5 EACH
- NEW BEARINGS WILL BE PAID UNDER ITEMS:
 

SOUTH ABUTMENT:	565.2032	5 EACH
PIER 1:	565.2033	5 EACH
PIER 2:	565.2024	5 EACH
PIER 3:	565.2033	5 EACH
NORTH ABUTMENT:	565.2032	5 EACH
- ALL COSTS ASSOCIATED WITH JACKING AND SHORING THE GIRDERS, INCLUDING ANY TEMPORARY CRIBBING, STIFFENERS, JACKING STRUTS/FRAMES OR OTHER STRENGTHENING SHALL BE INCLUDED IN ITEM 585.01 OR 585.02.
- ALL COSTS ASSOCIATED WITH REMOVING THE EXISTING BEARINGS & ANCHOR BOLTS SHALL ALSO BE INCLUDED IN ITEM 585.01 OR 585.02.

**EXISTING GIRDER SCHEDULE**

GIRDER	SPAN 1	OVER PIER 1	SPAN 2	OVER PIER 2	SPAN 3	OVER PIER 3	SPAN 4
G1	W24x76	W24x100	W24x76	W24x145	W24x76	W24x100	W24x76
G2	W27x102	W27x102	W27x102	W27x160	W27x102	W27x102	W27x102
G3	W27x102	W27x102	W27x102	W27x160	W27x102	W27x102	W27x102
G4	W27x102	W27x102	W27x102	W27x160	W27x102	W27x102	W27x102
G5	W24x76	W24x100	W24x76	W24x145	W24x76	W24x100	W24x76

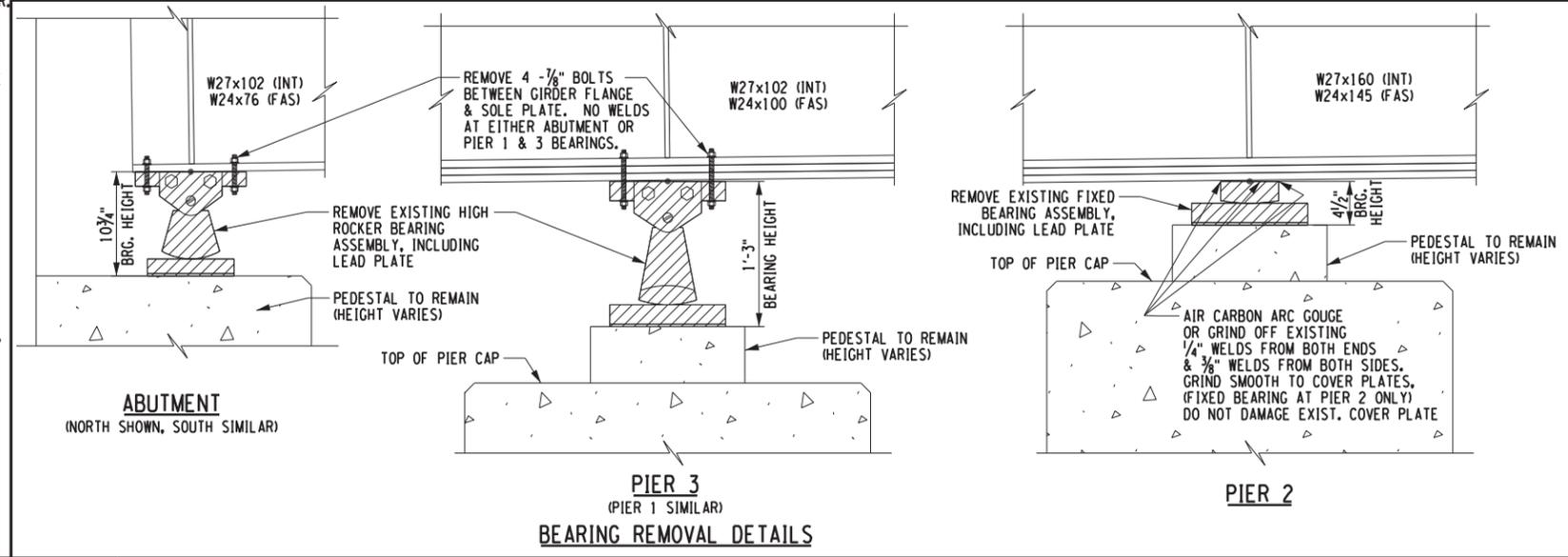
**APPROXIMATE JACKING LOADS:**

	FASCIAS	INTERIORS
SOUTH ABUTMENT:	35 KIPS	30 KIPS
PIER 1:	115 KIPS	100 KIPS
PIER 2:	140 KIPS	120 KIPS
PIER 3:	115 KIPS	100 KIPS
NORTH ABUTMENT:	35 KIPS	30 KIPS

A. LOADS SHOWN ARE DEAD LOADS ONLY, ARE NOT FACTORED, AND DO NOT INCLUDE ANY CONSTRUCTION LOADS OR LIVE LOADS.  
 B. LOADS SHOWN DO ACCOUNT FOR THE SHIFT IN SUPPORT LOCATION ONTO TEMPORARY POSTS.  
 C. LOADS SHOWN DO NOT ACCOUNT FOR ANY BEARING RESTRAINT OR JOINT FRICTION.  
 D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING AND ADDING ANY DESIRED CONSTRUCTION LOADING AND THE TOTAL SHORING LOAD/CAPACITY NEEDED UNDER EACH GIRDER.

**JACKING & REPAIR SCHEDULE**

- (G#) GIRDER IDENTIFICATION
- (A) ABUTMENT JACKING POINT, LIFTING OPERATION TYPE A (ITEM 585.01)
- (B) PIER JACKING POINT, LIFTING OPERATION TYPE B (ITEM 585.02)
- (PR) PARTIAL GIRDER REPLACEMENT
- (R1) EXISTING (EXPANSION) BEARING REMOVAL
- (R2) EXISTING (FIXED) BEARING REMOVAL
- (CP) NEW COVER PLATE INSTALLATION



ALTERED ON: \_\_\_\_\_ AFFIXED ON: 6/25/2020

SIGNATURE: \_\_\_\_\_ STAMP: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ STAMP: \_\_\_\_\_

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REVISIONS

DATE	DESCRIPTION	BY	SYM.

NEW YORK STATE OF OPPORTUNITY

**Thruway Authority**

2300 Main Place Tower  
Buffalo, NY 14202-3722  
716.847.6330 • www.cha.com

TITLE OF PROJECT: STEEL REPAIRS TO IMPACT DAMAGE  
 CONTRACT NUMBER: TAB 20-12B

LOCATION OF PROJECT: MP 463.45 BIN 5511490  
 SHERIDAN CENTER RD. OVER I-90  
 DATE: JUNE 2020

TITLE OF DRAWING: STRUCTURAL LIFTING PLAN & BEARING REMOVAL DETAILS  
 DRAWING NUMBER: S-32

FILE NAME = V:\Projects\ANY\K5\36292\CADD\MSTN\MP\_463.45\_Center Road\_Rte 91\146\_Bridge Hit Repairs\_MP\_463.45\_S-32.dgn  
 DATE/TIME = 26-JUN-2020 10:52:30  
 USER = G379  
 DESIGN SUPERVISOR: G. HOFFMANN  
 CHECKED BY: S. KINSMAN  
 DRAFTED BY: J. HARTWELL  
 CHECKED BY: S. SCHUKRAFT

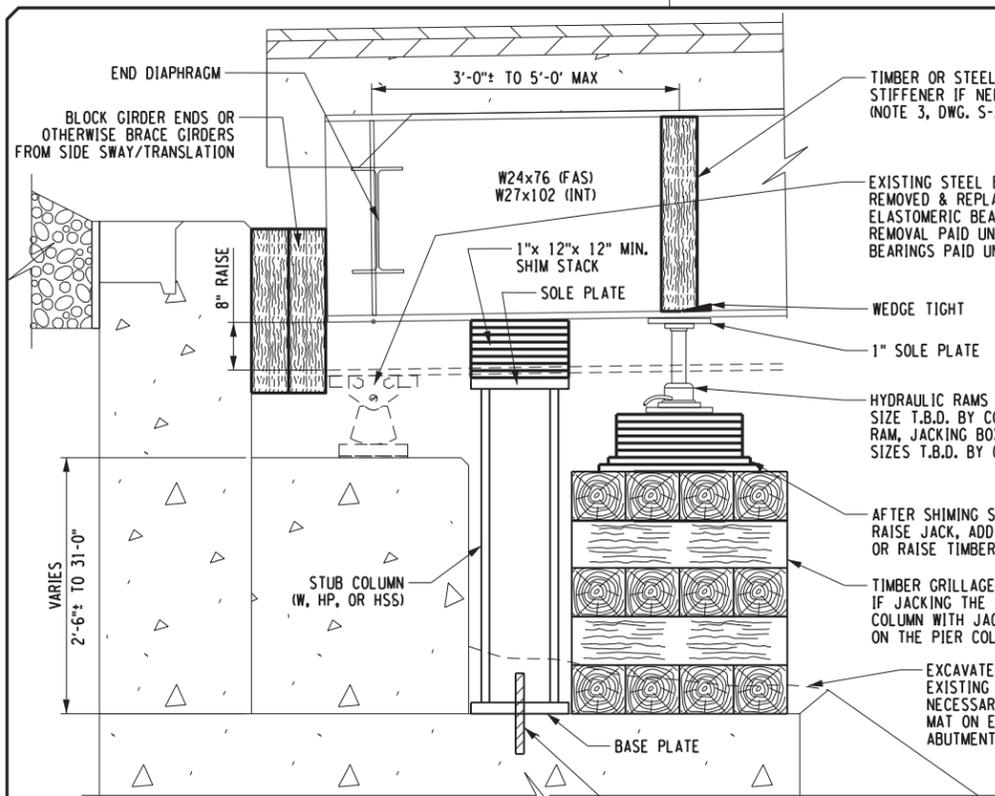
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DRAFTED BY: J. HARTWELL

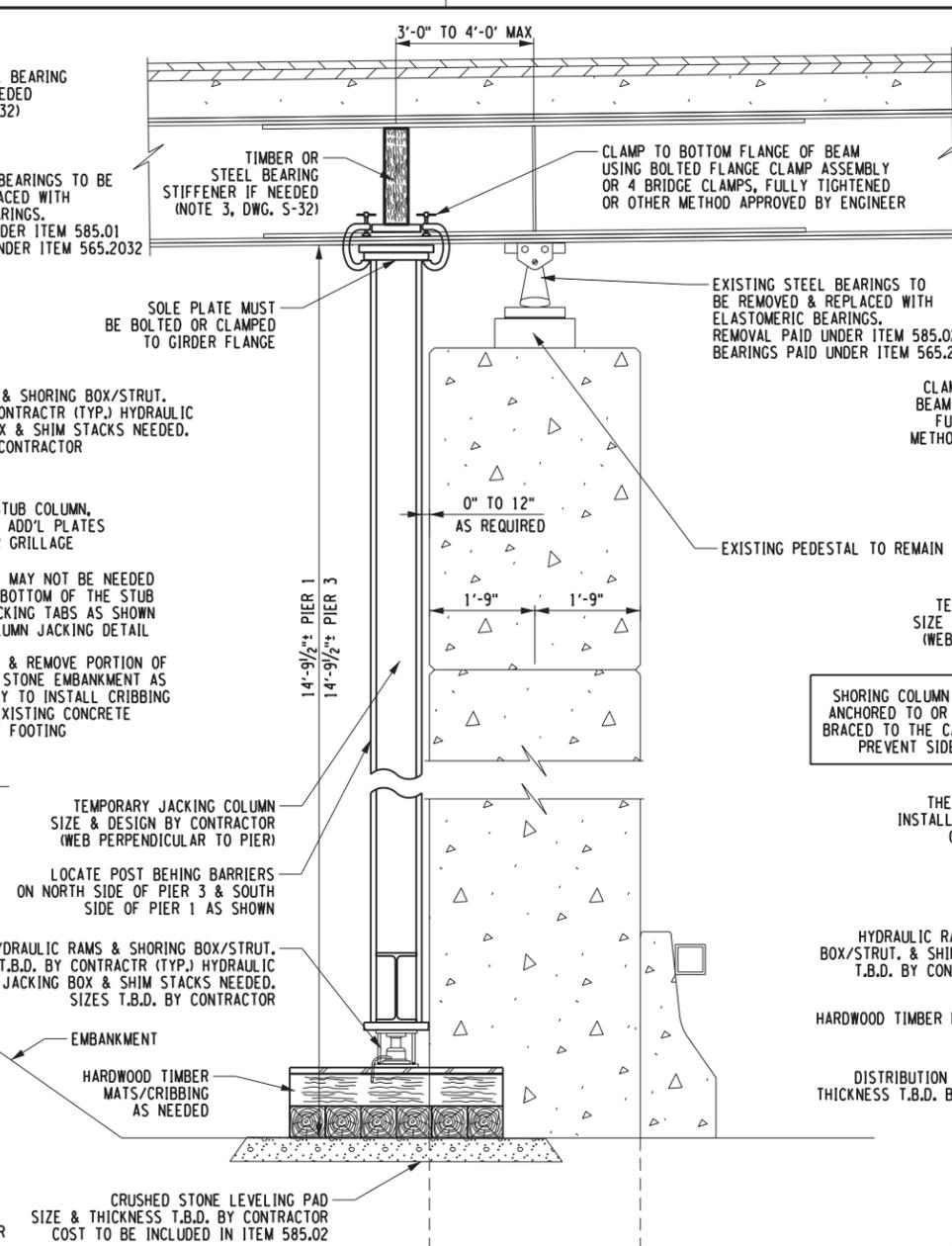
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DESIGNED BY: S. KINSMAN

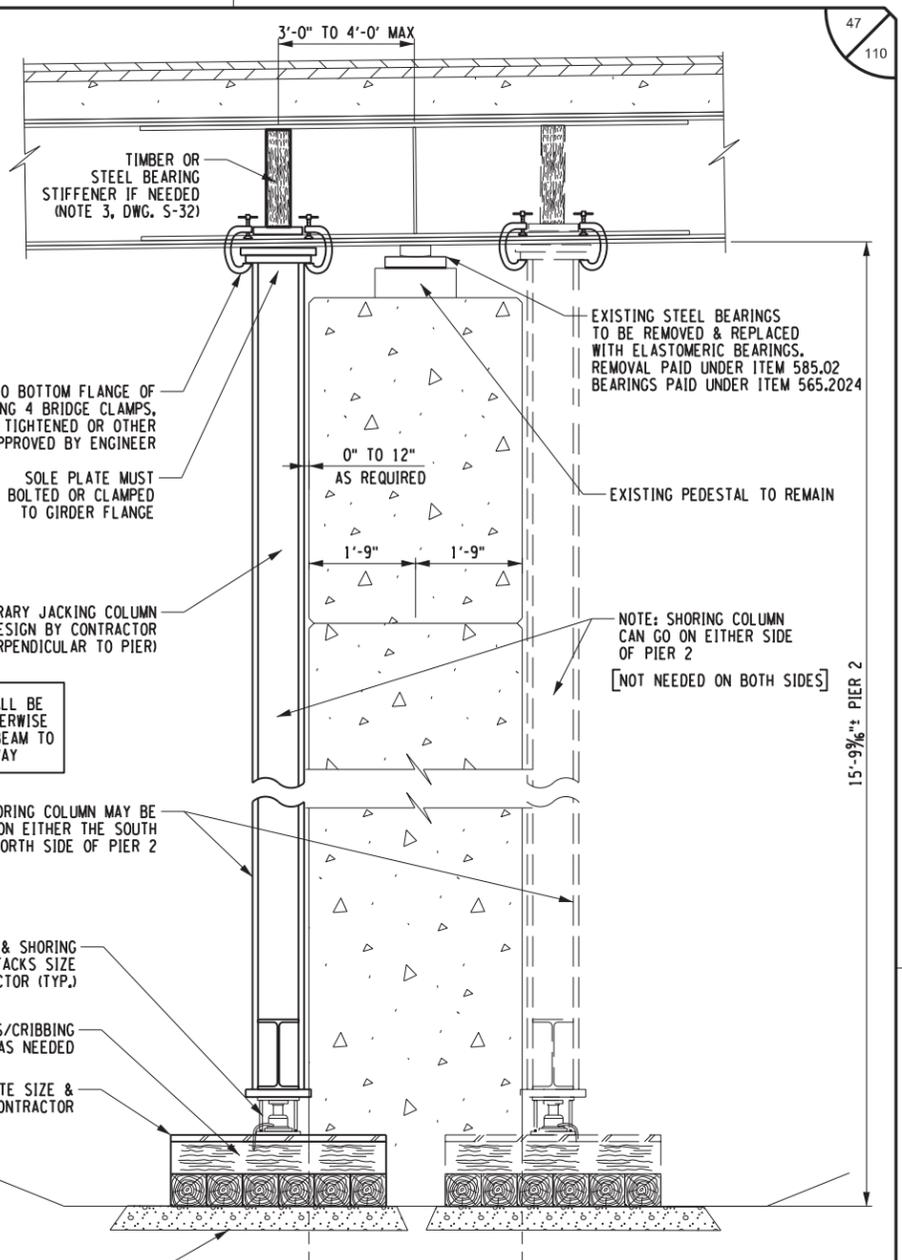
DESIGN SUPERVISOR: G. HOFFMANN



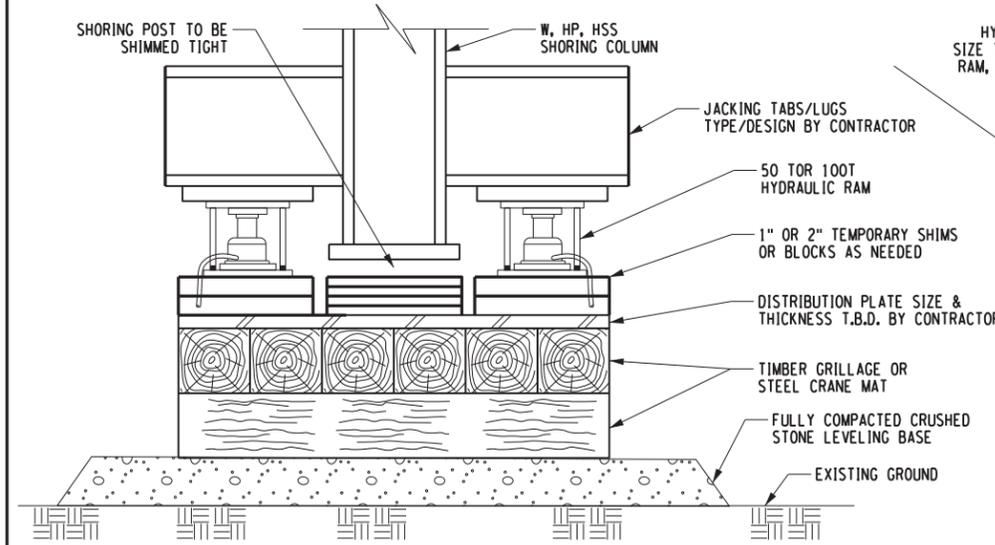
**JACKING DETAIL - TYPICAL ABUTMENT SECTION**  
(NORTH ABUTMENT SHOWN, SOUTH ABUTMENT SIMILAR)



**JACKING DETAIL - TYPICAL PIERS 1 & 3**  
(PIER 3 SHOWN, PIER 1 SIMILAR)



**JACKING DETAIL - TYPICAL PIER 2**



**JACKING DETAIL - TYPICAL ALL PIERS**

ALTERED ON:	AFFIXED ON: 6/25/2020
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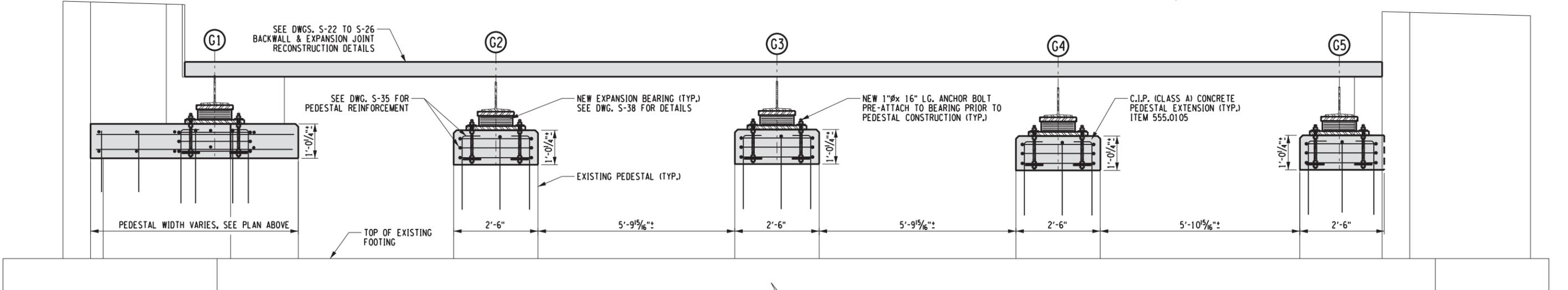
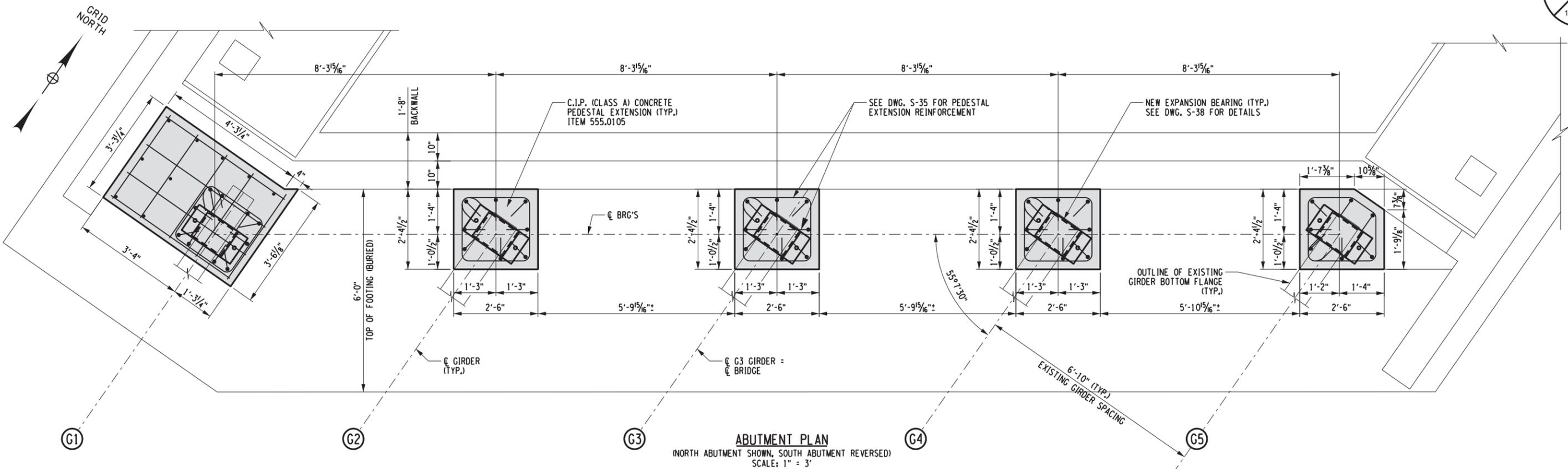
REVISIONS			
DATE	DESCRIPTION	BY	SYM.

**NEW YORK STATE OF OPPORTUNITY**  
**Thruway Authority**

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING STRUCTURAL LIFTING DETAILS	DRAWING NUMBER: S-33

**NOTE:**  
SCHEMATIC DETAILS SHOWN ON THIS DRAWING ARE CONCEPTUAL IDEAS ONLY AND ARE NOT REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE BEST METHOD OF JACKING & SHORING THE GIRDERS.

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DATE/TIME = 26-JUN-2020 10:53:33  
USER = G. HOFFMANN



- NOTES:**
1. FOR ABUTMENT PEDESTAL EXTENSION REINFORCEMENT DETAILS, SEE DWG. S-35.
  2. FOR ABUTMENT BEARING & ANCHOR BOLT DETAILS, SEE DWG. S-38.

ALTERED ON:	AFFIXED ON: 6/25/2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

ABUTMENT PEDESTAL CONCRETE TABLE	
LOCATION	ITEM 555.0105 (CLASS A)
NORTH ABUT.	1.6 CY
SOUTH ABUT.	1.6 CY
TOTAL =	3.2 CY

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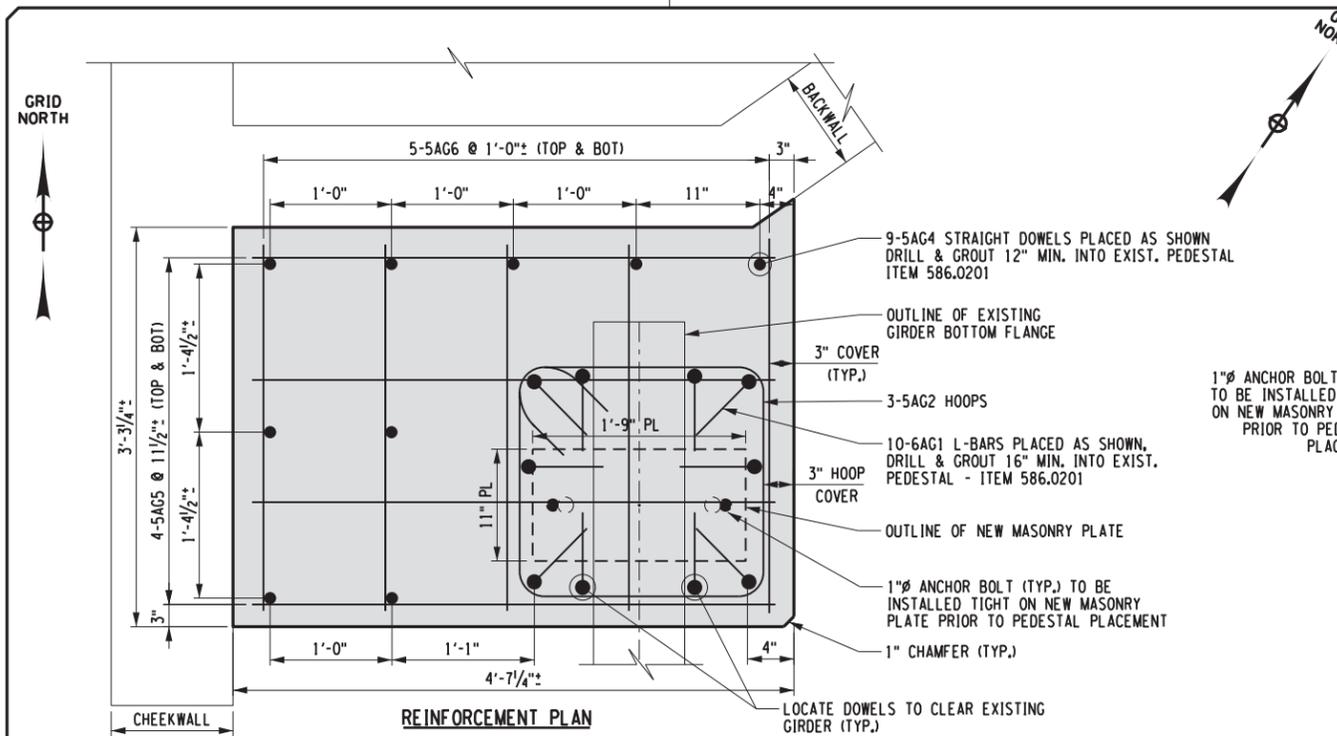
REVISIONS			
DATE	DESCRIPTION	BY	SYM.

 <b>Thruway Authority</b> 	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
	LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING PEDESTAL EXTENSION PLAN & ELEVATION ABUTMENTS	DRAWING NUMBER: S-34	

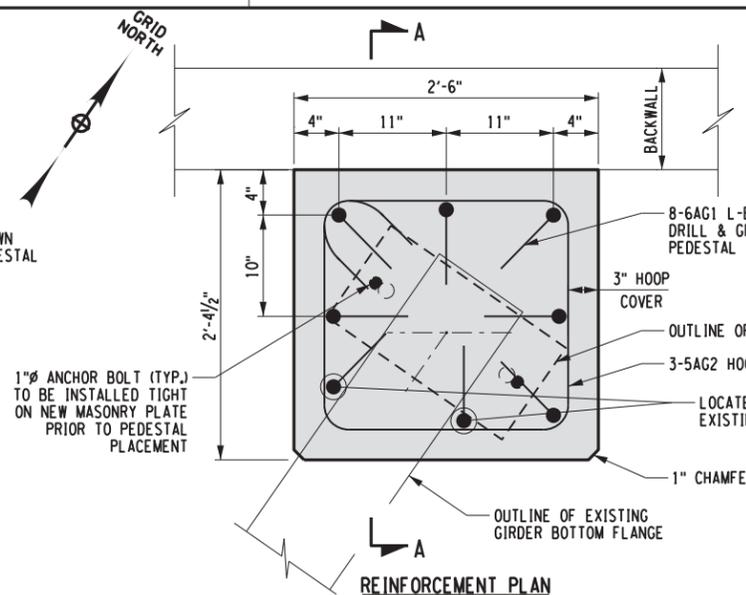
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 DATE/TIME = 26-JUN-2020 10:58:30  
 USER = S. SCHUKRAFT

CHECKED BY: S. SCHUKRAFT  
 DRAFTED BY: J. HARTWELL  
 CHECKED BY: G. HOFFMANN  
 DESIGNED BY: S. KINSMAN  
 DESIGN SUPERVISOR: G. HOFFMANN

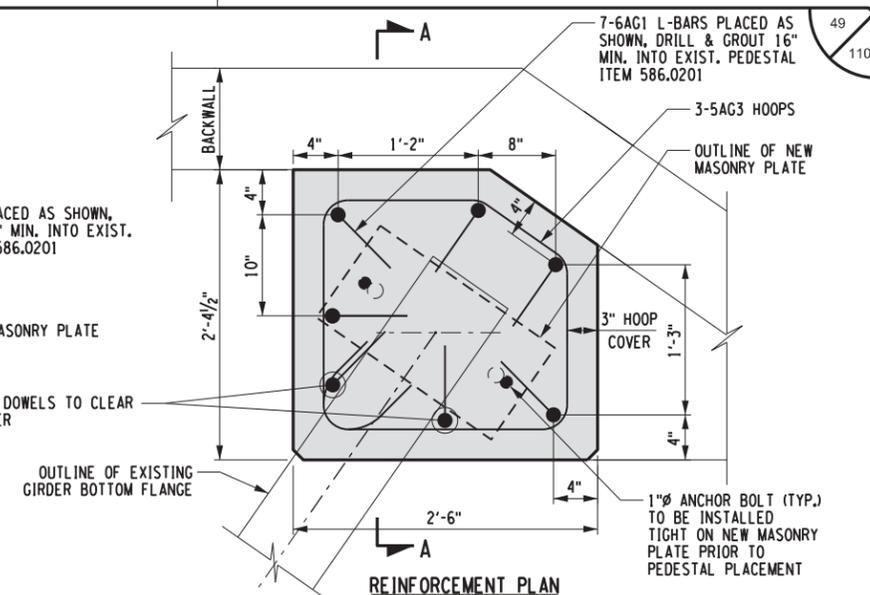
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 DESIGN SUPERVISOR: G. HOFFMANN  
 DESIGNED BY: S. KINSMAN  
 CHECKED BY: G. HOFFMANN  
 DRAFTED BY: J. HARTWELL  
 CHECKED BY: S. SCHUKRAFT



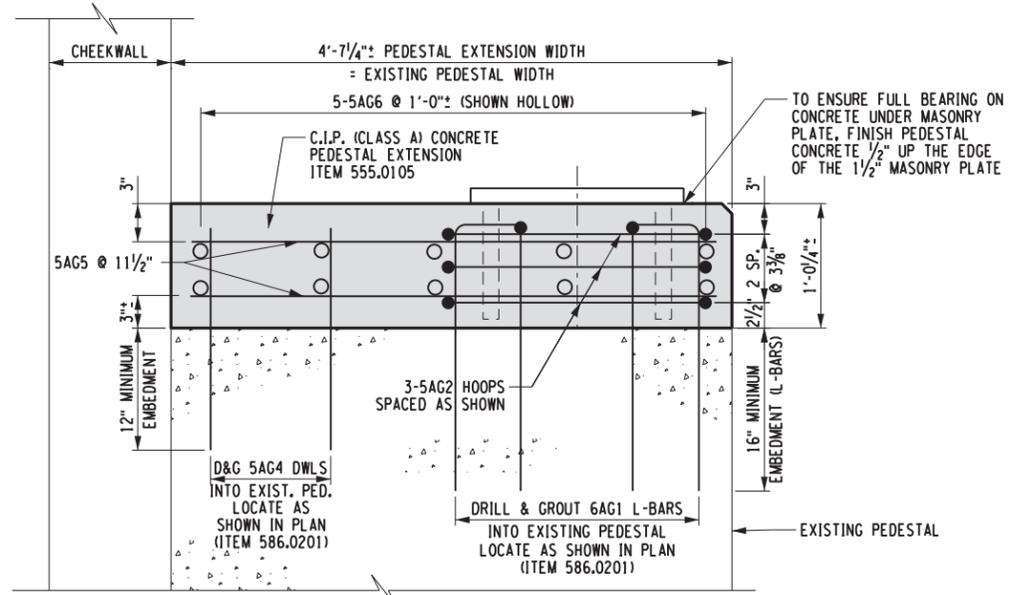
REINFORCEMENT PLAN



REINFORCEMENT PLAN

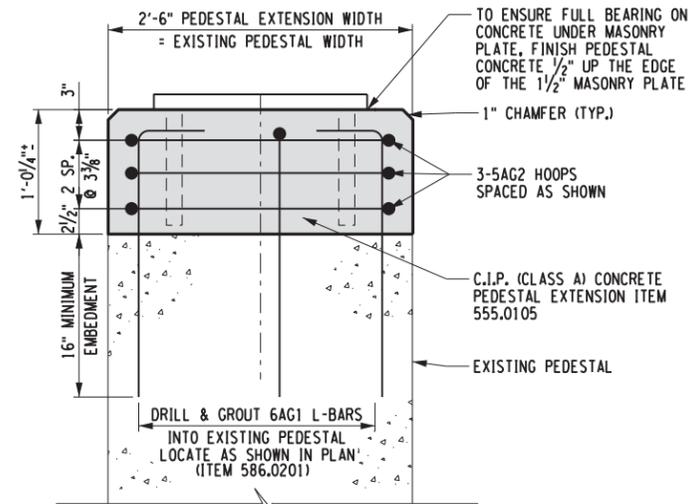


REINFORCEMENT PLAN



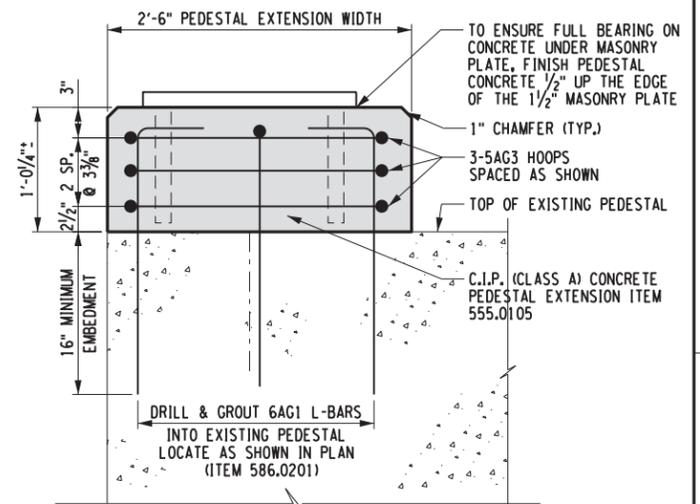
REINFORCEMENT ELEVATION

NORTHWEST PEDESTAL EXTENSION  
(SOUTHEAST PEDESTAL EXTENSION IDENTICAL)  
N.T.S.



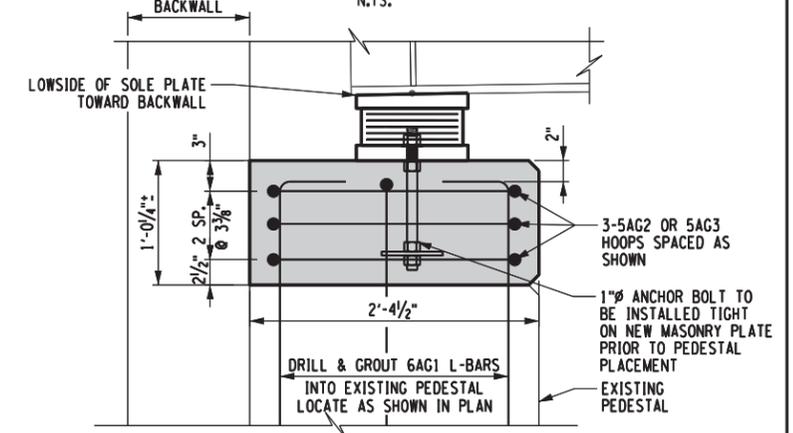
REINFORCEMENT ELEVATION

INTERIOR PEDESTAL EXTENSION  
(NORTH ABUTMENT SHOWN, SOUTH ABUTMENT IDENTICAL)  
N.T.S.



REINFORCEMENT ELEVATION

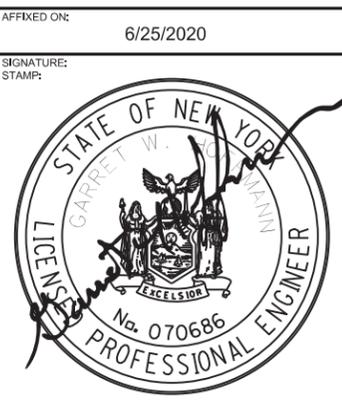
NORTHEAST FASCIA PEDESTAL EXTENSION  
(SOUTHWEST PEDESTAL EXTENSION IDENTICAL)  
N.T.S.



SECTION A-A  
(INTERIOR PEDESTAL SHOWN, NE OR SW FASCIA PEDESTALS SIMILAR)

**NOTES:**  
 1. FOR ABUTMENT PEDESTAL PLAN & ELEVATION, SEE DWG. S-34.  
 2. FOR ABUTMENT BEARING & ANCHOR BOLT DETAILS, SEE DWG. S-38.

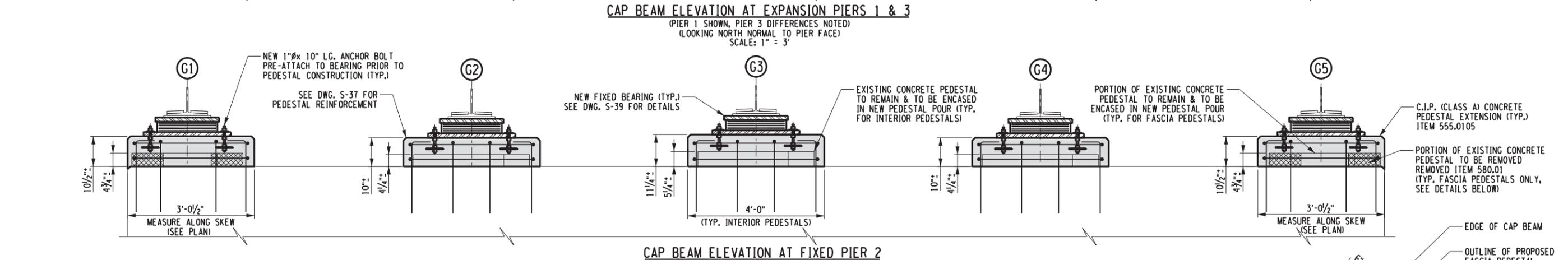
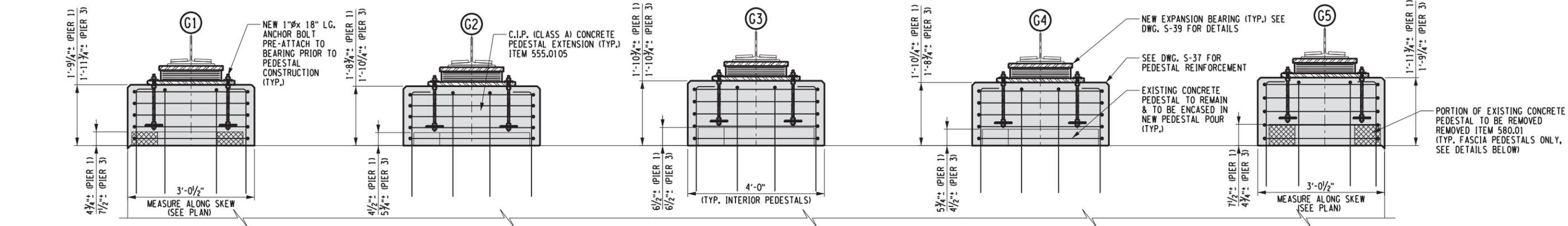
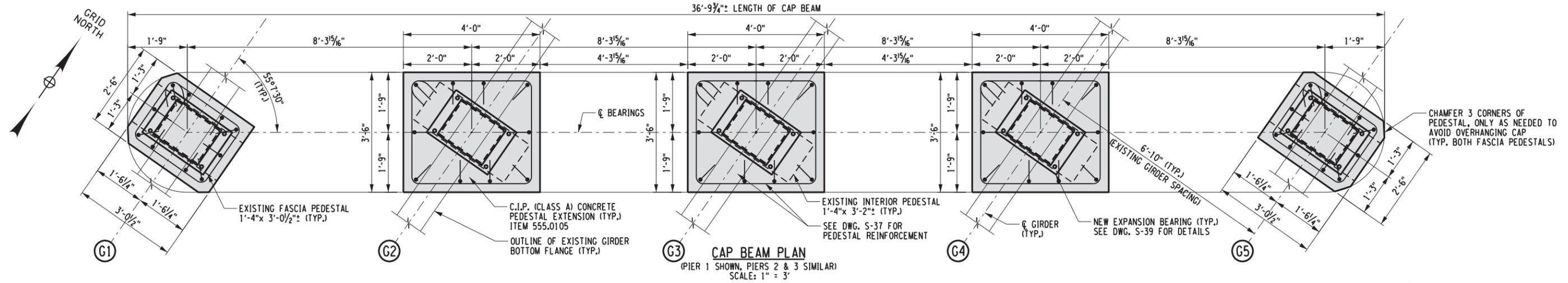
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SIGNATURE:	6/25/2020
STAMP:	SIGNATURE:
	STAMP:

REVISIONS			
DATE	DESCRIPTION	BY	SYM.

 <b>Thruway Authority</b>	TITLE OF PROJECT	CONTRACT NUMBER:
	STEEL REPAIRS TO IMPACT DAMAGE	TAB 20-12B
	LOCATION OF PROJECT	DATE:
	MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	JUNE 2020
TITLE OF DRAWING	DRAWING NUMBER:	
PEDESTAL EXTENSION REINFORCEMENT DETAILS ABUTMENTS	S-35	



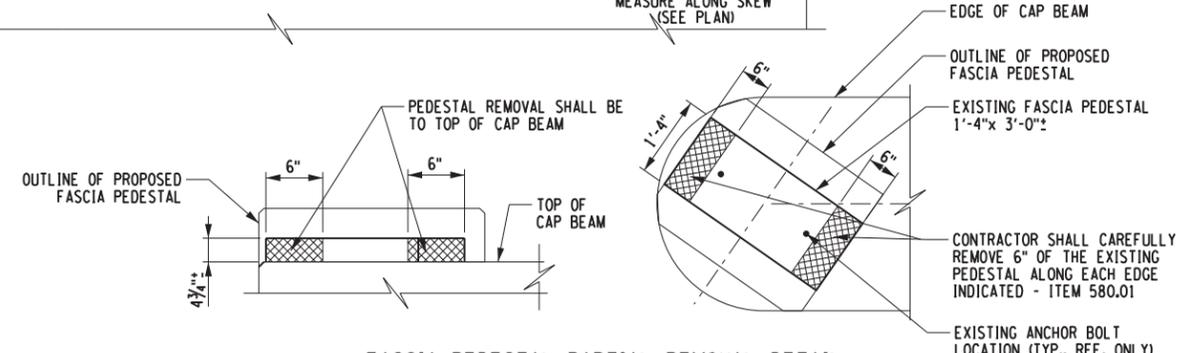
**NOTES:**

- FOR PEDESTAL REINFORCEMENT DETAILS, SEE DWG. S-37.
- FOR PIER BEARING & ANCHOR BOLT DETAILS, SEE DWGS. S-38 & S-39.

PIER PEDESTAL CONCRETE TABLE	
LOCATION	ITEM 555.0105 (CLASS A)
PIER 1	3.7 CY
PIER 2	1.8 CY
PIER 3	3.7 CY
TOTAL	9.2 CY

VOLUME OF EXISTING PEDESTALS IS SUBTRACTED FROM ABOVE QUANTITIES

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SIGNATURE: \_\_\_\_\_ STAMP: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ STAMP: \_\_\_\_\_

REVISIONS			
DATE	DESCRIPTION	BY	SYM.

