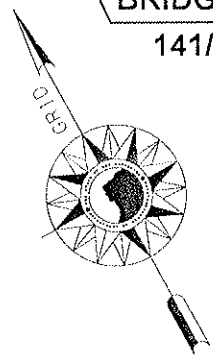
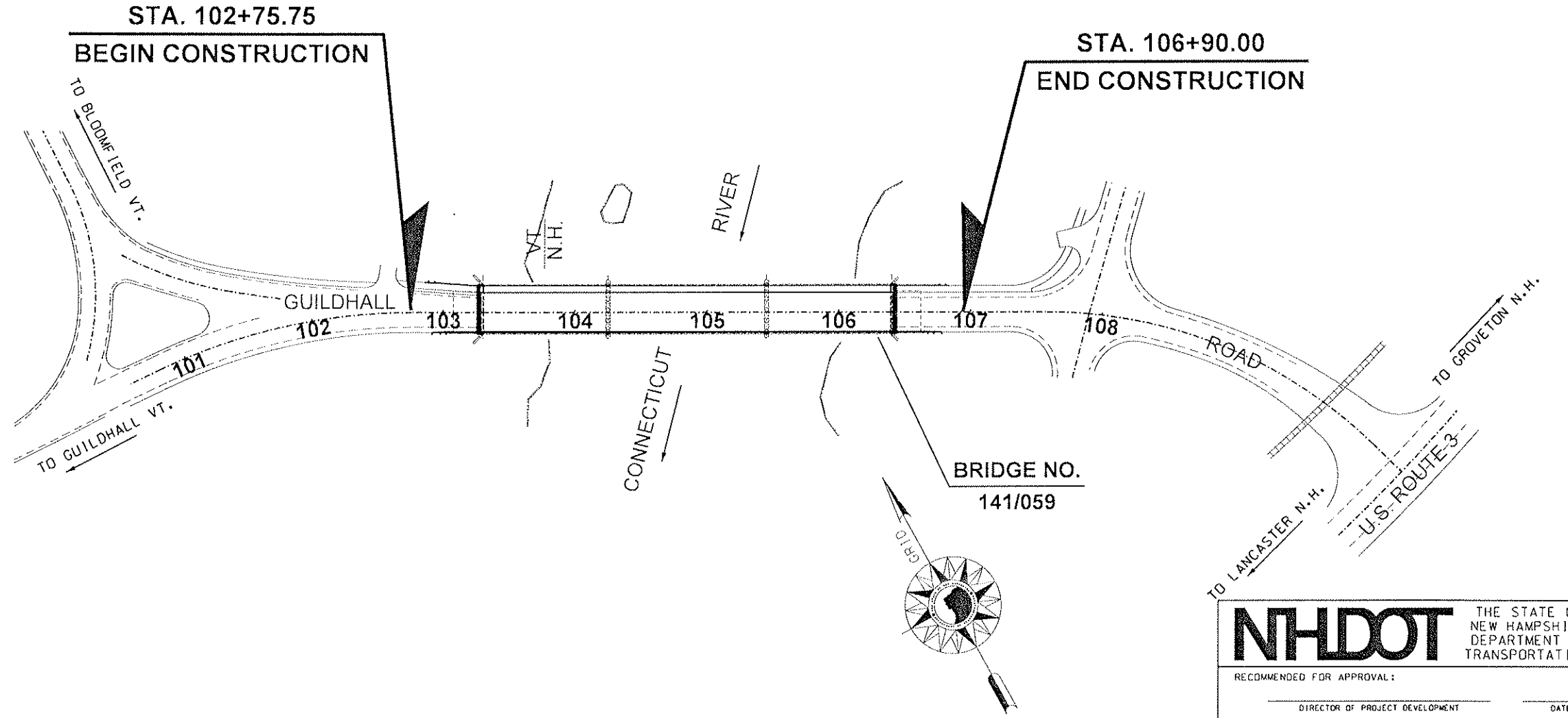
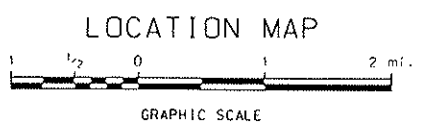
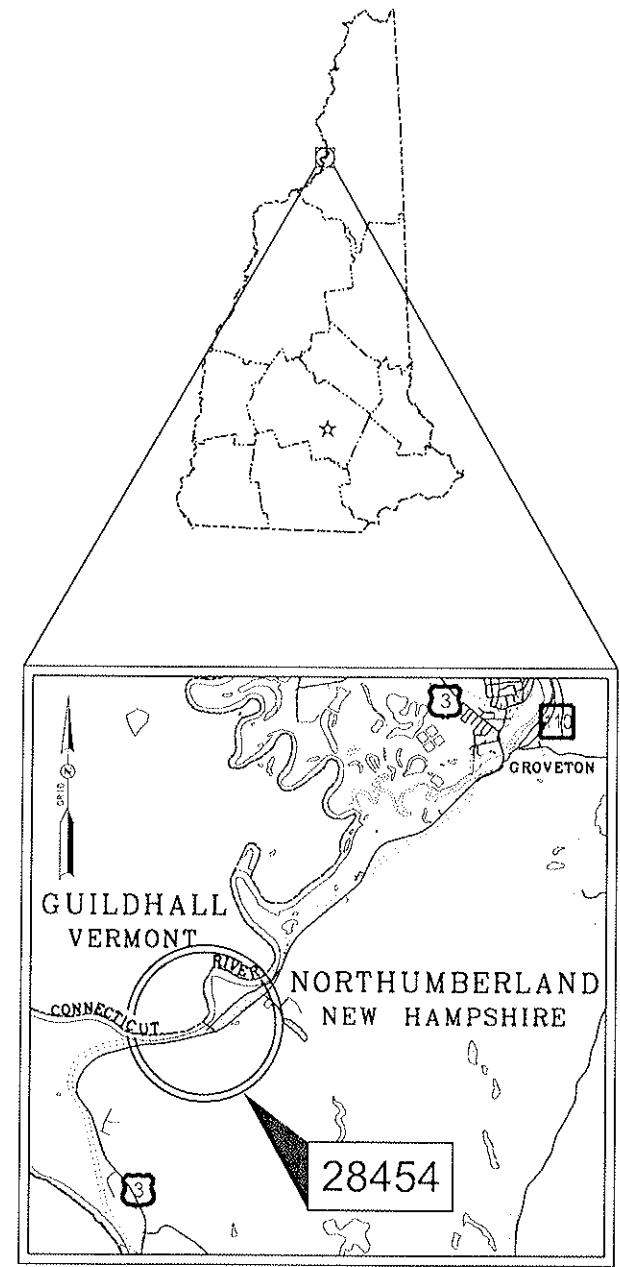


STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
CONSTRUCTION PLANS
FEDERAL AID PROJECT

X-A003(750)
N.H. PROJECT NO. 28454
GUILDHALL ROAD OVER CONNECTICUT RIVER

DESIGN DATA	
AVERAGE DAILY TRAFFIC 20 XX	XX
AVERAGE DAILY TRAFFIC 20 XX	XX
PERCENT OF TRUCKS	XX
DESIGN SPEED	XX
LENGTH OF PROJECT	XX



TOWN OF NORTHUMBERLAND N.H. - TOWN OF GUILDHALL VT.
COUNTY OF COOS N.H. - COUNTY OF ESSEX VT.
SCALE: 1" = 50'

NHDOT THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION			
RECOMMENDED FOR APPROVAL:			
_____ DIRECTOR OF PROJECT DEVELOPMENT		_____ DATE	
APPROVED:			
_____ ASSISTANT COMMISSIONER AND CHIEF ENGINEER		_____ DATE	
FEDERAL PROJECT NO. X-A003(750)	STATE PROJECT NO. 28454	SHEET NO. 1	TOTAL SHEETS 19

DRAWN BY: CMC
CHECKED BY: WPS
DATE: 8/14

GENERAL NOTES

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	TITLE PAGE
2	INDEX OF SHEETS AND GENERAL NOTES
3-4	STANDARD SYMBOLS
5	GENERAL PLAN AND ELEVATION
6	GENERAL NOTES AND SUMMARY OF QUANTITIES
7-15	BRIDGE PLANS
16-18	TRAFFIC CONTROL PLANS

- 1

FOR STANDARD PLANS, SEE "STANDARD PLANS FOR ROAD CONSTRUCTION" DATED 2010 (A BOUND BOOK).
- 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, 1986 ADJUSTMENT AND THE BEARINGS ARE GRID. ELEVATIONS ARE REFERENCED TO NGVD 1929.
- 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:											
☐	☐	☐	☐	☒	☒	☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

GENERAL

EDGE OF PAVEMENT TRAVELED WAY			
DRIVEWAYS			
BUILDINGS			
FOUNDATION			
LEACH FIELD			
BRIDGE CROSSINGS			
STEPS AND WALK			
INTERMITTENT WATER COURSE			
SHORE LINE			
POTENTIAL WET AREA SYMBOL			
BRUSH OR WOODS LINE			
TREES (PLANS)			
TREE OR STUMP (CROSS-SECTIONS)			
HEDGE			
MONITORING WELL			
WELL			
FLAG POLE			

ORIGINAL GROUND (TYPICALS)	
ROCK OUTCROP	
ROCK LINE (TYPICALS & SECTIONS ONLY)	
GUARDRAIL (LABEL TYPE)	
JERSEY BARRIER	
CURB (LABEL TYPE)	
STONE WALL	
RETAINING WALL (LABEL TYPE)	
FENCE (LABEL TYPE)	
SIGNS	
GAS PUMP	
FUEL TANK (ABOVE GROUND)	
STORAGE TANK FILLER CAP	
SEPTIC TANK	
GRAVE	
MAILBOX	
VENT PIPE	
SATELLITE DISH ANTENNA	
PHONE	
GROUND LIGHT/LAMP POST	
BORING LOCATION	
TEST PIT	
INTERSTATE NUMBERED HIGHWAY	
UNITED STATES NUMBERED HIGHWAY	
STATE NUMBERED HIGHWAY	

WETLANDS

WETLAND DESIGNATION AND TYPE	
DELINEATED WETLAND	
PRIME WETLAND	
ORDINARY HIGH WATER	
TOP OF BANK	
TOP OF BANK & ORDINARY HIGH WATER	
MEAN HIGH TIDE	
TIDAL BUFFER ZONE	
HIGHEST OBSERVABLE TIDAL LINE	
SPECIAL AQUATIC SITE	
VERNAL POOL	
INVASIVE SPECIES LABEL	
INVASIVE SPECIES	
WATER FRONT BUFFER	
NATURAL WOODLAND BUFFER	
PROTECTED SHORE LAND	

FLOODPLAIN / FLOODWAY

500 YEAR FLOODPLAIN BOUNDARY	
100 YEAR FLOODPLAIN BOUNDARY	
FLOODWAY	

ENGINEERING

CONSTRUCTION BASELINE	
PC, PT, POT (ON CONST BASELINE)	
PI (IN CONSTRUCTION BASELINES)	
INTERSECTION OR EQUATION OF TWO LINES	
ORIGINAL GROUND LINE (PROFILES AND CROSS-SECTIONS)	
PROFILE GRADE LINE (PROFILES AND CROSS-SECTIONS)	
CLEARING LINE	
SLOPE LINE	
SLOPE LINE (FILL)	
SLOPE LINE (CUT)	
PROFILES AND CROSS SECTIONS: ORIGINAL GROUND ELEVATION (LEFT) FINISHED GRADE ELEVATION (RIGHT)	

STATE OF NEW HAMPSHIRE				
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN				
STANDARD SYMBOLS				
REVISION DATE	OWN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
3-15-13	stdsyml_2	28454	3	19

DRAINAGE

MANHOLE		(existing)		(PROPOSED)
CATCH BASIN				
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 RCP
OPEN DITCH (PROPOSED)				
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
COUNTY LINE		CONCORD
STATE LINE		COOS
NATIONAL FOREST		GRAFTON
LCHIP CONSERVATION EASEMENT		MAINE
BENCH MARK / SURVEY DISK		NEW HAMPSHIRE
BOUND		
STATE LINE/ TOWN LINE MONUMENT		
NHDOT PROJECT MARKER		
IRON PIPE OR PIN		
DRILL HOLE IN ROCK		
TAX MAP AND LOT NUMBER		
PROPERTY PARCEL NUMBER		
HISTORIC PROPERTY		

UTILITIES

TELEPHONE POLE		(plot point at face not center of symbol)
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		(label ownership)
RAILROAD SIGN		
RAILROAD SIGNAL		
UTILITY JUNCTION BOX		
OVERHEAD ELECTRIC		
UNDERGROUND UTILITIES (on existing lines label size, type and note if abandoned)		
WATER		
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

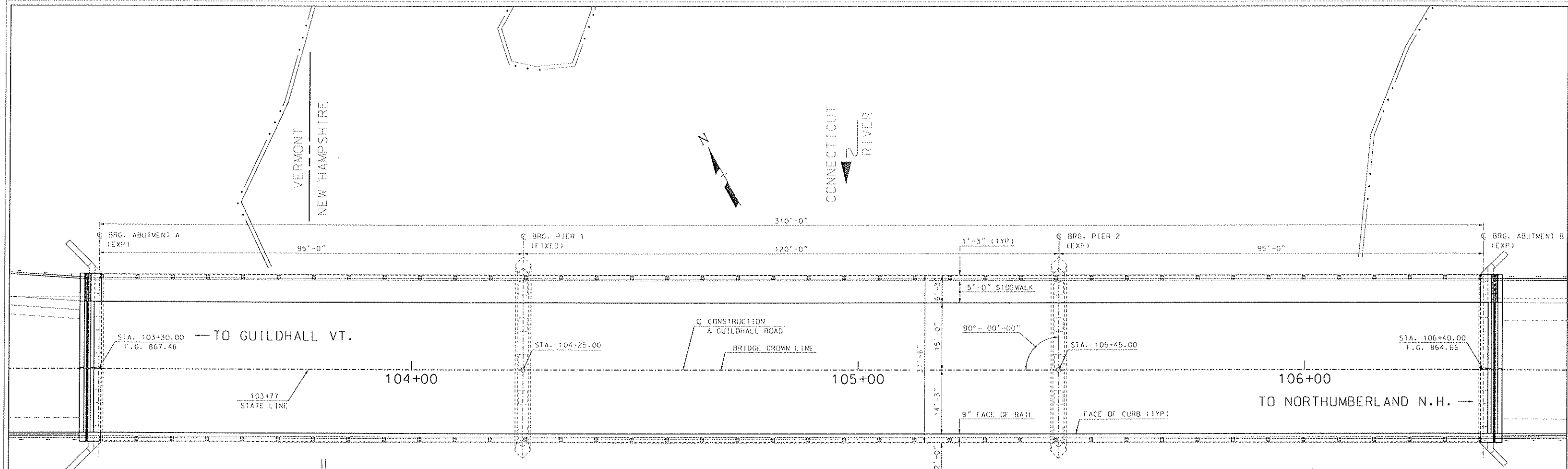
MAST ARM (existing)			(NOTE ANGLE FROM B)
OPTICOM RECEIVER			
OPTICOM STROBE			
TRAFFIC SIGNAL			
PEDESTAL WITH PEDESTRIAN SIGNAL HEADS AND PUSH BUTTON UNIT			
SIGNAL CONDUIT			
CONTROLLER CABINET			
METER PEDESTAL			
PULL BOX			
LOOP DETECTOR (QUADRUPOLE)			(label size)
LOOP DETECTOR (RECTANGULAR)			(label size)
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	A
DRAINAGE NOTE	1
EROSION CONTROL NOTE	A
FENCING NOTE	A
GUARDRAIL NOTE	1
ITS NOTE	1
LIGHTING NOTE	A
TRAFFIC SIGNAL NOTE	1

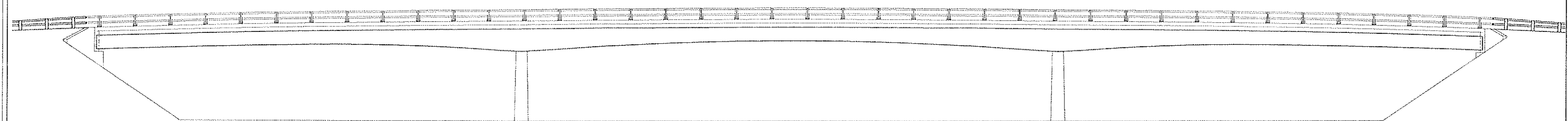
SHEET 2 OF 2

STATE OF NEW HAMPSHIRE				
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN				
STANDARD SYMBOLS				
E	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
	stdsyml_2	28454	4	19



PLAN

SCALE: 3/32" = 1'-0"



ELEVATION

SCALE: 3/32" = 1'-0"

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN NORTHUMBERLAND N.H. - GUILDHALL VT.				BRIDGE NO. 141.859		STATE PROJECT 28454			
LOCATION GUILDHALL ROAD OVER CONNECTICUT RIVER									
GENERAL PLAN AND ELEVATION									BRIDGE SHEET
REVISIONS AFTER PROPOSAL			BY	DATE	CHECKED	BY	DATE	1 OF 12	
			DESIGNED	GMC	3/14	WPS	3/14	125-3-1	
			DRAWN	GMC	3/14	WPS	3/14		
			QUANTITIES	WPS	3/14	GMC	3/14		
ISSUE DATE			FEDERAL PROJECT NO.			SHEET NO.		TOTAL SHEETS	
REV. DATE			-----			5		19	

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
BRCDetails	28454Genplan	1/8" = 1'-0"

SCOPE OF WORK

- BR. NO. 141/059 GUILDHALL ROAD OVER CONNECTICUT RIVER:
- REMOVE AND REPLACE DECK PAVEMENT AND MEMBRANE
 - PARTIAL & FULL DEPTH CONCRETE DECK REPAIRS
 - REMOVE GRANITE CURB, REPLACE WITH CONCRETE CURB
 - CONSTRUCT SUBWALLS FOR EXPANSION JOINTS AT ABUTMENT A & B
 - REMOVE AND REPLACE EXPANSION JOINT AT ABUTMENT A & B
 - REMOVE AND REPLACE EXPANSION BEARINGS AT ABUTMENT A & B
 - CLEAN AND PAINT EXISTING STRUCTURAL STEEL
 - RESET GRANITE APPROACH CURBS
 - REPAVE APPROACH ROADWAYS

MATERIALS AND SPECIFICATIONS

1. SPECIFICATIONS: NHDOT 2010 STANDARD SPECIFICATIONS AS AMENDED
2. NEW 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, SUBWALLS, DECK ENDS,
AND BACKWALL RECONSTRUCTIONS = 4000 psi
ITEM 520.0201, CONCRETE CLASS AA, ABOVE FOOTINGS,
SAME MIX AS CONCRETE BRIDGE DECK (OC/QA)

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 MAY BE VIEWED AT THE NHDOT, BUREAU OF BRIDGE DESIGN OFFICE DURING THE BIDDING PERIOD. AFTER THE CONTRACT IS AWARDED, A COMPLETE SET OF THE EXISTING PLANS WILL BE FORWARDED TO THE CONTRACTOR UPON REQUEST. THE FILE NUMBER FOR THIS BRIDGE IS 4-13-3-2.

