

STRUCTURE ELEVATION

(LOOKING DOWNSTREAM)

SFD SUBMITTAL

EXISTING ABUTMENT 1 STONES

TO BE REMOVED (TYP.). PAID FOR UNDER ITEM "REMOVAL OF

DESIGN

CHECKED

M.A.H.

J.A.W

8/28/2020

GRAPHIC SCALE

(IN FEET)

REVISIONS

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE TOWN AND IS IN NO WAY WARRANTED TO INDICATE THE TRUE CONDITIONS OR ACTUAL QUANTITIES OR DISTRIBUTION OF QUANTITIES OF WORK WHICH WILL BE REQUIRED.

EXISTING MASONRY"

ORDINARY HIGH WATER ELEVATION 15,5'±

APR#20-52W

INSPECTION OF FIELD WELDS QUANTIT METHODS INCHES NONE LTRASONIC NONE FEET MAGNETIC PARTICLE

CONCRETE DISTRIBUTION		
ABUTMENT AND WALL CONCRETE	80 C.Y.	
BRIDGE DECK CONCRETE	35 C.Y.	
APPROACH SLAB CONCRETE	55 C.Y.	
FOOTING CONCRETE	0 C.Y.	
TOTAL	170 C.Y.	

HYDRAULIC DATA 17.3 SQ. MILES 100 YEAR DESIGN FREQUENCY 2,580 C.F.S DESIGN DISCHARGE 14.82 FT AVERAGE DAILY FLOW ELEVATI 22.74 FT. UPSTREAM DESIGN WATER SURFACE ELEVATION 18,72 FT OWNSTREAM DESIGN WATER SURFACE ELEVATION -0.54 FT. MAXIMUM SCOUR ELEVATION 200-YR. FREQUENCY 3,270 C.F.S. WORST CASE SCOUR SUB-STRUCTURE UNIT ABUTMENT #1

NOTICE TO BRIDGE INSPECTORS

INSPECTED FOR, BUT NOT LIMITED TO, ALL APPROPRIATE COMPONENTS INDICATED IN THE GOVERNING MANUALS FOR BRIDGE INSPECTION, ATTENTION MUST BE GIVEN TO INSPECTING THE FOLLOWING SPECIAL COMPONENTS AND DETAILS (THE LISTING OF COMPONENTS FOR SPECIAL ATTENTION SHALL NOT BE CONSTRUED TO REDUCE THE COMPONENTS FUR SPECIAL ATTENTION OF ANY OTHER COMPONENT OF THE STRUCTURES. IMPORTANCE OF THE INSPECTION OF ANY OTHER COMPONENT OF THE STRUCTURES. THE FREQUENCY OF INSPECTION OF THIS STRUCTURE SHALL BE IN ACCORDANCE WITH THE GOVERNING MANUALS FOR BRIDGE INSPECTION, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OF BRIDGES AND STRUCTURES, OR NOTED BELOW.

COMPONENT OR DETAIL	BRIDGE SHEET REF.
NONE	NONE

TRANSPORTATION DIMENSIONS AND WEIGHT				
MEMBER	SHIPPING LENGTH	SHIPPING HEIGHT	SHIPPING WIDTH	SHIPP WEIG
B1 THRU B4	75'-6"	3'-4"	9'-7 3/4"	131,500

36'-0" OUT-TO-OU 32'-0" CURB-TO-CURB 3'-6" SHOULDER 3'-6" SHOULDER 12'-6" LANE 12'-6" LANE FULL HEIGHT CONCRETE
PARAPET (TYP.) CONSTRUCTION BASELINE MAIN STREET 4" YELLOW EPOXY RESIN 8 1/2" (TYP.) 3/8" / FOOT В3 PRESTRESSED NEXT 40D BEAM 3" OVERHANG (TYP.) 9" CLOSURE POUR (TYP.) 3" MIN, HMA OVERLAY ON MEMBRANE WATERPROOFING **BRIDGE SECTION** (COLD LIQUID ELASTOMERIC)
GENERAL NOTES:

SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 818 (2020) AND SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS (8TH EDITION) AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL (2003) UP TO AND INCLUDING 2011.

