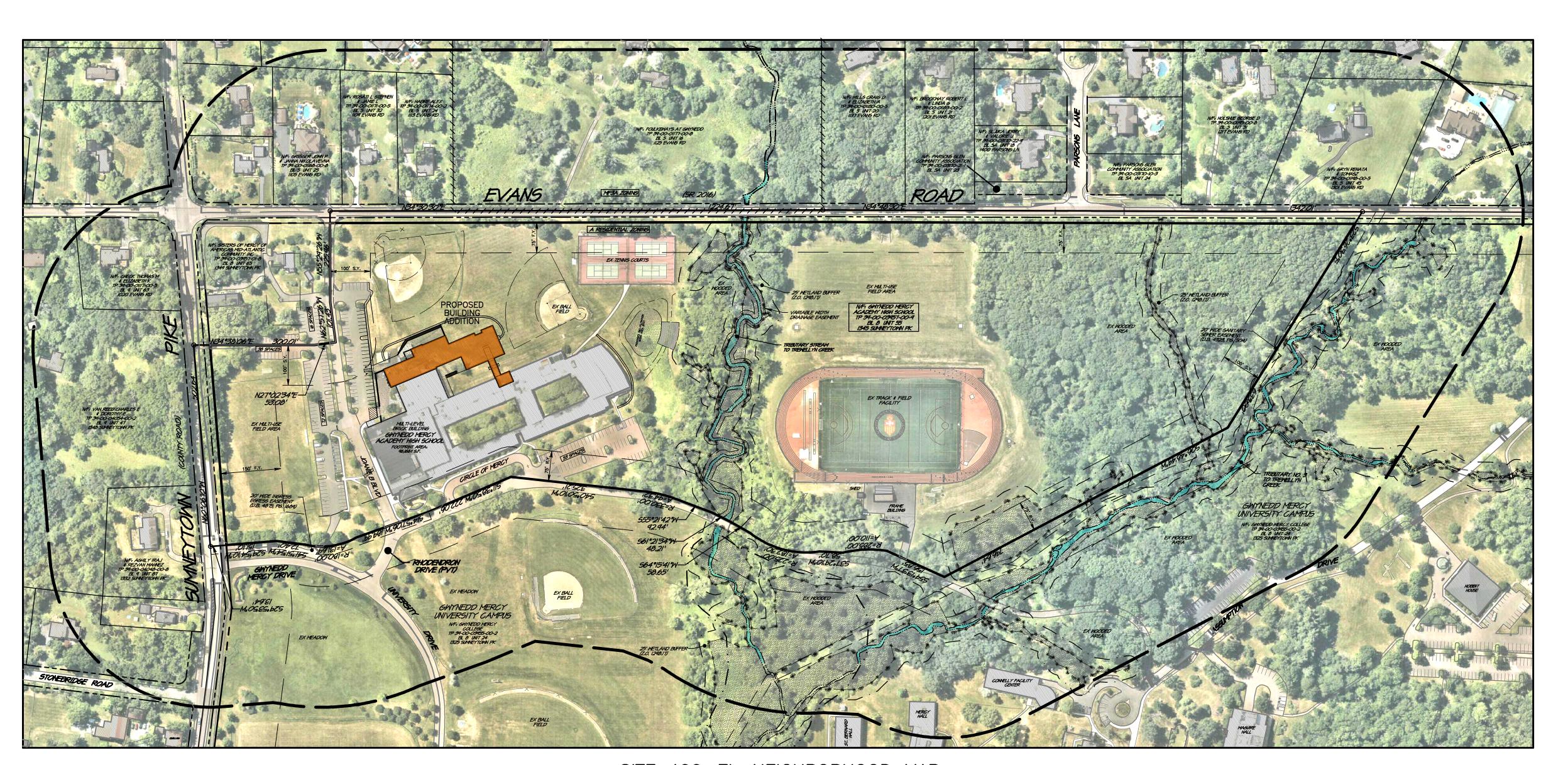
GWYNEDD MERCY ACADEMY HIGH SCHOOL

Preliminary / Final LAND DEVELOPMENT SCHOOL BUILDING EXPANSION

TPN 39-00-03957-00-9 Block 8 Unit 55

1345 Sumneytown Pike Lower Gwynedd Township - Montgomery County - Pennsylvania



* Plan sheets 1, 2 and 15 to be recorded with the Montgomery County Recorder of Deeds.

Plan Sheets 1 through 20 of 20 (Inclusive), on record with Lower Gwynedd Township, shall be considered a part of the approved Final Plan as if recorded with same.

This Application is for the construction of a Building

SITE 400-Ft. NEIGHBORHOOD MAP Aerial Imagery provided by Nearmap, Inc. — Flight date JULY 4, 2022

ZONING and SITE DATA SCHEDULE

ZONING and SITE DATA SCHEDULE								
	Zoning District: A — Re							
Item:	Section:	Requirement:	PROPOSED Site:					
Permitted Use	1257.02.(b)	EDUCATIONAL USE [1]	EDUCATIONAL USE					
Min Lot Area	1257.02.(b)	20 Acres [1]	42.0839 Acres					
Min Lot Width	1257.03(b)	200 Ft.	>200 Ft.					
Front Yard	1257.04(a)	75 Ft.	366.1 Ft. / 256.2 Ft.					
Side Yard	1257.04(b)(2)	100 Ft. (Non-Residential)	137.8 Ft.					
Rear Yard	1257.04(c)	75 Ft.	46.9 Ft. [3]					
Highway Setback	1298.12	150 Ft. [2]	366.1 Ft.					
Bldg Coverage (Max)	1257.05(a)(3)	20 %	6.42 %					
Lot Impervious (Max)	1257.05(b)(2)	45 % (Non-Residential)	23.62 %					
Bldg Height (Max)	1257.06(a)	45 Ft. / 2.5 Stories	25.6± Ft. [4]					
Accsy Height (Max)	1257.06(b)	14 Ft. / 1 Story	[4]					
Parking Quantity	1257.07 1294.01(b)(1)	1 Space for every (3) seats for assembly	179 Spaces (On—Site) 54 Spaces (Shared)					
		184 Spaces Req'd [5]	233 Spaces TOTAL					

1] Educational Use permitted by SPECIAL EXCEPTION subject to area requirements. [2] In every single—family residential district, any lot that abuts a highway shall have the setback requirement for that respective yard doubled in size. For purposes of this section, the following roads shall be considered highways: Sumneytown Pike.

[3] Existing Non-Conforming Item.

[4] Building Heights noted are outside grade to roof peak. [5] Assembly seating capacity is 550 seats / 3 spaces per seat = requied parking capacity of 184 spaces

LAND DEVELOPMENT APPROVAL:

This application received Final Plan Approval by the Board of Supervisors at their regular meeting held on conformance with all conditions noted in Resolution No.

WAIVERS and DEFERRALS: The following WAIVERS are REQUESTED per Final Plan Approval: Relief to submit a preliminary/final land development plan application as opposed to the need for a two-step process. 2. Section 1230.37(c)&(e) Requiring curbing and the construction and dedication of additional right-of-way beyond the existing legal right-of-way for major roadways.

Requiring street trees along Sumneytown Pike and Evans Road Requiring parking areas with greater than 10 vehicles, shall have a landscape strip of at least 10 feet in width & a minimu of 10% of any parking area in excess of 2,000 sq.ft. shall be devoted to landscaping. 4. Section 1230.41(g) Section 1230.45:

Applies to frontage along; Sumneytown Pike, and Evans Road Partial relief requiring to install monuments along all Property corners. 7. Section 1241.401(n): Relief from the requirement of all storm piping to be a min. of 18" diameter and Reinforced concrete material.

-0.04 Ac. +0.45 Ac. = 2.70 Acres 2.70 Ac. -0.52 Ac. +0.34 Ac. = 2.52 Acres4.02 Ac. -0.00 Ac. +0.00 Ac. = 4.02 AcresCourts & Track Area: -0.04 Ac. +0.38 Ac. = 0.70 Acres0.36 Ac.

LOT IMPERVIOUS SCHEDULE:

LOT AREA SCHEDULE:

Conc. & Hardscape:

NET Lot Area:	1,833,174.18 Sq. Ft.	(42.0839 Acres)
Ultimate Right—of—Way (Sumneytown):	−7,499.18 Sq. Ft.	(0.1722 Acres)
Ultimate Right—of—Way (Evans):	-34,454.32 Sq. Ft.	(0.7910 Acres)
Legal Right—of—Way (Sumneytown):	-12,540.04 Sq. Ft.	(0.2879 Acres)
Legal Right—of—Way (Evans):	-42,265.29 Sq. Ft.	(0.9703 Acres)
Gross Lot Area:	1,929,933.00 Sq. Ft.	(44.3052 Acres)
Block 8 Unit 55:		

			PROJECT SHEET INDEX
SHE	ET	No.:	SHEET DESCRIPTION:
1	of	16	* COVER - INDEX SHEET
2	of	16	* RECORD PLAN - LAND DEVELOPMENT
3	of	16	PROPERTY SURVEY and EXISTING FEATURES PLAN
4	of	16	PROJECT AREA - SURVEY & DEMOLITION PLAN
5	of	16	PROJECT AREA — LAYOUT DETAIL PLAN
6	of	16	PROJECT AREA - DEVELOPMENT & LANDSCAPING PLA
7	of	16	PROJECT AREA - UTILITIES PLAN
8	of	16	CONSTRUCTION DETAILS - SHEET 'A'
9	of	16	CONSTRUCTION DETAILS - SHEET 'B'
10	of	16	PLAN and PROFILE: CROSS—LOT UTILITIES — SHEET
11	of	16	PLAN and PROFILE: CROSS—LOT UTILITIES — SHEET
12	of	16	EROSION and SEDIMENTATION CONTROL PLAN
13	of	16	EROSION and SEDIMENTATION CONTROL NOTES
14	of	16	EROSION and SEDIMENTATION CONTROL DETAILS
15	of	16	* (PCSM) POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

16 of 16 (PCSM) POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS

RECORDING NOTE:

PROJECT SCOPE:

additional to the existing High School Building along with associated utility infrastructure upgrades.

Sht01_Cover 20-0209 D1

GWYNEDD MERCY ACADEMY HIGH SCHOOL 39-00-03957-00-9 Block 8 Unit 55 D.B.: 6225 Pg: 1394

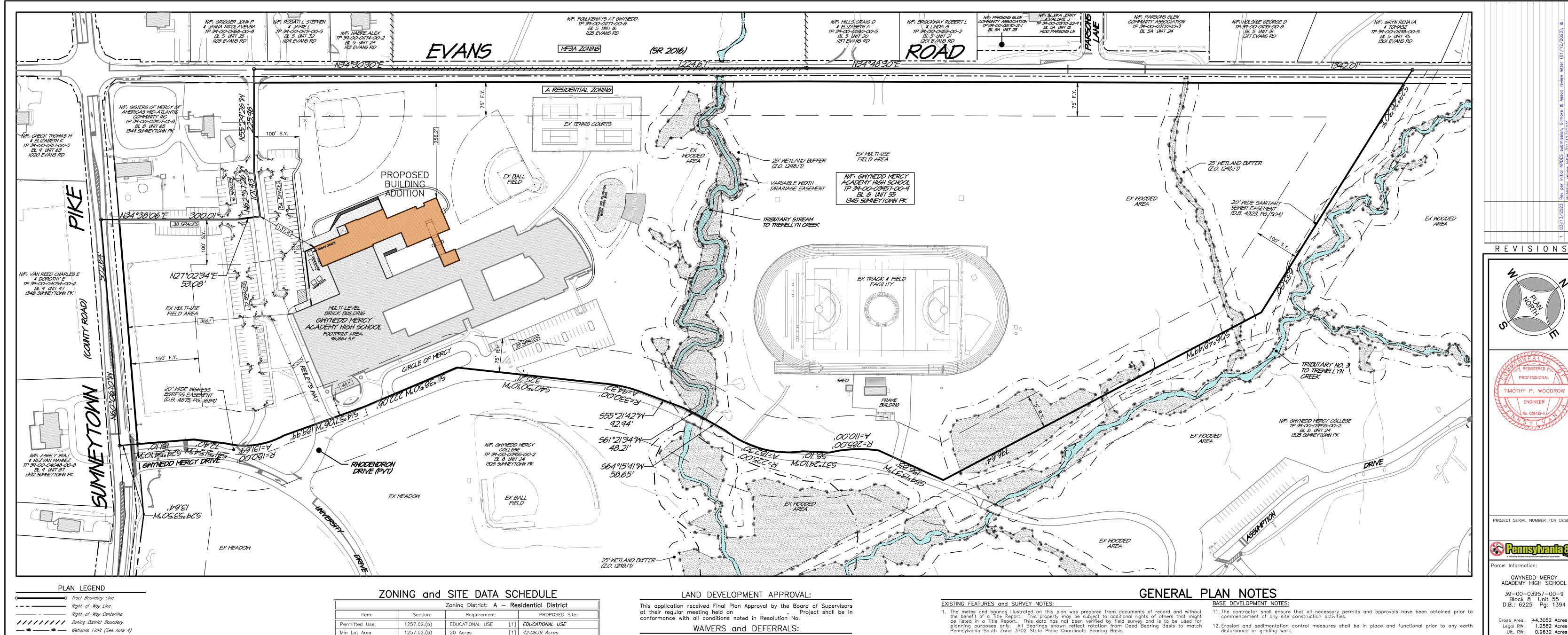
Gross Area: 44.3052 Acres Legal RW: 1.2582 Acres Ult. RW: **0.9632 Acres** NET Area: 42.0839 Acres

GWYNEDD MERCY ACADEMY HIGH SCHOOL

1345 Sumneytown Pike Gwynedd Valley, PA 19437

Scale In Feet (1" = 150')

NOVEMBER 21, 2022



· — · · — Zone 'A' Flood Limit (See note 5)

Sumneytown Pike:

(Right) Posted Speed Limit: 25 MPH Evans Road:

CAMPUS ACCESS

SIGHT DISTANCES:

Posted Speed Limit: 35 MPH

(Left)

39-00-03957-00-9 / Block 8 Unit 55

Existing field measured sight distances.

1257.06(a) Accsy Height (Max) 1 Space for every (3) Parking Quantity

Min Lot Width

Front Yard

Side Yard

Rear Yard

Highway Setback

TOTAL:

. Chief Executive Officer of GWYNEDD

Bldg Coverage (Max)

Lot Impervious (Max

[1] Educational Use permitted by SPECIAL EXCEPTION subject to area requirements. [2] In every single—family residential district, any lot that abuts a highway shall have the setback requirement for that respective yard doubled in size. For purposes of this section, the following roads shall be considered highways: Sumneytown Pike.

45 % (Non-Residential)

184 Spaces Req'd [5]

45 Ft. / 2.5 Stories

150 Ft

[3] Existing Non—Conforming Item. [4] Building Heights noted are outside grade to roof peak.

1257.03(b)

1257.04(a)

257.04(c)

1298.12

1257.04(b)(2)

257.05(b)(2⁻¹

1294.01(b)(1)

[5] Assembly seating capacity is 550 seats / 3 spaces per seat = requied parking capacity of 184 spaces

LC	T IMPERV	<u>'IOUS SCHI</u>	EDULE:				
BA	BASED ON PROJECT NET AREA: 42.0839 Acres						
	Existing:	Demolition:	New:	Total:			
Buildings:	2.29 Ac. (5.44%)	-0.04 Ac.	+0.45 Ac. =	2.70 Acres (6.42%)			
Asphalt Paving:	2.70 Ac.	-0.52 Ac.	+0.34 Ac. =	2.52 Acres			
Courts & Track Area:	4.02 Ac.	-0.00 Ac.	+0.00 Ac. =	4.02 Acres			
Conc. & Hardscape:	0.36 Ac.	-0.04 Ac.	+0.38 Ac. =	0.70 Acres			

BOARD OF SUPERVISORS CERTIFICATE

Township Engineer: _____

Gwynedd on this _____ day of ___

>200 Ft.

137.8 Ft.

46.9 Ft

366 1 Ft

23.62 %

25.6± Ft.

366.1 Ft. / 256.2 Ft.

179 Spaces (On-Site) 54 Spaces (Shared)

233 Spaces TOTAL

The following WAIVERS are REQUESTED per Final Plan Approval: 1. Section 1230.19.b: Relief to submit a preliminary/final land development plan application

s opposed to the need for a two-step process. Requiring curbing and the construction and dedication of additional right-of-way beyond the existing legal right-of-way for major roadways. Requiring street trees along Sumneytown Pike and Evans Road

Requiring parking areas with greater than 10 vehicles, shall have a landscape strip of at least 10 feet in width & a minimu of 10% of any parking area in excess of 2,000 sq.ft. shall be devoted to landscaping. 4. Section 1230.41(g)

Requiring sidewalks along all existing and new streets and pedestrian trails to be a min. width of 8—ft. except in such locations as may be determined by the Board of Supervisors. 5. Section 1230.45: Applies to frontage along; Sumneytown Pike, and Evans Road Section 1230.59:

Partial relief requiring to install monuments along all Property corners. Relief from the requirement of all storm piping to be a min. of 18" diameter and Reinforced concrete material. 2. Topographic and existing features illustrated on this plan was prepared from documents of record and field verified within the limits of the Proposed Project construction area only. Site elevation datum is referenced per note 3 below.

3. This plan was prepared utilizing the following references: a. Tax maps and deeds of record as obtained from the Recorder of Deeds online resources.

b. Existing Soils classifications and mapping has been plotted from maps obtained from the USDA Web Soil Survey website (http://websoilsurvey.sc.egov.usda.gov/) unless otherwise noted.

c. Vertical datum references provided by the PA Spacial Data Access system (PASDA). PAMAP data is based on PA State Plane (South) NAD83 horizontal, NAVD88 vertical datum. d. Aerial imagery used for base plan reference provided by NearMap, Inc. Imagery from flight dated March 03, 2022 and July 04, 2022.

e. Plan prepared by Alon Engineering titled "Subdivision Plan" prepared for Gwynedd Mercy College dated 05/30/1985, last revised 10/20/1987. f. Plan prepared by Chambers Assoc., Inc. titled "Record Plan" prepared for Sisters of Mercy dated

04/09/1998 last revised 08/12/1998. g. Plan prepared by Woodrow & Assoc., Inc. titled "Minor Subdivision — Record Plan" prepared for Sisters of Mercy dated 05/08/2020 last revised 10/12/2020.

h. Plan prepared by Control Point Assoc., Inc. titled "ALTA/NSPS Land Title Survey" prepared for Gwynedd Mercy University, dated 01/21/2021 (No revision).

4. Wetland limits shown taken from reference plan note #3.h. above. No field verification of illustrated mapping has been performed with the preparation of this plan 5. FEMA Flood Zone (graphic plotting only): This site is located primarily within Flood Plain Zone 'X' (areas determined to be outside the 0.2% annual chance floodplain) and Flood Plain Zone 'A' (1% annual chance flood, with average depths of less than 1—Ft. or with drainage areas of less than 1 Sq Mile; and areas protected by levees from 1% annual chance flood) as illustrated on Community Panel Number 42091—C—0278—G, effective date March 2, 2016 as prepared by the Federal Emer—

gency Management Agenc 24. For the driveway connection to Evans Road (with a 35 MPH posted speed limit), PennDOT minimum 6. All persons digging on this site shall comply with the requirements of Section 5 of PA Act 287 as amended by PA Act 181. State law requires a three (3) business day notice prior to any digging (does not include state holidays or weekends). Dial 8-1-1 or go to www.paonecall.org.

7. Existing subsurface utility information illustrated on these plans were based upon visual field locations obtained as part of site survey operations. The information provided is representative of subsurface conditions only at locations and depths where such information was available. There is no expressed or implied agreement that subsurface utility connections exist between explored locations. Accordingly, utility information shown should not be relied upon for construction purposes. It is incumbent upon the contractor to verify subsurface utilities prior to excavation.

8. Subject property is Zoned A — Residential District as noted on the official Zoning Map. 9. Right(s)—of—way widths for Sumneytown Pike and Evans Road taken from recorded plans (see note

3.e & 3.f above). No additional right—of—way is offered for dedication at the time of this application. 10. Yard Setbacks: Setbacks illustrated are reflective of a recorded plan prepared by Chambers Assoc., Inc. titled "Record Plan" prepared for Sisters of Mercy dated 04/09/1998 last revised 08/12/1998.

13. Contractor to ensure compliance with ADA regulations. 14. Nothing shall be permitted to be set on, placed or planted within, the area of any utility or storm water easement except lawns or suitable low ground cover.

15. Construction materials and procedures shall follow Pennsylvania Department of Transportation Specifications and Standard Drawings (latest edition). 16. All proposed utilities (including but not limited to: electric, gas, telephone, cable tv, etc.) shall be

installed underground in strict accordance with the operating authority's specifications. 17. Sanitary sewer is conveyed on-site by private system to public conveyance and treatment offsite by Upper Gwynedd Township Municipal Authority. Públic water supply provided by the North Wales Water

18. The stormwater Best Management Practices (BMPs) shown on these plans are a basic and perpetual part of the storm water management system of the proposed site located within the Municipality and, as such, are to be protected and preserved in accordance with the approved Final Plans by the owners, their successors, and assigns of these lands. The Municipality and/or its agents reserve the right and privilege to enter upon these lands from time to time for the inspection of said facilities in order to determine that the structural and design integrity is being maintained by the owner and the proper operation and maintenance are being conducted.

19. The proposed Ultimate Right—of—Way width for Sumneytown Pike and Evans Road are hereby offered to the agency having jurisdiction at the time of dedication.

20. Any damage incurred within the public Right-of-Way as a result of construction is to be repaired at the owner's sole expense.

21. A detailed retaining wall design and supporting structural calculations shall be submitted to the

22. The applicant shall enter into a Stormwater Ownership and Maintenance Agreement with Lower Gwynedd Township for the proposed stormwater facilities on site and must be executed prior to plan recording. 23. All proposed buildings and additions shall be equipped with sprinkler systems per Township Code.

safe sight distances of 440 feet to the left and 350 feet to the right shall be maintained at all

Block 8 Unit 55: Gross Lot Area: 1,929,933.00 Sq. Ft. (44.3052 Acres) -42,265.29 Sq. Ft. Legal Right-of-Way (Evans): Legal Right-of-Way (Sumneytown): -12,540.04 Sq. Ft. Ultimate Right-of-Way (Evans): Ultimate Right—of—Way (Sumneytown): 1,833,174.18 Sq. Ft. (42.0839 Acres) NET Lot Area:

RECORDING NOTE:

Plan sheets 1, 2 and 15 to be recorded with the

Montgomery County Recorder of Deeds.

LOT AREA SCHEDULE:

(0.9703 Acres) (0.2879 Acres) -34,454.32 Sq. Ft. (0.7910 Acres) -7,499.18 Sq. Ft. (0.1722 Acres)

NOVEMBER 21, 2022

Plan Date:

PROJECT SERIAL NUMBER FOR DESIG

GWYNEDD MERCY ACADEMY HIGH SCHOOL

39-00-03957-00-9

Block 8 Unit 55 D.B.: 6225 Pg: 1394

Gross Area: 44.3052 Acres

Legal RW: 1.2582 Acres

NET Area: 42.0839 Acres

GWYNEDD MERCY

ACADEMY HIGH SCHOOL

1345 Sumneytown Pike

Gwynedd Valley, PA 19437

Scale In Feet (1" = 100')

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DEVELOPMENT

MY HIGH SCHOOL

COUNTY - PENNSYLVANIA

AND

Ult. RW: **0.9632 Acres**

arcel Information:

Sh02_Record

20-0209 D1

Office for the recording of deeds, in and for the County of Montgomery, Pennsylvania in Plan Book ______, Page _____. Recorder of deeds:

RECORDER OF DEEDS:

MCPC No.: PROCESSED and REVIEWED. A report has been prepared by the Montgomery County Planning Commission in accórdance with the Municipalities Planning Code.

Certified this date:

Montgomery County Planning Commission

undersigned officer, personally appeared _

COMMONWEALTH OF PENNSYLVANIA

COUNTY OF MONTGOMERY

For: GWYNEDD MERCY ACADEMY HIGH SCHOOL

desire that this Plan be recorded according to law.

OWNER CERTIFICATION

for the purposes therein contained by signing the name of the corporation by him/herself as such officer. IN WITNESS WHEREOF, I have hereunto set my hand and official seal.