**NEW YORK STATE OF OPPORTUNITY.**

**Thruway Authority**

**CHA**

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TITLE OF PROJECT: STEEL REPAIRS TO IMPACT DAMAGE

CONTRACT NUMBER: TAB 20-12B

LOCATION OF PROJECT: MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90

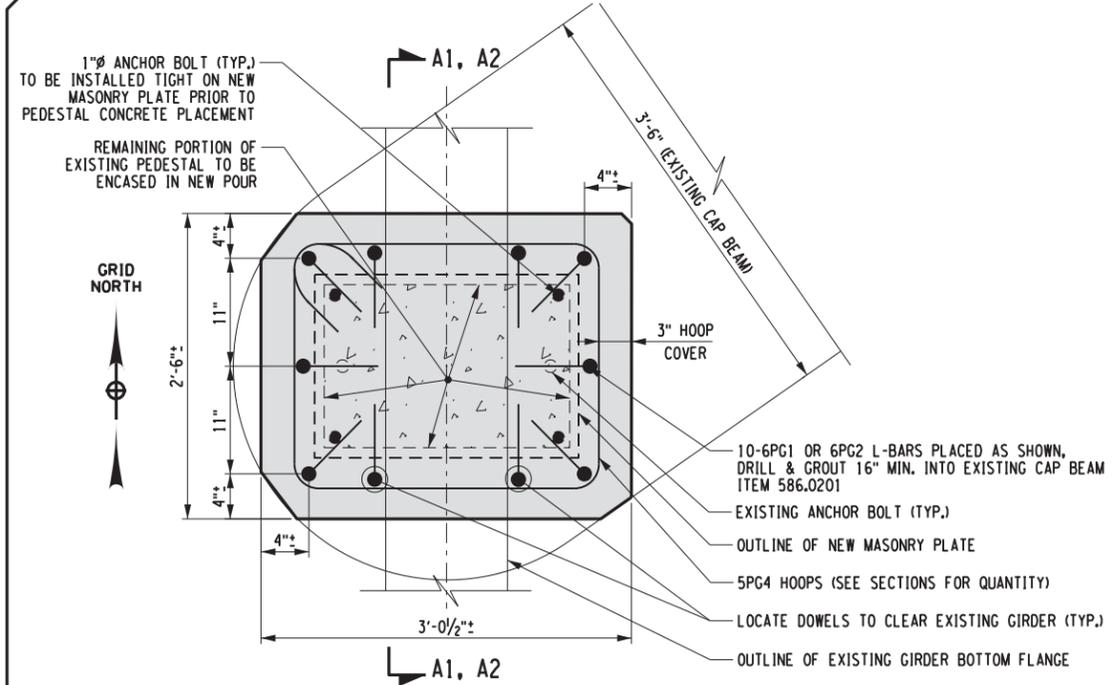
DATE: JUNE 2020

TITLE OF DRAWING: PEDESTAL EXTENSION PLAN & ELEVATIONS PIERS

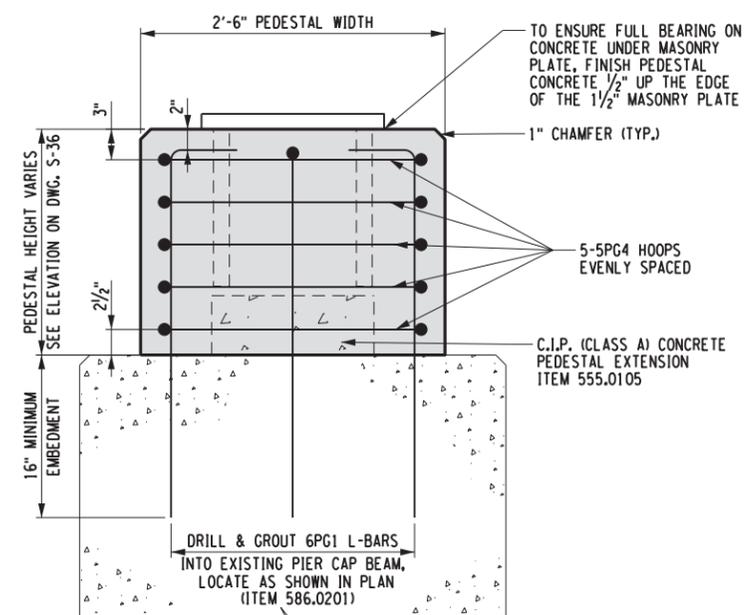
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DATE/TIME = 26-JUN-2020 10:58:11  
USER = G379

CHECKED BY: S. SCHUKRAFT  
DRAFTED BY: J. HARTWELL  
CHECKED BY: G. HOFFMANN  
DESIGNED BY: S. KINSMAN  
DESIGN SUPERVISOR: G. HOFFMANN

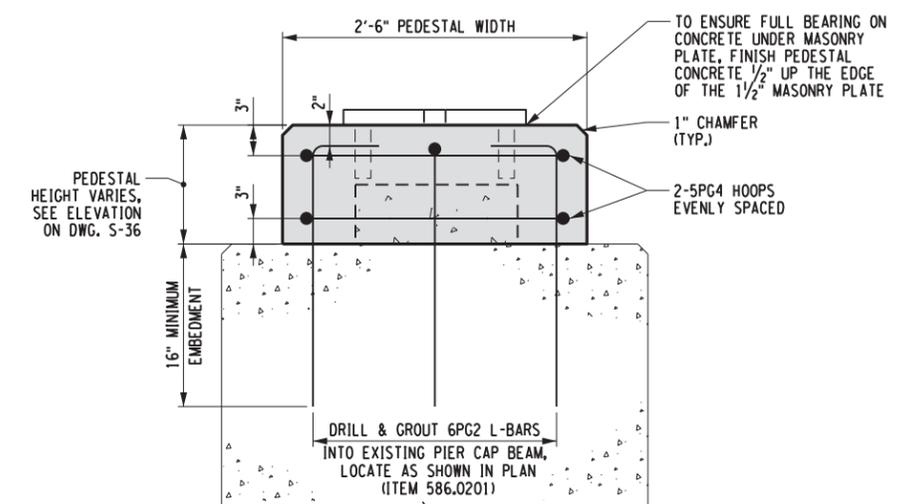


**REINFORCEMENT PLAN**  
(PIER 1 SHOWN, PIERS 2 & 3 SIMILAR)



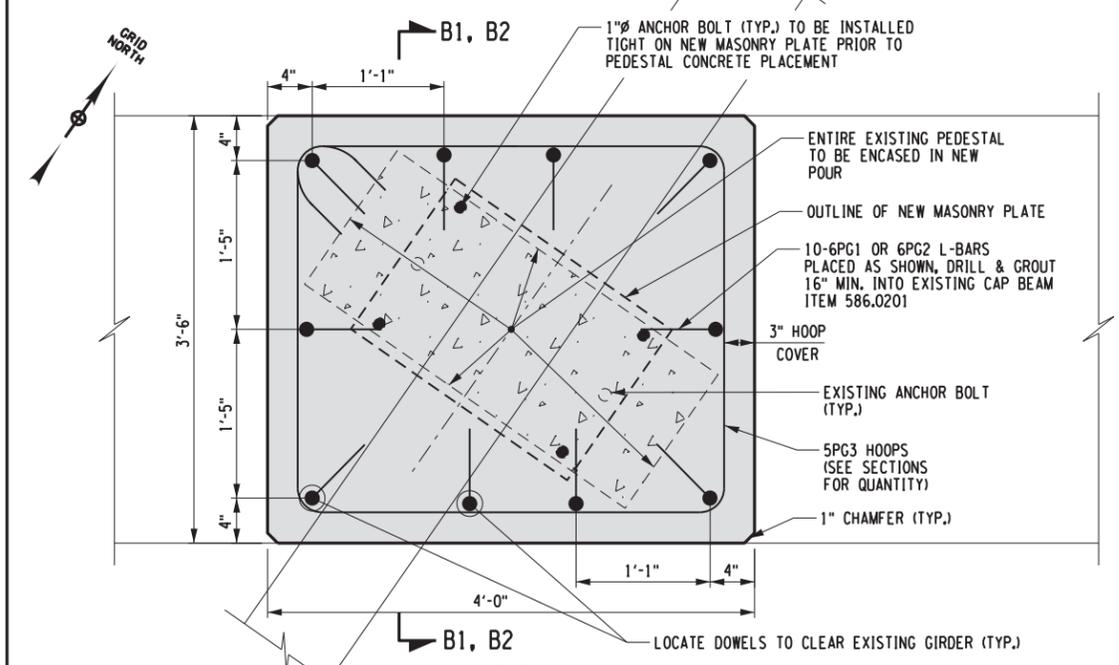
**SECTION A1-A1**

**PIER 1 & 3 FASCIA PEDESTAL REINFORCEMENT**  
N.T.S.

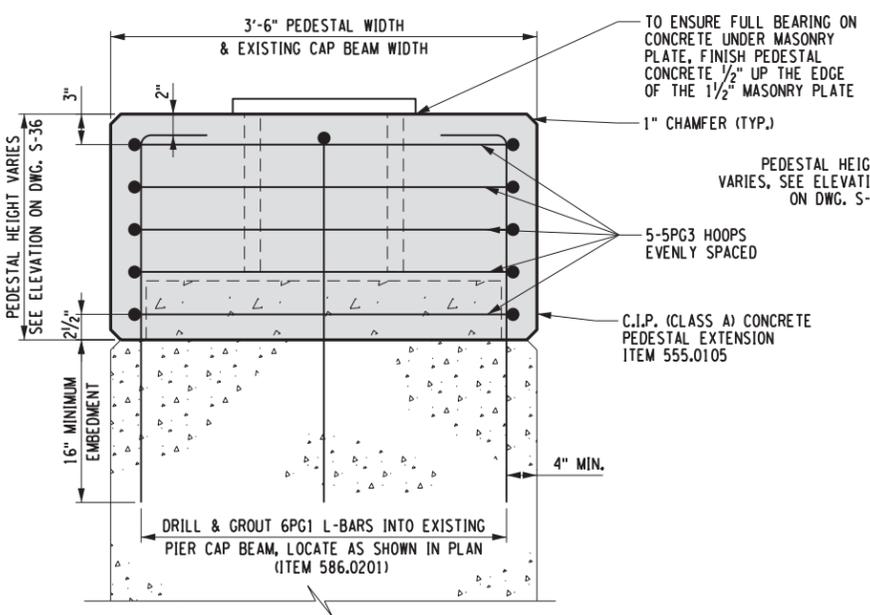


**SECTION A2-A2**

**PIER 2 FASCIA PEDESTAL REINFORCEMENT**  
N.T.S.

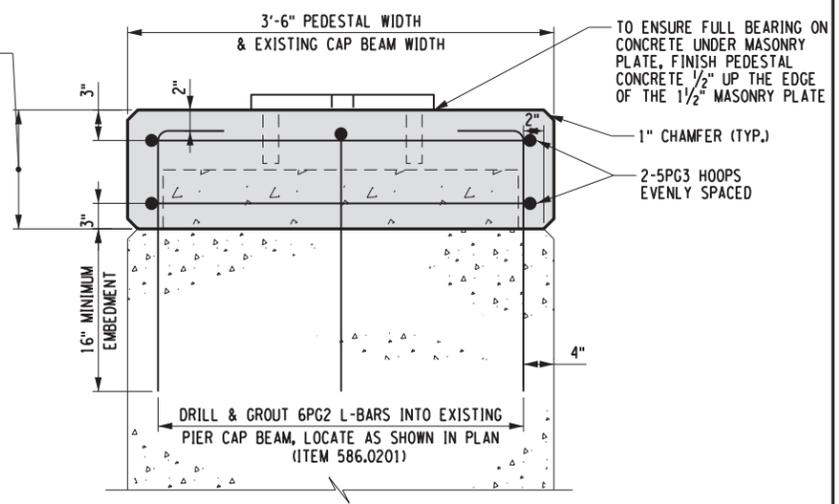


**REINFORCEMENT PLAN**  
(PIER 1 SHOWN, PIERS 2 & 3 SIMILAR)



**SECTION B1-B1**

**PIER 1 & 3 INTERIOR PEDESTAL REINFORCEMENT**  
N.T.S.



**SECTION B2-B2**

**PIER 2 INTERIOR PEDESTAL REINFORCEMENT**  
N.T.S.

- NOTES:**
- FOR PIER PEDESTAL PLAN & ELEVATIONS, AND PEDESTAL HEIGHTS, SEE DWG. S-36.
  - FOR PIER BEARING & ANCHOR BOLT DETAILS, SEE DWGS. S-38 & S-39.

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ALTERED ON:	AFFIXED ON: 6/25/2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

REVISIONS			
DATE	DESCRIPTION	BY	SYM.



TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING PEDESTAL EXTENSION REINFORCEMENT DETAILS PIERS	DRAWING NUMBER: S-37

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 USER = S. SCHUKRAFT  
 DESIGN SUPERVISOR: G. HOFFMANN  
 CHECKED BY: S. KINSMAN  
 DRAFTED BY: J. HARTWELL  
 CHECKED BY: S. SCHUKRAFT

ELASTOMERIC BEARING (TYPE E.B.) TABLE

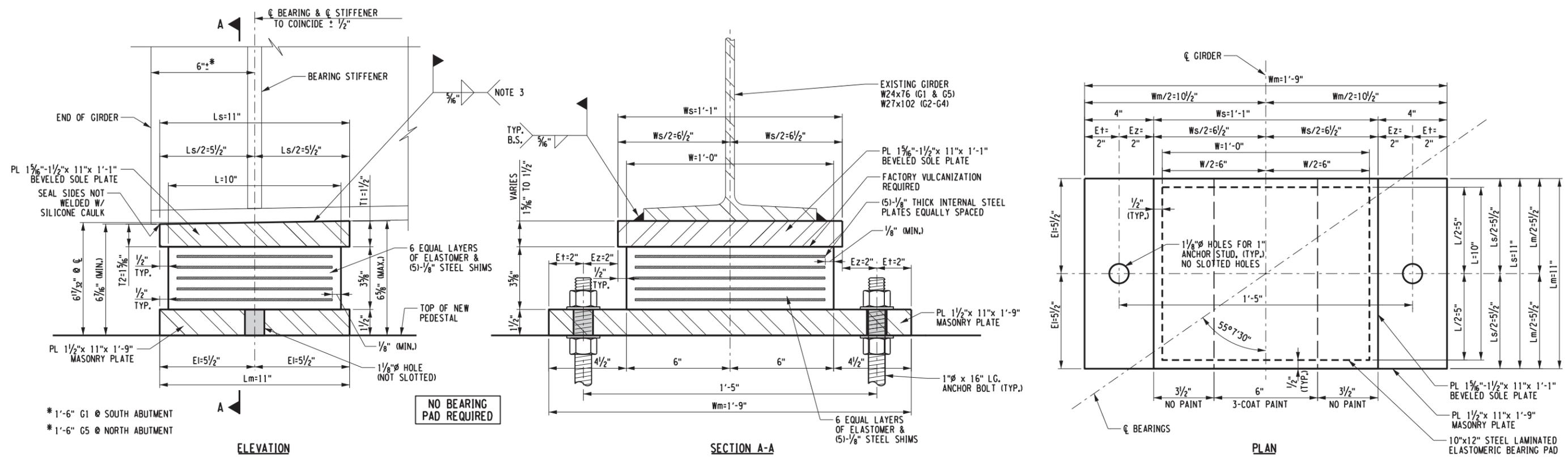
LOCATION	FIXED/EXP.	ITEM NO.	QTY. REQ'D	DL+SDL (KIPS)	LL (KIPS)	TOTAL DESIGN REACTION (KIPS)	SHAPE FACTOR	ELASTOMER LAYERS			h <sub>rft</sub> in.	COMP. AREA in. <sup>2</sup>	SHEAR AREA in. <sup>2</sup>	MASONRY PLATE				SOLE PLATE				ANCHOR BOLTS		WELD SIZE									
								THK/LAYER	N LAYERS	W				L	D	W <sub>m</sub>	L <sub>m</sub>	T <sub>m</sub>	E <sub>t</sub>	E <sub>i</sub>	A <sub>m</sub>	B <sub>m</sub>	W <sub>s</sub>		L <sub>s</sub>	T <sub>1</sub>	T <sub>2</sub>	H <sub>BRG</sub>	H <sub>MAX</sub>	Ø (PIN Ø)	DIA.	LENGTH	BOLTS/BRG.
S. & N. ABUTS.	EXP.	565.2032	10	18	48	66	5.45	1/2"	6	12"	10"	-	3"	114	120	21"	11"	1 1/2"	2"	5 1/2"	-	-	13"	11"	1 1/2"	1 5/8"	6 1/32"	6 5/8"	-	1"	16"	2	5/16"
PIER 1 & 3	EXP.	565.2033	10	90	63	153	7.87	1/2"	6	18"	14"	-	3"	244	252	26"	18"	1 1/2"	2"	2"	-	-	19"	15"	1 1/2"	-	6 5/8"	6 5/8"	-	1"	18"	4	5/16"
PIER 2	FIXED	565.2024	5	109	69	178	7.08	1/2"	6	18"	14"	-	3"	240	249	26"	18"	1 1/2"	2"	2"	-	-	19"	15"	1 1/2"	-	6 5/8"	6 5/8"	2"	1"	12"	4	5/16"

HEIGHT OF BEARING @ C

NOTES:

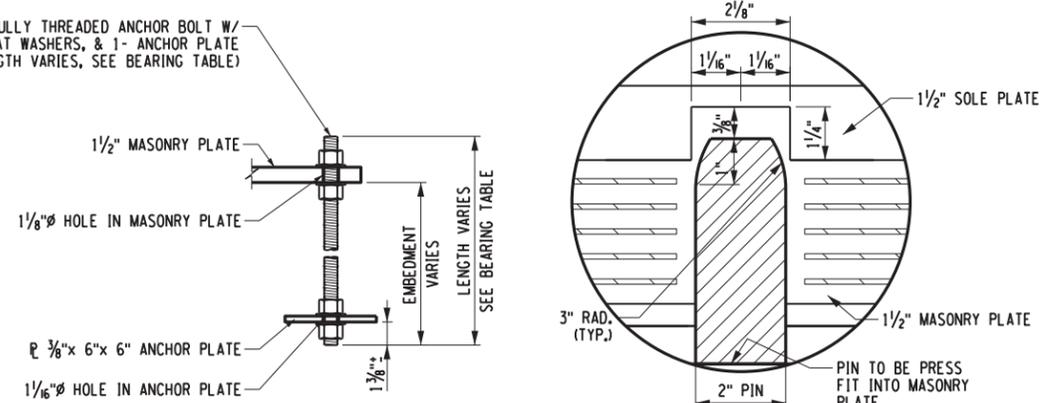
- FOR PIER EXPANSION AND FIXED BEARING DETAILS, SEE DWG. S-39.
- BEARINGS TO BE WELDED TO GIRDERS PRIOR TO POURING PEDESTALS. INSTALL ALL ANCHOR BOLTS & ANCHOR PLATES PRIOR TO PEDESTAL CONSTRUCTION.
- DURING WELDING OF THE BEARINGS TO THE EXISTING GIRDER BOTTOM FLANGES, THE TEMPERATURE OF THE STEEL SOLE PLATE SHALL NOT EXCEED 200°F. THE TEMPERATURE SHALL BE MONITORED DURING WELDING USING TEMPERATURE INDICATING CRAYONS.

T2 IS TOWARD THE BACKWALL FOR BOTH ABUTMENTS.



ABUTMENT EXPANSION BEARING DETAILS  
N.T.S

1" Ø GALV. ASTM A449 TYPE 1 FULLY THREADED ANCHOR BOLT W/ 4 - A563 DH H.H. NUTS, 4 - F436 TYPE 1 FLAT WASHERS, & 1 - ANCHOR PLATE (ANCHOR BOLT LENGTH VARIES, SEE BEARING TABLE)



ANCHOR BOLT DETAIL  
(80 REQ'D - LENGTHS VARY)

ANCHOR PIN DETAIL  
(PIER 2 BEARINGS ONLY)

ELASTOMERIC BEARING NOTES:

- THE BEARINGS SHALL MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 565 UNLESS OTHERWISE NOTED.
- ALL ELASTOMER SHALL BE 50 DUROMETER HARDNESS ON THE SHORE "A" SCALE.
- ALL STEEL EXCEPT THE INTERNAL STEEL PLATES SHALL CONFORM TO ASTM A709 GR 50W, UNLESS OTHERWISE NOTED.
- BEARING PADS SHALL CONFORM TO ONE OF THE FOLLOWING MATERIAL SPECIFICATIONS: 728-01, 728-02 OR 728-03. (NONE REQ'D THIS PROJECT)
- THE COST OF THE ANCHOR BOLTS, ANCHOR PLATES AND NUTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BEARING ITEM.
- AFTER BEARING ASSEMBLY, SOLE PLATE AND MASONRY PLATE SHALL BE BLAST CLEANED AND SHOP PAINTED WITH THREE COAT SYSTEM TO BE APPROVED BY THE ENGINEER, MEETING THE REQUIREMENTS OF SECTION 572 OF THE STANDARD SPECIFICATIONS (SSPC-SP6). OMIT PAINT FROM WITHIN 3" OF FIELD WELD. APPLY PRIMER ONLY TO BOTTOM OF MASONRY PLATES. COST OF PAINTING TO BE INCLUDED IN THE COST OF BEARING.
- FINISH COLOR: GREEN, FED. 595 COLOR 24272
- ANCHOR BOLTS, WASHERS, WASHER PLATES, ANCHOR PLATES, AND NUTS SHALL MEET THE REQUIREMENTS OF SUBSECTION 723-60. THEY SHALL BE GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF MATERIAL SUBSECTION 719-01, "GALVANIZED COATINGS AND REPAIR METHODS." THE COST, INCLUDING GALVANIZING, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BEARING ITEM.

FILE NAME = V:\Projects\NY\536292\CADD\NSTN\MP\_463.45\_S-38.dgn  
 DATE/TIME = 26-JUN-2020 10:58:10  
 USER = JKH  
 DESIGN SUPERVISOR: G. HOFFMANN  
 DESIGNED BY: S. KINSMAN  
 CHECKED BY: G. HOFFMANN  
 DRAFTED BY: J. HARTWELL  
 CHECKED BY: S. SCHUKRAFT

ALTERED ON: \_\_\_\_\_ AFFIXED ON: 6/25/2020

SIGNATURE: \_\_\_\_\_ SIGNATURE: \_\_\_\_\_  
 STAMP: \_\_\_\_\_ STAMP: \_\_\_\_\_

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REVISIONS			
DATE	DESCRIPTION	BY	SYM.

NEW YORK STATE OF OPPORTUNITY  
Thruway Authority

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING BEARING DETAILS (1 OF 2)	DRAWING NUMBER: S-38





**REINFORCING STEEL BAR SCHEDULE - SHERIDAN CENTER**

LOCATION	MARK	QTY	SIZE	TYPE	LENGTH	WEIGHT	A	B	C	D	E	F	G	H	J	K	L	REMARKS
<b>NORTH &amp; SOUTH BACKWALL EXTENSION</b>																		
L-BAR DOWELS (FOR HEADER)	5B81	68	5	27	6' - 11"	491		3'-0"	3'-11"									FIELD TRIM HORIZ. LEG OF LAST 4 L-BARS AT WEST END OF NORTH BKWL & 4 L-BARS AT EAST END OF SOUTH BKWL
TRANSVERSE BARS	7B82	44	7	STR.	21' - 9"	1,956												FIELD BEND AND/OR FIELD TRIM AS NEC AT WEST END OF NORTH BACKWALL & EAST END OF SOUTH BACKWALL
BACKWALL DOWELS (RF)	5B83	68	5	STR.	2' - 11"	207												DRILL & GROUT 12" INTO EXISTING BACKWALL
BACKWALL L-BAR DOWELS (FF)	7B84	68	7	27	6' - 8"	927		3'-0"	3'-8"									DRILL & GROUT 15" INTO EXISTING BACKWALL
HEADER DOWELS (HOOKED)	5B85	68	5	1	2' - 8"	189	0"	2'-1"					7"		5"			EMBEDMENT VARIES TO FOLLOW HEADER SLOPE
MISC. STRAIGHT BARS	5B86	4	5	STR.	30' - 0"	125												FIELD CUT AND PLACE AS SHOWN ON PLANS AT EAST END OF NORTH BACKWALL & WEST END OF SOUTH BACKWALL
3,895							LBS. - ITEM 556.0203 - GALVANIZED BAR REINFORCEMENT											
<b>NORTH &amp; SOUTH HEADER</b>																		
TRANSVERSE BARS	5HG1	16	5	STR.	21' - 9"	363												
STIRRUPS	5HG2	68	5	17	3' - 1"	219		12"	13"	12"								PLACE STIRRUPS TO FOLLOW TOP SLOPE OF HEADER
582							LBS. - ITEM 556.0203 - GALVANIZED BAR REINFORCEMENT FOR STRUCTURES											
<b>NORTH &amp; SOUTH DECK SLAB EXTENSION</b>																		
HAUNCH STIRRUPS	5DG1	56	5	16	5' - 11"	346	0"	11"	3'-8"	16"				11"		11"	4'-7"	
HAUNCH STIRRUPS (AT FASCIA)	5DG2	12	5	16	4' - 3"	53	0"	11"	2'-0"	16"				11"		11"	2'-11"	
HAUNCH TRANSVERSE BARS	5DG3	12	5	STR.	21' - 3"	266												
DOWELS	5DG4	68	5	STR.	2' - 6"	177												
LONGITUDINAL BARS	5DG5	140	5	STR.	5' - 9"	840												
TRANSVERSE BARS	5DG6	64	5	STR.	21' - 3"	1,418												
U-BARS FOR SAFETY WALK	5DG7	10	5	S6	7' - 6"	78	8"	1'-2"	3'-10"	1'-2"			8"					
U-BARS FOR SAFETY WALK	5DG8	10	5	S6	8' - 1"	84	8"	1'-2"	4'-5"	1'-2"			8"					
3,262							LBS. - ITEM 556.0203 - GALVANIZED BAR REINFORCEMENT											
<b>SAFETY WALK (ON DECK) (4 QUADRANTS)</b>																		
DOWELS	5SG1	16	5	STR.	2' - 6"	42												
LONGITUDINAL BARS	5SG2	18	5	STR.	5' - 10"	110												
152							LBS. - ITEM 556.0203 - GALVANIZED BAR REINFORCEMENT											
<b>SAFETY WALK (ON U-WALLS) (4 QUADRANTS)</b>																		
L-BAR DOWELS	5SG3	248	5	27	2' - 10"	733		1'-2"	1'-8"									
LONGITUDINAL BARS - NE & SW	5SG4	12	5	STR.	12' - 10"	161												CUT TO FIT IN FIELD
LONGITUDINAL BARS - NW & SE	5SG5	12	5	STR.	17' - 0"	213												CUT TO FIT IN FIELD
1,107							LBS. - ITEM 556.0203 - GALVANIZED BAR REINFORCEMENT											
<b>ABUTMENT PEDESTALS</b>																		
L-BAR DOWELS	6AG1	82	6	27	2' - 10"	349		2'-2"					8"					DRILL & GROUT 16" INTO EXISTING PEDESTAL
PEDESTAL HOOPS	5AG2	24	5	T1	8' - 9"	219	5 1/2"	2'-0"	1'-11"	2'-0"	1'-11"		5 1/2"	3 3/4"				12 PER ABUTMENT; 3 @ NW, SE, & ALL INTERIOR PEDESTALS
5 SIDED PEDSTAL HOOPS	5AG3	6	5	N4	8' - 5"	53	5 1/2"	2'-0"	1'-4"	11 1/2"	1'-3"	1'-11"	5 1/2"	3 3/4"	9"	7"		3 @ NE & SW PEDESTALS
STRAIGHT DOWELS	5AG4	18	5	STR.	1' - 10"	34												9 @ NW & SE PEDESTALS; D&G 12" INTO EXISTING PEDESTAL
TRANSVERSE BARS	5AG5	16	5	STR.	4' - 3"	71												8 @ NW & SE PEDESTALS; 4 (TOP MAT), 4 (BOT MAT)
LONGITUDINAL BARS	5AG6	20	5	STR.	2' - 11"	61												10 @ NW & SE PEDESTALS; 5 (TOP MAT), 5 (BOT MAT)
787							LBS. - ITEM 556.0203 - GALVANIZED BAR REINFORCEMENT											
<b>PIER PEDESTALS</b>																		
L-BAR DOWELS - PIERS 1 & 3	6PG1	100	6	27	3' - 8"	551		3'-0"					8"					DRILL & GROUT 16" INTO TOP OF EXISTING CAP BEAM
L-BAR DOWELS - PIER 2	6PG2	50	6	27	2' - 9"	207		2'-1"					8"					DRILL & GROUT 16" INTO TOP OF EXISTING CAP BEAM
TYP HOOPS UNDER G2 - G4	5PG3	36	5	T1	13' - 11"	523	5 1/2"	3'-6"	3'-0"	3'-6"	3'-0"		5 1/2"	3 3/4"				5 PER PEDESTAL - PIERS 1 & 3; 2 PER PEDESTAL - PIER 2
HOOPS AT G1 OR G5	5PG4	24	5	T1	9' - 11"	248	5 1/2"	2'-6"	2'-0"	2'-6"	2'-0"		5 1/2"	3 3/4"				5 PER PEDESTAL - PIERS 1 & 3; 2 PER PEDESTAL - PIER 2
1,529							LBS. - ITEM 556.0203 - GALVANIZED BAR REINFORCEMENT											
<b>TOTAL WEIGHT (THIS SHEET): 11,314 LBS. - ITEM 556.0203 - GALVANIZED BAR REINFORCEMENT</b>																		

DESCRIPTION	PIECE-MARK	SECTION	PAINTABLE AREA / LF	LENGTH	END AREA	# OF PIECES	TOTAL PAINT AREA
NEW GIRDER SEGMENT - G1 & G5	B1 & B5	W 24x 176	5.36 SF / Ft	37.50 Ft	30.82 In <sup>2</sup>	2	402.9 SF
NEW GIRDER SEGMENT - G2	B2	W 24x 176	5.88 SF / Ft	39.83 Ft	32.04 In <sup>2</sup>	1	234.5 SF
END WEB SPLICE PL - G1 & G5	P1	PL 1/2" x 14 1/2"	2.50 SF / Ft	1.66 Ft	7.25 In <sup>2</sup>	8	34.0 SF
1st HORIZ. WEB SPLICE PL - G1 & G5	P2	PL 1/2" x 6 1/2"	1.17 SF / Ft	20.10 Ft	3.25 In <sup>2</sup>	4	94.0 SF
2nd HORIZ. WEB SPLICE PL - G1 & G5	P3	PL 1/2" x 6 1/2"	1.17 SF / Ft	16.10 Ft	3.25 In <sup>2</sup>	4	75.4 SF
END WEB SPLICE PL - G2	P4	PL 1/2" x 14 1/2"	2.50 SF / Ft	1.93 Ft	7.25 In <sup>2</sup>	4	19.7 SF
LONG HORIZ. WEB SPLICE PL - G2	P5	PL 1/2" x 6 1/2"	1.17 SF / Ft	22.52 Ft	3.25 In <sup>2</sup>	2	52.7 SF
SHORT HORIZ. WEB SPLICE PL - G2	P6	PL 1/2" x 6 1/2"	1.17 SF / Ft	16.02 Ft	3.25 In <sup>2</sup>	2	37.5 SF
I/S BOT. FL. SPLICE PL - G1, G2 & G5	P7	PL 1" x 4"	0.83 SF / Ft	3.60 Ft	4.00 In <sup>2</sup>	8	24.5 SF
I/S BOT. FL. SPLICE PL - G1 & G5	P7A	PL 3/4" x 3 1/2"	0.71 SF / Ft	3.60 Ft	2.63 In <sup>2</sup>	4	10.4 SF
O/S BOT. FL. SPLICE PL - G1, G2 & G5	P8	PL 1" x 12"	2.17 SF / Ft	3.60 Ft	12.00 In <sup>2</sup>	4	32.0 SF
O/S BOT. FL. SPLICE PL - G1 & G5	P9	PL 3/4" x 10"	1.79 SF / Ft	3.60 Ft	7.50 In <sup>2</sup>	2	13.2 SF
BOT. FL. COVER PL - G4	P10	PL 3/4" x 15"	2.63 SF / Ft	23.04 Ft	11.25 In <sup>2</sup>	1	60.7 SF
BOT. FL. COVER PL - G1	P12	PL 3/4" x 12"	2.13 SF / Ft	14.00 Ft	9.00 In <sup>2</sup>	1	29.9 SF
BENT REPAIR PLATE - G1	BP11	PL 1/2" x 10 1/2"	1.83 SF / Ft	14.29 Ft	5.25 In <sup>2</sup>	1	26.3 SF
BENT REPAIR PL W/O HOLES - G1	BP12	PL 1/2" x 10 1/2"	1.83 SF / Ft	14.29 Ft	5.25 In <sup>2</sup>	1	26.3 SF
END WEB SPLICE FILLS (CUT) - G1 & G5	FP1	PL 1/2" x 14 1/2"	1.21 SF / Ft	1.66 Ft	1.75 In <sup>2</sup>	4	8.5 SF
1st HORIZ. WEB SPLICE FILLS - G1 & G5	FP2	PL 1/2" x 3 3/4"	0.60 SF / Ft	20.10 Ft	0.84 In <sup>2</sup>	2	24.4 SF
2nd HORIZ. WEB SPLICE FILLS - G1 & G5	FP3	PL 1/2" x 3 3/4"	0.60 SF / Ft	16.10 Ft	0.84 In <sup>2</sup>	2	19.5 SF
END WEB SPLICE FILL PLATES (CUT) - G2	FP4	PL 1/2" x 14 1/2"	1.21 SF / Ft	1.93 Ft	1.75 In <sup>2</sup>	2	5.1 SF
1st HORIZ. WEB SPLICE FILLS - G2	FP5	PL 1/2" x 3 3/4"	0.60 SF / Ft	22.52 Ft	0.84 In <sup>2</sup>	1	13.7 SF
2nd HORIZ. WEB SPLICE FILLS - G2	FP6	PL 1/2" x 3 3/4"	0.60 SF / Ft	16.02 Ft	0.84 In <sup>2</sup>	1	9.7 SF
BOT. FL. SPLICE FILLS - G1, G2 & G5	FP8	PL 1/4" x 12"	2.04 SF / Ft	1.79 Ft	3.00 In <sup>2</sup>	4	14.8 SF
BOT. FL. FILL - G1	FP12	PL 1/4" x 9"	1.71 SF / Ft	5.96 Ft	11.25 In <sup>2</sup>	1	10.4 SF
CONNECTION ANGLES - G1, G2 & G5	L1 & L2	L 4 x 4 x 1/2	1.33 SF / Ft	0.98 Ft	3.75 In <sup>2</sup>	12	16.3 SF
CONNECTION ANGLE - G1	L3	L 8 x 8 x 1/2	2.67 SF / Ft	0.83 Ft	7.84 In <sup>2</sup>	1	2.4 SF
CHANNEL DIAPHRAGMS	D1	C12x25	2.94 SF / Ft	6.66 Ft	7.34 In <sup>2</sup>	6	118.0 SF
<b>TOTAL PAINTING QUANTITY = 1,416.8 SF</b>							

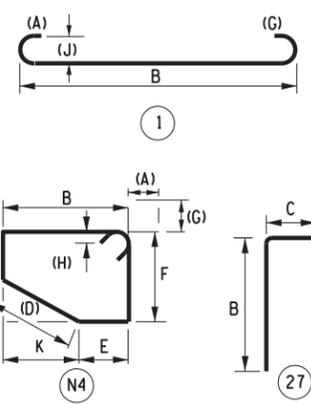
DESCRIPTION	PIECE-MARK	WEIGHT / PIECE	NO. REQ'D	TOTAL WEIGHT
NEW GIRDER SEGMENT - G1 & G5	B1 & B5	3,933.0 LB	2	7,866.0 LB
NEW GIRDER SEGMENT - G2	B2	4,343.0 LB	1	4,343.0 LB
END WEB SPLICE PL - G1 & G5	P1	41.0 LB	8	328.0 LB
1st HORIZ. WEB SPLICE PL - G1 & G5	P2	222.3 LB	4	889.2 LB
2nd HORIZ. WEB SPLICE PL - G1 & G5	P3	178.1 LB	4	712.4 LB
END WEB SPLICE PL - G2	P4	47.5 LB	4	190.0 LB
LONG HORIZ. WEB SPLICE PL - G2	P5	249.1 LB	2	498.2 LB
SHORT HORIZ. WEB SPLICE PL - G2	P6	177.2 LB	2	354.4 LB
I/S BOT. FL. SPLICE PL - G1, G2 & G5	P7	49.1 LB	8	392.8 LB
I/S BOT. FL. SPLICE PL - G1 & G5	P7A	32.2 LB	4	128.8 LB
O/S BOT. FL. SPLICE PL - G1, G2 & G5	P8	147.2 LB	4	588.8 LB
O/S BOT. FL. SPLICE PL - G1 & G5	P9	92.0 LB	2	184.0 LB
BOT. FL. COVER PL - G4	P10	882.1 LB	1	882.1 LB
BOT. FL. COVER PL - G1	P12	428.8 LB	1	428.8 LB
BENT REPAIR PLATE - G1	BP11	255.3 LB	1	255.3 LB
BENT REPAIR PL W/O HOLES - G1	BP12	255.3 LB	1	255.3 LB
END WEB SPLICE FILLS (CUT) - G1 & G5	FP1	11.7 LB	4	46.8 LB
1st HORIZ. WEB SPLICE FILLS - G1 & G5	FP2	57.7 LB	2	115.4 LB
2nd HORIZ. WEB SPLICE FILLS - G1 & G5	FP3	46.2 LB	2	92.4 LB
END WEB SPLICE FILL PLATES (CUT) - G2	FP4	13.3 LB	2	26.6 LB
1st HORIZ. WEB SPLICE FILLS - G2	FP5	64.7 LB	1	64.7 LB
2nd HORIZ. WEB SPLICE FILLS - G2	FP6	46.0 LB	1	46.0 LB
BOT. FL. SPLICE FILLS - G1, G2 & G5	FP8	18.3 LB	4	73.2 LB
BOT. FL. FILL - G1	FP12	228.1 LB	1	228.1 LB
CONNECTION ANGLES - G1, G2 & G5	L1 & L2	12.5 LB	12	150.0 LB
CONNECTION ANGLE - G1	L3	22.3 LB	1	22.3 LB
CHANNEL DIAPHRAGMS	D1	166.4 LB	6	998.4 LB
<b>TOTAL STEEL WEIGHT = 20,161.0 LB</b>				

**BAR MARK DESIGNATIONS**

A = ABUTMENT PEDESTAL  
 B = BACKWALL EXTENSION  
 D = DECK SLAB EXTENSION  
 H = JOINT HEADER  
 P = PIER PEDESTAL  
 S = SAFETY WALK

FF = FRONT FACE  
 RF = REAR FACE

G = GALVANIZED



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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

**Thruway Authority**

2200 Main Place Tower  
Buffalo, NY 14203-3722  
716.877.6330 • www.cha.com

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 463.45 BIN 5511490 SHERIDAN CENTER RD. OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING BAR LIST & STEEL WEIGHTS & PAINTING TABLES	DRAWING NUMBER: S-40

FILE NAME = V:\Projects\ANY\K5\36292\CADD\NSTN\MP\_463.45\_S-40.dgn  
 DATE / TIME = 26-JUN-2020 10:00:00  
 USER = G379  
 DESIGN SUPERVISOR: G. HOFFMANN  
 CHECKED BY: S. KINSMAN  
 DRAFTED BY: J. HARTWELL  
 CHECKED BY: S. SCHUKRAFT

ALTERED ON: \_\_\_\_\_ AFFIXED ON: 6/25/2020

SIGNATURE: \_\_\_\_\_ STAMP: \_\_\_\_\_

**PAINTING NOTES - MP 421.57:**

- ASIDE FROM PAINTING REQUIRED FOR THE STEEL REPAIRS, AND AREAS WITHIN AND IMMEDIATELY ADJACENT TO THE REPAIR LIMITS, NO OTHER CLEANING OR PAINTING OF THE STRUCTURAL STEEL IS ANTICIPATED.
- THE COST FOR ALL CLEANING, SURFACE PREPARATION, SHOP PRIMING AND SHOP PAINTING FOR ALL NEW STEEL SHALL BE PAID SEPARATELY UNDER ITEM 572.010002.  
  
THE COST FOR ALL CLEANING AND SURFACE PREPARATION OF THE EXISTING STEEL AND THE COST OF TOUCH-UP PAINTING OF BOTH THE EXISTING & NEW STEEL SHALL BE INCLUDED IN THE UNIT PRICE FOR THE APPLICABLE STEEL REPAIR ITEMS 564.7000XX.
- EXCEPT WHERE NOTED, PRIOR TO SHIPPING TO THE FIELD, ALL NEW OR REPLACEMENT STRUCTURAL STEEL SHALL BE ABRASIVELY BLAST CLEANED IN ACCORDANCE WITH SSPC SP 10, NEAR WHITE METAL BLAST AND SHALL BE PRE-PRIMED, AFTER SHOP FABRICATION, WITH AN INORGANIC ZINC-RICH PRIMER. ALL DIRT, GREASE AND FOREIGN MATTER SHALL BE CLEANED FROM THE NEW STEEL PRIOR TO APPLICATION OF THE FIELD APPLIED INTERMEDIATE COAT, AND FINISH COAT.
- PAINT SYSTEM MUST BE FROM NYSDOT APPROVED LIST, AND APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH THE MANUFACTURER'S CERTIFICATION STATING THAT THE PAINT MEETS THE ABOVE REQUIREMENTS.
- ALL LARGER STEEL REPLACEMENT ELEMENTS SHALL BE 3-COAT PAINTED IN THE SHOP IN ACCORDANCE WITH SECTION 572, WITH THEIR CONTACT SURFACES MASKED & PRIMED ONLY, AS INDICATED ON THESE DRAWINGS.
- ALL OTHER COMPONENTS (FILL PLATES) SHOULD BE SHOP PRIMED ONLY AND FINISH PAINTED IN THE FIELD. THE AREAS REQUIRING FULL SHOP PAINTING, OR SHOP PRIMING ONLY, SHALL BE CLEARLY IDENTIFIED ON THE STEEL SHOP DRAWINGS.
- ALL COATINGS SHALL BE APPLIED IN A NEAT, WORKMANLIKE MANNER. COATINGS SHALL BE APPLIED UNIFORMLY AND SHALL BE FREE OF RUNS, SAGS, DRIPS, OR OTHER DEFECTS. THE INTERMEDIATE EPOXY COAT AND THE URETHANE FINISH COAT MAY BE SHOP-APPLIED BY BRUSH, ROLLER OR SPRAY. THE INORGANIC ZINC PRIMER SHALL BE APPLIED BY SPRAY ONLY.
- FIELD TOUCH-UP OF DAMAGED AREAS OF PRIMER COAT SHALL BE AS DIRECTED BY THE ENGINEER USING A COMPATIBLE, ORGANIC ZINC TOUCH-UP PRIMER.
- GALVANIZED BOLTS USED FOR THE STRUCTURAL STEEL REPAIRS WILL BE REQUIRED TO BE PAINTED.
- ALONG THE CUT LINE, AND AT ALL FIELD WELDED REPAIRS, THE EXISTING PAINTED SURFACES SHALL BE CLEANED & PREPARED IN ACCORDANCE WITH SSPC SP 11 "POWER TOOL CLEANING TO BARE METAL" WITHIN 3 INCHES ON EACH SIDE OF THE CUT LINE, AND THEN PRIMED AFTER WITH AN APPROVED ORGANIC ZINC-RICH PRIMER.
- WHERE NEW MATERIAL IS TO BE BOLTED TO EXISTING MATERIAL, THE EXISTING CONTACT SURFACE SHALL BE CLEANED PER THE REQUIREMENTS OF SSPC SP 11 "POWER TOOL CLEANING TO BARE METAL." THE CONTACT SURFACES SHALL BE COATED WITH THE ORGANIC ZINC-RICH PRIMER PRIOR TO INSTALLATION OF NEW MATERIAL. WHERE NECESSARY, TARPS AND SCREENS WILL BE REQUIRED DURING PAINT REMOVAL OPERATION AND LARGE RUST SCALE WILL NOT BE PERMITTED TO BE DROPPED ON THE ROADWAY. THE COST FOR THE CLEANING AND PAINTING SHALL BE INCLUDED IN THE STEEL REPAIR ITEM.
- FINISH COLOR : (SAGE GREEN), (MATCH EXISTING PAINT)
- TEMPORARY COMPONENTS (STRONG-BACKS, CROSS-BEAMS, RODS, ANCHOR PLATES, ETC.) HAVE NO CLEANING OR PAINTING REQUIREMENTS.

**LEAD PAINT NOTES - 421.57:**

- THE BRIDGE WAS CLEANED AND PAINTED IN JULY, 2016 TO SSPC-SP10 AND THUS NO LONGER CONTAINS ANY LEAD PAINT, EXCEPT UNDER THE OVERLAPPING PLYS.
- THE CONTRACTOR IS STILL REQUIRED TO USE VACUUM SHROUDED TOOLS TO REDUCE EMISSIONS TO A MINIMUM. THE CONTRACTOR SHALL USE TARPS OR OTHER MEANS TO CONTAIN, AND MINIMIZE EMISSION OF PAINT DUST TO BE PAID UNDER ITEM 570.160002.
- ALL PAINT CHIPS, PAINT DUST & RUST SCALE SHALL BE COLLECTED AND DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL ORDINANCE.
- LIMITS AND METHODS FOR REMOVAL OF PAINT AT LOCATIONS OF FASTENER REMOVAL OR FLAME CUTTING SHALL BE AS DESCRIBED IN SUBSECTIONS 202-3.05 AND 574 OF THE STANDARD SPECIFICATIONS. THE COST OF ANY PAINT REMOVAL OR PAINT STRIPPING REQUIRED SHALL BE INCLUDED IN UNIT PRICE OF THE APPLICABLE STRUCTURAL STEEL REPAIR ITEM. PAINT WASTE SHALL BE COLLECTED FOLLOWING THE REQUIREMENTS OF THE ENVIRONMENTAL GROUND PROTECTION, AND PAINT WASTE SHALL BE DISPOSED OF FOLLOWING THE REQUIREMENTS OF SECTION 571 - DISPOSAL OF PAINT REMOVAL WASTE. NYSDOT STANDARD SPECIFICATIONS

**STEEL & FABRICATION NOTES - MP 421.57:**

- ALL STEEL FABRICATION IS GOVERNED BY, AND SHALL MEET THE REQUIREMENTS OF THE NEW YORK STATE STEEL CONSTRUCTION MANUAL, 4TH EDITION (JANUARY 2018) AND SECTION 564 OF THE STANDARD SPECIFICATIONS EXCEPT AS DIRECTED WITHIN THESE PLANS OR AS ORDERED BY THE ENGINEER.
- SHOP DRAWINGS SHALL BE SUBMITTED IN ENGLISH UNITS OF MEASURE AND IN ACCORDANCE WITH NYS SCM. THE WEIGHTS OF ALL COMPONENTS SHALL BE INDICATED ON THE BILL OF MATERIALS WITHIN THE SHOP DRAWINGS.
- NEW STRUCTURAL STEEL: STRUCTURAL STEEL PLATES OR SHAPES SHALL BE ASTM A709 GRADE 50 KSI.
- NO CHARPY V-NOTCH CERTIFICATION IS REQUIRED FOR ANY OF THE NEW STEEL COMPONENTS.
- TEMPORARY STEEL FOR THE STRONG-BACKS, CROSS-BEAMS, TEMP. ANCHOR PLATES & SHIMS MAY BE GR 36 KSI OR 50 KSI STEEL.
- THE COST OF ALL STRUCTURAL STEEL REMOVAL & DISPOSAL, TORCH CUTTING, ANY LOCALIZED PAINT STRIPPING, WELD REMOVAL AND ALL ACCESS REQUIRED SHALL BE INCLUDED IN THE STEEL REPAIR ITEM.
- WHERE HOLES ARE INDICATED, CONNECTIONS SHALL BE MADE WITH 3/8"Ø HIGH-STRENGTH BOLTS UNLESS OTHERWISE SPECIFIED. ALL BOLTS SHALL BE ASTM A325 TYPE 1 (HDC), WITH ASTM A563 DH HEAVY HEX NUTS AND (2) - F436 HARDENED WASHERS. ALL HOLES ARE 1 1/8"Ø U.N.O.
- ALL NUTS, BOLTS, AND WASHERS SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH THE SPECIFICATIONS. ALL BOLTS SHALL BE FULLY TENSIONED IN ACCORDANCE WITH NYSSCM.
- THE COST FOR FIELD DRILLING & INSTALLATION OF ALL BOLTS, NUTS, WASHERS, WELDS AND MISC. SHIM/FILL PLATES SHALL BE INCLUDED IN THE STEEL REPAIR ITEM.
- NEW HOLES IN EXISTING MATERIAL SHALL BE DRILLED USING THE NEW PIECE AS THE TEMPLATE.
- ANY INCIDENTAL FIELD MODIFICATIONS, FIELD TRIMMING, RETROFITS, SHIMMING OR ADJUSTMENTS TO THE EXISTING OR NEW STEEL (eg: COPEs, CUTS, CLIPS, REAMING, ETC.) NECESSARY TO ENSURE PROPER FIT-UP OF ALL NEW STEEL COMPONENTS SHALL BE INCLUDED IN THE STEEL REPAIR ITEM.
- ADDITIONAL NOTES ARE INCLUDED IN THE APPLICABLE STEEL INSTALLATION OR STEEL REPAIR DRAWINGS.

THE FOLLOWING CONTRACTOR SUBMITTALS REQUIRE APPROVAL PRIOR TO THE START OF WORK:

- STRUCTURAL STEEL SHOP DRAWINGS
- WELDING PROCEDURE SPECIFICATIONS, AND WHEN REQUIRED BY SECTION 8 OF THE NYSSCM, WELDING PROCEDURE QUALIFICATION RECORDS.
- EVIDENCE THAT ALL WELDERS/WELDING OPERATORS ARE QUALIFIED IN THE PROCESS AND POSITION ETC. OF THE WELD BEING PERFORMED IN ACCORDANCE WITH SECTION 8 OF THE NYSSCM.
- PAINT TYPE AND THE MANUFACTURER'S RECOMMENDED PAINT APPLICATION INSTRUCTIONS.

**HEAT STRAIGHTENING NOTES - MP 421.57:**

- ALL STRAIGHTENING, ERECTION, WELDING, HEATING, NON-DESTRUCTIVE TESTING, ETC. SHALL BE PERFORMED IN ACCORDANCE WITH THE NEW YORK STATE STEEL CONSTRUCTION MANUAL (NYSSCM) WITH CURRENT ADDENDA, EXCEPT AS MODIFIED HEREIN.
- ALL REPAIRS TO IMPACT DAMAGED STRUCTURES SHALL BE DONE USING THE GUIDELINES PROVIDED IN THE "U. S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, HEAT-STRAIGHTENING REPAIRS OF DAMAGED STEEL BRIDGES, A TECHNICAL GUIDE AND MANUAL PRACTICE", REPORT NO. FHWA-1F-99-004, OCTOBER 1998.
- ONLY FLAME STRAIGHTENING PROCEDURES MAY BE USED. EXCEPTIONS MAY BE MADE TO ALLOW HOT MECHANICAL STRAIGHTENING SUBJECT TO APPROVAL OF THE DIRECTOR OF ENGINEERING SERVICES. COLD MECHANICAL STRAIGHTENING WILL NOT BE ALLOWED.
- PRELOAD COMPRESSIVE STRESS WILL BE PERMITTED UP TO A MAXIMUM OF 20,000 PSI. PRELOAD STRESS IS INTENDED TO REDUCE THE NUMBER OF HEATING PATTERNS REQUIRED TO STRAIGHTEN DAMAGED MEMBERS.
- HEATING, INCLUDING PREHEATING, MAINTENANCE OF INTERPASS TEMPERATURE, POST-HEATING, FLAME STRAIGHTENING, ETC. SHALL BE CONTROLLED BY THE USE OF TEMPERATURE INDICATING CRAYONS. CRAYONS MANUFACTURED FOR 250°F (120°C), 400°F (200°C), 600°F (316°C), 1050°F (566°C), 1150°F (620°C), 1200°F (649°C) AND 1250°F (677°C) SHALL BE AVAILABLE AT THE WORK SITE. ANY HEATING PROCEDURE THAT CAUSES A PORTION OF THE STEEL TO BE HEATED IN EXCESS OF 1250°F SHALL BE CONSIDERED DESTRUCTIVE HEATING AND SHALL BE CAUSE FOR REPAIR OR REPLACEMENT OF THE STEEL AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR PERSONNEL ENGAGED IN HEATING OPERATIONS SHALL HAVE IN THEIR POSSESSION, TEMPERATURE INDICATION CRAYONS IN THE FOLLOWING INCREMENTS: 600°F, 1050°F, 1150°F, 1200°F, AND 1250°F.
- QUENCHING WITH WATER, OR WATER AND AIR, OR OTHER COOLING MEDIUM WILL NOT BE ALLOWED. COOLING WITH DRY COMPRESSED AIR WILL BE PERMITTED AFTER THE STEEL HAS COOLED TO 600°F.
- THE MANUAL SHIELDED METAL ARC WELDING (SMAW) PROCESS SHALL BE USED FOR ALL FIELD REPAIR WELDING. THE FLUX CORED ARC WELDING (FCAW) PROCESS WITH EXTERNAL GAS SHIELDING OR THE SUBMERGED ARC WELDING (SAW) PROCESS MAY BE USED AS APPROPRIATE, SUBJECT TO APPROVAL OF THE DIRECTOR OF ENGINEERING SERVICES, AND SUBJECT TO QUALIFICATION AS REQUIRED BY THE NYS STEEL CONSTRUCTION MANUAL. ALL COSTS ASSOCIATED WITH THE QUALIFICATION OF THE FCW AND SAW PROCESSES SHALL BE BORNE BY THE CONTRACTOR.
- AFTER ALL REQUIRED REPAIRS ARE COMPLETE, A MAGNETIC PARTICLE INSPECTION SHALL BE PERFORMED ON AND WITHIN 12" OF ANY AREAS THAT WERE HEATED, STRAIGHTENED, GROUND TO REMOVE NICKS, SCRAPES AND GOUGES OR WELDED.
- ALL NICKS, GOUGES, TEARS, CRACKS ETC. SHALL BE REPAIRED AND TESTED PRIOR TO FLAME STRAIGHTENING. ALL DAMAGED CONNECTION PLATES SHALL BE REMOVED AND REMOVAL AREAS TESTED PRIOR TO FLAME STRAIGHTENING.
- AT THE END OF DAILY WORK OPERATIONS, ALL EQUIPMENT OVER HEAD AND ADJACENT TO TRAVEL LANES SHALL BE REMOVED FROM THE STRUCTURE TO THE SATISFACTION OF THE ENGINEER. THIS SHALL INCLUDE BUT NOT BE LIMITED TO THE REMOVAL OF JACKING DEVICES, TEMPORARY BRACING, COME-ALONGS, STEEL SHIMS, WOOD BLOCKING, BEAM BLOCKING, DRILLING EQUIPMENT, LOOSE MISCELLANEOUS IRON, FASTENERS ETC.
- ULTRASONIC TESTING (UT), WHEN REQUIRED, SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 17 OF THE NYSSCM. WELD FLAWS SHALL BE EVALUATED FOR ACCEPTANCE OR REJECTION IN ACCORDANCE WITH TABLE 1700B-HIGHWAY & RAILWAY BRIDGES.
- MAGNETIC PARTICLE TESTING (MPT), WHEN REQUIRED, MUST BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 18 OF THE NYSSCM USING THE YOKE TECHNIQUE, EXCEPT THAT SEPARATE TESTS MUST BE PERFORMED USING BOTH AC OUTPUT CURRENT TO INSPECT FOR SURFACE DISCONTINUITIES AND HALF WAVE RECTIFIED DC OUTPUT CURRENT TO INSPECT FOR NEAR SURFACE DISCONTINUITIES. THE YOKE MUST BE CAPABLE OF PRODUCING A FIELD STRENGTH OF 10 POUNDS (4.5 KG) MINIMUM FOR ALTERNATING CURRENT AND 40 POUNDS (18 KG) MINIMUM FOR DIRECT CURRENT AT THE MAXIMUM POLE SPACING TO BE USED IN THE WORK. THE PROD METHOD SHALL NOT BE USED.
- DURING FLAME STRAIGHTENING PROCEDURES, SHORING POSTS MUST BE INSTALLED UNDER THE GIRDER BEING HEAT STRAIGHTENED IF THAT GIRDER IS STILL CARRYING TRAFFIC. SHORING POSTS MUST BE ATTACHED TO THE GIRDER AND PRE-LOADED AS SHOWN ON THE APPLICABLE DRAWINGS.
- THE ABOVE REQUIREMENTS ARE ONLY APPLICABLE TO SPAN 2 - GIRDER G4 & SPAN 3 - GIRDER G1. NO HEAT STRAIGHTENING & NO TESTING IS REQUIRED ON SPAN 2 - GIRDER G1.
- THE COST OF ANY HEAT STRAIGHTENING SHALL BE INCLUDED IN THE APPLICABLE STEEL REPAIR ITEMS 564.700008 & 564.700009.

