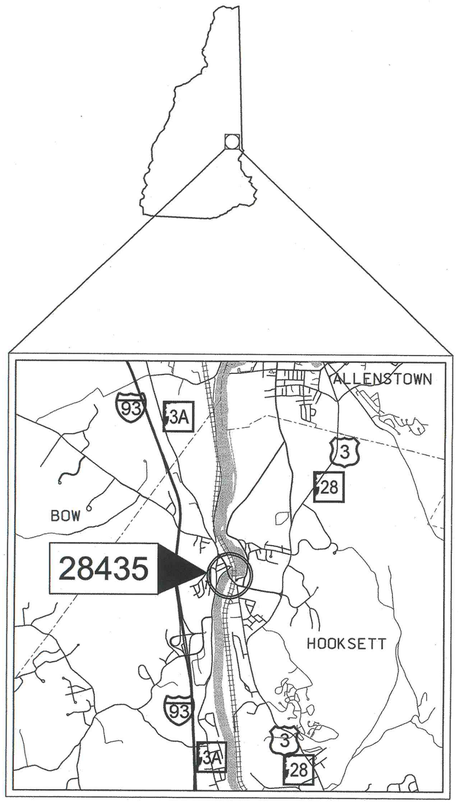
STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLANS
FEDERAL AID PROJECT

X-A003(751)
N.H. PROJECT NO. 28435
MAIN STREET

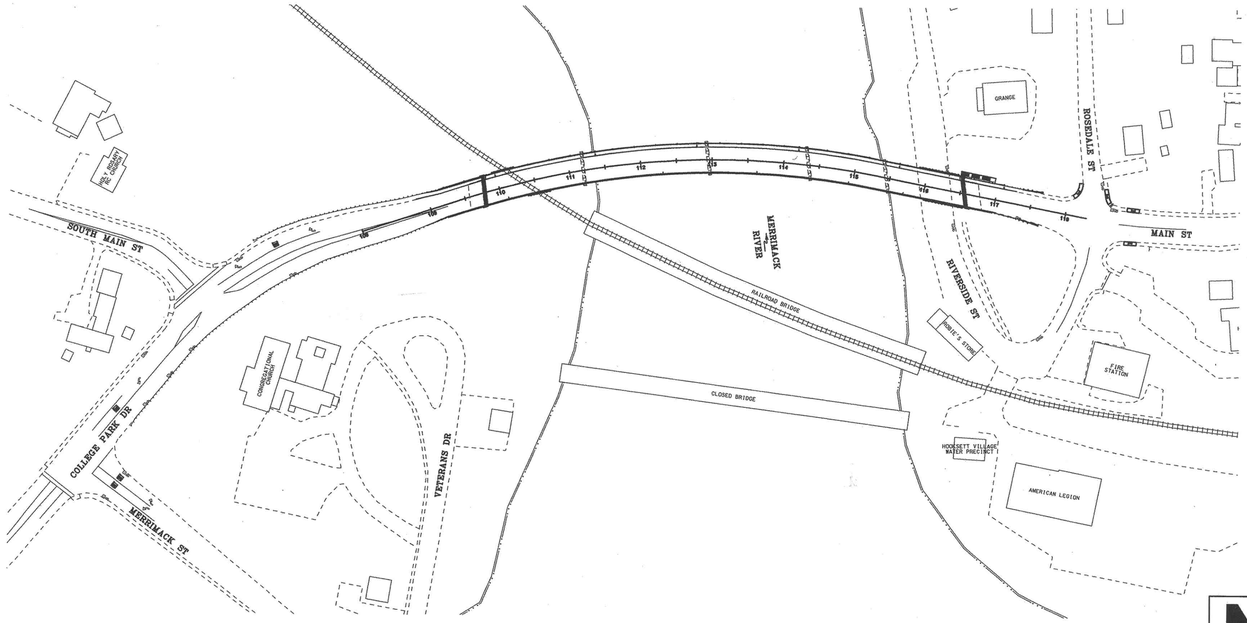
DESIGN DATA	
AVERAGE DAILY TRAFFIC 20 12	15000 VPD
AVERAGE DAILY TRAFFIC 20 32	22200 VPD
PERCENT OF TRUCKS	4%
DESIGN SPEED	30 MPH
LENGTH OF PROJECT	0.32 MILES



LOCATION MAP

1 1/2 0 1 2 mi.

GRAPHIC SCALE



AS-BUILT PLANS

DATE 10/04/2016

As-Built Plans

TOWN OF HOOKSETT

COUNTY OF MERRIMACK

SCALE: 1" = 100'-0"

DRAWN BY SMG	DATE 6/14
CHECKED BY JAT	DATE 6/14

STATE OF NEW HAMPSHIRE — PAUL RICHARDSON JAMES — LICENSED PROFESSIONAL ENGINEER

NHDOT THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION

RECOMMENDED FOR APPROVAL: William Cass — DIRECTOR OF PROJECT DEVELOPMENT — DATE 9/24/14

APPROVED: — ASSISTANT COMMISSIONER AND CHIEF ENGINEER — DATE 9/25/14

U. S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: — DIVISION ADMINISTRATOR — DATE

FEDERAL PROJECT NO.	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
X-A003(751)	28435	1	42

Construction
Record Plans
Hooksett
28435
Sc Opn 9/24/2014 8:32:11 AM "18Bmq"

INDEX OF SHEETS

GENERAL NOTES

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:											
1			4	5	6						

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

INDEX OF SHEETS AND GENERAL NOTES

REVISION DATE	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
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GENERAL

EDGE OF PAVEMENT — PROPOSED ROADWAY
TRAVELED WAY — existing roadway — (pavement removed outside slope lines)

DRIVEWAYS — (label surface type)

BUILDINGS — (building to be removed)
(label house or type of building)

FOUNDATION — (label type)

LEACH FIELD — leach field

BRIDGE CROSSINGS — STREAM — OVERPASS

STEPS AND WALK — (label type)

INTERMITTENT WATER COURSE

SHORE LINE — river/stream — pond — (label name of water body)

POTENTIAL WET AREA SYMBOL

BRUSH OR WOODS LINE

TREES (PLANS) — (deciduous) (coniferous) (stump)

TREE OR STUMP (CROSS-SECTIONS) — (show station, circumference in feet & type)

HEDGE — (label type)

MONITORING WELL — mon W

WELL — W

FLAG POLE — fp

ORIGINAL GROUND (TYPICALS)

ROCK OUTCROP

ROCK LINE (TYPICALS & SECTIONS ONLY)

GUARDRAIL (LABEL TYPE) — existing: bgr, cgr — PROPOSED: BGR, MEDIAN CGR

JERSEY BARRIER

CURB (LABEL TYPE)

STONE WALL

RETAINING WALL (LABEL TYPE) — (points toward retained ground)

FENCE (LABEL TYPE)

SIGNS — (single post) — (double post)

GAS PUMP — gp

FUEL TANK (ABOVE GROUND) — ft (label size & type)

STORAGE TANK FILLER CAP — fc

SEPTIC TANK — S

GRAVE — gr

MAILBOX — mb

VENT PIPE — vp

SATELLITE DISH ANTENNA — da

PHONE — ph

GROUND LIGHT/LAMP POST — gl lp

BORING LOCATION — B

TEST PIT — TP

INTERSTATE NUMBERED HIGHWAY — 293

UNITED STATES NUMBERED HIGHWAY — 3

STATE NUMBERED HIGHWAY — 102

WETLANDS

WETLAND DESIGNATION AND TYPE — 2 PUB2E

DELINEATED WETLAND — DW

PRIME WETLAND — PWET

ORDINARY HIGH WATER — OHW

TOP OF BANK — TOB

TOP OF BANK & ORDINARY HIGH WATER — TOBOHW

MEAN HIGH TIDE — MHT

TIDAL BUFFER ZONE — TBZ

HIGHEST OBSERVABLE TIDAL LINE — HOTL

SPECIAL AQUATIC SITE — SAS

VERNAL POOL — VP

INVASIVE SPECIES LABEL — I.S. I — I.S. II

INVASIVE SPECIES — INV

WATER FRONT BUFFER — WB50

NATURAL WOODLAND BUFFER — NWB150

PROTECTED SHORE LAND — PS250

FLOODPLAIN / FLOODWAY

500 YEAR FLOODPLAIN BOUNDARY — FP500

100 YEAR FLOODPLAIN BOUNDARY — FP100

FLOODWAY — FW

ENGINEERING

CONSTRUCTION BASELINE — 30 31 32

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

SLOPE LINE (FILL)

SLOPE LINE (CUT)

PROFILES AND CROSS SECTIONS:
ORIGINAL GROUND ELEVATION (LEFT) — 72.5
FINISHED GRADE ELEVATION (RIGHT) — 79.14

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION ◦ BUREAU OF HIGHWAY DESIGN

STANDARD SYMBOLS

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DRAINAGE

MANHOLE

CATCH BASIN — cb

DROP INLET — di

(existing) (PROPOSED)

DRAINAGE PIPE (existing) — (label size & type)

DRAINAGE PIPE (PROPOSED)

UNDERDRAIN (existing) W/ FLUSHING BASIN — fb — (label size & type)

UNDERDRAIN (PROPOSED) W/ FLUSHING BASIN

show direction of flow

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 — PL

PROPERTY LINE (COMMON OWNER) — Z

TOWN LINE — BOW / CONCORD

COUNTY LINE — COOS / GRAFTON

STATE LINE — MAINE / NEW HAMPSHIRE

NATIONAL FOREST

LCHIP CONSERVATION EASEMENT

BENCH MARK / SURVEY DISK

BOUND — bnd — (PROPOSED)

STATE LINE/ TOWN LINE MONUMENT — S/L — T/L

NHDOT PROJECT MARKER

IRON PIPE OR PIN — ip

DRILL HOLE IN ROCK — dh

TAX MAP AND LOT NUMBER — 156 / 14 — 1642/341 — 6.80 Ac.±

PROPERTY PARCEL NUMBER — 12

HISTORIC PROPERTY — H

UTILITIES

existing PROPOSED

TELEPHONE POLE

POWER POLE

JOINT OCCUPANCY

MISCELLANEOUS/UNKNOWN POLE

GUY POLE OR PUSH BRACE

(plot point at face not center of symbol)

LIGHT POLE

LIGHT ON POWER POLE

LIGHT ON JOINT POLE

POLE STATUS:
REMOVE, LEAVE, PROPOSED, OR TEMPORARY
AS APPLICABLE e.g.:

R L — P+04 25.0' — T+04 25.0'

RAILROAD — (label ownership)

RAILROAD SIGN

RAILROAD SIGNAL

UTILITY JUNCTION BOX — jb — JB

OVERHEAD ELECTRIC — OE

UNDERGROUND UTILITIES

WATER (on existing lines label size, type and note if abandoned) — W — PW

SEWER — S — PS

TELEPHONE — T — PT

ELECTRIC — E — PE

GAS — G — PG

LIGHTING — L — PL

INTELLIGENT TRANSPORTATION SYSTEM — ITS — PITS

FIBER OPTIC — FO — PFO

WATER SHUT OFF — WSO — WS

GAS SHUT OFF — GSO — GS

HYDRANT — HYD

MANHOLES

SEWER — S — MHS

TELEPHONE — T — MHT

ELECTRICAL — E — MHE

GAS — G — MHG

UNKNOWN — U

TRAFFIC SIGNALS / ITS

existing PROPOSED

MAST ARM (existing) — 30' MA (NOTE ANGLE FROM ℄)

OPTICOM RECEIVER

OPTICOM STROBE

TRAFFIC SIGNAL

PEDESTAL WITH PEDESTRIAN SIGNAL HEADS AND PUSH BUTTON UNIT

SIGNAL CONDUIT — C — PC

CONTROLLER CABINET — cc — CC

METER PEDESTAL — mp — MP

PULL BOX — pb — PB

LOOP DETECTOR (QUADRUPOLE) — (label size)

LOOP DETECTOR (RECTANGULAR) — (label size)

CAMERA POLE (CCTV)

FIBER OPTIC DELINEATOR — fod — FOD

FIBER OPTIC SPLICE VAULT — SVF

ITS EQUIPMENT CABINET — its — ITS

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

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ◦ BUREAU OF HIGHWAY DESIGN

STANDARD SYMBOLS

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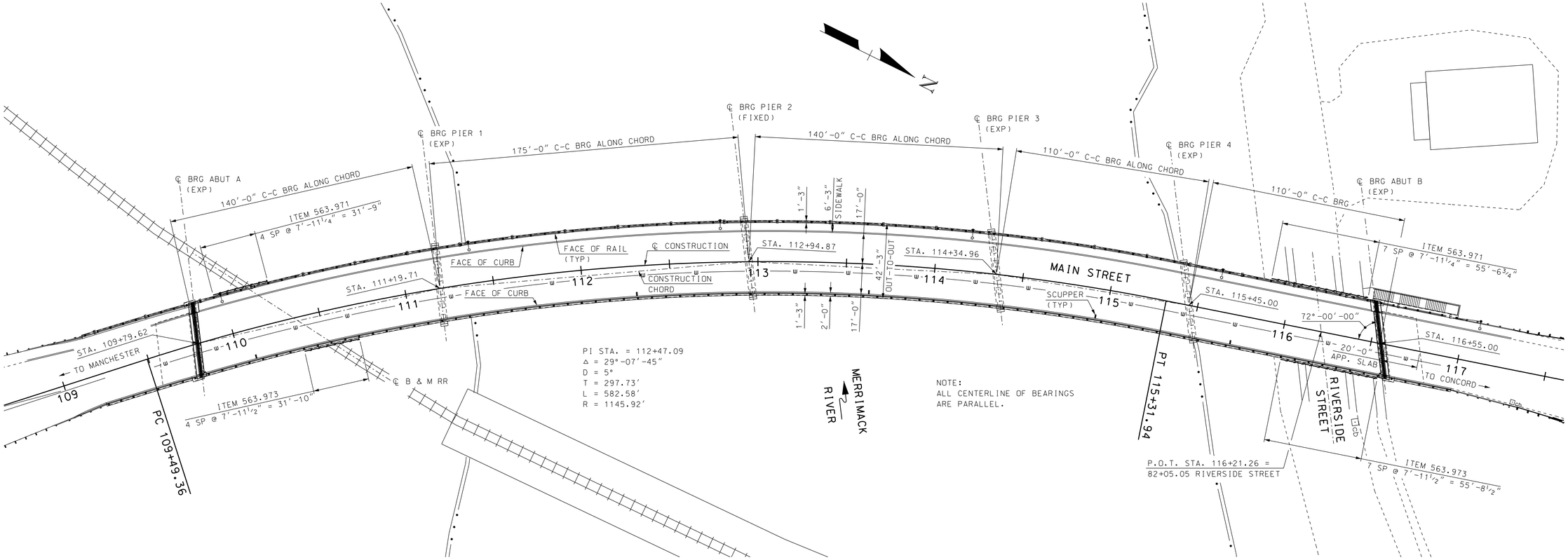
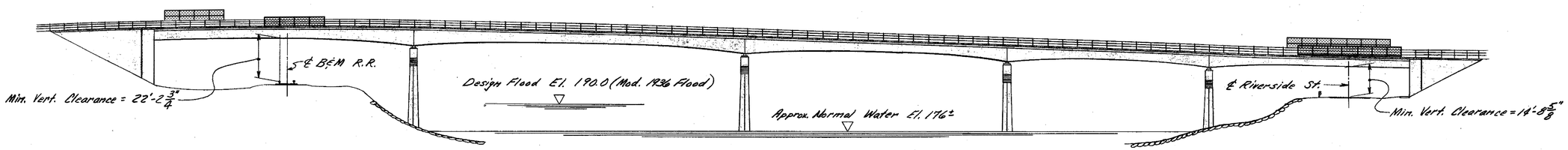


PLAN

SCALE: 1″ = 30′-0″



ELEVATION

SCALE: 1″ = 30′-0″

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

GENERAL PLAN

BRIDGE SHEET: 1 OF 18

FILE NUMBER: 126-1-1

REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	JAT	11/13	CHECKED	SMG	8/14
	DRAWN	SMG	11/13	CHECKED	JAT	8/14
	QUANTITIES	SMG	9/14	CHECKED	JAT	9/14
	ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
	REV. DATE		----------		5	42

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\	28435 Genplan	AS NOTED

SCOPE OF WORK

BR. NO. 080/048 MAIN STREET over B&M RR. MERRIMACK RIVER, & RIVERSIDE STREET:
- REMOVE AND REPLACE DECK PAVEMENT AND MEMBRANE
- PARTIAL & FULL DEPTH CONCRETE DECK REPAIRS
- REPLACE MODULAR JOINT AT ABUTMENTS A & B
- REPLACE EXISTING BEARINGS AT ABUTMENTS A & B
- INSTALL PROTECTIVE SCREENING ON SIDEWALK SIDE (WEST)
- INSTALL SNOW SCREENING ON COPING SIDE (EAST)
- REPLACE GUARDRAIL APPROACH AND END UNITS ON NORTHERN APPROACHES (NW & NE CORNERS)
- CONSTRUCT SIDEWALK TIP-DOWNS NORTH OF BRIDGE

MATERIALS AND SPECIFICATIONS

1. SPECIFICATIONS: NHDOT 2010 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AS AMENDED
   WELDING PER AASHTO/AWS D1.5-08 (INCLUDING ALL REVISIONS PUBLISHED BY AASHTO AS OF THE BID OPENING DATE)
2. REINFORCING STEEL: AASHTO M31 (ASTM A 615) GRADE 60
3. CONCRETE: PARTIAL DEPTH DECK REPAIRS AND CONCRETE REPAIRS
   CLASS II = 4000 psi
   ITEM 520.01, CONCRETE CLASS AA
   FULL DEPTH DECK REPAIRS, END OF DECK, AND BACKWALL
   RECONSTRUCTIONS = 4000 psi
   ITEM 520.0201, CONCRETE CLASS AA, ABOVE FOOTINGS

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 4-4-2-1.

REMOVAL NOTES

1. 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.
2. EXISTING DECK PAVEMENT AND MEMBRANE SHALL BE REMOVED, HANDLED, AND DISPOSED OF UNDER ITEM 1009.32. REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING MATERIAL (ACM).

GENERAL CONSTRUCTION NOTES

1. PORTABLE CONCRETE BARRIER AND TEMPORARY SIGNALS 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 OR ONTO THE RAILROAD TRACKS OR ROADWAY 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. TO ACCOMPLISH THE PROPOSED EXPANSION JOINT REPAIRS, THE EXISTING DECK AND BACKWALL SHALL BE REMOVED TO LIMITS SHOWN IN THE PLANS UNDER ITEM 502., REMOVAL OF EXISTING BRIDGE STRUCTURE. ALL EXPOSED CONCRETE SURFACES OF THE DECK AND BACKWALL SHALL BE SAWCUT 1" DEEP TO PROVIDE CLEAN REMOVAL LINES (ALL COSTS INCLUDED IN ITEM 502.). NEW DECK END AND BACKWALL 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 DRY (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 JACKING OPERATIONS. A PROTECTION PLAN SHALL BE SUBMITTED FOR APPROVAL. ALL COSTS PAID FOR UNDER ITEM 502.
9. AFTER REMOVAL OF EXISTING PAVEMENT AND MEMBRANE, THE EXISTING CONCRETE BRIDGE DECKS 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.
10. 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).
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 OF 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, SIDEWALKS, STAIRS ALONG NW WING, BACKWALLS, AND ABUTMENT 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. 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.
17. WHERE THE EXISTING GRANITE CURB HAS SEPERATED OR BEEN DISPLACED FROM THE CONCRETE BRUSH CURB, THE GRANITE CURB SHALL BE REMOVED AND RESET AS DIRECTED BY THE ENGINEER. ALL COSTS INCLUDED IN ITEM 609.55, RESET GRANITE CURB (BRIDGE), EXCEPT AS SHOWN IN THE PLANS.
18. RESET GRANITE APPROACH CURB AS DIRECTED, ITEM 609.5.
19. ITEM 562.1, SILICONE JOINT SEALANT (F), SHALL BE PLACED AS SHOWN ON THE BRIDGE EXPANSION JOINT SHEETS. A $^1/_2$"x $^1/_2$" STRIP SHALL ALSO BE PLACED IN THE JOINT BETWEEN THE WINGS AND PILASTERS. REMOVAL OF ANY EXISTING SEALANT AND CLEANING OF THE JOINT IS SUBSIDIARY TO ITEM 562.1.
20. JACKING SHALL BE REQUIRED TO REMOVE AND REPLACE BRIDGE SHOES AS OUTLINED IN THE PLANS AND SPECIAL PROVISIONS. THE PROPOSED JACKING METHOD SHALL BE SUBMITTED TO THE ENGINEER FOR DOCUMENTATION. THE MAXIMUM ALLOWABLE DIFFERENCE BETWEEN ADJACENT JACKING POINTS SHALL BE $^1/_4$". THE MAXIMUM AMOUNT THAT THE GIRDERS MAY BE JACKED (MEASURED AT THE BEARINGS) SHALL BE $1^1/_4$". TEMPORARY SHIMS OR BLOCKS SHALL BE PLACED BENEATH GIRDER FLANGES DURING THE TIME THAT JACKS ARE SUPPORTING THE LOADS. ALL COSTS SHALL BE INCLUDED IN ITEM 550.191, TEMPORARY GIRDER SUPPORT SYSTEM. ALL BEARINGS SHALL BE REPLACED IN ONE JACKING OPERATION AND NOT ACCORDING TO THE PHASED CONSTRUCTION SHOWN ON THE PLANS.
21. EROSION HOLE AND CATCH BASIN LOCATED ALONG NE APPROACH RAIL SHALL BE REPAIRED UNDER ITEM 604.4, RECONSTRUCTING/ADJUSTING CATCH BASIN & DROP INLET. EXCAVATION AND BACKFILL SHALL CONFORM TO 206.3 AND SHALL BE SUBSIDIARY TO ITEM 604.4.
22. ITEM 604.0007, POLYETHYLENE LINER, SHALL BE INSTALLED IN ALL CATCH BASINS LOCATED WITHIN THE PAVING LIMITS.
23. ITEM 606.691, HANDRAIL REPAIR, SHALL BE USED TO REPAIR THE HANDRAIL ALONG THE STAIRS AT THE NW WING. ACCORDING TO EXISTING BRIDGE PLANS, THE HANDRAIL SHALL BE $1^1/_2$" I.P.S. SCHED. 80 ALUMINUM TUBING (ALL CONNECTIONS SHALL BE WELDED). ALL DIMENSIONS AND BENDS SHALL BE MEASURED IN THE FIELD FOR PROPER FIT.
24. 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 AS SHOWN ON BRIDGE SHEET XX.
25. ITEM 403.99, TEMPORARY BITUMINOUS PAVEMENT, SHALL BE PLACED TO TRANSITION 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).
26. ITEMS 646.31 AND 647.1 SHALL BE USED TO REPAIR DISTURBED AREAS AS DIRECTED BY THE ENGINEER.
27. ITEM 538.2, BARRIER MEMBRANE, PEEL AND STICK - VERTICAL SURFACES (F), SHALL BE PLACED OVER THE BACKWALL RECONSTRUCTION JOINTS AS OUTLINED IN THE PLANS.
28. EXISTING ABUTMENTS, WINGWALLS, AND PIERS SHALL BE INSPECTED FOR DETERIORATED CONCRETE JOINTLY BY THE CONTRACT ADMINISTRATOR AND CONTRACTOR. ALL DETERIORATED CONCRETE SHALL BE REMOVED. CONCRETE SURFACES OF THE REMOVAL LIMITS SHALL BE SAWCUT TO 1" DEPTH TO PROVIDE CLEAN REMOVAL LINES. ALL INSPECTION, REMOVAL, AND CLEANING SHALL BE AS SPECIFIED IN SECTION 512 AND PAID FOR UNDER ITEM 512.0201. NEW CONCRETE PLACED IN THESE AREAS SHALL BE PAID UNDER ITEM 520.0201.
29. NO STRUCTURAL REPAIRS ARE ANTICIPATED. STRUCTURAL STEEL SHALL BE INSPECTED FOR STRUCTURAL DEFICIENCIES (e.g. SIGNIFICANT STEEL LOSS, CRACKS, MISSING BOLTS, ETC.) JOINTLY BY THE CONTRACT ADMINISTRATOR AND CONTRACTOR. ANY REPAIRS REQUIRED BY THE DEPARTMENT SHALL BE PERFORMED BY THE CONTRACTOR AND PAID UNDER ITEM 1002.1, REPAIRS OR REPLACEMENTS AS NEEDED - BRIDGE STRUCTURES.
30. PRIOR TO PLACING NEW CONCRETE AGAINST EXISTING CONCRETE SURFACES, THE EXISTING CONCRETE SURFACES SHALL BE BLAST CLEANED AND PREPARED TO A SATURATED SURFACE-DRY CONDITION. ALL COSTS SHALL BE SUBSIDIARY TO THE CONCRETE ITEM TO BE PLACED.
31. ADA COMPLIANT TIP-DOWNS SHALL BE CONSTRUCTED AT THE CORNERS OF ROSEDALE STREET AND ACROSS MAIN STREET AS SHOWN IN THE PLANS.

UTILITY NOTES

1. THE FOLLOWING UTILITIES ARE CARRIED ACROSS THE BRIDGE:
   - ELECTRICAL CONDUIT
   - WATER MAIN

As-Built Plans

SUMMARY OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT
202.7	REMOVAL OF GUARDRAIL	~~121~~ 173	LF
203.1	COMMMON EXCAVATION	~~10~~ 6.6	CY
203.55261	INSTALLATION AND REMOVAL OF SWZ-PORTABLE QUEUE TRAILER PLATFORM	~~2~~ 0	U
203.55551	GUARDRAIL 25' EAGRT PLATFORM ALTERNATE	~~2~~ 0	U
206.19	COMMON STRUCTURE EXCAVATION-EXPLORATORY	~~5~~ 0	CY
304.201	GRAVEL	~~5~~ 4.4	CY
304.3	CRUSHED GRAVEL (F)	~~10~~ 19.2	CY
403.1109	HOT BITUMINOUS PAVEMENT, MACHINE METHOD, HIGH STRENGTH	~~735~~ 248.63	T
403.12	HOT BITUMINOUS PAVEMENT, HAND METHOD	~~8~~ 29.5	T
403.6	PAVEMENT JOINT ADHESIVE	~~13200~~ 4143	LF
403.911	HOT BITUMINOUS BRIDGE PAVEMENT, 1" BASE COURSE	~~146~~ 163.74	T
403.99	TEMPORARY BITUMINOUS PAVEMENT	~~1~~ 4.21	T
417.	COLD PLANING BITUMINOUS SURFACES	~~6100~~ 5372	SY
502.	REMOVAL OF EXISTING BRIDGE STRUCTURE	1	U
504.1	COMMON BRIDGE EXCAVATION (F)	13	CY
511.02	PREPARATION FOR PARTIAL DEPTH CONCRETE BRIDGE DECK REPAIRS	~~130~~ 256.53	SY
511.03	PREPARATION FOR FULL DEPTH CONCRETE BRIDGE DECK REPAIRS	~~80~~ 21.6	SY
512.0201	PREPARATION FOR CONCRETE REPAIRS, CLASS II	~~10~~ 6.16	SY
520.01	CONCRETE CLASS AA	~~18~~ 34.02	CY
520.0201	CONCRETE CLASS AA, ABOVE FOOTINGS	~~42~~ 30.33	CY
534.3	WATER REPELLENT (SILANE-SILOXANE)	~~100~~ 89.5	GAL
538.2	BARRIER MEMBRANE, PEEL AND STICK - VERTICAL SURFACES (F)	27	SY
538.6	BARRIER MEMBRANE, HEAT WELDED - MACHINE METHOD (F)	2541	SY
541.5	PVC WATERSTOPS, NH TYPE 5 (F)	80	LF
544.	REINFORCING STEEL (F)	1746	LB
544.11	REINFORCING STEEL - MECHANICAL CONNECTORS (F)	152	LB
550.191	TEMPORARY GIRDER SUPPORT SYSTEM	1	U
550.2	BRIDGE SHOES (F)	12	EA
561.2001	PREFABRICATED MODULAR BRIDGE JOINT SYSTEM (F)	~~43~~ 47.2	LF
561.2002	PREFABRICATED MODULAR BRIDGE JOINT SYSTEM (F)	45	LF
562.1	SILICONE JOINT SEALANT (F)	~~115~~ 182	LF
563.971	PROTECTIVE SCREENING FOR OVERPASS STRUCTURES RAIL F	88	LF
563.973	SNOW SCREENING FOR OVERPASS STRUCTURES RAIL F	~~88~~ 56	LF
565.733	BRIDGE APPROACH RAIL F (3-BAR) (MODIFIED)	2	U
604.0007	POLYETHYLENE LINER	~~8~~ 4	EA
604.4	RECONSTRUCTING/ADJUSTING CATCH BASIN & DROP INLET	~~2~~ 16	LF
606.120	BEAM GUARDRAIL (STANDARD SECTION) (STEEL POST)	14	LF
606.1255	BEAM GUARDRAIL (TERM. UNIT TYPE EAGRT 25 FT.) (STEEL POST)	2	U
606.417	PORTABLE CONCRETE BARRIER FOR TRAFFIC CONTROL	~~1050~~ 720	LF
606.691	REPAIR HANDRAIL	6	LF
606.9513	TEMP. IMPACT ATTENUATION DEVICE (REDIRECTIVE), TEST LEVEL 3	2	U
608.2401	4" CONCRETE SIDEWALK	~~43~~ 29.8	SY
608.54	DETECTABLE WARNING DEVICES, CAST IRON	~~8~~ 3.6	SY
609.5	RESET GRANITE CURB	~~130~~ 77	LF
609.55	RESET GRANITE CURB (BRIDGE)	~~40~~ 25.3	LF
615.03	TRAFFIC SIGN TYPE C (F)	32	SF
615.06	TRAFFIC SIGN TYPE CC (F)	8	SF
616.161	TRAFFIC SIGNALS (TEMP)	1	U
616.191	ALTERATIONS TO TRAFFIC SIGNALS	1	U
616.192	ALTERATIONS TO TRAFFIC SIGNALS	~~10~~ 0.7	U
618.61	UNIFORMED OFFICERS WITH VEHICLE	*	$
618.7	FLAGGERS	~~1500~~ 2277	HR
619.1	MAINTENANCE OF TRAFFIC	1	U
619.25	PORTABLE CHANGEABLE MESSAGE SIGN	~~8~~ 6	U
619.503	SMART WORK ZONE OPERATIONAL COST (SUMMER)	6	MON
619.51	PORTABLE QUEUE TRAILER/SENSOR (PQT)	~~54~~ 48.5	MON
619.52	PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)	~~30~~ 27.83	MON
619.91	RELOCATE SMART WORK ZONE DEVICE	~~10~~ 0	U
621.31	SINGLE DELINEATOR WITH POST	~~10~~ 0	EA
621.32	DOUBLE DELINEATOR WITH POST	~~10~~ 0	EA
624.1	RAILROAD PROTECTION - FLAGGING SERVICE	~~720~~ 431.5	HR
628.2	SAWED BITUMINOUS PAVEMENT	~~475~~ 380	LF
628.22	SAWED BITUMINOUS PAVEMENT (BRIDGE)	80	LF
632.0104	RETROREFLECTIVE PAINT PAVE. MARKING, 4" LINE	~~18000~~ 16238	LF
632.0112	RETROREFLECTIVE PAINT PAVE. MARKING, 12" LINE	~~90~~ 65	LF
632.02	RETROREFLECTIVE PAINT PAVEMENT MARKING, SYMBOL OR WORD	~~265~~ 56.5	SF
632.3104	RETROREFLECT. THERMOPLAS. PAVE. MARKING, 4" LINE	~~360~~ 274	LF
632.3106	RETROREFLECT. THERMOPLAS. PAVE. MARKING, 6" LINE	~~450~~ 346	LF
632.3118	RETROREFLECT. THERMOPLAS. PAVE. MARKING, 18" LINE	~~90~~ 114	LF
632.911	OBLITERATE PAVE. MARKING LINE, 12" WIDE & UNDER	~~3400~~ 2416	LF
632.92	OBLITERATE PAVEMENT MARKING, SYMBOL OR WORD	~~79~~ 39.3	SF
645.531	SILT FENCE	~~50~~ 0	LF
646.31	TURF ESTABLISHMENT WITH MULCH AND TACKIFIERS	60	SY
647.1	HUMUS	~~6~~ 12	CY
670.104	TEMPORARY PORTABLE LIGHTING	2	U
670.95	TEMPORARY SAFETY FENCE	~~1450~~ 835	LF
692.	MOBILIZATION	1	U
697.31	PROJECT OPERATIONS PLAN	1	U
698.13	FIELD OFFICE TYPE C	~~10~~ 13	MON
699.	MISCELLANEOUS TEMPORARY EROSION AND SEDIMENT CONTROL	*	$
1002.1	REPAIRS OR REPLACEMENTS AS NEEDED - BRIDGE STRUCTURES	*	$
1008.211	ALTS. & ADDS. AS NEEDED - TEMP. TRAFFIC CONTROL (SIGNS & PAVE. MARKINGS)	*	$
1009.32	REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING MATERIAL (ACM)	*	$
1010.15	FUEL ADJUSTMENT	*	$

