

PROJECT SPECIFICATIONS

The Contractor shall comply with the *Contract Terms and Conditions* provided with the Bid Documents including but not limited to the following:

INSURANCE REQUIREMENTS – In accordance with the *Contract Terms and Conditions*, the Contractor is required to have in place during the term of the Contract and any renewals or extensions thereof, the following types of insurance, issued by companies acceptable to the Commonwealth and authorized to conduct such business under the laws of the Commonwealth of Pennsylvania:

- A. **Worker's Compensation Insurance** for all the Designer/Contractor's employees and those of any subcontractor, engaged in Work at the site of the project as required by law.
- B. **Builders Risk Insurance** the Designer/Contractor shall, until all physical on-site work is complete, maintain insurance on all insurable work included in the Contract against loss or damage by fire and lightning and those perils covered by the extended coverage endorsement. Insurable work includes work both interior and exterior of any building being constructed. The property insurance must include a Builder's Risk Policy or an installation floater that covers all risks. The risk of damage to the construction work is that of the Designer/Contractor and surety. No claims for such loss or damage will be recognized by the agency, nor will such loss or damage excuse the complete and satisfactory performance of the Contract by the Contractor. The Designer/Contractor and all subcontractors are required to produce certificates of insurance, naming the Commonwealth of Pennsylvania and Pennsylvania Game Commission as an additional insured.
- C. **Public Liability and Property Damage Insurance** to protect the Commonwealth, the Designer/Contractor, and any and all subcontractors from claims for damages for personal injury (including bodily injury), sickness or disease, accidental death and damage to property including the loss of use resulting from any property damage, which may arise from the activities performed under the Contract or the failure to perform under the Contract, whether such performance or non-performance be by the Designer/Contractor, by any subcontractor, or by anyone directly or indirectly employed by either. **The minimum amounts of coverage shall be \$250,000 per person and \$1,000,000 per occurrence for bodily injury, including death, and \$250,000 per person and \$1,000,000 per occurrence for property damage.** Such policies shall be occurrence rather than claims-made policies and shall not contain any endorsements or any other form designated to limit and restrict any action by the Commonwealth, as an additional insured, against the insurance coverage in regard to Work performed for the Commonwealth.

Prior to commencement of the Work under the Contract and at each insurance renewal date during the term of the Contract, the Contractor shall provide the Commonwealth with current certificates of insurance. **These certificates or policies shall name the Commonwealth AND Pennsylvania Game Commission as additional insured and shall contain a provision that the coverage's afforded under the policies will not be cancelled or changed until at least thirty (30) days written notice has been given to the Commonwealth.**

COMPLIANCE WITH LAW – The Contractor shall comply with all applicable federal and state laws and regulations and local ordinances in the performance of the Contract.

WORKMANSHIP - All Work shall be performed in a Workmanlike manner and all materials and labor shall be in strict and entire conformity with the Drawings and Specifications.

INSPECTION AND CHANGES - All Work is subject to review and acceptance by the Pennsylvania Game Commission. Any Work rejected as unsatisfactory or unsuitable shall be redesigned and resubmitted with suitable design at the sole cost of the designer to the complete satisfaction of the Game Commission.

Changes shall be in accordance with the *Contract Terms and Conditions*.

TEMPORARY SERVICES AND JOB CONDITIONS - The Contractor shall be responsible for providing any and all temporary facilities necessary to execute and protect the Work. The Contractor shall accept all conditions as found upon examination of the site and shall coordinate, plan, and execute the Work accordingly. The Contractor shall cooperate in the arrangements of the Work as necessary to least affect the administration or operations of existing buildings, facilities, and infrastructure. The Contractor shall keep the Work site clean at all times.

PREVAILING WAGE – Prevailing minimum wages apply to this project. See *Contract Terms and Conditions* and attached Prevailing Wage Determination.

The Contractor and each Subcontractor shall file a statement each week and a final statement at the conclusion of the Work on the contract with the contracting agency, under oath, and in form satisfactory to the Secretary, certifying that workmen have been paid wages in strict conformity with the provisions of the contract as prescribed by this section or if wages remain unpaid to set forth the amount of wages due and owing to each workman respectively. The PA Labor and Industry “Weekly Payroll Certification for Public Works Projects” form shall be used. The initial and final Payroll Certifications shall be notarized.

PAYMENT TERMS - A schedule of values is provided with the bid. Payment will be made monthly upon satisfactory completion of items listed on the Schedule of Values and in accordance with the *Contract Terms and Conditions*.

All payments due to the Contractor shall be processed after all Work has been inspected and approved by an agent of the Pennsylvania Game Commission. Payment will not be made for Work that is not progressing satisfactorily or for unsuitable or defective Work.

Payments may be withheld for failure to provide required documentation for the project including but not limited to required submittals / shop drawings and weekly submission of Certified Payrolls.

INVOICING – All Project invoices shall be submitted directly to:

Jeffery Mock
Land Management Supervisor
PGC Northcentral Region
P.O. Box 5038
Jersey Shore, PA 17740-5038
(570) 398-4744 Ext 30307
Fax 570-398-1632
Email : jmock@pa.gov

All invoices must be submitted in black and white with no color and shaded areas. Invoices must include the Purchase Order Number, Contractor’s SAP Vendor Number, Dates of services and the Contractor’s name and address as listed on the Purchase Order. Payment items on invoices shall match the items on the Purchase Order. Failure to submit invoices that meet these requirements will result in a delay of payment.

Please Note: Vendors are reminded to **NOT** include employer identification numbers, Social Security Numbers, bank account information, or other personally identifiable information on their invoices. That information is uniquely tied to your SAP Vendor Number and, for security purposes, should not be explicitly stated on an invoice.

CONTRACT TERM - The Contract shall commence upon delivery of Purchase Order to Contractor and shall terminate on **June 28, 2024**. Contract time is of the essence of the Project. All Work must be completed and accepted by this date.

EXCISE TAXES, PENNSYLVANIA SALES TAX - The Commonwealth is exempt from all Excise Taxes. See *Contract Terms and Conditions*.

OFFSET PROVISION - The Designer/Contractor agrees that the Commonwealth may set off the amount of any state liability or other debt of the Contractor or its subsidiaries that is owed to the Commonwealth and not being contested on appeal against any payments due the Contractor under this or any other contract with the Commonwealth.

PERFORMANCE SECURITY / CONTRACT BONDS – Within 10 days after award of the purchase order, the Bidder to whom the Contract is awarded, shall provide **Contract Performance Security** and a **Payment Bond** in a form acceptable to the Commonwealth for the amounts listed below and in accordance with the *Contract Terms and Conditions*.

A **Performance Bond** at one hundred percent (100%) of the contract amount, conditioned upon the faithful performance of the contract in accordance with the plans, specifications and conditions of the contract.

A **Payment Bond** in an amount equal to one hundred percent (100%) of the contract amount.

Performance and Payment Bonds shall be executed by a surety company authorized to do business in the Commonwealth and listed on the current U.S. Dept. of Treasury, Bureau of Fiscal Service, Department Circular 570 (<https://fiscal.treasury.gov/surety-bonds/list-certified-companies.html>). Bonds shall include a current Power of Attorney dated the same as the date of the bond. Bonds shall be made payable to the Commonwealth.

GUARANTY / WARRANTY – See *Contract Terms and Conditions* – all items are warranted for a period of one year following delivery by the Contractor and acceptance by the Commonwealth.

ADDENDA TO THE INVITATION FOR BID (IFB) – See *Contract Terms and Conditions* – If the issuing office deems it necessary to revise any part of this IFB before the bid response date, the issuing office will post an addendum to the DGS website at www.emarketplace.state.pa.us. It is the Contractor's responsibility to periodically check the website for any new information or addenda to the IFB.

HOLD HARMLESS PROVISION - See *Contract Terms and Conditions* - The Contractor shall hold the Commonwealth harmless from and indemnify the Commonwealth against any and all third party claims, demands and actions based upon or arising out of any activities performed by the Contractor and its employees and agents under this Contract, provided the Commonwealth gives Contractor prompt notice of any such claim of which it learns.

TECHNICAL SPECIFICATIONS

The following stipulations, specifications and description of Work are defined and described as Technical Specifications and it is understood and agreed that everything herein contained is hereby made part of the Contract. Wherever any feature of the Work is not fully set forth in these Technical Specifications and is necessary for the completion of Work, it shall be understood that the same is governed by the rules of the best prevailing practice for that class of Work, as determined by the Pennsylvania Game Commission and its representatives.

These Technical Specifications and any drawings, maps and/or plans forming a part thereof, will cover the furnishing of all labor, equipment, tools, materials, and related items necessary to perform the Work, as required under this Contract.

- Section 1 – Summary of Work
- Section 2 – Pay Schedule
- Section 3 – Clearing and Grubbing
- Section 4 – Excavation
- Section 5 – Roadway Surface Preparation
- Section 6 – Culvert and Drainage Pipe
- Section 7 – Borrow Materials and Road Base
- Section 8 – Headwalls/End Walls
- Section 9 – Erosion and Sediment Control
- Section 10 – Restoration

DRAWINGS

The following drawings are included:

- 1 of 2 – Drainage Pipe Details
- 2 of 2 – Typical Road Profile

TECHNICAL SPECIFICATION SECTION 1 - SUMMARY OF WORK

1.1 – SCOPE OF PROJECT

The project generally involves the installation of culvert pipes, road base construction, road resurfacing, grading, drainage turnouts and related work to establish approximately 6,442 linear feet of access roadway in Ridgway Township, Elk County. A list of detailed tasks are listed below.

1. Mohan Run Electric Road will have 1,200 linear feet of geotextile fabric installed at a width of 15 feet and 12' driving surface for a section of the road which is shown on the road station map.
2. Provide seven 18-inch diameter by 30 ft length double walled smooth bore plastic culvert pipes. All will be trenched with an excavator or backhoe. All culverts must be set in a minimum of 4" of compacted 2RC gravel. This will require 20 tons of 2RC gravel for each culvert. The 15-foot road surface directly over the culverts must be a minimum of 12 inches deep of compacted 2RC aggregate. All culverts will have head walls and end walls constructed of concrete unless otherwise specified. Old culverts will be removed from the site and properly disposed of. The culvert locations will be identified by PGC personnel during road improvement operations. The culvert locations are also shown on the road station map.
3. Provide fourteen new concrete headwalls and end walls for the seven new 18-inch diameter culverts on the entire length of Mohan Run Electric Road spanning from road stations 1-33.
6. All existing/remaining culverts will have inverts and discharges cleaned and stabilized as deemed necessary by the Land Management Supervisor. Several turn-outs will be added and cleaned as necessary.
7. Mohan Run Electric Road will have 12-inches of sub-base (borrow material) added and will be suitably drained with a center crown and side slope (4% - 6%) with a road grader or dozer with a 6-way blade. A stone rake and 10-ton vibrating roller will also be required following grading operations. All road edges including berms will be graded and rolled to a contour that allows for the sheet flow of water from the driving surface to an area where it can infiltrate naturally or a ditch if necessary, as determined by the Land Management Supervisor.
8. Apply approximately 8" thick of Driving Surface Aggregate (DSA) 12' wide on the designated public access parking lots and roadway sections. The DSA is to be applied with a motorized paver capable of applying the slopes. Once applied, the DSA is to be compacted by a vibratory smooth drum roller.

1.2 – WORK AREA

The project on SGL #044 involves approximately 6,442 linear feet of existing administrative road in Ridgway Township, Elk County, Pennsylvania. See Location Map included with the Bid Documents. The site is owned by the Pennsylvania Game Commission (PGC).

1.3 – WORK HOURS

Work will be restricted during hunting seasons. No Work or construction operations will be permitted during the following days and periods:

- The opening day and all Saturdays during spring turkey season, including the youth spring gobbler hunt.

The Contractor shall provide notice to Land Management Supervisor at least 96 hours (4 days) prior to start of the work.

1.4 – ACCESS TO WORK AREA

Access to the project sites and staging of equipment and materials shall be coordinated with the PGC. The Contractor shall keep access roads leading to the project sites open for use by the PGC. The Contractor is required to repair any ruts or other damage to the access roads and parking areas caused by construction equipment.

All equipment shall be cleaned of soil and debris before being moved onto site to prevent spread of invasive species.

1.5 – CONTROL OF WORK AREA

Coordinate with PGC staff for access and control of work areas. Provide barricades, signs and other devices as needed to prevent unauthorized access to work areas until construction activities are completed and parking areas are opened for public use.

All PGC gates on State Game Land roads used to access the project site shall be closed and locked at the end of each workday unless other arrangements are coordinated with PGC staff.

Do not block public roads at any time during construction. If necessary, provide temporary Maintenance and Control of Traffic in accordance with PennDOT Pub. 213 Temporary Traffic Control Guidelines and related PennDOT references.

Provide and maintain construction warning signs, truck crossing signs, etc. during active work and construction operations.

Damage to trails, roads, parking areas, gates, culverts, streams, rights-of-way, infrastructure, and property caused by the Contractor's equipment shall be repaired or restored to original condition at no additional cost.

All trash and construction debris / waste shall be removed from the project site and properly disposed of. Burning is not permitted on State Game Lands.

The Contractor is responsible for the control and collection of fluids leaking from any equipment used on the site. The Contractor shall provide spill containment and cleanup kits appropriate for the equipment being used. At a minimum, the kits shall contain; plugs and clamps to control hydraulic line breaks, a container to collect leaking fluids, fluid absorbent pads, heavy duty trash bags, and a shovel. The Contractor shall collect and control fluids leaking from any equipment and dispose of properly. The Contractor shall contain and cleanup all fluid spills and properly dispose of contaminated fluids, materials, and soils at an approved waste disposal / recycling site or facility. Operating equipment noticeably leaking fluids on State Game Lands is prohibited.

The Contractor, employees, and sub-contractors may not hunt to, from, or at the job site when the work location is beyond a gated road that is closed to public traffic. The Contractor may travel to and from the work location on non-workdays to check on the condition of equipment.

1.6 – PERMITS, LAWS AND REGULATIONS

The Contractor shall procure and pay for all permits, licenses, inspections, conveniences, or other approvals necessary for the execution of the contract. The PGC is not aware of any permits required for this project.

The Contractor shall comply with all laws, ordinances, rules, orders, and regulations relating to the performance of the work, the protection of adjacent property, the maintaining of surface passageways, guard fences, and/or other protective facilities.