**SUMMARY OF WZTC SET-UPS**

SET-UP	ANTICIPATED DURATION
1. 33 WB TO 90 WB RAMP CLOSURE & 90 WB RIGHT 2 LANES CLOSED	3 OR 4 NIGHTS
2. 33 WB TO 90 WB RAMP CLOSURE & 90 WB RIGHT 3 LANES CLOSED	6 TO 10 NIGHTS
3. MULTIPLE CLOSURES - 33 WB TO 90 WB RAMP CLOSURE, AND - 90 EB TO 33 WB RAMP CLOSURE, AND - 90 WB RIGHT 2 LANES CLOSURE - 90 EB RIGHT LANE CLOSURE	2 NIGHTS ONLY
4. 90 WB LEFT 2 LANES CLOSED ONLY - NO MPT ON ROUTE 33 & RAMPS	3 NIGHTS
5. 90 EB TO 33 WB RAMP CLOSURE AND 90 EB RIGHT LANE CLOSURE	3 OR 4 NIGHTS

**GENERAL SEQUENCE OF REPAIRS & NIGHTLY WZTC SCENARIOS**

**LOCATION & DESCRIPTION OF WORK**      **WZTC SET-UP**

1. STRIP PAINT FROM SPAN 2, G1 & G4, DRILL HOLES FOR ANCHOR RODS OVER ALL 3 LANES	*2
2. DELIVER & INSTALL STRONGBACK, FINISH STRIPPING PAINT FROM BOTH SPAN 2 & SPAN 3 GIRDERS	*3
3. CUT OUT DAMAGED GIRDER G1, FINISH STRIPPING PAINT ON SPAN 2, G4	*2
4. INSTALL REPLACEMENT GIRDER SEGMENT ON SPAN 2, G1; COMPLETE BOTH WEB SPLICES	*2
5. INSTALL LONGITUDINAL WEB SPLICE PLATE, START FIELD DRILLING WEB HOLES OVER ALL 3 LANES	*2
6. INSTALL BOTTOM SPLICE ON WEST END; INSTALL WEST END STIFFENING ANGLE	*1
7. COMPLETE LONGITUDINAL SPLICE, STIFFENING ANGLES & BOTTOM FLANGE SPLICE ON WEST END	*1
8. PREP EXISTING GIRDER'S FLANGE & WELD BOTTOM FLANGE SPLICE AT EAST END, CONTINUE LONG. WEB SPLICE	*4
9. INSTALL TEMPORARY POSTS & HEAT STRAIGHTEN SPAN 2, GIRDER G4. CONTINUE LONG. WEB SPLICE ON G1	*2
10. INSTALL REPAIR ANGLES ON SPAN 2 GIRDER G4. INSTALL WELDED STIFFENERS ON G1	*2
11. COMPLETE ANY REMAINING FIELD DRILLING & TORQUE BOLTS ON G1/G4, COMPLETE WELDED STIFFENERS	*2
12. INSTALL STIFFENING ANGLE ON EAST END OF G1 (OVER LEFT & CENTER LANES)	*4
13. COMPLETE ANY DRILLING/ TORQUE BOLTS ON EAST STIFFENING ANGLE; TOUCH UP PAINT (LEFT & CENTER)	*4
14. TOUCH UP PAINTING ON G1 & G4	*1
15. DRILL HOLES AND INSTALL REPAIR ANGLES ON SPAN 3, GIRDER G1. REMOVE STRONG-BACK OFF BRIDGE *	*3
16. FINISH DRILLING HOLES & TORQUING BOLTS ON SPAN 3, GIRDER G1	*5
17. FINISH TOUCH-UP PAINTING ON SPAN 3, GIRDER	*5
18. EXTRA DAY(S) FOR TORQUING BOLTS OR PAINT TOUCH UP, IF NEC.	*1, 2 OR 5

GENERAL & SUGGESTED SEQUENCE ONLY. MANY OPERATIONS MAY OCCUR SIMULTANEOUS. CONTRACTOR IS FREE TO SWITCH SEQUENCE OF OPERATIONS.

CONTRACTOR MAY ELECT TO PERFORM EB OPERATIONS \*15-17 FIRST, OR MAY PERFORM EB WORK SIMULTANEOUS WITH WB OPERATIONS

\* STRONGBACK MAY BE REMOVED AT ANY TIME AFTER BOTTOM FLANGE SPLICES ARE COMPLETED.

**ITEM 572.010002 - STRUCTURAL STEEL PAINTING: SHOP APPLIED - KENSINGTON EXPRESSWAY REPAIRS**

DESCRIPTION	PIECE-MARK	SECTION	PAINTABLE AREA / LF	LENGTH	END AREA	# OF PIECES	TOTAL PAINT AREA
NEW GIRDER SEGMENT - G1	B1	W 30 x 124	5.90 SF / Ft	29.0 Ft	23.77 In <sup>2</sup>	1	171.5 SF
END WEB SPLICE PLATES	P1	PL 1/2" x 14 1/2"	2.50 SF / Ft	1.85 Ft	7.25 In <sup>2</sup>	4	19.0 SF
HORIZ. WEB SPLICE PLATES	P2	PL 1/2" x 6 1/2"	1.17 SF / Ft	27.75 Ft	3.25 In <sup>2</sup>	2	64.9 SF
BOTTOM FL. SPLICE PLATES	P3	PL 1" x 4 1/4"	0.88 SF / Ft	4.98 Ft	4.25 In <sup>2</sup>	2	8.9 SF
WELDED WEB STIFF. PLATES	P4	PL 1" x 7 1/2"	0.83 SF / Ft	2.19 Ft	7.50 In <sup>2</sup>	6	11.6 SF
DIAPHRAGM CONN. ANGLES	L1	L 7 x 4 x 1/2	1.83 SF / Ft	1.29 Ft	5.26 In <sup>2</sup>	2	4.9 SF
EAST-MOST STIFF. ANGLES	L2	L 8 x 4 x 1	2.00 SF / Ft	17.79 Ft	11.10 In <sup>2</sup>	2	71.5 SF
SHOP BOLTED STIFF. ANGLES	L3	L 8 x 4 x 1	2.00 SF / Ft	25.29 Ft	11.10 In <sup>2</sup>	2	101.5 SF
WEST-MOST STIFF. ANGLES	L4	L 8 x 4 x 1	2.00 SF / Ft	6.79 Ft	11.10 In <sup>2</sup>	2	27.5 SF
SPAN 2, G4 REPAIR ANGLES	L5	L 6 x 6 x 3/4	2.00 SF / Ft	13.75 Ft	8.46 In <sup>2</sup>	2	55.3 SF
SPAN 3, G1 REPAIR ANGLES	L6	L 6 x 6 x 3/4	2.00 SF / Ft	12.0 Ft	8.46 In <sup>2</sup>	2	48.3 SF

ALL COMPONENTS ARE FOR SPAN 2 G1 REPAIR U.N.O.      **TOTAL PAINTING QUANTITY = 584.9 SF**

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REVISIONS			
DATE	DESCRIPTION	BY	SYM.



**Thruway Authority**



TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING GENERAL NOTES - MP 421.57 (1 OF 2)	DRAWING NUMBER: GN-3

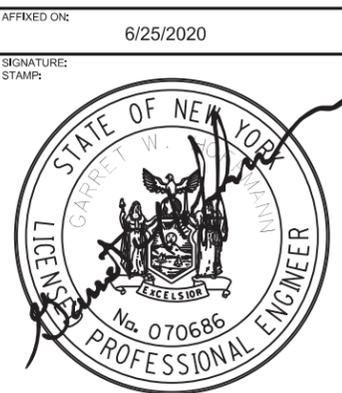
CHECKED BY: S. SCHUKRAFT

DRAFTED BY: J. HARTWELL

CHECKED BY: G. HOFFMANN

DESIGNED BY: S. KINSIMAN

DESIGN SUPERVISOR: G. HOFFMANN



**GENERAL SEQUENCE OF WORK TO BE DONE - MP 421.57;**

**SPAN 2 - GIRDER G1 REPLACEMENT;**

1. INSTALL SIDEWALK CLOSED SIGNS AT BOTH ENDS OF SIDEWALK, ON THE FAR SIDE OF THE TWO OVERHEAD BRIDGES OVER THE 33 RAMPS. REMOVE ANY INTERFERING FENCING ON TRAFFIC SIDE OF THE SIDEWALK ON THIS BRIDGE.
2. INSTALL 1-90 WB ADVANCED SIGNAGE, 33 WB RAMP DETOUR SIGNS & ESTABLISH WORK ZONE TRAFFIC CONTROL IN ACCORDANCE WITH THE APPLICABLE WZTC DWGS.
3. PLACE HARDWOOD GRILLAGE & DISTRIBUTION PLATE ON THE EXISTING SIDEWALK DIRECTLY OVER THE EXISTING FASCIA GIRDER, TO BE REPAIRED. LOCATE THE GRILLAGE DIRECTLY OVER PIER 1 & PIER 2 AS SHOWN ON THE DRAWINGS.
4. LAYOUT HOLE LOCATIONS & DRILL HOLES FOR HANGER RODS THROUGH EXISTING SIDEWALK & DECK. THIS SHOULD BE DONE PRIOR TO STRONG-BACK INSTALLATION DUE TO HAVING MINIMAL CLEARANCE TO THE FENCE & BRIDGE RAILING.
5. PLACE STRONG-BACK BEAM ON THE HARDWOOD GRILLAGE & DISTRIBUTION PLATE. WELD STRONG-BACK TO DISTRIBUTION PLATE AND WELD ONLY THE END BRACING DIAPHRAGMS AS SHOWN ON THE PLANS.
6. INSTALL HANGER RODS & PLATES THROUGH DECK & ATTACH TO STRONG-BACK. TORQUE ALL RODS AS SPECIFIED.
7. INSTALL THE 2 INTERMEDIATE BRACES ON THE STRONG BACK & ANCHOR TO THE SIDEWALK. THIS MUST BE DONE AFTER THE RODS ARE TORQUED.
8. REMOVE AND STORE THE TWO INTERFERING DIAPHRAGMS BETWEEN G1 & G2.
9. STRIP PAINT FROM WITHIN 3" AND/OR 7" ON BOTH SIDES OF THE PROPOSED CUT LINE. ALSO, STRIP PAINT ON EXISTING GIRDER UNDER CONTACT SURFACE FOR NEW STEEL.
10. TORCH CUT AND REMOVE THE DAMAGED WEB & BOTTOM FLANGE FROM THE GIRDER BEING WORKED ON.
11. REMOVE ANY REMAINING PORTION OF THE EXISTING DIAPHRAGM CONNECTION PLATES.
12. GRIND SMOOTH ALL NICKS AND GOUGES ON REMAINING GIRDER ALONG THE CUT LINE TO SATISFACTION OF ENGINEER.
13. BEVEL THE BOTTOM FLANGE AT EAST END OF THE EXISTING GIRDER. CUT THE WELDING ACCESS HOLE IN THE EXISTING WEB. PREP THE EAST JOINT FOR WELDING.
14. LIFT, INSTALL & ALIGN THE REPLACEMENT GIRDER SEGMENT. TEMPORARILY SUPPORT SEGMENT BY FORK-LIFT, OR TEMPORARY SUPPORT THROUGH THE DECK, OR A TEMPORARY SUPPORT FROM THE REMAINING GIRDER.
15. FIELD DRILL AND INSTALL END WEB SPLICES AND THEN THE TEMPORARY SUPPORTS CAN BE REMOVED. INSTALL BOTTOM FLANGE BOLTED SPlice AT WEST END.
16. FIELD DRILL EXISTING WEB AND INSTALL THE LONGITUDINAL WEB SPlice PLATE.
17. WELD THE BOTTOM FLANGES AT EAST END AND REMOVE ANY RUN-OFF TABS, & GRIND WELDS AS NEEDED.
18. RE-INSTALL THE 2 EXISTING DIAPHRAGMS. FIELD DRILL THE NEW CONNECTION ANGLES TO MATCH HOLES IN THE EXISTING DIAPHRAGM.
19. UNDER SEPARATE LEFT LANE & RAMP LANE CLOSURES, INSTALL SHORT SEGMENTS OF STIFFENING ANGLE AT EAST END & WEST END, RESPECTIVELY. FIELD WELD EAST END JOINT BETWEEN STIFFENING ANGLES.
20. TORQUE ALL BOLTS.
21. FIELD WELD 6 WEB STIFFENERS, LOCATED BY ENGINEER.
22. REMOVE TEMPORARY RODS, STRONG-BACK AND GRILLAGE. RE-INSTALL AND/OR REPAIR ANY DAMAGE TO FENCING, A.O.B.E.
23. FILL THE ANCHOR ROD HOLES THROUGH THE DECK/SIDEWALK WITH GROUT.
24. TOUCH UP PAINT ALL CONNECTIONS OR OTHER DAMAGED PAINT.
25. REMOVE ANY SIDEWALK CLOSED SIGNS.
26. REMOVE WORK ZONE TRAFFIC CONTROL AND REMOVE ANY RAMP DETOUR SIGNAGE (AS APPLICABLE).

**SPAN 2 - GIRDER G4 REPAIR:**

1. INSTALL 1-90 WB ADVANCED SIGNAGE, 33 WB DETOUR SIGNS & ESTABLISH WORK ZONE TRAFFIC CONTROL IN ACCORDANCE WITH THE APPLICABLE WZTC DWGS.
2. REMOVE PAINT FROM ONLY THE AREA OF THE BOTTOM FLANGE & LOWER WEB THAT WILL BE HEATED AND ALSO THE 6" CONTACT AREA THAT RECEIVES NEW STEEL FOR THE LENGTH OF THE NEW ANGLES.
3. AT SPAN 2, GIRDER G4 ONLY, PRIOR TO ANY HEATING OF THE GIRDER FOR HEAT STRAIGHTENING, INSTALL 2 TEMPORARY SHORING POSTS UNDER THE GIRDER AND PRE-LOAD THE SHORING POSTS.
4. AT SPAN 2, GIRDER G4 ONLY, HEAT THE BOTTOM FLANGE & LOWER WEB IN ACCORDANCE WITH THE HEAT STRAIGHTENING PROCEDURES (DWG. ST-12), AND STRAIGHTEN THE GIRDER TO REMOVE THE LONGITUDINAL SWEEP BY USE OF COME-ALONGS OR JACK & STRUT.
5. HEAT THE UNDERSIDE OF THE BOTTOM FLANGE IN ACCORDANCE WITH THE HEAT STRAIGHTENING PROCEDURES (DWG. ST-12), AND FLATTEN THE DISTORTION IN THE BOTTOM FLANGE USING JACKS & BLOCKING.
6. AFTER COOLING, REMOVE SHORING POSTS.
7. CLEAN ANY SOOT, DIRT OR GREASE AND APPLY ZINC-RICH PRIMER TO BARE STEEL.
8. LIFT, INSTALL & ALIGN THE NEW STRENGTHENING ANGLES.
9. FIELD DRILL HOLES AND INSTALL BOLTS THRU THE EXISTING GIRDER WEB.
10. SYSTEMATICALLY TIGHTEN AND RE-TIGHTEN ALL THE BOLTS TO REMOVE THE REMAINING WEB DISTORTION, SUCH THAT NEW ANGLES ARE TIGHT TO THE EXISTING WEB. USE IMPACT WRENCH TO ASSIST IN REMOVING THE WEB DISTORTION, BUT DO NOT OVER-TORQUE THE BOLTS.
11. ONCE ALL BOLTS ARE SNUG, TORQUE ALL BOLTS.
12. TOUCH UP PAINT THE NEW STEEL, BOLTS AND OTHER DAMAGED PAINT.
13. REMOVE WORK ZONE TRAFFIC CONTROL AND REMOVE DETOUR SIGNAGE (AS APPLICABLE).

**SPAN 3 - GIRDER G1 REPAIR:**

1. INSTALL ADVANCED SIGNAGE, 90 EB - 33 WB, DETOUR SIGNS & ESTABLISH WORK ZONE TRAFFIC CONTROL TO TAKE EB RIGHT LANE IN ACCORDANCE WITH THE APPLICABLE WZTC DRAWINGS.
2. REMOVE PAINT FROM ONLY THE AREA OF THE BOTTOM FLANGE THAT WILL BE HEATED AND ALSO THE 6" CONTACT AREA THAT RECEIVES NEW STEEL FOR THE LENGTH OF THE NEW ANGLES.
3. HEAT THE UNDERSIDE OF THE BOTTOM FLANGE & LOWER WEB IN ACCORDANCE WITH THE HEAT STRAIGHTENING PROCEDURES (DWG. ST-12), AND FLATTEN THE DISTORTION IN THE BOTTOM FLANGE USING JACKS & BLOCKING.
4. REMOVE ANY INCIDENTAL LONGITUDINAL SWEEP IN GIRDER, USING COME ALONGS, ONLY INSOFAR AS NEEDED TO PROPERLY ALIGN & INSTALL THE NEW ANGLE.
5. CLEAN ANY SOOT, DIRT OR GREASE AND APPLY ZINC-RICH PRIMER TO BARE STEEL.
6. LIFT, INSTALL & ALIGN THE NEW STRENGTHENING ANGLES.
7. FIELD DRILL HOLES AND INSTALL BOLTS THRU THE EXISTING GIRDER WEB.
8. SYSTEMATICALLY TIGHTEN AND RE-TIGHTEN ALL THE BOLTS TO REMOVE THE REMAINING WEB DISTORTION, SUCH THAT NEW ANGLES ARE TIGHT TO THE EXISTING WEB. USE IMPACT WRENCH TO ASSIST IN REMOVING THE WEB DISTORTION, BUT DO NOT OVER-TORQUE THE BOLTS.
9. ONCE ALL BOLTS ARE SNUG, TORQUE ALL BOLTS.
10. TOUCH UP PAINT THE NEW STEEL, BOLTS AND OTHER DAMAGED PAINT.
11. REMOVE WORK ZONE TRAFFIC CONTROL AND REMOVE DETOUR SIGNAGE (AS APPLICABLE).

**MAINTENANCE & PROTECTION OF TRAFFIC**

1. WORK ZONE TRAFFIC CONTROL IS TO BE PROVIDED BY THE CONTRACTOR, UNLESS OTHERWISE DIRECTED BY THE ENGINEER IN CHARGE.
2. SEE DWG'S DTR-1 TO DTR-3 AND DWG'S WZTC-1 THRU WZTC-35 FOR APPROPRIATE WORK ZONE TRAFFIC CONTROL & DETOUR SIGNAGE.
3. THE EXISTING SIDEWALK AWAY FROM THE BRIDGE IS NOT PASSABLE. NO PEDESTRIANS ARE ANTICIPATED. HOWEVER, INSTALL "SIDEWALK CLOSED" SIGNS AT BOTH ENDS WHERE DIRECTED BY ENGINEER.
4. THE CONTRACTOR SHALL WORK WITH THE NYSTA, NYSDOT, NIAGARA INTERNATIONAL TRANSPORTATION TECHNOLOGY COALITION (NITTEC), AND LOCAL EMERGENCY AND SERVICE OFFICIALS IN THE EVENT THAT THERE IS AN INCIDENT OR EMERGENCY WITHIN THE PROJECT LIMITS.
5. AT LEAST TWO WEEKS PRIOR TO IMPLEMENTING THIS TRAFFIC CONTROL PLAN, THE CONTRACTOR SHALL CONTACT NYSTA REPRESENTATIVE JEREMY D. LEFORT @ (716) 635-6233 TO COORDINATE CONCURRENT PROJECT WORK AND COORDINATE WHO IS CONTACTING LOCAL FIRE, POLICE, AMBULANCE AND REGIONAL TRANSIT SERVICES, IF ANY.
6. LANE CLOSURES SHALL BE REQUESTED & SCHEDULED WITH THE BUFFALO DIVISION TRAFFIC AT LEAST ONE WEEK IN ADVANCE OF ANY PROPOSED LANE CLOSURES.

THE CONTRACTOR IS REQUIRED TO OBTAIN A HIGHWAY WORK PERMIT FROM THE NYSDOT REGION 5 NORTH ERIE RESIDENCY. THE CONTRACTOR WILL ALSO BE REQUIRED TO FILL OUT AND SUBMIT A TRAVEL ADVISORY REPORT (TAR FORM) FOR EACH WEEK THAT THERE WILL BE ANY TRAFFIC CONTROL ON ROUTE 33 OR ON THE RAMP TO OR FROM ROUTE 33

**WORK ZONE TRAFFIC CONTROL:**

THE FOLLOWING IS A GENERAL DESCRIPTION OF THE WORK ZONE TRAFFIC CONTROL PHASING. IT IS INTENDED TO PROVIDE A GENERAL DESCRIPTION OF THE WZTC NEEDED FOR EACH REPAIR TYPE, AND IS NOT NECESSARILY A COMPLETE LISTING OF ALL WZTC WORK TO BE DONE. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE DRAWINGS AND THE APPLICABLE NYSDOT WZTC SPECIFICATIONS REFERENCED BY ITEM NUMBER WITHIN THE DRAWINGS.

**REPAIR NO. 1 STEEL REPAIRS TO SPAN 2 - GIRDER G1:**

1. INSTALL ADVANCED WARNING AND DETOUR SIGNS CLOSING ROUTE 33 WB TO I-90 WB RAMP ACCORDING TO DETAILS PROVIDED UNDER:
  - ROUTE 33 WB TO I-90 WB DETOUR SIGNING (DWGS. DTR-1 & DTR-2), WHICH WILL BE REQUIRED FOR THE MAJORITY OF PROPOSED WORK ON SPAN 2 GIRDER G1, EXCEPT WHEN TAKING THE LEFT LANE OR LEFT 2 LANES ON I-90, WHERE, UNDER THOSE SCENARIOS, THE 33 RAMP LANE SHALL REMAIN OPEN.
  - SET-UP REQUIRED THRUWAY MAINLINE (I-90) WB LANE CLOSURES AS NEEDED USING EITHER: I-90 WB TWO LANE CLOSURE (DWGS. WZTC-1 TO WZTC-11), WHICH IS NEEDED FOR THE MAJORITY OF REPAIRS TO SPAN 2, GIRDER G1, AND FOR WHICH 2/3 OF THE DRILLING & REPAIR INSTALLATION CAN BE ACCOMPLISHED. OR I-90 WB THREE LANE CLOSURE (DWGS. WZTC-12 TO WZTC-27), WHICH IS NEEDED FOR INSTALLING THE STRONG-BACK, DRILLING STRONG-BACK ANCHOR HOLES AND INSTALLING THE NEW GIRDER AND STIFFENING ANGLES. IT IS INTENDED TO UTILIZE THE 3 LANE CLOSURE SET-UP ONLY WHEN PERFORMING WORK IN THE CENTER & RIGHT LANES TOGETHER.
2. WORK REQUIRING CLOSURE OF LEFT LANE OR TWO LEFT LANES OF THRUWAY MAINLINE (I-90 WB) SHALL BE ACCOMPLISHED USING NYSTA STANDARD SHEET TA 619-12 AND TA 619-13 RESPECTIVELY. THIS WILL BE REQUIRED ONLY WHEN INSTALLING THE EAST-MOST STIFFENING ANGLE, AND/OR UNDER THE SCENARIO WHERE ALL OTHER WORK OVER THE RAMP LANE AND RIGHT LANE HAS BEEN COMPLETED & ONLY WORK OVER THE CENTER LANE IS REQUIRED FOR THAT SHIFT.

**REPAIR NO. 2: STEEL REPAIRS TO SPAN 2 - GIRDER G4:**

1. INSTALL ADVANCED WARNING AND DETOUR SIGNS CLOSING ROUTE 33 WB TO I-90 WB RAMP ACCORDING TO DETAILS PROVIDED UNDER:
  - ROUTE 33 WB TO I-90 WB DETOUR SIGNING (DWG DTR-1 & DTR-2), WHICH WILL BE REQUIRED FOR ALL PROPOSED WORK ON SPAN 2 GIRDER G4.
2. SET-UP REQUIRED THRUWAY MAINLINE (I-90) WB LANE CLOSURES AS NEEDED USING:
  - I-90 WB TWO LANE CLOSURE (DWGS. WZTC-1 TO WZTC-11), REQUIRED FOR ANY / ALL REPAIR WORK TO SPAN 2, GIRDER G4.
  - CLOSURE OF 3 LANES ON I-90 WB IS NOT REQUIRED FOR ANY WORK ON GIRDER G4 EXCEPT FOR WHEN SHORING POSTS ARE INSTALLED. HOWEVER, WHEN 3 LANES ARE BEING CLOSED FOR WORK ON GIRDER G1, THEN THE CONTRACTOR CAN ALSO WORK ON GIRDER G4 SIMULTANEOUSLY. IT IS INTENDED AND ANTICIPATED THAT ALL WORK ON SPAN 2, G4 CAN OCCUR SIMULTANEOUS WITH THE WORK ON SPAN 2, G1.
  - HEAT STRAIGHTENING OF GIRDER G4 SHALL BE LIMITED TO ONE OR TWO OVERNIGHT WORK SHIFTS, WHICH WILL REQUIRE 2 TEMPORARY SHORING POSTS TO BE INSTALLED. NO LANE CLOSURES ON ROUTE 33 ARE REQUIRED FOR HEAT STRAIGHTENING.

**REPAIR NO. 3: STEEL REPAIRS TO SPAN 3 - GIRDER G1:**

1. INSTALL ADVANCED WARNING AND DETOUR SIGNS CLOSING THE 90 EB TO ROUTE 33 WB RAMP ACCORDING TO DETAILS PROVIDED UNDER:
  - I-90 EB TO ROUTE 33 WB DETOUR SIGNING (DWG. DTR-3)
2. SET-UP REQUIRED THRUWAY MAINLINE (I-90) EB LANE CLOSURES USING:
  - I-90 EB SINGLE LANE CLOSURE (DWGS. WZTC-28 TO WZTC-35).

**SPECIAL NOTES FOR WORK ZONE TRAFFIC CONTROL:**

1. THE CONTRACTOR SHALL BE AWARE THAT ANY WORK COMPLETED SHALL BE DONE DURING THE FOLLOWING TIME-FRAMES:
    - 9 PM SUNDAY THROUGH 5:30 AM MONDAY
    - 10 PM MONDAY THROUGH 5:30 AM TUESDAY
    - 10 PM TUESDAY THROUGH 5:30 AM WEDNESDAY
    - 10 PM WEDNESDAY THROUGH 5:30 AM THURSDAY
    - 10:30 PM THURSDAY THROUGH 5:30 AM FRIDAY
    - 11:30 PM FRIDAY THROUGH 6:30 AM SATURDAY
    - 10:30 PM SATURDAY THROUGH 8 AM SUNDAY
- ALL TRAVEL LANES & RAMPS MUST BE OPEN, WITH ALL WZTC DEVICES REMOVED, NO LATER THAN THE MORNING END TIMES NOTED ABOVE. ADDITIONAL TIME RESTRICTIONS MAY BE APPLICABLE WHEN CLOSING 2 OR MORE LANES.
- ANY PROPOSED DEVIATIONS FROM THE ABOVE LANE RESTRICTION TIMES WILL REQUIRE THE APPROVAL OF THE EIC AND NYSTA TRAFFIC.
2. THE CONTRACTOR SHALL BE AWARE THERE MAY BE OTHER CONTRACTS, MAINTENANCE OPERATIONS, OR BRIDGE INSPECTIONS OCCURRING IN THE AREA OF THE PROPOSED WORK. THE ENGINEER AND CONTRACTOR SHALL COMMUNICATE & COORDINATE OPERATIONS WITH OTHER OPERATIONS SUCH THAT NO CONFLICT IN SCHEDULE OCCURS.

CHECKED BY: S. SCHUKRAFT

DRAFTED BY: J. HARTWELL

CHECKED BY: G. HOFFMANN

DESIGNED BY: S. KINSMAN

DESIGN SUPERVISOR: G. HOFFMANN

ALTERED ON:	AFFIXED ON: 6/25/2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:
	

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

 <b>Thruway Authority</b>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
	LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
	TITLE OF DRAWING GENERAL NOTES - MP 421.57 (2 OF 2)	DRAWING NUMBER: GN-4

CHECKED BY: S. SCHUKRAFT

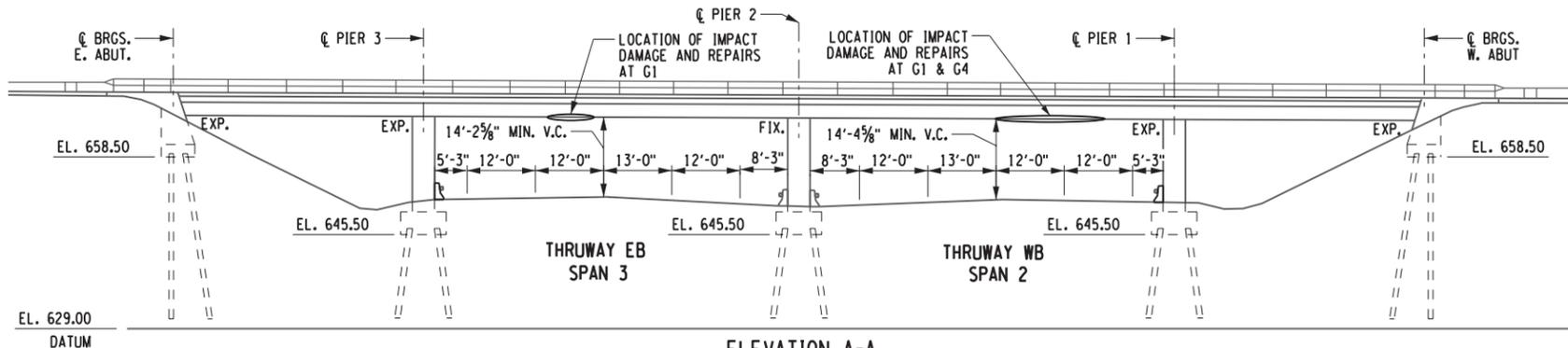
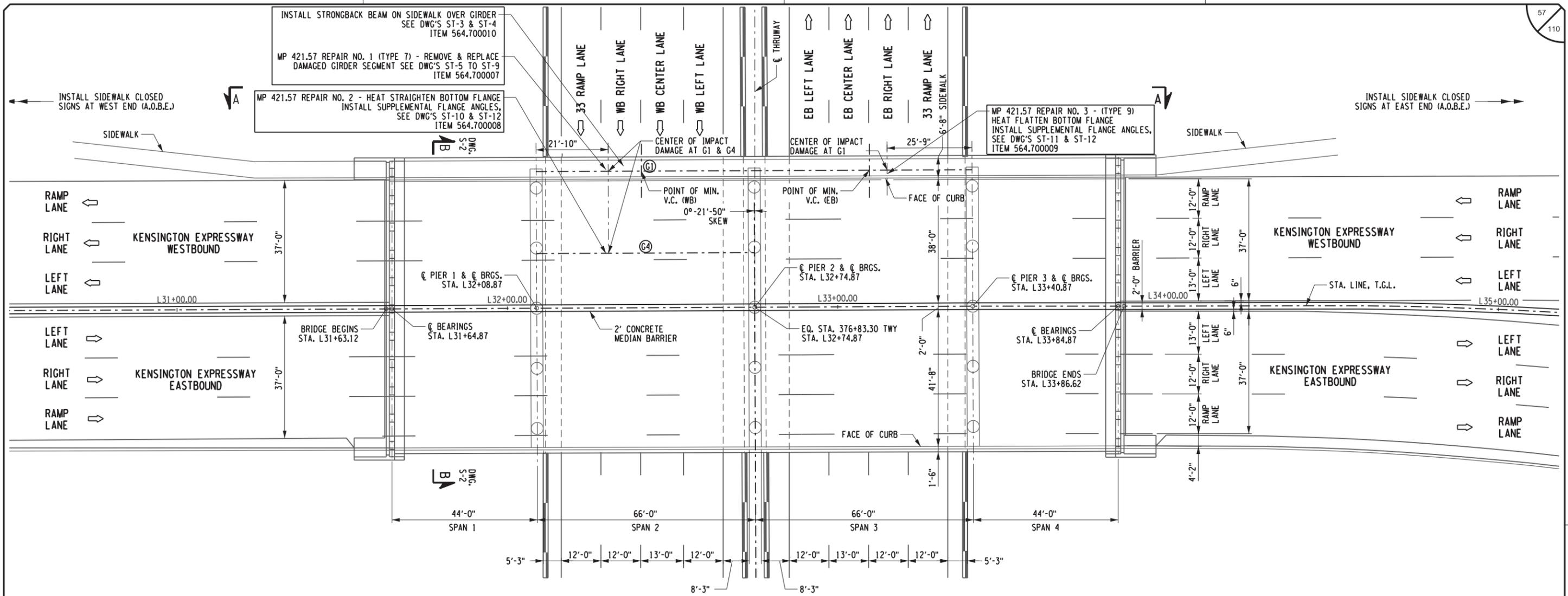
DRAFTED BY: J. HARTWELL

CHECKED BY: G. HOFFMANN

DESIGNED BY: S. KINSMAN

DESIGN SUPERVISOR: G. HOFFMANN

FILE NAME = V:\p\projects\ANY\K5\36292\CADD\MSTN\MP\_421.57\_Bridge Hit Repairs\_MP\_421.57\_ST-1.dgn  
DATE/TIME = 26-JUN-2020  
USER = 6379



ALTERED ON:	AFFIXED ON: 6/25/2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

STATE OF NEW YORK  
GABRIEL W. MANN  
LICENSED PROFESSIONAL ENGINEER  
No. 070686

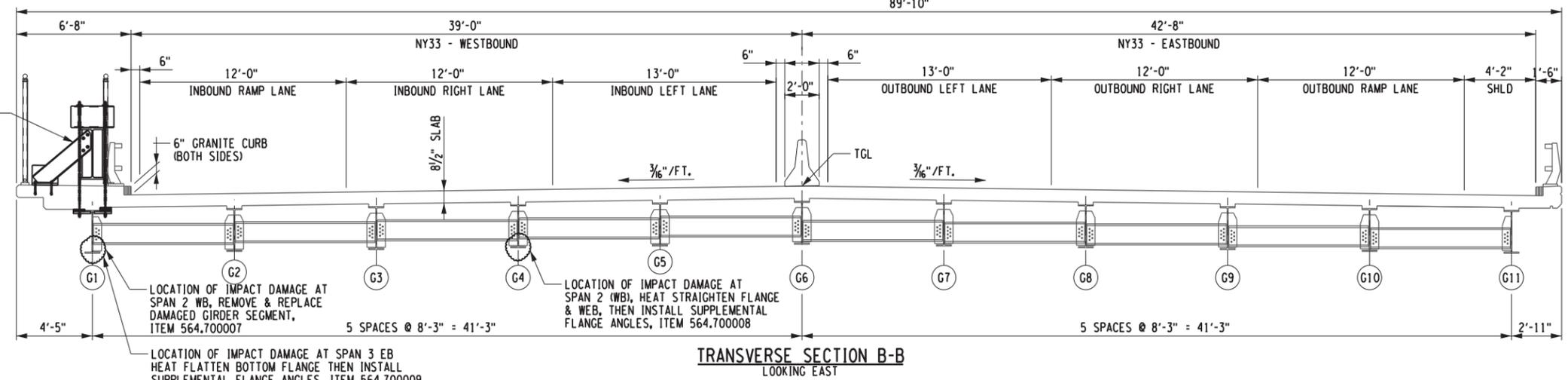
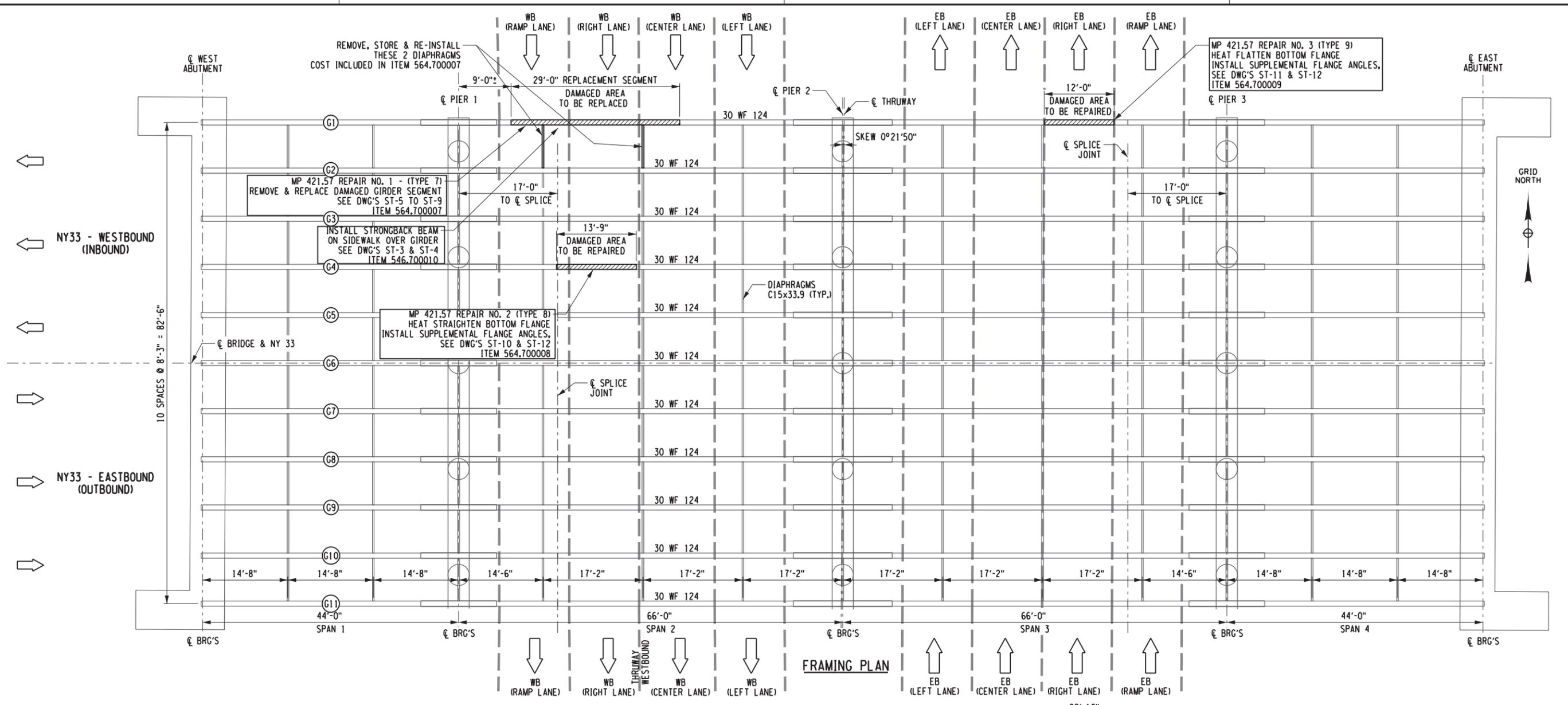
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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

<p><b>Thruway Authority</b></p>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
	LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
	TITLE OF DRAWING GENERAL PLAN & ELEVATION	DRAWING NUMBER: ST-1

FILE NAME = V:\Projects\NY\K5\36292\CADD\MS\N\WP\_421.57 (Kensington Expwy, Rte 33)\58.Bridge Hit Repairs\_MP\_421.57-ST-2.dgn  
DATE/TIME = 26-JUN-2020  
USER =

CHECKED BY: S. SCHUKRAFT  
DRAFTED BY: J. HARTWELL  
CHECKED BY: G. HOFFMANN  
DESIGNED BY: S. KINSMAN



ALTERED ON: \_\_\_\_\_ AFFIXED ON: 6/25/2020

SIGNATURE: \_\_\_\_\_ STAMP: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ STAMP: \_\_\_\_\_

STATE OF NEW YORK  
GABRIEL W. KINSMAN  
LICENSED PROFESSIONAL ENGINEER  
No. 070686

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DATE	DESCRIPTION	BY	SYM.

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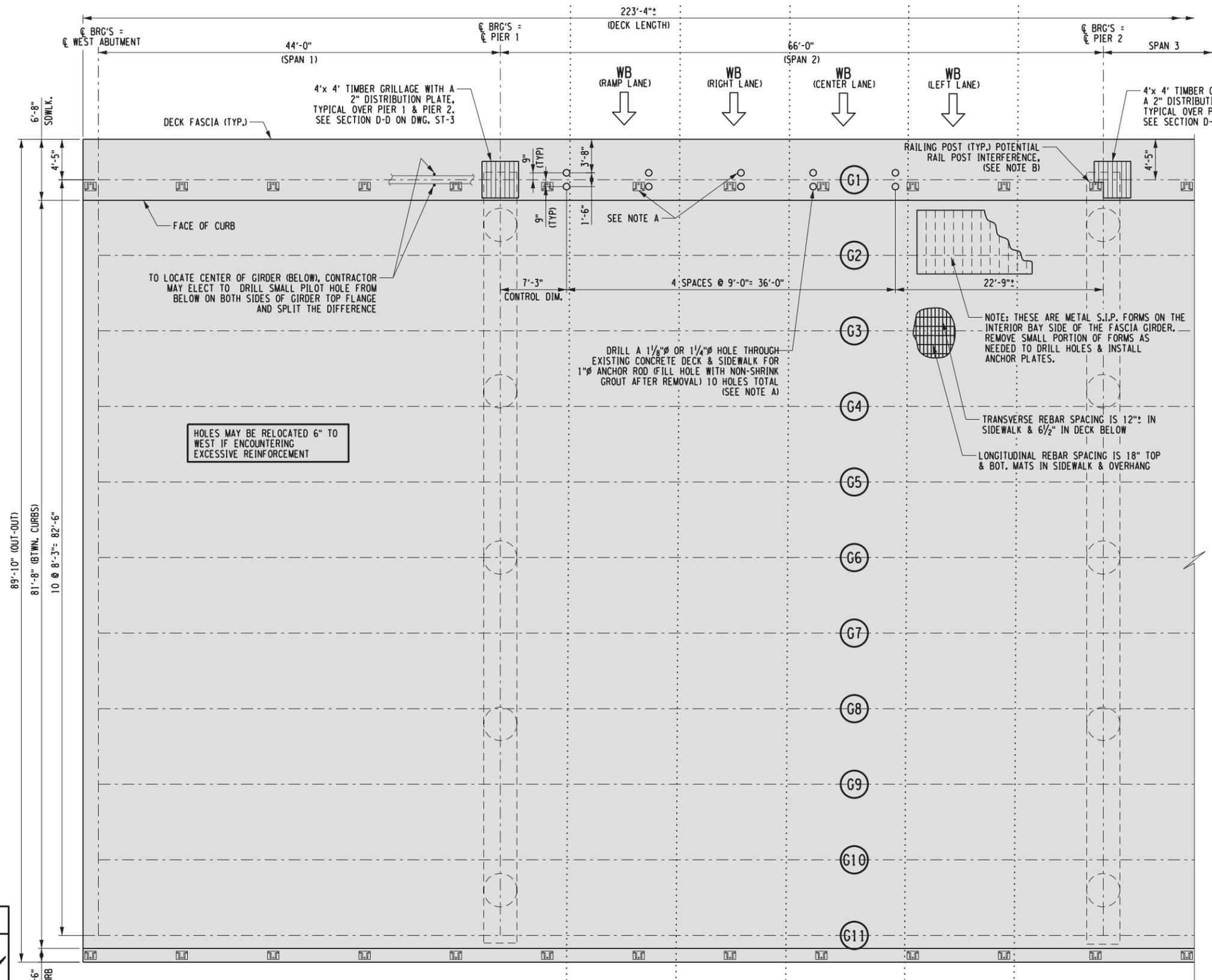
**Thruway Authority**

**CHA**  
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Buffalo, NY 14202-3722  
716.847.6330 • www.cha.com/contracts

TITLE OF PROJECT: STEEL REPAIRS TO IMPACT DAMAGE  
LOCATION OF PROJECT: MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90  
TITLE OF DRAWING: FRAMING PLAN & TRANSVERSE SECTION

CONTRACT NUMBER: TAB 20-12B  
DATE: JUNE 2020  
DRAWING NUMBER: ST-2





**NOTE A:**  
1. ADJUST SPACING OF HANGER RODS ONLY AS NECESSARY TO AVOID INTERFERENCE WITH EXISTING BRIDGE RAIL POSTS.  
2. DUE TO LIMITED ROOM ON SIDEWALK, DRILL HOLES PRIOR TO STRONG-BACK INSTALLATION

**NOTE B:**  
IF TIMBER GRILLAGE & 2" DISTRIBUTION PLATE INTERFERES WITH RAILING POST, GRILLAGE MAY BE SHIFTED UP TO 1'-0" TO CLEAR THE POST. IF THIS WONT WORK, THE GRILLAGE & DISTRIBUTION PLATE SHALL BE MODIFIED AS DIRECTED BY DESIGN ENGINEER

HOLES MAY BE RELOCATED 6" TO WEST IF ENCOUNTERING EXCESSIVE REINFORCEMENT

ANCHOR HOLE LAYOUT PLAN - SCHEMATIC ONLY  
N.T.S.

ITEM 564.700010

ALTERED ON:	AFFIXED ON: 6/25/2020
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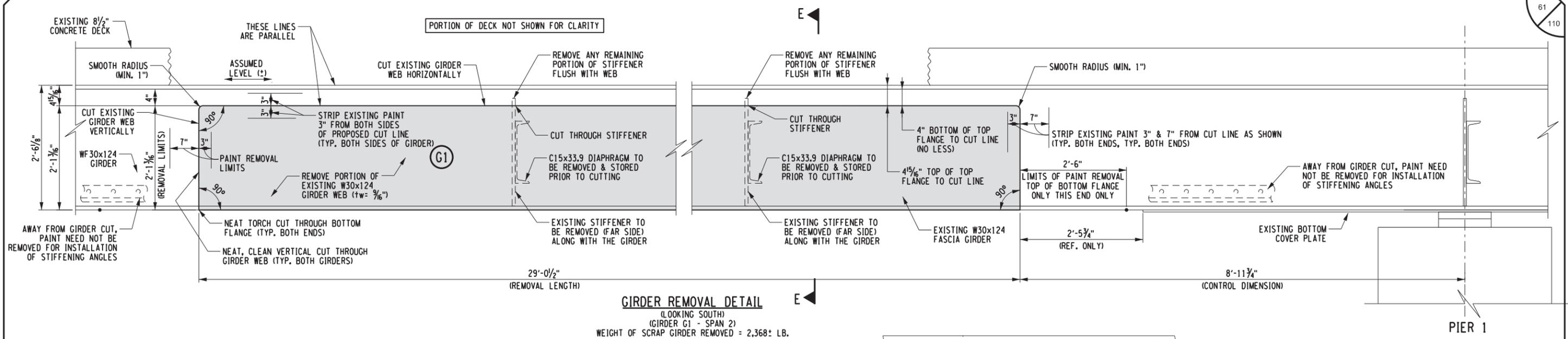
REVISIONS			
DATE	DESCRIPTION	BY	SYM.

**Thruway Authority**

TITLE OF PROJECT: STEEL REPAIRS TO IMPACT DAMAGE  
 LOCATION OF PROJECT: MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90  
 TITLE OF DRAWING: SPAN 2 - G1 STRONG-BACK ANCHOR HOLE LAYOUT PLAN

CONTRACT NUMBER: TAB 20-12B  
 DATE: JUNE 2020  
 DRAWING NUMBER: ST-4

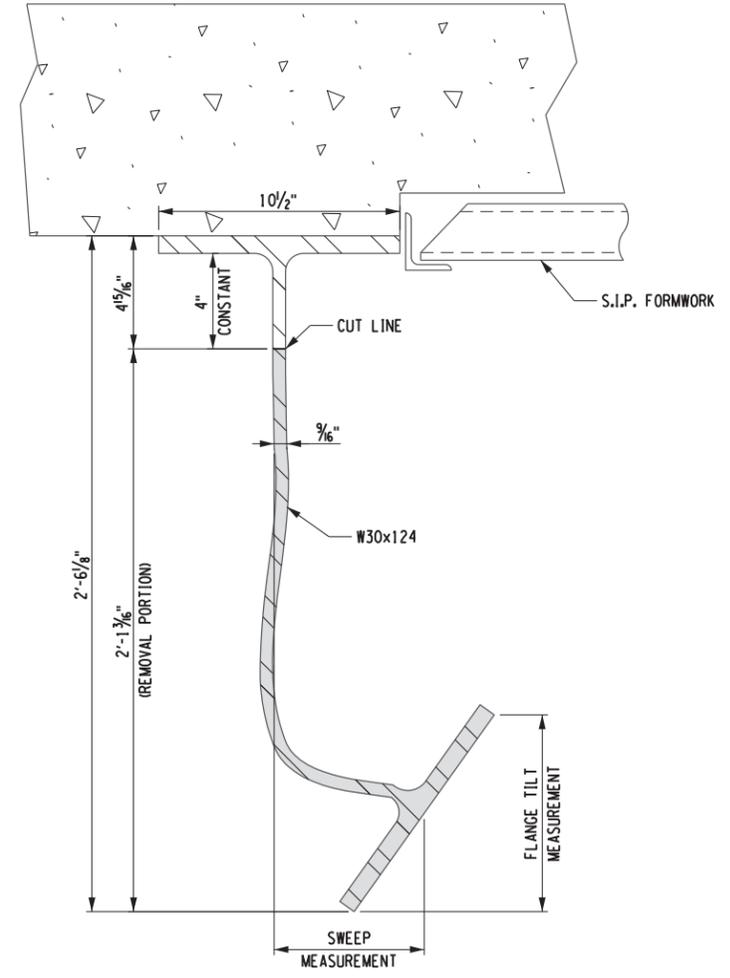
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 DATE/TIME = 26-JUN-2020 10:57:53  
 USER = G. HOFFMANN  
 DESIGN SUPERVISOR: G. HOFFMANN  
 DESIGNED BY: S. KINSMAN  
 CHECKED BY: G. HOFFMANN  
 DRAFTED BY: J. HARTWELL  
 CHECKED BY: S. SCHUKRAFT



**GIRDER REMOVAL DETAIL**  
(LOOKING SOUTH)  
(GIRDER G1 - SPAN 2)  
WEIGHT OF SCRAP GIRDER REMOVED = 2,368± LB.

SPAN 2 - NORTH FASCIA GIRDER (G1)			
DISTANCE FROM C.L. OF BRGS. OF PIER 1	DISTANCE FROM IMPACT (FT.) LEFT/RIGHT	SWEEP MEASUREMENT (IN.)	FLANGE TILT MEASUREMENT (IN.)
29'-10"	8 LEFT	1 1/4"	NOT TAKEN
28'-10"	7 LEFT	1 1/2"	NOT TAKEN
27'-10"	6 LEFT	2 3/8"	NOT TAKEN
26'-10"	5 LEFT	3 3/8"	1 7/8"
25'-10"	4 LEFT	4 5/8"	2 3/4"
24'-10"	3 LEFT	6 1/2"	4"
23'-10"	2 LEFT	8 1/2"	5"
22'-10"	1 LEFT	11"	7 3/4"
21'-10"	0	14"	11"
20'-10"	1 RIGHT	11"	7 1/2"
19'-10"	2 RIGHT	9 3/8"	5 1/2"
18'-10"	3 RIGHT	7 1/2"	3 3/8"
17'-10"	4 RIGHT	5 1/2"	2 3/4"
16'-10"	5 RIGHT	4 1/8"	2"
15'-10"	6 RIGHT	4 3/8"	NOT TAKEN
14'-10"	7 RIGHT	4 1/4"	NOT TAKEN

- NOTES:
1. PRIOR TO BEGINNING ANY REPAIR PROCEDURES, THE EXISTING PAINT SHALL BE REMOVED AS SHOWN ABOVE IN ACCORDANCE WITH THE NOTES PROVIDED IN THE GENERAL NOTES.
  2. ALL LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO COMPLETE REPAIRS TO STRUCTURAL STEEL SHALL BE INCLUDED UNDER THE STEEL REPAIR ITEM 564.700007.
  3. MEASUREMENTS SHOWN IN TABLE ARE FOR REFERENCE ONLY. NO PROPOSED WORK IS BASED ON THESE MEASUREMENTS.