* NOT A BID ITEM

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

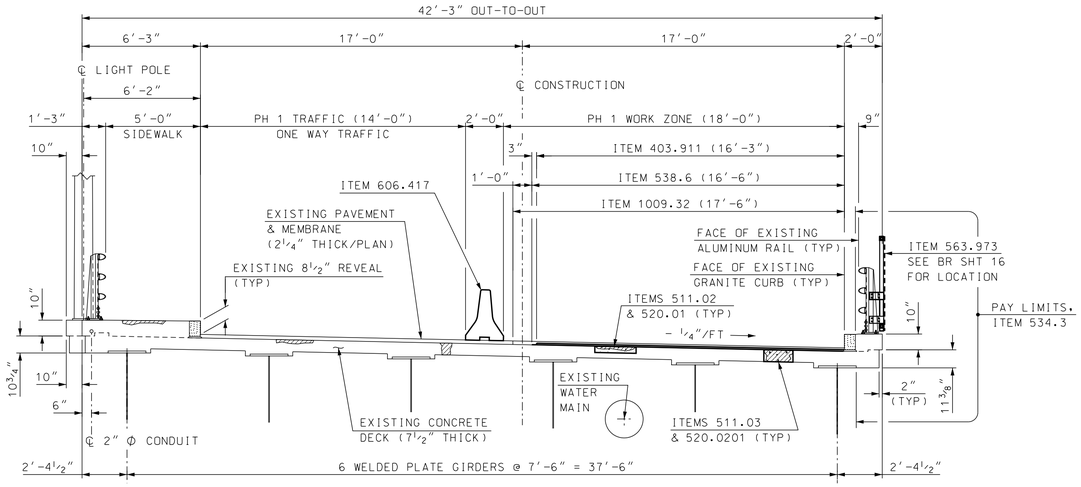
NOTES AND QUANTITY BOX

BRIDGE SHEET 2 OF 18

FILE NUMBER 126-1-1

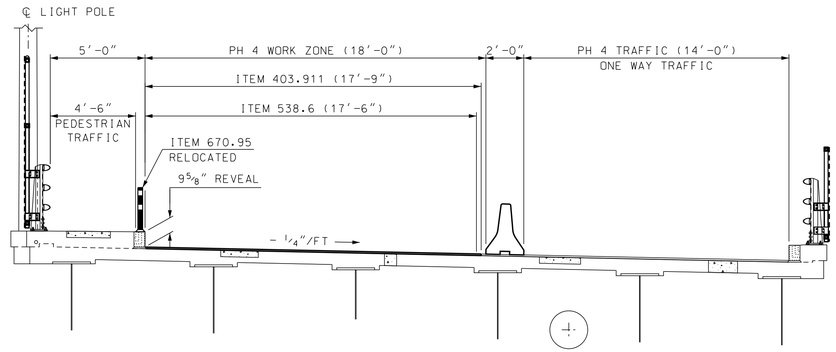
REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	JAT	6/14	CHECKED	SMG	8/14
	DRAWN	SMG	6/14	CHECKED	JAT	8/14
	QUANTITIES	SMG	9/14	CHECKED	JAT	9/14
	ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
	REV. DATE		----------		6	42

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\	28435 Notes	AS NOTED



PHASE 1 CONSTRUCTION

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



PHASE 4 CONSTRUCTION

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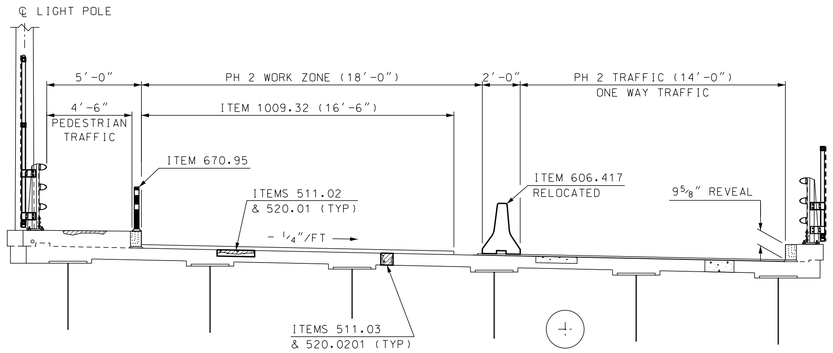
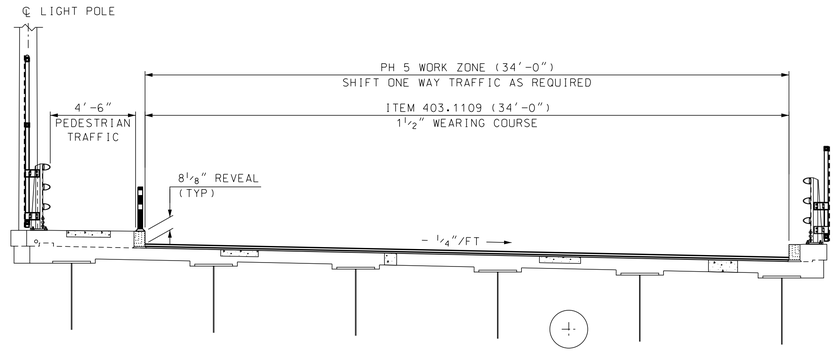


PHASE 2 CONSTRUCTION

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

NOTE:
ALL DIMENSIONS RADIAL
UNLESS NOTED OTHERWISE



PHASE 5 CONSTRUCTION

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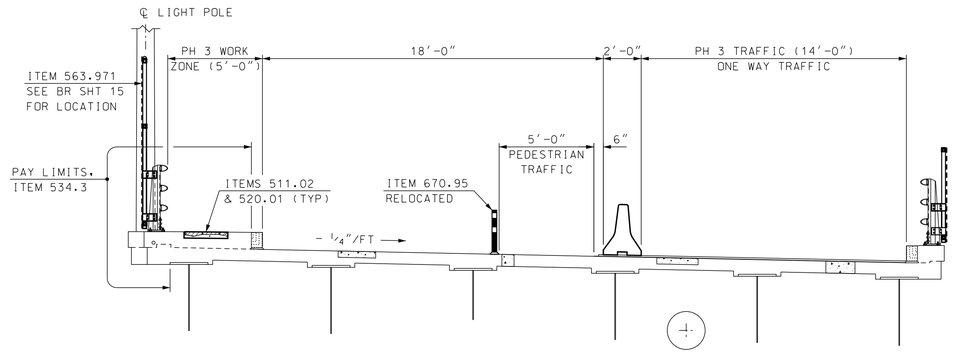
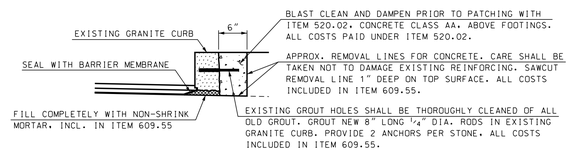


PHASE 3 CONSTRUCTION

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



** RESETTING GRANITE BRIDGE CURB DETAIL

SCALE: 1" = 1'-0"

** WHERE EXISTING GRANITE BRIDGE CURB HAS PULLED AWAY FROM THE CONCRETE BRUSH CURB. THE GRANITE CURB SHALL BE REMOVED AND RESET AS DIRECTED BY THE ENGINEER. ALL COSTS INCLUDED IN ITEM 609.55. RESET GRANITE CURB (BRIDGE).

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

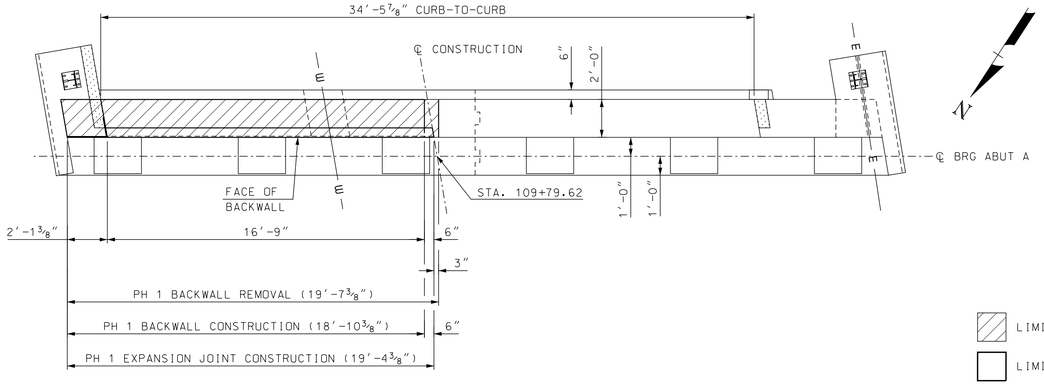
PHASING

BRIDGE SHEET: 3 OF 18

REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	JAT	5/14	CHECKED	SMG	8/14
	DRAWN	SMG	5/14	CHECKED	JAT	8/14
	QUANTITIES	SMG	9/14	CHECKED	JAT	9/14

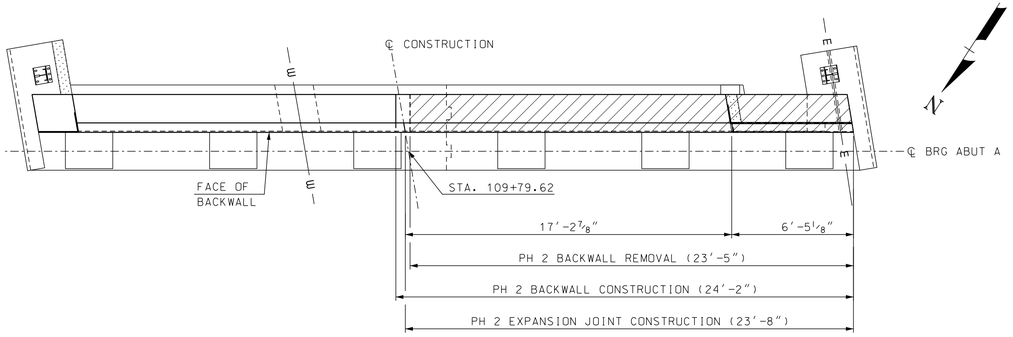
FILE NUMBER: 126-1-1

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE	ISSUE DATE	FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
BRC\	28435 Phasing	AS NOTED	REV. DATE	----------	7	42



PHASE 1 PLAN

SCALE: 1/4″ = 1′-0″



PHASE 2 PLAN

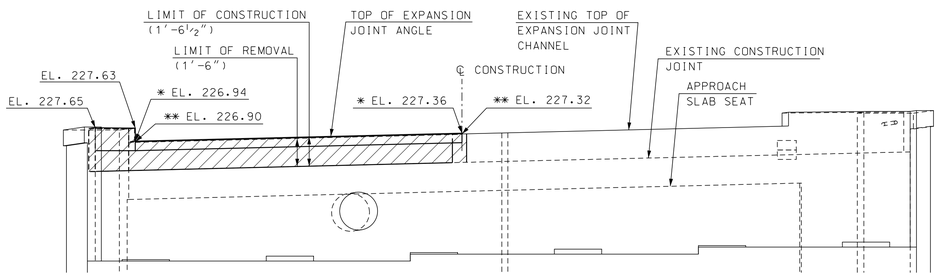
SCALE: 1/4″ = 1′-0″

LIMIT OF REMOVAL

LIMIT OF PROPOSED CONCRETE

NOTES:

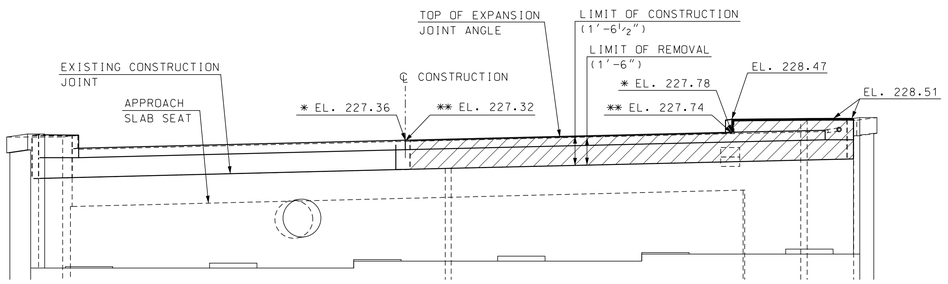
1. SEE EXPANSION JOINT PLAN VIEW ON BRIDGE SHEET 6 AND SECTION A-A REMOVAL AND SECTION A-A CONSTRUCTION ON BRIDGE SHEET 7 FOR FURTHER DETAILS.
2. DIMENSIONS ARE GIVEN FROM THE INTERSECTION OF ℄ CONSTRUCTION AND THE BACK OF BACKWALL.



EL. XXX.XX = EXISTING AND PROPOSED ELEVATION
* EL. XXX.XX = PROPOSED ELEVATION AT TOP OF EXPANSION JOINT ANGLE
** EL. XXX.XX = EXISTING ELEVATION AT TOP OF EXPANSION JOINT CHANNEL

PHASE 1 ELEVATION

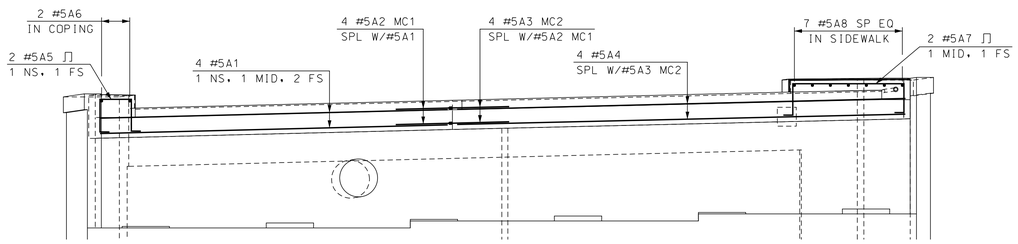
SCALE: 1/4″ = 1′-0″



EL. XXX.XX = EXISTING AND PROPOSED ELEVATION
* EL. XXX.XX = PROPOSED ELEVATION AT TOP OF EXPANSION JOINT ANGLE
** EL. XXX.XX = EXISTING ELEVATION AT TOP OF EXPANSION JOINT CHANNEL

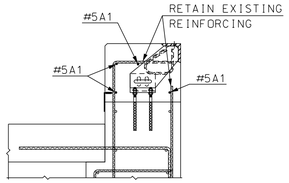
PHASE 2 ELEVATION

SCALE: 1/4″ = 1′-0″



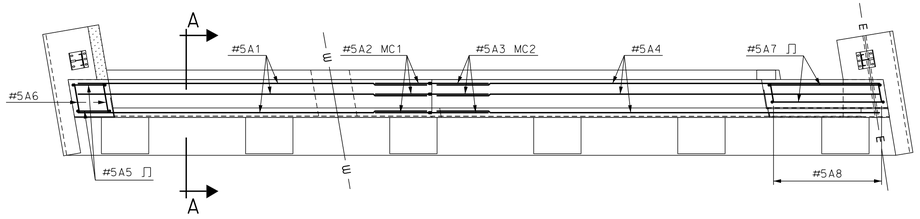
ABUTMENT A REINFORCEMENT ELEVATION

SCALE: 1/4″ = 1′-0″



SECTION A-A

SCALE: 1/2″ = 1′-0″



ABUTMENT A REINFORCEMENT PLAN

SCALE: 1/4″ = 1′-0″

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

ABUTMENT A PHASING

BRIDGE SHEET 4 OF 18

REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	JAT	6/14	CHECKED	SMG	8/14
	DRAWN	SMG	6/14	CHECKED	JAT	8/14
	QUANTITIES	SMG	9/14	CHECKED	JAT	9/14
	ISSUE DATE					
	REV. DATE					

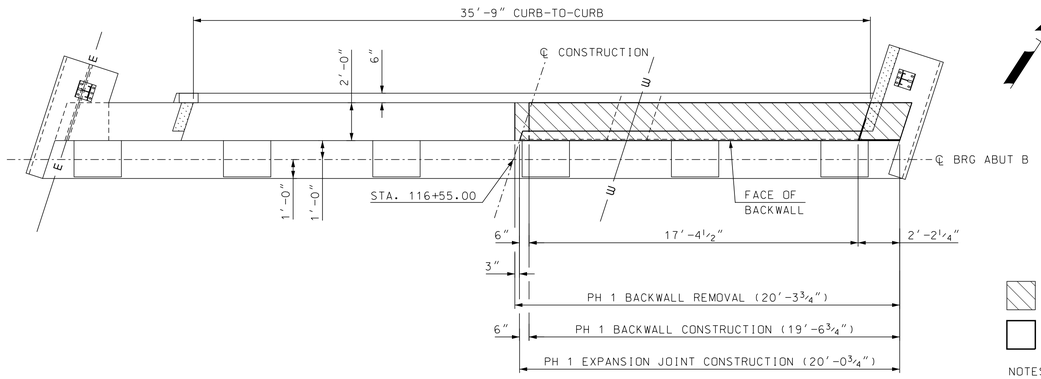
FILE NUMBER 126-1-1

FEDERAL PROJECT NO. ----------

SHEET NO. 8

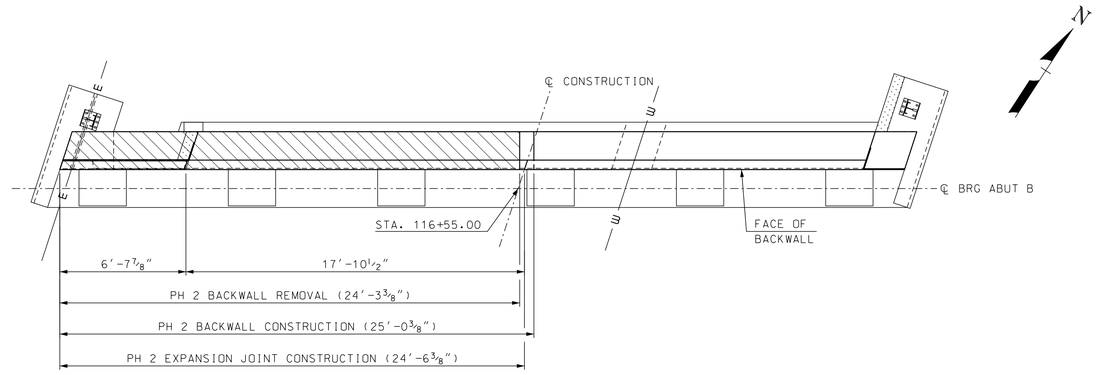
TOTAL SHEETS 42

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\	28435 AbutA	AS NOTED



PHASE 1 PLAN

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



PHASE 2 PLAN

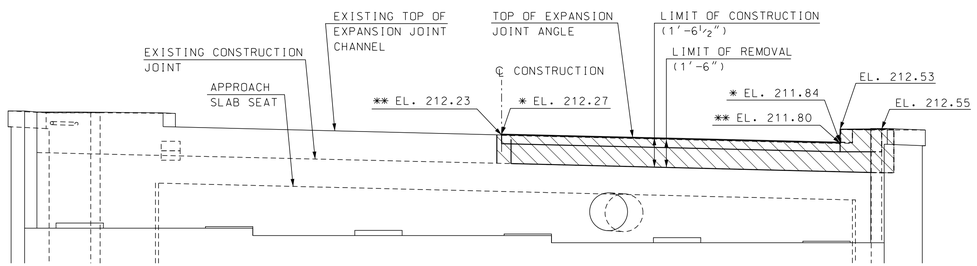
SCALE: 1/4" = 1'-0"

LIMIT OF REMOVAL

LIMIT OF PROPOSED CONCRETE

NOTES:

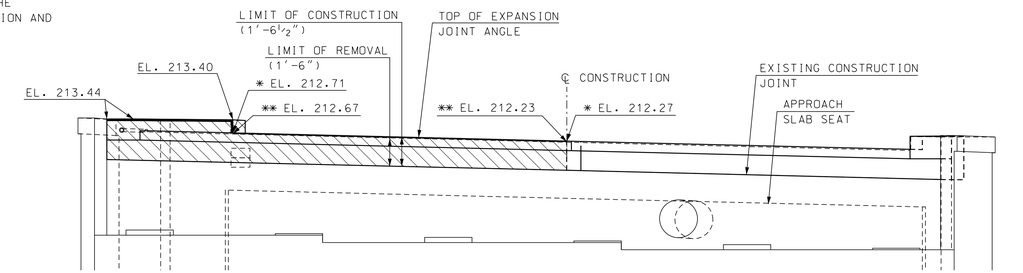
1. SEE EXPANSION JOINT PLAN VIEW ON BRIDGE SHEET 9 AND SECTION A-A REMOVAL AND SECTION A-A CONSTRUCTION ON BRIDGE SHEET 10 FOR FURTHER DETAILS.
2. DIMENSIONS ARE GIVEN FROM THE INTERSECTION OF ℄ CONSTRUCTION AND THE BACK OF BACKWALL.



EL. XXX.XX = EXISTING AND PROPOSED ELEVATION
* EL. XXX.XX = PROPOSED ELEVATION AT TOP OF EXPANSION JOINT ANGLE
** EL. XXX.XX = EXISTING ELEVATION AT TOP OF EXPANSION JOINT CHANNEL

PHASE 1 ELEVATION

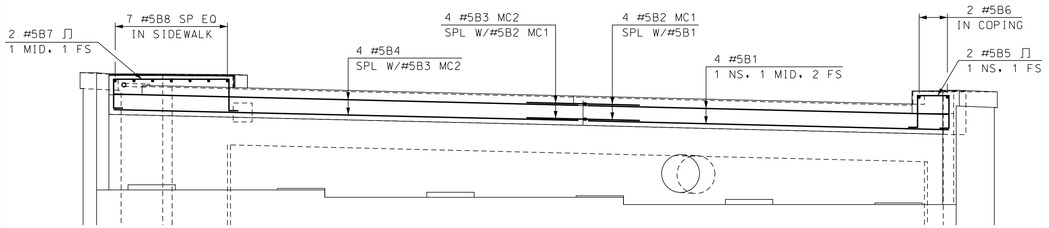
SCALE: 1/4" = 1'-0"



EL. XXX.XX = EXISTING AND PROPOSED ELEVATION
* EL. XXX.XX = PROPOSED ELEVATION AT TOP OF EXPANSION JOINT ANGLE
** EL. XXX.XX = EXISTING ELEVATION AT TOP OF EXPANSION JOINT CHANNEL

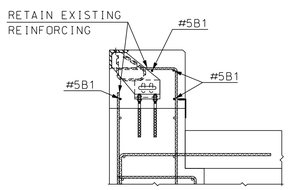
PHASE 2 ELEVATION

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



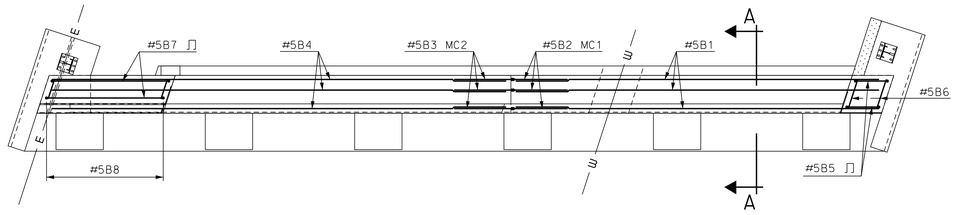
ABUTMENT B REINFORCEMENT ELEVATION

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



SECTION A-A

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



ABUTMENT B REINFORCEMENT PLAN

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

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

ABUTMENT B PHASING

BRIDGE SHEET 5 OF 18

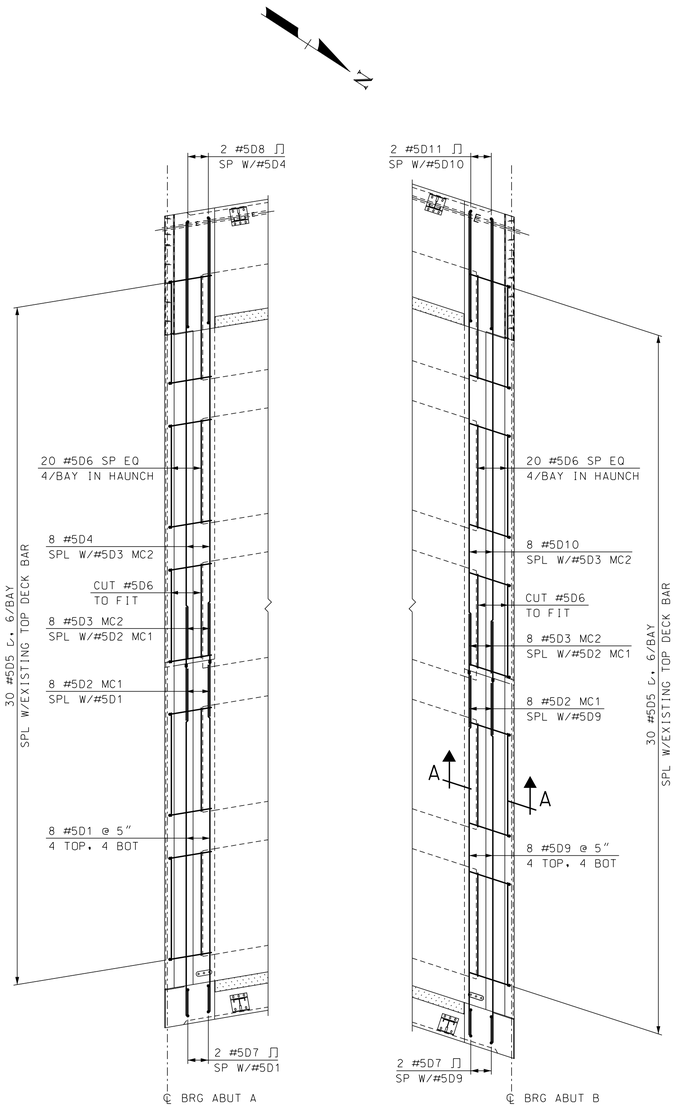
FILE NUMBER 126-1-1

REVISIONS AFTER PROPOSAL	BY	DATE

	BY	DATE		BY	DATE
DESIGNED	JAT	6/14	CHECKED	SMG	8/14
DRAWN	SMG	6/14	CHECKED	JAT	8/14
QUANTITIES	SMG	9/14	CHECKED	JAT	9/14

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\	28435 AbutB	AS NOTED

ISSUE DATE		FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
REV. DATE		----------	9	42

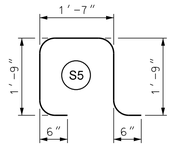


DECK REINFORCEMENT PLAN

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

#5A2, #5B2, & #5D2
N.T.S.

#5A3, #5B3, & #5D3
N.T.S.



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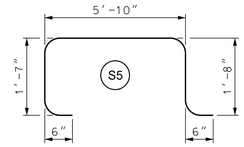

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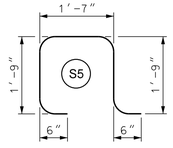

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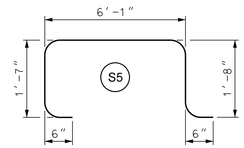

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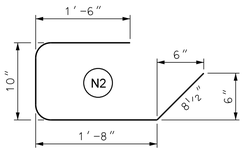

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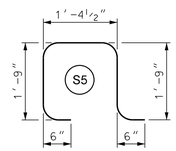

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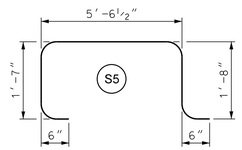

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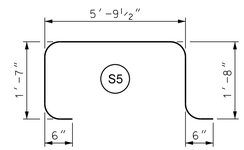

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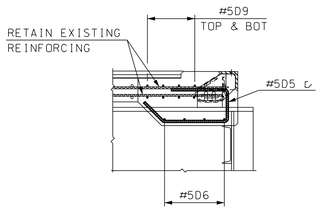


SECTION A-A

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

BR. NO. 080/148					
MARK	SIZE	LENGTH	TYPE	# PIECES	LBS
A1	#5	18'-5"	---	4	77
A2	#5	3'-0"	C1	4	13
A3	#5	3'-0"	C2	4	13
A4	#5	23'-5"	---	4	98
A5	#5	6'-1"	S5	2	13
A6	#5	1'-6 1/2"	---	2	4
A7	#5	10'-1"	S5	2	21
A8	#5	1'-0"	---	7	8
B1	#5	19'-2"	---	4	80
B2	#5	3'-0"	C1	4	13
B3	#5	3'-0"	C2	4	13
B4	#5	24'-0"	---	4	100
B5	#5	6'-1"	S5	2	13
B6	#5	1'-7"	---	2	4
B7	#5	10'-4"	S5	2	22
B8	#5	1'-1"	---	7	8
D1	#5	18'-4"	---	8	153
D2	#5	3'-0"	C1	16	50
D3	#5	3'-0"	C2	16	50
D4	#5	23'-1"	---	8	193
D5	#5	4'-8 1/2"	N2	60	295
D6	#5	5'-6"	---	40	230
D7	#5	5'-10 1/2"	S5	4	25
D8	#5	9'-9 1/2"	S5	2	21
D9	#5	19'-0"	---	8	159
D10	#5	24'-0"	---	8	201
D11	#5	10'-0 1/2"	S5	2	21
ITEM	DESCRIPTION				TOTAL
544.	REINFORCING STEEL (F)				1746
544.11	REINFORCING STEEL-MECHANICAL CONNECTORS (F)				152

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, EPOXY COATED.
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 502. ALL NEW REINFORCING BARS SHALL HAVE A MINIMUM CLEAR COVER OF 2 1/2" FROM PROPOSED CONCRETE SURFACES.
4. #5 BAR MIN LAP LENGTH = 2'-6".
5. PLACE REINFORCING STEEL TO AVOID EXPANSION JOINT STEEL.

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

DECK END REINFORCEMENT & BAR SCHEDULE

BRIDGE SHEET 6 OF 18

REVISIONS AFTER PROPOSAL	BY	DATE		BY	DATE
	DESIGNED	JAT	6/14	CHECKED	SMG 8/14
	DRAWN	SMG	6/14	CHECKED	JAT 8/14
	QUANTITIES	SMG	9/14	CHECKED	JAT 9/14
	ISSUE DATE				
	REV. DATE				

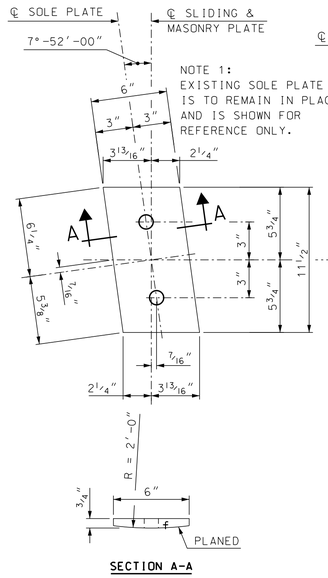
FILE NUMBER 126-1-1

FEDERAL PROJECT NO. ----------

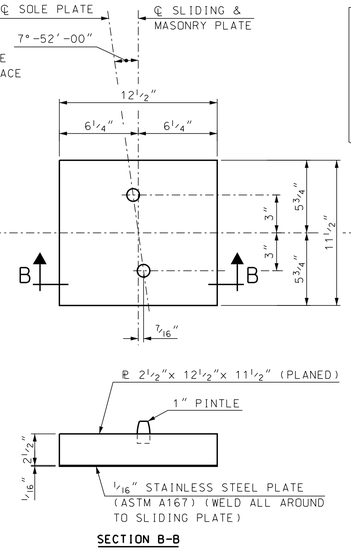
SHEET NO. 10

TOTAL SHEETS 42

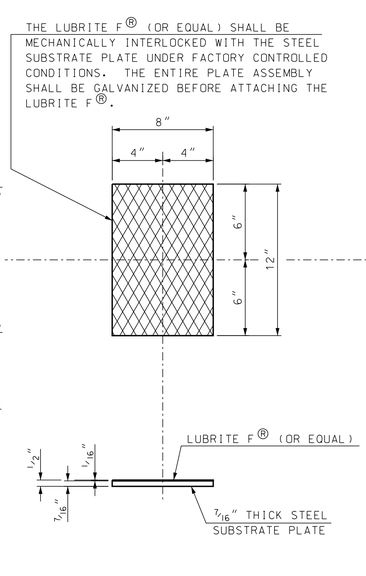
SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\	28435 Deckbars	AS NOTED



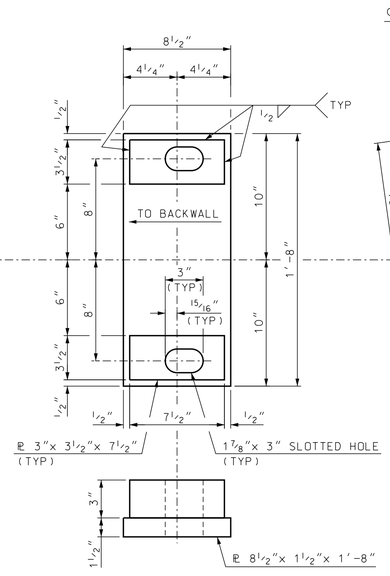
EXISTING SOLE PLATE TO REMAIN WELDED TO TIE-DOWN PLATE



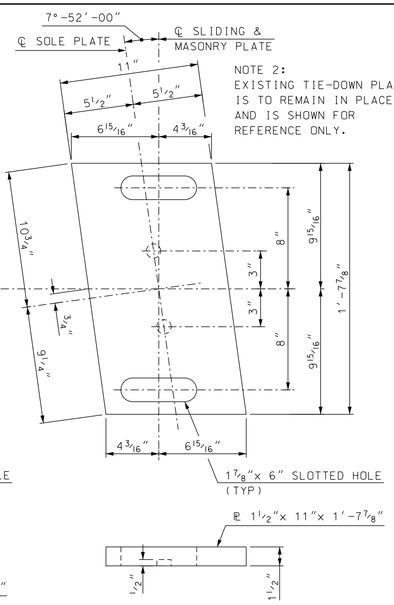
SLIDING PLATE



SUBSTRATE PLATE



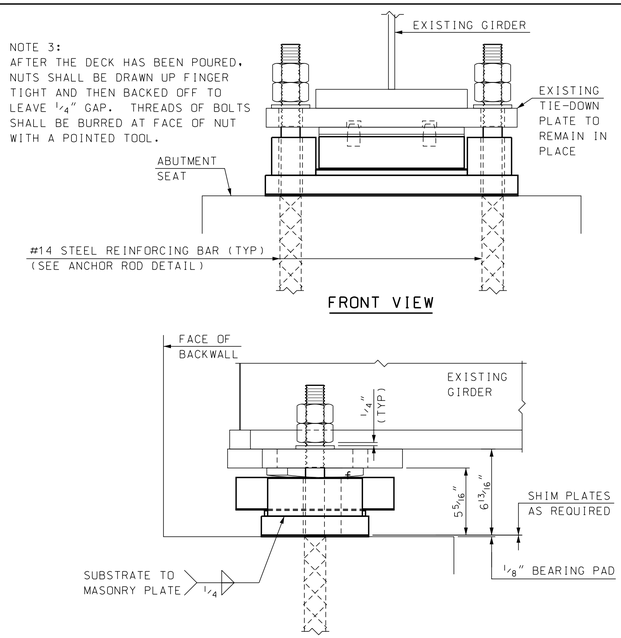
MASONRY PLATE

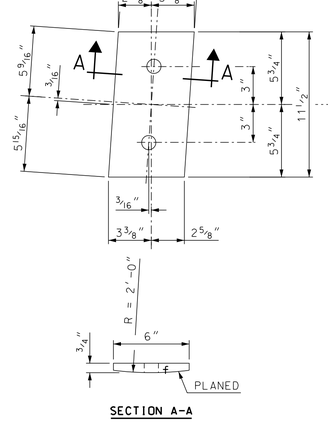


EXISTING TIE-DOWN PLATE TO REMAIN WELDED TO GIRDER

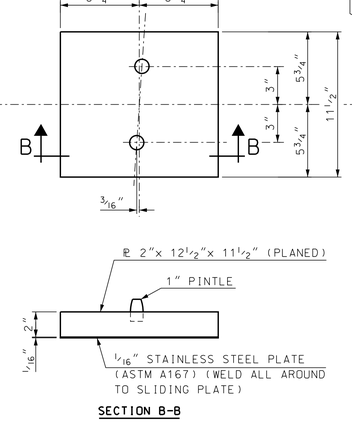
ABUTMENT A EXPANSION SHOE

(6 REQUIRED)
SCALE: 2″ = 1′-0″





EXISTING SOLE PLATE TO REMAIN WELDED TO TIE-DOWN PLATE



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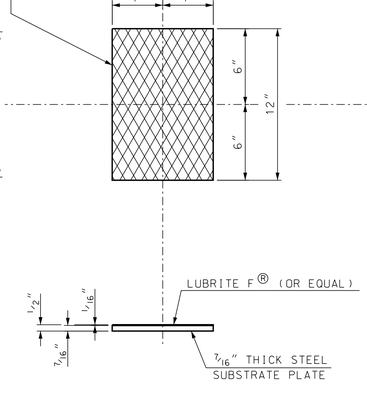
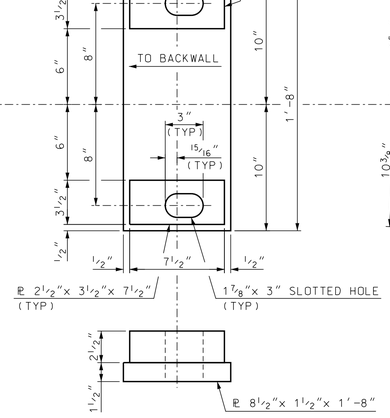
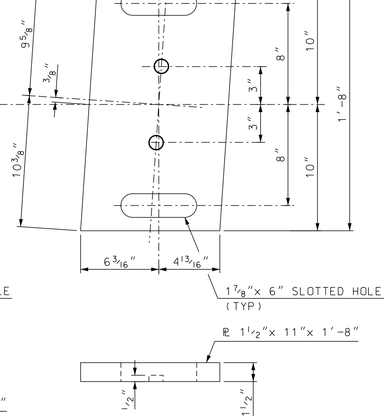


SUBSTRATE PLATE



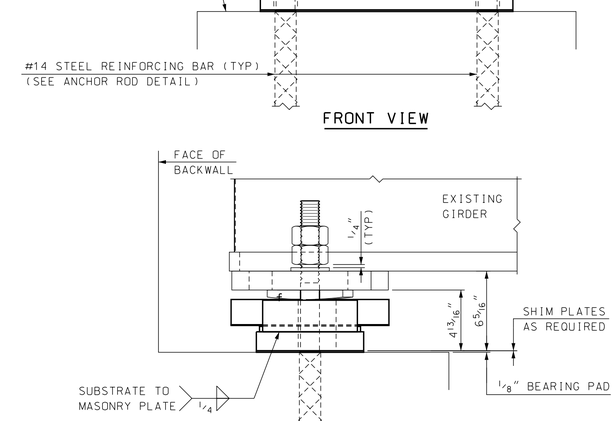
MASONRY PLATE



EXISTING TIE-DOWN PLATE TO REMAIN WELDED TO GIRDER

ABUTMENT B EXPANSION SHOE

(6 REQUIRED)
SCALE: 2″ = 1′-0″



BEARING NOTES

1. EXPANSION SHOE ASSEMBLIES, INCLUDING ANCHOR RODS, NUTS, WASHERS, SHIMS, AND BEARING PADS, SHALL BE PAID FOR AS ITEM 550.2, BRIDGE SHOES (F).
2. STEEL PLATES SHALL CONFORM TO AASHTO M270, GRADE 50W (ASTM A709, GRADE 50W). EXPOSED ASSEMBLED SURFACES SHALL BE GALVANIZED IN ACCORDANCE WITH SECTION 550.2.9 OF THE NHDOT STANDARD SPECIFICATIONS, 2010.
3. ALL PLATES SHALL BE FLAT AND TRUE AFTER WELDING.
4. ANCHOR RODS SHALL BE GALVANIZED AND FABRICATED IN ACCORDANCE WITH SECTION 550.2.5 OF THE NHDOT STANDARD SPECIFICATIONS, 2010
5. BEARING SURFACES MARKED "f", OR SURFACES IN CONTACT TO BE WELDED, SHALL BE FINISHED IN ACCORDANCE WITH AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, SECTION 11.4.6.
6. THE PREFORMED FABRIC PADS SHALL CONFORM TO SECTION 550.2.6 OF THE NHDOT STANDARD SPECIFICATIONS.
7. PROVIDE 2 - 1/16″ SHIMS AND 1 - 1/8″ SHIM FOR EACH BEARING ASSEMBLY.
8. EXISTING PLATES TO REMAIN IN PLACE SHALL BE BLAST CLEANED AND GALVANIZED. THE EXISTING PAINT SYSTEM ON THE BRIDGE SHOES IS LEAD BEARING PAINT.