REMOVAL NOTES

1. REMOVAL OF EXISTING BRIDGE STRUCTURE, ITEM 502., EXCEPT AS OTHERWISE SHOWN IN THE PLANS, SHALL INCLUDE:
- A) REMOVAL OF DISPOSAL OF THE EXISTING EXPANSION JOINTS, ABUTMENT BACKWALLS AND GRANITE BRIDGE CURBS.
 - B) THE TEMPORARY REMOVAL AND RESETTING OF BRIDGE AND APPROACH RAILINGS, POSTS AND ALL APPURTENANCES REQUIRED, FOR THE CONSTRUCTION OF EXPANSION JOINT AND SUBWALL.
 - C) REMOVAL AND DISPOSAL OF APPROACH ROADWAY AND SIDEWALK PAVEMENT NECESSARY TO CONSTRUCT THE SUBWALLS
 - D) DISPOSAL OF SELECT MATERIALS UNDER THE APPROACH ROADWAY, REMOVED UNDER ITEM 504.1 AND DEEMED NOT RE-USEABLE.
2. ITEM 511.00, CONCRETE BRIDGE DECK PAVEMENT REMOVAL (F), SHALL INCLUDE: COMPLETE REMOVAL AND DISPOSAL OF THE EXISTING BRIDGE DECK PAVEMENT AND MEMBRANE.
3. 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 WORK.

GENERAL CONSTRUCTION NOTES

1. PORTABLE CONCRETE BARRIER OR CHANNELIZING DEVICES SHALL BE IN PLACE BEFORE REMOVAL OPERATIONS BEGIN FOR EACH CONSTRUCTION PHASE.
2. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO INSURE THAT DEBRIS DOES NOT FALL INTO THE WATERWAY BELOW EXISTING STRUCTURES. 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 GIRDERS FOR CONSTRUCTION PURPOSES SHALL NOT BE PERMITTED UNLESS APPROVED BY THE NHDOT, BUREAU OF BRIDGE DESIGN.
5. DURING ALL REMOVAL AND REPAIR OPERATIONS, EXTREME CARE SHALL BE TAKEN NOT TO DAMAGE EXISTING DECK REINFORCEMENT. ANY DAMAGE SHALL BE IMMEDIATELY REPORTED TO THE BUREAU OF BRIDGE DESIGN AND REPAIRED AS DIRECTED, AT THE CONTRACTOR'S EXPENSE.
6. 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.
7. FOR EXPANSION JOINT REPLACEMENT, THE EXISTING CONCRETE BRIDGE DECK AND ABUTMENT BACKWALLS SHALL BE REMOVED TO LIMITS SHOWN IN THE PLANS UNDER ITEM 502.. REMOVAL OF EXISTING BRIDGE STRUCTURE, ALL CONCRETE SURFACES SHALL BE SAWCUT 1" DEEP TO PROVIDE CLEAN REMOVAL LINES (ALL COSTS INCLUDED IN ITEM 502.). BACKWALLS AND DECK ENDS SHALL BE RECONSTRUCTED WITH ITEM 520.0201, CONCRETE CLASS AA, ABOVE FOOTINGS. PRIOR TO PLACING NEW CONCRETE, THE REMOVAL SURFACES SHALL BE BLAST CLEANED AND SATURATED SURFACE DRIED (ALL COSTS INCLUDED IN ITEM 520.0201).

8. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT EXISTING UTILITY INSTALLATIONS FROM DAMAGE DURING DECK REMOVAL AND PAINTING OPERATIONS. A PROTECTION PLAN SHALL BE SUBMITTED FOR APPROVAL. ALL COSTS PAID FOR UNDER ITEM 502..
9. FOR CONCRETE BRIDGE DECK REHABILITATIONS, AFTER THE REMOVAL OF EXISTING PAVEMENT AND MEMBRANE, THE EXISTING CONCRETE BRIDGE DECKS SHALL BE "SOUNDED" TO DETERMINE AREAS REQUIRING PARTIAL AND FULL DEPTH REPAIRS (ALL COSTS TO BE INCLUDED IN ITEMS 511.02 AND 511.03). DETEIORATED AREAS SHALL BE PATCHED WITH CONCRETE CLASS AA. ITEMS 520.01 AND 520.0201. PRIOR TO PLACING NEW CONCRETE, THE PREPARED AREAS SHALL BE BLAST CLEANED AND SATURATED SURFACE DRIED (ALL COSTS INCLUDED IN ITEMS 520.01 AND 520.0201).
10. THE GRANITE CURB SHALL BE REMOVED, ITEM 502, AND REPLACED WITH CONCRETE CURB, ITEM 502.0201.
11. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4", UNLESS OTHERWISE NOTED.
12. ITEM 538.6, BARRIER MEMBRANE, HEAT WELDED - MACHINE METHOD (F) SHALL BE OVERLAPPED PER MANUFACTURER'S REQUIREMENTS. AT DECK ENDS, WHERE THE MEMBRANE WILL NOT OVERLAP NEW OR EXISTING MEMBRANE, A SEALANT/REPAIR MASTIC COMPATIBLE WITH ITEM 538.6 SHALL BRIDGE ANY GAP BETWEEN THE EXISTING MEMBRANE AND NEW MEMBRANE OR BETWEEN THE NEW MEMBRANE AND THE END DECK WHEN THERE IS NO EXISTING MEMBRANE. ALL COSTS SHALL BE SUBSIDIARY TO ITEM 538.6.
13. PROFILE ADJUSTMENTS IN THE VICINITY OF THE REHABILITATED BRIDGE SHALL BE MADE AS REQUIRED OR AS DIRECTED TO ACCOUNT FOR VARIATIONS IN THE BRIDGE DECK CROSS SLOPES. ALL COSTS SHALL BE INCLUDED IN THE APPROPRIATE ITEMS.
14. REMOVE ANY EXISTING LOOSE OR FLAKING EPOXY COATING FROM THE BACKWALL AND SEATS AS DIRECTED. COSTS PAID UNDER ITEM 502..
15. EXISTING BRIDGE DECK COPINGS, 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.
16. ANY SHEAR CONNECTORS DAMAGED DURING DECK REPAIR OPERATIONS SHALL BE REPLACED. THE CONTRACTOR SHALL TAKE SPECIAL CARE WHEN PLACING NEW (REPLACEMENT) SHEAR STUDS ON EXISTING GIRDERS. AUTOMATIC STUD WELDING OR INDIVIDUAL STICK WELDING OF STUDS IS PERMISSIBLE. THE TOP FLANGES SHALL BE GROUND TO BASE METAL OR BLAST CLEANED PRIOR TO WELDING STUDS. THE AREA TO BE WELDED SHALL BE FREE OF RUST, OIL OR OTHER FOREIGN MATERIALS. WELDING SHALL NOT BE DONE WHEN THE BASE METAL TEMPERATURE IS BELOW 32°F, OR WHEN THE SURFACE IS WET OR EXPOSED TO ANY PRECIPITATION. WORK SHALL CONFORM TO SECTION 547 AND ALL COSTS INCLUDED IN ITEM 502..
17. 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.
18. ITEM 403.99, TEMPORARY BITUMINOUS PAVEMENT, SHALL BE PLACED TO TRANSITION FROM THE JOINT SUB WALL TO THE APPROACH PAVEMENT, FROM THE DECK ARMORING TO THE BASE COURSE ON THE DECK DURING PHASED CONSTRUCTION AS REQUIRED. THE TEMPORARY PAVEMENT SHALL BE REMOVED PRIOR TO THE PLACEMENT OF FINAL ROADWAY WEARING COURSE (ALL COSTS FOR REMOVAL SHALL BE SUBSIDIARY TO ITEM 403.99).
19. RESET GRANITE APPROACH CURB AS DIRECTED, ITEM 609.5. ANY SAWCUTTING REQUIRED TO RESET APPROACH ROADWAY GRANITE CURB SHALL BE SUBSIDIARY TO ITEM 609.5.
20. ITEMS 646.31 AND 647.1 SHALL BE USED TO REPAIR DISTURBED AREAS AS DIRECTED BY THE ENGINEER.
21. ITEMS 403.12 HOT BITUMINOUS PAVEMENT, HAND METHOD SHALL BE PLACED AT 6" THICK 2 LIFTS (MIN) SUCH THAT THE TOP IS AT 1/8" ABOVE THE FINISHED ELEVATION ALONG THE BACK OF SUBWALL. AS PART OF THE OPERATION TO SCARIFY THE APPROACH PAVEMENT WITHIN THE PAVEMENT MATCH AREAS, THE TOP 1 1/2" OF HAND METHOD PAVEMENT SHALL BE REMOVED AND REPLACED WITH, ITEM 403.11 HOT BITUMINOUS PAVEMENT, MACHINE METHOD.
22. FORM WORK FOR CONCRETE SUBWALL SHALL NOT BEAR ON EXISTING WATERLINE.
23. PAVEMENT JOINT ADHESIVE, ITEM 403.6, SHALL BE APPLIED TO ALL EXPOSED PAVEMENT JOINTS PRIOR TO PLACEMENT OF EACH PAVEMENT COURSE. THE APPLICATION OF JOINT ADHESIVE SHALL ALSO BE PLACED ALONG THE LENGTH OF SUBWALL & CONCRETE ARMORING (CURB-CURB) AND AT FACE OF CURBING FOR EACH PAVEMENT COURSE.

REINFORCING NOTES

- (1) UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET - STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M 31 (ASTM A615), GRADE 60.
- (2) FOR TYPICAL BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS AND HOOKS AND OTHER STANDARD PRACTICE, SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
- (3) 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 520.0201. ALL NEW REINFORCING BARS SHALL HAVE A MINIMUM CLEAR COVER OF 2 1/2" FROM PROPOSED CONCRETE SURFACES.
- (4) UNLESS OTHERWISE NOTED, HOLES DRILLED INTO EXISTING CONCRETE SHALL BE DRILLED 1/2" DIAMETER LARGER THAN THE BAR DIAMETER AND GROUTED WITH HIGH STRENGTH, NON-SHRINK CEMENTITIOUS GROUT. ALL COSTS FOR DRILLING AND GROUTING SHALL BE SUBSIDIARY TO ITEM 520.0201.
- (5) ANY EPOXY COATED REBARS CUT TO FIT SHALL BE TOUCHED UP WITH AN APPROVED EPOXY COATING MATERIAL. ALL COSTS SHALL BE INCLUDED IN ITEM 544.201.
- (6) ANY EXISTING REBAR THAT IS EXPOSED SHALL BE CLEANED OF ALL FOREIGN MATERIAL AND COATED WITH AN EPOXY COATING, SUBSIDIARY TO ITEM 511.0X. (SEE SUPPLEMENTAL SPECIFICATION FOR ITEM 511.)
- (7) REINFORCING LEGEND: SP = SPACE, SPL = SPLICE, FS = FAR SIDE, NS = NEAR SIDE, BOT = BOTTOM, ALT = ALTERNATING.
- (8) PLACE REINFORCING STEEL TO AVOID RAIL POST ANCHOR ASSEMBLIES, ANCHOR BOLTS AND EXPANSION JOINT ASSEMBLIES.
- (9) REINFORCING BAR MARKS APPENDED WITH AN "E", INDICATE EPOXY COATED BARS.

SUMMARY OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT
209.4	GRANULAR BACKFILL (GRAVEL)	1	CY
304.3	CRUSHED GRAVEL (F)	26	CY
403.11	HOT BITUMINOUS PAVEMENT, MACHINE METHOD	80	L
403.12	HOT BITUMINOUS PAVEMENT, HAND METHOD	7	L
403.6	PAVEMENT JOINT ADHESIVE	2900	LF
403.911	HOT BITUMINOUS BRIDGE PAVEMENT, 1" BASE COURSE	58	T
403.99	TEMPORARY BITUMINOUS PAVEMENT	5	T
417.	COLD PLANING BITUMINOUS SURFACES	330	SY
502.	REMOVAL OF EXISTING BRIDGE STRUCTURE	1	U
504.1	COMMON BRIDGE EXCAVATION (F)	40	CY
511.00	CONCRETE BRIDGE DECK PAVEMENT REMOVAL (F)	1010	SY
511.02	PREPARATION FOR PARTIAL DEPTH CONCRETE DECK REPAIRS	50	SY
511.03	PREPARATION FOR FULL DEPTH CONCRETE BRIDGE DECK REPAIRS	20	SY
512.0201	PREPARATION FOR CONCRETE REPAIRS, CLASS II	2	SY
520.01	CONCRETE CLASS AA	7	CY
520.0201	CONCRETE CLASS AA, ABOVE FOOTINGS	43	CY
534.3	WATER REPELLENT (SILANE-SILOXANE)	40	GAL
538.6	BARRIER MEMBRANE, HEAT WELDED - MACHINE METHOD (F)	1015	SY
541.5	PVC WATERSTOPS, NH TYPE 5 (F)	75	LF
544.2	REINFORCING STEEL, EPOXY COATED (F)	5861	LB
544.21	REINFORCING STEEL, EPOXY COATED, MECHANICAL CONNECTORS (F)	277	LB
550.191	TEMPORARY GIRDER SUPPORT SYSTEM	1	U
550.2	BRIDGE SHOES (F)	10	EA
556.1	PAINTING EXISTING STRUCTURAL STEEL	1	U
561.1001	PREFABRICATED STRIP SEAL EXPANSION JOINT (F)	37.5	LF
561.1002	PREFABRICATED STRIP SEAL EXPANSION JOINT (F)	37.5	LF
562.1	SILICONE JOINT SEALANT (F)	15	LF
606.417	PORTABLE CONCRETE BARRIER FOR TRAFFIC CONTROL	420	LF
606.9513	TEMP. IMPACT ATTENUATION DEVICE (REDIRECTIVE), TEST LEVEL 3	2	U
608.12	2" BITUMINOUS SIDEWALK (F)	4	SY
609.5	RESET GRANITE CURB	40	LF
618.7	FLAGGERS	1000	HR
619.1	MAINTENANCE OF TRAFFIC	1	U
628.2	SAWED BITUMINOUS PAVEMENT	175	LF
632.0104	RETROREFLECTIVE PAINT PAVE, MARKING, 4" LINE	3800	LF
632.1104	PREFORMED RETROREFLECTIVE TAPE, TYPE 1 (REMOVABLE) 4" LINE	1100	LF
632.1118	PREFORMED RETROREFLECTIVE TAPE, TYPE 1 (REMOVABLE) 18" LINE	42	LF
632.911	OBLITERATE PAVE, MARKING LINE, 12" WIDE & UNDER	500	LF
632.912	OBLITERATE PAVE, MARKING LINE, OVER 12" WIDE	42	LF
646.31	TURF ESTABLISHMENT WITH MULCH AND JACKIFIERS	16	SY
647.1	HUMUS	2	CY
692.	MOBILIZATION	1	U
698.13	FIELD OFFICE TYPE C	10	MON
699.	MISCELLANEOUS TEMPORARY EROSION AND SEDIMENT CONTROL	*	\$
1002.1	REPAIRS OR REPLACEMENTS AS NEEDED - BRIDGE STRUCTURES	*	\$
1010.15	FUEL ADJUSTMENT	*	\$

