WESTERN PULASKI COUNTY WATER DISTRICT BIG CLIFTY CREEK AREA - PHASE 2 KY HIGHWAY 80 / FISHING CREEK BRIDGE WATER LINE REPLACEMENT PULASKI COUNTY, KENTUCKY

LOCATION MAP

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WESTERN PULASKI COUNTY WATER DISTRICT

DON CALDER, CHAIRMAN

AMY POLSTON STEVE DAVIS

JOEL WILSON RANDALL WILSON

OFFICE MANAGER - TAMMY VAUGHT GENERAL MANAGER - JOE McCLENDON

ATTORNEY - JOHN PRUITT

FEBRUARY 2020



Monarch Engineering, Inc.

556 CARLTON DRIVE LAWRENCEBURG, KY 40342

GENERAL NOTES TO CONTRACTOR

- BEFORE CONSTRUCTION BEGINS NEAR OR THROUGH EXISTING UTILITIES (i.e. GAS CO., TELEPHONE CO., CABLE CO., ETC.) EACH UTILITY COMPANY SHALL BE NOTIFIED. A REQUEST FOR THE EXACT LOCATION OF THE UTILITY SHALL BE MADE, AND PERMISSION TO PROCEED WITH CONSTRUCTION OBTAINED.
- BEFORE CONSTRUCTION BEGINS THROUGH ANY PROPERTY, THE CONTRACTOR SHALL MAKE HIMSELF AWARE OF THE EXACT LOCATION OF CONSTRUCTION THROUGH THE PROPERTY AND THE BOUNDS OF THE PERMANENT AND TEMPORARY CONSTRUCTION EASEMENTS.
- THE CONTRACTOR SHALL HAVE ON HAND AT THE JOB SITE 22, 45, AND 90 DEGREE BENDS TO ALLOW FOR THEIR USE WHERE WESTERN PULASKI COUNTY WATER DISTRICT REQUESTS INSTALLATION AS NECESSARY.
- PIPE JOINT DEFLECTION IS NOT TO EXCEED MANUFACTURER'S ALLOWABLE LIMITS.
- CONNECTING NEW LINES TO EXISTING LINES OR TO WORK IN THEIR CONTRACTS IS SUBSIDIARY TO THE CONTRACT. IT INCLUDES FITTINGS, SLEEVES, ETC., BUT DOES NOT INCLUDE GATE VALVES, WHICH ARE EXTRA PAY ITEM.
- THE CONTRACTOR SHALL FREE BORE ALL ASPHALT AND CONCRETE RESIDENTIAL DRIVEWAYS IN DIRT AND OPEN CUT IN ROCK AS DIRECTED BY THE WESTERN PULASKI COUNTY WATER DISTRICT AND ENGINEER. THE CONTRACTOR SHALL EXCAVATE FROM EITHER SIDE OF ALL FENCES TO AVOID CUTTING. FENCE CUTTING AND REPAIR SHALL BE LIMITED TO UNIQUE CONDITIONS WHERE APPROVED BY WESTERN PULASKI COUNTY WATER DISTRICT.
- ALL STREAM AND RIVER CROSSINGS GREATER THAN 15 FEET WIDE SHALL HAVE GATE VALVES INSTALLED ON EACH SIDE OF THE CROSSING. THE VALVE ON THE SOURCE SIDE SHALL HAVE A BYPASS SERVICE METER INSTALLED FOR LEAK DETECTION.
- ALL WATER LINES WITHIN 200 FEET RADIUS OF UNDERGROUND STORAGE TANKS (KRS-224.6-100), PETROLEUM STORAGE TANKS (KRS-224.60-115) AND ASSOCIATED PUMPS AND LINES SHALL BE DUCTILE IRON PIPE WITH PETROLEUM RESISTANT JOINTS AND ALL SERVICE LINE SHALL BE COPPER.
- WATER MAINS CROSSING SEWERS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER. THIS SHALL BE THE CASE WHERE THE WATER MAIN IS ABOVE OR BELOW THE SEWER AT CROSSINGS, ONE FULL LENGTH OF THE WATER PIPE SHALL BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. SPECIAL STRUCTURAL SUPPORT FOR THE WATER AND SEWER PIPES MAY BE REQUIRED.
- WATER MAINS INSTALLED PARALLEL TO SEWERS SHALL BE LAID TO PROVIDE A MINIMUM HORIZONTAL DISTANCE OF 10 FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER MAIN.
- THE CONTRACTOR SHALL NOT BE ALLOWED TO MAINTAIN PERSONNEL RESIDENCY FOR ANY EMPLOYEE ON THE CONSTRUCTION SITE.
- WHEN WORKING ALONG THE COMMONWEALTH OF KENTUCKY RIGHT OF WAY, THE CONTRACTOR SHALL BE ADVISED THAT THE WATER LINES SHALL NOT BE PLACED IN FILL AREAS.
- WHEN PERFORMING WORK ALONG OR ACROSS ANY PUBLIC ROADWAY, THE CONTRACTOR SHALL POST WARNING SIGNS PAINTED ORANGE AND THEY SHALL BE FOUR (4) FEET BY FOUR (4) FEET MOUNTED ON POSTS IN ACCORDANCE WITH THE KENTUCKY TRANSPORTATION DEPARTMENT'S MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. THE SIGNS SHALL BE AS FOLLOWS:
 - 1) CAUTION PIPELINE CONSTRUCTION 1500 FEET
 - 2) CAUTION PIPELINE CONSTRUCTION 1000 FEET
 - 3) CAUTION PIPELINE CONSTRUCTION 500 FEET
- THE CONTRACTOR SHALL MAINTAIN TWO (2) FLAG MEN AT ALL TIMES WHERE MACHINERY IS IN OPERATION WHEN WORKING THE FLOW OF TRAFFIC WILL BE DISTURBED. THERE IS NO EXCEPTION TO THIS REQUIREMENT. THE USE OF RADIOS WILL BE REQUIRED WHEN VISUAL CONTRACT BETWEEN THE FLAG MEN DOES NOT EXIST.
- ALL SIGNS, BARRICADES, LIGHTS AND TRAFFIC CONTROL SHALL BE INSTALLED IN ACCORDANCE WITH THE KENTUCKY TRANSPORTATION DEPARTMENT AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD 2009).
- AT THE COMPLETION OF EACH WORK DAY, THE CONTRACTOR SHALL BACKFILL ALL OPEN TRENCHES AND INSTALL ALL TRAFFIC CONTROL SIGNS, BARRICADES AND LIGHTS IN ACCORDANCE WITH THE KENTUCKY TRANSPORTATION DEPARTMENT AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD 2009).
- CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ENTIRE ROADWAY FREE AND CLEAR AT THE END OF EACH WORKING DAY. NO EQUIPMENT SHALL BE LEFT ON OR PARKED ALONG THE ROAD RIGHT OF WAY.
- ALL NECESSARY STEPS SHALL BE TAKEN TO PREVENT EROSION OR SILTATION OF THE PUBLIC RIGHT OF WAY, ADJOINING PROPERTY AND WATER WAYS.