DIRECTION OF TRAFFIC →  
**SECTION E-E**  
**FASCIA GIRDER (G1) @ SPAN 2**

CHECKED BY: S. SCHUKRAFT  
 DRAFTED BY: J. HARTWELL  
 CHECKED BY: G. HOFFMANN  
 DESIGNED BY: S. KINSMAN  
 DESIGN SUPERVISOR: G. HOFFMANN

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SIGNATURE: STAMP:	SIGNATURE: STAMP:

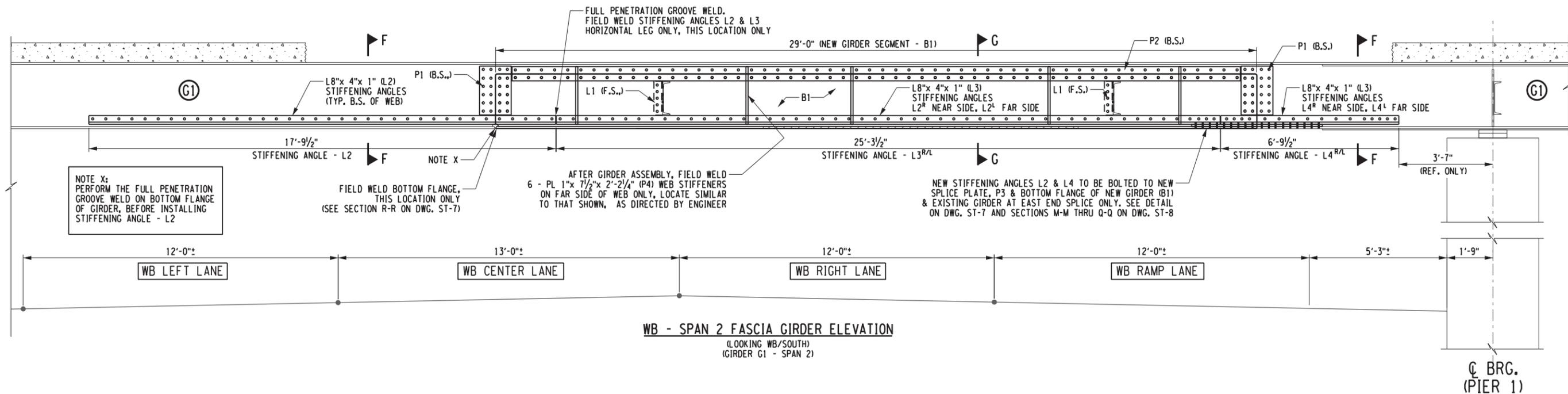
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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

**Thruway Authority**

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE		CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90		DATE: JUNE 2020
TITLE OF DRAWING SPAN 2 - G1 GIRDER REMOVAL DETAILS		DRAWING NUMBER: ST-5

ITEM 564.700007



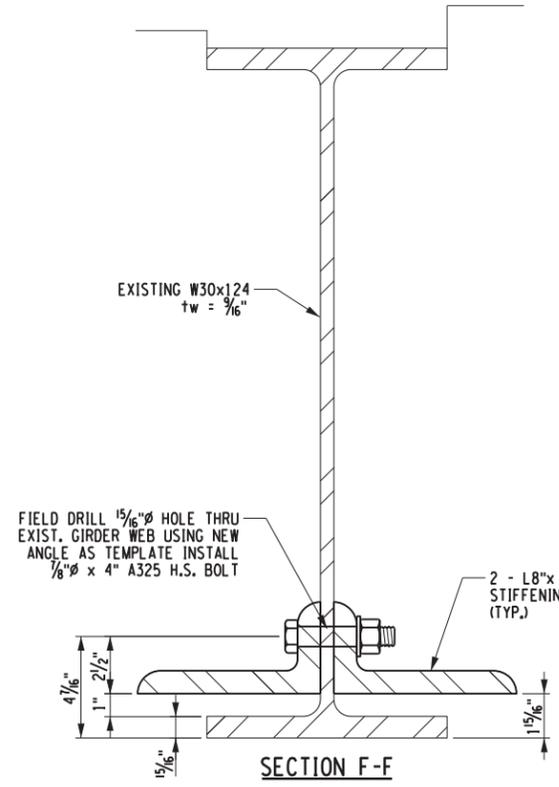
NOTE X:  
PERFORM THE FULL PENETRATION GROOVE WELD ON BOTTOM FLANGE OF GIRDER, BEFORE INSTALLING STIFFENING ANGLE - L2

NOTE X:  
FIELD WELD BOTTOM FLANGE, THIS LOCATION ONLY (SEE SECTION R-R ON DWG. ST-7)

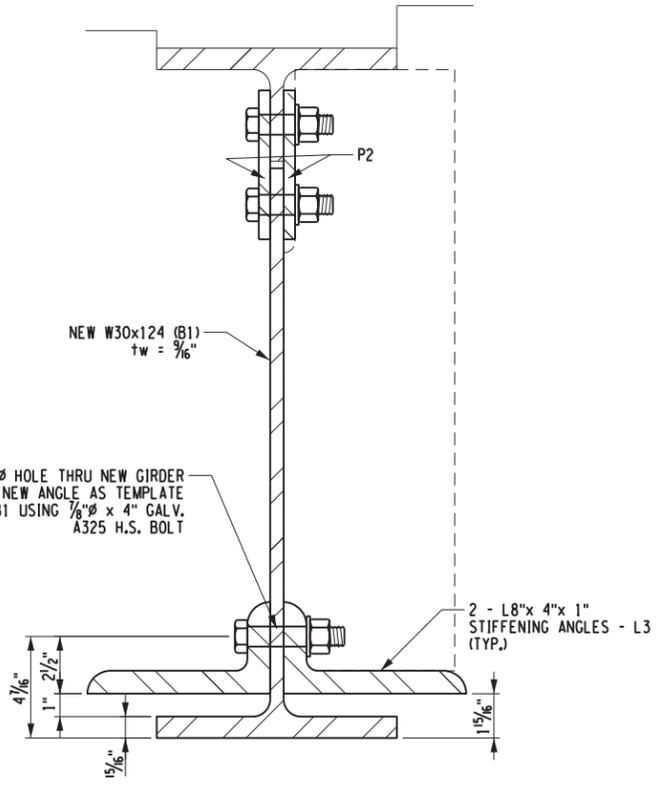
AFTER GIRDER ASSEMBLY, FIELD WELD 6 - PL 1"x 7/2"x 2'-2 3/16" (P4) WEB STIFFENERS ON FAR SIDE OF WEB ONLY, LOCATE SIMILAR TO THAT SHOWN, AS DIRECTED BY ENGINEER

NEW STIFFENING ANGLES L2 & L4 TO BE BOLTED TO NEW SPLICE PLATE, P3 & BOTTOM FLANGE OF NEW GIRDER (B1) & EXISTING GIRDER AT EAST END SPLICE ONLY. SEE DETAIL ON DWG. ST-7 AND SECTIONS M-M THRU Q-Q ON DWG. ST-8

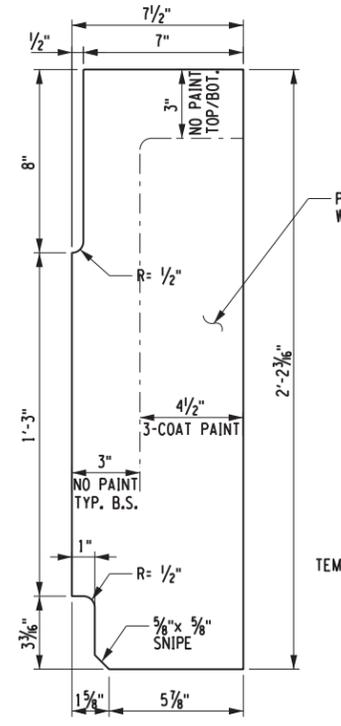
**WB - SPAN 2 FASCIA GIRDER ELEVATION**  
(LOOKING WB/SOUTH)  
(GIRDER G1 - SPAN 2)



**SECTION F-F**

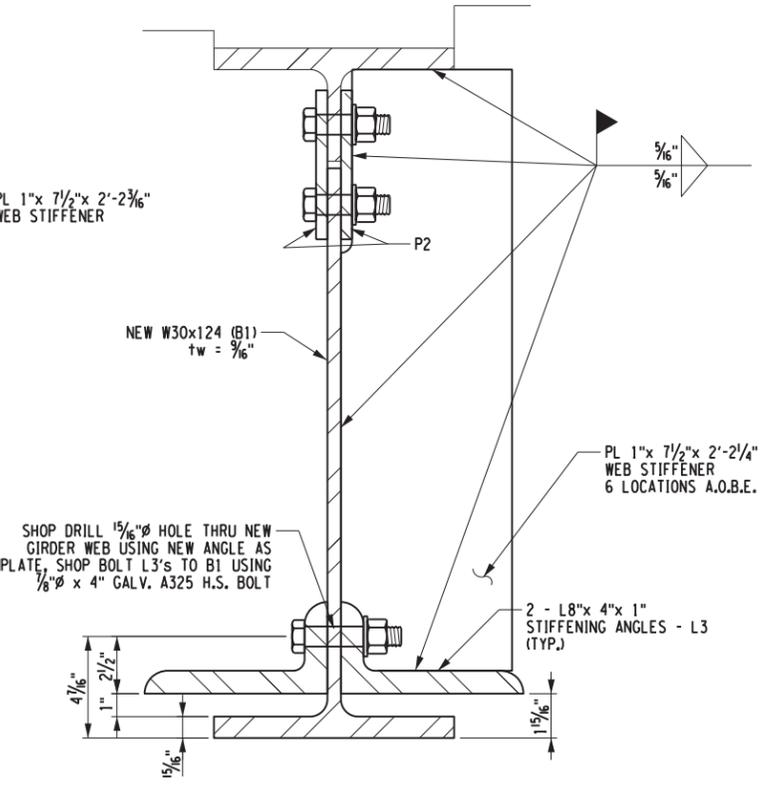


**SECTION G-G**



**WEB STIFFENER DETAIL - P4**  
PL 1"x 7/2"x 2'-2 3/16"

(6 REQ'D)  
(56 LB/EACH)  
(336 LB. TOTAL STEEL WEIGHT THIS SHEET)



**STIFFENER WELD DETAIL**

SEE DWG'S ST-7 & ST-8 FOR ADDITIONAL DETAILS & SECTIONS THRU GIRDER REPAIR & SPLICE PLATES

ALTERED ON:	AFFIXED ON: 6/25/2020
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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

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Buffalo, NY 14203-3722  
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ITEM 564.700007	
TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING SPAN 2 - G1 GIRDER ELEVATION & STIFFENER DETAILS	DRAWING NUMBER: ST-6

FILE NAME = V:\Projects\ANY\K5\36292\CADD\MSTN\MP\_421.57 (Kensington Expy. Rte 33)\62.Bridge Hit Repairs\_MP\_421.57\_ST-6.dgn  
DATE/TIME = 26-JUN-2020 10:52:11  
USER = G. HOFFMANN  
DESIGN SUPERVISOR: G. HOFFMANN  
DESIGNED BY: S. KINSMAN  
CHECKED BY: G. HOFFMANN  
DRAFTED BY: J. HARTWELL  
CHECKED BY: S. SCHUKRAFT

CHECKED BY: S. SCHUKRAFT

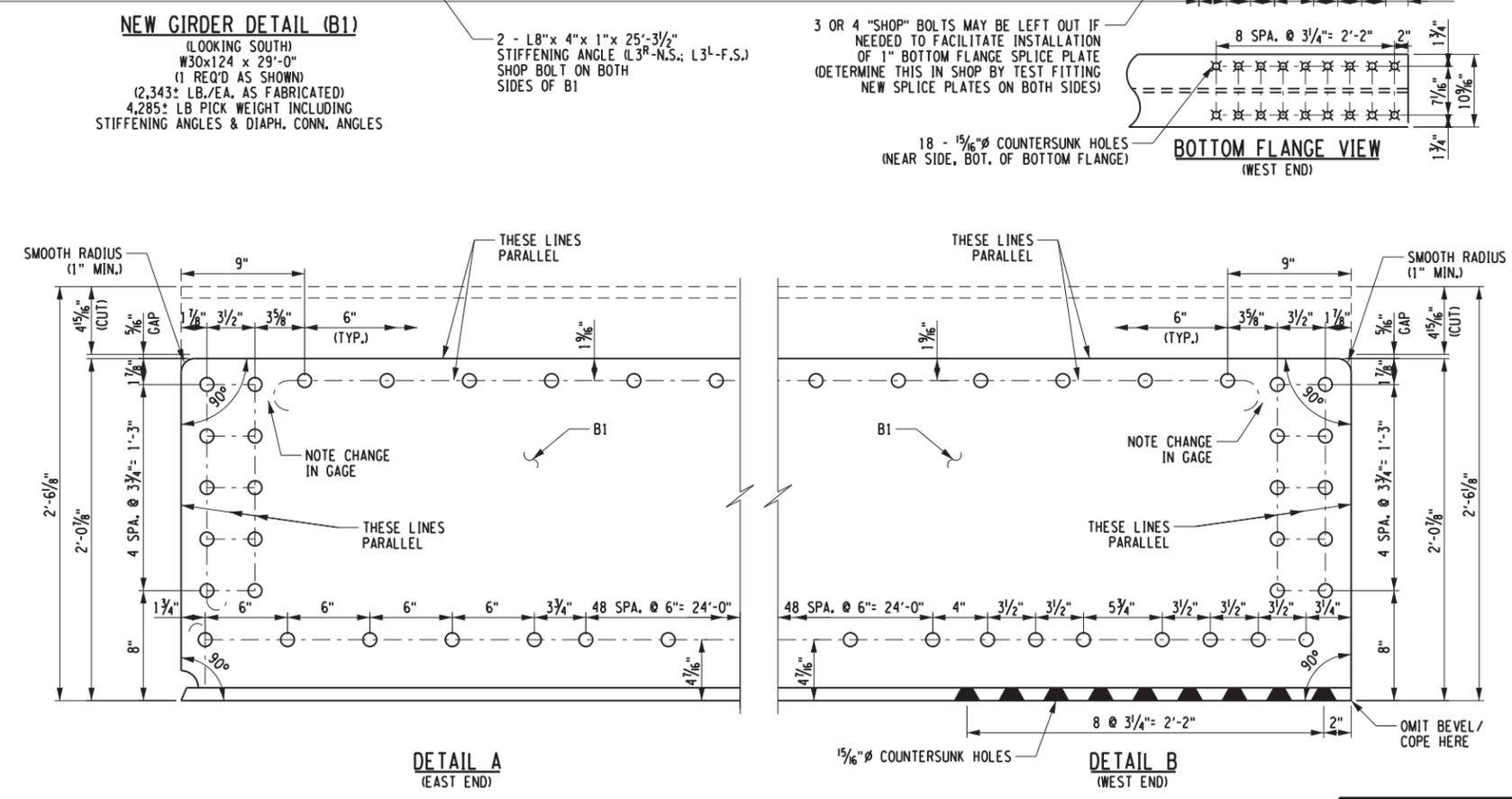
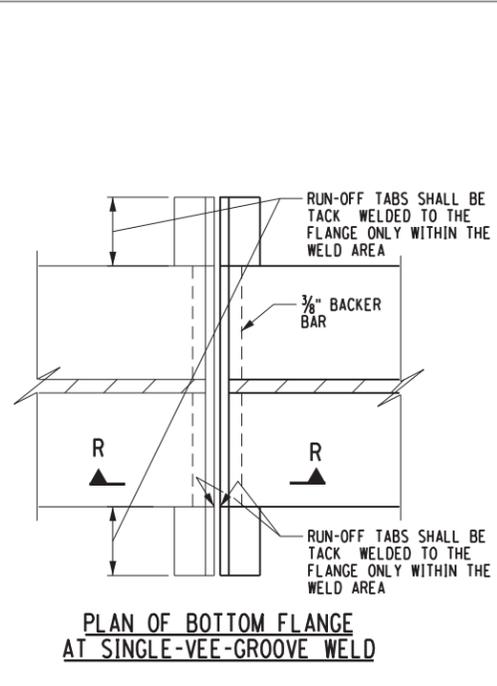
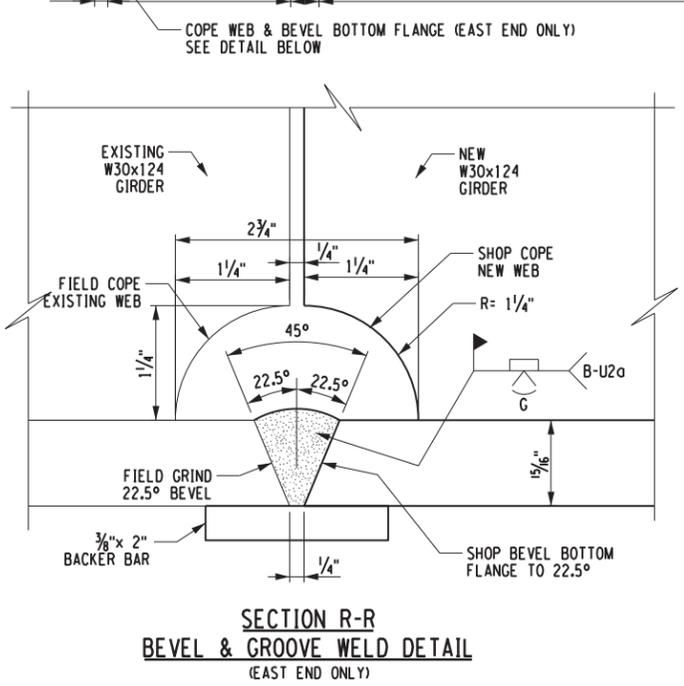
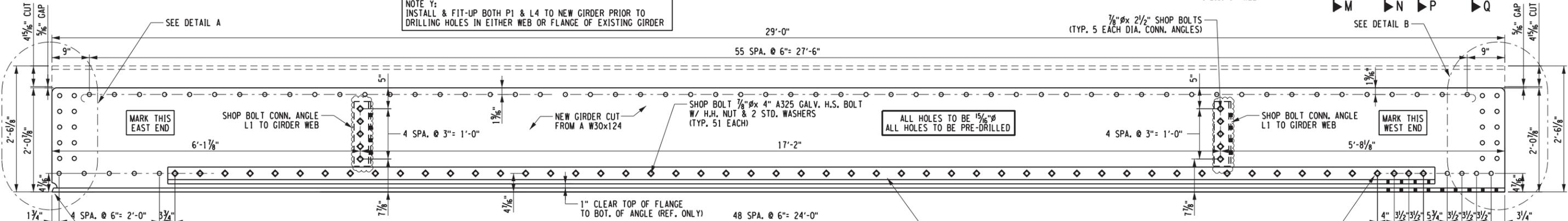
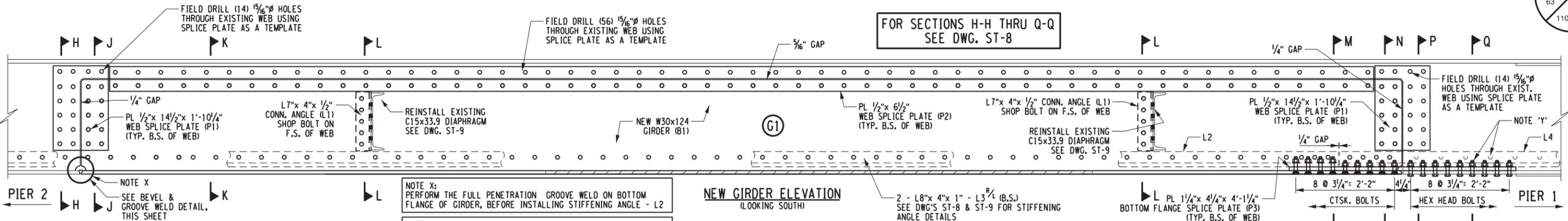
DRAFTED BY: J. HARTWELL

CHECKED BY: G. HOFFMANN

DESIGNED BY: S. KINSMAN

DESIGN SUPERVISOR: G. HOFFMANN

FOR SECTIONS H-H THRU Q-Q  
SEE DWG. ST-8



ALTERED ON:	AFFIXED ONE:
SIGNATURE: STAMP:	6/25/2020 SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

**NEW YORK STATE OF OPPORTUNITY**

**Thruway Authority**

**CHA**

2200 Main Plaza Tower  
Buffalo, NY 14202-3722  
716.847.6330 • www.cha.com

ITEM 564.700007	
TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING SPAN 2 - G1 NEW GIRDER DETAILS	DRAWING NUMBER: ST-7

FILE NAME = V:\Projects\ANY\K5\36292\CADD\MSTN\MP\_421.57\_Kensington Expwy\_Rte 33\63.Bridge Hit Repairs\_MP\_421.57-ST-7.dgn  
DATE/TIME = 26-JUN-2020 10:52:11  
USER = G. HOFFMANN

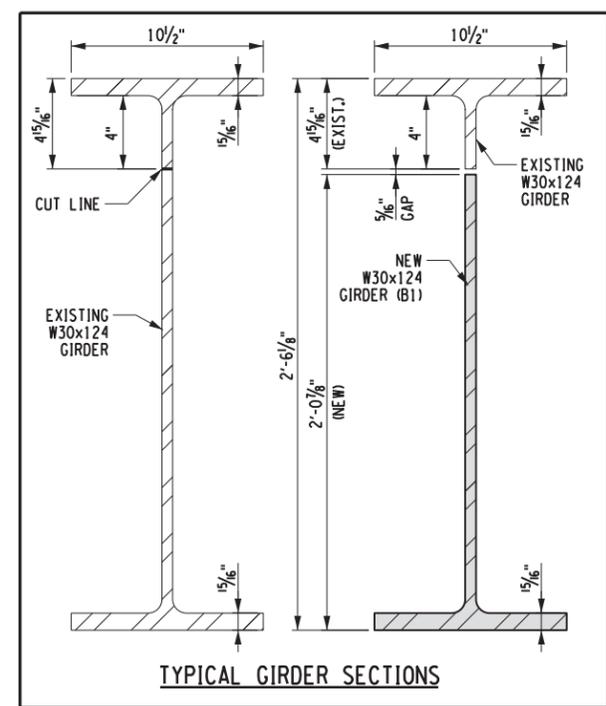
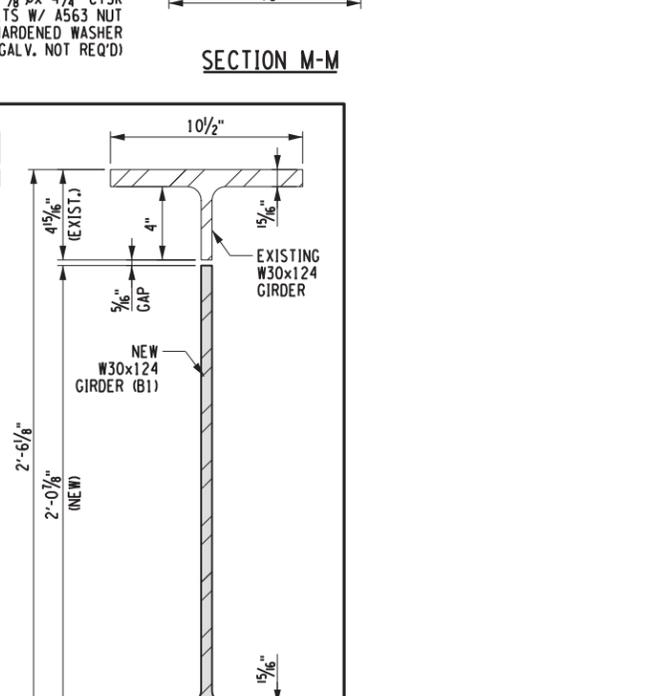
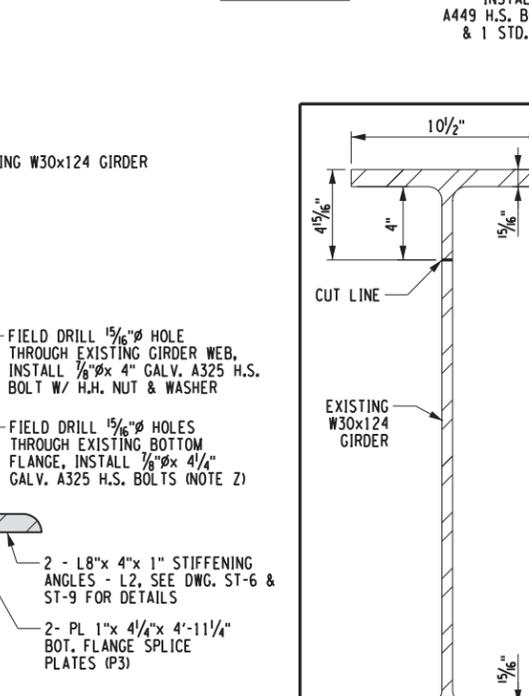
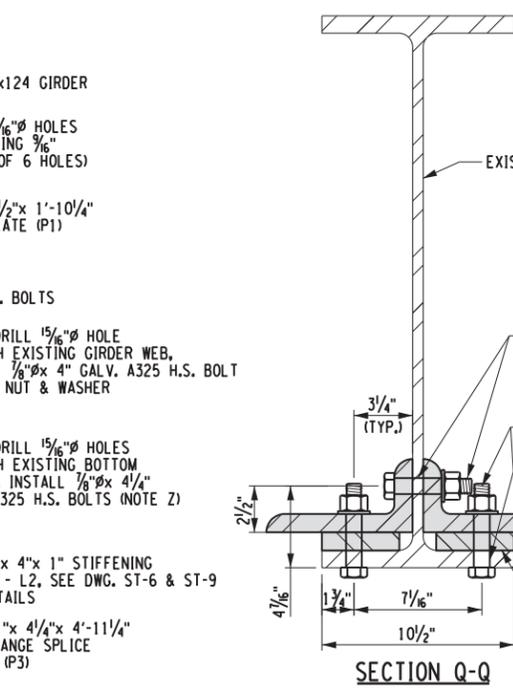
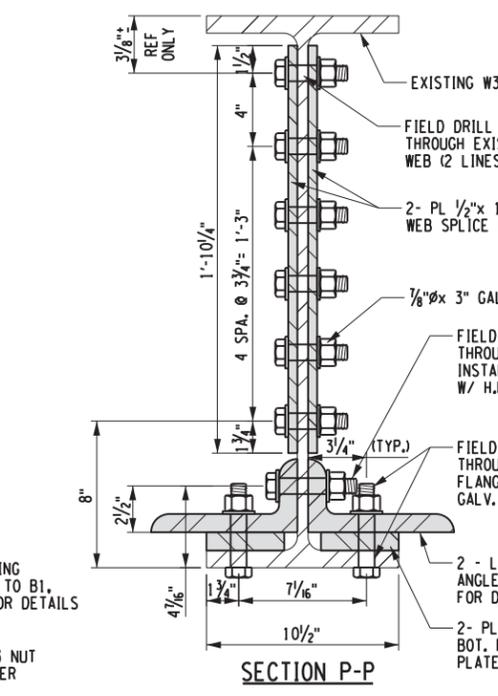
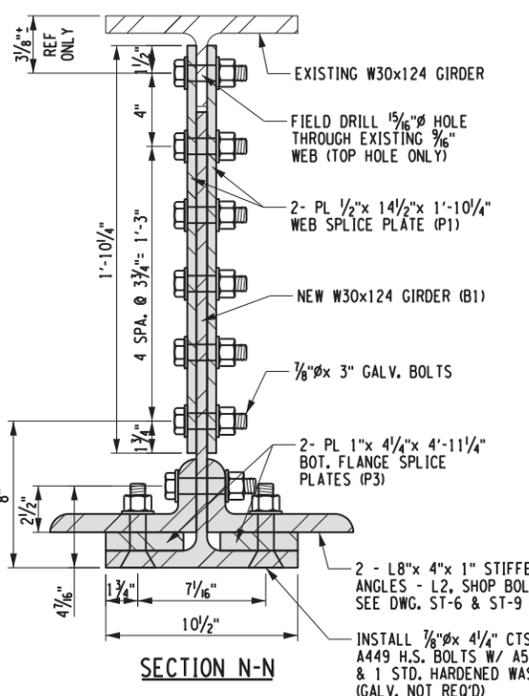
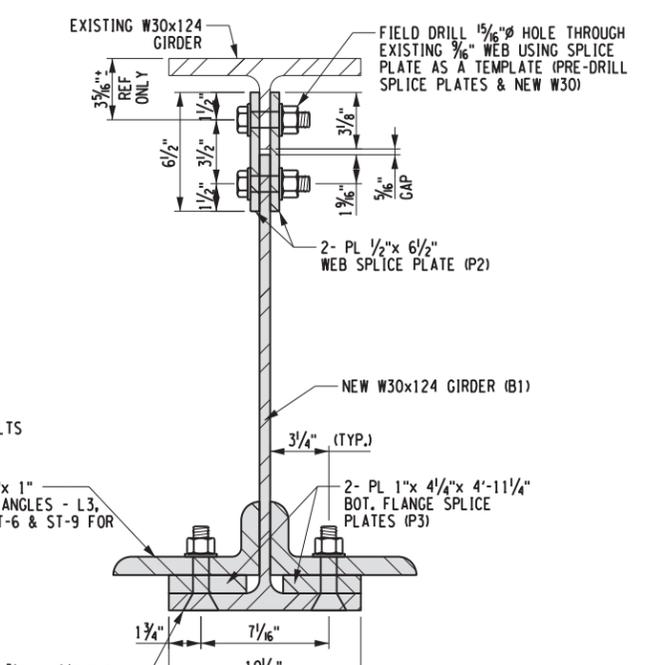
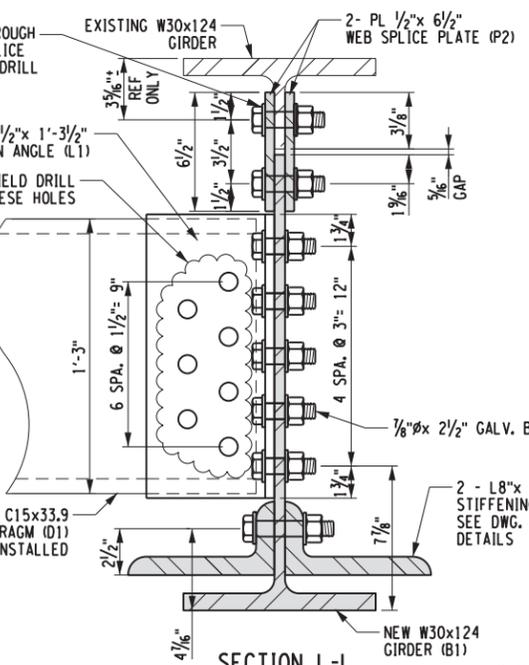
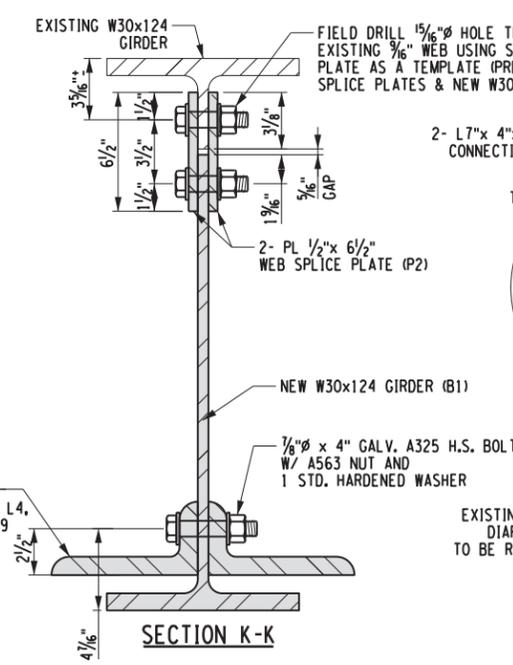
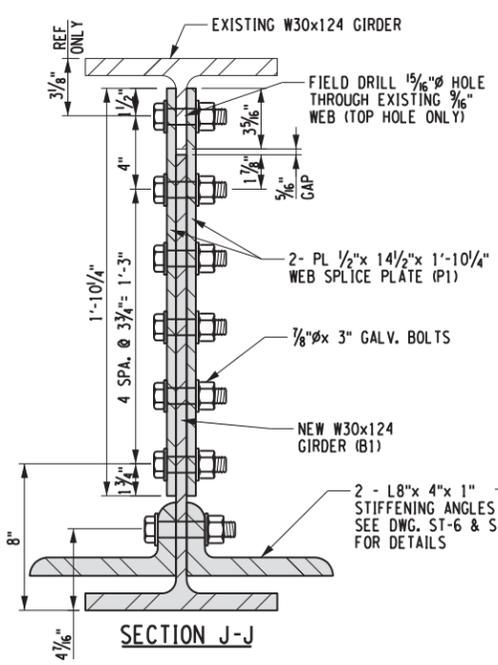
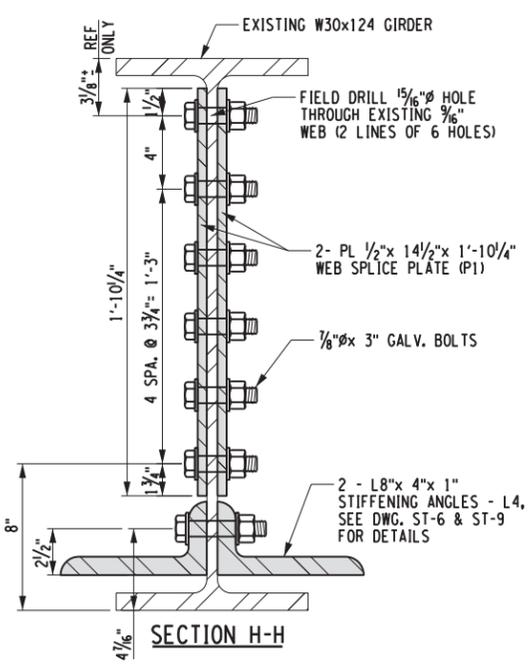
CHECKED BY: S. SCHUKRAFT

DRAFTED BY: J. HARTWELL

CHECKED BY: G. HOFFMANN

DESIGNED BY: S. KINSMAN

DESIGN SUPERVISOR: G. HOFFMANN



REQUIRED BOLTS - SPAN 2, G1 ONLY

DESCRIPTION	GRIP	SIZE	NUMBER REQ'D	TOTAL NO. FIELD-DRILLED HOLES
VERTICAL WEB SPLICES	1 1/16"	7/8" Ø x 3"	24 x 2 = 48 EA.	14 x 2 = 28
HORIZONTAL WEB SPLICES	1 1/16"	7/8" Ø x 3"	112 EA.	56
BOT. FLANGE SPLICE - EXIST. GIRD.	2 1/16"	7/8" Ø x 4 1/4"	18 EA. (SEE NOTE Z)	18
BOT. FLANGE SPLICE - NEW GIRD.*	2 1/16"	7/8" Ø x 4 1/4"	18 EA.	CTSK - A449 *
DIAPHRAGM TO CONN. ANGLE	7/8"	7/8" Ø x 2 1/2"	14 x 2 = 28 EA.	7 x 2 = 14 (L1 ONLY)
STIFFENING ANGLE TO ANGLE	2 9/16"	7/8" Ø x 4"	104 (SHOP BOLT 52)	43
DIAP. CONN. ANGLE TO W30 WEB	1 1/16"	7/8" Ø x 2 1/2"	5 x 2 = 10 (SHOP BOLT)	-
<b>TOTALS</b>			<b>338 BOLTS</b>	<b>159 F.D. HOLES</b>

\* BOLTS TO BOTTOM FLANGE SPLICE TO NEW GIRDER SHALL BE A449, COUNTERSUNK W/ A563 HEAVY HEX NUT & 1 STD. WASHER. COUNTERSUNK BOLTS NEED NOT BE GALVANIZED IF UNAVAILABLE.  
ALL OTHER BOLTS TO BE 7/8" Ø A325 H.S. BOLTS W/ A563 HEAVY HEX NUTS & 2 - F436, STD. HARDENED WASHERS. ALL NUTS & BOLTS TO BE HOT DIPPED GALVANIZED.

ALL HOLES TO BE 15/16" Ø FOR 7/8" Ø GALV. A325 H.S. BOLT WITH H.H. NUT & 2 STD. HARDENED WASHER (TYP.)

NOTE Z:  
IN SECTION P-P & Q-Q, OMIT THE WASHERS UNDER THE BOTTOM FLANGE BOLT HEADS

ALTERED ON: \_\_\_\_\_ AFFIXED ON: 6/25/2020

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REVISIONS

DATE	DESCRIPTION	BY	SYMBOL

NEW YORK STATE OF OPPORTUNITY

Thruway Authority

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TITLE OF PROJECT: STEEL REPAIRS TO IMPACT DAMAGE  
LOCATION OF PROJECT: MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90  
TITLE OF DRAWING: SPAN 2 - G1 GIRDER REPAIR SECTIONS

CONTRACT NUMBER: TAB 20-12B  
DATE: JUNE 2020  
DRAWING NUMBER: ST-8

ITEM 564.700007

FILE NAME = V:\Projects\ANY\K5\36292\CADD\MSTN.WP\_421.57 (Kensington Expy. Rte 33)\64.Bridge Hit Repairs\_MP\_421.57-ST-8.dgn  
DATE/TIME = 26-JUN-2020  
USER = 6379

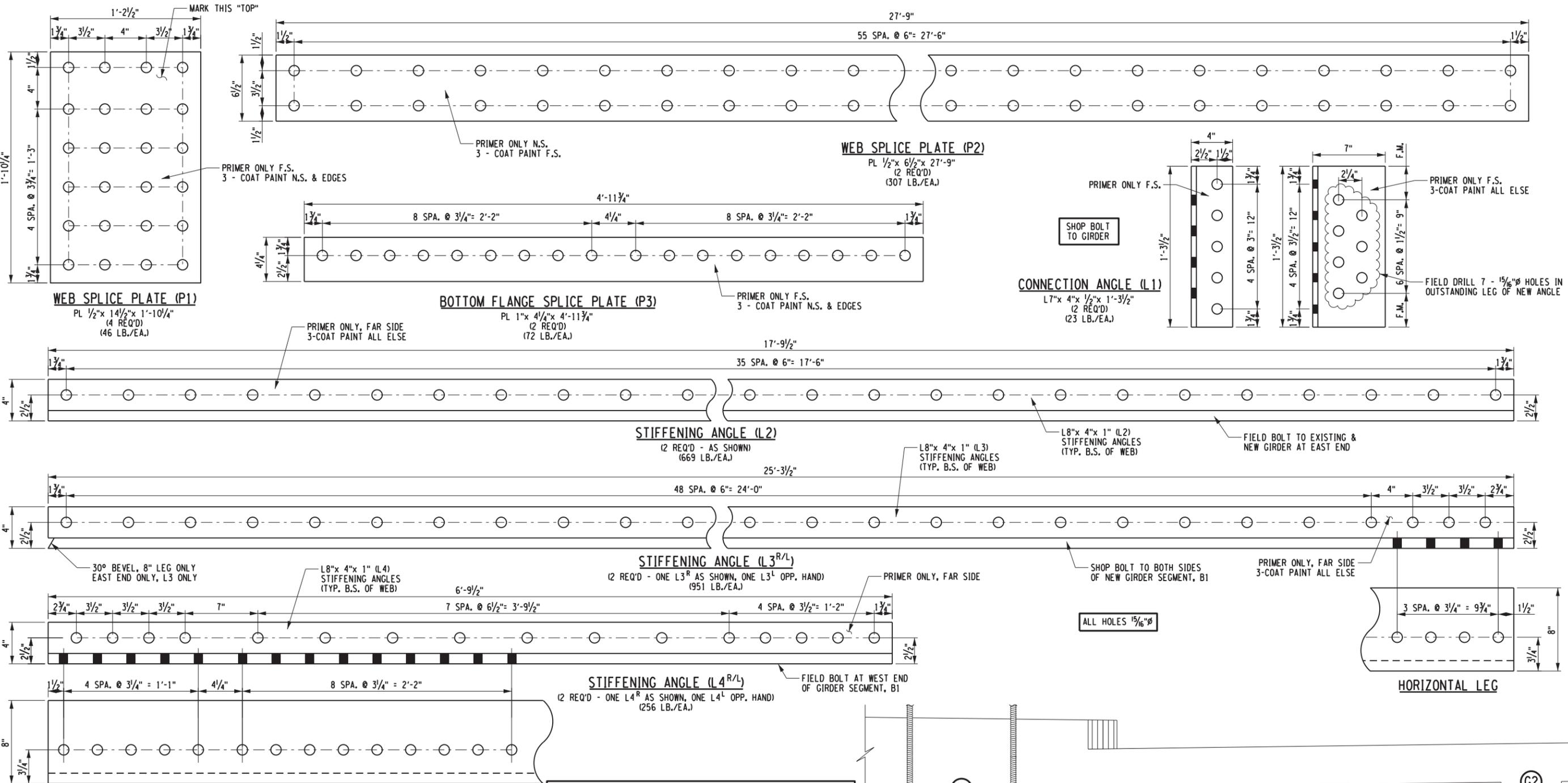
CHECKED BY: S. SCHUKRAFT

DRAFTED BY: J. HARTWELL

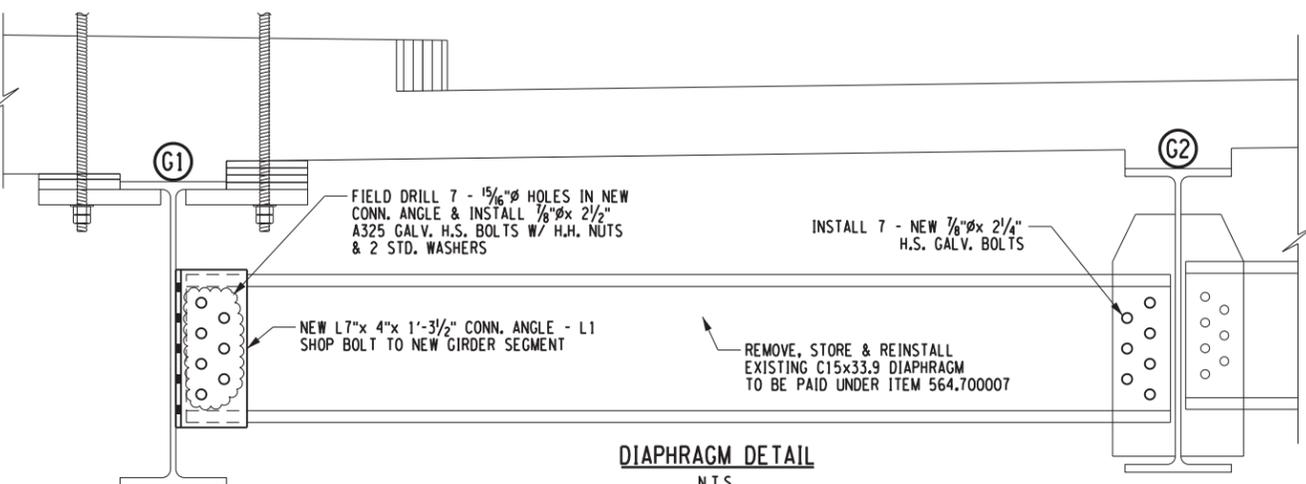
CHECKED BY: G. HOFFMANN

DESIGNED BY: S. KINSMAN

DESIGN SUPERVISOR: G. HOFFMANN



SUMMARY OF STEEL WEIGHTS				
MARK	DESCRIPTION	NO. REQ'D	WEIGHT/EACH	TOTAL WEIGHT
B1	REPLACEMENT GIRDER	1 EA.	2,346 LB.	2,346 LB.
P1	WEB SPLICE PLATE (ENDS)	4 EA.	46 LB.	184 LB.
P2	LONG. WEB SPLICE PLATE	2 EA.	307 LB.	614 LB.
P3	BOTTOM FLANGE SPLICE PLATE	2 EA.	72 LB.	144 LB.
L1	DIA. CONNECTION ANGLE	2 EA.	23 LB.	46 LB.
L2	STIFFENING ANGLE	2 EA.	669 LB.	1,338 LB.
L3 <sup>R/L</sup>	STIFFENING ANGLE	2 EA.	951 LB.	1,902 LB.
L4 <sup>R/L</sup>	STIFFENING ANGLE	2 EA.	256 LB.	512 LB.
			<b>TOTAL</b>	<b>7,086 LB.</b>



**ITEM 564.700007**

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**NEW YORK STATE OF OPPORTUNITY**

**Thruway Authority**

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TITLE OF PROJECT: STEEL REPAIRS TO IMPACT DAMAGE  
LOCATION OF PROJECT: MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90  
TITLE OF DRAWING: SPAN 2 - G1 STEEL PARTS DETAILS

CONTRACT NUMBER: TAB 20-12B  
DATE: JUNE 2020  
DRAWING NUMBER: ST-9

FILE NAME = V:\Projects\ANY\K5\36292\CADD\MSTN.WP\_421.57 (Kensington Expy. Rte 33)\65.Bridge Hit Repairs\_MP\_421.57-ST-9.dgn  
DATE/TIME = 26-JUN-2020  
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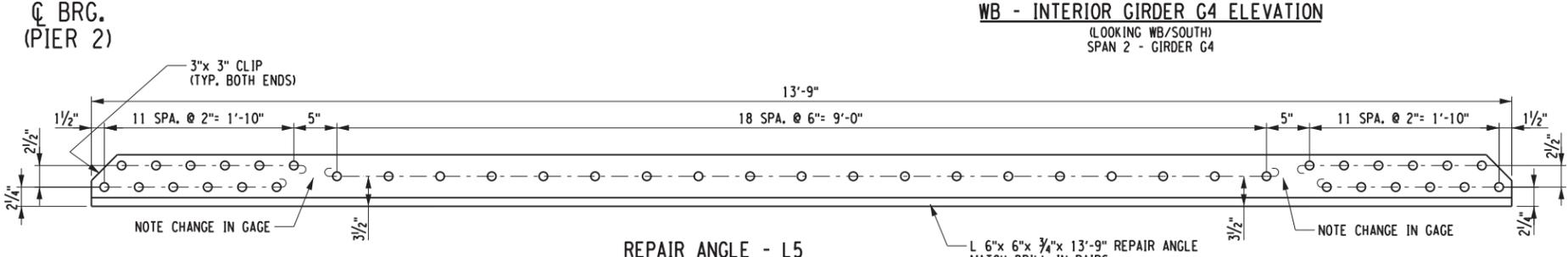
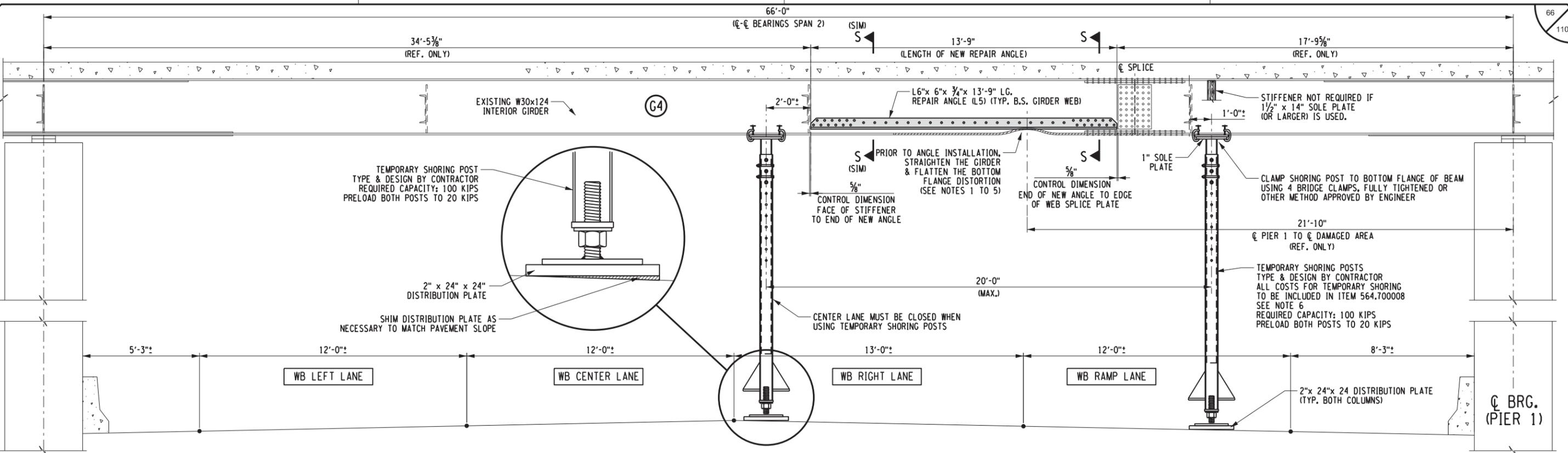
CHECKED BY: S. SCHUKRAFT

DRAFTED BY: J. HARTWELL

CHECKED BY: G. HOFFMANN

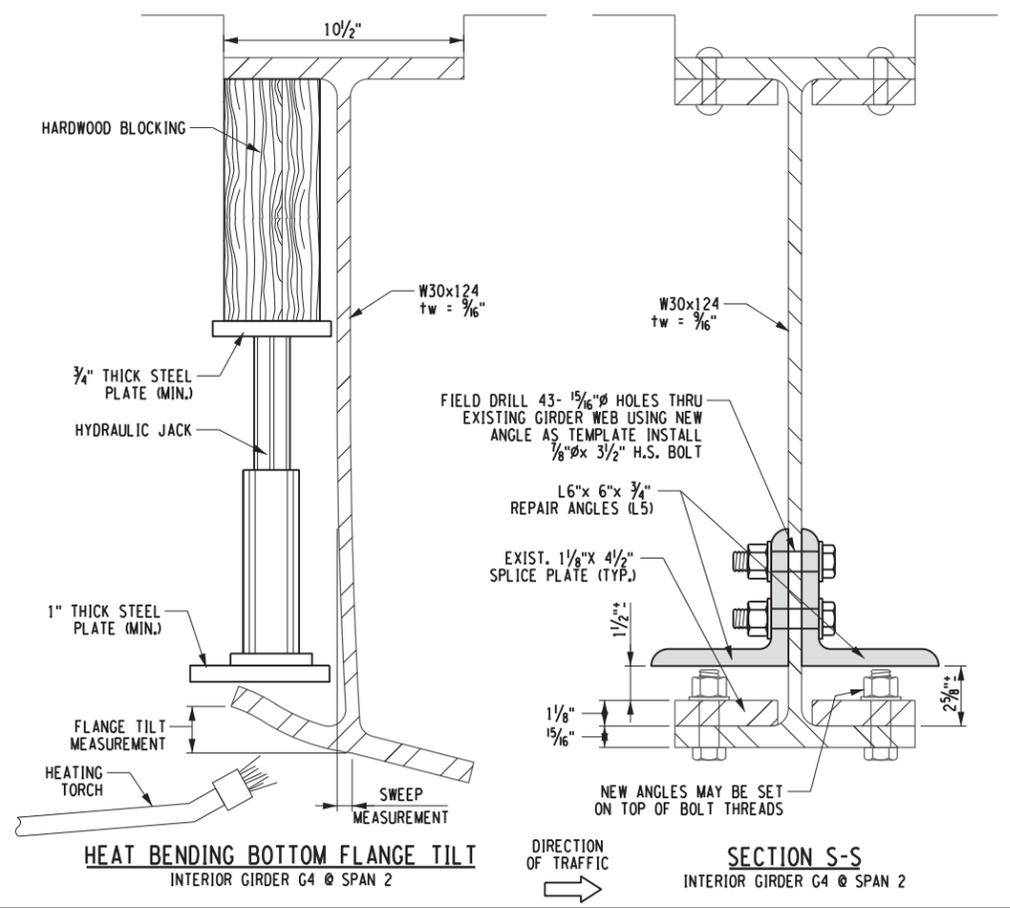
DESIGNED BY: S. KINSMAN

DESIGN SUPERVISOR: G. HOFFMANN



SPAN 2 - INTERIOR GIRDER - G4			
DISTANCE FROM C.L. OF BRGS. OF PIER 1	DISTANCE FROM IMPACT (FT.) LEFT/RIGHT	SWEEP MEASUREMENT (IN.)	FLANGE TILT MEASUREMENT (IN.)
26'-10"	5' LEFT	1"	0"
25'-10"	4' LEFT	2"	0"
24'-10"	3' LEFT	2 3/4"	0"
23'-10"	2' LEFT	3 1/2"	0"
22'-10"	1' LEFT	3 3/4"	0"
21'-10"	0	4 3/4"	3 1/4"
20'-10"	1' RIGHT	3 1/2"	-1/2"
19'-10"	2' RIGHT	3 1/8"	0"
18'-10"	3' RIGHT	2 3/4"	0"
17'-10"	4' RIGHT	2 3/8"	0"
16'-10"	5' RIGHT	1 1/2"	0"

- NOTES:
- PRIOR TO BEGINNING ANY REPAIR PROCEDURES, THE EXISTING PAINT SHALL BE REMOVED IN ACCORDANCE WITH THE NOTES PROVIDED IN THE GENERAL NOTES, SEE DWG. GA-3.
  - THE GIRDER SWEEP SHALL BE REMOVED BY USE OF HEAT STRAIGHTENING SUPPLEMENTED BY COME ALONGS OR JACKING STRUTS, SUFFICIENT TO ALLOW PROPER INSTALLATION OF THE SUPPLEMENTAL FLANGE ANGLES.
  - FOR PROCEDURES AND REQUIREMENTS FOR HEAT-STRAIGHTENING, SEE GENERAL NOTES AND HEATING DETAILS, DWG. ST-12.
  - ALL LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO COMPLETE REPAIRS TO STRUCTURAL STEEL SHALL BE INCLUDED UNDER THE STEEL REPAIR ITEM 564.700008.
  - PRIOR TO ANY FLAME STRAIGHTENING OF SPAN 2, G4, BOTH SHORING POSTS MUST BE INSTALLED, SECURED TO THE GIRDER AND PRE-LOADED TO 20 KIPS. DO NOT REMOVE SHORING POSTS UNTIL ALL STEEL HAS COOLED BELOW 400° F.
  - TEMPORARY SHORING POSTS ARE ONLY REQUIRED WHEN HEAT STRAIGHTENING GIRDER G4, WHICH IS ONLY ANTICIPATED TO REQUIRE 1 OR 2 NIGHTS.
- POSTS SHOULD NOT BE INSTALLED WHEN STRIPPING PAINT OR WHEN INSTALLING NEW REPAIR STEEL.



