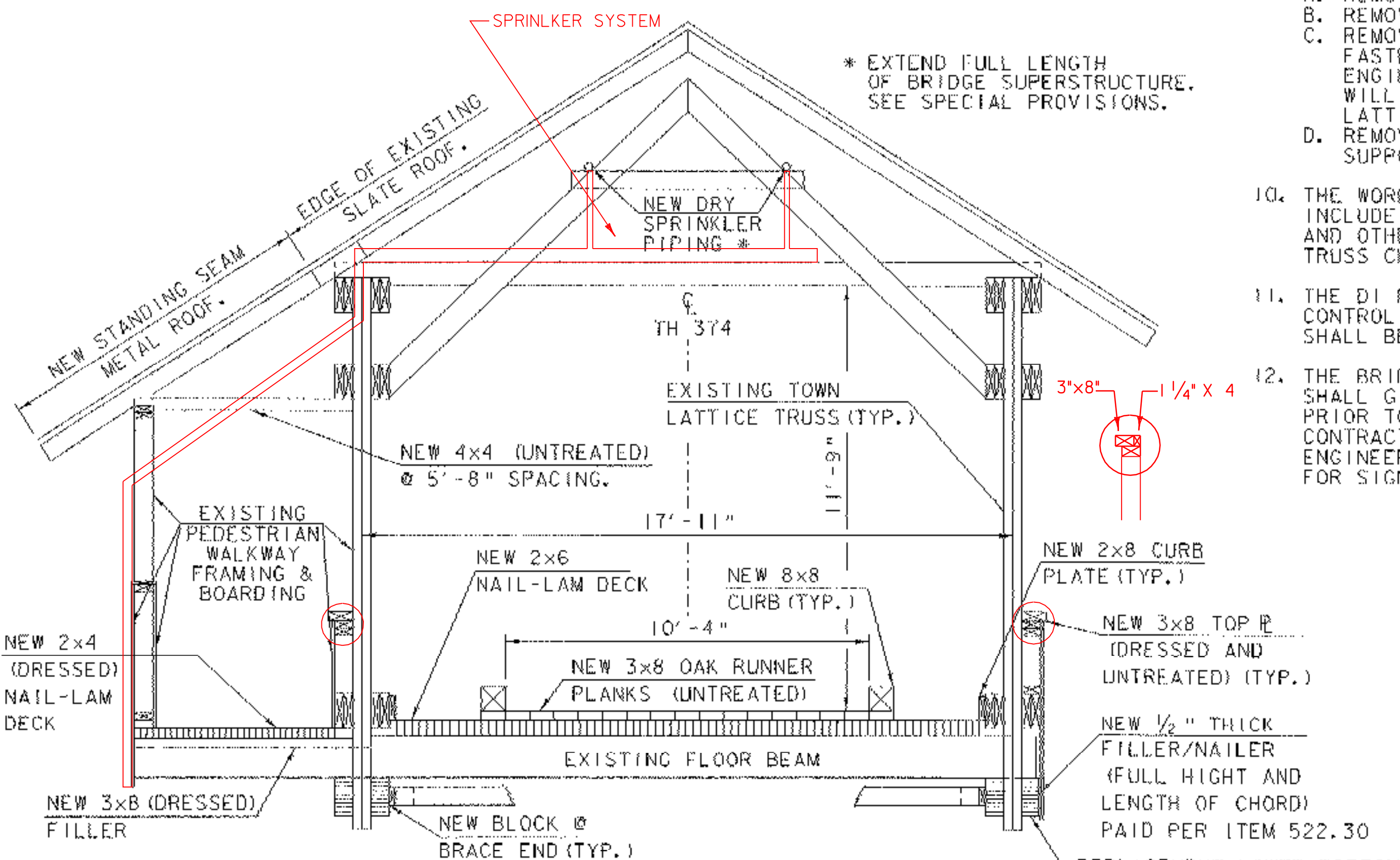


EXISTING CROSS SECTION

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



NEW CROSS SECTION

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

GENERAL NOTES:

- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE AGENCY OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2001, AND ITS LATEST REVISIONS AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DATED 2002, AND ITS LATEST REVISIONS.
- ALL INFORMATION PROVIDED IN THE PLANS, INCLUDING, BUT NOT LIMITED TO, PLAN DIMENSIONS AND LUMBER SIZE FIT-UP, SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING THE WORK.
- ALL WORK IS TO BE COMPLETED WITHIN THE AVAILABLE TOWN-OWNED RIGHT-OF-WAY. THE THREE ROD R.O.W. PORTION IS ASSUMED TO BE CENTERED ABOUT THE CENTER LINE OF THE BRIDGE OR ROADWAY. NO PROVISIONS HAVE BEEN MADE TO GO OUTSIDE THE EXISTING RIGHT-OF-WAY AND NO WORK SHALL BE PERFORMED OR PAID FOR OUTSIDE OF EXISTING TOWN-OWNED RIGHT-OF-WAY LIMITS. SHOULD THE CONTRACTOR REQUIRE ANY ADDITIONAL R.O.W. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL EASEMENTS.
- EXCEPT FOR TEMPORARY SUPPORTS REQUIRED DURING THE ESTABLISHMENT AND REMOVAL OF TEMPORARY SHORING, IT IS ANTICIPATED THAT NO WORK WILL TAKE PLACE WITHIN THE STREAM-BEDS. FOR ANY OTHER CONTRACTOR REQUIRED OPERATIONS IN THE STREAM, AND ERECTING STAGING, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL PERMITS.
- GREAT CARE SHALL BE TAKEN BY THE CONTRACTOR TO PREVENT ANY MATERIAL FROM ENTERING THE STREAM BED PER SECTION 105 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION. ANY MATERIAL THAT DOES ESCAPE THE CONTRACTOR'S CONTAINMENT SYSTEM WILL BE RECOVERED IMMEDIATELY.
- ALL WORK SHALL PROCEED IN A CAREFUL, ORDERLY MANNER SO THAT AFFECTED HISTORIC STRUCTURES ARE NOT DAMAGED IN ANY WAY. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO THE STRUCTURE AS A RESULT OF ITS OPERATIONS AT NO COST TO THE STATE. ALL DAMAGE WILL BE REPORTED TO THE PROJECT MANAGER IMMEDIATELY AND NO REPAIRS WILL BE MADE UNTIL APPROVED BY THE AGENCY.
- DETOURS AS DETAILED IN STANDARD E-107 WILL NOT BE ENCOUNTERED, HOWEVER GENERAL PLACEMENT OF APPROACH SIGNING AND "ROAD CLOSED" SIGNS WILL BE AS SHOWN ON STANDARD E-107. THE CONTRACTOR MAY CHOOSE TO SUBMIT TRAFFIC CONTROL PLANS FOR REVIEW.
- WITHIN EXISTING R.O.W. LIMITS, THINNING AND TRIMMING SHALL INCLUDE ALL WORK REQUIRED TO CUT AND TRIM TREES, STUMPS, AND VEGETATION UP TO 6 FEET FROM EXISTING ABUTMENT AND WING WALL FACES AND IN OTHER AREAS, AS DETERMINED BY THE ENGINEER.
- THE WORK PAID FOR UNDER ITEM 529.20 PARTIAL REMOVAL OF STRUCTURE SHALL INCLUDE:
 - REMOVAL AND DISPOSAL OF EXISTING ROADWAY DECK AND RUNNERS.
 - REMOVAL AND DISPOSAL OF EXISTING WALKWAY DECK.
 - REMOVAL AND DISPOSAL OF EXISTING LOWER BOTTOM CHORD MEMBERS AND FASTENERS. ONCE LOWER CHORD MEMBERS ARE COMPLETELY REMOVED, THE ENGINEER WILL CONTACT THE PROJECT MANAGER AND AGENCY/FHWA PERSONNEL WILL DETERMINE THE CONDITION, REPAIRS AND SISTER MEMBERS REQUIRED AT LATTICE TO CHORD CONNECTION LOCATIONS.
 - REMOVAL AND DISPOSAL OF THE EXISTING DRAIN CHANNEL AND CHANNEL SUPPORTS AT THE SOUTH ABUTMENT.
- THE WORK PAID FOR UNDER ITEM 502.10 SHORING SUPERSTRUCTURE SHALL INCLUDE PROVIDING TEMPORARY SUPPORT FOR BRIDGE TRUSSES, FLOOR BEAMS AND OTHER MEMBERS (THAT ARE TO REMAIN IN PLACE) WHILE THE LOWER BOTTOM TRUSS CHORDS ARE REPLACED AND DURING OTHER CONSTRUCTION OPERATIONS.
- THE DI NEAR THE NORTH PORTAL SHALL BE FITTED WITH A TEMPORARY SEDIMENT CONTROL DEVICE DURING CONSTRUCTION. WORK AND MATERIALS REQUIRED SHALL BE PAID FOR UNDER THE 651.26 PAY ITEM.
- THE BRIDGE WILL BE CLOSED DURING CONSTRUCTION. THE CONTRACTOR SHALL GIVE NOTICE TO THE BRATTLEBORO PUBLIC WORKS DIRECTOR 3 WEEKS PRIOR TO CLOSING. PRIOR TO ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL SUBMIT A SEQUENCE OF CONSTRUCTION FOR THE ENGINEER'S APPROVAL. THE TOWN OF BRATTLEBORO WILL BE RESPONSIBLE FOR SIGNING OF THE DETOUR ROUTE.

