TOWNSHIP OF FERGUSON

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FERGUSON TOWNSHIP PLANNING COMMISSION
REGULAR MEETING AGENDA
Monday, March 8, 2021
6:00 PM
Zoom Meeting

https://us02web.zoom.us/j/89904014437

Meeting ID: 899 0401 4437

I. Call To Order

II. Approval of Organizational Meeting Minutes—February 8, 2021

III. Approval of Regular Meeting Minutes—February 8, 2021

IV. Citizen Input

V. Land Development Plans

A. Wright Property Application for Consideration of a Modification/Waiver

Daniel and Kelly Wright, owners of the 44-acre property at 100 North Nixon Road, Tax Parcel 24-003C,054-,0000-,Rural Residential (RR) have submitted an Application for Consideration of a Modification/Waiver. There is currently one dwelling on the parcel. The applicants are proposing to construct a new dwelling on the property and live in the existing dwelling during the construction of the new dwelling. The owners plan to demolish the existing structure within 6 months of receiving a certificate of occupancy for the new dwelling. In accordance with the Municipalities Planning Code (MPC) and the Township's Subdivision and Land Development ordinance (SALDO), the addition of the second dwelling requires the applicant to submit a land development plan.

The applicants have requested a modification/waiver from the Subdivision and Land Development Ordinance requirement to complete a land development plan with the condition that the existing dwelling will be demolished within 6 months of receiving a certificate of occupancy for the new dwelling and the applicant will comply with all other State Regulations. Staff has reviewed the request and has no additional conditions to include with the application.

Staff Recommendation: *That the Planning Commission recommend to the Board of Supervisors approval of the Wright Property's Modification/Waiver with the condition that the existing dwelling be demolished within 6 months of receipt of a certificate of occupancy and comply with all other State Regulations.*

B. Kocher Well Field Water Pumping Improvements Final Land Development Plan

This Final Land Development Plan was submitted by Gwin, Dobson & Foreman Engineering, Inc. on behalf of their client, The State College Borough Water Authority. The parcel is 47.7 acres and is zoned Rural Residential (RA). The Land Development Plan proposes water pumping improvements via two proposed structures to the Kocher well fields on Tax parcel 24-006-055E, located at 3961 W. Whitehall Road. The construction consists of two (2) buildings that measure 9 feet 4 inches by 12 feet 4 inches relative to Existing Well No. 71 and 9 feet 4 inches by 11 feet 4 inches relative to Existing Well No. 78. There is an existing floodplain that traverses the parcel and no construction is planned in the floodplain.

On June 23, 2020, a variance was approved to utilize FEMA Mapping for Floodplain Boundary determination instead of independent Hydrologic and Hydraulic (H&H) study as required by §27-701. This is the final review of the land development plan. The Preliminary Plan was conditionally approved by the Board of Supervisors on October 5, 2020.

Staff Recommendation: *The Planning Commission recommend to the Board of Supervisors approval of the Final Land Development Plan pending outstanding staff comments.*

C. Wasson – Ash Avenue Replot/Subdivision

PennTerra Engineering, Inc. submitted the Wasson – Ash Avenue Replot Plan on behalf of their client. The Wasson – Ash Avenue Replot Plan is located at 1451 Ash Avenue, T.P. # 24-002A,132-,0000. The purpose of this plan is to replot Tax Parcel 24-002A,132-,0000-, 24-002A,134-,0000- and 24-002A,135-,0000-. Tax Parcel 24-002A,0132-,0000- is currently 0.547 acres and proposed to replotted to 0.74 acres. Tax Parcel 24-002A,0134-,00 is currently 0.414 acres and proposed to be replotted to 0.23 acres. Tax Parcel 24-002A,0135-,0000- is currently 0.268 acres and proposed to be replotted to 0.26 acres. The parcel is located within the Single Family Residential (R1) zoning district.

A request for a modification/waiver from Section 22-512 – Sidewalks and a request for a modification/waiver from Section 22-306.1. – Minor Subdivision and Minor Alteration were submitted.

Staff Recommendation: *That the Planning Commission recommend to the Board of Supervisors approval of the Preliminary/Final Land Development Plan pending outstanding staff comments.*

D. Wasson – Ash Avenue Application for Consideration of a Modification

PennTerra Engineering, Inc has requested a modification/waiver from Section 22-306.1.—Minor Subdivision and Minor Alteration. This section has a process outlined for a Minor Subdivision with requirements, however, the definition of a minor subdivision was omitted during the Township's Comprehensive Update to Chapter 22. The plan submitted is replotting lot lines and no new lots are being created.

Staff has reviewed the application and isn't recommending any conditions be included with the request.

Staff Recommendation: *That the Planning Commission recommend to the Board of Supervisors approval of the Application for Consideration of a Modification from §22-306.1.—Minor Subdivision and Minor Alteration.*

E. Wasson – Ash Avenue Application for Consideration of a Modification

PennTerra Engineering, Inc has requested a modification/waiver from Section 22-512—Sidewalks. The plan is replotting three (3) existing lots in an established, built-out neighborhood. There are no existing sidewalks on either side of the street. The potential for connection to future sidewalks is extremely unlikely and no new land development is proposed.

Staff has reviewed the application and isn't recommending any conditions be included with the request.

Staff Recommendation: *That the Planning Commission recommend to the Board of Supervisors approval of the Application for Consideration of a Modification.*

VI. Official Reports and Correspondences

- **A. Board of Supervisors**
- **B. CRPC Report**
- **C. Land Development Plans**
  - **i. West College Student Housing Land Development Plan Update**
- **D. Staff Updates**

VII. Adjournment

FERGUSON TOWNSHIP PLANNING COMMISSION
Organizational Meeting
Monday, February 8, 2021
6:00 P.M.

ATTENDANCE

The Planning Commission held its annual Organizational meeting on Monday, February 8, 2021, via Zoom. In attendance were:

Commission:	**Staff:**
Jeremie Thompson – Chair	Jenna Wargo, Planning & Zoning Director
Jerry Binney – Vice Chair	Kristina Aneckstein, Community Planner
Rob Crassweller - Secretary	Dave Modricker, Director of Public Works
Shannon Holliday	Lance King, Township Arborist
Bill Keough	Jeff Ressler, Zoning Administrator
Lisa Rittenhouse	David Pribulka, Township Manager
Dr. Ellen Taricani	
Ralph Wheland	
Quin Zhang	
Lewis Steinberg	

Others in attendance: Rhonda Demchak, Recording; Danielle Bleier, Develop Manager, Aspen Heights Partners; Wes Glebe, Ferguson Township Resident; John Sepp, CEO PennTerra; Doug Hill, Senior Engineer, Wooster and Associates; Jeremy White, Architect, Aspen Heights Partners; David Helfrich, President, East Division, Aspen Heights Partners; Daniel Koebel, VP of Development, Aspen Heights Partners; Evan Heiser; Laura Dininni, Ferguson Township Resident

I. CALL TO ORDER

Mr. Thompson called the Monday, February 8, 2021, Organizational meeting to order at 6:00 p.m.

Mr. Thompson noted that the Planning Commission meeting had been advertised in accordance to the PA Sunshine Act as a virtual meeting via Zoom. There was also an audio conference bridge that was accessible by dialing the Ferguson Township's main line at 814-238-4651 and then dialing extension 3799. Persons attending the meeting as members of the public and wanted to participate were asked to enter their name, municipality, and topic by utilizing the Q&A bubble at the bottom of the screen. C-NET is recording as well.

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

Ms. Wargo noted that the Organizational Meeting that was held on January 11, 2021, was not properly advertised and the actions that took place were not lawful.

Mr. Thompson made a motion to ***retain*** the same officers from 2020 to 2021. Mr. Crassweller seconded the motion. The motion passed unanimously.

II. ELECTION OF OFFICERS

Chair – Jeremie Thompson
Vice Chair – Jerry Binney
Secretary – Rob Crassweller.

III. CENTRE REGIOAN PLANNING COMMISSION (CRPC) REPRESENTATIVE AND ALTERNATE

Mr. Thompson asked for nominations for the CRPC Representative and Alternate.

Mr. Binney made a motion nominating Dr. Taricani as the representative and Ms. Holliday as the alternate. Mr. Crassweller seconded the motion. The motion passed unanimously.

IV. ADOPTED 2021 PLANNING COMMISSION MEETING CALEDNAR

Mr. Thompson noted that the calendar was approved at the December 2020 meeting and is included in the agenda packet.

V. ADOPTED 2021 PLANNING COMMISION WORK PROGRAM

Mr. Thompson noted that the Work Program was updated in December 2020 and is included in the agenda packet.

VI. ADJOURNMENT

Mr. Thompson welcomed Lewis Steinberg to the Planning Commission as an alternate and noted that the Commission is at full capacity.

Mr. Binney made a motion to adjourn the February 8, 2021 Planning Commission Organizational meeting at 6:08 p.m. Ms. Taricani seconded the motion. The motion passed unanimously.

Respectfully Submitted,

Rob Crassweller, Secretary
For the Planning Commission

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FERGUSON TOWNSHIP PLANNING COMMISSION
REGULAR MEETING MINUTES
MONDAY, FEBRUARY 8, 2021
6:00 PM

ATTENDANCE

The Planning Commission held its first meeting of the month on Monday, February 8, 2021, as a virtual meeting. In attendance:

Commission:	**Staff:**
Jeremie Thompson – Chair	Jenna Wargo, Planning & Zoning Director
Jerry Binney – Vice Chair	Kristina Aneckstein, Community Planner
Rob Crassweller - Secretary	Dave Modricker, Director of Public Works
Shannon Holiday	Lance King, Township Arborist
Bill Keough	Jeff Ressler, Zoning Administrator
Lisa Rittenhouse	David Pribulka, Township Manager
Dr. Ellen Taricani	
Lewis Steinberg	
Ralph Wheland	
Quin Zhang	

Others in attendance: Rhonda Demchak, Recording; Danielle Bleir, Develop Manager, Aspen Heights Partners; Wes Glebe, Ferguson Township Resident; John Sepp, PennTerra; Doug Hill, Senior Engineer, Wooster and Associates; Jeremy White, Architect, Aspen Heights Partners; David Helfrich, President, East Division, Aspen Heights Partners; Daniel Koebel, VP of Development, Aspen Heights Partners; Evan Heiser; Laura Dininni, Chair, Ferguson Township Board of Supervisors

I. CALL TO ORDER

Mr. Thompson called the Ferguson Township Planning Commission's regular meeting to order on Monday, February 8, 2021 at 6:08 p.m.

II. APPROVAL OF REGULAR MEETING MINUTES JANUARY 11, 2021

Mr. Thompson called for a motion to approve the minutes from January 11, 2021.

Mr. Crassweller moved that the Planning Commission ***approve*** the minutes of January 11, 2021. Ms. Holiday seconded the motion. The motion passed unanimously.

III. CITIZEN INPUT

None

IV. LAND DEVELOPMENT

A. West College Avenue Student Housing

Ms. Aneckstein presented the project. PennTerra Engineering, Inc. has submitted a Land Development Plan and Lot Consolidation Plan on behalf of their client, Aspen Heights Partners LLC/York Acquisitions. The parcels are located at the intersection of West College Ave and Buckhout Street. Tax Parcels 24-002A,015, 24-002A,016, 24-002A,017, 24-002A,018, and 36-010-006 are to be consolidated to form a 1.136 acre parcel. The parcels are located in the Terraced Streetscape District (TSD) in Ferguson Township and Parcel 36- 010-006 is located partially in The Borough of State College's CP-2 Planned Commercial District. The land development plan proposes a 6-story multi-family residential apartment building with commercial/retail space on the first floor. The

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applicant is utilizing height incentives found in §27- 304.3.B.(2) and has provided additional parking in the parking structure to share for use by others. The applicant is eligible for an additional 20 feet to be added to the permitted maximum height (55 feet). The building will consist of two subsurface floors of underground parking, one floor containing commercial space and 5 floors of multi-family residential apartments. There are 96 residential units with 268 beds and 5,976 square feet of non-residential spaces proposed. Ground floor area is 29,571 square feet with 28,483 in Ferguson Township and 1,088 square feet in the Borough of State College. The plan calls for 159 parking spaces, 151 of which will be located in the parking structure. A variance was granted by the Ferguson Township Supervisors on February 25, 2020 to allow parking on first floor of the building. There are 14 short-term bicycle parking spaces proposed.

Mr. David Helfrich, President, East Division, Aspen Heights Partners, presented a company overview. Aspen Heights is based in Austin, Texas and was founded in 2006. Aspen Heights has currently developed 34 different projects, including six that are under construction. Aspen Heights is consistently ranked among top developers in the country since the company's conception.

Mr. Jeremy White, Architect, reviewed the project highlights.

- 5-story apartments consisting of 96 two and three bedroom units
- Indoor and outdoor amenity areas
- On-site management and security staff
- Accessed controlled buildings, common area, units, and bedrooms
- Approximately 7,400 square feet of retail/commercial space

Mr. White reviewed the plan that included parking, commercial space, electrical charging stations, bike parking, roof terrace, integrated clubhouse with a fitness area and study lounge. Mr. White reviewed what the building will look like when completed.

Mr. Keough asked about internal traffic and if it will be one-way. Mr. White noted that it will be two-way traffic.

Ms. Taricani asked if Calder Alley will be one-way. Mr. John Sepp, PennTerra noted that it will be two-way. Ms. Taricani expressed concerns making a hard-right turn onto Buckhout. Mr. Sepp noted that trucks will be restricted from making the right turn off of Buckhout onto Calder Alley.

Ms. Holiday asked if a traffic study was conducted. Mr. Doug Hill, Senior Engineer, Wooster and Associates, noted that a traffic study was completed. Mr. Hill stated that there have been conversations with the Borough, PennDot, and the Township regarding a traffic control plan during construction that could include West College Avenue to be one lane near the project. Mr. Ron Seybert noted that the traffic study is still in review and has not been approved.

Mr. Keough asked if the traffic study took in to account the student population. Mr. Hill noted that they did and used historical data from the last few years.

Mr. Binney asked if the traffic study included the impacts or level of service with any lighted intersection on West College Avenue. Also, Mr. Binney inquired if the study included other approved developments in the region. Mr. Hill stated the intersections were not included in the study, but the developments were included.

Mr. Wheland noted that he doesn't see a CATA bus stop near the project. Mr. Sepp stated that CATA has an existing stop on College Avenue and will maintain a stop at the entrance of the building. Mr. Sepp noted that there is not an actual pull off and the bus will remain on the road. Mr. Keough expressed concerns with not having a pull off due to holding up traffic and the safety of pedestrians. A pull off was considered, but Mr. Sepp said there wasn't a place for a pull off with the project. Mr. Keough asked staff to obtain clarification from CATA with regards to dropping off people on the opposite side of the road. Ms. Holiday concurred with Mr. Keough.

Mr. Binney asked if any of the experts expressed concerns with regards to pedestrian safety. Mr. Hill noted that a sight distance analyses from every corner was performed and it was deemed appropriate with the characteristics of the roadway. Pedestrian enhancements will be included such as additional signage. There will be lights added along the sidewalks. Mr. Binney asked if there was consideration of flashing yellow lights at the crosswalks. Mr. Hill stated that at this time there hasn't been consideration, but there has been a recommendation to include pedestrian signage in the scheme of florescent green coloring. Mr. Helfrich stated they will cooperate in any way to ensure the safety of pedestrians.

Mr. Steinberg asked if there has been consideration in making West Calder Way one-way heading west and expressed concerns with the blind spot on the eastern side of the building. Mr. Sepp stated that cars coming from Calder Way will be sitting in the easterly direction and need to look to the left for cars approaching and it's a different visual pulling out from a parallel parking position versus a pulling out perpendicular. Dr. Taricani agreed with Mr. Steinberg and noted that having West Calder Way one-way makes more sense. Dr. Taricani stated that the road has been very bad for a long time because of the road condition.

Mr. Sepp reviewed the landscape plan that utilized the Terraced Streetscape District (TSD) design criteria.

Public Comment

Mr. Wes Glebe expressed concerns with pedestrian traffic with regards to a Brew Pub being established on the south corner of Buckhout Street in conjunction with the student housing project.

Mr. John Sepp, PennTerra Engineering, Inc. (PTE),noted that the waiver has been submitted for Consideration of a Modification as part of the West College Avenue Student Housing Land Development Plan. The modification/waiver is requesting relief from Section 22.502.5.I.3.b. This section of the code states that all entrance drives serving more than four dwelling units and all other used in this category shall be laid out to conform to the design, service and access standards established in this chapter for the classification of street based on expected ADT. The proposed entrances to the building are designed to meet Township parking lot design criteria. PTE states that this design provides safe access to the building.

Ms. Holiday asked why there couldn't be a pull off stop for CATA and what businesses are going to be in the building. Mr. Sepp stated that if a pull off stop was installed the sidewalk would only be 2-3 feet wide. Mr. Helfrich commented that the project is two-years out and they have not identified who the retailers would be but would be suitable for neighborhood retail.

Transportation Comments

Ms. Holiday asked about buses for school aged children occupying the apartments with their parents. Ms. Wargo noted that when a land development plan is received for housing units, they provide the data to the State College Area School District. Ms. Aneckstein stated that the State College Area School District will determine where the stop would be.

Alley Comments

Mr. Keough asked about the ownership of the alley. Mr. Modricker noted that he refers the West Calder Alley as a private alley and not owned by the Township. The alley was created with the sub-division that created the alley but never turned over to the Township. Mr. Sepp read the note on sheet four of the plan that states, the developer will maintain in good repair Calder Alley along the project and access to Calder Alley will not be restricted. Mr. Keough expressed concerns with having two-way traffic and recommends taking a closer look at the issue. Mr. Keough has concerns with delivery trucks not being able to fit into the garage and as a result, deliveries will be along College Avenue.

Ms. Rittenhouse concurred with Mr. Keough regarding deliveries along College Avenue. Mr. Sepp stated that they are considering having limited deliveries during off-peak hours on the western part of the building along College Avenue. Ms. Rittenhouse agreed with limited deliveries due to traffic issues. Mr. Thompson shared his concerns with vehicles pulling off in front of the building.

Mr. Keough stated that if the alley remains two-way that a width of 20 feet makes sense.

Ms. Holiday asked about ADA access. Mr. Sepp stated that there are handicap parking stalls inside the garage near the elevator and they designed the sidewalks into the building to meet ADA requirements. Mr. Keough recommended to the developer to have one or two units be designed as handicap units. Mr. White noted that all units are Type B Adaptable.

Pedestrian Comments

Dr. Taricani asked if the public has access to the parking garage and will the tenant have a parking fee. Mr. Helfrich stated there will be a few spaces for guests, but it is not open to the public to use.

Ms. Holiday asked if there has been consideration for a traffic light to be placed at the intersection of College Avenue and Buckhout Street to enable pedestrians to cross safely. Mr. Hill noted there would need to be one Traffic Signal Warrant from the state for a traffic signal to be installed, and the intersection doesn't satisfy any warrants from the state.

Mr. Keough expressed concerns with securing a space of 10 feet between the proposed building and the building next door. Mr. Keough suggested placing a gate at both ends of the space with lights. Mr. Helfrich stated they will study Mr. Keough's concern.

Parking Comments

Mr. Wes Glebe asked if the width of the ramps going into the underground lot have been modified from 20 feet to the National Building Code of 24 feet. Mr. Hill noted that if there are no parking spaces on the ramp, then it can be minimized to a 20-foot width.

Mr. Glebe asked if all the handicap parking could be located on the ground floor. Mr. Hill stated that it is code requirement to disburse handicap spaces equally where there is an elevator opportunity on each floor. Mr. Helfrich stated that the units come fully furnished so there will be limited moving of items during PSU move in and move out dates.

Mr. Thompson asked if the charging spaces will be designated for electric vehicles only when they are charging. Mr. Helfrich will examine this.

Mr. Binney asked if this will be student housing in perpetuity. Mr. Helfrich stated that there could be a mix of students and non-students. Ms. Holiday asked if there could be affordable housing included with the rental fees. Mr. Helfrich noted that there is nothing in place and they are market rate units.

Mr. Keough indicated that on sheet 3c the intersection of the alley and Buckhout Street that there is sinkhole that is in the Borough; however, it is not included on the plan. Mr. Sepp noted that there is a sinkhole, it has been identified and is included in the Stormwater Management Plan. Mr. Keough requested consideration of altering the landscape and sidewalks in front of the building to have a pull-off due to safety concerns. Mr. Sepp indicated that variances would be required.

Mr. Thompson reminded the Planning Commission that the plan is preliminary and will be reviewing again.

Mr. Keough moved that Planning Commission ***table*** the Preliminary West College Avenue Student Housing Land Development Plan until the next meeting due to outstanding questions that need to be addressed by the developer.

Ms. Wargo stated that the next Planning Commission is too close to get the plan back from the developer and staff has already reviewed the plan five times.

The motion failed.

Mr. Crassweller moved that the Planning Commission recommend to the Board of Supervisors to ***approve*** the Preliminary West College Avenue Student Housing Land Development Plan pending outstanding review comments. Dr. Taricani seconded the motion. The motion passed 6-1 with Mr. Keough opposing.

B. Modifications/Waiver for West College Avenue Student Housing

Ms. Aneckstein noted that much of the waiver was covered during the West College Avenue Student Housing discussion but introduced the waiver. PennTerra Engineering, Inc. (PTE) has submitted an Application for Consideration of a Modification as part of the West College Avenue Student housing LDP. The modification/waiver is requesting relief from Section 22.502.5.I.3.b. which are designed to meet Township parking lot design criteria. PTE states that this design provides safe access to the building.

Mr. Rob Crassweller moved that the Planning Commission ***recommend*** to the Board of Supervisors to approve the Application for Consideration of Modification/Waiver. Mr. Binney seconded the motion. The motion passed unanimously.

V. TREE PRESERVATION ORDINANCE

Ms. Wargo reviewed the ordinance. After the January 11th meeting, Ms. Wargo met with

Mr. King to review and update the ordinance from the comments and suggestions that were given. The ordinance was divided up into two chapters because it will be housed in the Township's SALDO. here are two amendments, the new chapter and to amend the definitions.

Mr. Binney expressed concerns with the lack of clarity within the Applicability Section. Ms. Wargo stated that it is the intent of dividing and having it live in the SALDO. The SALDO has the establishment of controls and applicability section within the ordinance.

Under Farm-Based Business, Mr. Keough asked why the following was included, "This use shall be considered of similar nature and function as a home-based business." Mr. Ressler noted that the Farm-Based Business is defined in the ordinance that was passed recently. Mr. Keough stated that there are farms that have separate lots that are wood lots and doesn't want to see those lots come under scrutiny if they want to timber.

Applicability – Mr. Keough requested to have the word "for" replace the word "of" in 3c. Ms. Wargo will make the change.

Tree preservation, protection and replacement – Mr. Keough asked if there needs to be a definition for Minor Alteration Plans under section 1.a.i. Mr. Ressler noted that it wouldn't be hard to make a definition. Under 2.a, Mr. Keough suggested adding a third "i" that accounts for flood plains and slopes. Mr. King didn't feel it should be the arborists decision and suggested having the tree portion examined separately.

Mr. Keough continues to disagree with the $1,000 fine. Ms. Wargo noted that the fine was a recommendation by the staff. Ms. Rittenhouse agreed that the fine is too high. Mr. Thompson suggested creating a tiered fine system. Ms. Rittenhouse liked the idea of the tiered program because mistakes happen and suggested having it start at $500 for the first offense, $750 for the second offense, $1000 for the third offense. Mr. Keough supports the tiered system. Ms. Holiday asked if the fine is per tree or per incident. Ms. Rittenhouse suggested the fine be per tree. Mr. Keough recommended that the tree be planted within a 10-foot diameter of the original tree. Mr. King supports Mr. Keough recommendation. Ms. Wargo suggested adding within a 5-foot diameter and add that it can't be planted within the buffer.

Mr. Keough moved that the Planning Commission recommend to the Board of Supervisors to ***consider*** a tiered fine system consisting of a $500 fine for the first offense, $750 for the second offense, $1000 for the third offense, and the landowner would be required to replace the tree within a 10-foot diameter of the original tree except if it would encroach on the buffer zone. Ms. Holiday seconded the motion. The motion passed unanimously.

Mr. Keough moved that the Planning Commission recommend to the Board of Supervisors to ***approve*** the Tree Preservation Ordinance with the tiered modification and authorize staff to advertise a public hearing. Mr. Binney seconded the motion. The motion passed unanimously.

VI. OFFICIAL REPORTS AND CORRESPONDENCES

A. Board of Supervisors

Ms. Wargo noted the Board met on February 1, 2021 and will be reviewing Storm

Water Management Utility Fee Ordinance on February 16th meeting.

B. CRPC Report

Dr. Taricani reported that Patton Township will have an equine hospital on Buffalo Run Road. Hilltop has developed housing for low income residents and for students. Aspen Heights will be the official name of the development. here will be an Aldi's built near the Nittany Mall and a Rural King will take over the old Sears store within the mall. Patton Township will have an Aldi's built as well. The old Auto Port in State College Borough was being considered for a large hotel, but it has been cancelled. There is reorganization being done within the CRPC area with combining departments to make more efficient.

Mr. Keough asked for an update regarding the casino. Dr. Taricani noted that it is being placed within the Nittany Mall. Ms. Aneckstein noted that the casino will create 300-400 full-time positions.

Ms. Holiday stated that the Pine Grove Mills Small Area Plan Advisory Committee requested to have either the Planning Commission or staff look into a traffic study for the LED light conversion installation at Nixon, Pine, and Water Street. Ms. Wargo noted that more information will be provided at the next Pine Grove Mills Small Area Plan Advisory Committee meeting.

Ms. Rittenhouse noted that a Mexican restaurant will take over the old Mario's restaurant.

C. Land Development Plans

Ms. Aneckstein noted that they are waiting on the developer to resubmit the Wasson-Ash Avenue Replot which is a three lot replot on Ash Avenue.

D. Staff Updates

No report.

Ms. Holiday asked if anyone attended the Representation Matters event that was aired through CNET. Ms. Holiday was a panel member where she discussed her experience as a minority serving on either an appointed or an elected office.

Mr. Keough thanked Ms. Wargo and Ms. Aneckstein for providing the large engineering plans for West College Avenue. Mr. Keough requested that in the future when a bigger plan is to be reviewed to have more time to prepare. Mr. Thompson suggested receiving a memo or email to check the Township website for any plans. Ms. Aneckstein noted that she can send everyone an email.

Ms. Holiday stated that the American Association of University Women is hosting their Empowering Women's Series via Zoom on March 17, 2021 from 11:00 a.m. – 1:00 p.m.

VII. ADJOUNMENT

Dr. Taricani made a motion to adjourn the February 8, 2021 Planning Commission meeting at 10:05 p.m. Mr. Binney seconded the motion. The motion passed unanimously.

Respectfully Submitted,

Rob Crassweller, Secretary
For the Planning Commission

TOWNSHIP OF FERGUSON

3147 Research Drive • State College, Pennsylvania 16801
Telephone: 814-238-4651 • Fax: 814-238-3454
www.twp.ferguson.pa.us

TO: Planning Commission

FROM: Kristina Aneckstein, Community Planner

DATE: March 8, 2021

SUBJECT: Application for Consideration of a Modification/Waiver

Daniel and Kelly Wright, owners of the 44-acre property at 100 North Nixon Road, Tax Parcel 24-003C,054-,0000-, have submitted an Application for Consideration of a Modification/Waiver. The property is zoned Rural Residential (RR) and there is currently one dwelling on the parcel. The applicants are proposing to construct a new dwelling on the property and live in the existing dwelling during the construction of the new dwelling. The owners plan to demolish the existing structure within 6 months of receiving a certificate of occupancy for the new dwelling. In accordance with the Municipalities Planning Code (MPC) and the Township's Subdivision and Land Development ordinance (SALDO), the addition of the second dwelling to a property requires the applicant to submit a land development plan.

The applicants have requested a modification/waiver from the Subdivision and Land Development Ordinance requirement to complete a land development plan with the condition that the existing dwelling will be demolished within 6 months of receiving a certificate of occupancy for the new dwelling and the applicant will comply with all other State Regulations. Staff has reviewed the request and has no additional conditions to include with the application.

Staff Recommendation: *That the Planning Commission recommend to the Board of Supervisors approval of the Wright Property's Modification/Waiver with the condition that the existing dwelling be demolished within 6 months of receipt of a certificate of occupancy and comply with all other State Regulations.*

APPLICATION FOR CONSIDERATION OF A MODIFICATION

Ferguson Township, Centre County

Submittal Date: 24-Feb-2021

A fee of $50.00 is required at the time of submitting this application.

The undersigned hereby applies for approval of a modification/waiver, submitted herewith and described below:

Applicant Information

Daniel J and Kelly A Wright

Name

1020 Laurel Crest Dr. | West Columbia, SC | 29169

Street Address | City | Zip

803-931-2763

Phone Number

Property/Plan Information

Daniel J and Kelly A Wright property

Plan Name

203201 | 02/12/2021

Plan Number | Plan Date

1000 North Nixon Road | RB2252, P562 UPI #24-3C/54 PB 24, P25 lot 54

Project Location | Parcel Number

Daniel J and Kelly A Wright

Name of Property Owner(s)

1000 North Nixon Road | State College | 16803

Street Address | City | Zip

Application Type:

- ☐ Subdivision
- ☐ Terraced Streetscape District (TSD)
- ☒ Land Development
- ☐ Traditional Town Development (TSD) District

Modification/Waiver Request Information

Specific Section(s) of the Subdivision and Land Development Ordinance or Design Standards for which a Modification/Waiver is requested:

We request a waiver from completing a land development plan as required by the Township Subdivision and Land Development ordinance for the construction of a second dwelling on our 44 acre parcel. We will demolish the original structure within 6 months of obtaining a certificate of occupancy for the new dwelling.

APPLICATION FOR CONSIDERATION OF A MODIFICATION

Ferguson Township, Centre County

State any proposed alternative(s) to the requirement:

NA

Please state in full, the grounds and facts of the unreasonableness or hardship the Ferguson Township Subdivision and Land Development Ordinance has placed on the property.

For a variety of reasons we would like to occupy the cabin structure only during the building of our new home. Reasons include: close access to monitoring and contributing to the build, cost savings including minimizing our carbon footprint associated with traveling from relatives home to construction site, ability to quarantine as may be needed during 2021 as Covid-19 likely ongoing, etc. To that end, we simply want to take advantage of the home that is already on the site and remove it once we can move into our new home.

*If necessary, please continue with your hardship specification on another page.

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

Daniel J and Kelly A Wright
Signature

24-Feb-2021
Date

-For Office Use Only-

Date Received:_____ By:_____

Date Paid:_____ Check No.:_____ Amount:_____

Advertisement Dates:_____ Planning Commission Review Date:_____

Board of Supervisors Meeting Date:_____

NOTES

1. Existing contour lines plotted from PAMAP LiDAR mapping and field data. Elevations are referenced to the North American Vertical Datum of 1988.
2. Bearing base is the North American Horizontal Datum of 1983, PA State Coordinate System, North Zone established using GPS observations taken June, 2008.
3. Building Setback Lines-Rural Residential (RR): Front-(50-feet from right-of-way street), Side-(50-feet from property line) and Rear-(75-feet from property line).
4. There are no Flood Boundary Areas on UPI #24-3/7E as displayed on the FEMA Flood Insurance Rate Map, Community-Panel No. 420260C0618F, revised date: May 4, 2009.
5. There are no Wetlands Areas on UPI #24-3/7E as displayed on U.S. Fish and Wildlife Service, National Wetlands Inventory Mapping data.
6. The areas around the suitable soil logs test pits are to remain undisturbed to provide for primary and replacement absorption areas for on-lot septic systems. No construction or activity may occur which would render these areas unsuitable for sewage disposal.
7. The existing old camp on UPI #24-3/7E will be removed as part of this action and the proposed new home will then be the primary residence on the tract.

SOILS TABLE

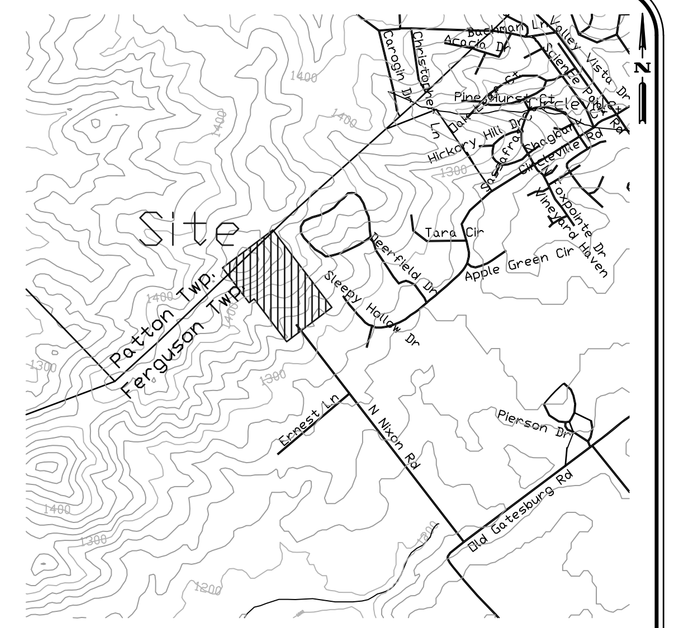
MrB	- Morrison sandy loam, 2 to 8% slopes - Prime Farmland
MrC	- Morrison sandy loam, 8 to 15% slopes - Prime Farmland
MsD	- Morrison very stony sandy loam, 15 to 25% slopes

UTILITIES

ELECTRIC: West Penn Power, 2800 E. College Ave, State College, PA 16801, (814) 231-5336

TELEPHONE: Verizon, 224 Allen St, State College, PA 16801, (814) 231-6511

CALL BEFORE YOU DIG !!
PENNSYLVANIA LAW REQUIRES
(3) WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND
(10) WORKING DAYS IN DESIGN STAGE
-- STOP & CALL --
Pennsylvania One Call System, Inc.
1-800-242-1776

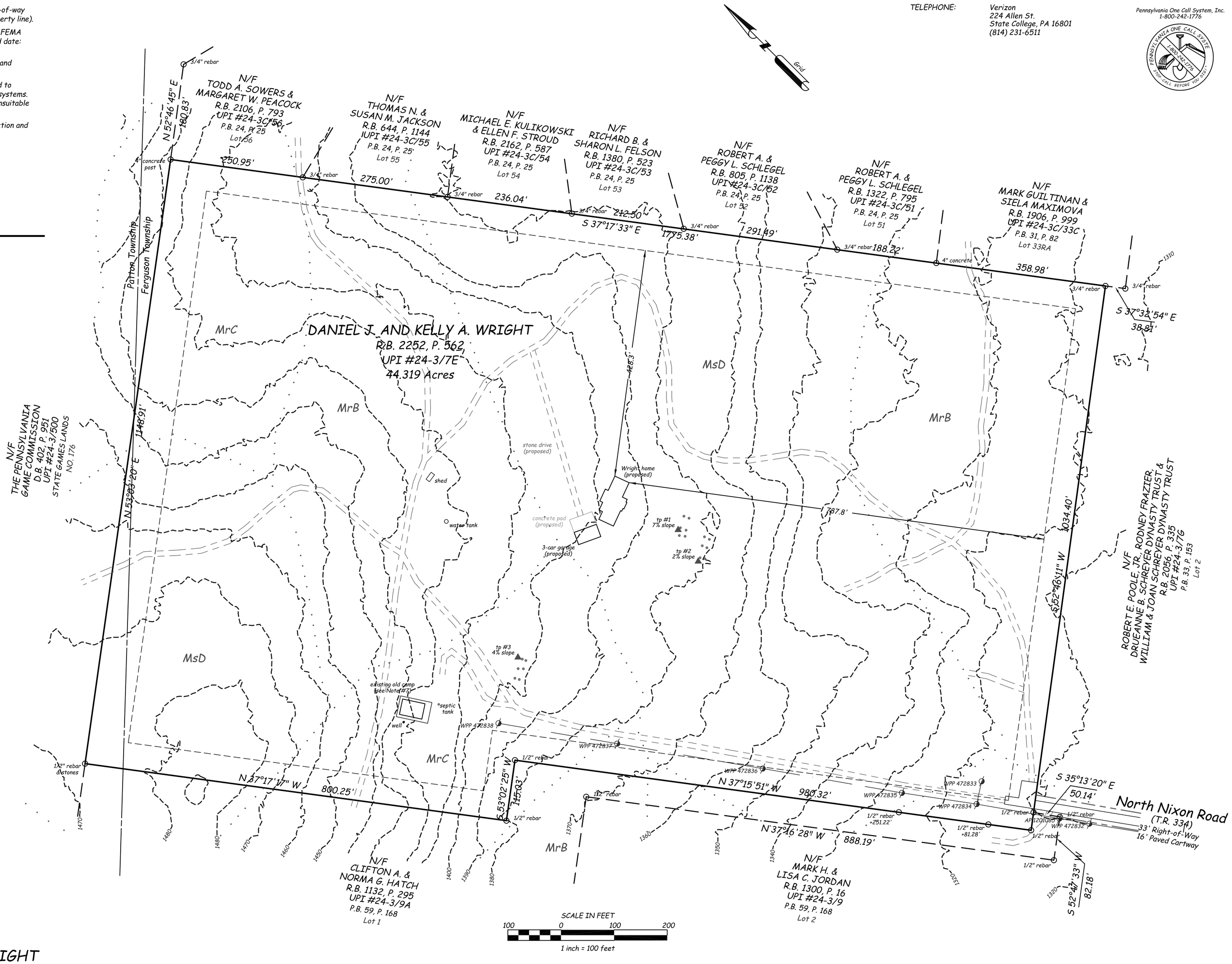


LOCATION MAP

JULIAN U.S.G.S. QUADRANGLE
SCALE: 1"=2000'

SITE DATA

Zoning: Rural Residential (RR)
Number of Lots: One (1)
Area:
Original Tract: 44.319 Acres
Sewage Disposal: On-Site
Water Source: On Site
Title Source: Record Book 2252, Page 562
Tax Parcel No.: 24-3/7E
Owners: Daniel J. and Kelly A. Wright
1020 Laurel Crest Dr.
West Columbia, SC 29169
Phone No.: (803) 931-2763
Use: Residential



SCALE IN FEET
100 0 100 200
1 inch = 100 feet

OWNERSHIP

STATE OF SOUTH CAROLINA
COUNTY OF LEXINGTON

On this the 14 day of February 20 21 before me, the undersigned officer, personally appeared Daniel J. and Kelly A. Wright who being duly sworn according to law, depose and says they are the owners of the property shown on this plan, and that they acknowledge the same to be their Act and Plan, and desire the same to be Recorded as such according to law.

Daniel J. Wright

Kelly A. Wright

NOTARY PUBLIC Dorine C. Cox

MY COMMISSION EXPIRES 10-17-2024

NOTARY PUBLIC SOUTH CAROLINA

MINOR LAND DEVELOPMENT

OF LANDS OF

DANIEL J. AND KELLY A. WRIGHT

SITUATE

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

GREGORY A. SHUFRAN
Professional Land Surveyor
P.O. Box 347
Boalsburg, PA 16827-0347
(814) 360-1385
email: gashufran@juno.com
shufranlandsurveying.com

SCALE: 1"=100'
PROJECT NO.: 203201
DATE: 2/12/21

Surveyed & Drawn by: gas ©

REVISED

DJW	2/18/21	gas

SURVEYOR CERTIFICATION

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL GREGORY A. SHUFRAN LAND SURVEYOR NO. 44067-E

I, Gregory A. Shufran, a Professional Land Surveyor in the Commonwealth of Pennsylvania, do hereby certify that the plan correctly represents the tract of land shown.

Gregory A. Shufran, P.L.S.

GFA and Percent Impervious Determination

COVER CALCULATION	SQUARE FOOTAGE				% LOT COVERAGE	
	EXISTING	PROPOSED	TOTAL	ALLOWABLE	TOTAL	ALLOWABLE
Building Coverage	2,500*	6,700	6,800		0.4%	
Other Impervious Cover	1,300	1,100	2,400		0.1%	
Total Impervious Cover	3,800*	7,800	9,200		0.5%	

* See Note #7 (-2,400 sq. ft.)

LEGEND

- Property Line
- Adjoining Property Line
- Soil Boundary Line
- Contour Line
- Building Setback Line
- Soil Test Pit With Percolation Holes
- Utility Pole
- Property Corner Set (3/4" Rebar)
- Property Corner Found (As Specified)
- Building
- D.B. - (Deed Book)
- R.B. - (Record Book)
- P. - (Page)

TOWNSHIP OF FERGUSON

3147 Research Drive, State College, Pennsylvania 16801
Telephone: 814-238-4651 Fax: 814-238-3454

TO: Ferguson Township Planning Commission

FROM: Kristina Aneckstein, Community Planner

DATE: March 8, 2021

SUBJECT: Kocher Well Field Water Pumping Improvements

The Final Land Development Plan for Kocher Well Field Water Pumping Improvements was submitted by Gwin, Dobson & Foreman Engineering, Inc. on behalf of their client, The State College Borough Water Authority. The Land Development Plan proposes water pumping improvements to the Kocher well fields on Tax parcel 24-006-055E, located at 3961 W. Whitehall Road. the construction of two (2) buildings that measure 9 feet 4 inches by 12 feet 4 inches. Each building will be in close proximity to existing welll #71 and well #78. There is an existing floodplain that traverses the parcel, no construction is planned in the floodplain. On June 23, 2020, a variance was approved to utilize FEMA Mapping for Floodplain Boundary determination instead of independent Hydrologic and Hydraulic (H&H) study as required by §27-701. The parcel is 47.7 acres and is zoned Rural Residential (RA). This is a Final Plan. The Preliminary Plan was conditionally approved by the Board of Supervisors on October 5, 2020.

Staff Recommendation: Staff recommends the Planning Commission make a recommendation to the Board of Supervisors to approve the Kocher Well Field Water Pumping Improvements Final Land Development Plan.

Outstanding Comments:

Arborist:

- Recommend replacing Red Maple shown on the plan with London Plane Tree due to potential pest and disease issues of Red Maple

Planning and Zoning:

- A GIS-Compatible digital copy of the plan in accordance with Township requirements must be provided to the Township prior to final plan signature.
- The plan must be signed, all fees paid to the Township, and the plan recorded within the plan deadline.
- The following statement must be included on the Record Plan: 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. (Chapter 22, Section 403.Q)

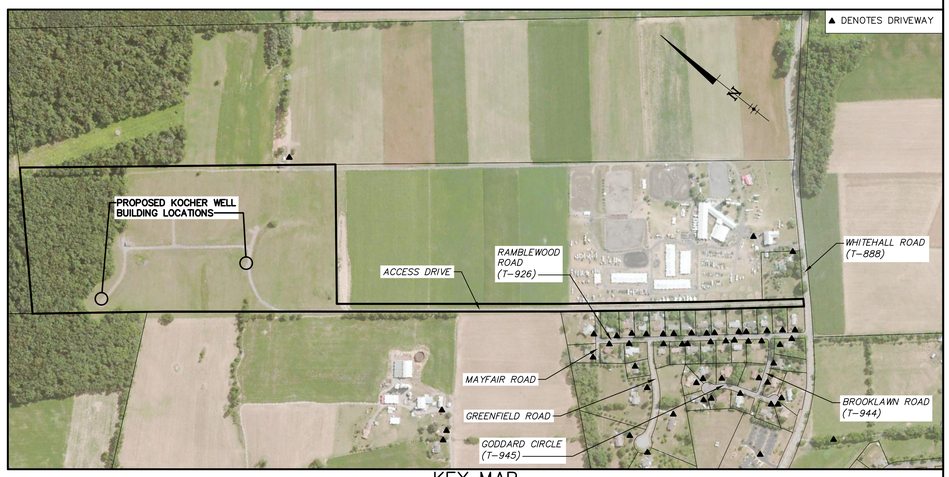
STATE COLLEGE BOROUGH WATER AUTHORITY
FERGUSON TOWNSHIP,
CENTRE COUNTY, PENNSYLVANIA

FINAL LAND DEVELOPMENT PLAN

FOR

KOCHER WELL FIELD WATER PUMPING IMPROVEMENTS

FEBRUARY 17, 2021



KEY MAP
SCALE: 1" = 400'

COMMONWEALTH OF PENNSYLVANIA ACT NO. 287

THE CONTRACTOR SHALL COMPLY WITH ALL THE APPLICABLE REQUIREMENTS OF ACT NO. 287 OF THE GENERAL ASSEMBLY OF THE COMMONWEALTH OF PENNSYLVANIA, AS AMENDED BY ACT NO. 187 OF 1996, AS AMENDED BY ACT NO. 181 OF 2006, EFFECTIVE MARCH 29, 2007, AND AS AMENDED BY ACT 121 OF 2008, EFFECTIVE OCTOBER 9, 2008.

THE FOLLOWING IS A LIST OF MEMBERS LOCATED WITHIN THE PROJECT AREA:

WATER/ WASTEWATER:	UNIVERSITY AREA JOINT AUTHORITY 1576 SPRING VALLEY ROAD STATE COLLEGE, PA. 16801 CONTACT: MARK HARTER EMAIL: mharter@uaja.com (814) 238-8370	ELECTRIC:	WEST PENN POWER 800 CABIN HILL DRIVE ROOM B100N GREENSBURG, PA 15601 CONTACT: ROBERT PAINTER EMAIL: rpointe@firstenergycorp.com
	PENN STATE UNIVERSITY WASTEWATER TREATMENT PLANT 501 UNIVERSITY DRIVE STATE COLLEGE, PA. 16801 CONTACT: JEFF MCDONALD EMAIL: jom86@psu.edu	ROADS/ STORM:	FERGUSON TOWNSHIP CENTRE COUNTY 3147 RESEARCH DRIVE STATE COLLEGE, PA. 16801 CONTACT: CHRIS LEIDY EMAIL: cleidy@twp.ferguson.pa.us
	STATE COLLEGE BOROUGH WATER AUTHORITY 1201 WEST BRANCH ROAD STATE COLLEGE, PA. 16801 CONTACT: STEVEN ALBRIGHT EMAIL: steve@scbwa.org (814) 238-0885		

PENNSYLVANIA ONE CALL SYSTEM INC. 1-800-242-1776 DIAL 8-1-1 BEFORE YOU DIG!

PA ONE-CALL (800) 242-1776
PA ONE-CALL SERIAL NUMBER:
20210482244

GD&F
GWIN DOBSON & FOREMAN
ENGINEERS
3121 Fairway Drive
Altoona, PA 16602
814.943.5214
gdfengineers.com

RECORD PLAN NOTE

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.

INDEX OF DRAWINGS

CS-1	COVER SHEET
1	EXISTING SITE PLAN
2	FINAL LAND DEVELOPMENT PLAN
3	KOCHER WELL BUILDING PLANS AND SECTIONS
4	EROSION AND SEDIMENT CONTROL (ESC) PLAN
5	LANDSCAPING PLAN
6	FINAL LAND DEVELOPMENT SECTIONS
D-1	EROSION AND SEDIMENT CONTROL (ESC) NOTES AND DETAILS
D-2	EROSION AND SEDIMENT CONTROL (ESC) NOTES

PROJECT NOTES

1. GENERAL SITE/LOT INFORMATION:
   - A. OWNER/DEVELOPER: STATE COLLEGE BOROUGH WATER AUTHORITY
   - B. TAX PARCEL NUMBER/LOT ACREAGE: 24-006-,055E-,0000-/47.70 ACRES
   - C. PROPERTY ADDRESS: 3961 W. WHITEHALL ROAD
   - D. RECORD BOOK/PAGE NUMBER: 793 / 314
   - E. LAND IS ZONED: RURAL AGRICULTURAL (RA)
   - F. BUILDING SETBACK LINE : FRONT YARD = 50'
SIDE YARD = 50'
REAR YARD = 50'
   - G. LOT REQUIREMENTS: EXISTING LOT AREA =
2,077,627 SQ. FT. OR 47.70 ACRES [BY DEED]
MAXIMUM BUILDING HEIGHT = 50'
PROPOSED BUILDING HEIGHT = 12.4'
   - H. EXISTING LAND USE: POTABLE WATER PUMP STATION FACILITY
   - I. PROPOSED LAND USE: POTABLE WATER PUMP STATION FACILITY
   - J. INFORMATION CONCERNING EXISTING FEATURES, RIGHT OF WAYS, PROPERTY LINES, ZONING BOUNDARIES, ETC. SHOWN ON THESE DRAWINGS WAS OBTAINED FROM DEEDS, RECORD DRAWINGS, FIELD OBSERVATIONS AND DATA OBTAINED FROM THE CENTRE COUNTY GIS SYSTEM AND MAY NOT REPRESENT CONDITIONS EXACTLY AS THEY EXIST AT THE PRESENT, NOR DO THEY CONSTITUTE ACTUAL FIELD INSTRUMENT SURVEYS FOR ALL INFORMATION SHOWN ON THESE PLANS.
   - K. HORIZONTAL CONTROLS ARE REFERENCED TO THE PENNSYLVANIA STATE PLANE (NAD 83) SOUTH ZONE.
   - L. VERTICAL CONTROLS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). TOPOGRAPHIC AND LOCATION INFORMATION INDICATED ON THESE PLANS WAS OBTAINED FROM THE PENNSYLVANIA SPATIAL DATA ACCESS (PASDA) CLEARINGHOUSE.
   - M. SOILS INFORMATION FROM UNITED STATE DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE. ONSITE SOILS CONSIST PRIMARILY OF SILT LOAMS UNDERLAIN BY CARBONATE ROCK.
   - N. EXISTING FLOODPLAIN INFORMATION FROM FLOOD INSURANCE RATE MAP (FIRM) PANEL NOS. 42027C0830F AND 42027C0835F FOR FERGUSON TOWNSHIP, EFFECTIVE DATE MAY 4, 2009, IS INDICATED ON THESE PLANS AND SUPPLEMENTED WITH FLOODPLAIN DATA FROM A DETAILED STUDY PERFORMED BY GWIN, DOBSON & FOREMAN, INC. AND DATED APRIL, 2020.
   - O. THERE ARE NO IDENTIFIABLE WETLANDS WITHIN THE ENVIRONS OF THE PROJECT LIMITS.
   - P. THERE ARE NO STEEP SLOPES (>25%) WITHIN THE ENVIRONS OF THE PROJECT LIMITS.
   - Q. THE PROPOSED WELL PUMP VFD BUILDINGS ARE LOCATED IN THE WELLHEAD ZONE 1 PROTECTION AREA AS DEFINED BY §27-405 (SOURCE WATER PROTECTION OVERLAY DISTRICT) OF THE FERGUSON TOWNSHIP CODE. THE BUILDINGS ARE TO BE USED TO INSTALL ELECTRICAL IMPROVEMENTS IN SUPPORT OF AN EXISTING POTABLE WATER PUMP STATION FACILITY. NO HAZARDOUS MATERIALS ARE TO BE STORED, HANDLED OR USED IN THE WELL PUMP VFD BUILDINGS. AS SUCH, THE CONSTRUCTION AND OPERATION OF THESE BUILDINGS BY THE STATE COLLEGE BOROUGH WATER AUTHORITY IS A PERMITTED USE IN ACCORDANCE WITH §27-405.7.B.40 (TABLE 405, LAND USE NO. 40).
2. LOT COVERAGE:
   - A. MAXIMUM IMPERVIOUS COVERAGE = 10.00%
   - B. PROPOSED IMPERVIOUS COVERAGE = 3.16% (65,638 SQ. FT.)
3. PARKING ANALYSIS:
   - A. REQUIRED PARKING – §22-5C01.1.B.(2)
= 1 SPACE / WORK VEHICLE X 3 WORK VEHICLES = 3 PARKING SPACES
   - B. PARKING PROVIDED = 3 SPACES (SEE PLANS)
4. DATE OF ZONING PERMIT APPLICATION: JULY 19, 2019
5. LIST OF APPROVED VARIANCES: (JUNE 23, 2020)
   - A. §27-701 – VARIANCE TO UTILIZE FEMA MAPPING FOR FLOODPLAIN BOUNDARY DETERMINATION INSTEAD OF INDEPENDENT HYDROLOGIC AND HYDRAULIC (H&H) STUDY.

