

Person responsible for plan:

E-mail:

J<u>NT JOY T</u>OWNSHI

Application for Consideration of a Subdivision and/or Land Development Plan

For Mount Joy Township Use Only:

M.J.T.P.C. File No.:	23-12-FLDP	Date of Receipt/Filing:	November 28, 2023
School District:	X Donegal	Elizabethtown	

The undersigned hereby applies for approval under Chapter 119, Subdivision and Land Development, of the Code of the Township of Mount Joy for the Plan submitted herewith and described below:

Plan & Project Information Plan Name: Preliminary/Final Plan for Cloverleaf Self Storage Plan No.: 2023108-001 Plan Date: November 27, 2023 Location: 1444 Cloverleaf Drive, Mount Joy, PA 17552 Property Owner: Greentree Self Storage, LP **Owner Address:** 239 E. Market Street, Suite 102, West Chester, PA 19382 Telephone No.: 267-225-4373 E-mail: peter.mcdaniel@hfireholdings.com 5791230 **Deed Reference:** Tax Parcel No.: 461-40563-0-0000 Plan Type: Sketch Preliminary х Final Minor Agricultural or Land Development Lot Line Change Expansion of the existing self storage **Description**: facility Zoning District: Light Industrial Is a zoning change necessary? If yes, please specify: No Is/was a zoning variance, special exception, or conditional If yes, attach ZHB decision. Yes use approval necessary? 10.41 Total Acreage: Name of applicant (if other than owner): Address: Telephone No.: E-mail: Bitner Engineering, LLC Firm which prepared plan: Address: 711 Speedwell Forge Road, Lititz, PA 17543 Phone No.: 717-368-1169

David Bitner, PE

dave@bitnerengineering.com

Proposed Lots and Units

	# of Lots	# of Units			# of Lots	# of Units
Total #			Mixed Use	Mixed Use		
Agricultural			Single Family Det	ached		
Commercial	1	260	Multifamily (attache	ed-sale)		
Industrial			Multifamily (attached-rental)			
Institutional			Other:			
Total Square Feet of Ground Floor Area (building f			footprint):	50,089		-
Total Square Feet of Existing Structures (all floors):			•	24,611		
Total Square Feet of Proposed Structures (all floors			5):	31,544		
Total Square Feet (or Acres) of Proposed Parkland			/Other Public Use: n/a			
Linear feet of new street:				n/a		
Identify all street(s) not proposed for dedication:			n/a			

Type of water supply proposed:

Public (Live)		Community
Public (Capped)	x	Individual

Type of sanitary sewage disposal proposed:

Public (Live)		Community
Public (Capped)	х	Individual

The undersigned hereby represents that, to the best of his knowledge and belief, all information listed above is true, correct and complete.

11/7/23

Signature of Landowner of Applicant

Date



November 27, 2023

Justin Evans Community Development Director/Zoning Officer Mount Joy Township 8853 Elizabethtown Road Elizabethtown, PA 17022

RE: Cloverleaf Self Storage Preliminary/Final Plan Mount Joy Township, Lancaster County Project No. 2023108-001

Dear Mr. Evans,

Bitner Engineering, LLC, on behalf of Hearthfire Holdings, is pleased to submit this application for a Preliminary/Final Plan review for an expansion at their current self-storage facility located at 1444 Cloverleaf Drive. The existing parcel is approximately 10.41 acres and is located within the Light Industrial Zoning District.

Currently existing on the site are 132 self-storage units, a barn, which is leased as contractor offices and two outbuildings currently used for contractor storage. The two outbuildings and contractor storage area will be demolished as part of this plan. The barn will remain.

Proposed is a 20,500 sf indoor climate controlled self-storage building as well as five additional buildings totaling 11,200 square feet with drive up access storage units with garage doors. A total of approximately 260 storage units are proposed.

Access to the site from Cloverleaf Road will remain unchanged. An existing paved area will be striped to accommodate parking for the proposed expansion.

Stormwater will be managed by expanding the existing stormwater facility, which was installed in the early 2000's with the original self-storage units. The total disturbed acreage is over 1 acre, thus an NPDES Permit is required. A stormwater management report is included addressing the requirements of the NPDES requirements and Mount Joy Township Stormwater Management Ordinance.

The indoor climate-controlled facility will contain bathroom facilities. Lateral connections to the existing on-lot well and septic system are proposed. The usage of the facility will be limited to lessee's of the indoor units, therefore the total water/sewer demand will be minimal.

711 Speedwell Forge Rd • Lititz, PA 17543 717.368.1169 • dave@bitnerengineering.com Several waivers are requested from the Subdivision and Land Development Ordinance, as well as the Stormwater Management Ordinance. A separate letter is included outlining those requests.

We request Preliminary/Final plan be discussed at the January 25, 2024 Planning Commission meeting.

Please do not hesitate to contact me if you have any questions. Thank you for your assistance in this process.

Sincerely, Bitner Engineering, LLC

David Bitner, PE President

Cc: Ben Craddock, Lancaster Civil (via email)



RECEIVED Nov 28 2023 MOUNT JOY TOWNSHIP

23-12-FLDP

November 27, 2023

Justin Evans Community Development Director/Zoning Officer Mount Joy Township 8853 Elizabethtown Road Elizabethtown, PA 17022

RE: Cloverleaf Self Storage Modification/Waiver Request Letter Mount Joy Township, Lancaster County Project No. 2023108-001

Dear Mr. Evans,

Bitner Engineering, LLC, on behalf of Hearthfire Holdings, requests the following waivers of the Mount Joy Township Subdivision and Land Development Ordinance and Roadway Ordinance:

Subdivision and Land Development Ordinance:

SECTION 119-25: SUBMISSION OF A PRELIMINARY PLAN

Requirement: Submission of a Preliminary Plan.

Requested Relief:

This waiver is being requested to allow for the plan to be processed as a Preliminary/Final Plan.

Justification:

The project will be completed as a single phase, there is no subdivision or new streets proposed. It is requested that the filing and review process be considered as a single preliminary/final plan. All the preliminary and final plan requirements in the Subdivision and Land Development Ordinance will be provided as part of the preliminary/final plan submission, avoiding duplicate review by the Township. It is for the reason stated above that we feel the waiver is justified and meets the intent of the ordinance by providing an equal or better alternative.

SECTION 119-32.A: WATER AND SEWER FEASIBILITY REPORT

Requirement:

Submit a feasibility report concerning availability of public sewer and public water systems.

Requested Relief:

To waive the requirement to submit a water/sewer feasibility report.

711 Speedwell Forge Rd • Lititz, PA 17543 717.368.1169 • dave@bitnerengineering.com

Justification:

The existing lot currently has on-lot sewer and water. A bathroom is proposed in the new building but will have minimal usage. Due to the existing on-lot water/sewer and minimal increase in demand, a water/sewer feasibility study is not warranted.

<u>SECTION 119-32.C(6): CONTRIBUTION IN LIEU OF TRAFFIC IMPACT STUDY</u> *Requirement:*

Contribution in lieu of preparation of the traffic study – the estimated contribution shall be \$1.50 per square foot of usable building floor area in a commercial, industrial, or institutional subdivision or land development.

Requested Relief:

To pay a fee-in-lieu based on the cost to prepare a Traffic Impact Study.

Justification:

This request is to pay the fee-in-lieu based on the cost to prepare a Traffic Impact Study, as an alternative of the \$1.50 per square foot of usable building floor. Enclosed is an estimate of \$5,500 from Traffic Resources Group to prepare a Traffic Impact Study per the requirements of the Subdivision and Land Development Ordinance. Traffic generated from a self-storage facility is minimal and a TIS is typically not warranted.

Stormwater Management Ordinance:

SECTION 113-31(L)(1): LIMITING ZONE

Requirement:

A minimum of 24 inches between the bottom of the facility and the limiting zone, unless it is demonstrated to the satisfaction of the Township that the selected BMP has design criteria which allow for a smaller separation.

Requested Relief:

A limiting zone of 12" is proposed.

Justification:

Due to the presence of groundwater at the bottom of the existing basin, the stormwater facility is being designed as an MRC facility. The bottom of the MRC facility will be 12" above the bottom of the existing basin. The MRC criteria allows for a minimum of 12" separation from the limiting zone.

SECTION 113-32.A(2)(A): LOADING RATIO

Requirement:

The maximum loading ratio for volume control facilities in non-karst areas shall be 5:1 impervious drainage area to infiltration area and 8:1 total drainage area to infiltration area.

Requested Relief:

A modification to allow loading ratios of 19.1 and 10.3:1.

Justification:

This request is to allow a loading ratio of 19.7:1 total area to infiltration area and 10.3:1 impervious area to infiltration area. Due to the groundwater within the existing basin bottom, the proposed facility is being designed utilizing DEP's MRC methodology. Any infiltration within the basin will be minimal due to the groundwater and the MRC orifice at the basin bottom. The facility is designed to dewater within 72 hours.

We request waivers be discussed at the January 25, 2024 Planning Commission meeting.

Please do not hesitate to contact me if you have any questions. Thank you for your assistance in this process.

Sincerely, Bitner Engineering, LLC

David Bitner, PE President

Cc: Ben Craddock, Lancaster Civil (via email)



MOUNT JOY TOWNSHIP • Lancaster County, Pennsylvania •

8853 Elizabethtown Road, Elizabethtown, PA 17022 717.367.8917 • 717.367.9208 fax www.mtjoytwp.org

July 12, 2023

Lancaster Portfolio I, LLC 1103 Lincoln Avenue Prospect Park, PA 19076

Re: Mount Joy Township Zoning Hearing Board – Lancaster Portfolio I, LLC Property located at 1444 Cloverleaf Road, Mount Joy, PA 17552 Zoning Case No. 230007

Dear Sir or Madam:

As a result of a public hearing held on July 5, 2023, the Mount Joy Township Zoning Hearing Board (the "Board") voted unanimously to grant the following requests on the Application for the property located at 1444 Cloverleaf Road, Mount Joy, PA 17552, Tax Parcel ID #461-40563-0-0000 (the "Property") in accordance with the Mount Joy Township Zoning Ordinance of 2012, as amended (the "Ordinance"):

- (i) A Special Exception pursuant to Section 135-163.D of the Ordinance to modify prior special exception approvals to develop a miniwarehouse facility;
- (ii) A Variance from Section 135-245.F. of the Ordinance to exceed the maximum building area; and
- (iii) A Variance from Section 135-165(A)(1) regarding minimum building height.

The Property is located within the LI – Light Industrial District and consists of approximately 10.41 acres. Applicant's predecessor-in-interest obtained special exception approval on October 3, 2002 to construct mini warehouse units in two phases, but only one phase was ultimately completed. On June 9, 2021, Applicant obtained special exception approval to reconfigure the remaining development with a new site plan, which divided the remaining phase into two new phases. Subsequently, Applicant received time extension approvals from the Board while they worked through land development issues. From and after the 2021 approval, Applicant encountered significant challenges in proceeding with the development due to an open Pennsylvania DEP E&S permit requiring remediation relating to a storm basin on the Property.

In the instant application, Applicant proposes to reconfigure the development to include only 1 final phase (replacing the prior contemplated phases), consisting of five miniwarehouse buildings. A total of 260 storage units will be added. Three of the five buildings are "standard" drive-up storage unit buildings with heights around 9'6", which is standard industry size. One of the buildings (Building B) will be a two-floor drive-up structure having 8,200 square feet, designed as such due to the slope of the Property. The remaining building (Building A) will replace existing structures and impervious areas to the north of the Property, and will contain 20,500 square feet. Building A will be an indoor, single entry-point building with interior hallways to accommodate smaller consumer storage needs. Buildings A and B To the north of Building A is existing robust landscape screening. Buildings A and B will be close to, but might fall shy of, twenty feet in height. The requested dimensional variances are due to changes in the industry trends and the hardships faced by Applicant due to the unique grade/topography of the Property and large swaths of the Property precluded from productive use (wetland areas). The variances will have no adverse effect on the community or adjoining properties. Applicant demonstrated compliance with the objective criteria regarding miniwarehouses in the LI District, with the exception of the requested variances. Pursuant to the Application

July 12, 2023 ZHB Case #230007 Page **2** of **2**

narrative, and testimony and exhibits at the hearing, Applicant demonstrated compliance with the general variance criteria and applicable law regarding dimensional variances.

The relief granted shall be subject to the following conditions and safeguards which the Board deems reasonable and necessary to implement the purpose of the Ordinance and the Pennsylvania Municipalities Planning Code:

- 1. The Applicant and/or the owner(s) of the Property shall comply with all other provisions contained in the Ordinance for which relief has not been requested or granted;
- 2. The Applicant shall file and obtain approval of a land development plan from the Mount Joy Township Planning Commission;
- 3. The Applicant and any representative of the Applicant shall comply with and adhere to the testimony and any evidence presented to the Board at the hearing held on July 5, 2023 except to the extent modified by conditions imposed by the Board herein.

Mount Joy Township Zoning Hearing Board

For: Gregory R. Hitz, Sr., Chairman James E. Hershey, Vice Chairman Robert F. Newton, Jr., Secretary Roni K. Clark, Alternate Member

JPH:slk

cc: Claudia N. Shank, Esq. Zoning Hearing Board Members Board of Supervisors Justin S. Evans, Zoning Officer



PA Office 2 East Market Street Suite 2 York, PA 17401-1206 T: (717) 846-4660

Consulting Engineers and Planners www.consulttrg.com MD Office 901 Dulaney Valley Road Suite 805 Towson, MD 21204-2624 T: (443) 275-2344

August 7, 2023

Mr. David Bitner, P.E. Bitner Engineering, LLC 711 Speedwell Forge Road Lititz, PA 17543

RE: Proposal for Traffic Engineering Services Greentree Mini-Storage – Phase 2 & 3 Mount Joy Township, Lancaster County, PA TRG Proposal No. 21.008.228

Dear Mr. Bitner:

Transportation Resource Group, Inc., (TRG) is pleased to submit this letter proposal/agreement to provide Traffic Engineering Services for the proposed Greentree Mini-Storage Phase 2 & 3 located along Cloverleaf Road (T-320) in Mount Joy Township, Lancaster County, PA. The scope of work, schedule and cost, and terms and conditions of this agreement follow.

Scope of Work

Part I. Traffic Impact Study

- 1. Prepare a site access study in accordance with Mount Joy Township requirements for traffic impact studies. (For purposes of this proposal, the traffic study is assumed to study only the site access. The Mount Joy Township Ordinance states that the study area include major intersections within one-half mile of the proposed entrance. If the Township requires additional study intersections, the scope will need to be revised accordingly.)
- 2. Contact the Township Engineer to determine the scope of the traffic impact study requirements.
- 3. Conduct manual turning movement counts (TMC) during the AM and PM peak hour periods at Cloverleaf Road (T-320)/Existing Greentree Mini-Storage Driveway intersection. If required by the Township, the traffic volumes will be adjusted to account for COVID 19 impacts to traffic.
- 4. Conduct Automatic Traffic Recorder (ATR) counts on Cloverleaf Road (T-320) in the vicinity of the driveway.

- 5. Estimate the site trip generation with full build-out of Phase 2 & 3 of the proposed development using ITE trip generation rates.
- 6. Distribute and assign the site trips based on the existing traffic patterns for the existing driveway.
- 7. Perform a traffic analysis for the site access intersection to include the following:
 - Existing traffic volumes
 - Future traffic volumes with and without development
 - Levels of service existing, future conditions, with and without development
 - Improvement analysis (if necessary)
 - Crash analysis
 - Sight distance evaluation at existing driveway
 - Turn Lane Analysis
- 8. Summarize the traffic analysis in report format for initial submission to Mount Joy Township.

Part I – Cost: \$5,500.00

Schedule

The submission of the traffic impact study will be six weeks after receipt of the signed proposal.

Terms and Conditions

1. Cost for the work shall be billed on a time and material basis at the following standard hourly rates as amended:

Principal	\$189.00/hour
Senior Associate	\$148.00/hour
Senior Project Engineer	\$136.00/hour
Project Engineer	\$119.00/hour
• Engineer	\$100.00/hour
Senior Project Planner	\$109.00/hour
Project Planner	\$ 97.00/hour
• Planner	\$ 86.00/hour
Senior CADD Designer	\$108.00/hour
CADD Designer	\$ 86.00/hour
Traffic Technician	\$ 75.00/hour
Admin. Asst.	\$ 84.00/hour
Clerical	\$ 58.00/hour
Traffic Counter	\$ 43.00/hour

Mr. David Bitner August 7, 2023 Page 3

- 2. The client may be invoiced on a bi-monthly basis, and payment is due upon receipt of the invoice. A finance charge of 1 ½% per month shall accrue until full payment is received.
- 3. Additional services may be requested in writing. The scope and cost of service shall be agreed upon before any additional work commences.
- 4. TRG makes no warranty, either expressed or implied, as to findings, recommendations, and specifications, professional advice, or other work except that the study was prepared in accordance with generally accepted traffic engineering and transportation planning practices.
- 5. All documents prepared or furnished by us are instruments of service in respect of the project. Ownership therein shall remain with TRG whether or not the project is complete. The documents are not intended for reuse by you or your company except upon the prior written consent of TRG.

