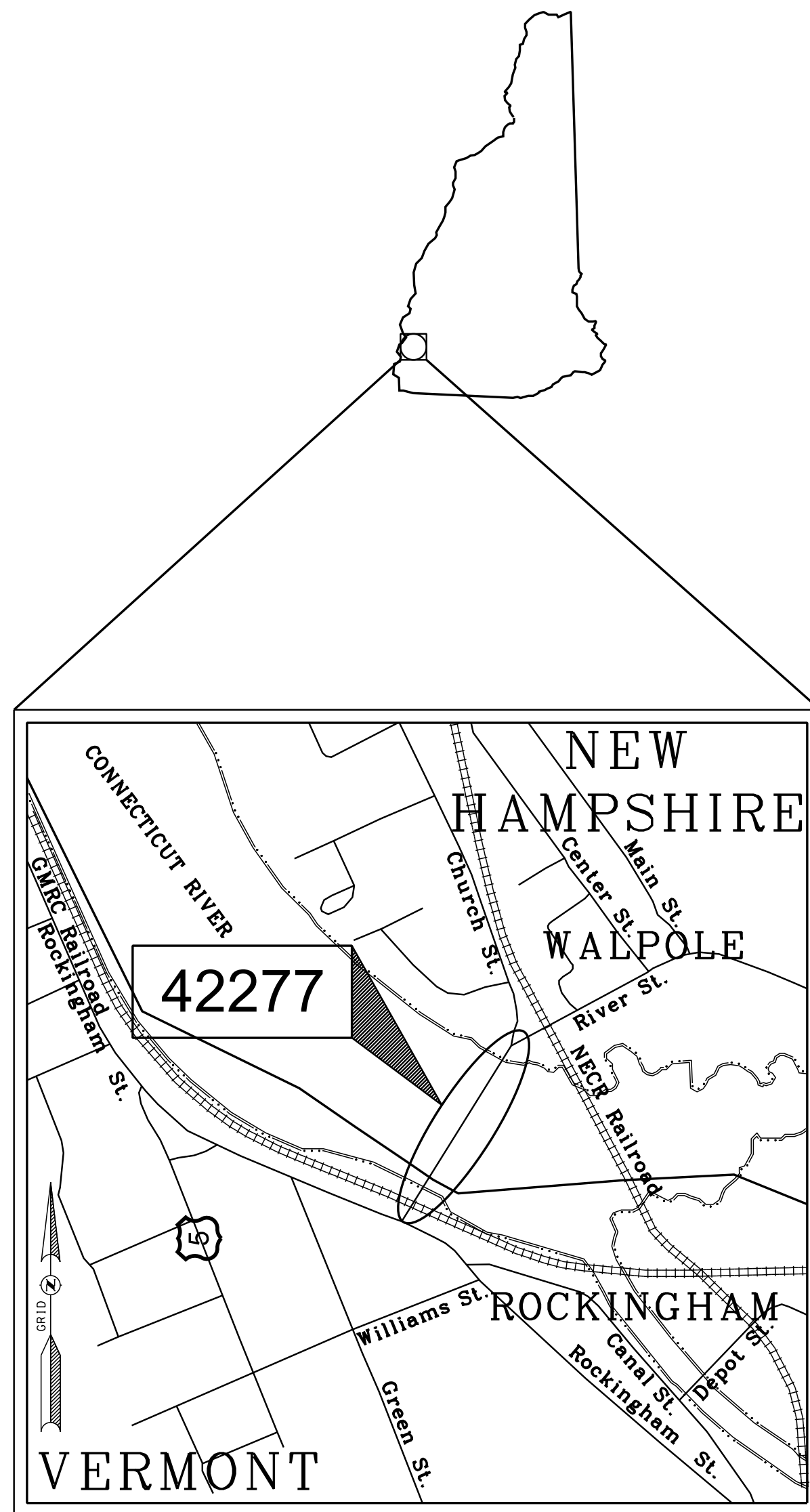


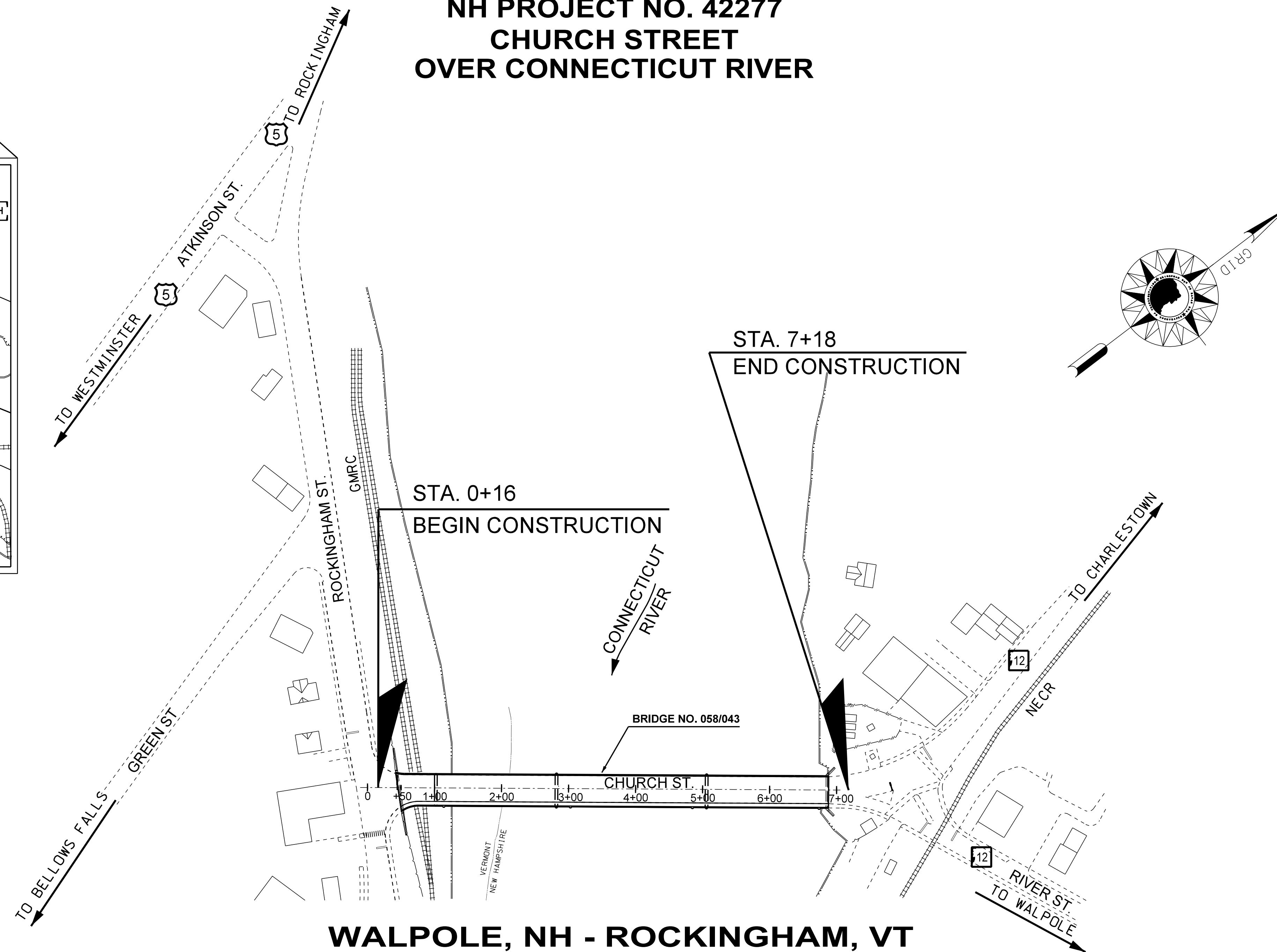
STATE OF NEW HAMPSHIRE  
 DEPARTMENT OF TRANSPORTATION  
**CONSTRUCTION PLANS**  
**FEDERAL AID PROJECT**

X-A004(799)  
 NH PROJECT NO. 42277  
**CHURCH STREET  
 OVER CONNECTICUT RIVER**

DESIGN DATA	
AVERAGE DAILY TRAFFIC 20_20	13000 VPD
AVERAGE DAILY TRAFFIC 20_40	16000 VPD
PERCENT OF TRUCKS	8.0%
DESIGN SPEED	30 MPH
LENGTH OF PROJECT	702 FT



LOCATION MAP  
 NOT TO SCALE



**WALPOLE, NH - ROCKINGHAM, VT**  
 COUNTIES OF CHESHIRE, NH AND WINDHAM, VT

SCALE: 1"=100'

DRAWN BY J. BURKE  
 CHECKED BY C. BOGUE  
 DATE 08/2020  
 DATE 08/2020

**NH DOT** THE STATE OF  
 NEW HAMPSHIRE  
 DEPARTMENT OF  
 TRANSPORTATION

RECOMMENDED FOR APPROVAL:  
 \_\_\_\_\_  
 DIRECTOR OF PROJECT DEVELOPMENT

APPROVED:  
 \_\_\_\_\_  
 ASSISTANT COMMISSIONER AND CHIEF ENGINEER DATE



FEDERAL PROJECT NO.	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
X-A004(799)	42277	1	31

# INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	INDEX OF SHEETS & GENERAL NOTES
3-4	STANDARD SYMBOLS 1-2
5	PAVEMENT MATCH AND CURB DETAILS
<u>BRIDGE PLANS</u>	
6	GENERAL PLAN AND ELEVATION
7	PROJECT NOTES
8	SUMMARY OF QUANTITIES
9-10	DECK PHASING 1-2
11	ABUTMENT B - STUBWALL SECTIONS
12-14	ABUTMENT B - STUBWALL PHASING 1-3
15-16	ABUTMENT B - STUBWALL REINFORCEMENT 1-2
17	DECK REINFORCING - PIER 1
18-20	FINGER JOINT EXPANSION JOINT DETAILS 1-3
21	STRIP SEAL EXPANSION JOINT
22	SIDEWALK PLATE DETAILS
23	REINFORCING SCHEDULE
24	ALUMINUM BRIDGE RAIL (3-BAR)
<u>TRAFFIC CONTROL PLANS</u>	
25-26	TRAFFIC CONTROL 1-2
27	TEMPORARY SIGNAL PLAN
28	CONSTRUCTION SIGN TEXT LAYOUT
29	SIGN TEXT LAYOUT
30-31	DETOUR PLAN 1-2

# GENERAL NOTES

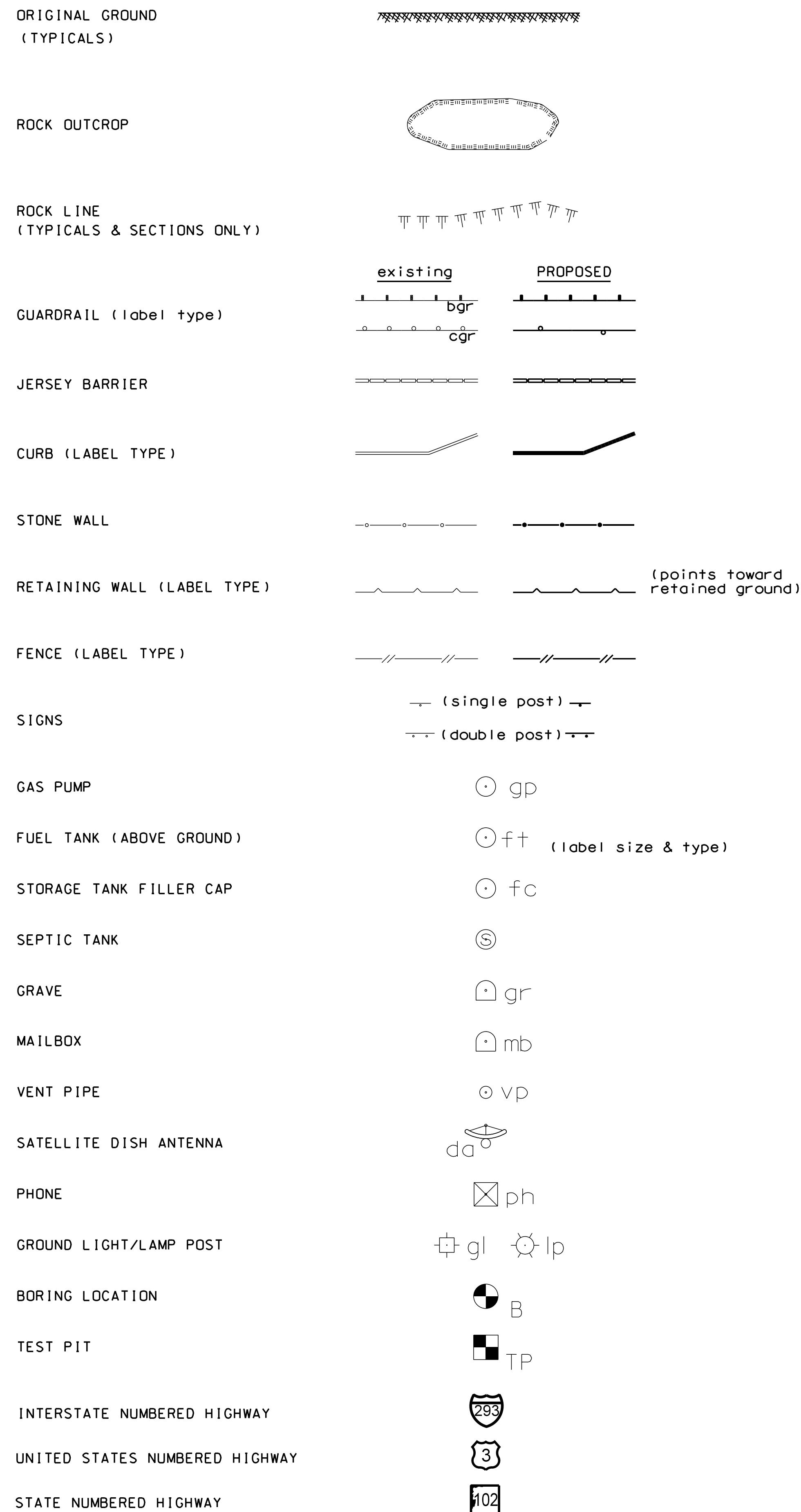
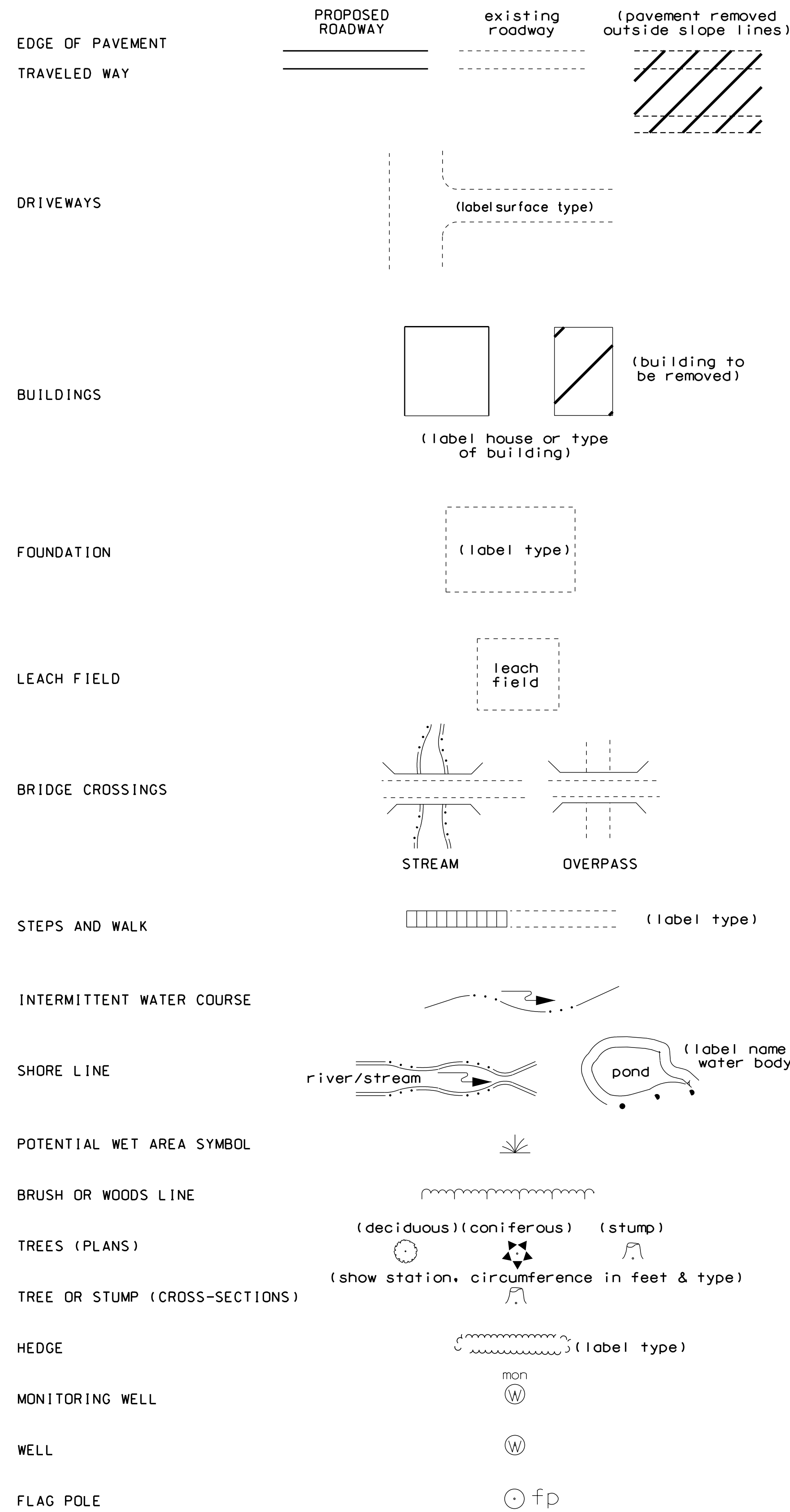
- ① FOR STANDARD PLANS, SEE DEPARTMENT OF TRANSPORTATION WEBSITE AT: [WWW.NH.GOV/DOT/ORG/PROJECTDEVELOPMENT/HIGHWAYDESIGN/STANDARDPLANS/INDEX.HTM](http://WWW.NH.GOV/DOT/ORG/PROJECTDEVELOPMENT/HIGHWAYDESIGN/STANDARDPLANS/INDEX.HTM).
- ② HIGH TENSION OVERHEAD TRANSMISSION LINES ARE LOCATED THROUGHOUT THE PROJECT WITH CROSSINGS AT VARIOUS LOCATIONS AND RUNNING ALONG THE ROAD THROUGHOUT THE PROJECT EVEN ON REGULAR POLES. THE CONTRACTOR IS ADVISED THAT EXTREME CAUTION WILL BE REQUIRED IN THE OPERATION OF EQUIPMENT, ESPECIALLY CRANES AND PILE DRIVING EQUIPMENT.
- ③ MODIFY SUPERELEVATION ON EXISTING CURVES BY THE USE OF A LEVELING COURSE TO THE RATES INDICATED ON THE PLANS OR AS ORDERED.
- ④ EXISTING DELINEATORS AND WITNESS MARKERS THAT ARE REMOVED AND DETERMINED BY THE ENGINEER TO BE IN ACCEPTABLE CONDITION SHALL BE RESET (SUBSIDIARY). ADDITIONAL DELINEATORS AND WITNESS MARKERS ORDERED WILL BE PAID UNDER THE APPROPRIATE ITEMS OF THE CONTRACT.
- ⑤ NO EXISTING MONUMENTS, BOUNDS, OR BENCHMARKS SHALL BE DISTURBED WITHOUT FIRST MAKING PROVISIONS FOR RELOCATION.
- ⑥ PERFORM ALL WORK WITHIN THE EXISTING RIGHT-OF-WAY, UNLESS OTHERWISE SHOWN ON THE PLANS OR AS ORDERED BY THE ENGINEER.
- ⑦ REMOVE UNPROTECTED PROJECT MARKERS (SUBSIDIARY).
- ⑧ SURVEY DATA FOR THIS PROJECT WAS COLLECTED BY SDR AND THE FIELD NOTES CAN BE FOUND IN THE FIELD BOOK(S) ----- COORDINATES ARE NEW HAMPSHIRE STATE PLANE COORDINATES OF NAD83, ---- ADJUSTMENT AND THE BEARINGS ARE GRID. ELEVATIONS ARE REFERENCED TO ---- ----.
- ⑨ QUANTITIES FOR EMBANKMENT AND EXCAVATION FOR SLOPE ROUNDINGS AS SHOWN ON THE TYPICALS HAVE NOT BEEN CALCULATED AND ARE NOT INCLUDED IN THE QUANTITY SUMMARIES, AND ARE CONSIDERED SUBSIDIARY TO THE APPROPRIATE 203 ITEMS.

THE FOLLOWING GENERAL NOTES WILL BE USED ON THIS PROJECT:											
①	②	○	○	⑤	⑥	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	○	○

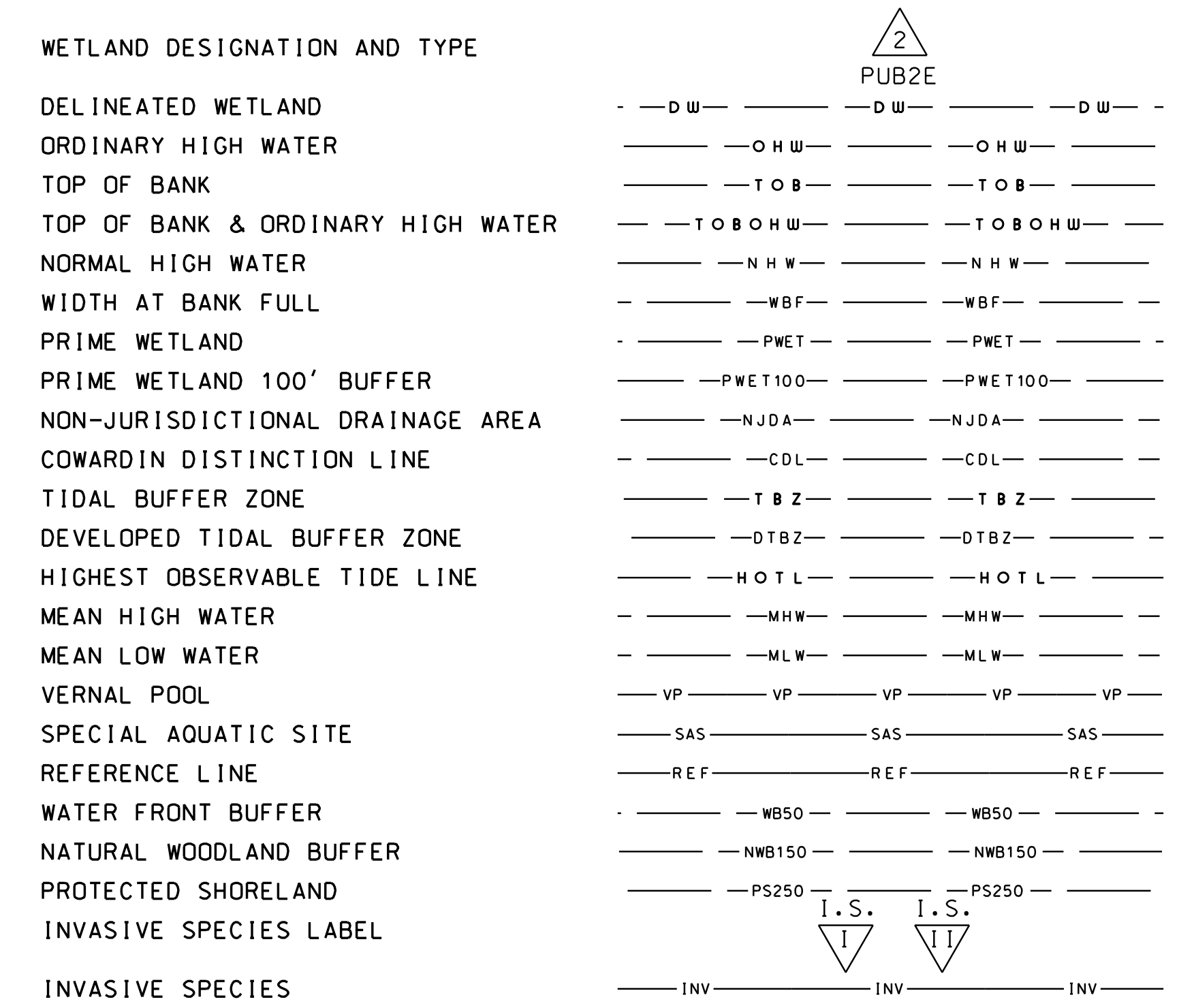


STATE OF NEW HAMPSHIRE				
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN				
<i>INDEX OF SHEETS &amp; GENERAL NOTES</i>				
REVISION DATE	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9-1-2016	02_Index	42277	2	31

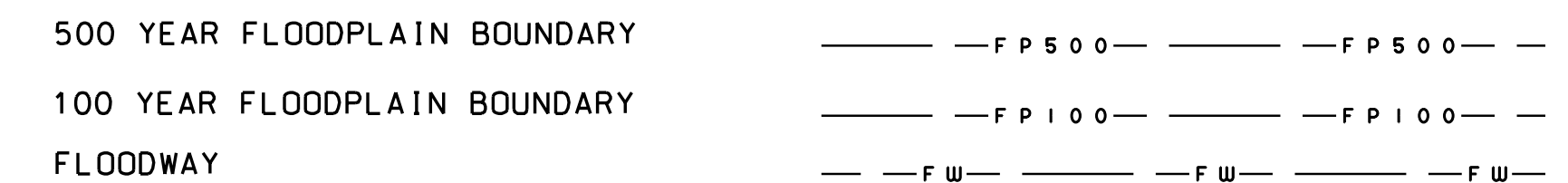
# GENERAL



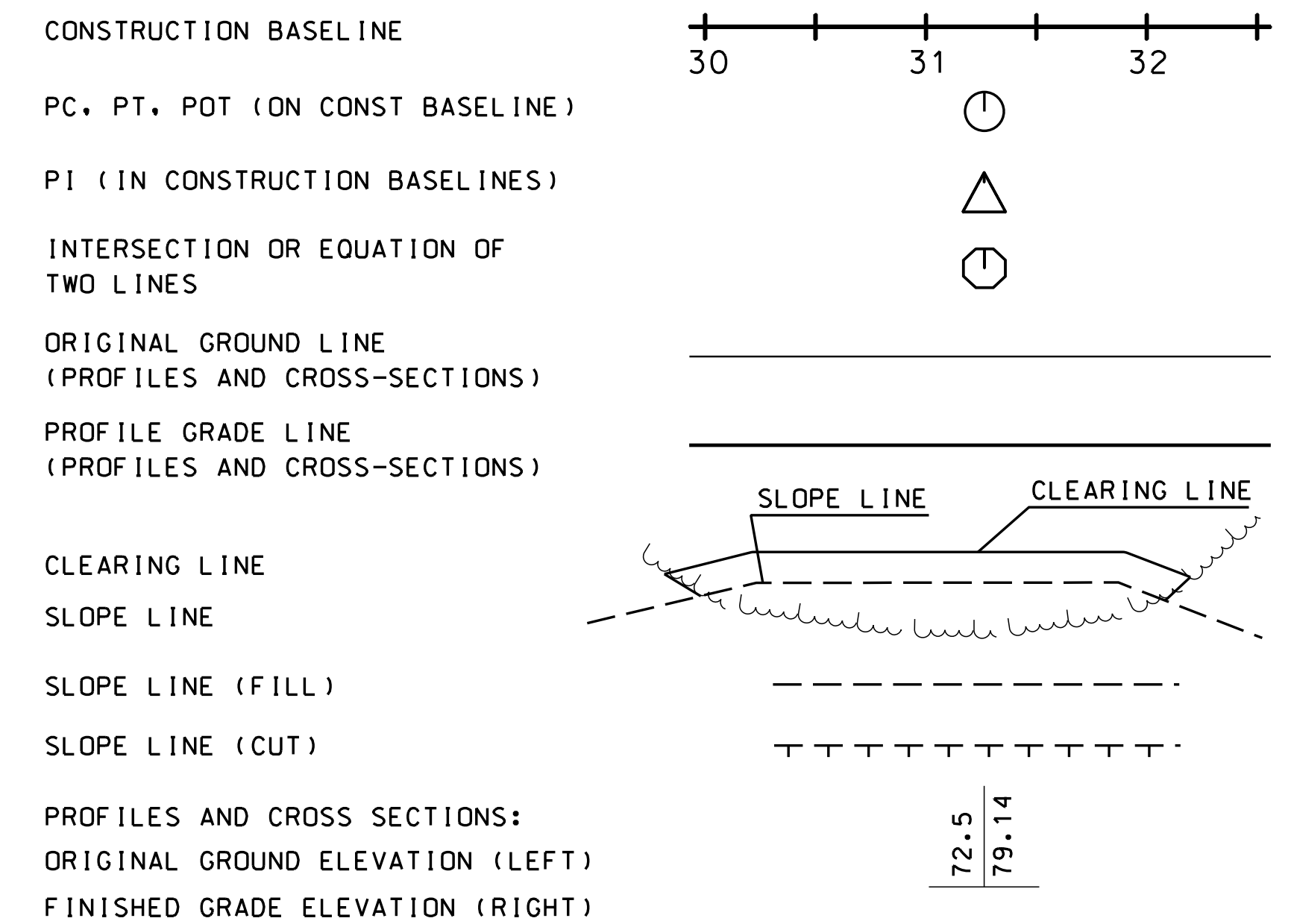
# SHORELAND - WETLAND



# FLOODPLAIN / FLOODWAY



# ENGINEERING



STATE OF NEW HAMPSHIRE				
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN				
<b>STANDARD SYMBOLS 1</b>				
REVISION DATE	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
11-21-2014	03_Symb1	42277	3	31



## DRAINAGE

MANHOLE		
CATCH BASIN		(existing)  (PROPOSED)
DROP INLET		
DRAINAGE PIPE (existing)		(label size & type)
DRAINAGE PIPE (PROPOSED)		(label size & type)
UNDERDRAIN (existing) W/ FLUSHING BASIN		(label size & type)
UNDERDRAIN (PROPOSED) W/ FLUSHING BASIN		(label size & type)
HEADER (existing & PROPOSED)		(with stone outlet protection)
END SECTION (existing & PROPOSED)		METAL or PLASTIC
OPEN DITCH (PROPOSED)		RCP
EROSION CONTROL/ STONE SLOPE PROTECTION		

## BOUNDARIES / RIGHT-OF-WAY

RIGHT-OF-WAY LINE		(label type)
RR RIGHT-OF-WAY LINE		
PROPERTY LINE		
PROPERTY LINE (COMMON OWNER)		
TOWN LINE		BOW CONCORD
COUNTY LINE		COOS GRAFTON
STATE LINE		MAINE NEW HAMPSHIRE
NATIONAL FOREST		
CONSERVATION LAND		
BENCH MARK / SURVEY DISK		
BOUND		bnd  (PROPOSED)
STATE LINE/ TOWN LINE MONUMENT		S/L  T/L
NHDOT PROJECT MARKER		
IRON PIPE OR PIN		
DRILL HOLE IN ROCK		
TAX MAP AND LOT NUMBER		156 14 1642/341 6.80 Ac. ±
PROPERTY PARCEL NUMBER		12
HISTORIC PROPERTY		

## UTILITIES

TELEPHONE POLE		
POWER POLE		
JOINT OCCUPANCY		
MISCELLANEOUS/UNKNOWN POLE		
GUY POLE OR PUSH BRACE		
LIGHT POLE		
LIGHT ON POWER POLE		
LIGHT ON JOINT POLE		
POLE STATUS: REMOVE, LEAVE, PROPOSED, OR TEMPORARY AS APPLICABLE e.g.:		
RAILROAD		
RAILROAD SIGN		
RAILROAD SIGNAL		
UTILITY JUNCTION BOX		
OVERHEAD WIRE		
UNDERGROUND UTILITIES		
WATER (on existing lines label size, type and note if abandoned)		
SEWER		
TELEPHONE		
ELECTRIC		
GAS		
LIGHTING		
INTELLIGENT TRANSPORTATION SYSTEM		
FIBER OPTIC		
WATER SHUT OFF		
GAS SHUT OFF		
HYDRANT		
MANHOLES		
SEWER		
TELEPHONE		
ELECTRICAL		
GAS		
UNKNOWN		

## TRAFFIC SIGNALS / ITS

MAST ARM (existing)		
OPTICOM RECEIVER		
OPTICOM STROBE		
TRAFFIC SIGNAL		
PEDESTAL WITH PEDESTRIAN SIGNAL HEADS AND PUSH BUTTON UNIT		
SIGNAL CONDUIT		
CONTROLLER CABINET		
METER PEDESTAL		
PULL BOX		
LOOP DETECTOR (QUADRUPOLE)		
LOOP DETECTOR (RECTANGULAR)		
CAMERA POLE (CCTV)		
FIBER OPTIC DELINEATOR		
FIBER OPTIC SPLICE VAULT		
ITS EQUIPMENT CABINET		
VARIABLE SPEED LIMIT SIGN		
DYNAMIC MESSAGE SIGN		
ROAD AND WEATHER INFO SYSTEM		

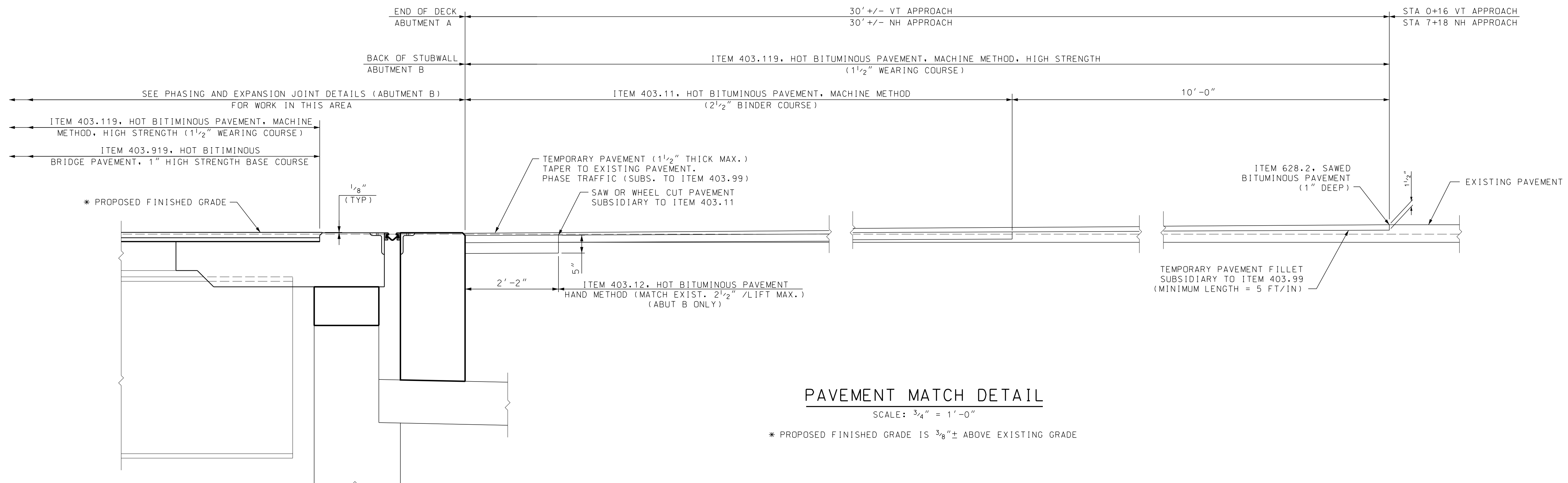
## CONSTRUCTION NOTES

CURB MARK NUMBER - BITUMINOUS	B-1
CURB MARK NUMBER - GRANITE	G-1
CLEARING AND GRUBBING AREA	
DRAINAGE NOTE	
EROSION CONTROL NOTE	
FENCING NOTE	
GUARDRAIL NOTE	
ITS NOTE	
LIGHTING NOTE	
TRAFFIC SIGNAL NOTE	

SHEET 2 OF 2

STATE OF NEW HAMPSHIRE				
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN				
<b>STANDARD SYMBOLS 2</b>				
REVISION DATE	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
9-1-2016	04_Symb2	42277	4	31

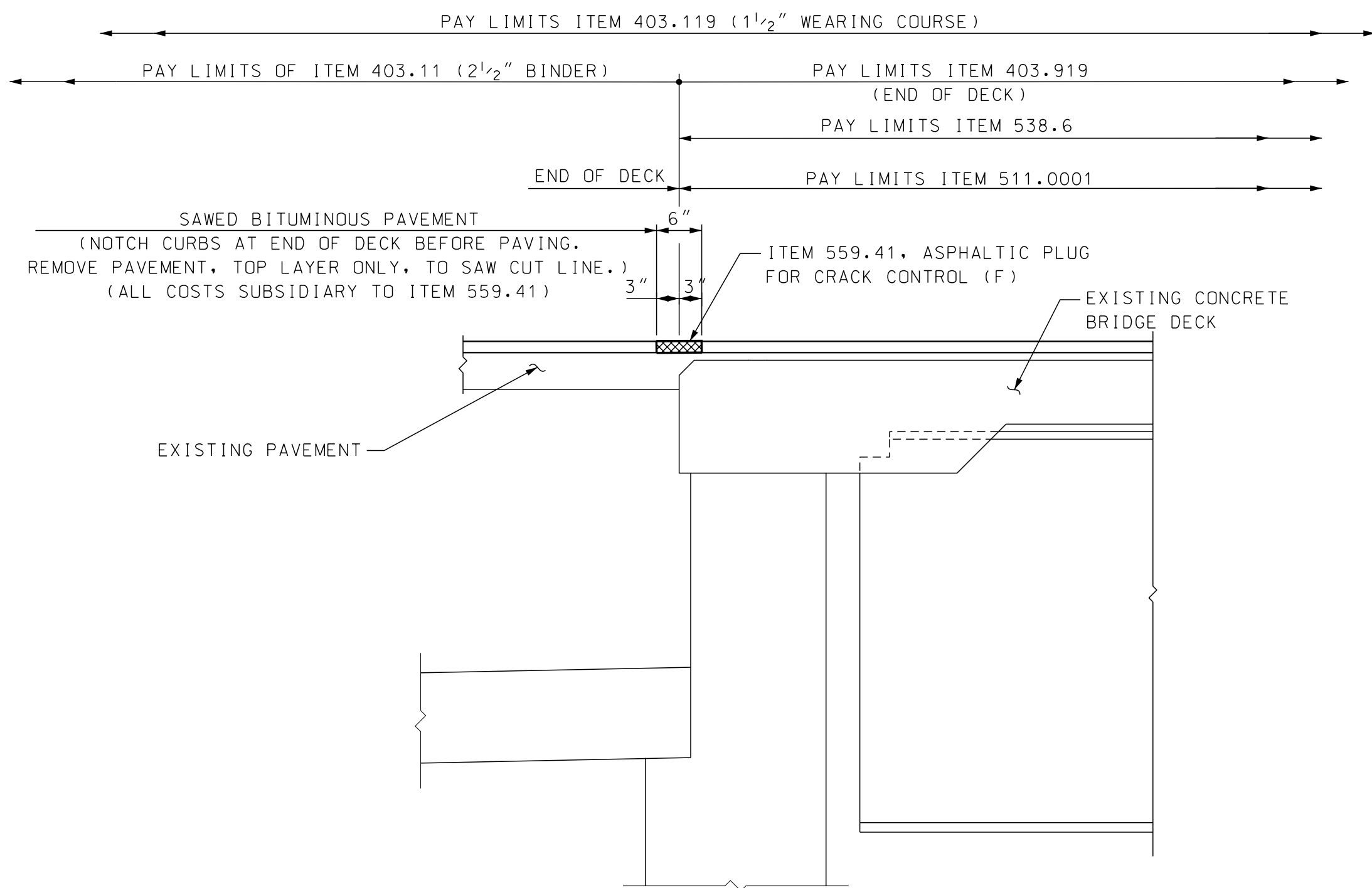




**PAVEMENT MATCH DETAIL**

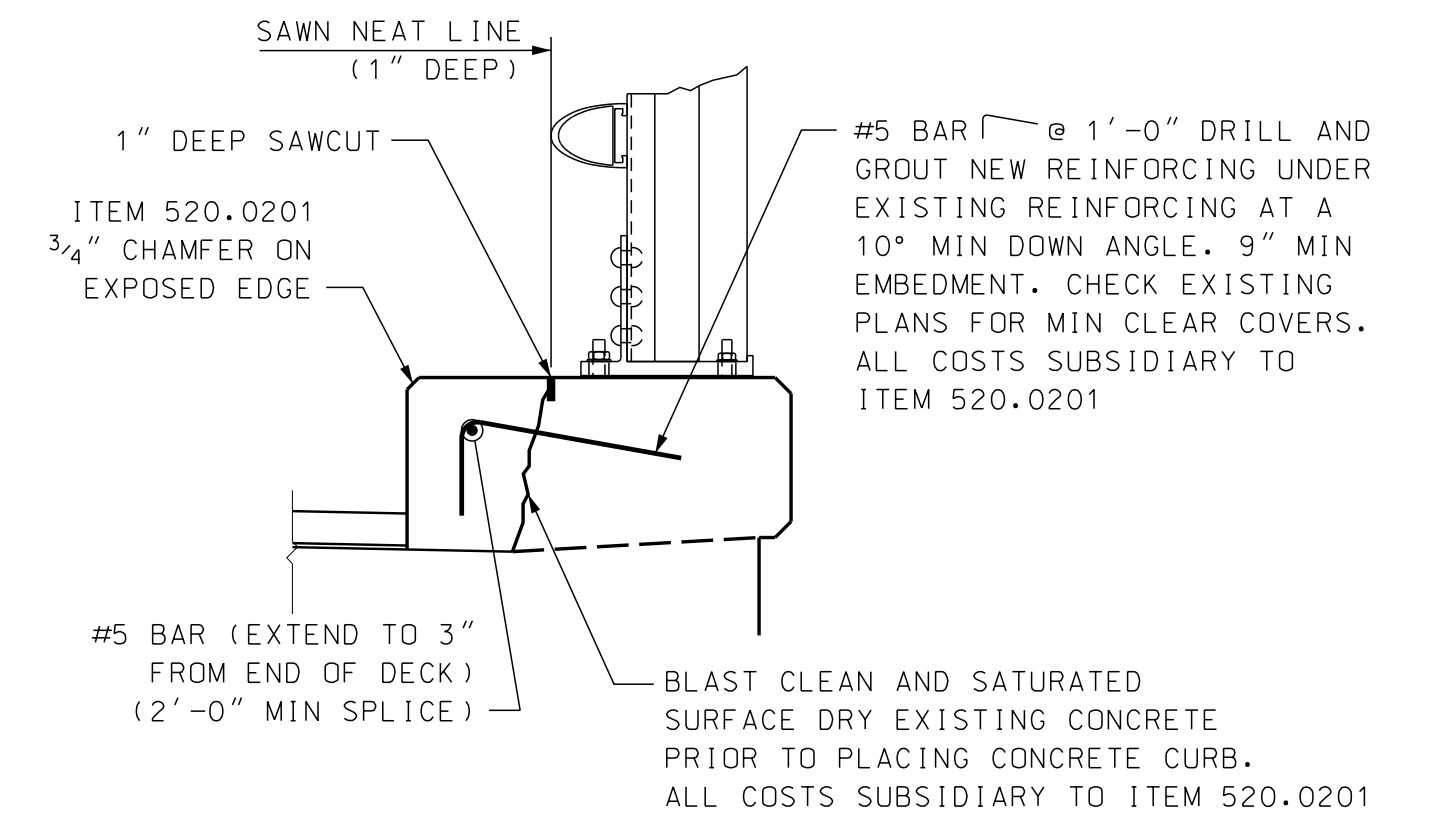
SCALE: 3/4" = 1'-0"

