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DATE/TIME = 28-OCT-2016 11:07  
USER = alabunski

DESIGN SUPERVISOR T. SOKA

JOB MANAGER R. HUDA

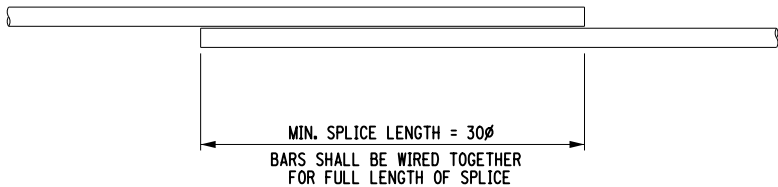
DESIGN F. RING

CHECK R. HUDA

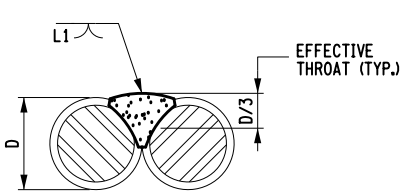
DRAFTING CMISHLER

CHECK F. RING

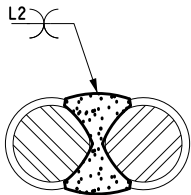
PROJECT MANAGER D. NEWBY



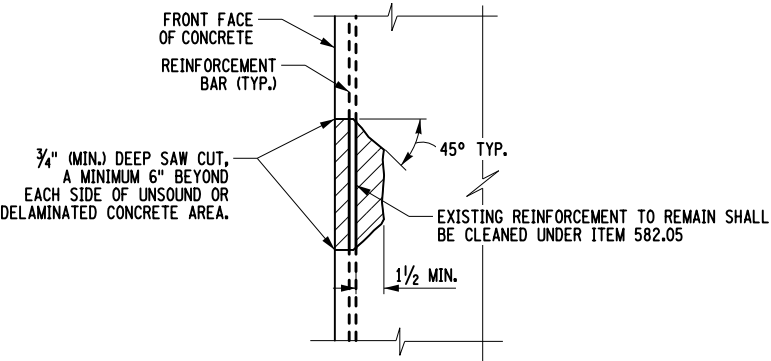
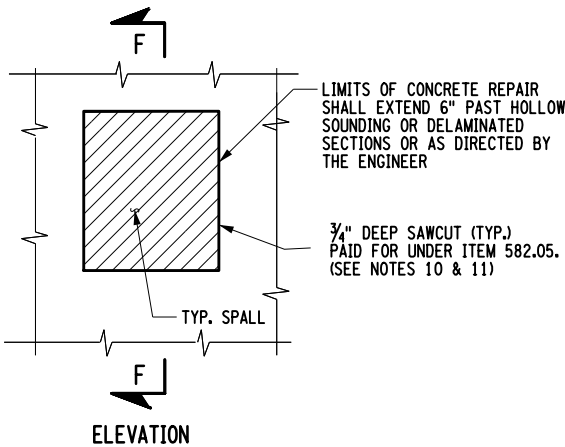
LAPPED, TIED SPLICE



SINGLE FLARE V-GROOVE WELD



DOUBLE FLARE V-GROOVE WELD



SECTION F-F

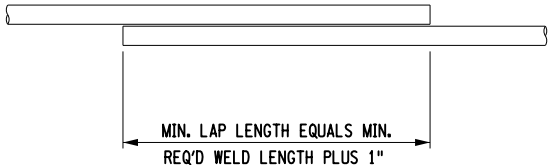
NOTES:  
CHIP AT A 45° ANGLE.  
USE SHARP CHISEL BIT (NOT A POINTED BIT).  
WORK THE REMOVAL TOWARD THE CENTER OF THE REPAIR AREA.

CONCRETE SPALL REPAIR DETAILS

MINIMUM WELD LENGTHS		
BAR SIZE	SINGLE FLARE V-GROVE WELD (L1)	DOUBLE FLARE V-GROVE WELD (L2)
5	4"	2 1/2"
6	4 1/2"	2 3/4"
7	5"	3"
8	5 1/2"	3 1/4"

WELDING NOTES:  
1. WELDER SHALL BE QUALIFIED IN ACCORDANCE WITH THE "NEW YORK STATE STEEL CONSTRUCTION MANUAL."  
2. FOR WELDING DETAILS, SEE "SECTION 7 OF THE NEW YORK YORK STATE STEEL CONSTRUCTION MANUAL."

