GENERAL NOTES

SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 817 (2016), SUPPLEMENTAL SPECIFICATIONS DATED JANUARY 2017 AND SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: LRFD BRIDGE DESIGN SPECIFICATIONS 7TH EDITION (2014), WITH INTERIM SPECIFICATIONS UP TO AND INCLUDING 2016, AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL (2003).

ALLOWABLE DESIGN STRESSES:

CLASS 'A' CONCRETE:
BASED ON f'c = 3,000 psi

CLASS 'F' CONCRETE:
BASED ON f'c = 4,000 psi

THE SPECIFIED CONCRETE STRENGTH USED IN DESIGN, f'c, OF THE CONCRETE COMPONENTS IS NOTED ABOVE. THE MINIMUM COMPRESSIVE STRENGTH OF THE CONCRETE IN THE CONSTRUCTED COMPONENTS SHALL CONFORM TO THE REQUIREMENTS OF "SECTION 6.01 CONCRETE FOR STRUCTURES".

REINFORCEMENT:
ASTM A615 GRADE 60
Fy = 60,000 psi

STRUCTURAL STEEL:
AASHTO M270 GRADE HPS 70W
Fy = 70,000 psi

AASHTO M270 GRADE 50W
Fy = 50,000 psi

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LIVE LOAD: HL-93 DESIGN VEHICLE
(2) CTDOT LEGAL VEHICLES
(10) CTDOT PERMIT VEHICLES

FUTURE PAVING ALLOWANCE: NONE

BITUMINOUS CONCRETE OVERLAY: THIS SHALL CONSIST OF TWO LIFTS. THE FIRST SHALL BE HMA S0.25 - TRAFFIC LEVEL 2 (1" THICK) AND THE SECOND SHALL BE HMA S0.5 - TRAFFIC LEVEL 2 (2" THICK).

FOUNDATION PRESSURES: THE VARIOUS GROUP LOADINGS NOTED ON THE SUBSTRUCTURE PLAN SHEETS REFER TO THE GROUP LOADS AS GIVEN IN THE AASHTO LRFD GUIDE SPECIFICATIONS.

DIMENSIONS: WHEN DECIMAL DIMENSIONS ARE GIVEN TO LESS THAN THREE DECIMAL PLACES, THE OMITTED DIGITS SHALL BE ASSUMED TO BE ZEROS.

COMPOSITE CONSTRUCTION: NO TEMPORARY INTERMEDIATE SUPPORTS SHALL BE USED DURING THE PLACING AND SETTING OF THE CONCRETE DECK.

CLASS "A" CONCRETE: CLASS "A" CONCRETE SHALL BE USED FOR CAST-IN-PLACE ABUTMENT FOOTINGS.

CLASS "F" CONCRETE: UNLESS NOTED OTHERWISE, CLASS "F" CONCRETE SHALL BE USED FOR BRIDGE DECKS INCLUDING PARAPETS AND SIDEWALKS, PEDESTALS, KEEPER BLOCKS, AND CAST-IN-PLACE VOID INFILL IN PRECAST SUBSTRUCTURE ELEMENTS.

HIGH EARLY STRENGTH CONCRETE: HIGH EARLY STRENGTH CONCRETE SHALL BE USED FOR CAST-IN-PLACE WINGWALL PARAPETS, BRIDGE DECK CLOSURE POURS, PARAPETS CLOSURE POURS, AND PRECAST APPROACH SLAB CLOSURE POURS.

PRECAST SUBSTRUCTURE ELEMENTS: SEE SPECIAL PROVISIONS FOR PRECAST SUBSTRUCTURE ELEMENT CONCRETE REQUIREMENTS.

JOINT SEAL: SEE SPECIAL PROVISIONS.

EXPOSED EDGES: EXPOSED EDGES OF CONCRETE SHALL BE BEVELED 1" x 1" UNLESS DIMENSIONED OTHERWISE.

CONCRETE COVER: ALL REINFORCEMENT SHALL HAVE TWO INCHES COVER UNLESS DIMENSIONED OTHERWISE.

