

FERGUSON TOWNSHIP PLANNING COMMISSION
Regular Meeting Agenda
Monday, June 13, 2022, 6:00 PM

Hybrid Meeting

REMOTE PARTICIPANTS:

Join Zoom Meeting:

<https://us02web.zoom.us/j/83268113138>

Meeting ID: 832 6811 3138

[Zoom Access Instructions](#)

IN-PERSON PARTICIPANTS:

**Ferguson Township Municipal
Building**

**Main Meeting Room
3147 Research Drive
State College, PA**

I. CALL TO ORDER

II. CITIZENS INPUT

III. APPROVAL OF MINUTES

1. May 23, 2022 Regular Meeting Minutes

IV. OLD BUSINESS

None.

V. NEW BUSINESS

1. Farmstead View Subdivision

On July 29, 2021, Penn Terra Engineering, Inc., submitted a Preliminary Subdivision Plan on behalf of their client, Farmstead Developer, LLC. The parcel is located at 139 Farmstead Lane (TP: 24-022-,306-,0000-) and is zoned Single-Family Residential (R1).

The parcel is currently 3.03-acre lot, and the applicant is proposing to subdivide this lot into 7-lots. There will be one (1) stormwater retention lot and six (6) single-family residential lots. On April 19, 2022, the Board of Supervisors conducted a Conditional Use Hearing for Lot 1 (103 Farmstead Drive) to permit the creation of the flag lot. The Board also denied the Modification Application request to the preservation of 20% of the existing, eligible tree canopy on site (§22-515.D.2.) at that same meeting.

As a result of the denial of the modification request, Lot 2 was amended to accommodate and protect a 27" DBH Red Pine Tree with a retaining wall. These alterations require a modification to the slope requirements of Chapter 21, Appendix A—Streets and Sidewalks. The maximum driveway grade at any point on the driveway is fifteen percent (15%). The slope of the proposed driveway for Lot 2 will not exceed eighteen percent (18%).

The administration and enforcement of Chapter 21—Streets and Sidewalks is delegated to the Director of Public Works. Upon review of the request, the Director is in favor of the

modification request subject to inclusion of release from liability language on the recorded plan.

Staff has reviewed the plan and is recommending approval pending outstanding staff comments.

Recommended Motion: Move that the Planning Commission recommend **approval** to the Board of Supervisors for the Farmstead View Subdivision Plan, pending outstanding staff comments as included in the Community Planner's memorandum dated June 7, 2022.

Staff's Recommendation: That the Planning Commission recommend **approval**.

VI. COMMUNICATIONS TO THE COMMISSION

VII. OFFICIAL REPORTS AND CORRESPONDENCE

1. Board of Supervisors Report
2. CRPC Report
3. Land Development Plans
 - a. Farmstead View Subdivision – PC review
 - b. CVIM – 2026 Sandy Dr – Conditional Approval, awaiting resubmission for signatures
 - c. Peace Center and Cemetery – Awaiting Response to first review
 - d. Centre Animal Hospital – Collecting Signatures for Approved Preliminary Plan
 - e. Fusion Japanese Steakhouse – Awaiting Response to first review
 - f. IMBT Subdivision - Awaiting Response to first review
 - g. West College Avenue Vertical Mixed-Use Development – Awaiting Response to first review.
 - h. Nittany Dental – First Review Comments sent on 6/6/2022
 - i. MP Machinery – First Review Comments sent on 6/6/2022
 - j. Salvation Baptist Church – Under Staff first review
 - k. 296 W. Pine Grove Road Minor LDP– Under Staff first review
4. Staff Updates

VIII. ADJOURNMENT

**FERGUSON TOWNSHIP PLANNING COMMISSION
REGULAR MEETING MINUTES
MONDAY, MAY 23, 2022
6:00 PM**

ATTENDANCE

The Planning Commission held its second meeting of the month on Monday, May 23, 2022, as a hybrid meeting. In attendance:

Commission:

Jerry Binney – Vice Chair
Rob Crassweller - Secretary
Bill Keough
Shannon Holliday
Lisa Rittenhouse - Alternate
Lewis Steinberg - Alternate
Ralph Wheland

Staff:

Jenna Wargo - Planning & Zoning Director
Kristina Bassett - Community Planner
Jeff Ressler - Zoning Administrator

Others in attendance: Rhonda R. Demchak, Recording Secretary; Wes Glebe, Ferguson Township Resident; Jack Orlandi, Ferguson Township Resident; Halie Kines, Centre Daily Times; Chris Summers

I. CALL TO ORDER

Mr. Binney called the Ferguson Township Planning Commission's regular meeting to order on Monday, May 23, at 6:02 p.m. and it has been advertised in accordance with the PA Sunshine Act. Mr. Binney stated that the meeting is being held as a hybrid meeting with some commission members in attendance.

Ms. Wargo took roll call, and the Planning Commission had a quorum.

Mr. Binney asked anyone addressing the Planning Commission to identify themselves so that the minutes can be accurately recorded for the minutes.

II. CITIZEN INPUT

There were no comments.

III. APPROVAL OF MINUTES

Mr. Keough moved that the Planning Commission **approve** the April 25, 2022, Regular Meeting Minutes. Mr. Wheland seconded the motion. The motion passed unanimously.

IV. OLD BUSINESS

None.

V. NEW BUSINESS

1. Application for Zoning Ordinance Text Amendment – Terraced Streetscape (TS) Zoning District

a. 127 Hoy Street

Ms. Wargo reported that On May 11, 2022, Pamela Steckler submitted an application for a text amendment to the Terraced Streetscape Zoning District (§27-304.2.A.—Permitted Principal Uses). The Board received the application₃

at the May 16, 2022, regular meeting and referred the request for further review to the Planning Commission. Included in the agenda is the application submitted by Ms. Steckler requesting to permit home burials in the Terraced Streetscape Zoning District.

Chapter 27—Zoning defines a cemetery as “Land used or dedicated to the burial of the dead, including, mausoleums, necessary sales and maintenance facilities.” Cemeteries are permitted as a principal use in the Rural Agricultural (RA) Zoning District and as an accessory use in the Rural Residential (RR) Zoning District.

The Zoning Ordinance doesn't include a definition or regulations for home burials. The Zoning Administrator has determined the definition of cemetery applies to home burial which only permits home burials as a principal use in the Rural Agricultural (RA) Zoning District and as an accessory use in the Rural Residential (RR) Zoning District.

Included in the agenda is a report from Staff about local and state regulations in relation to cemeteries and home burial/private interment. Typically, home burial/family burial grounds are privately held parcels of land specifically designated for the burial of members of the same family (blood or marriage). Most ordinances will include:

- Depth requirements
- Setback requirements (property lines, private or public wells, floodplains, roads, etc.)
- Minimum lot size requirements
- Maximum number of interments per acre of land
- Burial marker requirements
- Map/survey depicting the burial site location
- Access from a public or private roadway
- Maintenance

Additionally, ordinances will typically include additional requirements if the land is sold outside of the family that is within the family burial site. These requirements include:

- The deed needs to reflect the restriction/reservation for the family burial site
- Identify what party(s) are responsible for maintenance (landowner or other)
- Include an access easement for family members of the deceased

Finally, some regulations include disestablishment procedures:

- Removal of human remains
- Removal of markers, monuments, etc.
- Removal, demolition or conversion of mausoleum or columbarium
- A new deed of record must be filed documenting the disestablishment

Staff recognizes that there are differences between cemeteries and home burials including scale, familial requirements, commercialization, etc. Planning Commission is being asked to review the request and provide a recommendation to the Board of Supervisors for the June 7, 2022, regular

meeting.

Mr. Steinberg asked for clarification with the request. Ms. Wargo stated that the first step is for the Planning Commission to review the application and make a recommendation to the Board to deny or approve of the request. Mr. Binney asked if the Planning Commission should do this in two steps. Mr. Steinberg agreed that if a definition needs to be defined, staff should give the Planning Commission recommendations. Mr. Wheland stated that the request is to permit home burials in the TSD.

Ms. Holliday asked what the reasoning behind the request is. Ms. Wargo reported that Ms. Pam Steckler's spouse passed away recently and as conservationists, wants to be buried on their property.

Mr. Steinberg responded to Mr. Wheland's statement by noting that this request can't be addressed until a definition for home burial is established. Mr. Wheland stated that if it is not stated as a permitted use, then it's not permitted. Mr. Ressler concurred with Mr. Wheland that it is not a permitted use.

Ms. Holliday asked what the origin of the request is. Ms. Rittenhouse stated that on the request they want this to be completely natural. Ms. Wargo stated that there is a separate part of the application regarding the source water protection ordinance. Ms. Wargo reported that a consultant with the water authority is investigating the request. Ms. Wargo noted that Ms. Steckler would like to do a green burial, but currently the Township's source water ordinance will not allow the request because a cement liner is needed.

Mr. Keough stated that the request is not compatible with the type of zoning because the acreage is too small. Mr. Keough agreed that a home burial definition is needed. Ms. Wargo stated that staff agrees with it not being compatible. Mr. Keough suggested adding a definition for green burial. Mr. Wheland stated that composting should be addressed as well because big farms are composting their dead animals.

Mr. Crassweller stated that other zones should be considered and noted that green burial is done without the use of chemicals. Ms. Wargo reported that all of Ferguson Township does not allow for green burials due to the source water ordinance. Mr. Keough noted that there are farms with burial sites and would like to preserve that option. Mr. Wheland suggested to defer action with the definitions/regulations until staff hears back from the water authority. Mr. Keough had concerns if the land was sold. Mr. Wheland noted that an easement would be required.

Mr. Crassweller stated that the UK has a lot of rules and regulations on green burials and should be considered.

Mr. Keough moved that the Planning Commission recommend to the Board of Supervisors to **deny** the request for a home burial on the part of Pamela Steckler in the Terrace Streetscape District on the basis that it is not a compatible use in the high-density zoning that is attached to the lot. Mr. Wheland seconded the motion.

Mr. Steinberg suggested changing the motion to exclude the specific lot and just say denial of an ordinance that amends the TSD to allow home burials.

Mr. Keough amended his motion.

Mr. Keough moved that the Planning Commission recommend to the Board of Supervisors to **deny** the request for text amendment to the ordinance in the Terrace Streetscape District to allow for home burials on the basis that it is not a compatible use in the high-density zoning that is attached to the lot. Mr. Wheland seconded the motion. The motion passed unanimously.

Mr. Wheland and Mr. Binney suggested waiting until staff hears back from the water authority before starting the amendment process. Mr. Keough recommends moving forward with the motion.

Mr. Keough moved that the Planning Commission **recommend** an ordinance amendment to Chapter 27 Zoning to include a definition and regulations for home burials. Ms. Holliday seconded the motion. The motion passed 3-2 with Mr. Wheland and Mr. Crassweller opposing.

VI. OFFICIAL REPORTS AND CORRESPONDENCES

A. Communications to the Planning Commission

There were no communications.

B. Board of Supervisors

Ms. Wargo reported that they discussed the text amendment request that was reviewed tonight.

C. CRPC Meeting

No report.

D. Land Development Plans

Ms. Bassett reviewed the following:

- a. Farmstead View Subdivision – 5th submission under review

Ms. Bassett reported that the large tree that has been the topic of saving from the community might be saved.

- b. CVIM – 2026 Sandy Dr – BOS Approved 5/3 – awaiting plan for signatures
- c. Peace Center and Cemetery – Awaiting Response to first review

Mr. Steinberg stated that there might be an issue with burial due to Islamic beliefs with regards to the required cement casing. Ms. Wargo reported that the water authority is reviewing religious exemptions.

- d. Centre Animal Hospital – Awaiting Preliminary Plan to be signed
- e. Fusion Japanese Steakhouse – Awaiting Response to first review
- f. Imbt Subdivision - Awaiting Response to first review
- g. West College Avenue Vertical Mixed-Use Development – Awaiting Response to first review.
- h. Nittany Dental LDP – under first review
- i. MP Machinery LDP – under first review

E. Staff Updates

Ms. Wargo reported that she attended a conference in San Diego and Mr. Ressler attended a conference on floodplain management in Florida.

Ms. Holliday reported that she volunteered at the 49th Precinct as the Judge of Elections and if anyone would like to volunteer in November to let her know.

Mr. Binney noted that the Pine Grove Mills Mobility Committee is wrapping up their work and will be reporting at the Board of Supervisors on June 7th.

VII. Adjournment

Mr. Keough made a motion to **adjourn** the May 23, 2022, Planning Commission meeting at 7:04 p.m. Mr. Binney seconded the motion. The motion passed unanimously.

Respectfully Submitted,

Rob Crassweller, Secretary
For the Planning Commission

TO: Planning Commission

FROM: Kristina Bassett, Community Planner

DATE: June 7, 2022

SUBJECT: Farmstead View Subdivision Plan

Included in the agenda is the Farmstead View Subdivision Plan, submitted on July 29, 2021, by Penn Terra Engineering Inc. on behalf of their client, Farmstead Developer, LLC. The proposed subdivision (Tax Parcel 24-22-306-0000) is located at 139 Farmstead Lane, a 3.031-acre lot. The developer proposes to subdivide this lot into seven lots, six lots for single-family homes and one stormwater retention lot.

As a result of the denial of a Modification/Waiver from the Tree Preservation Ordinance by the Board of Supervisors, Lot 2 was amended to accommodate and protect a 27" DBH Red Pine with a retaining wall. This accommodation puts constraints on the construction of a home and driveway. Chapter 21, Appendix A of the Ferguson Township code states that the maximum allowable slope of a driveway is 15%. However, the slope of the proposed driveway will need to be up to a maximum of 18%.

The Board of Supervisors delegated the authority of Chapter 21 to the Public Works Director. The Public Works Director has stated that he is not opposed to increasing the slope from 15% to 18% subject to release from liability language (a note) on the plan.

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A Flag lot was approved as a conditional use for Lot 1 by the Board of Supervisors on April 19, 2022. The lot is zoned Single Family Residential (R1).

Staff has reviewed the plan and is recommending approval pending outstanding review comments attached to this memorandum.

To: Mark Toretta

Re: Farmstead View 5th Review:

From Public Works Director on Waiver/Modification from Chapter 21:

Assuming the developer's A/E justification is accurate (basically saves them on Wall cost and ties into grade better), I am not opposed to increasing the max driveway slope from 15% to 18% subject to release from liability language on the plan.

Community Planner Comments:

1. A note must be placed on the plan indicating indemnification of liability to allow the grade of the driveway in Lot 2 to exceed 15%.
2. A time extension must be submitted with any revised plan. (Chapter 22, Section 303)
3. A digital (GIS compatible) copy of the plan in accordance with Township requirements must be provided to the Township prior to final plan signature. (Chapter 22, Section 307.7)
4. The plan must be signed, all fees paid to the Township, and the plan recorded within the plan deadline.

TO: Kristina Bassett, Community Planner

FROM: Jeffrey Ressler, Zoning Administrator

DATE: June 6, 2022

SUBJECT: Farmstead View Preliminary Subdivision Plan 5th Review

1. Proposed lot #1 is shown to be a flag lot. Flag lots must be approved through a conditional use before the Board of Supervisors. **Comment Resolved.**
2. Any lots that contain steep slopes will be required to comply the requirements of Chapter 27-702 Slope Controls, including but not limited to land development plans for lots that contain steep slopes. **Comment Resolved.**



TOWNSHIP OF FERGUSON

3147 Research Drive • State College, Pennsylvania 16801

Telephone: 814-238-4651 • Fax: 814-238-3454

www.twp.ferguson.pa.us

TO: Kristina Bassett, Community Planner
FROM: Ron Seybert, Township Engineer
DATE: May 23, 2022
SUBJECT: Farmstead View Preliminary Subdivision Plan
Fifth Review (ES – 421)

I have completed my fifth review of 'Farmstead View Preliminary Subdivision Plan' consisting of 14 sheets as prepared by PennTerra Engineering, dated July 29, 2021, and last revised May 16, 2022. The following are comments from my review along with their status. Prior comments that have already been resolved have been removed.

1. *The Township stormwater engineer needs to review and approved the stormwater management site plan. All technical comments have been resolved. The DSAME will be prepared by the Township for applicant signature after the HOA documents have been approved.*
13. *Documentation for creation of a homeowner's association is required. Not resolved. The applicant's response is that the HOA documentation will be provided under a separate cover but has not yet been received.*
14. *Show existing feature of public sidewalk along adjoining property of Rothwell and how the proposed public sidewalk will connect including grading. Partially resolved. The design shows grading on the adjoining parcel. Permission will need to be obtained from the adjoiner for the grading.*

All the above comments need to be addressed. If you or the applicant have any questions on these comments, please contact me.

Copy: Scott Brown, NTM
Aaron Jolin, NTM
Jenna Wargo, Planning Director

May 23, 2022

Via Email

Township of Ferguson
3147 Research Drive
State College, Pennsylvania 16801

Attn: Mr. Ronald Seybert, PE, Township Engineer

**RE: 139 Farmstead Lane Plan
Stormwater Management Site Plan Review**

Dear Ron,

We have completed our fourth stormwater management review for the 139 Farmstead Lane Plan. The applicant's Design Professional, Penn Terra Engineering, submitted the following information that serves as the basis of our review:

1. Preliminary Subdivision and Land Development Plan dated July 29, 2021 and revised May 16, 2022.
2. Stormwater Water Management Site Plan dated July 29, 2021 and revised May 16, 2022.
3. Post Construction Narrative Report dated July 29, 2021 and revised May 16, 2022.
4. Comment Response Letter dated May 16, 2022.

NTM has reviewed these plans for compliance with Township stormwater management ordinance (Chapter 26 of the Township Code). Our comments follow.

Chapter 26 – Stormwater Management

6. §26-402 – Stormwater Management Report

- D. 2021 08 20 Comment: Based on the E&S development sequencing, it is unclear how “restored soil” will not be further compacted during individual lot development and utility installations. Update the narrative to provide additional clarification.

2022 01 05 Comment: Comment partially addressed. Because the sequencing allows for development on individual lots after the stormwater devices are constructed, provide the following note on the plans, “Individual stormwater

management site plans will be required for each lot, prior to individual lot construction. This will include the preparation of the plan, review of the plan, all necessary field testing, certification, recordation of a DSAME, as well as easements restricting the use of the soil restoration area.” Provide an interim stormwater management plan which shows the extent of soil restoration to be completed as part of mass grading and installation of the stormwater facilities.

2022 03 02 Comment: Comment withdrawn as restoration is no longer proposed. (The engineer utilized a soil HSG of C for modeling proposed land uses within disturbed areas.)

2022 04 26 Comment: Comment addressed; however, remove note 10 from the Preliminary Land Development Plan Grading Plan

2022 05 23 Comment: Comment addressed.

8. §26-703 – Maintenance Responsibilities

- B. 2021 08 20 Comment: For final approval of the stormwater management site plan, a declaration of stormwater access and maintenance easement is required.

2022 01 05 Comment: Pending. Signature of plan will be provided once the Township verifies the agreement is provided.

2022 03 02 Comment: Comment to remain until final approval.

2022 04 26 Comment: Comment to remain until final approval.

2022 05 23 Comment: Comment to be removed with signature/recording of the agreement

New Comments 2022 01 05

9. The “detention facility with filter” is designed with several outlet orifices sized at 2.94 inches. The tolerances specified will be difficult to construct and verify on as-built plans. We suggest designing the facilities with more standard, constructable tolerances.

2022 03 02 Comment: Comment partially addressed. Considering the mowing maintenance proposed, the design shall include measures that will keep the orifice(s) (located 0.2 from the ground) clear from plant growth (including growing through the trash rack).

2022 04 26 Comment: Comment not addressed. Provide a design that keeps the orifice clear from plant growth. (For example, a properly designed 2'x3' concrete or stone apron.)

2022 05 23 Comment: Comment addressed.

If you have any questions or require additional information, please feel free to contact me at 814-862-9191.

Sincerely,
NTM Engineering, Inc.

A handwritten signature in blue ink, appearing to read 'Scott Brown', followed by a long horizontal line.

Scott Brown, PE
-Senior Project Manager

cc: Mr. James Coslo, Centre County Conservation District
Kristina Bassett, Community Planner

2022 05 23 Farmstead Lane r5

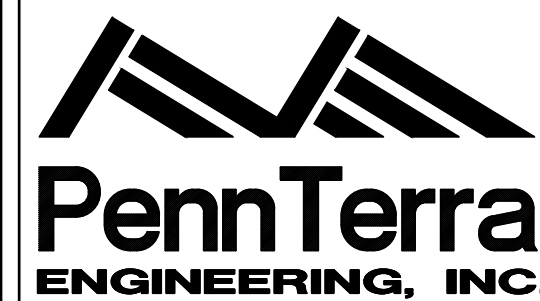
FARMSTEAD VIEW

PRELIMINARY SUBDIVISION PLAN

FERGUSON TOWNSHIP * CENTRE COUNTY * PENNSYLVANIA

JULY 29, 2021

LAST REVISED: MAY 16, 2022



**CENTRAL PENNSYLVANIA
REGION OFFICE:**
3075 ENTERPRISE DRIVE
SUITE 100
STATE COLLEGE, PA 16801
PH: 814-231-8285
Fax: 814-237-2308

**LANCASTER
REGION OFFICE:**
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TABLE OF CONTENTS

SHEET	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS, DEMOLITION PLAN & TREE SURVEY PLAN
3	SIGNATURES & NOTES
4	RECORD PLAN
5	GRADING PLAN
6	UTILITY PLAN
7	TREE PRESERVATION PLAN
7A	TREE PROTECTION PLAN
8	UTILITY DETAILS
9	GENERAL CONSTRUCTION DETAILS
ES1	EROSION & SEDIMENTATION CONTROL PLAN (BULK EARTHMOVING PHASE)
ES2	EROSION & SEDIMENTATION CONTROL PLAN (INDIVIDUAL LOT)
ES3	EROSION & SEDIMENTATION CONTROL DETAILS
ES4	EROSION & SEDIMENTATION CONTROL NARRATIVE

ACT 287 UTILITY INFORMATION (SERIAL NUMBER: 20211123505)

SANITARY SEWER
UNIVERSITY AREA JOINT AUTHORITY
1576 SPRING VALLEY ROAD
STATE COLLEGE, PA 16801
PHONE: (814) 238-9662

PUBLIC WATER
STATE COLLEGE BOROUGH WATER AUTHORITY
1201 WEST BRANCH ROAD
STATE COLLEGE, PA 16801
PHONE: (814) 238-6766

NATURAL GAS
COLUMBIA GAS OF PENNSYLVANIA
2550 CAROLEAN INDUSTRIAL DRIVE
STATE COLLEGE, PA 16801
PHONE: (814) 238-6775

ELECTRIC
WEST PENN POWER COMPANY
2800 EAST COLLEGE AVENUE
STATE COLLEGE, PA 16801
PHONE: (814) 237-5721

TELEPHONE
VERIZON
224 SOUTH ALLEN STREET
STATE COLLEGE, PA 16801
PHONE: (814) 231-6511

CABLE TELEVISION
COMCAST
60 DECIBEL ROAD
STATE COLLEGE, PA 16801
PHONE: (800) 992-3515



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PENNSYLVANIA 1. CALL 1-800-242-1776
NON-MEMBERS MUST BE CONTACTED DIRECTLY

**PennTerra
ENGINEERING INC.**
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Designer MLH
Draftsman XXX
Proj/Manager MAT
Surveyor BRK
Perimeter Ok. _____
Book ---- Pg ----
File 202206-PRE-02-EX-CON & DEMO
Layout EX CON & DEMO

5/24/22	REVISED PER TWP COMMENTS
MLH	
3/25/22	REVISED PER TWP COMMENTS
MLH	
2/2/22	REVISED PER TWP COMMENTS
MLH	
12/14/21	REVISED PER TWP COMMENTS
MLH	
10/19/21	PRICING SET
MLH	
Date	Description
	REVISIONS

FARMSTEAD VIEW

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY SUBDIVISION PLAN

EXISTING CONDITIONS, DEMOLITION PLAN & TREE SURVEY PLAN

PROJECT NO.
20290
DATE
JULY 29, 2021
SCALE SHEET NO.
1" = 30' **2**

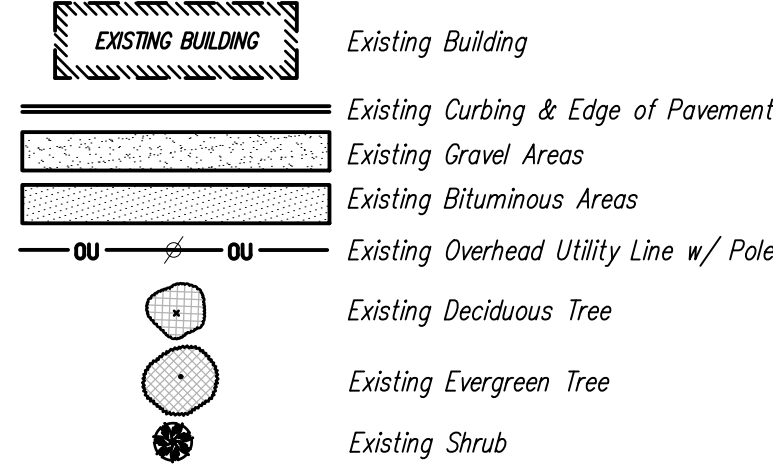
GENERAL SITE DEMOLITION NOTES

- The Contractor is responsible for obtaining all local and state permits required for demolition work.
- The Contractor shall indemnify and hold harmless the Owner and/or architect and engineer for any and all injuries and/or damages to personnel, equipment and/or existing facilities in the demolition and construction described in the plans and specifications.
- Existing conditions as depicted on these plans are general and illustrative in nature and do not include mechanical, electrical and miscellaneous structures. It is the responsibility of the Contractor to examine the site and be familiar with existing conditions prior to bidding on the demolition work for this project. If conditions encountered during examination are significantly different than those shown, the Contractor shall notify the architect and engineer immediately.
- All existing utilities not to be removed or abandoned are to remain operational at all times. Appropriate existing utilities shall remain in service until replacement/relocated utilities are operational.
- Existing above and below ground structures within the limits of new construction noted to be removed shall be razed unless noted otherwise this construction set, architectural plans and/or project specifications. This includes foundation slabs, walls, and footings.
- All demolition waste and construction debris shall be removed by the Contractor and disposed of in a state approved waste site and in accordance to all local and state codes and permit requirements.
- All utility removal, relocation, cutting, capping and/or abandonment shall be coordinated with the appropriate utility company.
- The burning of cleared material and debris shall not be allowed.
- Erosion and sedimentation control measures around areas of demolition shall be installed prior to initiation of demolition activities. Refer to plan and details for site specific information including tree protection details, if necessary.
- Asbestos or hazardous materials, if found on site, shall be removed by a licensed hazardous materials Contractor. Contractor shall notify Owner immediately if hazardous materials are encountered.
- Contractor shall protect all corner pins, monuments, property corners, and benchmarks during demolition activities. If disturbed, Contractor shall have disturbed items reset by a licensed surveyor at no additional cost to the Owner.
- Contractor shall adhere to all local, state, federal, and OSHA regulations operating demolition equipment around utilities.
- Contractor shall provide and maintain traffic control measures in accordance with the PennDOT & Township standards, and as required by local agencies working in and/or along streets, roads, highways, etc. It shall be the Contractor's responsibility to obtain approval and coordinate with local and/or state agencies regarding the need, extent, and limitations associated with installing and maintaining traffic control measures.
- Contractor shall protect at all times adjacent structures and items from damage due to demolition activities.
- Contractor shall coordinate existing facilities utility disconnects with the Owner a minimum 7 days prior to anticipated demolition of structures.
- Contractor shall refer to Construction Plans for other pertinent information where applicable.
- Contractor shall replace or repair to Owner's satisfaction all curb, utilities, sidewalks, landscaping, etc. damaged during construction that are not indicated to be removed.
- Contractor shall be responsible for all costs and work required to adjust existing and proposed utilities and appurtenances to finish grades within the limit of work.
- All paving to be removed shall be sawcut to provide a sharp clean edge. All sidewalks to be removed shall be sawcut at the nearest joint. Existing pavement shall be removed as required for new curb, walkway, or utility construction.
- Contractor shall verify the location of manholes, inlets valves, etc. Contractor shall test pit existing utilities as deemed necessary within the limits of construction to determine the exact location and depth as required. Report any discrepancies from that indicated on the plan to the architect. All existing utilities shall be retained unless marked otherwise, and appurtenances shall be adjusted to final grade. Damage to existing conditions and utilities to remain shall be repaired as required to the Owner's satisfaction at the expense of the Contractor.
- Contractor shall coordinate with utilities companies on installation, relocation or replacement of electrical, phone, gas and cable services.
- Contractor shall coordinate the relocation of the existing water service with SCBWA.

EXISTING TREE SURVEY

- EXISTING TREES:
 - (1) RED PINE 27" DIA. TO REMAIN
 - (4) BLACK WALNUTS 10" DIA. TO 18" DIA - 4 TO BE REMOVED
 - (1) BLACK CHERRY MULTI-STEM (3) TREE 8"-10" - TO BE REMOVED
 - (1) AMERICAN PERSIMMONS 24" DIA., POOR CONDITION - TO BE REMOVED
- TOTAL EXISTING TREE CANOPY AREA - 4,581 S.F.
- TOTAL REMAINING EXISTING TREE CANOPY AREA - 1,248 S.F. (27.24%)
- REFER TO TREE REMEDIATION PLAN - SHEET 7.

DEMOLITION FEATURES LEGEND

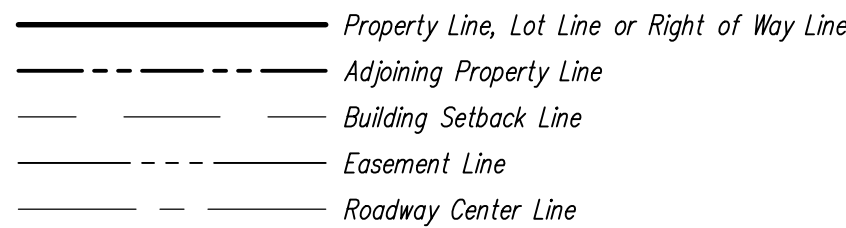


SOILS LEGEND

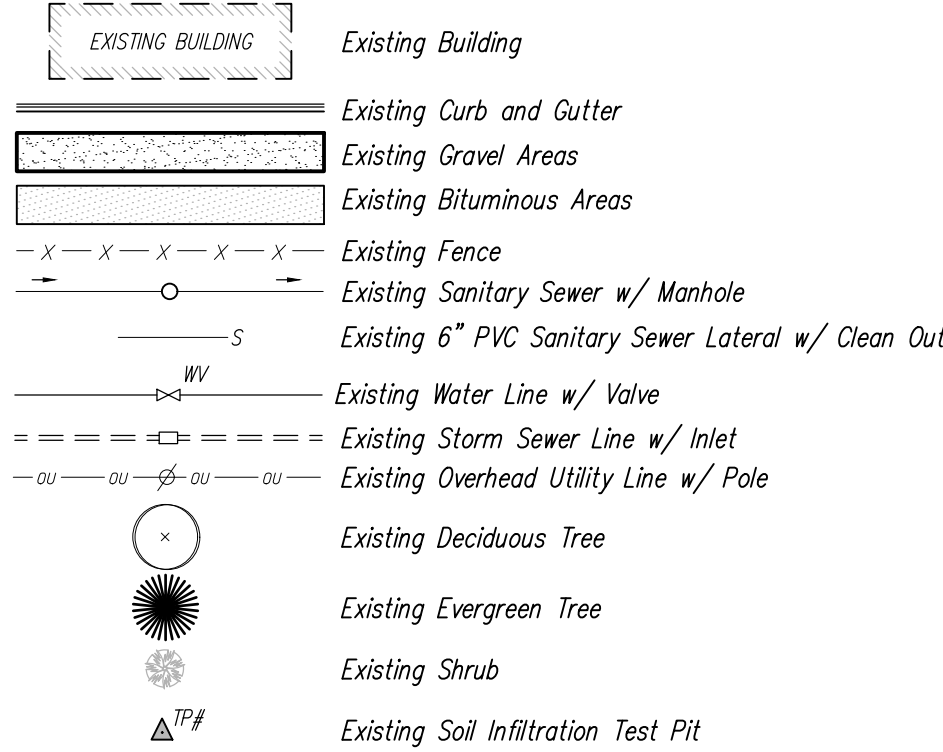
Soil cover on the site consists of:
HaB - Hagerstown Silt loam, 3%-8% Slopes
HaC - Hagerstown Silt Loam, 8%-15% Slopes
MrC - Morrison sandy loam, 8%-15% Slopes
WyA - Wyoming gravelly sandy loam rarely flooded, 0% to 5% slopes

--- Existing Soil Limit Line / Boundary
--- Existing Soil Type

SURVEY FEATURES LEGEND



EXISTING FEATURES LEGEND

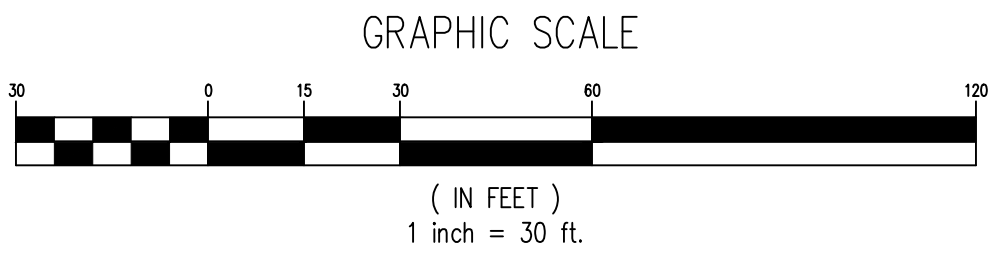
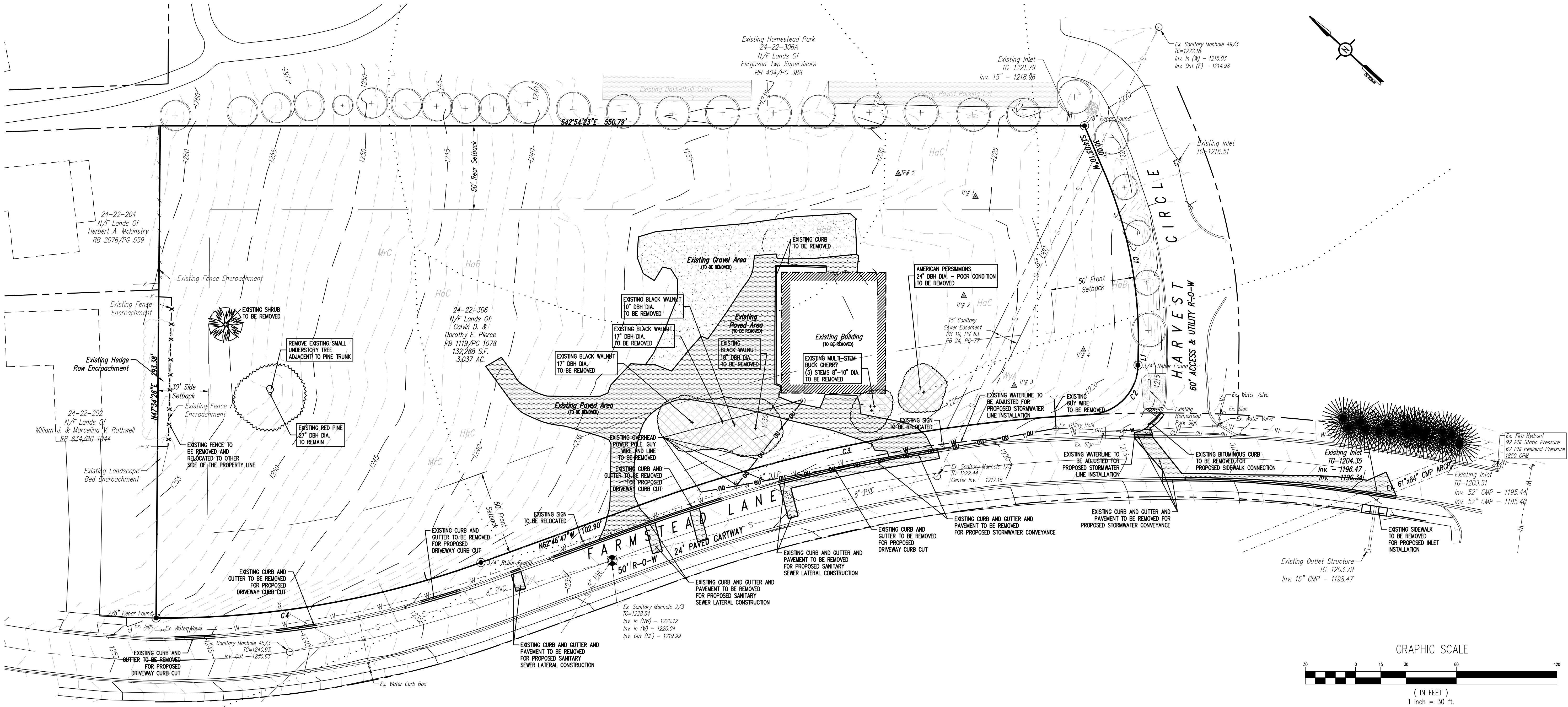


EXISTING CURVE TABLE

CURVE	LENGTH	RADIUS	TANGENT	CHORD DIRECTION	CHORD	DELTA
C1	106.74'	255.00'	54.16'	N 36° 02' 40" E	105.96'	23° 59' 00"
C2	45.21'	30.00'	28.14'	N 88° 47' 38" W	41.05'	86° 20' 25"
C3	272.48'	910.00'	137.27'	N 54° 12' 06" W	271.46'	17° 09' 22"
C4	197.41'	555.81'	99.76'	N 52° 36' 17" W	196.37'	20° 21' 00"

EXISTING LINE TABLE

LINE	DIRECTION	LENGTH
L1	S 48° 02' 10" W	11.06'





Project Notes:

1. General Site Information:
a. Owner Information:

Calvin D. & Dorothy E. Pierce
67 Fields Drive
New Castle, PA 16101
Farmstead Developer, LLC
1764 Cambridge Drive
State College, PA 16803
24-22-306
Record Book 1119, Page 1078
139 Farmstead Lane
State College, PA 16801

f. Municipality:
g. Zoning:
h. Existing Site Use:
i. Proposed Site Use:
j. Lot Size:
k. Maximum Building Coverage:
l. Proposed Building Coverage:

Ferguson Township
Single Family Residential District (R-1)
Storage Building
Single Family Residential
3,037 AC (132,288 SF)
30% (39,686 SF)
0.00% (0 SF) See chart for maximum proposed impervious coverage, including building area for each lot for stormwater design.
(Separate site plans to be submitted for Zoning Permit for each lot.)
50% (66,144 SF)

m. Maximum Impervious Coverage:
n. Proposed Impervious Coverage:
Pavement/Concrete Area:
Residential Lots Impervious:
Total Impervious Coverage:

2.03% (2,688 SF) (Proposed Sidewalk)
19.82% (26,222 SF) (Assumed Lot Development – Dwelling, Driveway & Entrance Walks)
21.85% (28,910 SF)

Assumed Lot Impervious	
Lot Number	Impervious Coverage
1	6,686
2	4,048
3	4,888
4	4,854
5	4,167
6	3,977
7	280
Total Square FT	28,910
Total Acres	0.664

a. Maximum Building Height:
p. Proposed Building Height:
q. Total Number of Lots:

40'
0' (No Buildings Proposed)
7 (Includes 6 Residential Lots and 1 Stormwater Management Lot)

2. Building Setbacks:

Existing Proposed Single Family Residential (R-1):
Front: 50' Front: 25'
Side: 30' Side: 10'
Rear: 50' Rear: 30'

3. The purpose of this plan is to Subdivide existing Tax Parcel Number 24-22-306 into 6 Single Family Residential lots, 1 Stormwater Management Lot, and install all associated utilities.

4. Act 287 Utility Information: (Serial Number: 20211123505)

All utility locations should be verified prior to any construction. utility information and locations should be considered approximate. contractor shall notify po one call prior to any excavation.

a. Water:

State College Borough Water Authority
1201 West Branch Road, State College, PA 16801; (814) 238-6766

b. Sanitary Sewer:

University Area Joint Authority
1576 Spring Valley Road, State College, PA 16801; (814) 238-9662

c. Telephone:

Verizon
224 South Allen Street, State College, PA 16801; (814) 231-6511

d. Electric:

West Penn Power Company
2800 East College Avenue, State College, PA 16801; (814) 237-5821

e. Cable television:

Comcast
60 Decibel Road, State College, PA 16801; (800) 992-3515

f. Gas:

Columbia Gas of Pennsylvania
2550 Carolean Drive, State College, PA 16801; (814) 238-6775

g. Stormwater & Traffic Signals:

Ferguson Township
3147 Research Drive, State College, PA 16801; (814) 238-4651

5. Natural Site Features & Survey Information:

- Soil limits and descriptions have been taken from the Natural Resources Conservation Service Web Soil Survey dated June 2020.
- There are not wetlands on the site according to the National Wetland Inventory Mapping (U.S. Fish & Wildlife Service) for State College, PA last updated July 2019.
- There are no portions of this site within Flood Plain according to the Federal Emergency Management Agency (FEMA) Map Number 42027C0617F, effective date May 4, 2009.
- Contours shown are taken from survey data collected in the field by PennTerra Engineering, Inc.
- Horizontal Datum is Pennsylvania North Zone State Plane Coordinates, North American Datum of 1983 (PA NAD83) U.S. Feet.
- Elevation Datum is the North American Vertical Datum of 1988 (NAVD 88).
- The Project Benchmark is a Sanitary Manhole (Manhole 2/3) in the center of Farmstead Lane. TC Elevation = 1228.54.
- There are no sinkholes on site according to the Preliminary Geologic Investigation prepared by CMT Laboratories, Inc., dated June 15, 2021.

6. Easement Information:

- There is a 10' Utility and Sidewalk Easement located along the street frontage of all lots on Farmstead Lane.
- There is a 20' Stormwater Easement thru Lots 1, 3-6. Easement shall be created by and included in the deed for these lots.
- There is a 10' Sanitary Sewer Easement thru Lot 2 to provide sanitary sewer lateral service to Lot 1. Easement shall be created by and included in the deed for these lots.
- There is an Existing Sanitary Sewer Easement thru Lot 7. Easement shall be included in the deed for this lot.

7. Street Lighting: Each lot shall be equipped with a "dusk 'till dawn" photocell controlled lamp on a post placed on the front lawn within 15' of the driveway.

8. Any signage required by the Township shall be acquired and erected at the expense of the developer.

9. Property monuments and pins shall be set after lot development and landscaping is completed.

10. Farmstead Lane is an existing road with a 50' R-O-W and a 26' paved cartway.

11. All pedestrian walkways, drainage easements, detention basins, and all drainage structures located outside of the street R-O-W shall be maintained by the Farmstead View's Home Owner's Association in accordance with the recorded HOA documents. All sidewalks adjacent to residential lots shall be maintained in accordance with the recorded HOA documents.

12. For additional information, refer to:

- "Homestead Farms Area No. 3" recorded in PB 19, PG 63, June 18, 1974.
- "Homestead Farms Area No. 4" recorded in PB 24, PG 77, August 17, 1978.
- A Stormwater Management Site Plan Report/PCSM Plan and Soil Erosion & Sedimentation Control Plan have been prepared for Farmstead View, dated July 28, 2021, last revised _____.
- "Infiltration Analysis, 139 Farmstead Lane" prepared by CMT Laboratories, Inc., dated June 16, 2021.

13. As-Built drawings/documentation of the stormwater management facilities must be prepared in accordance with Chapter 26 §26-402D.4 and submitted to Ferguson Township at the completion of construction as a prerequisite of the release of surety and issuance of Occupancy Permit.

14. Street trees along Farmstead Lane shall be as follows: (Min. Spacing: 41', Max. Spacing: 50', Min. Caliper: 2") (Refer to Record Plan, Sheet 4). Due to potential conflicts with driveway entrances and construction equipment, the installation of street trees within this subdivision shall be done all at the same time after all sidewalks are completed in this phase. Street tree planting shall be in compliance with Chapter 25 (Shade Trees) of the Ferguson Township Subdivision Ordinance.

15. No structure is required to have a built-in fire suppression system.

16. This Record Plan Conforms with the plan receiving final approval by the Ferguson Township Board of Supervisors on _____, All improvements are or will be installed in accordance with such plan in a manner and time so specified therein.

17. No land is being dedicated to public use. A fee-in-lieu payment of \$17,640 will be provided by the developer to meet the parkland requirement. The calculations for this payment are as follows based on the Ferguson Township 2021 Fee Schedule:
Parkland fee-in-lieu = \$1,225.00 per person. Fee is based on 2.4 dwelling units per acre
\$1,225.00 per person * 2.4 persons per dwelling unit = \$2,940 per dwelling unit
\$2,940 per dwelling unit * 6 dwelling units = \$17,640 fee-in-lieu payment

18. No more than 6 dwelling units may be constructed on the land which is the subject of this Subdivision Plan unless additional land is dedicated to the Township of Ferguson for parkland and/or the Board of Supervisors accepts an additional fee-in-lieu of dedication of parkland.

19. The 20' Stormwater Access Easement between Lots 1, 3-7 shall be subject to the following: No structures, landscaping & above ground obstructions shall be located within the Easement Area except for the Easement delineation items proposed and shown on the Record Plan. The 20' Easement area is to be kept open for access and shall be maintained in accordance with the recorded HOA Documents.

20. The plan proposes 6 Single-Family residential lots (Lots 1-6) and one non buildable lot (Lot 7) for stormwater management facilities.

Owner's Certification: TP# 24-22-306

State of _____
County of _____

On this the _____ day of _____, 20 _____,

personally appeared before me and certified that they were the owners of the properties shown on this plan and acknowledge the same to be their act and plan and designs, the same to be recorded as such, according to the law.

witness my hand and seal, this date _____

Notary Public Commission Expires

Professional Land Surveyor Certification

I, Nevin L. Grove, a Professional Land Surveyor in the Commonwealth of Pennsylvania, do hereby certify that this plan correctly represents the tracts of lands as shown.

Signature Date

Design Engineer Certification

I, _____, hereby certify that this land development meets all design requirements of the Subdivision and Land Development Ordinance, Zoning Ordinance and all other applicable Chapters of Ferguson Township Code.

Township Engineer Certification

I, _____, have reviewed and hereby certify that the plan meets all engineering design standards and criteria of the Ferguson Township Code of Ordinances.

Township Planning Commission

Ferguson Township Planning Commission Approved

Chair Date

Secretary Date

Township Supervisors

Ferguson Township Supervisors Approved

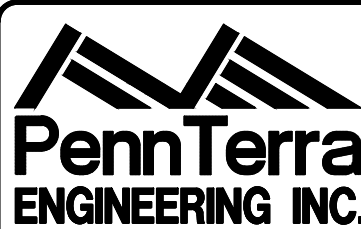
Chair Date

Secretary Date

Fire Chief Certification

I have reviewed and hereby certify that the location of Fire Lanes and Fire Hydrants shown on this plan are adequate.

Fire Chief Date



PennTerra
ENGINEERING INC.