WATER LINE GENERAL NOTES

- 1. ALL WATER LINES SHALL BE DUCTILE IRON CL 350 IN ACCORDANCE WITH AWWA C-151 (ASA A21.51) AND DUCTILE IRON FLEX RESTRAINED JOINT PIPE AS SHOWN ON THE DRAWINGS.
- 2. FITTINGS SHALL BE DUCTILE IRON CLASS 250 IN ACCORDANCE WITH AWWA C111-71 (ANSI A21.10).
- 3. ÀLL VALVES SHALL CONFORM TO AWWA C500.
- 4. CONSTRUCTION PRACTICES AND PROCEDURES SHALL CONFORM TO CURRENT AWWA STANDARDS AND BE APPROVED BY THE WESTERN PULASKI COUNTY WATER DISTRICT.
- 5. AFTER INSTALLATION, WATER LINES SHALL BE DISINFECTED WITH A CHLORINE SOLUTION IN SUCH AMOUNTS AS TO PRODUCE A CONCENTRATION OF AT LEAST FIFTY (50) PPM AND A RESIDUAL OF AT LEAST TWENTY—FIVE (25) PPM AT THE END OF THE 24 HOURS AND FOLLOWED BY THROUGH FLUSHING.
- 6. MINIMUM COVER OF WATER LINES SHALL BE 30 INCHES. WATER LINE WITHIN COMMONWEALTH OF KENTUCKY RIGHT—OF—WAYS SHALL HAVE A MINIMUM COVER OF 42—INCHES.
- 7. CONTRACTOR SHALL FULLY COMPLY WITH ALL LOCAL, STATE AND FEDERAL SAFETY AND ENVIRONMENTAL REGULATIONS GOVERNING UTILITY CONSTRUCTION.
- 8. ALL WATER LINE CROSSING PAVED SURFACE SHALL BE BACKFILLED FULL DEPTH WITH COMPACTED CRUSHED STONE.
- 9. EXISTING AND PROPOSED WATER MAIN LOCATIONS SHALL BE VERIFIED BY WESTERN PULASKI COUNTY WATER DISTRICT PRIOR TO CONSTRUCTION.
- 10. ALL PIPE AND FITTINGS SHALL HAVE A MINIMUM OF 6—INCHES OF BEDDING OF DIRT UNDER AND ON BOTH SIDES OF PIPE UNLESS OTHERWISE SPECIFIED. ALL PIPE AND FITTING SHALL BE BACK—FILLED WITH DIRT UNLESS OTHERWISE SPECIFIED.
- 11. ALL FITTINGS: 90° BENDS, TEES, ETC., SHALL BE BLOCK WITH A MINIMUM OF 12-INCHES POURED CONCRETE AGAINST UNDISTURBED SOIL.
- 12. ALL GATE VALVES SHALL TURN RIGHT TO CLOSE AND TURN LEFT TO OPEN.
- 13. ALL VALVES SHALL BE C.I. VALVE BOXES EXTENDING 2-INCHES ABOVE SURFACE.
- 14. ALL FLUSH HYDRANTS SHALL BE STANDARD 2-WAY 5 1/4-INCHES BREAKAWAY

 TYPE WITH A MINIMUM 3 1/2-FEET BURY AND TURN LEFT TO OPEN AND RIGHT TO CLOSE.
- 15. ALL PROPOSED WATER LINES SHALL HAVE A #12 COATED TRACER WIRE.
- 16. ALL FLUSH HYDRANTS, WATER VALVES AND FITTINGS SHALL HAVE RESTRAINER GLANDS.
- 17. ALL WATER LINES SHALL BE PRESSURE TESTED TO 150 PSI FOR A MINIMUM OF FOUR (4) HOURS.
- 18. CONTRACTOR SHALL PROVIDE BACTERIAL SAMPLE RESULTS OF PROPOSED WATER LINES TO THE WESTERN PULASKI COUNTY WATER DISTRICT.
- 19. SHOULD A PORTION OR SECTION OF THE EXISTING 10—INCH PIPE FALL INTO THE LAKE FROM THE BRIDGE DURING THE REMOVAL PROCESS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RETRIEVING THAT PORTION OR SECTION OF PIPE.

OWNER

WESTERN PULASKI COUNTY WATER DISTRICT 1059 WEST HIGHWAY 80 SOMERSET, KY 42503 (606) 679-1569

LINE/CABLE LOCATION SERVICES



BEFORE-U-DIG (BUD) (800) 752-6007

NOTE:

KENTUCKY STATUTES (KRS 367.4901 THROUGH 367.4917) REQUIRE THAT ALL EXCAVATORS PLANNING EXCAVATION OR DEMOLITION WORK SHALL NOTIFY ALL UTILITY COMPANIES IN THE AREA AND/OR AN UNDERGROUND PROTECTION SERVICE SUCH AS BUD (800-752-6007) AT LEAST TWO (2) WORKING DAYS BEFORE COMMENCING WORK TO ALERT UTILITY COMPANIES IN THE AREA WITH UNDERGROUND FACILITIES OF THE PLANNED EXCAVATION OR DEMOLITION ACTIVITIES.