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**ITEM 564.700008**

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**NEW YORK STATE OF OPPORTUNITY**

**Thruway Authority**

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TITLE OF PROJECT: STEEL REPAIRS TO IMPACT DAMAGE  
 LOCATION OF PROJECT: MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90  
 TITLE OF DRAWING: SPAN 2 - G4 GIRDER REPAIR DETAILS

CONTRACT NUMBER: TAB 20-12B  
 DATE: JUNE 2020  
 DRAWING NUMBER: ST-10

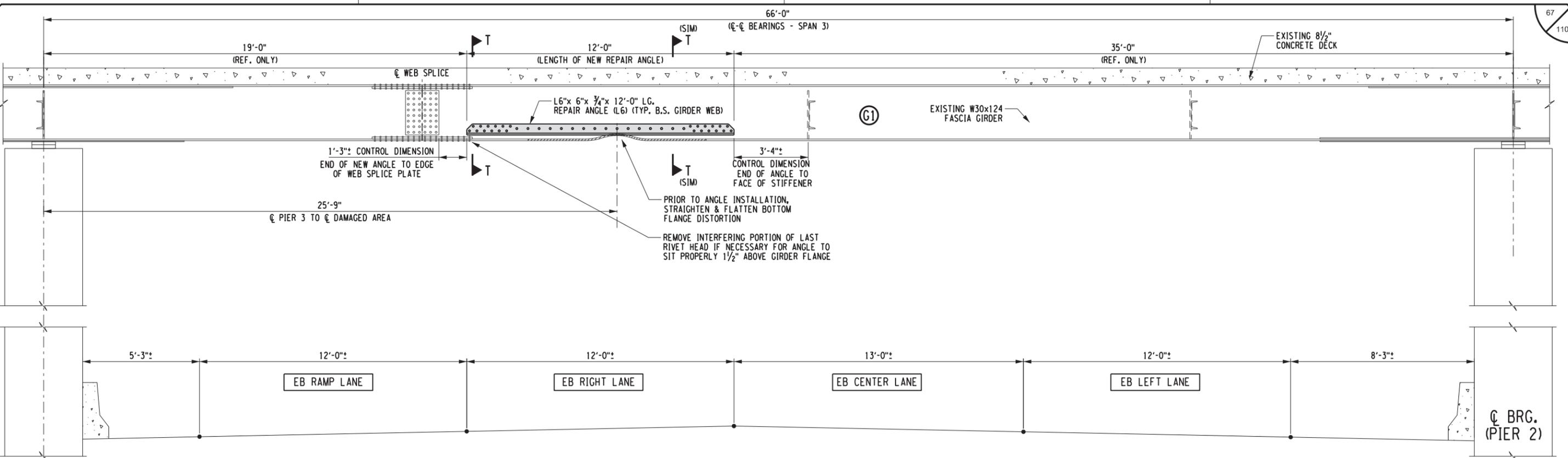
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DRAFTED BY: J. HARTWELL

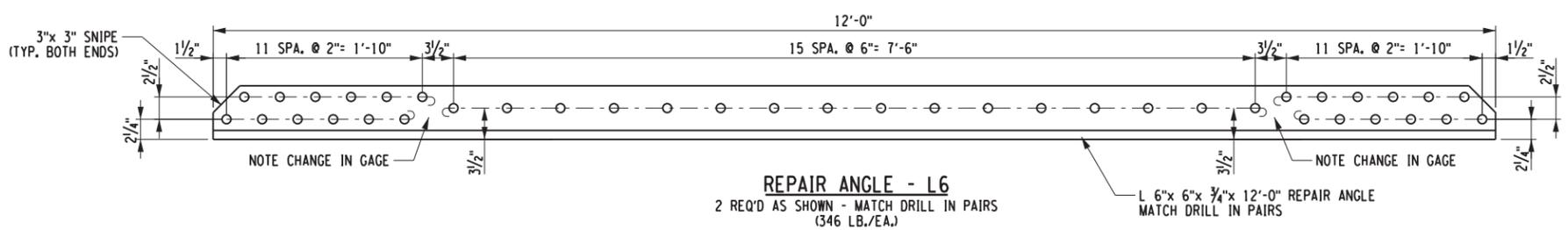
CHECKED BY: G. HOFFMANN

DESIGNED BY: S. KINSIMAN

DESIGN SUPERVISOR: G. HOFFMANN



**EB - FASCIA GIRDER G1 ELEVATION**  
(LOOKING SOUTH)  
SPAN 3 - GIRDER G1



**REPAIR ANGLE - L6**  
2 REQ'D AS SHOWN - MATCH DRILL IN PAIRS (346 LB./EA.)  
L 6"x 6"x 3/4"x 12'-0" REPAIR ANGLE  
MATCH DRILL IN PAIRS

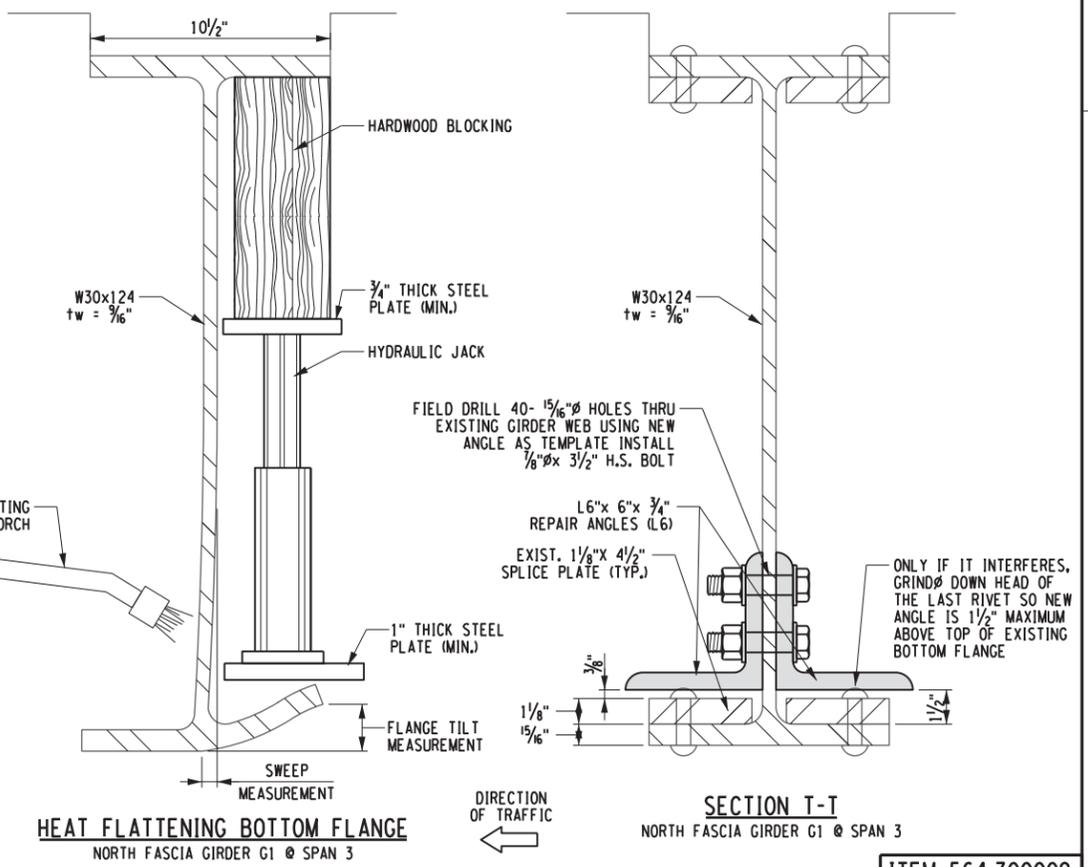
REQUIRED BOLTS: 7/8"Øx 3 1/2" - 40 EACH THIS SHEET  
A325 GALV. H.S. BOLTS W/ H.H. NUT & 2 STD. HARDENED WASHERS  
TOTAL STEEL WEIGHT: 692 LB (THIS SHEET)

SPAN 3 - FASCIA GIRDER - G1			
DISTANCE FROM C.L. OF BRGS. OF PIER 3	DISTANCE FROM IMPACT (FT.) LEFT/RIGHT	SWEEP MEASUREMENT (IN.)	FLANGE TILT MEASUREMENT (IN.)
21'-9"	4' RIGHT	0"	0"
25'-9"	0	1"	2 1/2"
29'-9"	4' LEFT	0"	0"

**NOTES:**

- PRIOR TO BEGINNING ANY REPAIR PROCEDURES, THE EXISTING PAINT SHALL BE REMOVED IN ACCORDANCE WITH THE NOTES PROVIDED IN THE GENERAL NOTES, SEE DWG. GN-3.
- FOR PROCEDURES AND REQUIREMENTS FOR HEAT-STRAIGHTENING, SEE GENERAL NOTES AND HEATING DETAILS, DWG. ST-12.
- ALL LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO COMPLETE THE STRUCTURAL STEEL REPAIRS, INCLUDING PAINT REMOVAL AND PAINT TOUCH-UP, SHALL BE INCLUDED UNDER THE STEEL REPAIR ITEM 564.700009.

BASED ON FIELD MEASUREMENTS, THERE IS APPROXIMATELY 1" OF SWEEP TO THE BOTTOM FLANGE & LOWER WEB. ONLY INCIDENTAL STRAIGHTENING OF THIS SWEEP IS ANTICIPATED / REQUIRED. USING HEATING OF THE BOTTOM & LOWER WEB, FLANGE AND THE USE OF COME ALONGS, THE GIRDER IS TO BE STRAIGHTENED ONLY INsofar AS NEEDED TO INSTALL THE NEW FLANGE ANGLES AND BE ABLE TO PROPERLY DRILL HOLES IN THE WEB, SEE HEAT STRAIGHTENING DETAIL ON DWG. ST-12.



**HEAT FLATTENING BOTTOM FLANGE**  
NORTH FASCIA GIRDER G1 @ SPAN 3

ITEM 564.700009

ALTERED ON: \_\_\_\_\_ AFFIXED ON: 6/25/2020

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**NEW YORK STATE OF OPPORTUNITY**

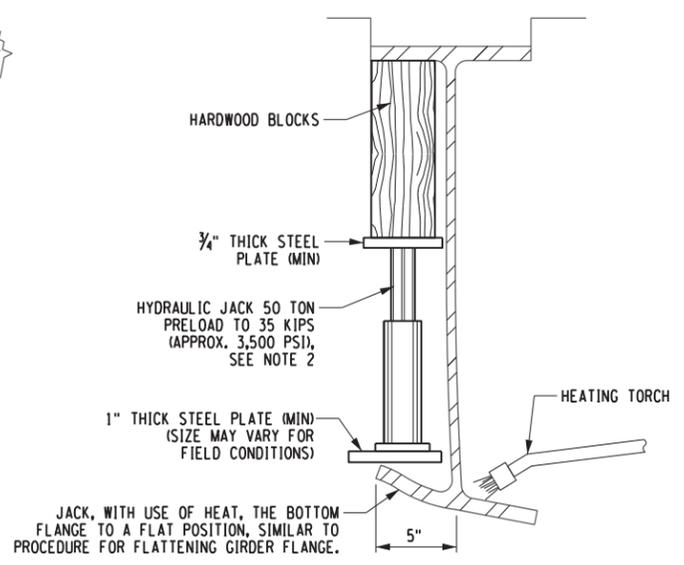
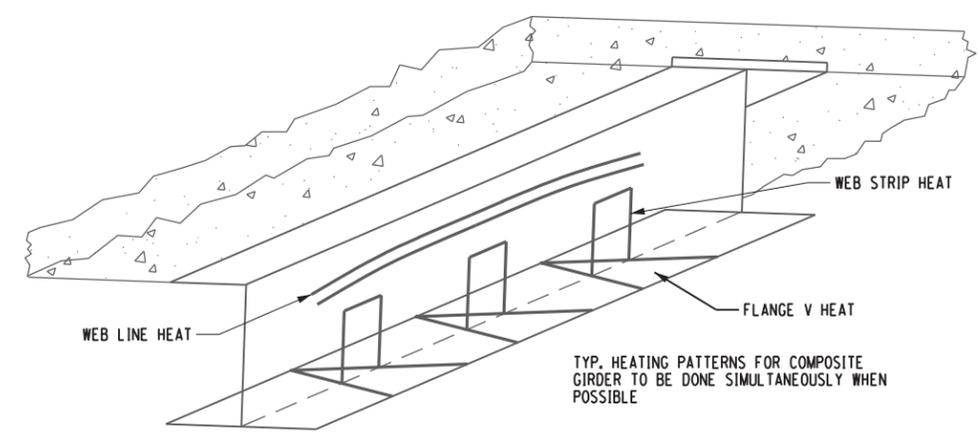
**Thruway Authority**

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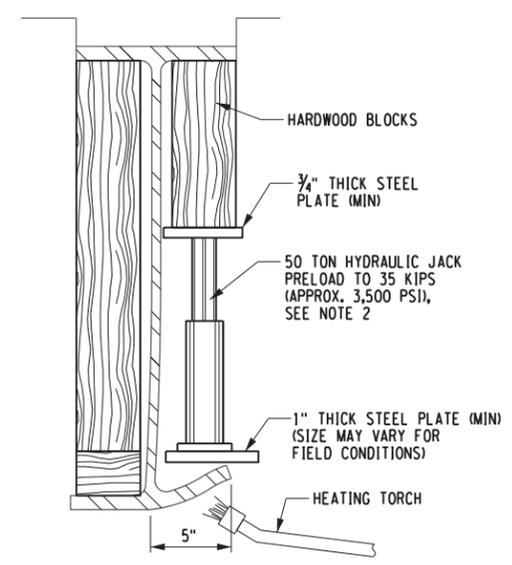
TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING SPAN 3 - G1 GIRDER REPAIR DETAILS	DRAWING NUMBER: ST-11

**HEAT STRAIGHTENING PROCEDURES :**

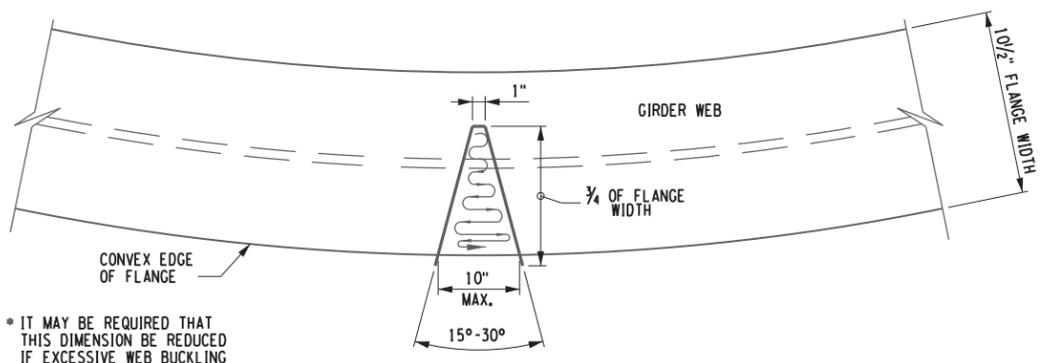
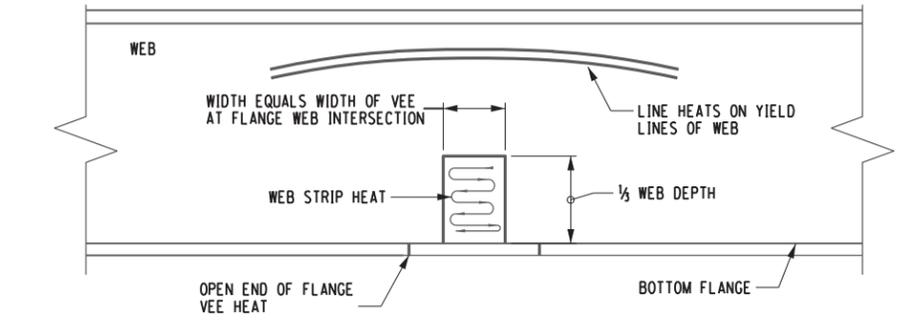
1. POSITION ONE OR MORE JACKING FIXTURES OVER THE DEFORMED AREA OF THE FLANGE AS SHOWN.
2. PUMP THE JACK TO PROVIDE A PRELOAD BENDING STRESS NOT TO EXCEED 20,000 PSI OR ABOUT 35 KIPS PER JACK. CONTRACTOR SHALL PROVIDE A MAXIMUM DISPLACEMENT DIMENSION AND JACKING PRESSURE, BASED ON SIZE OF ACTUAL JACK USED.
3. HEAT THE PERIMETER OF THE DEFORMATION TO A TEMPERATURE OF BETWEEN 1100° AND 1150° F. USE TEMPERATURE INDICATING CRAYONS TO VERIFY TEMPERATURE.
4. MAINTAIN PRESSURE ON THE JACK AS THE STEEL COOLS.
5. REPEAT STEPS 2 THRU 4 UNTIL THE DEFORMATION IS FLATTENED.
6. VISUALLY INSPECT THE BASE METAL FOR A DISTANCE OF ONE FOOT BEYOND EACH END OF THE FLATTENED AREA. REPORT ANY CRACKS TO THE NEW YORK STATE THRUWAY AUTHORITY'S METALS ENGINEERING UNIT.
7. MAGNETIC PARTICLE TEST THE REPAIRED AREA IN ACCORDANCE WITH SECTION 18 OF THE NYS STEEL CONSTRUCTION MANUAL USING THE YOKE TECHNIQUE TO TEST IN THE AC OUTPUT MODE. REPORT ANY CRACK IN ACCORDANCE WITH STEP 6.



**PROCEDURE FOR REMOVING GIRDER FLANGE TILT**  
SPAN 2 - G4 ONLY  
N.T.S.



**PROCEDURE FOR FLATTENING FLANGE AT IMPACT AREA**  
SPAN 2 - G4 & SPAN 3 G1  
N.T.S.



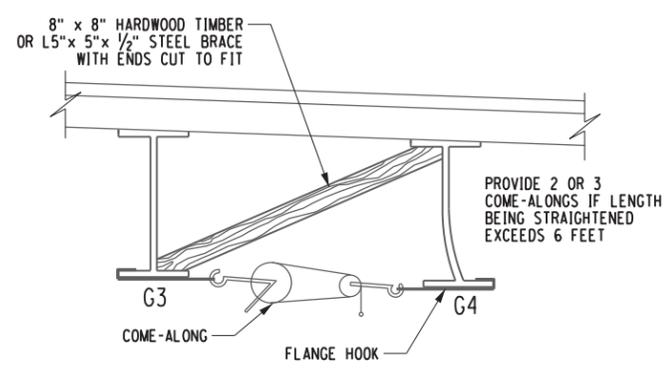
**TYPICAL VEE HEATING PATTERN & PROGRESSION OF HEATING TORCH**  
N.T.S.

\* IT MAY BE REQUIRED THAT THIS DIMENSION BE REDUCED IF EXCESSIVE WEB BUCKLING OCCURS.

NO HEAT STRAIGHTENING OF SPAN 2 GIRDER G1 IS REQUIRED ALL DAMAGE WILL BE CUT OUT

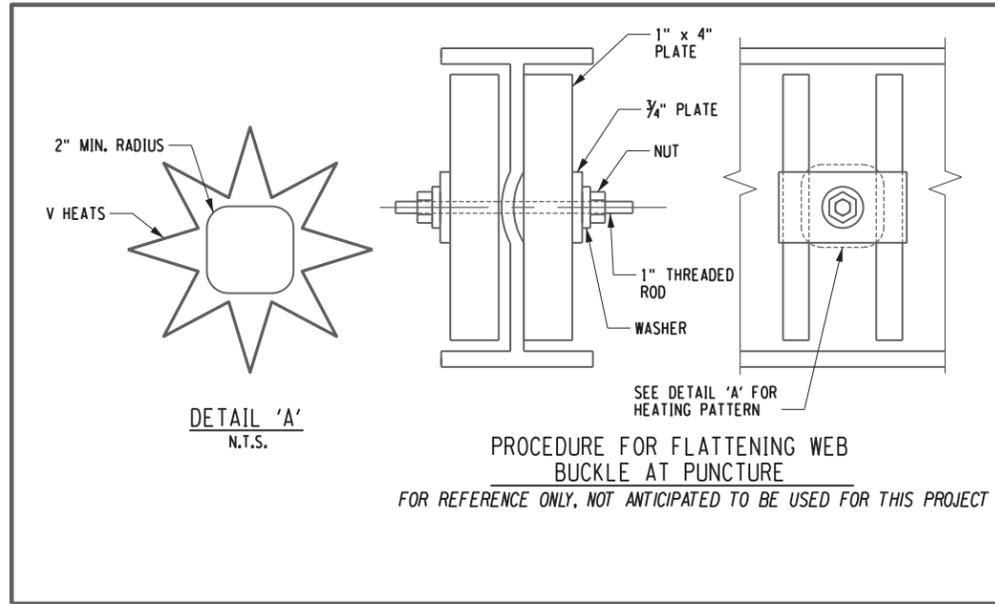
**HEATING NOTES:**  
VEE HEATS

1. THE INITIAL SEQUENCE OF HEATS SHALL BE APPLIED TO THE CONVEX SIDE OF THE BENT MEMBER AT THE POINT OF IMPACT.
2. HEATING PATTERNS SHALL BE LOCATED AND SPACED BY THE CONTRACTOR TO SUIT FIELD CONDITIONS.
3. WHEN AN APPLIED PRELOAD IS USED, ADJUSTMENT TO THE JACKING DEVICES OR COME-ALONGS SHALL NOT BE MADE UNTIL THE STEEL HAS COOLED TO 200°F.
4. WHEN THE DAMAGED FLANGE IS GREATER THAN 1 INCH IN THICKNESS OR A COVER PLATE IS ATTACHED TO THE DAMAGED FLANGE, HEAT SHALL BE APPLIED TO THE TOP AND BOTTOM OF THE DAMAGED MEMBER (S) USING TWO TORCHES SIMULTANEOUSLY.
5. IN GENERAL HEATING SHALL BE PERFORMED USING SINGLE ORIFICE TORCHES. THE CONTRACTOR SHALL SELECT TIP SIZES BASED UPON FIELD CONDITIONS WHICH WILL PROMOTE HEATING EFFICIENCY AND PREVENT UNNECESSARY DISTORTION. SEE SUGGESTED TORCH TIPS FOR VARIOUS MATERIAL THICKNESS.
6. BEGINNING AT THE TRUNCATED END OF THE TRIANGLE, BRING THE STEEL TO A TEMPERATURE BETWEEN 1100°F. AND 1150°F. AS RAPIDLY AS POSSIBLE. HEATING SHOULD PROGRESS SLOWLY TOWARDS THE BASE OF THE TRIANGLE IN A SERPENTINE PATTERN. ONCE HEATING BEGINS TO PROGRESS TOWARDS THE BASE OF THE PATTERN, THE HEATING TORCH SHALL NOT RETURN TO THE APEX OF THE TRIANGLE.



**STRAIGHTENING OF BOTTOM FLANGE SWEEP**  
SPAN 2 - G4 ONLY\*  
N.T.S.

\* INCIDENTAL HEATING AND STRAIGHTENING OF SPAN 3, G4 TO REMOVE A PORTION OF THE 1\"/>



**PROCEDURE FOR FLATTENING WEB BUCKLE AT PUNCTURE**  
FOR REFERENCE ONLY, NOT ANTICIPATED TO BE USED FOR THIS PROJECT

**LINE HEAT, STRIP HEATS, SPOT HEATS**

1. WHEN REQUIRED, THE CONTRACTOR SHALL USE LINE HEATS, STRIP HEATS, SPOT HEATS IN CONJUNCTION WITH VEE HEATS TO HEAT STRAIGHTEN MEMBERS.
2. ALL LINE HEATING SHALL BE PERFORMED USING SINGLE ORIFICE TORCH TIPS.
3. TORCH TIP SIZE SHALL BE SELECTED BY THE CONTRACTOR TO PROMOTE HEATING EFFICIENCY AND PREVENT DISTORTION. SEE SUGGESTED TORCH TIPS FOR VARIOUS MATERIAL THICKNESS.
4. HEATING PATTERNS AND LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR TO SUIT FIELD CONDITIONS.
5. THE STEEL SHALL BE BROUGHT TO A TEMPERATURE OF BETWEEN 1100°F. AND 1150°F. AS QUICKLY AS POSSIBLE. ONCE AN AREA HAS BEEN HEATED THE TORCH SHALL NOT RETURN TO THE AREA.

ALTERED ON:	AFFIXED ON: 6/25/2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

ALL HEAT STRAIGHTENING COSTS SHALL BE INCLUDED IN ITEMS 564.700008 & 564.700009	
TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING HEAT STRAIGHTENING DETAILS	DRAWING NUMBER: ST-12

FILE NAME = V:\P\Projects\ANY\K5\36292\CA00\ASTN.WP\_421.57 (Kensington Expy. Rte 33)\68.Bridge Hit Repairs\_MP 421.57\_ST-12.dgn  
 DATE / TIME = 26-JUN-2020 10:57:53  
 USER = G. HOFFMANN  
 DESIGNED BY: G. HOFFMANN  
 CHECKED BY: S. KINSMAN  
 DRAFTED BY: J. HARTWELL  
 CHECKED BY: S. SCHUKRAFT

PW/ CHECKED BY: B. EDINGER DRAFTED BY: D. HOLLNER CHECKED BY: B. EDINGER DESIGNED BY: J. SHINSKI DESIGN SUPERVISOR: JOSEPH ADAMCZAK



ALTERED ON:  
 SIGNATURE:  
 STAMP:

AFFIXED ON: 06-25-2020  
 SIGNATURE:  
 STAMP:

**DETOUR SIGNING PLAN**

NO SCALE

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

**Thruway Authority**

LEGEND	
	DETOUR ROUTE
	VARIABLE MESSAGE SIGN, ITEM 619.110513
	TEMPORARY SIGN, ITEM 619.01

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING ROUTE 33 WB TO I-90 WB DETOUR SIGNING (SHEET 1 OF 2)	DRAWING NUMBER: DTR-1





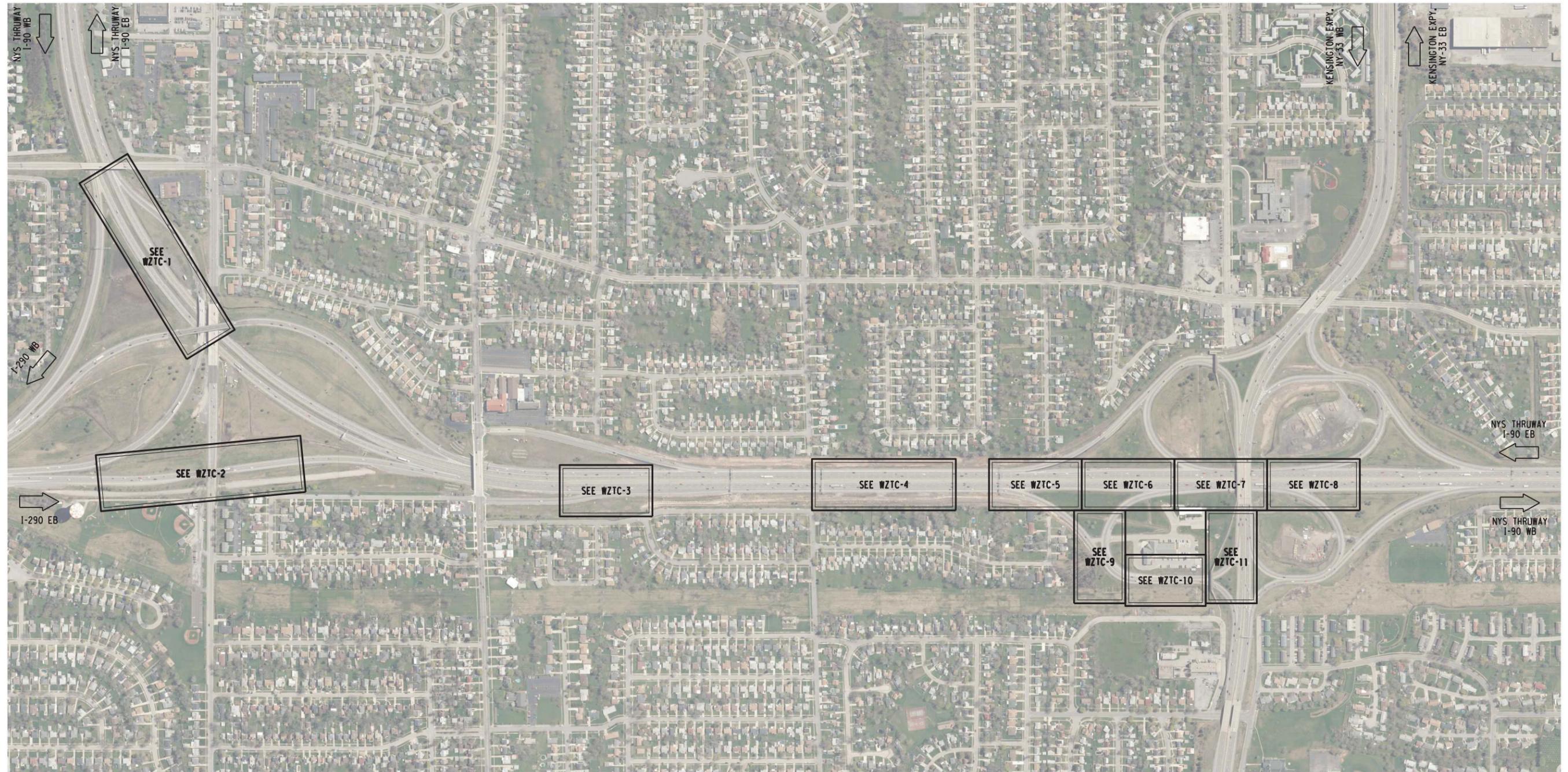
CHECKED BY: B. EDIGNER

DRAFTED BY: D. HOLLNER

CHECKED BY: J. ADAMCZAK

DESIGNED BY: B. EDIGNER

DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**I-90 WB TWO-LANE CLOSURE**  
NOT TO SCALE



ALTERED ON:	AFFIXED ON: 06-25-2020
SIGNATURE: STAMP:	SIGNATURE: STAMP: 

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.



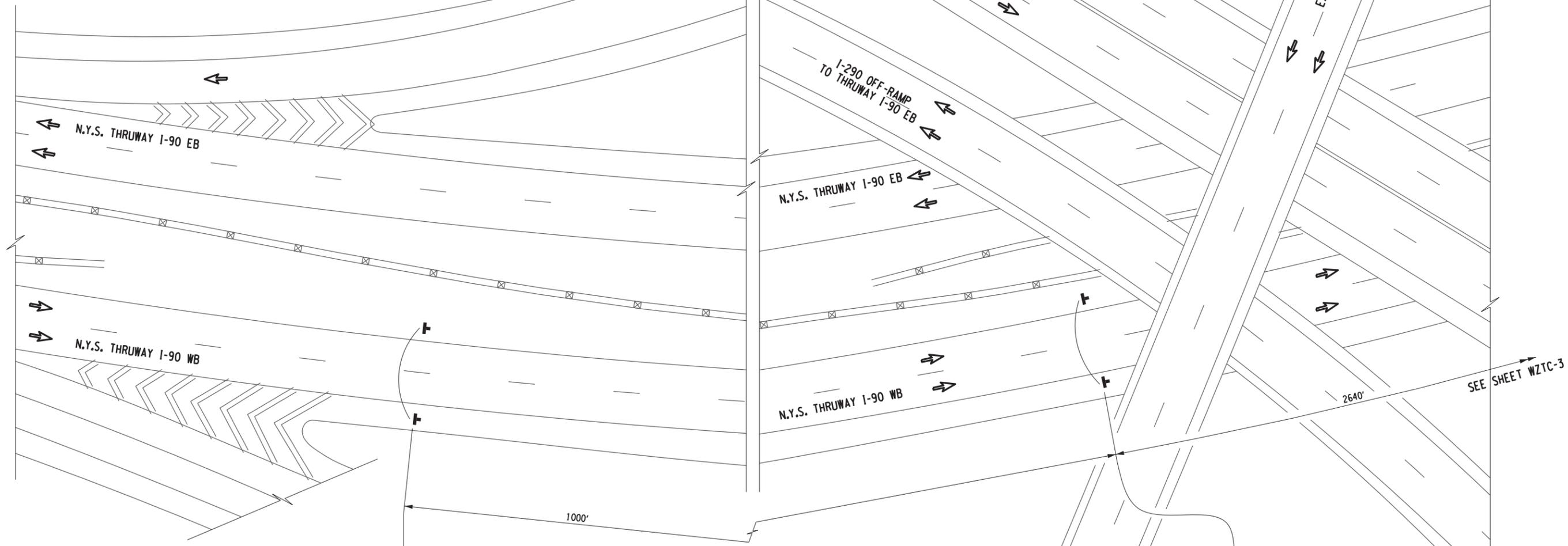
**Thruway Authority**

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB TWO-LANE CLOSURE SHEET LEGEND	DRAWING NUMBER: WZTC-LGD-1



**LEGEND**

-  CHANNELIZING DEVICES, ITEM 619.01
-  WORK SPACE
-  ARROW PANEL, ITEM 619.01
-  ARROW PANEL (CAUTION MODE), ITEM 619.01
-  COVER EXISTING SIGN, ITEM 619.01
-  BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
-  ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
-  DIRECTION OF TRAFFIC
-  TYPE III BARRICADE, ITEM 619.04
-  TEMPORARY SIGN, ITEM 619.01
-  EXISTING SIGN
-  VARIABLE MESSAGE SIGN, ITEM 619.110513



**WORK ZONE TRAFFIC CONTROL PLAN**

SCALE: 1" = 40'-0"

STATE LAW  
FINES  
DOUBLED FOR  
SPEEDING  
IN  
WORK ZONES  
NYR9-12  
48"x72"

ROAD  
WORK  
1 MILE  
W20-1  
48"x48"

ALTERED ON:  SIGNATURE: STAMP:	AFFIXED ON: 06-25-2020  
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REVISIONS			
DATE	DESCRIPTION	BY	SYMBOL

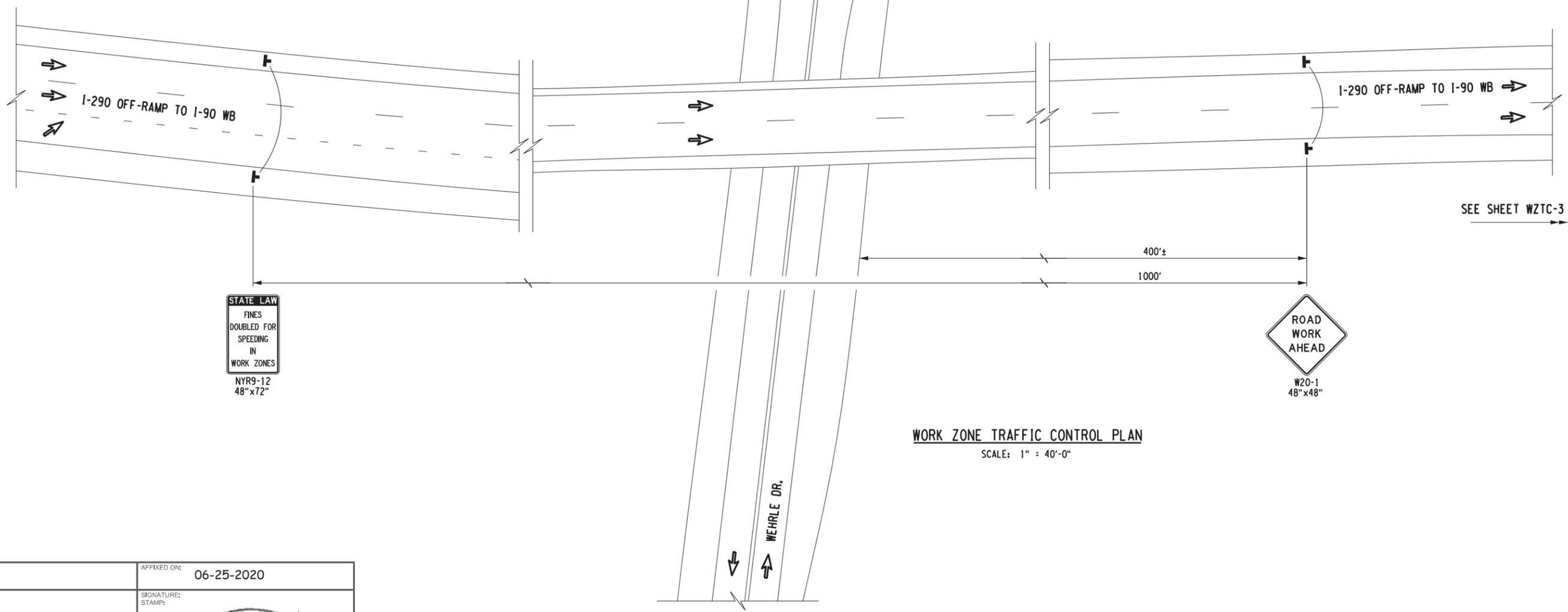
	<b>Thruway Authority</b>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
		LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB TWO-LANE CLOSURE (SHEET 1 OF 11)		DRAWING NUMBER: WZTC-1	

SEE SHEET WZTC-3

PW/  
 CHECKED BY: B. EDINGER  
 DRAFTED BY: D. HOLLNER  
 CHECKED BY: B. EDINGER  
 DESIGNED BY: J. SHINSKI  
 DESIGN SUPERVISOR: JOSEPH ADAMCZAK

**LEGEND**

- ■ ■ CHANNELIZING DEVICES, ITEM 619.01
- ▨ WORK SPACE
- ARROW PANEL, ITEM 619.01
- ◻ ARROW PANEL (CAUTION MODE), ITEM 619.01
- ▩ COVER EXISTING SIGN, ITEM 619.01
- ☐ BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ⇄ ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- ➔ DIRECTION OF TRAFFIC
- ⊥ TYPE III BARRICADE, ITEM 619.04
- ⊥ TEMPORARY SIGN, ITEM 619.01
- ⊥ EXISTING SIGN
- ⊥ VARIABLE MESSAGE SIGN, ITEM 619.110513



SEE SHEET WZTC-3

**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: 1" = 40'-0"

ALTERED ON:	AFFIXED ON: 06-25-2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

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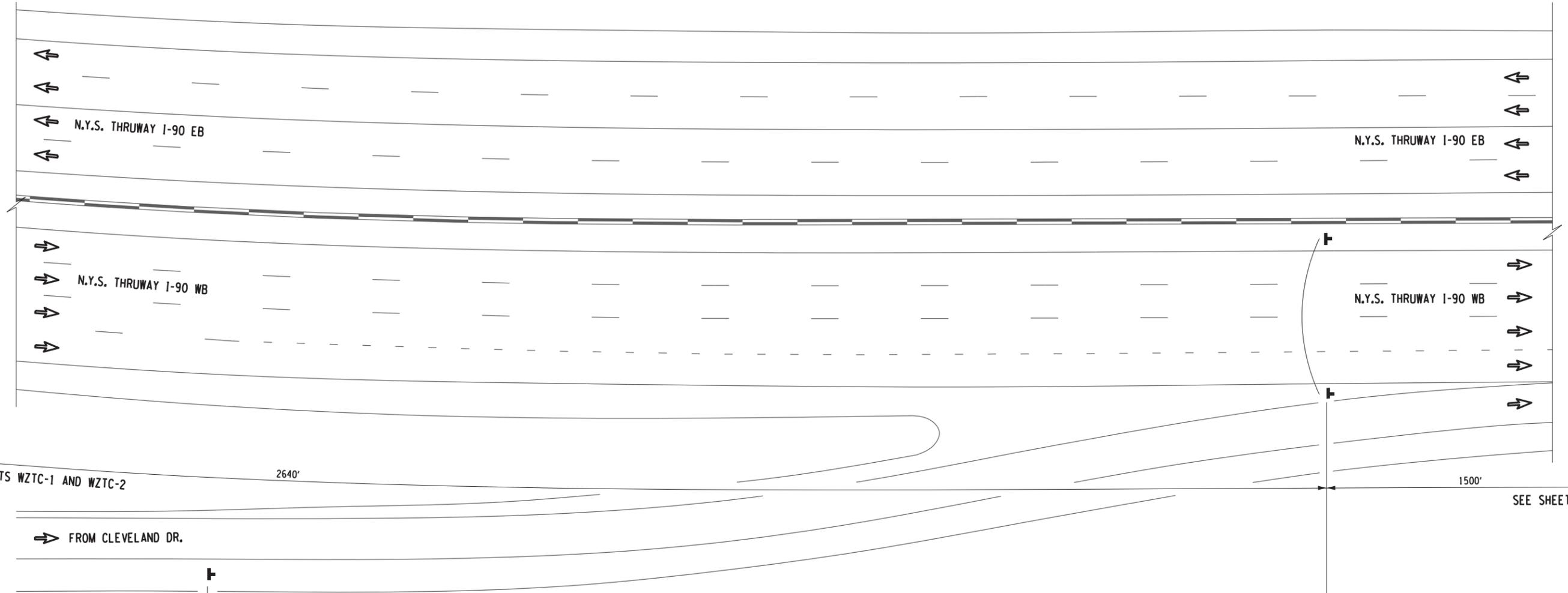
REVISIONS			
DATE	DESCRIPTION	BY	SYMBOL

**Thruway Authority**

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB TWO-LANE CLOSURE (SHEET 2 OF 11)	DRAWING NUMBER: WZTC-2



PW/ CHECKED BY: B. EDINGER DRAFTED BY: D. HOLLNER CHECKED BY: B. EDINGER DESIGNED BY: J. SHINSKI DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: 1" = 40'-0"



- LEGEND**
- ■ ■ CHANNELIZING DEVICES, ITEM 619.01
  - ▨ WORK SPACE
  - ● ● ARROW PANEL, ITEM 619.01
  - ● ● ARROW PANEL (CAUTION MODE), ITEM 619.01
  - ▨ COVER EXISTING SIGN, ITEM 619.01
  - 🚚 BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
  - ⬆ ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
  - ➡ DIRECTION OF TRAFFIC
  - ⊥ TYPE III BARRICADE, ITEM 619.04
  - ⊥ TEMPORARY SIGN, ITEM 619.01
  - ⊕ EXISTING SIGN
  - ⊥ VARIABLE MESSAGE SIGN, ITEM 619.110513

ALTERED ON:  SIGNATURE: STAMP:	AFFIXED ON: 06-25-2020  
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REVISIONS			
DATE	DESCRIPTION	BY	SYML

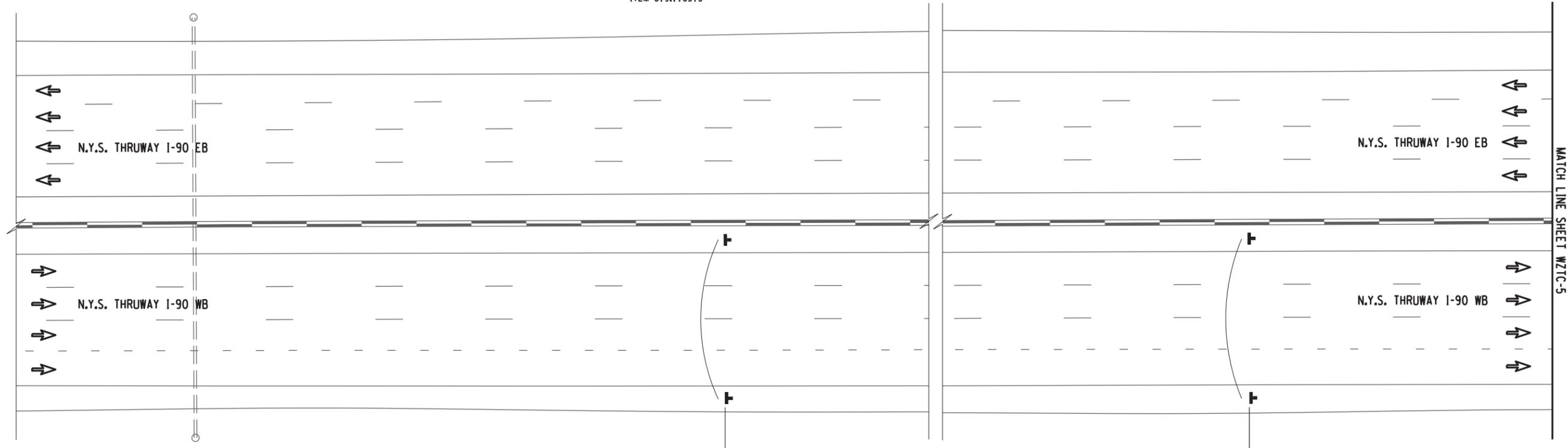
 <b>Thruway Authority</b>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
	LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB TWO-LANE CLOSURE (SHEET 3 OF 11)	DRAWING NUMBER: WZTC-3	

