

**STATE OF MONTANA
DEPARTMENT OF TRANSPORTATION
BID PACKAGE**

Sealed bids for construction of this project will be received by the Montana Department of Transportation, Construction Contracting Section, Room 101, 2701 Prospect, Helena, Montana until 9:00 a.m. on August 27, 2026. All bids will then be publicly opened, reviewed for correctness, and then publicly read.

Federal Aid Project(s):

SSS-NH 57-6(24)260 Brockway – West

Bid proposals, Plans, Standard Specifications, Detail Drawings, and Standard Contract Forms are on file for examination and may be obtained from the Construction Contracting Bureau of the Montana Department of Transportation, 2701 Prospect Avenue, P.O. Box 201001, Helena, Montana 59620-1001.

Prime bidders use the Electronic Bid System or bid on-line through Bid Express to produce a bid containing Proposal Forms, Schedule of Items, and Disadvantaged Business Enterprises (DBE) Requirements (if applicable).

MONTANA DEPARTMENT OF TRANSPORTATION

Loran Frazier, Chairperson
Montana Transportation Commission

Christopher Dorrington
Director of Transportation

Contract No.07826
HB:ST:9728000ADV

SPECIAL PROVISIONS

CONTRACT NO 07826

MONTANA DEPARTMENT OF TRANSPORTATION
SCHEDULE OF ITEMS

CONTRACT ID: 07826

PROJECT: SSS-NH 57-6(24)260 9728024000 BROCKWAY-WEST

SECTION: 0001 - GRADING, GRAVEL, CTB, PMS, SEAL & COVER

PROP LINE NO.	ITEM NUMBER	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY
0010	103000000	TRAINING PROGRAM	HOUR	500.00
0020	103500005	ESCROW OF BID DOCUMENTS	LS	1.00
0030	104030010	MISCELLANEOUS WORK	UNIT	50,000.00
0040	108000000	CRITICAL PATH SCHEDULE	LS	1.00
0050	109200005	MOBILIZATION	LS	1.00
0060	203020100	EXCAVATION-UNCLASSIFIED	CUYD	654,181.00
0070	203080100	TOPSOIL-SALVAGING AND PLACING	CUYD	57,437.00
0080	208010150	TEMPORARY EROSION CONTROL-LS	LS	1.00
0090	208010200	TEMPORARY EROSION CONTROL-FIXED	UNIT	500.00
0100	210020170	TEST TRAILER-TRANSPORT, SETUP	MILE	140.00
0110	301020268	TRAFFIC GRAVEL	CUYD	7,000.00
0120	301020340	CRUSHED AGGREGATE COURSE	CUYD	65,320.00
0130	301020450	SPECIAL BACKFILL	CUYD	2,744.00
0140	301020625	AGGREGATE TREATMENT	SQYD	161,965.00
0150	304010005	BASE-CEMENT TREATED	CUYD	23,456.00
0160	401020045	PLANT MIX SURF-3/4 IN	TON	29,864.00
0170	401020046	PLANT MIX BIT SURF-MISC	TON	172.00
0180	401020300	HYDRATED LIME	TON	421.00
0190	402020090	ASPHALT BINDER PG 58H-34	TON	1,592.00
0200	402020315	EMULSIFIED ASPHALT-TACK COAT	GAL	16,562.00
0210	402020375	EMULSIFIED ASPHALT CHFRS-2P	TON	261.90
0220	409000000	FINAL SWEEP AND BROOM	CRMI	6.90
0230	409000010	COVER-TYPE 1	SQYD	147,525.00
0240	411011130	CENTERLINE RUMBLE STRIPS-TYPE 3	MILE	6.80
0250	411011135	RUMBLE STRIPS	MILE	13.70
0260	551020030	CONCRETE-CLASS GENERAL	CUYD	72.00
0270	603000050	GRANULAR BEDDING MATERIAL	CUYD	744.00
0280	603000060	FOUNDATION MATERIAL	CUYD	487.00
0290	603010040	DRAINAGE PIPE 18 IN	LNFT	782.00
0300	603010048	DRAINAGE PIPE 24 IN	LNFT	170.00

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PROP LINE NO.	ITEM NUMBER	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY
0310	603010056	DRAINAGE PIPE 30 IN	LNFT	414.00
0320	603010064	DRAINAGE PIPE 42 IN	LNFT	248.00
0330	603010066	DRAINAGE PIPE 36 IN	LNFT	418.00
0340	603010072	DRAINAGE PIPE 54 IN	LNFT	106.00
0350	603010076	DRAINAGE PIPE 60 IN	LNFT	148.00
0360	603010080	DRAINAGE PIPE 66 IN	LNFT	302.00
0370	603010088	DRAINAGE PIPE 78 IN	LNFT	196.00
0380	603011290	CSPA 102 IN EQ DIA	LNFT	124.00
0390	603013385	REIN CONC BOX 12 X 7 DBL	LNFT	96.00
0400	603587020	REMOVE PIPE CULVERT	LNFT	1,767.00
0410	603587040	REMOVE AND SALVAGE CULVERT	LNFT	125.00
0420	607100252	FARM FENCE-TYPE F4M	LNFT	47,169.00
0430	607100362	FARM FENCE-PANEL/SINGLE FM	EACH	96.00
0440	607100385	FARM FENCE-PANEL/DOUBLE FM	EACH	91.00
0450	607100430	FARM GATE-WIRE-TYPE G-2	LNFT	468.00
0460	607100720	DEADMAN	EACH	67.00
0470	607150015	REMOVE FENCE	LNFT	1,874.00
0480	610100101	SEEDING AREA NO 1	ACRE	131.00
0490	610100102	SEEDING AREA NO 2	ACRE	1.40
0500	610100103	SEEDING AREA NO 3	ACRE	24.80
0510	610100326	FERTILIZING AREA NO 1	ACRE	131.00
0520	610100327	FERTILIZING AREA NO 2	ACRE	1.40
0530	610100565	EROSION CONTROL BLANKET-HIGH-	SQYD	68,145.00
0540	610220050	MULCH-COMPOST	ACRE	1.40
0550	613100085	OUTLET APRON	SQYD	34.00
0560	613520010	VEGETATED CONCRETE BLOCK MAT	SQYD	5,765.00
0570	618030015	TRAFFIC CONTROL-FIXED	UNIT	500.00
0580	618030075	TRAFFIC CONTROL-DAY	DAY	240.00
0590	618030230	TRAFFIC CONTROL PLAN	LS	1.00
0600	618040030	FLAGGER-SHIFT	EACH	50.00
0610	618040040	PILOT CAR-SHIFT	EACH	225.00
0620	618100001	MOTORCYCLE ADVISORY SIGN	EACH	2.00
0630	619010090	SIGNS-ALUM REFL SHEET XI	SQFT	164.40
0640	619010230	REMOVE SIGN	EACH	29.00
0650	619010310	POSTS-STEEL U SIGN	LB	154.00
0660	619010450	POLES-TREATED WOOD 4 IN	EACH	18.00

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PROP LINE NO.	ITEM NUMBER	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY
0670	619010460	POLES-TREATED WOOD 5 IN	EACH	1.00
0680	619011090	DELINEATOR TYPE 1	EACH	196.00
0690	620011105	WORDS AND SYMBOLS-WHITE PAINT	GAL	2.00
0700	620011260	WORDS AND SYMBOLS-WHITE EPOXY	GAL	1.00
0710	620012955	TEMPORARY STRIPING	LNFT	55,288.00
0720	620013000	STRIPING-WHITE PAINT	GAL	502.00
0730	620013960	STRIPING-WHITE EPOXY	GAL	335.00
0740	620014000	STRIPING-YELLOW PAINT	GAL	190.00
0750	620014960	STRIPING-YELLOW EPOXY	GAL	126.00
0760	622011084	GEOTEXTILE STABILIZATION	SQYD	1,643.00
0770	623000185	MAILBOX-EXTRA LARGE	EACH	2.00

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SPECIAL PROVISIONS
FEDERAL AID PROJECT NO(S). SSS-NH 57-6(24)260
 (REVISED 6-25-26)

The following special provisions are hereby made part of the contract and supplement and/or supersede any sections of the Standard Specifications of Road and Bridge Construction, adopted by the Montana Department of Transportation and the Montana Transportation Commission and all supplements thereto in conflict therewith.

The following documents are hereby incorporated by reference into this contract:

- “Question and Answer Forum”: [Question and Answer Forum](#)
- “Standard Specifications for Road and Bridge construction”:

[Standard Specifications June 2026](#)

- The most recent version of the Detailed Drawings: [Detailed Drawings](#)
- Materials Manual of Test Procedures: [Materials Manual June 25, 2026](#)

The latest version of the Standard Specifications, Biannual updates, and revision summaries can be found at the following website: [Standard Specifications](#)

The Question-and-Answer Forum opens at 5:00 p.m. on the bid letting advertisement date and closes at 8:00 a.m. on the Monday before the bid letting. If Monday is a state holiday, the forum will close on Friday before the bid letting at 3:00 p.m. Answers provided by the Department to the questions, clarifications, and notifications can be posted up to 5:00 p.m. on the day before the letting.

The U.S. Department of Transportation (DOT) operates a toll-free number at 1-800-424-9071, 24 hours a day - 7 days a week. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use this number to report such activities. All information will be treated confidentially, and callers may remain anonymous.

The Department attempts to provide reasonable accommodations for any known disability that may interfere with a person participating in any service, program, or activity of the Department. Alternate accessible formats of this document will be provided upon request. If reasonable accommodation is needed to participate in Department bid lettings, call the Civil Rights Bureau at 444-6331 or TTY 406-444-7696 [TTY 1-800-335-7592 (toll free)].

1. **PROJECT DESCRIPTION [102]**

The Brockway – West project includes the complete reconstruction of approximately 6.8 miles of Montana Highway 200 (MT-200) west of Brockway in McCone County. The project begins approximately 7 miles west of the town of Brockway in McCone County at reference post 260.2 and extends east for 6.8 miles ending at reference post 267.0. The roadway will be reconstructed, including 6 ft. wide shoulders, centerline and shoulder rumble strips, new drainage structures, signing and pavement markings.

2. **CONTRACT TIME [108] (REVISED 1-21-16)**

The work begins on the effective date stated in the Notice to Proceed (NTP) and is to be completed in 200 Working Days. The NTP will be issued with an effective date of April 15, 2027.

3. **SEQUENCE OF OPERATIONS**

A. Traffic Control Plan. Provide traffic control and a traffic control plan according to Section 618.

B. General Requirements. This special provision outlines the basic sequencing strategy and any specific limitations required for this project’s traffic control requirements. However, the basic strategy is not intended to cover every situation which may arise in the field as a result of the contractor’s operations or otherwise. Cooperate with the Project Manager and adjust the traffic control as required to fit specific field conditions.

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C. Sequence of Operations. In addition to the requirements of Subsection 104.05, Maintenance of the Work, and Subsection 108.04, Limitation of Operations, schedule operations in a manner to provide the least amount of inconvenience possible to the traveling public, and comply with the following:

- 1) Maintain a smooth, drivable surface where traffic is present at all times.
- 2) Drainage structures may be installed prior to grading operations. In the event the bituminous material of the present traveled way is removed during the installation of the drainage structures, repair and maintain the disturbed area with a minimum of 0.20 feet of bituminous surfacing. Provide the traveling public with a safe and smooth riding surface at all times. The cost of maintaining the present traveled way is not paid for separately. Absorb the cost in the unit bid for other items in the contract.
- 3) Settlement waiting areas may be constructed outside the stage requirements.
- 4) Two miles may be opened to grading operations. Before grading has begun on the third mile, the placing of aggregate surfacing must be completed on the first mile. Before grading has begun on the fourth mile, the placement of aggregate surfacing must begin on the second mile. The above grading limits may be adjusted to fit field grading balances when deemed necessary by the Project Manager.
- 5) Grading limits may be extended one mile at a time by coordinated progression of the aggregate surfacing. When construction is adjacent to and does not disturb the existing roadway, the above stage requirements do not apply.
- 6) Coordinate work in the beginning of the project with the adjacent project, West of Brockway – West (UPN 9727000), which includes a 0.3-mile-long connection that is planned within the limits of this project, including grading, drainage features and surfacing. The connection may not be fully constructed depending on timing and sequencing of each project's work. Perform work in this area to facilitate efficient use of materials and efficiently maintain traffic during construction.
- 7) Do not leave any segments of cement treated base exposed through the winter shutdown period. Provide a minimum of 4 inches of crushed aggregate course on top of any completed cement treated base sections if they will not be paved prior to winter shutdown. Maintenance of any gravel surface through winter shutdown remains the responsibility of the contractor.

D. Method of Measurement and Basis of Payment. All the work resulting from this special provision is covered under the respective items of the contract. Where work is specified and not distinctly covered by a unit quantity and price, that work is considered as incidental to and absorbed in the various bid items of the contract and no separate payment will be made. Traffic Control will be measured and paid for in accordance with Section 618 of the Standard Specifications and the "Traffic Control Rate Schedule" found elsewhere in this bid package.

4. CONTRACT DOCUMENTS [102] (REVISED 1-15-26)

The following documents are now available within the Contractors Reference Material on the Department's Contracting and Bidding webpage

<https://www.mdt.mt.gov/business/contracting/> :

- 1) [Table of Contractor's Submittals](#). (Revised 1-15-26)
- 2) [Traffic Control Rate Schedule](#) (Revised 3-9-23)
- 3) [Erosion Control Rates](#) (Revised 1-09-25)

5. LABOR AND CIVIL RIGHTS REQUIREMENTS [102] (REVISED 1-15-26)

Executive Orders 13658 and 13706 do not apply to this contract. Pay the minimum wage rates contained elsewhere in the bid package and comply with the required contract provisions contained in the form FHWA 1273 included with this contract. To obtain more information, contact the Department's Construction Engineering Services Bureau at 2701 Prospect, Helena, MT (406)475-2258, (800)335-7592 (TTY) or (406)444-7297 (Fax).

Ensure bulletin board requirements contained in the FHWA Form 1273 are met. Please see the following webpage for required bulletin board materials:

[Bulletin Board Materials & Requirements](#)

6. SOIL BORING INFORMATION [102] (REVISED 1-16-14)

The Department routinely conducts subsurface investigations and laboratory testing to collect soil, rock and groundwater information ("geotechnical information") within the anticipated limits of upcoming projects and maintains a comprehensive set of this information in its geotechnical file. For this contract, geotechnical information has been collected by the Department and logs of boring summarizing this information have been included in the Special Provisions and Plans. "Logs of Borings" in the Special Provisions and Plans are based on an interpretation of the field investigation and laboratory testing data, and do not include all the geotechnical information that may be available. The geotechnical information contained in the "Logs of Borings" has been edited or abridged and may not reveal all the geotechnical information which might be useful or of interest to the bidder.

The comprehensive set of geotechnical information is considered too voluminous to include in the bidding package. The geotechnical information that the Department has is available for review or copying upon request. Rock core samples are regularly retained as well. All bidders are expected to fully review all of the geotechnical information prior to submitting their bid. The prime bidder is responsible for ensuring that a firm submitting a subcontractor quote for the prime's use is aware of all available geotechnical information.

Submission of a bid without fully reviewing the Department's comprehensive set of geotechnical information or accepting a quote from a subcontractor without verifying that the subcontractor reviewed all available geotechnical information is a business decision by the bidder. Failing to fully review all available geotechnical information waives the contractor from making any claim, whether termed "superior knowledge", "justifiable reliance", "differing site condition", or otherwise, against the Department for any information that may be included in the comprehensive geotechnical information file and not shown, or not fully shown, in the "Logs of Borings" contained in the contract documents.

Soil, rock, and groundwater conditions shown on the logs of boring apply only at the specific boring locations and at the time the borings were made. They are not warranted to be representative of subsurface conditions at other locations or times. Groundwater conditions commonly vary seasonally and from that encountered during drilling. Determination of a material's classification is based in part on judgment and opinion. The Department assumes no responsibility for any variation or misinterpretation of the classification of materials.

Utilize the Question and Answer forum to request additional geotechnical information or to submit questions regarding the geotechnical information. To review all available geotechnical information, submit a request in writing to the Department's Geotechnical Section to schedule a time to review the available geotechnical information. Requests for access should be made a minimum of 10 business days prior to the bid opening.

7. BIDDER'S PROPOSED AGGREGATE SOURCE(S) [103] (REVISED 8-07-25)

No later than 7 calendar days after the date of bid-opening (the date of bid opening to count as the first full day), submit to ECCS form MDT-CON-106-02-3 in accordance with Subsection 103.11.

8. ESCROW OF BID DOCUMENTS [103] (REVISED 4-28-22)

Escrow of bid documents under 103.09 is required for this contract.

9. PARTNERING [105] (ADDED 1-11-24 M)

In accordance with Subsection 105.05.1, this contract requires Level (II) facilitation.

10. STEEL PRICE ADJUSTMENT [106] (REVISED 11-13-25)

In accordance with Subsection 106.09.1, the base price per pound of steel for this contract is: \$1.15.

11. DOMESTIC MATERIALS REQUIREMENTS [106] (REVISED 11-13-25)

A. Steel and Iron Materials. Furnish iron and steel materials in accordance with subsection 106.09. A manufactured product consisting primarily of steel and iron as defined in 23 CFR 635.410 is accepted under subsection 106.09.

B. Construction Materials. Furnish construction materials manufactured in the United States. Construction materials include articles, materials, or supplies that are or consist primarily of:

- Non-ferrous metals.
- Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables).

- Glass (including optic glass).
- Fiber optic cable (including drop cable).
- Optical fiber.
- Lumber.
- Drywall, and
- Engineered wood.

Construction materials exclude cement and cementitious materials, aggregates including stone, sand, or gravel, or aggregate binding agents (e.g., asphalt binder) or additives (e.g., polymer modifiers and admixtures).

Manufacturing processes for the construction material must occur in the United States. Manufacturing processes for each of the bulleted construction materials above are defined in 2 CFR 184.6 and are summarized below.

a) Non-ferrous metals: Initial smelting or melting through final shaping, coating, and assembly.

b) Plastics: Initial combination of plastic, polymer based, or composite materials until item is in its final form.

c) Glass: Initial batching and melting, annealing, cooling, and cutting.

d) Fiber Optic Cable: Initial ribboning, buffering, and fiber stranding and jacketing.

e) Optical Fiber: Initial preform fabrication through completion of draw.

f) Lumber: Initial debarking, treatment, and planing.

g) Drywall: Initial blending of gypsum, cutting, and drying of sandwiched panels.

h) Engineered Wood: Initial combination of constituents until item is in its final form.

C. Manufactured Products. Furnish manufactured products as defined in 2 CFR 184.3 that meet the requirements of 23 CFR 635.410. Beginning with the letting of November 13, 2025, the final fabrication of all manufactured products must occur in the United States. Beginning with the November 12, 2026 bid letting, the product must be manufactured in the United States and the cost of the components of the manufactured product that are mined, produced or manufactured in the United States must be greater than 55% of the total cost of all components of the manufactured product.

With respect to precast concrete products that are classified as manufactured products, ensure the components of precast concrete products that consist wholly or predominantly of iron or steel or a combination of both meet the requirements of subsection 106.09.

D. General. Domestic materials preference applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to a project. It does not apply to tools, equipment, and supplies brought to the construction site and removed at or before the completion of the project (e.g., temporary aluminum scaffolding). Buy America preference does not apply to equipment and furnishings that are used at or within the finished infrastructure project but are not permanently affixed to the structure (e.g., movable chairs, desks, or

computer equipment used at or within the project but are not integral or permanently affixed to a structure).

Refer to the decision tree in Section 3.5 of MT 601 to aid in appropriately categorizing specific materials.

Submit Form MDT-MAT-407 "Manufacturer's Certificate of Compliance" for every material identified as a construction material or manufactured product. Do not incorporate materials covered by Form MDT-MAT-407 into the project until all required documentation is submitted to the Department. Ensure suppliers and manufacturers understand the domestic material and contract requirements to supply the required materials and associated documentation.

The Department will not accept items installed until all supporting documentation has been reviewed and is found to be in accordance with the contract requirements. Insufficient or unavailable documentation or documentation showing products containing construction materials of foreign origin are grounds for removal and replacement at the contractor's expense. The Department has designated contract materials as either "construction materials" or "manufactured products" by their respective 9-digit material codes in section MT 601 of the Montana Materials Manual. The Department recognizes there will be situations where a product or material may not fit the designation indicated in section MT 601. In these cases, submit documentation demonstrating or justifying the supplier or manufacturer's position that their specific item has been misclassified to the Project Manager at least 10 business days in advance of installation. The Department, in conjunction with FHWA, will review the submitted documentation and decide as to how that specific product or material will be classified. These determinations will be final, and the appropriate documentation as defined above is required.

The Department further recognizes there will be situations when a product or material may not be addressed in MT 601. In these cases, submit certification of the material's domestic origin appropriate for the material classification to the Project Manager prior to installation.

The US DOT has found that it is in the public interest to issue a waiver of domestic preferences in certain situations. For construction materials and manufactured products, the domestic preference may be waived if the total value of non-compliant material is under \$1,000,000 or 5% of the total applicable project costs, whichever is less. Submit actual individual material costs, minus manufacturing costs outside the defined manufacturing processes outlined above, along with justification in the form of invoices, bills of lading, or other appropriate documents to the Department if requesting the waiver.

The above waiver does not apply to iron and steel, the existing de minimis standard for iron and steel under subsection 106.09 continues to apply.

A project with a total contract value of \$500,000 or less is exempt from all domestic preference regulations including steel and iron.

12. STATUS OF UTILITIES [108] (ADDED 1-1-03)

Utility relocation work is not complete and will not be complete as of the letting date and contract award date. Project work must be coordinated with the utility company relocation activities until the utility relocation work is complete. Under no circumstances will a delay in relocating utility facilities be considered as justification for additional compensation.

Should unforeseen conditions arise which substantially delay the utility relocation work, and the delay results directly in a delay to the project work, make a written request to the department for a time extension, see Subsection 108.07.4.

13. SUBCONTRACTING CONSULTANTS [108] (REVISED 2-27-14 M)

The following consultants performed work on the project.

- RESPEC
- HDR

14. NOTICE TO BIDDERS [108] (ADDED 11-21-08)

This project is funded in whole or in part by funds received from the Federal Highway Administration (FHWA), and its construction is wholly contingent on the state's continued receipt of those federal funds. If the federal funds are reduced or not received, the Department may choose to terminate the contract for convenience under the provisions of Subsection 108.10. Any bidder on this project, by submitting its bid, understands and accepts the possibility of the contract being terminated in the event federal funds are reduced or not available and by submitting a bid, each bidder waives any claims for costs or damages other than as specifically allowed by Subsection 108.10.2. In particular, bidders understand and accept that no payment will be allowed for any claimed anticipated profit for work not performed.

15. TRAINING PROGRAM [109] (REVISED 3-19-26 M)

Provide on-the-job training for 1 trainees. For more information and requirements of the job training program, see Subsection 109.12.

The Department's Civil Rights Bureau has taken oversight of the Training Program. Within Subsection 109.12, all references to the CES Bureau will now be rescinded and replaced with the Civil Rights Bureau.

16. MOISTURE SENSITIVE SOILS [203] (REVISED 9-11-14)

A. Description. Subsurface investigation for this project indicates that subgrade and/or foundation soils located within the project limits are sensitive to changes in moisture content and may cause construction difficulties. Use construction methods and equipment appropriate for moisture-sensitive soils.

B. Construction. Unless otherwise specified in the contract or by the Project Manager, limit the length of subgrade exposed to precipitation events to an amount that can be adequately sealed by the contractor within 30 minutes of the start of a precipitation event.

Many possibilities are available to facilitate construction and to achieve proper compaction of the subgrade or foundation soils in the project limits. The Department does not direct the use of any of them. However, in preparing bids, identify measures to address the identified conditions. Some possibilities to consider are:

1) Sealing the surface of all exposed subgrade/foundation by rolling with a smooth drum roller whenever work at a particular location is interrupted for 6 or more hours and at the end of each work day;

2) Grading and sloping the surface of all exposed subgrade/foundation to facilitate unimpeded surface drainage away from the work area; and/or,

3) Allowing soils to adequately dry (including after precipitation events) before attempting any type of construction work on the subgrade/foundation soils.

C. Method of Measurement and Basis of Payment. Include all costs for the method(s) chosen to effectively address construction on moisture sensitive soils in the bid item for unclassified excavation/borrow. No additional compensation will be allowed or given for claimed increased costs to address that portion of the work addressed by this provision.

17. ENVIRONMENTAL SPECIFICATIONS [208]

The Contractor is required to review and meet the specifications of the following subsections:

Migratory Bird Treaty Act Compliance – Vegetation Removal	Subsection 208.03.4A(1)
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18. STORM WATER PERMITTING REQUIREMENTS UNDER THE MT POLLUTANT DISCHARGE ELIMINATION SYSTEM (MPDES) [208] (REVISED 8-10-23)

A. Description. The DEQ regulates storm water discharges under the MPDES program. If the bid package contains blank erosion control plans, a construction storm water discharge permit authorization will be required. If not, a storm water discharge permit authorization may be required for this project depending on Contractor's operations. Sum the disturbance area (as defined by DEQ) identified in the contract with the area of disturbance caused by contractor operations to determine if the permit acreage threshold is exceeded. Contractor operations can include, but are not limited to, the following support activities: staging areas, access roads, material storage areas, temporary concrete, or asphalt batch plants, borrow areas, areas used for fill placement, etc. If the summed disturbance area is one acre or more, use the DEQ authorization to discharge under the MPDES General Permit for Storm Water Discharges Associated with Construction Activity (General Permit) for this project. In order to facilitate permit transfer, separate NOI packages are required for areas within the right-of-way and areas outside of the right-of-way. A NOI package includes a Notice of Intent, with a topographic map, a SWPPP, the erosion control plans, sage grouse consultation letter, if applicable, and supporting documentation.

Blank Erosion Control Plans, and a topographic map, are provided with the plans if the plans include greater than 1 acre of disturbance. Complete the erosion control plans as required by the general permit. Complete the SWPPP using DEQ's most current SWPPP Form.