\* PROPOSED FINISHED GRADE IS 3/8" +/- ABOVE EXISTING GRADE



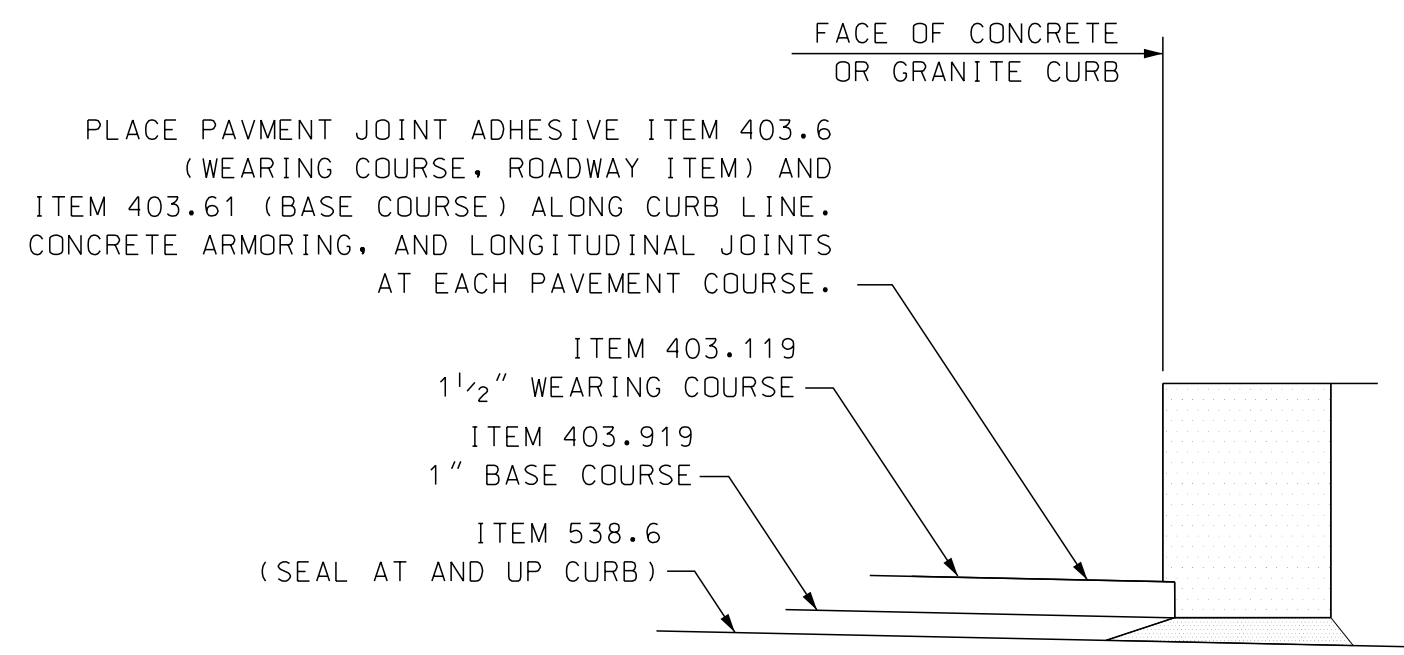
**ASPHALTIC PLUG FOR CRACK CONTROL (ABUTMENT A)**

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



**PROPOSED CONCRETE CURB**

SCALE: 1" = 1'-0"

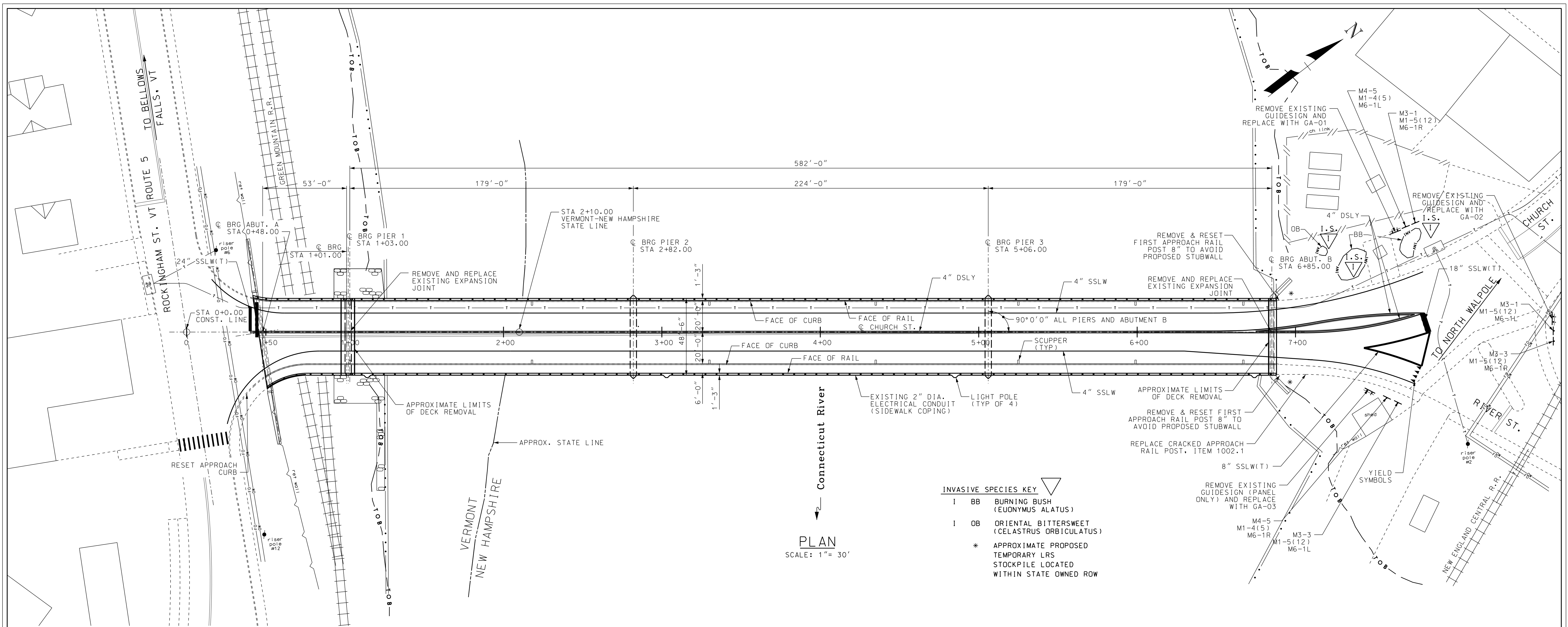


**CURB DETAIL**

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

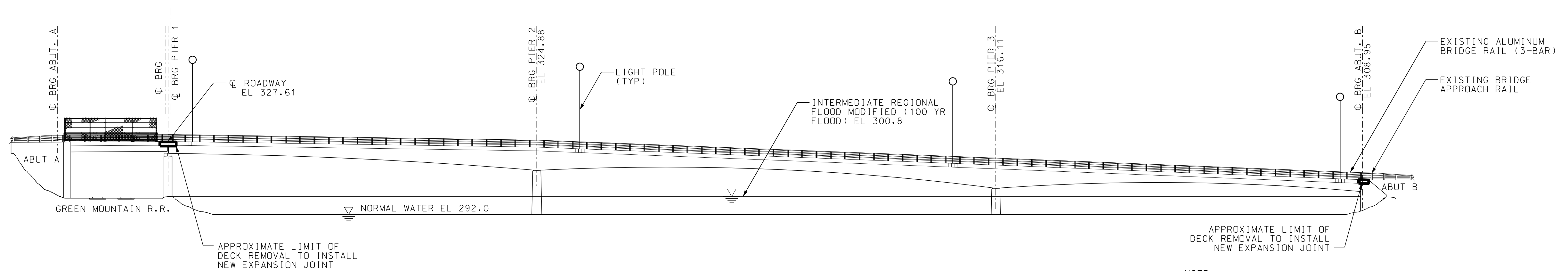


STATE OF NEW HAMPSHIRE			
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN			
<b>PAVEMENT MATCH AND CURB DETAILS</b>			
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
42277curb_pave det	42277	5	31



**PLAN**  
SCALE: 1" = 30'

- INVASIVE SPECIES KEY**
- I BB BURNING BUSH (EUONYMUS ALATUS)
  - I OB ORIENTAL BITTERSWEET (CELASTRUS ORBICULATUS)
  - \* APPROXIMATE PROPOSED TEMPORARY LRS STOCKPILE LOCATED WITHIN STATE OWNED ROW



**ELEVATION**  
SCALE: 1" = 30'

NOTE:  
FOR INDEX OF SHEETS, SEE SHEET 2.

<b>STATE OF NEW HAMPSHIRE</b>					
<b>DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN</b>					
TOWN	WALPOLE, NH - ROCKINGHAM, VT	BRIDGE NO.	058/043	STATE PROJECT	42277
LOCATION	CHURCH STREET OVER CONNECTICUT RIVER				
<b>GENERAL PLAN AND ELEVATION</b>					BRIDGE SHEET
REVISIONS AFTER PROPOSAL				BY	DATE
DESIGNED				JDG	04/2020
DRAWN				LRB	09/2019
QUANTITIES				JDG	11/2019
ISSUE DATE				FEDERAL PROJECT NO.	
REV. DATE				X-A004(799)	
				BY	DATE
CHECKED				GAB	05/2020
CHECKED				JDG	05/2020
CHECKED				SRW	05/2020
				SHEET NO.	TOTAL SHEETS
				6	31
				1 OF 19	FILE NUMBER
				136-3-2	



SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC	42277pregen	AS NOTED



**SCOPE OF WORK**

- BR. NO. 058/043 CHURCH STREET OVER CONNECTICUT RIVER  
 - REMOVE AND REPLACE DECK PAVEMENT AND MEMBRANE  
 - PARTIAL AND FULL DEPTH CONCRETE DECK REPAIRS  
 - PARTIALLY REMOVE AND REPLACE TOPS OF ABUTMENT BACKWALLS  
 - REMOVE COMPRESSION SEAL EXPANSION JOINT AT ABUTMENT B AND REPLACE WITH A STRIP SEAL  
 - REMOVE MODULAR EXPANSION JOINT AT PIER 1 AND REPLACE WITH A FINGER JOINT  
 - RESET BRIDGE APPROACH GRANITE CURB  
 - REPLACE MISSING BOLTS IN DIAPHRAGM

**MATERIALS AND SPECIFICATIONS**

- (1) SPECIFICATIONS: AASHTO BRIDGE CONSTRUCTION SPECIFICATION WITH INTERIMS 2017  
 NHDOT 2016 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AS AMENDED  
 WELDING PER AASHTO/AWS D1.5-10 WITH REVISIONS PUBLISHED BY AASHTO AS OF THE BID  
 OPENING DATE.
- (2) REINFORCING STEEL: AASHTO M31 (ASTM A 615) GRADE 60 EPOXY COATED
- (3) CONCRETE: PARTIAL DEPTH DECK REPAIRS = 4000 PSI  
 ITEM 520.01, CONCRETE CLASS AA
- FULL DEPTH DECK REPAIRS, CURB SEATS, ABUTMENT AND WINGWALL REPAIRS.  
 = 4,000 PSI  
 ITEM 520.0201, CONCRETE CLASS AA, ABOVE FOOTINGS
- BACKWALL AND DECK RECONSTRUCTION = 4,000 PSI  
 ITEM 520.02, CONCRETE CLASS AA, ABOVE FOOTINGS (F)

**BENCHMARK NOTE**

ALL EXISTING DISCS REPRESENTING STATE BENCHMARKS OR SURVEY TRIANGULATION POINTS MUST NOT BE DISTURBED. WHEN THE PROPOSED WORK INVOLVES DISTURBING ONE OF THESE DISCS, THE CONTRACTOR SHALL NOTIFY THE CONTRACT ADMINISTRATOR SUFFICIENTLY IN ADVANCE OF THE WORK TO PERMIT THE STATE TO TEMPORARILY RELOCATE THE AFFECTED MARKER.

**TO THE CONTRACTOR**

THE CONTRACTOR SHOULD BE AWARE THAT EXISTING STRUCTURE DIMENSIONS AND ELEVATIONS SHOWN ON THESE PLANS WERE TAKEN FROM ORIGINAL BRIDGE PLANS AND DO NOT NECESSARILY REPRESENT "AS-BUILT" DIMENSIONS AND ELEVATIONS. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS OF THE EXISTING STRUCTURES AND BE PREPARED TO MAKE ANY ADJUSTMENTS REQUIRED TO PROPERLY REHABILITATE THE BRIDGE. ANY DISCREPANCIES IN DIMENSIONS, CHARACTER, OR EXTENT OF THE EXISTING FEATURES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO ADVANCING THE WORK. THE EXISTING PLANS ARE AVAILABLE ON-LINE IN THE BID PACKAGE ON THE INVITATION TO BID WEB PAGE. AFTER THE CONTRACT IS AWARDED, A COMPLETE SET OF EXISTING PLANS WILL BE FORWARDED TO THE CONTRACTOR UPON REQUEST. THE FILE NUMBER FOR THIS BRIDGE IS 2-13-1-1.

**REMOVAL NOTES**

- (1) REMOVAL OF EXISTING BRIDGE STRUCTURE, ITEM 502., EXCEPT AS OTHERWISE SHOWN ON THE PLANS SHALL INCLUDE PARTIAL REMOVAL OF THE EXISTING BRIDGE DECK, BRIDGE CURB, AND BACKWALL NEEDED FOR EXPANSION JOINT REPLACEMENT. EQUIPMENT USED FOR REMOVAL SHALL MEET THE REQUIREMENTS OF 511.2.1.3 UNLESS OTHERWISE APPROVED BY THE CONTRACT ADMINISTRATOR.
- (2) THE CONTRACTOR SHALL SUBMIT, FOR DOCUMENTATION IN ACCORDANCE WITH SECTION 105.02, A DETAILED OUTLINE OR PLAN OF THE PROPOSED METHOD FOR ITEM 502. PRIOR TO COMMENCEMENT OF ANY REMOVAL OF WORK.
- (3) THE EXISTING PAVEMENT AND MEMBRANE, SHALL BE REMOVED UNDER ITEM 511.0001, CONCRETE BRIDGE DECK PAVEMENT REMOVAL (F).

**GENERAL CONSTRUCTION NOTES**

- (1) TRAFFIC CHANNELIZING DEVICES, AND TRAFFIC CONTROL MEASURES SHALL BE IN PLACE BEFORE OPERATIONS BEGIN FOR EACH CONSTRUCTION PHASE.
- (2) THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO INSURE THAT DEBRIS DOES NOT FALL INTO THE WATERWAY OR ONTO THE RAILROAD TRACKS BELOW EXISTING STRUCTURE. ALL COSTS SHALL BE PAID UNDER ITEM 502, AND SHALL INCLUDE THE ERECTION, MAINTENANCE, AND REMOVAL OF TEMPORARY STRUCTURES OR OTHER SUCH METHODS AS APPROVED.
- (3) NO SCAFFOLDS SHALL BE ERECTED OR OPERATIONS CONDUCTED IN THE ROADWAY, UNLESS APPROVED BY THE CONTRACT ADMINISTRATOR.
- (4) THE WELDING OF ATTACHMENTS TO STRUCTURAL STEEL FOR CONSTRUCTION PURPOSES SHALL NOT BE PERMITTED UNLESS APPROVED BY THE NHDOT, BUREAU OF BRIDGE DESIGN.
- (5) PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL MAKE A RECORD OF THE EXISTING PAINT PAVEMENT MARKINGS. UPON COMPLETION OF THE BRIDGE WORK, THE PAVEMENT MARKINGS SHALL BE REPLACED IN KIND WITH ITEM 632.0104, RETROREFLECTIVE PAINT PAVE, MARKING, 4" LINE.

**GENERAL CONSTRUCTION NOTES (CONT)**

- (6) ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4", UNLESS OTHERWISE NOTED.
- (7) ITEM 538.6, BARRIER MEMBRANE, HEAT WELDED - MACHINE METHOD (F) SHALL BE OVERLAPPED PER MANUFACTURER'S REQUIREMENTS. AT DECK ENDS AND CURB LINES, A SEALANT/REPAIR MASTIC COMPATIBLE WITH ITEM 538.6 SHALL BE PLACED BETWEEN THE NEW MEMBRANE AND THE END DECK OR CURB TO SEAL THE MEMBRANE. ALL COSTS SHALL BE SUBSIDIARY TO ITEM 538.6.
- (8) REMOVE ANY EXISTING LOOSE OR FLAKING EPOXY COATING FROM THE BACKWALL AND SEATS AS DIRECTED. COSTS PAID UNDER ITEM 502.
- (9) FOR SALVAGE OF MATERIALS SEE PROSECUTION OF WORK.
- (10) ITEM 538.2, BARRIER MEMBRANE, PEEL AND STICK - VERTICAL SURFACES (F), 2' WIDE, SHALL BE PLACED CENTERED OVER ALL HORIZONTAL AND VERTICAL CONSTRUCTION JOINTS WITH PROTECTION BOARD (SUBSIDIARY) EXCEPT THAT BARRIER SHALL COVER THE ENTIRE VERTICAL SURFACE OF THE BACK OF BACKWALL TO 1'-0" ONTO THE EXISTING APPROACH SLAB AS SHOWN IN SECTION A-A RECONSTRUCTION SHOWN ON BRIDGE SHEET 6.
- (11) SUPPORT OF EXCAVATION NECESSARY TO COMPLETE WORK SHALL BE SUBSIDIARY TO THE EXCAVATION ITEMS OF WORK.
- (12) APPLY PAVEMENT JOINT ADHESIVE ALONG ALL LONGITUDINAL JOINTS BETWEEN PAVEMENT PASSES AND ALONG BRIDGE CURB LINES AND EXPANSION JOINT ARMORING PRIOR TO PLACING ALL PAVEMENT COURSES. FOR BRIDGE BASE COURSE APPLY ITEM 403.61, PAVEMENT JOINT ADHESIVE (BRIDGE BASE) AND FOR WEARING COURSE APPLY ITEM 403.6, PAVEMENT JOINT ADHESIVE - ROADWAY ITEM.
- (13) ITEM 563.8, RESETTING BRIDGE RAIL, SHALL BE PAID AS 1 LF PER POST.

**REINFORCING NOTES**

- (1) EXISTING REINFORCING STEEL, UNLESS OTHERWISE SHOWN/NOTED IN THE PLANS, SHALL BE RETAINED.
- (2) EXISTING REINFORCING STEEL THAT IS TO REMAIN IN PLACE WITHIN THE REMOVAL AREAS SHALL BE CUT AS REQUIRED TO PROVIDE 2 1/2" MINIMUM CLEAR COVER FROM THE PROPOSED CONCRETE SURFACES. EXCEPT AS OTHERWISE NOTED, ALL COSTS INCLUDED IN ITEM 502. ALL NEW REINFORCING BARS SHALL HAVE A MINIMUM CLEAR COVER OF 2 1/2" FROM PROPOSED CONCRETE SURFACES.
- (3) ALL REINFORCING TO REMAIN IN PLACE SHALL BE INSPECTED FOR DAMAGE OR CORROSION JOINTLY BY THE CONTRACT ADMINISTRATOR AND CONTRACTOR AFTER EACH REMOVAL PHASE. ALL NEW REINFORCING STEEL REQUIRED TO REPAIR OR REPLACE EXISTING REINFORCEMENT SHALL BE PAID UNDER ITEM 1002.1, REPAIRS OR REPLACEMENTS AS NEEDED - BRIDGE STRUCTURES.
- (4) PLACE REINFORCING STEEL TO AVOID RAIL POST ANCHOR ASSEMBLIES AND ANCHOR BOLTS AND EXPANSION JOINT ASSEMBLIES.
- (5) REINFORCING LEGEND: SP = SPACE, SPL = SPLICE, FS = FAR SIDE,  
 NS = NEAR SIDE, BOT = BOTTOM, ALT = ALTERNATING
- (6) FOR TYPICAL BEND DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS AND HOOKS AND OTHER STANDARD PRACTICE SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
- (7) PROPOSED REINFORCEMENT, AS SHOWN IN THE PLANS, REPLACING EXISTING REBAR TO BE REMOVED, SHALL BE PAID UNDER ITEM 544.2, REINFORCING STEEL EPOXY COATED (F) AND ITEM 544.21, REINFORCING STEEL, EPOXY COATED, MECHANICAL CONNECTORS (F).
- (8) GALVANIC CORROSION PROTECTION SYSTEMS, ITEMS 540.511 AND 540.512, SHALL BE PLACED IN THE DECK AS SHOWN ON THE PLANS. SEE SPECIAL PROVISION FOR ADDITIONAL INFORMATION.
- (9) ANY EPOXY COATED REBARS CUT TO FIT AND ANY DAMAGED EPOXY COATING OF EXISTING EPOXY COATED REINFORCING SHALL BE TOUCHED UP WITH AN APPROVED EPOXY COATING MATERIAL. ALL COSTS SHALL BE INCLUDED IN ITEM 544.2 OR 544.21

**SUPERSTRUCTURE REHABILITATION NOTES**

- (1) BOLTS ARE MISSING AT THE LATERAL CONNECTION BRACKET (2 BOLTS). NEW 7/8" DIAMETER BOLTS CONFORMING TO THE REQUIREMENTS OF ITEM 550 SHALL FILL THESE HOLES. ALL COSTS SHALL BE PAID UNDER ITEM 1002.1, REPAIRS OR REPLACEMENTS AS NEEDED - BRIDGE STRUCTURES. NO OTHER STRUCTURAL REPAIRS ARE ANTICIPATED.
- (2) ITEM 538.6, BARRIER MEMBRANE, HEAT WELDED, MACHINE METHOD (F) SHALL BE LAPPED PER MANUFACTURER'S REQUIREMENTS. AT DECK ENDS, WHERE THE MEMBRANE WILL NOT LAP NEW OR EXISTING MEMBRANE, A SEALANT/REPAIR MASTIC COMPATIBLE WITH ITEM 538.6 SHALL BRIDGE ANY GAP BETWEEN THE EXISTING AND NEW MEMBRANE, OR BETWEEN THE NEW MEMBRANE AND THE END OF DECK WHEN THERE IS NO EXISTING MEMBRANE. ALL COSTS SHALL BE SUBSIDIARY TO ITEM 538.6.
- (3) DURING ALL REMOVAL AND REPAIR OPERATIONS EXTREME CARE SHALL BE TAKEN NOT TO DAMAGE EXISTING DECK REINFORCEMENT OR TOP FLANGES OF GIRDERS. ANY DAMAGE SHALL BE IMMEDIATELY REPORTED TO THE BUREAU OF BRIDGE DESIGN AND REPAIRED AS DIRECTED, AT THE CONTRACTOR'S EXPENSE.
- (4) DURING CONCRETE END OF DECK REMOVAL OPERATIONS, EXTREME CARE SHALL BE TAKEN NOT TO DAMAGE TOP FLANGES OF EXISTING GIRDERS. ANY DAMAGE SHALL BE IMMEDIATELY REPORTED TO THE BUREAU OF BRIDGE DESIGN AND REPAIRED AS DIRECTED, AT THE CONTRACTOR'S EXPENSE.
- (5) TO ACCOMPLISH THE PROPOSED EXPANSION JOINT REPAIRS, THE EXISTING DECK SHALL BE REMOVED TO LIMITS SHOWN IN THE PLANS UNDER ITEM 502., REMOVAL OF EXISTING BRIDGE STRUCTURE. ALL EXPOSED CONCRETE SURFACES OF THE DECK SHAL BE SAWCUT 1" DEEP TO PROVIDE CLEAN REMOVAL LINES (ALL COSTS INCLUDED IN ITEM 502.). NEW DECK END SHALL BE RECONSTRUCTED WITH ITEM 520.0201. PRIOR TO PLACING NEW CONCRETE, THE REMOVAL SURFACES SHALL BE BLAST CLEANED AND SATURATED SURFACE DRY (ALL COSTS INCLUDED IN ITEM 520.0201).
- (6) AFTER REMOVAL OF EXISTING PAVEMENT AND MEMBRANE, THE EXISTING CONCRETE BRIDGE DECK SHALL BE "SOUNDED" TO DETERMINE AREAS REQUIRING PARTIAL AND FULL DEPTH DECK REPAIRS. ALL COSTS TO BE INCLUDED IN ITEM 511.02 OR ITEM 511.03.
- (7) DETERIORATED AREAS OF DECK SHALL BE PATCHED WITH CONCRETE CLASS AA. PRIOR TO PLACING NEW CONCRETE, THE PREPARED AREAS SHALL BE BLAST CLEANED AND SATURATED SURFACE DRY (ALL COSTS SUBSIDIARY TO ITEM 520.01 OR 520.0201).
- (8) UNLESS OTHERWISE NOTED, HOLES DRILLED INTO EXISTING CONCRETE SHALL BE DRILLED 1/2" DIAMETER LARGER THAN THE BAR DIAMETER AND GROUTED WITH AN APPROVED HIGH STRENGTH, NON-SHRINK CEMENTITIOUS GROUT. ALL COSTS FOR DRILLING AND GROUTING SHALL BE PAID FOR UNDER ITEM 520.0201.
- (9) EXPOSED SURFACES OF EXISTING ABUTMENTS, WINGS, BACKWALLS, AND BRIDGE SEATS SHALL BE WASHED. SUBSIDIARY TO ITEM 534.3, IN SUCH A MANNER THAT OVERSPRAY INTO SURFACE WATERS IS KEPT TO A MINIMUM. IF THE WATER BEADS, NO COATING NEEDS TO BE APPLIED. IF THE WATER DOES NOT BEAD COAT THE SURFACE WITH ITEM 534.3, WATER REPELLENT (SILANE-SILOXANE), APPLICATION RATE = 150 SF/GAL.
- (10) RESET GRANITE APPROACH CURB AS SHOWN ON THE PLANS, ITEM 609.5.



<b>STATE OF NEW HAMPSHIRE</b>									
<b>DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN</b>									
TOWN	WALPOLE, NH - ROCKINGHAM, VT	BRIDGE NO.	058/043	STATE PROJECT	42277				
LOCATION	CHURCH STREET OVER CONNECTICUT RIVER								
<b>PROJECT NOTES</b>									BRIDGE SHEET
REVISIONS AFTER PROPOSAL		BY	DATE	CHECKED	BY	DATE			
		DESIGNED	JDG	05/2020	CHECKED	GAB	05/2020	2 OF 19	
		DRAWN	JTB	05/2020	CHECKED	JDG	05/2020	FILE NUMBER	
		QUANTITIES	JDG	05/2020	CHECKED	SRW	05/2020	136-3-2	
		ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS		
		REV. DATE		X-A004(799)		7	31		

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC	06_BridgeNotes 1	AS NOTED

**QUANTITIES**

ITEM NO.	ITEM DESCRIPTION	UNIT	VT QUANTITY	NH QUANTITY	TOTAL QUANTITY
203.11	COMMON EXCAVATION - LRS	CY	---	10	10
304.301	CRUSHED GRAVEL	CY	---	20	20
403.119	HOT BITUMINOUS PAVEMENT, MACHINE METHOD, HIGH STRENGTH	T	105	205	310
403.12	HOT BITUMINOUS PAVEMENT, HAND METHOD	T	---	2	2
403.61	PAVEMENT JOINT ADHESIVE (BRIDGE BASE)	LF	1600	4035	5635
403.919	HOT BITUMINOUS BRIDGE PAVMENT, 1" HIGH STRENGTH BASE COURSE	T	42	119	161
403.99	TEMPORARY BITUMINOUS PAVEMENT	T	5	5	10
410.22	ASPHALT EMULSION FOR TACK COAT	GAL	75	175	250
417	COLD PLANING BITUMINOUS SURFACES	SY	248	149	397
502	REMOVAL OF EXISTING BRIDGE STRUCTURE	U	0.26	0.74	1
504.1	COMMON BRIDGE EXCAVATION (F)	CY	0	30	30
511.0001	CONCRETE BRIDGE DECK PAVEMENT REMOVAL (F)	SY	731	2080	2811
511.02	PREPARATION FOR PARTIAL DEPTH CONCRETE BRIDGE DECK REPAIRS	SY	166	474	640
511.03	PREPARATION FOR FULL DEPTH CONCRETE BRIDGE DECK REPAIRS	SY	31	89	120
512.02	PREPARATION FOR CONCRETE REPAIRS, CLASS II	SY	1	4	5
520.01	CONCRETE CLASS AA	CY	19	55	74
520.02	CONCRETE CLASS AA ABOVE FOOTINGS (F)	CY	18	21	39
520.0201	CONCRETE CLASS AA ABOVE FOOTINGS	CY	10	27	37
534.3	WATER REPELLENT (SILANE-SILOXANE)	GAL	30	66	96
538.2	BARRIER MEMBRANE, PEEL AND STICK - VERTICAL SURFACES (F)	SY	0	13	13
538.6	BARRIER MEMBRANE, HEAT WELDED - MACHINE METHOD (F)	SY	731	2081	2812
540.511	GALVANIC CORROSION PROTECTION SYSTEM (DISTRIBUTED ANODES)	LF	49	141	190
540.512	GALVANIC CORROSION PROTECTION SYSTEM (DISCRETE ANODES)	EA	741	2109	2850
541.5	PVC WATERSTOPS, NH TYPE 5 (F)	LF	---	49	49
544.2	REINFORCING STEEL, EPOXY COATED (F)	LB	1805	4047	5852
544.21	REINFORCING STEEL, EPOXY COATED, MECHANICAL CONNECTORS (F)	LB	402	624	1026
559.41	ASPHALTIC PLUG FOR CRACK CONTROL (F)	LF	13	36	49
561.1001	PREFABRICATED STRIP SEAL EXPANSION JOINT (F)	LF	13	36	49
561.3001	PREFABRICATED FINGER EXPANSION JOINT (F)	LF	13	36	49
562.1	SILICONE JOINT SEALANT (F)	LF	303	107	410
563.073	ALUMINUM POST ASSEMBLY FOR F RAIL (3-BAR)	EA	4	2	6
563.8	RESETTING BRIDGE RAIL	LF	4	2	6
565.802	ADJUSTING BRIDGE APPROACH RAIL	U	---	2	2

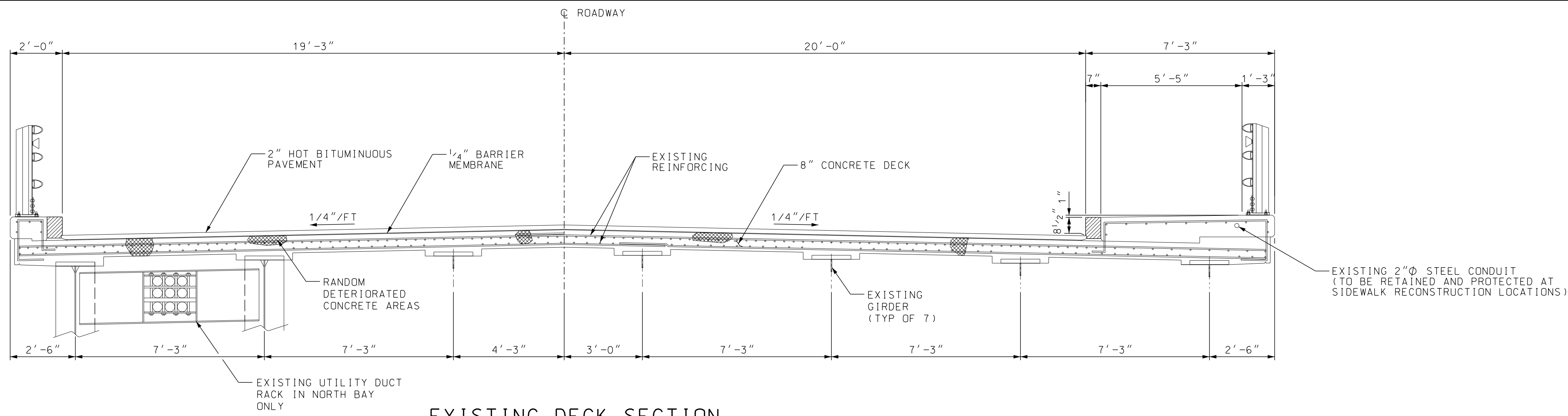
**QUANTITIES (CONTINUED)**

			VT	NH	TOTAL
609.5	RESET GRANITE CURB	LF	116	60	176
615.0201	TRAFFIC SIGN TYPE B	SF	---	21	21
615.023	REMOVING TRAFFIC SIGN TYPE B	U	---	3	3
615.0301	TRAFFIC SIGN TYPE C	SF	---	66	66
615.0501	TRAFFIC SIGN TYPE BB	SF	---	46	46
615.053	REMOVING TRAFFIC SIGN TYPE BB	U	---	1	1
615.0601	TRAFFIC SIGN TYPE CC	SF	---	18	18
616.161	TRAFFIC SIGNALS (TEMPORARY)	U	0.26	0.74	1
618.61	UNIFORMED OFFICER WITH VEHICLE	\$	0.26	0.74	1
618.7	FLAGGERS	HR	208	592	800
619.1	MAINTENANCE OF TRAFFIC	U	0.26	0.74	1
619.25	PORTABLE CHANGEABLE MESSAGE SIGN	U	2	2	4
628.2	SAWED BITUMINOUS PAVEMENT	LF	141	45	186
628.22	SAWED BITUMINOUS PAVEMENT (BRIDGE)	LF	308	976	1284
632.0104	RETROREFLECTIVE PAINT PAVE. MARKING, 4" LINE	LF	850	2400	3250
632.02	RETROREFLECTIVE PAINT PAVE. MARKING, SYMBOL OR WORD	SF	---	12	12
632.1104	PREFORMED RETROREFLECTIVE TAPE, TYPE I (REMOVABLE) 4" LINE	LF	1450	4120	5570
632.1118	PREFORMED RETROREFLECTIVE TAPE, TYPE I (REMOVABLE) 18" LINE	LF	10	30	40
632.2118	PREFORMED RETROREFLECTIVE TAPE TYPE II (NON-REMOVABLE). 18" LINE	LF	3	10	13
632.2124	PREFORMED RETROREFLECTIVE TAPE TYPE II (NON-REMOVABLE). 24" LINE	LF	4	12	16
632.931	BLACKOUT PAVEMENT MARKING LINE, 12" WIDE & UNDER	LF	75	215	290
641	LOAM	CY	0	10	10
645.3	EROSION STONE	TON	---	100	100
645.512	COMPOST SOCK FOR PERIMETER BERM	LF	---	100	100
670.95	TEMPORARY SAFETY FENCE	LF	364	1036	1400
692	MOBILIZATION	U	0.26	0.74	1
697.31	PROJECT OPERATIONS PLAN	U	0.26	0.74	1
698.12	FIELD OFFICE TYPE B	MON	2	6	8
699	MISCELLANEOUS TEMPORARY EROSION AND SEDIMENT CONTROL	\$	0.26	0.74	1
1002.1	REPAIRS OR REPLACEMENTS AS NEEDED - BRIDGE STRUCTURES	\$	0.26	0.74	1
1008.521	ALTERATIONS AND ADDITIONS AS NEEDED - TEMPORARY PEDESTRIAN ACCOMODATION	\$	0.26	0.74	1
1010.15	FUEL ADJUSTMENT	\$	0.26	0.74	1



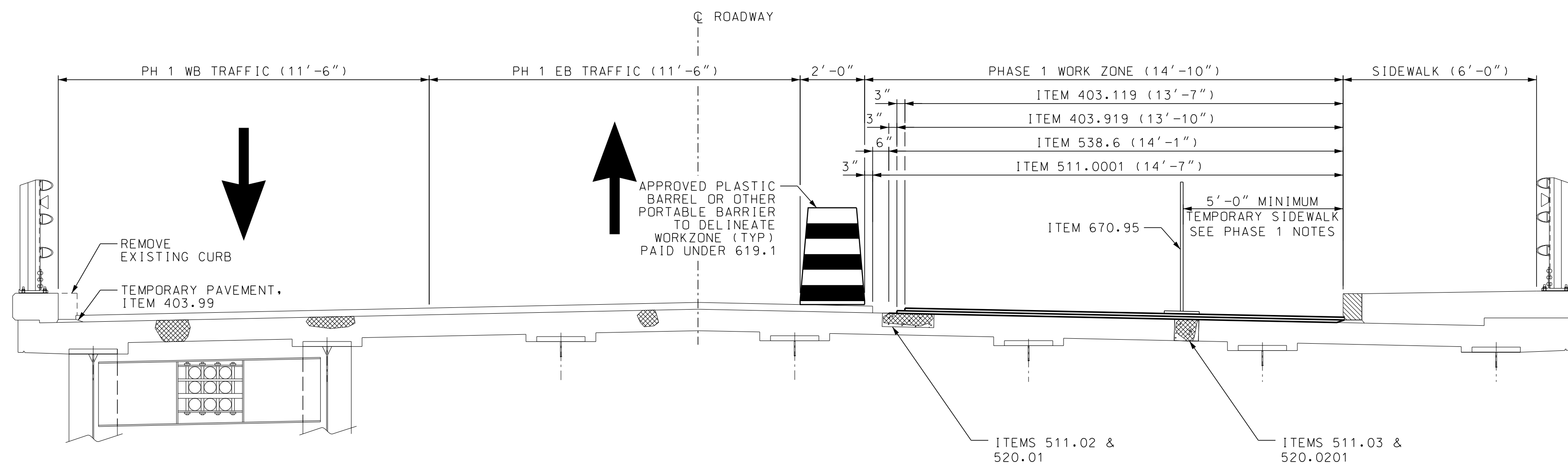
<b>STATE OF NEW HAMPSHIRE</b> DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN					
TOWN	WALPOLE, NH - ROCKINGHAM, VT	BRIDGE NO.	058/043	STATE PROJECT	42277
LOCATION	CHURCH STREET OVER CONNECTICUT RIVER				
<b>SUMMARY OF QUANTITIES</b>					BRIDGE SHEET 3 OF 19
DESIGNED	JDG	DATE	05/2020	CHECKED	SRW
DRAWN				CHECKED	
QUANTITIES				CHECKED	
ISSUE DATE		FEDERAL PROJECT NO.	X-A004(799)	SHEET NO.	8
REV. DATE				TOTAL SHEETS	31
SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE			
BRC	02a_Quantities	AS NOTED			





**EXISTING DECK SECTION**

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

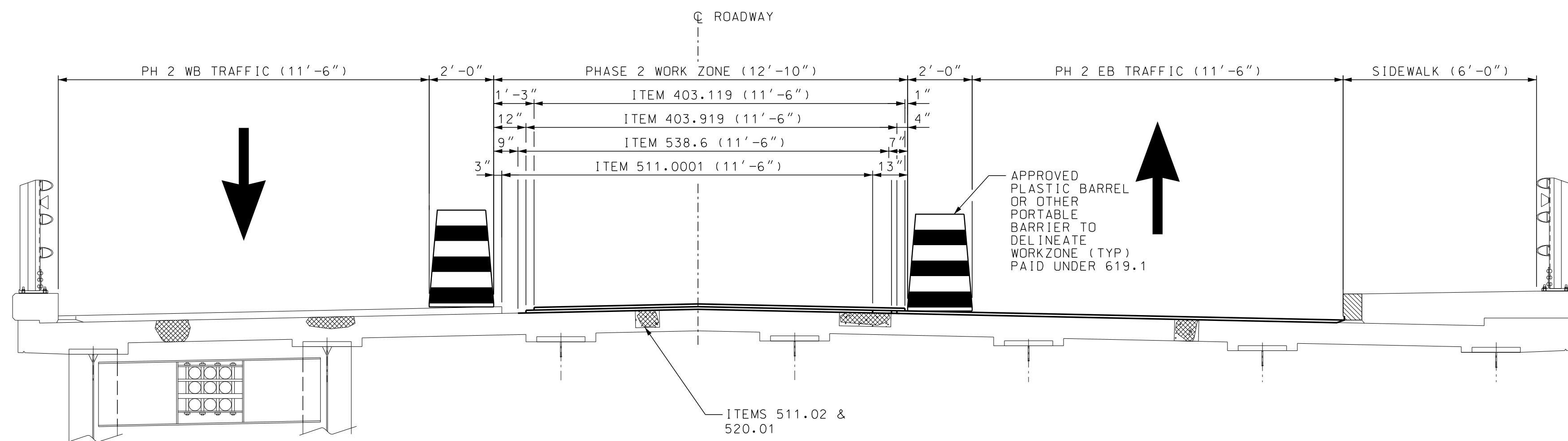


**PHASE 1 CONSTRUCTION**

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

**PHASE 1**

1. REMOVE NORTHERN GRANITE CURB AND PLACE TEMPORARY PAVEMENT
2. INSTALL TRAFFIC CONTROL AND DIVERT ROADWAY AND PEDESTRIAN TRAFFIC TO TEMPORARY LOCATIONS. DETOUR TRUCK TRAFFIC
3. THE TEMPORARY SIDEWALK SHALL MEET ADA REQUIREMENTS
4. A TEMPORARY WOODEN BRIDGE OR STEEL PLATE MAY BE UTILIZED OVER THE PEDESTRIAN FACILITIES TO AVOID A FIELD SPLICE
5. ANY OPEN AREAS IN THE WORKZONE SHALL BE PLATED WHEN THE CONTRACTOR IS NOT PRESENT
6. COMPLETE AND OPEN SIDEWALK BEFORE PAVING AND MEMBRANE OPERATIONS BEGIN



**PHASE 2 CONSTRUCTION**

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

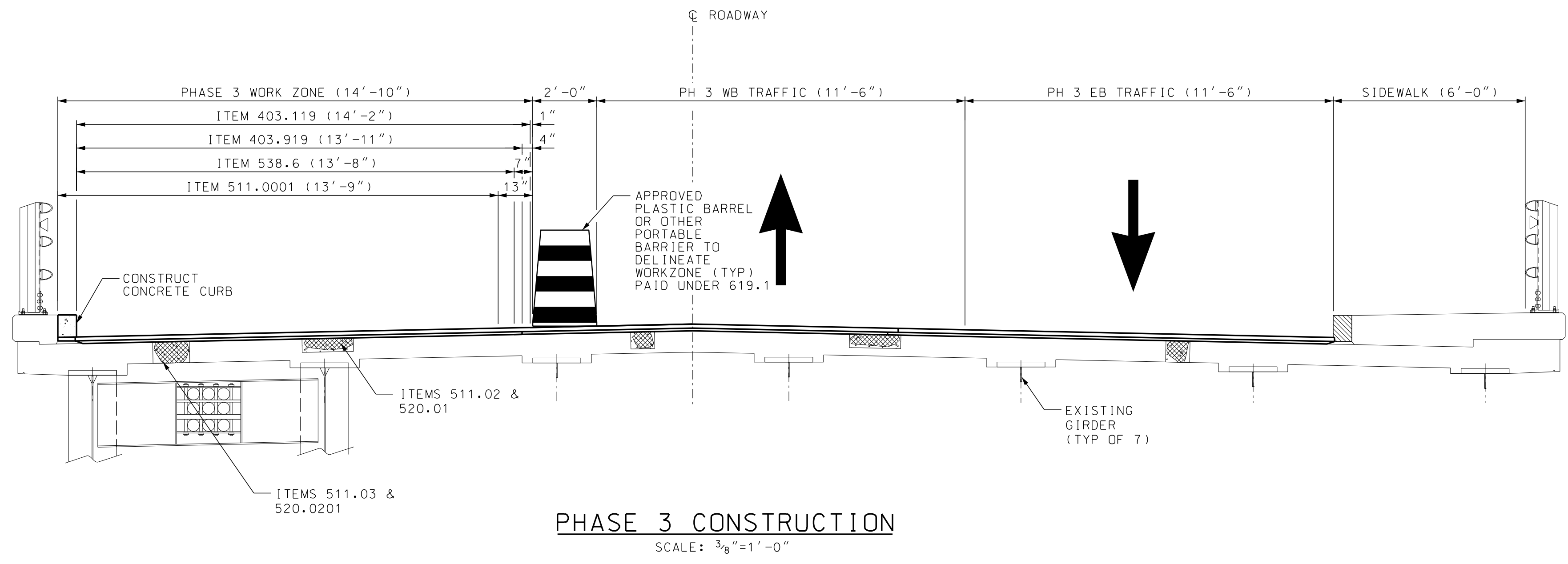
**PHASE 2**

1. MAINTAIN WESTBOUND TRAFFIC IN NORTHERN TEMPORARY LANE.
2. SHIFT EASTBOUND TRAFFIC TO SOUTHERN TEMPORARY LANE.
3. MAINTAIN PEDESTRIAN TRAFFIC ON SIDEWALK.
4. MAINTAIN TRUCK DETOUR.