* NOT A BID ITEM

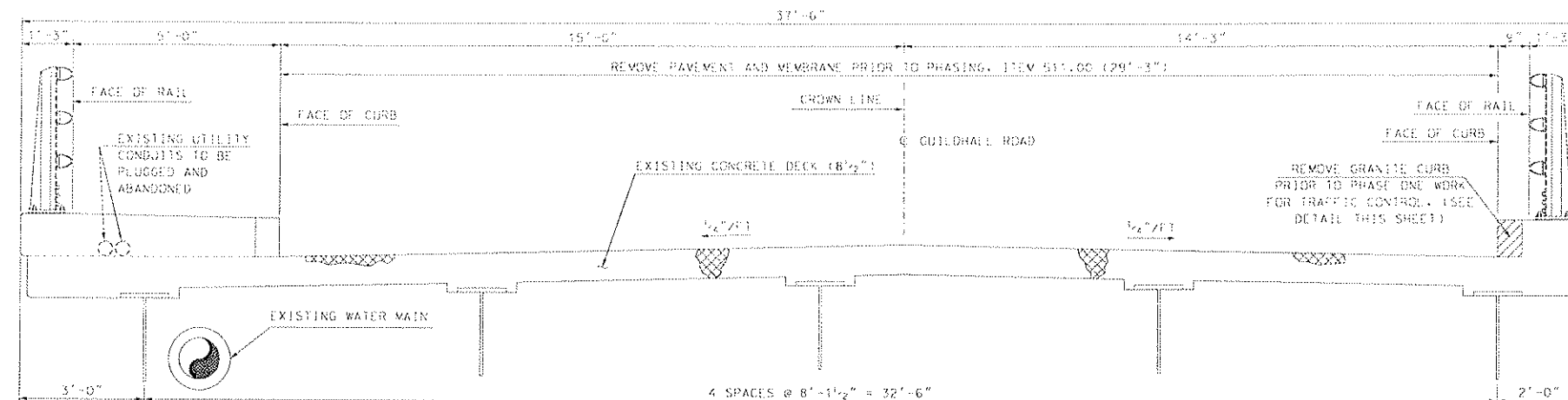
UTILITY NOTES

1. EXISTING UTILITY DUCTS (EMPTY) IN THE SIDEWALK SHALL BE PLUGGED AND ABANDONED (SUBSIDIARY TO ITEM 502.).
2. THE FOLLOWING UTILITIES ARE CARRIED OVER THE BRIDGE: 12" WATER (IRON). THE CONTRACTOR SHOULD NOTE THAT THE PROXIMITY OF THESE UTILITY PIPES TO THE ABUTMENTS AND DIAPHRAGMS MAY INTERFERE WITH TYPICAL METHODS OF JACKING AND/OR SUPPORTING THE SUPERSTRUCTURE DURING BEARING REPLACEMENT OPERATIONS. THE CONTRACTOR SHALL COORDINATE THE JACKING OPERATIONS WITH UTILITY OWNERS TO ENSURE UTILITIES REMAIN OPERATIONAL. SEE PROSECUTION OF WORK FOR MORE INFORMATION. SEE BRIDGE SHEETS 3 THRU 8 FOR APPROXIMATE LOCATION OF UTILITY LINES.

PAINTING NOTES

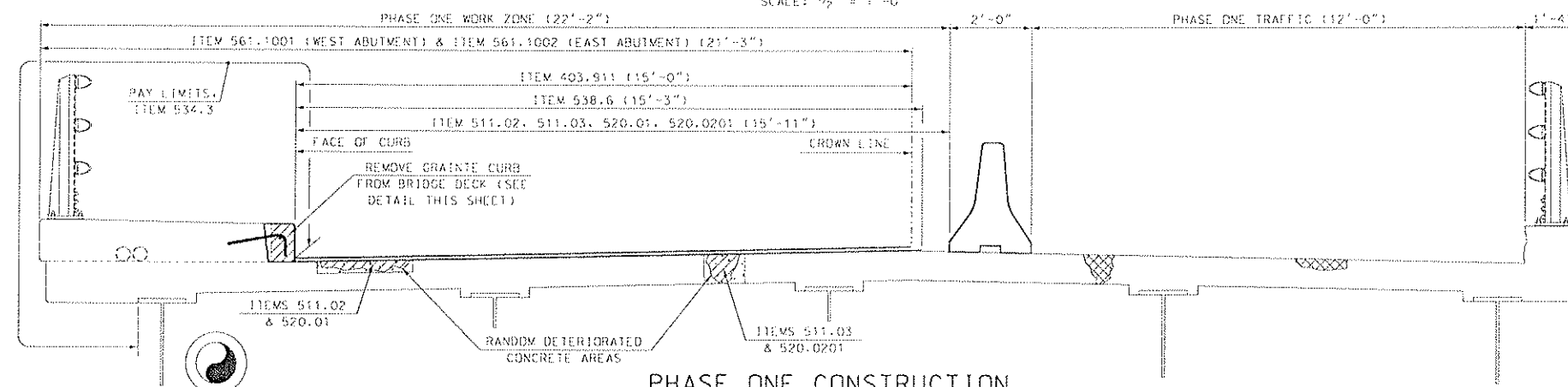
1. ALL STRUCTURAL STEEL WITHIN 10 FEET OF C.L. OF BEARING AT ABUTMENT A & B SHALL BE PAINTED. SEE SPECIAL PROVISIONS FOR ITEM 556. FOR ADDITIONAL INFORMATION.
2. NO EQUIPMENT REQUIRED FOR PAINTING OPERATIONS SHALL BE ALLOWED TO BE PLACED ON THE NEW WEARING SURFACE ONCE PLACED, UNLESS APPROVED BY THE ENGINEER.

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	NORTHAMBERLAND N.H. - GUILDHALL VT.			BRIDGE NO.		141/059		STATE PROJECT 28454	
LOCATION GUILDHALL ROAD OVER CONNECTICUT RIVER									
NOTES AND QUANTITY BOX								BRIDGE SHEET	
REVISIONS AFTER PROPOSAL				BY	DATE		BY	DATE	2 of 12
				DESIGNED	GMC	4/14	CHECKED	WPS	4/14
				DRAWN	GMC	4/14	CHECKED	WPS	4/14
				QUANTITIES	GMC	4/14	CHECKED	WPS	4/14
				ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO	TOTAL SHEETS
				REV. DATE		-----		6	19



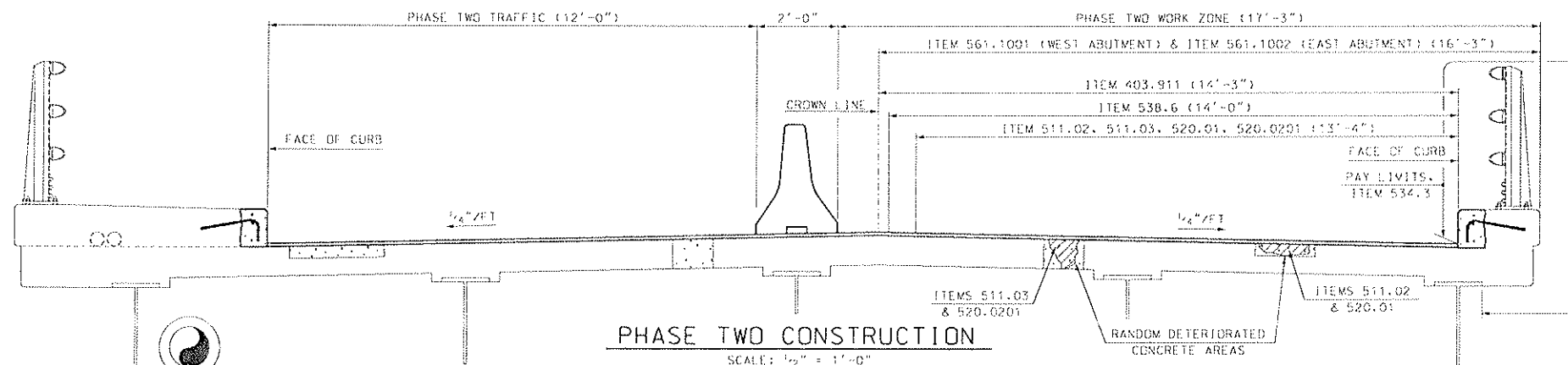
EXISTING DECK SECTION

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



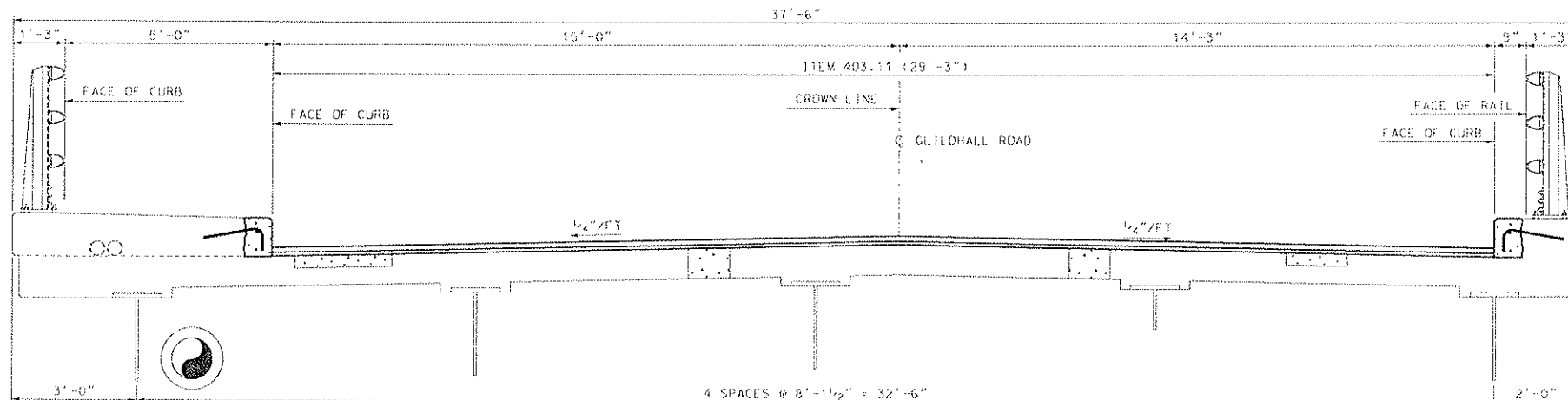
PHASE ONE CONSTRUCTION

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



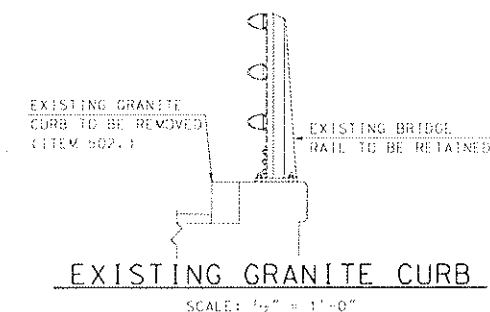
PHASE TWO CONSTRUCTION

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



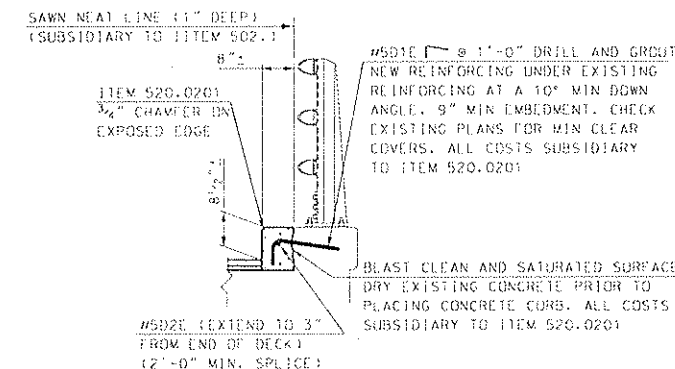
PROPOSED DECK SECTION

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



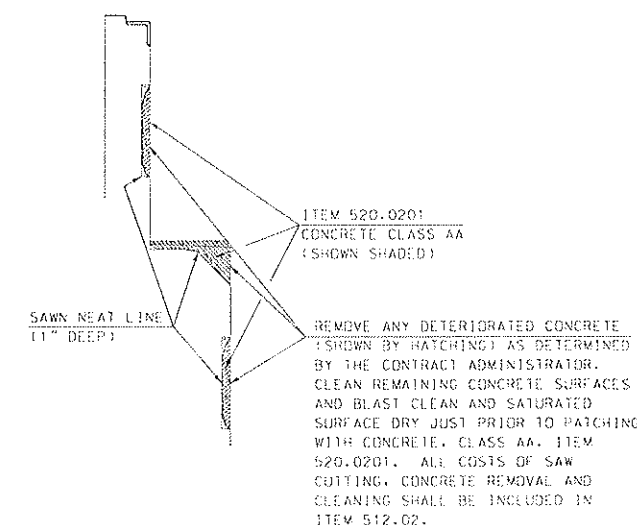
EXISTING GRANITE CURB

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



PROPOSED CONCRETE CURB

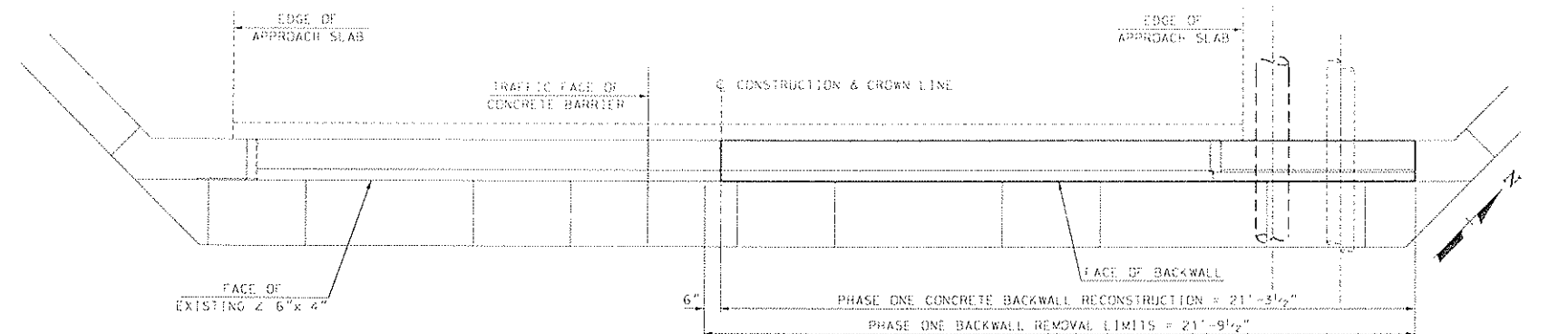
SCALE: 1/2" = 1'-0"



TYPICAL ABUTMENT DETAIL
CONCRETE REPAIRS

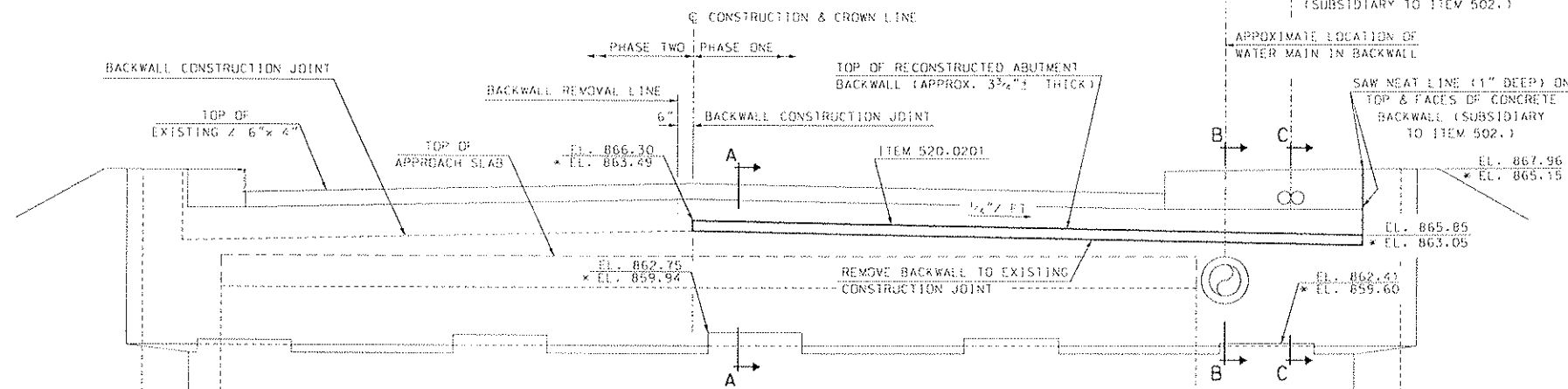
SCALE: 3/8" = 1'-0"

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	NORTHAMBERLAND N.H.		GUILDHALL VT.	BRIDGE NO.		141059		STATE PROJECT	28454
LOCATION GUILDHALL ROAD OVER CONNECTICUT RIVER									
DECK SECTION AND DETAILS									BRIDGE SHEET
REVISIONS AFTER PROPOSAL				BY	DATE		BY	DATE	3 of 12
			DESIGNED	GMC	3/14	CHECKED	WPS	3/14	125-3-1
			DRAWN	GMC	3/14	CHECKED	WPS	3/14	
			QUANTITIES	GMC	3/14	CHECKED	WPS	3/14	
ISSUE DATE				FEDERAL PROJECT NO.			SHEET NO.		TOTAL SHEETS
REV. DATE				-----			7		19
SUBDIRECTORY									
BRCDdetails									