This letter when executed by the owner will serve as the agreement. Please contact me should you have any questions.

Very truly yours, **Transportation Resource Group, Inc.**

histophen E. Schuch

Christopher E. Schwab, P.E. Senior Associate

CES/vaw

AGREED AND ACCEPTED Bitner Engineering, LLC

By: _____

Date

Name

Title

PRELIMINARY/FINAL LAND DEVELOPMENT PLAN FOR **CLOVERLEAF SELF-STORAGE** MOUNT JOY TOWNSHIP, LANCASTER COUNTY, PA

LANCASTER COUNTY PLANNING DEPARTMENT'S REVIEW CERTIFICATE

THIS PLAN, BEARING LCPC FILE NO. , WAS REVIEWED BY STAFF OF THE LANCASTER COUNTY PLANNING DEPARTMENT ON AS REQUIRED BY THE PENNSYLVANIA MUNICIPALITIES PLANNING CODE, ACT 247, OF 1968, AS AMENDED. THIS CERTIFICATE DOES NOT REPRESENT NOR GUARANTEE THAT THIS PLAN COMPLIES WITH THE VARIOUS ORDINANCES, RULES, REGULATIONS, OR LAWS OF THE LOCAL MUNICIPALITY, THE COMMONWEALTH. OR THE FEDERAL GOVERNMENT.

*SIGNATURE OF THE CHAIRPERSON OR THEIR DESIGNED

MOUNT JOY TOWNSHIP PLANNING COMMISSION **REVIEW CERTIFICATE**

20 , THE MOUNT JOY TOWNSHIP AT A MEETING HELD ON PLANNING COMMISSION REVIEWED THIS PLAN AND A COPY OF THE REVIEW COMMENTS IS ON FILE IN THE TOWNSHIP OFFICE.

MOUNT JOY TOWNSHIP BOARD OF SUPERVISORS FINAL PLAN APPROVAL CERTIFICATE

AT A MEETING ON ___, THE MOUNT JOY TOWNSHIP BOARD OF , 20 SUPERVISORS GRANTED FINAL PLAN APPROVAL OF THIS PROJECT, INCLUDING THE THROUGH COMPLETE SET OF PLANS MARKED SHEET(S) WHICH FORM A PART OF THE APPLICATION DATED ___, LAST REVISED_ AND BEARING CONOY TOWNSHIP FILE NO.

CERTIFICATION OF SURVEY ACCURACY

I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE SURVEY SHOWN AND DESCRIBED HEREON IS TRUE AND CORRECT TO THE ACCURACY REQUIRED BY THE MOUNT JOY TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

_____, 20___

CERTIFICATION OF PLAN ACCURACY

I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE PLAN SHOWN AND DESCRIBED HEREON IS TRUE AND CORRECT TO THE ACCURACY REQUIRED BY THE MOUNT JOY TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

, 20____

STORMWATER MANAGEMENT CERTIFICATION

I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THE STORM DRAINAGE FACILITIES SHOWN AND DESCRIBED HEREON ARE DESIGNED IN CONFORMANCE WITH THE STORM WATER MANAGEMENT REQUIREMENTS OF MOUNT JOY TOWNSHIP.

CARBONATE GEOLOGY CERTIFICATE

CERTIFY THAT THE PROPOSED STORMWATER /BMP FACILITIES IS NOT UNDERLAIN BY CARONATE GEOLOGY.

_____, 20_____

DOCUMENT ID 5971230 461-40563-0-0000 TAX ACCOUNT J-048-019 SUBDIVISION PLAN J-068-050 SUBDIVISION PLAN SUBDIVISION PLAN J-218-087

PREVIOUS PLAN APPROVALS: FINAL LAND DEVELOPMENT PLAN BRANDT MIN-STORAGE. RECORDED ON DECEMBER 12. 2003 AS SUBDIVISION PLAN BOOK J-218-087.

CERTIFICATE OF OWNERSHIP, ACKNOWLEDGMENT OF PLAN AND OFFER OF DEDICATION (CORPORATE)

COMMONWEALTH OF PENNSYLVANIA COUNTY OF LANCASTER

V	THIS,	THE	 DAY	OF .
VĽ	DERSIGI	NED	OFFI	CER,

, WHO BEING DULY SWORN ACCORDING TO LAW, DEPOSES AND SAYS THAT THE CORPORATION IS THE *** _ OF THE PROPERTY SHOWN ON THIS PLAN, THAT HE/SHE IS AUTHORIZED TO EXECUTE SAID PLAN ON BEHALF OF THE CORPORATION, THAT THE PLAN IS THE ACT AND DEED OF THE CORPORATION, THAT THE CORPORATION DESIRES THE SAME TO BE RECORDED AND ON BEHALF OF THE CORPORATION FURTHER ACKNOWLEDGES, THAT ALL STREETS AND OTHER PROPERTY IDENTIFIED AS PROPOSED PUBLIC PROPERTY ARE HEREBY DEDICATED TO THE PUBLIC USE - (EXCEPTING THOSE AREA LABELED "NOT FOR

**_____ DEDICATION").

MY COMMISSION EXPIRES ______, 20____

* INDIVIDUAL'S TITLE ** NAME OF CORPORATION

*** IDENTIFY OWNERSHIP OR EQUITABLE OWNERSHIP

**** SIGNATURE OF INDIVIDUAL ***** CORPORATE SEAL

****** SIGNATURE AND SEAL OF NOTARY PUBLIC OR OTHER OFFICER AUTHORIZED TO ACKNOWLEDGE DEEDS.

ACKNOWLEDGE THAT THE STORMWATER FACILITIES ARE PERMANENT FIXTURES THAT CANNOT BE ALTERED OR REMOVED UNLESS A REVISED PLAN IS APPROVED BY MOUNT JOY TOWNSHIP.

SIGNATURE OF THE DESIGNEE

OWNER

LANCASTER PORTFOLIO, LLC 239 E. MARKET ST., SUITE 101 WEST CHESTER, PA 19382

SITE ADDRESS

1444 CLOVERLEAF ROAD MOUNT JOY, PA 17552

SOURCE OF TITLE

ZONING/SITE DATA TOTAL SITE ACREAGE

EXISTING LAND USE: PROPOSED LAND USE: ZONING DISTRICT: WATER: SEWER:

LOT AREA: LOT WIDTH: LOT DEPTH: FRONT YARD: REAR YARD: SIDE YARD: **BUILDING HEIGHT BUILDING AREA:**

BUILDING COVERAGE IMPERVIOUS COVERAGE

*VARIANCE APPROVED FOR MIN. BUILDING AREA AND MIN. HEIGHT

PARKING CALCULATION:

ACT NO. 287/181

SERIAL NO. 20210202837

01/20/21

BSS

1 PARKING SPACE PER 25 UNITS, PLUS 1 SPACE PER 250 SF OF OFFICE AREA 132 EXISTING UNITS / 25 = 6 SPACES 260 PROPOSED UNITS / 25 = 11 SPACES TOTAL SPACES REQUIRED = 17

REQUIRED 1 AC. MIN.

150 FT. MIN.

125 FT. MIN.

40 FT. MIN.

30 FT. MIN.

15 FT. MIN.

REQUIRED

60% MAX.

70% MAX.

20* FT. MIN., 35 FT. MAX.

8,000 SF MAX. (EACH)

TOTAL SPACES PROVIDED: 21

20___, BEFORE ME, THE PERSONALLY APPEARED ,BEING

STORMWATER FACILITY CERTIFICATE

UTILITY LIST: BUCKEYE PARTNERS FIVE TEK PARK 9999 HAMILTON BLVD. **BREINIGSVILLE. PA 18031**

> CENTURYLINK **122 BALTIMORE STREET** PO BOX 896 HANOVER, PA 17331

MOUNT JOY TOWNSHIP 159 MERTS DRIVE ELIZABETHTOWN, PA 17022 PPL ELECTRIC UTILITIES 503 NEW MARKET ST. WILKES BARRE, PA 18702

UGI UTILITIES INC 1301 AIP DRIVE MIDDLETOWN, PA 17057

10.41 AC. (GROSS); 10.08 AC. (NET)

COMMERCIAL/MINIWAREHOUSE - 132 EXISTING UNITS COMMERCIAL/MINIWAREHOUSE - 260 UNITS (PROPOSED) LIGHT INDUSTRIAL ON-LOT ON-LOT

> PROPOSED 10.41 AC. (GROSS); 10.08 AC. (NET) 423 FT. 723 FT. 40 FT. 30 FT. 15 FT. 35 FT. MAX. ±20,500 SF. MAX*

EXISTING

5.6%

22.17%

PROPOSED 12.82% 28.21%



4000

SHEET LIST TABLE				
SHEET TITLE	SHEET NO.			
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*ALL PLAN SHEETS ARE TO BE RECORDED.	•			

REQUESTED WAIVERS/DEFERRALS:

THE FOLLOWING WAIVERS OF THE MOUNT JOY TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE ARE REQUESTED:

- 1. SECTION 119-25- REQUEST RELIEF FROM THE SUBMISSION OF A PRELIMINARY PLAN DATE: _____
- ACTION: _____ 2. SECTION 119-32.A- WATER AND SEWER FEASIBILITY REPORT
- ACTION: _____ DATE: 3. SECTION 119-32.C(6)- CONTRIBUTION IN LIEU OF TRAFFIC IMPACT STUDY
- ACTION: _____ DATE: _____

THE FOLLOWING WAIVERS OF THE MOUNT JOY TOWNSHIP STORMWATER MANAGEMENT ORDINANCE ARE REQUESTED:

1. SECTION 113-31(L)(1)- LIMITING ZONE

ACTION: _____ 2. SECTION 113-32.A(2)(A) - LOADING RATIO ACTION: _____

DATE:	
DΔTF·	

ZONING APPROVALS:

THE FOLLOWING SPECIAL EXCEPTION/VARIANCES OF THE MOUNT JOY TOWNSHIP ZONING ORDINANCE WERE APPROVED BY THE ZONING HEARING BOARD AT THEIR MEETING ON JULY 5, 2023:

- 1. SECTION 135-163.D SPECIAL EXCEPTION TO MODIFY PRIOR SPECIAL EXCEPTION APPROVALS TO DEVELOP A MINIWAREHOUSE FACILITY
- 2. SECTION 135-245.F EXCEED MAXIMUM BUILDING AREA
- 3. SECTION 135-165(A)(1) MINIMUM BUILDING HEIGHT



GENERAL NOTES :

- THE BOUNDARY SURVEY AND TOPOGRAPHIC SURVEY IS BASED ON A SURVEY EXECUTED BY TRIMBLE SURVEYORS, LLC PERFORMED FROM JANUARY 25 THROUGH FEBRUARY, 2021.
- THIS PROPERTY WAS SURVEYED USING THE CURRENT DEED OR DEEDS OF RECORDS AND WITHOUT THE BENEFIT OF A TITLE SEARCH.
- SITE BENCHMARK: MAG NAIL IN BITUMINOUS PARKING-LOT NEAR UTILITY POLE WITH METER. ELEVATION = 514.28
- DATUM: NAVD 1988 HORIZONTAL DATUM IS NORTH AMERICAN DATUM 1983 (NAD83) STATE PLANE
- COORDINATES (SOUTH ZONE) ESTABLISHED BY GPS STATIC SESSION AND SUBMITTED TO NGS OPUS SOLUTION.
- UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE AND WERE DETERMINED FROM VISIBLE LOCATION, PA ONE CALL UTILITY MARKINGS AND THE BEST AVAILABLE PLAN INFORMATION. THE LOCATIONS ARE APPROXIMATE AND MUST BE VERIFIED PRIOR TO ANY CONSTRUCTION, EXCAVATION OR BLASTING. TRIMBLE SURVEYORS LLC ASSUMES NO RESPONSIBILITY FOR ANY DAMAGES INCURRED AS A RESULT OF THE UTILITIES ADMITTED OR INACCURATELY SHOWN.
- THIS PROPERTY LIES WITHIN A 100 YEAR FLOODPLAIN (ZONE AE) AS DEPICTED ON FEMA FLOOD INSURANCE RATE MAP NO. 42071C0281F, PANEL NO. 281 OF 780, EFFECTIVE DATE APRIL 5, 2016. FLOOD PLAIN LINES SHOWN ARE APPROXIMATE AND ARE DEPICTED AS PER SHAPE FILES PROVIDED BY FEMA. ANY CHANGES TO THIS PLAN AFTER THE DATE OF PLAN PREPARATION OR LATEST REVISION SHALL NOT BE
- THE RESPONSIBILITY OF BITNER ENGINEERING, LLC. NOTHING SHALL BE PLACED, PLANTED, SET OR PUT WITHIN AN AREA OF AN EASEMENT THAT WOULD
- ADVERSELY AFFECT THE FUNCTION OF THE EASEMENT. THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE UTILITIES AT LEAST 72 HOURS PRIOR TO THE START OF ANY CONSTRUCTION. ALL UTILITIES HAVE BEEN IDENTIFIED BASED ON THE BEST AVAILABLE INFORMATION AND LISTED ON THESE PLANS IN ACCORDANCE WITH ACT 187 REQUIREMENTS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF EXISTING UTILITIES AND ALL EFFORTS SHALL BE UNDERTAKEN TO PROTECT EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE TO UTILITIES BY THE CONTRACTOR SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. RESTORATION OF ALL EXISTING SURFACE IMPROVEMENTS DAMAGED OR ALTERED DURING CONSTRUCTION, INCLUDING LANDSCAPING, SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING THE SAFE FLOW OF TRAFFIC DURING CONSTRUCTION WITHIN THE SITE AND THE EXISTING ROAD RIGHTS-OF-WAY WHILE ENTERING AND LEAVING THE SITE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY PERMITS RELATIVE TO THE CONSTRUCTION PROPOSED ON THIS PLAN.
- 12 THERE SHALL BE NO CHANGES OR DEVIATION FROM THESE PLANS UNLESS APPROVED BY THE ENGINEER.
- SUCH PLAN CHANGES, SHOULD THEY BECOME NECESSARY, ARE SUBJECT TO MUNICIPAL ORDINANCES. 13. THE CONTRACTOR SHALL INSPECT EXISTING SITE/PROJECT AREA CONDITIONS AND VERIFY ALL QUANTITIES AND MATERIALS PRIOR TO THE START OF CONSTRUCTION.
- 14. CURBS AND SIDEWALKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE (MUNICIPALITY) AS APPLICABLE.
- 15. THE DEVELOPER SHALL BE RESPONSIBLE FOR PROVIDING ALL PAVEMENT MARKINGS, STREET SIGNS, TRAFFIC DIRECTIONAL AND CONTROL SIGNS SHOWN ON THIS PLAN IN ACCORDANCE WITH APPLICABLE STATE OR MUNICIPAL REGULATIONS AND SPECIFICATIONS. ALL SIGNAGE SHALL BE CONSISTENT WITH EXISTING SIGNAGE WITHIN MOUNT JOY TOWNSHIP.
- 16. NO OBJECT SHALL BE PERMITTED WHICH OBSCURES VISION WITHIN THE CLEAR SIGHT TRIANGLE. ALL ELECTRIC, TELEPHONE, TELEVISION, AND OTHER COMMUNICATION FACILITIES, BOTH MAIN AND 17 SERVICE LINES SERVICING NEW DEVELOPMENTS, SHALL BE PROVIDED BY UNDERGROUND WIRING WITHIN EASEMENTS OR DEDICATED PUBLIC RIGHTS-OF-WAY, INSTALLED IN ACCORDANCE WITH THE PREVAILING

STANDARDS AND PRACTICES OF THE UTILITY OR OTHER COMPANIES PROVIDING SUCH SERVICE

TOWNSHIP NOTES :

- THERE ARE NO AREAS ON THIS PLAN WHICH ARE OFFERED FOR DEDICATION TO MOUNT JOY TOWNSHIP. MOUNT JOY TOWNSHIP IS NOT RESPONSIBLE FOR CONSTRUCTION OR MAINTENANCE OF ANY AREA NOT DEDICATED FOR PUBLIC USE.
- STORMWATER FACILITIES, INCLUDING SWALES, STORM PIPING, AND APPURTENANCES SHALL BE MAINTAINED IN GOOD WORKING CONDITION BY THE DEVELOPER OR THE SUCCESSIVE LAND OWNER. THE MUNICIPALITY SHALL HAVE THE RIGHT TO INSPECT THE FACILITIES AT ANY TIME; REQUIRE THE OWNER TO TAKE CORRECTIVE MEASURES AND ASSIGN THE OWNER REASONABLE TIME PERIODS FOR ANY NECESSARY ACTION; AUTHORIZE MAINTENANCE TO BE DONE AND LIEN ALL COST OF THE WORK AGAINST THE PROPERTIES OF THE OWNER RESPONSIBLE FOR MAINTENANCE.
- THE MUNICIPALITY SHALL NOT BE RESPONSIBLE FOR THE CONSTRUCTION OR MAINTENANCE OF ANY AREA NOT DEDICATED FOR THE PUBLIC USE.

