REQUIREMENT TO RECORD:
Following the action of the Board of Supervisors or of the Court on appeal, in approving any subdivision or land development plan, an approved duplicate copy of such plan shall,within ninety (90) days of the date of approval, be recorded by the applicant in the Office of the Recorder of Deeds of Montgomery County. The applicant shall notify the Board of Supervisors in writing of the date of such recording and the Plan Book and Page wherein such subdivision or land development is recorded. If the plan is not recorded within the ninety (90) day period, the approval shall lapse and become void.

NEW HANOVER TOWNSHIP CONSTRUCTION NOTE:
All construction shall be done in accordance with the standards and specifications of New Hanover Township.

CONSTRUCTION NOTE:
All users of this plan are referred to and cautioned to comply with Act 187 of 1996 pertaining to the Pennsylvania One-Call System, 73 P.S. 182.1. The PA One-Call System shall be contacted prior the any construction or excavation on the site. Pa One-Call phone number is 1-800-242-1776.

MET ED CO. RIGHT-OF-WAY NOTE:
Individual owners of lots 32 through 29 shall be notified of the right-of-way and the prohibition of above ground structures and swimming pools within said right-of-way.
The previously approved "Moyer Farm" Subdivision (PBV. A55 PG.353, 354) notes the "Right to trim, cut or remove trees adjacent to right-of-way that may in the judgment of MET ED Co. interfere with or endanger their facilities

PRE-CONSTRUCTION MEETING NOTE:
The Developer must schedule a pre-construction meeting with the Township prior to the start of construction.

WATER SERVICE NOTE:
All lots and the Townhouses shall be served by public water provided by Aqua Pennsylvania, Inc.
All water utility installation shall conform to the standards provided by Aqua Pennsylvania, Inc.

STREET LIGHT NOTE:
The Developer shall be responsible for all charges or rates of street lights until such time that the streets are accepted or condemned as Public streets by The Board of Supervisors. Provisions shall be made to energize the lights after 50 percent of the dwelling are occupied.

ASSOCIATION NOTE:
Units 40 through 63, the Association Area, and Hayward Street (north of the cul-de-sac) and Hayward Court shall be governed by the provisions of an Association Agreement. Limited provisions will also be provided for Lots 1 thru 39 (excluding Lot 6) which governs the continued maintenance, use, upkeep, repair, and replacement of stormwater/stormsewer/ DEP NPDES related items.

RAINGARDEN AND INFILTRATION BMP PROTECTION NOTE:
Raingardens and shallow installation infiltration BMP's shall be protected from disturbance prior to and during earthwork/construction activities by protective fencing placed as shown on the drawing ES115170 (sheet 33). Topsoil shall not be removed from these protected areas during bulk earthmoving operations.

EXISTING NATIVE AND NON-NATIVE VEGETATION NOTE:
Prior to the Clearing and Grubbing stages of construction, the existing onsite vegetation shall be evaluated to identify native, non-invasive species that can be preserved in lieu of planting new landscape restoration and to identify invasive species of trees and shrubs to be removed during construction. The evaluation shall refer to the PA DCNR invasive species list for vegetation to be removed and to the PA Stormwater BMP Manual Appendix B - Pennsylvania Native Plant List for vegetation the can be preserved.

MAIL CLUSTER BOX UNIT NOTE:
USPS Mail delivery shall be to cluster boxes. The mail cluster box units (CBU) shall be located where shown on the plan. Relocation must be approved by the Pottstown Post Office. All cluster boxes shall be of a type approved for use by USPS. The installation of the boxes and concrete pads shall conform to the requirements in the USPS National Delivery Planning Standards: A Guide for Builders & Developers publication.

FIRE PROTECTION NOTES:
1.) All of the single family attached units will have a fire suppression system installed to the current NFPA 13 D standard to include an exterior electric audible bell. Each set of Townhouses will have a single KNOX BOX key entry system that will provide a key to access to the occupancy.

2.) Fire Hydrant Placement:
Hydrants need to be placed at intervals of 800 feet from the existing fire hydrant that is on the Superior Water line that is going to be extended and continue at those intervals for the entire development. Two fire hydrants will be needed for the townhouse portion. Placement locations will be determined by the Fire Chief.

3.) Fire Hydrant Markings:
All of the fire hydrants need to have the following connections, hydrant markings and curb markings. Wherever a fire hydrant is located, the curbing in front of the hydrant needs to be painted in hi-vis traffic yellow a total of 30 feet with the hydrant located in the he center of the 30 feet. The main steamer connection base need to be 18 to 24" off of the finished grade at its placement. Below the two and half outlet ports need to have a 3 inch reflective number that would correlate with water main diameter placed on the barrel of the hydrant. All fire hydrant connections need to have a Sinch Steamer "Storz" connection with two 2½" NST side ports.

4.) Fire hydrant fees assessed by the water company will be borne by the developer until the roads are accepted by the township.

5.) The water system and fire hydrants shall be fully operational prior to issuance of occupancy permits.

FILL NOTE:
If any off-site source is used to provide fill for this project, an approved Erosion and Sediment Control Plan for the borrow site and evidence of environmental due diligence and the determination of clean fill shall be provided a minimum of one month prior to the pre-construction meeting.

STORMWATER EASEMENT NOTE:
A Blanket Easement is provided for the "Association Area" in favor of New Hanover Township for all stormwater facilities; including access to these facilities.

SANITARY SEWER CONSTRUCTION NOTE:
All sanitary sewer construction activities shall be in compliance with the New Hanover Township Authority (NHTA) Sanitary Sewer Manual. The developer shall supply NHTA with hard copy as-built drawings and CAD File upon completion of the sewer installation.

OPEN SPACE NOTE:
Open space land may not be separately sold, nor shall such land be further developed except for stormwater and other utilities and for recreational uses. Unimproved open space shall be considered Natural Area. The Natural Area is an area of natural vegetation undisturbed during construction or replanted. Meadow shall be maintained as such and not left to become infested by invasive or exotic plant species. Maintenance shall be minimal, but shall prevent the proliferation of invasive or exotic plants such as honeysuckle, multiflora rose and poison ivy. Litter shall be removed and streams shall be kept in free flowing condition. All or any portion of the open space to be used as public recreation area is hereby offered for dedication to the Township. Any portion of the open space not dedicated to the Township shall be owned and maintained by the Association.

"STORMWATER NOTE":
The retention/detention basins and stormwater facilities (as shown on these plans) are a basic and perpetual part of the storm drainage system of the Township of New Hanover, and as such are to be protected and preserved, in accordance with the approved final plan by the owner(s) and/or Association on whose lands the structure(s) is(are) located. The Township of New Hanover and/or its agents reserves the right and privilege to enter upon such lands from time to time for the purpose of inspection of said facilities and basin(s) in order to determine that the structural and design integrity are being maintained by the owner(s) and/or Association.

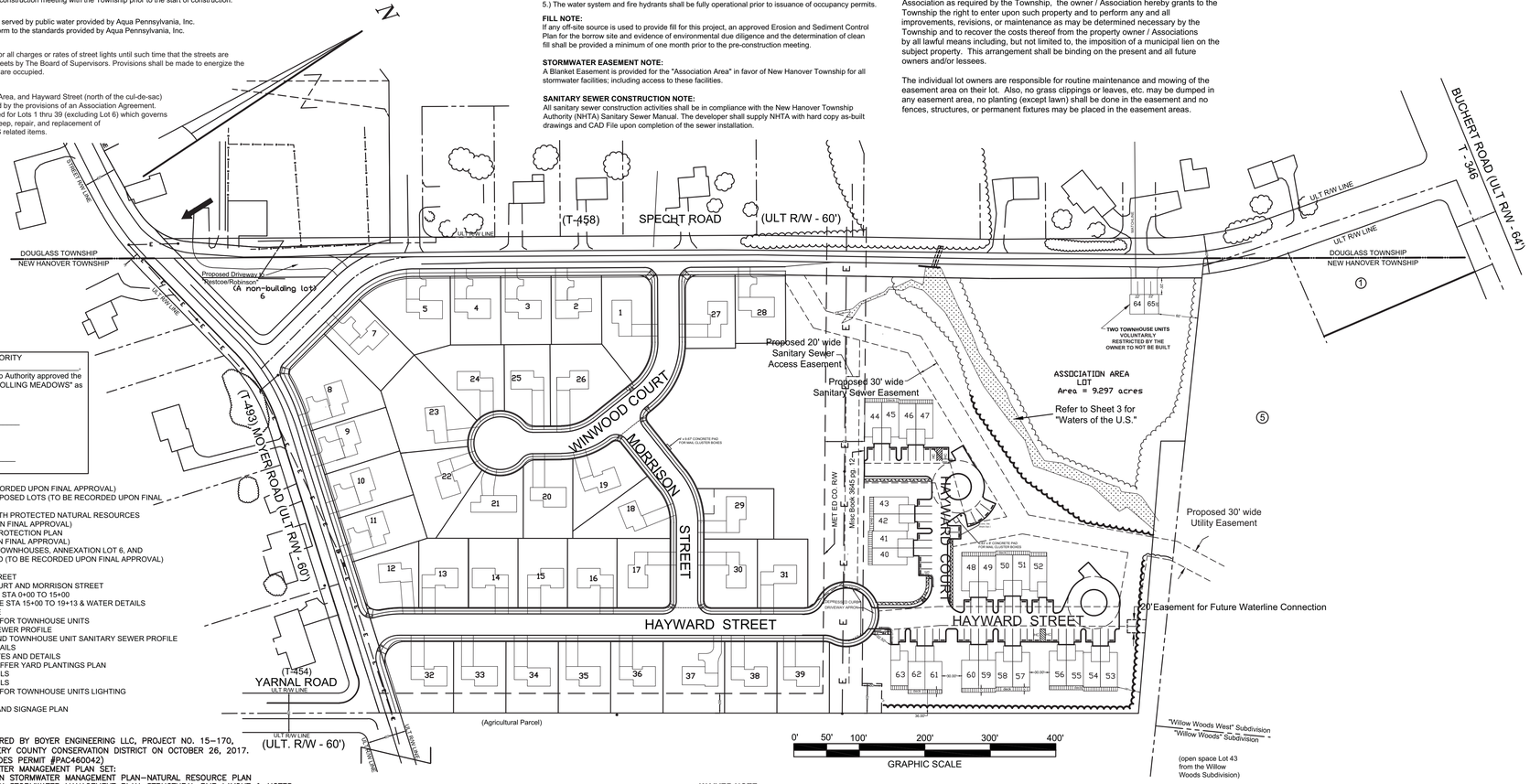
In the event that maintenance and structural integrity are not maintained by the owner / Association as required by the Township, the owner / Association hereby grants to the Township the right to enter upon such property and to perform any and all improvements, revisions, or maintenance as may be determined necessary by the Township and to recover the costs thereof from the property owner / Associations by all lawful means including, but not limited to, the imposition of a municipal lien on the subject property. This arrangement shall be binding on the present and all future owners and/or lessees.