REINFORCEMENT: ALL REINFORCEMENT SHALL BE ASTM A615 GRADE 60.

EPOXY COATED REINFORCING BARS: ALL REINFORCEMENT IN THE SUPERSTRUCTURE INCLUDING THE CONCRETE DECK AND THE PARAPETS SHALL BE EPOXY COATED UNLESS OTHERWISE NOTED. ALL REINFORCEMENT IN THE PEDESTALS SHALL BE EPOXY COATED. THESE BARS SHALL BE INCLUDED IN THE PAY ITEM FOR "DEFORMED STEEL BARS (EPOXY COATED)."

CONTROLLED DENSITY FILL: THE MINIMUM THICKNESS OF ALL CONTROLLED DENSITY FILL SHALL BE AS DETERMINED BY THE CONTRACTOR'S MIX DESIGN. THE MAXIMUM THICKNESS SHALL BE 3".

PREFORMED EXPANSION JOINT FILLER: THE COST OF FURNISHING AND INSTALLING PREFORMED EXPANSION JOINT FILLER SHALL BE INCLUDED IN THE COST OF THE ITEM "1" PREFORMED EXPANSION JOINT FILLER FOR BRIDGES".

CLOSED CELL ELASTOMER: THE COST OF FURNISHING AND INSTALLING CLOSED CELL ELASTOMER SHALL BE INCLUDED IN THE COST OF THE ITEM "CLASS 'F' CONCRETE".

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

TRAFFIC: ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIAL PROVISIONS "MAINTENANCE AND PROTECTION OF TRAFFIC".

BRIDGE IDENTIFICATION: FOR THIS CONTRACT, THE BRIDGES SHALL BE IDENTIFIED AS FOLLOWS:

BRIDGE	SITE NO.
03163	1
03164	2

BRIDGE IDENTIFICATION PLACARDS: THE CONTRACTOR SHALL PROVIDE AND INSTALL NEW BRIDGE IDENTIFICATION SIGNS AT THE LEADING END OF EACH BRIDGE PARAPET ON THE TRAFFIC SIDE. THE SIGNS SHALL BE FABRICATED WITH 40 GAUGE ALUMINUM SHEET METAL. THE SIGNS SHALL BE 4" x 12" WITH 3" WHITE REFLECTIVE BLOCK LETTERS ON GREEN REFLECTIVE SHEETING. EACH SIGN SHALL READ: "03163" OR "03164" AS APPLICABLE. ALL COSTS ASSOCIATED WITH PROVIDING AND INSTALLING THE BRIDGE SIGNS SHALL BE COVERED UNDER THE ITEM "SIGN FACE SHEET ALUMINUM (TYPE III REFLECTIVE SHEETING)." THE FINAL LOCATION AND ATTACHMENT METHOD FOR THE SIGNS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

