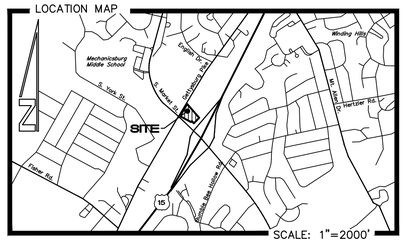
PRELIMINARY / FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN

151 GETTYSBURG PIKE

UPPER ALLEN TOWNSHIP
CUMBERLAND COUNTY, PENNSYLVANIA

LOCATION MAP



SCALE: 1"=2000'

POST-CONSTRUCTION STORMWATER MANAGEMENT (PSCM) PLAN OPERATION, OWNERSHIP AND MAINTENANCE PROGRAM

The storm water volume and quality control Best Management Practices (BMPs) constructed for the 151 Gettysburg Pike Land Development Plan will be maintained to function as designed, and shall implement the procedures described below; this shall be in the deed of the lot whenever the lot is sold to another. The owner of the lot shall own and maintain the stormwater facilities within the lot.

The approved facilities are to be permanent, and can only be removed or altered after approval by one or more of the following entities which may have jurisdiction: Upper Allen Township; and/or PA D.E.P. The lot owner, shall maintain on-lot stormwater management, and permanent erosion and sediment pollution control system(s) as set forth herein,

The following physical facilities shall be maintained to the original design and dimensions shown on the design plans approved by Upper Allen Township, until such time as an amended plan is approved by the Township:
--stormwater inlets, pipes and riprap aprons;
--rain gardens;
--surface stormwater detention basin #1; and
--stormwater facility #2.

The designated maintainer / lessee shall complete a visual inspection of BMPs as specified below for each BMP.

Rain Gardens #A, B, C and D:
--Inspect two times per year for sediment build-up, any erosion, and adequate vegetative cover condition.
--Remove any accumulation of debris at least once per year (such debris may include, but shall not be limited to aggregate material, leaves, grass clippings, and soil material). Removal of sediment/debris shall take place when the area has dried, if possible. Dispose of sediment, trash or other waste material at suitable disposal / recycling sites and in compliance with local, state and federal waste regulations.
--Maintain groundcover vegetation, and re-vegetate repaired areas in accordance with the specifications contained in the applicable erosion and sediment pollution control plan; and immediately repair any erosion damage by replacing topsoil on all areas that experience minor erosion, and seeding, mulching and matting such areas immediately in accordance with the specifications contained in the applicable erosion and sediment pollution control plan.
--Trees and shrubs should be inspected twice per year to evaluate health. Plants may need to be watered during periods of extended drought. Perennial herbaceous plantings may be cut down between the end of the growing season and the beginning of the next growing season,
--If mulched, mulch should be re-spread when erosion is evident and be replenished as needed. Once every 2 to 3 years the mulch area may require mulch replacement.
--If the rain garden has an underdrain pipe(s), they must remain plugged / capped unless runoff is being retained greater than 72 hours, after which they can be unplugged / uncapped to drain the rain garden. Once drained, they must be capped / plugged again.

Failure (BMP no longer provides the benefit or performance anticipated) for this BMP is the following:
--Inability to support vegetation due to standing water and/or compaction of soil; and
--Standing water for greater than 72 hours.

Corrective measure options should failure of this BMP occur:
--Examine the soil structure to see if it is compacted. If so, aerate the area. If this does not work, then in a short-term continuous operation when the area is dry, till surface soil and re-vegetate immediately. Or, replace the top 18" with new loam soil and immediately re-vegetate.

Storm Basin #1 and Surface Area of Stormwater Facility #2
--Inspect two times per year.
--Inspect the outlet structure, basin bottom, inlet, containment berm and riprap areas. Inspect for sediment build-up, any erosion, damage to outlet structure, berm stability, clogging of outlet, pools of standing water, and for adequate (min. 95%) vegetative cover condition.
--Remove any accumulation of debris (such debris may include, but shall not be limited to aggregate material, leaves, grass clippings, and soil material). Removal of sediment/debris shall take place when the area has dried, if possible. Dispose of sediment, trash or other waste material at suitable disposal / recycling sites and in compliance with local, state and federal waste regulations.
--Maintain groundcover vegetation. Mow and trim vegetation to ensure safety, aesthetics, proper swale operation, and to suppress weeds and invasive / exotic vegetation. Mow only when dry, to avoid rutting. Vehicular access is prohibited within basins except for maintenance; and care should be taken to avoid excessive compaction by mowers.
--For any erosion, rills and gullies, correct as needed. Re-vegetate and repair areas in accordance with the specifications contained in the applicable erosion and sediment pollution control plan; and immediately repair any erosion damage by replacing topsoil on all areas that experience minor erosion, and seeding, mulching and matting such areas immediately in accordance with the specifications contained in the applicable erosion and sediment pollution control plan.
--Apply fertilizer and pesticides only when absolutely necessary to salvage desirable vegetation, and to eliminate exotic / invasive species.
--Aerate turf areas if they become compacted.

Subsurface portion of Stormwater Facility #2:
--All inlet structures draining to an infiltration bed should be inspected two times per year, and be cleaned as needed. Dispose of sediment, trash or other waste material at suitable disposal / recycling sites and in compliance with local, state and federal waste regulations.
--Evaluate the drain-down time of the facility to ensure the maximum time of 72 hours is not being exceeded. If drain-down times are exceeding the maximum, drain the facility via pumping and clean out perforated piping. If slow drainage persists, the system may need to be replaced. If debris and/or standing water is visible in the inlets and system, then it shall be vacuumed to remove accumulated debris. Stormwater quality/recharge facilities that do not drain within seventy-two (72) hours shall be evaluated by a qualified engineer, geologist, and/or hydrogeologist prior to initiating any repair and/or reconstruction activities.

Failure (BMP no longer provides the benefit or performance anticipated) for this BMP is the following:
--standing water for greater than 72 hours.

Corrective measure options should failure of this BMP occur:
--Clean the perforated pipes and contributing inlets by vacuuming out debris.
--Check the contributory watershed for sources of debris / silt, such as erosion, leaves in roof drains, mulch washing from landscape beds, lawn clippings washing into the inlet. Correct the contributing situation so debris / silt does not enter the pipe system,
--If vacuuming does not work, then the BMP might have to be replaced. Consult a qualified engineer / consultant.

Storm Inlets, Storm Piping and Riprap Aprons:
--Inspect for signs of contamination or spills.
--All inlets, control orifices, storm piping, collection swales and drainage structures shall be kept free of any obstructions and foreign material that would cause disruption of water flow in a manner not anticipated for the facility.
--Dislodged rock in any riprap apron should be reset in place or replaced.
--Inspect two times per year, with one time being in late autumn after leaves have dropped, and the other in early spring when there may be grit and plow deposits.

General Provisions for any BMP listed above–
--A written report documenting each inspection shall be retained by the designee, including dates of inspection, dates of repair, list of items inspected, list of items repaired, list of items replaced, costs of replaced items, list of maintenance tasks performed, name and organization of the person conducting the inspection, and the contractor(s) information.
--For any structural facility (pipe, inlet, manhole), it must be repaired or replaced if damaged more than superficially, in a way that is a safety hazard, if structurally unsound, or if not substantially performing as it is intended per the original design.
--The owner shall immediately notify Upper Allen Township prior to initiating any "major" repair activities (such repairs that may be required as a result of settlement, sinkholes, seeps, structural cracking, foundation movement). All "major" repairs shall be conducted under the direction and supervision of a qualified engineer, geologist, and/or hydrogeologist.
--Vehicular access and parking is prohibited within basins and rain gardens except for maintenance; and care should be taken to avoid excessive compaction by mowers.
--All impervious surfaces shall be maintained clean of oil, fuel or other toxic spills, in accordance with State, Federal or local regulations.
--The PCSM plan, inspection reports, and monitoring records must be available for review and inspection by the PA Department of Environmental Protection and/or the County Conservation District.

Upper Allen Township shall have the right to:
a. Enter the site and inspect the facilities at any time;
b. Require the facility maintainer to take corrective measures, and assign reasonable time periods for any necessary action; and
c. Authorize maintenance to be done by the Township or an agent or contractor of the Township, and the liening of the cost of the work against the lot owner.

A licensed professional or their designee shall be present on the site for the following critical stages:
--installation and then final configuration / stabilization of storm basins #1 and #2;
--installation of subsurface storm facility #2; and
--installation of underdrains and amended soil of rain gardens #A, B, C and D.

GENERAL NOTES:

1. Proposed development is consolidation of two existing lots into one proposed lot (subdivision), on which a convenience store with gas dispensing, and a reatuarant with drive-in facility are proposed (land development).

2. Nothing shall be placed, planted, set or put within the area of an easement that would adversely affect the function of the easement or conflict with the easement agreement.

3. A highway occupancy permit is required before driveway access to a state road is permitted, pursuant to Section 420 of the Act of June 1, 1945 (P.L. 1242, No. 428), known as the 'State Highway Law'.

4. No lands or facilities are proposed for dedication to public use. Stormwater facilities shall be owned and maintained by the owner of the lot; see the detailed operation and maintenance program on this sheet.

5. No parking is permitted along access drives.

6. This project shall be completed in one phase.

7. No protective covenants are proposed other than what is shown on this plan.

8. Stormwater management plans approved by the Township shall be on the site throughout the duration of the regulated construction activity. A copy of the approved erosion and sedimentation control plan and any required permits shall be available at the project site at all times during construction.

9. Any proposed signs must be in accordance with the Upper Allen Township Zoning Ordinance Section 245 of Article XVIII. Proposed signs will be submitted separately.

10. Boundary and topographic information is based upon a field survey by Alpha Consulting Engineers, Inc. Basis of vertical datum is NAVD88.

11. Upper Allen Township is hereby granted use of the access drives to access drainage easements for observation, and emergency maintenance.

12. All sanitary sewer construction shall conform to the Standard Construction and Material Specifications for Upper Allen Township, latest edition.

13. All existing buildings within the site shall be removed prior to proposed construction.

14. There are no streams, rock outcrops, soil subsidences, floodplains, contaminated soils or natural slopes in excess of 25% known to exist on this site. There are wetlands present, which are shown as delineated by Alpha Consulting Engineers, Inc. in May, 2017.

15. A 21-foot type 2 buffer yard is required along Gettysburg Pike (opposite an existing single family residence, but per Section 245-16.5.G. of the Zoning Ordinance, the buffer width can be reduced when separated from a residential use by a public road at the rate of one foot for every two feet of the distance between the property line for which the buffer is required and the center line of the public road, but not by less than one-half of the original buffer. The width of Gettysburg Pike paving is 36 feet. The distance from the centerline of Gettysburg Pike to the front property line is 18 feet. Reduction of one foot of buffer yard for each 2 feet to front property line is 9 feet. Required buffer along Gettysburg Pike equals 30 feet minus 9 feet reduction, or 21 feet. A 21-foot wide type 2 buffer yard is provided.

16. Within clear sight triangles shown hereon, no fence, sign or other above grade structure shall be erected, and no hedge, tree, shrub or other growth shall be maintained or permitted which may cause danger to traffic by obscuring the view between three feet and nine feet above the grade of the street or driveway.

17. The site contractor shall schedule a pre-construction site meeting with the Upper Allen Township Engineer and the Cumberland County Conservation District at least 48 hours prior to starting site construction activities.

18. Construction of all work within the public street right-of-way and work related to storm drainage and sanitary sewer facilities requires inspection by the Township. The contractor must provide minimum 48 hours of notice to the Township before starting work.

19. As-built mylar plans and electronic data files shall be provided to the Township. All drawings must be signed and sealed by a professional engineer or land surveyor attesting to the correctness of the facility information shown, in accordance with Section 220-13.C(2) of the Codified Ordinances of Upper Allen Township.

20. All outdoor site lighting shall comply with Section 220-32. Of the Township Subdivision and Land Development Ordinance, and with Zoning Ordinance Sections 245-16.10.(G) and 245-17.8.

ZONING REQUIREMENTS:

Site is zoned C-2: Highway Commercial District.

Minimum lot area: None; Based upon meeting other requirements
Minimum front yard: 30 feet
Minimum side yard: 15 feet
Minimum rear yard: 15 feet
Minimum street frontage: 150 feet
Maximum building coverage: 50%
Maximum impervious coverage: 70%
Minimum landscaping / vegetative coverage: 30%
Maximum principal building height: 35 feet

Standards for Convenience Store with Gas Dispensing:
1. Driveway / access drive:
--minimum 40 feet from intersection of street right-of-way lines
--10 feet from side lot line
--minimum width of 12 feet
--maximum width of 35 feet
--minimum separation of drives on same lot of 25 feet

2. Minimum setbacks from street right-of-way line:
--pump: 40 feet
--building: 50 feet
--canopy: 55 feet

3. Minimum setback of fuel pump from parking area: 20 feet

Standards for Drive-in Facilities for permitted uses:
1. Minimum driveway setback from property line: 10 feet
2. Minimum distance between driveways on the site: 65 feet
3. Minimum distance of a driveway from a street intersection: 60 feet measured from the intersection of the street right-of-way line to the nearest end of the curb radius.
4. All drive-thru windows shall be separated from the parking lot's interior driveways, and shall have a stacking lane of at least 160 feet for fast-food businesses.

SITE DATA:

SITE DATA--

1. Applicant--
Highview Commercial LLC
280 Route 35, Suite 150
Red Bank, NJ 07701
(732) 530-9191

2. Total Site area:
Gross (includes street right-of-way): 133,476 square feet, or 3.06 acres.
Net (excludes street right-of-way): 127,623 square feet, or 2.93 acres.

3. Site is zoned C-2: Highway Commercial District.

4. This site is identified by the Cumberland County Tax Assessment Office as parcels 42-28-2419-131 (existing lot #2) and 42-28-2419-018 (existing lot #1).

5. Current site addresses are 147 (existing lot #2) and 151 Gettysburg Pike (existing lot #1).

6. Existing number of lots: 2

7. Proposed number of lots: 1

8. Proposed net lot area: 127,623 square feet, or 2.93 acres, excluding dedicated street right-of-way.

9. Proposed uses:
1) Convenience store with gas dispensing; and
2) Restaurant with drive-in facility

10. Proposed street frontage: 398.5 feet along Gettysburg Pike outside of limited access highway right-of-way.

11. Proposed building coverage: 18.57% of the proposed net lot area.

12. Proposed impervious coverage: 60% of the proposed net lot area.

13. Proposed landscaped area: 40% of the proposed net lot area.

14. Required and proposed off-street parking:
Convenience Store: 1 space required for each 200 square feet of retail floor area.
Proposed retail floor area is 3,750 sq. ft., divided by 200 = 19 spaces required for convenience store use.

Restaurant: 1 space required for every 4 seats of design capacity, plus one space for every two employees on the large shift.
56-seat capacity proposed, divided by 4 = 14 spaces
8 employees on largest shift, divided by 2 = 4 spaces
Total of 18 spaces required for the restaurant use.

Total number of off-street parking spaces required for this site: 37
Total number of off-street parking spaces proposed: 62 (includes 4 accessible spaces)

15. Proposed water supply: public (SUE2)

16. Proposed sewage disposal: public (Upper Allen Township)

INDEX OF DRAWINGS :

DATE :
JUNE 1, 2020

REVISED :
JULY 1, 2020
SEPTEMBER 25, 2020
MARCH 22, 2022

THE FOLLOWING WAIVERS/MODIFICATIONS/DEFERRALS ARE REQUESTED FROM THE UPPER ALLEN TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE:

	WAIVER SECTION	DESCRIPTION	DATE OF WAIVER / MODIFICATION REQUEST	DATE OF WAIVER / MODIFICATION/DEFERRAL APPROVAL
*	220–16.B.(5)	PERTAINING TO LOCATION OF SIDEWALK	6/1/2020	10/7/2020
*	220–16.A(1)	PERTAINING TO CURBING ALONG ACCESS DRIVES AND PARKING	6/1/2020	10/7/2020
**	220–16.A(2)	PERTAINING TO INSTALLATION OF CURBING ALONG GETTYSBURG ROAD	6/1/2020	10/7/2020
	220.23–D.(2)	PERTAINING TO CONSERVATION EASEMENT AROUND WETLAND	6/1/2020	10/7/2020

* MODIFICATION ONLY
** DEFERRAL ONLY. ANY DEFFERALS ARE GRANTED UNTIL SUCH TIME AS THE BOARD OF COMMISSIONERS DEEM THE IMPROVEMENT NECESSARY

UTILITY LISTING FOR UPPER ALLEN TOWNSHIP:

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

PA ONE–CALL FOR THIS PROJECT:
SERIAL NUMBER: 20170740542

- CABLE — COMCAST CABLE COMMUNICATIONS INC.
4601 SMITH ST.
HARRISBURG, PA 17109
TELEPHONE: 717–651–1915
- ELECTRIC — PPL ELECTRIC UTILITIES
642 S 20TH ST.
HARRISBURG, PA 17104–2222
TELEPHONE: 1–570–348–1509
- GAS — UGI UTILITIES INC.
1301 AIP DR.
MIDDLETOWN, PA 17057–5987
TELEPHONE: 717–930–0223
- SANITARY SEWER — TOWNSHIP OF UPPER ALLEN
100 GETTYSBURG PIKE
MECHANICSBURG, PA 17055
TELEPHONE: 717–766–0756
- TELEPHONE — VERIZON PENNSYLVANIA LLC
15 E MONTGOMERY AVE
PITTSBURGH, PA 15212
- WATER SERVICE — SUEZ WATER PENNSYLVANIA INC.
4211 E. PARK CIRCLE
HARRISBURG, PA 17111
TEL: (717) 564–3664

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF _____

ON THIS, THE ___ DAY OF _____, 2022, BEFORE ME, THE UNDERSIGNED, PERSONALLY APPEARED*_____,BEING _____, WHO BEING DULY SWORN ACCORDING TO LAW, DISPOSES AND SAYS THAT THE _____ IS THE OWNER OF THE PROPERTY SHOWN ON THIS PLAN, THAT THE PLAN THEREOF WAS MADE AT ITS DIRECTION, THAT IT ACKNOWLEDGES THE SAME TO BE ITS ACT AND PLAN AND DESIRES THE SAME TO BE RECORDED, AND THAT ALL STREETS AND OTHER PROPERTY IDENTIFIED AS PROPOSED PUBLIC PROPERTY (EXCEPTING THOSE AREAS LABELED "NOT FOR DEDICATION") ARE HEREBY DEDICATED TO THE PUBLIC USE.

* _____

** _____

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

MY COMMISSION EXPIRES _____, ____

APPROVED BY THE BOARD OF COMMISSIONERS OF UPPER ALLEN TOWNSHIP
THIS 7TH DAY OF, OCTOBER 2020.

THE CONDITIONS OF APPROVAL WERE SATISFIED
THIS _____ DAY OF, _____ 2022.

CHAIRMAN _____

SECRETARY _____

THIS PLAN RECOMMENDED FOR APPROVAL BY THE UPPER ALLEN TOWNSHIP PLANNING COMMISSION
THIS 27TH DAY OF, JULY 2020.

CHAIRMAN _____

SECRETARY _____

I, JOHN K. MURPHY, P.L.S., HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR, OR REGISTERED ENGINEER IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF PENNSYLVANIA; THAT THIS PLAN CORRECTLY REPRESENTS A SURVEY COMPLETED BY ME ON 3/22/17 ; THAT ALL THE MONUMENTS SHOWN THEREON ACTUALLY EXIST; AND THAT THEIR LOCATION, SIZE, TYPE AND MATERIAL ARE ACCURATELY SHOWN.

_____

I, JOHN K. MURPHY, P.E., ON _____ 2022,
HAVE REVIEWED AND HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT SITE PLAN MEETS ALL DESIGN STANDARDS AND CRITERIA OF THE UPPER ALLEN TOWNSHIP STORMWATER MANAGEMENT ORDINANCE, AND THAT ACCORDING TO GEOLOGIC MAPPING, THIS SITE IS NOT DIRECTLY UNDERLAIN BY LIMESTONE.
I HEREBY CERTIFY THIS PLAN TO BE CORRECT AS SHOWN, AND THAT ALL ELEMENTS OF THE PLAN ARE IN CONFORMITY WITH TOWNSHIP CODE AND ANY APPLICABLE STATE REGULATIONS.

_____

STORMWATER MANAGEMENT PLAN CERTIFICATE:

IT IS HEREBY CERTIFIED THAT THE STORMWATER MANAGEMENT FACILITIES AND BMP'S ARE PERMANENT FIXTURES AND CANNOT BE ALTERED OR REMOVED UNLESS A REVISED PLAN IS APPROVED BY UPPER ALLEN TOWNSHIP.

APPLICANT/OWNER _____

THIS PLAN REVIEWED BY THE TOWNSHIP ENGINEER OF UPPER ALLEN TOWNSHIP
THIS _____ DAY OF, _____ 2020.

ENGINEER _____

CUMBERLAND COUNTY PLANNING DEPARTMENT REVIEW STATEMENT:

REVIEWED ON JUNE 12, 2020 BY THE, CUMBERLAND COUNTY PLANNING DEPARTMENT.

_____
DIRECTOR OF PLANNING

THIS PLAN RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS IN AND FOR CUMBERLAND COUNTY
THIS _____ DAY OF, _____ 2022.

RECORDED IN INSTRUMENT # _____

APPLICANT/DEVELOPER
HIGHVIEW COMMERCIAL LLC
280 ROUTE 35, SUITE 150
RED BANK, NJ 07701
(732) 530–9191

ALPHA CONSULTING ENGINEERS, INC.
PLANNING • ENGINEERING • SURVEYING
115 LIMEKILN RD, P.O. BOX 'G'
NEW CUMBERLAND, PA 17070
PHONE: (717) 770 – 2500
FAX: (717) 770 – 2400
WWW.ALPHACEI.COM

LEGEND

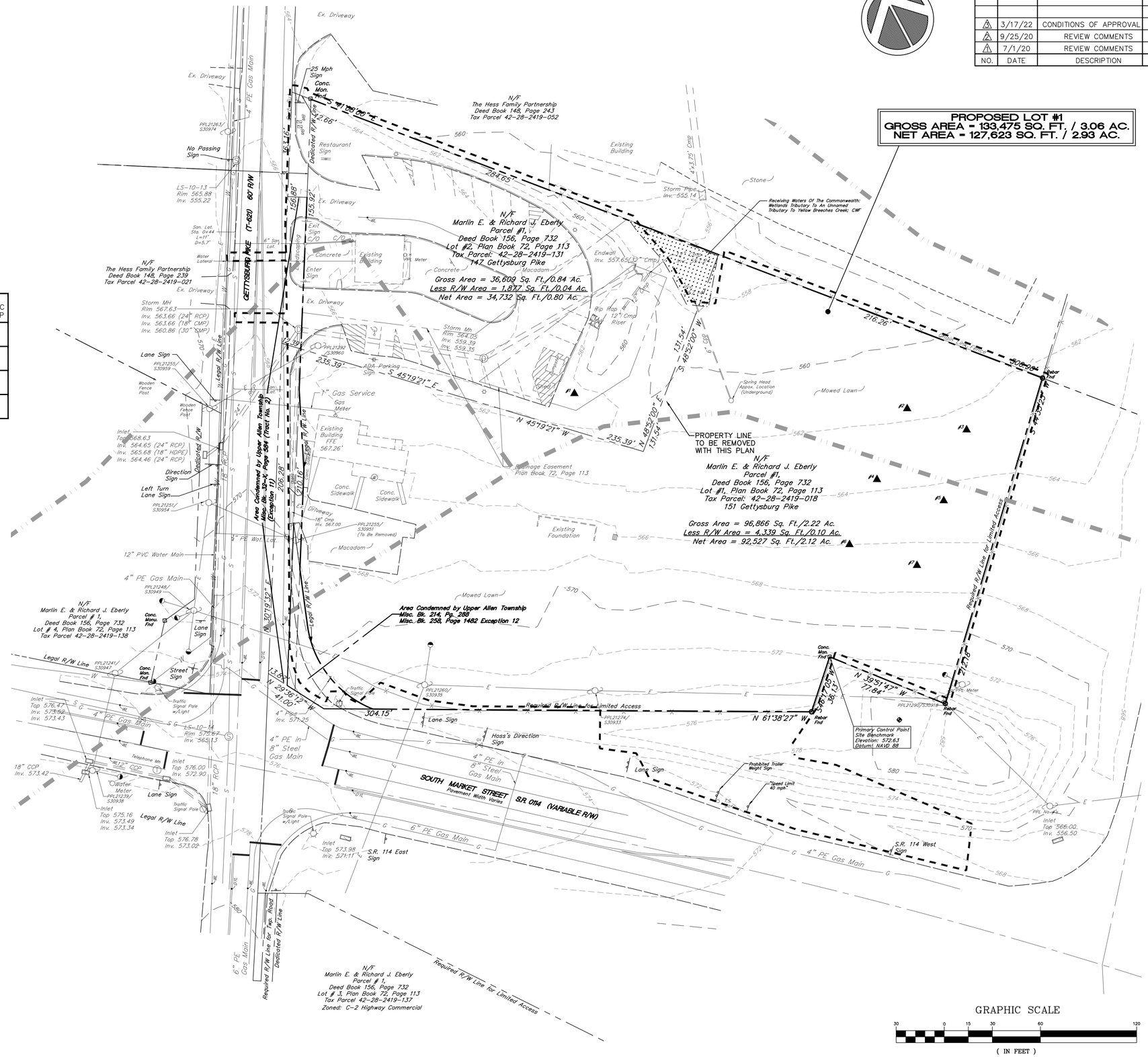
- Existing Property Line
- Existing Easement
- 170 Existing 10' Contour
- 172 Existing 2' Contour
- Existing Edge Of Pave
- Existing Edge Of Stone
- 18" RCP Existing Storm Sewer Inlet, Pipe Size and Manhole
- x 175.00 Existing Spot Elevation
- Existing Utility Pole & Guy Wire
- E Existing Overhead Utility Line
- Existing Property Corners (As Labeled)
- S Existing Sanitary Sewer Line; Manhole
- W WV Existing Water Line, Valve, Fire Hydrant
- Existing Sign
- I.D. #/Soil Test Site Performed May 2017
- BrB Soil Boundary and Soil Type
- Existing Structure (Typ.)
- NPDES Permit Boundary Line
- Wetland Limit