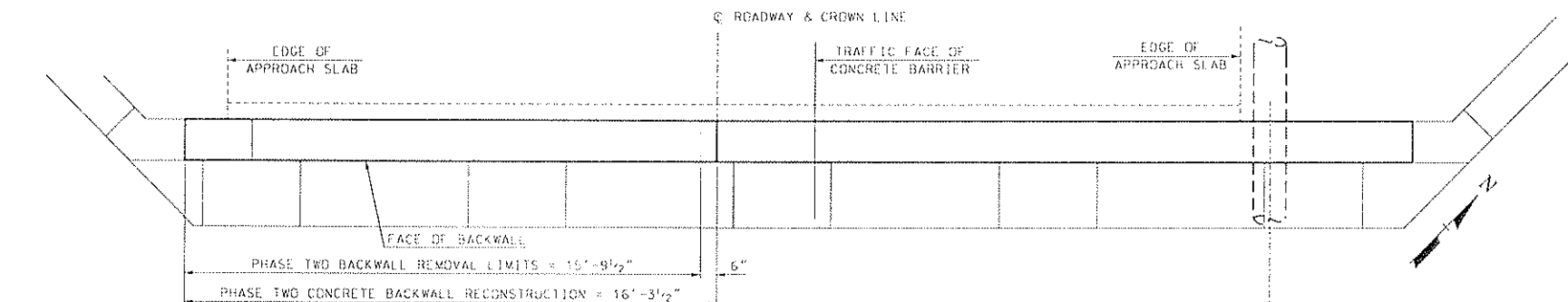
PHASE ONE BACKWALL PLAN - ABUTMENT A (VERMONT)

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



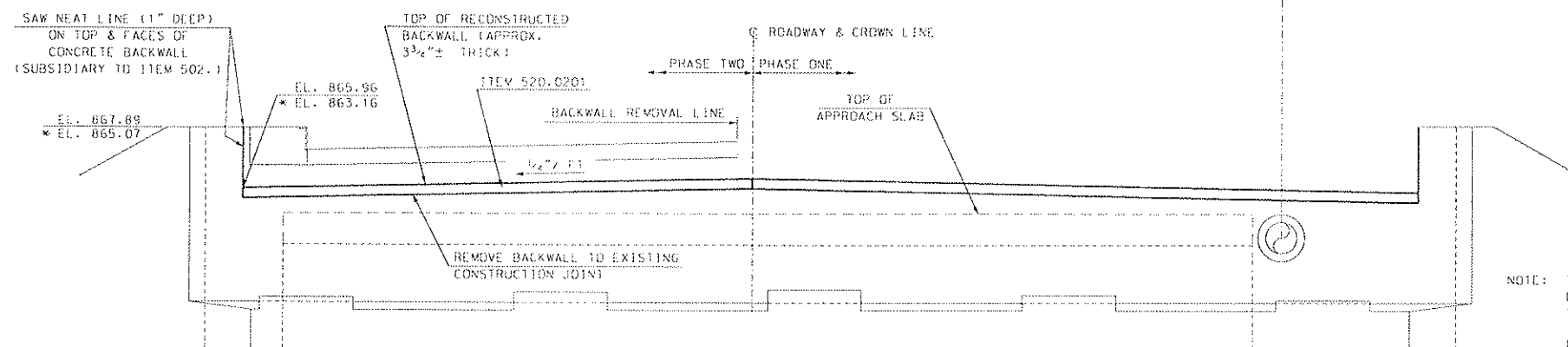
PHASE ONE BACKWALL ELEVATION - ABUTMENT A (VERMONT)

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



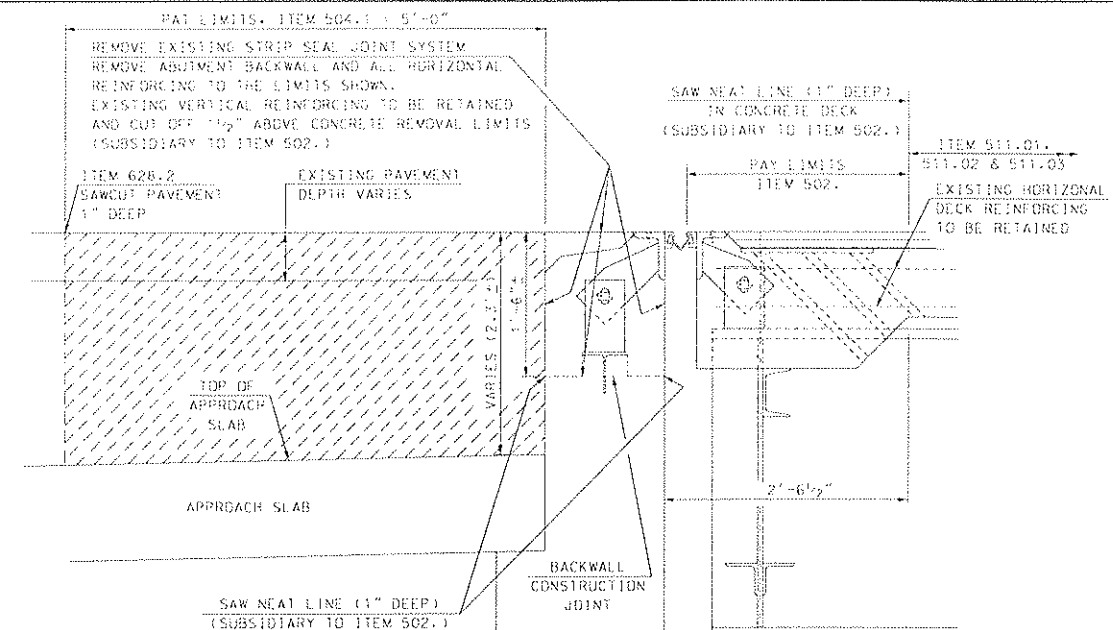
PHASE TWO BACKWALL PLAN - ABUTMENT A (VERMONT)

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



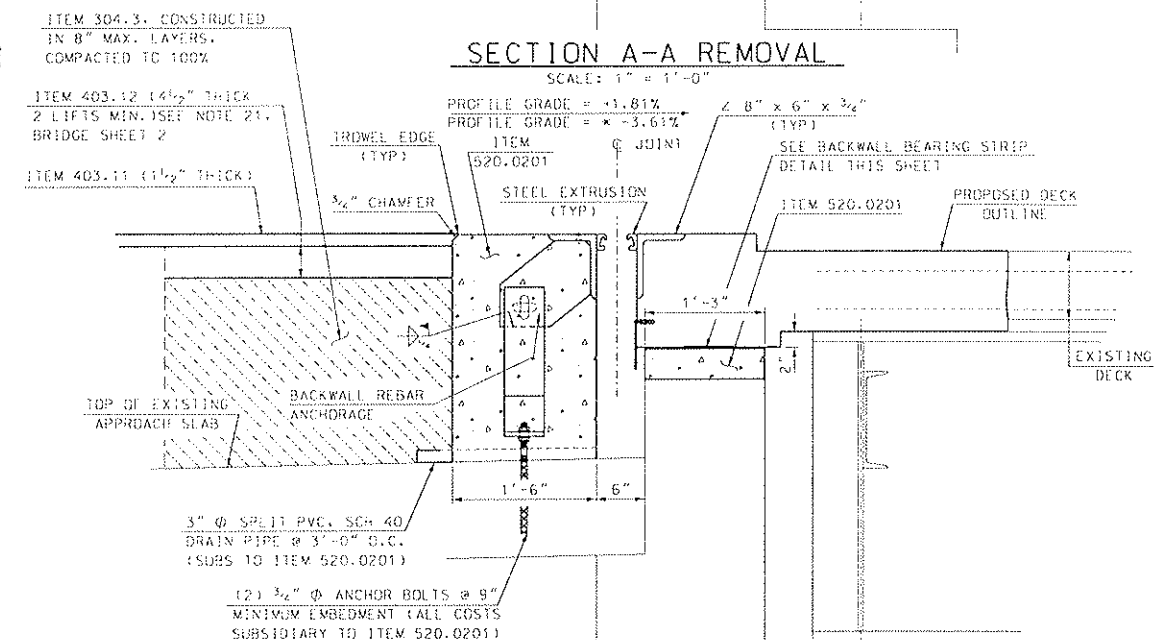
PHASE TWO BACKWALL ELEVATION - ABUTMENT A (VERMONT)

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



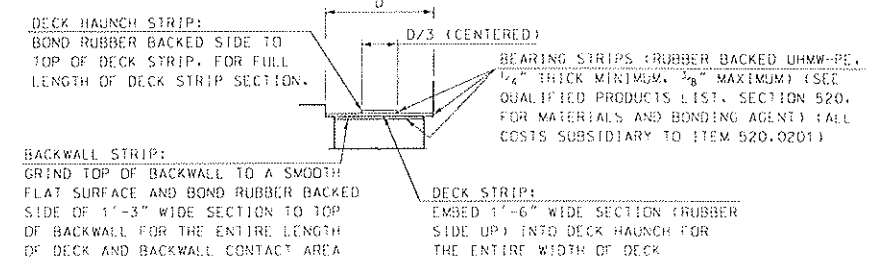
SECTION A-A REMOVAL

SCALE: 1" = 1'-0"



SECTION A-A RECONSTRUCTION

SCALE: 1" = 1'-0"



BACKWALL BEARING STRIP DETAIL

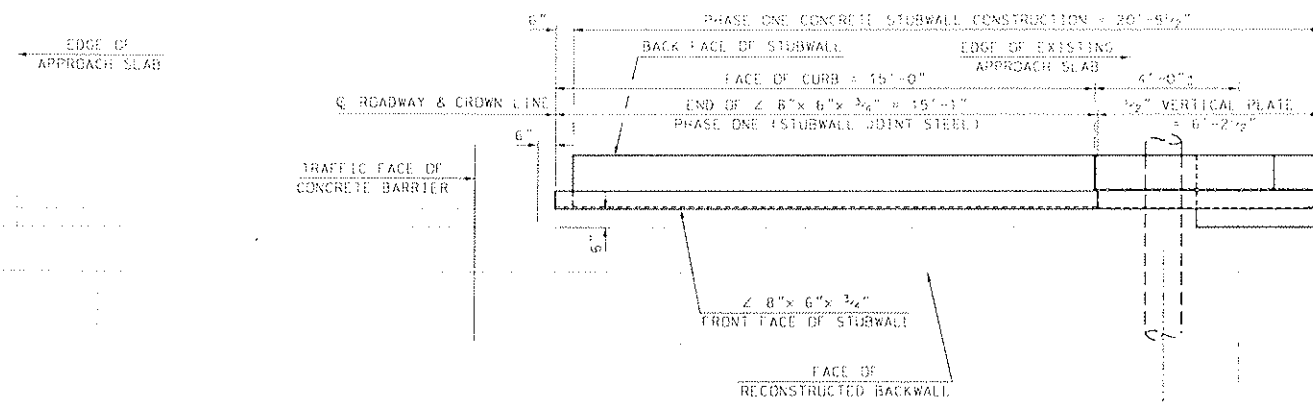
NOT TO SCALE

NOTE: THIS SHEET SHOWS ABUTMENT A. ABUTMENT B OPPOSITE HAND WITH INFORMATION PERTAINING TO ABUTMENT B SHOWN WITH *

FOR SECTION B-B, SEE BRIDGE SHEET 6
FOR SECTION C-C, SEE BRIDGE SHEET 6

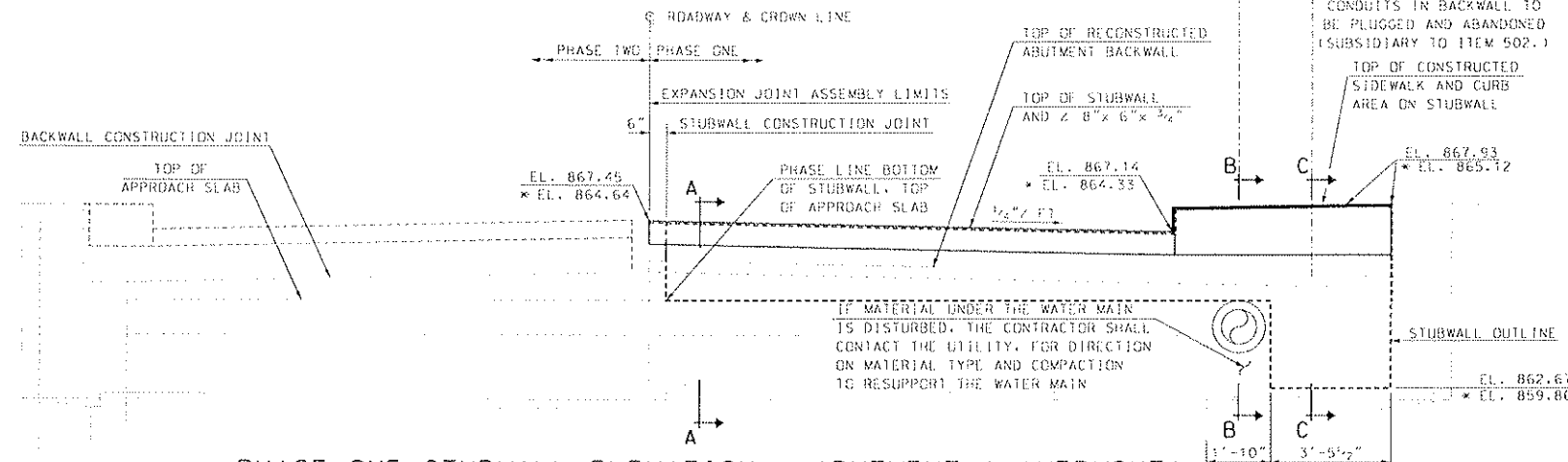
FOR PLAN VIEW OF DECK REMOVAL, SEE BRIDGE SHEET 6

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	NORTHUMBERLAND N.H. - GUILDFORD VT			BRIDGE NO	141-059		STATE PROJECT	28454	
LOCATION	GUILDFORD ROAD OVER CONNECTICUT RIVER								
ABUTMENT A BACKWALL REHABILITATION								SHEET NO.	
REVISIONS AT PROPOSAL				BY	DATE	CHECKED	BY	DATE	4 of 12
DESIGNED				GMC	3/14	CHECKED	WPS	3/14	
DRAWN				GMC	3/14	CHECKED	WPS	3/14	
QUANTITIES				GMC	3/14	CHECKED	WPS	3/14	
ISSUE DATE				FEDERAL PROJECT NO			SHEET NO		TOTAL SHEETS
REV. DATE				-----			8		19



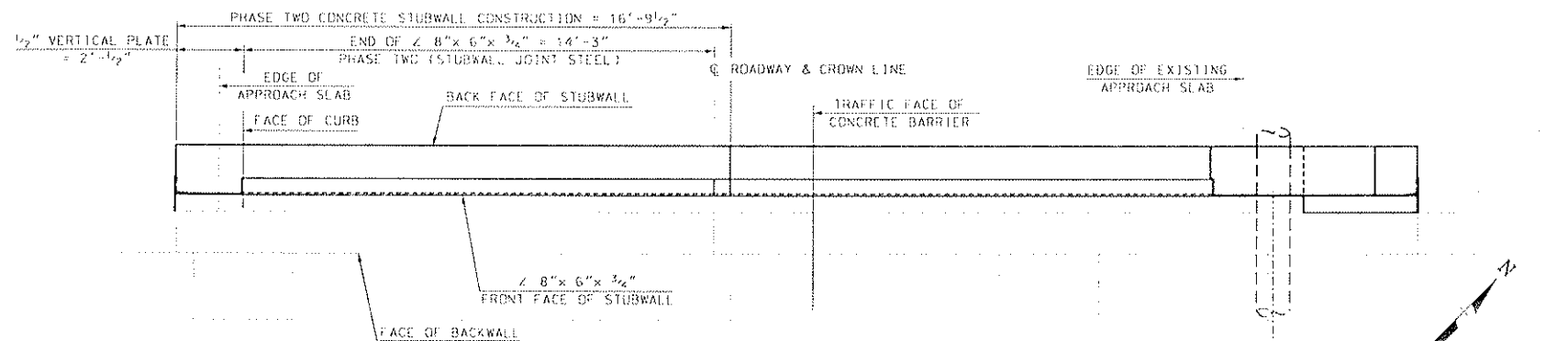
PHASE ONE STUBWALL PLAN - ABUTMENT A (VERMONT)

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



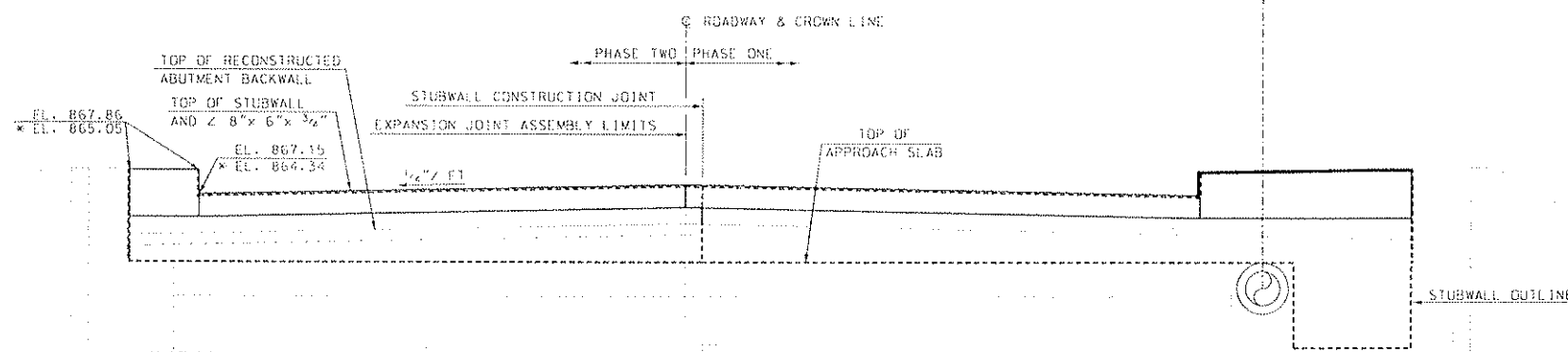
PHASE ONE STUBWALL ELEVATION - ABUTMENT A (VERMONT)