TABLE OF BRIDGE QUANTITIES

ITEM	UNIT	QUANTITY
CONSTRUCTION ACCESS	LS	LS
STRUCTURE EXCAVATION - EARTH (COMPLETE)	CY	807
STRUCTURE EXCAVATION - ROCK (COMPLETE)	CY	3223
COMPACTED GRANULAR FILL	CY	1606
PERVIOUS STRUCTURE BACKFILL	CY	4837
HMA S0.5	TON	160
HMA S0.25	TON	80
REMOVAL OF SUPERSTRUCTURE (SITE NO. 1)	LS	LS
REMOVAL OF SUPERSTRUCTURE (SITE NO. 2)	LS	LS
SHEAR CONNECTORS (SITE NO. 1)	EA	2130
SHEAR CONNECTORS (SITE NO. 2)	EA	2130
1-1/2" POLYVINYL CHLORIDE PLASTIC PIPE	LF	34
ASPHALTIC PLUG EXPANSION JOINT SYSTEM	CF	62
STEEL-LAMINATED ELASTOMERIC BEARINGS	EA	20
CLASS "A" CONCRETE	CY	544
PRECAST APPROACH SLAB	SY	320
HIGH EARLY STRENGTH CONCRETE	CY	334
CLASS "F" CONCRETE	CY	707
PRECAST SUBSTRUCTURE ELEMENTS	CY	1377
1" PREFORMED EXPANSION JOINT FILLER FOR BRIDGES	SF	772
$1\frac{1}{2}$" PREFORMED EXPANSION JOINT FILLER FOR BRIDGES	SF	266
DEFORMED STEEL BARS	LB	34600
DEFORMED STEEL BARS - EPOXY COATED	LB	88500
STRUCTURAL STEEL (SITE NO. 1)	LS	LS
STRUCTURAL STEEL (SITE NO. 2)	LS	LS
TEMPORARY SUPPORT SYSTEM (SITE NO. 1)	LS	LS
TEMPORARY SUPPORT SYSTEM (SITE NO. 2)	LS	LS
ERECTION EQUIPMENT - COMPLETE	LS	LS
MEMBRANE WATERPROOFING (COLD LIQUID ELASTOMERIC)	SY	1400
DAMPPROOFING	SY	1342
PROTECTIVE FENCE (6' HIGH)	LF	922
REMOVAL OF EXISTING MASONRY	CY	722
INSTALLATION AND REMOVAL OF FIRE ALARM CABLE	LS	LS
SIGN FACE - SHEET ALUMINUM (TYPE III REFLECTIVE SHEETING)	SF	1
FIRE SUPPRESSION STANDPIPE SYSTEM	EA	2

CONCRETE PAY ITEMS

ELEMENT	PAY ITEM
PRECAST ABUTMENT AND WINGWALL FOOTINGS	PRECAST SUBSTRUCTURE ELEMENTS
C.I.P. ABUTMENT AND WINGWALL FOOTINGS	CLASS "A" CONCRETE
PRECAST ABUTMENT AND WINGWALL STEMS	PRECAST SUBSTRUCTURE ELEMENTS
C.I.P. FOOTING STEPS	HIGH EARLY STRENGTH CONCRETE
C.I.P. CONCRETE AT STEM VOIDS	CLASS "F" CONCRETE
PRECAST ABUTMENT BRIDGE SEAT/WALL CAPS	PRECAST SUBSTRUCTURE ELEMENTS
C.I.P. PEDESTALS AND CHEEKWALLS	CLASS "F" CONCRETE
PRECAST BACKWALLS	PRECAST SUBSTRUCTURE ELEMENTS
C.I.P. DECK, PARAPETS, SIDEWALK	CLASS "F" CONCRETE
DECK CLOSURE POURS	HIGH EARLY STRENGTH CONCRETE
C.I.P. WINGWALL PARAPETS AND SIDEWALK	HIGH EARLY STRENGTH CONCRETE
PARAPET CLOSURE POURS	HIGH EARLY STRENGTH CONCRETE
PRECAST SLEEPER SLABS	PRECAST SUBSTRUCTURE ELEMENTS
PRECAST APPROACH SLABS	PRECAST APPROACH SLABS
APPROACH SLAB CLOSURE POURS	HIGH EARLY STRENGTH CONCRETE

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Andrew Lessard
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ADDENDUM NO. 2

REV.	DATE	REVISION DESCRIPTION	SHEET NO.
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
2	11/09/17	UPDATED CONCRETE PAY ITEMS TABLE	04.03.A2
1	11/01/17	ADDED AASHTO M270 GRADE 50W	04.03.A1

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

Plotted Date: 11/9/2017

DESIGNER/DRAFTER: JMB
CHECKED BY: AML
SCALE AS NOTED

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

Filename: ...\S-03 GENERAL NOTES AND QUANTITIES_A2.dgn

SIGNATURE/BLOCK:
Stantec Consulting Services Inc.
55 Church Street
Suite 601
New Haven, CT 06510

PROJECT TITLE:
REPLACEMENT OF BRIDGES 03163 & 03164 ROUTE 160 OVER I-91

TOWN: **ROCKY HILL**

DRAWING TITLE: **GENERAL NOTES & QUANTITIES**

PROJECT NO. **118-169**
DRAWING NO. **S-03**
SHEET NO. **04.03.A2**