MERCY ACADEMY HIGH SCHOOL, Owner, hereby acknowledge this Plan to be

the official plan of the Highways and properties shown thereon situate in the Township of Lower Gwynedd, Montgomery County, Pennsylvania, and

Notary Public: My Commission Expires:

___ , 2023, before the

PLANNING COMMISSION CERTIFICATE Recommended for approval by the Planning Commission of the Township of Lower Gwynedd on this _____ day of ____

Reviewed by the Township Engineer of the Township of Lower Gwynedd certifying that this plan conforms to the Township Subdivision & Land Development Regulations on this _____ day of _____

-0.60 Ac. +1.17 Ac. = 9.94 Acres (23.62%)

ENGINEER'S CERTIFICATION Approved by the Township Board of Supervisors of the Township of Lower

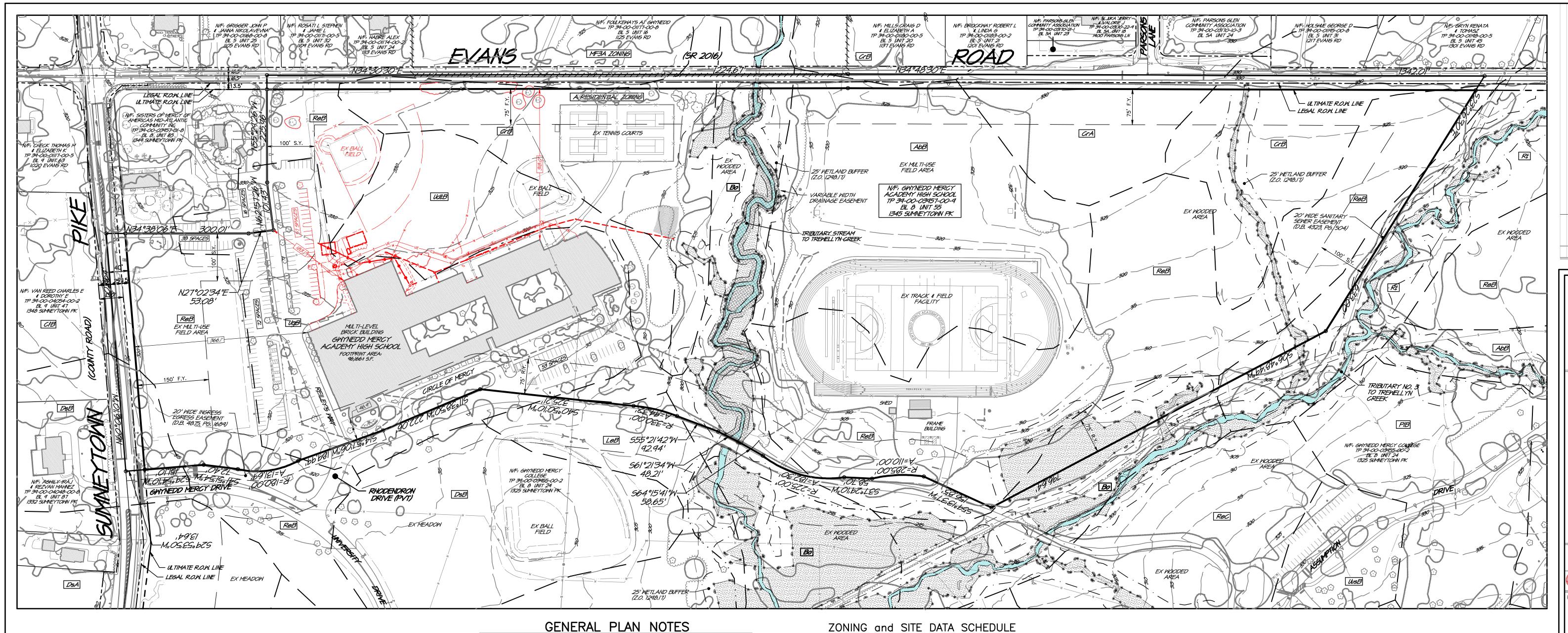
, TIMOTHY P. WOODROW, P.E. , do hereby certify that I am a Registered Professional Engineer, licensed in compliance with the laws of the Common wealth of Pennsylvania; that this plan was prepared by myself or under my supervision and that said plan complies with all ordinances and regulations of the Township.

038735-E

SURVEYOR'S CERTIFICATION , do hereby certify that I am a Registered Pro-

sional Land Surveyor, licensed in compliance with the laws of the Common wealth of Pennsylvania; that this plan correctly represents a survey made by myself or under my supervision and that all dimensional and geodetic détails shown are correct.

Lic. no:



PLAN LEGEND

Tract Boundary Line

Right—of—Way Line

Right—of—Way Centerline

Zoning District Boundary

Topographic Contour

Soil Series Limits

Wetlands Limit (See note 4)

Zone 'A' Flood Limit (See note 5)

Some A Flood Limit (See in Storm Sewer Piping
Some Government of Governm

Fence Line

Woodlands Dripline

PROJECT SOILS DATA

Soils Type:	Slopes: (%)	Depth to Restrictive Feature:	Depth to Water Table:	Hydrologic Soil Group:
AbB Abbottstown silt loam	3 to 8	18-22" to Fragipan 40-60" to Lithic Bedrock	6 to 18"	D
Bo Bowmansville—Knauers silt loam	Local Alluvial	72-99" to Lithic Bedrock	0 to 18"	C/D
CrA / CrB Croton silt loam	0 to 3 / 3 to 8	18—20" to Fragipan 40—60" to Lithic Bedrock	0 to 6" / 10 to 12"	D
DsB Doylestown silt loam	3 to 8	15-30" to Fragipan 60-72" to Lithic Bedrock	0 to 6"	C/D
LeB Lawrenceville silt loam	3 to 8	24—38" to Fragipan 48—99" to Lithic Bedrock	18 to 36"	С
ReB Readington silt loam	3 to 8	20-36" to Fragipan 40-60" to Lithic Bedrock	18 to 36"	С
Rt Rowland silt loam	terrace	60-99" to Lithic Bedrock	12 to 36"	С
UdtB Udorthents, shale & sandstone	0 to 8	20-99" to Lithic Bedrock	About 60"	А
UgB Urban land	0 to 8	_	_	-

1. The metes and bounds illustrated on this plan was prepared from documents of record and without the benefit of a Title Report. This property may be subject to additional rights of others that might be listed in a Title Report. This data has not been verified by field survey and is to be used for planning purposes only. All Bearings shown reflect rotation from Deed Bearing Basis to match Pennsylvania South Zone 3702 State Plane Coordinate Bearing Basis.

Topographic and existing features illustrated on this plan was prepared from documents of record and field verified within the limits of the Proposed Project construction area only. Site elevation datum is referenced per note 3 below.

3. This plan was prepared utilizing the following references:

EXISTING FEATURES and SURVEY NOTES:

a. Tax maps and deeds of record as obtained from the Recorder of Deeds online resources.
b. Existing Soils classifications and mapping has been plotted from maps obtained from the USDA Web Soil Survey website (http://websoilsurvey.sc.egov.usda.gov/) unless otherwise noted.

c. Vertical datum references provided by the PA Spacial Data Access system (PASDA). PAMAP data is based on PA State Plane (South) NAD83 horizontal, NAVD88 vertical datum.
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4. Wetland limits shown taken from reference plan note #3.h. above. No field verification of illustrated mapping has been performed with the preparation of this plan.

FEMA Flood Zone (graphic plotting only): This site is located primarily within Flood Plain Zone 'X' (areas determined to be outside the 0.2% annual chance floodplain) and Flood Plain Zone 'A' (1% annual chance flood, with average depths of less than 1—Ft. or with drainage areas of less than 1 Sq Mile; and areas protected by levees from 1% annual chance flood) as illustrated on Community Panel Number 42091—C—0278—G, effective date March 2, 2016 as prepared by the Federal Emergency Management Agenc
 All persons digging on this site shall comply with the requirements of Section 5 of PA Act 287 as

6. All persons digging on this site shall comply with the requirements of Section 5 of PA Act 287 as amended by PA Act 181. State law requires a three (3) business day notice prior to any digging (does not include state holidays or weekends). Dial 8-1-1 or go to www.paonecall.org.
7. Existing subsurface utility information illustrated on these plans were based upon visual field locations obtained as part of site survey operations. The information provided is representative of subsurface conditions only at locations and depths where such information was available. There is no expressed or implied agreement that subsurface utility connections exist between explored locations. Accordingly, utility information shown should not be relied upon for construction purposes. It is incumbent upon

the contractor to verify subsurface utilities prior to excavation.

8. Subject property is Zoned A — Residential District as noted on the official Zoning Map.

9. Right(s)—of—way widths for Sumneytown Pike and Evans Road taken from recorded plans (see note 3.e & 3.f above). No additional right—of—way is offered for dedication at the time of this application.

10. Yard Setbacks: Setbacks illustrated are reflective of a recorded plan prepared by Chambers Assoc., Inc. titled "Record Plan" prepared for Sisters of Mercy dated 04/09/1998 last revised 08/12/1998.

	Zoning District: A — Residential District							
Item:	Section:	Requirement:	EXISTING Site:					
Permitted Use	1257.02.(b)	EDUCATIONAL USE [1]	EDUCATIONAL USE					
Min Lot Area	1257.02.(b)	20 Acres [1]	42.0839 Acres					
Min Lot Width	1257.03(b)	200 Ft.	>200 Ft.					
Front Yard	1257.04(a)	75 Ft.	366.1 Ft. / 318.0 Ft.					
Side Yard	1257.04(b)(2)	100 Ft. (Non-Residential)	183.1 Ft.					
Rear Yard	1257.04(c)	75 Ft.	46.9 Ft. [3]					
Highway Setback	1298.12	150 Ft. [2]	366.1 Ft.					
Bldg Coverage (Max)	1257.05(a)(3)	20 %	5.44 %					
ot Impervious (Max)	1257.05(b)(2)	45 % (Non-Residential)	22.25 %					
Bldg Height (Max)	1257.06(a)	45 Ft. / 2.5 Stories	[4]					
Accsy Height (Max)	1257.06(b)	14 Ft. / 1 Story	[4]					
Parking Quantity	1257.07 1294.01(b)(1)	1 Space for every (3) seats for assembly	197 Spaces (On—Site) +38 Spaces (Shared) 235 Spaces Total					

[1] Educational Use permitted by SPECIAL EXCEPTION subject to area requirements.
 [2] In every single—family residential district, any lot that abuts a highway shall have the setback requirement for that respective yard doubled in size. For purposes of this section, the following roads shall be considered highways: Sumneytown Pike.
 [3] Existing Non—Conforming Item.

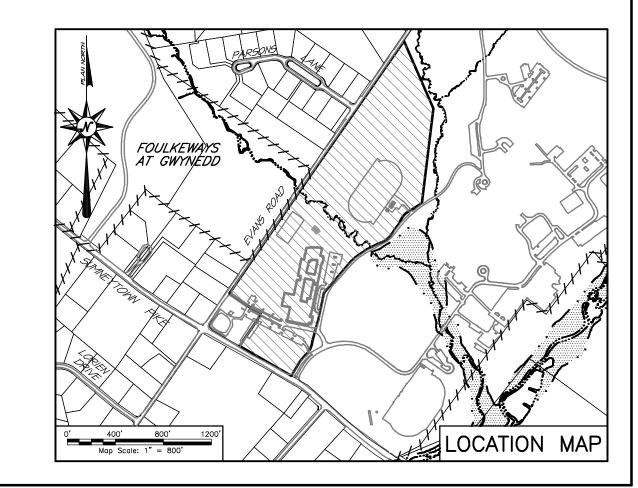
[4] Building Heights noted are outside grade to roof peak.

LOT IMPERVIOUS SCHEDULE:

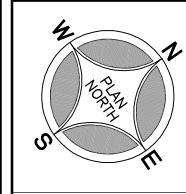
Existing Impervious Area:		
Building(s):	99,802 Sq. Ft.	(2.29 Acres)
Asphalt Paving:	117,150 Sq. Ft.	(2.70 Acres)
Courts & Track Area:	175,322 Sq. Ft.	(4.02 Acres)
Conc. & Hardscape:	15,680 Sq. Ft.	(0.36 Acres)
TOTAL Area:	407,954 Sq. Ft.	(9.37 Acres)

LOT AREA SCHEDULE:

Block 8 Unit 55:		
Gross Lot Area:	1,929,933.00 Sq. Ft.	(44.3052 Acres)
_egal Right−of−Way (Evans):	-42,265.29 Sq. Ft.	(0.9703 Acres)
_egal Right−of−Way (Sumneytown):	-12,540.04 Sq. Ft.	(0.2879 Acres)
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Ultimate Right—of—Way (Sumneytown):	-7,499.18 Sq. Ft.	(0.1722 Acres)
NET Lot Area:	1,833,174.18 Sq. Ft.	(42.0839 Acres)



REVISIONS



PROJECT SERIAL NUMBER FOR DESI

Parcel Information:

GWYNEDD MERCY
ACADEMY HIGH SCHOOL

39-00-03957-00-9
Block 8 Unit 55
D.B.: 6225 Pg: 1394

D.B.: 6225 Pg: 1394

Gross Area: 44.3052 Acres
Legal RW: 1.2582 Acres
Ult. RW: 0.9632 Acres

NET Area: 42.0839 Acres

GWYNEDD MERCY ACADEMY HIGH SCHOOL 1345 Sumneytown Pike Gwynedd Valley, PA 19437

Applicant:

Scale In Feet (1" = 100')

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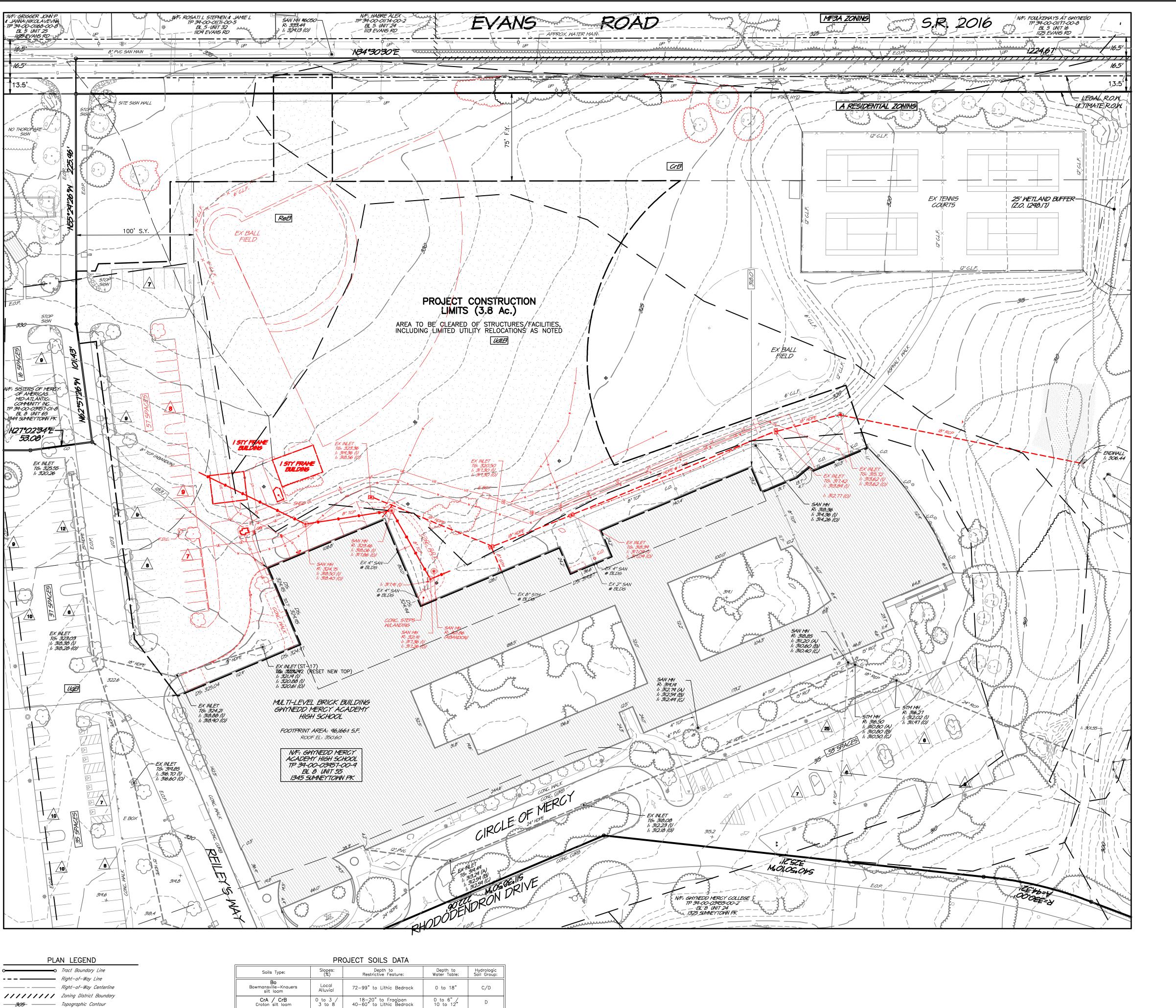
EXISTING FEATURES PLAN
EDD MERCY ACADEMY HIGH SCHOOL
WINEDD TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

WOODROW & ASSOCIATES, INC.
MUNICIPAL / CIVIL CONSULTING ENGINEERS

Sh03_Survey
No:
20-0209 D1
Date:

NOVEMBER 21, 2022
eet No:

3 16



0 to 6"

18 to 36"

18 to 36"

About 60"

24-38" to Fragipan 48-99" to Lithic Bedrock

20-36" to Fragipan 40-60" to Lithic Bedrock

20-99" to Lithic Bedrock

LeB Lawrenceville silt loam

ReB Readington silt loam

UdtB dorthents, shale & sandstone

3 to 8

0 to 8

0 to 8

C/D

-305 --- Topographic Contour

——s——S——Sanitary Main / Lateral

G——G—— Gas Main / Service Water Main / Service

Woodlands Dripline

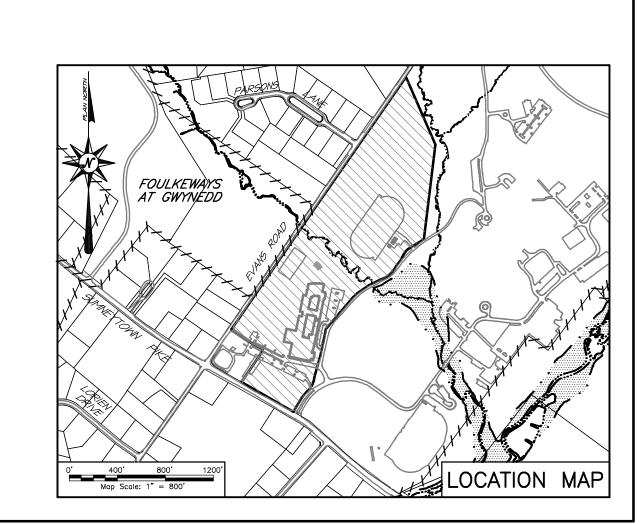
— 🕊 — — Wetlands Limit (See note 4)

- Zone 'A' Flood Limit (See note 5)

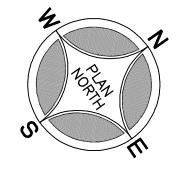
GENERAL PLAN NOTES

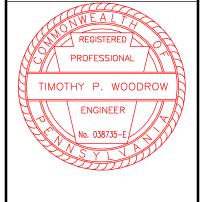
EXISTING FEATURES and SURVEY NOTES:

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- Topographic and existing features illustrated on this plan was prepared from documents of record and field verified within the limits of the Proposed Project construction area only. Site elevation datum is referenced per note 3 below.
- 3. This plan was prepared utilizing the following references:
- a. Tax maps and deeds of record as obtained from the Recorder of Deeds online resources.
- b. Existing Soils classifications and mapping has been plotted from maps obtained from the USDA Web Soil Survey website (http://websoilsurvey.sc.egov.usda.gov/) unless otherwise noted.
- c. Vertical datum references provided by the PA Spacial Data Access system (PASDA). PAMAP data is based on PA State Plane (South) NAD83 horizontal, NAVD88 vertical datum. d. Aerial imagery used for base plan reference provided by NearMap, Inc. Imagery from flight dated March 03, 2022 and July 04, 2022.
- e. Plan prepared by Alon Engineering titled "Subdivision Plan" prepared for Gwynedd Mercy College dated 05/30/1985, last revised 10/20/1987.
- f. Plan prepared by Chambers Assoc., Inc. titled "Record Plan" prepared for Sisters of Mercy dated 04/09/1998 last revised 08/12/1998.
- g. Plan prepared by Woodrow & Assoc., Inc. titled "Minor Subdivision Record Plan" prepared for Sisters of Mercy dated 05/08/2020 last revised 10/12/2020.
- h. Plan prepared by Control Point Assoc., Inc. titled "ALTA/NSPS Land Title Survey" prepared for Gwynedd Mercy University, dated 01/21/2021 (No revision).
- 4. Wetland limits shown taken from reference plan note #3.h. above. No field verification of illustrated mapping has been performed with the preparation of "this plan.
- 5. FEMA Flood Zone (graphic plotting only): This site is located primarily within Flood Plain Zone 'X' (areas determined to be outside the 0.2% annual chance floodplain) and Flood Plain Zone 'A' (1% annual chance flood, with average depths of less than 1—Ft. or with drainage areas of less than 1 Sq Mile; and areas protected by levees from 1% annual chance flood) as illustrated on Community Panel Number 42091—C—0278—G, effective date March 2, 2016 as prepared by the Federal Emergency Management Agenc
- 6. All persons digging on this site shall comply with the requirements of Section 5 of PA Act 287 as amended by PA Act 181. State law requires a three (3) business day notice prior to any digging (does not include state holidays or weekends). Dial 8-1-1 or go to www.paonecall.org.
- 7. Existing subsurface utility information illustrated on these plans were based upon visual field locations obtained as part of site survey operations. The information provided is representative of subsurface conditions only at locations and depths where such information was available. There is no expressed or implied agreement that subsurface utility connections exist between explored locations. Accordingly, utility information shown should not be relied upon for construction purposes. It is incumbent upon the contractor to verify subsurface utilities prior to excavation.
- 8. Subject property is Zoned A Residential District as noted on the official Zoning Map.
- 9. Right(s)—of—way widths for Sumneytown Pike and Evans Road taken from recorded plans (see note 3.e & 3.f above). No additional right—of—way is offered for dedication at the time of this application. 10. Yard Setbacks: Setbacks illustrated are reflective of a recorded plan prepared by Chambers Assoc., Inc. titled "Record Plan" prepared for Sisters of Mercy dated 04/09/1998 last revised 08/12/1998.