The individual lot owners are responsible for routine maintenance and mowing of the easement area on their lot. Also, no grass clippings or leaves, etc. may be dumped in any easement area, no planting (except lawn) shall be done in the easement and no fences, structures, or permanent fixtures may be placed in the easement areas.

Leveling and Overlay and Line Painting for Existing Roads:
Damage to Specht Road and/or Moyer Road during installation of improvements associated with this development shall be repaired to the satisfaction of the municipality and its designated engineer.

PROPOSED ROADWAY INFORMATION
Proposed Length of Winwood Court = 517 ft
Proposed Length of Morrison Street = 354 ft
Proposed Length of Hayward Street = 800 ft
Total Proposed Length of New Street = 1671 ft

Length of Moyer Road Improvements = 777 ft
Length of Specht Road Improvements = 942 ft



0' 50' 100' 200' 300' 400'
GRAPHIC SCALE

NEW HANOVER TOWNSHIP AUTHORITY
At a meeting held on _____, 20_____, the New Hanover Township Authority approved the subdivision plan of the property of "ROLLING MEADOWS" as shown hereon.

_____
Authority Chairman

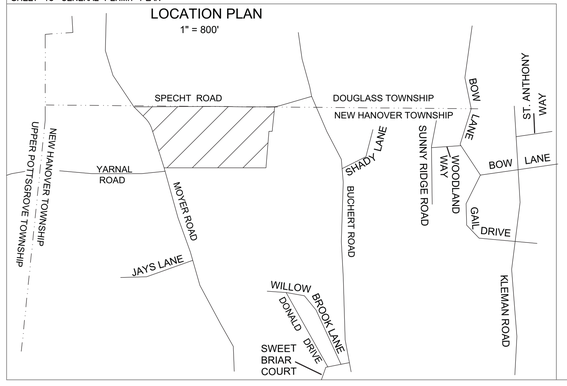
_____
Authority Secretary

PLAN SHEET LEGEND:
SHEET 1 - FINAL PLAN (TO BE RECORDED UPON FINAL APPROVAL)
SHEET 2 - 50 SCALE PLAN OF PROPOSED LOTS (TO BE RECORDED UPON FINAL APPROVAL)
SHEET 3 - EXISTING SITE PLAN WITH PROTECTED NATURAL RESOURCES (TO BE RECORDED UPON FINAL APPROVAL)
SHEET 4 - NATURAL RESOURCE PROTECTION PLAN (TO BE RECORDED UPON FINAL APPROVAL)
SHEET 5 - DIMENSION PLAN FOR TOWNHOUSES, ANNEXATION LOT 6, AND VACATED SPECHT ROAD (TO BE RECORDED UPON FINAL APPROVAL)
SHEET 6 - UTILITY PLAN
SHEET 7 - PROFILE HAYWOOD STREET
SHEET 8 - PROFILE WINWOOD COURT AND MORRISON STREET
SHEET 9 - SPECHT ROAD PROFILE STA 0+00 TO 15+00
SHEET 10 - SPECHT ROAD PROFILE STA 15+00 TO 19+13 & WATER DETAILS
SHEET 11 - MOYER ROAD PROFILE
SHEET 12 - ENLARGED SITE PLAN FOR TOWNHOUSE UNITS
SHEET 13 - OFF-SITE SANITARY SEWER PROFILE
SHEET 14 - ON-SITE OVERLAND AND TOWNHOUSE UNIT SANITARY SEWER PROFILE
SHEET 15 - SANITARY SEWER DETAILS
SHEET 16 - SANITARY SEWER NOTES AND DETAILS
SHEET 17 - LANDSCAPING AND BUFFER YARD PLANTINGS PLAN
SHEET 18 - CONSTRUCTION DETAILS
SHEET 19 - CONSTRUCTION DETAILS
SHEET 20 - ENLARGED SITE PLAN FOR TOWNHOUSE UNITS LIGHTING
SHEET 21 - OPEN SPACE PLAN
SHEET 22 - PAVEMENT MARKING AND SIGNAGE PLAN
SHEET 23 - CURB RAMP DETAILS

REFERENCE PLAN SETS PREPARED BY BOYER ENGINEERING LLC, PROJECT NO. 15-170,
(APPROVED BY THE MONTGOMERY COUNTY CONSERVATION DISTRICT ON OCTOBER 26, 2017.
REVISION DATE 10-17-17 NPDES PERMIT #PAC460042)
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN SET:
SHEET 24-POST CONSTRUCTION STORMWATER MANAGEMENT PLAN-NATURAL RESOURCE PLAN
SHEET 25-POST CONSTRUCTION STORMWATER MANAGEMENT PLAN-STRUCTURAL BMP LAYOUT & NOTES
SHEET 26-POST CONSTRUCTION STORMWATER MANAGEMENT PLAN-LANDSCAPE RESTORATION
SHEET 27-POST CONSTRUCTION STORMWATER MANAGEMENT PLAN-DETAILS
SHEET 28-POST CONSTRUCTION STORMWATER MANAGEMENT PLAN-DETAILS
SHEET 29-POST CONSTRUCTION STORMWATER MANAGEMENT PLAN-PREDEVELOPED DRAINAGE AREAS
SHEET 30-POST CONSTRUCTION STORMWATER MANAGEMENT PLAN-POSTDEVELOPED DRAINAGE AREAS
SHEET 31-POST CONSTRUCTION STORMWATER MANAGEMENT PLAN-SUBBASIN DRAINAGE AREAS

EROSION AND SEDIMENTATION CONTROL PLAN SET:
SHEET 32-EROSION CONTROL PLAN-EROSION CONTROL DRAINAGE AREAS
SHEET 33-EROSION AND SEDIMENTATION CONTROL PLAN-GENERAL SITE
SHEET 34-EROSION AND SEDIMENTATION CONTROL PLAN-INDIVIDUAL LOTS & TOWNHOUSES
SHEET 35-EROSION AND SEDIMENTATION CONTROL PLAN-OFFSITE SEWER
SHEET 36-EROSION AND SEDIMENTATION CONTROL PLAN-NARRATIVE
SHEET 37-EROSION AND SEDIMENTATION CONTROL PLAN-NARRATIVE
SHEET 38-EROSION AND SEDIMENTATION CONTROL PLAN-DETAILS
SHEET 39-EROSION AND SEDIMENTATION CONTROL PLAN-DETAILS
SHEET 40-GENERAL PERMIT PLAN

LOCATION PLAN
1" = 800'



NOTES:
1.) Total area = 21.294 acres
2.) Total no. of lots = 40; Total no. units = 64
- 22 "single family detached" lots and
- 16 "detatched dwelling: off center" lots
- 1 lot with 26 townhouse units
- 1 Annexation Parcel (Lot 6)

Average Lot size = 8,840 sq ft
Minimum Lot size = 8,000 sq ft

3.) Lots are to be served by underground utility service.
4.) Lots are to be served by public sewer and public wells.
5.) Refer to plan sheet 3 for "Contour Note" and soils information.
6.) For Lots 1 through 39, the lot owner is responsible for solid waste storage and disposal; For Lots 40 through 63, the Association shall be responsible for solid waste storage and disposal.
7.) The portion of this tract located within the Ult. R/W of Specht Road and Moyer Road, not previously dedicated, as well as all new streets (Morrison Street, Hayward Street to end of Cul-de-sac, and Winwood Court), are hereby offered for dedication to the agency having jurisdiction.
8.) Each lot owner is subject to the payment of the applicable impact fee by the owner at the time a building permit is obtained from the township.
9.) It shall be the responsibility of the developer to install and maintain the required soil erosion and sediment controls.
10.) Curbs, sidewalks, roads and other public improvements are to be constructed in accordance with the New Hanover Township standards and specifications.
11.) The adjacent properties located in New Hanover Township are zoned R-15 Residential. The adjacent properties located in Douglass Township are zoned R-1 Residential. All adjoining properties are used for single family homes except the "Agricultural Parcel" and "open space Lot 43 from the Willow Woods Subdivision" noted on the plan view above.
12.) No grading shall occur within 5 ft of any outer boundary property line.
13.) No roof drains are to discharge stormwater directly onto a sidewalk or street.
14.) Driveways shall be located a minimum of five (5) feet from any side or rear lot line.
15.) Wetland areas are to be located in the field and staked prior to the start of construction.
16.) The Developer shall be required to purchase the remaining EDU's for the development at the current cost each time a building permit is issued until the full amount of required EDU's are purchased.
17.) FirstEnergy/Met-Ed shall have permission to access their right-of-way on any route through the development.
18.) FirstEnergy/Met-Ed shall not be responsible for the replacement of expensive or rare species of vegitation within the development. Should FirstEnergy/Met-Ed restore any street surfaces, it will be restored only with either bituminous pavement or concrete at the discretion of FirstEnergy/Met-Ed.
19.) The land owners of the lots along all FirstEnergy Corp./Met-Ed rights-of-way shall not construct above ground structures or swimming pools in the right of way.
20.) Lots # 2, 3, 4, 7, 9, 13, 14, 15, 16, 24, 28, 30, 31, 35, 38 & 39 shall meet the requirements of Zoning Ordinance section 27-305.2.B.(2) the Performance Standard Development, Detach Dwelling; Off Center option. A minimum of 20' shall be provided between single family homes.

