REQUEST FOR QUOTE (RFQ)

Chesapeake Conservancy is a non-profit organization that works with conservation partners and landowners to implement Best Management Practices (BMPs) on agricultural land. Chesapeake Conservancy and our Central PA Partnership were awarded a Regional Conservation Partnership Program (RCPP) grant through the USDA Natural Resources Conservation Service (NRCS). Funding for Technical Assistance for practice design and assistance with practice installation and verification is available through RCPP.

As part of the RCPP grant, Chesapeake Conservancy is soliciting quotes for the following services:

- Engineering Services to design a roofed waste storage facility and associated practices for beef operation.
- Project and Construction Oversight
- Quality Assurance Inspections and Final Certification with PE Stamp

RFQ OVERVIEW AND DESCRIPTION OF WORK

RFQ Release Date: October 1, 2024

Landowner Name: John Grand

Project Location: 209 German Road
Lock Haven, PA 17745
Clinton County, Woodward Township

RFQ Issuing Office: Chesapeake Conservancy
Email: paprograms@chesapeakeconservancy.org
Phone: 570-372-4075

RCPP Partners: Natural Resources Conservation Service (NRCS) and Clinton County Conservation District

RFQ Due Date: **All quotes must be submitted by:**
October 31, 2024 at 10:00 am EDT
Quotes will not be accepted after this date and time.

RFQ Submission: **All quotes must be submitted electronically, or hand delivered in-person.**
DO NOT MAIL QUOTES – QUOTES WILL NOT BE ACCEPTED THROUGH U.S. MAIL.

Email: paprograms@chesapeakeconservancy.org
Include "Grand RFQ Response – Engineering Services" in the subject line.

In Person: Chesapeake Conservancy
Attention: Kathy Rohrer/Grand RFQ Response – Engineering Services
Susquehanna University, Freshwater Research Institute Building
1250 West Sassafras Street, Selinsgrove, PA 17870
A drop box is located inside the main entrance and is accessible at any time.

Questions: All questions regarding this RFQ should be submitted to:
Email: paprograms@chesapeakeconservancy.org
Contact/Phone: Kathy Rohrer, 570-372-4075

Project Description:

The landowner operates a beef cow/calf/finish operation on three farmsteads near Lock Haven, in Clinton County, PA. The location for this project is identified as the "Corman Farm" which is used for finishing beef. The successful bidder will be responsible for providing engineering and professional services to design and oversee construction of a roofed waste storage facility. The project involves construction of the roofed facility as well as waste transfer, access roads and other Best Management Practices (BMPs). The landowner prefers to use pre-cast concrete walls for the structure. The new facility will be designed and constructed next to an existing barn that was built in 2014. The existing barn is used to house 100 head of finishers which are raised continually onsite and are 100% confined to the barn.

There are no streams located on the property. The nearest stream, an unnamed tributary to Big Plum Run, is approximately 900 feet east, to which the farmstead drains. Big Plum Run is designated use of Cold Water Fishes (CWF). A Nutrient Management Plan has been developed for this operation.

The design shall include all components needed for constructing the practices identified in the Engineering Evaluation (I&E) that will adequately address water quality. BMPs may include but are not limited to those identified in the landowner's I&E (Attachment A). Bidders should refer to the Engineering Evaluation for practices, estimated quantities and other important information regarding the project site. This information is provided for informational purposes only.

This contract will include the following services:

Project Design

- Site survey(s) and engineering of planned BMPs
- Provide a concept plan for approval by NRCS after pre-design meeting
- Coordinate and communicate with NRCS staff to incorporate NRCS comments into final design
- Provide final design and drawings to NRCS for review and approval
    - The Engineer shall prepare all necessary design plans, drawings and specifications to be used for the construction of the BMPs. All information provided shall be complete in detail and contain all necessary information. Drawings shall conform with standard professional practice, including site plans, profiles and sections, erosion and sediment control plan, quality assurance/inspection plan, operation and maintenance plan and all details necessary to illustrate the complete scope of the work.
    - The Engineer shall include design calculations, documentation and cost estimate.
    - The design and drawings shall be signed and sealed by a qualified, licensed professional, and shall meet Pennsylvania Technical Guide Standards and Specifications.
- Provide NRCS approved design and drawings to the Conservancy, RCPP Partner (Conservation District) and landowner
- Provide NRCS technical standards and specifications of planned BMPs
    - Planned BMPs and estimated quantities are found in Attachment A.
- Provide printed sets of 11"x17" or larger drawings and designs for the site showing. Quantity will be determined based on number of attendees.

Project Permits

The landowner will be responsible for applying for and obtaining all permits required for this project.

Project Meetings

Project meetings including but not limited to:

- Pre-design meeting on site
- Site showing for bids on site

- Bid opening or review of bids
- Pre-construction visit on site

Construction Oversight and Quality Assurance

The Engineer is expected to furnish customary engineering advice and assistance necessary to Chesapeake Conservancy, NRCS, landowner, contractors and other project partners to enable all parties to readily understand the project and design. The Engineer shall provide oversight of the project and shall coordinate with Chesapeake Conservancy, NRCS, landowner, contractors and other partners throughout the project. The Engineer is expected to work directly with NRCS and the landowner on such things as design reviews, edits and approvals, site visits and other aspects of the project. The Engineer shall visit the construction site to observe progress and quality of work, to determine if work is proceeding in accordance with the design, to keep Chesapeake Conservancy informed of progress, to guard against defects and deficiencies and to disapprove of work not in conformance with the design and NRCS specifications.

The Engineer will, at a minimum, conduct quality assurance inspections on site during construction for critical tasks including, but not limited to:

- Placing compacted fill or subgrade/stone preparation
- Checking materials (rebar, posts, etc.) before installation
- Check reinforcing steel before concrete pour (not same day as pour)
- Pouring any concrete
- Backfilling poured concrete walls or final grading
- Setting trusses and associated truss bracing (Trusses must be approved by the Engineer prior to ordering. Final truss design needs a P.E. seal.)
- Installing stormwater pipes and drop boxes
- Final inspection for conformity with design, concept and NRCS specifications

Contractor will complete a NRCS RCPP TA-I Practice Certification Sheet (included with Attachment B) for each practice (Contract Item Number-CIN) in the NRCS contract that is part of the engineering design. An example Practice Certification Sheet has been provided by NRCS. The Contractor shall send the completed Practice Certification Sheet(s) to the local NRCS District Conservationist (DC) for functional review and DC signature and copy the Conservancy. NRCS will complete its review and return the signed Practice Certification Sheet(s) to the Contractor. The signed Practice Certification Sheet(s) shall be submitted to the Conservancy with the Contractor's invoice.

When the project is complete, the Engineer will provide the following:

- "As Built" documentation consisting of final drawings of practices and quantities installed and certification statement signed by a professional engineer stating installed practices meet the PA Technical Guide Standards and Specifications.
    - One electronic copy to Chesapeake Conservancy and NRCS.

Bidding Process

The Clinton County Conservation District (lead RCPP partner) will be required to utilize a competitive bidding process for the implementation phase of the project. The Conservation District will be responsible for compiling a bid package following their procurement policy. The Engineer and NRCS will review the final bid package for accuracy and completeness. The Engineer shall be available to answer contractors' questions pertaining to the design and supply the District with addenda, if required. The Engineer shall be prepared to provide printed sets of 11"x17" or larger of the designs and drawings for the site showing.

RFQ TERMS AND CONDITIONS

CONSTRUCTION TIMELINE:

Designs shall be completed as soon as possible. Contractors shall include with their response when they can begin working on the design and their projected completion date of the design. Preference shall be given to contractors who can complete the designs in a timeframe which could allow construction to be completed before June 2026 as funding from the RCPP partner for implementation/construction needs to be spent within this timeframe.

If the contracted services are not completed within the designated time period (as specified in the resulting contract from this RFQ), the contract can be extended if agreed to in writing by Chesapeake Conservancy and the contractor.

PA ONE CALL:

Contractor shall follow all laws and regulations relating to the Pennsylvania One-Call System including submitting all required design notifications to the Pennsylvania One-Call System.

COMMUNICATION:

Communication between the Contractor, NRCS, the District and the landowner is crucial to a successful project. Contractor shall work closely with NRCS, the District and the landowner during the design and implementation phases of the project to ensure the project is completely timely.

PAYMENT INFORMATION:

Chesapeake Conservancy will pay Contractor when the design is completed and approved by NRCS and as practices are certified and NRCS reporting requirements are met. Payment(s) will be issued on a Net 30 schedule upon submission of an approved invoice and a completed Application for Payment form.

NRCS REPORTING REQUIREMENTS:

NRCS requires Contractor to complete Attachment B with each invoice. Attachment B includes a RCPP TA-I Certification by Practice Sheet and a RCPP TA-I Reimbursement Summary Sheet.

RCPP TA-I Certification by Practice Sheet

Contractor shall include on the Certification by Practice Sheet basic information about the conservation practice, who was involved, brief description of activities, completion date and the charge by Activity Type (Design or Installation). A separate Certification Practice Sheet is to be completed for each practice in the producer's RCPP contract that is associated with the engineering design.

RCPP TA-I Reimbursement Summary Sheet

For each invoice the Contractor submits to the Conservancy, Contractor shall complete the Reimbursement Summary Sheet by compiling the total reimbursement request for all completed Conservation Practice Sheets for the invoice period. The Reimbursement Summary Sheet shall include the invoice period start and end date, details from the Certification Practice Sheet as well as the total cost being invoiced by conservation practice. The staff position, hours worked and hourly rate associated with each conservation practice should be broken out at the bottom of the form.

EQUAL EMPLOYMENT OPPORTUNITY:

Chesapeake Conservancy is an equal opportunity employer. The successful bidder shall comply with all federal, state, and local equal employment opportunity requirements. Additional information can be found at https://www.ecfr.gov and searching 41 CFR 60-1.4(b).

SMALL BUSINESS AND SMALL DIVERSE BUSINESS:

Chesapeake Conservancy encourages the use of small and small diverse businesses when soliciting Requests for Quotes. Contractors are encouraged to register with the federal government at www.sam.gov and with the Pennsylvania Department of General Services at www.dgs.pa.gov (search Small Diverse Business Verification). Please note Pennsylvania Department of General Service registration is only valid for three years. Contractors are encouraged to verify that their registration is current.

Contractors and any subcontractors who register on Sam.gov and with the PA Dept of General Services and who qualify as a small and/or small diverse business should check the applicable boxes on the Contractor Response Form.

DEBARMENT AND TAX LIABILITY:

Contractors will be required to certify that they and any subcontractors are not listed on the Debarment and Suspension List maintained by the Pennsylvania Department of General Services (https://www.dgs.internet.state.pa.us/debarmentsearch/debarment/index) and the General Services Administration's List of Parties Excluded from Federal Procurement or Nonprocurement Programs (www.SAM.gov) in accordance with Executive Orders 12549 and 12689, "Debarment and Suspension" and have no outstanding tax liabilities. Contractors will also be required to certify that they and any subcontractors are not in default of a loan or funding agreement administered by any Commonwealth agency.

INSURANCE REQUIREMENTS:

Bidders shall include a copy of their current Certificate of Insurance (COI) that reflects their existing levels of liability insurance coverage. Chesapeake Conservancy will work with the successful bidder to ensure adequate levels of insurance are in place for the project prior to finalizing a contract.