B. Materials. Follow the requirements described in the Department's *Erosion and Sediment Control Best Management Practices Manual (December 2016)*. Rescind Section 208 detailed drawings. Submit to the Project Manager for review and acceptance BMPs proposed for use that are not included in the Manual.

C. Construction Requirements.

1) MPDES Permit Required.

a) Submit one NOI package and the associated fees to DEQ for ground disturbance areas shown in the plans or within the right-of-way. For ground disturbance areas shown in the plans and any other areas within the right-of-way where Contractor activities causing ground disturbance are planned, the Contractor is the sole permittee until construction is complete and the General Permit is transferred to the Department or another entity.

The Department is not responsible for delays caused by incomplete or inaccurate submittals by the Contractor.

Comply with the requirements of the General Permit and implement the SWPPP. Provide an electronic copy of the NOI Package submitted to DEQ and confirmation for receipt of a complete NOI Package from DEQ to the Project Manager prior to conducting any ground disturbance activities.

Do not begin construction activities until the required copy of the NOI Package submitted to DEQ and confirmation for receipt of a complete NOI Package from DEQ is received by the Project Manager.

b) Furnish and install public signage as required by the General Permit. Include the cost of the required sign(s) in the Temporary Erosion Control Lump Sum bid item. Submit a separate NOI package and the associated fees to DEQ for ground disturbance and support activity areas outside the right-of-way and not shown in the plans. Contractor furnished material sources, staging areas, plant sites, or any other Contractor caused ground disturbance outside the right-of-way and not shown in the plans, are the Contractor's responsibility and must be submitted under a separate NOI package from the ground disturbance within the right-of-way. For all support activities outside the right-of-way which are not part of a larger commercial operation serving multiple unrelated construction activities and will not continue operation beyond the completion of the contracted road construction activity, a notice of intent package must be submitted to DEQ to obtain an authorization under the General Permit. Sand and gravel borrow area operations, gravel pits, and/or concrete batch plants that will continue

operation beyond the completion of the contracted road project, are part of a larger commercial operation, or serving multiple unrelated construction activities, must obtain permit coverage under the Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activity (MSGP) regardless of acreage size of the activity if the activity does not already have MSGP authorization. The Contractor is the sole permittee until stabilization is complete and the General Permit is terminated or transferred to another entity. The Department is not responsible for delays caused by incomplete or inaccurate submittals to DEQ by the Contractor.

Provide copies of all NOI Packages submitted to DEQ and confirmations for receipt of complete NOI Packages from DEQ to the Project Manager prior to conducting any ground disturbance activities.

Be responsible for all temporary erosion, sediment, and pollution prevention controls for Contractor furnished material sources, staging areas, plant sites, or any other Contractor caused ground disturbance outside the right-of-way and not shown in the plans.

c) Complete and document all inspections in accordance with the requirements of the General Permit. Use DEQ's most current self-inspection form available online at: <https://deq.mt.gov/files/Water/WQInfo/Documents/WPBFForms/2023-Attachment-B-MTR100000.pdf>. Provide a copy of all inspection reports to the Project Manager within 7 calendar days of the inspection.

Report potential noncompliance in accordance with applicable regulations, guidance, and permit conditions. Submit to the Project Manager within 7 calendar days of sending or receiving all correspondence to or from regulatory agencies regarding potential noncompliance or violations.

The temporary erosion and sediment control measures and devices to prevent pollution and control sediment transport and soil erosion will be inspected as part of the final inspection to ensure they are maintained and functioning properly. Do not transfer or terminate the General Permit coverage until the BMPs are inspected and accepted and all records required under the permit, including inspection and monitoring reports, are furnished to the Project Manager and authorization is received from the Department. The Department may require that certain BMPs be replaced by another type of BMP as a condition of permit transfer.

Upon approval of site conditions, measures, devices and all pertinent records, the Department will notify the Contractor to begin the Permit Transfer Notification in DEQ FACTS. Once completed, provide verification that all fees have been paid and the permit is ready for transfer in DEQ FACTS. The Department is not liable for the completeness or accuracy of Contractor records completed prior to the permit transfer. Ensure permit conditions and responsibilities are met until confirmation of the transfer is received from DEQ. Defend and hold the Department harmless from any violations, claims, enforcement actions, penalties or fines issued for Contractor activities or recordkeeping that occurred prior to the transfer of the General Permit.

If the Department concurs that final stabilization has been met during the final walk-through, the Contractor may submit a Notice of Termination form to DEQ. Pay the annual fee invoice due at the time of termination. Submit the annual fee invoice to the Project Manager for reimbursement.

2) MPDES Permit not Required.

The BMP-Administration item is included in contracts that may not meet either criteria for an MPDES permit but include ground disturbing activities. Complete BMP inspections and install BMPs, if necessary, in accordance with Section 208, if no storm water permit is required. Utilize form MDT-ENV-014, Water Pollution Control Inspection Report. A certified SWPPP Administrator is not required to conduct the inspections if no permit is required.

D. Method of Measurement. DEQ MPDES fees and monitoring costs associated with obtaining and maintaining the General Permit for ground disturbance areas both within and outside the right-of-way are not measured separately for payment.

If no permit is necessary, include the cost of all erosion control, devices, and inspections in the BMP-Administration bid item.

E. Basis of Payment. No additional payment will be made for the DEQ MPDES fees and monitoring costs associated with the General Permit. Include these costs in the Temporary Erosion Control-Lump Sum bid item.

For project including the BMP-Administration item, include the cost of all erosion control, devices, and inspections in the BMP-Administration bid item. Partial payment for the BMP-Administration will be monthly based on the lump sum contract price in accordance with Table 208-2 in Subsection 208.05.1.

Payment for BMPs required by an event or extra work, and approved by the Project Manager, will be measured and paid for in accordance with the Erosion Control Rate Schedule contained in the contract at a unit price of \$1.00 per unit.

19. CLEAN WATER ACT SECTION 404 PERMIT AND SECTION 401 CERTIFICATION

A. Description. This provision describes the project work that has been authorized under Sections 404 and 401 of the Clean Water Act (CWA) and the associated conditions that must be adhered to for compliance with CWA requirements.

B. Section 404 CWA Nationwide Permit 14 Description. The permanent features of this project are authorized under a US Army Corps of Engineers Nationwide Permit 14 – Linear Transportation Projects, (Army Corps File Number NWO-2026-00101-MT).

1) The project site is located at Latitude 47.313199°, Longitude -105.887713°, on Beauty Creek, within Section 17, Township 18 N, Range 46 E, McCone County, Montana.

2) The permit for this project authorizes the following project work to be performed within waters of the US

a) Site 2 – Wetland 2a & 2b (STA 2576+18 to 2586+61): Removal of existing culverts and installation of a 12-foot wide x 7-foot tall x 96-foot long double reinforced concrete box culvert at STA 2580+16 and roadside ditch grading, resulting in 0.101 acres of permanent wetland impacts at this location. Latitude 47.313473, Longitude -105.887359.

b) Site 3 – Wetlands 3a & 3b (STA 2581+96 to 2587+03): Removal of existing culvert and installation of a 36-inch x 110-foot long culvert at STA 2586+53 and roadside ditch grading, resulting in 0.218 acres of permanent wetland impacts at this location. Latitude 47.313240, Longitude -105.884805.

3) This authorization is valid until March 15, 2031

4) Obtain the Nationwide Permit 14 Fact Sheet that fully describes the Nationwide Permit 14 and lists the General Conditions that must be adhered to for this authorization to remain valid. Adhere to the General Conditions.

C. Section 404 CWA Nationwide Permit 33 Description. Obtain authorization for the temporary features of this project (e.g. work bridges, work pads, cofferdams, diversions, etc.) under US Army Corps of Engineers Nationwide Permit 33 – Temporary Construction, Access, and Dewatering.

1) Acquire an additional Section 404 Permit and 401 Certification authorization for temporary discharges that are:

a) Located within 100 feet of the water source in natural spring areas;

b) Within the following waterways and their impoundments: Bitterroot River, Clark Fork River (tributary to the Columbia River), East Rosebud Creek, Flathead Lake, Flathead River, Kootenai River, Milk River, Yellowstone River, or Missouri River;

c) Within Special River Management Zone of the Upper Yellowstone River; or

d) Within the boundaries of any Tribal Reservation or Tribal trust lands.

Prepare and submit a joint application in accordance with Section 208.03.3. MDT is not responsible for delays caused by incomplete or inaccurate submittals by the Contractor.

2) For all other temporary discharges, submit a written description to the Project Manager detailing the temporary facilities planned for the project, along with the associated restoration plan. Allow 5 working days for the Project Manager to review the plan and confirm CWA 404 pre-construction notification is not required. For temporary discharges authorized

under Nationwide Permit 33 without pre-construction notification, the authorization is valid until March 15, 2031.

3) Obtain the Nationwide Permit 33 Fact Sheet that fully describes the Nationwide Permit 33 and lists the General Conditions that must be adhered to for this authorization to remain valid. Adhere to the General Conditions.

D. CWA Section 404 Regional Conditions. Obtain the 2026 Nationwide Permits Regional Conditions, Omaha District, State of Montana, Effective March 15, 2026, that also apply to this project and must be adhered to for these authorizations to remain valid. Adhere to the Regional Conditions, including but not limited to the following:

1) Temporary Measures: Temporary controls (e.g., silt fences, netting, mats) must be removed and disposed of once they have served their purpose.

2) Permanent Measures: Permanent controls used in or near waters of the U.S. must be made of 100% biodegradable, non-plastic materials (such as jute, sisal, or coir). Plastic alternatives (including any degradable or oxo-degradable materials) are not authorized.

E. CWA Section 401 Water Quality Certification is granted for Nationwide Permit 23 by the Montana Department of Environmental Quality (DEQ), provided that certain general and special conditions are met. Obtain the water quality certification requirements issued by DEQ on December 15, 2026. Adhere to those general and special conditions.

F. Copies of the 2026 Nationwide Permit Fact Sheets for Nationwide Permits 23 and 33, the 2026 Nationwide Permit Regional Conditions for the State of Montana, and DEQ's 401 Water Quality Certification Requirements for the 2026 Nationwide Permits are available upon request from Environmental Services or on the web at:
<http://www.mdt.mt.gov/business/contracting/environmental/cwa.shtml>.

Coordinate with the Engineering Project Manager if you have questions regarding this authorization. Proposed changes to the permanent structures should be directed to the Engineering Project Manager for coordination with the District Environmental Project Engineer in the Environmental Services Bureau. Temporary facility permitting and/or general permit questions should be directed to the project manager for coordination with the District Environmental Engineering Specialist.

20. STREAM PROTECTION ACT 124 [107] [208]

A. Description. The proposed project has been authorized by Preconstruction Stream Protection Act (SPA) 124 No.: MDT-R6-02-2026, by Montana Fish, Wildlife, and Parks (FWP); provided the General and Special Conditions listed below are followed. This Preconstruction SPA 124 authorizes the permanent features to be constructed at the following locations:

Location of Waterbody	Name of Waterbody
M.P. 261.74	Beauty Creek
M.P. 267.00	Cotter Creek

B. General Conditions

1) Meet the specifications listed in Subsection 208.03.3.

2) Install and maintain Best Management Practices and temporary erosion control measures where appropriate to protect the waterbodies and adjacent areas listed in the table above. Conduct all work in a manner that minimizes turbidity and other disturbances to these areas.

3) All geotextile fabric and/or Turf Reinforcement Mat (TRM) used in association with rip rap protection at bridge abutments (i.e., on fill and cut slopes, beneath all riprap, etc.), must be 100% biodegradable. This will allow riparian vegetation to regrow in a timely manner, while also protecting reptiles, and other aquatic organisms such as fish and amphibians.

4) Limit the clearing of vegetation to only what is necessary for the construction of the project within all riparian areas. Restore temporary access routes and all other temporarily disturbed areas near and within all riparian areas to the original contours and conditions, prior to completing the reclamation, i.e., seeding, of the vegetation.

5) Obtain a temporary facility SPA 124 Permit/Authorization from FWP. This Preconstruction SPA 124 Permit/Authorization does not cover the construction of temporary facilities such as work bridges, work pads, cofferdams, temporary detours, diversions, etc. This authorization does not include removal and disposal of the existing structure, access to and from authorized locations, sequencing and construction methodology to construct authorized features, or any other unauthorized impacts affecting permitted drainages. These items, and any other items not covered here but potentially affecting a stream/river or its channel(s), must be permitted separately by the Contractor.

C. Special Conditions

1) This authorization is valid for two years from the date of issuance (03/26/2026)

2) The proposed work exceeds the scope of the Programmatic Environmental Assessment for a FWP issued Water Quality Discharge Permit (318 Permit) therefore application to the Montana Department of Environmental Quality for 318 Permit is required.

Copies of the Preconstruction SPA 124 Authorization No.: MDT-R6-02-2026, are available upon request from Environmental Services.

Contact the Project Manager for coordination with the District Biologist about any questions regarding this authorization.

21. INCREASE IN TURBIDITY [208] (REVISED 10-8-15)

A. Description. Montana Fish, Wildlife and Parks (FWP) has determined that this project may cause a significant increase in turbidity.

B. Requirement. Contact the Department of Environmental Quality (DEQ) to determine narrative conditions required to meet short-term (318 Authorization) water quality standards and protect aquatic biota.

1) Complete and submit the Joint Application for Proposed Work in Montana's Streams, Wetlands, Floodplains, and Other Water Bodies (Application Revised 6-5-2015) and all required attachments, according to the applications instructions. Form can be down loaded from: <http://dnrc.mt.gov/licenses-and-permits/stream-permitting>.

2) Application fees are the responsibility of the Contractor.

3) Do not begin any work that will affect a Montana stream, wetland, floodplain, and/or other water body until a valid 318 Authorization is received from DEQ. Other permits/authorizations may also be required for the proposed work.

C. Basis of payment. Include the cost to obtain this permit in the mobilization bid item.

22. SETTLEMENT WAITING PERIOD (REVISED 2-3-2022)

A. Description. Settlement waiting periods are required for embankment construction locations at the locations shown below:

Embankment Waiting Period Limits

Station Range	Recommended Waiting Period for Establishment of Finish Grading and Paving
2572+00RT to 2581+00RT	60 days
2574+00LT to 2620+00LT	60 days
2585+00RT to 2620+00RT	60 days

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- B. Construction.
 - 1) Construct the embankments to the design subgrade elevation as shown in the plans.
 - 2) After constructing the embankments to the design subgrade elevation, suspend grading operations for the specified time periods.
 - 3) Contract Time will not be suspended if other road work continues elsewhere on the project.
 - 4) Upon approval by the Project Manager, continue remaining embankment construction.
 - 5) Regrade embankments or place additional embankment as necessary to compensate for any settlement before placing pavement section. Settlement ranging from 5 to 6.5 inches should be anticipated.
- C. Method of Measurement and Basis of Payment. This work is not measured for payment, include all associated costs in other bid items.

23. CULVERT FOUNDATION TREATMENT (REVISED 2-2-2022)

- A. Description. Prior to culvert placement, construct the culvert foundation, consisting of culvert excavation, geotextile placement, and foundation material placement at the locations shown in the plans or as directed by the Project Manager.
- B. Materials.
 - 1) Provide Stabilization Geotextile meeting the requirements of Section 716.
 - 2) Provide Culvert Foundation Material with a maximum of 15% passing the #200 sieve in addition to the requirements of Subsection 701.04.2.
- C. Construction.
 - 1) Excavate a zone as shown elsewhere in the Contract and 2.0 feet below the bottom of the planned bedding elevation.
 - 2) Place geotextile as shown elsewhere in the Contract or as directed by the Project Manager. Overlap any adjoining edges of the geotextile a minimum of 3.0 feet with the edge of the upgrade sheet over the edge of the downgrade sheet.
 - 3) Place the first 16 inches of Foundation Material over the geotextile with minimal compaction effort necessary to create a stable base, with the least amount of equipment traffic possible, and otherwise in accordance with Subsection 622.03.
 - 4) Do not use vibratory, studded, or sheepsfoot rollers on the first 16 inches.
 - 5) Place subsequent lifts in accordance with Subsection 622.03.
- D. Method of Measurement.
 - 1) Culvert Foundation Material is measured in accordance with Subsection 603.04.
 - 2) Geotextile is measured in accordance with Subsection 622.04.
- E. Basis of Payment. Payment is full compensation for all labor, tools, equipment and other incidentals necessary to complete the work in accordance with the specifications and as directed by the Project Manager.
 - 1) Culvert Foundation Material is paid in accordance with Subsection 603.05.
 - 2) Geotextile is paid in accordance with Subsection 622.05.

24. SPECIAL BACKFILL FOR CULVERTS (REVISED 2-2-2022)

- A. Description. Place special backfill at the locations shown on the project plans and cross sections. Place special backfill to the bottom of the crushed aggregate course section or as shown in the plans.
- B. Materials. Provide backfill material consisting of a well-graded sand, silty sand, and gravel, free of organic and other deleterious material, meeting the AASHTO M 145 requirements for A-2-4 or better group classification, with 100% passing the 6-inch sieve.
- C. Construction. Compact Special Backfill in accordance with Section 203, limiting the lift thickness to 6 inches.

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- D. Method of Measurement. Special Backfill is measured by the cubic yard in place.
- E. Basis of Payment. Special Backfill is paid at the contract unit price bid per cubic yard complete and in place.

25. DEWATERING AND DIVERSION (REVISED 12-11-15)

- A. Description. Groundwater may be encountered when excavating for box culverts, pipes, and other drainage structures. Review the project irrigation practices and soil boring logs and make appropriate provisions for groundwater and necessary dewatering. Project borings indicate that groundwater may be encountered at shallow depths. However, groundwater levels can fluctuate yearly, seasonally, during precipitation events, or due to other factors. All excavations that encounter groundwater need to be dewatered properly and kept dry at all times.
- B. Submittals. Prior to starting excavation for any box culvert, pipes, or other drainage structure, submit a dewatering plan to the Project Manager. The dewatering plan must include the number, size, and proposed location of pumps and sumps that will be used to dewater the excavation as well as copies of all applicable permits. Allow 5 working days for the Project Manager to review the dewatering plan.
- C. Construction. When groundwater is encountered in excavations provide dewatering methods that will allow placement and compaction of backfill. Dewater the excavation to maintain conditions that allow for proper compaction of foundation materials and bedding in accordance with the requirements of the Contract. Do not allow the excavation to fill with surface water or groundwater at any time.
- D. Method of Measurement and Basis of Payment. Dewatering is measured and paid for as Miscellaneous Work in accordance with Subsection 109.04.

26. VEGETATED CONCRETE BLOCK MAT

- A. Description. Vegetated Concrete Block Mat is manufactured from individual concrete blocks tied together with high strength knitted polypropylene bi-axial geogrid and a triple layer underlayment. Each block is tapered, beveled, and interlocked, and includes connections that prevent lateral displacement of the blocks within the mats when they are lifted for placement. Furnish and place the Vegetated Concrete Block Mat system in accordance with this specification and conforming with the lines, grades, design, and dimensions shown on the plans.
- B. Materials. Use a tied Vegetated Concrete Block Mat with a Triple Layer Underlayment, consisting of Leno Weave, Recyclex TRM, and Curlex II Wood Excelsior. Provide Flexamat Plus or approved equal to meet the following specification requirements:
- 1) Concrete Blocks. Furnish blocks manufactured with concrete conforming to the cement requirements of ASTM C150 and to the aggregate requirements of ASTM C33. Meet a minimum compressive strength of 5,000 psi at 28 days. Furnish blocks that have a minimum weight of 3lb per block. Blocks to be placed no further than 2 inches apart.
 - 2) Polypropylene Bi-Axial Geogrid. Provide revetment mat that is constructed of an interlocking geogrid comprised of an open knitted fabric composed of high tenacity, multifilament polypropylene yarns knitted and coated in tension with an acrylic based coating which is designed to resist degradation in environments with exposure to water and low pH (<4 pH) and high pH (>9 pH). When combined with the revetment mat, this will yield a high tenacity, low elongating, and continuous filament polypropylene geogrid that is embedded within the base of the concrete blocks. Ensure the geogrid meets the requirements of Table 1:

Table 1- Polypropylene Bi-Axial Geogrid.

Property	Units	Test	Requirement ^(1,2)
Mass/Unit Area	oz/yd ²	ASTM D5261	6.5

Aperture Size	in	Measured	1.4 x 1.4
Ultimate Wide Width Tensile Strength (MD x CMD)	lb/ft	ASTM D6637	2,055
Elongation at Ultimate Tensile Strength (MD x CMD)	%	ASTM D6637	6
Wide Width Tensile Strength @ 2% (MD x CMD)	lb/ft	ASTM D6637	822
Wide Width Tensile Strength @ 5% (MD x CMD)	lb/ft	ASTM D6637	1,640
Tensile Modulus @ 2% (MD x CMD)	lb/ft	ASTM D6637	41,100
Tensile Modulus @ 5% (MD x CMD)	lb/ft	ASTM D6637	32,800
UV Stabilization (Carbon Black by Weight)	%	BS 2782:Part 4 Method 452B	> 0.8

Notes:

¹Minimum average roll values (MARV), except Aperture Size is nominal dimension.

²Minimum strength direction.

3) Underlayment Materials. The triple layer underlayment material will be packaged as part of the roll of concrete block mat. The underlayment material is two types of erosion control blanket (ECB) and a turf reinforcement mat (TRM).

a) The top layer of erosion control blanket is a five pick Leno Weave to provide strength and support to the lower underlayment matrix. Ensure the top layer of erosion control blanket meets the requirements of Table 2:

Table 2 – Top Layer of Underlayment (Erosion Control Blanket).

Property	Units	Requirement
GSM	g/m ²	118
Density	Picks /10cm	62 x 24 (+/-2)
Wrap Strength	N / 5cm	≥ 350
Wrap Elongation	%	20 - 50
Wrap Shrinkage	%	≤ 7
Weft Strength	N / 5cm	≥ 280
Weft Elongation	%	20 - 50
Weft Shrinkage	%	≤ 9

b) The middle layer of turf reinforcement mat is a permanent non-degradable TRM consisting of 100% post-consumer recycled polyester with 80% five-inch or greater fiber lengths. It is of consistent thickness with fibers evenly distributed throughout the entire area of the TRM. The top and bottom of the TRM is covered with heavy duty polypropylene net. Fibers are tightly crimped and curled to allow fiber interlock, and to retain 95% memory of the original shape after loading by hydraulic events. Fibers have a specific gravity greater than 1.0. Ensure the middle layer of turf reinforcement mat meets the requirements of Table 3:

Table 3 – Middle Layer of Underlayment (Turf Reinforcement Mat).

Property	Units	Test Method	Requirement ^(1,2)
Thickness	in	ASTM D 6525	0.29
Light Penetration	%	ASTM D 6567	57
Resiliency	%	ASTM D 6524	86

Mass per Unit Area	lb/yd ²	ASTM D 6566	0.5
MD-Tensile Strength Max.	lb/ft	ASTM D 6818	295
TD-Tensile Strength Max.	lb/ft	ASTM D 6818	194
MD-Elongation	%	ASTM D 6818	32
TD-Elongation	%	ASTM D 6818	41
Swell	%	ECTC Procedure	8
Water Absorption	%	ASTM D 1117 / ECTC	34
Specific Gravity	~	ASTM D 792	1.21
UV Stability	% min. @ 1000hrs	ASTM D 4355	80
Porosity	%	Calculated	97.5
Bench-Scale Rain Splash	@ 2 in/hr	ECTC Method 2	SLR = 5.9 ^(1,2)
Bench-Scale Rain Splash	@ 4 in/hr	ECTC Method 2	SLR = 5.0 ^(1,2)
Bench-Scale Rain Splash	@ 6 in/hr	ECTC Method 2	SLR = 6.3 ^(1,2)
Bench-Scale Shear	lb/ft ² @ ½ in of soil loss	ECTC Method 3	2.4 ⁽²⁾
Germination Improvement	%	ECTC Method 4	430

Notes:

¹ SLR is the Soil Loss Ratio, as reported by NTPEP/AASHTO.

² Bench-scale index values should not be used for design purposes.

c) The bottom layer of erosion control blanket is a naturally seed free Great Lakes Aspen curled wood excelsior with 80% six-inch or greater fiber lengths. It is of consistent thickness with fibers evenly distributed throughout the entire area of the blanket. The top and bottom of each wood excelsior is covered with degradable polypropylene netting. Ensure the bottom layer of erosion control blanket meets the requirements of Table 4:

Table 4 – Bottom Layer of Underlayment (Erosion Control Blanket).

Property	Units	Test Method	Requirement ^(1,2,3)
Thickness	in	ASTM D 6525	0.42
Light Penetration	%	ASTM D 6567	35
Resiliency	%	ASTM D 6524	64
Mass per Unit Area	lb/yd ²	ASTM D 6475	0.6 ⁽¹⁾
MD-Tensile Strength Max.	lb/ft	ASTM D 6818	127.0
TD-Tensile Strength Max.	lb/ft	ASTM D 6818	50.9
MD-Elongation	%	ASTM D 6818	29
TD-Elongation	%	ASTM D 6818	30

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Swell	%	ECTC Procedure	89%
Water Absorption	%	ASTM D 1117 / ECTC	199
Bench-Scale Rain Splash	@ 2 in/hr	ECTC Method 2	SLR = 6.8 ^(2,3)
Bench-Scale Rain Splash	@ 4 in/hr	ECTC Method 2	SLR = 7.2 ^(2,3)
Bench-Scale Rain Splash	@ 6 in/hr	ECTC Method 2	SLR = 7.6 ^(2,3)
Bench-Scale Shear	lb/ft ² @ ½ in of soil loss	ECTC Method 3	2.6 ⁽³⁾
Germination Improvement	%	ECTC Method 4	645

Notes:

¹ Weight is based on a dry fiber weight at time of manufacturing. Baseline moisture content of Great Lakes Aspen excelsior is 22%.

² SLR is the Soil Loss Ratio, as reported by NTPEP/AASHTO.

³ Bench-scale index values should not be used for design purposes.

C. Performance. Provide a Vegetated Concrete Block Mat that meets the requirements of Table 5:

Table 5 – Vegetated Concrete Block Mat Requirements.