CENTRAL PENNSYLVANIA REGION OFFICE:
3075 ENTERPRISE DRIVE
SUITE 100
STATE COLLEGE, PA 16801
PH: 814-231-8285
Fax: 814-237-2308

LANCASTER REGION OFFICE:
3904 B ABEL DRIVE
COLUMBIA, PA 17512
PH: 717-522-5031
Fax: 717-522-5046

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Seal

Seal

Designer _____ MLH
Draftsman _____ MLH
Proj/Manager _____ MAT
Surveyor _____ BRK
Perimeter Ok. _____
Book _____ Pg. _____
File _____ 20200-PRE-03-SIGNATURES & NOTES
Layout _____ SIG&NOTES

REVISIONS	
5/16/22	REVISED PER TWP COMMENTS
MLH	
3/21/22	REVISED PER TWP COMMENTS
MLH	
2/19/22	REVISED PER TWP COMMENTS
MLH	
12/14/21	REVISED PER TWP COMMENTS
MLH	
10/19/21	PRICING SET
MLH	
Date	Description
REVISIONS	

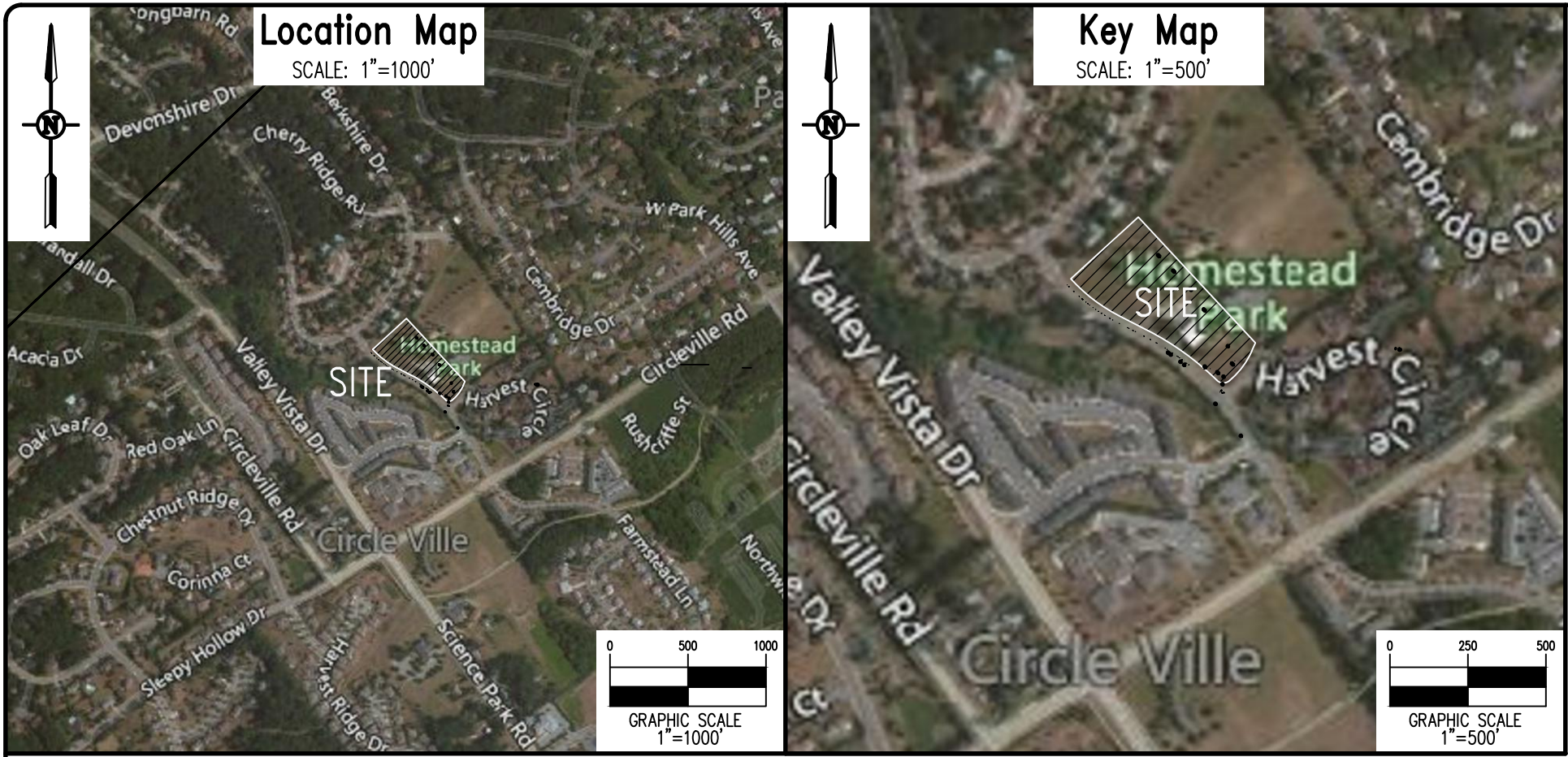
FARMSTEAD VIEW

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY SUBDIVISION PLAN

SIGNATURES & NOTES

PROJECT NO. 20290	
DATE JULY 29, 2021	
SCALE AS SHOWN	SHEET NO. 3



EXISTING CURVE TABLE						
CURVE	LENGTH	RADIUS	TANGENT	CHORD DIRECTION	CHORD	DELTA
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EXISTING LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S 48° 02' 10" W	11.06'

PROPOSED CURVE TABLE						
CURVE	LENGTH	RADIUS	TANGENT	CHORD DIRECTION	CHORD	DELTA
C5	85.64'	910.00'	42.85'	N 48° 19' 11" W	85.61'	5° 23' 32"
C6	92.24'	910.00'	46.16'	N 53° 55' 11" W	92.20'	5° 48' 27"
C7	83.70'	910.00'	41.88'	N 59° 27' 30" W	83.67'	5° 16' 12"
C8	10.90'	910.00'	5.45'	N 62° 26' 11" W	10.90'	0° 41' 11"
C9	55.89'	555.81'	27.97'	N 59° 53' 57" W	55.86'	5° 45' 39"
C10	81.41'	555.81'	40.78'	N 52° 49' 22" W	81.34'	8° 23' 31"
C11	60.12'	555.81'	30.09'	N 45° 31' 42" W	60.09'	6° 11' 50"

PROPOSED LINE TABLE		
LINE	DIRECTION	LENGTH
L2	N 62° 46' 47" W	74.40'
L3	N 62° 46' 47" W	28.49'

SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Roadway Center Line
- Property Corner Found
- Property Corner To Be Set

EXISTING FEATURES LEGEND

- EXISTING BUILDING
- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Gravel Areas
- Existing Bituminous Areas
- Existing Fence
- Existing Sanitary Sewer w/ Manhole
- Existing 6" PVC Sanitary Sewer Lateral w/ CI
- Existing Water Line w/ Valve
- Existing Storm Sewer Line w/ Inlet
- Existing Overhead Utility Line w/ Pole
- Existing Deciduous Tree
- Existing Evergreen Tree
- Existing Shrub

PROPOSED FEATURES LEGEND

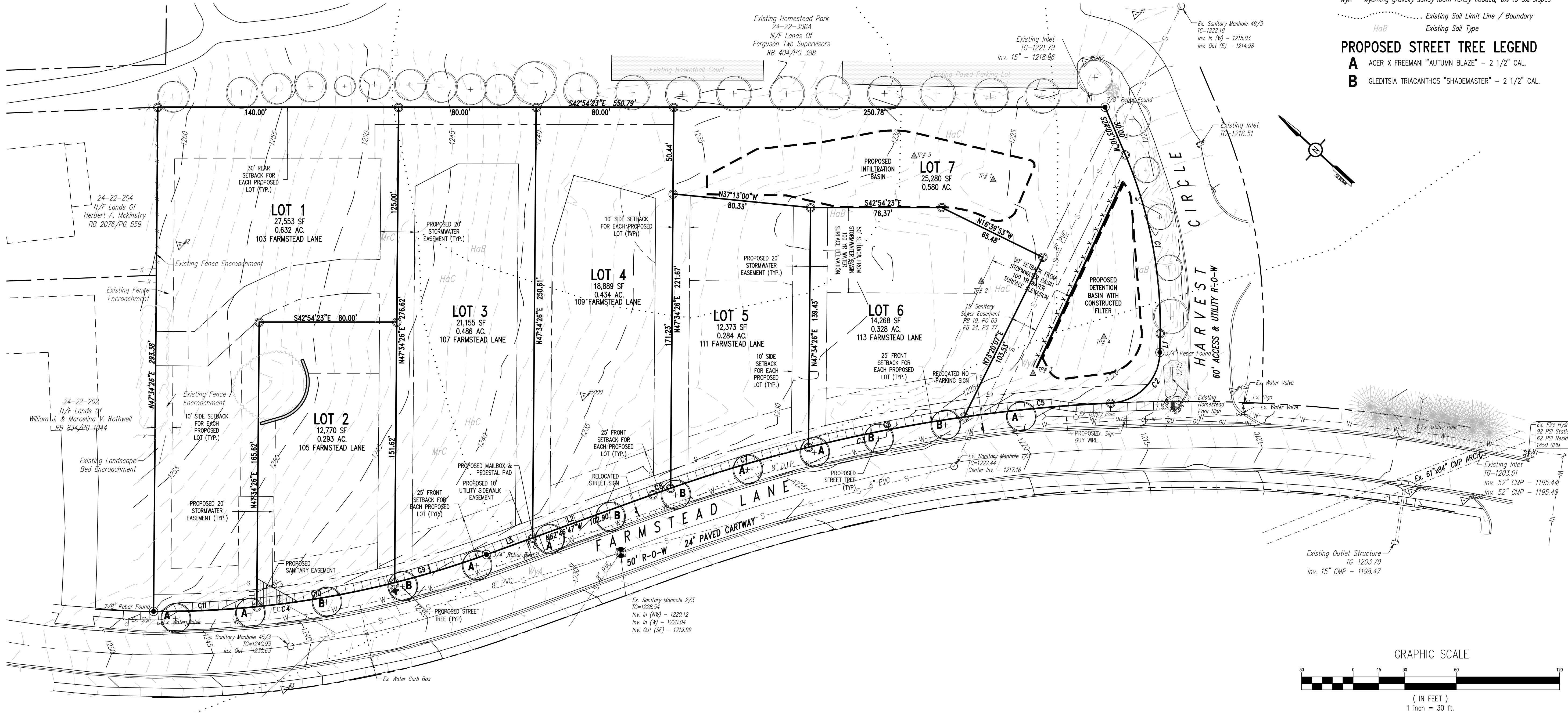
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED DEPRESSED CURB
- PROPOSED DETAINING WALL

SOILS LEGEND

- Soil cover on the site consists of:
- HaB - Hagerstown Silt loam, 3%-8% Slopes
 - HaC - Hagerstown Silt loam, 8%-15% Slopes
 - MrC - Morrison sandy loam, 8%-15% Slopes
 - WyA - Wyoming gravelly sandy loam rarely flooded, 0% to 5% slopes
- Existing Soil Limit Line / Boundary
- Existing Soil Type

PROPOSED STREET TREE LEGEND

- A ACER X FREEMANI "AUTUMN BLAZE" - 2 1/2" CAL.
- B GLEDITSIA TRIACANTHOS "SHADEMASTER" - 2 1/2" CAL.



PennTerra ENGINEERING INC.

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PENNTERRA ENGINEERING 2022
ALL RIGHTS RESERVED

Designer MLH

Draftsman MLH

Proj Manager MAT

Surveyor BRK

Perimeter OK

Book Pg

File 20220-PRE-04-RECORD

Layout RECORD

5/24/22	REVISED PER TWP COMMENTS
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12/29/22	REVISED PER TWP COMMENTS
12/30/22	REVISED PER TWP COMMENTS
12/31/22	REVISED PER TWP COMMENTS

FARMSTEAD VIEW

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY SUBDIVISION PLAN

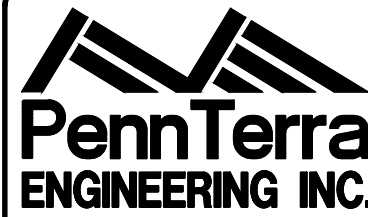
RECORD PLAN

PROJECT NO.
20290

DATE
JULY 29, 2021

SCALE
1"=30'

SHEET NO.
4



**CENTRAL PENNSYLVANIA
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Designer MLH
Draftsman MLH
Proj/Manager MAT
Surveyor BRK
Perimeter Ok. _____
Book ---- Pg ----
File 202206-FRE-05-GRADING
Layout GRADING

5/24/22	REVISED PER TWP COMMENTS
MLH	
3/21/22	REVISED PER TWP COMMENTS
MLH	
2/2/22	REVISED PER TWP COMMENTS
MLH	
12/14/21	REVISED PER TWP COMMENTS
MLH	
10/19/21	PRICING SET
MLH	
Date	Description
	REVISIONS

FARMSTEAD VIEW

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY SUBDIVISION PLAN

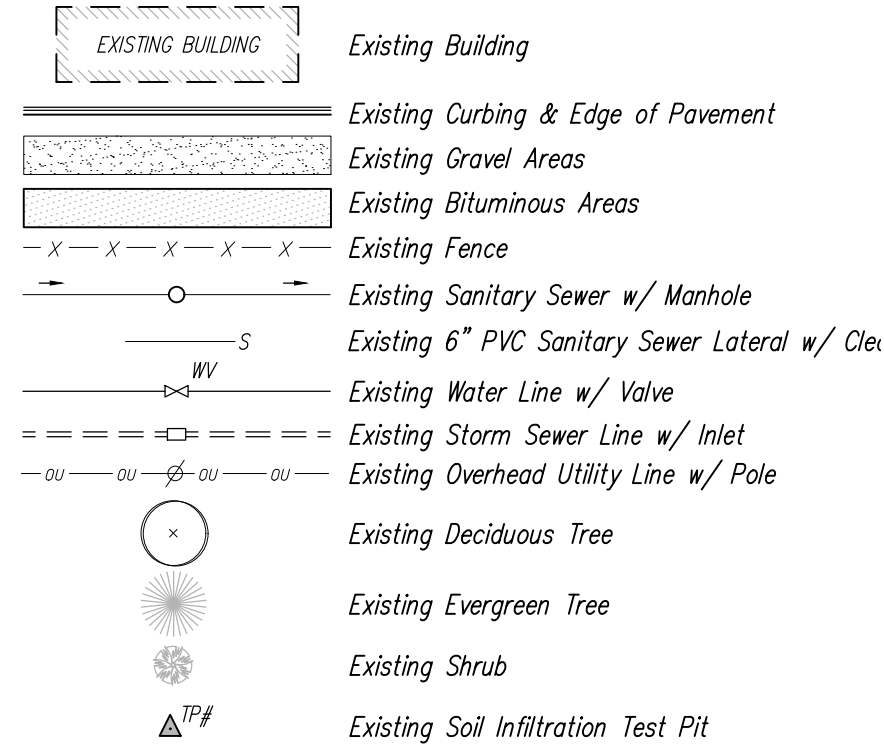
GRADING PLAN

PROJECT NO.	20290
DATE	JULY 29, 2021
SCALE	1" = 30'
SHEET NO.	5

GRADING NOTES

- ALL SITE WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS PREPARED BY PENNTERRA, THE CURRENT REQUIREMENTS OF THE FERGUSON TOWNSHIP, THE APPLICABLE SECTIONS OF THE PENNDOT STANDARD SPECIFICATIONS FOR ROADWAY CONSTRUCTION, AND ALL OTHER PERTINENT FEDERAL AND STATE LAWS.
- THE CONTRACTOR SHALL COMPLY AT ALL TIMES WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, PROVISIONS, AND POLICIES GOVERNING SAFETY AND HEALTH, INCLUDING THE FEDERAL CONSTRUCTION SAFETY ACT (PUBLIC LAW 91-54), FEDERAL REGISTER, CHAPTER XVII, PART 1926 OF TITLE 29 REGULATIONS, OCCUPATIONAL SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION, AND SUBSEQUENT PUBLICATIONS UPDATING THESE REGULATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING THE AREAS AND CONDITIONS UNDER WHICH THE PROJECT IS TO BE CONSTRUCTED PRIOR TO THE SUBMISSION OF A BID. SUBMISSION OF A BID SHALL BE CONSTRUED TO MEAN THE CONTRACTOR HAS REVIEWED THE SITE AND IS FAMILIAR WITH CONDITIONS AND CONSTRAINTS OF THE SITE.
- BEFORE EXCAVATION, ALL UNDERGROUND UTILITIES SHALL BE LOCATED IN THE FIELD BY THE PROPER AUTHORITIES. THE CONTRACTOR SHALL NOTIFY PA ONE CALL 1-800-242-1776. THE LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES ARE APPROXIMATE AND MAY NOT ALL BE SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND EXACT LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES.
- MAXIMUM SLOPES SHALL BE 3:1 (HORIZONTAL:VERTICAL) EXCEPT WHERE SPECIFICALLY NOTED.
- ALL AREAS NOT PAVED SHALL BE TOPSOILED, SEED, MULCHED OR LANDSCAPED UNLESS OTHERWISE NOTED IN THE CONSTRUCTION DRAWINGS, SITE SPECIFICATIONS OR INSTRUCTED BY THE OWNER.
- THE MAXIMUM SLOPE FOR ALL ON-SITE SIDEWALKS SHALL BE 4.90% WITH A MAXIMUM CROSS SLOPE OF 2.00% AND CURB RAMPS SHALL HAVE A MAXIMUM SLOPE OF 8.30%.
- CONTOURS SHOWN ARE GENERATED FROM A FIELD SURVEY BY PENNTERRA ENGINEERING, INC. AND ARE BASED ON AN ASSUMED ELEVATION. THE PROJECT BENCHMARK IS A SANITARY MANHOLE (MANHOLE 2/3) IN THE CENTER OF FARMSTEAD LANE. TC ELEVATION = 1228.54.
- ALL WORK WITHIN THE FARMSTEAD LANE R-O-W SHALL BE IN ACCORDANCE WITH THE FERGUSON TOWNSHIP STANDARDS AND SPECIFICATIONS.
- ALL FILL MATERIAL WITHIN THE HOUSE DEVELOPMENT SHALL BE WITH STRUCTURAL FILL APPROVED BY THE OWNERS GEOTECHNICAL ENGINEER. ANY BORROW MATERIAL UTILIZED AS STRUCTURAL FILL SHALL NOT CONTAIN ROCK GREATER THAN 4" IN MAXIMUM DIMENSION & SHOULD NOT CONTAIN MORE THAN 1 PERCENT (BY WEIGHT) OF ORGANIC MATTER OR OTHER DELETERIOUS MATERIAL. UNIFIED SOIL CLASSIFICATIONS OF GW, GM, GC, SW, SM, SC, CL & COMBINATIONS OF THERE OF ARE GENERALLY CONSIDERED SUITABLE FOR USE AS STRUCTURAL FILL.
- ALL HOUSE DEVELOPMENT AREAS & DRIVEWAY AREAS SHALL BE COMPACTED TO 100% OF MAXIMUM DRY DENSITY AS DETERMINED BY THE PROCTOR ASTM 698. FILL MATERIALS IN NON STRUCTURAL AREAS SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY. REFER TO THE STORMWATER MANAGEMENT SITE PLAN SET FOR THE COMPACTION REQUIREMENTS FOR THE BASIN.
- ALL EXCAVATION WILL BE CLASSIFIED AND WILL INCLUDE (WITHOUT LIMITATION THERETO) THE EXCAVATION AND REMOVAL OF ALL SOIL, SHALE AND ROCK FORMATIONS, BOULDERS AND EXISTING FOUNDATIONS ENCOUNTERED IN THE CONTRACT AREA. NO CLAIMS FOR EXTRA COMPENSATION OR EXTENSION OF CONTRACT TIME WILL BE CONSIDERED BY THE OWNER WHEN THE ABOVE ITEMS ARE ENCOUNTERED.

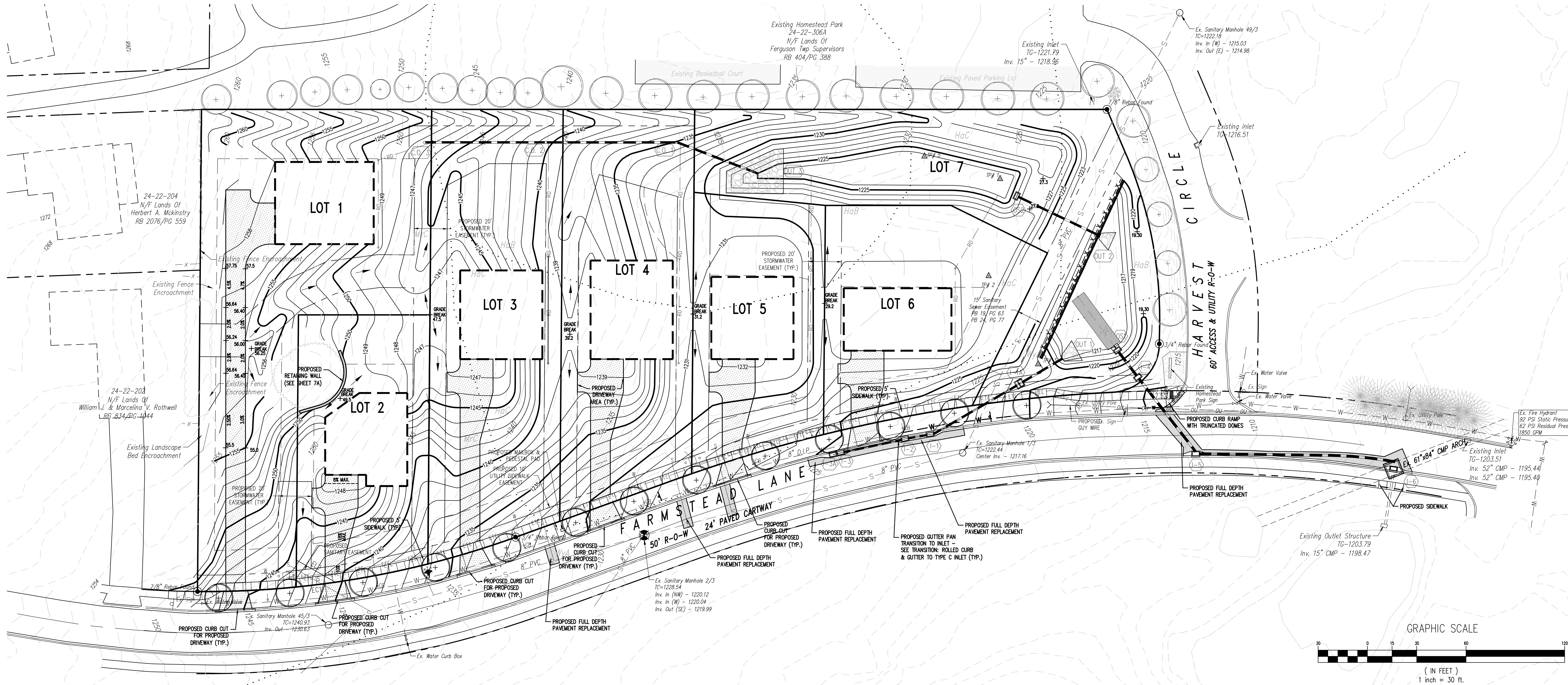
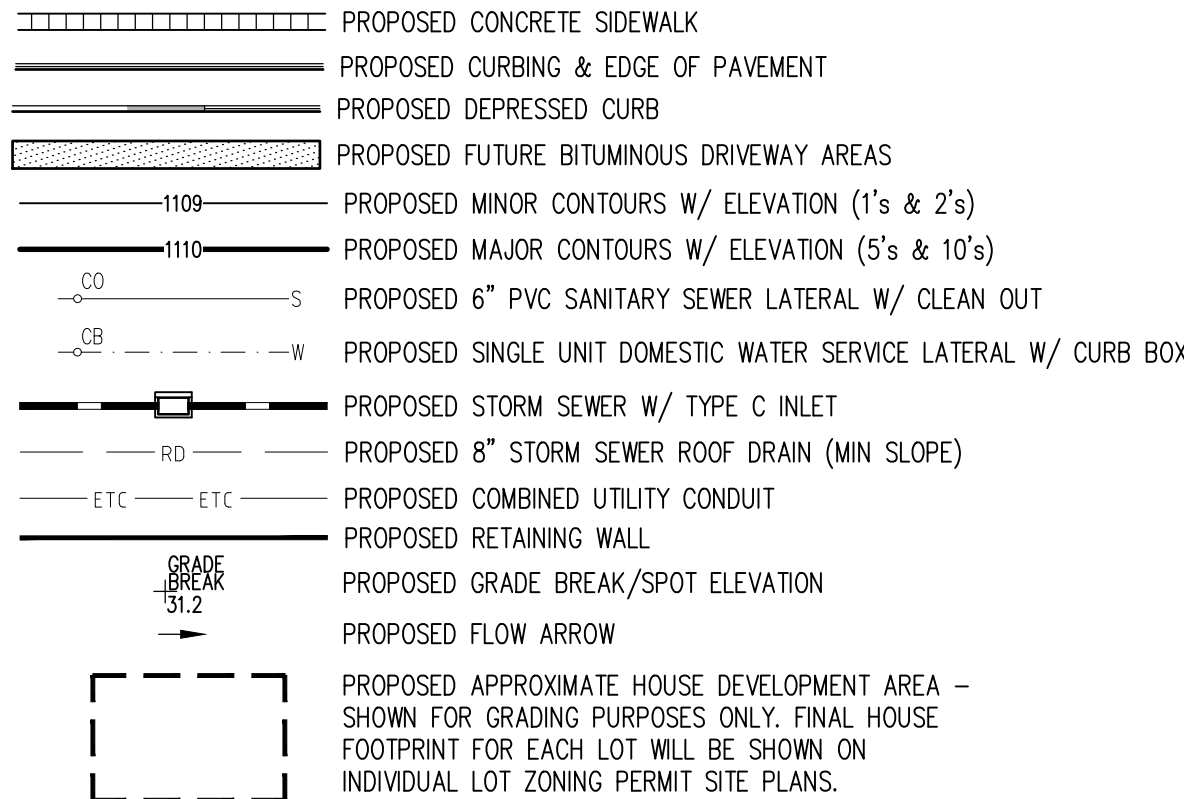
EXISTING FEATURES LEGEND



SOILS LEGEND

Soil cover on the site consists of:
HaB - Hagerstown Silt loam, 3%-8% Slopes
HaC - Hagerstown Silt loam, 8%-15% Slopes
McC - Morrison sandy loam, 8%-15% Slopes
WyA - Wyoming gravelly sandy loam rarely flooded, 0% to 5% slopes
Existing Soil Limit Line / Boundary
Existing Soil Type

PROPOSED FEATURES LEGEND



LANDSCAPE NOTES

1. Trees are to be mulched individually in a 4' diameter circle.
2. The mulch is to be double shredded hardwood bark mulch, well-aged and dark in color. Apply the mulch 3-4" thick.
3. Plant material substitutions may only be permitted at the approval of the owner and approving municipality prior to planting.
4. Any plantings which do not survive for a period of one year from the date of planting are to be replaced by the landscape contractor at no additional cost to the Owner.
5. All new plant material is to be kept watered by the landscape contractor when working on site until acceptance of the completion of the landscape or end of the season (then resume next season until project is completed). The owner will be responsible for watering thereafter.
6. All disturbed areas not being planted in trees or shrubs are to be fine graded with 6" of topsoil and seeded with a hardy perennial grass seed mixture and mulched with straw.
7. Grass must be 2 inches high over 90% of the seeded areas prior to acceptance by the owner.
8. All caliper measurements for landscaping shall be measured at 4.5' above the root ball.
9. Quantities of plant material noted on the planting schedule are to be verified with quantities shown on the plan which will have priority.

EXISTING FEATURES LEGEND

- EXISTING BUILDING Existing Building
- EXISTING CURBING & EDGE OF PAVEMENT Existing Curbing & Edge of Pavement
- EXISTING GRAVEL AREAS Existing Gravel Areas
- EXISTING BITUMINOUS AREAS Existing Bituminous Areas
- EXISTING FENCE Existing Fence
- EXISTING SANITARY SEWER W/ MANHOLE Existing Sanitary Sewer w/ Manhole
- EXISTING 6" PVC SANITARY SEWER LATERAL W/ CLEAN OUT Existing 6" PVC Sanitary Sewer Lateral w/ Clean Out
- EXISTING WATER LINE W/ VALVE Existing Water Line w/ Valve
- EXISTING STORM SEWER LINE W/ INLET Existing Storm Sewer Line w/ Inlet
- EXISTING OVERHEAD UTILITY LINE W/ POLE Existing Overhead Utility Line w/ Pole
- EXISTING DECIDUOUS TREE Existing Deciduous Tree
- EXISTING EVERGREEN TREE Existing Evergreen Tree
- EXISTING SHRUB Existing Shrub
- EXISTING SOIL INFILTRATION TEST PIT Existing Soil Infiltration Test Pit

PROPOSED FEATURES LEGEND

- PROPOSED CONCRETE SIDEWALK PROPOSED CONCRETE SIDEWALK
- PROPOSED CURBING & EDGE OF PAVEMENT PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED DEPRESSED CURB PROPOSED DEPRESSED CURB
- PROPOSED FUTURE BITUMINOUS DRIVEWAY AREAS PROPOSED FUTURE BITUMINOUS DRIVEWAY AREAS
- PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's) PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's) PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- PROPOSED 6" PVC SANITARY SEWER LATERAL W/ CLEAN OUT PROPOSED 6" PVC SANITARY SEWER LATERAL W/ CLEAN OUT
- PROPOSED SINGLE UNIT DOMESTIC WATER SERVICE LATERAL W/ CURB BOX PROPOSED SINGLE UNIT DOMESTIC WATER SERVICE LATERAL W/ CURB BOX
- PROPOSED STORM SEWER W/ TYPE C INLET PROPOSED STORM SEWER W/ TYPE C INLET
- PROPOSED 8" STORM SEWER ROOF DRAIN (MIN SLOPE) PROPOSED 8" STORM SEWER ROOF DRAIN (MIN SLOPE)
- PROPOSED COMBINED UTILITY CONDUIT PROPOSED COMBINED UTILITY CONDUIT
- PROPOSED RETAINING WALL PROPOSED RETAINING WALL
- PROPOSED GRADE BREAK/SPOT ELEVATION PROPOSED GRADE BREAK/SPOT ELEVATION
- PROPOSED FLOW ARROW PROPOSED FLOW ARROW
- PROPOSED APPROXIMATE HOUSE DEVELOPMENT AREA - SHOWN FOR GRADING PURPOSES ONLY. FINAL HOUSE FOOTPRINT FOR EACH LOT WILL BE SHOWN ON INDIVIDUAL LOT ZONING PERMIT SITE PLANS. PROPOSED APPROXIMATE HOUSE DEVELOPMENT AREA - SHOWN FOR GRADING PURPOSES ONLY. FINAL HOUSE FOOTPRINT FOR EACH LOT WILL BE SHOWN ON INDIVIDUAL LOT ZONING PERMIT SITE PLANS.

EXISTING TREE TO BE PRESERVED

SOILS LEGEND

Soil cover on the site consists of:

HaB - Hagerstown Silt loam, 3%-8% Slopes

HaC - Hagerstown Silt loam, 8%-15% Slopes

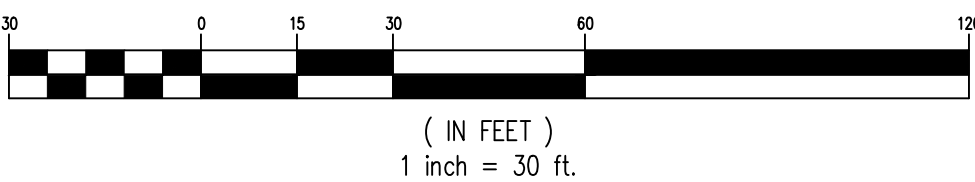
MrC - Morrison sandy loam, 8%-15% Slopes

WyA - Wyoming gravelly sandy loam rarely flooded, 0% to 5% slopes

Existing Soil Limit Line / Boundary

Existing Soil Type

GRAPHIC SCALE



Designer	MLH
Draftsman	MLH
Proj/Manager	MAT
Surveyor	BRK
Perimeter Ok.	
Book	Pg
File	2020-FRE-07-TREE-PLAN
Layout	TREE

5/24/22	REVISED PER TWP COMMENTS
MLH	
3/21/22	REVISED PER TWP COMMENTS
MLH	
2/29/22	REVISED PER TWP COMMENTS
MLH	
12/14/21	REVISED PER TWP COMMENTS
MLH	
10/19/21	PRICING SET
MLH	
Date	Description
	REVISIONS

FARMSTEAD VIEW

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY
SUBDIVISION PLAN

TREE
PRESERVATION
PLAN

PROJECT NO.	20290
DATE	JULY 29, 2021
SCALE	1" = 30'
SHEET NO.	7

PennTerra
ENGINEERING INC.
CENTRAL PENNSYLVANIA
REGION OFFICE:
3075 ENTERPRISE DRIVE
SUITE 100
STATE COLLEGE, PA 16801
PH: 814-231-8285
Fax: 814-237-2308

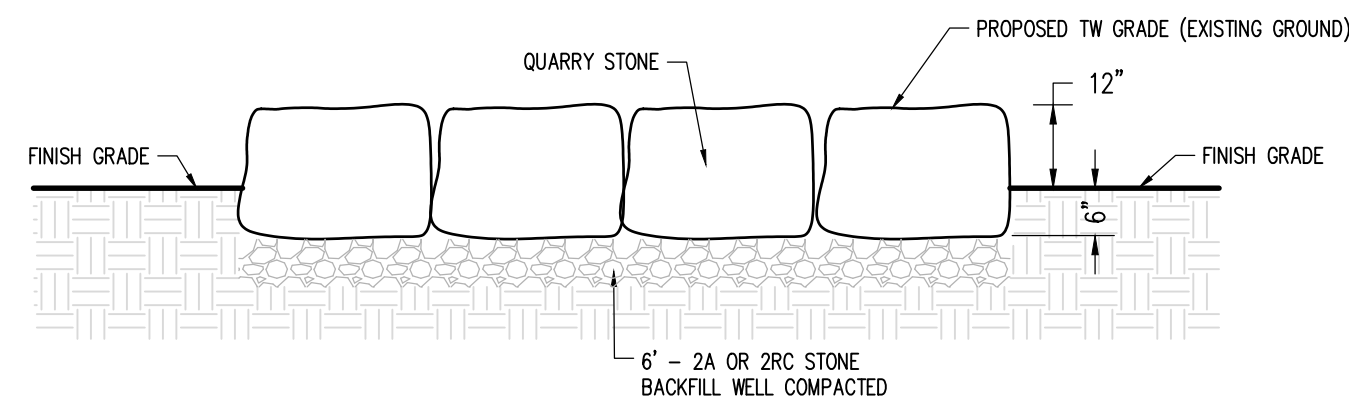
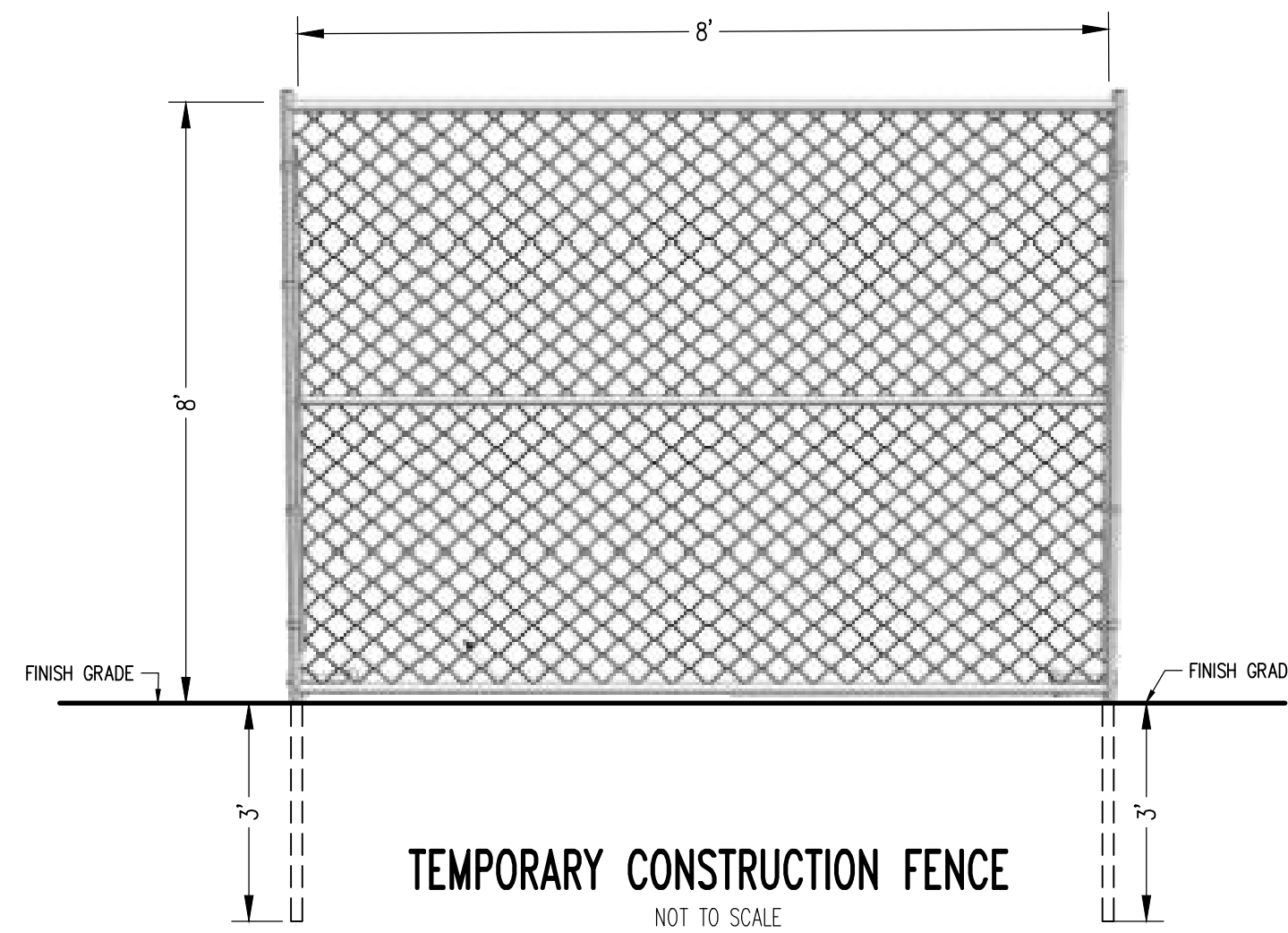
LANCASTER
REGION OFFICE:
3904 B ABEL DRIVE
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PH: 717-522-5031
Fax: 717-522-5046

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TREE PROTECTION NOTES:

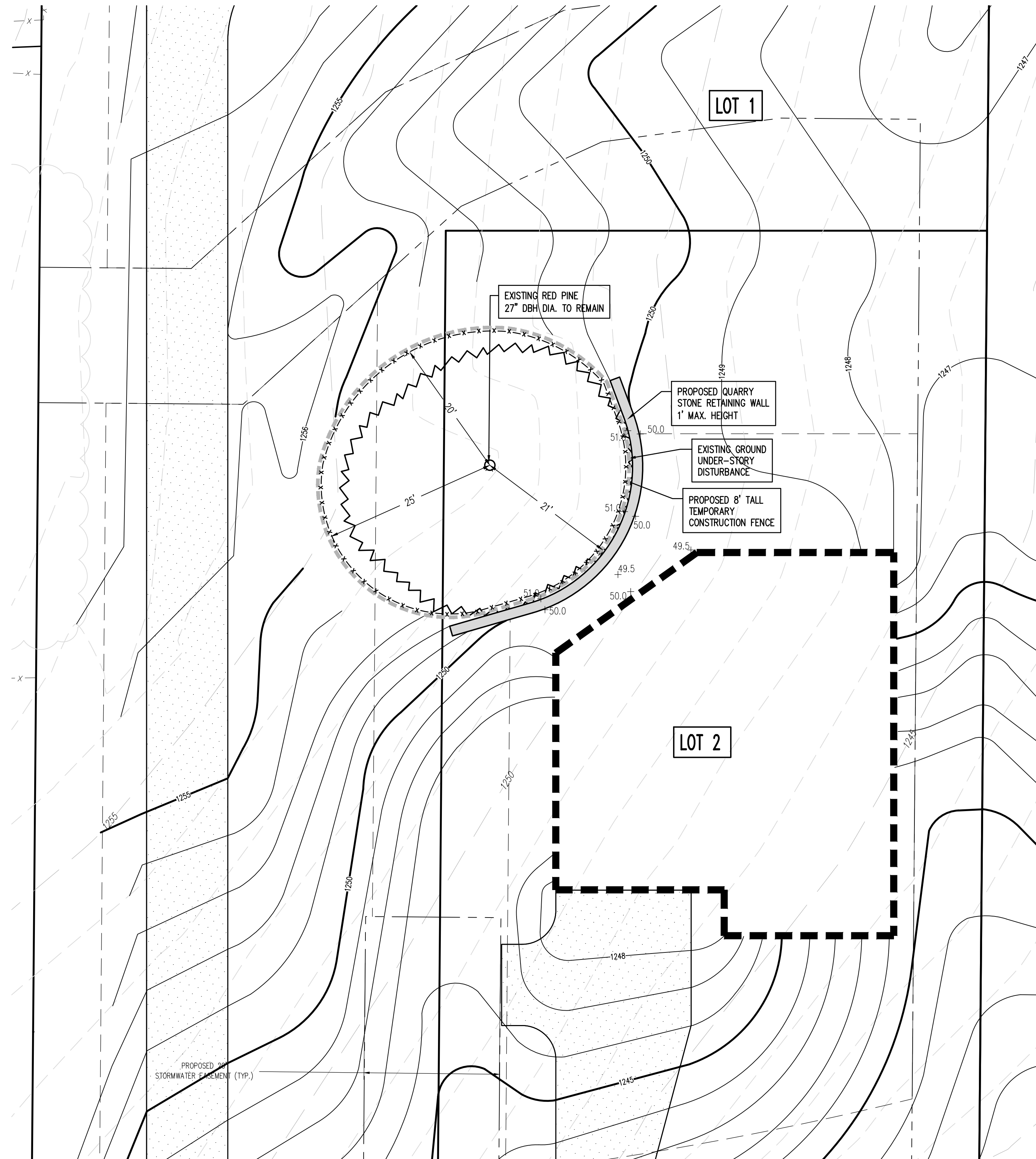
1. PRIOR TO THE PRE-CONSTRUCTION CONFERENCE WITH THE TOWNSHIP ARBORIST, PROTECTIVE FENCING SHALL BE PLACED AROUND TREES TO MINIMIZE DAMAGE TO ROOT SYSTEMS. FENCING SHALL BE A MINIMUM OF EIGHT IN. HEIGHT AND CONSTRUCTED OF CHAIN LINK OR OTHER MATERIAL APPROVED BY THE TOWNSHIP ARBORIST. UPON INSTALLATION OF THE FENCING THE CONTRACTOR SHALL ARRANGE AN ON-SITE MEETING WITH THE TOWNSHIP ARBORIST AND THE OWNERS REPRESENTATIVE.
2. THE PROTECTIVE FENCING SHALL BE PLACED AROUND THE DRIPLINE OF TREE. NOTHING SHALL BE STORE, STOCKPILED, TEMPORARILY PLACED, EXCAVATED OR ALLOWED IN THE PROTECTIVE FENCING.
3. THIS FENCE WILL BE INSTALLED PRIOR TO ANY AND ALL EARTH DISTURBANCE.
4. NO FUEL STORAGE, REFUELING OR MAINTENANCE OF EQUIPMENT OR WASH DOWN OF CEMENT HANDLING EQUIPMENT SHALL BE PERMITTED WITHIN AND PROTECTIVE FENCING.
5. ANY DAMAGE TO THE FENCING OR ENCROACHMENT ON THE PROTECTED AREAS SHALL BE REMEDIED IMMEDIATELY. ANY OBSERVED DAMAGE TO THE TREES OR ROOTS SHALL BE IMMEDIATELY REPORTED TO THE TOWNSHIP ARBORIST AND REMEDIED AS SOON AS POSSIBLE. CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE TREE PROTECTION AREA SECURE & FOR ANY DAMAGE TO THE TREE WITHIN THE PROTECTION AREA AFTER THE FENCING HAS BEEN INSTALLED.
6. TREE PROTECTION FENCING SHALL BE MAINTAINED AND REPAIRED BY THE CONTRACTOR FOR THE DURATION OF THE CONTRACT.
7. ACCESS TO FENCED AREAS WILL BE PERMITTED ONLY WITH PRIOR APPROVAL OF THE OWNER'S REPRESENTATIVE.
8. ANY EXCAVATION OR GRADING REQUIRED WITHIN THE FENCED AREAS SHALL BE DONE AS DIRECTED BY THE OWNER'S REPRESENTATIVE & UPON NOTIFICATION OF THE TOWNSHIP ARBORIST.
9. EXISTING TREES, SHRUBS, OR UNDER GROWTH TO BE CLEARED FROM PROTECTED ROOT ZONE AREAS SHALL BE REMOVED BY HAND AS DESIGNATED BY OWNER'S REPRESENTATIVE.



- NOTES:
1. STONES MUST BE A MINIMUM SIZE OF 1.5' THICK, 1.5' WIDE AND 1.5' DEEP. STONE FACES SHALL BE ROUGHLY SQUARED.
 2. STONES OBTAINED FROM PROJECT SITE MUST BE APPROVED BY ENGINEER.
 3. WEATHERED OR FRACTURED ROCK SHALL NOT BE USED.

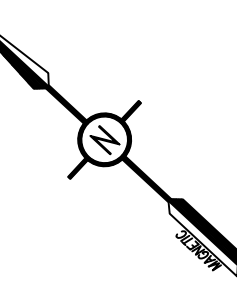
QUARRY STONE RETAINING WALL

NOT TO SCALE



TREE PRESERVATION PLAN VIEW

SCALE: 1\"/>

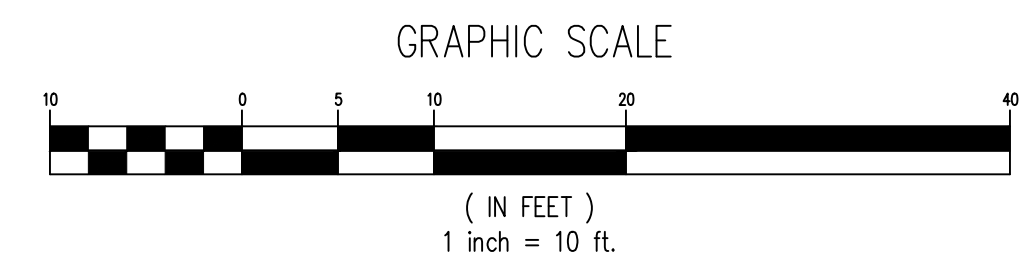


EXISTING FEATURES LEGEND

	Existing Building
	Existing Curbing & Edge of Pavement
	Existing Gravel Areas
	Existing Bituminous Areas
	Existing Fence
	Existing Sanitary Sewer w/ Manhole
	Existing 6\"/>
	Existing Water Line w/ Valve
	Existing Storm Sewer Line w/ Inlet
	Existing Overhead Utility Line w/ Pole
	Existing Deciduous Tree
	Existing Evergreen Tree
	Existing Shrub
	Existing Soil Infiltration Test Pit

PROPOSED FEATURES LEGEND

	PROPOSED FUTURE BITUMINOUS DRIVEWAY AREAS
	PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
	PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
	PROPOSED RETAINING WALL
	PROPOSED GRADE BREAK/SPOT ELEVATION
	PROPOSED FLOW ARROW
	PROPOSED APPROXIMATE HOUSE DEVELOPMENT AREA - SHOWN FOR GRADING PURPOSES ONLY. FINAL HOUSE FOOTPRINT FOR EACH LOT WILL BE SHOWN ON INDIVIDUAL LOT ZONING PERMIT SITE PLANS.