SOIL SYMBOL	SOIL DESCRIPTION	SLOPE (%)	DEPTH TO HIGH WATER TABLE PER S.C.S. SOIL SURVEY	DEPTH TO BEDROCK PER S.C.S. SOIL SURVEY	HYDROLOGIC SOIL GROUP
BdB	Bedington shaly Silt Loam	3–8	5'+	40"+	B
BdC	Bedington shaly Silt Loam	8–15	5'+	40"+	B
BrB	Brinkerton Silt Loam	3–8	0–0.5'	60"+	D
EtB	Ernest silt loam	3–8	1.5'–3'	60"+	C

SOIL SYMBOL	SOIL LIMITATIONS PER S.C.S. SOIL SURVEY	CONTRACTOR RESOLUTIONS OF SOIL LIMITATIONS
BdB BdC	Cutbanks cave easily, droughty, easily erodible, poor percolation, poor for topsoil, frost action	Proposed grading shall be compacted with equipment, in layers, per standard construction practices to ensure that placed soil is tight and strong. Soil with significant clay content shall be proof rolled. Any unsuitable material (such as the Brinkerton and Ernest soil areas where wetness might be present) shall be removed and replaced with adequate subgrade / subbase from drier portions of the site. Desirable seeding fertilizer and lime supplements for this site can be determined with a soil test. This would offset the possible low Ph. Slopes shall be re–graded, then stabilized with topsoil, seed and mulch, and matted if steep. Topsoil can be imported from other sources, as it is readily available in the area.In general, there are no unusual site characteristics here that are unlike those found elsewhere in the region where similar soils are present. No special construction methods or procedures seem necessary.
BrB	Cutbanks cave easily, droughty, easily erodible, slow percolation,shallow depth to seasonal high water table, piping, poor for topsoil, frost action, shrink–swell, wetness	
EtB	Cutbanks cave easily, easily erodible, slow percolation,shallow depth to seasonal high water table, low strength, piping, poor for topsoil, frost action, shrink–swell, wetness	

SOIL TEST RESULT SUMMARY

Soil Test Site #1	Existing Ground Elev.at test site	Bottom Elev. Of Probe Hole	Limiting Zone Elev. And Type of Limitation	Percolation Test Elev.	Measured Percolation Rate
1	562.8	556.8	none	558.8	0 in./hr
2	561.7	556.0	556.2: seeps; water table	561.0	1.25 in./hr
2	561.7	556.0	556.2: seeps; water table	558.9	0.125 in./hr
3	562.7	556.4	556.7: seeps; water table	561.5	1.5 in./hr
3	562.7	556.4	556.7: seeps; water table	558.9	0.75 in./hr
4	563.8	556.3	557.2: seeps; water table	561.5	0.25 in./hr
4	563.8	556.3	557.2: seeps; water table	559.0	0.75 in./hr
5	564.9	556.6	556.6: seeps; water table	561.5	0 in./hr
5	564.9	556.6	556.6: seeps; water table	558.9	4.0 in./hr
6	566.1	557.0	558.1: seeps; water table	561.5	0.125 in./hr
6	566.1	557.0	558.1: seeps; water table	559.0	9.0 in./hr
7	566.8	558.5	558.5: seeps; water table	561.5	3.25 in./hr
7	566.8	558.5	558.5: seeps; water table	560.5	10.5 in./hr



NO.	DATE	DESCRIPTION	BY
3	3/17/22	CONDITIONS OF APPROVAL	SRR
2	9/25/20	REVIEW COMMENTS	GDG
1	7/1/20	REVIEW COMMENTS	GDG

DESIGN : T.C.S.
DRAWN : G.D.G.
CHECKED : J.K.M.
DATE : 6/1/2020
REV :

ALPHA CONSULTING ENGINEERS, INC.
PLANNING • ENGINEERING • SURVEYING
NEW CUMBERLAND, PA 17070
PHONE: (717) 770 - 2500
FAX: (717) 770 - 2400
WWW.ALPHACEI.COM

SEAL

EXISTING FEATURES PLAN
PRELIMINARY / FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN
FOR
151 GETTYSBURG PIKE
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

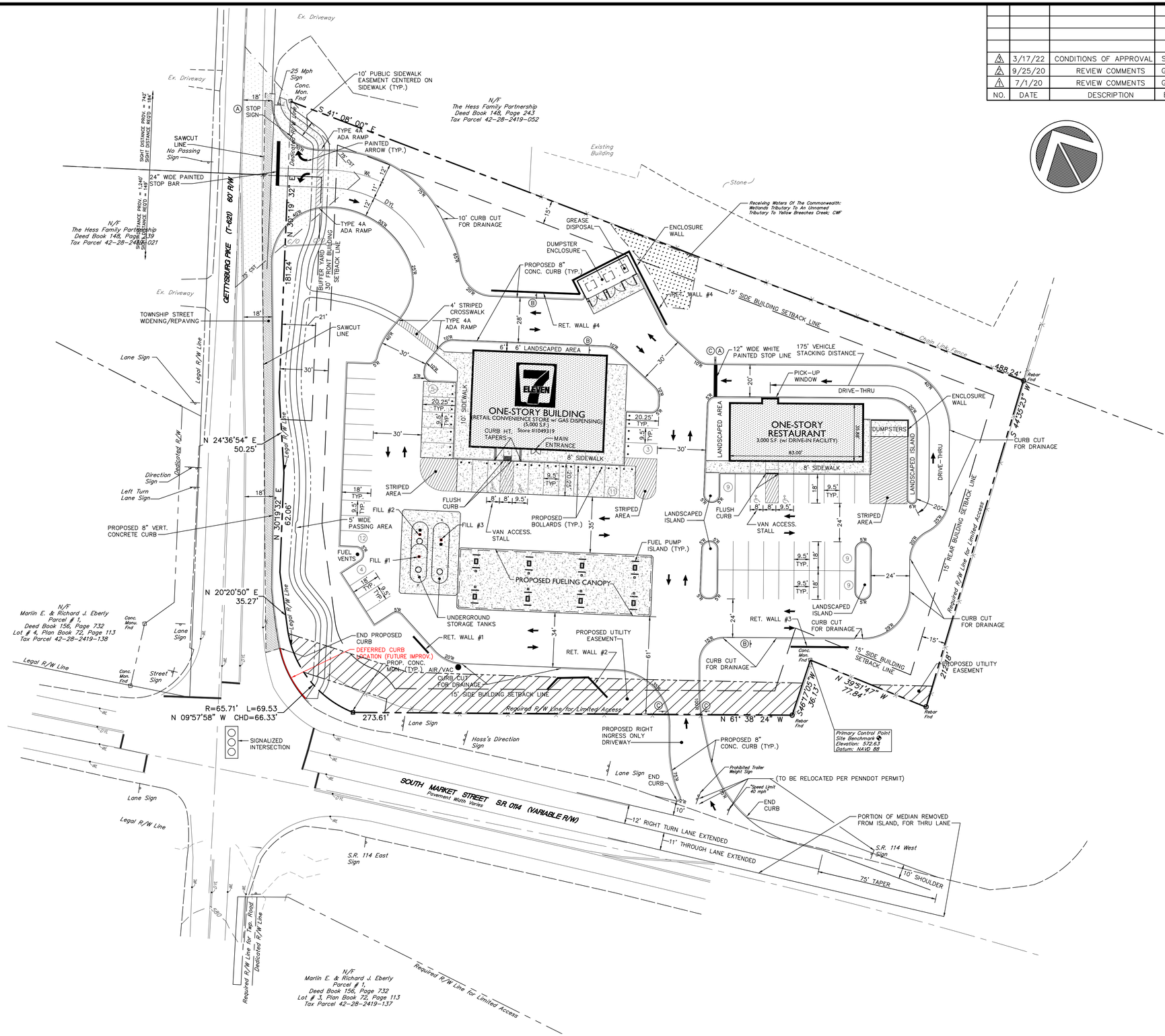
PROJECT NO. 319590
SURVEY BOOK :
SCALE : 1" = 30'
DWG : Y:\19\319590.apn\319590R\
FILE : Dwg\Plans\Prelim-Final\
02-EXISTING.dwg
SHEET 2 of 15

LEGEND

- *Existing Property Line*
- *Existing Edge Of Pave*
- *Existing Curb*
- *Delineated Wetlands*
- PROPOSED RIGHT OF WAY LINE
- PROPOSED UTILITY/DRAINAGE EASEMENT
- PROPOSED EDGE OF PAVEMENT
- PROPOSED CURB
- PROPOSED SIDEWALK/PATH

SIGN CHART

PLAN SYMBOL	PENNDOT DESIGNATION	SIGN DESCRIPTION	SIZE
(A)	R1-1	STOP	24"x24"
(B)	R8-3A	NO PARKING SIGN	12"x12"
(C)	R5-1	DO NOT ENTER SIGN	30"x30"



SEE SHEET #4 FOR EASEMENTS

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

1 inch = 30 ft.

NO.	DATE	DESCRIPTION	BY
3	3/17/22	CONDITIONS OF APPROVAL	SRR
2	9/25/20	REVIEW COMMENTS	GDG
1	7/1/20	REVIEW COMMENTS	GDG

DESIGN : T.C.S.
DRAWN : G.D.G.
CHECKED : J.K.M.
DATE : 6/1/2020
REV :

ALPHA
PLANNING • ENGINEERING • SURVEYING
1307 ALLEN ROAD, SUITE 201
NEW CUMBERLAND, PA 17070
PHONE: 717) 770 - 2500
FAX: (717) 770 - 2400
WWW.ALPHACE.COM
ALPHA CONSULTING ENGINEERS, INC.

SEAL

SEAL

SITE PLAN

PRELIMINARY / FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN

FOR

151 GETTYSBURG PIKE

UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

PROJECT NO. 319590
SURVEY BOOK :
SCALE : 1" = 30'
DWG \ FILE : Y:\19\319590.aph\319590B\Dwg\Plans\Prelim-Final\03-SITE.dwg
SHEET 3 of 15

LEGEND

- Property Line
- Existing Contour
- Existing Curb
- Existing Edge Of Pave
- Existing Gas Line/Valve
- Existing Water Line/Valve
- Existing Storm Sewer Inlet, Pipe Size And Manhole
- Existing Sanitary Sewer Line Cleanout And Manhole
- Existing Sign
- Existing Electric Line And Utility Pole/I.D. ATTCH19395/524021
- 608.28 Existing Spot Elevation
- PROPOSED STORM SEWER INLET, LINE
- PROPOSED RIP RAP APRON
- PROPOSED SANITARY SEWER MAIN AND MANHOLE TL1.17.2
- PROPOSED SANITARY SEWER LATERAL; CLEANOUT
- PROPOSED WATER LINE; HYDRANT; VALVE
- OVERHEAD ELECTRIC LINE
- UNDERGROUND ELECTRIC LINE
- 6" RD ROOF DRAIN COLLECTOR PIPE;
- PROPOSED WALK
- PROPOSED DRAINAGE EASEMENT
- PROPOSED UTILITY EASEMENT

LINE TABLE		
LINE	LENGTH	BEARING
L1	78.17'	S44°01'23"E
L2	246.25'	S60°24'32"E
L3	21.02'	S46°17'05"W
L4	253.83'	N61°38'26"W
L5	8.48'	N36°55'45"E
L6	54.40'	N44°01'23"W
L7	38.33'	S60°40'18"E
L8	13.68'	S44°35'22"W
L9	37.15'	N39°51'47"W

NO.	DATE	DESCRIPTION	BY
3	3/17/22	CONDITIONS OF APPROVAL	SRR
2	9/25/20	REVIEW COMMENTS	GDG
1	7/1/20	REVIEW COMMENTS	GDG

DESIGN : T.C.S.
DRAWN : G.D.G.
CHECKED : J.K.M.
DATE : 6/1/2020
REV :

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EASEMENT PLAN

PRELIMINARY / FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN
FOR

151 GETTYSBURG PIKE

UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

PROJECT NO. 319590
SURVEY BOOK :
SCALE : 1" = 30'
DWG FILE : Y:\19\319590.aph\319590B\Dwg\Plans\Prelim-Final\04-GRADE.dwg
SHEET 4 of 15

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

LEGEND

- Property Line
- Existing Contour
- Existing Curb
- Existing Edge Of Pave
- Existing Gas Line/Valve
- Existing Water Line/Valve
- Existing Storm Sewer Inlet, Pipe Size And Manhole
- Existing Sanitary Sewer Line Cleanout And Manhole
- Existing Sign
- Existing Electric Line And Utility Pole/I.D. #
- Existing Spot Elevation
- PROPOSED STORM SEWER INLET, LINE
- PROPOSED RIP RAP APRON
- PROPOSED SANITARY SEWER MAIN AND MANHOLE
- PROPOSED SANITARY SEWER LATERAL; CLEANOUT
- PROPOSED WATER LINE: HYDRANT; VALVE
- OVERHEAD ELECTRIC LINE
- UNDERGROUND ELECTRIC LINE
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION B.C.=BOTTOM OF CURB H.P.=HIGH POINT L.P.=LOW POINT
- ROOF DRAIN PIPE
- UNDERDRAIN / CLEANOUT
- PROPOSED WALK
- Soil Test Site Of May, 2017; I.D. #

NO.	DATE	DESCRIPTION	BY
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2	9/25/20	REVIEW COMMENTS	GDG
1	7/1/20	REVIEW COMMENTS	GDG

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ALPHA CONSULTING ENGINEERS, INC.

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GRADING / UTILITIES PLAN

PRELIMINARY / FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN
FOR

151 GETTYSBURG PIKE

UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

PROJECT NO. 319590
SURVEY BOOK :
SCALE : 1" = 30'
DWG FILE : Y:\19\319590.apk\319590B\Dwg\Plans\Prelim-Final\05-GRADE.dwg
SHEET 5 of 15

LEGEND

- Property Line
- Existing Curb
- Existing Edge Of Pave
- Existing Gas Line/Valve
- Existing Water Line/Valve/Hydrant
- Existing Storm Sewer Inlet, Pipe Size And Manhole
- Existing Sanitary Sewer Line Cleanout And Manhole
- Existing Sign
- Existing Electric Line And Utility Pole/I.D. # (ATTCH19393/524021)
- PROPOSED STORM SEWER LINE AND INLET; ID # (B1)
- PROPOSED RIP RAP APPRON
- PROPOSED SANITARY SEWER MAIN AND MANHOLE; ID # (TL1.32.2)
- PROPOSED SANITARY SEWER LATERAL; CLEANOUT (C.O.)
- PROPOSED WATER LATERAL (WL)
- PROPOSED CONCRETE WALK
- TYPE 1 BUFFER YARD AGAINST RESIDENTIAL PROPERTY

REQUIRED PLANTING CALCULATIONS

Street Trees--
Requirement: minimum 2 trees for every 100 linear feet of public right-of-way.
Calculation: 700 linear feet of public street right-of-way frontage, divided by 100 feet, equals 7, times 2 trees, equals 14 trees required.
Compliance: 7 sugar maple and 7 zelvoka trees are proposed.

Type 1 Buffer Yard against residential use in C-1 District--
Requirement: One shade tree per 50 linear feet of buffer screen.
Calculation: 315 linear feet of buffer screen, divided by 50 feet, equals 7 trees required.
Compliance: 7 dogwood trees are proposed.

Requirement: One evergreen tree per 40 linear feet of buffer screen.
Calculation: 152 linear feet of buffer screen, divided by 40 feet, equals 8 trees required.
Compliance: 8 spruce trees are proposed.

Dumpster Screening at Retail Center--
Requirement: One shade tree per 40 linear feet of visibility.
Calculation: 60 linear feet of perimiter visibility to street, divided by 40 feet, equals 2 trees required.
Compliance: Two redbud shade trees are proposed.

Requirement: One evergreen tree per 5 linear feet of visibility.
Calculation: 60 linear feet divided by 5 feet, equals 12 trees required.
Compliance: 12 alberta spruce evergreen trees are proposed.

Requirement: Minimum 6-foot high solid enclosure.
Compliance: An enclosure wall/ fence is provided.

Dumpster Screening--
Requirement : One shade tree per 40 linear feet of visibility.
Calculation: 40 linear feet of frontage visibility to street, divided by 40 feet, equals 1 tree required.
Compliance: One redbud shade tree is proposed.

Requirement: One evergreen tree per 5 linear feet of visibility.
Calculation: 40 linear feet of frontage visibility to street, divided by 5 feet, equals 8 trees required.
Compliance; 8 Alberta spruce evergreen trees are proposed.

Requirement: Minimum 6-foot high solid enclosure.
Compliance: An enclosure wall/fence is provided.

Stormwater Management Buffering and Screening--
Stormwater facilities will not visible from the street.

NOTES:

1. Summary: Furnish all labor, materials, services, equipment, and other necessary items required or establishing landscaped area in accordance with project specifications and these landscape notes.

2. Soil pH shall be determined by electronic or chemical soil test; pH shall be adjusted as required for specific plant material to be grown.

3. The subgrade in planting areas shall be loosened and mixed to a depth of three inches (3") and lightly compacted. Distribute topsoil over areas to be planted to a minimum depth of four inches (4").

4. Shrubs and trees: Contractor shall install all shrubs and trees as recommended by an experienced local AAN/PNA – certified nursery, unless noted otherwise on drawings. The standard warranty is for a one (1) year period, commencing on the date of final payment. Plants shall be alive and in satisfactory growth at the end of the warranty period.

5. Shrubs and trees shall be planted in accordance with the details shown in the plan set. If excessive rock or stone is encountered while digging planting holes, the contractor shall replace the unsuitable material with suitable backfill at no additional cost.

6. The landscape contractor shall review the entire set of the contract drawings to become aware of any possible conflicts with utilities and determine measures required to protect existing and proposed utilities.

7. Any nylon rope used in balling the tree must be cut and removed from the root ball.

8. If plant quantities on the plant schedule to not conform to the planting plan, the planting plan shall take precedence. No fewer plants may be installed without prior approval by the developer.

9. On-site landscaping shall be maintained in a healthy growing condition at all times by the contractor until the owner or their delegated representative has inspected and accepted all landscape improvements at the beginning of the one-year warranty period. Once accepted, during the one-year warranty period, landscaping in accordance with the care and maintenance schedule provided to the developer by the landscape contractor.

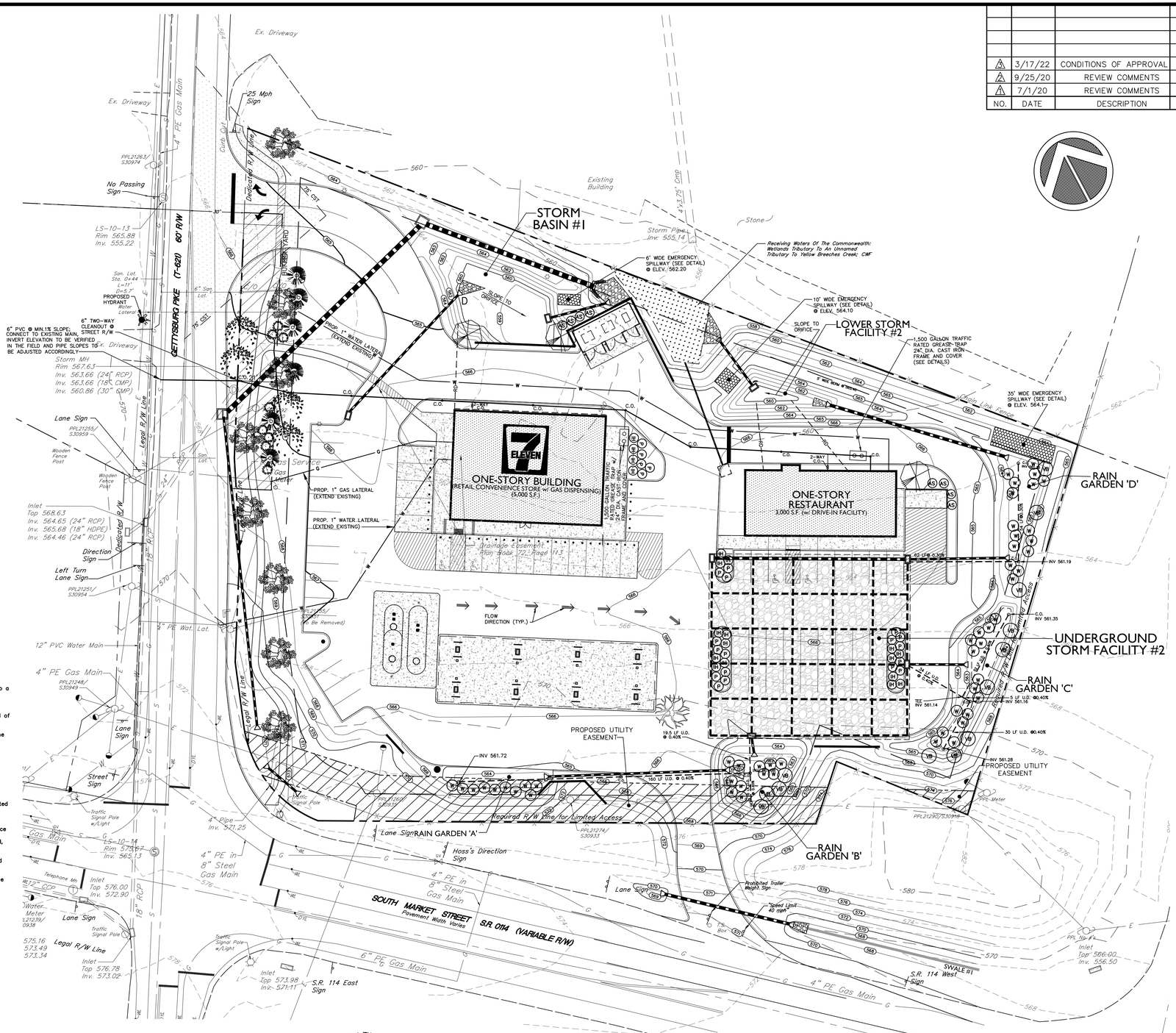
10. Inspection by the landscape contractor of all plant material shall occur seasonally during the warranty period. If the owner has followed the care and maintenance schedule and plant material has become diseased, is dying, or dead, the contractor shall replace all diseased, dying, or dead plant material. If the developer has not followed the care and maintenance schedule and plant material has become diseased, is dying, or is dead, the contractor is not responsible for replacing the diseased, dying, or dead plant material.

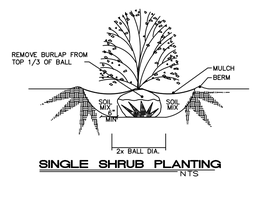
11. If the contractor believes a replacement plant will not grow because of identified environmental conditions, then the contractor may replace the originally specified plant with a similar species that meets the design intent, upon prior approval by the developer.

12. Landscaped areas shall be continuously maintained by the landowner. Failure to adequately maintain landscaped areas may be subject to a citation issued by the Township.

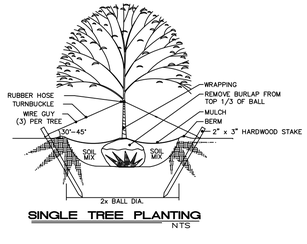
LANDSCAPE LEGEND:

SYMBOL	QTY	COMMON NAME	BOTANICAL NAME	NATIVE (IF X)	MIN. SIZE (AT PLANTING TIME)	SPACING	COMMENTS
VB	13	ARROW WOOD VIBURNUN OR BLACKHAW VIBURNUM	Viburnum dentatum or Viburnum prunifolium	X	2-3' HIGH	8' O.C.	RAIN GARDEN
W	52	WINTER RED WINTER BERRY (cultivars acceptable)	Ilex verticillata (put 1 male in each rain garden, remainder are female)	X	3-4' HIGH	8' O.C.	RAIN GARDEN
P	21	POTENTILLA	Potentilla fruticosa 'Abbottswood', 'Goldfinger' and/or 'Pink beauty'	X	1 GAL CONT.	4' O.C.	PARKING LANDSCAPE ISLANDS
HI	19	INKBERRY HOLLY (cultivars acceptable)	Ilex glabra 'Shamrock'	X	1 GAL CONT.	4' O.C.	PARKING LANDSCAPE ISLANDS
	8	WHITE CATAWBA RHODODENDRON	Rhododendron 'Catawbiense Album'	X	18" HIGH 12-15" SPREAD	6-8' O.C.	EVERGREEN BUFFER SHRUB per S.A.L.D.O. section 220-26-B
	6	EASTERN RED CEDAR	Juniperus virginiana 'Canaertii', 'Blue Mountain'	X	5' HIGH	SEE PLAN	Evergreen buffer tree per SALDO section 220-26.B.
	3	REDBUD	Cercis canadensis (Cultivars acceptable)	X	6' HIGH 2" CALIPER	SEE PLAN	Dumpster shade tree per SALDO section 220-26.B.(1)(e)
	4	FLOWERING DOGWOOD	Cornus florida (cultivars acceptable)	X	6' HIGH 2" CALIPER	SEE PLAN	Buffer shade tree per SALDO section 220-26.B.(1)(e)
	8	SERVICEBERRY	Amelanchier canadensis	X	4-5' HIGH	SEE PLAN	Street tree per SALDO section 220-26.D. (7)
AS	4	DWARF ALBERTA SPRUCE	Pinea glauca 'Conica'	X	30" HIGH	SEE PLAN	Dumpster evergreen tree per SALDO section 220-26.B.(1)(e)





SINGLE SHRUB PLANTING
NTS



SINGLE TREE PLANTING
NTS

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

NO.	DATE	DESCRIPTION	BY
3	3/17/22	CONDITIONS OF APPROVAL	SRR
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1	7/1/20	REVIEW COMMENTS	GDG

DESIGN : T.C.S.
DRAWN : G.D.G.
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DATE : 6/1/2020
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ALPHA CONSULTING ENGINEERS, INC.