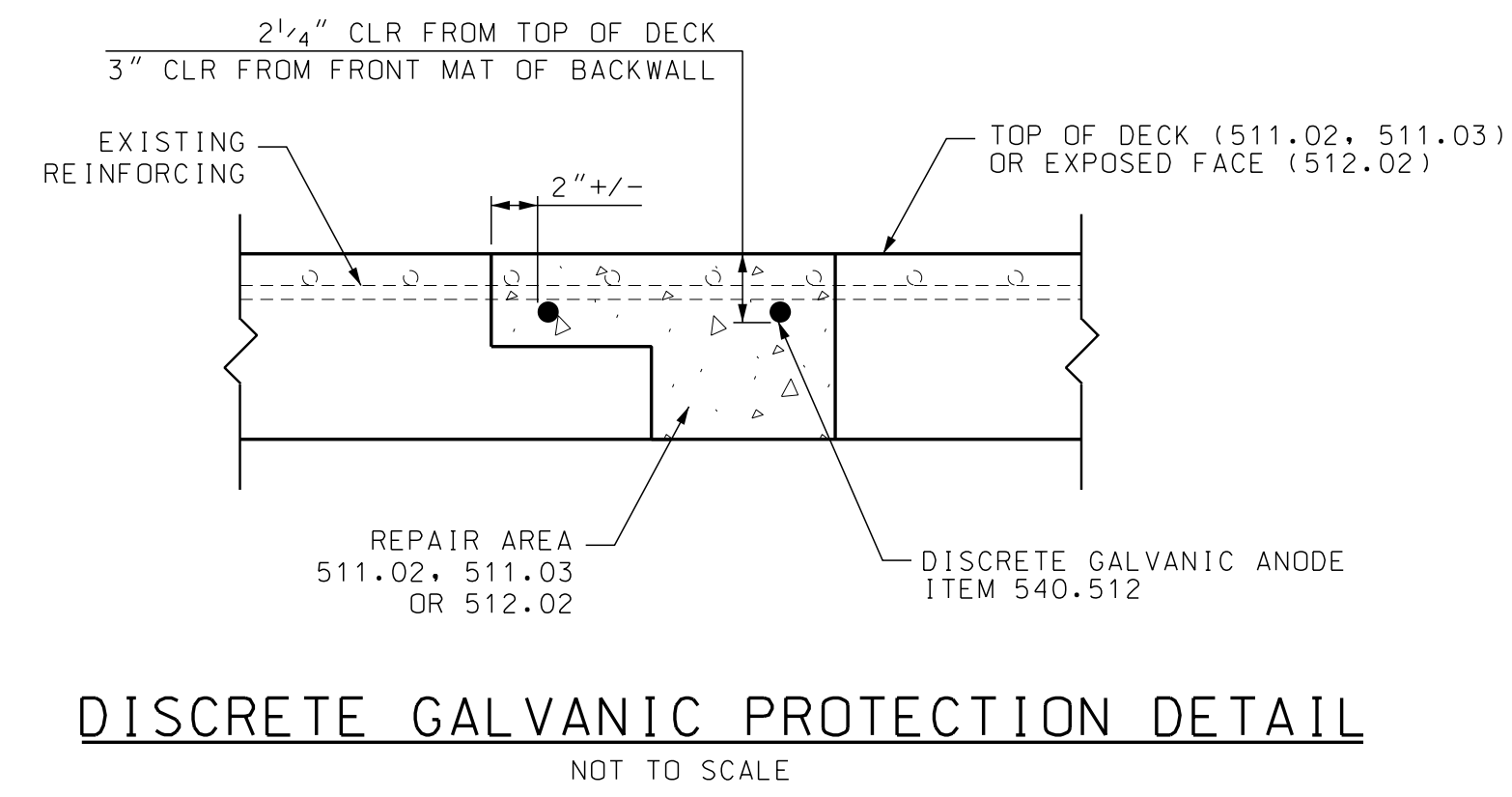
STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	WALPOLE, NH - ROCKINGHAM, VT			BRIDGE NO.	058/043		STATE PROJECT	42277	
LOCATION CHURCH STREET OVER CONNECTICUT RIVER									
DECK PHASING 1									
REVISIONS AFTER PROPOSAL		BY	DATE	CHECKED	BY	DATE	BRIDGE SHEET		
		DESIGNED	ISM	04/2019	JDG	05/2020	4 OF 19		
		DRAWN	JTB	05/2020	JDG	05/2020	FILE NUMBER		
		QUANTITIES	JDG	05/2020	SRW	05/2020	136-3-2		
		ISSUE DATE	FEDERAL PROJECT NO.			SHEET NO.		TOTAL SHEETS	
		REV. DATE	X-A004(799)			9		31	



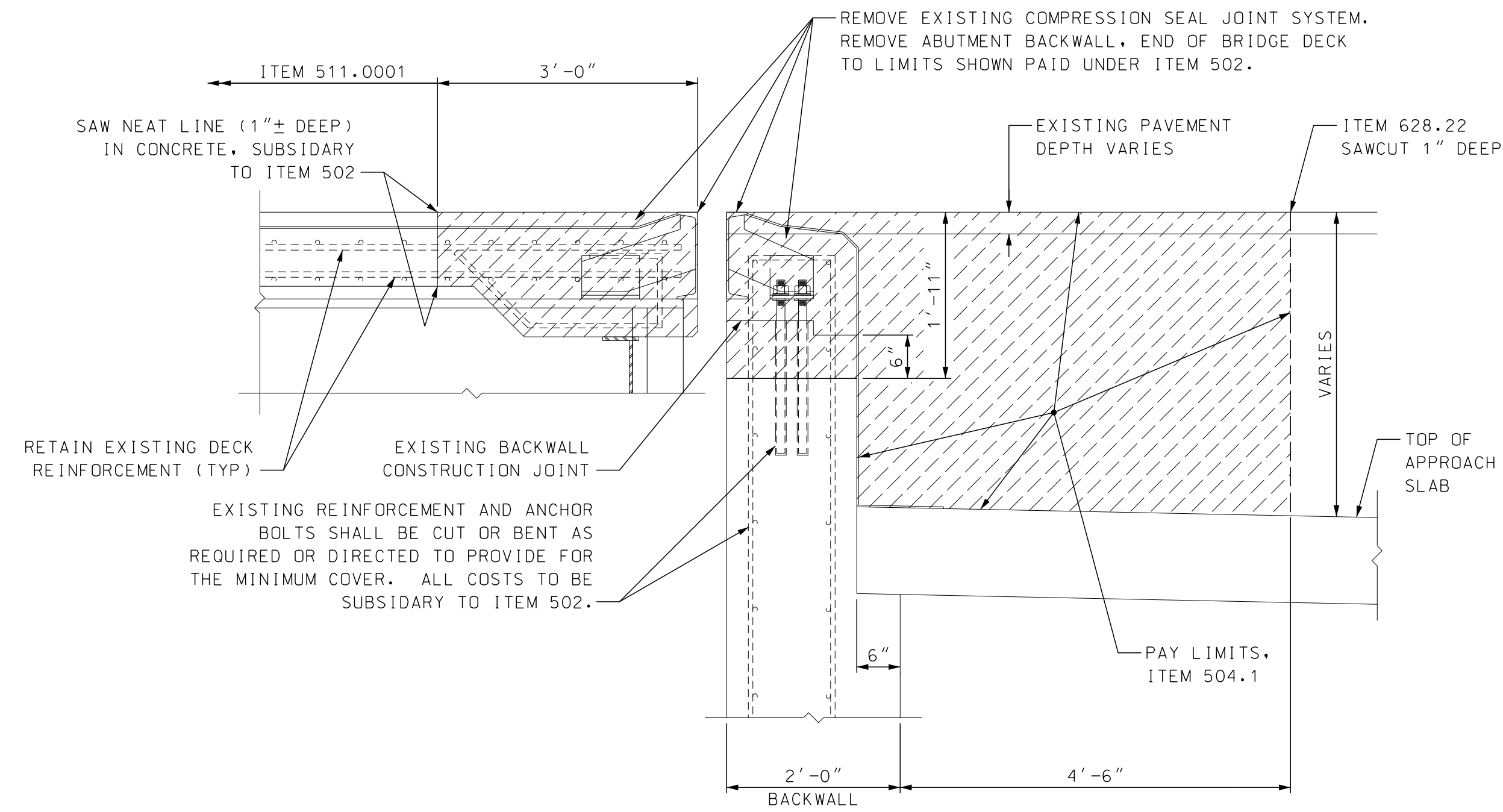
SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
HWY	42277typ	AS NOTED



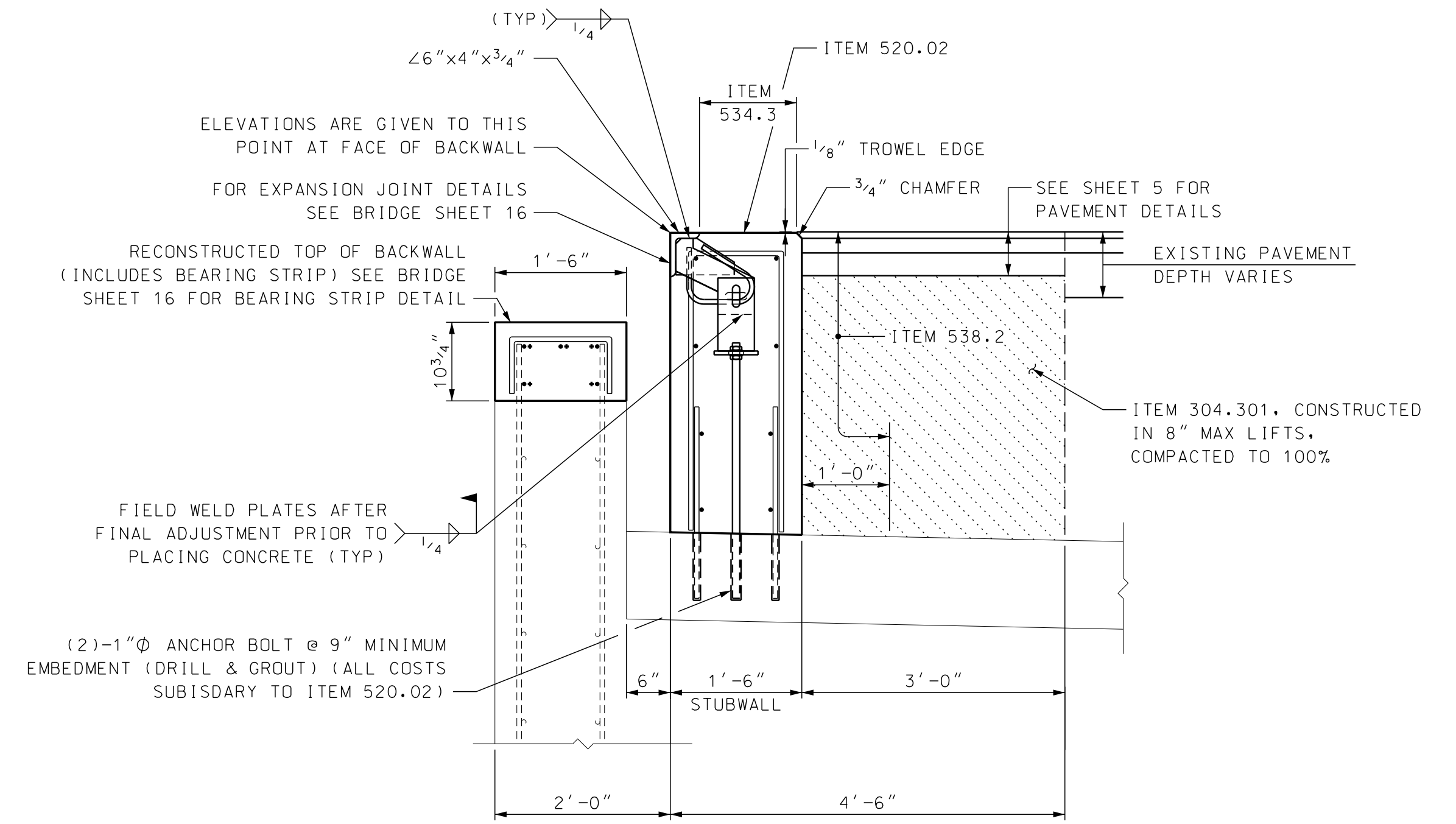
- PHASE 3
1. SHIFT WESTBOUND TRAFFIC TO CENTER TEMPORARY LANE.
  2. MAINTAIN EASTBOUND TRAFFIC IN TEMPORARY LANE.
  3. MAINTAIN PEDESTRIAN TRAFFIC ON SIDEWALK.
  4. MAINTAIN TRUCK DETOUR.



STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	WALPOLE, NH - ROCKINGHAM, VT	BRIDGE NO.	058/043	STATE PROJECT	42277	BRIDGE SHEET			
LOCATION	CHURCH STREET OVER CONNECTICUT RIVER					5 OF 19			
DECK PHASING 2									
REVISIONS AFTER PROPOSAL	BY	DATE	CHECKED	BY	DATE	FILE NUMBER			
	DESIGNED	ISM	04/2019	JDG	05/2020	136-3-2			
	DRAWN	JTB	05/2020	JDG	05/2020	TOTAL SHEETS			
	QUANTITIES	JDG	05/2020	SRW	05/2020	31			
	ISSUE DATE		FEDERAL PROJECT NO.	SHEET NO.					
	REV. DATE		X-A004(799)	10					
SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE							
HWY	42277typ	AS NOTED							



**SECTION A-A REMOVAL**  
SCALE: 3/4" = 1'-0"



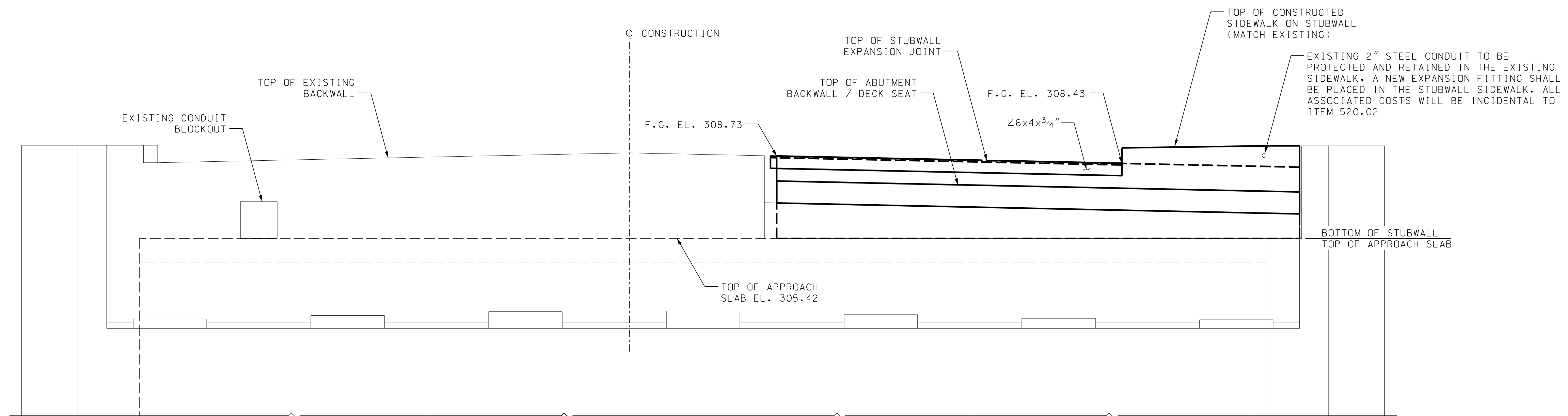
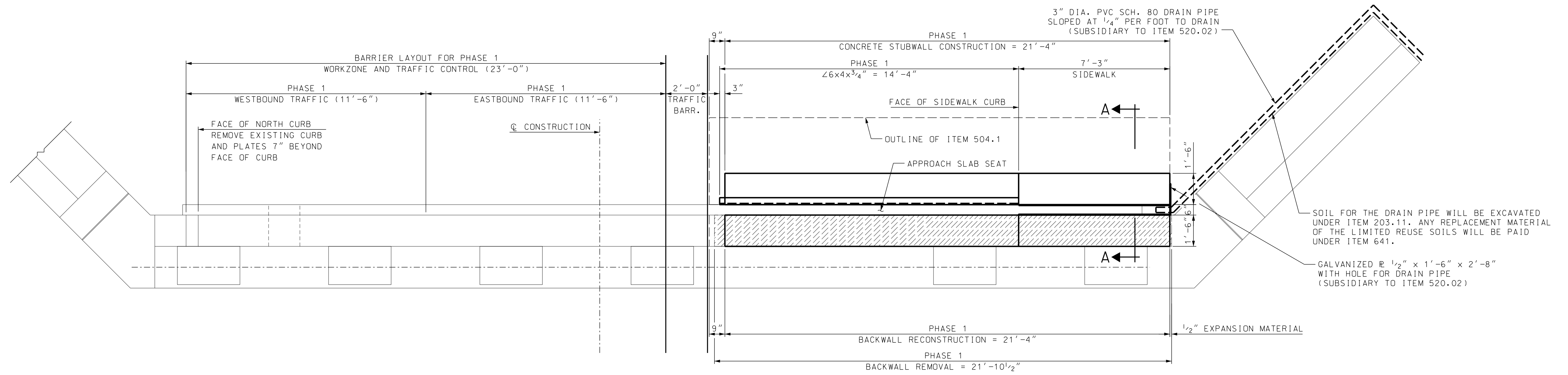
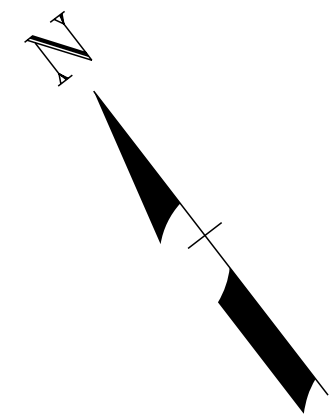
**SECTION A-A RECONSTRUCTION**  
SCALE: 3/4" = 1'-0"

**NOTE:**

- FOR LOCATION OF SECTION A-A REMOVAL AND SECTION A-A RECONSTRUCTION SEE BRIDGE SHEET 7 THROUGH 9.



STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	WALPOLE, NH - ROCKINGHAM, VT	BRIDGE NO.	058/043	STATE PROJECT	42277	BRIDGE SHEET			
LOCATION	CHURCH STREET OVER CONNECTICUT RIVER					6 OF 19			
ABUTMENT B - STUBWALL SECTIONS									
REVISIONS AFTER PROPOSAL		BY	DATE	CHECKED	BY	DATE	FILE NUMBER		
		DESIGNED	JDG	05/2020	JDG	05/2020	136-3-2		
		DRAWN	JTB	05/2020	JDG	05/2020	TOTAL SHEETS		
		QUANTITIES	JDG	05/2020	SRW	05/2020	31		
SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE	ISSUE DATE	FEDERAL PROJECT NO.	SHEET NO.				
BRC	42277phasing	AS NOTED	REV. DATE	X-A004(799)	11				



- NOTES:**
1. F.G. ELEVATIONS ARE AT FACE OF STUBWALL.
  2. FOR SECTION A-A SEE BRIDGE SHEET 6.

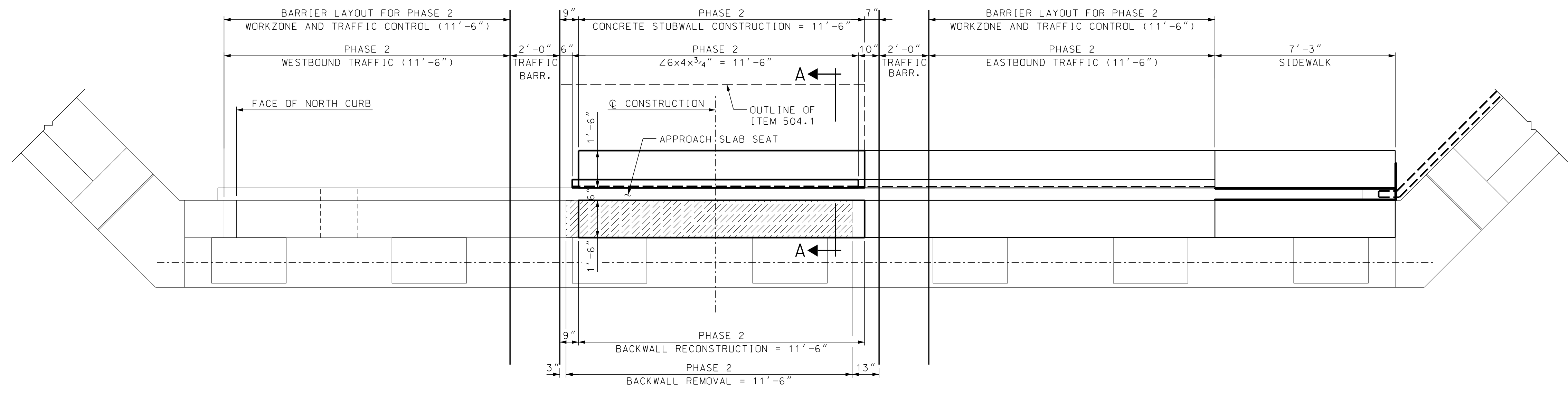
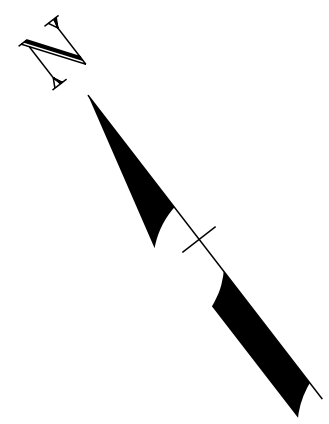
INDICATES BACKWALL REMOVAL



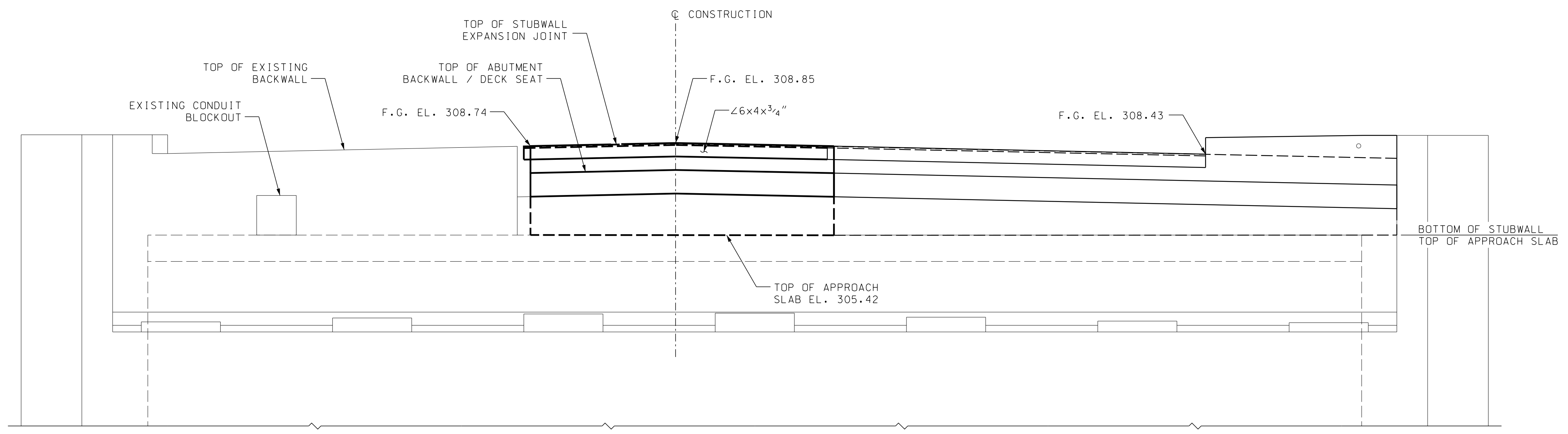
STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	WALPOLE, NH - ROCKINGHAM, VT	BRIDGE NO.	058/043	STATE PROJECT	42277	BRIDGE SHEET			
LOCATION	CHURCH STREET OVER CONNECTICUT RIVER					7 OF 19			
ABUTMENT B - STUBWALL PHASING 1 OF 3									
REVISIONS AFTER PROPOSAL		BY	DATE	CHECKED	BY	DATE	FILE NUMBER		
		DESIGNED	JDG	05/2020	JDG	05/2020	136-3-2		
		DRAWN	JTB	05/2020	JDG	05/2020	TOTAL SHEETS		
		QUANTITIES	JDG	05/2020	SRW	05/2020	31		
		ISSUE DATE	FEDERAL PROJECT NO.		SHEET NO.		TOTAL SHEETS		
		REV. DATE	X-A004(799)		12		31		

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
BRC	42277phasing	AS NOTED





PHASE 2 STUBWALL PLAN - ABUTMENT B  
SCALE: 3/8"=1'-0"



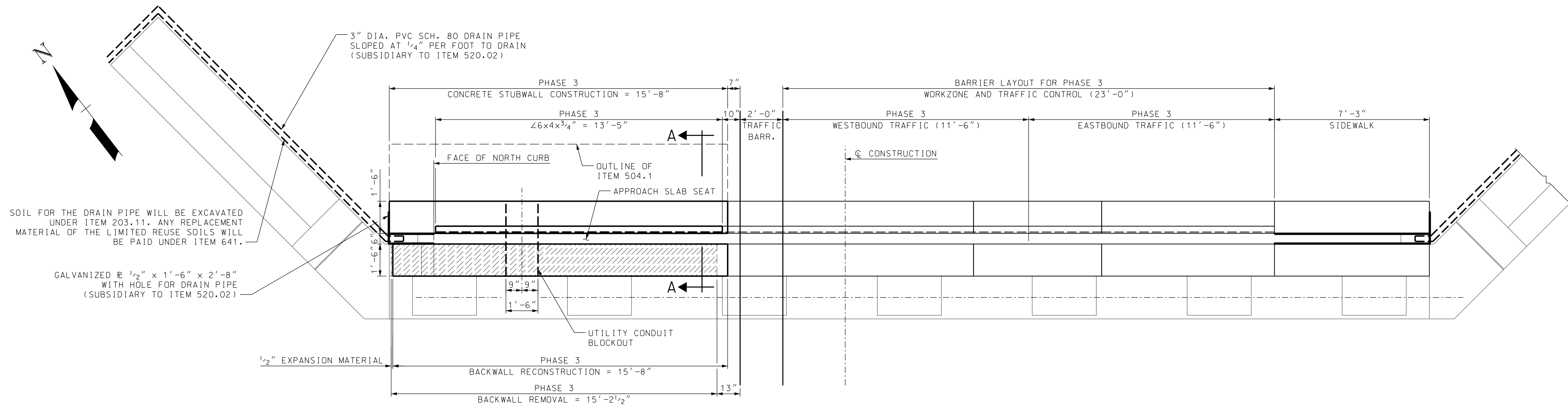
PHASE 2 STUBWALL ELEVATION - ABUTMENT B  
SCALE: 3/8"=1'-0"

- NOTES:
1. F.G. ELEVATIONS ARE AT FACE OF STUBWALL.
  2. FOR SECTION A-A SEE BRIDGE SHEET 6.
- INDICATES BACKWALL REMOVAL

<b>STATE OF NEW HAMPSHIRE</b>									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	WALPOLE, NH - ROCKINGHAM, VT	BRIDGE NO.	058/043	STATE PROJECT	42277				
LOCATION	CHURCH STREET OVER CONNECTICUT RIVER								
<b>ABUTMENT B - STUBWALL PHASING 2 OF 3</b>									
REVISIONS AFTER PROPOSAL		BY	DATE	CHECKED	BY	DATE	BRIDGE SHEET		
		DESIGNED	JDG	05/2020	JDG	05/2020	8 OF 19		
		DRAWN	JTB	05/2020	JDG	05/2020	FILE NUMBER		
		QUANTITIES	JDG	05/2020	SRW	05/2020	136-3-2		
		ISSUE DATE	FEDERAL PROJECT NO.			SHEET NO.	TOTAL SHEETS		
		REV. DATE	X-A004(799)			13	31		

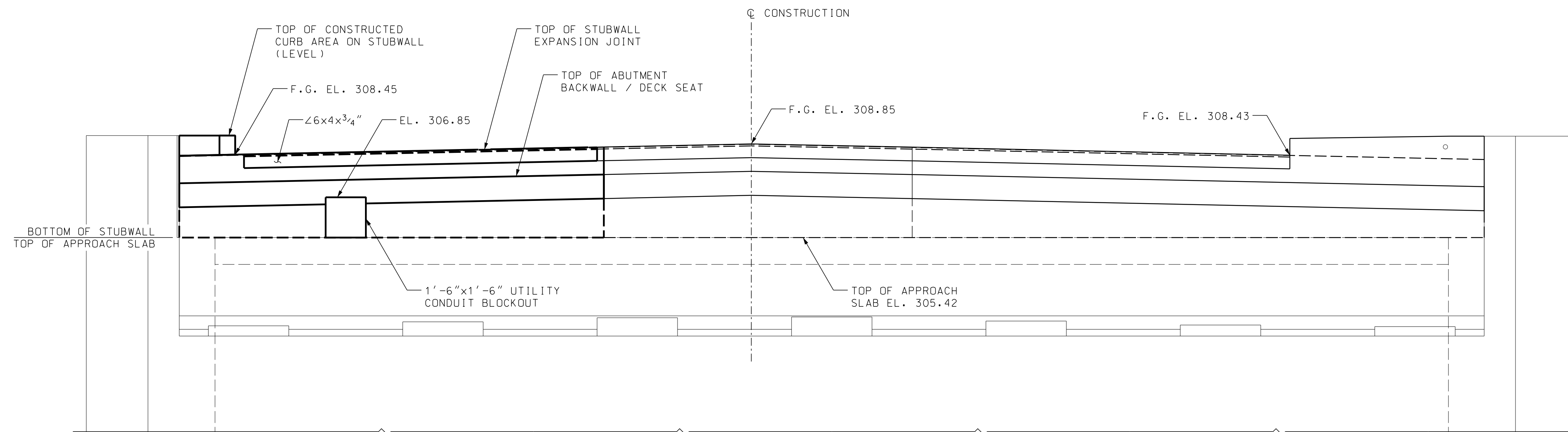


SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC	42277phasing	AS NOTED



PHASE 3 STUBWALL PLAN - ABUTMENT B

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



PHASE 3 STUBWALL ELEVATION - ABUTMENT B

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

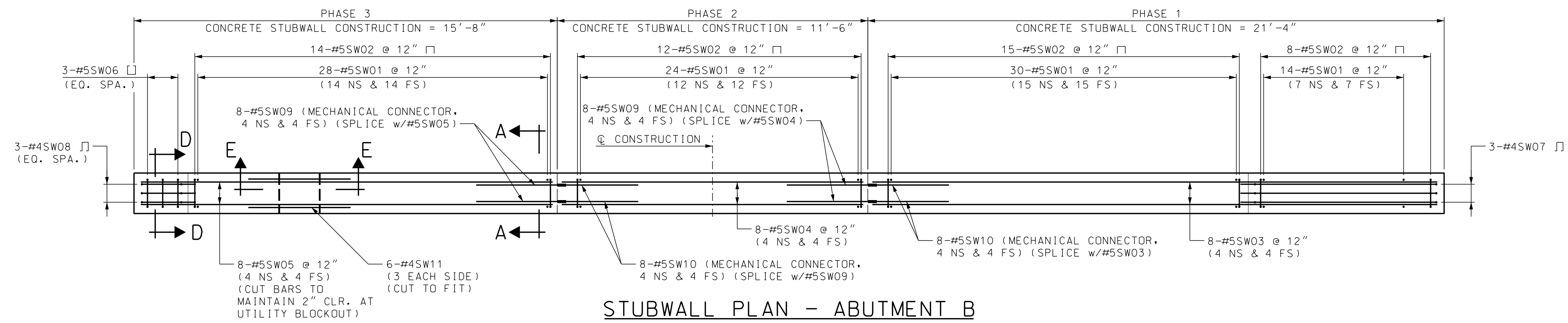
- NOTES:
1. F.G. ELEVATIONS ARE AT FACE OF STUBWALL.
  2. FOR SECTION A-A SEE BRIDGE SHEET 6.

INDICATES BACKWALL REMOVAL



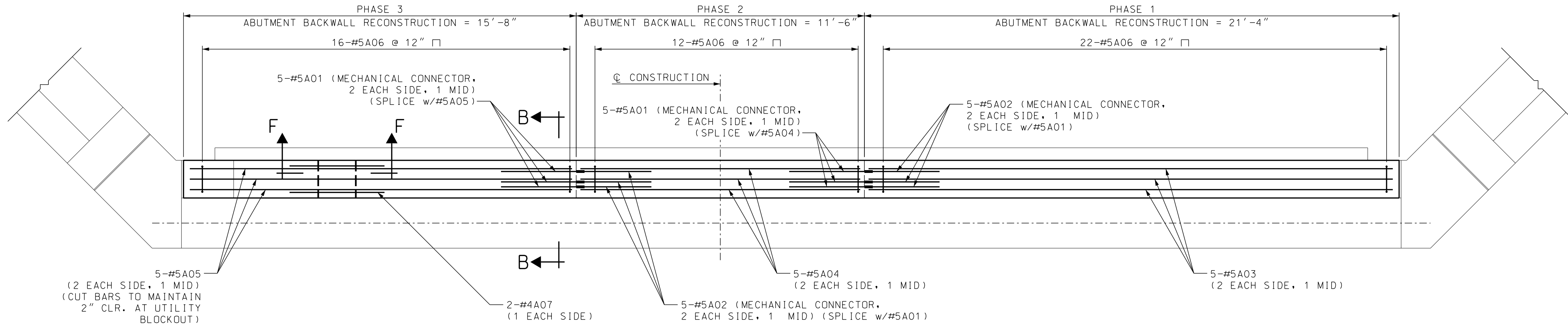
STATE OF NEW HAMPSHIRE					
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN					
TOWN	WALPOLE, NH - ROCKINGHAM, VT	BRIDGE NO.	058/043	STATE PROJECT	42277
LOCATION CHURCH STREET OVER CONNECTICUT RIVER					
ABUTMENT B - STUBWALL PHASING 3 OF 3					BRIDGE SHEET
REVISIONS AFTER PROPOSAL					9 OF 19
DESIGNED	JDG	05/2020	CHECKED	JDG	05/2020
DRAWN	JTB	05/2020	CHECKED	JDG	05/2020
QUANTITIES	JDG	05/2020	CHECKED	SRW	05/2020
ISSUE DATE			FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
REV. DATE			X-A004(799)	14	31

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
BRC	42277phasing	AS NOTED



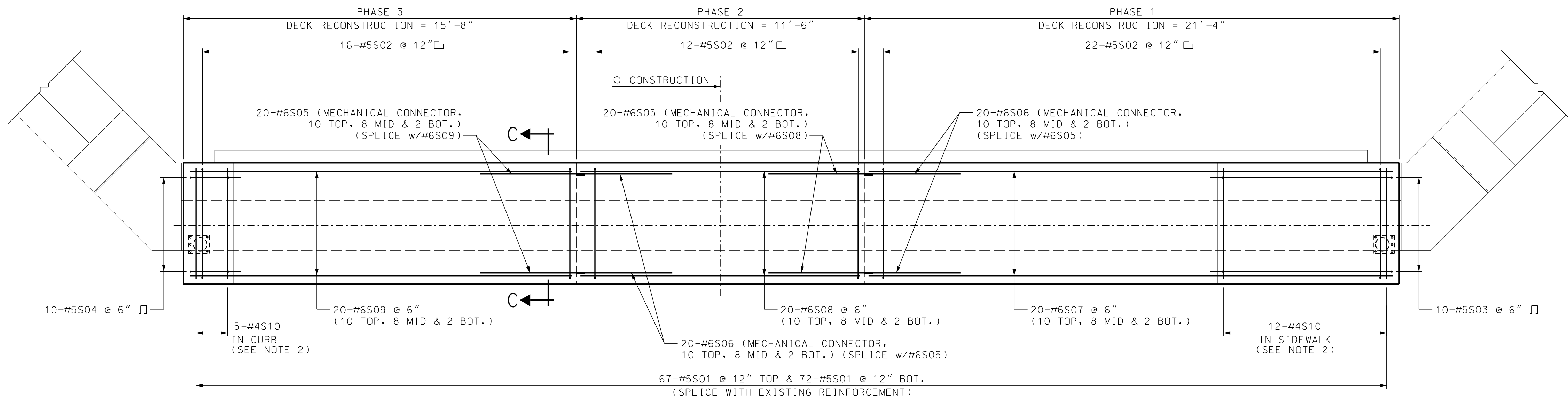
**STUBWALL PLAN - ABUTMENT B**

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



**ABUTMENT BACKWALL PLAN - ABUTMENT B**

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



**DECK PLAN - ABUTMENT B**

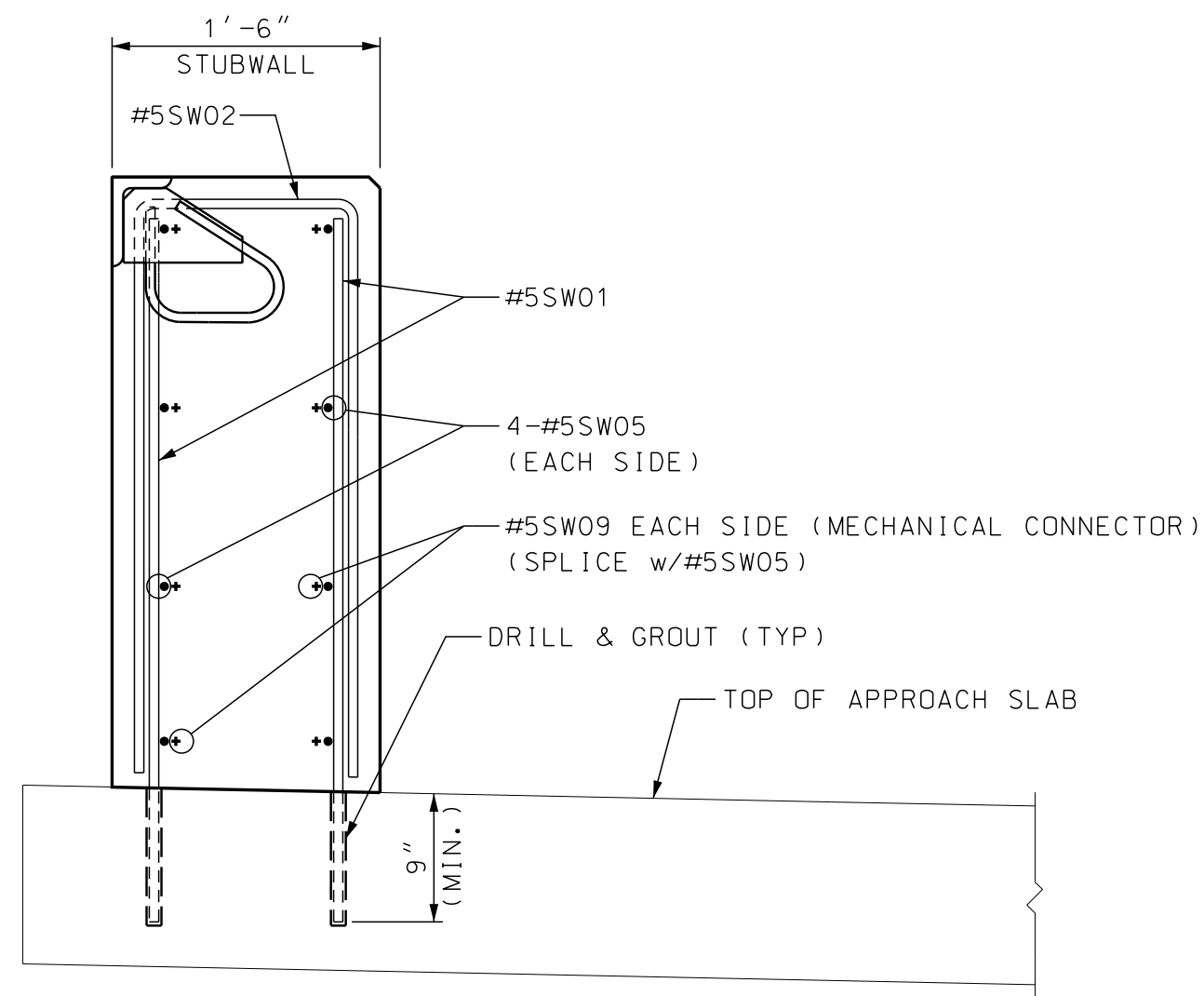
SCALE: 3/8"=1'-0"

- NOTE:
- FOR SECTION A-A, B-B, C-C, D-D, E-E & F-F SEE BRIDGE SHEET 11.
  - SEE BRIDGE SHEET 12 SECTION B-B FOR SIDEWALK AND CURB REINFORCING PLACEMENT.