REVISIONS





PROJECT SERIAL NUMBER FOR DESIGN



GWYNEDD MERCY ACADEMY HIGH SCHOOL 39-00-03957-00-9 Block 8 Unit 55 D.B.: 6225 Pg: 1394

Gross Area: 44.3052 Acres Legal RW: 1.2582 Acres Ult. RW: **0.9632 Acres** NET Area: 42.0839 Acres

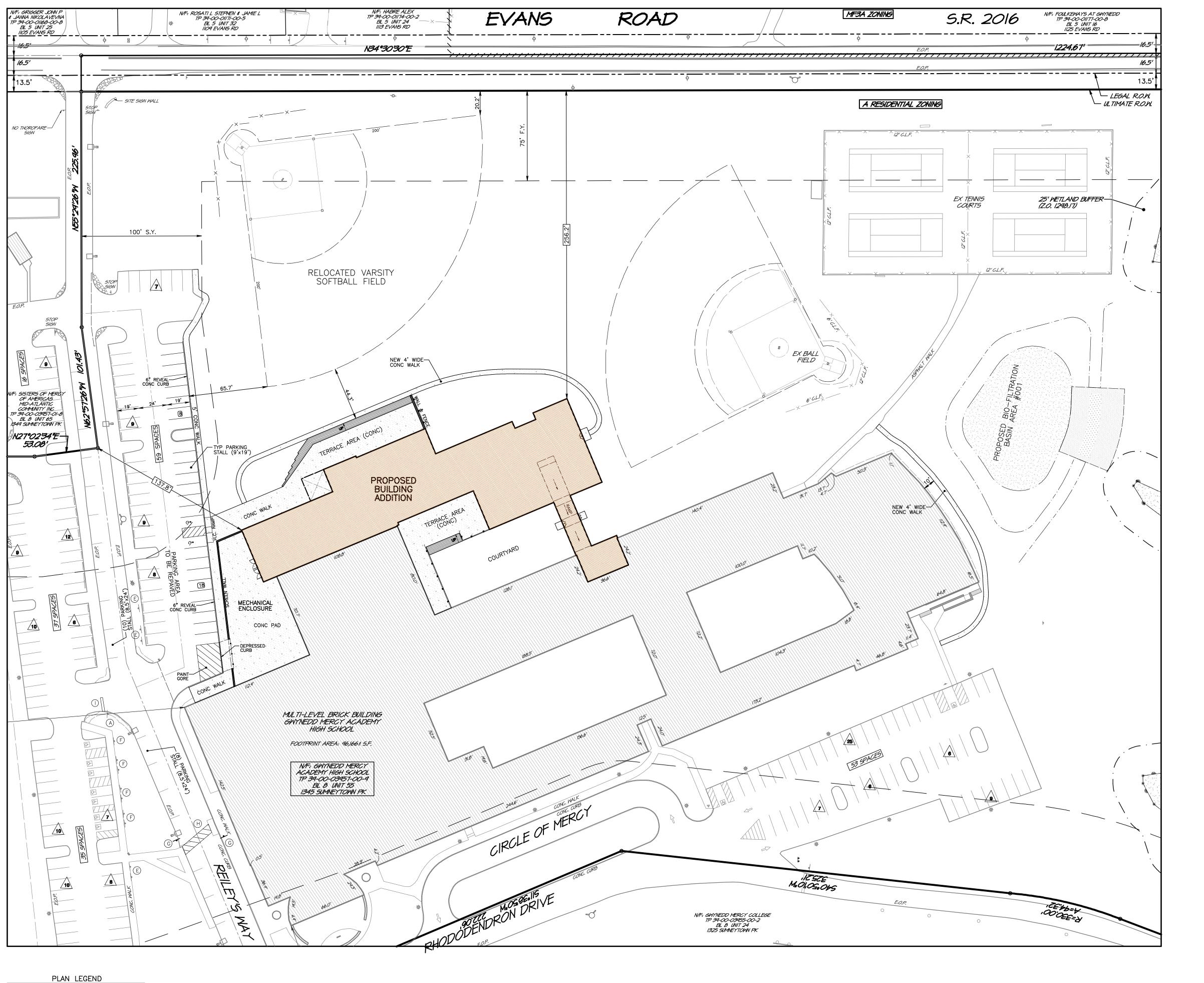
GWYNEDD MERCY ACADEMY HIGH SCHOOL

1345 Sumneytown Pike Gwynedd Valley, PA 1943

Scale In Feet (1" = 40')

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Sh04_Demo



─⊙ Tract Boundary Line ///////// Zoning District Boundary — **W** — Wetlands Limit (See note 4) · — · · Zone 'A' Flood Limit (See note 5)

X X Fence Line

GENERAL PLAN NOTES

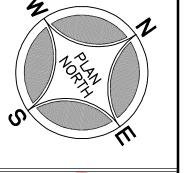
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ON-SITE SIGNAGE & MARKINGS

- A STOP SIGN
- (B) STREET NAME SIGNS
- (C) NO THRU TRAFFIC
- (D) DIRECTIONAL TRAFFIC ARROWS
- E VISITOR PARKING SIGN
- (F) ADA PARKING SIGN
- G) W11-2 PEDESTRIAN CROSSING SIGN
- (H) PAINTED CROSSWALK
- PAINTED STOP BAR

FOULKEWAYS AT GWYNEDD LOCATION MAP REVISIONS





PROJECT SERIAL NUMBER FOR DESIGN



39-00-03957-00-9 Block 8 Unit 55 D.B.: 6225 Pg: 1394 Gross Area: 44.3052 Acres
Legal RW: 1.2582 Acres
Ult. RW: 0.9632 Acres

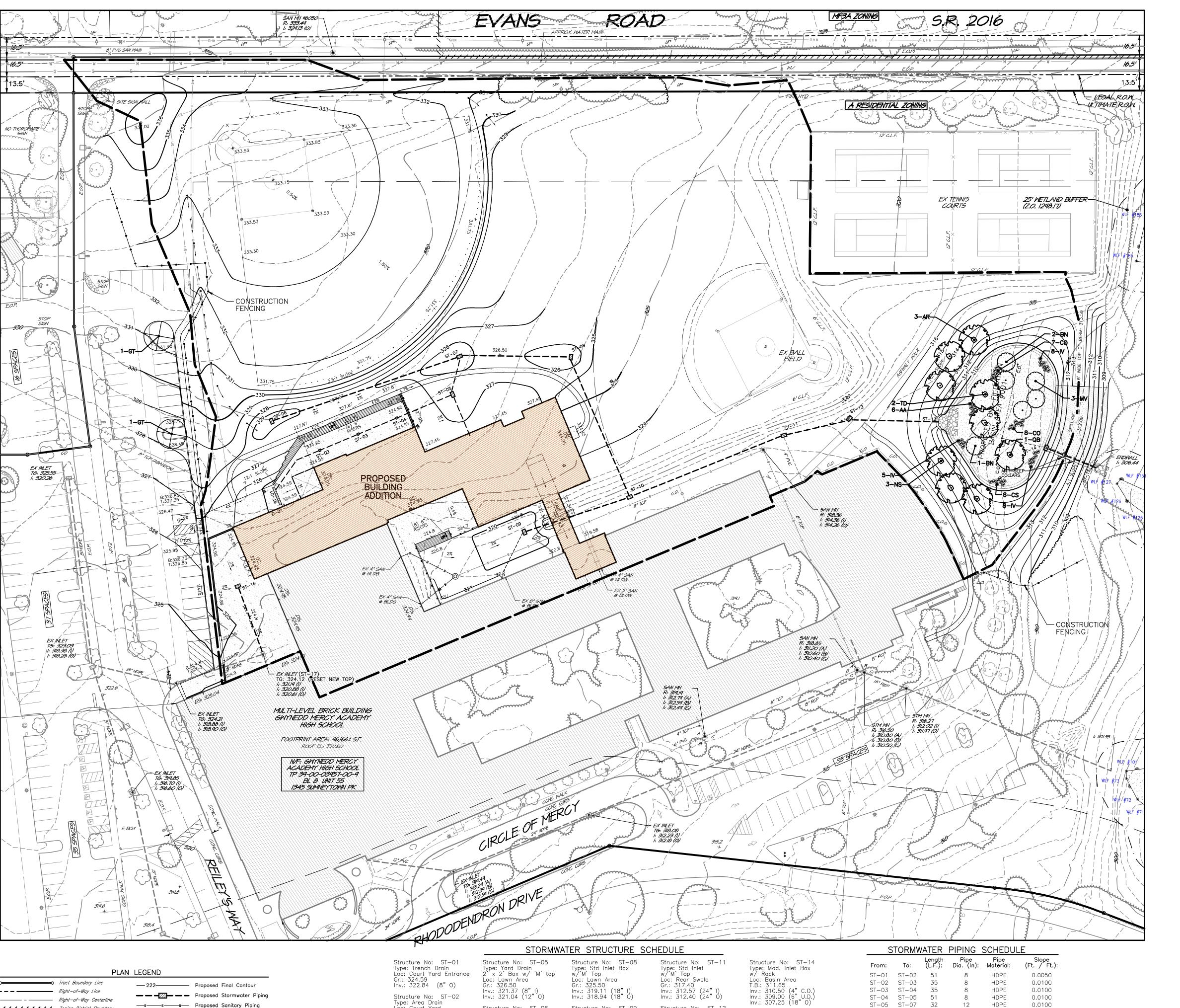
GWYNEDD MERCY ACADEMY HIGH SCHOOL

NET Area: 42.0839 Acres

Scale In Feet (1" = 40')

1345 Sumneytown Pike Gwynedd Valley, PA 1943

Sh05_Layout



Structure No: ST-02 Type: Area Drain Loc: Court Yard Gr.: 324.79 Inv.:322.58 (8" C)

Structure No: ST-03

Structure No: ST-04

Type: Area Drain Loc: Court Yard Gr.: 324.79 Inv.: 322.23 (8" C)

Type: Area Drain Loc: Court Yard Gr.: 324.79 Inv.: 321.88 (8" C)

Inv.: 321.04 (12" 0

Type: Std Inlet Box w/'M' Top

Loc: Lawn Area Gr.: 326.85 Inv.: 323.85 (18" 0)

Structure No: ST-07 Type: Std Inlet Box w/M' Top Loc: Lawn Area Gr.: 325.50 Inv.: 320.72 (12" I) Inv.: 320.22 (18" I) Inv.: 320.05 (18" O)

Structure No: ST-06

Structure No: ST-09
Type: Std Inlet Box
w/'M' Top
Loc: Court Yard Lawn
Gr.: 314.50 (18" 0)

Inv.: 314.50 (18" 0)

Structure No: ST-10 Type: Std Inlet Box w/'M' Top

Wy M Top Loc: Rear Swale Gr: 318.60 Inv.: 314.14 (18" I Inv.: 314.04 (18" I Inv.: 313.54 (24" (

Structure No: ST-12

Structure No: ST-15 Type: Ex. DW-Endwall

Loc: Wetlands Area T.W.: 308.94 +/-Inv.: 306.44 (18" 0)

Structure No: ST-16 Type: Std Inlet Box 2° x 2' Box Loc: Loading Area Gr.: 324.70 Inv.: 321.75 (12" I)

Type: Std Inlet w/'M' Top

Loc: Rear Swale Gr.: 315.70 Inv.: 311.60 (24" I) Inv.: 311.10 (30" (

Structure No: ST-13
Type: DW-Endwall
Loc: Basin Area
T.W.: 313.37

Inv.: 309.87 (30" 0)

ST-04 ST-05 51

ST-05 ST-07 32

ST-06 ST-07 165

ST-07 ST-08 94

ST-08 ST-10 128

ST-10 ST-11 140

ST-11 ST-12 57

ST-12 ST-13 75

HDPE

HDPE

HDPE

HDPE

HDPE

HDPE

12

18

18

24

24

30

ST-14 ST-15 45 18 O-RING RCP 0.0180

ST-16 ST-17 56 18 RCP 0.0170

0.0100

0.0100

0.0100

0.0375

0.0069

0.0140

///////// Zoning District Boundary

-- Storm Sewer Piping

——s——S——Sanitary Main / Lateral

G Gas Main / Service

Water Main / Service

Woodlands Dripline

____×____ × ___ Fence Line

Soil Series Limits

— 🕊 — Wetlands Limit (See note 4)

· — · · Zone 'A' Flood Limit (See note 5)

—s——s—— Proposed Sanitary Piping

GENERAL PLAN NOTES

Refer to the Record Plan (Sheet 1) for 'BASE EXISTING FEATURES AND SURVEY NOTES' and 'BASE DEVELOPMENT NOTES' BASE CONSTRUCTION DESIGN NOTES:

- The contractor shall ensure that all necessary permits and approvals have been obtained prior to commencement of any site construction activities.
- Erosion and sedimentation control measures shall be in place and functional prior to any earth disturbance or grading work.
- 3. Contractor to ensure compliance with ADA regulations.
- 4. This project shall be served by public sanitary sewer by (—list authority here—) and water services by (-list authority here-).
- 5. Nothing shall be permitted to be set on, placed or planted within, the area of any utility or storm water easement except lawns or suitable low ground cover.
- 6. Construction materials and procedures shall follow Pennsylvania Department of Transportation Specifications and Standard Drawings (latest edition).
- 7. Any/all storm water conveyance system(s) and detention facilities shown on these plans are a basic and perpetual part of the storm water management system for this Township, and as such, are to be protected, maintained and preserved in accordance with the approved final plans. The Township and/or its agents may reserve the right and privilege to enter upon such lands from time to time for the purpose of inspection of said storm water management system in order to determine that the structural design and integrity are being maintained.
- 8. The proposed finished grading shown on this plan has been based on the proposed building(s) finished floor elevations and has been used to design the storm water management facilities. The contractor shall comply with the grading scheme indicated unless otherwise approved by the Township and the
- 9. A minimum of six (6) inches of clean topsoil shall be provided on all lawn and planting areas.
- 10. Site grading shall be performed in accordance with these plans. The contractor shall be responsible for removing and replacing all soft, yielding or unsuitable materials and replacing with suitable materials. All excavated or filled areas shall be compacted to 95% of modified proctor maximum density per A.S.T.M. Test D—1557. moisture content at time of placement shall be no more than 2% above nor 3% below optimum. contractor shall submit a compaction report prepared by a qualified soils engineer, registered within the state where the work is performed, verifying that all filled areas and subgrade areas within the building pad area and areas to be paved have been compacted in accordance with these plans. accordance with these plans.
- 11. Subbase material for sidewalks, curb, or asphalt shall be free of organics and other unsuitable materials. Should subbase be deemed unsuitable, subbase is to be removed and filled with approved fill material compacted to 95% optimum density (as determined by modified proctor method).
- 12. The minimum slope in grassed areas shall not be less than 2% and the minimum in paved areas shall not be less than 1. 13. Erosion control matting shall be provided on all earth slopes at 3:1 or greater.
- Construction Fencing (as shown on the plans) shall be installed to prevent any pedestrian traffic from entering the proposed area of work.

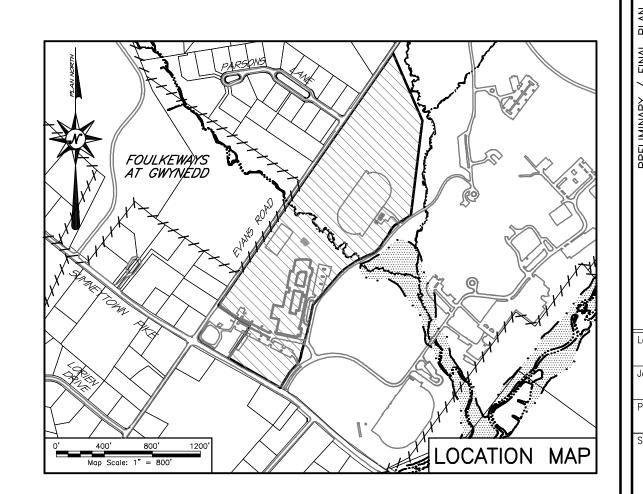
LANDSCAPING REQUIREMENTS

ITEM	REQUIREMENT	PROVIDED
SALDO Sect 1230—42(a)(1) Street Trees	Two shade trees per 40' of street length (assuming 2—sided street)	
Street frees	Sumneytown Pike: 503' 503/40 = 13 trees	13 existing trees
	Evans Road: 1225' 1225/40 = 31 trees	31 existing trees
SALDO Sect 1230—42(a)(2) Detention Basin Landscaping	One shade tree per 30' of basin perimeter May substitute up to 50% of shade trees with flowering trees at a rate of 2:1 *	
	Detention Basin: 507' 507/30 = 17 Shade trees	9 Shade Trees* 6 Flowering Trees 50 Shrubs
SALDO Sect 1230—42(i) Replacement Trees	Each tree 6" caliper or greater removed shall be replaced with a shade tree(s) from thelist of recommended plants which have a total caliper equal to or greater than the tree removed.	
	3 trees totaling 30 inches are proposed to be removed. These trees are dead / diseased / dying, therefore replacement trees are not required.	2 Shade Trees ^
SALDO Sect 1230-41(g) Parking Lot Landscape	Parking areas with greater than 10 vehicles, shall have a landscape strip of at least 10 feet in width. The modified parking row proposes 18 spaces prior to the proposed island.	waiver requested
	A minimum of 10% of any parking area in excess of 2,000 sf shall be devoted to landscaping. The Applicant is modifying existing parking and not adding more than 2,000 sf of parking.	waiver requested
TOTAL PLANTINGS PROVIDED:		11 Shade Trees 6 Flowering Trees 50 Shrubs

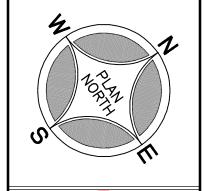
- * Evergreen and flowering trees proposed at a rate of 2:1 and shrubs proposed at a rate of 10:1 to promote greater diversity.
- ^ Shade trees proposed to provide parking lot shade where dead existing trees are to be removed.

DI ANTING SCHEDITIE

	PLANTING SCHEDULE							
Plan Symbol	Quantity	Botanical Name	Common Name	Minimum Planting Caliper	Planting Spread	Minimum Planting Height	Remarks	
AR	3	Acer rubrum 'October Glory'	'October Glory' Red Maple	2.5"	5-6'	14-16'	B&B	
GT	2	Gleditsia triacanthos var. inermis	Thornless Honeylocust	2.5"	5-6'	14-16'	B&B	
NS	3	Nyssa sylvatica	Blackgum	2.5"	5-6'	14–16'	B&B	
QB	1	Quercus bicolor	Swamp White Oak	2.5 "	5-6'	14-16'	B&B	
TD	2	Taxodium distichum	Bald Cypress	2.5"	5-6'	14–16'	B&B	
	11	TOTAL SHADE TREES						
BN	3	Betula nigra	River Birch	-	-	8'	B&B	
MV	3	Magnolia virginiana	Sweetbay Magnolia	-	-	8'	B&B	
	6	TOTAL ORNAMENTAL TREES						
AA	6	Aronia arbutifolia	Red Chokeberry	-	_	36"	CONT	
СО	15	Cephalanthus occidentalis	Buttonbush	-	-	36"	CONT	
cs	8	Cornus sericea	Red Twig Dogwood	-	-	36"	CONT	
IV	21	llex verticillata	Winterberry	-	-	36"	CONT	
	50	TOTAL SHRUBS TREES						



REVISIONS





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GWYNEDD MERCY ACADEMY HIGH SCHOOL 1345 Sumneytown Pike Gwynedd Valley, PA 1943

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PROJECT AREA

PROJECT AREA

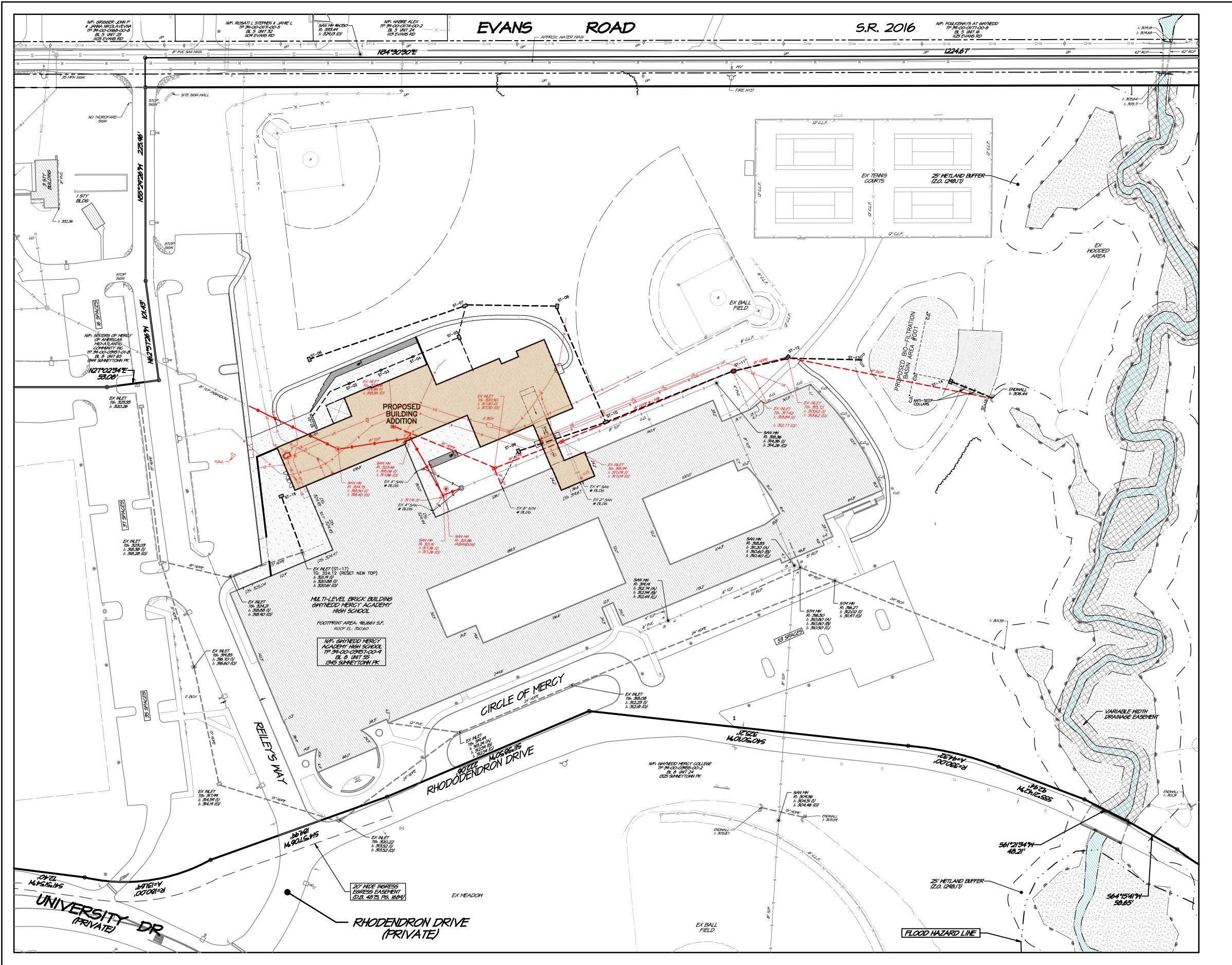
DEVELOPMENT & LANDSCAPING PLAN

GWYNEDD MERCY ACADEMY HIGH SCHOOL

LOWER GWYNEDD TOWNSHIP – MONTGOMERY COUNTY – PENNSYLVANIA

MUNICIPAL / CIVIL CONSULTING ENGINEERS

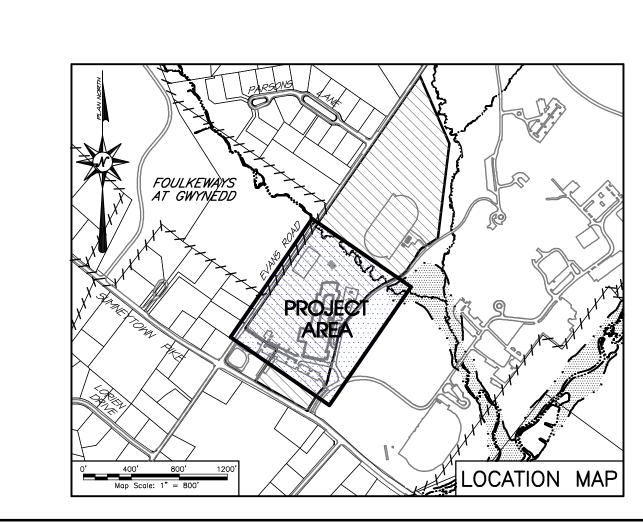
Sh06_Grading



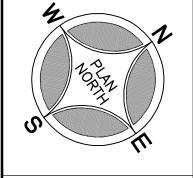
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REVISIONS



IMOTHY P. WOODROW

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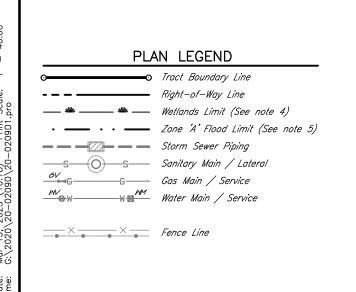
GWYNEDD MERCY ACADEMY HIGH SCHOOL 1345 Sumneytown Pike Gwynedd Valley, PA 19437

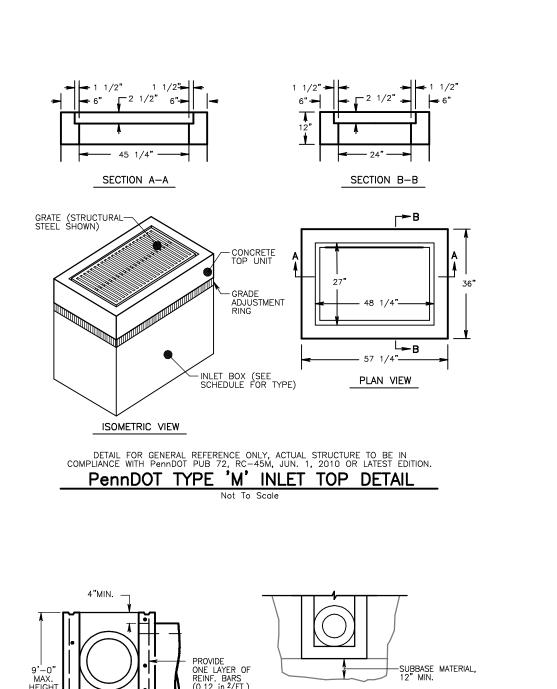
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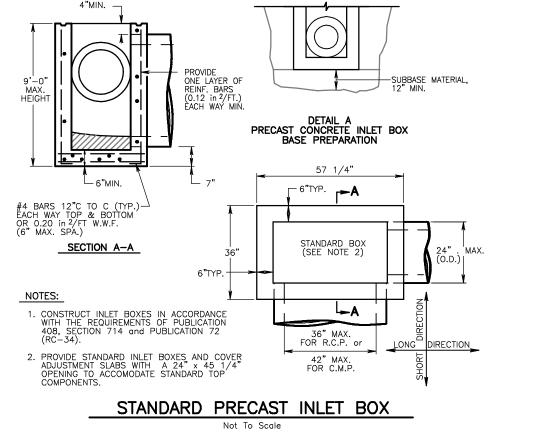
Sh07_Utility