Preferred levels of coverage include the following:

Type of Insurance Coverage	***Limit Required***
Workers Compensation and Employer's Liability -	Statutory
Bodily Injury, Each Accident:	State Minimum
Bodily Injury By Disease, Each Employee:	State Minimum
Bodily Injury/Disease, Policy Limit:	State Minimum
General Liability -	
Each Occurrence (Bodily Injury and Property Damage):	$1,000,000
General Aggregate:	$1,000,000
Excess or Umbrella Liability -	
Per Occurrence:	$1,000,000
General Aggregate:	$2,000,000
Automobile Liability -	
Combined Single Limit (Bodily Injury and Property Damage):	$1,000,000
Professional Liability – covering negligent acts, errors, and omissions in performance of professional services	
Each Claim Made	$5,000,000
Annual Aggregate	$5,000,000

It is preferred that all policies (except workers compensation) include a waiver of subrogation and list "**Chesapeake Conservancy"** as additional insured.

Once Chesapeake Conservancy and the successful bidder have reached an agreement pertaining to insurance coverage, the successful bidder shall provide Chesapeake Conservancy with a current COI certified by a licensed insurance broker. The approved COI needs to be provided to Chesapeake Conservancy prior to signing a contract.

Note: Bidders do not need to add the additional insured to their policy when responding to the RFQ. Only the successful bidder will be required to name the additional insured on their policy after the bid is awarded. The Certificate Holder should be as follows: Chesapeake Conservancy, 1212 West Street, Suite 42, Annapolis, MD 21401.

GRANTS:

The terms and conditions of the RCPP Supplemental Agreement for Technical Assistance and Financial Assistance for Easement Due Diligence Entered Into By USDA Natural Resources Conservation Service and Chesapeake Conservancy apply to the contracts that result from this RFP. Copies of the Agreement are available upon request.

PREVAILING WAGE AND ENHANCED MINIMUM WAGE REQUIREMENTS:

Prevailing wage and enhanced minimum wage rates do not apply to this RFQ.

SUBMISSION OF QUOTES AND SELECTION CRITERIA

SUBMISSION OF QUOTES:

Quotes are requested for the items described in the Project Description. Any estimated quantities included in this RFQ are for information only. The successful bidder will be responsible for determining the final quantities and practices as part of the design process.

At a minimum each quote response must include:

- Contractor Quote Form
  - Price – Must follow NRCS Crosswalk format outlined below*
  - Proposed start date
  - Proposed completion date
  - List of exclusions and assumptions (if applicable)
  - Signed by authorized representative
- Contractor General Information Form and corresponding documents**
  - Three references
  - Debarment and tax liability certification
  - Current Certificate of Insurance
  - Signed by authorized representative

Contractors bidding on more than one 2024 RCPP Engineering Services RFQ, will only need to submit one Contractor General Information Form and corresponding documents. Contractors should note on the Contractor Quote Form whether they are including the Contractor General Information Form with this response or if they submitted it with a separate 2024 RCPP Engineering Services response.

All quotes must be submitted electronically, or hand-delivered to Chesapeake Conservancy by the RFQ due date specified on Page 1 of the RFQ.

***NRCS Crosswalk**

A Generalized Crosswalk: Aligning SA TA-I Practices to NRCS 9 Step Planning Process	
TA-I Practice Code and Name	**Implementation TA Tasks – Must be directly related to a potentially viable RCPP funded FA application or contract, and not be otherwise precluded like are TA-E items (per APF), and partner administrative expenses (per Statute.)**
RTIP001 – TA-I, Negotiated Pre-Application	Pre-application assistance may assistance to producers in completion of application, establishing FSA records, and or field work to support eligibility or screening. **(Reminder: this activity does NOT include outreach to producers or general meetings to raise producer awareness of project, which are TA-E or contribution tasks.)**
RTIP002 – TA-I, Negotiated Planning	Steps 1-7 Note: TA-I Planning, Design tasks require adherence to NRCS planning procedures and or practice standards as described for each agreement in Attachment 5 (and or valuation methods attached to individual deliverables). Where partners will not complete entity of a plan or design (e.g. partner will provide a range heath assessment in support of a grazing plan to be prepared by NRCS planner), Attachment 5 must also identify specific requirements of items partner will complete to earn payment.
RTIP003 – TA-I, Negotiated Design	Steps 5, 6, 8 (Design)
RTIP004 – TA-I, Negotiated Installation	Step 8 (Installation)
RTIP005 – TA-I, Negotiated Checkout	Step 8 (Checkout) Note: TA-I Checkout, requires NRCS job approval authority as checkout determines eligibility of completed work for FA payment. Not generally delegated to partners.
RTIP006 – TA-I, Negotiated Post-Application	For post-application assistance Note: Post application assistance is not outcome assessment or monitoring (which are TA-E/Contribution tasks); RTIP006 should be used only where NRCS FA policy requires follow-up e.g. easement monitoring, 5% spot checks (with appropriate separate of duties)

CONTRACTOR SELECTION CRITERIA:

Contractor will be evaluated on the following criteria:

- Quote price
- Proposed start date
- Proposed completion date
- References - Demonstrates experience by providing examples of at least three (3) similar projects in Pennsylvania. More than 3 references are allowed.
- Debarment and tax liability status
- Exclusions and assumptions (if applicable)
- Provided Certificate of Insurance with current levels of coverage

Quotes will be awarded to the most qualified economic bidder, as determined by Chesapeake Conservancy. Chesapeake Conservancy reserves the right to reject any or all quotes and/or cancel the quote for any reason.

CONTRACTOR QUOTE FORM

Contractor Name: _____

Project Name: John Grand Engineering Services
Project Location: 209 German Road, Lock Haven, PA 17745, Clinton County

1. Price– Complete Contractor Quote Form Page 2 – ***Required***

   RCPP funding for Technical Assistance is provided through NRCS therefore we are using their categories for defining technical service categories. Include all Staff Position Titles that will be involved with the implementation of this project and Range Rate of staff for those positions, Estimated Number of Hours Per Activity and the Total Cost per Activity. The range of rates should account for the current staff rates and the expected pay increases for those positions over the next 3 years (term of the RCPP producer contract). Bidders may include overhead/admin expenses as a component of their claimed rate but that rate should be customary and reasonable and will be subject to review by NRCS and the Conservancy. Any cost associated with the 6 categories must be broken out. Activities 2-4 are the most typical for this type of project since we have producers with RCPP contracts in place already. Please include additional documentation if you are proposing costs associated with activity 5-6.

2. Date on which design can be started - ***Required***: _____

3. Estimated completion date of the design - ***Required***: _____

4. List any exclusions and assumptions associated with your proposal - _____

   _____

   _____

   _____

5. Please check whether you are submitting the Contractor General Information Form and related supporting documents with this response or if you submitted them under a separate 2024 RCPP Engineering Services RFQ – ***Required:***

   ☐ I have included the Contractor General Information Form with this RFQ response.

   ☐ I submitted the Contractor General Information Form with a separate 2024 RCPP Engineering Services RFQ response.

This quote is submitted in response to the RFQ for the project described above. The quote is based on my knowledge of the plans and specifications identified within. This quote will remain valid for 90 days after submission. If awarded the RFQ, I agree to sign a contract with the Chesapeake Conservancy.

Company Name:_____ Company Tax ID (EIN):_____

Company Address:_____

Representative's Name:_____ Telephone:_____

Email Address:_____

Signature:_____ Title:_____ Date:_____

CONTRACTOR QUOTE FORM

Page 2 of 2

INSERT REQUIRED INFORMATION

(Staff Position Titles, Rate Range, Estimated Hours and Total Cost)

TA-I Activity Code	Activities	Tasks	Staff Position Title(s)	Rate Range $xx-$xx/hr	Estimated # of hours per activity	Total Cost (using avg rates)
RTIP-001	TA Implementation Payment Pre-Application Activity	RCPP related Farm Visits (Follow up visits with NRCS or the farmer to develop application, review documents prior to contract, updating CNMPs or I&Es during ranking, screening, and contracting)				
RTIP-002	Updates to CNMPs as Needed. Amount not to exceed $2,500/farm	Conservation and Nutrient Management Plan development according to NRCS planning procedures				
RTIP-003	TA Implementation Payment Design on FA Applications or Contracts	Design/Engineering (5. Form Alternatives, 6. Evaluate Alternatives, 8. Design to Std, permit design/app, land rights, surveys, final designs)				
RTIP-004	TA Implementation Payment Installation (TA) on FA Applications or Contracts	Installation (8. Installation, inspections for structural practices)				
					Total Cost	

CONTRACTOR GENERAL INFORMATION FORM

Chesapeake Conservancy released ten RFQs for RCPP Engineering Services. Each RFQ is for a different project within the Conservancy's central PA rapid stream delisting catchment areas.

Contractors may bid on one or more of the RFQs. Contractors bidding on multiple RFQs only need to complete and return the Contractor General Information Form and related supporting documents with one of their RFQ submissions.

Contractor Name: _____

Project Name: **2024 RCPP Engineering Services**

1. The following three references are provided with telephone numbers of projects completed of similar scope and size - ***Required***:

   Name:_____ Telephone:_____

   Name:_____ Telephone:_____

   Name:_____ Telephone:_____

2. Small Business or Small Diverse Business (See Terms and Conditions for details) - *Check all that Apply*
   I have registered with Sam.gov and my business (or any subcontractors listed above) qualifies as a ☐ Small Business and/or ☐ Small Diverse Business

   I have registered with the PA Dept of General Services and my business (or any subcontractors listed above) has been certified as a ☐ Small Business and/or ☐ Small Diverse Business.

3. Debarment and tax liability status (See Terms and Conditions for details) - ***Required***:
   ☐I certify that my business, and any subcontractors, are not debarred by the State of Pennsylvania or the federal government.
   ☐I certify that my business, and any subcontractors, have no tax liabilities and are not in default of a loan or funding agreement administered by the State of Pennsylvania.

6. Certificate of Insurance (See Terms and Conditions for details) - ***Required***:
   ☐I have included with my response a copy of my Certificate of Insurance with my current levels of coverage.

This quote is submitted in response to the RFQ for the project described above. The quote is based on my knowledge of the plans and specifications identified within. This quote will remain valid for 90 days after submission. If awarded the RFQ, I agree to sign a contract with the Chesapeake Conservancy.

Company Name:_____ Company Tax ID (EIN):_____

Company Address:_____

Representative's Name:_____ Telephone:_____

Email Address:_____

Signature:_____ Title:_____ Date:_____

ATTACHMENTS:

Attachment A – CNMP Engineering Evaluation (I&E), Corman Farm Site, Roofed Manure Stacking Facility for John Grand

Attachment B – NRCS Reporting Requirements (Certification by Practice Sheet and Reimbursement Summary Sheet)

Attachment A

CNMP Engineering Evaluation
Corman Farm Site
Roofed Manure Stacking Facility

PREPARED FOR:

John Grand

231 Elk Lane
Lock Haven, PA 17745
570-263-0704
Dunnstable Twp, Clinton County, PA

Corman Farm Location
209 German Rd
Lock Haven, PA 17745
Woodward Township
Clinton County, PA

PREPARED BY:
Nathan Dewing, NM Specialist
February 8, 2022

APPROVED BY:
Rob Sweppenheiser, P.E.

Table of Contents

APPENDIX:

STRUCTURE SIZING, SOILS, CUT/FILL ESTIMATES, KEYSTONE WALLS ESTIMATE, DRAWINGS

1 Introduction

Mr. Grand contracted TeamAg, Inc. through the Chesapeake Conservancy to prepare a Comprehensive Nutrient Management Plan (CNMP). This Engineering Evaluation is a component of the CNMP and is focused only on practices needed at the Corman Farm site. Guidance documents from USDA NRCS Pennsylvania were followed in the preparation of this document. This element addresses the components and activities associated with manure storage and handling practices and storm water and runoff associated with this operation.