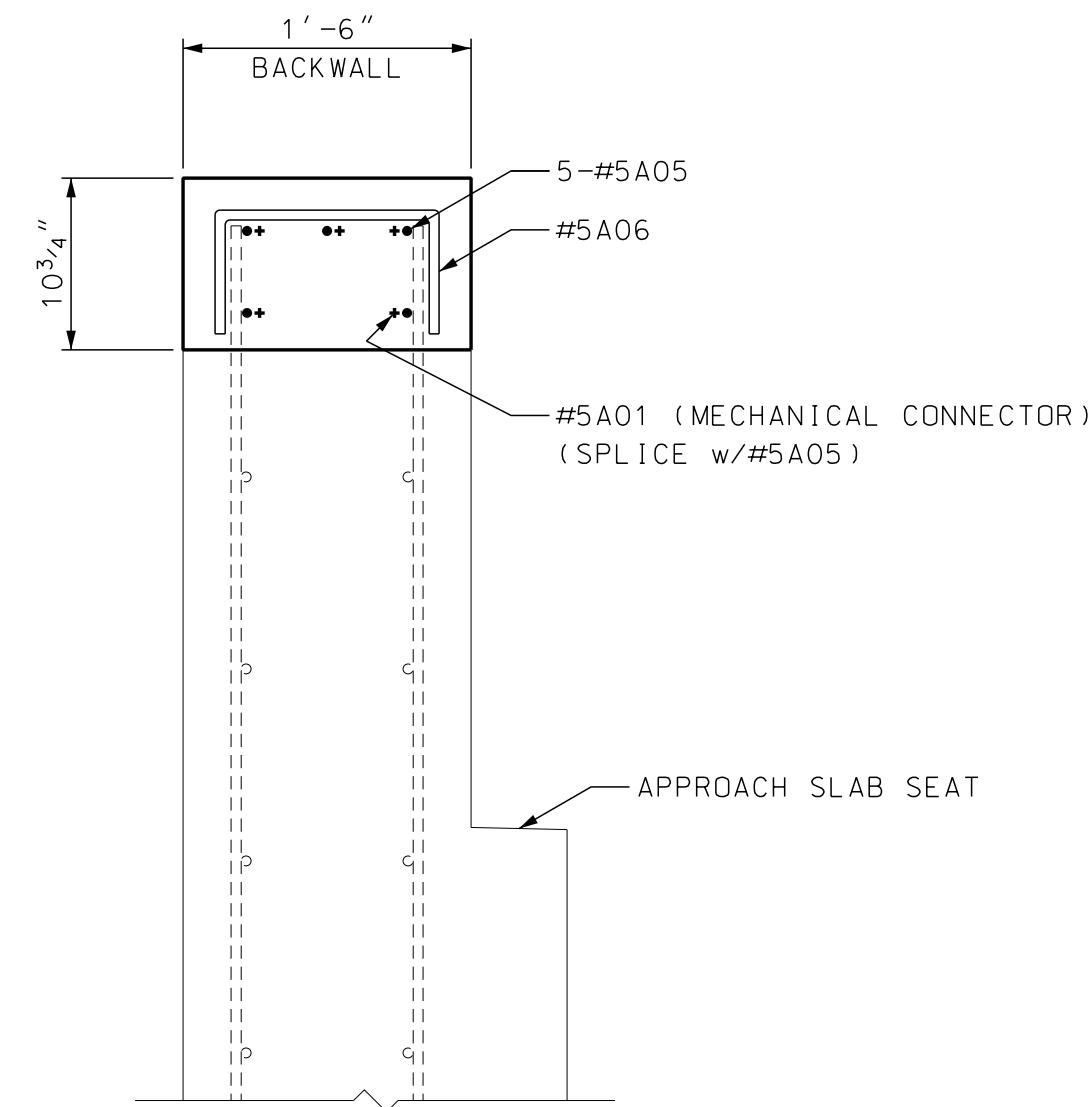
<b>STATE OF NEW HAMPSHIRE</b>									
<b>DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN</b>									
TOWN	WALPOLE, NH - ROCKINGHAM, VT			BRIDGE NO.	058/043		STATE PROJECT	42277	
LOCATION	CHURCH STREET OVER CONNECTICUT RIVER								
<b>ABUTMENT B - STUBWALL REINFORCEMENT 1 OF 2</b>									
REVISIONS AFTER PROPOSAL				BY	DATE	CHECKED	BY	DATE	BRIDGE SHEET
				JDG	05/2020	JDG	JDG	05/2020	10 OF 19
				JTB	05/2020	JDG	JDG	05/2020	FILE NUMBER
				JDG	05/2020	SRW	SRW	05/2020	136-3-2
				ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	
						X-A004(799)		15	
				REV. DATE				TOTAL SHEETS	
								31	



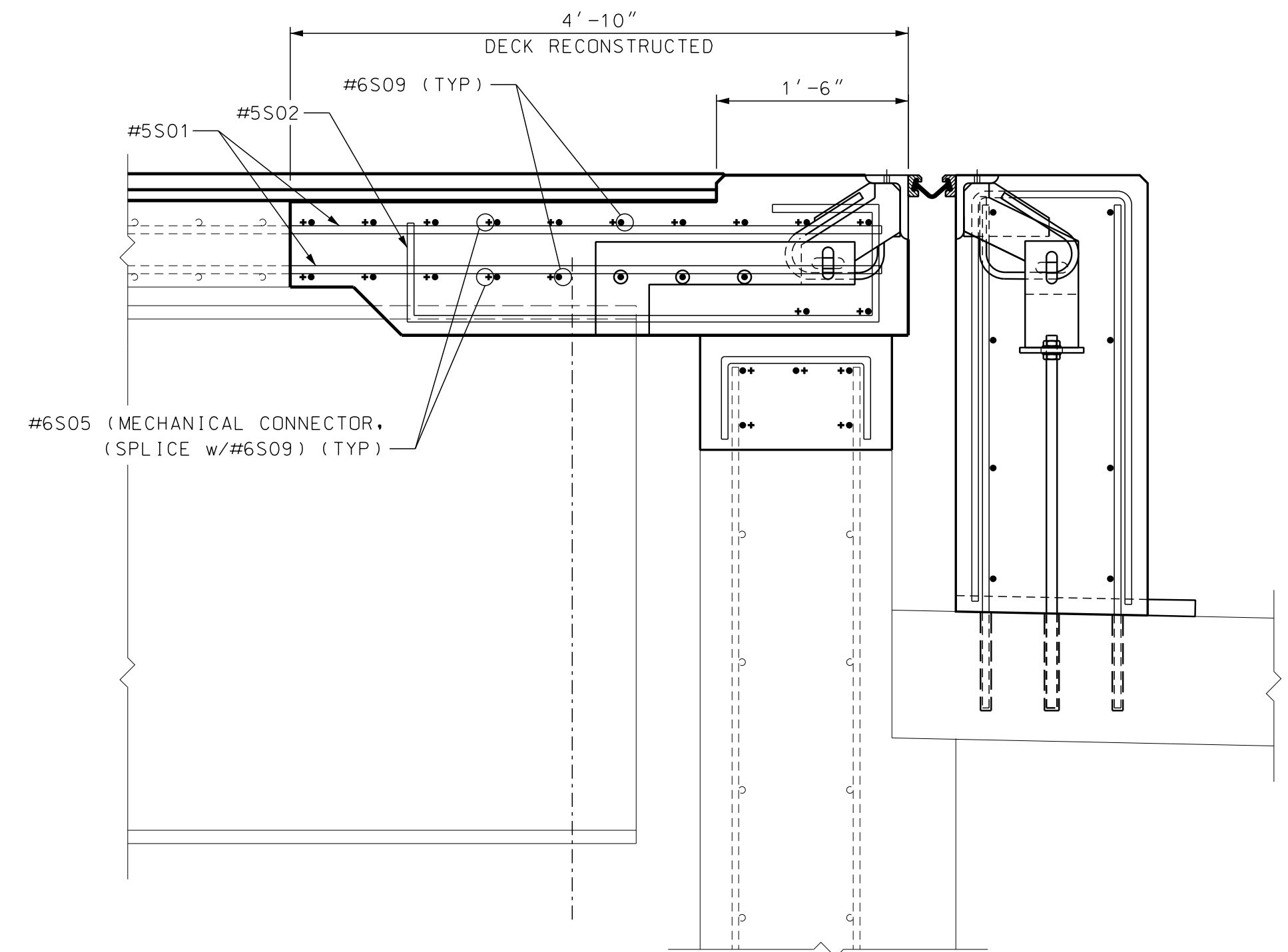
SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
BRC	42277phasing	AS NOTED



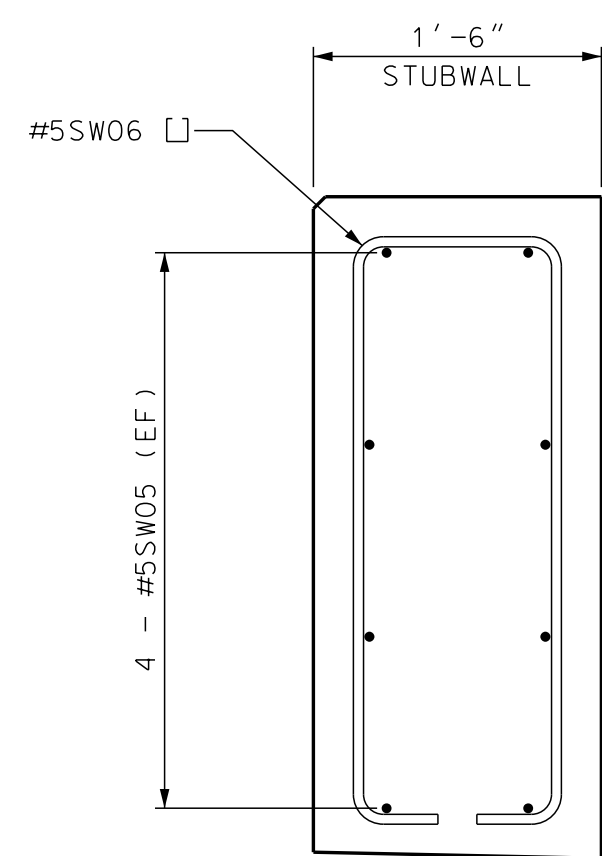
**SECTION A-A STUBWALL**  
SCALE: 1" = 1'-0"



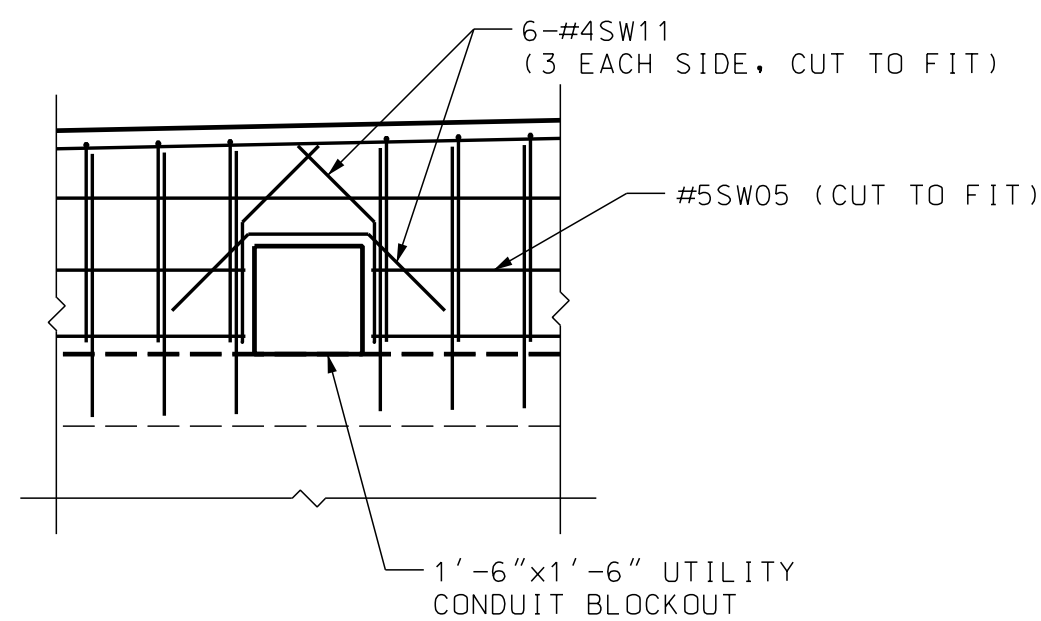
**SECTION B-B BACKWALL**  
SCALE: 1" = 1'-0"



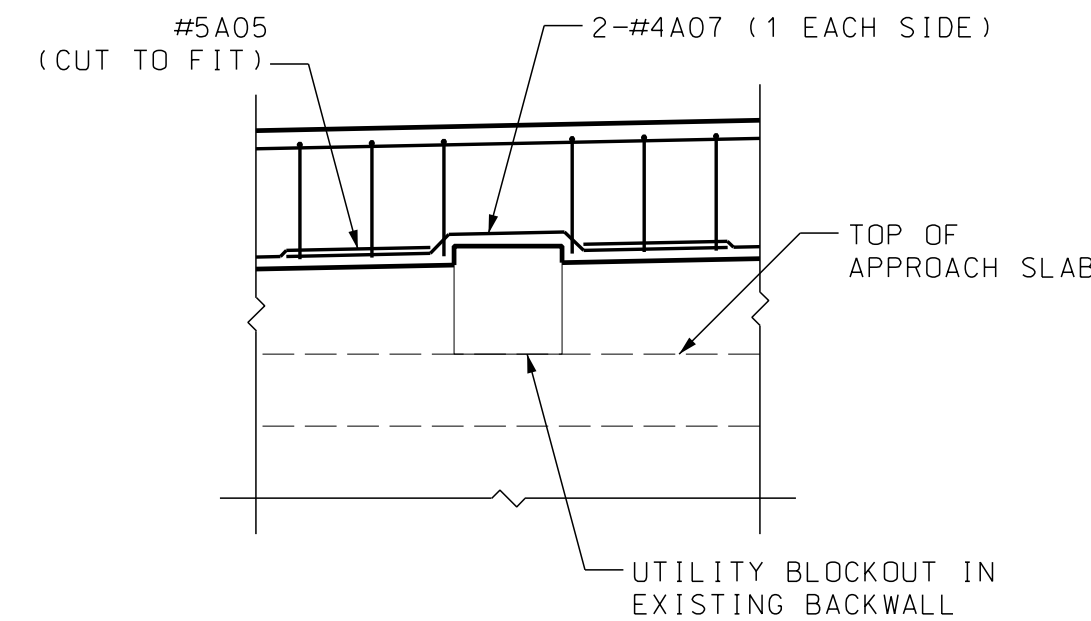
**SECTION C-C DECK**  
SCALE: 1" = 1'-0"



**SECTION D-D STUBWALL**  
SCALE: 1" = 1'-0"



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



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

**NOTE:**

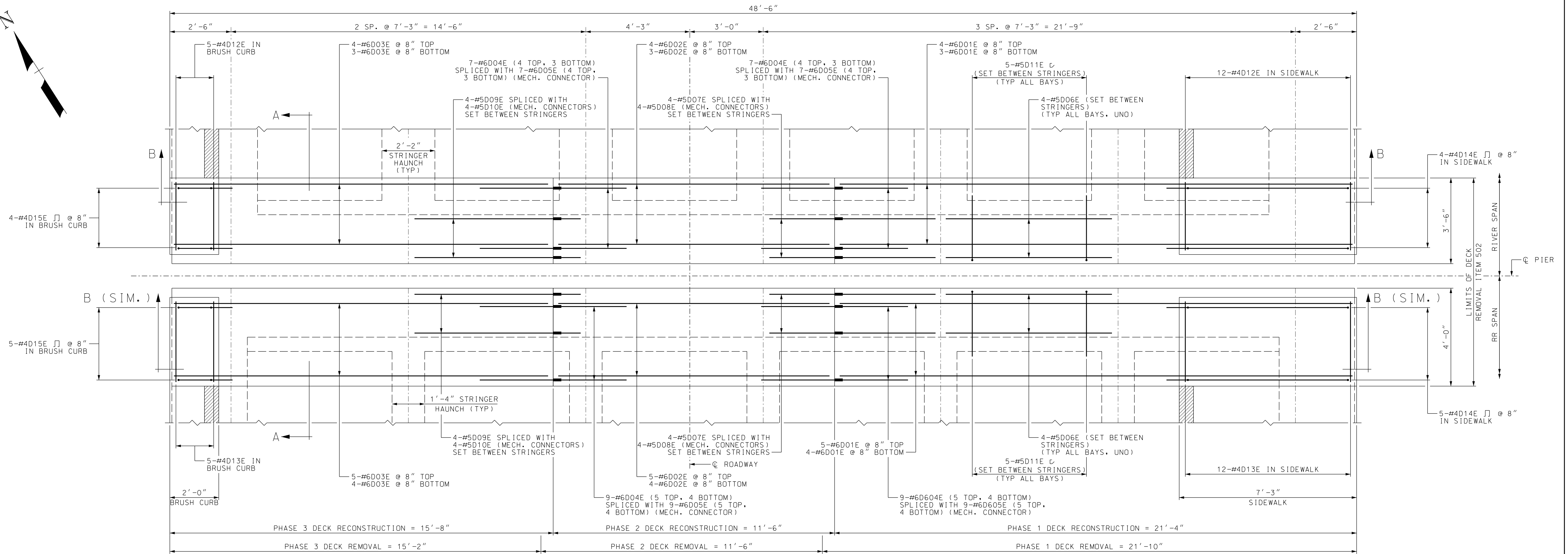
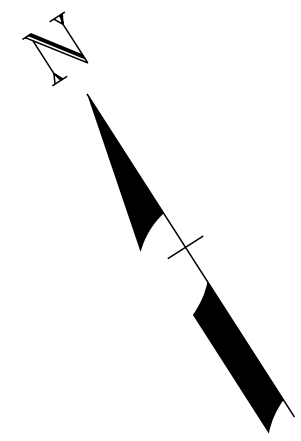
1. FOR LOCATION OF SECTION A-A, B-B, C-C, D-D, E-E & F-F SEE BRIDGE SHEET 10.



STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	WALPOLE, NH - ROCKINGHAM, VT			BRIDGE NO.	058/043	STATE PROJECT	42277		
LOCATION	CHURCH STREET OVER CONNECTICUT RIVER								
ABUTMENT B - STUBWALL REINFORCEMENT 2 OF 2									
REVISIONS AFTER PROPOSAL		BY	DATE	CHECKED	BY	DATE	BRIDGE SHEET		
		DESIGNED	JDG	05/2020	JDG	05/2020	11 OF 19		
		DRAWN	JTB	05/2020	JDG	05/2020	FILE NUMBER		
		QUANTITIES	JDG	05/2020	SRW	05/2020	136-3-2		
		ISSUE DATE	FEDERAL PROJECT NO.			SHEET NO.	TOTAL SHEETS		
		REV. DATE	X-A004(799)			16	31		

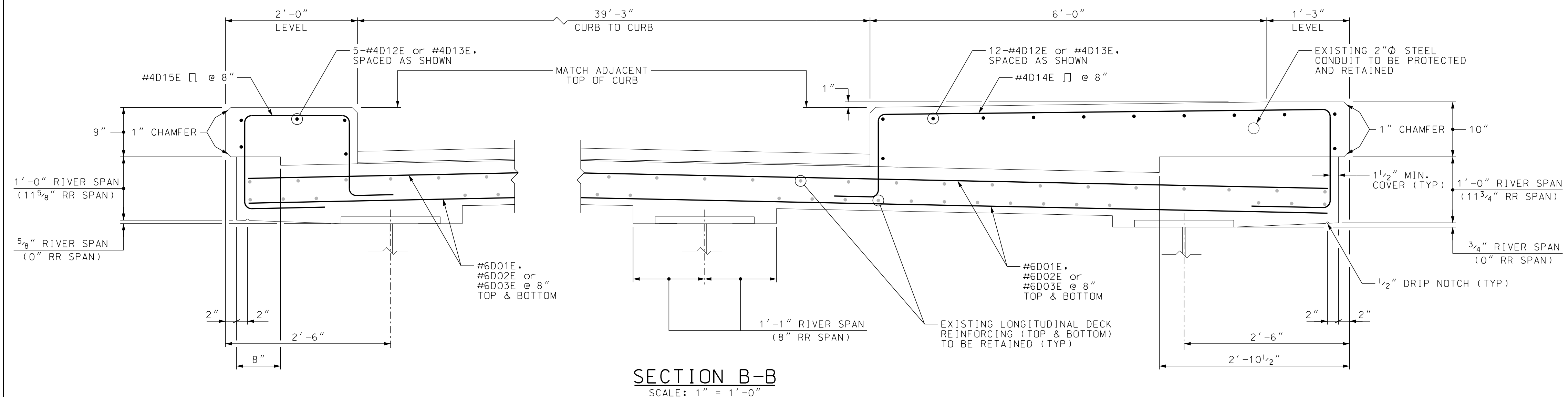
SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
BRC	42277phasing	AS NOTED





**DECK PLAN - PIER 1**

(EXISTING LONGITUDINAL REINFORCING TO BE RETAINED NOT SHOWN FOR CLARITY)  
 SCALE: 1/2" = 1'-0"

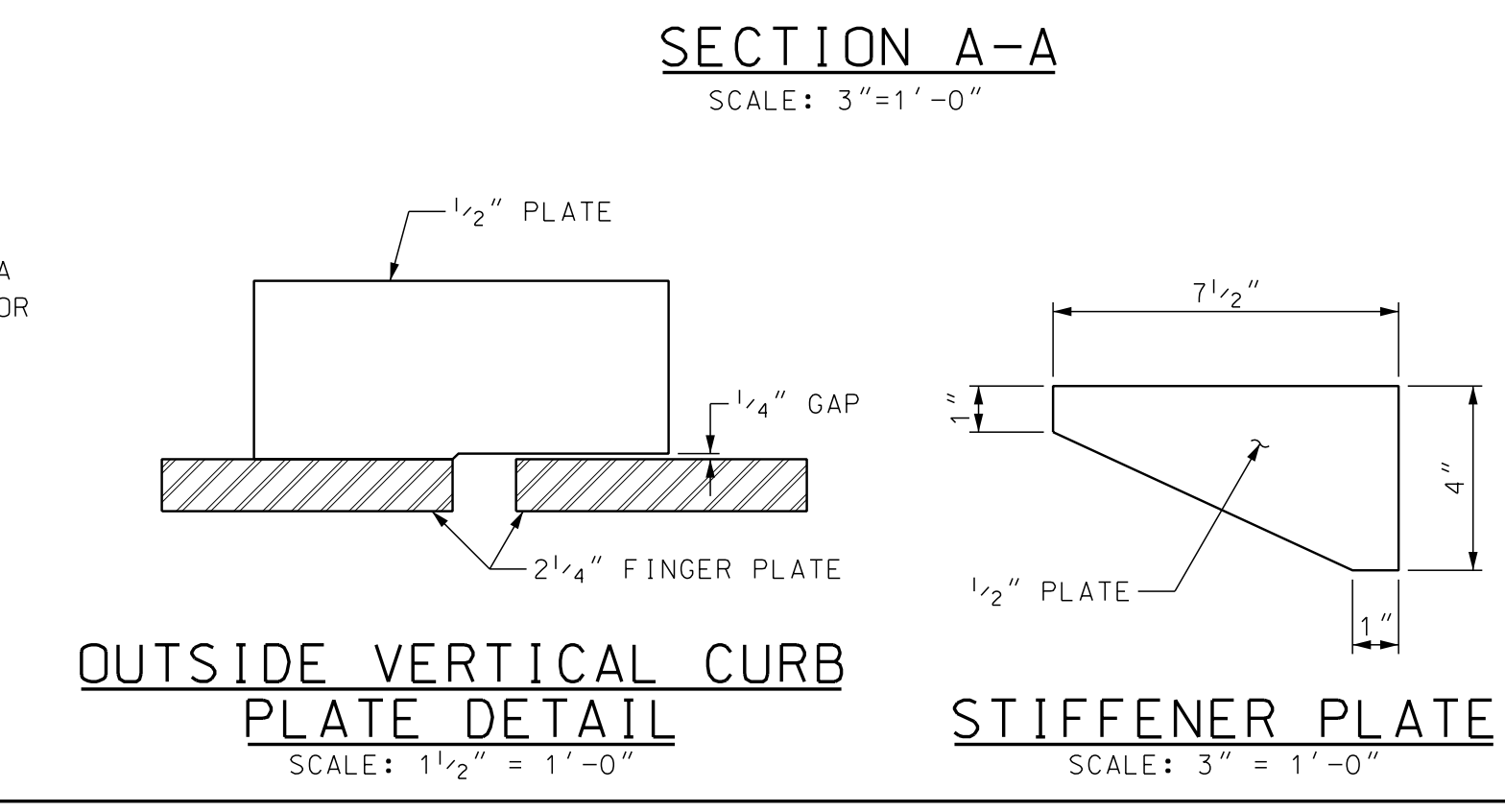
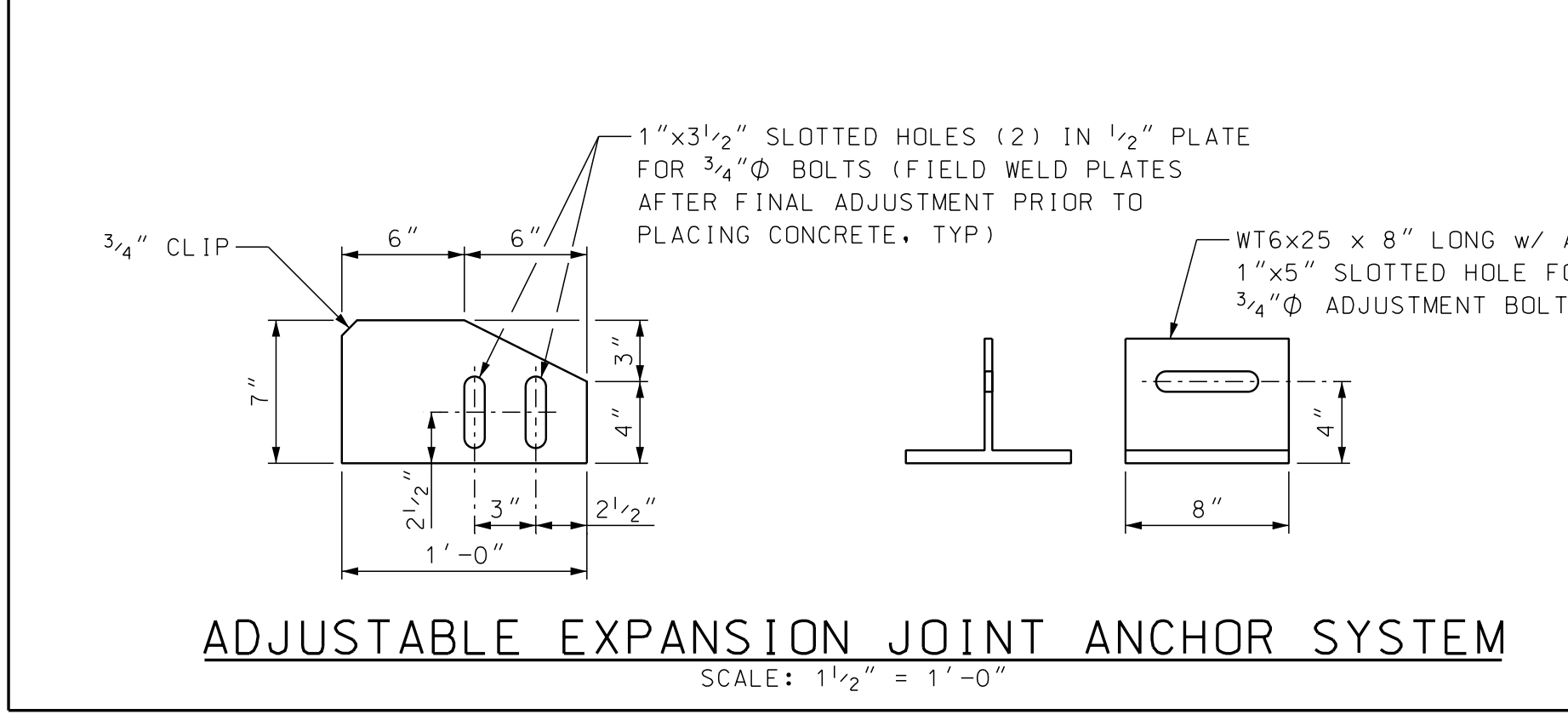
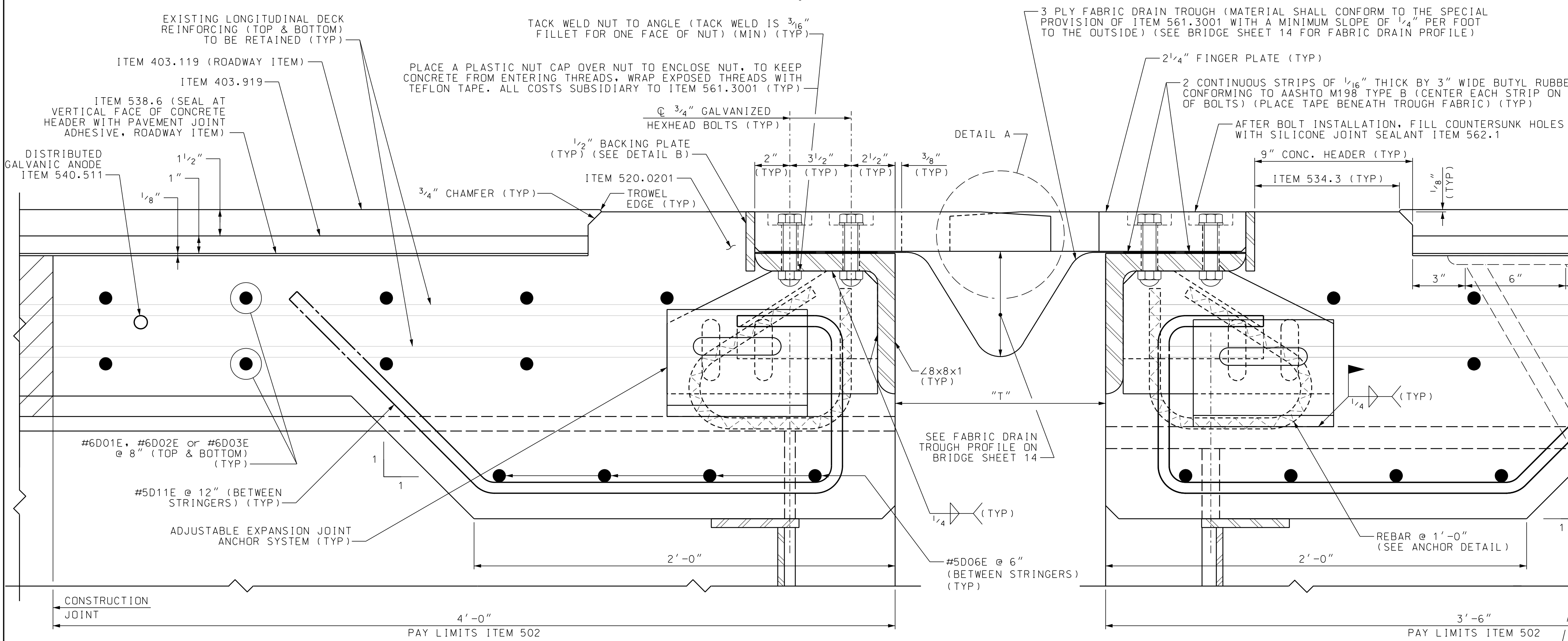
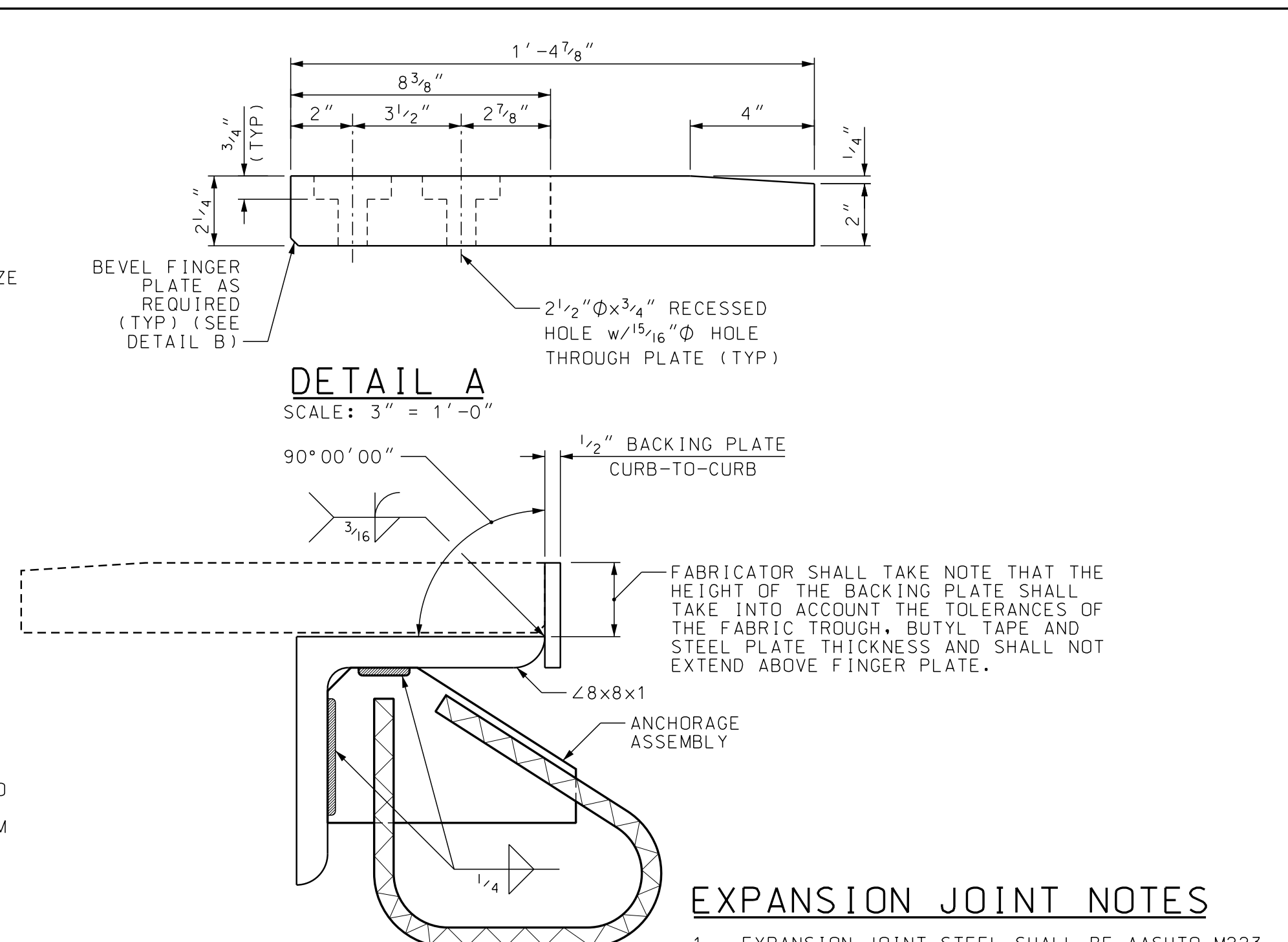
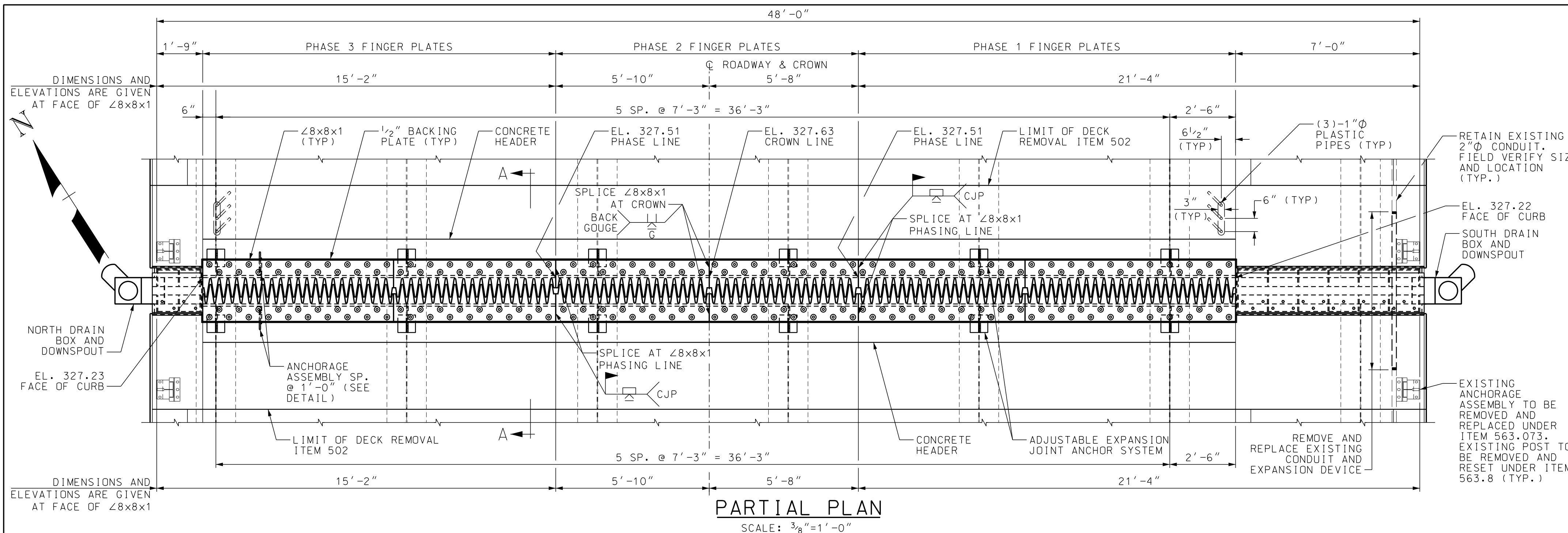


NOTE:  
 1. FOR SECTION A-A SEE BRIDGE SHEET 13.

<b>STATE OF NEW HAMPSHIRE</b>					
<b>DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN</b>					
TOWN	WALPOLE, NH - ROCKINGHAM, VT	BRIDGE NO.	058/043	STATE PROJECT	42277
LOCATION	CHURCH STREET OVER CONNECTICUT RIVER				
<b>DECK REINFORCING - PIER 1</b>					BRIDGE SHEET
REVISIONS AFTER PROPOSAL					12 OF 19
DESIGNED	GAB	DATE	04/2020	CHECKED	PAG 05/2020
DRAWN	JTB	DATE	05/2020	CHECKED	PAG 05/2020
QUANTITIES	PAG	DATE	05/2020	CHECKED	PAG 05/2020
ISSUE DATE	FEDERAL PROJECT NO.		SHEET NO.		TOTAL SHEETS
REV. DATE	X-A004(799)		17		31



SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
BRC	42277Pier1reinf	AS NOTED



**TEMPERATURE ADJUSTMENT TABLE**

TEMPERATURE	"T"
15°F	14"
30°F	13 1/16"
45°F	12 15/16"
60°F	12 3/8"
75°F	11 7/8"
90°F	11 5/16"

(3)-1"Ø PVC DRAINS. SET PIPES TO DISCHARGE AWAY FROM GIRDERS AND PIER. ATTACH DRAIN PIPES TO BOTTOM FLANGE WITH CLIP AND EXTEND DRAINS 12" MINIMUM BELOW BOTTOM OF STRUCTURAL STEEL. PROVIDE BREAK THROUGH MEMBRANE AND SEAL ALL AROUND WITH ASPHALT. ALL COSTS SUBSIDIARY TO ITEM 520.02.

**STATE OF NEW HAMPSHIRE**  
DEPARTMENT OF TRANSPORTATION \* BUREAU OF BRIDGE DESIGN

TOWN WALPOLE, NH - ROCKINGHAM, VT BRIDGE NO. 058/043 STATE PROJECT 42277

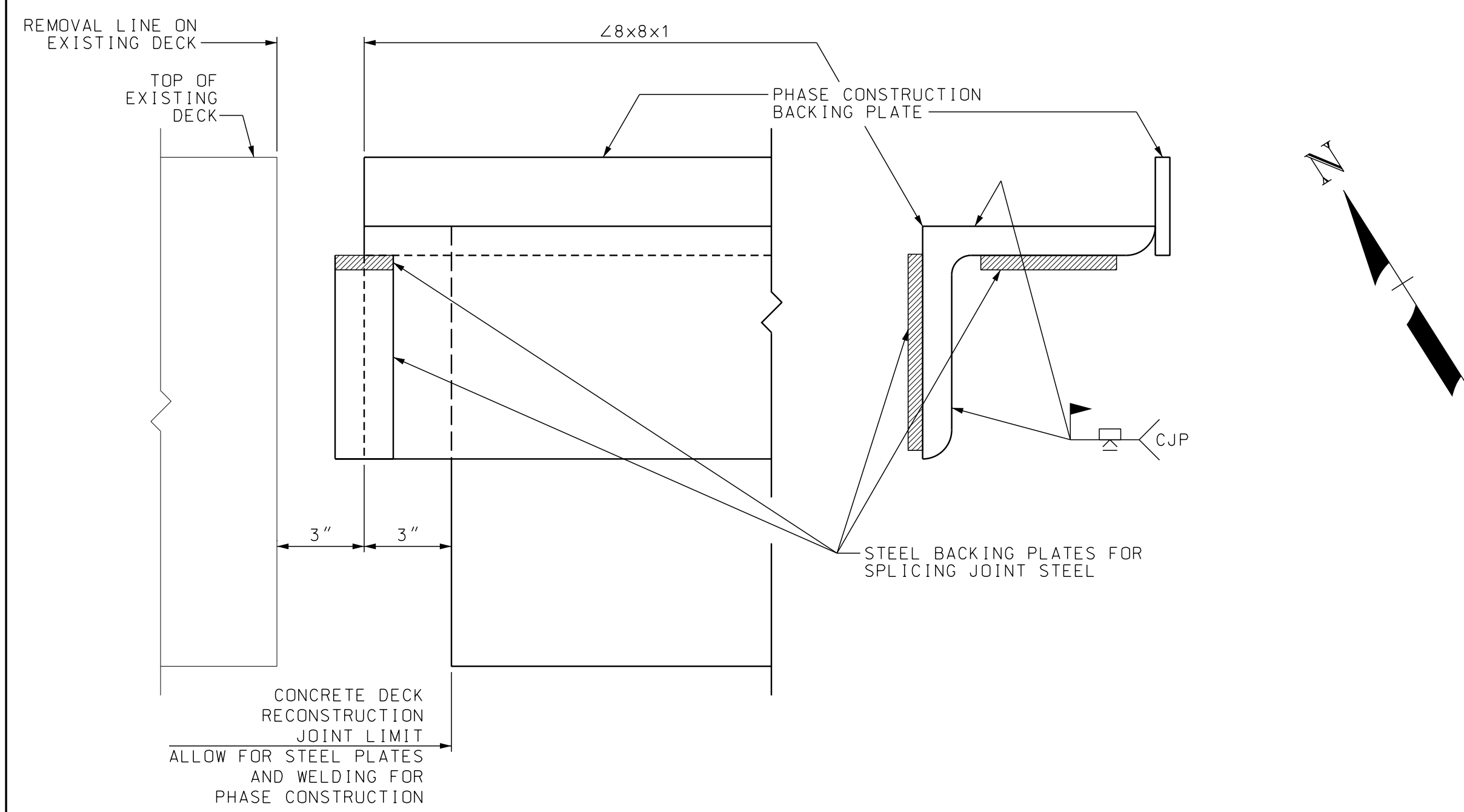
LOCATION CHURCH STREET OVER CONNECTICUT RIVER

**FINGER PLATE EXPANSION JOINT DETAILS (1 OF 3)**

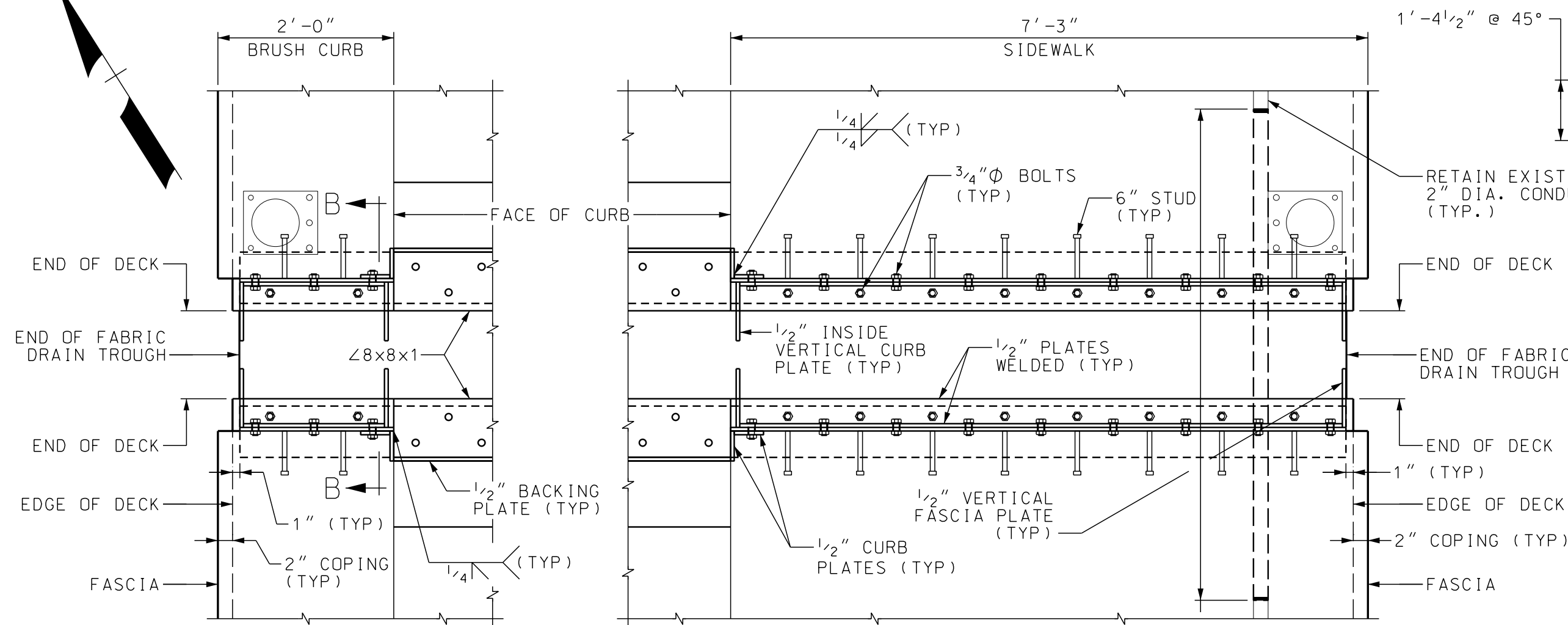
REVISIONS AFTER PROPOSAL	BY	DATE	CHECKED	PAG	DATE	BRIDGE SHEET
	GAB	04/2020	CHEKED	PAG	05/2020	13 OF 19
	JTB	05/2020	CHEKED	PAG	05/2020	FILE NUMBER
	PAG	05/2020	CHEKED	PAG	05/2020	136-3-2
ISSUE DATE	FEDERAL PROJECT NO.		SHEET NO.		TOTAL SHEETS	
REV. DATE	X-A004(799)		18		31	

**Stantec**

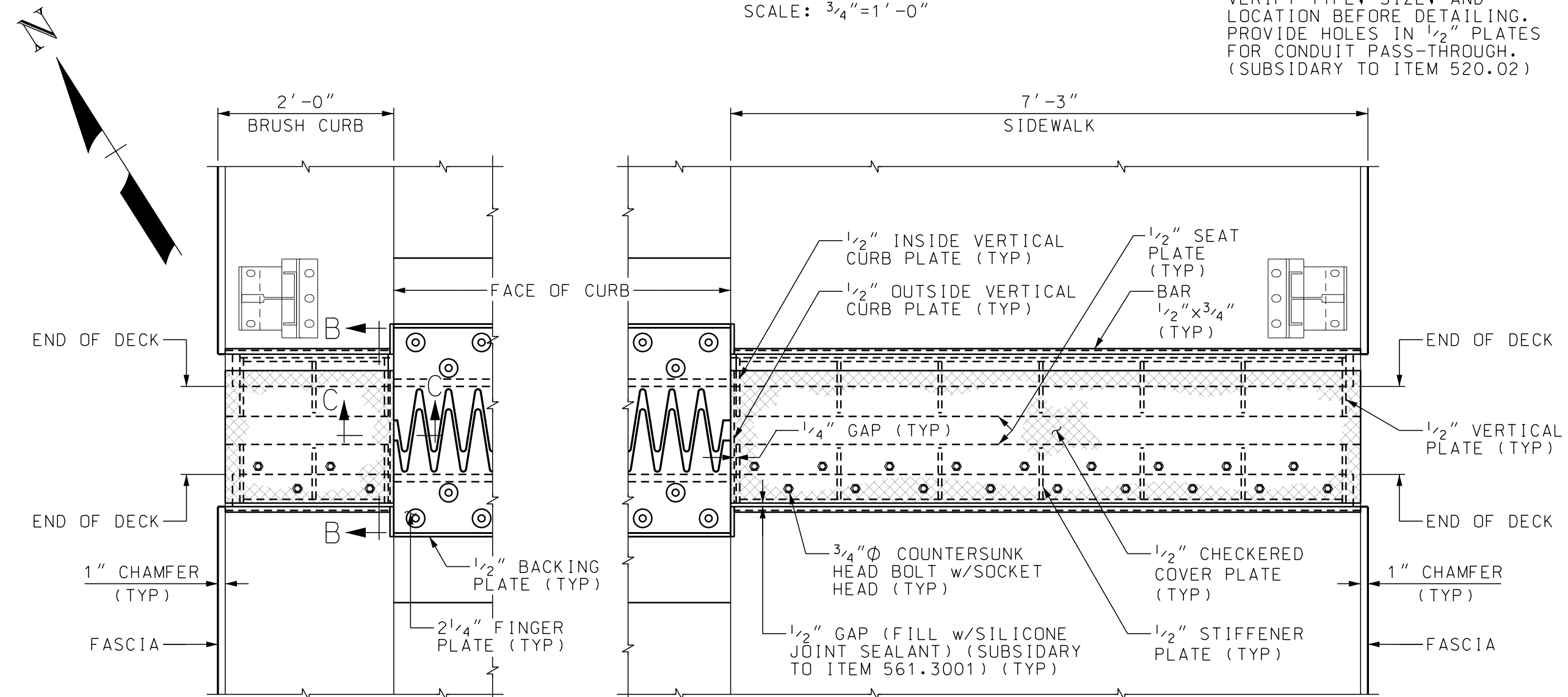
SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
BRC	42277FingerJt	AS NOTED