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



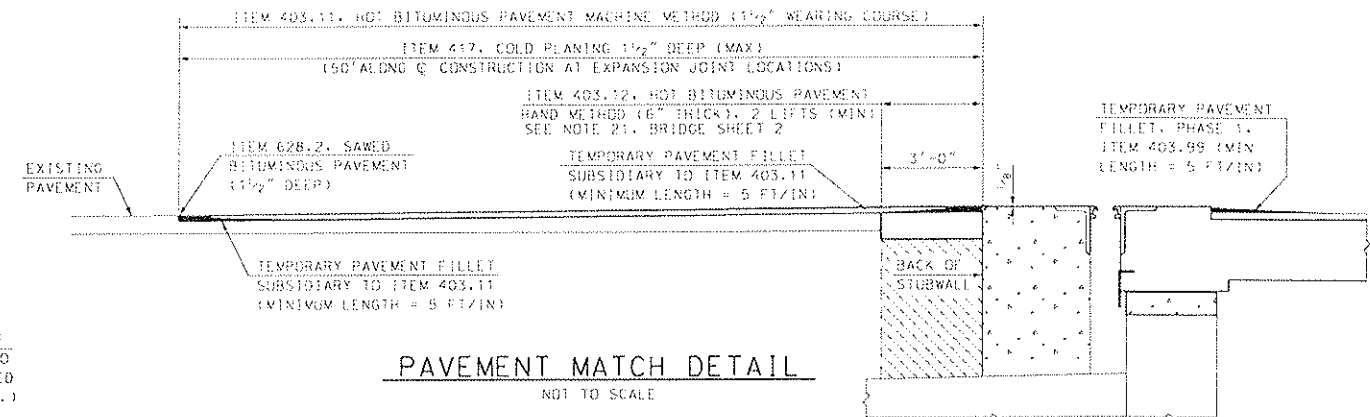
PHASE TWO STUBWALL PLAN - ABUTMENT A (VERMONT)

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



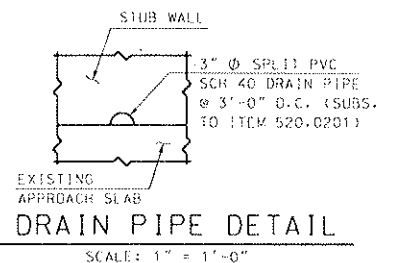
PHASE TWO STUBWALL ELEVATION - ABUTMENT A (VERMONT)

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



PAVEMENT MATCH DETAIL

NOT TO SCALE



DRAIN PIPE DETAIL

SCALE: 1" = 1'-0"

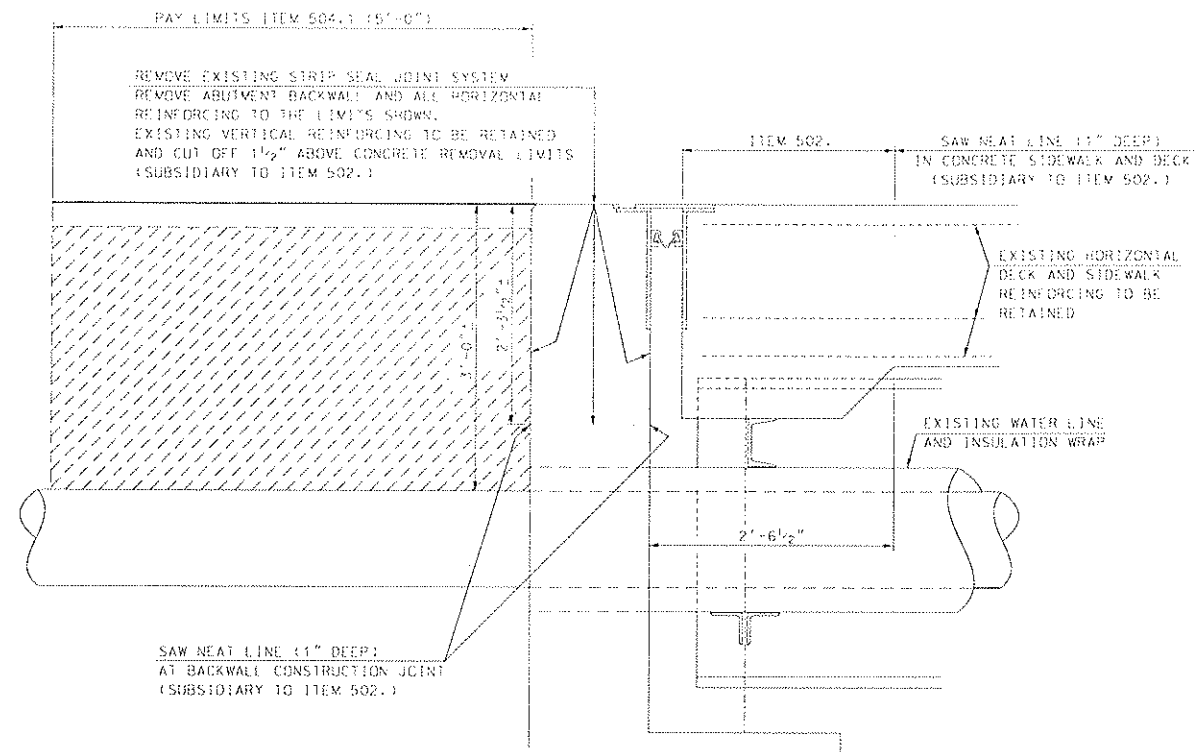
NOTE: THIS SHEET SHOWS ABUTMENT A. ABUTMENT B OPPOSITE HAND WITH INFORMATION PERTAINING TO ABUTMENT B SHOWN WITH *

FOR SECTION A-A, SEE BRIDGE SHEET 4
FOR SECTION B-B, SEE BRIDGE SHEET 6
FOR SECTION C-C, SEE BRIDGE SHEET 6

FOR PLAN VIEW OF DECK REMOVAL, SEE BRIDGE SHEET 8

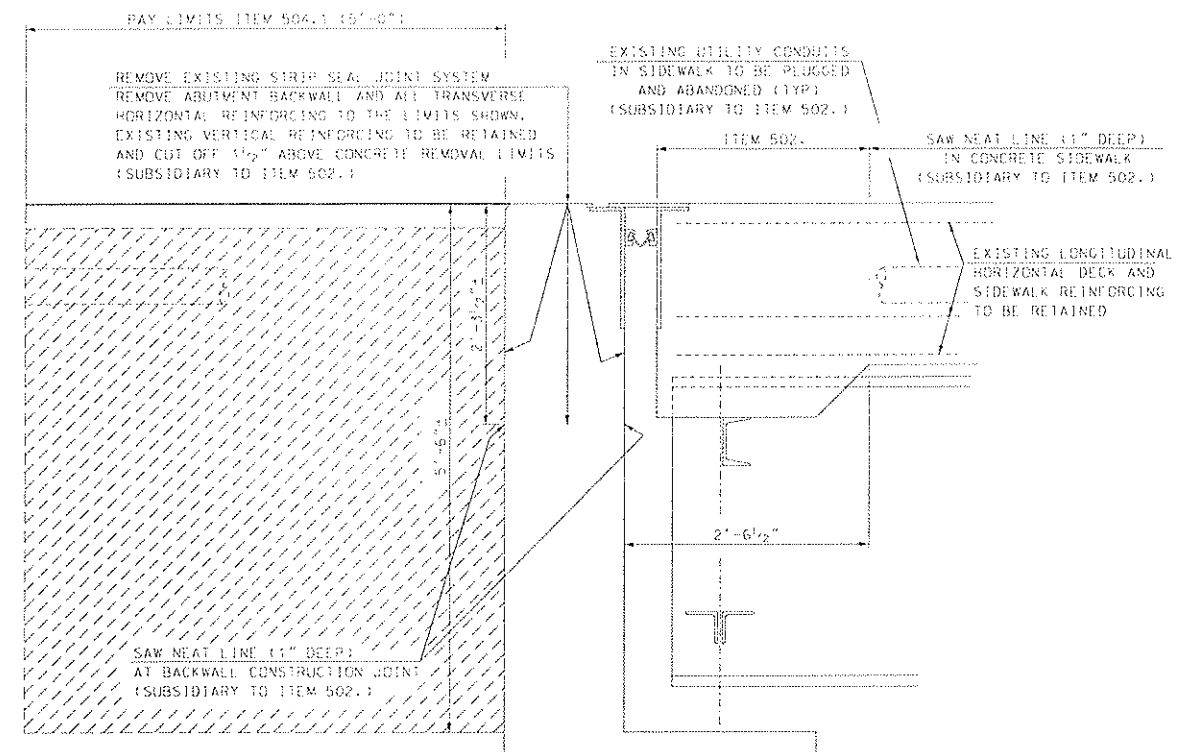
STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	NORTHUMPTON AND N.H. - GUILDFORD VT.			BRIDGE NO.	141/059		STATE PROJECT	28454	
LOCATION	GUILDFORD ROAD OVER CONNECTICUT RIVER								
ABUTMENT A STUBWALL CONSTRUCTION								BRIDGE SHEET	
REVISIONS AFTER PROPOSAL				BY	DATE	BY	DATE	5 OF 12	
				DESIGNED	GMC	3/14	CHECKED	WPS	3/14
				DRAWN	GMC	3/14	CHECKED	WPS	3/14
				QUANTITIES	GMC	3/14	CHECKED	WPS	3/14
ISSUE DATE				FEDERAL PROJECT NO.				SHEET NO.	
REV. DATE				-----				9	
								19	

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
BRG/Details	28454AbutA	AS NOTED



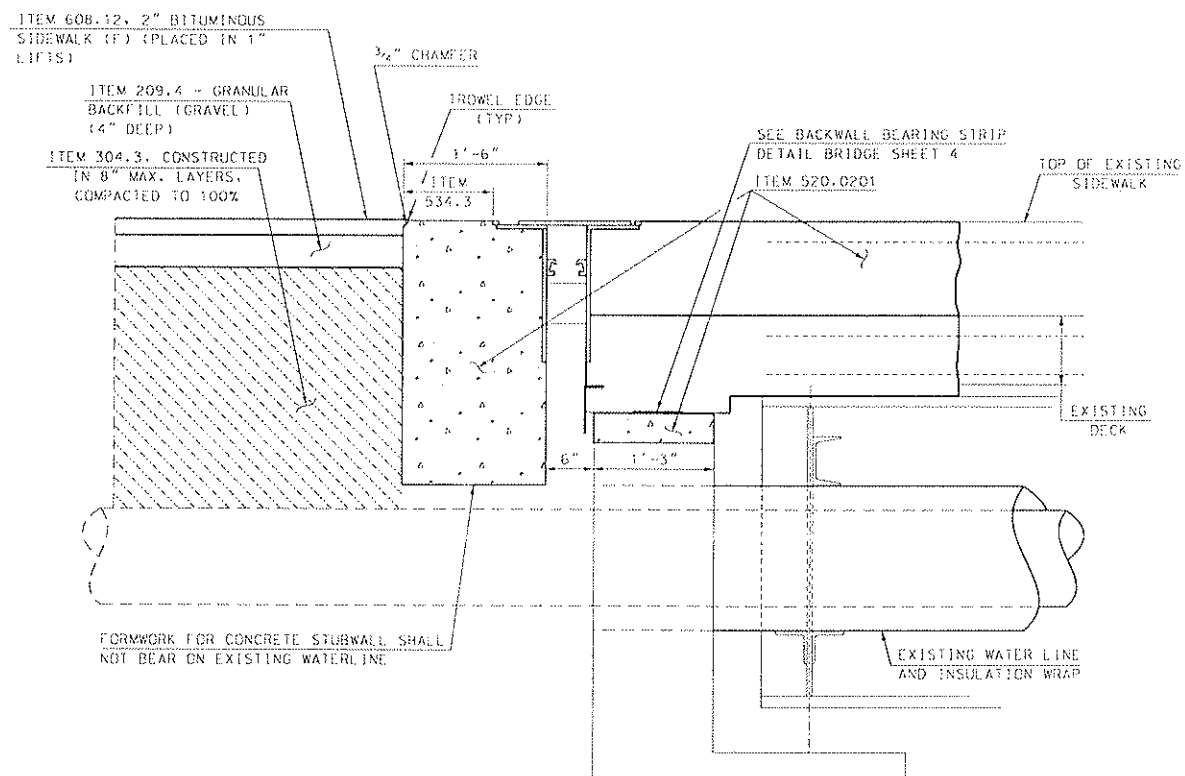
SECTION B-B REMOVAL

SCALE: 1" = 1'-0"



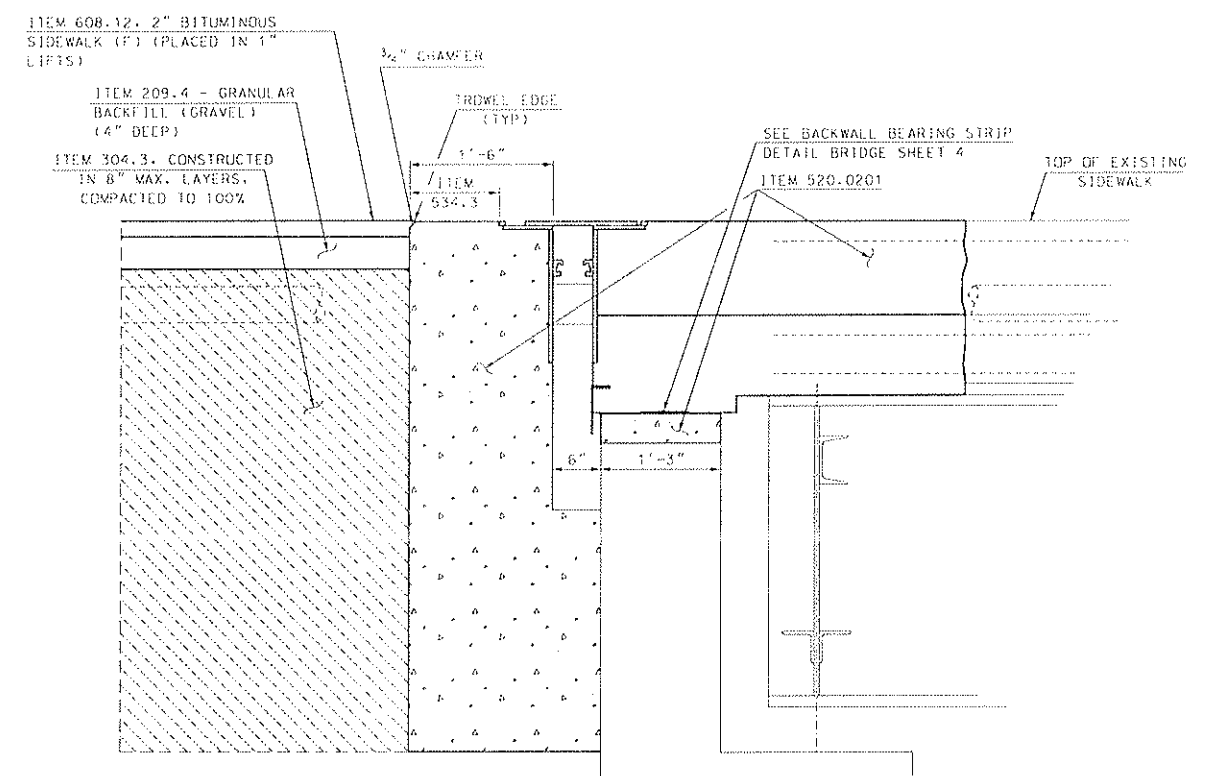
SECTION C-C REMOVAL

SCALE: 1" = 1'-0"



SECTION B-B RECONSTRUCTION

SCALE: 1" = 1'-0"



SECTION C-C RECONSTRUCTION

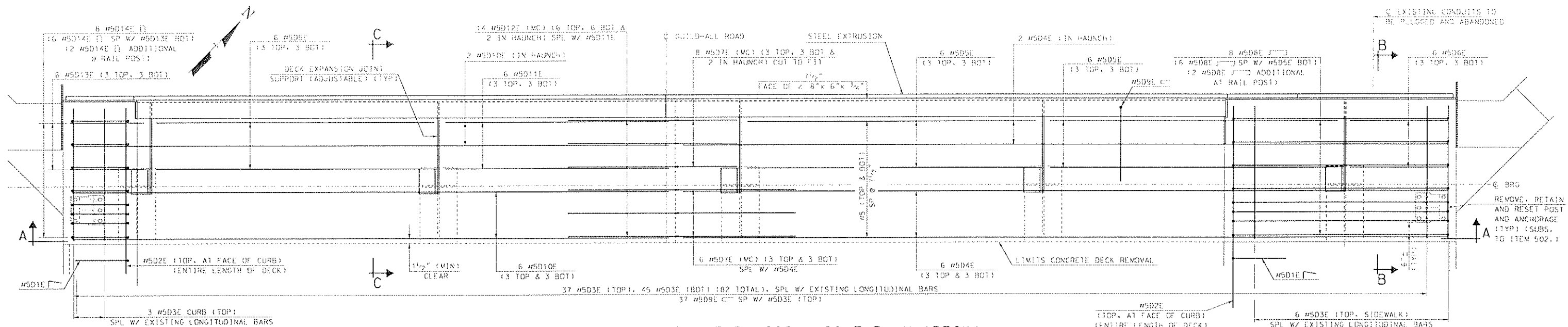
SCALE: 1" = 1'-0"