Designer	MLH
Draftsman	MLH
Proj Manager	MAT
Surveyor	BRK
Perimeter Ok	
Book	Pg
File	20290-PRE-01A-TREE-PROTECTION-PLAN
Layout	TREE

Date	Description
5/24/22	REVISED PER TWP COMMENTS
MLH	
3/21/22	REVISED PER TWP COMMENTS
MLH	
2/22/22	REVISED PER TWP COMMENTS
MLH	
12/14/21	REVISED PER TWP COMMENTS
MLH	
10/19/21	PRICING SET
MLH	
Date	Description
	REVISIONS

FARMSTEAD VIEW

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY SUBDIVISION PLAN

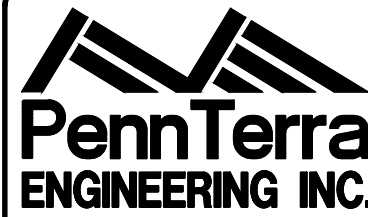
TREE PROTECTION PLAN

PROJECT NO.	20290
DATE	JULY 29, 2021
SCALE	AS SHOWN
SHEET NO.	7A

**LANCASTER
REGION OFFICE:**
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Designer MLH
Draftsman MLH
Proj Manager MAT
Surveyor BRK
Perimeter Ok.
Book ---- Pg ----
File 20220-FRE-06-DETAILS
Layout DETAILS

Date	Description	REVISIONS
5/24/22	REVISED PER TWP COMMENTS	MLH
3/21/22	REVISED PER TWP COMMENTS	MLH
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12/14/21	REVISED PER TWP COMMENTS	MLH
10/29/21	PRICING SET	MLH

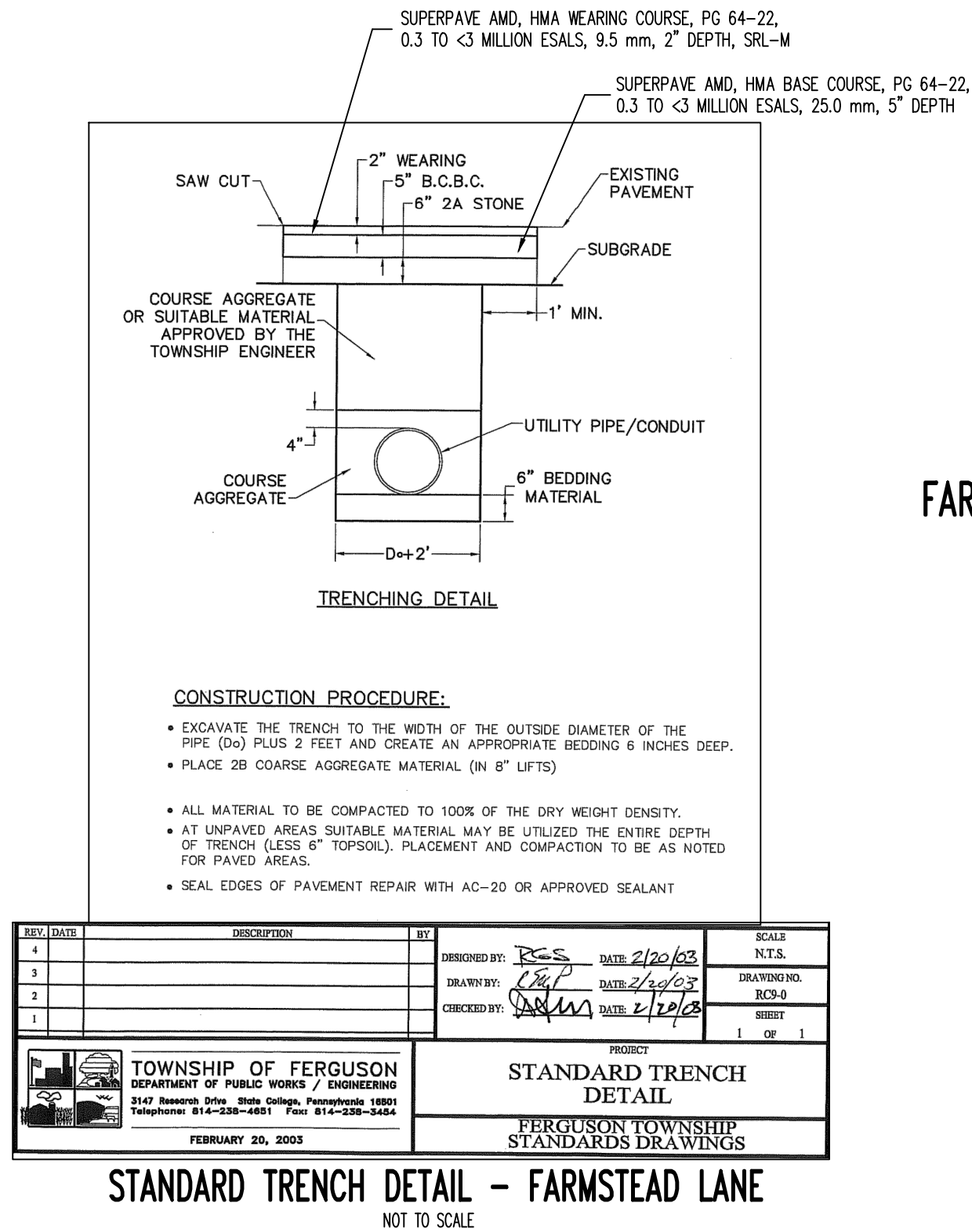
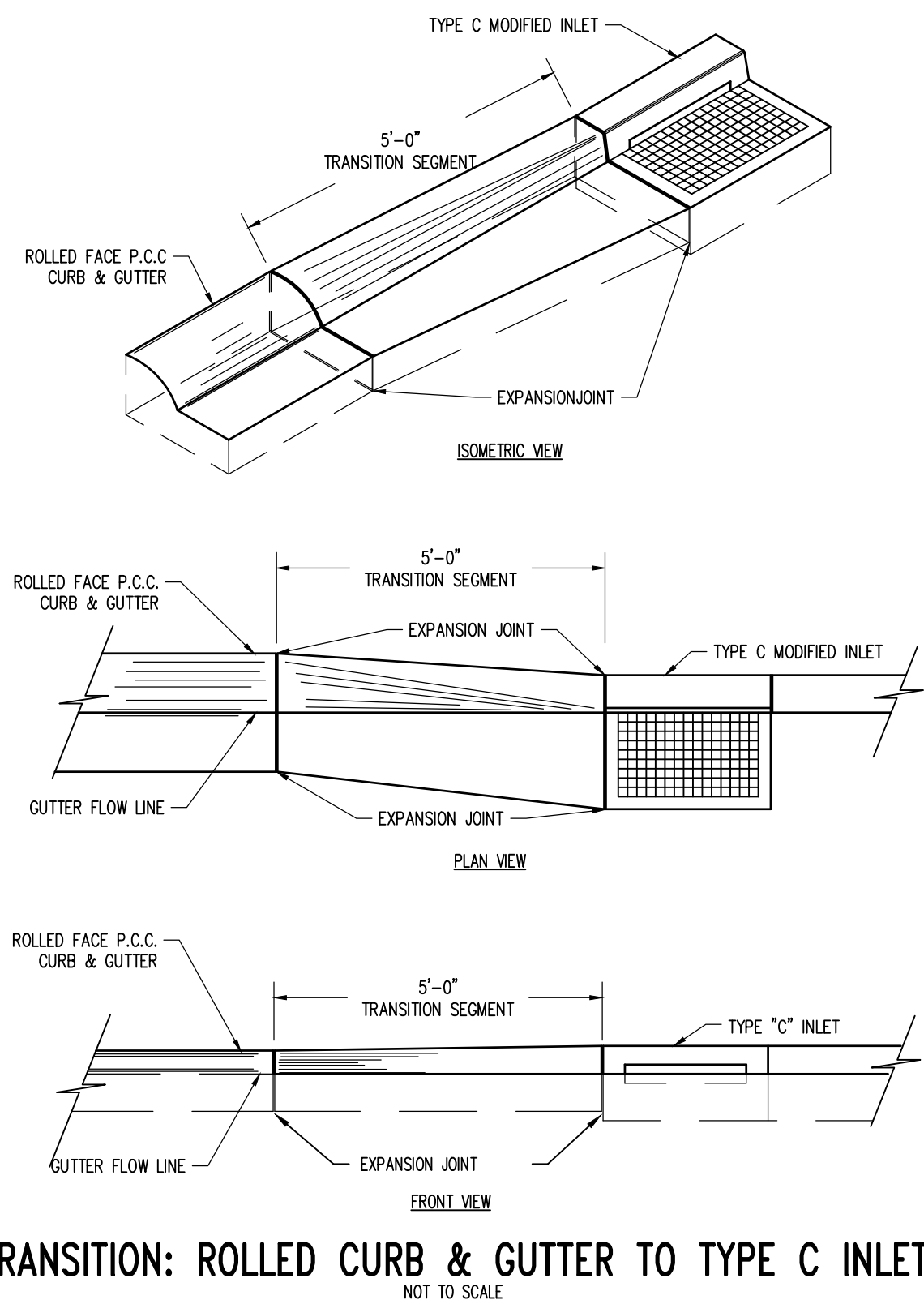
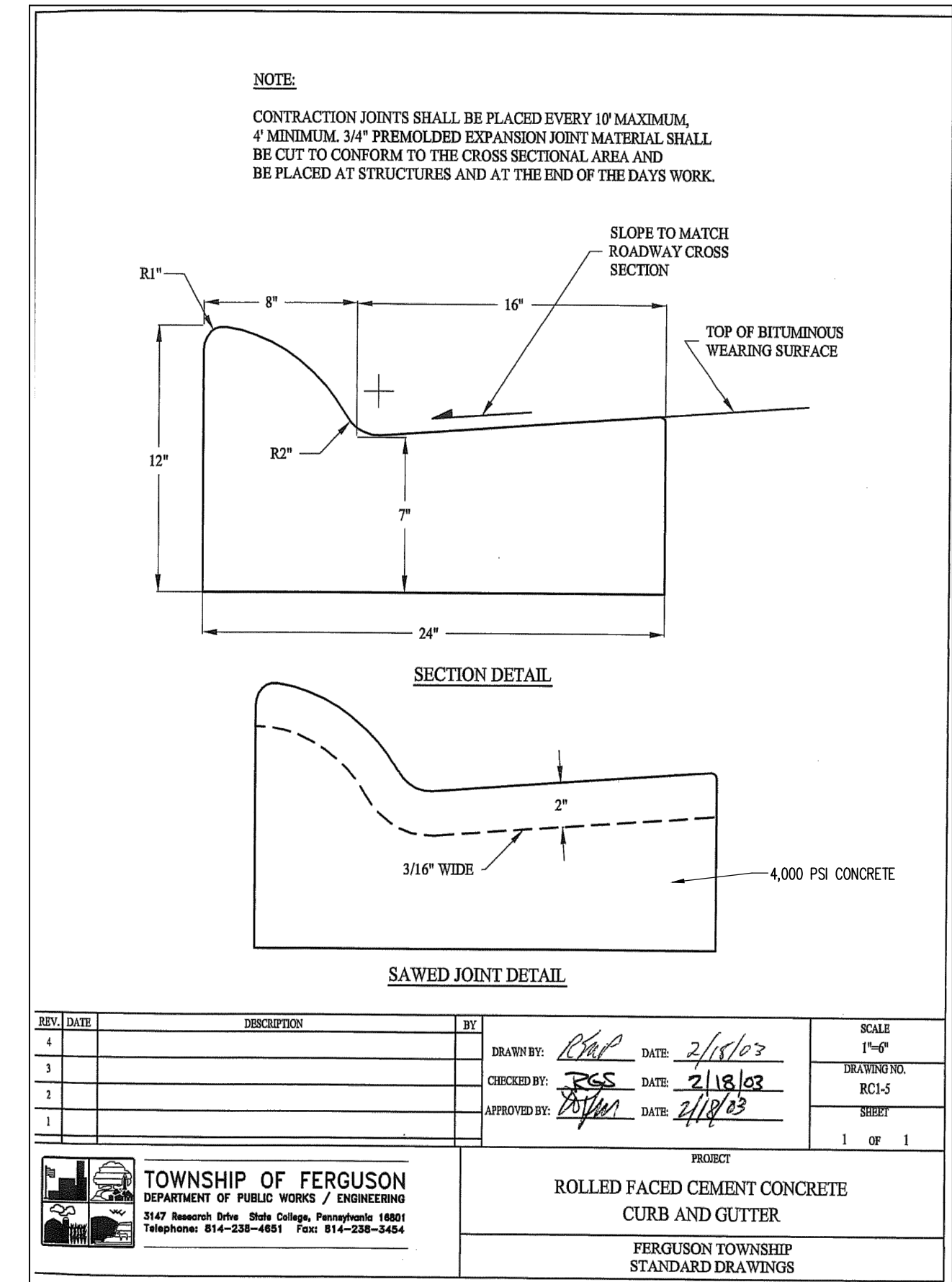
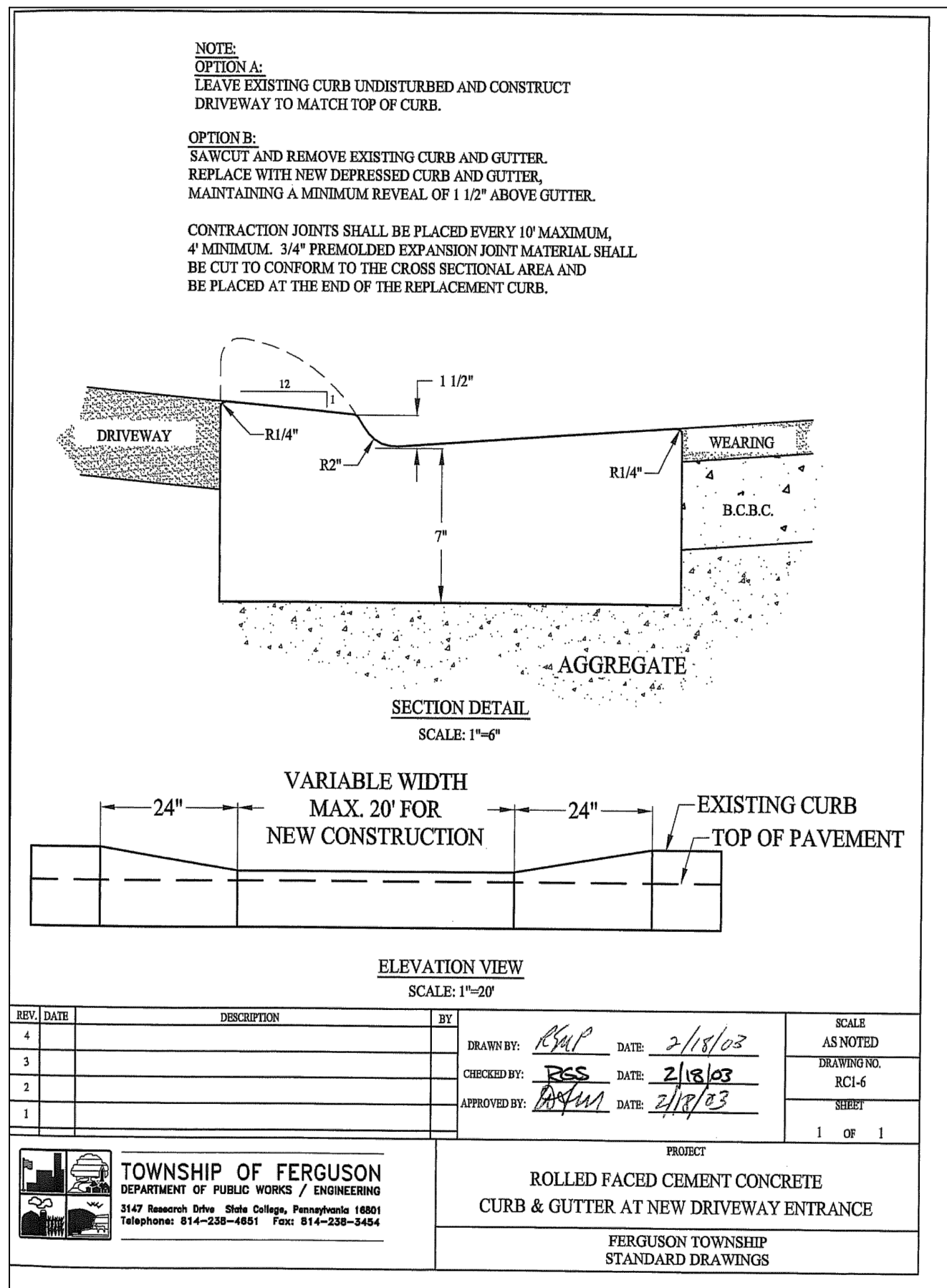
FARMSTEAD VIEW

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY SUBDIVISION PLAN

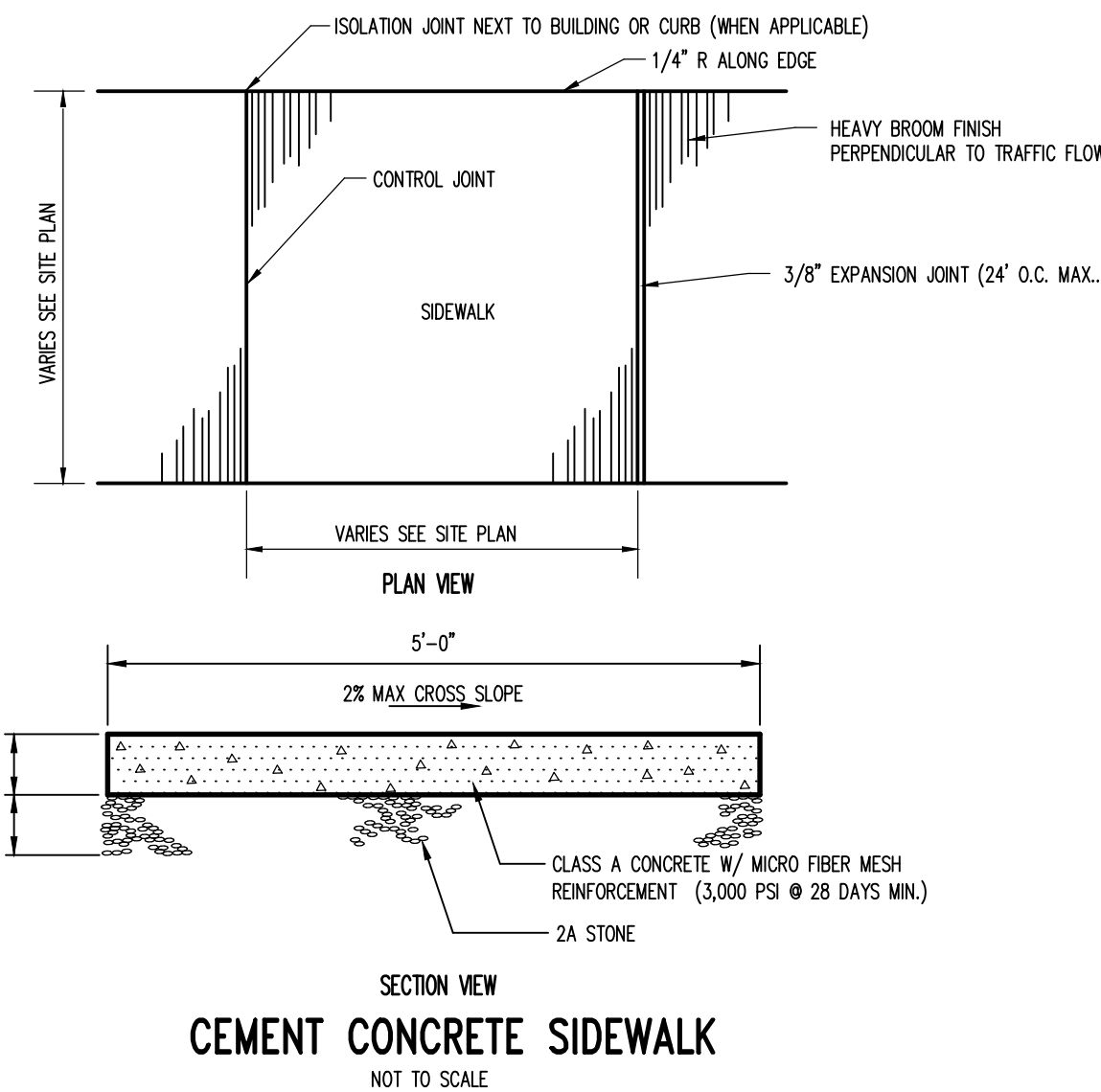
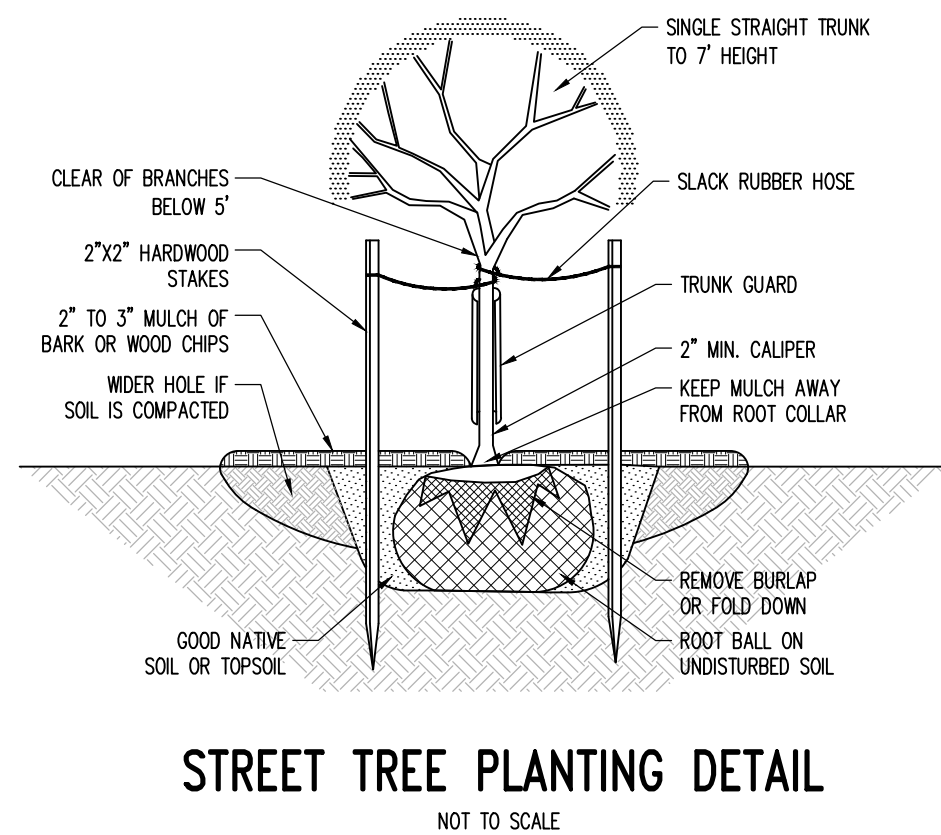
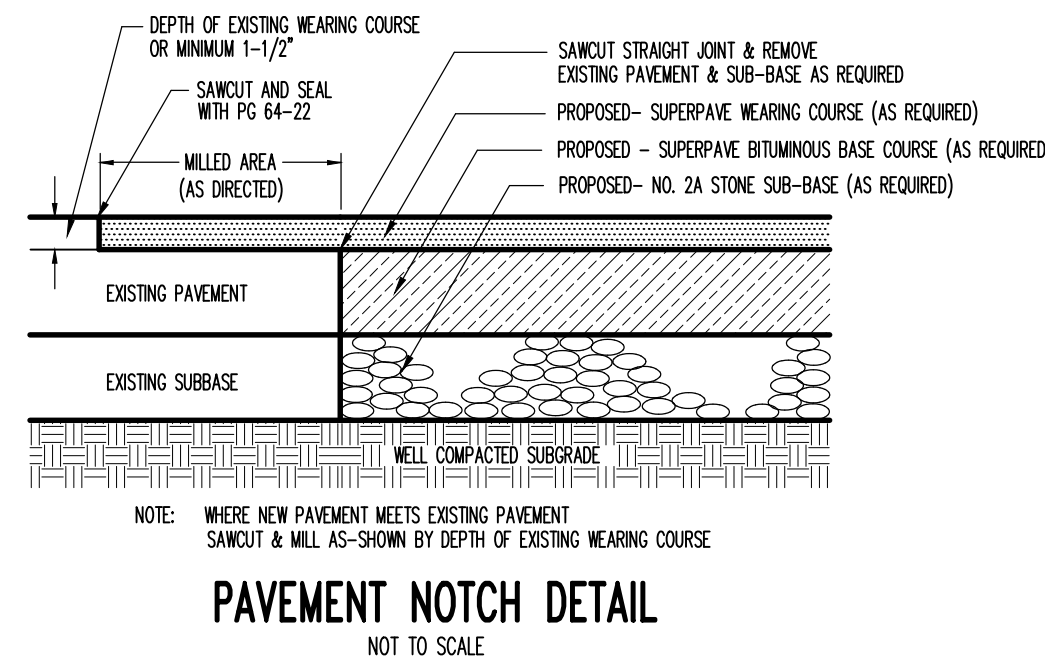
GENERAL CONSTRUCTION DETAILS

PROJECT NO.	20290
DATE	JULY 29, 2021
SCALE	N.T.S
SHEET NO.	9

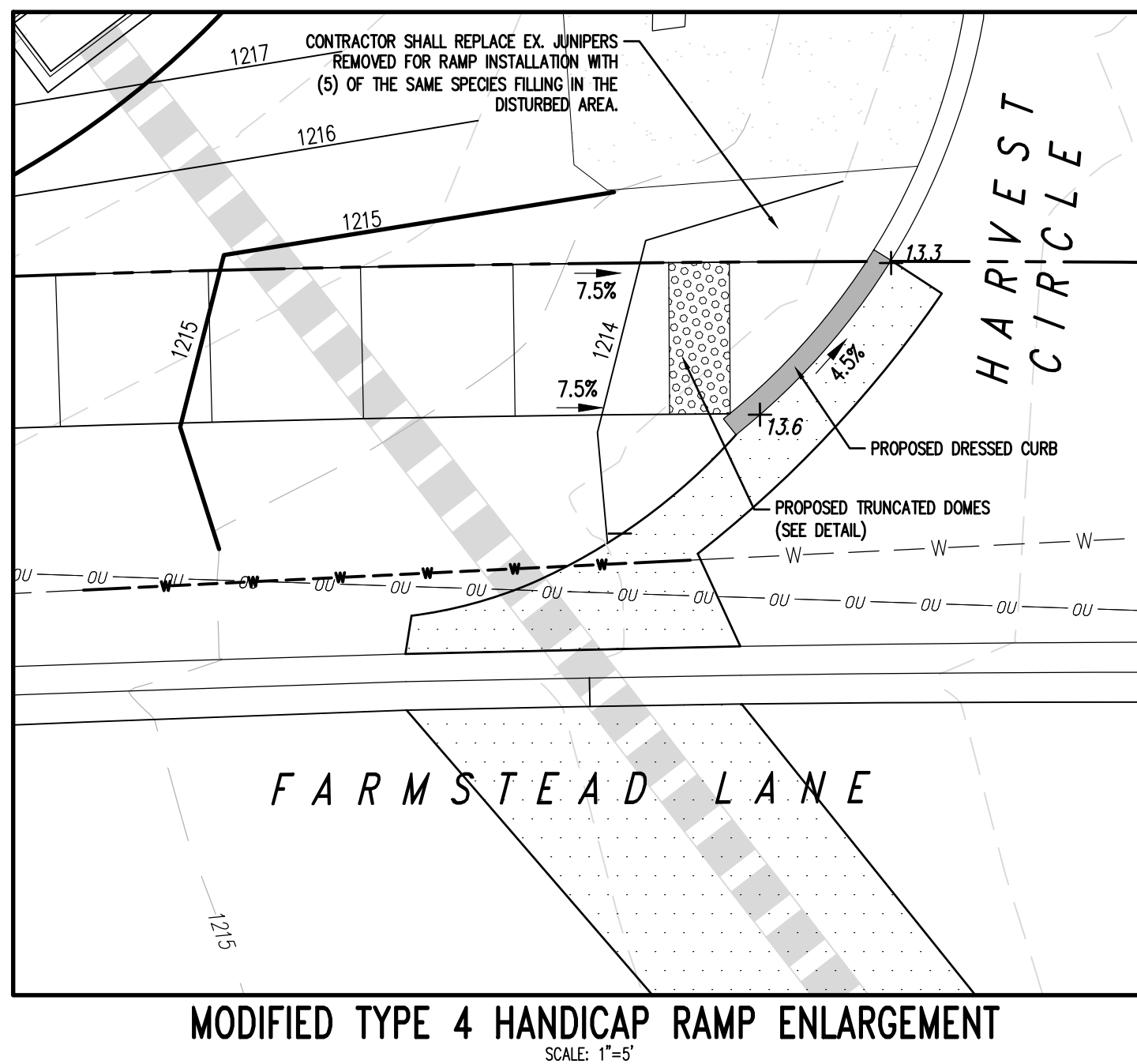
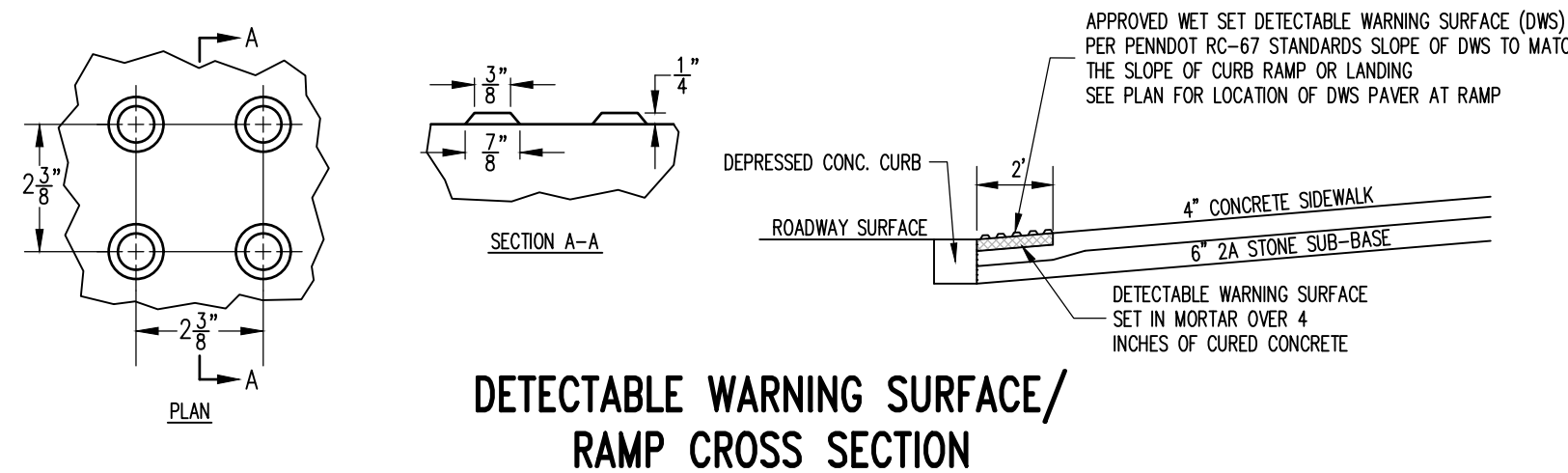


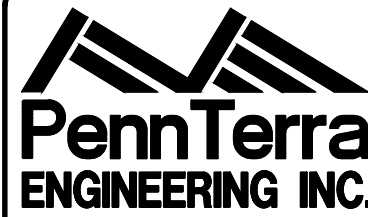
FARMSTEAD LANE PAVEMENT REPLACEMENT SECTION

NOT TO SCALE



- NOTES:
- CONTROL JOINTS 5' MAX. SPACING, FULL DEPTH EXPANSION JOINTS AT SOLID STRUCTURES, CURB AND BEGINNING AND END OF WORKING DAY.
 - CONSTRUCTION SHALL BE IN ACCORDANCE WITH FERGUSON TOWNSHIP STANDARDS AND SPECIFICATIONS.





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STORMWATER MANAGEMENT NOTES

- All site work shall be done in accordance with the plans prepared by PennTerra Engineering, Inc., the current requirements of the governing municipality, the applicable sections of the PennDOT standard specifications for roadway construction, and all other pertinent federal and state laws.
- The Contractor shall comply at all times with applicable federal, state and local laws, provisions, and policies governing safety and health, including the federal construction safety act, as amended.
- The Contractor shall be responsible for examining the areas and conditions under which the project is to be constructed prior to the submission of a bid. Submission of a bid to be constructed to mean the Contractor has reviewed the site and is familiar with conditions and constraints of the site.
- Before excavation, all underground utilities shall be located in the field by the proper authorities. The Contractor shall notify pa one call 1-800-242-1776. The location of all utilities and underground structures are approximate and may not all be shown. It is the responsibility of the Contractor to determine the existence and exact location of all utilities and underground structures.
- An as-built drawing of new utility services shall be prepared by the Contractor and submitted to the Owner upon completion of the project.
- All storm pipe shall be as noted. All joints shall be watertight.
- Contractor shall refer to other plans within this construction set for other pertinent information.
- Co-permittee requirements: Contractor to complete Pennsylvania Department of Environmental Protection (D.E.P.) forms and make application to become co-permittees of the general NPDES permit prior to commencing any land disturbance. Contractor shall assume full responsibility for any fines or other measures assessed by regulatory agencies due to improper or deficient installation and / or maintenance of the temporary erosion and sedimentation control measures and post-construction stormwater measures installed. Contractor shall remain a co-permittee of the National Pollutant Discharge Elimination System (NPDES) permit until the notice of termination of the NPDES permit has been issued by the PA D.E.P.
- Notice of termination services: Contractor shall be responsible for the services for the notice of termination of the NPDES permit. This includes but is not limited to the following:
 - Have a licensed professional or designee on-site to observe the critical stages of construction noted in the post-construction stormwater management plan. The licensed professional or designee will be responsible for signing the required certification forms and certifying that the facilities have been built according to the approved plans, processing and recording any required forms and the as-built survey through the PA D.E.P. until the notice of termination is received.
 - Prepare an as-built topographic survey sealed by a licensed surveyor from the commonwealth of Pennsylvania of the stormwater management facilities (infiltration basin, detention basin with constructed filter and outlet structures, outlet pipes, tops of berms and spillways).
 - Provide double-reading infiltrometer tests as outlined in the December 2006 PA D.E.P. Stormwater BMP manual of the produced basin bottom topsoil prior to installation to certify that the topsoil meets the infiltration requirements noted on the plans.
- Contractor shall have a licensed professional submit co-built drawings/documentation (including verification of infiltration testing) of the stormwater management facilities prepared in accordance with chapter 26 of the governing municipality's code of ordinances and submitted to the governing municipality at the completion of construction as a prerequisite of issuance of occupancy permit or release of the surety bond. A narrative and photographic documentation for critical stages of construction and for the infiltration surface prior to placement of topsoil must also be submitted to the governing municipality.
- As-built infiltration testing in basins shall be performed at the top of the finished native soil layer prior to topsoil placement. This testing is in addition to the testing identified in Note 5c. The number of infiltration tests performed shall be in accordance with the governing municipality's code of ordinances.

NPDES PERMIT, CO-PERMITTEE AND NOTICE OF TERMINATION NOTES

- The contractor shall process forms with the Local County Conservation District to become a co-permittee on the NPDES. The contractor shall remain a co-permittee until the applicant releases them from the permit.
- The Notice of Termination requires certification by a licensed professional of the stormwater facilities as noted on the Post Construction Stormwater Management Plan under the section labeled "Critical Stages of Construction".
- The licensed professional responsible for certifying the Notice of Termination (NOT) of the NPDES permit shall be selected prior to commencing earth disturbance activities on the project site. The general site contractor shall be responsible for supplying & coordinating the licensed professional.
- The licensed professional responsible for certifying the NOT shall be present for all "Critical Stages of Construction".
- A pre-construction meeting between the contractor, owner and licensed professional responsible for certifying the NOT is required to ensure all "Critical Stages of Construction" are reviewed, acknowledged and milestones established to ensure the licensed professional is present onsite during the "Critical Stages of Construction".
- The licensed professional will be required to certify and seal as-built drawings at the end of construction that the stormwater facilities have been built to the specifications on the post-construction stormwater management plans and details.
- Upon completion of all earth moving activities and once site stabilization is achieved in accordance with the Erosion and Sediment Control Plan, The contractor shall then file the as-built drawings and NOT certification with the Local County Conservation District

CRITICAL STAGES OF CONSTRUCTION FOR PROJECTS REQUIRING A GENERAL NPDES PERMIT

Critical Stages of Construction are key components of the construction sequence of the Post Construction Stormwater Management Plan and require certification and construction oversight by the licensed professional responsible for certification of the certified stormwater as-built plan and the NOT.

At least two weeks in advance of construction, the contractor shall schedule a coordination meeting with the licensed professional to review the critical stages and establish a schedule for inspections/verifications of all critical stages. At the discretion of the licensed professional, the contractor will provide photo documentation of the installation of certain items in lieu of the licensed professional being present.

The critical stages for each Post Construction Stormwater Best Management Practice are as follows:

INFILTRATION BASINS

- In order to ensure the basin floor is not compacted, equipment shall not be permitted to operate within the basin when the floor is less than 36" from subgrade elevation. A typical infiltration facility bottom excavation detail has been provided on the plans for construction. Alternatively, the contractor may develop their own plan and methods for bottom excavation. The contractor must review the proposed plan/methods with the licensed professional during the coordination meeting.
- Once subgrade of the facility has been reached, and prior to topsoil placement, the licensed professional and responsible testing firm shall be notified to schedule infiltration testing verification of the subgrade.
- Infiltration testing of the final basin floor elevation to verify infiltration rates of the topsoil placed on the basin floor is required. The contractor shall coordinate infiltration testing with the licensed professional and responsible testing firm. It is recommended that the topsoil also be tested prior to placement.
- The contractor must notify the licensed professional of the installation of the outlet structure, outfall pipe and anti-seep collars prior to backfill to ensure installation has been completed in accordance with the approved plan.
- Compaction testing reports are required on the basin berm. The contractor shall coordinate compaction testing with the licensed professional and responsible testing firm.
- Berms shall be installed and compacted in conformance with the requirements of the local municipality's Stormwater Management Ordinance. If the municipality does not specify compaction requirements, then all berms shall be installed as follows:
 - Whenever berm fill material in excess of 3 feet in height is to be used, each layer of compacted fill shall be tested to determine its density per ASTM D2922 or ASTM D3017.
 - All berm lifts shall be 8" or less.
 - The density of each layer shall be 98% of a Standard Proctor Density analysis per ASTM D698.
- All proposed vegetation within the limits of construction shall be established to a 70% uniform vegetated cover prior to final notice of termination certification.
- All professional infiltration/compaction testing results shall be provided in the as-built package to the township.

DETENTION BASINS WITH CONSTRUCTED FILTER

- The contractor must notify the licensed professional of the installation of the outlet structure, outfall pipe, constructed sand filter underdrain and anti-seep collars prior to backfill to witness and ensure installation has been completed in accordance with the approved plan.
- Compaction testing reports are required on the basin berm. The contractor shall coordinate compaction testing with the licensed professional and responsible testing firm.
- Berms shall be installed and compacted in conformance with the requirements of the local municipality's Stormwater Management Ordinance. If the municipality does not specify compaction requirements, then all berms shall be installed as follows:
 - Whenever berm fill material in excess of 3 feet in height is to be used, each layer of compacted fill shall be tested to determine its density per ASTM D2922 or ASTM D3017.
 - All berm lifts shall be 8" or less.
 - The density of each layer shall be 98% of a Standard Proctor Density analysis per ASTM D698.
- Constructed filter infiltration rate (topsoil infiltration rate and sand infiltration rate) shall be tested prior to and after placement to ensure the infiltration capabilities meet the design requirements noted on the Post construction Stormwater Management Details Sheet.
- All proposed vegetation within the basin shall be established to a 70% uniform vegetated cover prior to final notice of termination certification.
- All professional infiltration/compaction testing results shall be provided in the as-built package to the township.

GRADING DRAINAGE BREAKS

- Upon reaching finished grade, the contractor must notify the licensed professional to verify grade breaks as shown on the Post Construction Stormwater Management Plan. All roof drainage on Lots 1, 3 and 4 must be directed to the storm drainage system (CO#3 to the Infiltration Basin), and all roof drainage on Lots 5 and 6 must be piped to the Infiltration Basin by means of the proposed roof drain pipe network on each lot respectively.

NATURALLY OCCURRING GEOLOGIC FORMATIONS/SOIL CONDITIONS

There are no known naturally occurring geologic formations or soil conditions that pose the potential for pollution during construction. If a sinkhole is encountered due to karst topography, the sinkhole shall be repaired as specified on the sinkhole repair detail and/or a geotechnical engineer must be contacted for proper repair procedures.

STORMWATER AS-BUILT NOTE:

If the infiltration basin or detention basin with constructed filter should become non-functional during development or buildout, the developer or builder will be responsible for repairs/remediation. Verification that the facilities are functioning correctly will be required after the entire site is developed/stabilized.

EXISTING FEATURES LEGEND

- EXISTING BUILDING
- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Gravel Areas
- Existing Bituminous Areas
- Existing Fence
- Existing Sanitary Sewer w/ Manhole
- Existing 6" PVC Sanitary Sewer Lateral w/ Cle.
- Existing Water Line w/ Valve
- Existing Storm Sewer Line w/ Inlet
- Existing Overhead Utility Line w/ Pole
- Existing Deciduous Tree
- Existing Evergreen Tree
- Existing Shrub
- Existing Soil Infiltration Test Pit

SOILS LEGEND

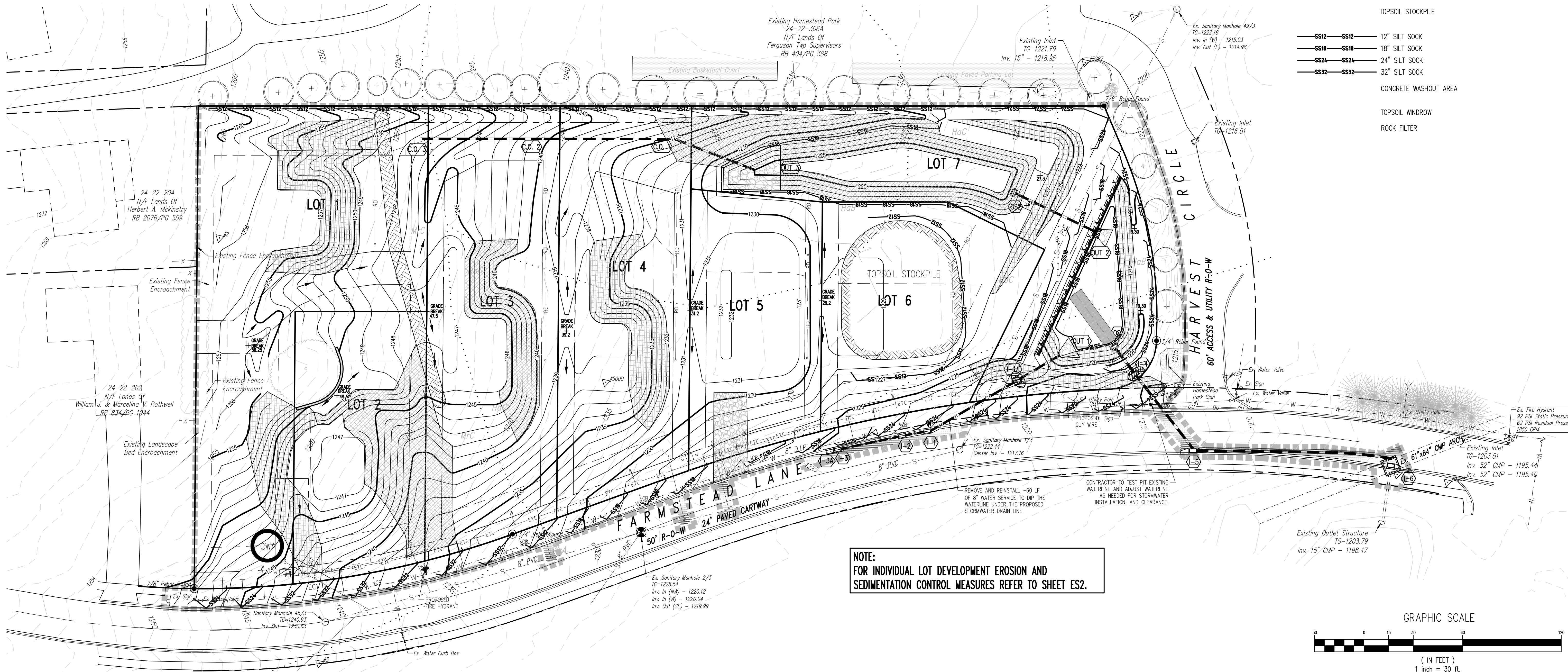
Soil cover on the site consists of:
HaB - Hagerstown Silt loam, 3%-8% Slopes
HaC - Hagerstown Silt loam, 8%-15% Slopes
Mrc - Morrison sandy loam, 8%-15% Slopes
Wya - Wyoming gravelly sandy loam rarely flooded, 0% to 5% slopes
Existing Soil Limit Line / Boundary
Existing Soil Type

PROPOSED FEATURES LEGEND

- PROPOSED CONCRETE SIDEWALK
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED DEPRESSED CURB
- PROPOSED FUTURE BITUMINOUS DRIVEWAY AREAS
- PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- PROPOSED 6" PVC SANITARY SEWER LATERAL W/ CLEAN OUT
- PROPOSED SINGLE UNIT DOMESTIC WATER SERVICE LATERAL W/ CURB BOX
- PROPOSED STORM SEWER W/ TYPE C INLET
- PROPOSED 8" STORM SEWER ROOF DRAIN (MIN SLOPE)
- PROPOSED RETAINING WALL
- PROPOSED GRADE BREAK/SPOT ELEVATION
- PROPOSED FLOW ARROW

EROSION & SEDIMENTATION CONTROL LEGEND

- LIMIT OF DISTURBANCE / NPDES BOUNDARY LINE
- CONSTRUCTION ENTRANCE
- INLET PROTECTION
- RIP-RAP APRON
- EROSION CONTROL LINING (CURLEX I OR APPROVED EQUAL)
- TOPSOIL STOCKPILE
- 12" SILT SOCK
- 18" SILT SOCK
- 24" SILT SOCK
- 32" SILT SOCK
- CONCRETE WASHOUT AREA
- TOPSOIL WINDROW
- ROCK FILTER



NOTE:
FOR INDIVIDUAL LOT DEVELOPMENT EROSION AND
SEDIMENTATION CONTROL MEASURES REFER TO SHEET ES2.

Designer MLH
Draftsman XXX
Proj/Manager MAT
Surveyor BRK
Perimeter Ok.
Book ---- Pg ----
File 20200-FRE-EAS-1-PLAN
Layout ES1

5/14/22	REVISED PER TWP COMMENTS
3/21/22	REVISED PER TWP COMMENTS
2/7/22	REVISED PER TWP COMMENTS
12/14/21	REVISED PER TWP COMMENTS
10/19/21	PACING SET
Date	Description
REVISIONS	

FARMSTEAD VIEW

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY SUBDIVISION PLAN

EROSION & SEDIMENTATION CONTROL PLAN (BULK EARTH MOVING PHASE)

PROJECT NO.
20290
DATE
JULY 29, 2021
SCALE **1" = 30'** SHEET NO. **ES1**


EXISTING FEATURES LEGEND


	Existing Building
	Existing Curbing & Edge of Pavement
	Existing Gravel Areas
	Existing Bituminous Areas
	Existing Fence
	Existing Sanitary Sewer w/ Manhole
	Existing 6" PVC Sanitary Sewer Lateral w/ Cleanout
	Existing Water Line w/ Valve
	Existing Storm Sewer Line w/ Inlet
	Existing Overhead Utility Line w/ Pole
	Existing Deciduous Tree
	Existing Evergreen Tree
	Existing Shrub
	Existing Soil Infiltration Test Pit

SOILS LEGEND

Soil cover on the site consists of:

- HaB – Hagerstown Silt loam, 3%–8% Slopes
- HaC – Hagerstown Silt Loam, 8%–15% Slopes
- MtC – Morrison sandy loam, 8%–15% Slopes
- WyA – Wyoming gravelly sandy loam rarely flooded, 0% to 5% slopes

 Existing Soil Limit Line / Boundary

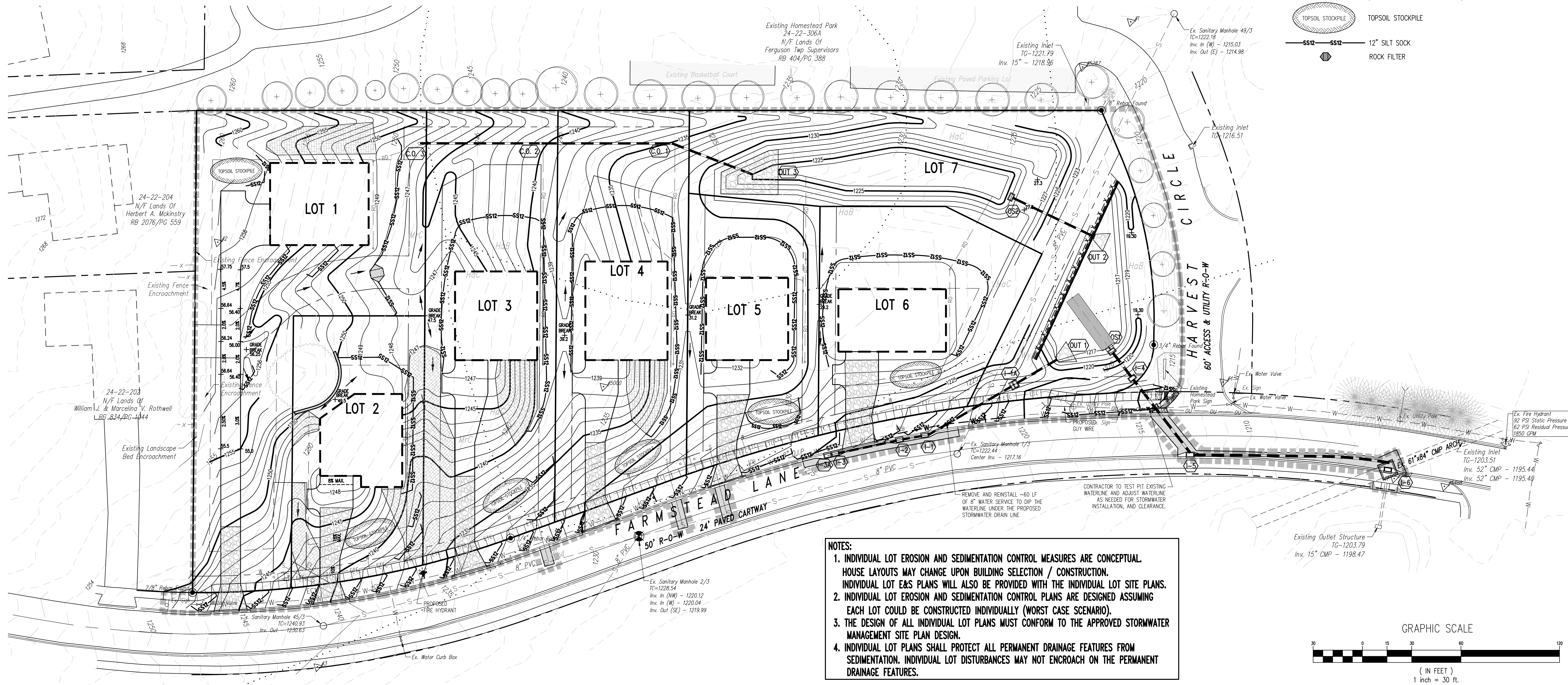
 Existing Soil Type

PROPOSED FEATURES LEGEND

	PROPOSED CONCRETE SIDEWALK
	PROPOSED CURBING & EDGE OF PAVEMENT
	PROPOSED DEPRESSED CURB
	PROPOSED FUTURE BITUMINOUS DRIVEWAY AREAS
	PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
	PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
	PROPOSED 6" PVC SANITARY SEWER LATERAL W/ CLEAN OUT
	PROPOSED SINGLE UNIT DOMESTIC WATER SERVICE LATERAL W/ CURB BOX
	PROPOSED STORM SEWER W/ TYPE C INLET
	PROPOSED 8" STORM SEWER ROOF DRAIN (MIN SLOPE)
	PROPOSED RETAINING WALL
	PROPOSED GRADE BREAK/SPOT ELEVATION
	PROPOSED FLOW ARROW

**EROSION & SEDIMENTATION
CONTROL LEGEND**

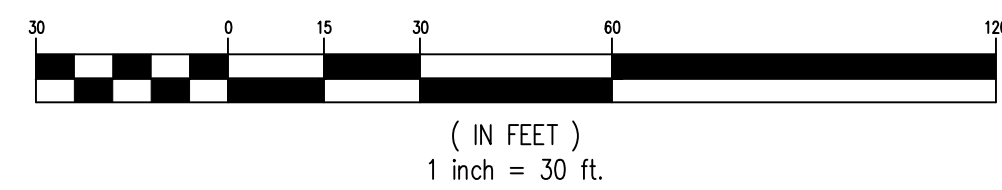
	LIMIT OF DISTURBANCE / NPDES BOUNDARY LINE
	CONSTRUCTION ENTRANCE
	RIP-RAP APRON
	EROSION CONTROL LINING (CURLEX I OR APPROVED EQUAL)
	TOPSOIL STOCKPILE
	12" SILT SOCK
	ROCK FILTER

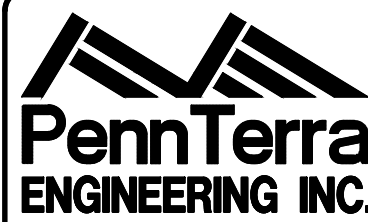


NOTES:

- INDIVIDUAL LOT EROSION AND SEDIMENTATION CONTROL MEASURES ARE CONCEPTUAL. HOUSE LAYOUTS MAY CHANGE UPON BUILDING SELECTION / CONSTRUCTION. INDIVIDUAL LOT E&S PLANS WILL ALSO BE PROVIDED WITH THE INDIVIDUAL LOT SITE PLANS.
- INDIVIDUAL LOT EROSION AND SEDIMENTATION CONTROL PLANS ARE DESIGNED ASSUMING EACH LOT COULD BE CONSTRUCTED INDIVIDUALLY (WORST CASE SCENARIO).
- THE DESIGN OF ALL INDIVIDUAL LOT PLANS MUST CONFORM TO THE APPROVED STORMWATER MANAGEMENT SITE PLAN DESIGN.
- INDIVIDUAL LOT PLANS SHALL PROTECT ALL PERMANENT DRAINAGE FEATURES FROM SEDIMENTATION. INDIVIDUAL LOT DISTURBANCES MAY NOT ENCROACH ON THE PERMANENT DRAINAGE FEATURES.

GRAPHIC SCALE





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Designer MLH
Draftsman MLH
Proj/Manager MAT
Surveyor BRK
Perimeter Ok. _____
Book ---- Pg. ----
File 20220-PRE-C&S-3-DETAILS
Layout ES3

DATE	REVISIONS
5/24/22 MLH	REVISED PER TWP COMMENTS
3/21/22 MLH	REVISED PER TWP COMMENTS
2/2/22 MLH	REVISED PER TWP COMMENTS
12/14/21 MLH	REVISED PER TWP COMMENTS
10/19/21 MLH	PRICING SET
Date	Description
	REVISIONS

FARMSTEAD VIEW

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

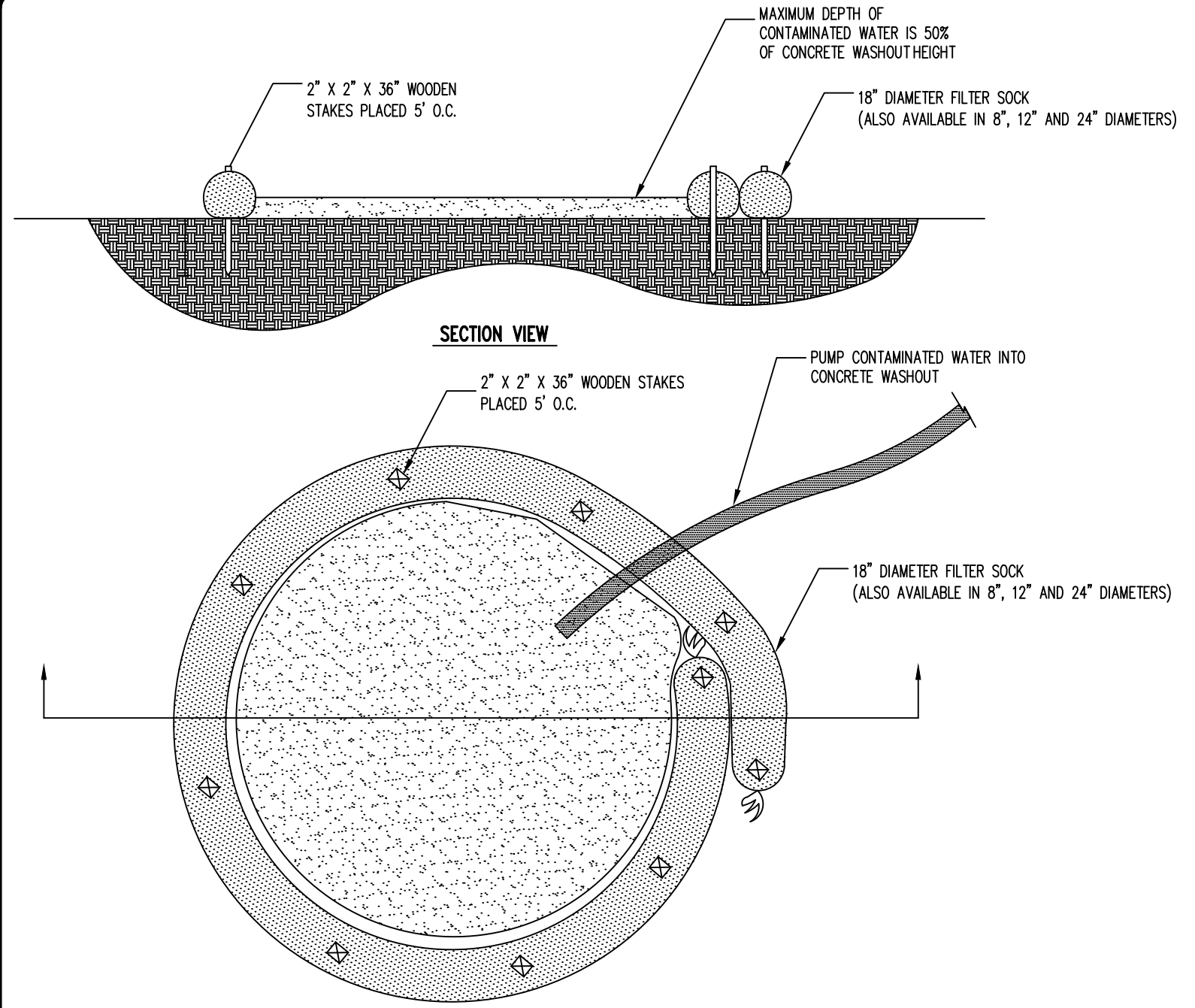
PRELIMINARY SUBDIVISION PLAN

EROSION AND SEDIMENTATION CONTROL DETAILS

PROJECT NO.
20290
DATE
JULY 29, 2021

SCALE
N.T.S.