PW/ CHECKED BY: B. EDINGER DRAFTED BY: D. HOLLNER CHECKED BY: B. EDINGER DESIGNED BY: J. SHINSKI DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**LEGEND**

	CHANNELIZING DEVICES, ITEM 619.01		BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
	WORK SPACE		ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
	ARROW PANEL, ITEM 619.01		DIRECTION OF TRAFFIC
	ARROW PANEL (CAUTION MODE), ITEM 619.01		TYPE III BARRICADE, ITEM 619.04
	COVER EXISTING SIGN, ITEM 619.01		TEMPORARY SIGN, ITEM 619.01
			EXISTING SIGN
			VARIABLE MESSAGE SIGN, ITEM 619.110513



SEE SHEET WZTC-3      1500'      500'      500'      MATCH LINE SHEET WZTC-5



**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: 1" = 40'-0"

ALTERED ON:	AFFIXED ON: 06-25-2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

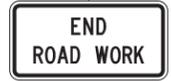
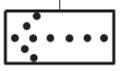
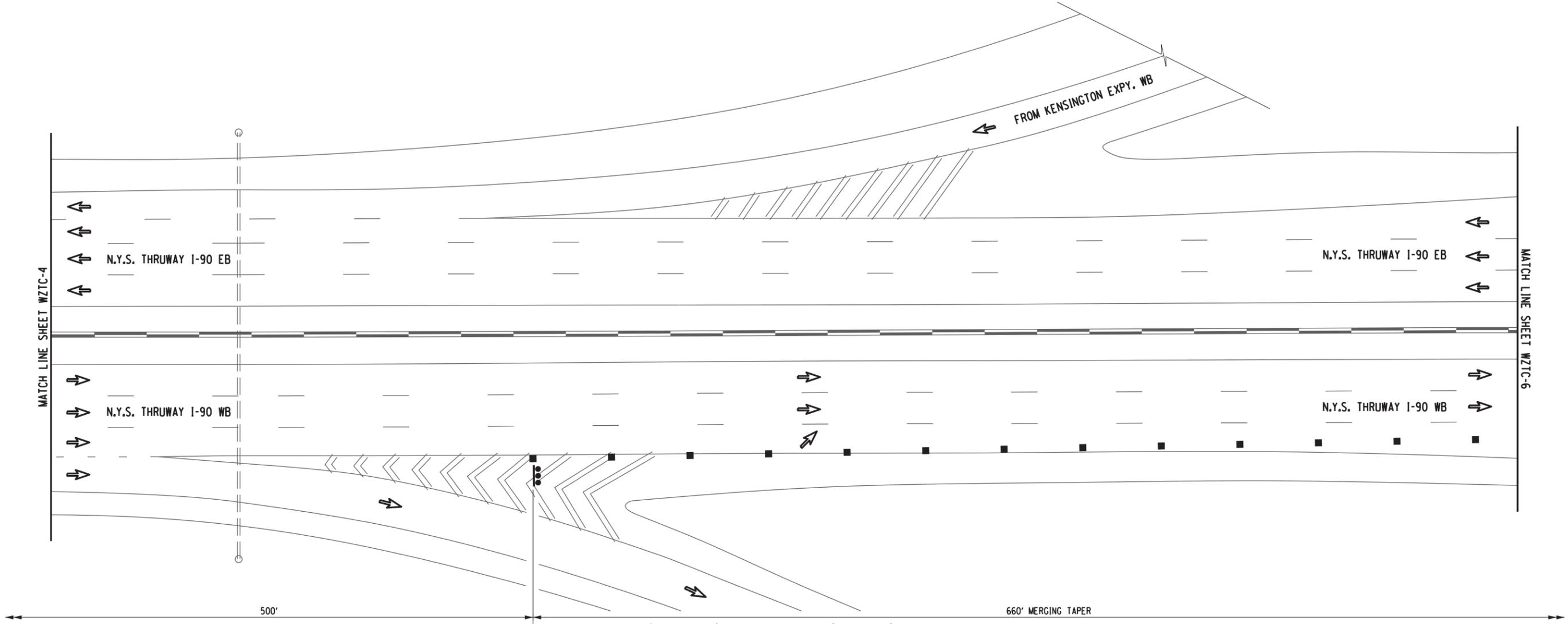
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REVISIONS			
DATE	DESCRIPTION	BY	SYML

**Thruway Authority**

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB TWO-LANE CLOSURE (SHEET 4 OF 11)	DRAWING NUMBER: WZTC-4

PW/ CHECKED BY: B. EDINGER DRAFTED BY: D. HOLLNER CHECKED BY: B. EDINGER DESIGNED BY: J. SHINSKI DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: 1" = 40'-0"

**LEGEND**

- CHANNELIZING DEVICES, ITEM 619.01
- WORK SPACE
- ARROW PANEL, ITEM 619.01
- ARROW PANEL (CAUTION MODE), ITEM 619.01
- COVER EXISTING SIGN, ITEM 619.01
- BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- DIRECTION OF TRAFFIC
- TYPE III BARRICADE, ITEM 619.04
- TEMPORARY SIGN, ITEM 619.01
- EXISTING SIGN
- VARIABLE MESSAGE SIGN, ITEM 619.110513

ALTERED ON: SIGNATURE: STAMP:	AFFIXED ON: 06-25-2020 SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYML

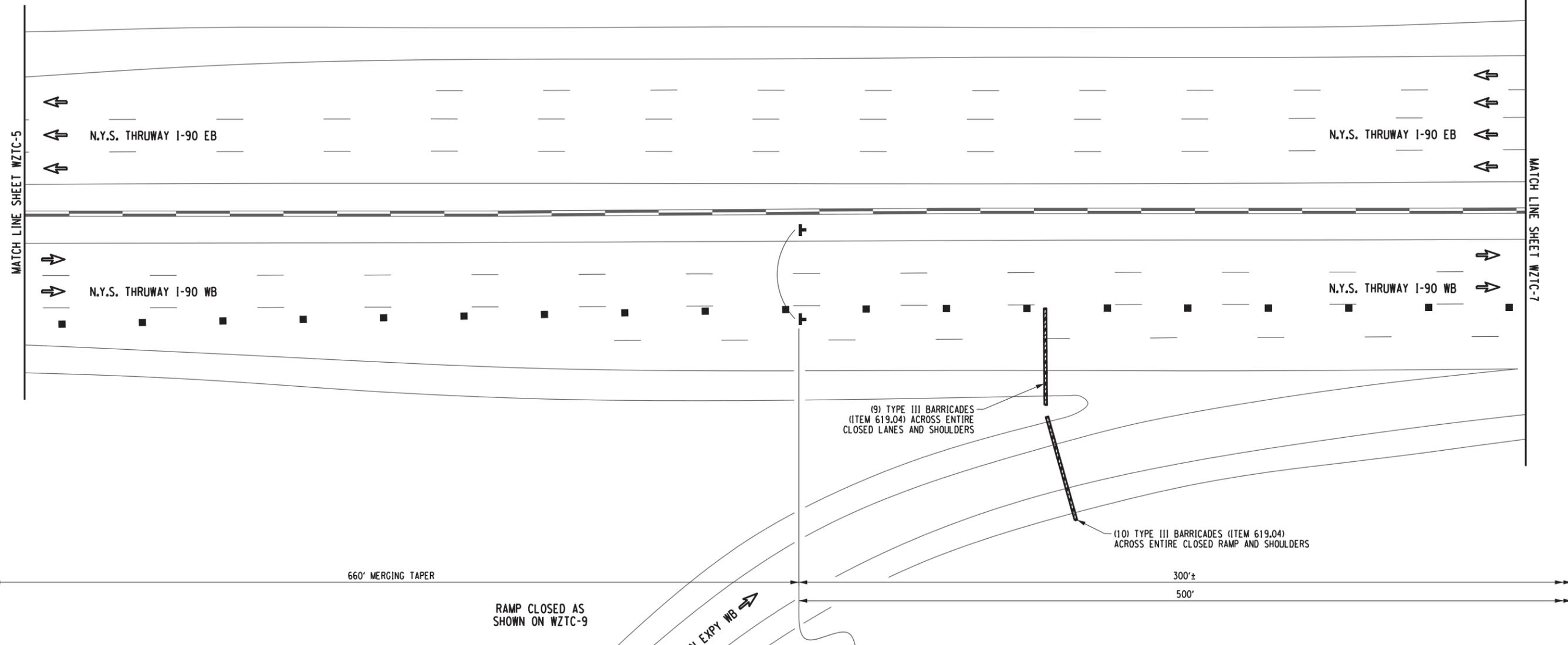
	<b>Thruway Authority</b>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
		LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB TWO-LANE CLOSURE (SHEET 5 OF 11)		DRAWING NUMBER: WZTC-5	

PW/ CHECKED BY: B. EDINGER DRAFTED BY: D. HOLLNER CHECKED BY: B. EDINGER DESIGNED BY: J. SHINSKI DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**LEGEND**

	CHANNELIZING DEVICES, ITEM 619.01		BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
	WORK SPACE		ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
	ARROW PANEL, ITEM 619.01		DIRECTION OF TRAFFIC
	ARROW PANEL (CAUTION MODE), ITEM 619.01		TYPE III BARRICADE, ITEM 619.04
	COVER EXISTING SIGN, ITEM 619.01		TEMPORARY SIGN, ITEM 619.01
			EXISTING SIGN
			VARIABLE MESSAGE SIGN, ITEM 619.110513



ALTERED ON:	AFFIXED ON: 06-25-2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYL

**Thruway Authority**

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB TWO-LANE CLOSURE (SHEET 6 OF 11)	DRAWING NUMBER: WZTC-6

G20-5aP  
36"x24"

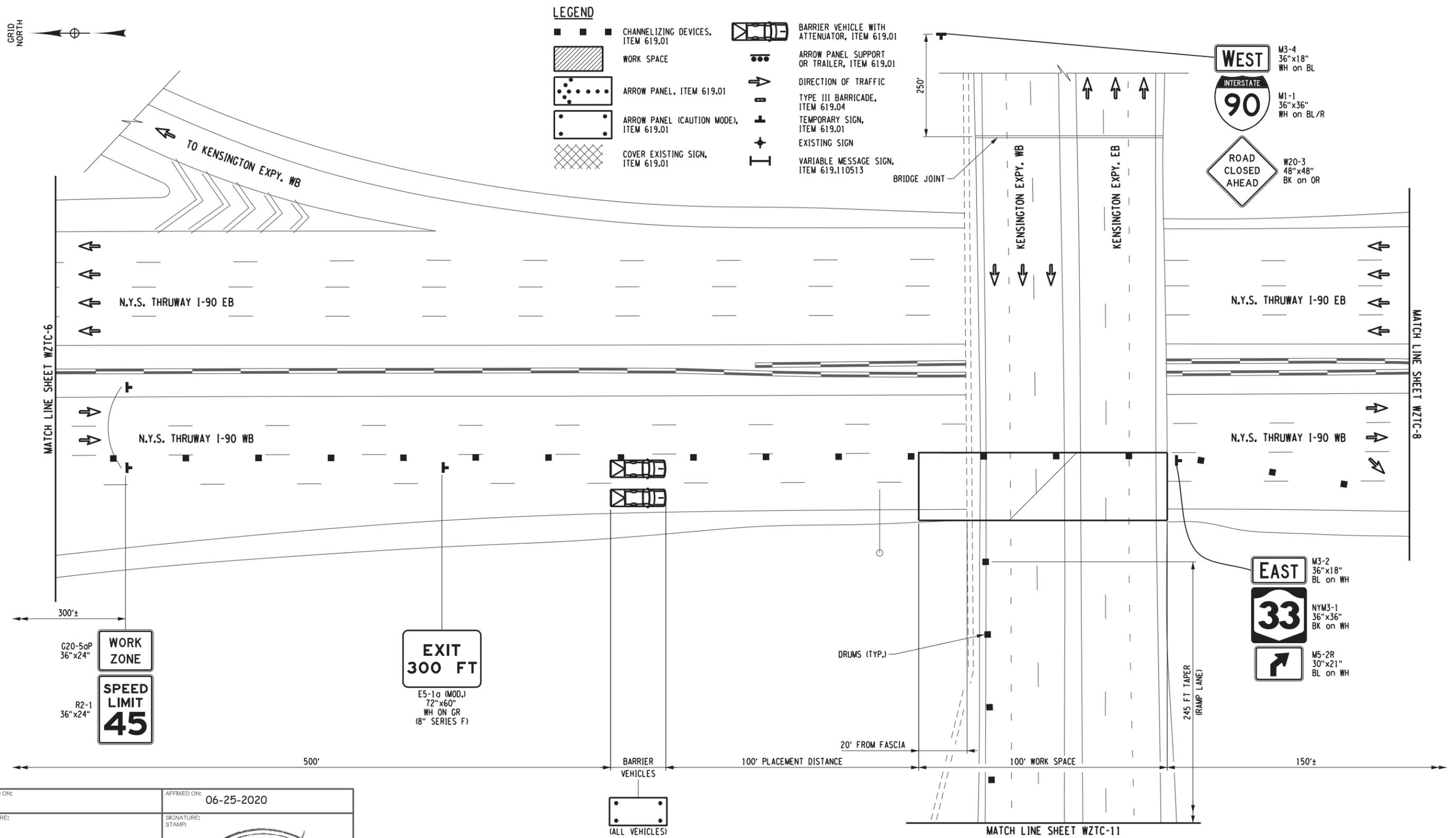
**WORK ZONE**

R2-1  
36"x24"

**SPEED LIMIT 45**

**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: 1" = 40'-0"

PW/ CHECKED BY: B. EDINGER DRAFTED BY: D. HOLLNER CHECKED BY: B. EDINGER DESIGNED BY: J. SHINSKI DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: 1" = 40'-0"

ALTERED ON:	AFFIXED ON: 06-25-2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

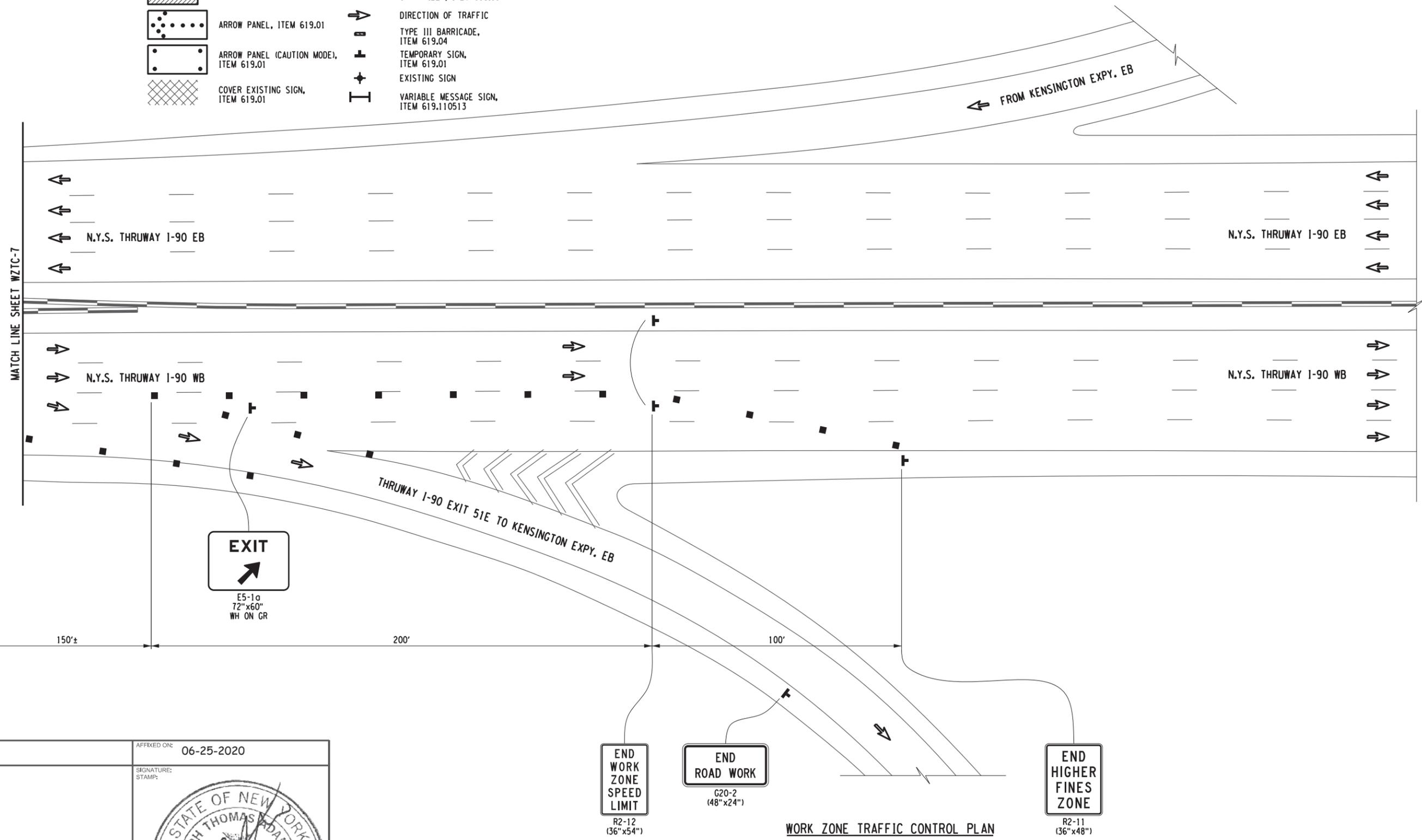
<b>Thruway Authority</b>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
	LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB TWO-LANE CLOSURE (SHEET 7 OF 11)	DRAWING NUMBER: WZTC-7	

PW/ CHECKED BY: B. EDINGER DRAFTED BY: D. HOLLNER CHECKED BY: B. EDINGER DESIGNED BY: J. SHINSKI DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**LEGEND**

-  CHANNELIZING DEVICES, ITEM 619.01
-  WORK SPACE
-  ARROW PANEL, ITEM 619.01
-  ARROW PANEL (CAUTION MODE), ITEM 619.01
-  COVER EXISTING SIGN, ITEM 619.01
-  BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
-  ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
-  DIRECTION OF TRAFFIC
-  TYPE III BARRICADE, ITEM 619.04
-  TEMPORARY SIGN, ITEM 619.01
-  EXISTING SIGN
-  VARIABLE MESSAGE SIGN, ITEM 619.110513



ALTERED ON:  SIGNATURE: STAMP:	AFFIXED ON: 06-25-2020  SIGNATURE: 
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REVISIONS			
DATE	DESCRIPTION	BY	SYMBOL



**Thruway Authority**

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB TWO-LANE CLOSURE (SHEET 8 OF 11)	DRAWING NUMBER: WZTC-8

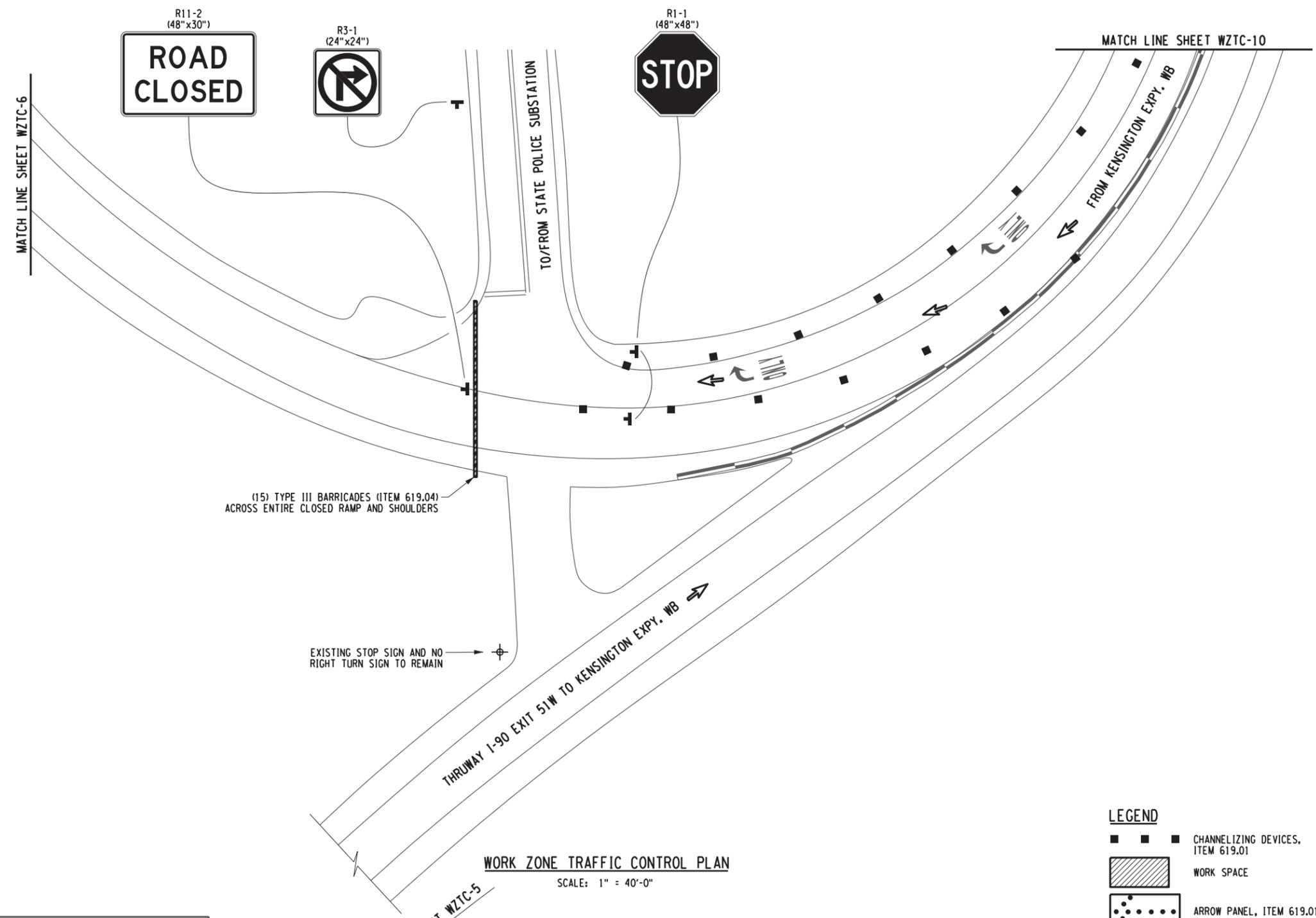
**END WORK ZONE SPEED LIMIT**  
R2-12 (36" x 54")

**END ROAD WORK**  
G20-2 (48" x 24")

**END HIGHER FINES ZONE**  
R2-11 (36" x 48")

**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: 1" = 40'-0"

PW/ CHECKED BY: B. EDINGER DRAFTED BY: D. HOLLNER CHECKED BY: B. EDINGER DESIGNED BY: J. SHINSKI DESIGN SUPERVISOR: JOSEPH ADAMCZAK



(15) TYPE III BARRICADES (ITEM 619.04)  
ACROSS ENTIRE CLOSED RAMP AND SHOULDERS

EXISTING STOP SIGN AND NO  
RIGHT TURN SIGN TO REMAIN

**WORK ZONE TRAFFIC CONTROL PLAN**

SCALE: 1" = 40'-0"

**LEGEND**

- CHANNELIZING DEVICES, ITEM 619.01
- WORK SPACE
- ARROW PANEL, ITEM 619.01
- ARROW PANEL (CAUTION MODE), ITEM 619.01
- COVER EXISTING SIGN, ITEM 619.01
- BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- DIRECTION OF TRAFFIC
- TYPE III BARRICADE, ITEM 619.04
- TEMPORARY SIGN, ITEM 619.01
- EXISTING SIGN
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ALTERED ON:  SIGNATURE: STAMP:	AFFIXED ON: 06-25-2020  
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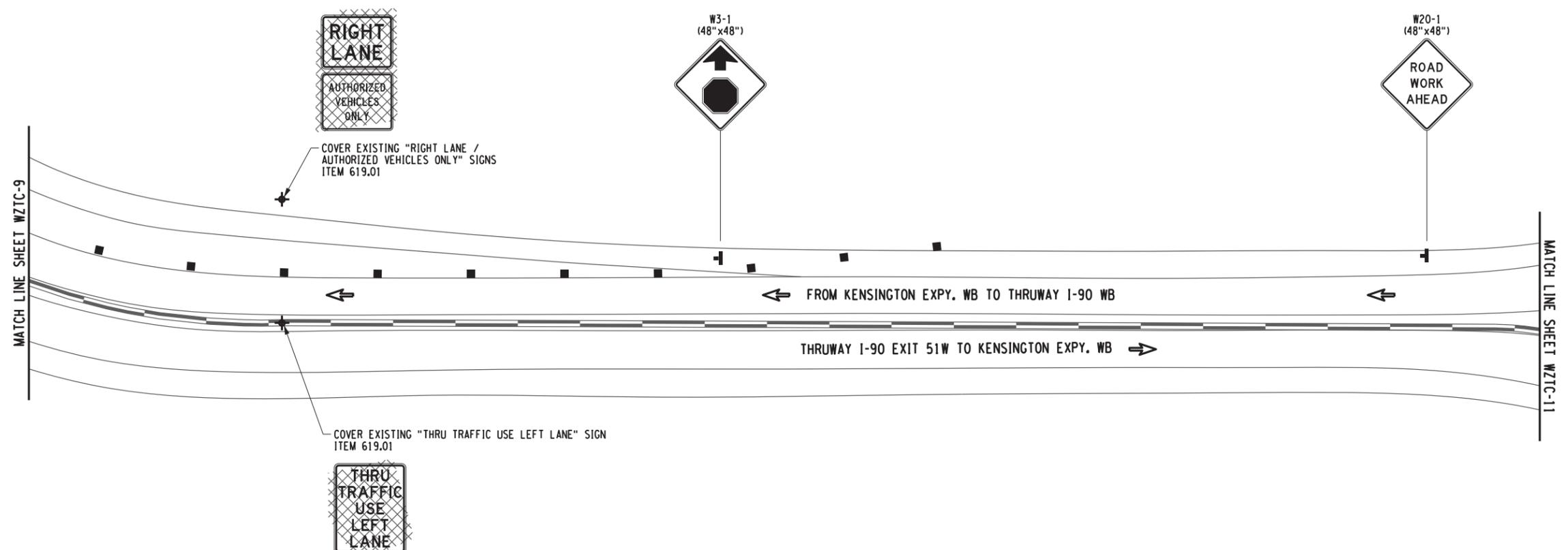
REVISIONS			
DATE	DESCRIPTION	BY	SYMBOL

**Thruway Authority**

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB TWO-LANE CLOSURE (SHEET 9 OF 11)	DRAWING NUMBER: WZTC-9



PW/ CHECKED BY: B. EDINGER DRAFTED BY: D. HOLLNER CHECKED BY: B. EDINGER DESIGNED BY: J. SHINSKI DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: 1" = 40'-0"

**LEGEND**

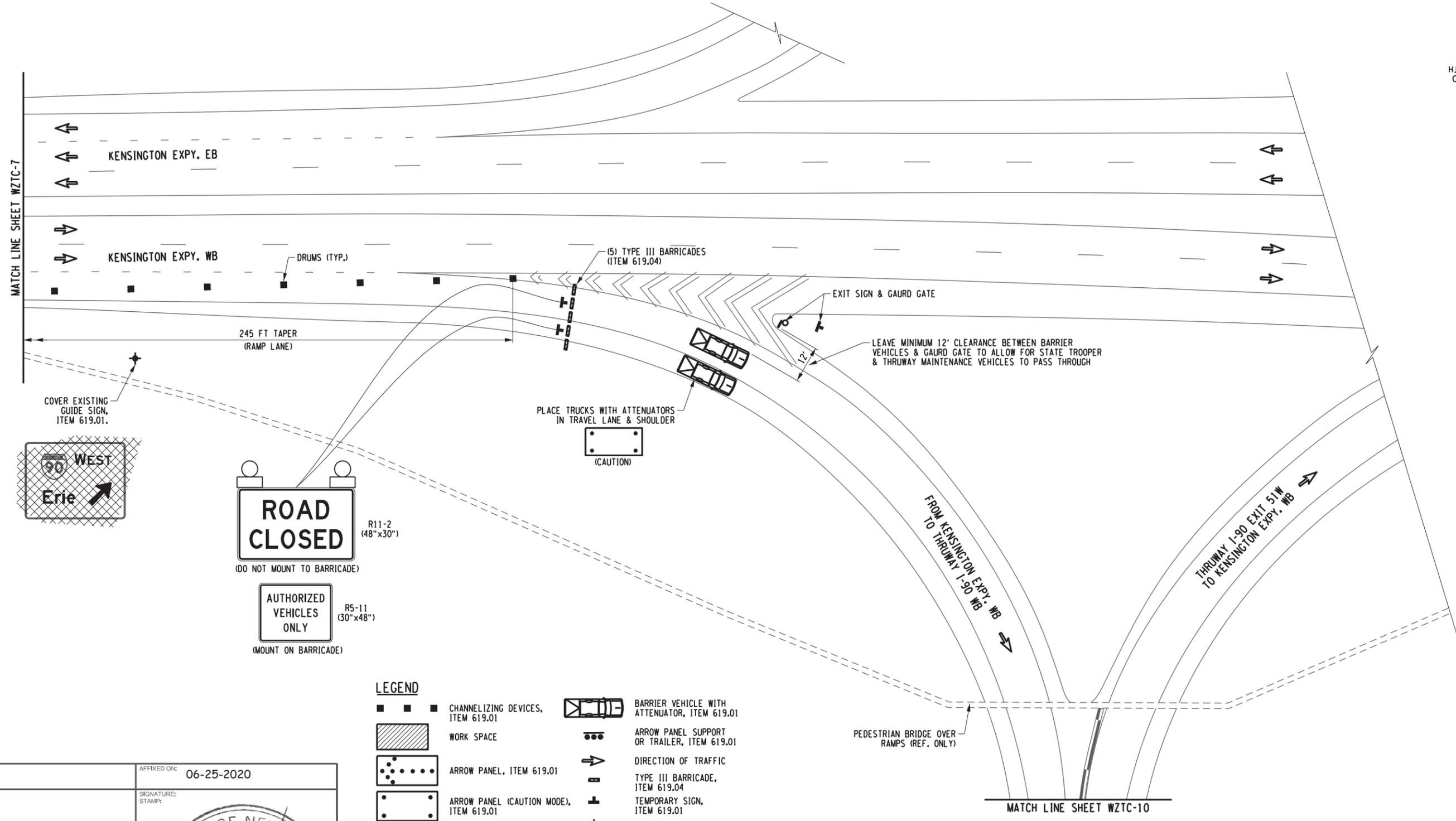
	CHANNELIZING DEVICES, ITEM 619.01		BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
	WORK SPACE		ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
	ARROW PANEL, ITEM 619.01		DIRECTION OF TRAFFIC
	ARROW PANEL (CAUTION MODE), ITEM 619.01		TYPE III BARRICADE, ITEM 619.04
	COVER EXISTING SIGN, ITEM 619.01		TEMPORARY SIGN, ITEM 619.01
			EXISTING SIGN
			VARIABLE MESSAGE SIGN, ITEM 619.110513

ALTERED ON:	AFFIXED ON: 06-25-2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYMBOL

	<b>Thruway Authority</b>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
		LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB TWO-LANE CLOSURE (SHEET 10 OF 11)		DRAWING NUMBER: WZTC-10	



**LEGEND**

- CHANNELIZING DEVICES, ITEM 619.01
- WORK SPACE
- ARROW PANEL, ITEM 619.01
- ARROW PANEL (CAUTION MODE), ITEM 619.01
- COVER EXISTING SIGN, ITEM 619.01
- BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- DIRECTION OF TRAFFIC
- TYPE III BARRICADE, ITEM 619.04
- TEMPORARY SIGN, ITEM 619.01
- EXISTING SIGN
- VARIABLE MESSAGE SIGN, ITEM 619.110513

**WORK ZONE TRAFFIC CONTROL PLAN**

SCALE: 1" = 40'-0"

ALTERED ON: \_\_\_\_\_ AFFIXED ON: 06-25-2020

SIGNATURE: \_\_\_\_\_ STAMP: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ STAMP: \_\_\_\_\_

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REVISIONS			
DATE	DESCRIPTION	BY	SYMBOL

**Thruway Authority**

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB TWO-LANE CLOSURE (SHEET 11 OF 11)	DRAWING NUMBER: WZTC-11

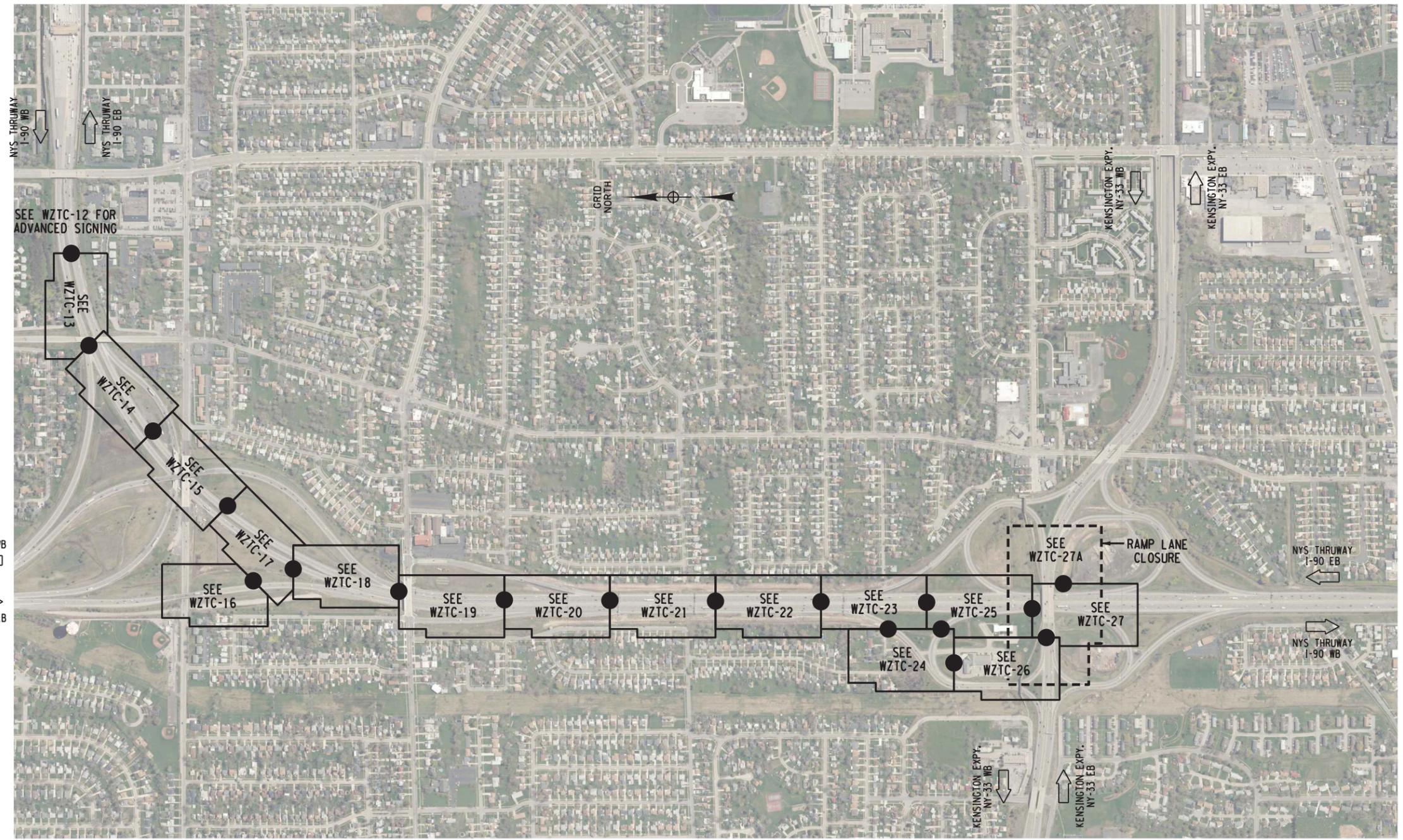
CHECKED BY: B. EDINGER

DRAFTED BY: D. HOLLNER

CHECKED BY: B. EDINGER

DESIGNED BY: J. SHINSKI

DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**WORK ZONE TRAFFIC CONTROL SHEET LEGEND**  
I-90 WB THREE-LANE CLOSURE  
N.T.S.

● = MATCH LINE DESIGNATION

ALTERED ON:	AFFIXED ON: 06-25-2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

**Thruway Authority**

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB THREE-LANE CLOSURE (SHEET LEGEND)	DRAWING NUMBER: WZTC-LGD-2

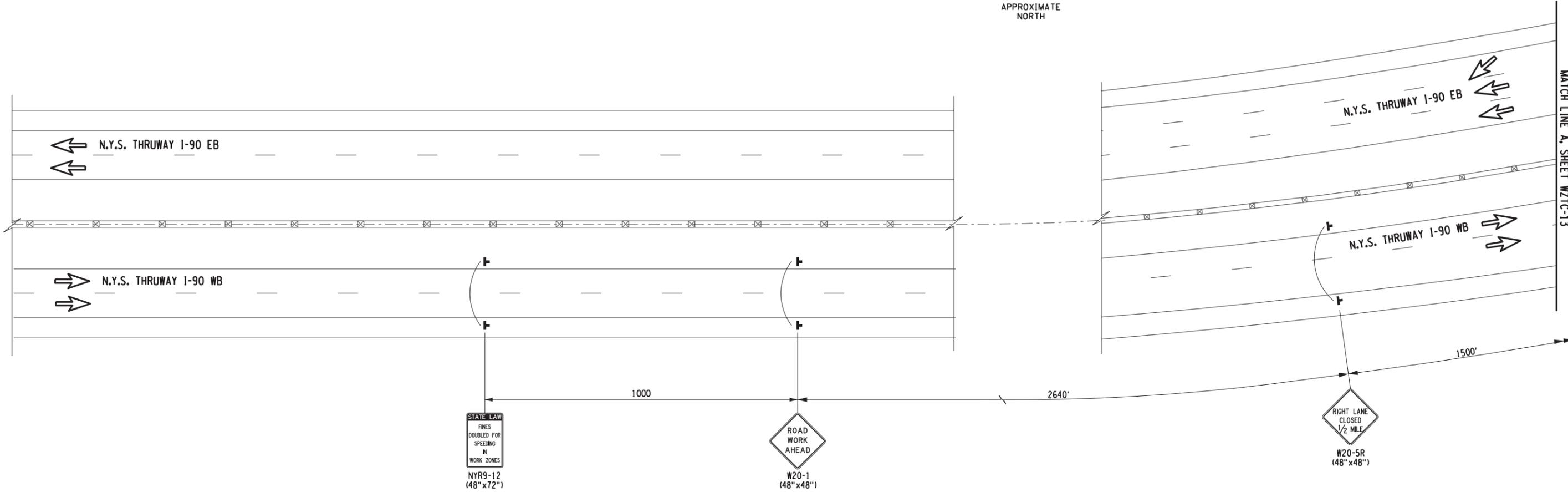
CHECKED BY: B. EDINGER

DRAFTED BY: D. HOLLNER

CHECKED BY: B. EDINGER

DESIGNED BY: J. SHINSKI

DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**LEGEND**

- ■ ■ CHANNELIZING DEVICES, ITEM 619.01
- ▨ WORK SPACE
- ● ● ● ● ARROW PANEL, ITEM 619.01
- ● ● ● ARROW PANEL (CAUTION MODE), ITEM 619.01
- ▨ COVER EXISTING SIGN, ITEM 619.01
- ☐ BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ● ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- ➔ DIRECTION OF TRAFFIC
- ⊥ TYPE III BARRICADE, ITEM 619.04
- ⊥ TEMPORARY SIGN, ITEM 619.01
- ⊥ EXISTING SIGN
- ⊥ VARIABLE MESSAGE SIGN, ITEM 619.110513

**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: N.T.S.

ALTERED ON:  SIGNATURE: STAMP:	AFFIXED ON: 06-25-2020  SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYML



TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB THREE-LANE CLOSURE (SHEET 1 OF 16)	DRAWING NUMBER: WZTC-12

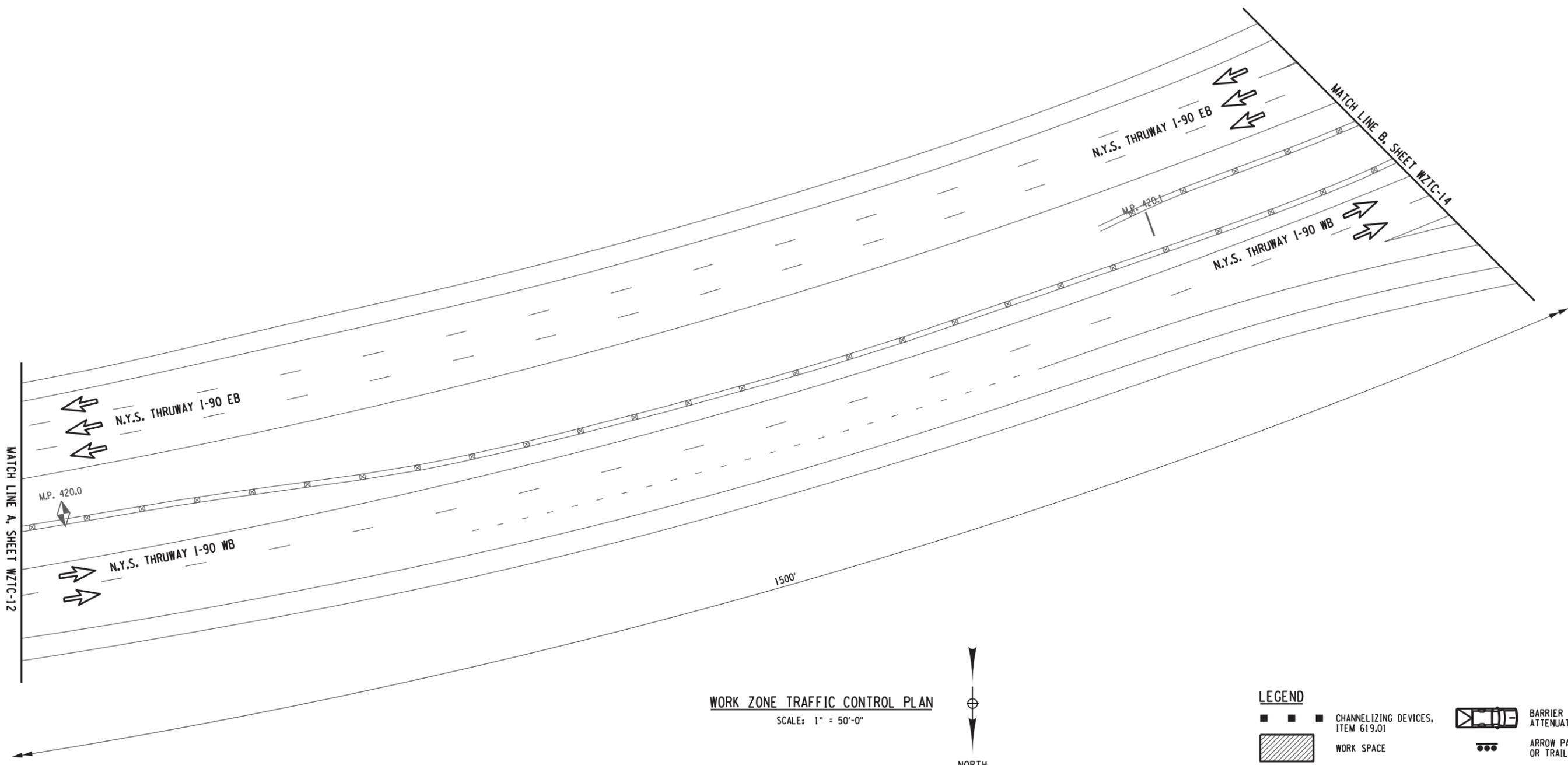
CHECKED BY: B. EDINGER

DRAFTED BY: D. HOLLNER

CHECKED BY: B. EDINGER

DESIGNED BY: J. SHINSKI

DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: 1" = 50'-0"

**LEGEND**

- ■ ■ CHANNELIZING DEVICES, ITEM 619.01
- ▨ WORK SPACE
- ● ● ● ● ARROW PANEL, ITEM 619.01
- (with dots) ARROW PANEL (CAUTION MODE), ITEM 619.01
- ▨ (cross-hatched) COVER EXISTING SIGN, ITEM 619.01
- ☐ (with arrow) BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ☐ (with dots) ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- ➔ DIRECTION OF TRAFFIC
- ☐ (with vertical line) TYPE III BARRICADE, ITEM 619.04
- ☐ (with horizontal line) TEMPORARY SIGN, ITEM 619.01
- ☐ (with cross) EXISTING SIGN
- ☐ (with vertical line and text) VARIABLE MESSAGE SIGN, ITEM 619.110513

ALTERED ON:	AFFIXED ON: 06-25-2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYML

**Thruway Authority**

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB THREE-LANE CLOSURE (SHEET 2 OF 16)	DRAWING NUMBER: WZTC-13

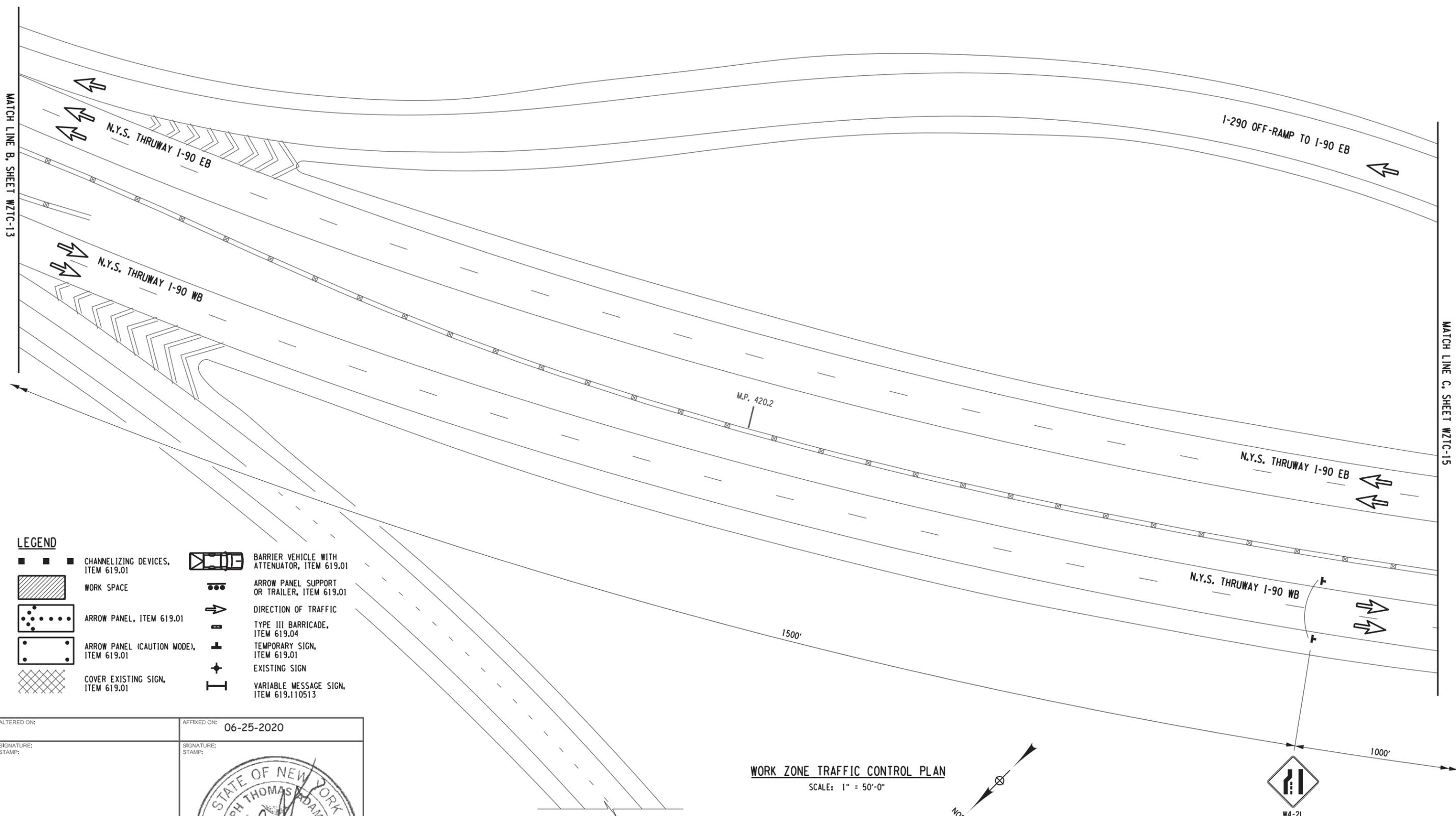
CHECKED BY: B. EDINGER

DRAFTED BY: D. HOLLNER

CHECKED BY: B. EDINGER

DESIGNED BY: J. SHINSKI

DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**LEGEND**

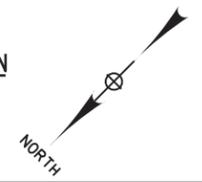
	CHANNELIZING DEVICES, ITEM 619.01		BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
	WORK SPACE		ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
	ARROW PANEL, ITEM 619.01		DIRECTION OF TRAFFIC
	ARROW PANEL (CAUTION MODE), ITEM 619.01		TYPE III BARRICADE, ITEM 619.04
	COVER EXISTING SIGN, ITEM 619.01		TEMPORARY SIGN, ITEM 619.01
			EXISTING SIGN
			VARIABLE MESSAGE SIGN, ITEM 619.110513

ALTERED ON:	AFFIXED ON: 06-25-2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYML

**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: 1" = 50'-0"



**Thruway Authority**



TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB THREE-LANE CLOSURE (SHEET 3 OF 16)	DRAWING NUMBER: WZTC-14

CHECKED BY: B. EDINGER

DRAFTED BY: D. HOLLNER

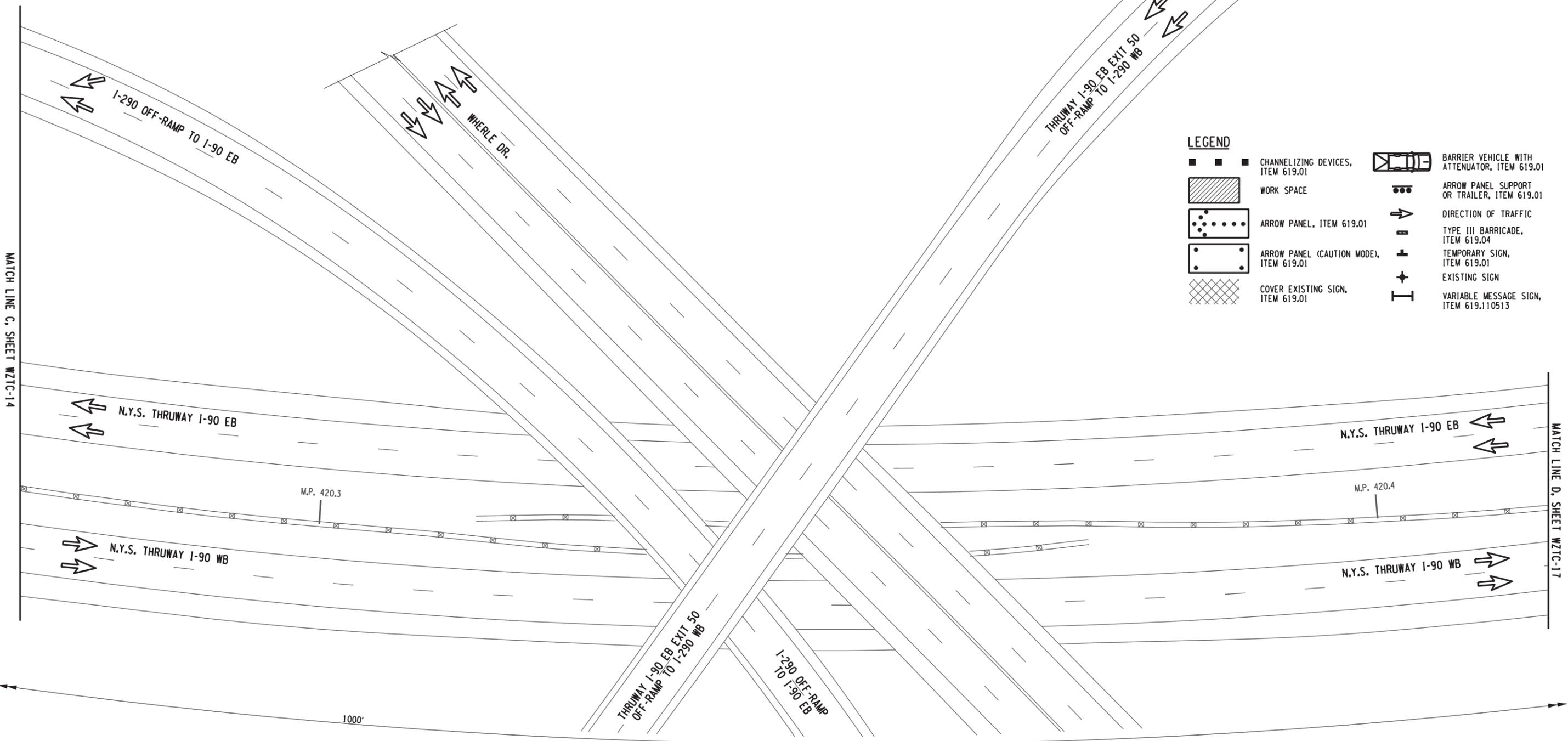
CHECKED BY: B. EDINGER

DESIGNED BY: J. SHINSKI

DESIGN SUPERVISOR: JOSEPH ADAMCZAK

MATCH LINE C, SHEET WZTC-14

MATCH LINE D, SHEET WZTC-17



**LEGEND**

- CHANNELIZING DEVICES, ITEM 619.01
- WORK SPACE
- ARROW PANEL, ITEM 619.01
- ARROW PANEL (CAUTION MODE), ITEM 619.01
- COVER EXISTING SIGN, ITEM 619.01
- BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- DIRECTION OF TRAFFIC
- TYPE III BARRICADE, ITEM 619.04
- TEMPORARY SIGN, ITEM 619.01
- EXISTING SIGN
- VARIABLE MESSAGE SIGN, ITEM 619.110513

**WORK ZONE TRAFFIC CONTROL PLAN**

SCALE: 1" = 50'-0"



ALTERED ON:	AFFIXED ON: 06-25-2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

**Thruway Authority**

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB THREE-LANE CLOSURE (SHEET 4 OF 16)	DRAWING NUMBER: WZTC-15

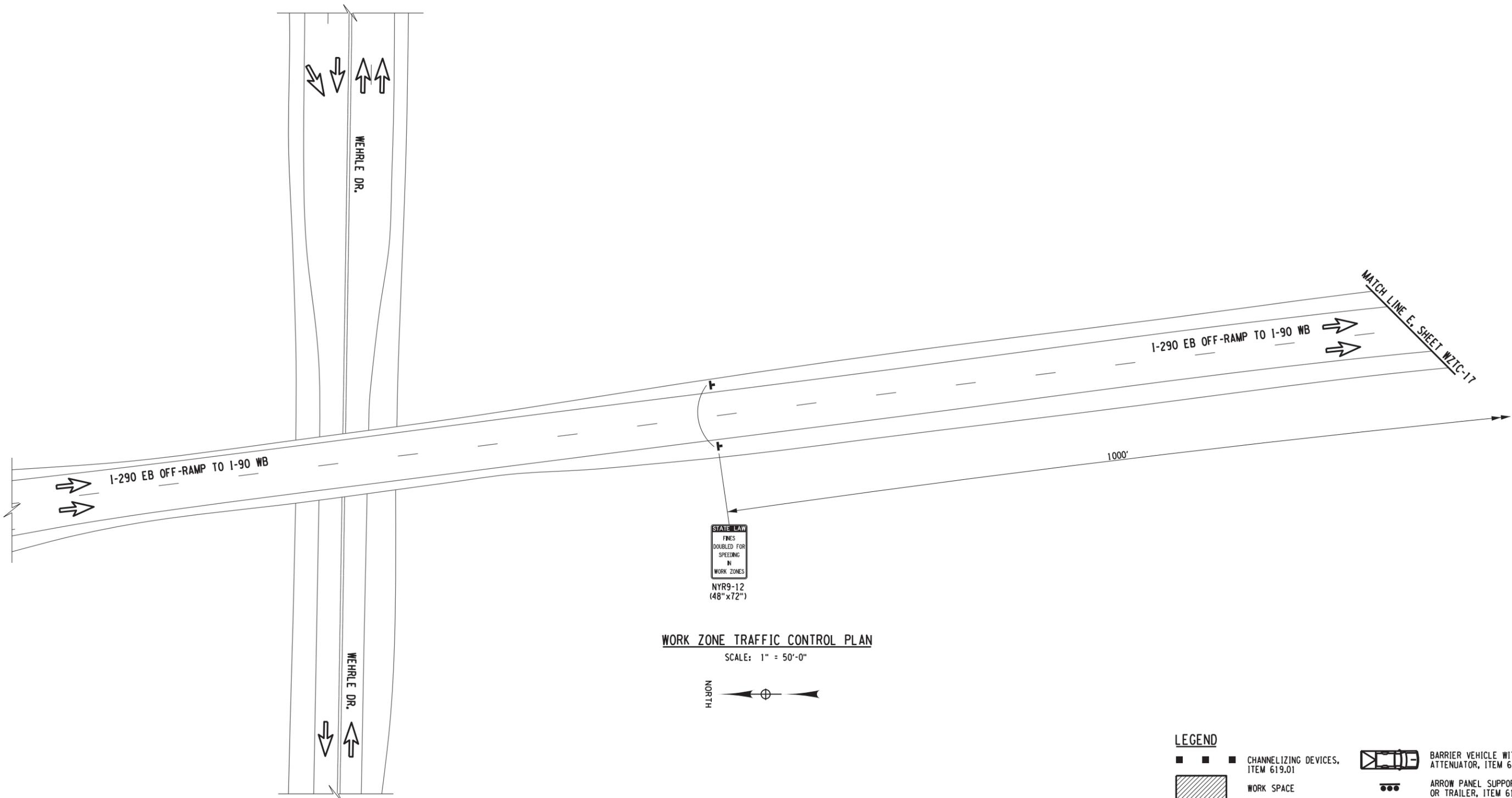
CHECKED BY: B. EDINGER

DRAFTED BY: D. HOLLNER

CHECKED BY: B. EDINGER

DESIGNED BY: J. SHINSKI

DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: 1" = 50'-0"



**LEGEND**

- ■ ■ CHANNELIZING DEVICES, ITEM 619.01
- ▨ WORK SPACE
- ● ● ● ARROW PANEL, ITEM 619.01
- (with dots) ARROW PANEL (CAUTION MODE), ITEM 619.01
- ▨ (cross-hatched) COVER EXISTING SIGN, ITEM 619.01
- ▢ (with barrier) BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ● (with support) ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- ➔ DIRECTION OF TRAFFIC
- ▢ (with T) TYPE III BARRICADE, ITEM 619.04
- ▢ (with T) TEMPORARY SIGN, ITEM 619.01
- ⊕ EXISTING SIGN
- ▢ (with T) VARIABLE MESSAGE SIGN, ITEM 619.110513

ALTERED ON:	AFFIXED ON: 06-25-2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYML

**Thruway Authority**

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB THREE-LANE CLOSURE (SHEET 5 OF 16)	DRAWING NUMBER: WZTC-16

**LEGEND**

- ■ ■ CHANNELIZING DEVICES, ITEM 619.01
- ▨ WORK SPACE
- ARROW PANEL, ITEM 619.01
- ARROW PANEL (CAUTION MODE), ITEM 619.01
- ▨ COVER EXISTING SIGN, ITEM 619.01
- ▭ BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- ➔ DIRECTION OF TRAFFIC
- ⊥ TYPE III BARRICADE, ITEM 619.04
- ⊥ TEMPORARY SIGN, ITEM 619.01
- ⊥ EXISTING SIGN
- ⊥ VARIABLE MESSAGE SIGN, ITEM 619.110513

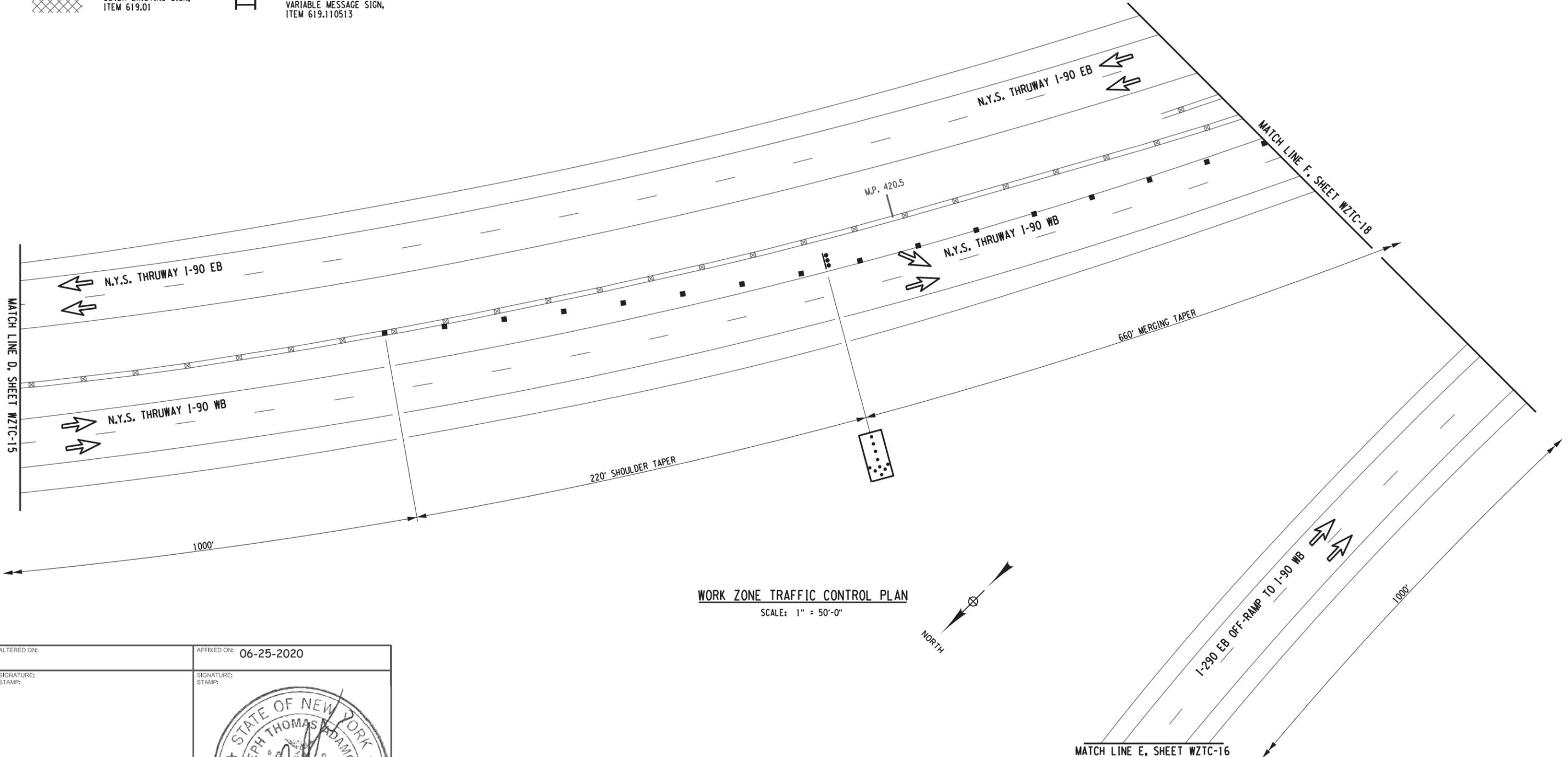
CHECKED BY: B. EDINGER

DRAFTED BY: D. HOLLNER

CHECKED BY: B. EDINGER

DESIGNED BY: J. SHINSKI

DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: 1" = 50'-0"

ALTERED ON: SIGNATURE: STAMP:	AFFIXED ON: 06-25-2020 SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYML

	<b>Thruway Authority</b>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
		LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB THREE-LANE CLOSURE (SHEET 6 OF 16)		DRAWING NUMBER: WZTC-17	

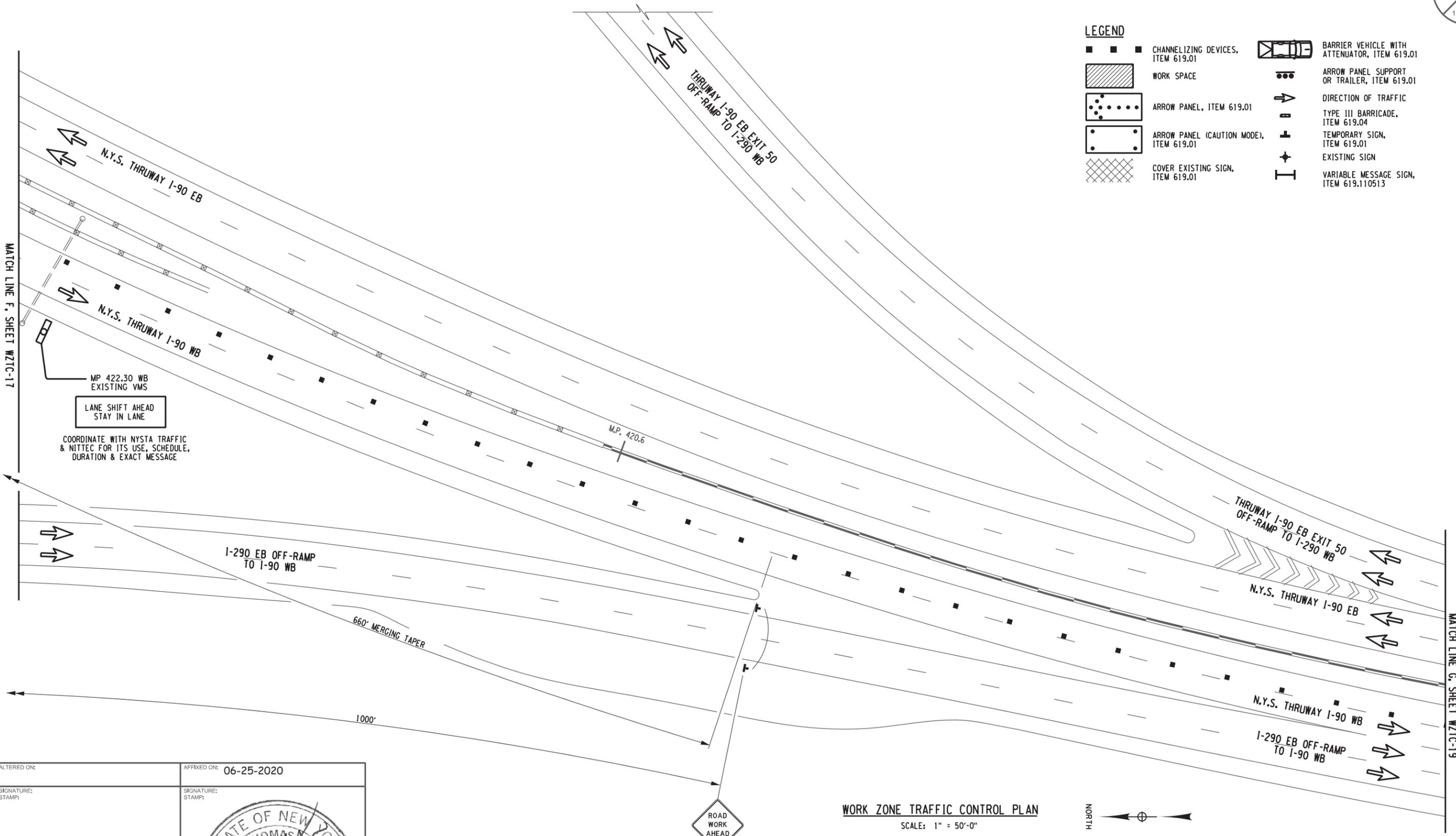
CHECKED BY: B. EDINGER

DRAFTED BY: D. HOLLNER

CHECKED BY: B. EDINGER

DESIGNED BY: J. SHINSKI

DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**LEGEND**

	CHANNELIZING DEVICES, ITEM 619.01		BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
	WORK SPACE		ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
	ARROW PANEL, ITEM 619.01		DIRECTION OF TRAFFIC
	ARROW PANEL (CAUTION MODE), ITEM 619.01		TYPE III BARRICADE, ITEM 619.04
	COVER EXISTING SIGN, ITEM 619.01		TEMPORARY SIGN, ITEM 619.01
			EXISTING SIGN
			VARIABLE MESSAGE SIGN, ITEM 619.110513

LANE SHIFT AHEAD  
STAY IN LANE

COORDINATE WITH NYSTA TRAFFIC & NITTEC FOR ITS USE, SCHEDULE, DURATION & EXACT MESSAGE

MP 422.30 WB  
EXISTING VMS

M.P. 420.6

I-290 EB OFF-RAMP  
TO I-90 WB

660' MERGING TAPER

1000'



W20-1  
(48"x48")

**WORK ZONE TRAFFIC CONTROL PLAN**

SCALE: 1" = 50'-0"



ALTERED ON: AFFIXED ON: 06-25-2020

SIGNATURE:  
STAMP:

SIGNATURE:  
STAMP:



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REVISIONS			
DATE	DESCRIPTION	BY	SYML



**Thruway Authority**

TITLE OF PROJECT  
STEEL REPAIRS TO IMPACT DAMAGE

LOCATION OF PROJECT  
MP 421.57 BIN 1022859  
KENSINGTON EXPY. (RT. 33) OVER I-90

TITLE OF DRAWING  
WORK ZONE TRAFFIC CONTROL  
I-90 WB THREE-LANE CLOSURE  
(SHEET 7 OF 16)

CONTRACT NUMBER:  
TAB 20-12B

DATE:  
JUNE 2020

DRAWING NUMBER:  
WZTC-18

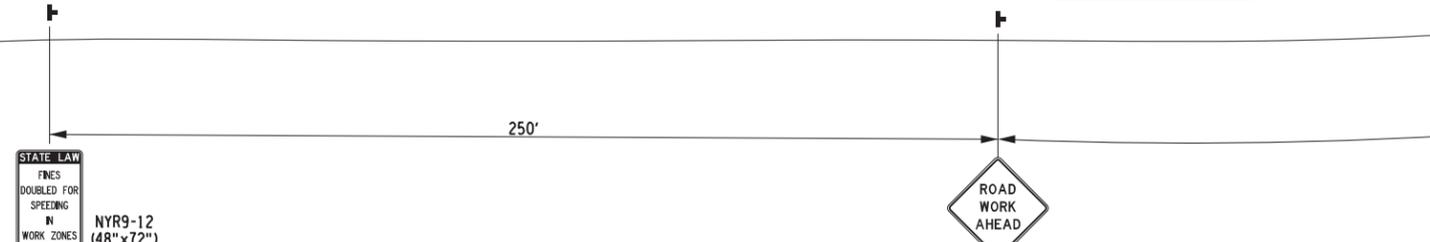
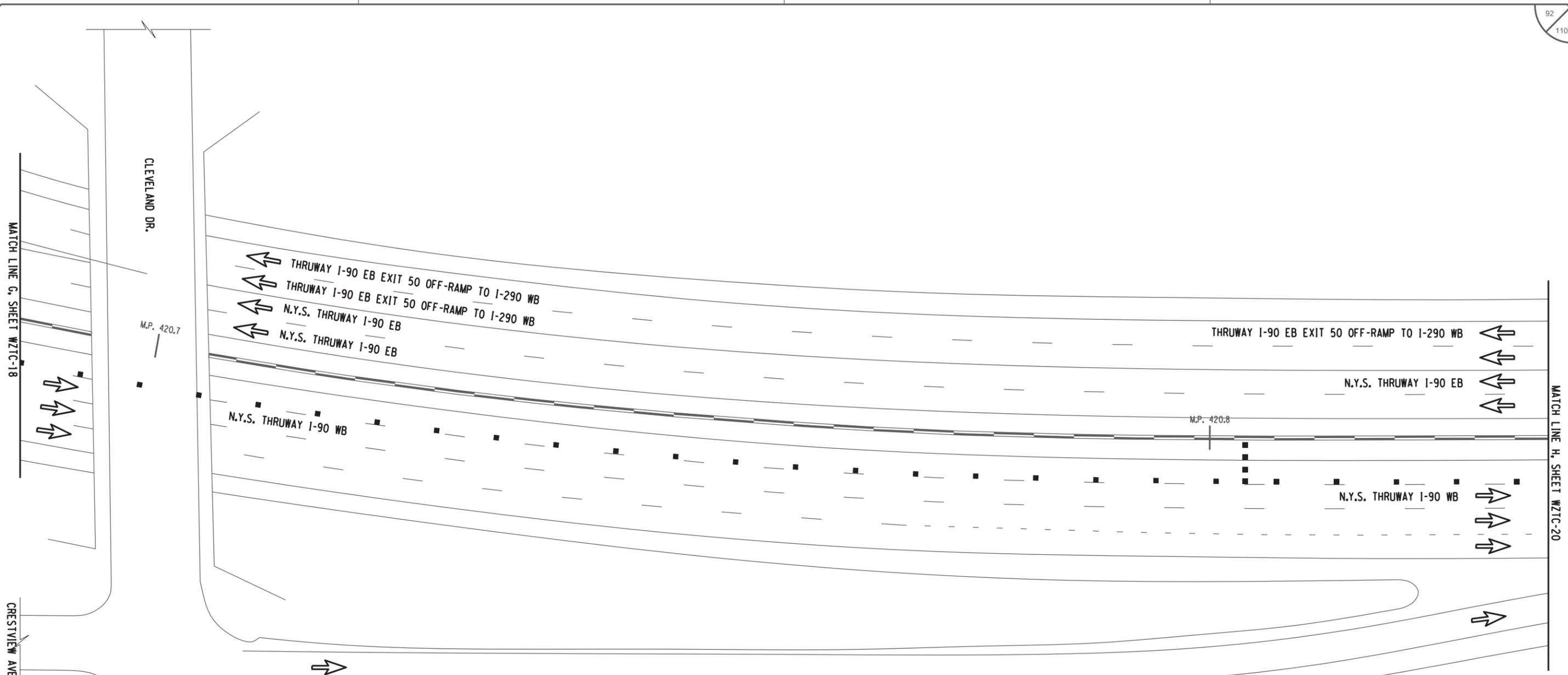
CHECKED BY: B. EDINGER

DRAFTED BY: D. HOLLNER

CHECKED BY: B. EDINGER

DESIGNED BY: J. SHINSKI

DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: 1" = 50'-0"

**LEGEND**

- ■ ■ CHANNELIZING DEVICES, ITEM 619.01
- ▨ WORK SPACE
- ● ● ARROW PANEL, ITEM 619.01
- ARROW PANEL (CAUTION MODE), ITEM 619.01
- ▧ COVER EXISTING SIGN, ITEM 619.01
- ☒ BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ⇄ ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- ➔ DIRECTION OF TRAFFIC
- ⊥ TYPE III BARRICADE, ITEM 619.04
- ⊕ TEMPORARY SIGN, ITEM 619.01
- ⊕ EXISTING SIGN
- ⊕ VARIABLE MESSAGE SIGN, ITEM 619.110513

ALTERED ON: \_\_\_\_\_ AFFIXED ON: 06-25-2020

SIGNATURE: \_\_\_\_\_ STAMP: \_\_\_\_\_



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

REVISIONS			
DATE	DESCRIPTION	BY	SYMBOL



**Thruway Authority**

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB THREE-LANE CLOSURE (SHEET 8 OF 16)	DRAWING NUMBER: WZTC-19

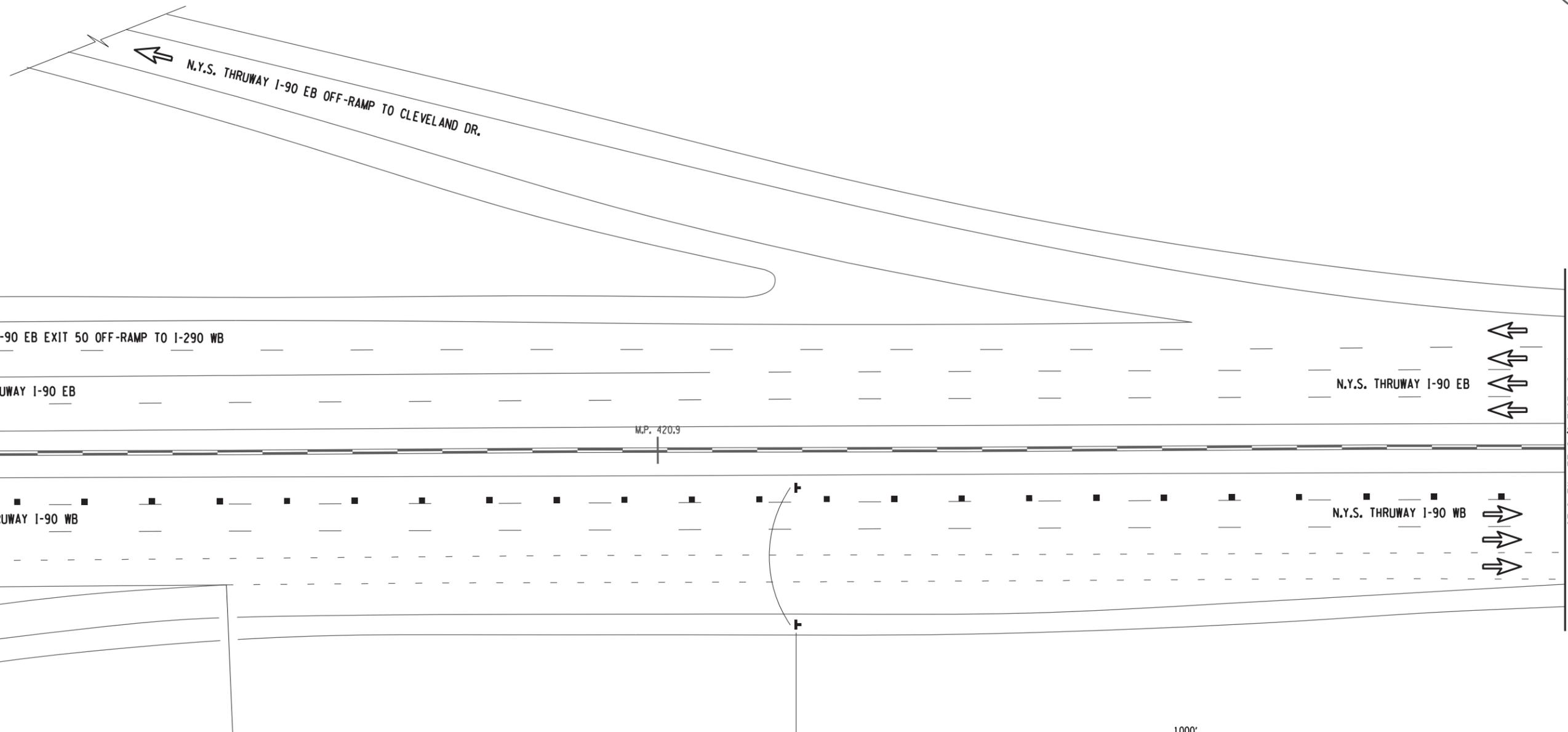
CHECKED BY: B. EDINGER

DRAFTED BY: D. HOLLNER

CHECKED BY: B. EDINGER

DESIGNED BY: J. SHINSKI

DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: 1" = 50'-0"



**LEGEND**

	CHANNELIZING DEVICES, ITEM 619.01		BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
	WORK SPACE		ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
	ARROW PANEL, ITEM 619.01		DIRECTION OF TRAFFIC
	ARROW PANEL (CAUTION MODE), ITEM 619.01		TYPE III BARRICADE, ITEM 619.04
	COVER EXISTING SIGN, ITEM 619.01		TEMPORARY SIGN, ITEM 619.01
			EXISTING SIGN
			VARIABLE MESSAGE SIGN, ITEM 619.110513

ALTERED ON:	AFFIXED ON: 06-25-2020
SIGNATURE: STAMP:	SIGNATURE: STAMP: 

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REVISIONS			
DATE	DESCRIPTION	BY	SYMBOL

<p><b>NEW YORK STATE OF OPPORTUNITY</b></p> <p><b>Thruway Authority</b></p>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
	LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
	TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB THREE-LANE CLOSURE (SHEET 9 OF 16)	DRAWING NUMBER: WZTC-20

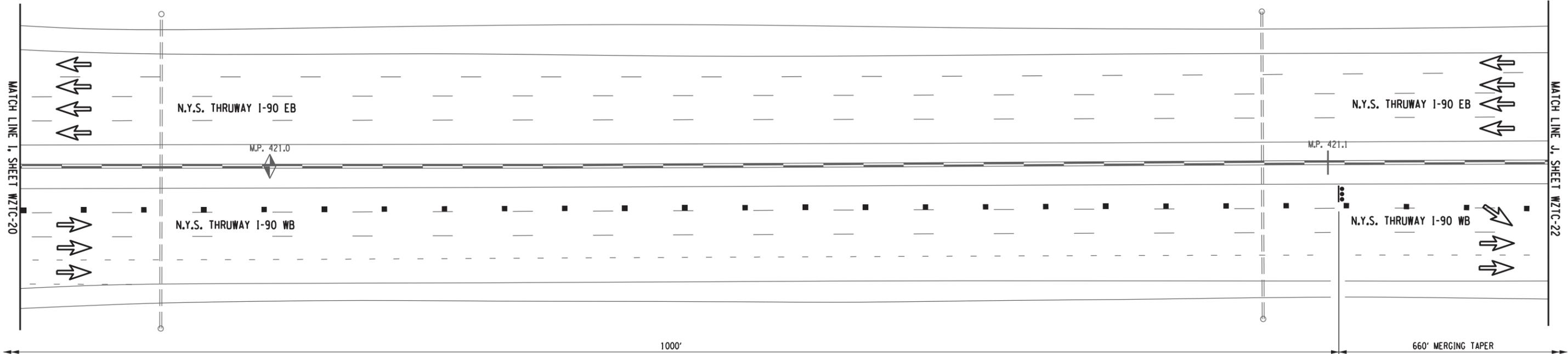
CHECKED BY: B. EDINGER

DRAFTED BY: D. HOLLNER

CHECKED BY: B. EDINGER

DESIGNED BY: J. SHINSKI

DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: 1" = 50'-0"



**LEGEND**

- ■ ■ CHANNELIZING DEVICES, ITEM 619.01
- ▨ WORK SPACE
- ● ● ● ● ARROW PANEL, ITEM 619.01
- (with dots) ARROW PANEL (CAUTION MODE), ITEM 619.01
- ▨ (cross-hatched) COVER EXISTING SIGN, ITEM 619.01
- ☐ (with barrier) BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ● (with arrow) ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- ➔ DIRECTION OF TRAFFIC
- ☐ (with vertical lines) TYPE III BARRICADE, ITEM 619.04
- ☐ (with horizontal lines) TEMPORARY SIGN, ITEM 619.01
- ☐ (with cross) EXISTING SIGN
- ☐ (with vertical lines and arrow) VARIABLE MESSAGE SIGN, ITEM 619.110513

ALTERED ON:	AFFIXED ON: 06-25-2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYL

<p><b>Thruway Authority</b></p>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
	LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB THREE-LANE CLOSURE (SHEET 10 OF 16)	DRAWING NUMBER: WZTC-21	

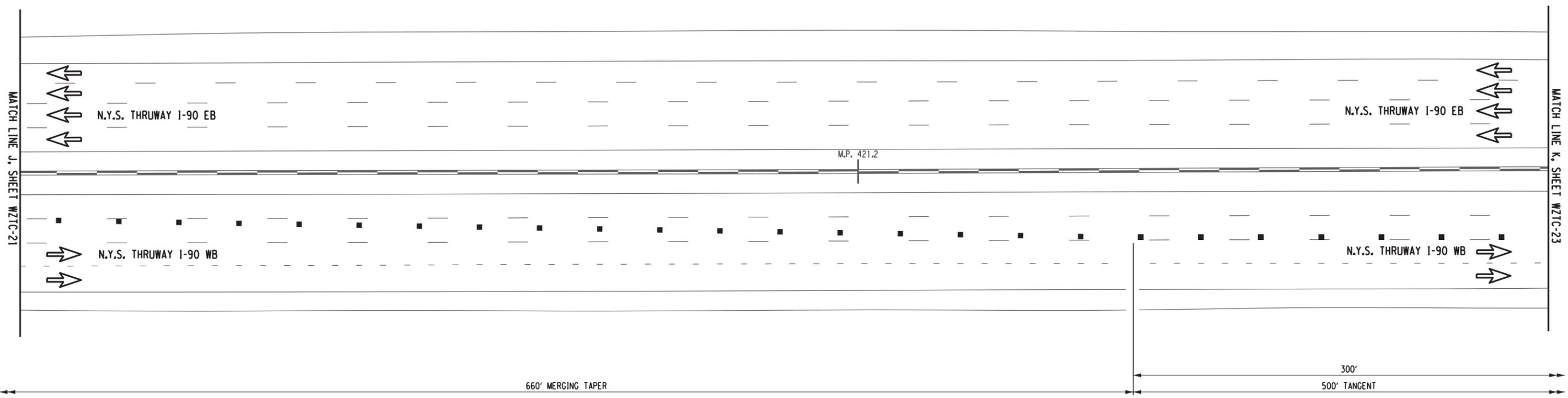
CHECKED BY: B. EDINGER

DRAFTED BY: D. HOLLNER

CHECKED BY: B. EDINGER

DESIGNED BY: J. SHINSKI

DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**WORK ZONE TRAFFIC CONTROL PLAN**

SCALE: 1" = 50'-0"



**LEGEND**

- ■ ■ CHANNELIZING DEVICES, ITEM 619.01
- ▨ WORK SPACE
- ● ● ● ● ARROW PANEL, ITEM 619.01
- (with dots) ARROW PANEL (CAUTION MODE), ITEM 619.01
- ▨ (cross-hatched) COVER EXISTING SIGN, ITEM 619.01
- ▭ (with lines) BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ● ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- ➔ DIRECTION OF TRAFFIC
- ▭ (with vertical lines) TYPE III BARRICADE, ITEM 619.04
- ▭ (with horizontal lines) TEMPORARY SIGN, ITEM 619.01
- ⊕ EXISTING SIGN
- ▭ (with text) VARIABLE MESSAGE SIGN, ITEM 619.110513

ALTERED ON:	AFFIXED ON: 06-25-2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYMBOL

**Thruway Authority**

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB THREE-LANE CLOSURE (SHEET 11 OF 16)	DRAWING NUMBER: WZTC-22

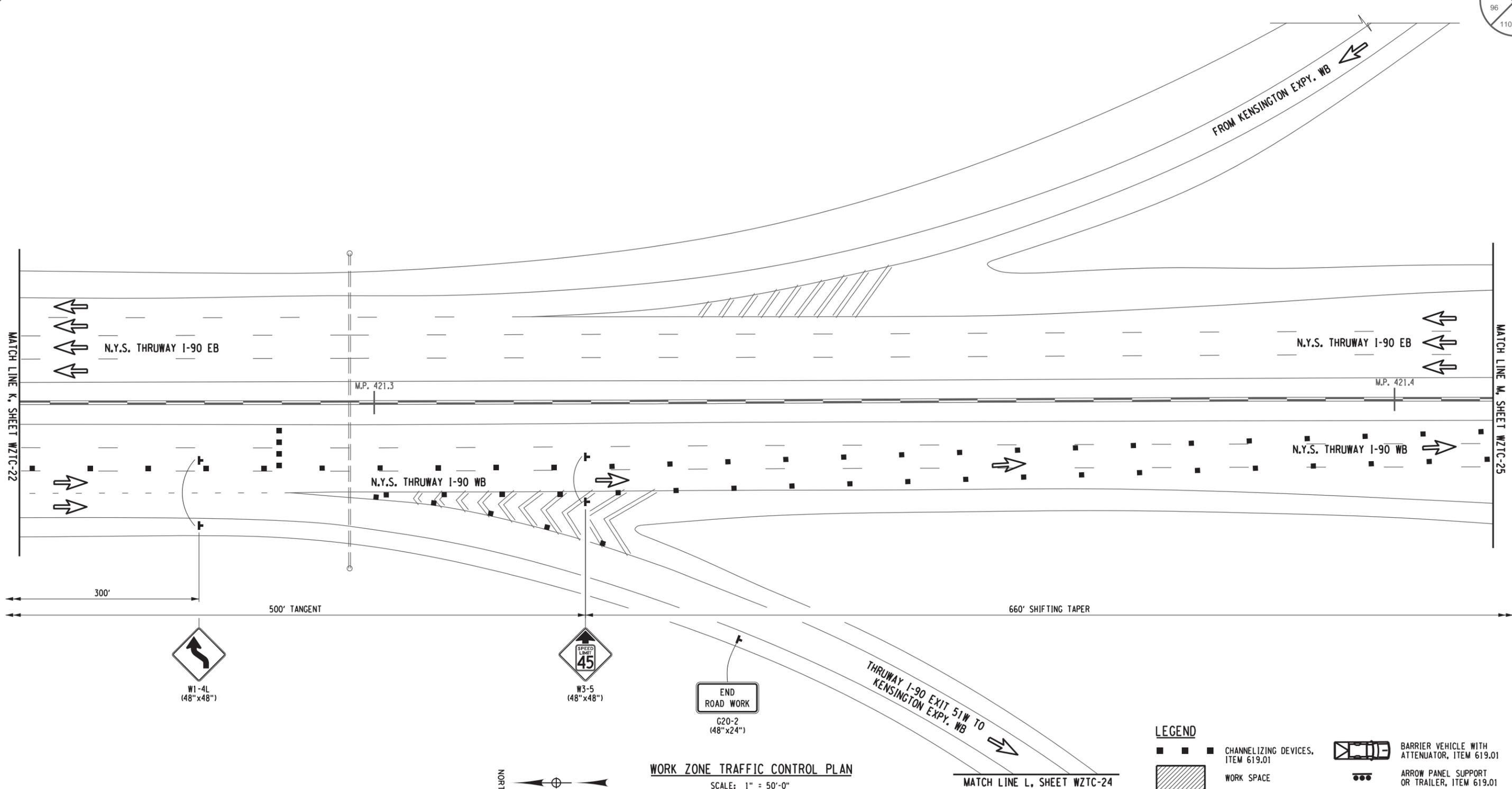
CHECKED BY: B. EDINGER

DRAFTED BY: D. HOLLNER

CHECKED BY: B. EDINGER

DESIGNED BY: J. SHINSKI

DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: 1" = 50'-0"

**LEGEND**

- ■ ■ CHANNELIZING DEVICES, ITEM 619.01
- ▨ WORK SPACE
- ● ● ● ● ARROW PANEL, ITEM 619.01
- ● ● ARROW PANEL (CAUTION MODE), ITEM 619.01
- ▩ COVER EXISTING SIGN, ITEM 619.01
- ▭ BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ● ● ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- ➔ DIRECTION OF TRAFFIC
- ▭ TYPE III BARRICADE, ITEM 619.04
- ⊕ TEMPORARY SIGN, ITEM 619.01
- ⊕ EXISTING SIGN
- ▭ VARIABLE MESSAGE SIGN, ITEM 619.110513

ALTERED ON:	AFFIXED ON: 06-25-2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYMBOL



**Thruway Authority**

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB THREE-LANE CLOSURE (SHEET 12 OF 16)	DRAWING NUMBER: WZTC-23

CHECKED BY: B. EDINGER

DRAFTED BY: D. HOLLNER

CHECKED BY: B. EDINGER

DESIGNED BY: J. SHINSKI

DESIGN SUPERVISOR: JOSEPH ADAMCZAK

MATCH LINE L, SHEET WZTC-23

MATCH LINE N, SHEET WZTC-25

97  
110

THRUWAY I-90 EXIT 51W TO KENSINGTON EXPY. WB

(15) TYPE III BARRICADES (ITEM 619.04) ACROSS ENTIRE CLOSED RAMP AND SHOULDERS

EXISTING "STOP" SIGN AND "NO RIGHT TURN" SIGN TO REMAIN

R11-2 (48"x30")  
**ROAD CLOSED**

R3-1 (24"x24")

TO/FROM STATE POLICE SUBSTATION

**STOP**  
R1-1 (48"x48")

FROM KENSINGTON EXPY. WB

MATCH LINE O, SHEET WZTC-26

**WORK ZONE TRAFFIC CONTROL PLAN**

SCALE: 1" = 50'-0"



**LEGEND**

- ■ ■ CHANNELIZING DEVICES, ITEM 619.01
- ▨ WORK SPACE
- ● ● ● ● ARROW PANEL, ITEM 619.01
- ● ● ● ARROW PANEL (CAUTION MODE), ITEM 619.01
- ▨ COVER EXISTING SIGN, ITEM 619.01
- BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ● ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- ➔ DIRECTION OF TRAFFIC
- ⊥ TYPE III BARRICADE, ITEM 619.04
- ⊥ TEMPORARY SIGN, ITEM 619.01
- ⊥ EXISTING SIGN
- ⊥ VARIABLE MESSAGE SIGN, ITEM 619.110513

ALTERED ON: \_\_\_\_\_ AFFIXED ON: 06-25-2020

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REVISIONS			
DATE	DESCRIPTION	BY	SYML



TITLE OF PROJECT  
STEEL REPAIRS TO IMPACT DAMAGE

LOCATION OF PROJECT  
MP 421.57 BIN 1022859  
KENSINGTON EXPY. (RT. 33) OVER I-90

TITLE OF DRAWING  
WORK ZONE TRAFFIC CONTROL  
I-90 WB THREE-LANE CLOSURE  
(SHEET 13 OF 16)

CONTRACT NUMBER:  
TAB 20-12B

DATE:  
JUNE 2020

DRAWING NUMBER:  
WZTC-24

**LEGEND**

- ■ ■ CHANNELIZING DEVICES, ITEM 619.01
- ▨ WORK SPACE
- ⬆ ARROW PANEL, ITEM 619.01
- ⬆ ARROW PANEL (CAUTION MODE), ITEM 619.01
- ▨ COVER EXISTING SIGN, ITEM 619.01
- 🚚 BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ⬆ ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- ➡ DIRECTION OF TRAFFIC
- ⊥ TYPE III BARRICADE, ITEM 619.04
- ⊥ TEMPORARY SIGN, ITEM 619.01
- ⊥ EXISTING SIGN
- ⊥ VARIABLE MESSAGE SIGN, ITEM 619.110513

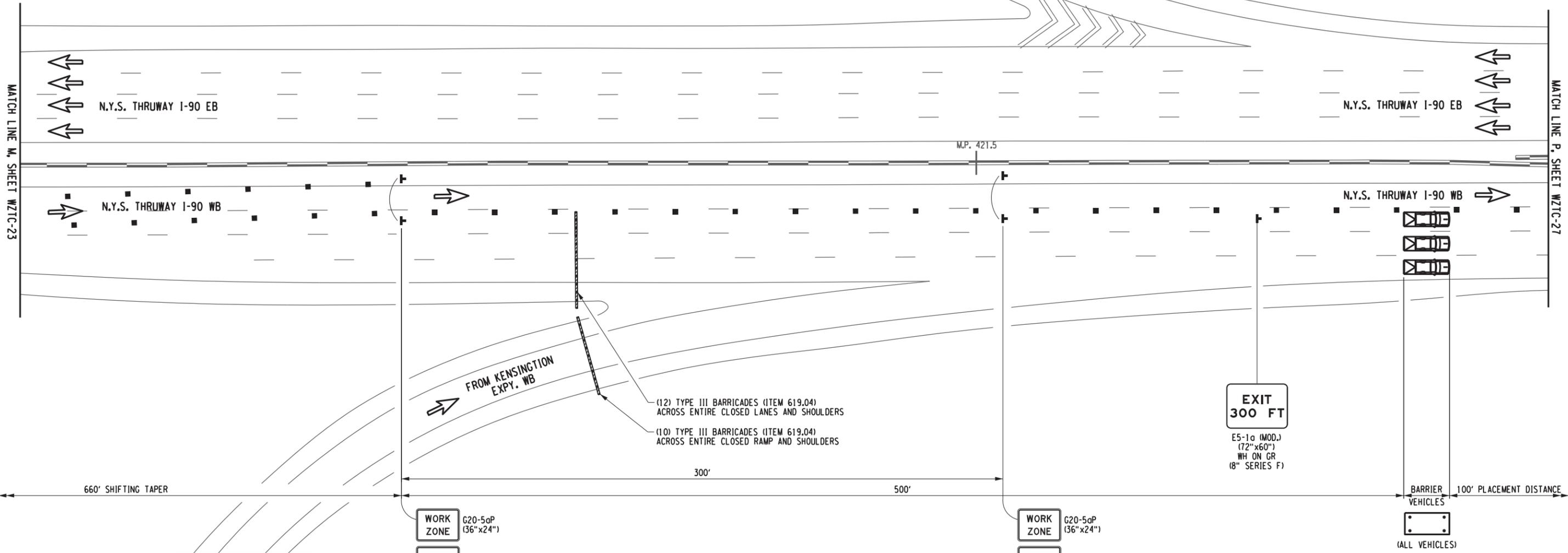
CHECKED BY: B. EDINGER

DRAFTED BY: D. HOLLNER

CHECKED BY: B. EDINGER

DESIGNED BY: J. SHINSKI

DESIGN SUPERVISOR: JOSEPH ADAMCZAK



MATCH LINE N, SHEET WZTC-24

**WORK ZONE TRAFFIC CONTROL PLAN**

SCALE: 1" = 50'-0"



ALTERED ON: SIGNATURE: STAMP:	AFFIXED ON: 06-25-2020 SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

 <b>Thruway Authority</b>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
	LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB THREE-LANE CLOSURE (SHEET 14 OF 16)		DRAWING NUMBER: WZTC-25

**LEGEND**

- ■ ■ CHANNELIZING DEVICES, ITEM 619.01
- ▨ WORK SPACE
- ● ● ARROW PANEL, ITEM 619.01
- ARROW PANEL (CAUTION MODE), ITEM 619.01
- ▩ COVER EXISTING SIGN, ITEM 619.01
- ☐ BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ● ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- ➔ DIRECTION OF TRAFFIC
- ☐ TYPE III BARRICADE, ITEM 619.04
- ☐ TEMPORARY SIGN, ITEM 619.01
- ☐ EXISTING SIGN
- ☐ VARIABLE MESSAGE SIGN, ITEM 619.110513

**NOTE A:**

FOR ONLY THE 2 NIGHTS THAT BOTH THE 33 WB TO 90 WB AND 90 EB TO 33 WB RAMP ARE CLOSED TO INSTALL & REMOVE THE STRONG-BACK, EXTEND THE DELINEATORS THE FULL LENGTH OF THE BRIDGE TO THE GORE FOR THE 90 EB ON RAMP TO CLOSE THE FULL LENGTH OF THE RAMP LANE. PROVIDE BARRIER VEHICLE AT ANY TIME A VEHICLE IS IN THAT RAMP LANE. SEE DWG. WZTC-27A