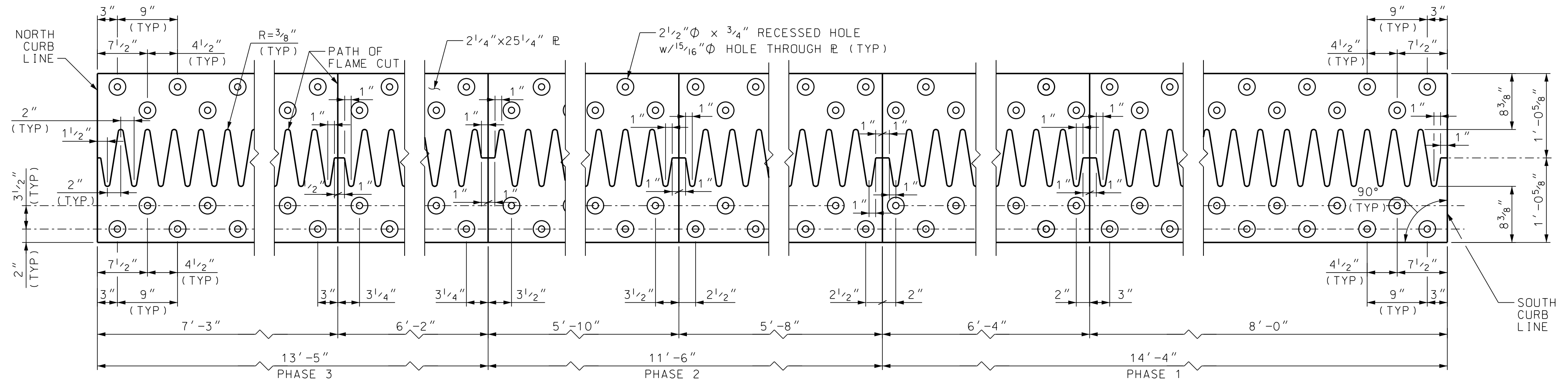
**PHASE CONSTRUCTION FIELD WELD SPLICE DETAILS**  
NOT TO SCALE



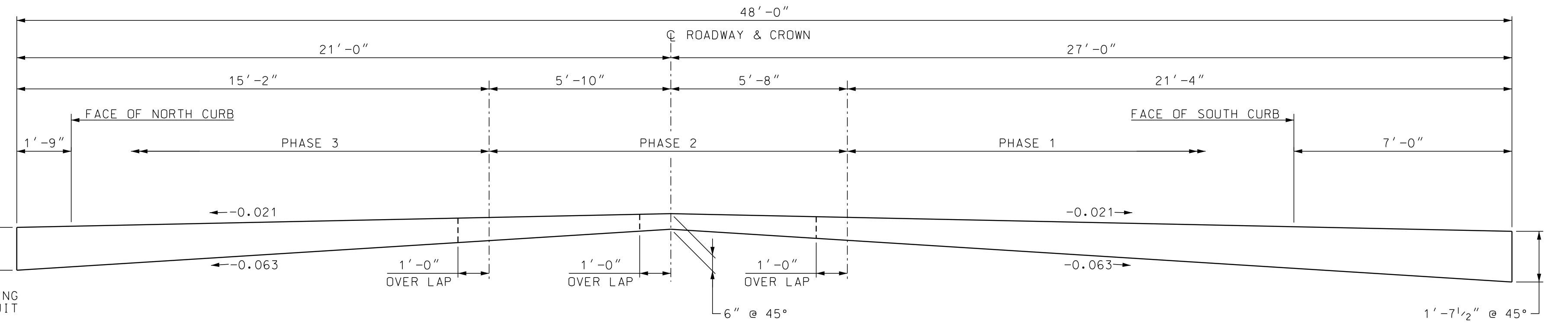
**LOWER ASSEMBLY**  
SCALE: 3/4"=1'-0"



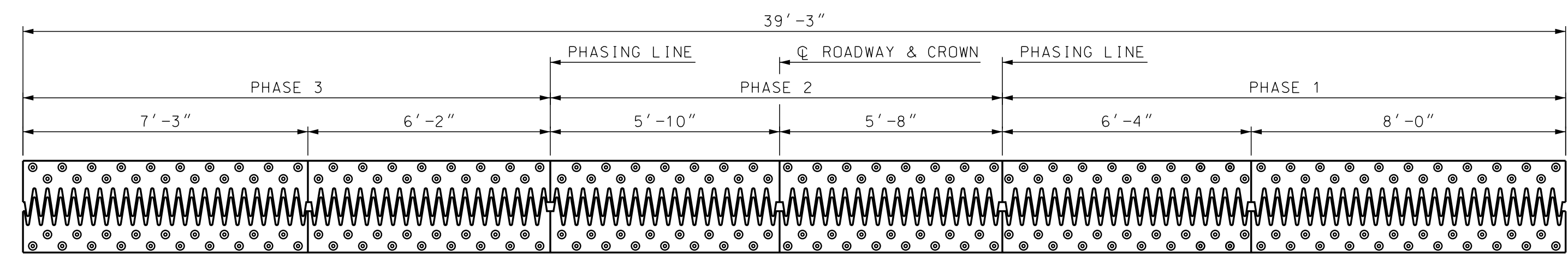
**UPPER ASSEMBLY**  
(STUDS NOT SHOWN)  
SCALE: 3/4"=1'-0"



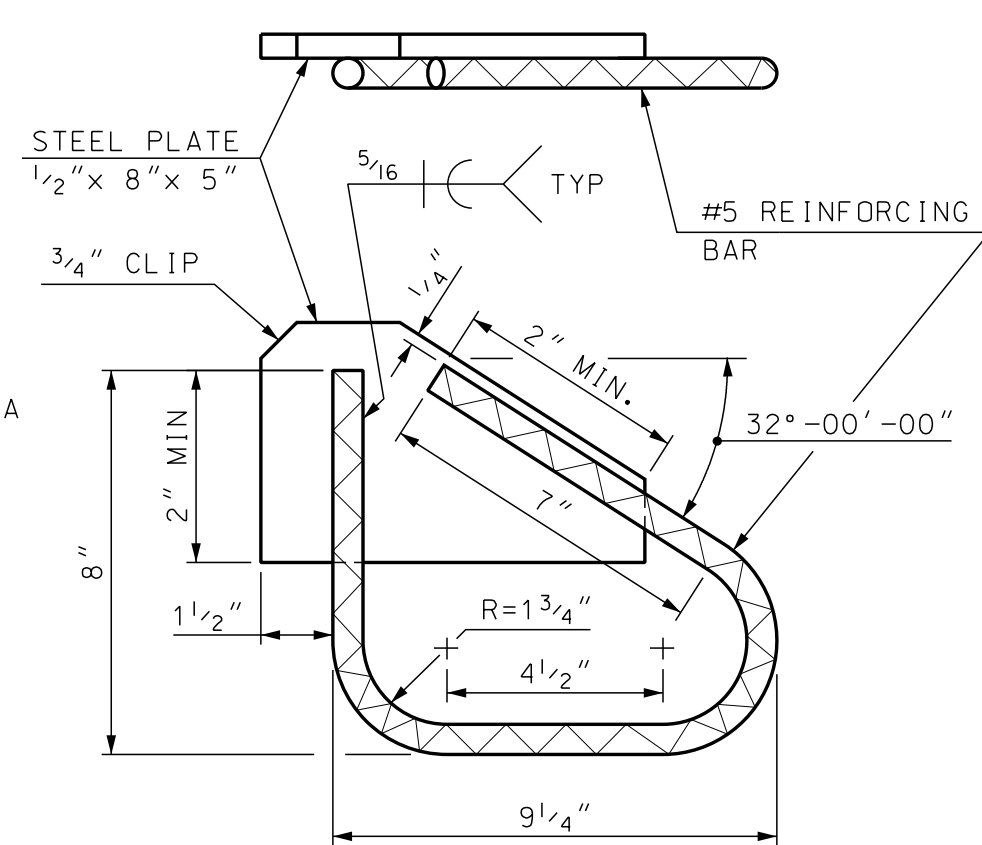
**FINGER CUTTING PLATE DETAIL**  
SCALE: 1"=1'-0"



**FABRIC DRAIN TROUGH PROFILE**  
SCALE: 3/8"=1'-0"



**FINGER PLATE PLAN**  
SCALE: 3/8"=1'-0"

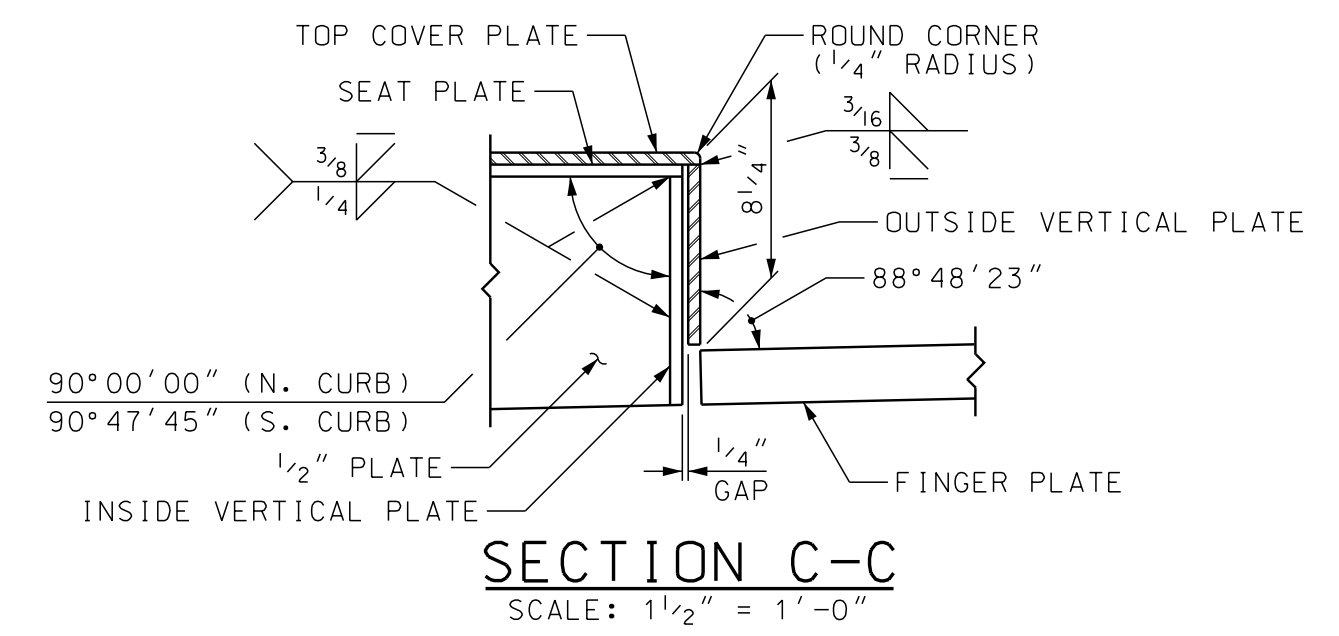
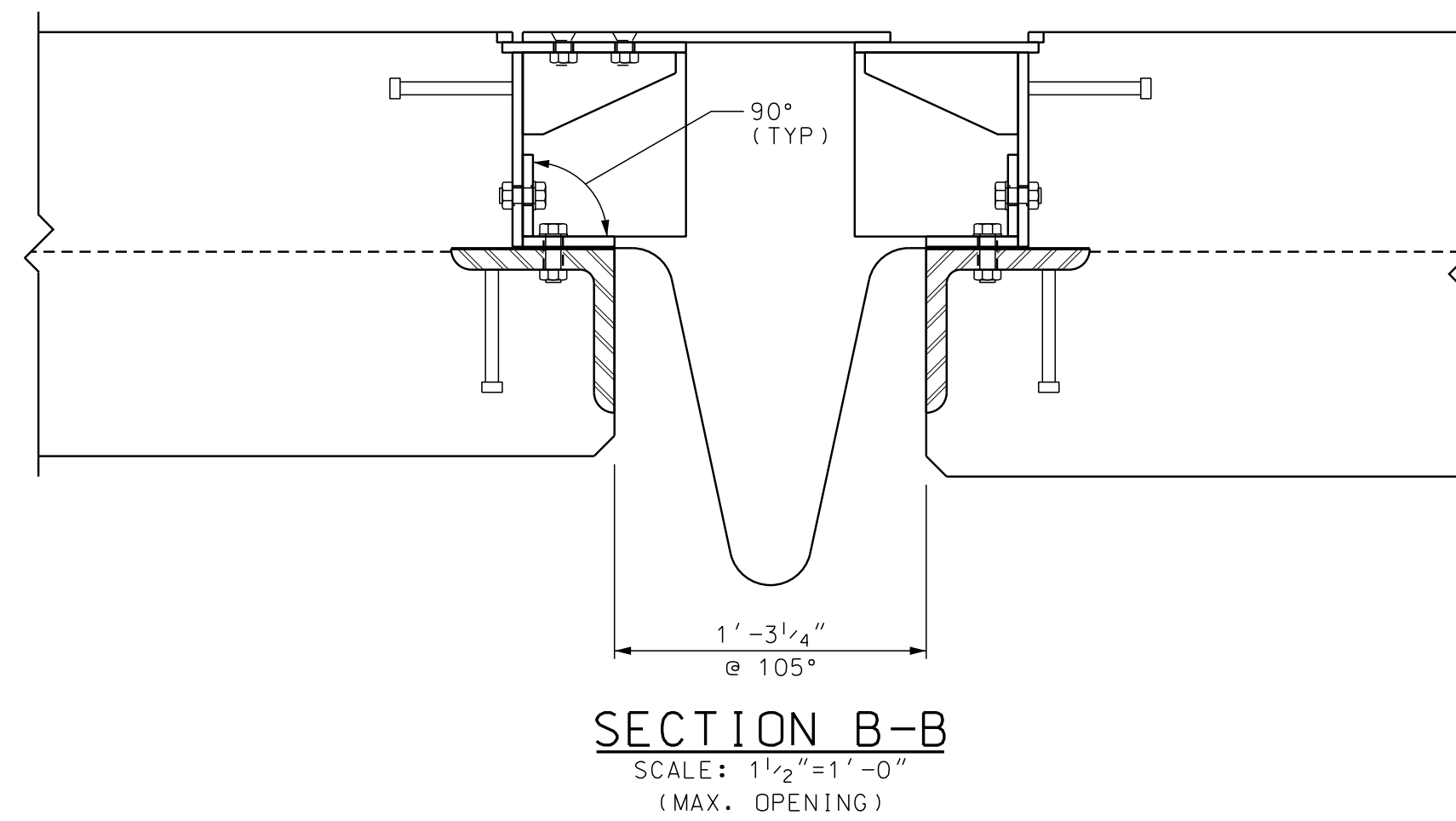
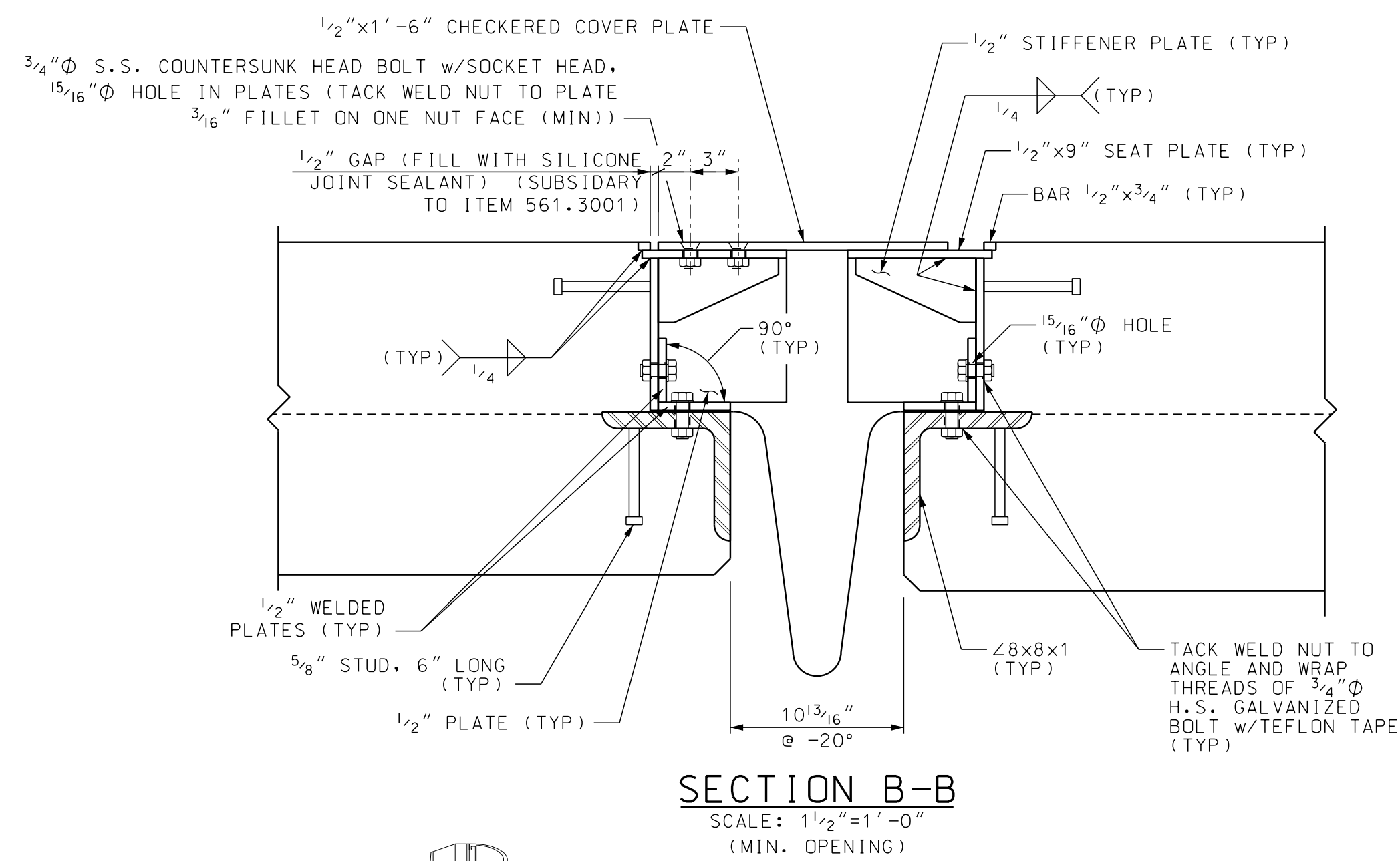


**ANCHOR DETAIL**  
SCALE: 3"=1'-0"



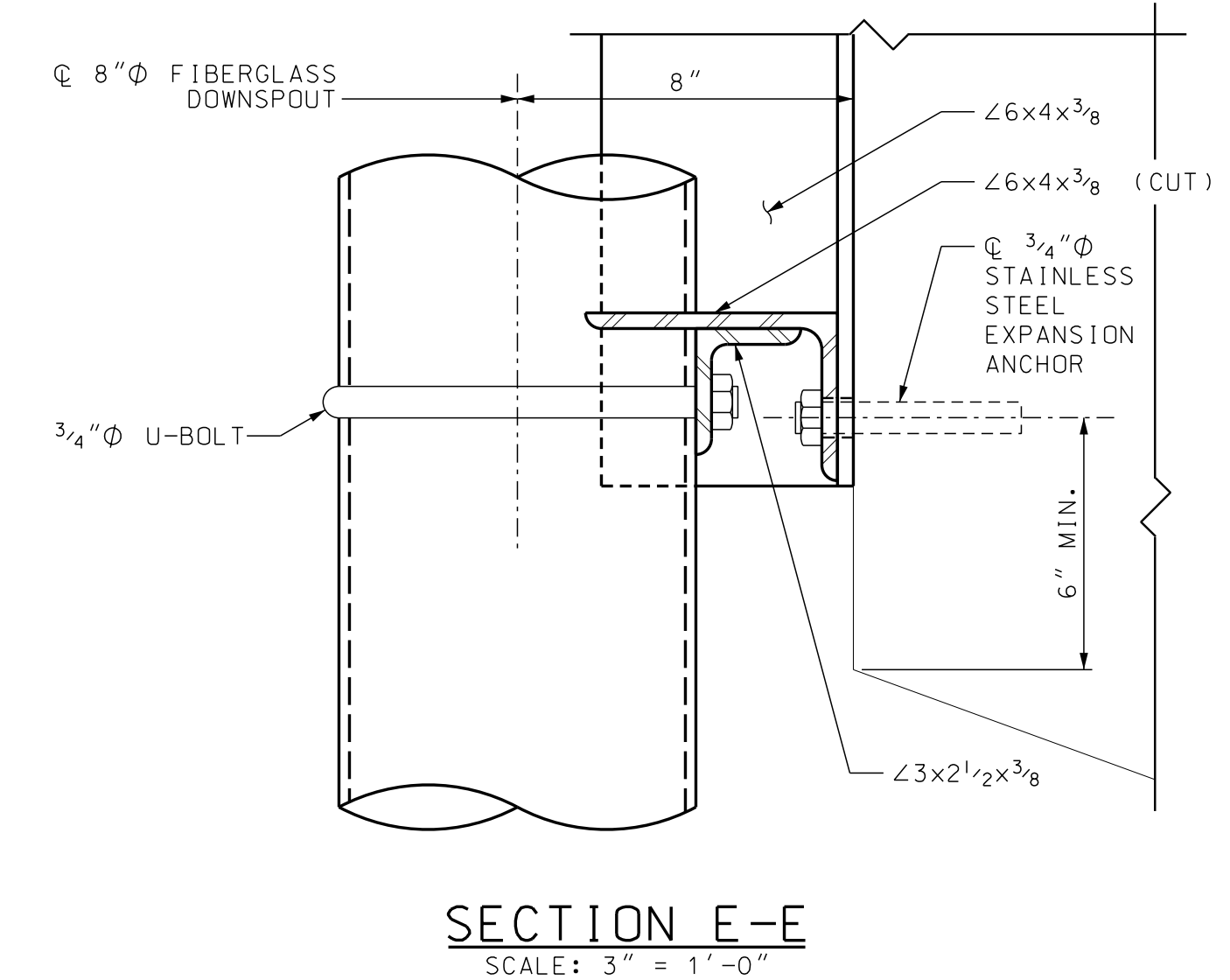
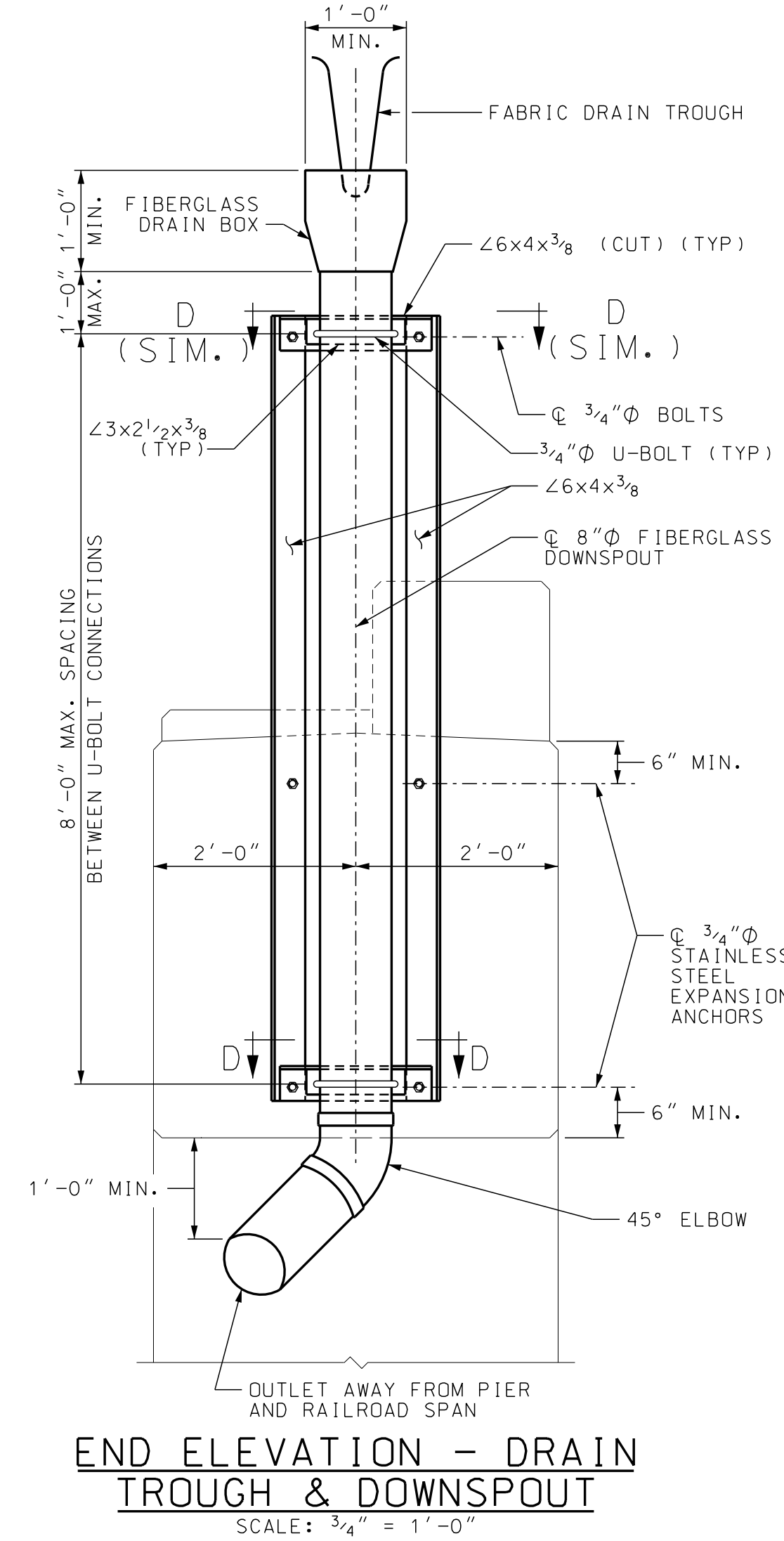
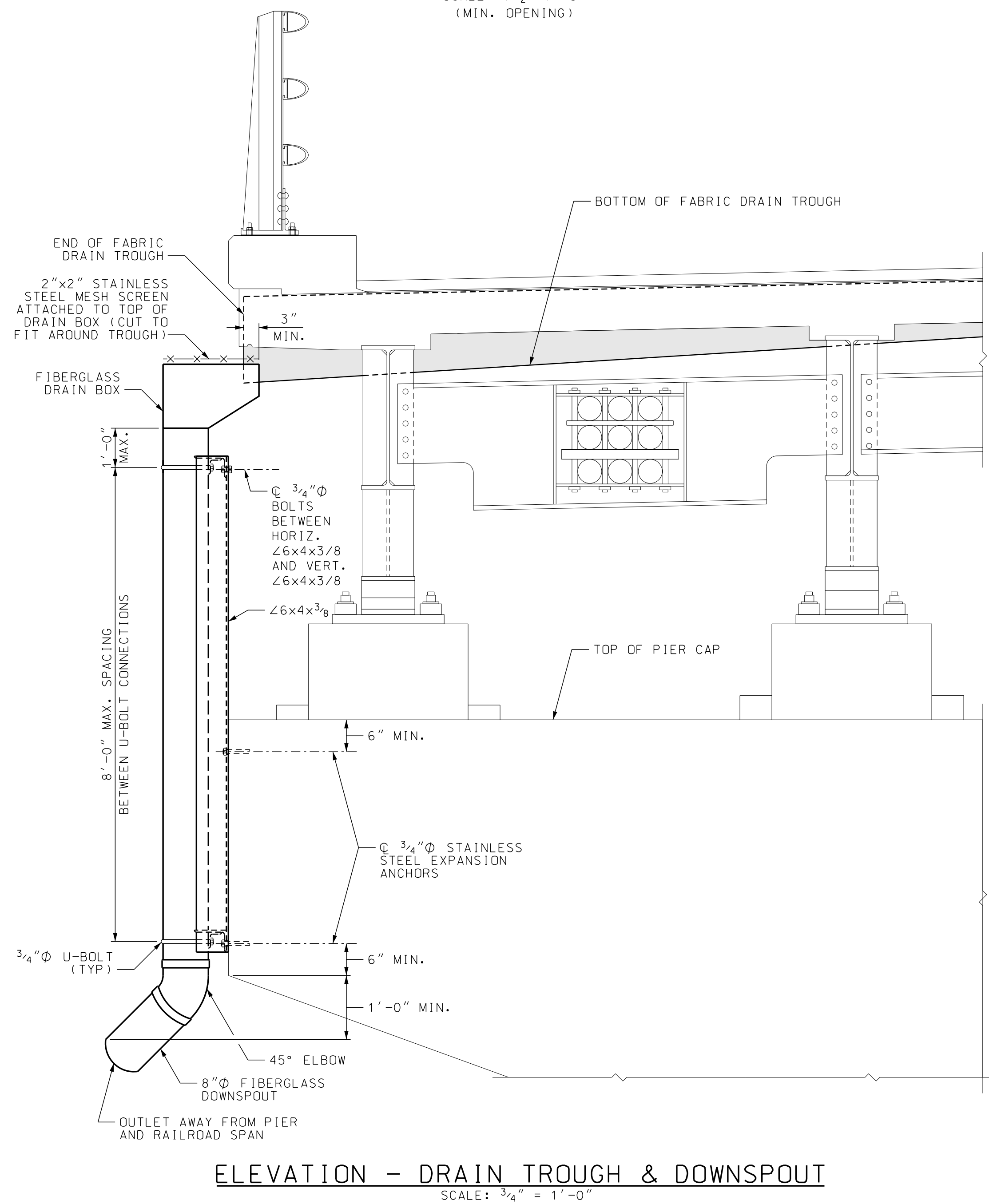
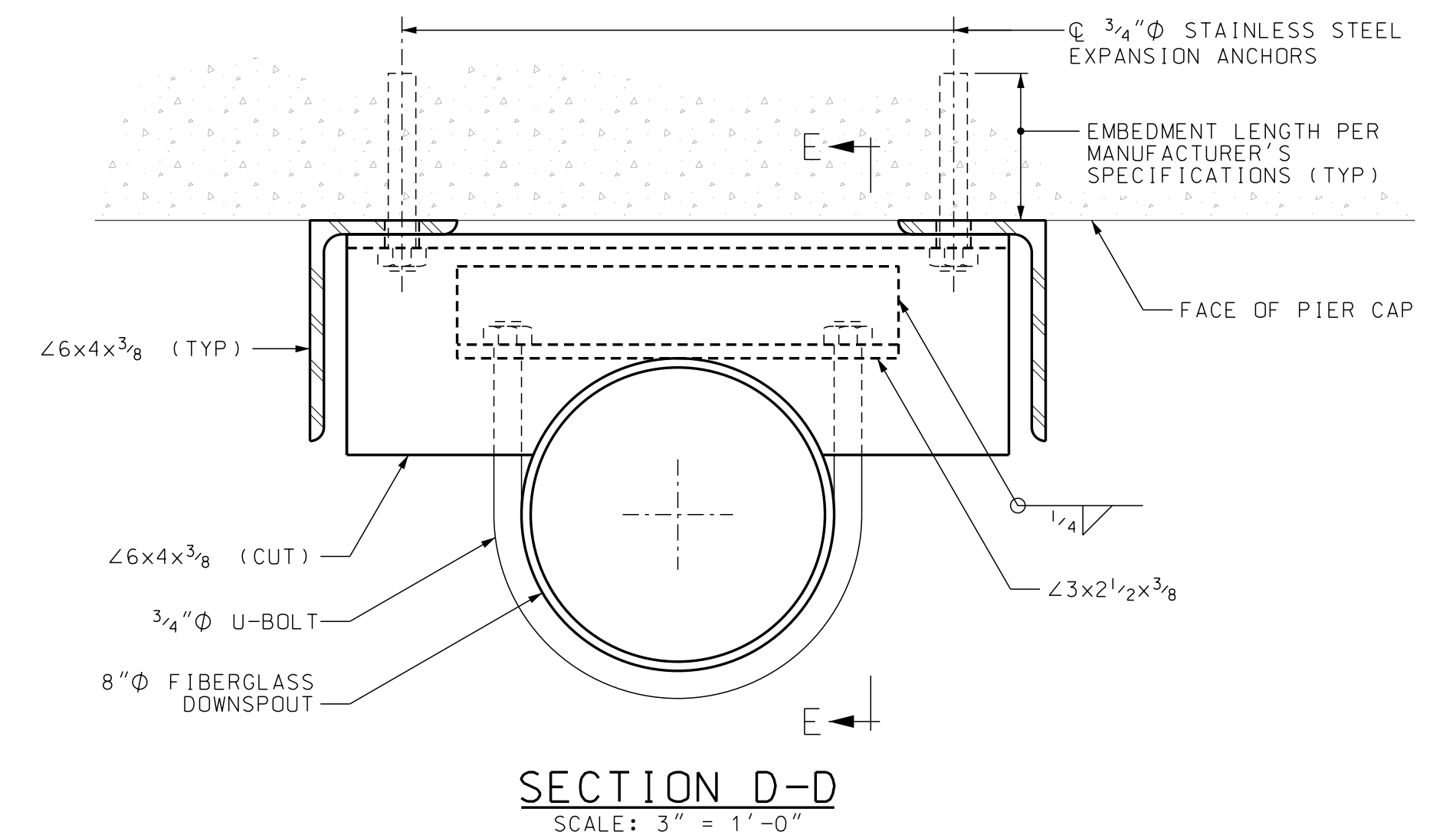
STATE OF NEW HAMPSHIRE											
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN											
TOWN	WALPOLE, NH - ROCKINGHAM, VT	BRIDGE NO.	058/043	STATE PROJECT	42277						
LOCATION	CHURCH STREET OVER CONNECTICUT RIVER					FINGER PLATE EXPANSION JOINT DETAILS (2 OF 3)		BRIDGE SHEET			
REVISIONS AFTER PROPOSAL						BY	DATE	BY	DATE		
						DESIGNED	GAB	04/2020	CHECKED	PAG	05/2020
						DRAWN	JTB	05/2020	CHECKED	PAG	05/2020
						QUANTITIES	PAG	05/2020	CHECKED	PAG	05/2020
						ISSUE DATE		FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS	
						REV. DATE		X-A004(799)	19	31	

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC	42277FingerJt	AS NOTED



**DOWNSPOUT NOTES**

- TWO (2) NEW FIBERGLASS DOWNSPOUT ASSEMBLIES SHALL BE INSTALLED, ONE AT EACH END OF THE NEW FABRIC DRAIN TROUGH.
- THE FIBERGLASS DOWNSPOUT PIPE AND COMPONENT FITTINGS SHALL MEET THE REQUIREMENTS OF ASTM D 2996. THE FINAL COLOR OF THE FIBERGLASS PIPE SHALL BE PIGMENTED CONCRETE GRAY.
- STEEL ANGLES USED FOR DOWNSPOUT SUPPORT ASSEMBLIES SHALL BE A36 STEEL AND SHALL BE GALVANIZED IN ACCORDANCE WITH SECTION 550. ALL BOLTS AND RELATED HARDWARE SHALL BE ASTM A307 AND SHALL BE GALVANIZED IN ACCORDANCE WITH SECTION 550.
- PAYMENT FOR FIBERGLASS DRAIN BOXES, DOWNSPOUTS, STEEL ANGLES AND ATTACHMENT HARDWARE WILL BE SUBSIDIARY TO ITEM 561.3001.

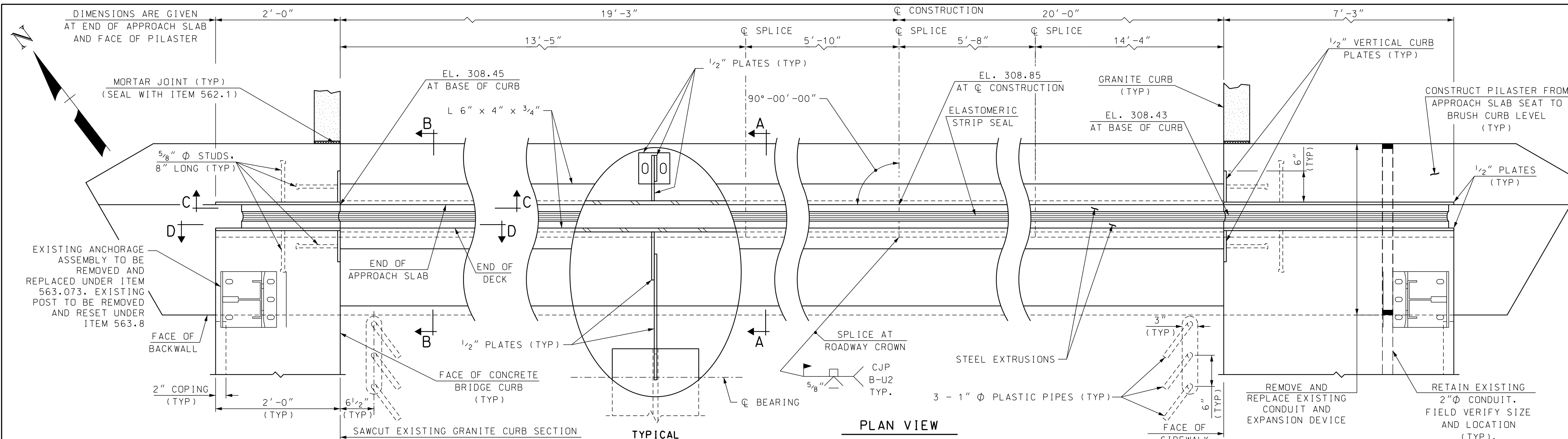


STATE OF NEW HAMPSHIRE												
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN												
TOWN	WALPOLE, NH - ROCKINGHAM, VT			BRIDGE NO.	058/043		STATE PROJECT	42277				
LOCATION	CHURCH STREET OVER CONNECTICUT RIVER											
FINGER PLATE EXPANSION JOINT DETAILS (3 OF 3)											BRIDGE SHEET	
REVISIONS AFTER PROPOSAL				BY	DATE	CHECKED	PAG	DATE	FILE NUMBER			15 OF 19
				DESIGNED	GAB	04/2020	CHECKED	PAG	05/2020			136-3-2
				DRAWN	JTB	05/2020	CHECKED	PAG	05/2020			
				QUANTITIES	PAG	05/2020	CHECKED	PAG	05/2020			TOTAL SHEETS
				ISSUE DATE	FEDERAL PROJECT NO.			SHEET NO.		20		
				REV. DATE	X-A004(799)			20		31		

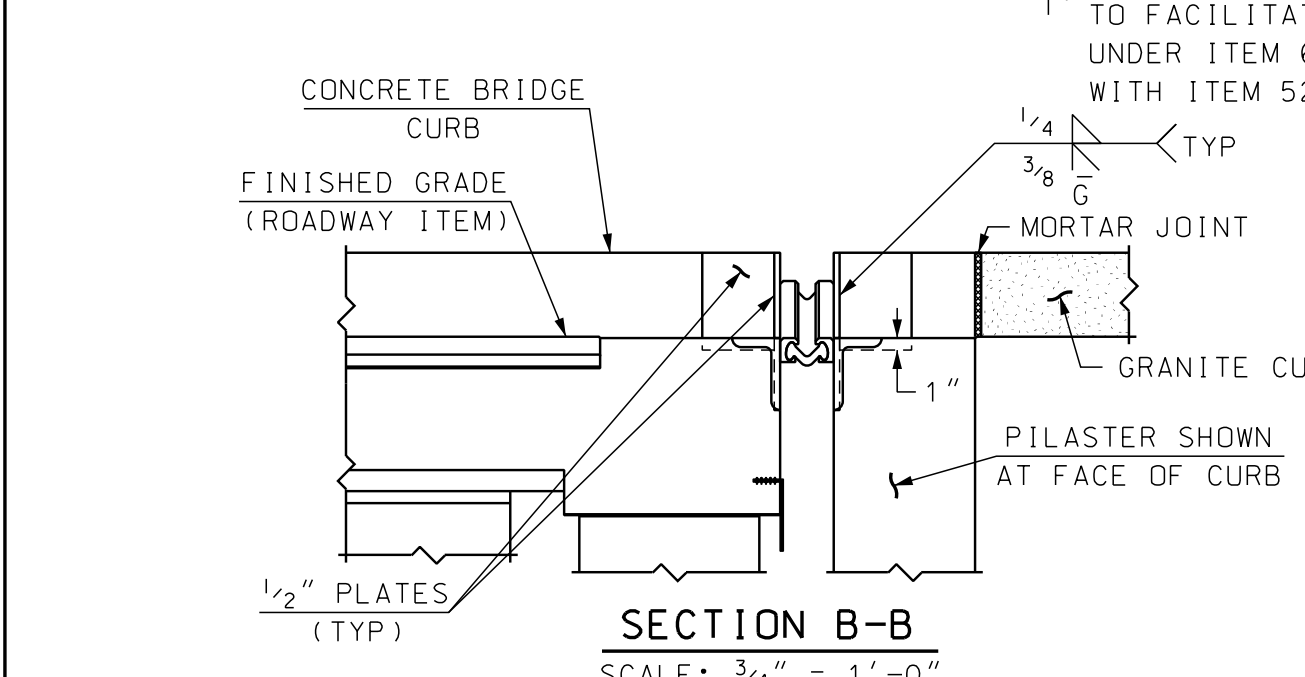


SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
BRC	42277FingerJt	AS NOTED

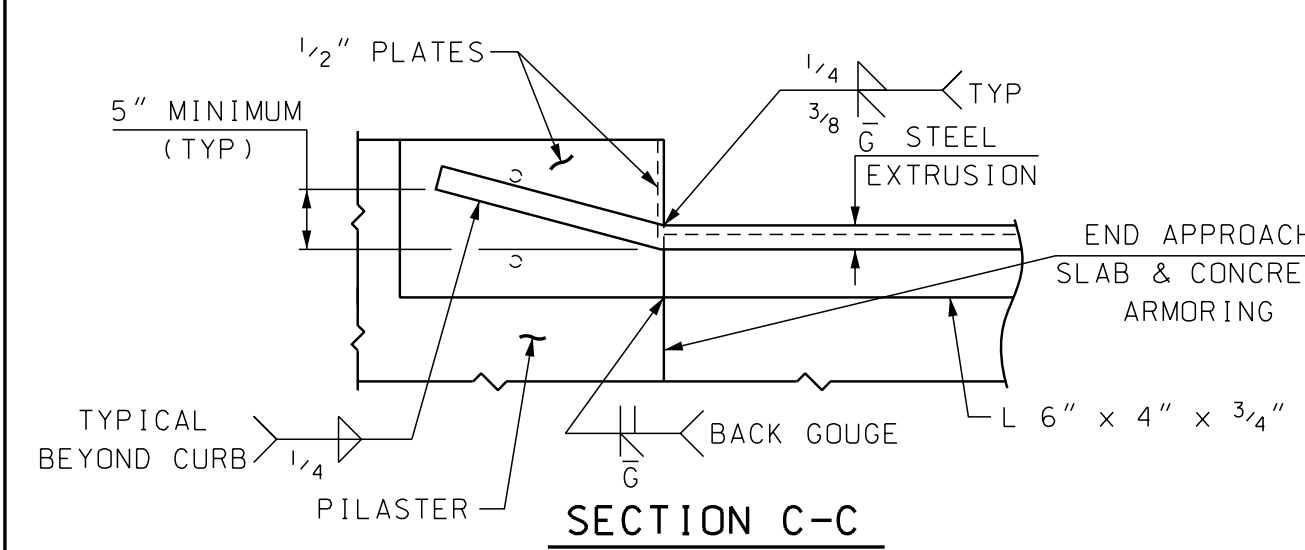




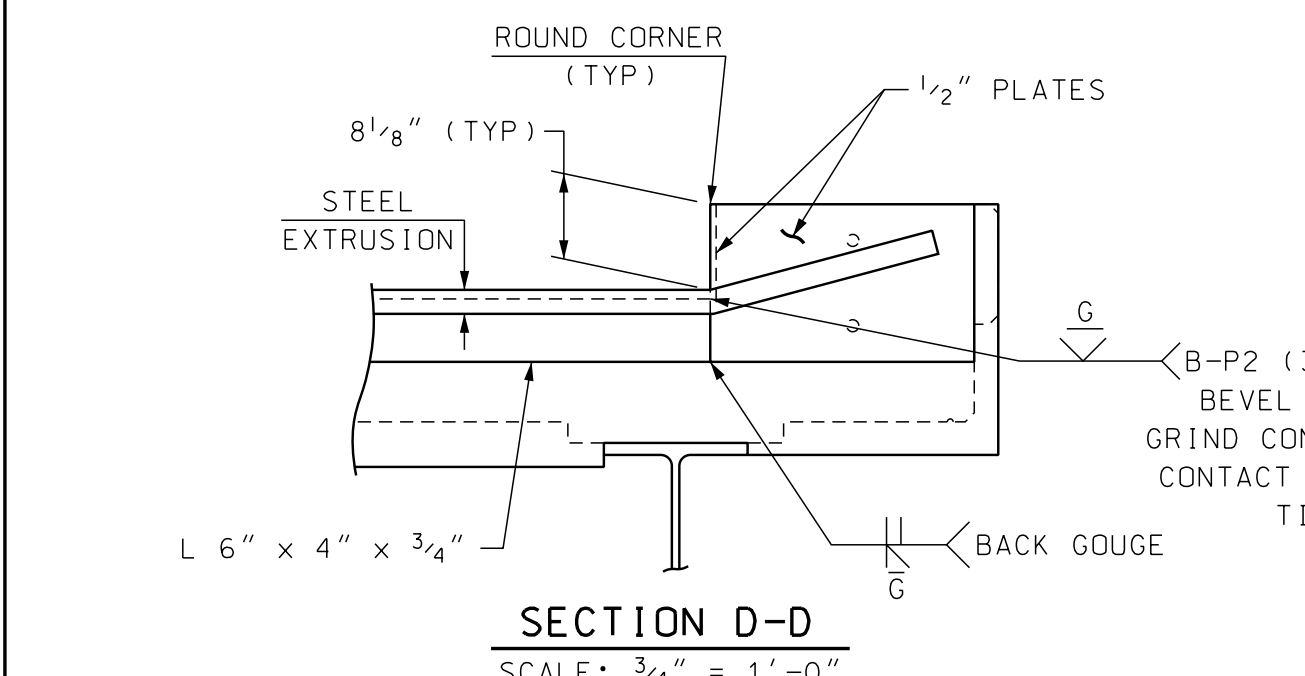
**PLAN VIEW**  
SCALE: 1" = 1'-0"