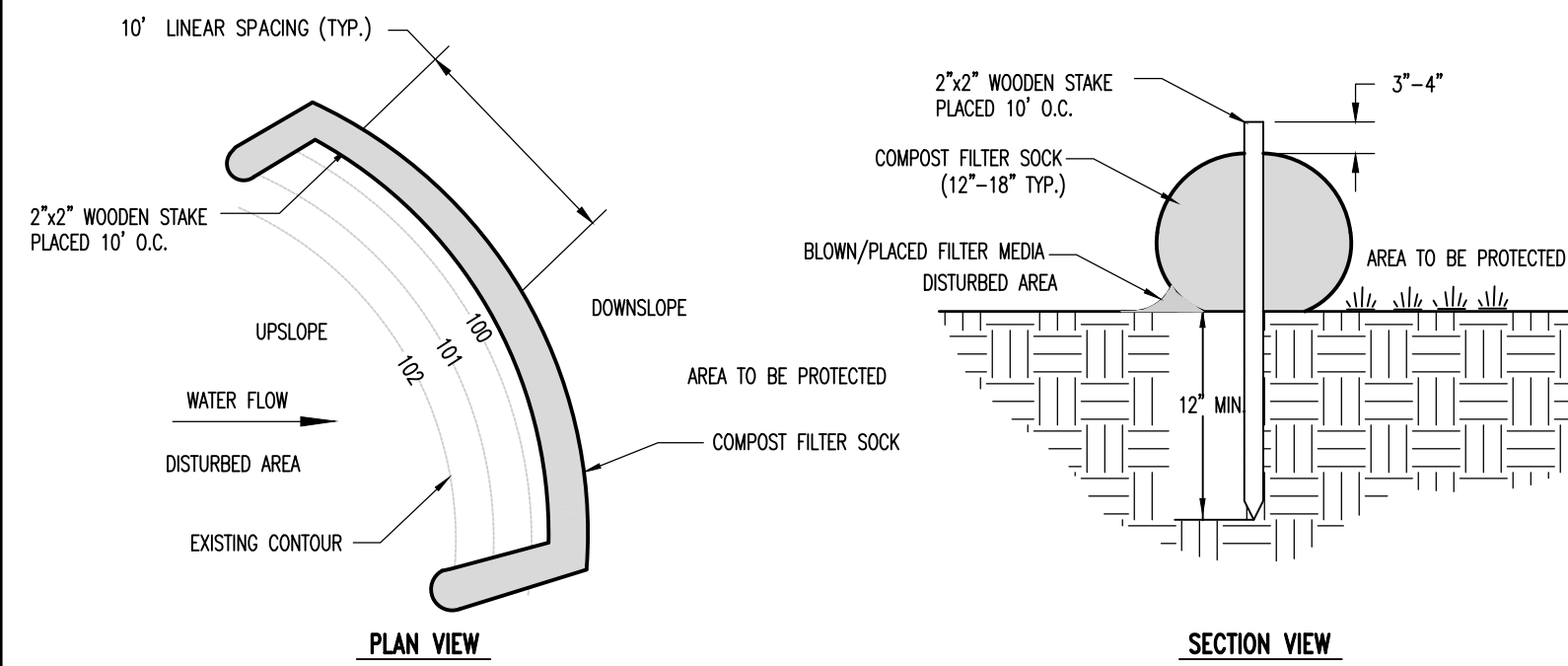
SHEET NO.
ES3



- NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.
 2. CONCRETE WASHOUT MAY BE STACKED IN A PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT AND STABILITY.
 3. CONCRETE WASHOUT MAY BE DIRECT SEEDED AT THE TIME OF INSTALLATION.
 4. A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE FILTER SOCKS.

CONCRETE WASHOUT AREA

NOT TO SCALE



- NOTES:
1. ALL MATERIAL TO MEET EPA COMPOST FILTER SOCK SPECIFICATIONS.
 2. SILT SOCK COMPOST/SOIL/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS.
 3. SILT SOCKS DEPICTED ARE FOR USE ON MINIMAL SLOPES. GREATER SLOPES MAY REQUIRE LARGER SILT SOCKS PER THE ENGINEER.
 4. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

COMPOST FILTER SOCK DETAIL

NOT TO SCALE

TABLE 4.1
Compost Sock Fabric Minimum Specifications

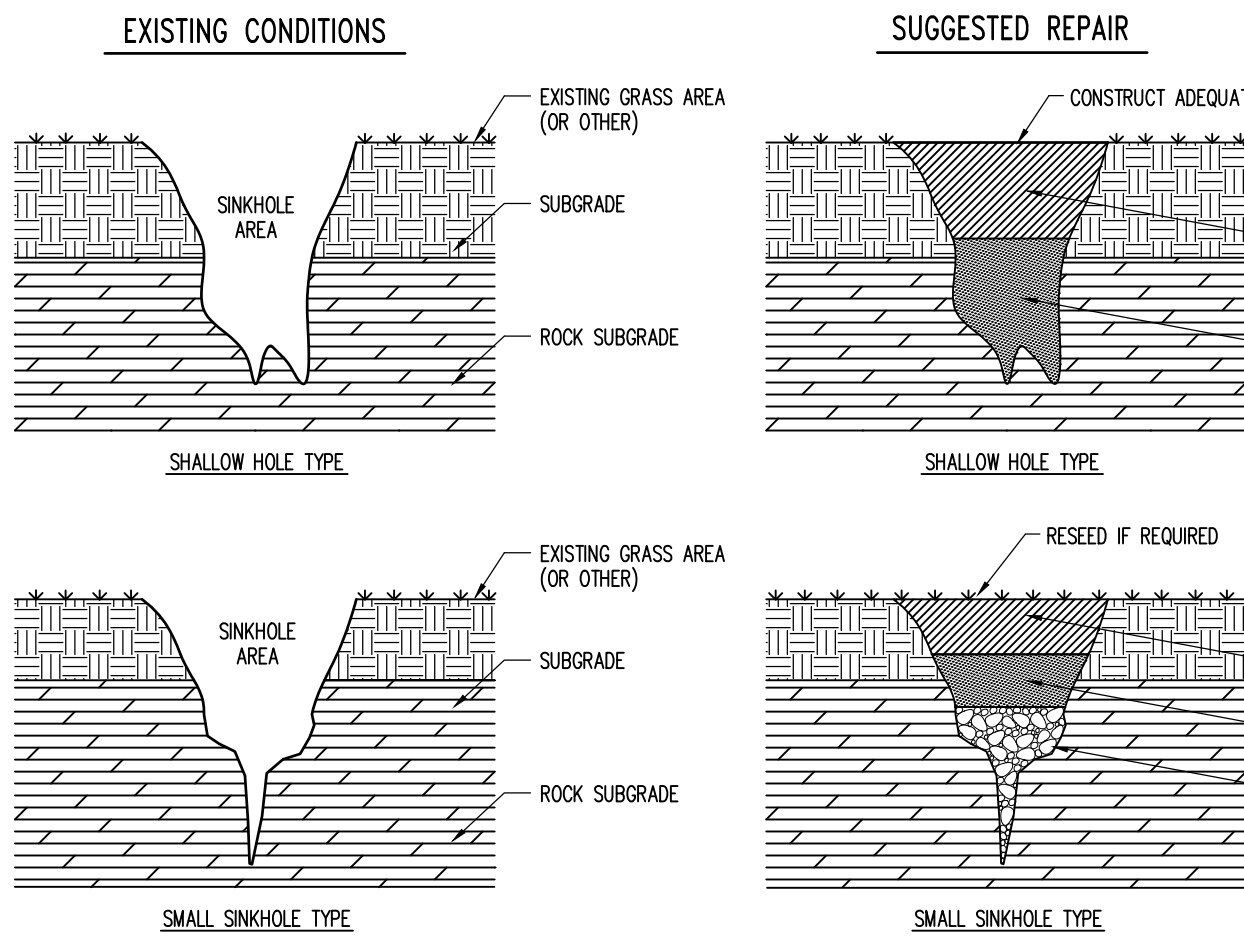
Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (MFPP)	Heavy Duty Multi-Filament Polypropylene (HDMFPP)
Material Characteristics	Photo-degradable	Photo-degradable	Bio-degradable	Photo-degradable	Photo-degradable
Sock Diameters	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		26 psi	26 psi	44 psi	202 psi
Ultraviolet Stability % Original Strength (ASTM G-155)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional Longevity	6 months	9 months	6 months	1 year	2 years
Two-Ply Systems					
Inner Containment Netting	HDPE biaxial net				
	Continuously wound				
	Fusion-welded junctures				
	3/4"x3/4" Max. aperture size				
Outer Filtration Mesh	Composite Polypropylene Fabric (Woven layer and non-woven fleece mechanically fused via needle punch)				
	3/16" Max. aperture size				
	3/16" Max. aperture size				
Sock fabrics composed of burlap may be used on projects lasting 6 months or less.					

TABLE 4.2
Compost Standards

Organic Matter Content	25%-100% (dry weight basis)
Organic Portion	Fibrous and elongated
pH	5.5-8.5
Moisture Content	30%-60%
Particle Size	30% - 50% pass through 3/8" sieve
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum

COMPOST FILTER SOCK TABLE

NOT TO SCALE

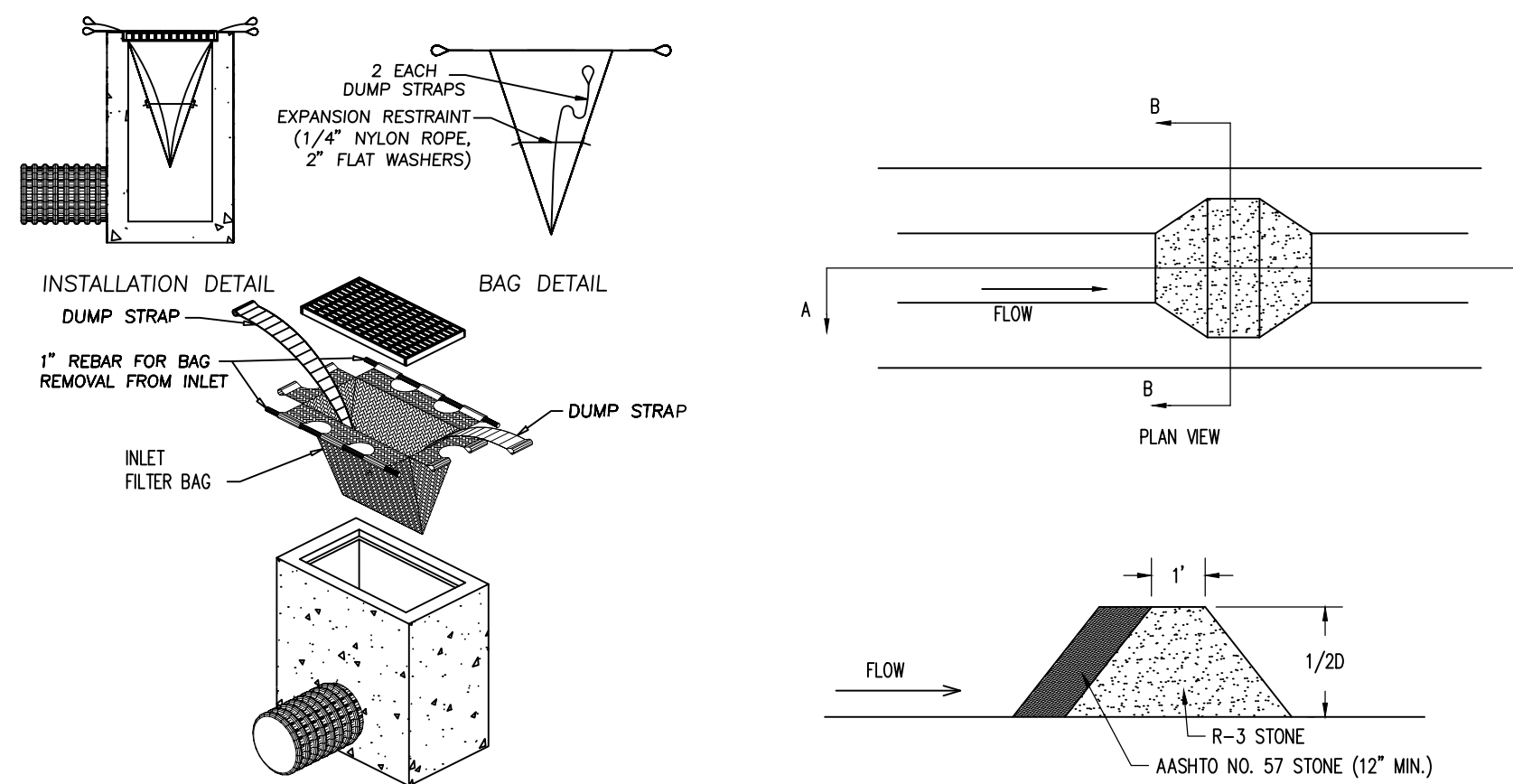


SINKHOLE REPAIR

(NOT INCLUDED IN UTILITY/EARTHWORK BASE BID)

THESE DETAILS REPRESENT TYPICAL SINKHOLE SHAPES AND REPAIR TECHNIQUES. SINKHOLES VARY IN SIZE AND TYPE. **THEREFORE, THE OWNER'S GEOTECHNICAL ENGINEER SHALL BE CONTACTED PRIOR TO FIELD REPAIR OF ANY SINKHOLE.**

NOT TO SCALE



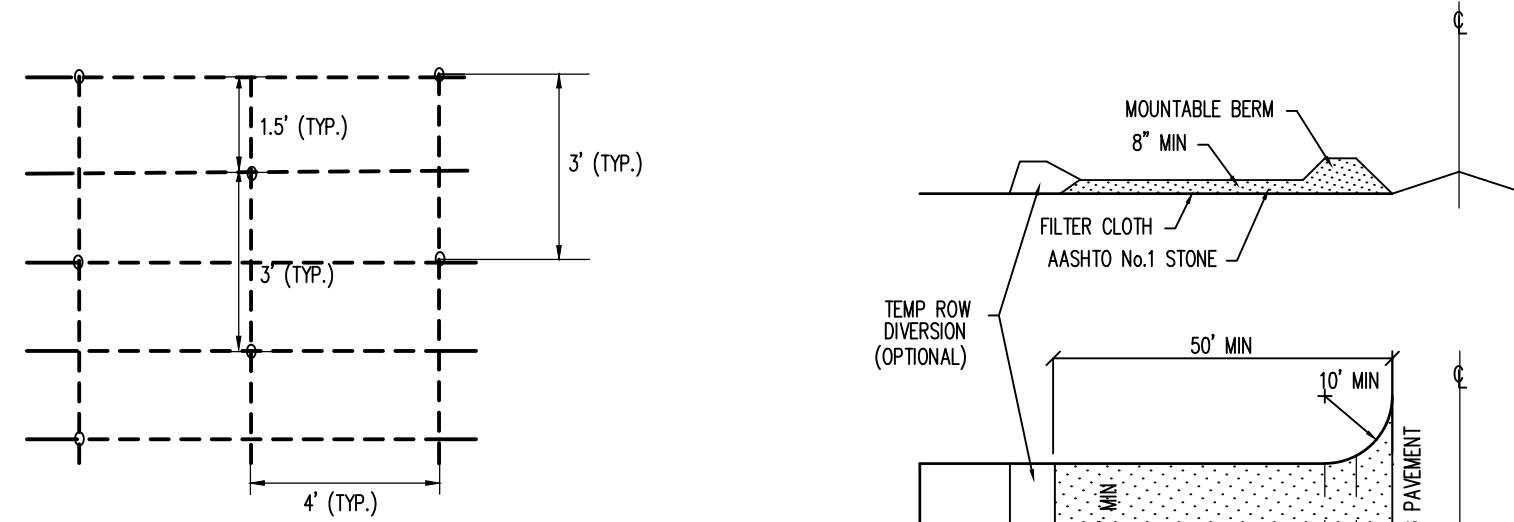
INLET FILTER BAG (TYPE M)

NOT TO SCALE

INLET FILTER BAG NOTES:
FILTER BAG SHOULD TRAP PARTICLES LARGER THAN 150 MICRONS.
WHEREVER FILTER BAGS ARE USED THEY SHOULD BE INSTALLED ACCORDING TO MANUFACTURERS SPECIFICATIONS.
INLET FILTER BAGS SHOULD BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT.
FILTER BAGS SHOULD BE CLEANED AND/OR REPLACED WHEN BAG IS 1/2 FULL.
DAMAGED FILTER BAGS SHOULD BE REPLACED.
NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER THE INSPECTION.

ROCK FILTER

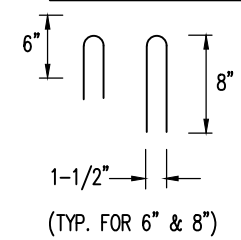
NOT TO SCALE



NOTE: THE FOLLOWING STAPLE PATTERN SHALL BE USED FOR ALL EROSION CONTROL LINING INSTALLATION.

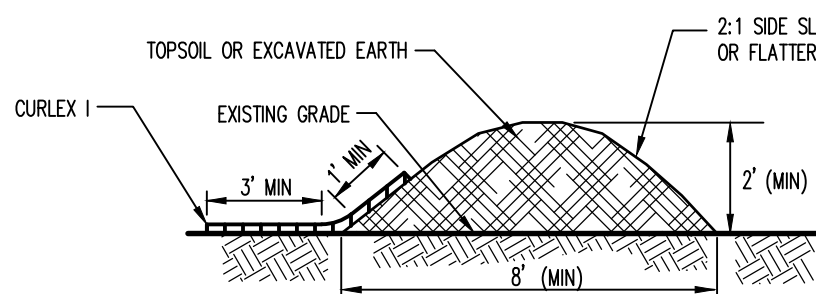
TYPICAL ANCHORING PATTERN (1.1 STAPLES/YD^2)

ANCHOR STAPLE SIZES



CONSTRUCTION ENTRANCE

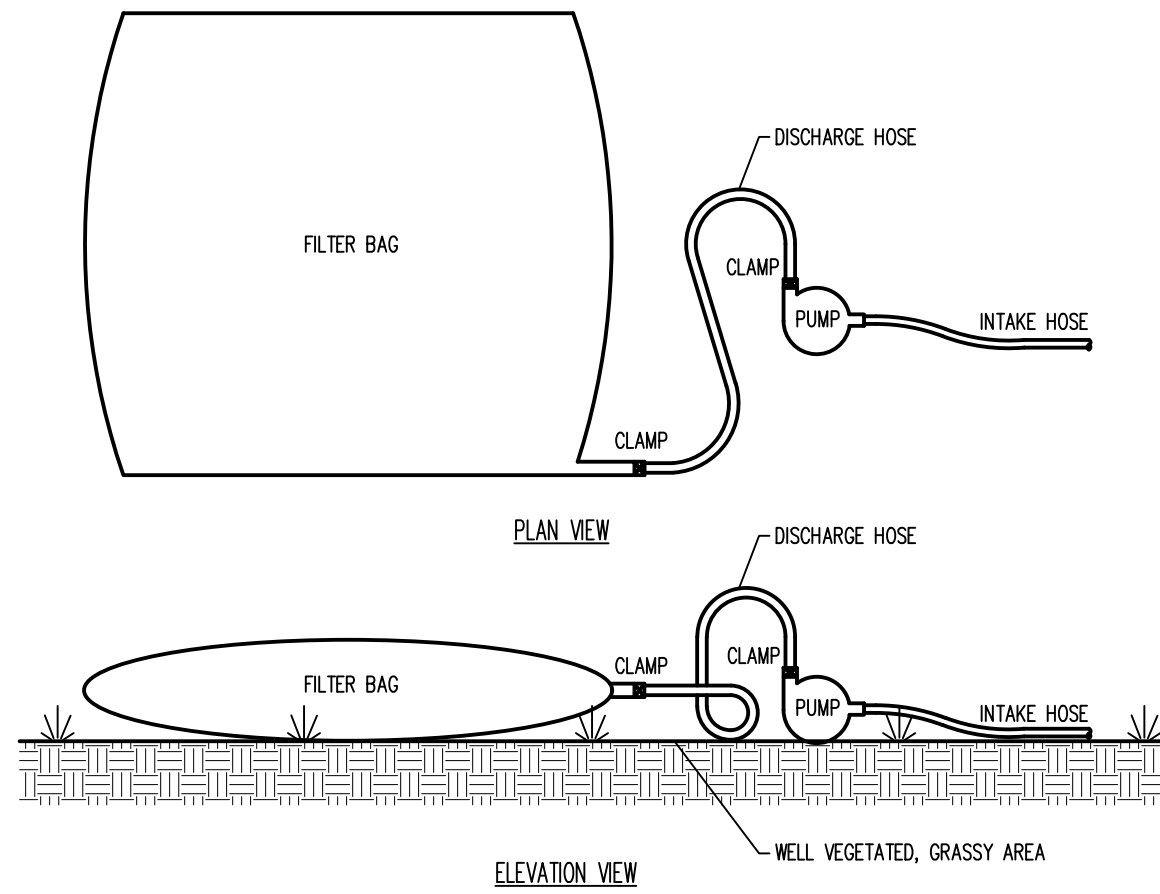
NOT TO SCALE



- NOTES:
1. RUN LOADER OVER TOPS AND SIDES TO COMPACT AND SHAPE.
 2. SEED AND MULCH WITH TEMPORARY MIXTURE.
 3. INSTALL CURLEX I AS PER THE INSTALLATION NOTES SHOWN ON THE EROSION CONTROL LINING DETAIL.

TOPSOIL WINDROW

NOT TO SCALE

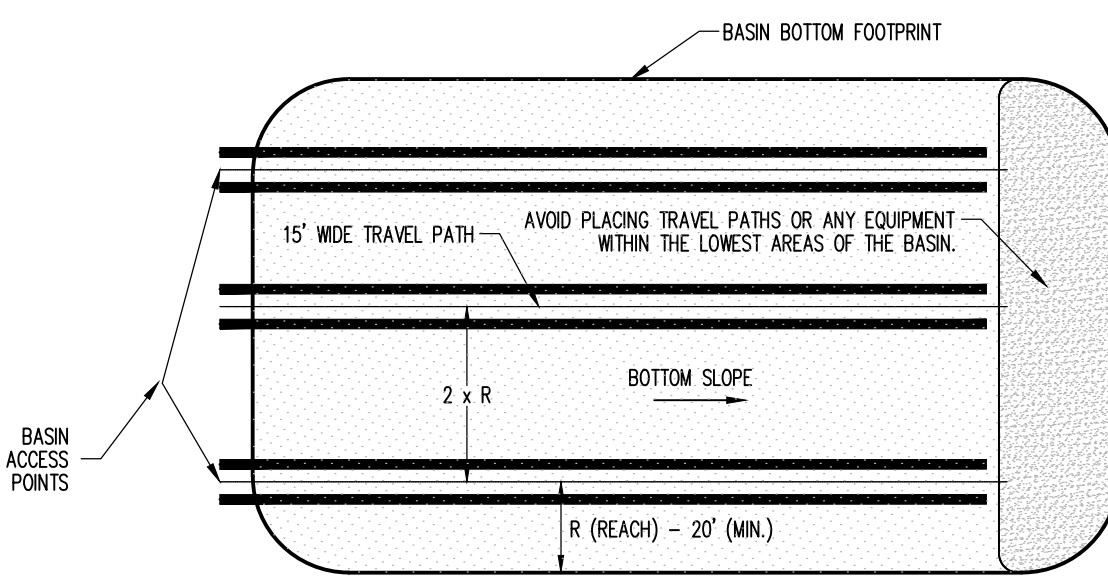


1. FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "I" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS.
2. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES MUST BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED.
3. BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS, WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE FLOW PATH SHALL BE PROVIDED. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%.
4. THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER, AND SECURELY CLAMPED.
5. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHOULD BE FLOATING AND SCREENED.

PUMPED WATER FILTER BAG DETAIL

NOTE: THIS DETAIL SHALL BE USED FOR PUMPING OF WATER FROM THE SITE

NOT TO SCALE

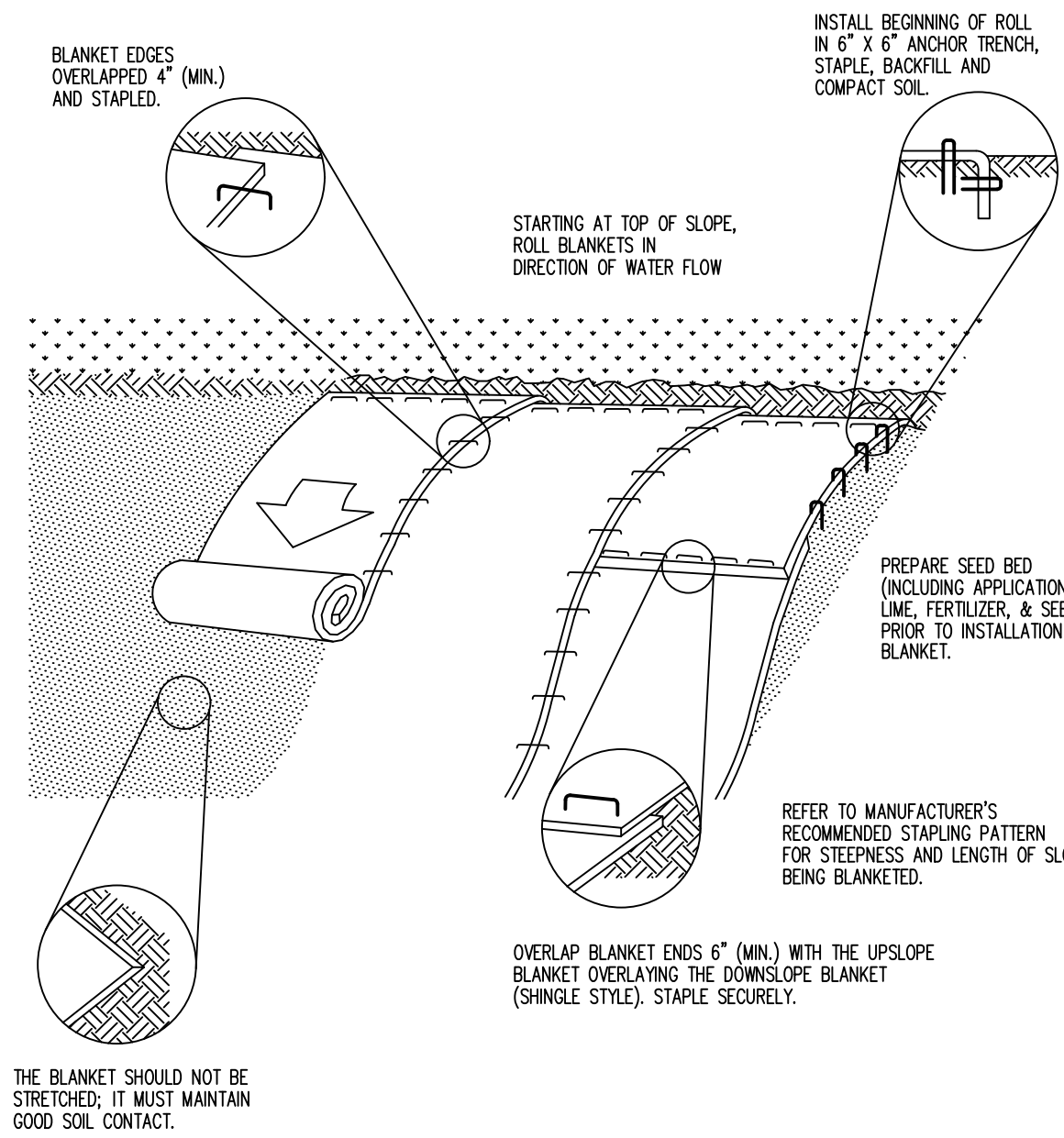


THIS DETAIL REPRESENTS A TYPICAL BASIN BOTTOM EXCAVATION TECHNIQUE. EACH BASIN VARIES WITH GEOMETRY AND OTHER VARIOUS PHYSICAL FEATURES. THE CONTRACTOR MUST DEVELOP A BASIN BOTTOM EXCAVATION PLAN AND CONSULT WITH THE SITE ENGINEER PRIOR TO COMMENCING THE BASIN BOTTOM EXCAVATION.

- NOTES:
1. ALL EQUIPMENT MOBILIZATION AND MANEUVERS MUST BE LIMITED TO THE TRAVEL PATH LOCATIONS. THE CONTRACTOR SHALL LOCATE AND CLEARLY POST ALL TRAVEL PATHS IN THE FIELD.
 2. TRAVEL PATH LOCATIONS SHALL BE SELECTED BASED UPON EQUIPMENT REACH CAPABILITY AND BASIN GEOMETRY. TRAVEL PATH LOCATIONS SHOULD BE SELECTED SUCH THAT THEY PARALLEL THE LONGEST SIDE OF THE BASIN.
 3. TRAVEL PATH SPACING SHALL VARY WITH EQUIPMENT REACH CAPABILITY. REACH CAPABILITY SHOULD BE A MINIMUM OF 20 FEET.
 4. MATERIAL SHALL BE REMOVED FROM THE TRAVEL PATH LOCATIONS WORKING TOWARD THE BASIN ACCESS POINTS. ONCE MATERIAL IS REMOVED FROM EACH TRAVEL PATH LOCATION AND FINAL GRADE IS ACHIEVED, ALL EQUIPMENT SHALL BE PROHIBITED FROM THESE LOCATIONS.

TYPICAL INFILTRATION BASIN AND DETENTION BASIN WITH CONSTRUCTED FILTER BOTTOM EXCAVATION

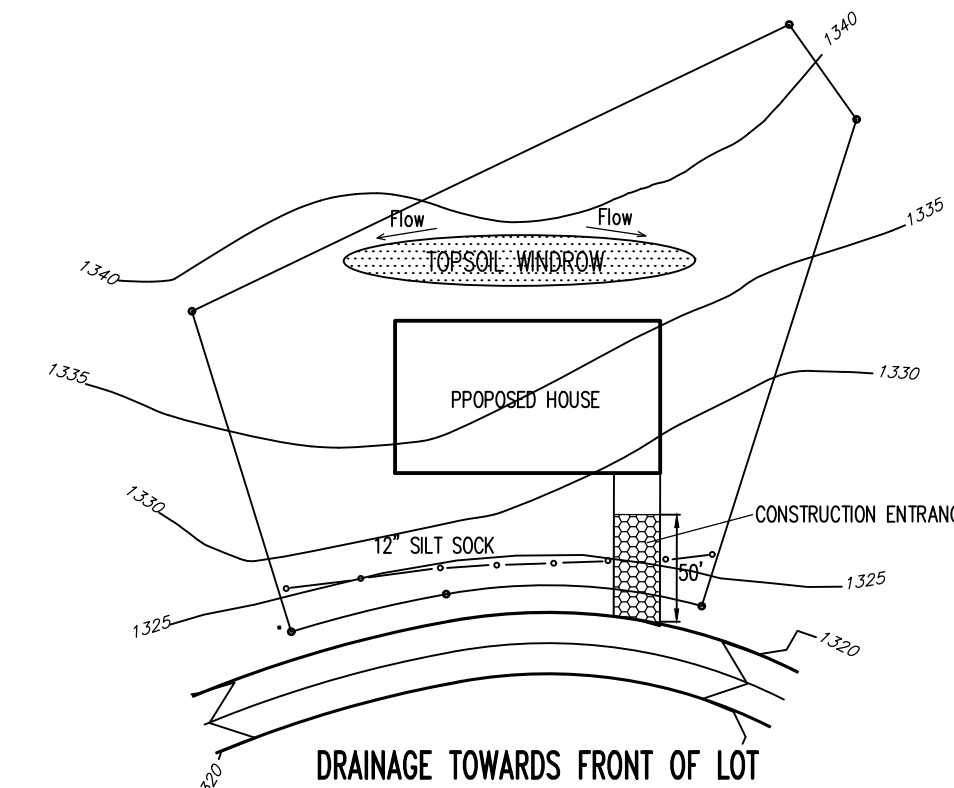
NOT TO SCALE



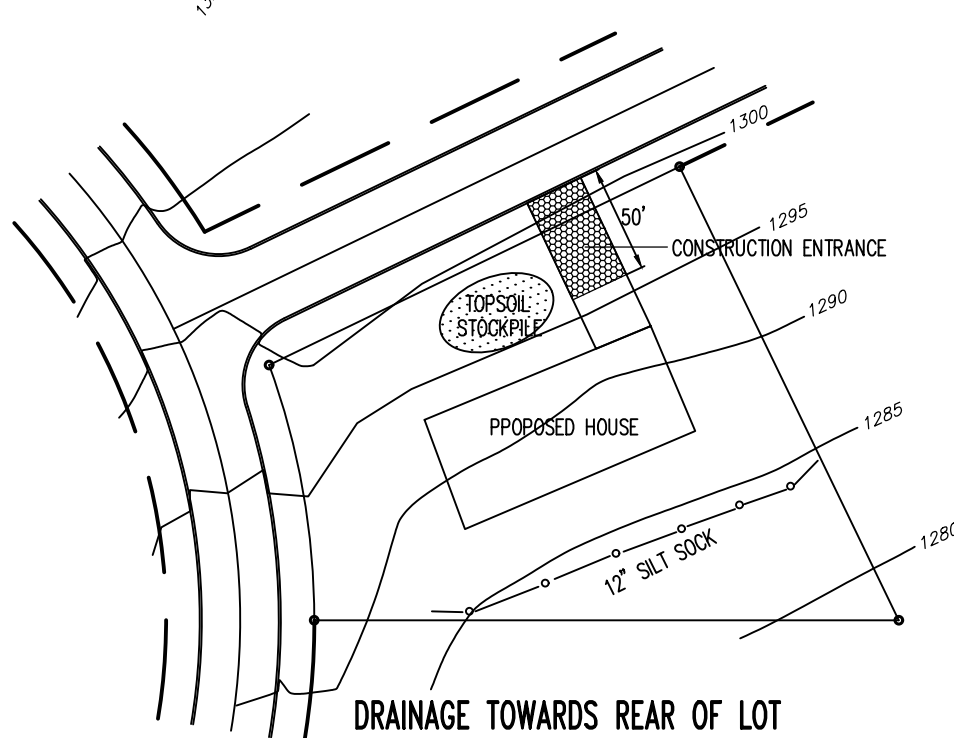
- NOTES:
1. Seed and soil amendments shall be applied according to the rates in the plan drawings prior to installing the blanket.
 2. Provide anchor trench at toe of slope in similar fashion as at top of slope.
 3. Slope surface shall be free of rocks, clods, sticks, and grass.
 4. Blanket shall have good continuous contact with underlying soil throughout entire length. Lay blanket loosely and slide or staple to maintain direct contact with soil. Do not stretch blanket.
 5. The blanket shall be stapled in accordance with the manufacturer's recommendations.
 6. Blanketed areas shall be inspected weekly and after each runoff event until perennial vegetation is established to a minimum uniform 70% coverage throughout the blanketed area. Damaged or displaced blankets shall be restored or replaced within 4 calendar days.

EROSION CONTROL BLANKET INSTALLATION

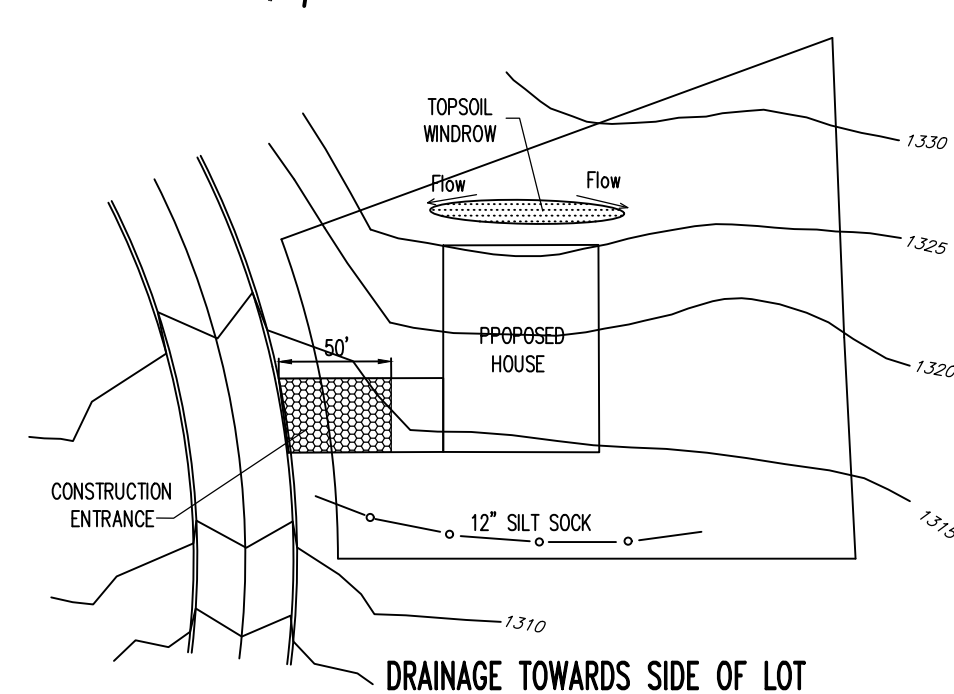
NOT TO SCALE



DRAINAGE TOWARDS FRONT OF LOT



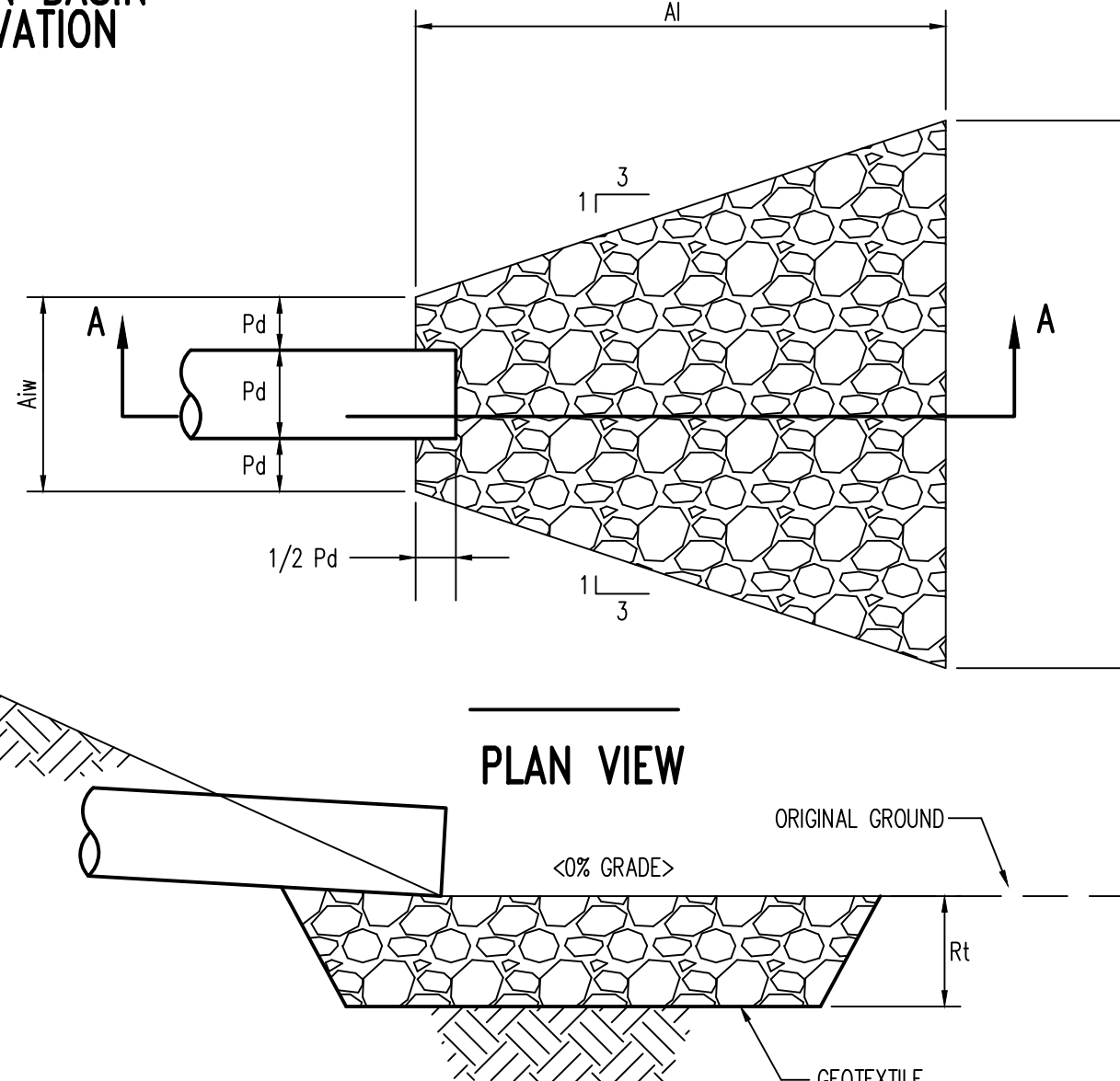
DRAINAGE TOWARDS REAR OF LOT



DRAINAGE TOWARDS SIDE OF LOT

(REFER TO SHEET ES2 FOR INDIVIDUAL LOT SPECIFIC PLANS) TYPICAL ON-LOT EROSION CONTROL

NOT TO SCALE



SECTION A-A

RIPRAP APRON AT PIPE OUTLET WITHOUT FLARED ENDWALL

NOT TO SCALE

OUTLET NO.	PIPE DIA Pd (N)	RIPRAP		APRON		
		SIZE (R-...)	THICK Rt (N)	LENGTH Al (FT)	INITIAL WIDTH Alw (FT)	TERMINAL WIDTH Atw (FT)
OUT-1	15"	R-4	18"	10.00'	3.75'	13.75'
OUT-2	15"	R-4	18"	8.00'	3.75'	11.75'
OUT-3	15"	R-4	18"	12.00'	3.75'	15.75'

- NOTES:
1. ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.
 2. ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.
 3. EXTEND RIPRAP ON BACK SIDE OF APRON TO AT LEAST 1/2 DEPTH OF PIPE ON BOTH SIDES TO PREVENT SCOUR AROUND THE PIPE.



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File	20200-PRE-E&S-4-NARRATIVE
Layout	ES4

5/24/22 MLH	REVISED PER TWP COMMENTS
3/25/22 MLH	REVISED PER TWP COMMENTS
2/2/22 MLH	REVISED PER TWP COMMENTS
12/14/21 MLH	REVISED PER TWP COMMENTS
10/19/21 MLH	PRICING SET
Date	Description
REVISIONS	

FARMSTEAD VIEW

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY SUBDIVISION PLAN

EROSION AND SEDIMENTATION CONTROL NARRATIVE

PROJECT NO.	20290
DATE	JULY 29, 2021
SCALE	N.T.S
SHEET NO.	ES4

Standard Erosion and Sedimentation Control Plan Notes

- 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 Centre County Conservation District) must be available at the project site at all times. The Centre County Conservation District shall be notified of any changes to the approved plan prior to implementation of those changes. The Centre County Conservation District may require a written submittal of those changes for review and approval at its discretion.
- At least 7 days prior to starting any earth disturbance activities, including clearing and grubbing, the owner and/or operator shall invite all contractors, the landowner, appropriate municipal officials, the E&S plan preparer, the PCSM plan preparer, the licensed professional responsible for oversight of critical stages of implementation of the PCSM plan, and a representative from the Centre County Conservation District to an on-site preconstruction meeting.
- At least 3 days prior to starting any earth disturbance activities, or expanding into an area previously unmarked, the Pennsylvania One Call System Inc. shall be notified at 1-800-242-1776 for the location of existing underground utilities.
- All earth disturbance activities shall proceed in accordance with the sequence provided on the plan drawings. Deviation from that sequence must be approved in writing from the Centre County Conservation District and by the Department prior to implementation.
- Areas to be filled are to be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots and other objectionable material.
- 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 E&S plan.
- 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 maps(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. Stockpile heights shall not exceed 35 feet. Stockpile slopes shall be 2H:1V or flatter.
- 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 Centre County Conservation District and/or the regional office of the Department.
- All building materials and wastes 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 discharge at the site.
- All off-site waste and borrow areas must have an E&S plan approved by the local conservation district or the Department fully implemented prior to being activated.
- The contractor is responsible for ensuring that any material brought on site is clean fill. Form PP-001 must be retained by the property owner for any fill material affected by a spill or release of a regulated substance by qualifying as clean fill due to analytical testing.
- All pumping of water from any work area shall be done according to the procedure described in this plan, over undisturbed vegetated areas.
- 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.
- 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.
- 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.
- All sediment removed from BMPs shall be disposed of in the manner described on the plan drawings.
- Areas which are to be topsoiled shall be scarified to a minimum depth of 3 to 5 inches – 6 to 12 inches on compacted soils – prior to placement of topsoil. Areas to be vegetated shall have a minimum 4 inches of topsoil in place prior to seeding and mulching. Fill outcrops shall have a minimum of 2 inches of topsoil.
- 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.
- All earthen fills shall be placed in compacted layers not to exceed 9 inches in thickness.
- 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.
- Frozen materials or soft, mucky, or highly compressible materials shall not be incorporated into fills.
- Fill shall not be placed on saturated or frozen surfaces.
- Seeps or springs encountered during construction shall be handled in accordance with the standard and specification for subsurface drain or other approved method.
- 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 grade, 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.
- 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 erosion. Cut and fill slopes shall be capable of resisting failure due to slumping, sliding, or other movements.
- 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 Centre County Conservation District or the Department.
- Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operator shall contact the Centre County Conservation District for an inspection prior to removal of the E&S BMPs.
- After final site stabilization has been achieved, temporary erosion and sediment BMPs must be removed Areas disturbed during removal of the BMPs shall be stabilized immediately. In order to ensure rapid revegetation of disturbed areas, such removal are to be done only during the germinating season.
- Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operator shall contact the Centre County Conservation District to schedule a final inspection.
- Failure to correctly install E&S BMPs, failure to prevent sediment-laden runoff from leaving the construction site, 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.
- 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.

General Construction Notes:

- All permanent and temporary seeding shall be done within 72 hours of the completion of disturbances for all areas requiring vegetative cover.
- In order to avoid compaction of the proposed infiltration basin bottom, special procedures shall be implemented for equipment operations during the final excavation of the infiltration basin bottom. The final excavation shall be completed utilizing equipment located outside the infiltration basin bottom (If excavation cannot fully be completed from outside the bottom, refer to the typical infiltration basin bottom excavation detail.)
- Prior to exiting the site, all construction vehicles must drive over the construction entrance.
- Silt Socks must be placed and maintained downslope of all topsoil stockpiles. Topsoil stockpiles must also be seeded with the temporary seeding mixture.
- All utility installation shall be done at a rate of which all trenching excavated shall be backfilled within the same day. All utility installation shall begin at the very downslope and proceed upslope.
- The removal of temporary Erosion and Sedimentation Controls shall be coordinated with the Centre County Conservation District and the site Civil Engineer. Prior to removal of these controls the Centre County Conservation District and the sites Civil Engineer shall be notified.

Staging of Earthmoving Activities Construction Sequence (Refer to Sheet ES1)

- All earth disturbance activities shall proceed in accordance with the following staging of earthmoving activities. Each stage shall be completed before a subsequent stage is initiated.
- Install the rock construction entrance for the site at the location shown on the Erosion and Sedimentation Control Plan (E&SCP).
 - Install the entire site silt sock as shown on the E&SCP. The 18" silt sock on the upslope side of the infiltration basin and upslope side of the detention basin with constructed filter shall not be installed at this time.
 - Demolish existing buildings, pavement, concrete, vegetation and all other features as proposed to be demolished within the limits of disturbance boundary. Haul away all material in accordance with the "Responsibilities for Fill Materials" section shown below.
 - Strip the topsoil from the proposed site (the topsoil must not be stripped in the location of the proposed infiltration basin and detention basin with constructed filter area at this time), and use it to form the topsoil windrow as shown on the E&SCP. Stockpile the remaining topsoil in the location shown on the E&SCP. Install silt sock on the downslope side of the topsoil stockpile and seed with the temporary seeding mixture.
 - Install storm sewer pipe run from proposed inlet 1-6 to 1-4. Installation shall be completed working from the very downslope of the pipe run and proceeding upslope. The amount of utility installation shall coincide with the amount of trenching that can be excavated and backfilled daily. Install inlet protection on 1-4.
 - Begin rough grading the site.
 - Continue with site grading, and begin installing all remaining utilities excluding storm sewer installation, working from the very downslope of each line and proceeding upslope. The amount of utility installation shall coincide with the amount of trenching that can be excavated and backfilled daily.
 - Once final grade is reached on Lots 1-6, apply topsoil, erosion control lining (in areas shown on the E&SCP) and seeding with the permanent seeding mixture.
 - Once vegetative stabilization has reached 70% on Lots 1-6, strip the topsoil from the detention basin with constructed filter area, and stockpile the topsoil in the location shown on the E&SCP.
 - Begin installing the detention basin with constructed filter as shown on the post construction stormwater details sheet. Installation shall include the outlet structure, outfall pipe with connection to 1-4, anti-seep collar, emergency spillway, underdrain and constructed filter media. The constructed filter media shall not be compacted during installation. Apply topsoil and seed the exterior side slopes and top of berm with the permanent seeding mixture. Seed the bottom with the basin bottom permanent seeding mixture. Install 18" silt sock around the interior toe of slope, and upslope top of berm as shown on the E&SCP to protect this facility from sedimentation.
 - Install proposed storm sewer run located in the Farmstead Lane right of way connecting to proposed outfall (OUT-1). Installation shall be completed working from the very downslope of the pipe run and proceeding upslope. The amount of utility installation shall coincide with the amount of trenching that can be excavated and backfilled daily. Install outlet protection on OUT-1. Since stabilization of 70% or greater is established at this time on lots 1-6, inlet protection on the inlets located on the Farmstead Lane right of way pipe run will not be needed. Install inlet protection on inlet 1-1A.
 - Strip the topsoil from the infiltration basin area, and stockpile the topsoil in the location shown on the E&SCP.
 - Begin installing the infiltration basin as shown on the post construction stormwater details sheet. Installation shall include the outlet structure, outfall pipe, anti-seep collar and emergency spillway. Apply topsoil and seed the exterior side slopes and top of berm with the permanent seeding mixture. Seed the bottom with the basin bottom permanent seeding mixture. Install 18" silt sock around the upslope top of berm as shown on the E&SCP to protect this facility from sedimentation.
 - Install all remaining storm sewer (CO4 to OUT-3). Installation shall be completed working from the very downslope of the pipe run and proceeding upslope. The amount of utility installation shall coincide with the amount of trenching that can be excavated and backfilled daily. Place outfall protection on proposed outfall OUT-3.

- Remove construction entrance.
- Stabilize any remaining disturbed lawn areas with topsoil, erosion control lining (where shown on the E&SCP), and seed the areas with the permanent seeding mixture.
- Once permanent stabilization has been achieved, all temporary erosion and sediment controls may be removed (see General Construction Note 6). These controls include, topsoil stockpiles/windrows, inlet protection and silt socks. Stabilize any areas disturbed by the removal of these controls immediately with the permanent seeding mixture as specified in the "Permanent Seeding Mixtures" section. Install snout on inlet 1-1A. Construction of the individual lots will follow the individual lot construction sequence provided below;

Construction of the individual lots will proceed as follows: (Refer to Sheet ES2)

- The proposed driveway entrance area will be stabilized with AASHTO #1 stone as shown in the construction entrance detail. The proposed silt sock is to be installed as shown on the typical on-lot erosion controls details depending on drainage direction. Lot 1 shall have the rock filter installed as shown on the E&SCP at this time.
- The proposed building and driveway area will have the topsoil stripped and stockpiled as shown on the typical on-lot erosion controls details. The stockpiles will be stabilized with the temporary seeding mixture.
- The building foundation will be constructed. Driveway sub-base shall be installed at this time.
- Utilities will be installed. Any facilities crossing temporary erosion control facilities will be installed and completed in one day and the control facility must be restored that same day.
- As building construction proceeds, sidewalks shall be installed and all lawn areas shall be seeded and mulched as per the rates shown in the section labeled "PERMANENT CONTROL MEASURES".
- As construction proceeds, temporary erosion control facilities will be maintained as specified in the maintenance program included in this report. All areas abandoned for more than four (4) days are to be seeded with the temporary seeding mixture.
- When construction is complete and the area stabilized with pavement or a uniform 70% vegetative cover over the entire disturbed area, all temporary erosion and sediment control measures will be removed.
- Driveway shall be paved at this time.

Temporary Control Measures

Temporary control measures will be implemented to ensure that erosion is minimized and that sediment is retained during construction. The rock construction entrances will be provided at the site entrance to prevent tracking of sediment from the site. Silt sock will be placed at the locations shown on the Erosion and Sedimentation Control Plan to provide proper filtration of the site runoff. Erosion control lining will be installed to help stabilize the steeper sloped areas to ensure full vegetation is obtained. The topsoil stockpile is provided for a convenient place to stock onsite topsoil. Inlet protection will be used to prevent sedimentation of the storm sewer systems. Pumped water filter bags will be used to filter pumped water from work areas. The topsoil windrow is used to divert upslope runoff from the downslope areas. The rock filter will be proposed to create a clean offsite water diversion during individual lot development on Lot 1.

Temporary seeding on all disturbed areas shall be done immediately after grading is finished and shall consist of the following:

Item	Rate
1. Agricultural grade limestone	1 ton / acre
2. Fertilizer 10-10-10	500 lbs. / acre
3. Annual ryegrass	40 lbs. / acre
4. Mulch (straw)	3 tons / acre

Permanent Control Measures

Permanent control measures include the stormwater infiltration basin, detention basin with constructed filter, water quality snout, storm sewer pipes, curbing and seeding / landscaping. Seeding specifications are for graded or cleared areas where permanent vegetative cover is needed.

Soil Enhancements: It is recommended that site specific soil testing be performed. Lieu of soil test recommendations, use the following schedule:

- Acceptable – Apply 6 tons per acre Dolomitic Limestone (240 lbs/ 1000 s.f.) and 1000 lbs/acre 10-20-20 fertilizer (25 lbs/ 1000 s.f.) before seeding. Harrow or disc into upper three inches of soil.
- Topsoil Placement – Topsoil shall be placed at a minimum 4" in depth over disturbed vegetated areas.

Permanent Seeding Mix shall consist of the following:

Item	Rate
1. Seed Mixture Consisting of 50% Poa pratensis (Kentucky Bluegrass) 30% Festuca rubra (Creeping Red Fescue) 20% Lolium perenne L. (Perennial Rye)	102 lbs./acre
2. *Mulch (straw)	3 tons/ acre

Infiltration Basin and Detention Basin with Constructed Filter Bottom Seeding Mix (To be used on the interior side slopes and bottom of the Infiltration Basin and Detention Basin with Constructed Filter)

Item	Rate
1. Seed Mixture Consisting of: 20% Agrostis alba (Redtop) 20% Agrostis stolonifera (Creeping Bentgrass) 20% Elymus riparius (Riverbank Wild Rye) 20% Carex vulpinoidea (Fox Sedge) 20% Puccinellia distans (Alkali Grass)	50 lbs / acre
2. Mulch	3 tons / acre

*Mulching: Apply mulch immediately after seeding and anchor properly with an anchoring tool or following one of the methods listed below.

- Tracking: The process of cutting mulch into the soil via equipment that runs on tracks, is employed primarily on slopes 3:1 or steeper.
- Mulch Nettings: Staple lightweight biodegradable paper, plastic or cotton netting over the mulch according to the manufacturer's recommendations.
- Synthetic Binders: Synthetic binders such as acrylic DLR (AGRI-TAC), DCA-70, Petroset or Terracot may be used at rates recommended by the manufacturer to anchor mulch material.
- Wood Cellulose Fiber: The fiber binder shall be applied at a net dry weight of 750 lb/acre. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs of wood cellulose fiber per 100 gallons.
- Peg & Twine: Drive 8 to 10 inch wooden pegs to within 2 to 3 inches of the soil surface every 4 feet in all directions. Stakes may be driven before or after applying mulch. Secure mulch to surface by stretching twine between pegs in a criss-cross within a square pattern. Secure twine around each peg with two or more turns.

Maintenance Program

During construction, the contractor will be responsible for maintenance and repair of all erosion and sedimentation control facilities. These facilities should be inspected daily and after every runoff event greater than 0.25". Any erosion control disturbed during construction, installation of utilities or found to be inadequate upon inspection shall be repaired or replaced within 24 hours after the disturbance or the discrepancy is discovered. The maintenance of the erosion control facilities will include the following:

During inspection of these facilities, written documentation for each inspection for all BMP repair, replacement, and/or maintenance activities shall be completed using the DEP Form 3800-FM-BCW0271d (A copy of this form is located in the Appendix of this report). Inspection reports should be kept onsite at all times.

Construction Entrance:

- The entrance shall be maintained in a condition that will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanup of any measure used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately. Sediment removed from the structure shall be spread over an existing stockpile with controls already in place and be seeded with the temporary seeding mixture.

Silt Socks:

- The Contractor shall maintain the socks in a functional condition at all times and it shall be routinely inspected.
- Where the sock requires repair, it will be routinely repaired.
- The contractor shall remove sediment collected at the base of the sock when they reach 1/2 of the exposed height of the sock, or as directed by the Engineer. Alternatively, rather than create a soil disturbing activity, the engineer may call for additional sock to be added at areas of high sedimentation, placed immediately on top of the existing sediment laden sock. The sock will be dispersed on site when no longer required, as determined by the Engineer.

Pumped Water Filter Bag:

- The contractor shall maintain the filter bag in a functional condition at all times and routinely inspect and repair as required.
- Filter bags shall be replaced when they become ½ full and spare bags shall be kept available for replacement of failed or filled filter bags.
- The pumping rate shall be observed and be no greater than 750 GPM or ½ the maximum specified by the manufacturer, whichever is less.

Topsoil Stockpile/Window:

- The topsoil stockpile/window shall be seeded with the temporary seeding mixture to ensure proper stabilization. Any additional topsoil spread at these locations shall also be seeded with the temporary seeding mixture.

Permanent Seeding:

- If the vegetative cover is not established uniformly by the third mowing, the contractor shall reapply topsoil if necessary and seed and mulch as needed to provide adequate cover.

Inlet Protection (Filter Bag):

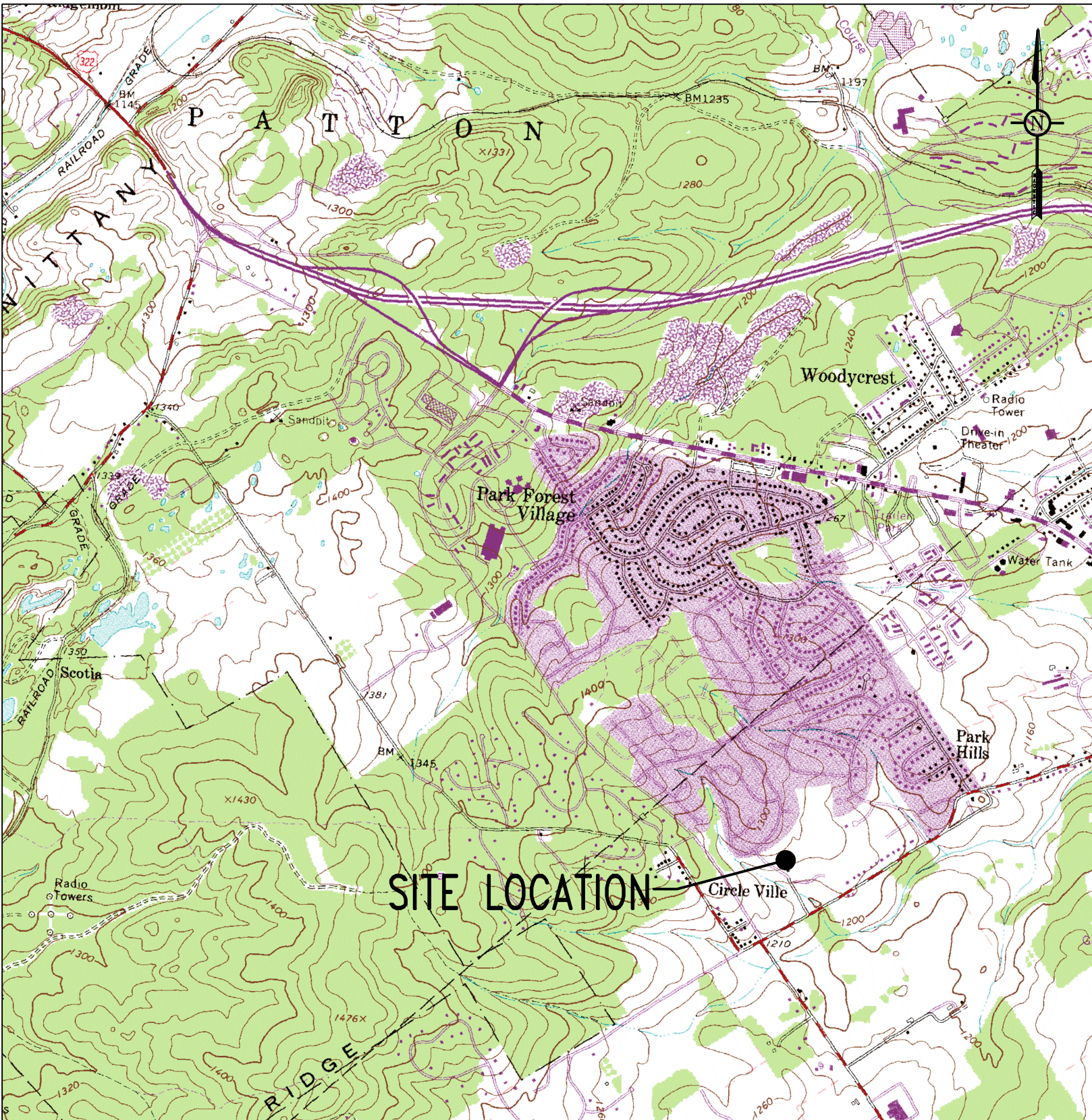
- inlet filter bags should be inspected on a weekly basis and after each runoff event. Needed repairs should be initiated immediately after the inspection.
- filter bags should be cleaned and/or replaced when the bag is ½ full. Damaged bags should be replaced.

Spoil Materials:

- All sediment removed from erosion and sedimentation pollution control facilities shall be spread over spoil areas with controls already in place. Stabilize the spoil material with the temporary seeding mixture.

Rock Filter:

- The rock filter shall be maintained in a condition that will allow for adequate filtration of the runoff through them. If the stone becomes clogged, it should be removed and used in grading operations. New stone should be added to the rock filter.



LOCATION MAP
SCALE (1" = 200')

Recycling and Disposal of Materials

The operator shall remove from the site, recycle, or dispose of all building materials and wastes in accordance with the Department's Solid Waste Management Regulations at 25 Pa. Code 260.1 et seq., 271.1 et seq., and 287.1 et seq. The contractor shall not illegally bury, dump, or discharge any building material or wastes.

Wastes generated during the construction of this project shall be recycled if at all possible. Any materials that cannot be recycled or reused shall be disposed of at a Pennsylvania Department of Environmental Protection approved landfill. If soil and/or rock disposal areas are required, erosion and sedimentation controls shall be implemented at these areas. Any excess soil waste may only be disposed of at an approved E&S/NPDES permitted site.

Responsibilities for Fill Materials

The contractor is responsible to use environmental due diligence to ensure any fill material required to be imported to or exported from the site qualifies as Clean Fill.

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.)

Environmental due diligence: 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 regulated substance. If 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 material 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.

Audrey Shu
102 Farmstead Lane
State College, PA, 16803

Dear Ferguson Township,

I have lived in State College my whole life. Growing up, I have seen patches of beautiful land get turned into complex luxury apartments. Just down the street from where I live, the corn field that I once walked by every week is now the location of "The Heights", with cars speeding through and many students living there. And now, right in front of Homestead Park, the park that I grew up with and continue to go to weekly, there will be more housing built.

Everywhere around town, new luxury apartment complexes are being built. However, Penn State's large student population of approximately 46,000 undergraduate students means that the State College housing market cannot support every students' needs. Students are already burdened with the high costs of tuition, many students cannot afford the expensive rents for these new luxury apartments.

Still, the State College Borough is authorizing the building of high rise apartments and luxury apartments more than affordable houses and apartments, which causes the exclusion of a large portion of the student population while also destroying the natural scenery that makes State College a beautiful place to live in. Additionally, this makes the affordable housing options extremely competitive to obtain. By inviting these real estate developers into State College and seemingly "metropolitanization" our town, local businesses are pushed out of the field, and State College is losing its old charm and sense of community. Many of these new housings are low-quality and not well-kept. The traffic circle garden in The Heights seems to be nice-looking, but in reality, after one year of being built, the flowers and plants are dried and wilted, and the soil is unkept. One of the houses had construction problems and after attempted fixing, the house is now on sale.

Similarly, there is a plan for the Farmstead View Preliminary Subdivision Plan-- to build 6 single-family residential lots and 1 stormwater management on an open field that leads straight to the Homestead Park. These lots will be extremely close together, and also encroach on the open feeling of Homestead Park. These new buildings that are built in a hurry will be similar to The Heights in their low quality of material and building. Open fields can be open fields without housing-- not every space that could be residential should be residential.

State College is a town, not a city. It should keep its community and charm by building housing that students will actually be able to afford, instead of building complexes that look luxurious and tall but block out and take over all the natural scenery. If State College continues this trend of building, soon, it will blend in with all the other aspiring metropolitan towns that aren't metropolitan-- only destroying nature and community. Please reconsider building new housing and apartments in areas that are being considered and planned on-- such as the place on Farmstead Lane. Nobody enjoys living in a crowded environment, and people deserve to live in housing with abundant greenery and views. People living on my street enjoy living in their house for many reasons, but an important one is the peaceful greenery out their window. My many neighbors and I have enjoyed the view of the dandelion field and storage barn in the field by the park for many many years, and made so many special and lasting memories. If houses are built on this dandelion field, the tranquil scenery will become only a fond memory of the past.

Please reconsider this construction project (Farmstead View Preliminary Subdivision Plan) so that the Park Forest community can continue to enjoy the greenery and foliage-- instead of walls and windows. The park and the connecting field holds so many cherished memories for many. They say that wishing on dandelions makes your dreams come true-- perhaps it is time for more of us to wish on the dandelions from that field, and blow a wish that this field will not just be a memory of the past.

Sincerely,



Audrey Shu

June 7, 2022

Audrey Shu
102 Farmstead Lane
State College, PA 16803

RE: Response to letter received June 3, 2022

Dear Audrey Shu,

Thank you for contacting me regarding your concerns about the Farmstead View Subdivision Plan. I appreciate the opportunity to respond.

As you know, Ferguson Township has consistently made green space preservation a top priority in the Township and that priority is evident in our ordinances and zoning map. Zoning is one of many tools for a community to achieve its community planning objectives and it serves as a key regulatory mechanism to protect property owners' rights.

The lot that is the subject of the Farmstead Subdivision Plan has been zoned Single-Family Residential (R1) for many years and it is the property owner's right to develop that lot in conformance with the Subdivision and Land Development (SALDO) and Zoning Regulations of the Township. The owner of this property is proposing to subdivide the lot for six (6) single-family homes and that use is permitted in the Single-Family Residential (R1) zoning district.

This plan is in the preliminary review stage of the approval process, and it is during this time, issues concerning compliance with specific requirements of the Township's Ordinances are addressed. If the applicant is not meeting the requirements of the Township's Ordinances, the Board of Supervisors have the grounds to deny a plan and must cite the deficiencies in relation to the Township's Ordinances. If the plan is meeting all Township Ordinance requirements, the Board of Supervisor's cannot deny the plan.

If you'd like to voice your concerns about this subdivision plan, it will be in front of Planning Commission for the preliminary review on June 13, 2022, and in front of the Board of Supervisors June 21, 2022. Both meetings are being held in a hybrid format (in-person or Zoom). Additionally, all active plans can be found on the Township Website (www.twp.ferguson.pa.us) if you'd like to access additional information about the subdivision plan. If you're interested in learning more about zoning and land development, the state provides excellent resources that can be found here: [https://dced.pa.gov/library/?wpdmc=publications and documents](https://dced.pa.gov/library/?wpdmc=publications+and+documents)

Again, thank you for taking the time to share your views and I'm happy to schedule time to talk with you about this plan in greater detail.

Should you have any additional questions, please contact me at jwargo@twp.ferguson.pa.us or 570-452-5102.

Sincerely,

A handwritten signature in cursive script that reads "Jenna Wargo". The signature is written in black ink and is positioned above the printed name and title.

Jenna Wargo, AICP
Director of Planning & Zoning

FERGUSON TOWNSHIP PLANNING COMMISSION
Regular Meeting Agenda
Monday, June 13, 2022, 6:00 PM

Hybrid Meeting

REMOTE PARTICIPANTS:

Join Zoom Meeting:

<https://us02web.zoom.us/j/83268113138>

Meeting ID: 832 6811 3138

[Zoom Access Instructions](#)

IN-PERSON PARTICIPANTS:

**Ferguson Township Municipal
Building**

**Main Meeting Room
3147 Research Drive
State College, PA**

I. CALL TO ORDER

II. CITIZENS INPUT

III. APPROVAL OF MINUTES

1. May 23, 2022 Regular Meeting Minutes

IV. OLD BUSINESS

None.

V. NEW BUSINESS

1. Farmstead View Subdivision

On July 29, 2021, Penn Terra Engineering, Inc., submitted a Preliminary Subdivision Plan on behalf of their client, Farmstead Developer, LLC. The parcel is located at 139 Farmstead Lane (TP: 24-022-,306-,0000-) and is zoned Single-Family Residential (R1).

The parcel is currently 3.03-acre lot, and the applicant is proposing to subdivide this lot into 7-lots. There will be one (1) stormwater retention lot and six (6) single-family residential lots. On April 19, 2022, the Board of Supervisors conducted a Conditional Use Hearing for Lot 1 (103 Farmstead Drive) to permit the creation of the flag lot. The Board also denied the Modification Application request to the preservation of 20% of the existing, eligible tree canopy on site (§22-515.D.2.) at that same meeting.

As a result of the denial of the modification request, Lot 2 was amended to accommodate and protect a 27" DBH Red Pine Tree with a retaining wall. These alterations require a modification to the slope requirements of Chapter 21, Appendix A—Streets and Sidewalks. The maximum driveway grade at any point on the driveway is fifteen percent (15%). The slope of the proposed driveway for Lot 2 will not exceed eighteen percent (18%).

The administration and enforcement of Chapter 21—Streets and Sidewalks is delegated to the Director of Public Works. Upon review of the request, the Director is in favor of the

modification request subject to inclusion of release from liability language on the recorded plan.

Staff has reviewed the plan and is recommending approval pending outstanding staff comments.

Recommended Motion: Move that the Planning Commission recommend **approval** to the Board of Supervisors for the Farmstead View Subdivision Plan, pending outstanding staff comments as included in the Community Planner's memorandum dated June 7, 2022.

Staff's Recommendation: That the Planning Commission recommend **approval**.

VI. COMMUNICATIONS TO THE COMMISSION

VII. OFFICIAL REPORTS AND CORRESPONDENCE

1. Board of Supervisors Report
2. CRPC Report
3. Land Development Plans
 - a. Farmstead View Subdivision – PC review
 - b. CVIM – 2026 Sandy Dr – Conditional Approval, awaiting resubmission for signatures
 - c. Peace Center and Cemetery – Awaiting Response to first review
 - d. Centre Animal Hospital – Collecting Signatures for Approved Preliminary Plan
 - e. Fusion Japanese Steakhouse – Awaiting Response to first review
 - f. IMBT Subdivision - Awaiting Response to first review
 - g. West College Avenue Vertical Mixed-Use Development – Awaiting Response to first review.
 - h. Nittany Dental – First Review Comments sent on 6/6/2022
 - i. MP Machinery – First Review Comments sent on 6/6/2022
 - j. Salvation Baptist Church – Under Staff first review
 - k. 296 W. Pine Grove Road Minor LDP– Under Staff first review
4. Staff Updates

VIII. ADJOURNMENT

**FERGUSON TOWNSHIP PLANNING COMMISSION
REGULAR MEETING MINUTES
MONDAY, MAY 23, 2022
6:00 PM**

ATTENDANCE

The Planning Commission held its second meeting of the month on Monday, May 23, 2022, as a hybrid meeting. In attendance:

Commission:

Jerry Binney – Vice Chair
Rob Crassweller - Secretary
Bill Keough
Shannon Holliday
Lisa Rittenhouse - Alternate
Lewis Steinberg - Alternate
Ralph Wheland

Staff:

Jenna Wargo - Planning & Zoning Director
Kristina Bassett - Community Planner
Jeff Ressler - Zoning Administrator

Others in attendance: Rhonda R. Demchak, Recording Secretary; Wes Glebe, Ferguson Township Resident; Jack Orlandi, Ferguson Township Resident; Halie Kines, Centre Daily Times; Chris Summers

I. CALL TO ORDER

Mr. Binney called the Ferguson Township Planning Commission's regular meeting to order on Monday, May 23, at 6:02 p.m. and it has been advertised in accordance with the PA Sunshine Act. Mr. Binney stated that the meeting is being held as a hybrid meeting with some commission members in attendance.

Ms. Wargo took roll call, and the Planning Commission had a quorum.

Mr. Binney asked anyone addressing the Planning Commission to identify themselves so that the minutes can be accurately recorded for the minutes.

II. CITIZEN INPUT

There were no comments.

III. APPROVAL OF MINUTES

Mr. Keough moved that the Planning Commission **approve** the April 25, 2022, Regular Meeting Minutes. Mr. Wheland seconded the motion. The motion passed unanimously.

IV. OLD BUSINESS

None.

V. NEW BUSINESS

1. Application for Zoning Ordinance Text Amendment – Terraced Streetscape (TS) Zoning District

a. 127 Hoy Street

Ms. Wargo reported that On May 11, 2022, Pamela Steckler submitted an application for a text amendment to the Terraced Streetscape Zoning District (§27-304.2.A.—Permitted Principal Uses). The Board received the application

at the May 16, 2022, regular meeting and referred the request for further review to the Planning Commission. Included in the agenda is the application submitted by Ms. Steckler requesting to permit home burials in the Terraced Streetscape Zoning District.

Chapter 27—Zoning defines a cemetery as “Land used or dedicated to the burial of the dead, including, mausoleums, necessary sales and maintenance facilities.” Cemeteries are permitted as a principal use in the Rural Agricultural (RA) Zoning District and as an accessory use in the Rural Residential (RR) Zoning District.

The Zoning Ordinance doesn't include a definition or regulations for home burials. The Zoning Administrator has determined the definition of cemetery applies to home burial which only permits home burials as a principal use in the Rural Agricultural (RA) Zoning District and as an accessory use in the Rural Residential (RR) Zoning District.

Included in the agenda is a report from Staff about local and state regulations in relation to cemeteries and home burial/private interment. Typically, home burial/family burial grounds are privately held parcels of land specifically designated for the burial of members of the same family (blood or marriage). Most ordinances will include:

- Depth requirements
- Setback requirements (property lines, private or public wells, floodplains, roads, etc.)
- Minimum lot size requirements
- Maximum number of interments per acre of land
- Burial marker requirements
- Map/survey depicting the burial site location
- Access from a public or private roadway
- Maintenance

Additionally, ordinances will typically include additional requirements if the land is sold outside of the family that is within the family burial site. These requirements include:

- The deed needs to reflect the restriction/reservation for the family burial site
- Identify what party(s) are responsible for maintenance (landowner or other)
- Include an access easement for family members of the deceased

Finally, some regulations include disestablishment procedures:

- Removal of human remains
- Removal of markers, monuments, etc.
- Removal, demolition or conversion of mausoleum or columbarium
- A new deed of record must be filed documenting the disestablishment

Staff recognizes that there are differences between cemeteries and home burials including scale, familial requirements, commercialization, etc. Planning Commission is being asked to review the request and provide a recommendation to the Board of Supervisors for the June 7, 2022, regular meeting.

meeting.

Mr. Steinberg asked for clarification with the request. Ms. Wargo stated that the first step is for the Planning Commission to review the application and make a recommendation to the Board to deny or approve of the request. Mr. Binney asked if the Planning Commission should do this in two steps. Mr. Steinberg agreed that if a definition needs to be defined, staff should give the Planning Commission recommendations. Mr. Wheland stated that the request is to permit home burials in the TSD.

Ms. Holliday asked what the reasoning behind the request is. Ms. Wargo reported that Ms. Pam Steckler's spouse passed away recently and as conservationists, wants to be buried on their property.

Mr. Steinberg responded to Mr. Wheland's statement by noting that this request can't be addressed until a definition for home burial is established. Mr. Wheland stated that if it is not stated as a permitted use, then it's not permitted. Mr. Ressler concurred with Mr. Wheland that it is not a permitted use.

Ms. Holliday asked what the origin of the request is. Ms. Rittenhouse stated that on the request they want this to be completely natural. Ms. Wargo stated that there is a separate part of the application regarding the source water protection ordinance. Ms. Wargo reported that a consultant with the water authority is investigating the request. Ms. Wargo noted that Ms. Steckler would like to do a green burial, but currently the Township's source water ordinance will not allow the request because a cement liner is needed.

Mr. Keough stated that the request is not compatible with the type of zoning because the acreage is too small. Mr. Keough agreed that a home burial definition is needed. Ms. Wargo stated that staff agrees with it not being compatible. Mr. Keough suggested adding a definition for green burial. Mr. Wheland stated that composting should be addressed as well because big farms are composting their dead animals.

Mr. Crassweller stated that other zones should be considered and noted that green burial is done without the use of chemicals. Ms. Wargo reported that all of Ferguson Township does not allow for green burials due to the source water ordinance. Mr. Keough noted that there are farms with burial sites and would like to preserve that option. Mr. Wheland suggested to defer action with the definitions/regulations until staff hears back from the water authority. Mr. Keough had concerns if the land was sold. Mr. Wheland noted that an easement would be required.

Mr. Crassweller stated that the UK has a lot of rules and regulations on green burials and should be considered.

Mr. Keough moved that the Planning Commission recommend to the Board of Supervisors to **deny** the request for a home burial on the part of Pamela Steckler in the Terrace Streetscape District on the basis that it is not a compatible use in the high-density zoning that is attached to the lot. Mr. Wheland seconded the motion.

Mr. Steinberg suggested changing the motion to exclude the specific lot and just say denial of an ordinance that amends the TSD to allow home burials.

Mr. Keough amended his motion.

Mr. Keough moved that the Planning Commission recommend to the Board of Supervisors to **deny** the request for text amendment to the ordinance in the Terrace Streetscape District to allow for home burials on the basis that it is not a compatible use in the high-density zoning that is attached to the lot. Mr. Wheland seconded the motion. The motion passed unanimously.

Mr. Wheland and Mr. Binney suggested waiting until staff hears back from the water authority before starting the amendment process. Mr. Keough recommends moving forward with the motion.

Mr. Keough moved that the Planning Commission **recommend** an ordinance amendment to Chapter 27 Zoning to include a definition and regulations for home burials. Ms. Holliday seconded the motion. The motion passed 3-2 with Mr. Wheland and Mr. Crassweller opposing.

VI. OFFICIAL REPORTS AND CORRESPONDENCES

A. Communications to the Planning Commission

There were no communications.

B. Board of Supervisors

Ms. Wargo reported that they discussed the text amendment request that was reviewed tonight.

C. CRPC Meeting

No report.

D. Land Development Plans

Ms. Bassett reviewed the following:

- a. Farmstead View Subdivision – 5th submission under review

Ms. Bassett reported that the large tree that has been the topic of saving from the community might be saved.

- b. CVIM – 2026 Sandy Dr – BOS Approved 5/3 – awaiting plan for signatures
- c. Peace Center and Cemetery – Awaiting Response to first review

Mr. Steinberg stated that there might be an issue with burial due to Islamic beliefs with regards to the required cement casing. Ms. Wargo reported that the water authority is reviewing religious exemptions.

- d. Centre Animal Hospital – Awaiting Preliminary Plan to be signed
- e. Fusion Japanese Steakhouse – Awaiting Response to first review
- f. Imbt Subdivision - Awaiting Response to first review
- g. West College Avenue Vertical Mixed-Use Development – Awaiting Response to first review.
- h. Nittany Dental LDP – under first review
- i. MP Machinery LDP – under first review

E. Staff Updates

Ms. Wargo reported that she attended a conference in San Diego and Mr. Ressler attended a conference on floodplain management in Florida.

Ms. Holliday reported that she volunteered at the 49th Precinct as the Judge of Elections and if anyone would like to volunteer in November to let her know.

Mr. Binney noted that the Pine Grove Mills Mobility Committee is wrapping up their work and will be reporting at the Board of Supervisors on June 7th.

VII. Adjournment

Mr. Keough made a motion to **adjourn** the May 23, 2022, Planning Commission meeting at 7:04 p.m. Mr. Binney seconded the motion. The motion passed unanimously.

Respectfully Submitted,

Rob Crassweller, Secretary
For the Planning Commission

TO: Planning Commission

FROM: Kristina Bassett, Community Planner

DATE: June 7, 2022

SUBJECT: Farmstead View Subdivision Plan

Included in the agenda is the Farmstead View Subdivision Plan, submitted on July 29, 2021, by Penn Terra Engineering Inc. on behalf of their client, Farmstead Developer, LLC. The proposed subdivision (Tax Parcel 24-22-306-0000) is located at 139 Farmstead Lane, a 3.031-acre lot. The developer proposes to subdivide this lot into seven lots, six lots for single-family homes and one stormwater retention lot.

As a result of the denial of a Modification/Waiver from the Tree Preservation Ordinance by the Board of Supervisors, Lot 2 was amended to accommodate and protect a 27" DBH Red Pine with a retaining wall. This accommodation puts constraints on the construction of a home and driveway. Chapter 21, Appendix A of the Ferguson Township code states that the maximum allowable slope of a driveway is 15%. However, the slope of the proposed driveway will need to be up to a maximum of 18%.

The Board of Supervisors delegated the authority of Chapter 21 to the Public Works Director. The Public Works Director has stated that he is not opposed to increasing the slope from 15% to 18% subject to release from liability language (a note) on the plan.

.

A Flag lot was approved as a conditional use for Lot 1 by the Board of Supervisors on April 19, 2022. The lot is zoned Single Family Residential (R1).

Staff has reviewed the plan and is recommending approval pending outstanding review comments attached to this memorandum.

To: Mark Toretta

Re: Farmstead View 5th Review:

From Public Works Director on Waiver/Modification from Chapter 21:

Assuming the developer's A/E justification is accurate (basically saves them on Wall cost and ties into grade better), I am not opposed to increasing the max driveway slope from 15% to 18% subject to release from liability language on the plan.

Community Planner Comments:

1. A note must be placed on the plan indicating indemnification of liability to allow the grade of the driveway in Lot 2 to exceed 15%.
2. A time extension must be submitted with any revised plan. (Chapter 22, Section 303)
3. A digital (GIS compatible) copy of the plan in accordance with Township requirements must be provided to the Township prior to final plan signature. (Chapter 22, Section 307.7)
4. The plan must be signed, all fees paid to the Township, and the plan recorded within the plan deadline.

TO: Kristina Bassett, Community Planner

FROM: Jeffrey Ressler, Zoning Administrator

DATE: June 6, 2022

SUBJECT: Farmstead View Preliminary Subdivision Plan 5th Review

1. Proposed lot #1 is shown to be a flag lot. Flag lots must be approved through a conditional use before the Board of Supervisors. **Comment Resolved.**
2. Any lots that contain steep slopes will be required to comply the requirements of Chapter 27-702 Slope Controls, including but not limited to land development plans for lots that contain steep slopes. **Comment Resolved.**



TOWNSHIP OF FERGUSON

3147 Research Drive • State College, Pennsylvania 16801

Telephone: 814-238-4651 • Fax: 814-238-3454

www.twp.ferguson.pa.us

TO: Kristina Bassett, Community Planner
FROM: Ron Seybert, Township Engineer
DATE: May 23, 2022
SUBJECT: Farmstead View Preliminary Subdivision Plan
Fifth Review (ES – 421)

I have completed my fifth review of 'Farmstead View Preliminary Subdivision Plan' consisting of 14 sheets as prepared by PennTerra Engineering, dated July 29, 2021, and last revised May 16, 2022. The following are comments from my review along with their status. Prior comments that have already been resolved have been removed.

1. *The Township stormwater engineer needs to review and approved the stormwater management site plan. All technical comments have been resolved. The DSAME will be prepared by the Township for applicant signature after the HOA documents have been approved.*
13. *Documentation for creation of a homeowner's association is required. Not resolved. The applicant's response is that the HOA documentation will be provided under a separate cover but has not yet been received.*
14. *Show existing feature of public sidewalk along adjoining property of Rothwell and how the proposed public sidewalk will connect including grading. Partially resolved. The design shows grading on the adjoining parcel. Permission will need to be obtained from the adjoiner for the grading.*

All the above comments need to be addressed. If you or the applicant have any questions on these comments, please contact me.

Copy: Scott Brown, NTM
Aaron Jolin, NTM
Jenna Wargo, Planning Director

May 23, 2022

Via Email

Township of Ferguson
3147 Research Drive
State College, Pennsylvania 16801

Attn: Mr. Ronald Seybert, PE, Township Engineer

**RE: 139 Farmstead Lane Plan
Stormwater Management Site Plan Review**

Dear Ron,

We have completed our fourth stormwater management review for the 139 Farmstead Lane Plan. The applicant's Design Professional, Penn Terra Engineering, submitted the following information that serves as the basis of our review:

1. Preliminary Subdivision and Land Development Plan dated July 29, 2021 and revised May 16, 2022.
2. Stormwater Water Management Site Plan dated July 29, 2021 and revised May 16, 2022.
3. Post Construction Narrative Report dated July 29, 2021 and revised May 16, 2022.
4. Comment Response Letter dated May 16, 2022.

NTM has reviewed these plans for compliance with Township stormwater management ordinance (Chapter 26 of the Township Code). Our comments follow.

Chapter 26 – Stormwater Management

6. §26-402 – Stormwater Management Report

- D. 2021 08 20 Comment: Based on the E&S development sequencing, it is unclear how "restored soil" will not be further compacted during individual lot development and utility installations. Update the narrative to provide additional clarification.

2022 01 05 Comment: Comment partially addressed. Because the sequencing allows for development on individual lots after the stormwater devices are constructed, provide the following note on the plans, "Individual stormwater

management site plans will be required for each lot, prior to individual lot construction. This will include the preparation of the plan, review of the plan, all necessary field testing, certification, recordation of a DSAME, as well as easements restricting the use of the soil restoration area.” Provide an interim stormwater management plan which shows the extent of soil restoration to be completed as part of mass grading and installation of the stormwater facilities.

2022 03 02 Comment: Comment withdrawn as restoration is no longer proposed. (The engineer utilized a soil HSG of C for modeling proposed land uses within disturbed areas.)

2022 04 26 Comment: Comment addressed; however, remove note 10 from the Preliminary Land Development Plan Grading Plan

2022 05 23 Comment: Comment addressed.

8. §26-703 – Maintenance Responsibilities

- B. 2021 08 20 Comment: For final approval of the stormwater management site plan, a declaration of stormwater access and maintenance easement is required.

2022 01 05 Comment: Pending. Signature of plan will be provided once the Township verifies the agreement is provided.

2022 03 02 Comment: Comment to remain until final approval.

2022 04 26 Comment: Comment to remain until final approval.

2022 05 23 Comment: Comment to be removed with signature/recording of the agreement

New Comments 2022 01 05

9. The “detention facility with filter” is designed with several outlet orifices sized at 2.94 inches. The tolerances specified will be difficult to construct and verify on as-built plans. We suggest designing the facilities with more standard, constructable tolerances.

2022 03 02 Comment: Comment partially addressed. Considering the mowing maintenance proposed, the design shall include measures that will keep the orifice(s) (located 0.2 from the ground) clear from plant growth (including growing through the trash rack).

2022 04 26 Comment: Comment not addressed. Provide a design that keeps the orifice clear from plant growth. (For example, a properly designed 2'x3' concrete or stone apron.)

2022 05 23 Comment: Comment addressed.

If you have any questions or require additional information, please feel free to contact me at 814-862-9191.

Sincerely,
NTM Engineering, Inc.

A handwritten signature in blue ink, appearing to read 'Scott Brown', followed by a long horizontal line.

Scott Brown, PE
-Senior Project Manager

cc: Mr. James Coslo, Centre County Conservation District
Kristina Bassett, Community Planner

2022 05 23 Farmstead Lane r5



Project Notes:

1. General Site Information:
a. Owner Information:

Calvin D. & Dorothy E. Pierce
67 Fields Drive
New Castle, PA 16101
Farmstead Developer, LLC
1764 Cambridge Drive
State College, PA 16803
24-22-306
Record Book 1119, Page 1078
139 Farmstead Lane
State College, PA 16801

f. Municipality:
g. Zoning:
h. Existing Site Use:
i. Proposed Site Use:
j. Lot Size:
k. Maximum Building Coverage:
l. Proposed Building Coverage:

Ferguson Township
Single Family Residential District (R-1)
Storage Building
Single Family Residential
3,037 AC (132,288 SF)
30% (39,686 SF)
0.00% (0 SF) See chart for maximum proposed impervious coverage, including building area for each lot for stormwater design.
(Separate site plans to be submitted for Zoning Permit for each lot.)
50% (66,144 SF)

m. Maximum Impervious Coverage:
n. Proposed Impervious Coverage:
Pavement/Concrete Area:
Residential Lots Impervious:
Total Impervious Coverage:

2.03% (2,688 SF) (Proposed Sidewalk)
19.82% (26,222 SF) (Assumed Lot Development – Dwelling, Driveway & Entrance Walks)
21.85% (28,910 SF)

Assumed Lot Impervious	
Lot Number	Impervious Coverage
1	6,686
2	4,048
3	4,888
4	4,854
5	4,167
6	3,977
7	280
Total Square FT	28,910
Total Acres	0.664

a. Maximum Building Height:
p. Proposed Building Height:
q. Total Number of Lots:

40'
0' (No Buildings Proposed)
7 (Includes 6 Residential Lots and 1 Stormwater Management Lot)

2. Building Setbacks:

Existing Proposed Single Family Residential (R-1):
Front: 50' Front: 25'
Side: 30' Side: 10'
Rear: 50' Rear: 30'

3. The purpose of this plan is to Subdivide existing Tax Parcel Number 24-22-306 into 6 Single Family Residential lots, 1 Stormwater Management Lot, and install all associated utilities.

4. Act 287 Utility Information: (Serial Number: 20211123505)

All utility locations should be verified prior to any construction. utility information and locations should be considered approximate. contractor shall notify po one call prior to any excavation.

a. Water:

State College Borough Water Authority
1201 West Branch Road, State College, PA 16801; (814) 238-6766

b. Sanitary Sewer:

University Area Joint Authority
1576 Spring Valley Road, State College, PA 16801; (814) 238-9662

c. Telephone:

Verizon
224 South Allen Street, State College, PA 16801; (814) 231-6511

d. Electric:

West Penn Power Company
2800 East College Avenue, State College, PA 16801; (814) 237-5821

e. Cable television:

Comcast
60 Decibel Road, State College, PA 16801; (800) 992-3515

f. Gas:

Columbia Gas of Pennsylvania
2550 Carolean Drive, State College, PA 16801; (814) 238-6775

g. Stormwater & Traffic Signals:

Ferguson Township
3147 Research Drive, State College, PA 16801; (814) 238-4651

5. Natural Site Features & Survey Information:

- Soil limits and descriptions have been taken from the Natural Resources Conservation Service Web Soil Survey dated June 2020.
- There are not wetlands on the site according to the National Wetland Inventory Mapping (U.S. Fish & Wildlife Service) for State College, PA last updated July 2019.
- There are no portions of this site within Flood Plain according to the Federal Emergency Management Agency (FEMA) Map Number 42027C0617F, effective date May 4, 2009.
- Contours shown are taken from survey data collected in the field by PennTerra Engineering, Inc.
- Horizontal Datum is Pennsylvania North Zone State Plane Coordinates, North American Datum of 1983 (PA NAD83) U.S. Feet.
- Elevation Datum is the North American Vertical Datum of 1988 (NAVD 88).
- The Project Benchmark is a Sanitary Manhole (Manhole 2/3) in the center of Farmstead Lane. TC Elevation = 1228.54.
- There are no sinkholes on site according to the Preliminary Geologic Investigation prepared by CMT Laboratories, Inc., dated June 15, 2021.

6. Easement Information:

- There is a 10' Utility and Sidewalk Easement located along the street frontage of all lots on Farmstead Lane.
- There is a 20' Stormwater Easement thru Lots 1, 3-6. Easement shall be created by and included in the deed for these lots.
- There is a 10' Sanitary Sewer Easement thru Lot 2 to provide sanitary sewer lateral service to Lot 1. Easement shall be created by and included in the deed for these lots.
- There is an Existing Sanitary Sewer Easement thru Lot 7. Easement shall be included in the deed for this lot.

7. Street Lighting: Each lot shall be equipped with a "dusk 'till dawn" photocell controlled lamp on a post placed on the front lawn within 15' of the driveway.

8. Any signage required by the Township shall be acquired and erected at the expense of the developer.

9. Property monuments and pins shall be set after lot development and landscaping is completed.

10. Farmstead Lane is an existing road with a 50' R-O-W and a 26' paved cartway.

11. All pedestrian walkways, drainage easements, detention basins, and all drainage structures located outside of the street R-O-W shall be maintained by the Farmstead View's Home Owner's Association in accordance with the recorded HOA documents. All sidewalks adjacent to residential lots shall be maintained in accordance with the recorded HOA documents.

12. For additional information, refer to:

- "Homestead Farms Area No. 3" recorded in PB 19, PG 63, June 18, 1974.
- "Homestead Farms Area No. 4" recorded in PB 24, PG 77, August 17, 1978.
- A Stormwater Management Site Plan Report/PCSM Plan and Soil Erosion & Sedimentation Control Plan have been prepared for Farmstead View, dated July 28, 2021, last revised _____.
- "Infiltration Analysis, 139 Farmstead Lane" prepared by CMT Laboratories, Inc., dated June 16, 2021.

13. As-Built drawings/documentation of the stormwater management facilities must be prepared in accordance with Chapter 26 §26-402D.4 and submitted to Ferguson Township at the completion of construction as a prerequisite of the release of surety and issuance of Occupancy Permit.

14. Street trees along Farmstead Lane shall be as follows: (Min. Spacing: 41', Max. Spacing: 50', Min. Caliper: 2") (Refer to Record Plan, Sheet 4). Due to potential conflicts with driveway entrances and construction equipment, the installation of street trees within this subdivision shall be done all at the same time after all sidewalks are completed in this phase. Street tree planting shall be in compliance with Chapter 25 (Shade Trees) of the Ferguson Township Subdivision Ordinance.

15. No structure is required to have a built-in fire suppression system.

16. This Record Plan Conforms with the plan receiving final approval by the Ferguson Township Board of Supervisors on _____, All improvements are or will be installed in accordance with such plan in a manner and time so specified therein.

17. No land is being dedicated to public use. A fee-in-lieu payment of \$17,640 will be provided by the developer to meet the parkland requirement. The calculations for this payment are as follows based on the Ferguson Township 2021 Fee Schedule:
Parkland fee-in-lieu = \$1,225.00 per person. Fee is based on 2.4 dwelling units per acre
\$1,225.00 per person * 2.4 persons per dwelling unit = \$2,940 per dwelling unit
\$2,940 per dwelling unit * 6 dwelling units = \$17,640 fee-in-lieu payment

18. No more than 6 dwelling units may be constructed on the land which is the subject of this Subdivision Plan unless additional land is dedicated to the Township of Ferguson for parkland and/or the Board of Supervisors accepts an additional fee-in-lieu of dedication of parkland.

19. The 20' Stormwater Access Easement between Lots 1, 3-7 shall be subject to the following: No structures, landscaping & above ground obstructions shall be located within the Easement Area except for the Easement delineation items proposed and shown on the Record Plan. The 20' Easement area is to be kept open for access and shall be maintained in accordance with the recorded HOA Documents.

20. The plan proposes 6 Single-Family residential lots (Lots 1-6) and one non buildable lot (Lot 7) for stormwater management facilities.

Owner's Certification: TP# 24-22-306

State of _____
County of _____

On this the _____ day of _____, 20 _____,

personally appeared before me and certified that they were the owners of the properties shown on this plan and acknowledge the same to be their act and plan and designs, the same to be recorded as such, according to the law.

witness my hand and seal, this date _____

Notary Public Commission Expires

Professional Land Surveyor Certification

I, Nevin L. Grove, a Professional Land Surveyor in the Commonwealth of Pennsylvania, do hereby certify that this plan correctly represents the tracts of lands as shown.

Signature Date

Design Engineer Certification

I, _____, hereby certify that this land development meets all design requirements of the Subdivision and Land Development Ordinance, Zoning Ordinance and all other applicable Chapters of Ferguson Township Code.

Township Engineer Certification

I, _____, have reviewed and hereby certify that the plan meets all engineering design standards and criteria of the Ferguson Township Code of Ordinances.

Township Planning Commission

Ferguson Township Planning Commission Approved

Chair Date

Secretary Date

Township Supervisors

Ferguson Township Supervisors Approved

Chair Date

Secretary Date

Fire Chief Certification

I have reviewed and hereby certify that the location of Fire Lanes and Fire Hydrants shown on this plan are adequate.