All applicable Federal and State laws and regulations, municipal ordinances and rules and regulations of all authorities, having jurisdiction over construction of the project shall apply to the contract throughout, and they shall be deemed to be included in the contract as a part, thereof, the same as though herein written out in full.

All regulations of the Occupational Safety and Health Act are in effect on this contract. It will be the Contractor's responsibility to make himself aware of all appropriate County, State and Federal regulations that apply to this contract.

Any violations incurred from improper execution of the above provisions shall be paid for by the Contractor. Loss of time on the project from such violations will not be tolerated.

1.7 – PROTECTION OF UTILITIES - PA ONE CALL (ACT 287 of 1974 as amended)

The Contractor shall comply with Act 287 (as amended) and the “*Underground Utility Line Protection Law*” when Work involves excavation and earthmoving activities as defined by the Act. The Contractor shall contact the Pennsylvania One Call System, Inc. by phone at 1-800-242-1776 or their website (www.pa1call.org) to notify affected utilities and to coordinate utility locations prior to earthwork and excavation operations at the site.

1.8 – ROAD PERMITS AND BONDING

The Contractor shall coordinate, acquire, pay for, and maintain for the duration of the project any and all permits or bonds required by local municipalities and/or PennDOT to utilize public roads and infrastructure for heavy hauling and related construction activities. Responsibilities shall include any pre or post construction inspections and related reports if required. All costs related to permitting and bonding public roadways and infrastructure shall be included with and incidental to the Bid submitted by the Contractor and will not be paid for separately.

1.9 – EQUIPMENT

The PGC reserves the right to inspect/evaluate Contractor provided equipment used to complete the project. If in the opinion of the PGC staff the equipment is not adequate to meet the requirements of the contract, the Contractor shall provide other equipment acceptable to the PGC staff for the project. If the Contractor does not provide adequate equipment to complete

the project the contract will be terminated. The decision of the PGC staff Officer in Charge as it relates to proper equipment and its ability to complete the work will be final.

Adequate equipment required to complete the project shall remain on site for the duration of the project. If equipment is removed from the site and is later needed to finish the required work and restoration or to perform repairs / corrections, the Contractor shall remobilize and provide necessary equipment to complete the work to the satisfaction of the PGC staff. No separate or additional payment will be made to remobilize equipment to the project site.

1.10 – FINAL INSPECTION

Final inspection of the project will be conducted by PGC staff. The Contractor may be present at the final inspection. Upon successful completion of the required work, restoration of disturbed or damaged areas and/or infrastructure, submission of all required project documentation, certified payrolls, aggregate load slips, etc., final payment will be released to the Contractor.

1.11 – MEASUREMENT AND PAYMENT

See Technical Specification Section 2 for description of pay items.

1.12 - **CONTRACT TERM** - The Contract shall commence upon delivery of Purchase Order to the Contractor and shall terminate on June 28, 2024. All Work must be completed and accepted by this date.

TECHNICAL SPECIFICATION SECTION 2 – MEASUREMENT AND PAYMENT

2.1 – GENERAL

- A. The items on the Bid Form for this Contract will be measured and the payment made in accordance with this Section.
- B. All payments will be made at the unit prices for each item listed in the Bid Form.
- C. Any items not specifically listed on the Bid Form but are specified and/or are necessary to complete the Work will be considered incidental to the related items listed on the Bid Form.

2.2 – PAY ITEMS AND MEASUREMENT METHODS

Pay items are listed in the order they appear on the Bid Form and unless stated otherwise, the numbers correspond to the Pay Item Numbers on the Bid Form and the Purchase Order.

1. ADMINISTRATION, MOBILIZATION, TERMS AND CONDITIONS, CONTRACT BONDS - SGL 044 MOHAN RUN ELECTRIC ROAD MAINTENANCE PROJECT ELK COUNTY, PA
 - a. This price and payment shall constitute full compensation for providing Performance and Payment Bonds, insurance coverage and certificates, compliance with the Terms and Conditions, and general project requirements except where specifically described and scheduled elsewhere, mobilization, demobilization, temporary facilities, municipal and state (PennDOT) roadway bonding requirements / fees and costs / inspections, and compliance with requirements of permits and approvals (not measured and paid for elsewhere) required for the project by the Contract Documents.
 - b. Unit of Measurement: Lump Sum.
2. Geotextile Fabric Installation
 - a. This price and payment shall constitute full compensation for providing 1,200 feet of geotextile fabric. The unit cost is not subject to payment until it is installed to the specified width and installed to satisfaction of the PGC.
 - b. Unit of Measurement: Linear Feet (LF).
3. SOIL EROSION AND SEDIMENTATION CONTROL
 - a. This price and payment shall constitute full compensation for providing Soil Erosion and Sedimentation Controls as specified and shown and directed by PGC staff including but not limited to all labor, materials, equipment, supervision, and related work and incidental items required to prevent accelerated soil erosion and surface water contamination and to address and correct erosion problems that occur during construction. Includes provision of controls at the stone borrow site on State Game Lands.

b. Unit of Measurement: Lump Sum

4. CLEARING AND GRUBBING

a. This price and payment shall constitute full compensation for providing clearing and grubbing as required to create a sixteen-foot ditch line to ditch line cartway path as depicted in the provided drawings and as directed by PGC staff. This includes but not limited to all labor, materials, equipment, supervision, and related work and incidental items required.

b. Unit of Measure: Lump Sum

5. EXCAVATE, GRADE AND SHAPE ROADWAY

a. This price and payment shall constitute full compensation to excavate, grade and shape the roadway as specified and shown on the drawings / details and directed by PGC staff including but not limited to all labor, materials, equipment, supervision, excavation and earthwork operations, cut / fill excavation and earthwork operations, excavation and removal of existing earth berms, borrow site excavation and fill operations (if required), compaction of subgrade; excavations / grading required to create ditches, turnouts, tail ditches, grade breaks, and broad based dips; disposal of excess / waste materials, and related work required to provide the roadway subgrade. Contractor shall provide adequate construction excavation and earthmoving equipment suitable for the required work including but not limited to a dozer with a 6-way blade, grader, and excavator.

b. Unit of Measurement: Linear Foot measured along the length of the roadway based on the Typical Road Section detail.

6. CULVERT INSTALLATION

a. This price and payment shall constitute full compensation to relocate and/or install an culvert, as directed by PGC staff including but not limited to all labor, materials, 2A bedding aggregate, equipment, supervision, excavation and earthwork operations, miscellaneous culvert fittings / accessories, disposal of waste excavated materials, riprap lined culvert discharge apron (if required), and related work required to provide the culverts.

b. Unit of Measurement: Linear Foot.

7. HEADWALLS

a. This price and payment shall constitute full compensation to install headwalls on culvert invert and outlet ends, work is not limited to all labor, materials, equipment,

supervision, excavation and earthwork operations, miscellaneous culvert fittings / accessories, disposal of waste excavated materials, riprap lined culvert discharge apron (if required), and related work required to provide the culverts.

b. Unit of Measurement: Each.

8. ROADWAY BASE – BORROW MATERIAL

a. This price and payment shall constitute full compensation to provide suitable road base/surface, as directed by PGC staff including but not limited to all labor, materials, equipment, supervision, excavation and earthwork operations, compaction, and related work required to provide the roadway aggregate. Borrow material will be assumed to found on-site.

b. Unit of Measurement: Cubic Yards – To be paid on compacted volume but anticipated as shipped and dumped at the site. Quantity in Bid is estimated based on anticipated volume required. The volume will be assumed as project length of project specified depth and width (compacted volume).

9. ROADWAY SURFACE – DRIVING SURFACE AGGREGATE (DSA)

a. This price and payment shall constitute full compensation to provide driving surface aggregate (DSA) as directed by PGC staff and meeting specifications found in section 5.2. This includes but is not limited to all labor, materials, equipment, supervision, excavation and earthwork operations, compaction, and related work required to provide the roadway aggregate.

b. Unit of Measurement: Ton – Loose as shipped and dumped at the site. Quantity in Bid is estimated based on anticipated volume required. Actual quantity measured and paid shall be based on load slips provided by the aggregate supplier / quarry where the material is obtained and weighed. **The Contractor shall provide copies of ALL aggregate load slips including a project summary sheet provided by the aggregate supplier for verification of quantities and quality control. Load slips shall include the following minimum information: 1) supplier, 2) contractor, 3) project name, 4) aggregate type, 5) quantity delivered (tons), 6) delivery date, and 7) specific delivery location. In addition to individual load / weigh slips, a summary spreadsheet in Microsoft Excel format of all aggregate material shipments shall be provided.**

10. RESTORATION

a. This price and payment shall constitute full compensation to stabilize and restore all disturbed areas along the roadway corridor as specified and shown and directed by PGC staff including but not limited to all labor, materials, equipment, supervision, seed mixtures, mulches, soil amendments, and related work. Includes restoration work at the stone borrow site on State Game Lands as directed by PGC staff.

b. Unit of Measurement: Lump Sum

TECHNICAL SPECIFICATION SECTION 3 – CLEARING AND GRUBBING

3.1 -SCOPE

This work includes incidental removal and disposal of trees, stumps, and vegetation in the project area necessary for the roadway to provide a 16' ditchline-ditchline clearance and constructed turnouts.

Clearing is cutting trees and brush so that stumps are no more than three inches above the ground. Grubbing is removal of stumps and roots at least twelve inches below finished grade.

3.2 - PROCEDURE

Review with PGC staff areas where clearing and grubbing will be necessary before commencing clearing and grubbing operations. Protect and do not damage any plants or trees, natural growth, or other objects outside the areas to be cleared and grubbed.

Cut down the trees and brush in the designated areas of the drainage turnouts. Cut the trees and brush so that the stumps are no more than three inches above the ground. Stumps must also be removed from the areas designated to be grubbed.

Remove trees from road corridor as marked and directed by PGC staff. Remove stumps within the limits of the road cartway and as directed by PGC staff. Stumps beyond the limits of the road cartway and drainage ditches that will not impact the road maintenance and construction work can remain.

Tops and slash from removed trees will be cleared within 10 feet of the State Game Land boundary, roads and ditch lines, culverts, spring runs, and defined stream channels.

Cleared and grubbed material shall be placed at the project site as directed by PGC staff. Burning is not permitted at the site.

3.3 - MEASUREMENT AND PAYMENT

See Technical Specification Section 2 for description of pay items.

TECHNICAL SPECIFICATION SECTION NO. 4 - EXCAVATION

4.1- SCOPE

This work includes grading and other excavation activities to maintain the roadway, drainage features, and related work to re-establish and shape the road subgrade in preparation for resurfacing and road base operations. Work includes but is not limited to removal, hauling, and disposal of all materials encountered for construction of the project as required and directed by PGC staff.

4.2 - PROCEDURE

- A. General** - Follow all guidelines set forth in the Construction Industry Standards, OSHA 2207, of the Occupational Safety and Health Administration, U.S. Department of Labor. Protect the work, adjacent roadways, and surrounding property.

The Contractor shall coordinate work and roadway alignment / corridor areas and layout start and end locations with PGC staff. Do not over-excavate - unauthorized excavation and replacement of materials in the over-excavated areas will not be measured and paid for. Replace over-excavated work with compacted AASHTO #1 aggregate, or compacted suitable fill material as determined by PGC staff at no additional cost to the Game Commission.

- B. Excavation** - Remove all materials to the limits required for the roadway work. All excavation work is considered unclassified and shall include the excavation of all materials encountered, including rock materials, regardless of their nature or the manner in which they are removed. Grading and finishing of the roadbed is to be completed prior to the depositing of aggregate. No additional payment will be considered or paid for unsuitable material or rock excavation.
- C. Disposal** – Suitable excavated materials can be used for backfilling and grading at the site. Unsuitable materials and excess excavated material shall be disposed of on-site as directed by PGC staff.

4.3 - MEASUREMENT AND PAYMENT

See Technical Specification Section 2 for description of pay items.

TECHNICAL SPECIFICATION SECTION NO. 5 – ROAD SURFACE PREPARATION AND CONSTRUCTION

5.1- SCOPE

This work includes but is not limited to preparing the road subgrade and resurfacing the road with coarse aggregate, borrow material or other material as specified herein and shown on the drawings / details. This work also includes preparing and resurfacing broad based dips as part of the roadway as specified and shown.

5.2– MATERIALS

- A. PENNDOT 2A Coarse Aggregate** –Locally sourced 2A sandstone aggregate will be used for culvert pipe bedding. A sample of the material to be used will be approved by the project manager.
- B. Geotextile** – The geotextile fabric shall be Class2, Type A geotextile conforming to the requirements of Section 735 of PennDOT Pub. 408. Obtain the geotextile from a source listed in PennDOT Bulletin 15.
- C. Driving Surface Aggregate (DSA)** – DSA is to be derived from natural stone formations. DSA is an aggregate mix. All components of the aggregate mix are to be derived from crushed rock material and meeting the following requirements.

Size: The required amounts and allowed ranges, determined by % weight, for various size particles are shown on the gradation chart on the attached “Driving Surface Aggregate Certification”.

Minus #200 fine composition: Ninety-eight percent (98%) of fines passing the #200 sieve must be rock material. No clay or silt soil may be added. Limestone material passing the #200 sieve may be used to make up a deficit in the distribution of sandstone aggregate rock, and vice versa. All added material passing the #200 sieve must be derived from rock material that conforms to program specifications. Lime kiln dust and cement kiln dust may be added to DSA to account for up to 50% of the fines passing the #200 sieve. The amount of particles passing the #200 sieve shall be determined using the washing procedures specified in PTM No. 100.

LA Abrasion: The acceptable limit as measured by weight loss is “less than 40% loss”. Los Angeles Abrasion test, AASHTO T-96 (ASTM C131) shall be used to determine this property. Existing data obtained from tests made for and approved by PennDOT will be accepted.

pH: DSA must be in the range of pH 6 to pH 12.45 as measured by EPA 9045C.

Optimum Moisture and Density: Material is to be delivered and placed at optimum moisture content as determined using Proctor Test ASTM D698, procedure C, Standard. The Proctor

Test shall also be used to determine the density for compaction. These figures will be used in field compaction testing.