WAIVER NOTE:
At a meeting held on September 10, 2007, the Board of Supervisors, by Resolution No. 50-07, granted waivers of the following sections of the Township's Subdivision and Land Development Ordinance for this plan.

Section 803.1 - To not exclude the easements from the lot dimensions and the lot areas.

Section 806.5.A - To use the "Rational Method" for stormwater design, rather than the TR-55 method.

Section 806.5.I - To allow the stormwater basin to have a bottom slope of less than two percent (2%) for groundwater recharge.

Section 806.5.L - To allow six inches (6") of freeboard to be installed above the design water level elevation in the basin spillway rather than the required twelve inches (12") of freeboard.

Section 812.3 and 812.4 - To not require full widening and curb installation on Specht Road along the frontage of the open space area in favor of the overall Specht Road upgrades.

Section 813.5 - To allow parking on one side of the road only with a thirty-two (32) foot wide paved cartway.

Section 818.4 - To allow Hayward Street to intersect with Moyer Road at less than a ninety degree (90°) angle for less than the required fifty feet (50') in consideration of the realignment of the Specht Road intersection.

Section 822 - To waive the requirement of sidewalks along Specht Road along the frontage of the open space area in consideration of the overall Specht Road upgrades.

Section 823.3 - To not require curbing in the townhouse parking areas because the townhouse units have garages.

Section 823.7 - To allow a 4.9% grade in the parking area of the townhouse units rather than the 3% grade required.

Section 829.1.D - To not require the Class B buffe requirement next to the adjacent R-15 Zoning District which is filed in "clean and green" and accordingly cannot be developed for residential use currently.

Section 834.2 - To allow the payment of a fee in lieu of the required bicycle path improvements.

Section 831/835 - To allow park and recreation areas to be provided by and at the discretion of the Condominium Association.

ADDITIONAL WAIVER REQUEST:
At a meeting held on July 11, 2011, the Board of Supervisors by Resolution No. 19-11(FINAL), granted these additional waivers for the following sect- ions of the Township's Subdivision and Land Development Ordinance for this plan:

Section 813.6 - A waiver of the 200 ADT service restriction for a local road , which would allow the reduction of the required Ultimate Right-of-Way width for the pro -posed Hayward Street from 60 feet to 52 feet.

Section 822 - To not require sidewalks in the Townhouse area since the driveways and garages in front of the units make it impractical. Additional sidewalk will be added in the area where practical, and where it does not interfere with parking for individual units.

Section 823.6 - To reduce the required lighting intensity level in Townhouse parking area, which is a residential area, to 0.2 footcandles.

At a meeting held on June 25, 2018, the Board of Supervisors granted waivers for the following sectons of the Township's Subdivision and Land Development Ordinance for this plan:

Section 22-811.A - Allowing the cul-de-sac length of Winwood Court to be 219 feet, which is less than the minimum required length of 250 feet.

At a meeting held on March 7, 2019, the Board of Supervisors granted a waiver for the following secton of the Township's Subdivision and Land Development Ordinance for this plan:

Section 22-811.C - Allowing the cul-de-sac radius of Hayward Court and Hayward Street to be 40 feet with a 20 feet island, which is less than the minimum required radius of 50 feet with a 20 feet island.

ZONING CLASSIFICATION : R-15
B2 Performance Standard Development,

"1. Detached Dwellings":	"2. Detached Dwellings: Off Center"
Min. lot area = 8,000 sq. ft.	Min. lot area = 7,000 sq. ft.
Min. lot width = 70' (at setback)	Min. lot width = 60' (at setback)
Front yard setback = 30'	Front yard setback = 20'
Side yard setback = 10'	Side yard setback = 15' & 5' = 20' total
Rear yard setback = 40'	Rear yard setback = 35'
Max bldg. coverage = 30%	Max bldg. coverage = 30%

with "Townhouse. An attached dwelling unit from ground to roof, having individual outside access. A row of attached townhouses shall not exceed five (5) units in a building.

Dimensional Requirements (Townhouses)

Minimum lot area	2,000 square feet
Minimum lot width	22 feet
Maximum building coverage	50% (ratio to lot area)
Minimum building setback	
Street line	30 feet
Parking area	10 feet
Pedestrian walkway	5 feet
Minimum rear yard	20 feet
Minimum building spacing	30 feet

To create architectural interest in the layout and character of the buildings, variations in setbacks, materials roof lines and design are encouraged. In any case, the facade of every third dwelling unit shall be offset by 2 feet from the adjoining unit. [Ord. 99-2]

Performance Standards. The following requirements apply:

District	Minimum Site Area (acres)	Maximum Density (du/ac)	Minimum Open Space (%)	Maximum Impervious Surface (%)	Dwelling Types
R-15	10	4.0	35	30	All

SOURCE OF TITLE
TAX BLOCK 66 UNIT 98 (PARCEL #47-00-07678-033)
TAX BLOCK 66 UNIT 99 (PARCEL #47-00-05128-018)
TAX BLOCK 66 UNIT 100 (PARCEL #47-00-07678-042)
"MOYER FARM" Subdivision PBV. A-55 PG. 353, 354

Being the same property as that which Nick & Les, Inc. by a deed dated September 24, 2019 and recorded in deed book 6158 page 01275 in the Montgomery County Records granted and conveyed unto Wexford Court, LLC.

OWNER OF RECORD:
WEXFORD COURT, LLC

_____
Joseph Margusity, Member

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF MONTGOMERY
On the _____ day of _____, A.D. 20____ before me, the subscriber, a NOTARY PUBLIC in and for the said County and State, personally appeared Joseph Margusity, Member of Wexford Court, LLC who being duly sworn according to law says that the said Wexford Court, LLC is the owner of record of the property shown on this plan.

_____ my commission expires _____.
NOTARY PUBLIC

ACKNOWLEDGEMENT OF PLAN, OFFER OF DEDICATION, AND OWNERS CERFICATION OF BMP'S:
Joseph Margusity, Member of Wexford Court, LLC acknowledges that the subdivision/land development plan hereof was made at the direction of Wexford Court, LLC, and he acknowledges the same to be their act and plan and desires the same to be recorded as such according to law and that all streets and open spaces contained therein and all public improvements shown and not heretofore dedicated are hereby dedicated to the public use; and further certifies that the Best Management Practice ("BMP") facilities can not be removed or altered without prior approval from the Township.

Owner's Signature: _____ Date:_____
Owner: Joseph Margusity, Member of Wexford Court, LLC

BOARD OF SUPERVISORS:
At the meeting held on the _____ day of _____, A.D. 20_____ the Board of Supervisors of New Hanover Township by Resolution _____, duly enacted and approved the Subdivision/Land Development Plan of the Property of **ROLLING MEADOWS** as shown hereon.

_____
Charles Garner, Jr.
Chairman of the Board of Supervisors

_____
Jamie Gwynn
Township Secretary

PLANNING COMMISSION:
Reviewed by the New Hanover Township Planning Commission and recommended for approval on the ___ day of _____, A.D. 20___.

_____
Sue Smith
Planning Commission Chairman

Reviewed by the Township Engineer on the ___ day of _____, A.D. 20___.

_____
Geoffrey Attanasio, P.E.
Township Engineer

CERTIFICATION OF THE COUNTY RECORDER OF DEEDS AND THE COUNTY PLANNING COMMISSION
Recorded in the office of Recorder of Deeds for Montgomery County, at Norristown, Pennsylvania, this _____ day of _____, 20___.

By:_____
Recorder of Deeds

MCPC No. 00-0394-_____
PROCESSED and REVIEWED, Report prepared by Montgomery County Planning Commission in accordance with the Municipalities Planning Code.

Certified this date _____

_____
For the Director
Montgomery County Planning Commission

SURVEYOR'S CERTIFICATION
I hereby certify that the plan shown and described hereon, as well as all drawings bearing my seal, are true and correct to the accuracy required by the New Hanover Township Subdivision and Land Development Ordinance, and were prepared by me or under my direction and for which I accept full responsibility. The perimeter monuments shall be accurately placed as required by the Township.

_____20____ _____
John T. Aston III, SU-041475-E

NOTE: The outer boundary of this property was surveyed by John T. Aston III, SU - 041475-E, in February of 2000.

