Scope of Work: Cedar Bluff Transfer Station Proposal

0. Project Information and Bid Process:

- **Project Name:** Construction/Reconfiguration of Cedar Bluff Transfer Station
- **Project Location:** 193 Cedar Valley Drive, Cedar Bluff, Virginia
- **Date:** August 19, 2025
- **Bid Submission Deadline:** Bids must be received no later than **2:00 PM on September 4, 2025**.
- **Bid Opening:** Bids will be opened at the Tazewell County Engineer's office immediately following the submission deadline on September 4, 2025.
- **Bid Submission Address:** The bid envelope must be clearly marked "Construction/Reconfiguration of Cedar Bluff Transfer Station" and addressed to: Kenneth Dunford Jr. Director of Engineering 135 Court St, Suite 318 Tazewell VA 24651
- **Electronic Bid Submission:** Bids may also be submitted by emailing them to Kenneth.Dunford@tazewellcounty.org.
- **Questions and Pre-Bid Conference Inquiries:** Questions concerning the bid will be responded to by emailing kenneth.dunford@tazewellcounty.org. Questions will be accepted until September 1, 2025
- Scope Work, Addendums, Answer to questions and all other information will be placed on the following website https://tazewellcountyva.org/procurement/
- **Tazewell County's Rights:** The Tazewell County Board of Supervisors reserves the right to waive any informality, to reject all bids if it appears in Tazewell County's best interest to do so, and to accept only that bid deemed to be in the best interest of Tazewell County, Virginia.

This Scope of Work outlines the construction and related activities for the Cedar Bluff Transfer Station, as detailed in the provided bid package drawings (C-01 to C-06).

1. General Requirements & Site Preparation:

- The Contractor shall be solely responsible for the overall construction site management and all necessary permits required for the project. (excluding Erosion and Sediment Control Tazewell County is currently in the process of having this permit prepared)
- The Contractor shall verify all existing underground utility locations before any excavation and notify the Tazewell County Engineering Department of any variations. All excavations near existing utility lines shall be carried out with extreme caution.
- The Contractor shall contact the Virginia "Miss Utility" system before commencing any excavation work.
- The Contractor shall refer to drawings of other trades and vendor drawings for embedded items not shown on structural drawings.
- The Contractor shall verify all dimensions of existing construction affecting new construction and report variations to the designer prior to shop drawing submission.

- The Contractor shall verify all sizes and locations of mechanical and electrical openings and equipment and shall be responsible for providing all necessary openings and sleeves for proper distribution.
- The Contractor shall support structures to ensure stability. Retaining walls and basement walls must be shored prior to backfilling. Shores shall remain in place until supporting structures are in place and have attained their design strength (verified by cylinder testing or time period). Shoring design is the responsibility of the Contractor and shall be performed by a licensed engineer.
- Perform initial site grading outside the main structure to match original site conditions and ensure proper drainage, from the point of initiation of the optimal drainage.
- Manage and address any water or unexpected soil conditions encountered during excavation.

2. Earthwork and Site Grading:

- All foundations are designed for a bearing capacity of 2,000 PSF on suitable soil. Minimum soil conditions must be adhered to; contact the engineer if unsuitable conditions are encountered.
- Proof roll the site prior to asphalt and concrete pours. Excavations shall be completed to prevent soil drying if the subgrade materials are susceptible, and water shall be retained for curing concrete.
- All fill material shall be free of trash, organics, pyritic materials, coal, coal mine refuse, unsuitable material, or pieces of rock greater than 6 inches in any dimension.
- Fill material shall be placed in 8-inch lifts and compacted to 95% of the modified proctor maximum dry density, as determined by ASTMD 1557. Moisture content during placement shall be maintained within 3% of the optimum.
- Implement Filter Fabric Fence (Sediment Control) as per the Filter Fabric Fence Detail (Sheet C-03) and the Overall Plan (Sheet C-04) to prevent erosion.

3. Concrete Work:

- **Concrete Notes:**
    - Concrete sampling and testing shall be performed in accordance with ASTM C172 for sampling freshly mixed concrete.
    - For every 50 cubic yards of concrete placed in a pour, one cylinder sample shall be taken.
    - Samples shall be taken at regular intervals throughout the discharge of an entire batch, not just at the beginning or end. Samples shall be molded at the job site at the location in the work, considering air temperature and any unusual conditions at the time of sampling.
    - Cylinder molding shall be done in accordance with ASTM C31, Standard Practice for Making and Curing Concrete Test Specimens in the Field.
    - All molds shall be filled in three equal layers, with each layer rodded 25 strokes using a 5/8" diameter rod.

    - Concrete cylinders are to be stored and transported upright on a level surface, away from direct sunlight, extreme weather, or any other conditions that could compromise natural curing.
    - Cylinders can be transported to the testing laboratory only after a minimum of 24 hours has passed since molding. Samples transported before 8 hours after molding will not be demolded prior to transportation.
    - Samples must be transported to the laboratory no later than 48 hours after initial curing.
    - During transportation, specimens must be protected using suitable cushioning material to prevent damage from jarring, or damage from changes in temperature or moisture.
    - Testing shall be performed in accordance with ASTM standards unless otherwise noted. One cylinder shall be broken at 7 days, one cylinder at 14 days, and one cylinder at 28 days. The remaining fourth cylinder shall be held in reserve.
- **Dump Pad Area:** Construct concrete apron and dump pad as per the "Concrete Apron & Metal Dump Plate Detail" and "Dump Pad Area" plan (Sheet C-05).
- **Walls and Ramps:** Construct all concrete walls and ramps according to the "WALL PLAN," "RAMP PLAN," "WALL PROFILE," and "RAMP PROFILE" on Sheet C-05. This includes 12" wall width from 10' wall height to 4'.
- **Typical Sections:** Construct concrete elements conforming to "TYPICAL SECTION @ MAIN" and "TYPICAL SECTION @ 8'-4' WALL AREA" details (Sheet C-05).
- **Corner Details:** Adhere to "TYPICAL CORNER DETAIL" including #5@9" O.C. and #5@12" O.C. rebar configurations (Sheet C-06).

4. Drainage & Pipe Installation:

- Install 24" CMP (Corrugated Metal Pipe) as indicated in the "TYPICAL SECTION @ MAIN" (Sheet C-05) and "Section A-A" (Sheet C-03).
- Pipe systems shall be installed in accordance with ASTM D2321, Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity Flow Applications, latest edition.
- Measures should be taken to prevent migration of native fines into backfill material when required.
- **Foundation:** Where the trench bottom is unstable, the Contractor shall excavate to a depth required by the engineer and replace with suitable material. Alternatively, the trench bottom may be stabilized using a geotextile material at the discretion of the design engineer.
- **Bedding:** Suitable bedding material shall be Class I or II, with a minimum thickness of 4 inches (100mm) for 4-24 inch (100mm-600mm) diameter pipes, and 6 inches (150mm) for 30-60 inch (760mm-1500mm) diameter pipes. The Contractor shall provide documentation for material specification to the engineer.
- **Initial Backfill:** Suitable initial backfill material shall be Class I or II in the pipe zone, extending not less than 12 inches above the crown of the pipe. The Contractor shall provide documentation for material specification to the engineer. Material shall be installed as required in ASTM D2321, latest edition.

- **Minimum Cover:**
    - Non-traffic applications (grass or landscape areas): 12 inches from the top of pipe to ground surface. Additional cover may be required to prevent flotation.
    - Traffic applications: 12 inches cover for pipes up to 48 inches diameter, and 24 inches of cover for 60 inch diameter pipe, measured from top of pipe to bottom of flexible pavement or to top of rigid pavement.
    - Minimum recommended cover based on vehicle loading conditions: For pipe diameters 12-48 inches, 12 inches for AASHTO H-25 loading; for pipe diameters 12-60 inches, 48 inches for heavy construction (25T axle load). Vehicles in excess of 25T may require additional cover.

5. Fencing & Gates:

- Install safety fence as per the "Safety Fence Detail" (Sheet C-06).
- Install chain link rolling gate as per the "Chain Link Rolling Gate Detail" (Sheet C-06). A 4-foot high pre-fabricated chain-link fence is to be installed as shown plan

6. Miscellaneous Details:

- Install precast concrete wheel stops as per the "Precast Concrete Wheel Stop" detail (Sheet C-06).
- Install apron and metal dump plate as per the "Apron & Metal Dump Plate Detail" (Sheet C-06), including the 3/8" x 28" A36 Steel Plate full length of the wall.
- Implement all other details and specifications shown on drawings C-01 through C-06.
- Follow the approved Erosion & Control Plan/Stormwater Plan (E&S/SWPPP). (Tazewell County is in the process of obtaining)

7. Quality Control and Documentation:

- The Contractor shall adhere to all applicable codes and standards, including VCC-2021, ACI-2019, and ASCE 7-10.
- The Contractor shall provide documentation for material specifications to the engineer as required for bedding and initial backfill.
- All testing (e.g., concrete cylinder testing, soil compaction testing) shall be performed in accordance with the specified ASTM standards and general notes.

Deliverables:

- Completed Cedar Bluff Transfer Station facility as per the approved plans and specifications.
- All necessary permits and approvals.
- Documentation of material specifications and testing results.
- Project closeout documentation.

Exclusions:

- Unless explicitly stated in the drawings or this Scope of Work, any items not detailed are considered excluded from this scope.

7. Proposal Submission Requirements

- A project schedule including start and finish dates
    - For purposes of this bid assume that the contract will be signed on September 15, 2025
- Provided a cost estimate broken down into the following items included any mobilization and administrative cost in the estimate (place bid on attached sheet)
    - Site Preparation
    - Earthwork and Site Grading
    - Concrete Work
    - Drainage & Pipe Installation
    - Fencing & Gates
    - Miscellaneous
    - Quality Control and Documentation
    - Total
- Provided Contractors licences
- Provided proof of insurance in an amount no less that $1,000,0000

Item	Cost
Site Preparation	
Earthwork and Site Grading	
Concrete Work	
Drainage & Pipe Installation	

Miscellaneous	
Quality Control and Documentation	
Total	