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R.L.A. (for landscape design only)

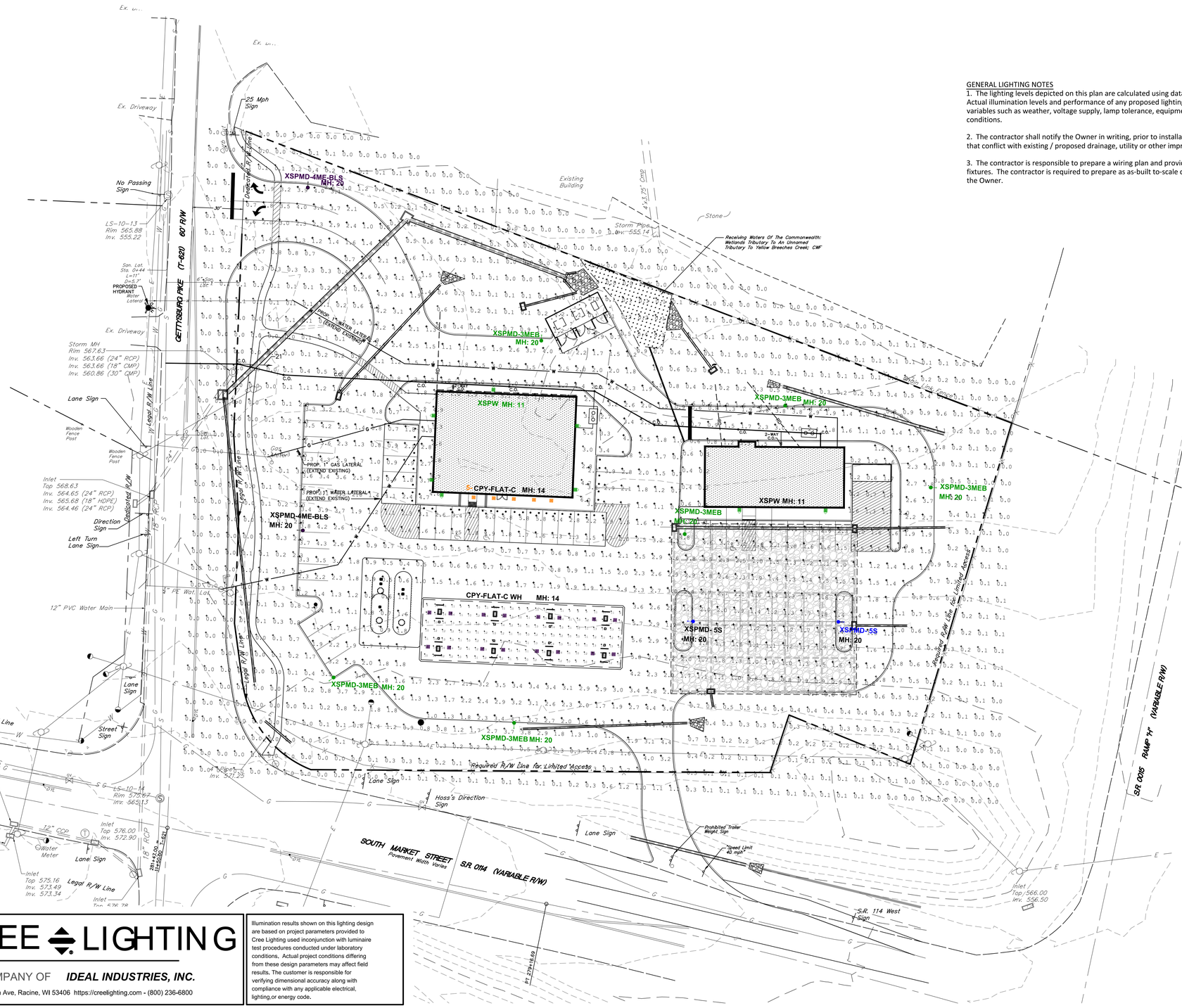
LANDSCAPE PLAN
PRELIMINARY / FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN
FOR
151 GETTYSBURG PIKE
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

PROJECT NO. 319590
SURVEY BOOK :
SCALE : 1" = 30'
DWG FILE: Y:\19\319590.sph\319590\Dwg\Plans\Prelim-Final\
SHEET 6 of 15

Calculation Summary (Footcandles calculated using predicted lumen values @ 50K hrs of operation)						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
CANOPY	Fc	11.85	15	8	1.48	1.88
PAVEMENT	Fc	2.06	6.0	0.4	5.15	15.00
SITE	Fc	0.43	6.0	0.0	N.A.	N.A.

Luminaire Schedule

Symbol	Qty	Label	Arrangement	LMF	Lum. Lumens	Lum. Watts	Part Number
	5	CPY-FLAT-C	SINGLE	1.000	3028	21	CPY250-B-DM-F-C-UL-57K-BZ-HZ
	16	CPY-FLAT-C WH	SINGLE	1.000	4520	31	CPY250-B-DM-F-C-UL-57K-WH-HZ
	2	XSPMD- 5S	SINGLE	1.000	11875	95	XSPMD-D-HT-5SH-12L-57K7-UL-BZ-N
	7	XSPMD-3MEB	SINGLE	1.000	8425	95	XSPLG-D-HT-3ME-12L-57K7-UL-BZ-N w_XA-SP1BLS
	5	XSPMD-4ME-BLS	SINGLE	1.000	8675	95	XSPMD-D-HT-4ME-12L-57K7-UL-BZ-N w_XA-SP1BLS
	8	XSPW	WALL MOUNT	1.000	3245	24	XSPW-B-WM-3ME-4L-57K-UL-BZ



GENERAL LIGHTING NOTES

1. The lighting levels depicted on this plan are calculated using data obtained from the listed manufacturer. Actual illumination levels and performance of any proposed lighting fixture may vary due to uncontrollable variables such as weather, voltage supply, lamp tolerance, equipment service life and other variable field conditions.

2. The contractor shall notify the Owner in writing, prior to installation, of any proposed lighting features that conflict with existing / proposed drainage, utility or other improvements.

3. The contractor is responsible to prepare a wiring plan and provide electric service to all proposed lighting fixtures. The contractor is required to prepare as as-built to-scale drawing of wiring and provide a copy to the Owner.

BOM: Complete Part Description

16- CPY250-B-DM-F-C-UL-WH-57K-HZ
5- CPY250-B-DM-F-C-UL-BZ-57K-HZ
2- XSPMD-D-HT-5SH-12L-57K-UL-BZ-N
5- XSPMD-D-HT-3ME-12L-57K-UL-BZ-N
10- XSPMD-D-HT-4ME-12L-57K-UL-BZ-N
13- XA-SP1BLS
8- XSPW-B-WM-3ME-4L-57K-UL-BZ
14- SSS-4-11-17-CW-BS-OT-N-BZ
14- PD-1H4

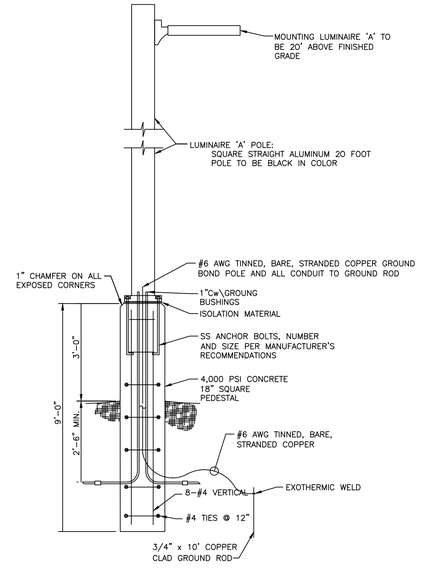
FIXTURES MOUNTING HEIGHTS AS SHOWN
POLES MOUNTED ON 3' BASE

Additional Equipment:

(14) SSS-4-11-17-CW-BS-OT-C-BZ (17' X 4" STEEL SQUARE POLE)
(14) PD-1H4 (SINGLE TENON)

Proposed poles meet 140 MPH sustained winds.

*** CUSTOMER TO VERIFY ORDERING INFORMATION AND CATALOGUE NUMBER PRIOR TO PLACING ORDER ***



LIGHT POLE BASE DETAIL
NTS

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

CREE LIGHTING

A COMPANY OF ***IDEAL INDUSTRIES, INC.***

9201 Washington Ave, Racine, WI 53406 https://creelighting.com - (800) 236-6800

Illumination results shown on this lighting design are based on project parameters provided to Cree Lighting used inconjunction with luminaire test procedures conducted under laboratory conditions, Actual project conditions differing from these design parameters may affect field results. The customer is responsible for verifying dimensional accuracy along with compliance with any applicable electrical, lighting,or energy code.

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DRAWN : G.D.G.
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PLANNING ● ENGINEERING ● SURVEYING
115 LIMEKILN RD, P.O. BOX 'G'
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LIGHTING PLAN
PRELIMINARY / FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN
FOR
151 GETTYSBURG PIKE
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

PROJECT NO. 319590
SURVEY BOOK :
SCALE : 1" = 30'
DWG FILE : Y:\19\319590.vpn\319590R\Dwg\Plans\Prelim-Final\07-LtgPlan.dwg
SHEET 7 of 15

LEGEND

- Existing Property Line
- Existing Easement
- 175 Existing 10' Contour
- 173 Existing 2' Contour
- Existing Edge Of Pave
- Existing Curb
- Existing Edge of Water
- 18" RCP Existing Storm Sewer Inlet, Pipe Size and Manhole
- x175.00 Existing Spot Elevation
- Existing Utility Pole
- G Existing Gas Line
- E Existing Overhead Utility Line
- S Existing Sanitary Sewer Line; Manhole
- W Existing Water Line, Valve, Fire Hydrant
- Tree / Brush Line
- Significant Individual Tree (As Labeled)
- Delineated Wetlands
- #17 Soil Test Site; ID #;
- 15 PROPOSED STORM SEWER LINE AND INLET
- PROPOSED RIP RAP APRON
- S/S PROPOSED SANITARY SEWER LINE W/ MANHOLE AND CLEANOUT
- 550 PROPOSED PERMANENT CONTOUR
- LIMITS OF ULTIMATE EARTH DISTURBANCE
- IP INLET PROTECTION (SEE DETAIL)
- EROSION CONTROL MATTING N.A.G.S75 (SEE DETAIL)
- SILT SOCK w/ SIZE; ID# (SEE DETAIL)
- PROTECTION FENCING (SEE DETAIL)
- NORTH AMERICAN P300 PERMANENT MATTING
- C.M. CLEANOUT MARKER

NO.	DATE	DESCRIPTION	BY
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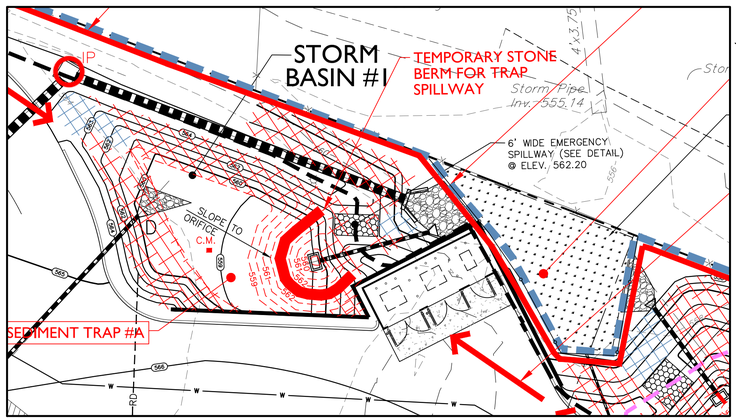
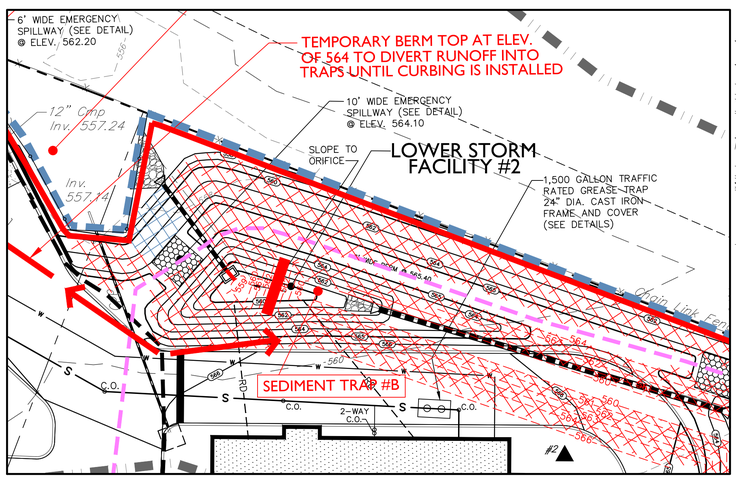
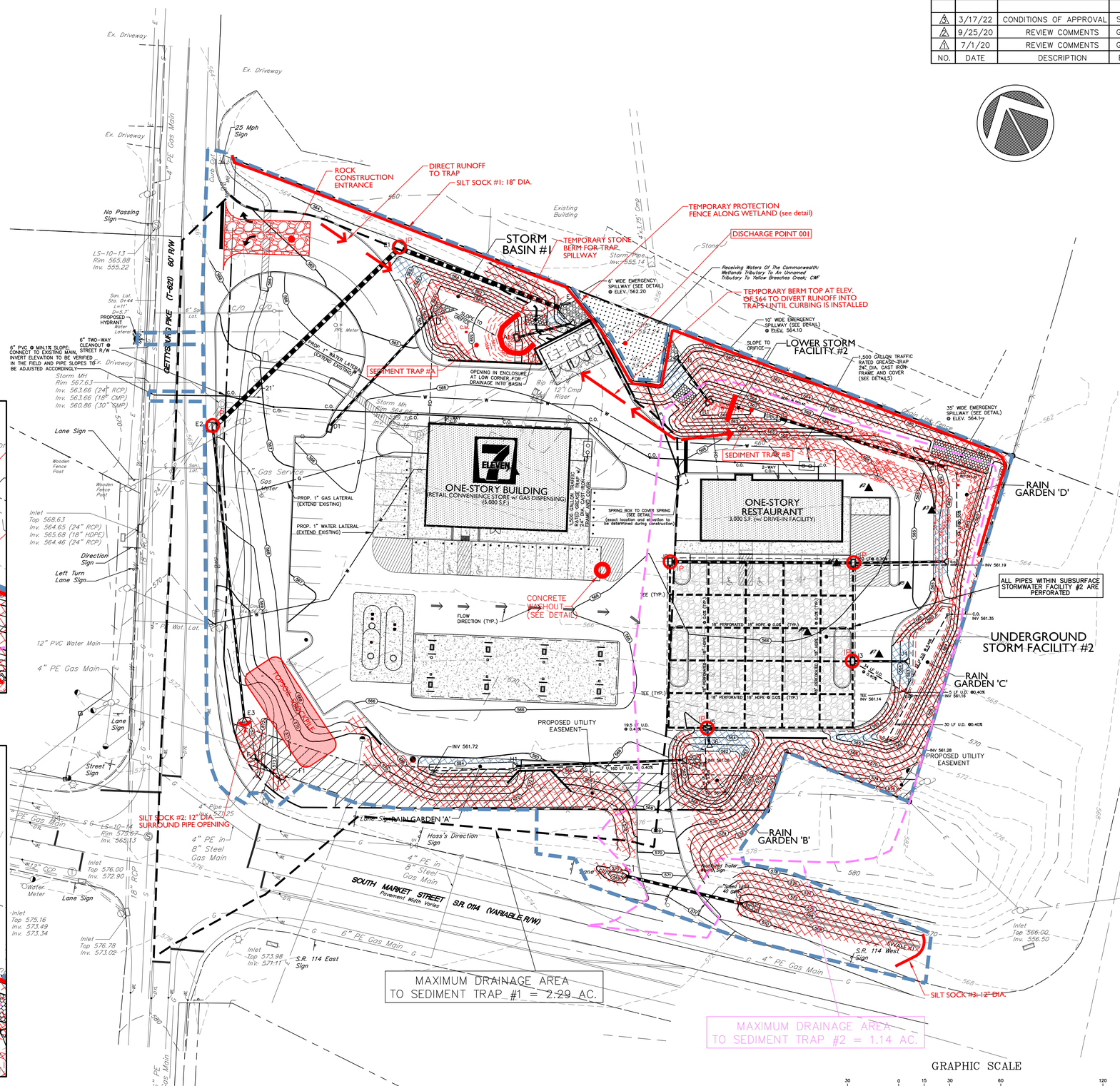
EROSION CONTROL PLAN
PRELIMINARY / FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN
FOR
151 GETTYSBURG PIKE
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA



SEDIMENT TRAP #A INSET
SCALE: 1" = 20'



SEDIMENT TRAP #B INSET
SCALE: 1" = 20'



GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

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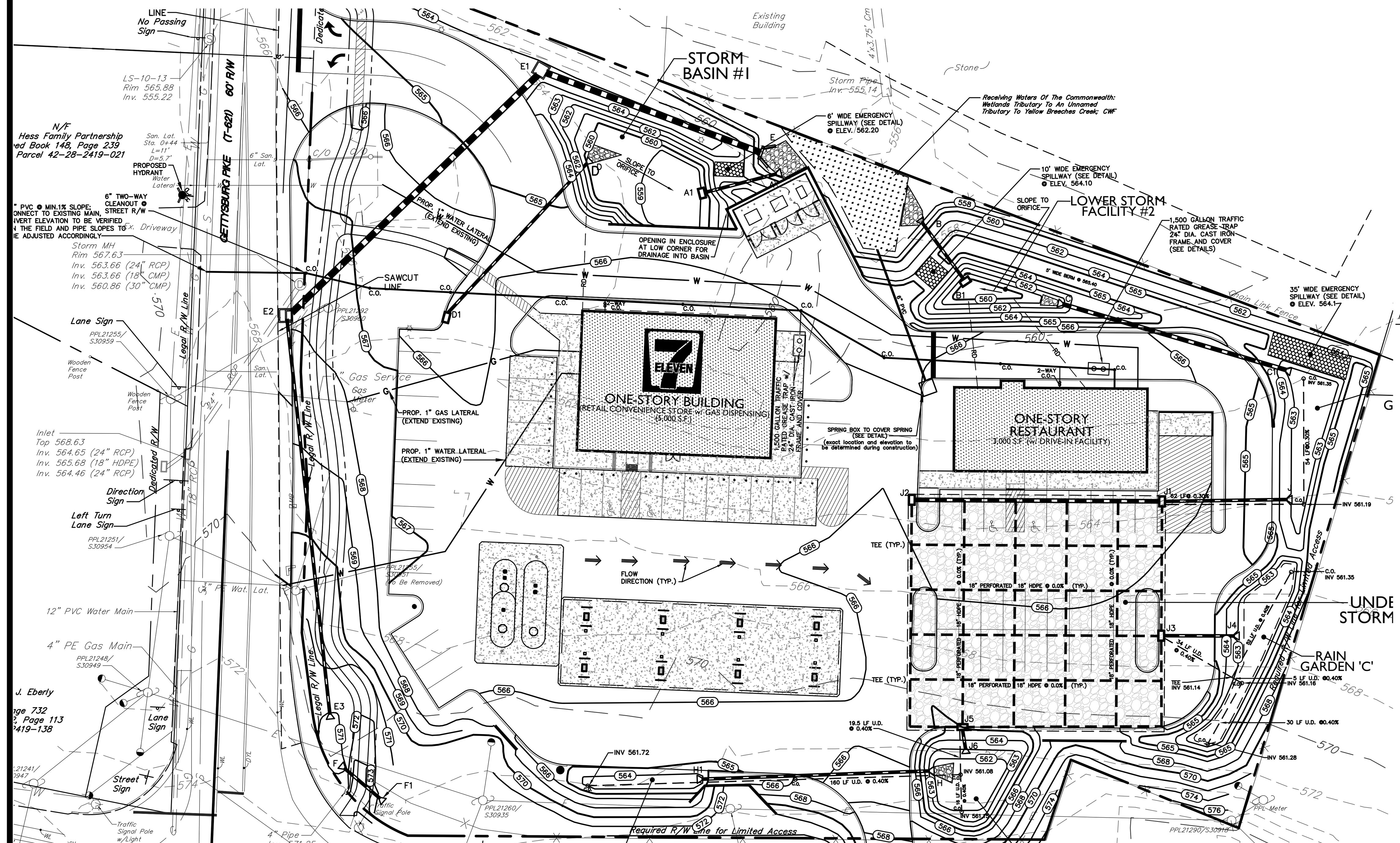
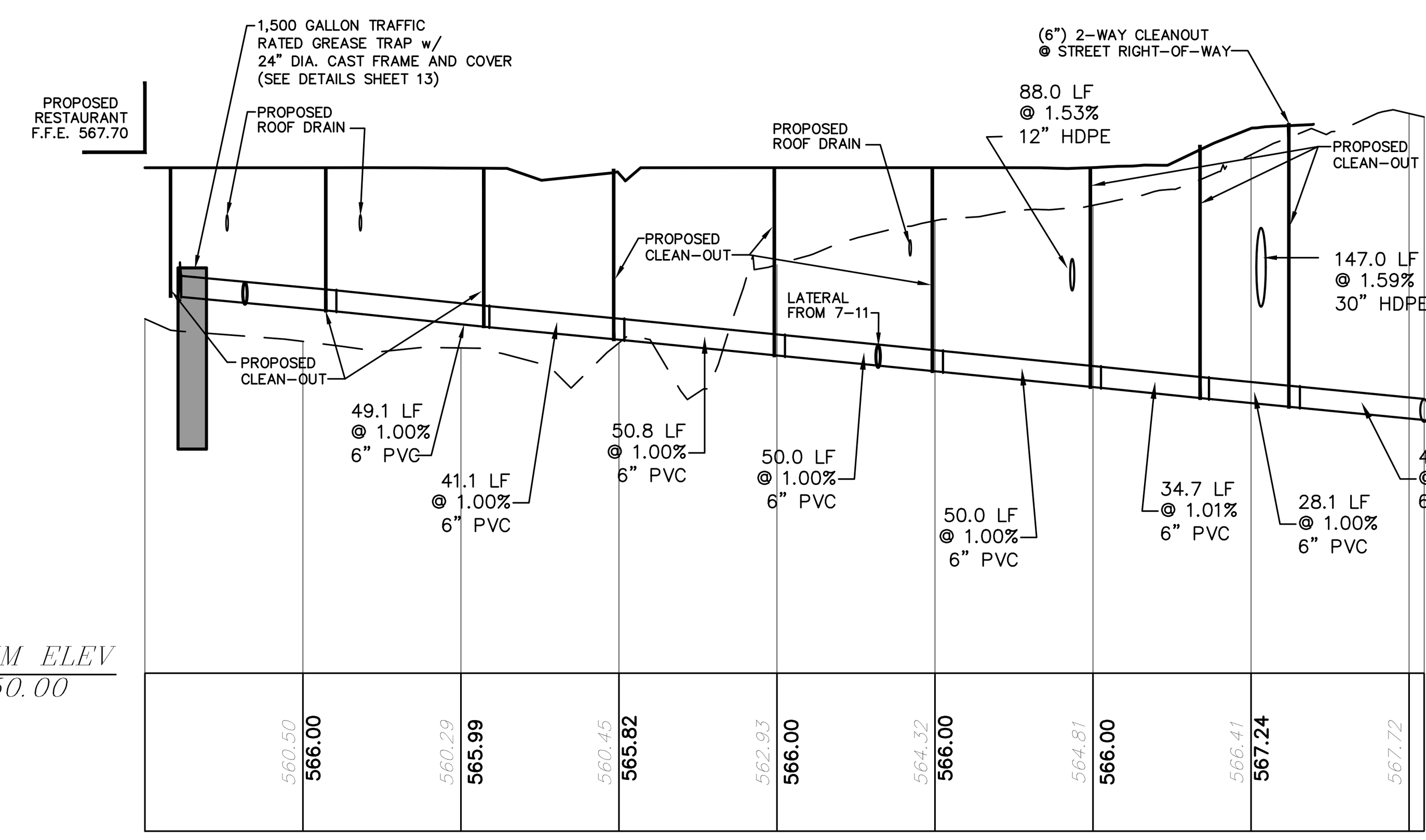
SHEET 8 of 15

GENERALLY, CLEANOUTS SHALL BE PROVIDED IN EACH BUILDING SEWER AND AT INTERVALS NOT TO EXCEED 60 FEET IN LENGTH UNLESS OTHERWISE AUTHORIZED BY THE TOWNSHIP. CLEANOUTS SHALL BE CONSTRUCTED AS SHOWN ON THE DETAIL DRAWINGS.