NOTE: THIS SHEET SHOWS ABUTMENT A, ABUTMENT B OPPOSITE HAND
FOR LOCATION OF SECTION B-B AND C-C, SEE BRIDGE SHEET 4 AND 5
FOR PLAN VIEW OF DECK REMOVAL, SEE BRIDGE SHEET B

SUBDIRECTORY	DCN LOCATOR	SHEET SCALE
BRC/Details	28454A88A	AS NOTED

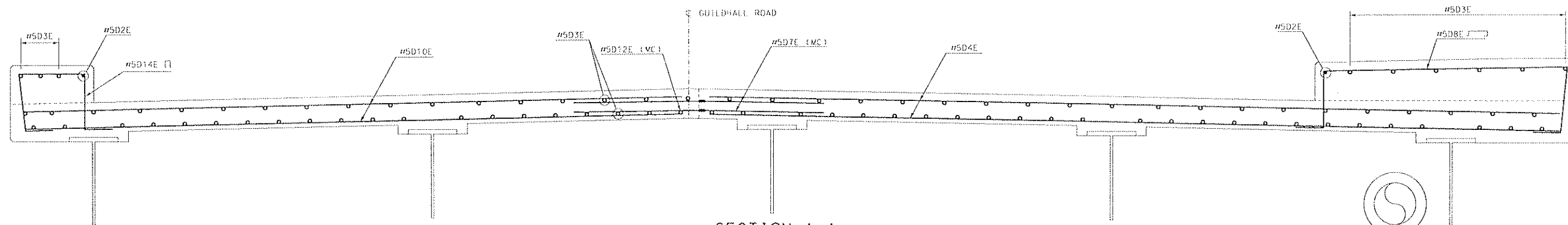
STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	NORTHUMBERLAND NH - GUILDFORD VT			BRIDGE NO.	141089		STATE PROJECT	28454	
LOCATION	GUILDFORD ROAD OVER CONNECTICUT RIVER								
ABUTMENT A SECTION DETAILS									BRIDGE SHEET
REVISIONS AFTER PROPOSAL				BY	DATE	CHECKED	BY	DATE	6 OF 12
				DESIGNED	GMC	3/14	CHECKED	WPS	3/14
				DRAWN	GMC	3/14	CHECKED	WPS	3/14
				QUANTITIES	GMC	3/14	CHECKED	WPS	3/14
ISSUE DATE				FEDERAL PROJECT NO.				SHEET NO.	TOTAL SHEETS
REV. DATE								10	19

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN NORTHUMBERT AND N.H. - GUILDFORD VT			BRIDGE NO. 141/R59		STATE PROJECT 28454				
LOCATION GUILDFORD ROAD OVER CONNECTICUT RIVER									
ABUTMENT A BACKWALL & STUBWALL REINFORCING								BRIDGE SHEET	
REVISIONS AFTER PROPOSAL		BY	DATE	CHECKED	BY	DATE	7 OF 12		
		DESIGNED	GMC	3-14	CHECKED	WPS	3-14	PRINT NUMBER	
		DRAWN	GMC	3-14	CHECKED	WPS	3-14	125-3-1	
		QUANTITIES	GMC	3-14	CHECKED	WPS	3-14		
ISSUE DATE			FEDERAL PROJECT NO.				SHEET NO.		TOTAL SHEETS
REV. DATE			-----				11		19



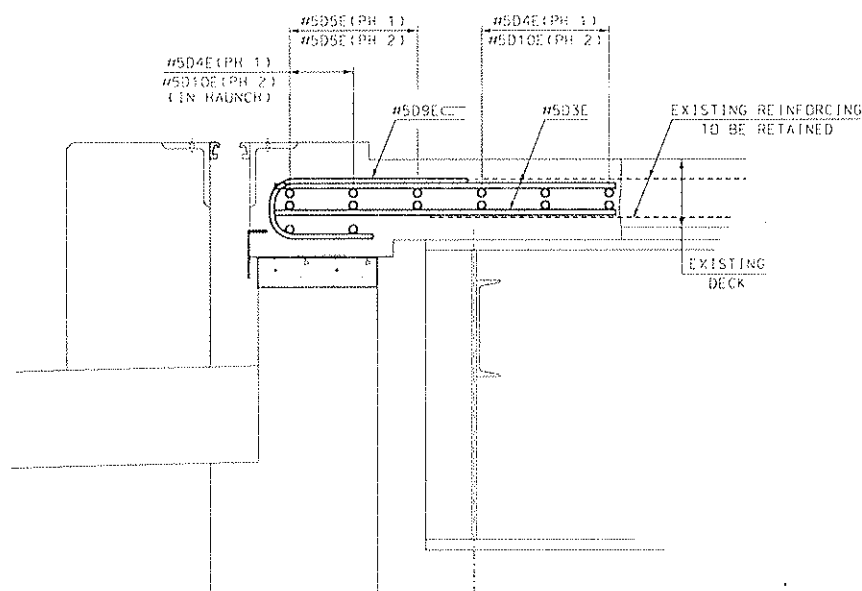
PLAN - ABUTMENT A EXPANSION JOINT PLAN (DECK)
(ABUTMENT B SIMILAR)

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



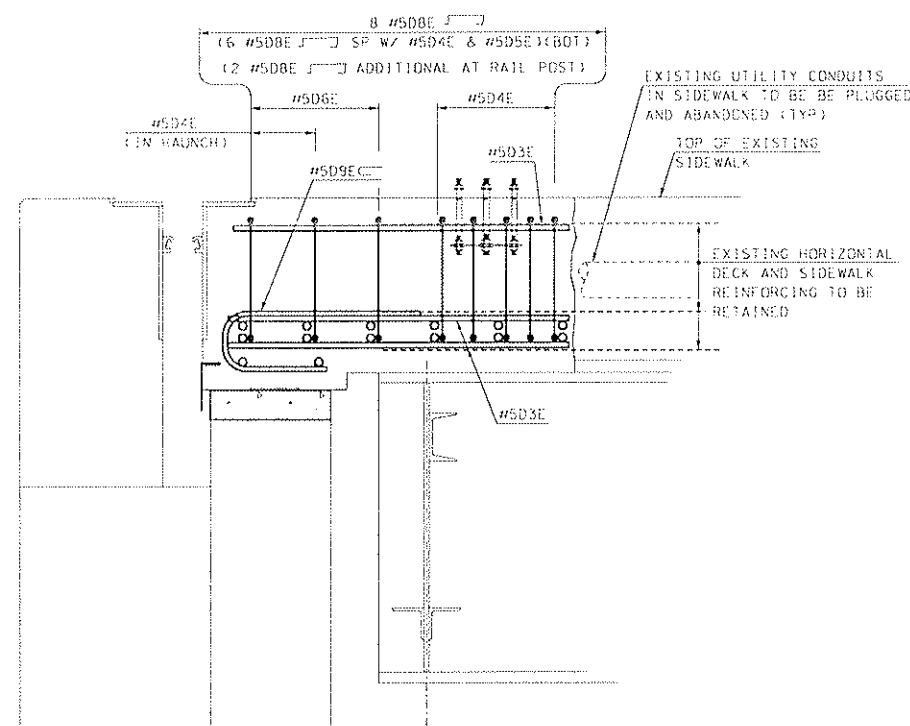
SECTION A-A

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



SECTION C-C DECK REINFORCING

SCALE: 1" = 1'-0"

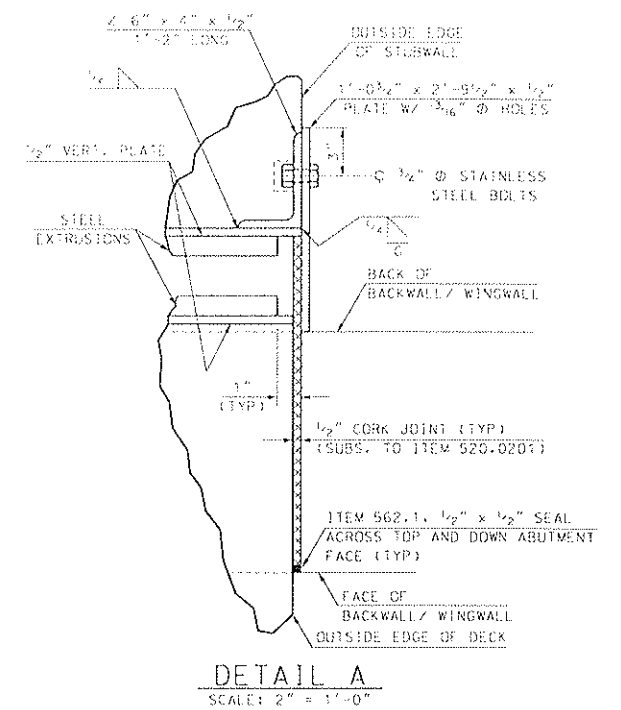


SECTION B-B DECK REINFORCING

SCALE: 1" = 1'-0"

NOTE: THIS SHEET SHOWS ABUTMENT A. ABUTMENT B
OPPOSITE HAND
NOTE: EXISTING LONGITUDINAL DECK REINFORCING RETAINED
NOT SHOWN IN PLAN VIEW FOR CLARITY.

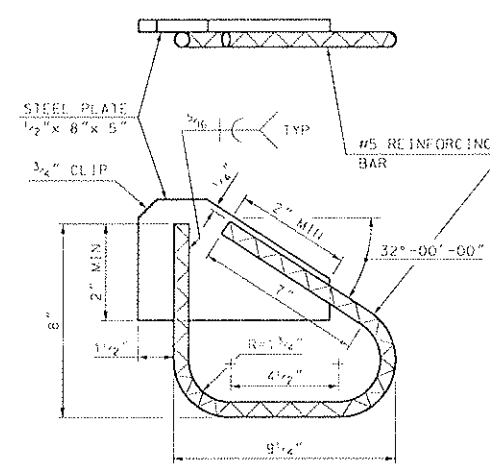
STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	NORTHUMBERLAND & N.H. GUILDFORD, VT.			BRIDGE NO.	141359		STATE PROJECT	28454	
LOCATION	GUILDFORD ROAD OVER CONNECTICUT RIVER								
DECK REINFORCING								BRIDGE SHEET	
REVISIONS AFTER PROPOSAL				BY	DATE	BY	DATE	8	12
DESIGNED				GMC	3/14	CHECKED	WPS	3/14	FILE NUMBER
DRAWN				GMC	3/14	CHECKED	WPS	3/14	125-3-1
QUANTITIES				GMC	3/14	CHECKED	WPS	3/14	TOTAL SHEETS
ISSUE DATE				FEDERAL PROJECT NO.			SHEET NO.		
REV. DATE							12		19



NOTE THAT THE ELEVATIONS AND DIMENSIONS SHOWN ARE TAKEN FROM THE ORIGINAL PLANS AND/OR BRIDGE MAINTENANCE RECORDS. DAMAGE AND/OR FIELD MAINTENANCE MAY HAVE OCCURRED THAT MAY NOT HAVE BEEN RECORDED SO FIELD VERIFICATION OF DIMENSIONS AND ELEVATIONS IS REQUIRED TO ENSURE PROPER FITTING OF EXPANSION JOINT. ANY DIFFERENCES BETWEEN FIELD MEASUREMENTS AND DESIGN PLANS SHALL BE NOTED ON THE SHOP DRAWINGS.

EXPANSION JOINT NOTES

- (1) ALL EXPANSION JOINT STEEL SHALL BE GALVANIZED, STEEL ANGLES SHALL BE AASHTO M223 (ASTM A572) GRADE 50. MINOR STEEL PLATES MAY CONFORM TO AASHTO M163 (ASTM A36). THE ENTIRE ASSEMBLY, INCLUDING STRIP SEAL, SHALL BE PAID FOR AS ITEM 561.100X, PREFABRICATED STRIP SEAL EXPANSION JOINT (F).
- (2) SPLICES FOR STEEL ANGLES SHALL DEVELOP FULL STRENGTH.
- (3) EXPANSION JOINT SHALL BE PRESET TO THE TEMPERATURE ANTICIPATED AT THE TIME OF INSTALLATION. FINAL SETTING IN THE FIELD SHALL BE DETERMINED BY THE CONTRACT ADMINISTRATOR (SEE TEMPERATURE ADJUSTMENT TABLE & NOTES).
- (4) THE STRIP SEAL SHALL BE FURNISHED IN ONE CONTINUOUS LENGTH. NO SPLICES WILL BE ALLOWED.
- (5) JOINT SUPPORT PLATES AND CURB PLATES SHALL BE SHOP WELDED TO EXPANSION JOINT STEEL AND SHALL BE VERTICAL AFTER THE JOINT ASSEMBLY HAS BEEN ADJUSTED FOR ROADWAY CROSS-SLOPE AND GRADE.
- (6) THE EXPANSION JOINT ASSEMBLY SHALL BE INSTALLED ONLY AFTER BOTH ABUTMENTS HAVE BEEN BACKFILLED TO TOP OF SUB GRADE.
- (7) 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.
- (8) PROTECT TOP OF EXPANSION JOINT DURING PLACEMENT OF CONCRETE AND BITUMINOUS PAVEMENT.
- (9) THE STRIP SEAL HAS BEEN DESIGNED FOR A TOTAL FACTORED MOVEMENT OF $\frac{1}{8}$ 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.
- (10) ELEVATIONS SHOWN AT TOP OF ANGLES ARE $\frac{1}{8}$ " LOWER THAN PROPOSED FINISHED ROADWAY GRADE.
- (11) NO "LOW PROFILE" STEEL EXTRUSIONS SHALL BE ALLOWED.
- (12) FOR SECTIONS B-B, C-C, D-D, E-E AND F-F, SEE BRIDGE SHEET 10.



ANCHORAGE DETAIL
SCALE: 3" = 1'-0"

TEMPERATURE ADJUSTMENT TABLE	
TEMPERATURE	"T"
20°F	ABUT. A
20°F	1 ¹⁵ / ₁₆ "
35°F	1 ⁷ / ₈ "
50°F	1 ¹³ / ₁₆ "
65°F	1 ³ / ₄ "
80°F	1 ¹¹ / ₁₆ "
95°F	1 ⁵ / ₈ "

- ### TEMPERATURE ADJUSTMENT NOTES
1. "T" DIMENSIONS ARE PERPENDICULAR TO FACE OF BACKWALL.
 2. MINIMUM "T" WIDTH FOR SEAL INSTALLATION = $\frac{1}{2}$ "
(APPROXIMATELY 65°F OR LESS).
 3. VALUES IN THE TEMPERATURE ADJUSTMENT TABLE ARE FOR SETTING THE EXPANSION JOINT ASSEMBLY IMMEDIATELY PRIOR TO POURING CONCRETE BLOCKOUTS.

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
BRC/NBHansonBJ194-093	284541explant	AS NOTED

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	NORTHUMBERLAND N.H. - GUILDFORD VT.			BRIDGE NO.	141-059		STATE PROJECT	28454	
LOCATION: GUILDFORD ROAD OVER CONNECTICUT RIVER									
ABUTMENT A (B) EXPANSION JOINT (SHEET 1 OF 2)								BRIDGE SHEET	
REVISIONS AFTER PROPOSAL				BY	DATE	BY	DATE	9 of 12	
				DESIGNED	GMC	3/14	CHECKED	WPS	3/14
				DRAWN	GMC	3/14	CHECKED	WPS	3/14
				QUANTITIES	GMC	3/14	CHECKED	WPS	3/14
ISSUE DATE				FEDERAL PROJECT NO.				SHEET NO.	
REV. DATE				-----				13	
								19	
								TOTAL SHEETS	

SECTION B-B (CURB)
SCALE: $\frac{3}{4}" = 1' - 0"$

SECTION B-B (SIDEWALK)
SCALE: $\frac{3}{4}" = 1'-0"$

SECTION D-D
SCALE: $\frac{3}{8}" = 1'-0"$

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

SECTION C-C (CURB)
SCALE: $\frac{3}{4}" = 1' - 0"$

SECTION C-C (SIDEWALK)
SCALE: $\frac{3}{4}" = 1' - 0"$

SECTION F-F

SCALE: $\frac{3}{4}'' = 1' - 0''$

DECK EXPANSION JOINT SUPPORT (ADJUSTABLE)

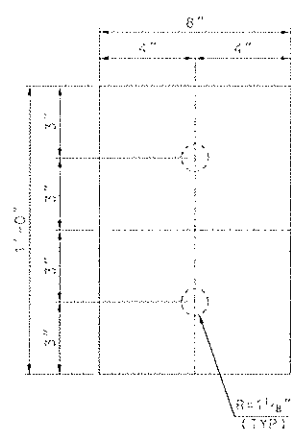
PHASE CONSTRUCTION
FIELD WELD SPLICE DETAILS
N. T. S.