ENVIRONMENTAL NOTES:

VORTEX ENVIRONMENTAL CONDUCTED A FIELD INVESTIGATION ON MARCH 17, 2023 AND CONCLUDES THAT NO "WATER OF THE UNITED STATES COMMONWEALH" EXIST WITHIN THE PROJECT AREA. NO WETLANDS WERE IDENTIFIED WITHIN THE STUDY AREA OR THE IMMEDIATE VICINITY.

STORMWATER NOTES :

- THE PROPERTY OWNER WILL BE RESPONSIBLE FOR MAINTANANCE OF ALL STORMWATER MANAGEMENT FACILIITIES.
- STORMSEWER PIPES, CULVERTS, MANHOLES AND INLETS OUTSIDE OF THE PUBLIC RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH PENNDOT RC-34 STANDARDS. CONVEYANCE PIPES, CULVERTS, MANHOLES, INLETS AND ENDWALLS WHICH ARE OTHERWISE SUBJECT TO
- VEHICULAR LOADING SHALL BE DESIGNED FOR THE HS-35 LOADING CONDITIONS. ALL STORMSEWER PIPES SHALL BE WATERTIGHT
- ALL STORM SEWERS AND APPURTENANCES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS AND TO THE STANDARDS OF THE MUNICIPAL ORDINANCES.
- NO PERSON SHALL MODIFY, REMOVE, FILL, LANDSCAPE OR ALTER SWM FACILITIES AND/OR BMP FACILITIES WHICH MAY HAVE BEEN INSTALLED ON A PROPERTY UNLESS A STORMWATER MANAGEMENT PERMIT HAS BEEN OBTAINED TO PERMIT SUCH MODIFICATION, REMOVAL, FILLING, LANDSCAPING OR ALTERATION. NO PERSON SHALL PLACE ANY STRUCTURE, FILL, LANDSCAPING OR VEGETATION INTO A SWM FACILITY, A BMP OR WITHIN DRAINAGE EASEMENTS.
- ALL PIPES MUSH ENTER INLETS COMPLETELY THROUGH ONE OF THE SIDES ON INLETS. NO CORNER ENTRY OF PIPES IS PERMITTED THE STORMWATER MANAGEMENT BASIN IS DESIGNED FOR 62,243 SF.

GEOTECHNICAL NOTES:

THE FOLLOWING RECOMMENDATIONS ARE BASED ON THE INFORMATION CONTAINED IN THE "GEOTECHNICAL REPORT FOR STORMWATER MANAGEMENT FOR MOUNT JOY MINI-STORAGE" BY ECS MID-ATLANTIC (PROJ. NO. 18:5290). LLC DATED JULY 9.2021:

- A) IF REDOXIMORPHIC FEATURES (SOIL MOTTLING AND COLORATION PATTERNS FORMED BY THE REDUCTION OF IRON AND/OR MANGANESE FROM SATURATED CONDITIONS IN THE SOIL) ARE ENCOUNTERED: A QUALIFIED PROFESSIONAL SHOULD DETERMINE IF THE FEATURES OBSERVED ARE ASSOCIATED WITH A HISTORIC CONDITION (ASSOCIATED WITH FILL, PREVIOUS SITE CONDITION, OR NATURAL COLORATION) OR
- ARE ASSOCIATED WITH CONDITIONS THAT COULD PRESENTLY OCCUR (SEASONAL VARIATIONS IN THE WATER TABLE). • EVALUATE THE ELEVATION OF THE FEATURES RELATIVE TO THE PROPOSED DESIGN ELEVATION OF THE
- SWM FEATURE AND DETERMINE IF THE SIZE AND ELEVATION OF THE SWM FEATURE CAN BE ADJUSTED TO ALLEVIATE THE CONFLICT. • RETAIN ECS AND CIVIL ENGINEER TO EVALUATE ALTERNATE DESIGN CONCEPTS. ALTERNATE DESIGNS
- PROPOSED BY THE PROFESSIONAL SHOULD BE SEALED AND SUBMITTED TO THE TOWNSHIP FOR APPROVAL.

IF MATERIAL REPLACEMENT IS REQUIRED IN STRUCTURAL AREAS (EX: BELOW-GRADE SWM FACILITIES IN PAVED AREAS), MATERIAL PLACEMENT SPECIFICATIONS, INCLUDING MATERIALS TYPE, MIX RATIO, COMPACTIVE EFFORT AND REQUIRED DENSITY SHOULD BE DETERMINED BY ECS. SUITABLE SOIL MIXTURES CAN CONSIST OF A BLEND OF ON-SITE AND/OR OFF-SITE MATERIALS AVAILABLE TO THE CONTRACTOR GENERALLY CONFORMING THE TABLE ABOVE, WITH FIELD INFILTRATION RATES POST PLACEMENT DETERMINED AND APPROVED BY ECS.

CONSTRUCTION RECOMMENDATIONS

IT IS RECOMMENDED THAT VERIFICATION OF THE SUBGRADE CONDITIONS AT THE TIME OF CONSTRUCTION BE CONDUCTED BY AN AUTHORIZED ECS REPRESENTATIVE.

DURING EXCAVATION OF THE BASIN, THE MATERIALS AT THE BOTTOM OF BASIN SHOULD BE VERIFIED TO BE CONSISTENT WITH THOSE ENCOUNTERED IN THE EXPLORATION. PROPER PERFORMANCE OF INFILTRATION FACILITIES WILL BE INFLUENCED BY THE VARIABILITY IN THE SUBSURFACE. IT WILL BE IMPORTANT THAT CONSTRUCTION EQUIPMENT DOES NOT TRAFFIC ON THE MATERIALS AT THE INFILTRATION BED ELEVATION, AND THAT HAND PROBING ON AN APPROXIMATELY 25 FOOT GRID OR ISOLATED TEST PITS BE PROVIDED TO EVALUATE PROPER OFFSET DISTANCES FROM BEDROCK LIMITING ZONES.

STEEP SLOPE NOTES :

ANY DISTURBANCE OF STEEP SLOPES SHALL BE COMPLETED WITHIN ONE CONSTRUCTION SEASON, AND DISTURBED AREAS SHALL NOT BE LEFT BARE AND EXPOSED DURING THE WINTER AND SPRING THAW PERIODS. PERMANENT VEGETATIVE COVER SHALL BE PLANTED WITHIN THREE DAYS AFTER COMPLETION OF GRADING.

D. GRADING REQUIREMENTS.

- (1) GRADING AND EARTHMOVING ON ALL STEEP SLOPES SHALL NOT RESULT IN EARTH CUTS OR FILLS WHOSE HIGHEST VERTICAL DIMENSIONS EXCEED 10 FEET, EXCEPT IF ONE OF THE FOLLOWING APPLIES:
- (a) WHERE NO REASONABLE ALTERNATIVES EXIST FOR CONSTRUCTION OF ROADS, DRAINAGE STRUCTURES, AND OTHER PUBLIC IMPROVEMENTS, EARTH CUTS AND FILLS' HIGHEST VERTICAL DIMENSIONS SHALL NOT EXCEED 20 FEET.
- (b) THE MAXIMUM VERTICAL DIMENSION OF CUTS OR FILLS DOES NOT APPLY IF AN ENGINEERED RETAINING WALL IS CONSTRUCTED. THE RETAINING WALL SHALL BE SUBJECT TO REVIEW AND APPROVAL UNDER THE UNIFORM CONSTRUCTION CODE.
- (2) FINISHED SLOPES OF ALL CUTS AND FILLS SHALL NOT EXCEED 3:1, UNLESS THE APPLICANT CAN SATISFACTORILY DEMONSTRATE TO THE ZONING OFFICER THAT STEEPER SLOPES CAN BE STABILIZED AND MAINTAINED ADEQUATELY. THE ZONING OFFICER MAY CONSULT WITH THE TOWNSHIP ENGINEER IF NEEDED. THE LANDSCAPE
- SHALL BE PRESERVED IN ITS NATURAL STATE INSOFAR AS PRACTICABLE. E. ANY FILL PLACED ON A LOT SHALL BE PROPERLY STABILIZED AND, WHEN FOUND NECESSARY DEPENDING UPON EXISTING SLOPES AND SOIL TYPES, SUPPORTED BY RETAINING WALLS OR OTHER APPROPRIATE STRUCTURES AS APPROVED BY THE TOWNSHIP ZONING OFFICER. THE ZONING OFFICER MAY CONSULT WITH THE TOWNSHIP ENGINEER IF NEEDED. ANY RETAINING WALLS SHALL MEET THE STANDARDS OF THE PENNSYLVANIA UNIFORM CONSTRUCTION CODF.
- ANY CUTS SHALL BE SUPPORTED BY RETAINING WALLS OR OTHER APPROPRIATE RETAINING STRUCTURES, WHEN, DEPENDING UPON THE NATURE OF THE SOIL CHARACTERISTICS, SUCH STRUCTURES ARE REQUIRED IN ORDER TO PREVENT EROSION AND ARE APPROVED BY THE TOWNSHIP ZONING OFFICER. THE ZONING OFFICER MAY CONSULT WITH THE TOWNSHIP ENGINEER IF NEEDED.

ZONING HEARING BOARD DECISION

AS A RESULT OF A PUBLIC HEARING HELD ON JULY 5, 2023, THE MOUNT JOY TOWNSHIP ZONING HEARING BOARD (THE "BOARD") VOTED UNANIMOUSLY TO GRANT THE FOLLOWING REQUESTS ON THE APPLICATION FOR THE PROPERTY LOCATED AT 1444 CLOVERLEAF ROAD, MOUNT JOY, PA 17552, TAX PARCEL ID #461-40563-0-0000 (THE "PROPERTY") IN ACCORDANCE WITH THE MOUNT JOY TOWNSHIP ZONING ORDINANCE OF 2012, AS AMENDED (THE "ORDINANCE"):

- (i) A SPECIAL EXCEPTION PURSUANT TO SECTION 135-163.D OF THE ORDINANCE TO MODIFY PRIOR SPECIAL EXCEPTION APPROVALS TO DEVELOP A MINIWAREHOUSE FACILITY;
- (ii) A VARIANCE FROM SECTION 135-245.F. OF THE ORDINANCE TO EXCEED THE MAXIMUM BUILDING AREA; AND
- (iii) A VARIANCE FROM SECTION 135-165(A)(1) REGARDING MINIMUM BUILDING HEIGHT.

THE PROPERTY IS LOCATED WITHIN THE LI - LIGHT INDUSTRIAL DISTRICT AND CONSISTS OF APPROXIMATELY 10.41 ACRES. APPLICANT'S PREDECESSOR-IN-INTEREST OBTAINED SPECIAL EXCEPTION APPROVAL ON OCTOBER 3, 2002 TO CONSTRUCT MINI WAREHOUSE UNITS IN TWO PHASES, BUT ONLY ONE PHASE WAS ULTIMATELY COMPLETED. ON JUNE 9, 2021, APPLICANT OBTAINED SPECIAL EXCEPTION APPROVAL TO RECONFIGURE THE REMAINING DEVELOPMENT WITH A NEW SITE PLAN, WHICH DIVIDED THE REMAINING PHASE INTO TWO NEW PHASES. SUBSEQUENTLY, APPLICANT RECEIVED TIME EXTENSION APPROVALS FROM THE BOARD WHILE THEY WORKED THROUGH LAND DEVELOPMENT ISSUES. FROM AND AFTER THE 2021 APPROVAL, APPLICANT ENCOUNTERED SIGNIFICANT CHALLENGES IN PROCEEDING WITH THE DEVELOPMENT DUE TO AN OPEN PENNSYLVANIA DEP E&S PERMIT REQUIRING REMEDIATION RELATING TO A STORM BASIN ON THE PROPERTY.

IN THE INSTANT APPLICATION, APPLICANT PROPOSES TO RECONFIGURE THE DEVELOPMENT TO INCLUDE ONLY 1 FINAL PHASE (REPLACING THE PRIOR CONTEMPLATED PHASES), CONSISTING OF FIVE MINIWAREHOUSE BUILDINGS. A TOTAL OF 260 STORAGE UNITS WILL BE ADDED. THREE OF THE FIVE BUILDINGS ARE "STANDARD" DRIVE-UP STORAGE UNIT BUILDINGS WITH HEIGHTS AROUND 9'6", WHICH IS STANDARD INDUSTRY SIZE. ONE OF THE BUILDINGS (BUILDING B) WILL BE A TWO-FLOOR DRIVE-UP STRUCTURE HAVING 8,200 SQUARE FEET, DESIGNED AS SUCH DUE TO THE SLOPE OF THE PROPERTY. THE REMAINING BUILDING (BUILDING A) WILL REPLACE EXISTING STRUCTURES AND IMPERVIOUS AREAS TO THE NORTH OF THE PROPERTY, AND WILL CONTAIN 20,500 SQUARE FEET. BUILDING A WILL BE AN INDOOR, SINGLE ENTRY-POINT BUILDING WITH INTERIOR HALLWAYS TO ACCOMMODATE SMALLER CONSUMER STORAGE NEEDS. BUILDINGS A AND B TO THE NORTH OF BUILDING A IS EXISTING ROBUST LANDSCAPE SCREENING. BUILDINGS A AND B WILL BE CLOSE TO, BUT MIGHT FALL SHY OF, TWENTY FEET IN HEIGHT. THE REQUESTED DIMENSIONAL VARIANCES ARE DUE TO CHANGES IN THE INDUSTRY TRENDS AND THE HARDSHIPS FACED BY APPLICANT DUE TO THE UNIQUE GRADE/TOPOGRAPHY OF THE PROPERTY AND LARGE SWATHS OF THE PROPERTY PRECLUDED FROM PRODUCTIVE USE (WETLAND AREAS). THE VARIANCES WILL HAVE NO ADVERSE EFFECT ON THE COMMUNITY OR ADJOINING PROPERTIES. APPLICANT DEMONSTRATED COMPLIANCE WITH THE OBJECTIVE CRITERIA REGARDING MINIWAREHOUSES IN THE LI DISTRICT, WITH THE EXCEPTION OF THE REQUESTED VARIANCES. PURSUANT TO THE APPLICATION NARRATIVE, AND TESTIMONY AND EXHIBITS AT THE HEARING, APPLICANT DEMONSTRATED COMPLIANCE WITH THE GENERAL VARIANCE CRITERIA AND APPLICABLE LAW REGARDING DIMENSIONAL VARIANCES.

THE RELIEF GRANTED SHALL BE SUBJECT TO THE FOLLOWING CONDITIONS AND SAFEGUARDS WHICH THE BOARD DEEMS REASONABLE AND NECESSARY TO IMPLEMENT THE PURPOSE OF THE ORDINANCE AND THE PENNSYLVANIA MUNICIPALITIES PLANNING CODE:

- 1. THE APPLICANT AND/OR THE OWNER(S) OF THE PROPERTY SHALL COMPLY WITH ALL OTHER PROVISIONS CONTAINED IN THE ORDINANCE FOR WHICH RELIEF HAS NOT BEEN REQUESTED OR GRANTED;
- 2. THE APPLICANT SHALL FILE AND OBTAIN APPROVAL OF A LAND DEVELOPMENT PLAN FROM THE MOUNT JOY TOWNSHIP PLANNING COMMISSION;
- 3. THE APPLICANT AND ANY REPRESENTATIVE OF THE APPLICANT SHALL COMPLY WITH AND ADHERE TO THE TESTIMONY AND ANY EVIDENCE PRESENTED TO THE BOARD AT THE HEARING HELD ON JULY 5, 2023 EXCEPT TO THE EXTENT MODIFIED BY CONDITIONS IMPOSED BY THE BOARD HEREIN.