FISHING CREEK BRIDGE WATER LINE REPLACEMENT WESTERN PULASKI COUNTY WATER DISTRICT PULASKI COUNTY, KENTUCKY

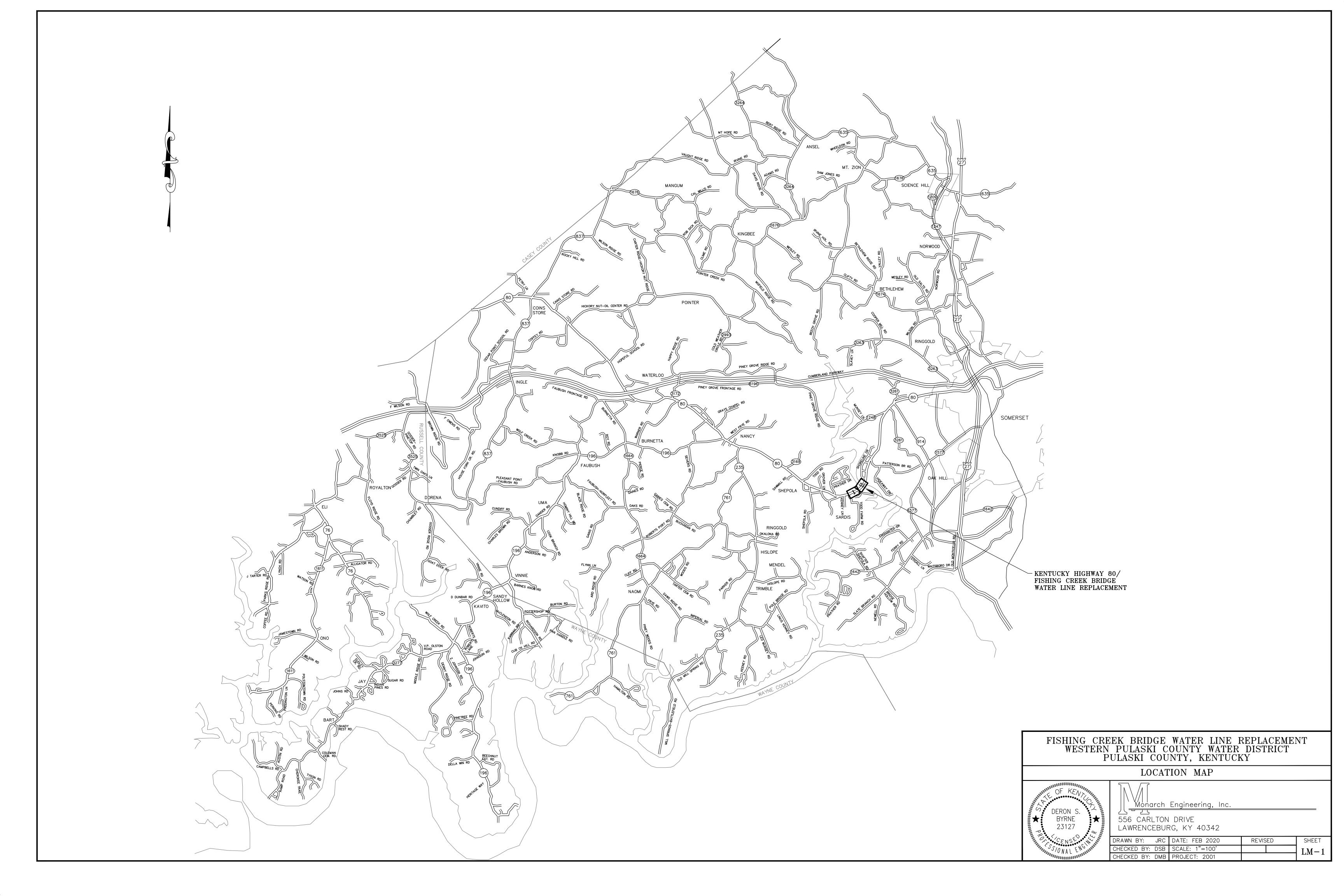
GENERAL NOTES

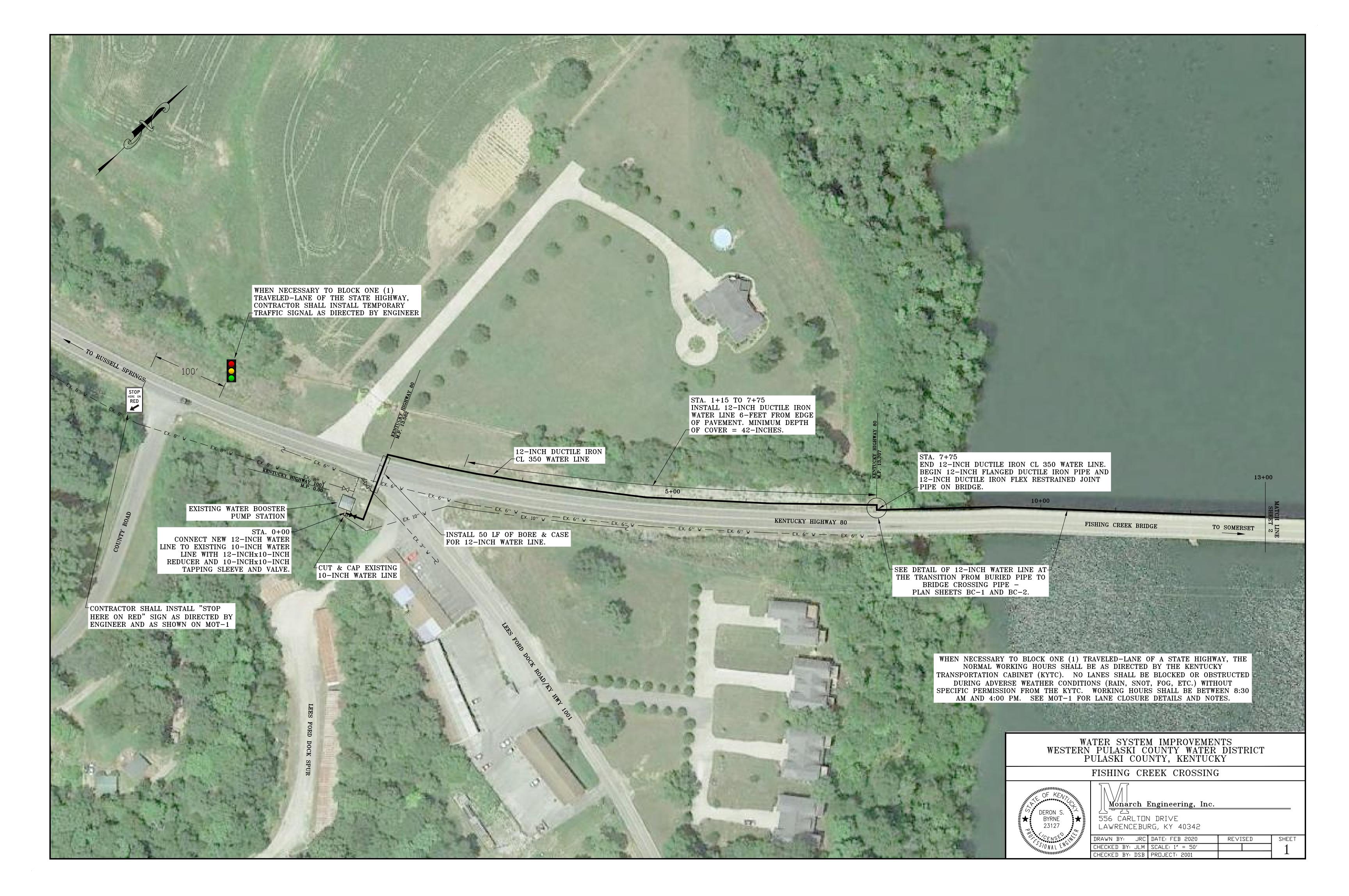


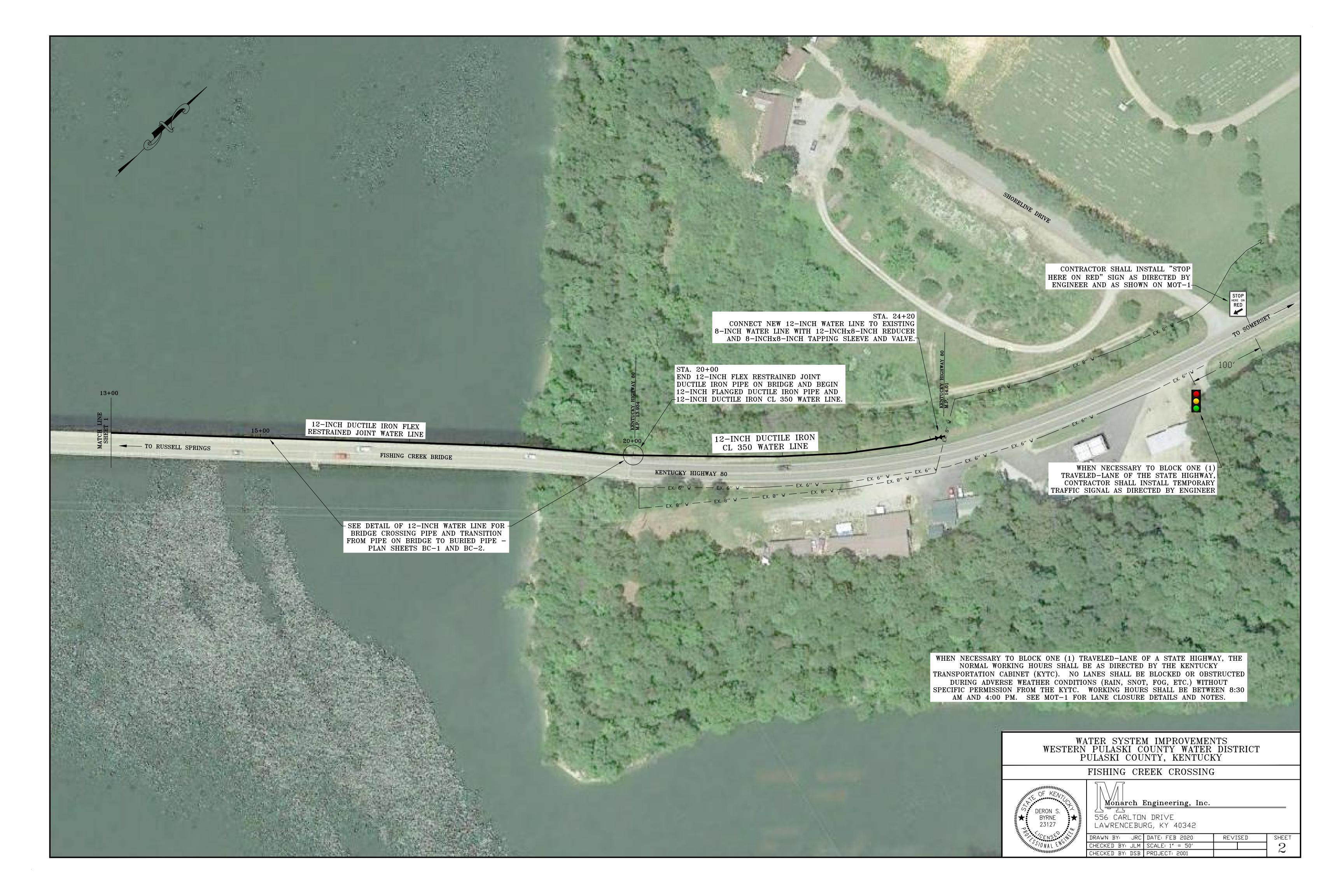
