

TOWN OF SALEM
SALEM, NEW HAMPSHIRE

PLANS OF THE PROPOSED REPAIRS OF THE NORTH MAIN STREET BRIDGE OVER THE SPICKET RIVER (BR. NO. 113/134)

AUGUST 2016

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DIRECTOR OF MUNICIPAL SERVICES

ROY E. SORENSON

ENGINEERING DIVISION

JAMES A. DANIS, P.E.

RECORD DRAWINGS

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, BASED UPON CONSTRUCTION RECORDS, THAT ALL WORK SHOWN IN THESE DRAWINGS HAS BEEN COMPLETED AS SHOWN.

HOYLE, TANNER & ASSOCIATES, INC.

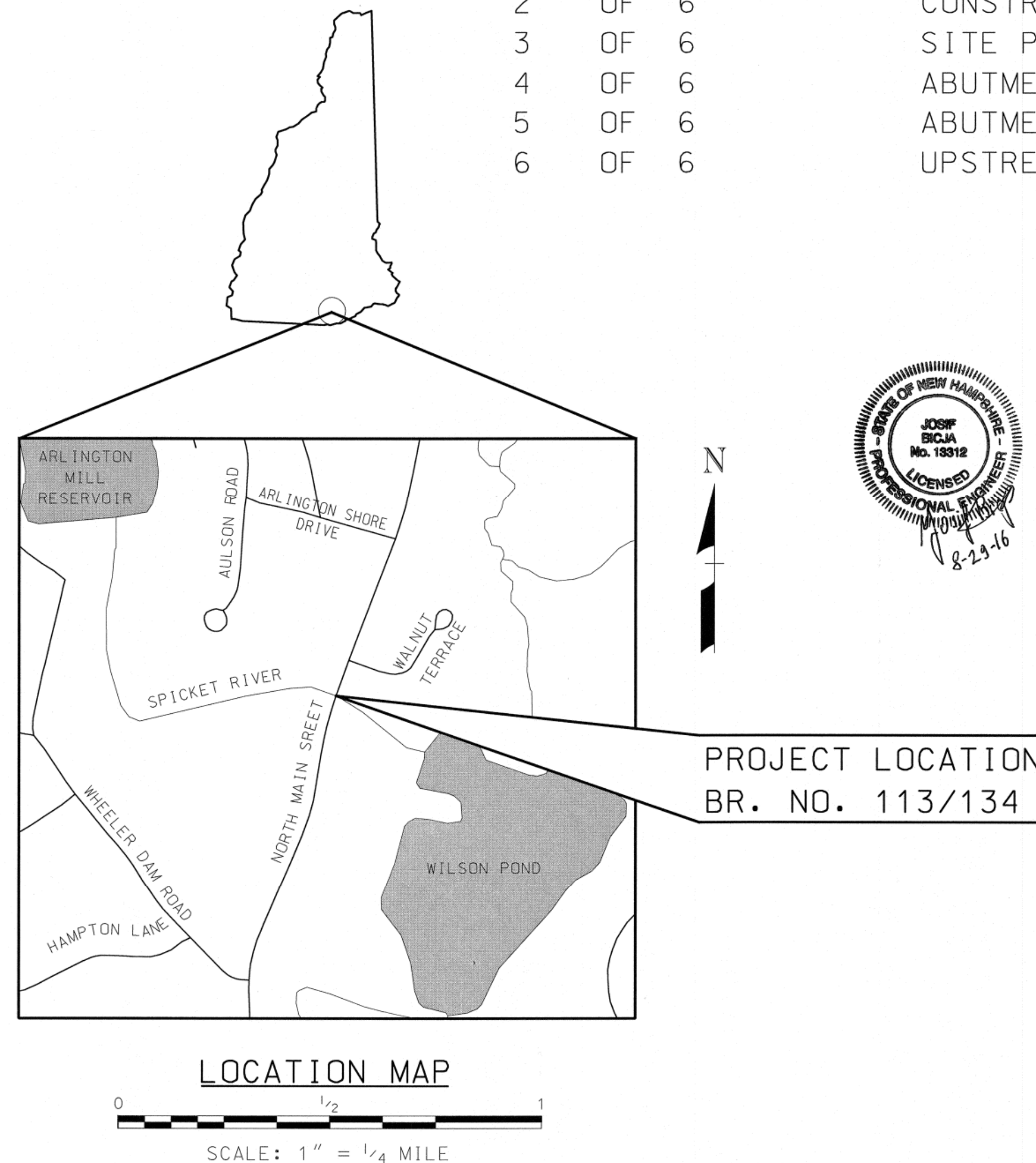
SIGNED *[Signature]*

JUNE 2017

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INDEX OF SHEETS

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6 OF 6	UPSTREAM HEADWALL ELEVATION AND DETAILS



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HOYLE, TANNER & ASSOCIATES, INC.
SIGNED *[Signature]*
JUNE 2017

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Hoyle, Tanner & Associates, Inc.
150 Dow Street, Manchester, NH 03101-1227
Tel (603) 669-5555 · Fax (603) 669-4168
www.hoyletanner.com

TOWN OF SALEM
SALEM, NEW HAMPSHIRE
NORTH MAIN STREET BRIDGE OVER SPICKET RIVER (NH DOT BR. NO. 113134)
TITLE SHEET

PROJECT NO.: 918106
FILE NAME: 918106FSC
MODEL NAME: FSC
SHEET NO.
1
SHEET 1 OF 6

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GENERAL NOTES

- GENERAL NOTES SHALL APPLY TO ALL DRAWINGS PREPARED BY HOYLE, TANNER & ASSOCIATES, INC. (HOYLE, TANNER) AND THE PROPOSED WORK THEY CONVEY.
- ALL WORK SHALL CONFORM TO ALL FEDERAL, STATE AND LOCAL CODES, REGULATIONS AND STANDARDS. THE MORE STRINGENT SHALL GOVERN.
- THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS AND COORDINATION OF OTHER TRADES.
- THESE DOCUMENTS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. CARE OF ADJACENT PROPERTIES DURING CONSTRUCTION AND COMPLIANCE WITH STATE AND FEDERAL REGULATIONS REGARDING SITE SAFETY SHALL SOLELY BE THE CONTRACTOR'S RESPONSIBILITY.
- ALL DIMENSIONS, ELEVATIONS AND CONDITIONS MUST BE VERIFIED BY THE GENERAL CONTRACTOR OR RESPONSIBLE TRADES PRIOR TO COMMENCING WITH THE WORK. FABRICATION OR ORDERING MATERIALS. DO NOT SCALE DRAWINGS. USE DIMENSIONS SHOWN.
- ANY DISCREPANCIES BETWEEN THESE DRAWINGS AND AS-BUILT CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY, BEFORE PROCEEDING WITH THE WORK.
- IN THE PREPARATION OF THESE DRAWINGS, HOYLE, TANNER HAS RELIED UPON INFORMATION OBTAINED FROM THE FOLLOWING REPORTS, DRAWINGS, TEST DATA/RESULTS OR OTHER DOCUMENTATION AS FOLLOWS:

- BRIDGE INSPECTION REPORT BY NHDOT, DATED 08/27/2013
- EXISTING BRIDGE CONSTRUCTION DRAWINGS, PROJECT NO. T-4834, DATED 01/08/1963
- AS-BUILT NORTH MAIN STREET RECONSTRUCTION DRAWINGS DATED 1/27/2009

THIS INFORMATION IS AVAILABLE FOR REVIEW DURING NORMAL BUSINESS HOURS AT THE OFFICE OF HOYLE, TANNER AND ASSOCIATES, INC., 150 DOW STREET, MANCHESTER, NH 03101.

- THE INFORMATION SHOWN ON THESE PLANS CONCERNING THE TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING DETERMINATIONS AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. ALL COSTS FOR DETERMINING UNDERGROUND UTILITY TYPES AND LOCATIONS SHALL BE SUBSIDIARY TO THE CONTRACT.
- ALL APPLICABLE UTILITY DEPARTMENT AND COMPANIES SHALL BE NOTIFIED BEFORE EXCAVATION IS STARTED. UTILITIES WITHIN 50 FEET OF AN EXCAVATION SHALL BE MARKED IN THE FIELD.
- HOYLE, TANNER WAIVES ANY AND ALL RESPONSIBILITY AND LIABILITY FOR PROBLEMS THAT ARISE DUE TO THE FAILURE OF THE CONTRACTOR:
 - TO FOLLOW THESE DRAWINGS AND SPECIFICATIONS AND THE DESIGN INTENT THEY CONVEY
 - TO NOTIFY HOYLE, TANNER OF ANY DISCREPANCIES, ERRORS, OMISSIONS OR CONFLICTS AND OBTAIN THEIR GUIDANCE TO RESOLVE.
- NO TRACKED EQUIPMENT SHALL BE ALLOWED ON THE ROADWAY. ANY PAVEMENT DAMAGE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AN EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE "NHDOT GUIDELINES FOR TEMPORARY EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT" BY THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION BUREAU OF CONSTRUCTION.

DESIGN LOADS, MATERIALS AND SPECIFICATIONS

- DESIGN LIVE LOAD: HS20-44
- DESIGN METHOD: ALLOWABLE STRESS DESIGN (ASD)
- DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGES, 17 EDITION (2002). NHDOT SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2010 WITH CURRENT ADDITIONS AND MODIFICATIONS.
- REINFORCING STEEL: AASHTO M 284 (ASTM A775) GRADE 60 EPOXY COATED.
- CONCRETE: CAST-IN-PLACE REPAIR CONCRETE CLASS AA F'C = 4000 PSI

REINFORCEMENT NOTES

- ALL REINFORCING STEEL SHALL HAVE 2 1/2" MINIMUM CLEAR COVER UNLESS OTHERWISE NOTED.
- REINFORCING LEGEND: SP = SPACE SPL = SPLICE FS = FAR SIDE
NS = NEAR SIDE BOT = BOTTOM MID = MIDDLE
EQ = EQUAL ALT = ALTERNATING DOW = DOWELS
- REINFORCING BAR MARKS WITH AN (E) REFERENCE, INDICATE EPOXY COATING.

MOBILIZATION AREAS NOTE

- THE CONTRACTOR SHALL BE LIMITED TO MOBILIZATION WITHIN THE TOWN'S RIGHT-OF-WAY LIMITS AND TEMPORARY RIGHT OF ENTRY AREA SHOWN IN THESE PLANS, UNLESS NOTED OTHERWISE. ADDITIONAL MOBILIZATION AREAS REQUIRED BY THE CONTRACTOR SHALL BE COORDINATED BY THE CONTRACTOR WITH THE AFFECTED PROPERTY OWNERS AND SHALL BE AT THE CONTRACTOR'S EXPENSE.

CMP CULVERT REHABILITATION NOTES

- SURFACES OF THE PLATE ARCH AGAINST WHICH CONCRETE IS TO BE PLACED SHALL BE CLEANED SO AS TO REMOVE ALL LOOSE CORROSION IN AREAS WHERE THE METAL IS DETERIORATED.
- ANY CUTTING AND BENDING TO FIELD FIT REINFORCING STEEL SHALL BE CONSIDERED INCIDENTAL TO ITEM 544.31.
- THE MINIMUM LAP FOR THE #5 LONGITUDINAL BARS IS 1'-7".
- ALL BOLTED CONNECTIONS SHALL BE MADE WITH 7/8" DIAMETER HIGH-STRENGTH TWIST OFF BOLTS IN 1 5/16" DIAMETER HOLES AS SHOWN ON DETAIL "A" SECTION A-A ON SHEET 4. FASTENERS SHALL CONFORM TO AASHTO M164 (ASTM A325) TYPE 3. BOLTS. THE COST OF SUPPLYING AND INSTALLING THE BOLTS AND CUTTING OF HOLES IS SUBSIDIARY TO ITEM 520.01.
- ALL EXPOSED EDGES OF NEW CONCRETE SHALL BE CHAMFERED 3/4".
- NEW CONCRETE USED TO RECONSTRUCT THE NEW ABUTMENT WALL EXTENSIONS AS SHOWN ON SHEET 4 OF THE PLANS SHALL BE INCLUDED IN ITEM 520.01, CONCRETE CLASS AA.
- HOLES DRILLED IN EXISTING CONCRETE SHALL BE DRILLED 1/2" DIAMETER LARGER THAN THE REINFORCING STEEL DIAMETER (OR AS RECOMMENDED BY THE MANUFACTURER) AND GROUTED WITH SIMPSON STRONG TIE ET-HP EPOXY ADHESIVE OR APPROVED EQUAL. REINFORCING STEEL SHALL HAVE A MINIMUM EMBEDMENT LENGTH OF 7" UNLESS OTHERWISE NOTED. ALL COSTS FOR DRILLING AND GROUTING SHALL BE INCLUDED IN ITEM 544.31.
- A 3'-3"± WIDE X FULL LENGTH AREA OF THE STEEL CMP AS SHOWN ON SHEET 4 SHALL BE CLEANED SO AS TO REMOVE ALL LOOSE PAINT, COATING AND CORROSION PRIOR TO HAVING TWO (2) COATS OF AN APPROVED COAL TAR EPOXY COATING APPLIED. ACCEPTABLE PRODUCTS INCLUDE ~~A H COAL TAR EPOXY 210 BY ANTI-HYDRO COMPANY, BITUMASTIC 300-M BY CARBOLINE, RUST OLEUM 69570 SYSTEM COAL TAR EPOXY BY RUST OLEUM OR EQUAL AS APPROVED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE SUBSIDIARY TO ITEM 520.01.~~
- CONCRETE SUPPLIER SHALL TEST THE CONCRETE FOR SLUMP, AIR ENTRAINMENT, COMPRESSIVE STRENGTH AND TEMPERATURE AND PROVIDE THE TEST RESULTS TO THE ENGINEER. COST FOR SUCH WORK IS CONSIDERED INCIDENTAL TO ITEM 520.01, CONCRETE CLASS AA.

WATER DIVERSION NOTES

- A TEMPORARY WATER DIVERSION STRUCTURE WILL BE REQUIRED. IT IS EXPECTED THAT THE TEMPORARY SANDBAG COFFERDAMS SHOWN ON SHEET 3 WILL PROVIDE ADEQUATE WATER FLOW THROUGH THE WORK AREA.
- A TURBIDITY CURTAIN SHALL BE INSTALLED ACROSS THE LIMITS OF THE SPICKET RIVER DOWNSTREAM OF THE WATER DIVERSION STRUCTURE, PRIOR TO ANY DISTURBANCE ON THE SPICKET RIVER TO PREVENT SILTATION OF THE SPICKET RIVER OUTSIDE THE PROJECT LIMITS. ALL COSTS FOR SUCH WORK SHALL BE PAID FOR UNDER ITEM 645.99, TURBIDITY CURTAIN.
- ALL COSTS FOR THE INSTALLATION, MAINTENANCE AND REMOVAL OF THE WATER DIVERSION STRUCTURE, TEMPORARY SANDBAG COFFERDAMS WILL BE PAID FOR UNDER ITEM 503.101, WATER DIVERSION STRUCTURES.
- ALL CAST-IN-PLACE CONCRETE, SHALL BE PLACED IN THE DRY. DEWATERING COSTS (IF REQUIRED) SHALL BE INCLUDED IN ITEM 503.101.

UTILITY COORDINATION NOTES

- OVERHEAD UTILITIES ARE PRESENT WITHIN THE PROJECT SITE. THE CONTRACTOR SHALL BE FAMILIAR AND TAKE NECESSARY PRECAUTIONS WITH THESE UTILITIES DURING CONSTRUCTION. CONTRACTOR SHALL COORDINATE TEMPORARY RELOCATIONS; SHIELDING NECESSARY FOR EQUIPMENT MOBILIZATION AND TEMPORARY DISCONNECTION OF POWER WITH THE UTILITY OWNERS IF REQUIRED. LIBERTY UTILITIES HAS AGREED TO RELOCATE THE GUY WIRE IN THE SOUTHWEST QUADRANT OF THE PROJECT ONCE THE CONTRACTOR HAS CLEARED THE AREA. ALL COST FOR THIS COORDINATION SHALL BE INCLUDED IN ITEM 692, MOBILIZATION. ALL COSTS ASSOCIATED WITH MISCELLANEOUS TREE TRIMMING & CLEARING FOR TEMPORARY UTILITY RELOCATIONS SHALL BE INCLUDED IN ITEM 201.01, CLEARING (F).

OVERHEAD UTILITY OWNER INFORMATION:
LIBERTY UTILITIES (ELECTRIC)
ANTHONY STRABONE
(603) 216-3541 (OFFICE)
(603) 327-9367 (CELL)
ANTHONY.STRABONE@LIBERTYUTILITIES.COM

FAIRPOINT COMMUNICATIONS (TELEPHONE)
JACOB PURSELLEY
(603) 695-1926 (OFFICE)
(603) 296-5998 (CELL)
JPURSELLEY@FAIRPOINT.COM

COMCAST (CABLE TELEVISION)
KATY HONOHAN
(603) 679-5695 EXT.1011
KATY_HONOHAN@CABLE.COMCAST.COM

- UNDERGROUND UTILITIES (STORM DRAINAGE AND MUNICIPAL WATER) ARE PRESENT WITHIN THE PROJECT SITE. THE CONTRACTOR SHALL BE FAMILIAR AND TAKE NECESSARY PRECAUTIONS WITH THESE UTILITIES DURING CONSTRUCTION.

UNDERGROUND UTILITY OWNER INFORMATION:
MUNICIPAL SERVICES, UTILITY DIVISION
FRANK GIORDANO, UTILITY MANAGER
(603) 890-2171

SUMMARY OF QUANTITIES

ITEM	ITEM DESCRIPTION	Quantity	
		Unit	Amount
201.01	CLEARING (F)	A	0.05
201.21	REMOVING SMALL TREES	EA	1
503.101	WATER DIVERSION STRUCTURE	U	1
512.01	PREPARATION FOR CONCRETE REPAIRS, CLASS I	SY	3
512.02	PREPARATION FOR CONCRETE REPAIRS, CLASS II	SY	1
520.01	CONCRETE CLASS AA	CY	1.5
544.31	REINFORCING STEEL, EPOXY COATED (CONTRACTOR DETAILED)	LB	300
562.1	SILICONE JOINT SEALANT (F)	LF	17
585.2	STONE FILL, CLASS B	CY	20
571.1	CHINKING STONE MASONRY	U	1
571.2	REPOINTING STONE MASONRY	U	1
593.411	GEOTEXTILE; PERM CONTROL CL.1, NON-WOVEN	SY	20
618.6	UNIFORMED OFFICERS	\$	1
645.43	TEMPORARY SLOPE STABILIZATION TYPE C	SY	210
645.512	COMPOST SOCK FOR EROSION AND SEDIMENT CONTROL	LF	110
645.531	SILT FENCE	LF	110
645.99	TURBIDITY CURTAIN	U	1
646.51	TURF ESTABLISHMENT WITH MULCH, TACKIFIERS AND LOAM	SY	210
692	MOBILIZATION	U	1
699	MISCELLANEOUS TEMPORARY EROSION AND SEDIMENT CONTROL	\$	1

3.3
0

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HOYLE, TANNER & ASSOCIATES, INC.
SIGNED: *Mark B. B...*
DATE: 06/20/17

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AUGUST 2016
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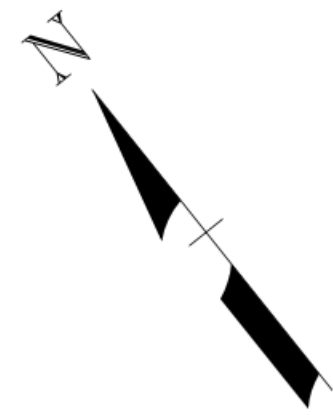
TOWN OF SALEM
SALEM, NEW HAMPSHIRE
NORTH MAIN STREET BRIDGE OVER SPICKET RIVER (NHDOT BR. NO. 113134)

CONSTRUCTION NOTES AND SUMMARY OF QUANTITIES

PROJECT NO.: 918106
FILE NAME: AB918106BrNotes
MODEL NAME: 918106BrNotes

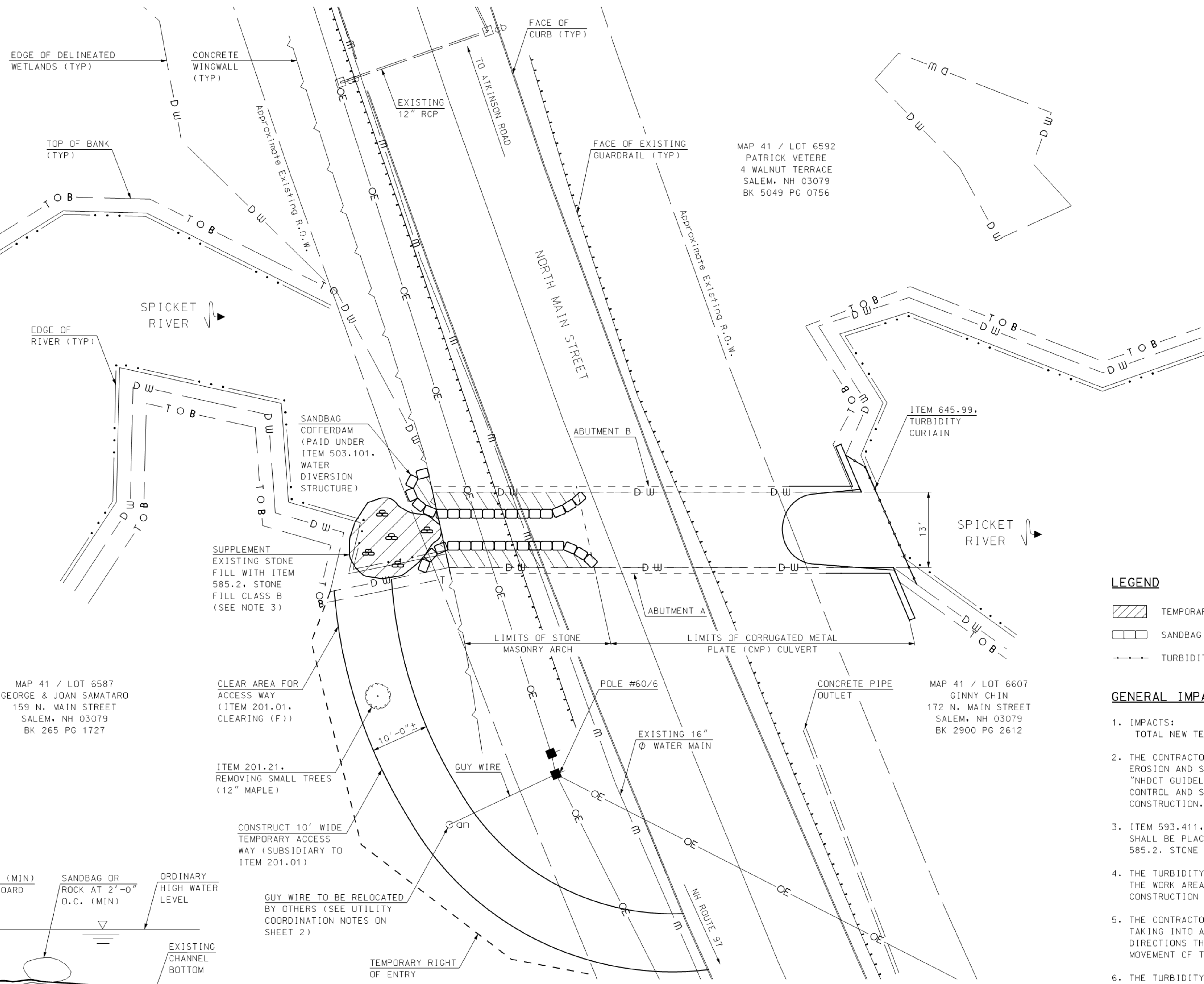
SHEET NO.
2

SHEET 2 OF 6



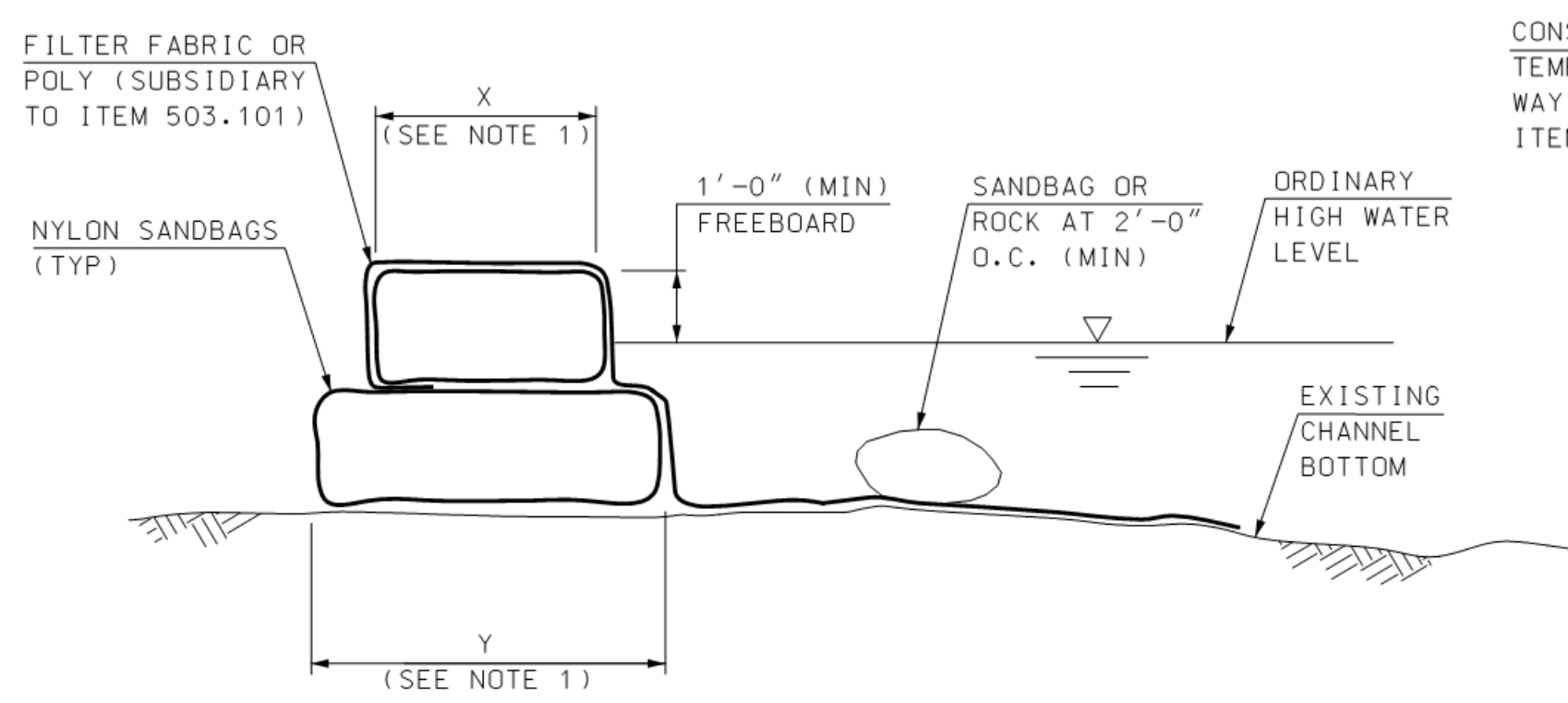
MAP 41 / LOT 6577
TOWN OF SALEM
33 GEREMONTY DRIVE
SALEM, NH 03079
BK 2474 PG 1546

MAP 41 / LOT 6592
PATRICK VETERE
4 WALNUT TERRACE
SALEM, NH 03079
BK 5049 PG 0756



MAP 41 / LOT 6587
GEORGE & JOAN SAMATARO
159 N. MAIN STREET
SALEM, NH 03079
BK 265 PG 1727

MAP 41 / LOT 6607
GINNY CHIN
172 N. MAIN STREET
SALEM, NH 03079
BK 2900 PG 2612



SANDBAG COFFERDAM
NOT TO SCALE

SITE PLAN
SCALE: 1" = 10'

NOTE

1. THE ABOVE DETAIL IS CONCEPTUAL IN NATURE AND IS PROVIDED FOR BIDDING PURPOSES ONLY. THE SANDBAG SIZE NUMBER AND ORIENTATION SHALL BE DETERMINED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.

LEGEND

- TEMPORARY WETLAND IMPACTS
- SANDBAG COFFERDAM
- TURBIDITY CURTAIN

GENERAL IMPACT NOTES

1. IMPACTS:
TOTAL NEW TEMPORARY IMPACTS = 419 SF
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AN EROSION AND SEDIMENT CONTROL PLAN IN ACCORDANCE WITH THE "NH DOT GUIDELINE FOR TEMPORARY EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT" BY NH DOT BUREAU OF CONSTRUCTION.
3. ITEM 593.411, GEOTEXTILE; PERM CONTROL CL.1, NON-WOVEN SHALL BE PLACED UNDER ENTIRE PROPOSED LIMITS OF ITEM 585.2, STONE FILL, CLASS B.
4. THE TURBIDITY CURTAIN WALL SHALL BE PLACED AS CLOSE TO THE WORK AREA AS POSSIBLE WITHOUT INTERFERING WITH CONSTRUCTION OPERATIONS.
5. THE CONTRACTOR SHALL MONITOR THE TURBIDITY CURTAIN, TAKING INTO ACCOUNT WEATHER PATTERNS AND PREVAILING WIND DIRECTIONS THAT MAY AFFECT WATER LEVELS, VELOCITY AND MOVEMENT OF THE TURBIDITY CURTAIN.
6. THE TURBIDITY CURTAIN SHALL CONTAIN A WEIGHTED ANCHOR SYSTEM THAT ALLOWS THE CURTAIN TO CONFORM TO THE CONTOUR ON THE BOTTOM OF THE WATERWAY.
7. PAYMENT FOR THE INSTALLATION, MAINTENANCE, INSPECTION MONITORING, REPAIRS (IF REQUIRED) AND REMOVAL OF THE TURBIDITY CURTAIN SHALL BE MADE UNDER ITEM 645.99, TURBIDITY CURTAIN.
8. THOMAS SOKOLOSKI, CERTIFIED WETLAND SCIENTIST #127, OF TES ENVIRONMENTAL CONSULTANTS, L.L.C. OF BOW, NH, PERFORMED THE WETLAND MAPPING ON MAY 20, 2016 ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0, JANUARY 2012, US ARMY CORPS OF ENGINEERS.

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, BASED UPON CONSTRUCTION RECORDS, THAT ALL WORK SHOWN IN THESE DRAWINGS HAS BEEN COMPLETED AS SHOWN.
HOYLE, TANNER & ASSOCIATES, INC.
SIGNED: *[Signature]*
DATE: 06/2017

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TOWN OF SALEM
SALEM, NEW HAMPSHIRE
NORTH MAIN STREET BRIDGE OVER SPICKET RIVER (NH DOT BR. NO. 113134)
SITE PLAN

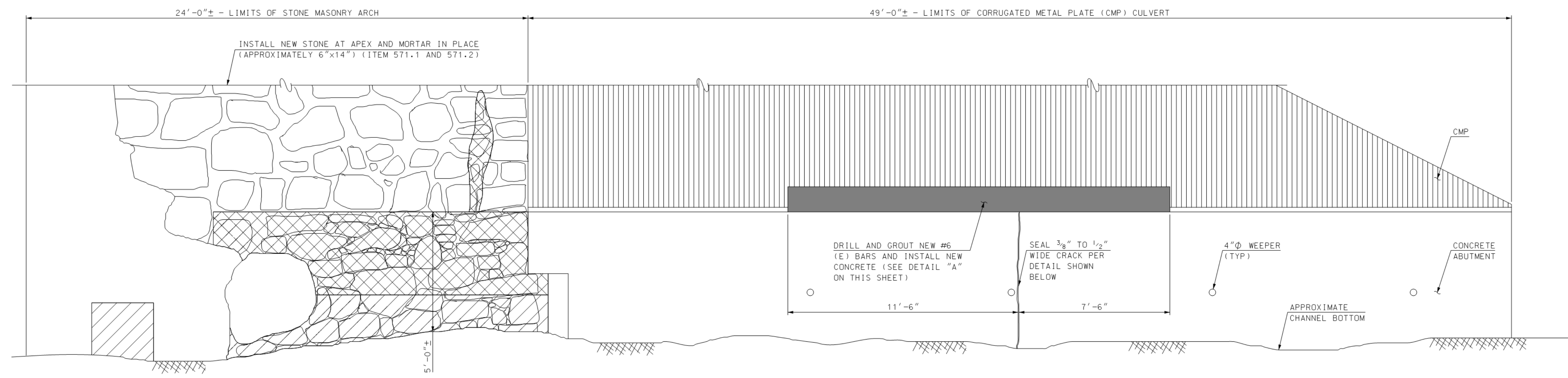
PROJECT NO.: 918106
FILE NAME: AB918106Siteplan
MODEL NAME: 918106Wetplan
SHEET NO.
3
SHEET 3 OF 6

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 JUN 14 2017

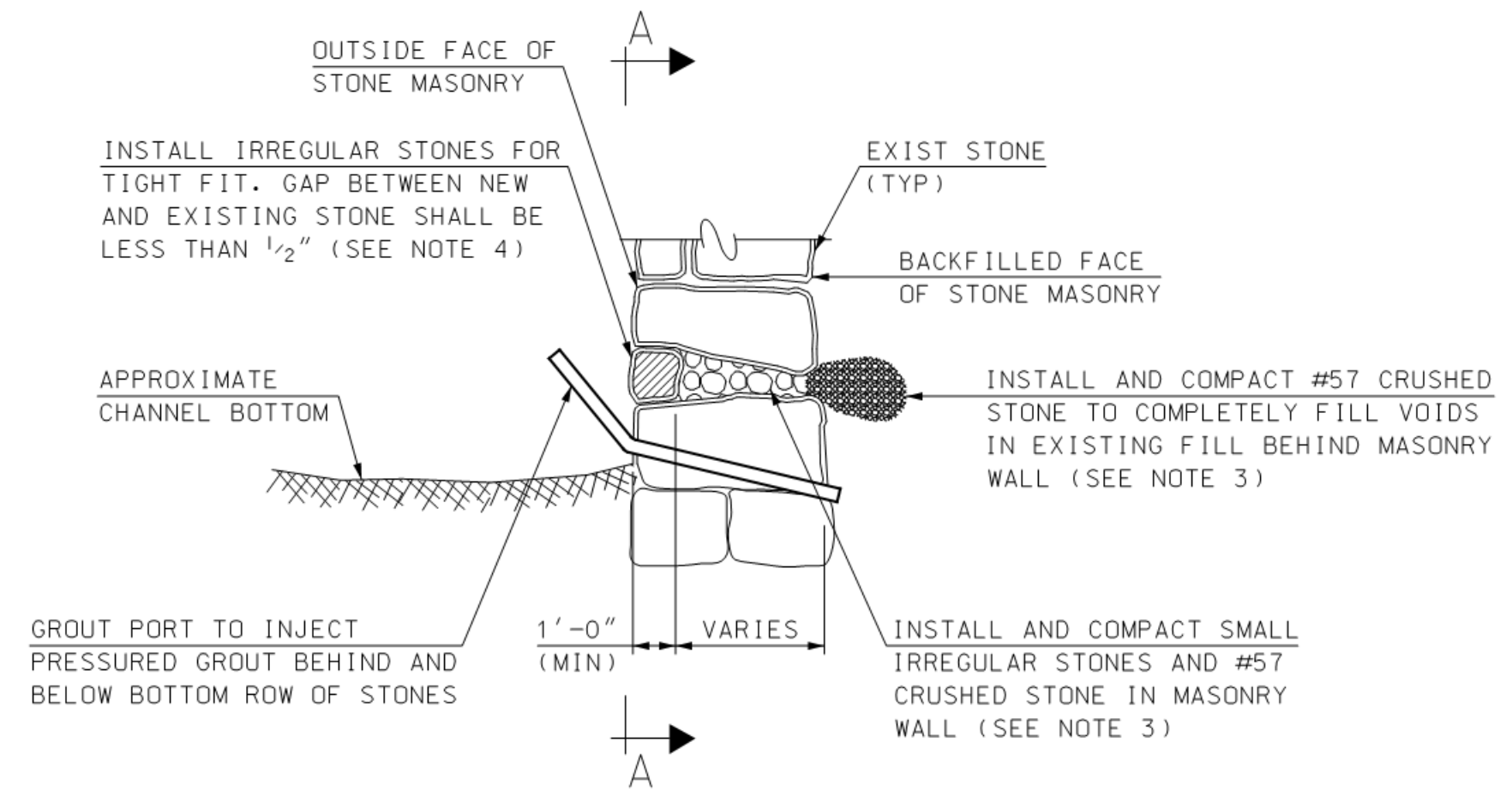
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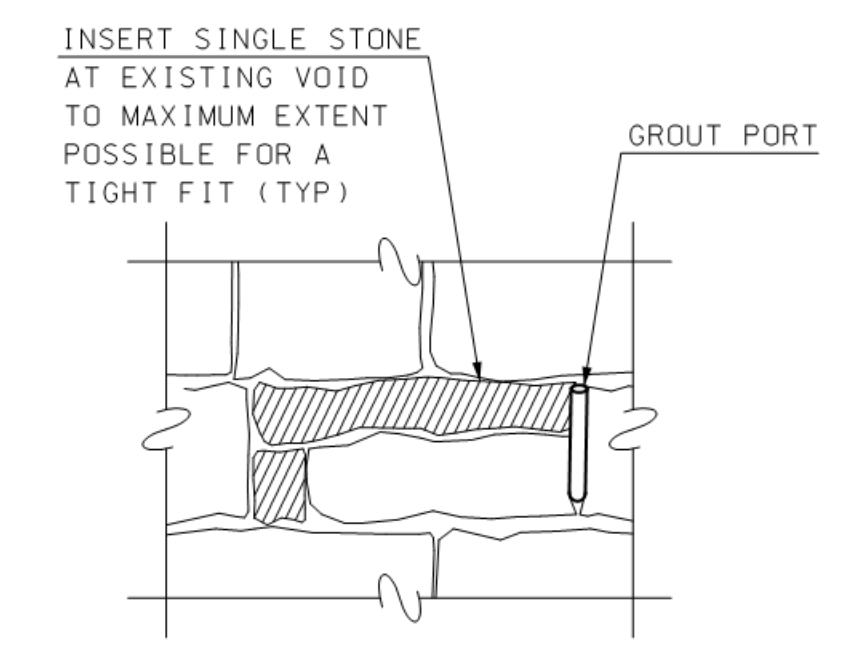
ABUTMENT B ELEVATION VIEW
 (LOOKING NORTH)
 NOT TO SCALE

LEGEND

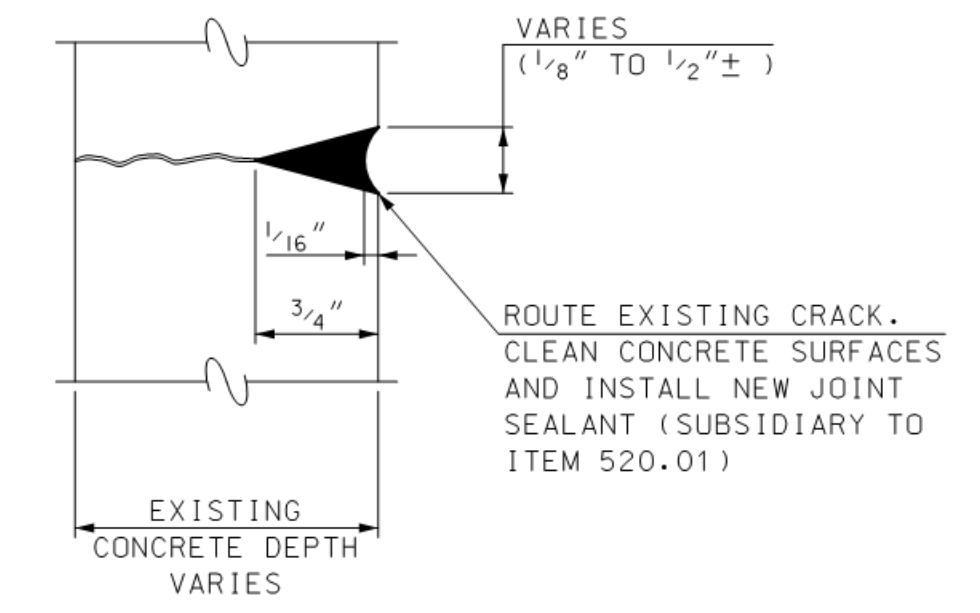
- NEW CONCRETE (ITEM 520.01)
- AREA TO BE CHINKED WITHOUT POINTING WITH MORTAR (ITEM 571.1, CHINKING STONE MASONRY)
- AREA TO BE CHINKED AND POINTED WITH MORTAR (ITEM 571.1, CHINKING STONE MASONRY AND ITEM 527.2, REPOINTING STONE MASONRY)



STONE MASONRY REPAIR DETAIL
 NOT TO SCALE



SECTION A-A
 NOT TO SCALE



CRACK SEAL DETAIL
 NOT TO SCALE

NOTES

1. PAYMENT UNDER ITEM 571.1, CHINKING STONE MASONRY SHALL INCLUDE COMPACTION OF LOOSE FILL BEHIND WALL STONES, RESETTING OF STONES, ADDITION OF SIMILAR NEW STONES AS REQUIRED AND ALL WORK ASSOCIATED WITH PRESSURE GROUTING BEHIND AND BELOW BOTTOM ROW OF STONES.
2. PAYMENT UNDER ITEM 571.2, REPOINTING STONE MASONRY SHALL INCLUDE CLEANING OF JOINTS, PREMOISTENING AND APPLICATION OF THE MORTAR.
3. COMPACT CRUSHED STONE MATERIAL BEHIND AND INTO MASONRY WALL BY USING TAMPING RODS OR OTHER METHODS ACCEPTABLE TO THE RESIDENT ENGINEER (PAID UNDER ITEM 571.1).
4. NEW STONES SHALL CLOSELY MATCH THE COLOR, TEXTURE AND PATTERN OF EXISTING STONES. STONES SHALL BE APPROVED BY THE RESIDENT ENGINEER PRIOR TO USE.
5. NEW STONES SHALL HAVE A MINIMUM OF 75% OF TOP AND BOTTOM SURFACES IN BEARING WITH EXISTING STONES.
6. SEE SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS.

NOTES

1. NEW JOINT SEALANT SHALL BE AN APPROVED ONE COMPONENT POLYURETHANE ELASTOMERIC SEALANT. ACCEPTABLE PRODUCTS INCLUDE SIKAFLEX 201 FROM SIKA, DYMATIC FC FROM TREMCO OR ~~MAPLEFLEX PI FROM MAPET. TA FROM SIKA~~
2. EXISTING CONCRETE SURFACES SHALL BE CLEANED WITH A PRESSURE WASHER AND BE FREE OF TRACES OF DUST.
3. APPLY THE NEW JOINT MATERIAL IN DRY SURFACES IN TEMPERATURES 40°F AND ABOVE AND IN CONFORMANCE WITH OTHER MANUFACTURER'S REQUIREMENTS. HEATING IN COLD WEATHER IS INCIDENTAL TO ITEM 520.01.

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 SALEM, NEW HAMPSHIRE
 NORTH MAIN STREET BRIDGE OVER SPICKET RIVER (NH DOT BR. NO. 1131/34)
 ABUTMENT B ELEVATION AND DETAILS

PROJECT NO.:	918106
FILE NAME:	AB918106B-Abut
MODEL NAME:	918106A-Abut

SHEET NO.
5
 SHEET 5 OF 6

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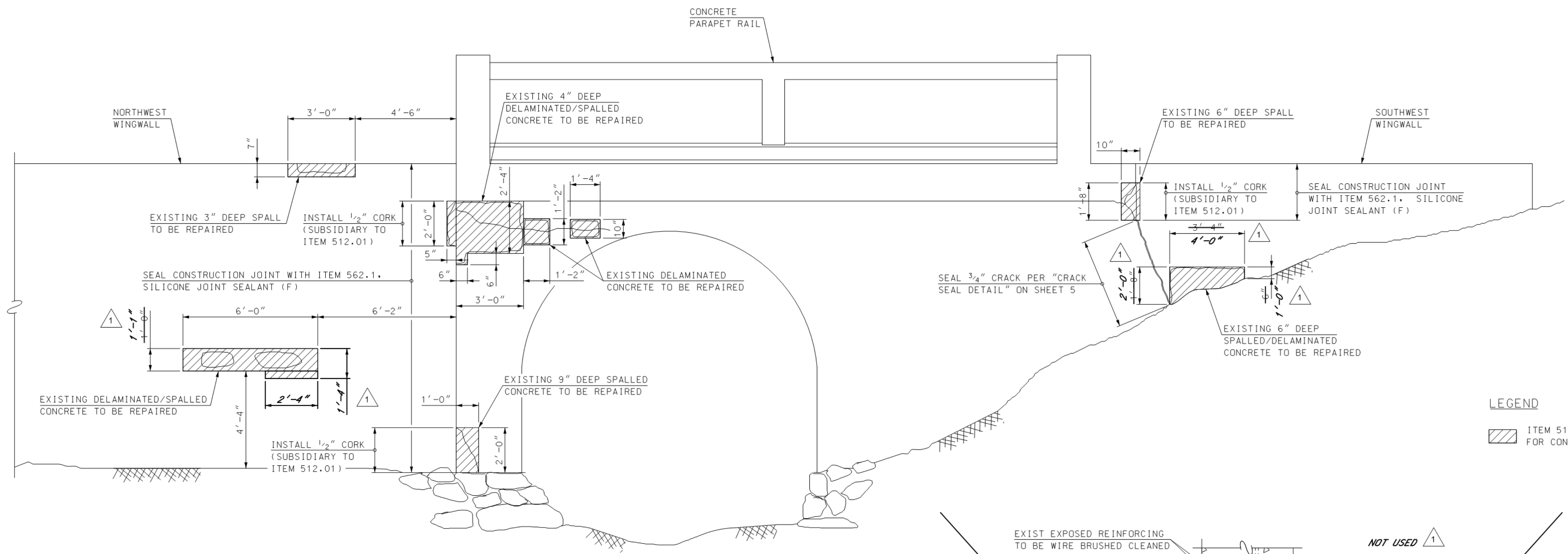
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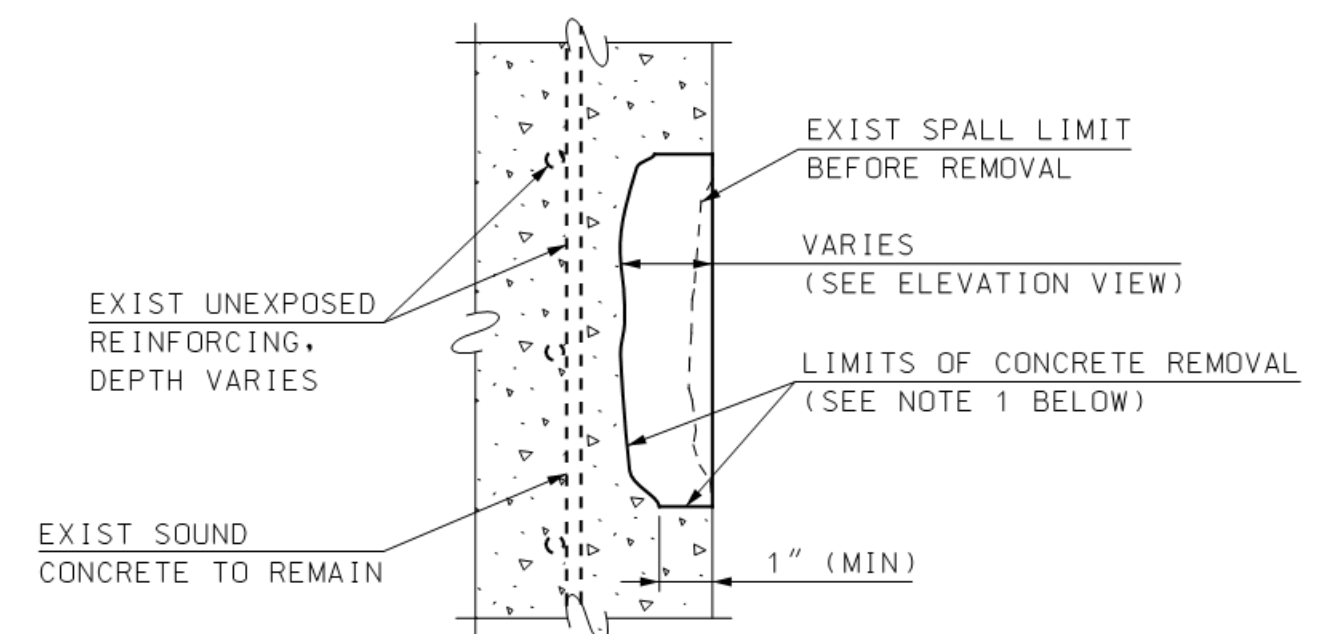
TOWN OF SALEM
 SALEM, NEW HAMPSHIRE
 NORTH MAIN STREET BRIDGE OVER SPICKET RIVER (NH DOT BR. NO. 113134)
 UPSTREAM HEADWALL ELEVATION AND DETAILS

PROJECT NO.: 918106
 FILE NAME: AB918106Dtlis
 MODEL NAME: 918106Dtlis
 SHEET NO.
6
 SHEET 6 OF 6



LEGEND

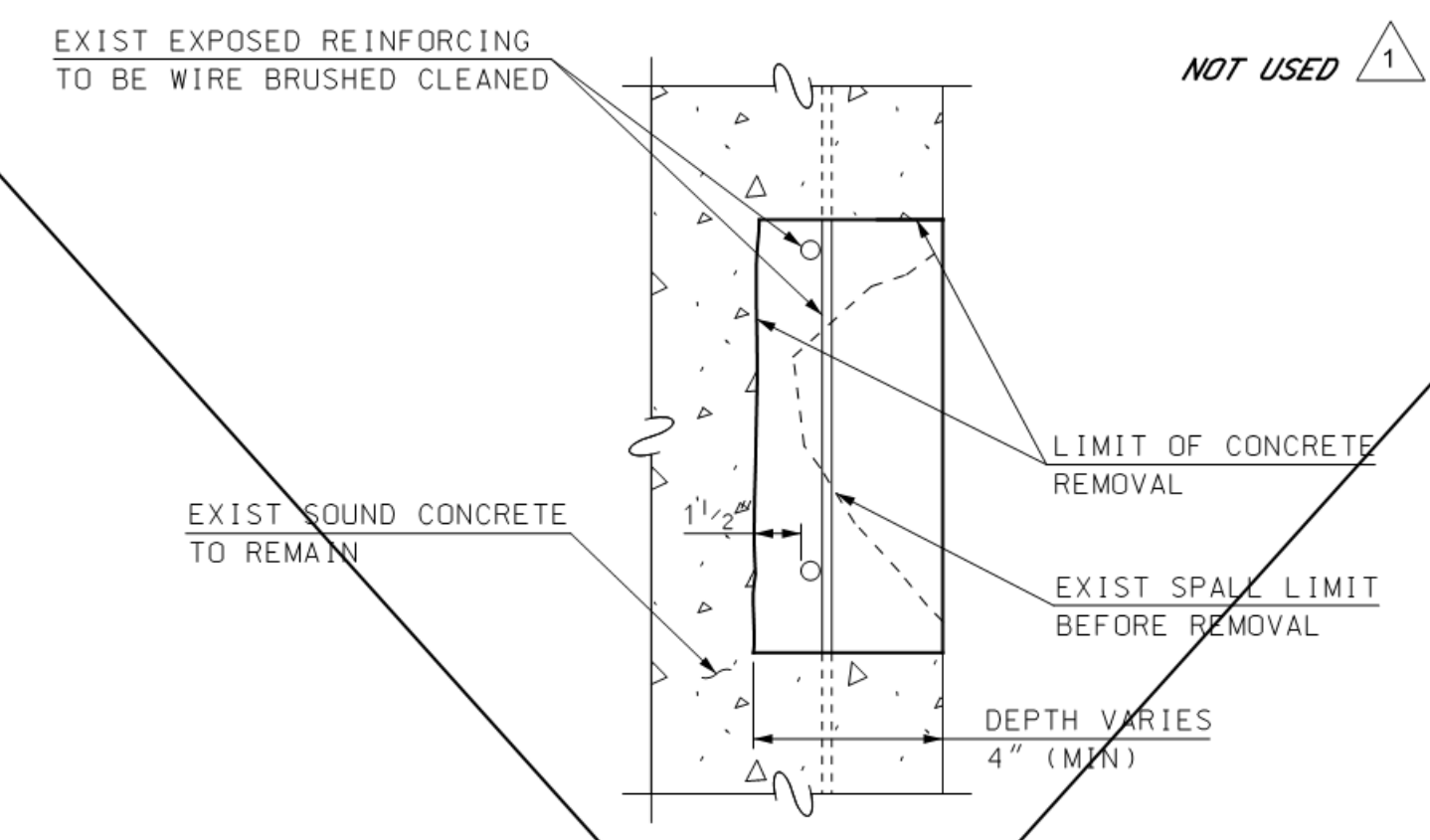
ITEM 512.01, PREPARATION FOR CONCRETE, CLASS I



TYPE I VERTICAL CONCRETE REPAIR DETAIL
 (ITEM 512.01)
 NOT TO SCALE

NOTES

- PREPARE SPALLED AREA BY REMOVAL OF ALL DETERIORATED CONCRETE TO A DEPTH OF 1" MIN BY SQUARE CUTTING REPAIR AREA. FEATHERED REMOVAL EDGES WILL NOT BE PERMITTED. MINIMUM REPAIR AREA SHALL BE 1'x1'.
- USE OF CHIPPING HAMMERS HEAVIER THAN NOMINAL 15 POUND CLASS ARE NOT PERMITTED.
- AFTER CONCRETE REMOVAL, THE REPAIR SURFACE SHALL BE THOROUGHLY CLEANED OF INJURIOUS RUST, CONCRETE, DIRT, GREASE, OR ANY OTHER BOND-INHIBITING MATERIALS.
- COAT ALL REPAIR SURFACES WITH AN APPROVED BONDING AGENT PRIOR TO PLACING REPAIR MATERIAL.
- PATCH REPAIR AREA WITH AN APPROVED VERTICAL REPAIR MATERIAL. THE CONCRETE REPAIR MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PROCEDURES.
- REPAIR MATERIAL SHALL BE FAST-SETTING CEMENT REPAIR MORTAR LISTED BELOW OR AN APPROVED EQUAL WITH A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI IN 28 DAYS:
 - SIKA CORPORATION PRODUCT: SIKATOP 123 PLUS
 - FOSROC, INC. PRODUCT: RENDEROC HB2
 - MASTER BUILDING TECHNOLOGIES PRODUCT: MASTER EMACO T545
- ALL COSTS FOR WORK DESCRIBED AND SHOWN ABOVE SHALL BE PAID UNDER ITEM 512.01.



TYPE II VERTICAL CONCRETE REPAIR DETAIL
 (ITEM 512.02)
 NOT TO SCALE

NOTES

- PREPARE SPALLED AREA BY REMOVING ALL DETERIORATED CONCRETE TO A MINIMUM DEPTH OF 1 1/2" BEHIND THE BACK FACE OF THE REINFORCING STEEL AND SOUND CONCRETE BY SQUARE CUTTING THE REPAIR AREA. FEATHERED REMOVAL EDGES WILL NOT BE PERMITTED. MINIMUM REPAIR AREA SHALL BE 1'x1'.
- USE OF CHIPPING HAMMERS HEAVIER THAN NOMINAL 15 POUND CLASS ARE NOT PERMITTED.
- AFTER CONCRETE REMOVAL, THE REPAIR SURFACE SHALL BE THOROUGHLY CLEANED OF INJURIOUS RUST, CONCRETE, DIRT, GREASE, OR ANY OTHER BOND-INHIBITING MATERIALS.
- COAT ALL REPAIR SURFACES WITH AN APPROVED BONDING AGENT PRIOR TO PLACING REPAIR MATERIAL.
- PATCH REPAIR AREA WITH AN APPROVED REPAIR MATERIAL. THE CONCRETE REPAIR MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PROCEDURES.
- REPAIR MATERIAL SHALL BE FAST-SETTING CEMENT REPAIR MORTAR LISTED BELOW OR AN APPROVED EQUAL WITH A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI IN 28 DAYS:
 - SIKA CORPORATION PRODUCT: SIKATOP 123 PLUS
 - FOSROC, INC. PRODUCT: RENDEROC HB2
 - MASTER BUILDING TECHNOLOGIES PRODUCT: MASTEREMACO T545
- ALL COSTS FOR WORK DESCRIBED AND SHOWN ABOVE SHALL BE PAID UNDER ITEM 512.02. NO WORK FOR CONCRETE CLASS II REPAIR IS SHOWN IN THE PLANS BUT IT IS ASSUMED THAT REINFORCING MAY EXIST IN SOME AREAS. ASSUMED BID QUANTITY FOR THIS ITEM IS 1 SQUARE YARD.

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