ANCHOR ROD DETAIL

(24 REQUIRED)
SCALE: NTS

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\	28435 BrShoes	AS NOTED

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

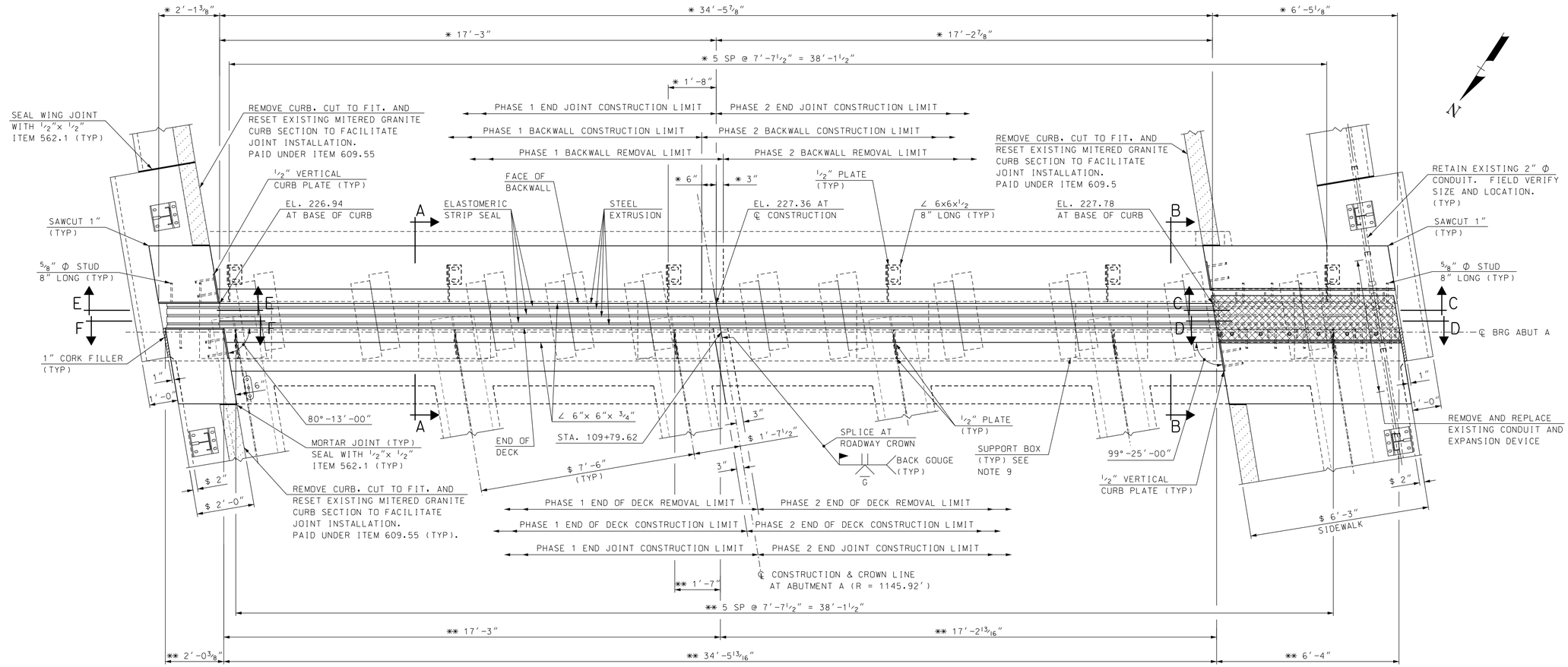
ABUTMENT A & B BRIDGE SHOES

BRIDGE SHEET 7 OF 18

FILE NUMBER 126-1-1

REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	JAT	8/14	CHECKED	SMG	8/14
	DRAWN	SMG	8/14	CHECKED	JAT	8/14
	QUANTITIES	SMG	9/14	CHECKED	JAT	9/14

ISSUE DATE	FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
REV. DATE	----------	11	42



PLAN VIEW

SCALE: 1/2″ = 1′-0″

$ RADIAL DIMENSION
* DIMENSION ALONG FACE OF BACKWALL
** DIMENSION ALONG END OF DECK

EXPANSION JOINT NOTES

1. THE MODULAR JOINT SHOWN IS REPRESENTATIVE OF THE TYPE OF EXPANSION JOINT ACCEPTABLE FOR USE. THE EXACT JOINT CONFIGURATION WILL DEPEND UPON THE MANUFACTURER'S DETAILS. SHOP DRAWINGS OF MODULAR EXPANSION JOINT SYSTEM INCLUDING BARRIER/CURB DETAILS, PLACEMENT DETAILS, AND SHIPPING DEVICES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. THE ENTIRE ASSEMBLY, INCLUDING ELASTOMERIC SEALS, SHALL BE PAID FOR AS ITEM 561.2001, PREFABRICATED MODULAR BRIDGE JOINT SYSTEM (F) (SEE SPECIAL PROVISION).
2. EXPANSION JOINT STEEL SHALL BE AASHTO M223 (ASTM A572) GRADE 50. THE MINOR STEEL PLATES AND EXTRUSIONS MAY CONFORM TO AASHTO M183 (ASTM A36). ALL STEEL SHALL BE GALVANIZED.
3. SPLICES FOR EXPANSION JOINT STEEL SHALL DEVELOP FULL STRENGTH.
4. ELASTOMERIC SEALS SHALL BE FURNISHED IN ONE CONTINUOUS LENGTH. NO SPLICES WILL BE ALLOWED.
5. THE EXPANSION JOINT MANUFACTURER SHALL INCLUDE A TEMPERATURE SETTING TABLE FOR THE EXPANSION JOINT LOCATION ON THE SHOP DRAWINGS.
6. MINIMUM INSTALLATION WIDTH "T" = 10 1/4″ AT 65°F. ADJUSTMENT IN OPENING FOR A 15°F CHANGE IN TEMPERATURE = 3/8″.
7. THE MODULAR BRIDGE JOINT SYSTEM SHALL HAVE A RANGE OF MOVEMENT OF 3.69″. THE CONTRATOR SHALL USE MODULAR BRIDGE JOINT SYSTEM STM SERIES BY WATSON BOWMAN ACME OR D SERIES BY D.S. BROWN. THIS DESIGN INCLUDES MOVEMENT DUE TO TEMPERATURE, SKEW, AND MINIMUM INSTALLATION.
8. JOINT SUPPORT PLATES AND HARDWARE SHALL BE SHOP WELDED TO THE EXPANSION JOINT STEEL AND SHALL BE DETAILED TO ALLOW FOR ALL NECESSARY ADJUSTMENTS TO ACCOMMODATE ROADWAY CROSS SLOPE, GRADE, AND TEMPERATURE SETTINGS.
9. SUPPORT BOXES AND BARS SHALL BE DESIGNED BY THE MANUFACTURER. TYPE, SIZE, AND LOCATION SHALL BE DETERMINED BY THE MANUFACTURER.
10. STIFFENER PLATES, STUDS, AND ANCHORAGES MAY NEED TO SHIFTED FROM THE LAYOUT AS SHOWN ON THESE PLANS BASED ON THE MANUFACTURER'S DESIGN OF THE SUPPORT BOXES AND BARS.
11. PROTECT THE TOP OF THE EXPANSION JOINT DURING PLACEMENT OF CONCRETE AND BITUMINOUS PAVEMENT.
12. ELEVATIONS SHOWN AT THE TOP OF THE EXPANSION JOINT STEEL ARMOR ANGLES AND BEAMS ARE 1/8″ LOWER THAN ADJACENT PROPOSED FINISHED ROADWAY GRADE.
13. NO "LOW PROFILE" STEEL EXTRUSIONS SHALL BE ALLOWED.
14. NO REINFORCING STEEL SHALL BE CUT TO CLEAR THE BRIDGE EXPANSION DEVICE WITHOUT PRIOR APPROVAL OF THE ENGINEER.
15. 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 PER SECTION 550
16. SEE BRIDGE SHEETS 7 & 8 FOR SECTIONS A-A, B-B, C-C, D-D AND E-E.

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

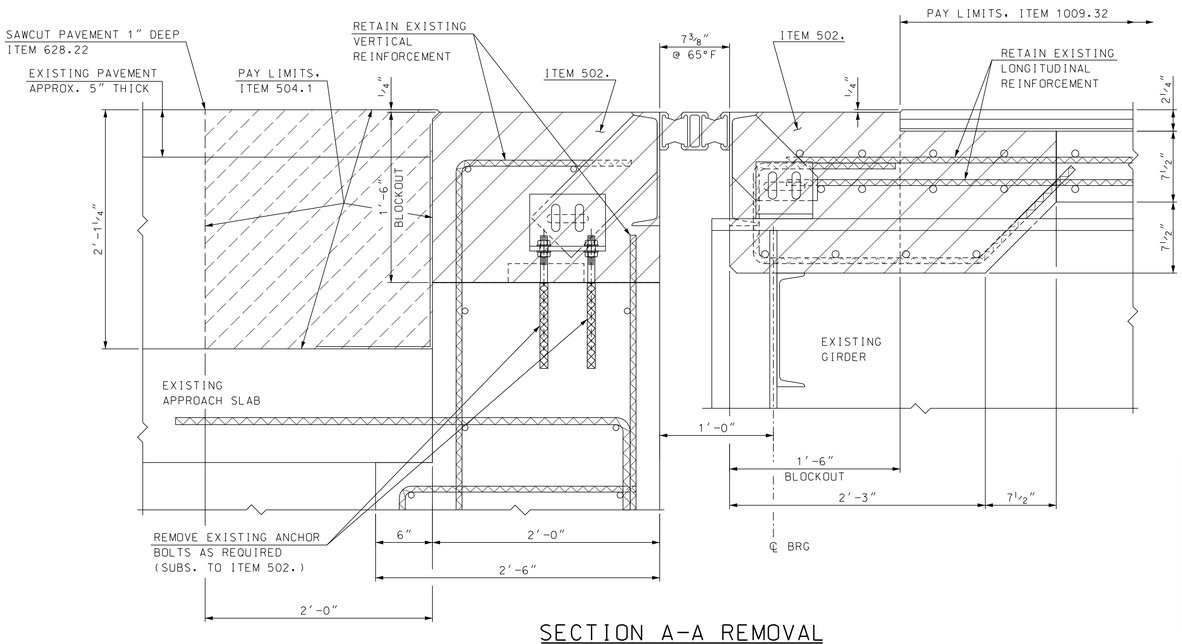
ABUTMENT A EXPANSION JOINT (1 OF 3)

BRIDGE SHEET 8 OF 18

FILE NUMBER 126-1-1

REVISIONS AFTER PROPOSAL				BY	DATE		BY	DATE
			DESIGNED	JAT	12/13	CHECKED	SMG	8/14
			DRAWN	SMG	12/13	CHECKED	JAT	8/14
			QUANTITIES	SMG	9/14	CHECKED	JAT	9/14

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE	ISSUE DATE		FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
BRC\	28435 Exp Jt A	AS NOTED	REV. DATE		----------	12	42



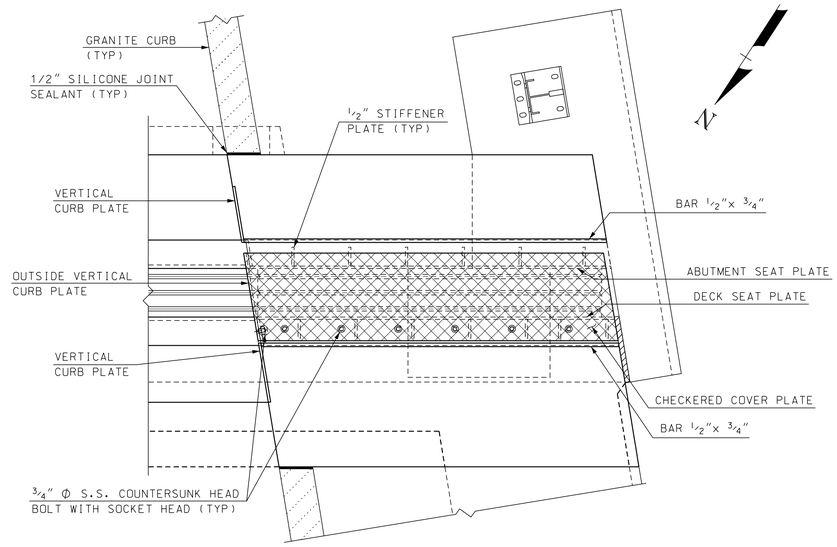
SECTION A-A REMOVAL

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

TEMPERATURE ADJUSTMENT TABLE	
TEMPERATURE	"T"
20°F	11 3/8"
35°F	11"
50°F	10 5/8"
65°F	10 1/4"
80°F	9 7/8"
95°F	9 1/2"

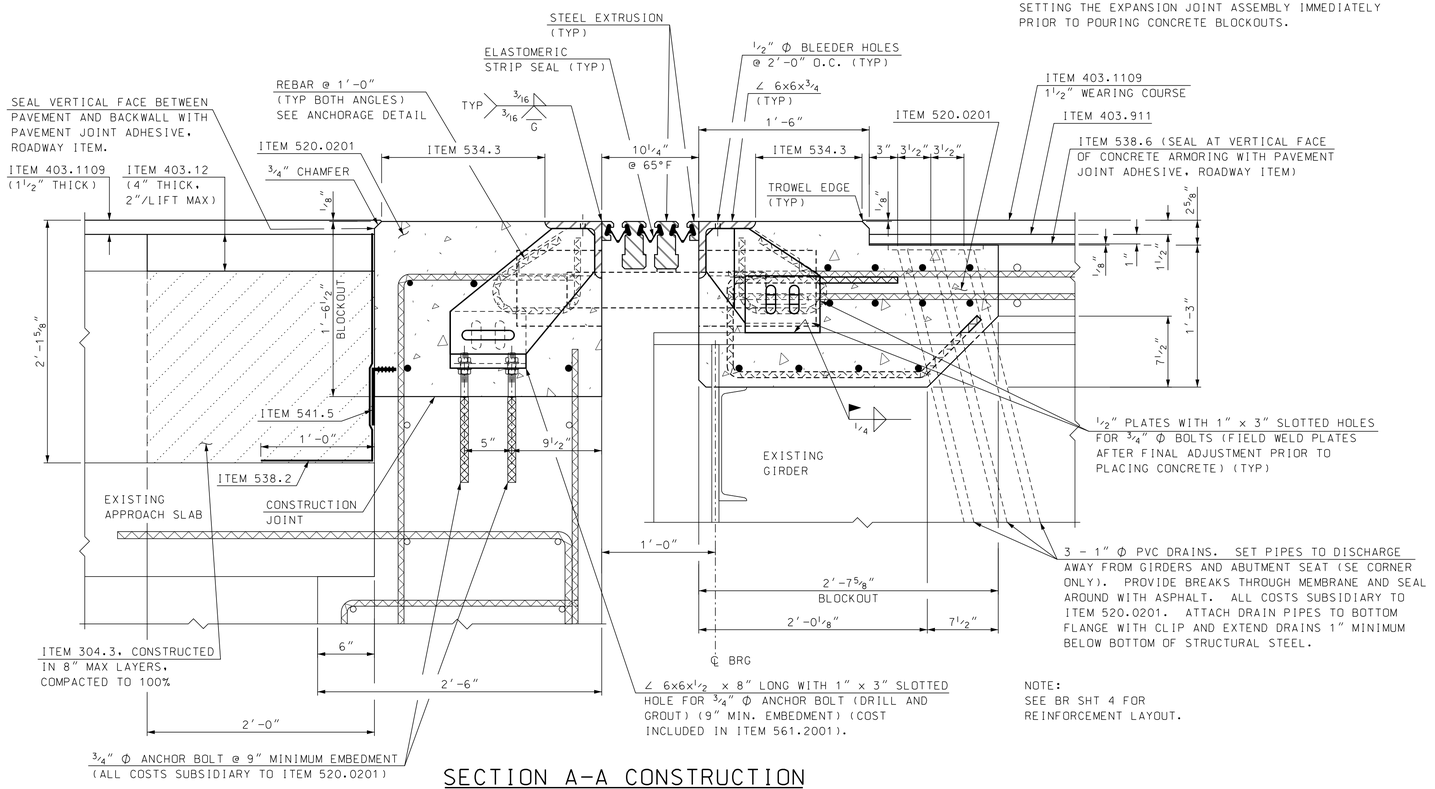
TEMPERATURE ADJUSTMENT NOTES

1. "T" DIMENSIONS ARE PERPENDICULAR TO FACE OF BACKWALL.
2. MINIMUM "T" WIDTH FOR SEAL INSTALLATION = 10 1/4" (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.



UPPER ASSEMBLY

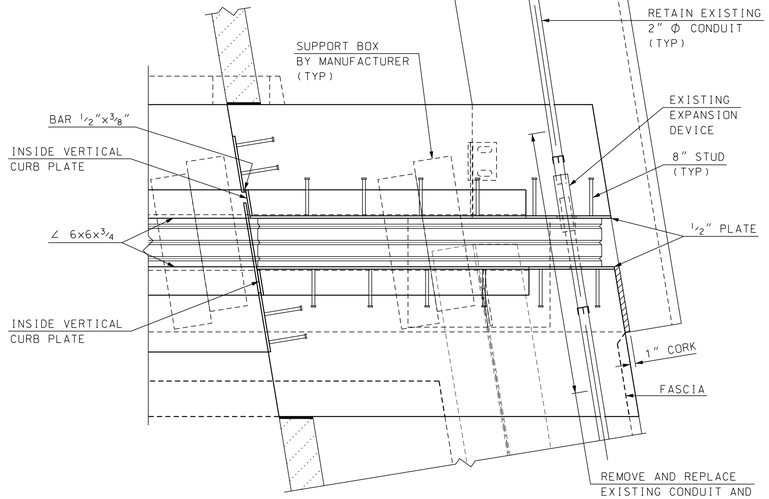
SCALE: 3/4" = 1'-0"



SECTION A-A CONSTRUCTION

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

NOTE:
SEE BR SHT 4 FOR
REINFORCEMENT LAYOUT.



LOWER ASSEMBLY

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

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

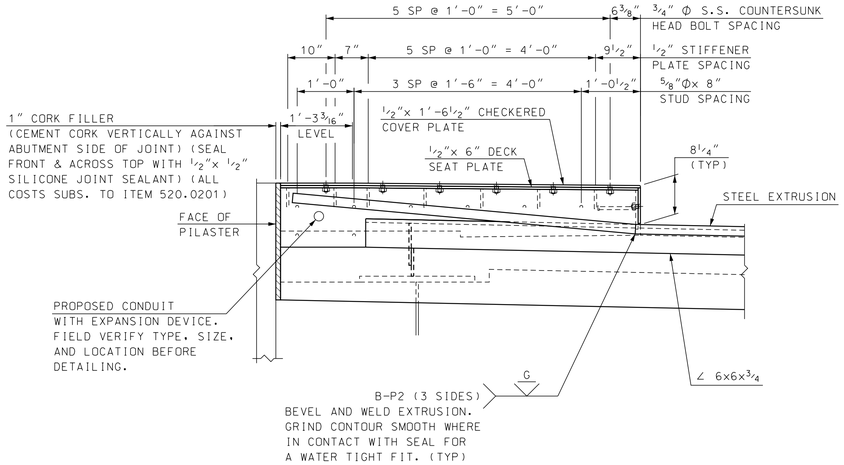
ABUTMENT A EXPANSION JOINT (2 OF 3)

BRIDGE SHEET 9 OF 18

FILE NUMBER 126-1-1

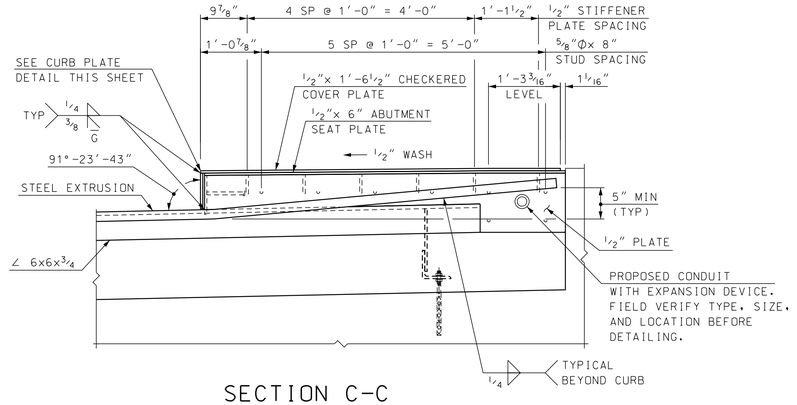
REVISIONS AFTER PROPOSAL	BY	DATE		BY	DATE
DESIGNED	JAT	12/13	CHECKED	SMG	8/14
DRAWN	SMG	12/13	CHECKED	JAT	8/14
QUANTITIES	SMG	9/14	CHECKED	JAT	9/14
ISSUE DATE			FEDERAL PROJECT NO.		SHEET NO. 13
REV. DATE			----------		TOTAL SHEETS 42

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\	28435 Exp Jt A	AS NOTED



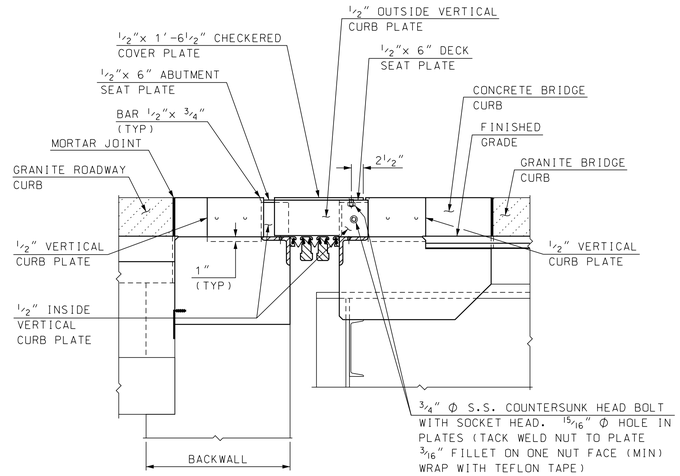
SECTION D-D

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



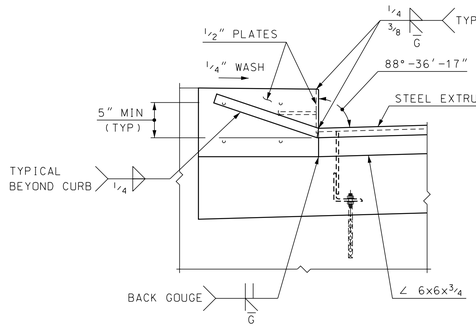
SECTION C-C

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



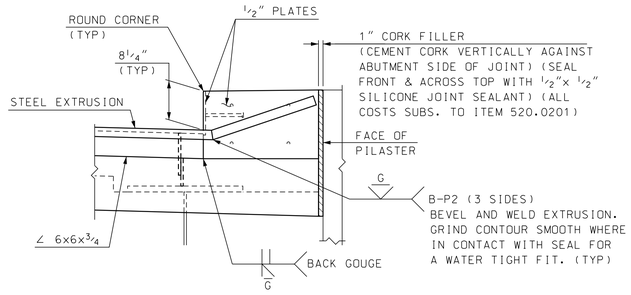
SECTION B-B

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



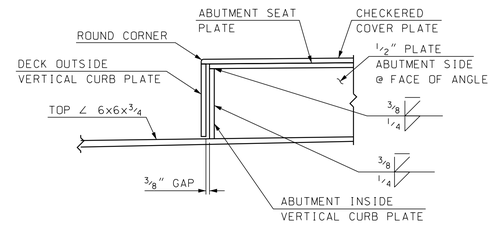
SECTION E-E

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



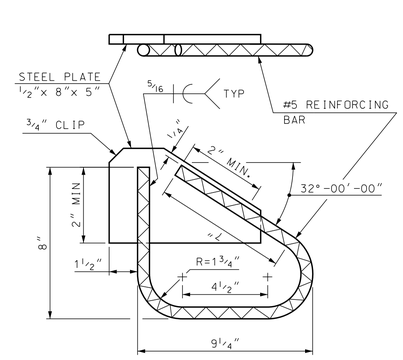
SECTION F-F

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



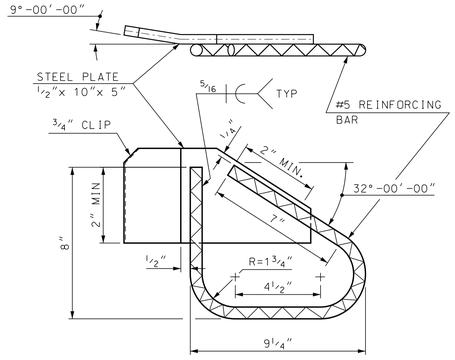
CURB PLATE DETAIL

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



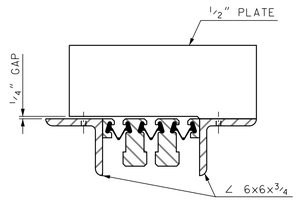
BACKWALL ANCHORAGE DETAIL

SCALE: 3" = 1'-0"



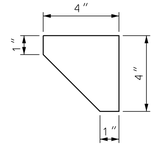
DECK SIDE ANCHORAGE DETAIL

SCALE: 3" = 1'-0"



DECK OUTSIDE VERTICAL CURB PLATE DETAIL

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



STIFFENER PLATE

SCALE: 3" = 1'-0"

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

ABUTMENT A EXPANSION JOINT (3 OF 3)

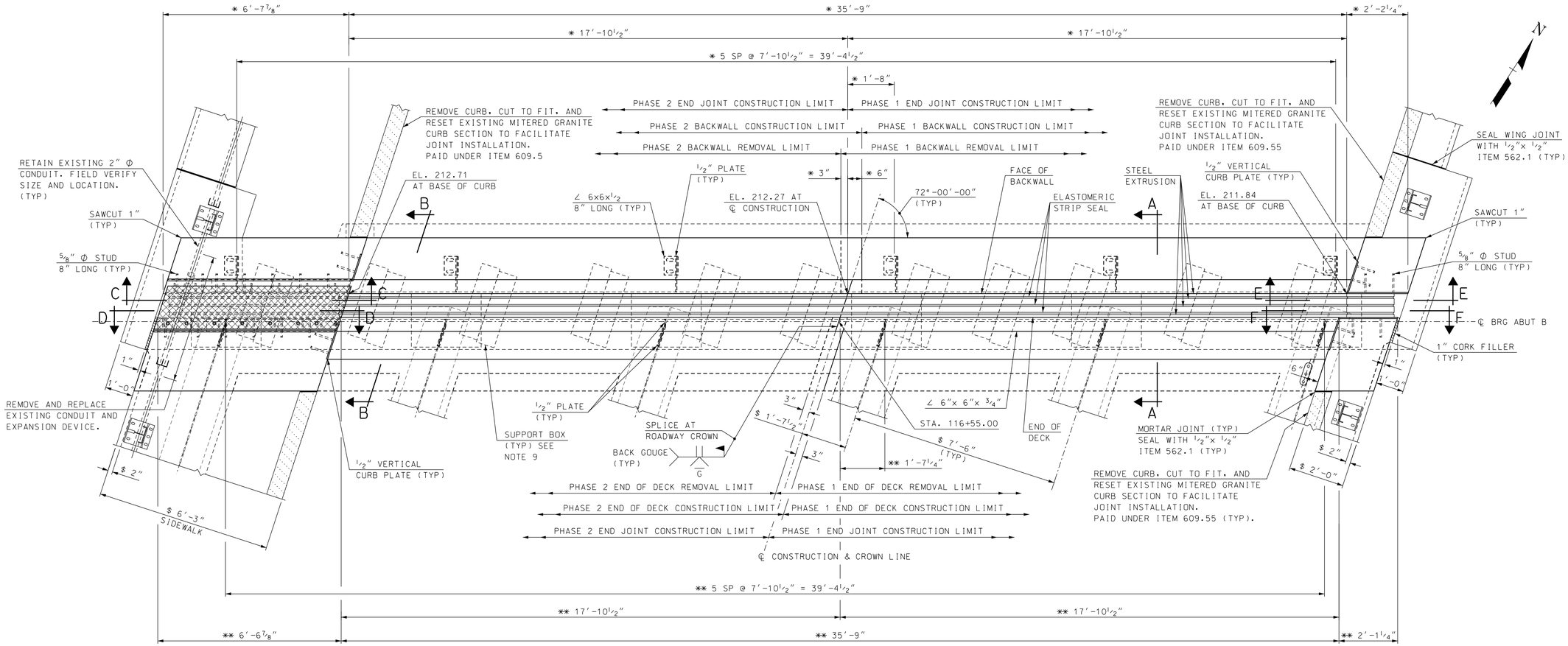
BRIDGE SHEET 10 OF 18

REVISIONS AFTER PROPOSAL	BY	DATE		BY	DATE
	DESIGNED	JAT	12/13	CHECKED	SMG	8/14
	DRAWN	SMG	12/13	CHECKED	JAT	8/14
	QUANTITIES	SMG	9/14	CHECKED	JAT	9/14

FILE NUMBER 126-1-1

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\	28435 Exp Jt A	AS NOTED

ISSUE DATE	FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
REV. DATE	----------	14	42



PLAN VIEW

SCALE: ½″ = 1′-0″

$ RADIAL DIMENSION
* DIMENSION ALONG FACE OF BACKWALL
** DIMENSION ALONG END OF DECK

EXPANSION JOINT NOTES

1. THE MODULAR JOINT SHOWN IS REPRESENTATIVE OF THE TYPE OF EXPANSION JOINT ACCEPTABLE FOR USE. THE EXACT JOINT CONFIGURATION WILL DEPEND UPON THE MANUFACTURER'S DETAILS. SHOP DRAWINGS OF MODULAR EXPANSION JOINT SYSTEM INCLUDING BARRIER/CURB DETAILS, PLACEMENT DETAILS, AND SHIPPING DEVICES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. THE ENTIRE ASSEMBLY, INCLUDING ELASTOMERIC SEALS, SHALL BE PAID FOR AS ITEM 561.2002, PREFABRICATED MODULAR BRIDGE JOINT SYSTEM (F) (SEE SPECIAL PROVISION).
2. EXPANSION JOINT STEEL SHALL BE AASHTO M223 (ASTM A572) GRADE 50. THE MINOR STEEL PLATES AND EXTRUSIONS MAY CONFORM TO AASHTO M183 (ASTM A36). ALL STEEL SHALL BE GALVANIZED.
3. SPLICES FOR EXPANSION JOINT STEEL SHALL DEVELOP FULL STRENGTH.
4. ELASTOMERIC SEALS SHALL BE FURNISHED IN ONE CONTINUOUS LENGTH. NO SPLICES WILL BE ALLOWED.
5. THE EXPANSION JOINT MANUFACTURER SHALL INCLUDE A TEMPERATURE SETTING TABLE FOR THE EXPANSION JOINT LOCATION ON THE SHOP DRAWINGS.
6. MINIMUM INSTALLATION WIDTH "T" = $10\frac{3}{8}$″ AT 65°F. ADJUSTMENT IN OPENING FOR A 15°F CHANGE IN TEMPERATURE = $\frac{7}{16}$″.
7. THE MODULAR BRIDGE JOINT SYSTEM SHALL HAVE A RANGE OF MOVEMENT OF 4.21″. THE CONTRATOR SHALL USE MODULAR BRIDGE JOINT SYSTEM STM SERIES BY WATSON BOWMAN ACME OR D SERIES BY D.S. BROWN. THIS DESIGN INCLUDES MOVEMENT DUE TO TEMPERATURE, SKEW, AND MINIMUM INSTALLATION.
8. JOINT SUPPORT PLATES AND HARDWARE SHALL BE SHOP WELDED TO THE EXPANSION JOINT STEEL AND SHALL BE DETAILED TO ALLOW FOR ALL NECESSARY ADJUSTMENTS TO ACCOMMODATE ROADWAY CROSS SLOPE, GRADE, AND TEMPERATURE SETTINGS.
9. SUPPORT BOXES AND BARS SHALL BE DESIGNED BY THE MANUFACTURER. TYPE, SIZE, AND LOCATION SHALL BE DETERMINED BY THE MANUFACTURER.
10. STIFFENER PLATES, STUDS, AND ANCHORAGES MAY NEED TO SHIFTED FROM THE LAYOUT AS SHOWN ON THESE PLANS BASED ON THE MANUFACTURER'S DESIGN OF THE SUPPORT BOXES AND BARS.
11. PROTECT THE TOP OF THE EXPANSION JOINT DURING PLACEMENT OF CONCRETE AND BITUMINOUS PAVEMENT.
12. ELEVATIONS SHOWN AT THE TOP OF THE EXPANSION JOINT STEEL ARMOR ANGLES AND BEAMS ARE ⅛″ LOWER THAN ADJACENT PROPOSED FINISHED ROADWAY GRADE.
13. NO "LOW PROFILE" STEEL EXTRUSIONS SHALL BE ALLOWED.
14. NO REINFORCING STEEL SHALL BE CUT TO CLEAR THE BRIDGE EXPANSION DEVICE WITHOUT PRIOR APPROVAL OF THE ENGINEER.
15. 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 PER SECTION 550
16. SEE BRIDGE SHEETS 10 & 11 FOR SECTIONS A-A, B-B, C-C, D-D AND E-E.

