ADDENDUM NO. 1

TO: PLANS AND SPECIFICATIONS FOR STATE OF MISSOURI

Water Renovations
Sam A. Baker State Park
Patterson, Missouri
Project No. X2335-01

Bid Opening Date: 1:30 PM, September 17, 2024 (Not Changed)

Bidders are hereby informed that the construction Plans and/or Specifications are modified as follows:

SPECIFICATION CHANGES:

1. Section 321123 – Aggregate Base Course

    a. See attachment for revised specification section.

2. ADD Section 333000 – Utility Horizontal, Directional Drilling

    a. See attachment.

DRAWING CHANGES:

1. Sheet C-100

    a. ADD the following Note:
        4. WHERE EXISTING VAULTS AND VALVES ARE CALLED OUT FOR REMOVAL ON PLANS, THE REMAINING CREATED EARTHEN VOID SHALL BE BACKFILLED FOLLOWING THE SPECIFICATIONS FOR EARTH MOVING.

2. Sheet C-105

    a. Where the new water main crosses State Highway 143 (two locations), the water main shall be constructed via horizontal, directional drilling rather than open cut. See attachment for revised drawing.

3. Sheet C-201

    a. Where the new water main crosses State Highway 143 (two locations), the water main shall be constructed via horizontal, directional drilling rather than open cut. See attachment for revised drawing.

GENERAL COMMENTS:

1. The Pre-Bid Meeting was held on August 28, 2024 at 10:00 AM. The Pre-Bid Meeting sign-in sheet is attached.
2. Please contact April Howser, Contract Specialist, at 573-751-0053 or April.Howser@oa.mo.gov for questions about bidding procedures, MBE\WBE\SDVE Goals, and other submittal requirements.
3. The deadline for technical questions was September 9, 2024 at 12:00 PM.

4. Changes to, or clarification of, the bid documents are only made as issued in the addenda.
5. All correspondence with respect to this project must include the State of Missouri project number as indicated above.
6. Current Plan holders list available online at: https://www.oafmdcplanroom.com/projects/2569/plan-holders/x2335-01-water-renovations-sam-a-baker-state-park.
7. Prospective Bidders contact American Document Solutions, 1400 Forum Blvd Suite 1C, Columbia MO 65201, 573-446-7768 to order official plans and specifications.
8. **All bids shall be submitted on the bid form without additional terms and conditions, modifications, or stipulations. Each space on the bid form shall be properly filled. Failure to do so will result in rejection of the bid.**
9. **MBE/WBE/SDVE participation requirements can be found in DIVISION 00. The MBE/WBE/SDVE participation goals are 0%/0%/3%, respectively. Only certified firms as of the bid opening date can be used to satisfy the MBE/WBE/SDVE participation goals for this project. If a bidder is unable to meet a participation goal, a Good Faith Effort Determination Form must be completed. Failure to complete this process will result in rejection of the bid.**

ATTACHMENTS:

1. Pre-Bid Meeting Sign-In Sheet
2. Section 321123 – Aggregate Base Course
3. Section 333000 – Utility Horizontal, Directional Drilling
4. Sheets C-105 and C-201

September 10, 2024

END OF ADDENDUM NO. 1

Water Renovations
Sam A. Baker State Park
Patterson, MO
Project No. X2335-01

August 28, 2024

Name & Title	Company Name	Phone	E-Mail Address
Eric Hibdon	OA FMDC	573-522-0322	Eric.Hibdon@oa.mo.gov
Randy Dickson	OA/FMDC	573-619-4395	randy.dickson@oa.mo.gov
DAVID Grubbs	Robertson INC.	573-776-4693	DAVID@RobertsonBRidge.com
Kaitlin Ford	CDI	314.991-9044	kford@civildesigninc.com
Jonnie Jones	WBE Jones Family Supplies LLC	573-944-6348	Jonesjonnie@Hotmail.com
Jonnie Jones	SDVE Carl R. Jones Excavating LLC	573-944-6348	Jonnie@CarlrjonesexcavatingLLC.com
Bob Persons	Persons & Son	573-429-3157	LYONSOU@boycomonline.com
Jeff Hand	Sam A. Baker	573-856-4411	jeff.hand@dnr.mo.gov
James Robins	Sam A. Baker	573 856 4411	james.robins@dnr.mo.gov
Brandon Radford	Sam A. Baker	573-714-2132	brandonr_2011@hotmail.com
Jason Luedderke	Sam A. Baker	573-450-5515	Jason.Luedderke@DNR.MO.GOV
Charles Walker	CA Walker Const	573-624-0216	charles@cawalkerconst.com
Gregory McGuire			
Chad Hovis	ECYER		Chad.hovis@dnr.mo.gov
Krista Kennon	MSD	314-290-7290	Krista.kennon@dnr.mo.gov
Kevin Hultberg	OA/FMDC	636-524-9402	kevin.hultberg@oa.mo.gov