NO.	DATE	DESCRIPTION

REVISIONS

CENTRE COUNTY RECORDER OF DEEDS

COMMONWEALTH OF PENNSYLVANIA COUNTY OF CENTRE

CERTIFICATION OF OWNERSHIP

ON THIS, _____ DAY OF _____, 20___, THE UNDERSIGNED OWNER(S), PERSONALLY APPEARED BEFORE ME AND CERTIFIED THAT THEY WERE THE OWNER(S) 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.

OWNER SIGNATURE OWNER PRINT NAME OWNER TITLE

WITNESS MY HAND AND SEAL, THIS DATE _____.

NOTARY PUBLIC COMMISSION EXPIRES

DESIGN PROFESSIONAL CERTIFICATION

I, KENNETH W. BELDIN, JR., PE, HEREBY CERTIFY THAT THIS LAND DEVELOPMENT MEETS ALL DESIGN REQUIREMENTS OF CHAPTER 22, SUBDIVISION AND LAND DEVELOPMENT; CHAPTER 27, ZONING; AND ALL OTHER APPLICABLE CHAPTERS OF THE FERGUSON TOWNSHIP CODE.

FERGUSON 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.

FERGUSON TOWNSHIP PLANNING COMMISSION

FERGUSON TOWNSHIP PLANNING COMMISSION APPROVED

SECRETARY DATE

CHAIRMAN DATE

FERGUSON TOWNSHIP BOARD OF SUPERVISORS

FERGUSON TOWNSHIP BOARD OF SUPERVISORS APPROVED

SECRETARY DATE

CHAIRMAN DATE

FERGUSON TOWNSHIP ZONING OFFICER

FERGUSON TOWNSHIP ZONING OFFICER APPROVED

ZONING OFFICER 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

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL KENNETH WILLIAM BELDIN, JR. ENGINEER No. PE061568

SEAL

COVER SHEET

STATE COLLEGE BOROUGH WATER AUTHORITY

KOCHER WELL FIELD WATER PUMPING IMPROVEMENTS

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

DATE: 2/17/2021	JOB: 16049	SCALE: AS SHOWN
FILE:	DRAWN BY: DLK	CHECKED BY: KWB

GD&F
GWIN DOBSON & FOREMAN
ENGINEERS
3121 Fairway Drive
Altoona, PA 16602
814.943.5214
gdfengineers.com

SHEET NO: CS-1

PLOT CREATED: 2/17/2021 1:53 PM

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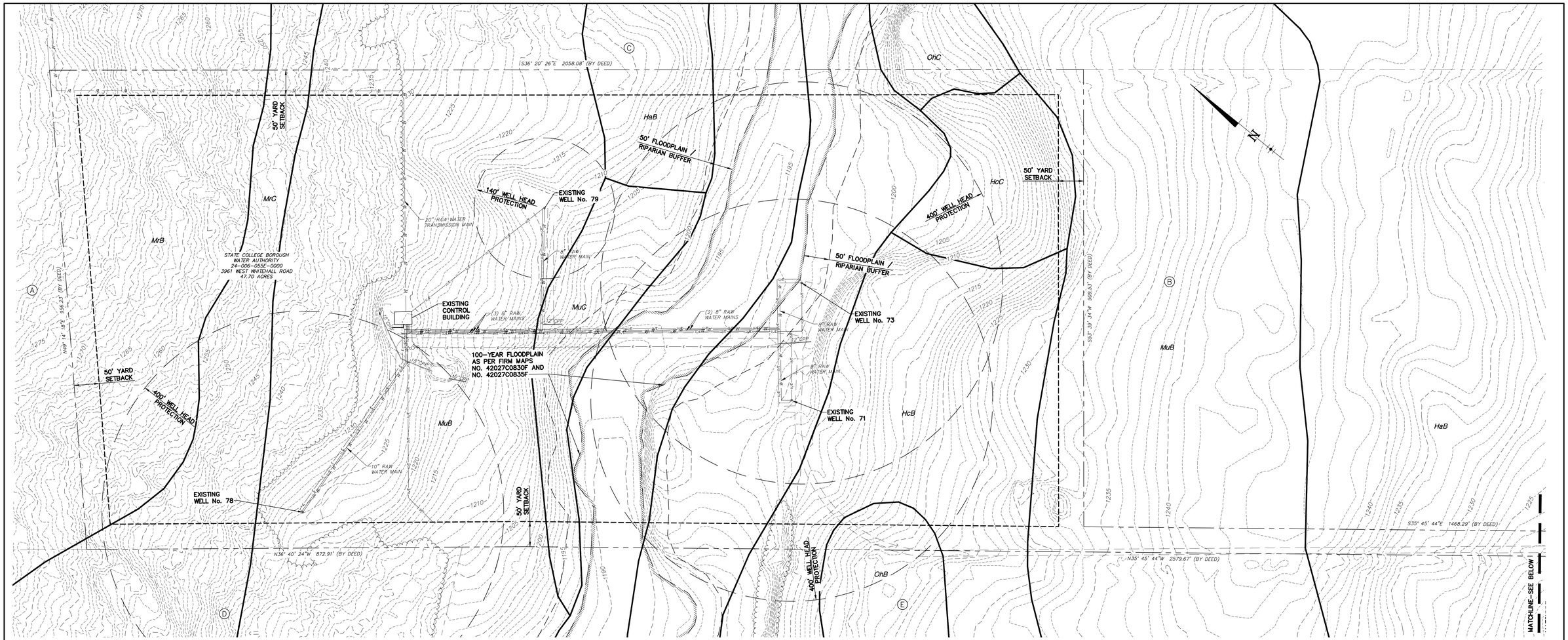

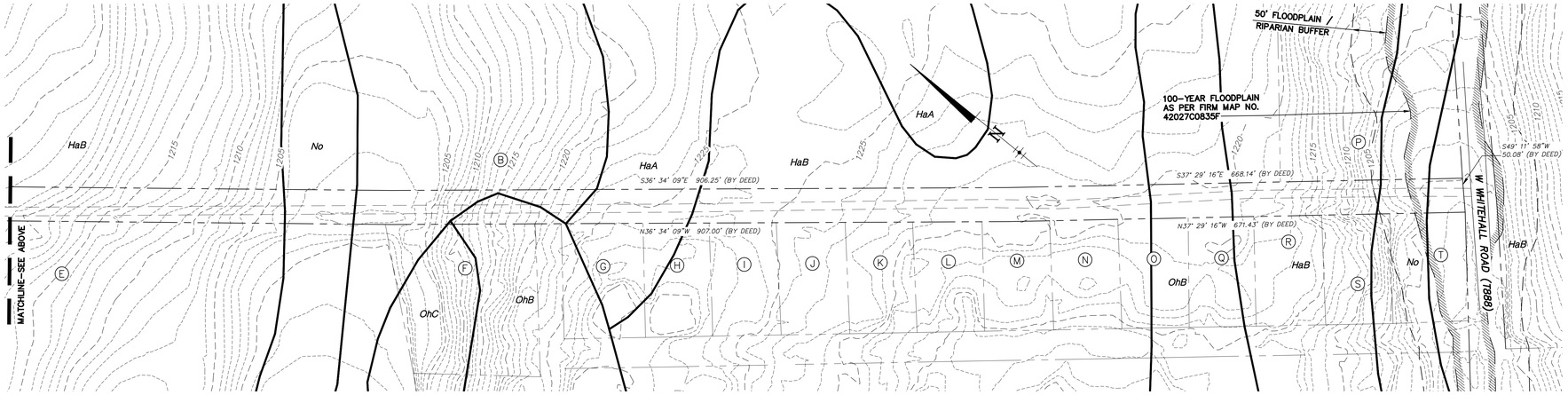

LEGEND

- RIGHT-OF-WAY LINE
- PROPERTY LINE
- BITUMINOUS PAVEMENT
- STABILIZED AREA
- TREELINE
- STREAM/DITCH LINE
- FENCE LINE
- BURIED ELECTRIC
- OVERHEAD ELECTRIC
- UTILITY LINE
- STORM SEWER (12" OR LARGER)
- WATERLINE
- MAJOR CONTOUR (5')
- MINOR CONTOUR (1')
- 100-YEAR FLOODPLAIN BOUNDARY (FEMA)
- 50' RIPARIAN BUFFER

ADJOINING PARCEL INFORMATION

PARCEL	TAX ID	OWNERS	MAILING ADDRESS	DEED BOOK / PAGE
A	24-003-,005-,0000	N/F GRUBB, JEFFREY A. ET AL	2009 COLETO STREET, AUSTIN, TX 78722	2136 / 671
B	24-006-,055A,0000	N/F GAIL K. KOCHER	3951 WEST WHITEHALL ROAD, PENNA FURNACE, PA 16865	1045 / 366
C	24-006-,055B,0000	N/F KOCHER, GARY J.	3998 WEST WHITEHALL ROAD, PENNA FURNACE, PA 16865	2136 / 536
D	24-006-,050A,0000	N/F RONALD E. CONNELLY & FRANK S. CONNELLY, JR.	2080 TADPOLE ROAD, PENNA FURNACE, PA 16865	2245 / 403
E	24-006-,055-,0000	N/F LEROY E. & KAREN D. DRDBELBIS	1691 TADPOLE ROAD, PENNA FURNACE, PA 16865	463 / 103
F	24-006B,020-,0000	N/F BLAIR SCOTT & JENNIFER J. HEFKIN	345 MAYFAIR ROAD, PENNA FURNACE, PA 16865	1787 / 101
G	24-006B,018-,0000	N/F NIZAR & AMIRA MEDDEB	125 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	2146 / 674
H	24-006B,017-,0000	N/F PLUMMER, KIMBERLY C.	123 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	2092 / 95
I	24-006B,016-,0000	N/F RONALD ALDY HOY	121 RAMBLEWOOD RD, PENNA FURNACE, PA 16865	890 / 11
J	24-006B,015-,0000	N/F RUSSELL A. ROAN	119 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	386 / 389
K	24-006B,014-,0000	N/F MILLER, JOSEPH L. & AMBER R.	117 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	2148 / 969
L	24-006B,013-,0000	N/F PRIBULKA, DAVID G. & STACY L.	115 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	2137 / 439
M	24-006B,012-,0000	N/F WARNER, JONATHAN R.	113 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	2117 / 189
N	24-006B,006-,0000	N/F VITALIY & TATYANA NOVIKOV	111 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	1266 / 438
O	24-006B,007-,0000	N/F ROBERT E. & THELMA E. HOMAN	109 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	328 / 349
P	24-006-,055F,0000	N/F BECKERLE, PATRICK T. & ROSEANN M.	3955 WEST WHITEHALL ROAD, PENNA FURNACE, PA 16865	2190 / 100
Q	24-006B,008-,0000	N/F JAMES W., JR. & ROSELLA J. WAGNER	107 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	1367 /419
R	24-006B,009-,0000	N/F VIKTOR I. & OLGA G. ASEYEV	105 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	1112 / 567
S	24-006B,010-,0000	N/F GERALDINE B. REEVE	103 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	994 / 546
T	24-006B,011-,0000	N/F KURTIS S. & LESLIE M. AURANDT	101 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	2189 / 644

GRAPHIC SCALE

80 0 40 80 160 320

1 inch = 80 ft.

NO.	DATE	DESCRIPTION

REVISIONS

SEAL

KENNETH WILLIAM BELDIN, JR. — REGISTERED PROFESSIONAL ENGINEER — No. PE061568 — COMMONWEALTH OF PENNSYLVANIA

EXISTING SITE PLAN

STATE COLLEGE BOROUGH WATER AUTHORITY

KOCHER WELL FIELD WATER PUMPING IMPROVEMENTS

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

DATE: 2/17/2021 | JOB: 16049 | SCALE: AS SHOWN

FILE: | DRAWN BY: AJL | CHECKED BY: KWB

SHEET NO: 1

GD&F
GWIN DOBSON & FOREMAN
ENGINEERS
3121 Fairway Drive
Altoona, PA 16602
814.943.5214
gdfengineers.com

PLOT CREATED: 2/17/2021 1:52 PM

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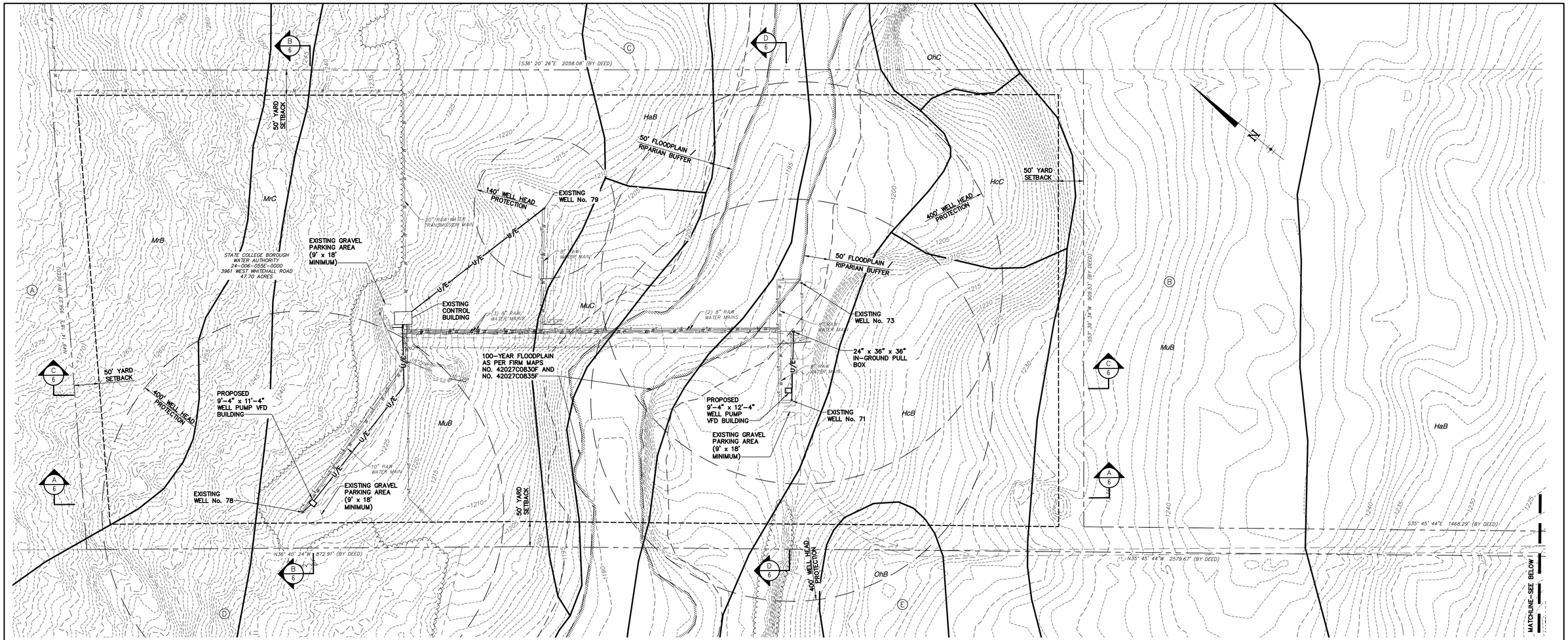

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- STABILIZED AREA
- TREELINE
- STREAM/DITCH LINE
- FENCE LINE
- BURIED ELECTRIC
- UTILITY LINE
- WATERLINE
- MAJOR CONTOUR (5')
- MINOR CONTOUR (1')
- 100-YEAR FLOODPLAIN BOUNDARY (FEMA)
- 50' RIPARIAN BUFFER
- U/E — PROPOSED UNDERGROUND ELECTRIC LINE

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J	24-006B,015-,0000	N/F RUSSELL A. ROAN	119 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	386 / 389
K	24-006B,014-,0000	N/F MILLER, JOSEPH L. & AMBER R.	117 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	2148 / 969
L	24-006B,013-,0000	N/F PRIBULKA, DAVID G. & STACY L.	115 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	2137 / 439
M	24-006B,012-,0000	N/F WARNER, JONATHAN R.	113 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	2117 / 189
N	24-006B,006-,0000	N/F VITALIY & TATYANA NOVIKOV	111 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	1266 / 438
O	24-006B,007-,0000	N/F ROBERT E. & THELMA E. HOMAN	109 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	328 / 349
P	24-006-,055F,0000	N/F BECKERLE, PATRICK T. & ROSEANN M.	3955 WEST WHITEHALL ROAD, PENNA FURNACE, PA 16865	2190 / 100
Q	24-006B,008-,0000	N/F JAMES W., JR. & ROSELLA J. WAGNER	107 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	1367 /419
R	24-006B,009-,0000	N/F VIKTOR I. & OLGA G. ASEYEV	105 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	1112 / 567
S	24-006B,010-,0000	N/F GERALDINE B. REEVE	103 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	994 / 546
T	24-006B,011-,0000	N/F KURTIS S. & LESLIE M. AURANDT	101 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	2189 / 644

GRAPHIC SCALE

80 0 40 80 160 320

1 inch = 80 ft.

NO.	DATE	DESCRIPTION
		REVISIONS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER KENNETH WILLIAM BELDIN, JR. No. PE051585

SEAL

FINAL LAND DEVELOPMENT PLAN

STATE COLLEGE BOROUGH WATER AUTHORITY

KOCHER WELL FIELD WATER PUMPING IMPROVEMENTS

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

DATE: 2/17/2021 | JOB: 16049 | SCALE: AS SHOWN

FILE: | DRAWN BY: AJL | CHECKED BY: KWB

SHEET NO: 2

GD&F GWIN DOBSON & FOREMAN ENGINEERS
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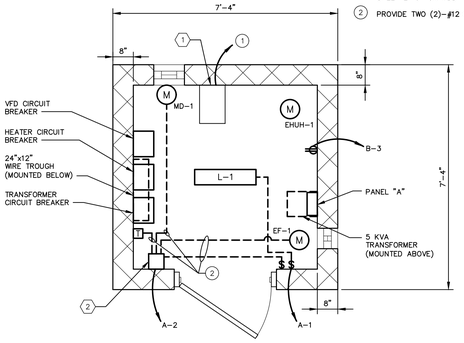
PLAN NOTE:

1. PROVIDE EIGHT (8)–#16 SHIELDED CONDUCTORS AND TWO (2)–#16 TSP IN ONE (1)–3/4" CONDUIT FROM VFD TO TELEMETRY PANEL LOCATED IN EXISTING CONTROL BUILDING. SEE SITE PLAN ON SHEET E119 FOR ADDITIONAL DETAILS.
2. PROVIDE TWO (2)–#12 CONDUCTORS, ONE (1)–#12 GROUND IN ONE (1)–3/4" CONDUIT.



WELL PUMP No. 78 VFD BUILDING FLOOR PLAN

SCALE: 1/2" = 1'–0"

EQUIPMENT NOTES:

1. 100 HP, THREE PHASE, 480 VOLT, VFD, NEMA 12 ENCLOSURE. PROVIDE LINE REACTOR MOUNTED ABOVE VFD AND LOAD REACTOR MOUNTED BELOW VFD. SEE SPECIFICATIONS SECTION 262419.
2. 6"x6"x6" NEMA 12 ENCLOSURE, 4PDT RELAY. SEE WIRING DETAIL THIS SHEET.

PLAN NOTE:

1. PROVIDE EIGHT (8)–#16 SHIELDED CONDUCTORS AND TWO (2)–#16 TSP IN ONE (1)–1" CONDUIT FROM VFD TO JUNCTION BOX.
2. PROVIDE SIXTEEN (16)–#16 SHIELDED CONDUCTORS AND FOUR (4)–#16 TSP IN ONE (1)–2" CONDUIT FROM JUNCTION BOX TO EXISTING CONTROL BUILDING UTILIZING PROPOSED PULL BOX AND EXISTING 4" CONDUIT FROM PULL BOX TO THE EXISTING CONTROL BUILDING. SEE SITE PLAN ON SHEET E119 FOR ADDITIONAL DETAILS.
3. PROVIDE TWO (2)–#12 CONDUCTORS, ONE (1)–#12 GROUND IN ONE (1)–3/4" CONDUIT.

WELL PUMP No. 71/73 VFD BUILDING FLOOR PLAN

SCALE: 1/2" = 1'–0"

EQUIPMENT NOTES:

1. 100 HP, THREE PHASE, 480 VOLT, VFD, NEMA 12 ENCLOSURE. PROVIDE LINE REACTOR MOUNTED ABOVE VFD AND LOAD REACTOR MOUNTED BELOW VFD. SEE SPECIFICATIONS SECTION 262419.
2. 6"x6"x6" NEMA 12 ENCLOSURE, 4PDT RELAY. SEE WIRING DETAIL THIS SHEET.

FOUNDATION PLAN

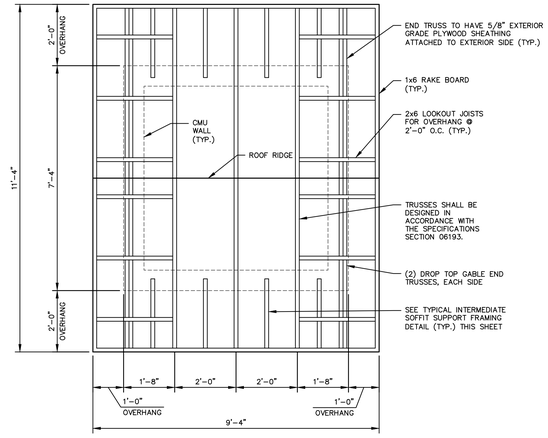
SCALE: 1/2" = 1'–0"

LEGEND

GRADE BEAM

FOUNDATION NOTE:

REQUIRED SOIL BEARING CAPACITY: 2,000 PSF



ROOF PLAN

SCALE: 1/2" = 1'–0"

ROOF FRAMING NOTES:

1. ROOF TRUSSES AND ROOF FRAMING SHALL BE ENGINEERED AND PREFABRICATED.
2. WIND LOAD:
   RISK CATEGORY III:
   BASIC WIND SPEED V = 120 MPH
   WIND DIRECTIONALITY FACTOR K_d = 0.85
   EXPOSURE CATEGORY = C
   TOPOGRAPHIC FACTOR K_{zt} = 1.0
   GUST EFFECT FACTOR = 0.85
   ENCLOSURE CLASSIFICATION = ENCLOSED
   INTERNAL PRESSURE COEFFICIENT GC_{pi} = ±0.18
   VELOCITY PRESSURE EXPOSURE COEFFICIENT, K_h AND K_z = 0.85
   VELOCITY PRESSURE q_h = 26.6 PSF
   ROOF SLOPE = 5:12, 22.6°
   MEAN ROOF HEIGHT h = 12.4'
   WALL DESIGN WIND PRESSURE p = 22.9 PSF
   ROOF DESIGN WIND PRESSURE p = –34.2 PSF

   SNOW LOAD:
   RISK CATEGORY III
   GROUND SNOW LOAD = 40 PSF
   IMPORTANCE FACTOR I = 1.1
   SLOPED ROOF SNOW LOAD= 33.9 PSF
   CEILING AND INSULATION= 12 PSF MIN. BOTTOM CHORD
   ROOFING MATERIAL LOAD= 10 PSF MIN. TOP CHORD

   SEISMIC LOAD:
   IMPORTANCE FACTOR I = 1.25
   SEISMIC DESIGN CATEGORY = E
   SITE CLASSIFICATION = D
   BASIC STRUCTURAL SYSTEM AND SEISMIC RESISTING SYSTEM–BEARING WALL SYSTEM
3. PROVIDE TRUSS BRACING AS RECOMMENDED BY TRUSS MANUFACTURER.

FRONT ELEVATION

SCALE: 1/2" = 1'–0"

RIGHT ELEVATION

SCALE: 1/2" = 1'–0"

REAR ELEVATION

SCALE: 1/2" = 1'–0"

LEFT ELEVATION

SCALE: 1/2" = 1'–0"

NO.	DATE	DESCRIPTION
		REVISIONS

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — KENNETH WILLIAM BELDON, JR. — ENGINEER — No. PE061561

SEAL

KOCHER WELL BUILDING PLANS AND SECTIONS

STATE COLLEGE BOROUGH WATER AUTHORITY

KOCHER WELL FIELD WATER PUMPING IMPROVEMENTS

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

DATE: 2/17/2021 | JOB: 16049 | SCALE: AS SHOWN

FILE: | DRAWN BY: RLN | CHECKED BY: KWB

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gdfengineers.com

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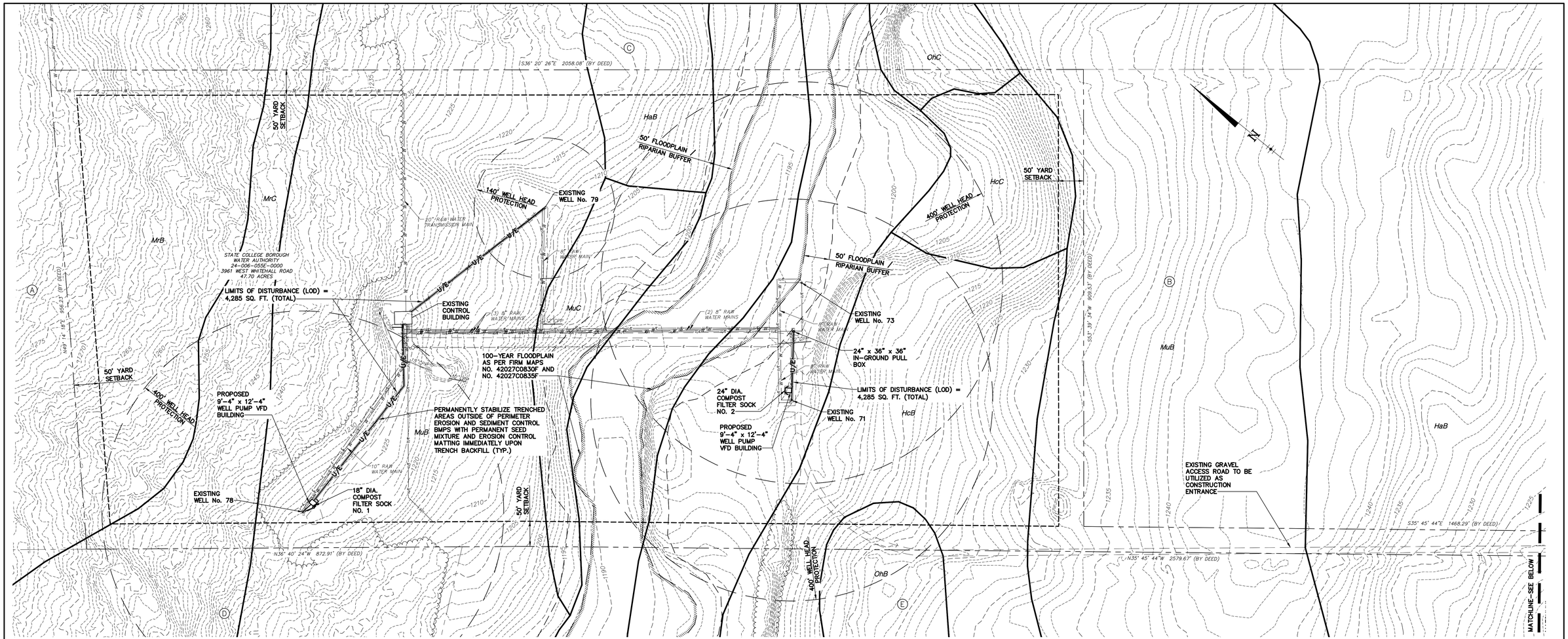

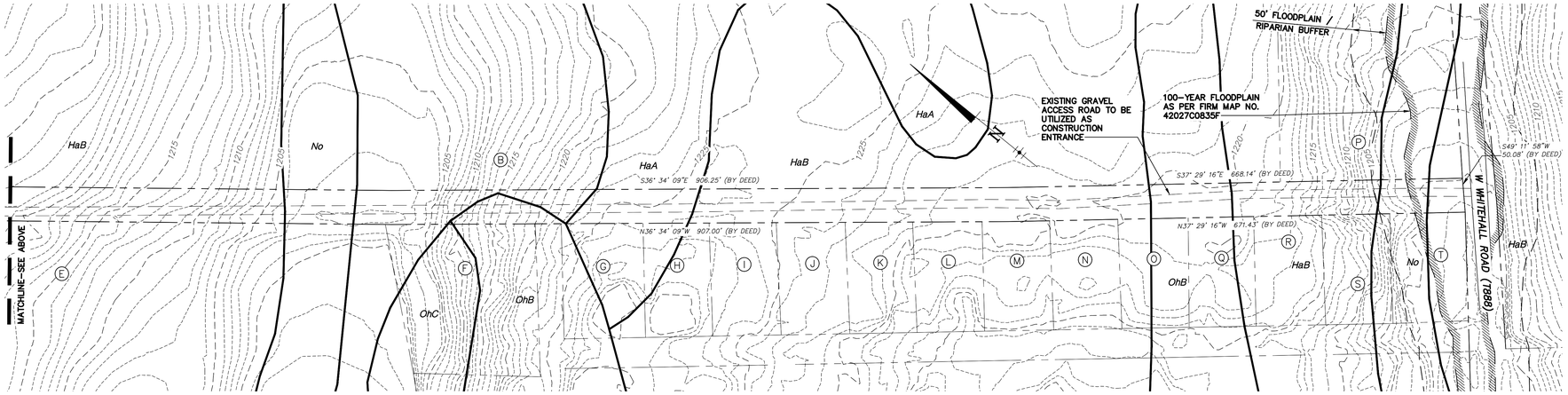

LEGEND

- RIGHT-OF-WAY LINE
- PROPERTY LINE
- BITUMINOUS PAVEMENT
- STABILIZED AREA
- TREELINE
- STREAM/DITCH LINE
- X X FENCE LINE
- E E BURIED ELECTRIC
- UTILITY LINE
- W W WATERLINE
- 1200 MAJOR CONTOUR (5')
- MINOR CONTOUR (1')
- 100-YEAR FLOODPLAIN BOUNDARY (FEMA)
- 50' RIPARIAN BUFFER
- U/E PROPOSED UNDERGROUND ELECTRIC LINE
- LOD PROPOSED LIMITS OF DISTURBANCE (LOD)
- CS CS PROPOSED COMPOST FILTER SOCK

ADJOINING PARCEL INFORMATION

PARCEL	TAX ID	OWNERS	MAILING ADDRESS	DEED BOOK / PAGE
A	24-003-,005-,0000	N/F GRUBB, JEFFREY A. ET AL	2009 COLETO STREET, AUSTIN, TX 78722	2136 / 671
B	24-006-,055A,0000	N/F GAIL K. KOCHER	3951 WEST WHITEHALL ROAD, PENNA FURNACE, PA 16865	1045 / 366
C	24-006-,055B,0000	N/F KOCHER, GARY J.	3998 WEST WHITEHALL ROAD, PENNA FURNACE, PA 16865	2136 / 536
D	24-006-,050A,0000	N/F RONALD E. CONNELLY & FRANK S. CONNELLY, JR.	2080 TADPOLE ROAD, PENNA FURNACE, PA 16865	2245 / 403
E	24-006-,055-,0000	N/F LEROY E. & KAREN D. DRIEBELBIS	1691 TADPOLE ROAD, PENNA FURNACE, PA 16865	463 / 103
F	24-006B,020-,0000	N/F BLAIR SCOTT & JENNIFER J. HEFKIN	345 MAYFAIR ROAD, PENNA FURNACE, PA 16865	1787 / 101
G	24-006B,018-,0000	N/F NIZAR & AMIRA MEDDEB	125 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	2146 / 674
H	24-006B,017-,0000	N/F PLUMMER, KIMBERLY C.	123 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	2092 / 95
I	24-006B,016-,0000	N/F RONALD HOY	121 RAMBLEWOOD RD, PENNA FURNACE, PA 16865	890 / 11
J	24-006B,015-,0000	N/F RUSSELL A. ROAN	119 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	386 / 389
K	24-006B,014-,0000	N/F MILLER, JOSEPH L. & AMBER R.	117 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	2148 / 969
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T	24-006B,011-,0000	N/F KURTIS S. & LESLIE M. AURANDT	101 RAMBLEWOOD ROAD, PENNA FURNACE, PA 16865	2189 / 644

GRAPHIC SCALE

80 0 40 80 160 320

1 inch = 80 ft.

NO.	DATE	DESCRIPTION
		REVISIONS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL KENNETH WILLIAM BELDIN, JR. ENGINEER No. PE051568

SEAL

EROSION AND SEDIMENT CONTROL (ESC) PLAN

STATE COLLEGE BOROUGH WATER AUTHORITY

KOCHER WELL FIELD WATER PUMPING IMPROVEMENTS

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

DATE: 2/17/2021 | JOB: 16049 | SCALE: AS SHOWN

FILE: | DRAWN BY: AJL | CHECKED BY: KWB

SHEET NO: 4

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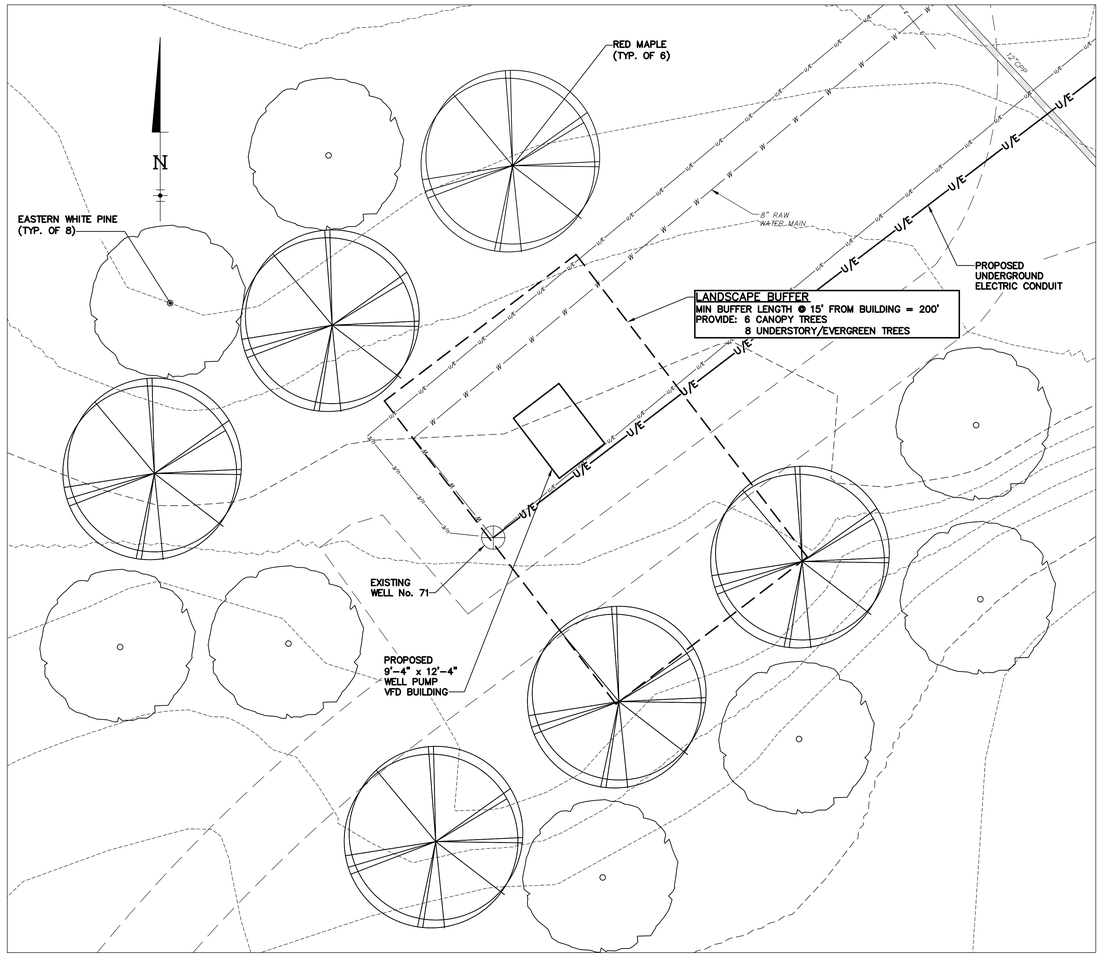
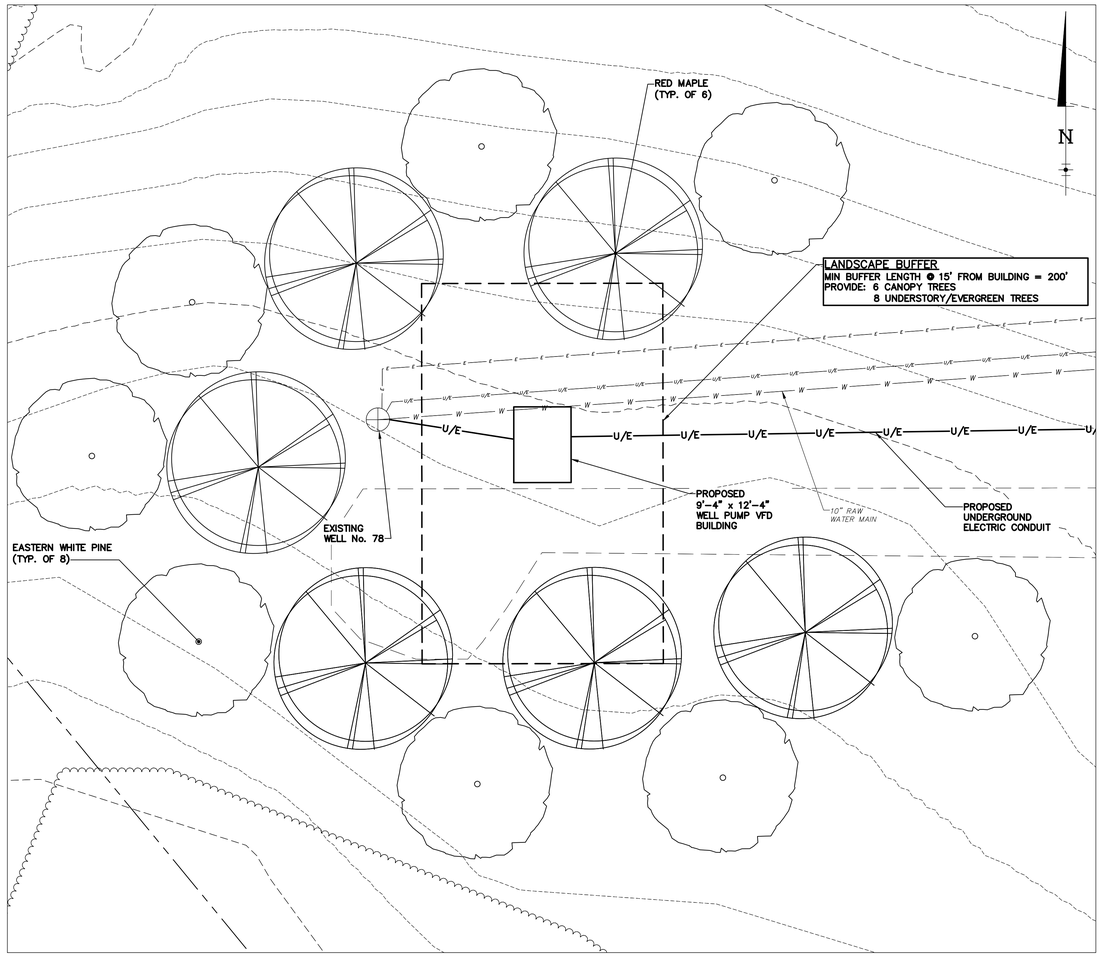




PLANTING SCHEDULE

DECIDUOUS TREES							
BOTANICAL NAME (SYMBOL)	COMMON NAME	SPACING	SIZE	CONTAINER	QUANTITY	MATURE HEIGHT	MATURE SPREAD
ACER RUBRUM (AR)	RED MAPLE	AS SHOWN	2" CAL.	B & B	12	50'	40'
EVERGREEN TREES							
BOTANICAL NAME	COMMON NAME	SPACING	SIZE	CONTAINER	QUANTITY	MATURE HEIGHT	MATURE SPREAD
PINUS STROBUS (PS)	EASTERN WHITE PINE	AS SHOWN	6'	B & B	16	60'	30'

LANDSCAPE BUFFER YARD REQUIREMENTS:

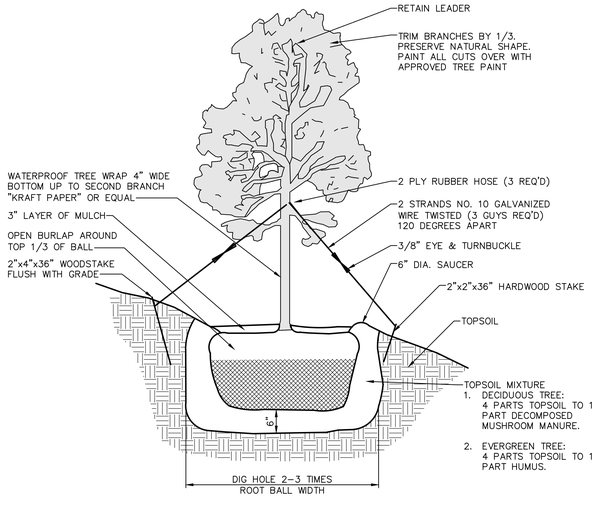
REQUIRED BUFFER YARD = 15'
[§27-707]

BUFFER YARD PROVIDED = 15' (MINIMUM)

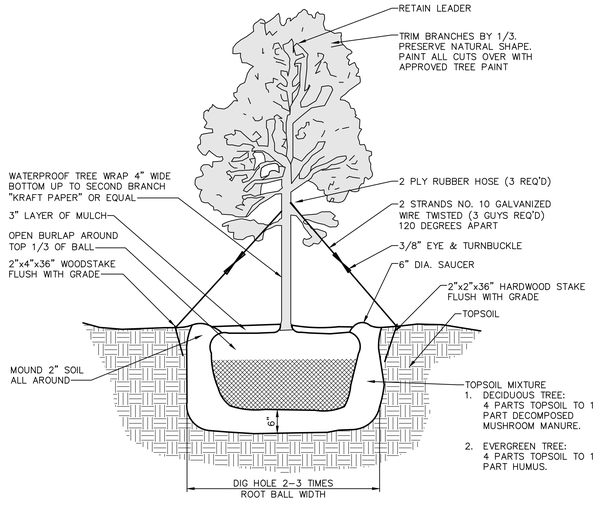
BUFFER YARD REQUIREMENTS = 3 CANOPY TREES PER 100' OF BUFFER YARD
4 UNDERSTORY/EVERGREEN TREES PER 100' OF BUFFER YARD

LANDSCAPING GENERAL NOTES:

1. THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
2. THE CONTRACTOR SHALL REFER TO THE PLANT LIST FOR SEASONAL REQUIREMENTS AND OTHER RESTRICTIONS RELATED TO THE TIME OF PLANTING.
3. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING SHOWN ON ALL DRAWINGS.
4. ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN OR EQUIVALENT.
5. NO PLANT SHALL BE PUT INTO THE GROUND BEFORE ROUGH GRADING HAS BEEN FINISHED AND APPROVED BY THE PROJECT ENGINEER.
6. THE DAY PRIOR TO PLANTING, THE LOCATION OF ALL TREES AND SHRUBS SHALL BE STAKED FOR APPROVAL BY THE OWNER.
7. ALL PLANTS SHALL BE INSTALLED AS PER DETAILS AND THE CONTRACT SPECIFICATIONS AND IN ACCORDANCE WITH THE "GUIDE TO PLANTING IN FERGUSON TOWNSHIP."
8. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL GRADE BEFORE DIGGING.
9. ALL PLANTS SHALL BE BALLED AND WRAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL ROOT WRAPPING MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED AT TIME OF PLANTING.
10. WITH CONTAINER GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE CONTAINER BALL SHALL BE CUT THROUGH THE SURFACE IN TWO VERTICAL LOCATIONS.
11. PLANT AT ABOUT THE SAME DEPTH, OR NOT TO EXCEED ONE-HALF INCH DEEPER THAN IT WAS IN THE NURSERY. USE THE ROOT COLLAR FOR DEPTH JUDGMENT.
12. INSTALL THE MAIN ROOTS NEARLY STRAIGHT AND SPREAD OUT, NOT DOUBLED, OR SHARPLY BENT.
13. INSTALL THE SOIL FIRMLY AROUND THE ROOTS. LEAVE NO AIR POCKETS.
14. INSTALL THE TREE IN AN UPRIGHT POSITION, AND HAVE IT NEARLY EVEN WITH THE GENERAL GROUND LEVEL, NOT SUNK IN A HOLE OR RAISED ON A MOUND.
15. ALL PLANTS AND STAKES SHALL BE SET PLUMB UNLESS OTHERWISE SPECIFIED.
16. ALL PLANTS SHALL BE SPRAYED WITH AN ANTIDESSICANT WITHIN 24 HOURS AFTER PLANTING. IN TEMPERATE ZONES, ALL PLANTS SHALL BE SPRAYED WITH AN ANTIDESSICANT AT THE BEGINNING OF THEIR FIRST WINTER.
17. THE CONTRACTOR SHALL PROVIDE LOAM FILL AS PER THE CONTRACT DOCUMENTS.
18. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY OR MORE OFTEN, IF NECESSARY, DURING THE FIRST GROWING SEASON.
19. THE GENERAL CONTRACTOR SHALL REFER TO THE CONTRACT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
20. MULCH COLOR TO BE SELECTED BY THE OWNER. MINIMUM MULCH DIAMETER SHALL BE 6 FEET.
21. ALL TREES SHALL HAVE TEMPORARY TAGS IDENTIFYING SIZE, SPECIES AND SOURCE OF MATERIALS FIRMLY ATTACHED TO TRUNK.
22. ALL TREES AND SHRUBS SHALL BE PLANTED IN ACCORDANCE WITH THE "GUIDE TO ARBOR WORK IN FERGUSON TOWNSHIP."



TREE PLANTING DETAIL
ON SLOPED GRADE
NO SCALE



TREE PLANTING DETAIL
ON LEVEL GRADE
NO SCALE

GRAPHIC SCALE
10 0 5 10 20 40
1 inch = 10 ft.