ENGINEER'S CERTIFICATION OF STORMWATER MANAGEMENT DESIGN:
I hereby certify that I am the engineer responsible for the stormwater management system designed on these plans.

_____ _____
Brian D. Boyer, P.E. date

OWNER & DEVELOPER:
Wexford Court, LLC
Joseph Margusity, Member
505 Hanley Lane
Downington, PA 19335
PH: 610-960-9220

		Rev #20	11 - 20 - 20
		Rev #19	10 - 29 - 20
		Rev #18	01 - 24 - 20
		Rev #17	08 - 29 - 19
		Rev #16	03 - 14 - 19
Rev #21	12 - 11 - 20	Rev #15	01 - 30 - 19
Rev #14	11 - 29 - 18		
Rev #13	07 - 20 - 18		
Rev #12	05 - 02 - 18		
Rev #11	01 - 31 - 18		
Rev #10	11 - 27 - 17		
Rev #9	12 - 25 - 09		
Rev #8	03 - 30 - 09		
Rev #7	04 - 01 - 08		
Rev #6	04 - 01 - 07		
Rev #5	12 - 22 - 05		
Rev #4	07 - 14 - 04		
Rev #3	03 - 31 - 03		
Rev #2	01 - 09 - 03		
Rev #1	05 - 15 - 01		

PLAN RECORDING NOTE:
Sheets 1 through 5 of this set of plans shall be recorded in the Montgomery County Records after municipal approval.

The Post Construction Stormwater Management Plan set was recorded in the Montgomery County Records on 12/19/2017, Deed Bk 6073 PG 02390 to 02395.9. Instrument Number 2017095540.

SHEET 1 OF 40
FINAL PLAN

SUBDIVISION PLAN

ROLLING MEADOWS

NEW HANOVER TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

ASTON
SURVEYORS/ ENGINEERS , INC.
BOYERTOWN , PA 19512

plan date
4 - 10 - 00

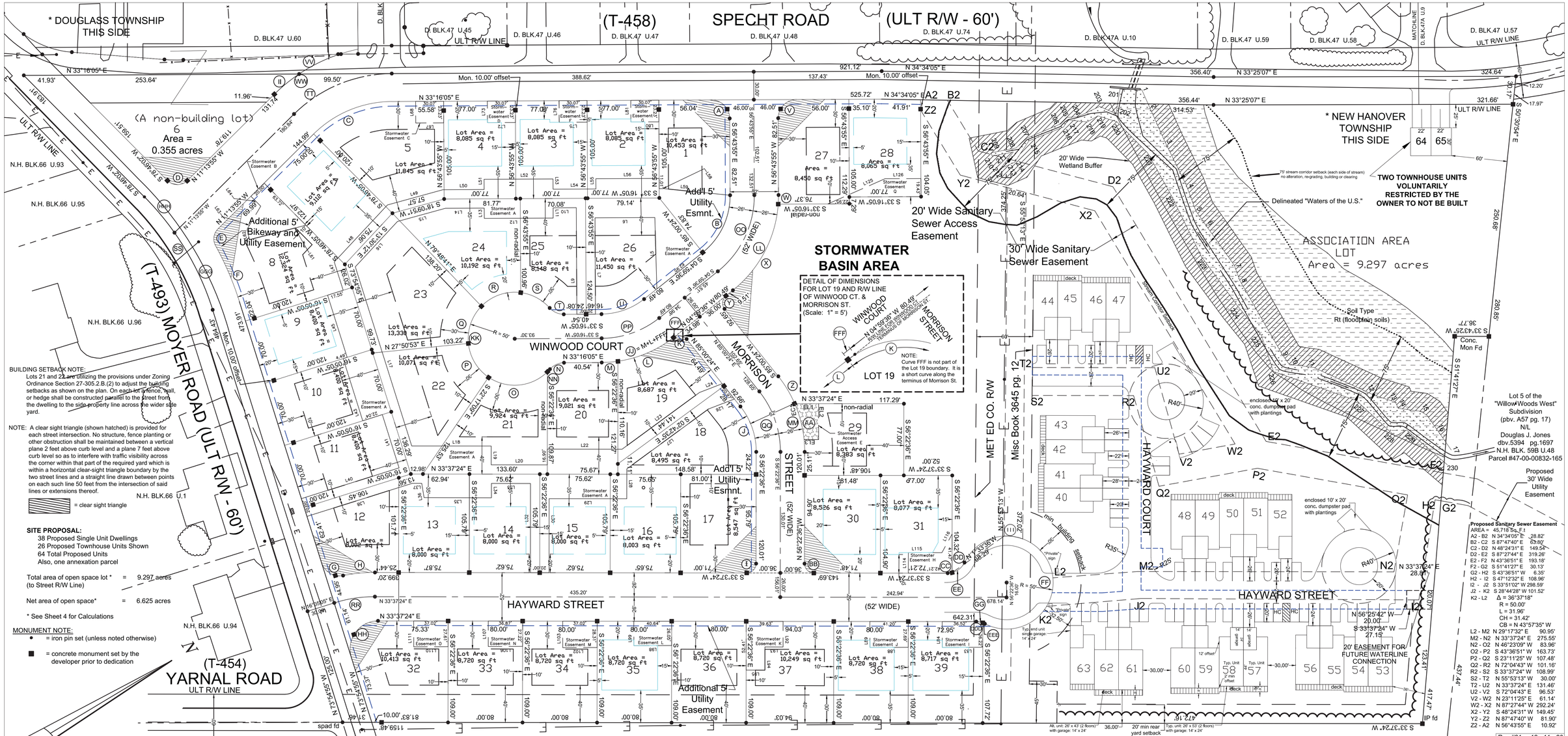
scale
1" = 100'

fld. wk. date
2 - 11 - 00

fld. bk. 127
pg. 36

fin. pl. comp. ck.
2 - 05 - 10 MA

plan no.
2323 - RMA



BUILDING SETBACK NOTE:
Lots 21 and 22 are utilizing the provisions under Zoning Ordinance Section 27-305.2.B.(2) to adjust the building setbacks as shown on the plan. On each lot a fence, wall, or hedge shall be constructed parallel to the street from the dwelling to the side property line across the wider side yard.

NOTE: A clear sight triangle (shown hatched) is provided for each street intersection. No structure, fence planting or other obstruction shall be maintained between a vertical plane 2 feet above curb level and a plane 7 feet above curb level so as to interfere with traffic visibility across the corner within that part of the required yard which is within a horizontal clear-sight triangle boundary by the two street lines and a straight line drawn between points on each such line 50 feet from the intersection of said lines or extensions thereof.

= clear sight triangle

SITE PROPOSAL:
38 Proposed Single Unit Dwellings
26 Proposed Townhouse Units Shown
64 Total Proposed Units
Also, one annexation parcel

Total area of open space lot * = 9.297 acres
(to Street R/W Line)

Net area of open space* = 6.625 acres

* See Sheet 4 for Calculations

MONUMENT NOTE:
• = iron pin set (unless noted otherwise)
■ = concrete monument set by the developer prior to dedication

TOTAL GROSS AREA = 21.294 ACRES
TOTAL NET AREA = 19.444 ACRES

CURVE INFORMATION:

A	Δ=90°00'00" R=20.00' A=31.42' T=20.00' CH=28.28' CB=N 78°16'05" E	G	Δ=83°59'27" R=20.00' A=29.32' T=18.01' CH=26.76' CB=S 64°05'21" W	M	Δ=97°57'08" R=126.00' A=17.49' T=8.76' CH=17.47' CB=N 29°17'31" E	S	Δ=41°08'49" R=50.00' A=35.91' T=18.77' CH=35.14' CB=S 61°36'44" W	Y	Δ=90°00'00" R=10.00' A=15.71' T=10.00' CH=14.14' CB=N 49°59'36" W	EE	Δ=64°37'23" R=20.00' A=22.56' T=12.65' CH=21.38' CB=N 01°18'43" E
B	Δ=51°44'20" R=78.00' A=70.44' T=37.82' CH=68.07' CB=S 30°51'45" E	H	Δ=11°31'46" R=171.00' A=34.41' T=17.26' CH=34.35' CB=S 27°51'31" W	N	Δ=48°55'04" R=20.00' A=17.08' T=9.10' CH=16.56' CB=N 8°48'33" E	T	Δ=48°55'04" R=20.00' A=17.08' T=9.10' CH=16.56' CB=S 57°43'36" W	Z	Δ=15°05'30" R=130.00' A=34.23' T=17.22' CH=34.14' CB=N 87°26'50" W	FF	Δ=272°17'01" R=50.00' A=237.61' T=48.05' CH=69.29' CB=S 74°51'28" E
C	Δ=44°30'00" R=120.00' A=93.20' T=49.09' CH=90.88' CB=N 11°01'05" E		Δ=90°00'00" R=10.00' A=15.71' T=10.00' CH=14.14' CB=S 11°22'36" E	O	Δ=78°51'41" R=50.00' A=68.82' T=41.12' CH=63.51' CB=N 28°17'00" E	U	Δ=38°15'40" R=74.00' A=49.42' T=25.67' CH=48.50' CB=S 14°08'15" W	AA	Δ=23°31'30" R=53.38' T=27.07' CH=39.00' CB=N 68°08'20" W	GG	Δ=27°39'38" R=20.00' A=9.66' T=4.92' CH=9.56' CB=S 47°27'13" W
D	Δ=89°59'58" R=15.00' A=23.56' T=15.00' CH=21.21' CB=S 33°46'03" W	J	Δ=38°37'00" R=78.00' A=52.57' T=27.33' CH=51.58' CB=S 75°41'06" E	P	Δ=50°08'02" R=50.00' A=43.75' T=23.39' CH=42.37' CB=S 87°13'08" E	V	Δ=90°00'00" R=20.00' A=31.42' T=20.00' CH=28.28' CB=N 11°43'55" W	BB	Δ=90°00'00" R=10.00' A=15.71' T=10.00' CH=14.14' CB=S 78°37'24" W	HH	Δ=107°32'20" R=30.00' A=56.31' T=40.04' CH=48.40' CB=N 20°08'46" W
E	Δ=74°01'05" R=15.00' A=19.38' T=11.31' CH=18.06' CB=N 48°14'28" W	K	Δ=89°34'22" R=10.00' A=15.63' T=9.93' CH=14.09' CB=N 40°13'13" E	Q	Δ=50°08'02" R=50.00' A=43.75' T=23.39' CH=42.37' CB=S 37°05'06" E	W	Δ=4°18'40" R=130.00' A=9.78' T=4.89' CH=9.78' CB=N 54°34'35" W	CC	Δ=13°51'53" R=20.00' A=4.84' T=2.43' CH=4.83' CB=S 26°41'28" W	II	Δ =10°56'34" R=180.00' A=34.38' T=17.24' CH=34.33' CB=N 05°45'38" W
F	Δ=11°20'05" R=330.00' A=65.28' T=32.75' CH=65.18' CB=N 79°34'58" W	L	Δ=29°52'55" R=126.00' A=65.71' T=33.62' CH=64.97' CB=N 10°22'30" E	R	Δ=53°03'25" R=50.00' A=46.30' T=24.96' CH=44.66' CB=S 14°30'37" W	X	Δ=47°25'39" R=130.00' A=107.61' T=57.10' CH=104.56' CB=N 28°42'25" W	DD	Δ=50°45'31" R=20.00' A=17.72' T=9.49' CH=17.14' CB=S 05°37'14" E	JJ	Δ=38°15'40" R=126.00' A=84.14' T=43.71' CH=82.59' CB=S 14°08'15" W