SECTION 321123 – AGGREGATE BASE COURSES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Special Conditions and other Division 00 and 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This section includes the following:

1. Aggregate material and installation requirements for pavement base courses.

1.3 DEFINITIONS

A. Base Course: Layer placed between the prepared subgrade and paving materials.

B. Geotechnical Testing Agency: Individual or company who will be providing geotechnical testing responsibilities for this project.

C. MODOT: Missouri Department of Transportation.

D. Prepared Subgrade: Surface which has been proof-rolled and/or compacted to the satisfaction of the Geotechnical Testing Agency and approved by the Architect.

1.4 SUBMITTALS

A. Material Certifications: Aggregate gradation and written documentation from the manufacturing source certifying that each specified aggregate meets the requirements indicated.

1.5 QUALITY ASSURANCE

A. Installation by a contractor specializing in the work, and with a minimum of ten (10) years of documented experience for successful, high quality installations of aggregate base specified herein.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Base Courses:

1. MODOT Type 5 Aggregate: Type 5 aggregate for base shall consist of crushed stone or sand and gravel. The aggregate shall not contain more than 15 percent deleterious rock and shale. If crushed stone is used, sand may be added only for the purpose of reducing the plasticity index of the fraction passing the No. 40 sieve in the finished product. The fraction passing the No. 40 sieve shall have a plasticity not to exceed six. Any sand, silt and clay, and any deleterious rock and shale shall be uniformly distributed throughout the material. When sand and gravel aggregate are used, the fraction passing the No. 200 sieve shall be less than one half of the fraction passing the No. 30 sieve. The aggregate shall be in accordance with the following gradation requirements:

Sieve	Percent by Weight
Passing 1 inch	100
Passing ½ inch	60-90
Passing No. 4	35-60
Passing No. 30	10-35
Passing No. 200	0-15

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect and maintain benchmarks and survey control points from disturbance during construction.

B. Protect subgrades and foundation soils against freezing temperatures or frost. Provide protective insulating materials as necessary.

C. Verify that all erosion control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust has been installed properly. Refer to plan drawings and erosion control details in the construction drawings for specifics on location and placement of erosion control measures.

3.2 DEWATERING

A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.

B. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.

1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
2. Install a dewatering system to keep subgrades dry and convey ground water away from excavations. Maintain until dewatering is no longer required

3.3 EXCAVATION

A. Excavation for pavement and sidewalks: Excavate areas under planned pavement and sidewalk areas to indicated subgrade elevations as shown on the plan drawings.

3.4 STORAGE OF SOIL MATERIALS

A. Aggregates shall be produced, handled and stockpiled to minimize segregation, degradation and contamination. Regardless of the method of storage and handling, all aggregate that is segregated, degraded or contaminated to the extent that the aggregate does not meet specifications, will be considered unacceptable.

B. Stockpile aggregate materials away from edges of construction. Do not store within drip line of remaining trees.

3.5 INSTALLATION

A. Only place aggregate bases on prepared subgrades.

B. Place aggregate base materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.

C. Compact each layer of aggregate base material to not less than the following percentages of maximum dry density as determined by the modified Proctor test, according to ASTM D 1557.

1. Compact each layer of aggregate material as is recommended by the Geotechnical Report for the project (including any addenda.

3.6 FIELD QUALITY CONTROL

A. The Owner and/or Construction Inspector reserves the right to require geotechnical quality control testing if it does not appear compaction requirements are being met during construction. If testing is required, the Contractor is responsible for engaging the Geotechnical Testing Agency in order to perform quality control testing. All test reports will be submitted to the Architect and

Owner's Representative no more than 24 hours after the test results are known. Should testing be required, the following procedures shall be followed:

1. Nuclear density test according to ASTM D 2922 of aggregate base at the rate of one (1) per 5,000 square feet, but in no case fewer than 3 tests.
2. Written verification that the compacted aggregate base meets or exceeds the standards of this specification.
3. When the Geotechnical Testing Agency reports that aggregate bases have not achieved degree of compaction specified, remove and replace aggregates to depth required. Recompact and retest until specified compaction is obtained. The Owner is not responsible for any costs associated with retesting previously failed areas.

B. The Contractor is responsible for limiting the amount of heavy vehicle construction traffic on aggregate bases. Contractor shall be responsible for rebuilding damaged aggregate bases as a result of excessive construction traffic at no additional cost to the Owner.

3.7 PROTECTION

A. Protect newly placed aggregate bases from freezing and erosion. Keep free of trash and debris.

3.8 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Disposal:

1. Dispose of waste material and debris legally off Owner's property.

END OF SECTION 321123

SECTION 333000 – UTILITY HORIZONTAL, DIRECTIONAL DRILLING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract including General and Supplementary Conditions, Bid Form, and other Division 1 Specification Sections apply to this Section.

1.2 SUMMARY

A. Work includes

a. Trenchless boring for sanitary sewer piping, force main piping, water main piping, and water service lines.

b. Locating, protecting and repairing existing utilities.

c. Excavation and fill for boring pits.

1.3 QUALITY ASSURANCE

A. A competent supervisor shall be onsite during the process of the work who shall act for the contractor in all matters concerning the work. The supervisor shall have the authority to receive and to act upon directions from the owner.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION

3.1 INSTALLATION

A. Bore Path

a. Bore path designs shall follow the allowable longitudinal deflection and allowable bend radius of pipe criteria. The contractor shall review the technical product specification sheet from the pipe manufacturer to determine the maximum allowable bend radius and longitudinal deflection of the pipe being installed.

b. The pipe entry angle into the bore shall be between 8 and 20 degrees measured from the horizontal.

c. The pipe exit angle from the bore shall be between 5 and 12 degrees measured from the horizontal.

B. Bore Pits

a. Bore pits shall be properly dimensioned to ensure that the minimum bend radius of the pipe is not exceeded when the pipe is laid out and pulled through the bore hole.

C. Maximum Pull Force

a. The contractor shall determine the expected pull force required for each pipe and bore.

b. The contractor shall review the technical product specification sheet from the pipe

manufacturer to determine the maximum allowable pullback force of the pipe being installed.

c. The contractor shall ensure that the pull force does not exceed maximum allowable pull force of the pipe being installed before and during installation.

D. Bore Hole Diameter

a. The final bore hole diameter shall be the smaller of 1.5 times the actual outside diameter or 12 inches larger than the actual outside diameter of the product pipe.

b. If collapsing soil formations are encountered, the contractor shall contact the engineer. Confirm notification in writing. Under this circumstance, the allowable final bore hole diameter can be less than 1.5 times the outside diameter of the product pipe only by Engineer's written authorization.

c. If substantial swelling of the soil is expected to occur, the contractor shall contact the engineer. Confirm notification in writing. Under this circumstance, the allowable final bore hole diameter can be increased by 25% only by Engineer's written authorization.

3.2 PROTECTION

A. Protect excavations by shoring, bracing, sheet piling, underpinning or other methods to prevent cave-in or loose soil from falling into excavation.

B. Underpin adjacent structures which may be damaged by excavation work, including service utilities and pipe chases.

C. Notify Engineer immediately of unexpected subsurface conditions. Confirm notification in writing. Discontinue work until Engineer issues written notification to resume work.

D. Protect bottom of excavations and soil adjacent to and beneath foundations from frost.

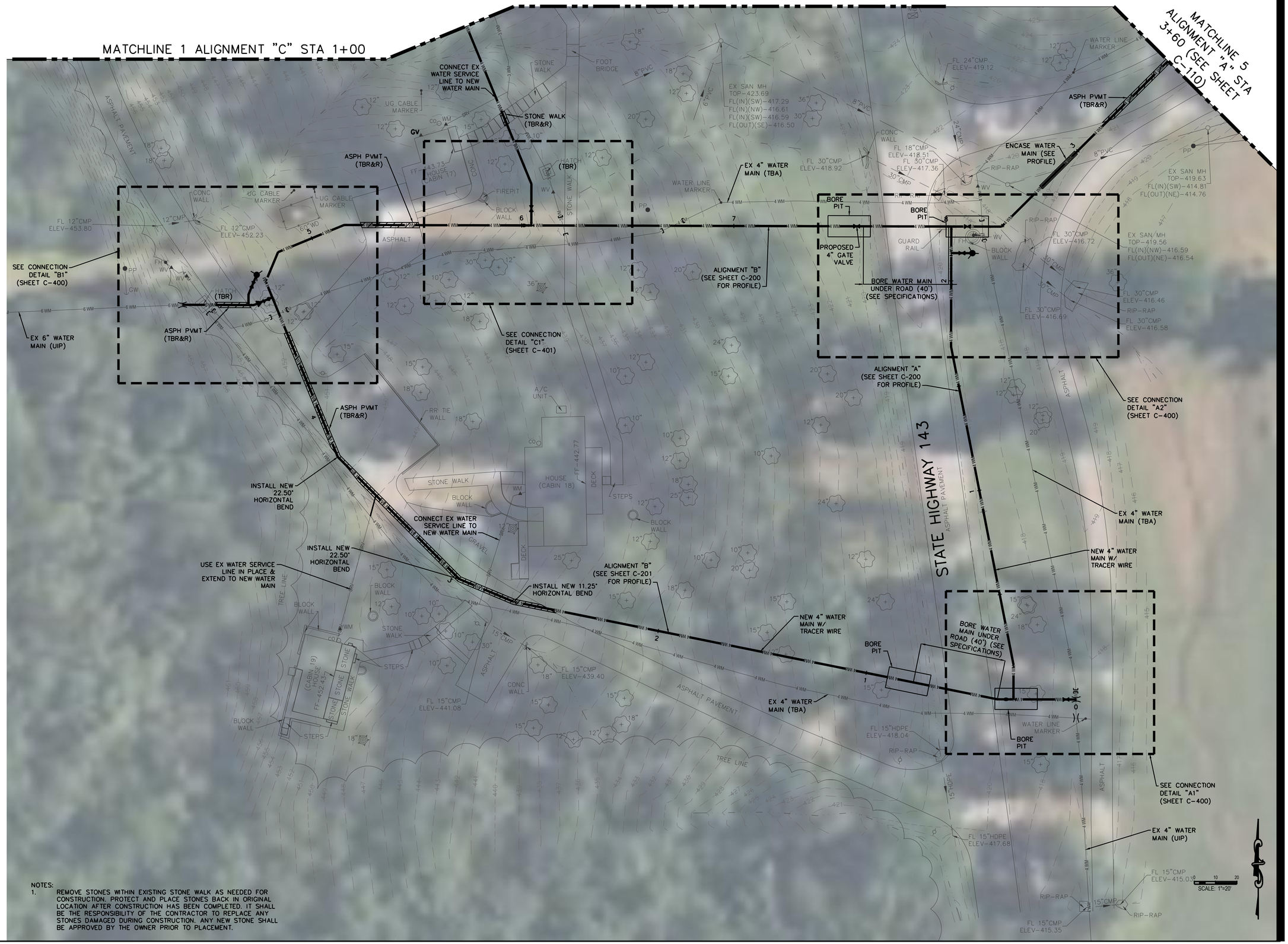
E. Grade excavation top perimeter to prevent surface water runoff into excavation.

F. Trees, shrubs, fences and all other property and surface structures shall be protected during construction unless their removal is called for in the contract documents. All properties destroyed shall be restored to original conditions.

3.3 SAFETY

A. All local, federal and state rules and regulations pertaining to safety and protection of workmen, public and private property shall be observed during all work.

END OF SECTION 33 30 00



NOTES:
1. REMOVE STONES WITHIN EXISTING STONE WALK AS NEEDED FOR CONSTRUCTION. PROTECT AND PLACE STONES BACK IN ORIGINAL LOCATION AFTER CONSTRUCTION HAS BEEN COMPLETED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPLACE ANY STONES DAMAGED DURING CONSTRUCTION. ANY NEW STONE SHALL BE APPROVED BY THE OWNER PRIOR TO PLACEMENT.