On December 14, 2021, Nathan Dewing, TeamAg Inc. NM Specialist, visited the farm and met with John Grand, the farm owner and operator, to perform the field work for this report. Bill Deitrick, USDA-NRCS Soil Conservation Technician was also present for this site visit. Bryan Conklin, NRCS Civil Engineering Technician was present when we evaluated the other two farmsteads for the conservation and nutrient management plans.

Mr. Grand owns an existing beef cow/calf/finish operation near Lock Haven, PA. The farm operates three farmsteads. This engineering evaluation is limited to improvements needed at the Corman farm site. The other two farmsteads were also visited for purposes related to the conservation and nutrient management plan portions of the CNMP. There are no surface water sources located on the property at the Corman farm. The nearest stream is approximately 900 feet east, to which the farmstead area drains. This is an unnamed tributary to Big Plum Run, which empties into the Susquehanna River approximately 5 miles east of Lock Haven at Avis, PA. Big Plum Run has a designated use of Cold Water Fishes (CWF).

The Corman farm site is used for finishing beef animals. The barn at the Corman farm was built approximately 2014 along with a concrete feed storage bunk for corn silage. These are the only structures on the farm. Some foundation remnants from an older barn remain directly north of the new beef barn.

100 total head of finishers are raised continually at the site ranging in weight from 600 – 1,400 lbs. The cattle are 100% confined to the barn. Manure is currently cleaned from the barn about every three weeks and either piled outside the barn or spread directly to fields. Total animal units at the Corman farm site are 100 AUs.

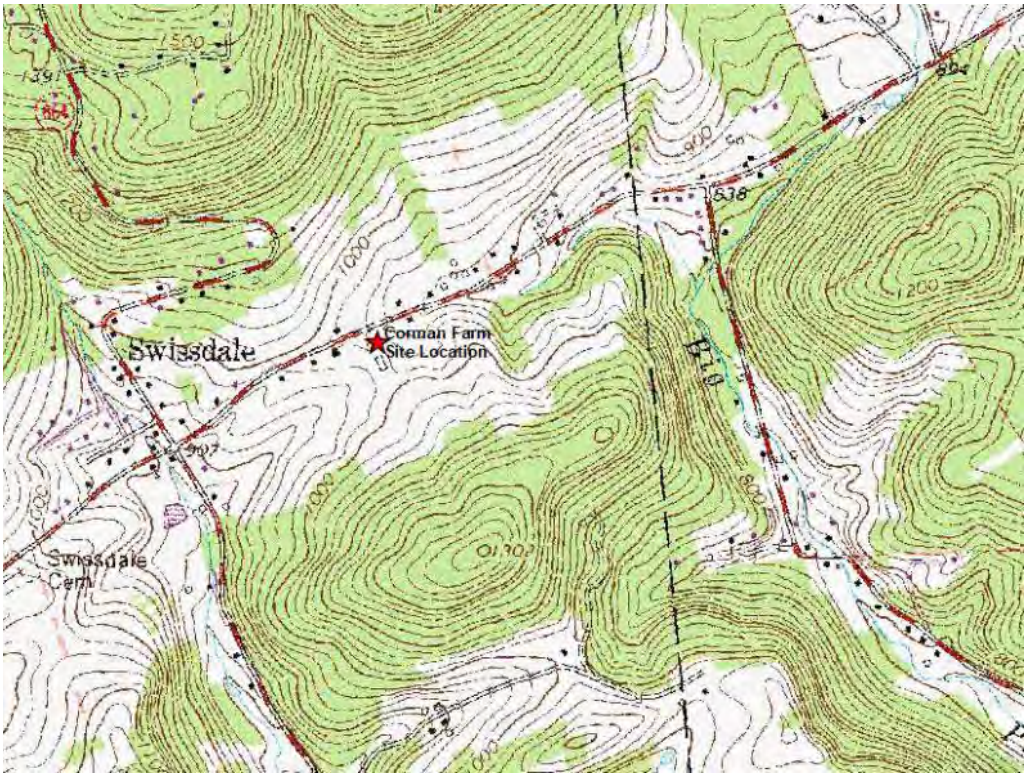
The conservation plan and nutrient management plan portions of the CNMP will include the entire operation. This encompasses 268 total owned acres consisting of 19.5 acres of farmstead, 97.3 acres of pasture, 95.2 acres of crop land, with the remainder being forest or unfarmed land. An additional 225 acres of crop land is rented. Crop land is used to grow primarily hay and corn, with some soybeans. Nearly all planting is done without tillage. The total animal units on the farm are approximately 421 AEU's and the operation is not considered a concentrated animal operation (CAO).

2 Site Data

Farm Location Map

Aerial Photo of Corman Farm Site

USGS TOPOGRAPHIC MAP OF YODER FARM



3 CNMP Engineering Inventory

Water quality from manure runoff is the main resource concern. A significant amount of manure from this farmstead is spread during the winter. When manure from cleaning the barn is not immediately spread, it is stacked outside on a concrete apron at the south end of the barn. Runoff from the manure pile is free flowing to the watershed.

Cattle are confined under-roof, so runoff from the animal concentration area is not a concern. The north end of the lean-to roof over the feed lane is not yet completed. This is being completed by the farmer and will need to be completed to prevent runoff from manure in the feed lane.

3.2 Photos

1 - North end of beef barn where manure stacking area is planned.

2 – West side of barn.

3 – South end of barn.

4 – Bunk silos at south end of barn.

5 – Inside barn. Shorter section at north end. Pushoff to be at far (N) end in photo.

6 – These show both sides of feed bunk along east side of barn (looking south). Lean-to roof being completed by farmer.

7 – North end of barn; view from location of proposed push-offs.

8 – North end of barn – location of proposed storage between barn and tree, open end north (toward tree).

9 – North end of barn. Power line may need to be re-routed underground from pole to barn.

10 – North end of barn looking north toward state road.

11 – North end of barn. View from proposed location of storage. Storage floor elev. planned at 12 ft below barn floor elevation. Proposed push-off from feed lane through guard rails, and pushoff from barn through the north wall.

ALTERNATIVE ANALYSIS

Mr. Grand wants to take advantage of elevations at the site to utilize push-offs into the manure storage. This simplifies scraping manure from the barn and feed alley but complicates manure stacking by creating a second handling operation to move manure away from pushoffs inside the storage. These management issues have been taken into consideration as part of this evaluation. Since using pushoffs is a priority, the site directly north of the barn is planned for storage location.

Soil on the farmstead is Meckesville silt loam (MeB), hydrologic group C. Drainage class is "well drained". This soil could be suitable for a vegetative treatment area (VTA). Given that the improved area is to stack manure, a roof covering is advised to keep manure stackable and to prevent clean precipitation from mixing with manure. Therefore, use of a VTA in conjunction with an uncovered storage is not being recommended.

The power feed to the barn (see photos) may need to be rerouted to avoid interference with a new roof. If the line needs to be moved, routing it underground would be an option to consider. No contact was made with the power company during the development of these recommendations. Nothing is included in the cost estimate for this.

Deep excavation close to the north end of the existing barn will be required to install this structure. Various dimensions, elevations and orientations for the new structure were evaluated for safety of the cut slope and to minimize depth of fill at the NE corner. The layout described in this report is being

considered the option of choice at this time. Mr. Grand prefers to use pre-cast concrete walls for the structure. 8 ft high walls are most common and are preferred since they provide plenty of height for storage and are most cost effective. However, only an 8 ft drop from existing barn floor would require approximately 8 feet of fill at NE corner of the storage. For this reason, varying wall heights are being proposed as the best balance of landowner goals, cost and fill depth. Other dimensions and elevations can still be considered.

SUMMARY OF PLANNED IMPROVEMENTS

A concrete manure stacking area with a roof covering is planned. The storage is sized for 5 months with an additional 1 month of storage in bed pack. Two short scrape lanes with pushoffs are planned to load manure into the storage. Precast concrete walls are planned. A concrete apron will stabilize the storage entrance. Reinforced gravel access road is planned for stable equipment access. One roof gutter and outlet is planned for the SW side of the new roof. A footer drain and outlet is planned for storage walls.

3.4 Best Management Practices (BMP's):

MANURE STACKING STRUCTURE (PA-313)

A roofed manure stacking area will be constructed to store manure from the beef herd on site. The storage will be sized for 100 finishing beef cattle (see sizing calculations). Storage configuration will be three walled sides and a partially walled front. Footprint required is 64' w x 56' l. The layout proposed has a longer width than length to best fit the space available and to meet landowner goals. The landowner wants the new roof to be oriented the same direction as the existing barn. Input from Timbertech Engineering suggests that 64 ft is the widest structure to consider for precast walls with standard trusses and bracing.

The manure storage will extend longer than the roof structure at the pushoffs. This is needed because the new roof will be too low to provide clearance for equipment pushing manure into the storage. The pushoff area could have a separate roof, at the same level as the barn. This evaluation does not include a roof over the pushoffs. Outside wall dimensions of the rectangular storage area are likely to be 64'6" x 56'6" with a pushoff area measuring 8' x 40.5'. Total area for manure storage = 3,968 ft^2. Storage capacity will be 21,806 ft^3 when stacking 6 ft high. Sizing calculations are included. The structure is sized for 5 months with 1 month additional storage in the bed pack on the barn floor. The structure will have concrete walls, concrete floor, and a roof structure to keep the manure stackable and to eliminate runoff.

The operator would like to construct the entrance with a more pronounced ramp to prevent manure spillage more reliably. This is noted as an 18" high ramp with a 10% grade. Other layouts and dimensions can be considered.

Excavation Notes – The storage is planned taking advantage of existing elevations to use pushoffs for loading manure into the storage. The storage floor elevation is planned to minimize fill depth at the NE corner. As planned, maximum fill depth is 4 feet. The entire subgrade is planned to be over-excavated 2 feet and recompacted to provide a uniform subgrade. Soil compaction testing may be required for all subgrade fill to confirm 95% standard proctor density. The building engineer shall approve test results. The cost estimate includes hiring an independent laboratory for compaction testing. Recommendation is for the excavation contractor to be responsible for securing independent testing. Heavy compaction equipment will be required. The structure is proposed using pre-cast concrete walls, which usually require approximately 30" minimum backfill. The east and west sides will be partially backfilled meeting minimum requirements. The 12 ft wall on the south side will be entirely backfilled using a minimum 2 ft thick envelope of free-draining material against the wall for the entire height. The north side wall is

planned for 18" backfill height to better fit finished grades of the site. Wall supplier may require additional measures if minimum backfill cannot be achieved. Alternatives to wall backfill should be discussed with design engineers. If Keystone precast walls are used, contact Timbertech Engineering to discuss alternatives to backfill. All finished grades will slope away from the structure. Excavation volumes (compacted in-place) are estimated at 1,300 yd^3 of cut, 570 yd^3 compacted subgrade (including over-excavation), and the remaining 730 yd^3 to be used for wall backfill and graded out on-site.

CRITICAL AREA PLANTING (PA-342) AND MULCHING (PA-484)

After construction is complete, any disturbed ground will need to be seeded and mulched to prevent erosion. Approximately 0.5 acre of critical area seeding and mulching is estimated.

ROOFS AND COVERS (PA-367)

A new roof will be constructed over the proposed manure stacking area. Roof height is planned for 16 ft inside clearance. The roof will be timber structure supported and anchored by the precast concrete walls. Roof overhangs will be minimal on all sides. All four sides will likely be sided except for the entrance. 2 ft tall openings at top of walls around entire perimeter are recommended for ventilation.

Outside measurements of the timber structure are likely to be 64'9" wide x 56'6" long = 3,658 ft^2. With overhangs the roof is estimated to be 67' x 59' = 3,953 ft^2.