5.3 – APPROVAL OF MATERIALS

Submit gradation tests, certifications, and other documents to attest to the suitability of the aggregates to the Pennsylvania Game Commission (PGC) for review and approval. Representatives from the PGC will review the submittals and, if necessary, visit the quarry to review and approve the material. Do not order materials until final approval is received from the PGC.

5.4 - PROCEDURE

- A. General** – All work in this section shall be coordinated to provide the designed features of the new road surface as shown on the drawings / details and as directed by PGC staff. PennDOT 2A aggregate and DSA is designated to be used to improve roadways prior and subsequent to the main road project limits by grading and filling potholes and washed areas. AASHTO #1 is designated splash aprons of culverts. Borrow material (on-site) is designated to be used throughout the length of the project to establish a base and surface capable of being shaped and compacted.
- B. Project Layout** – The project layout was prepared by PGC Regional Staff. Roadway construction operations are limited to the existing roadway alignment and corridor and as directed by PGC staff. A PGC representative will perform periodic site visits and inspections during construction to provide assistance and quality control.
- C. Filling Potholes** – Voids resulting from tree and stump removal or removal of large rocks shall be filled with on-site suitable excavated material. Compact the material with a vibratory plate compactor or similar equipment. Compaction of fill material will be considered adequate with no visible movement of material under compaction equipment and no rutting or displacement under vehicle loads.
- D. Remove Organic Material** – Scrape leaves, roots, grass, weeds, etc. off the surface of the road alignment. Spoil this material on site as directed by PGC staff.
- E. Scarifying** – Scarify the surface of the existing road to a minimum depth of two (2) inches to obtain material for grading and shaping the road.
- F. Grading and Shaping** – Grade and shape the roadway in accordance with the attached details and as directed by PGC staff to form the required road section shape and to provide an even surface for road base construction and resurfacing operations. The contractor is required to clear and improve the broad-based dips and side ditches, in addition to shaping the roadway.
- G. Compaction** – Compact the graded and shaped material with a 10-Ton (min.) single smooth drum vibratory roller.

5.5 - MEASUREMENT AND PAYMENT

See Technical Specification Section 2 for description of pay items.

TECHNICAL SPECIFICATION SECTION NO. 6 – CULVERTS

6.1 - SCOPE

This work is relocating the culvert as described in the details to correct the existing misalignment.

6.2 – MATERIALS

A. PennDOT No. 2A Aggregate – Aggregate for the pipe bedding and backfill shall be PennDOT 2A. This material should be locally sourced sandstone 2A.

B. RIPRAP – Rock utilized for riprap at the outlet discharge of the culvert shall be as specified in Section 850 of PennDOT Pub. 408. Rock shall come from material providing an approved Type A aggregate and from a source listed in PennDOT Bulletin 14. Provide riprap size as shown on drawings / details or as specified and directed by PGC staff.

C. Unless otherwise specified or directed by PGC staff, coarse aggregate culvert backfill and riprap shall either be crushed limestone or limestone rock or sandstone / sandstone rock.

Culverts- diameters and lengths of culverts must comply with all corresponding bid documents. The culverts corrugated polyethylene with smooth interior conforming to AASHTO M 294, Type S.

6.3 - PROCEDURE

A. Coordinate with PGC staff and provide construction layout to determine elevations and set culvert inverts and slope to accommodate field conditions and provide positive drainage.

B. Provide relocation/installations of culverts as designated by PGC staff.

C. Construct culverts in the dry in non-flow conditions. The culvert shall be installed as shallow as possible with fill used in the approaches to help create grade breaks in the roadway. Excavate to the required depth, length and shape as shown on the details. Install culvert in accordance with manufacturer's written instructions. Install applicable placed natural stone or reinforced concrete headwalls at the inlet and outlet of the culverts. Provide coarse aggregate pipe bedding compacted in 6-inch lifts with a stand-up hand operated or walk behind vibratory compactor to 12" above top of culvert. Backfill remaining trench with suitable excavated material and/or required roadway materials. Compaction of culvert bedding will be considered adequate with no visible movement of material under compaction equipment and no rutting or displacement under vehicle loads.

- D.** Extend tail ditches from culvert discharge as required to provide free drainage and allow positive gravity flow of water away from the roadway. Provide applicable rip-rap discharge apron at culvert outlets capable of dissipating drainage velocity.
- E.** Existing culverts removed during construction shall be removed from PGC property and properly disposed of.

6.4 - MEASUREMENT AND PAYMENT

See Technical Specification Section 2 for description of pay items.

TECHNICAL SPECIFICATION SECTION NO. 7 – BORROW MATERIAL/ROAD BASE

7.1- SCOPE

This work includes but is not limited to preparing the road subgrade with borrow material, resurfacing the road with coarse aggregate as specified herein and shown on the drawings / details. This work also includes preparing the road as specified and shown. The location of the borrow pit is provided in the attached maps.

7.2– MATERIALS

A. Commonwealth Provided Borrow Pit Material and Stone – The Commonwealth has designated a borrow pit on State Game Lands. If the awarded contractor wants to use other material as road base it is their responsibility to secure an off-site location with approved material for road base building. Borrow material shall be predominantly suitable shale or sandstone for road base construction and shall be free from vegetation and organic materials. Suitable borrow material may not contain topsoil or excessive amount of fines. Borrow material shall consist mainly of large aggregate with suitable fines and being able to be compacted. Borrow material is to be free of debris and naturally occurring organic material only. Construction or man-made debris is not permitted as suitable material and may not be contained in the material. Borrow material containing unsuitable materials will be rejected by PGC staff.

7.3 – APPROVAL OF MATERIALS

Suitable borrow material should have at least 75% of its material retained by a 3/8” sieve size, of which, 25% should have a bottom size of 1-1/2”. Submit gradation tests (if required-at expense of contractor), certifications, and other documents to attest to the suitability of the aggregates to the Pennsylvania Game Commission (PGC) for review and approval. Representatives from the PGC will review the samples, submittals and, if necessary, visit the site to review and approve the material. Do not order materials until final approval is received from the PGC. If non-suitable borrow material is able to be secured by the commonwealth, alternative solutions will be considered.

7.4 - PROCEDURE

A. General – All work in this section shall be coordinated to provide the designed features of the new road surface as shown on the drawings / details and as directed by PGC staff.

B. Project Layout – The project layout was prepared by PGC Regional Staff. Roadway construction operations are limited to the existing roadway alignment and corridor and as directed by PGC staff. A PGC representative will perform periodic site visits and inspections during construction to provide assistance and quality control.

C. Borrow Material – Road Base Construction – Place stone material from the provided borrow pit or obtained from an off-site borrow site secured by the contractor. Compact the coarse aggregate with a 10-Ton (min.) single smooth drum vibratory roller to a minimum

compacted thickness as shown. Maintain the road shape, slope and profile during placement and compaction operations.

7.5 - MEASUREMENT AND PAYMENT

See Technical Specification Section 2 for description of pay items.

TECHNICAL SPECIFICATION SECTION NO. 8 – PRECAST CONCRETE HEADWALLS

8.1 - SCOPE

This work is installing precast concrete headwalls for the new drainage pipes and some existing drainage pipes as shown on the Drawings. The types of headwalls; flat and winged. Refer to the schedule below for information on which type of headwalls are to be installed.

8.2 - MATERIALS

The precast concrete headwalls shall be single piece units with the following characteristics.

1. Concrete – 4,000 psi at 28 days with 5.5% air entrainment.
2. Reinforcement – ASTM 615, grade 60 with minimum cover of 1-1/2 inches.
3. All exposed edges are chamfered at 1-inch.
4. Materials and construction to comply with the applicable portions PennDOT Publication 408.
5. Layout and dimensions to be comparable to the attached drawings with minimum 12-inch-thick walls with an integral footer.

All pipes (new and existing) are 18-inch corrugated plastic pipe with smooth interiors. The headwalls are to be constructed to fit this size pipe.

8.3 - PROCEDURE

Excavate the trench for the new drainage pipe at the proper location. Prepare the subgrade for the headwalls on both ends of the excavated trench. Place the precast concrete headwalls on the subgrade. The PGC recommends placing a small amount of #2A coarse aggregate on the subgrade so that the headwalls can be placed level and stable. Make sure that the headwalls are placed at the proper elevations so that a minimum slope of 3-inches per 10-feet is achieved in the drainage pipes.

The corrugations on the ends of the pipes can be removed to obtain proper fit inside the precast concrete headwalls. Insert the drainage pipes in the headwalls. Complete the backfill of the drainage pipes to lock them in place. Grout any voids around the pipes. Use a non-shrink grout with a minimum compressive strength of 4,000 psi.

8.4 – SCHEDULE

Concrete Headwall	Diameter	Type	Quantity
SGL 44	18"	Winged	14

8.5 - MEASUREMENT AND PAYMENT

See Technical Specification Section 2 for description of pay items.

TECHNICAL SPECIFICATION SECTION 9 - EROSION AND SEDIMENTATION CONTROL

9.1-SCOPE

This work consists of implementing the soil erosion and sedimentation (E&S) control measures. E&S control measures shall be implemented in accordance with the provisions of the Clean Streams Law and 25 Pennsylvania Code Chapter 102. The Pennsylvania Department of Environmental Protection Erosion and Sediment Program Pollution Control Manual as well as the Commonwealth of Pennsylvania Department of Transportation Publication 408 and the PSU Center for Dirt and Gravel Road Studies Technical Bulletins and Standard Detail Sheets are the sources for the construction items described and referenced herein and incorporated into this plan.

9.2- PROCEDURE

A. Project Description –This Soil Erosion and Sedimentation Control Plan is designed to control soil erosion at its source and to prevent runoff flows from carrying sediment beyond the work area limits. The Contractor is responsible for the implementation and execution of this plan and for providing and maintaining proper soil erosion and sedimentation controls during the duration of the project until permanent stabilization conditions are achieved.

B. Stormwater Runoff and Drainage – The project site(s) consist of access / administrative road corridors on undeveloped, rural, forested PGC State Game Lands. Post construction runoff will reach existing drainage features and surface waters by way of overland flow consistent with existing conditions. Existing storm water flow at the individual sites will not be substantially altered because of the project. Existing drainage features or facilities disturbed during construction shall be repaired or reconstructed by the Contractor.

The roadway and adjacent areas shall be graded as needed to provide the desired road cross section and suit existing site conditions and requirements for access; however, finished contours for the affected adjacent areas will not be substantially different than existing. Roadway surfaces will be surfaced and stabilized with coarse aggregate. All other disturbed areas will be restored to their pre-construction conditions with seed and mulch.

C. Soils Information / Limitations - Soils information for the project is available from the U.S.D.A. Natural Resources Conservation Service soil survey for Pennsylvania.

Subsurface conditions from the NRCS Soil Survey have not been verified in the field by the PGC.

The Contractor shall provide appropriate excavation equipment and construction techniques to conduct earthwork operations required for the project.

Unsuitable materials shall be separated from fill material prior to placing and compacting embankment fill.

- D. Hydrology and Hydraulics** - Construction will not significantly affect the overall hydrology of the project sites. Vegetation clearing and grubbing and grading work will be required for construction. Roadways will be stabilized with aggregate and all other disturbed areas and pre-construction drainage patterns will be restored after the construction activities have ended.

The Contractor shall provide and maintain E&S controls during construction by following E&S Best Management Practices to minimize the impact of runoff during rainfall events. Once the temporary impacts of construction have ended, the pre-existing hydrology will be re-established.

E. Erosion Control Measures -

1. General

- a.) Accelerated erosion control shall be accomplished through the rapid stabilization of all disturbed surfaces throughout the project area, use of Best Management Practices (BMPs), and precautions in the use of construction equipment.
- b.) During the earth disturbance activity, precautions must be taken to prevent accelerated erosion, minimize damage, injury or destruction of property; prevent pollution; protect natural vegetation not targeted for removal during the activity/project; and protect natural drainage ways and surface waters. All disturbed areas shall be stabilized immediately.
- c.) The Contractor shall provide temporary erosion control measures as required and site conditions dictate to reduce the erosion potential of the site. Compost Filter Sock shall be provided as needed in accordance with the attached details and as directed by PGC staff.

2. Temporary Stabilization

- a.) Provide temporary stabilization of disturbed areas as shown on the details.
- b.) At a minimum, all disturbed areas shall be temporarily restored and stabilized (mulched) within 4 days of the disturbance. Seed mixture and application rates are included in the specifications.

C. Permanent Stabilization

- a.) Permanent seeding and soil supplements shall be provided on disturbed and final graded areas during the germinating season as soon as practical but not more

than 15 days after disturbance. Seeding and mulching shall be provided as specified herein and as shown on the drawings / details.

- b.) Provide permanent stabilization of disturbed areas as specified herein.
- c.) The project area will be considered permanently stabilized when all permanent control measures/facilities have been completed and are operational, all temporary control measures/facilities removed, and a minimum uniform 70% perennial vegetative cover, with a density capable of resisting accelerated erosion and sedimentation is established.

D. Maintenance

- a.) Maintain temporary control measures and facilities as shown on the details.
- b.) Sediment accumulation shall be removed and disposed of at approved locations. These locations shall be selected such that the sediment will not erode into the construction area or any natural waterway.
- c.) Stabilized coarse aggregate (stone or gravel) surfaces that become eroded shall be restored with additional coarse aggregate materials.
- d.) Any permanent seeded areas that become eroded shall be repaired / regraded, seeded, and new mulch applied.
- e.) If the vegetative cover deteriorates and becomes ineffective, a fertilization and re-seeding program shall be established and carried out as the construction proceeds. Areas where failures have been experienced in the establishment of both permanent and temporary vegetative protection shall be promptly treated. Re-establishment of permanent vegetative cover shall be initiated as soon as possible.
- f.) After permanent site stabilization has been achieved, temporary erosion and sedimentation controls must be removed. Areas disturbed during removal of the control must be stabilized immediately. Re-grade areas as needed and seed and mulch using the permanent seeding schedule as indicated.

F. Waste Disposal Sites - Excess excavated material shall be properly and legally disposed of off-site or as directed by the PGC. The contractor shall provide appropriate soil erosion and sedimentation controls for the waste sites and they shall be stabilized. Provision of E&S controls at disposal sites is considered incidental to construction.

G. Failure to implement soil erosion and sediment pollution control measures may result in a cease and desist order, causing shutdown of the work. No extension of time, nor additional

compensation will be granted if such a shutdown should occur as a result of act or neglect of the Contractor.

9.2- MEASUREMENT AND PAYMENT

See Technical Specification Section 2 for description of pay items.

TECHNICAL SPECIFICATION SECTION 10 - RESTORATION

10.1- SCOPE

This work is securing a satisfactory stand of grass and permanent stabilization at disturbed areas or where directed by the PGC, and includes preparation of the seed bed, furnishing and placing lime and fertilizer, furnishing and sowing of seed, mulching, and maintaining and tending the seeded areas.

10.2- APPLICABLE PUBLICATIONS AND REFERENCES

Bulletin 15 - Approved Construction Materials, Pennsylvania Department of Transportation.
Publication 408 - Specifications, Pennsylvania Department of Transportation.

10.3- MATERIALS

A - Grass Seed – As shown and specified below. Other similar mixes may be proposed subject to the approval of PGC staff and provided proposed mixes provide effective stabilization and protection against accelerated erosion, promote improved wildlife habitat, and are consistent with the project requirements and PGC wildlife habitat management best practices. [NOTE: Disregard seed mixes recommended in the “*Erosion and Sediment Control (E & S) Plan Template for a Timber Harvesting Operation*” document included in the specifications. Provide the seed mix specified below OR an alternate mix as directed and approved by PGC staff.]

**NATIVE SEED MIX FOR DISTURBED AREA RESTORATION
ON STATE GAME LANDS**

Approximately two acres will need to be seeded with the following mixture

SEEDING: Exact seed mixture and specifications will be required. No substitutions of other seed mixtures will be allowed.

Seed: 5 lbs CRIMSON clover /acre
5 lbs ladino or white clover /acre
50 lbs oats or wheat (seasonal) /acre

FERTILIZER: 500 LBS/ACRE OF 10-20-20
LIME: 2 ton/acre of **pulverized agricultural limestone**
MULCH: 2.5 ton/acre straw (100 bales) – no paper mulch
SEEDING DATES: Spring - up to June 15th
Fall – August 1st to September 15.
or Winter wheat (Fall)

** ALL QUANTITIES (WHERE APPLICABLE) ARE BASED ON PURE LIVE SEED (PLS)

Seed mixes **SHALL NOT** include annual or perennial rye, wildrye, or fescue variety grass seeds.

Deliver premixed seed in bags or other suitable containers, each fully labeled with the name, trademark, and warranty of the producer and with the mixture type, weed seed percentage, purity percentage, germination percentage, and mix formula or composition.

Do not use seed which has become wet, moldy, or otherwise damaged in transit or storage, has a mix date older than 9 months prior to seeding, or has a test date older than 6 months prior to seeding.

B - Fertilizer – If required and specified, use dry formulation of 10-20-20-analysis. Fertilizer shall be delivered in bags or other suitable containers, each fully labeled and bearing the name, trademark, and warranty of the producer.

C - Lime - If required and specified, lime application shall conform to Section 804.2(a).1 of Pub.408.

D – Inoculant – If required and specified, provide in accordance with Section 804.2(c) of Pub. 408.

E - Mulches - Mulches shall be free from mature seedbearing stalks or roots of prohibited or noxious weeds as defined by law. Do not use mulches which are cut into lengths of less than 6 inches.

Mulches shall be either one or a combination of the following, shall contain no stems of tobacco, soybeans, or other coarse or woody materials.

1. - **Straw** - Either wheat or oat straw, and free of weeds and viable seeds, well-cured to less than 20 percent moisture content by weight, not chopped or finely broken.
2. - **Wood Fiber** - Use wood fiber meeting the requirements of Section 805.2(a).1.c of Pub. 408.
3. - **Pellet Mulch** - Use pellet mulch meeting the requirements of Section 805.2(a).1.d of Pub. 408.

F - Mulch Binders - Use one of the following mulch binders in accordance with Section 805.2(b) of Pub. 408. Use Recycled Cellulose Fiber, Wood Fiber or a Mixture of Recycled Cellulose Wood Fiber and Wood Fiber. Obtain binders from a producer listed in Bulletin 15.

G - Water - Water shall be fresh and free from injurious amounts of oil, acid, alkali, salts, or other materials harmful to the growth of grass.

H – Topsoil - Acceptable friable loam that is reasonably free of subsoil, clay lumps, brush, roots, weeds, other objectionable vegetation, stones, other foreign material larger than 2 inches

in any dimension, litter, and/or other material unsuitable or harmful to plant growth in accordance with Section 801.2 (a) and 802.2 of Pub. 408.

10.4- PROCEDURE

Follow the procedures specified below and as listed in Section 804.3 of Pub. 408. The amounts of seed, lime, fertilizer, and mulch specified are the minimum acceptable. Employ modifications if they are deemed necessary, at no additional cost to the PGC, and accept full responsibility for obtaining a satisfactory stand of grass.

A – Topsoil Furnished and Placed – Reference Section 802 of Pub. 408. Provide topsoil as shown on the drawings / details and as required to restore disturbed areas. Grade the areas to be covered by topsoil. Using acceptable methods, loosen soil to a depth of 2 inches before placing the topsoil. Remove stones and other foreign material 2 inches or larger in any dimension. Remove and satisfactorily dispose of unsuitable and surplus material. Place topsoil on the prepared areas and, unless otherwise indicated, spread and compact to a 4-inch uniform depth $\pm 1 \frac{1}{2}$ inches. Compact with a roller having a weight not over 120 pounds per foot width of roller or by other acceptable methods, as directed. Remove over-depth topsoil, unless otherwise agreed upon in writing. Do not place topsoil in a wet or frozen condition.

B - Sowing - Sow the seed mixture on a still day at a rate specified in Section 804.2 of Pub. 408. Sow by hand or by approved sowing equipment in 2 applications, one-half the seed while the seeder is traveling in one direction and the other half while the seeder is traveling at right angle to the first direction. After sowing, rake, cultipack, or brush drag the surface very lightly, just deep enough to cover the seeds. Rake only in a direction parallel to the contour lines.

C - Mulching - After sowing is completed, spread mulch uniformly over the entire seeded area at a rate of 3 tons (dry weight) per acre. The mulch shall be moist at the time of placement.

Apply wood fiber mulch hydraulically in accordance with the manufacturer's tank-mixing instructions. Wood fiber mulch may be incorporated into the slurry after the seed and soil supplements have been thoroughly mixed. Apply wood fiber mulch at a rate of 800 Lbs. per acre unless otherwise indicated by the manufacturer.

On slopes 6:1 or flatter, apply pellet mulch by hand or using a mechanical spreader immediately after seeding, at a rate of 2,615 Lbs. per acre. Thoroughly wet pellet mulch with water without dislodging mulch.

To prevent loss or bunching by wind and to form a soil-binding mulch, anchor the moist mulch to the soil with a mulch binder. Use mulch binders at the following rates:

Recycled Cellulose Fiber - 775 Lbs./Acre

Wood Fiber - 775 Lbs./Acre

Mixture of Recycled Cellulose Fiber and Wood Fiber - 775 Lbs./Acre

On slopes where machinery cannot be used, retain the mulch in place by some suitable means which will not be detrimental to subsequent operations.

10.5- MAINTENANCE

At no additional cost to the PGC, maintain the seeded areas until all work under the Contract has been completed and accepted by the PGC. Maintenance shall include refilling rain-washed gullies, reseeding, reapplying fertilizer, lime and mulch, and removal of large and noxious weeds, as directed by the PGC.

10.6- MEASUREMENT AND PAYMENT

See Technical Specification Section 2 for description of pay items.



WORKER PROTECTION AND INVESTMENT CERTIFICATION FORM

A. Pursuant to Executive Order 2021-06, *Worker Protection and Investment* (October 21, 2021), the Commonwealth is responsible for ensuring that every worker in Pennsylvania has a safe and healthy work environment and the protections afforded them through labor laws. To that end, contractors and grantees of the Commonwealth must certify that they are in compliance with Pennsylvania’s Unemployment Compensation Law, Workers’ Compensation Law, and all applicable Pennsylvania state labor and workforce safety laws including, but not limited to:

1. Construction Workplace Misclassification Act
2. Employment of Minors Child Labor Act
3. Minimum Wage Act
4. Prevailing Wage Act
5. Equal Pay Law
6. Employer to Pay Employment Medical Examination Fee Act
7. Seasonal Farm Labor Act
8. Wage Payment and Collection Law
9. Industrial Homework Law
10. Construction Industry Employee Verification Act
11. Act 102: Prohibition on Excessive Overtime in Healthcare
12. Apprenticeship and Training Act
13. Inspection of Employment Records Law

B. Pennsylvania law establishes penalties for providing false certifications, including contract termination; and three-year ineligibility to bid on contracts under 62 Pa. C.S. § 531 (Debarment or suspension).

CERTIFICATION

I, the official named below, certify I am duly authorized to execute this certification on behalf of the contractor/grantee identified below, and certify that the contractor/grantee identified below is compliant with applicable Pennsylvania state labor and workplace safety laws, including, but not limited to, those listed in Paragraph A, above. I understand that I must report any change in the contractor/grantee’s compliance status to the Purchasing Agency immediately. I further confirm and understand that this Certification is subject to the provisions and penalties of 18 Pa. C.S. § 4904 (Unsworn falsification to authorities).

<i>Signature</i>	<i>Date</i>
<i>Name (Printed)</i>	
<i>Title of Certifying Official (Printed)</i>	
<i>Contractor/Grantee Name (Printed)</i>	

**BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES**

Project Name:	Mohan Run Electric Road Project
Awarding Agency:	PA Game Commission
Contract Award Date:	3/31/2024
Serial Number:	24-02273
Project Classification:	Heavy/Highway
Determination Date:	3/7/2024
Assigned Field Office:	Altoona
Field Office Phone Number:	(814)940-6224
Toll Free Phone Number:	
Project County:	Elk County

**BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES**

Project: 24-02273 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Asbestos & Insulation Workers	8/1/2022		\$39.55	\$28.51	\$68.06
Boilermakers	6/1/2016		\$40.90	\$27.61	\$68.51
Bricklayer	12/1/2022		\$31.62	\$23.06	\$54.68
Carpenters - Piledriver/Welder	1/1/2023		\$40.63	\$21.22	\$61.85
Carpenters - Piledriver/Welder	1/1/2024		\$42.13	\$21.97	\$64.10
Carpenters - Piledriver/Welder	1/1/2025		\$43.38	\$22.72	\$66.10
Carpenters - Piledriver/Welder	1/1/2026		\$44.63	\$23.47	\$68.10
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2022		\$32.05	\$17.87	\$49.92
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2023		\$33.01	\$18.41	\$51.42
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2024		\$33.97	\$18.95	\$52.92
Cement Finishers	6/1/2016		\$28.71	\$17.85	\$46.56
Cement Masons	6/1/2021		\$31.77	\$21.89	\$53.66
Drywall Finisher	6/1/2022		\$31.50	\$21.06	\$52.56
Drywall Finisher	6/1/2023		\$31.89	\$22.92	\$54.81
Drywall Finisher	6/1/2024		\$33.51	\$23.80	\$57.31
Electricians & Telecommunications Installation Technician	12/26/2022		\$48.31	\$29.29	\$77.60
Electricians & Telecommunications Installation Technician	12/22/2023		\$48.61	\$31.80	\$80.41
Electricians & Telecommunications Installation Technician	12/27/2024		\$51.76	\$31.80	\$83.56
Electricians & Telecommunications Installation Technician	12/26/2025		\$55.06	\$31.80	\$86.86
Elevator Constructor	1/1/2023		\$56.14	\$42.83	\$98.97
Elevator Constructor	1/1/2024		\$58.55	\$43.87	\$102.42
Glazier	9/1/2021		\$24.55	\$23.05	\$47.60
Glazier	9/1/2022		\$24.90	\$24.45	\$49.35
Glazier	9/1/2023		\$25.40	\$25.70	\$51.10
Iron Workers	6/1/2022		\$31.79	\$32.31	\$64.10
Iron Workers	6/1/2023		\$32.29	\$32.85	\$65.14
Laborers (Class 01 - See notes)	1/1/2023		\$22.98	\$18.53	\$41.51
Laborers (Class 01 - See notes)	1/1/2024		\$24.48	\$19.03	\$43.51
Laborers (Class 01 - See notes)	1/1/2025		\$25.98	\$19.53	\$45.51
Laborers (Class 02 - See notes)	1/1/2023		\$23.23	\$18.53	\$41.76
Laborers (Class 02 - See notes)	1/1/2024		\$24.73	\$19.03	\$43.76
Laborers (Class 02 - See notes)	1/1/2025		\$26.23	\$19.53	\$45.76
Laborers (Class 03 - See notes)	1/1/2023		\$23.78	\$18.53	\$42.31
Laborers (Class 03 - See notes)	1/1/2024		\$25.28	\$19.03	\$44.31
Laborers (Class 03 - See notes)	1/1/2025		\$26.78	\$19.53	\$46.31
Landscape Laborer (Skilled)	1/1/2023		\$23.79	\$18.28	\$42.07
Landscape Laborer (Skilled)	1/1/2024		\$24.79	\$18.53	\$43.32
Landscape Laborer (Skilled)	1/1/2025		\$25.79	\$18.78	\$44.57
Landscape Laborer (Skilled)	1/1/2026		\$26.79	\$19.03	\$45.82
Landscape Laborer (Tractor Operator)	1/1/2023		\$24.09	\$18.28	\$42.37

**BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES**

Project: 24-02273 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Landscape Laborer (Tractor Operator)	1/1/2024		\$25.09	\$18.53	\$43.62
Landscape Laborer (Tractor Operator)	1/1/2025		\$26.09	\$18.78	\$44.87
Landscape Laborer (Tractor Operator)	1/1/2026		\$27.09	\$19.03	\$46.12
Landscape Laborer	1/1/2018		\$17.60	\$16.48	\$34.08
Landscape Laborer	1/1/2023		\$23.37	\$18.28	\$41.65
Landscape Laborer	1/1/2024		\$24.37	\$18.53	\$42.90
Landscape Laborer	1/1/2025		\$25.37	\$18.78	\$44.15
Landscape Laborer	1/1/2026		\$26.37	\$19.03	\$45.40
Millwright	6/1/2020		\$41.68	\$20.32	\$62.00
Operators (Class 01 - see notes)	7/1/2022		\$34.17	\$20.62	\$54.79
Operators (Class 01 - see notes)	7/1/2023		\$35.87	\$20.92	\$56.79
Operators (Class 01 - see notes)	7/1/2024		\$36.87	\$21.42	\$58.29
Operators (Class 02 -see notes)	7/1/2022		\$29.55	\$20.62	\$50.17
Operators (Class 02 -see notes)	7/1/2023		\$31.25	\$20.92	\$52.17
Operators (Class 02 -see notes)	7/1/2024		\$32.87	\$21.42	\$54.29
Operators (Class 03 - See notes)	7/1/2022		\$27.00	\$20.62	\$47.62
Operators (Class 03 - See notes)	7/1/2023		\$28.70	\$20.92	\$49.62
Operators (Class 03 - See notes)	7/1/2024		\$29.70	\$21.42	\$51.12
Operators (Class 04 - Chief of Party (Surveying and Layout))	7/1/2022		\$26.60	\$20.62	\$47.22
Operators (Class 04 - Chief of Party (Surveying and Layout))	7/1/2023		\$28.30	\$20.92	\$49.22
Operators (Class 04 - Chief of Party (Surveying and Layout))	7/1/2024		\$29.30	\$21.42	\$50.72
Operators (Class 04 - Instrument Person (Surveying & Layout))	7/1/2022		\$25.60	\$20.62	\$46.22
Operators (Class 04 - Instrument Person (Surveying & Layout))	7/1/2023		\$27.30	\$20.92	\$48.22
Operators (Class 04 - Instrument Person (Surveying & Layout))	7/1/2024		\$28.30	\$21.42	\$49.72
Operators (Class 04 - Rodman/Chainman (Surveying and Layout))	7/1/2022		\$25.15	\$20.62	\$45.77
Operators (Class 04 - Rodman/Chainman (Surveying and Layout))	7/1/2023		\$26.85	\$20.92	\$47.77
Operators (Class 04 - Rodman/Chainman (Surveying and Layout))	7/1/2024		\$27.85	\$21.42	\$49.27
Painters Class 6 (see notes)	6/1/2022		\$29.50	\$22.82	\$52.32
Painters Class 6 (see notes)	6/1/2023		\$30.56	\$24.01	\$54.57
Painters Class 6 (see notes)	6/1/2024		\$32.14	\$24.93	\$57.07
Painters Class 6 (see notes)	6/1/2025		\$34.16	\$25.81	\$59.97
Pile Driver Divers (Building, Heavy, Highway)	1/1/2023		\$58.70	\$21.22	\$79.92
Pile Driver Divers (Building, Heavy, Highway)	1/1/2024		\$60.95	\$21.97	\$82.92
Pile Driver Divers (Building, Heavy, Highway)	1/1/2025		\$62.82	\$22.72	\$85.54
Pile Driver Divers (Building, Heavy, Highway)	1/1/2026		\$64.70	\$23.47	\$88.17
Piledrivers	1/1/2023		\$39.13	\$21.22	\$60.35
Piledrivers	1/1/2024		\$40.63	\$21.97	\$62.60
Piledrivers	1/1/2025		\$41.88	\$22.72	\$64.60

**BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES**

Project: 24-02273 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Piledrivers	1/1/2026		\$43.13	\$23.47	\$66.60
Plasterers	6/1/2022		\$31.44	\$19.74	\$51.18
Plasterers	6/1/2023		\$32.14	\$20.54	\$52.68
Plumbers and Steamfitters	6/1/2022		\$38.17	\$24.90	\$63.07
Plumbers and Steamfitters	6/1/2023		\$38.57	\$26.26	\$64.83
Pointers, Caulkers, Cleaners	12/1/2022		\$35.47	\$20.88	\$56.35
Roofers	6/1/2022		\$36.04	\$19.13	\$55.17
Roofers	6/1/2023		\$37.00	\$19.92	\$56.92
Sheet Metal Workers	7/1/2021		\$38.76	\$30.00	\$68.76
Sheet Metal Workers	7/1/2022		\$39.50	\$31.43	\$70.93
Sheet Metal Workers	8/1/2023		\$41.00	\$32.94	\$73.94
Sign Makers and Hangars	7/15/2022		\$30.54	\$24.35	\$54.89
Sign Makers and Hangars	7/15/2023		\$31.76	\$24.63	\$56.39
Sprinklerfitters	4/1/2023		\$44.33	\$28.04	\$72.37
Stone Masons	12/1/2022		\$38.56	\$23.61	\$62.17
Terrazzo Finisher	12/1/2022		\$36.13	\$18.03	\$54.16
Terrazzo Mechanics	12/1/2022		\$35.49	\$20.32	\$55.81
Tile Finisher	12/1/2022		\$28.76	\$17.34	\$46.10
Tile Setter	12/1/2022		\$35.64	\$21.81	\$57.45
Truckdriver class 1(see notes)	1/1/2023		\$33.04	\$22.13	\$55.17
Truckdriver class 1(see notes)	1/1/2024		\$34.79	\$22.63	\$57.42
Truckdriver class 1(see notes)	1/1/2025		\$36.29	\$23.13	\$59.42
Truckdriver class 1(see notes)	1/1/2026		\$37.79	\$23.63	\$61.42
Truckdriver class 2 (see notes)	1/1/2023		\$33.50	\$22.43	\$55.93
Truckdriver class 2 (see notes)	1/1/2024		\$35.25	\$22.93	\$58.18
Truckdriver class 2 (see notes)	1/1/2025		\$36.75	\$23.43	\$60.18
Truckdriver class 2 (see notes)	1/1/2026		\$38.25	\$23.93	\$62.18
Truckdriver class 3 (see notes)	1/1/2016		\$28.10	\$16.88	\$44.98
Window Film / Tint Installer	10/1/2019		\$25.00	\$2.63	\$27.63

**BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES**

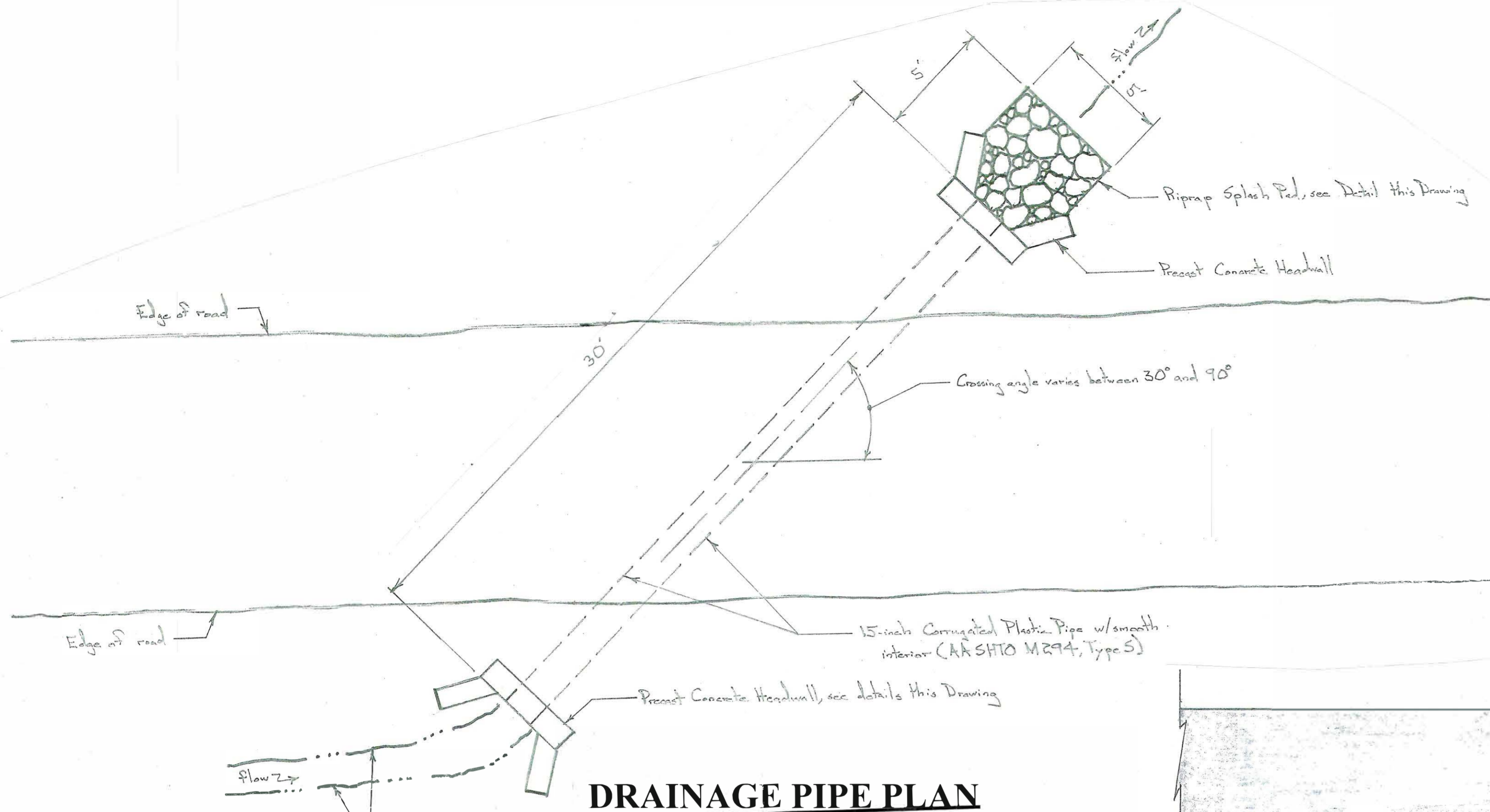
Project: 24-02273 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Carpenter	1/1/2023		\$38.35	\$20.59	\$58.94
Carpenter	1/1/2024		\$39.85	\$21.34	\$61.19
Carpenter	1/1/2025		\$41.10	\$22.09	\$63.19
Carpenter	1/1/2026		\$42.35	\$22.84	\$65.19
Carpenter Welder	1/1/2023		\$39.85	\$20.59	\$60.44
Carpenter Welder	1/1/2024		\$41.35	\$21.34	\$62.69
Carpenter Welder	1/1/2025		\$42.60	\$22.09	\$64.69
Carpenter Welder	1/1/2026		\$43.85	\$22.84	\$66.69
Carpenters - Piledriver/Welder	1/1/2023		\$40.63	\$21.22	\$61.85
Carpenters - Piledriver/Welder	1/1/2024		\$42.13	\$21.97	\$64.10
Carpenters - Piledriver/Welder	1/1/2025		\$43.38	\$22.72	\$66.10
Carpenters - Piledriver/Welder	1/1/2026		\$44.63	\$23.47	\$68.10
Cement Finishers	1/1/2023		\$34.14	\$25.05	\$59.19
Cement Finishers	1/1/2024		\$35.14	\$26.30	\$61.44
Cement Finishers	1/1/2025		\$35.94	\$27.50	\$63.44
Cement Masons	1/1/2020		\$32.84	\$21.10	\$53.94
Electric Lineman	8/29/2022		\$62.66	\$28.08	\$90.74
Electric Lineman	9/4/2023		\$64.68	\$29.01	\$93.69
Electric Lineman	1/1/2024		\$64.46	\$29.23	\$93.69
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	6/1/2022		\$31.79	\$32.31	\$64.10
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	6/1/2023		\$32.29	\$32.85	\$65.14
Laborers (Class 01 - See notes)	1/1/2023		\$29.95	\$25.50	\$55.45
Laborers (Class 01 - See notes)	1/1/2024		\$32.20	\$25.50	\$57.70
Laborers (Class 01 - See notes)	1/1/2025		\$33.70	\$26.00	\$59.70
Laborers (Class 01 - See notes)	1/1/2026		\$34.70	\$27.00	\$61.70
Laborers (Class 02 - See notes)	1/1/2023		\$30.11	\$25.50	\$55.61
Laborers (Class 02 - See notes)	1/1/2024		\$32.36	\$25.50	\$57.86
Laborers (Class 02 - See notes)	1/1/2025		\$33.86	\$26.00	\$59.86
Laborers (Class 02 - See notes)	1/1/2026		\$34.86	\$27.00	\$61.86
Laborers (Class 03 - See notes)	1/1/2023		\$30.50	\$25.50	\$56.00
Laborers (Class 03 - See notes)	1/1/2024		\$32.75	\$25.50	\$58.25
Laborers (Class 03 - See notes)	1/1/2025		\$34.25	\$26.00	\$60.25
Laborers (Class 03 - See notes)	1/1/2026		\$35.25	\$27.00	\$62.25
Laborers (Class 04 - See notes)	1/1/2023		\$30.95	\$25.50	\$56.45
Laborers (Class 04 - See notes)	1/1/2024		\$33.20	\$25.50	\$58.70
Laborers (Class 04 - See notes)	1/1/2025		\$34.70	\$26.00	\$60.70
Laborers (Class 04 - See notes)	1/1/2026		\$35.70	\$27.00	\$62.70
Laborers (Class 05 - See notes)	1/1/2023		\$31.36	\$25.50	\$56.86
Laborers (Class 05 - See notes)	1/1/2024		\$33.61	\$25.50	\$59.11
Laborers (Class 05 - See notes)	1/1/2025		\$35.11	\$26.00	\$61.11
Laborers (Class 05 - See notes)	1/1/2026		\$36.11	\$27.00	\$63.11
Laborers (Class 06 - See notes)	1/1/2023		\$28.20	\$25.50	\$53.70
Laborers (Class 06 - See notes)	1/1/2024		\$30.45	\$25.50	\$55.95

**BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES**

Project: 24-02273 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Laborers (Class 06 - See notes)	1/1/2025		\$31.95	\$26.00	\$57.95
Laborers (Class 06 - See notes)	1/1/2026		\$32.95	\$27.00	\$59.95
Laborers (Class 07 - See notes)	1/1/2023		\$30.95	\$25.50	\$56.45
Laborers (Class 07 - See notes)	1/1/2024		\$33.20	\$25.50	\$58.70
Laborers (Class 07 - See notes)	1/1/2025		\$34.70	\$26.00	\$60.70
Laborers (Class 07 - See notes)	1/1/2026		\$35.70	\$27.00	\$62.70
Laborers (Class 08 - See notes)	1/1/2023		\$32.45	\$25.50	\$57.95
Laborers (Class 08 - See notes)	1/1/2024		\$34.70	\$25.50	\$60.20
Laborers (Class 08 - See notes)	1/1/2025		\$36.20	\$26.00	\$62.20
Laborers (Class 08 - See notes)	1/1/2026		\$37.20	\$27.00	\$64.20
Millwright	6/1/2020		\$41.68	\$20.32	\$62.00
Millwright	6/1/2023		\$45.50	\$23.72	\$69.22
Millwright	6/1/2024		\$47.59	\$23.72	\$71.31
Millwright	6/1/2025		\$49.72	\$23.72	\$73.44
Operators (Class 01 - see notes)	1/1/2023		\$36.79	\$23.58	\$60.37
Operators (Class 01 - see notes)	1/1/2024		\$38.59	\$24.03	\$62.62
Operators (Class 01 - see notes)	1/1/2025		\$40.39	\$24.23	\$64.62
Operators (Class 02 -see notes)	1/1/2023		\$36.53	\$23.58	\$60.11
Operators (Class 02 -see notes)	1/1/2024		\$38.33	\$24.03	\$62.36
Operators (Class 02 -see notes)	1/1/2025		\$40.13	\$24.23	\$64.36
Operators (Class 03 - See notes)	1/1/2023		\$32.88	\$23.58	\$56.46
Operators (Class 03 - See notes)	1/1/2024		\$34.68	\$24.03	\$58.71
Operators (Class 03 - See notes)	1/1/2025		\$36.48	\$24.23	\$60.71
Operators (Class 04 - See notes)	1/1/2023		\$32.42	\$23.58	\$56.00
Operators (Class 04 - See notes)	1/1/2024		\$34.22	\$24.03	\$58.25
Operators (Class 04 - See notes)	1/1/2025		\$36.02	\$24.23	\$60.25
Operators (Class 05 - See notes)	1/1/2023		\$32.17	\$23.58	\$55.75
Operators (Class 05 - See notes)	1/1/2024		\$33.97	\$24.03	\$58.00
Operators (Class 05 - See notes)	1/1/2025		\$35.77	\$24.23	\$60.00
Operators Class 1-A	1/1/2023		\$39.79	\$23.58	\$63.37
Operators Class 1-A	1/1/2024		\$41.59	\$24.03	\$65.62
Operators Class 1-A	1/1/2025		\$43.39	\$24.23	\$67.62
Operators Class 1-B	1/1/2023		\$38.79	\$23.58	\$62.37
Operators Class 1-B	1/1/2024		\$40.59	\$24.03	\$64.62
Operators Class 1-B	1/1/2025		\$42.39	\$24.23	\$66.62
Painters Class 1 (see notes)	6/1/2022		\$34.45	\$22.82	\$57.27
Painters Class 2 (see notes)	6/1/2019		\$35.25	\$20.06	\$55.31
Painters Class 2 (see notes)	6/1/2023		\$36.01	\$24.01	\$60.02
Painters Class 2 (see notes)	6/1/2024		\$38.09	\$24.93	\$63.02
Painters Class 2 (see notes)	6/1/2025		\$40.36	\$25.81	\$66.17
Painters Class 3 (see notes)	6/1/2022		\$36.77	\$22.82	\$59.59
Painters Class 3 (see notes)	6/1/2023		\$38.33	\$24.01	\$62.34
Painters Class 3 (see notes)	6/1/2024		\$40.66	\$24.93	\$65.59
Painters Class 3 (see notes)	6/1/2025		\$43.69	\$25.81	\$69.50

**BUREAU OF LABOR LAW COMPLIANCE
PREVAILING WAGES PROJECT RATES**

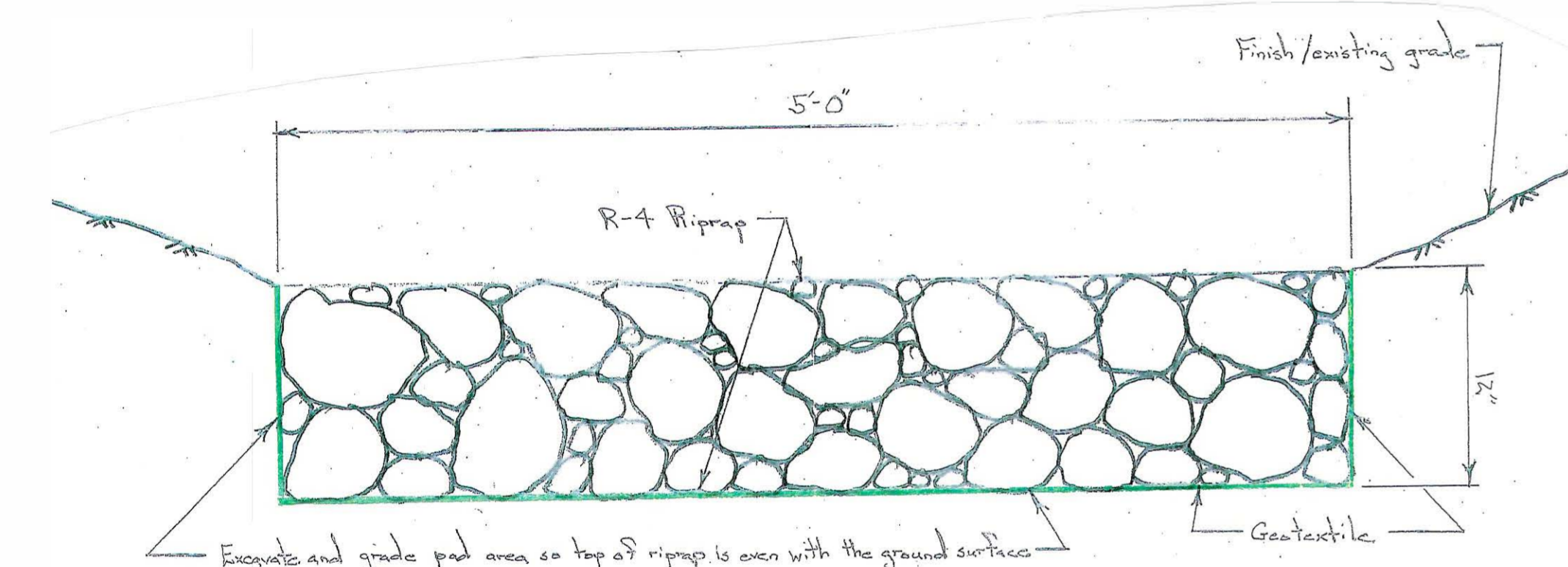
Project: 24-02273 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Painters Class 4 (see notes)	6/1/2019		\$28.20	\$20.06	\$48.26
Painters Class 5 (see notes)	6/1/2019		\$22.91	\$20.06	\$42.97
Pile Driver Divers (Building, Heavy, Highway)	1/1/2023		\$58.70	\$21.22	\$79.92
Pile Driver Divers (Building, Heavy, Highway)	1/1/2024		\$60.95	\$21.97	\$82.92
Pile Driver Divers (Building, Heavy, Highway)	1/1/2025		\$62.82	\$22.72	\$85.54
Pile Driver Divers (Building, Heavy, Highway)	1/1/2026		\$64.70	\$23.47	\$88.17
Piledrivers	1/1/2023		\$39.13	\$21.22	\$60.35
Piledrivers	1/1/2024		\$40.63	\$21.97	\$62.60
Piledrivers	1/1/2025		\$41.88	\$22.72	\$64.60
Piledrivers	1/1/2026		\$43.13	\$23.47	\$66.60
Steamfitters (Heavy and Highway - Gas Distribution)	5/1/2022		\$48.43	\$40.28	\$88.71
Truckdriver class 1(see notes)	1/1/2023		\$33.04	\$22.13	\$55.17
Truckdriver class 1(see notes)	1/1/2024		\$34.79	\$22.63	\$57.42
Truckdriver class 1(see notes)	1/1/2025		\$36.29	\$23.13	\$59.42
Truckdriver class 1(see notes)	1/1/2026		\$37.79	\$23.63	\$61.42
Truckdriver class 2 (see notes)	1/1/2023		\$33.50	\$22.43	\$55.93
Truckdriver class 2 (see notes)	1/1/2024		\$35.25	\$22.93	\$58.18
Truckdriver class 2 (see notes)	1/1/2025		\$36.75	\$23.43	\$60.18
Truckdriver class 2 (see notes)	1/1/2026		\$38.25	\$23.93	\$62.18
Truckdriver class 3 (see notes)	1/1/2019		\$29.45	\$19.73	\$49.18



DRAINAGE PIPE PLAN

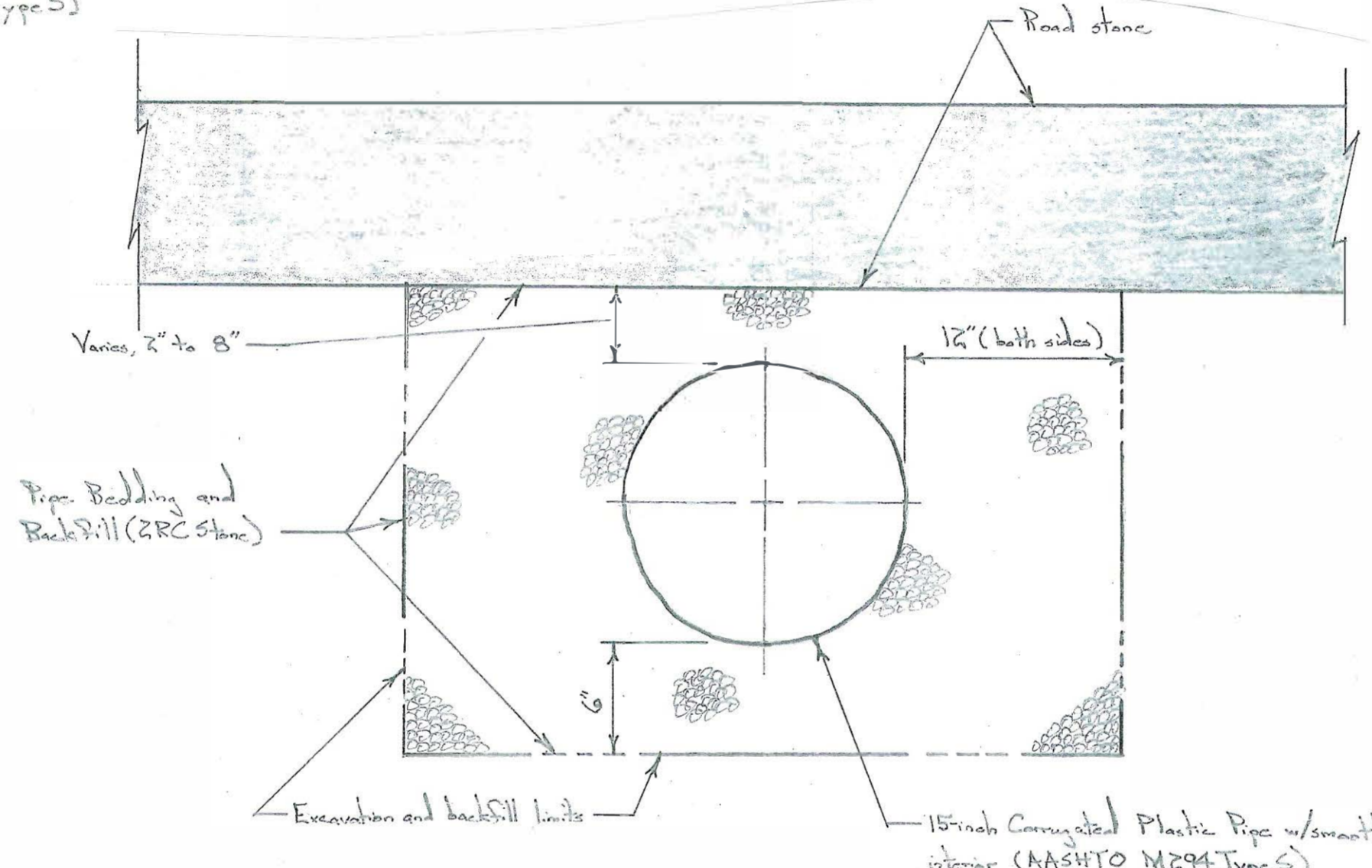
Scale: 1/4 in. = 1 ft.

Note: Use this plan for pipes that cross the road on an angle.



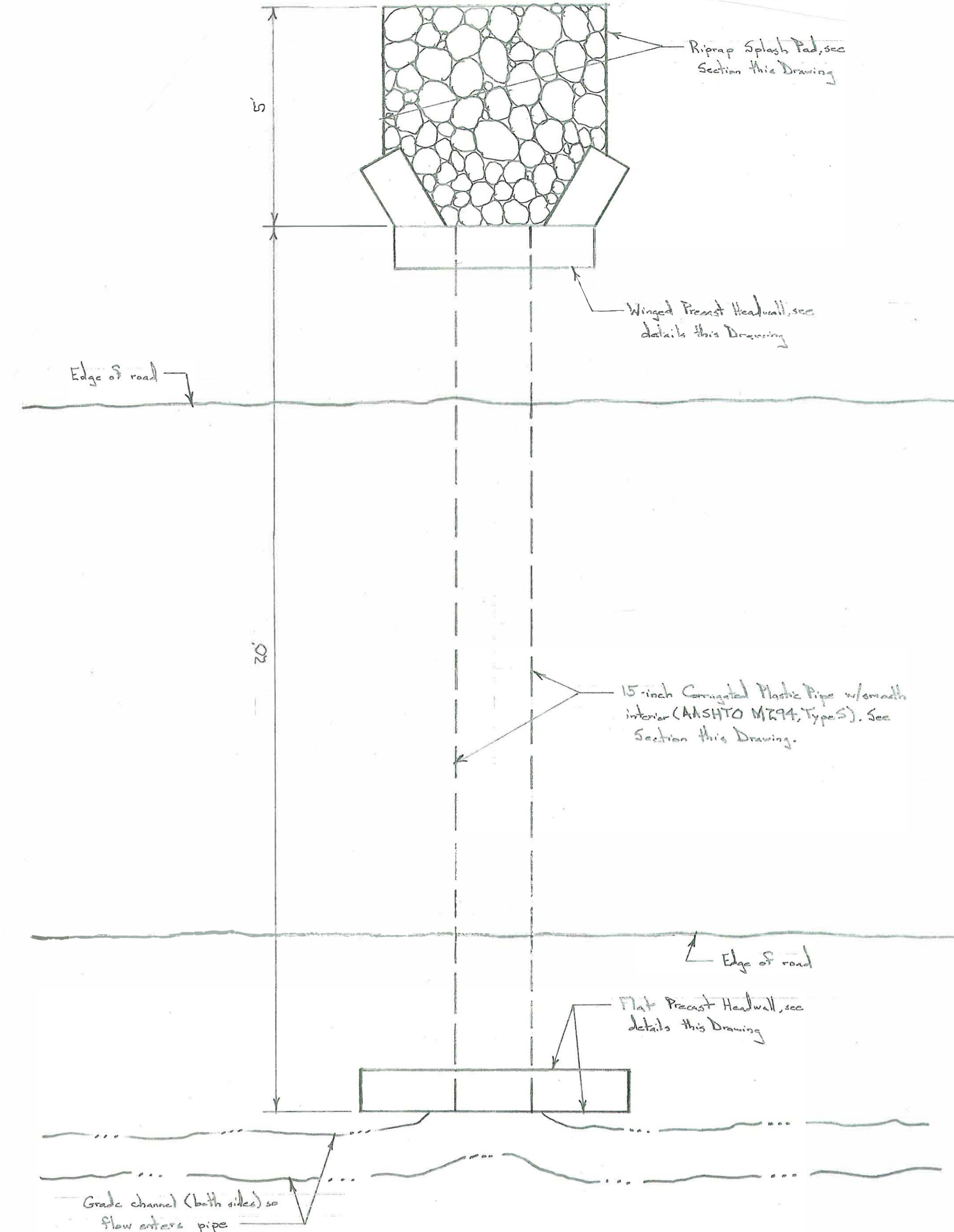
RIPRAP SPLASH PAD SECTION

Scale: 1-1/2 in. = 1 ft.



DRAINAGE PIPE SECTION

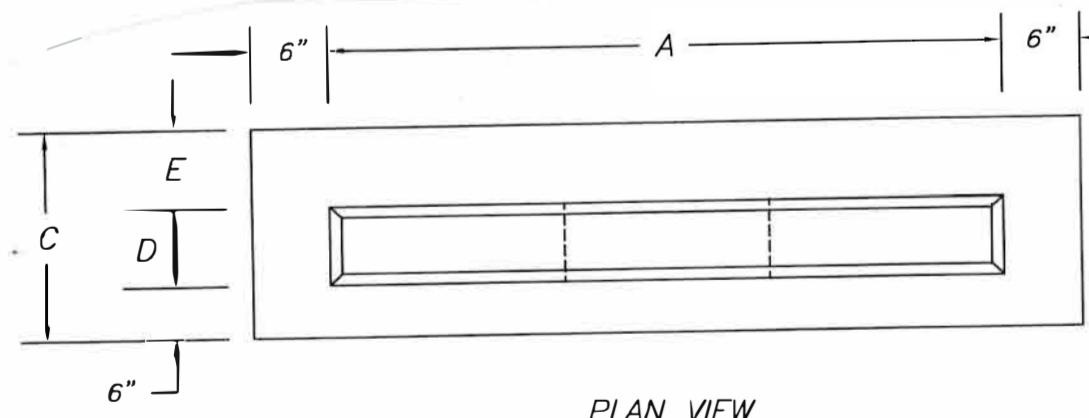
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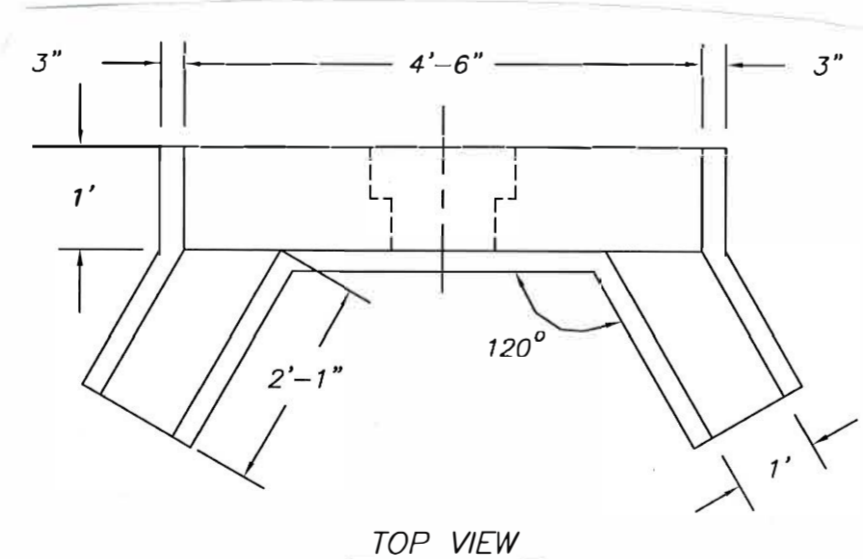
DRAINAGE PIPE PLAN

Scale: 1/2 in. = 1 ft.

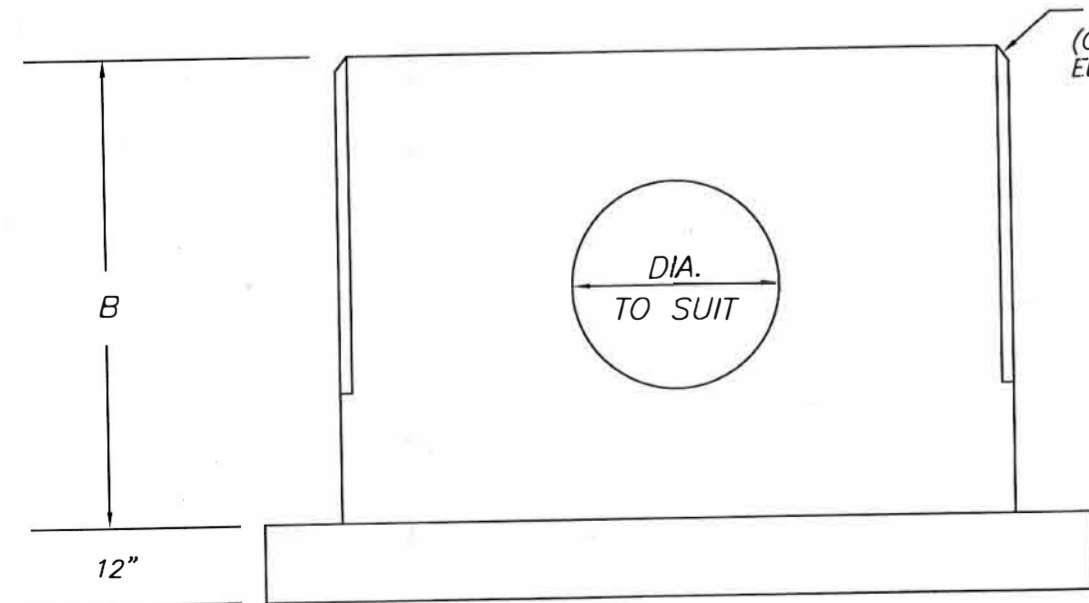
Note: Use this plan for pipes that cross the road perpendicularly.



DIMENSION SCHEDULE							
PIPE DIA.	WALL OPENING	A	B	C	D	E	APPROX WEIGHTS
12"	20"	40"	40"	24"	12"	0"	3,990 LBS.
15"	24"	72"	60"	30"	12"	12"	6,575 LBS.
18"	28"						

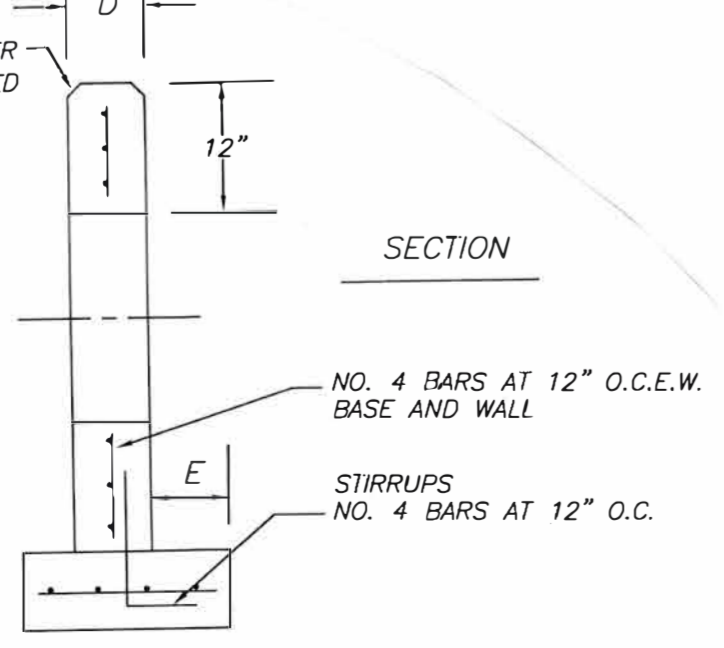


TOP VIEW



ELEVATION

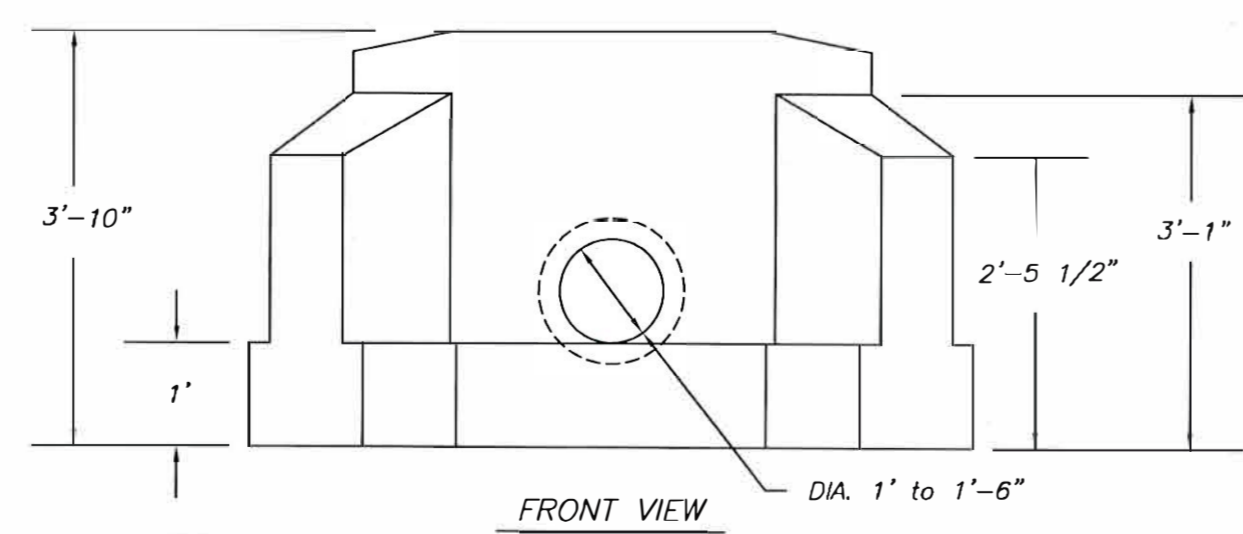
FLAT HEADWALL



SECTION

HEADWALL DETAILS

No Scale



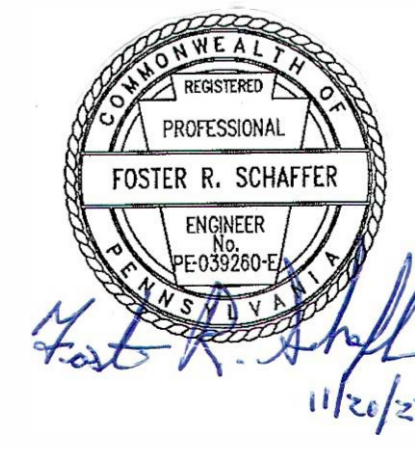
FRONT VIEW

WINGED HEADWALL

- NOTES:
- MINIMUM 4,000 P.S.I. CONCRETE AT 28 DAYS WITH 5.5% A.E.
 - REINFORCEMENT—A.S.T.M. A615 GRADE 60, MINIMUM 1 1/2" COVER
 - ALL EXPOSED EDGES ARE CHAMFERED 1"
 - MATERIAL AND CONSTRUCTION SHALL COMPLY WITH PENN. D.O.T. PUB. 408
 - APPROX. WEIGHTS:
15" = 4,100 LBS.
18" = 4,000 LBS.

DRAINAGE PIPE NOTES

- The minimum fall in the new drainage pipes is 3-inches per 10-foot length (slope of 0.025).
- Pipes that are 20-foot long should cross the road at 90-degrees (perpendicular to road centerline). Longer length pipes should cross at angles to suit field flow conditions and existing drainage ditches.
- Perform minor grading at the inlet and outlet ends of the new drainage pipes so that flow smoothly enters and exits the pipes.
- Minimum cover over the new drainage pipes is 12-inches.
- The depth of placement of the new drainage pipes can vary to meet field conditions. The downstream ends of the pipes can be deeper to meet field conditions and slope requirements.
- Place new road base material (minimum depth of 6-inches) over new pipes so that the stone surface matches the existing center crown shape of the road.

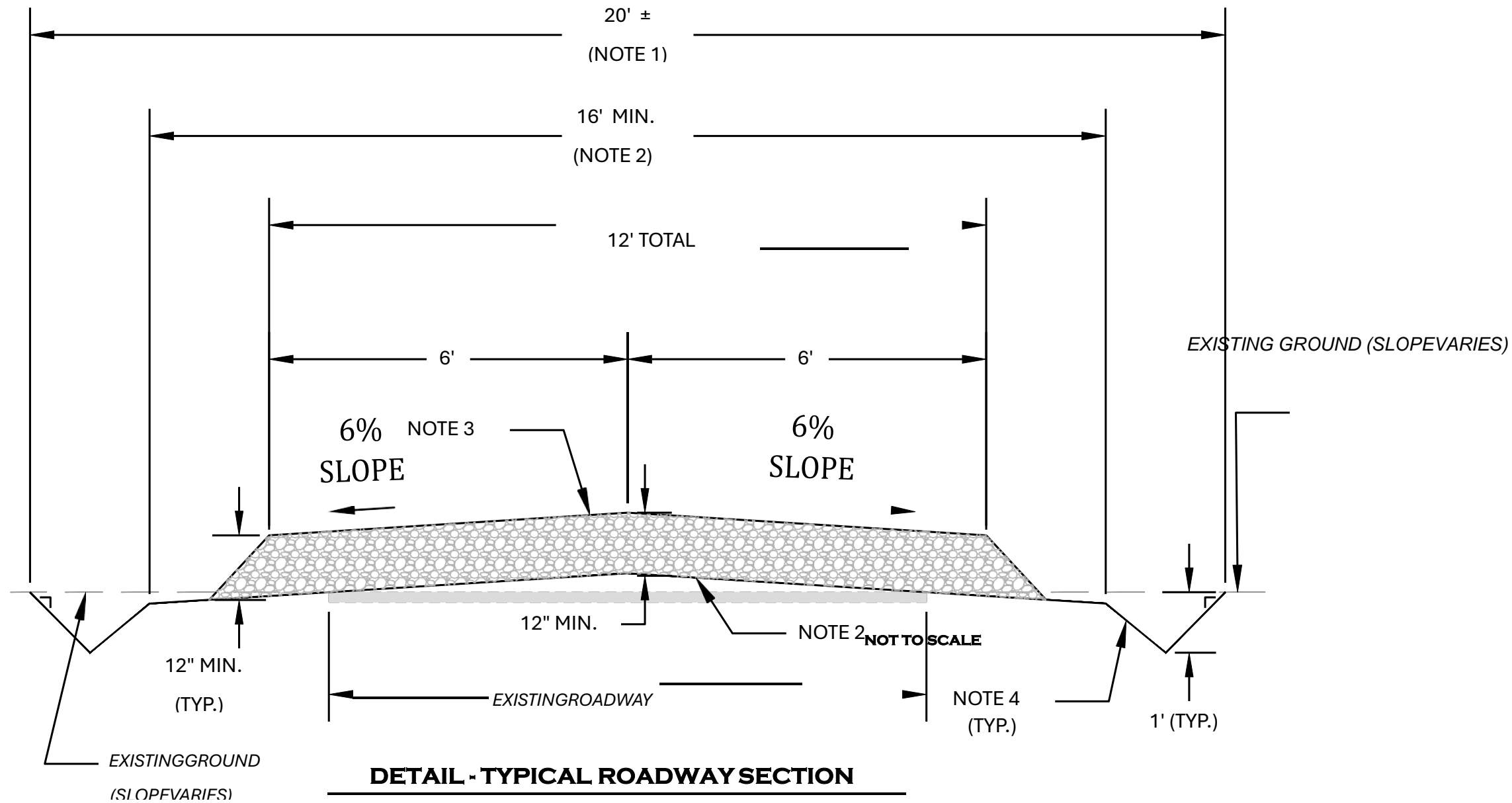


PENNSYLVANIA GAME COMMISSION
 SGL 044, St. Marys Township Elk County
 Mohan Run Electric Road
 DRAINAGE PIPE DETAILS

REVISIONS	PROJECT NO.	PGC-044-23-1
▲	DRAWN BY:	J.S.
▲	DATE:	11/20/23
▲	SHEET NO.	3 OF 3

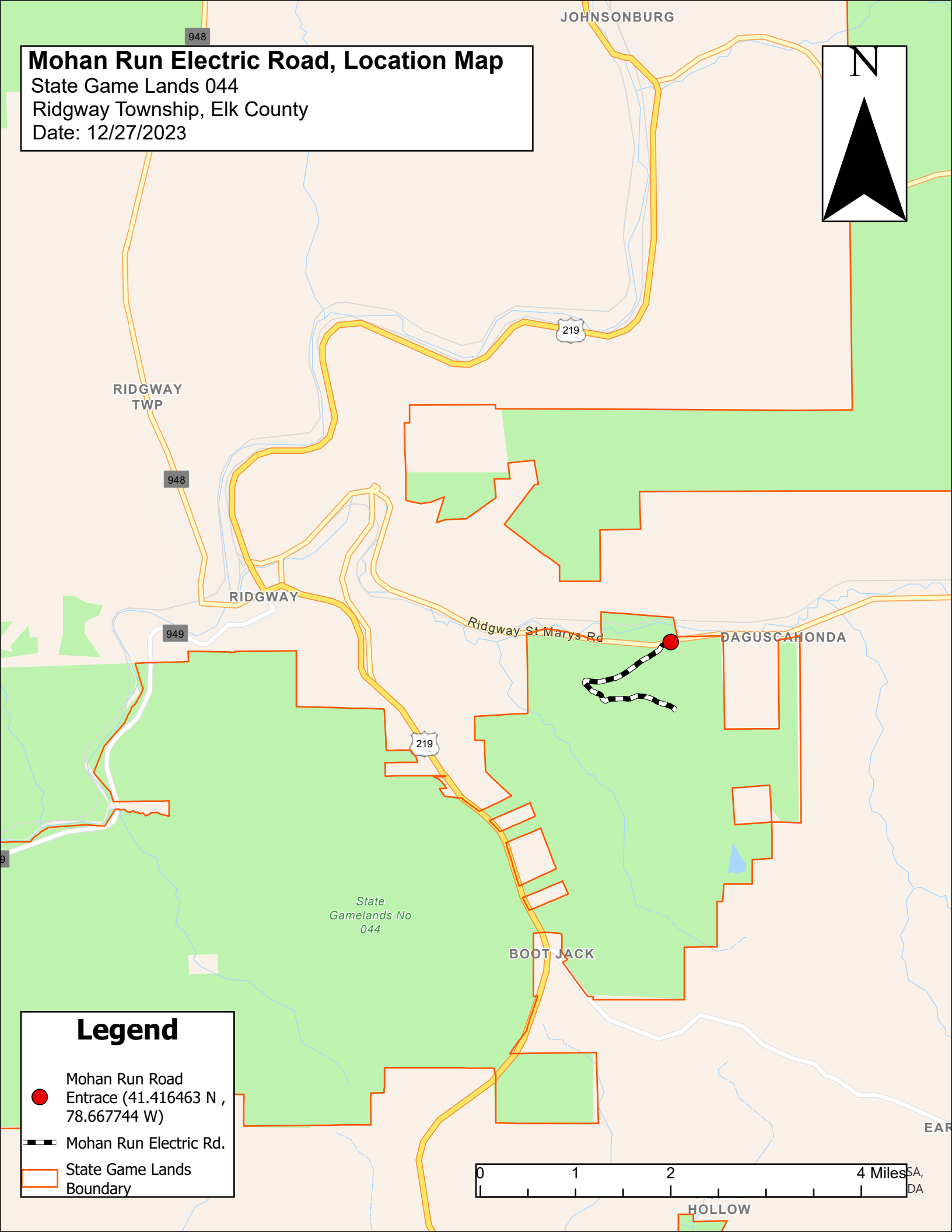
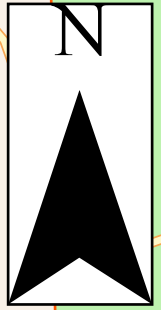
CONSTRUCTION NOTES:

1. WIDEN ROAD CORRIDOR - CLEAR AND GRUB TREES AND VEGETATION TO MARKED TREES OR AS DIRECTED BY PGC STAFF.
2. WIDEN AND GRADE ROADWAY SUBGRADE TO REQUIRED WIDTH WITH CENTER CROWN AS SHOWN. PROVIDE GRADE BREAKS AND BROAD BASED DIPS AS REQUIRED OR AS DIRECTED BY PGC STAFF TO ACCOMMODATE THE ROAD GRADE, TERRAIN, AND SITE CONDITIONS TO FACILITATE DRAINAGE ALONG AND ACROSS ROADWAY. COMPACT SUBGRADE WITH 10-TON (MIN.) VIBRATORY DRUM ROLLER.
3. PROVIDE STONE BASE USING BORROW MATERIAL EXCAVATED FROM PIT ON STATE GAME LANDS - 12" MIN. COMPACTED DEPTH WITH CENTER CROWN AS SHOWN. COMPACT BASE WITH 10-TON (MIN.) VIBRATORY DRUM ROLLER. TOP WITH 8" OF DSA OR 6" OF 2A AS APPLICABLE
4. PROVIDE DITCHES AND DITCH TURNOUTS AS SHOWN OR AS DIRECTED BY PGC STAFF TO COLLECT AND DIRECT STORMWATER RUNOFF AWAY FROM ROAD SURFACE.



Mohan Run Electric Road, Location Map

State Game Lands 044
Ridgway Township, Elk County
Date: 12/27/2023



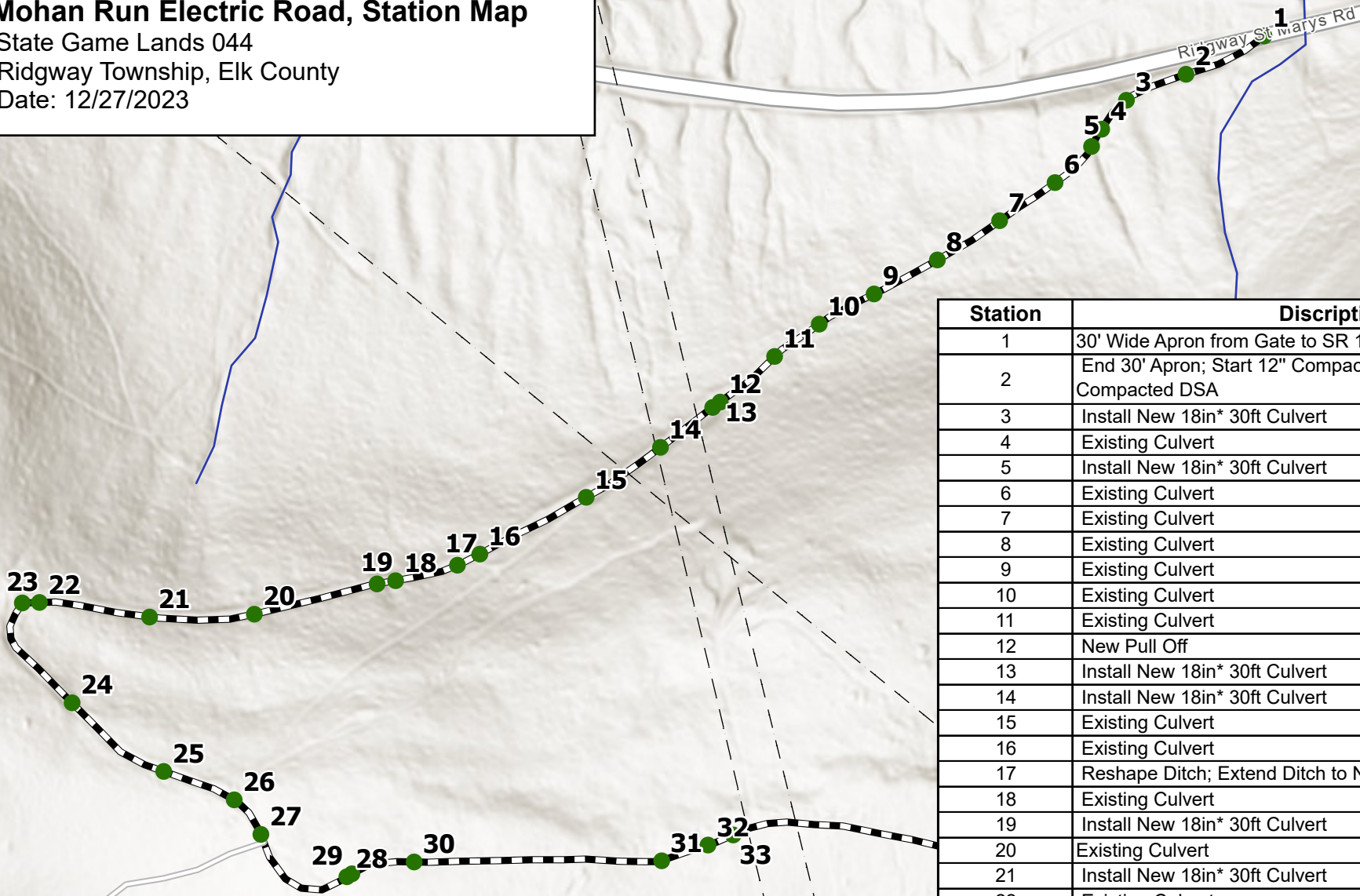
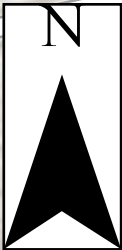
Legend

-  Mohan Run Road Entrance (41.416463 N , 78.667744 W)
-  Mohan Run Electric Rd.
-  State Game Lands Boundary



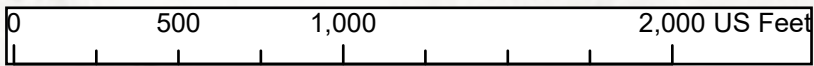
HOLLOW

Mohan Run Electric Road, Station Map
 State Game Lands 044
 Ridgway Township, Elk County
 Date: 12/27/2023



Stone Pit
Road Stations
Power Line ROW
Stone Pit Rd.
Mohan Run Electric Rd.
Stream

Sources: Esri, Airbus D
 Rijkswaterstaat,
 Contributors, data.pa.



Station	Discription
1	30' Wide Apron from Gate to SR 120
2	End 30' Apron; Start 12" Compacted Sub-Base; Start 4" Compacted DSA
3	Install New 18in* 30ft Culvert
4	Existing Culvert
5	Install New 18in* 30ft Culvert
6	Existing Culvert
7	Existing Culvert
8	Existing Culvert
9	Existing Culvert
10	Existing Culvert
11	Existing Culvert
12	New Pull Off
13	Install New 18in* 30ft Culvert
14	Install New 18in* 30ft Culvert
15	Existing Culvert
16	Existing Culvert
17	Reshape Ditch; Extend Ditch to Nearest Culvert
18	Existing Culvert
19	Install New 18in* 30ft Culvert
20	Existing Culvert
21	Install New 18in* 30ft Culvert
22	Existing Culvert
23	New Parking Area
24	Existing Culvert
25	Existing Culvert
26	Install New 18in* 30ft Culvert
27	New Turn Out
28	New Turn Out
29	Start 1,200' of Geotextile Fabric
30	Existing Culvert
31	Existing Culvert
32	Existing Culvert
33	New Parking Lot 20'x80';End 1,200' Geotextile Fabric; End 12" Sub-Base; End 4" Compacted DSA

2053 ft