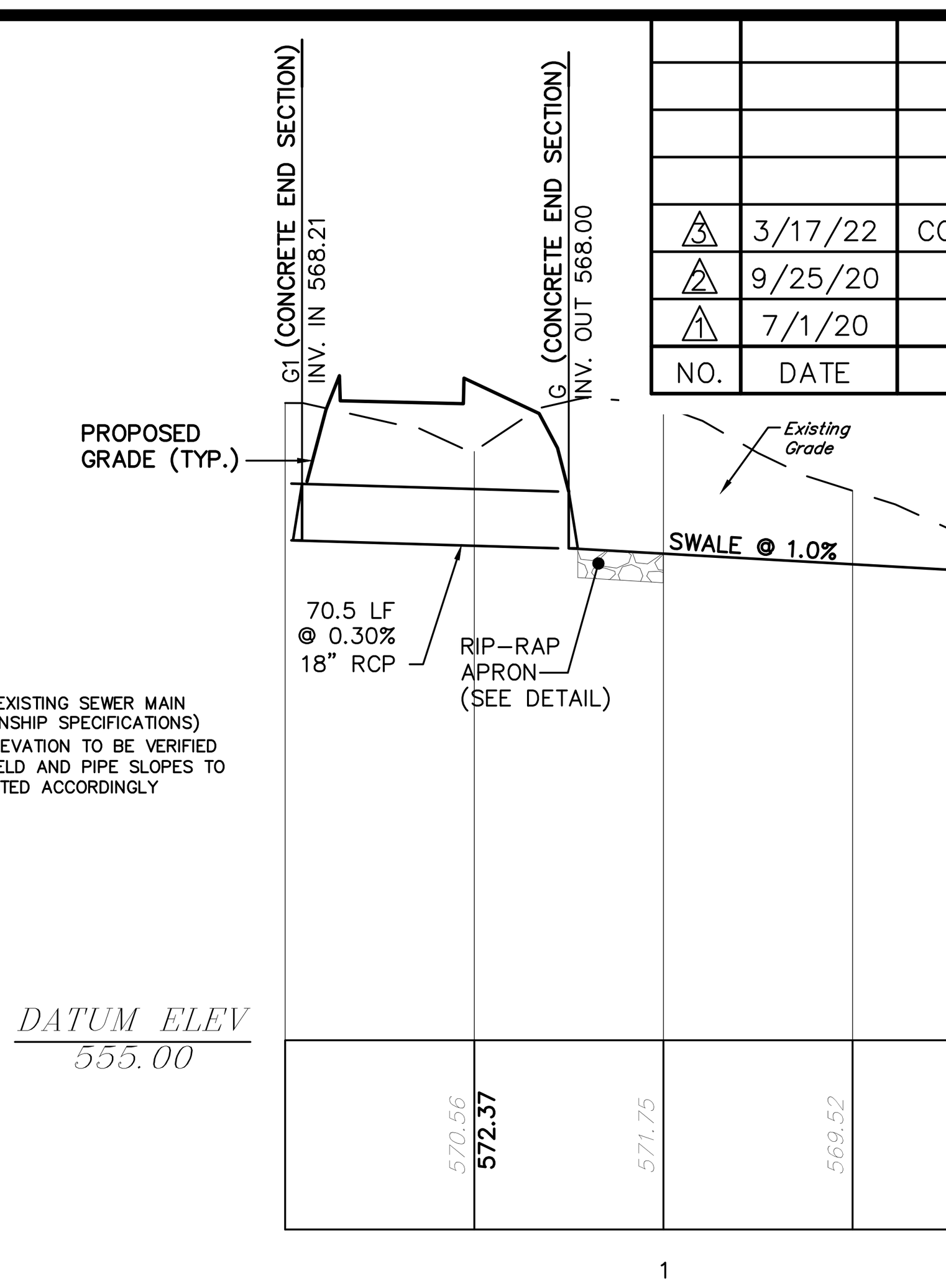
PLAN VIEW

SCALE: 1" = 40'



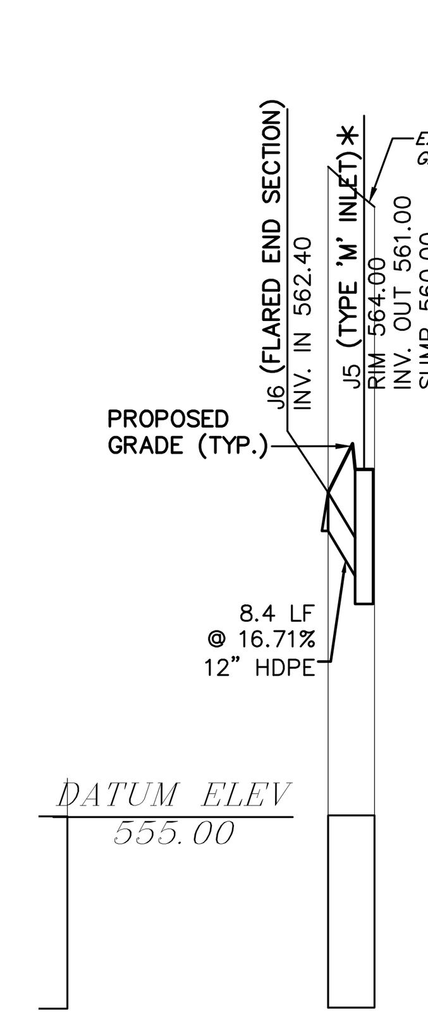
SANITARY SEWER LATERAL

SCALES: 1"=50'H 1"=5'V



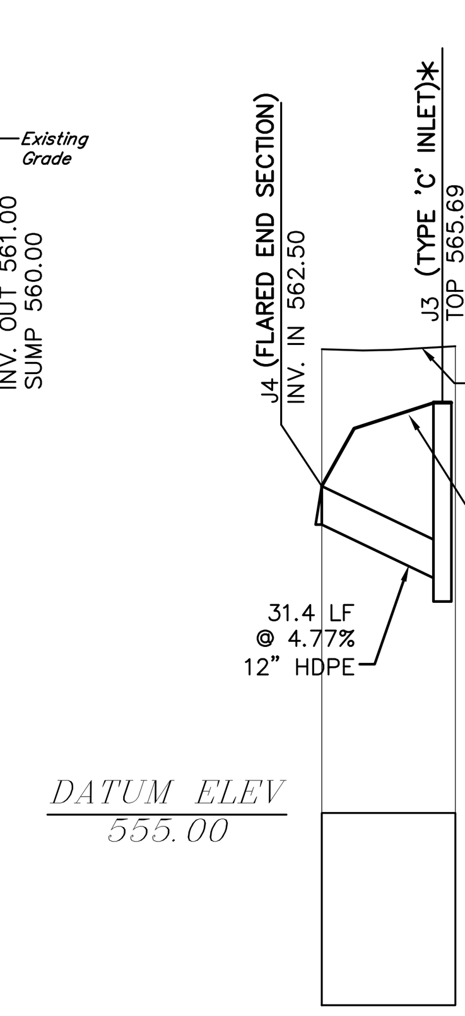
G1 TO G / SWALE #1

SCALES: 1"=50'H 1"=5'V



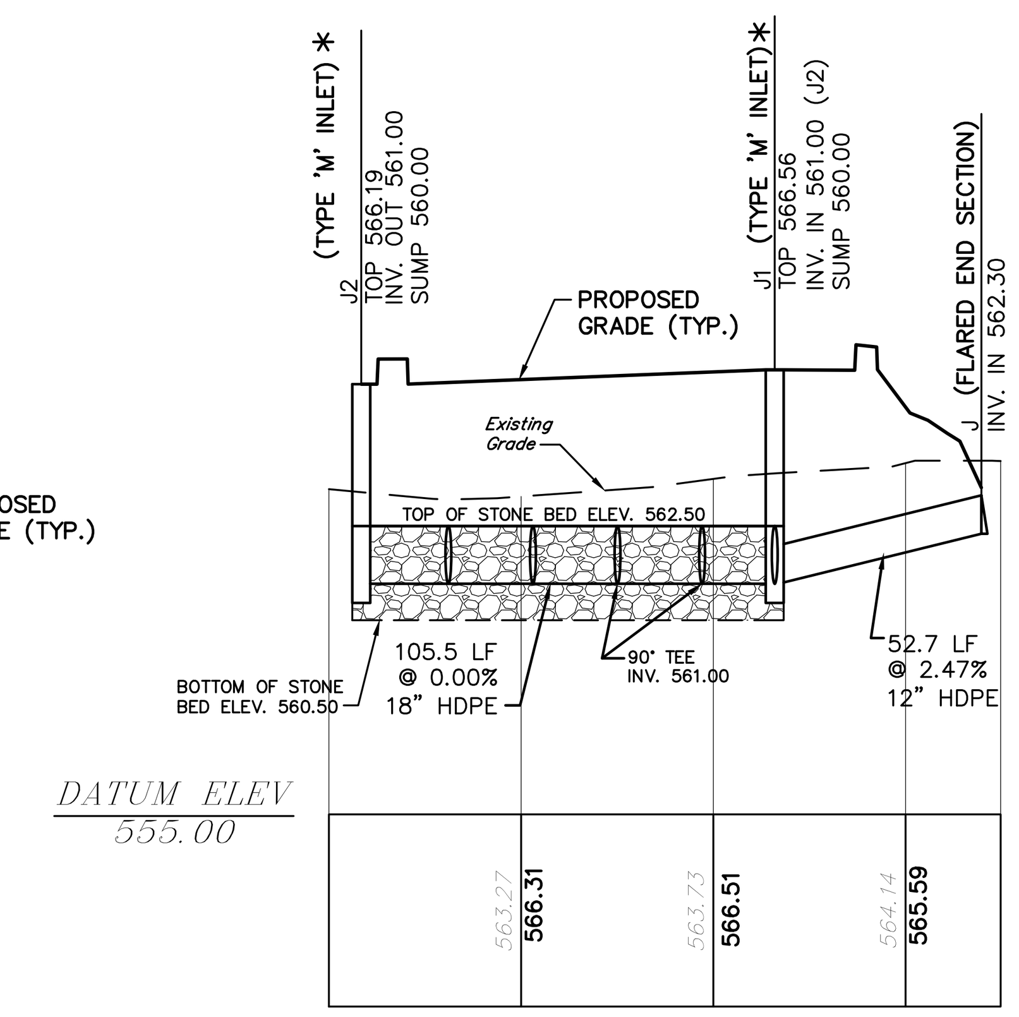
J6 TO J5

SCALES: 1"=50'H 1"=5'V



J4 TO J3

SCALES: 1"=50'H 1"=5'V



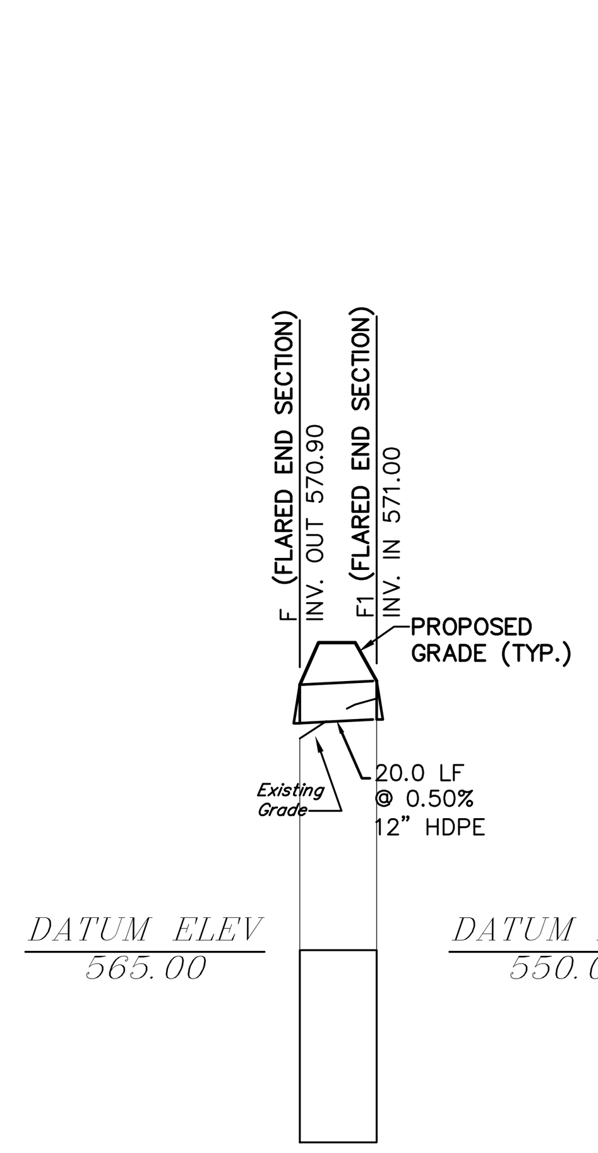
J2 TO J

SCALES: 1"=50'H 1"=5'V

STORM SEWER NOTES:

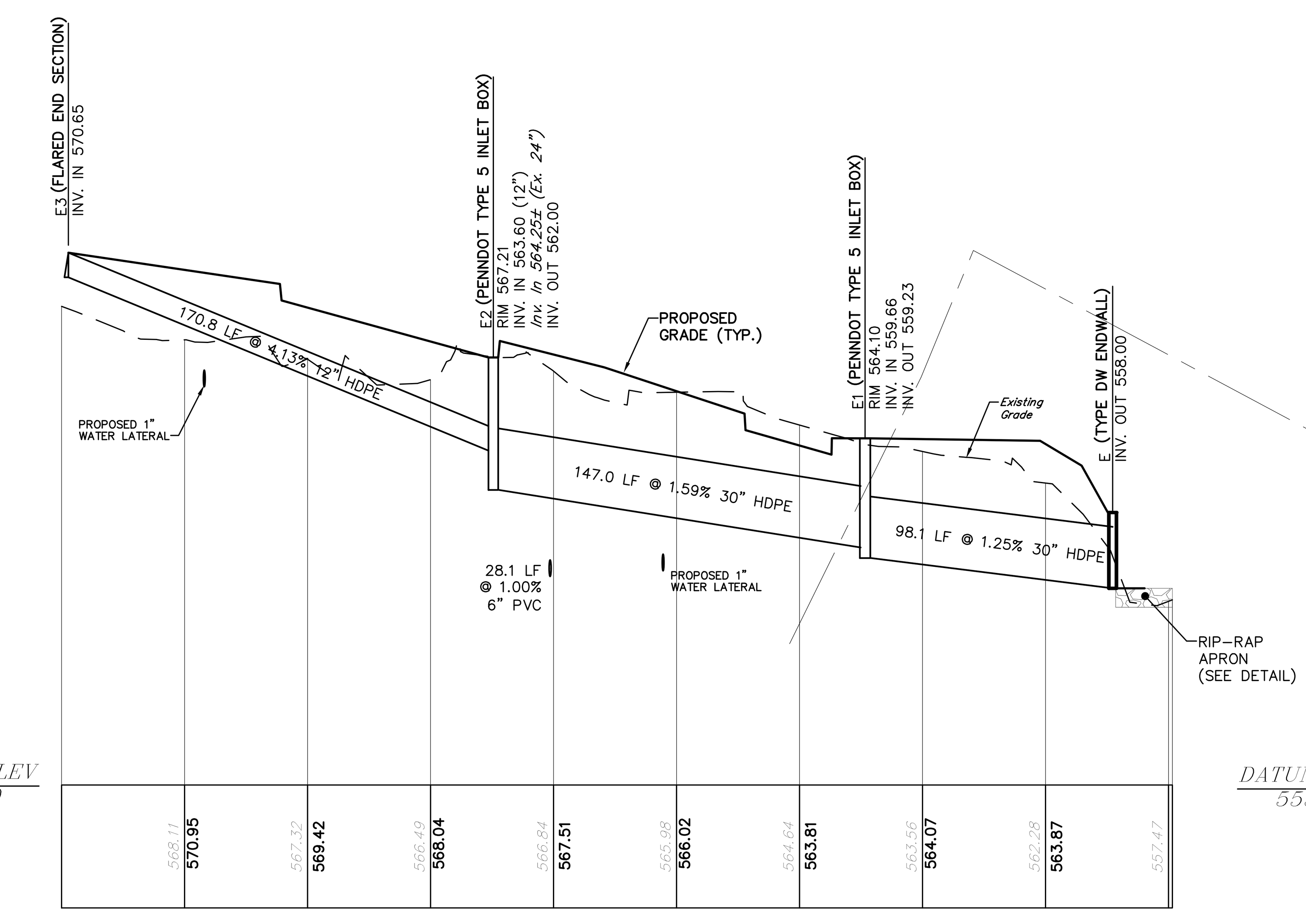
1. ALL STORM PIPES ARE TO BE WATERTIGHT GASKETED JOINT CONNECTIONS. CONNECTIONS INTO INLETS SHALL BE WATERTIGHT. ALL PIPES ENTERING OR EXISTING SHALL BE CUT FLUSH WITH THE INLET WALL.
2. HDPE = SMOOTH INTERIOR CORRUGATED PLASTIC PIPE.
3. STORM INLETS OVER 5 FEET IN DEPTH SHALL BE EQUIPPED WITH PENNDOT RC-39M LADDER RUNGS.
4. ALL STORM INLETS SHALL HAVE HEAVY DUTY BICYCLE SAFE GRATES CONSISTENT WITH PENNDOT PUBLICATION 72M.
5. STORM INLETS OUTSIDE OF PUBLIC STREET RIGHTS-OF-WAY MAY USE PENNDOT APPROVED OR EQUIVALENT PRODUCTS PRODUCED BY MONARCH PRODUCTS COMPANY, INC. OF YORK HAVEN, PA, SUCH AS WITH AN 8" SLAB TOP.
6. ALL BACKFILL FOR UTILITIES AND STORM SEWERS SHALL BE SUITABLE BACKFILL MATERIAL WITH NO STONES OVER FOUR INCHES IN DIAMETER AND NO ORGANIC MATTER, COMPACTED TO WITHIN 3% OF THE OPTIMUM MATERIAL MOISTURE CONTENT AND PLACED IN NOT GREATER THAN EIGHT-INCH LIFTS.