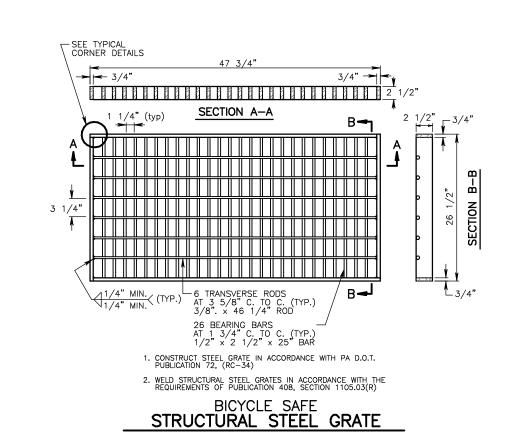
20-0209 D1 NOVEMBER 21, 2022

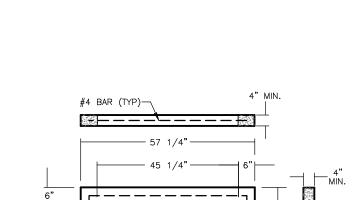
of 16



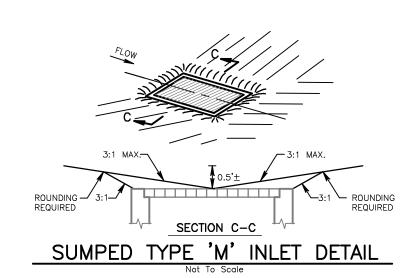


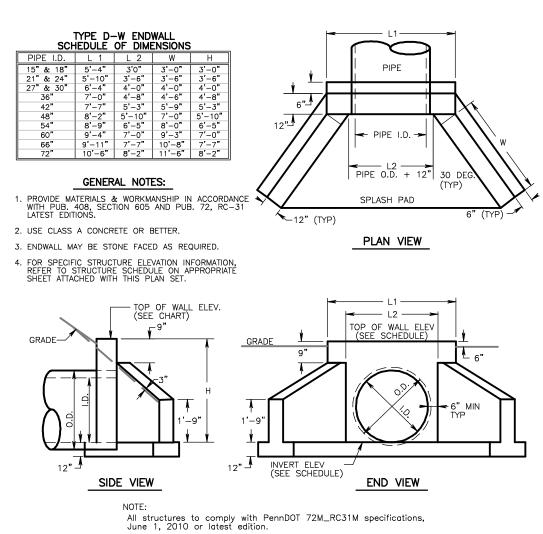




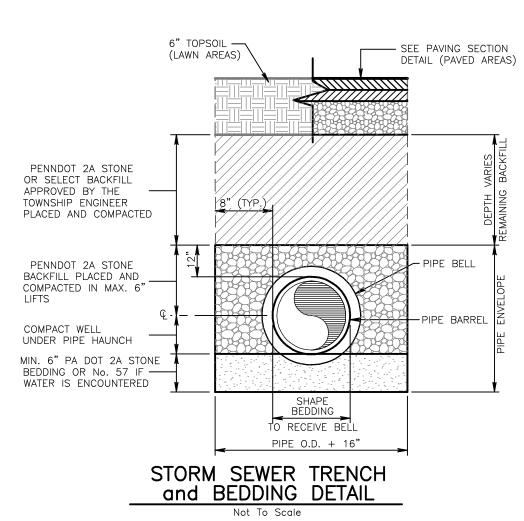


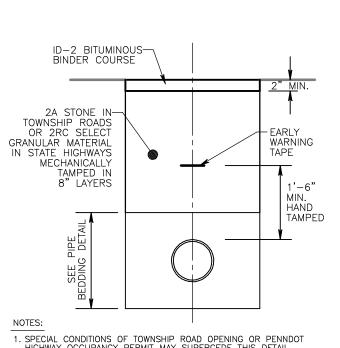
(PRECAST)
GRADE ADJUSTMENT RING

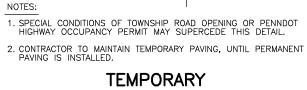




TYPE D-W ENDWALL

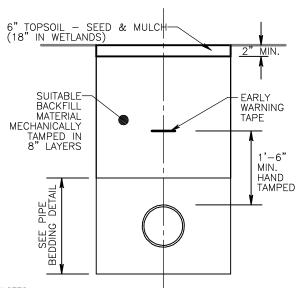




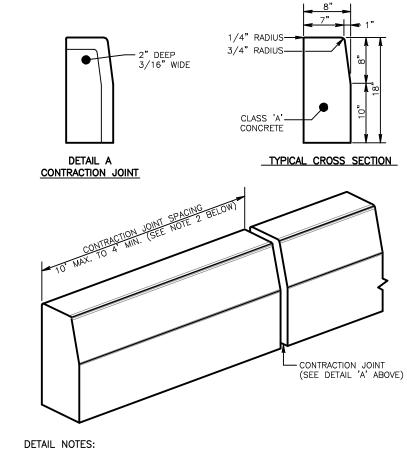


PAVEMENT RESTORATION

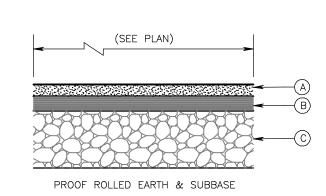
Not To Scale



1. THE TOP 6" OF ALL TRENCHES IN NON-WETLAND AREAS SHALL BE BACKFILLED WITH TOPSOIL AND RESTORED IN ACCORDANCE WITH SPECIFICATIONS NOTED ON PLANS. RESTORATION IN UNPAVED AREAS





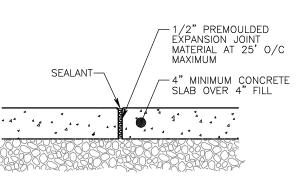


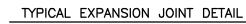
(A) = 1.5" SuperPave Volumetric Asphalt Mixture Design, 9.5mm, PG 64-22, HMA Wearing Course, 0-0.3M ESALs, SRL-M or Greater $\fbox{$\rm B$}=2.5"$ SuperPave Volumetric Asphalt Mixture Design, 25mm, PG 64-22, HMA Base Course, 0-0.3M ESALs

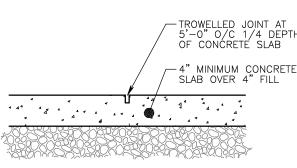
1. ALL SUBGRADE AREAS TO BE COMPACTED AND APPROVED PRIOR TO PLACEMENT OF MATERIALS.

© = 6" 2A Stone Subbase on prepared subgrade

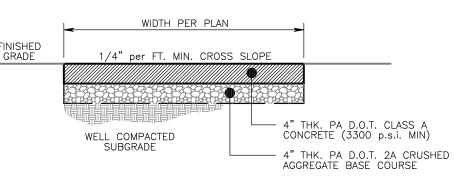
PROJECT PAVING SECTION Not To Scale



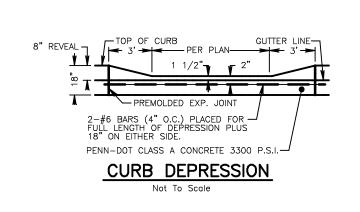


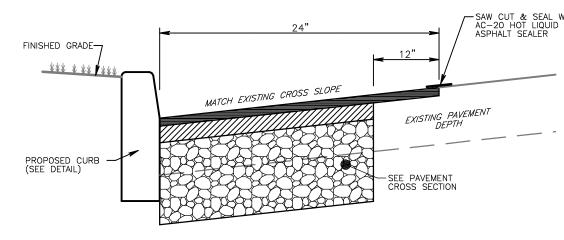


TYPICAL CONTROL JOINT DETAIL

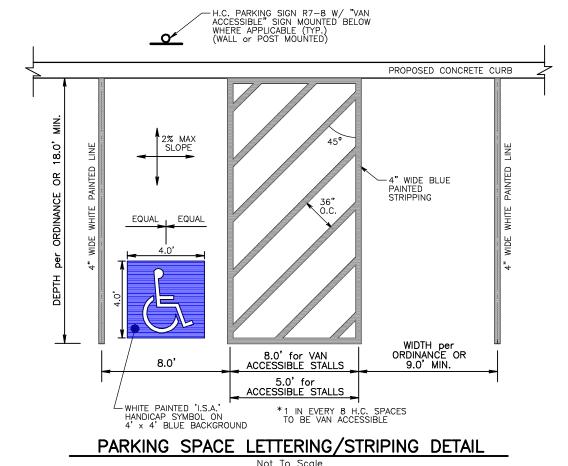


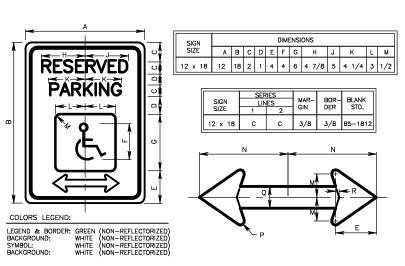
CONCRETE SIDEWALK





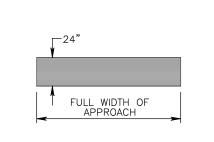
PAVEMENT REPAIR at CURB REPAIR/REMOVAL



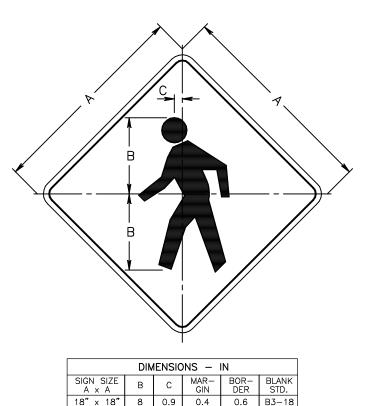


SIGN SHALL MEET THE REQUIREMENTS OF PUBLICATION 68, SECTION 211.241.

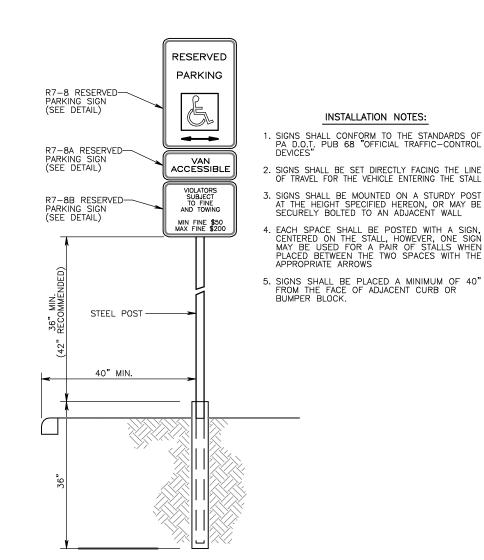
(R7-8) RESERVED PARKING SIGN



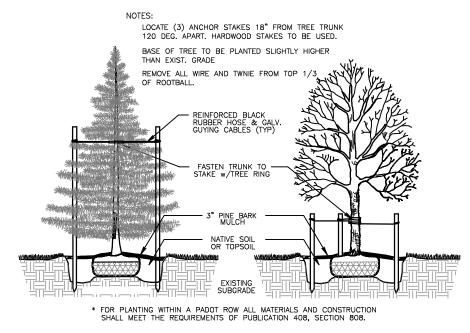
PAINTED (WHITE) STOP BAR



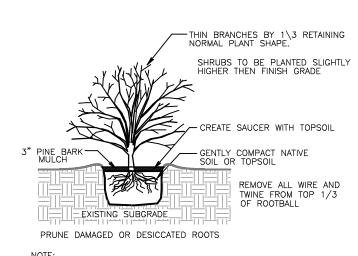
	A×A	В	C	GIN	DER	STD.		
	18" x 18"	8	0.9	0.4	0.6	B3-18		
	30" x 30"	13.6	1.5	0.5	0.8	B3-30		
	36" × 36"	16.3	1.8	0.6	0.8	B3-36		
			COL	.OR:				
SYMBOL AND BORDER: BACKGROUND BLACK (NON-REFLECTIVE) YELLOW OR FLUORESCENT YELLOW GREEN (REFLECTORIZED)								
(W11-2) PEDESTRIAN SIGN								
Not To Scale								



SIGN INSTALLATION DETAIL

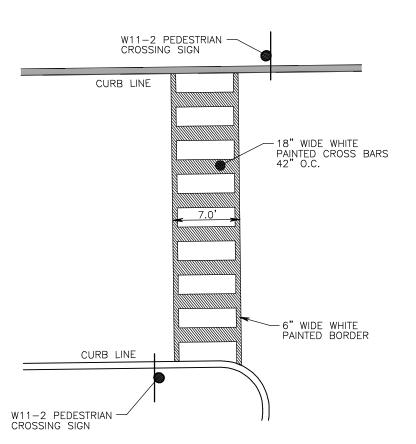


TREE PLANTING DETAIL



NOTE: ALL MATERIALS SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN OR EQUIVALENT. SHRUB PLANTING DETAIL

Not To Scale



PAINTED CROSSWALK DETAIL

Sht07_Details-A 20-0209 D1

WOODROW & /

REVISIONS

MOTHY P. WOODROW

ENGINEER

√ No. 038735-E

PROJECT SERIAL NUMBER FOR DESIGN

Pennsylvania 811.

A Privately funded non-profit rennsylvania Corporation

GWYNEDD MERCY ACADEMY HIGH SCHOOL

39-00-03957-00-9 Block 8 Unit 55 D.B.: 6225 Pg: 1394

Gross Area: 44.3052 Acres
Legal RW: 1.2582 Acres
Ult. RW: 0.9632 Acres

NET Area: 42.0839 Acres

GWYNEDD MERCY

ACADEMY HIGH SCHOOL

1345 Sumneytown Pike Gwynedd Valley, PA 19437

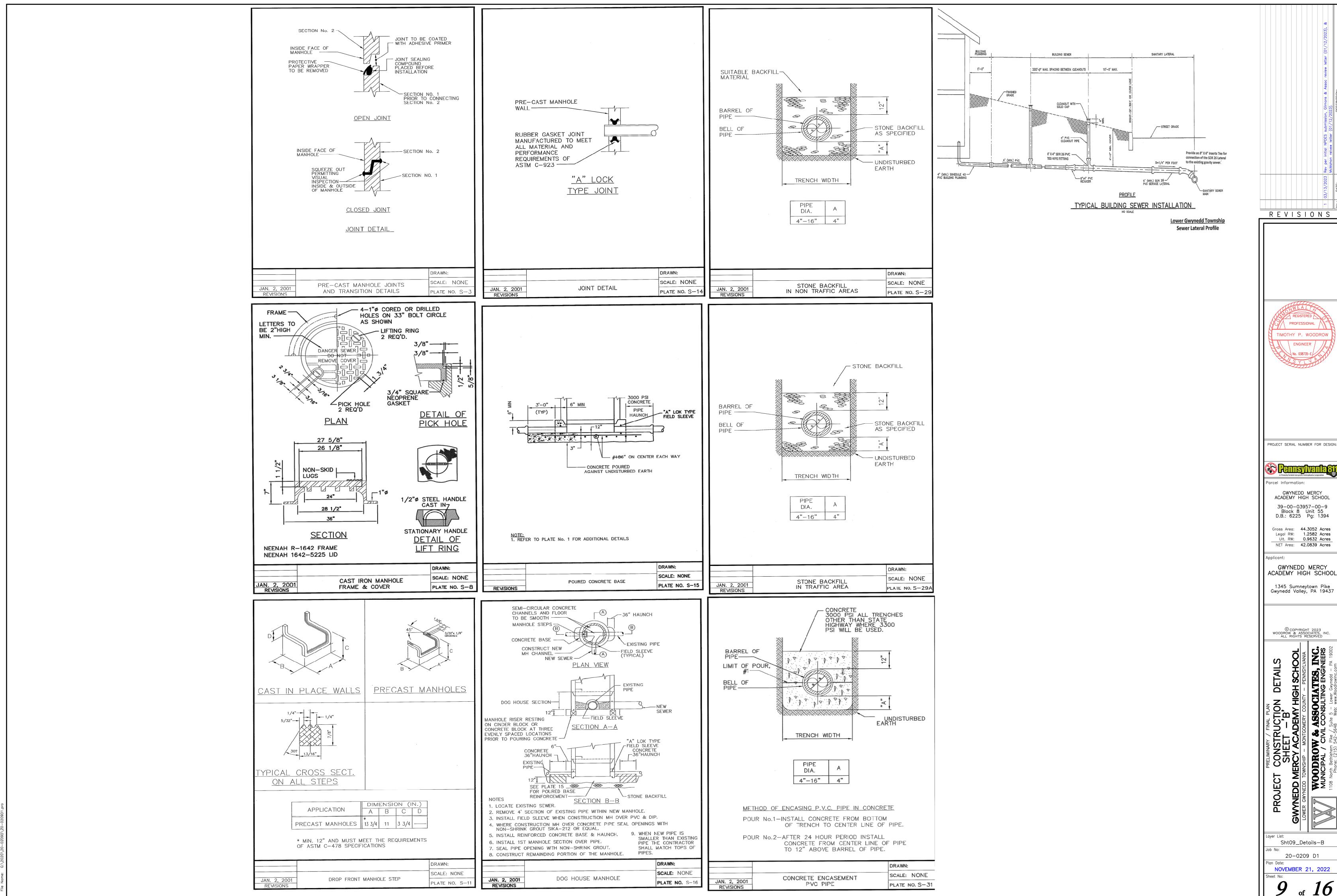
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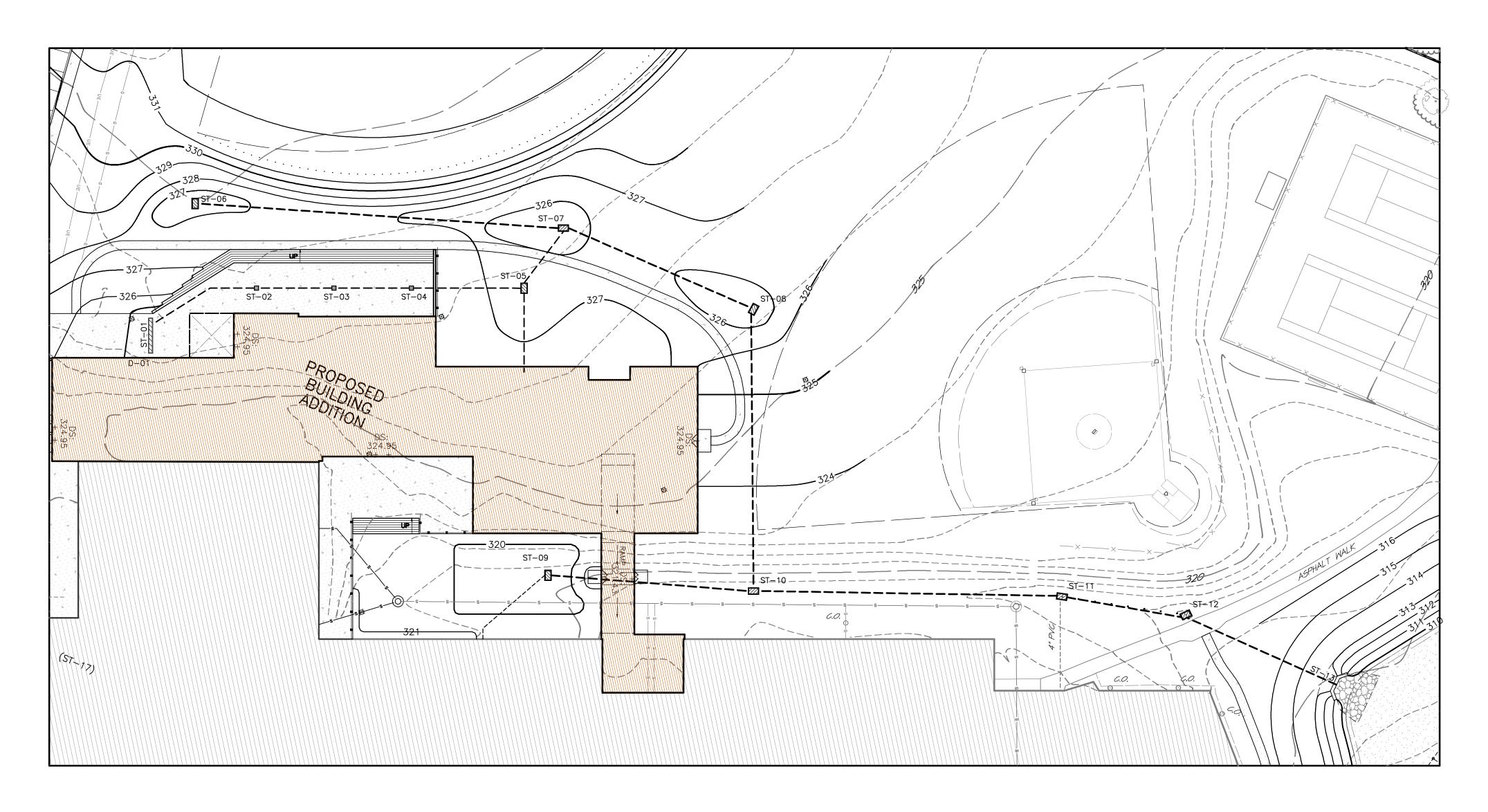
DETAILS

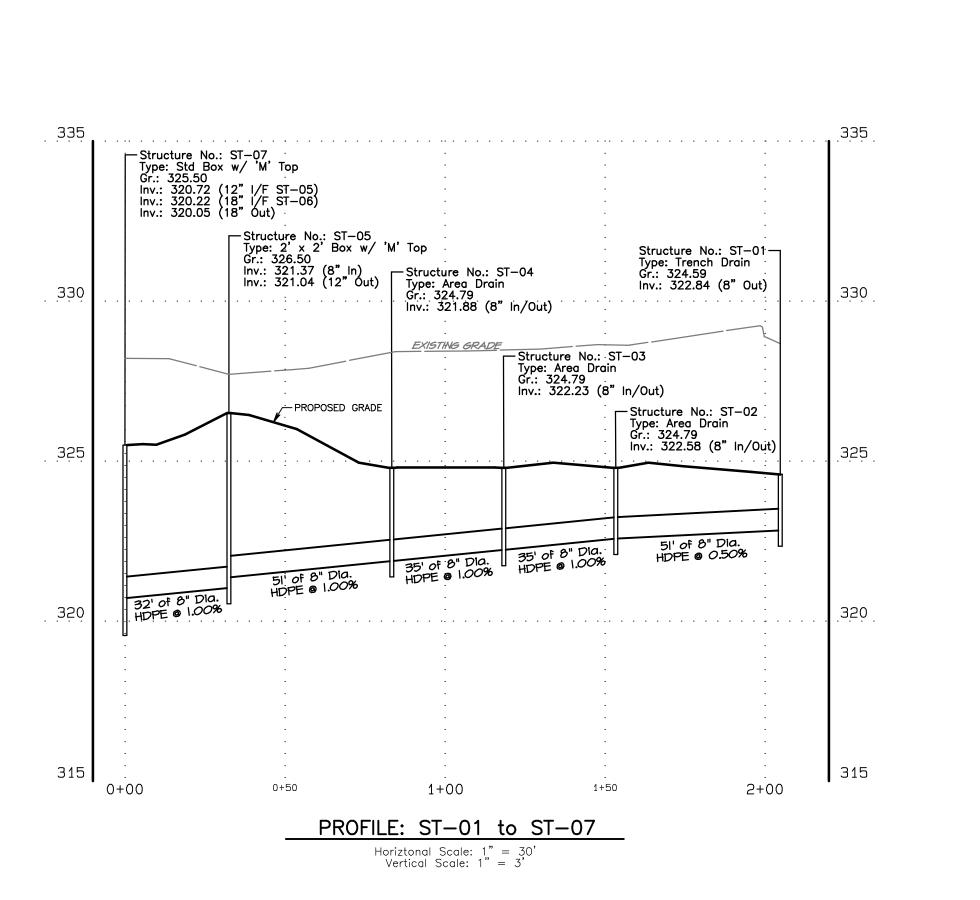
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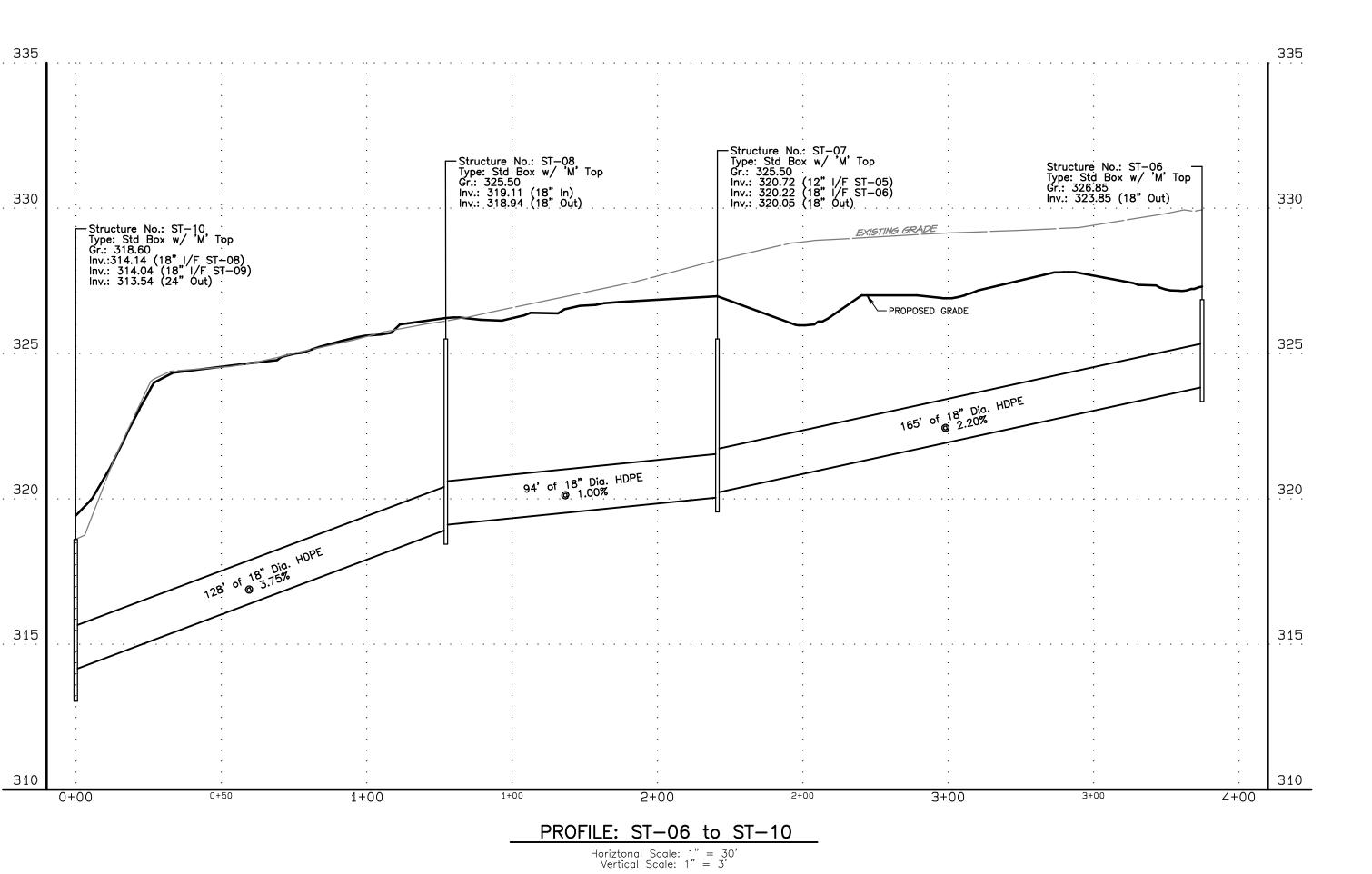
of 16