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

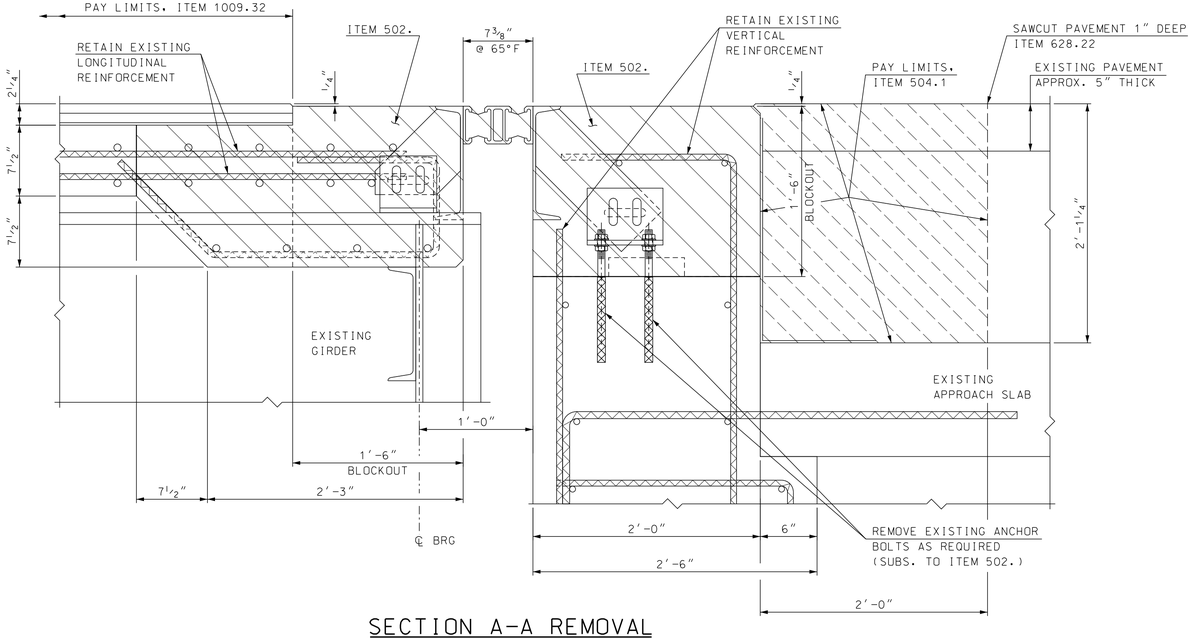
ABUTMENT B EXPANSION JOINT (1 OF 3)

BRIDGE SHEET 11 OF 18

FILE NUMBER 126-1-1

REVISIONS AFTER PROPOSAL			BY	DATE		BY	DATE
		DESIGNED	JAT	12/13	CHECKED	SMG	8/14
		DRAWN	SMG	12/13	CHECKED	JAT	8/14
		QUANTITIES	SMG	9/14	CHECKED	JAT	9/14
		ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
		REV. DATE		----------		15	42

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\	28435 Exp Jt B	AS NOTED



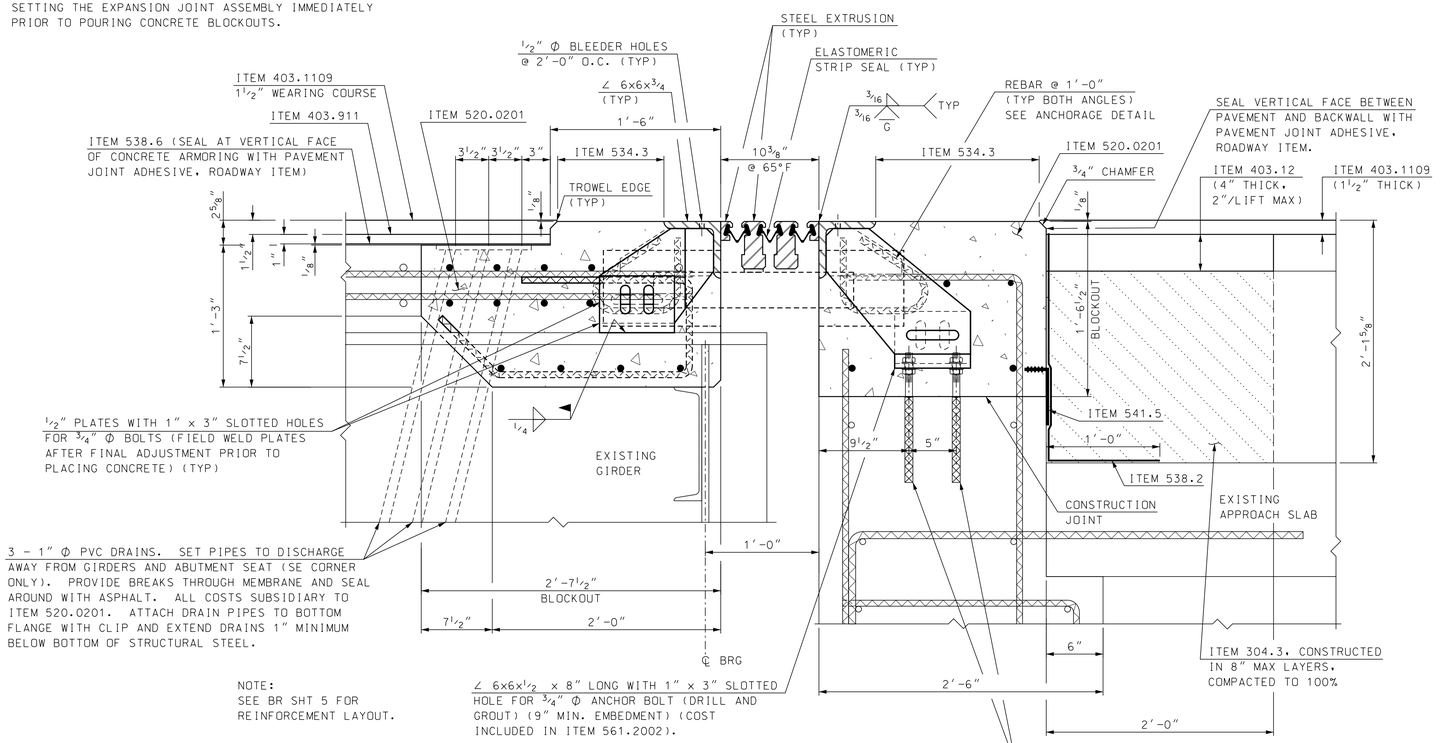
SECTION A-A REMOVAL

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

TEMPERATURE ADJUSTMENT TABLE	
TEMPERATURE	"T"
20°F	11 11/16"
35°F	11 1/4"
50°F	10 13/16"
65°F	10 3/8"
80°F	9 15/16"
95°F	9 1/2"

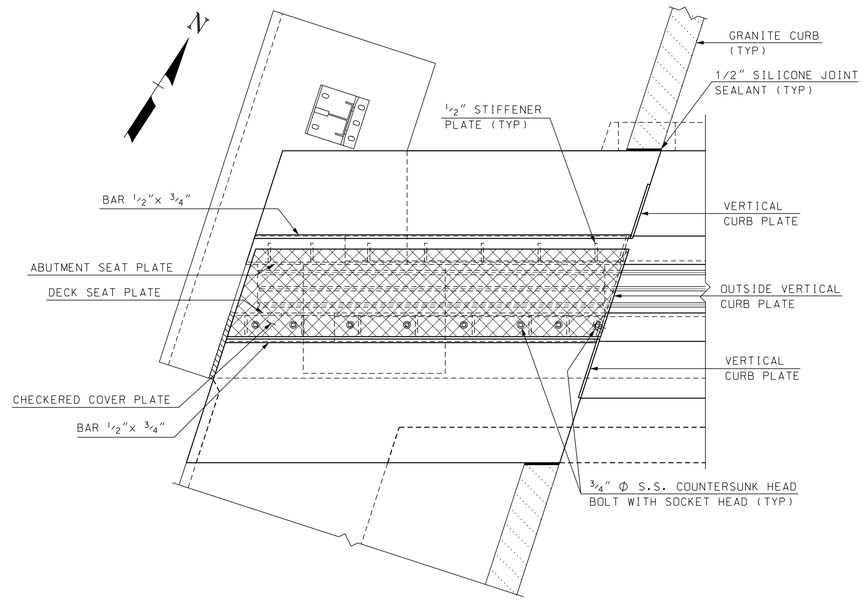
TEMPERATURE ADJUSTMENT NOTES

1. "T" DIMENSIONS ARE PERPENDICULAR TO FACE OF BACKWALL.
2. MINIMUM "T" WIDTH FOR SEAL INSTALLATION = 10 1/4" (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.



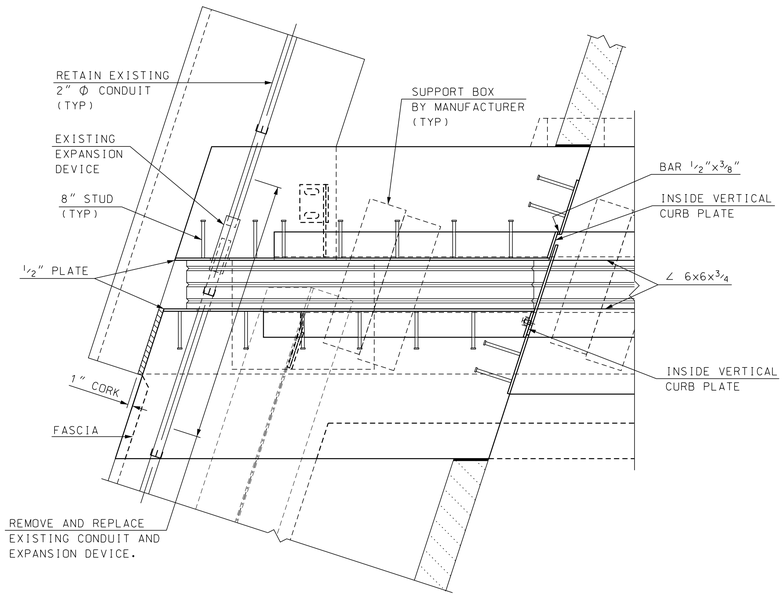
SECTION A-A CONSTRUCTION

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



UPPER ASSEMBLY

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



LOWER ASSEMBLY

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

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

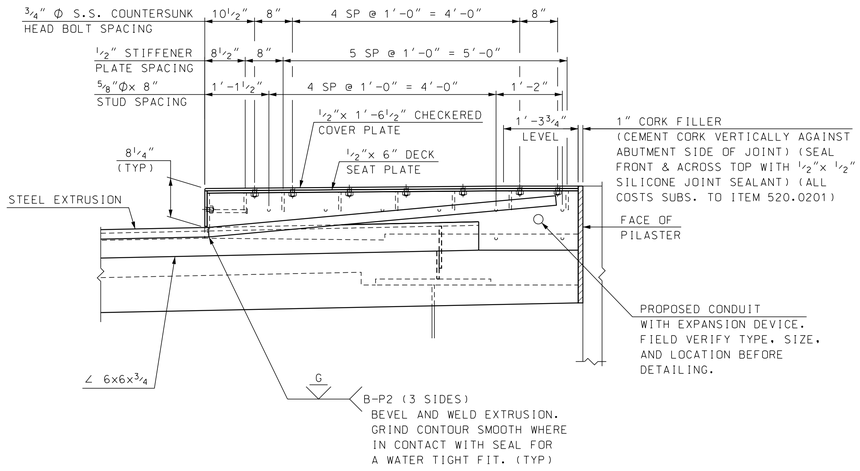
ABUTMENT B EXPANSION JOINT (2 OF 3)

BRIDGE SHEET 12 OF 18

FILE NUMBER 126-1-1

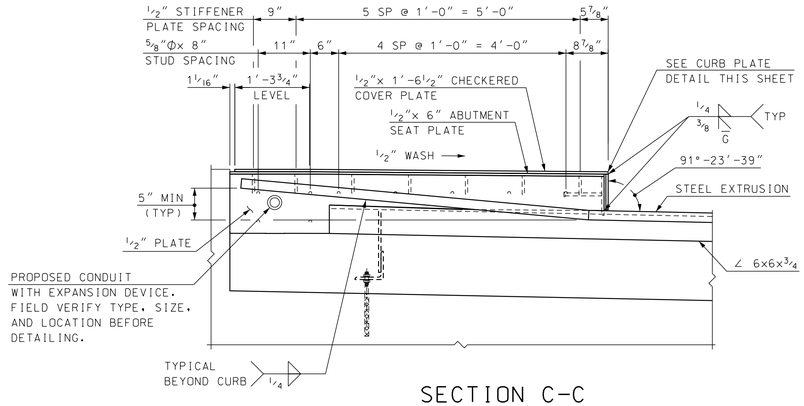
REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	JAT	12/13	CHECKED	SMG	8/14
	DRAWN	SMG	12/13	CHECKED	JAT	8/14
	QUANTITIES	SMG	9/14	CHECKED	JAT	9/14
	ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
	REV. DATE		----------		16	42

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\	28435 Exp Jt B	AS NOTED



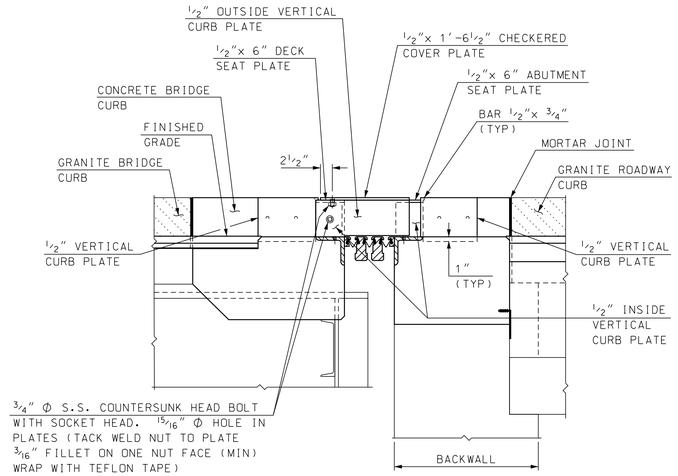
SECTION D-D

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



SECTION C-C

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



SECTION B-B

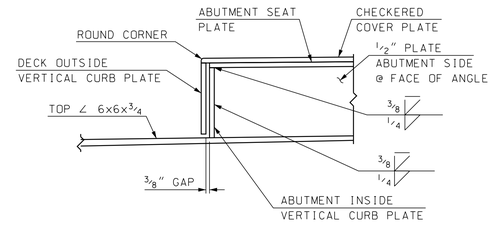
SCALE: 3/4" = 1'-0"

SECTION E-E

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

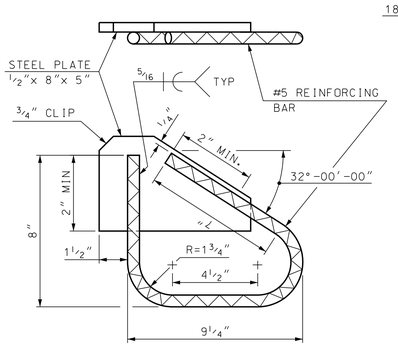
SECTION F-F

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



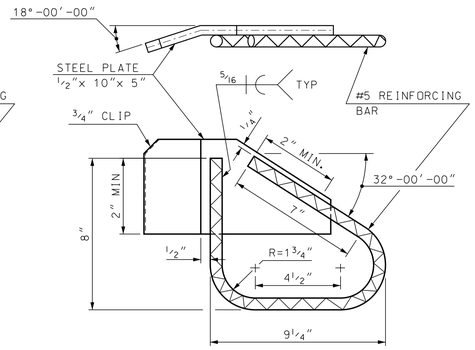
CURB PLATE DETAIL

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



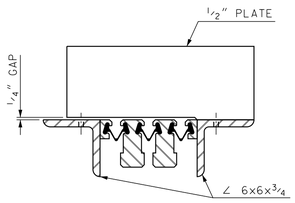
BACKWALL ANCHORAGE DETAIL

SCALE: 3" = 1'-0"



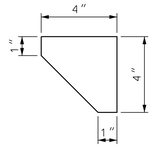
DECK SIDE ANCHORAGE DETAIL

SCALE: 3" = 1'-0"



DECK OUTSIDE VERTICAL CURB PLATE DETAIL

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



STIFFENER PLATE

SCALE: 3" = 1'-0"

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

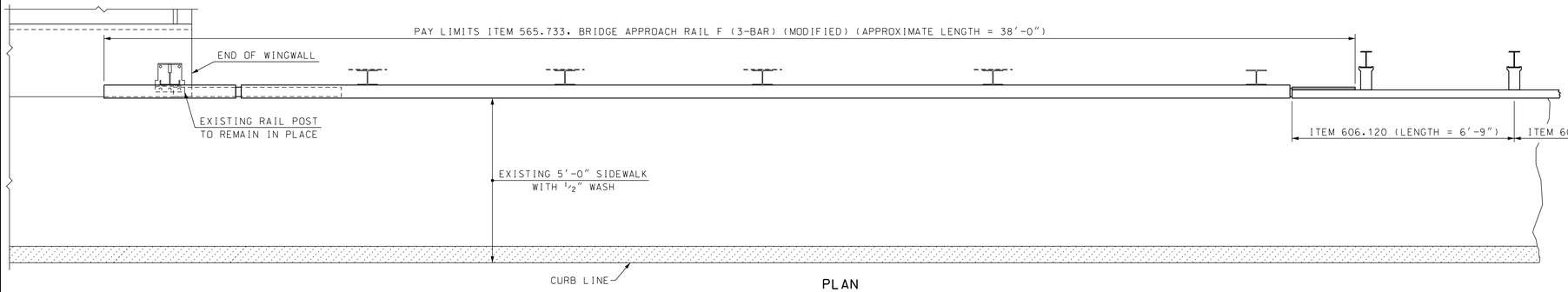
ABUTMENT B EXPANSION JOINT (3 OF 3)

BRIDGE SHEET 13 OF 18

REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	JAT	12/13	CHECKED	SMG	8/14
	DRAWN	SMG	12/13	CHECKED	JAT	8/14
	QUANTITIES	SMG	9/14	CHECKED	JAT	9/14
	ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
	REV. DATE		----------		17	42

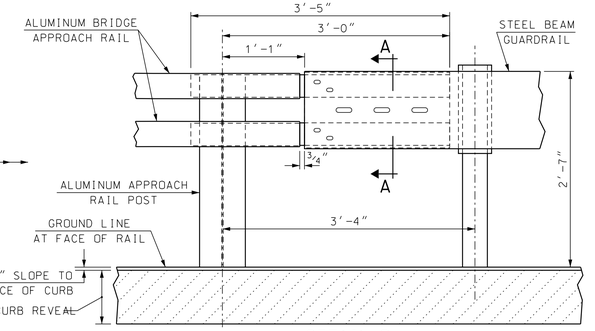
FILE NUMBER 126-1-1

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\	28435 Exp Jt B	AS NOTED



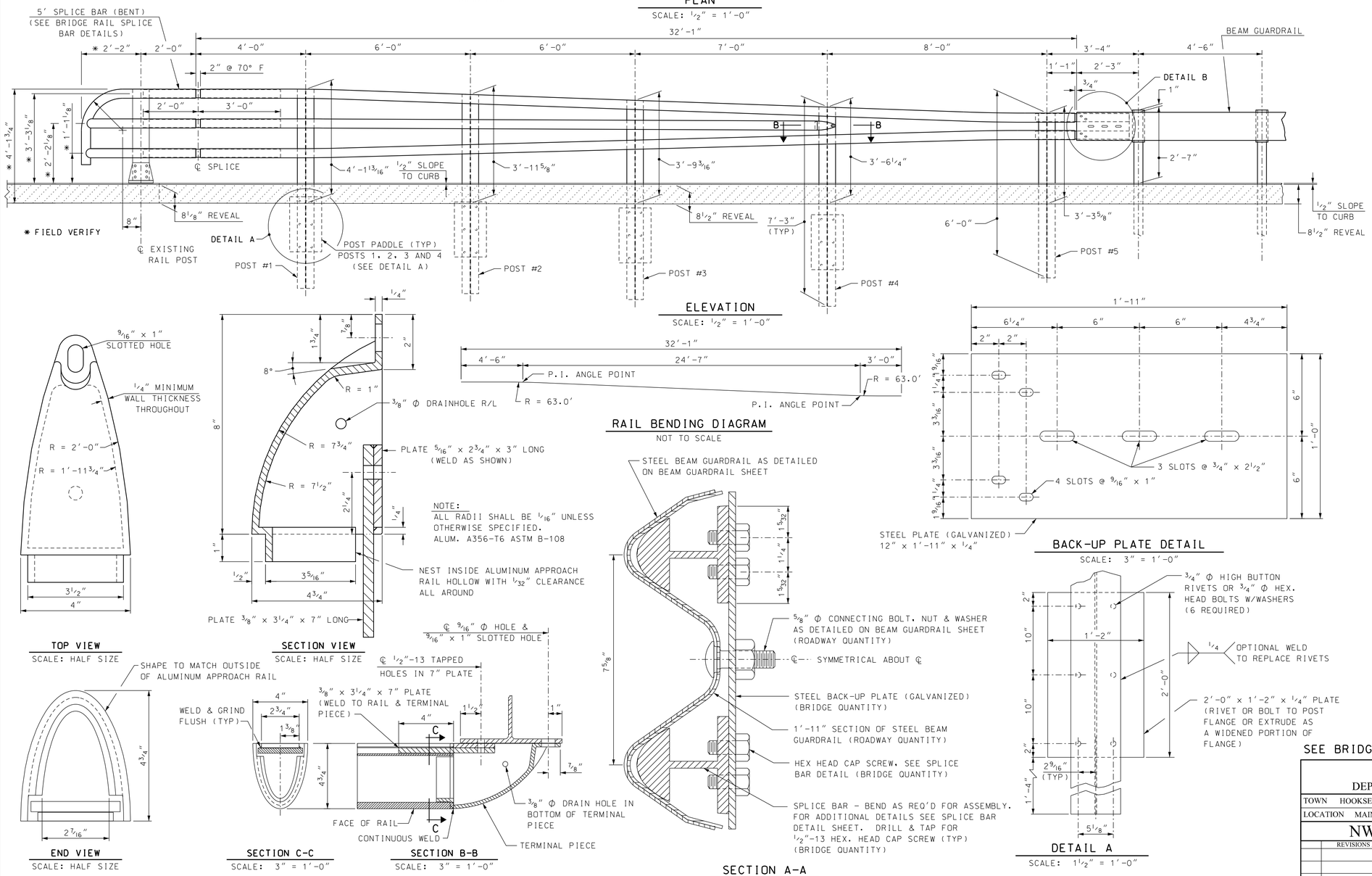
PLAN

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



DETAIL B

SCALE: 1" = 1'-0"

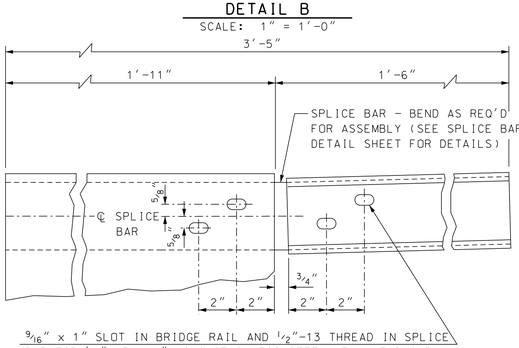


ELEVATION

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

BACK-UP PLATE DETAIL

SCALE: 3" = 1'-0"



9/16" x 1" SLOT IN BRIDGE RAIL AND 1/2"-13 THREAD IN SPLICE BAR FOR 1/2"-13 x 1" LONG STAINLESS STEEL HEX. HEAD CAP SCREW WITH 1 1/16" OUTSIDE Φ x 17/32" INSIDE Φ x 3/32" THICK ALUMINUM WASHER

SPLICE BAR DETAIL

SCALE: 3" = 1'-0"
(BACK VIEW)

TOP VIEW

SCALE: HALF SIZE

SECTION VIEW

SCALE: HALF SIZE

END VIEW

SCALE: HALF SIZE

SECTION C-C

SCALE: 3" = 1'-0"

SECTION B-B

SCALE: 3" = 1'-0"

TERMINAL PIECE DETAILS

32'-1"
4'-6" | 24'-7" | 3'-0"
P.I. ANGLE POINT
R = 63.0'
R = 63.0'
P.I. ANGLE POINT

RAIL BENDING DIAGRAM

NOT TO SCALE

SECTION A-A

HALF SCALE

DETAIL A

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

RAIL NOTES:

1. ALUMINUM BRIDGE RAIL SHALL NOT BE USED ON NATIONAL HIGHWAY SYSTEMS.
2. THE ALUMINUM BRIDGE RAIL SYSTEM SHOWN ON THIS SHEET IS IN COMPLIANCE WITH REQUIREMENTS PER NCHRP REPORT 350 AND ACCEPTED FOR TL-2 (FHWA LETTER 1997) FOR DESIGN SPEEDS ≤ 45 mph.
3. RAIL POSTS SHALL BE NORMAL TO FINISHED GRADE.
4. JOINTS IN RAIL LENGTH SHALL BE SPLICED AS DETAILED.
5. ENDS OF TUBE SECTIONS SHALL BE SAWED OR MILLED.
6. CUT ENDS SHALL BE TRUE AND SMOOTH.
7. GRIND ALL EDGES SMOOTH.

MATERIAL NOTES:

1. ALUMINUM EXTRUSIONS (POSTS, RAILS, SPLICE BARS, PINS AND CLAMP BARS) SHALL BE ASTM B221, ALLOY 6061-T6 OR ALLOY 6351-T5 (MINIMUM 10% ELONGATION).
2. STEEL EMBEDDED JAM AND HEX NUTS SHALL BE ASTM A563 GRADE A OR BETTER.
3. ALUMINUM WASHERS SHALL BE ASTM B209, ALLOY 2024-T3 ALCLAD.
4. RETROREFLECTIVE DELINEATORS, FIELD DRILLING OF POSTS, STAINLESS STEEL (TYPE 304) BOLTS, NUTS & WASHERS SHALL BE SUBSIDIARY TO ITEM 565.733. SEE STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION (DL-1) FOR ADDITIONAL DETAILS AND SPACING.