NO.	DATE	DESCRIPTION

REVISIONS

SEAL

LANDSCAPING PLAN

STATE COLLEGE BOROUGH
WATER AUTHORITY

KOCHER WELL FIELD
WATER PUMPING IMPROVEMENTS

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

DATE: 2/17/2021 | JOB: 16049 | SCALE: AS SHOWN
FILE: | DRAWN BY: AJL | CHECKED BY: KWB

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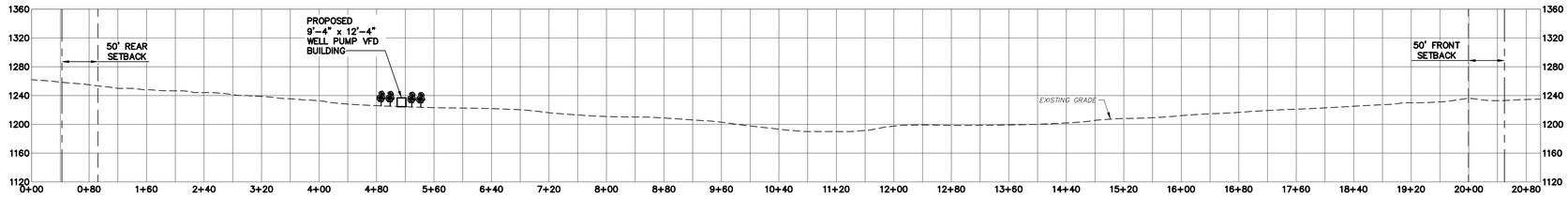
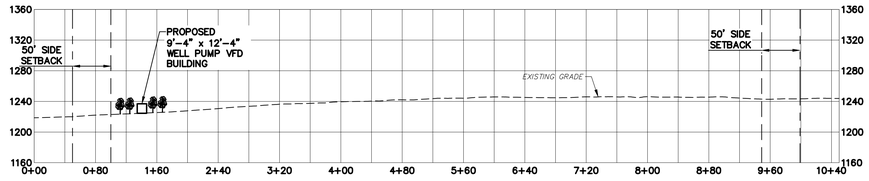


SECTION A–A – SHEET 2



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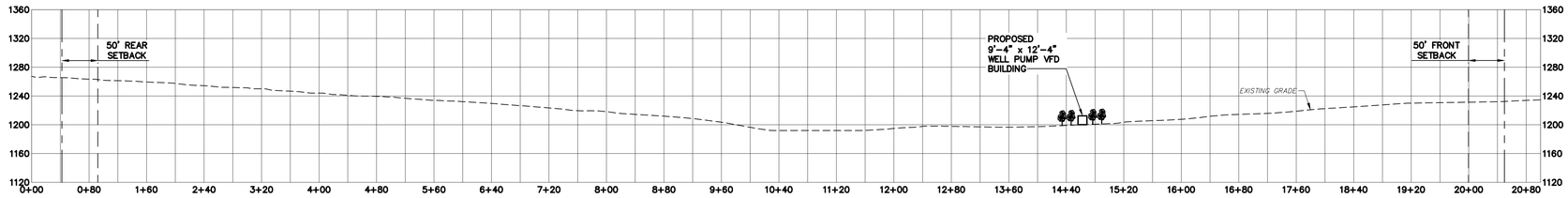

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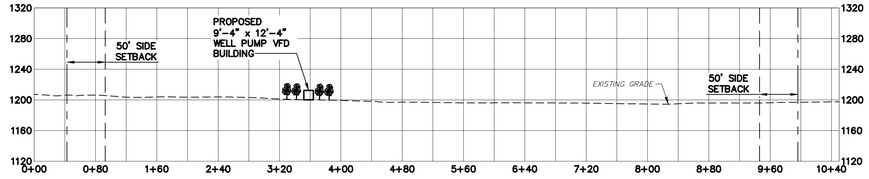

SECTION D–D – SHEET 2

NO.	DATE	DESCRIPTION

REVISIONS

KENNETH WILLIAM BELDIN, JR. REGISTERED PROFESSIONAL ENGINEER VAL. PE061566 PENNSYLVANIA

SEAL

FINAL LAND DEVELOPMENT SECTIONS

STATE COLLEGE BOROUGH
WATER AUTHORITY

KOCHER WELL FIELD
WATER PUMPING IMPROVEMENTS

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

DATE: 2/17/2021	JOB: 16049	SCALE: AS SHOWN
FILE:	DRAWN BY: BRP	CHECKED BY: KWB

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NOTES:

LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

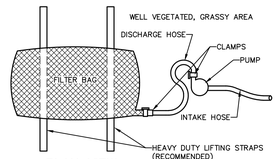
BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5% FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

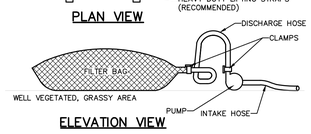
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.



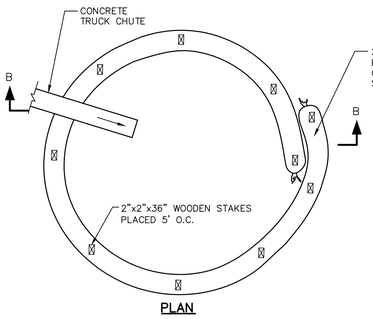
PLAN VIEW



ELEVATION VIEW

PUMPED WATER FILTER BAG DETAIL

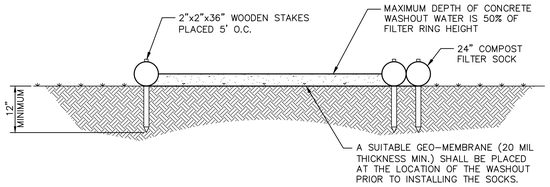
NO SCALE



PLAN

NOTES:

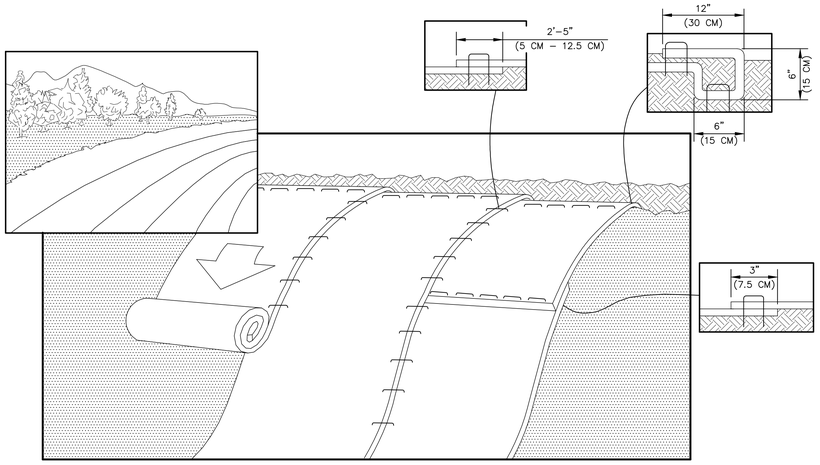
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE
2. 18" DIAMETER MAY BE STACKED ONTO DOUBLE 24" DIAMETER SOCKS IN PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT.



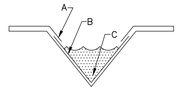
SECTION B-B

COMPOST SOCK WASHOUT INSTALLATION

NO SCALE



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP's IN A 6" (15CM) DEEP x 6" (15CM) WIDE TRENCH WITH APPROXIMATELY 12" (30CM) OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30CM) PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30CM) APART ACROSS THE WIDTH OF THE RECP's.
3. ROLL CENTER RECP's (A.) DOWN OR (B.) HORIZONTALLY ACROSS SLOPE. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP's MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5CM-12.5CM) OVERLAP DEPENDING ON RECP's TYPE.
5. CONSECUTIVE RECP's SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30CM) APART ACROSS ENTIRE RECP's WIDTH.
6. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15CM) MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.



CRITICAL POINTS:

A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM/SIDE SLOPE VERTICES

NOTES:

* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.

SLOPE INSTALLATION DETAIL

NO SCALE

TEMPORARY AND PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS

PROJECT NAME:	KOCHER WELL FIELD		
LOCATION:	FERGUSON TOWNSHIP, CENTRE COUNTY, PA		
PREPARED BY:	AJL	DATE:	2/17/21
CHECKED BY:	KWB	DATE:	2/17/21

SPECIFICATIONS: THE DEPARTMENT RECOMMENDS THE USE OF THE PENN STATE PUBLICATION, "EROSION CONTROL AND CONSERVATION PLANTINGS ON NONCROPLAND," AS THE STANDARD TO USE FOR THE SELECTION OF SPECIES, SEED SPECIFICATIONS, MIXTURES, LIMING AND FERTILIZING, TIME OF SEEDING, AND SEEDING METHODS. SPECIFICATIONS FOR THESE ITEMS MAY ALSO BE OBTAINED FROM PENNDOT PUBLICATION #408, SECTION 804 OR BY CONTACTING THE APPLICABLE COUNTY CONSERVATION DISTRICT. UPON SELECTION OF A REFERENCE, THAT REFERENCE SHOULD BE USED TO PROVIDE ALL SPECIFICATIONS FOR SEEDING, MULCHING, AND SOIL AMENDMENTS. THE FOLLOWING SPECIFICATION WILL BE USED FOR THIS PROJECT:

(TEMPORARY)

***SPECIES:**	ANNUAL RYEGRASS OR WINTER RYE
% PURE LIVE SEED:	85%
APPLICATION RATE:	10 (RYEGRASS) OR 56 (WINTER RYE) LB./ACRE
FERTILIZER TYPE:	10-10-10
FERTILIZER APPL. RATE:	500 LB./ACRE
LIMING RATE:	1 T./ACRE
MULCH TYPE:	STRAW
MULCHING RATE:	3 T./ACRE

(PERMANENT)

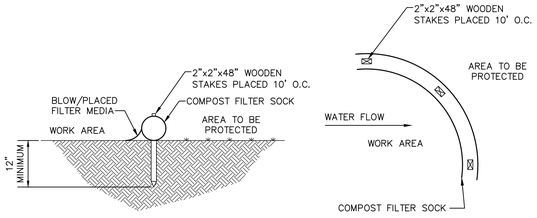
TOPSOIL PLACEMENT DEPTH:	6 IN.
***SPECIES:**	PA VALLEY & RIDGE PROVINCE UPLAND GRASS MIX (ERNST SEED MIX NO. ERNMX-230)
% PURE LIVE SEED:	87%
APPLICATION RATE:	20 LB./ACRE
FERTILIZER TYPE:	10-10-20
FERTILIZER APPL. RATE:	1000 LB./ACRE
LIMING RATE:	6 T./ACRE
MULCH TYPE:	STRAW
MULCHING RATE:	3 T./ACRE
ANCHOR MATERIAL:	N/A
ANCHORING METHOD:	MECHANICAL CRIMPING
RATE OF ANCHOR MATERIAL APPL:	N/A
SEEDING SEASON DATES:	MARCH 15 - JUNE 1 AND AUGUST 1 - OCTOBER 1

PERMANENT SEED SCHEDULE

ERNMX #ERNMX-230 (PA VALLEY & RIDGE PROVINCE UPLAND GRASS MIX)
SEEDING RATE 20 LBS/ACRE, OR 1/2 LB/1,000 SQ. FT.
MIX TYPE: UPLANDS & MEADOWS

SPECIES LIST:

- 32.0% SCHIZACHYRIUM SCOPARIUM, FORT INDIANTOWN GAP-PA ECOTYPE (LITTLE BLUESTEM, FORT INDIANTOWN GAP-PA ECOTYPE)
- 32.0% SORGHASTRUM NUTANS, PA ECOTYPE (INDIANGRASS, PA ECOTYPE)
- 25.0% ELYMUS VIRGINICUS, PA ECOTYPE (VIRGINIA WILDRYE, PA ECOTYPE)
- 5.0% ANDROPOGON GERARDII, 'NIAGARA' (BIG BLUESTEM, 'NIAGARA')
- 5.0% PANICUM VIRGATUM, 'SHELTER' (SWITCHGRASS, 'SHELTER')
- 1.0% PANICUM CLANDESTINUM, 'TIOGA (DEERTONGUE, 'TIOGA)



COMPOST FILTER SOCK

NOTES:

1. SEE PLAN VIEW FOR SOCK SIZE AND LOCATION.
2. SOCK FABRIC SHALL MEET THE STANDARDS OF TABLE 4.1 AND COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PADEP EROSION CONTROL BMP MANUAL.
3. SLOPE LENGTHS SHALL NOT EXCEED THE LENGTHS SHOWN ON FIGURE 4.2 OF THE PADEP EROSION CONTROL BMP MANUAL.

COMPOST FILTER SOCK DETAIL

NO SCALE

MULCHING AND SEEDING NOTES

A. SEED MIXTURES AND APPLICATION RATES SHALL BE AS SET FORTH IN SECTION 804 OF THE PENNDOT CONSTRUCTION SPECIFICATIONS (PUBLICATION 408). PLEASE NOTE THAT THERE MAY BE ACIDIC SOILS PRESENT ON THE SITE. THIS LIMITS THE TYPE AND SPECIES OF VEGETATION TO BE USED FOR STABILIZATION.

B. PROVIDE SEED CONFORMING TO THE REGULATIONS OF CHAPTER 71 - SEED OF THE PENNSYLVANIA SEED ACT 164 OF 2004, EFFECTIVE JANUARY 29, 2005, AND AMENDMENTS AND MEET ANY OTHER APPLICABLE REGULATIONS OF THE SEED, TESTING AND CERTIFICATION PROGRAMS OF THE PENNSYLVANIA DEPARTMENT OF AGRICULTURE (PDA), BUREAU OF PLANT INDUSTRY. PROVIDE SEEDS THAT HAVE BEEN TESTED AND APPROVED FOR THE SPECIFIED SEED FORMULA'S PURITY, GERMINATION, AND WEED SEED ANALYSIS LIMITS AND OTHER APPLICABLE PDA RULES FOR SEED TESTING. PROVIDE CERTIFIED SEED FOR ALL KENTUCKY BLUEGRASS, PERENNIAL RYEGRASS, CREEPING RED FESCUE, CHEWINGS FESCUE AND HARD FESCUE VARIETIES SUBMITTED FOR EACH SEED FORMULA.

C. PROVIDE PREMIXED SEED MIXTURES FROM A LICENSED SEED DISTRIBUTOR/SEED MIXING COMPANY LOCATED WITHIN THE COMMONWEALTH AND MIXED UNDER THE SUPERVISION OF THE PDA FOR THE DESIGNATED PENNDOT SEED FORMULAS. USE ONLY SEED THAT HAS AN APPROVED SEED INSPECTOR'S TAG OR LABEL SIGNED BY A PDA INSPECTOR SEWN OR STAPLED TO THE OUTSIDE OF EACH SEED BAG OR OTHER CONTAINER IN A CONSPICUOUS PLACE. PRESSURE SENSITIVE LABELS MAY BE USED ON PAPER OR PLASTIC CONTAINERS.

D. SEED MIXTURES MAY ALSO BE MIXED TO PROJECT SPECIFICATIONS AT THE PROJECT SITE FOR SPECIAL SEED FORMULAS IF ALL SPECIFIED SEED SPECIES HAVE BEEN PREVIOUSLY INSPECTED, TESTED, AND APPROVED BY PDA FOR THE DESIGNATED PURITY, GERMINATION, WEED SEED LIMITS, OR PURE LIVE SEED ANALYSIS. MIX THE SEED SPECIES TO THE DESIGNATED FORMULA OR MIXTURE SPECIFICATIONS UNDER SUPERVISION BY THE ENGINEER.

E. DO NOT USE SEED FROM CONTAINERS THAT HAVE NOT BEEN PROPERLY SEALED. DO NOT USE SEED THAT HAS A SELL-BY DATE OF MORE THAN 15 MONTHS FROM THE DATE OF THE INSPECTION, EXCLUSIVE OF THE MONTH OF THE TEST. THE ENGINEER MAY REJECT OR REQUEST RE-TESTING FOR ANY QUESTIONABLE SEED DELIVERED TO THE PROJECT.

F. KEEP SEEDING RATE TO THAT RECOMMENDED IN THE TABLES. SEED MIXTURES CONTAINING INVASIVE SPECIES SHOULD NOT BE USED IN AREAS ADJACENT TO WETLANDS OR STREAM CHANNELS.

G. PREPARE AREAS FOR SEEDING BY UNIFORMLY APPLYING SUPPLEMENTS. BLEND THE INITIAL SOIL SUPPLEMENTS INTO THE SOIL AT LEAST 2 INCHES, ON TOPSOILED AREAS, BY RAKING, DISKING, HARROWING, OR OTHER ACCEPTABLE METHODS. BLEND THE SUPPLEMENTS INTO THE SOIL DURING TILLAGE OPERATIONS.

H. APPLY SLOW-RELEASE NITROGEN FERTILIZER TO THE SURFACE OF FORMULA B AND D SEEDED AREAS BEFORE PROJECT COMPLETION. DO NOT APPLY SLOW-RELEASE NITROGEN FERTILIZER SUPPLEMENT TO FORMULA C SEEDED AREAS.

I. FILL SLOPES SHOULD BE SEEDED AND MULCHED AT REGULAR VERTICAL INCREMENTS, 15 TO 25 FEET MAXIMUM, AS THE FILL IS BEING CONSTRUCTED. THIS WILL ALLOW THE BOTTOM OF THE FILL TO PROGRESS TOWARD STABILIZATION WHILE WORK CONTINUES ON THE UPPER PORTION, MAKING FINAL STABILIZATION EASIER TO ACHIEVE AND PROVIDING SOME VEGETATIVE BUFFERING AT THE BOTTOM OF THE SLOPE.

J. WHEREVER SEED AND/OR MULCH IS APPLIED BY HYDROSEEDING METHODS, THE SEED AND MULCH SHOULD BE APPLIED IN SEPARATE APPLICATIONS WITH THE SEED BEING APPLIED FIRST AND THE MULCH SPRAYED ON TOP OF THE SEED. THIS IS TO ENSURE THAT THE SEED MAKES CONTACT WITH THE UNDERLYING SOIL. SOIL PREPARATION SHOULD BE COMPLETED PRIOR TO ADDING SEED TO THE HYDROSEEDING EQUIPMENT. RUNNING SEED THROUGH THE PUMPING SYSTEM CAN RESULT IN EXCESSIVE ABRASION OF THE SEED AND REDUCE THE PERCENTAGE OF PURE LIVE SEED IN THE APPLICATION. THEREFORE ALL SITE PREPARATION SHOULD BE COMPLETED PRIOR TO THE ARRIVAL OF THE HYDROSEEDER.

K. VEHICULAR TRAFFIC SHOULD BE RESTRICTED FROM AREAS TO BE SEEDED TO PREVENT SOIL COMPACTION.

L. PLACE MULCH, OF THE TYPE INDICATED, IMMEDIATELY AFTER SEEDING IS COMPLETED. UNLESS OTHERWISE INDICATED, PLACE ONLY STRAW OR WOOD FIBER OVER TOPSOILED AREAS. USE HAY, STRAW, OR WOOD FIBER IN OTHER AREAS.

M. PLACE HAY OR STRAW UNIFORMLY, IN A CONTINUOUS BLANKET, AT A MINIMUM RATE OF 1,200 POUNDS PER 1,000 SQUARE YARDS. AN ACCEPTABLE MECHANICAL BLOWER MAY BE USED TO APPLY MULCH. DO NOT USE MACHINES THAT CUT MULCH INTO SHORT PIECES.

N. MULCH TEMPORARILY SEEDED AREAS WITH HAY.

RECYCLING AND DISPOSAL OF WASTE MATERIAL

1. ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH DEP'S SOLID WASTE MANAGEMENT REGULATIONS OF 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ. AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED MATERIALS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THE SITE.
2. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF WASTE FROM THIS PROJECT AT AN APPROVED DISPOSAL SITE (SEE NOTES 2 AND 3 BELOW). THE CONTRACTOR WILL INSPECT THE PROJECT AREA WEEKLY. THE CONTRACTOR WILL PROPERLY AND LEGALLY DISPOSE OF ALL CONSTRUCTION WASTES. MATERIALS WILL BE SEPARATED FROM OTHER WASTES AND HANDLING FOR SUITABLE RECYCLING. RECEIPTS FROM THE RECYCLING CENTERS SHALL BE FILED WITH THE ENGINEER.
3. THE CONTRACTOR IS RESPONSIBLE FOR DEPOSITING OF ALL CLEAN/SAFE FILL, AS DEFINED BY PA CODE, TITLE 25, INCLUDING, BUT NOT LIMITED TO, EXCESS SOIL MATERIALS, AT AN OFFSITE LOCATION TO BE DETERMINED BY THE GENERAL CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. IF POTENTIALLY HAZARDOUS MATERIAL IS OBSERVED DURING CONSTRUCTION EXCAVATION, THE ENGINEER WILL EVALUATE THE MATERIAL IN ACCORDANCE WITH THE CLEAN/SAFE FILL POLICY REGULATIONS. IF QUESTIONABLE MATERIAL IS ENCOUNTERED, ALL CONSTRUCTION ACTIVITIES SHALL CEASE UNTIL THE SITE IS ENVIRONMENTALLY CLEARED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR A SEPARATE WRITTEN E&S PLAN FOR PROPOSED PERMANENT WASTE/SPOIL AREAS GREATER THAN 5,000 SQUARE FEET IN DISTURBANCE; THE WASTE AREA MUST COMPLY WITH ALL CHAPTER 102 EROSION CONTROL RULES AND REGULATIONS, INCLUDING NPDES PERMIT REQUIREMENTS IF GREATER THAN 1 ACRE OF DISTURBED GROUND OCCURS: THE WASTE/SPOIL AREA MUST COMPLY WITH CHAPTER 105 STREAM ENCROACHMENT REGULATIONS AND BE MORE THAN 50 FEET FROM ANY FLOODWAY, TOP OF STREAM BANK OR WETLANDS.
5. ANY MATERIAL THAT DOES NOT MEET THE CRITERIA OF THE CLEAN/SAFE FILL POLICY SHALL BE DISPOSED OF AT A PA DEP APPROVED SITE.
6. ALL MATERIALS USED FOR THE CONSTRUCTION AND MAINTENANCE OF THE TREATMENT FACILITY AND ANY APPURTENANT CONSTRUCTION, AS WELL AS ANY UNDISCLOSED OR UNKNOWN ITEMS/OBJECTS REVEALED BY EXCAVATING OR GRADING, WILL BE REMOVED FROM THE PROJECT AREA BY THE CONTRACTOR AND DISPOSED OF PROPERLY. WASTE DISPOSAL IN LANDFILLS SHALL BE MINIMIZED TO THE GREATEST EXTENT POSSIBLE. OF THE INEVITABLE WASTE THAT IS GENERATED, AS MUCH OF THE WASTE MATERIAL AS ECONOMICALLY FEASIBLE SHALL BE SALVAGED, RECYCLED OR REUSED.

THE CONTRACTOR SHALL USE ALL REASONABLE MEANS TO DIVERT CONSTRUCTION AND DEMOLITION WASTE FROM LANDFILLS AND INCINERATORS, AND FACILITATE THEIR SALVAGE AND RECYCLE INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:

A. WASTE MANAGEMENT PLAN DEVELOPMENT AND IMPLEMENTATION.
B. TECHNIQUES TO MINIMIZE WASTE GENERATION.
C. SORTING AND SEPARATING OF WASTE MATERIALS.
D. SALVAGE OF EXISTING MATERIALS AND ITEMS FOR REUSE OR RESALE.
E. RECYCLING OF MATERIALS THAT CANNOT BE REUSED OR SOLD.

AT A MINIMUM, THE FOLLOWING WASTE CATEGORIES SHALL BE DIVERTED FROM LANDFILLS:

- SOIL.
- INERTS (EG, CONCRETE, MASONRY AND ASPHALT).
- CLEAN DIMENSIONAL WOOD AND PALETTE WOOD.
- GREEN WASTE (BIODEGRADABLE LANDSCAPING MATERIALS).
- ENGINEERED WOOD PRODUCTS (PLYWOOD, PARTICLE BOARD AND I-JOISTS, ETC).
- METAL PRODUCTS (EG, STEEL, WIRE, BEVERAGE CONTAINERS, COPPER, ETC).
- CARDBOARD, PAPER AND PACKAGING.
- BITUMEN ROOFING MATERIALS.
- PLASTICS (EG, ABS, PVC).
- CARPET AND/OR PAD AND OTHER FLOORING MATERIALS.
- GYPSUM BOARD.
- INSULATION.
- PAINT.
- FLUORESCENT LAMPS.

THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN THE MANAGEMENT OF NON-HAZARDOUS BUILDING CONSTRUCTION AND DEMOLITION WASTE. THEY SHALL ALSO CONDUCT A SITE ASSESSMENT TO ESTIMATE THE TYPES OF MATERIALS THAT WILL BE GENERATED BY DEMOLITION AND CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF ANY SPECIAL PROGRAMS INVOLVING REBATES OR SIMILAR INCENTIVES RELATED TO RECYCLING AND PROVIDE ALL DEMOLITION, REMOVAL AND LEGAL DISPOSAL OF MATERIALS. THE CONTRACTOR SHALL ENSURE THAT FACILITIES USED FOR RECYCLING, REUSE AND DISPOSAL SHALL BE PERMITTED FOR THE INTENDED USE TO THE EXTENT REQUIRED BY LOCAL, STATE, FEDERAL REGULATIONS. THE WHOLE BUILDING DESIGN GUIDE WEBSITE (HTTP://WWW.WBDG.ORG/TOOLS/CWM.PHP) PROVIDES A CONSTRUCTION WASTE MANAGEMENT DATABASE THAT CONTAINS INFORMATION ON COMPANIES THAT HAUL, COLLECT, AND PROCESS RECYCLABLE DEBRIS FROM CONSTRUCTION PROJECTS.

THE CONTRACTOR SHALL ASSIGN A SPECIFIC ONSITE AREA TO FACILITATE SEPARATION OF MATERIALS FOR REUSE, SALVAGE, RECYCLING AND RETURN. SUCH AREAS ARE TO BE KEPT NEAT AND CLEAN AND CLEARLY MARKED IN ORDER TO AVOID CONTAMINATION OR MIXING OF MATERIALS. ONSITE INSTRUCTIONS AND SUPERVISION OF SEPARATION, HANDLING, SALVAGING, RECYCLING, REUSE AND RETURN METHODS TO BE USED BY ALL PARTIES DURING WASTE GENERATING STAGES SHALL BE AVAILABLE AT ALL TIMES. RECORDS OF DAILY REPORTS INDICATING ANY PROBLEMS IN COMPLYING WITH REUSE, SALVAGE, RECYCLING AND RETURN SHALL BE KEPT ONSITE AT ALL TIMES AND SHALL NOTE ANY CORRECTIVE ACTIONS TAKEN FOR COMPLIANCE.

NO.	DATE	DESCRIPTION

REVISIONS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL KENNETH WILLIAM BELDIN, JR. ENGINEER No. PE051580

SEAL

EROSION AND SEDIMENT CONTROL (ESC) NOTES AND DETAILS

STATE COLLEGE BOROUGH WATER AUTHORITY

KOCHER WELL FIELD
WATER PUMPING IMPROVEMENTS

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

DATE: 2/17/2021	JOB: 16049	SCALE: AS SHOWN
FILE:	DRAWN BY: AJL	CHECKED BY: KWB

GD&F
GWIN DOBSON & FOREMAN ENGINEERS
3121 Fairway Drive
Altoona, PA 16602
814.943.5214
gdfengineers.com

SHEET NO:

D-1

PLOT CREATED: 2/17/2021 1:52 PM

G:\16049\LAND DEVELOPMENT\KOCHER WELL FIELD LDP\16049_KOCHER_LD_D-1

STANDARD EROSION AND SEDIMENT CONTROL NOTES

1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.

2. AT LEAST TEN (10) 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 AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE PRE-CONSTRUCTION MEETING.

3. AT LEAST THREE (3) BUSINESS 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.

4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCES PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (PADEP) PRIOR TO IMPLEMENTATION.

5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.

6. 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.

7. 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.

8. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE CENTRE COUNTY CONSERVATION DISTRICT AND/OR THE DEP REGIONAL OFFICE.

9. 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 DISCHARGED AT THE SITE.

10. ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE PADEP FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.

11. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.

12. 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.

13. 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.

14. 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.

15. ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED IN THE PLAN.

16. 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 6 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.

17. 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.

18. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.

19. 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.

20. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.

21. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.

22. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.

23. 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.

24. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUB-AREA 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.

25. 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.

26. E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.

27. 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/CONVERSION OF THE E&S BMPS.

28. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPS. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID RE-VEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.

29. 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.

30. 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 PADEP 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.

31. CONCRETE WASH WATER SHALL BE HANDLED IN THE MANNER DESCRIBED IN THE PLAN. IN NO CASE SHALL IT BE ALLOWED TO ENTER ANY SURFACE WATERS OR GROUNDWATER SYSTEMS.

32. BIODEGRADABLE DOUBLE NET EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES GREATER THAN 3H:1V, ALL CHANNEL SIDES AND BOTTOMS AND IN ALL DISTURBED AREAS WITHIN 100 FEET OF WATER OF THE COMMONWEALTH.

33. MULCH APPLIED TO PERMANENTLY STABILIZED AREAS IS TO BE MECHANICALLY CRIMPED TO PREVENT BLOW OFF AND LOSS OF MULCH FROM RAINFALL. IN THE EVENT THAT MECHANICAL CRIMPING IS INEFFECTIVE, THE MULCH SHALL BE ANCHORED BY A NON-TOXIC BINDING EMULSION APPLIED TO THE MULCH AT THE MANUFACTURERS RECOMMENDED RATE. MANUFACTURERS INFORMATION MUST BE PROVIDED TO THE ENGINEER TO VERIFY THAT THE COMPONENTS OF THE EMULSION ARE NON-TOXIC TO VEGETATION AND ANIMAL SPECIES.

STORMWATER MANAGEMENT STATEMENT

THE DEVELOPMENT ACTIVITIES IDENTIFIED IN THIS PLAN ARE EXEMPT FROM THE REQUIREMENT TO SUBMIT A STORMWATER MANAGEMENT SITE PLAN TO FERGUSON TOWNSHIP FOR REVIEW, BUT REMAIN SUBJECT TO THE DESIGN STANDARDS AND CRITERIA OF CHAPTER 26 (STORMWATER MANAGEMENT) OF THE FERGUSON TOWNSHIP CODE OF ORDINANCES. THE DEVELOPMENT WILL CREATE A LAND DISTURBANCE OF LESS THAN 5,000 SQUARE FEET. RUNOFF FROM THE VFD BUILDINGS IS DISCHARGED VIA GUTTERS TO SPLASH BLOCKS WHICH THEN TRAVELS OVERLAND TO A FEMA IDENTIFIED FLOODPLAIN. ADEQUATE DISCONNECTION OF THE RUNOFF FROM THE DISCHARGE LOCATION AT EACH STRUCTURE IS PROVIDED BEFORE REACHING THE FLOODPLAIN OR LEAVING THE PROPERTY AND THE HEALTH, SAFETY, AND PROPERTY OF DOWNSTREAM OWNERS WILL NOT BE NEGATIVELY AFFECTED BY THE CONSTRUCTION OF THE VFD BUILDINGS.

EROSION AND SEDIMENT CONTROL CONSTRUCTION SEQUENCE

A. ALL EARTH DISTURBANCE AND CONSTRUCTION ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE DRAWINGS. DEVIATION FROM THIS SEQUENCE MUST BE APPROVED BY THE ENGINEER, THE CENTRE COUNTY CONSERVATION DISTRICT AND/OR THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (PADEP) PRIOR TO IMPLEMENTATION. EACH STEP OF THE SEQUENCE SHALL BE COMPLETED BEFORE PROCEEDING TO THE NEXT STEP, EXCEPT AS NOTED.

B. A PRE-CONSTRUCTION MEETING SHALL BE HELD AND NOTIFICATION MUST BE PROVIDED TO THE ENGINEER PRIOR TO THE ISSUANCE OF NOTICE TO PROCEED WITH CONSTRUCTION. THE CONTRACTOR IS TO NOTIFY THE ENGINEER, OWNER AND THE CENTRE COUNTY CONSERVATION DISTRICT AT LEAST TEN (10) WORKING DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION TO SCHEDULE THE MEETING. THE CONTRACTOR MAY ALSO BE REQUIRED BY THE STATE COLLEGE BOROUGH WATER AUTHORITY TO BE LISTED AS A CO-PERMITTEE ON SOME PERMITS.

C. AT LEAST THREE (3) WORKING DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA THAT WAS PREVIOUSLY UNMARKED, NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM FOR THE LOCATION OF ANY EXISTING UNDERGROUND UTILITIES. THE LIMITS OF DISTURBANCE (LOD), WATERS OF THE COMMONWEALTH AND ANY OTHER SENSITIVE ENVIRONMENTAL FEATURES SHALL ALSO BE CLEARLY MARKED AND DELINEATED IN THE FIELD PRIOR TO THE BEGINNING OF ANY EARTH DISTURBANCE ACTIVITY.

D. AREAS TO BE PROTECTED, WATERS OF THE COMMONWEALTH AND ANY OTHER SENSITIVE ENVIRONMENTAL FEATURES SHALL ALSO BE CLEARLY MARKED AND DELINEATED IN THE FIELD PRIOR TO THE BEGINNING OF ANY EARTH DISTURBANCE ACTIVITY. ANY AREA THAT IS LEFT UNDISTURBED FOR FOUR (4) DAYS OR GREATER SHALL BE TEMPORARILY STABILIZED UNTIL GRADING OPERATIONS RE-COMMENCE. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES GREATER THAN 3H:1V AND IN ALL DISTURBED AREAS WITHIN 100 FEET OF WATERS OF THE COMMONWEALTH. AREAS WITHIN 100 FEET OF WATERS OF THE COMMONWEALTH SHALL BE PERMANENTLY STABILIZED WITH SEED AND EROSION CONTROL MATTING IMMEDIATELY UPON REACHING FINAL GRADE.

E. INSTALL COMPOST FILTER SOCKS AS SHOWN ON THE APPROVED ESC PLAN DRAWINGS. AFTER INSTALLATION OF THE PERIMETER SEDIMENT CONTROLS, NOTIFY THE CENTRE COUNTY CONSERVATION DISTRICT AT LEAST THREE (3) WORKING DAYS PRIOR TO ANY FURTHER CONSTRUCTION TO PERFORM AN INSPECTION OF THE LOCATION AND CONSTRUCTION OF THE PERIMETER SEDIMENT CONTROLS. NO CONSTRUCTION ACTIVITIES MAY BE PERFORMED UNTIL AUTHORIZATION TO PROCEED WITH CONSTRUCTION ACTIVITIES IS PROVIDED TO THE CONTRACTOR BY A REPRESENTATIVE FROM THE CENTRE COUNTY CONSERVATION DISTRICT.

F. BEGIN CONSTRUCTION OF VFD CONTROL BUILDING FOUNDATIONS AND THE UNDERGROUND ELECTRICAL CONDUITS LINKING THE MAIN CONTROL BUILDING TO EACH VFD CONTROL BUILDING. UPON COMPLETION OF THE FOUNDATION CONSTRUCTION AND CONDUIT INSTALLATION, TEMPORARILY STABILIZE ALL DISTURBED AREAS WITH THE APPROPRIATE SEED MIXTURE AND MULCH BEFORE CONTINUING CONSTRUCTION ACTIVITIES.

G. CONTINUE THE CONSTRUCTION OF THE VFD CONTROL BUILDINGS. INSTALL ANY REQUIRED LANDSCAPING AND PERMANENTLY STABILIZED ALL DISTURBED AREAS WITH THE APPROPRIATE SEED MIXTURE AND BIODEGRADABLE, DOUBLE NET EROSION CONTROL MATTING.

H. REMOVE REMAINING SEDIMENT AND EROSION CONTROLS AFTER UNIFORM 70% VEGETATIVE COVER OF EROSION RESISTANT PERENNIAL VEGETATION HAS BEEN ESTABLISHED AND APPROVAL TO REMOVE THE CONTROLS HAS BEEN PROVIDED BY THE CENTRE COUNTY CONSERVATION DISTRICT. PERMANENTLY STABILIZE ALL AREAS DISTURBED DURING THE REMOVAL OF THE PERIMETER CONTROLS. ADDITIONAL SEED AND MULCH, AND IF APPLICABLE, EROSION CONTROL MATTING ARE TO BE PLACED AS NECESSARY TO PROMOTE REVEGETATION OF ANY AREAS WHICH ARE DISTURBED DUE TO REMOVAL OF CONTROLS.

EROSION AND SEDIMENT CONTROL MAINTENANCE SCHEDULE

1. ALL SEDIMENT AND EROSION CONTROL FACILITIES SHALL BE CHECKED FOR DAMAGE AND CLOGGING ON A WEEKLY BASIS AND AFTER EACH STORM EVENT. ALL FACILITIES THAT ARE DAMAGED, CLOGGED, OR CAN NO LONGER PERFORM IN THE MANNER FOR WHICH THEY WERE DESIGNED SHALL BE REPLACED.

2. ANY PERMANENTLY STABILIZED AREAS THAT BECOME ERODED SHALL HAVE THE TOPSOIL REPLACED AND THE GRASS SOWN AGAIN WITH NEW MULCH APPLIED. IF CULTIVATION OF A NEW LEGUME OR GRASS CROP IS NOT PRACTICAL IN THE ERODED AREA, THE CONTRACTOR SHALL INSTALL NYLON EROSION CONTROL MATS.

3. IF THE VEGETATIVE COVER ESTABLISHED IS ALLOWED TO DETERIORATE AND BECOME INEFFECTIVE, A FERTILIZATION AND SEEDING PROGRAM SHALL BE ESTABLISHED AND CARRIED OUT AS THE CONSTRUCTION PROCEEDS. AREAS WHERE FAILURES HAVE BEEN EXPERIENCED IN THE ESTABLISHMENT OF BOTH PERMANENT AND TEMPORARY VEGETATIVE PROTECTION SHALL BE PROMPTLY TREATED. THE RE-ESTABLISHMENT OF PERMANENT VEGETATIVE COVER SHALL BE INITIATED AS SOON AS POSSIBLE.

4. WHEN THE ACCUMULATION OF SEDIMENT IN THE CONTROL DEVICES REACHES 1/3 THE DEPTH OF THE DEVICE OR AS SPECIFIED BY THE MANUFACTURER, THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN SUCH LOCATIONS AS DETERMINED BY THE CONTRACTOR AND APPROVED BY THE OWNER. THESE LOCATIONS SHALL BE SELECTED SUCH THAT THE SEDIMENT WILL NOT ERODE INTO THE CONSTRUCTION AREA OR ANY NATURAL WATERWAY.

5. ALL SEDIMENT AND EROSION FACILITIES MUST BE MAINTAINED IN OPERATING CONDITION UNTIL UPSTREAM AREAS ARE STABILIZED WITH FINAL GROUND COVER AND HAVE ESTABLISHED UNIFORM 70% VEGETATIVE COVER OR GREATER OF EROSION RESISTANT PERENNIAL SPECIES.

6. SEDIMENT DEPOSITED ON PAVED ROADWAYS SHOULD BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE THROUGH STREET SWEEPING AS NEEDED. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO THE ROADWAY DITCHES, SEWERS, CULVERTS OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

7. THE CONTRACTOR SHALL IMPLEMENT THIS PLAN, INCLUDING CONSTRUCTION AND MAINTENANCE.

8. THE OWNER IS RESPONSIBLE TO INSURE THAT THE CONTRACTOR IS PERFORMING THE WORK AS DETAILED IN THIS PLAN.

9. THE OWNER IS RESPONSIBLE FOR CONDUCTING INSPECTIONS DURING CONSTRUCTION ON A WEEKLY BASIS AND AFTER EACH RAINFALL EVENT AND RECORDING ANY DEFICIENCIES THAT MAY BE FOUND IN A LOG WHICH WILL BE MADE AVAILABLE UPON REQUEST.

10. THE CONTRACTOR SHALL PERMIT ALL OFFICIAL REPRESENTATIVES FROM PADEP AND THE CENTRE COUNTY CONSERVATION DISTRICT ON SITE TO INSPECT THE EROSION CONTROLS INSTALLED FOR THIS PROJECT. ALL DEFICIENCIES IN THE CONTROLS MUST BE CORRECTED IMMEDIATELY.

11. ALL TEMPORARY CONTROLS SHALL BE MAINTAINED AS FOLLOWS:

A. COMPOST FILTER SOCK MAINTENANCE:

1. THE COMPOST FILTER SOCK INSTALLATION SHOULD BE INSPECTED WEEKLY AND AFTER EVERY RAINFALL EVENT.
2. ACCUMULATED SEDIMENTS WILL BE REMOVED AS REQUIRED TO KEEP THE COMPOST FILTER SOCK FUNCTIONAL. IN ALL CASES, REMOVE DEPOSITS WHERE ACCUMULATIONS REACH 1/3 THE ABOVE GROUND HEIGHT OF THE COMPOST FILTER SOCK.
3. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
4. ADHERE TO ANY MANUFACTURER'S RECOMMENDATIONS FOR REPLACING COMPOST FILTER SOCK DUE TO WEATHERING.

B. EROSION CONTROL BLANKETS MAINTENANCE

1. BLANKETED AREAS SHALL BE INSPECTED WEEKLY OR AFTER ANY RAINFALL EVENT UNTIL A MINIMUM UNIFORM 70% COVERAGE OF EROSION RESISTANT PERENNIAL VEGETATION IS ESTABLISHED.
2. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN FOUR (4) CALENDAR DAYS.

C. CONCRETE WASHOUT STRUCTURES MAINTENANCE

1. CONCRETE WASHOUT STRUCTURES SHALL BE INSPECTED DAILY.
2. DAMAGED OR LEAKING STRUCTURES SHALL BE DE-ACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY.
3. ACCUMULATED MATERIALS SHALL BE REMOVED WHEN THEY REACH 50% CAPACITY.
4. PLASTIC LINERS SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.

D. PUMPED WATER FILTER BAG MAINTENANCE

1. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED.
2. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED.
3. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.
4. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEMS ARE DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

IMPORTING FILL MATERIAL

1. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ENVIRONMENTAL DUE DILIGENCE AND DETERMINE THAT ALL FILL IMPORTED MEETS PA DEP'S DEFINITION OF CLEAN FILL.
2. 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.)
3. ENVIRONMENTAL DUE DILIGENCE IS DEFINED AS: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREENS, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS.

NO.	DATE	DESCRIPTION

REVISIONS

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL KENNETH WILLIAM BELDIN, JR. ENGINEER No. PE081568

SEAL

EROSION AND SEDIMENT CONTROL (ESC) NOTES

STATE COLLEGE BOROUGH WATER AUTHORITY

KOCHER WELL FIELD WATER PUMPING IMPROVEMENTS

FERGUSON TOWNSHIP, CENTRE COUNTY, PENNSYLVANIA

DATE: 2/17/2021 | JOB: 16049 | SCALE: AS SHOWN

FILE: | DRAWN BY: AJL | CHECKED BY: KWB

GD&F
GWIN DOBSON & FOREMAN
ENGINEERS
3121 Fairway Drive
Altoona, PA 16602
814.943.5214
gdfengineers.com

SHEET NO: D-2

PLOT CREATED: 2/17/2021 1:53 PM

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TOWNSHIP OF FERGUSON

3147 Research Drive • State College, Pennsylvania 16801
Telephone: 814-238-4651 • Fax: 814-238-3454
www.twp.ferguson.pa.us

TO: Planning Commission

FROM: Kristina Aneckstein, Community Planner

DATE: March 8, 2021

SUBJECT: Wasson – Ash Avenue Replot/Subdivision

PennTerra Engineering, Inc. submitted the Wasson – Ash Avenue Replot Plan on behalf of their client. The Wasson – Ash Avenue Replot Plan is located at 1451 Ash Avenue, T.P. # 24-002A,132-,0000. The purpose of this plan is to replot Tax Parcel 24-002A,132-,0000-, 24-002A,134-,0000- and 24-002A,135-,0000-. Tax Parcel 24-002A,0132-,0000- is currently 0.547 acres and proposed to replotted to 0.74 acres. Tax Parcel 24-002A,0134-,00 is currently 0.414 acres and proposed to be replotted to 0.23 acres. Tax Parcel 24-002A,0135-,0000- is currently 0.268 acres and proposed to be replotted to 0.26 acres. The parcels are located within the Single Family Residential (R1) zoning district.

A request for a modification/waiver from Section 22-512 – Sidewalks and a request for a modification/waiver from Section 22-306.1. – Minor Subdivision and Minor Alteration were submitted.

Staff Recommendation: *That the Planning Commission recommend to the Board of Supervisors approval of the Preliminary/Final Land Development Plan pending outstanding staff comments.*

Outstanding Comments:

Planning:

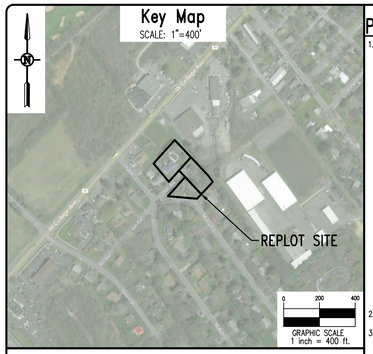
- Section 22.402.1.B/Section 22.508.1 Location and Elevation of installed monuments and markers, please note on the plan the coordinates of new markers being placed.
- Must submit a GIS-compatible plan prior to receiving signatures.
- All required signature blocks will need to be signed

Zoning:

- All non-conformities should be listed on the plan. The TP number 24-2A-135 shows the house over the rear setback line.
- The setback along Ash Avenue for 201 Madison Street should be listed as a front yard setback of 25 feet.

Key Map

SCALE: 1"=400'



Owners Certification: TP# 24-02A-132

Commonwealth of Pennsylvania County of Centre

On this the_____day of_____, 20_____,

_____

undersigned owner, 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.

_____

Owner

witness my hand and seal, this date _____

_____

Notary Public Commission Expires

Owners Certification: TP# 24-02A-134

Commonwealth of Pennsylvania County of Centre

On this the_____day of_____, 20_____,

_____

undersigned owner, 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.

_____

Owner

witness my hand and seal, this date _____

_____

Notary Public Commission Expires

Owners Certification: TP# 24-02A-135

Commonwealth of Pennsylvania County of Centre

On this the_____day of_____, 20_____,

_____

undersigned owner, 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.

_____

Owner

witness my hand and seal, this date _____

_____

Notary Public Commission Expires

Township Planning Commission

Ferguson Township Planning Commission Approved

_____

Chairman Date

_____

Secretary Date

Township Supervisors

Ferguson Township Supervisors Approved

_____

Chairman Date

_____

Secretary Date

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

Recorder's Stamp Here

Township Zoning Officer

Ferguson Township Zoning Officer Approved

_____

Zoning Officer Date

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.

PROJECT NOTES:

1. General Site Information:

	Tax Parcel 24-2A-132	Tax Parcel 24-2A-134	Tax Parcel 24-2A-135
Owner of Record:	Rita S. Wasson Revocable Trust 1451 Ash Ave State College PA, 16801	Rita S. Wasson Revocable Trust 1451 Ash Ave State College PA, 16801	Marc A. & Christina M. McNeill 201 Madison St State College PA, 16801
Record Book/Page:	Record Book 2177, Page 457	Record Book 2177, Page 457	Record Book 2179, Page 86
Lot Address:	1451 Ash Ave	1444 Ash Ave	201 Madison St
Zoning:	Single Family Residential (R-1)	Single Family Residential (R-1)	Single Family Residential (R-1)
Building Setbacks:	Front-25' (Local Street) Side-10' Rear-30'	Front-25' (Local Street) Side-10' Rear-30'	Front-25' (Local Street) Side-10' Rear-30'
Building Height:	40' Max	40' Max	40' Max
Existing Lot Size:	23,808 S.F. / 0.55 Acres	18,041 S.F. / 0.41 Acres	11,663 S.F. / 0.27 Acres
Addition To Lot:	8,250 S.F. / 0.19 Acres	-7,881 S.F / 0.18 Acres	-369 S.F / .01 Acres
Proposed Lot Size:	32,058 S.F. / 0.74 Acres	10,160 S.F. / 0.23 Acres	11,294 S.F. / 0.26 Acres
Lot Coverage:	Max. Coverage Allowed - 50% - 16,029 S.F. Max. Building Coverage Allowed - 30% - 9,617 S.F. Existing Building Coverage (After Replot) - 4,035 S.F. Existing Pavement, Sidewalks, etc. - 3,876 S.F. Total Coverage - 7,911 S.F. (25%)	Max. Coverage Allowed - 50% - 5,080 S.F. Max. Building Coverage Allowed - 30% - 3,048 S.F. Existing Building Coverage (After Replot) - 730 S.F. Existing Pavement, Sidewalks, etc. - 2,674 S.F. Total Coverage - 3,404 S.F. (34%)	Max. Coverage Allowed - 50% - 5,647 S.F. Max. Building Coverage Allowed - 30% - 3,388 S.F. Existing Building Coverage (After Replot) - 1,327 S.F. Existing Pavement, Sidewalks, etc. - 802 S.F. Total Coverage - 2,129 S.F. (19%)
Existing Use:	Residential	Residential	Residential
Proposed Use:	Residential	Residential	Residential

2. The purpose of this plan is to Replot Tax Parcels 24-2A-132, 24-2A-134, and 24-2A-135.

3. Act 287 Utility Information: Serial No. 20202692554
   All utility locations should be verified prior to any construction, utility information and locations should be considered approximate. Contractor shall notify PA One Call prior to any excavation.
   a. Electric
      West Penn Power; 2800 E. College Ave., State College, PA 16801; Phone: (814) 231-5355
   b. Telephone
      Verizon, Facility Management Center; 224 S. Allen Street, State College, PA 16801; Phone: (814) 231-6511
   c. TV Cable
      Comcast; 60 Decibel Road, State College, PA 16801; Phone: (814) 238-5050
   d. Gas
      Columbia Gas; 2550 Carolean Drive, State College, PA 16801; Phone: (888) 460-4332
   e. Sanitary Sewer
      University Area Joint Authority (UAJA); 1576 Spring Valley Road, State College, PA 16801; Phone: (814) 238-5361
   f. Water
      State College Borough Water Authority (SCBWA); 1201 West Branch Road, State College, PA 16801; Phone: (814) 238-6766
   g. Stormwater & Traffic Signals
      Ferguson Township; 3147 Research Drive, State College, PA 16801; Phone: (814) 238-4651

4. Reference:
   1. Final Plan, Agway Subdivision, Prepared by Uni-Tec Consulting Engineers, Recorded in PB 31, PG 81.
   2. Wasson Lot Consolidation, Consolidation of Parcels 24-2A-132/133 and 24-2A-133A/134 dated September 21, 1993, Prepared by PennTerra Engineering Inc., Recorded in PB 48, PG 118.

5. Easement:
   A. An easement for shared driveway access and maintenance between Tax Parcel 241-2A-132 and Tax Parcel 24-2A-135 was recorded at the Centre County Recorder of Deeds Office in RB _____, PG _____.
   B. A 15' utility easement for water lateral access and maintenance for Tax Parcel 24-2A-135 through Tax Parcel 24-2A-132 was recorded at the Centre County Recorder of Deeds Office in RB _____, PG _____.
   C. A 15' utility easement for shared sanitary sewer lateral access and maintenance between Tax Parcel 24-2A-132 and Tax Parcel 24-2A-134 was recorded at the Centre County Recorder of Deeds Office in RB _____, PG _____.
   D. A 12' easement for driveway access and maintenance to the rear of the existing garage for Tax Parcel 24-2A-132 from Tax Parcel 24-2A-134 was recorded at the Centre County Recorder of Deeds Office in RB _____, PG _____.