Test	Tested Value	Bed Slope	Soil Classification	Limiting Value
ASTM 6460	Shear Stress	30%	Sandy Loam (USDA)	24 lb/ft ²
ASTM 6460	Velocity	20%	Loam (USDA)	30 ft/sec

D. Equipment. Provide the proper equipment to place the mat that will not damage mat material or disturb the topsoil subgrade and seed bed.

E. Construction Requirements. Prior to installing Vegetated Concrete Block Mat, prepare the subgrade as detailed in the plans. All subgrade surfaces to be smooth and free of all rocks, stones, sticks, roots, and other protrusions or debris of any kind that would result in an individual block being raised more than 3/4in above the adjoining blocks. Provide a 4in thick topsoil layer for subgrade material that can sustain growth.

1) Ensure the prepared 4in thick topsoil subgrade provides a smooth, firm, and unyielding foundation for the mats. Grade the subgrade topsoil to conform with the lines, grades, and dimensions shown on the plans. Channels or ditches, grade shape to concentrate flow to middle of mat.

2) Distribute seed and fertilizer on the prepared topsoil subgrade before installation of the concrete mats in accordance with manufacturer specifications. Seed and fertilize according to the specifications in the revegetation special.

3) Install mats to the line and grade shown on the plans and per the manufacturer's guidelines. The manufacturer or authorized representative will provide technical assistance during the slope preparation and installation of the concrete block mats as needed.

4) At the upstream and downstream extent of the mat embed three blocks of the Vegetated Concrete Block mat into the subgrade to serve as an anchor trench.

5) Vertically embed two blocks of Vegetated Concrete Block mat at extents parallel to flow direction.

6) Provide fastening or anchoring as detailed in the plans. Provide "U" anchors that consist of #3 rebar.

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F. Delivery and Storage. Cover the mat or otherwise protect it during long periods of storage to protect against degradation of the backing material as recommended by the manufacturer.

1) Inspect all mats upon delivery. Assure that all units are sound and free of defects that would interfere with the proper placing of the unit or impair the strength or permanence of the construction.

2) Chipping or missing concrete resulting in a weight loss exceeding 15% of the average weight of a concrete unit is grounds for rejection. Replace, repair, or patch the damaged areas per the manufacturer's recommendations.

G. Method of Measurement. The Vegetated Concrete Block Mat will be measured by the square yard, as shown on the plans, complete in place. Anchor trenches and overlaps are not measured for payment.

H. Basis of Payment. Payment at the contract unit price for Vegetated Concrete Block Mat – Square Yard is full compensation for all costs needed to furnish and install the item of work, including topsoil, fertilizer, seed, "U" anchors, overlaps, anchor trenches, vertical embedment areas, and any other required resources.

27. OUTLET APRON

A. Description. Provide optional material to prevent scour and/or erosion at outlet end of culverts.

B. Materials.

1) Ancillary Armor. Furnish Class I Ancillary Armor in accordance with Subsection 701.06.

2) Veg. Conc. Block Mat. Furnish Veg. Conc. Block Mat in accordance with Veg. Conc. Block Mat Special Provision.

3) Other approved materials. Furnish other materials approved by the Project Manager Deemed to be equivalent to Class I Ancillary Armor or Veg. Conc. Block Mat.

C. Construction Requirements.

1) Ancillary Armor. Meet all requirements of Section 613.03.1 for the placement of Ancillary Armor.

2) Veg. Conc. Block Mat. Meet all requirements of Veg. Conc. Block Mat Special Provision for the placement of Veg. Conc. Block Mat.

3) Other materials approved by the Project Manager. Install approved materials.

D. Method of Measurement.

1) Outlet apron associated with culvert outlet protection will be measured by the square yard as shown on the plans, complete in place. The leading and trailing anchor trenches, seam overlaps, geotextile, ancillary armor, topsoil, and seeding will not be measured for payment.

2) Basis of Payment. Payment at the contract unit price is full compensation for all necessary resources to complete the item of work under the contract. Payment for completed and accepted quantities is made under the following:

Pay Item	Pay Unit
Outlet Apron	Square Yard

28. ELECTRONIC TICKETING – PMS [401] (REVISED 4-09-26)

A. Description. This work consists of providing electronic ticketing (E- ticket) for material delivery of plant mix surfacing to the project.

B. Equipment and Programming. Coordinate with the Project Manager and the Haulhub representative to facilitate export of data from the plant's existing scale to the

Department's E-ticketing portal provided by Haulhub. Provide electronic data from the load read-out weigh system to provide information as described in Subsection 401.03.8(B).

The Department's E-ticket portal can be found at the following link:

[MDT E-Ticket Portal](#)

1) Internet Availability. E-ticketing requires internet access. Ensure internet access at the hot plant location.

2) Set-up and Calibration. A minimum of 3 calendar days prior to plant mix paving, set-up and calibrate the interface with the Department's Haulhub portal and provide at least 5 calibration E-tickets for plant mix weights marking each ticket "Test".

3) Upload time. Ensure the upload time to the Department's portal does not exceed 5 minutes from the time the ticket was created.

Representatives from Haulhub will be available virtually to assist in the set-up, calibration, and production throughout the project duration. Contact information for Haulhub can be found at the following link: <https://www.haulhub.com/agency/montana>

For immediate support contact Carlos Osorio at Haulhub; Phone (929) 298-3396; email: carlos.osorio@haulhub.com

Printed tickets will be required along with E-tickets unless otherwise directed by the Project Manager.

All work for programming, training and utilizing E-ticketing is not measured for payment.

4) If the Project Manager determines that best efforts have been made to integrate the current plant technologies available, or technologies for integration do not exist, this special provision may be rescinded, and paper tickets will be required in accordance with Subsection 401.03.13.

29. RIDE SPECIFICATION CATEGORY (SINGLE) [401] (REVISED 03-19-26)

This is a Category I project.

30. TARP LOADS

Tarpping loads may be necessary if damage to the traveling public is caused by trucks hauling uncovered loads.

The cost associated with tarping truck loads will not be paid for separately but considered incidental to other items of the contract.

31. CEMENT TREATED BASE – CURING

A. Description. This work is the process of curing the cement treated base (CTB).

B. Construction. Meet the requirements of Section 304 for placement of the CTB with the following modification to curing requirements. When the CTB is finished to grade, apply the selected curing method from one of the three options:

1) Curing Seal & Blotter: Meet all the requirements of Section 304.03.8 for the placement of curing seal and blotter.

2) Water Cure: \Keep the CTB surface moist (by lightly watering or misting) for a 7-day period following final compaction of the CTB or until the required minimum compressive strength is reached, whichever is greater. Do not let the top surface dry out completely during the curing period.

3) CAC Cure: Keep the CTB surface moist between final compaction and application of a minimum 4-inch thick lift of crushed aggregate course CAC over top of the CTB surface. Do not begin placement of the CAC over the CTB for a minimum of 48 hours after placement and compaction of the CTB. Do not use vibratory compaction equipment on the CAC layer unless minimum compressive strengths have been achieved.

4) Other methods approved by the Project Manager.

C. Method of Measurement and Basis of Payment. Curing of the CTB will not be measured separately for payment. Include all costs associated with this provision in the unit price bid per cubic yard of CTB.

32. VEGETATED CONCRETE BLOCK MAT ALLOWABLE SUBSTITUTION

A. Description. Vegetated Concrete Block Mats (VCBM) are specified for Permanent Erosion & Sediment Control (PESC) measures. Refer to the associated summary frame and details in the plans for locations. Substitution of ancillary armor for VCBM will be allowed where the ditch grade is 25% (4:1) or flatter and outside of the roadside clear zone.

B. Materials.

1) Provide ancillary armor meeting Class 1 requirements.

2) Provide Permanent Erosion Control Geotextile – Class C, High Survivability under all ancillary armor.

C. Construction Requirements.

1) In locations where the ditch grade is 25% (4:1) or flatter and outside of the roadside clear zone, Class 1 ancillary armor is allowed in place of VCBM.

2) The finished surface of the ancillary armor must match the same finished ditch dimensions identified in the plans for the VCM.

3) Excavate as needed to meet the finished surface requirements for the ancillary armor. The minimum depth of Class 1 ancillary armor is 1.5 ft.

4) Place Permanent Erosion Control – Class C Geotextile, High Survivability under the riprap, ensuring all sides are keyed in a minimum 18 inches per the VCBM anchorage details.

5) Leave the ancillary armor exposed, without any filler material, topsoil or seed mixture applied.

6) Overlap Erosion Control Blanket (ECB) to ancillary armor transitions in the same manner as shown on the detail for ECB to ancillary armor transitions in the plans.

D. Method of Measurement and Basis of Payment.

1) All work associated with substitution of the Class 1 ancillary armor for the VCBM will be measured and paid for as Vegetated Concrete Block Mat at the unit price bid per square yard of the finished surface of VCBM (or ancillary armor substitute) as shown on the plans, complete in place. The permanent erosion control geotextile, including the areas needed for the leading and trailing anchor trenches, and seam overlaps will not be measured for payment.

2) Payment at the contract unit price is full compensation for all necessary resources to complete the item of work under the contract. Payment for completed and accepted quantities is made by the Square Yard of Vegetated Concrete Block Mat.

33. REMOVE AND SALVAGE CULVERT

A. Description. Salvage the 95" x 67" x 125.0' corrugated metal pipe arch, at Sta. 2560+37, for the Department. Take care in the removal process to ensure that the pipe can be used in the future. Dispose items that have deteriorated to the point of being unusable. Culvert sections damaged by the contractor are not eligible for payment.

B. Construction Requirements. Follow all structure removal provisions specified in the Standard Specifications. Provide at least 24 hours advance notice of intent to deliver salvaged material. Coordinate salvage and delivery to the Flowing Wells Maintenance yard with the following contact:

Colton Fleming	Flowing Wells Section Person	406-740-1752
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C. Basis of Payment. Include all cost associated with salvaging, stockpiling, and delivering the specified items in the Linear Feet of REMOVE AND SALVAGE CULVERT bid item.

34. CORRUGATED POLYETHYLENE APPROACH PIPE [603] (REVISED 12-12-19)

A. Description. Corrugated polyethylene pipe is an option to RCP, CSP or CAP for approach drainage pipes as indicated in the Approach Pipe Summary.

B. Material. Meet the requirements of Subsection 708.07 of the Standard and Supplemental Specifications for Road and Bridge Construction, and of Type S pipe as defined in Section 4 of AASHTO M294.

C. Construction Requirements. Provide steel Flared End Terminal Sections (FETS) or Road Approach Culvert End Treatment (RACET) in accordance with Detailed Drawing 603-02 and 603-14. Provide hardware for connection of the end section to the polyethylene pipe as approved by the Project Manager.

D. Basis of Payment. Cost of materials, handling, tools, equipment and labor necessary to accomplish the work is included in the contract unit price bid per foot (meter) of drainage pipe.

35. PRECAST REINFORCED BOX CULVERTS [603] (REVISED 1-15-26)

A. Description. Precast reinforced concrete box culvert (RCB) is specified at locations shown on the plans.

B. Materials.

1) RCB. Furnish RCB that meets the requirements HL-93 live loading. RCB must also meet the requirements of ASTM C1577, except the aggregate gradations must meet Subsection 701.01 or a Department approved optimized gradation. Refer to ASTM special design provisions for RCB sizes that are not included in the ASTM table or for any changes in wall thickness. Use AASHTO M 85 Type V cement or an AASHTO M 240 high sulfate resistant blended cement tested in accordance with ASTM C1012 meeting a maximum length change requirement of 0.05% at 6 months or 0.10% at 12 months if the 6-month limit is exceeded.

2) Joint Sealant. Install flexible plastic gaskets between culvert sections meeting the requirements of Subsection 707.02. Provide joint material that is 1.25-inch equivalent diameter (1 inch x 1.23-inch actual dimensions).

3) External Joint wrap. Furnish Type III, chemically bonded adhesive butyl bands for all joints between box sections meeting the requirements of ASTM C877. Use Type A designation with a sealing bandwidth of 12 inches. Apply joint wrap material externally around each joint over semi-liquid paintable butyl rubber-based adhesive primer. Begin each joint wrap at haunch, extend up and over the top of the culvert, and terminate at the other haunch. Extend joint wrap under the haunches as far as possible on each side of the box culvert while maintaining seal with adhesive primer. If two or more pieces are required, lap a minimum of 6 inches. Replace punctured or torn joint wrap damaged by culvert installation at Contractor expense.

4) Bedding material. Use granular bedding material for bedding material. Provide a 12-inch-thick base. Compact granular bedding by proof rolling with vibratory compactor or by using a method approved by the Project Manager.

5) Flared or Tapered End Section. Furnish precast flared or tapered end sections according to the RCB detail.

6) Optional Cutoff Walls. Cast-in-place or precast cutoff walls are acceptable for the ends of RCB.

7) Reinforcing Steel. Use rebar dowels meeting the requirements of AASHTO M 31, Grade 60 (Grade 420).

8) Epoxy Resin Bonding Adhesive. Meet the requirements of AASHTO M 235 Type 4.

C. Construction Requirements.

1) Joint Tolerance. When placing RCB sections in final position, the gaps between sections must not exceed 0.75 inch. Check for misalignment by measuring normal to the walls and slabs. Correct misalignment between sections before adding the next section.

2) Lift Holes. Plug all lift holes and fabrication holes before placing backfill. Use the manufacturer supplied plugs for filling holes in the top slab. Grout all holes in the side and floor slabs.

3) Tie Bolt Holes. Fill the annular area by injecting silicone caulking in tie bolt holes or fill with joint material after installation of the bolt and before placing the washer.

4) Manufacturer's Installation Procedure. Follow the recommended installation procedure provided by the manufacturer. Provide the Project Manager one copy of the recommended procedure ten calendar days before installation.

5) Welding Requirements. Perform all welding on precast member connections in accordance with AWS D1.1 Structural Welding Code.

Alternate Connection – Concrete Edge Protection. Drill holes in RCB end sections at locations shown on the plans. Epoxy bond #6 rebar dowels with 8 inches minimum protrusion. The required depth of embedment is RCB wall thickness minus 2 inches. Minimum distance from edge of RCB to center of hole is 4 inches. Follow adhesive manufacturer's recommendations for hole diameter and other installation requirements.

Precast Concrete Curb Connection. When precast concrete curbs are required at the RCB ends, connect the curbs to the RCB using the precast holes in the curb. Mark the hole locations and drill and epoxy bond #6 x 12-inch rebar dowels into the RCB a depth of 5 inches. Follow manufacturer's recommendations for hole diameter and other installation requirements. Install curb, centering the dowels in the holes and fill the curb holes with non-shrink grout.

Precast Cut-off Wall Connection. If precast cut-off walls are used, connect the RCB end to the cut-off wall using the precast holes provided in the RCB. Drill 1.5-inch diameter x 6 inch holes in the cut-off wall at each location. Clean hole of loose debris, fill hole in cut-off wall with approved non-shrink grout and install #6 x 12-inch-long rebar into the hole keeping the rebar centered. Fill remaining hole in RCB with grout.

Filletts. Reinforce fillets with a minimum of #3 grade 60 rebar at 12-inch centers.

6) Submittals. Submit shop drawings and all supporting hand and computer design calculations for approval prior to fabrication. All design plans and calculations must be signed and sealed by a Professional Engineer registered in the State of Montana. Calculations are to include load rating factors for design vehicle. Calculate rating factors in accordance with the latest version of the AASHTO Manual of Bridge Evaluation. Submit all welding procedure specifications and welder qualification records for approval prior to welding precast connections. Submit epoxy bonding system for approval prior to installation.

D. Method of Measurement. Precast Reinforced Concrete Box Culvert is measured in accordance with Subsection 603.04.

E. Basis of Payment. Include all costs associated with this item, as well as all pumping, bailing, and drainage necessary for foundation preparation, in the unit price bid per foot for Reinforced Concrete Box Culvert.

Payment at the contract unit price is full compensation for all necessary resources to complete the item of work under the contract.

36. TRAFFIC CONTROL PLAN

A. Provide a traffic control plan and written narrative meeting the requirements of the contract and 618. Submit detailed traffic control plans on aerial overlays. Specifically, address any contract-specific sequence of operations.

B. Method of Measurement. Traffic control plans are measured by Lump Sum. All work associated with creating, submitting, correcting, updating and meeting the contract's requirements is considered incidental to the item.

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C. Basis of Payment. Partial payments for the Traffic Control Plan will be based on the lump sum contract price at the rates listed below.

Progress estimate payment	Percent of lump sum item
First partial payment after start of contract work	80
Estimate paying 60% of original contract amount	20

37. FLAGGER – SHIFT

- A. Description: This work is defining, measuring and paying for flaggers by the shift.
- B. Definitions.
- 1) Dayshift – Any shift that begins and primarily occurs between 5:00 a.m. and 7:00 p.m.
- 2) Night Shift – Any shift that begins and primarily occurs between 7:00 p.m. and 5:00 a.m.
- C. Construction. Provide flaggers at the locations shown on the Traffic Control Plan.
- D. Method of Measurement. Flaggers will be measured by the number of authorized flaggers necessary to complete a shift.
- E. Items not authorized for separate payment
- 1) Replacing one flagger with another during a shift.
- 2) Relocating a flagger within the project limits during the same shift.
- 3) Flaggers operating in multiple locations during the same shift.
- 4) Supervisors providing breaks for flaggers
- F. Basis of Payment. Include all costs associated with this provision in the unit price bid per each for Flagger-Shift.

38. PILOT CAR – SHIFT

- A. Description: This work is defining, measuring and paying for pilot cars by the shift.
- B. Definitions.
- 1) Dayshift – Any shift that begins and primarily occurs between 5: a.m. and 7:00 p.m.
- 2) Night Shift – Any shift that begins and primarily occurs between 7:00 p.m. and 5:00 a.m.
- C. Construction. Provide pilot cars at the locations shown on the Traffic Control Plan.
- D. Method of Measurement. Pilot cars will be measured by the number of pilot cars necessary to complete a shift.
- E. Items not authorized for separate payment
- 1) Replacing one pilot car with another during a shift.
- 2) Relocating a pilot car within project limits during the same shift.
- 3) Pilot cars operating in multiple locations during the same shift.
- 4) A supervisor providing breaks for a pilot car.
- F. Basis of Payment. Include all costs associated with this provision in the unit price bid per each for Pilot Car-Shift.

39. RSFO REMOVAL [619] (ADDED 8-06-2026)

Include the cost of removal in the cost to replace the sign face only.

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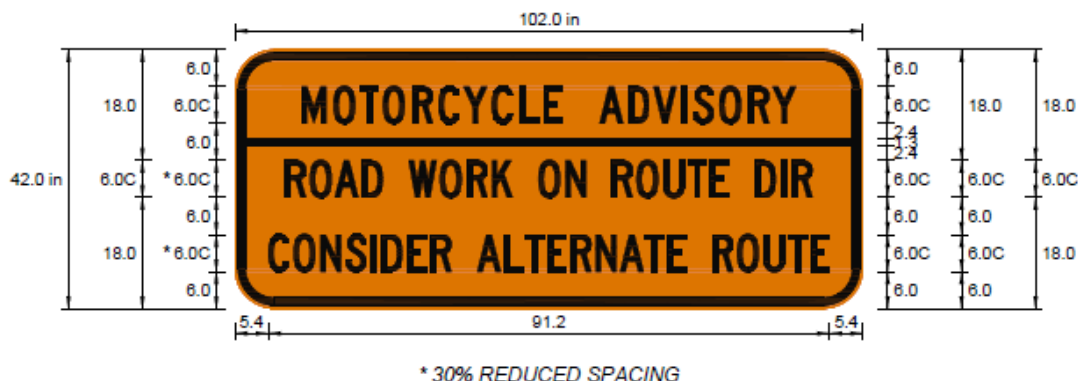
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40. MOTORCYCLE ADVISORY SIGNS [619] (REVISED 9-18-25)

A. Description. This work is the furnishing, installing, maintaining, and removal of motorcycle advisory signs.

B. Materials. Furnish materials meeting the requirements of Subsection 618.02. Furnish ASTM D4956 type VI or higher retro-reflective sheeting.

C. Construction Requirements. Furnish and install the signs shown on the following detail to the required typical cross section and profile grade, meeting Detailed Drawing 618-01, two-post installation, at the locations listed in the contract. The ROUTE will specify the route number, and the DIR will specify the direction of the construction. The sign must meet the height requirements specified on the Detailed Drawing.



For rural intersections install sign(s) on the right shoulder within 1000 feet to 1500 feet in advance of the roadway's intersection. For urban intersections install sign(s) within 200 feet of the roadway's intersection. Adjust sign within the specified distance to prevent obstruction from existing signs.

Install sign(s) no more than 2 calendar days before construction activities begin that change the roadway surface from a paved surface to an unpaved surface. Remove sign(s) within 2 calendar days after the roadway surface has a paved surface.

Coordinate with the Project Manager the date the sign(s) are to be installed, the verification of the sign locations, and the date of removal.

D. Method of Measurement. Motorcycle advisory signs, including all costs associated with labor, materials, tools and equipment required to provide, install and remove are measured by the Each.

E. Basis of Payment. Payment for the completed and accepted quantities is made under the following:

Pay Item	Pay Unit
Motorcycle Advisory Signs	Each

41. SEEDING

A. Description. This work consists of providing the necessary equipment and materials to accomplish revegetation of all areas disturbed by construction activities, and/or as directed by the project manager.

Area Descriptions	
Area 1	Areas with slopes 3:1 and flatter
Area 2	Areas with slopes steeper than 3:1 or inaccessible to drill seed equipment
Area 3	A 15 foot-wide strip adjacent and parallel to the finished pavement, on both sides.

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- B. Materials.
1) Fertilizer.

	Nitrogen lbs per acre	P2O5 lbs per acre
Area 1 & 2	10—15	30—35
Area 3	None	None

- 2) Mulch—Compost.

	Biotic Soil Amendment/Media Rate	Engineered/Bonded Fiber Matrix Rate
Area 1 & 3	None	None
Area 2	2,000 lbs. per acre	3,000 lbs. per acre

- 3) Seed. Furnish the following reclamation seed mixtures. Use substitute species only if the recommended species is not available and substitution is approved by the Department's Reclamation Specialist.

Area 1			Drill Seeding Rate		
Scientific Name	Common Name	Variety	PLS / sq. ft.	% of Mix	Pounds PLS/ acre
<i>Elymus trachycaulus</i>	Slender wheatgrass	Pryor	6	8	2.0
<i>Pascopyrum smithii</i>	Western wheatgrass	Rosana	6	8	3.0
<i>Elymus canadensis</i>	Streambank wheatgrass	Sodar	7	8	2.0
<i>Poa secunda</i>	Canby bluegrass	Canbar	10	13	0.5
<i>Achnatherum hymenoides</i>	Indian ricegrass	Rimrock	13	16	3.0
<i>Nasella viridula</i>	Green needlegrass	Lodorm	13	16	3.0
<i>Schizachyrium scoparium</i>	Little bluestem	Badlands	12	14	2.0
<i>Ratibida columnifera</i>	Prairie coneflower	Stillwater	7	8	0.5
<i>Cleome serrulata</i>	Rocky Mtn beeplant	VNS	4	5	3.0
GRAND TOTAL			81	100	19.0

Area 2 = Area 1	The Broadcast and Hydroseeding rate is 2X drill seeding rate of Area 1.
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Area 3			Drill Seeding Rate		
Scientific Name	Common Name	Variety	PLS / sq. ft.	% of Mix	Pounds PLS/ acre
<i>Elymus trachycaulus</i>	Slender wheatgrass	Pryor	6	5	2.0
<i>Pascopyrum smithii</i>	Western wheatgrass	Rosana	6	5	3.0
<i>Elymus lanceolatus</i>	Streambank wheatgrass	Sodar	7	5	2.0
<i>Achnatherum hymenoides</i>	Indian ricegrass	Rimrock	16	13	3.0
<i>Poa secunda</i>	Canby bluegrass	Canbar	21	16	1.0
<i>Elymus elymoides</i>	Bottlebrush squirreltail	Wapiti	13	10	3.0
<i>Sporobolus cryptandrus</i>	Sand dropseed	VNS	32	26	0.25

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<i>Bouteloua gracilis</i>	Blue grama	Birdseye	19	15	1.0
<i>Ratibida columnifera</i>	Prairie coneflower	Stillwater	7	5	0.5
GRAND TOTAL			127	100	15.75

C. Construction Requirements.

1) Topsoil. Salvage sufficient quantities of topsoil in accordance with Subsection 203.03.6 to place an average 4inch loose depth over all disturbed areas. Place the topsoil in accordance with Subsection 203.03.6 immediately following grading.

2) Seedbed preparation and application.

	Method	Seeding Depth	Season of Seeding
Area 1	Drill Seed	0.25 – 0.5 in	10/1—5/15
Area 2	Dry Broadcast or Hydroseed		10/1—5/15
Area 3	Drill Seed	0.25 – 0.5 in	10/1—5/15

a) Condition, fertilize and drill seed in accordance with Subsection 610.

b) Leave areas to be hydroseeded in a roughened condition, machinery tracks must run horizontal across the slope and parallel to the contour.

c) Rake, harrow or otherwise scarify broadcast seeded areas to incorporate the seed ¼ to ½ inch into the soil.

d) Seeding outside the designated seeding period is allowed only with prior approval from MDT's Reclamation Specialist.

3) Mulch—Compost Requirements.

a) Hydroseed Area 2 slopes with a Biotic Soil Amendment or Biotic Soil Media from the Department's QPL. Within 24 hours of hydroseeding, apply a 100% wood Engineered Fiber Matrix or Bonded Fiber Matrix erosion control mulch.

b) Apply soil amendments, seed and mulch in accordance with manufacturer's recommendations and Subsection 610.03.2.F.

D. Method of Measurement and Basis of Payment.

1) Topsoil Salvaging and Placement is measured and paid in accordance with Subsection 203.04 and 203.05.