SEE BRIDGE SHEET 15 FOR RAIL POST - FRONT ELEVATION

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

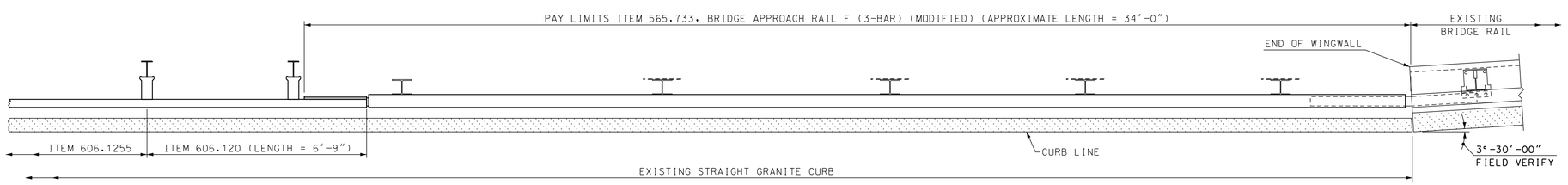
NW ALUMINUM APPROACH RAIL (3-BAR)

BRIDGE SHEET 14 OF 18

REVISIONS AFTER PROPOSAL	BY	DATE		BY	DATE
	DESIGNED NHDOT	9/87	CHECKED NHDOT		
	DRAWN GMC/PJP	4/06	CHECKED PJP/MGL	4/06	
	QUANTITIES		CHECKED		
	ISSUE DATE ---		FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
	REV. DATE 3/30/14		----------	18	42

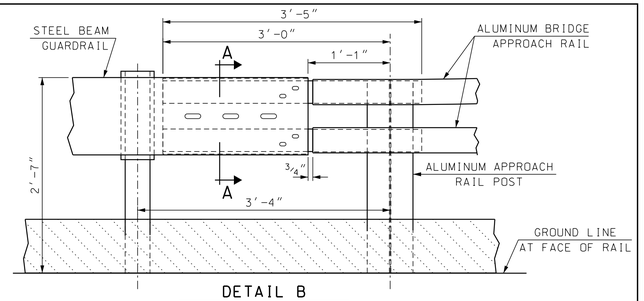
FILE NUMBER 126-1-1

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\STANDARDS	APP-3BAR-SW_SP	AS NOTED



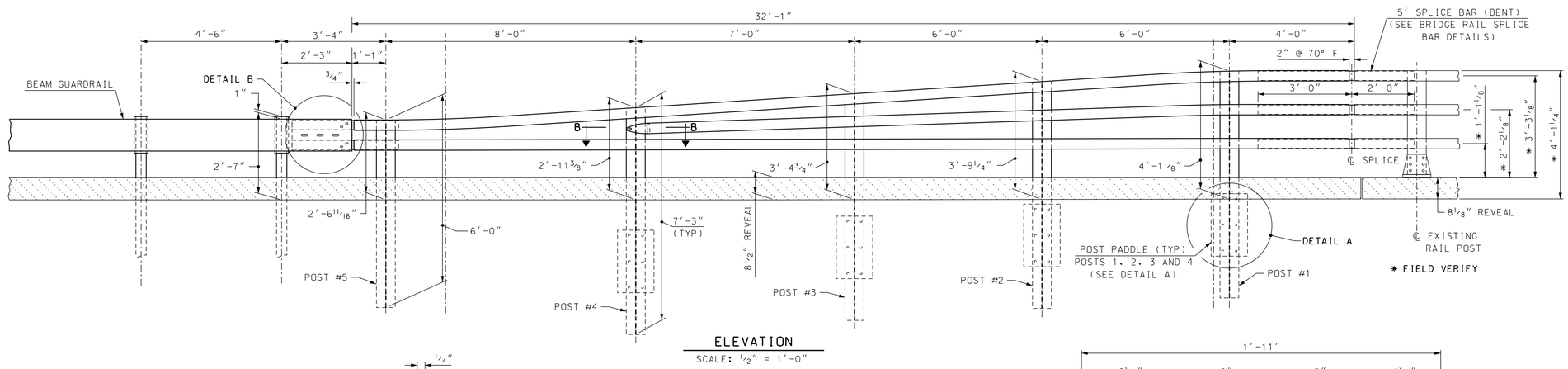
PLAN

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



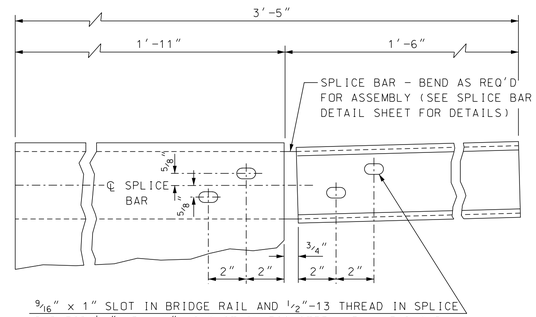
DETAIL B

SCALE: 1" = 1'-0"



ELEVATION

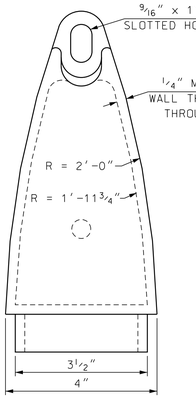
SCALE: 1/2" = 1'-0"



9/16" x 1" SLOT IN BRIDGE RAIL AND 1/2"-13 THREAD IN SPLICE BAR FOR 1/2"-13 x 1" LONG STAINLESS STEEL HEX. HEAD CAP SCREW WITH 1 1/16" OUTSIDE Φ x 17/32" INSIDE Φ x 3/32" THICK ALUMINUM WASHER

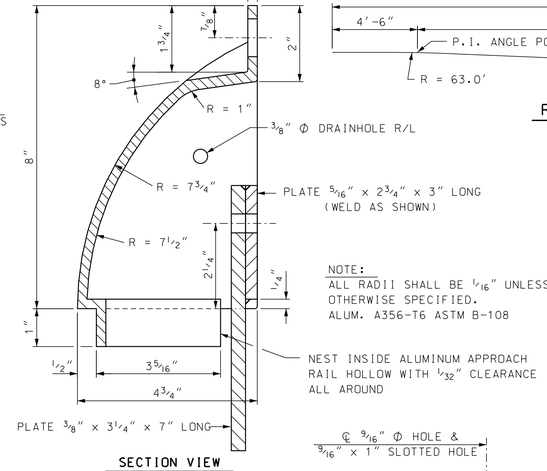
SPLICE BAR DETAIL

SCALE: 3" = 1'-0"
(BACK VIEW)



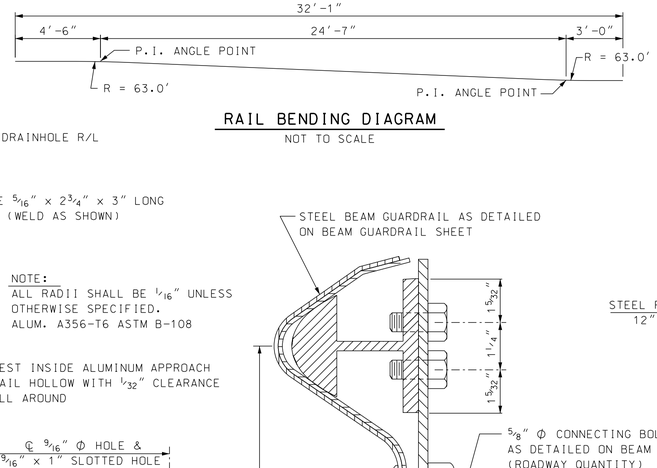
TOP VIEW

SCALE: HALF SIZE



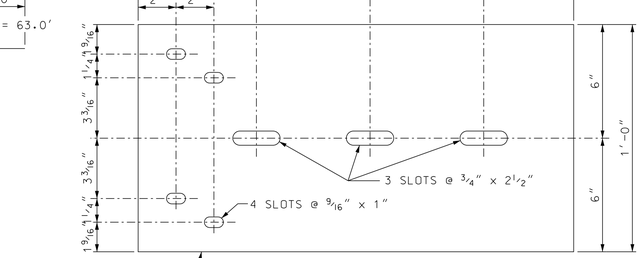
SECTION VIEW

SCALE: HALF SIZE



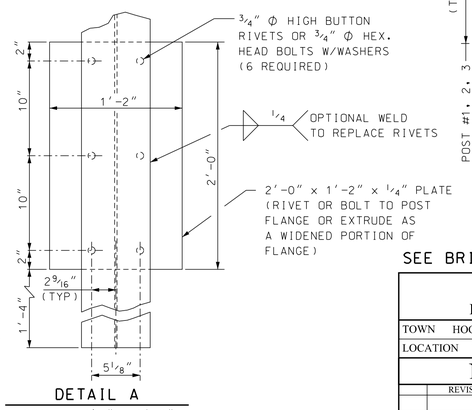
RAIL BENDING DIAGRAM

NOT TO SCALE



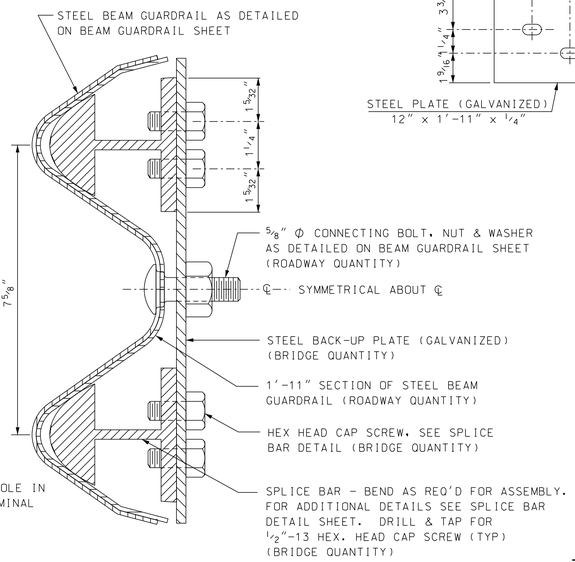
BACK-UP PLATE DETAIL

SCALE: 3" = 1'-0"



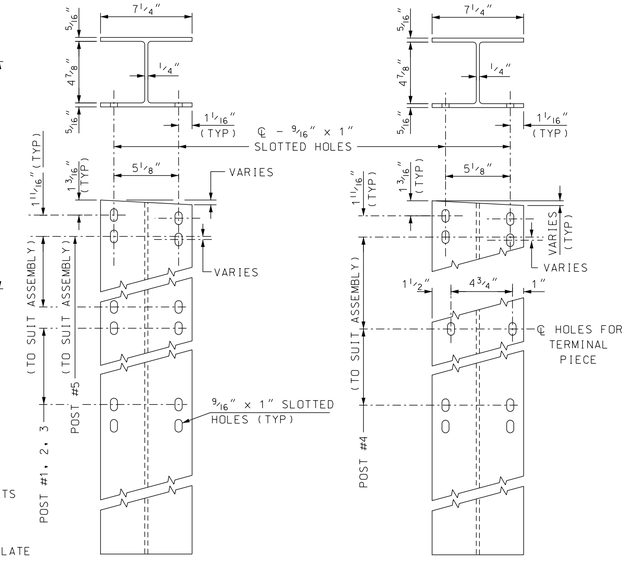
DETAIL A

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



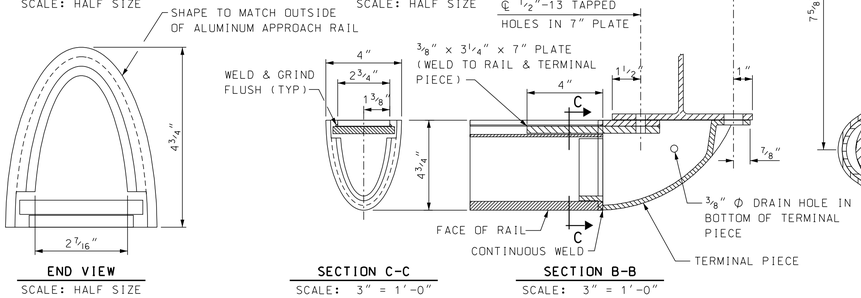
SECTION A-A

HALF SCALE



RAIL POST - FRONT ELEVATION

SCALE: 2" = 1'-0"



END VIEW

SCALE: HALF SIZE

SECTION C-C

SCALE: 3" = 1'-0"

SECTION B-B

SCALE: 3" = 1'-0"

TERMINAL PIECE DETAILS

SEE BRIDGE SHEET 14 FOR RAIL AND MATERIAL NOTES

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

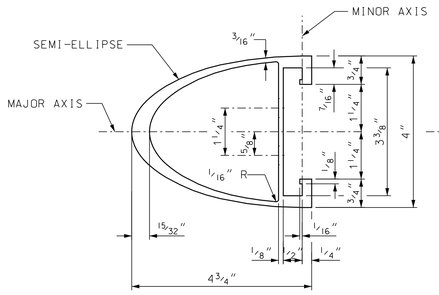
NE ALUMINUM APPROACH RAIL (3-BAR)

BRIDGE SHEET 15 OF 18

REVISIONS AFTER PROPOSAL	BY	DATE	BY	DATE
	DESIGNED NHDOT	9/87	CHECKED NHDOT	
	DRAWN SMG	4/06	CHECKED PJP/MGL	4/06
	QUANTITIES		CHECKED	
	ISSUE DATE ---		FEDERAL PROJECT NO. ----------	SHEET NO. 19
	REV. DATE 3/30/14			TOTAL SHEETS 42

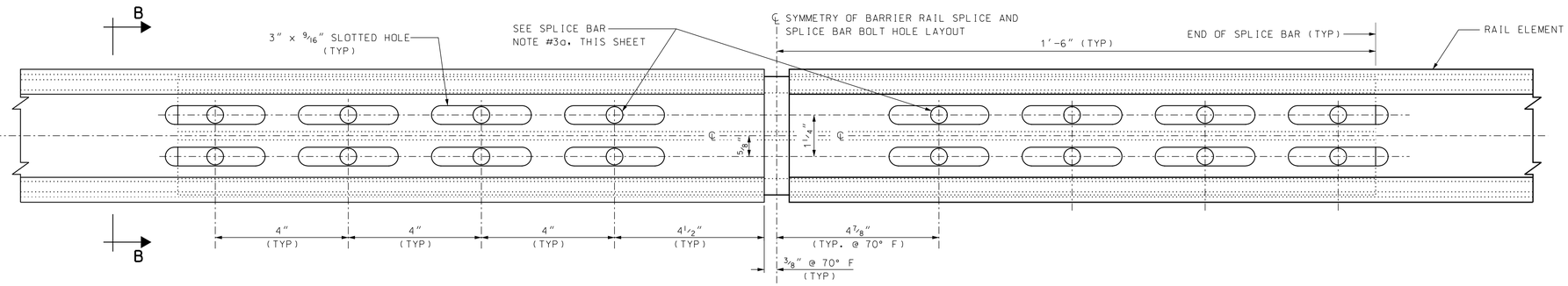
FILE NUMBER 126-1-1

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\STANDARDS	APP-3BAR-BC_SP	AS NOTED



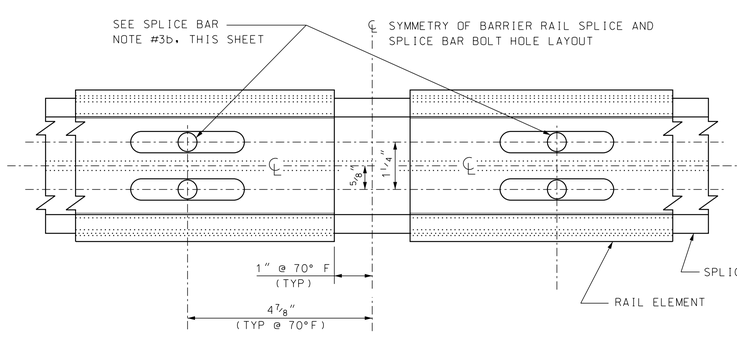
SECTION B-B

HALF SIZE



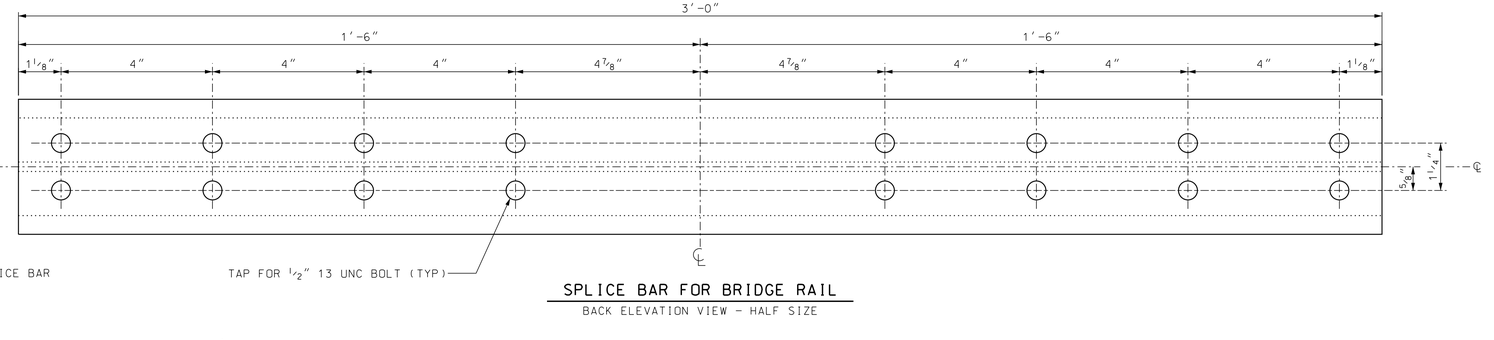
STANDARD SPLICE ASSEMBLY DETAIL

BACK ELEVATION VIEW - HALF SIZE



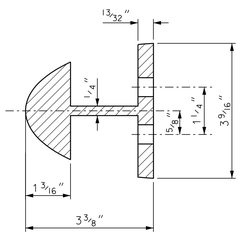
SPLICE ASSEMBLY DETAIL AT BRIDGE EXPANSION JOINT

BACK ELEVATION VIEW - HALF SIZE



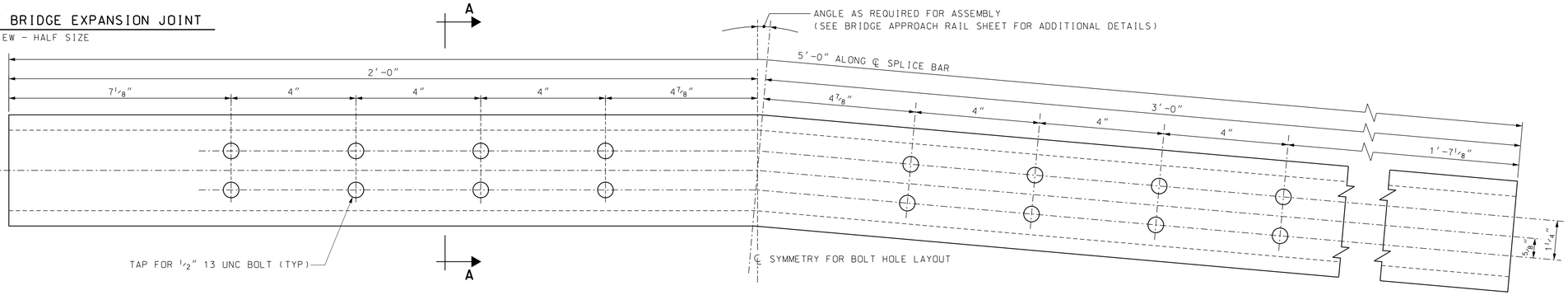
SPLICE BAR FOR BRIDGE RAIL

BACK ELEVATION VIEW - HALF SIZE



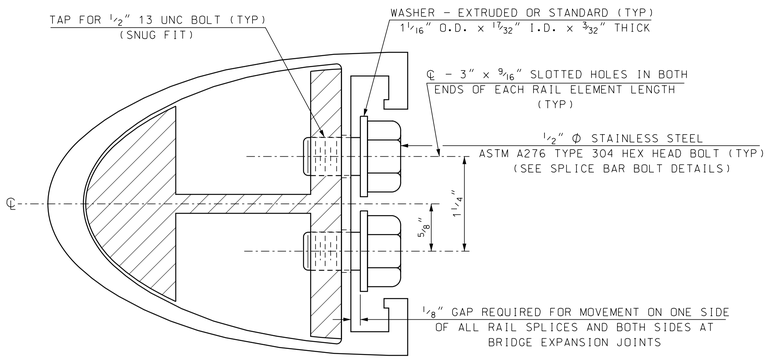
SECTION A-A

HALF SIZE



SPLICE BAR FOR BRIDGE APPROACH RAIL

BACK ELEVATION VIEW - HALF SIZE



BRIDGE RAIL & SPLICE BAR - ASSEMBLY DETAIL

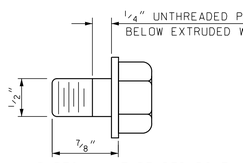
SECTION VIEW - FULL SCALE

SPLICE BAR NOTES

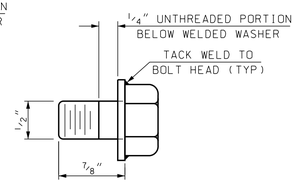
(1) FOR MATERIALS SPECIFICATIONS AND ADDITIONAL DETAILS, SEE THE BRIDGE RAIL AND BRIDGE APPROACH RAIL SHEETS.

(2) ALL BRIDGE RAILS AND BRIDGE APPROACH RAILS SHALL HAVE SLOTTED HOLES AT BOTH ENDS OF EACH RAIL ELEMENT.

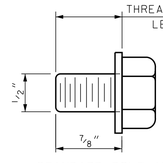
(3) THE SPLICE BAR SHALL BE ATTACHED TO THE RAIL ELEMENT AS FOLLOWS:
- (a) THE STANDARD SPLICE FOR BOTH BRIDGE AND APPROACH RAILS SHALL BE FASTENED ON ONE SIDE USING STANDARD BOLTS & WASHERS TIGHTENED SECURELY. THE OTHER SIDE OF THE SPLICE SHALL USE THE PARTIALLY THREADED BOLT WITH EITHER THE EXTRUDED WASHER OR THE WELDED WASHER, TIGHTENED SECURELY TO THE END OF THE THREADS, AND LEAVING A 1/8" GAP. THIS ALLOWS EXPANSION ON ONE SIDE OF THE JOINT.
- (b) THE RAIL SPLICE AT THE BRIDGE EXPANSION JOINT SHALL BE FASTENED ON BOTH SIDES OF THE RAIL SPLICE USING THE PARTIALLY THREADED BOLTS, WITH EITHER THE EXTRUDED WASHER OR THE WELDED WASHER, TIGHTENED SECURELY TO THE END OF THE THREADS, AND LEAVING A 1/8" GAP. THIS ALLOWS EXPANSION ON BOTH SIDES OF THE JOINT.



PARTIALLY THREADED BOLT WITH EXTRUDED WASHER



PARTIALLY THREADED BOLT WITH WELDED WASHER



STANDARD BOLT AND WASHER

SPLICE BAR BOLT DETAILS

FULL SIZE

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN HOOKSETT | BRIDGE NO. 080\148 | STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

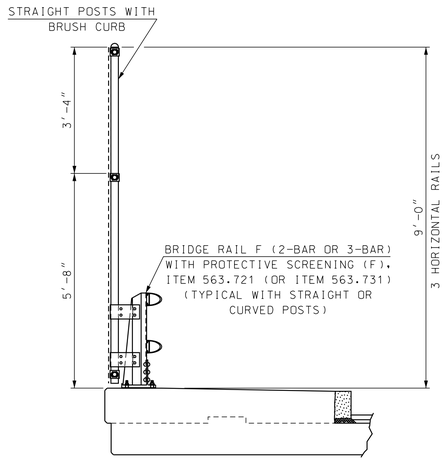
ALUMINUM RAIL SPLICE BAR DETAILS

BRIDGE SHEET 16 OF 18

FILE NUMBER 126-1-1

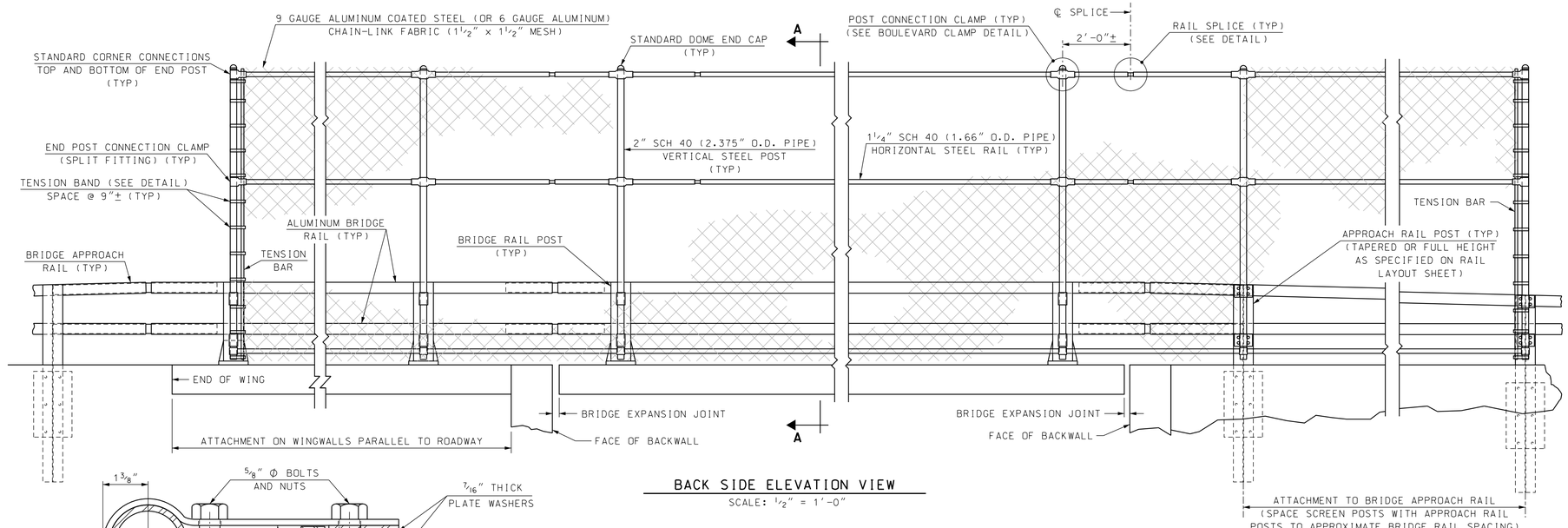
REVISIONS AFTER PROPOSAL	BY	DATE		BY	DATE
	DESIGNED NHDOT	9/87	CHECKED	NHDOT	
	DRAWN NDS/MTG	4/01	CHECKED	PJP	6/01
	QUANTITIES		CHECKED		

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE	ISSUE DATE	10/87	FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
BRC\STANDARDS	AL-SPLICEBAR	AS NOTED	REV. DATE	12/20/13	----------	20	42



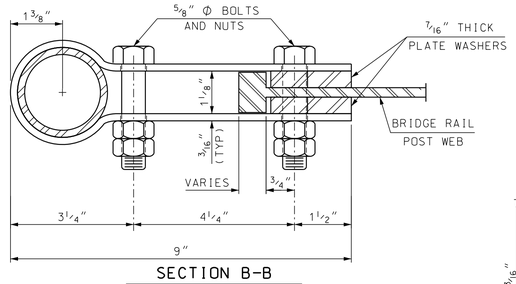
SECTION A-A

SCALE: $\frac{1}{2}$" = 1'-0"



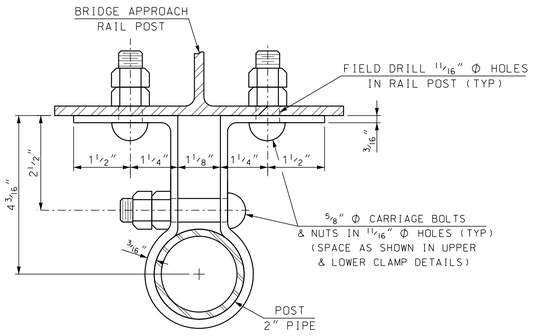
BACK SIDE ELEVATION VIEW

SCALE: $\frac{1}{2}$" = 1'-0"



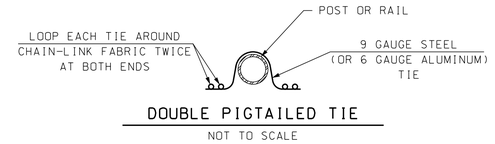
SECTION B-B

SCALE: 6" = 1'-0"



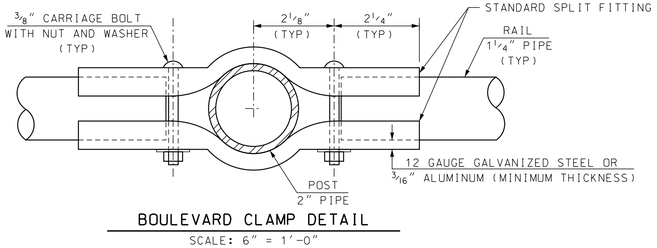
CLAMP AT APPROACH RAIL

SCALE: 6" = 1'-0"



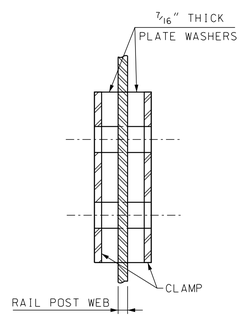
DOUBLE PIGTAILED TIE

NOT TO SCALE



BOULEVARD CLAMP DETAIL

SCALE: 6" = 1'-0"



SECTION C-C

SCALE: 6" = 1'-0"

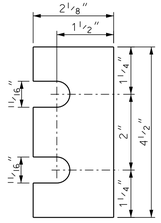
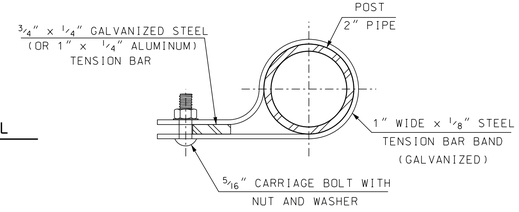


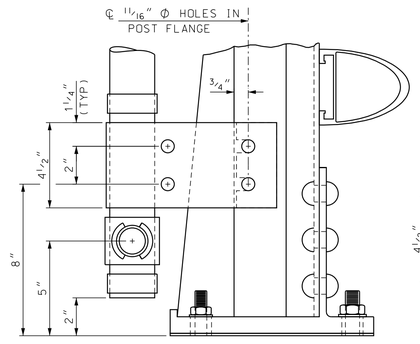
PLATE WASHER DETAIL

SCALE: 6" = 1'-0"



TENSION BAND DETAIL

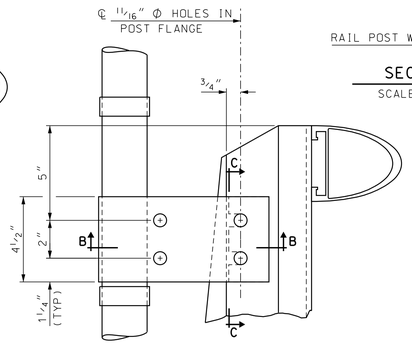
SCALE: 6" = 1'-0"



LOWER CLAMP DETAILS

TYPICAL WITH 2-BAR & 3-BAR RAIL
(BASE OF FENCE)

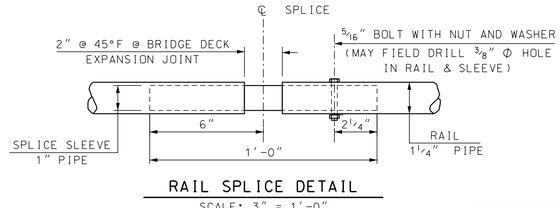
SCALE: 3" = 1'-0"



UPPER CLAMP DETAILS

TYPICAL WITH 2-BAR & 3-BAR RAIL
(TOP OF RAIL POST)

SCALE: 3" = 1'-0"



RAIL SPLICE DETAIL

SCALE: 3" = 1'-0"

GENERAL NOTES

(1) CHAIN-LINK FABRIC SHALL BE 9 GAUGE STEEL, ZINC-COATED CONFORMING TO AASHTO M 181, TYPE I, CLASS D (ASTM A 392), ALUMINUM-COATED CONFORMING TO AASHTO M 181, TYPE II (ASTM A 491) OR 6 GAUGE ALUMINUM ALLOY CONFORMING TO AASHTO M 181, TYPE III (ASTM F 1183). CHAIN-LINK FABRIC SHALL BE KNUCKLED ON TOP AND BOTTOM. THE SIZE OF WIRE MESH (FABRIC) SHALL BE 1 1/2".

(2) WIRE TIES SHALL BE STANDARD ROUND 9 GAUGE ZINC- OR ALUMINUM-COATED STEEL OR 6 GAUGE ALUMINUM ALLOY CONFORMING TO ASTM F 626. ALL TIES SHALL BE WRAPPED AROUND CHAIN-LINK FABRIC TWICE (DOUBLE PIGTAILED) AT BOTH ENDS. SPACE TIES @ 6" O.C. TO BOTTOM RAIL AND @ 12" O.C. TO ALL POSTS AND OTHER RAILS.

(3) POST AND RAIL PIPE SHALL BE HOT-DIP GALVANIZED STEEL CONFORMING TO AASHTO M 181, GRADE 1 (ASTM F 1083) OR ALUMINUM ALLOY CONFORMING TO AASHTO M 181 (ASTM B 429, ALLOY 6063-T6). ALL PIPE SHALL BE SCHEDULE 40, STANDARD WEIGHT. NOMINAL PIPE SIZES ARE SHOWN ON THE DRAWING.

(4) TENSION BARS, BAR BANDS, BOULEVARD AND END CLAMPS SHALL BE STEEL OR ALUMINUM ALLOY CONFORMING TO AASHTO M 181 (ASTM F 626). STEEL COMPONENTS SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH AASHTO M 111 (ASTM A 123) OR AASHTO M 232 (ASTM A 153) AS APPLICABLE.

(5) ALL BOLTS AND NUTS SHALL BE STEEL CONFORMING TO ASTM A 307 AND ASTM A 563 GRADE A RESPECTIVELY. WASHERS SHALL BE HARDENED STEEL COMMERCIAL TYPE A PLAIN AND SHALL MEET THE DIMENSIONAL REQUIREMENTS OF ANSI B18.22. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH AASHTO M 111 (ASTM A 123) OR AASHTO M 232 (ASTM A 153) AS APPLICABLE.

(6) RAIL SPLICES SHALL BE PROVIDED AT BRIDGE DECK EXPANSION JOINT(S) AND BRIDGE RAIL SPLICES AS DIRECTED BY THE CONTRACTOR ADIMINISTRATOR.

(7) RAIL MAY BE FIELD CUT (SAWN) TO FIT POST SPACING. GALVANIZED RAIL, CUT OR DRILLED AS ALLOWED, SHALL BE TOUCHED-UP IN ACCORDANCE WITH 563.3.2.2.3.

(8) ALL COSTS FOR CHAIN-LINK FABRIC, POSTS, RAILS AND APPURTENANCES SHALL BE INCLUDED IN ITEM 563.971, PROTECTIVE SCREENING FOR OVERPASS STRUCTURES RAIL F.