KK	Δ=277°50'07" R=50.00' A=242.46' T=43.56' CH=65.71' CB=N 56°43'55" W	QQ	Δ=38°37'00" R=104.00' A=70.09' T=36.44' CH=68.78' CB=S 75°41'06" E	WW	Δ=26°26'19" R=180.00' A=83.06' T=42.28' CH=82.32' CB=N 01°59'14" E	DDD	Δ =20°37'40" A=7.20' T=3.64' CH=7.16' CB=N 43°56'14" E
LL	Δ=51°44'20" R=130.00' A=117.39' T=63.04' CH=113.44' CB=S 30°51'45" E	RR	Δ=17°32'26" R=145.00' A=44.39' T=22.37' CH=44.22' CB=N 24°51'11" E	XX	Δ =06°38'41" R=175.00' A=20.30' T=10.16' CH=20.28' CB=S 34°45'45" W	EEE	Δ =07°01'58" R=20.00' A=2.46' T=1.23' CH=2.45' CB=N 57°46'03" E
MM	Δ=38°37'00" R=87.62' A=45.55' CH=85.97' CB=S 75°41'06" E	SS	Δ=27°19'02" R=300.00' A=143.03' T=72.90' CH=141.68' CB=N 87°34'27" W	YY	Δ =50°14'42" R=100.00' A=87.69' T=46.89' CH=84.91' CB=S 63°12'25" W	FFF	Δ =00°25'38" R=126.00' A=0.94' T=0.47' CH=0.94' CB=N 04°46'47" W
NN	Δ=4°30'08" R=50.00' A=3.93' T=1.97' CH=3.93' CB=N 13°23'55" W	TT	Δ=44°30'00" R=150.00' A=116.50' T=61.37' CH=113.59' CB=N 11°01'05" E	ZZ	Δ =06°25'27" R=275.00' A=30.83' T=15.43' CH=30.82' CB=N 88°27'30" W	GGG	Δ =17°43'26" R=300.00' A=92.80' T=46.77' CH=92.43' CB=N 82°46'41" W
OO	Δ=51°44'20" R=104.00' A=93.91' T=50.43' CH=90.75' CB=S 30°51'45" E	UU	Δ=89°59'33" R=15.00' A=23.56' T=15.00' CH=21.21' CB=S 33°45'49" W	AAA	Δ =32°04'02" R=100.00' A=55.97' T=28.74' CH=55.24' CB=S 64°07'05" W	HHH	Δ =09°35'34" R=300.00' A=50.23' T=25.17' CH=50.17' CB=S 83°33'49" W
PP	Δ=38°15'40" R=100.00' A=66.78' T=34.69' CH=65.54' CB=S 14°08'15" W	VV	Δ =15°29'45" R=180.00' A=48.68' T=24.49' CH=48.53' CB=N 07°27'31" E	BBB	Δ =18°10'40" R=100.00' A=31.73' T=16.00' CH=31.59' CB=S 79°14'26" W	III	Δ =23°18'43" R=50.00' A=20.34' T=10.31' CH=20.20' CB=S 42°15'11" W

STORMWATER EASEMENT LINE TABLE

Line #	Length	Direction	Line #	Length	Direction	Line #	Length	Direction
L5	76.75	N58° 02' 50"W	L36	15.59	N65° 43' 25"W	L75	30.07	S33° 16' 05"W
L6	64.29	S33° 16' 20"W	L37	10.23	S33° 37' 24"W	L76	23.23	N56° 43' 55"W
L7	103.49	S56° 43' 55"E	L38	118.46	S16° 05' 05"W	L80	30.07	S33° 16' 05"W
L9	114.50	N56° 43' 55"W	L40	110.00	N16° 05' 05"E	L81	23.23	N56° 43' 55"W
L10	24.85	S33° 16' 02"W	L41	60.00	N73° 54' 55"W	L83	43.42	S33° 18' 23"W
L11	11.00	S56° 44' 13"E	L43	70.00	N73° 54' 55"W	L84	27.75	N56° 41' 37"W
L12	74.00	S33° 16' 05"W	L45	70.00	N73° 54' 55"W	L88	41.05	S33° 19' 29"W
L13	11.00	N56° 43' 55"W	L47	31.84	N73° 54' 55"W	L89	27.90	N56° 40' 31"W
L14	41.68	S33° 16' 05"W	L48	83.72	N13° 30' 12"W	L92	27.46	S56° 25' 48"E
L15	53.40	S18° 09' 51"W	L49	61.73	N18° 09' 51"E	L93	19.52	S33° 37' 24"W
L16	66.40	S13° 30' 12"E	L50	44.33	N33° 16' 05"E	L94	24.95	S56° 25' 48"E
L17	201.74	S73° 54' 55"E	L51	11.00	N56° 43' 55"W	L95	20.16	S33° 37' 24"W
L18	85.39	N33° 37' 24"E	L52	74.00	N33° 16' 05"E	L98	40.50	S33° 18' 22"W
L19	20.15	S56° 22' 36"E	L53	11.00	S56° 43' 55"E	L99	26.28	N56° 41' 38"W
L20	60.24	N33° 37' 24"E	L54	46.00	N33° 16' 02"E	L102	36.87	S33° 19' 53"W
L22	80.27	N33° 37' 24"E	L55	11.01	N56° 43' 58"W	L103	28.50	N56° 40' 07"W
L23	103.02	N2° 42' 35"W	L56	68.00	N33° 16' 02"E	L106	37.04	S33° 19' 11"W
L24	26.15	N12° 31' 49"E	L58	4.85	N33° 16' 05"E	L107	27.41	N56° 22' 36"W
L26	29.78	S12° 31' 49"W	L59	71.59	N39° 17' 37"E	L110	36.87	S33° 19' 21"W
L27	108.79	S2° 42' 35"E	L61	62.68	S19° 13' 03"W	L111	27.81	N56° 40' 34"W
L28	32.13	S56° 22' 36"E	L62	11.70	N67° 31' 05"W	L114	22.00	N56° 22' 36"W
L29	83.34	S33° 37' 24"W	L63	28.47	N25° 55' 42"W	L115	36.00	N33° 37' 24"E
L30	79.46	S56° 22' 36"E	L64	15.00	S78° 46' 05"W	L116	22.87	N27° 37' 23"W
L32	95.79	N56° 22' 36"W	L67	30.07	S33° 16' 05"W	L125	66.93	N9° 44' 11"E
L33	41.91	S33° 37' 24"W	L68	23.23	N56° 43' 55"W	L126	38.58	N33° 16' 05"E
L34	15.39	S56° 22' 36"E	L72	30.07	S33° 16' 05"W			
L35	72.34	S33° 37' 24"W	L73	23.23	N56° 43' 55"W			

ADJOINING PROPERTY OWNERS

D. Blk. 47 U60: Neil A. Pestcoe & Dorothy A. Robinson dbv.6136 pg.00196 Parcel #3200-04417-00-6
D. Blk. 47 U9: Caroline Specht Parcel #3200-00728-00-5
D. Blk. 47 U45: John & Joan MacDonald dbv.4687 pg.1160 Parcel #3200-06354-00-4
D. Blk. 47 U46: Christopher D. & Carlyn K. Yerkes dbv.4931 pg.1594 Parcel #3200-06354-01-3
D. Blk. 47 U47: John F. & Janet A. Wiencek dbv.5157 pg.1519 Parcel #3200-06354-02-2
D. Blk. 47 U48: John M. & Donna J. Freed dbv.4931 pg.752 Parcel #3200-06354-03-1
D. Blk. 47 U74: Caroline Specht Parcel #3200-06354-30-1
D. Blk. 47A U10: Donald F. & Sheila R. Specht dbv.4443 pg.0082 Parcel #3200-06354-07-6
D. Blk. 47 U59: Raymond L. Jr. & Janet Leyfert dbv.4844 pg.1771 Parcel #3200-06354-07-6
D. Blk. 47 U58: Mary Beth Ford & Judith A. Brennan dbv.5185 pg.2402 Parcel #3200-06354-08-5