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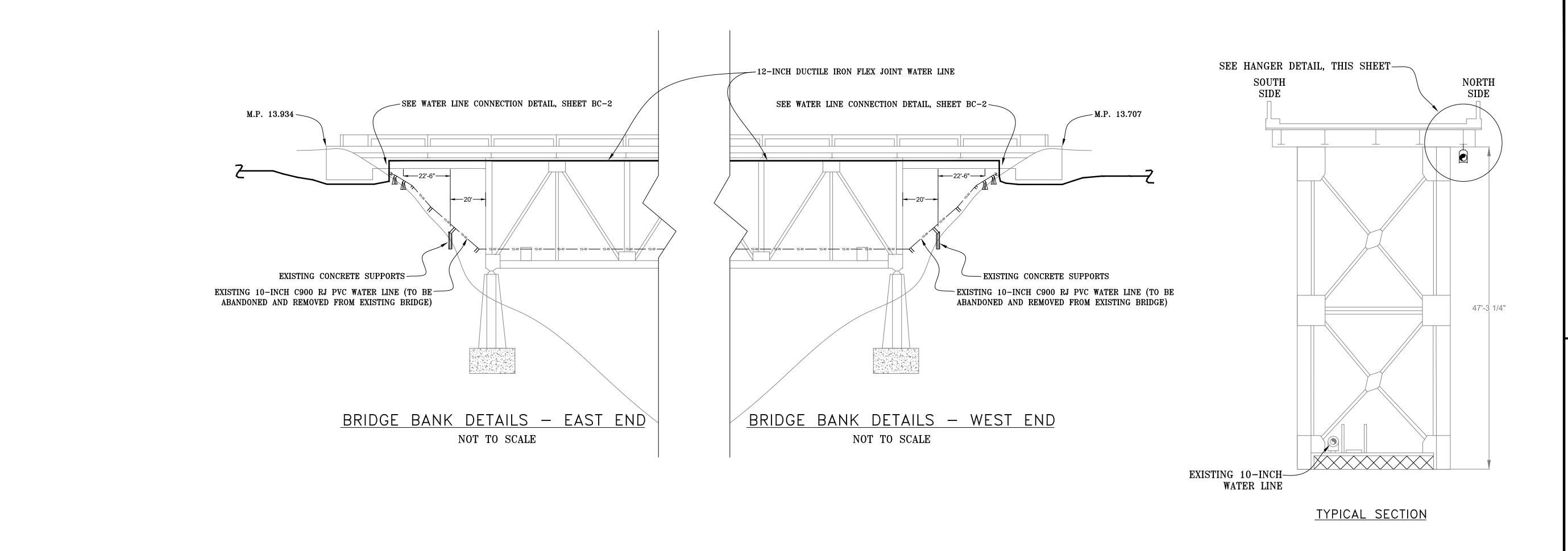
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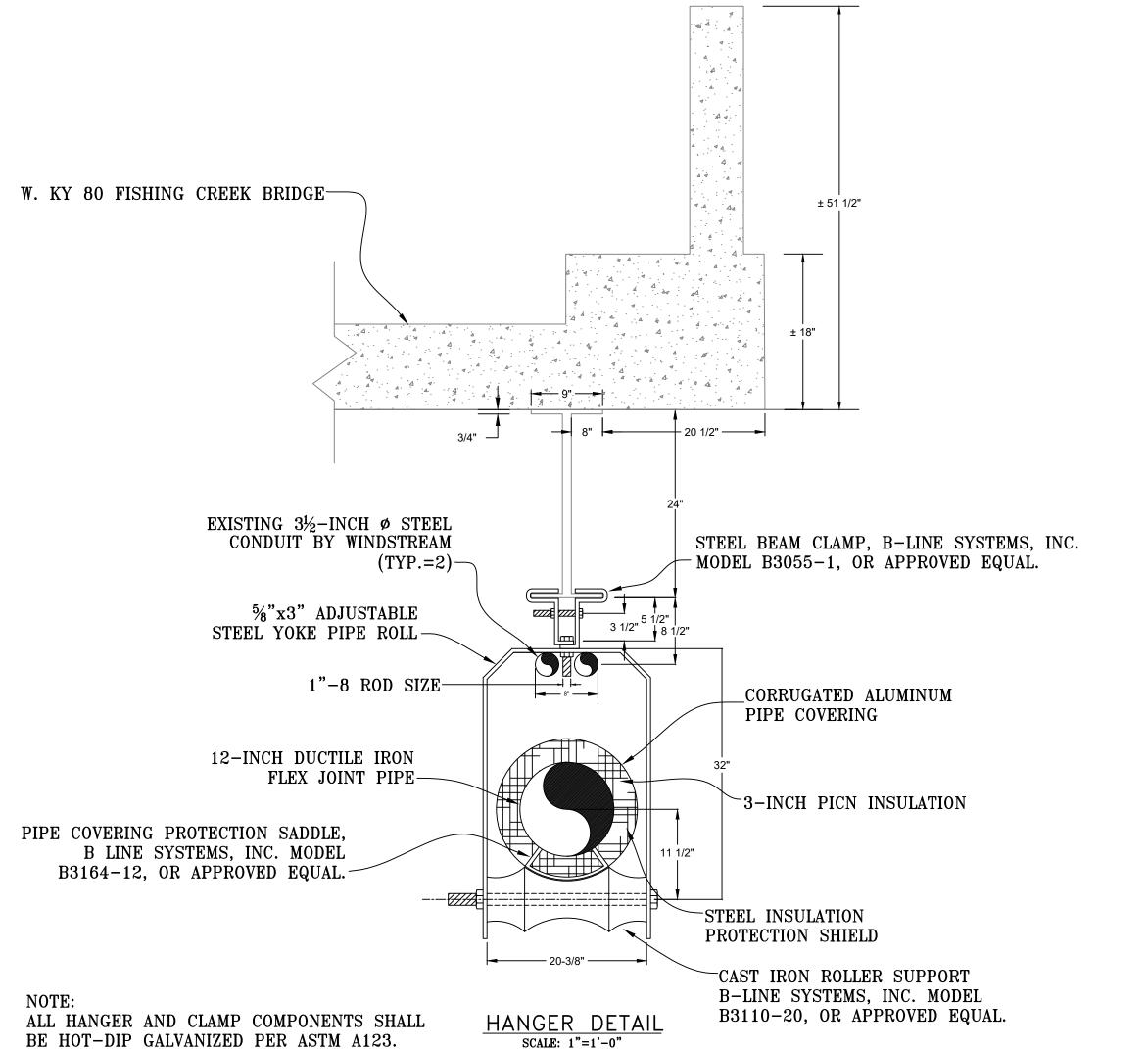
DRAWN BY: JRC DATE: FEB 2020 REVISED SHEET CHECKED BY: DSB SCALE: N.T.S. G-1