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

PROTECTIVE SCREENING FOR ALUMINUM BRIDGE RAIL

BRIDGE SHEET 17 OF 18

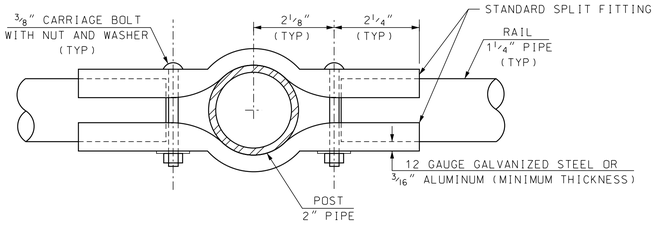
FILE NUMBER 126-1-1

REVISIONS AFTER PROPOSAL		BY	DATE

				BY	DATE
DESIGNED			CHECKED	NHDOT	6/06
DRAWN	PJP	6/06	CHECKED	MGL	6/06
QUANTITIES			CHECKED		
ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
REV. DATE		----------		21	42

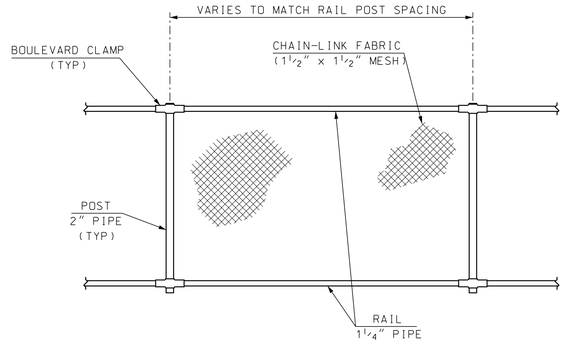
SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\STANDARD	AL-RAIL_PROSCRN	AS NOTED

AL-RAIL_PROSCRN.dgn Default 10/1/2014 8:16:30 AM n18smg



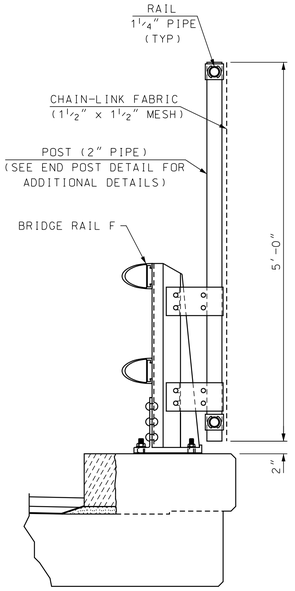
BOULEVARD CLAMP DETAIL

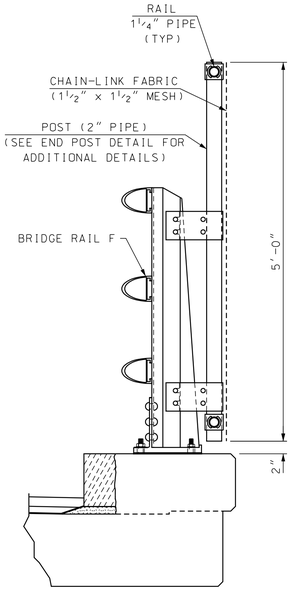
SCALE: 6" = 1'-0"



ELEVATION - SNOW SCREENING

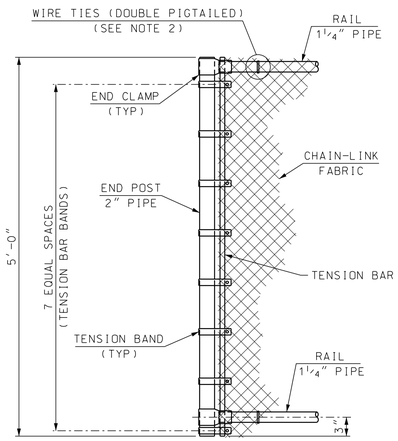
SCALE: 1/2" = 1'-0"





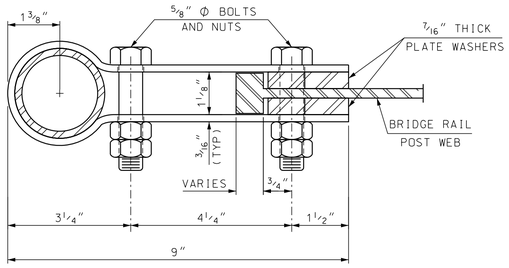
TYPICAL SECTIONS

SCALE: 1" = 1"-0"



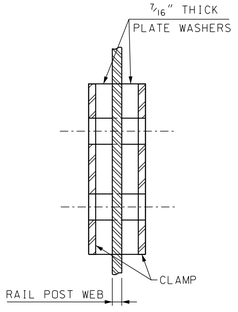
END POST DETAIL

SCALE: 1" = 1"-0"



SECTION A-A

SCALE: 6" = 1'-0"



SECTION B-B

SCALE: 6" = 1'-0"

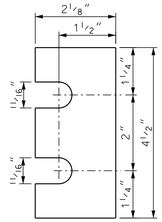
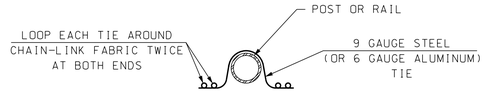


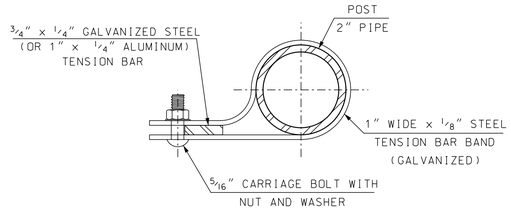
PLATE WASHER DETAIL

SCALE: 6" = 1'-0"



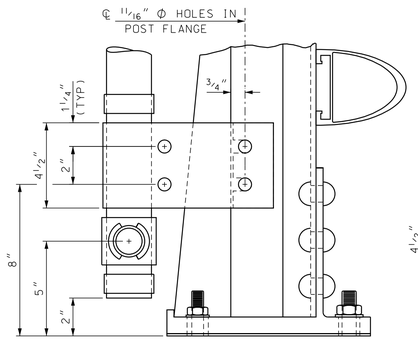
DOUBLE PIGTAILED TIE

NOT TO SCALE



TENSION BAND DETAIL

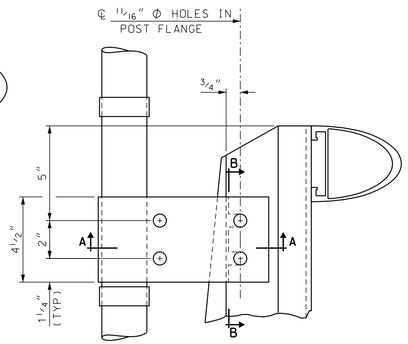
SCALE: 6" = 1'-0"



LOWER CLAMP DETAILS

TYPICAL WITH 2-BAR & 3-BAR RAIL (BASE OF FENCE)

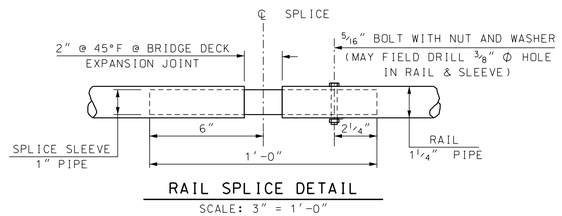
SCALE: 3" = 1'-0"



UPPER CLAMP DETAILS

TYPICAL WITH 2-BAR & 3-BAR RAIL (TOP OF RAIL POST)

SCALE: 3" = 1'-0"



RAIL SPLICE DETAIL

SCALE: 3" = 1'-0"

GENERAL NOTES

(1) CHAIN-LINK FABRIC SHALL BE 9 GAUGE STEEL, ZINC-COATED CONFORMING TO AASHTO M 181, TYPE I, CLASS D (ASTM A 392), ALUMINUM-COATED CONFORMING TO AASHTO M 181, TYPE II (ASTM A 491) OR 6 GAUGE ALUMINUM ALLOY CONFORMING TO AASHTO M 181, TYPE III (ASTM F 1183). CHAIN-LINK FABRIC SHALL BE KNUCKLED ON TOP AND BOTTOM. THE SIZE OF WIRE MESH (FABRIC) SHALL BE 1 1/2".

(2) WIRE TIES SHALL BE STANDARD ROUND 9 GAUGE ZINC- OR ALUMINUM-COATED STEEL OR 6 GAUGE ALUMINUM ALLOY CONFORMING TO ASTM F 626. ALL TIES SHALL BE WRAPPED AROUND CHAIN-LINK FABRIC TWICE (DOUBLE PIGTAILED) AT BOTH ENDS. SPACE TIES @ 6" O.C. TO BOTTOM RAIL AND @ 12" O.C. TO ALL POSTS AND OTHER RAILS.

(3) POST AND RAIL PIPE SHALL BE HOT-DIP GALVANIZED STEEL CONFORMING TO AASHTO M 181, GRADE 1 (ASTM F 1083) OR ALUMINUM ALLOY CONFORMING TO AASHTO M 181 (ASTM B 429, ALLOY 6063-T6). ALL PIPE SHALL BE SCHEDULE 40, STANDARD WEIGHT. NOMINAL PIPE SIZES ARE SHOWN ON THE DRAWING.

(4) TENSION BARS, BAR BANDS, BOULEVARD AND END CLAMPS SHALL BE STEEL OR ALUMINUM ALLOY CONFORMING TO AASHTO M 181 (ASTM F 626). STEEL COMPONENTS SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH AASHTO M 111 (ASTM A 123) OR AASHTO M 232 (ASTM A 153) AS APPLICABLE.

(5) ALL BOLTS AND NUTS SHALL BE STEEL CONFORMING TO ASTM A 307 AND ASTM A 563 GRADE A RESPECTIVELY. WASHERS SHALL BE HARDENED STEEL COMMERCIAL TYPE A PLAIN AND SHALL MEET THE DIMENSIONAL REQUIREMENTS OF ANSI B18.22. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH AASHTO M 111 (ASTM A 123) OR AASHTO M 232 (ASTM A 153) AS APPLICABLE.

(6) RAIL SPLICES SHALL BE PROVIDED AT BRIDGE DECK EXPANSION JOINT(S) AND BRIDGE RAIL SPLICES AS DIRECTED BY THE CONTRACT ADMINISTRATOR.

(7) RAIL MAY BE FIELD CUT (SAWN) TO FIT POST SPACING. GALVANIZED RAIL, CUT OR DRILLED AS ALLOWED, SHALL BE TOUCHED-UP IN ACCORDANCE WITH 563.3.2.2.3.

(8) ALL COSTS FOR CHAIN-LINK FABRIC, POSTS, RAILS AND APPURTENANCES SHALL BE INCLUDED IN ITEM 563.973, SNOW SCREENING FOR OVERPASS STRUCTURES RAIL F.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

SNOW SCREENING FOR ALUMINUM BRIDGE RAIL

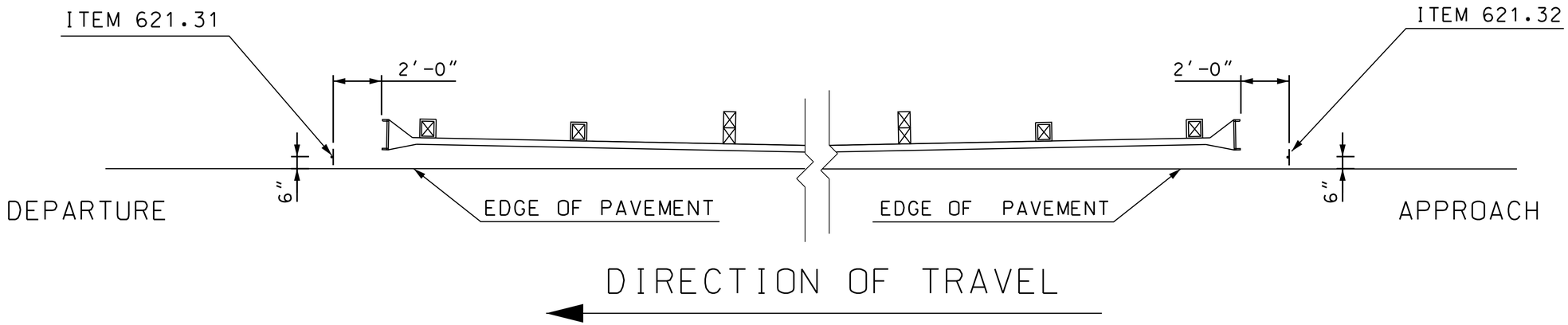
BRIDGE SHEET 18 OF 18

REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
		DESIGNED		CHECKED NHDOT		6/06
		DRAWN PJP	6/06	CHECKED MGL		6/06
		QUANTITIES		CHECKED		
		ISSUE DATE		FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
		REV. DATE		----------	22	42

FILE NUMBER 126-1-1

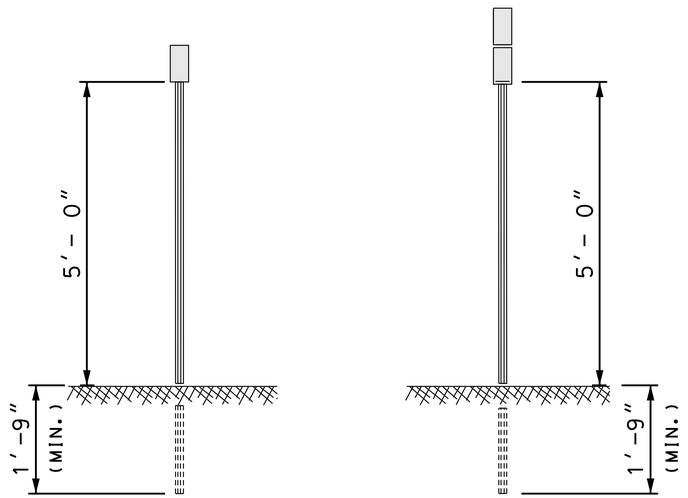
SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
XX	AL-RAIL_SNOWSCR	AS NOTED

Terminal Unit Delineation



ITEM 621.31
SINGLE DELINEATOR
WITH POST

ITEM 621.32
DOUBLE DELINEATOR
WITH POST



TYPICAL INSTALLATION

ITEM 621.31	SINGLE DELINEATOR WITH POST	WHITE 0	YELLOW 0	RED 0	GREEN 1
ITEM 621.32	DOUBLE DELINEATOR WITH POST	WHITE 0	YELLOW 0	RED 1	GREEN 0

REVISIONS AFTER PROPOSAL

NUMBER	DESCRIPTION	STATION	STATION	DATE

SDR PROCESSED NAME1 DATE DATE1
NEW DESIGN NAME2 DATE DATE2
SHEET CHECKED NAME3 DATE DATE3
AS BUILT DETAILS DATE

STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN
Terminal Unit Delineation

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
termunitdelin	28435	23	42

GENERAL NOTES

1. THE MAXIMUM RUNNING SLOPE OF ANY SIDEWALK CURB RAMP IS 12:1. THE MAXIMUM CROSS SLOPE IS 2%. THE SLOPE OF THE LANDING SHALL NOT EXCEED 2% IN ANY DIRECTION.

   RAMP RUNNING SLOPE EXCEPTION: A GREATER THAN 8.33% RAMP RUNNING GRADE IS ALLOWED WHERE THE THE ROADWAY AND THE SIDEWALK(S) ARE PARALLEL AND VERY CLOSE TOGETHER. WITH THE SAME GRADE. AND USING A GRADE OF 8.33% WOULD RESULT IN A RAMP LENGTH LONGER THAN 15'. IN THOSE CIRCUMSTANCES USE A MAXIMUM RAMP LENGTH OF 15'AND THE ALLOWABLE RUNNING SLOPE OF THE RAMP(S) IS GREATER THAN 8.33%.

2. TRANSITIONS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES. ROADWAY SHOULDER SLOPES ADJOINING SIDEWALK CURB RAMPS SHALL BE A MAXIMUM OF 5% (FULL WIDTH) FOR A DISTANCE OF 2 FT. FROM THE ROADWAY CURBLINE.

3. INTERCEPT DRAINAGE ALONG THE CURB IN ADVANCE OF SIDEWALK CURB RAMPS OR LANDINGS. CATCH BASINS. MANHOLES. ETC. SHALL NOT BE LOCATED IN. OR AT THE BASE OF. SIDEWALK CURB RAMPS OR LANDINGS.

4. THE BOTTOM OF THE SIDEWALK CURB RAMP OR LANDING. EXCLUSIVE OF THE FLARED SIDES. SHALL BE WHOLLY CONTAINED WITHIN THE CROSSWALK MARKINGS.

5. THE SURFACE OF A PERPENDICULAR SIDEWALK CURB RAMP OR THE LANDING OF A PARALLEL SIDEWALK CURB RAMP SHALL CONTRAST VISUALLY WITH THE ADJOINING SIDEWALK SURFACE. EITHER ASPHALT/LIGHT-COLORED CONCRETE OR LIGHT-COLORED CONCRETE/DARK-STAINED CONCRETE. THE CONCRETE SURFACE SHALL BE SLIP RESISTANT.

6. DETECTABLE WARNING PANELS SHALL BE THE FULL WIDTH OF THE LANDING. BLENDED TRANSITION. OR CURB RAMP THEY ARE A PART OF AND SHALL BE A MINIMUM OF 2 FEET IN DEPTH. THE ROWS OF TRUNCATED DOMES SHALL BE ALIGNED PERPENDICULAR TO THE GRADE BREAK BETWEEN THE RAMP. BLENDED TRANSITION. OR LANDING AND THE STREET.

TRANSITION RAMPS:

BLENDED TRANSITIONS HAVE A RUNNING SLOPE GREATER THAN 2% BUT LESS THAN 5%. CURB RAMPS HAVE A RUNNING SLOPE OF 5% MIN. TO 8.33% MAX. SIDEWALK. BLENDED TRANSITIONS. AND CURB RAMPS HAVE A MAX. CROSS SLOPE OF 2%.

ALL GRADE BREAKS BETWEEN LANDINGS. RAMPS. AND BLENDED TRANSITIONS SHALL BE PERPENDICULAR TO THE DIRECTION OF TRAVEL.

IF IT IS NECESSARY TO USE SIDEWALK WIDTHS 5'-0" OR LESS. PROVIDE A WIDENED AREA A MINIMUM OF 5'-0" WIDE BY 5'-0" LONG SPACED AT INTERVALS OF 200' MAXIMUM TO ALLOW FOR USERS TO PASS EACH OTHER.

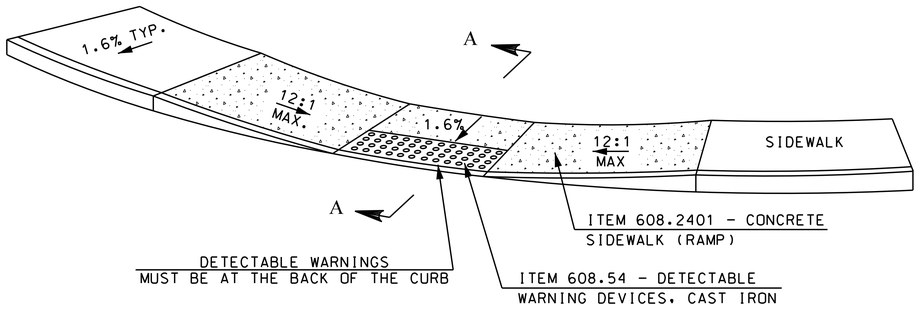
PROVIDE DETECTABLE WARNING SURFACES ANYTIME THAT A CURB RAMP. BLENDED TRANSITION. OR LANDING CONNECTS TO A STREET. PLACEMENT FOR DETECTABLE WARNING SURFACES ARE AS FOLLOWS:

PARALLEL CURB RAMPS:

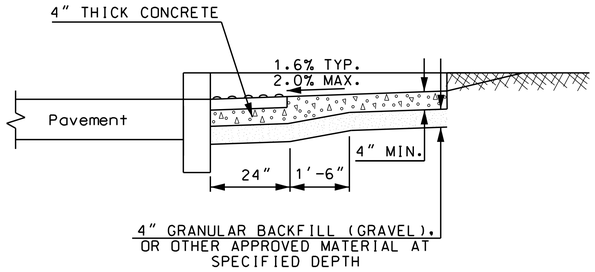
LOCATE THE DETECTABLE WARNING SURFACES AT THE BACK OF THE CURB ALONG THE EDGE OF THE LANDING.

FOR BLENDED TRANSITIONS AND LANDINGS:

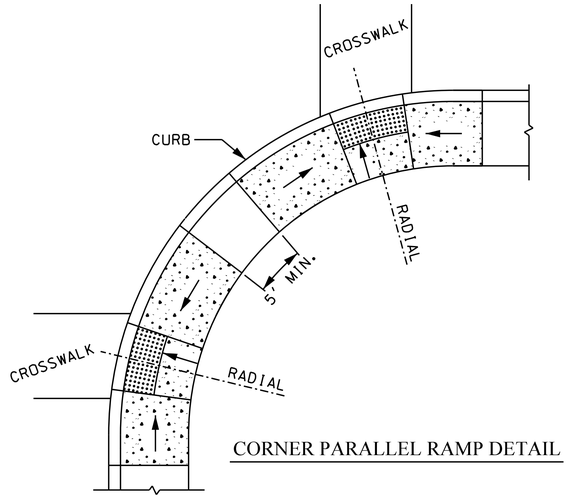
LOCATE THE DETECTABLE WARNING SURFACES AT THE BACK OF THE CURB.



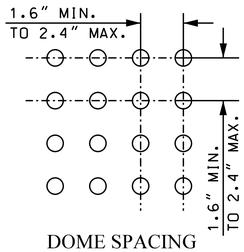
PARALLEL CURB RAMP DETAIL



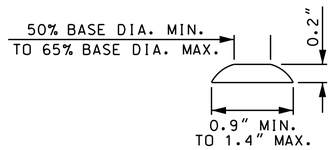
SECTION A-A



CORNER PARALLEL RAMP DETAIL



DOME SPACING



DOME SECTION

THE ORDER OF PREFERENCE FOR LOCATION OF CORNER RAMPS:

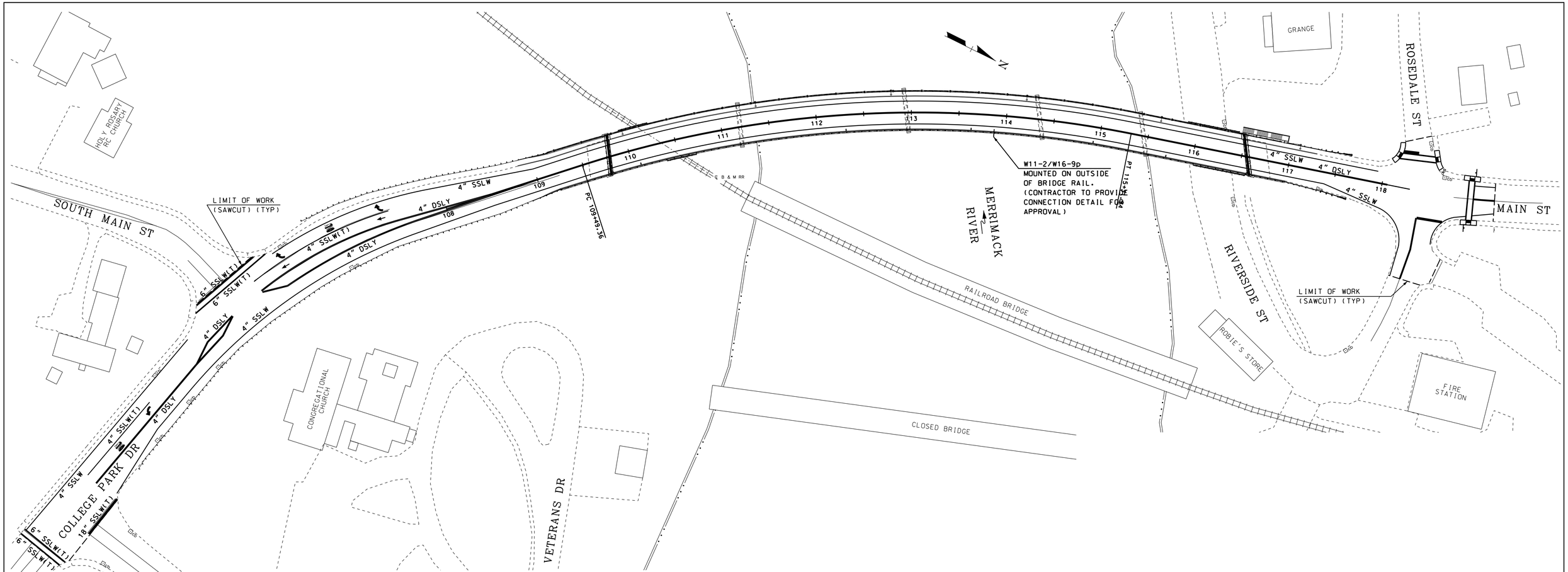
1. TWO SEPARATE RAMPS LOCATED ON TANGENT SIDEWALK AREA IMMEDIATELY OUTSIDE OF CORNER RADIUS.
2. TWO SEPARATE RAMPS SEPARATED BY 5' MINIMUM AS SHOWN ABOVE.
3. SINGLE RAMP SERVING TWO CROSSWALKS.

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION ∘ BUREAU OF HIGHWAY DESIGN

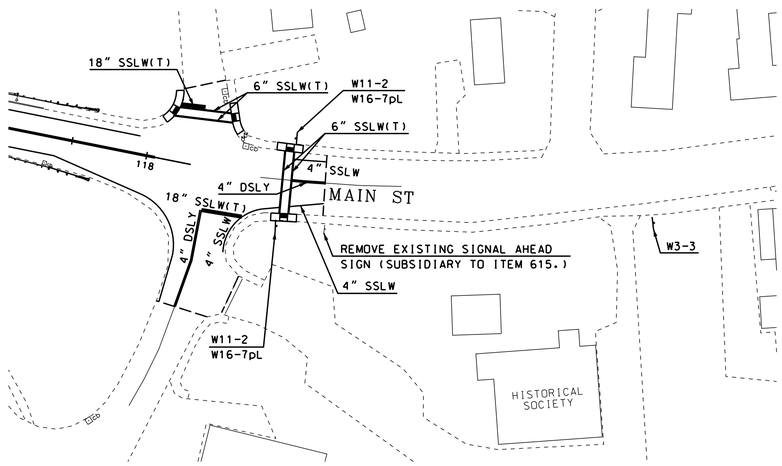
SIDEWALK CURB RAMPS WITH DETECTABLE WARNINGS

DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
crbrmp	28435	24	42



PLAN

SCALE: 1" = 50'-0"



PLAN

SCALE: 1" = 50'-0"

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

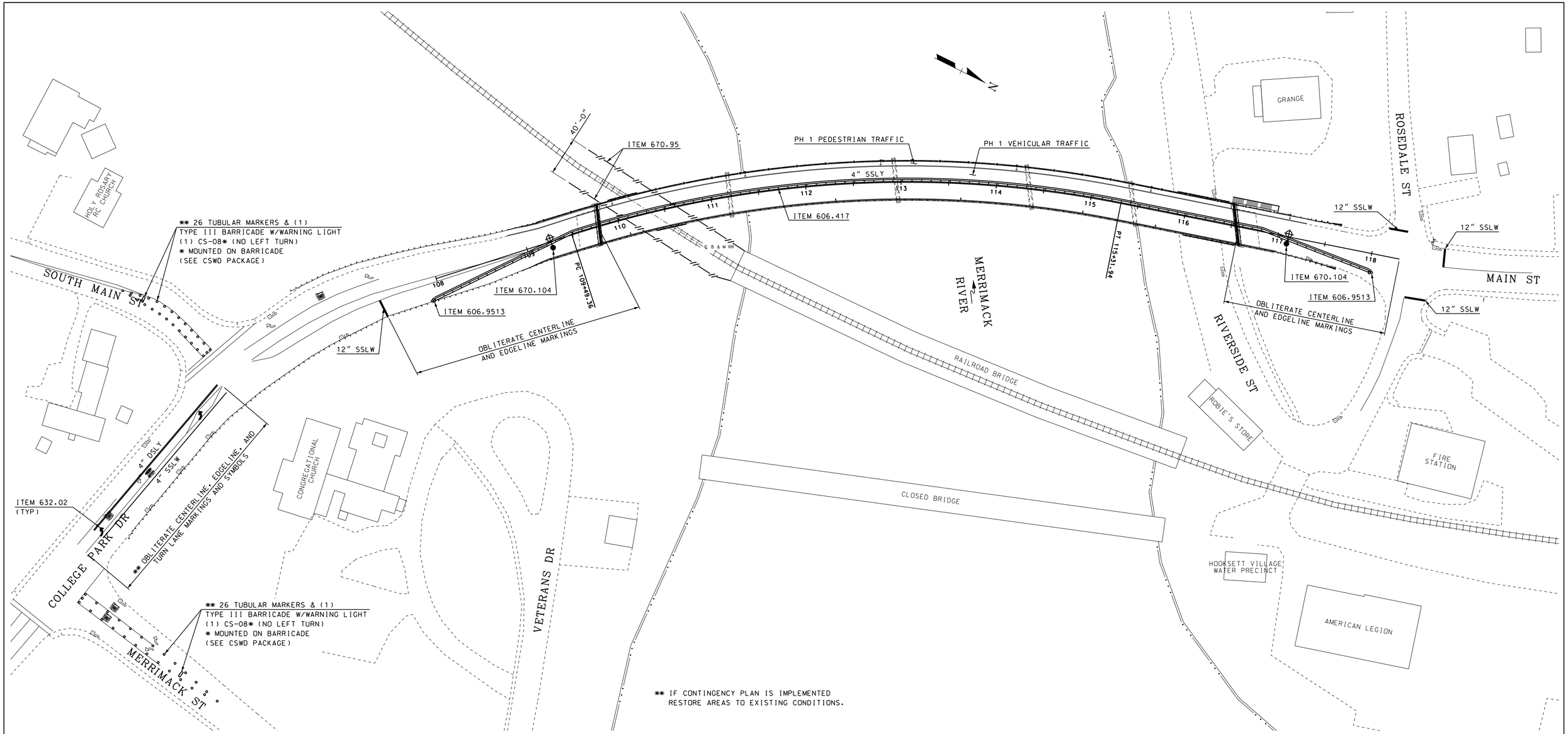
PAVEMENT MARKING & PERMANENT SIGNING

BRIDGE SHEET --- OF ---

REVISIONS AFTER PROPOSAL			BY	DATE		BY	DATE
		DESIGNED	JAT	8/14	CHECKED	SMG	8/14
		DRAWN	SMG	8/14	CHECKED	JAT	8/14
		QUANTITIES	SMG	9/14	CHECKED	JAT	9/14
		ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
		REV. DATE		----------		25	42

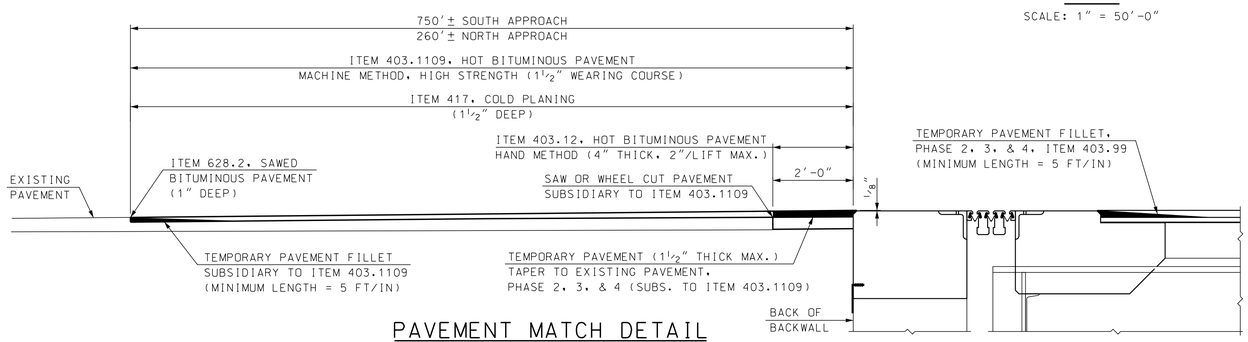
FILE NUMBER 126-1-1

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\	28435 Pavemark	AS NOTED



PLAN

SCALE: 1" = 50'-0"



PAVEMENT MATCH DETAIL

NOT TO SCALE

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

TRAFFIC CONTROL PHASE 1

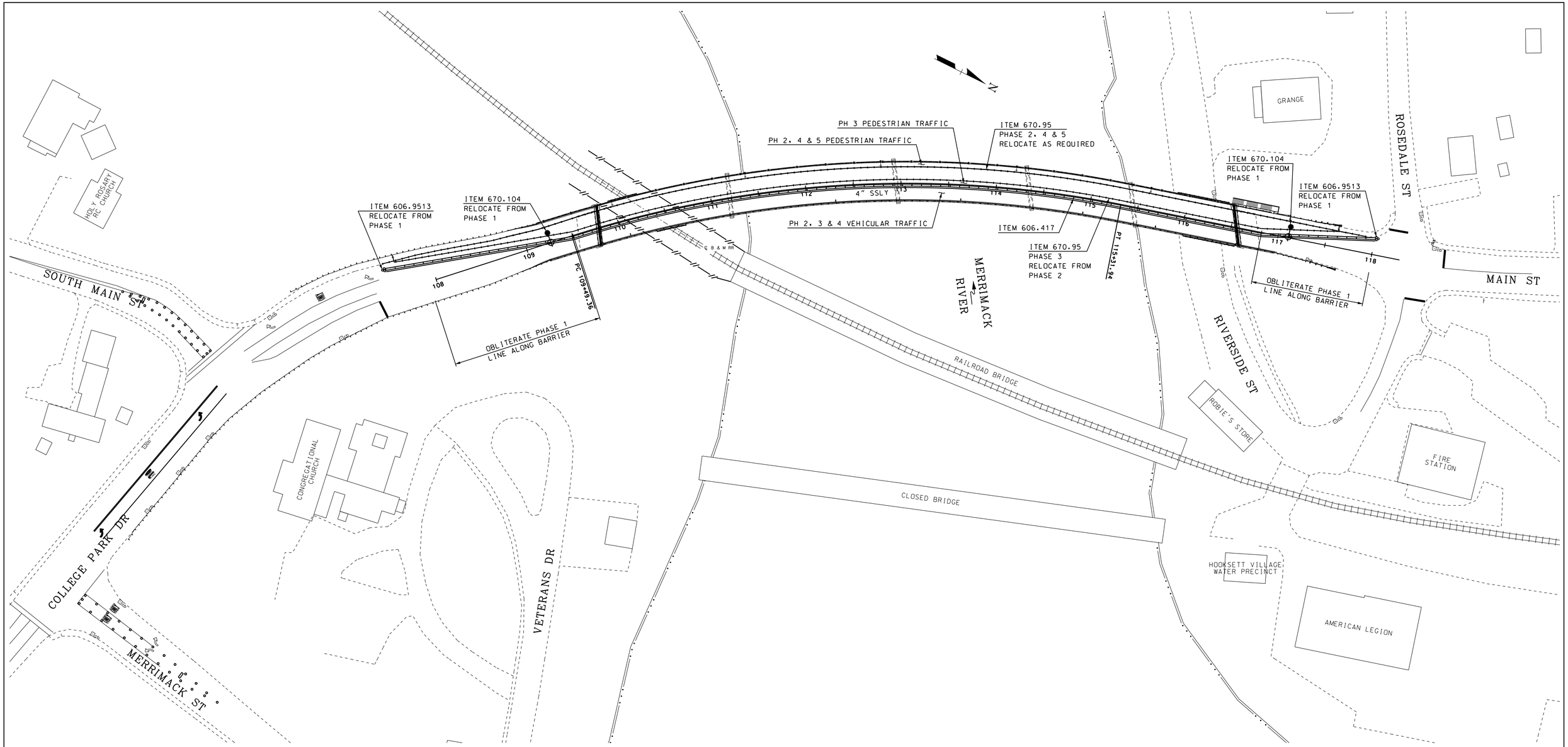
BRIDGE SHEET --- OF ---

REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	JAT	6/14	CHECKED	SMG	8/14
	DRAWN	SMG	6/14	CHECKED	JAT	8/14
	QUANTITIES	SMG	9/14	CHECKED	JAT	9/14
	ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	
	REV. DATE		----------		26	

FILE NUMBER 126-1-1

TOTAL SHEETS 42

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\	28435 Traf Control	AS NOTED



PLAN

SCALE: 1" = 50'-0"

STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION * BUREAU OF BRIDGE DESIGN

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

TRAFFIC CONTROL PHASE 2, 3 & 4

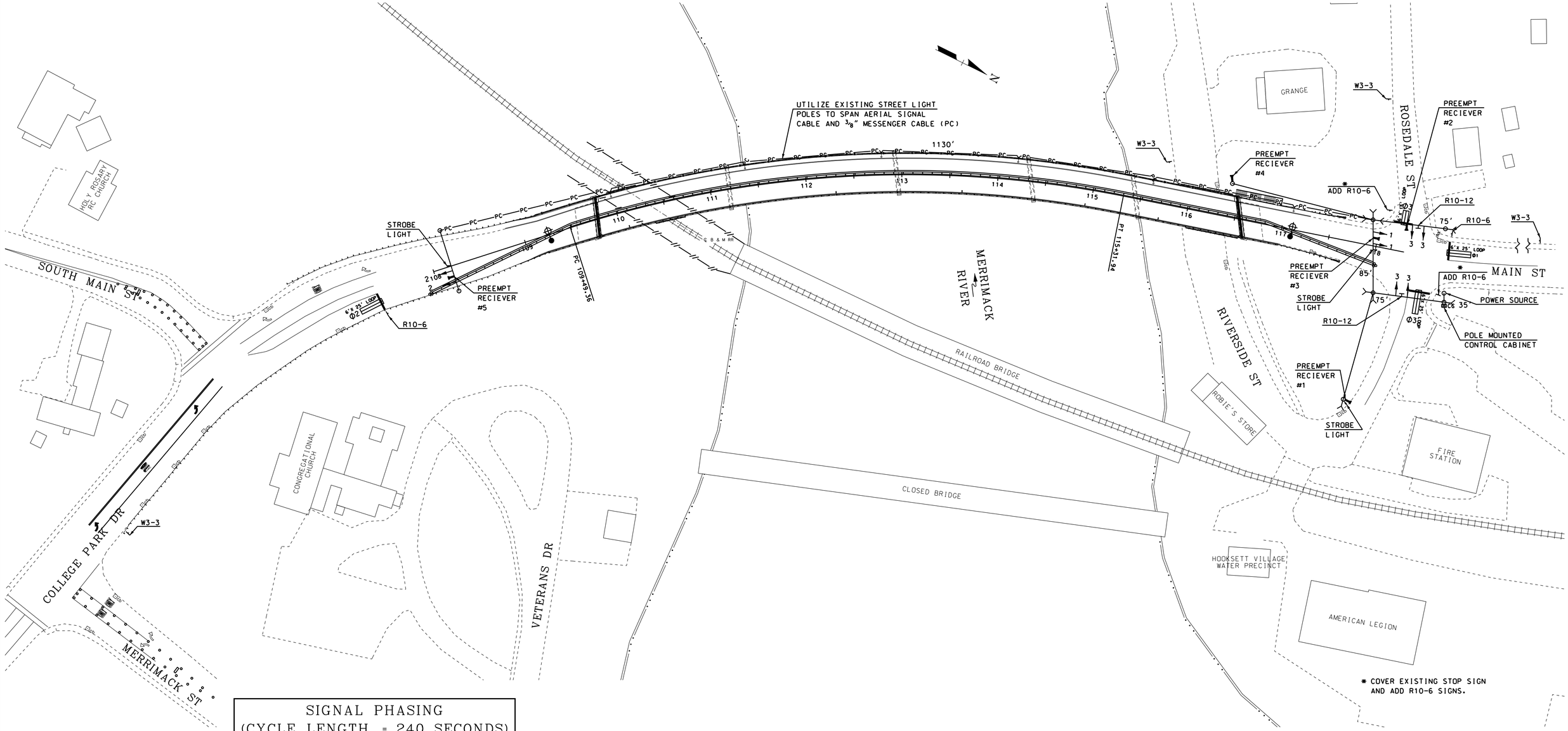
BRIDGE SHEET --- OF ---

REVISIONS AFTER PROPOSAL			BY	DATE		BY	DATE
		DESIGNED	JAT	6/14	CHECKED	SMG	8/14
		DRAWN	SMG	6/14	CHECKED	JAT	8/14
		QUANTITIES	SMG	9/14	CHECKED	JAT	9/14
		ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	
		REV. DATE		----------		27	

FILE NUMBER 126-1-1

TOTAL SHEETS 42

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\	28435 Traf Control	AS NOTED



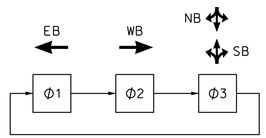
SIGNAL PHASING (CYCLE LENGTH = 240 SECONDS)

	Ø1	Ø2	Ø3	Ø4
TIMING IN SECONDS	EB ←	WB →	↑ ↓	
INITIAL INTERVAL	5	5	7	
VEHICLE EXTENSION	3	3	3	
MAXIMUM I (6AM - 9AM)	32	76	40	
MAXIMUM II (3PM - 7PM)	40	32	76	
OFF PEAK HOURS	28	62	58	
YELLOW	2	2	2	
ALL RED	42	42	2	
WALK/DON'T WALK	-	-	-	
PEDESTRIAN WALK	-	-	-	
PEDESTRIAN CLEAR	-	-	-	
FLASH	FR	FR	FR	
RECALL	ON	OFF	OFF	
DETECTOR	-	-	-	

TEMPORARY SIGNALS TO BE TIME-BASED COORDINATION WITH RTE 3A SIGNALS (70 SECONDS OFFSET), REFERENCED TO Ø2 START OF GREEN

PLAN

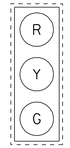
SCALE: 1" = 50'-0"



NOTE 1:
THE CONTRACTOR SHALL INSTALL ITEM 616.192 - ALTERATIONS TO TRAFFIC SIGNALS IN CONJUNCTION WITH ITEM 616.161 - TRAFFIC SIGNALS (TEMPORARY) IN PREPARATION TO EXECUTE, IF REQUIRED, THE CONTINGENCY PLAN IN A TIMELY MANNER.