NOVEMBER 21, 2022









Print Date: Mar 13, 2023 (10:16) Print Scale: 1" = 40.00' File Name: G:\2020\20-0209D\20-0209D1.pro

Plan Date:

NOVEMBER 21, 2022

Sheet No:

10 of 16

Sh10_Prof-A

20-0209 D1

REVISIONS

PROJECT SERIAL NUMBER FOR DESIGN

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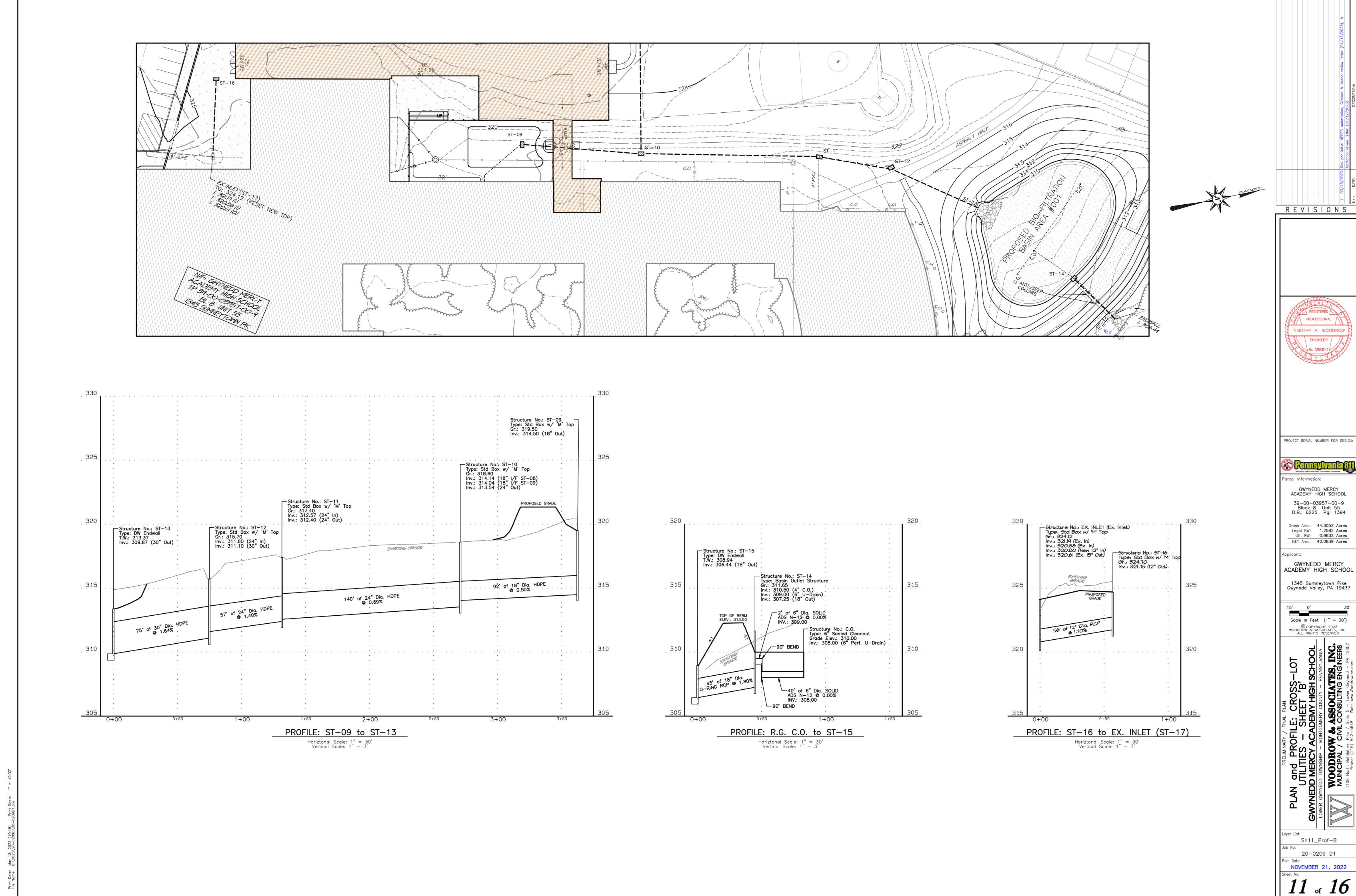
GWYNEDD MERCY ACADEMY HIGH SCHOOL

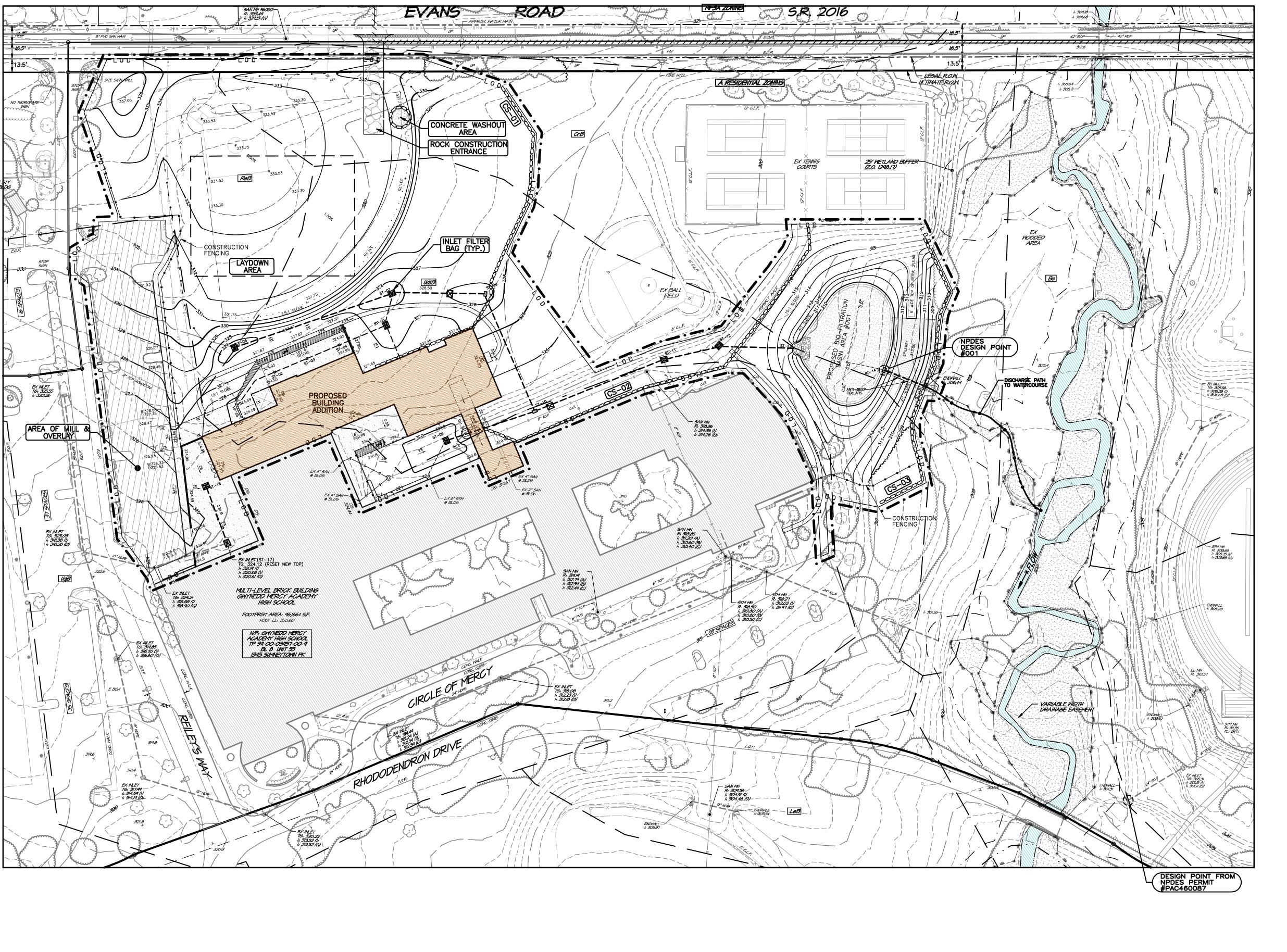
1345 Sumneytown Pike Gwynedd Valley, PA 19437

Scale In Feet (1" = 30')

PLAN and PROFILE: CROSS—LOT
UTILITIES — SHEET 'A'
CWYNEDD MERCY ACADEMY HIGH SCHOOL
LOWER GWYNEDD TOWNSHIP — MONTGOMERY COUNTY — PENNSYLVANIA

WOODROW & ASSOCIATES, INC.
MUNICIPAL / CIVIL CONSULTING ENGINEERS
MUNICIPAL / CIVIL CONSULTING ENGINEERS





GENERAL PLAN NOTES

1. The Erosion & Sedimentation Control Plan shall minimize the extent and duration of earth disturbance to the greatest extent possible by outlining an efficient construction sequence to complete the proposed improvements as quickly as possible while utilizing the Erosion and Sedimentation Controls shown and detailed on the plan(s), to minimize any sediment—laden runoff during construction.

2. The Erosion & Sedimentation Control Plan shall maximize protection of existing drainage features and vegetation to the greatest extent possible by outlining the Limit of Disturbance to avoid impact to any natural drainage features.

3. The Erosion & Sedimentation Control Plan shall minimize soil compaction to the greatest extent possible by flagging the area of the proposed Rain Garden to prohibit any vehicular access during general site construction activities in an effort to preserve natural infiltration rates. Soil compaction shall also be avoided by loosening the subsoil to a depth of 3 to 5 inches to permit the bonding of topsoil to the surface areas and scarification of 6 to 12 inches for compacted soils prior to seeding.

4. The Erosion & Sedimentation Control Plan outlines controls to prevent and/or minimize the generation of increased stormwater through the use of a post—construction Rain Carden to capture, slow, and cool runoff while allowing the natural infiltration properties in the soil in this location the greatest amount of time to absorb retained runoff. During the sediment—control phase of the project, the proposed Compost Sock shall limit any potential for sediment—laden runoff from leaving the area of work to the greatest extent possible.

5. Any proposed impervious areas, Rooftops, Pavement and Sidewalk areas, Etc., have the potential to increase thermal impacts to the watershed. Through the use of the proposed BMPs identified on the Plan and specifications for this Project, runoff is captured, slowed, and cooled to the greatest extent possible; thereby reducing the potential for thermal impacts to the watershed as much as possible.

6. There are no naturally occurring geologic conditions on—site that could potentially cause pollution. All Erosion and Sedimentation Controls (Compost Socks, Etc.) are proposed around the project site in an effort to minimize any construction related pollution from leaving the site.

7. If bedrock is encountered during the construction of the proposed BMPs, the project engineer shall

be consulted to ensure that the proposed BMPs will still function as designed. 8. Sediment—laden runoff is an anticipated construction waste. Through the use of the proposed Erosion Control Device outlined on this plan set, sediment—laden runoff has been mitigated and prevented from leaving the project site to the greatest extent possible.

9. The project site can be referenced on the AMBLER U.S.G.S. Quadrangle Map.

10. The wetlands limits shown on these plans have been taken from boundaries illustrated on the 'ALTA/NSPS Land Title Survey' sheet number 1—10 of 10, dated January 21, 2021, last revised February 26, 2021, prepared by Control Point Associates, Inc. and further verified as accurate by Valley Environmental Service, Inc. on February 26, 2021.

MAINTENANCE PROGRAM for EROSION & SEDIMENT CONTROL MEASURES

All Erosion and Sediment Control Measures require inspection and maintenance as specified below. A written report shall be compiled and kept on—site at all times outlining any necessary maintenance and repair that has been performed on the Erosion & Sediment Control Measures. The report shall be updated weekly and after each runoff event requiring BMP inspection. The owners, their successors, or its assigns, shall assume all responsibility for the cost associated with the inspection, cleaning of the system(s), engineering fees and ultimately any costs associated with the required repairs and/or replacement of said facilities.

TEMPORARY ROCK CONSTRUCTION ENTRANCE: (CONSTANT 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. PUMPED WATER FILTER BAG: (DAILY MAINTENANCE)

Filter bags shall be inspected daily. If any problem is detected, pumping shall cease immediately and not resume until the problem is corrected.

COMPOST SOCK CONCRETE WASHOUT AREA: (DAILY MAINTENANCE)

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

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

3. Plastic liners should be replaced with each cleaning of the washout facility. ROCK FILTER: (WEEKLY MAINTENANCE & AFTER EACH RUNOFF EVENT)

Rock filters should be inspected weekly and after each runoff event.

Sediment shall be removed when accumulations reach 1/2 the height of the filter.

Clogged filter stone (AASHTO #57) or clogged compost layer should be replaced immediately upon discovery.

FILTER BAG INLET PROTECTION: (WEEKLY MAINTENANCE & AFTER EACH RUNOFF EVENT)

1. Inlet filter bags should be inspected on a weekly basis and after each runoff event. Filter bags should be cleaned and/or replaced when the bag is half full or when flow capacity has been reduced so as to cause flooding or bypassing the inlet. Accumulated sediment should be disposed in the approved manner. Bags that will be reused should be rinsed at a location where the rinse water will enter a sediment trap or sediment basin. Damaged filter bags should be replaced.

2. Needed repairs should be initiated immediately after the inspection.

(WEEKLY MAINTENANCE & AFTER EACH RUNOFF EVENT) RIPRAP APRON: All aprons shall be inspected at least weekly and after each runoff event. Displaced riprap within the apron shall be replaced immediately

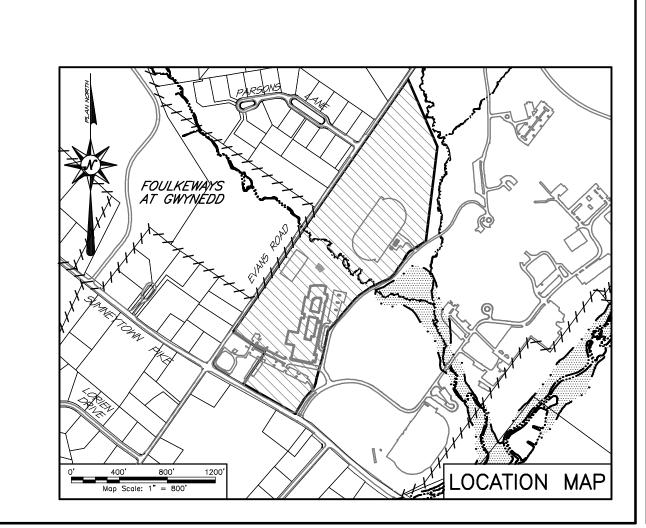
EROSION CONTROL BLANKET: (WEEKLY MAINTENANCE & AFTER EACH RUNOFF EVENT)

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 resotred or replaced within 4 calendar days.

COMPOST FILTER SOCK: (WEEKLY MAINTENANCE & AFTER EACH RUNOFF EVENT)

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 filter socks shall be replaced after 6 months; photodegradable socks after 1 year. Polypropylene socks shall be replaced according to manufacturer's specifications.



REVISIONS

MOTHY P. WOODRO

PROJECT SERIAL NUMBER FOR DESIGN

GWYNEDD MERCY ACADEMY HIGH SCHOOL

39-00-03957-00-9 Block 8 Unit 55 D.B.: 6225 Pg: 1394 Gross Area: 44.3052 Acres

Legal RW: 1.2582 Acres Ult. RW: **0.9632 Acres** NET Area: 42.0839 Acres

ACADEMY HIGH SCHOOL 1345 Sumneytown Pike Gwynedd Valley, PA 19437

GWYNEDD MERCY

Scale In Feet (1" = 50")

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Sh12_Erosion

20-0209 D1 NOVEMBER 21, 2022

LIMIT OF DISTURBANCE: 5.54 ACRES

Soil Series Limits

____ W ____ Mapped Wetlands Limit

EXISTING FEATURES LEGEND **—⊙** Tract Boundary Line - - Right-of-Way Line

- - Storm Sewer Piping G Gas Main / Service Water Main / Service Woodlands Dripline

PROJECT SITE BOUNDARY: 5.90 ACRES

Temp Compost Filter Sock

Area of existing parking lot Mill & Overlay (No Earth Disturbance)

— — Temp Inlet Protection

E&S LEGEND

—222——— Proposed Final Contour Project Site Boundary ————**Lap** — Earth Disturbance Limit

COMPOST SOCK SCHEDULE Sock No. CS-01 between existing baseball fields 2.07% 370 below existing tennis courts 516 3.10% 426

580

3.50%

306

CS-03 below proposed Rain Garden area 24"

PROJECT SOILS WITHIN THE LIMIT OF DISTURBANCE Soils Type: ReB Readington silt loam 3 to 8 18 to 36" UdtB dorthents, shale & sandstone 20-99" to Lithic Bedrock About 60" 0 to 8

- 1. All earth disturbances, including clearing and grubbing as well as cuts and fills shall be done in accordance with the approved E&S plan. A copy of the approved drawings (stamped, signed and dated by the reviewing agency) must be available at the project site at all times. The reviewing agency shall be notified of any changes to the approved plan prior to implementation of those changes. The reviewing agency may require a written submittal of those changes for review and approval at
- At least 7 days prior to starting any earth disturbance activities, including clearing and grubbing, the owner and/or operator shall invite all contractors, the landowner, appropriate municipal officials, the E&S plan preparer, the PCSM plan preparer, the licensed professional responsible for oversight of critical stages of implementation of the PCSM plan, and a representative from the local conservation district to an on-site preconstruction meeting.
- 3. At least 3 days prior to starting any earth disturbance activities, or expanding into an area previously unmarked, the Pennsylvania One Call System Inc. shall be notified at 1-800-242-1776 or 811 for the location of existing underground utilities.
- 4 All earth disturbance activities shall proceed in accordance with the sequence provided on the plan drawings. Deviation from that sequence must be approved in writing from the local conservation
- district or by the Department prior to implementation. 5. Areas to be filled are to be cleared, grubbed, and stripped of topsoil to remove trees, vegetation,
- 6. Clearing, grubbing, and topsoil stripping shall be limited to those areas described in each stage of the construction sequence. General site clearing, grubbing and topsoil stripping may not commence in any stage or phase of the project until the E&S BMPs specificed by the BMP sequence for that
- 7. At no time shall construction vehicles be allowed to enter areas outside the limit of disturbance boundaries shown on the plan maps. These areas must be clearly marked and fenced off before clearing and grubbing operations begin.

stage or phase have been installed and are functioning as described in the E&S plan

and/or the regional office of the Department.

- 8. Topsoil required for the establishment of vegetation shall be stockpiled at the location(s) shown on the plan map(s) in the amount necessary to complete the finish arading of all exposed areas that
- are to be stabilized by vegetation. Each stockpile shall be protected in the manner shown on the plan drawings. Stockpile heights shall not exceed 35 feet. Stockpile slopes shall be 2H:1V or flatter. 9. Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate best management practices to minimize the potential for erosion and sediment pollution and notify the local conservation district
- 10. All building materials and wastes shall be removed from the site and recycled or disposed of in accordance with the Department's Solid Waste Management Regulations at 25Pa. Code 260.1 et seq., 271.1, and 287.1 et. seq. No building materials or wastes or unused building materials shall be burned, buried, dumped, or discharged at the site.
- 11. All off—site waste and borrow areas must have an E&S plan approved by the local conservation district or the Department fully implemented prior to being activated
- 12. The contractor is responsible for ensuring that any material brought on site is clean fill. Form FP-001 must be retained by the property owner for any fill material affected by a spill or release of a regulated substance but qualifying as clean fill due to analytical testing.
- 13. All pumping of water from any work area shall be done according to the procedure described in this
- 14. Until the site is stabilized, all erosion and sediment BMPs shall be maintained properly. Maintenance shall include inspections of all erosion and sediment BMPs after each runoff event on a weekly basis.
- reseeding, remulching and renetting must be performed immediately. If the E&S BMPs fail to perform as expected, replacement BMPs, or modifications of those installed will be required. 15. A log showing dates that E&S BMPs were inspected as well as any deficiencies found and the date they were corrected shall be maintained on the site and be made available to regulatory agency officials

All preventative and remedial maintenance work, including clean out, repair, rep

- 16. Sediment tracked onto any public roadway or sidewalk shall be returned to the construction site by
- the end of each work day and disposed in the manner described in this plan. In no case shall the sediment be washed, shoveled, or swept into any roadside ditch, storm sewer, or surface water. 17. All sediment removed from BMPs shall be disposed of in the manner described on the plan drawings.
- inches on compacted soils prior to placement of topsoil. Areas to be vegetated shall have a minimum 4 inches of topsoil in place prior to seeding and mulching. Fill outslopes shall have a 19. All fills shall be compacted as required to reduce erosion, slippage, settlement, subsidence or other related problems. Fill intended to support buildings, structures and conduits, etc. shall be compacted

18. Areas which are to be topsoiled shall be scarified to a minimum depth of 3 to 5 inches - 6 to 12

- in accordance with local requirements or codes.
- 20. All earthen fills shall be placed in compacted layers not to exceed 9 inches in thickness. 21. Fill materials shall be free of frozen particles, brush, roots, sod, or other foreign or objectionable materials that would interfere with or prevent construction of satisfactory fills
- 22. Frozen materials or soft, mucky, or highly compressible materials shall not be incorporated into fills. 23. Fill shall not be placed on saturated or frozen surfaces.
- 24. Seeps or springs encountered during construction shall be handled in accordance with the standard and specification for subsurface drain or other approved method.
- 25. All graded areas shall be permanently stabilized immediately upon reaching finished grade. Cut slopes in competent bedrock and rock fills need not be vegetated. Seeded areas within 50 feet of a surface water, or as otherwise shown on the plan drawings, shall be blanketed according to the standards
- 26. Immediately after earth disturbance activities cease in any area or subarea of the project, the operator shall stabilize all disturbed areas. During non—germinating months, mulch or protective blanketing shall be applied as described in the plan. Areas not at finished grade, which will be reactivated within 1 year, may be stabilized in accordance with the temporary stabilization specifications. Those areas which will not be reactivated within 1 year shall be stabilized in accordance with the permanent
- 27. Permanent stabilization is defined as a minimum uniform, perennial 70% vegetative cover or other
- slopes shall be capable of resisting failure due to slumping, sliding, or other movements. 28 F&S BMPs shall remain functional as such until all areas tributary to them are permanently stabilized or until they are replaced by another BMP approved by the local conservation district of the Department. 29. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas,
- the owner and/or operator shall contact the local conservation district for an inspection prior to removal/conversion of the E&S BMPs. 30. After final site stabilization has been achieved, temporary erosion and sediment BMPs must be removed or converted to a permanent post construction stormwater management BMPs. Areas disturbed during removal or conversion of the BMPs shall be stabilized immediately. In order to
- ensure rapid revegetation of disturbed areas, such removal/conversions are to be done only during the germinating season. 31. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas,
- areas, the owner and/or operator shall contact the local conservation district to schedule a
- 32. Failure to correctly install E&S BMPs, failure to prevent sediment-laden runoff from leaving the construciton site, or failure to take immediate corrective action to resolve failure of E&S BMPs may result in administrative, civil, and/or criminal penalties being instituted by the Department as defined in Section 602 of the Pennsylvania Clean Streams Law. The Clean Streams Law provides for up to \$10,000 per day in civil penalties, up to \$10,000 in summary criminal penalties, and up to \$25,000
- the inlet cap and box to prevent runoff from entering the box between this seal.
- 34. Should any Compost Sock or Silt Fence need to be relocated due to proposed grading activities, said grading should be immediately stabillized with a permanent seed and mulch mixture applied at the recommended rates and the Compost Sock/Silt Fence that was moved, placed back to its original location and repaired or replaced if damaged during moving. SITE SPECIFIC NOTES:

33. All inlets installed within lawn areas shall have mastic or an approved equivalent installed between

- 35. Concrete wash water shall be handled in the manner described on the plan drawings. In no case shall it be allowed to enter any surface waters or groundwater systems.
- 36. All channels shall be kept free of obstructions including but not limited to fill, rocks, leaves, woody debris, accumulated sediment, excess vegetation, and construction material/wastes
- 37. 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 area in the manner described in this plan until such restoration
- 38. Erosion control blanketing shall be installed on all slopes 3H:1V or steeper and on all other disturbed areas specified on the plan maps and/or detail sheets.
- 39. Fill material for embankments shall be free of roots, or other woody vegetation, organic material, large stones, and other objectionable materials. The embankment shall be compacted in maximum 8" layered lifts at 95 % density. DUST CONTROL

40. Dust control measures must be implemented upon the generation of enough dust whereas it leaves

- the project site on an as—needed basis or upon direction of a municipal representative and/or a representative of the local Conservation District.
- The exposed soil surface should be moistened until the surface has been adequately wettened to
- The exposed soil surface shall be seeded and mulched according to the recomended rates per
- Shall be in the form of loose, dry granules or flakes fine enough to feed through a spreader at

a rate that will keep the surface moist but not cause pollution or plant damage

I. GENERAL NOTES:

- 1. This Erosion and Sedimentation Control Plan was prepared by the staff of Woodrow & Associates, Inc. under the direction of Mr. Timothy P. Woodrow, P.E.
- 2. Sediment must be removed from storm water inlet protection after each runoff event.
- 3. Straw mulch shall be applied in long strands, not chopped or finely broken.