LAPPED, WELDED SPLICE



PLAN-WELDED SPLICE

CONCRETE SPALL REPAIR NOTES:

- THE AREAS OF CONCRETE REMOVAL SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND WERE DETERMINED FROM THE MOST RECENT BRIDGE INSPECTION REPORTS. SOME OF THE REPAIR AREAS WERE ESTIMATED FROM VISUAL ASSESSMENT ONLY. THE CONTRACTOR AND ENGINEER SHALL SOUND AND EVALUATE THE SUBSTRUCTURE SURFACES TO DETERMINE THE AREAS REQUIRING CONCRETE REPAIRS.
- THE COST OF FURNISHING, INSTALLING, MAINTAINING, REMOVING AND DISPOSING OF ALL PLATFORM NETS, SCREENS, OR OTHER PROTECTIVE DEVICES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE APPROPRIATE ITEMS OF THE CONTRACT.
- ALL MATERIAL FALLING ON THE AREA BELOW AND ADJACENT TO THE BRIDGE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AT NO COST TO THE STATE.
- WHERE CONCRETE REMOVAL AND REPLACEMENT NECESSITATES ADJACENT SEPARATE CONCRETE PLACEMENTS, CONCRETE REMOVAL SHALL EXTEND A MINIMUM OF 12" BEYOND THE LIMIT OF THE FIRST CONCRETE PLACEMENT. THIS CLEAR SPACE WILL MINIMIZE THE NEGATIVE IMPACT OF THE ADJACENT CONCRETE REMOVAL OPERATION ON THE RECENTLY COMPLETED REPAIR.
- THE EXTENT OF CONCRETE REMOVAL FOR ANY COMPONENT SHALL NOT JEOPARDIZE IT'S STRUCTURAL INTEGRITY. THE CONTRACTOR SHALL SUBMIT, PRIOR TO COMMENCEMENT OF THIS WORK, A REMOVAL PLAN AND SCHEDULE FOR EIC APPROVAL.
- THE ENGINEER-IN-CHARGE MAY ORDER SUPPLEMENTAL REBAR ANCHORS AS PART OF THE CONCRETE REPLACEMENT PROCEDURE.
- REMOVAL OF UNSOUND CONCRETE AND REMOVAL OF CONCRETE SHOWN ON THESE DRAWINGS SHALL BE PERFORMED TO PREVENT DAMAGE TO THE EXISTING REINFORCEMENT ORIGINATING IN THE SOUND STRUCTURAL CONCRETE TO REMAIN. ANY DAMAGE TO EXISTING REINFORCEMENT TO REMAIN, AS DETERMINED BY THE ENGINEER, SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- FOR EXISTING DETERIORATED REINFORCEMENT, AS DETERMINED BY THE ENGINEER, SHALL BE REPAIRED OR REPLACED AND PAID FOR UNDER ITEM NO. 556.0201 - UNCOATED BAR REINFORCEMENT FOR STRUCTURES.
- REINFORCEMENT BARS THAT ARE EITHER DAMAGED OR DETERIORATED, SHALL BE REPAIRED BY A PROCEDURE PROPOSED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.
- THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT SOUND CONCRETE MAY HAVE TO BE REMOVED TO OBTAIN THE 1/2" MINIMUM CLEARANCE BEHIND THE REINFORCEMENT STEEL.
- THE CONTRACTOR SHALL PROVIDE A 3/4" DEEP SAWCUT BETWEEN THE CONCRETE TO BE REMOVED AND THE CONCRETE TO REMAIN. THE COST OF THE SAWCUT SHALL BE PAID FOR UNDER ITEM NO. 582.05.
- AREAS OF CONCRETE DETERIORATION SHALL BE REPAIRED USING ITEM 582.05 - REMOVAL OF STRUCTURAL CONCRETE - REPLACED WITH CLASS A CONCRETE. CLASS D CONCRETE MAY BE SUBSTITUTED FOR CLASS A CONCRETE AT NO ADDITIONAL COST TO THE STATE.
- ALL CONCRETE SURFACES RECEIVING NEW CONCRETE SHALL BE SANDBLASTED PRIOR TO THE APPLICATION OF NEW CONCRETE. THE SURFACES SHALL BE AIR CLEANED, THEN PRE-WET FOR 12 HOURS. THERE WILL BE NO SEPARATE PAYMENT FOR THIS WORK. THE COST SHALL BE INCLUDED IN THE UNIT PRICES BID FOR VARIOUS CONCRETE IN THE CONTRACT.
- THE USE OF A WATER REDUCING ADMIXTURE (711-08) ASTM C 494, TYPE F (HIGH RANGE) MAY BE ALLOWED WITH THE APPROVAL OF THE REGIONAL MATERIALS ENGINEER.
- ALL REPAIRS SHALL BE RESTORED TO ORIGINAL DIMENSIONS, TO THE SATISFACTION OF THE ENGINEER.
- ALL REINFORCEMENT SHALL HAVE 2" COVER UNLESS OTHERWISE NOTED.
- EXISTING ELEVATIONS AND DIMENSIONS ARE FROM RECORD PLANS AND ARE FOR REFERENCE ONLY.

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS  
DESCRIPTION OF ALTERATIONS:

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

PIN 9067.63

BRIDGES  
1013260

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

SUBSTRUCTURE CONCRETE REPAIR

4 OF 5

CR 28

OVER

RTE. 17 (EXPRESSWAY)

CONTRACT NUMBER  
D263355

DRAWING NO. ST2-12  
SHEET NO. 83



Department of  
Transportation