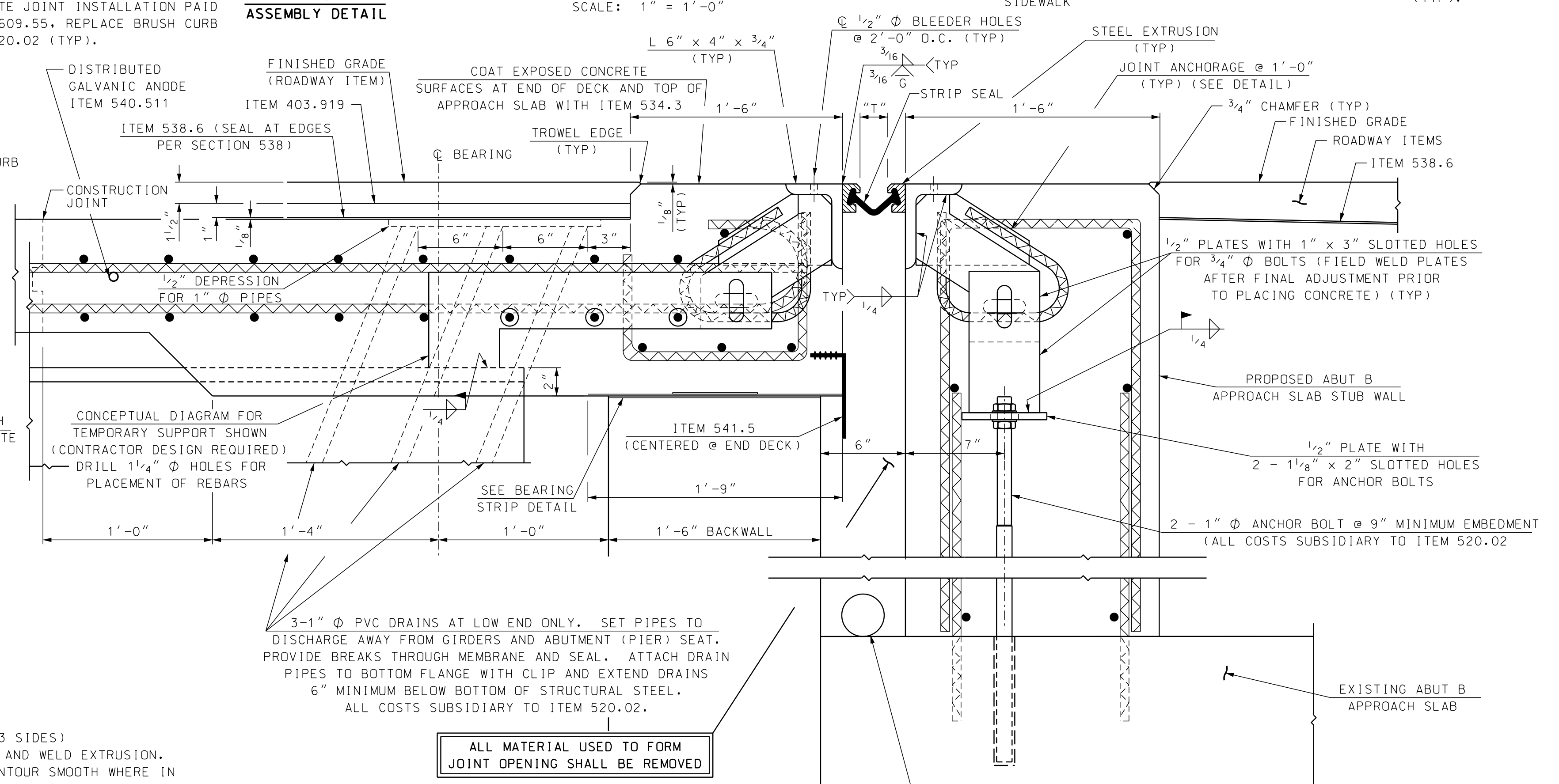
**SECTION B-B**  
SCALE: 3/4" = 1'-0"



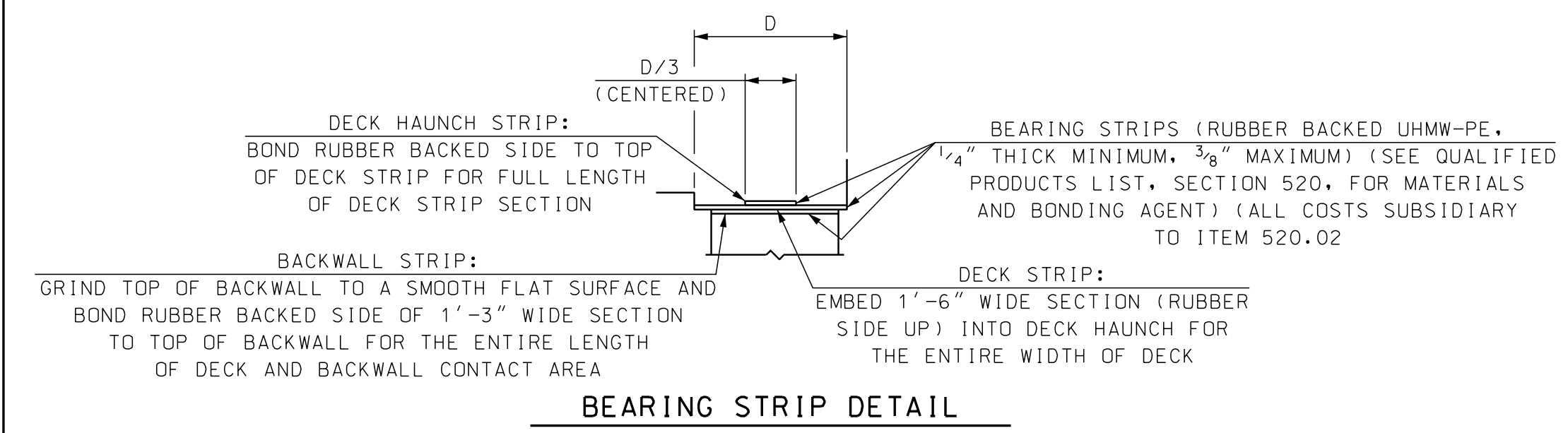
**SECTION C-C**  
SCALE: 3/4" = 1'-0"



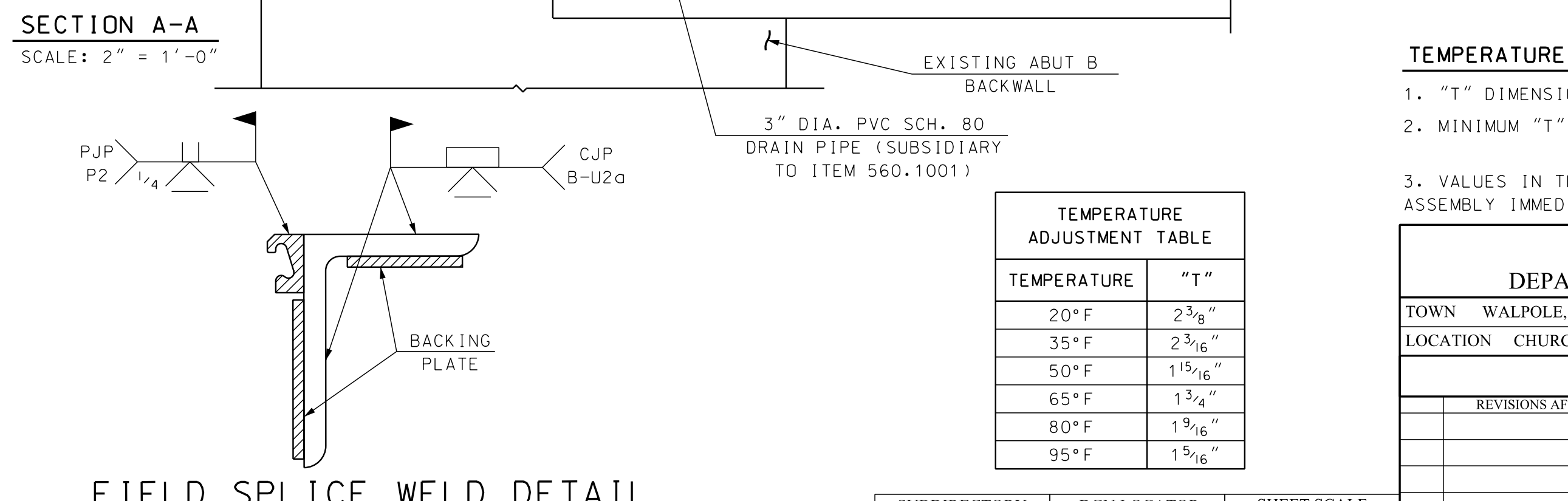
**SECTION D-D**  
SCALE: 3/4" = 1'-0"



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



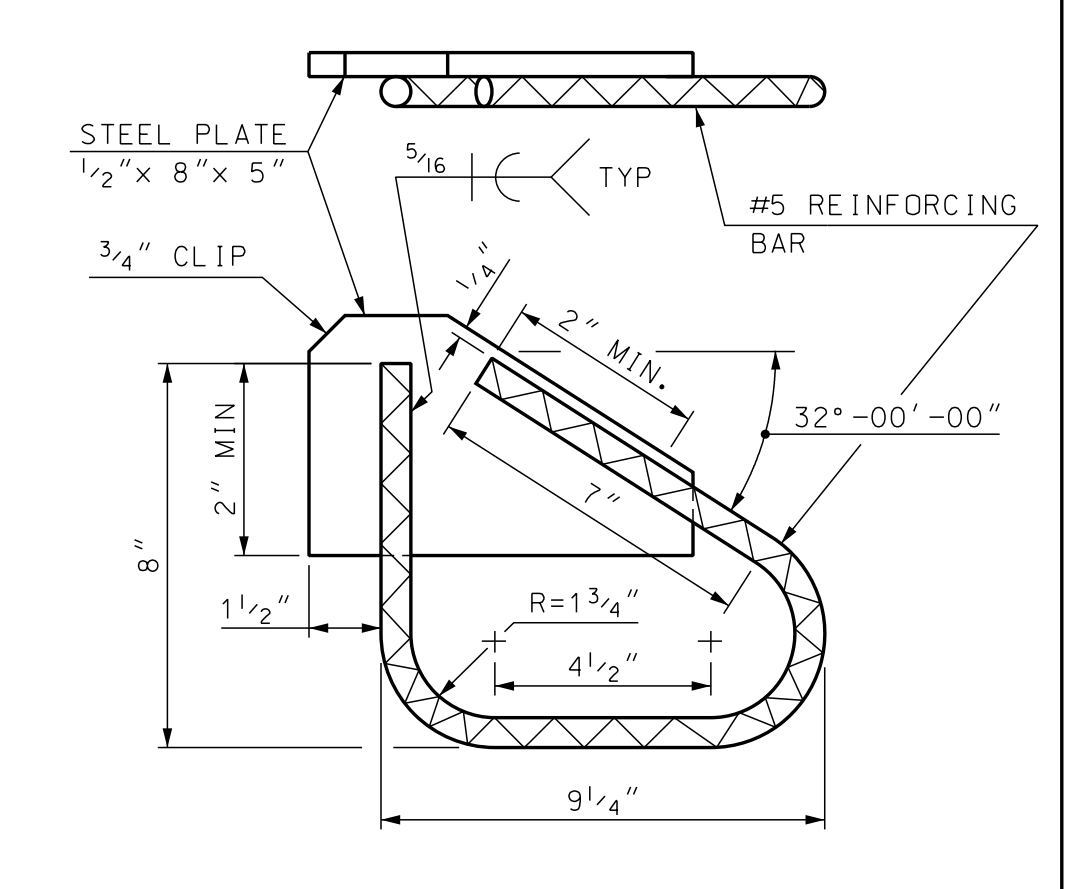
**BEARING STRIP DETAIL**  
NOT TO SCALE



**FIELD SPLICE WELD DETAIL**

**EXPANSION JOINT NOTES**

- ALL EXPANSION JOINT STEEL, INCLUDING ANCHORS, SHALL BE GALVANIZED. STEEL ANGLES SHALL BE ASTM A572 GRADE 50. MINOR STEEL PLATES MAY CONFORM TO ASTM A36. THE ENTIRE ASSEMBLY, INCLUDING STRIP SEAL, SHALL BE PAID FOR AS ITEM 561.1001, PREFABRICATED STRIP SEAL EXPANSION JOINT (F).
- SPLICES FOR STEEL ANGLES SHALL DEVELOP FULL STRENGTH.
- EXPANSION JOINT OPENING SHALL BE ADJUSTED TO TEMPERATURE ANTICIPATED JUST PRIOR TO POURING DECK BLOCKOUT. FINAL SETTING IN THE FIELD SHALL BE DETERMINED BY THE CONTRACT ADMINISTRATOR. SEE TEMPERATURE ADJUSTMENT TABLE & NOTES.
- STRIP SEAL SHALL BE FURNISHED IN ONE CONTINUOUS LENGTH. NO SPLICES WILL BE ALLOWED. SEAL SHALL BE INSTALLED IN THE FIELD BY THE CONTRACTOR, IN ACCORDANCE WITH THE MANUFACTURER OF THE SEAL, USING AN APPROVED TOOL THAT WILL NOT DAMAGE THE SEAL.
- JOINT SUPPORT PLATES AND CURB PLATES SHALL BE SHOP WELDED TO EXPANSION JOINT STEEL AND SHALL BE NORMAL TO GRADE AFTER JOINT ASSEMBLY HAS BEEN ADJUSTED FOR ROADWAY CROSS-SLOPE AND GRADE. STEEL ANGLES AND EXTRUSIONS SHALL BE ASSEMBLED WITH A CONSTANT JOINT OPENING TO ENSURE PROPER PERFORMANCE AND WATER TIGHTNESS.
- IMMEDIATELY AFTER THE JOINT HAS BEEN SECURED TO THE STRUCTURAL STEEL AND BACKWALL, REMOVE SHIPPING DEVICES AND GRIND SMOOTH ANY WELDS ON EXPOSED SURFACES. REPAIR ANY DAMAGE TO GALVANIZED SURFACES IN ACCORDANCE WITH SECTION 550.
- PROTECT TOP OF EXPANSION JOINT DURING PLACEMENT OF CONCRETE AND BITUMINOUS PAVEMENT.
- THE STRIP SEAL HAS BEEN DESIGNED FOR A TOTAL FACTORED MOVEMENT OF 2.1 INCHES. DESIGN INCLUDES MOVEMENT DUE TO TEMPERATURE, SKEW, SHRINKAGE AND MINIMUM INSTALLATION WIDTH. THE CONTRACTOR SHALL USE AN SE-400 SEAL BY WATSON BOWMAN OR A2R-400 BY D.S. BROWN, AS NOTED IN THE OPL.
- ELEVATIONS SHOWN AT TOP OF ANGLES ARE 1/8" LOWER THAN PROPOSED FINISHED ROADWAY GRADE.
- NO "LOW PROFILE" STEEL EXTRUSIONS SHALL BE ALLOWED. SEE OPL FOR APPROVED PRODUCTS.
- PRIOR TO INSTALLING THE SEAL, ALL TEMPORARY FORM SHALL BE REMOVED. STEEL ANGLES AND EXTRUSIONS SHALL BE MAINTAINED FREE FROM DIRT, WATER AND ANY OTHER LOOSE DEBRIS, WITH THE USE OF COMPRESSED AIR, TO ENSURE PROPER FIT OF THE SEAL. CARE SHALL BE TAKEN NOT TO DAMAGE GALVANIZED SURFACES.
- A TEMPORARY SEAL(S) SHALL BE INSTALLED PRIOR TO THE START OF THE WINTER MAINTENANCE PERIOD FOR ALL JOINT ASSEMBLIES OR PORTIONS THEREOF THAT WILL BE IN PLACE THROUGHOUT THE WINTER. ALL TEMPORARY SEALS SHALL BE REMOVED AND JOINT OPENINGS AND SUBSTRUCTURE SHALL BE CLEANED PRIOR TO INSTALLING THE FINAL SEAL. ALL COSTS SHALL BE SUBSIDIARY TO ITEM 561.1001.



**ANCHOR DETAIL (90° CROSSING)**  
SCALE: 3" = 1'-0"

**TEMPERATURE ADJUSTMENT NOTES**

- "T" DIMENSIONS ARE PERPENDICULAR TO FACE OF BACKWALL.
- MINIMUM "T" WIDTH FOR SEAL INSTALLATION = 1 3/4" (APPROXIMATELY 65°F OR LESS).
- VALUES IN THE TEMPERATURE ADJUSTMENT TABLE ARE FOR SETTING THE EXPANSION JOINT ASSEMBLY IMMEDIATELY PRIOR TO POURING THE DECK BLOCKOUT.

TEMPERATURE ADJUSTMENT TABLE	
TEMPERATURE	"T"
20°F	2 3/8"
35°F	2 3/16"
50°F	1 15/16"
65°F	1 3/4"
80°F	1 3/16"
95°F	1 5/16"

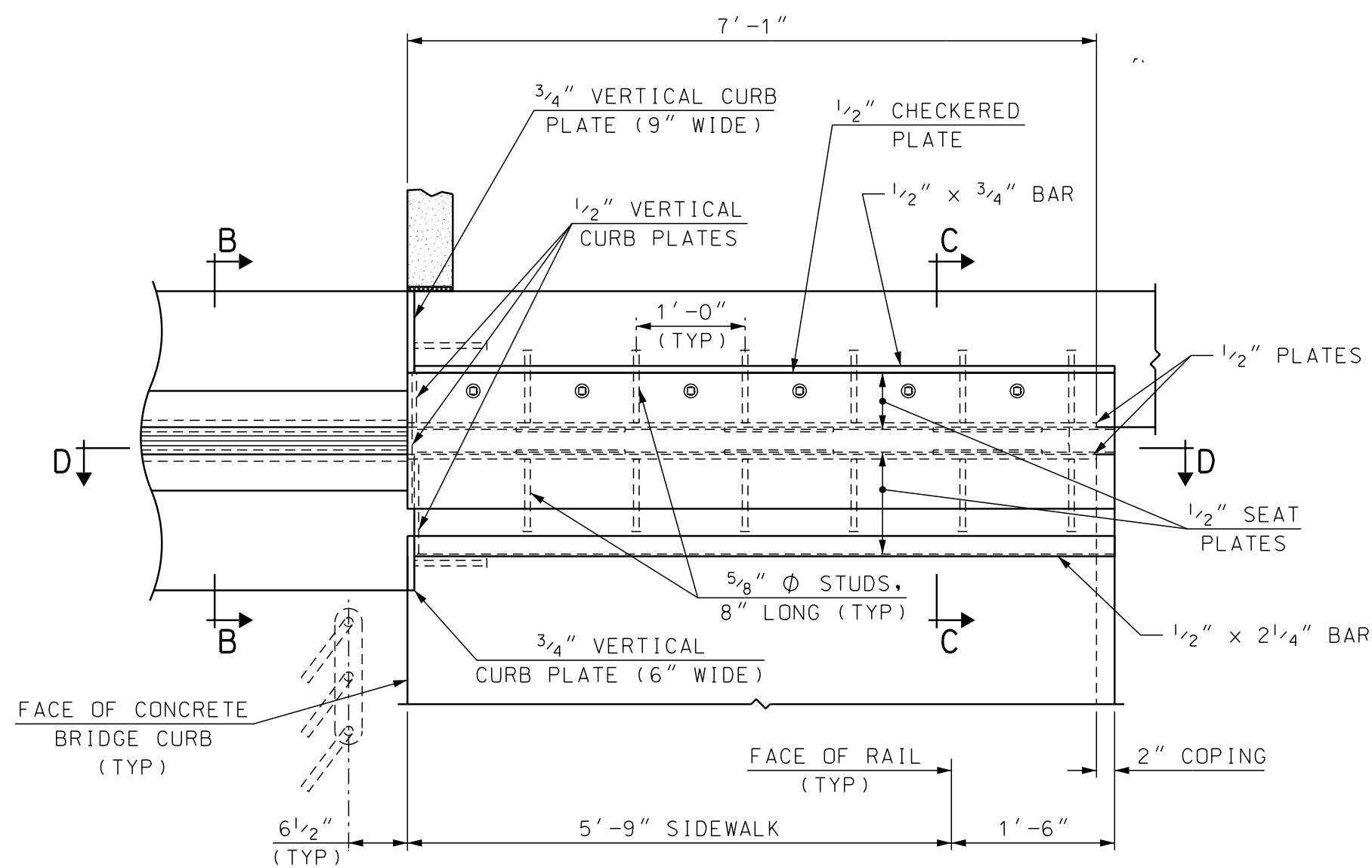
**STATE OF NEW HAMPSHIRE**  
DEPARTMENT OF TRANSPORTATION \* BUREAU OF BRIDGE DESIGN

TOWN WALPOLE, NH - ROCKINGHAM, VT BRIDGE NO. 058/043 STATE PROJECT 42277

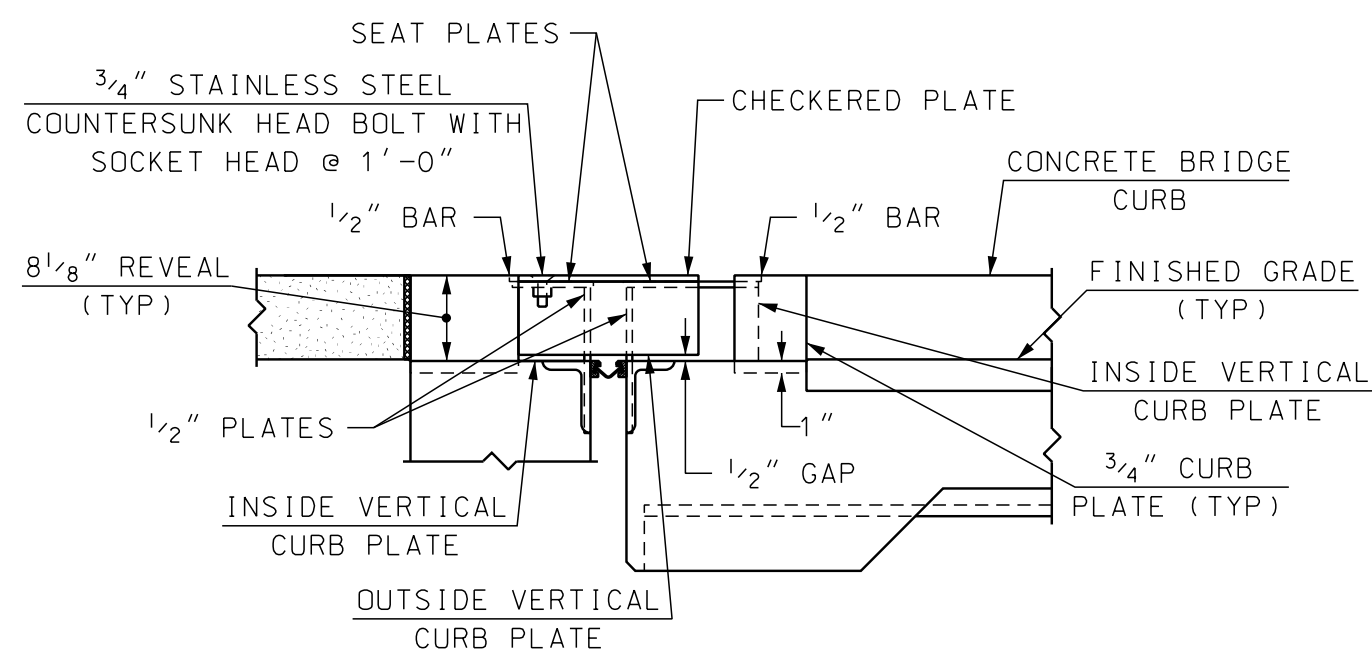
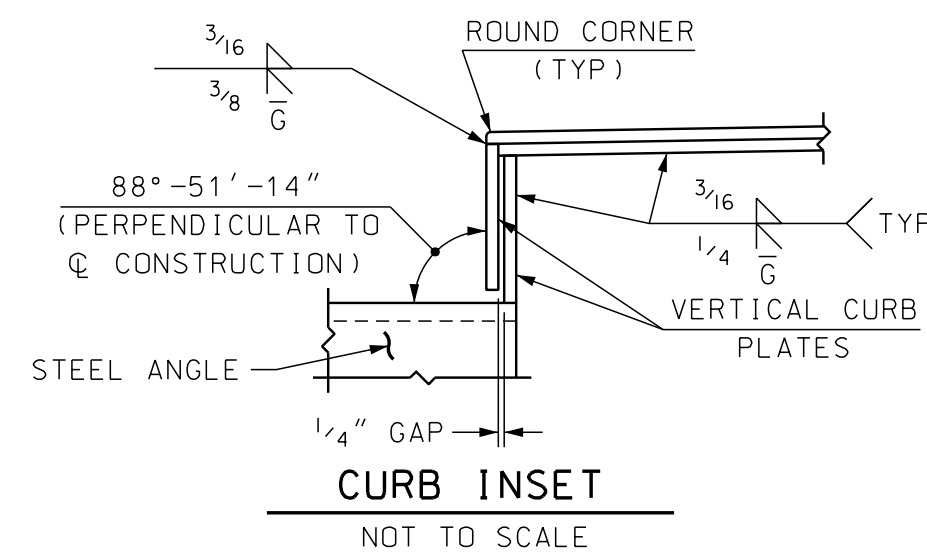
LOCATION CHURCH STREET OVER THE CONNECTICUT RIVER

STRIP SEAL EXPANSION JOINT				BRIDGE SHEET
REVISIONS AFTER PROPOSAL	BY	DATE	DATE	16 OF 19
DESIGNED	JGS	9/2019	CHECKED JDG	05/2020
DRAWN	LRB	10/2019	CHECKED JDG	05/2020
QUANTITIES	JDG	05/2020	CHECKED SRW	05/2020
ISSUE DATE	FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
REV. DATE	X-A004(799)		21	31

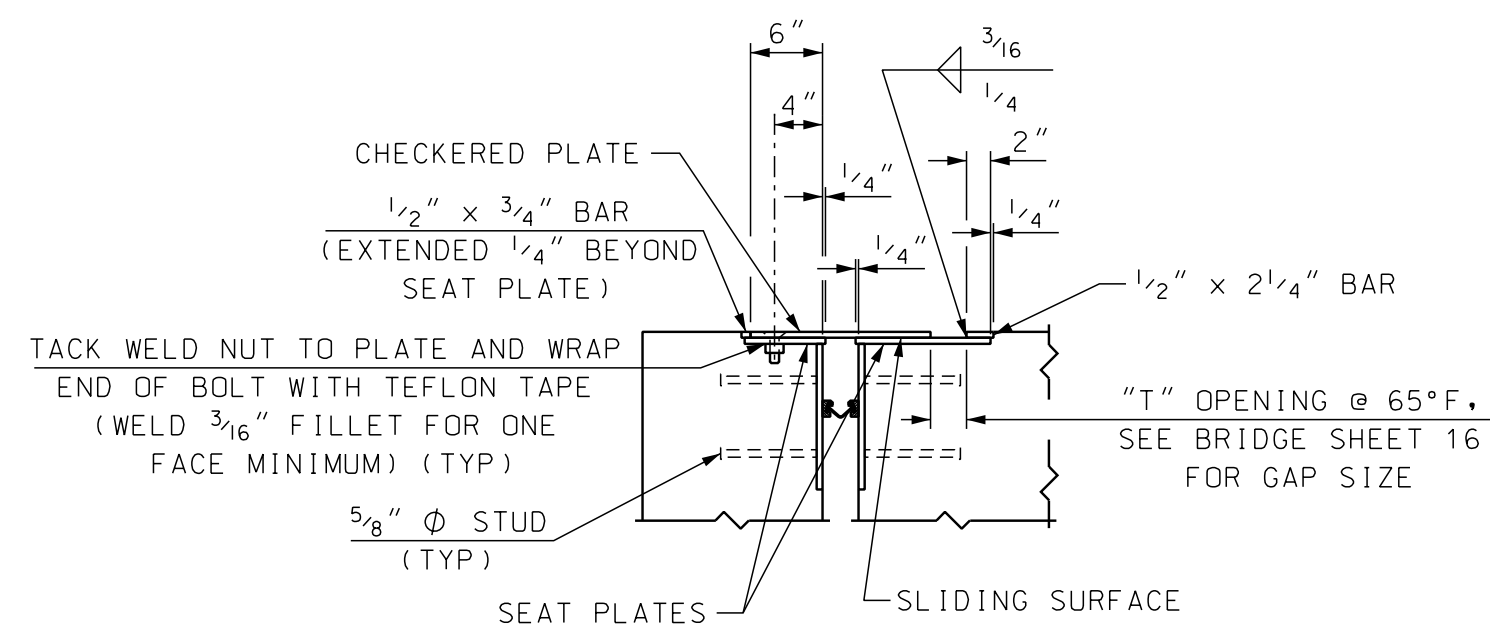
SUBDIRECTORY .DGN LOCATOR SHEET SCALE  
English/EXP-J48277/STRIP\_SEAL-BKWL PANELAS NOTED



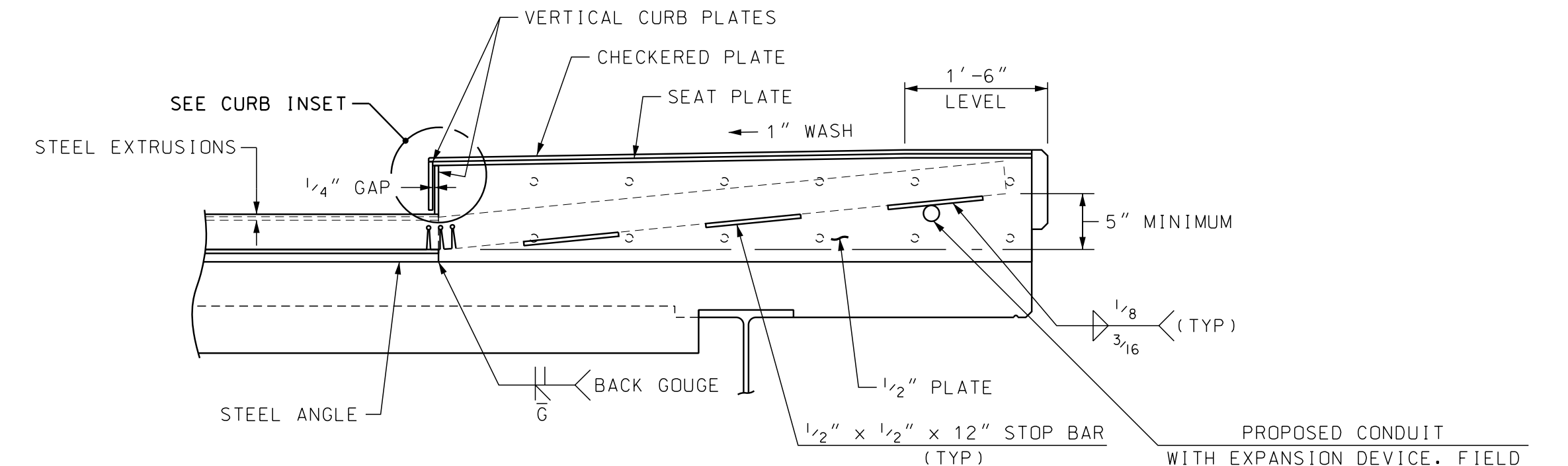
**PARTIAL ASSEMBLY DETAIL**  
SCALE: 3/4" = 1'-0"



**SECTION B-B**  
SCALE: 3/4" = 1'-0"



**SECTION C-C**  
SCALE: 3/4" = 1'-0"



**SECTION D-D**  
SCALE: 3/4" = 1'-0"

<b>STATE OF NEW HAMPSHIRE</b>									
<b>DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN</b>									
TOWN	WALPOLE, NH - ROCKINGHAM, VT	BRIDGE NO.	058/043	STATE PROJECT	42277				
LOCATION	CHURCH STREET OVER THE CONNECTICUT RIVER								
<b>SIDEWALK PLATE DETAILS</b>									BRIDGE SHEET
REVISIONS AFTER PROPOSAL			BY	DATE	BY	DATE	17 OF 19		
	DESIGNED	JGS	9/2019	CHECKED	JDG	05/2020	FILE NUMBER		
	DRAWN	LRB	10/2019	CHECKED	JDG	05/2020	136-3-2		
	QUANTITIES	JDG	05/2020	CHECKED	SRW	05/2020	TOTAL SHEETS		
SUBDIRECTORY	DGN LOCATOR	SHEET SCALE	ISSUE DATE	FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS			
English/EXP-JTS	42277Exp Jt Sidewalk Plates	AS NOTED	REV. DATE	X-A004(799)	22	31			

ABUTMENT B - SUBWALL REINFORCEMENT					BRIDGE SHEET 10 OF 19												
Mark	Size	Length	# Pieces	Type	A	B	C	D	E	F	G	H	J	K	R	O	
SW01	#5	2.50	96	—													
SW02	#5	6.24	49	17		2.58	1.08	2.58									
SW03	#5	20.92	8	—													
SW04	#5	11.08	8	—													
SW05	#5	15.25	8	—													
SW06	#5	7.92	3	S6	0.83	2.58	1.08	2.58			0.83						
SW07	#4	9.83	3	S5	0.67	0.83	6.83	0.83			0.67						
SW08	#4	4.58	3	S5	0.67	0.83	1.58	0.83			0.67						
SW09	#5	3.00	16	C1													
SW10	#5	3.00	16	C2													
SW11	#4	4.67	6	N10		1.50	1.67	1.50				1.08	1.08	1.08	1.08		
A01	#5	3.00	10	C1													
A02	#5	3.00	10	C2													
A03	#5	20.92	5	—													
A04	#5	11.08	5	—													
A05	#5	15.25	5	—													
A06	#5	2.08	50	17		0.50	1.08	0.50									
A07	#4	5.37	2	N11	1.50	0.35	1.67	0.35	1.50			0.25	0.25	0.25	0.25		
S01	#5	4.63	139	—													
S02	#5	6.17	50	S6	0.00	0.75	3.67	0.92			0.83						
S03	#5	11.50	10	S5	1.25	1.50	6.83	1.25			0.67						
S04	#5	6.17	10	S5	1.25	1.42	1.58	1.25			0.67						
S05	#6	3.83	40	C1													
S06	#6	3.83	40	C2													
S07	#6	20.92	20	—													
S08	#6	11.08	20	—													
S09	#6	15.25	20	—													
S10	#4	4.63	17	—													

SECTION SUMMARY TOTAL WEIGHT (lbs):

ITEM #	DESCRIPTION	#3	#4	#5	#6	#7	#8	#9	#10	#11	#14	#18	TOTAL
544	REINFORCING STEEL	0	0	0	0	0	0	0	0	0	0	0	0
544.11	MECH. CONNECTOR	0	0	0	0	0	0	0	0	0	0	0	0
544.2	EPOXY COATED	0	107	2520	1419	0	0	0	0	0	0	0	4047
544.21	EPOXY MECH. CON.	0	0	163	461	0	0	0	0	0	0	0	623

DECK REINFORCING - PIER 1 BRIDGE SHEET 12 OF 19

Mark	Size	Length	# Pieces	Type	A	B	C	D	E	F	G	H	J	K	R	O
D01E	#6	20.83	16	—												
D02E	#6	11.17	16	—												
D03E	#6	15.17	16	—												
D04E	#6	3.00	32	C1												
D05E	#6	3.00	32	C2												
D06E	#5	6.83	32	—												
D07E	#5	4.17	8	C1												
D08E	#5	2.67	8	C2												
D09E	#5	1.17	8	C1												
D10E	#5	5.67	8	C2												
D11E	#5	4.33	60	N2		0.58	0.83	1.67	1.25			0.92		0.92		
D12E	#4	2.75	17	—												
D13E	#4	3.25	17	—												
D14E	#4	11.33	9	S5	1.25	1.50	6.83	1.25			0.50					
D15E	#4	6.00	9	S5	1.25	1.42	1.58	1.25			0.50					

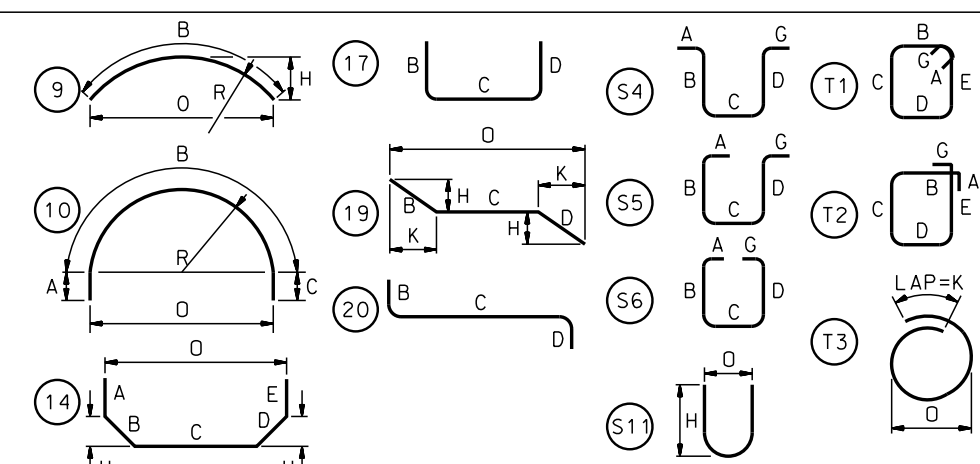
SECTION SUMMARY TOTAL WEIGHT (lbs):

ITEM #	DESCRIPTION	#3	#4	#5	#6	#7	#8	#9	#10	#11	#14	#18	TOTAL
544	REINFORCING STEEL	0	0	0	0	0	0	0	0	0	0	0	0
544.11	MECH. CONNECTOR	0	0	0	0	0	0	0	0	0	0	0	0
544.2	EPOXY COATED	0	172	499	1134	0	0	0	0	0	0	0	1805
544.21	EPOXY MECH. CON.	0	0	114	288	0	0	0	0	0	0	0	402

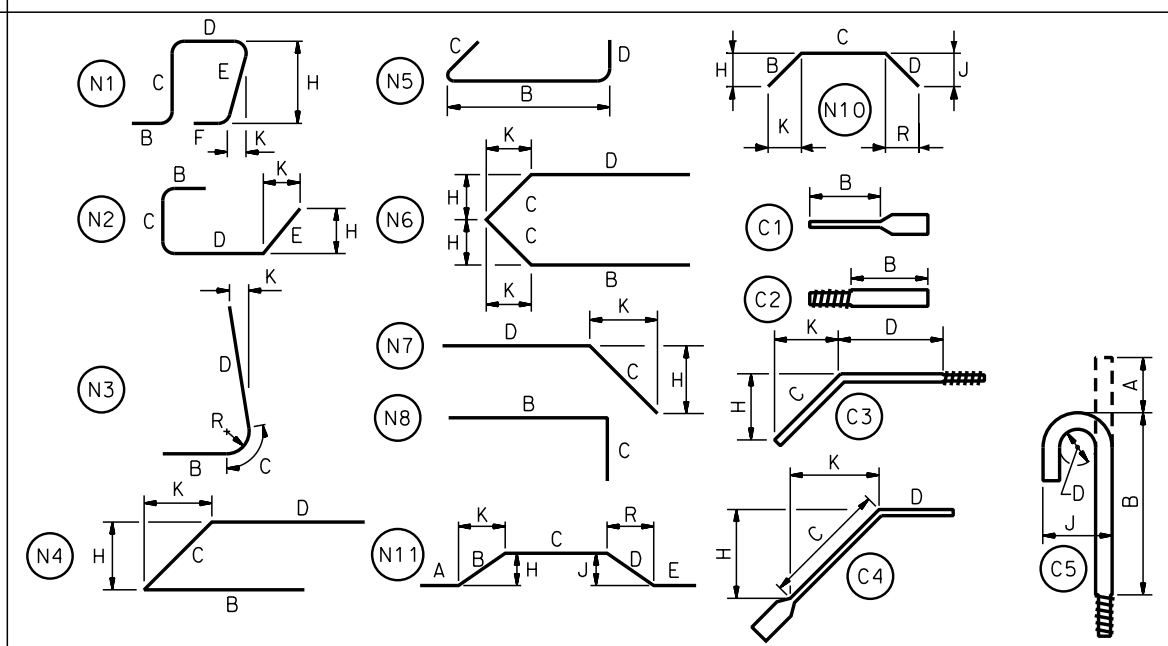
STANDARD INDUSTRY BENDS, STIRRUPS, & TIES

RECOMMENDED END HOOKS ALL GRADES (IN)				STIRRUP & TOE HOOK DIMENSIONS ALL GRADES (IN)					
BAR SIZE	D	180° HOOKS	90° HOOKS	BAR SIZE	D	90° HOOKS	135° HOOKS		
	Φ	A, G	J, A, G		Φ	A, G	A, G, H (appr)		
#3	2 1/4	5	3	6	#3	1 1/2	4	4	2 1/2
#4	3	6	4	8	#4	2	4 1/2	4 1/2	3
#5	3 3/4	7	5	10	#5	2 1/2	6	5 1/2	3 3/4
#6	4 1/2	8	6	12	#6	4 1/2	12	7 3/4	4 1/2
#7	5 1/4	10	7	14	#7	5 1/4	14	9	5 1/4
#8	6	11	8	16	#8	6	16	10 1/4	6
#9	9 1/2	15	11 3/4	19					
#10	10 3/4	17	13 1/4	22					
#11	12	19	14 3/4	24					
#14	18 1/4	27	21 3/4	31					

NOTE: D = finished inside bend at of hook. For additional data on standard bar bends not shown on this sheet see current CRS1 Manual.



STANDARD N.H. & SPECIAL BENDS



- NOTES:
- FIGURES IN CIRCLE SHOW TYPE OF BEND.
  - UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING #18 SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET - STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M 31-94 (ASTM A615).
  - FOR TYPICAL BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS AND HOOKS AND OTHER STANDARD PRACTICE REFER TO THE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
  - BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
  - ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180° AND 135° HOOKS.
  - "J" DIMENSION ON 180° HOOKS TO BE SHOWN ONLY WHEN NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
  - "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
  - WHERE SLOPE DIFFERS FROM 45° DIMENSIONS "H" AND "K" MUST BE SHOWN.
- ▲ DENOTES BARS TO BE CUT IN FIELD, AS REQUIRED.  
 ▲ DENOTES BARS TO BE BENT IN FIELD.

ASTM STANDARD REINFORCING BARS

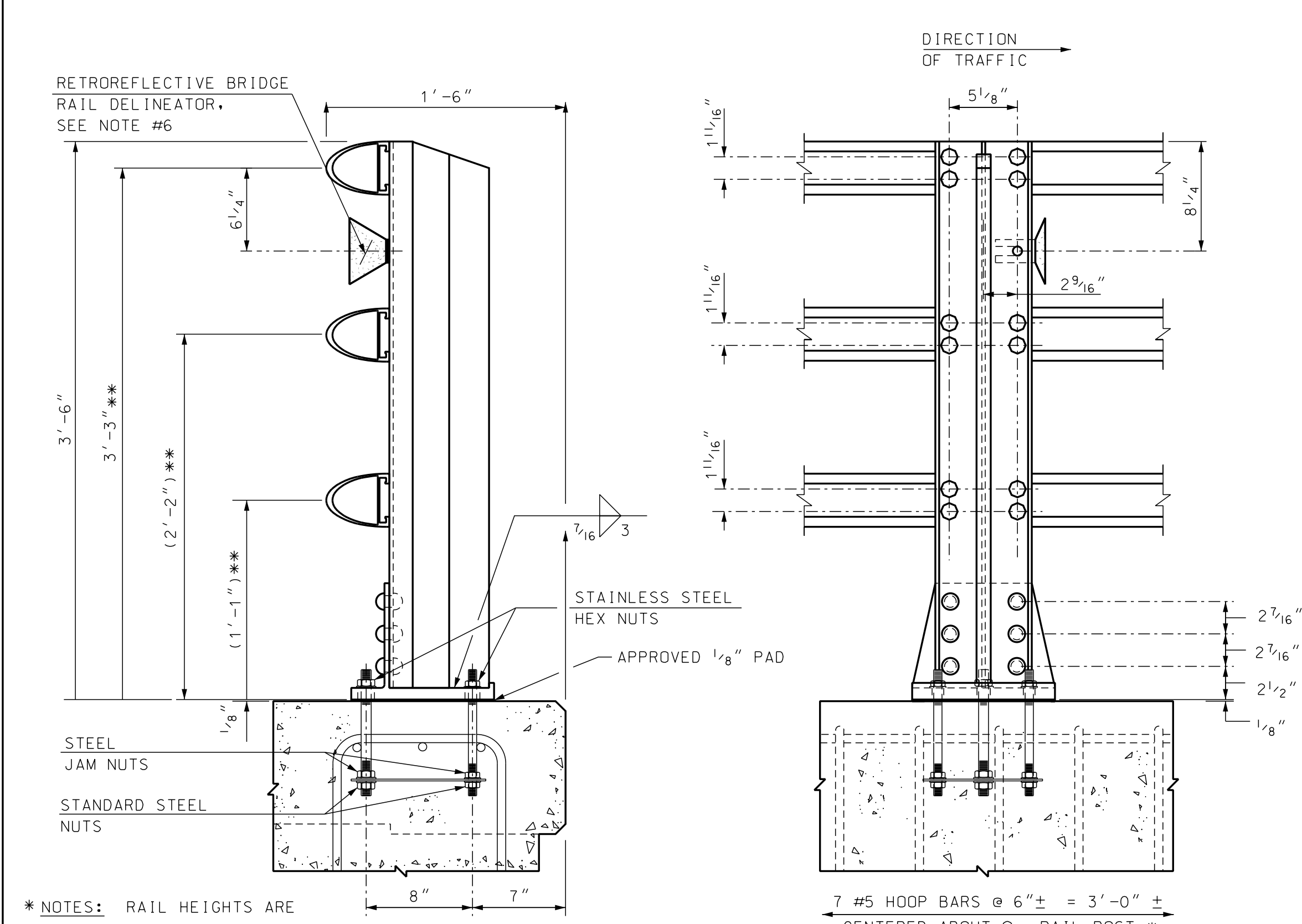
BAR SIZE	WEIGHT LBS/FT	DIAM IN	CROSS SECT AREA IN²
#3	0.376	0.375	0.11
#4	0.668	0.500	0.20
#5	1.043	0.625	0.31
#6	1.502	0.750	0.44
#7	2.044	0.875	0.60
#8	2.670	1.000	0.79
#9	3.400	1.128	1.00
#10	4.303	1.270	1.27
#11	5.313	1.410	1.56
#14	7.650	1.693	2.25
#18	13.600	2.257	4.00

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
BRC	42277reinf scht	AS NOTED



STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN					
TOWN		BRIDGE NO.		STATE PROJECT	
WALPOLE, NH - ROCKINGHAM, VT		058/043		42277	
LOCATION CHURCH STREET OVER CONNECTICUT RIVER					
REINFORCING SCHEDULE					BRIDGE SHEET
DESIGNED					18 OF 19
DRAWN					FILE NUMBER
QUANTITIES					136-3-2
ISSUE DATE					TOTAL SHEETS
REV. DATE					23
FEDERAL PROJECT NO.					9
SHEET NO.					23
TOTAL SHEETS					31





**SECTION VIEW**  
SCALE: 1 1/2" = 1'-0"

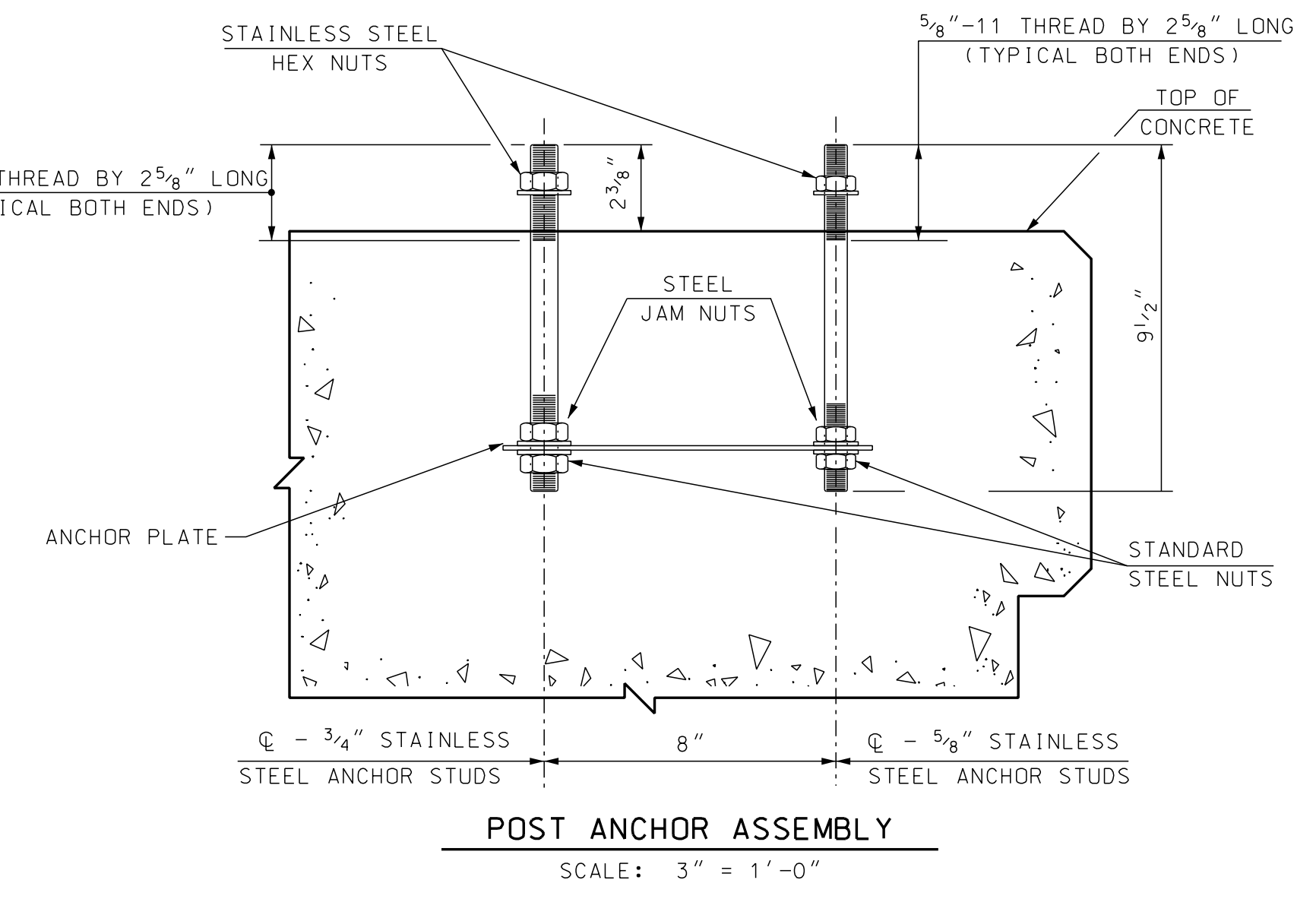
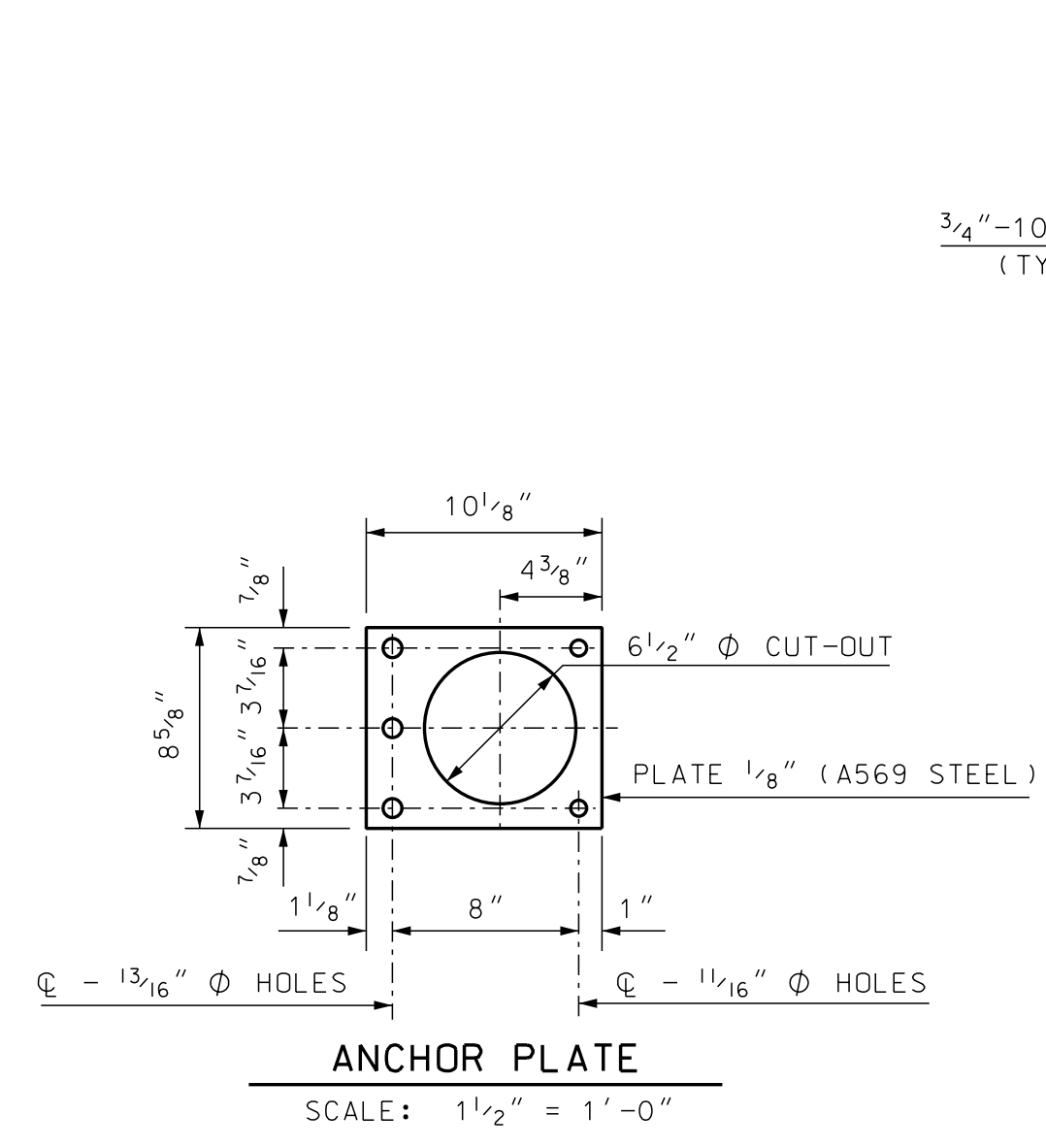
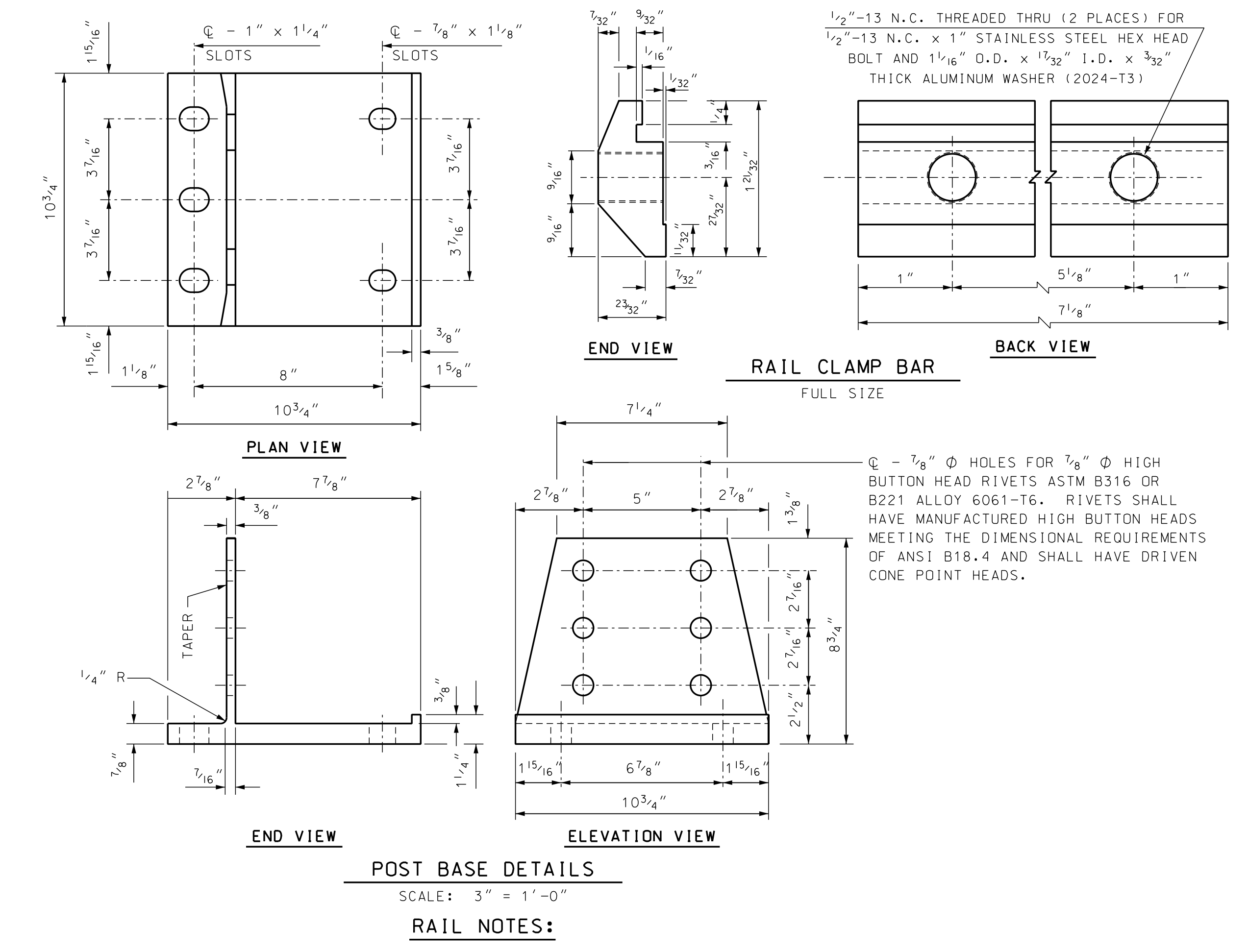
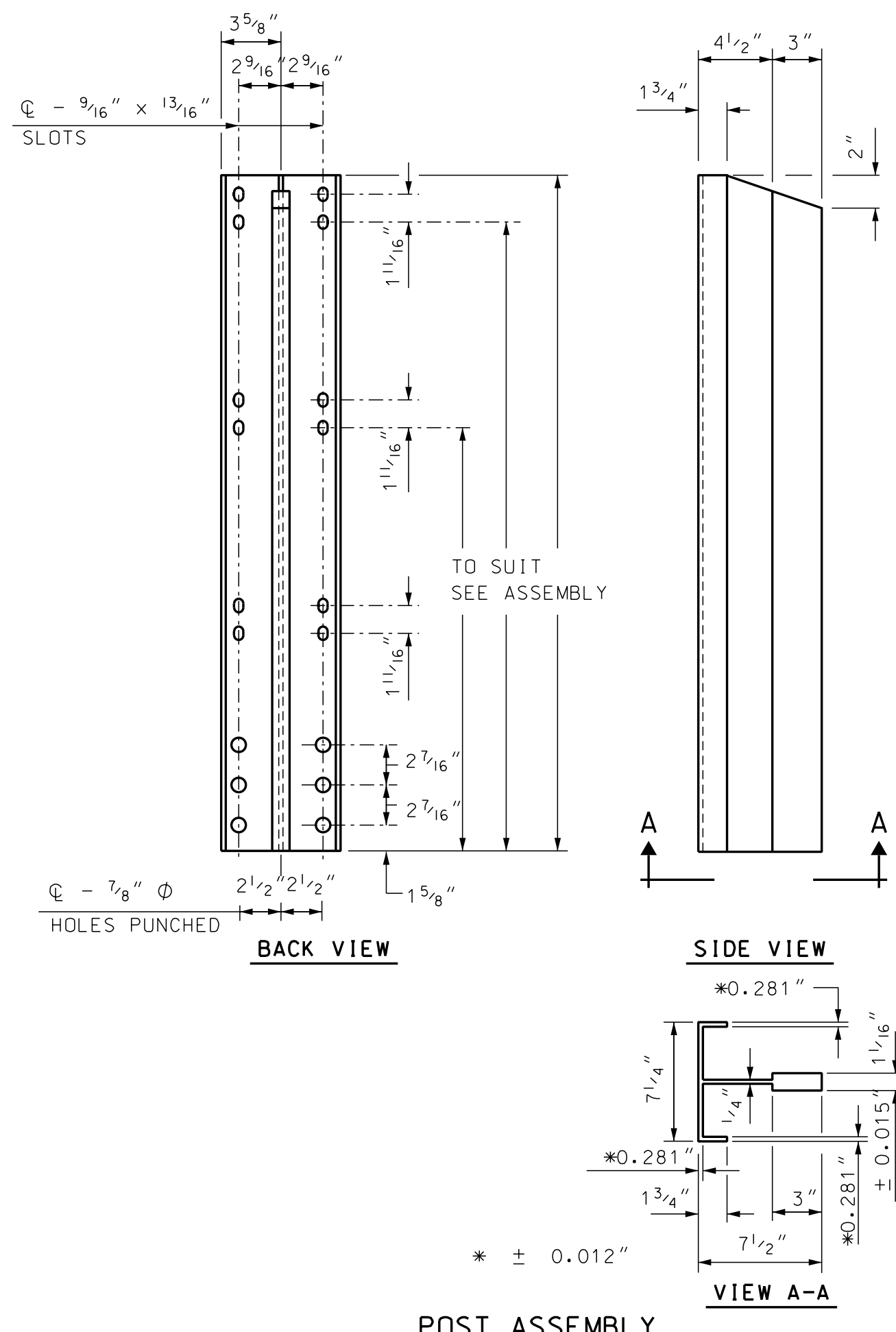
**BACK ELEVATION VIEW**  
SCALE: 1 1/2" = 1'-0"

**POST ASSEMBLY**  
SCALE: 1 1/2" = 1'-0"

\* NOTES: RAIL HEIGHTS ARE GIVEN FOR USE WITH A SIDEWALK. WITH A BRUSH CURB, USE ( ).

\*\*MATCH EXISTING RAIL HEIGHTS.

\* REINFORCING CAPACITY SHALL MEET OR EXCEED THAT SHOWN



**MATERIAL:**

- ALUMINUM EXTRUSIONS (POSTS, BASES, RAILS, SPLICE BARS, PINS AND CLAMP BARS) SHALL BE ASTM B221, ALLOY 6061-T6 OR ALLOY 6351-T5 (MIN. 10% ELONGATION).
- STAINLESS STEEL ANCHOR STUDS, HEX HEAD BOLTS AND HEX NUTS (TYPE 302) SHALL BE ASTM A276, TYPE 430 MOD OR TYPE 304 MOD, (100,000 PSI AND 15% ELONGATION).
- STEEL EMBEDDED JAM AND HEX NUTS SHALL BE ASTM A563 GRADE A OR BETTER.
- ALUMINUM WASHERS SHALL BE ASTM B209, ALLOY 2024-T3 ALCLAD.
- PREFORMED ELASTOMERIC BEARING PAD SHALL MEET REQUIREMENTS OF AASHTO M251.
- RETROREFLECTIVE DELINEATORS, FIELD DRILLING OF POSTS, STAINLESS STEEL (TYPE 304) BOLTS, NUTS & WASHERS SHALL BE SUBSIDIARY TO ITEM 563.73. SEE STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION (DL-1) FOR ADDITIONAL DETAILS AND SPACING.

**ANCHOR ASSEMBLY NOTES:**

- 3/4" AND 5/8" AMERICAN STANDARD FINISHED HEXAGON STEEL NUTS ON BOTTOM OF ANCHOR ASSEMBLY, 3/4" AND 5/8" AMERICAN STANDARD FINISHED HEXAGON STEEL JAM NUTS ON TOP OF ANCHOR PLATE.
- 3/4" AND 5/8" STAINLESS STEEL HEXAGON NUTS ON TOP ENDS OF BOLTS WITH CLASS 2B THREADS. 13/16" I.D., 2" O.D., 1/8" THICK ALUMINUM WASHERS UNDER NUTS ON TOP. ALL NUTS SHALL COMPLY WITH AMERICAN HEXAGON ANSI SPEC. B18.2. STAINLESS STEEL HEXAGON NUTS SHALL HAVE FULL THREADS.

**SPLICE BAR DETAILS:**

- SEE STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION (BR-R3) FOR DETAILS AND NOTES.

**BALUSTER DETAILS:**

- SEE STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION (BR-R4) FOR DETAILS AND NOTES.

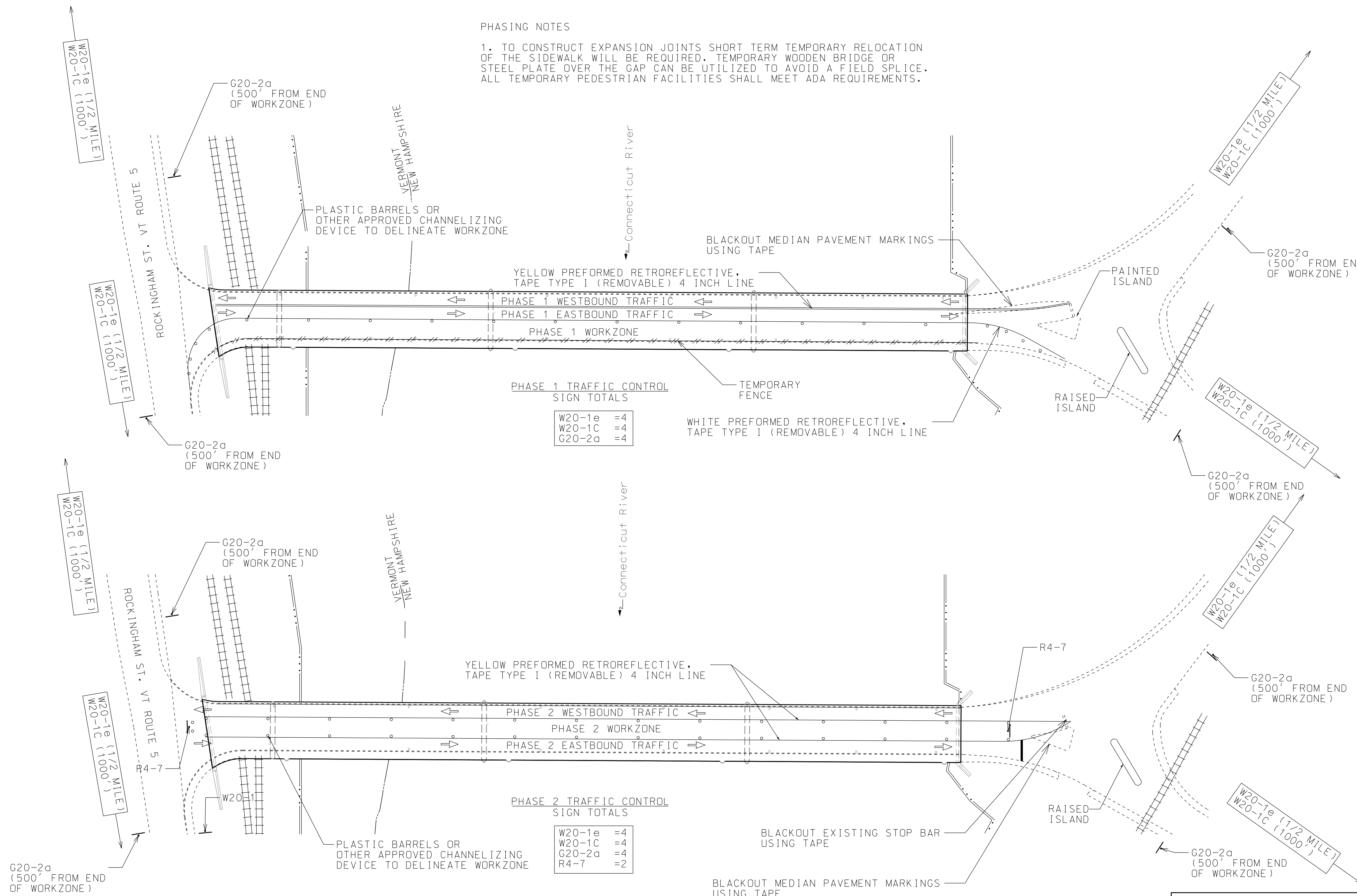
<b>STATE OF NEW HAMPSHIRE</b>					
<b>DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN</b>					
TOWN	WALPOLE, NH - ROCKINGHAM, VT	BRIDGE NO.	058/043	STATE PROJECT	42277
LOCATION	CHURCH STREET OVER CONNECTICUT RIVER				
<b>ALUMINUM BRIDGE RAIL (3-BAR)</b>					BRIDGE SHEET
					19 OF 19
REVISIONS AFTER PROPOSAL		BY	DATE	BY	DATE
		DESIGNED	JGS 9/2019	CHECKED	JDG 05/2020
		DRAWN	LRB 10/2019	CHECKED	JDG 05/2020
		QUANTITIES	JDG 05/2020	CHECKED	SRW 05/2020
ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
REV. DATE		X-A004(799)		24	31

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
English/EXP-JTS	422773BarAlum	AS NOTED



PHASING NOTES

1. TO CONSTRUCT EXPANSION JOINTS SHORT TERM TEMPORARY RELOCATION OF THE SIDEWALK WILL BE REQUIRED. TEMPORARY WOODEN BRIDGE OR STEEL PLATE OVER THE GAP CAN BE UTILIZED TO AVOID A FIELD SPLICE. ALL TEMPORARY PEDESTRIAN FACILITIES SHALL MEET ADA REQUIREMENTS.



PHASE 1 TRAFFIC CONTROL SIGN TOTALS

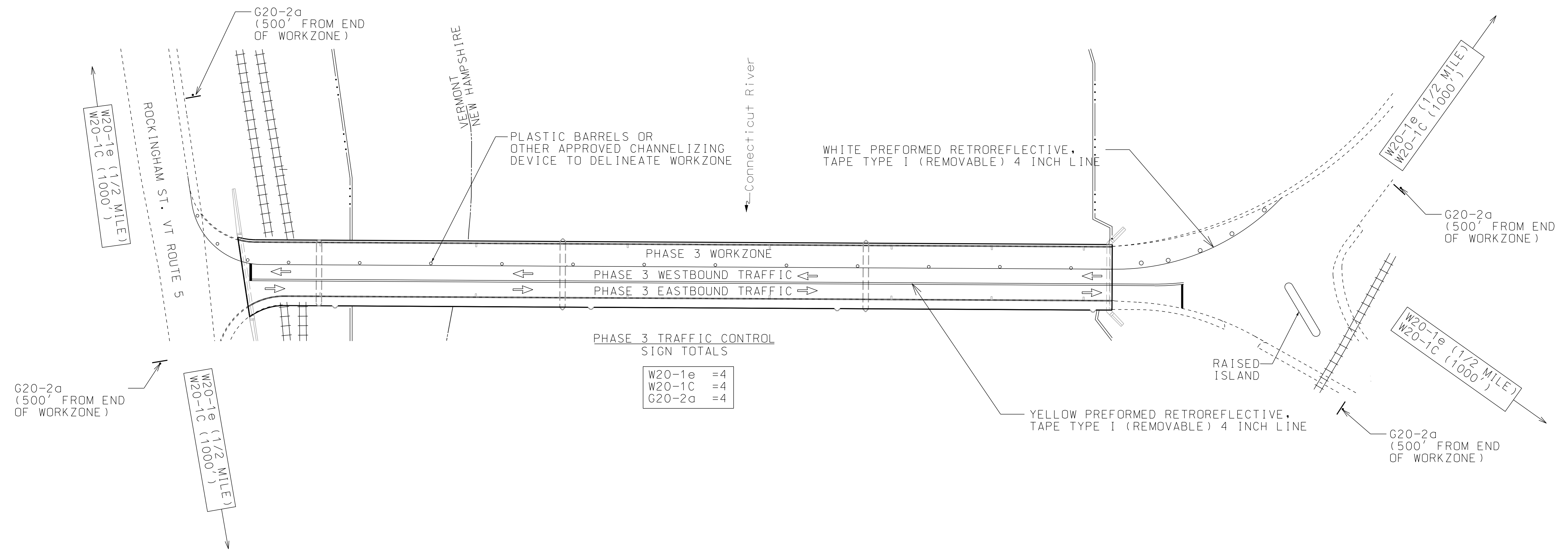
W20-1e	=4
W20-1C	=4
G20-2a	=4

PHASE 2 TRAFFIC CONTROL SIGN TOTALS

W20-1e	=4
W20-1C	=4
G20-2a	=4
R4-7	=2

STATE OF NEW HAMPSHIRE			
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN			
<b>TRAFFIC CONTROL 1</b>			
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
42277tc	42277	25	31

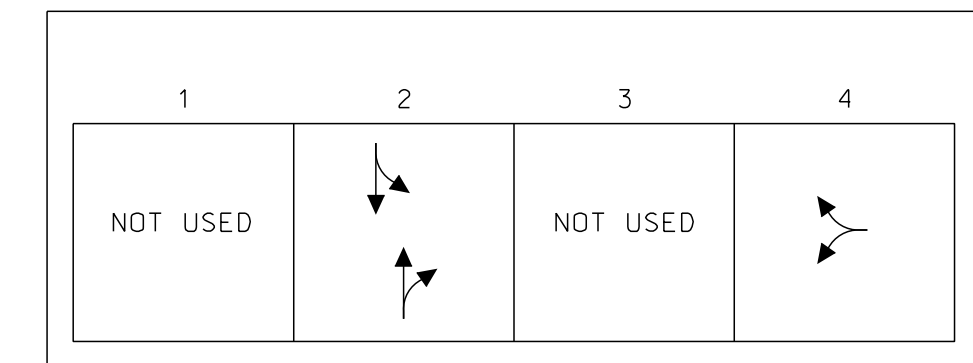




STATE OF NEW HAMPSHIRE			
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN			
<i>TRAFFIC CONTROL 2</i>			
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
42277tc	42277	26	31

TEMPORARY TRAFFIC SIGNAL PHASING DIAGRAM

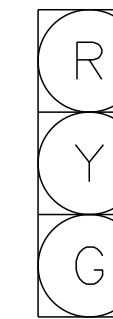
VT SIDE: ROCKINGHAM ST AT CHURCH ST



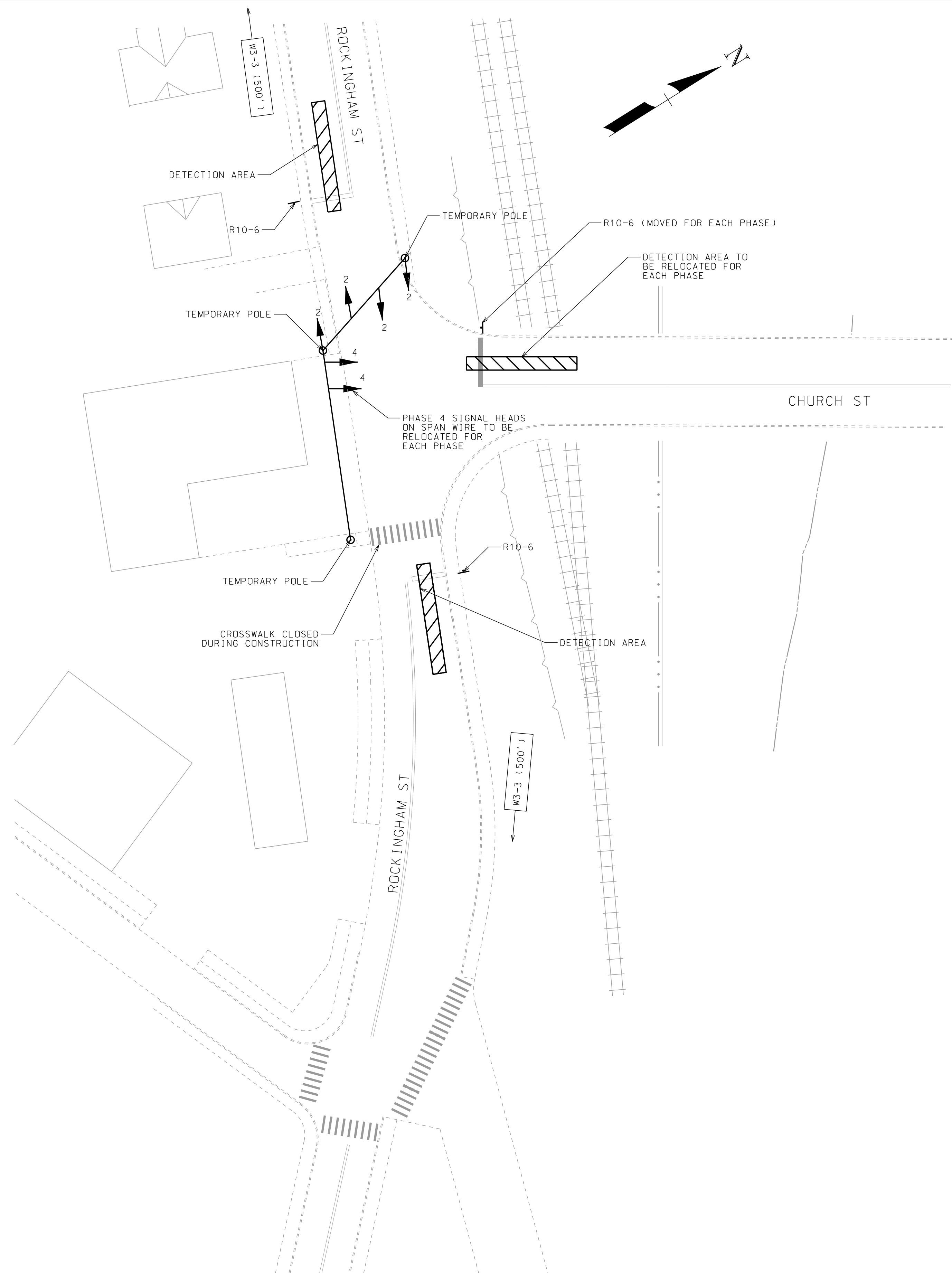
TEMPORARY TRAFFIC SIGNAL TIMING		
	PHASE 2	PHASE 4
	ROCKINGHAM ST	CHURCH ST
MINIMUM	10	10
EXTENSION	3	3
MAXIMUM	30	30
YELLOW	4	4
ALL RED	2	2
RECALL	ON	

TEMPORARY TRAFFIC SIGNAL NOTES

- FOR TRAFFIC CONTROL ASSOCIATED WITH SIGNALS SEE TRAFFIC CONTROL SHEETS 1 AND 2 (SHEETS 25 AND 26)
- TEMPORARY TRAFFIC SIGNALS SHALL BE LOCATED ON THE VT SIDE USING TEMPORARY POLES AS SHOWN ON THE PLAN AND IN COMPLIANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). AS CONSTRUCTION PHASING REQUIRES THE TRAFFIC SIGNAL HEAD LOCATIONS ON THE VT SIDE MAY REQUIRE ADJUSTMENTS.
- THE TEMPORARY SIGNALS ON THE VT SIDE SHALL INCLUDE CONTROLLER, TRAFFIC SIGNALS AND SUPPORTS, VEHICLE DETECTION, POWER SOURCE AND ALL NECESSARY EQUIPMENT FOR DAILY OPERATION.
- TIMING OF THE TEMPORARY TRAFFIC SIGNAL ON THE VT SIDE WILL BE AS SHOWN AND ADJUSTED AS REQUIRED IN THE FIELD AS DIRECTED BY THE RESIDENT ENGINEER.



SIGNAL HEAD DIAGRAM  
ALL



DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN			
<b>TEMPORARY SIGNAL PLAN</b>			
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
42277tc	42277	27	31



PERMANENT CONSTRUCTION SIGNS AND WARNING DEVICES (INCLUDED IN ITEM NO. 619.1)									
SIGN NO.	DESCRIPTION	SIZE (ft)	S.F.	NO. REQ.	TOTAL AREA	POSTS	REMARKS		
G20-2a	END ROAD WORK	2x4	8	4	32	2	BLACK/ORANGE		
W20-1c	ROAD WORK 1000 FEET	4x4	16	4	64	8	BLACK/ORANGE		
W20-1e	ROAD WORK 1/2 MILE	4x4	16	4	64	8	BLACK/ORANGE		
R9-11a	SIDEWALK CLOSED	2x4	8	2	16	4	BLACK/WHITE		
R5-2a (M)	NO TRAILER TRUCKS	3x3	9	4	36	8	BLACK/WHITE		
W5-2	NARROW BRIDGE	4x4	16	4	64		BLACK/YELLOW; MOUNT BELOW R5-2A(M)		
M4-4	TRUCK	2x1	2	30	60		BLACK/ORANGE MOUNT ABOVE M4-8		
M4-8	DETOUR	2x1	2	30	60		BLACK/ORANGE MOUNT ABOVE M1-4(5), M1-5(12)		
M1-5(12)	NH ROUTE 12	2x2	4	19	76	38	BLACK/WHITE		
M1-4(5)	VT ROUTE 5	2x2	4	11	44	22	BLACK/WHITE		
M6-3	ARROW	1.75x1.25	2.19	10	21.875		BLACK/ORANGE MOUNT WITH DETOUR ROUTE ASSEMBLY		
M4-6	END	2x1	2	2	4		BLACK/ORANGE MOUNT WITH DETOUR ROUTE ASSEMBLY		
M6-1L	ARROW	1.75x1.25	2.19	7	15.313		BLACK/ORANGE MOUNT WITH DETOUR ROUTE ASSEMBLY		
M6-1R	ARROW	1.75x1.25	2.19	1	2.1875		BLACK/ORANGE MOUNT WITH DETOUR ROUTE ASSEMBLY		
M6-2R	ARROW	1.75x1.25	2.19	2	4.375		BLACK/ORANGE MOUNT WITH DETOUR ROUTE ASSEMBLY		
M5-1L	ARROW	1.75x1.25	2.19	5	10.938		BLACK/ORANGE MOUNT WITH DETOUR ROUTE ASSEMBLY		
M5-1R	ARROW	1.75x1.25	2.19	1	2.1875		BLACK/ORANGE MOUNT WITH DETOUR ROUTE ASSEMBLY		
M5-2R	ARROW	1.75x1.25	2.19	2	4.375		BLACK/ORANGE MOUNT WITH DETOUR ROUTE ASSEMBLY		
	TRACTOR TRAILERS	5x1	5	6	30		BLACK/ORANGE MOUNT WITH R11-3(M)		
	DETOUR AHEAD	5x1	5	6	30		BLACK/ORANGE MOUNT WITH R11-3(M)		
R4-7	KEEP RIGHT	2x2.5	5	2	10	2	BLACK/WHITE		
R11-3 (M1)	BRIDGE CLOSED (200 FT)	5x2.5	12.5	6	75		BLACK/WHITE		
R11-3 (M2)	BRIDGE CLOSED (500 FT)	5x2.5	12.5	6	75		BLACK/WHITE		
R11-3 (M3)	BRIDGE CLOSED (2 MILES)	5x2.5	12.5	6	75		BLACK/WHITE		
R11-3 (M4)	BRIDGE CLOSED (3 MILES)	5x2.5	12.5	6	75		BLACK/WHITE		
R11-3 (M5)	BRIDGE CLOSED (4 MILES)	5x2.5	12.5	6	75		BLACK/WHITE		
R11-3 (M6)	BRIDGE CLOSED (I-91 TO NH12)	5x2.5	12.5	6	75		BLACK/WHITE		
R8-10	STOP HERE ON RED	2x3	6	3	18	3	BLACK/WHITE		
W3-3	SIGNAL AHEAD	3x3	9	2	18	4	BLACK/ORANGE		

The estimated quantities of "Permanent Controls" are hereby listed. The Contractor is responsible for all "Operational Controls" required under section 619 of the NHDOT Specifications and the Manual on Uniform Traffic Control Devices (MUTCD), Part VI.







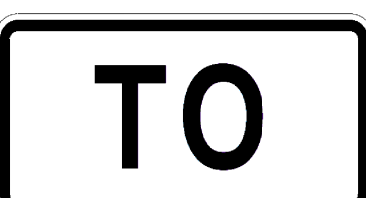
ITEM #	SIGN SIZE	TEXT	TEXT DIMENSIONS			SHIELD SIZE (inch)	ARROW (inch)	NUMERAL (inch)	# SIGNS REQ'D	SIGN AREA (SQ. FT.)		POSTS PER SIGN					REMARKS	
			WIDTH (inch)	HEIGHT (inch)	LETTER HEIGHT (inch)					NOM AREA	TOTAL AREA	BREAKAWAY	STEEL I-BEAM	CONCRETE BASE	4" ALUMINUM	U-CHANNEL-GALV.		
619.1	60	12	TRACTOR TRAILERS			5C			6	5.00	30.00						BLACK / ORANGE MOUNT WITH R11-3(M)	
619.1	60	12	DETOUR AHEAD			5C			6	5.00	30.00						BLACK / ORANGE MOUNT WITH R11-3(M)	
619.1	R11-3 (M1)	60	30	BRIDGE CLOSED 200 FEET AHEAD LOCAL TRAFFIC ONLY			6C 5C 4C		1	12.50	12.50						2	BLACK / WHITE
619.1	R11-3 (M2)	60	30	BRIDGE CLOSED 500 FEET AHEAD LOCAL TRAFFIC ONLY			6C 5C 4C		1	12.50	12.50						2	BLACK / WHITE
619.1	R11-3 (M3)	60	30	BRIDGE CLOSED 2 MILES AHEAD LOCAL TRAFFIC ONLY			6C 5C 4C		1	12.50	12.50						2	BLACK / WHITE
619.1	R11-3 (M4)	60	30	BRIDGE CLOSED 3 MILES AHEAD LOCAL TRAFFIC ONLY			6C 5C 4C		1	12.50	12.50						2	BLACK / WHITE
619.1	R11-3 (M5)	60	30	BRIDGE CLOSED 4 MILES AHEAD LOCAL TRAFFIC ONLY			6C 5C 4C		1	12.50	12.50						2	BLACK / WHITE
619.1	R11-3 (M6)	60	30	I-91 TO NH-12 BRIDGE CLOSED			6C 5C		1	12.50	12.50						2	BLACK / WHITE

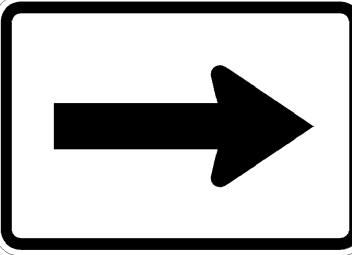
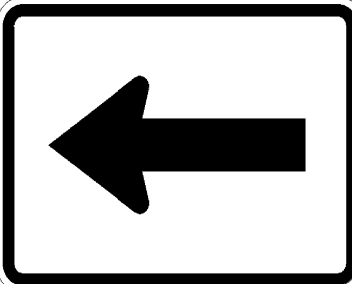
GENERAL NOTES

- ALL GUIDE SIGNS SHALL HAVE TYPE III TEXT AND BORDER WITH TYPE III BACKGROUND SHEETING, UNLESS OTHERWISE SPECIFIED. ALL GUIDE SIGNS WITH ITEM NUMBERS 615.01 OR 615.04 (TYPE A & TYPE AA) SHALL HAVE FLAT SHEET DEMOUNTABLE TEXT AND BORDER AS PRESCRIBED IN THE SPECIFICATIONS.
- THERE SHALL BE NO GAPS IN THE BORDERS OF ALL GUIDE SIGNS.
- ALL REGULATORY AND WARNING SIGNS SHALL HAVE TYPE I BACKGROUND SHEETING, UNLESS OTHERWISE SPECIFIED.
- ALL GUIDE SIGNS SHALL CONTAIN THE SIZE AND DATE OF MANUFACTURE, LOCATED IN THE LOWER LEFT CORNER OF THE FRONT FACE. THESE LETTERS AND NUMBERS SHALL BE 2" NON-REFLECTIVE WHITE (I.E., 3-98 10' x 15').
- REFER TO THE "STANDARD HIGHWAY SIGNS MANUAL" AS PUBLISHED BY THE USDOT-FHWA FOR EXACT DETAILS OF BORDERS, ETC.
- REFER TO THE "STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION" AS PUBLISHED BY THE NHDOT FOR EXACT DETAILS OF PERMANENT SIGNING STANDARDS.
- THE MINIMUM SIGN HEIGHT FOR A ROADSIDE SIGN IN A RURAL DISTRICT SHALL BE INCREASED FROM 5 FEET TO 6 FEET. ALL OTHER SIGN HEIGHTS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD.

STATE OF NEW HAMPSHIRE			
DEPARTMENT OF TRANSPORTATION • BUREAU OF TRAFFIC			
<b>CONSTRUCTION SIGN TEXT LAYOUT</b>			
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
42277+yp		28	31



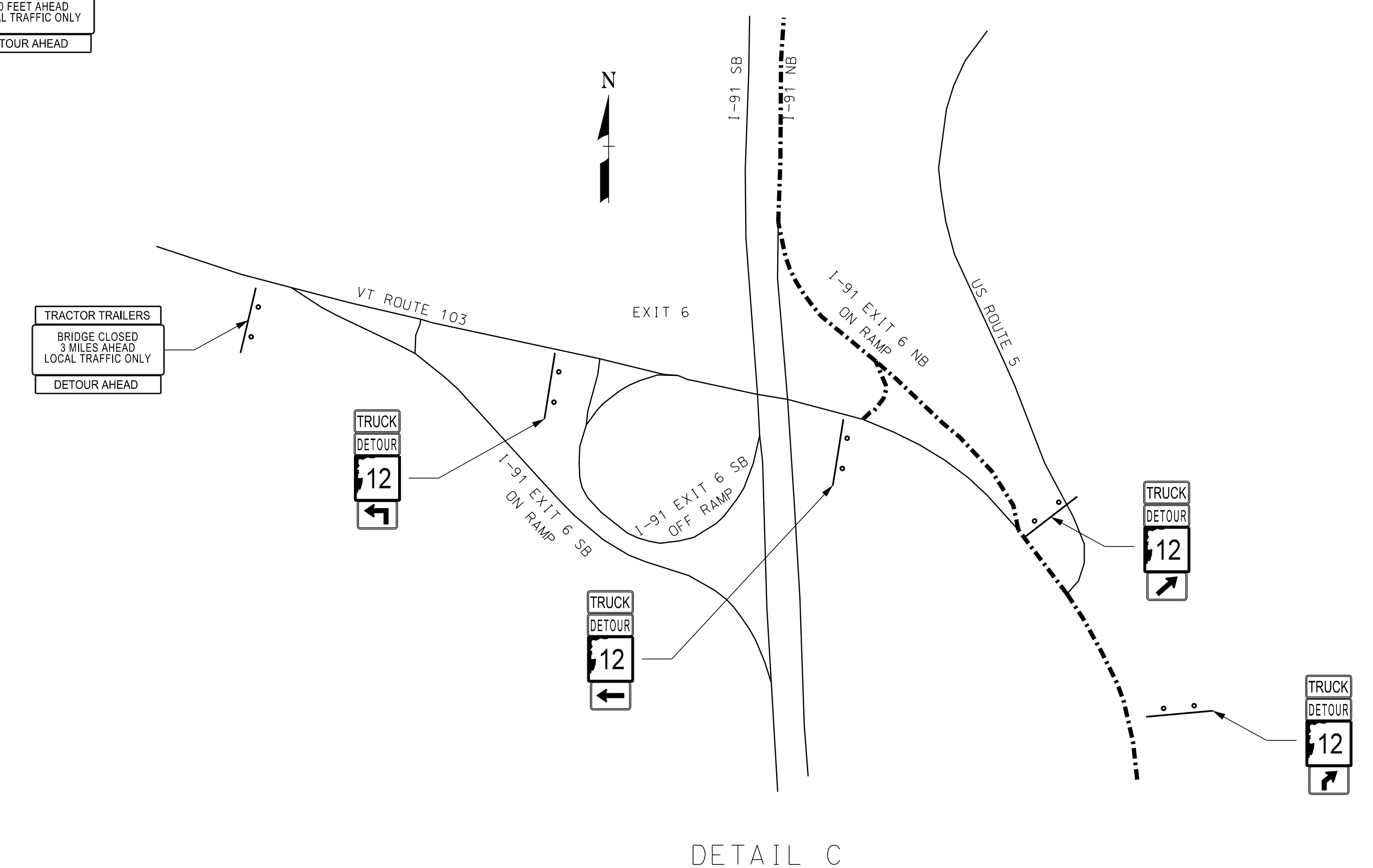
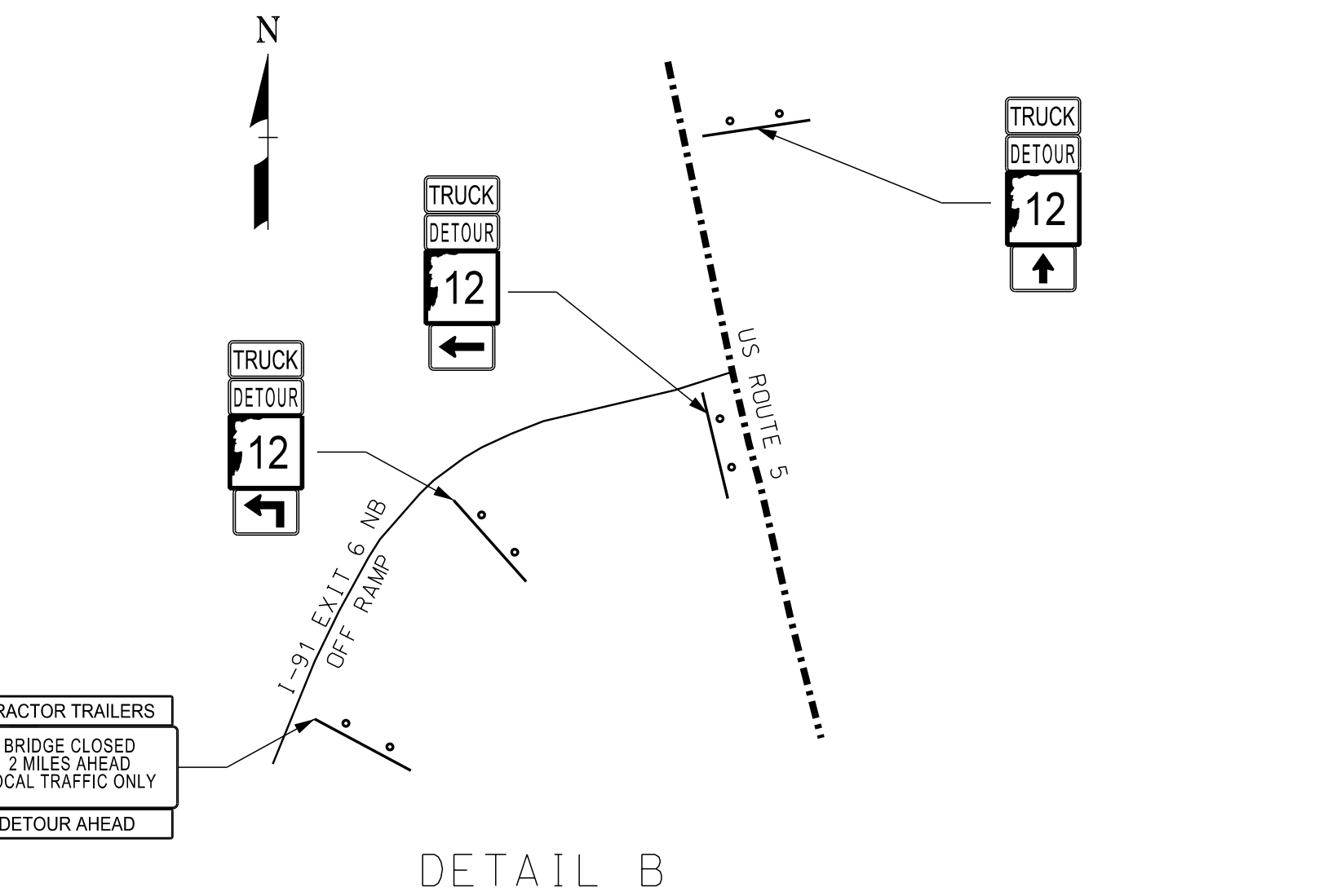
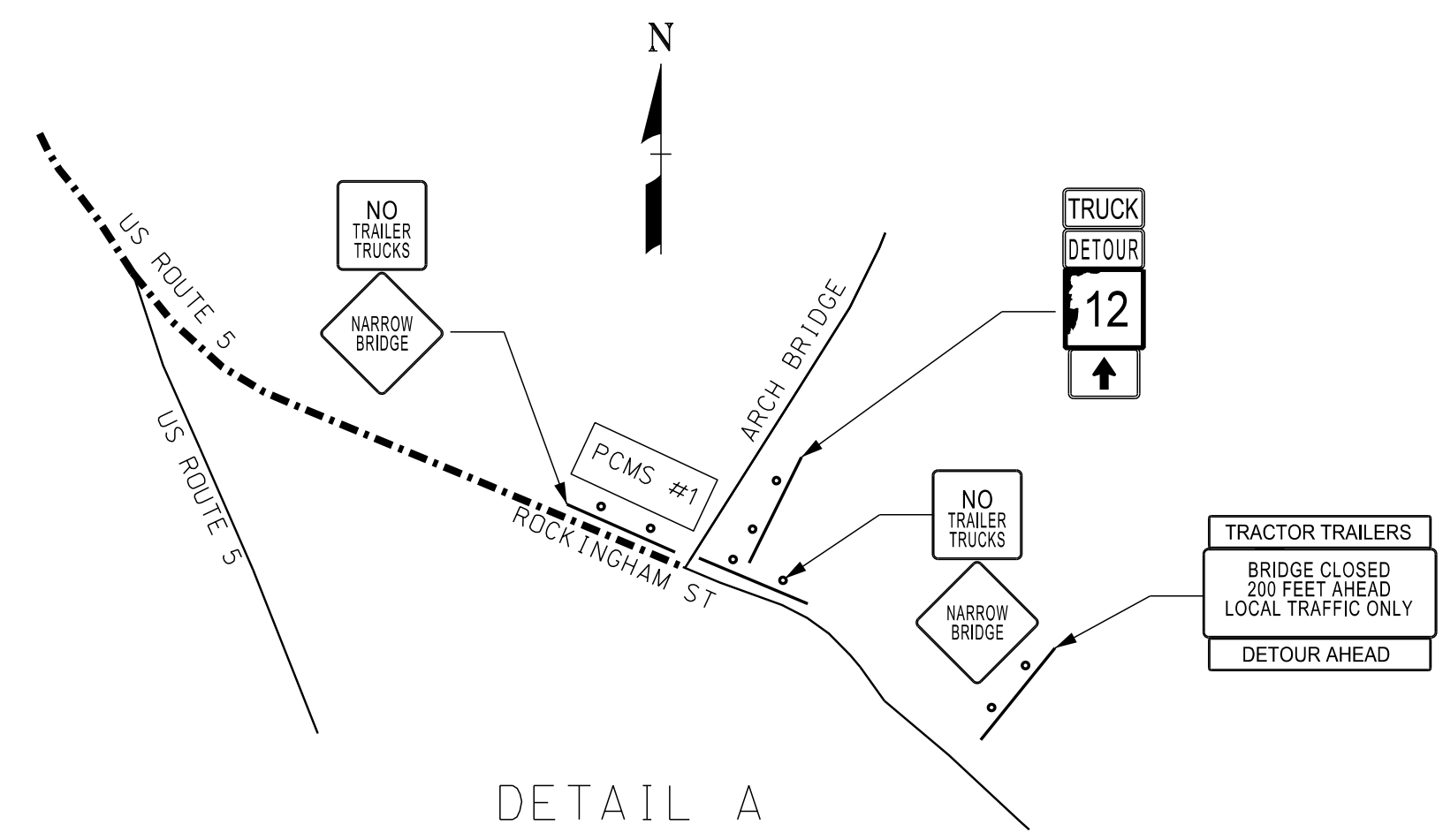
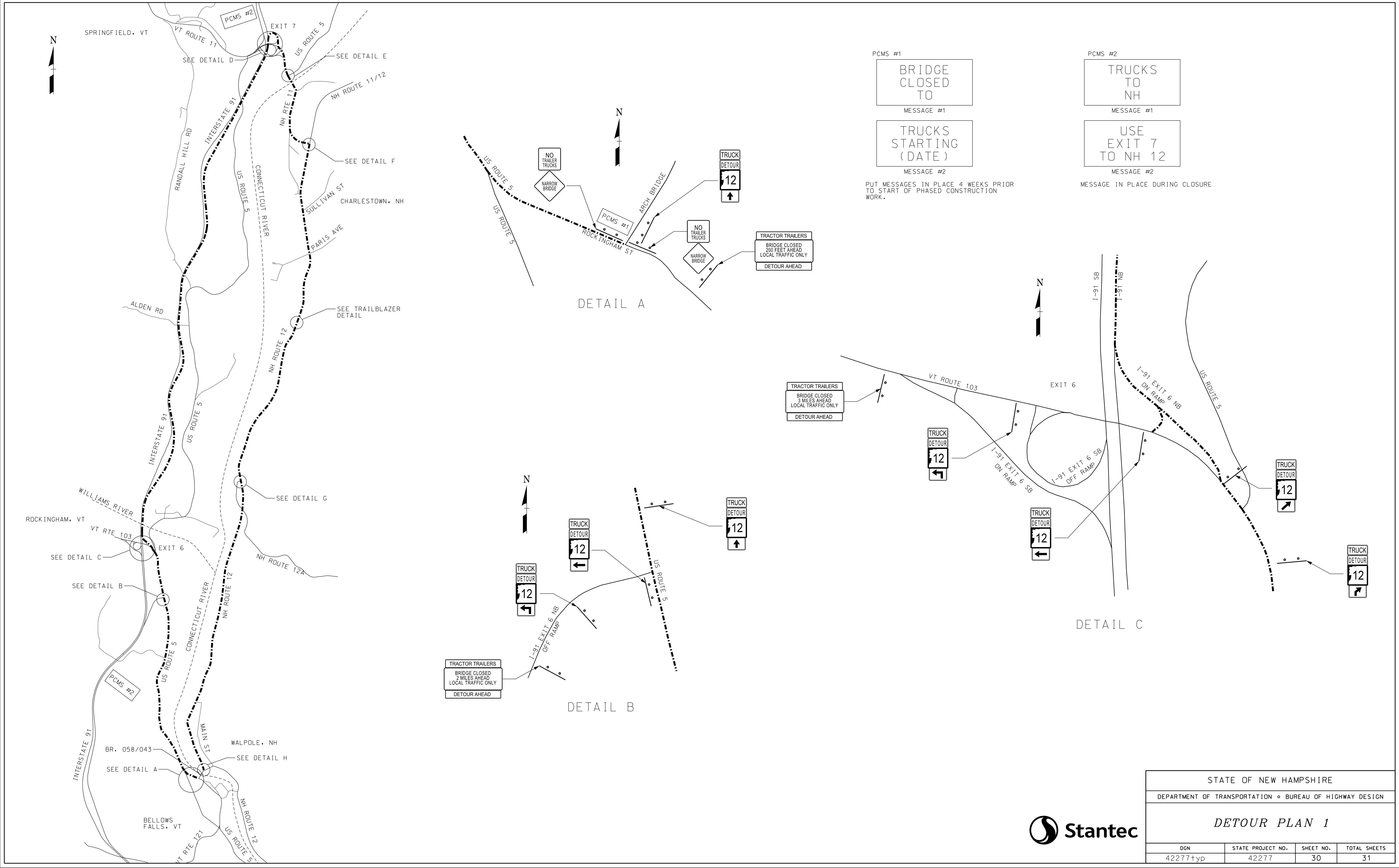
ITEM #	IDENT #	SIGN SIZE		TEXT	TEXT DIMENSIONS			SHIELD SIZE (inch)	ARROW (inch)	NUMERAL (inch)	# SIGNS REQ'D	SIGN AREA (SQ. FT.)		POSTS PER SIGN				REMARKS	
		WIDTH (inch)	HEIGHT (inch)		LETTER HEIGHT (inch)	UC	LC					CAPS	NOM AREA	TOTAL AREA	BREAKAWAY	STEEL I-BEAM	4" OD ALUMINUM		U-CHANNEL-GALV.
615.0501	GA-01	78	42	← Bellows Falls VT Charlestown → Claremont →	*6D *6D *6D			9x6 9x6 9x6			1	22.75	22.75						WHITE/GREEN Mount on existing posts. *6D @ 50% spacing
615.0201	GA-02	72	42	← Charlestown Walpole → Keene →	6D 6D 6D			9x6 9x6 9x6			1	21.00	21.00						WHITE/GREEN
615.0501	GA-03	78	42	← Walpole ← Keene Bellows Falls VT →	*6D *6D *6D			9x6 9x6 9x6			1	22.75	22.75						WHITE/GREEN Mount on existing posts. *6D @ 50% spacing
615.0301	M1-4(5)	24	24								2	4.00	8.00						BLACK/WHITE REFER TO 'ROUTE MARKER POST ASSEMBLY DETAIL' 'PS-03B' INCLUDED IN PROPOSAL.
615.0301	M1-5(11)	24	24							12D	1	4.00	4.00						BLACK/WHITE REFER TO 'ROUTE MARKER POST ASSEMBLY DETAIL' 'PS-03B' INCLUDED IN PROPOSAL.
615.0301	M1-5(12)	24	24							12D	6	4.00	24.00						BLACK/WHITE REFER TO 'ROUTE MARKER POST ASSEMBLY DETAILS' 'PS-03A' & 'PS-03B' INCLUDED IN PROPOSAL.
615.0601	M3-1	24	12				7C/6C				3	2.00	6.00						BLACK/WHITE MOUNT ABOVE M1-5(12)
615.0601	M3-2	24	12				7C/6C				1	2.00	2.00						BLACK/WHITE MOUNT ABOVE M1-5(11)
615.0601	M3-3	24	12				7C/6C				3	2.00	6.00						BLACK/WHITE MOUNT ABOVE M1-5(12)
615.0601	M4-5	24	12				6E				2	2.00	4.00						BLACK/WHITE MOUNT ABOVE M1-4(5)

ITEM #	IDENT #	SIGN SIZE		TEXT	TEXT DIMENSIONS			SHIELD SIZE (inch)	ARROW (inch)	NUMERAL (inch)	# SIGNS REQ'D	SIGN AREA (SQ. FT.)		POSTS PER SIGN				REMARKS	
		WIDTH (inch)	HEIGHT (inch)		LETTER HEIGHT (inch)	UC	LC					CAPS	NOM AREA	TOTAL AREA	BREAKAWAY	STEEL I-BEAM	4" OD ALUMINUM		U-CHANNEL-GALV.
615.0301	M6-1R	21	15						14.625 x7		4	2.19	8.75						BLACK/WHITE MOUNT BELOW M1-4(5) M1-5(12)
615.0301	M6-1L	21	15						14.625 x7		5	2.19	10.94						BLACK/WHITE MOUNT BELOW M1-4(5) M1-5(11) M1-5(12)

GENERAL NOTES

- REFER TO THE 2016 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION PUBLISHED BY THE NHDOT.
- NOTE NEW REFLECTIVITY REQUIREMENTS IN THE 2016 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 718 PUBLISHED BY THE NHDOT.
- REFER TO THE 2010 STANDARD PLANS FOR ROAD CONSTRUCTION AS PUBLISHED BY THE NHDOT FOR EXACT DETAILS OF PERMANENT SIGNING STANDARDS and NHDOT specific signs.
- REFER TO THE LATEST EDITION OF THE STANDARD HIGHWAY SIGNS MANUAL AS PUBLISHED BY THE USDOT-FHWA FOR EXACT DETAILS OF BORDERS, ETC.
- THE ALUMINUM OR U-CHANNEL POST SHALL BE FLUSH WITH THE TOP OF THE SIGN ON ALL SINGLE POST ASSEMBLIES.
- DIGITALLY PRINTED SIGNS ARE NOT PERMITTED.
- REFER TO 'ROUTE MARKER POST ASSEMBLY DETAILS' LOCATED IN THE PROPOSAL FOR SIDE BY SIDE ROUTE MARKER SIGN INSTALLATIONS.

STATE OF NEW HAMPSHIRE			
DEPARTMENT OF TRANSPORTATION • BUREAU OF TRAFFIC			
<i>SIGN TEXT LAYOUT</i>			
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
42277+yp		29	31



PCMS #1  
 BRIDGE CLOSED TO  
 MESSAGE #1  
 TRUCKS STARTING (DATE)  
 MESSAGE #2

PCMS #2  
 TRUCKS TO NH  
 MESSAGE #1  
 USE EXIT 7 TO NH 12  
 MESSAGE #2

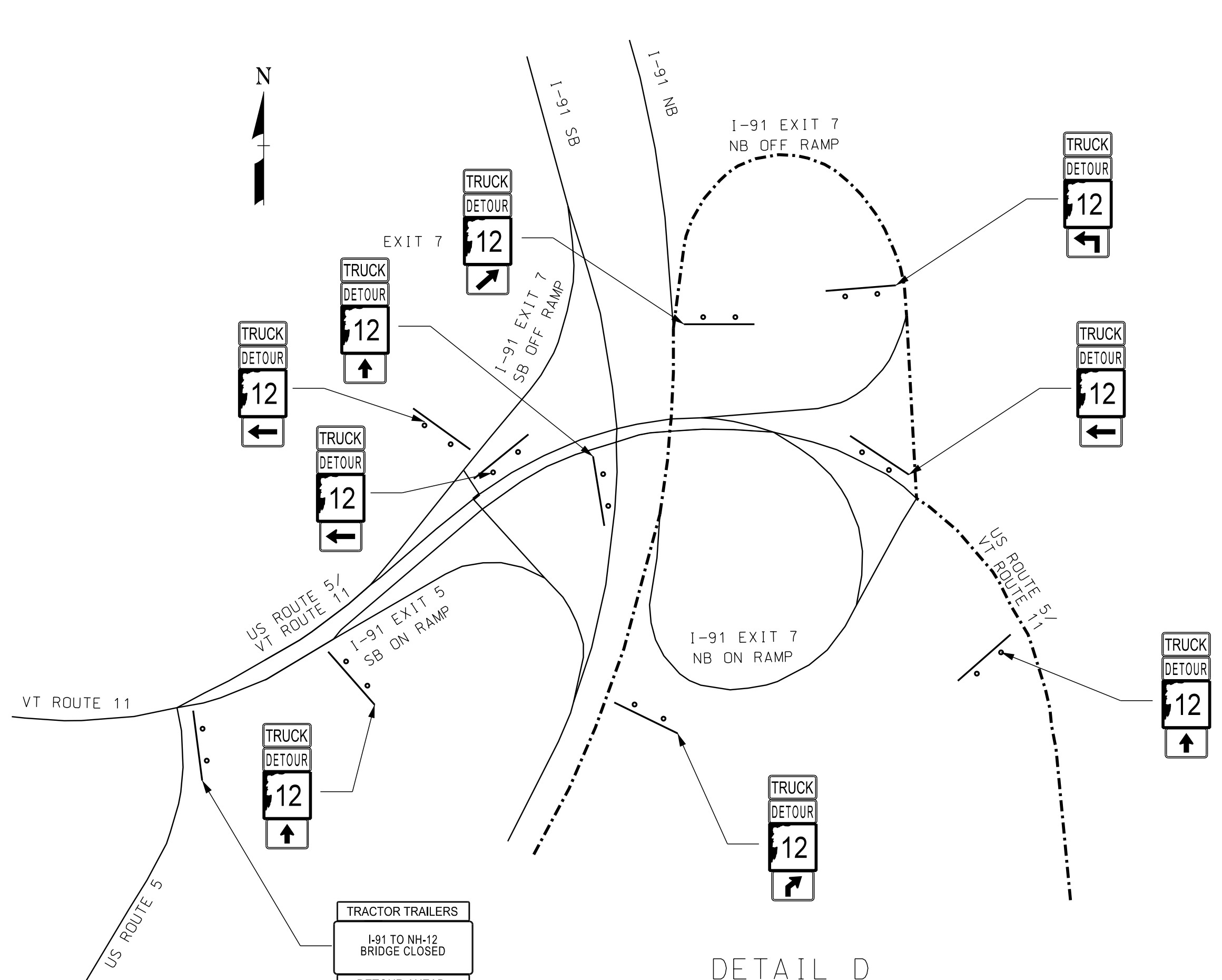
PUT MESSAGES IN PLACE 4 WEEKS PRIOR TO START OF PHASED CONSTRUCTION WORK.

MESSAGE IN PLACE DURING CLOSURE

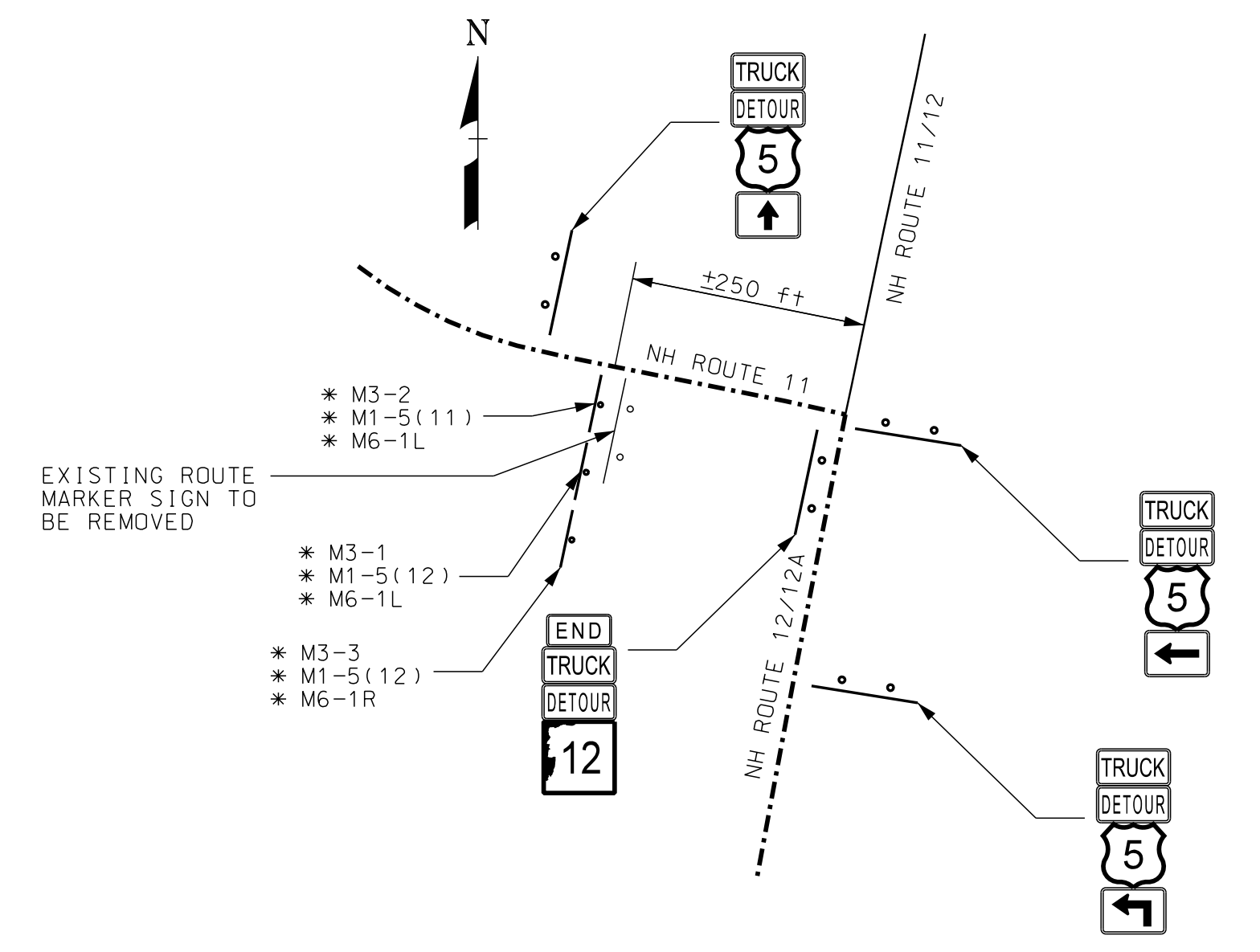
STATE OF NEW HAMPSHIRE			
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN			
<b>DETOUR PLAN 1</b>			
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
42277+yp	42277	30	31





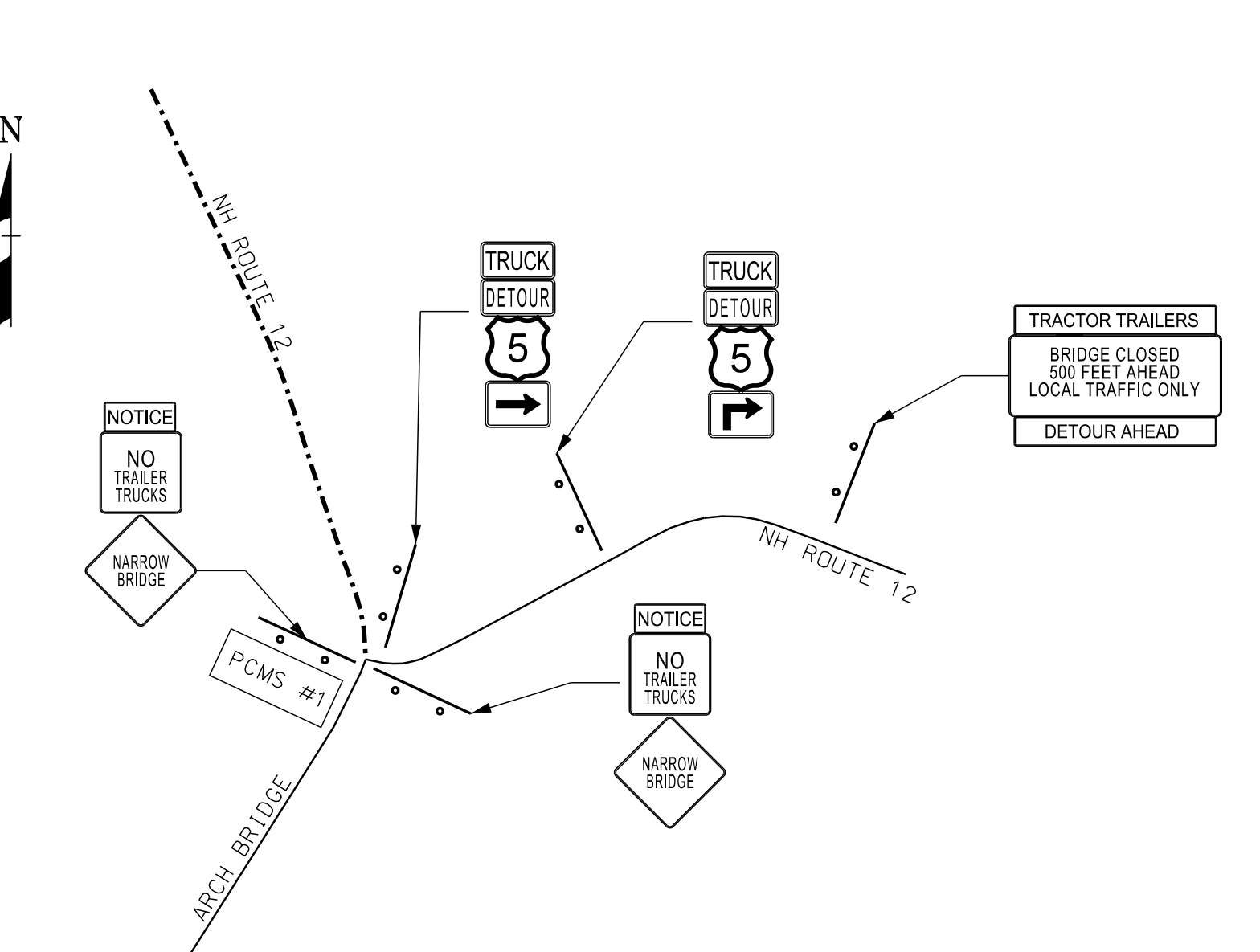


DETAIL D

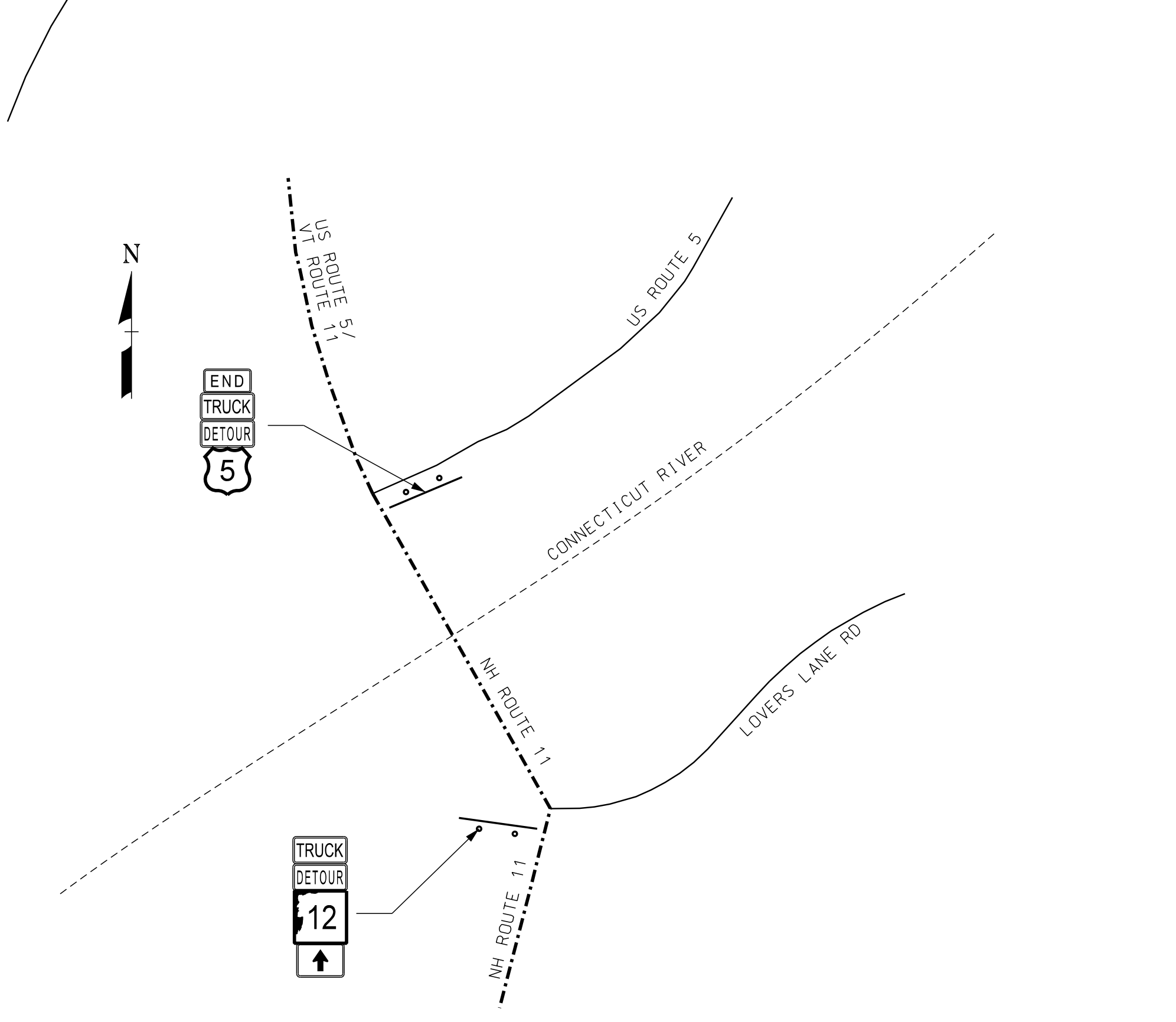


DETAIL F

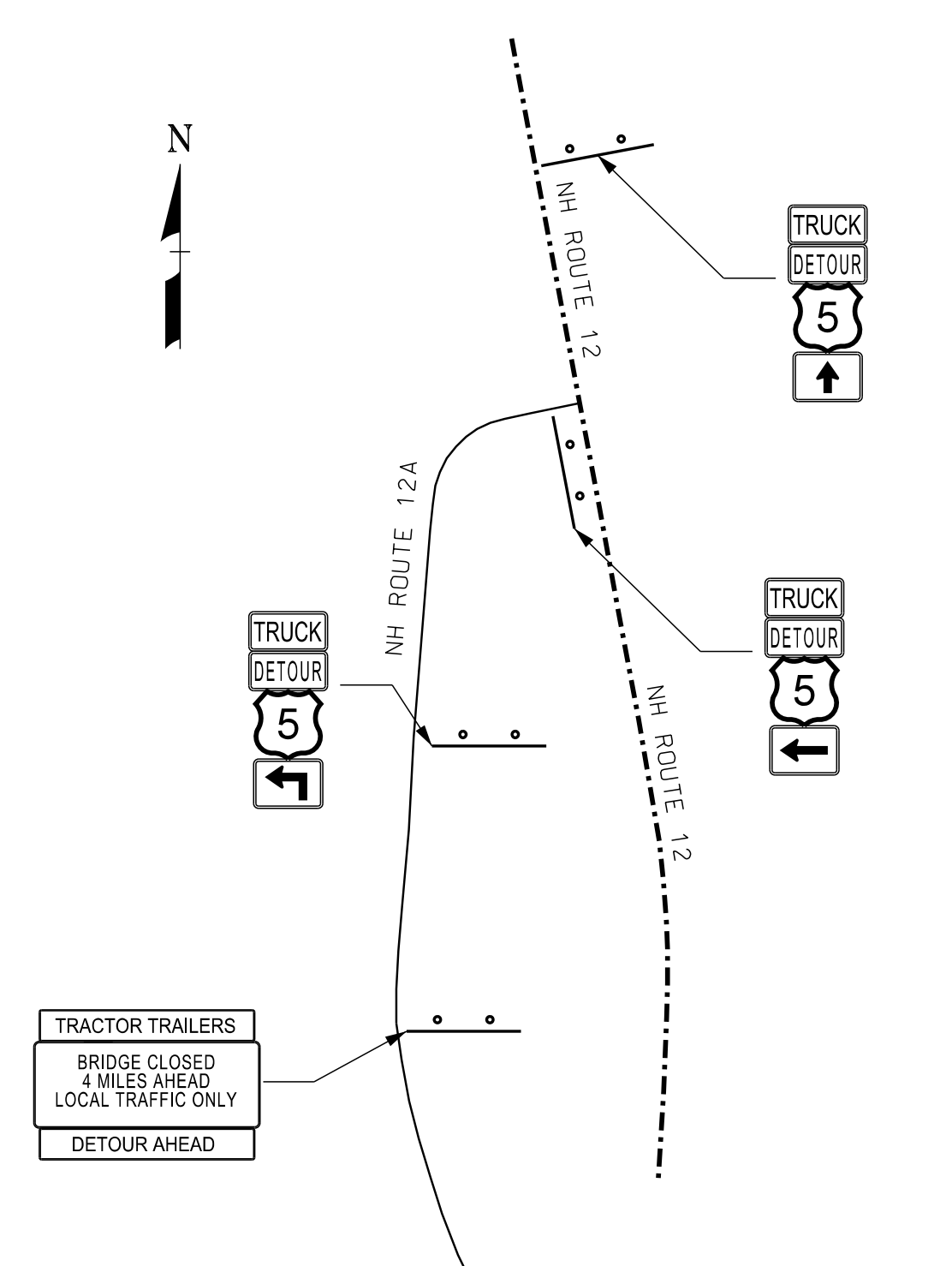
\* PERMANENT SIGN TO BE INSTALLED PRIOR TO OPENING DETOUR. SIGN TO REMAIN AFTER PROJECT COMPLETION. (REFER TO P.O.W. NOTE '2' UNDER 'MARKING AND SIGNING' AND ALSO SIGN TEXT LAYOUT SHEET 29 FOR DETAILS)



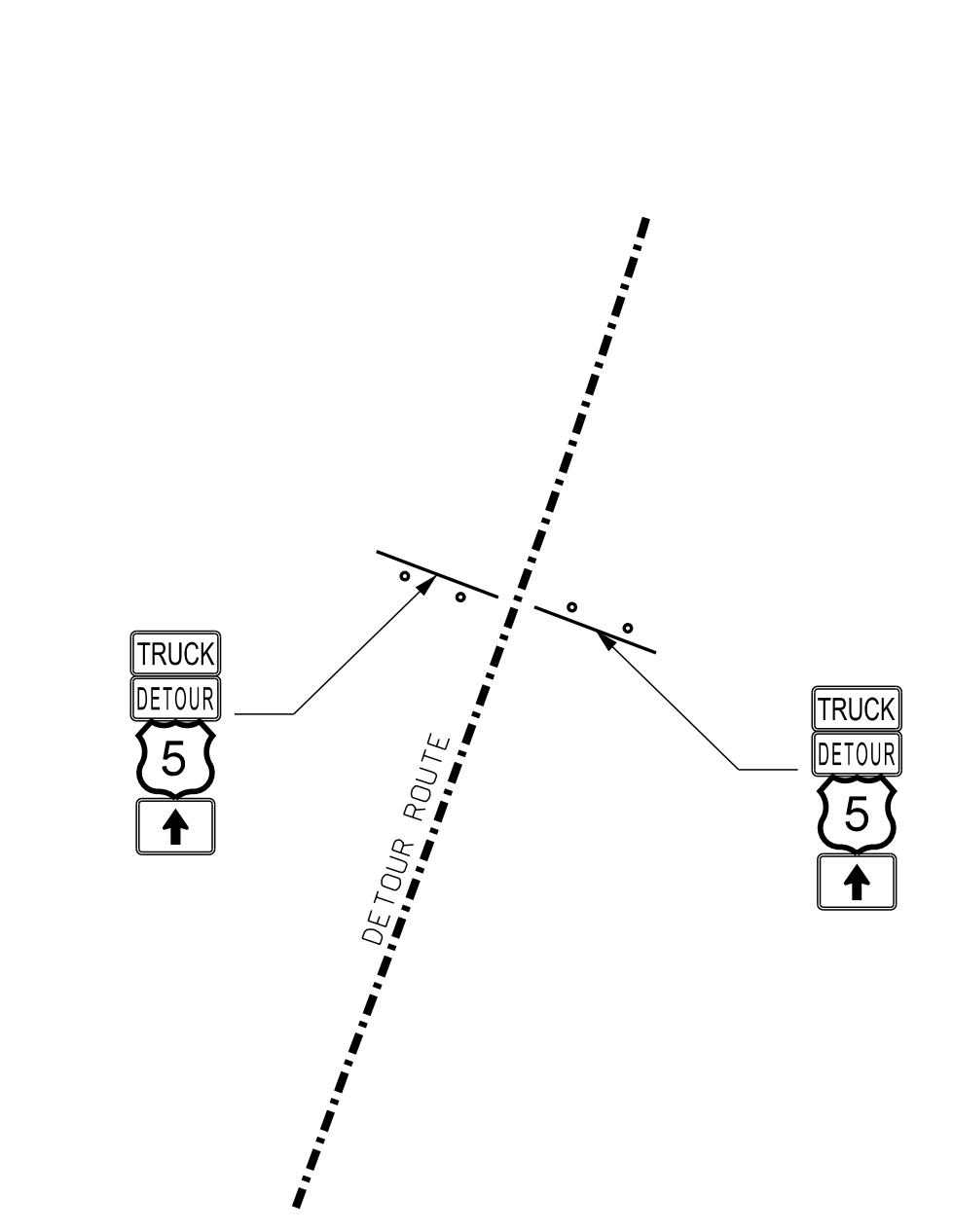
DETAIL H



DETAIL E



DETAIL G



TRAILBLAZER DETAIL



STATE OF NEW HAMPSHIRE			
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN			
<b>DETOUR PLAN 2</b>			
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
42277+yp	42277	31	31