SIGNAL HEADS

ALL LENSES 12" WITH 5" LOUVERED BACK PLATE



Ø1, Ø2, & Ø3

NOTE 2:
ALL GROUND-MOUNTED CONSTRUCTION SIGNS SHOWN ON THIS PLAN SHALL BE INSTALLED BY THE CONTACTOR AND ALL OVERHEAD SIGNS SHOWN ON THIS PLAN SHALL BE INSTALLED BY THE SIGNAL CONTRACTOR.

* COVER EXISTING STOP SIGN AND ADD R10-6 SIGNS.

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

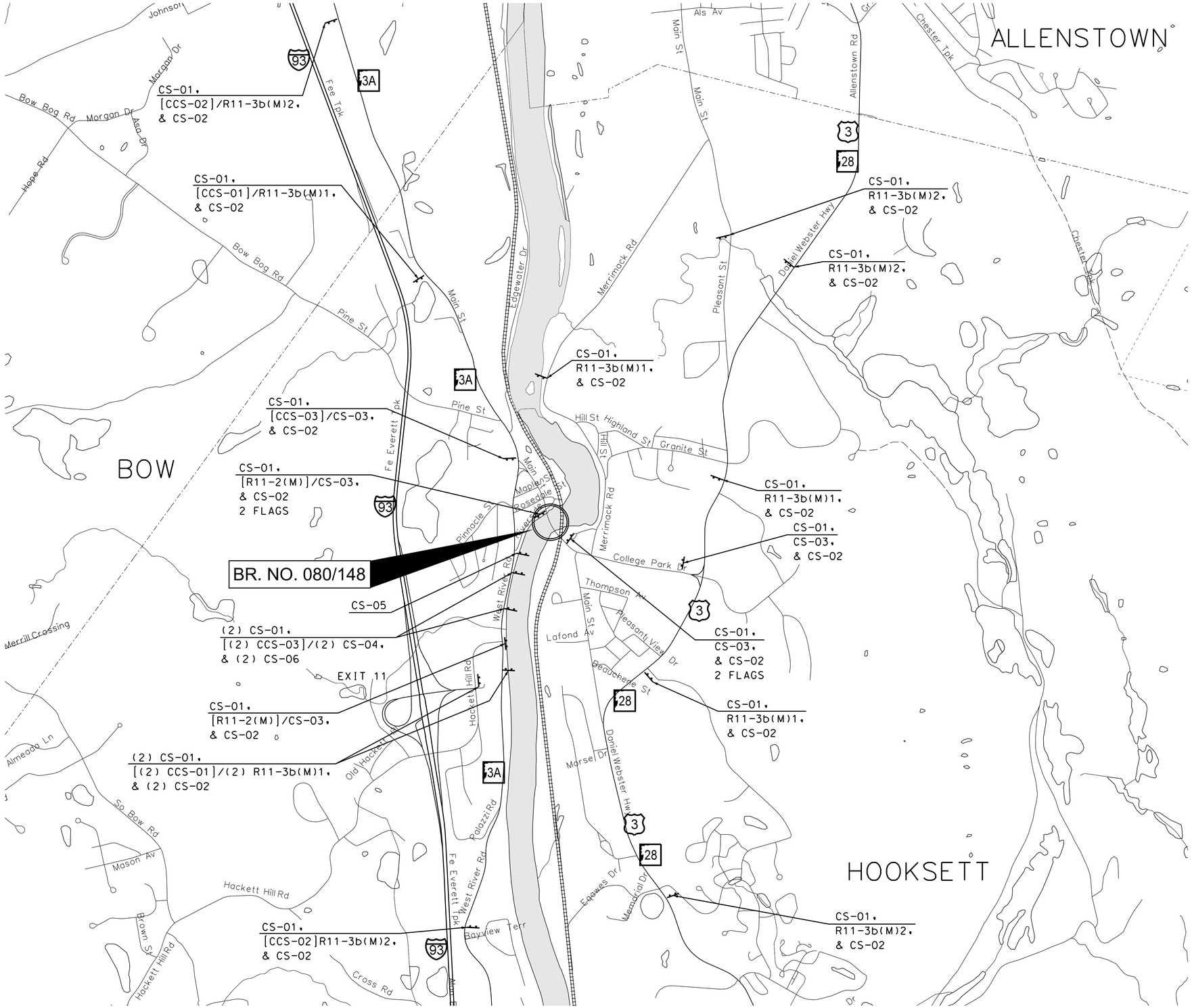
CONSTRUCTION SIGNAL PLAN

BRIDGE SHEET --- OF ---

REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	JAT	6/14	CHECKED	SMG	8/14
	DRAWN	SMG	6/14	CHECKED	JAT	8/14
	QUANTITIES	SMG	9/14	CHECKED	JAT	9/14

FILE NUMBER 126-1-1

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE	ISSUE DATE	FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
BRC\	28435 ConstSignal	AS NOTED	REV. DATE	----------	28	42



NOTE:
SIGNS SHOWN WITH [SIGN]/ DESIGNATION ARE CONTINGENCY PLAN SIGNS THAT ARE TO BE MOUNTED BEHIND THE SIGN DESIGNATION FOLLOWING THE /. EXAMPLE [CCS-03]/CS-03 MEANS SIGN CCS-03 IS TO BE MOUNTED BEHIND SIGN CS-03.

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

TOWN HOOKSETT | BRIDGE NO. 080\148 | STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

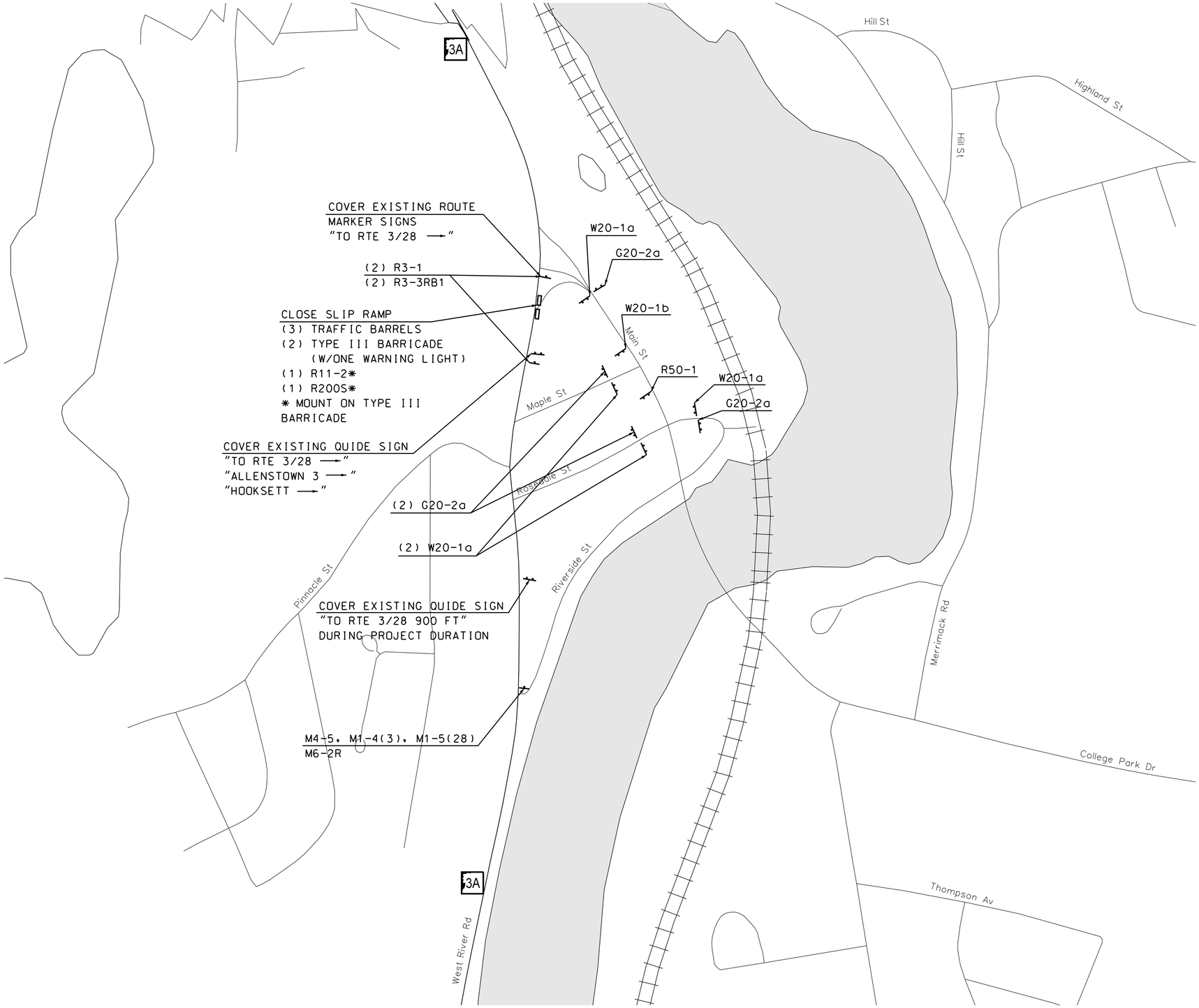
CONSTRUCTION/CONTINGENCY SIGNING

BRIDGE SHEET --- OF ---

REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	NHDOT	9/14	CHECKED	---	---
	DRAWN	SMG	9/14	CHECKED	JAT	9/14
	QUANTITIES	---	---	CHECKED	---	---
	ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
	REV. DATE		----------		29	42

FILE NUMBER 126-1-1

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\	28435 PreconSign	AS NOTED



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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

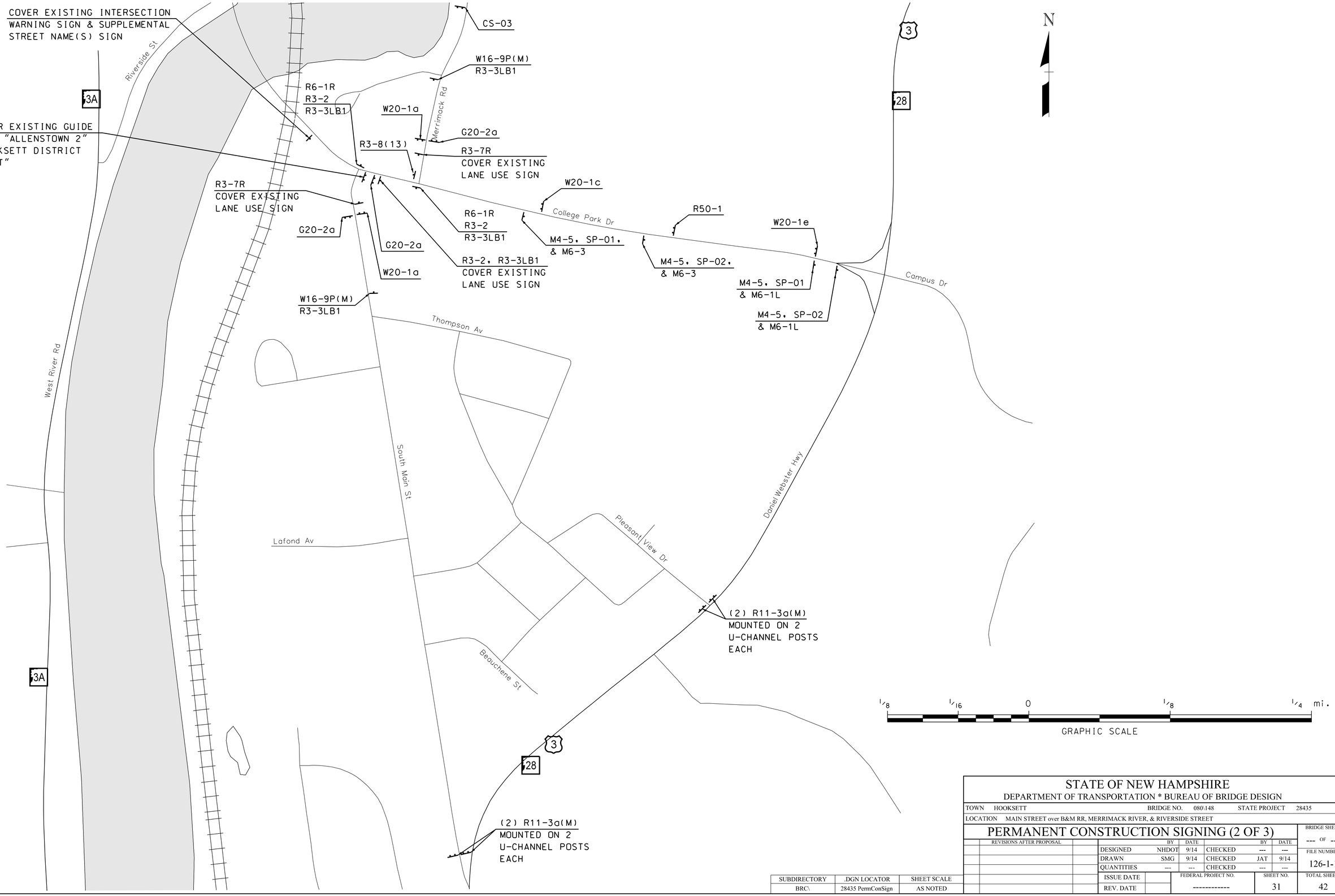
PERMANENT CONSTRUCTION SIGNING (1 OF 3)

BRIDGE SHEET --- OF ---

FILE NUMBER 126-1-1

REVISIONS AFTER PROPOSAL			BY	DATE		BY	DATE
		DESIGNED	NHDOT	9/14	CHECKED	---	---
		DRAWN	SMG	9/14	CHECKED	JAT	9/14
		QUANTITIES	---	---	CHECKED	---	---
		ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
		REV. DATE		----------		30	42

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\	28435 PermConSign	AS NOTED



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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

PERMANENT CONSTRUCTION SIGNING (2 OF 3)

BRIDGE SHEET --- OF ---

REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	NHDOT	9/14	CHECKED	---	---
	DRAWN	SMG	9/14	CHECKED	JAT	9/14
	QUANTITIES	---	---	CHECKED	---	---
	ISSUE DATE					
	REV. DATE					

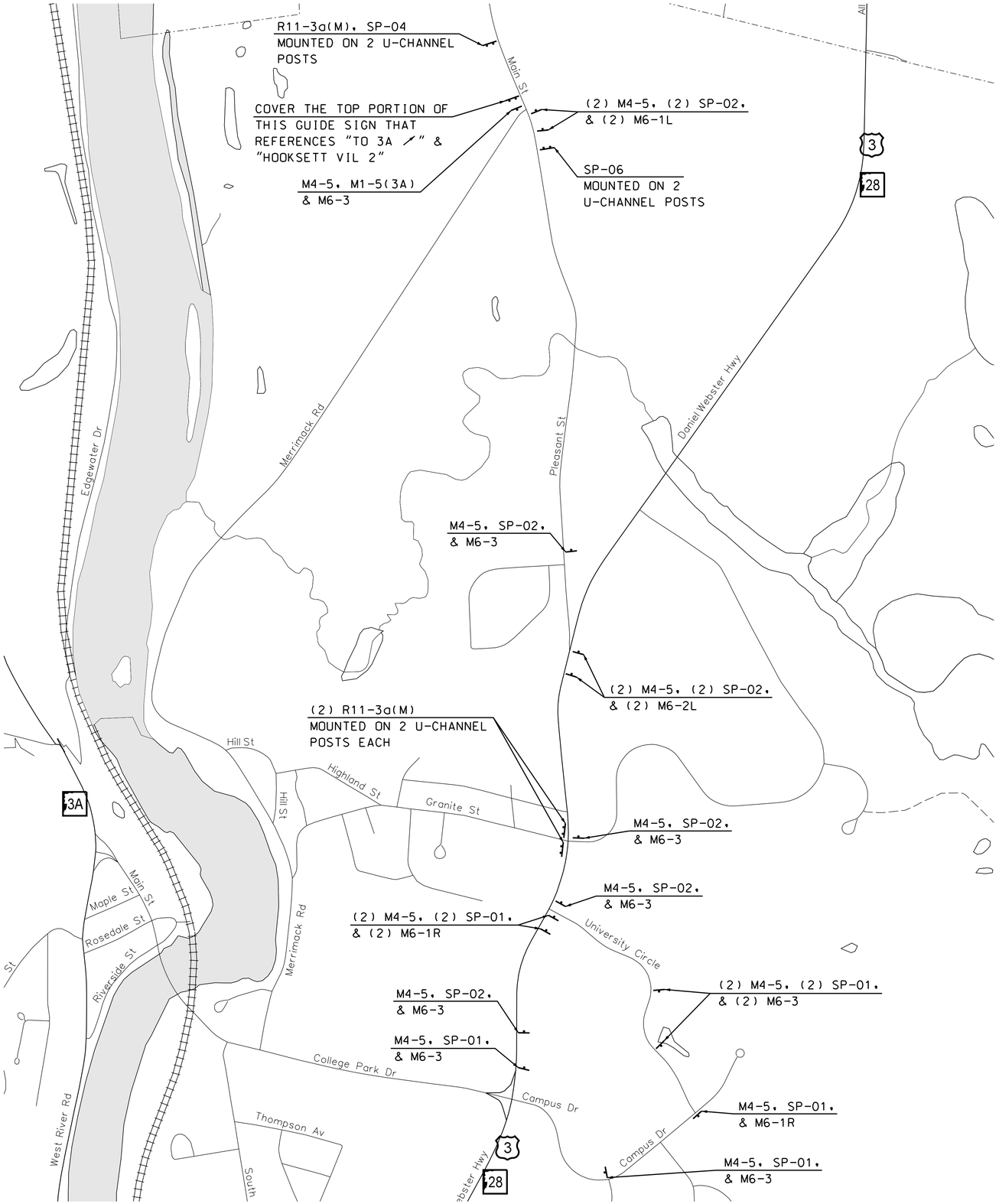
FILE NUMBER 126-1-1

FEDERAL PROJECT NO. ----------

SHEET NO. 31

TOTAL SHEETS 42

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\	28435 PermConSign	AS NOTED



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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

PERMANENT CONSTRUCTION SIGNING (3 OF 3)

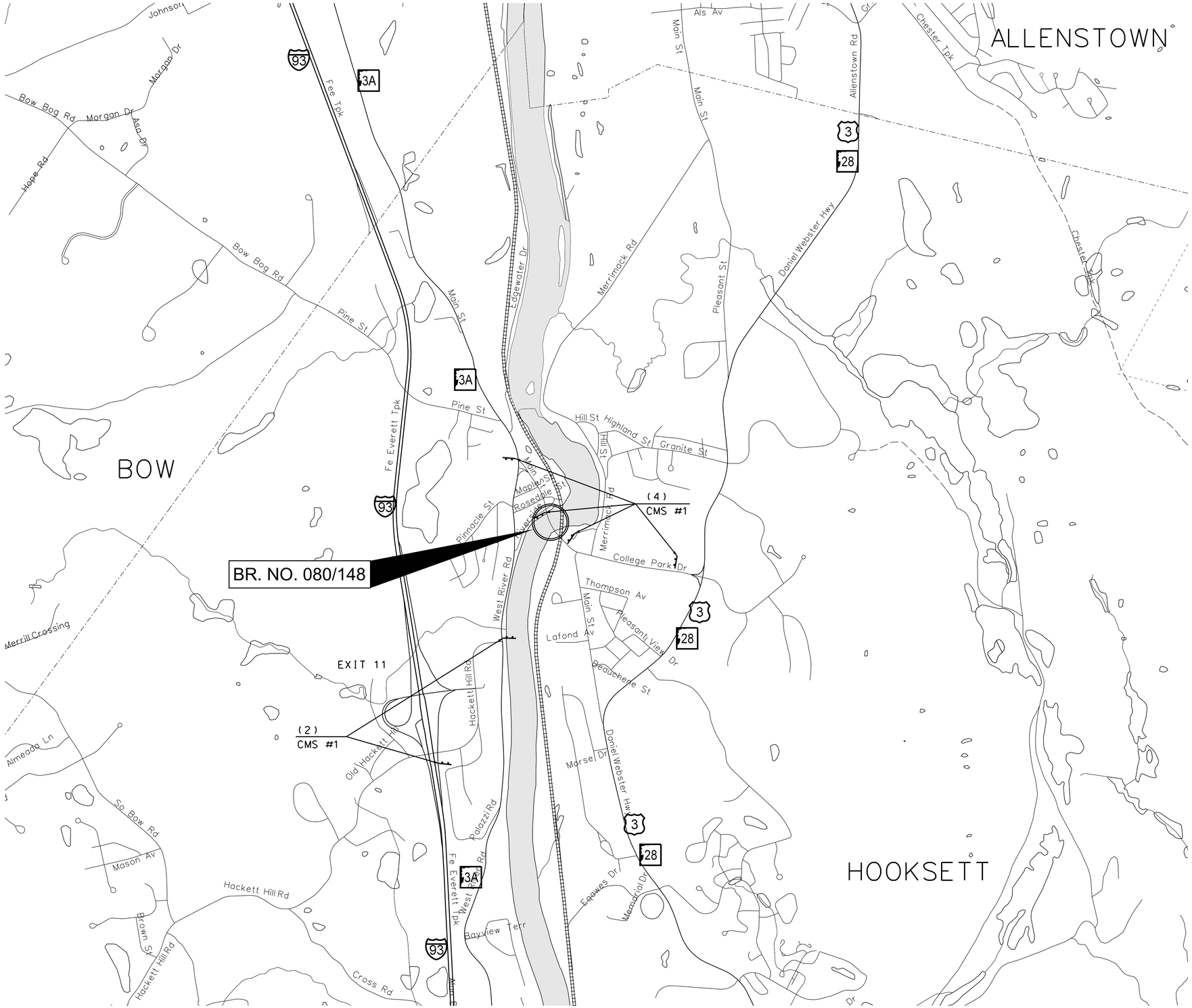
BRIDGE SHEET --- OF ---

REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	NHDOT	9/14	CHECKED	---	---
	DRAWN	SMG	9/14	CHECKED	JAT	9/14
	QUANTITIES	---	---	CHECKED	---	---
	ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
	REV. DATE		----------		32	42

FILE NUMBER 126-1-1

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\	28435 PermConSign	AS NOTED

28435 PermConSign.dgn Default 10/1/2014 8:16:45 AM n18smg



CMS #1 (6)

MESSAGE #1	BRIDGE WORK (DATE)
MESSAGE #2	EXPECT SEVERE DELAYS

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

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

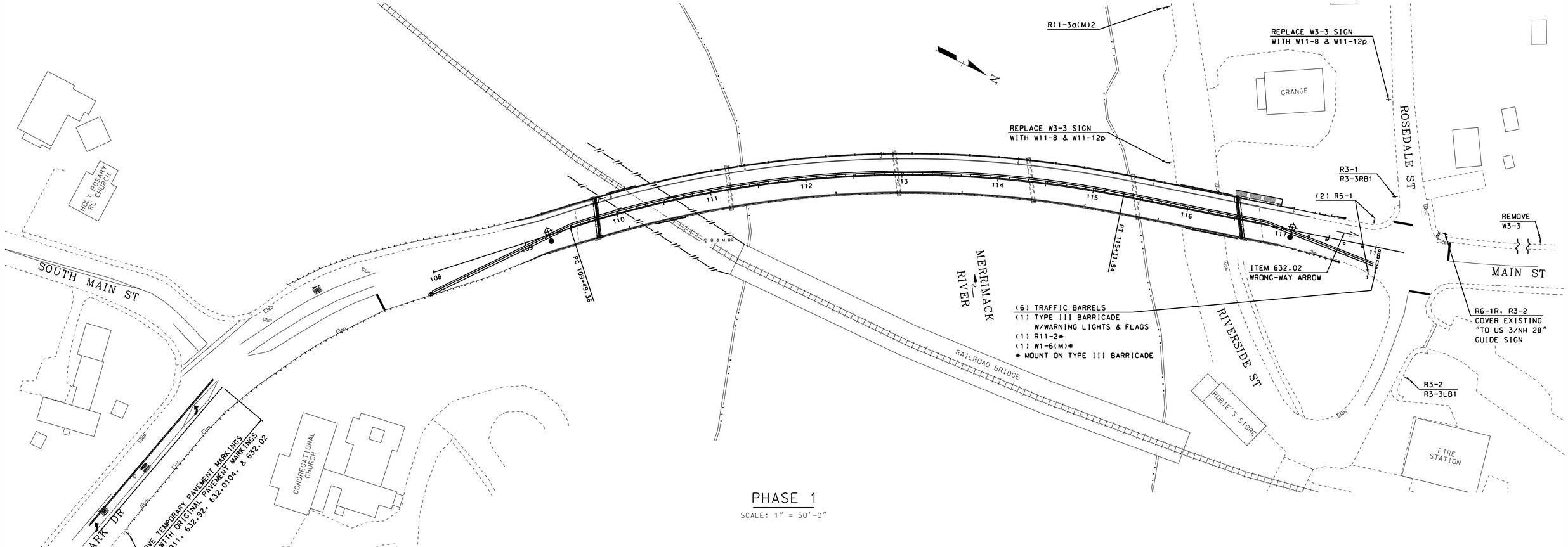
CHANGEABLE MESSAGE SIGN (CMS) BOARDS

BRIDGE SHEET --- OF ---

REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	NHDOT	9/14	CHECKED	---	---
	DRAWN	SMG	9/14	CHECKED	JAT	9/14
	QUANTITIES	---	---	CHECKED	---	---

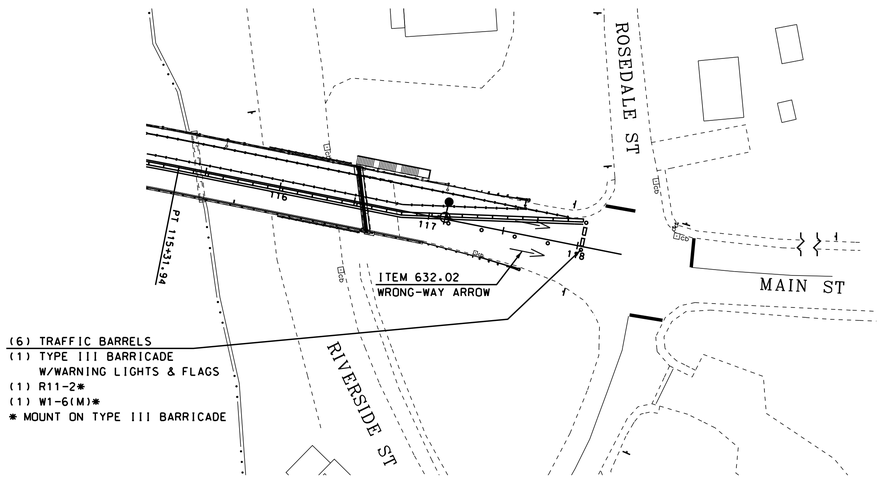
FILE NUMBER 126-1-1

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE	ISSUE DATE	FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
BRC\	28435 CMSBoard	AS NOTED	REV. DATE	----------	33	42



PHASE 1

SCALE: 1" = 50'-0"



ALL OTHER SIGNAGE FROM PHASE 1 TO REMAIN IN PLACE FOR PHASE 2.

PHASE 2

SCALE: 1" = 50'-0"

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

CONTINGENCY PHASING PLAN

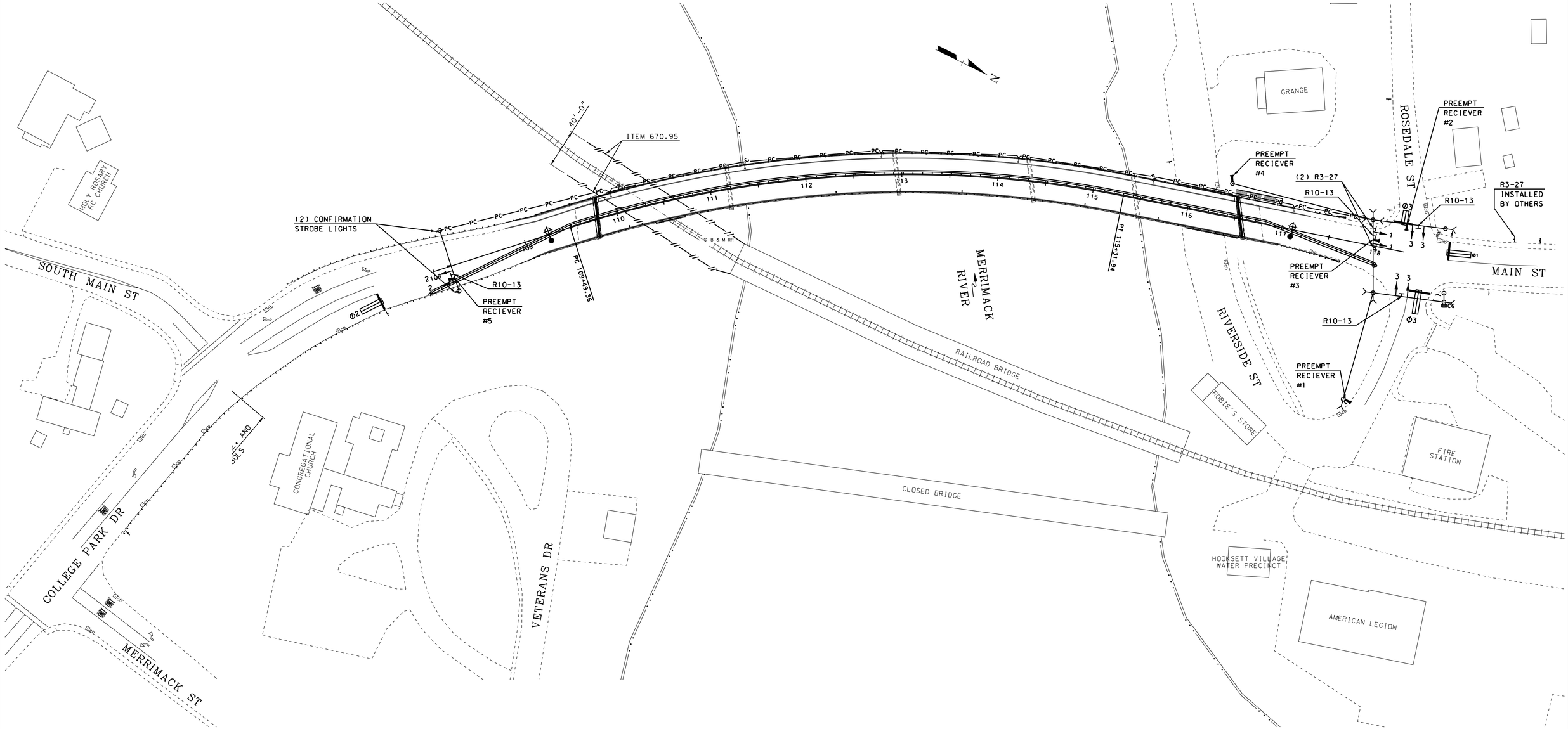
BRIDGE SHEET --- OF ---

REVISIONS AFTER PROPOSAL				BY	DATE		BY	DATE
			DESIGNED	JAT	6/14	CHECKED	SMG	8/14
			DRAWN	SMG	6/14	CHECKED	JAT	8/14
			QUANTITIES	SMG	9/14	CHECKED	JAT	9/14

FILE NUMBER 126-1-1

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE	ISSUE DATE	FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
BRC\	28435 ContinPhase	AS NOTED	REV. DATE	----------	34	42

28435 ContinPhase.dgn Default 10/1/2014 8:16:47 AM n18smg

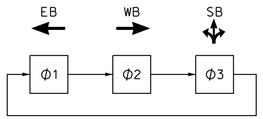


PLAN

SCALE: 1" = 50'-0"

EMERGENCY-VEHICLE ACTIVATION SEQUENCE

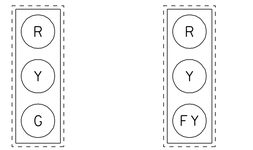
	Ø1	Ø2	Ø3
NON-EMERGENCY OPERATION	SR	FY	FR
MAIN STREET (WEST) Ø1 - ACTIVATED	SR - SG	FY - SY - SR	FR - SY - SR
MAIN STREET (EAST) Ø2 - ACTIVATED	SR	FY	FR - SY - SR
RIVERSIDE STREET Ø3 - ACTIVATED	SR	FY - SY - SR	FR - SG
ROSEDALE STREET Ø3 - ACTIVATED	SR	FY - SY - SR	FR - SY - SR



NOTE 1:
THE CONTRACTOR SHALL INSTALL ITEM 616.192 - ALTERATIONS TO TRAFFIC SIGNALS IN CONJUNCTION WITH ITEM 616.161 - TRAFFIC SIGNALS (TEMPORARY) IN PREPARATION TO EXECUTE, IF REQUIRED, THE CONTINGENCY PLAN IN A TIMELY MANNER.