MOUNT JOY TOWNSHIP ZONING HEARING BOARD









LEGEND

STORMWATER EASEMENT

CONSERVATION EASEMENT

PROPOSED

								NO. DATE REVISION
	II NER, PE	CHKD BY:		CHKD BY:	DWB		DATE 11/27/2023	
MANAGER:		DESIGN BY:		DRAWN BY:	DWB		SURV. CHIEF: TRIMBLE	
CLIENT			239 E. MARKET STREET, STE 102	WEST CHESTER, PA 19382	717-884-4687	SCALE	1"=50'	0' 25' 50' 100' 150
		T) Bitner				711 Speedwell Forge Rd • Lititz, PA 17543	717.368.1169 • dave@bitnerengineering.com	
ЦПСЕ	PRFI MINARY/FINAL PLAN	FOR					EASEMENT PLAN	VIOUNT JOY TOWNSHIP LANCASTER COUNTY, PA
SH	EET	NO.		5	_OF	:	19	_

JOB. NO. 2023108-001

PROPOSED EASEMENT LINE DATA					
LINE	BEARING	LENGTH			
E-1	\$74°03'52"W	40.71			
E-2	N81°13'50"W	20.58			
E-3	S81°24'28"W	6.29			
E-4	S20°15'06"E	42.34			
E-5	S15°34'50"E	56.40			
E-6	S16°53'05"E	36.15			
E-7	S10°40'51"E	36.98			
E-8	S13°50'20"W	19.58			
E-9	S18°30'17"E	30.44			
E-10	S44°42'59"W	50.52			
E-11	S16°23'40"E	73.31			
E-12	S4°10'50"W	23.54			
E-13	S20°07'53"W	7.41			
E-14	S71°47'34"E	11.22			
E-15	S11°23'50"W	52.53			
E-16	N86°19'11"W	10.28			
E-17	S0°18'52"W	26.45			
E-18	S60°37'33"W	18.30			
E-19	S81°02'00"W	125.93			
E-20	N0°28'14"W	38.00			
E-21	N20°40'02"E	38.10			
E-22	N13°46'07"E	28.72			
E-23	N74°09'08"E	42.53			
E-24	N33°32'23"E	114.24			
E-25	N19°52'21"W	68.12			
E-26	N18°16'12"E	24.89			
E-27	N16°36'30"W	34.83			
E-28	N20°25'06"W	49.02			
E-29	N17°36'11"W	65.58			
E-30	S19°10'59"W	5.78			
E-31	S1°53'52"W	35.46			
E-32	S40°02'43"W	18.89			
E-33	S15°35'48"E	10.72			
E-34	S36°28'32"E	39.63			
E-35	S2°34'26"W	73.88			
E-36	N47°49'45"W	59.38			
E-37	N46°28'28"W	27.07			
E-38	N34°59'45"W	41.18			
E-39	N0°50'16"E	15.34			
E-40	S82°19'14"W	56.02			
E-41	N6°25'01"W	440.68			

PRC	PROPOSED EASEMENT LINE DATA						
LINE	BEARING	LENGTH					
E-42	N74°53'10"E	96.43					
E-43	S50°28'17"E	10.32					
E-44	S75°31'38"E	102.58					
E-45	S73°25'55"W	53.31					
E-46	S30°24'11"E	9.10					
E-47	S43°03'59"E	55.97					
E-48	S49°09'01"E	31.04					
E-49	S40°29'27"E	57.32					
E-50	S13°18'20"W	43.14					
E-51	S1°51'38"E	37.83					
E-52	S3°47'46"E	2.12					
E-53	S82°18'36"E	12.14					
E-54	S39°48'52"E	42.84					
E-55	S14°15'59"E	17.19					
E-56	S70°16'18"W	25.32					
E-57	S65°42'46"E	31.27					
E-58	S32°23'07"W	16.34					
E-59	S35°02'41"E	15.25					
E-60	S41°12'29"E	15.94					
E-61	S14°15'59"E	29.06					
E-62	N14°27'11"W	20.94					
E-63	\$74°53'43"W	298.87					
E-64	N15°06'17"W	117.35					
E-65	N74°53'43"E	30.00					
E-66	S15°06'17"E	87.35					
E-67	N74°53'43"E	180.00					
E-68	N15°06'17"W	10.00					
E-69	S74°40'56"W	16.13					
E-70	N15°06'17"W	65.06					
E-71	N16°20'52"W	63.51					
E-72	N38°01'48"W	27.54					
E-73	N15°10'50"W	121.59					
E-74	N81°02'00"E	30.18					
E-75	S15°10'50"E	117.72					
E-76	S38°01'48"E	27.53					
E-77	S16°20'52"E	63.83					
E-78	N74°54'06"E	52.06					
E-79	N25°36'19"E	16.46					
E-80	N45°35'15"E	21.42					
E-81	N65°14'50"E	32.99					
E-82	N85°41'28"E	32.24					





GENERAL PLANTING NOTES:

- CONTRACTOR SHALL CONTACT PA ONE CALL (8-1-1), AND REQUEST THE LOCATION OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA TO BE MARKED PRIOR TO ANY PLANTING BED PREPARATION OR INSTALLATION OF PLANT MATERIALS.
 THE LANDSCAPE CONTRACTOR SHALL VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO PLANTING. IF ANY
- DISCREPANCIES ARE IDENTIFIED FROM THE INFORMATION SHOWN ON THE APPROVED PLANS, AND THE REVISED SITE CONDITIONS WOULD RESULT IN REVISIONS TO THE PLANTING DESIGN, THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT OF RECORD FOR INSTRUCTIONS.
- 3. THE LANDSCAPE CONTRACTOR SHALL FIELD-ADJUST THE LOCATIONS OF TREES AND SHRUBS, IF NECESSARY, TO AVOID ANY CONFLICTS WITH UTILITIES (OVERHEAD OR UNDERGROUND). ALL PROPOSED DESIGN CHANGES SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT OF RECORD PRIOR TO PLANTING.
- THIS PLAN IS FOR PLANTING INFORMATION PURPOSES ONLY, AND SHALL NOT BE USED FOR ANY WORK RELATED TO EARTHWORK GRADING, UTILITY INSTALLATION, SITE WORK IMPROVEMENTS OR SEDIMENT EROSION
- CONTROL PLACEMENT.
 ALL PLANT MATERIALS SHALL BE SUBJECT TO THE APPROVAL OR REJECTION BY THE LANDSCAPE ARCHITECT OF RECORD, OR THE OWNER'S REPRESENTATIVE, PRIOR TO INSTALLATION. UNSATISFACTORY PLANT MATERIAL
- SHALL BE REMOVED FROM THE PROJECT SITE. PLANT MATERIALS INSTALLED WITHOUT PRIOR APPROVAL ARE SUBJECT TO REJECTION AND REPLACEMENT BY THE CONTRACTORS AT THE CONTRACTORS EXPENSE.PROPOSED PLANTING BED OUTLINES SHALL BE STAKED OR OUTLINED IN THE FIELD BY THE CONTRACTOR FOR
- APPROVAL BY THE LANDSCAPE ARCHITECT OF RECORD, OR OWNER'S REPRESENTATIVE, PRIOR TO PLANTING.
 ALL TREES, SHRUBS, AND OTHER PLANT MATERIALS SHALL ONLY BE PLANTED/SEEDED AFTER FINISHED GRADES HAVE BEEN ESTABLISHED (INCLUDING TOPSOIL PLACEMENT).
 THE CONTRACTOR SHALL VERIFY THAT ALL PLANTING AREAS HAVE ADEQUATE DRAINAGE. IF ANY AREAS TO BE
- PLANTED SHOW EVIDENCE OF POOR DRAINAGE, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF RECORD IMMEDIATELY FOR CORRECTIVE ACTIONS. PLANT MATERIAL THAT DIES DUE TO POOR OR INADEQUATE DRAINAGE SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
 9. THE TOP OF OF THE MAIN ORDER ROOT (FIRST LARGE SET OF ROOTS THAT DIVIDE FROM THE TRUNK) SHALL BE
- PLANTED NO LOWER THAN ONE OR TWO INCHES INTO THE SOIL. REMOVE ANY EXCESS SOIL FROM PLANT ROOT FLARES, IF PRESENT.
 10. PLANT QUANTITIES NOTED ON THE PLANT SCHEDULE SHOULD MATCH THE GRAPHIC DRAWING SYMBOLS SHOWN ON THE PLANS. THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT IF ANY DIFFERENCES ARE FOUND
- BETWEEN THE QUANTITIES NOTED IN THE PLANT SCHEDULE AND THE GRAPHIC DRAWING SYMBOLS. GRAPHIC SYMBOL QUANTITIES TAKE PRECEDENCE OVER THE PLANT SCHEDULE QUANTITIES.
- ALL SITE AREAS DISTURBED BY PLANTING OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT HIS/HER EXPENSE, AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
 ALL PLANTS AND SHRUBS SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS, SPECIFICATIONS AND COMMENTS NOTED ON THESE DRAWINGS.

PLANT GUARANTEE:

- ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE INSTALLATION CONTRACTOR FOR THE DURATION OF 18 MONTHS FOLLOWING FINAL INSPECTION AND ACCEPTANCE OF THE WORK. PLANTS SHALL BE ALIVE AND IN SATISFACTORY GROWING CONDITION AT THE END OF THE GUARANTEE PERIOD.
- THE CONTRACTOR SHALL GUARANTEE THAT PLANTS SHALL BE IN VIGOROUS AND THRIVING CONDITION AT THE END OF THE GUARANTEE PERIOD. ANY PLANTS APPEARING TO BE IN POOR HEALTH OR LACKING NORMAL GROWTH HABIT, AS DETERMINED BY THE LANDSCAPE ARCHITECT, SHALL BE REMOVED AND REPLACED.
 DURING THE TIME BETWEEN THE INSTALLATION OF PLANTS AND THE BEGINNING OF THE GUARANTEE PERIOD, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ALL OVERSIGHT AND CARE OF THE PLANTINGS INCLUDING BUT NOT LIMITED TO, WATERING, FERTILIZING, FACILITATING DISEASE CONTROL MEASURES (IF REQUIRED), PRUNING, AND WEEDING. THE GUARANTEE PERIOD WILL BEGIN ONLY WHEN ALL PLANTS ARE INSTALLED AS
- 4. SITE INSPECTION TO DETERMINE WORK COMPLETION FOR BEGINNING THE GUARANTEE PERIOD SHALL BE MADE EITHER BY THE OWNER OR THE LANDSCAPE ARCHITECT OF RECORD. THE CONTRACTOR WILL BE NOTIFIED OF ANY DEFICIENCIES TO BE CORRECTED. A SECOND INSPECTION WITH THE CONTRACTOR TO DETERMINE WORK
- COMPLETION FOR BEGINNING THE GUARANTEE PERIOD MAY BE NECESSARY.
 ONLY AFTER ALL DEFICIENCIES ARE ADDRESSED, SHALL THE GUARANTEE PERIOD BEGIN.
 18 MONTHS FROM THE FROM THE START OF THE PLANT GUARANTEE PERIOD, THE CONTRACTOR, OWNER AND LANDSCAPE ARCHITECT WILL INSPECT THE SITE TO LOCATE ANY PLANTS THAT ARE NOT IN HEALTHY CONDITION OR HAVE DIED. A SITE INSPECTION REPORT WILL BE ISSUED TO THE CONTRACTOR AND THE CONTRACTOR WILL HAVE 30 DAYS TO REPLACE ANY PLANTS IDENTIFIED AS FAILING THE GUARANTEE STANDARD.

PLANT STANDARDS

- ALL TREES SHALL BE NURSERY GROWN IN A CLIMATE SIMILAR TO THAT OF THE PROJECT SITE.
 ALL PLANTS SHALL HAVE A NORMAL GROWTH HABIT AND SHALL BE SOUND, HEALTHY, AND VIGOROUS; THEY SHALL BE FREE FROM DISEASE, INSECTS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT.
- ALL PLANTING SHALL BE PERFORMED IN CONFORMANCE WITH GOOD NURSERY AND LANDSCAPE PRACTICE.
 REQUIREMENTS FOR PLANT MEASUREMENTS & SIZING, BRANCHING, GRADING, QUALITY, AND BALLING AND BURLAPPING SHALL FOLLOW THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1), CURRENT EDITION, AS AMENDED AND PUBLISHED BY AMERICAN HORTICULTURE INDUSTRY ASSOCIATION D/B/A AMERICAN HORT.
 SPECIES OF THE SAME PLANT STOCK SHOULD BE SELECTED TO PROVIDE A UNIFORM PLANTING HEIGHT AND

SPREAD.

- MULCH:

 1.
 THE CONTRACTOR SHALL APPLY A PRE-EMERGENT HERBICIDE (PER THE MANUFACTURERS SPECIFICATIONS) TO ALL PLANTING BED AREAS FOR THE CONTROL OF WEED GERMINATION.

 2.
 A LAYER OF NATURAL, NON-COLORED ORGANIC MULCH SHALL BE APPLIED ACROSS THE ENTIRE PLANTING BED
- AREA UNLESS OTHERWISE INDICATED ON THE PLAN. MULCH DEPTHS SHALL NOT BE GREATER THAN 3" NOR LESS THAN 2".
 3. MULCH SHALL NOT BE PLACED WITHIN 3" OF ANY ROOT FLARES OR TREE TRUNKS.
- 4. MULCH SHALL BE ORGANIC, DOUBLE-CUT, NATURAL, UN-DYED AND FREE FROM DELETERIOUS MATERIALS.

SEED ESTABLISHMENT NOTES:

- GRASS SEED SHALL BE FRESH, CLEAN, DRY, NEW-CROP SEED COMPLYING WITH AOSA'S "RULING FOR TESTING SEEDS" FOR PURITY AND GERMINATION TOLERANCES.
 RECOMMENDED TIME FOR TURFGRASS SEEDING:
- 2.1. FALL: SEPTEMBER 1ST TO OCTOBER 15TH 2.2. SPRING: SEED NO LATER THAN APRIL 1ST FOR BEST RESULTS.
- SOW RECOMMENDED SEED MIXTURE ADAPTED TO USE IN CLIMATIC CONDITIONS OF THE SPECIFIC SITE AREA.
 PRIOR TO SEEDING, REMOVE ANY EXISTING VEGETATION FROM PROPOSED LAWN AREAS.
- FRICK TO SEEDING, REMOVE ANY EXISTING VEGETATION PROMPROFOSED LAWN AREAS.
 IF TOPSOIL HAS BEEN DEPLETED OR REMOVED IN THE AREA TO BE SEEDED, PROVIDE SOIL AMENDMENTS PER
- THE SOIL AGRONOMY REPORT.DIVIDE TOTAL SEED QUANTITY INTO TWO EQUAL LOTS, SOWING ONE LOT IN ONE DIRECTION, AND THE SECOND
- LOT AT RIGHT ANGLES TO THE FIRST WITH A MECHANICAL SEEDER OR SPREADER.
 MULCHING WITH STRAW, HYDROMULCH, OR FIBER MATS IS RECOMMENDED TO PROTECT SEED FROM DRYING OUT OR WASHING AWAY. HEAVY MULCHES SHOULD BE REMOVED FROM THE AREA WITHIN A FEW DAYS AFTER SEED GERMINATION. CONTRACTOR IS RESPONSIBLE FOR TURF MAINTENANCE UNTIL SATISFACTORY TURF IS ESTABLISHED, AS DETERMINED BY THE LANDSCAPE ARCHITECT. MAINTENANCE TO INCLUDE WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING, REPLANTING, AND PERFORMING OTHER OPERATIONS AS
- REQUIRED TO ESTABLISH HEALTHY, VIABLE TURF
 8. WATERING: SCHEDULE WATERING TO PREVENT WILTING, PUDDLING, EROSION, AND DISPLACEMENT OF SEED OR MULCH. WATER TURF WITH FINE SPRAY AT A MINIMUM RATE OF 1 INCH PER WEEK UNLESS RAINFALL
- PRECIPITATION IS ADEQUATE. 9. TURF POST-FERTILIZATION: APPLY FERTILIZER AFTER INITIAL MOWING AND WHEN GRASS IS DRY. USE
- FERTILIZER THAT PROVIDES ACTUAL NITROGEN OF AT LEAST 1 LB/1000 SQ. FT. TO TURF AREA.





PLANT SPECIFICATION NOTES: 1. SET PLANTS AT SAME FINISHED GRADE AS GROWN IN THE NURSERY.