CHECKED BY: B. EDINGER

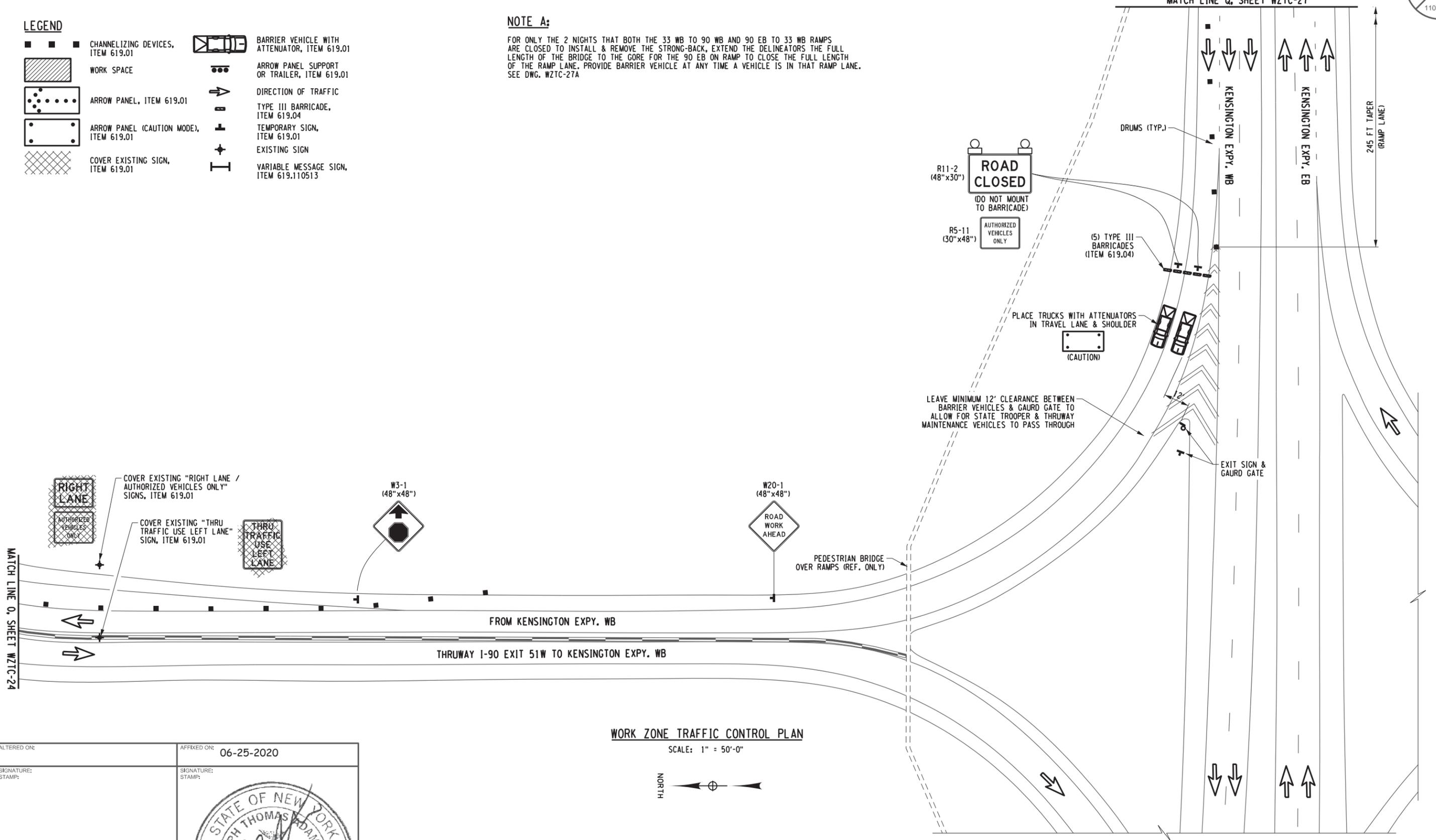
DRAFTED BY: D. HOLLNER

CHECKED BY: B. EDINGER

DESIGNED BY: J. SHINSKI

DESIGN SUPERVISOR: JOSEPH ADAMCZAK

MATCH LINE Q, SHEET WZTC-27



**WORK ZONE TRAFFIC CONTROL PLAN**

SCALE: 1" = 50'-0"



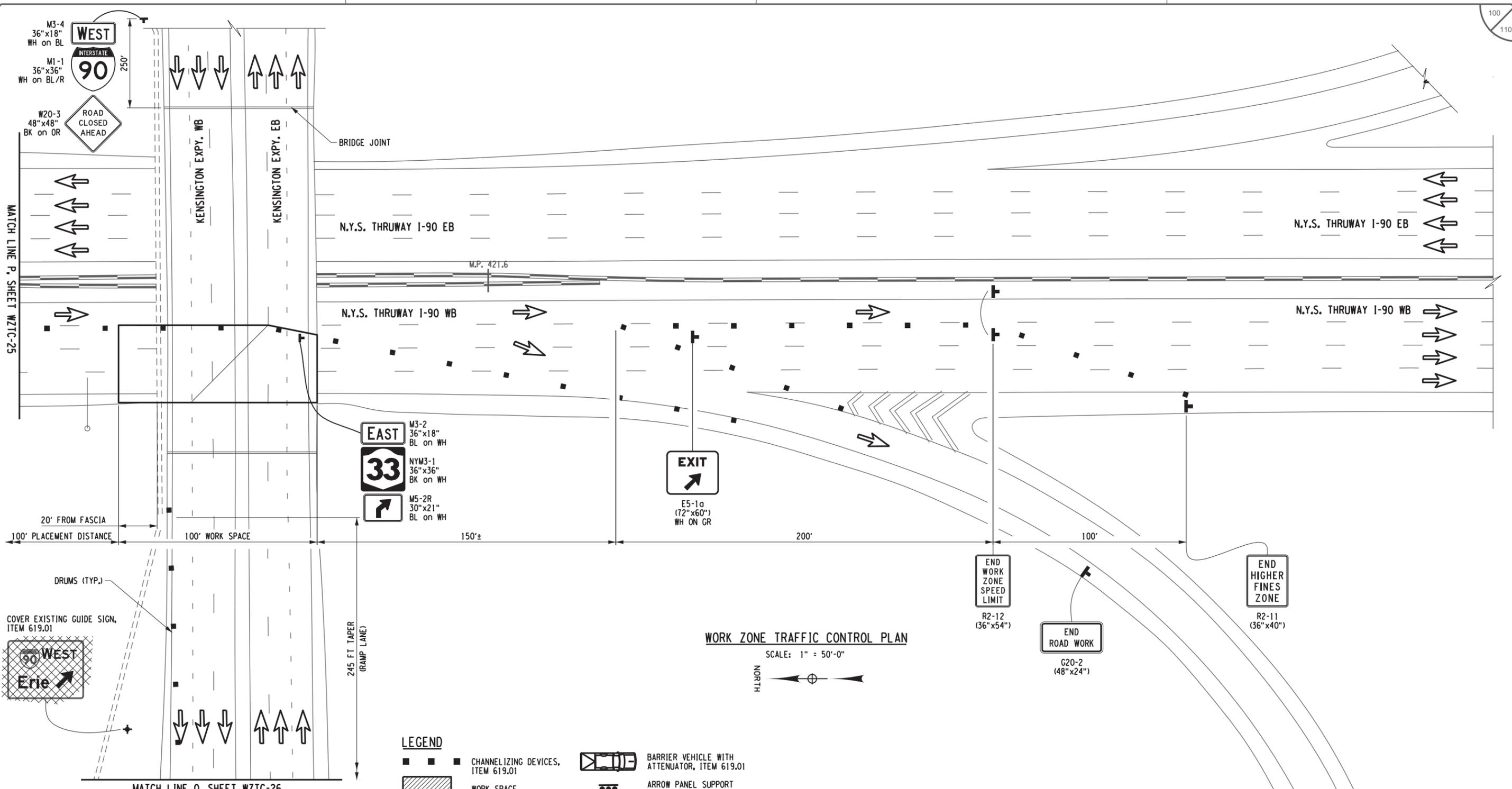
ALTERED ON: SIGNATURE: STAMP:	AFFIXED ON: 06-25-2020 SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

	<b>Thruway Authority</b>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
	LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020	
	TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB THREE-LANE CLOSURE (SHEET 15 OF 16)	DRAWING NUMBER: WZTC-26	

CHECKED BY: B. EDINGER  
 DRAFTED BY: D. HOLLNER  
 CHECKED BY: B. EDINGER  
 DESIGNED BY: J. SHINSKI  
 DESIGN SUPERVISOR: JOSEPH ADAMCZAK



ALTERED ON: \_\_\_\_\_ AFFIXED ON: 06-25-2020

SIGNATURE: \_\_\_\_\_ STAMP: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ STAMP: \_\_\_\_\_

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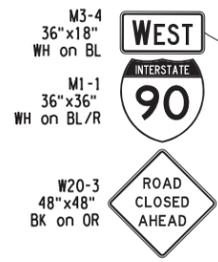
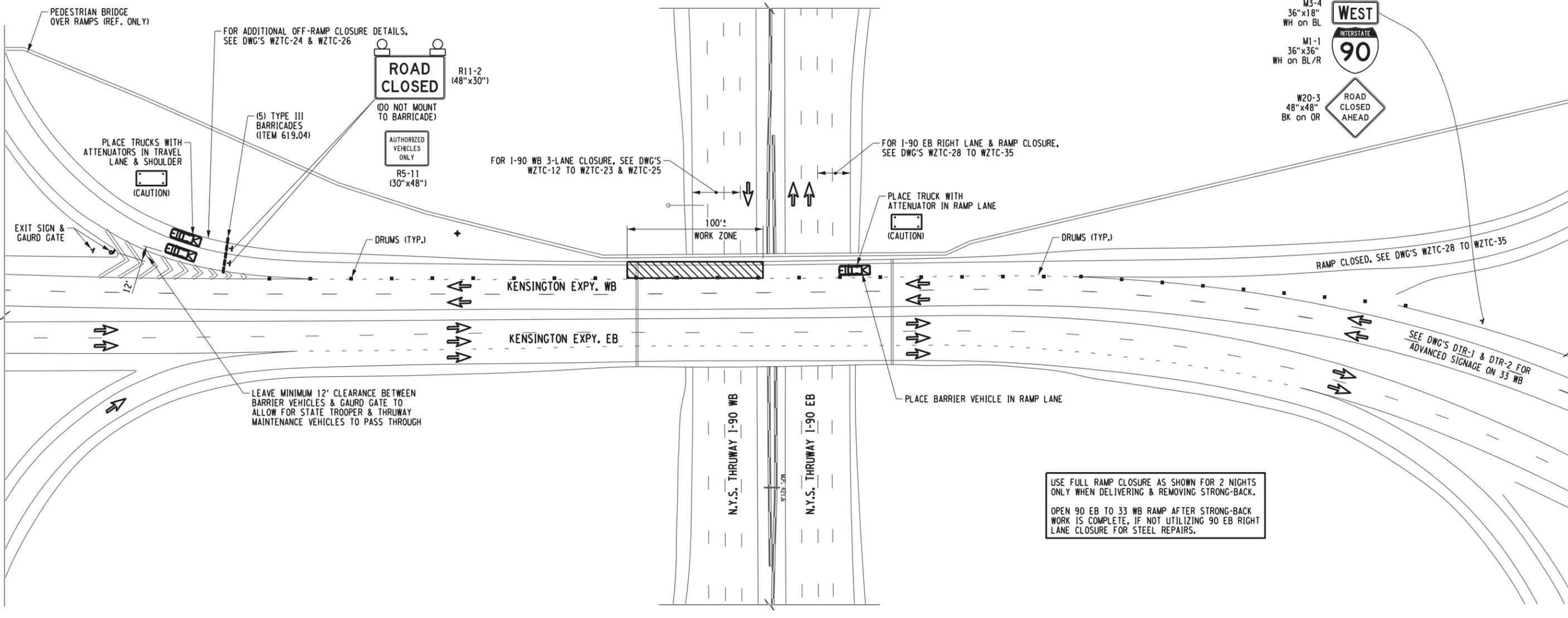
REVISIONS			
DATE	DESCRIPTION	BY	SYM.

**Thruway Authority**

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 WB THREE-LANE CLOSURE (SHEET 16 OF 16)	DRAWING NUMBER: WZTC-27

FILE NAME = V:\Projects\ANY\K5\36292\CADD\MSTN\MP\_421.57\_WZTC-RAMP LANE CLOSURE.dgn  
 DATE/TIME = 26-JUN-2020  
 USER = S. SCHUKRAFT

CHECKED BY: S. SCHUKRAFT  
 DRAFTED BY: J. HARTWELL  
 CHECKED BY: G. HOFFMANN  
 DESIGNED BY: S. KINSMAN  
 DESIGN SUPERVISOR: G. HOFFMANN



USE FULL RAMP CLOSURE AS SHOWN FOR 2 NIGHTS ONLY WHEN DELIVERING & REMOVING STRONG-BACK.  
 OPEN 90 EB TO 33 WB RAMP AFTER STRONG-BACK WORK IS COMPLETE, IF NOT UTILIZING 90 EB RIGHT LANE CLOSURE FOR STEEL REPAIRS.

**WORK ZONE TRAFFIC CONTROL PLAN**  
**33 WB FULL RAMP CLOSURE**  
 N.T.S.



**LEGEND**

- ■ ■ CHANNELIZING DEVICES, ITEM 619.01
- ▨ WORK SPACE
- ● ● ● ● ARROW PANEL, ITEM 619.01
- ● ● ● ● ARROW PANEL (CAUTION MODE), ITEM 619.01
- ▨ COVER EXISTING SIGN, ITEM 619.01
- ▭ BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ▭ ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- ➔ DIRECTION OF TRAFFIC
- ▭ TYPE III BARRICADE, ITEM 619.04
- ▭ TEMPORARY SIGN, ITEM 619.01
- ⊕ EXISTING SIGN
- ▭ VARIABLE MESSAGE SIGN, ITEM 619.110513

ALTERED ON:	AFFIXED ON: 6/25/2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYMBOL

	<b>Thruway Authority</b>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
		LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
		TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL 33 WB FULL RAMP CLOSURE	DRAWING NUMBER: WZTC-27A



**I-90 EB SINGLE-LANE CLOSURE**  
NOT TO SCALE



ALTERED ON:	AFFIXED ON: 06-25-2020
SIGNATURE: STAMP:	SIGNATURE: STAMP: 

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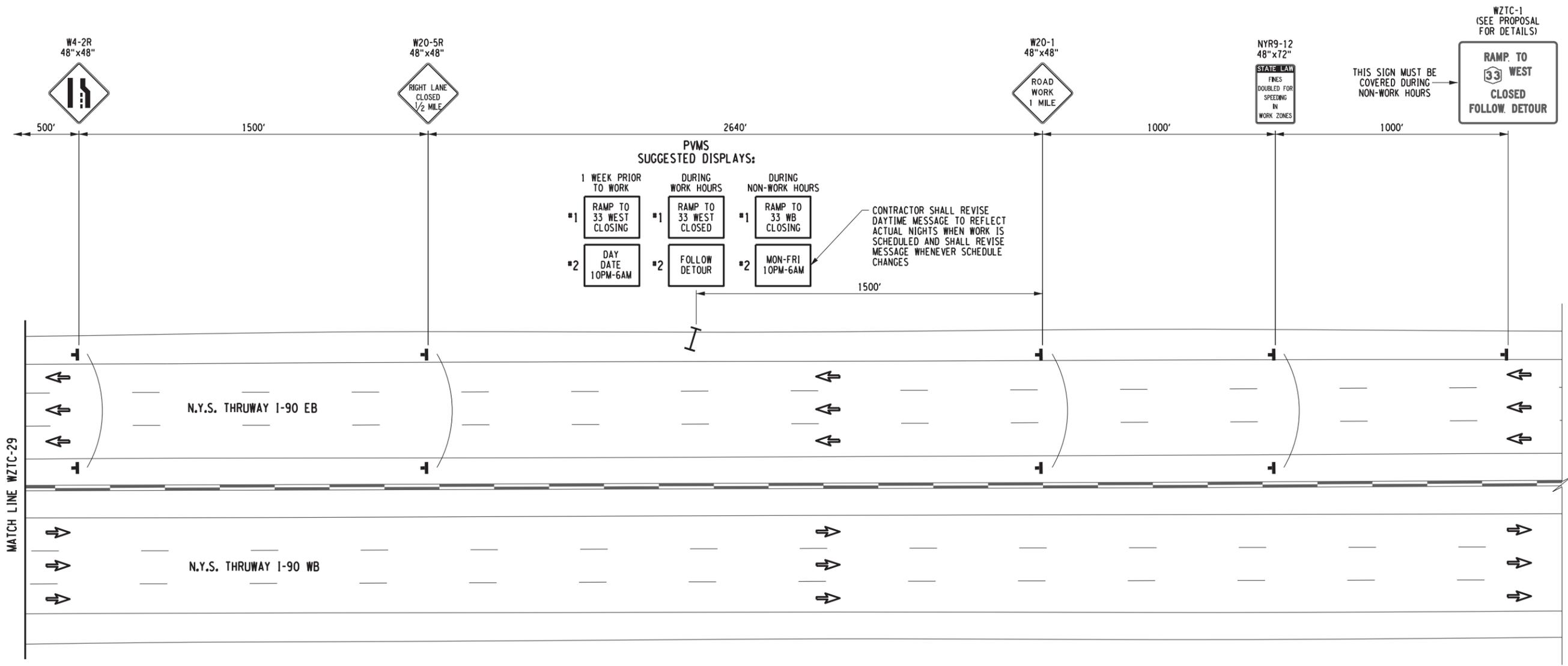
REVISIONS			
DATE	DESCRIPTION	BY	SYM.



**Thruway Authority**

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 EB SINGLE-LANE CLOSURE SHEET LEGEND	DRAWING NUMBER: WZTC-LGD-3

PW/ B. EDINGER B. EDINGER D. HOLLNER B. EDINGER J. SHINSKI JOSEPH ADAMCZAK



**WORK ZONE TRAFFIC CONTROL PLAN**  
N.T.S.

**WZTC WB LEGEND**

- ■ ■ CHANNELIZING DEVICES, ITEM 619.01
- ▨ WORK SPACE
- ● ● ARROW PANEL, ITEM 619.01
- ● ● ARROW PANEL (CAUTION MODE), ITEM 619.01
- ▭ BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ● ● ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- ▭ TYPE III BARRICADE, ITEM 619.04
- ▭ TEMPORARY SIGN, ITEM 619.01
- ▭ VARIABLE MESSAGE SIGN, ITEM 619.110513

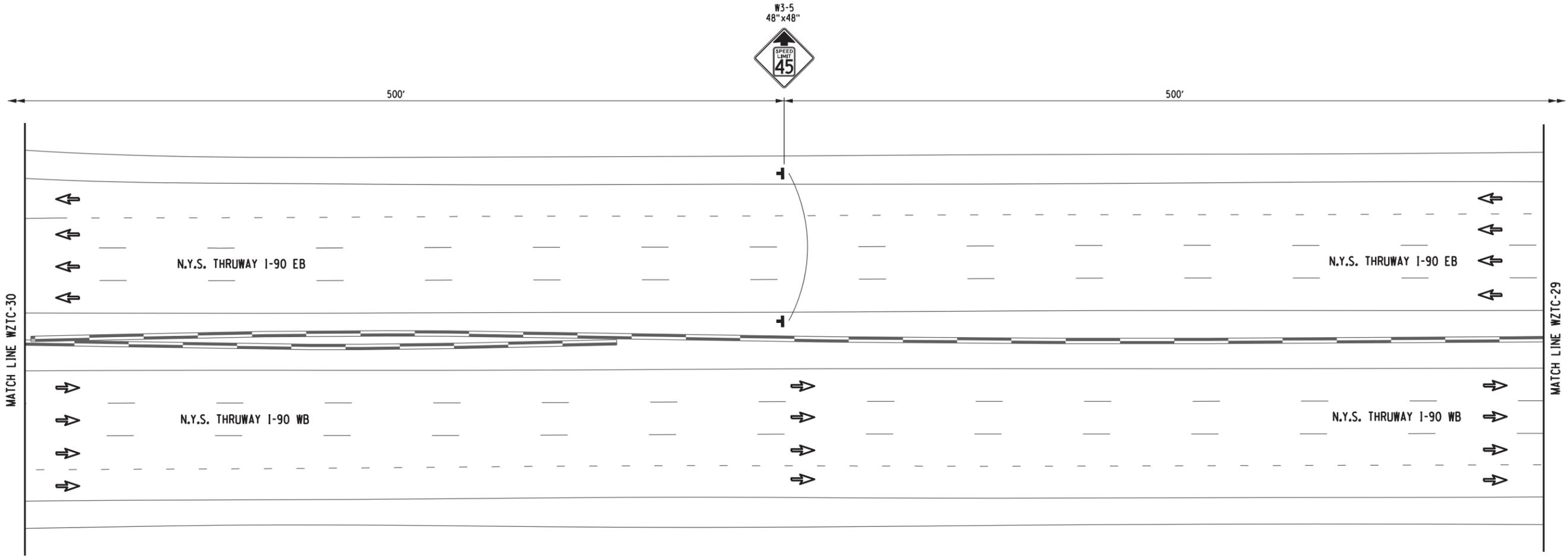
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REVISIONS			
DATE	DESCRIPTION	BY	SYML

 <b>Thruway Authority</b>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
	LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 EB RIGHT-LANE CLOSURE (SHEET 1 OF 8)		DRAWING NUMBER: WZTC-28

PW/ CHECKED BY: B. EDINGER DRAFTED BY: D. HOLLNER CHECKED BY: B. EDINGER DESIGNED BY: J. SHINSKI DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: 1" = 40'-0"

**WZTC WB LEGEND**

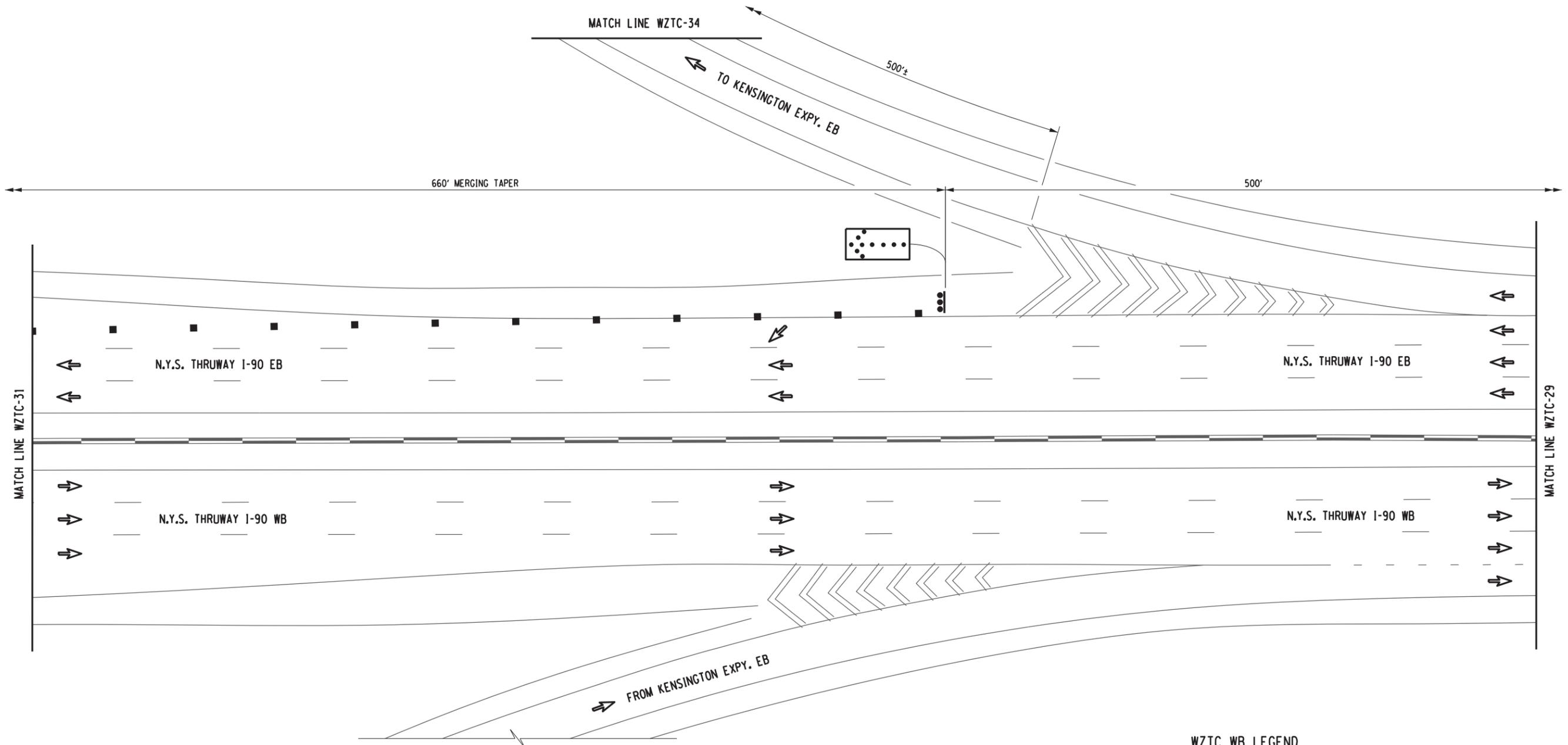
- ■ ■ CHANNELIZING DEVICES, ITEM 619.01
- ▨ WORK SPACE
- ● ● ARROW PANEL, ITEM 619.01
- ■ ■ ARROW PANEL (CAUTION MODE), ITEM 619.01
- ▭ BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ● ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- ⊢ TYPE III BARRICADE, ITEM 619.04
- ⊢ TEMPORARY SIGN, ITEM 619.01
- ⊢ VARIABLE MESSAGE SIGN, ITEM 619.110513

ALTERED ON:	AFFIXED ON: 06-25-2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYM.

	<b>Thruway Authority</b>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
		LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 EB RIGHT-LANE CLOSURE (SHEET 2 OF 8)		DRAWING NUMBER: WZTC-29	



**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: 1" = 40'-0"

**WZTC WB LEGEND**

-  CHANNELIZING DEVICES, ITEM 619.01
-  WORK SPACE
-  ARROW PANEL, ITEM 619.01
-  ARROW PANEL (CAUTION MODE), ITEM 619.01
-  BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
-  ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
-  TYPE III BARRICADE, ITEM 619.04
-  TEMPORARY SIGN, ITEM 619.01
-  VARIABLE MESSAGE SIGN, ITEM 619.110513

ALTERED ON: \_\_\_\_\_ AFFIXED ON: 06-25-2020

SIGNATURE: \_\_\_\_\_ STAMP: \_\_\_\_\_



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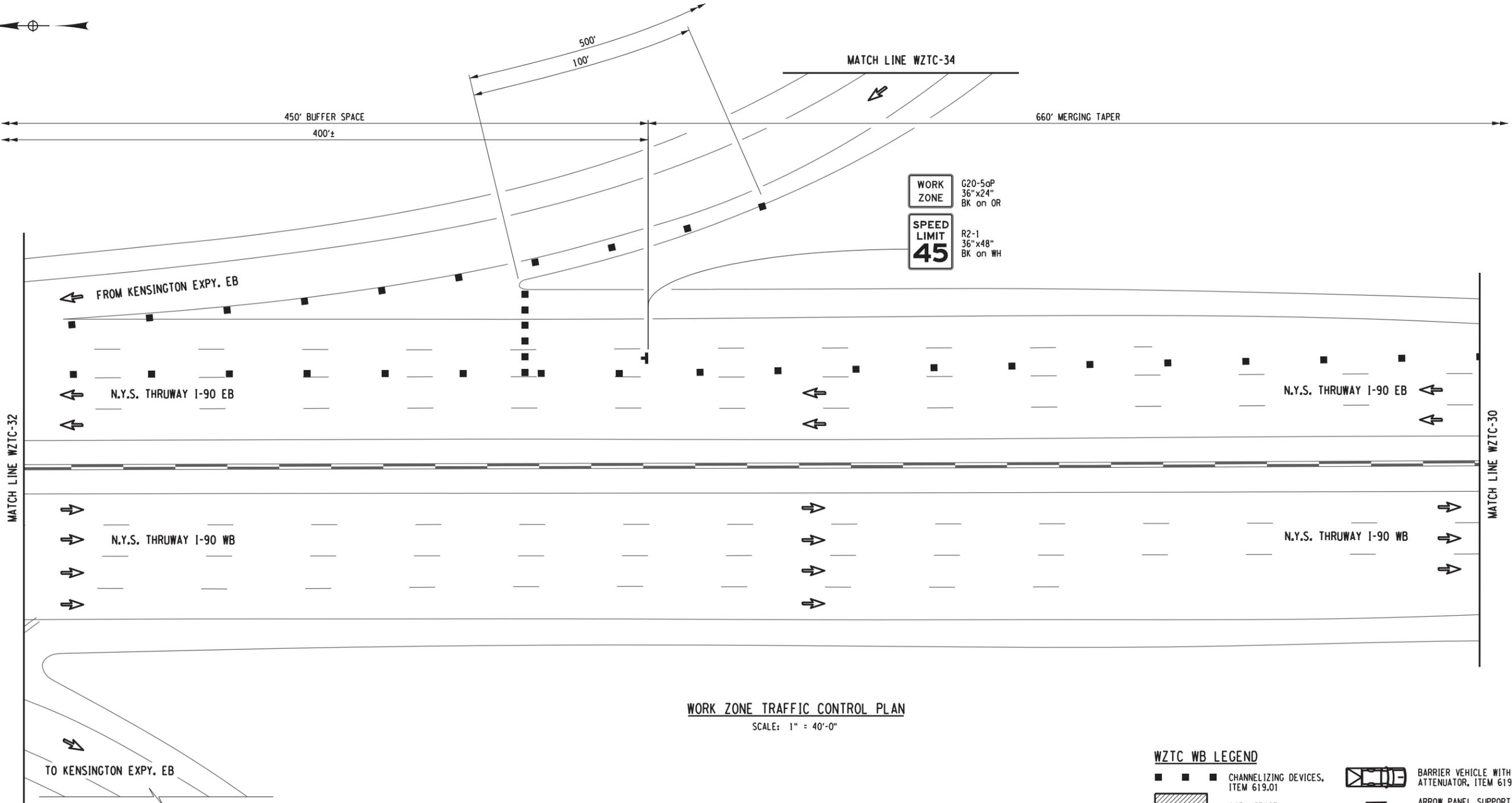
REVISIONS			
DATE	DESCRIPTION	BY	SYL



**Thruway Authority**

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 EB RIGHT-LANE CLOSURE (SHEET 3 OF 8)	DRAWING NUMBER: WZTC-30

PW/ CHECKED BY: B. EDINGER DRAFTED BY: D. HOLLNER CHECKED BY: B. EDINGER DESIGNED BY: J. SHINSKI DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**WORK ZONE TRAFFIC CONTROL PLAN**

SCALE: 1" = 40'-0"

**WZTC WB LEGEND**

- ■ ■ CHANNELIZING DEVICES, ITEM 619.01
- ▨ WORK SPACE
- ● ● ARROW PANEL, ITEM 619.01
- (with dots) ARROW PANEL (CAUTION MODE), ITEM 619.01
- ▢ (with arrow) BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ● ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- ▢ (with vertical line) TYPE III BARRICADE, ITEM 619.04
- ▢ (with horizontal line) TEMPORARY SIGN, ITEM 619.01
- ▢ (with vertical line and dots) VARIABLE MESSAGE SIGN, ITEM 619.110513

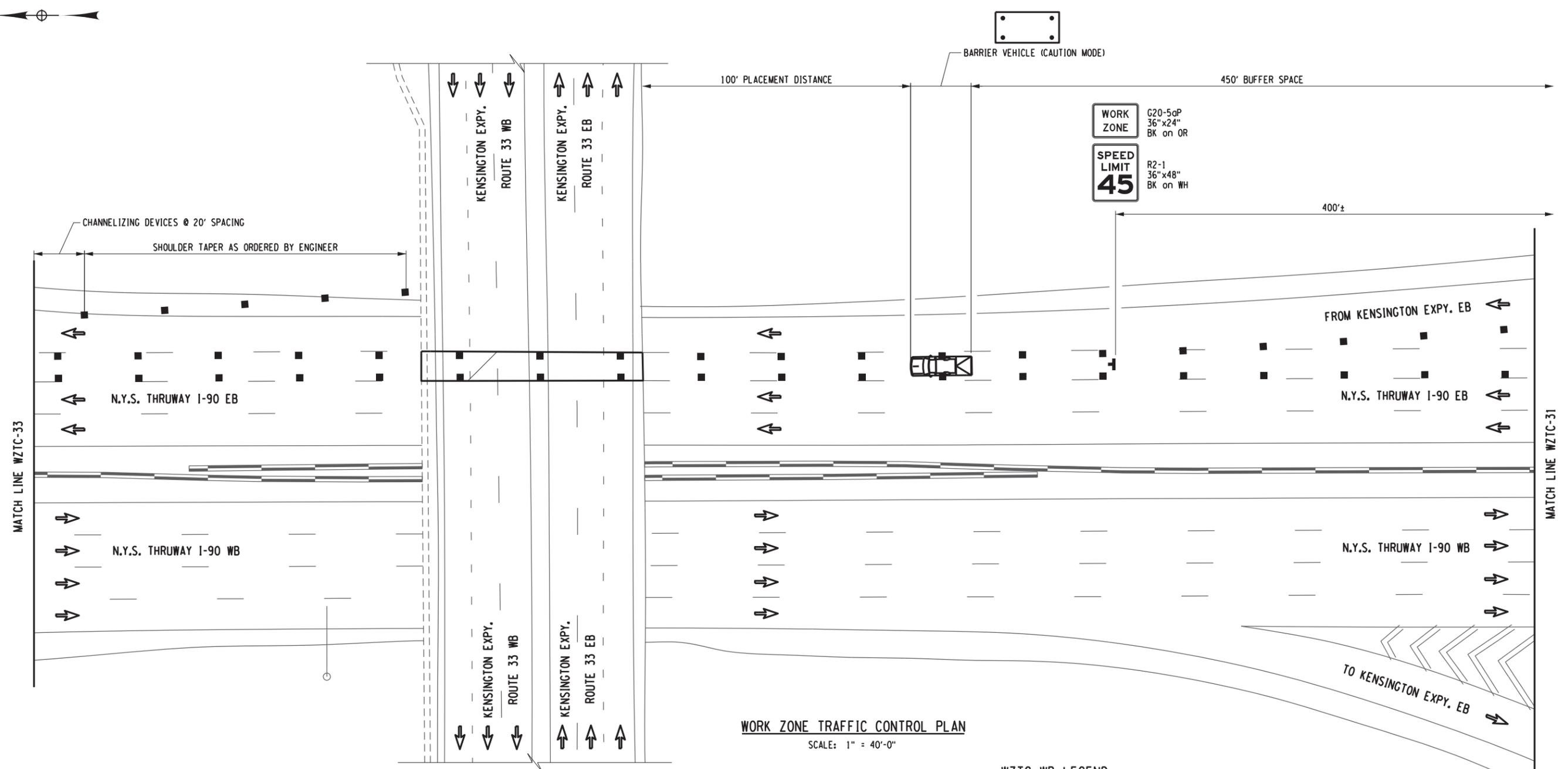
ALTERED ON: SIGNATURE: STAMP:	AFFIXED ON: 06-25-2020 SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYML

	<b>Thruway Authority</b>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
		LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 EB RIGHT-LANE CLOSURE (SHEET 4 OF 8)		DRAWING NUMBER: WZTC-31	

PW/ CHECKED BY: B. EDINGER DRAFTED BY: D. HOLLNER CHECKED BY: B. EDINGER DESIGNED BY: J. SHINSKI DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: 1" = 40'-0"

- WZTC WB LEGEND**
- CHANNELIZING DEVICES, ITEM 619.01
  - WORK SPACE
  - ARROW PANEL, ITEM 619.01
  - ARROW PANEL (CAUTION MODE), ITEM 619.01
  - BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
  - ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
  - TYPE III BARRICADE, ITEM 619.04
  - TEMPORARY SIGN, ITEM 619.01
  - VARIABLE MESSAGE SIGN, ITEM 619.110513

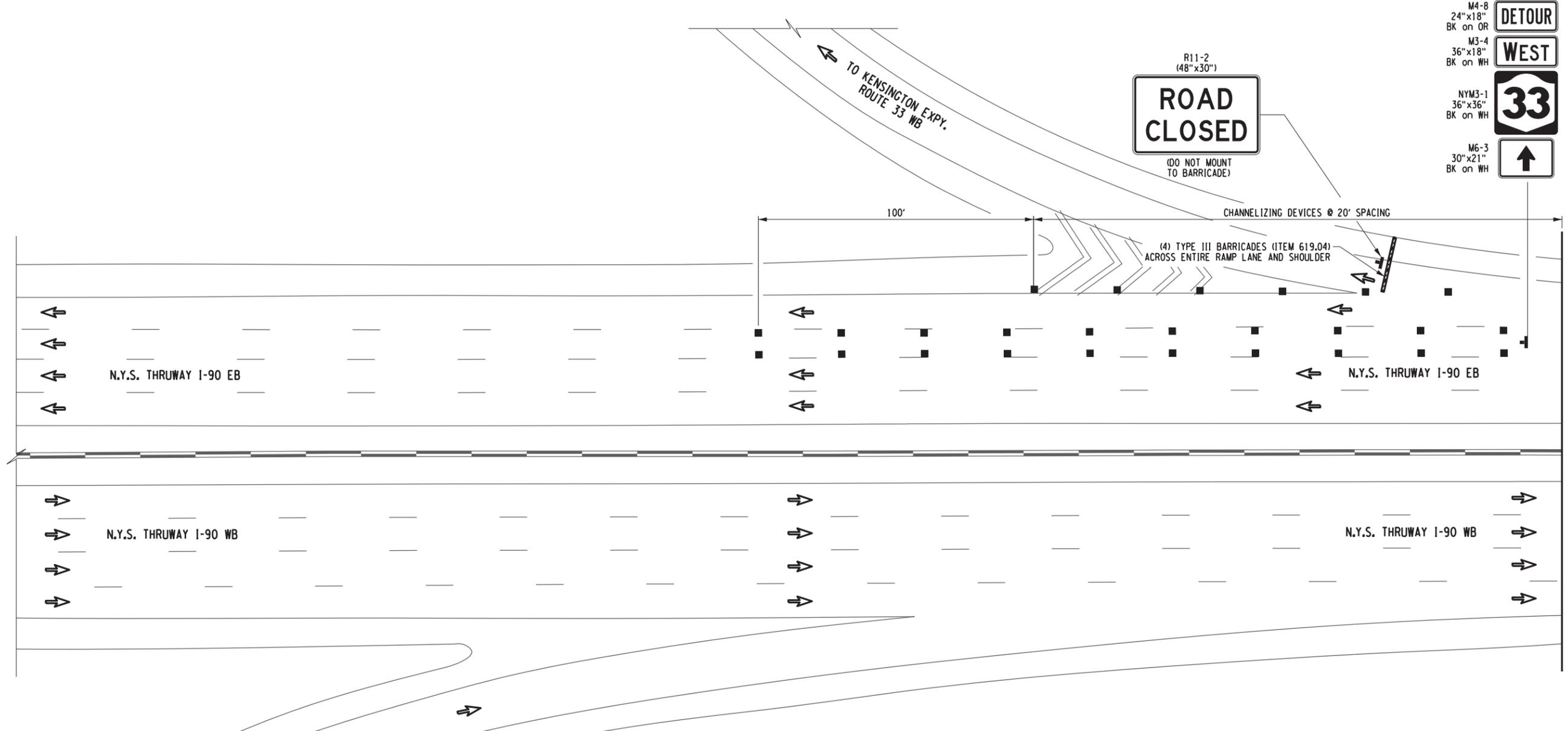
ALTERED ON:	AFFIXED ON: 06-25-2020
SIGNATURE: STAMP:	SIGNATURE: 

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REVISIONS			
DATE	DESCRIPTION	BY	SYMBOL

	<b>Thruway Authority</b>	TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
		LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 EB RIGHT-LANE CLOSURE (SHEET 5 OF 8)		DRAWING NUMBER: WZTC-32	

PW:/  
 CHECKED BY: B. EDINGER  
 DRAFTED BY: D. HOLLNER  
 CHECKED BY: B. EDINGER  
 DESIGNED BY: J. SHINSKI  
 DESIGN SUPERVISOR: JOSEPH ADAMCZAK



- M4-8  
24"x18"  
BK on OR
- M3-4  
36"x18"  
BK on WH
- NYM3-1  
36"x36"  
BK on WH
- M6-3  
30"x21"  
BK on WH

**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: 1" = 40'-0"

- WZTC WB LEGEND**
- CHANNELIZING DEVICES, ITEM 619.01
  - WORK SPACE
  - ARROW PANEL, ITEM 619.01
  - ARROW PANEL (CAUTION MODE), ITEM 619.01
  - BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
  - ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
  - TYPE III BARRICADE, ITEM 619.04
  - TEMPORARY SIGN, ITEM 619.01
  - VARIABLE MESSAGE SIGN, ITEM 619.110513

**NOTE:**  
FOR COMPLETE DETOUR SIGNING, SEE DRAWING DTR-3 - "I-90 EB TO ROUTE 33 WB DETOUR SIGNING"



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REVISIONS			
DATE	DESCRIPTION	BY	SYMBOL



**Thruway Authority**

TITLE OF PROJECT  
STEEL REPAIRS TO IMPACT DAMAGE

LOCATION OF PROJECT  
MP 421.57 BIN 1022859  
KENSINGTON EXPY. (RT. 33) OVER I-90

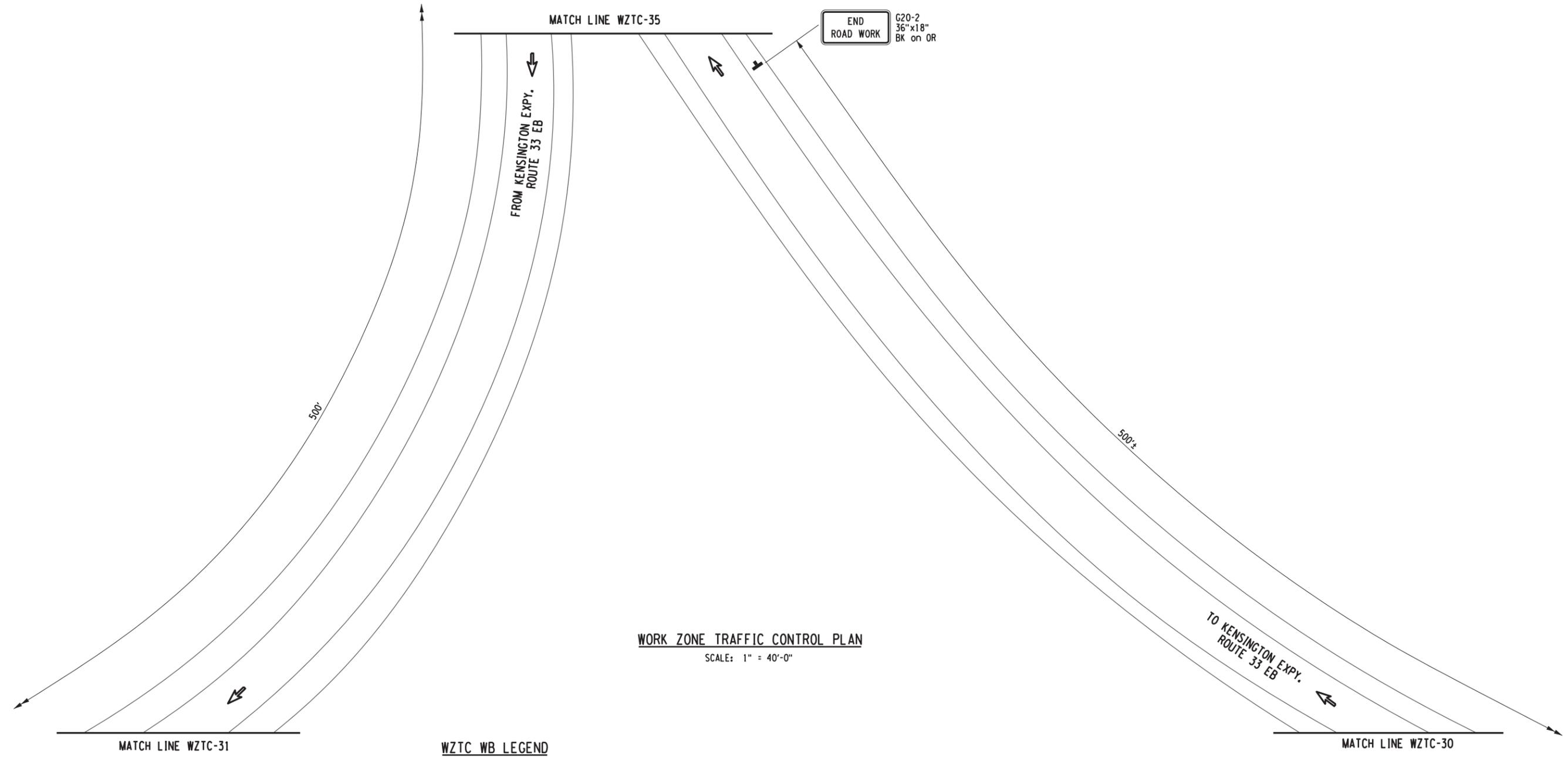
TITLE OF DRAWING  
WORK ZONE TRAFFIC CONTROL  
I-90 EB RIGHT-LANE CLOSURE  
(SHEET 6 OF 8)

CONTRACT NUMBER:  
TAB 20-12B

DATE:  
JUNE 2020

DRAWING NUMBER:  
WZTC-33

PW/ CHECKED BY: B. EDINGER DRAFTED BY: D. HOLLNER CHECKED BY: B. EDINGER DESIGNED BY: J. SHINSKI DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**WZTC WB LEGEND**

- ■ ■ CHANNELIZING DEVICES, ITEM 619.01
- ▨ WORK SPACE
- ● ● ● ● ARROW PANEL, ITEM 619.01
- ● ARROW PANEL (CAUTION MODE), ITEM 619.01
- ☐ BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ● ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- ☐ TYPE III BARRICADE, ITEM 619.04
- ☐ TEMPORARY SIGN, ITEM 619.01
- ☐ VARIABLE MESSAGE SIGN, ITEM 619.110513

ALTERED ON:	AFFIXED ON: 06-25-2020
SIGNATURE: STAMP:	SIGNATURE: STAMP:

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REVISIONS			
DATE	DESCRIPTION	BY	SYMBOL

**Thruway Authority**

TITLE OF PROJECT STEEL REPAIRS TO IMPACT DAMAGE	CONTRACT NUMBER: TAB 20-12B
LOCATION OF PROJECT MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90	DATE: JUNE 2020
TITLE OF DRAWING WORK ZONE TRAFFIC CONTROL I-90 EB RIGHT-LANE CLOSURE (SHEET 7 OF 8)	DRAWING NUMBER: WZTC-34

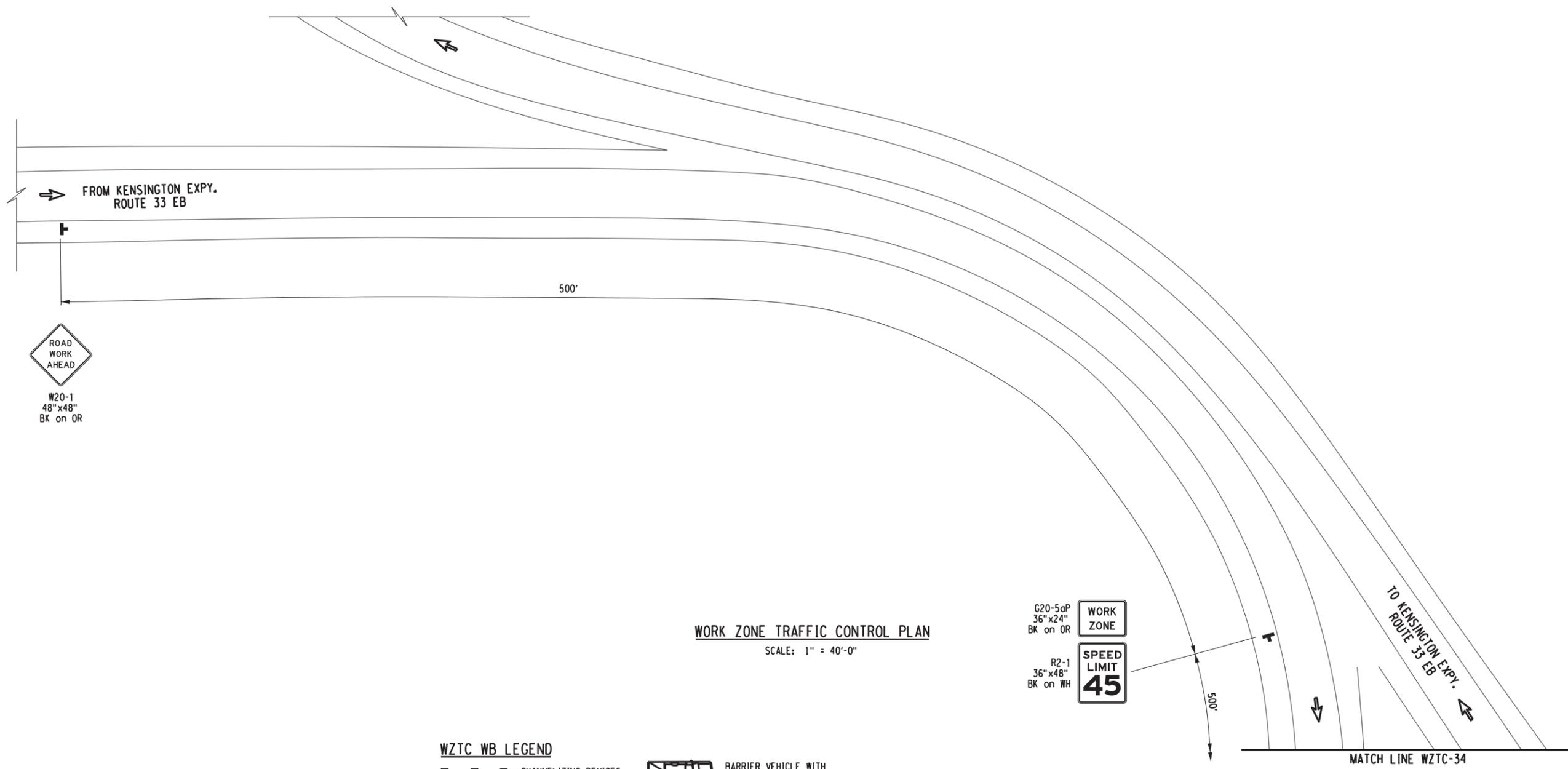
CHECKED BY: B. EDINGER

DRAFTED BY: D. HOLLNER

CHECKED BY: B. EDINGER

DESIGNED BY: J. SHINSKI

DESIGN SUPERVISOR: JOSEPH ADAMCZAK



**WORK ZONE TRAFFIC CONTROL PLAN**  
SCALE: 1" = 40'-0"

**WZTC WB LEGEND**

- ■ ■ CHANNELIZING DEVICES, ITEM 619.01
- ▨ WORK SPACE
- ● ● ● ARROW PANEL, ITEM 619.01
- ● ARROW PANEL (CAUTION MODE), ITEM 619.01
- ▢ BARRIER VEHICLE WITH ATTENUATOR, ITEM 619.01
- ● ● ARROW PANEL SUPPORT OR TRAILER, ITEM 619.01
- ▢ TYPE III BARRICADE, ITEM 619.04
- ▢ TEMPORARY SIGN, ITEM 619.01
- ▢ VARIABLE MESSAGE SIGN, ITEM 619.110513

ALTERED ON: \_\_\_\_\_ AFFIXED ON: 06-25-2020

SIGNATURE: \_\_\_\_\_ STAMP: \_\_\_\_\_



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REVISIONS			
DATE	DESCRIPTION	BY	SYML



TITLE OF PROJECT: STEEL REPAIRS TO IMPACT DAMAGE  
 LOCATION OF PROJECT: MP 421.57 BIN 1022859 KENSINGTON EXPY. (RT. 33) OVER I-90  
 TITLE OF DRAWING: WORK ZONE TRAFFIC CONTROL I-90 EB RIGHT-LANE CLOSURE (SHEET 8 OF 8)

CONTRACT NUMBER: TAB 20-12B  
 DATE: JUNE 2020  
 DRAWING NUMBER: WZTC-35