A second roof is planned to cover the scrape lanes and pushoff areas. This roof will free-standing and separate from both the barn and storage but will effectively connect the two. This roof is planned to provide at least 10 ft of clearance for manure scraping equipment. The scrape lane area covered is 210 ft^2 and the manure storage area under the pushoffs covered by this roof = 40'6" x 8'4" = 338 ft^2 for a total of 548 ft^2. Overall planned dimensions for this roof are 44' wide x 14' long = 616 ft^2.

ROOF RUNOFF STRUCTURE (PA-558)

Approximately 59 linear feet of roof gutter is planned for the SW side of the new roof to divert clean water from traffic areas. The gutter will outlet via underground outlet as described.

ACCESS ROAD (PA-560)

Approximately 120 linear ft of reinforced gravel access road will be installed to connect the existing driveway to the concrete apron at the storage entrance, providing stable equipment access to the site. The area constructed will be wider than 12'. Total area planned measures 3,300 ft^2.

HEAVY USE AREA PROTECTION (PA-561)

Concrete heavy use area protection is planned for an apron at the stacking area opening. The apron is planned at 20' wide x 30' long = 600 ft^2. The apron will slope away from the stacking structure.

SUBSURFACE DRAIN (PA-606) AND UNDERGROUND OUTLETS (PA-620)

A subsurface drain is planned along the footers of the new stacking area wall. This drain will be located at base of footer elevation. The tile line is planned as 4" perforated pipe and length is 270 feet. The tile outlet is planned as shown on the drawings near the state road. Outlet is planned as 4" PVC pipe; length = 100'.

Approximately 130 ft. of 6-inch PVC pipe with risers will be needed as outlet for the planned roof gutter.

WASTE TRANSFER (PA-634)

Two short scrape lanes with curbs are planned for scraping manure into the storage: one from the feed lane and one from inside the barn. Planned dimensions of these scrape lanes are approximately 12' wide x 6' long. The east side scrape lane flares wider to accommodate scraping from both sides of the

feed bunk. These scrape lanes are planned as bridge slabs supported on top of the 12 ft storage wall. Pushoff guards will be required at each. These are planned as basic welded pipe pushoff guards.

4 Other Comments and Considerations

Animal Group & Manure Production Information

Refer to attachments at the end of this report for manure volume calculations and documentation of the relevant AEUs. The calculated volumes used to size the manure storage should remain reliable. These will differ slightly from volumes calculated in the nutrient management plan. Designing engineer should review manure production volumes with the operator at time of design.

Safety Issues

Pushoff guards must be maintained at each pushoff. During construction, safety will be critical for deep excavation close to the north end of the barn. Finished grade will be close to top of wall along the driveway at SW corner. Siding should eliminate this safety concern. If the storage is not sided, a safety fence will be needed.

Operation and Maintenance Plans

An Operation and Maintenance Plan needs to be developed for the installed best management practices (BMPs. Refer to the final engineered design of the best management practices for specific operation and maintenance details.

Emergency Action Planning

Emergency response strategies for manure spills are necessary. Contact information for emergencies should be included in the Emergency Response section of the Nutrient Management Plan and in Operation and Maintenance Plans for Best Management Practices (BMPs).

Manure and Wastewater Not Stored

The roof structures will eliminate the stormwater contact with manure. At this site, all manure will be handled through the storage or applied directly to fields according to the nutrient management plan.

Silage Leachate

Silage leachate from the bunk silo was evaluated. Leachate volume is low. There is no concentrated flow of leachate from the site.

Effects On Neighbor's Properties

The effects on neighboring properties are estimated to be low. There may be off-site odors when the storage structure is being unloaded. Care should be taken while spreading manure since a large quantity of manure could be spread at one time. Manure spreading setbacks must be followed as outlined in the nutrient management plan.

Permitting

The scope of this project will likely require disturbing an area less than 1 acre as defined by DEP for agricultural BMP's. Unless the scope of work changes, the landowner would not need an NPDES permit. Building and zoning permits shall be acquired as needed. Township and county ordinances will need to be checked to verify if a storm water plan will be required for the proposed roofed structures.

ANIMAL MORTALITY FACILITIES

Dead animals are buried, rendered, or taken to the landfill.

PESTICIDE AND FUEL STORAGE

Fuel is stored in an above ground steel tanks. Spray chemicals are used seasonally on the farm and stored inside.

STAGING OF BEST MANAGEMENT PRACTICES

All planned practices for this site are related and should be installed at the same time.

VERIFICATION OF BEST MANAGEMENT PRACTICES

These planned quantities should be verified in the field before setting final figures for contracting these practices

5 Engineer's Estimate

Disclaimer: This is an engineering estimate for actual construction costs and is un-related to potential grant funds. Various grant funding may vary greatly from this estimate.

CODE	ITEM	UNIT	QUANTITY	UNIT COST ($)	COST($)
313	**Manure stacking area - 60' x 64'**	**$97,568.00**			
	Storage floor	cy	63	$250.00	$15,750.00
	Storage walls - precast - 8 and 12 ft	job	1	$54,000.00	$54,000.00
	Subgrade stone under floor and footer	tons	93	$26.00	$2,418.00
	Cut	cy	1,300	$5.00	$6,500.00
	Compacted subgrade (incl over-excav)	cy	570	$10.00	$5,700.00
	Free draining backfill for 12 ft wall	tons	175	$26.00	$4,550.00
	Backfill and grading	cy	730	$5.00	$3,650.00
	*Compaction testing - independent	job	1	$3,000.00	$3,000.00
	*Added engineering costs for earth work	job	1	$2,000.00	$2,000.00
342	**CRITICAL AREA PLANTING**	**$500.00**			
	Seed Disturbed Areas	job	1	$500.00	$500.00
367	**ROOFS AND COVERS**	**$61,001.00**			
	62' x 66' over stacking area	sq.ft	3,953	$13.25	$52,377.00
	44' x 14' over scrape and pushoff	sq.ft	616	$14.00	$8,624.00
484	**MULCHING**	**$500.00**			
	Post-Construction	job	1	$500.00	$500.00
558	**ROOF RUNOFF CONTROLS**	**$826.00**			
	Roof Gutters	L.F.	59	$14.00	$826.00
560	**ACCESS ROAD - 120 lin ft (3,300 sf)**	**$7,560.00**			
	Stone Base Material (#4s)	tons	140	$26.00	$3,640.00
	Stone Topper (2A)	tons	70	$26.00	$1,820.00
	Geotextile	rolls	1	$600.00	$600.00
	Excavation	days	1	$1,500.00	$1,500.00
561	**HEAVY USE AREA PROTECTION**	**$2,890.00**			
	Concrete - flat work	cy	10	$250.00	$2,500.00
	Stone for subgrade	tons	15	$26.00	$390.00
606	**SUBSURFACE DRAIN**	**$1,890.00**			
	Footer drain for new walls	ft	270	$7.00	$1,890.00
620	**UNDERGROUND OUTLETS**	**$2,085.00**			
	4" SDR Outlet - for footer drain	ft	100	$8.50	$850.00
	6" SDR Outlets - for roof gutters	ft	130	$9.50	$1,235.00
634	**WASTE TRANSFER - two pushoffs**	**$10,130.00**			
	Concrete - 2 bridge slabs with curbs	cy	15	$400.00	$6,000.00
	Stone under slab	tons	5	$26.00	$130.00
	Pushoff guards	each	2	$2,000.00	$4,000.00
	SUBTOTAL				**$184,950.00**
	Contingency	%	5		$9,248.00
	CONSTRUCTION TOTAL				**$194,198.00**
	*These items may or may not be needed depending on final engineering decisions.				

Manure Production for MSF sizing

COUNTY: Clinton
OWNER: John Grand - Corman site
PREPARER: NateD

DATE: 1/17/2022
ADDRESS: Corman site - 209 German Rd; Lock Haven, PA 17745
TITLE:

Animal Group	# of Animals	Avg Wt (lb)	Animal Units
Finishers	100	1000	100
			0
			0
			0
			0
			0
			0
			0
			0
Sum =	100		100

150 days	Planned Storage Duration (days)
1.2 cf	Daily manure production per AU (ft^3/AU/day)
18,000 cf	Manure Produced during storage period
2,743 cf	Bedding volume in storage during storage period

20,743 cf **Total Volume to be Stored**

Bedding Added to Manure

Material	Volume before use	Volume in storage (%)	Volume Stored
Straw	5,485 cf	50%	2,743 cf
			0 cf
			0 cf
		Sum =	2,743 cf

Notes:
- Planned storage duration 5 months (plus 1 month on barn floor).
- Barn cleaning rotation every 3 weeks. 6 straw bales placed after cleaning. 4'x4'x8' bales = 128 cf/bale x 6 bales = 768cf/21 days = 36.5 cf/day x 150 days = 5,485 cf total bedding in bale form. Volume reduction (per NRCS guidance) after use = 50% x 5,485 cf = 2,750 cf in storage.

IS THE PRODUCT STACKABLE?

STACKABLE =	GREATER TH/	25.00%	SOLDS CONTENT
NOT STACKABLE =	LESS THAN	25.00%	SOLIDS CONTENT

MOISTURE CONTENT OF MANURE %		SOLIDS CONTENT %
Dairy =	88	12
Veal =	96	4
Beef =	86	14

MOISTURE CONTENT OF BEDDING %		SOLIDS CONTENT %
Corn Tops (Shredded) =	16	84
Ground Limestone =		
Hay (Chopped) =	14	86
Hay (Loose) =	14	86
Hay (Bailed) =	14	86
Sand =		
Sawdust =	39	61
Newspaper =	8	92
Straw (Chopped) =	10	90
Straw (Loose) =	10	90
Straw (Bailed) =	10	90

MANURE VOLUME (Cu.Ft.)
18000

* BEDDING VOLUME (Cu.Ft.)
5485

ANIMAL TYPE
Beef

BEDDING TYPE
Straw

92

MANURE SOLIDS CONTENT (%)
14

BEDDING SOLIDS CONTENT (%)
90

* NO REDUCTION FACTOR SHALL BE APPLIED TO BEDDING VOLUME,
THIS IS THE TOTAL VOLUME OF BEDDING BEING USED .