2) Revegetation pay items are measured in accordance with Subsection 610.04 Payment for the completed and accepted quantities is made under the following:

Pay Item	Pay Unit
Fertilizing Area No 1	Acre
Fertilizing Area No 2	Acre
Mulch-compost	Acre
Seeding Area No 1	Acre
Seeding Area No 2	Acre
Seeding Area No 3	Acre

END OF SECTION I

MDT NONDISCRIMINATION AND DISABILITY ACCOMMODATION NOTICE

Montana Department of Transportation (“MDT”) is committed to conducting all of its business in an environment free from discrimination, harassment, and retaliation. In accordance with State and Federal law MDT prohibits any and all discrimination and protections are all inclusive (hereafter “protected classes”) by its employees or anyone with whom MDT does business:

Federal protected classes

Race, color, religion, national origin, sex, age, disability, and genetic information.

State protected classes

Race; color; national origin; familial or marital status; pregnancy, childbirth, or medical conditions related to pregnancy or childbirth; creed; social origin or condition; genetic information; sex, sexual orientation, gender identification or expression; ancestry; age; mental or physical disability; political or religious affiliations or ideas; military service or veteran status; vaccination status or possession of immunity passport.

For the duration of this contract/agreement, the PARTY agrees as follows:

(1) Compliance with Regulations: The PARTY (hereinafter includes consultant) will comply with all Acts and Regulations of the United States and the State of Montana relative to Non-Discrimination in Federally and State-assisted programs of the U.S. Department of Transportation and the State of Montana, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

(2) Non-discrimination:

- a. The PARTY, with regard to the work performed by it during the contract, will not discriminate, directly or indirectly, on the grounds of any of the protected classes in the selection and retention of subcontractors, including procurements of materials and leases of equipment, employment, and all other activities being performed under this contract/agreement.
- b. PARTY will provide notice to its employees and the members of the public that it serves that will include the following:
 - i. Statement that PARTY does not discriminate on the grounds of any protected classes.
 - ii. Statement that PARTY will provide employees and members of the public that it serves with reasonable accommodations for any known disability, upon request, pursuant to the Americans with Disabilities Act as Amended (ADA).

- iii. Contact information for PARTY's representative tasked with handling non-discrimination complaints and providing reasonable accommodations under the ADA.
- iv. Information on how to request information in alternative accessible formats.
- c. In accordance with Mont. Code Ann. § 49-3-207, PARTY will include a provision, in all of its hiring/subcontracting notices, that all hiring/subcontracting will be on the basis of merit and qualifications and that PARTY does not discriminate on the grounds of any protected class.

(3) Participation by Disadvantaged Business Enterprises (DBEs):

- a. If the PARTY receives federal financial assistance as part of this contract/agreement, the PARTY must comply with applicable federal and state laws regarding the DBEs, including but not limited to 49 CFR Part 26.
- b. By signing this agreement the PARTY assures that:
The contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.
- c. PARTY must include the above assurance in each contract/agreement the PARTY enters.

(4) Solicitation for Subcontracts, Including Procurement of Materials and Equipment:

In all solicitations, either by competitive bidding, or negotiation, made by the PARTY for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the PARTY of the PARTY's obligation under this contract/agreement and all Acts and Regulations of the United States and the State of Montana related to Non-Discrimination.

(5) Information and Reports: The PARTY will provide all information and reports required by the Acts, Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information and its facilities as may be determined by MDT or relevant US DOT Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the PARTY will so certify to MDT or relevant US DOT Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

(6) Sanctions for Noncompliance: In the event of a PARTY's noncompliance with the Non-discrimination provisions of this contract/agreement, MDT will impose such sanctions as it

or the relevant US DOT Administration may determine to be appropriate, including, but not limited to:

- a. Withholding payments to the PARTY under the contract/agreement until the PARTY complies; and/or
- b. Cancelling, terminating, or suspending the contract/agreement, in whole or in part.

(7) Pertinent Non-Discrimination Authorities:

During the performance of this contract/agreement, the PARTY, for itself, its assignees, and successor in interest, agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Federal

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21;
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601 *et seq.*), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Sections 162 and 301(g) of the Federal-Aid Highway Act of 1973, (Public Law No. 93-87, 87 Stat. 250, codified at 23 U.S.C. § 324), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Section 520 of the Airport and Airways Improvement Act of 1982, (49 U.S.C. § 47123), (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (Public Law No. 100-259), (broadened the scope, coverage, and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients, and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, (42 U.S.C. §§ 12131 through 12189), which prohibits discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and

certain testing entities as implemented by Department of Transportation regulations at 49 CFR parts 37 and 38;

- Title IX of the Education Amendments of 1972, as amended, which prohibits discrimination on the basis of sex in education programs or activities (20 U.S.C. § 1681 *et seq.*).

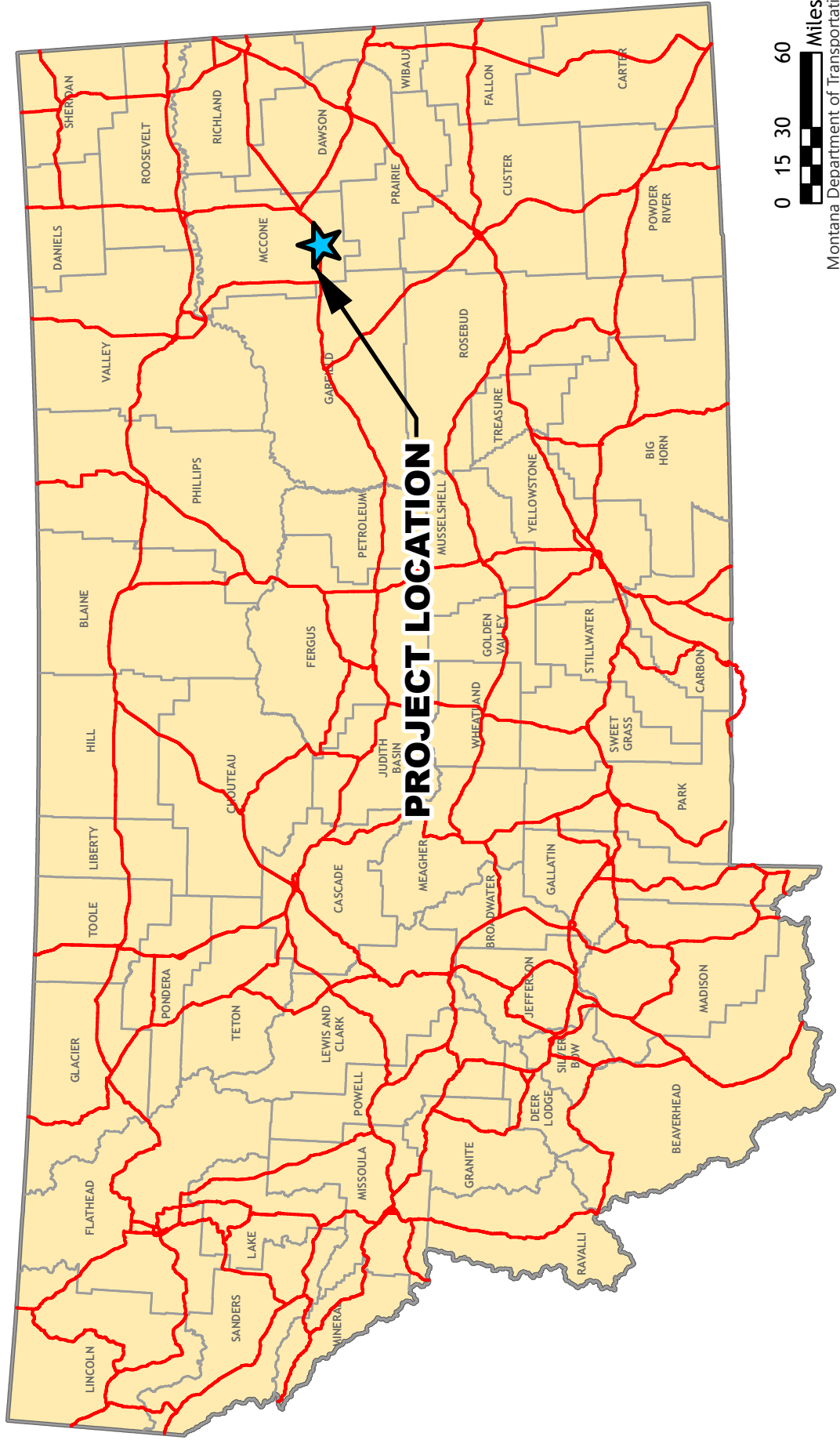
State

- Mont. Code Ann. § 49-3-205 Governmental services;
- Mont. Code Ann. § 49-3-206 Distribution of governmental funds;
- Mont. Code Ann. § 49-3-207 Nondiscrimination provision in all public contracts.

(8) Incorporation of Provisions: The PARTY will include the provisions of paragraphs one through seven in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and/or directives cited therein. The PARTY will take action with respect to any subcontract or procurement as MDT or the relevant US DOT Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the PARTY becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the PARTY may request MDT to enter into any litigation to protect the interests of MDT. In addition, the PARTY may request the United States to enter into the litigation to protect the interests of the United States.

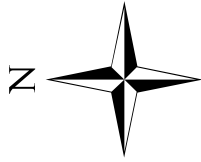


**FEDERAL AID PROJECT SSS-NH 57-6(24)260
RECONSTRUCTION
BROCKWAY - WEST
CONTROL NUMBER 9728000
PROJECT LOCATION STATE MAP - MONTANA**

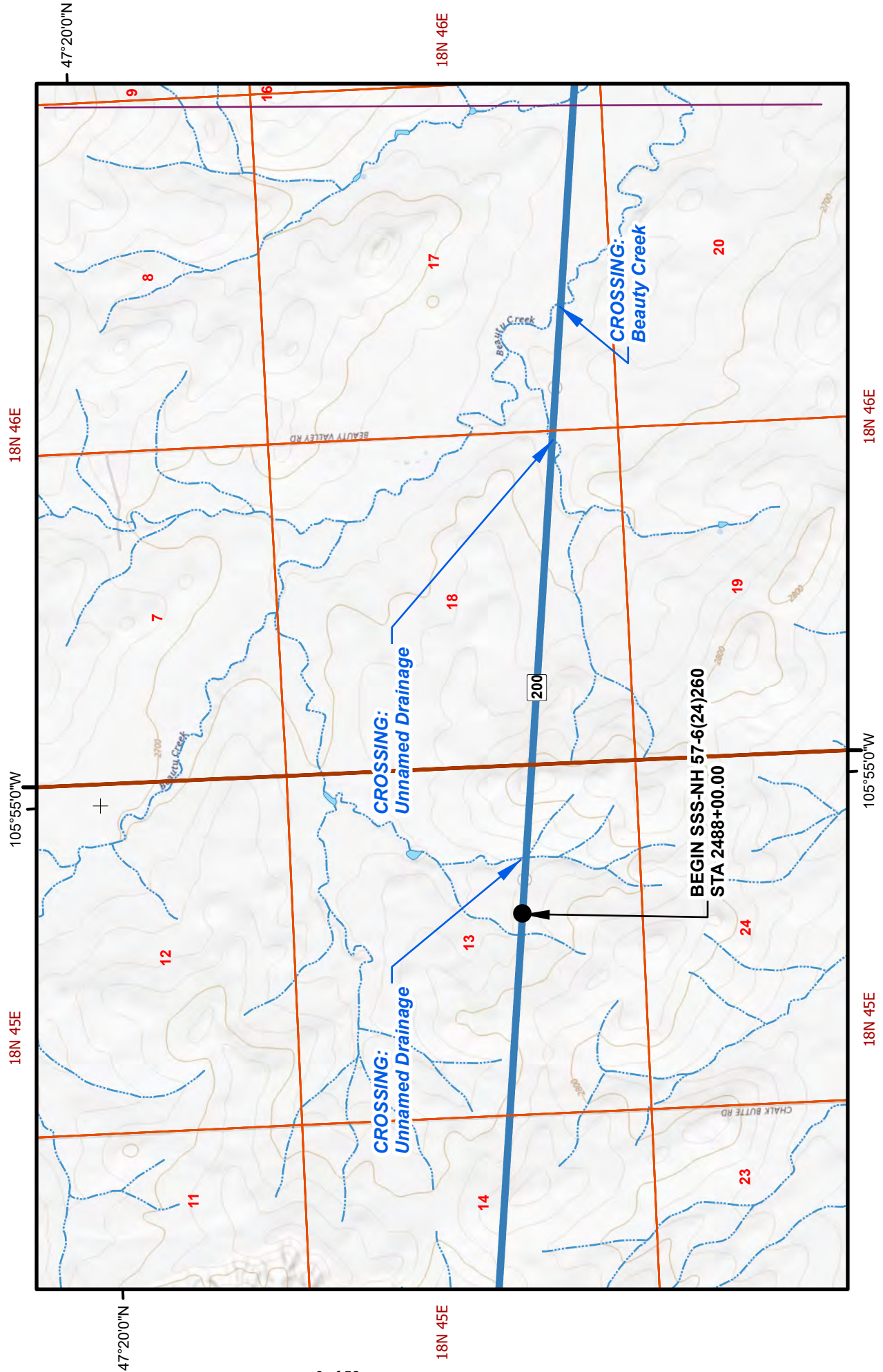


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Montana Department of Transportation

FEDERAL AID PROJECT SSS-NH 57-6(24)260
RECONSTRUCTION
BROCKWAY - WEST
CONTROL NUMBER 9728000
PROJECT LOCATION QUAD MAP - MCCONE COUNTY 1 OF 3



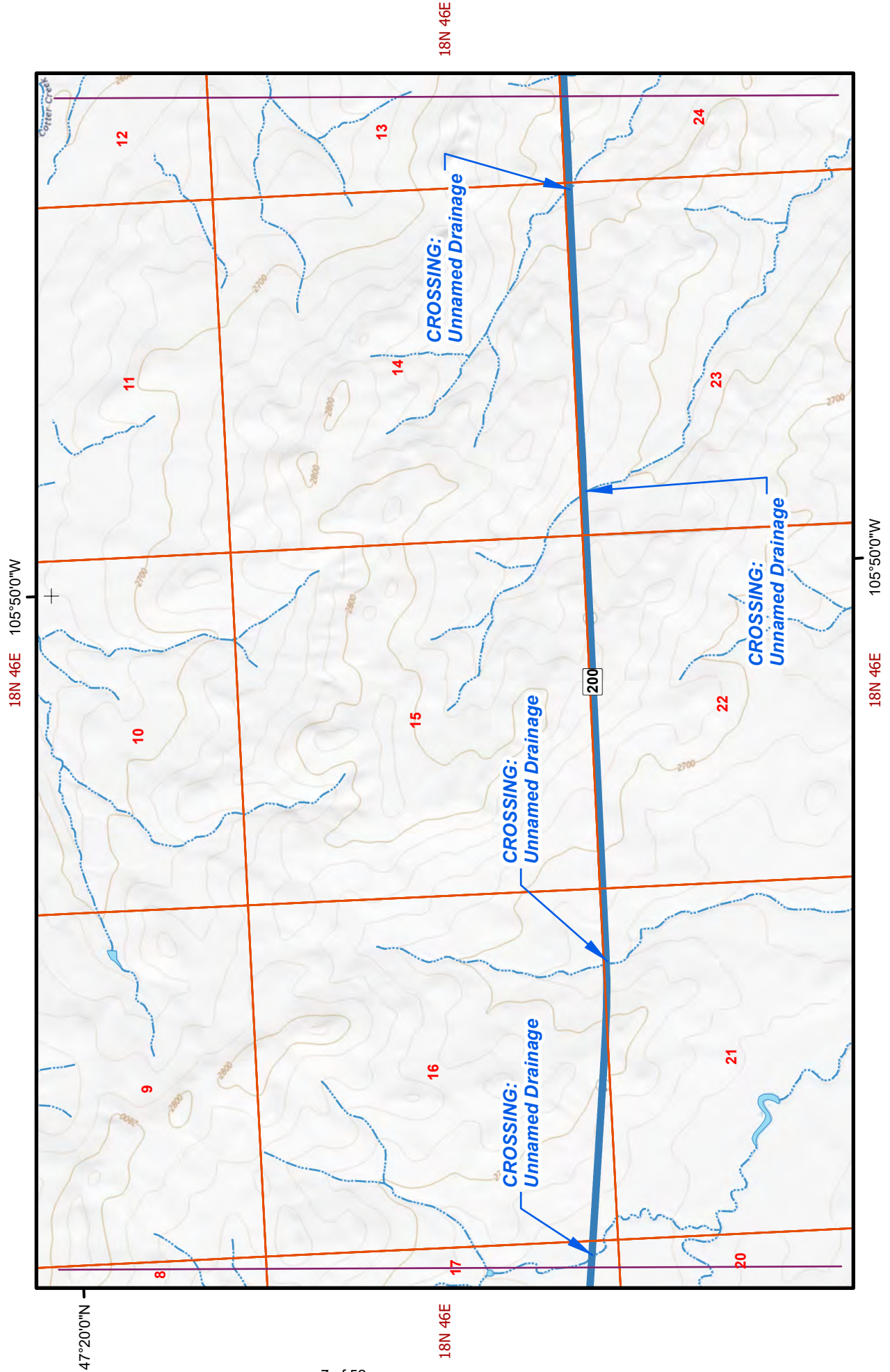
SECTION II



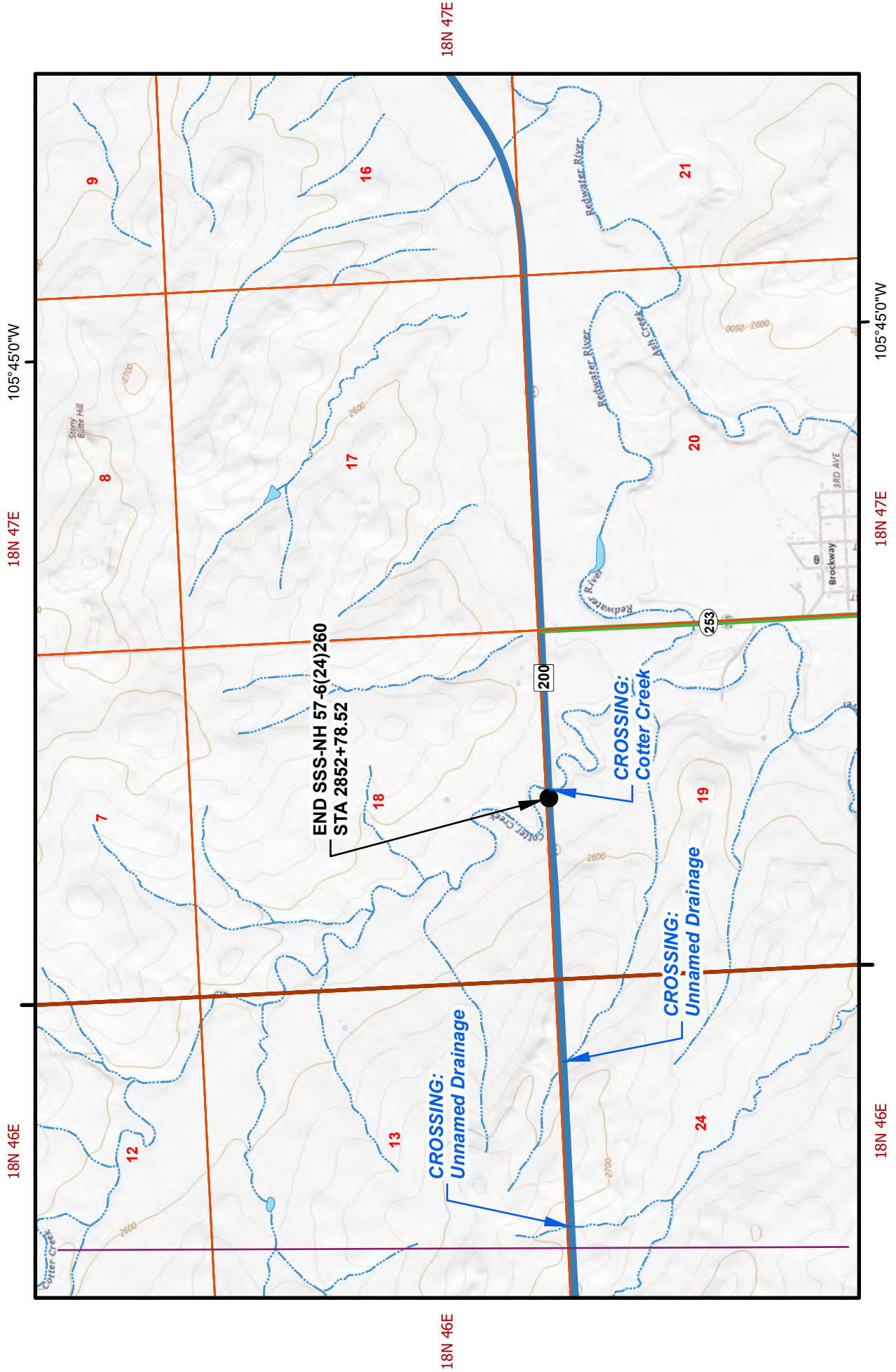
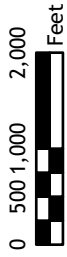
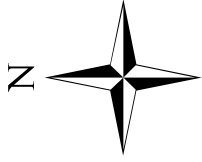
FEDERAL AID PROJECT SSS-NH 57-6(24)260
RECONSTRUCTION
BROCKWAY - WEST
CONTROL NUMBER 9728000
PROJECT LOCATION QUAD MAP - MCCONE COUNTY 2 OF 3



SECTION II



FEDERAL AID PROJECT SSS-NH 57-6(24)260
RECONSTRUCTION
BROCKWAY - WEST
CONTROL NUMBER 9728000
PROJECT LOCATION QUAD MAP - MCCONE COUNTY 3 OF 3



MDT Boring Log Descriptive Terminology

Key to Soil Symbols and Terms

01/18/12



SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL
			GRAPH	LETTER	DESCRIPTIONS
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	Well-graded gravels, gravel sand mixtures, little or no fines.
				GP	Poorly graded gravels, gravel-sand mixtures, little or no fines.
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	Silty gravels, gravel-sand-silt mixtures.
	SAND AND SANDY SOILS			GC	Clayey gravels, gravel-sand-clay mixtures,
		CLEAN SANDS (LITTLE OR NO FINES)		SW	Well-graded sands, gravelly sands, little or no fines.
				SP	Poorly graded sands, gravelly sands, little or no fines.
MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	Silty sands, sand-silt mixtures.
				SC	Clayey sands, sand-clay mixtures.
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
				CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
				OL	Organic silts and organic silty clays of low plasticity.
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
				CH	Inorganic clays of high plasticity, fat clays.
				OH	Organic clays of medium to high plasticity, organic silts.
HIGHLY ORGANIC SOILS				PT	Peat and other highly organic soils.

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

Notes

See Soil Boring Information Special Provision.

SPT (Standard Penetration Test-ASTM D1586):

The number of blows of a 140 lb (63.6 kg) hammer

falling 2.5 ft (750 mm) used to drive a 2 in (50 mm)

O.D. Split Spoon sampler for a total of 1.5 ft (0.45 m) of penetration.

Written as follows:

first 0.5 ft (0.15 m) - second 0.5 ft (0.15 m) - third 0.5 ft (0.15 m)

(ex: 1-3-9)

Note: if the number of blows exceeds 50 before 0.5 ft (0.15 m) of penetration is achieved, the actual penetration rounded to the nearest 0.1 ft (0.03 m) follows the number of blows in parentheses (ex: 12-24-50 (0.09 m), 34-50 (0.4 ft), or 100 (0.3 ft)). WR denotes a zero blow count with the weight of the rods only.

WH denotes a zero blow count with the weight of the rods plus the weight of the hammer.

MC=Moisture Content, LL=Liquid limit, PL=Plastic Limit

-200%=percent soil passing 200 sieve, DD=Dry Density

Soil Classifications are Based on the Unified Soil Classification System, ASTM D2487 and D2488. Also included are the AASHTO group classifications (M145). Descriptions are based on visual observation, except where they have been modified to reflect results of laboratory tests as deemed appropriate.

Example soil description: Sandy FAT CLAY (CH), soft, wet, brown. (A-7)

Order of Descriptors

- Group Name
- Consistency or Relative Density
- Moisture Condition
- Color
- Particle size descriptor(s) (coarse grained soils only)
- Angularity of coarse grained soils
- Other relevant notes

Criteria For Descriptors Consistency of Fine Grained Soils

Consistency	N-Value (uncorrected)
Very Soft	< 2
Soft	2 - 4
Medium Stiff	5 - 8
Stiff	9 - 15
Very Stiff	16 - 30
Hard	> 30

Apparent Density of Coarse Grained Soils

Relative Density	N-Value (uncorrected)
Very Loose	< 4
Loose	4 - 10
Medium Dense	11 - 30
Dense	31 - 50
Very Dense	> 50

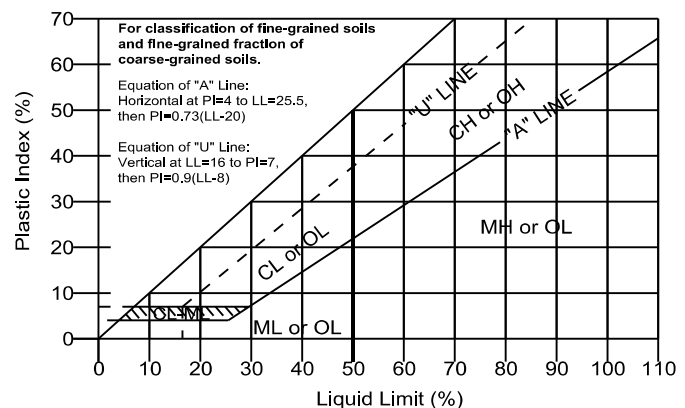
Moisture Condition

- | | |
|-------|--|
| Dry | -Absence of moisture, dusty, dry to the touch. |
| Moist | -Damp, but no visible water. |
| Wet | -Visible free water. |

Definition of Particle Size Ranges

Soil Component	Size Range
Boulder	> 12 in (300 mm)
Cobble	3 in (75 mm) - 12 in (300 mm)
Gravel	No. 4 Sieve (4.75 mm) to 3 in (75 mm)
Sand	No. 200 (0.075 mm) to No. 4 Sieves (4.75 mm)
Silt	< No. 200 Sieve (0.075 mm)*
Clay	< No. 200 Sieve (0.075 mm)*

*Atterberg limits and chart below to differentiate between silt and clay.