*SEE DETAIL FOR INLETS WITH SUMP BOTTOMS



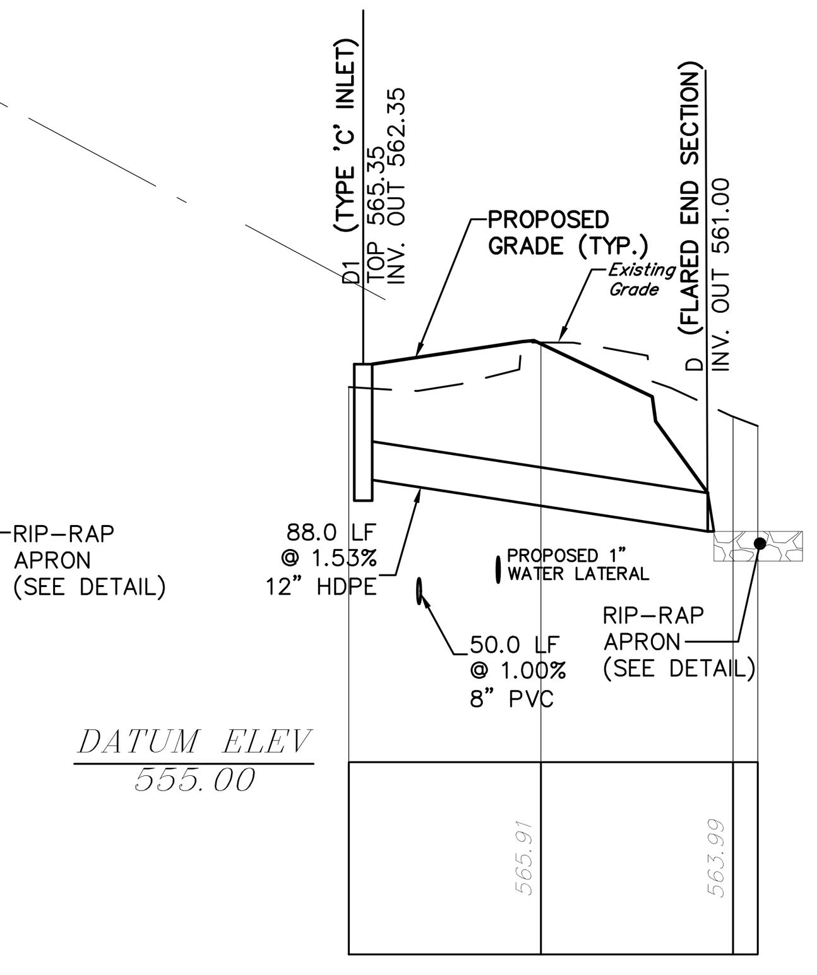
F1 TO F

SCALES: 1"=50'H 1"=5'V



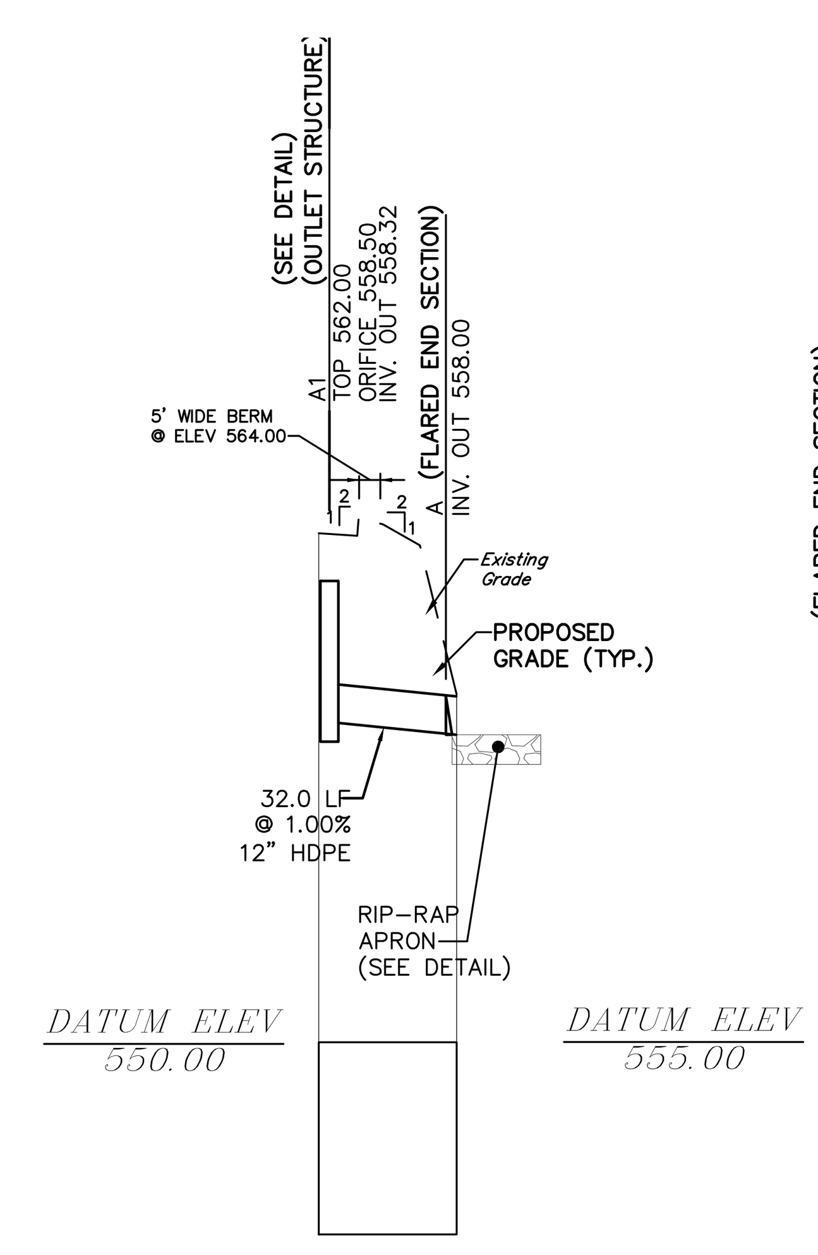
E3 TO E

SCALES: 1"=50'H 1"=5'V



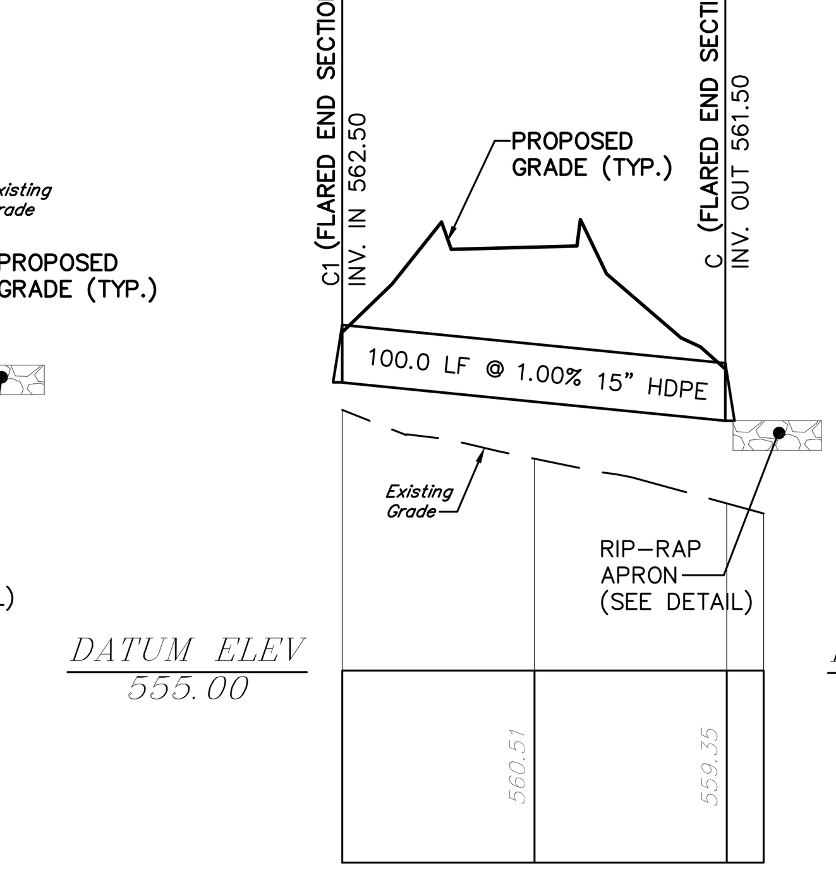
D1 TO D

SCALES: 1"=50'H 1"=5'V



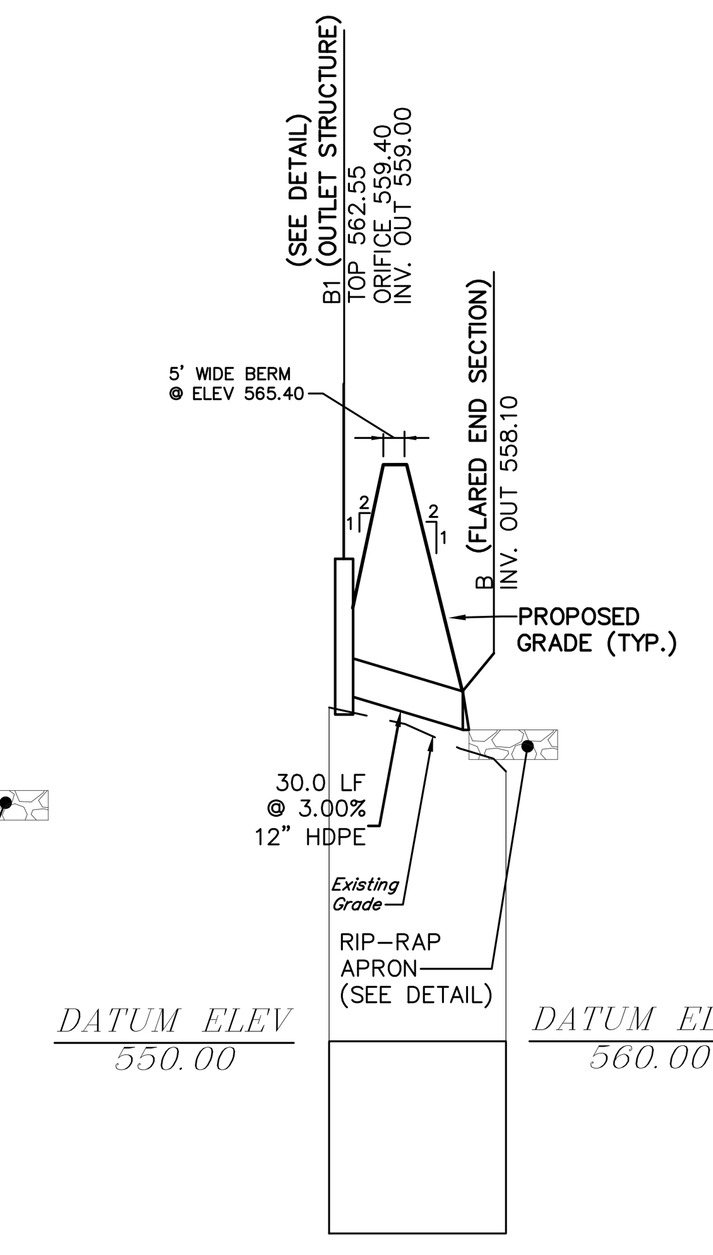
A1 TO A

SCALES: 1"=50'H 1"=5'V



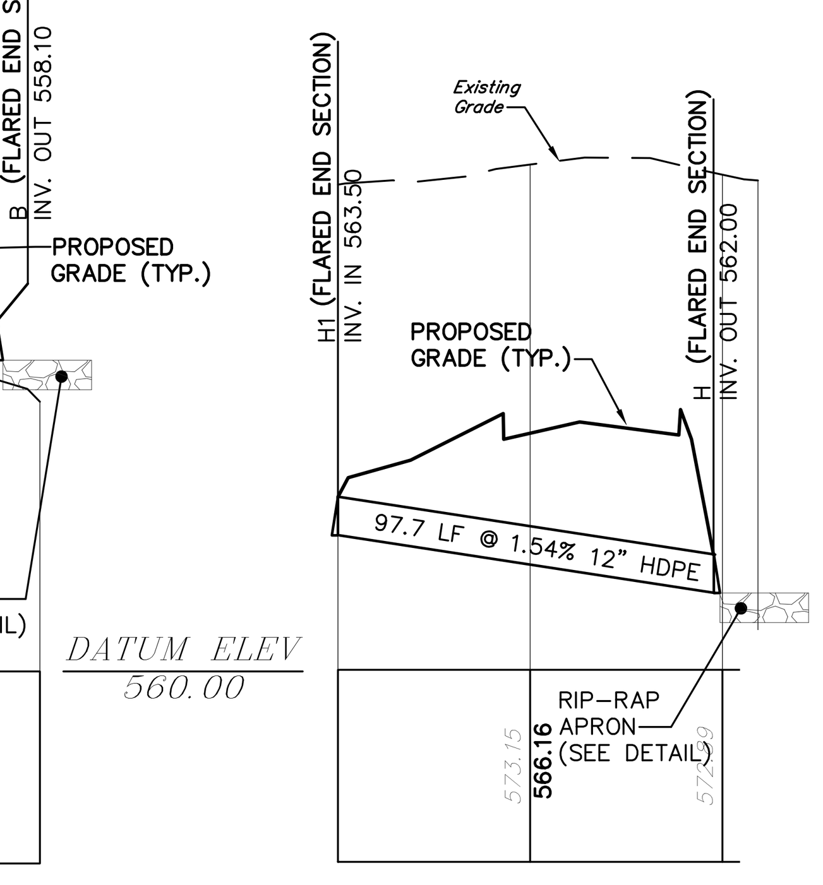
C1 TO C

SCALES: 1"=50'H 1"=5'V



B1 TO B

SCALES: 1"=50'H 1"=5'V



H1 TO H

SCALES: 1"=50'H 1"=5'V

NO.	DATE	DESCRIPTION	BY
3	3/17/22	CONDITIONS OF APPROVAL	SRR
2	9/25/20	REVIEW COMMENTS	GDG
1	7/1/20	REVIEW COMMENTS	GDG

DESIGN : T.C.S.
DRAWN : G.D.G.
CHECKED : J.K.M.
DATE : 6/1/2020
REV :

ALPHA CONSULTING ENGINEERS, INC.
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NEW CUMBERLAND, PA 17070
PHONE: (717) 770 - 2500
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UTILITY PROFILES

PRELIMINARY / FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN

FOR

151 GETTYSBURG PIKE

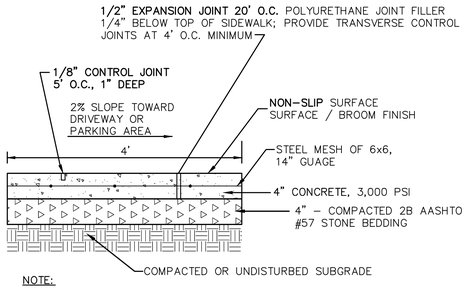
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

PROJECT NO. 319590

SURVEY BOOK :

SCALE : AS NOTED

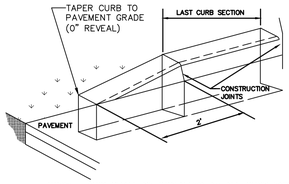
DWG FILE: Y:\19\319590.aph\3195908\Dwg\Plans\Prelim-Final\09-UT PRO.dwg



NOTE:

1. MINIMUM WALK WIDTH SHALL BE 4', UNLESS OTHERWISE NOTED ON THE SITE PLAN.
2. CURB RAMPS MUST BE INSTALLED AT CURBING PER ADA REQUIREMENTS.

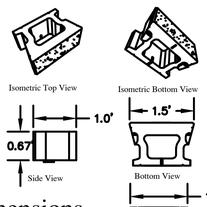
CONCRETE SIDEWALK DETAIL
NTS



NOTE: THIS SHALL BE INSTALLED AT ALL CURB ENDS.

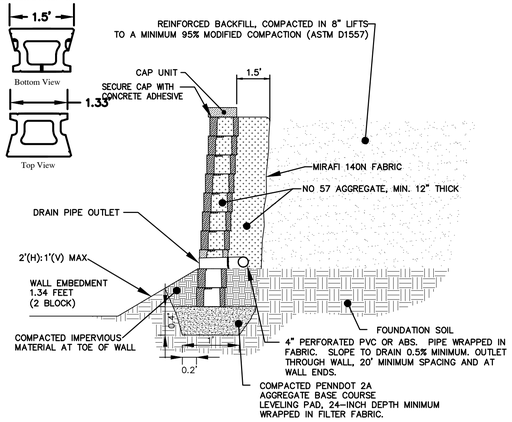
VERTICAL CURB TERMINUS DETAIL
NTS

CornerStone Straight Face



Dimensions

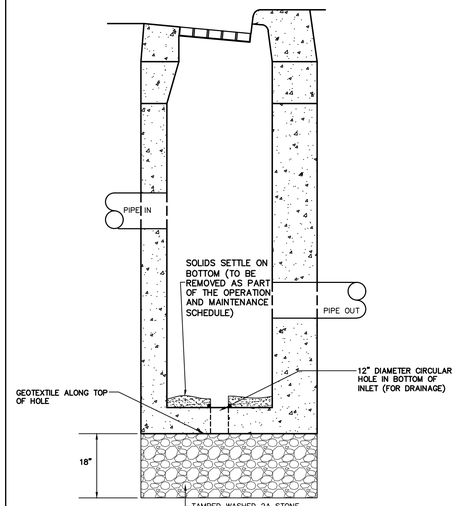
Face Width	18"	457mm
Back Width	16"	406mm
Depth	12"	305mm
Height	8"	203mm
Face Area	1 ft	
Setback	4.5°	
Weight	75lbs	34Kg



SUITABLE SOILS:

1. THE FIELD SOIL PROPERTIES MUST BE VERIFIED BY THE TESTING AGENCY AND THE GEOTECHNICAL ENGINEER OF RECORD TO DETERMINE SUITABILITY OF FOUNDATION SOILS, AND THE SUITABILITY OF ONSITE SOILS FOR USE IN REINFORCED BACKFILL.
2. THE WALL DESIGNER MUST BE NOTIFIED IMMEDIATELY OF ANY VARIATION IN THE SOIL PROPERTIES.
3. UNSUITABLE FOUNDATION SOILS MUST BE REMOVED.
4. OVER EXCAVATION OF ORGANIC AND UNSUITABLE FILL MATERIAL AND FOUNDATION SOILS SHALL BE OVERSEEN AND CERTIFIED BY A GEOTECHNICAL ENGINEER.
5. INSTALL PER MANUFACTURING SPECIFICATIONS.
6. OWNER SHALL DETERMINE MATERIAL COLOR.

RETAINING WALL DETAIL
NTS

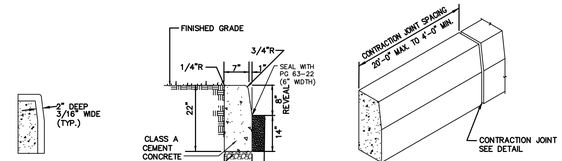


SEE PROFILE FOR INLET LOCATIONS AND SPECIFIC ELEVATIONS.

INLET WITH SUMP BOTTOM
NTS

NO.	DATE	DESCRIPTION	BY
4	3/17/22	CONDITIONS OF APPROVAL	SRR
3	9/25/20	REVIEW COMMENTS	GDG
2	7/1/20	REVIEW COMMENTS	GDG

DESIGN : T.C.S.
DRAWN : G.D.G.
CHECKED : J.K.M.
DATE : 6/1/2020
REV :

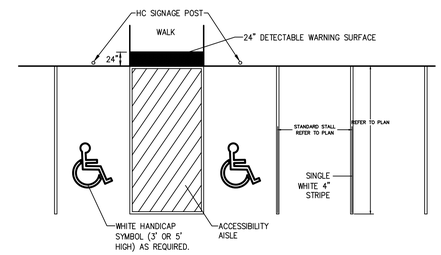


CONTRACTION JOINT DETAIL — TYPICAL CURB CROSS-SECTION — PLAIN CEMENT CONCRETE CURB

NOTES:

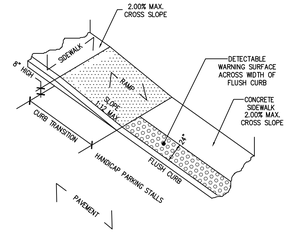
1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS PENNDOT RC-64m, LATEST EDITION.
2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
3. PLACE 3/4-INCH PREMOLDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY. CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB.
4. EXPANSION JOINTS SHALL BE INSTALLED AT 60' INTERVALS, AT STRUCTURES, AND AT THE END OF EACH WORK DAY.

VERTICAL CONCRETE CURB DETAIL
NTS



4. ACCESSIBLE RAMPS
4.1. ALL CONCRETE ACCESSIBLE RAMPS (3000 PSI) SURFACES SHALL HAVE A "WARNING SURFACE TILE" WITH SCREW DOWN TRUNCATED DOMES PER ADA STANDARDS AND LOCAL ACCESSIBILITY CODE(S).

HANDICAP PARKING SPACE MARKING DETAIL
NTS



IN-LINE HANDICAP RAMP AT PARKING SPACES DETAIL
NTS

NOTES:
1. ALL SIGNAGE TO BE FROM LATEST EDITION OF MUTCD.

2. TOP PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.

3. BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.

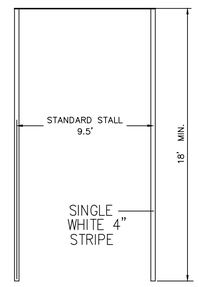
4. FINE NOTIFICATION SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.

CONTRACTOR SHALL VERIFY FINE AMOUNT AND ORDINANCE NUMBER.

5. ONE (1) SIGN REQUIRED FOR EACH ACCESSIBLE PARKING SPACE.

6. INSTALLED HEIGHT OF SIGN SHALL BE IN ACCORDANCE WITH SECTION 24-23 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. (MUTCD)

7. SIGN MAY BE MOUNTED ON BUILDING/WALL, AT PROPER HEIGHT, IF ALIGNED WITHIN 12" OF CENTER OF PARKING SPACE.



TYP. PARKING SPACE MARKING DETAIL
NTS

NOTES:
1. ALL SIGNAGE TO BE FROM LATEST EDITION OF MUTCD.

2. TOP PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.

3. BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.

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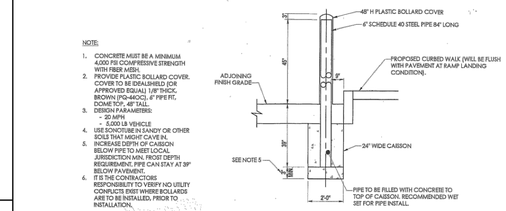
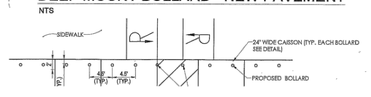
7. SIGN MAY BE MOUNTED ON BUILDING/WALL, AT PROPER HEIGHT, IF ALIGNED WITHIN 12" OF CENTER OF PARKING SPACE.

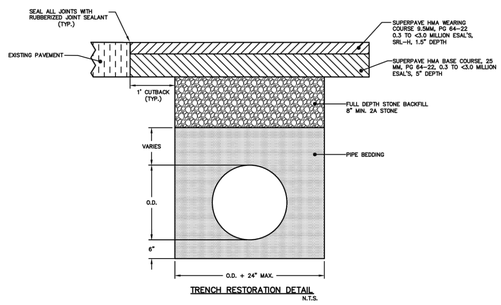
HANDICAP PARKING SIGNAGE
NTS

ACCESS DRIVE/PARKING AREA PAVEMENT SECTION
NTS



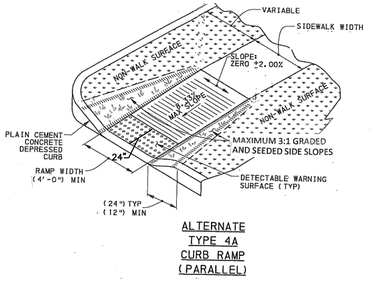
DEEP MOUNT BOLLARD - NEW PAVEMENT
NTS





TRENCH RESTORATION DETAIL
N.T.S.

TOWNSHIP STREET RESTORATION AND WIDENING DETAIL
NTS



TYPE 4A NON-TRAVERSABLE ROLLED FLARE TRANSITION

ALTERNATE TYPE 4A CURB RAMP (PARALLEL)

HANDICAMP RAMP DETAIL
NTS

ALPHA
PLANNING • ENGINEERING • SURVEYING
1307 ALLEN ROAD, SUITE 4
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WWW.ALPHAGEI.COM
ALPHA CONSULTING ENGINEERS, INC.

SEAL

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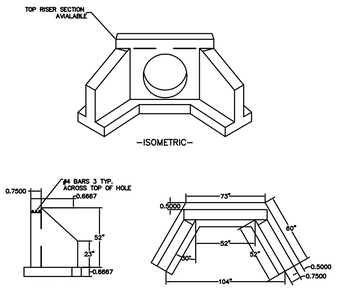
MISCELLANEOUS DETAILS
PRELIMINARY / FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN
FOR
151 GETTYSBURG PIKE
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

PROJECT NO. 319590
SURVEY BOOK :
SCALE : AS NOTED
DWG / FILE : X:\19\319590.aph\319590\Dwg\Plans\Prelim-Final\10-DETAILS.dwg
SHEET 10 of 15

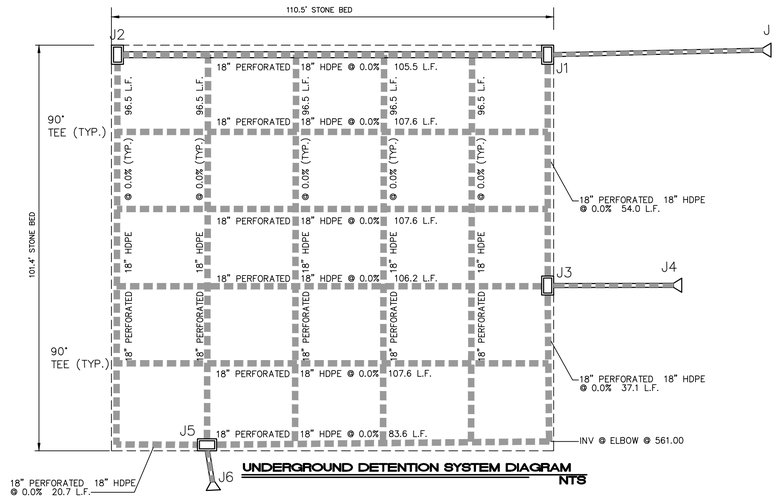
MONARCH PRODUCTS COMPANY, INC.
YORK HAVEN, PA.



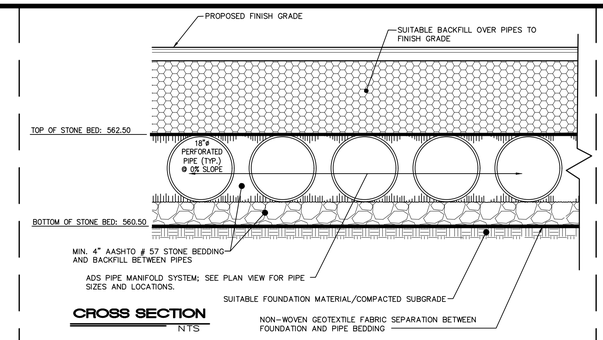
NOTE: REINFORCEMENT TO BE 0.12 IN²/FT. EACH WAY

TYPE D–W ENDWALL
MAXIMUM PIPE SIZE – 48" C.M.P.

DWG. OS–3



UNDERGROUND DETENTION SYSTEM DIAGRAM
NTS



CROSS SECTION
NTS

1. All cross pipes in the underground stormwater detention system shall be laid at 0% slope.
2. All pipe connections hall be watertight.
3. If soft or unsuitable materials are encountered for the foundation area, remove poor soils down to a suitable foundation, and then build up the appropriate elevation with a competent backfill, such as shale or 2A stone.
4. Place backfill over pipes in loose 8-inch lifts and compact to 90% ASSHTO T99 standard proctor density, or until no further yielding of the material is observed under the compactor or under foot. Material shall be worked into the pipe haunches by means of shovel-slicing, rodding, air tamper, vibratory rod or other effective methods.
5. All grate inlets shall be steel bicycle safe.
6. Contact a ADS (Advanced Drainage Systems, Inc or Lane Enterprises) sales representative for elbows, tees, fittings and manifold sections. The spacing of underground pipes can shift slightly if necessary for installation, per manufacturer's specifications.
7. Care should be taken to not drive heavy vehicles over the pipe system until completed backfill has been placed over the system.
8. The contractor and owner shall prevent silt and other debris from entering grate inlets until the project area is permanently stabilized with gravel surfacing and/or vegetation as applicable.
9. If any groundwater seeps into the work area during installation, it shall be removed and treated with a pumped water facility as detailed hereon.

UNDERGROUND PORTION DETENTION FACILITY #2
NTS

NO.	DATE	DESCRIPTION	BY
4	3/17/22	CONDITIONS OF APPROVAL	SRR
3	9/25/20	REVIEW COMMENTS	GDG
2	7/1/20	REVIEW COMMENTS	GDG
1			

DESIGN : T.C.S.
DRAWN : G.D.G.
CHECKED : J.K.M.
DATE : 6/1/2020
REV :

LANE

HDPE PERFORATION GUIDE
PERFORATIONS PER AASHTO M252/M294

AASHTO M294 CLASS 2 SLOTTED PERFORATIONS FOR DOUBLE-WALL (SP) PIPE

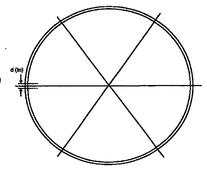
Type SP Class 2 Perforations

D	d	L	WIA
12	0.3125	1.94	2.85
15	0.3125	2.62	2.11
18	0.3125	2.96	1.87

D = Nominal pipe diameter (in)
d = diameter of circular perforation (in)
L = Longitudinal spacing between holes (in)
WIA = Water inlet area (in^2/ft)

Summary description

Class 2 perforations for 12", 15" and 18" HDPE pipes include a total of six equally spaced 5/16" diameter holes in each corrugation valley as shown at right.



PERFORATED PIPE SECTION
NTS

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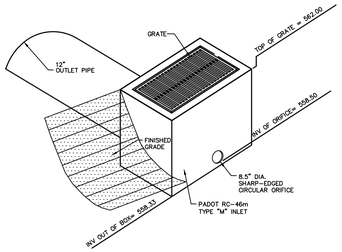
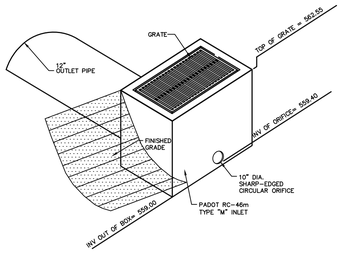
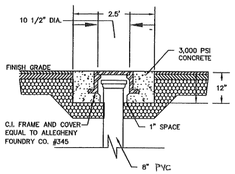


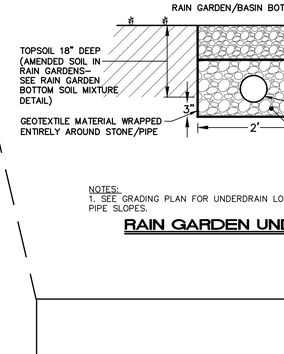
STRUCTURE #A1 • STORM BASIN #1
NTS



STRUCTURE #B1 • LOWER STORM FACILITY #2 OUTLET STRUCTURE
NTS

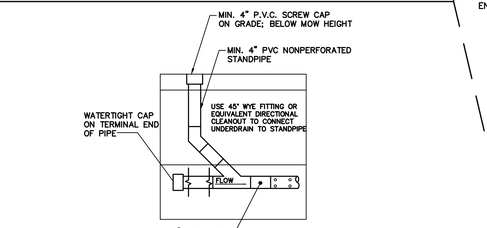


CLEAN-OUT CAP IN PAVED AREAS
NTS



NOTE: SEE GRADING PLAN FOR CLEANOUT LOCATIONS AND INVERT ELEVATIONS.

UNDERDRAIN CLEANOUT DETAIL
NTS

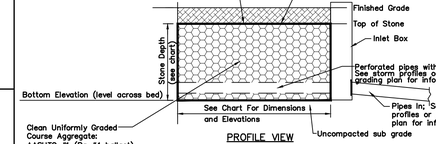


NOTES:
1. SEE GRADING PLAN FOR UNDERDRAIN LOCATIONS, INVERT ELEVATIONS AND PIPE SLOPES.

RAIN GARDEN UNDERDRAIN DETAIL
NTS

INSTALLATION PROCEDURES AND GUIDELINES FOR SUBSBURFACE STORMWATER INFILTRATION BED

1. DURING CONSTRUCTION, ISOLATE BED FROM SURFACE RUNOFF AND POSSIBLE SILT. ALSO, MAINTAIN A FILTER ON THE CATCH BASIN GRATE UNTIL THE PROJECT AREA IS ENTIRELY PERMANENTLY STABILIZED.
2. EXCAVATE SUBSURFACE BED BOTTOM TO A UNIFORM, LEVEL AND UNCOMPACTED GRADE, FREE FROM ROCKS AND DEBRIS. DO NOT COMPACT SUBGRADE. ALL EXCAVATION AND COMPACTION WITHIN THE BED AREA SHOULD BE PERFORMED WITH THE LIGHTEST PRACTICAL EQUIPMENT. EXCAVATION SHOULD PREFERABLY OCCUR FROM EQUIPMENT PLACED OUTSIDE THE LIMITS OF THE BED. THE BOTTOM OF THE BED SHOULD BE TILLED, THEN SMOOTHED OUT WITH A LEVELING DRAG OR EQUIVALENT.
3. BACKFILL WITH UNIFORMLY GRADED CLEAN–WASHED AGGREGATE IN 8–INCH LIFTS, LIGHTLY COMPACTING BETWEEN LIFTS.
4. FOLD AND SECURE NONWOVEN GEOTEXTILE AROUND SUBSURFACE AREA, WITH A MINIMUM OVERLAP OF 24 INCHES.