STATE OF MISSOURI
MICHAEL L. PARSON, GOVERNOR

STATE OF MISSOURI
KAITLIN DOROTHY FORD
NUMBER PE-2021001893
10/10/2024
PROFESSIONAL ENGINEER

CIVIL DESIGN, INC.
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Civil Engineering #2002006804
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5220 OAKLAND AVENUE
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OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF STATE PARKS

WATER RENOVATIONS

SAM A. BAKER STATE PARK
5580 MO-143
PATTERSON, MISSOURI 63956

PROJECT # **X2335-01**
CDI PROJECT # **6376**

SITE # **5218**
ASSET # **7815218040**

REVISION: **ADDENDUM 1**
DATE: **09/10/2024**
REVISION:
DATE:
REVISION:
DATE:
ISSUE DATE:

CAD DWG FILE: **X2335 SP C-100.dwg**
DRAWN BY: **KDF**
CHECKED BY: **WMK**
DESIGNED BY: **KDF**

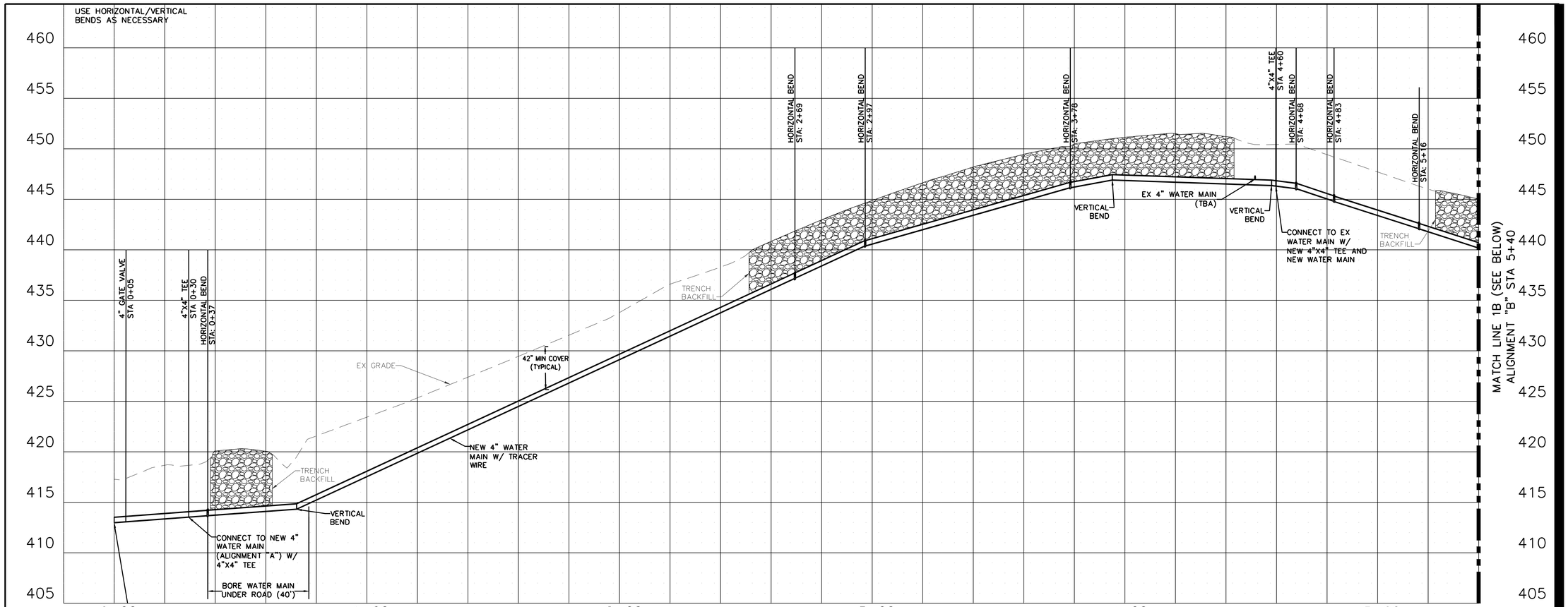
SHEET TITLE:

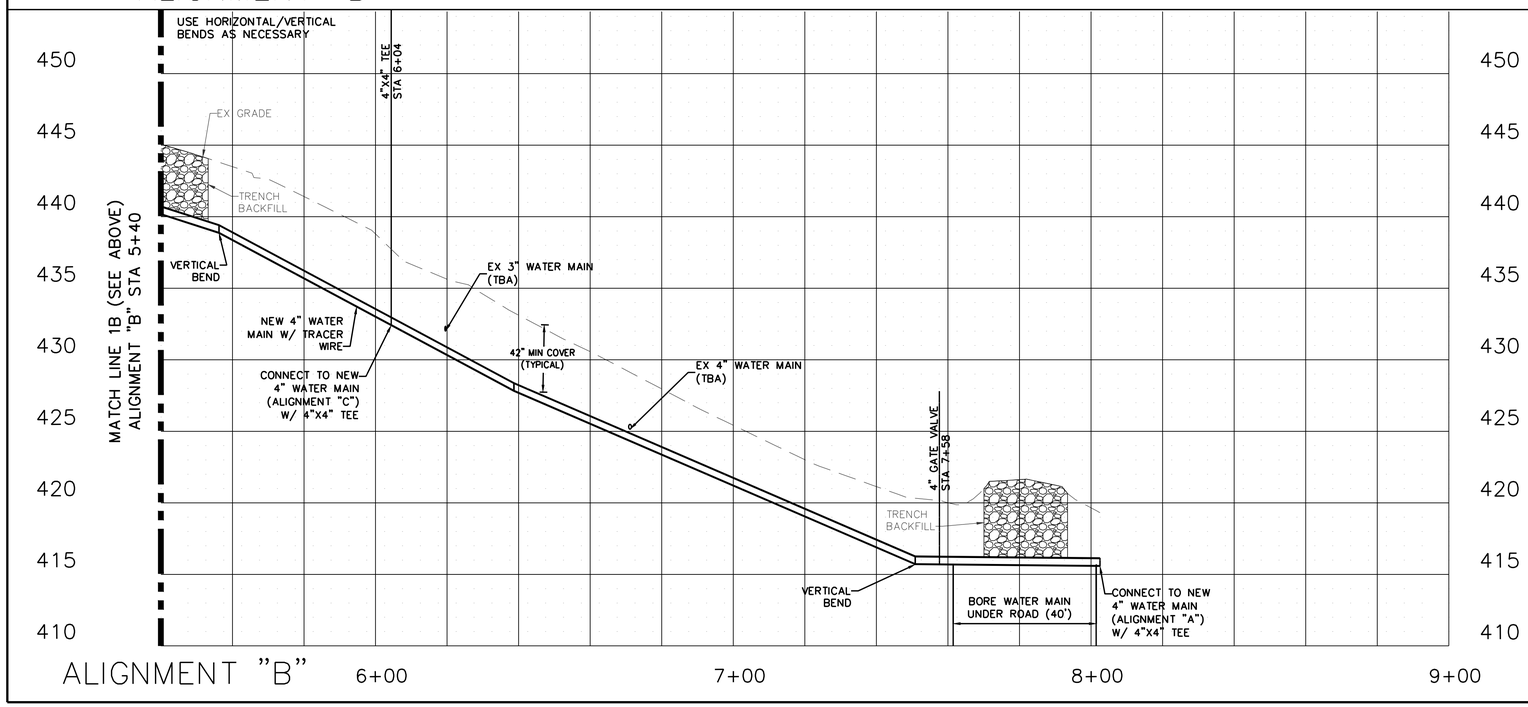
SITE PLAN

SHEET NUMBER:

C-105

SHEET OF 21
JULY 19, 2024





NOTES:

1. DEPTHS OF EX WATER MAINS ARE UNKNOWN. FIELD VERIFY DEPTHS, AND RECONCILE ANY CONFLICTS AS NEEDED.
2. FIELD VERIFY ALL SEWER CROSSINGS, RECONDILE ANY CONFLICTS AS NEEDED, AND PROVIDE A MINIMUM 18-INCH CLEARANCE BETWEEN THE SEWER CROSSING AND NEW WATER MAIN.

SCALE: 1"=20' HORIZONTAL
1"=5' VERTICAL

STATE OF MISSOURI
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WATER RENOVATIONS

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5580 MO-143
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PROJECT # **X2335-01**
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SITE # **5218**
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REVISION: **ADDENDUM 1**
DATE: **09/10/2024**
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DATE:
ISSUE DATE:

CAD DWG FILE: **X2335_EL_C-200.dwg**
DRAWN BY: **KDF**
CHECKED BY: **WMK**
DESIGNED BY: **KDF**

SHEET TITLE:

WATER MAIN PROFILE

SHEET NUMBER:

C-201

SHEET 14 OF 21
JULY 19, 2024