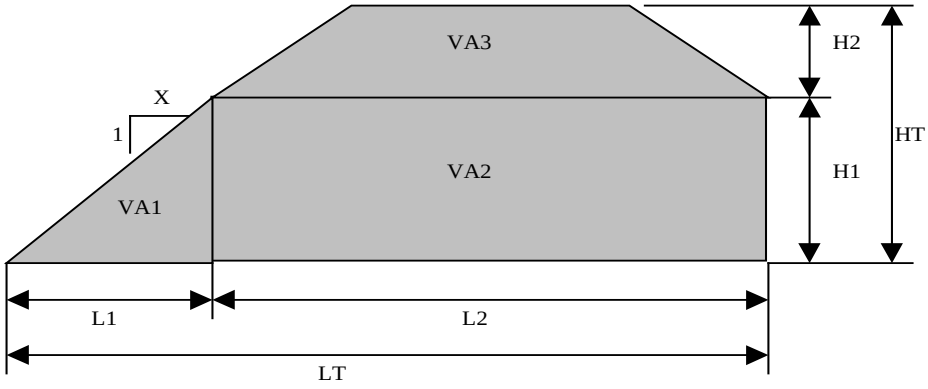
SOLIDS CONTENT = $\frac{\text{(Volume of Manure Solids) + (Volume of Bedding Solids)}}{\text{Total Volume of Manure + Bedding}}$

= 31.75%

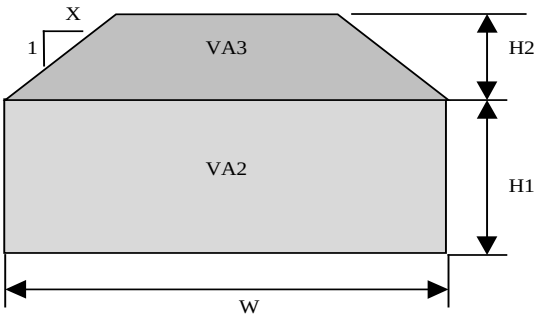
= STACKABLE

STACKING STRUCTURE CALCULATION SHEET
STRUCTURE WITH ONE END OPEN

COUNTY	Clinton	DATE	1/17/22		
OWNER	John Grand	ADDRESS	Corman site - 209 German Rd, Lockhaven, PA 17745		
PREPARER	Nate Dewing, TeamAg, Inc.	TITLE	NM Specialist	DATE	
CHECKED		TITLE		DATE	



SIDE VIEW



FRONT VIEW

Storage Volume Required	20,743	cu. ft.
Storage Duration	150	days

STRUCTURE DIMENSIONS

X - Angle of repose for manure	1	:1 ratio, (1:1 suggested)
HT - Total Manure Height	6	ft.
H1 - Structure Wall Height -4 Ft. max.	5	ft.
H2 - Stackable Height above wall	1	ft.
LT - Total Structure Length	56	ft. (Recommend making length divisible by 8')
L1 - Length for VA1	5	ft.
L2 - Length for VA2	51	ft.
W - Structure Width	64	ft.

CALCULATED VOLUMES

VA1 =	800.0	cu. ft.	(V=.5*L1*W*H1)
VA2 =	16,320.0	cu. ft.	(V=L2*W*H1)
VA3 =	3,150.3	cu. ft.	(V=(L2*W*H2)-(X*L2*H2^2)-(X*W*H2^2)+(1.33*X^2*H2^3))
TOTAL VOLUME =	20,270.3	cu. ft.	20743 cu. Ft. = Required volume

CONCLUSION

Structure Length:	56	ft.
Structure Width:	64	ft.
Height of Manure Pile:	6	ft.
Storage Volume:	20,270	cu. ft.

Note: Additional storage under pushoffs: 8'x16'x6' = 768 cf x 2 = 1,536 cf. Total storage = 20,270 + 1,536 = 21,806 cf. Capacity for 157 days = 5 months plus one week. Recommend 64' wide x 56' long to minimize fill at NE corner.

Cut/Fill Report

Generated: 2022-02-02 14:29:48

By user: NateD

Drawing: C:\Users\NateD\Desktop\Current Projects\Grand, John - 2541\Engineering\CNMP - 5235-21-4\Drawings\C:\Users\NateD\Desktop\Current Projects\Grand, John - 2541\Engineering\CNMP - 5235-21-4\Drawings\Grand, John I&E 50bb.dwg

Volume Summary

Name	Type	Cut Factor	Fill Factor	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
MSF SG VOL	full	1.00	1.00	7165.41	832.68	93.11	739.57<Cut>

Totals

	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
Total	7165.41	832.68	93.11	739.57<Cut>

* Value adjusted by cut or fill factor other than 1.0

Cut/Fill Report

Generated: 2022-02-02 14:31:12

By user: NateD

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Volume Summary

Name	Type	Cut Factor	Fill Factor	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
MSF SG VOL	full	1.00	1.00	7287.69	1296.23	22.65	1273.59<Cut>

Totals

	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
Total	7287.69	1296.23	22.65	1273.59<Cut>

* Value adjusted by cut or fill factor other than 1.0

KEYSTONE CONCRETE PRODUCTS INC.

477 East Farmersville Rd
New Holland, PA 17557
Phone # 717-355-2361
Fax # 717-355-9548

Proposal

Date	Estimate #
2/1/2022	14917

Name / Address	Ship to :
John Grand 231 Elk Lane Lockhaven PA 17745	209 German Rd Lock Haven,PA 161 Miles Zone 4

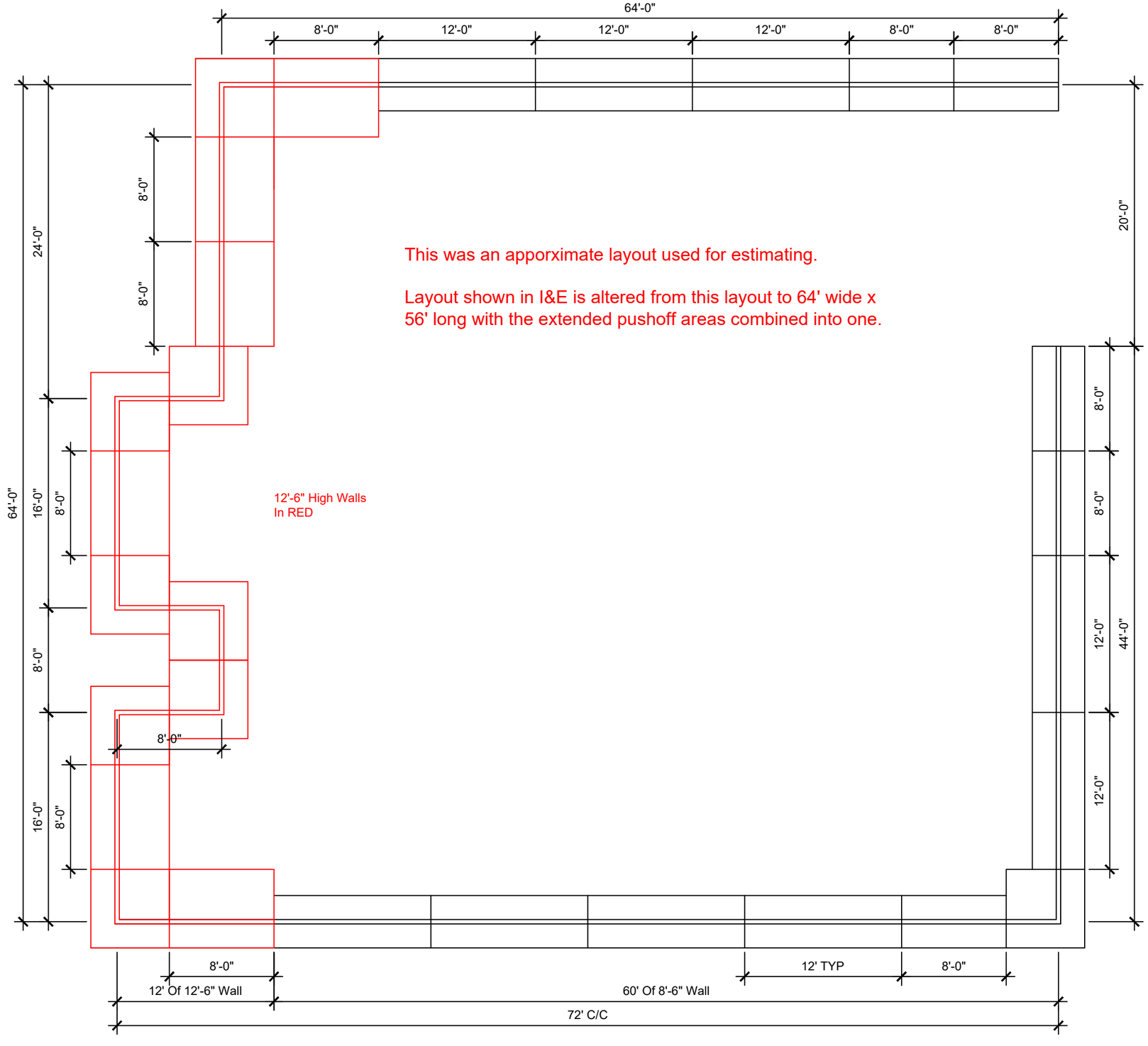
Email	Phone	Fax	Rep	Terms
grandwaterrush@yahoo.com	570-769-8906		JAS	C.O.D.

Qty	Description			Total
	Dry stack manure building. Main building 64' x 64' with 44' return on front gable and 2 - 8' deep x 16' pushin bump outs in back wall. 12'-6" high backwall and 12' returns on both sides in the back. Remaining walls to be 8'-6" high outside walls.			
156	Feet of 8'6" high outside T-wall panels 140' of 8' wall	150.00	21,000	23,400.00
112	Feet of 12'6" high outside T-wall panels 96' of 12' wall	299.00	28,704	33,488.00
5	Corner bracket	135.00		675.00
2	End bracket	135.00		270.00
22	Standard Bracket	135.00		2,970.00
	Price includes: Walls delivered,set and jointes caluked on customers prepared stone base. Also includes Timbertech stamped building plans.			
	Quote valid for 15 days			
	Noted changes by Nate Dewing for estimating purposes only Changed pushoff configuration and shortened length from 64' to 56'			

Signature Jonas A Stoltzfus

Total $60,803.00

$53,619



General Notes

No.	Revision/Issue	Date

Firm Name and Address

Keystone Concrete Products Inc
477 E Farmersville Rd
New Holland PA 17557
717-355-2361 Phone
717-355-9548 Fax

Project Name and Address

John Grand
209 German Rd
Lock Haven,PA

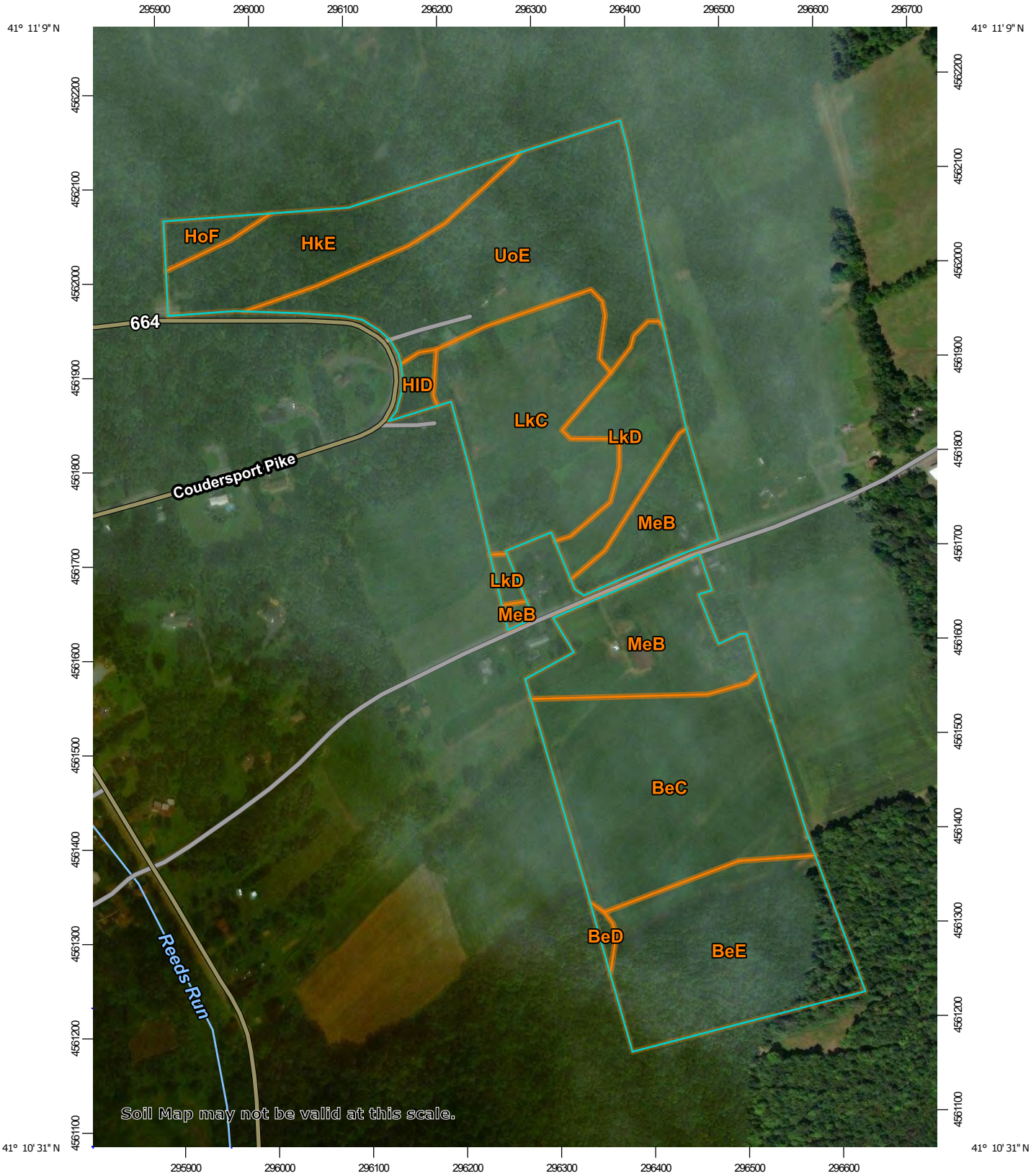
By J.A.S.