- ALL SHRUBS SHALL HAVE BEEN NURSERY GROWN IN A CLIMATE SIMILAR TO THAT OF THE FINAL PLANTING SITE. ALL SHRUBS SHALL HAVE A NORMAL GROWTH HABIT AND SHALL BE SOUND, HEALTHY AND VIGOROUS; THEY SHALL BE FREE FROM
- DISEASE, INSECTS, INSECT EGGS, AND LARVAE.
 ALL PLANTING SHALL BE PERFORMED IN CONFORMANCE WITH GOOD NURSERY AND LANDSCAPE PRACTICE.
 REQUIREMENTS FOR SHRUB MEASUREMENTS, BRANCHING, GRADING, QUALITY, BALLING, AND BURLAPPING OF SHRUBS SHALL FOLLOW
- THE CODE OF STANDARDS RECOMMENDED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC., IN THE AMERICAN STANDARD FOR NURSERY STOCK, ANSIZ60, CURRENT EDITION, AS AMENDED.

TYPICAL SHRUB PLANTING DETAIL





NO SCALE





NO SCALE

1. EXPANSION JOINTS SHALL CONSIST OF 1/2" THICK PREMOLDED EXPANSION JOINT FILLER MATERIAL. EXPANSION JOINTS SHALL BE LOCATED AT ALL STRUCTURES AT THE END OF THE WORK DAY AND AT INTERVALS OF 100 FEET. CUT MATERIAL TO CONFORM WITH CROSS SECTIONAL AREA OF CURB. 2. CONTRACTION JOINTS SHALL CONSIST OF A 2" DEEP, 3/16" WIDE SAW CUT AND BE PLACED AT UNIFORM LENGTHS OF 20 FOOT INTERVALS MAXIMUM AND 4 FOOT INTERVALS MINIMUM.









INSPECTION ACTIVITIES	SUGGESTED FREQUENCY		
 Inspect after several storm events for bank stability, vegetation growth, and to determine if the desired residence time has been achieved. Inspect outlet structure for evidence of clogging or outflow release velocities that are greater than design flow. 	Post Construction (0-12 Months)		
Inspect for the following issues: differential settlement, cracking, erosion of pond banks or bottom, leakage or tree growth on the embankment; the condition of the rip-rap in the inlet, clogging of the outlet and pilot channels; standing water, slope stability, presence of burrows; sediment accumulation is the basin, and outlet structures; trash and debris, and the vigor and density of the vegetation on the basin side slopes and floor.	Semi-annual, after Significant Storms or more Frequent n		
Inspect for the following issues: subsidence, damage to the emergency spillway; inadequacy of the inlet/outlet channel erosion control measures; changes in the condition of the pilot channel, accumulated sediment volume, and semi-annual inspection items.	Annual		
 During inspections, changes to the stormwater facility or the contributing watershed should be noted, as these may affect basin performance. 	Annual		
MAINTENANCE ACTIVITIES	SUGGESTED FREQUENCY		
 If necessary, modify the outlet orfice to achieve design values if inspection indicates modifications. Repair undercut or eroded areas. Mow side slopes. Manage pesticide and nutrients. Remove litter and debris. Control vectors, as necessary. 	As Needed		
 Remove accumulated trash and debris from the basin, around the riser pipe, side slopes, embankment, emergency spillway, and outflow trash racks. The frequency of this activity may be altered to meet specific site conditions. Trim vegetation at the beginning and end of the wet season to prevent establishment of woody vegetation and for aesthetic and vector reasons. 	Semi-annual or More Frequent, as needed.		
 Seed or sod to restore dead or damaged ground cover. Repair erosion to banks and bottom, as required. 	Annual Maintenance (as Needed)		
 Supplement wetland plants if a significant portion have not been established (at least 50% of the surface area). Remove nuisance plant species. 	Annual Maintenance (if Needed)		
 Remove accumulation sediment at the basin inflow points. 	3 to 5 Year Maintenance		
Monitor sediment accumulation and remove accumulated sediment and regrade about every 10 years or when the accumulated sediment volume exceeds 10-20% of the basin volume or when accumulation reaches 6 inches or if resuspension is observed. Clean in early spring so vegetation damaged during cleaning has time to re-establish.	Every 10 to 25 Years		

SWMF-1 OPERATION AND MAINTENANCE NOTES









MIN. D

1.0'

4

2'

SWALE I.D.

1

SWALE LINING

PROTECTION

NAG S75

SLOPE

2.6%





CONSTRUCTION SEQUENCE GENERAL NOTES

- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE.
- EACH STAGE SHALL BE COMPLETED AND IMMEDIATELY STABILIZED BEFORE ANY FOLLOWING STAGE IS INITIATED.
- CLEARING, GRUBBING AND TOPSOIL STRIPPING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE. ANY DEVIATION FROM THE FOLLOWING SEQUENCE MUST BE APPROVED IN WRITING FROM THE LANCASTER COUNTY CONSERVATION DISTRICT.
- AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS. THE LANDOWNER. ALL APPROPRIATE MUNICIPAL OFFICIALS. THE E&S PLAN PREPARER. PCSM PLAN PREPARER. THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE OF THE LANCASTER COUNTY CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING.
- AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
- ALL STAGES OF CONSTRUCTION IDENTIFIED IN BOLD TEXT DENOTE A CRITICAL STAGE OF IMPLEMENTATION OF THE POST CONSTRUCTION STORMWATER MANAGEMENT (PCSM) PLAN FOR WHICH A LICENSED PROFESSIONAL OR DESIGNEE SHALL BE PRESENT ON THE PROJECT SITE.

SEQUENCE OF CONSTRUCTION

- FIELD LOCATE THE PROPOSED LIMITS OF DISTURBANCE AND MARK WITH ORANGE CONSTRUCTION FENCE, CONSTRUCTION STAKES, OR EQUIVALENT.
- 2. INSTALL ROCK CONSTRUCTION ENTRANCE AT LOCATION SHOWN ON THE PLANS. 3. INSTALL FILTER SOCK AS SHOWN ON THE PLANS. DO NOT GRUB AND/OR STRIP TOPSOIL TO INSTALL FILTER SOCK OR SILT
- FENCE. 3.1. IF CONCENTRATED FLOW AREAS FORM, REPLACE THE FILTER SOCK IN THE CONCENTRATED FLOW AREA WITH A ROCK FILTER OUTLET. REMOVE SEDIMENT FROM THE FILTER SOCK WHEN ACCUMULATION REACHES THE MANUFACTURER'S SPECIFICATIONS FOR MAINTENANCE.
- 4. CLEAR AND GRUB VEGEATION IN THE AREA OF SWALE 1 AND 2. STRIP TOPSOIL IN THE AREA OF PROPOSED SWALES 1 AND 2 AND STOCKPILE AT THE LOCATION SHOWN ON THE PLANS. INSTALL SWALES 1 AND 2, IMMEDIATELY STABILIZE WITH SEED, MULCH AND MATTING AS SPECIFIED ON THE PLANS.
- 5. DURING INSTALLATION OF THE SWALES, INSTALL PROPOSED STORMSEWER. IMMEDIATELY INSTALL RIP-RAP AT ENDWALLS, AS SPECIFIED ON THE PLANS 5. CLEAR AND GRUB VEGETATION IN THE AREA OF SEDIMENT BASIN NO. 1. STRIP TOPSOIL IN THE AREA OF THE SEDIMENT
- BASIN AND STOCKPILE AT THE LOCATION SHOWN ON THE PLANS. IMMEDIATELY PLACE FILTER SOCK ON THE DOWN SLOPE SIDE OF THE TOPSOIL STOCKPILE
- EXCAVATE SEDIMENT BASIN 1 IN ACCORDANCE WITH GRADES AND DETAILS SHOWN ON THE PLANS. EXCAVATED MATERIAL SHALL BE PLACED UPSTREAM OF THE SEDIMENT BASIN. SEED AND MULCH THE DISTURBED AREAS AND PLACE EROSION CONTROL BLANKETS AT THE LOCATIONS INDICATED ON THE PLANS.
- 8. CLEAR AND GRUB THE REMAINING PORTION OF THE SITE TO THE EXTENT DELINEATED ON THE PLAN.
- 9. STRIP REMAINING TOPSOIL AND STOCKPILE AT THE LOCATION SHOWN ON THE PLANS.
- 10. MASS GRADE THE REMAINING PORTION OF THE SITE TO THE PROPOSED GRADES SHOWN ON THE PLANS. AS GRADING OPERATIONS PROGRESS, THE CONTRACTOR SHALL ENSURE THAT ALL SEDIMENT LADEN RUNOFF IS CONTAINED WITHIN THE AREA OF DISTURBANCE AND PREVENTED FROM ENTERING ANY DOWNSTREAM WATERCOURSES, EXISTING STORMWATER CONVEYANCE SYSTEMS. OR PERMITTED TO LEAVE THE SITE.
- 16. PLACE CURBING AND STONE BASE MATERIAL IN THE AREAS OF PAVING AS SOON AS PRACTICAL.
- 17. ESTABLISH BUILDING PADS AND BEGIN BUILDING CONSTRUCTION. 18. INSTALL RETAINING WALLS IN THE LOCATIONS IDENTIFIED ON THE PLANS.
- 19. FINALIZE ANY GRADING AS SHOWN ON THE PLAN, ENSURING POSITIVE DRAINAGE TO THE INLETS. IMMEDIATELY SEED AND MULCH THE DISTURBED AREAS AND PLACE EROSION CONTROL BLANKETS AS INDICATED ON THE PLANS.
- 20. PLACE BINDER COURSE ON ALL PAVED AREAS. DO NOT PLACE FINAL WEARING COURSE. 21. FOLLOWING FINAL GRADES BEING ESTABLISHED, SPREAD TOPSOIL OVER AND IMMEDIATELY SEED AND MULCH ALL
- DISTURBED AREAS. 22. CONTRACTOR TO CLEAN AND FLUSH ALL STORM DRAINS LINES TO ENSURE THAT ACCUMULATED SEDIMENT HAS BEEN
- REMOVED FROM THE STORMWATER CONVEYANCE SYSTEMS. 23. COMPLETE ANY REMAINING LANDSCAPING AS SHOWN ON THE APPROVED PLANS.
- 24. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS. THE OWNER AND/OR OPERATORS SHALL CONTACT THE LANCASTER CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO THE REMOVAL/CONVERSION OF THE E&S BMP'S.
- 25. UPON APPROVAL BY THE LOCAL CONSERVATION DISTRICT, THE CONTRACTOR SHALL CONVERT SEDIMENT BASIN NO. 1 TO STORMWATER MANAGEMENT FACILITY NO. 1 IN ACCORDANCE WITH THE DETAILS AND SPECIFICATIONS INCLUDED ON THIS PLAN
- 26. REPAIR/STABILIZE ANY AREAS WHICH DO NOT HAVE A UNIFORM VEGETATIVE COVER AND MAY HAVE BEEN DISTURBED DURING THE FACILITY CONVERSION.
- 27. ANY REMAINING E&S CONTROLS ON-SITE SHALL BE REMOVED AND ALL AREAS DISTURBED DURING SUCH ACTIVITIES SHALL BE PERMANENTLY STABILIZED.
- 28. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES, THE OWNER AND/OR OPERATOR SHALL SUBMIT A NOTICE OF TERMINATION TO THE LANCASTER COUNTY CONSERVATION DISTRICT FOR THE NPDES PERMIT.

TEMPORARY SEEDING SPECIFICATIONS

- 1. IN ORDER TO ESTABLISH A QUICK GRASS COVER OVER DISTURBED AREAS, A TEMPORARY SEED MIXTURE SHALL BE USED. A. STABILIZATION EFFORTS DURING THE NON-GERMINATING PERIOD, OCT. 15 TO MARCH 15, SHOULD BE MULCHED WITH CLEAN STRAW AT A RATE OF 3 TONS/AC. (EQUIVALENT TO 0.75" TO 1" DEEP). CLEAN STRAW MULCH SHOULD NOT BE FINELY CHOPPED OR BROKEN DURING APPLICATION.
- B. SEED MIXES ARE FROM THE PENN STATE AGRONOMY GUIDE AND THE MIX TO BE USED DEPENDS ON THE DATE UTILIZED. THEY ARE:
- SEEDING SCHEDULE FOR TEMPORARY COVER FDING RATE ANNUAL RYEGRASS 100% 1 LB./1000 SF MAR 1 TO JUNE 1
- WINTER RYE 100% 4.0 LBS./1000 SF AUG. 15 TO OCT. 15
- STRAW MULCH SHALL BE REQUIRED IN ALL DISTURBED AREAS AND APPLIED AT 3 TONS/ACRE. STRAW AND HAY MULCH SHOULD BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION TO PREVENT BEING WINDBLOWN. A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO "CRIMP" THE STRAW OR HAY INTO THE SOIL - ABOUT 3 INCHES. THIS METHOD SHOULD BE LIMITED TO SLOPES NO STEEPER THAN 3H:1V. THE MACHINERY
- SHOULD BE OPERATED ON THE CONTOUR. MULCH ON SLOPES OF 8% OR STEEPER SHOULD BE HELD IN PLACE WITH NETTING. LIGHTWEIGHT PLASTIC, FIBER, OR PAPER NETS MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. FERTILIZER MIX OF 10 - 10 - 10 AT AN APPLICATION RATE OF 500 LB./ACRE SHALL BE USED WITH TEMPORARY
- G. LIME RATES OF 1 TON/ACRE OF AGRICULTURAL GRADE LIME SHALL BE USED WITH TEMPORARY SEEDING.
- ALL AREAS SHALL BE TEMPORARILY STABILIZED UPON CESSATION OF WORK FOR 4 DAYS OR MORE, OR AS SOON AS ANY DISTURBED AREA REACHES ITS FINAL GRADE.

PERMANENT SEEDING SPECIFICATIONS

- 1. ALL DISTURBED AREAS THAT ARE NOT TO BE PAVED SHALL BE COVERED WITH GRASS OR A LEGUME IN ORDER TO MINIMIZE EROSION, UNLESS OTHERWISE DIRECTED BY THE OWNER. MULCHING SHALL BE USED TO PROTECT SEEDING AND HELP IN PREVENTING RUNOFF.
- A. CLEAN STRAW MULCH SHALL BE REQUIRED IN ALL DISTURBED AREAS AND APPLIED AT A RATE OF 3 TONS/ACRE (EQUIVALENT TO 0.75" TO 1" DEEP). CLEAN STRAW MULCH SHOULD NOT BE FINELY CHOPPED OR BROKEN DURING APPLICATION. STRAW AND HAY MULCH SHOULD BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION TO PREVENT
- BEING WINDBLOWN, A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO "CRIMP" THE STRAW OR HAY INTO THE SOIL - ABOUT 3 INCHES. THIS METHOD SHOULD BE LIMITED TO SLOPES NO STEEPER THAN 3H:1V. THE MACHINERY SHOULD BE OPERATED ON THE CONTOUR. POLYMERIC AND GUM TACKIFIERS MIXED AND APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS
- MAY BE USED TO TACK MULCH. SYNTHETIC BINDERS, OR CHEMICAL BINDERS, MAY BE USED AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH PROVIDED SUFFICIENT DOCUMENTATION IS PROVIDED TO SHOW THEY ARE NON-TOXIC TO NATIVE PLANT AND ANIMAL SPECIES.
- MULCH ON SLOPES OF 8% OR STEEPER SHOULD BE HELD IN PLACE WITH NETTING, LIGHTWEIGHT PLASTIC, FIBER, OR PAPER NETS MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- SHREDDED PAPER HYDROMULCH SHOULD NOT BE USED ON SLOPES STEEPER THAN 5%. WOOD FIBER HYDROMULCH MAY BE APPLIED ON STEEPER SLOPES PROVIDED A TACKIFIER IS USED. THE APPLICATION RATE FOR ANY HYDROMULCH SHOULD BE 2,000 LB/ACRE AT A MINIMUM.
- 3. SEED MIXTURES ARE FROM THE PENN STATE AGRONOMY GUIDE. THE SEED MIXTURES SHALL CONSIST OF:

SEED TYPE	<u>% BY WT.</u>	SEEDING RATE	SEEDING DATES
KY. BLUEGRASS	30%	4 LBS./1000 SF	AUG. 15 TO OCT. 15
CREEP RED FESCUE	55%		
PERENNIAL RYEGRASS	15%		

FOR FURTHER INFORMATION ON SEED MIXES, SEE THE E & S WORKSHEETS IN THE CHAPTER 102 REGULATIONS. 5. CONTRACTOR SHALL EVALUATE SOIL ACIDITY. ALL SOILS WITH A PH LESS THAN 5.5 SHALL BE TREATED WITH LIME AT 6

- TONS/ACRE. 6. IN THE ABSENCE OF SOIL TESTING, FERTILIZER OF 10-20-20, AT AN APPLICATION RATE OF 1000 LB./ACRE SHALL BE USED
- WITH PERMANENT SEEDING. IN THE ABSENCE OF SOIL TESTING, LIME RATES OF 6 TONS/ACRE OF AGRICULTURAL GRADE LIME SHALL BE USED WITH
- PERMANENT SEEDING.