MATERIAL STRENGTH:

CONCRETE

CLASS PCC 03340 f'c = 3000 P.S.I. CLASS PCC 04460 Fc = 4000 P.S.I.

CLASS PCC 04462 f'c = 4000 P.S.I

CLASS PCC 06662 f'c = 6000 P.S.I.

THE CONCRETE STRENGTH, Fc, USED IN DESIGN OF THE CONCRETE COMPONENTS IS NOTED ABOVE. THE COMPRESSIVE STRENGTH OF THE CONCRETE IN THE CONSTRUCTED COMPONENTS SHALL CONFORM TO THE REQUIREMENTS OF 6.01 - CONCRETE FOR STRUCTURES, AND M.D3 - PORTLAND CEMENT CONCRETE

REINFORCEMENT: ALL REINFORCEMENT SHALL BE GALVANIZED AFTER FABRICATION UNLESS NOTED OTHERWISE. ALL REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM A767, CLASS 1, INCLUDING SUPPLEMENTAL REQUIREMENTS. THE COST OF FURNISHING AND PLACING THIS REINFORCEMENT SHALL BE INCLUDED IN THE ITEM "DEFORMED STEEL BARS - GALVANIZED." fy = 60,000 P.S.I.

LIVE LOAD: HL-93, LEGAL AND PERMIT VEHICLES

FUTURE PAVING ALLOWANCE: NONE

HMA OVERLAY: THIS SHALL CONSIST OF 2" MIN. OF HMA 50.5 (LEVEL 2) ON TOP OF 1" OF HMA 50.25 (LEVEL 2) ON MEMBRANE WATERPROOFING (COLD LIQUID ELASTOMERIC).

DIMENSIONS: ALL DIMENSIONS SHOWN ON THE PLANS ARE IN FEET AND INCHES EXCEPT IF NOTED OTHERWISE. ALL ELEVATIONS ARE GIVEN IN PEET. WHEN ELEVATIONS AND ARE GIVEN TO LESS THAN THREE DECIMAL PLACES, THE OMITTED DIGITS SHALL BE ASSUMED TO BE ZEROS

EXISTING DIMENSIONS: DIMENSIONS OF THE EXISTING STRUCTURE SHOWN ON THESE PLANS ARE FOR GENERAL REFERENCE ONLY AN ARE NOT GUARANTEED. THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY TO ASSURE PROPER FIT OF THE FINISHED WORK AND SHALL ASSUME FULL RESPONSIBILITY OF THEIR ACCURACY. WHEN SHOP DRAWINGS BASED ON FIELD MEASUREMENTS ARE SUBMITTED FOR APPROVAL, FIELD MEASUREMENTS SHALL ALSO BE SUBMITTED FOR REFERENCE BY THE REVIEWS SUPERSTRUCTURE REMOVAL: BEFORE INITIATING CONSTRUCTION, CONTRACTOR SHALL SUBMIT A PLAN FOR APPROVAL DEFINING METHOD FOR PROTECTION OF THE STREAM AREA DURING REMOVAL OF EXISTING BRIDGE SUPERSTRUCTURE, COST TO BE INCLUDED I THE COST OF REMOVAL OF SUPERSTRUCTURE.

COFFERDAMS AND DEWATERING: REFORE INITIATING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT A PLAN FOR APPROVAL THAT DEFINES METHODS AND MATERIALS FOR CONTROLLING STREAM WATER (COFFERDAMS, ETC.), DEWATERING, STRUCTURE EXCAVATION AND PROTECTING THE STREAM DURING VARIOUS STAGES OF CONSTRUCTION. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF "HANDLING WATER"