II. RECEIVING WATERSHED:

The receiving watershed for this development is an unnamed tributary to the Trewellyn Creek. The Chapter 93 Classification for this receiving watershed is TSF & MF.

III. INTENT OF CONSERVATION PROGRAM: The intent of this program is to prevent accelerated erosion of the exposed site soils during the construction and permanent life periods of the Development. The program requires retention of all sediments on the construction site while minimizing the impact of development on existing streams

These objectives will be achieved by minimizing exposure time of potentially erosive soils to runoff and installation of the temporary and permanent conservation practices in proper sequence with construction. The intent of this program should be understood and implemented throughout the entire development. The various construction trades should be appraised of this program and directed to prevent undue disturbance of prepared and protected surfaces.

IV. SURFACE STABILIZATION CRITERIA:

- All denuded soil surfaces including soil stockpiles that are subject to erosion shall be stabilized immediately, either temporarily or permanently. Crushed stone on pavement subgrades is considered adequate protection. Disturbed areas which are not at finished grade and which will be redisturbed within one (1) year may be stabilized with a quick growing, temporary seeding mixture and mulch. During non-germination periods, mulch shall be applied at recommended rates. Germination period shall be from April 1st to June 15th and August 15th to October 15th, during non-germination periods mulched areas shall be limed, fertilized, seeded and remulched immediately
- Silt fence must be installed parallel to existing contours and constructed in level alignments. The ends of the fence must be extended a minimum of eight (8) feet up slope and at forty—five (45) degrees to the main fence alignment If any of the measures contained within this plan prove inadequate at removing sediment from flows prior to discharge or stabilizing of the surfaces involved, additional measures must be immediately

Contractor/Applicant shall assume responsibility for the maintenance and operation of all erosion and

implemented by the Contractor/Applicant to eliminate all such problems. Said measures shall be approved by the local soil conservation district A reserve supply of crushed stone, silt fence, temporary seed and hay bales shall be maintained on site for emergency replacement of any failing erosion and sediment control measures.

V. EROSION CONTROL DEVICES / MAINTENANCE PROGRAM:

STABILIZED CONSTRUCTION ENTRANCE:

- Entrances are to be constructed per Ch. 102 Standard Construction Detail #16 and the details provided with this plan set. The stabilized construction entrance(s) shall be maintained so that tire scrubbing activity does not become ineffective. Any buildup of mud or soil on the street shall be cleaned immediately by hand or mechanical sweeping. COMPOST FILTER SOCKS:
- Compost Socks shall be installed per Ch. 102 Standard Construction Details #4-1 and the details provided with this plan set. 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 **ROCK FILTERS:**
- Rock Filters shall be installed per Ch. 102 Standard Construction Details #4—6 and #4—14 (as applicable) and the deteails included on this plan set. Rock Filters should be inspected weekly and after each runoff event. Clogged filter stone (AASHTO #57) should be replaced. Needed repairs should be initiated immediately after the inspection.

PUMPED WATER FILTER BAGS:

- Pumped Water Filter Bags shall be installed per Ch. 102 Standard Construction Detail #3—16 and the details provided with this plan set. Filter Bags shall be inspected daily. If any problem is detected, pumping shall cease immediately and not resume until the problem is corrected. COMPOST SOCK CONCRETE WASHOUT AREA:
- Compost Sock Concrete Washout Areas shall be installed per Ch. 102 Figure 3.18 and the details provided with this plan set. Washout Areas shall 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 CHANNELS/SWALES:

Channels/Swales shall be desianed and installed accordina to all applicable information within Chapter 6 of the PA DEP Erosion and Sediment Pollution Control Program Manual, Ch. 102 Standard Construction Details #6-1, #6-2, and #6-3 (as applicable) and the details provided with this plan set. Channels/ Swales "should be maintained to ensure that the specified design dimensions and protective linings

are available at all times. A channel/swale should be cleaned whenever total channel/swale dept is reduced by 25% at any location. Damaged channel/swale linings should be repaired or replaced immediately RIPRAP APRONS:

- Riprap Areas shall be installed per Ch. 102 Standard Construction Details #9-1, #9-2, and #9-3 (as applicable) and the details provided with this plan set. All aprons shall be inspected at least weekly and after each runoff event. Displaced riprap within the apron shall be replaced immediately. STORM INLET PROTECTION:
- Inlet protection devices shall be constructed per Ch. 102 Standard Construction Details #28-32 and the details provided with this plan set. Inlet protection shall be maintained until all earthwork within the tributary drainage area has been completely stabilized. SEDIMENT DISPOSAL:
- Silt removed from temporary erosion and sediment control devices shall be disposed of on-site in andscaped areas located outside the 100 year flood plains, wetlands, steep slopes and drainage swales. Areas of sediment disposal shall be considered a critical vegetation area requiring immediate stablization. Each drainage sub-area will require separate and unique erosion and sediment control measures.
- he contractor shall follow the specific construction sequence deemed appropriate by the local soil All BMP listed above require inspection weekly and after each runoff event. All required repairs and or replacement of BMP's must be done immediately.

VI. UTILITY TRENCH EXCAVATION: GENERAL REQUIREMENTS

final surface layer following trench backfilling.

- Exposed trench excavations have high potential for accelerated erosion and sediment pollution. Since these excavations are usually located at lower elevation along or across earth disturbance sites, open ches serve to concentrate sediment laden runoff and convey it to site boundaries or waterways The most important erosion and sediment pollution control consideration for trench construction is the limiting and specific scheduling of work activities. CONSTRUCTION REQUIREMENTS:
- Limit advance clearing and grubbing operations to a distance equal to two times the length of pipe Work crews and equipment for trenching, placement of pipe, plug construction and backfilling will be self contained and separate from clearing and work crews and site restoration and stabilization
- All soils excavated from the trench shall be placed on uphill side of the trench. Limit daily trench excavation to the length of pipe placement, plug installation and backfilling that
- can be completed the same day Water which accumulates in the open trench will be completely removed by pumping before pipe placement and/or backfilling begins. Water removed from the trench shall be pumped through a
- On the day following pipe placement and trench backfilling, the disturbed area will be graded to Soils excavated from the existing surface layer should be stockpiled separately and returned as

EROSION and SEDIMENTATION CONTROL

VII. FERTILIZATION, SEEDING AND MULCHING:

TEMPORARY COVER ON DISTURBED AREAS:

Upon temporary cessation of an earth disturbance or any stage or phase of an activity where a cessation of earth disturbance activities exceed 4 days, the site shall be immediately seeded, mulched or otherwise protected from accelerated erosion and sedimentation pending future earth

PERMANENT COVER ON DISTURBED AREAS

- Disturbed areas which are either at finish grade or will not be redisturbed a within one (1) year period must be seeded and mulched with a permanent seed mixture. All disturbed areas shall be stabilized immediately with a temporary seed and mulch mixture applied at the recommended rates. Site preparation of mulch and mainténance shall be performed in accordance with the Penn State University's Erosion Control & Conservation Plantings on Noncropland manual and Pennsylvania Department of Transportation publication form 408 specifications (latest
- edition). During nongermination periods, mulch must be applied at the recommended rates. Graded areas shall be scarified or otherwise loosened to a depth of 3" to 5" prior to topsoil placement to permit the bonding of new topsoil

MUI CHING:

- All seeded greas should be mulched or blanketed to minimize the potential for failure to establish adequate vegetated cover. Mulching may also be used as a temporary stabilization of disturbed areas in non—germinating seasons. Muĺch shall be applied immediately after seeding or at the termination of grading operations during non-germinating seasons.
- Straw and hay mulch should be anchored or tackified immediately after application to prevent being windblown. A tractor—drawn implement may be used to "crimp" the straw or hay into the soil about 3 inches deep. This method should be limited to slopes no steeper than 3H:1V. The Polymeric and gum tackifiers mixed and applied according to manufacturer's recommendations ma
- be used to tack mulch. Avoid application during rain and on windy days. A 24 hour curing period and a soil temperature of 45 degrees F are typically required. Application should generally be heaviest at edges of seeded areas and at crests of ridges and banks to prevent loss. The remainder of the area shall have binder applied uniformly. Binders may only be applied after mulch is spread or sprayed onto the mulch as it is being blown onto the soil. Synthetic binders, or chemical binders, may be used as recommended by the manufacturer to anchor mulch provided that sufficient documentation is provided to show they are non-toxic to native plant
- Mulch on slopes of 8% or steeper should be held in place with netting. Light-weight plastic, fiber, or paper nets may be stapled over the mulch according to manufacturer's recommendations. Shredded paper hydromulch should not be used on slopes steeper than 5%. Wood fiber hydromulch may be applied on steeper slopes provided a tacifier is used. The application for any hydromulch should be 2000 lb/acre at a minimum.

MULCH APPLICATION RATES

Mulah Tuna		Application Rate	Notes:	
Mulch Type:	Per Acre:	Per 1,000 S.F.	Per 1,000 S.Y.	Notes:
Straw	3 tons	140 lbs.	1,240 lbs.	Either wheat or oat straw, free of weeds, not chopped or finely broken
Hay	3 tons	140 lbs.	1,240 lbs.	Timothy, mixed clover and timothy or other native forage grasses
Wood Chips	4-6 tons	185-275 lbs.	1,650-2500 lbs.	May prevent germination of grasses and legumes
Hydromulch	1 ton	47 lbs.	415	See limitations above

VIII. SEEDING SCHEDULE:

and animal species.

Seeding to conform to specifications outlined in Section 804 — Seeding and Soil Supplements of PADOT Publication 408/2003 (latest revision). A soils test should be performed in order to determine actual lime and fertilizer needs of the project site instead of using the generic application rates listed below.

TEMPORARY SEEDING SPECIFICATION - FORMULA F: 100% ANNUAL RYEGRASS (LOLIUM MULTIFLORUM): 10.0 lbs./1,000 s.y.

PERMANENT SEEDING SPECIFICATION - FORMULA B: 15.0 lbs./1,000 s.y. 70% Tall Fescue (Festuca Arunoinacea var., Kentucky 31): 30% Creeping Red Fescue or Chewings Fescue: 6.0 lbs./1,000 s.v.

SEEDING RATES FOR THE ABOVE MIXTURES:

- Spread seeds where indicated and at the rates specified above (and Table A, Pub 408, Section 804). Spread seeds within the following dates, or as otherwise indicated or directed: - March 15 to June 01 August 01 to October 15 * Formula B:
- * Formula E: - March 15 to October 15 Extend seeding dates where project conditions warrant. Apply full treatment or apply only 50% of the permanent seeding and soil supplements and apply the remaining 50% within the next seeding dates. Place mulch, hay or straw immediately after seeding or within 48 hours after seeding is completed. Place hay or strow uniformly, in a continuous blanket, until seeding is completed. If directed, increase the rate of application, depending upon the material used, season, soil conditions or method of

application. SOIL SUPPLEMENTS:

Pulverized agricultural limestone and commercial fertilizer shall be applied to all disturbed areas which are to be seeded in both temporary and permanent conditions at the following rates: SOIL AMENDMENT APPLICATION RATE EQUIVALENTS Permanent Seeding Application Rate

Ca: Amazandarank	Perm	anent Seeding App	nication Rate	Notes		
Soil Amendment	Per Acre:	Per 1,000 S.F.	Per 1,000 S.Y.	Notes		
Agricultural Lime	6 tons	240 lb.	2,480 lb.	Or as per soil test; may not be required in agricultural fields		
10-20-20 Fertilizer	1,000 lb.	25 lb. 210 lb.		Or as per soil test; may not be required in agricultural fields		
Temporary Seeding Application Rate						
Agricultural Lime	1 ton	40 lb.	410 lb.	Typically not required for topsoil stockpiles		
10-10-10 Fertilizer	0-10 Fertilizer 500 lb. 12.5 lb.		100 lb.	Typically not required for topsoil stockpiles		

Adapted from Penn State, "Erosion Control and Conservation Plantings on Noncropland IX. SOILS RESOLUTIONS:

- Contractor to ensure proper stablization. Methods to include, seeding and mulching at the recommended rates and where necessary, the placement of an approved erosion control blanket.
- Contractor to ensure all fill used for roadway construction is placed and compacted in appropriate lifts. Should material not be suitable for roadway construction the contractor may import suitable material from an area within the permitted area.
- Contractor to ensure proper stablization. Methods to include, seeding and mulching at the recommended rates and where necessary, the placement of an approved erosion control blanket. growth. Should the topsoil be lacking of the nutrients to produce growth the contractor shall consider applying lime and/or fertilizers at the rates recommended by the project landscape consultant and/or
- Topsoil may be imported from an area within the permitted area proven to be suitable. Topsoil shall contain 4.0% to 10.0% organic matter and meet the following grading analysis:

Minimum Percent Passing: 2 inches

Ponds, Dikes and Levees Embankments

- Contractor to ensure all fill used for basin embankment construction is placed and compacted in propriate lifts. Should material not be suitable for basin construction the contractor may import suitable material from an area within the permitted area. Contractor to ensure proper stablization. Methods to include, seeding and mulching at the recommended rates and where necessary the placement of an approved erosion control blanket
- Terraces, diversions and waterways Contractor to ensure all earthwork associated with swales, diversion berms and/or watercourses is adequately stabilized with an approved erosion and sediment control blanket and/or seeding and mulching applied at the recommended rates Should erosion continue the contractor shall consult the design engineer, the local conservation district,

and take appropriate measures to correct the problems. Corrective measures may include but are not

Additional seeding and mulching, the placement of sod, armoring the channel with a stronger stabilization blanket, or the placement of rip-rap.

X. POST-CONSTRUCTION MAINTENANCE PROGRAM:

- Post-Construction maintenance of all implemented BMP's shall include but not be limited to the following: 1. Check all vegetated areas after any runoff events to identify any areas showing accelerated erosion. If any area is identified as eroding, these areas are to be stabilized using methods described or
- 2. All storm structures shall be inspected and cleaned of debris annually or as necessary to maintain full capacity of the storm system

XI. STANDARD NOTE TO COMPLY WITH NPDES CHECKLIST ITEM #2.b.xv:

- (#3.b.xv for an Individual NPDES Permit) If the site will need to import or export material from the site, the responsibility for performing environmental due diligence and determination of clean fill will rest with the permittee . Clean Fill is defined as: Uncontaminated, non-water soluble, non-decomposable, inert, solid material.
- processed for re-use). 2. Clean Fill affected by a spill or release of a regulated substance: Fill materials affected by a spil 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".

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 recognized as such

The term does not include materials placed in or on the waters of the Commonwealth unless other—wise authorized. (The term "used asphalt" does not include milled asphalt or asphalt that has been

- 3. Any person placing 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.
- 4. Environmental due diligence: The applicant must perform environmental due diligence to determine if the fill materials associated with the project qualify as clean fill. Environmental due diligence is defined as: Investigative techniques, including, but not limited to, visual property inspections, electronic data base searches, review of property ownership, review of property use history, Sanborn maps, environmental questionaires, 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 Chapter 287 Residual Waste Management or 271 Municipal Waste Management, whichever is

XII. MONITORING, INSPECTION, AND REPORTING REQUIREMENTS:

- The permittee or co—permitee(s) must ensure that visual site inpsections are conducted weekly, and within 24 hours after each measurable rainfall event throughout the duration of construction and unti-the receipt and acknowledgement of the N.O.T. by the department or authorized conservation district he visual site inspections and reports shall be completed in a format provided by the department and conducted by qualified personnel, trained and experienced in erosion and sediment control, to ascertain that E&S BMP's and PCSM BMP's are properly constructed and maintained to effectively minimize pollution to the waters of this commonwealth. A written report of each inspection shall be
- (1) A summary of site conditions, E&S BMP and PCSM BMP, implementation and maintenance

(2) The date, time, name and signature of the person conducting the inspection. Noncompliance Reporting:

- Where E&S, PCSM or PPC BMP's are found to be inoperative or ineffective during an inspection or any other time, the permittee and co-permittee(s) shall, within 24 hours, contact the department or authorized conservation district, by phone or personal contact, followed by the submission of a written report within 5 days of the initial contact. Noncompliance reports shall include the following
- (1) Any condition on the project site which may endanger public health, safety, or the environment, or involved incidents which cause or threaten pollutio
- (2) The period of noncompliance, including exact dates and times and/or anticipated time when the (3) Steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance; and

(4) The date or schedule of dates, and identifying remedies for correcting noncompliance conditions. Reduction, Loss, or Failure of the BMP's: Upon reduction, loss or failure of the BMP's, the permittee and co-permittee shall take immediate

or alternative treatment shall be at least as effective as the original BMP's.

action to restore the BMP's or provide an alternative method of treatment. Such restored BMP's

Termination of Coverage: N.O.T.: Upon permanent stabilization of earth disturbance activities associated with construction activity that are authorized by this permit and when BMP's identified in the PCSM Plan have been properly installed, the permittee and/or co-permittee of the facility must submit a N.O.T. form that is signed in accordance with Part B, Section 1.c, Signatory Requirementes, of the NPDES permit. All letters certifying discharge termination are to be sent to the department or authorized conservation district. The N.O.T. must contain the following information: facility name, address and location, operator name and address, permit number, identification and proof of acknowledgment from the person(s) who will be responsible for the operation and maintenance of the PCSM BMP's in accordance with the approved PCSM Plan, and the reason for the permit termination. Until the permittee has recieved written acknowledgement of the N.O.T., the permittee will remain responsible for the

operation and maintaining all E&S BMP's and PCSM BMP's on the project site and will be responsible

for the violations occurring on the project site. Completion Certificate and Final Plans:

Within 30 days after the completion of the earth disturbance activities authorized by this permit, including the permanent stabilization of the site and proper installation of PCSM BMP's in accordance with the approved PCSM Plan, or upon submission of the N.O.T., the permittee shall file with the department or authorized conservation district a statement signed by a licensed professional and b the permittee certifying that work has been performed in accordance with the terms and conditions of the NPDES permit and the approved E&S and PCSM Plans.

LIMITATION OF SOILS PERTAINING TO EARTHMOVING

SOILS NAME:

| x | x | x | x | x

SPECIFIC LIMITATION RESOLUTIONS:

● LOW STRENGTH/LANDSLIDE PRONE

the infiltration rates of the subsoil

in removing extra wetness from the soil.

Readington

Udorthents

• EASILY ERODIBLE

- CUTBANKS CAVE rench wall reinforcement shall be provided on—site if necessary to stabilize construction related trenching.
- Soils testing should be conducted to determine the actual risk of corrosion to concrete or steel and if necessary, concrete mixes adjusted and steel coated to withstand the soil corrosiveness
- Special consideration should be applied to ensure that seed mixes and proposed plantings have sufficient water and nutrients within the soil to establish growth.
- Additional erosion control blanketing shall be considered to control any potential erosion in sloped areas. • DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE Special consideration shall be taken in the design of all proposed BMPs to ensure that any existing saturated zones or high water tables will not impact the proposed design.
- Hydric soils shall be scarified and mixed with a planting soils mixture and/or topsoil to improvie the vegetative properties of the soil.
- Additional erosion control mats or other slope reinforcment shall be considered to assist in landslide and carification of the subsoil shall be a consideration during final grading and topsoil placement to improve
- Extra care must be taken in site grading to locate and identify any potential sinkhole areas, and if discovered, immediate measures shall be taken to remediate any sinkhole locations. ● POOR SOURCE OF TOPSOIL on-site stockpiles are deemed to be poor for use in topsoil, improved topsoil shall be imported to
- the site and utilized for final site grading. ● FROST ACTION Special care must be taken to ensure that the soil is not frozen solid when grading the site to the proposed elevations. If large areas of the project site appear to be frozen, the soil shall be thawed before being set to final design elevations.
- Scarification of the subsoil shall be a consideration during final grading and topsoil placement to improve the infiltration rates of the subsoil.

Scarification of the subsoil shall be a consideration during final grading and topsoil placement to improve the infiltration rates of the subsoil. Additional plantings shall be considered to be placed on—site to assist

At least 7 days before starting any earth disturbance activities, the operator shall invite all contractors involved in those activities, the landowner, all appropriate municipal officials, the erosion and sediment control plan preparer, the designated Licensed Professional, and the local Conservation District to an on—site meeting. Also, at least 3 days before starting any earth disturbance activities, all contractors involved in those activities shall notify the Pennsylvania One Call Incorporated System at 811 or 1-800-242-1776 for buried utilities locations.

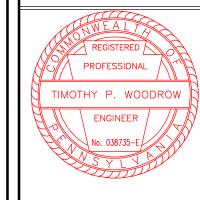
All earth disturbance activities shall proceed in accordance with the outlined sequence on these plans Each stage shall be completed before any following stage is initiated; clearing and grubbing shall be limited only to those areas described in each stage. General site clearing, grubbing, and topsoil 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. Deviation from this sequence must be approved in writing from the local Conservation District or by DEP prior to implementation. No more than 15,000 square feet of disturbed area shall reach final grade before initiating seeding and mulching operations.

Upon temporary cessation of an earth disturbance or any stage or phase of an activity where a cessation of earth disturbance activities exceed 4 days, the site shall be immediately seeded, mulched or otherwise protected from accelerated erosion and sedimentation pending future earth disturbance activities. Per NPDES requirements "Upon the installation or stabilization of all perimeter sediment control BMPs and at least 3 days prior to proceeding with the bulk earth disturbance activities, the permittee or co-permittee shall provide notification to the Department or authorized conservation district.