EROSION AND SEDIMENT CONTROL NOTES GENERAL NOTES

- 1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
- 2. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
- 3. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS F&S PLAN.
- 4. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE EARTH DISTURBANCE ACTIVITY. OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
- 5. IN ORDER TO MINIMIZE SOIL COMPACTION IN NON-STRUCTURAL AREAS, THE CONTRACTOR SHALL UTILIZE SMALLER, TRACKED EQUIPMENT WHEN POSSIBLE, IN PLACE OF STANDARD HEAVY EARTHMOVING MACHINERY
- 6. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION(S) SHOWN ON THE PLAN MAP(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS AND STABILIZED IN ACCORDANCE WITH THE DETAILS INCLUDED ON THIS PLAN. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
- 8. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
- 10. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, THROUGH A SEDIMENT CONTROL BEST MANAGEMENT PRACTICE SUCH AS A PUMPED WATER FILTER BAG OR EQUIVALENT SEDIMENT REMOVAL FACILITY. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE OVER UNDISTURBED VEGETATED AREAS.
- 11. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT. REPAIR. REPLACEMENT. REGRADING. RESEEDING. REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED
- 12. A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
- 13. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER. 14. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN
- DRAWINGS. 15. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE
- OR OTHER RELATED PROBLEMS, FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES. 16. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS, OR AS OTHERWISE SPECIFIED IN THE GEOTECHNICAL REPORT FOR THE PROJECT SITE.
- 17. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS
- 18. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- 19. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES. 20. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- 21. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
- IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT. THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS. MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRAD WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS
- 23. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED FROSION, CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING. SUDING, OR OTHER MOVEMENTS
- 24. E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
- 25. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPS.
- 26. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPS. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
- 27. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.
- 28. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.
- 29. ALL CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION, AND CONSTRUCTION MATERIAL/WASTES.
- 30. SEDIMENT BASINS AND/OR TRAPS SHALL BE KEPT FREE OF ALL CONSTRUCTION WASTE, WASH WATER, AND OTHER DEBRIS HAVING POTENTIAL TO CLOG THE BASIN/TRAP OUTLET STRUCTURES AND/OR POLLUTE THE SURFACE WATERS.
- 31. SEDIMENT TRAPS SHALL BE PROTECTED FROM UNAUTHORIZED ACTS BY THIRD PARTIES. 32. ANY DAMAGE THAT OCCURS IN WHOLE OR IN PART AS A RESULT OF BASIN OR TRAP DISCHARGE SHALL BE IMMEDIATELY REPAIRED BY THE PERMITTEE IN A PERMANENT MANNER SATISFACTORY TO THE MUNICIPALITY, LOCAL CONSERVATION DISTRICT, AND THE OWNER OF THE DAMAGED PROPERTY.
- 33. UPON REQUEST, THE APPLICANT OR HIS CONTRACTOR SHALL PROVIDE AN AS-BUILT (RECORD DRAWING) FOR ANY SEDIMENT BASIN OR TRAP TO THE MUNICIPAL INSPECTOR, LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT 34. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER WITHIN 50 FEET OF
- A SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS. 35. UPON COMPLETION OF AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY, THE
- SITE SHALL BE IMMEDIATELY SEEDED, MULCHED OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION. EROSION AND SEDIMENT CONTROL BMP'S SHALL BE IMPLEMENTED AND MAINTAINED UNTIL THE PERMANENT STABILIZATION IS COMPLETED. FOR AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY TO BE CONSIDERED PERMANENTLY STABILIZED, THE DISTURBED AREAS SHALL BE COVERED WITH ONE OF THE FOLLOWING: (1) A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION. (2) AN ACCEPTABLE BMP WHICH PERMANENTLY MINIMIZES ACCELERATED EROSION AND SEDIMENTATION.
- 36. ALL SUPPLIES AND MATERIALS NECESSARY TO IMPLEMENT E&S AND/OR PCSM PLAN SHALL BE READILY AVAILABLE PRIOR TO THE ANTICIPATED CONSTRUCTION OF EACH BMP.
- 37. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE

THERMAL IMPACTS ANALYSIS

- 1. THE TEMPERATURE EXTREMES OF STORMWATER RUNOFF CAN SIGNIFICANTLY EFFECT A RECEIVING STREAM'S AQUATIC HABITAT. IMPERVIOUS SURFACES, ESPECIALLY ASPHALT, TEND TO ABSORB HEAT AND LACK THE
- COOLING PROPERTIES OF VEGETATION. THE DISCHARGE POINTS FROM CONVEYANCE FACILITIES, AS WELL AS THE DESIGN OF PCSM BMPS, SHOULD PROVIDE MITIGATION MEASURES FOR THERMAL IMPACTS PRIOR TO
- STORMWATER RUNOFF REACHING A RECEIVING WATERCOURSE. PROPOSED MEASURES TO MITIGATE OR MINIMIZE THE TEMPERATURE CHANGES OF STORMWATER RUNOFF FROM THE DEVELOPMENT INCLUDE A.)
- VEGETATIVE SYSTEMS, BUFFERS OR BMPS TO REPLACE SECTIONS OF PIPE THAT MAY IMPART HEAT TO RUNOFF, B.) INTEGRATING ROADSIDE VEGETATED SWALES WITHIN AN AREA OF DEVELOPMENT, WHERE PRACTICAL, TO
- HELP REDUCE THE TEMPERATURE OF RUNOFE FROM ROADWAYS, AND C.) PRESERVING EXISTING SHADE TREES.
- AND VEGETATION, WHERE PRACTICAL, AND PROPOSING ADDITIONAL VEGETATIVE COVER TO LOWER THE AMBIENT TEMPERATURE OF THE IMPERVIOUS AREAS. THE INTRODUCTION OF SUCH MEASURES WILL GREATLY REDUCE THE THERMAL IMPACTS OF EXISTING OR PROPOSED DEVELOPMENTS AND ENSURE THAT THE
- DOWNSTREAM RECEIVING WATERCOURSE IS PROTECTED

APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER **RESOURCES. CHAPTER 102. EROSION CONTROL.** 38. THE CONTRACTOR MAY NOT BEGIN CONSTRUCTION UNTIL ALL REQUIRED PERMITS HAVE BEEN ISSUED BY

THE CONSERVATION DISTRICT OR PA DEP. IT IS THE CONTRACTORS' RESPONSIBILITY TO VERIFY WITH RGS ASSOCIATES, PRIOR TO BEGINNING CONSTRUCTION, THAT THE MOST CURRENT APPROVED PLANS ARE BEING UTILIZED. 39. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT

SITE AT ALL TIMES. THE COUNTY CONSERVATION DISTRICT SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE DISTRICT MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.

MAINTENANCE PROGRAM

1. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT CONTROL BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS BY QUALIFIED PERSONNEL, TRAINED AND EXPERIENCED IN FROSION AND SEDIMENT CONTROL. TO ENSURE FACILITIES ARE OPERATIONAL AND EFFECTIVE IN PREVENTING POLLUTION TO THE WATERS OF THE COMMONWEALTH. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF ANY FACILITIES ARE FOUND TO BE INOPERATIVE OR INEFFECTIVE, THE REVIEWING AGENCY SHALL BE NOTIFIED BY PHONE OR PERSONAL CONTACT, AND REPLACEMENT BMP'S, OR MODIFICATIONS TO THOSE INSTALLED WILL BE REQUIRED.

2. THE PERMITTEE AND CO-PERMITTEE MUST ENSURE THAT VISUAL SITE INSPECTIONS ARE CONDUCTED WEEKLY, AND AFTER EACH MEASURABLE PRECIPITATION EVENT (0.25 INCHES) BY QUALIFIED PERSONNEL, TRAINED AND EXPERIENCED IN EROSION AND SEDIMENT CONTROL, TO ASCERTAIN THAT THE EROSION AND SEDIMENT CONTROL (E&S) BMP'S ARE OPERATIONAL AND EFFECTIVE IN PREVENTING POLLUTION TO THE WATERS OF THE COMMONWEALTH. A WRITTEN REPORT OF EACH **INSPECTION SHALL BE KEPT, AND INCLUDE:**

(1) A SUMMARY OF SITE CONDITIONS, E&S BMP'S, AND COMPLIANCE; AND (2) THE DATE, TIME, AND THE NAME OF THE PERSON CONDUCTING THE INSPECTION. SPECIFIC MAINTENANCE REQUIREMENTS FOR THE RESPECTIVE FACILITIES ARE AS FOLLOWS:

- A). SWALES
 - REPAIR ANY DAMAGE TO MATTING ON THE SWALE. • IF SEEDING HAS BEEN WASHED AWAY, RE-SEED AS ORIGINALLY SPECIFIED. PROBLEM AREAS SHALL BE SODDED. ANY ACCUMULATED SEDIMENT SHALL BE REMOVED.
 - B). MULCHING • ANY MULCHING WASHED AWAY SHALL BE REPLACED IN KIND AND TACKED.
 - C). FILTER SOCK REPAIR ANY DAMAGE (KNOCKED DOWN SECTION OR UNDERMINED TOE).
 - REPLACE ANY SECTIONS WHICH ARE UNABLE TO BE REPAIRED. • REMOVE SILT WHEN UP TO 1/2 HEIGHT OF SOCK.
 - D). ROCK CONSTRUCTION ENTRANCE • MAINTAIN THE THICKNESS OF THE STRUCTURE WITH A SUPPLY OF AASHTO #1 STONE ON-SITE. AT THE END OF DAY OR MORE OFTEN AS NEEDED. ALL SEDIMENT LOCATED ON ADJACENT
 - ROADS SHALL BE REMOVED (WITHOUT WATER) AND DEPOSITED ON-SITE. E). STOCKPILES ANY FILTER SOCK BELOW THESE PILES THAT IS KNOCKED DOWN OR UNDERMINED SHALL BE REPLACED WITH STONE FILTER OUTLETS.
 - ANY SEEDING WASHED AWAY SHALL BE REPLACED. F). INLET PROTECTION
 - REMOVE SILT WHEN ACCUMULATION REACH 1/2 THE HEIGHT OF INLET PROTECTION. REPAIR ANY DAMAGE AND MAINTAIN HEIGHT. G). SEDIMENT TRAPS/BASINS
 - INSPECT ALL SEDIMENT TRAPS OR BASINS AT LEAST WEEKLY AND AFTER EACH RUNOFF
 - FVFNT • PROVIDE ACCESS FOR SEDIMENT REMOVAL AND OTHER REQUIRED MAINTENANCE
 - ACTIVITIES. • REMOVE SEDIMENT AND RESTORE THE TRAP/BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO THE LEVEL SHOWN ON THE SEDIMENT CLEAN-OUT
 - STAKE. DISPOSE OF ACCUMULATED MATERIAL CHECK TRAP/BASIN FOR DAMAGE AND IMMEDIATELY REPAIR.
 - MOW VEGETATION ON BERM AS NEEDED. H). SEDIMENT FILTER BAGS
 - A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE MAINTAINED.
 - FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.
 - I). CONCRETE WASHOUT FACILITIES ALL CONCRETE WASHOUT FACILITIES SHOULD BE INSPECTED DAILY.
 - DAMAGED OR LEAKING WASHOUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY. ACCUMULATED MATERIALS SHOULD BE REMOVED WHEN THEY REACH 75% CAPACITY.
 - PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY
 - J). SEDIMENT BASIN/TRAP BAFFLES DAMAGED OR WARPED SHOULD BE REPLACED WITHIN 7 DAYS OF INSPECTION
- WHEN SEDIMENT IS REMOVED FROM THE VARIOUS FACILITIES. IT SHALL BE PLACED IN AREAS ADJACENT TO STOCKPILES. FILTER SOCK SHALL BE PLACED DOWNHILL FROM THE PILE. IMMEDIATELY COVER WITH PLASTIC SHEETING AND ANCHOR FIRMLY OR STABILIZE WITH SEED, LIME, FERTILIZE AND MULCH. THIS MATERIAL CAN BE USED AS FILL MATERIAL AND INCORPORATED INTO THE SITE GRADING
- 5. REFER TO THE EROSION AND SEDIMENTATION CONTROL DETAILS FOR SPECIFIC INFORMATION REGARDING THE CONSTRUCTION, INSPECTION SCHEDULE, SEDIMENT CLEANOUT LEVELS, REPAIR PARAMETERS AND TIME FRAMES, AND DIRECTIONS FOR SEDIMENT REMOVAL ASSOCIATED WITH PROPOSED F&S BMP'S
- 6. SOME OF THE FACILITIES MAY HAVE TO BE EXTENDED OR SUPPLEMENTED DUE TO UNFORESEEN SITE SPECIFIC SITUATIONS. STEPS SHALL BE TAKEN TO ENSURE THAT SEDIMENT LADEN RUNOFF IS PREVENTED FROM FLOWING FROM THESE AREAS BY USING THE MEASURES NOTED HEREIN.
- 7. CONTRACTOR SHALL ENSURE THAT PROPER MECHANISMS ARE IN PLACE TO CONTROL WASTE MATERIALS THAT COULD ADVERSELY IMPACT WATER QUALITY. DISPOSAL OR RECYCLING OF EXCESS
- MATERIAL SHALL BE PERFORMED IN ACCORDANCE WITH DEPARTMENT REGULATIONS. 8. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE AND THE PREVENTION OF SEDIMENT

RECYCLING AND DISPOSAL SPECIFICATIONS

RUNOFF FROM ENTERING ADJACENT PROPERTIES.

- THE RECYCLING AND DISPOSAL OF MATERIAL ASSOCIATED WITH THE INSTALLATION, CONVERSION, REMOVAL AND/OR MAINTENANCE OF THE PCSM BMPS IS ANTICIPATED TO INCLUDE SEDIMENT, VEGETATION, PLASTIC CONVEYANCE PIPING, RIP-RAP, ARBITRARY DEBRIS, AND/OR ANY PACKAGING ASSOCIATED WITH MATERIALS UTILIZED IN THE CONSTRUCTION OF THE PCSM BMP. ANY SEDIMENT REMOVED FROM THE AREA OF THE PROPOSED PCSM BMP. OR FROM A PREVIOUSLY INSTALLED FACILITY BEING CONVERTED AS PART OF THE CONSTRUCTION AND INSTALLATION OF THE PCSM BMP, SHALL BE PLACED IN A LOCATION ON-SITE AND IMMEDIATELY STABILIZED TO MINIMIZE THE POTENTIAL FOR ACCELERATED EROSION. APPROPRIATE EROSION AND SEDIMENTATION CONTROL MEASURES, IMPLEMENTED IN ACCORDANCE WITH CURRENT CHAPTER 102 REGULATIONS. SHALL BE IN PLACE TO PREVENT SEDIMENT LADEN RUNOFF FROM LEAVING THE DISTURBED AREA. ANY EXISTING VEGETATION SHALL BE COMPOSTED ON-SITE. WHEN PRACTICAL. OR TRANSPORTED TO AN APPROPRIATE FACILITY ABLE TO ACCEPT MATERIAL OF THIS NATURE. THE REMOVAL OF PREVIOUSLY INSTALLED CONVEYANCE PIPING OR RIP-RAP, ARBITRARY DEBRIS, AND/OR ANY PACKAGING ASSOCIATED WITH MATERIALS UTILIZED IN THE INSTALLATION OF THE PCSM BMPs. SHALL BE REMOVED OR RECYCLED IN ACCORDANCE WITH ANY AND ALL APPLICABLE STATE OR FEDERAL REGULATIONS. NO MATERIALS OR WASTES OR UNUSED MATERIALS FROM PCSM BMP INSTALLATION SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
- CONSTRUCTION WASTE IS ANTICIPATED TO INCLUDE TYPICAL BUILDING MATERIALS (I.E. LUMBER, DRYWALL, MASONRY, CARDBOARD AND PAPER, INSULATION, ASPHALT ROOFING, PLASTIC AND VINYL, PAINTS, STAINS, SOLVENTS AND SEALANTS, ETC.). IT IS STRONGLY ENCOURAGED THAT SUCH RECOVERABLE WASTE MATERIALS BE SEPARATED AND APPROPRIATELY RECYCLED. NO POTENTIALLY TOXIC OR HAZARDOUS WASTE IS KNOWN TO BE PRESENT ON-SITE. IF ANY TOXIC OR HAZARDOUS WASTE IS ENCOUNTERED, THE CONTRACTOR SHALL FOLLOW ANY AND ALL APPLICABLE STATE OR FEDERAL REGULATIONS ASSOCIATED WITH THE DISPOSAL OF SUCH MATERIALS.
- ALL MATERIALS AND WASTES ASSOCIATED WITH PCSM BMP INSTALLATION AND/OR BUILDING CONSTRUCTION SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1., AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE
- THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF ANY EXCESS MATERIAL AND MAKE SURE THE SITE(S) RECEIVING THE EXCESS HAS AN APPROVED AND FULLY IMPLEMENTED EROSION AND SEDIMENT CONTROL PLAN THAT MEETS THE CONDITIONS OF CHAPTER 102 AND/OR OTHER STATE OR FEDERAL REGULATIONS. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSABLE, INERT, SOLID MATERIAL, THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR
- CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM OTHER WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED. (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHALT THAT HAS BEEN PROCESSED FOR RE-USE.). ANY PLACEMENT OF CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE
- MUST USE FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL
- ENVIRONMENTAL DUE DILIGENCE MUST BE PERFORMED TO DETERMINE IF THE FILL MATERIALS ASSOCIATED WITH THE PROJECT QUALIFY AS CLEAN FILL. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES. REVIEW OF PROPERTY OWNERSHIP. REVIEW OF PROPERTY USE HISTORY. SANBORN MAPS. ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF A REGULATED SUBSTANCE. JE THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE. IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF THE DEPARTMENT'S POLICY "MANAGEMENT OF FILL". FILL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE DEPARTMENT'S MUNICIPAL OR RESIDUAL WASTE REGULATIONS BASED ON 25 PA. CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE. THESE REGULATIONS ARE AVAILABLE ON-LINE AT WWW.PACODE.COM.