D. Blk. 47A U9: David E. & Melissa A. Mabry dbv.5288 pg.1254 Parcel #3200-06354-31-9
D. Blk. 47 U57: Christopher D. & Kimberly A. Mitchell dbv.5010 pg.406 Parcel #3200-06354-09-4
N.H. Blk. 66 U93: Scott & Georgann Geiser dbv.5116 pg.521 Parcel #47-00-05256-20
N.H. Blk. 66 U95: Scott & Georgann Geiser dbv. 5116 pg.521 Parcel #47-00-05256-20
N.H. Blk. 66 U96: Robert A. & Kristen T. Schurr dbv.5178 pg.2133 Parcel #47-00-05128-02
N.H. Blk. 66 U1: Donald J. & Patricia E. Derrick dbv.5118 pg.1182 Parcel #47-00-05128-00
N.H. Blk. 66 U94: J. Roger & Dorothy L. Moyer dbv.5020 pg.752 Parcel #47-00-05256-10

PROPOSED STORMWATER ACCESS EASEMENT "E"
Area = 758.90 sq ft
EL1–N 33°37'24"E 25.80'
EL2–S 56°22'36"E 38.55'
EL3–S 33°37'24"W 15.69'
EC1–Δ38°37'00", R=130', A=40.02', T=20.09', CHORD=N71°4'59"W 39.86'

0' 25' 50' 100' 150' 200'
GRAPHIC SCALE

Proposed Sanitary Sewer Easement

AREA =	45,719 Sq. Ft.
A2 - B2	N 34°34'05" E 28.82'
B2 - C2	S 87°47'40" E 63.80'
C2 - D2	N 48°24'31" E 149.50'
D2 - E2	S 87°27'44" E 319.26'
E2 - F2	N 43°36'51" E 193.18'
F2 - G2	S 51°41'27" E 30.13'
G2 - H2	S 43°36'51" W 6.35'
H2 - I2	S 47°12'32" E 108.96'
I2 - J2	S 33°51'02" W 298.59'
J2 - K2	S 28°44'28" W 101.52'
K2 - L2	Δ = 36°37'18" R = 50.00' L = 31.96' CH = 31.42' CB = N 43°57'35" W
L2 - M2	N 29°17'32" E 90.95'
M2 - N2	N 33°37'24" E 275.55'
N2 - O2	N 46°23'09" W 83.96'
O2 - P2	S 43°36'51" W 163.73'
P2 - Q2	S 23°11'25" W 107.48'
Q2 - R2	N 72°04'43" W 101.16'
R2 - S2	S 33°37'24" W 108.99'
S2 - T2	N 55°53'13" W 30.00'
T2 - U2	N 33°37'24" E 131.46'
U2 - V2	S 72°04'43" E 96.53'
V2 - W2	N 23°11'25" E 61.14'
W2 - X2	N 87°27'44" W 292.24'
X2 - Y2	S 48°24'31" W 149.45'
Y2 - Z2	N 87°47'40" W 81.90'
Z2 - A2	N 56°43'55" E 10.92'

Rev #21	12 - 11 - 20
Rev #20	11 - 20 - 20
Rev #19	10 - 29 - 20
Rev #18	01 - 24 - 20
Rev #17	08 - 29 - 19
Rev #16	03 - 14 - 19
Rev #15	01 - 30 - 19
Rev #14	11 - 29 - 18
Rev #13	07 - 20 - 18
Rev #12	05 - 02 - 18
Rev #11	01 - 31 - 18
Rev #10	11 - 27 - 17
Rev #9	12 - 25 - 09
Rev #8	03 - 30 - 09
Rev #7	04 - 01 - 08
Rev #6	04 - 01 - 07
Rev #5	12 - 22 - 05
Rev #4	07 - 14 - 04
Rev #3	03 - 31 - 03
Rev #2	01 - 09 - 03
Rev #1	05 - 15 - 01

PLAN RECORDING NOTE:
Sheets 1 through 5 of this set of plans shall be recorded in the Montgomery County Records after municipal approval.

SHEET 2 OF 40
50 SCALE PLAN OF PROPOSED LOTS

SUBDIVISION PLAN

ROLLING MEADOWS

NEW HANOVER TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

ASTON
SURVEYORS/ ENGINEERS , INC.
BOYERTOWN , PA 19512

plan date
4 - 10 - 00

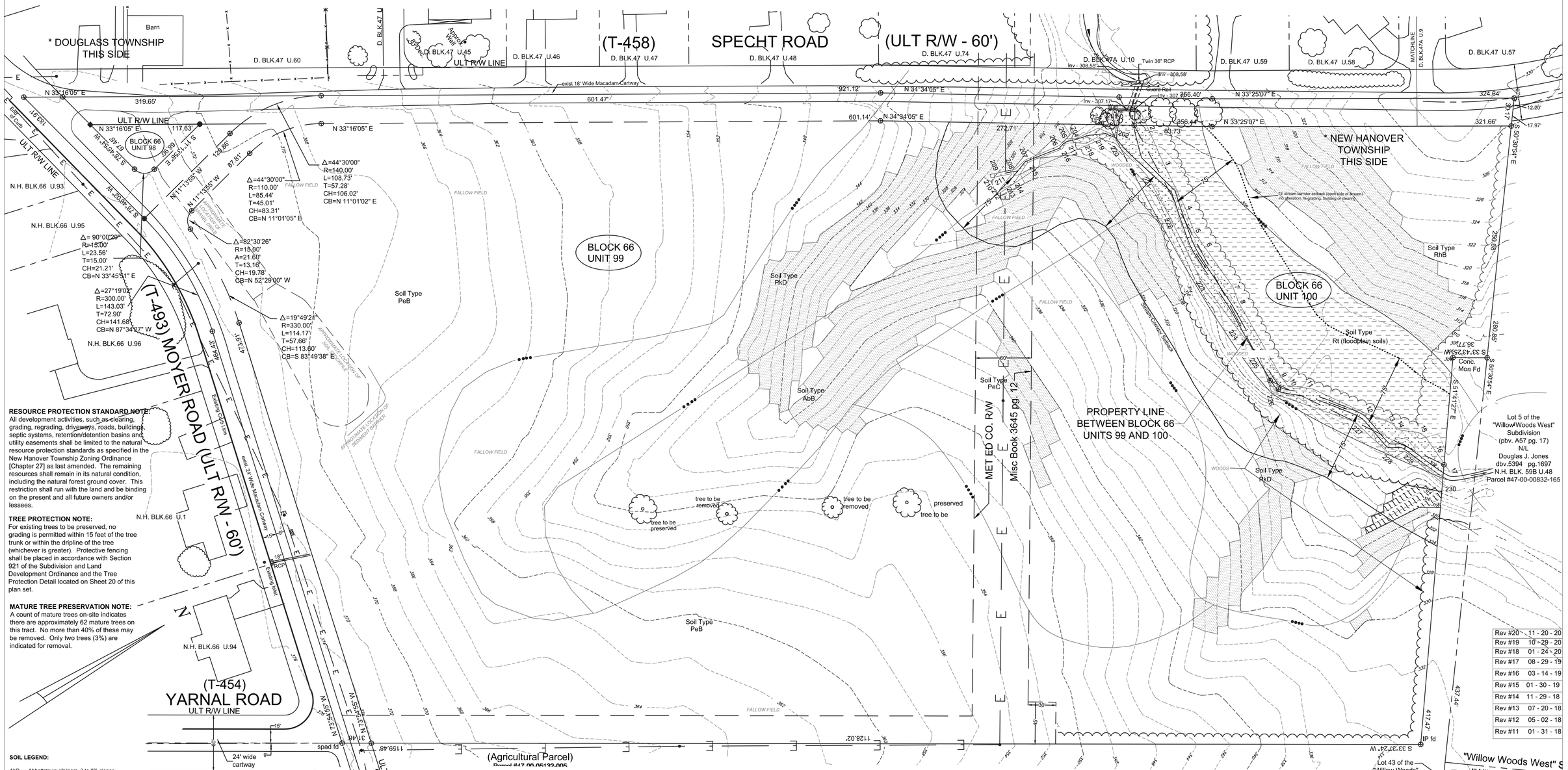
scale
1" = 50'

fld. wk. date
2 - 11 - 00

fld. bk. 127
pg. 36

fin. pl. comp. ck.
2 - 05 - 10 MA

plan no.
2323 - RMB



RESOURCE PROTECTION STANDARD NOTE:
All development activities, such as clearing, grading, regrading, driveways, roads, buildings, septic systems, retention/detention basins and utility easements shall be limited to the natural resource protection standards as specified in the New Hanover Township Zoning Ordinance [Chapter 27] as last amended. The remaining resources shall remain in its natural condition, including the natural forest ground cover. This restriction shall run with the land and be binding on the present and all future owners and/or lessees.

TREE PROTECTION NOTE:
For existing trees to be preserved, no grading is permitted within 15 feet of the tree trunk or within the dripline of the tree (whichever is greater). Protective fencing shall be placed in accordance with Section 921 of the Subdivision and Land Development Ordinance and the Tree Protection Detail located on Sheet 20 of this plan set.