- 1. Install rock construction entrance along Evans Road as shown and detailed on the plans. Stake and flag the Limit of Disturbance as shown on the plans
- 2. Install all Compost Filter Sock as shown and detailed on the plans. Install proposed Construction Fencing as shown to prohibit any pedestrian traffic from entering the area of work.
- 3. Begin removal and demolition of all features marked for removal on the plans. Dispose of all materials and wastes in accordance with all local municipal, county, and federal regulations.
- 4. Begin construction of proposed building addition as shown on the plans. Begin site grading as shown on the plans. As site grading comes to final proposed grades, immediately stabilize disturbance with a permanent seed and mulch mixture applied at the recommended rates. 5. Prior to beginning construction of the Bio-filtration Basin, ensure that the upslope Compost Sock
- CS-02 is properly installed and functioning as maximum effort shall be taken to prevent any sediment-laden runoff from entering the Basin area. If necessary, remove any accumulated sediment from this compost sock and repair or replace any damaged areas. 6. Begin installation of proposed Bio-filtration Basin as shown and detailed on the plans. See Individual Basin Construction Sequence on the sheet '(PCSM) POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS' for greater detail. Finalize all berm and spillway areas including the erosion control matting on the spillway as shown and detailed on the plans. Install all rip—rap areas as shown and detailed
- on the plans. Immediately stabilize all Basin area construction with the Basin seed mixtures shown 7. Install remaining yard drain and storm sewer collection system. Install an inlet filter bag within each inlet as it is installed and connect all proposed roof leaders from the new building addition as shown on the plans. Immediately stabilize all disturbance with a permanent seed and mulch mixture applied
- 8. Finalize building addition construction and all site grading, including base course for the new parking
- areas alongside the building addition and all concrete pathway/sidewalk areas. 9. Reconstruct the proposed baseball field in the location of the Rock Construction Entrance as shown on the plans. Apply Lawn Soil Restoration to all indicated lawn areas as shown and detailed on the plans. See Individual Lawn Soil Restoration Construction Sequence on the sheet '(PCSM) POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS' for greater detail. Immediately stabilize all
- disturbance with a permanent seed and mulch mixture applied at the recommended rates. 10. Vegetated greas shall be considered permanently stabilized when a uniform 70% vegetative cover or erosion resistant perennial species have been achieved, or the disturbed area is covered with an acceptable BMP which permanently minimizes accelerated erosion and sedimentation. Until such time as this standard is achieved, interim stabilization measures and temporary erosion and sediment control BMPs that are used to treat project runoff may not be removed. If soil areas appear to be compacted, scarify 6 to 12 inches prior to seeding. New topsoil shall be placed with a minimum
- 11. Upon completion of site stabilization and removal of all temporary erosion and sediment control measures, commence with the placement of the final wearing coarse for the parking areas.
- 12. Install all traffic control devices. (i.e. signage and striping.)
- 13. Within 30 days after the completion of earth disturbance activities authorized by the NPDES permit, including the permanent stabilization of the site and proper installation of PCSM BMPs in accordance with the approved PCSM Plan, or upon submission of the NOT if sooner, the permittee shall file with the department or authorized conservation district a statement signed by a licensed professional and by the permittee certifying that work has been performed in accordance with the terms and conditions of the NPDES permit and the approved E&S and PCSM Plans. Completion certificates are needed to ensure that all work has been performed in accordance with the terms and conditions of the NPDES permit and the approved E&S and PCSM Plans.

CONSTRUCTION SEQUENCE

REVISIONS



PROJECT SERIAL NUMBER FOR DESIG



GWYNEDD MERCY

ACADEMY HIGH SCHOOL

Legal RW: 1.2582 Acres

GWYNEDD MERCY

ACADEMY HIGH SCHOOL

1345 Sumneytown Pike

Ult. RW: 0.9632 Acres

39-00-03957-00-9 Block 8 Unit 55 D.B.: 6225 Pg: 1394 Gross Area: 44.3052 Acres

NET Area: 42.0839 Acres

Gwynedd Valley, PA 19437

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IROL SF

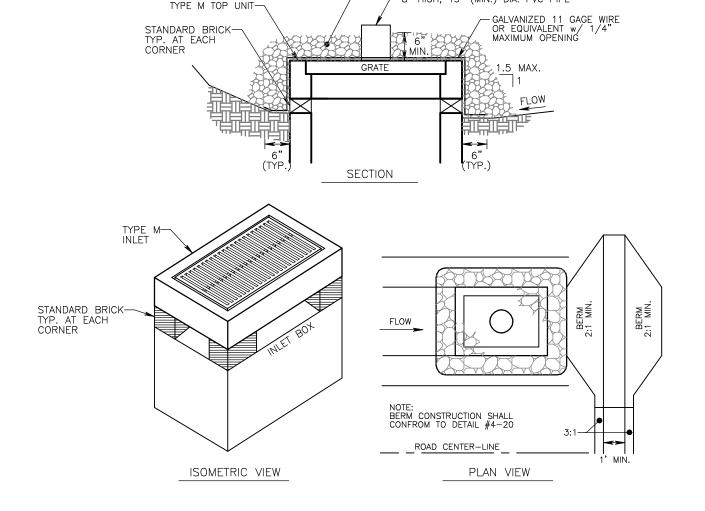
Sht13_E&S-Specs

INLET PROTECTION IS NOT REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS REQUIRED FOR ALL INSTALLATIONS. 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. DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS

FILTER BAG INLET PROTECTION

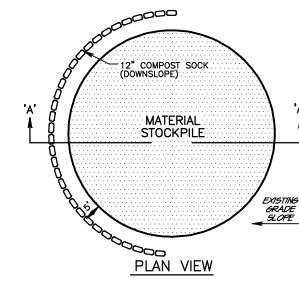
- AASHTO NO. 57 STONE

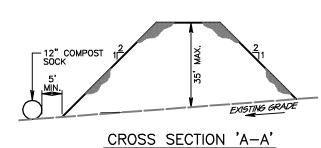
-8" HIGH, 15" (MIN.) DIA. PVC PIPE



Inlet protection shall not be required for inlets tributary to sediment basins or sediment traps. Alternate Type M inlet protection can be used on one acre maximum drainage area with 15" overflow pipe and 4" head. Berms shall be required for all installations not located at low points. Earthen berms shall be stabilized with vegetation and maintained until roadway is stoned or tributary area is permanently vegetated. Road subbase berms shall be maintained until roadway is proved. Inlets shall be inspected weekly and after each runoff event. Accumulated sediment shall be removed when it reaches half the height of the stone. Damaged installations shall be repaired or replaced within 24 hours of inspection. For systems discharging to HQ or EV surface water, a 6 inch thick compost layer shall be securely anchored on outside and over top of stone. Compost shall meet the standards of Table 4.2.

ATLERNATE TYPE M INLET PROTECTION - NOT AT GRADE

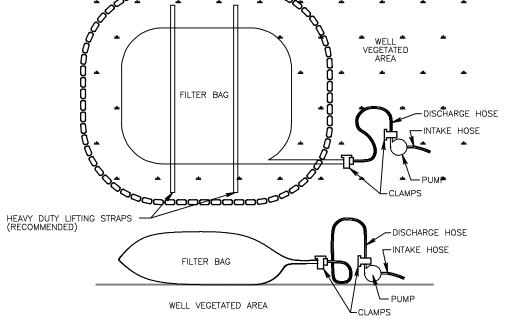




- 1. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. 2. SIDE SLOPES MUST BE NO GREATER THEN 2:1. 2 FEET HORIZONTALLY TO ONE FOOT VERTICALLY. 3. 12" COMPOST SOCK SHALL BE INSTALLED ON THE DOWN SLOPE SIDE OF THE STOCKPILE AT A MINIMUM OF 5 FEET FROM THE TOE OF SLOPE.
- 4. SHOULD THE NEED ARISE WHERE ADDITIONAL STOCKPILE AREAS ARE REQUIRED THOSE AREAS MUST BE APPROVED BY THE LOCAL AUTHORITY OR COUNT CONSERVATION DISTRICT. 5. STOCKPILE AREA MUST BE SEEDED AND MULCHED IMMEDIATELY AFTER THE PLACE-MENT OF ANY STOCKPILE MATERIAL.

TEMPORARY STOCKPILE AREA

- 12" COMPOST FILTER SOCK RING (PADEP EROSION and SEDIMENT POLLUTION CONTROL PROGRAM MANUAL - MARCH 2012) (STANDARD CONSTRUCTION DETAIL #3-16)



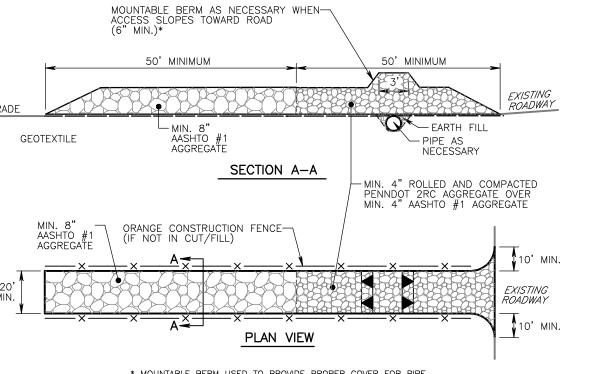
LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THEN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

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 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

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. (PADEP EROSION and SEDIMENT POLLUTION CONTROL PROGRAM MANUAL - MARCH 2012) (STANDARD CONSTRUCTION DETAIL #3-16)

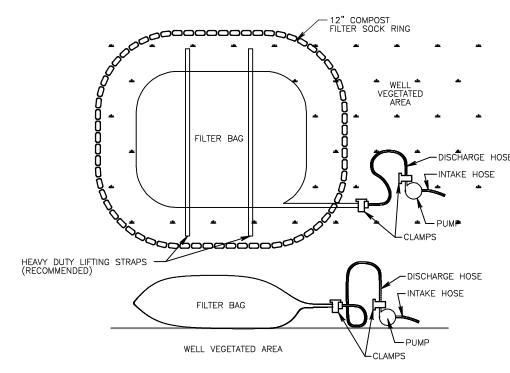
SEDIMENT FILTER BAG FOR PUMPED WATER Not To Scale



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE 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.

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.

ROCK CONSTRUCTION ENTRANCE



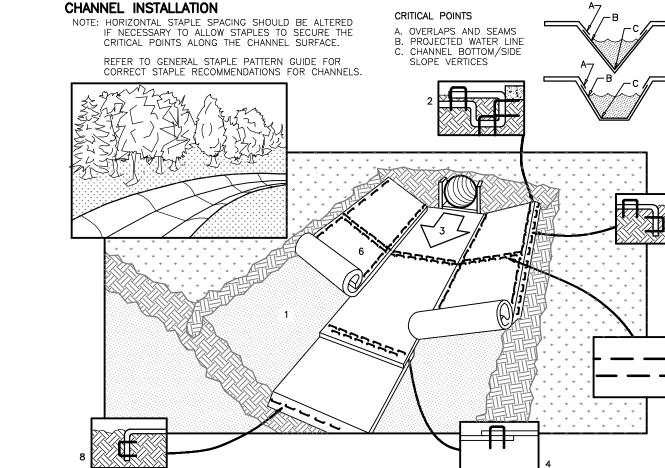
LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THEN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET

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.

SEDIMENT FILTER BAG FOR PUMPED WATER



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED. 2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCE. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW ON BOTTOM OF CHANNEL. 4. PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH A 6" OVERLAP. USE A DOUBLE ROW OF STAGGERED STAPLES 4" APART TO SECURE BLANKETS.

5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. 6. BLANKETS ON SIDE SLOPES MUST BE OVERLAPPED 4" OVER THE CENTER BLANKET AND STAPLED (2" FOR C350 MATTING).

7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A ROW OF STAPLES 4" APART OVER ENTIRE WIDTH OF THE CHANNEL. PLACE A SECOND ROW 4" BELOW THE FIRST ROW IN A STAGGERED PATTERN.

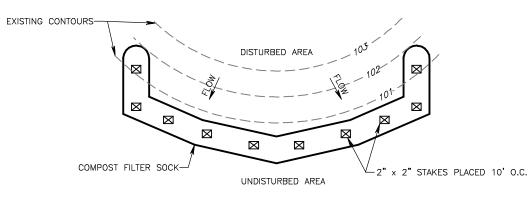
8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. STRAW EROSION CONTROL BLANKET



SECTION VIEW

__2" x 2" STAKES PLACED 10' O.C.

COMPOST FILTER SOCK UNDISTURBED AREA



PLAN VIEW Not To Scale

Sock fabric shall meet standards of Table 4.1 of the Pennsylvania Department of Enviromental Protection Erosion and Sediment Pollution Control Program Manual (Technical Guidance Number 363—2134—008). Compost shall meet standards of Table 4.2 of the Pennsylvania Department of Environmental Protection Erosion and Sediment Pollution Control Program Manual (Technical Guidance Number 363—2134—008). Compost filter sock shall be placed at existing level grade. Both ends of the sock shall be extended at least 8 feet up slope at 45 degrees to the main sock alignment. Maximum slope length above any sock shall not exceed that shown on Figure 4.2 of the Pennsylvania Department of Environmental Protection Erosion and Sediment Pollution Control Program Manual (Technical Guidance Number 363—2134—008). Stakes may be installed immediately downslope of the sock if so specified by the manufacturer. Traffic shall not be permitted to cross filter sock.

Accumulated sediment shall be removed when it reaches half the aboveground height of the sock and disposed in the same manner described elsewhere in the plan. 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 filter socks shall be replaced after 6 months; photodegrable 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.

TABLE 4.1 Compost Sock Fabric Minimum Specifications

AMERICAN

14649 HIGHWAY 41 NORTH EVANSVILLE, INDIANA 47711

USA 1-800-772-2040

Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi—Filament Polypropylene (MFPP)	Heavy Duty Multi—Filamen Polypropylene (HDMFPP)
Material Characteristics	Photo— degradable	Photo- degradable	Bio- degradable	Photo— degradable	Photo— degradable
Sock Diameters	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		26 psi	26 psi	44 psi	202 psi
Ultraviolet Stability % Original Strength (ASTM G-155)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional Longevity	6 months	9 months	6 months	1 year	2 years
		Two-ply sys	stems		
				HDPE biaxial net	
Inner (Containment Net	ting	С	ontinuously wour	ıd
Inner Containment Netting			Fusion-welded junctures		

Composite Polypropylene Fabric (Woven layer and non—woven fleece mechanically fused via needle punch) Outer Filtration Mesh 3/16" Max. aperture size Sock fabrics composed of burlap may be used on projects lasting 6 months or less Filtrexx & JMD

TABLE 4.2 Compost Standards

80% — 100% (dry weight basis)
Fibrous and elongated
5.5 - 8.0
35% — 55%
98% pass through 1" screen
5.0 dS/m (mmhos/cm) Maximum

(PADEP EROSION and SEDIMENT POLLUTION CONTROL PROGRAM MANUAL — MARCH 2012) (STANDARD CONSTRUCTION DETAIL #4-1) COMPOST FILTER SOCK

SECTION B-B GEOTEXTILE FABRIC

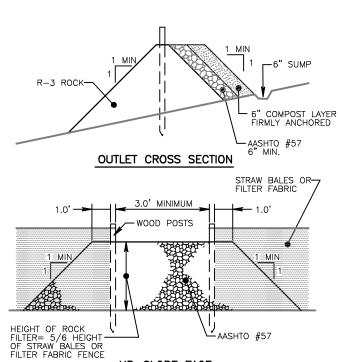
SECTION A-A

PLAN **ENERGY DISSIPATOR SIZING DATA** Tailwater (Max or Min) (CFS) (FPS) Size Rt (inches) 30 MIN. | 14.81 | 10.78 | R 5 | 27 | 16.0 | 7.5 | 23.5 MAX. 7.27 8.04 R 4 18 10.0 4.5 8.5

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

(PADEP EROSION and SEDIMENT POLLUTION CONTROL PROGRAM MANUAL - MARCH 2012)
(STANDARD CONSTRUCTION DETAIL #9-2)

RIPRAP APRON OUTLET PROTECTION



SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET. STANDARD CONSTRUCTION DETAIL #4-6

ROCK FILTER BERM DETAIL

3/4" x 3/4" Max. aperture size

UP-SLOPE FACE

Sht14_E&S-Det 20-0209 D1 Plan Date:

REVISIONS

MOTHY P. WOODROV

PROJECT SERIAL NUMBER FOR DESIG

GWYNEDD MERCY

ACADEMY HIGH SCHOOL 39-00-03957-00-9

Block 8 Unit 55 D.B.: 6225 Pg: 1394

Gross Area: 44.3052 Acres

Legal RW: 1.2582 Acres

NET Area: 42.0839 Acres

GWYNEDD MERCY

ACADEMY HIGH SCHOOL

1345 Sumneytown Pike Gwynedd Valley, PA 19437

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SEDIMENTATION
L DETAILS
CADEMY HIGH SCHO

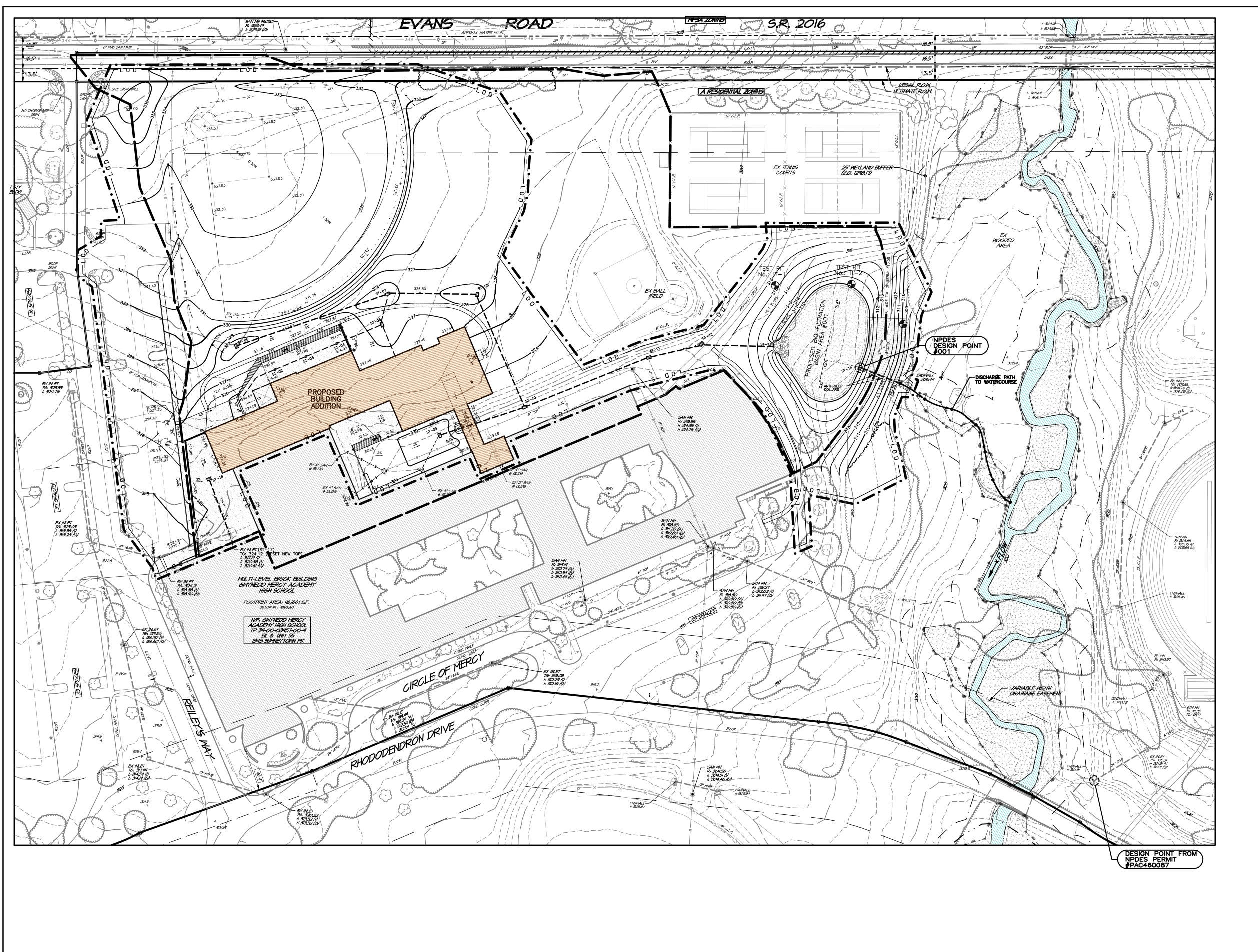
EROSION and S CONTROL YNEDD MERCY ACA

Ult. RW: **0.9632 Acres**

Parcel Information:

Applicant:

NOVEMBER 21, 2022



INFILTRATION TESTING RESULTS

Test Pit No.:	Existing Grade at Test Location:	Test Pit Depth:	Depth to Groundwater	Depth to Rock:	Tested Infiltration Rate:	Bottom Elevation of BMP:	BMP Clearance to Limiting Zone:
IT-1	316.28	3.83' (elev.: 312.45)	Not Encountered	3.83' (elev.: 312.45)	0.03 in/hr	N/A	N/A
IT-2	312.89	2.17' (elev.: 310.72)	Not Encountered	2.17' (elev.: 310.72)	0.27 in/hr	308.00	– 2.72 Ft. *
IT-3	309.55	3.58' (elev.: 305.97)	Not Encountered	3.58' (elev.: 305.97)	0.00 in/hr	308.00	2.03 Ft.

* See Bouyancy calculations for the proposed Basin in relation to potential groundwater in test pit #IT-2

A licensed professional or the PCSM designee shall be present on—site during construction of the Rain Garden to ensure proper construction sequences are followed.

GENERAL PLAN NOTES

- SEE RECORD PLAN FOR ALL EXISTING FEATURES AND GENERAL DEVELOPMENT NOTES.
- Sediment laden runoff is an anticipated construction waste. Due to the implementation of numerous BMPs around the project site, there are no anticipated project wastes other than clean water runoff once the site is stabilized and complete.
- Runoff from the project site enters an unnamed tributary to Trewellyn Creek. Trewellyn Creek is classified by Title 25 Environmental Resources Chapter 93 as TSF & MF. 3. The project site can be referenced on the AMBLER U.S.G.S. Quadrangle Map.
- 4. The shown BMPs are proposed to preserve the integrity of stream channels and maintain and protect the physical, biological, and chemical qualities of the receiving stream through the use of the proposed BMPs to capture, slow, and cool runoff before releasing it in a predevelopment direction but at a reduced flowrate
- 5. The proposed BMPs shall prevent an increase in the rate and volume of stormwater runoff to the greatest extent possible by utilizing the under—drain within the proposed Rain Garden to capture and slow runoff to
- the greatest extent possible.
- 6. Impervious cover has been minimized to the greatest extent possible my limiting proposed impervious coverage solely to the needs of the proposed development.
- 7. Protection of existing drainage features and existing vegetation has been maximized to the greatest extent possible by placing tree protection fencing around existing vegetation to be preserved.
- 8. Land clearing and grading has been minimized to the greatest extent possible by staking and flagging the limit of disturbance as the first step in the construction sequence to avoid any unnecessary disturbance and limiting disturbance solely to the areas of proposed improvement.
- 9. Soil compaction has been minimized to the greatest extent possible by scarifying all areas of new topsoil placement, and deeper scarification required in areas that appear to be compacted.
- 10. Through the use of the proposed BMPs, the flowrate and volume of runoff has been reduced when compared to predevelopment conditions; therefore, as designed, the project site will preserve the integrity of stream channels within the watershed and help to maintain and protect the physical, biological, and chemical qualities of the receiving stream.
- 11. There are no geologic formations located on the project site that require mapping. 12. The wetlands limits shown on these plans have been taken from boundaries illustrated on the 'ALTA/NSPS Land Title Survey' sheet number 1—10 of 10, dated January 21, 2021, last revised February 26, 2021, prepared by Control Point Associates, Inc. and further verified as accurate by Valley Environmental Service, Inc. on February 26, 2021.

Silt removed from permanent BMPs shall be disposed of on—site in landscaped areas located outside the 100 year flood plains, wetlands, steep slopes and drainage swales. Areas of sediment disposal shall be considered a critical vegetation area requiring immediate stablization.

All BMP shown above require inspection weekly and after each runoff event. All required repairs and or replacement of BMP's must be done immédiately. RECYCLING and DISPOSAL METHODS:

There are no naturally occurring geologic formations or soil conditions that could cause pollution after the earth disturbance activities are completed and the project site is fully stabilized. Upon completion and stabilization of proposed improvements, the homeowner, or other designated entity, responsible for perpetual operation and maintenance of the constructed BMPs shall remove any sediment, trash, debris or other such refuse collected within these BMPs and dispose of said materials in accordance with all local, state, and governmental regulations.

B.M.P. MAINTENANCE PROGRAM

The stormwater detention facility shown hereon is a permanent B.M.P. structure and is not to be removed altered or reconfigured in any way without the approval of the applicable municipality and/or the local County Conservation District and D.E.P.

All B.M.P.'s such as this basin and conveyance system require yearly inspection and maintenance to ensure the B.M.P.'s are functioning as designed. Maintenance of the system will include the removal of any debris and flushing of the system. An inspection report should be provided by a creditable Engineering firm under the direction of a Licensed Engineer. The owners, their successors, or its assigns, shall assume all responsibilty for the cost associated with the inspection, cleaning of the system, engineering fees and ultimately any costs associated with recommended repairs, and/or replacement of said facilities. Copies of the inspection report shall be forwarded to the applicable municipality for review and record in keeping with State regulations.

During the construction phase of the project, the permittee shall be responsible for the proper construction, stabilization, and maintenance of all erosion and sedimentation control measures. The permittee shall also be responsible for the proper construction, operation and maintenance of all post construction stormwater management BMPs identified in the PCSWM Plan. The applicant, its assigns will assume responsibility for the operation and maintenance responsibilities of all post construction stormwater management BMPs.

If at any point the Basin fails to infiltrate the storage volume within 72 hours, the remaining water shall be immediately pumped into the Basin Outlet Structure and a certified professional contacted to investigate the cause and recommend a solution to the infiltration failure.