WATER MAIN RELOCATION: COORDINATE WATER MAIN SHUT-OFF WITH THE MDC. WATER MAIN WORK WITHIN LIMITS OF CONSTRUCTION SHALL BE THE PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. UTILITY RELOCATIONS: OVERHEAD UTILITY LINES MAY BE IN CONFLICT WITH TEMPORARY OR PEMANENT SHEETING OR COFFERDAMS, SETTING OF PRECAST CONCRETE BEAM UNITS OR OTHER CONSTRUCTION, DEPENDING UPON THE CONTRACTOR'S CONSTRUCTION OPERATIONS, THESE UTILITIES MAY NEED TO BE RELOCATED TO TEMPORARY LOCATIONS FOR PORTIONS OF THE CONSTRUCTION OPERATIONS AND THEN MOVED BACK TO PERMANENT LOCATIONS WHICH MAY BE OTHER THAN CURRENT LOCATIONS. THE ACTUAL UTILITY RELOCATIONS (PERMANENT OR TEMPORARY) WILL BE THE RESPONSIBILITY OF THE INDIVIDUAL UTILITY OWNER, HOWEVER T CONTRACTOR WILL BE REQUIRED TO COORDINATE ALL UTILITY RELOCATIONS WITH EACH UTILITY OWNER AND TO PHASE HIS WORK A REQUIRED TO ACCOMMODATE TEMPORARY AND PERMANENT UTILITY RELOCATION WORK. THE CONTRACTOR SHALL HAVE NO RIGHT TO CLAIM EXTRA COMPENSATION FOR DELAYS OR STAGING AND PHASING OF HIS WORK DUE TO UTILITY RELOCATION WORK. UNCONFINED IN-STREAM: UNCONFINED IN-STREAM ACTIVITIES MUST BE LIMITED TO THE TIME PERIOD JUNE 1 THROUGH SEPTEME

CONCRETE: THE FOLLOWING PAY ITEMS AND CONCRETE CLASSES ARE REQUIRED FOR CAST-IN-PLACE BRIDGE COMPONENTS:

ITEM	ITEM BRIDGE COMPONENTS PCC CLAS	
ABUTMENT AND WALL CONCRETE	ABUTMENT AND WINGWALL STEMS	PCC03340
PARAPET CONCRETE AND BRIDGE DECK CONCRETE	BRIDGE PARAPET AND BRIDGE DECK	PCC04482
APPROACH SLAB CONCRETE	APPROACH SLAB	PCC04460

JOINT SEAL: SEE SECTION 6.01 "CONCRETE FOR STRUCTURE"

CONCRETE COVER: ALL REINFORCEMENT SHALL HAVE MIN. 2" COVER UNLESS DIMENSIONED OTHERWISE.

REINFORCEMENT: ALL REINFORCEMENT SHALL BE ASTM A615 GRADE 60.

REINFORCEMENT: REINFORCEMENT: ALL REINFORCEMENT SHALL BE GALVANIZED AFTER FABRICATION UNLESS NOTED OTHERWISE ALL REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM A767, CLASS 1, INCLUDING SUPPLEMENTAL REQUIREMENTS. THE COST OF FURNISHING AND PLACING THIS REINFORCEMENT SHALL BE INCLUDED IN THE ITEM "DEFORMED STEEL BARS -GALVANIZED.

CONSTRUCTION JOINTS: CONSTRUCTION JOINTS, OTHER THAN THOSE SHOWN ON THE PLANS, WILL NOT BE PERMITTED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.

EXPOSED EDGES: EXPOSED EDGES OF CONCRETE SHALL BE BEVELED 1"X1" UNLESS DIMENSIONED OTHERWISE. CONCRETE NEXT BEAMS: FABRICATORS OF PRESTRESSED CONCRETE NEXT BEAMS SHALL BE REQUIRED TO SUBMIT SHOP DRAWINGS HE ENGINEER FOR APPROVAL PRIOR TO FABRICATION.

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PREPARED FOR

TOWN OF SOUTH WINDSOR 1540 SULLIVAN AVENUE

STRUCTURE PLAN, ELEVATION AND SECTION _ S.F.D. _ 13098.10 _ FILE NAME NUMBER REV. OF

REPLACEMENT OF THE MAIN STREET

BRIDGE OVER PODUNK RIVER

SOUTH WINDSOR, CT 06074 D - MAIN ST. PROJECT'