6. 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.

7. A waiver for a Minor Subdivision was approved by the Ferguson Township Board of Supervisors on _____, 2021.

8. A waiver of sidewalk requirement for the Re-plot was approved by the Ferguson Township Board of Supervisors on _____, 2021.

9. The existing house on Tax Parcel 24-2A-134 is over the existing front yard setback and the existing house on Tax Parcel 24-2A-132 is over the existing rear yard setback. These are existing non-conformities.

PROPOSED WATER EASEMENT LINE TABLE

LINE	DIRECTION	LENGTH
EL1	S 51° 05' 09" E	28.26'
EL2	S 42° 58' 28" E	40.93'
EL3	S 46° 49' 26" W	9.85'
EL4	N 61° 31' 42" W	16.18'
EL5	N 42° 58' 27" W	24.55'
EL6	N 51° 05' 09" W	21.63'
EL7	S 88° 10' 03" W	1.65'
EL8	S 43° 03' 55" W	0.78'
EL9	N 43° 10' 34" W	15.03'
EL10	N 43° 03' 55" E	6.02'
EL11	N 88° 10' 03" E	13.45'
RL1	S 43° 10' 34" E	3.02'

PROPOSED SHARED ACCESS EASEMENT LINE TABLE

LINE	DIRECTION	LENGTH
EL21	N 43° 10' 34" W	12.00'
EL22	N 46° 49' 26" E	76.22'
EL23	S 25° 52' 33" E	12.57'
EL24	S 46° 49' 26" W	72.48'

PROPOSED SANITARY SEWER EASEMENT LINE TABLE

LINE	DIRECTION	LENGTH
EL25	N 46° 49' 26" E	21.25'
EL26	S 88° 15' 50" E	10.91'
EL27	S 43° 21' 01" E	21.25'
EL28	N 88° 15' 50" W	41.00'

PROPOSED SHARED ACCESS EASEMENT LINE TABLE

LINE	DIRECTION	LENGTH
EL12	S 70° 55' 13" E	21.48'
EL13	S 43° 10' 34" E	61.42'
EL14	S 43° 10' 34" E	17.70'
EL15	S 46° 49' 26" W	10.00'
EL16	S 46° 49' 26" W	10.00'
EL17	N 43° 10' 34" W	30.36'
EL18	N 43° 10' 34" W	16.74'
EL19	N 41° 58' 27" E	10.04'
EL20	N 43° 10' 34" W	50.18'

SOILS LEGEND

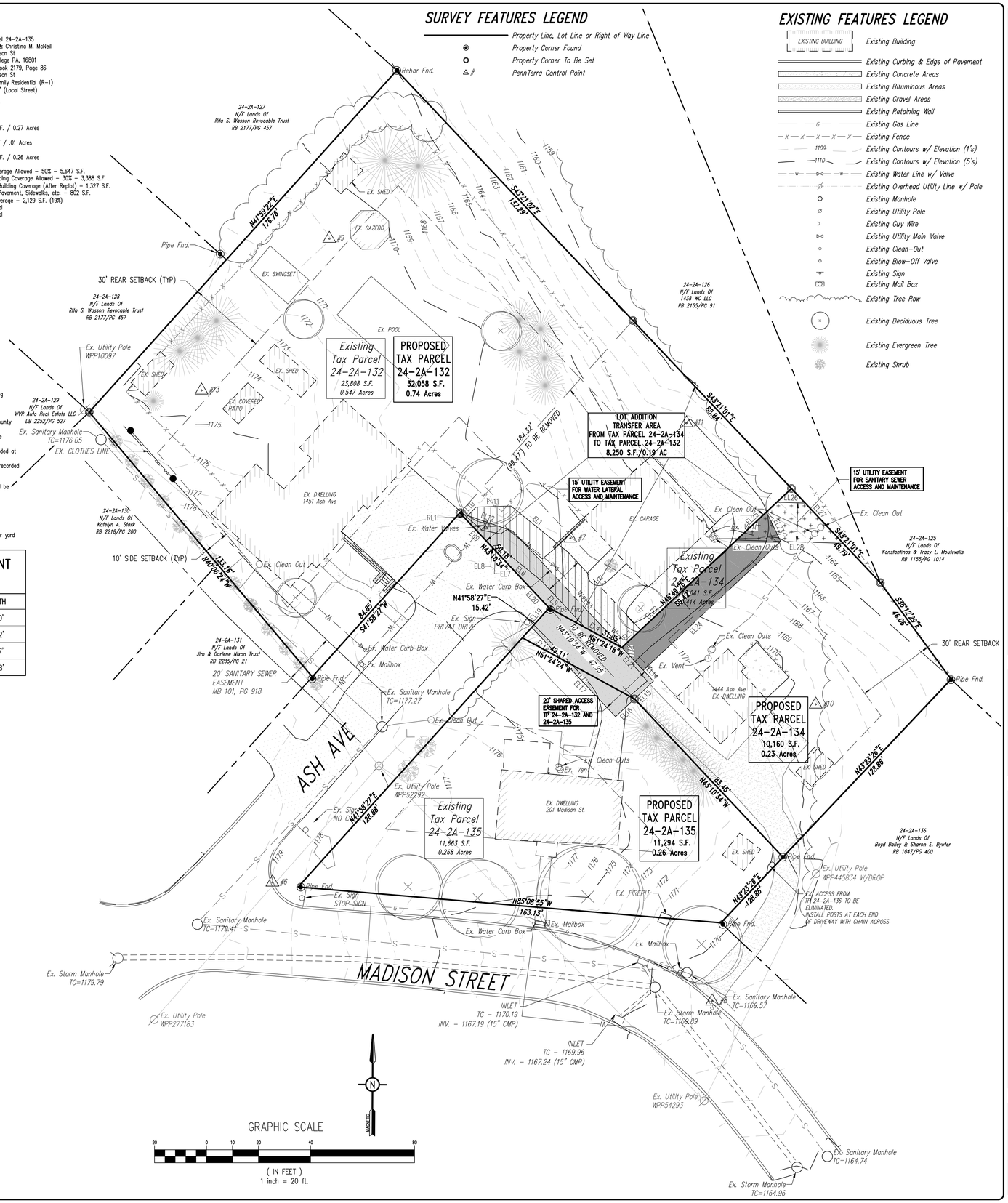
All Soil cover on the site consists of:
HaB - Hagerstown Silt Loam, 3%-8% Slopes

SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
- Property Corner Found
- Property Corner To Be Set
- PennTerra Control Point #

EXISTING FEATURES LEGEND

- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Gas Line
- Existing Fence
- Existing Contours w/ Elevation (1's)
- Existing Contours w/ Elevation (5's)
- Existing Water Line w/ Valve
- Existing Overhead Utility Line w/ Pole
- Existing Manhole
- Existing Utility Pole
- Existing Guy Wire
- Existing Utility Main Valve
- Existing Clean-Out
- Existing Blow-Off Valve
- Existing Sign
- Existing Mail Box
- Existing Tree Row
- Existing Deciduous Tree
- Existing Evergreen Tree
- Existing Shrub



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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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JOHN C. SEPP ENGINEER 040003-E Seal

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL NEVIN L. GROVE LAND SURVEYOR No. SU061171 Seal

Designer	CJW
Draftsman	CJW
Proj.Manager	MAT
Surveyor	XXX
Perimeter Ck.	XXX
Book	XXX Pg XXX
Drive__P:	Layout XXX
Acad	19263-MD-dwg

Date	Description
2/19/21 CJW	REVISED PER TWP. COMMENTS

REVISIONS

WASSON - ASH AVENUE REPLOT

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL SUBDIVISION PLAN

RECORD PLAN: REPLOT OF TAX PARCELS 24-2A-132, 24-2A-134, AND 24-2A-135

PROJECT NO. 19263

DATE NOVEMBER 24, 2020

SCALE 1" = 20'

SHEET NO. 1

P:\laddproj\2019\19263\Design\design files\19263-MD-REPLOT.dwg, 2/19/2021 9:29:29 AM, 1:1

SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Property Corner Found
- Property Corner To Be Set
- PennTerra Control Point

SOILS LEGEND

All Soil cover on the site consists of:
HaB – Hagerstown Silt Loam, 3%-8% Slopes

EXISTING FEATURES LEGEND

- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Fence
- Existing Contours w/ Elevation (1's)
- Existing Contours w/ Elevation (5's)
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- Existing Sanitary Sewer Lateral w/ Clean Out
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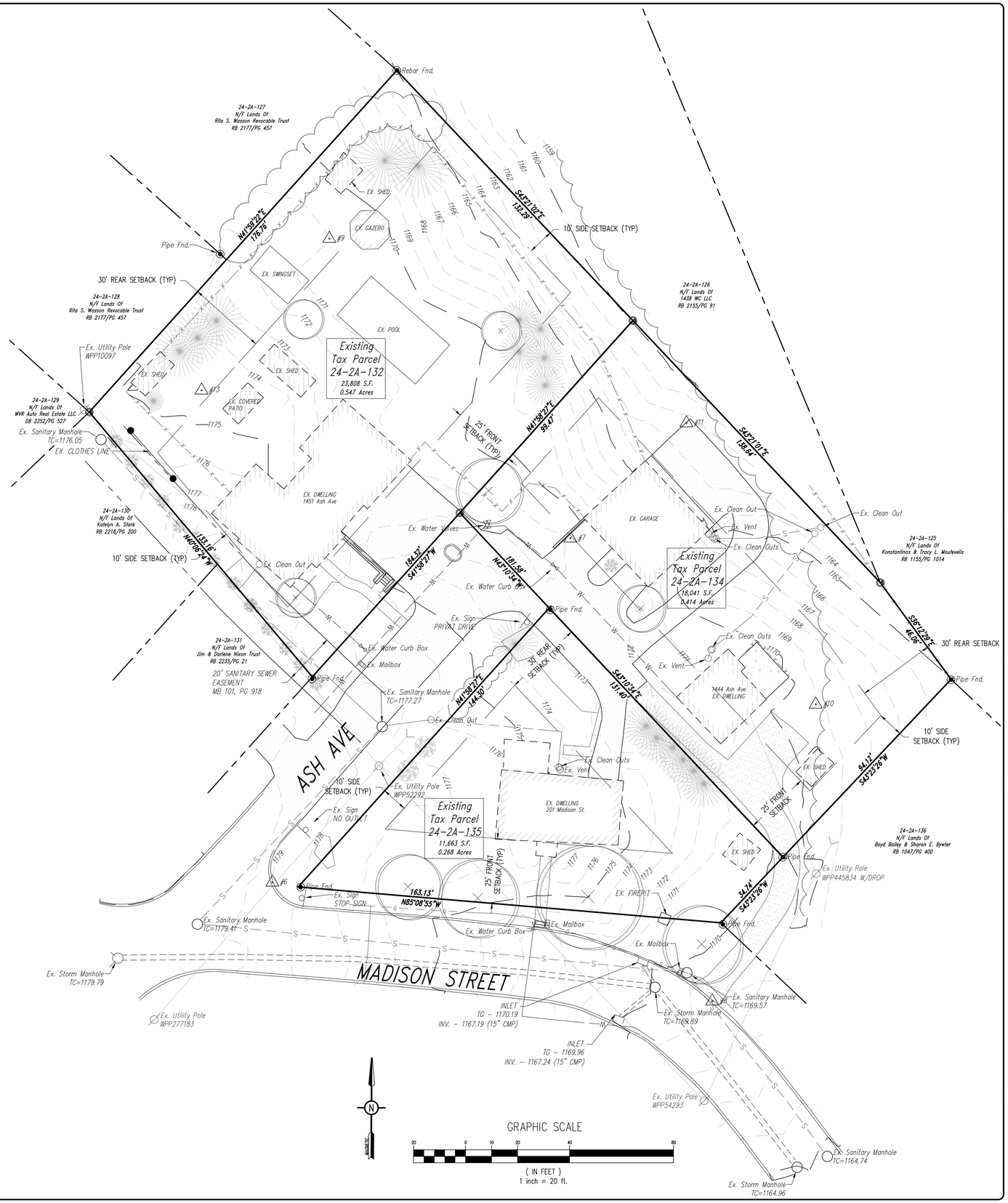
- Existing Utility Main Valve
- Existing Clean-Out
- Existing Blow-Off Valve
- Existing Sign
- Existing Mail Box
- Existing Tree Row
- Existing Deciduous Tree
- Existing Evergreen Tree
- Existing Shrub



GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

PennTerra ENGINEERING INC.

CENTRAL PENNSYLVANIA REGION OFFICE:
3075 ENTERPRISE DRIVE
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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOHN C. SEPP — ENGINEER 040003-E — Seal

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — NEVIN L. GROVE — LAND SURVEYOR No. SU061171 — Seal

Designer	CJW
Draftsman	CJW
Proj Manager	MAT
Surveyor	XXX
Perimeter Ck.	XXX
Book	XXX Pg XXX
Drive	P: Layout XXX
Acad	19263-MD-dwg

Date	Description
2/19/21 CJW	ADDED SHEET PER TWP. COMMENTS

REVISIONS

WASSON - ASH AVENUE REPLOT

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY/FINAL SUBDIVISION PLAN

EXISTING CONDITIONS: REPLOT OF TAX PARCELS 24-2A-132, 24-2A-134, AND 24-2A-135

PROJECT NO.	
19263	
DATE	
NOVEMBER 24, 2020	
SCALE	SHEET NO.
1" = 20'	2

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TOWNSHIP OF FERGUSON

3147 Research Drive • State College, Pennsylvania 16801
Telephone: 814-238-4651 • Fax: 814-238-3454
www.twp.ferguson.pa.us

TO: Planning Commission

FROM: Kristina Aneckstein, Community Planner

DATE: March 8, 2021

SUBJECT: Application for Consideration of a Modification/Waiver

PennTerra Engineering, Inc, on behalf of their client, has requested a modification/waiver from Section 22-306.1.—Minor Subdivision and Minor Alteration. This section has a process outlined for a Minor Subdivision with requirements, however, the definition of a minor subdivision was omitted during the Township's Comprehensive Update to Chapter 22. The plan submitted is replotting lot lines and no new lots are being created.

Staff has reviewed the application and isn't recommending any conditions be included with the request.

Staff Recommendation: *That the Planning Commission recommend to the Board of Supervisors approval of the Application for Consideration of a Modification from §22-306.1.—Minor Subdivision and Minor Alteration.*

APPLICATION FOR CONSIDERATION OF A MODIFICATION

Ferguson Township, Centre County

Submittal Date:_____

A fee of $50.00 is required at the time of submitting this application.

The undersigned hereby applies for approval of a modification/waiver, submitted herewith and described below:

Applicant Information

Rita Wasson

Name

1451 Ash Avenue | State College | 16801

Street Address | City | Zip

_____

Phone Number

Property/Plan Information

Wasson - Ash Avenue Replot

Plan Name

19263 | 11/24/2020

Plan Number | Plan Date

1451 Ash Avenue and 201 Madison Street | 24-2A-132, 24-2A-134, 24-2A-135

Project Location | Parcel Number

Rita Wasson / Marc & Christina McNeill

Name of Property Owner(s)

1451 Ash Ave. / 201 Madison St. | State College | 16801

Street Address | City | Zip

Application Type:

- ☐ Subdivision
- ☐ Land Development
- ☐ Terraced Streetscape District (TSD)
- ☐ Traditional Town Development (TSD) District
- ■ Replot

Modification/Waiver Request Information

Specific Section(s) of the Subdivision and Land Development Ordinance or Design Standards for which a Modification/Waiver is requested:

Modification/waiver from Section 22-306

APPLICATION FOR CONSIDERATION OF A MODIFICATION

Ferguson Township, Centre County

State any proposed alternative(s) to the requirement:

This section has a process outlined and what is required with submission, however what was left out of the section is (during the Zoning and SALDO update process) what constitutes a minor subdivision. And it's not defined anywhere in the township's ordinances.

Please state in full, the grounds and facts of the unreasonableness or hardship the Ferguson Township Subdivision and Land Development Ordinance has placed on the property.

This plan is a proposed replot which would meet the requirements of a Minor Plan Subdivision since it proposes no new infrastructure and no new lots.

*If necessary, please continue with your hardship specification on another page.

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

Signature

2-18-2021
Date

-For Office Use Only-

Date Received:_____ By:_____

Date Paid:_____ Check No.:_____ Amount:_____

Advertisement Dates:_____ Planning Commission Review Date:_____

Board of Supervisors Meeting Date:_____

TOWNSHIP OF FERGUSON

3147 Research Drive • State College, Pennsylvania 16801
Telephone: 814-238-4651 • Fax: 814-238-3454
www.twp.ferguson.pa.us

TO: Planning Commission

FROM: Kristina Aneckstein, Community Planner

DATE: March 8, 2021

SUBJECT: Application for Consideration of a Modification/Waiver

PennTerra Engineering, Inc, on behalf of their client, has requested a modification/waiver from Section 22-512—Sidewalks. The plan is proposing to replot three (3) existing lots in an established, built-out neighborhood. There are no existing sidewalks on either side of the street. The potential for connection to future sidewalks is extremely unlikely and no new land development is proposed.

Staff has reviewed the application and isn't recommending any conditions be included with the request.

Staff Recommendation: *That the Planning Commission recommend to the Board of Supervisors approval of the Application for Consideration of a Modification.*

APPLICATION FOR CONSIDERATION OF A MODIFICATION

Ferguson Township, Centre County

Submittal Date:_____

A fee of $50.00 is required at the time of submitting this application.

The undersigned hereby applies for approval of a modification/waiver, submitted herewith and described below:

Applicant Information

Rita Wasson

Name

1451 Ash Avenue | State College | 16801

Street Address | City | Zip

_____

Phone Number

Property/Plan Information

Wasson - Ash Avenue Replot

Plan Name

19263 | 11/24/2020

Plan Number | Plan Date

1451 Ash Avenue and 201 Madison Street | 24-2A-132, 24-2A-134, 24-2A-135

Project Location | Parcel Number

Rita Wasson / Marc & Christina McNeill

Name of Property Owner(s)

1451 Ash Ave. / 201 Madison St. | State College | 16801

Street Address | City | Zip

Application Type:

☐ Subdivision ☐ Terraced Streetscape District (TSD) ■ Replot

☐ Land Development ☐ Traditional Town Development (TSD) District

Modification/Waiver Request Information

Specific Section(s) of the Subdivision and Land Development Ordinance or Design Standards for which a Modification/Waiver is requested:

Modification/waiver from Section 22-512 Sidewalks

APPLICATION FOR CONSIDERATION OF A MODIFICATION

Ferguson Township, Centre County

State any proposed alternative(s) to the requirement:

There are no alternatives.

Please state in full, the grounds and facts of the unreasonableness or hardship the Ferguson Township Subdivision and Land Development Ordinance has placed on the property.

The plan is for replotting three existing lots in an established, built-out neighborhood. There are no sidewalks on any of the existing streets. The potential for connection to future sidewalks is extremely unlikely. See attachment. There is no new land development proposed either.

*If necessary, please continue with your hardship specification on another page.

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

Mark Tomutti
Signature

2/19/21
Date

-For Office Use Only-

Date Received:_____ By:_____

Date Paid:_____ Check No.:_____ Amount:_____

Advertisement Dates:_____ Planning Commission Review Date:_____

Board of Supervisors Meeting Date:_____

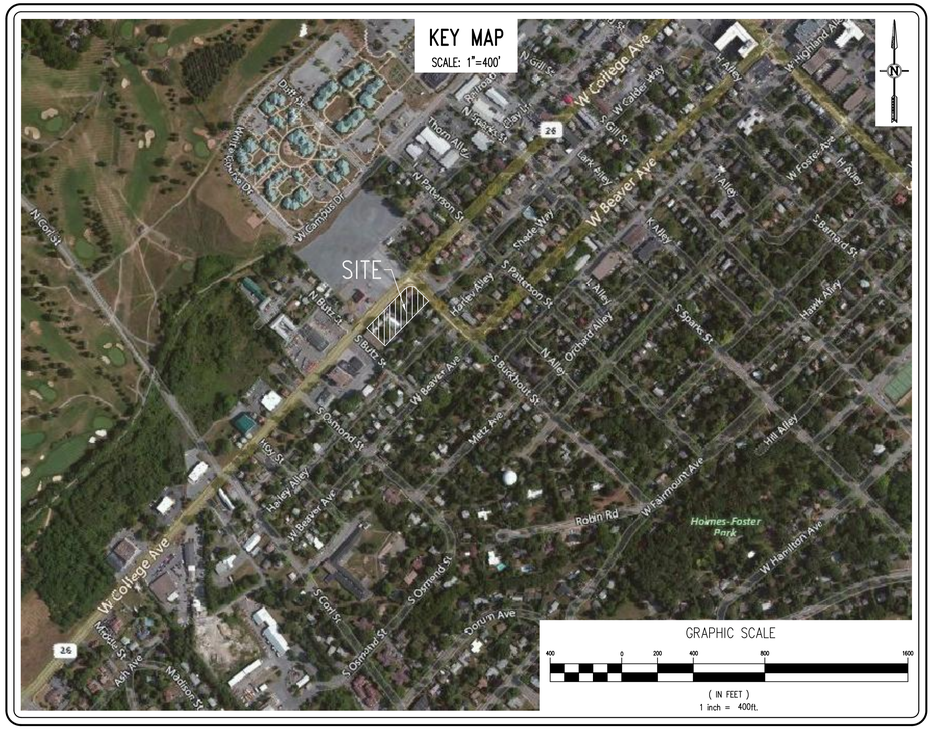
Wasson -Ash Avenue Area
Aerial Map illustrating lack of sidewalks within the property vicinity
Legend
Ash Ave
Middle St
Ash Ave
Ash Ave
Madison St
Carl Alley
Ash Ave
Owens Dr
Madison St
Google Earth
© 2021 Google
600 ft
N

WEST COLLEGE STUDENT HOUSING

PRELIMINARY LAND DEVELOPMENT PLAN

FERGUSON TOWNSHIP * CENTRE COUNTY * PENNSYLVANIA

AUGUST 14, 2020
LAST REVISED: FEBRUARY 19, 2021



PennTerra
ENGINEERING, INC.

CENTRAL PENNSYLVANIA REGION OFFICE:
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SUITE 100
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Fax: 814-237-2308

LANCASTER REGION OFFICE:
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TABLE OF CONTENTS

SHEET	DESCRIPTION
1	COVER PAGE
2	EXISTING CONDITIONS & DEMOLITION PLAN
3	RECORD PLAN
4	SIGNATURE & NOTES PAGE
5	GEOMETRY PLAN
6	GRADING PLAN
7	GRADING PLAN - ENLARGEMENT
8	GRADING PLAN - ENLARGEMENT
9	GRADING PLAN - ENLARGEMENT
10	GRADING PLAN - ENLARGEMENT
11	UTILITY PLAN
12	GENERAL CONSTRUCTION DETAILS
13	GENERAL CONSTRUCTION DETAILS
14	GENERAL CONSTRUCTION DETAILS
15	LANDSCAPING PLAN
16	LIGHTING PLAN
17	SITE CROSS SECTIONS
PC1	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN
PC2	POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS
PC3	POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS
PC4	POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS
PC5	POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS
ES1	EROSION & SEDIMENTATION CONTROL PLAN
ES2	EROSION & SEDIMENTATION CONTROL DETAILS
ES3	EROSION & SEDIMENTATION CONTROL NARRATIVE

ELECTRICAL DESIGN PLANS (PREPARED BY VRETTOS PAPPAS CONSULTING ENGINEERS, P.A.

SHEET	DESCRIPTION
SL1	SITE LIGHTING PLAN, NOTES & DETAILS
SL2	ELECTRICAL RISERS & SCHEDULES

ACT 287 UTILITY INFORMATION
(SERIAL NUMBER: 20200352497)
(SERIAL NUMBER: 20200352498)

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

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

SANITARY SEWER COLLECTION & CONVEYANCE
STATE COLLEGE BOROUGH SEWER AUTHORITY
243 SOUTH ALLEN STREET
STATE COLLEGE, PA 16801
PHONE: (814) 234-7135

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
250 REESE ROAD
STATE COLLEGE, PA 16801
PHONE: (800) 992-3515

PENNSYLVANIA ONE CALL SYSTEM INC 1-800-242-1776 STOP! CALL BEFORE YOU DIG!

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA ! CALL 1-800-242-1776
NON-MEMBERS MUST BE CONTACTED DIRECTLY

P:\ddtproj\2019\19052\Design\plot files\preim plans\Ferguson\19052-FERGUSON-PRELIMINARY-LD-CP.dwg, 2/19/2021 2:58:03 PM, 1:1

SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Municipal Boundary
- Zoning Boundary
- Property Corner Found
- Property Corner To Be Set
- Project Benchmark

SOILS LEGEND

Soil cover on the site consists of:

HaB – Hagerstown Silt Loam, 3%–8% Slopes
HcB – Hagerstown Silty Loam, 3%–8% Slopes

EXISTING FEATURES LEGEND

- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Fence / Type
- Existing Contours w/ Elevation (1's & 2's)
- Existing Contours w/ Elevation (5's & 10's)
- Existing Sanitary Sewer w/ Manhole
- Existing Sanitary Sewer Lateral w/ Clean Out
- Existing Water Line w/ Valve
- Existing Water Service Lateral
- Existing Storm Sewer Line w/ Inlet
- Existing Gas Line
- Existing Overhead Utility Line w/ Pole
- Existing Fire Hydrant
- Existing Manhole
- Existing Utility Pole
- Existing Guy Wire
- Existing Storm Sewer Inlet Type–M
- Existing Storm Sewer Inlet Type–C
- Existing Utility Meter
- Existing Light Pole/Standard
- Existing Flood Light
- Existing Monitoring Well
- Existing Sign
- Existing Mail Box
- Existing Soil Limit Boundary
- Existing Soil Type
- Existing Tree Row
- 25% Slopes Or Greater
- Existing Deciduous Tree
- Existing Evergreen Tree
- Existing Shrub

DEMOLITION & CLEARING NOTES:

*BEFORE DIGGING IN PENNSYLVANIA, CALL 1–800–242–1776

FOR THE PURPOSES OF THE SITE DEMOLITION ACTIVITIES; CONSIDER THE DEMOLITION AREA TO BE 2' OUTSIDE OF THE FACE–OF–CURB AT WEST COLLEGE AVENUE SO THAT THE CURB CAN BE REPLACED AS SHOWN, 2' OUTSIDE OF THE FACE–OF–CURB AT SOUTH BUCKHOUT STREET SO THAT THE CURB CAN BE REPLACED AS SHOWN, 2' OUTSIDE OF THE EDGE OF PAVEMENT/GRAVEL ALONG WEST CALDER WAY SO THAT THE PAVEMENT/GRAVEL CAN BE MILLED/REMOVED AS SHOWN, AND ALONG THE WESTERN PROPERTY LINE SO THAT DEMOLITION ACTIVITIES CAN BE PERFORMED AS SHOWN. ALL STREET SIGNAGE TO BE REMOVED WITH CARE AND SET ASIDE TO BE REINSTALLED AT PROPOSED LOCATIONS AS SHOWN.

1. INSTALL CONSTRUCTION FENCE AROUND THE ENTIRE PERIMETER OF THE SITE.
2. PLACE 'CONSTRUCTION AREA' SIGNS AROUND THE PERIMETER OF THE SITE ALONG EACH ROADWAY.
3. PLACE 'SIDEWALK CLOSED' SIGNS AT ALL SIDEWALKS AROUND THE PERIMETER OF THE SITE.
4. CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH THE PENNDOT STANDARDS, AND AS REQUIRED BY LOCAL AGENCIES WHEN WORKING IN AND/OR ALONG STREETS, ROADS, HIGHWAYS, ETC. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN APPROVAL. CONTRACTOR SHALL CONTACT FERGUSON TOWNSHIP/BOROUGH OF STATE COLLEGE FOR CONSTRUCTION ON PUBLIC STREETS.
5. INSTALL INITIAL EROSION & SEDIMENTATION CONTROLS (SILT SOXX AND CONSTRUCTION ENTRANCE OFF OF WEST CALDER WAY). REFER TO THE EROSION & SEDIMENTATION CONTROL PLAN, NARRATIVES & DETAILS.
6. 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. ALL EXISTING UTILITIES SHALL BE RETAINED UNLESS MARKED OTHERWISE, AND APPURTENANCES SHALL BE ADJUSTED TO FINAL GRADE. DAMAGE TO EXISTING CONDITIONS AND UTILITIES SHALL BE REPAIRED AS REQUIRED TO THE OWNER'S SATISFACTION AT THE EXPENSE OF THE CONTRACTOR.
7. 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.
8. DISCONNECT ALL UTILITIES PRIOR TO DEMOLITION ACTIVITIES BEGIN. ARRANGE SPECIFIC DISCONNECTION WITH THE UTILITY COMPANY. OBTAIN IN WRITING FROM THE UTILITY PROVIDER NOTICE THAT FACILITIES HAVE BEEN APPROPRIATELY ABANDONED AND/OR DISCONNECTED.
9. RAZE EXISTING BUILDINGS. VERIFY WITH OWNER IF ANY MATERIAL IS TO BE SALVAGED. NOTIFY AND OBTAIN NECESSARY PERMITS FROM THE BOROUGH OF STATE COLLEGE AND FERGUSON TOWNSHIP BEFORE COMMENCING ANY DISTURBANCE ACTIVITIES.
10. VERIFY IF PA DEP AIR QUALITY DEPARTMENT REQUIRES ANY TESTING BEFORE DEMOLITION ACTIVITIES COMMENCING. OBTAIN IN WRITING THIS PROOF. SUPPLY TO THE OWNER.

    BUILDING DEMOLITION MINIMUM REQUIREMENTS:
    DEMOLITION CONTRACTOR SHALL PROVIDE PENNSYLVANIA CERTIFICATION LICENSES AND NAMES OF PERSONNEL THAT WILL PERFORM WORK AND SHALL PROVIDE A LIST OF THE WASTE DISPOSAL SITES AND

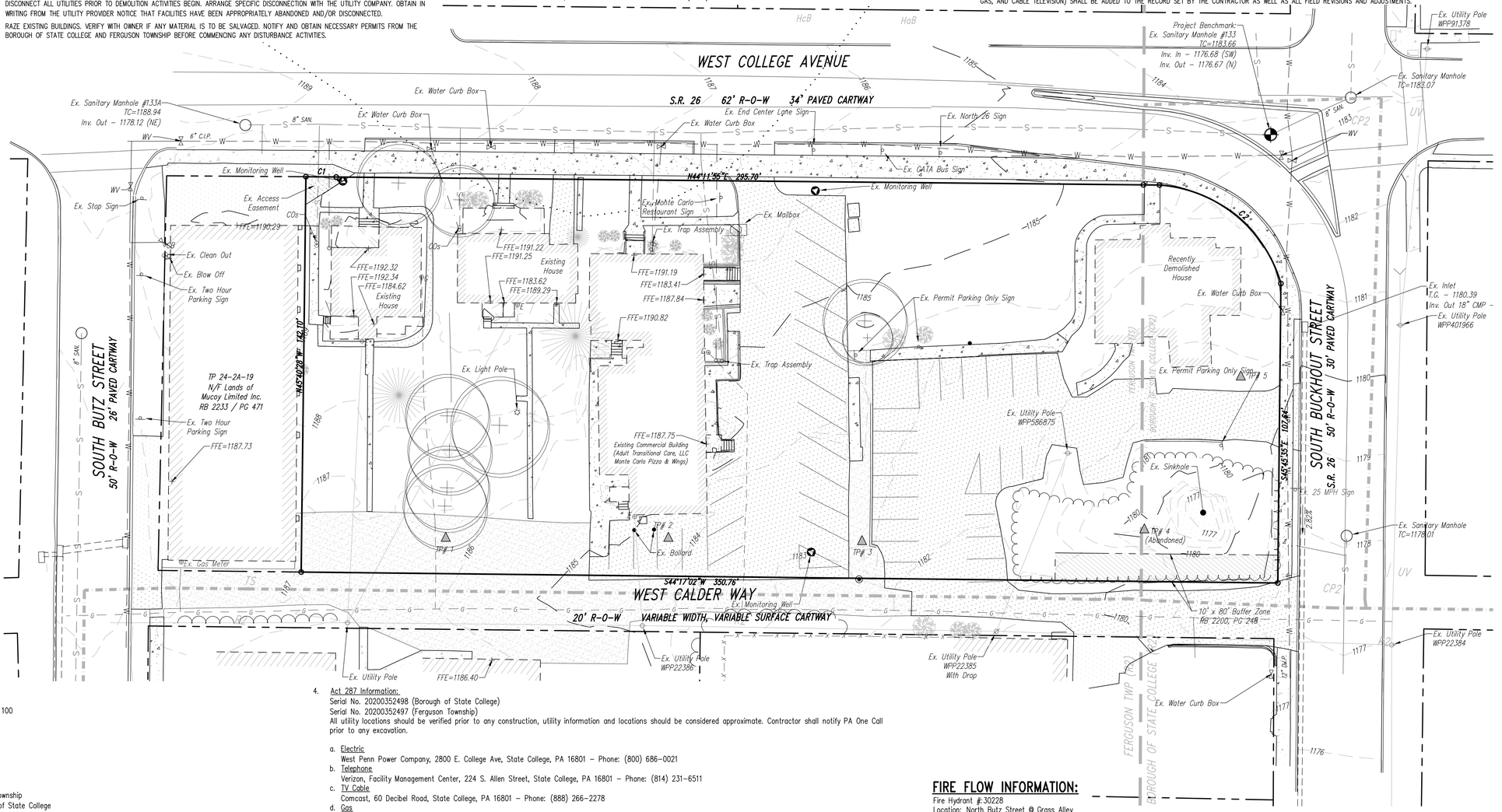
    DEP PERMIT NUMBERS WHERE ACMS WILL BE TAKEN AND DISPOSED OF.

    DEP FORM 2700–FM–AQ0021– ASBESTOS ABATEMENT AND DEMOLITION/RENOVATION NOTIFICATION FORM FOR PROCESSING AND SUBMISSION TO THE PADEP AIR QUALITY COMPLIANCE PROGRAM AT LEASE TWO WEEKS PRIOR TO START OF DEMOLITION ACTIVITIES. PROOF OF MAIL RECEIPT (ORIGINAL) MUST BE PROVIDED TO OWNER.

    PROVIDE A DEMOLITION SURVEY, ACCORDING TO 29CFR 1926.850(A), FOR RECORD OF THE OWNER.

    PROVIDE IN ACCORDANCE WITH CONTRACT DOCUMENTS:
11. PERFORM DEMOLITION WORK IN ACCORDANCE WITH 29 CFR 1926, WITH PARTICULAR ATTENTION TO REQUIREMENTS SET FORTH IN SUBPART T, "DEMOLITION".
12. PERFORM WORK IN SAFE AND SYSTEMATIC MANNER.
13. DEMOLISH AND REMOVE EXISTING CONSTRUCTION ONLY TO EXTENT REQUIRED, AND AS INDICATED IN CONTRACT DOCUMENTS.
14. WEAR PROPER PERSONAL PROTECTIVE EQUIPMENT AT ALL TIMES.
15. USE WATER AS NECESSARY TO LAY DUST WHEN CHIPPING, CORING, OR SAWING CONCRETE, MASONRY OR SIMILAR MATERIALS.
16. COMPLETELY BACKFILL BELOW–GRADE AREAS AND VOIDS RESULTING FROM UTILITY REMOVAL AND OTHER DEMOLITION WORK.

    IF ITEMS ARE DETERMINED TO BE HAZARDOUS, REFER TO DEP FORM 2700–FM–AQ0021– ASBESTOS ABATEMENT AND DEMOLITION/RENOVATION NOTIFICATION FORM, FOR DISPOSAL OF HAZARDOUS WASTES (ACMS).
17. ALL FILL MATERIAL BROUGHT ON TO THE SITE BY THE CONTRACTOR MUST COMPLY WITH ALL APPLICABLE D.E.P. REGULATIONS REGARDING CLEAN FILL.
18. REMOVE TREES, ROOTS COMPLETE AND ALL VEGETATION WITHIN THE LIMITS OF THE DEVELOPMENT SITE. ALL STREET TREE REMOVAL MUST BE COORDINATED WITH STATE COLLEGE BOROUGH PUBLIC WORKS DEPARTMENT, FERGUSON TOWNSHIP, AND THEIR RESPECTIVE ARBORISTS.
19. REMOVE ALL FACILITIES, BUILDINGS AND COMPONENTS LOCATED WITHIN THE DEMOLITION AREA; INCLUDING BUT NOT LIMITED TO:
    - BUILDINGS – PAVEMENT – CURBS – CONCRETE – VEGETATION – INLETS
    - UNDERGROUND UTILITIES INCLUDING BUT NOT LIMITED TO WATER, SANITARY SEWAGE, GAS, STORMWATER, ETC.
    - UTILITY LATERALS TO CURB STOPS, VALVES OR SIMILAR.
    - SELECT OVERHEAD UTILITY POLES. REFER TO THE DEMO PLAN FOR OVERHEAD UTILITY POLES TO BE REMOVED.
20. IN ALL CASES, THE DEMOLITION CONTRACTOR SHALL NEATLY SAW CUT AND REMOVE/DISCONNECT EXISTING IMPROVEMENTS. IF DEMOLITION WORK IS TO BE PERFORMED IN THE RIGHT–OF–WAY OF THE BOROUGH AND/OR FERGUSON TOWNSHIP AND/OR THE COMMONWEALTH OF PENNSYLVANIA; THEN IN ALL CASES NOTIFY THE APPROPRIATE PARTY AND FOLLOW THEIR RULES AND PROCEDURES FOR DEMOLITION ACTIVITIES. THIS IS SOLELY THE RESPONSIBILITY OF THE DEMOLITION CONTRACTOR.
21. RE–ESTABLISH THE EROSION & SEDIMENTATION CONTROLS. BEGIN SITE DEVELOPMENT CONSTRUCTION WORK.
22. ALL AREAS DISTURBED DURING CONSTRUCTION, NOT DESIGNATED TO RECEIVE PAVING OR MULCH SHALL BE FINE GRADED, TOPSOILED, AND SEEDED UNLESS OTHERWISE NOTED IN THE CONSTRUCTION DRAWINGS, SITE SPECIFICATIONS, OR INSTRUCTED BY THE OWNER.
23. CONTRACTOR SHALL REPAIR OR REPLACE ALL CURB, PAVEMENT, UTILITIES, SIDEWALKS, LANDSCAPING, ETC. WITHIN THE SITE DAMAGED DURING CONSTRUCTION THAT ARE NOT INDICATED TO BE REMOVED.
24. CONTRACTOR SHALL MAINTAIN ONE SET OF CONTRACT DOCUMENTS ON SITE TO BE UTILIZED FOR RECORD DOCUMENTS. FIELD RECORDS OF THE DEPTH AND LOCATIONS OF ALL UNDERGROUND SERVICE UTILITIES (WATER, SANITARY SEWER, STORM DRAINS, PRIMARY AND SECONDARY ELECTRIC, GAS, AND CABLE TELEVISION) SHALL BE ADDED TO THE RECORD SET BY THE CONTRACTOR AS WELL AS ALL FIELD REVISIONS AND ADJUSTMENTS.



PROJECT NOTES:

1. Property Owner Information:
   Scott L. & Glenda C. Yocum
   PO Box 57
   Boalsburg, PA 16827

   Developer Information:
   Aspen Heights Partners
   8008 Corporate Center Drive, Suite 100
   Charlotte, NC 28226

2. General Site Information:
   a. Tax Parcel No.: 24–002A–015
   b. Site Address: 914 West College Ave, State College, PA 16801
   c. Municipality: Ferguson Township / Borough of State College
   d. Zoning: Terraced Streetscape (TS) District – Ferguson Township; Planned Commercial (CP–2) District – Borough of State College
   e. Deed Information: Record Book _____, Page _____
   f. Existing Site/Lot Size: 49,489 S.F. (1.136 Acres)

3. Natural Site Features & Survey Information:
   a. Soil limits and descriptions have been taken from the Natural Resources Conservation Service Web Soil Survey dated June 2020.
   b. There are no portions of this property located within a Zone 'A' 100–year Flood Plain according to the Federal Emergency Management Agency (FEMA) Map Number 42027C0636F for the Borough of State College, effective date May 4, 2009.
   c. There are no wetlands on the property according to the National Wetlands Inventory (U.S. Fish & Wildlife Service) for State College, PA, last updated June 2020.
   d. Horizontal Datum is Pennsylvania North Zone State Plane Coordinates, North American Vertical Datum of 1983 (PA NAD83) U.S. Feet
   e. Elevation Datum is the North American Vertical Datum of 1988 (NAVD 88)
   f. The Project Benchmark is the top of casting of the sanitary sewer manhole in the median island at the intersection of West College Avenue and South Buckhout Street, as shown on the plan. Elevation = 1183.66'.

4. Act 287 Information:
   Serial No. 20200352498 (Borough of State College)
   Serial No. 20200352497 (Ferguson Township)
   All utility locations should be verified prior to any construction, utility information and locations should be considered approximate. Contractor shall notify PA One Call prior to any excavation.

   a. Electric
      West Penn Power Company, 2800 E. College Ave, State College, PA 16801 – Phone: (800) 686–0021
   b. Telephone
      Verizon, Facility Management Center, 224 S. Allen Street, State College, PA 16801 – Phone: (814) 231–6511
   c. TV Cable
      Comcast, 60 Decibel Road, State College, PA 16801 – Phone: (888) 266–2278
   d. Gas
      Columbia Gas of Pennsylvania, 2550 Carolean Drive, State College, PA 16801 – Phone: (814) 238–6775
   e. Sanitary Sewer Treatment
      University Area Joint Authority (UAJA), 1576 Spring Valley Road, State College, PA 16801 – Phone: (814) 238–5361
   f. Sanitary Sewer Collection & Conveyance
      State College Borough Sewer Authority, 243 S. Allen Street, State College, PA 16801 – Phone: (814) 234–7135
      University Area Joint Authority (UAJA), 1576 Spring Valley Road, State College, PA 16801 – Phone: (814) 238–5361
   g. Water
      State College Borough Water Authority (SCBWA), 1201 West Branch Road, State College, PA 16801 – Phone: (814) 238–6766

5. Project References:
   "Final Plan Lot Consolidation Of Tax Parcels 24–002A–015 & 24–002A–016 & 24–002A–017 & 24–002A–018 & 36–010–006", prepared by PennTerra Engineering, Inc., and dated August 14, 2020.

FIRE FLOW INFORMATION:

Fire Hydrant #:30228
Location: North Butz Street @ Grass Alley
Flow Information
Test Date: 07/17/2019
Pressure: Static: 37 psi
Residual: 15 psi
Flow: 850 gpm

Fire Hydrant #:30212
Location: West College Avenue @ North Buckhout Street
Flow Information
Test Date: 07/17/2019
Pressure: Static: 46 psi
Residual: 38 psi
Flow: 1,325 gpm

Fire Hydrant #:30208
Location: West Beaver Ave @ South Buckhout Street
Flow Information
Test Date: 07/12/2019
Pressure: Static: 50 psi
Residual: 40 psi
Flow: 1,300 gpm

EXISTING CURVE TABLE

CURVE	LENGTH	RADIUS	TANGENT	CHORD DIRECTION	CHORD	DELTA
C1	10.87'	11428.19'	5.44'	N 44° 10' 17" E	10.87'	0° 03' 16"
C2	59.79'	49.17'	34.22'	N 82° 42' 59" E	56.17'	69° 40' 23"

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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
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Fax: 717–522–5046
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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JOHN C. SEPP ENGINEER 040003–E

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL KEVIN L. GROVE LAND SURVEYOR No. SU061171

Designer EAH
Draftsman EAH
Proj.Manager JCS
Surveyor BRK
Perimeter Ck. _____
Book 542 Pg 42
Acad 19052–FERGUSON–PRELIMINARY–LD–EX
Layout EX

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/27/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
12/18/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
11/06/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS

REVISIONS

WEST COLLEGE STUDENT HOUSING

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

EXISTING CONDITIONS & DEMOLITION PLAN

PROJECT NO. 19052
DATE AUGUST 14, 2020
SCALE 1"=20'
SHEET NO. 2

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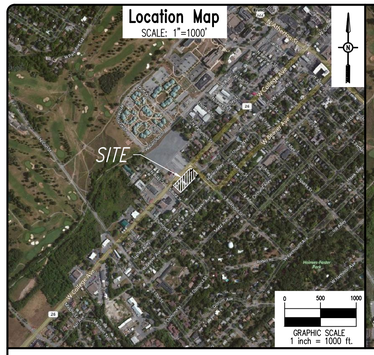
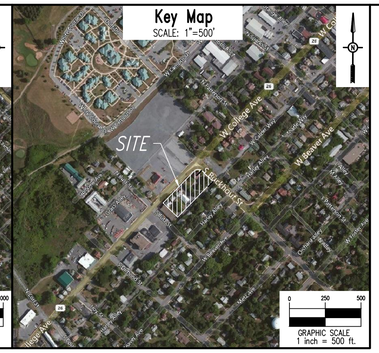




SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Municipal Boundary
- Zoning Boundary
- Property Corner Found
- Property Corner To Be Set
- Project Benchmark

SOILS LEGEND

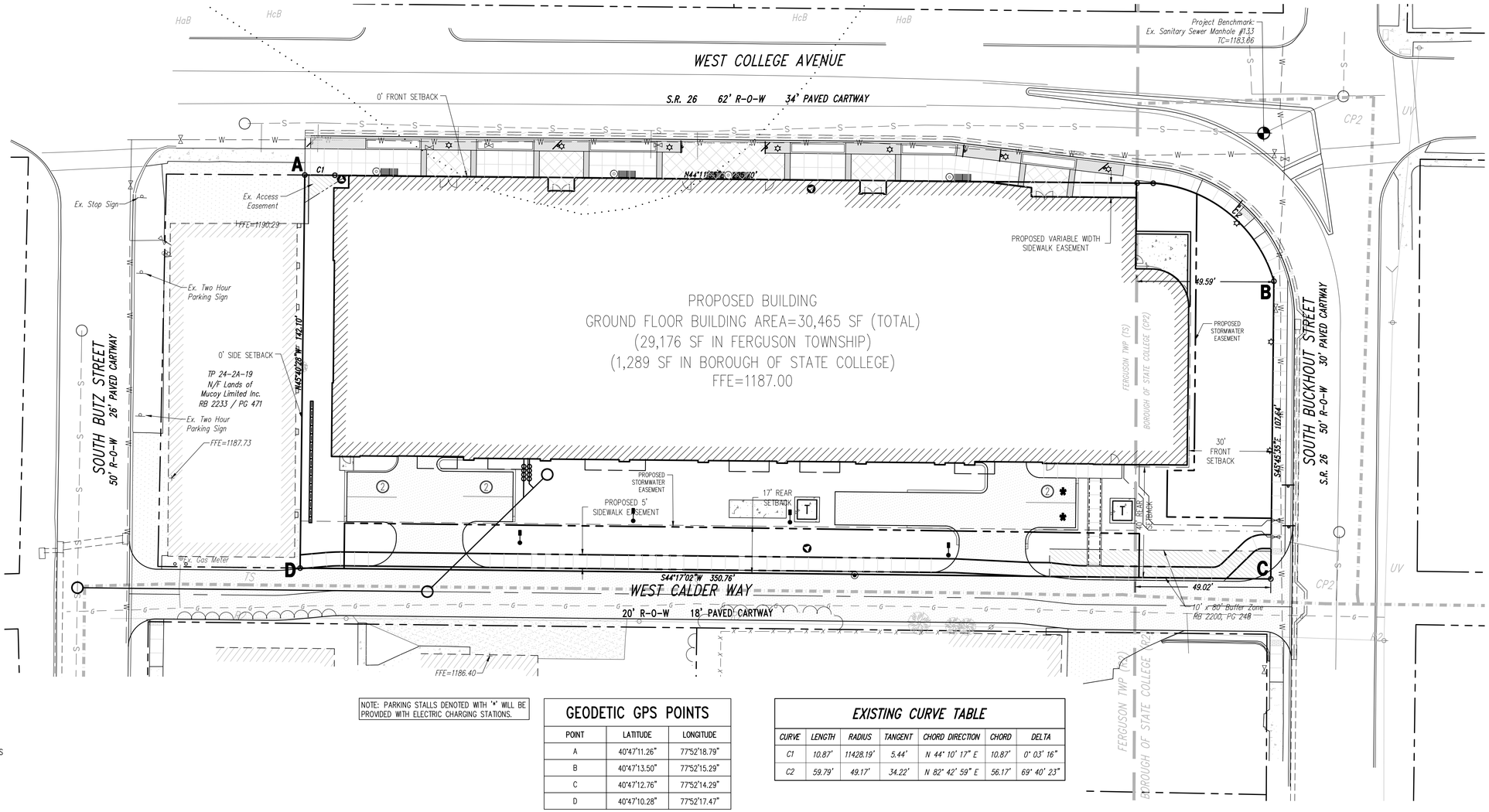
Soil cover on the site consists of:
HaB – Hagerstown Silt Loam, 3%-8% Slopes
HcB – Hagerstown Silty Loam, 3%-8% Slopes

EXISTING FEATURES LEGEND

- EXISTING BUILDING — Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Fence / Type
- Existing Sanitary Sewer w/ Manhole
- Existing Sanitary Sewer Lateral w/ Clean Out
- Existing Water Line w/ Valve
- Existing Water Service Lateral
- Existing Storm Sewer Line w/ Inlet
- Existing Gas Line
- Existing Overhead Utility Line w/ Pole
- Existing Fire Hydrant
- Existing Manhole
- Existing Utility Pole
- Existing Guy Wire
- Existing Storm Sewer Inlet Type-M
- Existing Storm Sewer Inlet Type-C
- Existing Utility Meter
- Existing Light Pole/Standard
- Existing Monitoring Well
- Existing Sign
- Existing Soil Limit Boundary
- HaB — Existing Soil Type
- Existing Deciduous Tree
- Existing Evergreen Tree
- Existing Shrub

PROPOSED FEATURES LEGEND

- PROPOSED BUILDING — PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS
- PROPOSED FULL-DEPTH BITUMINOUS PAVEMENT AREAS
- PROPOSED OVERLAY BITUMINOUS PAVEMENT AREAS
- PROPOSED LIGHT FIXTURE (DECORATIVE)
- PROPOSED LIGHT POLE (SINGLE FIXTURE)
- PROPOSED TRAFFIC FLOW ARROWS (NOT PAINTED)
- PROPOSED PARKING STALL COUNT
- PROPOSED SIGN W/ LABEL
- DEPRESSED CURB / TRANSITION CURB — PROPOSED DEPRESSED CURB W/ CURB TRANSITION
- PROPOSED HANDICAPPED RAMP
- PROPOSED RETAINING WALL
- PROPOSED RETAINING WALL FENCE
- PROPOSED 6"ø STEEL BOLLARD FILLED W/ CONCRETE



NOTE: PARKING STALLS DENOTED WITH '•' WILL BE PROVIDED WITH ELECTRIC CHARGING STATIONS.