							REVISION
							NO. DATE
NER, PE	снкр ву: DWB		CHKD BY:	DWB		DATE 11/27/2023	
MANAGER: DAVID BIT	DESIGN BY: DWB		DRAWN BY:	DWB		SURV. CHIEF: TRIMBLE	
CLIENT	HEAKI HFIKE HOLDINGS	203 E. IVIANNEI JINEEI, JIE 102 Mutet cuiteten na 10303	WESI CHESIEK, PA 19382	717-884-4687	SCALE	AS NOTED	
	(T) Bitner				711 Speedwell Forge Kd • Lititz, PA 17543	717.368.1169 • dave@bitnerengineering.com	
TITLE DRFI ΜΙΝΔRV/FINAL DI ΔΝ	FOR					EROSION & SEDIMENT CONTROL NOTES	MOUNT JOY TOWNSHIP LANCASTER COUNTY, PA
SHEET	NO	ES 20	14)23	OF	-01	19)1	_
JUD. N		21		_00	50	-	









HEIGHT OF ROCK FILTER=5/6 HEIGHT OF STRAW BALES OR FILTER FABRIC -----FENCE

NOTES:



EROSION CONTROL BLANKET INSTALLATION

NO SCALE

UP - SLOPE FACE

A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ AND EV WATERSHEDS. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

STANDARD CONSTRUCTION DETAIL #4-6 **ROCK FILTER OUTLET**

NO SCALE



PLAN VIEW



ENTRANCE.





CHANNELS. 2. ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

RIP RAP APRON









PROPERTY	TEST METHOD	MINIMUM STANDARD			
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN			
GRAB TENSILE	ASTM D-4632	205 LB			
PUNCTURE	ASTM D-4833	110 LB			
MULLEN BURST	ASTM D-3786	350 PSI			
UV RESISTANCE	ASTM D-4355	70%			
AOS % RETAINED	ASTM D-4751	80 SIEVE			
A SOTTABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER F FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAG REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED. BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHEI UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPAC GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BI STEEPNESS. NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE. THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECUF RECOMMENDED FOR THIS PURPOSE. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEV SCREENED. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME					

NOTES: OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE

BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 GS SHALL BE PLACED ON STRAPS TO FACILITATE

RE THIS IS NOT POSSIBLE, A GEOTEXTILE CITY. BAGS SHALL NOT BE PLACED ON SLOPES E PLACED UNDER THE BAG TO REDUCE SLOPE

L BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV

RELY CLAMPED. A PIECE OF PVC PIPE IS

VER IS LESS. PUMP INTAKES SHALL BE FLOATING AND

DISSIPATER

SIZE

(R-)

N/A

THICK.

DRt

N/A

LENGTH WIDTH RIPRAP

Dw

(FT)

N/A

E UNTIL THE PROBLEM IS CORRECTED.



CHANNEL

(FT)

DEPTH

Cd

(FT)

(FT)

N/A

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OF COUNSEL WILLIAM C. CROSSWELL RANDALL K. MILLER

December 3, 2023

VIA EMAIL

Justin S. Evans, AICP, Community Development Director/Zoning Officer Mount Joy Township 8853 Elizabethtown Road Elizabethtown, PA 17022

> Re: Preliminary/Final Land Development Plan for Cloverleaf Self-Storage Our File No. 10221-1

Dear Justin:

I have been provided with a copy of the Preliminary/Final Land Development Plan for Cloverleaf Self-Storage (the "Plan") and supporting information. The Plan relates to a tract of land on the east side of Cloverleaf Road identified as 1444 Cloverleaf Road (the "Property") which is presently developed with three buildings containing storage units and three additional buildings used as a contractor's office and associated contractor storage. This letter will set forth comments on the Plan.

The Plan does not correctly identify either the landowner or the source of title. The cover sheet states that the landowner is "Lancaster Portfolio, LLC" and the source of title is a deed recorded at Document No. 5971230. Sheet 3 of the Plan indicates that the landowner is Greentree Self Storage, LP by a deed recorded at Document No. 5791230. Numerous other sheets of the Plan also identify the landowner as Greentree Self Storage, LP.

The Application submitted by Bitner Engineering states that the landowner is Greentree Self Storage, LP. The letter with the application from Bitner Engineering states that it is making the filing "on behalf of Hearthfire Holdings". According to the website of the Corporation Bureau, "Hearthfire Holdings, LLC" is a limited liability company. It has a website that indicates that its mailing address is 239 East Market Street, Suite 102, West Chester, which is the address listed for Greentree Self Storage on the application.

According to the website of the Office of the Recorder of Deeds, the property is owned by "Lancaster Portfolio I, LLC" by a deed recorded at Document No. 6578969. Lancaster Portfolio I, LLC is a Delaware limited liability company authorized to do business in the Commonwealth. All Plan sheets should be corrected to identify the landowner as Lancaster Portfolio I, LLC and

Justin S. Evans, AICP, Community Development Director/Zoning Officer December 3, 2023 Page 2

the source of title as the deed at Document No. 6578969. There must be a revised application clearly indicating the identity of the landowner, the identity of the applicant, and some proof that whoever the applicant is has the permission of the landowner to make the application.

The information concerning adjoining property owners must also be updated on the Plan. 1532 Cloverleaf Road, which the Plan indicates is held by John R. & Kathryn K. Musser, is owned by Daniel Lee Beiler and David L. Beiler by a deed recorded at Document No. 6754104. 1362 Cloverleaf Road, which the Plan indicates is held by Myron P. Shevell, is held by 1362 Clover Leaf Road, L.P., by a deed recorded at Document No. 6592311.

The Plan proposes to remove the two existing buildings used for contractor storage and replace them with a single building of 20,344 square feet identified as Building A and also to install four additional buildings for storage units (the "New Storage Units") together with off-street parking and circulation. The New Storage Units will be located partially within the existing storm water management easement created by the Final Land Development Plan for Brandt Mini-Storage recorded at Subdivision Plan Book J-218, Page 87 (the "2003 Plan"), and governed by the Storm Water Management Agreement and Declaration of Easement relating to the 2003 Plan recorded at Document No. 5275020 in the Office of the Recorder of Deeds. There must be a new Storm Water Management Agreement for the Plan. That Storm Water Management Agreement should contain a paragraph stating that the Storm Water Management Agreement recorded at Document No. 5275020 has no further force and effect. The new Storm Water Management Agreement should apply to all facilities shown on the Plan, both existing facilities which will remain and new storm water management facilities which will be constructed.

According to the website of the Office of the Recorder of Deeds, Univest Bank and Trust Co. holds a mortgage against the property recorded at Document No. 6578970. Univest will have to execute a Joinder by Mortgagee for the Storm Water Management Agreement.

The southeast portion of the Property contains wetlands, and there is also an area of wetlands at the northeast corner of the Property. Sheet 5 of the Plan includes the areas of wetlands within a conservation easement. There should be a recorded Agreement Providing for Grant of Conservation Easement. Univest will have to execute a Joinder by Mortgagee to that document.

General Note 6 states that the Property lies within a 100 year floodplain (Zone AE), but the Plan does not identify the location of the floodplain. The floodplain should be clearly identified on the Plan.

The Property is served by an on-lot sewage disposal system. The Plan shows the existing "septic field". There is no tested replacement location shown. The Township's Individual and Community On-Lot Sewage System Ordinance, codified as Article VI of Chapter 100, Sewers, of the Code of Ordinance, requires that each person who files an application for land development

Justin S. Evans, AICP, Community Development Director/Zoning Officer December 3, 2023 Page 3

approval shall demonstrate that a tested replacement location exists. There must be a tested replacement location, and it must be clearly designated on the Plan.

The Plan proposes dedication of additional right-of-way along Cloverleaf Road to the Township. There should be an Agreement Providing for Grant of Public Right-of-Way with a legal description for the additional right-of-way. If it is easier, the legal description can include the entire area of the property within the existing right-of-way of Cloverleaf Road as well as the additional right-of-way. Univest will have to execute a release for the Agreement Providing for Grant of Public Right-of-Way.

If you have any questions concerning these comments, please contact me.

Very truly yours,

Josele Cleary

JC:sle MUNI\10221-1(7)\231201\71

Ryan Minnich, Township Manager (via e-mail) cc: Patricia J. Bailey, Secretary (via e-mail) Benjamin S. Craddock, P.E. (via e-mail) David Bitner, PE, Project Manager (via e-mail) December 22, 2023

Ryan Minnich Township Manager Mount Joy Township 8853 Elizabethtown Road Elizabethtown, PA 17022

Via email: Justin@mtjoytwp.org

Re: Cloverleaf Self-Storage Preliminary/Final Land Development Plan Township Permit No. 23-12-FLDP LCEC Project No: 25-162

Dear Mr. Minnich,

We have received a land development plan submission from Bitner Engineering for the abovereferenced project. The submission consisted of the following documents:

- Submission cover letter dated November 27, 2023
- Modification/waiver request letter dated November 27, 2023
- Proposal for Traffic Engineering Services dated August 7, 2023
- Mount Joy Township Zoning Hearing Board Decision dated July 12, 2023
- Preliminary/Final Land Development Plan dated November 27, 2023
- Stormwater Management Report dated November 27, 2023
- Wetland Investigation dated November 13, 2023
- Geotechnical Engineering Report dated July 9, 2021
- Geotechnical Engineering Field Reports dated July 29, 2022

Based upon my review of the submitted information, I offer the following comments for the Township to consider:

Zoning Ordinance

- 1. At a Zoning Hearing Board meeting on July 5, 2023, the Board granted the following:
 - a. Special Exception per Section 135-163.D to modify the prior special exception approvals to develop a miniwarehouse facility.
 - b. Variance from Section 135-245.F to exceed the maximum building area.
 - c. Variance from Section 135-165.(A)(1) to permit a building less than the minimum building height.
- 2. The proposed building heights shall be added to the Zoning/Site Data table (135-165.A).
- 3. The setbacks for off-street parking, outdoor storage areas, loading areas for front and rear yards shall be added to the Zoning/Site Data table (135-165.E(1)(c) & 135-165.E(3)).
- 4. The Zoning/Site Data table shall reference all areas included in the side yard setback requirements (e.g. off-street parking, outdoor storage areas, loading areas, etc.) (135-165.E(2)).

- 5. The rear yard setback shall be labeled and dimensioned (135-165.E(3)).
- 6. The minimum separation distance between buildings shall be added to the Zoning/Site Data table (135-245.C).
- 7. If lighting is proposed, an exterior lighting plan shall be submitted (135-298.D).
- 8. The total area of the landscape strip (22,050 sf) shown in the Landscape Buffer And Screening Notes is inconsistent with the total area shown in the landscaping strip notes in the plan view (26,910 sf) (135-299.B(3)).
- 9. The proposed landscape strip trees shall be distributed along the front yard and the southern side yard where there are no existing trees (135-299.B(3)).
- 10. All nonresidential uses shall contain a landscape screen when such use is adjacent to a residential zone (135-299.C(1)). It appears a portion of the northern property line along the John R. & Katherine K. Musser property does not meet this requirement. The applicant shall confirm whether existing trees to remain meet this requirement or if additional trees need to be installed.
- 11. The applicant shall enter into a recordable agreement with the Township providing for the permanent maintenance of the riparian corridor, in a form acceptable to the Township Solicitor (135-306.F).
- 12. The 25 foot buffer surrounding the wetlands boundary shall be labeled and dimensioned on the plans (135-307.B). The applicant shall enter into a recordable agreement with the Township providing for the permanent maintenance of the wetland area, in a form acceptable to the Township Solicitor (135-307.E).
- 13. The applicant shall confirm whether an office area use should be included in the Parking Calculations shown on the Cover Sheet (135-343.C(10)).
- 14. The entire loading/unloading area shown on Sheet 4 shall be dimensioned (135-346).

Subdivision and Land Development Ordinance

15. A preliminary plan is required (119-25). The applicant has requested a modification of this requirement.

<u>Modification response</u>: The applicant proposes to process this as a preliminary/final plan which includes both preliminary and final plan requirements. This project is not phased and construction of public improvements is not scheduled to begin prior to plan recordation, therefore I have no objection to this modification.

- 16. There are several instances of overlapping/obscured text that shall be resolved (119-31.A(4)).
- 17. The plans shall be signed and sealed by a registered engineer, surveyor or landscape architect (119-31.A(5)).
- 18. The name of the owner for the subject tract shown on the Cover Sheet is inconsistent with the name of the owner shown on the plan sheets. The address of the owner of the subtract tract shown on the Cover Sheet is inconsistent with the address of the owner shown in County records (119-31.B(3)).
- 19. The location of the zoning district boundary lines shall be shown and labeled on the plans (119-31.B(9)).
- 20. The source of title (i.e. deed reference) shown on the plans shall be corrected to Instrument #: 6578969 (119-31.B(10)).

- 21. The Previous Plan Approvals list on the cover sheet shall have a verification signed by the design professional that such list is complete and correct (119-31.B(14) & 119-51.C).
- 22. The names and deed references of the adjacent landowners along the northern and southern property lines shall be corrected (119-31.C(2)).
- 23. Existing features within 200 feet of the subject tract shall be shown on the plans (119-31.C(3) & 113-43.I(5)).
- 24. The existing right-of-way shall be dimensioned at each change in right-of-way width (119-31.C(3)(a)).
- 25. The existing access drive shall be dimensioned (119-31.C(4)(a)).
- 26. The existing sanitary sewer lateral and water service lines shall be shown (119-31.C(4)(b) & 113-43.I(2)).
- 27. Watercourses 1 through 3 delineated in the wetland investigation dated November 13, 2023 shall be shown on the plans (119-31.C(5)).
- 28. General Note 6 on Sheet 2 of the plans shall be deleted or revised since no floodplain is located on the subject tract (119-31.C(5)).
- 29. The total number of lots, units of occupancy and density shall be provided on the plans (119-31.D(3)).
- 30. There appear to be existing trees that should be shown on the plan. Some of the trees not currently shown on the plan will need to be removed for the proposed features to be constructed. The existing trees to be removed and to remain shall be clearly shown on the plans (119-31.D(6) & 113-43.I(3)).
- 31. The plans should clarify whether each corner is already in place (FD) or to be set (119-31.D(14). The existing and proposed lot markers and monuments shall be labeled or included in the legend.
- 32. A water and sewer feasibility report shall be provided (119-32.A & 119-35.E(3)(b)). The applicant has requested a waiver of this requirement.