Date 2-1-2022

Scale NTS

Sheet

Soil Map—Clinton County, Pennsylvania
(John Grand - Engineering I&E)



Map Scale: 1:5,790 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 50 100 200 300

Feet
0 250 500 1000 1500

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Clinton County, Pennsylvania
Survey Area Data: Version 17, Aug 31, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 4, 2012—Sep 10, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BeC	Berks channery silt loam, 8 to 15 percent slopes	12.2	19.4%
BeD	Berks-Weikert complex, 15 to 25 percent slopes	0.2	0.3%
BeE	Berks-Weikert complex, 25 to 60 percent slopes	9.7	15.4%
HkE	Hazleton channery sandy loam, 25 to 80 percent slopes, rubbly	5.7	9.1%
HlD	Hazleton-Clymer channery loams, 15 to 25 percent slopes	0.6	0.9%
HoF	Hazleton-Laidig complex, 25 to 50 percent slopes, extremely stony	0.8	1.3%
LkC	Leck kill channery silt loam, 8 to 15 percent slopes	9.0	14.3%
LkD	Leck kill channery silt loam, 15 to 25 percent slopes	4.0	6.4%
MeB	Meckesville silt loam, 3 to 8 percent slopes	8.3	13.3%
UoE	Ungers loam, 25 to 50 percent slopes, extremely stony	12.3	19.6%
Totals for Area of Interest		**62.8**	**100.0%**

Map Unit Description (Brief, Generated)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, provide information on the composition of map units and properties of their components.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Report—Map Unit Description (Brief, Generated)

Clinton County, Pennsylvania

Map Unit: BeC—Berks channery silt loam, 8 to 15 percent slopes

Component: Berks (85%)

The Berks component makes up 85 percent of the map unit. Slopes are 8 to 15 percent. This component is on ridges on hills, mountain slopes on mountains. The parent material consists of residuum weathered from shale and siltstone and/or fine grained sandstone. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.

Component: Weikert (10%)

Generated brief soil descriptions are created for major soil components. The Weikert soil is a minor component.

Component: Brinkerton (5%)

Generated brief soil descriptions are created for major soil components. The Brinkerton soil is a minor component.

Map Unit: BeD—Berks-Weikert complex, 15 to 25 percent slopes

Component: Berks (45%)

The Berks component makes up 45 percent of the map unit. Slopes are 15 to 25 percent. This component is on ridges on valleys. The parent material consists of residuum weathered from shale and siltstone. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.

Component: Weikert (30%)

The Weikert component makes up 30 percent of the map unit. Slopes are 15 to 25 percent. This component is on hillslopes. The parent material consists of residuum weathered from shale and siltstone. Depth to a root restrictive layer, bedrock, lithic, is 10 to 20 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

Component: Hartleton (10%)

Generated brief soil descriptions are created for major soil components. The Hartleton soil is a minor component.

Component: Laidig (5%)

Generated brief soil descriptions are created for major soil components. The Laidig soil is a minor component.

Component: Pennval (5%)

Generated brief soil descriptions are created for major soil components. The Pennval soil is a minor component.

Component: Unnamed (5%)

Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Map Unit: BeE—Berks-Weikert complex, 25 to 60 percent slopes

Component: Berks (40%)

The Berks component makes up 40 percent of the map unit. Slopes are 25 to 60 percent. This component is on ridges on valleys. The parent material consists of residuum weathered from shale and siltstone. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

Component: Weikert (35%)

The Weikert component makes up 35 percent of the map unit. Slopes are 25 to 60 percent. This component is on hillslopes. The parent material consists of residuum weathered from shale and siltstone. Depth to a root restrictive layer, bedrock, lithic, is 10 to 20 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Component: Hartleton (10%)

Generated brief soil descriptions are created for major soil components. The Hartleton soil is a minor component.

Component: Unnamed (5%)

Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Component: Laidig (5%)

Generated brief soil descriptions are created for major soil components. The Laidig soil is a minor component.

Component: Pen Argyl (5%)

Generated brief soil descriptions are created for major soil components. The Pen Argyl soil is a minor component.

Map Unit: HkE—Hazleton channery sandy loam, 25 to 80 percent slopes, rubbly

Component: Hazleton (80%)

The Hazleton component makes up 80 percent of the map unit. Slopes are 25 to 80 percent. This component is on mountain slopes, mountains. The parent material consists of residuum weathered from sandstone. Depth to a root restrictive layer, bedrock, lithic, is 40 to 69 inches (depth from the mineral surface is 39 to 65 inches). The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 69 percent. Below this thin organic horizon the organic matter content is about 4 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

Component: Laidig (10%)

Generated brief soil descriptions are created for major soil components. The Laidig soil is a minor component.

Component: Clymer (10%)

Generated brief soil descriptions are created for major soil components. The Clymer soil is a minor component.

Map Unit: HlD—Hazleton-Clymer channery loams, 15 to 25 percent slopes

Component: Hazleton (41%)

The Hazleton component makes up 41 percent of the map unit. Slopes are 15 to 25 percent. This component is on mountains. The parent material consists of residuum weathered from sandstone. Depth to a root restrictive layer, bedrock, lithic, is 40 to 80 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.

Component: Clymer (39%)

The Clymer component makes up 39 percent of the map unit. Slopes are 15 to 25 percent. This component is on moderately steep ridges on plateaus. The parent material consists of residuum weathered from sandstone and shale. Depth to a root restrictive layer, bedrock, lithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.

Component: Laidig (10%)

Generated brief soil descriptions are created for major soil components. The Laidig soil is a minor component.

Component: Cookport (5%)

Generated brief soil descriptions are created for major soil components. The Cookport soil is a minor component.

Component: Buchanan (5%)

Generated brief soil descriptions are created for major soil components. The Buchanan soil is a minor component.

Map Unit: HoF—Hazleton-Laidig complex, 25 to 50 percent slopes, extremely stony

Component: Hazleton (36%)

The Hazleton component makes up 36 percent of the map unit. Slopes are 25 to 50 percent. This component is on mountains. The parent material consists of stony residuum weathered from sandstone. Depth to a root restrictive layer, bedrock, lithic, is 40 to 68 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

Component: Laidig (34%)

The Laidig component makes up 34 percent of the map unit. Slopes are 25 to 50 percent. This component is on mountain slopes on mountain valleys. The parent material consists of stony colluvium derived from sandstone and shale. Depth to a root restrictive layer, fragipan, is 30 to 50 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 37 inches during January, February, March. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

Component: Hapludults, nonstony (10%)

Generated brief soil descriptions are created for major soil components. The Hapludults, nonstony soil is a minor component.

Component: Clymer (10%)

Generated brief soil descriptions are created for major soil components. The Clymer soil is a minor component.

Component: Unnamed (10%)

Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Map Unit: LkC—Leck kill channery silt loam, 8 to 15 percent slopes

Component: Leck Kill (80%)

The Leck Kill component makes up 80 percent of the map unit. Slopes are 8 to 15 percent. This component is on ridges on valleys. The parent material consists of fine grained sandstone and shale residuum weathered from sandstone and shale. Depth to a root restrictive layer, bedrock, lithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.

Component: Calvin (10%)

Generated brief soil descriptions are created for major soil components. The Calvin soil is a minor component.

Component: Klinesville (5%)

Generated brief soil descriptions are created for major soil components. The Klinesville soil is a minor component.

Component: Ungers (5%)

Generated brief soil descriptions are created for major soil components. The Ungers soil is a minor component.

Map Unit: LkD—Leck kill channery silt loam, 15 to 25 percent slopes

Component: Leck Kill (80%)

The Leck Kill component makes up 80 percent of the map unit. Slopes are 15 to 25 percent. This component is on moderately steep ridges on valleys. The parent material consists of fine grained sandstone and shale residuum weathered from sandstone and shale. Depth to a root restrictive layer, bedrock, lithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.

Component: Calvin (10%)

Generated brief soil descriptions are created for major soil components. The Calvin soil is a minor component.

Component: Klinesville (5%)

Generated brief soil descriptions are created for major soil components. The Klinesville soil is a minor component.

Component: Ungers (5%)

Generated brief soil descriptions are created for major soil components. The Ungers soil is a minor component.

Map Unit: MeB—Meckesville silt loam, 3 to 8 percent slopes

Component: Meckesville (80%)

The Meckesville component makes up 80 percent of the map unit. Slopes are 3 to 8 percent. This component is on mountain valleys. The parent material consists of sandstone, siltstone and shale colluvium derived from sedimentary rock. Depth to a root restrictive layer, fragipan, is 30 to 48 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 36 inches during January, February, March, April, November, December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Albrights (10%)

Generated brief soil descriptions are created for major soil components. The Albrights soil is a minor component.

Component: Ungers (5%)

Generated brief soil descriptions are created for major soil components. The Ungers soil is a minor component.

Component: Leck Kill (5%)

Generated brief soil descriptions are created for major soil components. The Leck Kill soil is a minor component.

Map Unit: UoE—Ungers loam, 25 to 50 percent slopes, extremely stony

Component: Ungers (80%)

The Ungers component makes up 80 percent of the map unit. Slopes are 25 to 50 percent. This component is on mountain slopes. The parent material consists of stony residuum weathered from sandstone and siltstone. Depth to a root restrictive layer, bedrock, lithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

Component: Meckesville (10%)

Generated brief soil descriptions are created for major soil components. The Meckesville soil is a minor component.

Component: Laidig (5%)

Generated brief soil descriptions are created for major soil components. The Laidig soil is a minor component.

Component: Leck Kill (5%)

Generated brief soil descriptions are created for major soil components. The Leck Kill soil is a minor component.