Angularity of Coarse-Grained Particles

- | | |
|------------|--|
| Angular | -Particles have sharp edges and relative plane sides with unpolished surfaces. |
| Subangular | -Particles are similar to angular description, but have rounded edges. |
| Subrounded | -Particles have nearly plane sides, but have no edges. |
| Rounded | -Particles have smoothly curved sides and well-rounded corners and edges. |

MDT Boring Log Descriptive Terminology

Key to Rock Symbols and Terms

01/18/12



Rock Type	Symbol	Rock Type	Symbol	Rock Type	Symbol
Argillite		Dolomite		Quartzite	
Basalt		Gneiss		Rhyolite	
Bedrock (other)		Granitic		Sandstone	
Breccia		Limestone		Schist	
Claystone		Siltstone		Shale	
		Conglomerate			

Order of Descriptors

- Rock Type
- Color
- Grain size (if applicable)
- Stratification/Foliation (as applicable)
- Field Hardness
- Other relevant notes

Criteria For Descriptors

Grain Size

Description	Characteristic
Coarse Grained	-Individual grains can be easily distinguished by eye
Fine Grained	-Individual grains can be distinguished with difficulty

Stratum Thickness

Thickly Bedded	3-10 ft (1-3 m)
Medium Bedded	1-3 ft (300 mm - 1 m)
Thinly Bedded	2-12 in (50-300 mm)
Very Thinly Bedded	< 2 in (50 mm)

Rock Field Hardness

Very Soft	-Can be carved with knife. Can be excavated readily with point of rock hammer. Can be scratched readily by fingernail.
Soft	-Can be grooved or gouged readily by knife or point of rock hammer. Can be excavated in fragments from chips to several inches in size by moderate blows of the point of a rock hammer.
Medium	-Can be grooved or gouged 0.05 in (2 mm) deep by firm pressure of knife or rock hammer point. Can be excavated in small chips to pieces about 1 in (25 mm) maximum size by hard blows of the point of a rock hammer.
Moderately hard	-Can be scratched with knife or pick. Gouges or grooves to 0.25 in (6 mm) can be excavated by hard blow of rock hammer. Hand specimen can be detached by moderate blows.
Hard	-Can be scratched with knife or pick only with difficulty. Hard hammer blows required to detach hand specimen.
Very Hard	-Cannot be scratched with knife or sharp rock hammer point. Breaking of hand specimens requires several hard blows of a rock hammer.

Notes:

UCS = Unconfined Compressive Strength obtained from laboratory testing at the given depth.

See Soil Boring Information Special Provision.

Miscellaneous Soil/Rock Symbols and Terms

	Concrete
	Asphalt
	Water
	Boulders and Cobbles
	Coal
	Fill
	Millings
	Topsoil

Explanation of Text Fields in Boring Logs:

Material Description: Lithologic Description of soil or rock encountered.

Remarks: Comments on drilling, including method, bit type, and problems encountered. Unless stated on logs as being surveyed by district survey, all locations are considered approximate.

General Notes

- Descriptions on these boring logs apply only at the specific boring, and at the time the borings were made. These logs are not warranted to be representative of subsurface conditions at other locations or times.
- Water level observations apply only at the specific boring, and at the time the borings were made. Due to the variability of groundwater measurements given the type of drilling used, and the stratification of the soil in the boring, these logs are not warranted to be representative of groundwater conditions at other locations or times.
- Other terms may be used as descriptors, as defined by the profession.

-Soil and Rock descriptions are based on visual observation, except where they have been modified to reflect results of laboratory tests as deemed appropriate.

Operation Types:

	Auger
	Casing Advancer
	Core Barrel
	Drive Casing

Sample Types:

	Split Spoon
	Shelby
	Bulk Sample
	Grab Sample
	Cone Penetrometer
	Vane Shear
	Special Samplers
	Testpit

Example Rock Log

SANDSTONE, gray, fine grained, thickly bedded, hard field hardness.



LOG OF BORING

Boring 9728000-1

Sheet 1 of 3

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137782.6 ft		Station: 2508 + 77	
Project Number: NH 57-6(23)260				UPN: 9728000		Hammer: Auto		Coordinates E: 2856680.5 ft	
Date Started: 3/22/22				Date Finished: 3/22/22		Boring Diameter: 8"		System: MT S.P. (E)	
Drilling Fluid: None				Location Source: Surveyed		Datum: NAD83		Ground Elevation: 2836.2 ft	
Driller: Helgerson				Notes: Proposed Cut				PLS TRS-QQ: 18N 45E 13 - DA	
Logger: Kettner								Abandonment: Cuttings	

Depth (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5			100		18 - 32 - 50/0.3ft		Silty SAND with gravel (SM), dry to moist, gray, fine grained, [A-4]. Gravel consists of predominantly sandstone clasts.	1.5							Hollow stem augers with finger bit.
2831.2			100		17 - 25 - 32		Silty SANDSTONE, gray, fine grained, very soft field hardness. Poorly cemented.	2834.7	10						
10			100		9 - 17 - 21		Sandy SILTSTONE, gray to tan, very soft to soft field hardness. Occasional iron oxide staining. Poorly lithified.	7.0	7						
2826.2			100		8 - 14 - 16			2829.2	7						
15			100		3 - 7 - 12		SILTSTONE, gray to tan, very soft to soft field hardness. Interbedded with claystone. Occasional iron oxide staining. Poorly lithified.	12.0	18						
2821.2			100		8 - 14 - 25			2824.2	15						
20			100		11 - 23 - 39		SILTSTONE, gray to tan, very soft to soft field hardness. Occasional iron oxide staining. Poorly lithified.	20.2	17						
2816.2								23.0							
25			100		17 - 19 - 28		CLAYSTONE, gray, very soft to soft field hardness. Occasional coal fragments.	2813.2	18						
2811.2							Sandy SILTSTONE, gray to tan, very soft to soft field hardness. Poorly lithified.	26.8							
30								2809.4							
2806.2															

Water Level Observations		☐ During Drilling: Not Encountered ☐ After Drilling: Not Encountered +0.25 hrs. Augers Out	Remarks: Boring caved to 48.9' after augers removed.
End of Drilling: Not Encountered. Augers In			

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-1

Sheet 2 of 3

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137782.6 ft		Station: 2508 + 77	
Project Number: NH 57-6(23)260				UPN: 9728000		Hammer: Auto		Coordinates E: 2856680.5 ft	
Date Started: 3/22/22				Date Finished: 3/22/22		Boring Diameter: 8"		System: MT S.P. (E)	
Drilling Fluid: None				Location Source: Surveyed		Datum: NAD83		Ground Elevation: 2836.2 ft	
Driller: Helgerson				Notes: Proposed Cut				PLS TRS-QQ: 18N 45E 13 - DA	
Logger: Kettner								Abandonment: Cuttings	

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
35 2801.2			100		12 - 20 - 21			32.7 2803.5	20						
40 2796.2			100		13 - 24 - 38		Shaley CLAYSTONE, dark gray, very soft to soft field hardness.	19							
45 2791.2			100		10 - 22 - 34			17							
50 2786.2			100		11 - 31 - 50/0.4ft		Sandy SILTSTONE, gray, very soft to soft field hardness. Poorly lithified.	13							
55 2781.2			100		21 - 46 - 50/0.4ft		Silty SANDSTONE, gray, fine grained, very soft field hardness. Poorly cemented.	4							
60 2776.2			100		17 - 34 - 50/0.4ft		Sandy siltstone interbeds in 55-56.4' sample.	12							

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ

Water Level Observations		☐ During Drilling: Not Encountered ☐ After Drilling: Not Encountered +0.25 hrs. Augers Out	Remarks: Boring caved to 48.9' after augers removed.
☐ End of Drilling: Not Encountered, Augers In			



LOG OF BORING

Boring 9728000-1

Sheet 3 of 3

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137782.6 ft				Station: 2508 + 77			
				Hammer: Auto		Coordinates E: 2856680.5 ft				Offset: 48 ft R			
Project Number: NH 57-6(23)260				UPN: 9728000		Boring Diameter: 8"				System: MT S.P. (E)			
Date Started: 3/22/22				Date Finished: 3/22/22		Drilling Fluid: None				Datum: NAD83			
Date Started: 3/22/22				Date Finished: 3/22/22		Drilling Fluid: None				Location Source: Surveyed			
Driller: Helgerson				Notes: Proposed Cut				PLS TRS-QQ: 18N 45E 13 - DA					
Logger: Kettner								Abandonment: Cuttings					

Depth (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
65		X	100		24 - 48 - 50/0.4ft				3						
2771.2			100		22 - 46 - 50/0.4ft				8						
								66.4							

Boring Depth: 66.4 ft, Elevation: 2769.8 ft

Water Level Observations		☐ During Drilling: Not Encountered ☐ After Drilling: Not Encountered +0.25 hrs. Augers Out	Remarks: Boring caved to 48.9' after augers removed.
☐ End of Drilling: Not Encountered. Augers In			

(2) MDT LOG OF BORING - MDT_2016+WELL_V1.GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-2

Sheet 1 of 1

Project: Brockway-West		Rig: CME 1050	Boring Location N: 1137669.7 ft	Station: 2534 + 56
Project Number: NH 57-6(23)260		Hammer: Auto	Coordinates E: 2859257.3 ft	Offset: 0 ft L
UPN: 9728000		Boring Diameter: 8"	System: MT S.P. (E)	Ground Elevation: 2702.6 ft
Date Started: 3/23/22	Date Finished: 3/23/22	Drilling Fluid: None	Datum: NAD83	Elevation Source: Surveyed
Driller: Helgerson		Notes: Beauty Creek Tributary. 36" CMP Existing		PLS TRS-QQ: 18N 46E 18 - CD
Logger: Kettner		Abandonment: Cuttings + Bentonite		

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5 2697.6			75		1 - 3 - 4		Lean CLAY (CL), medium stiff, dry to moist, gray to tan, [A-6]. Occasional organics.	18							Hollow stem augers with finger bit.
			75					17				97			
10 2692.6			75		2 - 3 - 4		CLAYSTONE, gray, very soft to soft field hardness. Occasional iron oxide staining, occasional siltstone seams, occasional evaporite crystals.	7.0 2695.6							
			100		2 - 6 - 10			25							
			100		4 - 7 - 14			19							
15 2687.6			100		7 - 17 - 26			17							
								16							
Boring Depth: 16.5 ft, Elevation: 2686.1 ft								16.5 2686.1							

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ

Water Level Observations		During Drilling: Not Encountered	Remarks: Boring caved to 14.2' after augers removed.
End of Drilling: Not Encountered, Augers In	After Drilling: Not Encountered +0.25 hrs. Augers Out		



LOG OF BORING

Boring 9728000-3

Sheet 1 of 1

Project: Brockway-West		Rig: CME 1050	Boring Location N: 1137480 ft	Station: 2560 + 39
Project Number: NH 57-6(23)260		Hammer: Auto	Coordinates E: 2861834.1 ft	Offset: 29 ft R
UPN: 9728000		Boring Diameter: 8"	System: MT S.P. (E)	Ground Elevation: 2665.9 ft
Date Started: 3/29/22	Date Finished: 3/29/22	Drilling Fluid: None	Datum: NAD83	Elevation Source: Surveyed
Driller: Helgerson		Notes: Beauty Creek Tributary. 7.9'x5.6' CMPA Existing		PLS TRS-QQ: 18N 46E 17 - CC
Logger: Kettner		Abandonment: Cuttings + Bentonite		

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5 2660.9			75		2 - 2 - 2		Lean CLAY (CL), soft, dry to moist, tan, [A-4]. Trace sand. Occasional silt layers/seams.								Hollow stem augers with finger bit.
			100		WH - 1 - 1										
			100				Lean CLAY with sand (CL), moist, tan to brown, fine to coarse grained, angular to subrounded, [A-4]. Interlayered with sandy silt. Trace gravel.	7.0 2658.9							
10 2655.9			100		4 - 7 - 8		Silty SANDSTONE, gray, fine grained, very soft field hardness. poorly cemented.	9.5 2656.4							
			100		9 - 14 - 18										
15 2650.9			100		10 - 16 - 24										
Boring Depth: 16.5 ft, Elevation: 2649.4 ft								16.5 2649.4							

(2) MDT LOG OF BORING - MDT, 2016+ WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ

Water Level Observations		During Drilling: 8.0 ft (2657.9 ft) After Drilling: 7.8 ft (2658.1 ft) +0.5 hrs. Augers Out	Remarks: Boring caved to 11.3' after augers removed.
End of Drilling: 8.0 ft (2657.9 ft) +0.25 hrs. Augers In			



LOG OF BORING

Boring 9728000-4

Sheet 1 of 1

Project: Brockway-West		Rig: CME 1050	Boring Location N: 1137385.4 ft	Station: 2579 + 87
Project Number: NH 57-6(23)260		Hammer: Auto	Coordinates E: 2863780 ft	Offset: 47 ft R
UPN: 9728000	Boring Diameter: 8"	System: MT S.P. (E)	Ground Elevation: 2650.3 ft	
Date Started: 6/26/24	Date Finished: 6/26/24	Drilling Fluid: None	Datum: NAD83	Elevation Source: Surveyed
Driller: C. Higdon		Notes: Beauty Creek. 72" CMP's (2) & 48" CMP's (2) Existing		PLS TRS-QQ: 18N 46E 17 - CD
Logger: Jaynes		Abandonment: Cuttings		

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5 2645.3			46		2 - 4 - 2		TOPSOIL, Sandy SILT (ML), loose, dry to moist, light brown to tan, [A-4]. Frequent fine roots and fine to coarse grained, subrounded to subangular gravel clasts.	1.0 2649.3	7						Hollow stem augers with bullet bit.
			80		1 - 2 - 1		Sandy SILT (ML), loose, moist, light brown to tan, [A-4].	2.7 2647.6	11						
							Sandy Lean CLAY (CL), soft, moist to wet, light brown, [A-4].	3.8 2646.5	23						
			100				Silty CLAY with sand (CL-ML), very soft to soft, wet, grayish brown, [A-4]. Transitions to brownish gray with depth		27	25	18	72			
			100		WH - WH - WH				28						
10 2640.3			0		WH - 1 - 3										
			89				Silty SAND (SM), medium dense, wet, grayish brown, fine to coarse grained, subangular to subrounded, [A-2/4]. Some fine-grained sedimentary gravel. Trace iron oxide staining.	13.0 2637.3	19		NP	47			
			100		9 - 12 - 9		CLAYSTONE, light gray, very soft field hardness. Frequent iron oxide staining. Transitions to dark gray to black at 20.2'.	16.2 2634.1	17		NP	29			
20 2630.3			100		2 - 6 - 7		COAL, black.	20.4 2629.9	37						
							CLAYSTONE, light gray, very soft field hardness. Frequent iron oxide staining.	23.0 2627.3							
25 2625.3			100		34 - 50/0.2ft		COAL, black.	24.0 2626.3	23						
								25.7 2624.6	60						

Boring Depth: 25.7 ft, Elevation: 2624.6 ft

(2) MDT LOG OF BORING - MDT, 2016+WELL V1.GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ

Water Level Observations		During Drilling: 3.3 ft (2647.0 ft) After Drilling: 4.7 ft (2645.6 ft) +0.25 hrs. Augers Out	Remarks: Boring cave-in depth not measured.
End of Drilling: 18.9 ft (2631.4 ft), Augers In			



LOG OF BORING

Boring 9728000-5

Sheet 1 of 2

Project: Brockway-West		Rig: CME 1050	Boring Location N: 1137459.5 ft	Station: 2580 + 43
Project Number: NH 57-6(23)260		Hammer: Auto	Coordinates E: 2863838.7 ft	Offset: 29 ft L
UPN: 9728000	Boring Diameter: 8"	System: MT S.P. (E)	Ground Elevation: 2649.8 ft	
Date Started: 3/29/22	Date Finished: 3/29/22	Drilling Fluid: None	Datum: NAD83	Elevation Source: Surveyed
Driller: Helgerson		Notes: Beauty Creek. 72" CMP's (2) & 48" CMP's (2) Existing		PLS TRS-QQ: 18N 46E 17 - CD
Logger: Kettner		Abandonment: Cuttings + Bentonite		

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5 2644.8			75		WH - WH - WH		Lean CLAY with sand (CL), very soft, moist, gray, [A-4]. Occasional organics.								Hollow stem augers with finger bit.
								4.6 2645.2	25						
			100				Sandy Lean CLAY (CL), very soft, moist, gray to tan, [A-4]. Occasional sandy silt layer/seams.		19						
								8.0 2641.8	22						
10 2639.8			100		WH - WH - 4		Sandy SILT (ML), very loose to medium dense, moist, tan to gray, [A-4]. Occasional lean clay seams.		16		NP	60			
			100		4 - 9 - 10				12						
15 2634.8			100		4 - 6 - 6				14						
20 2629.8			0		WH - WH - WH										
25 2624.8			100		1 - 4 - 4		COAL.	24.5 2625.3	22						
							CLAYSTONE, gray, very soft to soft field hardness.	24.7 2625.1							
30 2619.8			100		3 - 7 - 17				22						

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ

Water Level Observations		During Drilling: 10.4 ft (2639.4 ft)	Remarks: Boring caved to 29' after augers removed.
End of Drilling: 3.3 ft (2646.5 ft), Augers In	After Drilling: 3.7 ft (2646.1 ft) +0.5 hrs. Augers Out		



LOG OF BORING

Boring 9728000-5

Sheet 2 of 2

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137459.5 ft		Station: 2580 + 43	
Project Number: NH 57-6(23)260				UPN: 9728000		Hammer: Auto		Coordinates E: 2863838.7 ft	
Date Started: 3/29/22				Date Finished: 3/29/22		Boring Diameter: 8"		System: MT S.P. (E)	
Drilling Fluid: None				Location Source: Surveyed		Datum: NAD83		Ground Elevation: 2649.8 ft	
Driller: Helgerson				Notes: Beauty Creek. 72" CMP's (2) & 48" CMP's (2) Existing				PLS TRS-QQ: 18N 46E 17 - CD	
Logger: Kettner								Abandonment: Cuttings + Bentonite	

Depth (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
31.0 2618.8							SILTSTONE, gray, very soft to soft field hardness. Poorly lithified.								
35 2614.8			100		7 - 9 - 17				22						
Boring Depth: 35.5 ft, Elevation: 2614.3 ft															

Water Level Observations		During Drilling: 10.4 ft (2639.4 ft) After Drilling: 3.7 ft (2646.1 ft) +0.5 hrs. Augers Out	Remarks: Boring caved to 29' after augers removed.
End of Drilling: 3.3 ft (2646.5 ft), Augers In			

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-6

Sheet 1 of 1

Project: Brockway-West		Rig: CME 1050	Boring Location N: 1137356.5 ft	Station: 2596 + 06
Project Number: NH 57-6(23)260		Hammer: Auto	Coordinates E: 2865399.1 ft	Offset: 1 ft L
UPN: 9728000		Boring Diameter: 8"	System: MT S.P. (E)	Ground Elevation: 2648.5 ft
Date Started: 6/13/24	Date Finished: 6/13/24	Drilling Fluid: None	Datum: NAD83	Elevation Source: Surveyed
Driller: C. Higdon		Notes: Proposed Fill		PLS TRS-QQ: 18N 46E 17 - DC
Logger: Jaynes				Abandonment: Cuttings

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5 2643.5			60		2 - 4 - 2		TOPSOIL, Lean CLAY (CL), soft, moist, light brown, [A-6]. Frequent fine roots.	0.4 2648.1	10						Hollow stem augers with bullet bit.
			72		1 - 2 - 3		Lean CLAY (CL), very soft to medium stiff, moist, brown, [A-6].		25	37	22	99			
			100						24	30	19	95			
			100		WH - WH - WH		Grayish brown, very soft and wet at 7'.		28						
10 2638.5			80		1 - 1 - 2		Silty GRAVEL with sand (GM), very loose, wet, grayish brown, fine to coarse grained, subangular to subrounded, [A-2]. Frequent iron oxide staining.	10.2 2638.3 10.7 2637.8	20 15 37						
			100		2 - 4 - 4		CLAYSTONE, grayish brown, very soft field hardness. Frequent iron oxide staining and thin (<0.3') coal layers.		30						
15 2633.5			100		4 - 10 - 9		Light gray with occasional iron oxide staining at 12.5', decreasing with depth.	16.5 2632.0	22						
Boring Depth: 16.5 ft, Elevation: 2632.0 ft															

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ

Water Level Observations	During Drilling: 7.0 ft (2641.5 ft)	Remarks: Boring caved to 13.9' after augers removed.
End of Drilling: 13.9 ft (2634.6 ft). Augers In	After Drilling: 13.0 ft (2635.5 ft) +0.25 hrs. Augers Out	



LOG OF BORING

Boring 9728000-7

Sheet 1 of 1

Project: Brockway-West		Rig: CME 1050	Boring Location N: 1137262.2 ft	Station: 2611 + 26
Project Number: NH 57-6(23)260		Hammer: Auto	Coordinates E: 2866916.4 ft	Offset: 1 ft L
UPN: 9728000		Boring Diameter: 8"	System: MT S.P. (E)	Ground Elevation: 2651.7 ft
Date Started: 3/23/22	Date Finished: 3/23/22	Drilling Fluid: None	Datum: NAD83	Elevation Source: Surveyed
Driller: Helgerson		Notes: Beauty Creek Tributary. 48" CMP Existing		PLS TRS-QQ: 18N 46E 17 - DD
Logger: Kettner		Abandonment: Cuttings + Bentonite		

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5 2646.7			100		WH - 2 - 4		SILT (ML), very loose to loose, dry to moist, tan to brown, [A-4]. Trace fine sand. Occasional evaporites and organics. Interlayered with lean clay.	13				NP	86		Hollow stem augers with finger bit.
			100		4 - 4 - 4			9							
			100		2 - 2 - 3			16							
10 2641.7			100		WH - WH - WH			22							
			100				Poorly-Graded SAND with clay and gravel (SP), medium dense, wet, tan to gray, fine to coarse grained, angular to rounded, [A-4].	11.5 2640.2	24	34	23	96			
15 2636.7			100		4 - 5 - 7			18							
							Poorly-Graded SAND with silt and gravel (SP), medium dense, wet, tan to gray, fine to coarse grained, angular to rounded, [A-4].	17.0 2634.7							
20 2631.7			50		5 - 9 - 6			12							
							Silty SANDSTONE, gray, fine grained, very soft field hardness. Poorly cemented.	22.0 2629.7							
25 2626.7			100		10 - 18 - 20			22							
Boring Depth: 25.5 ft, Elevation: 2626.2 ft								25.5 2626.2							

(2) MDT LOG OF BORING - MDT, 2016+WELL V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ

Water Level Observations		During Drilling: 13.2 ft (2638.5 ft)	Remarks: Water level not measured at End of Drilling. / Boring caved to 20.3' after augers removed.
End of Drilling:		After Drilling: 13.9 ft (2637.8 ft) +0.5 hrs. Augers Out	



LOG OF BORING

Boring 9728000-8

Sheet 1 of 2

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137115.4 ft		Station: 2641 + 75	
Project Number: NH 57-6(23)260				UPN: 9728000		Hammer: Auto		Coordinates E: 2869961.5 ft	
Date Started: 3/30/22				Date Finished: 3/30/22		Boring Diameter: 8"		System: MT S.P. (E)	
Drilling Fluid: None				Location Source: Surveyed		Datum: NAD83		Ground Elevation: 2717.3 ft	
Driller: Helgerson				Notes: Proposed Cut				PLS TRS-QQ: 18N 46E 16 - DC	
Logger: Kettner								Abandonment: Cuttings	

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5 2712.3			75		3 - 2 - 3		Silty SAND (SM), loose, dry to moist, gray, fine grained, [A-4].	4.5 2712.8							Hollow stem augers with finger bit.
			100		7 - 12 - 15		Silty SANDSTONE, gray, fine grained, very soft field hardness. Poorly cemented.	5							
			100		9 - 16 - 18			5							
10 2707.3			100		12 - 16 - 12			6							
			100		3 - 7 - 6		CLAYSTONE, gray, very soft to soft field hardness.	11.3 2706.0							
			100		9 - 9 - 11		Sandy SILTSTONE, gray to tan, very soft to soft field hardness. Occasional iron oxide staining. Poorly lithified.	12.0 2705.3							
15 2702.3			100		9 - 13 - 17		Silty SANDSTONE, gray to tan, fine grained, very soft field hardness. Poorly cemented. Occasional iron oxide staining.	15.1 2702.2							
20 2697.3			100		9 - 15 - 18			9							
25 2692.3			100		3 - 2 - 6		Sandy SILTSTONE, gray to tan, very soft field hardness. Occasional iron oxide staining. Occasional coal fragments. Poorly lithified. Frequent claystone seams 30.9 to 31.2'.	30.3 2687.0	16						
30 2687.3			100		50/0.4ft		COAL.	31.2 2686.1	28						
35 2682.3			100						32						

Water Level Observations				☐ During Drilling: Not Encountered ☒ After Drilling: Not Encountered +0.25 hrs. Augers Out		Remarks: Boring caved to 30' after augers removed.
☒ End of Drilling: Not Encountered. Augers In						

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-8

Sheet 2 of 2

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137115.4 ft				Station: 2641 + 75			
Project Number: NH 57-6(23)260				UPN: 9728000		Hammer: Auto				Coordinates E: 2869961.5 ft			
Date Started: 3/30/22				Date Finished: 3/30/22		Boring Diameter: 8"				System: MT S.P. (E)			
Drilling Fluid: None				Location Source: Surveyed				Datum: NAD83				Ground Elevation: 2717.3 ft	
Driller: Helgerson				Notes: Proposed Cut				PLS TRS-QQ: 18N 46E 16 - DC				Elevation Source: Surveyed	
Logger: Kettner								Abandonment: Cuttings					