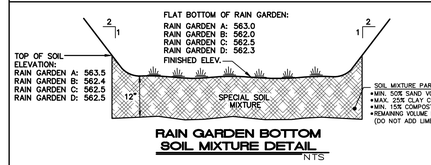


PROFILE VIEW

SUBSURFACE STORMWATER BED SUMMARY		
HORIZONTAL AREA	BOTTOM OF STONE ELEVATION	STONE DEPTH (FT.)
11,153	560.50	2.0

NOTE:
1. ALL STORM PIPES WITHIN A BED SHALL BE PERFORATED.

DIAGRAM OF SUBSURFACE STORMWATER DETENTION/INFILTRATION FACILITY
NTS



RAIN GARDEN BOTTOM SOIL MIXTURE DETAIL
NTS

SOIL AMENDMENT NOTE

SOIL AMENDMENT AND RESTORATION IS THE PROCESS OF RESTORING DISTURBED SOILS BY RESTORING SOIL POROSITY AND/OR ADDING A SOIL AMENDMENT, SUCH AS COMPOST, FOR THE PURPOSE OF RE–ESTABLISHING THE SOIL'S LONG–TERM CAPACITY FOR INFILTRATION AND POLLUTION REMOVAL. AMENDMENT AND RESTORATION SHALL OCCUR AFTER THE BUILDINGS, DRIVES AND UTILITIES ARE CONSTRUCTED, AND THE LOT IS BEING READIED FOR FINAL SEEDING. SOIL AMENDMENT CAN INCLUDE COMPOST, MULCH, MANURES, AND SAND. COMPOST SHOULD BE ADDED TO TOPSOIL AT A RATE OF 2:1 (SOIL:COMPOST).

PRE–INSTALLATION SOIL INSPECTION

PRIOR TO PLACEMENT OF THE AMENDED SOILS, WHEN THE SOIL PILE(S) ARE ON–SITE, THE CONTRACTOR / DEVELOPER SHALL CONTACT THE SITE ENGINEER FOR A CRITICAL STAGE OF CONSTRUCTION INSPECTION OF THE SOIL MATERIALS. THE CRITICAL STAGE LICENSED PROFESSIONAL OR THEIR DESIGNEE SHALL DO A VISUAL INSPECTION OF THE SOILS PRIOR TO PLACEMENT. THE LICENSED PROFESSIONAL OR THEIR DESIGNEE MUST BE PRESENT DURING INSTALLATION. IF SOIL MATERIALS WERE PRE–MIXED OFF–SITE BY ANOTHER ENTITY, THEN THE CONTRACTOR / DEVELOPER SHALL PROVIDE CERTIFICATION PAPERWORK OF THE SOIL MIXTURE COMPOSITION AND SOURCES TO THE SITE ENGINEER.

SUB–SOILING TO RELIEVE COMPACTION:

BEFORE THE COMPOST IS PLACED AND PREFERABLY WHEN EXCAVATION IS COMPLETED, THE SUBSOIL SHALL BE IN A LOOSE, FRIABLE CONDITION TO A DEPTH OF ABOUT 20 INCHES BELOW FINAL TOPSOIL GRADE, AND THERE SHALL BE NO EROSION RILLS OR WASHOUTS IN THE SUBSOIL SURFACE EXCEEDING 3 INCHES IN DEPTH.

THE CONTRACTOR SHALL DELAY OPERATIONS UNTIL THE SOIL IS NOT WET (WILL NOT HOLD A BALL WHEN SQUEEZED). ONLY ONE PASS SHALL BE PERFORMED ON ERODIBLE SLOPES GREATER THAN 1 VERTICAL TO 3 HORIZONTAL. WHEN ONLY ONE PASS IS USED, WORK SHOULD BE AT RIGHT ANGLES TO THE DIRECTION OF SURFACE DRAINAGE, WHENEVER PRACTICAL.

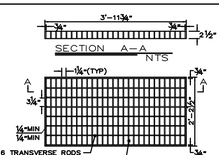
EXCEPTIONS TO SUB–SOILING INCLUDE AREAS WITHIN THE DRIP LINE OF ANY EXISTING TREES, OVER UTILITY OR DRAINAGE PIPE INSTALLATIONS WITHIN 30 INCHES OF THE SURFACE.

COMPOST SOIL AMENDMENT INSTALLATION:

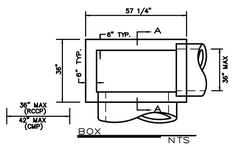
SPREAD 2–3 INCHES OF APPROVED COMPOST ON EXISTING SOIL. TILL ADDED SOIL INTO EXISTING SOIL WITH A ROTARY TILLER THAT IS SET TO A DEPTH OF 6 INCHES. ADD AN ADDITIONAL 4 INCHES OF APPROVED SOIL/COMPOST TO BRING THE AREA UP TO GRADE.

MISCELLANEOUS DETAILS
PRELIMINARY / FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN
FOR
151 GETTYSBURG PIKE
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

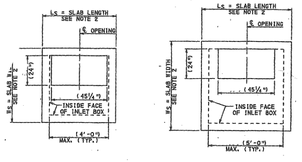
PROJECT NO. 319590
SURVEY BOOK :
SCALE : AS NOTED
DWG FILE: Y:\19\319590.opn\319590R\Dwg\Plans\Prelim-Final\10-DETAILS.dwg
SHEET 11 of 15



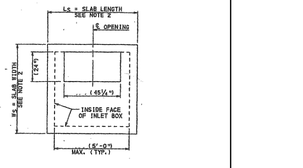
BICYCLE SAFE STEEL GRATE
NTS



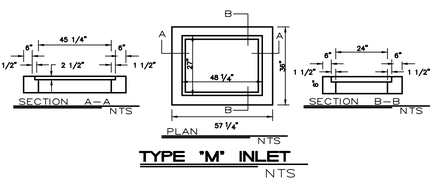
NTS



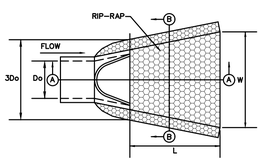
FOR TYPE 4 INLET BOX



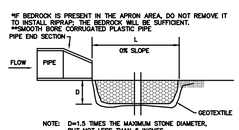
FOR TYPE 5 INLET BOX



TYPE "M" INLET
NTS

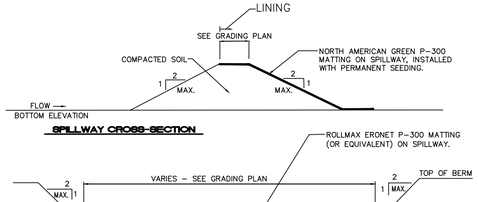


OUTLET STRUCTURE DESIGNATION	W (FT)	L (FT)	SIZE OF ROCK	MIN ROCK DEPTH (D)	PIPE DIA. SIZE (IN.)	PIPE MATERIAL
A	12.0	9.0	R–3	9"	12"	HDPE
B	11.0	8.0	R–4	18"	12"	HDPE
C	11.75	8.0	R–4	18"	15"	HDPE
D	12.0	9.0	R–3	9"	18"	HDPE
E	27.5	20.0	R–5	27"	30"	HDPE
G	12.5	8.0	R–3	9"	18"	RCP
H	11.0	8.0	R–4	18"	12"	HDPE

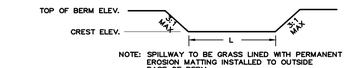


NOTES:
1. THICKNESS IN ONE CONTINUOUS OPERATION TO PREVENT SEGREGATION OF MATERIALS. INDIVIDUAL ROCKS MAY BE REARRANGED, AND VOIDS FILLED WITH HAND PLACED SMALLER ROCK, TO ACHEIVE A UNIFORM ROCK BLANKET.
2. NO ROCK PEICES SHALL HAVE A LENGTH EXCEEDING THREE
3. ROCK SHALL BE ANGULAR, CRUSHED AND HAVE A UNIT WEIGHT OF 165 LBS./C.F.
4. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.
5. ALL APRONS SHOULD BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

RIP–RAP APRON DETAIL
NTS



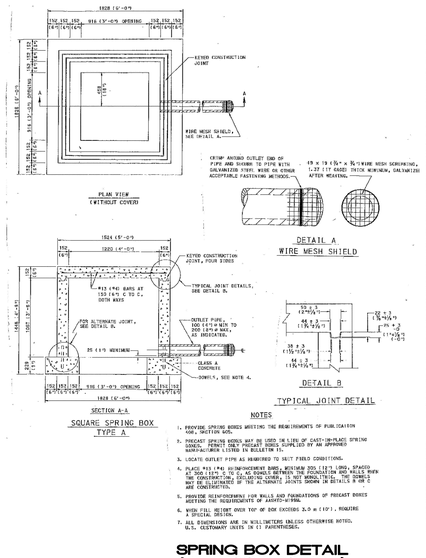
SPILLWAY ELEVATION DETAIL
NTS



NOTE: SPILLWAY TO BE GRASS LINED WITH PERMANENT EROSION MATTING INSTALLED TO OUTSIDE BASE OF BERM.

	TOP OF BERM ELEV.	CREST ELEV.	LENGTH (L)
STORM BASIN #1	564.00	562.20	6'
UNDERGROUND FACILITY #2	565.40	564.10	35'
LOWER STORM FACILITY #2	565.40	564.10	10'

STORMWATER MANAGEMENT AREA PERMANENT SPILLWAY DETAIL
NTS



SPRING BOX DETAIL (PENNDOT RC–36M)
NTS

NO.	DATE	DESCRIPTION	BY
3	3/17/22	CONDITIONS OF APPROVAL	SRR
2	9/25/20	REVIEW COMMENTS	GDG
1	7/1/20	REVIEW COMMENTS	GDG

DESIGN : T.C.S.
DRAWN : G.D.G.
CHECKED : J.K.M.
DATE : 6/1/2020
REV :

ALPHA CONSULTING ENGINEERS, INC.
PLANNING • ENGINEERING • SURVEYING
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NEW CUMBERLAND, PA 17070
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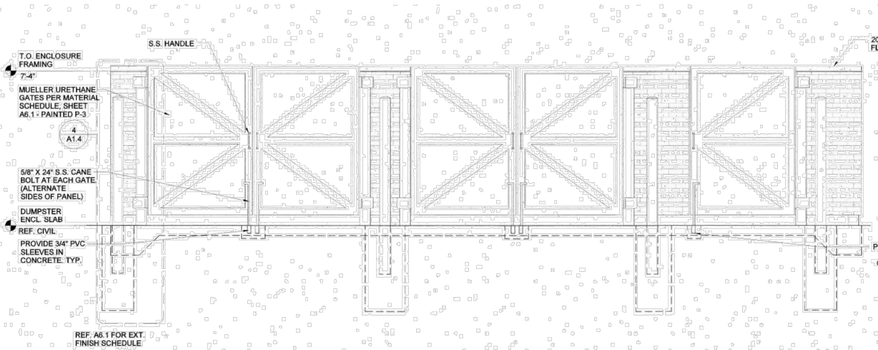
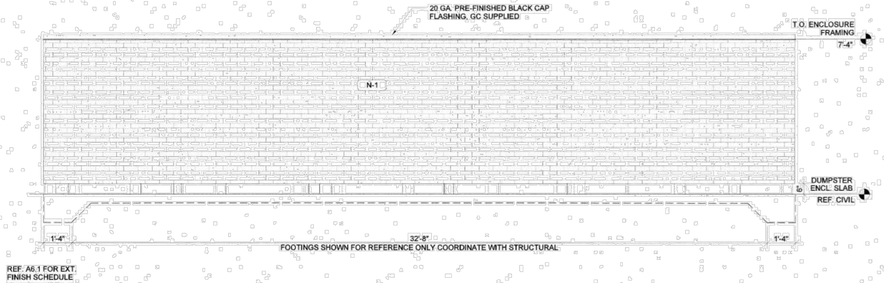
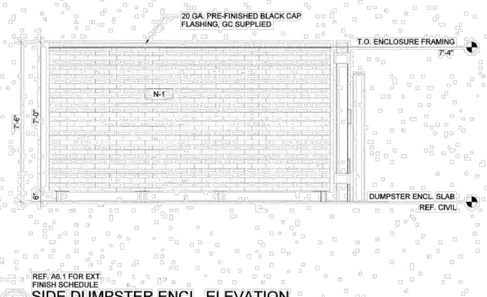
MISCELLANEOUS DETAILS
PRELIMINARY / FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN
FOR
151 GETTYSBURG PIKE
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA



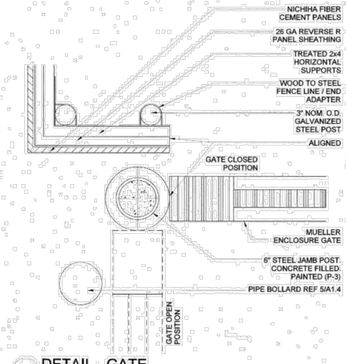
9 FRONT DUMPSTER ENCL. ELEVATION
3/8" = 1'-0"



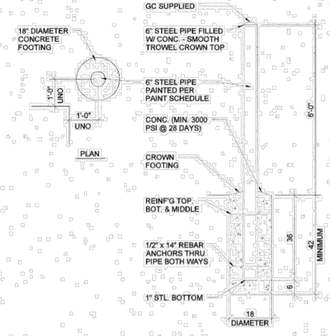
8 REAR DUMPSTER ENCL. ELEVATION
3/8" = 1'-0"



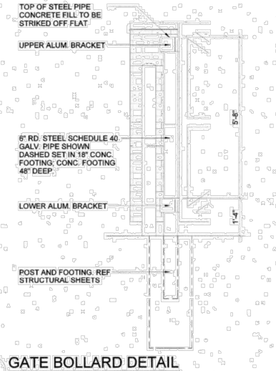
7 SIDE DUMPSTER ENCL. ELEVATION
3/8" = 1'-0"



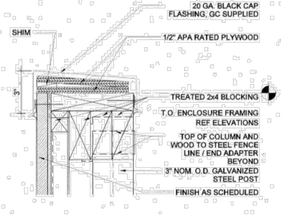
6 DETAIL - GATE
1 1/2" = 1'-0"



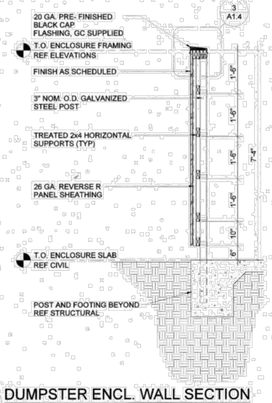
5 TYPICAL BOLLARD SECTION
1/2" = 1'-0"



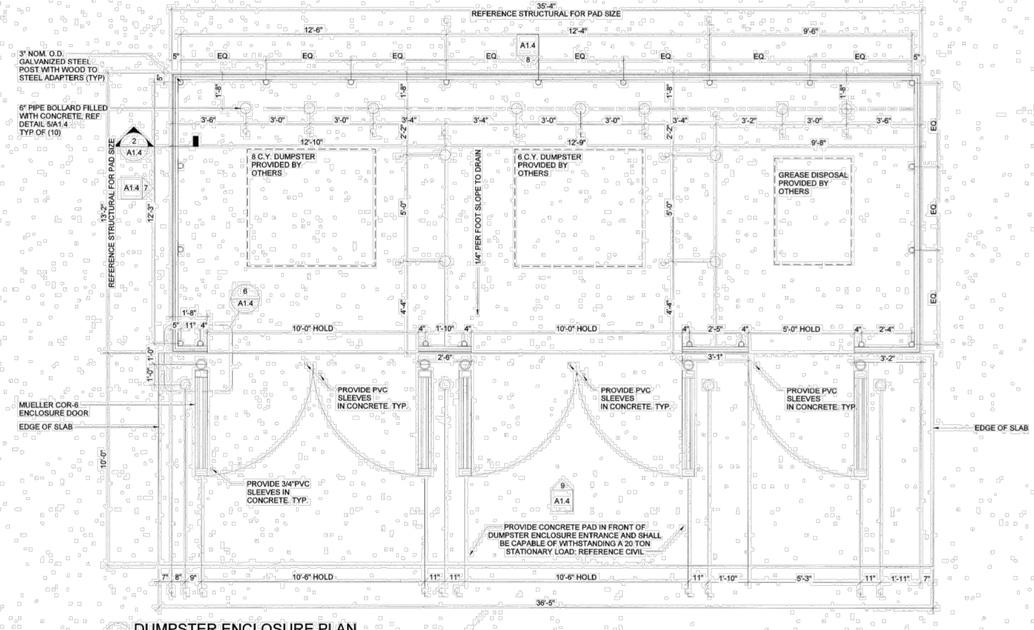
4 GATE BOLLARD DETAIL
1/2" = 1'-0"



3 DETAIL - COPING
3" = 1'-0"



2 DUMPSTER ENCL. WALL SECTION
1/2" = 1'-0"



1 DUMPSTER ENCLOSURE PLAN
3/8" = 1'-0"

PROJECT NO. 319590
SURVEY BOOK :
SCALE : AS NOTED
DWG : Y:\19\319590.apn\319590\Dwg\Plans\Prelim-Final\10-DETAILS.dwg
FILE :
SHEET 12 of 15

NO.	DATE	DESCRIPTION	BY
4	3/17/22	CONDITIONS OF APPROVAL	SRR
3	9/25/20	REVIEW COMMENTS	GDG
2	7/1/20	REVIEW COMMENTS	GDG
1			

DESIGN : T.C.S.
DRAWN : G.D.G.
CHECKED : J.K.M.
DATE : 6/1/2020
REV :

ALPHA
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ALPHA CONSULTING ENGINEERS, INC.

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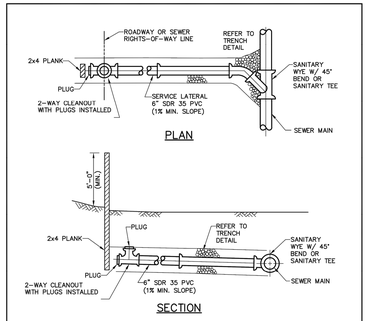


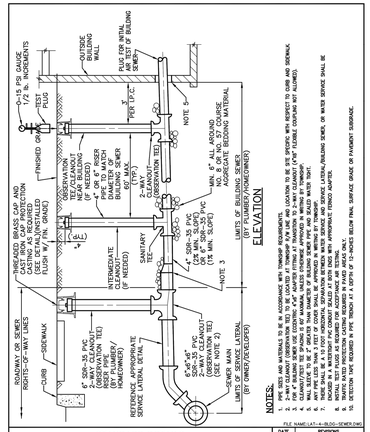
NOTES:

1. 2-WAY CLEANOUT NOT TO BE LOCATED IN SIDEWALK OR BENEATH OTHER CURB LINE UTILITIES.
2. THERE SHALL BE A 10 FOOT HORIZONTAL SEPARATION BETWEEN THE WATER SERVICE AND THE SERVICE LATERAL/BUILDING SEWER.
3. 2-WAY CLEANOUT TO BE LOCATED ON TOWNSHIP R/W LINE AND LOCATION TO BE SITE SPECIFIC WITH RESPECT TO CURB AND SIDEWALK.
4. WHERE 2-WAY CLEANOUT IS NOT REQUIRED, SERVICE CONNECTION SHALL BE EXTENDED TO THE RIGHTS-OF-WAY LINE AND PLUGGED.
5. DETECTION TAPE REQUIRED IN PIPE TRENCH AT A DEPTH OF NO MORE THAN 12-INCHES BELOW FINAL SURFACE GRADE OR PAVEMENT SUBGRADE.
6. 2-WAY CLEANOUTS MAY ALSO BE USED FOR TESTING AND OBSERVATION.

FILE NAME:LAT-1-SHALLOW.DWG

STANDARD DETAILS
SERVICE LATERAL – SHALLOW SEWER
UPPER ALLEN TOWNSHIP

DATE	REVISIONS
3/08	DWG. CREATED
12/13	DWG. UPDATED
1/17	DWG./NOTE REVISIONS
SCALE: NO SCALE	DWG. NO.: LAT-1



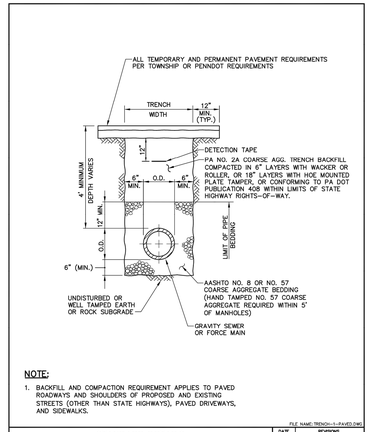
NOTES:

1. ALL MATERIALS TO BE IN ACCORDANCE WITH TOWNSHIP REQUIREMENTS.
2. 2-WAY CLEANOUT (OBSERVATION TEE) TO BE LOCATED AT TOWNSHIP R/W LINE AND LOCATION TO BE SITE SPECIFIC WITH RESPECT TO CURB AND SIDEWALK.
3. CLEANOUT(S) TO BE SPACED AT NO MORE THAN 100 FEET APART AND AT ANY POINT OF CHANGE IN DIRECTION GREATER THAN 45 DEGREES. ANY BUILDING SEWER, OR WATER SERVICE SHALL BE ENCASED IN A WATERTIGHT PVC CONDUIT SEALED AT BOTH ENDS WITH APPROPRIATE ITEMCO ADAPTER.
4. ALL CLEANOUTS SHALL BE INSTALLED WITH A WATERTIGHT PLUG AND CAP.
5. ROUTE ALL ROOF DRAINS, FOUNDATION DRAINS, AND SUMP PUMPS AWAY FROM BUILDING SEWER, OR WATER SERVICE SHALL BE ROUTED TO PAVED AREA OR PAVED SWALE.
6. DETECTION TAPE REQUIRED IN PIPE TRENCH AT A DEPTH OF 12-INCHES BELOW FINAL SURFACE GRADE OR PAVEMENT SUBGRADE.

FILE NAME:LAT-4-BLDG-SEWER.DWG

STANDARD DETAILS
BUILDING SEWER DETAIL
UPPER ALLEN TOWNSHIP

DATE	REVISIONS
3/08	DWG. CREATED
12/13	DWG. UPDATED
1/17	NOTE REVISIONS
SCALE: NO SCALE	DWG. NO.: LAT-4



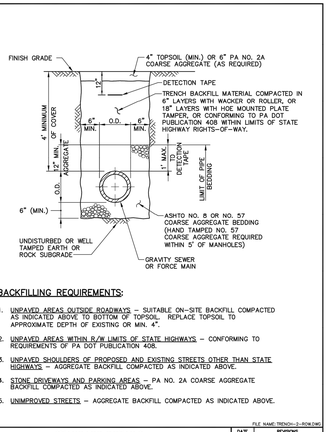
NOTE:

1. BACKFILL AND COMPACTION REQUIREMENT APPLIES TO PAVED ROADWAYS AND SHOULDERS OF PROPOSED AND EXISTING STREETS (OTHER THAN STATE HIGHWAYS), PAVED DRIVEWAYS, AND SIDEWALKS.

FILE NAME:TRENCH-1-PAVED.DWG

STANDARD DETAILS
TRENCH BACKFILL DETAIL IN PAVED AREAS
UPPER ALLEN TOWNSHIP

DATE	REVISIONS
3/08	DWG. CREATED
12/13	DWG. UPDATED
1/17	NOTE REVISIONS
SCALE: NO SCALE	DWG. NO.: TR-1



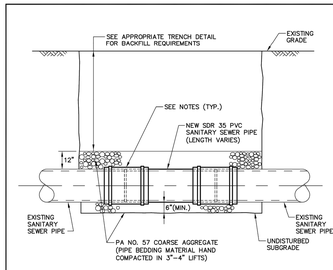
BACKFILLING REQUIREMENTS:

1. UNPAVED AREAS OUTSIDE ROADWAYS – SUITABLE ON-SITE BACKFILL COMPACTED AS INDICATED ABOVE TO BOTTOM OF TOPSOIL. REPLACE TOPSOIL TO APPROXIMATE DEPTH OF EXISTING OR MIN. 4".
2. UNPAVED AREAS WITHIN R/W LIMITS OF STATE HIGHWAYS – CONFORMING TO REQUIREMENTS OF PA DOT PUBLICATION 408.
3. UNPAVED SHOULDERS OF PROPOSED AND EXISTING STREETS OTHER THAN STATE HIGHWAYS – AGGREGATE BACKFILL COMPACTED AS INDICATED ABOVE.
4. STONE DRIVEWAYS AND PARKING AREAS – PA NO. 2A COARSE AGGREGATE BACKFILL COMPACTED AS INDICATED ABOVE.
5. UNIMPROVED STREETS – AGGREGATE BACKFILL COMPACTED AS INDICATED ABOVE.