Data Source Information

Soil Survey Area: Clinton County, Pennsylvania
Survey Area Data: Version 17, Aug 31, 2021

German Rd (state road)

overhead power line

driveway

GUTTER OUTLET

FOOTER DRAIN OUTLET

ACCESS ROAD
100'
3,150 FT²

960

962

APPROX TOE OF COMPACTED FILL

964

966

968

970

980

20' x 30' CONC APRON

8%

PROPOSED MANURE STACKING AREA

8%

lean-to feed lane

existing barn

existing bunk silo

980

980

NORTH

BENCHMARK INFORMATION :

BM-1 :
BM-2 :
BM-3 :
BM-4 :
BM-5 :

SOILS LEGEND

AbC - 123

PRELIMINARY
NOT FOR CONSTRUCTION

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570-263-0704

WOODWARD TOWNSHIP
CLINTON COUNTY

Project Manager:

Design By:

Drawn By: N DEWING

MANURE STACKING AREA

TOPO

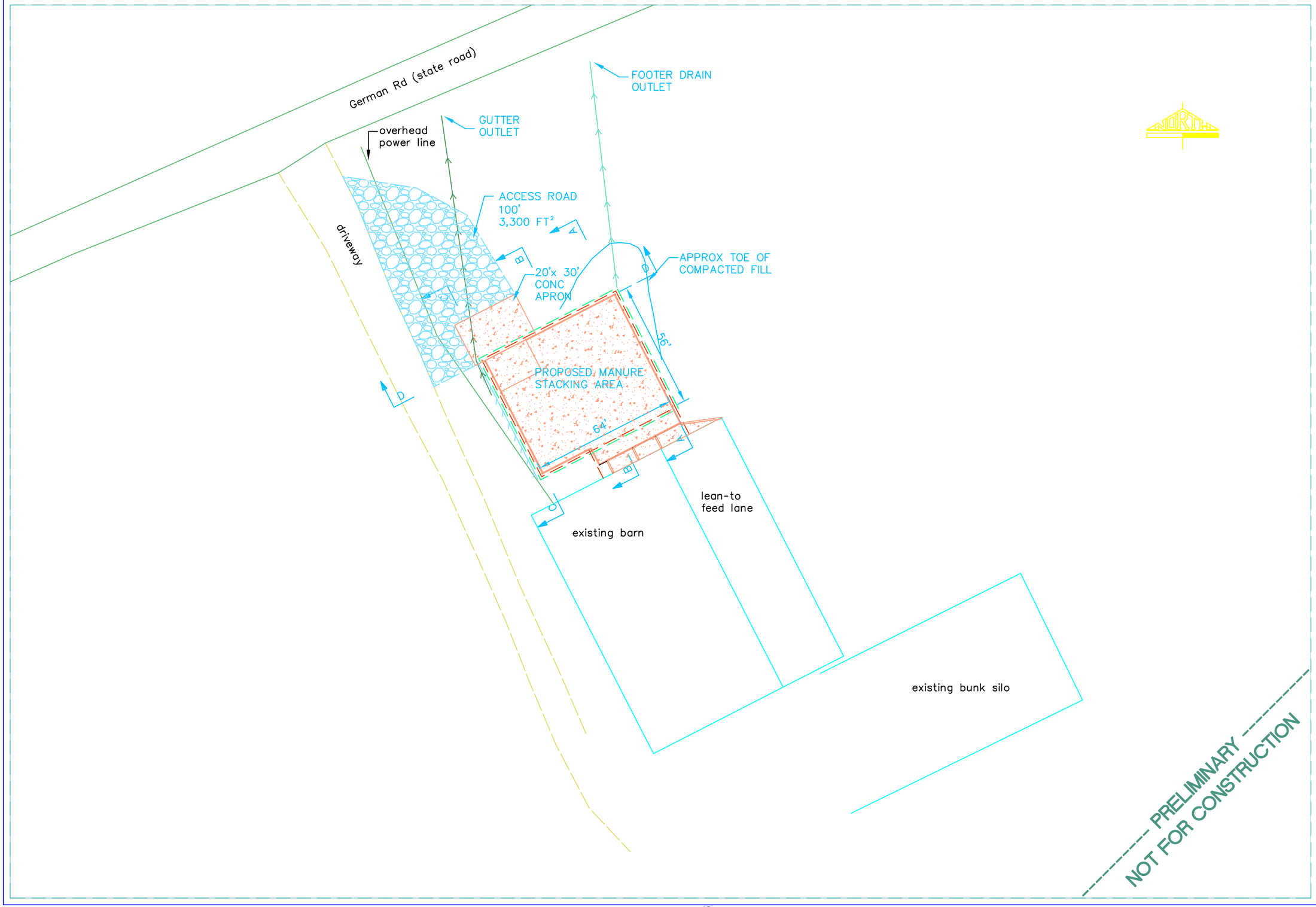
SCALE
1" = 40'
0'
40

Proj.: 5226-20-01

Date:

Rev.:

Sheet 3 of



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WOODWARD TOWNSHIP
CLINTON COUNTY

Project Manager:

Design By:

Drawn By: N DEWING

MANURE STACKING AREA
PLAN VIEW

SCALE 1" = 40'

Proj.: 5226-20-01

Date:

Rev.:

Sheet 4 of

WALL NOTES:
- PLANNED FOR PRE-CAST CONCRETE WALL
- 140 LIN FT OF 8 FT WALL
- 96 LIN FT OF 12 FT WALL
- 18" BACKFILL ON N SIDE
- 8 FT WALL ON E AND W SIDES PARTIAL BACKFILL
- ALL 12 FT WALL IS FULL BACKFILL WITH FREE-DRAINING MATERIAL
- ROOF TO BE SUPPORTED BY NE AND SW SIDE WALLS

ROOF NOTES:
- ROOF PEAK IN CENTER, SLOPE TO NE AND SW
- GUTTER ON SW SIDE, NO GUTTER ON NE SIDE
- PUSHOFFS COULD BE ROOFED OR SLOPED TO MINIMIZE WATER ENTERING STORAGE
- ROOF OVER PUSHOFFS IS SEPARATE, FREE STANDING ROOF

CONCRETE APRON
20' X 30'

64'

44'

8 FT WALL

8 FT WALL - ROOF SUPPORT

52'

FOOTER DRAIN

ROOF OVERHANG
(APPROX)

20'

RAMP ENTRANCE
18" DROP IN 15'

15'

PROPOSED MANURE STACKING AREA
64' WIDE X 56' LONG
FLOOR LEVEL @ ELEV = 970.0
BOTTOM OF TRUSS ELEV = 986.0

8 FT WALL - ROOF SUPPORT

44'

ROOF GUTTER - 58'

56'

12 FT WALL AT SOUTH END
(FULL BACKFILL)

12 FT WALL

12'

12 FT WALL

12'

24'

14'

40'

8'

PUSHOFF
ELEV 982.0

PUSHOFF
ELEV 982.0

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WOODWARD TOWNSHIP
CLINTON COUNTY

Project Manager:

Design By:

Drawn By: N DEWING

MANURE STACKING AREA
LAYOUT

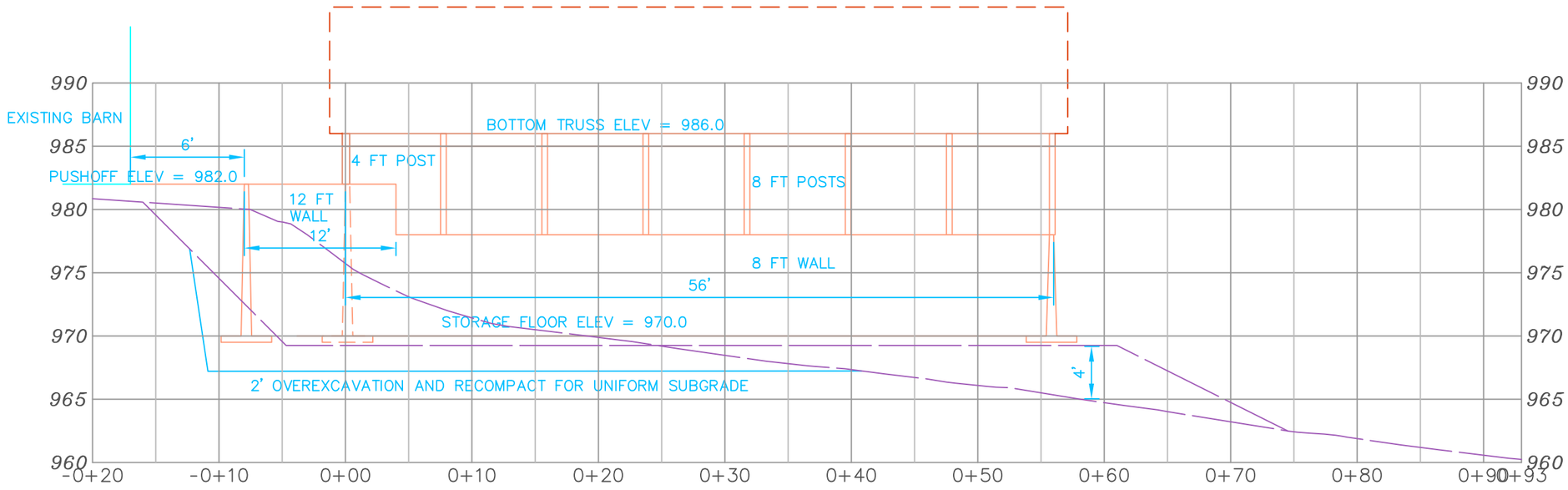
SCALE
1" = 10'
0
10

Proj.: 5226-20-01

Date:

Rev.:

Sheet 5 of



AA

HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 10'

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WOODWARD TOWNSHIP
CLINTON COUNTY

Project Manager:

Design By:

Drawn By: N DEWING

MANURE STACKING AREA
CROSS SECTION A-A

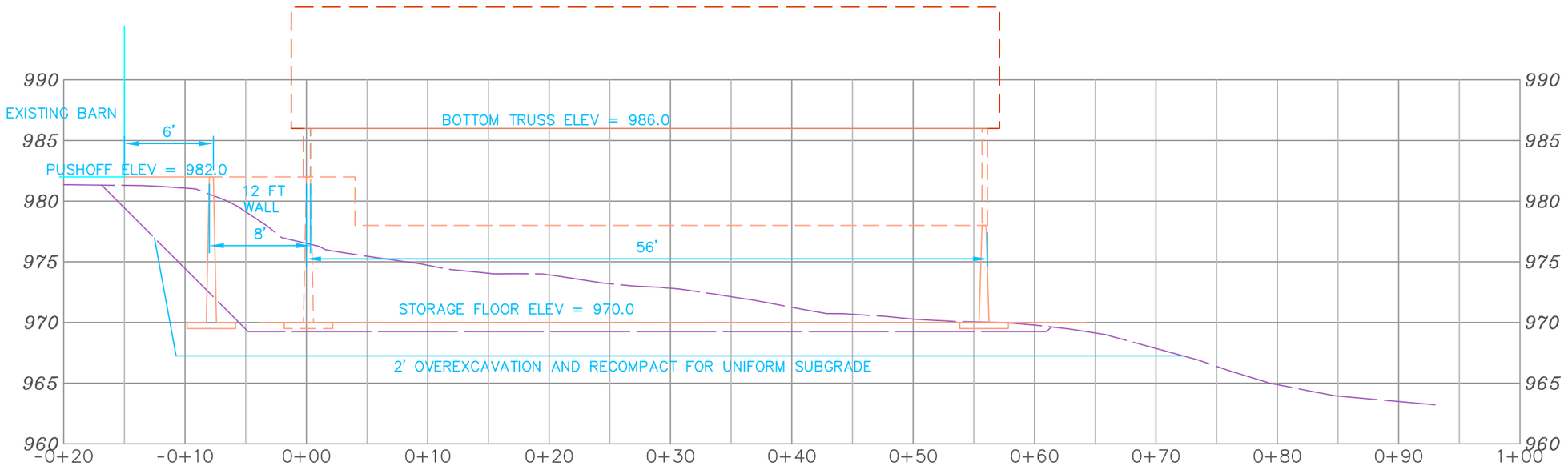
SCALE
0
10
1" = 10'

Proj.: 5226-20-01

Date:

Rev.:

Sheet of



BB

HORIZONTAL SCALE: 1" = 10'

VERTICAL SCALE: 1" = 10'

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WOODWARD TOWNSHIP
CLINTON COUNTY

Project Manager:

Design By:

Drawn By: N DEWING

MANURE STACKING AREA
CROSS SECTION B-B

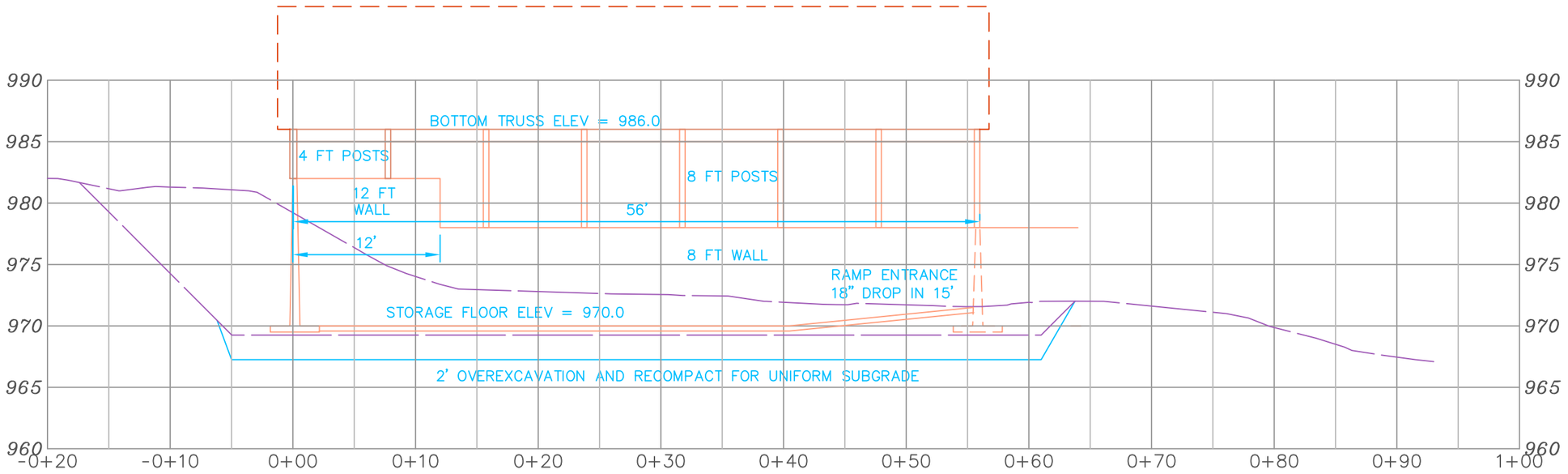
SCALE
0 10
1" = 10'

Proj.: 5226-20-01

Date:

Rev.:

Sheet of



CC

HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 10'

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WOODWARD TOWNSHIP
CLINTON COUNTY

Project Manager:

Design By:

Drawn By: N DEWING

MANURE STACKING AREA
CROSS SECTION C-C

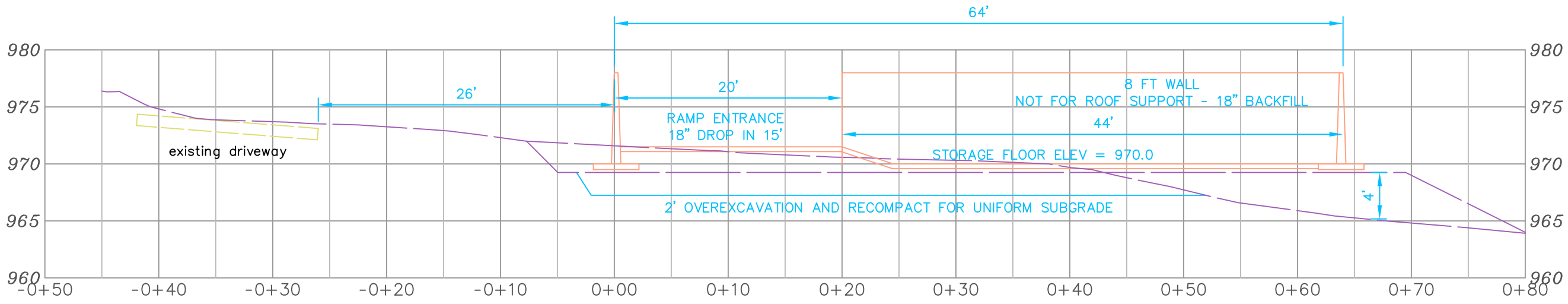
SCALE
1" = 10'
0
10

Proj.: 5226-20-01

Date:

Rev.:

Sheet of



DD
HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 10'

PRELIMINARY
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570-263-0704

WOODWARD TOWNSHIP
CLINTON COUNTY

Project Manager:

Design By:

Drawn By: N DEWING

MANURE STACKING AREA
CROSS SECTION D-D

SCALE
0 10
1" = 10'

Proj.: 5226-20-01

Date:

Rev.:

Sheet of

Attachment B

RCPP TA-I Practice Certification Sheet

RCPP Project Name: Delisting Ag-Impaired Streams in Central PA
RCPP Project Number: 2761
RCPP Contract Participant and Contract Number:

Technical Assistance - Implementation (TA-I) Verification of Certification for Payment

Date:

					Activity Type ($)					Travel Expenses			
CIN	**Practice Code and Name**	**Certified by:**	**Description**	**Completed**	**Pre-Application**	**Planning**	**Design**	**Installation**	**Checkout**	**Mileage**	**IRS Rate**	**Total Travel Expenses**	**Reimbursement Request**

**Attach all invoices and travel logs (if applicable) associated with this practice, showing appliable hourly staff rates and detailed travel records (if applicable), and Design Cover Sheet showing certification*
Complete a separate sheet for each practice

I hereby certify that to the best of my knowledge this practice has been completed fully and to NRCS standards.

_____ _____

Functional Review w/JAA (if certified by consultant) Printed Name and Title:

_____ _____

NRCS DC - (signature, date) Printed Name:

EXAMPLE - RCPP TA-I Practice Certification Sheet

RCPP Project Name: XXXXXXXXXXXXXXX
RCPP Project Number: 1111
RCPP Contract Participant and Contract Number: Joe Smith, 111222333444

Technical Assistance - Implementation (TA-I) Verification of Certification for Payment

Date: 1/1/2024

					Activity Type ($)					Travel Expenses			
CIN	**Practice Code and Name**	**Certified by:**	**Description**	**Completed**	**Pre-Application**	**Planning**	**Design**	**Installation**	**Checkout**	**Mileage**	**IRS Rate**	**Total Travel Expenses**	**Reimbursement Request**
1	340 - Cover Crop	Joe Planner - Partner xyz	Cover crops planted on planned land units per conservation plan. Establishment verified.	12/1/23	$0.00	$0.00	$0.00	$0.00	$79.00	23	$0.63	$14.49	$93.49

*Attach all invoices and travel logs (if applicable) associated with this practice, showing appliable hourly staff rates and detailed travel records (if applicable), and Design Cover Sheet showing certification

I hereby certify that to the best of my knowledge this practice has been completed fully and to NRCS standards.

Functional Review w/JAA (if certified by consultant)

Printed Name and Title:

NRCS DC - (signature, date)

Printed Name:

Technical Assistance - Implementation (TA-I) Verification of Certification for Payment

Date: 1/1/2024

					Activity Type ($)					Travel Expenses			
CIN	**Practice Code and Name**	**Certified by:**	**Description**	**Completed**	**Pre-Application**	**Planning**	**Design**	**Installation**	**Checkout**	**Mileage**	**IRS Rate**	**Total Travel Expenses**	**Reimbursement Request**
2	313 - Waste Storage Facility	Ag, Inc	XXXX gallon waste storage completed. Supporting practices complete. Inspection and redline docs completed.	11/15/23			$4,000.00	$5,200.00	$2,200.00	0	$0.63	$0.00	$11,400.00

*Attach all invoices and travel logs (if applicable) associated with this practice, showing appliable hourly staff rates and detailed travel records (if applicable), and Design Cover Sheet showing certification

I hereby certify that to the best of my knowledge this practice has been completed fully and to NRCS standards.

Functional Review w/JAA (if certified by consultant)

Printed Name and Title:

NRCS DC - (signature, date)

Printed Name:

Technical Assistance - Implementation (TA-I) Verification of Certification for Payment

Date: 1/1/2024

					Activity Type ($)					Travel Expenses			
CIN	**Practice Code and Name**	**Certified by:**	**Description**	**Completed**	**Pre-Application**	**Planning**	**Design**	**Installation**	**Checkout**	**Mileage**	**IRS Rate**	**Total Travel Expenses**	**Reimbursement Request**
4	102 - CNMP	Ag, Inc	I&E, NMP, Conservation Plan components complete, CNMP done.	10/6/23		$3,252.50				0	$0.63	$0.00	$3,252.50

*Attach all invoices and travel logs (if applicable) associated with this practice, showing appliable hourly staff rates and detailed travel records (if applicable), and Design Cover Sheet showing certification

I hereby certify that to the best of my knowledge this practice has been completed fully and to NRCS standards.

Functional Review w/JAA (if certified by consultant)

Printed Name and Title:

NRCS DC - (signature, date)

Printed Name:

RCPP TA-I Reimbursement Summary Sheet

RCPP Project Name: Delisting Ag-Impaired Streams in Central PA
RCPP Project Number: 2761
RCPP Contract Participant and Contract Number:

Technical Assistance - Implementation (TA-I) Reimbursement Request Summary Sheet

Period Start: **Period End:**

					Activity Type ($)					Mileage ($)	
CIN	**Practice Code and Name**	**Certified by:**	**Description**	**Certification Date**	**Pre-Application**	**Planning**	**Design**	**Installation**	**Checkout**	**Total Travel Expenses**	**Reimbursement Request**
TOTAL					**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**

3rd Party or Partner Staff Information for Reimbursement				
Position	Organization	CIN	# of Hours	$/hr rate

*Staff rates must match rates in current TA-I Supplemental Agreement

EXAMPLE - RCPP TA-I Reimbursement Summary

RCPP Project Name: XXXXXXXXXXXXXXX
RCPP Project Number: 1111
RCPP Contract Participant and Contract Number: Joe Smith, 111222333444

Technical Assistance - Implementation (TA-I) Reimbursement Request Summary Sheet

Period Start: 1/1/2023 **Period End: 12/31/2023**

					Activity Type ($)					Mileage ($)	
CIN	**Practice Code and Name**	**Certified by:**	**Description**	**Certification Date**	**Pre-Application**	**Planning**	**Design**	**Installation**	**Checkout**	**Total Travel Expenses**	**Reimbursement Request**
1	340 - Cover Crop	Partner xyz	RCPP related Farm Visits (certification of practice)	12/1/23					$79.00	$14.49	$93.49
2	313 - Waste Storage Facility	Ag, Inc	RCPP related Farm Visits (Follow up visits for design and installation of contracted practices)	11/15/23			$4,000.00	$5,200.00	$2,200.00		$11,400.00
4	102 - CNMP	Ag, Inc	IE, NMP, Conservation Plan, CNMP attachments	10/6/23		$3,252.50					$3,252.50
TOTAL					**$0.00**	**$3,252.50**	**$4,000.00**	**$5,200.00**	**$2,279.00**	**$14.49**	**$14,745.99**

3rd Party or Partner Staff Information for Reimbursement				
Position	Organization	CIN	# of Hours	$/hr rate
Engineer	Team Ag	2	76	150
Conservation Planner	Team Ag	4	26.25	102
Drafter	Team Ag	4	5.75	100

*Staff rates must match rates in current TA-I Supplemental Agreement