SIGNAL HEADS

ALL LENSES 12" WITH 5" LOUVERED BACK PLATE



NOTE 2:
ALL GROUND-MOUNTED CONSTRUCTION SIGNS SHOWN ON THIS PLAN SHALL BE INSTALLED BY THE CONTACTOR AND ALL OVERHEAD SIGNS SHOWN ON THIS PLAN SHALL BE INSTALLED BY THE SIGNAL CONTRACTOR.

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\	28435 ContinSignal	AS NOTED

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

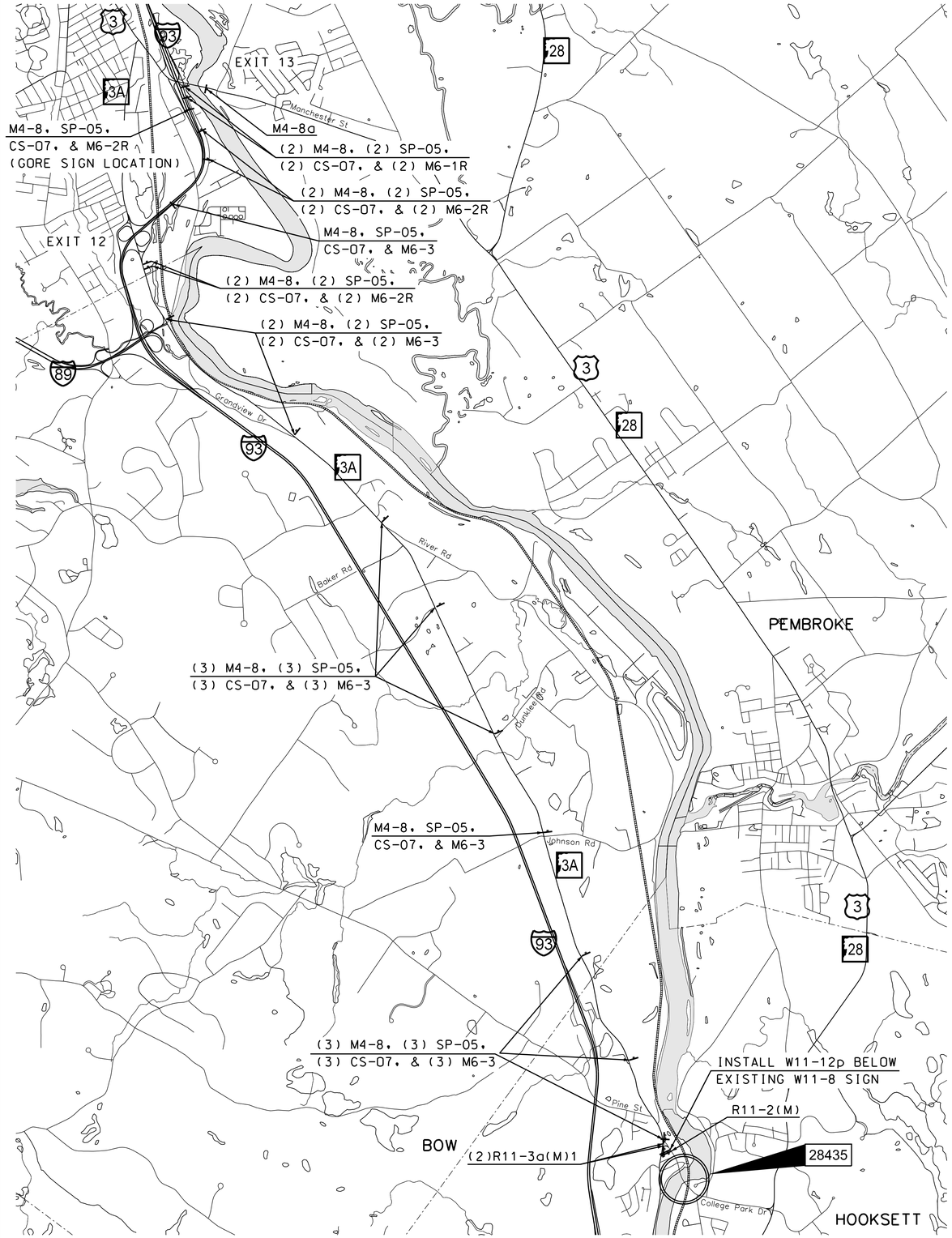
CONTINGENCY SIGNAL PLAN

BRIDGE SHEET --- OF ---

REVISIONS AFTER PROPOSAL			BY	DATE		BY	DATE
		DESIGNED	JAT	6/14	CHECKED	SMG	8/14
		DRAWN	SMG	6/14	CHECKED	JAT	8/14
		QUANTITIES	SMG	9/14	CHECKED	JAT	9/14
		ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
		REV. DATE		----------		35	42

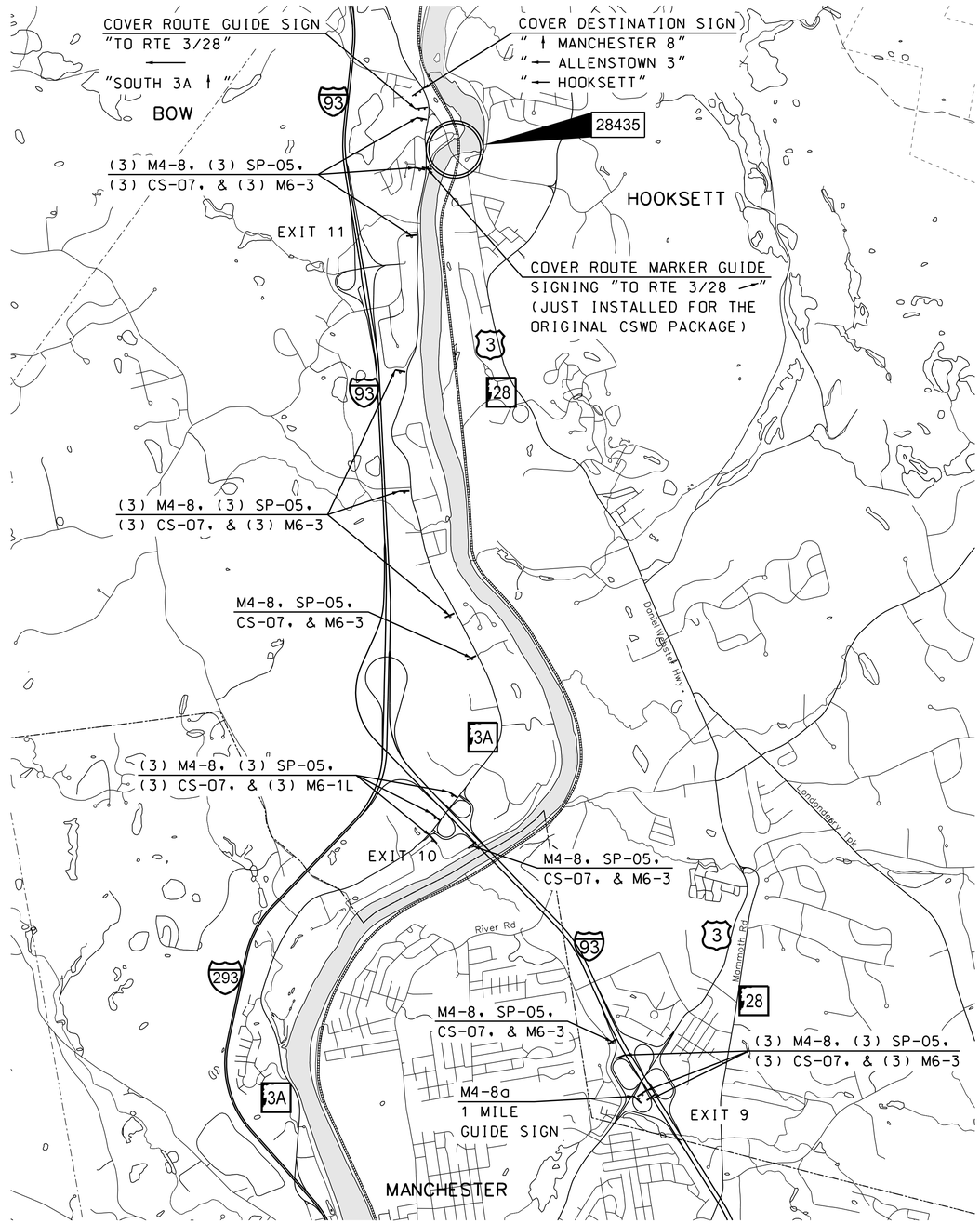
FILE NUMBER 126-1-1

28435 ContinSignal.dgn Default 10/1/2014 8:16:49 AM n18smg



NORTH OF BRIDGE

N



SOUTH OF BRIDGE

1/2 1/4 0 1/2 1 mi.

GRAPHIC SCALE

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

TOWN HOOKSETT BRIDGE NO. 080\148 STATE PROJECT 28435

LOCATION MAIN STREET over B&M RR, MERRIMACK RIVER, & RIVERSIDE STREET

CONTINGENCY PLAN DETOUR SIGNS

BRIDGE SHEET: XX OF 18

REVISIONS AFTER PROPOSAL		BY	DATE		BY	DATE
	DESIGNED	NHDOT	9/14	CHECKED	XXX	XX/XX
	DRAWN	SMG	9/14	CHECKED	JAT	9/14
	QUANTITIES	XXX	XX/XX	CHECKED	XXX	XX/XX
	ISSUE DATE		FEDERAL PROJECT NO.		SHEET NO.	TOTAL SHEETS
	REV. DATE		----------		36	42

FILE NUMBER: 126-1-1

SUBDIRECTORY	.DGN LOCATOR	SHEET SCALE
BRC\	28435 ContiDetour	AS NOTED

ITEM #	IDENT#	SIGN SIZE WIDTH (inch)	SIGN SIZE HEIGHT (inch)	TEXT	TEXT DIMENSIONS LETTER HEIGHT (inch) UC	LC	CAPS	SHIELD SIZE (inch)	ARROW (inch)	NUMERAL (inch)	# SIGNS REQ'D	SIGN AREA (SQ. FT.) NOM AREA	TOTAL AREA	POSTS PER SIGN BREAKAWAY	STEEL I-BEAM	CONCRETE BASE	4" OD ALUMINUM	U-CHANNEL-GALV	REMARKS
615.03	W3-3	30	30								1	6.25	6.25					1	RED, GREEN, BLACK / YELLOW
615.03	W11-2	30	30								4	6.25	25.00					1	BLACK / YELLOW
615.06	W16-7pL*	24	12								2	2.00	4.00						* Mount below W11-2 BLACK / YELLOW
615.06	W16-9p*	24	12								2	2.00	4.00						* Mount below W11-2 BLACK / YELLOW

GENERAL NOTES

1. REFER TO THE 2010 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION PUBLISHED BY THE NHDOT.
2. NOTE NEW REFLECTIVITY REQUIREMENTS IN THE 2010 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 718 PUBLISHED BY THE NHDOT.
3. 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.
4. REFER TO THE LATEST EDITION OF THE STANDARD HIGHWAY SIGNS MANUAL AS PUBLISHED BY THE USDOT-FHWA FOR EXACT DETAILS OF BORDERS, ETC.

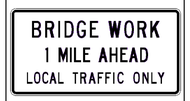
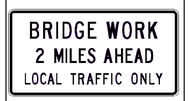
STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION BUREAU OF TRAFFIC

SIGN TEXT LAYOUT

SUBDIRECTORY	.DGN LOCATOR	EXCEL FILE NAME	STATE PROJECT NO.	FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
BRC/SIGN	28435 PermSign	S:\ProjectDevelopment\Forms\Project\sgntxt-l.xls	28435	----------	37	42

ITEM #	IDENT #	SIGN SIZE WIDTH (inch)	SIGN SIZE HEIGHT (inch)	TEXT	TEXT DIMENSIONS LETTER HEIGHT (inch) UC	LC	CAPS	SHIELD SIZE (inch)	ARROW (inch)	NUMERAL (inch)	# SIGNS REQ'D	SIGN AREA (SQ. FT.) NOM AREA	TOTAL AREA	POSTS PER SIGN BREAKAWAY	STEEL I-BEAM	CONCRETE BASE	4" OD ALUMINUM	U-CHANNEL-GALV.	REMARKS
619.1	R3-1	24	24								2	4.00	8.00					1	RED, BLACK / WHITE
619.1	R3-2	24	24								3	4.00	12.00					1	RED, BLACK / WHITE
619.1	R3-3LB1	24	18				5/4C 4C				5	3.00	15.00					1	(3) mount below R3-2 and (2) mounted on post. BLACK / WHITE
619.1	R3-3RB1	24	18				5/4C 4C				2	3.00	6.00						Mount below R3-1 BLACK / WHITE
619.1	R3-7R	30	30				4C 5C 4C				2	6.25	12.50					1	BLACK / WHITE
619.1	R3-8(13)	36	30				4D				1	7.50	7.50					1	BLACK / WHITE
619.1	R6-1R	36	12				4D				2	3.00	6.00						Mount below R3-2 BLACK / WHITE
619.1	R9-9	30	18				4D 4D				2	3.75	7.50						Mount on portable sign support BLACK / WHITE
619.1	R9-11L	48	36				4C 4C 4C		5.4x40		2	12.00	24.00						Mount on portable sign support BLACK / WHITE
619.1	R9-11R	48	36				4C 4C 4C		5.4x40		2	12.00	24.00						Mount on portable sign support BLACK / WHITE

ITEM #	IDENT#	SIGN SIZE WIDTH (inch)	SIGN SIZE HEIGHT (inch)	TEXT	TEXT DIMENSIONS LETTER HEIGHT (inch) UC	LC	CAPS	SHIELD SIZE (inch)	ARROW (inch)	NUMERAL (inch)	# SIGNS REQ'D	SIGN AREA (SQ. FT.) NOM AREA	TOTAL AREA	POSTS PER SIGN BREAKAWAY	STEEL I-BEAM	CONCRETE BASE	4" OD ALUMINUM	U-CHANNEL-GALV.	REMARKS
619.1	R10-6	24	36				5D 3D 5D		7X14.625		4	6.00	24.00					1	Installed as part of Temporary Signals Item 616.161 BLACK / WHITE
619.1	R10-12	30	36				4C 5C 4C	10			2	7.50	15.00						Installed by the Signal Contractor as part of Temporary Signals Item 616.161 BLACK / WHITE
619.1	R11-2	48	30				8D 8D				1	10.00	10.00					2	Mount on Type III Barricade BLACK / WHITE
619.1	R11-3a(M)	60	30				6C 5C 4C				7	12.50	87.50					2	BLACK / WHITE
619.1	R11-3b(M)1	60	30				6C 5C 4C				6	12.50	75.00					2	Mount in front of CCS-01 BLACK / WHITE
619.1	R11-3b(M)2	60	30				6C 5C 4C				5	12.50	62.50					2	Mount in front of CCS-02 BLACK / WHITE
619.1	R50-1	72	48				7D 5D 5D 5D 1.5B				2	24.00	48.00					2	BLACK / WHITE

GENERAL NOTES

1. REFER TO THE 2010 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION PUBLISHED BY THE NHDOT.
2. NOTE NEW REFLECTIVITY REQUIREMENTS IN THE 2010 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 718 PUBLISHED BY THE NHDOT.
3. 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.
4. REFER TO THE LATEST EDITION OF THE STANDARD HIGHWAY SIGNS MANUAL AS PUBLISHED BY THE USDOT-FHWA FOR EXACT DETAILS OF BORDERS, ETC.

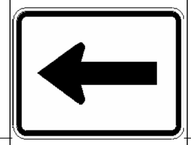
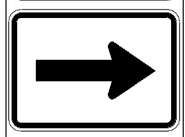
STATE OF NEW HAMPSHIRE

DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY DESIGN

CONST. SIGN TEXT LAYOUT

SUBDIRECTORY	.DGN LOCATOR	EXCEL FILE NAME	STATE PROJECT NO.	FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
BRC/SIGN	28435 ConstSign	S:\ProjectDevelopment\Forms\Project\sgntxt-l.xls	28435	----------	38	42

ITEM #	IDENT #	SIGN SIZE WIDTH (inch)	SIGN SIZE HEIGHT (inch)	TEXT	TEXT DIMENSIONS LETTER HEIGHT (inch) UC	LC	CAPS	SHIELD SIZE (inch)	ARROW (inch)	NUMERAL (inch)	# SIGNS REQ'D	SIGN AREA (SQ. FT.) NOM AREA	TOTAL AREA	POSTS PER SIGN BREAKAWAY	STEEL I-BEAM	CONCRETE BASE	4" OD ALUMINUM	U-CHANNEL-GALV.	REMARKS
619.1	R200S	48	24	UNAUTHORIZED TRAVEL PROHIBITED			4D 5D 5D				1	8.00	8.00					1	Mount on Type III Barricade BLACK / WHITE
619.1	W3-3	36	36								4	9.00	36.00					2	Installed as part of Temporary Signals Item 616.161 RED,GREEN,BLACK / YELLOW
619.1	W16-9P(M)	24	12	AHEAD			5C				2	2.00	4.00						Mount above R3-3LB1 BLACK / ORANGE
619.1	W20-1a	48	48	ROAD CONSTRUCTION AHEAD			7C 7C 7C				6	16.00	96.00					2	BLACK / FLUORESCENT ORANGE
619.1	W20-1b	48	48	ROAD CONSTRUCTION 500FT			7C 7C 7C			7C	1	16.00	16.00					2	BLACK / FLUORESCENT ORANGE
619.1	W20-1c	48	48	ROAD CONSTRUCTION 1000 FT			7C 7C 7C			7C	1	16.00	16.00					2	BLACK / FLUORESCENT ORANGE
619.1	W20-1e	48	48	ROAD CONSTRUCTION 1/2 MILE			7C 7C 7C			7C	1	16.00	16.00					2	BLACK / FLUORESCENT ORANGE
619.1	W20-6	48	48	MOTORCYCLES USE CAUTION			6C 6C 6C				2	16.00	32.00						Mount on Portable Sign Support BLACK / ORANGE
619.1	W20-7a	48	48								2	16.00	32.00						Mount on Portable Sign Support BLACK / ORANGE
619.1	G20-2a	48	24	END ROAD WORK			6C 6C				7	8.00	56.00					2	BLACK / ORANGE

ITEM #	IDENT#	SIGN SIZE WIDTH (inch)	SIGN SIZE HEIGHT (inch)	TEXT	TEXT DIMENSIONS LETTER HEIGHT (inch) UC	LC	CAPS	SHIELD SIZE (inch)	ARROW (inch)	NUMERAL (inch)	# SIGNS REQ'D	SIGN AREA (SQ. FT.) NOM AREA	TOTAL AREA	POSTS PER SIGN BREAKAWAY	STEEL I-BEAM	CONCRETE BASE	4" OD ALUMINUM	U-CHANNEL-GALV.	REMARKS
619.1	M1-4(3)	24	24				12C			12C	1	4.00	4.00					1	BLACK / WHITE
619.1	M1-5(3A)	24	24				12C			12C	1	4.00	4.00					1	BLACK / WHITE
619.1	M1-5(28)	24	24				12C				1	4.00	4.00						Mount below M1-4(3) BLACK / WHITE
619.1	M4-5	24	12	TO			6E				21	2.00	42.00						Mount above SP-01, SP-02 M1-5(3A) & M1-4(3) BLACK / WHITE
619.1	M6-1L	21	15						7X14.6		4	2.19	8.75						Mount below SP-01, SP-02 BLACK / WHITE
619.1	M6-1R	21	15						7X14.6		3	2.19	6.56						Mount below SP-01, SP-02 BLACK / WHITE

GENERAL NOTES

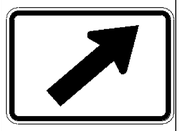
1. REFER TO THE 2010 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION PUBLISHED BY THE NHDOT.
2. NOTE NEW REFLECTIVITY REQUIREMENTS IN THE 2010 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 718 PUBLISHED BY THE NHDOT.
3. REFER TO THE 2010 STANDARD PLANS FOR ROAD CONSTRUCTION AS PUBLISHED BY THE NHDOT FOR EXACT DETAILS OF PERMANENT SIGNING STANDARDS AND NHDOT SPECIFIC SIGNS.
4. 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 HIGHWAY DESIGN

CONST. SIGN TEXT LAYOUT

SUBDIRECTORY	.DGN LOCATOR	EXCEL FILE NAME	STATE PROJECT NO.	FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
BRC/SIGN	28435 ConstSign	S:\ProjectDevelopment\Forms\Project\sgntxt-l.xls	28435	----------	39	42

ITEM #	IDENT #	SIGN SIZE WIDTH (inch)	SIGN SIZE HEIGHT (inch)	TEXT	TEXT DIMENSIONS LETTER HEIGHT (inch) UC	LC	CAPS	SHIELD SIZE (inch)	ARROW (inch)	NUMERAL (inch)	# SIGNS REQ'D	SIGN AREA (SQ. FT.) NOM AREA	TOTAL AREA	POSTS PER SIGN BREAKAWAY	STEEL I-BEAM	CONCRETE BASE	4" OD ALUMINUM	U-CHANNEL-GALV.	REMARKS
619.1	M6-2L	21	15						7x14.6 at 140°		2	2.19	4.38						Mount below SP-02 BLACK / WHITE
619.1	M6-2R	21	15						7x14.6 at 42°		1	2.19	2.19						Mount below M1-5(28) BLACK / WHITE
619.1	M6-3	21	15						7x9.8		11	2.19	24.06						Mount below SP-01, SP-02 BLACK / WHITE
619.1	CS-01	60	24	HOOKSETT MAIN STREET			6C 6C				18	10.00	180.00						Mount above R11-3b(M)1, R11-3b(M)2 CS-03, CS-04 BLACK / ORANGE
619.1	CS-02	60	12	SEEK ALT ROUTE			5C				16	5.00	80.00						Mount below R11-3b(M)1, R11-3b(M)2, CS-03 BLACK / ORANGE
619.1	CS-03	60	30	BRIDGE WORK EXPECT SEVERE DELAYS APRIL THRU OCTOBER			6C 4C 4C				6	12.50	75.00					2	Mount in front of CCS-01 & R11-2(M) BLACK / WHITE
619.1	CS-04	60	30	US 3 & NH 28 TRAFFIC	6D		4C/6D 6D				2	12.50	25.00					2	Mount in front of CCS-03 BLACK / WHITE
619.1	CS-05	48	36	RIVERSIDE STREET 			6C* 6C*		8.1x18 at 35°		1	12.00	12.00					2	*80% letter Spacing BLACK / ORANGE
619.1	CS-06	60	12	USE RIVERSIDE ST			5C*				2	5.00	10.00						*80% letter Spacing BLACK / ORANGE
619.1	CS-08	48	30	NO LEFT TURN			6C 6C				2	10.00	20.00						Mount on Type III Barricade BLACK / WHITE

ITEM #	IDENT #	SIGN SIZE WIDTH (inch)	SIGN SIZE HEIGHT (inch)	TEXT	TEXT DIMENSIONS LETTER HEIGHT (inch) UC	LC	CAPS	SHIELD SIZE (inch)	ARROW (inch)	NUMERAL (inch)	# SIGNS REQ'D	SIGN AREA (SQ. FT.) NOM AREA	TOTAL AREA	POSTS PER SIGN BREAKAWAY	STEEL I-BEAM	CONCRETE BASE	4" OD ALUMINUM	U-CHANNEL-GALV.	REMARKS
619.1	CS-09	30	36	WALK BIKE ON SIDEWALK			4C 4C 4C 4C				2	7.50	15.00					1	BLACK / WHITE
619.1	SP-01	36	24	Reverse Direction	6C* 6C*	6C* 6C*					9	6.00	54.00					1	* 80% Letter Spacing BLACK / ORANGE
619.1	SP-02	36	24	Merrimack Street	6C* 6C*	6C* 6C*					10	6.00	60.00					1	* 50% Letter Spacing WHITE / GREEN
619.1	SP-04	60	12	NEXT RIGHT			5C*				1	5.00	5.00						Mount below R11-3A(M) * 150% Letter Spacing BLACK / ORANGE
619.1	SP-06	48	24	HOOKSETT DISTRICT COURT NEXT LEFT			4C 4C 4C				1	8.00	8.00					2	WHITE / GREEN

GENERAL NOTES

1. REFER TO THE 2010 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION PUBLISHED BY THE NHDOT.
2. NOTE NEW REFLECTIVITY REQUIREMENTS IN THE 2010 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 718 PUBLISHED BY THE NHDOT.
3. 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.
4. 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 HIGHWAY DESIGN

CONST. SIGN TEXT LAYOUT

SUBDIRECTORY	.DGN LOCATOR	EXCEL FILE NAME	STATE PROJECT NO.	FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
BRC/SIGN	28435 ConstSign	S:\ProjectDevelopment\Forms\Project\sgntxt-1.xls	28435	----------	40	42

ITEM #	IDENT #	SIGN SIZE WIDTH (inch)	SIGN SIZE HEIGHT (inch)	TEXT	TEXT DIMENSIONS LETTER HEIGHT (inch) UC	LC	CAPS	SHIELD SIZE (inch)	ARROW (inch)	NUMERAL (inch)	# SIGNS REQ'D	SIGN AREA (SQ. FT.) NOM AREA	TOTAL AREA	POSTS PER SIGN BREAKAWAY	STEEL I-BEAM	CONCRETE BASE	4" OD ALUMINUM	U-CHANNEL-GALV.	REMARKS
619.1	R3-1	24	24								1	4.00	4.00					1	RED, BLACK / WHITE
619.1	R3-2	24	24								3	4.00	12.00					1	RED, BLACK / WHITE
619.1	R3-3LB1	24	18	NO LEFT TURN			5/4C 4C				5	3.00	15.00					1	(3) mount below R3-2 and (2) mounted on post. BLACK / WHITE
619.1	R3-3RB1	24	18	NO RIGHT TURN			5/4C 4C				2	3.00	6.00						Mount below R3-1 BLACK / WHITE
619.1	R3-27	36	36								2	9.00	18.00						Installed by Signal Contractor on span-wire as part of Item 616.192 RED, BLACK / WHITE
619.1	R3-27	36	36								1	9.00	9.00					2	Ground Mounted Sign RED, BLACK / WHITE
619.1	R5-1	30	30	DO NOT ENTER			4D 4D				2	6.25	12.50					1	RED / WHITE
619.1	R6-1R	36	12	ONE WAY			4D				2	3.00	6.00						Mount below R3-2 BLACK / WHITE
619.1	R10-13	36	24	EMERGENCY SIGNAL			4.75C 4.75C				4	6.00	24.00						Installed by Signal Contractor on span-wire as part of Item 616.192 BLACK / WHITE
619.1	R11-2	48	30	ROAD CLOSED			8D 8D				1	10.00	10.00					2	Mount on Type III Barricade BLACK / WHITE

ITEM #	IDENT#	SIGN SIZE WIDTH (inch)	SIGN SIZE HEIGHT (inch)	TEXT	TEXT DIMENSIONS LETTER HEIGHT (inch) UC	LC	CAPS	SHIELD SIZE (inch)	ARROW (inch)	NUMERAL (inch)	# SIGNS REQ'D	SIGN AREA (SQ. FT.) NOM AREA	TOTAL AREA	POSTS PER SIGN BREAKAWAY	STEEL I-BEAM	CONCRETE BASE	4" OD ALUMINUM	U-CHANNEL-GALV	REMARKS
619.1	W1-6(M)	48	24						6.5X18.25		1	8.00	8.00						Mount on Type III Barricade BLACK / ORANGE
619.1	W11-8	36	36								3	9.00	27.00						Install at same location as W3-3 using existing posts. See Contingency Plan, part of Item 616.192 BLACK / YELLOW
619.1	W11-12p	36	30	EMERGENCY SIGNAL AHEAD			4.25C 4.25C 4.25C				4	7.50	30.00						BLACK / YELLOW
619.1	M4-8	24	12	DETOUR			6B				32	2.00	64.00						Mount above SP-05 BLACK / ORANGE
619.1	M4-8a	24	18	END DETOUR			5C 5C				2	3.00	6.00					1	BLACK / ORANGE
619.1	M6-1R	21	15						7X14.6		2	2.19	4.38						Mount below CS-07 BLACK / WHITE
619.1	M6-1L	21	15						7X14.6		3	2.19	6.56						Mount below CS-07 BLACK / WHITE
619.1	R11-3a(M)1	60	30	BRIDGE CLOSED AHEAD LOCAL TRAFFIC ONLY			6C 5C 4C				2	12.50	25.00					2	BLACK / WHITE

GENERAL NOTES

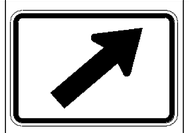
1. REFER TO THE 2010 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION PUBLISHED BY THE NHDOT.
2. NOTE NEW REFLECTIVITY REQUIREMENTS IN THE 2010 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION SECTION 718 PUBLISHED BY THE NHDOT.
3. REFER TO THE 2010 STANDARD PLANS FOR ROAD CONSTRUCTION AS PUBLISHED BY THE NHDOT FOR EXACT DETAILS OF PERMANENT SIGNING STANDARDS AND NHDOT SPECIFIC SIGNS.
4. 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 HIGHWAY DESIGN

CONST. SIGN TEXT SHEET (CONTINGENCY PLAN)

SUBDIRECTORY	.DGN LOCATOR	EXCEL FILE NAME	STATE PROJECT NO.	FEDERAL PROJECT NO.	SHEET NO.	TOTAL SHEETS
BRC/SIGN	28435 ContinSign	S:\ProjectDevelopment\Forms\Project\sgntxt-I.xls	28435	----------	41	42

ITEM #	IDENT #	SIGN SIZE WIDTH (inch)	SIGN SIZE HEIGHT (inch)	TEXT	TEXT DIMENSIONS LETTER HEIGHT (inch) UC	LC	CAPS	SHIELD SIZE (inch)	ARROW (inch)	NUMERAL (inch)	# SIGNS REQ'D	SIGN AREA (SQ. FT.) NOM AREA	TOTAL AREA	POSTS PER SIGN BREAKAWAY	STEEL I-BEAM	CONCRETE BASE	4" OD ALUMINUM	U-CHANNEL-GALV.	REMARKS
619.1	M6-3	21	15						7x9.8		22	2.19	48.13						Mount below CS-07 BLACK / WHITE
619.1	SP-05	24	24		6C* 6C*	6C* 6C*					32	4.00	128.00					1	WHITE / GREEN
619.1	CS-07	24	12				6B				32	2.00	64.00						Mount below SP-05 BLACK / WHITE
619.1	CCS-01	60	30				6C 5C			5C	3	12.50	37.50						Mount in back of R11-3b(M)1 BLACK / WHITE
619.1	CCS-02	60	30				6C 5C			5C	2	12.50	25.00						Mount in back of R11-3b(M)2 BLACK / WHITE
619.1	CCS-03	60	30				6C 5C				3	12.50	37.50						Mount in back of CS-03 & CS-04 BLACK / WHITE
619.1	M6-2R	21	15						7x14.6 at 42°		5	2.19	10.94						Mount below CS-07 BLACK / WHITE

ITEM #	IDENT #	SIGN SIZE WIDTH (inch)	SIGN SIZE HEIGHT (inch)	TEXT	TEXT DIMENSIONS LETTER HEIGHT (inch) UC	LC	CAPS	SHIELD SIZE (inch)	ARROW (inch)	NUMERAL (inch)	# SIGNS REQ'D	SIGN AREA (SQ. FT.) NOM AREA	TOTAL AREA	POSTS PER SIGN BREAKAWAY	STEEL I-BEAM	CONCRETE BASE	4" OD ALUMINUM	U-CHANNEL-GALV	REMARKS
619.1	R11-2(M)	60	30				8D 8D				3	12.50	37.50					2	Mount in back of CS-03 BLACK / WHITE
619.1	R11-3A(M)2	60	30				6C 5C 4C				1	12.50	12.50					2	BLACK / WHITE

GENERAL NOTES

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