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
40 2677.3			100		10 - 20 - 32		SILTSTONE, gray, very soft to soft field hardness. Poorly lithified.	38.0 2679.3							
45 2672.3					10 - 29 - 50/0.3ft		47.0 2670.3								
50 2667.3					15 - 36 - 47		51.5 2665.8								
Boring Depth: 51.5 ft, Elevation: 2665.8 ft															

Water Level Observations		☐ During Drilling: Not Encountered ☒ After Drilling: Not Encountered +0.25 hrs. Augers Out	Remarks: Boring caved to 30' after augers removed.
☒ End of Drilling: Not Encountered. Augers In			

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-9

Sheet 1 of 1

Project: Brockway-West		Rig: CME 1050	Boring Location N: 1137066.3 ft	Station: 2655 + 58
Project Number: NH 57-6(23)260		Hammer: Auto	Coordinates E: 2871340.5 ft	Offset: 15 ft L
UPN: 9728000		Boring Diameter: 8"	System: MT S.P. (E)	Ground Elevation: 2665.9 ft
Date Started: 3/30/22	Date Finished: 3/30/22	Drilling Fluid: None	Datum: NAD83	Elevation Source: Surveyed
Driller: Helgerson		Notes: Beauty Creek Tributary. 48" CMP Existing		PLS TRS-QQ: 18N 46E 21 - AA
Logger: Kettner		Abandonment: Cuttings + Bentonite		

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5 2660.9			100		1 - 2 - 3		Lean CLAY (CL), medium stiff, dry to moist, tan to brown, [A-6]. Occasional organics.	17							Hollow stem augers with finger bit.
			100		2 - 4 - 3			17							
			100					14							
10 2655.9			75		1 - 2 - 2		Silty SAND (SM), very loose to loose, moist, tan to gray, fine to coarse grained, angular to subrounded, [A-4]. Trace gravel. Occasional iron oxide staining.	10.0 2655.9							
			100		3 - 5 - 5		Silt seams 12.5 to 14.5'.	24			NP	94			
15 2650.9			100		4 - 6 - 4		Silty SAND (SM), loose, moist to wet, gray, fine grained, [A-4].	14.5 2651.4							
							CLAYSTONE, gray, very soft to soft field hardness. Interbedded with siltstone. Occasional iron oxide staining.	16.3 2649.6							
							Silty SANDSTONE, gray, fine grained, very soft field hardness. Poorly cemented.	17.3 2648.6							
20 2645.9			100		7 - 11 - 16			28							
25 2640.9			100		9 - 17 - 21			24							
							SILTSTONE, very soft to soft field hardness. Poorly lithified.	26.1 2639.8							Boring Depth: 26.5 ft, Elevation: 2639.4 ft
								26.5 2639.4							
								26.5 2639.4							

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ

Water Level Observations		During Drilling: 18.9 ft (2647.0 ft) After Drilling: 17.9 ft (2648.0 ft) +0.5 hrs. Augers Out	Remarks: Boring caved to 22.9' after augers removed.
End of Drilling: 21.0 ft (2644.9 ft) +0.25 hrs. Augers In			



LOG OF BORING

Boring 9728000-10

Sheet 1 of 2

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137277.8 ft		Station: 2698 + 58	
Project Number: NH 57-6(23)260				UPN: 9728000		Hammer: Auto		Coordinates E: 2875635.5 ft	
Date Started: 3/31/22				Date Finished: 3/31/22		Boring Diameter: 8"		System: MT S.P. (E)	
Drilling Fluid: None				Location Source: Surveyed		Datum: NAD83		Ground Elevation: 2787.4 ft	
Driller: Helgerson				Notes: Proposed Cut				PLS TRS-QQ: 18N 46E 15 - DC	
Logger: Kettner								Abandonment: Cuttings	

Depth (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests	
5			100		8 - 10 - 13		Silty SAND (SM), medium dense, dry to moist, gray, [A-4]. Trace gravel. Occasional iron oxide staining, more frequent with depth.	4.5								Hollow stem augers with finger bit.
2782.4			100		9 - 14 - 17		Silty SANDSTONE, gray, fine grained, very soft field hardness. Poorly cemented.	5								
			100		9 - 18 - 20			5								
10			100		10 - 19 - 23			4								
2777.4			100		10 - 19 - 24			5								
			100		11 - 21 - 25			5								
15			100		10 - 21 - 23			5								
2772.4			100		13 - 26 - 33			6								
20			100													
2767.4			100													
25			100													
2762.4			100													
30			100													
2757.4			100													

Water Level Observations		☐ During Drilling: Not Encountered ☐ After Drilling: Not Encountered +0.25 hrs. Augers Out	Remarks: Boring caved to 31.5' after augers removed.
☐ End of Drilling: Not Encountered. Augers In			

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-10

Sheet 2 of 2

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137277.8 ft				Station: 2698 + 58					
				Hammer: Auto		Coordinates E: 2875635.5 ft				Offset: 22 ft L					
Project Number: NH 57-6(23)260				UPN: 9728000		Boring Diameter: 8"				System: MT S.P. (E)					
						Datum: NAD83				Ground Elevation: 2787.4 ft					
Date Started: 3/31/22				Date Finished: 3/31/22		Drilling Fluid: None				Location Source: Surveyed					
										Elevation Source: Surveyed					
Driller: Helgerson				Notes: Proposed Cut						PLS TRS-QQ: 18N 46E 15 - DC					
Logger: Kettner										Abandonment: Cuttings					

Depth (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
Elev. (ft)								Elev. (ft)							
35			100		13 - 25 - 32				5						
2752.4				100				13 - 26 - 32		6					
40				100				10 - 24 - 27		6					
2747.4								41.5							

Boring Depth: 41.5 ft, Elevation: 2745.9 ft

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ

Water Level Observations

☐ During
 Drilling: Not Encountered
☐ After
 Drilling: Not Encountered +0.25 hrs. Augers Out

Remarks: Boring caved to 31.5' after augers removed.

☒ End of
 Drilling: Not Encountered, Augers In



LOG OF BORING

Boring 9728000-11

Sheet 1 of 2

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137317.2 ft		Station: 2705 + 02			
				Hammer: Auto		Coordinates E: 2876277.8 ft		Offset: 31 ft L			
Project Number: NH 57-6(23)260			UPN: 9728000		Boring Diameter: 8"		System: MT S.P. (E)		Ground Elevation: 2784.8 ft		
Date Started: 3/31/22			Date Finished: 3/31/22		Drilling Fluid: None		Location Source: Surveyed		Elevation Source: Surveyed		
Driller: Helgerson				Notes: Proposed Cut				PLS TRS-QQ: 18N 46E 15 - DC			
Logger: Kettner								Abandonment: Cuttings			

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5 2779.8			100		6 - 11 - 13		Silty SAND (SM), dry to moist, gray, [A-4]. Trace gravel. Occasional iron oxide staining.	4.0 2780.8	3						Hollow stem augers with finger bit.
			100		8 - 11 - 14		Silty SANDSTONE, gray, fine grained, very soft field hardness. Poorly cemented. Occasional iron oxide staining.	4							
10 2774.8			100		8 - 14 - 16			4							
			100		8 - 14 - 16			5							
15 2769.8			100		9 - 17 - 19			4							
20 2764.8			100		7 - 12 - 14			4							
25 2759.8			100		8 - 16 - 18		5								
30 2754.8			100		7 - 10 - 13			5							

Water Level Observations				☐ During Drilling: Not Encountered		Remarks: Boring caved to 26.7' after augers removed.
☒ End of Drilling: Not Encountered. Augers In				☒ After Drilling: Not Encountered +0.25 hrs. Augers Out		

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-11

Sheet 2 of 2

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137317.2 ft				Station: 2705 + 02		
				Hammer: Auto		Coordinates E: 2876277.8 ft				Offset: 31 ft L		
Project Number: NH 57-6(23)260			UPN: 9728000		Boring Diameter: 8"		System: MT S.P. (E)				Ground Elevation: 2784.8 ft	
Date Started: 3/31/22			Date Finished: 3/31/22		Drilling Fluid: None		Location Source: Surveyed				Elevation Source: Surveyed	
Driller: Helgerson				Notes: Proposed Cut				PLS TRS-QQ: 18N 46E 15 - DC				
Logger: Kettner								Abandonment: Cuttings				

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
35 2749.8			100		10 - 21 - 25		29.7'-29.9': Iron oxide rich siltstone, orange, very soft to soft field hardness.		10						
40 2744.8					13 - 21 - 26			40.5 2744.3							
Boring Depth: 40.5 ft, Elevation: 2744.3 ft															

Water Level Observations		☐ During Drilling: Not Encountered ☐ After Drilling: Not Encountered +0.25 hrs. Augers Out	Remarks: Boring caved to 26.7' after augers removed.
☒ End of Drilling: Not Encountered. Augers In			

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-12

Sheet 1 of 1

Project: Brockway-West		Rig: CME 1050 Hammer: Auto	Boring Location N: 1137385.4 ft Coordinates E: 2878376.9 ft	Station: 2726 + 02 Offset: 1 ft R	
Project Number: NH 57-6(23)260		UPN: 9728000	Boring Diameter: 8"	System: MT S.P. (E) Datum: NAD83	Ground Elevation: 2708.0 ft
Date Started: 3/31/22	Date Finished: 3/31/22	Drilling Fluid: None	Location Source: Surveyed		Elevation Source: Surveyed
Driller: Helgerson Logger: Kettner		Notes: Dirty Creek Tributary. 4'x5' Timber Box Existing		PLS TRS-QQ: 18N 46E 14 - CC Abandonment: Cuttings + Bentonite	

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5 2703.0 															

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ

Water Level Observations		During Drilling: Not Encountered	Remarks: Boring caved to 7.1' after augers removed.
End of Drilling: Not Encountered, Augers In	After Drilling: Not Encountered +0.25 hrs. Augers Out		



LOG OF BORING

Boring 9728000-13

Sheet 1 of 1

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137492 ft		Station: 2744 + 33	
Project Number: NH 57-6(23)260				UPN: 9728000		Hammer: Auto		Coordinates E: 2880205.1 ft	
Date Started: 4/5/22				Date Finished: 4/5/22		Boring Diameter: 8"		System: MT S.P. (E)	
Drilling Fluid: None				Location Source: Surveyed		Datum: NAD83		Ground Elevation: 2750.2 ft	
Driller: Helgerson				Notes: Proposed Cut				PLS TRS-QQ: 18N 46E 14 - CD	
Logger: Kettner								Abandonment: Cuttings	

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5 2745.2			100		7 - 9 - 8		SILT with sand (ML), dry to moist, tan to gray, [A-4]. Occasional iron oxide staining.	1.0 2749.2							Hollow stem augers with finger bit.
			100		6 - 14 - 17		SILTSTONE, tan to gray, very soft to soft field hardness. Occasional iron oxide staining. Poorly lithified.	3.6 2746.6	11	22					
			100		7 - 14 - 22		SILTSTONE, gray, very soft to soft field hardness. Interbedded with claystone. Occasional iron oxide staining. Poorly lithified.	7.0 2743.2	22	17	95				Bulk Sample (5'-10') MDD: 118.0 pcf OMC: 12.0 %
10 2740.2			100		12 - 20 - 25		Sandy SILTSTONE, tan, very soft to soft field hardness. Occasional iron oxide staining. Classifies as CL-ML / A-4 when mechanically processed. Poorly lithified.	9.5 2740.7	19						
			100		9 - 18 - 19		Silty SANDSTONE, tan, fine grained, very soft field hardness. Poorly cemented. Occasional iron oxide staining.	10							
15 2735.2			100		6 - 15 - 20			9							
			100		8 - 16 - 28		SILTSTONE, gray, very soft to soft field hardness. Interbedded with claystone. Occasional iron oxide staining. Poorly lithified.	17							
20 2730.2			100		8 - 17 - 27		Sandy SILTSTONE, tan to gray, very soft to soft field hardness. Occasional claystone seam. Occasional iron oxide staining. Poorly lithified.	18.0 2732.2	19						
25 2725.2			100					23.0 2727.2							
								26.5 2723.7	20						
Boring Depth: 26.5 ft, Elevation: 2723.7 ft															

Water Level Observations		☐ During Drilling: Not Encountered ☒ After Drilling: Not Encountered, Augers Out		Remarks: Boring caved to 22.1' after augers removed.
☒ End of Drilling: Not Encountered, Augers In				

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-14

Sheet 1 of 1

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137608.1 ft		Station: 2771 + 51	
Project Number: NH 57-6(23)260				UPN: 9728000		Hammer: Auto		Coordinates E: 2882920.4 ft	
Date Started: 4/5/22				Date Finished: 4/5/22		Boring Diameter: 8"		System: MT S.P. (E)	
Drilling Fluid: None				Location Source: Surveyed		Datum: NAD83		Ground Elevation: 2675.4 ft	
Driller: Helgerson				Notes: Redwater River Tributary. 48" CMP Existing				PLS TRS-QQ: 18N 46E 23 - AA	
Logger: Kettner				Abandonment: Cuttings + Bentonite					

Depth (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
Elev. (ft)								Elev. (ft)							
5					2 - 2 - 2		Sandy SILT (ML), very loose, moist to wet, tan, [A-4]. Occasional iron oxide staining.	11							Hollow stem augers with finger bit.
2670.4			100		WH - WH - 2			18							
10			75		WH - 1 - 1										
2665.4			75		1 - 1 - 1										
15			100		2 - 2 - 3			14.9							
2660.4							Silty SAND (SM), loose, wet, tan to gray, fine to coarse grained, angular to subrounded, [A-4]. Trace gravel. Occasional iron oxide staining.	18.5							
20			100		4 - 8 - 14		Sandy SILTSTONE, tan to gray, very soft to soft field hardness. Interbedded with claystone. Occasional iron oxide staining. Poorly lithified.	23							
2655.4								21							
25			100		6 - 14 - 21			16							
2650.4								25.5							
								2649.9							
Boring Depth: 25.5 ft, Elevation: 2649.9 ft															

Water Level Observations		During Drilling: 13.0 ft (2662.4 ft) After Drilling: Not Encountered +0.5 hrs. Augers Out	Remarks: Boring caved to 10' after augers removed.
End of Drilling: 13.4 ft (2662.0 ft) +0.25 hrs. Augers In			

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-15

Sheet 1 of 2

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137691.6 ft		Station: 2783 + 02	
Project Number: NH 57-6(23)260				UPN: 9728000		Hammer: Auto		Coordinates E: 2884069.5 ft	
Date Started: 4/5/22				Date Finished: 4/5/22		Boring Diameter: 8"		System: MT S.P. (E)	
Drilling Fluid: None				Location Source: Surveyed		Datum: NAD83		Ground Elevation: 2700.8 ft	
Driller: Helgerson				Notes: Proposed Cut				PLS TRS-QQ: 18N 46E 24 - BB	
Logger: Kettner								Abandonment: Cuttings	

Depth (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests	
5			100		5 - 7 - 8		Silty SAND (SM), medium dense, dry to moist, gray to tan, fine to coarse grained, angular to subrounded, [A-4]. Occasional iron oxide staining.	4.5								Hollow stem augers with finger bit.
2695.8			100		7 - 15 - 19		Silty SANDSTONE, tan to gray, fine grained, very soft field hardness. Poorly cemented. Occasional iron oxide staining.	2696.3								
			100		10 - 16 - 22											
10			100		10 - 14 - 20											
2690.8			100		10 - 16 - 20											
			100		9 - 19 - 24											
15			100													
2685.8																
20			100		10 - 17 - 23											
2680.8																
25			100		10 - 25 - 31											
2675.8																
30																
2670.8																

Water Level Observations		☐ During Drilling: Not Encountered	Remarks: Boring caved to 30.5' after augers removed.
☒ End of Drilling: Not Encountered. Augers In		☒ After Drilling: Not Encountered. Augers Out	

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018-PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-15

Sheet 2 of 2

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137691.6 ft		Station: 2783 + 02	
Project Number: NH 57-6(23)260				UPN: 9728000		Hammer: Auto		Coordinates E: 2884069.5 ft	
Date Started: 4/5/22				Date Finished: 4/5/22		Boring Diameter: 8"		System: MT S.P. (E)	
Drilling Fluid: None				Location Source: Surveyed		Datum: NAD83		Ground Elevation: 2700.8 ft	
Driller: Helgerson				Notes: Proposed Cut				PLS TRS-QQ: 18N 46E 24 - BB	
Logger: Kettner								Abandonment: Cuttings	

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
35 2665.8			100		9 - 23 - 27				7						
36.5 2664.3			100		3 - 7 - 13		CLAYSTONE, gray, very soft to soft field hardness. Frequent coal seams and fragments. Occasional iron oxide staining.	35.0 2665.8	22						
40 2660.8			100		14 - 31 - 46		Shaley CLAYSTONE, dark gray, very soft to soft field hardness.	36.5 2664.3							
41.5 2659.3								18							

Boring Depth: 41.5 ft, Elevation: 2659.3 ft

Water Level Observations		☐ During Drilling: Not Encountered ☐ After Drilling: Not Encountered, Augers Out	Remarks: Boring caved to 30.5' after augers removed.
End of Drilling: Not Encountered, Augers In			

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT, - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-16

Sheet 1 of 1

Project: Brockway-West		Rig: CME 1050	Boring Location N: 1137699.7 ft	Station: 2788 + 73
Project Number: NH 57-6(23)260		Hammer: Auto	Coordinates E: 2884640.2 ft	Offset: 15 ft L
UPN: 9728000	Boring Diameter: 8"	System: MT S.P. (E)	Ground Elevation: 2685.1 ft	
Date Started: 4/7/22	Date Finished: 4/7/22	Drilling Fluid: None	Datum: NAD83	Elevation Source: Surveyed
Driller: Helgerson		Notes: Redwater River Tributary. 36" CMP Existing		PLS TRS-QQ: 18N 46E 24 - BA
Logger: Kettner		Abandonment: Cuttings + Bentonite		

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5 2680.1			100		2 - 2 - 2		Sandy SILT (ML), dry to moist, gray to tan, [A-4]. Trace gravel.	2.8 2682.3	15						Hollow stem augers with finger bit.
			100		WH - WH - WH		Sandy SILT (ML), very loose, moist, tan to gray, [A-4]. Trace gravel.	4.5 2680.6	16						
			100				SILT with sand (ML), very loose, moist, tan to gray, [A-4]. Trace gravel. Occasional lean clay seams.		19						
10 2675.1			100		2 - 3 - 3		Silty SAND (SM), loose, moist, tan to gray, fine grained, [A-4].	9.5 2675.6	14		NP	85			
			100		4 - 7 - 9		CLAYSTONE, gray to tan, very soft to soft field hardness. Interbedded with siltstone.	11.2 2673.9	19		NP	45			
15 2670.1			100		5 - 11 - 17		SILTSTONE, gray, very soft to soft field hardness. Occasional iron oxide staining. Poorly lithified.	14.5 2670.6	19						
20 2665.1			100		10 - 14 - 12		Sandy SILTSTONE, gray, very soft field hardness. Poorly lithified.	18.0 2667.1	20						
								21.5 2663.6	20						

Boring Depth: 21.5 ft, Elevation: 2663.6 ft

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ

Water Level Observations		☐ During Drilling: Not Encountered ☒ After Drilling: Not Encountered, Augers Out	Remarks: Boring caved to 18.1' after augers removed.
☒ End of Drilling: Not Encountered, Augers In			



LOG OF BORING

Boring 9728000-17

Sheet 1 of 2

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137751.1 ft		Station: 2798 + 54	
Project Number: NH 57-6(23)260				UPN: 9728000		Hammer: Auto		Coordinates E: 2885619.6 ft	
Date Started: 4/7/22				Date Finished: 4/7/22		Boring Diameter: 8"		System: MT S.P. (E)	
Drilling Fluid: None				Location Source: Surveyed		Datum: NAD83		Ground Elevation: 2732.9 ft	
Driller: Helgerson				Notes: Proposed Cut				PLS TRS-QQ: 18N 46E 24 - BA	
Logger: Kettner								Abandonment: Cuttings	

Depth (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5			100		6 - 6 - 6		Sandy SILT (ML), medium dense, moist, gray to tan, [A-4].	4.5							Hollow stem augers with finger bit.
2727.9			100		5 - 5 - 7		SILT with sand (ML), medium dense, moist, tan, [A-4]. Occasional silt layers/seams.	2728.4							
			100		3 - 5 - 6										
10			100		4 - 6 - 8										
2722.9			100		4 - 5 - 9										
			100		4 - 6 - 8						NP	96			
15			100		3 - 6 - 7		Silty SAND (SM), medium dense, moist, tan to gray, fine grained, [A-4]. Frequent coarse grained sand with gravel layers. Occasional lean clay layer/seam.	23.0							
2717.9			100		5 - 7 - 13			2709.9							
20			100												
2712.9			100												
25			100												
2707.9			100												
30															
2702.9															

Water Level Observations		☐ During Drilling: Not Encountered	Remarks: Boring caved to 33.1' after augers removed.
☒ End of Drilling: Not Encountered. Augers In		☒ After Drilling: Not Encountered. Augers Out	

(2) MDT LOG OF BORING - MDT, 2016+ WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-17

Sheet 2 of 2

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137751.1 ft		Station: 2798 + 54	
Project Number: NH 57-6(23)260				UPN: 9728000		Hammer: Auto		Coordinates E: 2885619.6 ft	
Date Started: 4/7/22				Date Finished: 4/7/22		Boring Diameter: 8"		System: MT S.P. (E)	
Drilling Fluid: None				Location Source: Surveyed		Datum: NAD83		Ground Elevation: 2732.9 ft	
Driller: Helgerson				Notes: Proposed Cut				PLS TRS-QQ: 18N 46E 24 - BA	
Logger: Kettner								Abandonment: Cuttings	

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
35 2697.9			100		4 - 6 - 8		30'-35': Classifies as CL / A-6 when mechanically processed.	34.0 2698.9	7	26	14	67			Bulk Sample (30'-35') MDD: 125.1 pcf OMC: 11.7 %
40 2692.9			100		10 - 18 - 25		Silty SANDSTONE, gray, fine grained, very soft field hardness. Poorly cemented.	6							
			100		13 - 27 - 32			5							
								41.5 2691.4							

Boring Depth: 41.5 ft, Elevation: 2691.4 ft

Water Level Observations		☐ During Drilling: Not Encountered ☐ After Drilling: Not Encountered, Augers Out	Remarks: Boring caved to 33.1' after augers removed.
☐ End of Drilling: Not Encountered, Augers In			

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-18

Sheet 1 of 1

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137881.8 ft		Station: 2818 + 84	
Project Number: NH 57-6(23)260				UPN: 9728000		Hammer: Auto		Coordinates E: 2887645.9 ft	
Date Started: 4/6/22				Date Finished: 4/6/22		Boring Diameter: 8"		System: MT S.P. (E)	
Drilling Fluid: None				Location Source: Surveyed		Datum: NAD83		Ground Elevation: 2698.1 ft	
Driller: Helgerson				Notes: Proposed Cut				PLS TRS-QQ: 18N 46E 24 - AA	
Logger: Kettner								Abandonment: Cuttings	

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5 2693.1			100		6 - 10 - 12		Silty SAND (SM), dry to moist, gray, fine to coarse grained, angular to subrounded, [A-4].	1.0 2697.1							Hollow stem augers with finger bit.
			100		11 - 16 - 21		Silty SANDSTONE, gray, fine grained, very soft field hardness. Poorly cemented. Occasional iron oxide staining.		4						
10 2688.1			100		8 - 17 - 21				5						
			100		9 - 12 - 12				5						
15 2683.1			100		4 - 5 - 8		SILTSTONE, tan to gray, very soft to soft field hardness. Interbedded with claystone. Occasional iron oxide staining. Marine fossils (shells) in claystone interbedds. Poorly lithified.	13.5 2684.6	20						
20 2678.1			100		10 - 22 - 36				22						Bulk Sample (25'-30') MDD: 116.9 pcf OMC: 13.4 %
25 2673.1			100		3 - 4 - 6				24						
							25'-30': Classifies as CL / A-4 when mechanically processed.			27	17	95			
30 2668.1			100		7 - 15 - 21				19						
35 2663.1			100		10 - 12 - 18				17						
40 2658.1			100		13 - 23 - 34				17						
Boring Depth: 40.5 ft, Elevation: 2657.6 ft								40.5 2657.6							

Water Level Observations		☐ During Drilling: Not Encountered ☐ After Drilling: Not Encountered, Augers Out	Remarks: Boring caved to 33.3' after augers removed.
End of Drilling: Not Encountered, Augers In			

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-19

Sheet 1 of 1

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137884.6 ft		Station: 2822 + 18	
Project Number: NH 57-6(23)260				UPN: 9728000		Hammer: Auto		Coordinates E: 2887980.1 ft	
Date Started: 4/6/22				Date Finished: 4/6/22		Boring Diameter: 8"		System: MT S.P. (E)	
Drilling Fluid: None				Location Source: Surveyed		Datum: NAD83		Ground Elevation: 2695.2 ft	
Driller: Helgerson				Notes: Proposed Cut				PLS TRS-QQ: 18N 46E 24 - AA	
Logger: Kettner								Abandonment: Cuttings	

Depth (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5			75		3 - 6 - 7		Silty SAND (SM), medium dense, dry to moist, tan to gray, fine to coarse grained, angular to rounded, [A-4]. Trace gravel. Occasional iron oxide staining.	4.5	7						Hollow stem augers with finger bit.
2690.2			100		7 - 11 - 15		Silty SANDSTONE, gray, fine grained, very soft field hardness. Poorly cemented.	2690.7	4						
10			100		16 - 14 - 7			8.8	5						
2685.2			100		7 - 11 - 14		SILTSTONE, gray, very soft to soft field hardness. Interbedded with claystone. Occasional iron oxide staining. Occasional coal fragment. Poorly lithified.	2686.4	19						
15			100		7 - 10 - 13				19						
2680.2			100		9 - 17 - 25		15'-20': Classifies as CL / A-6 when mechanically processed.		19						
20			100		10 - 15 - 19				30	16	77			Bulk Sample (15'-20') MDD: 115.4 pcf OMC: 14.2 %	
2675.2			100		9 - 10 - 11			21							
2670.2			100		6 - 15 - 21			16							
2665.2			100		9 - 20 - 48		CLAYSTONE, gray to green, very soft to soft field hardness. Frequent evaporites.	33.0	17						
2660.2			100		10 - 19 - 23		Sandy SILTSTONE, gray, very soft field hardness. Poorly lithified.	37.0	17						
40			100		9 - 13 - 20		CLAYSTONE, dark gray, soft field hardness. Occasional coal seams.	42.0	24						
2655.2			100					46.5							
2650.2			100					2648.7							

Boring Depth: 46.5 ft, Elevation: 2648.7 ft

Water Level Observations		☐ During Drilling: Not Encountered ☐ After Drilling: Not Encountered, Augers Out		Remarks: Boring caved to 42' after augers removed.
☒ End of Drilling: Not Encountered, Augers In				

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-20

Sheet 1 of 1

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137873.5 ft				Station: 2825 + 46			
				Hammer: Auto		Coordinates E: 2888309.3 ft				Offset: 14 ft L			
Project Number: NH 57-6(23)260				UPN: 9728000		Boring Diameter: 8"				System: MT S.P. (E)			
Date Started: 4/7/22				Date Finished: 4/7/22		Drilling Fluid: None				Datum: NAD83			
Date Started: 4/7/22				Date Finished: 4/7/22		Drilling Fluid: None				Location Source: Surveyed			
Driller: Helgerson				Notes: Proposed Cut				PLS TRS-QQ: 18N 46E 26 - AA					
Logger: Kettner								Abandonment: Cuttings					

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5 2652.9			50		5 - 8 - 8		TOPSOIL, Sandy SILT (ML), moist, gray to tan, [A-4]. Trace lean clay. Frequent organics.	1.0 2656.9							Hollow stem augers with finger bit.
			100		7 - 12 - 22		CLAYSTONE, gray, very soft to soft field hardness. Occasional iron oxide staining. Occasional coal fragments.	17							
			100		8 - 15 - 21			16							
			100		8 - 11 - 24		Sandy SILTSTONE, gray, very soft field hardness. Poorly lithified.	17 9.5 2648.4 10.5 2647.4							
Boring Depth: 10.5 ft, Elevation: 2647.4 ft															

Water Level Observations		☐ During Drilling: Not Encountered ☐ After Drilling: Not Encountered, Augers Out	Remarks: Boring caved to 7.2' after augers removed.
End of Drilling: Not Encountered, Augers In			

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-21

Sheet 1 of 1

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137177.9 ft		Station: 2677 + 74	
Project Number: NH 57-6(23)260				UPN: 9728000		Hammer: Auto		Coordinates E: 2873553.2 ft	
Date Started: 4/21/22				Date Finished: 4/21/22		Boring Diameter: 8"		System: MT S.P. (E)	
Drilling Fluid: None				Location Source: Surveyed		Datum: NAD83		Ground Elevation: 2721.4 ft	
Driller: Helgerson				Notes: Proposed Cut				PLS TRS-QQ: 18N 46E 15 - CC	
Logger: Kettner								Abandonment: Cuttings	

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests	
5 2716.4			100		6 - 8 - 8		Sandy SILT (ML), moist, tan to gray, [A-4]. Trace lean clay.	1.0 2720.4							Hollow stem augers with finger bit.	
					4 - 9 - 13											
					7 - 12 - 18											
					6 - 14 - 21											
					9 - 19 - 23											
10 2711.4			100		8 - 17 - 25		Silty SANDSTONE, gray, fine grained, very soft field hardness. Poorly cemented.	12.3 2709.1								
					3 - 4 - 7											
15 2706.4			100		7 - 16 - 50/0.3ft		COAL.	20.2 2701.2								
20 2701.4			100				SILTSTONE, gray to tan, very soft to soft field hardness. Frequent coal seams in top 1.5'. Poorly lithified.	20.4 2701.0								
25 2696.4			100					26.5 2694.9								
Boring Depth: 26.5 ft, Elevation: 2694.9 ft																

Water Level Observations		☐ During Drilling: Not Encountered ☒ After Drilling: Not Encountered, Augers Out	Remarks: Boring caved to 18.7' after augers removed.
☒ End of Drilling: Not Encountered, Augers In			

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-22

Sheet 1 of 1

Project: Brockway-West		Rig: CME 1050	Boring Location N: 1137815.2 ft	Station: 2807 + 55
Project Number: NH 57-6(23)260		Hammer: Auto	Coordinates E: 2886519.2 ft	Offset: 41 ft L
UPN: 9728000		Boring Diameter: 8"	System: MT S.P. (E)	Ground Elevation: 2703.9 ft
Date Started: 4/21/22	Date Finished: 4/21/22	Drilling Fluid: None	Location Source: Surveyed	Elevation Source: Surveyed
Driller: Helgerson		Notes: Proposed Cut		PLS TRS-QQ: 18N 46E 13 - DC
Logger: Kettner		Abandonment: Cuttings		

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5 2698.9			100		3 - 8 - 11		Silty SAND (SM), medium dense, dry to moist, tan to gray, fine to coarse grained, angular to subrounded, [A-4]. Trace gravel.	5.0 2698.9							
			100		5 - 8 - 16		Silty SANDSTONE, gray, fine grained, very soft field hardness. Poorly cemented, occasional iron oxide staining, frequent iron oxide rich sandy siltstone layers.								
			100		7 - 16 - 19										
10 2693.9			100		6 - 17 - 26										
			100		8 - 16 - 24										
15 2688.9			100		9 - 19 - 20										
			100												
20 2683.9			100		9 - 17 - 21										
25 2678.9			100		9 - 19 - 21										

Boring Depth: 26.5 ft, Elevation: 2677.4 ft

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ

Water Level Observations		☐ During Drilling: Not Encountered ☒ After Drilling: Not Encountered, Augers Out	Remarks: Boring caved to 20.5' after augers removed.
☒ End of Drilling: Not Encountered, Augers In			



LOG OF BORING

Boring 9728000-23

Sheet 1 of 1

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137777.9 ft		Station: 2507 + 49	
Project Number: NH 57-6(23)260				UPN: 9728000		Hammer: Auto		Coordinates E: 2856552.2 ft	
Date Started: 6/12/24				Date Finished: 6/12/24		Boring Diameter: 8"		System: MT S.P. (E)	
Drilling Fluid: None				Location Source: Surveyed		Datum: NAD83		Ground Elevation: 2831.5 ft	
Driller: C. Higdon				Notes: Proposed Cut				PLS TRS-QQ: 18N 45E 13 - DA	
Logger: Jaynes								Abandonment: Cuttings	

Depth (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5			100		50/0.5ft		SANDSTONE, light brown to tan, fine grained, medium to hard field hardness.	3.0							Hollow stem augers with bullet bit. Hard/slow drilling 0-3'.
2826.5			87		7 - 15 - 19		Silty SANDSTONE, light brown to tan, fine grained, very soft field hardness. 5'-6.5': Classifies as SM / A-2-4 when mechanically processed.	7.9		NP	25				
10			93		7 - 12 - 15		SILTSTONE, grayish brown, very soft field hardness. Poorly lithified. Frequent iron oxide staining.	20							
15			87		7 - 16 - 25		CLAYSTONE, brownish gray, soft to very soft field hardness. Occasional iron oxide stained fracture faces.	21							
20			100		7 - 14 - 22		Occasional thin coal seams 20 to 25'.	20							
25			100		5 - 14 - 17		SILTSTONE, grayish brown, very soft field hardness. Poorly lithified. Frequent iron oxide staining.	22							
30			100		15 - 30 - 40		CLAYSTONE, light gray, soft to very soft field hardness.	16							
35			100		8 - 13 - 22		Shaley CLAYSTONE, brownish gray, soft to very soft field hardness. Frequent iron oxide stained fracture faces. Some fissility.	19							
40			100		13 - 26 - 46			37.5							
45			100		32 - 50/0.5ft		Silty SANDSTONE, brownish gray, fine grained, very soft field hardness.	16							
2786.5							Boring Depth: 46.0 ft, Elevation: 2785.5 ft	45.0							
								46.0							
								2785.5							

Water Level Observations		☐ During Drilling: Not Encountered ☒ After Drilling: Not Encountered +0.25 hrs. Augers Out	Remarks: Boring caved to 46.5' after augers removed.
☒ End of Drilling: Not Encountered. Augers In			

(2) MDT LOG OF BORING - MDT 2016+WELL V1.GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-24

Sheet 1 of 1

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137908.3 ft		Station: 2507 + 23	
Project Number: NH 57-6(23)260				UPN: 9728000		Hammer: Auto		Coordinates E: 2856533.6 ft	
Date Started: 6/12/24				Date Finished: 6/12/24		Boring Diameter: 8"		System: MT S.P. (E)	
Drilling Fluid: None				Location Source: Surveyed		Datum: NAD83		Ground Elevation: 2815.4 ft	
Driller: C. Higdon				Notes: Proposed Cut				PLS TRS-QQ: 18N 45E 13 - DA	
Logger: Jaynes								Abandonment: Cuttings	

Depth (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
0.5 2814.9			97		6 - 3 - 4		FILL, Poorly-Graded GRAVEL with silt and sand (GP), loose, moist, brown, fine to coarse grained, subrounded to subangular, [A-1].	4 21							Hollow stem augers with bullet bit.
5.3 2810.4			100		9 - 24 - 26		CLAYSTONE, light gray, very soft field hardness. Frequent iron oxide staining.	6 2810.1							
8.2 2807.2			100		5 - 12 - 17		Silty SANDSTONE, brownish gray, fine grained, very soft field hardness. Very poorly cemented. Occasional iron oxide staining.	18 NP			67				Bulk Sample (5'-15') MDD: 120.3 pcf OMC: 11.9 % Classifies as ML / A-4 when mechanically processed.
14.5 2800.4			100		5 - 10 - 13		SILTSTONE, grayish brown, very soft field hardness. Poorly lithified. Frequent iron oxide staining.	20 60		25	97				
24.5 2790.4			100		7 - 15 - 26		CLAYSTONE, dark gray, soft to very soft field hardness. Occasional coal fragments. Trace iron oxide staining. Classifies as CH / A-7 when mechanically processed.	16							
25.5 2789.9			100		20 - 24 - 50/0.4ft		Silty SANDSTONE, brownish gray, fine grained, very soft field hardness. Very poorly cemented.	4 15							
27.1 2788.3			80		25 - 50/0.5ft		Shaley CLAYSTONE, brownish gray, soft to very soft field hardness. Frequent iron oxide stained fracture faces. Some fissility.	5							
41.5 2773.9			100		21 - 41 - 44		Silty SANDSTONE, brownish gray, fine grained, very soft field hardness. Very poorly cemented. Occasional siltstone interbedding.	4 16							
					27 - 39 - 50/0.5ft			8							

Boring Depth: 41.5 ft, Elevation: 2773.9 ft

Water Level Observations	☐ During Drilling: Not Encountered ☒ After Drilling: Not Encountered +0.25 hrs. Augers Out	Remarks: Boring caved to 38' after augers removed.
☒ End of Drilling: Not Encountered. Augers In		

(2) MDT LOG OF BORING - MDT, 2016+WELL V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-25

Sheet 1 of 1

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137749.1 ft		Station: 2521 + 125	
Project Number: NH 57-6(23)260				UPN: 9728000		Hammer: Auto		Coordinates E: 2857929 ft	
Date Started: 6/13/24				Date Finished: 6/13/24		Boring Diameter: 8"		System: MT S.P. (E)	
Drilling Fluid: None				Location Source: Surveyed		Datum: NAD83		Ground Elevation: 2735.6 ft	
Driller: C. Higdon				Notes: Proposed Fill				PLS TRS-QQ: 18N 46E 18 - CA	
Logger: Jaynes								Abandonment: Cuttings	

Depth (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
0.5			100		3 - 3 - 2		TOPSOIL, SILT (ML), loose, dry to moist, light brown to tan, [A-4]. Frequent fine roots.	0.5	7						Hollow stem augers with bullet bit.
2.5			87		3 - 3 - 2		SILT (ML), loose, moist, light brown, [A-4]. Trace fine sand. Occasional fine roots.	2.5	15	27	19	93			
5			80		2 - 2 - 2		Lean CLAY (CL), medium stiff to soft, moist, light brown, [A-4]. Trace fine sand.	20							
10			87		2 - 2 - 3		Lean CLAY with sand (CL), medium stiff, moist, light brown, [A-4]. Occasional white evaporite. Increased sand content with depth.	7.5	19						
15			93		3 - 3 - 3			12.0	14						
20			100		2 - 4 - 5		CLAYSTONE, grayish brown, very soft field hardness. Occasional iron oxide staining.	16							
25			100		5 - 7 - 9		SILTSTONE, brownish gray, very soft field hardness. Poorly lithified.	15.0	12						
30			87		2 - 4 - 5		CLAYSTONE, light gray, very soft field hardness. Frequent thin coal fragments. Occasional iron oxide stained fracture faces.	18.5	26						
35			100		8 - 11 - 16			21							
40			100		10 - 25 - 28		SILTSTONE, grayish brown, very soft field hardness. Poorly lithified. Frequent iron oxide staining.	29.0	23						
Boring Depth: 31.5 ft, Elevation: 2704.1 ft								31.5							

Water Level Observations

End of Drilling: Not Encountered. Augers In

During Drilling: Not Encountered

After Drilling: Not Encountered +0.25 hrs. Augers Out

Remarks: Boring caved to 27.5' after augers removed.



LOG OF BORING

Boring 9728000-26

Sheet 1 of 1

Project: Brockway-West		Rig: CME 1050	Boring Location N: 1137728.9 ft	Station: 2527 + 03
Project Number: NH 57-6(23)260		Hammer: Auto	Coordinates E: 2858506.8 ft	Offset: 12 ft L
UPN: 9728000	Boring Diameter: 8"	System: MT S.P. (E)	Ground Elevation: 2716.0 ft	
Date Started: 6/11/24	Date Finished: 6/11/24	Drilling Fluid: None	Datum: NAD83	Elevation Source: Surveyed
Driller: C. Higdon		Notes: Proposed Fill		PLS TRS-QQ: 18N 46E 18 - CA
Logger: Jaynes				Abandonment: Cuttings

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5 2711.0			60		WH - 2 - 2		TOPSOIL, SILT (ML), very loose, dry, light brown to tan, [A-4]. Frequent fine roots.	0.4 2715.6	8						Hollow stem augers with bullet bit.
			90		1 - 2 - 1		Lean CLAY (CL), soft, moist, light brown, [A-4]. Trace fine sand. Occasional fine roots.		16						
			88					6.3 2709.7	25	26	19	88			
			100		1 - 3 - 4	Silty CLAY (CL-ML), soft, moist, grayish brown, [A-4]. Trace fine sand. Increased sand content with depth.	8.2 2707.8	19	19						
			83		2 - 3 - 2	CLAYSTONE, light gray, very soft field hardness. Frequent iron oxide staining.		22							
10 2706.0							SILTSTONE, grayish brown, very soft field hardness. Poorly lithified. Frequent iron oxide stained fracture faces. Transitions to light gray with depth.	11.5 2704.5							
		100		5 - 8 - 9	CLAYSTONE, brownish gray, very soft field hardness. Frequent iron oxide stained fracture faces.		14.0 2702.0	21							
15 2701.0			100		9 - 15 - 19			16.5 2699.5	19						
Boring Depth: 16.5 ft, Elevation: 2699.5 ft															

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ

Water Level Observations		During Drilling: Not Encountered	Remarks: Boring caved to 14.1' after augers removed.
End of Drilling: Not Encountered, Augers In	After Drilling: Not Encountered +0.25 hrs. Augers Out		



LOG OF BORING

Boring 9728000-27

Sheet 1 of 1

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137528.9 ft		Station: 2556 + 86	
				Hammer: Auto		Coordinates E: 2861483.1 ft		Offset: 2 ft R	
Project Number: NH 57-6(23)260			UPN: 9728000	Boring Diameter: 8"		System: MT S.P. (E)		Ground Elevation: 2668.0 ft	
Date Started: 6/11/24		Date Finished: 6/11/24		Drilling Fluid: None		Location Source: Surveyed		Elevation Source: Surveyed	
Driller: C. Higdon			Notes: Proposed Fill				PLS TRS-QQ: 18N 46E 18 - DD		
Logger: Jaynes							Abandonment: Cuttings		

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests	
5 2663.0			67		2 - 6 - 6		TOPSOIL, Sandy SILT (ML), loose, dry, light brown to tan, [A-4]. Frequent fine to coarse grained subrounded to subangular gravel clasts and fine roots.	0.8 2667.2	7	12						Hollow stem augers with bullet bit.
			87	4 - 3 - 4	Sandy Lean CLAY (CL), medium stiff, moist, light brown, [A-4]. Trace fine sand. Occasional fine roots. Frequent iron concretions at 5'.		11	24	16	63						
			83	4 - 3 - 5			15									
			97	1 - 2 - 1	Soft and wet at 7.9'.		17									
			10 2658.0	87	3 - 3 - 5		Silty SANDSTONE, grayish brown, fine grained, very soft field hardness. Very poorly cemented. Occasional iron oxide staining.	9.8 2658.2	28							
15 2653.0			100		6 - 12 - 16		Light gray at 12.5'.		26						15': ~2" sand heave prior to SPT.	
			100	8 - 17 - 19			26									
Boring Depth: 16.5 ft, Elevation: 2651.5 ft								16.5 2651.5								

Water Level Observations		During Drilling: 7.9 ft (2660.1 ft) After Drilling: 10.5 ft (2657.5 ft) +0.25 hrs. Augers Out	Remarks: Boring cave-in depth not measured.
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(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-28

Sheet 1 of 1

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137211.1 ft		Station: 2627 + 91	
Project Number: NH 57-6(23)260				UPN: 9728000		Hammer: Auto		Coordinates E: 2868580.8 ft	
Date Started: 6/18/24				Date Finished: 6/18/24		Boring Diameter: 8"		System: MT S.P. (E)	
Drilling Fluid: None				Location Source: Surveyed		Datum: NAD83		Ground Elevation: 2688.3 ft	
Driller: C. Higdon				Notes: Proposed Cut				PLS TRS-QQ: 18N 46E 16 - CD	
Logger: Jaynes								Abandonment: Cuttings	

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5 2683.3			100		2 - 2 - 3		TOPSOIL, Sandy SILT (ML), loose, dry, light brown to tan, [A-4]. Frequent fine roots.	0.2 2688.1	4						Hollow stem augers with bullet bit.
			100		3 - 5 - 6		Sandy SILT (ML), loose, dry, light brown to tan, [A-4]. Trace fine roots and fine-grained subangular gravel clasts.	5.8 2682.5	17						
10 2678.3			100		8 - 12 - 10		10'-11.5': Classifies as ML / A-4 when mechanically processed.				NP 77				
15 2673.3			100		6 - 10 - 12				19						
20 2668.3			87		5 - 7 - 8		COAL, black.	20.0 2668.3	53						
25 2663.3			100		16 - 19 - 21		Shaley CLAYSTONE, gray, soft to very soft field hardness. Frequent fissility.		48						
30 2658.3			100		10 - 19 - 28			27.0 2661.3	16						
35 2653.3			100		11 - 20 - 33			36.5 2651.8	18						
Boring Depth: 36.5 ft, Elevation: 2651.8 ft															

Water Level Observations		☐ During Drilling: Not Encountered ☐ After Drilling: Not Encountered +0.25 hrs. Augers Out	Remarks: Boring caved to 31.9' after augers removed.
☒ End of Drilling: Not Encountered. Augers In			

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-29

Sheet 1 of 1

Project: Brockway-West		Rig: CME 1050	Boring Location N: 1136972.6 ft	Station: 2641 + 52
Project Number: NH 57-6(23)260		Hammer: Auto	Coordinates E: 2869929.6 ft	Offset: 100 ft R
UPN: 9728000	Boring Diameter: 8"	System: MT S.P. (E)	Ground Elevation: 2710.4 ft	
Date Started: 6/18/24	Date Finished: 6/18/24	Drilling Fluid: None	Datum: NAD83	Elevation Source: Surveyed
Driller: C. Higdon		Notes: Proposed Cut		PLS TRS-QQ: 18N 46E 16 - DC
Logger: Jaynes				Abandonment: Cuttings

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5 2705.4		X	87		1 - 2 - 3		TOPSOIL, Silty SAND (SM), very loose, dry, light brown to tan, [A-2]. Frequent fine roots.	0.3 2710.1	4						Hollow stem augers with bullet bit.
10 2700.4		X	100		8 - 14 - 15		Silty SAND (SM), loose, dry, light brown to tan, [A-2]. Trace fine-grained subangular gravel clasts.	5.0 2705.4	8		NP	21			
15 2695.4		X	100		6 - 12 - 15		Silty SANDSTONE, light brown to tan, fine grained, very soft field hardness. Very poorly cemented. Classifies as SM / A-2-4 when mechanically processed.	10.8 2699.6	17						
20 2690.4		X	100		7 - 13 - 15		SILTSTONE, grayish brown, very soft field hardness. Poorly lithified. Frequent iron oxide staining.		22						
25 2685.4		X	100		9 - 11 - 15				18						
30 2680.4		X	100		12 - 50/0.5ft		COAL, black.	25.0 2685.4	35						
		X	100		45 - 50/0.3ft			30.8 2679.6	51						

Boring Depth: 30.8 ft, Elevation: 2679.6 ft

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ

Water Level Observations		During Drilling: Not Encountered	Remarks: Boring caved to 27.9' after augers removed.
End of Drilling: Not Encountered, Augers In	After Drilling: Not Encountered +0.25 hrs. Augers Out		



LOG OF BORING

Boring 9728000-30

Sheet 1 of 1

Project: Brockway-West		Rig: CME 1050	Boring Location N: 1137191.3 ft	Station: 2684 + 96
Project Number: NH 57-6(23)260		Hammer: Auto	Coordinates E: 2874276.2 ft	Offset: 1 ft L
UPN: 9728000		Boring Diameter: 8"	System: MT S.P. (E)	Ground Elevation: 2725.1 ft
Date Started: 6/19/24	Date Finished: 6/19/24	Drilling Fluid: None	Datum: NAD83	Elevation Source: Surveyed
Driller: C. Higdon		Notes: Proposed Fill		PLS TRS-QQ: 18N 46E 15 - CD
Logger: Jaynes		Abandonment: Cuttings + Bentonite		

Depth (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
Elev. (ft)								Elev. (ft)							
5 2720.1		X	83		3 - 3 - 2		TOPSOIL, Silty SAND (SM), loose, moist, dark brown, [A-4]. Frequent roots and organics.	0.3 2724.8	20	8		NP	46		Hollow stem augers with bullet bit.
		X	100		3 - 3 - 1		Silty SAND (SM), loose, dry to moist, light brown, [A-4]. Occasional roots. Transitions to dark brown with depth.	3.1 2722.0	13						
		X	90		2 - 1 - WH		SILT with sand (ML), loose to very loose, moist, dark brown, [A-4]. Trace fine-grained subangular gravel clasts. Transitions to light brown with increased sand content with depth.		14						
10 2715.1			100					9.0 2716.1	25		NP	93			
		X	100		4 - 4 - 6		SILTSTONE, grayish brown, very soft field hardness. Poorly lithified. Frequent iron oxide staining.	11.0 2714.1	24						
		X	100		3 - 6 - 9		CLAYSTONE, grayish brown to light gray, very soft to soft field hardness. Frequent iron oxide staining. Occasional gypsum crystals with depth.		19						
15 2710.1		X	100		4 - 7 - 9			19							
Boring Depth: 16.5 ft, Elevation: 2708.6 ft									16.5 2708.6						

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ

Water Level Observations		During Drilling: Not Encountered	Remarks: Boring caved to 14.5' after augers removed.
End of Drilling: Not Encountered, Augers In	After Drilling: Not Encountered +0.25 hrs. Augers Out		



LOG OF BORING

Boring 9728000-31

Sheet 1 of 1

Project: Brockway-West		Rig: CME 1050	Boring Location N: 1137366.6 ft	Station: 2720 + 43
Project Number: NH 57-6(23)260		Hammer: Auto	Coordinates E: 2877818.8 ft	Offset: 7 ft L
UPN: 9728000		Boring Diameter: 8"	System: MT S.P. (E)	Ground Elevation: 2723.1 ft
Date Started: 6/19/24	Date Finished: 6/19/24	Drilling Fluid: None	Location Source: Surveyed	Elevation Source: Surveyed
Driller: C. Higdon		Notes: Proposed Fill		PLS TRS-QQ: 18N 46E 14 - CC
Logger: Jaynes		Abandonment: Cuttings + Bentonite		

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
5 2718.1			87		2 - 3 - 1		TOPSOIL, Sandy SILT (ML), loose, moist, brown, [A-4]. Frequent roots and organics.	0.5 2722.6	13	6					Hollow stem augers with bullet bit.
			87		2 - 3 - 3		Sandy SILT (ML), loose, moist, brown, [A-4]. Occasional roots.	3.1 2720.0	16						
			83		2 - 2 - 3		Sandy SILT with gravel (ML), loose, moist, light brown, [A-4]. Gravel clasts fine to coarse grained and subangular.	5.6 2717.5	12						
10 2713.1			100		3 - 5 - 5		CLAYSTONE, grayish brown, very soft field hardness. Frequent iron oxide staining.		24						
			100		4 - 7 - 9			11.2 2711.9	21						
			100		7 - 9 - 8		SILTSTONE, grayish brown, very soft field hardness. Poorly lithified. Frequent iron oxide staining. Occasional gypsum crystals.	14.0 2709.1	22						
Boring Depth: 14.0 ft, Elevation: 2709.1 ft															

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ

Water Level Observations		During Drilling: Not Encountered	Remarks: Boring caved to 12.2' after augers removed.
End of Drilling: Not Encountered. Augers In	After Drilling: Not Encountered +0.25 hrs. Augers Out		



LOG OF BORING

Boring 9728000-32

Sheet 1 of 1

Project: Brockway-West				Rig: CME 1050		Boring Location N: 1137420.2 ft		Station: 2747 + 16	
Project Number: NH 57-6(23)260				UPN: 9728000		Hammer: Auto		Coordinates E: 2880491.8 ft	
Date Started: 6/19/24				Date Finished: 6/19/24		Boring Diameter: 8"		System: MT S.P. (E)	
Drilling Fluid: None				Location Source: Surveyed		Datum: NAD83		Ground Elevation: 2746.9 ft	
Driller: C. Higdon				Notes: Proposed Cut				PLS TRS-QQ: 18N 46E 23 - AB	
Logger: Jaynes								Abandonment: Cuttings + Bentonite	

Depth (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
0.5 2746.4			80		2 - 3 - 3		TOPSOIL, Sandy SILT (ML), loose, moist, light brown, [A-4]. Frequent roots and organics.	9							Hollow stem augers with bullet bit.
5.0 2741.9			87		6 - 11 - 11		SILT with sand (ML), loose, dry, light brown to tan, [A-4]. Occasional roots.	7		NP	23				
10.5 2736.4			100		4 - 4 - 6		Silty SANDSTONE, grayish brown, fine grained, very soft field hardness. Very poorly cemented. Classifies as SM / A-2-4 when mechanically processed.	18	21	19	34				Bulk Sample (5'-15') MDD: 117.2 pcf OMC: 11.8 % Classifies as SM / A-2-4 when mechanically processed.
15.0 2731.9			100		7 - 14 - 20		SILTSTONE, grayish brown, very soft field hardness. Poorly lithified. Occasional iron oxide staining.	18							
20.0 2726.9			100		9 - 16 - 18			20							
25.0 2721.9			100		4 - 8 - 6			22							
30.0 2716.9			100		6 - 14 - 15			20							
35.0 2711.9			100		6 - 18 - 16		CLAYSTONE, light gray, very soft field hardness. Occasional thin coal interbeds.	21							
Boring Depth: 36.5 ft, Elevation: 2710.4 ft															

Water Level Observations		☐ During Drilling: Not Encountered ☒ After Drilling: Not Encountered +0.25 hrs. Augers Out	Remarks: Boring caved to 33.5' after augers removed.
☒ End of Drilling: Not Encountered. Augers In			

(2) MDT LOG OF BORING - MDT 2016+WELL V1.GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ



LOG OF BORING

Boring 9728000-33

Sheet 1 of 1

Project: Brockway-West		Rig: CME 1050	Boring Location N: 1137649.6 ft	Station: 2779 + 56
Project Number: NH 57-6(23)260		Hammer: Auto	Coordinates E: 2883725.2 ft	Offset: 8 ft L
UPN: 9728000	Boring Diameter: 8"	System: MT S.P. (E)	Ground Elevation: 2678.7 ft	
Date Started: 6/25/24	Date Finished: 6/25/24	Drilling Fluid: None	Datum: NAD83	Elevation Source: Surveyed
Driller: C. Higdon		Notes: Proposed Fill		PLS TRS-QQ: 18N 46E 24 - BB
Logger: Jaynes		Abandonment: Cuttings		

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
0.4 2678.3			80		1 - 2 - 3		TOPSOIL, Sandy SILT (ML), very loose, moist, brown, [A-4]. Frequent roots. Sandy SILT (ML), loose, dry, light brown, [A-4]. Occasional roots.	0.4 2678.3	17	6					Hollow stem augers with bullet bit.
2 2676.7															
4 2674.7			100					4.0 2674.7	15	26	20	91			
6 2672.7			90		WH - WH - WH		Silty CLAY (CL-ML), very soft, moist, light brown, [A-4].		14						
8 2670.7			80				Sandy SILT (ML), very loose, moist, light brown, [A-4].	7.0 2671.7	11		NP	59			
10 2668.7			100		2 - 2 - 1				9						
12 2666.7							SILT with sand (ML), loose, moist, light brown, [A-4]. Transitions to grayish brown with frequent iron oxide staining and occasional fine-grained subangular gravel clasts with depth.	11.0 2667.7							
14 2664.7			100		2 - 3 - 2		Lean CLAY (CL), moist, grayish brown, [A-4]. Occasional coal fragments and thin light gray silt seams.	13.6 2665.1	17						
16 2662.7			100		4 - 5 - 7		CLAYSTONE, light gray, very soft field hardness. Occasional iron oxide staining and coal fragments. Transitions to grayish brown with frequent iron oxide staining with depth.	14.1 2664.6	24						
								16.5 2662.2	20						

Boring Depth: 16.5 ft, Elevation: 2662.2 ft

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ

Water Level Observations		During Drilling: Not Encountered	Remarks: Boring caved to 14.5' after augers removed.
End of Drilling: Not Encountered, Augers In	After Drilling: Not Encountered +0.25 hrs. Augers Out		



LOG OF BORING

Boring 9728000-34

Sheet 1 of 1

Project: Brockway-West		Rig: CME 1050	Boring Location N: 1137814 ft	Station: 2812 + 46
Project Number: NH 57-6(23)260		Hammer: Auto	Coordinates E: 2887010.6 ft	Offset: 16 ft L
UPN: 9728000		Boring Diameter: 8"	System: MT S.P. (E)	Ground Elevation: 2670.7 ft
Date Started: 6/25/24	Date Finished: 6/25/24	Drilling Fluid: None	Location Source: Surveyed	Elevation Source: Surveyed
Driller: C. Higdon		Notes: Redwater River Tributary. 30" CMP Existing		PLS TRS-QQ: 18N 46E 13 - DC
Logger: Jaynes		Abandonment: Cuttings + Bentonite		

Depth (ft) Elev. (ft)	Operation	Sample Type	Recovery (%)	RQD (%)	Blow Count	Lithology	Material Description	Depth (ft) Elev. (ft)	MC (%)	LL	PL	-200 (%)	Qu (psi)	DD (pcf)	Remarks and Other Tests
0.4 2670.3			80		2 - 3 - 3		TOPSOIL, Sandy SILT (ML), loose, moist, light brown, [A-4]. Frequent fine roots.	0.4 2670.3	13						Hollow stem augers with bullet bit.
2 2668.7							Sandy SILT (ML), loose, dry, light brown to tan, [A-4]. Occasional fine roots and white evaporites. Trace fine grained subangular to angular gravel clasts. Decreasing sand content with depth.		6						
4 2666.7			80						13		NP	57			
6 2664.7			100		2 - 2 - 2				9						
8 2662.7			100		2 - 2 - 2				14						
10 2660.7			80		3 - 4 - 3		Silty SAND with gravel (SM), loose, moist, grayish brown, fine to coarse grained, subangular to angular, [A-4]. Occasional thin silt layers.	10.0 2660.7	10						
12 2658.7			60		3 - 4 - 6				15						Coarse-grained subangular gravel clast stuck in SS shoe at 14'.
14 2656.7			100		3 - 7 - 9		CLAYSTONE, brownish gray, soft to very soft field hardness. Frequent iron oxide staining. Occasional coal fragments. Transitions to light gray at 15.9'.	14.0 2656.7	19						
16 2654.7							Occasional iron oxide stained fracture faces at 20'. Transitions to grayish brown with frequent iron oxide staining at 21'.								
18 2652.7															
20 2650.7			97		4 - 6 - 10				15						
Boring Depth: 21.5 ft, Elevation: 2649.2 ft								21.5 2649.2							

Water Level Observations		During Drilling: Not Encountered	Remarks: Boring caved to 19.5' after augers removed.
End of Drilling: Not Encountered. Augers In	After Drilling: Not Encountered +0.25 hrs. Augers Out		

(2) MDT LOG OF BORING - MDT, 2016+WELL, V1, GDT - 9/30/24 14:07 - G:\PROJECTS\2018+PROJECTS\9728000.GPJ

STANDARD PROVISIONS INDEX

<u>FEDERAL AID PROJECTS</u>	<u>CONTAINS</u>
Federal Wage Rates (Rev. 6-04-2026)	8 Pages
Requirements & Acknowledgement for Working on Railroad R/W	1 Page
Required Contract Provisions Federal-Aid Const. Contracts (FORM FHWA-1273) [Rev.06-25-2026]	12 Pages
Supplemental Revisions for Required Contract Provisions Federal-Aid Const. Contracts (FORM FHWA-1273) [Added 2-4-2016]	1 Page
EEO Affirmative Action Req. on Federal-Aid Construction	1 Page

General Decision Number: MT 20260080 06042026

State: Montana

Construction Type: Highway

Counties: Montana Statewide.

HIGHWAY CONSTRUCTION PROJECTS

Modification Number Publication Date

1	01/30/2026
2	05/18/2026
3	06/04/2026

SAMT2025-001 01/11/2025

	Rates	Fringes
CARPENTER		
Carpenter.....	\$ 43.78	17.07
Millwright.....	\$ 49.79	20.79
CEMENT MASON/CONCRETE FINISHER...\$ 44.98 20.50		
DIVER		
Diver Tender.....	\$ 59.66	20.22
Diving.....	\$ 121.53	20.22
Standy-By.....	\$ 60.76	20.22

The Tender shall receive 2 hours at the straight time pay rate per shift for dressing and/or undressing when work is done under hyperbaric conditions.

Depth Pay (Surface Diving):

0-20 ft.: Free zone

>20-100 ft.: \$2.00 per ft.

>100-150 ft.: \$3.00 per ft.

>150-220 ft.: \$4.00 per ft.

>220 ft.: \$5.00 per ft.

Diving in Enclosures (Diver Only):

0-25 ft.: Free zone

>25-300 ft.: \$1.00 per ft.

ELECTRICIAN.....\$ 48.31 22.00

All Areas

IRONWORKER

Reinforcing Iron and Rebar Workers.....\$ 42.70 28.92

Structural Iron and Steel Workers.....\$ 38.31 27.91

LABORER

Group 1.....\$ 30.48 13.60

Group 2.....\$ 33.96 13.60

Group 3.....\$ 34.21 13.60

Group 4.....\$ 35.33 13.60

GROUP 1: Flag Person for Traffic Control

GROUP 2: General Labor; Asbestos Removal; Burning Bar; Bucket Man; Carpenter Tender; Caisson Worker; Cement Mason Tender; Cement Handler (dry); Chuck Tender; Choker Setter; Concrete Worker; Curb Machine-Lay Down; Crusher and Batch Worker; Heater Tender; Fence Erector; Landscape Laborer; Landscaper; Lawn Sprinkler Installer; Pipe Wrapper; Pot Tender; Powderman Tender; Rail and Truck Loaders and Unloaders; Riprapper; Sign Erection; Guardrail and Jersey Rail; Spike Driver; Stake Jumper; Signalman: Tail Hoseman; Tool Checker and Houseman and Traffic Control Worker

GROUP 3: Concrete Vibrator; Dumpman (Grademan); Equipment Handler; Geotextile and Liners; High-Pressure Nozzleman; Jackhammer (Pavement Breaker) Non-Riding Rollers; Pipelayer; Posthole Digger (power); Power Driven Wheelbarrow; Rigger; Sandblaster; Sod-Cutter-power and Tampers

GROUP 4: Hod Carrier; Water Well Laborer; Blaster; Wagon Driller; Asphalt Raker; Cutting Torch; Grade Setter; High- Scaler; Power Saws (Faller & Concrete); Powderman; Rock & Core Drill; Track or Truck Mounted Wagon Drill and Welder incl. Air Arc

LINE CONSTRUCTION

Equipment Operator.....\$ 55.14 23.37

Groundman.....\$ 37.43 21.85

Lineman.....\$ 62.60 24.46

PAINTER.....\$ 39.60 14.12

PILE BUCKS.....\$ 43.78 17.07

POWER EQUIPMENT OPERATOR:

Group 1.....\$ 35.72 14.05

Group 2.....\$ 38.00 14.05

Group 3.....\$ 39.27 14.05

Group 4.....\$ 40.60 14.05

Group 5.....\$ 41.85 14.05

Group 6.....\$ 43.20 14.05

Group 7.....\$ 46.15 14.05

GROUP 1: Air Compressor; Auto Fine Graders; Belt Finishing; Boring Machine (small); Cement Silo; Crane, A-Frame Truck Crane; Crusher Conveyor; DW-10, 15, and 20 Tractor Roller; Farm Tractor; Forklift; Form Grader; Front End Loader Under 1 CU Yard; Heavy Duty Drills; Herman Nelson Heater; Mulching Machine; Oiler, All Except Cranes & Shovels; Pumpman

GROUP 2: Air Doctor; Backhoe/Excavator/Shovel up to and including 3 CU Yard; Bit Grinder; Bituminous Paving Travel Plant; Boring Machine Large; Broom, Self-Propelled; Concrete Travel Batchers; Concrete Float & Spreader; Concrete Bucket Dispatcher; Concrete Finish Machine; Concrete Conveyor; Distributor; Dozer; Rubber-Tired, Push & Side Boom; Elevating Grader/Gradall; Field Equipment Serviceman; Front End Loader 1 CU Yard to including 5 CU Yard; Grade Setter; Heavy Duty Drills, All Types; Hoist/Tugger, All; Hydra lift Forklifts & Similar; Industrial Locomotive; Motor Patrol (except finish); Mountain Skidder; Oiler, Cranes\Shovels; Pavement Breaker, EMSCO; Power Saw, Self-Propelled; Pugmill; Pumpcrete\Grout Machine; Punch Truck; Roller, Other Than Asphalt; Roller, Sheepsfoot (Self-Propelled); Roller, 25 Tons and Over; Ross Carrier; Rotomill Under 6 Ft; Trenching Machine; Washing/Screening Plant

GROUP 3: Asphalt Paving Machine; Asphalt Screed; Backhoe/Excavator/Shovel Over 3 CU Yard; Cableway Highline; Concrete Batch Plant; Concrete Curing Machine; Concrete Pump; Cranes; Creter; Cranes, Electric Overhead; Cranes 24 Tons and Under; Curb Machine/Slip Form Paver; Finish Dozer; Front End Loader Over 5 CU Yard; Mechanic/Welder; Pioneer Dozer; Roller Asphalt (Breakdown & Finish); Rotomill, Over 6 FT; Scraper, Single, Twin or Pulling Belly Dump; Yo-Yo Cat Haul Truck, Articulating Trucks, Vac Truck

GROUP 4: Asphalt/Hot Plant Operator, Cranes, 25 Tons up to and incl. 44 Tons; Crusher Operator; Finish Motor Patrol; Finish Scraper

GROUP 5: Cranes, 45 Tons up to and incl. 74 Tons

GROUP 6: Cranes, 75 Tons up to and incl. 149 Tons; Crane, Whirley (All)

GROUP 7: Cranes, 150 Tons up to and incl. 250 Tons; Cranes, over 250 tons-add \$1.00 for every 100 tons over 250 tons; Crane, Tower (All); Crane Stiff-Leg or Derrick; Helicopter Hoist

TRUCK DRIVER

Group 1.....\$ 31.03 13.83

Group 2.....\$ 39.31 13.83

Group 1: Pilot Car

Group 2: Combination Truck and Concrete Mixer and Transit Mixer; Dry Batch Trucks; Distributor Driver; Dumpman; Dump Trucks and Similar Equipment; Dumpster; Flat Trucks; Lumber Carriers; Lowboys; Pickup; Powder Truck Driver; Power Boom; Serviceman; Service Truck/Fuel Truck/Tireperson; Truck Mechanic; Trucks with Power Equipment; Warehouseman, Partsman, Cardex and Warehouse Expeditor; Water Trucks

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors, applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at: <https://www.dol.gov/agencies/whd/government-contracts>.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded.

If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least \$13.65 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract from May 11, 2026, through December 31, 2026. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses

(29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010

01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier. ?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

- 1) Has there been an initial decision in the matter? This can be:
 - a) a survey underlying a wage determination
 - b) an existing published wage determination
 - c) an initial WHD letter setting forth a position on a wage determination matter

d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to:

davisbaconinfo@dol.gov or

by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to:

BCWD-Office@dol.gov or

by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7).

Requests for review and reconsideration can be submitted via email to:

dba.reconsideration@dol.gov or

by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board).

Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

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END OF GENERAL DECISION"

**"CONTRACTOR REQUIREMENTS AND
ACKNOWLEDGMENT FOR
WORKING ON RAILROAD RIGHT-OF-WAY"**

This document must be dated and signed by the Contractor and submitted to the State before occupying or working on Railroad right-of-way.

- 1) No change, which has a direct effect on the Railroad, will be made to construction plans without submitting revised plans and receiving approval from the Railroad. Work covered by the plans, that requires flagging, will be covered by the Railroad/Highway Agreement. For work that is a result of the contractor's discretion, flagging protection will be required when equipment crosses or is working within 25 feet (7.62 meters) of center of any live track. When deemed necessary by local Railroad officers, a flagman may be required at all times while working on Railroad right-of-way in high density rail traffic area.
- 2) Crossing of any Railroad tracks must be done at approved locations and must be full depth timber, rubber, etc. Any equipment with steel wheels, lugs or tracks must not cross steel rails without the use of rubber tires or other approved protection. This shall apply specifically to, but not be limited to, access for Contractor furnished gravel, borrow or waste sites. The Contractor will be required to obtain a permit from the Railroad, and comply with any provisions thereof, before using any private Railroad crossings. All track crossing locations must be covered by a Private Roadway and Crossing Agreement. This does not apply to any public crossing.
- 3) Costs of flagging or planking protection of the tracks, which are a direct result of the planned construction, will be paid for by the State. Costs of flagging, planking for protection of the tracks, installation of new crossings or other work caused by the Contractor's discretion, will be paid by the Contractor.
- 4) When work to be performed by the Contractor is not covered in the Railroad/Highway agreement, the Contractor must furnish a plan to the Railroad for approval showing details as to how any work that may affect the Railroad will be accomplished.
- 5) Storing of construction materials or any other material, including dirt, sand, etc., within the Railroad right-of-way, will not be allowed unless covered by an easement, construction permit, or Contractor's permit/lease.
- 6) Construction within 25 feet (7.62 meters) of the center of any track not covered by the Railroad/Highway agreement will require plan approval and authorization by the Railroad Superintendent Maintenance and Engineering. This includes, but is not limited to, any excavation, slope work and driving of sheet piling.
- 7) No vehicles, equipment or machines shall be parked or stored unattended within 25 feet (7.62 meters) of any track, on railroad right-of-way, without specific written approval of the Railroad.
- 8) When any work is to be performed on Railroad property by the Contractor that is not shown in the construction plans, the Contractor must submit a detailed plan of the work to the Railroad for their approval.

CONTRACTOR'S ACKNOWLEDGMENT:

WORK SITE LOCATION:

Company

Town

By: _____
Name

State

Title

Project #

Date

Rev. 01/01/04

FHWA-1273 – Revised June 25, 2026

CONTRACT PROVISIONS FOR FEDERAL-AID CONSTRUCTION CONTRACTS

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ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only).

I. GENERAL

1. Historically, contracting agencies using Federal-aid highway funds were required to ensure Form FHWA-1273 was physically incorporated into all contracts and subcontracts. Effective June 10, 2026, this requirement was eliminated [91 FR 25492]. Future use of Form FHWA-1273 is now optional on the part of the contracting agency using Federal-aid highway funds. FHWA continues to make Form FHWA-1273 available as a convenience to contracting agencies. Contracting agencies must continue to ensure compliance with the provisions cited in Form FHWA-1273 in accordance with the provisions regardless of the use of Form FHWA-1273. Accordingly, the contracting agency retains the authority to determine whether the contractor must use Form FHWA-1273 to physically incorporate required contract provisions in each subcontract and in lower tier contracts. Where permitted by the contracting agency, the contractor may choose other ways to include required contract provisions in each subcontract, besides incorporating Form FHWA-1273. Contract provisions in Form FHWA-1273 are not required to be physically included in subcontracts for design services on Federal-aid design-build contracts, or in purchase orders, rental agreements and other agreements for supplies or services.

The applicable provisions of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor or design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents.

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's

immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION

The contractor and all subcontractors must comply with the following policies: 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27, including any amendments thereto.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27, including any amendments thereto.

The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract.

1. Assurances Required:

a. The requirements of 49 CFR Part 26, including any amendments thereto, and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26, including any amendments thereto, in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E, including any amendments thereto, are incorporated by reference. 49 CFR Part 21.

III. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act ([29 CFR part 3](#))), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act ([40 U.S.C. 3141\(2\)\(B\)](#)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in

paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in [29 CFR part 1](#), a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the

classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. Fringe benefits not expressed as an hourly rate. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. Unfunded plans. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. Interest. In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. Withholding requirements. The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered

necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. Priority to withheld funds. The Department has priority to funds withheld or to be withheld in accordance with paragraph 2.a. of this section or Section IV, paragraph 3.a., or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its repurchase costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901](#)–3907.

3. Records and certified payrolls (29 CFR 5.5)

a. Basic record requirements (1) Length of record retention. All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) *Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act); daily and weekly number

of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) *Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) *Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. *Certified payroll requirements* (1) *Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in [29 CFR part 3](#); and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) *Use of Optional Form WH-347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under [18 U.S.C. 1001](#) and [31 U.S.C. 3729](#).

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under [29 CFR part 6](#) any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices (1) Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with [29 CFR part 30](#), including any amendments thereto.

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section III. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs (1) through (11) of this section, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the

contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, [18 U.S.C. 1001](#).

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#); or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#).

IV. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the

Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* \$33 as of January 15, 2025 (See 90 FR 1859) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section III paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its procurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901–3907](#).

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

V. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of

the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" in paragraph 1. of this section refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph 1. of this section is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on longstanding interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however,

contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VI. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the

character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

VIII. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

IX. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this

covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the

eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

* * * * *

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contractor). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers to any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered

transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

* * * * *

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

* * * * *

X. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XI. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the

extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS** (40 U.S.C. sections 14501(d) and 14701
and the Appalachian Regional Commission Code as
authorized under 40 U.S.C. section 14302)

This provision is applicable to all Federal-aid projects funded
under the Appalachian Regional Development Act of 1965.

6. The contractor shall include the provisions of Sections 1
through 4 of this Attachment A in every subcontract for work
which is, or reasonably may be, done as on-site work.

1. During the performance of this contract, the contractor
undertaking to do work which is, or reasonably may be, done
as on-site work, shall give preference to qualified persons who
regularly reside in the labor area as designated by the DOL
wherein the contract work is situated, or the subregion, or the
Appalachian counties of the State wherein the contract work is
situated, except:

a. To the extent that qualified persons regularly residing in
the area are not available.

b. For the reasonable needs of the contractor to employ
supervisory or specially experienced personnel necessary to
assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to
present or former employees as the result of a lawful collective
bargaining contract, provided that the number of nonresident
persons employed under this subparagraph (1c) shall not
exceed 20 percent of the total number of employees employed
by the contractor on the contract work, except as provided in
subparagraph (4) below.

2. The contractor shall place a job order with the State
Employment Service indicating (a) the classifications of the
laborers, mechanics and other employees required to perform
the contract work, (b) the number of employees required in
each classification, (c) the date on which the participant
estimates such employees will be required, and (d) any other
pertinent information required by the State Employment
Service to complete the job order form. The job order may be
placed with the State Employment Service in writing or by
telephone. If during the course of the contract work, the
information submitted by the contractor in the original job order
is substantially modified, the participant shall promptly notify
the State Employment Service.

3. The contractor shall give full consideration to all qualified
job applicants referred to him by the State Employment
Service. The contractor is not required to grant employment to
any job applicants who, in his opinion, are not qualified to
perform the classification of work required.

4. If, within one week following the placing of a job order by
the contractor with the State Employment Service, the State
Employment Service is unable to refer any qualified job
applicants to the contractor, or less than the number
requested, the State Employment Service will forward a
certificate to the contractor indicating the unavailability of
applicants. Such certificate shall be made a part of the
contractor's permanent project records. Upon receipt of this
certificate, the contractor may employ persons who do not
normally reside in the labor area to fill positions covered by the
certificate, notwithstanding the provisions of subparagraph (1c)
above.

5. The provisions of 40 U.S.C. 14501 allow the contracting
agency to provide a contractual preference for the use of
mineral resource materials native to the Appalachian region.

Supplemental Revisions for FHWA Form-1273 (Dated May 1, 2012)
Required Contract Provisions
Federal-Aid Construction Contracts

The following are supplementary or amendatory to the May 1, 2012, FHWA Form-1273 insofar as they apply to this contract:

Add the following provisions in accordance with the FHWA memo dated December 11, 2015:

Utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

Furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in above paragraph to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

SPECIAL PROVISIONS**EEO AFFIRMATIVE ACTION REQUIREMENTS ON FEDERAL & FEDERAL-AID CONSTRUCTION CONTRACTS**

Federal-aid contractors are hereby notified they are subject to the OFCCP goals and economic areas for minority and female participation expressed below. Compliance with the goals and OFCCP affirmative action efforts for contracts and subcontracts consisting of \$10,000 or more will be determined by OFCCP officials.

Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246)

1. The Offeror's or Bidder's attention is called to the Equal Opportunity Clause and "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

GOALS FOR FEMALE PARTICIPATION (statewide) 6.9%

GOALS FOR MINORITY PARTICIPATION IN EACH TRADE**Economic Areas:**

152	Non-SMSA (Standard Metropolitan Statistical Area) Counties Daniels, Richland, Roosevelt, Sheridan	4.4%
153	Great Falls, MT SMSA Counties 3040 Great Falls, MT Cascade	3.2%
	Non-SMSA Counties Blaine, Broadwater, Chouteau, Fergus, Glacier, Hill, Jefferson, Judith Basin, Lewis & Clark, Liberty, Meagher, Petroleum, Phillips, Pondera, Teton, Toole, Valley, Wheatland	4.1%
154	Missoula, MT Non-SMSA Counties Beaverhead, Deer Lodge, Flathead, Granite, Lake, Lincoln, Madison, Mineral, Missoula, Powell, Ravalli, Sanders, Silver Bow	2.7%
155	Billings, MT SMSA Counties 0880 Billings, MT Yellowstone	3.3%
	Non-SMSA Counties Big Horn, Carbon, Carter, Custer, Dawson, Fallon, Gallatin, Garfield, Golden Valley, McCone, Musselshell, Park, Powder River, Prairie, Rosebud, Stillwater, Sweet Grass, Treasure, Wibaux, Yellowstone Nat'l Park	3.3%

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.