FILE NAME:TRENCH-2-ROW.DWG

STANDARD DETAILS
TRENCH BACKFILL DETAIL IN UNPAVED AREAS
UPPER ALLEN TOWNSHIP

DATE	REVISIONS
3/08	DWG. CREATED
12/13	DWG. UPDATED
1/17	NOTE REVISIONS
SCALE: NO SCALE	DWG. NO.: TR-2



NOTES:

1. SLEEVES, ADAPTERS AND COUPLINGS.
   A. PVC TO PVC CONNECTION USE; GASKETED PVC REPAIR SLEEVE.
   B. PVC TO TCP/VCP CONNECTION; USE FERNCO STAINLESS STEEL ANTI-SHEAR COLLAR RUBBER ADAPTER, OR APPROVED EQUAL.
   C. PVC TO DIP/CIP CONNECTION; USE MECHANICAL JOINT COUPLING.
   D. PVC/DIP TO ACP CONNECTION; USE MECHANICAL JOINT COUPLING OR STAINLESS STEEL ANTI-SHEAR COLLAR RUBBER ADAPTER, AS APPROVED BY TOWNSHIP.
   E. DIP/CIP TO DIP/CIP CONNECTION; USE MECHANICAL JOINT COUPLING.
2. MECHANICAL JOINT COUPLINGS TO BE SMITH-BLAIR, DRESSER, OR APPROVED EQUAL.
3. RECONNECTIONS TO BE AIR TESTED IN ACCORDANCE WITH SPECIFICATIONS OR AS DIRECTED BY TOWNSHIP.

FILE NAME:SEWER-2-PIPE-RECONNECTION.DWG

STANDARD DETAILS
PIPE REPAIR/RECONNECTION DETAIL
UPPER ALLEN TOWNSHIP

DATE	REVISIONS
3/08	DWG. CREATED
12/13	DWG. UPDATED
1/17	NOTE REVISIONS
SCALE: NO SCALE	DWG. NO.: SEW-2

NOTES:

1. CASTING FRAME AND COVER SHALL BE HEAVY DUTY WITH "S" MARKING ON COVER. (EAST JORDAN IRON WORKS CATALOG No. 1565, OR APPROVED EQUAL.)

FILE NAME:LAT-8-CO-CAP.DWG

STANDARD DETAILS
CAP PROTECTION CASTING FOR CLEANOUT COVER IN VEHICULAR TRAFFIC AREAS
UPPER ALLEN TOWNSHIP

DATE	REVISIONS
3/08	DWG. CREATED
1/17	NOTE/TITLE REVISIONS
SCALE: NO SCALE	DWG. NO.: LAT-8

NOTES:

1. MINIMUM SIZE OF GREASE INTERCEPTOR PERMITTED IS 1,000 GALLONS.
2. GREASE INTERCEPTOR SIZE AND DESIGN SHALL COMPLY WITH SECTION 200-3.13, PARA. E, OF THE TOWNSHIP CODE.
3. ACCEPTABLE MANUFACTURERS: MONARCH PRODUCTS OR APPROVED EQUAL.
4. CONCRETE FOR SLOPE TO BE 3500 psi MIX DESIGN MEETING SECTION 2601 PART 3 PARAGRAPH E OF THE STANDARD SPECIFICATIONS.
5. COAT ALL INTERIOR CONCRETE SURFACES WITH 100% SOLIDS EPOXY RESIN SYSTEM.

FILE NAME:GR-1-GREASE-INT.DWG

STANDARD DETAILS
TYPICAL GREASE INTERCEPTOR AND SAMPLING VAULT
UPPER ALLEN TOWNSHIP

DATE	REVISIONS
11/08	DWG. CREATED
11/14	GENERAL REVISIONS
SCALE	DWG. NO.

MONARCH
MONARCH PRODUCTS COMPANY, INC.
YORK HAVEN, PA.

PRECAST CONCRETE 1500 GALLON COMMERCIAL GREASE INTERCEPTOR | GI-1500STD

STANDARD DETAILS
HEAVY DUTY MANHOLE SELF-SEALING COVER
UPPER ALLEN TOWNSHIP

FILE NAME:MH-1-HD-COVER.DWG

DATE	REVISIONS
3/08	DWG. CREATED
12/14	DWG. UPDATED
SCALE: NO SCALE	DWG. NO.: MH-1

SEAL

SEAL

SANITARY SEWER DETAILS
PRELIMINARY / FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN
FOR
151 GETTYSBURG PIKE
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

PROJECT NO. 319590
SURVEY BOOK :
SCALE : 1" = 30'
DWG Y:\19\319590.apn\319590R\
FILE : Dwg\Plans\Prelim-Final\10-DETAILS.dwg
SHEET 13 & 15

EROSION CONTROL PLAN GENERAL NOTES:

1. The site contractor shall be responsible for implementation of this Erosion Control Plan.

2. The site contractor shall not disturb more area than is necessary for the task to be done, so that potential for erosion is minimized.

3. Erosion and sedimentation controls must be constructed, stabilized, and functional before site disturbance within the tributary areas to the controls.

4. A copy of the approved Erosion and Sediment Control Plan / Drawings (stamped, signed and dated by the reviewing agency) must be available at the project site during at all times.

5. At least 7 days prior to starting any earth disturbance activities, or expanding into an area previously unmarked, the owner and/or operator shall invite all contractors involved in those activities, the landowner, appropriate municipal officials, the erosion control plan preparer, the post construction plan preparer, and a representative of the County Conservation District to an on-site pre-construction meeting.

6. At least 3 days before starting any earth disturbance activities, or expanding into an area previously unmarked, the Pennsylvania One Call system Incorporated shall be notified at 1-800-242-1776 for the location of existing underground utilities.

7. All earth disturbance activities shall proceed in accordance with the sequence provided on the plan drawings. Each stage shall be completed and immediately stabilized before any following stage is initiated. Clearing, grubbing, and topsoil stripping shall be limited only to those areas described in each stage. Deviation from that sequence must be approved in writing from the County Conservation District prior to implementation.

8. 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 Construction Sequence for that stage or phase have been installed and are functioning as described in this document.

9. 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 operation begin.

10. Topsoil stockpile heights shall not exceed 35 feet. Stockpile side slopes must be 2:1 or flatter.

11. Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate best management practices (BMPs) to minimize the potential for erosion and sediment pollution, and notify the Conservation District and/or the regional office of PA DEP.

12. Solids, trash and other pollutants shall be disposed in accordance with federal and state regulations in order to prevent any pollutant in such materials from adversely affecting the environment. All building materials and wastes must be removed from the site and recycled or disposed in accordance with the Department of Environmental Protection's Solid Waste Management regulations at 25 Pa. Code 260, 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.

13. All off-site waste and borrow areas must have an E & S Plan approved by the Conservation District or DEP, and fully implemented prior to being activated.

14. The contractor is responsible for ensuring that any material brought onto the 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.

15. All pumping of sediment laden water shall be through a sediment control BMP, such as a pumped water filter bag or equivalent sediment removal facility, over undisturbed vegetated areas.

16. Areas which are to be topsoiled shall be scarified to a minimum depth of 4 inches 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 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, conduits, etc. shall be compacted in accordance with local requirements or codes. All fills shall be placed in compacted layers not to exceed 9 inches in thickness. Fill materials shall be free of frozen particles, brush, roots, sod, or other foreign or objectionable materials that would interfere with or prevent construction of satisfactory fills. Frozen materials or soft, mucky, or highly compressible materials shall not be incorporated into fills. Fill shall not be placed on saturated or frozen surfaces.

18. Seeps or springs encountered during construction shall be handled in accordance with the standard and specification for subsurface drain or other approved method.

19. All graded areas shall be permanently stabilized immediately upon reaching finished grade. Cut slopes in competent bedrock and rock fills need not be vegetated.

20. 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.

21. 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.

22. All E & S BMPs must remain functional as such until all areas tributary to them are permanently stabilized or until they are replaced by another BMP approved by the Conservation District or PA DEP.

23. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and / or operator shall contact the Conservation District for an inspection prior to removal / conversion of the
E & S BMPs.

24. After final site stabilization has been achieved, temporary E & S BMPs must be removed or converted to permanent post construction stormwater management BMPs. Ares disturbed during removal or conversion of the BMPs must be stabilized immediately. In order to ensure rapid revegetation of disturbed areas, such removal / conversions should be done only during the germinating season.

25. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and / or operator shall contact the Conservation District to schedule a final inspection.

26. 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 Pennsylvania Department of Environmental Protection 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.

27. Only limited disturbance will be permitted to initially access and acquire borrow to construct control facilities, before general site alteration begins.

28. If fuel or other dangerous chemicals are stored on site, then a Preparedness, Prevention and Contingency (PPC) Plan must be developed and kept on site.

29. An erosion control blanket must be installed on all disturbed slopes steeper than 3:1, in all areas with concentrated flows as noted on the drawings.

30. Underground utilities cutting through any active channel shall be immediately backfilled and the channel restored to its original cross-section and protective lining. Any base flow within the channel shall be conveyed past the work in the manner described in this plan until such restoration is complete.

MAINTENANCE PLAN:

1. Until the site is stabilized, all erosion and sediment control BMPs must be maintained properly. Responsibility for implementing and maintaining erosion and sedimentation control measures shall be designated to a minimum of one individual who will be present at the project site each working day. Maintenance must include inspections of all erosion and sediment control BMPs after each runoff event and on a weekly basis, to ensure that they are in place, stable, and functioning properly. All preventative and remedial maintenance work, including clean out, repair, replacement, re-grading, reseeding, re-mulching, and re-netting must be performed immediately, to restore the control measure to the original design. If erosion and sediment control BMPs fail to perform as expected, replacement BMPs, or modifications of those installed, will be required.

2. 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.

3. Any sediment removed from BMPs during construction will be returned to upland areas within the project area, and incorporated into the site grading, or in the manner described on the plan drawings.

4. See the construction details and seeding specifications for maintenance procedures for the various control measures.

5. Mud must be removed from vehicle tires before they exit the site. 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.

STAGING OF EARTHMOVING ACTIVITIES

GENERAL NOTES--

A. At least 7 days before starting any earth disturbance activities, including clearing and grubbing, the owner and/or operator shall invite all contractors involved in those activities, the landowner, all appropriate municipal officials, the erosion control plan preparer, the licensed professional responsible for oversight of critical stages of implementation of the PCSM plan, and a representative of the County Conservation District to an on-site pre-construction meeting.

B. At least 3 days before starting any earth disturbance activities, all contractors involved in those activities shall notify the Pennsylvania One Call system Incorporated at 1-800-242-1776 (or 811) for the location of existing underground utilities.

C. All earth disturbance activities shall proceed in accordance with the following specific sequencing. Each stage shall be completed and immediately stabilized before any following stage is initiated. Clearing, grubbing and topsoil stripping shall be limited only to those areas described in each stage. any deviation from the following sequence must be approved in writing by the County Conservation District.

D. Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate best management practices to eliminate the potential for accelerated erosion and/or sediment pollution, and notify the County Conservation District.

E. Immediately after earth disturbance activities cease, the operator shall stabilize the disturbed areas. During non-germinating periods, mulch must be applied at the specified rates. Disturbed areas which are not at finished grade and which will be re-disturbed within 1 year must be stabilized in accordance with the temporary vegetative stabilization specifications. Disturbed areas which are not at final grade or which will not be re-disturbed within 1 year must be stabilized in accordance with the permanent vegetative stabilization specifications.

F. All pumping of sediment laden water shall be through a sediment control BMP, such as a pumped water filter bag or equivalent sediment removal facility, over undisturbed vegetated areas.

E&S GENERAL NOTES CON'T:

31. Fill Materials--
The NPDES Permit covers the "moving, depositing, stockpiling, or storing of soil rock or earth materials." If the site will need to have fill imported from an off site location, the responsibility for performing environmental due diligence and the determination of clean fill will in most cases reside with the Operator. If the site will have excess fill that will need to be exported to an off site location, the responsibility of clean fill determination and the environmental due diligence rests on the applicant. If all cut and fill materials will be used on the site, a clean fill determination is not required by the operator unless there is a belief that a spill or release of a regulated substance occurred on site. The contractor is responsible for ensuring that any material brought onto the site is Clean Fill. Any placement of clean fill that has been affected by a spill or release of a regulated substance must use form FP-001 to certify the origin of the fill material and the results of the analytical testing to qualify the material as clean fill. Form FP-001 must be retained by the owner of the property receiving the fill.

Applicants and/or operators must use environmental due diligence to ensure that the fill material associated with this project qualifies as Clean Fill. Definitions of Clean Fill and Environmental Due Diligence are provided below. All fill material must be used in accordance with the Department's policy "Management of Fill", document number 258-2182-773. A copy of this policy is available online at www.depweb.state.pa.us. Under the heading Quick Access on the left side of the screen, click on "Forms and Publications." On the left side of the screen click on "Technical Guidance Documents- Final." Then type the document number 258-2182-773 into the search window and conduct the search. Click on "Management of 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.)

Clean Fill affected by a spill or release of a regulated substance: Fill materials affected by a spill or release of a regulated substance still qualifies as clean fill provided the testing reveals that the fill material contains concentrations of regulated substances that are below the residential limits in Tables FP-1a and FP-1b found in the Department's policy "Management of Fill."

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.

32. The erosion and sediment pollution control plan and NPDES permit must be approved by the County Conservation District prior to any earthmoving activities on this site.

33. All channels must be kept free of obstructions such as fill ground, fallen leaves and woody debris, accumulated sediment, and construction wastes/materials. Channels should be kept mowed and/or free of all weedy, brushy or woody growth. Any underground utilities running across/through the channel(s) shall be immediately backfilled and the channel(s) repaired and stabilized per the channel cross-section detail.

34. Vegetated channels shall be constructed free of rocks, tree roots, stumps or other projections that will impede normal channel flow and/or prevent good lining to soil contact. The channel shall be initially over-excavated to allow for the placement of topsoil.

35. The permittee and co-permittee must ensure that visual site inspections are conducted weekly, and after each measurable precipitation event by qualified personnel, trained and experienced in erosion and sediment control, to ascertain that the Erosion and Sediment Control (E&S) BMPs are operational and effective in preventing pollution to the waters of the Commonwealth. A written report of each inspection shall be kept, and include:
1) a summary of the site conditions, E&S BMPs, and compliance; and
2) the date, time, and the name of the person conducting the inspection.

36. The contractor shall be responsible for the removal of any excess material and make sure the site(s) receiving the excess has an approved erosion and sediment control plan that meets the conditions of Chapter 102 and/or other State or Federal regulations.

TEMPORARY SEEDING SCHEDULE:

The contractor shall immediately temporarily stabilize any rough graded area, topsoil stockpile or unused excavated fill material that will be left idle for less than 1 year. The grass will provide interim protection against the impact of precipitation, running water and wind. Permanently seed any area that will be idle for more than 1 year.

Temporary seeding schedule is as follows:

Species:	annual rye grass
% Live Seed:	98%
Application rate:	10 lbs./1,000 sq. yds.
Fertilizer type:	general purpose granular, 10-20-20
Fertilizer application rate:	11 lbs./1,000 sq. yds.
Liming rate:	per soil test; minimum of 4 tons per acre.
Strawbale mulch rate:	1,200 lbs/1,000 sq. yds.
Seeding dates:	no seeding between 1 1/1 and 3/15
Mulch anchoring:	Asphalt, either emulsified or cut-back, containing no solvents or other diluting agents toxic to plan or animal life, uniformly applied at the rate of 31 gallons per 1,000 square yards. Synthetic binders (chemical binders) may be used per manufacturer's recommendation provided they are non-toxic to plant and animal species.

When seeding is not possible due to the time of year or other limitations, disturbed area shall be mulched with strawbales at the rate above. An erosion control blanket must be installed on all disturbed slopes steeper than 3:1, and all areas with concentrated flows. Matting can be North American Green 'S75' or approved equal.

Maintenance procedure:
1) Maintain a minimum 70% soil surface coverage with grass and/or mulch.
2) If a washout, slope failure or similar disturbance occurs, correct drainage problem if necessary, then reapply soil to the proper grade, reapply soil amendments, seed and mulch.

PERMANENT SEEDING SCHEDULE:

All disturbed soil not to be covered with impervious surfaces, riprap or landscaping mulch shall be permanently seeded to provide protection against the impact of precipitation, running water and wind. Permanent seeding schedule for the general project area is as follows:

FOR GENERAL LAWN PLANTING--
Species: 30% Kentucky bluegrass
40% Pennlawn Creeping Red Fescue
20% Norlea Perennial ryegrass
10% annual ryegrass

% Pure live seed:	98%
Application rate:	6 lbs./1,000 sq. ft.
Fertilizer type:	general purpose granular, 10-20-20
Fertilizer application rate:	11 lbs./1,000 sq. yds.
Liming rate:	per soil test; minimum of 6 tons per acre
Seeding dates:	between 4/1 and 10/15
Strawbale mulching rate:	3 tons per acre
Mulch anchoring:	Asphalt, either emulsified or cut-back, containing no solvents or other diluting agents toxic to plan or animal life, uniformly applied at the rate of 31 gallons per 1,000 square yards. Synthetic binders (chemical binders) may be used per manufacturer's recommendation provided they are non-toxic to plant and animal species.

RAIN GARDEN SEEDING SCHEDULE:

Species: 100% Tall Fescue, varieties such as K-31, Altra or other recently released dwarf variety tolerant of wetness.

% Pure live seed:	98%
Application rate:	6 lbs./1,000 sq. ft.
Fertilizer type:	general purpose granular, 10-20-20
Fertilizer application rate:	11 lbs./1,000 sq. yds.
Liming rate:	per soil test; minimum of 6 tons per acre
Seeding dates:	between 4/1 and 10/15
Strawbale mulching rate:	3 tons per acre
Mulch anchoring:	Asphalt, either emulsified or cut-back, containing no solvents or other diluting agents toxic to plan or animal life, uniformly applied at the rate of 31 gallons per 1,000 square yards. Synthetic binders (chemical binders) may be used per manufacturer's recommendation provided they are non-toxic to plant and animal species.

SPECIFIC STAGING OF EARTHMOVING ACTIVITIES--

GENERAL NOTES FOR ALL WORK--

A. At least 7 days before starting any earth disturbance activities, including clearing and grubbing, the owner and/or operator shall invite all contractors involved in those activities, the landowner, all appropriate municipal officials, the erosion control plan preparer, the licensed professional responsible for oversight of critical stages of implementation of the PCSM plan, and a representative of the County Conservation District to an on-site pre-construction meeting.

B. At least 3 days before starting any earth disturbance activities, all contractors involved in those activities shall notify the Pennsylvania One Call system Incorporated at 1-800-242-1776 (or 811) for the location of existing underground utilities.

C. All earth disturbance activities shall proceed in accordance with the following specific sequencing. Each stage shall be completed and immediately stabilized before any following stage is initiated. Clearing, grubbing, and topsoil stripping shall be limited only to those areas described in each stage. any deviation from the following sequence must be approved in writing by the County Conservation District.

D. Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate best management practices to eliminate the potential for accelerated erosion and/or sediment pollution, and notify the County Conservation District.

E. Immediately after earth disturbance activities cease, the operator shall stabilize the disturbed areas. During non-germinating periods, mulch must be applied at the specified rates. Disturbed areas which are not at finished grade and which will be re-disturbed within 1 year must be stabilized in accordance with the temporary vegetative stabilization specifications. Disturbed areas which are not at final grade or which will not be re-disturbed within 1 year must be stabilized in accordance with the permanent vegetative stabilization specifications.

F. All pumping of sediment laden water shall be through a sediment control BMP, such as a pumped water filter bag or equivalent sediment removal facility, over undisturbed vegetated areas.

PRIOR TO CONSTRUCTION:

A. Abandon any existing well(s) at old farmhouse. All well closures and abandonment shall conform to water well abandonment guidelines as published in chapter 7 of the PA DEP publication "Ground Water Monitoring Guidance Manual".

B. At least 7 days before starting any earth disturbance activities, the operator shall invite all contractors involved in those activities, the land owner, all appropriate municipal officials, the erosion control plan preparer, and a representative of the Cumberland County Conservation District to an on-site pre-construction meeting. Also, at least 3 days before starting any earth disturbance activities, all contractors involved in those activities shall notify the PA One Call System, Inc. At 1-800-242-1776 for buried utilities location.

SPECIFIC STAGES OF CONSTRUCTION:

1. Install stabilized construction entrance #1. Clearly mark the limits of earth disturbance. Install all protection fence at the wetland as shown on the drawings. Install silt socks #1 and 3.

2. Raze existing all existing buildings, only disturbing the minimum amount of ground necessary. Remove existing pavement. All building waste material must be removed from the site and recycled or disposed of in accordance with the department's solid waste management regulations and 25 pa. Code 260.1 et seq., 271.1., and 287.1 et seq. Remove pole lines associated with the razed buildings, in coordination with the utility company(s).

3. In one continuous short-term operation when precipitation is not forecasted, strip topsoil as necessary and install storm pipe system E3 to E; connect existing cross pipe at E2. This pipe system conveys off-site clean runoff around the project area. With this work remove existing storm pipes within the site. Install inlet protection on E2 and E1 as soon as the inlets are placed. Install riprap with the pipe outlet placement. Install silt sock #2 curled around the opening at pipe end E3. Once the outlet E is in place with riprap, silt sock #1 can be broken and curled around the riprap and endwall so it is out of concentrated flow.

4. Install storm pipe F1 to F, and grade the minor swale from it to pipe endl E3. Immediately permanently seed the area, and install matting where shown; silt sock must be continuously maintained. This work will interceptor clean runoff from the street and direct it around the site. Install the spring box and outlet pipe and cover with shale cut material to protect the pipe and box.

5. With shale subgrade cut material from the western portion of the site, create and compact a berm along the east side of the site that is the base of the permanent fill area for the project. A portion of this is the berm for storm basins #1 and 2.

6. Install storm pipes A1 to, and B1 to B, with riprap apron at the end. Temporarily block the outlet orifices in the boxes from discharging runoff until the sediment trap is in place per the next stage. Compact backfill in the pipe trenches, place topsoil on the top and outside of the berms and permanently seed and mat, as these areas will not be disturbed again. Basin emergency spillways should be installed and permanently stabilized with this stage.

7. Install sediment traps #A and B, including cleanout marker, temporary stone outlet embankment berm encircling the orifices at structures A1 and B1, and retaining wall #4. Once the outlet berm is in place the orifices can be unplugged. Trap grading should conform to the final surface basin grade except where superseded by the red temporary contours shown. Temporary seed a trap as soon as it is graded.

8. Strip topsoil within the site and stockpile where shown; temporary seed / mulch the pile when all is stripped.

9. Rough grade the site. As soon as steep cuts at the south and east ends of the site are established, install retaining walls #1, 2 and 3, and create swale #1, then replace topsoil and permanently seed and mat immediately as these areas will not be disturbed again. Place gravel subgrade in areas to be paved, in order to protect soil and maintain a less muddy project area.

10. Construct the buildings, and install utility laterals from Gettysburg Pike. Pave trench cuts as soon as all work is finished in the public street. All disturbed soil for the off-site utility work must be permanently seeded / paved as soon as the utility is installed, as the area will not be disturbed again. Should any water accumulate in any trench in the depth that can be pumped then use the facility for pumped water as detailed on the drawings. Install storm pipe D1 to D, G1 to G, H1 to H, placing riprap immediately at the outlet. Roof drains from the buildings can be installed so they discharge into the traps.

**11. In a short-term continuous operation, install the entire underground stormwater facility, but block the inlet grates and pipe ends #J, J4 and J6 from receiving any water yet (or leave the inlet tops above grade for now). Should any water accumulate in any trench/ excavation to a depth that can be pumped, then use the facility for pumped water as detailed on the drawings. Installation of the stormwater facility shall be considered a critical stage of construction, for which a licensed professional or their designee must be present during construction. At the end of this stage rough grade the drive-thru lane around the restaurant and install pipe C1 to C with riprap at the pipe end; this work fills in much of sediment trap #B.

12. Install the internal curbing for driveways and parking areas, placing gravel subbase of paving as soon as possible (to cover soil). Install dumpster area / enclosure. Continuously maintain inlet protection on J1, J2, J3 and J5 and the blocked pipe ends J, J4 and J6.

13. Install walks. Replace topsoil, then permanently seed or landscape / mulch as appropriate; install matting on slopes greater than 3:1. Stabilize areas as soon as practical to minimize prolonged soil exposure. Pave parking lot and drives.

**14. After the site is permanently stabilized, in a short-term operation, install rain gardens #A, B, C and D, including the special soil mix (and underdrain where applicable), and immediately stabilize with plantings and mulch. Perform final grading in the basins / rain gardens. Permanently seed / plant a rain garden as soon as it is graded. Install P300 matting in areas of concentrated flow immediately. A sediment trap shall remain until the contributing watershed to it is permanently stabilized before installing the rain garden. Unblock pipe ends #J, J4 and J6 when the contributing watershed is entirely permanently stabilized. Removal / conversion to permanent stormwater basin configuration specifics staging:
1) Request a site inspection and approval by the Conservation District prior to removal or conversion of the trap.
2) Convert during the growing season, preferably when dry and no precipitation is anticipated for a few days.
3) If necessary, flush sediment from contributing storm pipe system before basin conversion.
4) If necessary, de-water the trap using the facility detailed on the drawings. Remove the cleanout marker and baffle (if applicable). Remove any sediment and incorporate into the landscaping.
5) Install the defining low berm of the rain garden across the basin and perform final basin grading, place topsoil and permanently seed and mat immediately. Permanently seed and mat any disturbed soil remaining.
6) Remove the temporary rock filter that was the sediment trap outlet. Install a 12" silt sock in a semi-circle around the orifice outlet, to remain until the trap seeding attains permanent stabilization.

Note: All excavation and hauling at the time of final finish grading in the rain garden or basin bottom shall utilize rubber-wheeled equipment to prevent and/or minimize soil compaction. No tracked vehicles shall be permitted. Installation of a rain garden shall be considered a critical stage of construction, for which a licensed professional or their designee must be present during installation of the amended soils on the bottoms.

Temporary control measures can be removed when the watershed draining to the measure is permanently stabilized, meaning a minimum uniform 70% perennial vegetative cover or other permanent non-vegetative cover with a density capable to resist accelerated surface erosion, and subsurface characteristics sufficient to resist sliding and other movements. The location of the control measure must be immediately permanently stabilized upon its removal. Upon completion of all earth disturbance activities, and permanent stabilization of all disturbed areas, the owner and/or operators shall contact the County Conservation District for an inspection prior to the removal / conversion of the E&S BMPs. Silt socks can be removed, or #1 can be allowed to rot in place. Silt sock #2 must be removed. Remove all inlet protection.

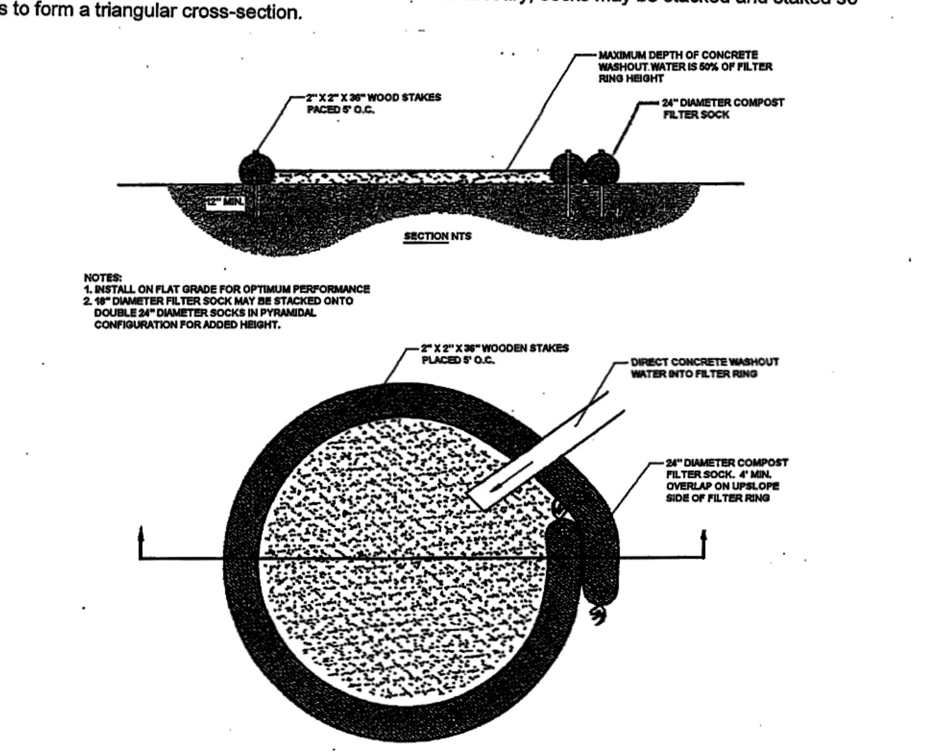
** Stages #11 and 14 shall be considered a 'critical stage of construction' during which a licensed engineer of their designee must be present.

CONCRETE WASHOUT - For any project on which concrete will be poured or otherwise formed on site, a suitable washout facility must be provided for the cleaning of chutes, mixers, and hoppers of the delivery vehicles unless such a facility will be used at the source of the concrete. Under no circumstances may wash water from these vehicles be allowed to enter any surface waters. Make sure that proper signage is provided to drivers so that they are aware of the presence of washout facilities.

Washout facilities should not be placed within 50 feet of storm drains, open ditches or surface waters. They should be in a convenient location for the trucks, preferably near the place where the concrete is being poured, but far enough from other vehicular traffic to minimize the potential for accidental damage or spills. Wherever possible, they should be located on slopes not exceeding a 2% grade. Additional information on washouts may be obtained from EPA's stormwater website at: http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=browse&Rbutton=detail&bmp=117&minmeasure=4.

Compost Sock Washout

Wherever compost sock washouts are used, a suitable impervious geomembrane should be placed at the location of the washout. Compost socks should be staked in the manner recommended by the manufacturer around perimeter of the geomembrane so as to form a ring with the ends of the sock located at the upslope corner (Figure 3.18). Care should be taken to ensure continuous contact of the sock with the geomembrane at all locations. Where necessary, socks may be stacked and staked so as to form a triangular cross-section.



A suitable impervious geomembrane shall be placed at the location of the washout prior to installing the socks.

FIGURE 3.18
Typical Compost Sock Washout Installation

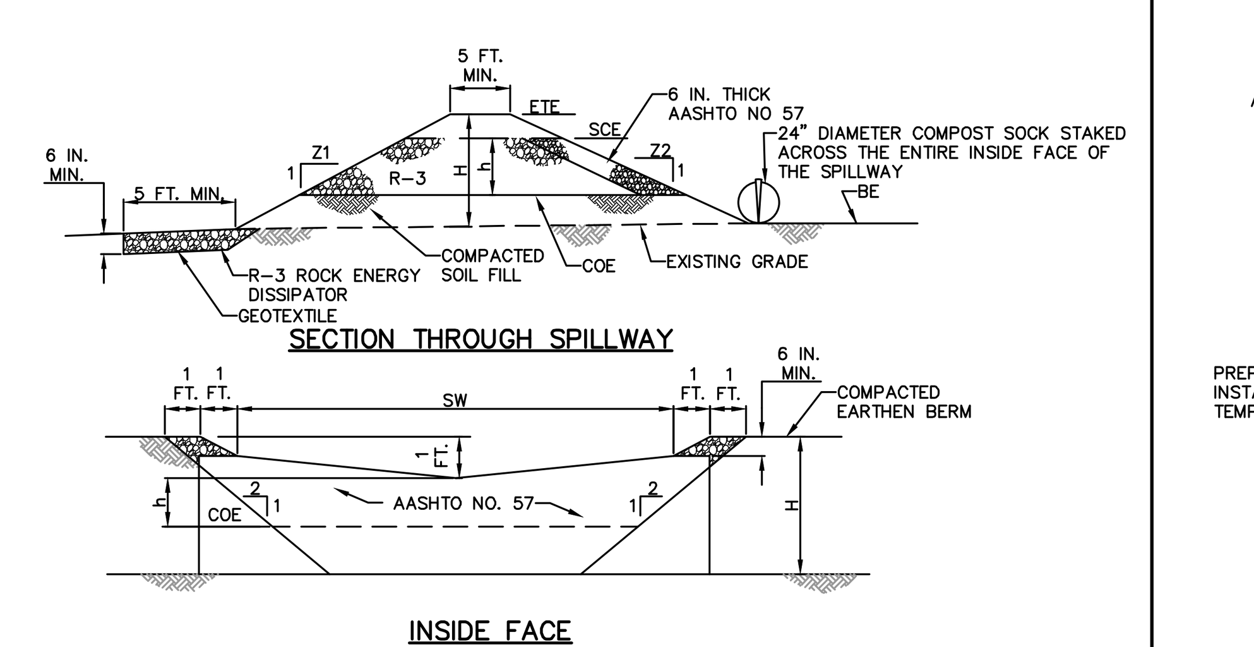
Maintenance

All concrete washout facilities should be inspected daily. Damaged or leaking washouts should be deactivated and repaired or replaced immediately.

Accumulated materials should be removed when they reach 75% capacity.

Plastic liners should be replaced with each cleaning of the washout facility.

CONCRETE WASHOUT DETAIL
NTS



TRAP NO.	Z1 (FT)	Z2 (FT)	H (FT)	h (FT)	EMBANK. TOP ELEV. ETE (FT)	SPILLWAY CREST ELEV. SCE (FT)	CLEAN OUT ELEV. COE (FT)	BOTTOM ELEV. BE (FT)	SPILLWAY WIDTH SW (FT)
A	2	2	5.0	3.0	564.0	562.0	560.45	559.0	46.0
B	2	2	4.0	3.0	564.0	562.0	561.0	560.0	16.0

NOTES:

EMBANKMENT OUTLET SHALL BE COMPOSED ENTIRELY OF ROCK ABOVE CLEAN OUT ELEVATION (COE); MAIN BODY R-3 OR LARGER -- R-4 TO BE USED FOR DRAINAGE AREAS GREATER THAN 3.0 ACRES, INSIDE FACE AASHTO # 57 STONE OR SMALLER. A 6 IN. THICK LAYER OF COMPOST, COMPOST SOCK, OR CLEAN SAND SHALL BE INSTALLED ON TOP OF THE AASHTO #57 STONE AND SECURELY ANCHORED IN HQ WATERSHEDS. 24 IN. DIAMETER COMPOST SOCK(S) SHALL BE USED IN PLACE OF FILTER FABRIC AND AASHTO #57 STONE IN EV WATERSHEDS.

FILL MATERIAL FOR THE EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN LAYERED LIFTS OF NOT MORE THAN 9 IN.. THE MAXIMUM ROCK SIZE SHALL BE NO GREATER THAN 6 IN. UPON COMPLETION, THE EMBANKMENT SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED ACCORDING TO THE SPECIFICATIONS OF THE E&S PLAN DRAWINGS.

ALL SEDIMENT TRAPS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT.

ACCESS FOR SEDIMENT REMOVAL AND OTHER REQUIRED MAINTENANCE ACTIVITIES SHALL BE PROVIDED.

A CLEAN OUT STAKE SHALL BE PLACED NEAR THE CENTER OF EACH TRAP. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED THE CLEAN OUT ELEVATION ON THE STAKE AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS. DISPOSE OF MATERIALS REMOVED FROM THE TRAP IN THE MANNER DESCRIBED IN THE E&S PLAN.

CHECK EMBANKMENTS, SPILLWAYS, AND OUTLETS FOR EROSION, PIPING AND SETTLEMENT. CLOGGED OR DAMAGED SPILLWAYS AND/OR EMBANKMENTS SHALL BE IMMEDIATELY RESTORED TO THE DESIGN SPECIFICATIONS.

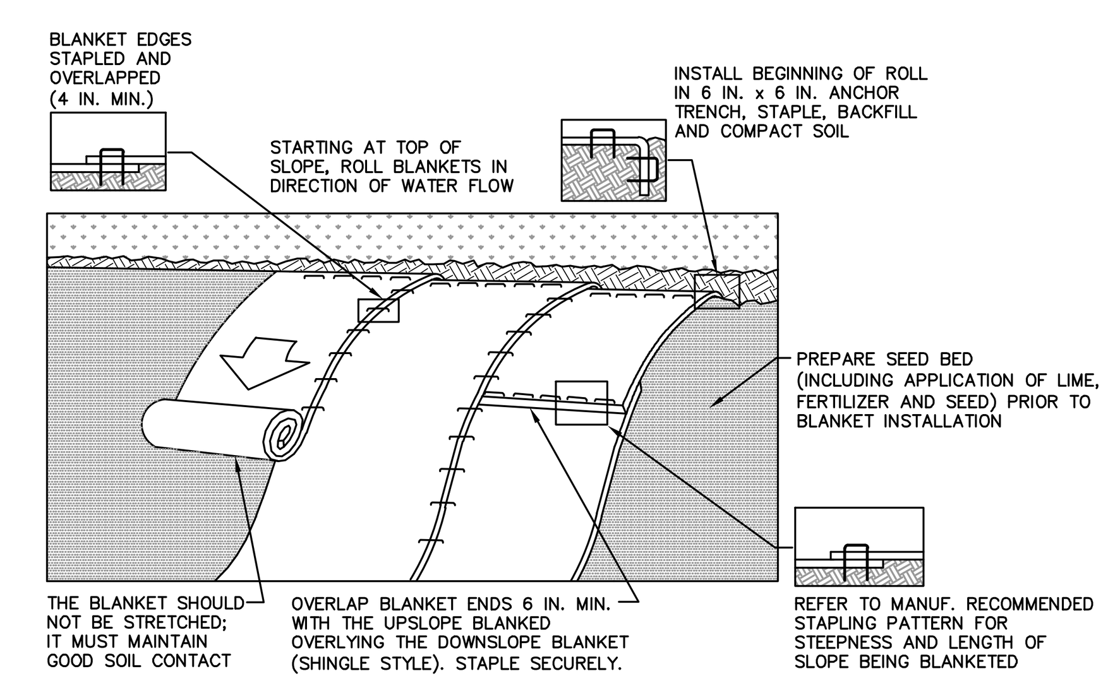
DISPLACED RIPRAP WITHIN THE SPILLWAY OR OUTLET PROTECTION SHALL BE REPLACED IMMEDIATELY.

ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISTURBED AREAS INSIDE THE TRAP SHALL BE STABILIZED BEFORE CONVERSION TO A STORMWATER MANAGEMENT FACILITY. TO ASSIST IN REMOVING SEDIMENT, WHICH MAY BE SATURATED, A DEVICE SUCH AS IS SHOWN IN STANDARD CONSTRUCTION DETAIL #7-18 MAY BE USED TO DEWATER THE SEDIMENT PRIOR TO ITS REMOVAL.

STANDARD CONSTRUCTION DETAIL #8-1
EMBANKMENT SEDIMENT TRAP (ADAPTED FOR ABACT)
NOT TO SCALE

NO.	DATE	DESCRIPTION	BY
3	3/17/22	CONDITIONS OF APPROVAL	SRR
2	9/25/20	REVIEW COMMENTS	GDG
1	7/1/20	REVIEW COMMENTS	GDG

DESIGN : T.C.S.
DRAWN : G.D.G.
CHECKED : J.K.M.
DATE : 6/1/2020
REV :



NOTES:

SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.

PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF SLOPE.

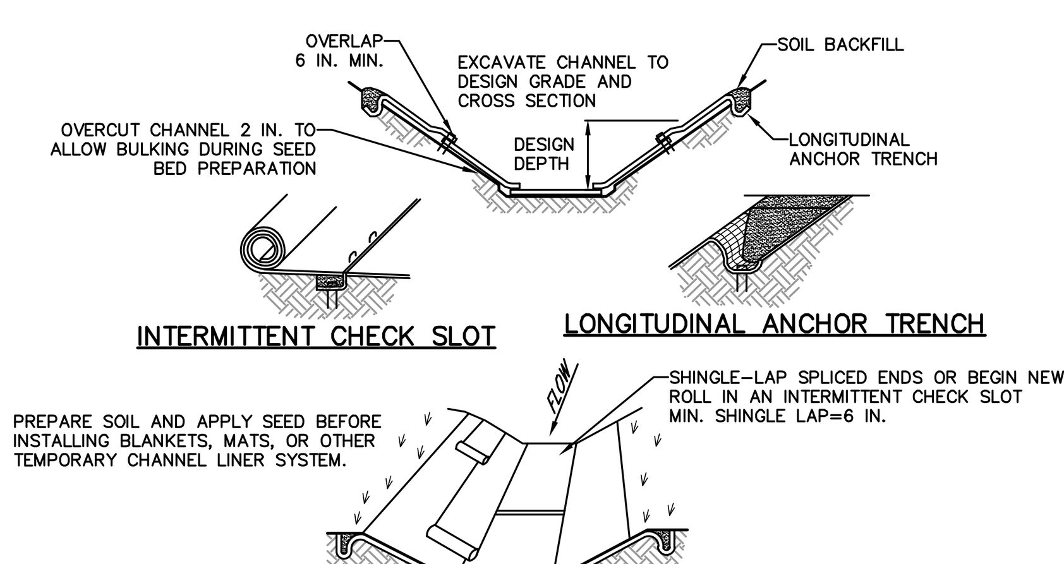
SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.

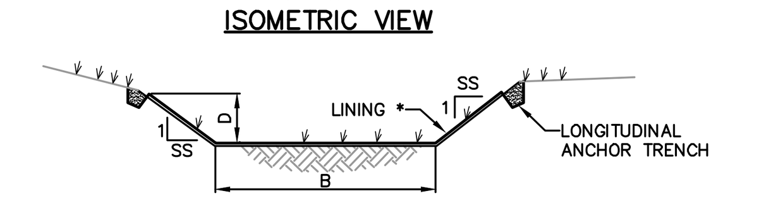
BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

STANDARD CONSTRUCTION DETAIL #11-1
EROSION CONTROL BLANKET INSTALLATION
NTS





CHANNEL CROSS-SECTION

* SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION

CHANNEL NO.	CHANNEL SLOPE	SS	B (FT)	D (MIN.) (FT)	LINING
1	1.00%	2	2.0	1.20	ERONET S75 MAT

1. All Channels Must Be Kept Free Of Obstruction Such As Fill Ground, Fallen Leaves And Woody Debris, Accumulated Sediment, And Construction Materials / Wastes. Channels Should Be Kept Mowed And/or Free Of All Weedy, Brushy Or Woody Growth (unless Part Of The Landscape Plan). Any Underground Utilities Running Across / Through The Channel(s) Shall Be Immediately Backfilled And The Channel(s) Repaired And Stabilized Per The Channel Cross-section Detail.
2. Vegetated Channels Shall Be Constructed Free Of Rocks, Tree Roots, Stumps Or Other Projections That Will Impede Normal Channel Flow And/or Prevent Good Lining To Soil Contact. The Channel Shall Be Initially Over-excavated Minimum Of 6" To Allow For Placement Of Topsoil.
3. Channels Must Be Stabilized With Indicated Lining Immediately Upon Construction.
4. Channel Maintenance: Channels Must Be Maintained To Ensure That The Specified Design Dimensions And Stabilization Are Available At All Times.
5. Anchor Trenches Shall Be Installed At Beginning And End Of Channel In The Same Manner As Longitudinal Anchor Trenches.
6. Channel Dimensions Shall Be Constantly Maintained. Channel Shall Be Cleaned Whenever Total Channel Depth Is Reduced By 25% At Any Location. Sediment Deposits Shall Be Removed Within 24 Hours Of Discovery Or As Soon As Soil Conditions Permit Access To Channel Without Further Damage. Damaged Lining Shall Be Repaired Or Replaced Within 48 Hours Of Discovery.
7. No More Than One Third Of The Shoot (grass Leaf) Shall Be Removed In Any Mowing. Grass Height Shall Be Maintained Between 2 And 3 Inches Unless Otherwise Specified. Excess Vegetation Shall Be Removed From Permanent Channels To Ensure Sufficient Channel Capacity.

STANDARD CONSTRUCTION DETAIL #6-1
VEGETATED CHANNEL
NTS

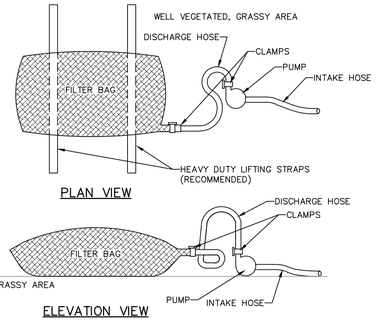
PLANNING • ENGINEERING • SURVEYING
115 LIMEKILN RD, P.O. BOX 'G'
NEW CUMBERLAND, PA 17070
PHONE: 717) 770 - 2500
FAX: (717) 770 - 2400
WWW.ALPHACEI.COM
ALPHA CONSULTING ENGINEERS, INC.

SEAL

SEAL

EROSION CONTROL NOTES AND DETAILS
PRELIMINARY / FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN
FOR
151 GETTYSBURG PIKE
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

PROJECT NO. 319590
SURVEY BOOK :
SCALE : AS NOTED
DWG FILE: Y:\19\319590.aph\3195908\Dwg\Plans\Prelim-Final\10-DETAILS.dwg



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

A 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.

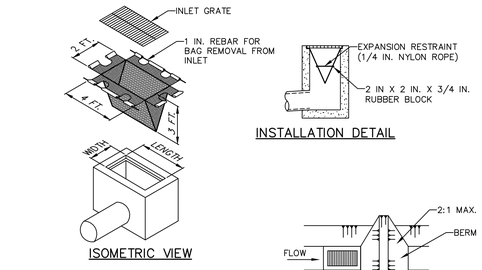
NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

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.

PUMPED WATER FILTER BAG
NTS



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

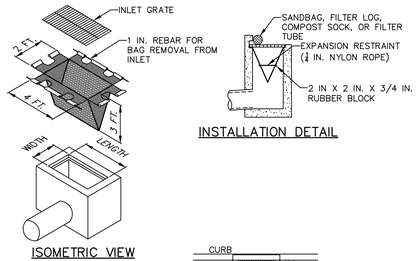
ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.

AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

FILTER BAG INLET PROTECTION (CHANNEL OR ROADSIDE SWALE)
NTS



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

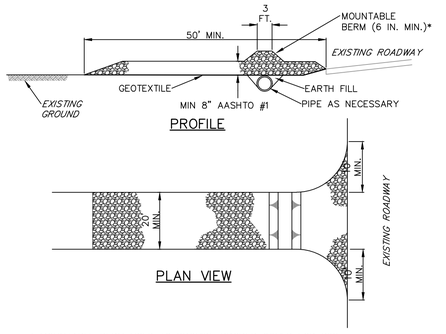
INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

FILTER BAG INLET PROTECTION (CURBED ROADWAY)
NTS



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

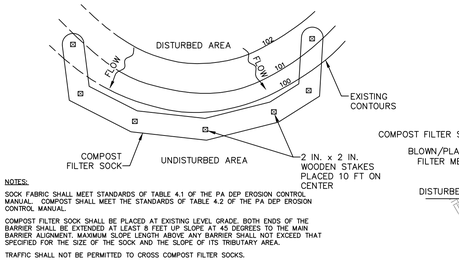
REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STABILIZED ROCK CONSTRUCTION ENTRANCE
NTS



NOTES:

SOCK FABRIC SHALL MEET STANDARDS OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.

COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

COMPOST FILTER 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.

BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS. PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

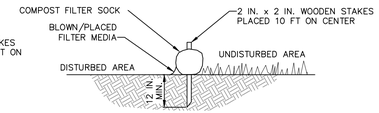
UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

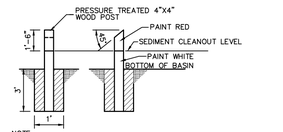
WHERE SOCK CROSSES PAVEMENT, ANCHOR SOCK IN PLACE WITH A FILLED SANDBAG BUTTED ON EACH SIDE OF THE SOCK, EVERY 30 FEET OF SOCK.

THE PHYSICAL PARAMETERS OF THE COMPOST SHOULD COMPLY WITH THE STANDARDS IN TABLE 4.2. THE STANDARDS CONTAINED IN THE PENNDOT PUBLICATION 408 ARE AN ACCEPTABLE ALTERNATIVE.

ORGANIC MATTER CONTENT	80% - 100% (dry weight basis)
ORGANIC PORTION	FIBROUS AND ELONGATED
pH	5.5 - 8.0
MOISTURE CONTENT	35% - 55%
PARTICLE SIZE	98% PASS THROUGH 1" SCREEN
SOLUBLE SALT CONCENTRATION	5.0 dS/m (mmhos/cm) MAXIMUM

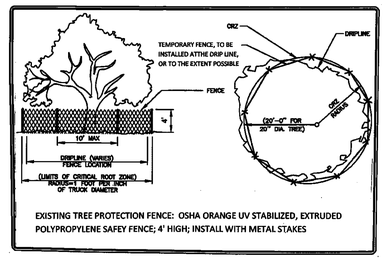
SILT SOCK DETAIL
NTS





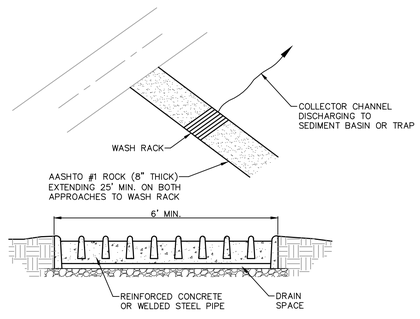
NOTE:
IF SEDIMENT REACHES CLEANOUT LEVEL, REMOVE SEDIMENT AND PLACE ON TOPSOIL STOCKPILE. RESTORE BASIN TO ORGINAL DIMENSIONS.

SEDIMENT CLEANOUT STAKE DETAIL
NTS



TEMPORARY INFILTRATION AREA PROTECTION FENCING
NTS

FENCING NOTES:
1. Fencing shall be installed prior to the commencement of earthmoving within the given phase.
2. Fencing shall remain until the phase construction is permanently stabilized.
3. Any damaged fence shall be repaired immediately.
4. Any earth disturbance within the fence necessary for final seeding or minor shaping shall be minimized, and shall be done by rubber-tired vehicles only.
5. See grading or landscaping plan for fencing locations.



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.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. DRAIN SPACE UNDER WASH RACK SHALL BE KEPT OPEN AT ALL TIMES. DAMAGE TO THE WASH RACK SHALL BE REPAIRED PRIOR TO FURTHER USE OF THE RACK. ALL SEDIMENT DEPOSITED ON ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

STANDARD CONSTRUCTION DETAIL #3-2
ROCK CONSTRUCTION ACCESS WITH WASH RACK
NOT TO SCALE

NO.	DATE	DESCRIPTION	BY
3	3/17/22	CONDITIONS OF APPROVAL	SRR
2	9/25/20	REVIEW COMMENTS	GDG
1	7/1/20	REVIEW COMMENTS	GDG

DESIGN : T.C.S.
DRAWN : G.D.G.
CHECKED : J.K.M.
DATE : 6/1/2020
REV :

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SEAL

SEAL

EROSION CONTROL DETAILS
PRELIMINARY / FINAL SUBDIVISION AND LAND DEVELOPMENT PLAN
FOR
151 GETTYSBURG PIKE
UPPER ALLEN TOWNSHIP, CUMBERLAND COUNTY, PENNSYLVANIA

PROJECT NO. 319590
SURVEY BOOK :
SCALE : AS NOTED
DWG \Y-\19\319590.apn\319590\Dwg\Plans\Prelim-Final\19-DETAILS.dwg
FILE :
SHEET 15 & 15