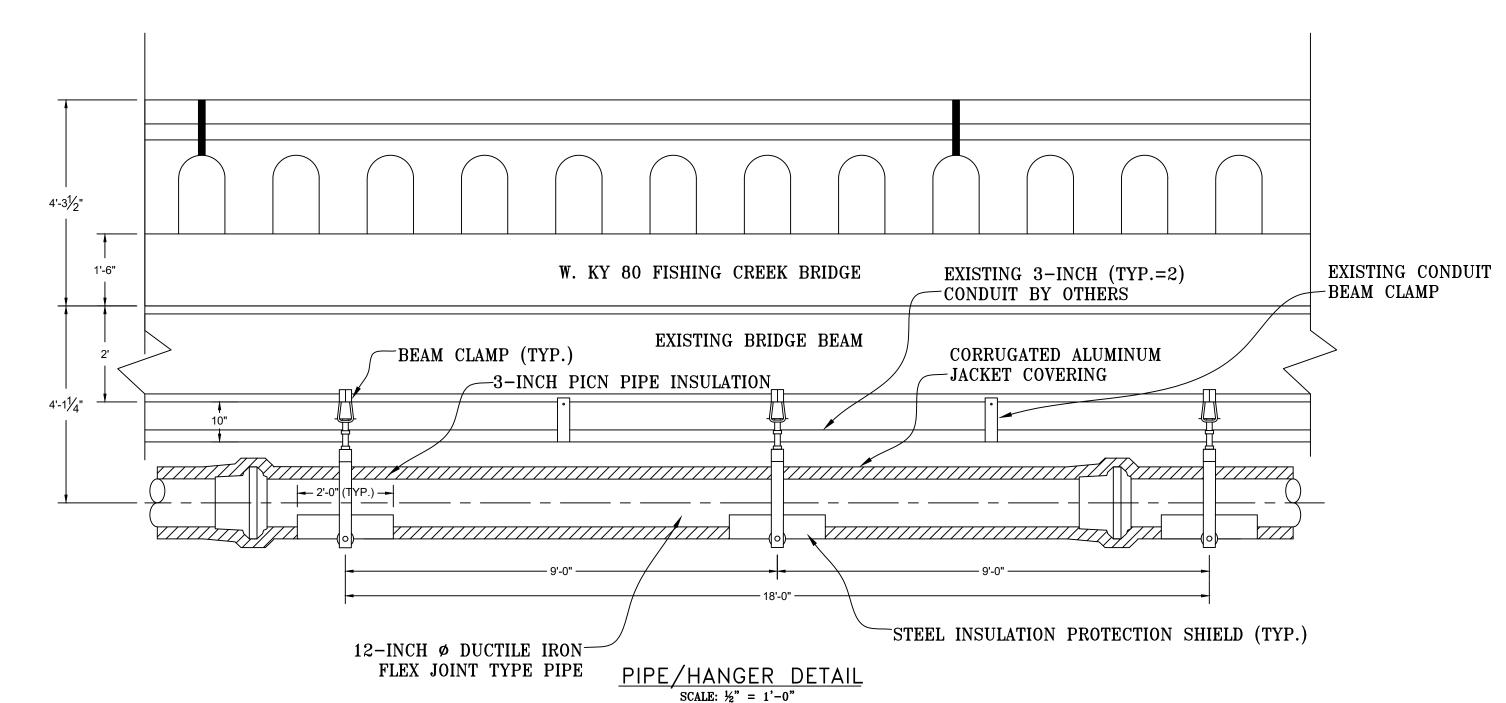












NOTES:

- 1. THE PLANS AND DETAILS SHOWN ON THIS SHEET ARE FOR THE FISHING CREEK BRIDGE CROSSING NEAR THE LEES FORD MARINA DOCK ROAD.
- 2. PIPE HANGERS SHALL BE INSTALLED AT 9'-0" INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- 3. EXPOSED PIPING SHALL BE INSULATED WITH PRE-FORMED FOAMGLASS INSULATION AND SHALL BE FOAMGLASS AS MANUFACTURED BY PITTSBURGH CORNING CORPORATION, PITTSBURGH, PA, OR APPROVED EQUAL.
- 4. EXPOSED PIPE INSULATION SHALL BE PROTECTED CONTINUOUSLY WITH AN ALUMINUM JACKETING AND SHALL BE SUREFIT AS MANUFACTURED BY PABCO SUREFIT ALUMINUM PRODUCTS, HOUSTON, TX, OR APPROVED EQUAL.
- 5. NO WELDING, CUTTING OR DRILLING WILL BE ALLOWED TO THE EXISTING BRIDGE COMPONENTS.
- 6. SHOULD A PORTION OR SECTION OF THE EXISTING 10-INCH PIPE FALL INTO THE LAKE FROM THE BRIDGE DURING THE REMOVAL PROCESS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RETRIEVING THAT PORTION OR SECTION OF PIPE.

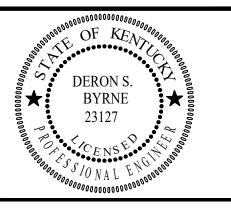
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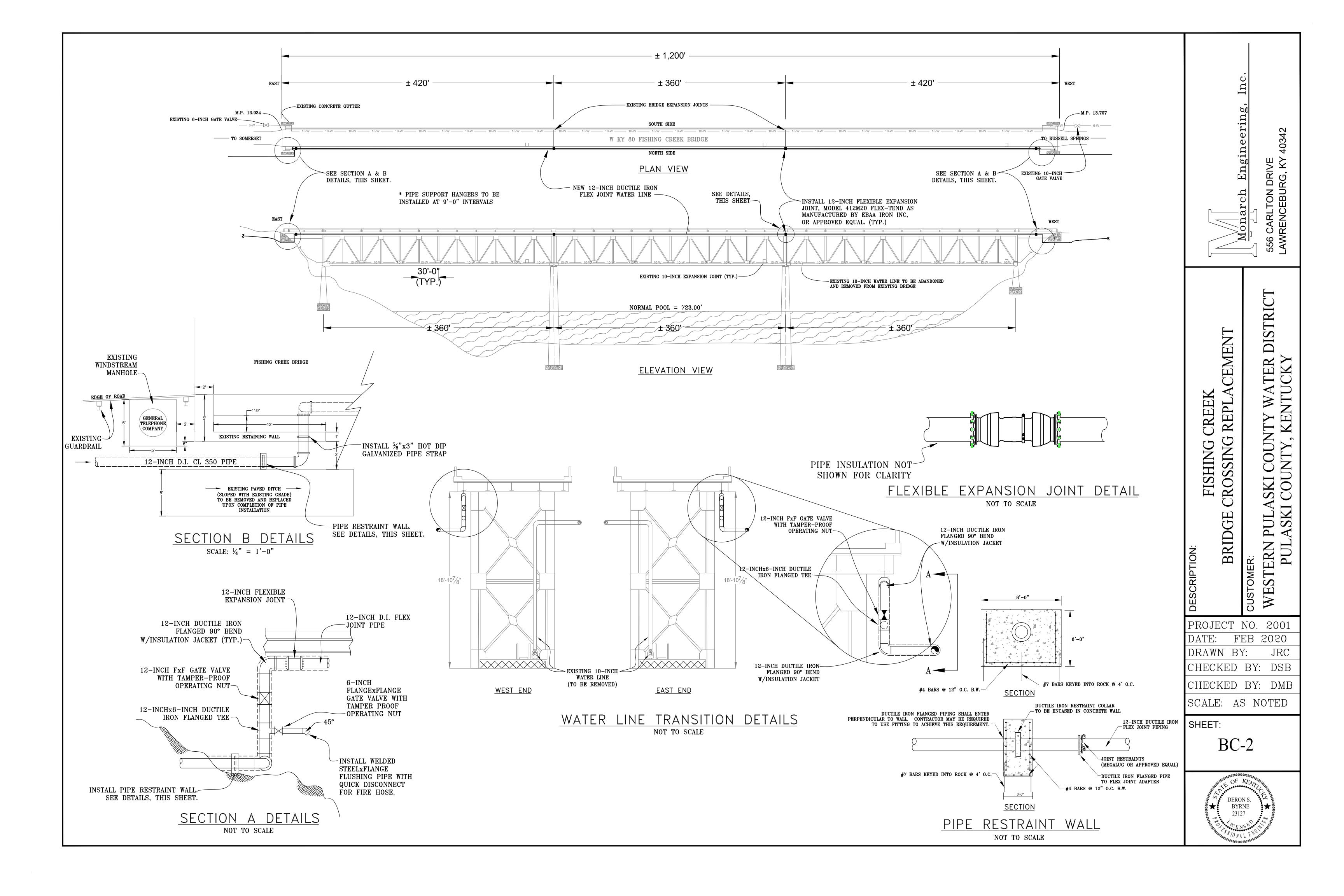
FISHING CREEK BRIDGE CROSSING REPLACEMENT CUSTOMER: WESTERN PULASKI COUNTY, KENTUCKY

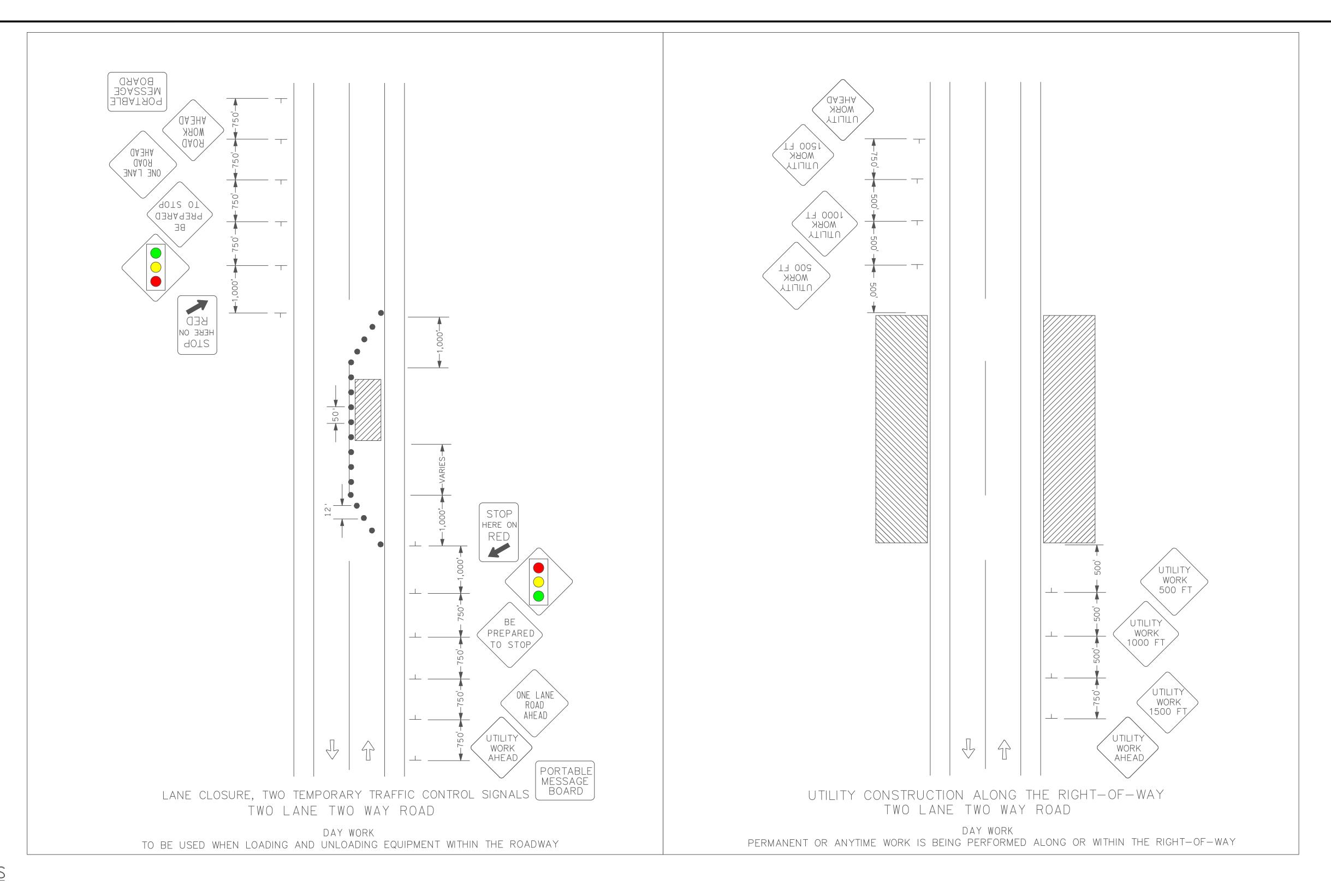
PROJECT NO. 2001
DATE: FEB 2020
DRAWN BY: JRC
CHECKED BY: DSB
CHECKED BY: DMB
SCALE: AS NOTED

SHEET:

BC-1







NOTES & GUIDELINES

GENERAL INFORMATION:

- 1. THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN THE DEVICES IN THIS TRAFFIC CONTROL PLAN UNLESS OTHERWISE NOTED.
- 2. FIELD CONDITIONS MAY REQUIRE MODIFICATIONS OF THIS LAYOUT AS DEEMED NECESSARY BY THE ENGINEER.
- 3. ALL DISTANCES ARE APPROXIMATE.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ANY WORK AREAS NEAR TRAFFIC IN ACCORDANCE WITH KYDOT STANDARDS
- 5. THE CONTRACTOR SHALL CONFORM TO THE GENERAL REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD 2009)

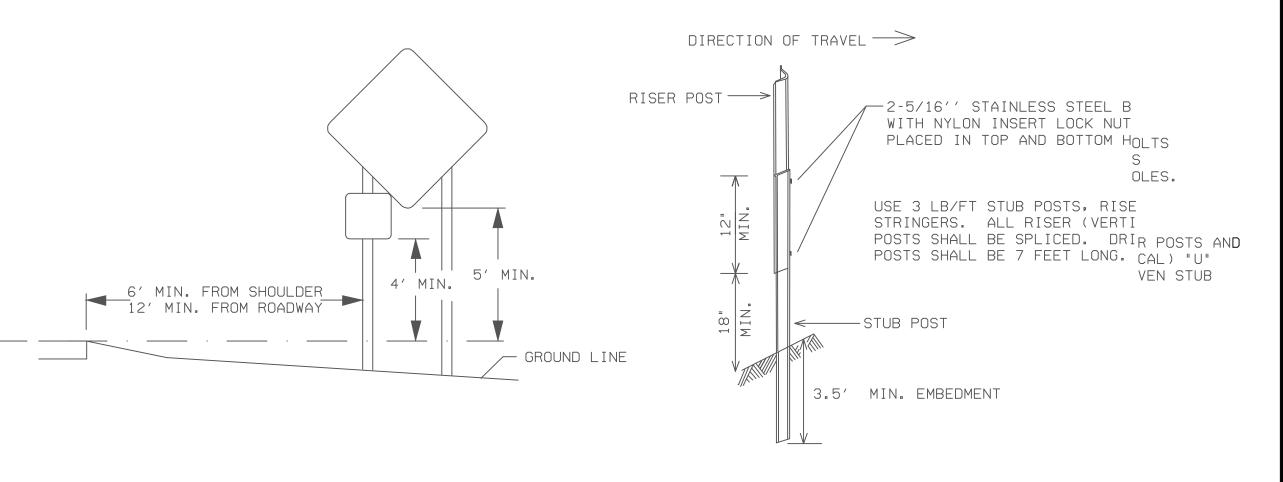
SIGNING:

- 1. ALL TRAFFIC CONTROL DEVICES, INCLUDING OVERHEAD SIGNS ON ROADS OPEN TO TRAFFIC THAT ARE NOT CONSISTANT WITH TRAFFIC OPERATION SHALL BE COVERED, REMOVED OR REVISED AS DIRECTED BY THE ENGINEER.
- 2. WHEN SIGNS ARE INSTALLED, THEY SHALL BE MOUNTED ON POSTS DRIVEN INTO THE GROUND AT THE PROPER HEIGHT AND LATERAL OFFSET AS DETAILED BY THE KYDOT. IF THIS IS NOT POSSIBLE THEY WILL BE MOUNTED ON PORTABLE SUPPORTS AS APPROVED BY THE ENGINEER. WHEN THE SIGNS ARE REMOVED THE SIGN POSTS SHALL ALSO BE REMOVED AS SOON AS POSSIBLE.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY EXTRA SIGNING NEEDED TO FACILITATE TRAFFIC SWITCHES OR FOR TRANSITIONING TRAFFIC FROM ONE STAGE TO ANOTHER.
- 4. ALL ORANGE WARNING AND ORANGE GUIDE SIGNS SHALL BE FABRICATED WITH SIGN SHEETING MATERIAL AS LISTED ON THE KYDOT APPROVED PRODUCT LIST FOR "SHEETING FOR RIGID TEMPORARY WORK ZONE SIGNS".
- 5. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE FINAL SIGNS TO ASSURE THAT THE FINAL SIGNS ARE INSTALLED AS NEEDED, OR PROVIDE TEMPORARY SIGNING AT THEIR EXPENSE UNTIL THE FINAL SIGNING IS INSTALLED.

TRAFFIC CONTROL DEVICES & SYMBOLS LEGEND

SIGN COLOR SIZE SYMBOL **DESCRIPTION** BLACK ON 48" x 48" AREA CLOSED TO TRAFFIC / WORK AREA ORANGE BLACK ON 48" x 48" TRAFFIC CONTROL SIGN ORANGE BE PREPARED TO STOP BLACK ON DRUM-LIKE CHANNELIZER = 48" x 48" ORANGE BLACK ON FLAGGER LOCATION ORANGE BLACK ON 48" x 48" ORANGE UTILITY WORK 1000 FT TRAFFIC CONTROL SIGNAL SIGN BLACK ON ORANGE BLACK ON ORANGE BLACK ON 24" x 18" WHITE

SIGN CONSTRUCTION DETAILS



Monarch Engineerin 556 CARLTON DRIVE

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CUSTOMER:
WESTERN PULASKI COUNTY WATER
PULASKI COUNTY, KENTUCKY

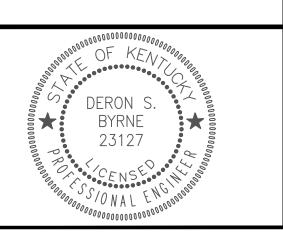
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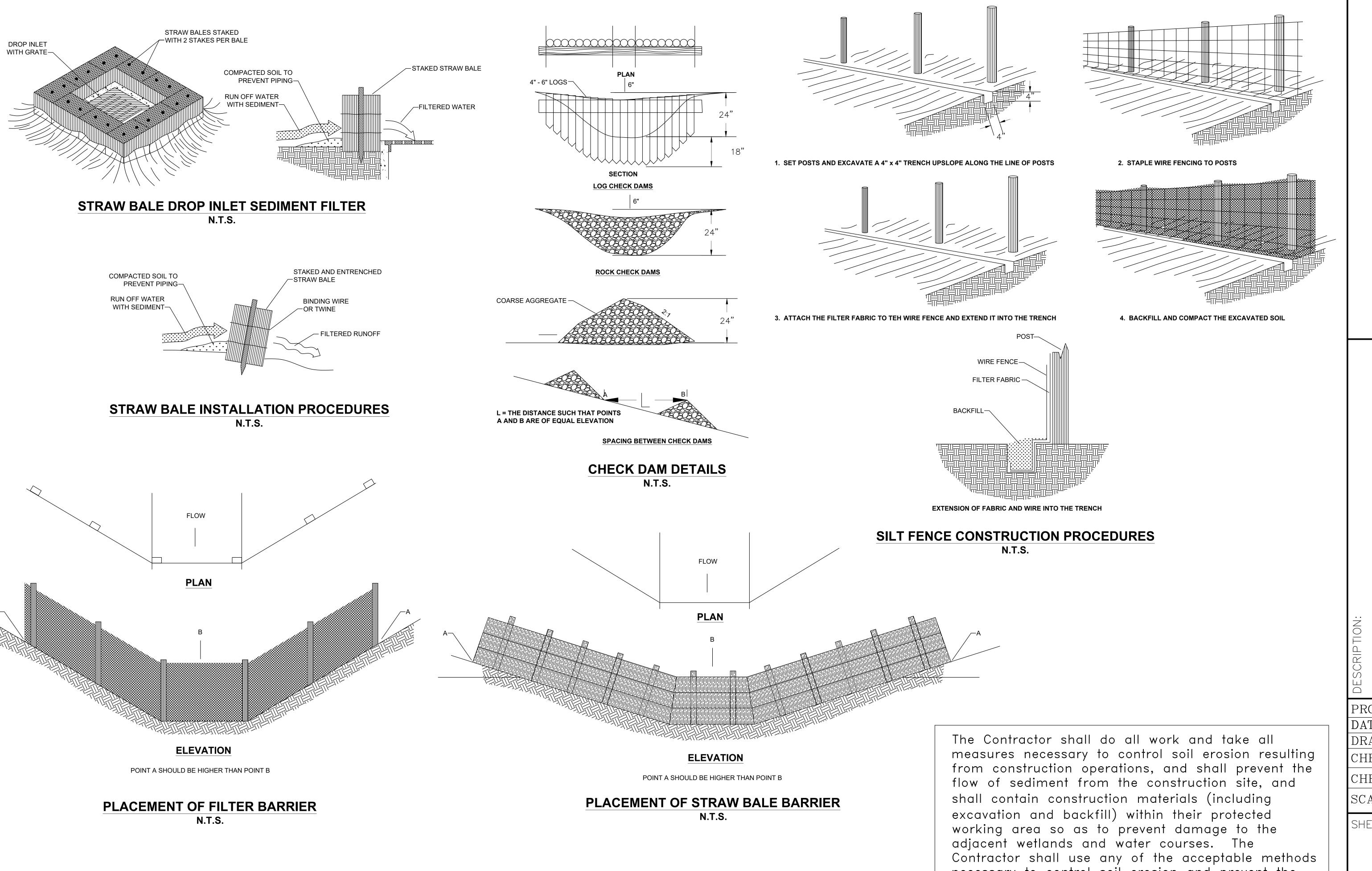
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SCALE: 1/8"=1'-0"

SHEET

MOT-1





EROSION CONTROL DETAILS N.T.S.

necessary to control soil erosion and prevent the flow of sediment to the maximum extent possible. These methods shall include, but not be limited to, the use of water diversion structures, diversion ditches, and settling basins.

PROJECT NO. 2001 DATE: FEB 2020 DRAWN BY: JRC CHECKED BY: DSB CHECKED BY: DMB SCALE: AS NOTED SHEET: $\mathbb{EC}-1$

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