Fire Chief Date

PennTerra
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Seal

Seal

Designer MLH

Draftsman MLH

Proj/Manager MAT

Surveyor BRK

Perimeter Ok

Book Pg

File 20200-PRE-03-SIGNATURES & NOTES

Layout SIGN&NOTES

5/16/22	REVISED PER TWP COMMENTS
MLH	
3/21/22	REVISED PER TWP COMMENTS
MLH	
2/7/22	REVISED PER TWP COMMENTS
MLH	
12/14/21	REVISED PER TWP COMMENTS
MLH	
10/19/21	PRICING SET
MLH	
Date	Description
	REVISIONS

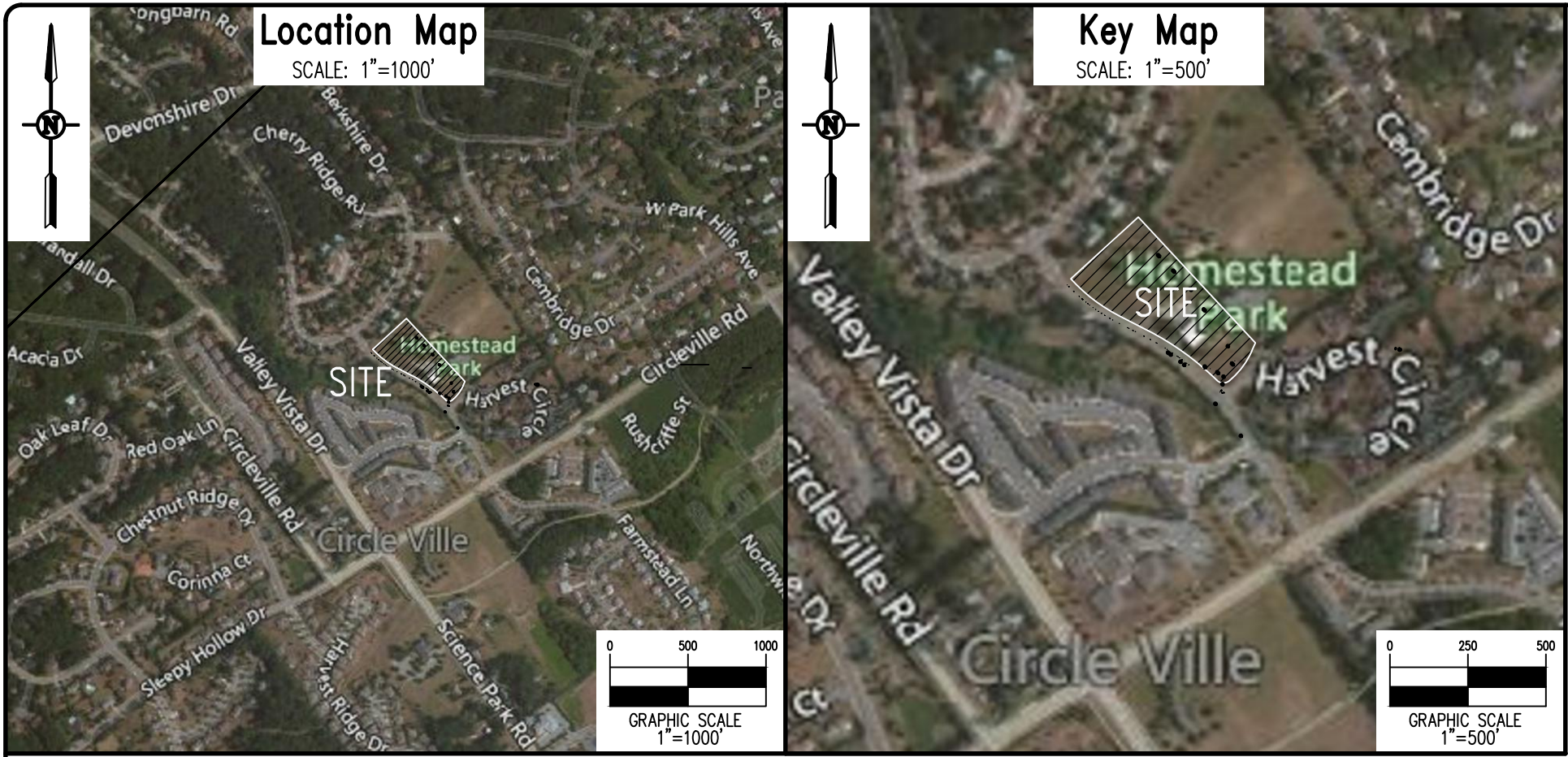
FARMSTEAD VIEW

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY SUBDIVISION PLAN

SIGNATURES & NOTES

PROJECT NO. 20290	
DATE JULY 29, 2021	
SCALE AS SHOWN	SHEET NO. 3



EXISTING CURVE TABLE						
CURVE	LENGTH	RADIUS	TANGENT	CHORD DIRECTION	CHORD	DELTA
C1	106.74'	255.00'	54.16'	N 36° 02' 40" E	105.96'	23° 59' 00"
C2	45.21'	30.00'	28.14'	N 88° 47' 38" W	41.05'	86° 20' 25"
C3	272.48'	910.00'	137.27'	N 54° 12' 06" W	271.46'	17° 09' 22"
C4	197.41'	555.81'	99.76'	N 52° 36' 17" W	196.37'	20° 21' 00"

EXISTING LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S 48° 02' 10" W	11.06'

PROPOSED CURVE TABLE						
CURVE	LENGTH	RADIUS	TANGENT	CHORD DIRECTION	CHORD	DELTA
C5	85.64'	910.00'	42.85'	N 48° 19' 11" W	85.61'	5° 23' 32"
C6	92.24'	910.00'	46.16'	N 53° 55' 11" W	92.20'	5° 48' 27"
C7	83.70'	910.00'	41.88'	N 59° 27' 30" W	83.67'	5° 16' 12"
C8	10.90'	910.00'	5.45'	N 62° 26' 11" W	10.90'	0° 41' 11"
C9	55.89'	555.81'	27.97'	N 59° 53' 57" W	55.86'	5° 45' 39"
C10	81.41'	555.81'	40.78'	N 52° 49' 22" W	81.34'	8° 23' 31"
C11	60.12'	555.81'	30.09'	N 45° 31' 42" W	60.09'	6° 11' 50"

PROPOSED LINE TABLE		
LINE	DIRECTION	LENGTH
L2	N 62° 46' 47" W	74.40'
L3	N 62° 46' 47" W	28.49'

SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Roadway Center Line
- Property Corner Found
- Property Corner To Be Set

EXISTING FEATURES LEGEND

- EXISTING BUILDING
- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Gravel Areas
- Existing Bituminous Areas
- Existing Fence
- Existing Sanitary Sewer w/ Manhole
- Existing 6" PVC Sanitary Sewer Lateral w/ CI
- Existing Water Line w/ Valve
- Existing Storm Sewer Line w/ Inlet
- Existing Overhead Utility Line w/ Pole
- Existing Deciduous Tree
- Existing Evergreen Tree
- Existing Shrub

PROPOSED FEATURES LEGEND

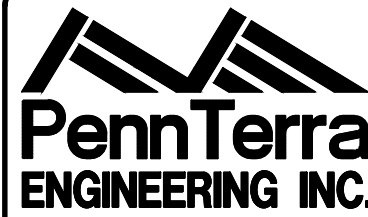
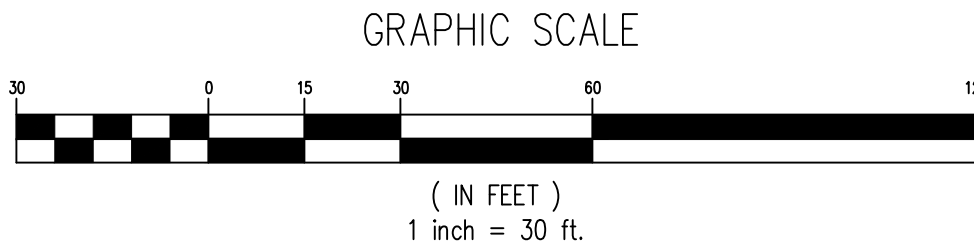
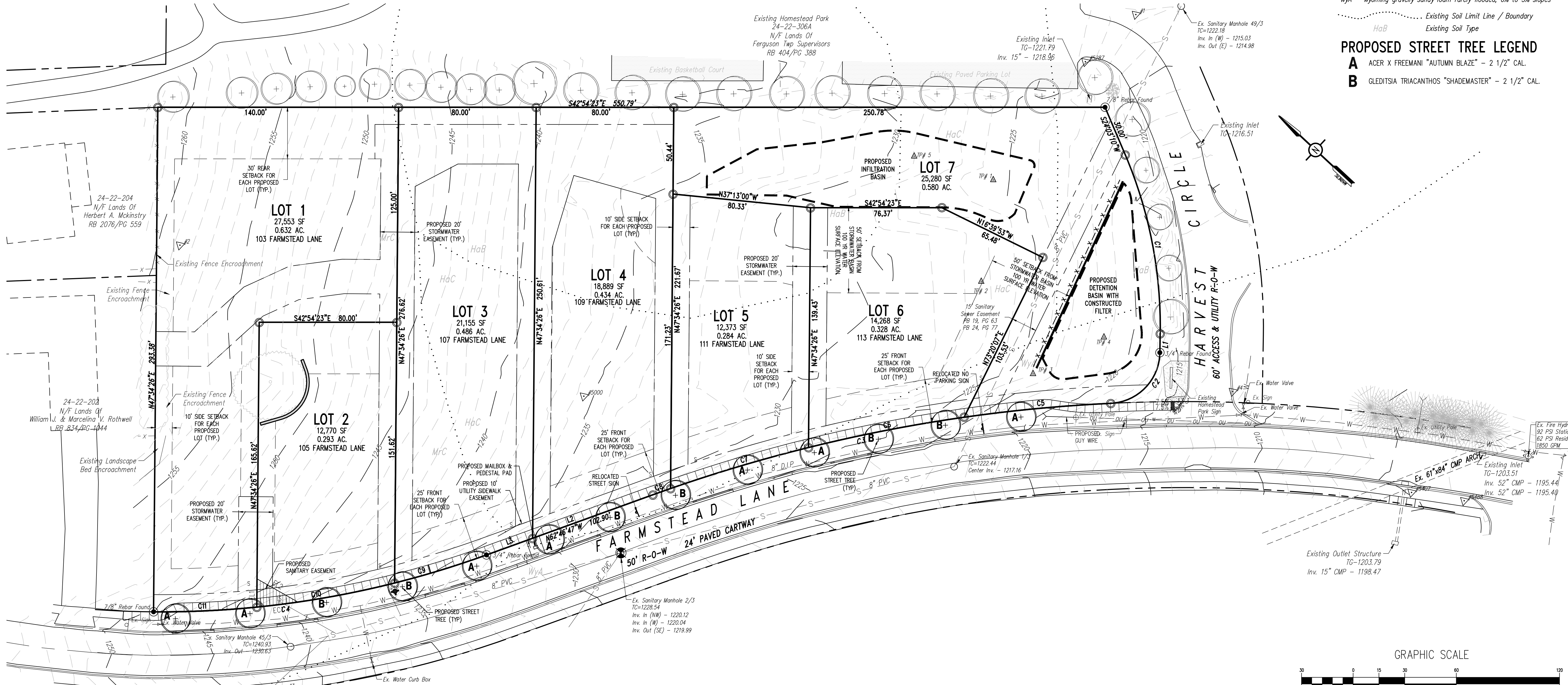
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED DEPRESSED CURB
- PROPOSED DETAINING WALL

SOILS LEGEND

- Soil cover on the site consists of:
- HaB - Hagerstown Silt loam, 3%-8% Slopes
 - HaC - Hagerstown Silt Loam, 8%-15% Slopes
 - MrC - Morrison sandy loam, 8%-15% Slopes
 - WyA - Wyoming gravelly sandy loam rarely flooded, 0% to 5% slopes
- Existing Soil Limit Line / Boundary
- Existing Soil Type

PROPOSED STREET TREE LEGEND

- A ACER X FREEMANI "AUTUMN BLAZE" - 2 1/2" CAL.
- B GLEDITSIA TRIACANTHOS "SHADEMASTER" - 2 1/2" CAL.



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Designer: M.H.
Draftsman: M.H.
Proj Manager: M.A.T.
Surveyor: B.R.K.
Perimeter Ok.
Book: Pg.
File: 20200-PRE-04-RECORD
Layout: RECORD

DATE	REVISIONS
5/24/22	REVISED PER TWP COMMENTS
3/25/22	REVISED PER TWP COMMENTS
2/2/22	REVISED PER TWP COMMENTS
12/14/21	REVISED PER TWP COMMENTS
10/19/21	PRICING SET
DATE	DESCRIPTION

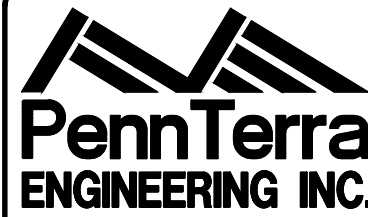
FARMSTEAD VIEW

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY SUBDIVISION PLAN

RECORD PLAN

PROJECT NO.
20290
DATE
JULY 29, 2021
SCALE
1"=30'
SHEET NO.
4



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Designer MLH
Draftsman MLH
Proj/Manager MAT
Surveyor BRK
Perimeter Ok. _____
Book ---- Pg ----
File 20206-FRE-05-GRADING
Layout GRADING

5/24/22	REVISED PER TWP COMMENTS
MLH	
3/21/22	REVISED PER TWP COMMENTS
MLH	
2/2/22	REVISED PER TWP COMMENTS
MLH	
12/14/21	REVISED PER TWP COMMENTS
MLH	
10/19/21	PRICING SET
MLH	
Date	Description
	REVISIONS

FARMSTEAD VIEW

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY SUBDIVISION PLAN

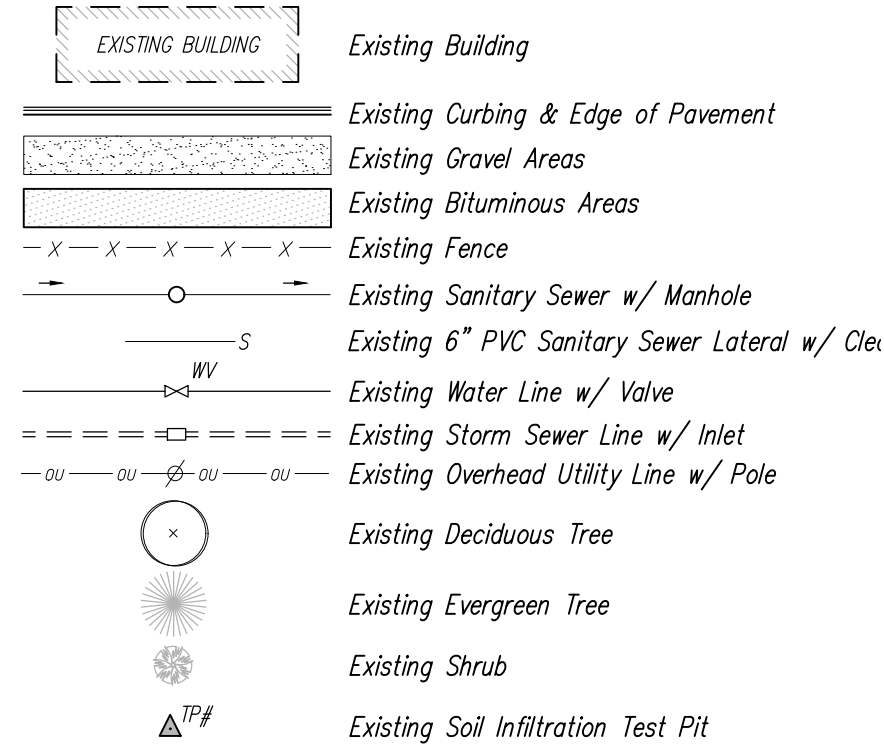
GRADING PLAN

PROJECT NO.	20290
DATE	JULY 29, 2021
SCALE	1" = 30'
SHEET NO.	5

GRADING NOTES

- ALL SITE WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS PREPARED BY PENNTERRA, THE CURRENT REQUIREMENTS OF THE FERGUSON TOWNSHIP, THE APPLICABLE SECTIONS OF THE PENNDOT STANDARD SPECIFICATIONS FOR ROADWAY CONSTRUCTION, AND ALL OTHER PERTINENT FEDERAL AND STATE LAWS.
- THE CONTRACTOR SHALL COMPLY AT ALL TIMES WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, PROVISIONS, AND POLICIES GOVERNING SAFETY AND HEALTH, INCLUDING THE FEDERAL CONSTRUCTION SAFETY ACT (PUBLIC LAW 91-54), FEDERAL REGISTER, CHAPTER XVII, PART 1926 OF TITLE 29 REGULATIONS, OCCUPATIONAL SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION, AND SUBSEQUENT PUBLICATIONS UPDATING THESE REGULATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING THE AREAS AND CONDITIONS UNDER WHICH THE PROJECT IS TO BE CONSTRUCTED PRIOR TO THE SUBMISSION OF A BID. SUBMISSION OF A BID SHALL BE CONSTRUED TO MEAN THE CONTRACTOR HAS REVIEWED THE SITE AND IS FAMILIAR WITH CONDITIONS AND CONSTRAINTS OF THE SITE.
- BEFORE EXCAVATION, ALL UNDERGROUND UTILITIES SHALL BE LOCATED IN THE FIELD BY THE PROPER AUTHORITIES. THE CONTRACTOR SHALL NOTIFY PA ONE CALL 1-800-242-1776. THE LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES ARE APPROXIMATE AND MAY NOT ALL BE SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND EXACT LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES.
- MAXIMUM SLOPES SHALL BE 3:1 (HORIZONTAL:VERTICAL) EXCEPT WHERE SPECIFICALLY NOTED.
- ALL AREAS NOT PAVED SHALL BE TOPSOILED, SEED, MULCHED OR LANDSCAPED UNLESS OTHERWISE NOTED IN THE CONSTRUCTION DRAWINGS, SITE SPECIFICATIONS OR INSTRUCTED BY THE OWNER.
- THE MAXIMUM SLOPE FOR ALL ON-SITE SIDEWALKS SHALL BE 4.90% WITH A MAXIMUM CROSS SLOPE OF 2.00% AND CURB RAMPS SHALL HAVE A MAXIMUM SLOPE OF 8.30%.
- CONTOURS SHOWN ARE GENERATED FROM A FIELD SURVEY BY PENNTERRA ENGINEERING, INC. AND ARE BASED ON AN ASSUMED ELEVATION. THE PROJECT BENCHMARK IS A SANITARY MANHOLE (MANHOLE 2/3) IN THE CENTER OF FARMSTEAD LANE. TC ELEVATION = 1228.54.
- ALL WORK WITHIN THE FARMSTEAD LANE R-O-W SHALL BE IN ACCORDANCE WITH THE FERGUSON TOWNSHIP STANDARDS AND SPECIFICATIONS.
- ALL FILL MATERIAL WITHIN THE HOUSE DEVELOPMENT SHALL BE WITH STRUCTURAL FILL APPROVED BY THE OWNERS GEOTECHNICAL ENGINEER. ANY BORROW MATERIAL UTILIZED AS STRUCTURAL FILL SHALL NOT CONTAIN ROCK GREATER THAN 4" IN MAXIMUM DIMENSION & SHOULD NOT CONTAIN MORE THAN 1 PERCENT (BY WEIGHT) OF ORGANIC MATTER OR OTHER DELETERIOUS MATERIAL. UNIFIED SOIL CLASSIFICATIONS OF GW, GM, GC, SW, SM, SC, CL & COMBINATIONS OF THERE OF ARE GENERALLY CONSIDERED SUITABLE FOR USE AS STRUCTURAL FILL.
- ALL HOUSE DEVELOPMENT AREAS & DRIVEWAY AREAS SHALL BE COMPACTED TO 100% OF MAXIMUM DRY DENSITY AS DETERMINED BY THE PROCTOR ASTM 698. FILL MATERIALS IN NON STRUCTURAL AREAS SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY. REFER TO THE STORMWATER MANAGEMENT SITE PLAN SET FOR THE COMPACTION REQUIREMENTS FOR THE BASIN.
- ALL EXCAVATION WILL BE CLASSIFIED AND WILL INCLUDE (WITHOUT LIMITATION THERETO) THE EXCAVATION AND REMOVAL OF ALL SOIL, SHALE AND ROCK FORMATIONS, BOULDERS AND EXISTING FOUNDATIONS ENCOUNTERED IN THE CONTRACT AREA. NO CLAIMS FOR EXTRA COMPENSATION OR EXTENSION OF CONTRACT TIME WILL BE CONSIDERED BY THE OWNER WHEN THE ABOVE ITEMS ARE ENCOUNTERED.

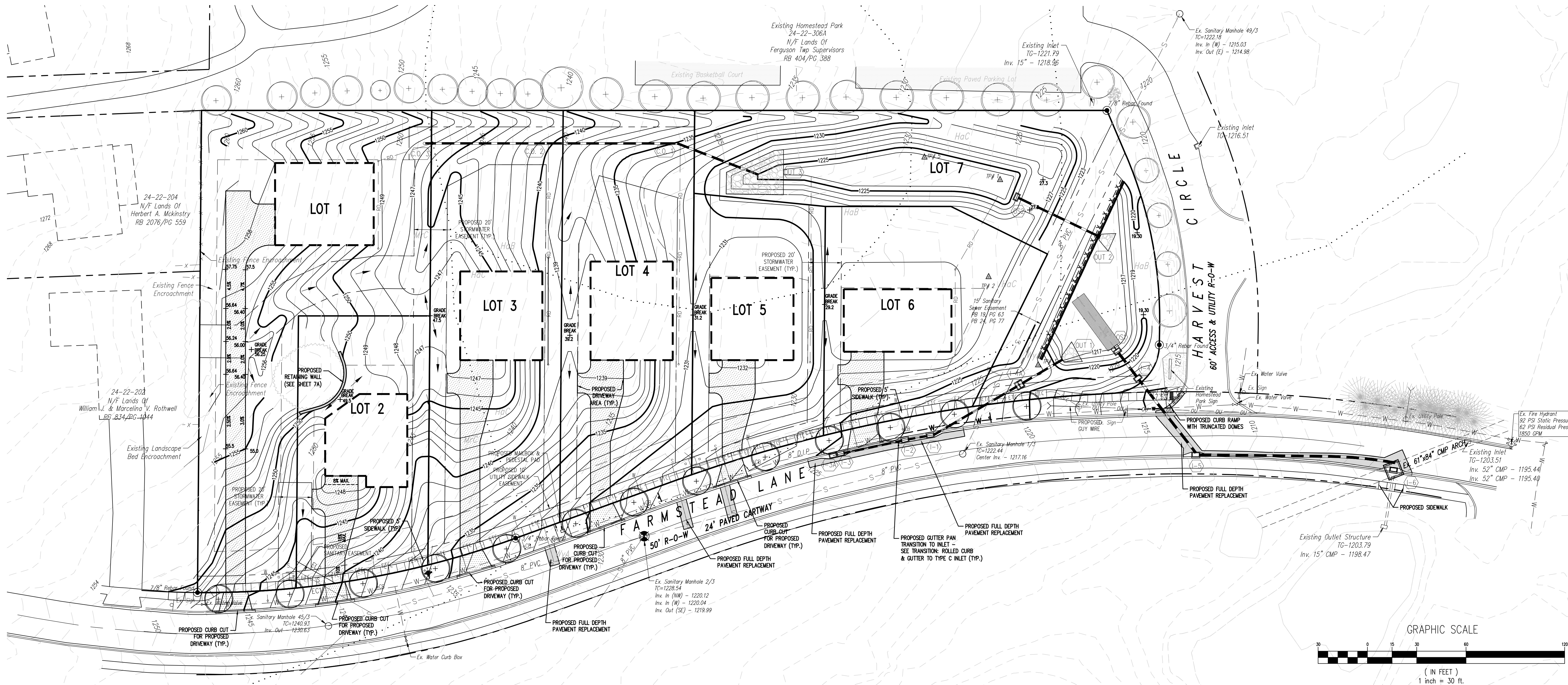
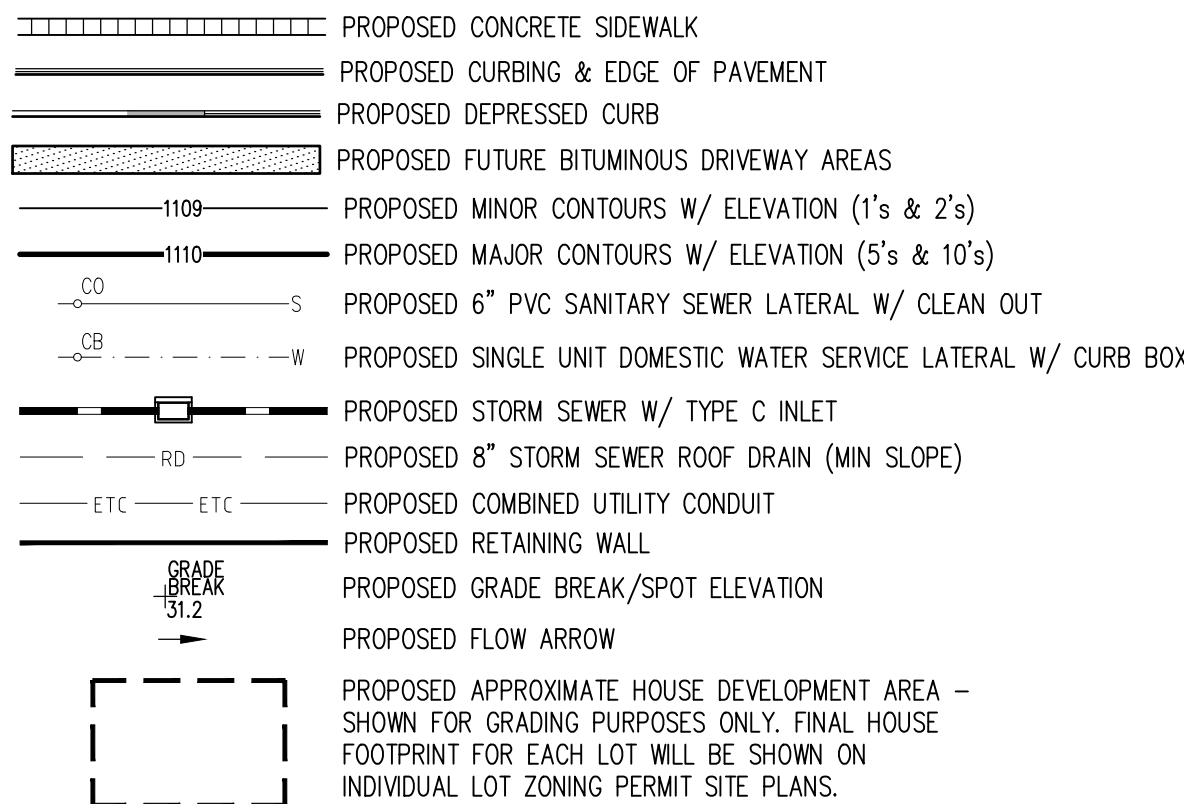
EXISTING FEATURES LEGEND



SOILS LEGEND

Soil cover on the site consists of:
HaB - Hagerstown Silt loam, 3%-8% Slopes
HaC - Hagerstown Silt loam, 8%-15% Slopes
McC - Morrison sandy loam, 8%-15% Slopes
WyA - Wyoming gravelly sandy loam rarely flooded, 0% to 5% slopes
Existing Soil Limit Line / Boundary
Existing Soil Type

PROPOSED FEATURES LEGEND



PennTerra
ENGINEERING INC.

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Designer	MLH
Draftsman	XXX
Proj/Manager	MAT
Surveyor	BRK
Perimeter Ok.	
Book	Pg
File	2020-PR-06-UTILITY
Layout	UTILITY PLAN

5/16/22	REVISED PER TWP COMMENTS
MLH	
3/21/22	REVISED PER TWP COMMENTS
MLH	
2/7/22	REVISED PER TWP COMMENTS
MLH	
12/14/21	REVISED PER TWP COMMENTS
MLH	
10/19/21	PRICING SET
MLH	
Date	Description
	REVISIONS

FARMSTEAD VIEW

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY SUBDIVISION PLAN

UTILITY PLAN

PROJECT NO.	20290
DATE	JULY 29, 2021
SCALE	1" = 30'
SHEET NO.	6

- UTILITY NOTES**
- ALL SITE WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS PREPARED BY PENNTERRA ENGINEERING INC., THE CURRENT REQUIREMENTS OF THE FERGUSON TOWNSHIP, THE APPLICABLE SECTIONS OF THE PENNDOT STANDARD SPECIFICATIONS FOR ROADWAY CONSTRUCTION, AND ALL OTHER PERTINENT FEDERAL AND STATE LAWS.
 - THE CONTRACTOR SHALL COMPLY AT ALL TIMES WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, PROVISIONS, AND POLICIES GOVERNING SAFETY AND HEALTH, INCLUDING THE FEDERAL CONSTRUCTION SAFETY ACT (PUBLIC LAW 91-54), FEDERAL REGISTER, CHAPTER XVII, PART 1926 OF TITLE 29 REGULATIONS, OCCUPATIONAL SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION, AND SUBSEQUENT PUBLICATIONS UPDATING THESE REGULATIONS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING THE AREAS AND CONDITIONS UNDER WHICH THE PROJECT IS TO BE CONSTRUCTED PRIOR TO THE SUBMISSION OF A BID. SUBMISSION OF A BID SHALL BE CONSTRUED TO MEAN THE CONTRACTOR HAS REVIEWED THE SITE AND IS FAMILIAR WITH CONDITIONS AND CONSTRAINTS OF THE SITE.
 - BEFORE EXCAVATION, ALL UNDERGROUND UTILITIES SHALL BE LOCATED IN THE FIELD BY THE PROPER AUTHORITIES. THE CONTRACTOR SHALL NOTIFY PA ONE CALL AT 1-800-242-1776, THE LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES ARE APPROXIMATE AND MAY NOT ALL BE SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND EXACT LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BID AND PERFORM ALL UTILITY WORK IN COMPLIANCE TO ALL APPLICABLE LOCAL AND STATE CODES AND REGULATIONS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES ASSOCIATED WITH THE INSTALLATION, INSPECTING, TESTING AND FINAL ACCEPTANCE OF ALL PROPOSED UTILITIES CONSTRUCTION.
 - ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE RESPECTIVE UTILITY COMPANY OR REGULATORY AUTHORITY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE UTILITY COMPANIES TO ENSURE ALL UTILITIES ARE INSTALLED CORRECTLY TO MEET PROJECT REQUIREMENTS WHETHER PERFORMED BY THE CONTRACTOR OR NOT.
 - AN AS-BUILT DRAWING OF NEW UTILITY SERVICES SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE OWNER UPON COMPLETION OF THE PROJECT.
 - ALL SANITARY SEWER & WATER LINES SHALL HAVE 4' MINIMUM COVERAGE.
 - ALL WATER SERVICE SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE SUMMARY OF STATE COLLEGE BOROUGH WATER AUTHORITY PUBLIC WATER MAIN, SERVICE CONNECTION & FIRE HYDRANT SPECIFICATIONS FOR DEVELOPER/CONTRACTOR INSTALLATION.
 - ALL SANITARY SEWER SERVICE LATERALS SHALL BE IN ACCORDANCE WITH THE UNIVERSITY AREA JOINT AUTHORITY'S STANDARDS AND SPECIFICATIONS. LATERAL CONNECTIONS TO SEWER MAIN FOR LOTS 3-6 AND ASSOCIATED RESTORATION SHALL BE BY UAJA. EXTENSIONS OF EXISTING LATERALS FOR LOTS 1 & 2 SHALL BE BY THE CONTRACTOR.
 - REFER TO THE LATEST FARMSTEAD VIEW STORMWATER MANAGEMENT SITE PLAN SET FOR STORMWATER DRAINAGE SYSTEM DESIGN INFORMATION.

EXISTING FEATURES LEGEND

- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Gravel Areas
- Existing Bituminous Areas
- Existing Fence
- Existing Sanitary Sewer w/ Manhole
- Existing 6" PVC Sanitary Sewer Lateral w/ Cleo
- Existing Water Line w/ Valve
- Existing Storm Sewer Line w/ Inlet
- Existing Overhead Utility Line w/ Pole
- Existing Deciduous Tree
- Existing Evergreen Tree
- Existing Shrub
- Existing Soil Infiltration Test Pit

SOILS LEGEND

Soil cover on the site consists of:

- HaB - Hagerstown Silt loam, 3%-8% Slopes
- HaC - Hagerstown Silt loam, 8%-15% Slopes
- MrC - Morrison sandy loam, 8%-15% Slopes
- WyA - Wyoming gravelly sandy loam rarely flooded, 0% to 5% slopes

Existing Soil Limit Line / Boundary

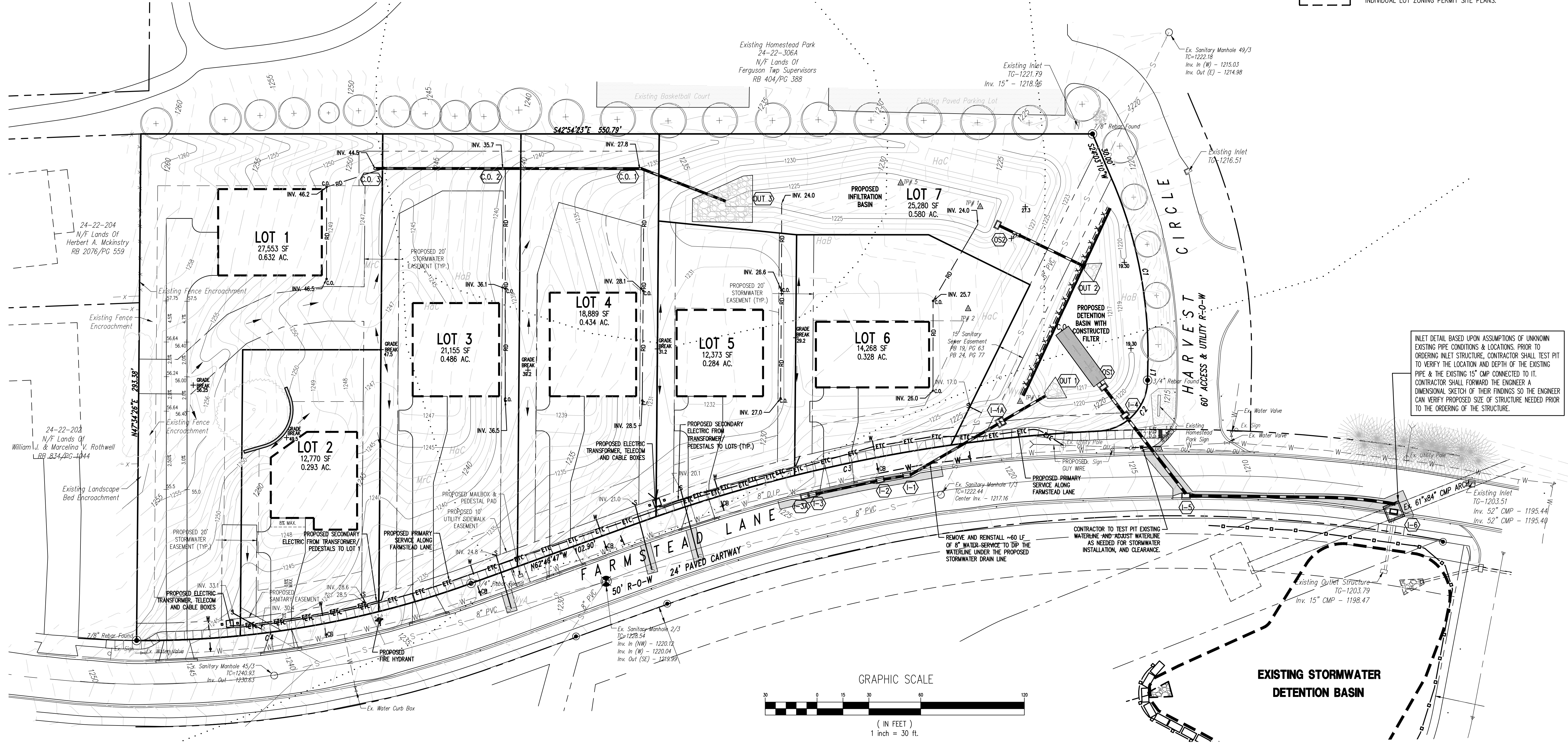
Existing Soil Type

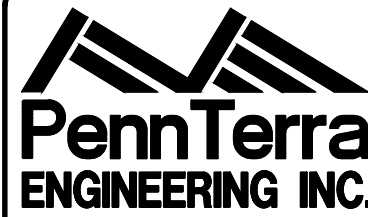
SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Roadway Center Line
- Property Corner Found
- Property Corner To Be Set

PROPOSED FEATURES LEGEND

- PROPOSED CONCRETE SIDEWALK
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED DEPRESSED CURB
- PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- PROPOSED PVC SANITARY SEWER LATERAL W/ CLEAN OUT (SEE DETAIL ON SHEET 7)
- PROPOSED 1" K COPPER WATER SERVICE LATERAL W/ CURB BOX
- PROPOSED STORM SEWER W/ TYPE C INLET
- PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED COMBINED UTILITY CONDUIT
- PROPOSED RETAINING WALL
- PROPOSED APPROXIMATE HOUSE DEVELOPMENT AREA - SHOWN FOR GRADING PURPOSES ONLY. FINAL HOUSE FOOTPRINT FOR EACH LOT WILL BE SHOWN ON INDIVIDUAL LOT ZONING PERMIT SITE PLANS.





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LANDSCAPE NOTES

1. Trees are to be mulched individually in a 4' diameter circle.
2. The mulch is to be double shredded hardwood bark mulch, well-aged and dark in color. Apply the mulch 3-4" thick.
3. Plant material substitutions may only be permitted at the approval of the owner and approving municipality prior to planting.
4. Any plantings which do not survive for a period of one year from the date of planting are to be replaced by the landscape contractor at no additional cost to the Owner.
5. All new plant material is to be kept watered by the landscape contractor when working on site until acceptance of the completion of the landscape or end of the season (then resume next season until project is completed). The owner will be responsible for watering thereafter.
6. All disturbed areas not being planted in trees or shrubs are to be fine graded with 6" of topsoil and seeded with a hardy perennial grass seed mixture and mulched with straw.
7. Grass must be 2 inches high over 90% of the seeded areas prior to acceptance by the owner.
8. All caliper measurements for landscaping shall be measured at 4.5' above the root ball.
9. Quantities of plant material noted on the planting schedule are to be verified with quantities shown on the plan which will have priority.

EXISTING FEATURES LEGEND

- EXISTING BUILDING Existing Building
- EXISTING CURBING & EDGE OF PAVEMENT Existing Curbing & Edge of Pavement
- EXISTING GRAVEL AREAS Existing Gravel Areas
- EXISTING BITUMINOUS AREAS Existing Bituminous Areas
- EXISTING FENCE Existing Fence
- EXISTING SANITARY SEWER W/ MANHOLE Existing Sanitary Sewer w/ Manhole
- EXISTING 6" PVC SANITARY SEWER LATERAL W/ CLEAN OUT Existing 6" PVC Sanitary Sewer Lateral w/ Clean Out
- EXISTING WATER LINE W/ VALVE Existing Water Line w/ Valve
- EXISTING STORM SEWER LINE W/ INLET Existing Storm Sewer Line w/ Inlet
- EXISTING OVERHEAD UTILITY LINE W/ POLE Existing Overhead Utility Line w/ Pole
- EXISTING DECIDUOUS TREE Existing Deciduous Tree
- EXISTING EVERGREEN TREE Existing Evergreen Tree
- EXISTING SHRUB Existing Shrub
- EXISTING SOIL INFILTRATION TEST PIT Existing Soil Infiltration Test Pit

PROPOSED FEATURES LEGEND

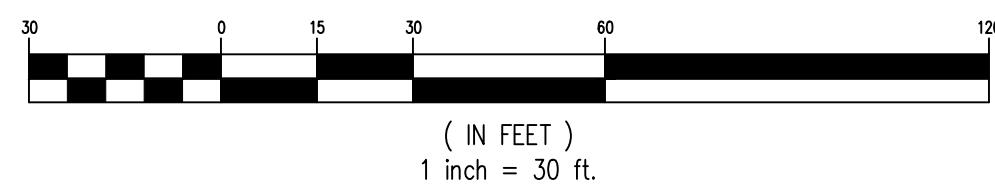
- PROPOSED CONCRETE SIDEWALK PROPOSED CONCRETE SIDEWALK
- PROPOSED CURBING & EDGE OF PAVEMENT PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED DEPRESSED CURB PROPOSED DEPRESSED CURB
- PROPOSED FUTURE BITUMINOUS DRIVEWAY AREAS PROPOSED FUTURE BITUMINOUS DRIVEWAY AREAS
- PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's) PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's) PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- PROPOSED 6" PVC SANITARY SEWER LATERAL W/ CLEAN OUT PROPOSED 6" PVC SANITARY SEWER LATERAL W/ CLEAN OUT
- PROPOSED SINGLE UNIT DOMESTIC WATER SERVICE LATERAL W/ CURB BOX PROPOSED SINGLE UNIT DOMESTIC WATER SERVICE LATERAL W/ CURB BOX
- PROPOSED STORM SEWER W/ TYPE C INLET PROPOSED STORM SEWER W/ TYPE C INLET
- PROPOSED 8" STORM SEWER ROOF DRAIN (MIN SLOPE) PROPOSED 8" STORM SEWER ROOF DRAIN (MIN SLOPE)
- PROPOSED COMBINED UTILITY CONDUIT PROPOSED COMBINED UTILITY CONDUIT
- PROPOSED RETAINING WALL PROPOSED RETAINING WALL
- PROPOSED GRADE BREAK/SPOT ELEVATION PROPOSED GRADE BREAK/SPOT ELEVATION
- PROPOSED FLOW ARROW PROPOSED FLOW ARROW
- PROPOSED APPROXIMATE HOUSE DEVELOPMENT AREA - SHOWN FOR GRADING PURPOSES ONLY. FINAL HOUSE FOOTPRINT FOR EACH LOT WILL BE SHOWN ON INDIVIDUAL LOT ZONING PERMIT SITE PLANS. PROPOSED APPROXIMATE HOUSE DEVELOPMENT AREA - SHOWN FOR GRADING PURPOSES ONLY. FINAL HOUSE FOOTPRINT FOR EACH LOT WILL BE SHOWN ON INDIVIDUAL LOT ZONING PERMIT SITE PLANS.

EXISTING TREE TO BE PRESERVED

SOILS LEGEND

Soil cover on the site consists of:
HaB - Hagerstown Silt loam, 3%-8% Slopes
HaC - Hagerstown Silt loam, 8%-15% Slopes
MrC - Morrison sandy loam, 8%-15% Slopes
WyA - Wyoming gravelly sandy loam rarely flooded, 0% to 5% slopes
Existing Soil Limit Line / Boundary
Existing Soil Type

GRAPHIC SCALE



Designer MLH
Draftsman MLH
Proj/Manager MAT
Surveyor BRK
Perimeter Ok.
Book Pg
File 2020-PRE-07-TREE-PLAN
Layout TREE

5/24/22	REVISED PER TWP COMMENTS
5/25/22	REVISED PER TWP COMMENTS
5/25/22	REVISED PER TWP COMMENTS
2/2/22	REVISED PER TWP COMMENTS
12/14/21	REVISED PER TWP COMMENTS
10/19/21	PRICING SET
Date	Description
REVISIONS	

FARMSTEAD VIEW

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY SUBDIVISION PLAN

TREE PRESERVATION PLAN

PROJECT NO.
20290
DATE
JULY 29, 2021
SCALE SHEET NO.
1" = 30' 7

PennTerra
ENGINEERING INC.
CENTRAL PENNSYLVANIA
REGION OFFICE:
3075 ENTERPRISE DRIVE
SUITE 100
STATE COLLEGE, PA 16801
PH: 814-231-8285
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Designer MLH
Draftsman MLH
Proj/Manager MAT
Surveyor BRK
Perimeter OK _____
Book Pg
File 20220-PRE-01A-TREE-PROTECTION-PLAN
Layout TREE

5/24/22	REVISED PER TWP COMMENTS
MLH	
3/21/22	REVISED PER TWP COMMENTS
MLH	
2/22/22	REVISED PER TWP COMMENTS
MLH	
12/14/21	REVISED PER TWP COMMENTS
MLH	
10/19/21	PRICING SET
MLH	
Date	Description
	REVISIONS

FARMSTEAD VIEW

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

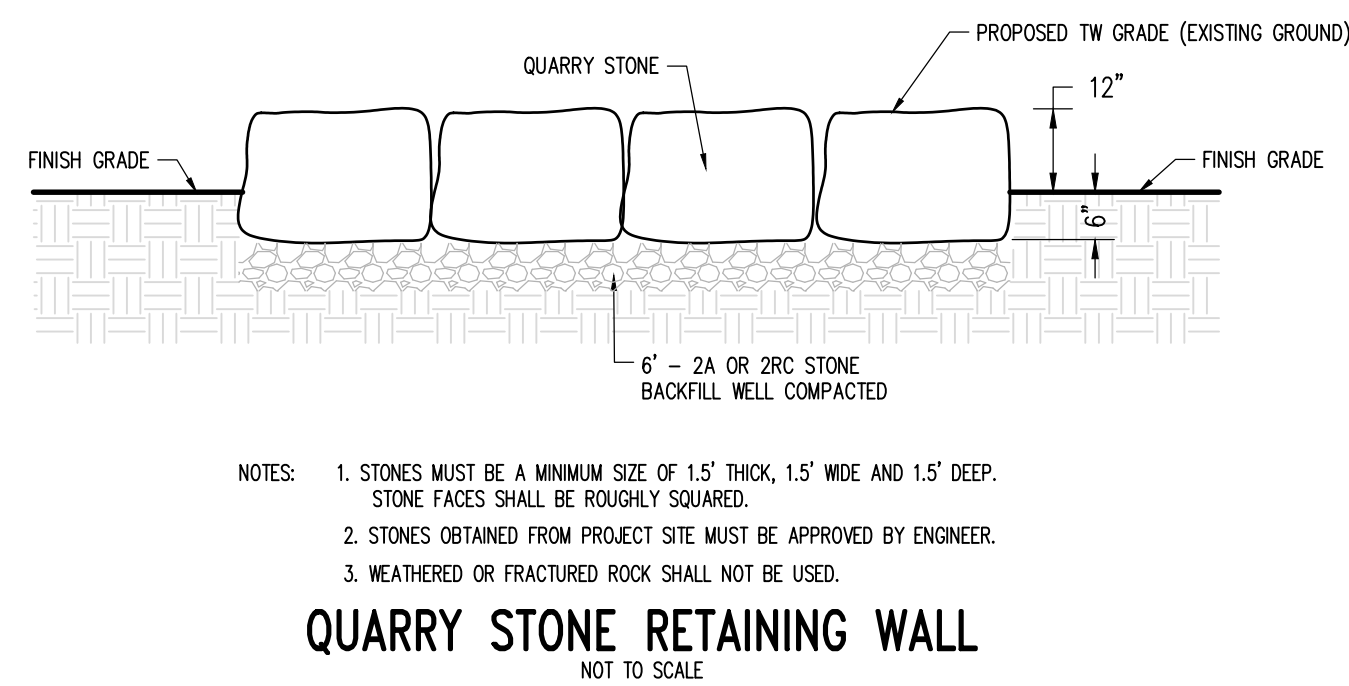
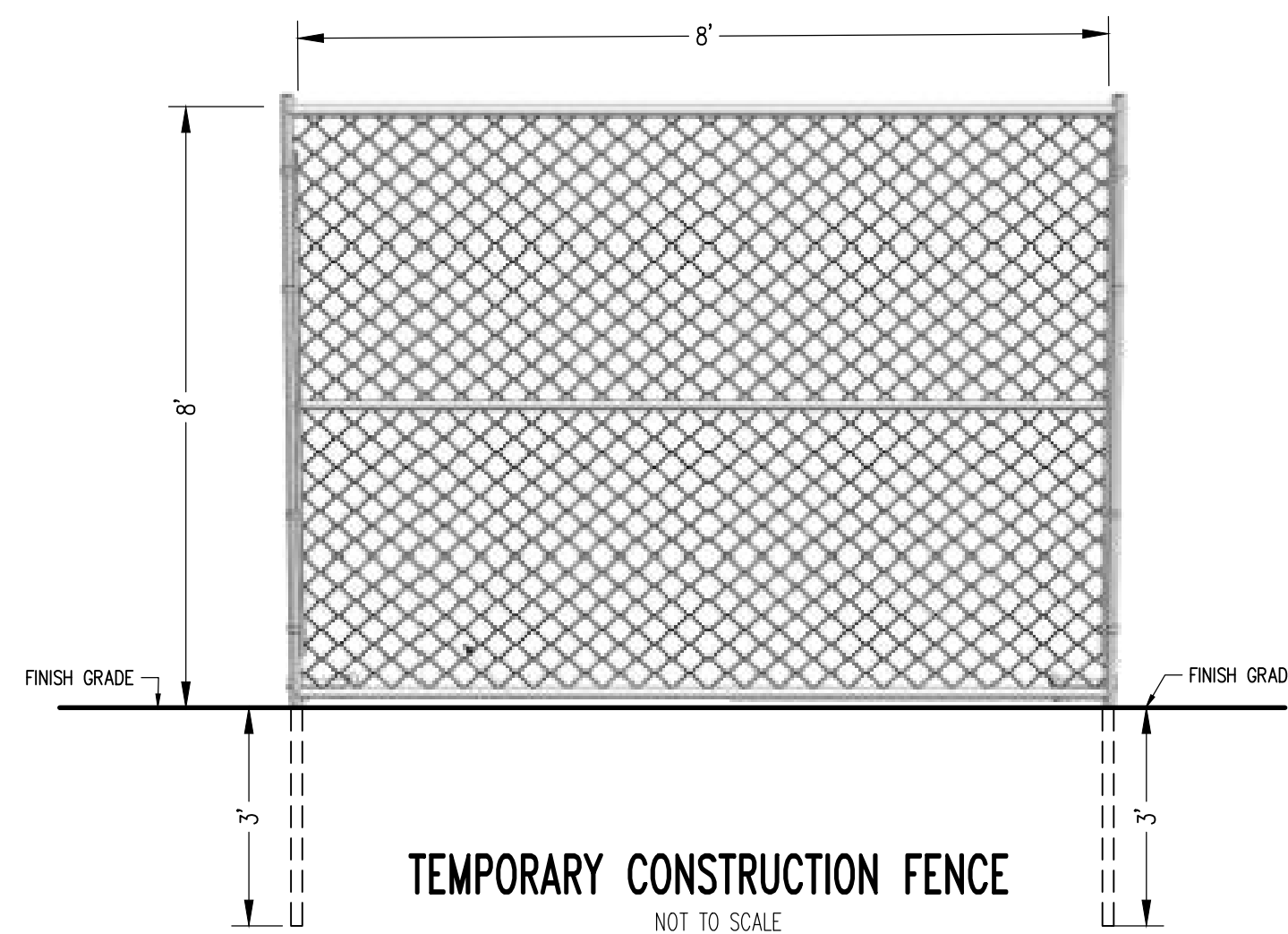
PRELIMINARY SUBDIVISION PLAN

TREE PROTECTION PLAN

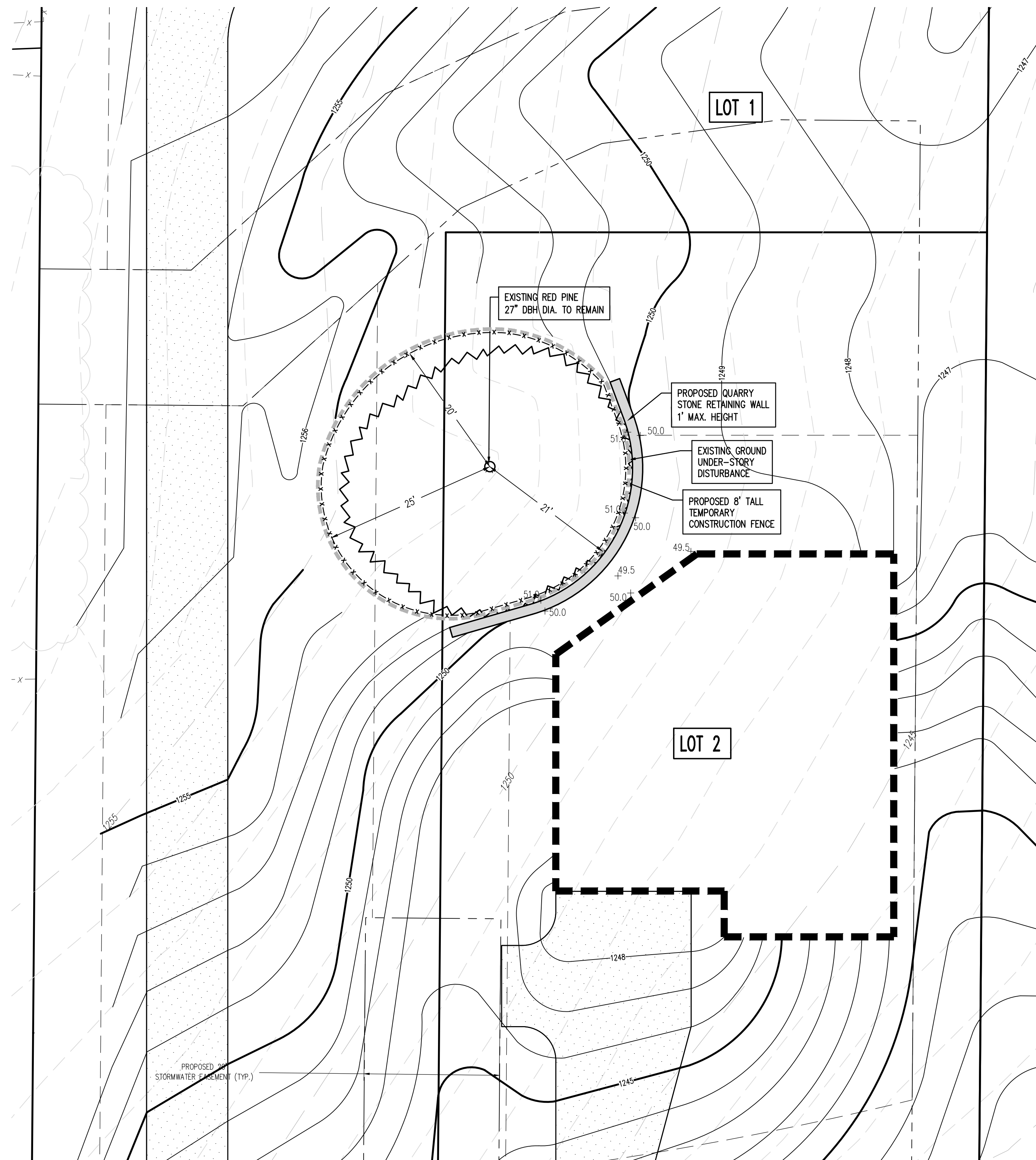
PROJECT NO.	20290
DATE	JULY 29, 2021
SCALE	AS SHOWN
SHEET NO.	7A

TREE PROTECTION NOTES:

1. PRIOR TO THE PRE-CONSTRUCTION CONFERENCE WITH THE TOWNSHIP ARBORIST, PROTECTIVE FENCING SHALL BE PLACED AROUND TREES TO MINIMIZE DAMAGE TO ROOT SYSTEMS. FENCING SHALL BE A MINIMUM OF EIGHT IN HEIGHT AND CONSTRUCTED OF CHAIN LINK OR OTHER MATERIAL APPROVED BY THE TOWNSHIP ARBORIST. UPON INSTALLATION OF THE FENCING THE CONTRACTOR SHALL ARRANGE AN ON-SITE MEETING WITH THE TOWNSHIP ARBORIST AND THE OWNERS REPRESENTATIVE.
2. THE PROTECTIVE FENCING SHALL BE PLACED AROUND THE DRIPLINE OF TREE. NOTHING SHALL BE STORE, STOCKPILED, TEMPORARILY PLACED, EXCAVATED OR ALLOWED IN THE PROTECTIVE FENCING.
3. THIS FENCE WILL BE INSTALLED PRIOR TO ANY AND ALL EARTH DISTURBANCE.
4. NO FUEL STORAGE, REFUELING OR MAINTENANCE OF EQUIPMENT OR WASH DOWN OF CEMENT HANDLING EQUIPMENT SHALL BE PERMITTED WITHIN AND PROTECTIVE FENCING.
5. ANY DAMAGE TO THE FENCING OR ENCROACHMENT ON THE PROTECTED AREAS SHALL BE REMEDIED IMMEDIATELY. ANY OBSERVED DAMAGE TO THE TREES OR ROOTS SHALL BE IMMEDIATELY REPORTED TO THE TOWNSHIP ARBORIST AND REMEDIED AS SOON AS POSSIBLE. CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE TREE PROTECTION AREA SECURE & FOR ANY DAMAGE TO THE TREE WITHIN THE PROTECTION AREA AFTER THE FENCING HAS BEEN INSTALLED.
6. TREE PROTECTION FENCING SHALL BE MAINTAINED AND REPAIRED BY THE CONTRACTOR FOR THE DURATION OF THE CONTRACT.
7. ACCESS TO FENCED AREAS WILL BE PERMITTED ONLY WITH PRIOR APPROVAL OF THE OWNER'S REPRESENTATIVE.
8. ANY EXCAVATION OR GRADING REQUIRED WITHIN THE FENCED AREAS SHALL BE DONE AS DIRECTED BY THE OWNER'S REPRESENTATIVE & UPON NOTIFICATION OF THE TOWNSHIP ARBORIST.
9. EXISTING TREES, SHRUBS, OR UNDER GROWTH TO BE CLEARED FROM PROTECTED ROOT ZONE AREAS SHALL BE REMOVED BY HAND AS DESIGNATED BY OWNER'S REPRESENTATIVE.



- NOTES:
1. STONES MUST BE A MINIMUM SIZE OF 1.5" THICK, 1.5" WIDE AND 1.5" DEEP. STONE FACES SHALL BE ROUGHLY SQUARED.
 2. STONES OBTAINED FROM PROJECT SITE MUST BE APPROVED BY ENGINEER.
 3. WEATHERED OR FRACTURED ROCK SHALL NOT BE USED.

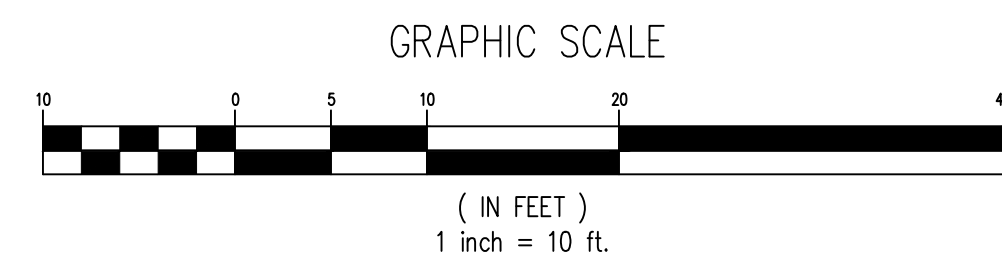


EXISTING FEATURES LEGEND

	Existing Building
	Existing Curbing & Edge of Pavement
	Existing Gravel Areas
	Existing Bituminous Areas
	Existing Fence
	Existing Sanitary Sewer w/ Manhole
	Existing 6" PVC Sanitary Sewer Lateral w/ Clean Out
	Existing Water Line w/ Valve
	Existing Storm Sewer Line w/ Inlet
	Existing Overhead Utility Line w/ Pole
	Existing Deciduous Tree
	Existing Evergreen Tree
	Existing Shrub
	Existing Soil Infiltration Test Pit

PROPOSED FEATURES LEGEND

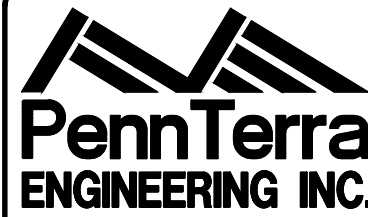
	PROPOSED FUTURE BITUMINOUS DRIVEWAY AREAS
	PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
	PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
	PROPOSED RETAINING WALL
	PROPOSED GRADE BREAK/SPOT ELEVATION
	PROPOSED FLOW ARROW
	PROPOSED APPROXIMATE HOUSE DEVELOPMENT AREA - SHOWN FOR GRADING PURPOSES ONLY. FINAL HOUSE FOOTPRINT FOR EACH LOT WILL BE SHOWN ON INDIVIDUAL LOT ZONING PERMIT SITE PLANS.



LANCASTER
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Fax: 717-522-5046

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STORMWATER MANAGEMENT NOTES

- All site work shall be done in accordance with the plans prepared by PennTerra Engineering, Inc., the current requirements of the governing municipality, the applicable sections of the PennDOT standard specifications for roadway construction, and all other pertinent federal and state laws.
- The Contractor shall comply at all times with applicable federal, state and local laws, provisions, and policies governing safety and health, including the federal construction safety act, as amended.
- The Contractor shall be responsible for examining the areas and conditions under which the project is to be constructed prior to the submission of a bid. Submission of a bid to be constructed to mean the Contractor has reviewed the site and is familiar with conditions and constraints of the site.
- Before excavation, all underground utilities shall be located in the field by the proper authorities. The Contractor shall notify pa one call 1-800-242-1776. The location of all utilities and underground structures are approximate and may not all be shown. It is the responsibility of the Contractor to determine the existence and exact location of all utilities and underground structures.
- An as-built drawing of new utility services shall be prepared by the Contractor and submitted to the Owner upon completion of the project.
- All storm pipe shall be as noted. All joints shall be watertight.
- Contractor shall refer to other plans within this construction set for other pertinent information.
- Co-permittee requirements: Contractor to complete Pennsylvania Department of Environmental Protection (D.E.P.) forms and make application to become co-permittee of the general NPDES permit prior to commencing any land disturbance. Contractor shall assume full responsibility for any fines or other measures assessed by regulatory agencies due to improper or deficient installation and / or maintenance of the temporary erosion and sedimentation control measures and post-construction stormwater measures installed. Contractor shall remain a co-permittee of the National Pollutant Discharge Elimination System (NPDES) permit until the notice of termination of the NPDES permit has been issued by the PA D.E.P.
- Notice of termination services: Contractor shall be responsible for the services for the notice of termination of the NPDES permit. This includes but is not limited to the following:
 - Have a licensed professional or designee on-site to observe the critical stages of construction noted in the post-construction stormwater management plan. The licensed professional or designee will be responsible for signing the required certification forms and certifying that the facilities have been built according to the approved plans, processing and recording any required forms and the as-built survey through the PA D.E.P. until the notice of termination is received.
 - Prepare an as-built topographic survey sealed by a licensed surveyor from the commonwealth of Pennsylvania of the stormwater management facilities (infiltration basin, detention basin with constructed filter and outlet structures, outlet pipes, tops of berms and spillways).
 - Provide double-ring infiltration tests as outlined in the December 2006 PA D.E.P. Stormwater BMP manual of the produced basin bottom topsoil prior to installation to certify that the topsoil meets the infiltration requirements noted on the plans.
- Contractor shall have a licensed professional submit co-built drawings/documentation (including verification of infiltration testing) of the stormwater management facilities prepared in accordance with chapter 26 of the governing municipality's code of ordinances and submitted to the governing municipality at the completion of construction as a prerequisite of issuance of occupancy permit or release of the surety bond. A narrative and photographic documentation for critical stages of construction and for the infiltration surface prior to placement of topsoil must also be submitted to the governing municipality.
- As-built infiltration testing in basins shall be performed at the top of the finished native soil layer prior to topsoil placement. This testing is in addition to the testing identified in Note 5.c. The number of infiltration tests performed shall be in accordance with the governing municipality's code of ordinances.

NPDES PERMIT, CO-PERMITTEE AND NOTICE OF TERMINATION NOTES

- The contractor shall process forms with the Local County Conservation District to become a co-permittee on the NPDES. The contractor shall remain a co-permittee until the applicant releases them from the permit.
- The Notice of Termination requires certification by a licensed professional of the stormwater facilities as noted on the Post Construction Stormwater Management Plan under the section labeled "Critical Stages of Construction".
- The licensed professional responsible for certifying the Notice of Termination (NOT) of the NPDES permit shall be selected prior to commencing earth disturbance activities on the project site. The general site contractor shall be responsible for supplying & coordinating the licensed professional.
- The licensed professional responsible for certifying the NOT shall be present for all "Critical Stages of Construction".
- A pre-construction meeting between the contractor, owner and licensed professional responsible for certifying the NOT is required to ensure all "Critical Stages of Construction" are reviewed, acknowledged and milestones established to ensure the licensed professional is present onsite during the "Critical Stages of Construction".
- The licensed professional will be required to certify and seal as-built drawings at the end of construction that the stormwater facilities have been built to the specifications on the post-construction stormwater management plans and details.
- Upon completion of all earth moving activities and once site stabilization is achieved in accordance with the Erosion and Sediment Control Plan, The contractor shall then file the as-built drawings and NOT certification with the Local County Conservation District

CRITICAL STAGES OF CONSTRUCTION FOR PROJECTS REQUIRING A GENERAL NPDES PERMIT

Critical Stages of Construction are key components of the construction sequence of the Post Construction Stormwater Management Plan and require certification and construction oversight by the licensed professional responsible for certification of the certified stormwater as-built plan and the NOT.

At least two weeks in advance of construction, the contractor shall schedule a coordination meeting with the licensed professional to review the critical stages and establish a schedule for inspections/verifications of all critical stages. At the discretion of the licensed professional, the contractor will provide photo documentation of the installation of certain items in lieu of the licensed professional being present.

The critical stages for each Post Construction Stormwater Best Management Practice are as follows:

INFILTRATION BASINS

- In order to ensure the basin floor is not compacted, equipment shall not be permitted to operate within the basin when the floor is less than 36" from subgrade elevation. A typical infiltration facility bottom excavation detail has been provided on the plans for construction. Alternatively, the contractor may develop their own plan and methods for bottom excavation. The contractor must review the proposed plan/methods with the licensed professional during the coordination meeting.
- Once subgrade of the facility has been reached, and prior to topsoil placement, the licensed professional and responsible testing firm shall be notified to schedule infiltration testing verification of the subgrade.
- Infiltration testing of the final basin floor elevation to verify infiltration rates of the topsoil placed on the basin floor is required. The contractor shall coordinate infiltration testing with the licensed professional and responsible testing firm. It is recommended that the topsoil also be tested prior to placement.
- The contractor must notify the licensed professional of the installation of the outlet structure, outfall pipe and anti-seep collars prior to backfill to ensure installation has been completed in accordance with the approved plan.
- Compaction testing reports are required on the basin berm. The contractor shall coordinate compaction testing with the licensed professional and responsible testing firm.
- Berms shall be installed and compacted in conformance with the requirements of the local municipality's Stormwater Management Ordinance. If the municipality does not specify compaction requirements, then all berms shall be installed as follows:
 - Whenever berm fill material in excess of 3 feet in height is to be used, each layer of compacted fill shall be tested to determine its density per ASTM D2922 or ASTM D3017.
 - All berm lifts shall be 8" or less.
 - The density of each layer shall be 98% of a Standard Proctor Density analysis per ASTM D698.
- All proposed vegetation within the limits of construction shall be established to a 70% uniform vegetated cover prior to final notice of termination certification.
- All professional infiltration/compaction testing results shall be provided in the as-built package to the township.

DETENTION BASINS WITH CONSTRUCTED FILTER

- The contractor must notify the licensed professional of the installation of the outlet structure, outfall pipe, constructed sand filter underdrain and anti-seep collars prior to backfill to witness and ensure installation has been completed in accordance with the approved plan.
- Compaction testing reports are required on the basin berm. The contractor shall coordinate compaction testing with the licensed professional and responsible testing firm.
- Berms shall be installed and compacted in conformance with the requirements of the local municipality's Stormwater Management Ordinance. If the municipality does not specify compaction requirements, then all berms shall be installed as follows:
 - Whenever berm fill material in excess of 3 feet in height is to be used, each layer of compacted fill shall be tested to determine its density per ASTM D2922 or ASTM D3017.
 - All berm lifts shall be 8" or less.
 - The density of each layer shall be 98% of a Standard Proctor Density analysis per ASTM D698.
- Constructed filter infiltration rate (topsoil infiltration rate and sand infiltration rate) shall be tested prior to and after placement to ensure the infiltration capabilities meet the design requirements noted on the Post construction Stormwater Management Details Sheet.
- All proposed vegetation within the basin shall be established to a 70% uniform vegetated cover prior to final notice of termination certification.
- All professional infiltration/compaction testing results shall be provided in the as-built package to the township.

GRADING DRAINAGE BREAKS

- Upon reaching finished grade, the contractor must notify the licensed professional to verify grade breaks as shown on the Post Construction Stormwater Management Plan. All roof drainage on Lots 1, 3 and 4 must be directed to the storm drainage system (CO#3 to the Infiltration Basin), and all roof drainage on Lots 5 and 6 must be piped to the Infiltration Basin by means of the proposed roof drain pipe network on each lot respectively.

NATURALLY OCCURRING GEOLOGIC FORMATIONS/SOIL CONDITIONS

There are no known naturally occurring geologic formations or soil conditions that pose the potential for pollution during construction. If a sinkhole is encountered due to karst topography, the sinkhole shall be repaired as specified on the sinkhole repair detail and/or a geotechnical engineer must be contacted for proper repair procedures.

STORMWATER AS-BUILT NOTE:

If the infiltration basin or detention basin with constructed filter should become non-functional during development or buildout, the developer or builder will be responsible for repairs/remediation. Verification that the facilities are functioning correctly will be required after the entire site is developed/stabilized.

EXISTING FEATURES LEGEND

- EXISTING BUILDING
- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Gravel Areas
- Existing Bituminous Areas
- Existing Fence
- Existing Sanitary Sewer w/ Manhole
- Existing 6" PVC Sanitary Sewer Lateral w/ Cle.
- Existing Water Line w/ Valve
- Existing Storm Sewer Line w/ Inlet
- Existing Overhead Utility Line w/ Pole
- Existing Deciduous Tree
- Existing Evergreen Tree
- Existing Shrub
- Existing Soil Infiltration Test Pit

SOILS LEGEND

Soil cover on the site consists of:
HaB - Hagerstown Silt loam, 3%-8% Slopes
HaC - Hagerstown Silt loam, 8%-15% Slopes
Mrc - Morrison sandy loam, 8%-15% Slopes
Wya - Wyoming gravelly sandy loam rarely flooded, 0% to 5% slopes
Existing Soil Limit Line / Boundary
Existing Soil Type

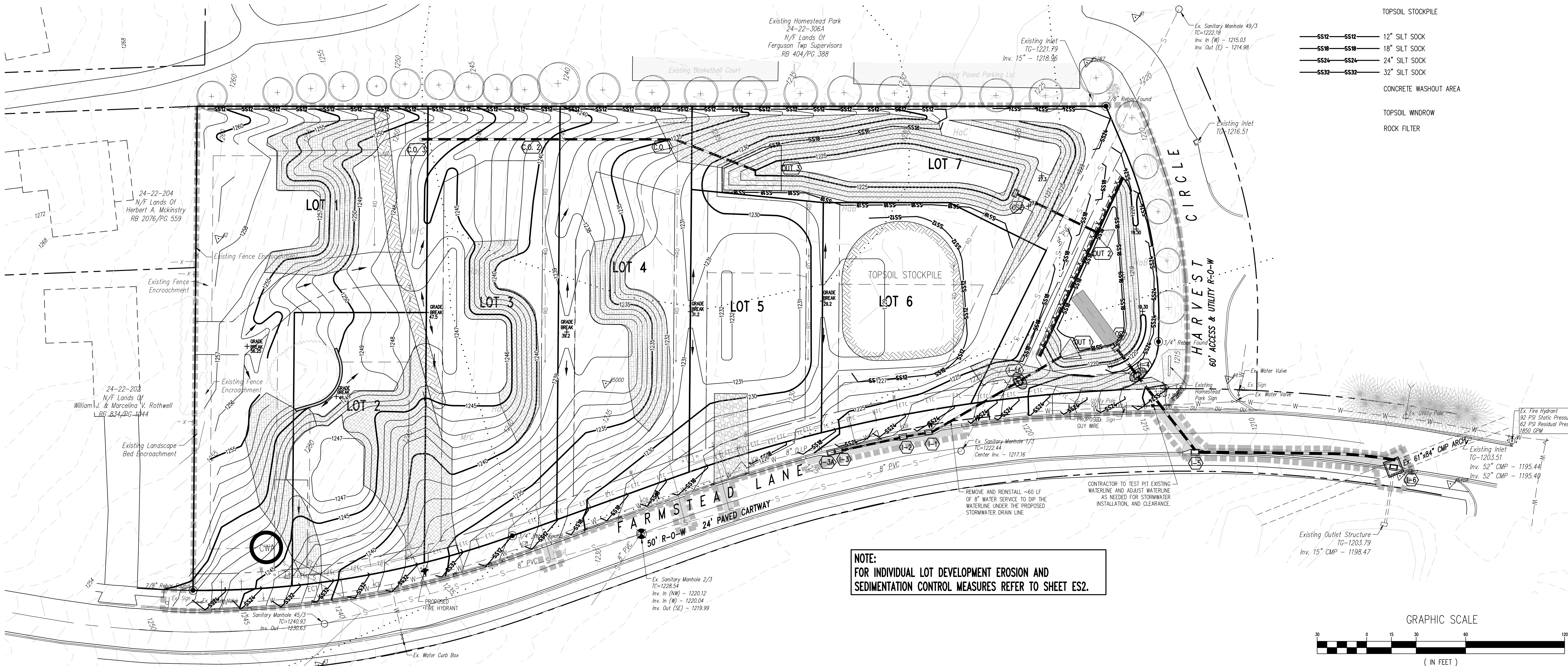
PROPOSED FEATURES LEGEND

- PROPOSED CONCRETE SIDEWALK
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED DEPRESSED CURB
- PROPOSED FUTURE BITUMINOUS DRIVEWAY AREAS
- PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
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- PROPOSED RETAINING WALL
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- PROPOSED FLOW ARROW

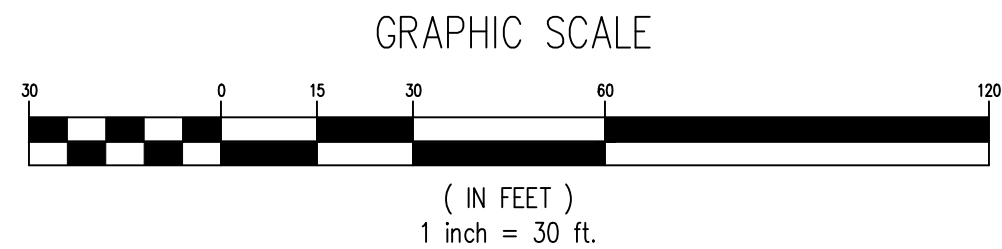
EROSION & SEDIMENTATION CONTROL LEGEND

- LIMIT OF DISTURBANCE / NPDES BOUNDARY LINE
- CONSTRUCTION ENTRANCE
- INLET PROTECTION
- RIP-RAP APRON
- EROSION CONTROL LINING (CURLEX I OR APPROVED EQUAL)
- TOPSOIL STOCKPILE
- CONCRETE WASHOUT AREA
- TOPSOIL WINDROW
- ROCK FILTER

- SS12 - SS12 12" SILT SOCK
- SS18 - SS18 18" SILT SOCK
- SS24 - SS24 24" SILT SOCK
- SS32 - SS32 32" SILT SOCK



NOTE:
FOR INDIVIDUAL LOT DEVELOPMENT EROSION AND
SEDIMENTATION CONTROL MEASURES REFER TO SHEET ES2.



FARMSTEAD VIEW

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY SUBDIVISION PLAN

EROSION & SEDIMENTATION CONTROL PLAN (BULK EARTH MOVING PHASE)

PROJECT NO.
20290
DATE
JULY 29, 2021
SCALE
1" = 30'
SHEET NO.
ES1

EXISTING FEATURES LEGEND

	Existing Building
	Existing Curbing & Edge of Pavement
	Existing Gravel Areas
	Existing Bituminous Areas
	Existing Fence
	Existing Sanitary Sewer w/ Manhole
	Existing 6" PVC Sanitary Sewer Lateral w/ Cle.
	Existing Water Line w/ Valve
	Existing Storm Sewer Line w/ Inlet
	Existing Overhead Utility Line w/ Pole
	Existing Deciduous Tree
	Existing Evergreen Tree
	Existing Shrub
	Existing Soil Infiltration Test Pit

SOILS LEGEND

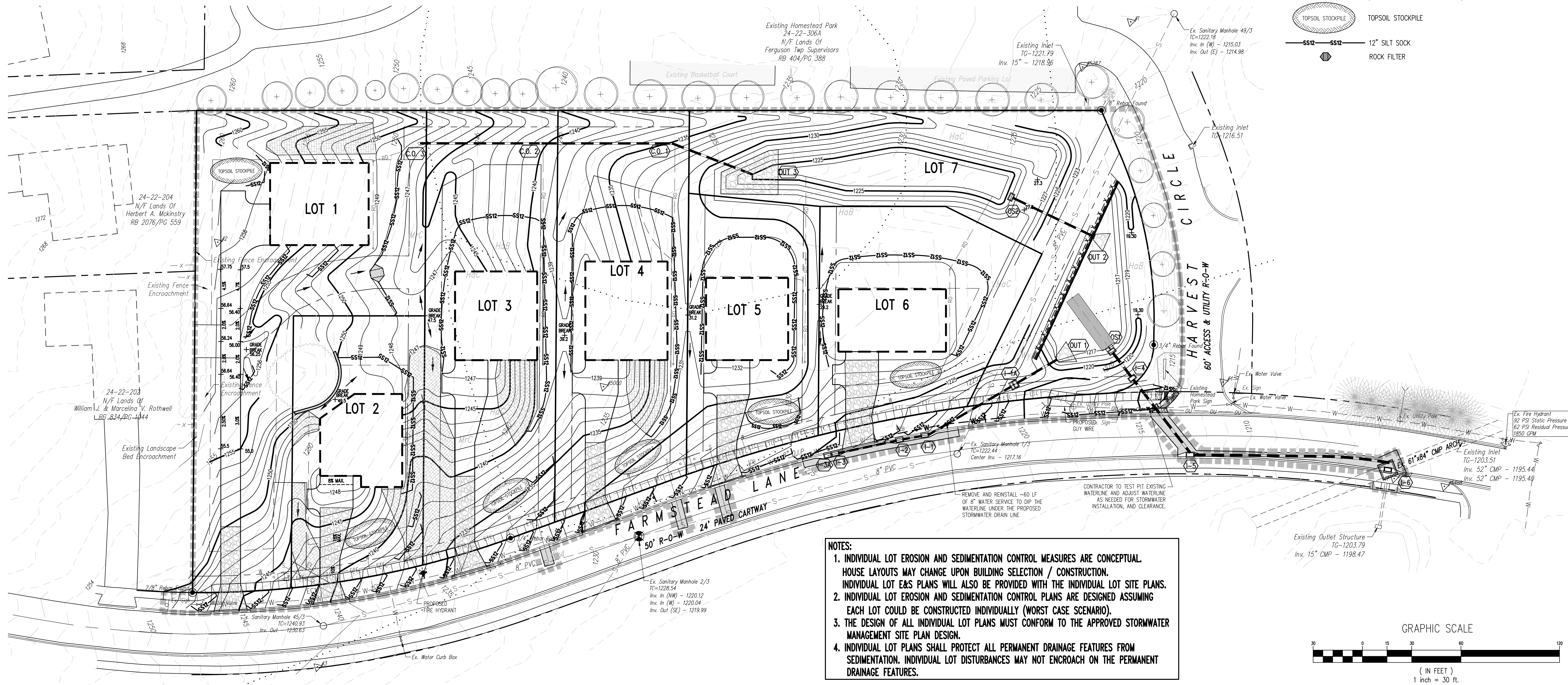
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HaC - Hagerstown Silt Loam, 8%-15% Slopes
MtC - Morrison sandy loam, 8%-15% Slopes
WyA - Wyoming gravelly sandy loam rarely flooded, 0% to 5% slopes
Existing Soil Limit Line / Boundary
Existing Soil Type

PROPOSED FEATURES LEGEND

	PROPOSED CONCRETE SIDEWALK
	PROPOSED CURBING & EDGE OF PAVEMENT
	PROPOSED DEPRESSED CURB
	PROPOSED FUTURE BITUMINOUS DRIVEWAY AREAS
	PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
	PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
	PROPOSED 6" PVC SANITARY SEWER LATERAL W/ CLEAN OUT
	PROPOSED SINGLE UNIT DOMESTIC WATER SERVICE LATERAL W/ CURB BOX
	PROPOSED STORM SEWER W/ TYPE C INLET
	PROPOSED 8" STORM SEWER ROOF DRAIN (MIN SLOPE)
	PROPOSED RETAINING WALL
	PROPOSED GRADE BREAK/SPOT ELEVATION
	PROPOSED FLOW ARROW

**EROSION & SEDIMENTATION
CONTROL LEGEND**

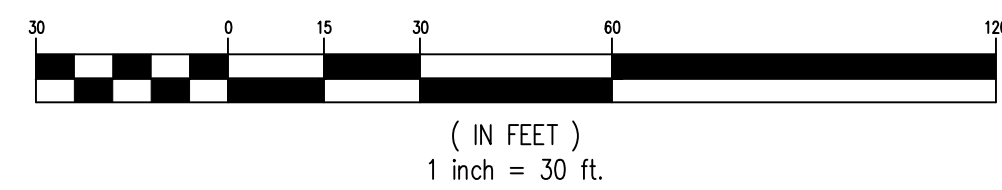
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	CONSTRUCTION ENTRANCE
	RIP-RAP APRON
	EROSION CONTROL LINING (CURLEX I OR APPROVED EQUAL)
	TOPSOIL STOCKPILE
	12" SILT SOCK
	ROCK FILTER



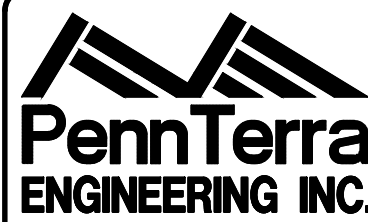
NOTES:

1. INDIVIDUAL LOT EROSION AND SEDIMENTATION CONTROL MEASURES ARE CONCEPTUAL. HOUSE LAYOUTS MAY CHANGE UPON BUILDING SELECTION / CONSTRUCTION. INDIVIDUAL LOT E&S PLANS WILL ALSO BE PROVIDED WITH THE INDIVIDUAL LOT SITE PLANS.
2. INDIVIDUAL LOT EROSION AND SEDIMENTATION CONTROL PLANS ARE DESIGNED ASSUMING EACH LOT COULD BE CONSTRUCTED INDIVIDUALLY (WORST CASE SCENARIO).
3. THE DESIGN OF ALL INDIVIDUAL LOT PLANS MUST CONFORM TO THE APPROVED STORMWATER MANAGEMENT SITE PLAN DESIGN.
4. INDIVIDUAL LOT PLANS SHALL PROTECT ALL PERMANENT DRAINAGE FEATURES FROM SEDIMENTATION. INDIVIDUAL LOT DISTURBANCES MAY NOT ENCROACH ON THE PERMANENT DRAINAGE FEATURES.

GRAPHIC SCALE



(IN FEET)
1 inch = 30 ft.



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Proj/Manager MAT
Surveyor BRK
Perimeter Ok. _____
Book ---- Pg ----
File 20220-PRC-C&S-3-DETAILS
Layout ES3

Date	Description
5/24/22	REVISED PER TWP COMMENTS
MLH	
3/21/22	REVISED PER TWP COMMENTS
MLH	
2/2/22	REVISED PER TWP COMMENTS
MLH	
12/14/21	REVISED PER TWP COMMENTS
MLH	
10/19/21	PRICING SET
MLH	
Date	Description
	REVISIONS

FARMSTEAD VIEW

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

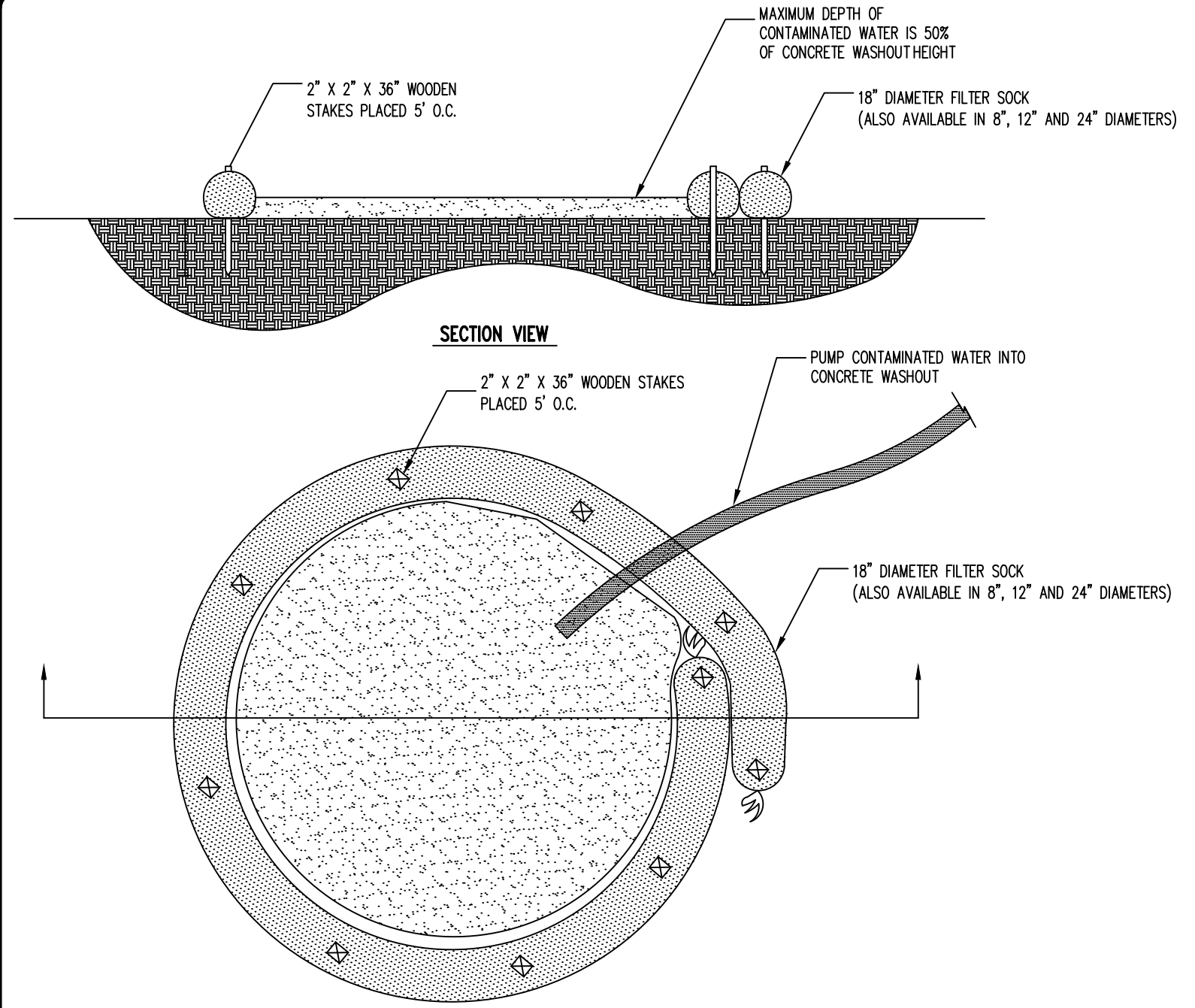
PRELIMINARY SUBDIVISION PLAN

EROSION AND SEDIMENTATION CONTROL DETAILS

PROJECT NO.
20290
DATE
JULY 29, 2021

SCALE
N.T.S

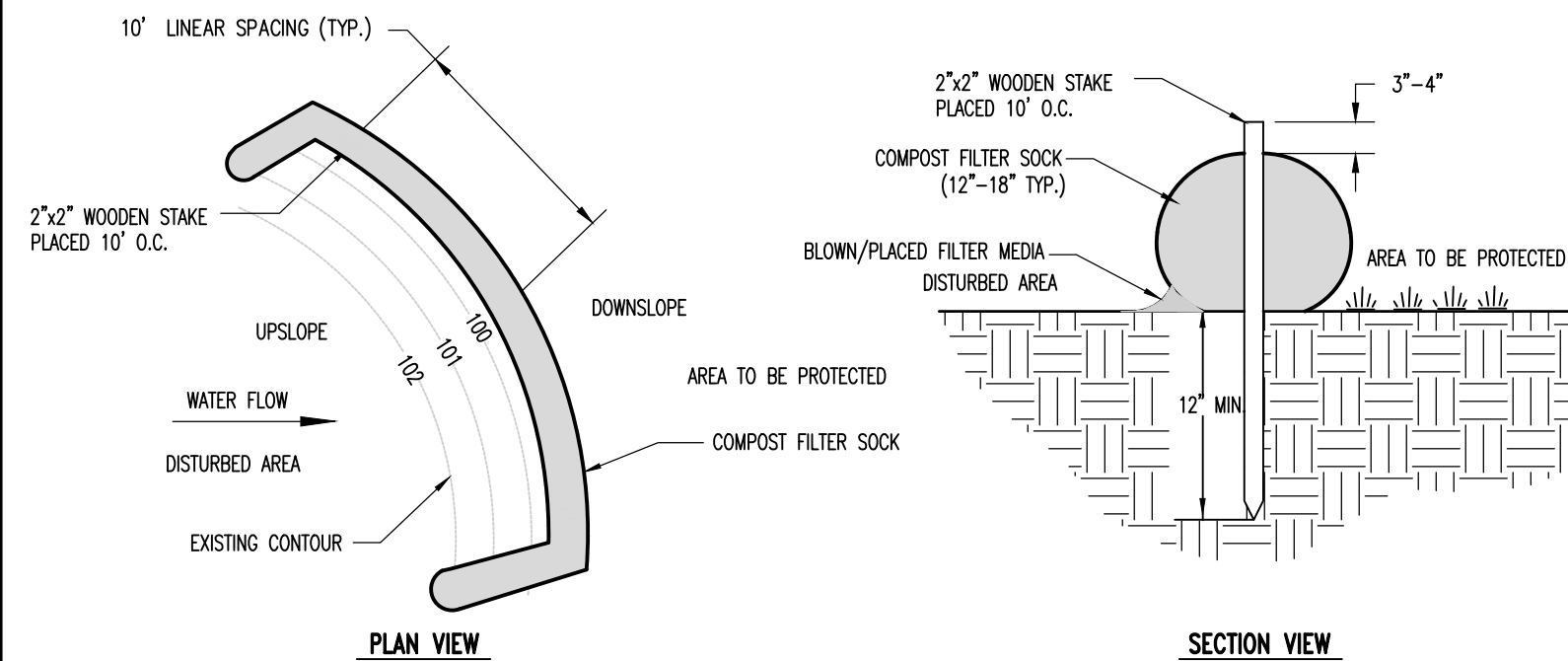
SHEET NO.
ES3



- NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.
 2. CONCRETE WASHOUT MAY BE STACKED IN A PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT AND STABILITY.
 3. CONCRETE WASHOUT MAY BE DIRECT SEEDED AT THE TIME OF INSTALLATION.
 4. A SUITABLE IMPERVIOUS GEOMEMBRANE SHALL BE PLACED AT THE LOCATION OF THE WASHOUT PRIOR TO INSTALLING THE FILTER SOCKS.

CONCRETE WASHOUT AREA

NOT TO SCALE



COMPOST FILTER SOCK DETAIL

NOT TO SCALE

TABLE 4.1
Compost Sock Fabric Minimum Specifications

Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (MFPP)	Heavy Duty Multi-Filament Polypropylene (HDMFPP)
Material Characteristics	Photo-degradable	Photo-degradable	Bio-degradable	Photo-degradable	Photo-degradable
Sock Diameters	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		26 psi	26 psi	44 psi	202 psi
Ultraviolet Stability % Original Strength (ASTM G-155)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional Longevity	6 months	9 months	6 months	1 year	2 years

Two-Ply Systems

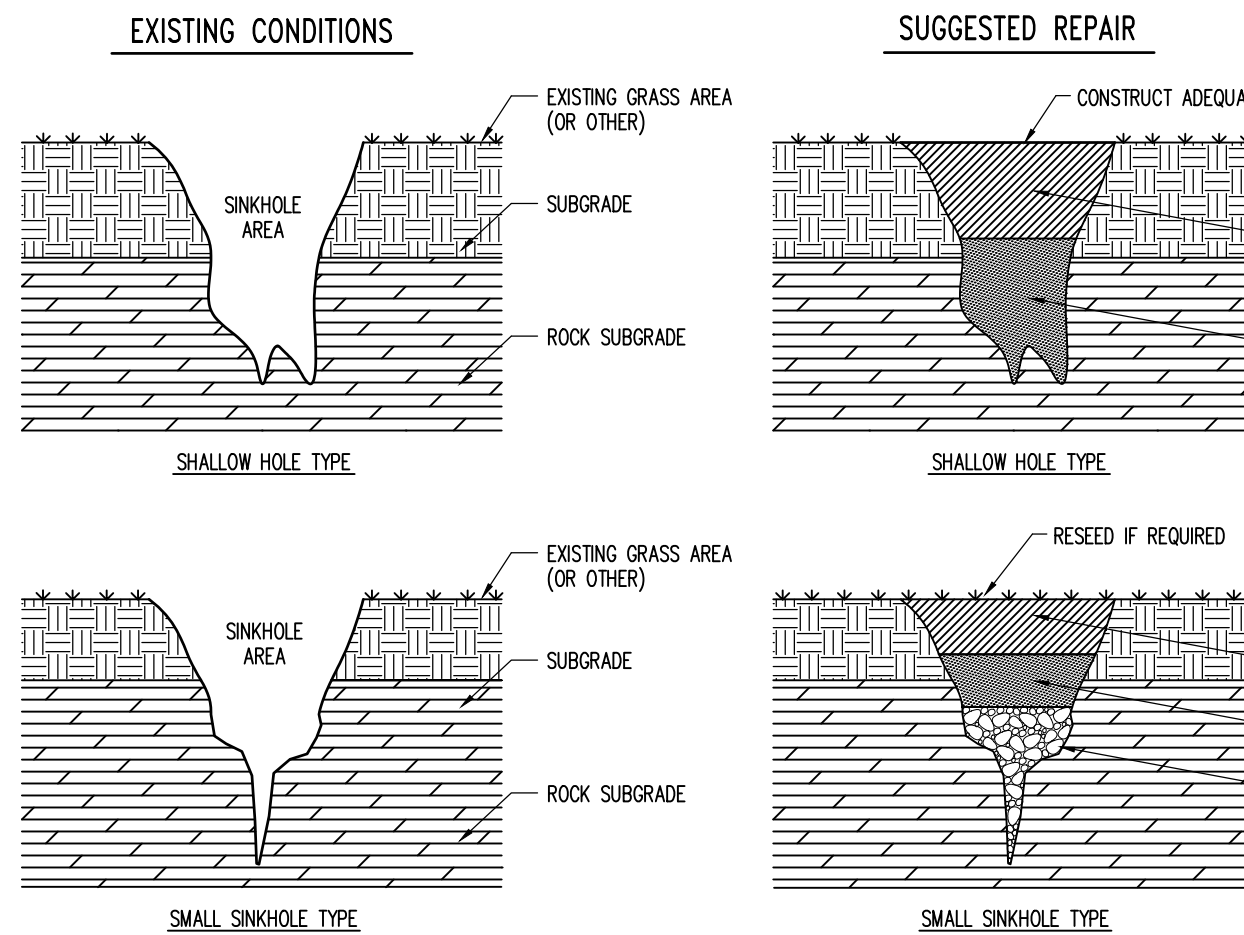
Inner Containment Netting	HDPE biaxial net Continuously wound Fusion-welded junctures 3/4"x3/4" Max. aperture size
Outer Filtration Mesh	Composite Polypropylene Fabric (Woven layer and non-woven fleece mechanically fused via needle punch) 3/16" Max. aperture size
Sock fabrics composed of burlap may be used on projects lasting 6 months or less.	

TABLE 4.2
Compost Standards

Organic Matter Content	25%-100% (dry weight basis)
Organic Portion	Fibrous and elongated
pH	5.5-8.5
Moisture Content	30%-60%
Particle Size	30% - 50% pass through 3/8" sieve
Soluble Salt Concentration	5.0 ds/m (mmhos/cm) Maximum

COMPOST FILTER SOCK TABLE

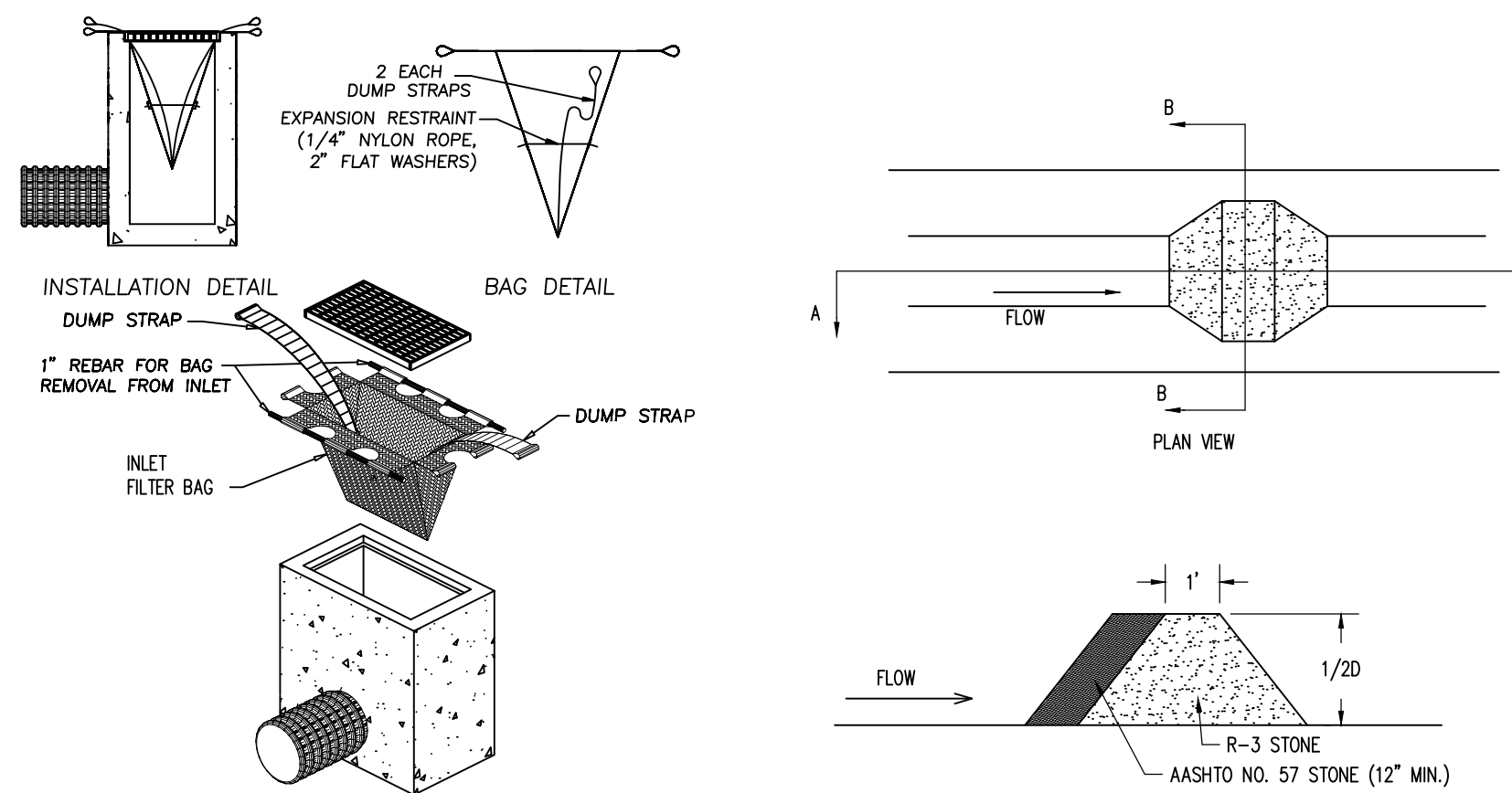
NOT TO SCALE



SINKHOLE REPAIR (NOT INCLUDED IN UTILITY/EARTHWORK BASE BID)

THESE DETAILS REPRESENT TYPICAL SINKHOLE SHAPES
AND REPAIR TECHNIQUES. SINKHOLES VARY IN SIZE AND TYPE.
**THEREFORE, THE OWNER'S GEOTECHNICAL ENGINEER SHALL BE CONTACTED
PRIOR TO FIELD REPAIR OF ANY SINKHOLE.**

NOT TO SCALE



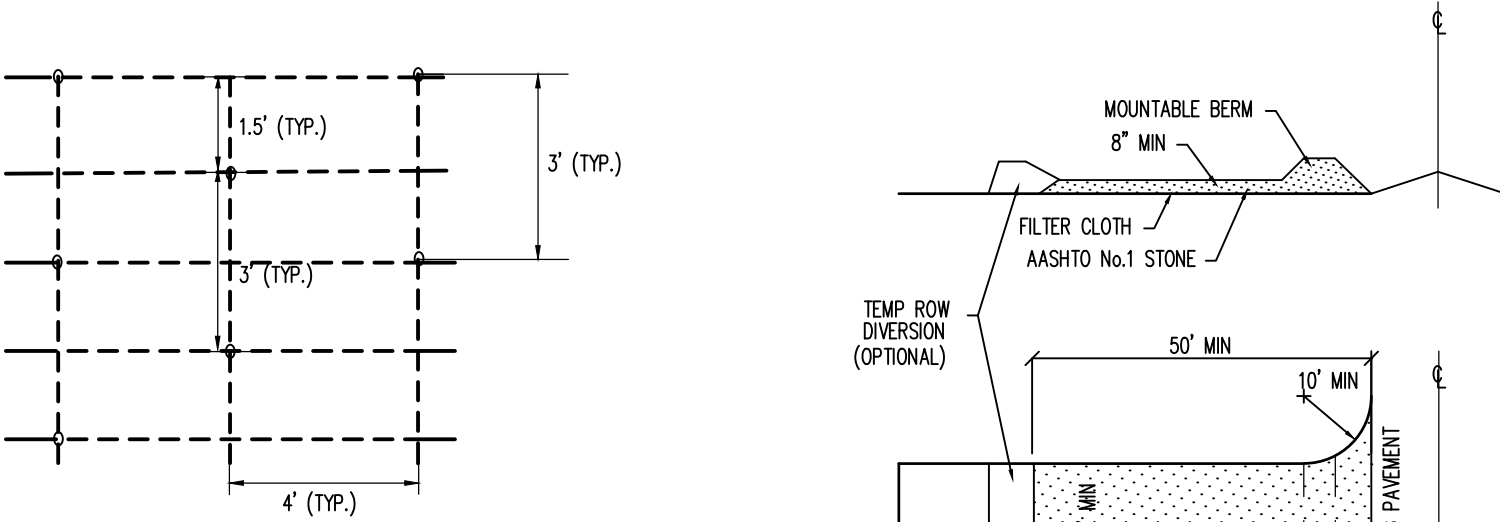
INLET FILTER BAG (TYPE M)

NOT TO SCALE

INLET FILTER BAG NOTES:
FILTER BAG SHOULD TRAP PARTICLES LARGER THAN 150 MICRONS.
WHEREVER FILTER BAGS ARE USED THEY SHOULD BE INSTALLED ACCORDING TO
MANUFACTURERS SPECIFICATIONS.
INLET FILTER BAGS SHOULD BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH
RUNOFF EVENT.
FILTER BAGS SHOULD BE CLEANED AND/OR REPLACED WHEN BAG IS 1/2 FULL
DAMAGED FILTER BAGS SHOULD BE REPLACED.
NEEDED REPAIRS SHOULD BE INITIATED IMMEDIATELY AFTER THE INSPECTION.

ROCK FILTER

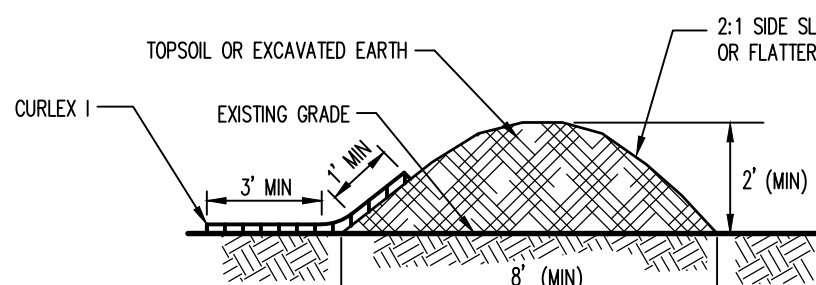
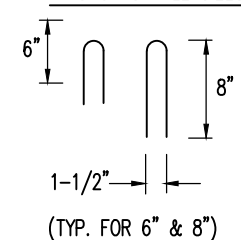
NOT TO SCALE



TYPICAL ANCHORING PATTERN (1.1 STAPLES/YD^2)

NOTE: THE FOLLOWING STAPLE PATTERN SHALL BE USED FOR ALL EROSION CONTROL LINING INSTALLATION.

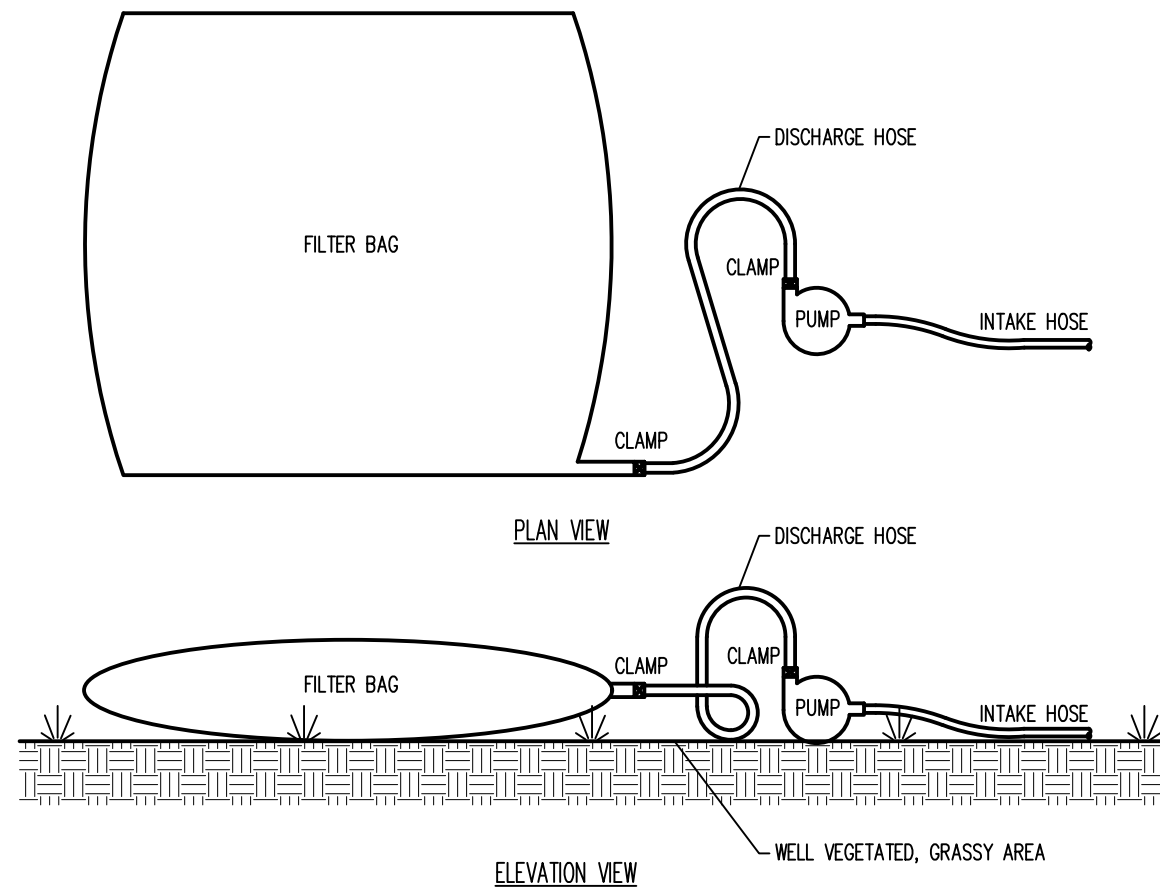
ANCHOR STAPLE SIZES



- NOTES:
1. RUN LOADER OVER TOPS AND SIDES TO COMPACT AND SHAPE.
 2. SEED AND MULCH WITH TEMPORARY MIXTURE.
 3. INSTALL CURLEX I AS PER THE INSTALLATION NOTES SHOWN ON THE EROSION CONTROL LINING DETAIL.

TOPSOIL WINDROW

NOT TO SCALE

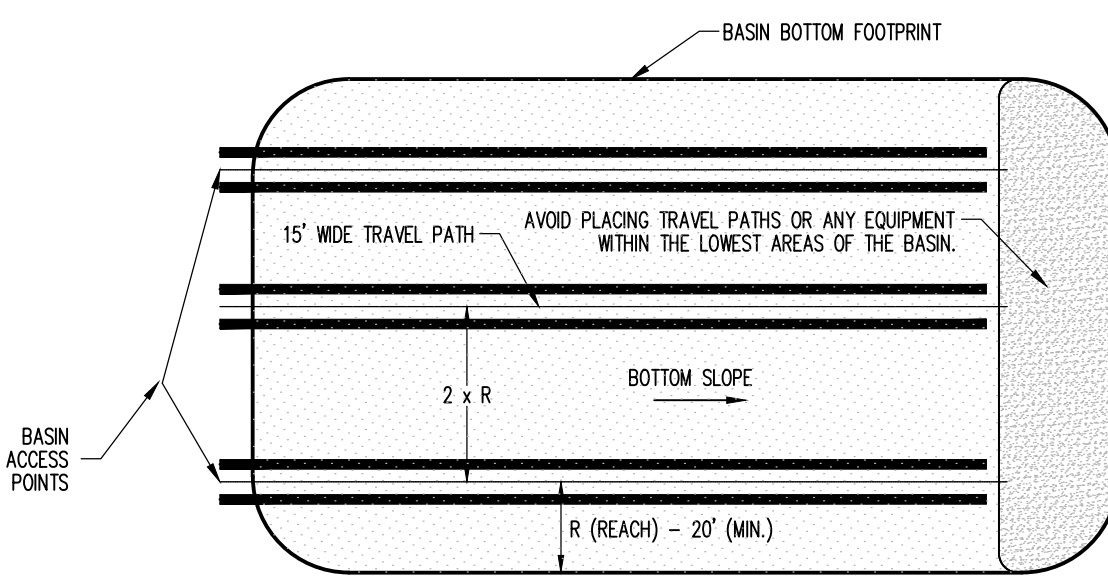


1. FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "I" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS.
2. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES MUST BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED.
3. BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS, WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE FLOW PATH SHALL BE PROVIDED. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%.
4. THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER, AND SECURELY CLAMPED.
5. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHOULD BE FLOATING AND SCREENED.

PUMPED WATER FILTER BAG DETAIL

NOTE: THIS DETAIL SHALL BE USED FOR PUMPING OF WATER FROM THE SITE

NOT TO SCALE



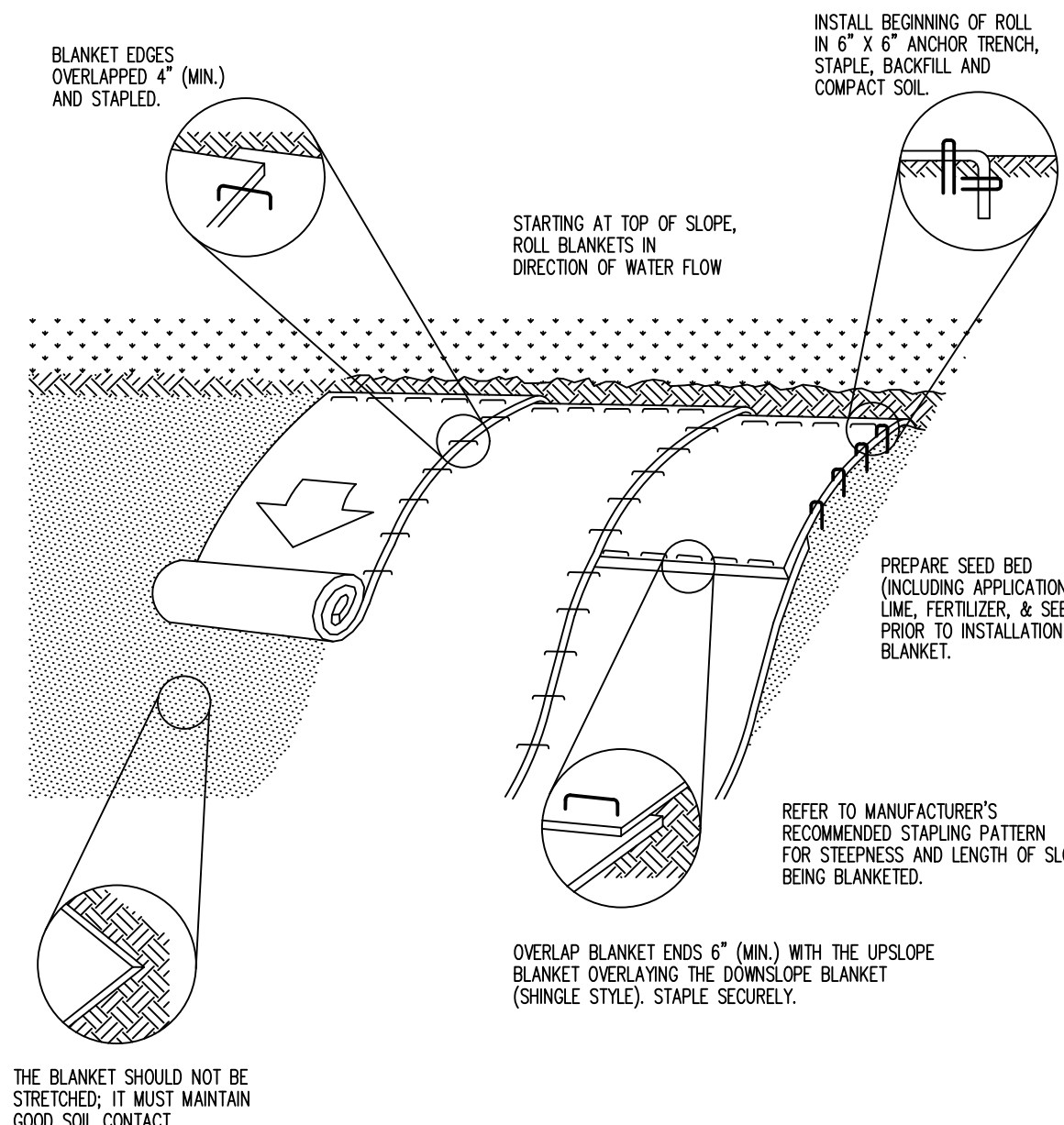
THIS DETAIL REPRESENTS A TYPICAL BASIN BOTTOM EXCAVATION TECHNIQUE. EACH BASIN VARIES WITH GEOMETRY
AND OTHER VARIOUS PHYSICAL FEATURES. THE CONTRACTOR MUST DEVELOP A BASIN BOTTOM EXCAVATION PLAN
AND CONSULT WITH THE SITE ENGINEER PRIOR TO COMMENCING THE BASIN BOTTOM EXCAVATION.

NOTES:

1. ALL EQUIPMENT MOBILIZATION AND MANEUVERS MUST BE LIMITED TO THE TRAVEL PATH LOCATIONS. THE CONTRACTOR SHALL LOCATE AND CLEARLY POST ALL TRAVEL PATHS IN THE FIELD.
2. TRAVEL PATH LOCATIONS SHALL BE SELECTED BASED UPON EQUIPMENT REACH CAPABILITY AND BASIN GEOMETRY. TRAVEL PATH LOCATIONS SHOULD BE SELECTED SUCH THAT THEY PARALLEL THE LONGEST SIDE OF THE BASIN.
3. TRAVEL PATH SPACING SHALL VARY WITH EQUIPMENT REACH CAPABILITY. REACH CAPABILITY SHOULD BE A MINIMUM OF 20 FEET.
4. MATERIAL SHALL BE REMOVED FROM THE TRAVEL PATH LOCATIONS WORKING TOWARD THE BASIN ACCESS POINTS. ONCE MATERIAL IS REMOVED FROM EACH TRAVEL PATH LOCATION AND FINAL GRADE IS ACHIEVED, ALL EQUIPMENT SHALL BE PROHIBITED FROM THESE LOCATIONS.

TYPICAL INFILTRATION BASIN AND DETENTION BASIN WITH CONSTRUCTED FILTER BOTTOM EXCAVATION

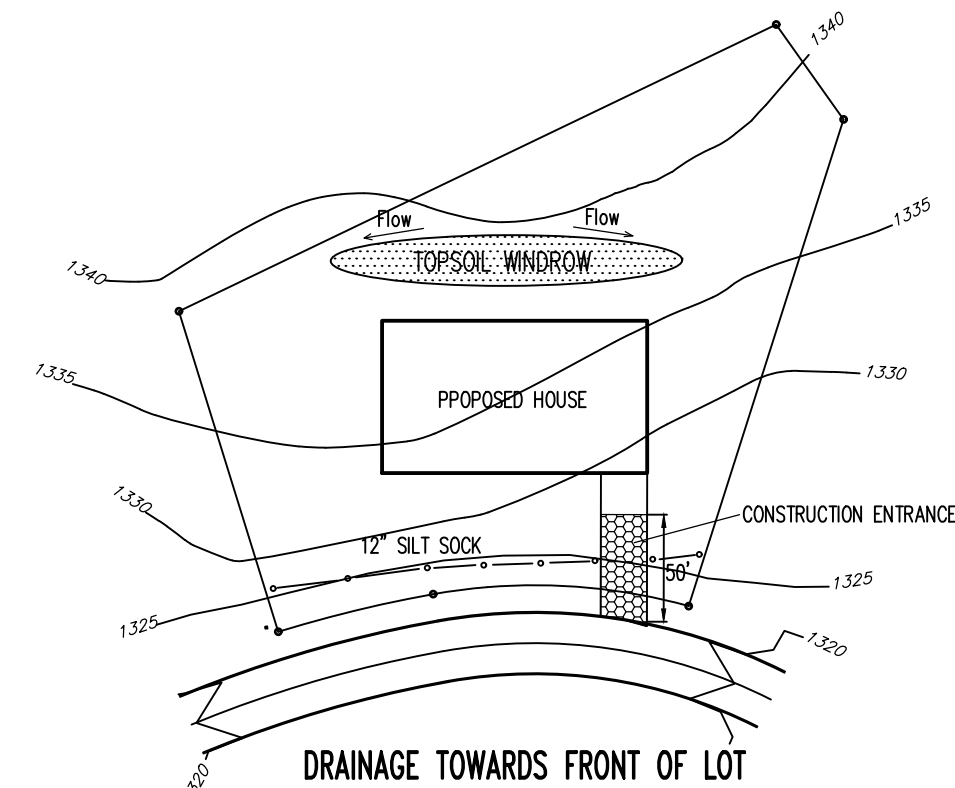
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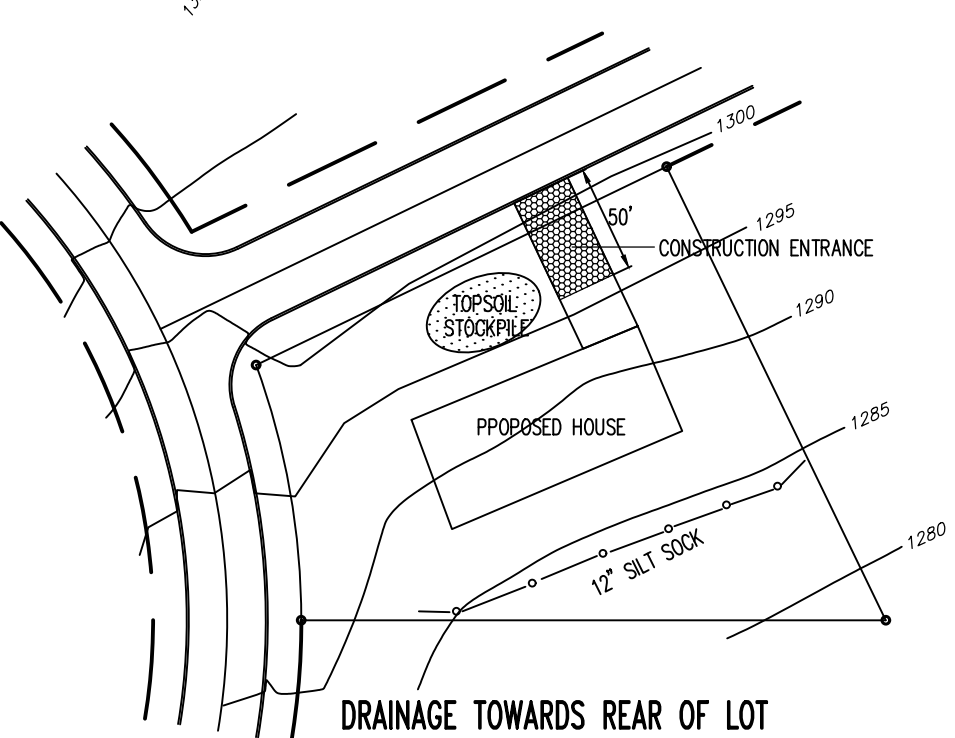
- NOTES:
1. Seed and soil amendments shall be applied according to the rates in the plan drawings prior to installing the blanket.
 2. Provide anchor trench at toe of slope in similar fashion as at top of slope.
 3. Slope surface shall be free of rocks, clods, sticks, and grass.
 4. Blanket shall have good continuous contact with underlying soil throughout entire length. Lay blanket loosely and slide or staple to maintain direct contact with soil. Do not stretch blanket.
 5. The blanket shall be stapled in accordance with the manufacturer's recommendations.
 6. Blanketed areas shall be inspected weekly and after each runoff event until perennial vegetation is established to a minimum uniform 70% coverage throughout the blanketed area. Damaged or displaced blankets shall be restored or replaced within 4 calendar days.

EROSION CONTROL BLANKET INSTALLATION

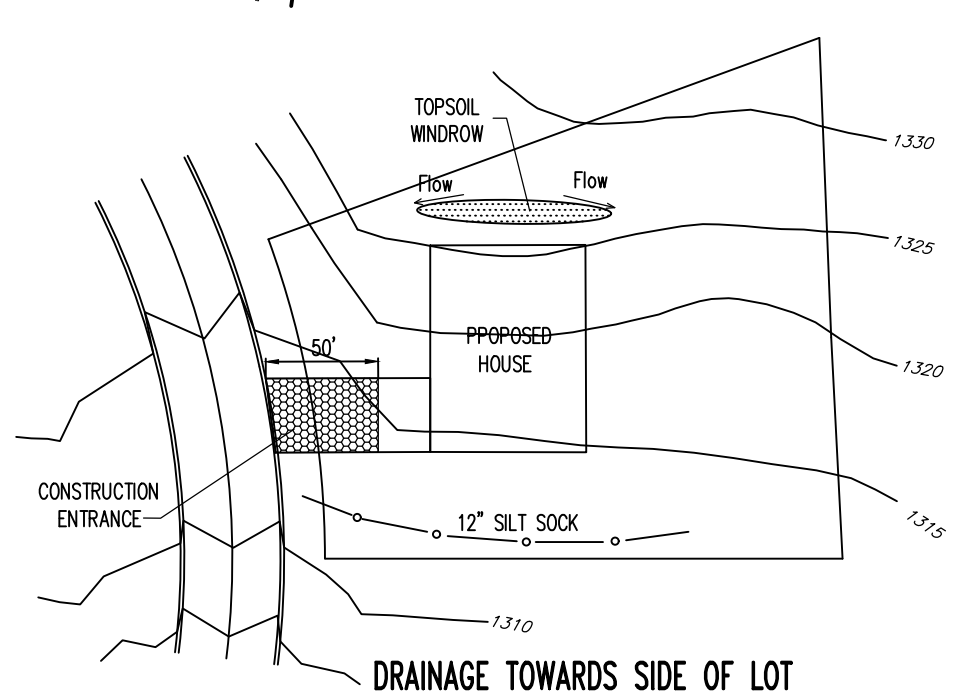
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DRAINAGE TOWARDS FRONT OF LOT



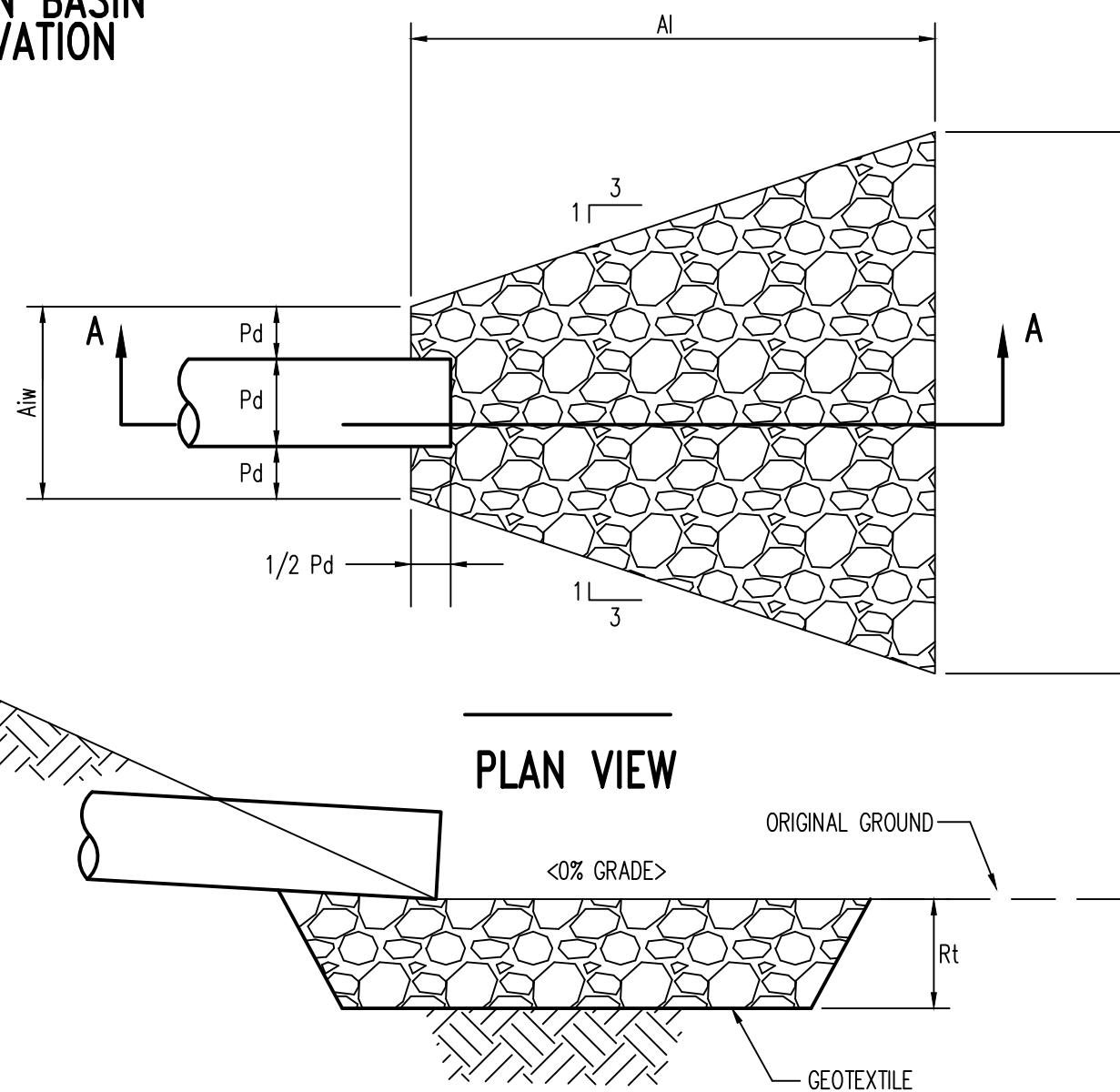
DRAINAGE TOWARDS REAR OF LOT



DRAINAGE TOWARDS SIDE OF LOT

(REFER TO SHEET ES2 FOR INDIVIDUAL LOT SPECIFIC PLANS) TYPICAL ON-LOT EROSION CONTROL

NOT TO SCALE



SECTION A-A

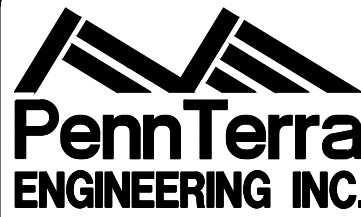
RIPRAP APRON AT PIPE OUTLET WITHOUT FLARED ENDWALL

NOT TO SCALE

OUTLET NO.	PIPE DIA Pd (N)	RIPRAP		APRON		
		SIZE (R-...)	THICK Rt (N)	LENGTH Al (FT)	INITIAL WIDTH Alw (FT)	TERMINAL WIDTH Atw (FT)
OUT-1	15"	R-4	18"	10.00'	3.75'	13.75'
OUT-2	15"	R-4	18"	8.00'	3.75'	11.75'
OUT-3	15"	R-4	18"	12.00'	3.75'	15.75'

NOTES:

1. ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.
2. ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.
3. EXTEND RIPRAP ON BACK SIDE OF APRON TO AT LEAST 1/2 DEPTH OF PIPE ON BOTH SIDES TO PREVENT SCOUR AROUND THE PIPE.



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Proj/Manager MAT
Surveyor BRK
Perimeter Ck. _____
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File 20200-PRE-E&S-4-NARRATIVE
Layout ES4

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5/24/22	MLH
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3/25/22	MLH
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2/2/22	MLH
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12/14/21	MLH
10/19/21	PRICING SET
10/19/21	MLH
Date	Description
	REVISIONS

FARMSTEAD VIEW

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY SUBDIVISION PLAN

EROSION AND SEDIMENTATION CONTROL NARRATIVE

PROJECT NO.	20290
DATE	JULY 29, 2021
SCALE	N.T.S
SHEET NO.	ES4

Standard Erosion and Sedimentation Control Plan Notes

- 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 Centre County Conservation District) must be available at the project site at all times. The Centre County Conservation District shall be notified of any changes to the approved plan prior to implementation of those changes. The Centre County Conservation District may require a written submittal of those changes for review and approval at its discretion.
- At least 7 days prior to starting any earth disturbance activities, including clearing and grubbing, the owner and/or operator shall invite all contractors, the landowner, appropriate municipal officials, the E&S plan preparer, the PCSM plan preparer, the licensed professional responsible for oversight of critical stages of implementation of the PCSM plan, and a representative from the Centre County Conservation District to an on-site preconstruction meeting.
- At least 3 days prior to starting any earth disturbance activities, or expanding into an area previously unmarked, the Pennsylvania One Call System Inc. shall be notified at 1-800-242-1776 for the location of existing underground utilities.
- All earth disturbance activities shall proceed in accordance with the sequence provided on the plan drawings. Deviation from that sequence must be approved in writing from the Centre County Conservation District and by the Department prior to implementation.
- Areas to be filled are to be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots and other objectionable material.
- 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 E&S plan.
- 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 maps(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. Stockpile heights shall not exceed 35 feet. Stockpile slopes shall be 2H:1V or flatter.
- 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 Centre County Conservation District and/or the regional office of the Department.
- All building materials and wastes 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 discharge at the site.
- All off-site waste and borrow areas must have an E&S plan approved by the local conservation district or the Department fully implemented prior to being activated.
- The contractor is responsible for ensuring that any material brought on site is clean fill. Form PP-001 must be retained by the property owner for any fill material affected by a spill or release of a regulated substance by qualifying as clean fill due to analytical testing.
- All pumping of water from any work area shall be done according to the procedure described in this plan, over undisturbed vegetated areas.
- 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, re mulching 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.
- 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.
- 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.
- All sediment removed from BMPs shall be disposed of in the manner described on the plan drawings.
- Areas which are to be topsoiled shall be scarified to a minimum depth of 3 to 5 inches – 6 to 12 inches on compacted soils – prior to placement of topsoil. Areas to be vegetated shall have a minimum 4 inches of topsoil in place prior to seeding and mulching. Fill out slopes shall have a minimum of 2 inches of topsoil.
- 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.
- All earthen fills shall be placed in compacted layers not to exceed 9 inches in thickness.
- 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.
- Frozen materials or soft, mucky, or highly compressible materials shall not be incorporated into fills.
- Fill shall not be placed on saturated or frozen surfaces.
- Seeps or springs encountered during construction shall be handled in accordance with the standard and specification for subsurface drain or other approved method.
- 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 grade, 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.
- 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 erosion. Cut and fill slopes shall be capable of resisting failure due to slumping, sliding, or other movements.
- 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 Centre County Conservation District or the Department.
- Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operator shall contact the Centre County Conservation District for an inspection prior to removal of the E&S BMPs.
- After final site stabilization has been achieved, temporary erosion and sediment BMPs must be removed Areas disturbed during removal of the BMPs shall be stabilized immediately. In order to ensure rapid revegetation of disturbed areas, such removal are to be done only during the germinating season.
- Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operator shall contact the Centre County Conservation District to schedule a final inspection.
- Failure to correctly install E&S BMPs, failure to prevent sediment-laden runoff from leaving the construction site, 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.
- 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.

General Construction Notes:

- All permanent and temporary seeding shall be done within 72 hours of the completion of disturbances for all areas requiring vegetative cover.
- In order to avoid compaction of the proposed infiltration basin bottom, special procedures shall be implemented for equipment operations during the final excavation of the infiltration basin bottom. The final excavation shall be completed utilizing equipment located outside the infiltration basin bottom (If excavation cannot fully be completed from outside the bottom, refer to the typical infiltration basin bottom excavation detail.)
- Prior to exiting the site, all construction vehicles must drive over the construction entrance.
- Silt Socks must be placed and maintained downslope of all topsoil stockpiles. Topsoil stockpiles must also be seeded with the temporary seeding mixture.
- All utility installation shall be done at a rate of which all trenching excavated shall be backfilled within the same day. All utility installation shall begin at the very downslope and proceed upslope.
- The removal of temporary Erosion and Sedimentation Controls shall be coordinated with the Centre County Conservation District and the site Civil Engineer. Prior to removal of these controls the Centre County Conservation District and the sites Civil Engineer shall be notified.

Staging of Earthmoving Activities Construction Sequence (Refer to Sheet ES1)

- All earth disturbance activities shall proceed in accordance with the following staging of earthmoving activities. Each stage shall be completed before a subsequent stage is initiated.
- Install the rock construction entrance for the site at the location shown on the Erosion and Sedimentation Control Plan (E&SCP).
 - Install the entire site silt sock as shown on the E&SCP. The 18" silt sock on the upslope side of the infiltration basin and upslope side of the detention basin with constructed filter shall not be installed at this time.
 - Demolish existing buildings, pavement, concrete, vegetation and all other features as proposed to be demolished within the limits of disturbance boundary. Haul away all material in accordance with the "Responsibilities for Fill Materials" section shown below.
 - Strip the topsoil from the proposed site (the topsoil must not be stripped in the location of the proposed infiltration basin and detention basin with constructed filter area at this time), and use it to form the topsoil windrow as shown on the E&SCP. Stockpile the remaining topsoil in the location shown on the E&SCP. Install silt sock on the downslope side of the topsoil stockpile and seed with the temporary seeding mixture.
 - Install storm sewer pipe run from proposed inlet 1-6 to 1-4. Installation shall be completed working from the very downslope of the pipe run and proceeding upslope. The amount of utility installation shall coincide with the amount of trenching that can be excavated and backfilled daily. Install inlet protection on 1-4.
 - Begin rough grading the site.
 - Continue with site grading, and begin installing all remaining utilities excluding storm sewer installation, working from the very downslope of each line and proceeding upslope. The amount of utility installation shall coincide with the amount of trenching that can be excavated and backfilled daily.
 - Once final grade is reached on Lots 1-6, apply topsoil, erosion control lining (in areas shown on the E&SCP) and seeding with the permanent seeding mixture.
 - Once vegetative stabilization has reached 70% on Lots 1-6, strip the topsoil from the detention basin with constructed filter area, and stockpile the topsoil in the location shown on the E&SCP.
 - Begin installing the detention basin with constructed filter as shown on the post construction stormwater details sheet. Installation shall include the outlet structure, outfall pipe with connection to 1-4, anti-seep collar, emergency spillway, underdrain and constructed filter media. The constructed filter media shall not be compacted during installation. Apply topsoil and seed the exterior side slopes and top of berm with the permanent seeding mixture. Seed the bottom with the basin bottom permanent seeding mixture. Install 18" silt sock around the interior toe of slope, and upslope top of berm as shown on the E&SCP to protect this facility from sedimentation.
 - Install proposed storm sewer run located in the Farmstead Lane right of way connecting to proposed outfall (OUT-1). Installation shall be completed working from the very downslope of the pipe run and proceeding upslope. The amount of utility installation shall coincide with the amount of trenching that can be excavated and backfilled daily. Install outlet protection on OUT-1. Since stabilization of 70% or greater is established at this time on lots 1-6, inlet protection on the inlets located on the Farmstead Lane right of way pipe run will not be needed. Install inlet protection on inlet 1-1A.
 - Strip the topsoil from the infiltration basin area, and stockpile the topsoil in the location shown on the E&SCP.
 - Begin installing the infiltration basin as shown on the post construction stormwater details sheet. Installation shall include the outlet structure, outfall pipe, anti-seep collar and emergency spillway. Apply topsoil and seed the exterior side slopes and top of berm with the permanent seeding mixture. Seed the bottom with the basin bottom permanent seeding mixture. Install 18" silt sock around the upslope top of berm as shown on the E&SCP to protect this facility from sedimentation.
 - Install all remaining storm sewer (CO4 to OUT-3). Installation shall be completed working from the very downslope of the pipe run and proceeding upslope. The amount of utility installation shall coincide with the amount of trenching that can be excavated and backfilled daily. Place outfall protection on proposed outfall OUT-3.

- Remove construction entrance.
- Stabilize any remaining disturbed lawn areas with topsoil, erosion control lining (where shown on the E&SCP), and seed the areas with the permanent seeding mixture.
- Once permanent stabilization has been achieved, all temporary erosion and sediment controls may be removed (see General Construction Note 6). These controls include, topsoil stockpiles/windrows, inlet protection and silt socks. Stabilize any areas disturbed by the removal of these controls immediately with the permanent seeding mixture as specified in the "Permanent Seeding Mixtures" section. Install snout on inlet 1-1A. Construction of the individual lots will follow the individual lot construction sequence provided below;

Construction of the individual lots will proceed as follows: (Refer to Sheet ES2)

- The proposed driveway entrance area will be stabilized with AASHTO #1 stone as shown in the construction entrance detail. The proposed silt sock is to be installed as shown on the typical on-lot erosion controls details depending on drainage direction. Lot 1 shall have the rock filter installed as shown on the E&SCP at this time.
- The proposed building and driveway area will have the topsoil stripped and stockpiled as shown on the typical on-lot erosion controls details. The stockpiles will be stabilized with the temporary seeding mixture.
- The building foundation will be constructed. Driveway sub-base shall be installed at this time.
- Utilities will be installed. Any facilities crossing temporary erosion control facilities will be installed and completed in one day and the control facility must be restored that same day.
- As building construction proceeds, sidewalks shall be installed and all lawn areas shall be seeded and mulched as per the rates shown in the section labeled "PERMANENT CONTROL MEASURES".
- As construction proceeds, temporary erosion control facilities will be maintained as specified in the maintenance program included in this report. All areas abandoned for more than four (4) days are to be seeded with the temporary seeding mixture.
- When construction is complete and the area stabilized with pavement or a uniform 70% vegetative cover over the entire disturbed area, all temporary erosion and sediment control measures will be removed.
- Driveway shall be paved at this time.

Temporary Control Measures

Temporary control measures will be implemented to ensure that erosion is minimized and that sediment is retained during construction. The rock construction entrances will be provided at the site entrance to prevent tracking of sediment from the site. Silt sock will be placed at the locations shown on the Erosion and Sedimentation Control Plan to provide proper filtration of the site runoff. Erosion control lining will be installed to help stabilize the steeper sloped areas to ensure full vegetation is obtained. The topsoil stockpile is provided for a convenient place to stock onsite topsoil. Inlet protection will be used to prevent sedimentation of the storm sewer systems. Pumped water filter bags will be used to filter pumped water from work areas. The topsoil windrow is used to divert upslope runoff from the downslope areas. The rock filter will be proposed to create a clean offsite water diversion during individual lot development on Lot 1.

Temporary seeding on all disturbed areas shall be done immediately after grading is finished and shall consist of the following:

Item	Rate
1. Agricultural grade limestone	1 ton / acre
2. Fertilizer 10-10-10	500 lbs. / acre
3. Annual ryegrass	40 lbs. / acre
4. Mulch (straw)	3 tons / acre

Permanent Control Measures

Permanent control measures include the stormwater infiltration basin, detention basin with constructed filter, water quality snout, storm sewer pipes, curbing and seeding / landscaping. Seeding specifications are for graded or cleared areas where permanent vegetative cover is needed.

Soil Enhancements: It is recommended that site specific soil testing be performed. Lieu of soil test recommendations, use the following schedule:

- Acceptable – Apply 6 tons per acre Dolomitic Limestone (240 lbs/ 1000 s.f.) and 1000 lbs/acre 10-20-20 fertilizer (25 lbs/ 1000 s.f.) before seeding. Harrow or disc into upper three inches of soil.
- Topsoil Placement – Topsoil shall be placed at a minimum 4" in depth over disturbed vegetated areas.

Permanent Seeding Mix shall consist of the following:

Item	Rate
1. Seed Mixture Consisting of 50% Poa pratensis (Kentucky Bluegrass) 30% Festuca rubra (Creeping Red Fescue) 20% Lolium perenne L. (Perennial Rye)	102 lbs./acre
2. *Mulch (straw)	3 tons/ acre

Infiltration Basin and Detention Basin with Constructed Filter Bottom Seeding Mix (To be used on the interior side slopes and bottom of the Infiltration Basin and Detention Basin with Constructed Filter)

Item	Rate
1. Seed Mixture Consisting of: 20% Agrostis alba (Redtop) 20% Agrostis stolonifera (Creeping Bentgrass) 20% Elymus riparius (Riverbank Wild Rye) 20% Carex vulpinoidea (Fox Sedge) 20% Puccinellia distans (Alkali Grass)	50 lbs / acre
2. Mulch	3 tons / acre

*Mulching: Apply mulch immediately after seeding and anchor properly with an anchoring tool or following one of the methods listed below.

- Tracking: The process of cutting mulch into the soil via equipment that runs on tracks, is employed primarily on slopes 3:1 or steeper.
- Mulch Nettings: Staple lightweight biodegradable paper, plastic or cotton netting over the mulch according to the manufacturer's recommendations.
- Synthetic Binders: Synthetic binders such as acrylic DLR (AGRI-TAC), DCA-70, Petroset or Terracot may be used at rates recommended by the manufacturer to anchor mulch material.
- Wood Cellulose Fiber: The fiber binder shall be applied at a net dry weight of 750 lb/acre. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs of wood cellulose fiber per 100 gallons.
- Peg & Twine: Drive 8 to 10 inch wooden pegs to within 2 to 3 inches of the soil surface every 4 feet in all directions. Stakes may be driven before or after applying mulch. Secure mulch to surface by stretching twine between pegs in a criss-cross within a square pattern. Secure twine around each peg with two or more turns.

Maintenance Program

During construction, the contractor will be responsible for maintenance and repair of all erosion and sedimentation control facilities. These facilities should be inspected daily and after every runoff event greater than 0.25". Any erosion control disturbed during construction, installation of utilities or found to be inadequate upon inspection shall be repaired or replaced within 24 hours after the disturbance or the discrepancy is discovered. The maintenance of the erosion control facilities will include the following:

During inspection of these facilities, written documentation for each inspection for all BMP repair, replacement, and/or maintenance activities shall be completed using the DEP Form 3800-FM-BCW0271d (A copy of this form is located in the Appendix of this report). Inspection reports should be kept onsite at all times.

Construction Entrance:

- The entrance shall be maintained in a condition that will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measure used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately. Sediment removed from the structure shall be spread over an existing stockpile with controls already in place and be seeded with the temporary seeding mixture.

Silt Socks:

- The Contractor shall maintain the socks in a functional condition at all times and it shall be routinely inspected.
- Where the sock requires repair, it will be routinely repaired.
- The contractor shall remove sediment collected at the base of the sock when they reach 1/2 of the exposed height of the sock, or as directed by the Engineer. Alternatively, rather than create a soil disturbing activity, the engineer may call for additional sock to be added at areas of high sedimentation, placed immediately on top of the existing sediment laden sock. The sock will be dispersed on site when no longer required, as determined by the Engineer.

Pumped Water Filter Bag:

- The contractor shall maintain the filter bag in a functional condition at all times and routinely inspect and repair as required.
- Filter bags shall be replaced when they become ½ full and spare bags shall be kept available for replacement of failed or filled filter bags.
- The pumping rate shall be observed and be no greater than 750 GPM or ½ the maximum specified by the manufacturer, whichever is less.

Topsoil Stockpile/Window:

- The topsoil stockpile/window shall be seeded with the temporary seeding mixture to ensure proper stabilization. Any additional topsoil spread at these locations shall also be seeded with the temporary seeding mixture.

Permanent Seeding:

- If the vegetative cover is not established uniformly by the third mowing, the contractor shall reapply topsoil if necessary and seed and mulch as needed to provide adequate cover.

Inlet Protection (Filter Bag):

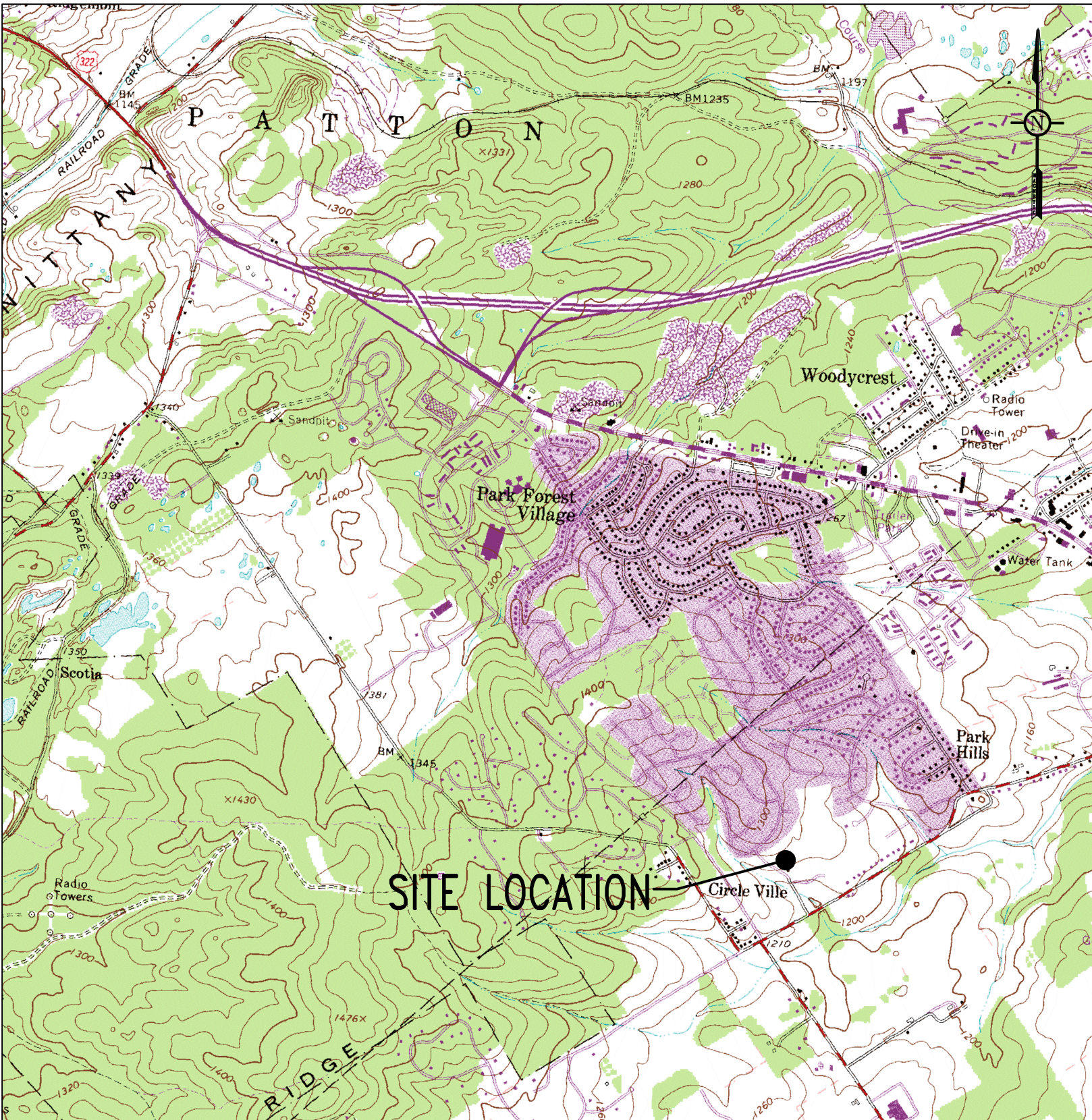
- inlet filter bags should be inspected on a weekly basis and after each runoff event. Needed repairs should be initiated immediately after the inspection.
- filter bags should be cleaned and/or replaced when the bag is ½ full. Damaged bags should be replaced.

Spoil Materials:

- All sediment removed from erosion and sedimentation pollution control facilities shall be spread over spoil areas with controls already in place. Stabilize the spoil material with the temporary seeding mixture.

Rock Filter:

- The rock filter shall be maintained in a condition that will allow for adequate filtration of the runoff through them. If the stone becomes clogged, it should be removed and used in grading operations. New stone should be added to the rock filter.



LOCATION MAP
SCALE (1" = 200')

Recycling and Disposal of Materials

The operator shall remove from the site, recycle, or dispose of all building materials and wastes in accordance with the Department's Solid Waste Management Regulations at 25 Pa. Code 260.1 et seq., 271.1 et seq., and 287.1 et seq. The contractor shall not illegally bury, dump, or discharge any building material or wastes.

Wastes generated during the construction of this project shall be recycled if at all possible. Any materials that cannot be recycled or reused shall be disposed of at a Pennsylvania Department of Environmental Protection approved landfill. If soil and/or rock disposal areas are required, erosion and sedimentation controls shall be implemented at these areas. Any excess soil waste may only be disposed of at an approved E&S/NPDES permitted site.

Responsibilities for Fill Materials

The contractor is responsible to use environmental due diligence to ensure any fill material required to be imported to or exported from the site qualifies as Clean Fill.

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.)

Environmental due diligence: 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 regulated substance. If 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 material 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.

Audrey Shu
102 Farmstead Lane
State College, PA, 16803

Dear Ferguson Township,

I have lived in State College my whole life. Growing up, I have seen patches of beautiful land get turned into complex luxury apartments. Just down the street from where I live, the corn field that I once walked by every week is now the location of "The Heights", with cars speeding through and many students living there. And now, right in front of Homestead Park, the park that I grew up with and continue to go to weekly, there will be more housing built.

Everywhere around town, new luxury apartment complexes are being built. However, Penn State's large student population of approximately 46,000 undergraduate students means that the State College housing market cannot support every students' needs. Students are already burdened with the high costs of tuition, many students cannot afford the expensive rents for these new luxury apartments.

Still, the State College Borough is authorizing the building of high rise apartments and luxury apartments more than affordable houses and apartments, which causes the exclusion of a large portion of the student population while also destroying the natural scenery that makes State College a beautiful place to live in. Additionally, this makes the affordable housing options extremely competitive to obtain. By inviting these real estate developers into State College and seemingly "metropolitanization" our town, local businesses are pushed out of the field, and State College is losing its old charm and sense of community. Many of these new housings are low-quality and not well-kept. The traffic circle garden in The Heights seems to be nice-looking, but in reality, after one year of being built, the flowers and plants are dried and wilted, and the soil is unkept. One of the houses had construction problems and after attempted fixing, the house is now on sale.

Similarly, there is a plan for the Farmstead View Preliminary Subdivision Plan-- to build 6 single-family residential lots and 1 stormwater management on an open field that leads straight to the Homestead Park. These lots will be extremely close together, and also encroach on the open feeling of Homestead Park. These new buildings that are built in a hurry will be similar to The Heights in their low quality of material and building. Open fields can be open fields without housing-- not every space that could be residential should be residential.

State College is a town, not a city. It should keep its community and charm by building housing that students will actually be able to afford, instead of building complexes that look luxurious and tall but block out and take over all the natural scenery. If State College continues this trend of building, soon, it will blend in with all the other aspiring metropolitan towns that aren't metropolitan-- only destroying nature and community. Please reconsider building new housing and apartments in areas that are being considered and planned on-- such as the place on Farmstead Lane. Nobody enjoys living in a crowded environment, and people deserve to live in housing with abundant greenery and views. People living on my street enjoy living in their house for many reasons, but an important one is the peaceful greenery out their window. My many neighbors and I have enjoyed the view of the dandelion field and storage barn in the field by the park for many many years, and made so many special and lasting memories. If houses are built on this dandelion field, the tranquil scenery will become only a fond memory of the past.

Please reconsider this construction project (Farmstead View Preliminary Subdivision Plan) so that the Park Forest community can continue to enjoy the greenery and foliage-- instead of walls and windows. The park and the connecting field holds so many cherished memories for many. They say that wishing on dandelions makes your dreams come true-- perhaps it is time for more of us to wish on the dandelions from that field, and blow a wish that this field will not just be a memory of the past.

Sincerely,



Audrey Shu

June 7, 2022

Audrey Shu
102 Farmstead Lane
State College, PA 16803

RE: Response to letter received June 3, 2022

Dear Audrey Shu,

Thank you for contacting me regarding your concerns about the Farmstead View Subdivision Plan. I appreciate the opportunity to respond.

As you know, Ferguson Township has consistently made green space preservation a top priority in the Township and that priority is evident in our ordinances and zoning map. Zoning is one of many tools for a community to achieve its community planning objectives and it serves as a key regulatory mechanism to protect property owners' rights.

The lot that is the subject of the Farmstead Subdivision Plan has been zoned Single-Family Residential (R1) for many years and it is the property owner's right to develop that lot in conformance with the Subdivision and Land Development (SALDO) and Zoning Regulations of the Township. The owner of this property is proposing to subdivide the lot for six (6) single-family homes and that use is permitted in the Single-Family Residential (R1) zoning district.

This plan is in the preliminary review stage of the approval process, and it is during this time, issues concerning compliance with specific requirements of the Township's Ordinances are addressed. If the applicant is not meeting the requirements of the Township's Ordinances, the Board of Supervisors have the grounds to deny a plan and must cite the deficiencies in relation to the Township's Ordinances. If the plan is meeting all Township Ordinance requirements, the Board of Supervisor's cannot deny the plan.

If you'd like to voice your concerns about this subdivision plan, it will be in front of Planning Commission for the preliminary review on June 13, 2022, and in front of the Board of Supervisors June 21, 2022. Both meetings are being held in a hybrid format (in-person or Zoom). Additionally, all active plans can be found on the Township Website (www.twp.ferguson.pa.us) if you'd like to access additional information about the subdivision plan. If you're interested in learning more about zoning and land development, the state provides excellent resources that can be found here: [https://dced.pa.gov/library/?wpdmc=publications and documents](https://dced.pa.gov/library/?wpdmc=publications+and+documents)

Again, thank you for taking the time to share your views and I'm happy to schedule time to talk with you about this plan in greater detail.

Should you have any additional questions, please contact me at jwargo@twp.ferguson.pa.us or 570-452-5102.

Sincerely,

A handwritten signature in cursive script that reads "Jenna Wargo". The signature is written in black ink and is positioned above the printed name and title.

Jenna Wargo, AICP
Director of Planning & Zoning