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
2001	3660	505	57	4.0	115
2021	4750	645	57	3.0	130
FLEXIBLE ESAL'S @ 2001-2021		1,687,000	2001-2041		3,881,000

ASD FACTOR LOAD RATING (TONS)

LOADING LEVELS (LOAD FACTORY)	TRUCK				
	H	HS	3S2	6 AXLE	3A. STR.
INVENTORY	4.6				
POSTED	5.8				
OPERATING	6.5				

COMMENTS: EXISTING END FLOORBEAMS CONTROL LOAD RATING

SUGGESTED SEQUENCE OF CONSTRUCTION:

- REMOVE EXISTING NAIL-LAM ROADWAY DECK AND RUNNER PLANKS, REMOVE EXISTING NAIL-LAM WALKWAY DECK.
- SHORE SUPERSTRUCTURE, SUPPORTING THE TRUSSES WITH ABOVE GRADE CARRYING MEMBERS FOUNDED AT OR NEAR EXISTING ABUTMENT BRIDGE SEATS. SUPPORT EXISTING BOTTOM BRACING AND FLOORBEAMS WITH THE SAME SUPPORT SYSTEM.
- REPLACE LOWER BOTTOM TRUSS CHORDS. SEE GENERAL NOTE 9 THIS SHEET. FIT EXISTING BOTTOM BRACING TO NEW GLULAM CHORD MEMBERS.
- REMOVE SUPERSTRUCTURE SHORING. INSTALL NEW DRAINAGE-CHANNEL AT SOUTH ABUTMENT.
- INSTALL NEW LATTICE SISTER MEMBERS.
- INSTALL NEW ROADWAY DECK, RUNNER PLANKS AND CURBS. INSTALL NEW WALKWAY DECK.
- REPLACE METAL ROOFING IN WALKWAY AREA.
- APPLY INSECTICIDE AND FIRE RETARDANT COATINGS.

QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	TOTAL
201.31	THINNING AND TRIMMING	EACH	1
502.10	SHORING SUPERSTRUCTURE	LS	1
506.60	STRUCTURAL STEEL (MOD.)	LBS	310
513.30	STRUCTURAL PAINTING, FIELD APPLIED (MOD.)	LS	1
513.36	CONTAINMENT & ENVIRONMENTAL PROTECTION, FIELD (MOD.)	LS	1
522.20	STRUCTURAL LUMBER AND TIMBER-UNTREATED	MFBM	3.4
522.20	STRUCTURAL LUMBER AND TIMBER-UNTREATED (MOD.)	MFBM	0.7
522.25	STRUCTURAL LUMBER AND TIMBER-TREATED (DECK)	MFBM	10.7
522.25	STRUCTURAL LUMBER AND TIMBER-TREATED	MFBM	1.1
522.30	NON-STRUCTURAL LUMBER-UNTREATED	MFBM	0.5
522.40	STRUCTURAL GLUED LAMINATED TIMBER	LS	1
529.20	PARTIAL REMOVAL OF STRUCTURE	EACH	1
602.30	REPOINTING MASONRY (MOD.)	SY	3
623.60	WATER MAIN ON BRIDGE (MOD.- SPRINKLER SYSTEM)	LS	1
630.15	FLAGGERS	HR	25
631.10	FIELD OFFICE - ENGINEERS	LS	1
631.25	FIELD OFFICE - TELEPHONE (N.A.B.I.)	LU	1
635.11	MOBILIZATION / DEMOBILIZATION	LS	1
641.10	TRAFFIC CONTROL	LS	1
651.26	HAY BALES FOR EROSION CONTROL (MOD.)	EACH	1
665.15	REMOVE EXISTING ROOF	SF	750
665.18	METAL ROOFING	SF	750
679.15	STREET LIGHTING (MOD.- FIRE ALARM)	LS	1

EXISTING STRUCTURE HYDRAULIC DATA

STRUCTURE TYPE: SINGLE SPAN WOODEN COVERED BRIDGE YEAR BUILT: 1879

CLEAR SPAN (NORMAL TO STREAM): 16.8m (55.1 FEET)

VERTICAL CLEARANCE ABOVE STREAMBED: 4.6m (15.1 FEET) [AVG. LOW STEEL: 126.0m (413.4 FEET)]

WATERWAY OF FULL OPENING: 74.5m (244.5 SQ. FT.)

DISPOSITION OF STRUCTURE: VEHICLE USE

TYPE OF MATERIAL UNDER SUBSTRUCTURE: UNKNOWN

WATER SURFACE ELEV. @ Q2.33= 122.1m (400.6 FEET) VELOCITY= 3.4 mps (11.2 FPS)

Q10= 122.7m (402.6 FEET) " 4.3 mps (14.1 FPS)

Q25= 123.2m (404.2 FEET) " 4.8 mps (15.7 FPS)

Q50= 123.5m (405.2 FEET) " 5.2 mps (17.1 FPS)

Q100= 123.9m (406.5 FEET) " 5.6 mps (18.4 FPS)

LONG TERM STREAM BED CHANGES: 0.3m (1 FOOT) SCOUR THROUGH BRIDGE AREA

IS THE ROADWAY OVERTOPPED BELOW THE Q100? NO FREQUENCY: Q100+

RELIEF ELEVATION: 126m (413.4 FEET) DISCHARGE OVER ROAD @ Q100: N/A

PROJECT: BRATTLEBORO BHO 1442 (33)

DESIGN FILE NAME: IPARM FILE NAME: PLOT DATE: 10-AUG-2006

DESIGNED BY: J. WEAVER DRAWN BY: J. WHITE CHECKED BY: J. WEAVER

TYPICAL SECTIONS, NOTES & QUANTITIES SHEET: 2 OF 8