GEODETIC GPS POINTS

POINT	LATITUDE	LONGITUDE
A	40°47'11.26"	77°52'18.79"
B	40°47'13.50"	77°52'15.29"
C	40°47'12.76"	77°52'14.29"
D	40°47'10.28"	77°52'17.47"

EXISTING CURVE TABLE

CURVE	LENGTH	RADIUS	TANGENT	CHORD DIRECTION	CHORD	DELTA
C1	10.87'	11428.19'	5.44'	N 44° 10' 17" E	10.87'	0° 03' 16"
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GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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

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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOHN C. SEPP — ENGINEER 040003-E

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — NEVIN L. GROVE — LAND SURVEYOR No. SU061171

Designer	EAH
Draftsman	EAH
Proj.Manager	JCS
Surveyor	BRK
Perimeter Ck.	
Book	542 Pg 42
Acad	19052-FERGUSON-PRELIMINARY-LD-RP
Layout	RP

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/27/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
12/18/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
11/04/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS

REVISIONS

WEST COLLEGE STUDENT HOUSING

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

RECORD PLAN

PROJECT NO. 19052
DATE AUGUST 14, 2020
SCALE 1"=20'
SHEET NO. 3

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Owners Certification Tax Parcel _____

Commonwealth of Pennsylvania
County of Centre

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

Storm Water Facilities Acknowledgement

I/We, _____ the landowner(s), my/our heirs and assigns, acknowledge the Stormwater Management System to be a permanent facility which can be altered or removed only after approval of a revised plan by the Ferguson Township Board of Supervisors. The stormwater management system is to be maintained in accordance with the approved ownership and maintenance program.

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.

Municipal Storm Water Certification

I, _____, _____20___, have reviewed the Stormwater Management Plan in accordance with the design standards and criteria of the Ferguson Township Stormwater Management Ordinance.

Township Planning Commission

Ferguson Township Planning Commission Approved

_____
Chairman Date

_____
Secretary Date

Township Supervisors

Ferguson Township Supervisors Approved

_____
Chairman

_____
Secretary

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

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

Storm Water Certification

I, _____, hereby certify that the Stormwater Management Plan meets all design standards and criteria of the Ferguson Township Stormwater Management Ordinance.

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.

PROJECT NOTES:

1. Property Owner Information:
Scott L. & Glenda C. Yocum
PO Box 57
Boalsburg, PA 16827

Developer Information:
Aspen Heights Partners
8008 Corporate Center Drive
Charlotte, NC 28226

2. General Site Information:
   a. Tax Parcel No.: 24-002A-015
   b. Site Address: 914 West College Ave, State College, PA 16801
   c. Municipality: Borough of State College / Ferguson Township
   d. Zoning: Planned Commercial (CP-2) District / Terraced Streetscape (TS) District
   e. Deed Information: Record Book _____, Page _____
   f. Existing Site/Lot Size: 49,489 S.F. (1.136 Acres)

3. Zoning Information: (Note: All Zoning Information pertains to the Ferguson Township portion of the project.)
   a. Proposed Site Use: Multi-Family Residential Apartment Building with Commerical/Retail Space on the First Floor.
   b. Front Yard Setback: 12' From the back edge of the curb on College Avenue
   c. Side Yard Setbacks: 0'-Side yard adjacent to lot that Fronts on West College Avenue
   d. Rear Yard Setbacks: 17'-Abutting an Alley which coincides with a district boundary
   e. Maximum Building Height: 55' (Additional height up to 75' for lots of at least one acre may be obtained through the use of incentives. See §27-703.3 for more information.)
   f. Proposed Building Height: 74.8'
   g. Proposed Building Coverage: 61.56% (30,465 S.F.)
   h. Maximum Impervious Coverage: 75.00% (37,117 S.F.)
   i. Existing Impervious Coverage: 50.76% (25,119 S.F.)
   j. Proposed Impervious Coverage: 74.64% (36,940 S.F.)
   k. A Variance was granted by the Ferguson Township Zoning Hearing Board on February 25, 2020 allowing parking on the first floor of the building.
   l. Building Area Information:

Residential (TS District):	145,880 SF
Commercial (TS District):	7,488 SF
Professional Office (CP-2, Borough of State College):	1,208 SF

4. Unit and Bed Calculations:

Unit Type	Number of Units	Number of Beds
2 Bedroom (B1)	9	18
2 Bedroom (B1 Type A)	1	2
2 Bedroom (B2)	10	20
2 Bedroom (B3)	20	60
3 Bedroom (C1)	55	165
3 Bedroom (C1 Type A)	1	3
Totals:	96	268 (All Within Ferguson Township)

5. Automobile Parking Calculations:
   Required Parking (Ferguson Township):
   Residential (TS District): Residential parking within the TS District shall be provided at the rate of 1.5 spaces for each unit that is two bedrooms or larger.
   96 Units * 1.5 Spaces = 144 Spaces Required
   Non-Residential (TS District): Parking for non-residential uses within the TS District shall be provided at the rate of 1/500 square feet.
   7,488 SF * 1 Space per 500 SF = 15 Spaces Required
   Required Parking (Borough of State College):
   Professional Office: 1 Space per 300 square feet of gross floor area
   1,208 SF * 1 Space per 300 SF = 4 Spaces Required
   Total Required Parking:
   Ferguson Township Total: 159 Spaces
   Borough of State College Total: 4 Spaces
   Total Parking Required: 163 Spaces

   Total Parking Provided: 165 Spaces (159 In the Parking Structure and 6 Exterior)

6. Bicycle Parking Calculations:
   Short-Term: 268 Beds * 0.05 Spaces per Bedroom = 13.4
   14 Short-Terms Bicycle Parking Spaces Required
   Long-Term: There are no Long-Term Bicycle Parking Spaces required for this project since multi-family dwelling units with private garages are proposed. See §22-502C.A.1.

7. Natural Site Features & Survey Information:
   a. Soil limits and descriptions have been taken from the Natural Resources Conservation Service Web Soil Survey dated June 2020.
   b. There are no portions of this property located within a Zone 'A' 100-year Flood Plain according to the Federal Emergency Management Agency (FEMA) Map Number 42027C0636F for the Borough of State College, effective date May 4, 2009.
   c. There are no wetlands on the property according to the National Wetlands Inventory (U.S. Fish & Wildlife Service) for State College, PA, last updated June 2020.
   d. Horizontal Datum is Pennsylvania North Zone State Plane Coordinates, North American Vertical Datum of 1983 (PA NAD83) U.S. Feet
   e. Elevation Datum is the North American Vertical Datum of 1988 (NAVD 88)
   f. The Project Benchmark is the top of casting of the sanitary sewer manhole in the median island at the intersection of West College Avenue and South Buckhout Street, as shown on the plan. Elevation = 1183.66'.
   g. Field monumentation of the Municipal Boundary Line could not be located. Plans of Record, field survey data, and PennDOT mapping was used to determine the location as shown on the plan.

8. Act 287 Information:
Serial No. 20200352498 (Borough of State College)
Serial No. 20200352497 (Ferguson Township)
All utility locations should be verified prior to any construction, utility information and locations should be considered approximate. Contractor shall notify PA One Call prior to any excavation.

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   b. Telephone
   Verizon, Facility Management Center, 224 S. Allen Street, State College, PA 16801 – Phone: (814) 231-6511
   c. TV Cable
   Comcast, 250 Reese Road, State College, PA 16801 – Phone: (888) 266-2278
   d. Gas
   Columbia Gas of Pennsylvania, 2550 Carolean Drive, State College, PA 16801 – Phone: (814) 238-6775
   e. Sanitary Sewer Treatment
   University Area Joint Authority (UAJA), 1576 Spring Valley Road, State College, PA 16801 – Phone: (814) 238-5361
   f. Sanitary Sewer Collection & Conveyance
   State College Borough Sewer Authority, 243 S. Allen Street, State College, PA 16801 – Phone: (814) 234-7135
   University Area Joint Authority (UAJA), 1576 Spring Valley Road, State College, PA 16801 – Phone: (814) 238-5361
   g. Water
   State College Borough Water Authority (SCBWA), 1201 West Branch Road, State College, PA 16801 – Phone: (814) 238-6766

9. Project References:
   a. "Final Plan Lot Consolidation of Tax Parcels 24-002A-015 & 24-002A-016 & 24-002A-017 & 24-002A-018 & 36-010-006", prepared by PennTerra Engineering, Inc. and dated August 14, 2020.
   b. "Post Construction Stormwater Management Plan Narrative", prepared by PennTerra Engineering, Inc., last revised February 19, 2021.
   c. "Erosion & Sedimentation Control Plan Narrative", prepared by PennTerra Engineering, Inc., last revised February 19, 2021.
   d. "Traffic Impact Study For The Proposed Aspen Heights Partners Development", prepared by David E. Wooster & Associates, inc., dated August 19, 2020, and last revised November 2020.

10. 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 issuance of Occupancy Permit. As-built drawings/documentation of the stormwater management facilities must also be submitted to the Borough of State College in accordance with §14-224.h of the Stormwater Management Ordinance.

11. Face area and height for all signs shall conform to the Ferguson Township Sign Ordinance and will be included with the Final Plan.

12. Plan Purpose:
The purpose of this plan is to construct a one story mixed-use building within the Planned Commercial District (CP-2) in the Borough of State College, and a six story mixed-use building within the Terraced Streetscape District (TS) in Ferguson Township. The building will consist of two subsurface floors of underground parking, one floor containing commercial space, and five floors of multi-family residential apartments located in Ferguson Township. Refer to the Architectural Plans prepared by BSB Design, Inc. for additional building information.

13. Additional Planning Information:
   a. The proposed building will be fully sprinklered with automatic wet-pipe & dry-pipe sprinkler systems. Standpipes with fire hose valves will be provided in the stairs. An internal fire pump will support the sprinkler and standpipe systems. All fire protection systems in the building will be designed and installed in accordance with NFPA 13, NFPA 14, NFPA 20, and local building and fire codes. An integral Siamese Fire Department Connection will also be provided as coordinated between the Developer, Architect, and the Centre Regional Council of Governments Regional Fire Protection Program Fire Director.
   b. Highway Occupancy Permits are required from the Pennsylvania Department of Transportation for all construction activities located within the state Right-Of-Way along West College Avenue.
   c. All "Refuse and Recycling" collection bins/dumpsters/compactors will be typically located inside of the building's refuse and recycling area. On refuse/recycling collection days, all collection bins/dumpsters/compactors will be moved outside of the building to the loading space, and then returned to the building after collection.

14. 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.

15. The date of application for a Zoning Permit is August 17, 2020.

16. Pre-construction meetings are required prior to starting work to discuss stormwater and public improvements. Please contact the Municipal Engineer to schedule the meeting.

17. A Township Pave Cut Permit must be obtained for the sewer connection at Butz Street prior to issuing a Zoning Permit for this development.

18. The Developer will maintain in good repair Calder Way along the project. Access to Calder Way will not be restricted.

19. A Fee-in-Lieu of Parkland will be offered for the 96 Residential Units in this project based on the following Ferguson Township Fee Schedule.
96 Units X 2.54 persons per unit X $1,225.00 per person = $298,704 Fee-In-Lieu of Parkland

20. The project will provide full-time on-site management.

21. An as-built drawing of the sinkhole repair shall be submitted to the township as port of the stormwater as-builts drawings.

22. A Sidewalk Easement Agreement has been recorded in RB _____, PG _____ for the concrete sidewalk located along West Calder Way and a section of sidewalk located along West College Ave (SR0026).

FIRE FLOW INFORMATION:

Fire Hydrant #:30228
Location: North Butz Street @ Grass Alley
Flow Information
Test Date: 07/17/2019
Pressure: Static: 37 psi
Residual: 15 psi
Flow: 850 gpm

Fire Hydrant #:30212
Location: West College Avenue @ North Buckhout Street
Flow Information
Test Date: 07/17/2019
Pressure: Static: 46 psi
Residual: 38 psi
Flow: 1,325 gpm

Fire Hydrant #:30208
Location: West Beaver Ave @ South Buckhout Street
Flow Information
Test Date: 07/12/2019
Pressure: Static: 50 psi
Residual: 40 psi
Flow: 1,300 gpm

PennTerra ENGINEERING INC.

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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOHN C. SEPP — ENGINEER 040003-E

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — NEVIN L. GROVE — LAND SURVEYOR No. SU061171

Designer EAH
Draftsman EAH
ProjManager JCS
Surveyor BRK
Perimeter Ck.
Book 542 Pg 42
Acad 19052-FERGUSON-PRELIMINARY-LD-SIG
Layout SIG-NOTES

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/27/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
12/18/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
11/06/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS

REVISIONS

WEST COLLEGE STUDENT HOUSING

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

SIGNATURE & NOTES PAGE

PROJECT NO. 19052
DATE AUGUST 14, 2020
SCALE N.T.S.
SHEET NO. 4

P:\ddtprog\2019\19052\Design\plot files\prelim plans\Ferguson\19052-FERGUSON-PRELIMINARY-LD-SIG.dwg, 2/19/2021 2:58:38 PM, 1:1

SURVEY FEATURES LEGEND

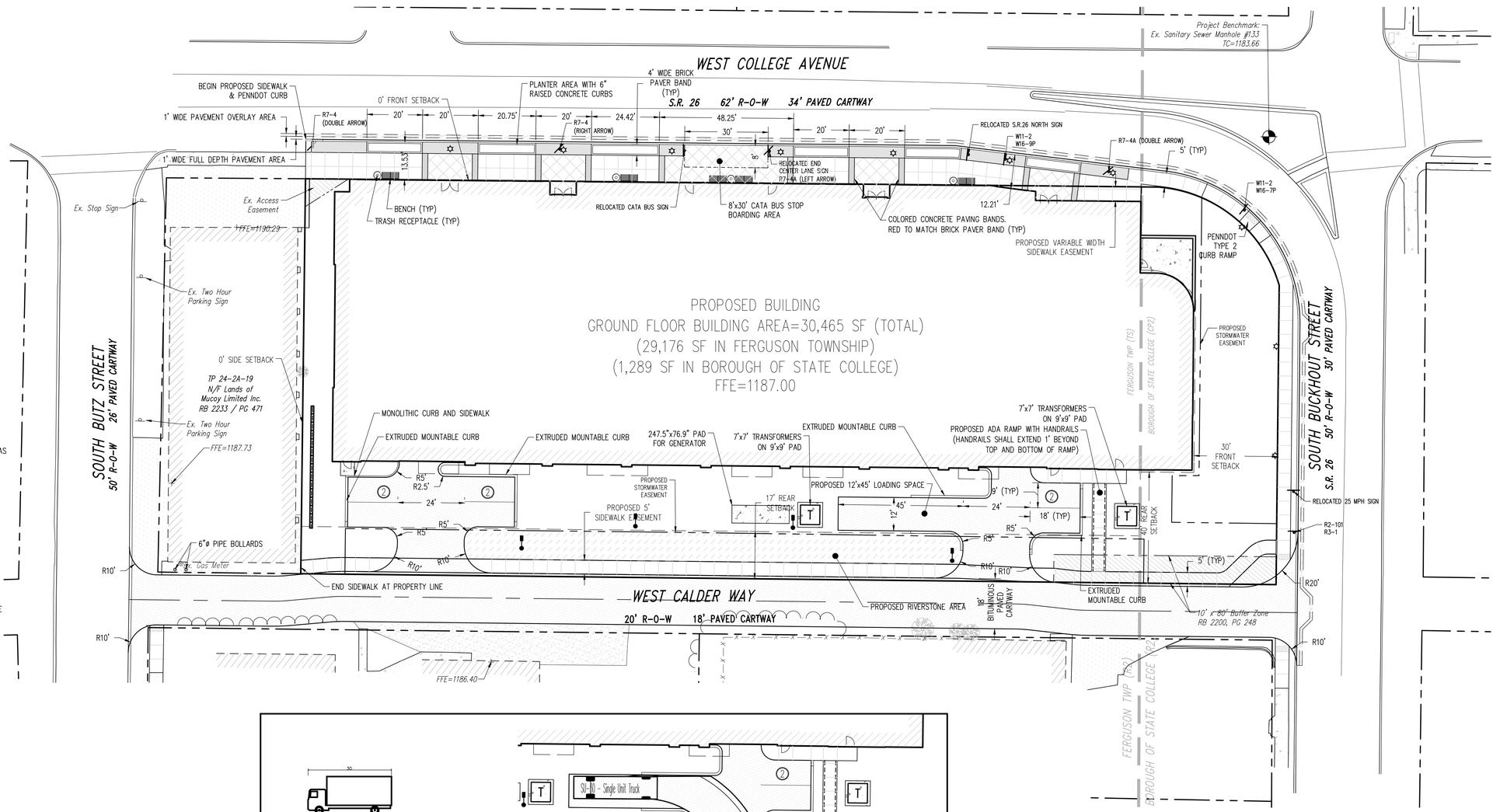
- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Project Benchmark
- Municipal Boundary

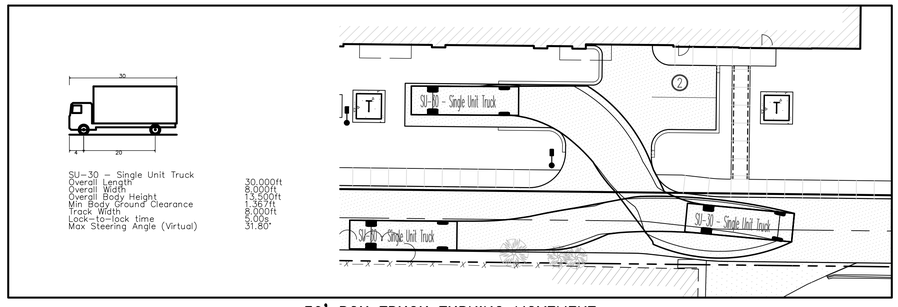
EXISTING FEATURES LEGEND

- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Fence / Type
- Existing Sign
- Existing Tree Row
- Existing Deciduous Tree
- Existing Evergreen Tree
- Existing Shrub

PROPOSED FEATURES LEGEND

- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS
- PROPOSED FULL-DEPTH BITUMINOUS PAVEMENT AREAS
- PROPOSED OVERLAY BITUMINOUS PAVEMENT AREAS
- PROPOSED LIGHT FIXTURE (DECORATIVE)
- PROPOSED LIGHT POLE (SINGLE FIXTURE)
- PROPOSED PARKING STALL COUNT
- PROPOSED SIGN W/ LABEL
- PROPOSED DEPRESSED CURB W/ CURB TRANSITION
- PROPOSED HANDICAPPED RAMP
- PROPOSED RETAINING WALL
- PROPOSED RETAINING WALL FENCE
- PROPOSED RIVERSTONE AREAS
- PROPOSED 6"ø STEEL BOLLARD FILLED W/ CONCRETE

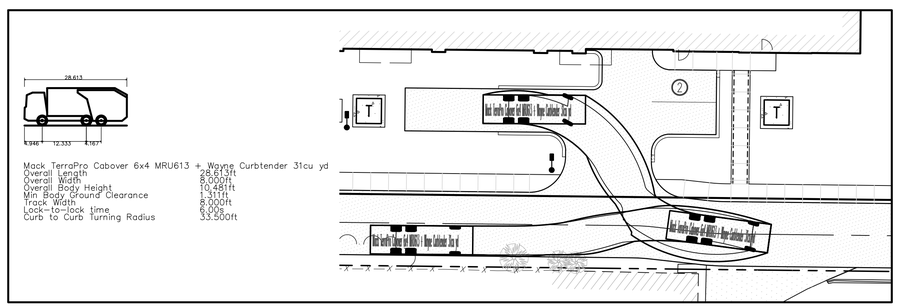




SU-30 – Single Unit Truck

Overall Length	30.000ft
Overall Width	8.000ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.367ft
Track Width	8.000ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	31.80°

30' BOX TRUCK TURNING MOVEMENT



Overall Length	28.613ft
Overall Width	8.000ft
Overall Body Height	10.481ft
Min Body Ground Clearance	1.311ft
Track Width	8.000ft
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	33.500ft

GARBAGE TRUCK TURNING MOVEMENT

All "Refuse and Recycling" collection bins/dumpsters/compactors will be typically located inside of the building's refuse and recycling area. On refuse/recycling collection days, all collection bins/dumpsters/compactors will be moved outside of the building to the loading space, and then returned to the building after collection.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

PennTerra ENGINEERING INC.

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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOHN C. SEPP — ENGINEER — 040003-E

Designer	EAH
Draftsman	EAH
Proj.Manager	JCS
Surveyor	BRK
Perimeter Ck.	
Book	542 Pg 42
Acad	19052-FERGUSON-PRELIMINARY-LD-GEO
Layout	GEO

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/27/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
12/18/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
11/06/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS

REVISIONS

WEST COLLEGE STUDENT HOUSING

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

GEOMETRY PLAN

PROJECT NO.	19052
DATE	AUGUST 14, 2020
SCALE	1"=20'
SHEET NO.	5

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GRADING NOTES

1. ALL SITE WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS PREPARED BY PENNTERRA, THE CURRENT REQUIREMENTS OF THE FERGUSON TOWNSHIP, THE CURRENT REQUIREMENTS OF THE BOROUGH OF STATE COLLEGE, THE APPLICABLE SECTIONS OF THE PENNDOT STANDARD SPECIFICATIONS FOR ROADWAY CONSTRUCTION, AND ALL OTHER PERTINENT FEDERAL AND STATE LAWS.
2. 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.
3. 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.
4. MAXIMUM SLOPES SHALL BE 3:1 (HORIZONTAL:VERTICAL) EXCEPT WHERE SPECIFICALLY NOTED.
5. ALL AREAS NOT PAVED SHALL BE TOPSOILED, SEEDED, MULCHED OR LANDSCAPED UNLESS OTHERWISE NOTED IN THE CONSTRUCTION DRAWINGS, SITE SPECIFICATIONS OR INSTRUCTED BY THE OWNER.
7. 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%.
8. CONTOURS SHOWN ON THIS PLAN ARE GENERATED FROM A FIELD SURVEY BY PENNTERRA ENGINEERING, INC. THE PROJECT BENCHMARK IS THE TOP OF CASTING OF THE SANITARY SEWER MANHOLE IN THE MEDIAN ISLAND AT THE INTERSECTION OF WEST COLLEGE AVENUE AND SOUTH BUCKHOUT STREET, AS SHOWN ON THE PLAN. ELEVATION = 1183.66'.

SURVEY FEATURES LEGEND

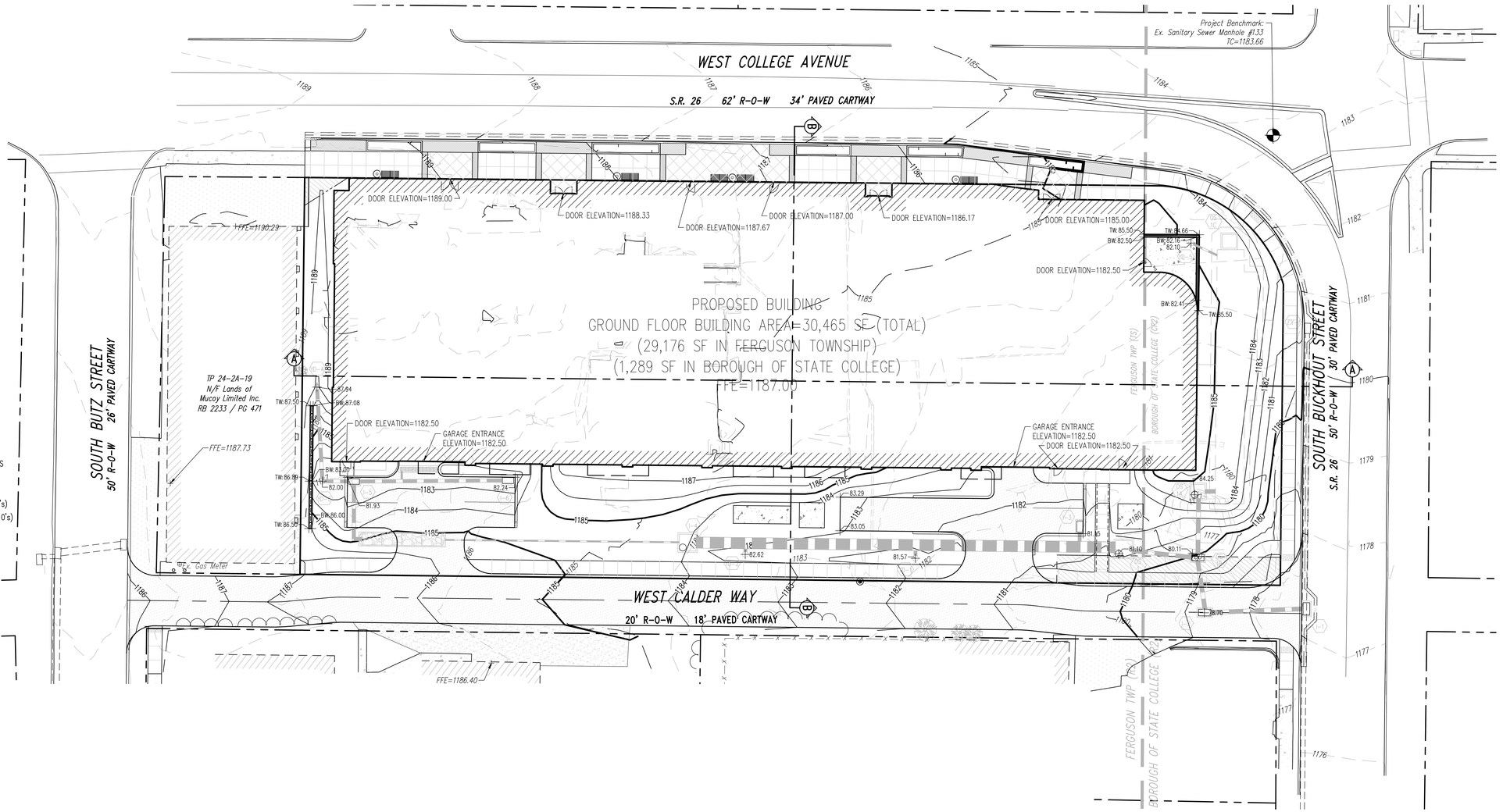
- *Property Line, Lot Line or Right of Way Line*
- *Adjoining Property Line*
- *Building Setback Line*
- *Easement Line*
- *Project Benchmark*
- *Municipal Boundary*

EXISTING FEATURES LEGEND

- *Existing Building*
- *Existing Curbing & Edge of Pavement*
- *Existing Concrete Areas*
- *Existing Bituminous Areas*
- *Existing Gravel Areas*
- *Existing Retaining Wall*
- *Existing Fence / Type*
- *Existing Contours w/ Elevation (1's & 2's)*
- *Existing Contours w/ Elevation (5's & 10's)*
- *Existing Storm Sewer Line w/ Inlet*
- *Existing Tree Row*
- *25% Slopes Or Greater*
- *Existing Deciduous Tree*
- *Existing Evergreen Tree*
- *Existing Shrub*

PROPOSED FEATURES LEGEND

- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS
- PROPOSED FULL-DEPTH BITUMINOUS PAVEMENT AREAS
- PROPOSED OVERLAY BITUMINOUS PAVEMENT AREAS
- PROPOSED RETAINING WALL
- PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- PROPOSED SPOT ELEVATION
- PROPOSED GRADE SLOPE
- PROPOSED STORM SEWER W/ TYPE C INLET
- PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED STORM SEWER TRENCH DRAIN
- PROPOSED DEPRESSED CURB W/ CURB TRANSITION
- PROPOSED HANDICAPPED RAMP
- PROPOSED RETAINING WALL FENCE
- PROPOSED 6"ø STEEL BOLLARD FILLED W/ CONCRETE



GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

PennTerra ENGINEERING INC.

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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOHN C. SEPP — ENGINEER — 040003-E

Designer	EAH
Draftsman	EAH
Proj.Manager	JCS
Surveyor	BRK
Perimeter Ck.	
Book	542 Pg 42
Acad	19052-FERGUSON-PRELIMINARY-LD-GP
Layout	GP

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/27/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
12/18/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
11/06/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS

REVISIONS

WEST COLLEGE STUDENT HOUSING

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

GRADING PLAN

PROJECT NO. 19052
DATE AUGUST 14, 2020
SCALE 1"=20'
SHEET NO. 6

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SURVEY FEATURES LEGEND

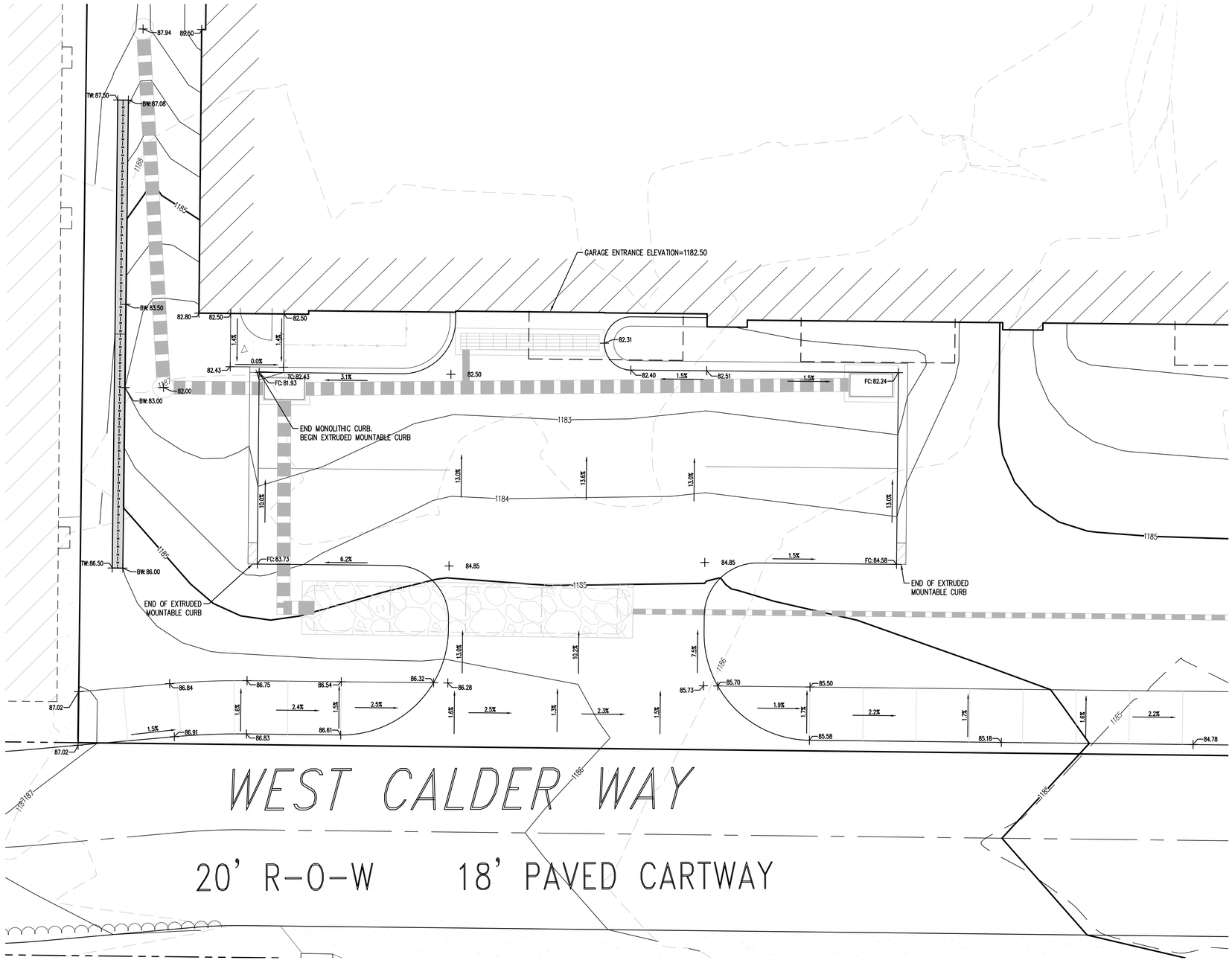
- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Project Benchmark
- Municipal Boundary

EXISTING FEATURES LEGEND

- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Fence / Type
- Existing Contours w/ Elevation (1's & 2's)
- Existing Contours w/ Elevation (5's & 10's)
- Existing Storm Sewer Line w/ Inlet
- Existing Tree Row
- 25% Slopes Or Greater
- Existing Deciduous Tree
- Existing Evergreen Tree
- Existing Shrub

PROPOSED FEATURES LEGEND

- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS
- PROPOSED FULL-DEPTH BITUMINOUS PAVEMENT AREAS
- PROPOSED OVERLAY BITUMINOUS PAVEMENT AREAS
- PROPOSED RETAINING WALL
- PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- PROPOSED SPOT ELEVATION
- PROPOSED GRADE SLOPE
- PROPOSED STORM SEWER W/ TYPE C INLET
- PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED STORM SEWER TRENCH DRAIN
- PROPOSED DEPRESSED CURB W/ CURB TRANSITION
- PROPOSED HANDICAPPED RAMP
- PROPOSED RETAINING WALL FENCE
- PROPOSED 6"ø STEEL BOLLARD FILLED W/ CONCRETE



GRAPHIC SCALE

5 0 2.5 5 10 20

(IN FEET)
1 inch = 5 ft.

PennTerra ENGINEERING INC.

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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOHN C. SEPP — ENGINEER — 040003-E

Designer	EAH
Draftsman	EAH
Proj.Manager	JCS
Surveyor	BRK
Perimeter Ck.	
Book	542 Pg 42
Acad	19052-FERGUSON-PRELIMINARY-LD-GPEN1
Layout	GP-EN1

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/27/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
12/16/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
11/06/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS

REVISIONS

WEST COLLEGE STUDENT HOUSING

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

GRADING PLAN - ENLARGEMENT

PROJECT NO. 19052

DATE AUGUST 14, 2020

SCALE 1"=5'

SHEET NO. 7

P:\ldd\proj\2019\19052\Design\plot files\preliminary plans\Ferguson\19052-FERGUSON-PRELIMINARY-LD-GPEN1.dwg, 2/19/2021 2:59:19 PM, 1:1

GARAGE ENTRANCE ELEVATION=1182.50

END OF EXTRUDED MOUNTABLE CURB

PROPOSED RAMP WITH HANDRAILS
(HANDRAILS MUST EXTEND 12"
BEYOND TOP AND BOTTOM OF RAMP)

END OF EXTRUDED MOUNTABLE CURB

END OF EXTRUDED MOUNTABLE CURB

WEST CALDER WAY

20' R-O-W 18' PAVED CARTWAY

SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Project Benchmark
- Municipal Boundary

EXISTING FEATURES LEGEND

- EXISTING BUILDING — Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Fence / Type
- 1109 — Existing Contours w/ Elevation (1's & 2's)
- 1110 — Existing Contours w/ Elevation (5's & 10's)
- Existing Storm Sewer Line w/ Inlet
- Existing Tree Row
- 25% Slopes Or Greater
- Existing Deciduous Tree
- Existing Evergreen Tree
- Existing Shrub

PROPOSED FEATURES LEGEND

- PROPOSED BUILDING — PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS
- PROPOSED FULL-DEPTH BITUMINOUS PAVEMENT AREAS
- PROPOSED OVERLAY BITUMINOUS PAVEMENT AREAS
- PROPOSED RETAINING WALL
- 1109 — PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- 1110 — PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- 69.87 — PROPOSED SPOT ELEVATION
- 2.0% — PROPOSED GRADE SLOPE
- PROPOSED STORM SEWER W/ TYPE C INLET
- RD — PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED STORM SEWER TRENCH DRAIN
- DEPRESSED CURB TRANSITION CURB — PROPOSED DEPRESSED CURB W/ CURB TRANSITION
- PROPOSED HANDICAPPED RAMP
- PROPOSED RETAINING WALL FENCE
- PROPOSED 6"ø STEEL BOLLARD FILLED W/ CONCRETE

Magnetic North

GRAPHIC SCALE

5 0 2.5 5 10 20

(IN FEET)
1 inch = 5 ft.

PennTerra ENGINEERING INC.

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Designer	EAH
Draftsman	EAH
Proj Manager	JCS
Surveyor	BRK
Perimeter Ck.	
Book	542 Pg 42
Acad	19052-FERGUSON-PRELIMINARY-LD-GPEN2
Layout	GP-EN2

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/27/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
12/18/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
11/06/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS

REVISIONS

WEST COLLEGE STUDENT HOUSING

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

GRADING PLAN - ENLARGEMENT

PROJECT NO.	19052
DATE	AUGUST 14, 2020
SCALE	1"=5'
SHEET NO.	8

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SURVEY FEATURES LEGEND

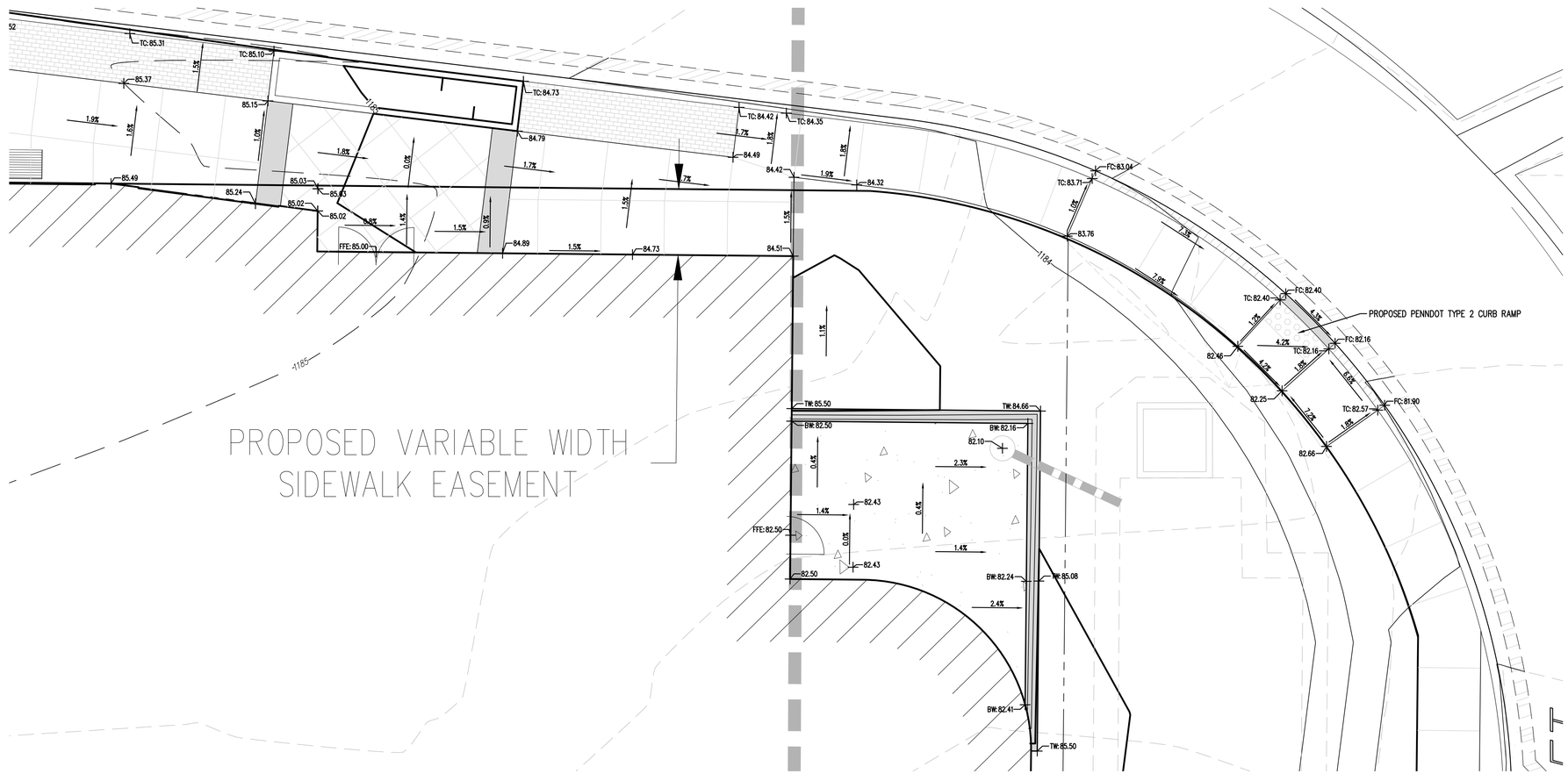
- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Project Benchmark
- Municipal Boundary

EXISTING FEATURES LEGEND

- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Fence / Type
- Existing Contours w/ Elevation (1's & 2's)
- Existing Contours w/ Elevation (5's & 10's)
- Existing Storm Sewer Line w/ Inlet
- Existing Tree Row
- 25% Slopes Or Greater
- Existing Deciduous Tree
- Existing Evergreen Tree
- Existing Shrub

PROPOSED FEATURES LEGEND

- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS
- PROPOSED FULL-DEPTH BITUMINOUS PAVEMENT AREAS
- PROPOSED OVERLAY BITUMINOUS PAVEMENT AREAS
- PROPOSED RETAINING WALL
- PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- PROPOSED SPOT ELEVATION
- PROPOSED GRADE SLOPE
- PROPOSED STORM SEWER W/ TYPE C INLET
- PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED STORM SEWER TRENCH DRAIN
- PROPOSED DEPRESSED CURB W/ CURB TRANSITION
- PROPOSED HANDICAPPED RAMP
- PROPOSED RETAINING WALL FENCE
- PROPOSED 6"ø STEEL BOLLARD FILLED W/ CONCRETE



GRAPHIC SCALE

5 0 2.5 5 10 20

(IN FEET)
1 inch = 5 ft.

PennTerra ENGINEERING INC.

CENTRAL PENNSYLVANIA REGION OFFICE:
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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOHN C. SEPP — ENGINEER — 040003-E

Designer	EAH
Draftsman	EAH
Proj.Manager	JCS
Surveyor	BRK
Perimeter Ck.	
Book	542 Pg 42
Acad	19052-FERGUSON-PRELIMINARY-LD-GPEN3
Layout	GP-EN3

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/27/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
12/18/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
11/04/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS

REVISIONS

WEST COLLEGE STUDENT HOUSING

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

GRADING PLAN - ENLARGEMENT

PROJECT NO. 19052
DATE AUGUST 14, 2020
SCALE 1"=5'
SHEET NO. 9

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SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
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EXISTING FEATURES LEGEND

- Existing Building
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- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Fence / Type
- Existing Contours w/ Elevation (1's & 2's)
- Existing Contours w/ Elevation (5's & 10's)
- Existing Storm Sewer Line w/ Inlet
- Existing Tree Row
- 25% Slopes Or Greater
- Existing Deciduous Tree
- Existing Evergreen Tree
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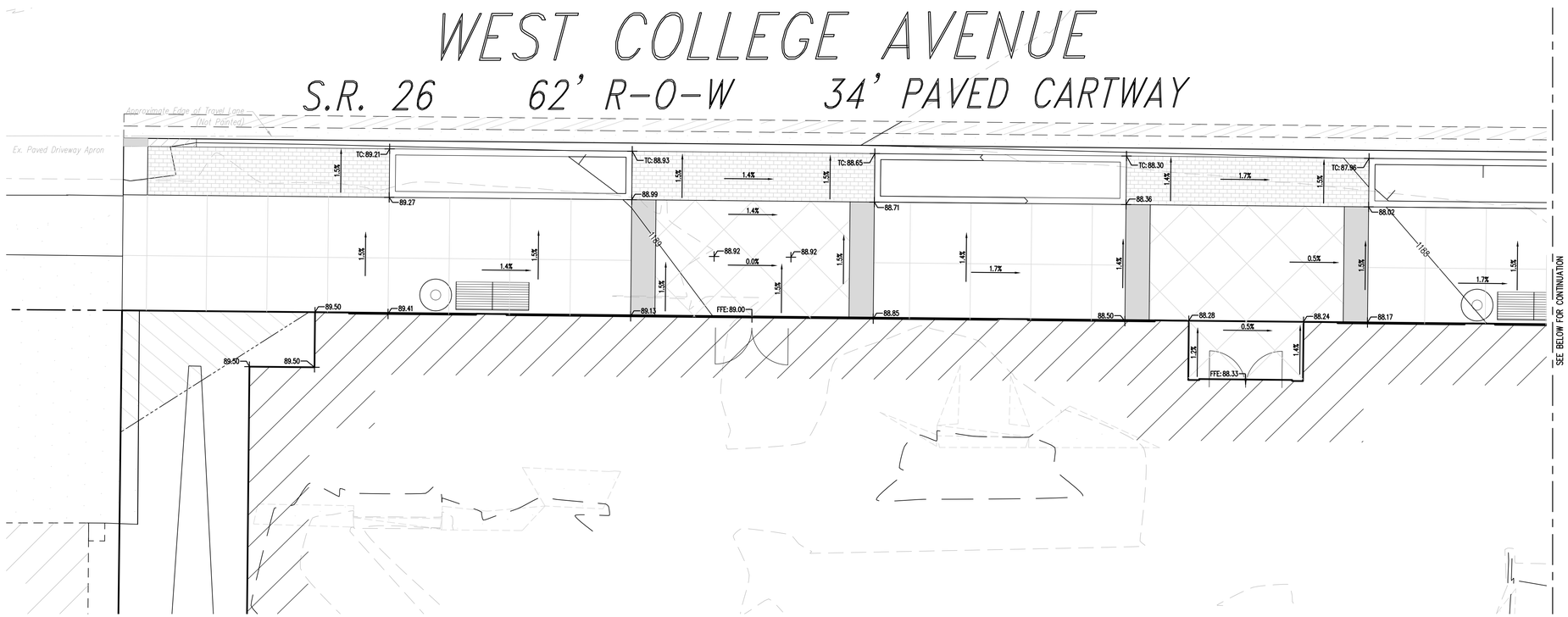
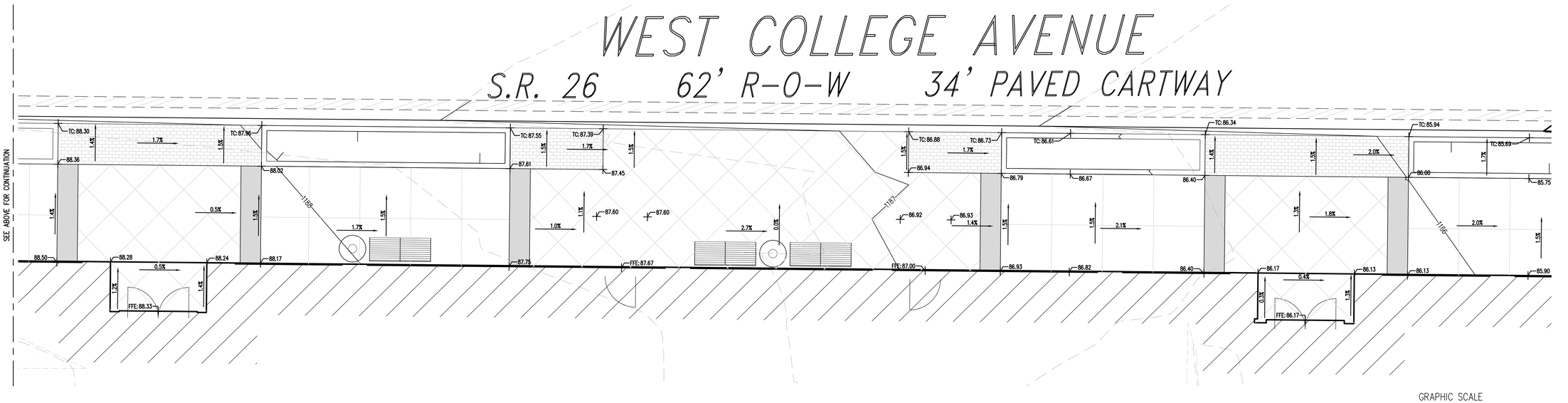
PROPOSED FEATURES LEGEND

- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS
- PROPOSED FULL-DEPTH BITUMINOUS PAVEMENT AREAS
- PROPOSED OVERLAY BITUMINOUS PAVEMENT AREAS
- PROPOSED RETAINING WALL
- PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- PROPOSED SPOT ELEVATION
- PROPOSED GRADE SLOPE
- PROPOSED STORM SEWER W/ TYPE C INLET
- PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED STORM SEWER TRENCH DRAIN
- PROPOSED DEPRESSED CURB W/ CURB TRANSITION
- PROPOSED HANDICAPPED RAMP
- PROPOSED RETAINING WALL FENCE
- PROPOSED 6"ø STEEL BOLLARD FILLED W/ CONCRETE





GRAPHIC SCALE

5 0 2.5 5 10 20

(IN FEET)
1 inch = 5 ft.