Per PACode §102.8(m)(2) — For any property containing a PCSM BMP, the permittee or co-permittee shall record an instrument with the recorder of deeds which will assure disclosure of the PCSM BMP and the related obligations in the ordinary course of a title search of the subject property. The recorded instrument must identify the PCSM BMP, provide for necessary access related to long—term operation and maintenance for PCSM BMPs and provide notice that the responsibility for long—term operation and maintenance of the PCSM BMP is a covenant that runs with the land that is binding upon and enforceable by subsequent grantees, and provide proof of filing with the notice of termination under §102.7(b)(5). MAINTENANCE NOTES & SCHEDULE:

1. Maintenance of the Bio-filtration Basin areas: (Semi-annually)

Mow bio-filter planting twice a year. Once a year mowing is sufficient to keep a meadow from reverting to woodland, but may not be sufficient to discourage woody seedlings, brambles, invasive vines and multiflora rose. Mowing more than twice a year will only encourage cool season grass species and create additional turf areas. Recommended dates for mowing are early July for the first cutting and a second cutting in March up to April 15th. This will maximize bird and animal habitat and promote desirable and attractive vegetation. Mow bio—filter areas when the ground is dry and at a height of 6—8" during the dormant season. Monitor bio—filter for intrusion by invasive plants such as thistle. Eliminate invasives by spot mowing, spot spraying, or wick application of appropriate herbicide, or manual or mechanical pulling. A combination of strategies may be the best approach. Do not use herbicides within 50 feet of streams. Trees and shrubs should be inspected twice per year to evaluate health. Inflow and outflow structures shall be inspected at least two times per year for erosion. Rip—rap areas at these structures shall be replaced to design specifications if necessary. 2. Maintenance of the Basin Outlet Structures: (After each runoff event)

The owner, its assigns shall be responsible to ensure that the basin outlet structure is free and clear of any debris that would impede outfall from the basin. The outlet structure shall be inspected after each runoff event and cleaned as required. The slow-release cap on the under-drain discharge within the Outlet Structure shall be inspected to ensure it is free and clear of any debris and freely

3. Maintenance of the storm sewer collection system: (After each runoff event)

The owner, its assigns shall be responsible to ensure that the storm sewer collection and lawn drain system is free and clear of any debris. The system shall be inspected after each runoff event and

4. Maintenance of the downspout & roof leader collection system: (Quarterly)

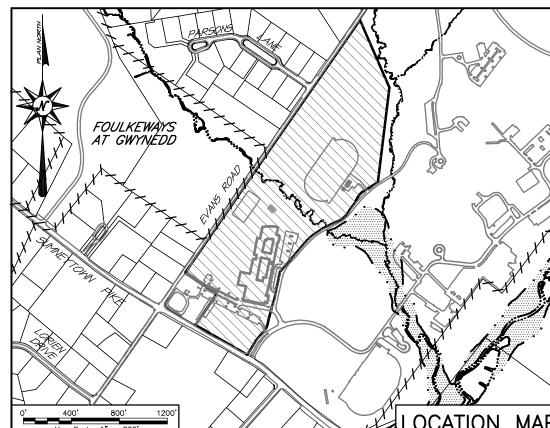
The owner, its assigns shall be responsible to ensure that the downspout and roof leader collection system is free and clear of any debris. The system shall be inspected after each runoff event and cleaned if required. Quarterly flushing of the system shall be done to ensure the system is free and clear of any sediment and debris.

5. Rock Filter Outlets: (After each runoff event)

The owner, its assigns shall be responsible to regularly inspect that the rock filters are functioning properly by monitoring drawdown time after major storm events. Ensure that the rock filter outlets are free and clear of any debris and/or invasive vegetation. If discovered, invasive plants shall be removed immediately. Regularly inspect for erosion or other failures. Avoid running heavy equipment over the rock filter, only small landscaping machines are appropriate. DO NOT apply pesticides or fetilizers where stormwater will be conveyed.

ACKNOWLEDGEMENT:

, ACKNOWLEDGE THAT THE STORMWATER MANAGEMENT FACILITIES SHOWN ON THESE PLANS CAN ONLY BE ALTERED OR REMOVED AFTER APPROVAL OF A REVISED PLAN BY THE APPLICABLE MUNICIPALITY. OWNER ALSO AGREES TO ALL ABOVE LISTED BMP MAINTENANCE PROGRAM REQUIREMENTS.



REVISIONS

PROJECT SERIAL NUMBER FOR DESIG

Parcel Information:

GWYNEDD MERCY ACADEMY HIGH SCHOOL 39-00-03957-00-9 Block 8 Unit 55 D.B.: 6225 Pg: 1394

Gross Area: 44.3052 Acres Legal RW: 1.2582 Acres Ult. RW: **0.9632 Acres** NET Area: 42.0839 Acres

GWYNEDD MERCY ACADEMY HIGH SCHOOL 1345 Sumneytown Pike Gwynedd Valley, PA 19437

Scale In Feet (1" = 40') © COPYRIGHT 2023 WOODROW & ASSOCIATES, INC ALL RIGHTS RESERVED

Sht15_PostCon

20-0209 D1 NOVEMBER 21, 2022

5.54 ACRES

LIMIT OF DISTURBANCE:

Tract Boundary Line - - Right-of-Way Line • — • • — Municipal Boundary Line //////// Zoning District Boundary _____ Topographic Contour

ReB Soil Series Limits

____ # ____ Mapped Wetlands Limit

EXISTING FEATURES LEGEND - - Storm Sewer Piping ——s——S———Sanitary Main / Lateral G G G Gas Main / Service W Water Main / Service ————————————————Overhead Wires Woodlands Dripline

PROJECT SITE BOUNDARY:

5.90 ACRES

PCSM LEGEND Project Site Boundary

— — — Proposed Stormwater Piping

Infiltration Testing Location

CONSTRUCTION SEQUENCE

At least 7 days before starting any earth disturbance activities, the operator shall invite all contractors involved in those activities, the landowner, all appropriate municipal officials, the erosion and sediment control plan preparer, the designated Licensed Professional, and the local Conservation District to an on—site meeting. Also, at least 3 days before starting any earth disturbance activities, all contractors involved in those activities shall notify the Pennsylvania One Call Incorporated System at 811 or 1-800-242-1776 for buried utilities locations.

All earth disturbance activities shall proceed in accordance with the outlined sequence on these plans. All earth disturbance activities shall proceed in accordance with the outlined sequence on these plans. Each stage shall be completed before any following stage is initiated; clearing and grubbing shall be limited only to those areas described in each stage. 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. Deviation from this sequence must be approved in writing from the local Conservation District or by DEP prior to implementation. No more than 15,000 square feet of disturbed area shall reach final grade before initiating seeding and mulching operations. before initiating seeding and mulching operations.

Upon temporary cessation of an earth disturbance or any stage or phase of an activity where a cessation of earth disturbance activities exceed 4 days, the site shall be immediately seeded, mulched or otherwise protected from accelerated erosion and sedimentation pending future earth disturbance activities. Per NPDES requirements "Upon the installation or stabilization of all perimeter sediment control BMPs and at least 3 days prior to proceeding with the bulk earth disturbance activities, the permittee or co—permittee shall provide notification to the Department or authorized conservation district.

- 1. Install rock construction entrance along Evans Road as shown and detailed on the plans. Stake and flag the Limit of Disturbance as shown on the plans.
- 2. Install all Compost Filter Sock as shown and detailed on the plans. Install proposed Construction
- Fencing as shown to prohibit any pedestrian traffic from entering the area of work. 3. Begin removal and demolition of all features marked for removal on the plans. Dispose of all materials and wastes in accordance with all local municipal, county, and federal regulations.
- 4. Begin construction of proposed building addition as shown on the plans. Begin site grading as shown on the plans. As site grading comes to final proposed grades, immediately stabilize disturbance with a permanent seed and mulch mixture applied at the recommended rates.
- 5. Prior to beginning construction of the Bio-filtration Basin, ensure that the upslope Compost Sock CS-02 is properly installed and functioning as maximum effort shall be taken to prevent any sediment-laden runoff from entering the Basin area. If necessary, remove any accumulated sediment from this compost sock and repair or replace any damaged areas.
- 6. Begin installation of proposed Bio—filtration Basin as shown and detailed on the plans. See Individual Basin Construction Sequence on the sheet '(PCSM) POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS' for greater detail. Finalize all berm and spillway areas including the erosion control matting on the spillway as shown and detailed on the plans. Install all rip—rap areas as shown and detailed on the plans. Immediately stabilize all Basin area construction with the Basin seed mixtures shown
- 7. Install remaining yard drain and storm sewer collection system. Install an inlet filter bag within each inlet as it is installed and connect all proposed roof leaders from the new building addition as shown on the plans. Immediately stabilize all disturbance with a permanent seed and mulch mixture applied at the recommended rates.
- 8. Finalize building addition construction and all site grading, including base course for the new parking areas alongside the building addition and all concrete pathway/sidewalk areas.
- 9. Reconstruct the proposed baseball field in the location of the Rock Construction Entrance as shown on the plans. Apply Lawn Soil Restoration to all indicated lawn areas as shown and detailed on the plans. See Individual Lawn Soil Restoration Construction Sequence on the sheet '(PCSM) POST CONSTRUCTION STORMWATER MANAGEMENT DETAILS' for greater detail. Immediately stabilize all disturbance with a permanent seed and mulch mixture applied at the recommended rates. 10. Vegetated areas shall be considered permanently stabilized when a uniform 70% vegetative cover or
- erosion resistant perennial species have been achieved, or the disturbed area is covered with an acceptable BMP which permanently minimizes accelerated erosion and sedimentation. Until such time as this standard is achieved, interim stabilization measures and temporary erosion and sediment control BMPs that are used to treat project runoff may not be removed. If soil areas appear to be compacted, scarify 6 to 12 inches prior to seeding. New topsoil shall be placed with a minimum
- 11. Upon completion of site stabilization and removal of all temporary erosion and sediment control measures, commence with the placement of the final wearing coarse for the parking areas. 12. Install all traffic control devices. (i.e. signage and striping.)
- 13. Within 30 days after the completion of earth disturbance activities authorized by the NPDES permit. including the permanent stabilization of the site and proper installation of PCSM BMPs in accordance with the approved PCSM Plan, or upon submission of the NOT if sooner, the permittee shall file with the department or authorized conservation district a statement signed by a licensed professional and by the permittee certifying that work has been performed in accordance with the terms and conditions of the NPDES permit and the approved E&S and PCSM Plans. Completion certificates are needed to ensure that all work has been performed in accordance with the terms and conditions of the NPDES permit and the approved E&S and PCSM Plans.

BIO-FILTRATION BASIN CONSTRUCTION SEQUENCE *per PA DEP BMP Manual — Chapter 6.4.5.

- 1. Complete site improvements that have a potential to create sediment runoff.
- 2. Ensure all Compost Socks upslope from the area of Basin construction are in-place and functioning. 3. Excavate any sediment within the Rain Garden area that may have collected during construction.
- Scarify the excavated subsoil surface if necessary. DO NOT compact soils. 4. Excavate area for under-drain placement and stone trench installation. Install aco-textile fabric around the stone trench area as shown and detailed on the plans. Install Basin Outlet Structure, discharge pipe, and terminal endwall as shown and detailed on the plans. Install rip—rap at endwall as shown and detailed on the plans. Install rip—rap at endwall as shown and detailed on the plans. Finalize perforated under—drain and solid under—drain, with upturned elbow, installation into the Basin Outlet Structure as shown and detailed on the plans. Install the under—drain cap with managed release sized hole drilled into it on the under—drain stub within
- 5. Upon completion of under—drain and stone trench installation. Backfill the remainder of the Basin area subsurface with Basin Soils Mix as shown and detailed on the plans. Overfilling is recommended to account for settlement. Light hand tamping is acceptable if necessary. Under no circumstances shall heavy equipment be allowed within the area of the Basin.
- 6. Finalize construction of the Basin berm and spillway areas as shown and detailed on the plans. Install erosion control blanket on all spillway areas as shown and detailed on the plans. Immediately stabilize all disturbance with a permanent seed and mulch mixture and Basin seed mixtures (if
- 7. Presoak the planting soil prior to planting vegetation to aid in settlement and install all proposed plantings as shown on the plans.

LAWN AREA SOIL RESTORATION CONSTRUCTION SEQUENCE

*per PA DEP BMP Manual — Chapter 6.7.3 1. All site construction, including Rain Garden construction, shall be completed and stabilized prior to

PENNDOT CLASS A 3300 P.S.I.

(MIN.) CONCRETE POURED IN PLACE TO PROVIDE A WATERTIGH

CONNECTION AROUND THE PIPE.

4.6' x 4.6' REINFORCED CONCRETE ANTI-SEEP COLLAR

— 48 1/4" —

PLAN VIEW

TRASH GRATE:
L1"x1"x3/16" ANGLE STEEL FRAME w/5/8" DIA. STEEL GRATE BARS AT
4 1/2" O.C. (Max) PAINTED WITH ANTI-RUST COMPOUNDS.

2. ATTACH TO CONCRETE TOP WITH (6) $3/8" \times 2"$ LAG BOLTS SET IN LEAD EXPANDERS.

Not To Scale

FRONT VIEW

TYPE 'M'
CONCRETE
TOP UNIT

END/SIDE VIEW

#4 BARS (TYP.)

SECTION A-A

- 2. Soil areas to be restored shall be dry prior to scarification.
- 3. Ripping (subsoiling) shall be completed on all lawn areas to a depth of 20 inches for areas of major compaction and 8 inches for areas of minor compaction.
- 4. Till and blend compost/topsoil layers according to specification.

the Basin Outlet Strucure ensuring a water—tight connection.

5. Water lawn areas as necessary to establish vigorous and healthy seed growth.

BASIN SEEDING NOTES

Refer to plan Sheet 14 'VII. SEEDING SCHEDULE' for overal site seed mixtures.

These seed mixes are for the basin/BMP areas only.

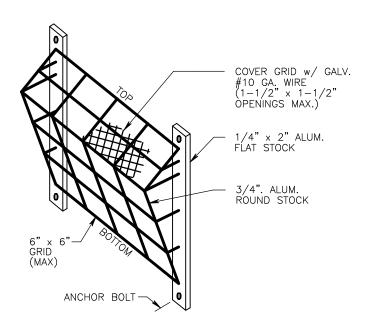
BASIN FLOOR:

Seed in ERNST Seed Mix (ERNMX-180; Rain Garden Mix) Seeding rate is 20 lbs. per acre w/30 lbs. per acre Grain Rye (cover crop) Basin Floor Area = 7,845 sq.ft. (7,845 / 43,560) x 20 lbs. = 3.6 lbs. of ERNMX-180 (7,845 / 43,560) x 30 lbs. = 5.4 lbs. of GRAIN RYE

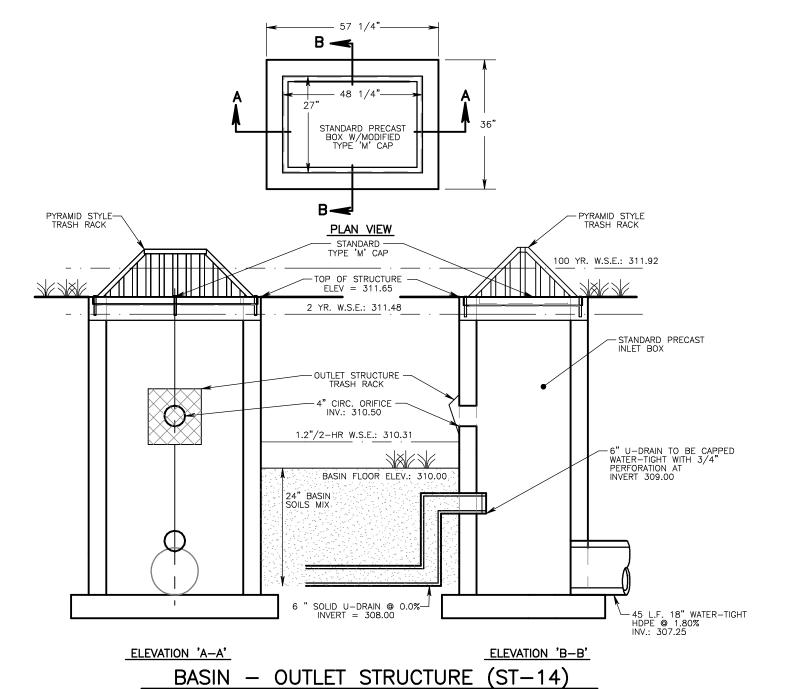
BASIN INTERIOR SIDE SLOPES:

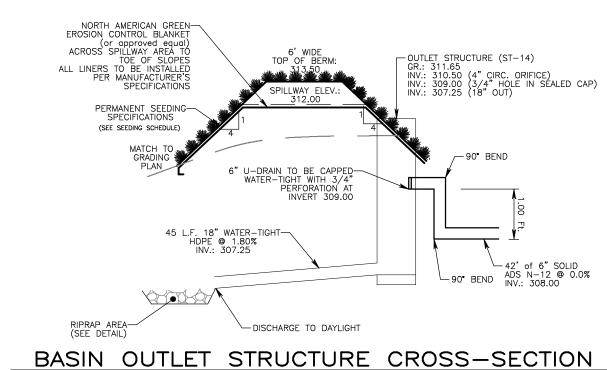
Seed in ERNST Seed Mix (ERNMX-181; Netive Steep Slope Mix w/ Annual Ryegrass) Seeding rate is 60 lbs. per acre Basin Interior Side Slope Area = 6,800 sq.f

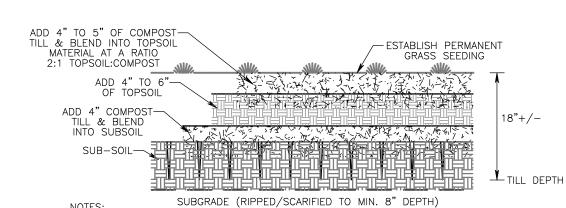
 $(6,800 / 43,560) \times 60$ lbs. = 9.4 lbs. of ERNMX-181



OUTLET STRUCTURE TRASH RACK DETAIL

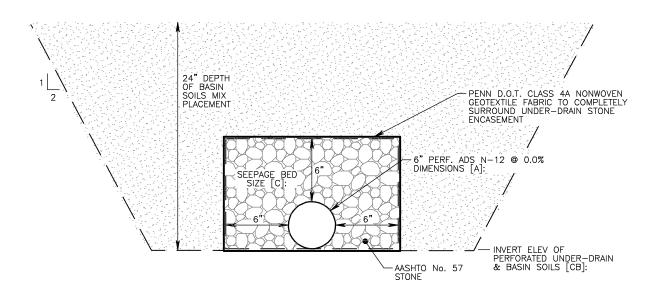






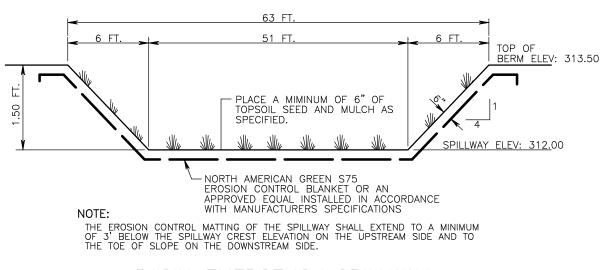
TILL SUBGRADE UP TO 8 INCHES FOR MINOR COMPACTION AND UP TO 20 INCHES FOR MAJOR COMPACTION. SEE DEP BMP MANUAL, CHAPTER 6.7.3. - TABLE 1 FOR APPROVED COMPOST PRODUCTS. RIPPING SHOULD BE DONE WITH A SOLID SHANK RIP TEEH ON A REAR OR TRACK MACHINE. DO NOT RIP SOIL IF WET. AVOID RIPPING EXISTING TREE ROOTS. SPACE RIP CHANNELS 12" TO 36" APART. TILLING AND BLENDING MAY BE DONE WITH ROTOTILLER, DISK HARROW, CHISEL PLOW, SPRING TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. WATER GRASS AS NEEDED FOR VIGOROUS HEALTH. APPLY ADDITIONAL COMPOST AS NEEDED FOR NOURISHMENT. AVOID COMMERCIAL FERTILIZER AND PESTICIDES.

LAWN SOIL RESTORATION DETAIL

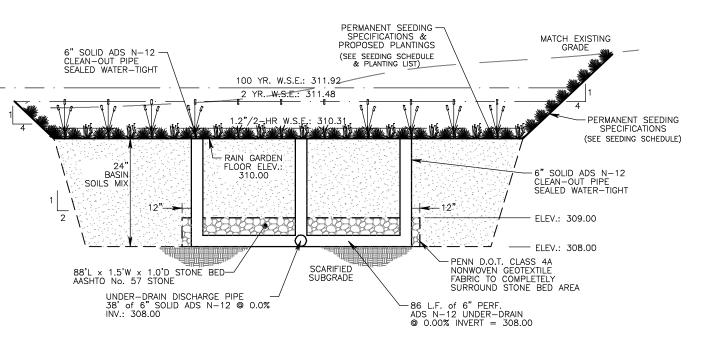


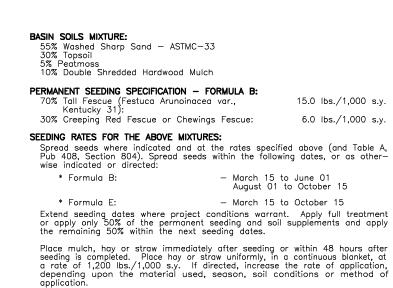
UNDERDRAIN DIMENSIONS [A]:	INVERT ELEV OF PERFORATED UNDER-DRAIN & BOTTOM OF BASIN SOILS [B]:	SEEPAGE BED SIZE [C]:
86 L.F. of 6" PERF. ADS N-12 @ 0.00%	308.00	88'L x 1.50'W x 1.00'D

BASIN PERFORATED UNDER-DRAIN DETAIL

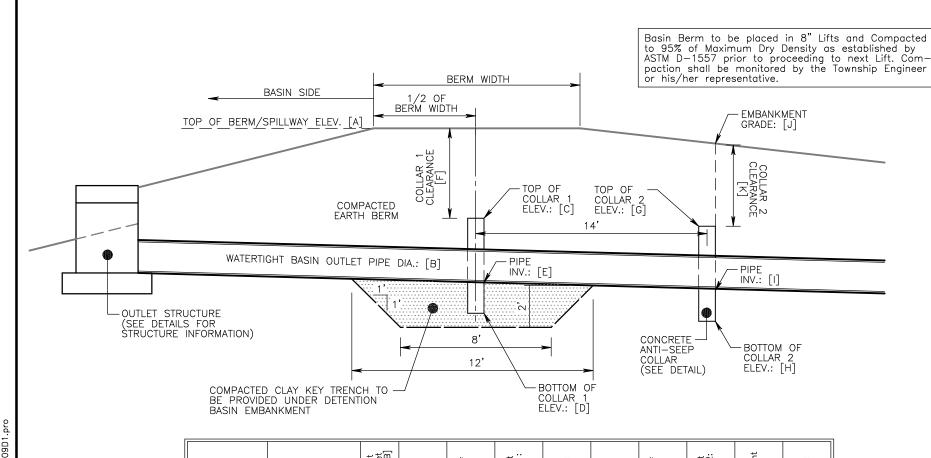


BASIN EMERGENCY SPILLWAY





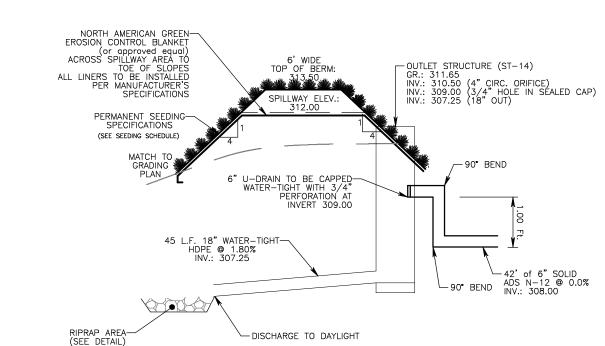
BASIN CROSS-SECTION



18" | 310.10 | 305.52 | 307.07 | 3.40 Ft. | 309.86 | 305.28 | 306.82 | 312.00 | 2.14 Ft

Not To Scale

3. WELD ALL GRATE BAR CONNECTIONS. 4. SIZE TRASH GRATE TO FIT IN PLACE OF STANDARD 'M' STEEL GRATE. ANTI-SEEP COLLAR PLACEMENT DETAIL PYRAMID STYLE - TRASH RACK TOP



Not to Scale

NOVEMBER 21, 2022 16 of 16

Sht16_Post-Det

20-0209 D1

REVISIONS

PROFESSIONAL

MOTHY P. WOODROW

ENGINEER

√ No. 038735-F

PROJECT SERIAL NUMBER FOR DESIG

Remodigation 911

GWYNEDD MERCY

ACADEMY HIGH SCHOOL 39-00-03957-00-9

Block 8 Unit 55 D.B.: 6225 Pg: 1394

Gross Area: 44.3052 Acres

GWYNEDD MERCY ACADEMY HIGH SCHOOL

1345 Sumneytown Pike Gwynedd Valley, PA 19437

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Legal RW: 1.2582 Acres Ult. RW: **0.9632 Acres** NET Area: 42.0839 Acres

arcel Information: