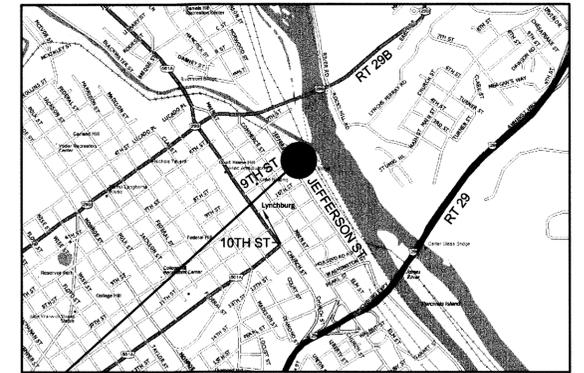
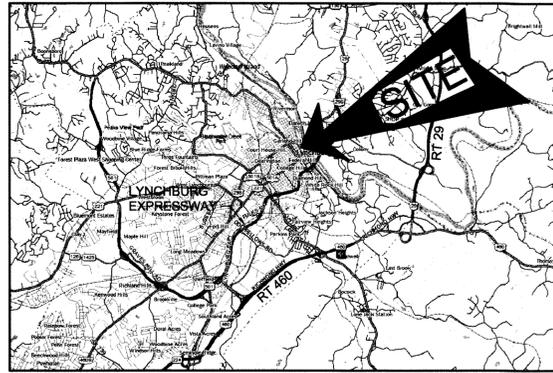


CITY OF LYNCHBURG KANAWHA CANAL BRIDGE REPAIRS LYNCHBURG, VIRGINIA

CITY PROJECT NO: 14022-B
FOR CONSTRUCTION
OCTOBER 30, 2015



GENERAL NOTES:

- THESE DRAWINGS ARE SCHEMATIC IN NATURE AND ARE NOT INTENDED FOR USE AS FABRICATION DRAWINGS. THESE DRAWINGS INDICATE THE GENERAL AND APPROXIMATE SIZE AND LOCATION OF MATERIAL. FIELD VERIFY ALL DIMENSIONS AND LOCATIONS PRIOR TO BEGINNING WORK. ALL UTILITIES NOTED ON PLANS ARE APPROXIMATE AND CONTRACTOR SHALL FIELD VERIFY LOCATION.
- ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES AND REGULATIONS, INCLUDING, BUT NOT LIMITED TO, THE CITY OF LYNCHBURG MANUAL OF SPECIFICATIONS AND STANDARD DETAILS, LATEST EDITION.
- ALL MATERIAL SHALL BE NEW UNLESS OTHERWISE NOTED. MATERIALS ARE BASED ON THE INDICATED MANUFACTURERS/MODELS AND ARE INTENDED ONLY TO SHOW THE GENERAL SIZE, CONFIGURATION, LOCATION, CONNECTIONS, AND SUPPORT FOR INDICATED MATERIAL WITH RELATION TO OTHER BUILDING SYSTEMS. MATERIAL BY ANY MANUFACTURER THAT MEETS THE SCHEDULED CRITERIA IS ACCEPTABLE. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ACTUAL INSTALLED MATERIAL AND ASSOCIATED CHANGES.
- CONTRACTOR SHALL COORDINATE THE WORK WITH EXISTING CONDITIONS, INCLUDING SITE FEATURES AND OTHER OBSTRUCTIONS, WHETHER OR NOT SUCH IS SHOWN ON DRAWINGS.
- CONTACT MISS UTILITY AT 811, 1-800-552-7001, OR [HTTP://WWW.MISSUTILITYOFVIRGINIA.COM](http://www.missutilityofvirginia.com) NO LESS THAN 72 HOURS PRIOR TO EXCAVATION AND DO NOT DISTURB THE SOIL UNTIL DIG TICKET HAS BEEN PROCESSED.
- CONTRACTOR SHALL COORDINATE THE WORK BETWEEN ALL TRADES.
- EXISTING MATERIAL TO BE REMOVED SHALL BE REMOVED CAREFULLY TO AVOID DAMAGING MATERIAL TO REMAIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE THAT OCCURS TO EXISTING MATERIAL TO REMAIN OR TO BE RELOCATED DURING DEMOLITION AND CONSTRUCTION.
- CONTRACTOR SHALL ADVISE THE A/E IMMEDIATELY OF DISCREPANCIES FOUND ON THE DRAWINGS, IN THE SPECIFICATIONS, OR BETWEEN THE TWO. MINOR DEVIATIONS FROM THE PLANS MAY BE MADE TO AVOID MINOR CONFLICTS. WHERE MAJOR CONFLICTS ARE ENCOUNTERED, THE AFFECTED WORK SHALL NOT BE INSTALLED UNTIL THE CONFLICT HAS BEEN RESOLVED. NEITHER THE A/E NOR THE OWNER SHALL BE RESPONSIBLE FOR CONSEQUENCES OF PROCEEDING WITH WORK BASED ON CONTRACTOR INTERPRETATION OR ON DIRECTION FROM OTHER PARTIES, INCLUDING THE OWNER AND INSPECTORS.
- ALL MATERIAL SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS, MAINTAINING ALL REQUIRED CLEARANCES AND WITH ALL COMPONENTS ACCESSIBLE AND SERVICEABLE.
- CONTRACTOR SHALL PROVIDE MATERIAL DATA SUBMITTALS FOR ALL NEW MATERIAL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ASSEMBLING OPERATION AND MAINTENANCE MANUALS CONTAINING ALL MATERIAL SUBMITTALS, INSTALLATION AND OPERATING INSTRUCTIONS, AND WARRANTY INFORMATION. THREE (3) HARD COPIES AND ONE (1) ELECTRONIC COPY (PDF OF O&M MANUALS SHALL BE SUBMITTED TO THE A/E AT THE TIME OF SUBSTANTIAL COMPLETION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING A SET OF AS-BUILT DRAWINGS ON SITE WHICH INDICATE IN RED ALL DEVIATIONS FROM ORIGINAL CONSTRUCTION DOCUMENTS, INCLUDING APPROVED CONSTRUCTION CHANGE ORDERS. CONTRACTOR SHALL PERFORM AS-BUILT SURVEY FOR TOPO AND UTILITIES PER CITY OF LYNCHBURG MANUAL OF SPECIFICATIONS AND STANDARD DETAILS. AS-BUILT DRAWINGS SHALL BE SUBMITTED TO THE A/E AT THE TIME OF SUBSTANTIAL COMPLETION. AS-BUILT DRAWINGS SHALL BE CLEARLY LEGIBLE AND COMPLETE.
- CONTRACTOR SHALL KEEP PUBLIC AREAS FREE OF TRASH AND CONSTRUCTION DEBRIS AND CLEAN ENTIRE WORK AREA ON A DAILY BASIS.
- CONTRACTOR SHALL PROVIDE TEMPORARY POWER AND WATER SERVICE AS REQUIRED.
- CONTRACTOR SHALL PROVIDE A TEMPORARY TOILET FACILITY FOR USE BY CONTRACTOR'S PERSONNEL FOR THE DURATION OF THE PROJECT.
- CONTRACTOR SHALL VISIT THE SITE TO BECOME FAMILIAR WITH THE SCOPE OF WORK AND TO VERIFY EXISTING CONDITIONS PRIOR TO BIDDING THIS PROJECT. ANY DISCREPANCIES OR AMBIGUOUS ITEMS MUST BE REPORTED TO THE A/E AND THE OWNER FOR CLARIFICATION PRIOR TO BIDDING.
- CONTRACTOR IS TYPICALLY PERMITTED TO WORK BETWEEN 7:00 AM AND 6:00 PM MONDAY THRU FRIDAY. WORK OUTSIDE THESE HOURS SHALL BE COORDINATED WITH OWNER'S PROJECT MANAGER DURING CONSTRUCTION.
- CONTRACTOR SHALL PROTECT THE BRIDGE, ADJACENT FEATURES, ROADWAYS, WALKWAYS, SITE IMPROVEMENTS, EXTERIOR PLANTINGS, LANDSCAPING, ETC. AS REQUIRED FROM DAMAGE AND CORRECT DAMAGE RESULTING FROM CONSTRUCTION ACTIVITIES TO THE SATISFACTION OF THE OWNER.
- CONTRACTOR SHALL COLLECT DEMOLISHED MATERIALS AND PLACE IN APPROPRIATE DISPOSAL CONTAINERS. DEMOLISHED MATERIALS SHALL BE PROMPTLY REMOVED FROM THE OWNER'S PROPERTY AND DISPOSED OF LEGALLY.
- CONTRACTOR SHALL COORDINATE CONSTRUCTION STAGING LOCATION WITH OWNER DURING CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY FOR THE DURATION OF THE PROJECT. CONTRACTOR SHALL PROVIDE ORANGE CONSTRUCTION FENCING AROUND PERIMETER OF WORK AREA. CONTRACTOR SHALL PROVIDE APPROPRIATE TRAFFIC CONTROL MEASURES AND SIGNAGE FOR ROAD CLOSURE AND ASSOCIATED TRAFFIC DETOUR.
- CONTRACTOR SHALL PROVIDE PRE-DEMOLITION PHOTOGRAPHIC OR VIDEOGRAPHIC DOCUMENTATION TO SHOW EXISTING CONDITIONS OF FINISHED SURFACES IN WORK AREA AND ADJOINING CONSTRUCTION INCLUDING SITE STORAGE AND ACCESS AREAS PRIOR TO PRE-CONSTRUCTION MEETING AND A MINIMUM OF 10 WORKING DAYS PRIOR TO COMMENCEMENT OF WORK.
- CONTRACTOR SHALL NOTIFY OWNER OF ANY INTERRUPTION OF UTILITIES INCLUDING BUT NOT LIMITED TO POWER, WATER, COMMUNICATIONS, ETC AND COORDINATE OUTAGE WITH SURROUNDING PROPERTY OWNERS.
- ANY ROAD/PARKING LOT CLOSURE SHALL BE DONE IN ACCORDANCE WITH THE LATEST VERSION OF THE VIRGINIA WORK AREA PROTECTION MANUAL AND MUST BE APPROVED BY THE CITY'S TRAFFIC ENGINEER AND IN ACCORDANCE WITH THE CITY OF LYNCHBURG ROAD CLOSURE POLICY.
- DEFINITIONS:
FURNISH: SUPPLY AND DELIVER TO PROJECT SITE FOR INSTALLATION BY OTHERS.
INSTALL: INSTALL ITEMS FURNISHED BY OTHERS, INCLUDING UNLOADING, TEMPORARILY STORING, UNPACKING, AND ASSEMBLY.
PROVIDE: FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE.
REMOVE: DETACH ITEMS FROM EXISTING CONSTRUCTION AND LEGALLY DISPOSE OF THEM OFF-SITE UNLESS INDICATED TO BE REMOVED AND SALVAGED OR REMOVED AND REINSTALLED.
REMOVE AND REINSTALL: DETACH ITEMS FROM EXISTING CONSTRUCTION, PREPARE FOR REUSE, AND REINSTALL WHERE INDICATED.
REMOVE AND SALVAGE: CAREFULLY DETACH FROM EXISTING CONSTRUCTION, IN A MANNER TO PREVENT DAMAGE, AND DELIVER TO OWNER.

DRAWING LIST:

DRAWING NO	TITLE
T1	TITLE SHEET
C1	MOT PLAN - EXISTING CONDITIONS
C2	MOT PLAN - SITE AND GRADING
C3	MOT PLAN - DETOUR
S1	ARCH REFLECTED CEILING PLAN AND ELEVATIONS
S2	BRIDGE ROADWAY PLAN AND SECTIONS
S3	GENERAL NOTES, SECTIONS, AND DETAILS

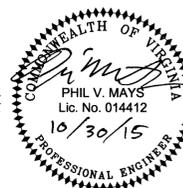
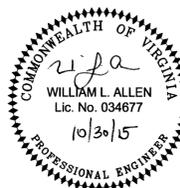
UNIT PRICE (REFER TO BID FORM):

- PROVIDE A UNIT PRICE PER LINEAR FOOT OF MORTAR JOINT FOR MORTAR JOINT REPOINTING IN ADDITION TO THE APPROXIMATE AREAS NOTED ON THE BRIDGE SIDEWALLS AND ABUTMENTS IN ELEVATIONS A AND B ON DRAWING S1.
- UNIT PRICE SHALL INCLUDE ALL MATERIAL, PLUS COST FOR DELIVERY, INSTALLATION, INSURANCE, APPLICABLE TAXES, OVERHEAD, AND PROFIT.
- CONTRACTOR, OWNER, AND A/E SHALL QUANTIFY LINEAR FEET OF ADDITIONAL MORTAR JOINTS BY IN PLACE FIELD MEASUREMENTS.

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PHONE: (434) 316-6001



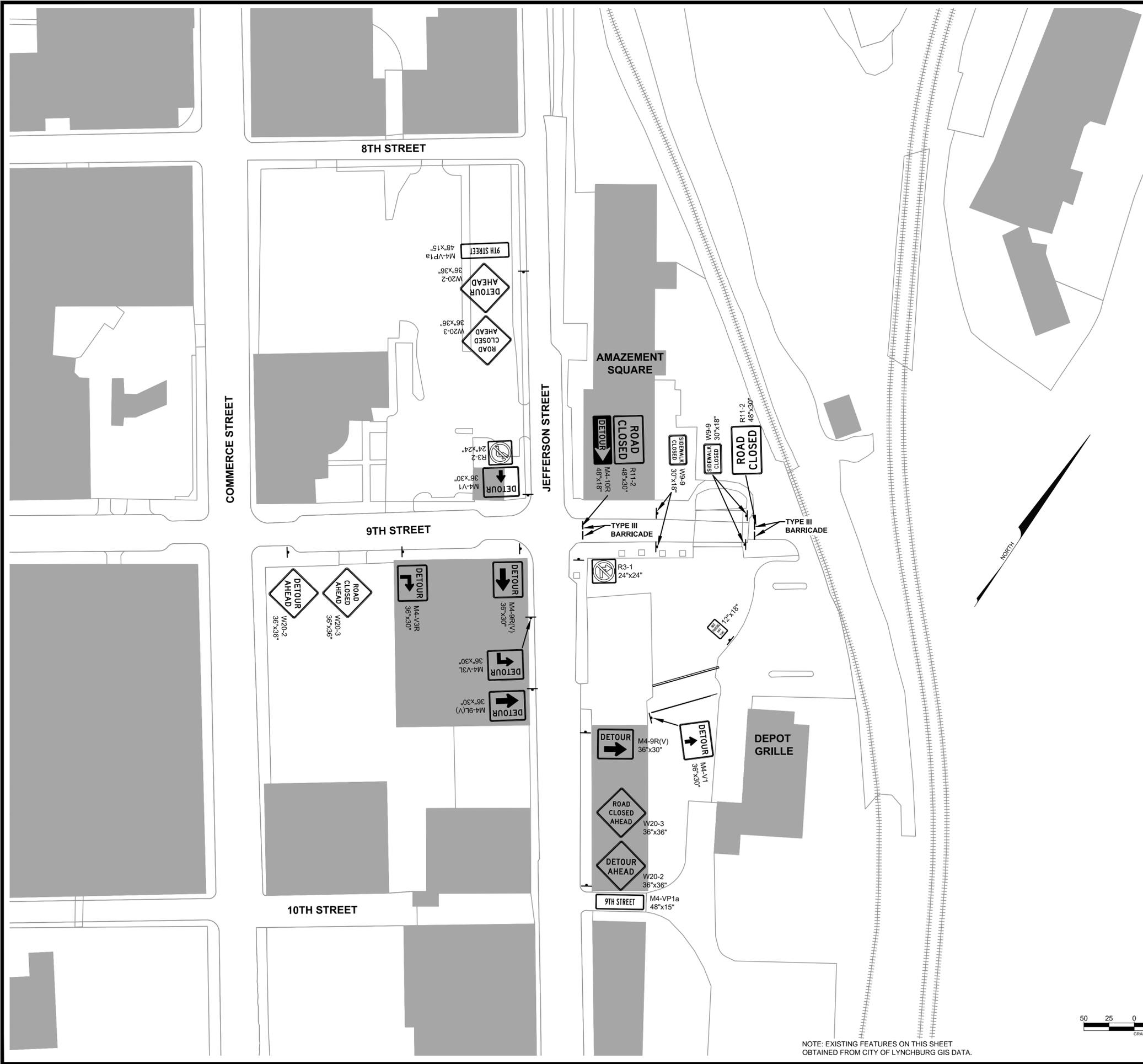
VAE PROJECT NO: 13144



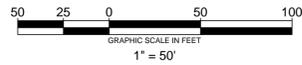
Job No.: 13144

Drawing No.:

T1



NOTE: EXISTING FEATURES ON THIS SHEET OBTAINED FROM CITY OF LYNCHBURG GIS DATA.



GENERAL NOTES

1. PROJECT CATEGORY (MINIMUM TMP REQUIREMENTS):
 - A. THIS WILL BE A CATEGORY B PROJECT (MODERATE LEVEL OF CONSTRUCTION)
 - i. THIS WILL BE PERMITTED WORK.
 - ii. THIS PROJECT WILL INVOLVE TRAFFIC CONTROL DEVICES AND LANE CLOSURES TO ENSURE SAFE TRAVEL AROUND THE WORK ZONES.
2. TEMPORARY TRAFFIC CONTROL PLAN:
 - A. THE MAJOR COMPONENTS WILL CONSIST OF THE GENERAL NOTES, NARRATIVE, AND DETAILS AS NECESSARY.
 - B. TRAFFIC CONTROL DEVICES SHALL BE USED AS SHOWN ON THIS PLAN.
 - C. ALL SIGNS, STRIPING, AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF VIRGINIA'S WORK AREA PROTECTION MANUAL AND MUTCD STANDARDS.

MAINTENANCE OF TRAFFIC NOTES

1. IT IS NOT THE INTENT OF THIS PLAN TO ENUMERATE EVERY DETAIL WHICH MUST BE CONSIDERED IN THE CONSTRUCTION OF EACH WORK ZONE, BUT ONLY TO SHOW THE GENERAL FEATURES NECESSARY TO PROVIDE FOR PROPER HANDLING OF TRAFFIC. THE CONSTRUCTION TECHNIQUES ULTIMATELY EMPLOYED BY THE CONTRACTOR ARE TO BE APPROVED BY THE CITY OF LYNCHBURG. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE FOR SAFE TRAVEL AROUND THE WORK ZONES IN ACCORDANCE WITH THE PLAN PROVIDED HEREIN.
2. CONTRACTOR SHALL CONTACT THE CITY OF LYNCHBURG REPRESENTATIVE IN WRITING WITH A WORK SCHEDULE TWO WEEKS BEFORE STARTING WORK.
3. THE CONTRACTOR SHALL COORDINATE THE SEQUENCE OF CONSTRUCTION WITH THE CITY OF LYNCHBURG APPROVAL.
4. SIGN SPACING MAY BE ADJUSTED TO FIT FIELD CONDITIONS WITH CITY OF LYNCHBURG APPROVAL.
5. ALL PAVEMENT MARKINGS CONFLICTING WITH TRAFFIC PATTERNS SHALL BE ERADICATED AND RESTRIPE AS NECESSARY.
6. WHEN WORK IS NOT BEING PERFORMED, THE CLEAR ZONE OF THE ROADWAY SHALL BE FREE OF STORED MATERIALS AND PARKED EQUIPMENT. THE CLEAR ZONE FOR THIS PROJECT IS THE TOTAL ROADSIDE BORDER AREA WITHIN 4' OF THE EDGE OF THE TRAVELED WAY.
7. THE EXISTING POSTED SPEED LIMIT IN THE PROJECT AREA IS 25 MPH UNLESS NOTED OTHERWISE.
8. SAFE ACCESS TO ALL EXISTING PUBLIC ROADWAYS SHALL BE MAINTAINED AT ALL TIMES.
9. CONSTRUCTION WORK AFTER DARK IS NOT ANTICIPATED FOR THIS PROJECT. ANY CONSTRUCTION WORK AFTER DARK SHALL OCCUR WITH FLOODLIGHTS BEING USED WHERE EXISTING LIGHT IS NOT ADEQUATE. THE FLOODLIGHTS SHALL NOT CREATE A DISTRACTING GLARE TO ADJACENT DRIVERS.
10. ALL FLAGGERS SHALL BE STATE-CERTIFIED AND HAVE THEIR CERTIFICATION CARD IN THEIR POSSESSION WHEN PERFORMING FLAGGING DUTIES.
11. CHANNELIZING DEVICES SUCH AS CONES OR BARRELS SHALL BE UTILIZED WHERE REQUIRED AND SHALL CONFORM TO THE WAPM.
12. CONTRACTOR SHALL MAINTAIN ALL EXISTING ROADWAY SIGNAGE DURING ALL PHASES OF THE PROJECT.
13. LANE CLOSURES SHALL BE LIMITED TO 1/4 MILE OR AS DIRECTED BY THE CITY OF LYNCHBURG.
14. MOTORISTS SHALL BE WARNED IN ADVANCE OF ANY INTERSECTION CLOSURES.

MAINTENANCE OF TRAFFIC NARRATIVE

THIS MAINTENANCE OF TRAFFIC PLAN IS INTENDED TO PROVIDE A BASIC OVERVIEW OF THE TYPES OF TRAFFIC CONTROL MEASURES NECESSARY FOR THE MAJOR WORK ZONES ON THE PROJECT. THIS PLAN IS NOT INTENDED TO SHOW EVERY FEATURE OF THE TRAFFIC CONTROL PLAN. THE CONTRACTOR SHALL ULTIMATELY BE RESPONSIBLE FOR ENSURING SAFE TRAVEL AROUND ALL WORK AREAS.

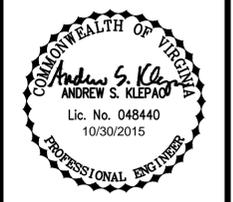
THE MAINTENANCE OF TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION'S WORK AREA PROTECTION MANUAL, FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AND AASHTO'S LATEST DESIGN MANUAL.

PRE-CONSTRUCTION AND PUBLIC NOTIFICATION
 AT LEAST TWO WEEKS PRIOR TO COMMENCING CONSTRUCTION, VARIABLE MESSAGE SIGNS SHALL BE PLACED IN THE VICINITY OF THE PENDING CONSTRUCTION ACTIVITY TO ADVISE ABOUT THE UPCOMING CONSTRUCTION EFFORT. THE MESSAGE SHOULD CONVEY THE CONSTRUCTION COMMENCEMENT DATE AND THAT DELAYS SHOULD BE EXPECTED.

*ENGINEERING >> SURVEYING >> PLANNING

HURT & PROFFITT
 INCORPORATED
 2524 LANGHORNE ROAD
 LYNCHBURG VA 24501
 800.242.4906 TOLL FREE
 434.847.7796 MAIN
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NO.	BY	REVISIONS	DATE



Virginia A & E

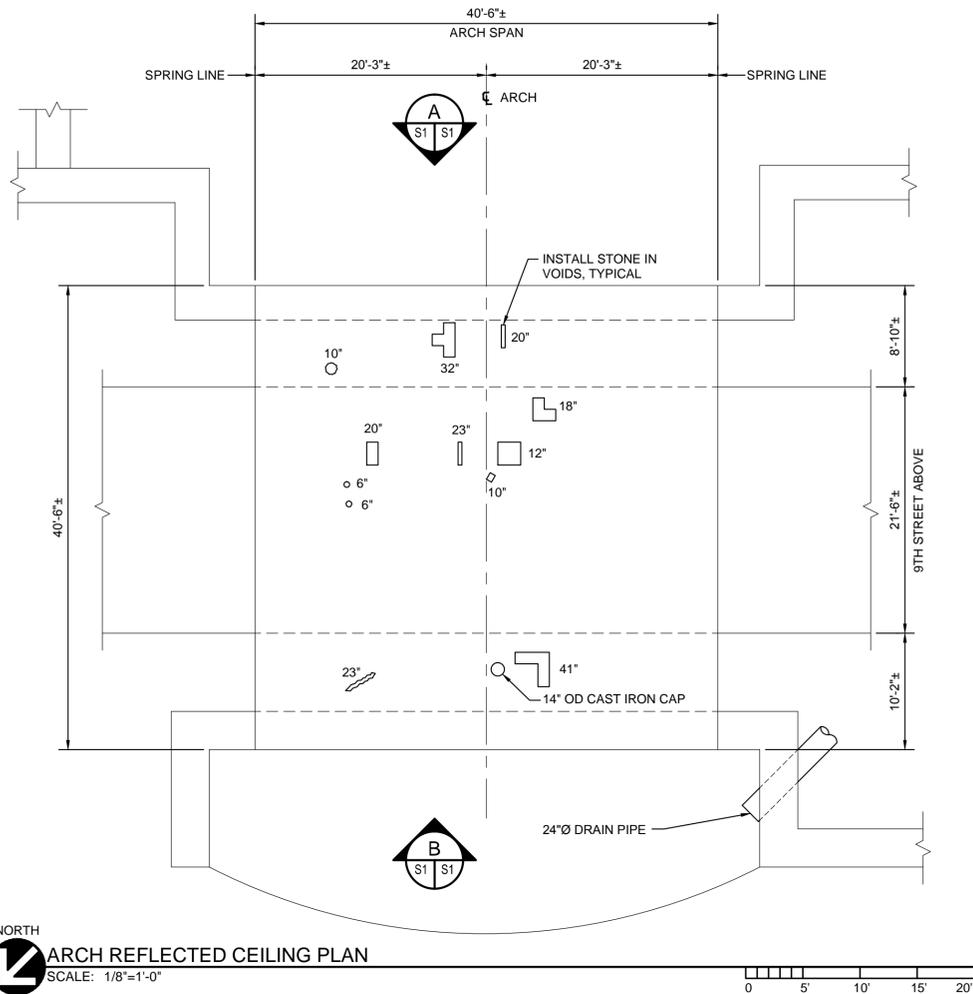
VIRGINIA A&E, PLLC
 1115 VISTA PARK DRIVE
 FOREST, VIRGINIA 24551
 PHONE: (434) 316-6001

CITY OF LYNCHBURG
KANAWHA CANAL BRIDGE REPAIRS
 CITY PROJECT NO.: 14022-B
 LYNCHBURG, VIRGINIA

MOT PLAN - DETOUR

PROJECT NO.: 13144
 DATE: 30 OCT 15

Full Scale Verification
 0" 1"
 Drawing No.: **C3**



A
ELEVATION
SCALE: NONE



B
ELEVATION
SCALE: NONE

LEGEND:

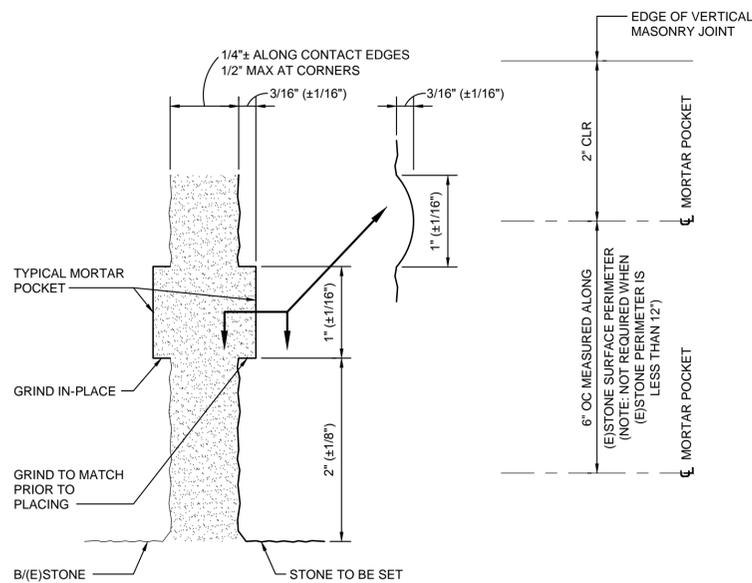


GENERAL NOTES:

1. THE MISSING STONES OR CRACKS ARE DRAWN TO SCALE AND IN THE LOCATION OBSERVED ON THE ARCH REFLECTED CEILING PLAN.
2. THE DEPTH PROBED AT MISSING STONES, JOINTS OR CRACKS ARE NOTED ON THE ARCH REFLECTED CEILING PLAN. PROBE DEPTH IS BEYOND THE DEPTH OF MISSING STONE.
3. OTHER SMALL VOIDS EXIST IN AREAS NEIGHBORING MISSING STONES AND SHOWN IN ELEVATIONS A AND B, THIS DRAWING.
4. REMOVE VEGETATION FROM BRIDGE IN ADVANCE OF STONE REPOINTING AND REPLACEMENT.

STONE REPOINTING AND REPLACEMENT NOTES:

1. REPAIR AND REHABILITATION WORK SHALL BE DONE BY A MASON EXPERIENCED IN THE STONE WORK, IN SHAPING AND PLACING STONES, AND IN THE MIXTURE AND USE OF MORTAR.
2. THE REPLACEMENT STONE SHALL MATCH THE EXISTING STONE IN TYPE, SIZE, AND COLOR.
3. ALL STONE SHALL BE CLEAN, PROPERLY QUARRIED AND FREE FROM STRUCTURAL DEFECTS.
4. STONE SHALL BE THOROUGHLY SATURATED, ON THE SURFACE, WITH CLEAN WATER PRIOR TO BEDDING WORK. STONE SHALL NOT BE SOAKED IN STANDING WATER.
5. DOCUMENT ALL REPAIR AND REHABILITATION WORK LOCATIONS AND DESCRIPTIONS. INCLUDE PHOTOGRAPHS OF PREPARATION WORK.
6. SOUND MORTAR ON ADJACENT MASONRY SHOULD NOT BE REMOVED.
7. NO STAINING MATERIAL MAY BE USED.
8. SEE PROJECT MANUAL FOR TECHNICAL SPECIFICATION ASSOCIATED WITH STONE REPOINTING AND MAINTENANCE OF STONE ASSEMBLIES.
9. SEE TYPICAL STONE INSTALLATION DETAIL, THIS DRAWING.
10. NO POWERED EQUIPMENT SHALL BE PERMITTED ON THE BRIDGE TRAFFIC SURFACE AREA UNTIL THE RIVER JACK (RJ) STONE HAS BEEN PLACED.



- NOTES:**
1. SHORE SURROUNDING STONE AT ALL DURING ALL WORK.

TYPICAL STONE INSTALLATION DETAIL
SCALE: NONE

NO.	BY	REVISIONS	DATE



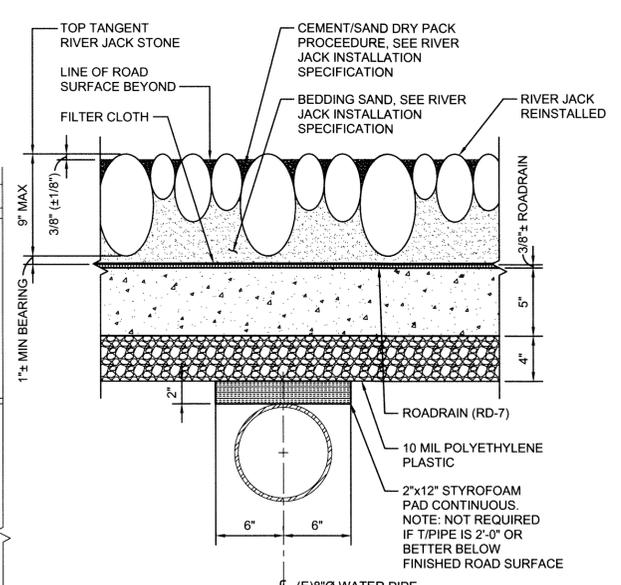
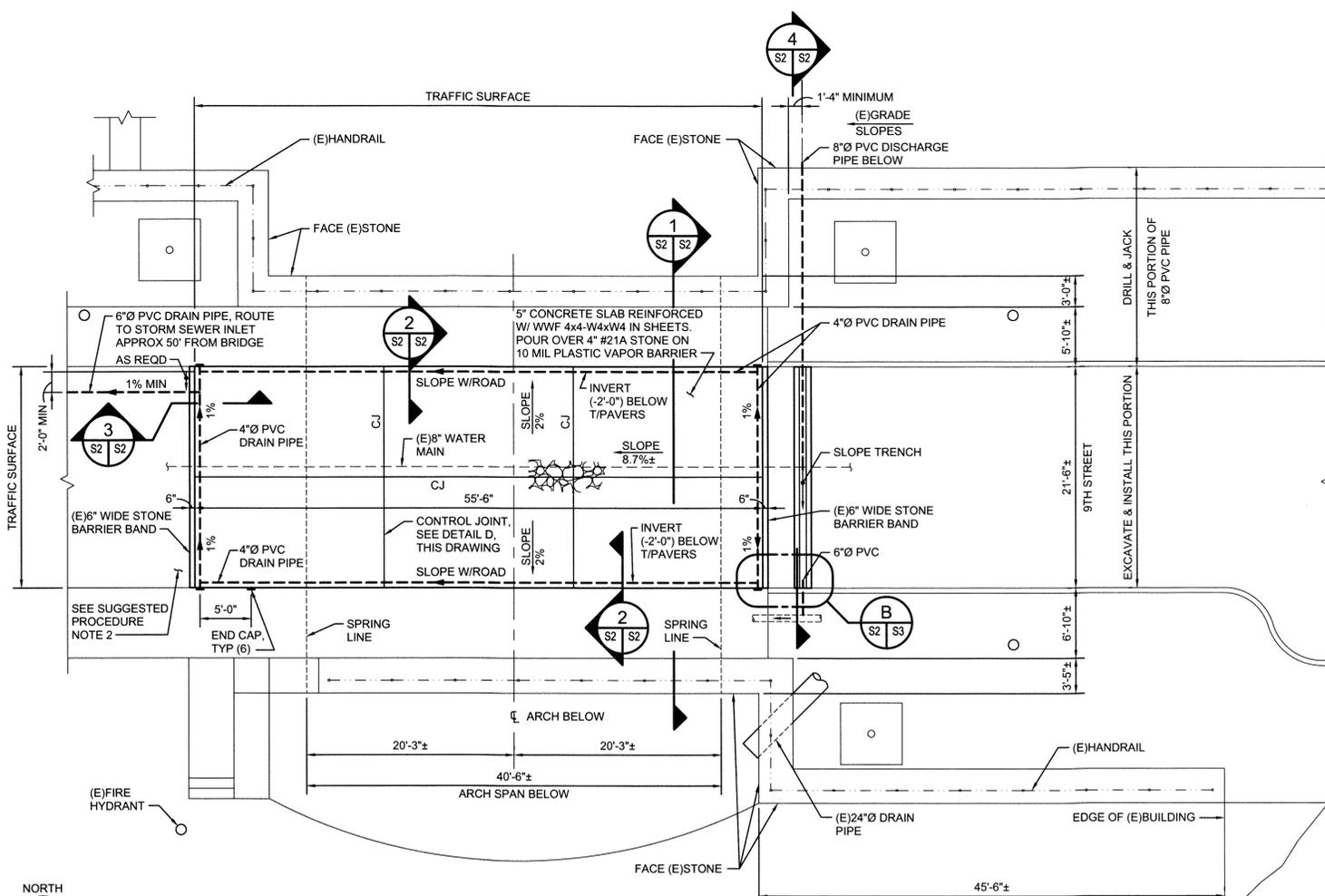
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CITY OF LYNCHBURG
KANAWHA CANAL BRIDGE REPAIRS
CITY PROJECT NO: 14022-B
LYNCHBURG, VIRGINIA

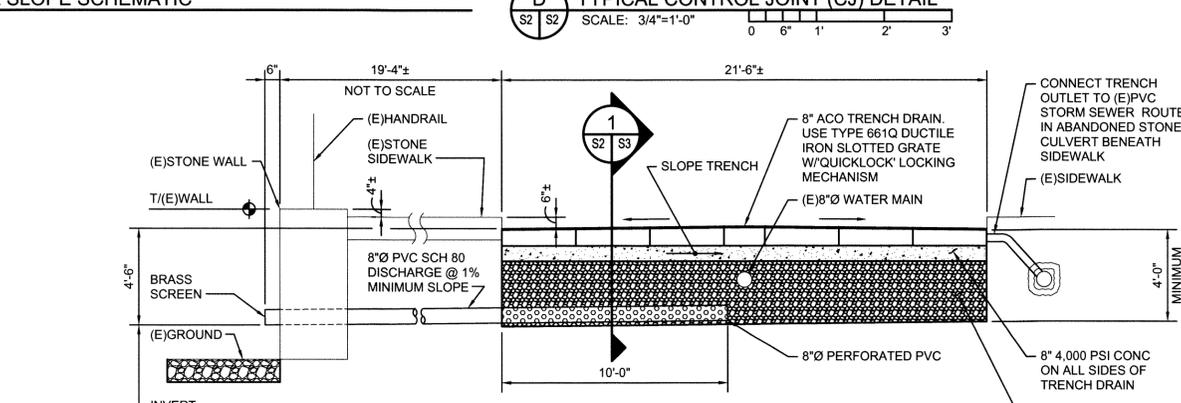
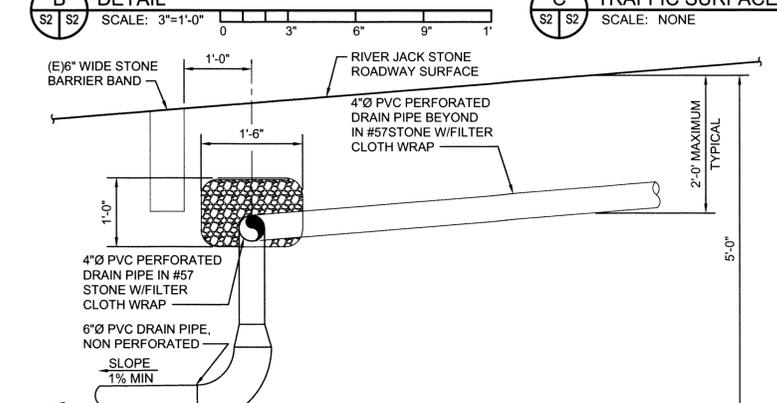
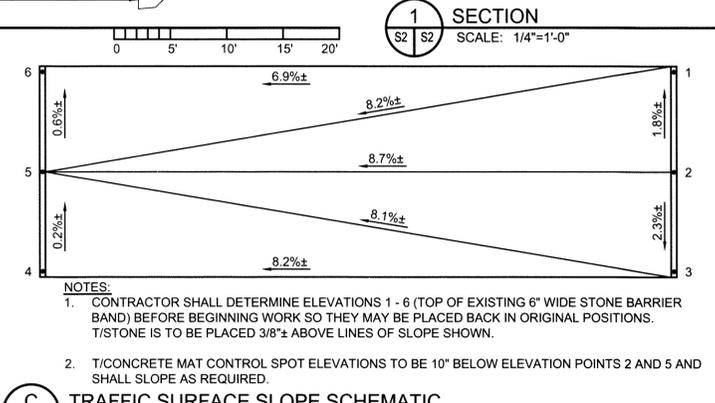
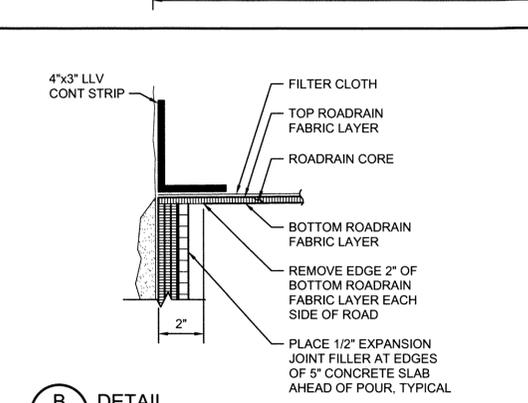
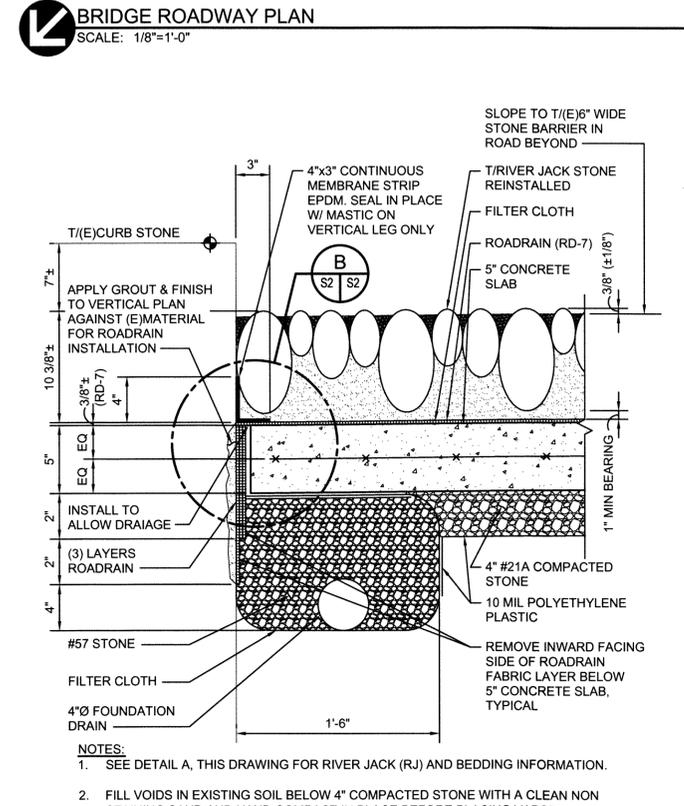
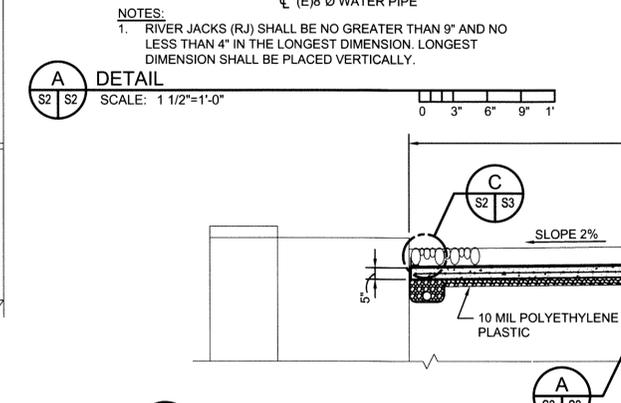
ARCH REFLECTED CEILING
PLAN AND ELEVATIONS
PROJECT NO: 13744
DATE: 30 OCT 15

Full Scale Verification
0" 1"

S1



- GENERAL NOTES:**
- SEE PROJECT MANUAL FOR TECHNICAL SPECIFICATIONS ASSOCIATED WITH RIVER JACK INSTALLATION.
- SUGGESTED PROCEDURE:**
- SURVEY AND MARK ALL EXISTING ELEVATIONS OF 6" WIDE STONE BARRIER EACH END OF SLOPE BEFORE REMOVAL FOR REPLACEMENT INTO ORIGINAL POSITION. STONE BARRIERS SHOWN ON PLAN AT EACH END OF ROADWAY SURFACE TO BE REINSTALLED AT EXISTING ELEVATIONS.
 - PLACE STRAW BAIL BARRIER BELOW LOW END OF CONSTRUCTION AND MAINTAIN THROUGHOUT PROJECT.
 - REMOVE AND SALVAGE THE BRIDGE TRAFFIC SURFACE RJ STONES AND STORE FOR REINSTALLATION.
 - REMOVE AND STORE 6" WIDE STONE BARRIER BANDS AT EACH END OF RIVER JACK DRIVING STONE TRAFFIC SURFACE AND ANY COBBLES REQUIRED EACH END, AS REQUIRED, AND STORE FOR REINSTALLATION.
 - EXCAVATE SOIL FILL TO A DEPTH OF 1'-8" BELOW EXISTING DRIVING SURFACE WITH HAND EXCAVATION EQUIPMENT. CARE SHALL BE TAKEN TO LOCATE AND IDENTIFY ALL UNDERGROUND SERVICES OR OTHER ITEMS.
 - REWORK EXISTING MATERIAL REMAINING AS REQUIRED AND COMPACT THE ROAD AREA WITH HAND OPERATED COMPACTION EQUIPMENT.
 - ROD COMPACT AROUND AND BENEATH SIDEWALK STONES AND OTHER VOIDS, WITH CLEAN, NON STAINING SAND AS REQUIRED. NO STAINING FILL MATERIALS MAY BE USED.
 - INSTALL DRAINAGE SYSTEM AND ROAD BEDDING TO PROPER COMPACTION WITH LIGHT HAND OPERATED EQUIPMENT.
 - REINSTALL 6" WIDE STONE BARRIER BANDS EACH END OF DRIVING SURFACE.
 - POUR CONCRETE MAT BENEATH DRIVING SURFACE AS SHOWN.
 - CURE CONCRETE MAT FOR 48 HOURS PRIOR TO PLACING ROADRAIN AS SPECIFIED.
 - INSTALL ROADRAIN AND PERIMETER MEMBRANE.
 - INSTALL RIVER JACK (RJ) STONE ROADWAY SURFACE AND ASSOCIATED BEDDING MATERIAL AS SPECIFIED AND DETAILED.
 - RIVER JACK SHALL BE INSTALLED FROM THE BOTTOM END OF THE ROAD GRADE TOWARD THE TOP.



NOTES:

- SEE DETAIL A, THIS DRAWING FOR RIVER JACK (RJ) AND BEDDING INFORMATION.
- FILL VOIDS IN EXISTING SOIL BELOW 4" COMPACTED STONE WITH A CLEAN NON STAINING SAND AND HAND COMPACT IN PLACE BEFORE PLACING VAPOR BARRIER AND #21A STONE.

DATE	30 OCT 15
REVISIONS	
BY	
NO.	

PROFESSIONAL ENGINEER
PHIL V. MAYS
Lic. No. 014412
10/30/15

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CITY OF LYNCHBURG
KANAHA CANAL BRIDGE REPAIRS
CITY PROJECT NO: 14022-B
LYNCHBURG, VIRGINIA

BRIDGE ROADWAY PLAN AND SECTIONS

Full Scale Verification
0" 1"
Drawing No.: S2

GENERAL NOTES:

CONCRETE:

- CONCRETE MIXTURES SHALL COMPLY WITH ACI 301. PREPARE NORMAL-WEIGHT CONCRETE (145 PCF) DESIGN MIXES UNLESS OTHERWISE NOTED, PROPORTIONED ACCORDING TO ACI 301, AS FOLLOWS:

ROAD BED SUPPORT SLAB:
A. MINIMUM COMPRESSIVE STRENGTH: 4000 PSI AT 7 DAYS.
B. MAXIMUM WATER-CEMENTITIOUS MATERIALS RATIO: 0.45
C. SLUMP LIMIT: 5 INCHES +/- 1 INCH FOR CONCRETE
D. AIR CONTENT: MAINTAIN 6% (+/- 1%)
- READY MIXED CONCRETE PRODUCER SHALL CONFORM TO QUALIFICATIONS BY ASTM C94.
- MEASURE, BATCH, MIX, AND DELIVER CONCRETE ACCORDING TO ASTM C94 AND ASTM C1116. WHEN AIR TEMPERATURE IS ABOVE 90 DEG F, REDUCE MIXING AND DELIVERY TIME TO 60 MINUTES.
- ALL DETAILING, FABRICATION AND PROCEDURES OF CONCRETE PLACEMENT SHALL CONFORM WITH THE LATEST EDITIONS OF ACI 301 - "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS", ACI 315 - "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT", AND ACI 318 - "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
- REINFORCING BARS SHALL BE ROLLED FROM NEW BILLET STEEL CONFORMING TO ASTM A615, GRADE 60 DEFORMED, UNLESS OTHERWISE NOTED.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 AND A82 HAVE END LAPS OF ONE FULL MESH PLUS 2" BETWEEN CROSS WIRES AND EDGE LAPS OBTAINED BY OVERLAPPING LONGITUDINAL SELVAGE WIRES 2" AND WIRING ALL LAPS SECURELY TOGETHER. WELDED WIRE FABRIC SHALL EXTEND INTO SUPPORT BEAMS AND WALLS FOR ANCHORAGE UNLESS AN EXPANSION JOINT IS INDICATED.
- THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR ALL REINFORCEMENT, UNLESS OTHERWISE NOTED:
A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
B. CONCRETE EXPOSED TO EARTH OR WEATHER: 2"
- LAP ALL REINFORCING SPLICES AT LEAST 48 BAR DIAMETERS UNLESS OTHERWISE NOTED. SPLICE LOCATIONS SHALL BE STAGGERED FOR PARALLEL BARS.
- ALL REINFORCING SHALL BE SECURELY WIRED TOGETHER IN FORMS AS CALLED FOR IN "PLACING REINFORCING BARS" BY CRSI.
- NO TORCH CUTTING, HEAT BENDING, OR WELDING OF REINFORCING SHALL BE DONE UNLESS OTHERWISE NOTED.
- CEMENTITIOUS MATERIAL: USE CEMENTITIOUS MATERIALS, OF THE SAME TYPE, BRAND, AND SOURCE, THROUGHOUT PROJECT. PORTLAND CEMENT SHALL BE ASTM C150, TYPE 1/11, GRAY. SUPPLEMENT WITH FLY ASH IN ACCORDANCE WITH ASTM C618, CLASS F OR C AND GROUND GRANULATED BLAST-FURNACE SLAG IN ACCORDANCE WITH ASTM C989, GRADE 100 OR 120. SILICA FUME SHALL BE ASTM C1240, AMORPHOUS SILICA.
- NORMAL-WEIGHT AGGREGATES: ASTM C33, CLASS 3S COARSE AGGREGATE OR BETTER, GRADED. PROVIDE AGGREGATES FROM A SINGLE SOURCE WITH DOCUMENTED SERVICE RECORD DATA OF AT LEAST 10 YEARS' SATISFACTORY SERVICE IN SIMILAR APPLICATIONS AND SERVICE CONDITIONS USING SIMILAR AGGREGATES AND CEMENTITIOUS MATERIALS. MAXIMUM COARSE-AGGREGATE SIZE SHALL BE 1 INCH NOMINAL. FINE AGGREGATES SHALL BE FREE OF MATERIALS WITH DELETERIOUS REACTIVITY TO ALKALI IN CEMENT.
- WATER SHALL BE ASTM C94 AND POTABLE.
- AIR-ENTRAINING ADMIXTURE SHALL CONFORM TO ASTM C260.
- CHEMICAL ADMIXTURES SHALL CONFORM TO ASTM C494 AND BE WATER REDUCING. CONTRACTOR SHALL NOT USE CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CALCIUM CHLORIDE.
- COMPLY WITH CRSI'S "MANUAL OF STANDARD PRACTICE" FOR FABRICATING, PLACING, AND SUPPORTING REINFORCEMENT.
- BEFORE PLACING CONCRETE, VERIFY THAT INSTALLATION OF FORMWORK, REINFORCEMENT, AND EMBEDDED ITEMS IS COMPLETE AND THAT ALL REQUIRED INSPECTIONS HAVE BEEN PERFORMED.
- PLACE CONCRETE IN A CONTINUOUS OPERATION AND CONSOLIDATE USING MECHANICAL VIBRATING EQUIPMENT.
- PROTECT CONCRETE FROM PHYSICAL DAMAGE, PREMATURE DRYING, AND REDUCED STRENGTH DUE TO HOT OR COLD WEATHER DURING MIXING, PLACING, AND CURING.
- SLAB FINISHES SHALL COMPLY WITH ACI 302.1R RECOMMENDATIONS FOR SCREEDING, RESTRAIGHTENING, AND FINISHING OPERATIONS FOR CONCRETE SURFACES. APPLY FINISHES TO SLABS NOTED BELOW:
A. BROOM FINISH SHALL BE APPLIED TO CONCRETE, IMMEDIATELY AFTER FLOAT FINISHING, SLIGHTLY ROUGHEN TRAFFICKED SURFACE BY BROOMING WITH FIBER-BRISTLE BROOM PERPENDICULAR TO MAIN TRAFFIC ROUTE. COORDINATE REQUIRED FINAL FINISH WITH OWNER/ENGINEER BEFORE APPLICATION.
- SAW CUT CONTROL JOINTS (CJ) AS SHOWN ON PLAN AFTER INITIAL GEL AND WITHIN 24 HOURS OF POUR. GEL MUST BE SUITABLE TO PREVENT SURFACE FRACTURING DURING SAW CUT.
- BEGIN CURING CONCRETE SLABS AFTER FINISHING.
- PROTECT CONCRETE FROM DAMAGE. REPAIR SURFACE DEFECTS IN FORMED CONCRETE AND SLABS.
- DO NOT ADD WATER TO CONCRETE DURING DELIVERY, AT PROJECT SITE, OR DURING PLACEMENT UNLESS APPROVED BY ENGINEER.
- BEFORE TEST SAMPLING AND PLACING CONCRETE, WATER MAY BE ADDED AT PROJECT SITE, SUBJECT TO LIMITATIONS OF ACI 301 AND ENGINEER APPROVAL. DO NOT ADD WATER TO CONCRETE AFTER ADDING HIGH-RANGE WATER-REDUCING ADMIXTURES TO MIXTURE.
- DEPOSIT AND CONSOLIDATE CONCRETE FOR SLABS IN A CONTINUOUS OPERATION, WITHIN LIMITS OF CONSTRUCTION JOINTS, UNTIL PLACEMENT OF A PANEL OR SECTION IS COMPLETE. CONSOLIDATE CONCRETE DURING PLACEMENT OPERATIONS SO CONCRETE IS THOROUGHLY WORKED AROUND REINFORCEMENT AND OTHER EMBEDDED ITEMS AND INTO CORNERS. MAINTAIN REINFORCEMENT IN POSITION ON CHAIRS DURING CONCRETE PLACEMENT. SCREED SLAB SURFACES WITH A STRAIGHTEDGE AND STRIKE OFF TO CORRECT ELEVATIONS. SLOPE SURFACES UNIFORMLY TO DRAIN WHERE REQUIRED. BEGIN INITIAL FLOATING

- USING BULL FLOATS OR DARBIES TO FORM A UNIFORM AND OPEN-TEXTURED SURFACE. DO NOT FURTHER DISTURB SLAB SURFACES BEFORE STARTING FINISHING OPERATIONS.
- COLD-WEATHER PLACEMENT: COMPLY WITH ACI 306.1 AND AS FOLLOWS. PROTECT CONCRETE WORK FROM PHYSICAL DAMAGE OR REDUCED STRENGTH THAT COULD BE CAUSED BY FROST, FREEZING ACTIONS, OR LOW TEMPERATURES. WHEN AVERAGE HIGH AND LOW TEMPERATURE IS EXPECTED TO FALL BELOW 40 DEG F FOR THREE SUCCESSIVE DAYS, MAINTAIN DELIVERED CONCRETE MIXTURE TEMPERATURE WITHIN THE TEMPERATURE RANGE REQUIRED BY ACI 301. DO NOT USE FROZEN MATERIALS OR MATERIALS CONTAINING ICE OR SNOW. DO NOT PLACE CONCRETE ON FROZEN SUBGRADE OR ON SUBGRADE CONTAINING FROZEN MATERIALS. DO NOT USE CALCIUM CHLORIDE, SALT, OR OTHER MATERIALS CONTAINING ANTIFREEZE AGENTS OR CHEMICAL ACCELERATORS UNLESS OTHERWISE SPECIFIED AND APPROVED IN MIXTURE DESIGNS.
- HOT WEATHER PLACEMENT SHALL COMPLY WITH ACI 301. MAINTAIN CONCRETE TEMPERATURE BELOW 90 DEG F AT TIME OF PLACEMENT. CHILLED MIXING WATER OR CHOPPED ICE MAY BE USED TO CONTROL TEMPERATURE, PROVIDED WATER EQUIVALENT OF ICE IS CALCULATED TO TOTAL AMOUNT OF MIXING WATER. USING LIQUID NITROGEN TO COOL CONCRETE IS CONTRACTOR'S OPTION. FOG-SPRAY FORMS, STEEL REINFORCEMENT, AND SUBGRADE JUST BEFORE PLACING CONCRETE. KEEP SUBGRADE UNIFORMLY MOIST WITHOUT STANDING WATER, SOFT SPOTS, OR DRY AREAS.
- CURE CONCRETE ACCORDING TO ACI 308.1 MOISTURE CURING: KEEP SURFACES CONTINUOUSLY MOIST FOR NOT LESS THAN FIVE DAYS WITH WATER, CONTINUOUS WATER-FOG SPRAY, ABSORPTIVE COVER, WATER SATURATED, AND KEPT CONTINUOUSLY WET. COVER CONCRETE SURFACES AND EDGES WITH 12 INCH LAP OVER ADJACENT ABSORPTIVE COVERS.
- OWNER SHALL ENGAGE A TESTING AND INSPECTION FIRM TO PERFORM FIELD TESTS ON CONCRETE AND TO SUBMIT TEST REPORTS FOR VALIDATION WITH DESIGN PARAMETERS NOTED ABOVE.
- INSPECTIONS SHALL INCLUDE STEEL REINFORCEMENT PLACEMENT, VERIFICATION OF USE OF REQUIRED DESIGN MIXTURE, CONCRETE PLACEMENT, INCLUDING CONVEYING AND DEPOSITING, AND CURING PROCEDURES AND MAINTENANCE OF CURING TEMPERATURE.
- CONCRETE TESTS: TESTING OF COMPOSITE SAMPLES OF FRESH CONCRETE OBTAINED ACCORDING TO ASTM C172. TESTING FREQUENCY: OBTAIN ONE COMPOSITE SAMPLE FOR EACH DAY'S POUR OF EACH CONCRETE MIXTURE EXCEEDING 5 CUBIC YARDS, BUT LESS THAN 25 CUBIC YARDS, PLUS ONE SET FOR EACH ADDITIONAL 50 CUBIC YARDS OR FRACTION THEREOF.
- SLUMP: ASTM C143; ONE TEST AT POINT OF PLACEMENT FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR OF EACH CONCRETE MIXTURE. PERFORM ADDITIONAL TESTS WHEN CONCRETE CONSISTENCY APPEARS TO CHANGE.
- AIR CONTENT: ASTM C231, PRESSURE METHOD, FOR NORMAL-WEIGHT CONCRETE; ONE TEST FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR OF EACH CONCRETE MIXTURE.
- CONCRETE TEMPERATURE: ASTM C1064; ONE TEST HOURLY WHEN AIR TEMPERATURE IS 40 DEG F AND BELOW AND WHEN 80 DEG F AND ABOVE, AND ONE TEST FOR EACH COMPOSITE SAMPLE.
- COMPRESSION TEST SPECIMENS: ASTM C39; CAST AND FIELD CURE THREE SETS OF TWO STANDARD CYLINDERS FOR EACH COMPOSITE SAMPLE. TEST ONE SET OF TWO LABORATORY-CURED SPECIMENS AT 7 DAYS, ONE SET OF TWO SPECIMENS FOR 28 DAYS, AND HOLD ONE SET IN RESERVE. A COMPRESSIVE-STRENGTH TEST SHALL BE THE AVERAGE COMPRESSIVE STRENGTH FROM A SET OF TWO SPECIMENS OBTAINED FROM SAME COMPOSITE SAMPLE AND TESTED AT AGE INDICATED WHEN STRENGTH OF FIELD-CURED CYLINDERS.
- STRENGTH OF EACH CONCRETE MIXTURE WILL BE SATISFACTORY IF EVERY AVERAGE OF ANY THREE CONSECUTIVE COMPRESSIVE-STRENGTH TESTS EQUALS OR EXCEED SPECIFIED COMPRESSIVE STRENGTH AND NO COMPRESSIVE STRENGTH TEST VALUE FALLS BELOW SPECIFIED COMPRESSIVE STRENGTH BY MORE THAN 500 PSI.
- TEST RESULTS SHALL BE REPORTED IN WRITING TO OWNER, A/E, AND CONTRACTOR WITHIN 48 HOURS OF TESTING. REPORTS OF COMPRESSIVE-STRENGTH TESTS SHALL CONTAIN PROJECT IDENTIFICATION NAME AND NUMBER, DATE OF CONCRETE PLACEMENT, NAME OF CONCRETE TESTING AND INSPECTION FIRM, LOCATION OF CONCRETE BATCH IN WORK, DESIGN COMPRESSIVE STRENGTH AT 28 DAYS, CONCRETE MIXTURE PROPORTIONS AND MATERIALS, COMPRESSIVE BREAKING STRENGTH, AND TYPE OF BREAK FOR 7 DAY TESTS.
- NONDESTRUCTIVE TESTING: IMPACT HAMMER, SONOSCOPE, OR OTHER NONDESTRUCTIVE DEVICE MAY BE PERMITTED, BUT WILL NOT BE USED AS SOLE BASIS FOR APPROVAL OR REJECTION OF CONCRETE.
- ADDITIONAL TESTS: TESTING AND INSPECTION FIRM SHALL MAKE ADDITIONAL TESTS OF CONCRETE WHEN TEST RESULTS INDICATE THAT SLUMP, AIR ENTRAINMENT, COMPRESSIVE STRENGTHS, OR OTHER REQUIREMENTS HAVE NOT BEEN MET. TESTING AND INSPECTION FIRM MAY CONDUCT TESTS TO DETERMINE ADEQUACY OF CONCRETE BY CORED CYLINDERS COMPLYING WITH ASTM C42 OR BY OTHER METHODS.
- ADDITIONAL TESTING AND INSPECTING, AT CONTRACTOR'S EXPENSE, WILL BE PERFORMED TO DETERMINE COMPLIANCE OF REPLACED OR ADDITIONAL WORK WITH SPECIFIED REQUIREMENTS.
- CORRECT DEFICIENCIES IN THE WORK THAT TEST REPORTS AND INSPECTIONS INDICATE DO NOT COMPLY WITH THE CONTRACT DOCUMENTS.

ROADRAIN (RD-7) INSTALLATION:

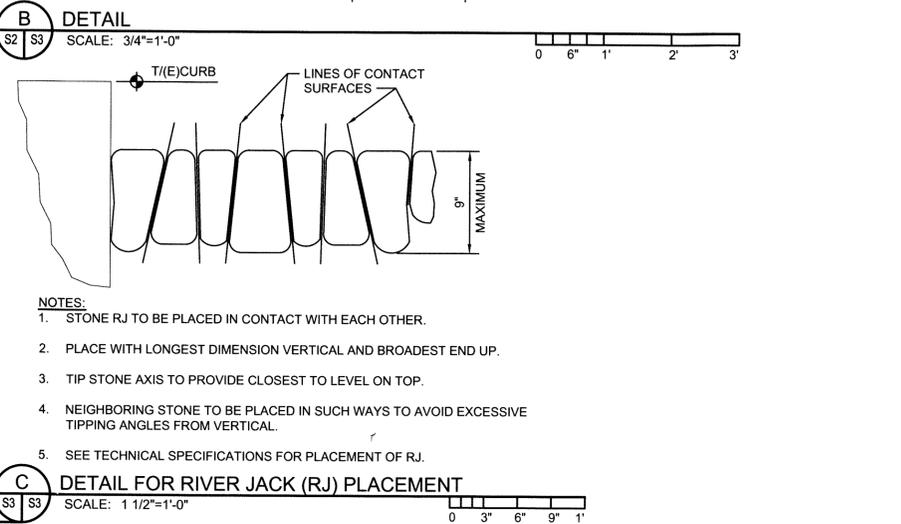
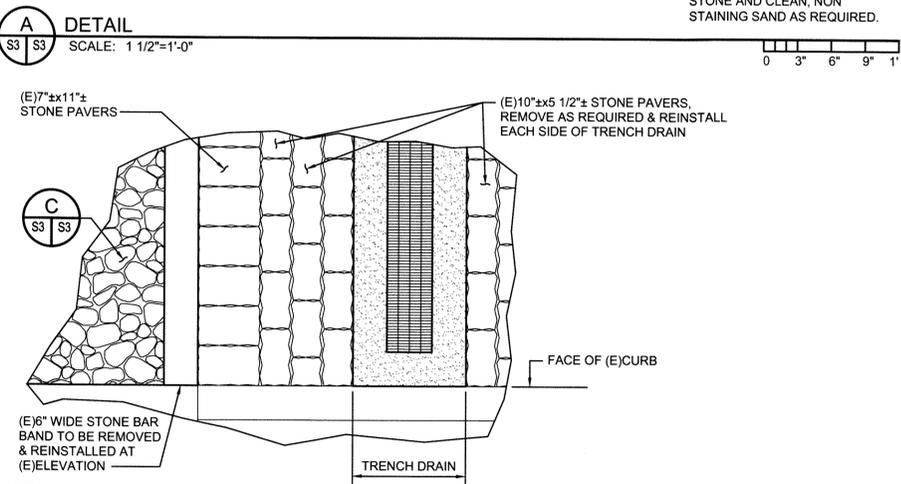
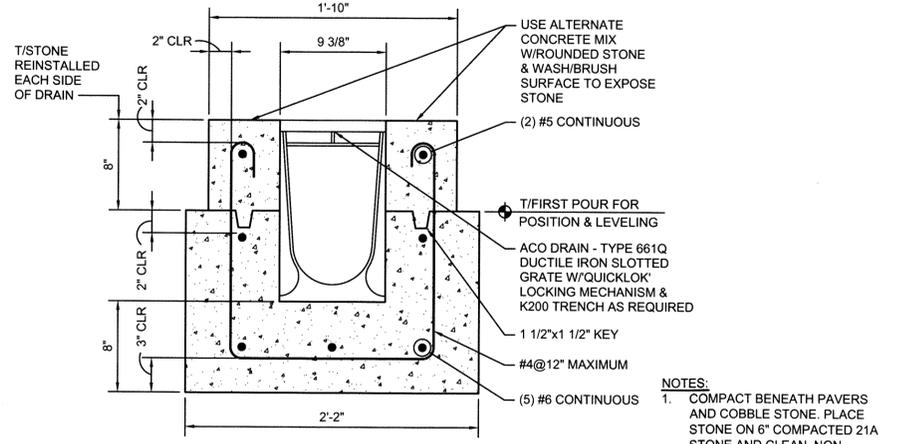
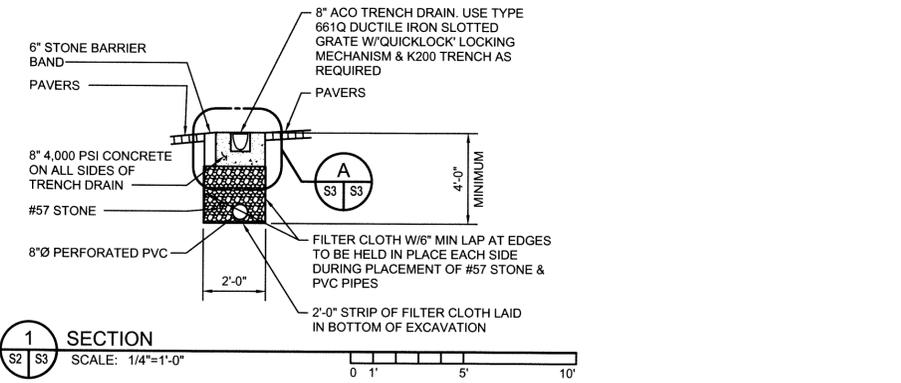
- THE INSTALLER SHALL CHECK THE MATERIAL UPON DELIVERY TO VERIFY THAT THE MATERIALS RECEIVED ARE THE PROPER TYPE AND GRADE.
- ROADRAIN SHALL BE HANDLED IN SUCH A MANNER AS TO ENSURE IT IS NOT DAMAGED IN ANY WAY. APPROPRIATE EQUIPMENT SHALL BE EMPLOYED WHEN OFF LOADING AND HANDLING ROADRAIN.
- ROADRAIN SHALL BE STORED IN A CLEAN AND DRY ENVIRONMENT, OFF THE GROUND AND OUT OF DIRECT SUNLIGHT AND SHALL BE PROTECTED FROM EXCESSIVE HEAT, COLD, MUD, DIRT, AND DUST.
- THE CONTRACTOR SHALL VERIFY THAT THE SURFACE OF THE AREA TO RECEIVE THE ROADRAIN IS SMOOTH AND CLEAN COMPACTED, WITH NO VOIDS OR HUMPS, AND HAS THE PROPER DESIGN GRADE THAT SLOPES TOWARDS THE EDGE DRAIN OR OTHER WATER COLLECTION STRUCTURE AS SHOWN IN SECTION 2/S2, S2.

- AREAS IN THE BASE WHERE WATER, DIRT, OR OTHER CONTAMINANTS ARE OBSERVED SHOULD BE CLEANED AND DRIED.
- ROADRAIN SHOULD ALWAYS BE HANDLED WITH PROPER EQUIPMENT AND CARE SO AS TO PREVENT ANY DAMAGE SUCH AS CUTS, TEARS OR PUNCTURES.
- PLACE AND POSITION THE ROLLS IN THE PROPER MANNER AT THE ELEVATIONS AND ALIGNMENT SHOWN IN THE CONSTRUCTION DRAWINGS AND AS DIRECTED BY THE ENGINEER. THE ROLL SHOULD BE ORIENTED TO ALIGN THE CENTER CORE STRIPS AT 45± TO THE ROAD DIRECTION SO AS TO DIRECT DRAINAGE DOWN HILL AND TO THE OUTSIDE EDGE OF ROADWAY. NOTE: THIS REQUIRES FEEDING ROLL FROM UNDER SIDE ON ONE SIDE AND FROM TOP ON THE OTHER SIDE OF THE ROAD WIDTH.
- ROADRAIN SHOULD RUN PARALLEL TO THE DIRECTION OF THE ROADWAY.
- STEPS SHOULD BE TAKEN TO PREVENT THE LEADING EDGE OF THE MATERIAL FROM CURLING UP BY SECURING IT TO THE CONCRETE WITH SANDBAGS.
- TO PREVENT WRINKLES, MAINTAIN PROPER TENSION AND ALIGNMENT WHEN UNROLLING ROADRAIN.
- DRAINAGE CORES OF ADJACENT PANELS AND END TO END PANELS SHOULD BE BUTT TIGHT TOGETHER PER MANUFACTURER'S STANDARD DETAILS.

- THE FABRIC FILTERS ARE WIDER THAN THE DRAINAGE CORE. THESE "FLAPS" ENSURE AMPLE FABRIC IS AVAILABLE FOR PROPER SEAMING. BE SURE TO FOLLOW PROPER SEAMING METHODS TO ENSURE CONTINUITY OF FLOW AND PREVENT SOIL PARTICLES FROM ENTERING THE DRAINAGE CORE.
- TO PREVENT MOVEMENT AND MAINTAIN ALIGNMENT DURING FILL PLACEMENT, CORES OF ADJACENT PANELS (SIDE BY SIDE ROLLS) SHOULD BE TIED EVERY 5 FEET ALONG THEIR LENGTH WITH PLASTIC CABLE TIES AND EVERY 2 FEET ALONG THEIR WIDTH (END TO END ROLLS). CABLE TIES SHOULD HAVE A MINIMUM TENSILE STRENGTH OF 50 LBS.
- TO PREVENT SOIL FROM ENTERING THE DRAINAGE CORE, ADJACENT PANELS SHALL HAVE A SEPARATE STRIP OF NON-WOVEN GEOTEXTILE PLACED OVER THE SEAM PER MANUFACTURER'S STANDARD DETAILS.
- OVERLAPS AND STRIPS OF GEOTEXTILE NEED TO BE SECURE AND REMAIN IN PLACE FOR THE DURATION OF THE TOPPING PLACEMENT OPERATION. APPROVED METHODS INCLUDE SEWING, HEAT BONDING OR A SPRAY ADHESIVE SUCH AS 3M HI-STRENGTH 90, OR BY APPLYING DUCT TAPE. IF HEAT BONDING IS USED, CARE MUST BE TAKEN TO NOT BURN THROUGH THE GEOTEXTILE.
- ROADRAIN CAN BE MADE TO FIT ANY WIDTH OR LENGTH BY CUTTING THE MATERIAL. LONG CUTS ARE BEST MADE WITH A CONTRACTOR'S SAW EMPLOYING AN ABRASIVE (NON-TOOTHED) BLADE. SHORTER CUTS CAN BE MADE WITH A SHARP SERRATED BLADE UTILITY KNIFE. CUTTING EXPOSES THE CORE EDGE. ALL EXPOSED CORE EDGES (EXCEPT THE EDGE CONNECTED TO THE EDGE DRAIN, SEE SECTION 2/S2, S2) SHALL BE WRAPPED WITH A STRIP OF GEOTEXTILE AND SECURED UTILIZING METHODS DESCRIBED ABOVE.
- PRIOR TO COVERING THE DEPLOYED GEOCOMPOSITE, EACH ROLL SHALL BE INSPECTED FOR DAMAGE. POTENTIAL REPAIR TECHNIQUES WILL BE ADDRESS SEPARATELY FOR JUST GEOTEXTILE DAMAGE AND FOR GEONET DAMAGE ON THE GEOCOMPOSITE.

- MANUFACTURER RECOMMENDS PATCHING SMALL HOLES WITH AN 8-INCH BY 8-INCH TEXTILE PATCH. CENTER AND APPLY THE 8-INCH BY 8-INCH TEXTILE PATCH OVER THE SMALL HOLES IN THE GEOTEXTILE. FIRMLY PRESS 8-INCH BY 8-INCH TEXTILE PATCH OVER REPAIR AREA. IF THE DAMAGED AREA OF THE GEOTEXTILE IS GREATER THAN THIS PATCH SIZE, A BIGGER PATCH IS RECOMMENDED INSTEAD OF USING A MULTITUDE OF 8-INCH BY 8-INCH PATCHES.
- DAMAGE TO THE GEONET PORTION OF THE DEPLOYED GEOCOMPOSITE SHALL BE PATCHED BY PLACING A GEONET OR GEOCOMPOSITE PATCH EXTENDING 12 INCHES BEYOND THE EDGES OF THE DAMAGED AREA. THE PATCH SHALL BE SECURED TO THE ORIGINAL GEONET BY TYING EVERY 6 INCHES WITH APPROVED TYING DEVICES. IF THE DAMAGE ON THE GEONET PORTION OF THE DEPLOYED GEOCOMPOSITE IS MORE THAN 50 PERCENT OF THE WIDTH OF THE ROLL, THIS ENTIRE FULL WIDTH SECTION SHALL BE CUT OUT, AND THE TWO PORTIONS OF THE GEONET (END TO END) SHALL BE JOINED PER MANUFACTURER'S STANDARD DETAILS.
- ROADWAY SURFACE SHALL BE PLACED AS SOON AS POSSIBLE ON PROPERLY INSTALLED MATERIAL. INSTALL ONLY THE AMOUNT OF ROADRAIN THAT CAN BE COMPLETELY PAVED WITH ACCEPTABLE CLIMATE CONDITIONS FOR CONCRETE PLACEMENT. ROADRAIN SHOULD NOT BE LEFT EXPOSED TO DIRECT SUNLIGHT FOR MORE THAN 14 DAYS.
- SPRAY THE ROADRAIN WITH FINE MIST OF WATER JUST AHEAD OF THE PAVING OPERATION TO PROVIDE A MOIST SURFACE FOR PROPER CURING OF THE PAVEMENT.

- IF REQUIRED, 5 DAYS AFTER CONCRETE POUR, LIGHT WEIGHT ROLLERS CAN BE ALLOWED TO OPERATE DIRECTLY ON THE ROADRAIN. VEHICLES OPERATING ON THE ROADRAIN MUST DO SO SLOWLY AND IN A STRAIGHT FORWARD OR BACKWARDS MOTION. THE VEHICLE OPERATOR SHALL AVOID SHARP OR STANDING TURNS AND ABRUPT STOPS OR ACCELERATION.
- ENSURE THAT ALL EQUIPMENT OPERATING ON THE ROADRAIN WILL HAVE THEIR EXHAUST DIRECTED AWAY FROM THE ROADRAIN. INSTALL PER MANUFACTURER'S INSTRUCTION.
- ROADRAIN (RD-7) CORE DIMENSION = 7.6mm WITH 8 OZ PER SQUARE YARD FABRIC TOP AND BOTTOM.
- ROADRAIN SHALL BE PLACED 48 HOURS MINIMUM AFTER CONCRETE POUR. IT SHALL BE PLACED IN DRY WEATHER ON 'S1 SLOW SET EMULSION' SPRAYED AT 0.8 GALLONS PER SQUARE YARD RESIDUAL BINDER. APPLY PER MANUFACTURER'S INSTRUCTIONS.
- ONE LAYER OF FILTER CLOTH SHALL BE PLACED OVER ROADRAIN PRIOR TO PLACING SAND BEDDING AND RIVER JACKS (RJ).



- NOTES:**
- COMPACT BENEATH PAVERS AND COBBLE STONE. PLACE STONE ON 6" COMPACTED 21A STONE AND CLEAN, NON STAINING SAND AS REQUIRED.

NO.	BY	REVISIONS	DATE



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**CITY OF LYNCHBURG
 KANAWHA CANAL BRIDGE REPAIRS**
 CITY PROJECT NO.: 14022-B
 LYNCHBURG, VIRGINIA

**GENERAL NOTES,
 SECTIONS, AND DETAILS**

PROJECT NO.: 13144
 DATE: 30 OCT 15