PennTerra ENGINEERING INC.

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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JOHN C. SEPP ENGINEER 040003-E

Designer	EAH
Draftsman	EAH
Proj.Manager	JCS
Surveyor	BRK
Perimeter Ck.	
Book	542 Pg 42
Acad	19052-FERGUSON-PRELIMINARY-LD-GPEN4
Layout	GP-EN4

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/27/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
12/18/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
11/06/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS

REVISIONS

WEST COLLEGE STUDENT HOUSING

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

GRADING PLAN - ENLARGEMENT

PROJECT NO. 19052
DATE AUGUST 14, 2020
SCALE 1"=5'
SHEET NO. 10

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UTILITY NOTES

1. 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.
2. 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.
3. 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.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES ASSOCIATED WITH THE INSTALLATION, INSPECTING, TESTING AND FINAL ACCEPTANCE OF ALL PROPOSED UTILITIES CONSTRUCTION.
5. 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 ENSURE ALL UTILITIES ARE INSTALLED CORRECTLY TO MEET PROJECT REQUIREMENTS WHETHER PERFORMED BY THE CONTRACTOR OR NOT.
6. ALL SANITARY SEWER & WATER LINES SHALL HAVE 4' MINIMUM COVERAGE.
7. ALL WATER SERVICE LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE STATE COLLEGE BOROUGH WATER AUTHORITY'S STANDARDS AND SPECIFICATIONS FOR PRIVATE SERVICE LATERALS.
8. ALL SANITARY SEWER MAINS & SERVICE LATERALS SHALL BE IN ACCORDANCE WITH THE UNIVERSITY AREA JOINT AUTHORITY'S STANDARDS AND SPECIFICATIONS.
9. ALL ROOF DRAIN LINES LEAVING THE BUILDING SHALL BE CONNECTED TO AN FG-DS10 FLOGARD DOWNSPOUT FILTER. THESE FILTERS MUST BE INSTALLED ON A VERTICAL RISER PIPE WITHIN THE BUILDING, AND MUST BE ACCESSIBLE FOR MAINTENANCE. COORDINATE EXACT INSTALLATION LOCATIONS WITH THE ARCHITECT & MEP CONSULTANT. SEE SHEET PC4 FOR MORE INFORMATION.

SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
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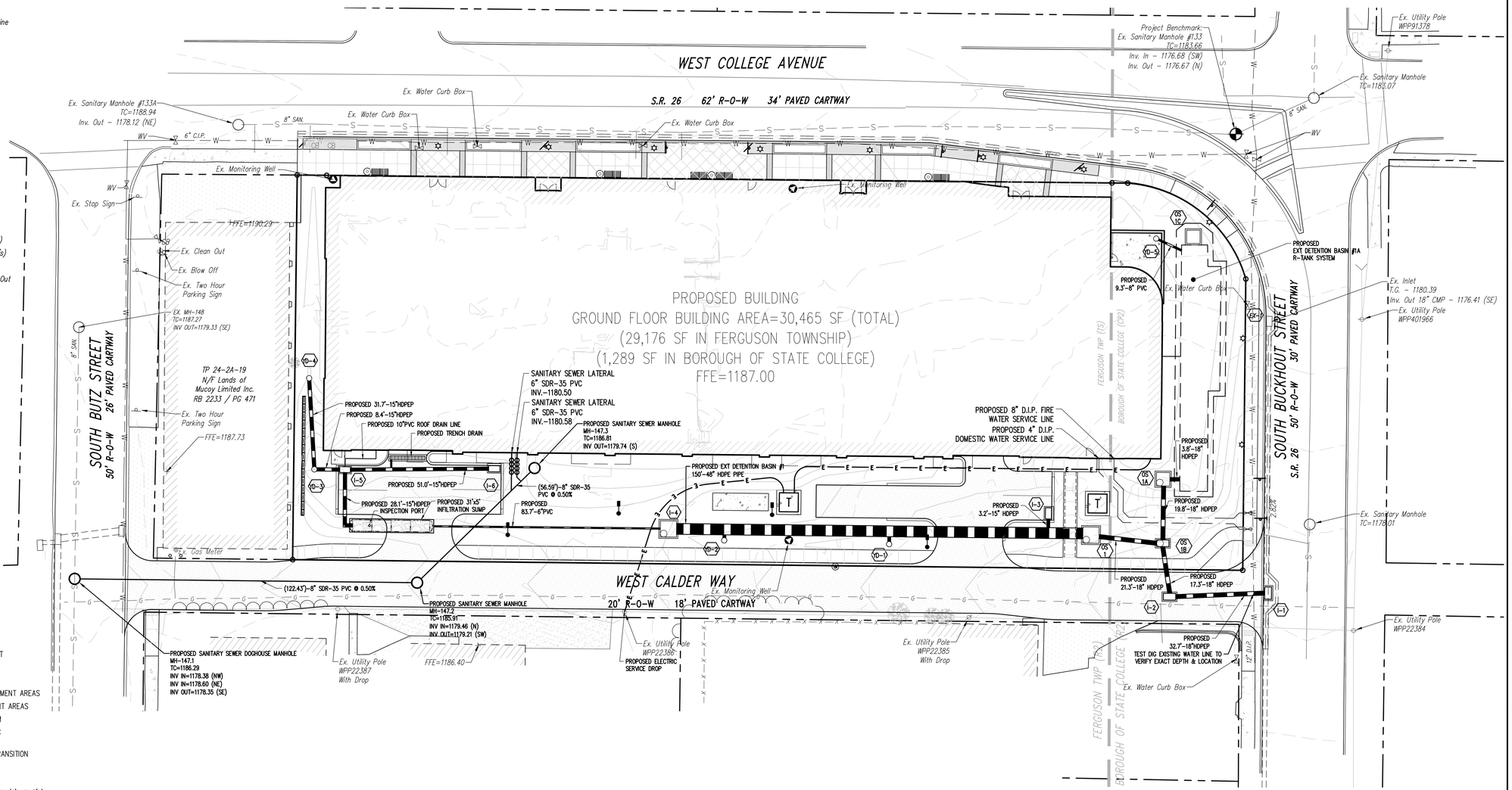
EXISTING FEATURES LEGEND

- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Fence / Type
- Existing Contours w/ Elevation (1's & 2's)
- Existing Contours w/ Elevation (5's & 10's)
- Existing Sanitary Sewer w/ Manhole
- Existing Sanitary Sewer Lateral w/ Clean Out
- Existing Water Line w/ Valve
- Existing Water Service Lateral
- Existing Storm Sewer Line w/ Inlet
- Existing Gas Line
- Existing Overhead Utility Line w/ Pole
- Existing Fire Hydrant
- Existing Manhole
- Existing Utility Pole
- Existing Guy Wire
- Existing Storm Sewer Inlet Type-M
- Existing Storm Sewer Inlet Type-C
- Existing Utility Meter
- Existing Light Pole/Standard
- Existing Flood Light
- Existing Monitoring Well
- Existing Sign
- Existing Mail Box
- Existing Tree Row
- Existing Deciduous Tree
- Existing Evergreen Tree
- Existing Shrub

PROPOSED FEATURES LEGEND

- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS
- PROPOSED FULL-DEPTH BITUMINOUS PAVEMENT AREAS
- PROPOSED OVERLAY BITUMINOUS PAVEMENT AREAS
- PROPOSED STORM SEWER INLET - TYPE M
- PROPOSED STORM SEWER INLET - TYPE C
- PROPOSED DEPRESSED CURB W/ CURB TRANSITION
- PROPOSED HANDICAPPED RAMP
- PROPOSED RETAINING WALL
- PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- PROPOSED 8" SANITARY SEWER W/ MANHOLE
- PROPOSED SANITARY SEWER LATERAL W/ CLEAN OUT
- PROPOSED WATER SERVICE LATERAL W/ CURB BOX
- PROPOSED STORM SEWER W/ TYPE C INLET
- PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED STORM SEWER TRENCH DRAIN
- PROPOSED GAS LINE
- PROPOSED LIGHT FIXTURE (DECORATIVE)
- PROPOSED LIGHT POLE (SINGLE FIXTURE)
- PROPOSED SIGN
- PROPOSED RETAINING WALL FENCE



GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

PennTerra ENGINEERING INC.

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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JOHN C. SEPP ENGINEER 040003-E

Designer	EAH
Draftsman	EAH
Proj.Manager	JCS
Surveyor	BRK
Perimeter Ck.	
Book	542 Pg 42
Acad	19052-FERGUSON-PRELIMINARY-LD-UP
Layout	UP

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/27/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
12/18/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
11/04/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS

REVISIONS

WEST COLLEGE STUDENT HOUSING

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

UTILITY PLAN

PROJECT NO. 19052
DATE AUGUST 14, 2020
SCALE 1"=20'
SHEET NO. 11

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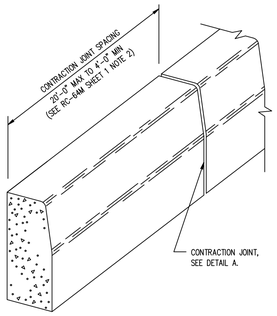
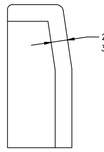
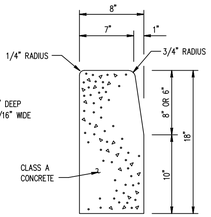


PLAIN CEMENT CONCRETE CURB



DETAIL A
CONTRACTION JOINT



TYPICAL
CROSS SECTION

PENNDOT CURB

NOT TO SCALE

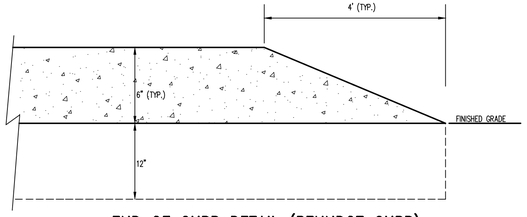
RC-67M SHEET 1 NOTES

1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTIONS 350, 409, 630, 676, 694 AND 695.
2. PROVIDE EXPANSION JOINT MATERIAL 1/2" THICK WHERE CURB RAMP ADJOINS ANY RIGID PAVEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.
4. SEAL JOINTS WITH AN APPROVED SEALING MATERIAL.
6. MODIFY CONSTRUCTION DETAILS TO ADAPT DIMENSIONS TO EXISTING CURB HEIGHTS WHERE THE CURB IS LESS THAN THE STANDARD 8" HEIGHT.
9. NON-WALK AREA IS AN OBSTRUCTED OR GRASS/NON-PAVED AREA ADJACENT TO THE PEDESTRIAN ACCESS ROUTE THAT IS NOT USED BY THE PEDESTRIAN FOR ACCESS.
14. FOR NEW CONSTRUCTION, DO NOT EXCEED 2.00% CROSS SLOPE ON THE CURB RAMP OR PEDESTRIAN ACCESSIBLE ROUTE.
16. CONSTRUCT SIDEWALKS AT A LONGITUDINAL SLOPE NOT TO EXCEED 5.00% FOR ROADWAY PROFILE SLOPES THAT EXCEED 5.00%. CONSTRUCT PARALLEL SIDEWALKS ADJACENT TO ROADWAY AT A LONGITUDINAL SLOPE NOT TO EXCEED ROADWAY PROFILE SLOPE.
18. THE CONSTRUCTION STANDARDS DEPICTED ARE MOST APPROPRIATE FOR NEW CONSTRUCTION. ALL CONSTRUCTION MUST MEET THE STANDARDS CONTAINED HEREIN UNLESS OTHERWISE NOTED OR DIRECTED.
21. THE TRAVEL LANE IS DEFINED BY THE OUTSIDE EDGE OF THE WHITE PAVEMENT MARKING LINE. IF A WHITE PAVEMENT MARKING LINE DOES NOT EXIST, THE TRAVEL LANE IS DEFINED BY THE CONTRACT DOCUMENTS.
26. A 4'-0" MAXIMUM DIGITAL DISPLAY LEVEL WILL BE USED TO VERIFY THE SLOPES OF CURB RAMPS AND SIDEWALKS.
27. INSTALL DUMMY JOINTS WHERE RAMPS, TURNING SPACES, FLARES, AND SIDEWALKS ABUT.
29. DO NOT SCORE OR MAKE GROOVES ON SLOPED SURFACES. LINES SHOWN ON DETAILS ARE FOR ILLUSTRATION ONLY. SEE NOTE 5.

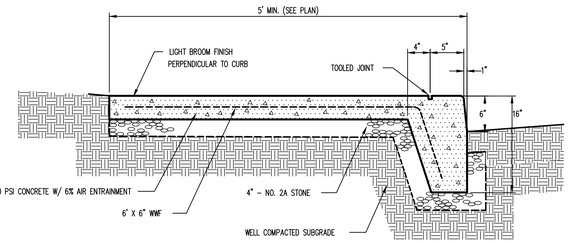
RC-64M SHEET 1 NOTES

1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 630 FOR PLAIN CEMENT CONCRETE CURB AND DEPRESSED CURB, SECTION 640 FOR PLAIN CEMENT CONCRETE GUTTER AND SECTION 641 FOR PLAIN CEMENT CONCRETE CURB GUTTER.
2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
3. PLACE 3/4" THICK PREMOLDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY. CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB.
5. WHERE CURBS ARE INSTALLED ADJACENT TO PARKING LANES A 6" HIGH CURB CAN BE UTILIZED WITH APPROVAL FROM THE LOCAL MUNICIPALITY.

CONTRACTOR NOTES:
-PER RC-64M SHEET 1 NOTE #5, WHERE CURBS ARE INSTALLED ADJACENT TO PARKING LANES A 6" HIGH CURB CAN BE UTILIZED WITH APPROVAL FROM LOCAL MUNICIPALITY
-PER RC-67M SHEET 1 NOTE #6, CONTRACTOR TO MODIFY TYPICAL CONSTRUCTION DETAILS TO ADAPT DIMENSIONS TO EXISTING CURB HEIGHTS WHERE THE CURB IS LESS THAN THE STANDARD 8" HEIGHT.
-CONTRACTOR TO MATCH ALL EXISTING CURBS HEIGHTS ALONG WEST COLLEGE AVENUE.



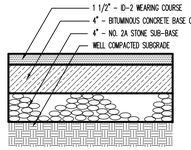
END OF CURB DETAIL (PENNDOT CURB)
NOT TO SCALE



MONOLITHIC SIDEWALK & CURB 5' WIDE
NOT TO SCALE

NOTE: CONTROL JOINTS 5' MAXIMUM SPACING. FULL DEPTH EXPANSION JOINTS AT SOLID STRUCTURES, CURBING, AND BEGINNING AND END OF WORKING DAY.

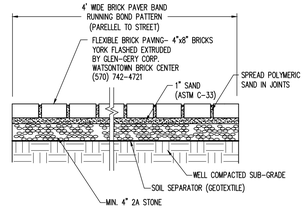
5' CEMENT CONCRETE SIDEWALK
NOT TO SCALE



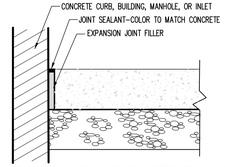
NOTES:
1. ID-2 WEARING COURSE CAN BE REPLACED WITH: SUPERPAVE 9.5MM WEARING COURSE, PG 64-22, SRL-L, < 0.3 MILLION ESASLS, 50 GYRATION.

2. BCBC BASE COURSE CAN BE REPLACED WITH: SUPERPAVE 25MM BASE COURSE, PG 64-22, < 0.3 MILLION ESASLS, 50 GYRATION.

PARKING LOT & DRIVEWAY ENTRANCE PAVEMENT SECTION
NOT TO SCALE

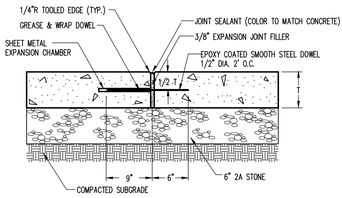


TYPICAL SECTION
BRICK PAVER ACCENT BAND
NOT TO SCALE

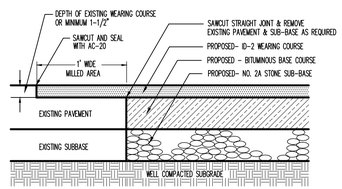


NOTES: INSTALL ISOLATION JOINTS FOR CONCRETE SIDEWALKS AT ABUTTING WALLS, CURBS, & BUILDING WALLS & COLUMN.
REFER TO STRUCTURAL DRAWINGS & DETAILS FOR CONCRETE PAVEMENT AT PROPOSED BUILDINGS ENTRANCES.
INSTALL ISOLATION JOINTS AT ABUTTING WALLS, CURBS, & BUILDING WALLS.
USE 3/8" ISOLATION JOINTS & 1/2" DOWELS FOR SIDEWALKS

CONCRETE ISOLATION JOINT
NOT TO SCALE

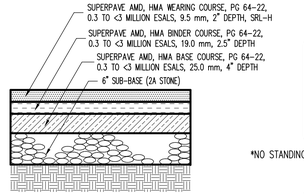


CONCRETE EXPANSION JOINT DETAIL
NOT TO SCALE



NOTE: WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT SAWCUT & MILL 1' WIDE MINIMUM BY DEPTH OF EXISTING WEARING COURSE

PAVEMENT NOTCH DETAIL
NOT TO SCALE



WEST COLLEGE AVENUE PAVEMENT SECTION WITHIN PENNDOT R-O-W
NOT TO SCALE

*NO STANDING ANYTIME SIGN (DOUBLE ARROW)
R7-4
12"x18"

*NO STOPPING OR STANDING SIGN (DOUBLE ARROW)
R7-4A
12"x18"

*NO STANDING ANYTIME SIGN (RIGHT ARROW)
R7-4
12"x18"

*NO STOPPING OR STANDING SIGN (LEFT ARROW)
R7-4A
12"x18"

TRUCK AND BUS PLAQUE
R2-101
24"x24"

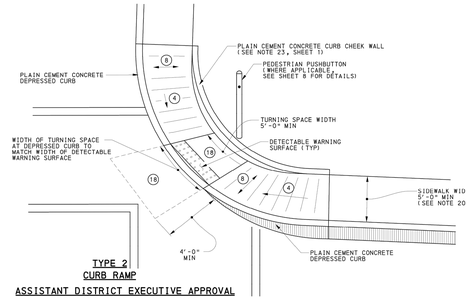
NO RIGHT TURN SIGN
R3-1
24"x24"

PEDESTRIAN SIGN
W11-2
30"x30"
(FLUORESCENT YELLOW GREEN BACKGROUND)

DIAGONAL DOWNWARD POINTING ARROW PLAQUE
W16-7P
24"x12"
(FLUORESCENT YELLOW GREEN BACKGROUND)

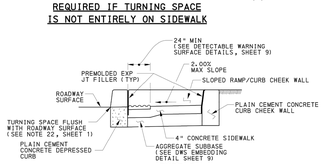
AHEAD PLAQUE
W16-9P
24"x12"
(FLUORESCENT YELLOW GREEN BACKGROUND)

SIGN DETAILS
NOT TO SCALE



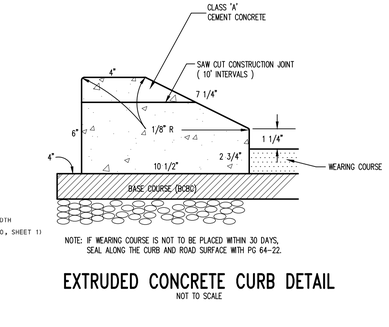
TYPE 2
CURB RAMP

ASSISTANT DISTRICT EXECUTIVE APPROVAL REQUIRED IF TURNING SPACE IS NOT ENTIRELY ON SIDEWALK



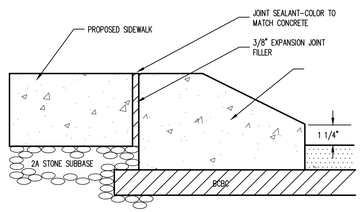
TYPE 2
CURB RAMP
SECTION B-B

PENNDOT TYPE 2 CURB RAMP (PARALLEL)
NOT TO SCALE

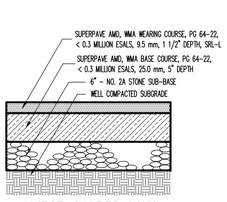


NOTE: IF WEARING COURSE IS NOT TO BE PLACED WITHIN 30 DAYS, SEAL ALONG THE CURB AND ROAD SURFACE WITH PG 64-22.

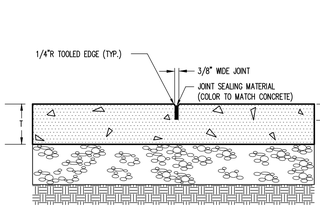
EXTRUDED CONCRETE CURB DETAIL
NOT TO SCALE



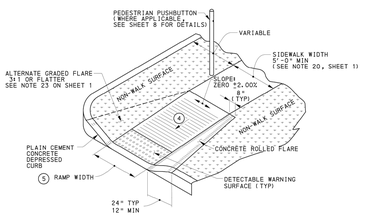
EXTRUDED CONCRETE CURB W/CONC. WALK DETAIL
NOT TO SCALE



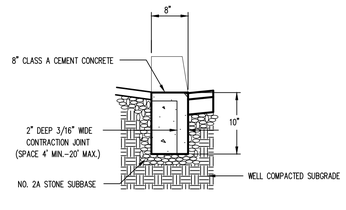
WEST CALDER WAY
PAVEMENT SECTION
NOT TO SCALE



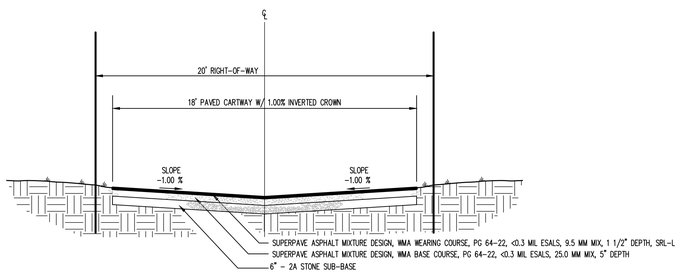
CONCRETE CONTROL JOINT
NOT TO SCALE



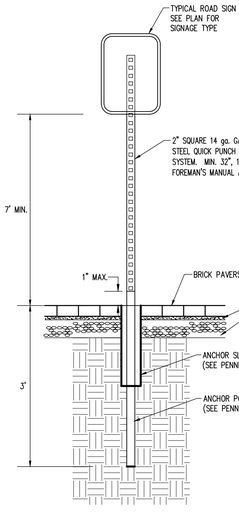
ALTERNATE TYPE 4A CURB RAMP (PARALLEL)
NOT TO SCALE



DEPRESSED CONCRETE CURB
NOT TO SCALE



CROSS SECTION: 20' R-O-W W/ 18' CARTWAY
WEST CALDER WAY
NOT TO SCALE



NOTES:
1. MOUNT SIGN AT RIGHT ANGLE TO DIRECTION OF TRAFFIC FLOW UNLESS DENOTED BY 'Y'.
2. SIGNS DENOTED BY 'Y' ARE TO BE MOUNTED AT AN ANGLE OF 30°-45° WITH A LINE PARALLEL TO THE FLOW OF TRAFFIC.
3. PROVIDE A MINIMUM CLEARANCE OF TWO FEET FROM FACE OF CURB.

SIGN POST DETAIL
(LOCATED IN PAVER ACCENT BAND)
NOT TO SCALE

PennTerra ENGINEERING INC.

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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JOHN C. SEPP
ENGINEER
040003-E

Designer	EAH
Draftsman	EAH
Proj.Manager	JCS
Surveyor	BRK
Perimeter Ck.	
Book	542 Pg 42
Acad	19052-FERGUSON-PRELIMINARY-LD-DT1
Layout	DT1

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/27/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
12/18/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
11/06/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS

REVISIONS

WEST COLLEGE STUDENT HOUSING

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

GENERAL CONSTRUCTION DETAILS

PROJECT NO.	19052
DATE	AUGUST 14, 2020
SCALE	N.T.S.
SHEET NO.	12

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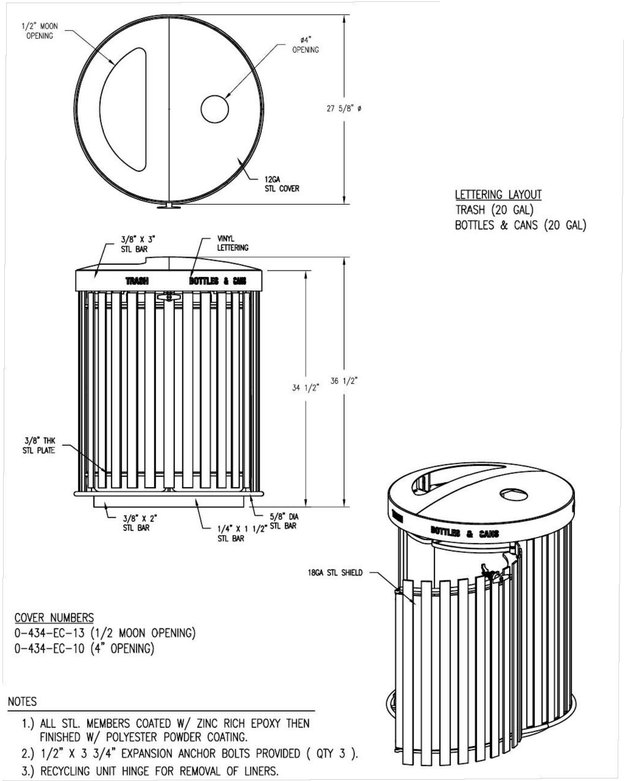
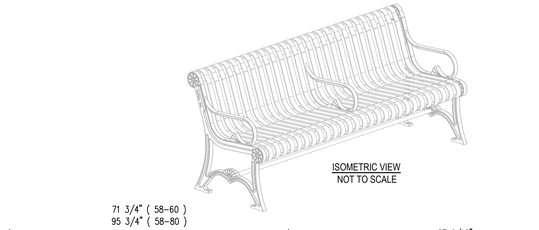


NOTES

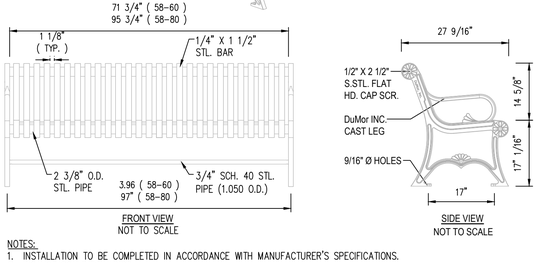
1.) ALL STL. MEMBERS COATED W/ ZINC RICH EPOXY THEN FINISHED W/ POLYESTER POWDER COATING.
2.) 1/2" X 3 3/4" EXPANSION ANCHOR BOLTS PROVIDED (QTY 3).
3.) RECYCLING UNIT HINGE FOR REMOVAL OF LINERS.
4.) COLOR: BLACK

DUMOR INC. TRASH/RECYCLING RECEPTACLE

MODEL 436-40SH
NOT TO SCALE



ISOMETRIC VIEW
NOT TO SCALE



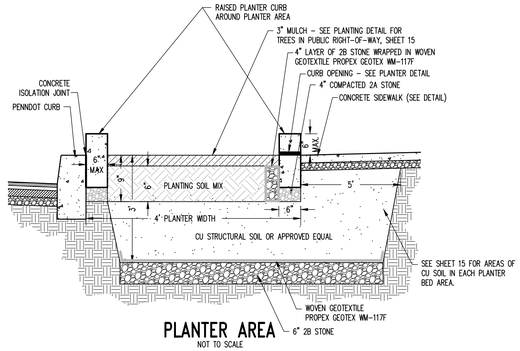
FRONT VIEW
NOT TO SCALE

SIDE VIEW
NOT TO SCALE

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.
3. ALL STL. MEMBERS COATED W/ ZINC RICH EPOXY THEN FINISHED W/ POLYESTER POWDER COATING.
4. 1/2" X 3 3/4" EXPANSION ANCHOR BOLTS PROVIDED.
5. CUSTOM LETTERING AVAILABLE FOR RECESSED SIDE PANEL (37 TOTAL SPACES).
6. CONTRACTOR'S NOTE: FOR PRODUCT AND PURCHASING INFORMATION VISIT www.CADdetails.com/info REFERENCE NUMBER 017-302.
7. COLOR: BLACK

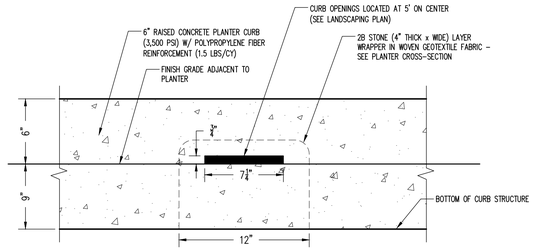
DUMOR INC. 58 SERIES STEEL BENCH

NOT TO SCALE



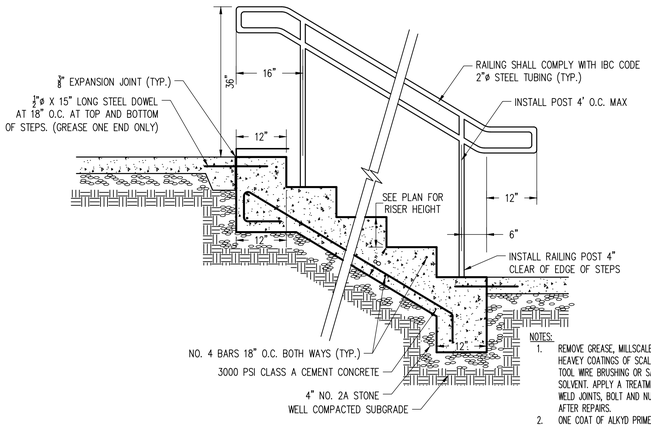
PLANTER AREA

NOT TO SCALE



PLANTER CURB ELEVATION DETAIL

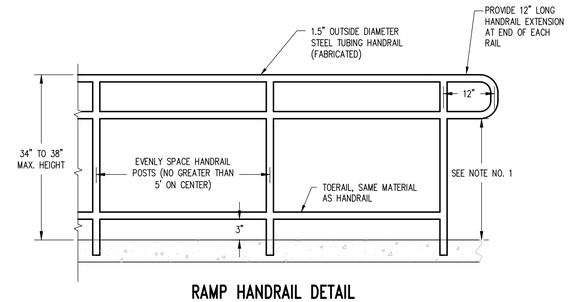
NOT TO SCALE



CONCRETE STAIRWAYS W/ CHEEKWALL DETAIL

NOT TO SCALE

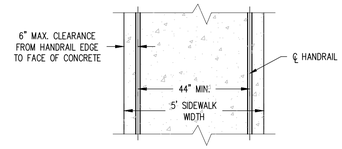
NOTES:
1. REMOVE GREASE, MILLSCALE, WELD SPLATTER, DIRT AND RUST. WHERE HEAVEY COATINGS OF SCALE ARE EVIDENT, REMOVE BY HAND, POWER TOOL WIRE BRUSHING OR SANDBLASTING. CLEAN BY WASHING WITH SOLVENT. APPLY A TREATMENT OF PHOSPHORIC ACID SOLUTION, ENSURING WELD JOINTS, BOLT AND NUTS ARE SIMILARLY CLEANED. SPOT PRIME PAINT AFTER REPAIRS.
2. ONE COAT OF ALKYD PRIMER AND TWO COATS OF ALKYD ENAMEL, SEMI-GLOSS, COLOR TO BE SELECTED BY ARCHITECT.
3. ALL HANDRAILS, HANDRAIL TERMINATIONS, AND HORIZONTAL AND VERTICAL CLEARANCES SHALL COMPLY WITH THE PROVISIONS OF THE GOVERNING EDITIONS OF THE INTERNATIONAL BUILDING CODE, AND WITH ICC/ANSI 117.1.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING HANDRAIL COMPLIANT WITH THE GOVERNING CODES.
5. CORE DRILL OR SURFACE MOUNT ANCHORING METHODS ARE ACCEPTABLE. SUBJECT TO NOTE #4 ABOVE.
6. CMU CHEECKWALLS ON FOOTERS MAY BE USED IN PLACE OF CEMENT CONCRETE CHEECKWALLS AT THE OWNER'S DISCRETION. REGARDLESS OF CHEECKWALL CONSTRUCTION, STAIRWAYS SHALL UTILIZE COMPARABLE STRUCTURAL REINFORCEMENT TO THAT WHICH IS SHOWN ABOVE.



RAMP HANDRAIL DETAIL

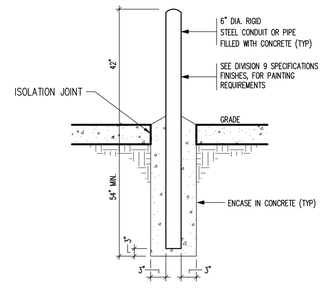
NOT TO SCALE

NOTES: ALL HANDRAILS, HANDRAIL TERMINATIONS, & HORIZONTAL/VERTICAL CLEARANCES SHALL COMPLY WITH THE PROVISIONS OF THE GOVERNING EDITIONS OF THE INTERNATIONAL BUILDING CODE AND WITH ICC/ANSI 117.1
CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING HANDRAIL COMPLIANT WITH THE GOVERNING CODES.
CORE DRILL OR SURFACE MOUNT ANCHORING METHODS ARE ACCEPTABLE
SEE DIVISION 9 SPECIFICATIONS FINISHES FOR PAINTING REQUIREMENTS



PLAN VIEW - RAMP HANDRAIL DETAIL

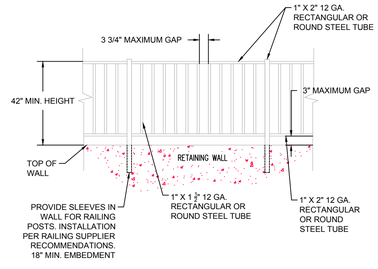
NOT TO SCALE



6" DIAMETER STEEL BOLLARD DETAIL

NOT TO SCALE

NOTES:
1. USE 6" RIGID GALVANIZED STEEL CONDUIT, CUT TO 8' AND FILL WITH CONCRETE.
2. ENCASE BOLLARDS OR BOLLARD SLEEVES IN 3" OF CONCRETE AS SHOWN.
3. THE TWO (2) BOLLARDS IN FRONT OF THE TRANSFORMERS ARE TO BE REMOVABLE.



ELEVATION VIEW

RETAINING WALL FENCE DETAIL

NOT TO SCALE

NOTES:
1. SHOP DRAWINGS OF RAILING SHALL BE SUBMITTED FOR APPROVAL SHOWING MATERIALS, COLOR, AND DIMENSION OF HEIGHT.
2. CUTTING SHALL BE DONE BY SAWING OR MILLING AND ALL CUTS SHALL BE TRUE AND SMOOTH. FLAME CUTTING WILL NOT BE PERMITTED.
3. SLEEVES SHALL BE SCHEDULE 40 PVC AND HAVE AN INSIDE DIAMETER 2 INCHES LARGER THAN THE POST OUTSIDE DIAMETER. IF RAILING IS TO BE INSTALLED IN EXISTING SIDEWALK, HOLES SHALL BE CORE DRILLED 2 INCHES LARGER THAN THE OUTSIDE DIAMETER OF THE POST, AND NO LESS THAN 6" FROM THE EDGE OF CONCRETE.

PennTerra ENGINEERING INC.
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COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL JOHN C. SEPP ENGINEER 040003-E

Designer	EAH
Draftsman	EAH
Proj.Manager	JCS
Surveyor	BRK
Perimeter Ck.	
Book	542 Pg 42
Acad	19052-FERGUSON-PRELIMINARY-LD-DT2
Layout	DT2

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/27/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
12/18/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
11/06/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS

REVISIONS

WEST COLLEGE STUDENT HOUSING

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

GENERAL CONSTRUCTION DETAILS

PROJECT NO. 19052
DATE AUGUST 14, 2020
SCALE N.T.S.
SHEET NO. 13

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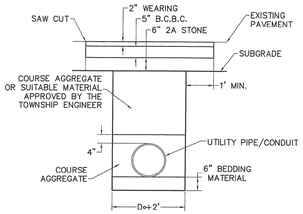


TRENCHING DETAIL

CONSTRUCTION PROCEDURE:

- EXCAVATE THE TRENCH TO THE WIDTH OF THE OUTSIDE DIAMETER OF THE PIPE (Do) PLUS 2 FEET AND CREATE AN APPROPRIATE BEDDING 6 INCHES DEEP.
- PLACE 2B COARSE AGGREGATE MATERIAL (IN 8" LIFTS)
- ALL MATERIAL TO BE COMPACTED TO 100% OF THE DRY WEIGHT DENSITY.
- AT UNPAVED AREAS SUITABLE MATERIAL MAY BE UTILIZED THE ENTIRE DEPTH OF TRENCH (LESS 6" TOPSOIL). PLACEMENT AND COMPACTION TO BE AS NOTED FOR PAVED AREAS.
- SEAL EDGES OF PAVEMENT REPAIR WITH AC-20 OR APPROVED SEALANT

REV	DATE	DESCRIPTION	BY
4			
3			
2			
1			

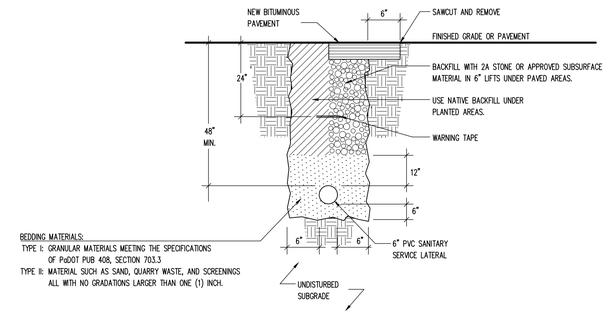
DESIGNED BY: RSS DATE: 2/20/03
DRAWN BY: CBH DATE: 2/20/03
CHECKED BY: DATE: 2/20/03

SCALE: N.T.S.
DRAWING NO.: FCSD-9
SHEET: 1 OF 1

TOWNSHIP OF FERGUSON
DEPARTMENT OF PUBLIC WORKS / ENGINEERING
3147 Research Drive State College, Pennsylvania 16801
Telephone: 814-238-4651 Fax: 814-238-2424

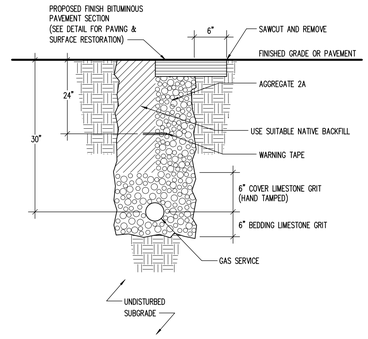
FEBRUARY 20, 2003

PROJECT
STANDARD TRENCH DETAIL
FERGUSON TOWNSHIP STANDARDS DRAWINGS



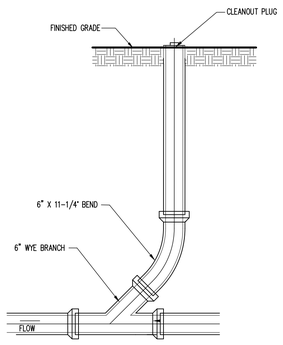
SANITARY LATERAL TRENCH DETAIL

NOT TO SCALE



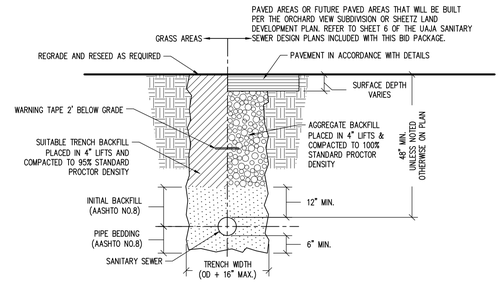
NATURAL GAS SERVICE TRENCH DETAIL

NOT TO SCALE



6" SANITARY SEWER CLEAN-OUT DETAIL (LAWN AREAS)

NOT TO SCALE



SANITARY SEWER MAIN TRENCH DETAIL

NOT TO SCALE

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REGISTERED PROFESSIONAL
JOHN C. SEPP
ENGINEER
040003-E

Designer EAH
Draftsman EAH
Proj.Manager JCS
Surveyor BRK
Perimeter Ck.
Book 542 Pg 42
Acad 19052-FERGUSON-PRELIMINARY-LD-DT3
Layout DT3

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/27/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
12/18/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
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REVISIONS

WEST COLLEGE STUDENT HOUSING

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

GENERAL CONSTRUCTION DETAILS

PROJECT NO.
19052

DATE
AUGUST 14, 2020

SCALE
N.T.S.

SHEET NO.
14

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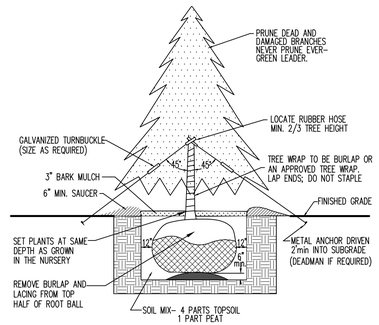
PLANTING SCHEDULE

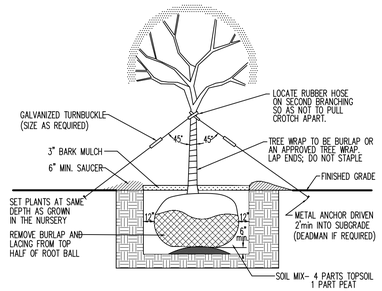
SYMBOL	KEY	QTY	COMMON NAME	BOTANICAL NAME	SIZE	HEIGHT	SPREAD
CANOPY TREES							
	HB	6	Hackberry (1 in Borough of State College)	Celtis accidentalis	2.5" Cal.	50'	50'
	RT	7	Hardy Rubber Tree (1 in Borough of State College)	Eucommia ulmoides	2.5" Cal.	50'	30'
	LP	3	London Plane (2 in Borough of State College)	Platanus hispanica	2.5" Cal.	60'	50'
SHRUBS							
	VPT	49	Shasta Doublefire Viburnum (13 in Borough of State College)	Vinurnum plicatum tomentosum 'Shasta'	24"–36"	8'	10'
	AGH	36	Girard's Hot Shot Azalea (0 in Borough of State College)	Azalea 'Girard Hot Shot'	18"–24"	2'	3'
	IV	70	Henry's Garnet Virginia Sweetspire (10 in Borough of State College)	Itea Virginica 'Henry's Garnet'	18"–24"	4'	5'
	VON	96	Dwarf European Cranberrybush (5 in Borough of State College)	Viburnum opulus 'Nanum'	12"–18"	2'	3'
GRASSES & PERRENIALS							
	PLB	78	Little Bunny Dwarf Fountain Grass (0 in Borough of State College)	Pennisteum alopecuroides 'Little Bunny'	#1 cont.	---	---
	AJR	210	Ajuga bugleweed (0 in Borough of State College)	Ajuga reptans	2" pots	---	---

NOTES:
1. ALL TREES AND SHRUBS SHALL BE PLANTED IN ACCORDANCE WITH THE "GUIDE TO ARBOR WORK IN FERGUSON TOWNSHIP".
2. 3' OF CU STRUCTURAL SOIL SHALL BE INSTALLED IN THE STREETSIDE PLANTERS. REFER TO DETAIL ON SHEET 8.
3. TREES ARE TO BE MULCHED INDIVIDUALLY IN A 4' DIAMETER CIRCLE.
4. THE MULCH IS TO BE DOUBLE SHREDDED HARDWOOD BARK MULCH, WELL AGED AND DARK IN COLOR. APPLY THE MULCH 4" THICK.
5. PLANT MATERIAL SUBSTITUTIONS MAY ONLY BE PERMITTED AT THE APPROVAL OF THE OWNER, TOWNSHIP AND ENGINEER OR LANDSCAPE ARCHITECT.
6. ANY PLANTINGS WHICH DO NOT SURVIVE FOR A PERIOD OF ONE YEAR FROM THE DATE OF PLANTING ARE TO BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
7. ALL NEW PLANT MATERIAL IS TO BE KEPT WATERED BY THE LANDSCAPE CONTRACTOR WHEN WORKING ON SITE UNTIL COMPLETION OF THE LANDSCAPE OR SEASON'S END (THEN RESUME NEXT SEASON UNTIL PROJECT IS COMPLETED). THE OWNER WILL BE RESPONSIBLE FOR WATERING THEREAFTER.
8. ALL DISTURBED AREAS NOT BEING PLANTED IN TREES OR SHRUBS ARE TO BE FINE GRADED AND SEEDED WITH A HARDY PERENNIAL GRASS SEED MIXTURE AND MULCHED WITH STRAW.
9. ALL CALIPER MEASUREMENTS FOR LANDSCAPING SHALL BE MEASURED AT 6" ABOVE THE ROOT BALL.



NOTES:
1. IN PAVED AREAS- STONE SAUCER IN A SQUARE
2. IN GRASS AREAS- MULCH SAUCER IN A CIRCLE
3. AFTER PLANTING- THE SAUCER SHOULD BE FLOODED WITH WATER TWICE IN THE FIRST 24 HRS.
4. BARK MULCH MUST NOT COVER THE ROOT CROWN OF THE TREE

TYPICAL EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE



NOTES:
1. IN PAVED AREAS- STONE SAUCER IN A SQUARE
2. IN GRASS AREAS- MULCH SAUCER IN A CIRCLE
3. AFTER PLANTING- THE SAUCER SHOULD BE FLOODED WITH WATER TWICE IN THE FIRST 24 HRS.
4. BARK MULCH MUST NOT COVER THE ROOT CROWN OF THE TREE

TYPICAL DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE

PROPOSED LANDSCAPE BUFFER REQUIREMENTS:

BUFFERYARD ONE – A LANDSCAPE BUFFER IS REQUIRED ALONG THE SOUTHERN PROPERTY LINE BETWEEN THE PROPOSED BUILDING AND WEST CALDER WAY.
PER THE TERRACED STREETSCAPE (TS) DISTRICT SECTION OF THE ZONING ORDINANCE (§27-304.C.4.c), THIS BUFFER IS REQUIRED TO BE 12' WIDE.
THE CALCULATION REQUIREMENTS FOR THIS LANDSCAPE BUFFER ARE AS FOLLOWS: 1 CANOPY OR EVERGREEN TREE; 15 SHRUBS PER 35 LF OF THE LOT LINE (301.74').
THE CALCULATIONS FOR THE LANDSCAPE BUFFER ARE AS FOLLOWS:
CANOPY/EVERGREEN TREES . . . . . 301.74/35 x 1 = 8.62 OR 9 CANOPY/EVERGREEN TREES REQUIRED; —— 2 RED HACKBERRY, 3 HARDY RUBBER TREE, AND 1 LONDON PLANE. (*6 TOTAL PROVIDED)
SHRUBS . . . . . 301.74/35 x 15 = 129.32 OR 129 SHRUBS REQUIRED; —— 36 SHASTA DOUBLEFIRE VIRBURNUM, 60 HENRY'S GARNET VIRGINIA SWEETSPIRE, AND 48 DWARF EUROPEAN CRANBERRY BUSH ARE PROVIDED. (*144 TOTAL PROVIDED)
NOTE: BOTH MALE AND FEMALE PLANTS MUST BE SPACED APPROPRIATELY FOR THE SPECIES TO FRUIT/FLOWER.
DUE TO UNDERGROUND UTILITIES, 15 SHRUBS ARE BEING PROVIDED IN PLACE OF 3 EVERGREEN TREES AS ALLOWED BY §27-707.7.F.(3). THESE SHRUBS ARE INCLUDED IN THE SHRUB QUANTITIES ABOVE.