STUBWALL EXPANSION JOINT SUPPORT
(ADJUSTABLE)
SCALE: 3" = 3'-0"

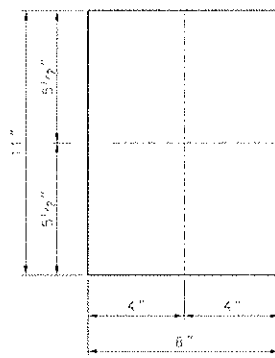
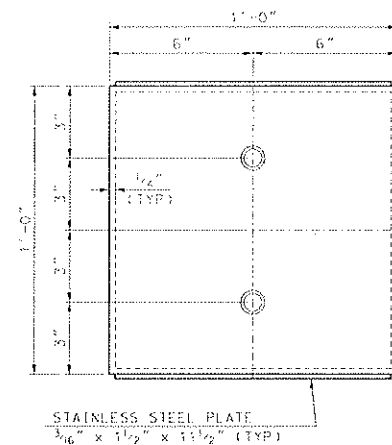
ABUTMENT A & B EXPANSION JOINT DECK DRAIN DETAIL
(PROVIDE BOTH SIDES OF JOINT)
SCALE: 1 1/2" = 1'-0"

BEARING STRIP DETAIL
NOT TO SCALE

FOR LOCATION OF SECTIONS B-B, C-C, D-D, E-E AND F-F, SEE BRIDGE SHEET 9.									
STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN NORTHUMBERLAND N.H. - GUILDFORD, VT.			BRIDGE NO. 141089		STATE PROJECT			28454	
LOCATION GUILDFORD ROAD OVER CONNECTICUT RIVER									
ABUTMENT A (B) EXPANSION JOINT (SHEET 2 OF 2)								BRIDGE SHEET	
REVISIONS AFTER PROPOSAL				BY	DATE	BY	DATE	10 OF 12	
DESIGNED				GMC	3/14	CHECKED	WPS	3/14	FIG. NUMBER
DRAWN				GMC	3/14	CHECKED	WPS	3/14	
QUANTITIES				GMC	3/14	CHECKED	WPS	3/14	
ISSUE DATE				FEDERAL PROJECT NO.			SHEET NO.		TOTAL SHEETS
REV. DATE				-----			14		19

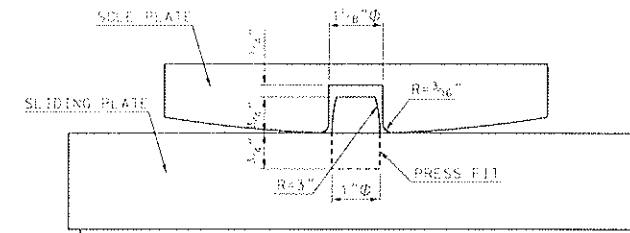
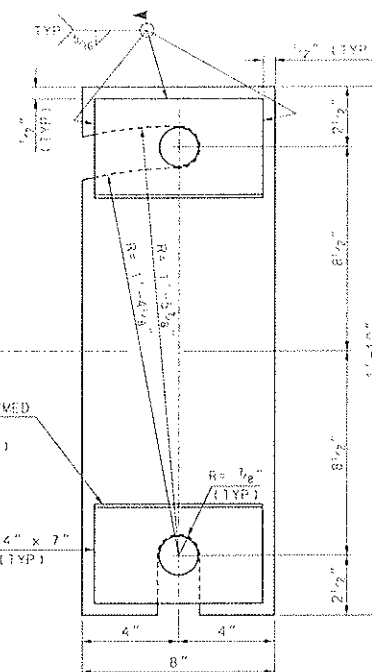


(EXISTING SOLE PLATE TO REMAIN IN PLACE AND IS SHOWN FOR REFERENCE ONLY)

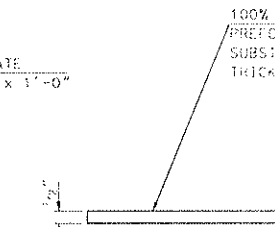
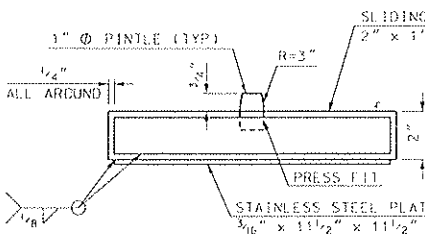
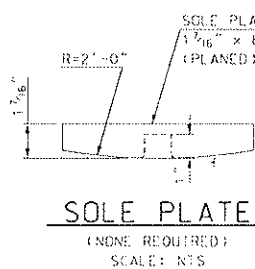


TEFLON-FACED PREFORMED FABRIC PAD, 1/8" x 2" x 7" (TYP)

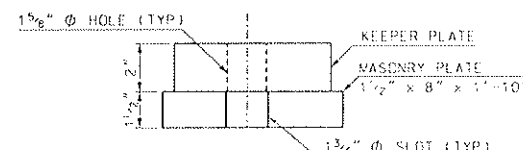
KEEPER PLATE 2" x 4" x 7" WITH 1/8" Ø HOLE (TYP)



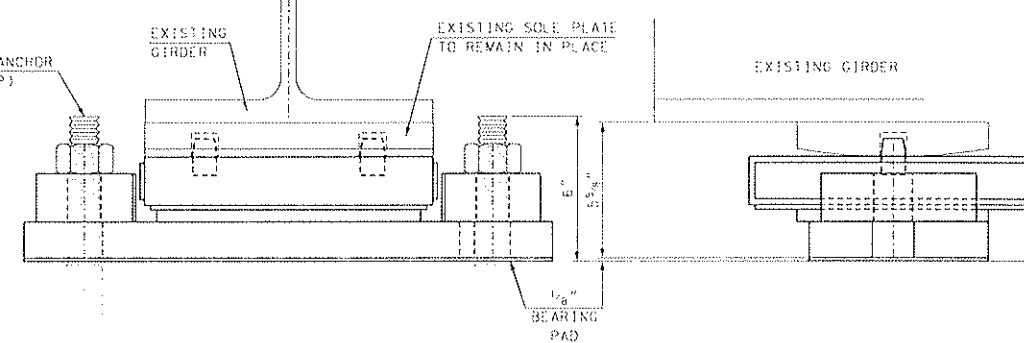
PINTLE DETAIL
SCALE: NTS



100% VIRGIN PTFE (TEFLON) BONDED TO PREFORMED FABRIC PAD WITH CONFINING SUBSTRATE (11" x 8" x 1/2" TOTAL THICKNESS) BOND TO MASONRY PLATE



MASONRY PLATE



SHOE ASSEMBLY

EXPANSION SHOE DETAIL
(10 REQUIRED)
SCALE: NTS

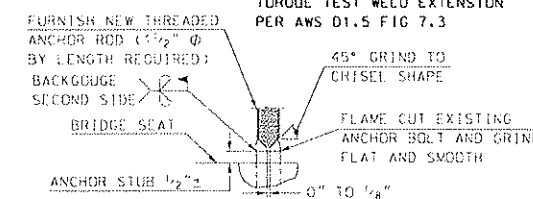
STEEL EXPANSION SHOE NOTES

- EXPANSION SHOE ASSEMBLIES, COMPLETE AS SHOWN, (INCLUDING ANCHOR BOLT REPAIR, REPLACEMENT OR RESETTING, IF REQUIRED), SHALL BE PAID FOR AS ITEM 550.2, BRIDGE SHOES (F).
- ALL PLATES SHALL BE FLAT AND TRUE AFTER WELDING.
- ALL STEEL PLATES SHALL CONFORM TO ASTM A709 GRADE 50, AND PAINTED, EXCEPT 3/16" STAINLESS STEEL PLATES SHALL BE AISI TYPE 304 (ASTM A240).
- ANCHOR BOLTS (IF REQUIRED) SHALL BE FABRICATED IN ACCORDANCE WITH SECTION 550.2.5 OF THE CURRENT NHDOT STANDARD SPECIFICATIONS AS AMENDED.
- THE CONTRACTOR SHALL MAKE EVERY EFFORT TO REMOVE EXISTING BRIDGE SHOES WITHOUT NEED TO PARTIALLY REMOVE EXISTING ANCHOR BOLTS. PARTIAL REMOVAL OF ANCHOR BOLTS TO FACILITATE REMOVAL OF EXISTING BRIDGE SHOES SHALL BE DISCUSSED WITH AND APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION. EXISTING ANCHOR BOLTS SHALL BE INSPECTED JOINTLY BY THE CONTRACT ADMINISTRATOR AND CONTRACTOR AFTER REMOVAL OF EXISTING BRIDGE SHOES. ANY REPAIRS REQUIRED BY THE DEPARTMENT SHALL BE PERFORMED BY THE CONTRACTOR AS SHOWN IN THE ANCHOR BOLT REPAIR DETAIL, THIS SHEET. RESETTING OF EXISTING ANCHOR BOLTS (IF REQUIRED), SHALL BE DONE USING APPROVED METHODS AND MATERIALS.
- SURFACES IN CONTACT TO BE WELDED, SHALL BE FINISHED IN ACCORDANCE WITH AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, SECTION 11.4.6.

- PTFE (TEFLON) SHALL BE FABRICATED AS UNFILLED SHEET AND THE SURFACE SHALL BE DIMPLED-LUBRICATED IN ACCORDANCE WITH AASHTO LRFD DESIGN SPECIFICATIONS SECTION 14.7.2.1.
- THE PTFE SHALL CONFORM TO NHDOT SECTION 550.2.10. THE COEFFICIENT OF FRICTION BETWEEN THE PTFE AND STAINLESS STEEL SURFACES SHALL BE DETERMINED IN ACCORDANCE WITH AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS SECTION 18.1.5.2.3.
- THE PTFE SHALL BE BONDED TO THE STEEL BY AN EPOXY RESIN SATISFYING THE REQUIREMENTS OF AASHTO M 235/M 235 (ASTM C 881/C 881M), FEP FILM, OR EQUAL, AS APPROVED BY THE ENGINEER.
- THE STAINLESS STEEL SURFACE IN CONTACT WITH THE PTFE SHALL HAVE A #6 MIRROR FINISH.
- THE PREFORMED FABRIC PADS SHALL CONFORM TO SECTION 550.2.6 OF THE CURRENT NHDOT STANDARD SPECIFICATIONS.
- PROVIDE 1/8" BEARING PADS, TO BE PLACED BETWEEN NEW BEARING SURFACE AND MASONRY PLATE.
- REPLACEMENT OF BEARINGS (TO INCLUDE RETIGHTENING OF ALL DIAPHRAGM CONNECTIONS LOOSED TO FACILITATE INSTALLATION) SHALL BE COMPLETED PRIOR TO PAINTING.

NOTES: CLEAN AREA OF WELD TO BARE METAL BEFORE WELDING

TORQUE TEST WELD EXTENSION PER AWS D1.5 FIG 7.3



ANCHOR BOLT REPAIR DETAIL
SCALE: NTS

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	NORTHUMBERLAND NH - GUILDHALL VT				BRIDGE NO	141/059		STATE PROJECT	28454
LOCATION	GUILDHALL ROAD OVER CONNECTICUT RIVER								
STEEL EXPANSION BRIDGE SHOES									
REVISIONS AFTER ORIGINAL				BY	DATE	BY	DATE	BRIDGE SHEET	
DESIGNED				GMC	8/14	CHECKED	WPS	8/14	11 OF 12
DRAWN				GMC	8/14	CHECKED	WPS	8/14	SHEET NUMBER
QUANTITIES				GMC	8/14	CHECKED	WPS	8/14	125-3-1
ISSUE DATE				FEDERAL PROJECT NO				SHEET NO.	
REV. DATE								15 19	

ABUTMENT BACKWALL (ABUT A & B)										BRIDGE SHEET 7 OF 11									
Mark	Size	Length	# Pieces	Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Coating
A1	#5	20.87	4	---															EPOXY
A2	#5	18.87	4	---															EPOXY
A3	#5	3.00	4	---															EPOXY
A4	#5	3.00	4	---															EPOXY

SECTION SUMMARY TOTAL WEIGHT (lbs):

ITEM #	DESCRIPTION	#3	#4	#5	#6	#7	#8	#9	#10	#11	#14	#18	TOTAL
S41	REINFORCING STEEL	0	0	0	0	0	0	0	0	0	0	0	0
S41.1	MECH. CONNECTOR	0	0	0	0	0	0	0	0	0	0	0	0
S41.2	EPOXY COATED	0	0	154	0	0	0	0	0	0	0	0	154
S41.21	EPOXY MECH. CON.	0	0	26	0	0	0	0	0	0	0	0	26

STUPIWALL (ABUT A & B)										BRIDGE SHEET 7 OF 11									
Mark	Size	Length	# Pieces	Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Coating
SW1	#5	2.50	128	---															EPOXY
SW2	#5	4.92	92	17		1.92	1.68	1.92											EPOXY
SW3	#5	20.53	12	---															EPOXY
SW4	#5	2.54	24	---															EPOXY
SW5	#5	4.58	16	---															EPOXY
SW6	#5	3.00	12	---															EPOXY
SW7	#5	5.75	4	---															EPOXY
SW8	#5	3.00	12	C1		3.00													EPOXY
SW9	#5	3.00	12	C2		3.00													EPOXY
SW10	#5	16.53	12	---															EPOXY
SW11	#5	1.67	4	---															EPOXY

SECTION SUMMARY TOTAL WEIGHT (lbs):

ITEM #	DESCRIPTION	#3	#4	#5	#6	#7	#8	#9	#10	#11	#14	#18	TOTAL
S44	REINFORCING STEEL	0	0	0	0	0	0	0	0	0	0	0	0
S44.1	MECH. CONNECTOR	0	0	0	0	0	0	0	0	0	0	0	0
S44.2	EPOXY COATED	0	0	1474	0	0	0	0	0	0	0	0	1474
S44.21	EPOXY MECH. CON.	0	0	76	0	0	0	0	0	0	0	0	76

DECK END (ABUT A & B)										BRIDGE SHEET 8 OF 11									
Mark	Size	Length	# Pieces	Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Coating
D1	#5	2.00	618	N4		0.56	1.44	0.00				1.42			0.21				EPOXY
D2	#5	33.25	20	---															EPOXY
D3	#5	3.50	382	---															EPOXY
D4	#5	20.58	16	---															EPOXY
D5	#5	7.75	36	---															EPOXY
D6	#5	2.67	12	---															EPOXY
D7	#5	3.00	28	C1		3.00													EPOXY
D8	#5	10.21	16	N1		0.67	1.25	5.83	1.46	1.00		0.00			0.00				EPOXY
D9	#5	3.71	74	17		1.08	0.63	2.00											EPOXY
D10	#5	16.08	16	---															EPOXY
D11	#5	6.08	12	---															EPOXY
D12	#5	3.00	28	C2		3.00													EPOXY
D13	#5	2.00	12	---															EPOXY
D14	#5	5.50	16	N1		0.67	1.25	1.58	1.53	0.67		0.00			0.00				EPOXY

SECTION SUMMARY TOTAL WEIGHT (lbs):

ITEM #	DESCRIPTION	#3	#4	#5	#6	#7	#8	#9	#10	#11	#14	#18	TOTAL
S44	REINFORCING STEEL	0	0	0	0	0	0	0	0	0	0	0	0
S44.1	MECH. CONNECTOR	0	0	0	0	0	0	0	0	0	0	0	0
S44.2	EPOXY COATED	0	0	4233	0	0	0	0	0	0	0	0	4233
S44.21	EPOXY MECH. CON.	0	0	175	0	0	0	0	0	0	0	0	175

GRAND SUMMARY TOTAL WEIGHT (lbs):

ITEM #	DESCRIPTION	#3	#4	#5	#6	#7	#8	#9	#10	#11	#14	#18	TOTAL
S44	REINFORCING STEEL	0	0	0	0	0	0	0	0	0	0	0	0
S44.1	MECH. CONNECTOR	0	0	0	0	0	0	0	0	0	0	0	0
S44.2	EPOXY COATED	0	0	5861	0	0	0	0	0	0	0	0	5861
S44.21	EPOXY MECH. CON.	0	0	277	0	0	0	0	0	0	0	0	277

RECOMMENDED END HOOKS ALL GRADES (IN)

BAR SIZE	D	180° HOOKS	90° HOOKS
#3	2 1/4	5	3
#4	3	6	4
#5	3 3/4	7	5
#6	4 1/2	8	6
#7	5 1/4	10	7
#8	6	11	8
#9	6 3/4	15	11 1/2
#10	10 3/4	17	13 1/2
#11	12	19	14 1/2
#14	18 3/4	27	21 3/4

STIRRUP & TIE HOOK DIMENSIONS ALL GRADES (IN)

BAR SIZE	D	90° HOOKS	135° HOOKS
#3	2 1/4	4	4
#4	3	4 1/2	4 1/2
#5	3 3/4	6	5 1/2
#6	4 1/2	12	7 1/2
#7	5 1/4	14	9
#8	6	16	10 1/2

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 #10 SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET - STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M 31-98 (ASTM A615).
- FOR TYPICAL BENDING DETAILS, RECOMMENDED MIN. DIAMETER "D" OF BENDS AND HOOKS AND OTHER STANDARD PRACTICE REFER TO THE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICES".
- 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.
- "W" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
- WHERE SLOPE DIFFERS FROM 45° DIMENSIONS "H" AND "K" MUST BE SHOWN.

▲ BENDS BARS TO BE CUT IN FIELD, AS REQUIRED.

▲ BENDS 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	0.660	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	3.490	1.128	1.00
#10	4.300	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

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

TOWN NORTHUMBERLAND N.H. GUILDFALL VT

BRIDGE NO. 141059

STATE PROJECT 28454

LOCATION GUILDFALL ROAD OVER CONNECTICUT RIVER

BRIDGE SHEET 12 OF 12

REINFORCING SCHEDULE (SHEET 1 OF 1)

125-3-1

DESIGNED WPS 9/14

CHECKED GMC 9/14

DRAWN WPS 9/14

CHECKED GMC 9/14

QUANTITIES WPS 9/14

CHECKED GMC 9/14

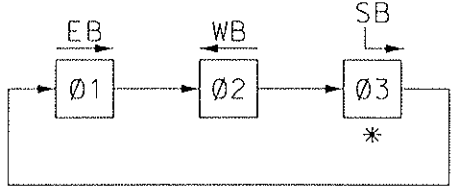
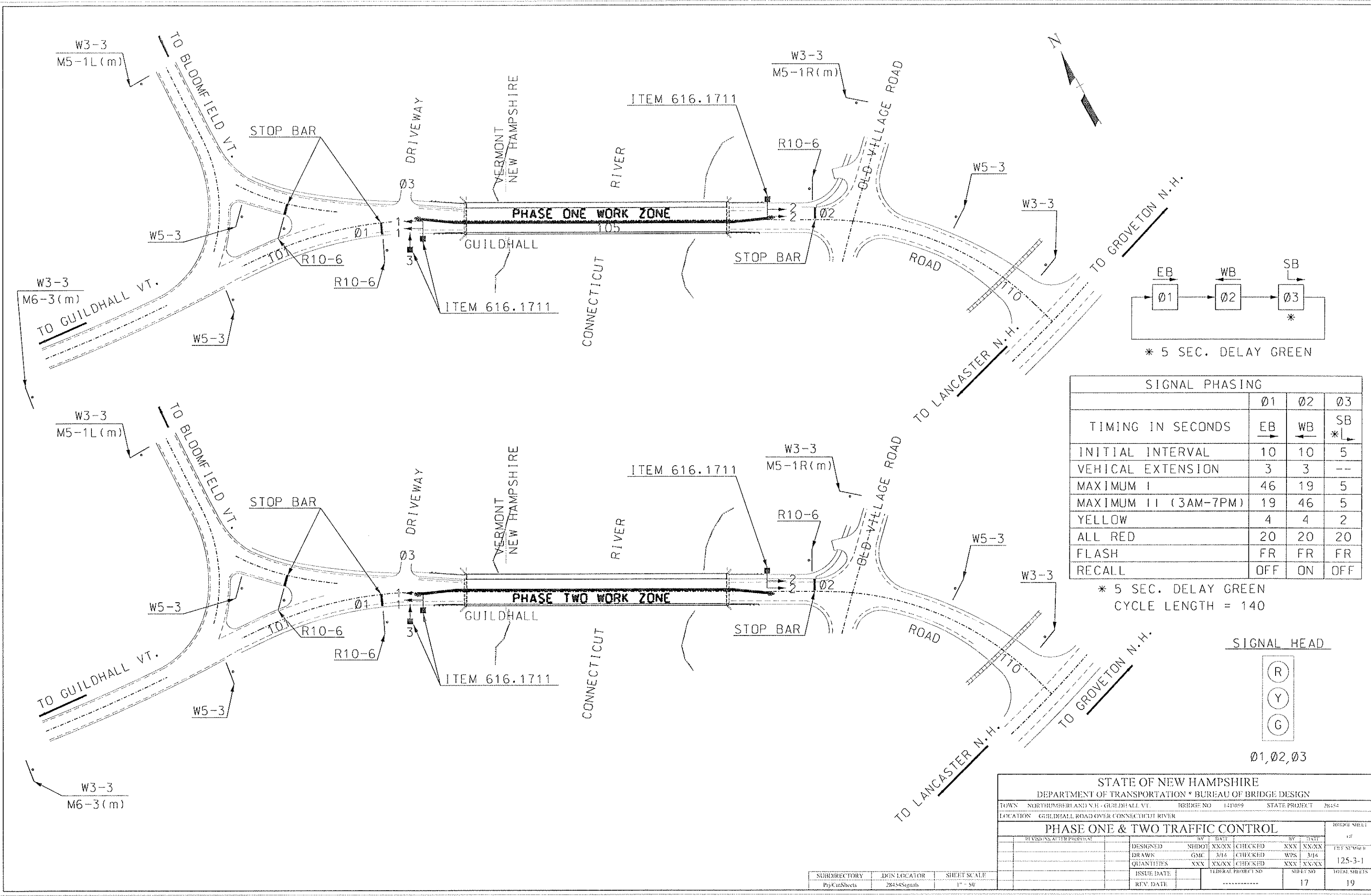
ISSUE DATE

REV. DATE

FEDERAL PROJECT NO.

SHEET NO.

TOTAL SHEETS

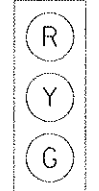


* 5 SEC. DELAY GREEN

SIGNAL PHASING			
	Ø1	Ø2	Ø3
TIMING IN SECONDS	EB →	WB ←	SB *←
INITIAL INTERVAL	10	10	5
VEHICAL EXTENSION	3	3	--
MAXIMUM I	46	19	5
MAXIMUM II (3AM-7PM)	19	46	5
YELLOW	4	4	2
ALL RED	20	20	20
FLASH	FR	FR	FR
RECALL	OFF	ON	OFF

* 5 SEC. DELAY GREEN
CYCLE LENGTH = 140

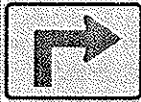
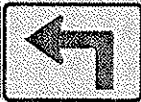
SIGNAL HEAD



Ø1, Ø2, Ø3

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN	NORTHUMBERLAND N.H. - GUILDHALL VT.			BRIDGE NO.	1419659		STATE PROJECT	28454	
LOCATION	GUILDHALL ROAD OVER CONNECTICUT RIVER								
PHASE ONE & TWO TRAFFIC CONTROL									BRIDGE SHEET
DIVISIONS AT THE PROPOSAL				BY	DATE	BY		DATE	1 of 1
DESIGNED				NHDOT	XX/XX	CHECKED	XXN	XX/XX	1 of 1 NUMBER
DRAWN				GMC	3/14	CHECKED	WPS	3/14	125-3-1
QUANTITIES				XXX	XX/XX	CHECKED	XXX	XX/XX	
ISSUE DATE:				FEDERAL PROJECT NO.			SHEET NO.		TOTAL SHEETS
REV. DATE:				*****			17		19

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
Pj/CutSheets	28454Signals	1" = 50'

ITEM #	IDENT#	REF#	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" OD ALUMINUM	U-CHANNEL GALV		
						UC	LC	CAPS													
619.1	CS-01		60	48	ONE LANE BRIDGE TO 102 VERMONT 1 MILE AHEAD			6B 5C 5B	14X21		10C	2	30.00	40.00						2	BLACK/ORANGE
619.1	CS-02		60	48	ONE LANE BRIDGE TO 3 NEW HAMPSHIRE 1 MILE AHEAD			6B 5C 5B	18X18		9D	2	20.00	40.00						2	BLACK/ORANGE
619.1	CS-03		60	48	ONE LANE BRIDGE TO 102 VERMONT 3 MILES AHEAD			6B 5C 5B	14X21		10C	2	30.00	40.00						2	BLACK/ORANGE
619.1	CS-04		60	48	ONE LANE BRIDGE TO 3 NEW HAMPSHIRE 3 MILES AHEAD			6B 5C 5B	18X18		9D	2	20.00	40.00						2	BLACK/ORANGE
619.1	M5-1R(M)		21	15								1	2.19	2.19							BLACK/ORANGE MOUNT BELOW W3-3
619.1	M5-1L(M)		21	15								1	2.19	2.19							BLACK/ORANGE MOUNT BELOW W3-3
619.1	M6-3(M)		21	15								1	2.19	2.19							BLACK/ORANGE MOUNT BELOW W3-3
619.1	W20-1a(M)		48	48	BRIDGE WORK AHEAD			7C 7C 7C				2	16.00	32.00						2	BLACK/ORANGE

- GENERAL NOTES**
- REFER TO THE 2010 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION PUBLISHED BY THE NHDOT.
 - NOTE NEW REFLECTIVITY REQUIREMENTS IN THE 2010 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 710 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.

STATE OF NEW HAMPSHIRE				
DEPARTMENT OF TRANSPORTATION * BUREAU OF TRAFFIC				
SIGN TEXT LAYOUT				
PROJECT NAME	STATE PROJECT NO.	FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
PROJECT LOCATION				

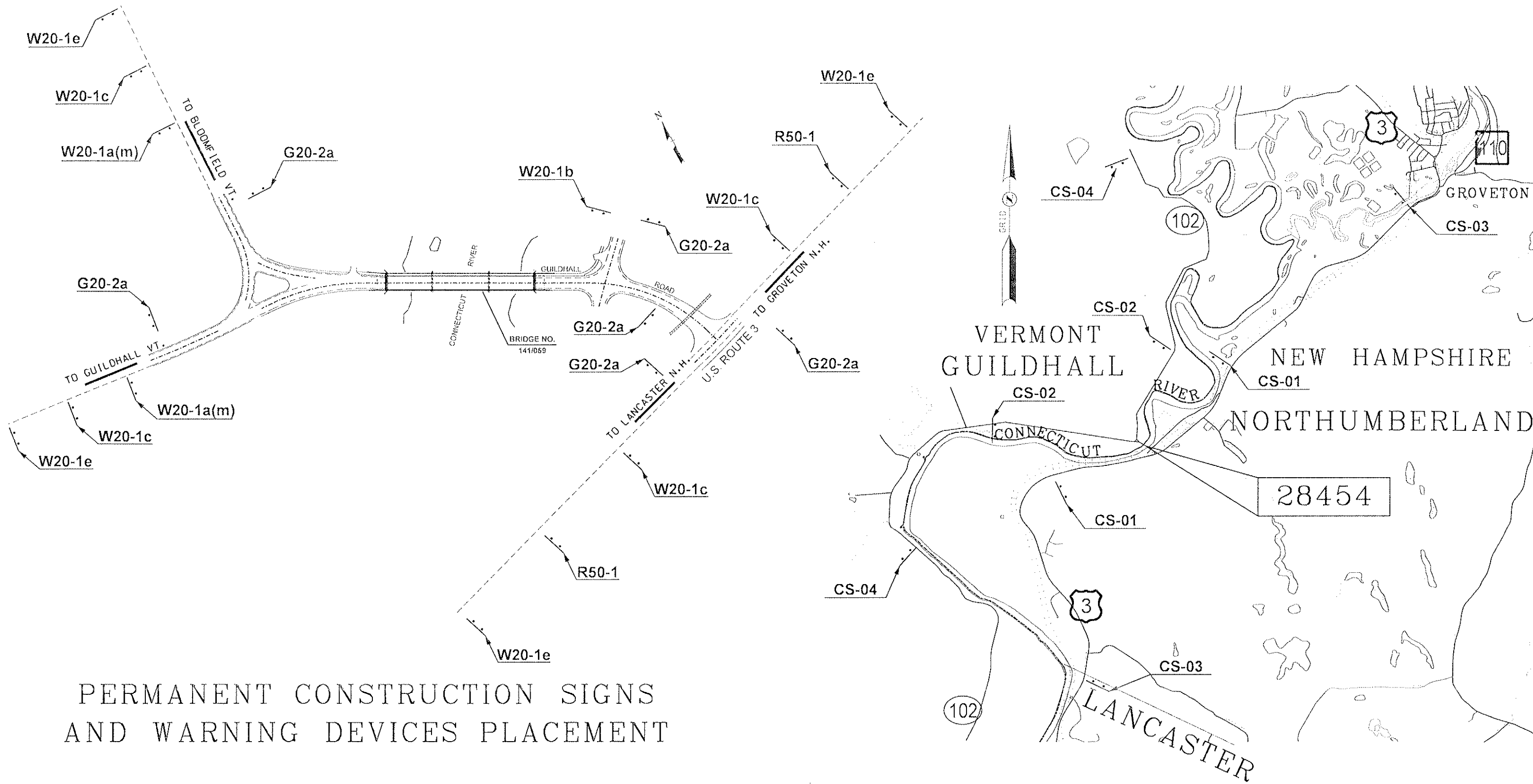
ITEM #	IDENT#	SIGN SIZE		TEXT	TEXT DIMENSIONS			SHIELD SIZE (inch)	ARROW (inch)	NUMERAL (inch)	# SIGNS REQ'D	SIGN AREA (SQ. FT.)		POSTS PER SIGN					REMARKS
		WIDTH (inch)	HEIGHT (inch)		LETTER HEIGHT (inch)							NOM. AREA	TOTAL AREA	BREAKAWAY	STEEL I-BEAM	CONCRETE BASE	4" OD ALUMINUM	U-CHANNEL GALV.	
					LC	LC	CAPS												
615 022	R1-1	30	30				10C				1	6.25	6.25	x				1"	* 2" Square Galvanized Sign Post: WHITE / RED

- GENERAL NOTES**
- REFER TO THE 2010 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION PUBLISHED BY THE NHDOT.
 - NOTE NEW REFLECTIVITY REQUIREMENTS IN THE 2010 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 710 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.

PERMANENT CONSTRUCTION SIGNS AND WARNING DEVICES (INCLUDED IN ITEM NO. 619.1)									
SIGN NO.	DESCRIPTION	SIZE (ft)	S.F.	NO. REQ.	TOTAL AREA	POSTS	PORTABLE SIGN SUPPORTS	REMARKS	
CS-01	ONE LANE BRIDGE TO VT 1MILE AHEAD	4X5	20	2	40	4			
CS-02	ONE LANE BRIDGE TO NH 1 MILE AHEAD	4X5	20	2	40	4			
CS-03	ONE LANE BRIDGE TO VT 3 MILES AHEAD	4X5	20	2	40	4			
CS-04	ONE LANE BRIDGE TO NH 3 MILES AHEAD	4X5	20	2	40	4			
G20-2a	END ROAD WORK	2X4	8	6	48	6			
M5-1R(M)	DIRECTIONAL ARROW (Right)	1.25x1.75	2.19	1	2.19	*		Black / Orange * mount below W3-3	
M5-1L(M)	DIRECTIONAL ARROW (Left)	1.25x1.75	2.19	1	2.19	*		Black / Orange * mount below W3-3	
M6-3(M)	DIRECTIONAL ARROW (Up)	1.25x1.75	2.19	1	2.19	*		Black / Orange * mount below W3-3	
R9-8	PEDESTRIAN CROSSWALK	1X2	2	2	4		2		
R9-9	SIDEWALK CLOSED	1X2	2	2	4		2		
R9-10	CROSSWALK CLOSED USE OTHER SIDE	1X2	2	2	4		2		
R9-11	SIDEWALK CLOSED AHEAD CROSS HERE	1.25X2	2.5	2	5		2		
W3-3	SIGNAL AHEAD	3X3	9	4	36	8			
W5-3	ONE LANE BRIDGE	4X4	16	3	48	6			
W20-1a(M)	BRIDGE WORK AHEAD	4X4	16	2	32	4		FLUORESCENT ORANGE	
W20-1b	ROAD WORK 500 FT	4X4	16	1	16	2		FLUORESCENT ORANGE	
W20-1c	ROAD WORK 1000 FT	4X4	16	4	64	8		FLUORESCENT ORANGE	
W20-1e	ROAD WORK 1/2 MILE	4X4	16	4	64	8		FLUORESCENT ORANGE	
R50-1	NH LAW WORK ZONE	4X6	24	2	48	4			

STATE OF NEW HAMPSHIRE									
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN									
TOWN - NORTHUMBERLAND N.H. - GUILDHALL VT.			BRIDGE NO. 1410059		STATE PROJECT 28454				
LOCATION - GUILDHALL ROAD OVER CONNECTICUT RIVER									
SIGN QUANTITIES									BRIDGE SHEET
REVISIONS AT THE PROPRIETARY			BY DATE		BY DATE		OF		
DESIGNED			NH DOT XXXX		CHECKED XXX		SHEET NUMBER		
DRAWN			XXX XXXX		CHECKED XXX		125-3-1		
QUANTITIES			XXX XXXX		CHECKED XXX		TOTAL SHEETS		
ISSUE DATE			FEDERAL PROJECT NO.		SHEET NO.				
REV. DATE					18		19		

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
Pg/CutSheet	28454SignQuant	AS NOTED



PERMANENT CONSTRUCTION SIGNS
AND WARNING DEVICES PLACEMENT

CONSTRUCTION SIGNS PLACEMENT

SUBDIRECTORY	DGN LOCATOR	SHEET SCALE
Proj/Cut/Sheets	28454/Signs	SCALE NONE

STATE OF NEW HAMPSHIRE											
DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN											
TOWN NORTHUMBERLAND N.H. GUILDHALL VT.				BRIDGE NO. 141/059				STATE PROJECT 28454			
LOCATION GUILDHALL ROAD OVER CONNECTICUT RIVER											
CONSTRUCTION SIGNS & WARNING DEVICES										BRIDGE SHEET	
DIVISIONS APPROVED				BY DATE		BY DATE		OF		THIRTY NUMBER	
DESIGNED				NHDOT XX/XX		CHECKED XXX XX/XX				125-3-1	
DRAWN				GMC 3/14		CHECKED WPS 3/14					
QUANTITIES				XXX XX/XX		CHECKED XXX XX/XX					
ISSUE DATE				FEDERAL PROJECT NO				SHEET NO		TOTAL SHEETS	
REV. DATE				-----				19		19	