<u>Waiver response</u>: The subject tract currently has on-lot sewer and water. The waiver request indicates that a bathroom is proposed in the new building. A water and sewer feasibility study should be provided to confirm the availability of public service and to determine whether the proposed development is required to connect to public sewer and water as per Section 119-60.A & 119-60.B.

- 33. Environmental Note 1 shall be corrected (119-32.B).
- 34. A PDNI search shall be included in the wetlands study (119-32.B).
- 35. A traffic impact study is required since the development is a nonresidential development with a building in excess of 1,000 square feet of usable space. The developer intends to make a contribution in lieu of traffic study (119-32.C(2) & 119-32.C(6)). The applicant has requested a modification of the requirement to make a contribution in lieu of traffic study.

<u>Modification response</u>: The applicant is requesting that a contribution in lieu of a traffic study be provided. Per Section 119-32.C(6), the estimated contribution shall be \$1.50 per square foot of usable building floor area. The applicant has provided an August 7, 2023 proposal from Transportation Resource Group, Inc. for a Traffic Impact Study and has requested the total cost of \$5,500.00 listed on the proposal be considered the contribution in lieu of a traffic study.

I have no objections to using the proposal as the contribution in lieu of a traffic study provided the proposal includes costs for the following requirements:

- a. The traffic area shall include all streets and major intersections within the area in a onehalf-mile concentric circle around each entrance to the proposed development (e.g Hereford Road, Cloverleaf Road, Mount Pleasant Road, etc.).
- b. Providing twenty-four-hour volume data for all streets which provide direct access to the proposed development and for the arterial and collector streets which serve the proposed development.
- c. The Saturday midday time shall be included in the manual turning movement counts (TMC).

In addition, the applicant shall satisfy the following requirements of this section:

- a. The contribution is in addition to traffic impact fees required under Chapter 125 and all other review fees.
- b. The applicant shall enter into an agreement with the Township setting forth the contribution in lieu of preparation of studies to be paid and the studies to be waived by the Township in a form acceptable to the Township Solicitor.
- c. All contributions shall be paid prior to recording of the final plan.
- 36. Bearings and distances shall be provided for the proposed right-of-way (119-35.D(1)).
- 37. The first floor elevations shall be provided for buildings B through E (119-35.D(5)).
- 38. All certificates shall be executed prior to final plan approval (119-35.E).
- 39. The Mount Joy Township Board of Supervisors Final Plan Approval Certificate shall be removed from the Cover Sheet (119-35.E(1)).
- 40. The certificate for the approval of the Mount Joy Township Planning Commission shall match Appendix No. 9 (119-35.E(1)(b)).
- 41. Written notice shall be provided from the DEP that approval of the sewer planning module has been granted or notice from the Department that such approval is not required (119-35.E(2)(a) & 119-60.A).
- 42. Township Note #1 indicates that "no areas on this plan which are offered for dedication to Mount Joy Township"; however, Sheets 4 and 6 indicate that street right-of-way is proposed (119-35.E(2)(d)).
- 43. Written notices from the emergency service providers that will serve as the primary responders for the land development shall be submitted indicating that the building layout is satisfactory and will not present any obstacles or other problems for emergency responders to the land development (119-35.E.(2)(h)).
- 44. Legal descriptions for easements to be dedicated to the Township shall be provided (119-35.E(4)(a)).
- 45. Legal descriptions for the right-of-way proposed for dedication to Mount Joy Township shall be provided (119-35.E(4)(b)).
- 46. A Stormwater Management Agreement and Declaration of Easement in a form acceptable to the Township Solicitor shall be executed and recorded (119-35.E(4)(c), 119-56.E & 113-62).
- 47. A land development agreement in a form acceptable to the Township Solicitor shall be executed (119-35.E(4)(f)).

- 48. A construction cost estimate and financial security shall be provided (119-41 & 113-60).
- 49. The frontage along Cloverleaf Road (a collector street) shall be improved in accordance with 119-52.J or as indicated on the Township Official Map, whichever is greater. Improvements shall include pavement widening (119-52.J(3)(a)). The required cartway width for a collector street outside of the urban growth area is 32 feet (i.e. 22 feet with 5-foot paved shoulders).
- 50. If the Township determines that the road improvements required by 119-52.J(3)(a) are not feasible at the time of development, the developer shall deposit funds with the Township in the amount of 110% of the cost of improvements, or the applicant shall enter into an agreement that would defer road improvements to a time the Township would deem such road improvements as feasible (119-52.J(3)(d)).
- 51. A note shall be provided which states that no structures, landscaping or grading may be constructed, installed or performed within the area of the clear sight triangle which would obscure the vision of motorists (119-52.L). Deeds to lots which contain clear sight triangles shall provide the same restrictions.
- 52. All subdivisions containing or nonresidential buildings containing 15,000 or greater of square feet of gross floor area shall be provided with at least two separate and distinct means of access (119-52.S(1)(a)).
- 53. The length for the parking spaces shall be shown on the plans (119-53.A(2)).
- 54. The bollard construction detail shall provide information consistent with the proposed bollards shown in the proposed concrete in front of Building A (119-53.B).
- 55. Sidewalks shall be a minimum of five feet wide per Appendix No. 16 (119-53.B(4)(b)).
- 56. The Concrete Sidewalk Detail shall indicate a 2% maximum cross slope (119-53.B(9)).
- 57. The Depressed Curb and Concrete Curb details shall include the 2B stone subbase per Appendix No. 16 (119-53.C(2)(a)).
- 58. The width of the contraction joint shown in Section 'A' of the Concrete Curb Detail shall be 3/16" (119-53.C(2)(a)).
- 59. The Concrete Curb Detail shall specify Class A Concrete per Appendix No. 16 (119-53.C(2)(a)).
- 60. The curb details shall include the requirement for expansion joints at 100 feet maximum (119-53.C(2)(a)).
- 61. General Note #8 shall be revised to include the entire easement statement (119-56.B). This note shall also be included in all deeds for lots which contain an easement.
- 62. Drainage easements shall be provided for the existing endwall and riprap apron and for the entire length of Swale 1. Access easements shall be provided. Requirements for the drainage easements shall be included in the new deed (119-56.E).
- 63. Three monuments shall be spaced around the proposed project, with at least two of the monuments placed as consecutive corners along the street right-of-way (119-57.B).
- 64. Lot line markers shall be set at the street right-of-way (119-57.D).
- 65. A note on the plans shall indicate when the monuments and lot markers are to be set (119-57.H).
- 66. The 100 year floodplain shall be established for all watercourses and delineated by a hydrologic report (119-58.B(1)).

- 67. Provide a landscape plan note indicating that the top of the main order root shall be planted no lower than one or two inches into the soil (119-59.B(1)).
- 68. Provide a landscape plan note indicating that all required landscape plants shall be maintained and guaranteed for a length of 18 months from the date of planting. No more than 1/3 of the tree or shrub shall be damaged or dead without replacement. Replacement plants shall conform to all requirements of this section and shall be maintained after replanting for an additional 18 months (119-59.C).
- 69. A replacement location for the on-lot sewage system shall be provided (if the Township determines connection to the public sewer is not required) (119-60.C(2)).
- 70. Any action taken on waiver requests, dates, and any conditions of approval shall be added to the cover sheet (119-91.C).

Stormwater Management Ordinance

- 71. Evidence of NPDES and E&S permit approval by the Lancaster County Conservation District shall be provided (113-31.D, 113-45.B & 113-45.C).
- 72. The following erosion and sediment control items shall be addressed (113-31.E & 113-43.K):
 - a. Additional compost filter sock shall be installed downslope from areas of disturbance.
 - b. The plans shall specify the type of slope matting proposed on the E&S plans.
 - c. The installation of the sediment basin skimmer and wearing course shall be included in the construction sequence.
 - d. The location of the inlet protection shown in the legend on Sheet 13 of the plans shall be shown on the plans.
- 73. It shall be demonstrated that a minimum depth of 24 inches is provided between the bottom of the facility and the limiting zone (113-31.L(1)). The applicant has requested a waiver of this requirement; however, this requirement only applies to infiltration BMPs. Since an MRC facility is not an infiltration BMP, this requirement does not apply, and the waiver should be withdrawn.
- 74. The plans shall incorporate the construction recommendations included on page 10 of the geotechnical engineering report (113-31.L(1)).
- 75. A minimum thirty-foot-wide access easement shall be provided for all stormwater facilities with tributary areas equal or greater than 1,000 square feet and not located within a public right-of-way (113-31.Q).
- 76. The Structural BMP Volume Credits table indicates ET credits are being used. Per the DEP PCSM Spreadsheet Instructions (rev. 9/13/2023), plug plantings are required for a BMP to quality for ET credit; however, only a seed mixture is shown on the bottom of the proposed MRC facility in the Stormwater Management Facility Detail (113-32).
- 77. The proposed MRC facilities shall be in accordance with the Manage Release Concept design standards as follows (113-32):
 - a. The soil depth above the proposed underdrain pipe invert for the stormwater facility shall be at least 24".
 - b. The designer should consider providing at least one to two feet of additional suitable soil media below the underdrain, since the geotechnical report appears to show the on-site undisturbed soils are unsuitable for providing an internal water storage (IWS).

- c. At least one foot of separation distance shall be maintained between the elevation of the groundwater/seasonally high-water table and the bottom elevation of the amended soils.
- 78. The following items in the Managed Release Concept Design Summaries shall be resolved (113-32):
 - a. The post development peak rates for the one- to one hundred-year storms shall be provided for the proposed MRC Facility.
 - b. The equivalent contributing impervious area to BMP (2.79 acres) is inconsistent with the equivalent impervious area shown in the MRC Design Input worksheet (2.84 acres).
 - c. The "Separation Distance (Groundwater) (ft)" value of 1 foot is inconsistent with the proposed bottom elevation of the soil media (473.00) and the elevation of the groundwater/seasonally high-water table shown in the geotechnical report for TP-3 (474.0).
- 79. The Ordinance requires the loading ratio for the total drainage area to infiltration area to be less than 8:1 and the impervious drainage area to infiltration area to be less than 5:1 (113-32.A.(2)(c)). The applicant has requested a waiver of this requirement; however, this requirement only applies to infiltration BMPs. Since an MRC facility is not an infiltration BMP, this requirement does not apply, and the waiver should be withdrawn.
- 80. The storage volumes shown in the Facility Surface Dewatering Computation SWMF-1 worksheet are inconsistent with the Cumul. Volume shown in the Facility Surface Dewatering Computation worksheet. The dewatering times shown in the two Facility Surface Dewatering Computation worksheets in the PCSM Report are inconsistent (113-32.D).
- 81. The volume control storage which will be used for rate control is that storage which is available within 24 hours from the end of the design storm based on the stabilized infiltration rate (113-32.E.2). The wet pond starting elevation for all routings shall be the water elevation within the basin 24 hours from the end of the 2-year 24-hour storm event.
- 82. All regulated activities (i.e. limit of disturbance) shall be included in the rate control calculations (113-33).
- 83. A separate pre/post-development POI analysis shall be provided to ensure that the peak rate discharge to the adjacent property to the south (Myron P. Shevell) is not increased (113-33).
- 84. The point(s) of interest and time of concentration flow paths shall be shown on the drainage area maps (113-35.B).
- 85. Spot elevation(s) should be provided to confirm the post development Inlet I-4 drainage area boundary east of Inlet I-4 (113-35.B).
- 86. The post-development drainage area boundary near the southern property line (Myron P. Shevell) does not accurately reflect the drainage captured by SWMF-1 (113-35.B)
- 87. The data used to determine the rainfall intensity from PennDOT Publication 584, PennDOT Drainage Manual, shall be provided (113-35.D).
- 88. Post-development runoff coefficients for I-5/Swale 1 and Ex. I-4 shall be based on winter or poor land use conditions since it conveys an off-site discharge (113-35.G).
- 89. The pre-development time of concentration shall be calculated. An assumption of 5 minutes is not conservative (113-35.I).

- 90. The spillway width shown in the Emergency Spillway Detail is inconsistent with the width of the emergency spillway shown on Sheet 6 of the plans, Standard Construction Detail 7-13, and Standard E&S Worksheet #11 (113-37.A(1)(e)[3]). If the design intent is to have a different spillway width during construction, this shall be clearly shown on the plans.
- 91. The depth of stone beneath the underdrain shown in the Underdrain Detail is inconsistent with the invert elevation of the underdrain and the bottom elevation of soil shown in the Stormwater Management Facility Detail (113-37.A(4)(b)).
- 92. The spillway depth shown in the Standard Construction Detail 7-13 is inconsistent with the depth shown in the Emergency Spillway Detail and Standard E&S Worksheet #11 (113-37.A.(6)). If the design intent is to have a different spillway width during construction, this shall be clearly shown on the plans.
- 93. Inlet grates shall be depressed (113-37.C(1)(b)[2]). The profile elevations for the inlets shall reflect the depressed grates.
- 94. A minimum of 6" of freeboard shall be provided for Swale 2 (113-37.C(1)(d)[1]).
- 95. The side slope shown in the Trapezoidal Swale Detail for Swale 1 (4:1) is inconsistent with the proposed grading on the eastern side of Swale 1 shown on Sheet 6 of the plans (3:1) (113-37.C(1)(d)[4]).
- 96. The Pipe Bedding and Trench Backfill Detail shall specify the Class 2 Backfill material (113-37.C(3)(a)).
- 97. A note shall be added to the plan to specify that the backfill material shall be free of large (not exceeding six inches), objectionable, or detritus material. Select non-aggregate material should be indigenous to the surrounding soil material for non-vehicular areas (113-37.C(3)(a)).
- 98. Inlets and manholes greater than five feet in depth shall be equipped with ladder rungs (113-37.C(4)(f)).
- 99. The riprap apron design curve (Figure 9.3) from the E&S manual shall be provided for proposed riprap aprons (113-37.C(8)).
- 100.A protective barrier device shall be provided for the existing endwall (113-37.C(9)(a)).
- 101. The landowner shall execute the final documents prior to final plan approval (113-41.B).
- 102.A SWM site plan approval certification shall be added to the plans (113-43.E).
- 103.A note shall be added to the plan informing the owner that the Township shall have the right of entry for the purposes of inspecting all stormwater conveyance, treatment, or storage facilities (113-43.G).
- 104.All existing manmade features within 200 feet of the development site boundary shall be shown (113-43.I(5)).
- 105.Additional contours and/or spot elevations shall be provided for the proposed spillway and the proposed top of berm (113-43.J(1)).
- 106.A note identifying any recorded stormwater management agreements affecting the subject property (or that none exist) shall be included on the plans (113-43.I(6)).
- 107. The skimmer arm length and flexible hose diameter shown in the Standard Construction Details 7-2 shall be corrected (113-43.J(5)).

- 108. The permanent riser crest and barrel invert elevations shown in the Standard Construction Detail 7-2 are inconsistent with the elevations shown in the Stormwater Management Facility Detail (113-43.J(5)).
- 109. The width of the horizontal opening of the permanent riser shown in the Standard Construction Detail 7-2 shall be confirmed (113-43.J(5)).
- 110. The expected project schedule shall be added to the plans (113-44.E).
- 111.A note indicating the amount of impervious coverage on the lot, measured in square feet, shall be added to the plans (113-44.F).
- 112.A note shall be added to the plans to specify that upon completion of the plan improvements and prior to the release of financial security, the applicant shall submit an as-built plan to the Township (113-58.A).
- 113.A note shall be added to the plans to specify that following approval of the as-built plan by the Township Engineer, the applicant shall submit the SWM site plan for recordation in the office of the Recorder of Deeds (113-58.C).
- 114.An operation and maintenance (O&M) agreement shall be provided (113-62).

Traffic

115. The proposed development is located within the Transportation Service Area established for the Mount Joy Township Traffic Impact Fee Ordinance. Therefore, the development shall be assessed a traffic impact fee based on the number of new P.M. peak hour trips generated by the development. The number and type of dwelling unit per phase shall be provided to determine the Traffic Impact Fee in accordance with Chapter 125.

If you should have any questions or need additional information, please do not hesitate to contact me at <u>bencraddock@lancastercivil.com</u> or via telephone at 717-799-8599.

Sincerely,

Bayjamin S haddack

Benjamin S. Craddock, PE, President LANCASTER CIVIL

cc: Justin Evans, Township Community Development Director/Zoning Officer (via email) Patricia Bailey, Township Secretary (via email) Josele Cleary, Esquire, Township Solicitor (via email) Dave Bitner, PE, Bitner Engineering (via email) Len Spencer, Township SEO (via email) Del Becker, PE, EAWA (via email) Nick Viscome, ERSA (via email) Adam Minichelli, PE, CDM Smith (via email) Renee Addleman, Planner, LCPC (via email)