SURVEY FEATURES LEGEND

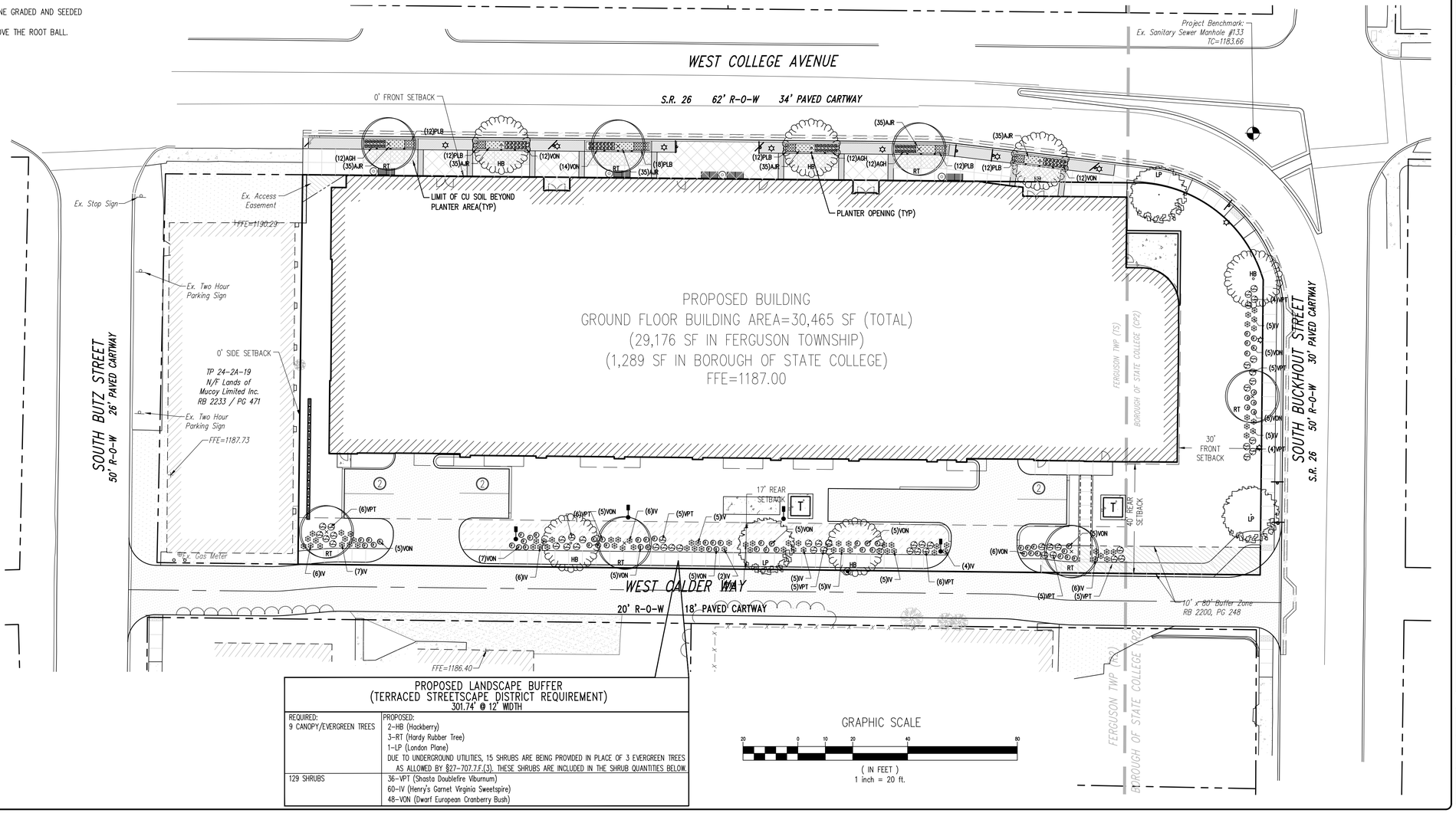
- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Project Benchmark
- Municipal Boundary

EXISTING FEATURES LEGEND

- Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Fence / Type
- Existing Sign
- Existing Tree Row
- Existing Deciduous Tree
- Existing Evergreen Tree
- Existing Shrub

PROPOSED FEATURES LEGEND

- PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS
- PROPOSED FULL-DEPTH BITUMINOUS PAVEMENT AREAS
- PROPOSED OVERLAY BITUMINOUS PAVEMENT AREAS
- PROPOSED LIGHT FIXTURE (DECORATIVE)
- PROPOSED LIGHT POLE (SINGLE FIXTURE)
- PROPOSED PARKING STALL COUNT
- PROPOSED SIGN W/ LABEL
- PROPOSED DEPRESSED CURB W/ CURB TRANSITION
- PROPOSED HANDICAPPED RAMP
- PROPOSED RETAINING WALL
- PROPOSED RETAINING WALL FENCE
- PROPOSED RIVERSTONE AREAS
- PROPOSED 6"ø STEEL BOLLARD FILLED W/ CONCRETE



PROPOSED LANDSCAPE BUFFER (TERRACED STREETSCAPE DISTRICT REQUIREMENT) 301.74' @ 12' WIDTH	
REQUIRED: 9 CANOPY/EVERGREEN TREES	PROPOSED: 2–HB (Hackberry) 3–RT (Hardy Rubber Tree) 1–LP (London Plane) DUE TO UNDERGROUND UTILITIES, 15 SHRUBS ARE BEING PROVIDED IN PLACE OF 3 EVERGREEN TREES AS ALLOWED BY §27-707.7.F.(3). THESE SHRUBS ARE INCLUDED IN THE SHRUB QUANTITIES BELOW.
129 SHRUBS	36–VPT (Shasta Doublefire Viburnum) 60–IV (Henry's Garnet Virginia Sweetspire) 48–VON (Dwarf European Cranberry Bush)

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

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PENNSYLVANIA JONATHAN D. HEISTAND REGISTERED LANDSCAPE ARCHITECT REGISTRATION NUMBER LA001698E

Designer	EAH
Draftsman	EAH
Proj Manager	JCS
Surveyor	BRK
Perimeter Ck.	
Book	542 Pg 42
Acad	19052-FERGUSON-PRELIMINARY-LD-LSP
Layout	LSP

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/27/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
12/18/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
11/06/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS

REVISIONS

WEST COLLEGE STUDENT HOUSING

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

LANDSCAPING PLAN

PROJECT NO. 19052
DATE AUGUST 14, 2020
SCALE 1"=20'
SHEET NO. 15

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SURVEY FEATURES LEGEND

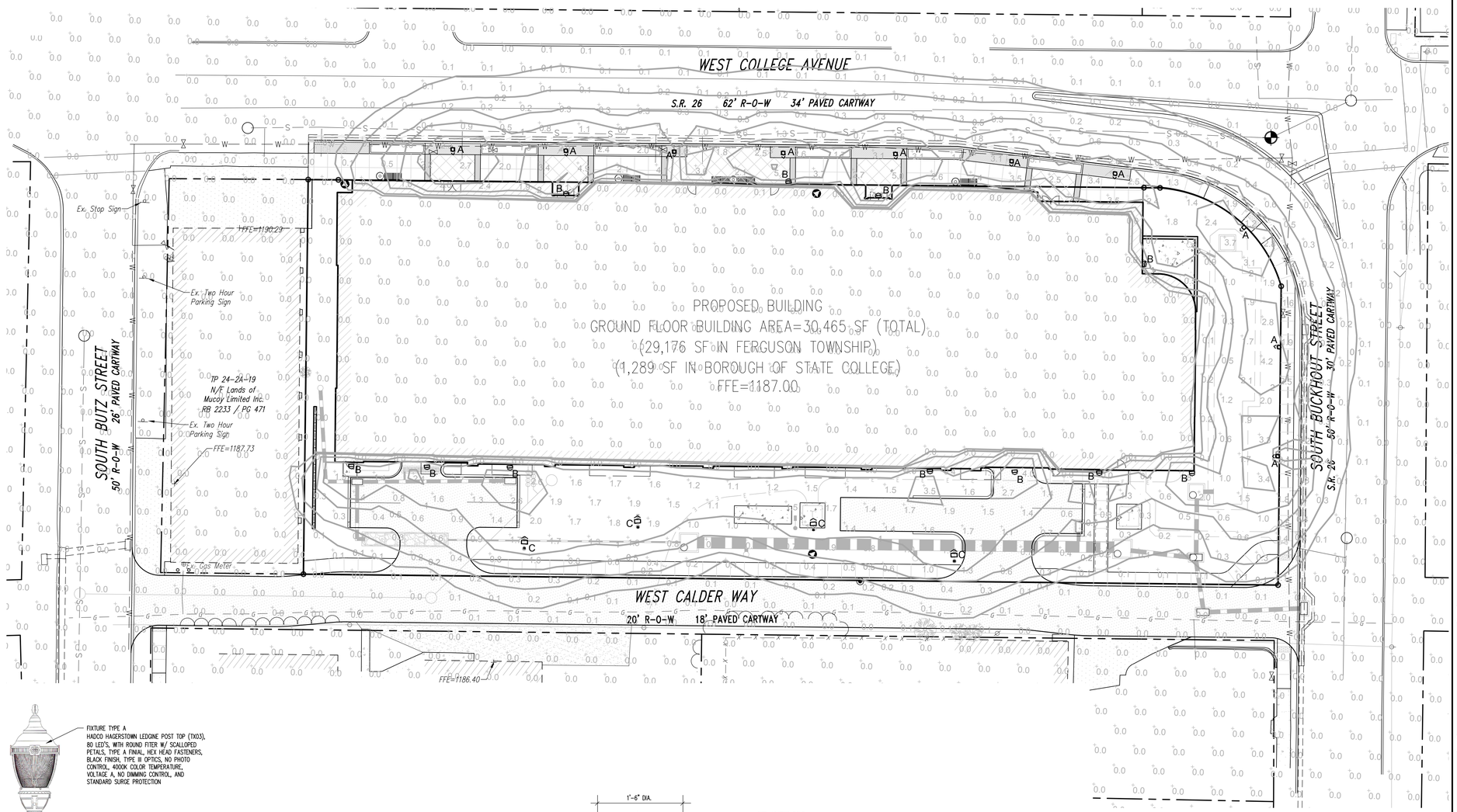
- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Project Benchmark
- Municipal Boundary

EXISTING FEATURES LEGEND

- EXISTING BUILDING — Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Retaining Wall
- X — X — X — X — X — Existing Fence / Type
- 1109 — Existing Contours w/ Elevation (1's & 2's)
- 1110 — Existing Contours w/ Elevation (5's & 10's)
- S — S — Existing Sanitary Sewer w/ Manhole
- Existing Sanitary Sewer Lateral w/ Clean Out
- W — W — Existing Water Line w/ Valve
- Existing Water Service Lateral
- Existing Storm Sewer Line w/ Inlet
- G — Existing Gas Line
- Existing Overhead Utility Line w/ Pole
- Existing Fire Hydrant
- Existing Manhole
- Existing Utility Pole
- Existing Guy Wire
- Existing Storm Sewer Inlet Type-M
- Existing Storm Sewer Inlet Type-C
- Existing Utility Meter
- Existing Light Pole/Standard
- Existing Flood Light
- Existing Monitoring Well
- Existing Sign
- Existing Mail Box
- Existing Tree Row
- Existing Deciduous Tree
- Existing Evergreen Tree
- Existing Shrub

PROPOSED FEATURES LEGEND

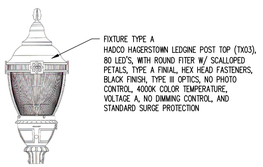
- PROPOSED BUILDING — PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS
- PROPOSED FULL-DEPTH BITUMINOUS PAVEMENT AREAS
- PROPOSED OVERLAY BITUMINOUS PAVEMENT AREAS
- PROPOSED STORM SEWER INLET - TYPE M
- PROPOSED STORM SEWER INLET - TYPE C
- DEPRESSED CURB TRANSITION CURB — PROPOSED DEPRESSED CURB W/ CURB TRANSITION
- PROPOSED HANDICAPPED RAMP
- PROPOSED RETAINING WALL
- 1109 — PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- 1110 — PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- PROPOSED 8" SANITARY SEWER W/ MANHOLE
- PROPOSED SANITARY SEWER LATERAL W/ CLEAN OUT
- PROPOSED WATER SERVICE LATERAL W/ CURB BOX
- PROPOSED STORM SEWER W/ TYPE C INLET
- RD — PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED STORM SEWER TRENCH DRAIN
- G — G — G — PROPOSED GAS LINE
- PROPOSED LIGHT FIXTURE (DECORATIVE)
- PROPOSED LIGHT POLE (SINGLE FIXTURE)
- PROPOSED SIGN
- X — X — X — X — X — PROPOSED RETAINING WALL FENCE



GRAPHIC SCALE

20 0 10 20 40 80

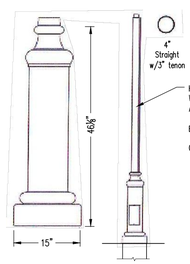
(IN FEET)
1 inch = 20 ft.



FIXTURE TYPE A
HADCO HAGERSTOWN LEDGINE POST TOP (TX03), 80 LED'S, WITH ROUND FITER W/ SCALLOPED PETALS, TYPE A FINIAL, HEX HEAD FASTENERS, BLACK FINISH, TYPE III OPTICS, NO PHOTO CONTROL, 4000K COLOR TEMPERATURE, VOLTAGE A, NO DIMMING CONTROL, AND STANDARD SURGE PROTECTION

DECORATIVE STREET LIGHTS TOP

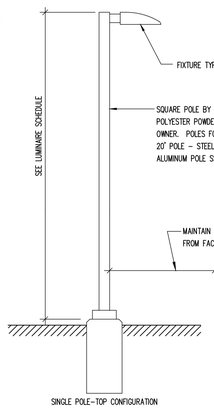
NOT TO SCALE



HADCO "P4030 14 A T 0" POLE - 14' HEIGHT, BLACK FINISH WITH PROVISIONS FOR:
A. HADCO "BA 4 1 A 24 B A" UPPER & LOWER BANNER ARMS PERPENDICULAR TO STREET EDGE - ONE SIDE OF POLE
B. HADCO "FPB 4 2 12 A" PLANTER ARMS PARALLEL TO STREET EDGE - ONE ON EACH SIDE OF POLE
C. EXTERIOR RATED DUPLEX ELECTRICAL OUTLET IMMEDIATELY BELOW FIXTURE CONNECTION AT POLE

DECORATIVE STREET LIGHTS POLE AND BASE

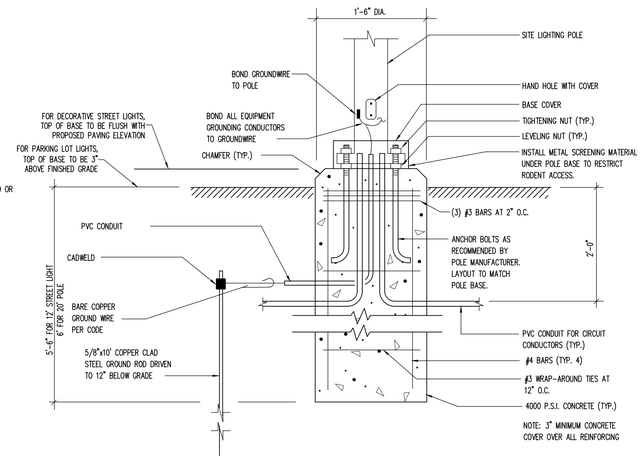
NOT TO SCALE



SINGLE POLE-TOP CONFIGURATION

PARKING LOT LIGHTS

NOT TO SCALE



SITE PARKING LOT LIGHTING POLE BASE DETAIL

NOT TO SCALE

Schedule

Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Lumens per Lamp	LLF	Wattage
	A	10	PHILIPS-HADCO LIGHTING	TX0332BA1A3NNANS	TX0332BA1A3NNANS - 32 LED, LUXEON R BOARD, TYPE III OPTICS, VERTICAL RIBBED GLOBE MOUNTING HEIGHT: 14'	32 LED BOARD	2979	1	35.8
	B	11	RAB LIGHTING, INC.	ENTRA12N	CAST FINNED BROWN PAINTED METAL HOUSING, FORMED WHITE PAINTED METAL REAR REFLECTOR, MOLDED PLASTIC UPPER REFLECTOR WITH SPECULAR FINISH, 1 WHITE CIRCUIT BOARD WITH ONE 3X3 LED ARRAY, MOLDED CLEAR PLASTIC FRONT COVER WITH HOLOGRAPHIC LENSED SECTION AND BROWN PAINTED INTERIOR TOP, SIDE, AND LOWER SECTIONS. SIDE AND UPPER FRONT EXTERIOR SECTIONS ARE TEXTURED. MOUNTING HEIGHT: 10'	NINE WHITE LIGHT EMITTING DIODES (LEDS) WITH 1 CLEAR SEMI-HEMISPHERICAL INTEGRAL PLASTIC LENS, VERTICAL BASE-UP POSITION.	109	1	13.9
	C	4	LITHONIA LIGHTING	DSXO LED P1 40K T4M MVOLT HS	DSXO LED P1 40K T4M MVOLT with houseside shield MOUNTING HEIGHT: 20'	LED	3579	1	38

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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOHN C. SEPP — ENGINEER — 040003-E

Designer	EAH
Draftsman	EAH
Proj.Manager	JCS
Surveyor	BRK
Perimeter Ck.	
Book	542 Pg 42
Acad	19052-FERGUSON-PRELIMINARY-LD-LT
Layout	LT

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/27/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
12/18/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
11/04/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS

REVISIONS

WEST COLLEGE STUDENT HOUSING

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

LIGHTING PLAN

PROJECT NO. 19052

DATE AUGUST 14, 2020

SCALE 1"=20' SHEET NO. 16

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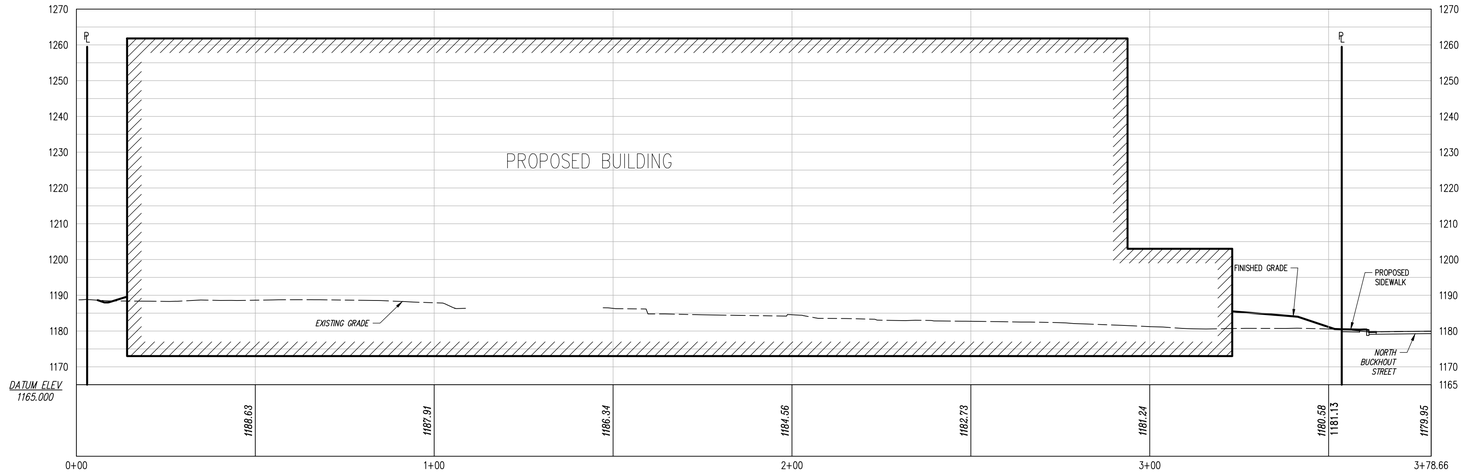
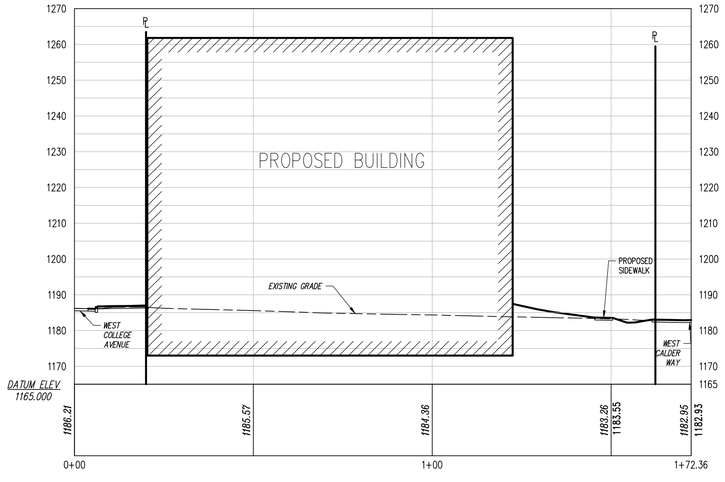


SITE CROSS SECTION A-A

SCALE:
VERTICAL: 1" = 20'
HORIZONTAL: 1" = 20'



SITE CROSS SECTION B-B

SCALE:
VERTICAL: 1" = 20'
HORIZONTAL: 1" = 20'

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JOHN C. SEPP
ENGINEER
040003-E

Designer	EAH
Draftsman	EAH
Proj.Manager	JCS
Surveyor	BRK
Perimeter Ck.	
Book	542 Pg 42
Acad	19052-FERGUSON-PRELIMINARY-LD-SEC
Layout	SEC

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/27/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
12/18/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
11/04/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS

REVISIONS

WEST COLLEGE STUDENT HOUSING

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

SITE CROSS SECTIONS

PROJECT NO.
19052

DATE
AUGUST 14, 2020

SCALE
1"=20'

SHEET NO.
17

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SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Easement Line
- Project Benchmark
- Municipal Boundary

SOILS LEGEND

Soil cover on the site consists of:

HaB – Hagerstown Silt Loam, 3%-8% Slopes
HcB – Hagerstown Silty Loam, 3%-8% Slopes

EXISTING FEATURES LEGEND

- EXISTING BUILDING — Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Fence / Type
- 1109 — Existing Contours w/ Elevation (1's & 2's)
- 1110 — Existing Contours w/ Elevation (5's & 10's)
- Existing Storm Sewer Line w/ Inlet
- Existing Utility Pole
- Existing Storm Sewer Inlet Type-M
- Existing Storm Sewer Inlet Type-C
- Existing Monitoring Well
- Existing Soil Limit Boundary
- HaB — Existing Soil Type
- Existing Tree Row
- 25% Slopes Or Greater
- Existing Deciduous Tree
- Existing Evergreen Tree
- Existing Shrub
- TP# 3 — Infiltration Test Pit Location

PROPOSED FEATURES LEGEND

- PROPOSED BUILDING — PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS
- PROPOSED FULL-DEPTH BITUMINOUS PAVEMENT AREAS
- PROPOSED OVERLAY BITUMINOUS PAVEMENT AREAS
- PROPOSED STORM SEWER INLET – TYPE M
- PROPOSED STORM SEWER INLET – TYPE C
- DEPRESSED CURB TRANSITION CURB — PROPOSED DEPRESSED CURB W/ CURB TRANSITION
- PROPOSED HANDICAPPED RAMP
- PROPOSED RETAINING WALL
- 1109 — PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- 1110 — PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- PROPOSED STORM SEWER W/ TYPE C INLET
- RD — PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED STORM SEWER TRENCH DRAIN
- PROPOSED RIVERSTONE AREAS W/ AMENDED SOILS

POST CONSTRUCTION STORMWATER MANAGEMENT LEGEND

- NPDES BOUNDARY LINE
- LIMIT OF DISTURBANCE
- PROPOSED AMENDED SOIL AREAS
- PROPOSED RIVERSTONE AREAS W/ AMENDED SOILS

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 260.1et 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.

CRITICAL STAGES OF CONSTRUCTION

THE SITE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH THE OWNER TO ENSURE THAT A REGISTERED PROFESSIONAL SHALL BE ONSITE FOR THE CONSTRUCTION OF THE FOLLOWING FACILITIES:

1. REPAIR & DESIGN OF THE PERMANENT SINKHOLE FIX SHALL BE OVERSEEN BY A QUALIFIED GEOTECHNICAL ENGINEER OR HIS DESIGNEE.
2. EXCAVATION AND INSTALLATION OF THE UNDERGROUND INFILTRATION SUMP.
3. EXCAVATION AND INSTALLATION OF THE UNDERGROUND EXTENDED DETENTION BASIN 1 AND 1A.
4. PLACEMENT OF SOIL AMENDMENTS.
5. FINAL SITE GRADING.

Permanent Seeding Mixtures

Permanent Seeding shall consist of the following:

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

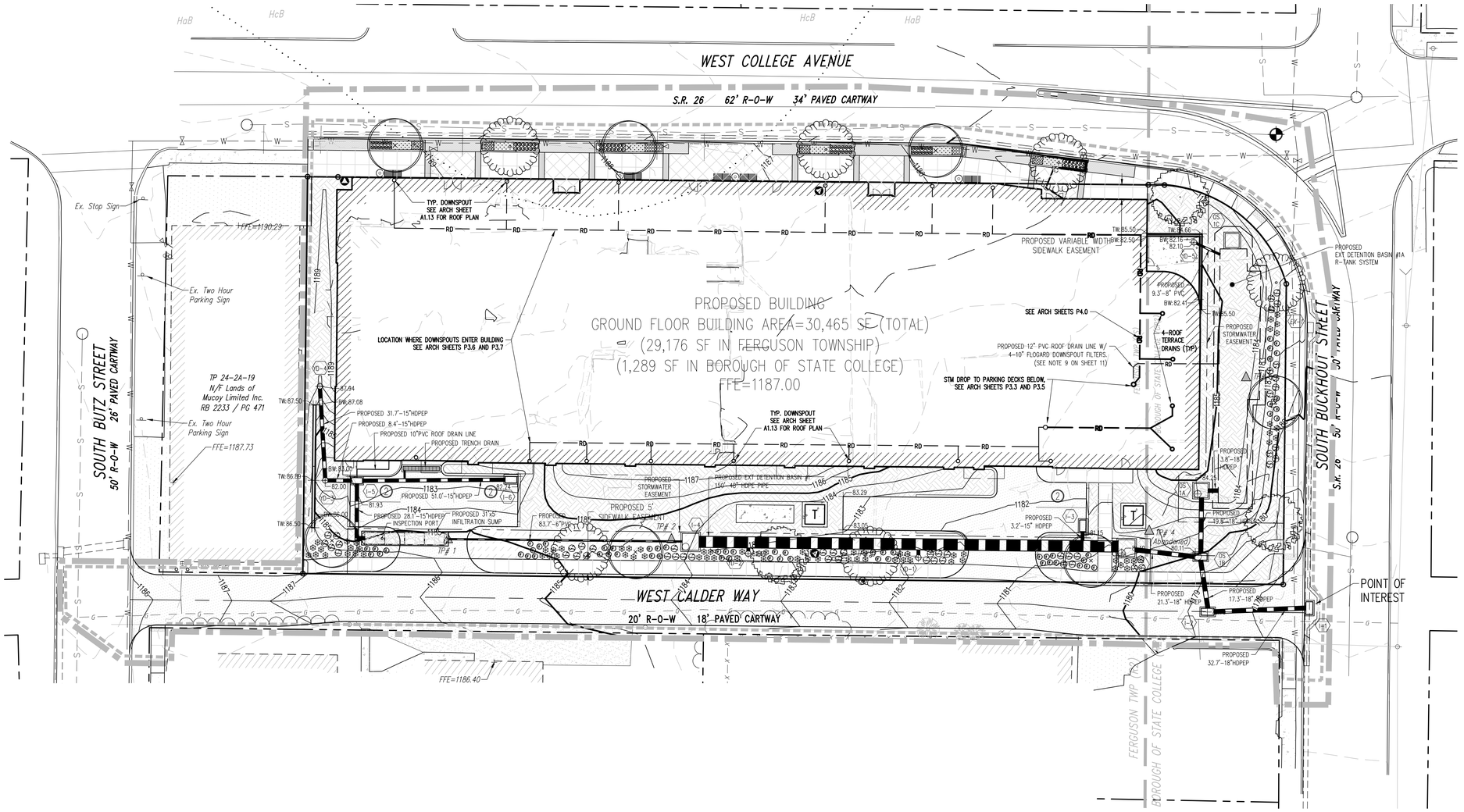
Post Construction Earth Moving Activities

Construction Sequence:

A. Once stabilization has been achieved on all disturbed areas, and a 70% uniform vegetative cover is established, ensure that all sediment is removed from the sumped inlet bottoms (proposed inlets I-5). Install Grate Inlet Skimmer Boxes and Flogard Downspout Filters.

NPDES PERMIT NOTICE OF TERMINATION NOTE:

UPON CONTRACTOR BEING AWARDED THE SITE WORK CONTRACT, THE CONTRACTOR IS RESPONSIBLE AND SHALL PROCESS FORMS W/ THE CENTRE COUNTY CONSERVATION DISTRICT TO BECOME A CO-PERMITTEE ON THE NPDES PERMIT AND SHALL REMAIN AS A CO-PERMITTEE UNTIL THE CONTRACTOR FILES THE NOTICE OF TERMINATION. THE NOTICE OF TERMINATION REQUIRES CERTIFICATION OF THE STORMWATER FACILITIES MENTIONED ON THE POST CONSTRUCTION STORMWATER PLAN.



INTERNAL ROOF DRAIN LINES SHOWN ON THIS PLAN ARE FOR VISUAL PURPOSES ONLY. SEE ARCHITECTURAL & MEP PLUMBING PLANS FOR EXACT INTERNAL PLUMBING DESIGN.

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

PennTerra ENGINEERING INC.

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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOHN C. SEPP — ENGINEER — 040003-E

Designer	EAH
Draftsman	EAH
Proj.Manager	JCS
Surveyor	BRK
Perimeter Ck.	
Book	542 Pg 42
Acad	19052-FERGUSON-PRELIMINARY-LD-PC1
Layout	PC1

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/27/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
12/18/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
11/06/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS

REVISIONS

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FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

PROJECT NO. 19052
DATE AUGUST 14, 2020
SCALE 1"=20'
SHEET NO. PC1

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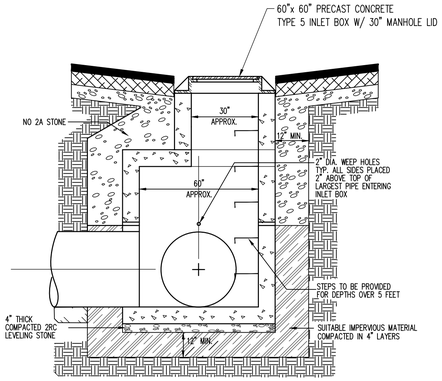
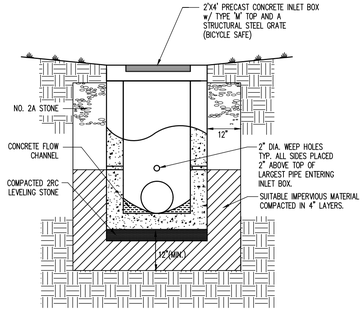


60"X60" PENNDOT PRECAST TYPE 5 INLET W/ 30" MANHOLE LID

NOT TO SCALE

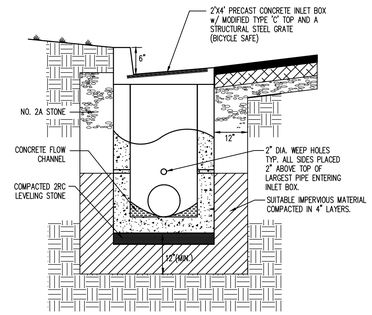


NOTE

Any Type 'M' Inlet exceeding 4' in depth is required to have steps installed.

TYPE 'M' PRECAST CONCRETE INLET

NOT TO SCALE

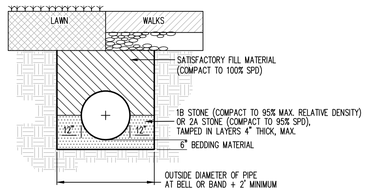


NOTE

Any Type 'C' Inlet exceeding 4' in depth is required to have steps installed.

MODIFIED TYPE 'C' PRECAST CONCRETE INLET

NOT TO SCALE

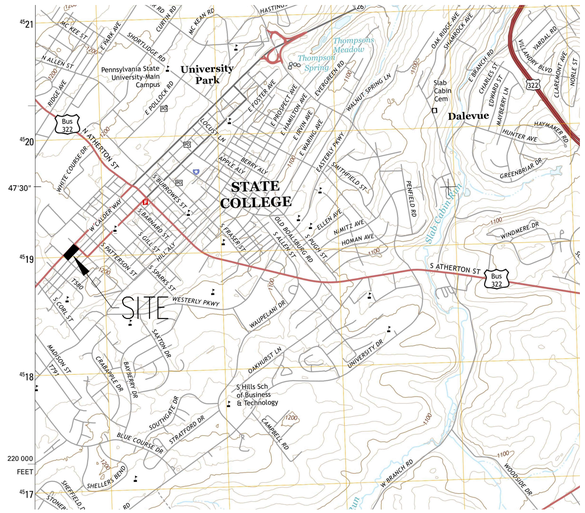


NOTES:

1. EXCAVATE THE TRENCH TO THE WIDTH OF THE OUTSIDE DIAMETER OF THE PIPE + 2' AND CREATE AN APPROPRIATE BEDDING 6" DEEP.
2. AT UNPAVED AREAS SUITABLE MATERIAL MAY BE UTILIZED THE ENTIRE DEPTH OF TRENCH (LESS 6" TOPSOIL). PLACEMENT AND COMPACTION TO BE AS NOTED FOR PAVED AREAS.
3. ALL STORM SEWER PIPE IS TO BE HIGH-DENSITY POLYETHYLENE (HDPE) AND HAVE A SMOOTH LINED INTERIOR WITH WATER-TIGHT JOINTS.
4. SATISFACTORY FILL MATERIAL:- SOILS MEETING ASTM D2487 SOIL CLASSIFICATION GROUPS GW, GC, GM, SW, SC, SM, AND CL WITH LIQUID LIMIT NOT GREATER THAN 35, OR A COMBINATION OF THESE GROUPS, FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION, AND OTHER DELETERIOUS MATTER; WITHIN 3% OF OPTIMUM MOISTURE CONTENT. (INCLUDES 2A)
5. PLACE SATISFACTORY FILL MATERIAL IN LAYERS 8" THICK MAX. COMPACT TO 100% SPD.
6. OWNER WILL ENGAGE A QUALIFIED INDEPENDENT GEOTECHNICAL ENGINEERING TESTING AGENCY TO PERFORM FIELD QUALITY ASSURANCE TESTING. NOTIFY TESTING AGENCY AT LEAST 48 HOURS PRIOR TO FILL PLACEMENT ACTIVITIES. ALLOW TESTING AGENCY TO INSPECT AND TEST SUBGRADES AND EACH FILL OR BACKFILL LAYER. PROCEED WITH SUBSEQUENT EARTHWORK ONLY AFTER TEST RESULTS FOR PREVIOUSLY COMPLETED WORK COMPLY WITH REQUIREMENTS.

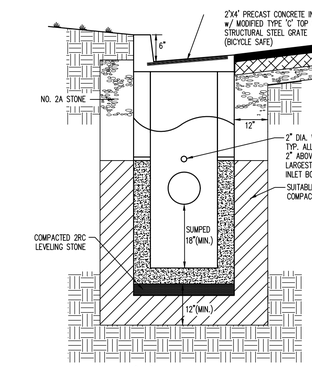
STORMSEWER (HDPE) INSTALLATION

NOT TO SCALE



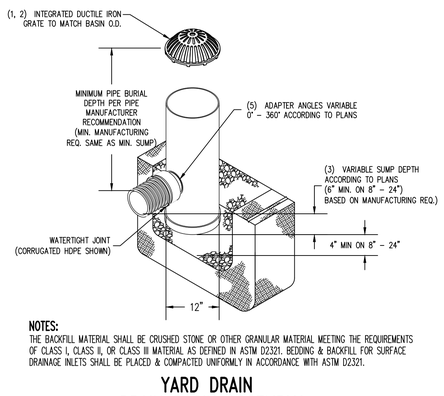
LOCATION MAP

SCALE (1" = 2000')



MODIFIED TYPE 'C' PRECAST CONCRETE INLET WITH SUMPED BOTTOM INLET I-5

NOT TO SCALE

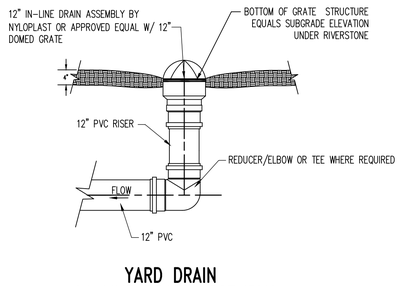


NOTES:

THE BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS I, CLASS II, OR CLASS III MATERIAL AS DEFINED IN ASTM D2321. BEDDING & BACKFILL FOR SURFACE DRAINAGE INLETS SHALL BE PLACED & COMPACTED UNIFORMLY IN ACCORDANCE WITH ASTM D2321.

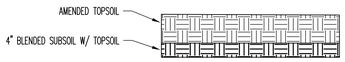
YARD DRAIN DRAIN BASIN ASSEMBLY

NOT TO SCALE



YARD DRAIN IN-LINE DRAIN ASSEMBLY

NOT TO SCALE

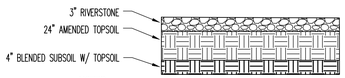


NOTES:

1. USE TILLING EQUIPMENT TO MIX AND BLEND TOPSOIL WITH THE SUBSOIL.
2. DO NOT OVERCOMPACT SUBSOIL/TOPSOIL LAYERS. MINIMIZE RUBBER TIRE VEHICULAR TRAFFIC AFTER PLACEMENT.
3. ALL INFILTRATION BASIN MUST UTILIZE TOPSOIL BLENDING TECHNIQUES.

AMENDED TOPSOIL BLENDING SPECIFICATION

NOT TO SCALE



NOTES:

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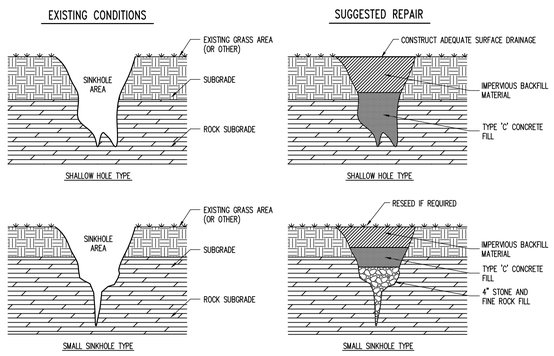
3. ALL INFILTRATION BASIN MUST UTILIZE TOPSOIL BLENDING TECHNIQUES.

RIVERSTONE AREA W/ AMENDED TOPSOIL

NOT TO SCALE



NOTE:

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 INCLUDED IN UTILITY/EARTHWORK BASE BID)

SINKHOLE REPAIR

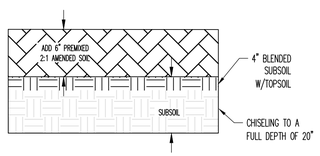
NOT TO SCALE

SOIL AMENDMENTS

SOIL AMENDMENT APPLICATION – PREMIXTURE WITH TOPSOIL (AREAS AT SUBGRADE AND LITTLE TO NO TOPSOIL IN PLACE)

A) SOIL AMENDMENT MEDIA COMPOST TO BE TRIPLE GROUND BARK MULCH. MATERIAL TO BE COMPOSTED AT A PADEP BUREAU OF WASTE MANAGEMENT PERMITTED SITE AND CONFORMING TO PA CODE TITLE 25, CHAPTER 281, COMPOST FACILITIES. COMPOST SHALL BE TESTED IN ACCORDANCE WITH US COMPOSTING COUNCIL TEST METHODS FOR EXAMINING OF COMPOSTING AND COMPOST (TMECC).
B) PREPARE A MIXTURE OF TOPSOIL AND COMPOST AT A RATE OF 2:1 (TOPSOIL:COMPOST). IF A PROPRIETARY PRODUCT IS USED, THE MANUFACTURER'S INSTRUCTIONS SHOULD BE FOLLOWED IN TERMS OF MIXING AND APPLICATION RATE.
C) SOIL RESTORATION SHOULD NOT BE USED ON SLOPES GREATER THAN 30% IN THESE AREAS, DEEP-ROOTED VEGETATION CAN BE USED TO INCREASE STABILITY.
D) SOIL RESTORATION SHOULD NOT TAKE PLACE WITHIN THE DRIP LINE OF A TREE TO AVOID DAMAGING THE ROOT SYSTEM.
E) ON-SITE SOILS WITH AN ORGANIC CONTENT OF AT LEAST 5 PERCENT CAN BE PROPERLY STOCKPILED (TO MAINTAIN ORGANIC CONTENT) AND REUSED.
F) SPREAD MIXTURE REFERENCED IN ITEM B. TO A MINIMUM DEPTH OF 6 INCHES OVER THE ENTIRE PROPOSED LAWN AREA.
G) THE SOIL AMENDMENT MIXTURE MUST NOT BE COMPACTED.

NOTE: SOIL AMENDMENTS SHALL BE CONSTRUCTED WITH DEEP CHISELING OR SUBSOILING TO A DEPTH OF 20 INCHES OR THE BOTTOM OF COMPACTED SOIL.



SOIL AMENDMENT APPLICATION & INSTALLATION

NOT TO SCALE

PROPOSED STORM DRAIN STRUCTURE DATA

ID	STRUCTURE Type	TG ELEV	INVERT IN		INVERT OUT	PIPE RUN PIPE TYPE		LENGTH (FT)	SIZE (IN)	SLOPE (%)	GRATE INLET SKIMMER BOX FILTER
I-1	24" X 48" Precast Type C Modified Inlet w/ Bicycle Safe Grate	1176.80	1173.63 *1173.70*	I-2 *Existing*	*1173.53*	*I-1 TO EXISTING*	*HDPEP*	*157.0*	*18*	*2.82*	NO
I-2	24" X 48" Precast Type M Modified Inlet w/ Bicycle Safe Grate	1178.45	1173.89	OS-1	1173.79	I-2 TO I-1	HDPEP	32.7	18	0.50	NO
OS-1C	48" X 48" Precast Inlet Box w/ 30" Manhole Lid	1184.00			1174.22				36		NO
OS-1B	24" X 48" Precast Inlet Box w/ 30" Manhole Lid	1180.10	1174.10 1174.10	OS-1 OS-1A	1174.10	OS-1B TO I-2	HDPEP	17.3	18	1.12	NO
OS-1A	60" X 60" Precast Inlet Box w/ 30" Manhole Lid	1184.00	1174.22	DETENTION	1174.22	OS-1A TO OS-1B	HDPEP	19.8	18	0.61	NO
OS-1	72" X 72" Precast Inlet Box w/ 30" Manhole Lid	1181.70	1174.26	DETENTION	1174.26	OS-1 TO OS-1B	HDPEP	21.3	18	0.75	NO
I-4	60" X 60" Precast Inlet Box w/ 30" Manhole Lid	1185.00	1178.60	SUMP	1174.26	I-4 TO OS-1	HDPEP	150.0	48	0.00	NO
SUMP	STORMTECH SC-740 STORAGE CHAMBERS	N/A	1179.25	I-5	1181.25	SUMP TO I-4	SDR-35	83.7	6	3.17	NO
I-5	24" X 48" Precast Type C Modified Inlet w/ Bicycle Safe Grate *Bottom of Box=1177.88 (1.5' Sump)	1182.00	1179.48 1179.48	YD-3 I-6	1179.38	I-5 TO I-SUMP	HDPEP	25.2	15	0.50	YES
I-6	24" X 48" Precast Type C Modified Inlet w/ Bicycle Safe Grate	1182.20			1179.73	I-6 TO I-5	HDPEP	50.7	15	0.50	YES
YD-1	12" NYLOPLAST INLINE DRAIN W/ DOMED GRATE	1181.50			1175.86	YD-1 TO DETENTION PIPE	HDPEP	2.5	12	4.00	NO
YD-2	12" NYLOPLAST INLINE DRAIN W/ DOMED GRATE	1182.50			1175.86	YD-2 TO DETENTION PIPE	HDPEP	2.5	12	4.00	NO
YD-3	12" NYLOPLAST INLINE DRAIN W/ DOMED GRATE	1182.00	1179.65		1179.55	YD-3 TO I-5	HDPEP	8.4	12	1.20	NO
YD-4	12" NYLOPLAST DRAIN BASIN W/ FLUSH GRATE	1188.00			1182.75	YD-4 TO YD-3	HDPEP	31.7	12	9.78	NO
YD-5	12" NYLOPLAST DRAIN BASIN W/ FLUSH GRATE	1182.10			1180.00	YD-5 TO R-TANK	HDPEP	9.3	8	5.38	NO
I-3	24" X 48" Precast Type C Modified Inlet w/ Bicycle Safe Grate	1181.69			1175.73	I-3 TO DETENTION PIPE	HDPEP	3.2	15	3.12	YES
TD-1	4" POLY DRAIN	1182.31			1179.90	TD-1 TO PIPE	SDR-35	3.0	8	2.00	NO
RD	ROOF DRAIN W/ 4-INTERNAL FLOGARDS FG-DS10 FILTER MOUNTED VERTICALLY				1180.00	FLOGARD MANIFOLD TO R-TANK DETENTION	HDPEP	7.1	12	0.50	NO

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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOHN C. SEPP — ENGINEER — 040003-E

Designer	EAH
Draftsman	EAH
Proj.Manager	JCS
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Book	542 Pg 42
Acad	19052-FERGUSON-PRELIMINARY-LD-PC2
Layout	SWDT

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REVISIONS

WEST COLLEGE STUDENT HOUSING

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS

PROJECT NO.
19052

DATE
AUGUST 14, 2020

SCALE
N.T.S.

SHEET NO.
PC2

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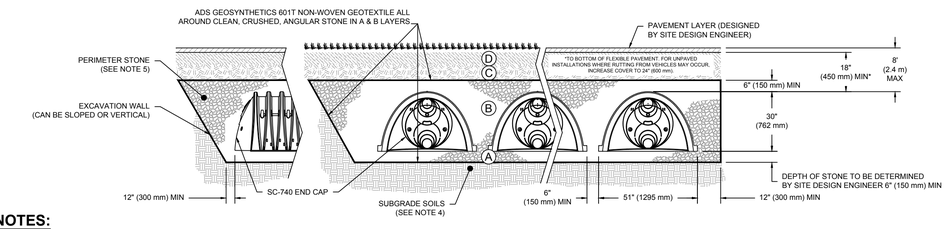
ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[1] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

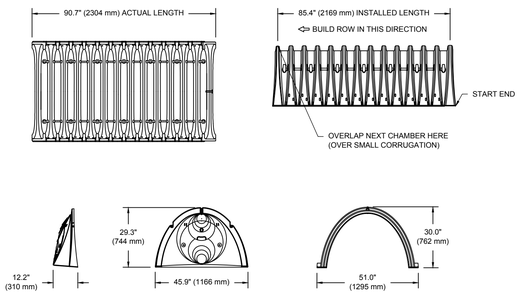
PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



NOTES:

1. SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS", OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
4. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
5. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
6. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

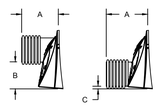
1 SC-740 CROSS SECTION DETAIL



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	51.0" X 30.0" X 85.4"	(1295 mm X 762 mm X 2169 mm)
CHAMBER STORAGE	45.9 CUBIC FEET	(1.30 m³)
MINIMUM INSTALLED STORAGE*	74.9 CUBIC FEET	(2.12 m³)
WEIGHT	75.0 lbs.	(33.6 kg)

*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS



PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE-CORED END CAPS END WITH "PC"

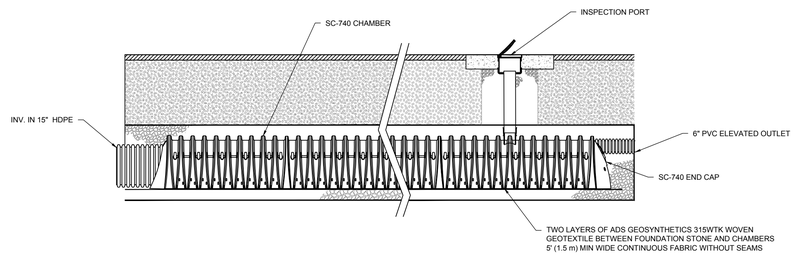
PART #	STUB	A	B	C
SC740EPE06T / SC740EPE06TPC	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	---
SC740EPE06B / SC740EPE06BPC			---	0.5" (13 mm)
SC740EPE08T /SC740EPE08TPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	---
SC740EPE08B / SC740EPE08BPC			---	0.6" (15 mm)
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	---
SC740EPE10B / SC740EPE10BPC			---	0.7" (18 mm)
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	---
SC740EPE12B / SC740EPE12BPC			---	1.2" (30 mm)
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---
SC740EPE15B / SC740EPE15BPC			---	1.3" (33 mm)
SC740EPE18T / SC740EPE18TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	---
SC740EPE18B / SC740EPE18BPC			---	1.6" (41 mm)
SC740EPE24B*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)

ALL STUBS, EXCEPT FOR THE SC740EPE24B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

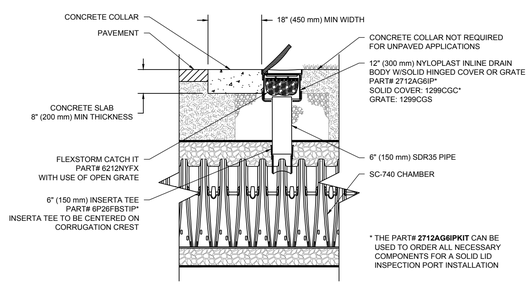
* FOR THE SC740EPE24B THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

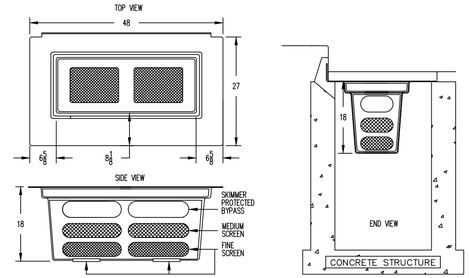
2 SC-740 TECHNICAL SPECIFICATIONS



3 SC-740 CROSS SECTION DETAIL



4 SC-740 6" (150 mm) INSPECTION PORT DETAIL



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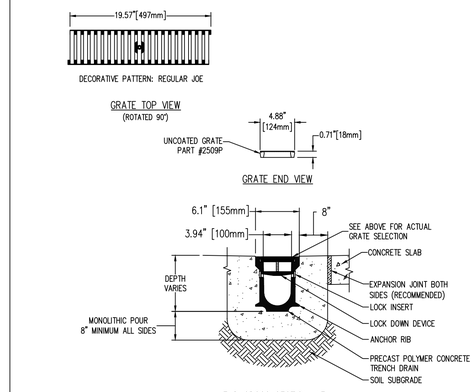
LB WATER
570-259-8855

SKIMMER BOX PER SUNTREE TECHNOLOGIES, INC., COCOA, FL
OR APPROVED EQUAL
Part # GISB-27-48-18

GRATE INLET SKIMMER BOX FOR PENNDOT TYPE C INLETS

NOT TO SCALE



PLAN NOTES
SERIES NUMBER: PD-2509P (REGULAR JOE)
1. GRATE:
   - DUCTILE IRON PER ASTM A536 GRADE 80-55-06 (UNCOATED)
   - LOAD RATING: 494 PSI (AASHTO M-306 TEST METHOD)
   - MADE IN THE USA
2. CONCRETE: CONCRETE THICKNESS AND REINFORCEMENT PER STRUCTURAL ENGINEER'S SPECIFICATION FOR THE APPLICATION.

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ABT, INC.
P.O. BOX 837, 259 MOORDOCK ROAD
TROUTMAN, NC. 28166
(704) 528-2096

PolyDrain – 4" [100mm] ID Precast Trench Drain
with Uncoated Decorative Grate

SERIES: PD-2509P (Regular Joe) REV: 00

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COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
JOHN C. SEPP
ENGINEER
040003-E

Designer	EAH
Draftsman	EAH
Proj.Manager	JCS
Surveyor	BRK
Perimeter Ck.	
Book	542 Pg 42
Acad	19052-FERGUSON-PRELIMINARY-LD-PC3
Layout	SWDT

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/21/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
12/18/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
11/06/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS

REVISIONS

WEST COLLEGE STUDENT HOUSING

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS

PROJECT NO. 19052
DATE AUGUST 14, 2020
SCALE N.T.S.
SHEET NO. PC3

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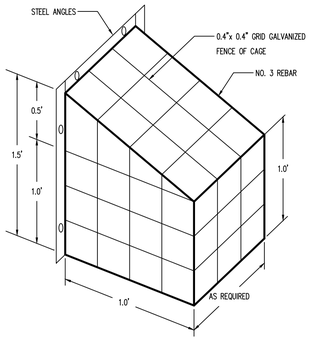
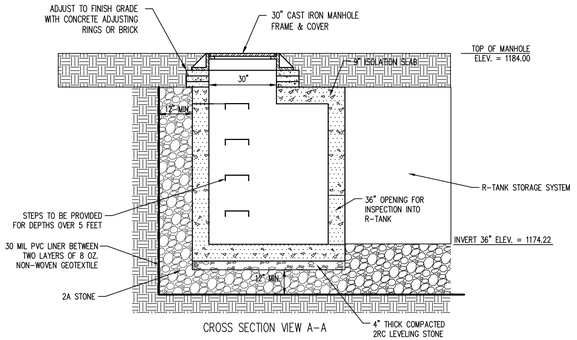


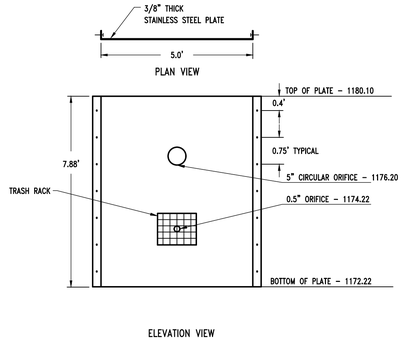
NOTE: PROVIDE CORROSION PROTECTION ON ALL METAL SURFACES

TRASH RACK
NOT TO SCALE



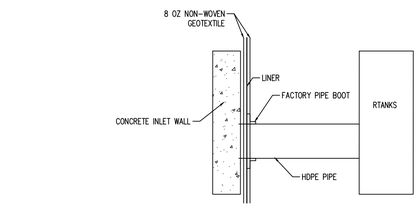
CROSS SECTION VIEW A-A

OUTLET STRUCTURE 1 (OS-1C) - 4'X4' PRECAST INLET W/ MANHOLE FRAME & COVER
NOT TO SCALE

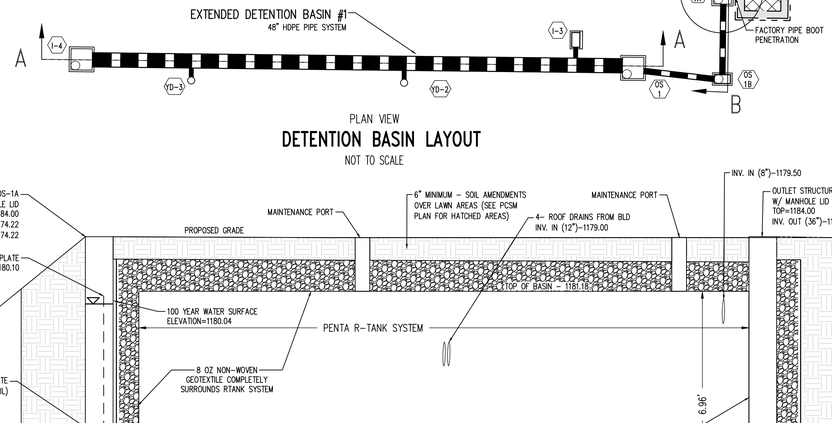


ELEVATION VIEW

EXTENDED DETENTION BASIN ORIFICE PLATE (OS-1A)
NOT TO SCALE

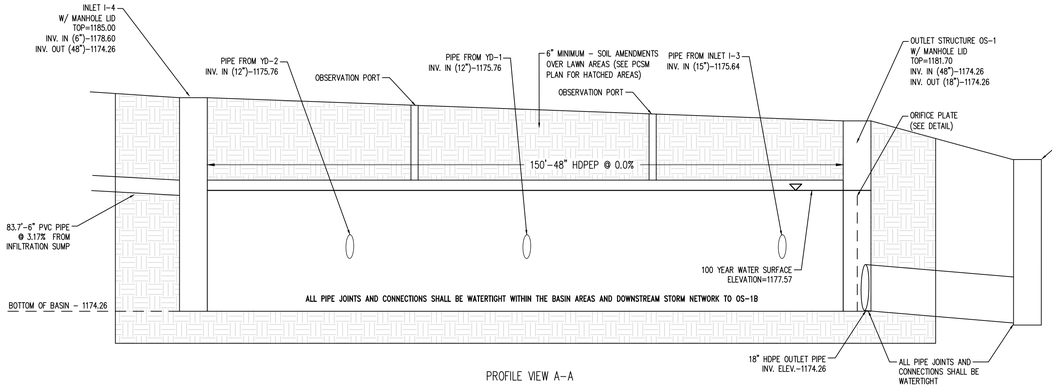


PIPE CONNECTION BLOWUP AT OS-1A
NOT TO SCALE



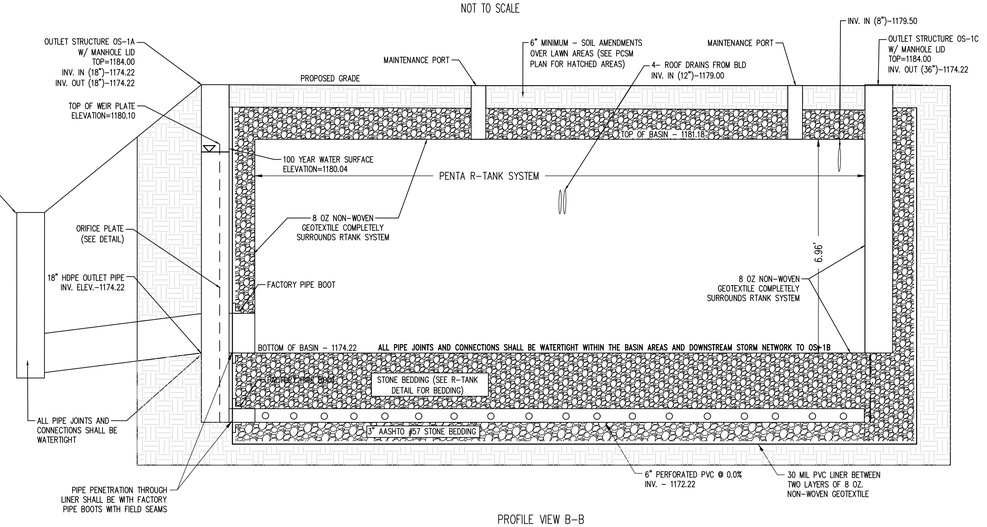
PLAN VIEW

DETENTION BASIN LAYOUT
NOT TO SCALE



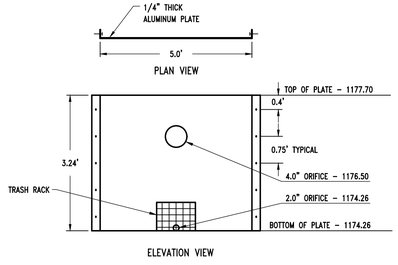
PROFILE VIEW A-A

EXTENDED DETENTION BASIN #1
NOT TO SCALE



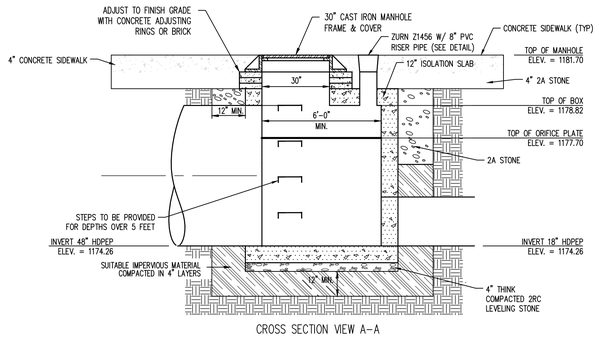
PROFILE VIEW B-B

EXTENDED DETENTION BASIN #1A
NOT TO SCALE



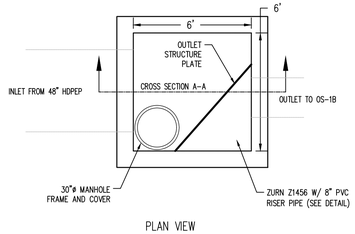
ELEVATION VIEW

EXTENDED DETENTION BASIN ORIFICE PLATE (OS-1)
NOT TO SCALE

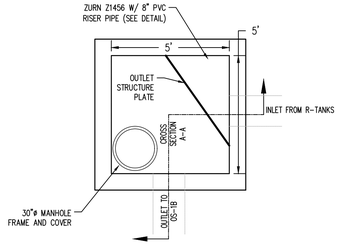


CROSS SECTION VIEW A-A

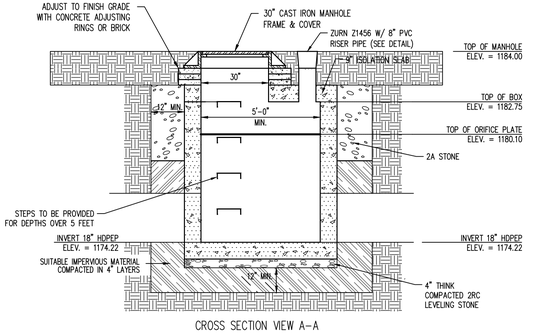
OUTLET STRUCTURE 1 (OS-1) - 6'X6' PRECAST INLET W/ MANHOLE FRAME & COVER
NOT TO SCALE



PLAN VIEW



PLAN VIEW



CROSS SECTION VIEW A-A

OUTLET STRUCTURE 1 (OS-1A) - 5'X5' PRECAST INLET W/ MANHOLE FRAME & COVER
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Designer	EAH
Draftsman	EAH
Proj.Manager	JCS
Surveyor	BRK
Perimeter Ck.	
Book	542 Pg 42
Acad	19052-FERGUSON-PRELIMINARY-LD-PC4
Layout	SWDT

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/27/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
12/18/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
11/06/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS

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FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS

PROJECT NO. 19052
DATE AUGUST 14, 2020
SCALE N.T.S.
SHEET NO. PC4

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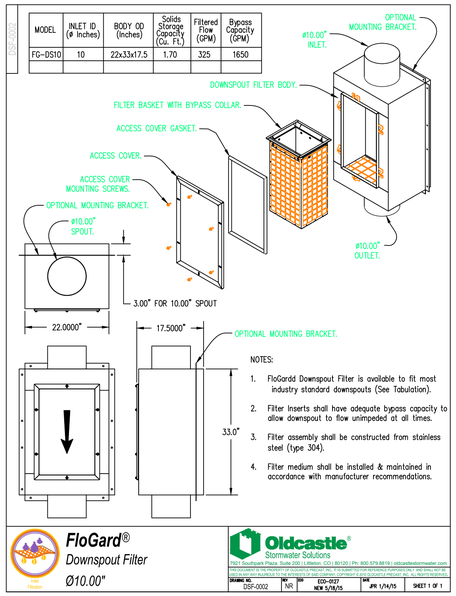
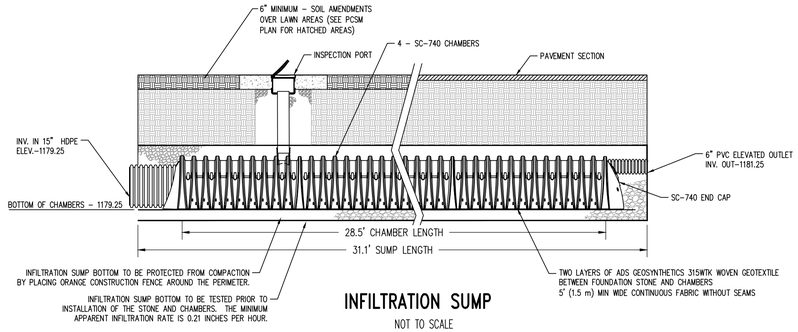


NOTES:
1. A MAXIMUM OF 8,275 SQUARE FEET OF ROOF AREA TO ANY ONE FLOGARD. BASED ON THE CURRENT 29,571 SF BUILDING, 4 FLOGARD FILTER WILL BE REQUIRED.

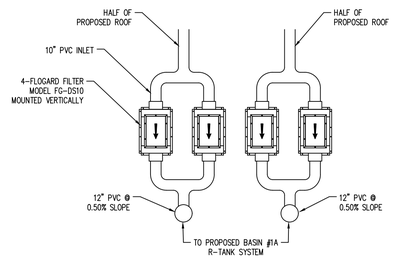
10" FLOGARD DOWNSPOUT FILTER

NOT TO SCALE



INFILTRATION SUMP

NOT TO SCALE



TYPICAL MULTIPLE FLOGARD LAYOUT

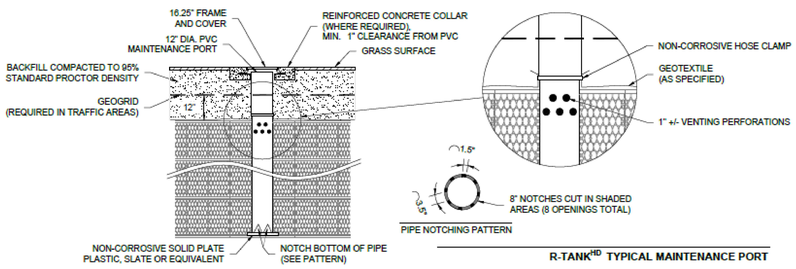
NOT TO SCALE

STORMWATER MAINTENANCE PROGRAM

All stormwater management facilities on the West College Ave Student Housing site not contained in a Ferguson Township or State College Borough Right–of–Way shall be owned and maintained by the owner/developer (Aspen Heights Partners). Ferguson Township and State College Borough shall have the uninterrupted right to access the property to inspect the stormwater facilities. The facilities that will require maintenance are the inlets, amended soil areas, grate inlet skimmer boxes, flogard downspout filters, storm sewer pipes, extended detention basins, infiltration sump and all basin outlet structures. All stormwater facilities should be inspected and maintained as follows:

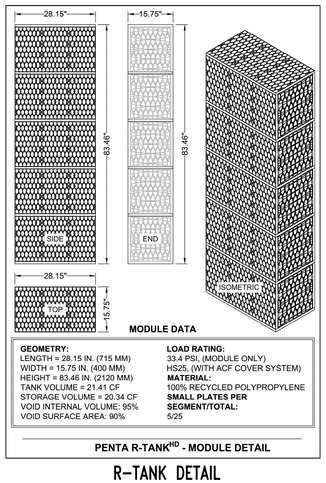
STORMWATER BMP MAINTENANCE ITEM	MAINTENANCE DUTY	OCCURRENCE INTERVAL
STORM SEWER INLETS AND PIPES (BOTH MUNICIPALITIES)	STORM SEWER INLETS AND PIPES SHALL BE CLEANED OF ALL DEBRIS, LITER, AND OTHER DELETERIOUS MATERIAL. SPECIFICALLY, THE SUMP WITHIN INLET I-5 SHALL HAVE ALL MATERIAL REMOVED.	MONTHLY OR AFTER EACH RAINFALL EVENT PRODUCING 0.5" RAIN
AMENDED SOIL AREAS (BOTH MUNICIPALITIES)	SOIL AMENDED AREAS SHALL MINIMIZE TRACKING OF HEAVY MACHINERY WHEN MOWING/ACTIVITIES OCCUR. ALL AMENDED SOIL AREAS ARE TO BE NEAR 100% GRASS COVER IN GOOD CONDITION.	EVERY 6 MONTHS
GRATE INLET SKIMMER BOXES (I-3,5,6) (FERGUSON TWP)	THE GRATE INLET SKIMMER BOXES SHALL BE SERVICED QUARTERLY (4 TIMES A YEAR) AND AFTER MAJOR STORM EVENTS. THE STORM BOOM SHALL BE REPLACED WHEN THERE IS KNOWN DEBRIS/CONTAMINANTS IN THE SKIMMER TRAY, AND THE OLD STORM BOOM DISPOSED OF PROPERLY. IT IS RECOMMENDED THAT THE STORM BOOM BE REPLACED AT A MINIMUM OF 2 TIMES A YEAR REGARDLESS OF VISUAL CONTAMINANTS. DEBRIS IN THE FILTRATION BOX SHALL BE DUMPED INTO A PROPER DISPOSAL CONTAINER OR SUCTIONED OUT WITH A VACUUM. CLEAN THE SCREENS WITH A SPRAY WAND OR BRUSH.	QUARTERLY OR AFTER EACH RAINFALL EVENTS PRODUCING 0.5" RAIN
FLOGARD DOWNSPOUT FILTERS (STATE COLLEGE BOROUGH)	THE FLOGARD DOWNSPOUT FILTERS SHALL BE INSPECTED FOR DEFECTS AND POSSIBLE LEAKAGE. COLLECTED MATERIALS WITHIN THE UPPER AND LOWER FILTERS SHALL BE REMOVED USING A VACUUM OR IT SHALL BE DUMPED IN A DOT APPROVED CONTAINER. THE FILTER LINER, GASKETS, STAINLESS STEEL FRAME, MOUNTING BRACKETS AND LINER SHALL BE INSPECTED TO ENSURE THEY ARE FULLY FUNCTIONAL, AND SHALL BE REPAIRED/REPLACED AS NECESSARY. THE FILTER MEDIUM SHALL BE REPLACED AT A MINIMUM ONCE PER YEAR.	ANNUALLY
UNDERGROUND EXTENDED DETENTION BASIN 1 (FERGUSON TWP)	THE BASIN SHALL BE INSPECTED AND CLEANED OF DEBRIS AND VACUUMED OUT IF NECESSARY.	EVERY 6 MONTHS
UNDERGROUND EXTENDED DETENTION BASIN 1A (STATE COLLEGE BOROUGH)	THE BASIN SHALL BE INSPECTED AND CLEANED OF DEBRIS AND VACUUMED OUT IF NECESSARY.	EVERY 6 MONTHS
INFILTRATION SUMP (FERGUSON TWP)	MONITOR SEDIMENT BUILDUP. CLEANOUT AND VACUUM OUT ANY NOTICABLE BUILDUP. IF THE SUMP DOES NOT DEWATER IN 72 HOURS, CONTACT A REGISTERED PROFESSIONAL FOR EVALULATION AND SUBSEQUENT REMEDIATION.	MONTHLY OR AFTER EACH RAINFALL EVENT PRODUCING 0.5" RAIN
OUTLET STUCTURES OS-1 (FERGUSON TWP)	THE OUTLET STRUCTURES SHALL BE INSPECTED TO ENSURE STRUCTURAL STABILITY. ALL JOINTS WITH OUTLET PIPES SHALL BE WATER-TIGHT AND IF NECESSARY RE-GROUTED.	ANNUALLY
OUTLET STUCTURES OS-1A (STATE COLLEGE BOROUGH)	THE OUTLET STRUCTURES SHALL BE INSPECTED TO ENSURE STRUCTURAL STABILITY. ALL JOINTS WITH OUTLET PIPES SHALL BE WATER-TIGHT AND IF NECESSARY RE-GROUTED.	ANNUALLY
TREE PLANTER AREAS (FERGUSON TOWNSHIP)	THE TREE PLANTER AREAS SHALL REMOVE ANY DEBRIS ACCUMULATION WITHIN THE CURB CUT THAT WILL ALLOW RUNOFF INTO THE PLANTER.	MONTHLY OR AFTER EACH RAINFALL EVENT PRODUCING 0.5" RAIN
SINKHOLE PREVENTION MEASURES	INSPECT THE UNDERGROUND SUMP AND BASIN BOTTOM FOR ANY SUBSIDENCE. IN THE EVENT THAT A SINKHOLE FORMS, CONTACT THE TOWNSHIP & BOROUGH ENGINEER, ANY ADJACENT PROPERTY OWNER THAT MAY BE AFFECTED AND THE STATE COLLEGE BOROUGH WATER AUTHORITY IMMEDIATELY.	MONTHLY OR AFTER EACH RAINFALL EVENT PRODUCING 0.5" RAIN

*DOCUMENTATION OF INSPECTIONS MUST BE MAINTAINED BY THE OWNER AND SUBMITTED TO TOWNSHIP & BOROUGH UPON REQUEST. MAINTENANCE INSPECTIONS MAY BE PERFORMED BY THE TOWNSHIP AND/OR BOROUGH TO ENSURE PROPER FUNCTIONING OF ALL STORMWATER FACILITIES.



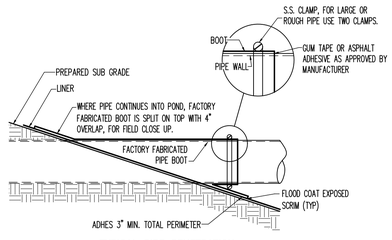
R–TANK MAINTENANCE PORT

NOT TO SCALE

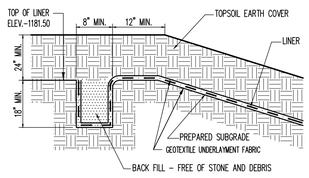


R–TANK DETAIL

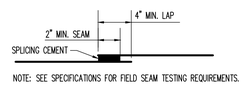
NOT TO SCALE



TYPICAL PIPE PENETRATION



TYPICAL ANCHOR TRENCH TERMINATION



NOTE: SEE SPECIFICATIONS FOR FIELD SEAM TESTING REQUIREMENTS.

TYPICAL CHEMICAL FUSION FIELD SEAM

NOTES:
1. WHEN ROCK IS ENCOUNTERED DURING THE EXCAVATION OF A BASIN WITH A MANUFACTURED LINER, IT SHALL BE REMOVED TO AN ELEVATION OF AT LEAST 12" MIN. BELOW LINER AND REPLACED W/ SUBGRADE MATERIAL.
2. SUBGRADE MATERIAL SHALL BE FREE OF DEBRIS, ROCK, AND ANY PROTRUDING OBJECTS.
3. OWNERS TESTING AGENCY SHALL INSPECT SUBGRADE PRIOR TO GEOTEXTILE UNDERLAYMENT INSTALLATION.
4. SEE SPECIFICATION SECTION 02630.
5. SEE SITE DRAWINGS AND SPECIFICATIONS FOR BASIN CONSTRUCTION REQUIREMENTS.
6. BASIN LINER SHALL FABRICATED WITH FACTORY SEAMS AS NEEDED SO AS TO BE DELIVERED TO SITE AS ONE CONTIGUOUS PIECE OF MATERIAL. FIELD SEAMS SHALL BE REQUIRED ONLY AT THE PIPE PENETRATION BOOTS. FIELD SEAMS SHALL BE SEALED BY DUAL–TRACK FUSION WELDING OR CHEMICAL FUSION PER THE SPECIFICATIONS.

BASIN LINER INSTALLATION DETAILS

NOT TO SCALE

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COMMONWEALTH OF PENNSYLVANIA – REGISTERED PROFESSIONAL – JOHN C. SEPP – ENGINEER – 040003–E

Designer EAH
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Proj.Manager JCS
Surveyor BRK
Perimeter Ck.
Book 542 Pg 42
Acad 19052–FERGUSON–PRELIMINARY–LD–PC5
Layout SWDT

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/27/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
12/18/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
11/06/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS

REVISIONS

WEST COLLEGE STUDENT HOUSING

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS

PROJECT NO. 19052
DATE AUGUST 14, 2020
SCALE N.T.S.
SHEET NO. PC5

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SURVEY FEATURES LEGEND

- Property Line, Lot Line or Right of Way Line
- Adjoining Property Line
- Building Setback Line
- Easement Line
- Project Benchmark
- Municipal Boundary

SOILS LEGEND

Soil cover on the site consists of:
HaB – Hagerstown Silt Loam, 3%–8% Slopes
HcB – Hagerstown Silty Loam, 3%–8% Slopes

EXISTING FEATURES LEGEND

- EXISTING BUILDING — Existing Building
- Existing Curbing & Edge of Pavement
- Existing Concrete Areas
- Existing Bituminous Areas
- Existing Gravel Areas
- Existing Retaining Wall
- Existing Fence / Type
- 1109 — Existing Contours w/ Elevation (1's & 2's)
- 1110 — Existing Contours w/ Elevation (5's & 10's)
- Existing Sanitary Sewer w/ Manhole
- Existing Sanitary Sewer Lateral w/ Clean Out
- Existing Water Line w/ Valve
- Existing Water Service Lateral
- Existing Storm Sewer Line w/ Inlet
- Existing Gas Line
- Existing Overhead Utility Line w/ Pole
- Existing Fire Hydrant
- Existing Manhole
- Existing Utility Pole
- Existing Guy Wire
- Existing Storm Sewer Inlet Type–M
- Existing Storm Sewer Inlet Type–C
- Existing Utility Meter
- Existing Light Pole/Standard
- Existing Flood Light
- Existing Monitoring Well
- Existing Sign
- Existing Mail Box
- Existing Soil Limit Boundary
- HaB — Existing Soil Type
- Existing Tree Row
- 25% Slopes Or Greater
- Existing Deciduous Tree
- Existing Evergreen Tree
- Existing Shrub

PROPOSED FEATURES LEGEND

- PROPOSED BUILDING — PROPOSED BUILDING
- PROPOSED CURBING & EDGE OF PAVEMENT
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE AREAS
- PROPOSED FULL–DEPTH BITUMINOUS PAVEMENT AREAS
- PROPOSED OVERLAY BITUMINOUS PAVEMENT AREAS
- PROPOSED STORM SEWER INLET – TYPE M
- PROPOSED STORM SEWER INLET – TYPE C
- DEPRESSED CURB TRANSITION CURB — PROPOSED DEPRESSED CURB W/ CURB TRANSITION
- PROPOSED HANDICAPPED RAMP
- PROPOSED RETAINING WALL
- 1109 — PROPOSED MINOR CONTOURS W/ ELEVATION (1's & 2's)
- 1110 — PROPOSED MAJOR CONTOURS W/ ELEVATION (5's & 10's)
- PROPOSED 8" SANITARY SEWER W/ MANHOLE
- CO — PROPOSED SANITARY SEWER LATERAL W/ CLEAN OUT
- PROPOSED WATER SERVICE LATERAL W/ CURB BOX
- PROPOSED STORM SEWER W/ TYPE C INLET
- RD — PROPOSED STORM SEWER ROOF DRAIN
- PROPOSED STORM SEWER TRENCH DRAIN
- G — G — G — PROPOSED GAS LINE

EROSION & SEDIMENTATION CONTROL LEGEND

- NPDES BOUNDARY LINE
- LIMIT OF DISTURBANCE
- 18" SILT SOCK
- CONSTRUCTION ENTRANCE
- INLET PROTECTION
- YARD DRAIN PROTECTION
- CONCRETE WASHOUT AREA

NPDES PERMIT NOTICE OF TERMINATION NOTE:

UPON CONTRACTOR BEING AWARDED THE SITE WORK CONTRACT, THE CONTRACTOR IS RESPONSIBLE AND SHALL PROCESS FORMS W/ THE CENTRE COUNTY CONSERVATION DISTRICT TO BECOME A CO–PERMITTEE ON THE NPDES PERMIT AND SHALL REMAIN AS A CO–PERMITTEE UNTIL THE CONTRACTOR FILES THE NOTICE OF TERMINATION. THE NOTICE OF TERMINATION REQUIRES CERTIFICATION OF THE STORMWATER FACILITIES MENTIONED ON THE POST CONSTRUCTION STORMWATER PLAN.

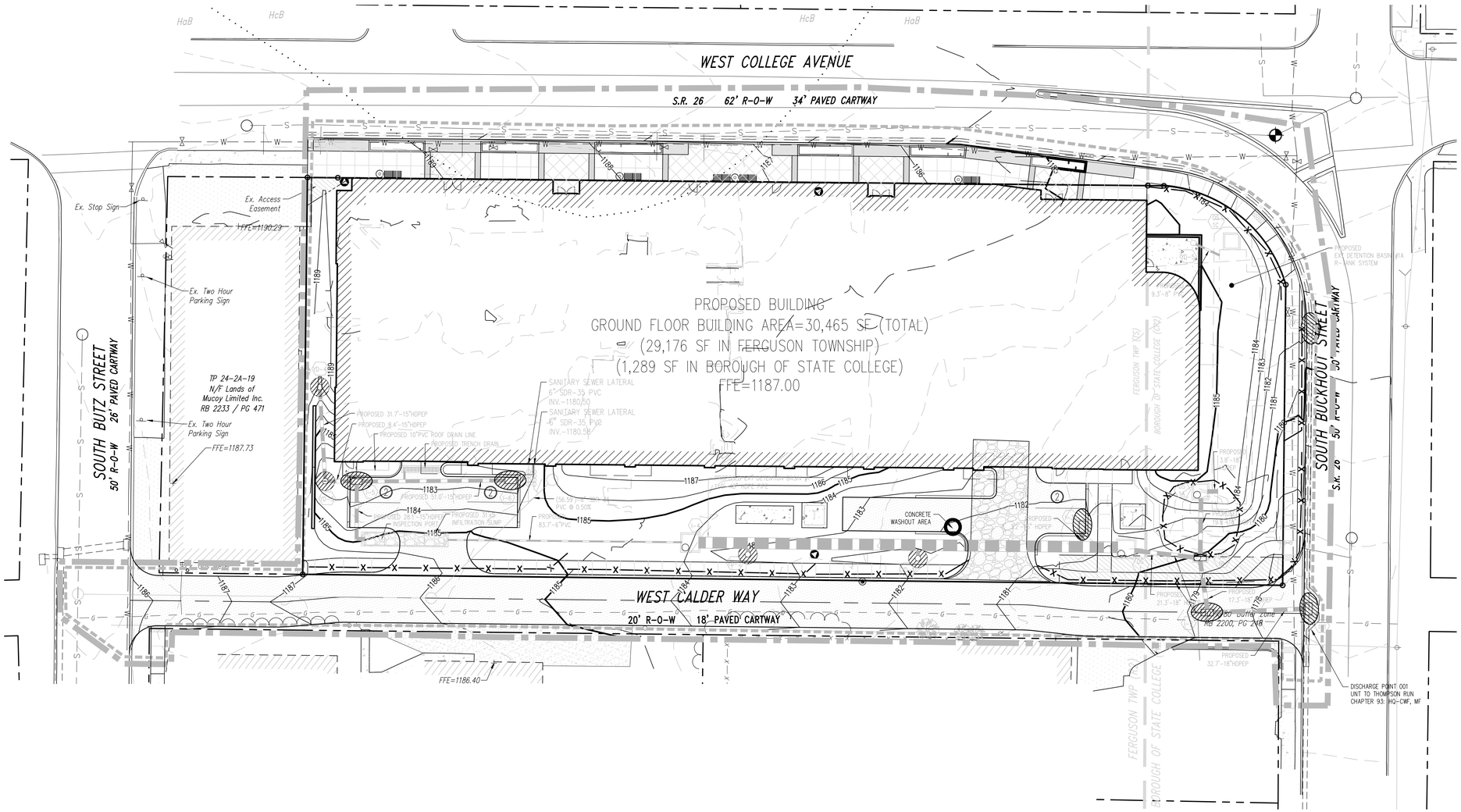
CRITICAL STAGES OF CONSTRUCTION

THE SITE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH THE OWNER TO ENSURE THAT A REGISTERED PROFESSIONAL SHALL BE ONSITE FOR THE CONSTRUCTION OF THE FOLLOWING FACILITIES:

1. REPAIR & DESIGN OF THE PERMANENT SINKHOLE FIX SHALL BE OVERSEEN BY A QUALIFIED GEOTECHNICAL ENGINEER OR HIS DESIGNEE.
2. EXCAVATION AND INSTALLATION OF THE UNDERGROUND INFILTRATION SUMP.
3. EXCAVATION AND INSTALLATION OF THE UNDERGROUND EXTENDED DETENTION BASIN 1 AND 1A.
4. PLACEMENT OF SOIL AMENDMENTS.
5. FINAL SITE GRADING.

CONSTRUCTION GRADING NOTE:

DURING ALL PHASES OF CONSTRUCTION, SITE RUNOFF SHALL BE KEPT IN A SHEET FLOW CONDITION TO BE TREATED BY THE EROSION CONTROL SILT SOCK. IF AT ANY MOMENT, THE SILT SOCK IS BEING BYPASSED OR IF IT ACTS AS A DIVERSION WITHOUT BEING TREATED, STEPS SHALL BE TAKEN TO HAVE RUNOFF TREATED BY EACH INDIVIDUAL SILT SOCK SECTION.



GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

Magnetic

PennTerra ENGINEERING INC.

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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOHN C. SEPP — ENGINEER — 040003–E

Designer	EAH
Draftsman	EAH
Proj.Manager	JCS
Surveyor	BRK
Perimeter Ck.	
Book	542 Pg 42
Acad	19052–FERGUSON–PRELIMINARY–LD–ES1
Layout	ES1

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/27/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
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REVISIONS

WEST COLLEGE STUDENT HOUSING

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

EROSION & SEDIMENTATION CONTROL PLAN

PROJECT NO.
19052

DATE
AUGUST 14, 2020

SCALE
1"=20'

SHEET NO.
ES1

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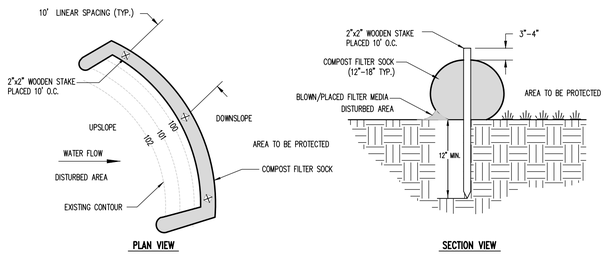


1. Sock fabric shall meet standards of Table 4.1. Compost shall meet the standards of Table 4.2.
2. Silt sock compost/soil/rock/seed fill to meet application requirements.
3. Silt socks depicted are for use on minimal slopes. Greater slopes may require larger silt socks per the Engineer.
4. Compost material to be dispersed on site, as determined by Engineer.
5. Traffic shall not be permitted to cross filter socks.
6. Accumulated sediment shall be removed when it reaches half the aboveground height of the sock and disposed in the manner described elsewhere in the plan.
7. Socks shall be inspected weekly and after each runoff event. Damaged socks shall be repaired according to manufacturer's specifications or replaced within 24 hours of inspection.
8. Biodegradable filter socks shall be replaced after 6 months; photodegradable socks after 1 year. Polypropylene socks shall be replaced according to manufacturer's recommendations.
9. Upon stabilization of the area tributary to the sock, stakes shall be removed. The sock may be left in place and vegetated or removed. In the latter case, the mesh shall be cut open and the mulch spread as a soil supplement.

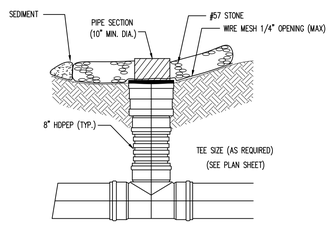
TABLE 4.1
Compost Sock Fabric Minimum Specifications

Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (MFPP)	Heavy Duty Multi-Filament Polypropelene (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.					

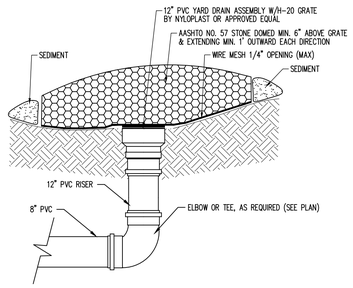
TABLE 4.2
Compost Standards

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

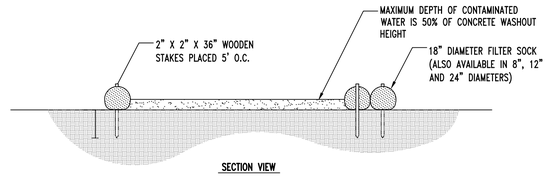
COMPOST FILTER SOCK DETAIL
NOT TO SCALE



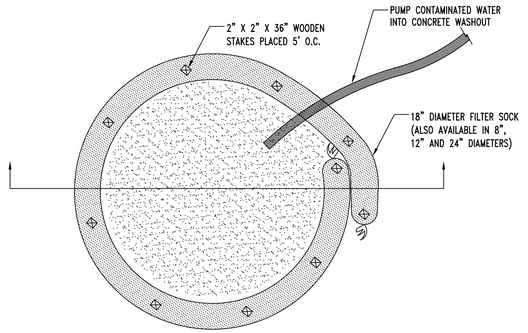
15" INLINE DRAIN INLET PROTECTION
NOT TO SCALE



YARD DRAIN INLET PROTECTION
NOT TO SCALE



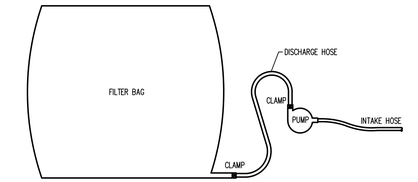
SECTION VIEW



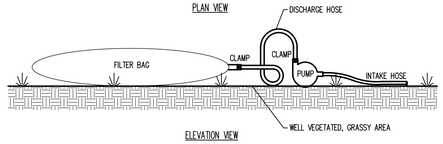
PLAN VIEW

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



PLAN VIEW



ELEVATION VIEW

1. FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS.

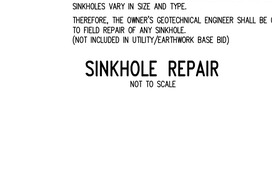
2. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES MUST BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED.

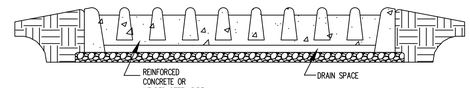
3. BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE FLOW PATH SHALL BE PROVIDED. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%.

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.

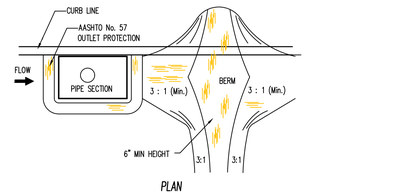
PUMPED WATER FILTER BAG DETAIL
NOT TO SCALE



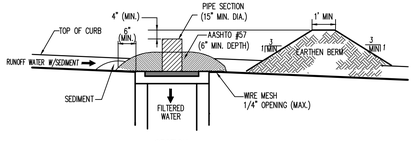


ROCK CONSTRUCTION ENTRANCE with WASH RACK
NOT TO SCALE

NOTES:
1. WASH RACK SHALL BE 20 FEET (MIN.) WIDE OR TOTAL WIDTH OF ACCESS.
2. WASH RACK SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE ANTICIPATED CONSTRUCTION VEHICULAR TRAFFIC.
3. A WATER SUPPLY SHALL BE MADE AVAILABLE TO WASH THE WHEELS OF ALL VEHICLES EXITING THE SITE.



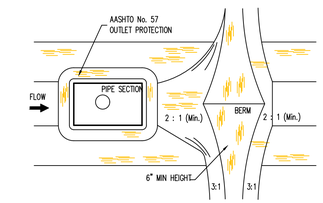
PLAN



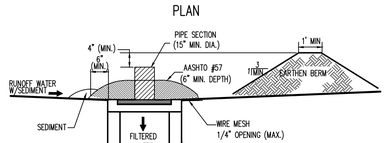
SECTION

NOTE: USE 2-15" PIPE SECTIONS AT INLETS TS-1 AND TS-2

DROP INLET FILTER W/ EARTHEN BERM (TYPE C)
NOT TO SCALE

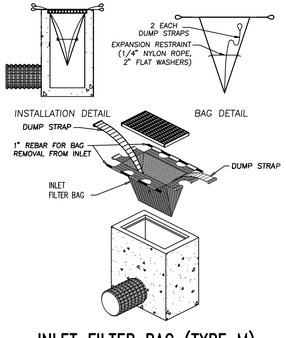


PLAN



SECTION

DROP INLET FILTER W/ EARTHEN BERM (TYPE M)
NOT TO SCALE



INLET FILTER BAG (TYPE M)
NOT TO SCALE

INLET FILTER BAG NOTES:

FILTER BAG SHOULD TRAP PARTICLES LARGER THAN 150 MICRONS.

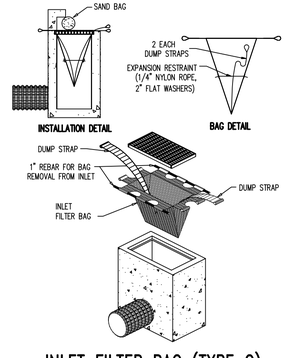
WHEREVER FILTER BAGS ARE USED THEY SHOULD BE INSTALLED ACCORDING TO MANUFACTURERS SPECIFICATIONS.

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.



INLET FILTER BAG (TYPE C)
NOT TO SCALE

INLET FILTER BAG NOTES:

FILTER BAG SHOULD TRAP PARTICLES LARGER THAN 150 MICRONS.

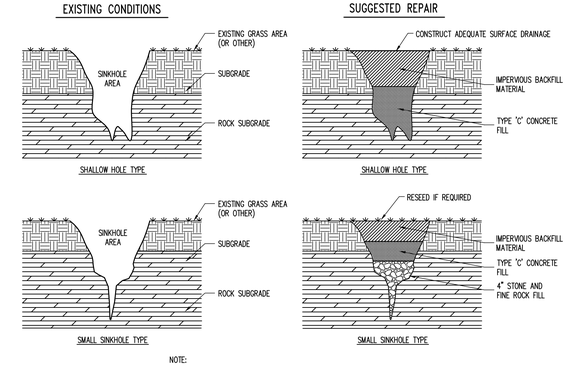
WHEREVER FILTER BAGS ARE USED THEY SHOULD BE INSTALLED ACCORDING TO MANUFACTURERS SPECIFICATIONS.

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.



NOTE:
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 INCLUDED IN UTILITY/EARTHWORK BASE BID)

SINKHOLE REPAIR
NOT TO SCALE

PennTerra ENGINEERING INC.
CENTRAL PENNSYLVANIA REGION OFFICE:
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COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — JOHN C. SEPP — ENGINEER — 040003-E

Designer	EAH
Draftsman	EAH
Proj Manager	JCS
Surveyor	BRK
Perimeter Ck.	
Book	542 Pg 42
Acad	19052-FERGUSON-PRELIMINARY-LD-ES2
Layout	ES-DET

Date	Description
02/19/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
01/27/21 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
12/18/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS
11/06/20 EAH	REVISED PER FERGUSON TOWNSHIP COMMENTS

REVISIONS

WEST COLLEGE STUDENT HOUSING

FERGUSON TOWNSHIP
CENTRE COUNTY
PENNSYLVANIA

PRELIMINARY LAND DEVELOPMENT PLAN

EROSION & SEDIMENTATION CONTROL DETAILS

PROJECT NO. 19052
DATE AUGUST 14, 2020
SCALE N.T.S.
SHEET NO. ES2

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Standard Erosion and Sedimentation Control Plan Notes

1. All earth disturbances, including clearing and grubbing as well as cuts and fills shall be done in accordance with the approved E&S plan. A copy of the approved drawings (stamped, signed and dated by the 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.
2. 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.
3. 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.
4. 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 or by the Department prior to implementation.
5. Areas to be filled are to be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots and other objectionable material.
6. 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.
7. 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.
8. 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.
9. 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.
10. 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.
11. All off-site waste and borrow areas must have an E&S plan approved by the Centre County Conservation District or the Department fully implemented prior to being activated.
12. The contractor is responsible for ensuring that any material brought on site is clean fill. Form FP-001 must be retained by the property owner for any fill material affected by a spill or release of a regulated substance by qualifying as clean fill due to analytical testing.
13. All pumping of water from any work area shall be done according to the procedure described in this plan, over undisturbed vegetated areas.
14. 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.
15. 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.
16. 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.
17. All sediment removed from BMPs shall be disposed of in the manner described on the plan drawings.
18. 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 outslopes shall hove a minimum of 2 inches of topsoil.
19. 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.
20. All earthen fills shall be placed in compacted layers not to exceed 9 inches in thickness.
21. 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.
22. Frozen materials or soft, mucky, or highly compressible materials shall not be incorporated into fills.
23. Fill shall not be placed on saturated or frozen surfaces.
24. Seeps or springs encountered during construction shall be handled in accordance with the standard and specification for subsurface drain or other approved method.
25. 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.
26. 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.
27. 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.
28. 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.
29. 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.
30. 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.
31. 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.
32. 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.
33. 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:

1.) All permanent and temporary seeding shall be done within 72 hours of the completion of disturbances for all areas requiring vegetative cover.

2.) In order to avoid compaction of the proposed underground infiltration basin bottom, special procedures shall be implemented for equipment operations within the bottom of the underground infiltration basin. 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 underground infiltration basin bottom excavation detail.)

3.) Prior to exiting the site, all construction vehicles must drive over the construction entrance.

4.) Silt Socks must be placed and maintained downslope of all topsoil stockpiles. Topsoil stockpiles must also be seeded with the temporary seeding mixture.

5.) 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.

6.) 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

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.

A. Install construction entrances off of Calder Way.
B. Install the proposed silt sock, as shown on the Erosion and Sedimentation Control Plan (E&SCP).
C. Install inlet protection on the existing inlets shown on the E&SCP.
D. Repair the closed depression/sinkhole by contacting a registered professional to oversee construction and design a permanent fix as the area is excavated. The design shall incorporate limiting potential surface and subsurface runoff from entering this area.
E. Demolish existing pavement, concrete, vegetation and all other features as proposed to be demolished. Haul away all material in accordance with the "Responsibilities for Fill Materials" section shown below.
F. Strip the topsoil from the proposed site and stockpile the topsoil on the topsoil stockpile as shown on the E&SCP, after installing silt sock on the downslope end of the topsoil stockpile. Seed the topsoil stockpile with the temporary seeding mixture.
G. Begin rough grading and bulk excavation for the site. Haul away all material in accordance with the "Responsibilities for Fill Materials" section shown below.
H. Once excavation is complete, building construction can occur at this time.
I. Continue with other site grading, and begin installing the underground infiltration sump and extended detention basin.
J. Other remaining utilities including storm sewer, sanitary sewer and water line 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. Install inlet/yard drain protection on all inlets/yard drains, as shown on the E&SCP.
K. Install all site sidewalks.
L. Once final grade of the roadway area is complete, paving operations can begin thus removing rock construction entrance.
M. As all lawn areas are brought to grade, stabilize these areas immediately with topsoil, erosion control lining and the permanent seeding mixture.
N. 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, inlet/yard drain protection, and silt socks. Stabilize any areas disturbed by the removal of these controls immediately with the permanent seeding mixture. Remove all sediment that may have entered the infiltration sump (in accordance with Note 2 above). Stabilize all other disturbed areas with topsoil and the permanent seeding mixture. Install the Grate Inlet Skimmer Boxes and Flogard Downspout Filters.

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 entrance 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. The topsoil stockpile is provided for a convenient place to stock onsite topsoil. Inlet/yard drain protection will be used to prevent sedimentation of the storm sewer systems. Erosion control lining will be used to help stabilize all proposed vegetated areas.

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 underground infiltration basin, storm sewer pipes, Grate Inlet Skimmer Boxes, Water Quality Snout 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:

1) 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.
2) Topsoil Placement – Topsoil shall be placed at a minimum 4" in depth over disturbed vegetated areas.

Permanent Seeding shall consist of the following:

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

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

1) Tracking: The process of cutting mulch into the soil via equipment that runs on tracks, is employed primarily on slopes 3:1 or steeper.
2) Mulch Nettings: Staple light-weight biodegradable paper, plastic or cotton netting over the mulch according to the manufacturer's recommendations.
3) Synthetic Binders: Synthetic binders such as acrylic DLR (AGR-TAC), DCA-70, Petroset or Terratack may be used at rates recommended by the manufacturer to anchor mulch material.
4) 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.
5) 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:

a. 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:

a. The Contractor shall maintain the socks in a functional condition at all times and it shall be routinely inspected.
b. Where the sock requires repair, it will be routinely repaired.
c. 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.

Topsoil Stockpile:

a. The topsoil stockpile 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:

a. 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:

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

Yard Drain Protection:

a. Sediment shall be removed from the structure and spread over an existing stockpile with controls already in place and be seeded with the temporary seeding mixture.
b. The structure should be checked regularly to ensure its soundness. If the stone filter has been disturbed and cannot perform its proper protective function, additional stone should be installed to provide adequate filtration.

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 260.1et 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.

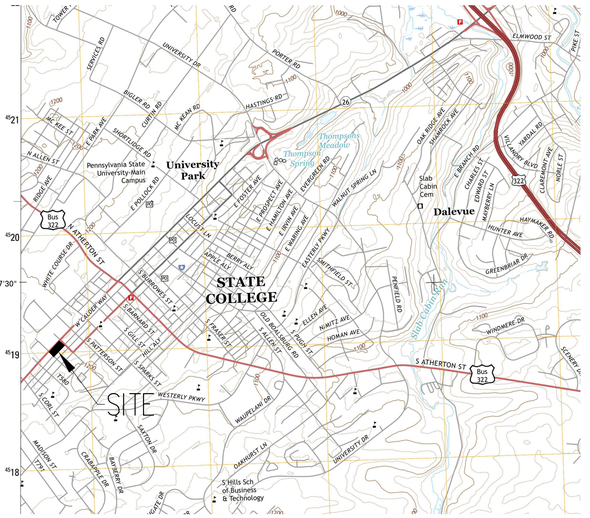
Responsibilities for Fill Materials

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.


University Park
Pennsylvania State University-Main Campus
Thompson Spring
Thompson Meadow
Slab Cabin Cem
Dalevue
STATE COLLEGE
SITE
5 Hills Sch of Business & Technology
Bus 322
Bus 323
Bus 322
Spring Creek
ELMWOOD ST
UNIVERSITY DR
HASTINGS RD
W BEAVER AVE
E BEAVER AVE
E COLLEGE AVE
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E PROSPECT AVE
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