MATURE TREE PRESERVATION NOTE:
A count of mature trees on-site indicates there are approximately 62 mature trees on this tract. No more than 40% of these may be removed. Only two trees (3%) are indicated for removal.

SOIL LEGEND:

AbB - Abbottstown silt loam, 3 to 8% slopes,
Depth to restrictive feature: 15 to 30 inches to fragipan
40 to 60 inches to lithic bedrock
Depth to water table: 6 to 18 inches
Residential Development - Very Limited
Lawns and Landscaping - Very Limited
Local Roads and Streets - Somewhat Limited

PeB - Penn silt loam, 3 to 8% slopes,
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Depth to water table: More than 80 inches
Residential Development - Very Limited
Lawns and Landscaping - Moderate,
Local Roads and Streets - Moderate

PeC - Penn silt loam, 8 to 15% slopes,
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Depth to water table: More than 80 inches
Residential Development - Very Limited
Lawns and Landscaping - Somewhat Limited
Local Roads and Streets - Somewhat Limited

PkD - Penn-Klinesville channery silt loams, 15 to 25% slopes,
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Depth to water table: More than 80 inches
Residential Development - Very Limited
Lawns and Landscaping - Very Limited
Local Roads and Streets - Very Limited

RhB - Reaville silt loam, 3 to 8% slopes,
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Depth to water table: 6 to 36 inches
Residential Development - Very Limited
Lawns and Landscaping - Somewhat Limited
Local Roads and Streets - Very Limited

Rt - Rowland silt loam, terrace, 0 to 3% slopes,
Depth to restrictive feature: 60 to 90 inches to lithic bedrock
Depth to water table: 12 to 36 inches
Residential Development - Very Limited
Lawns and Landscaping - Somewhat Limited
Local Roads and Streets - Very Limited

NOTE: The soil types are taken from the Montgomery County Soil Survey maps.

PLAN LEGEND

- = SANITARY SEWER LINE
- = D.I.P. WATER LINE
- = CURB CUT RAMP
- = WATER VALVE
- = FIRE HYDRANT
- = BLOW OFF VALVE
- = EXISTING CONTOUR
- = PROPOSED CONTOUR
- = INLET
- = 8" CONCRETE CURB
- = CONCRETE SIDEWALK
- = SOIL BOUNDARY LINE
- = SANITARY SEWER MANHOLE
- = RCP STORM SEWER PIPE
- = Limit of Required Perimeter Buffer
- = Areas of 15% slopes or greater
- = Areas of 25% slopes or greater
- = Delineated "Waters of the U.S."
- = existing electric line
- = Soil Type Rt - flodplain soils

ADJOINING PROPERTY OWNERS

D. Blk. 47 U60: Neil A. Pestcoe & Dorothy A. Robinson
dbv.6136 pg.00196
Parcel #3200-04417-00-6

D. Blk. 47 U9: Caroline Specht
Parcel #3200-00728-00-5

D. Blk. 47 U45: John & Joan MacDonald
dbv.4687 pg.1160
Parcel #3200-06354-00-4

D. Blk. 47 U46: Christopher D. & Carlyn K. Yerkes
dbv.4931 pg.1594
Parcel #3200-06354-01-3

D. Blk. 47 U47: John F. & Janet A. Wiencek
dbv.5157 pg.1519
Parcel #3200-06354-02-2

D. Blk. 47 U48: John M. & Donna J. Freed
dbv.4931 pg.752
Parcel #3200-06354-03-1

D. Blk. 47 U74: Caroline Specht
Parcel #3200-06354-30-1

D. Blk. 47A U10: Donald F. & Sheila R. Specht
dbv.4443 pg.0082
Parcel #3200-06354-07-6

D. Blk. 47 U59: Raymond L. Jr. & Janet Leyfert
dbv.4844 pg.1771
Parcel #3200-06354-07-6

D. Blk. 47 U58: Mary Beth Ford &
Judith A. Brennan
dbv.5185 pg.2402
Parcel #3200-06354-08-5

D. Blk. 47A U9: David E. & Melissa A. Mabry
dbv.5288 pg.1254
Parcel #3200-06354-31-9

D. Blk. 47 U57: Christopher D. & Kimberly A. Mitchell
dbv.5010 pg.406
Parcel #3200-06354-09-4

N.H. Blk. 66 U93: Scott & Georgann Geiser
dbv.5116 pg.521
Parcel #47-00-05256-20

N.H. Blk. 66 U95: Scott & Georgann Geiser
dbv. 5116 pg.521
Parcel #47-00-05256-20

N.H. Blk. 66 U96: Robert A. & Kristen T. Schurr
dbv.5178 pg.2133
Parcel #47-00-05128-02

N.H. Blk. 66 U1: Donald J. & Patricia E. Derrick
dbv.5118 pg.1182
Parcel #47-00-05128-00

N.H. Blk. 66 U94: J. Roger & Dorothy L. Moyer
dbv.5020 pg.752
Parcel #47-00-05256-10

0' 25' 50' 100' 150' 200'
GRAPHIC SCALE

"WATERS OF THE U.S." NOTE:
The limit of "Waters of the U.S." were field delineated by:
DelVal Soil & Environmental Consultants, Inc.
P.O.Box 298
Doylestown, PA 18901
PH: 215 - 345-5545

There may be no construction or earth disturbance within a "Waters of the U.S." area without the required DEP/Army Corp permits.

= Delineated "Waters of the U.S."

CONTOUR NOTE: The contours shown are taken from actual field survey elevations.
Local benchmark: invert of san. MH286-A,
located in Buchert Road (refer to sheet 16)
Top EL. = 293.20; Inv. EL = 284.00 sewer authority datum

SOURCE OF TITLE
TAX BLOCK 66 UNIT 98 (PARCEL #47-00-07678-033)
TAX BLOCK 66 UNIT 99 (PARCEL #47-00-05128-018) Subdivision "MOYER FARM"
TAX BLOCK 66 UNIT 100 (PARCEL #47-00-07678-042) PBV. A-55 PG. 353, 354

Being the same property as that which Nick & Les, Inc. by a deed dated September 24, 2019 and recorded in deed book 6158 page 01275 in the Montgomery County Records granted and conveyed unto Wexford Court, LLC.

OWNER & DEVELOPER:
Wexford Court, LLC
356 Hidden Farm Drive
Exton, PA 19431
PH: 610-960-9220
Contact: Joseph Margusity

"WATERS OF THE U.S." NOTE:
The limit of "Waters of the U.S." were field delineated on December 16, 1999 and confirmed on December 6, 2013 by:
DelVal Soil & Environmental Consultants, Inc.
P.O.Box 298
Doylestown, PA 18901
PH: 215 - 345-5545
And confirmed on January 17, 2020 by:
Palustris Environmental, LLC.
140 Lamplighter Drive
Morgantown, WV 26508

There may be no construction or earth disturbance within a "Waters of the U.S." area without the required DEP/USACOE permits.

WATERS OF THE U.S. CERTIFICATION:
I do hereby certify that the delineation of the Waters of the United States shown on this plan are in accordance with the findings of my field investigation and that I have determined these limits based upon the U.S. Corps of Engineers guidelines.

Andrew Longenecker, Biologist — Date
Palustris Environmental, LLC

PLAN RECORDING NOTE:
Sheets 1 through 5 of this set of plans shall be recorded in the Montgomery County Records after municipal approval.

TOTAL GROSS AREA = 21.294 acres
TOTAL NET AREA = 19.444 acres

SHEET 3 OF 40
EXISTING SITE PLAN WITH PROTECTED NATURAL RESOURCES

Rev	
Rev #20	11 - 20 - 20
Rev #19	10 - 29 - 20
Rev #18	01 - 24 - 20
Rev #17	08 - 29 - 19
Rev #16	03 - 14 - 19
Rev #15	01 - 30 - 19
Rev #14	11 - 29 - 18
Rev #13	07 - 20 - 18
Rev #12	05 - 02 - 18
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Rev #7	04 - 01 - 08
Rev #6	04 - 01 - 07
Rev #5	12 - 22 - 05
Rev #4	07 - 14 - 04
Rev #3	03 - 31 - 03
Rev #2	01 - 09 - 03
Rev #1	05 - 15 - 01

SUBDIVISION PLAN

ROLLING MEADOWS

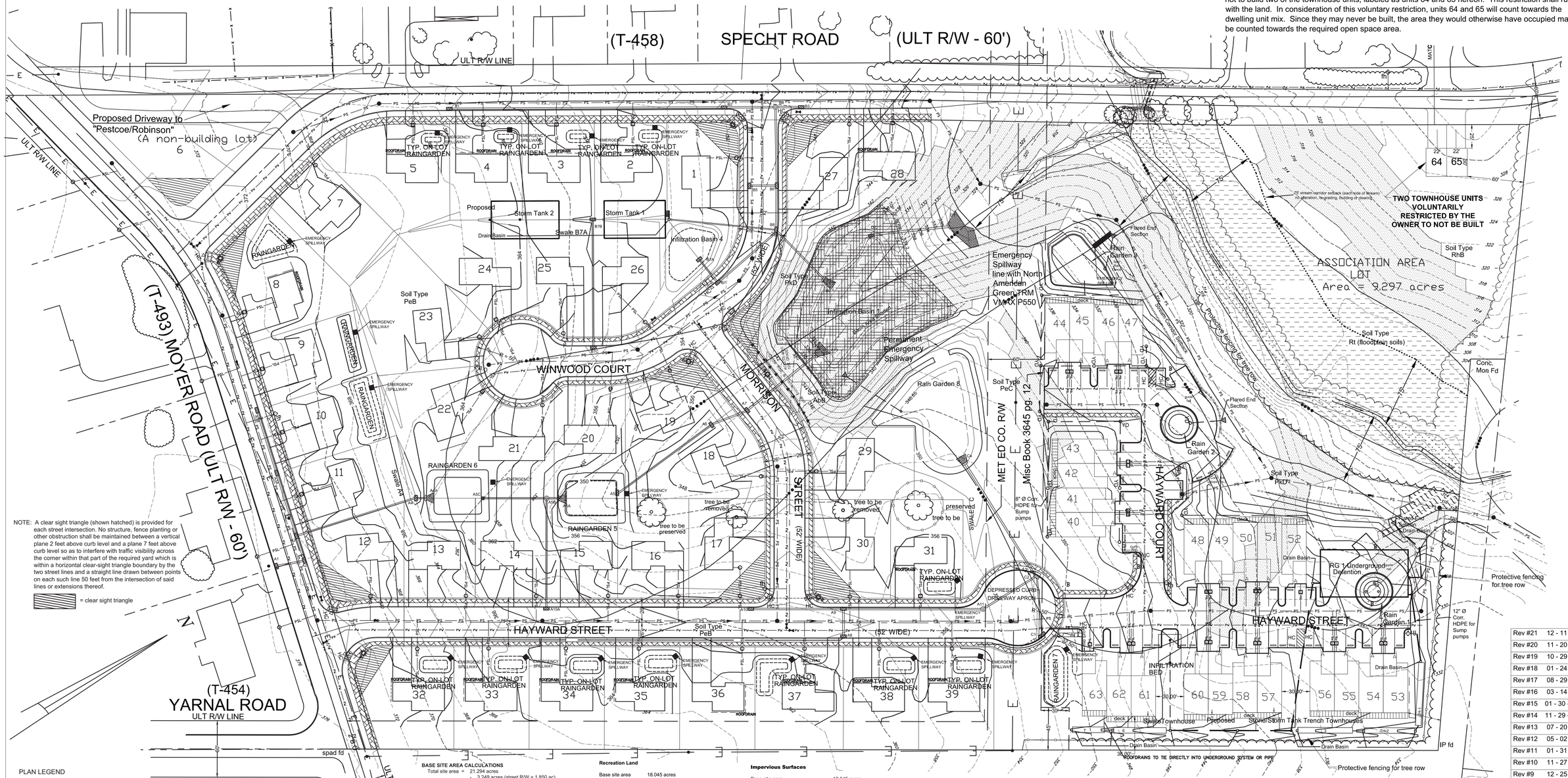
NEW HANOVER TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

ASTON
SURVEYORS/ ENGINEERS , INC.
BOYERTOWN , PA 19512

plan date 4 - 10 - 00
scale 1" = 50'
fld. wk. date 2 - 11 - 00
fld. bk. 127 pg. 36
fin. pl. comp. ck. 2 - 05 - 10 MA
plan no. 2323 - RMC

NOTE REGARDING THE DWELLING UNIT MIX AND THE OPEN SPACE

In discussions and agreement with the Township, 38 single family detached dwellings and 26 townhomes are shown for this site. In an effort to make larger style townhomes with attached garages, decks, and adequate parking spaces - and in consideration of the limitations of providing the required amount of open space - the owners of this tract have voluntarily agreed, now and forever, not to build two of the townhouse units, labeled as units 64 and 65 hereon. This restriction shall run with the land. In consideration of this voluntary restriction, units 64 and 65 will count towards the dwelling unit mix. Since they may never be built, the area they would otherwise have occupied may be counted towards the required open space area.



NOTE: A clear sight triangle (shown hatched) is provided for each street intersection. No structure, fence planting or other obstruction shall be maintained between a vertical plane 2 feet above curb level and a plane 7 feet above curb level so as to interfere with traffic visibility across the corner within that part of the required yard which is within a horizontal clear-sight triangle boundary by the two street lines and a straight line drawn between points on each such line 50 feet from the intersection of said lines or extensions thereof.

= clear sight triangle

PLAN LEGEND

- = SANITARY SEWER LINE
- = D.I.P. WATER LINE
- = CURB CUT RAMP
- = WATER VALVE
- = FIRE HYDRANT
- = BLOW OFF VALVE
- = EXISTING CONTOUR
- = PROPOSED CONTOUR FOR SITE IMPROVEMENTS
- = PROPOSED CONTOUR
- = INLET
- = 8" CONCRETE CURB
- = CONCRETE SIDEWALK
- = SOIL BOUNDARY LINE
- = SANITARY SEWER MANHOLE
- = RCP STORM SEWER PIPE
- = Limit of Required Perimeter Buffer
- = Areas of 15% slopes or greater
- = Areas of 25% slopes or greater
- = Delineated "Waters of the U.S."
- = existing electric line
- = Soil Type Rt - floodplain soils
- = proposed pole mounted light
- = proposed street light
- = proposed sewer lateral
- = proposed water lateral
- = proposed sewer lateral for townhouse unit
- = proposed water lateral for townhouse unit
- = proposed sanitary sewer
- = proposed 8" Ø water main
- = proposed 6" Ø water main
- = proposed 4" Ø water main
- = proposed retaining wall
- = proposed guide rail
- = proposed split rail fence
- = Limit of basin

BASE SITE AREA CALCULATIONS

Total site area = 21.294 acres
- 3.249 acres (street R/W = 1.850 ac)
(utility R/W = 1.399 ac)

Base site area = 18.045 acres

Resource	Open Space Ratio	Acres of Land in Resources	Resource Protection Land (acres x open space ratio)
Floodway	100%	0	0
Flood Fringe	80%*	0	0
Approx. 100 yr. flood boundary	100%**	0	0
Floodplain soils	100%**	1.158 ac	1.158 ac
Slopes 15 - 25%	70%	2.433 ac	1.703 ac
25% or greater	80%	0.024 ac	0.019 ac
Woodlands: (outside land with higher protection coefficient) R-25, R15, CB-1, CB-2, LI, HI, R-2, R-50	50% 80%	0.535 ac	0.268 ac
Watercourses Streams,	100%	0.014 ac	0.014
Wetlands	100%	0	0
Pond Shorelines	80%	0	0
Wetland Margins	80%	0	0
Land with Resource Restrictions		4.164 ac	
Resource Protection Land			3.162 ac

Recreation Land

Base site area 18.045 acres
Subtract land with resource restrictions 4.164 acres
Remainder 13.881 acres
Multiply by 1/3 x min. open space ratio 1/3 x .35 x 13.881 acres
Recreation land = 1.619* acres

Combine Resource Protection Land and Recreation Land

Resource protection land 3.162 acres
Add recreation land + 1.619 acres
Resource protection and recreation land 4.781 acres

Standard Minimum Open Space

Base site area 18.045 acres
Multiply by min. open space x 35%
Standard min. open space = 6.316 acres

Determine Required Open Space

The required open space is the resource protection and recreation land or the standard minimum open space, whichever is greater 6.316 acres

Net Buildable Site Area

Base site area 18.045 acres
Subtract required open space - 6.316 acres
Net buildable site area = 11.732 acres

Number of Dwelling Units/Lots

Base site area 18.045 acres
Multiply by maximum density x 4 du/ac
Number of dwelling units = 72 dwelling units
(Note: 64 dwelling units are proposed)

Impervious Surfaces

Base site area 18.045 acres
Multiply by max. impervious surface ratio x 30%
Max. All. Impervious surface = 5.414 acres
(Note: Proposed Impervious Surface = 5.379 acres)

Site Capacity Summary

Required open space 6.316 acres
(Proposed open space = 6.337 acres)
Net buildable site area 11.732 acres
Max. number of dwelling units/lots 72 units

DISTURBED SLOPE AREA CALCULATIONS

Resource	Allowable Disturbance Ratio	Acres of Land in Resources	Allowable Disturbance (acres)	Proposed Disturbance (acres)
15 - 25%	70%	2.433	0.730	0.721
25% or greater	80%	0.024	0.005	0.004

EXISTING VEGETATION PRESERVATION NOTE:

The existing wooded area located along the drainageway in the Open Space Lot and along the tract boundary line are to remain except in the area proposed for the construction of the sanitary sewer line. The existing mature trees located on Lots 16 and 31 shall be preserved, if possible, with protective fencing.

= protective fencing

0' 25' 50' 100' 150' 200'
GRAPHIC SCALE

PERFORMANCE STANDARDS:

	REQUIRED	PROPOSED
Density	72 (max)	64
Open Space Ratio	0.35 (min)	0.351
Impervious Surface Ratio	0.30 (max)	0.298
Dwelling Unit type and numbers	2 unit types 60% max. (x 64) one type = 38 15% min (x 64) any type = 10	2 unit types Detached Dwellings shown = 38 Townhouse Units shown = 26
Size of units	--------	3/4 bedroom

Townhouse Off street parking Calculations
Total for Townhouse units = 1 garage space / constructed unit (24 spaces) + 64 paved spaces = 88 Total

The private parking spaces for the individual townhouses shall be clearly marked with all-weather markings or signage. (see Sheet 15)

Nonresidential use and floor area 0 0

ADDITIONAL NOTES:

Total Gross Area = 21.294 acres
Total Net Area = 19.444 acres
Total No. of Townhouse Units shown = 26
Total No. of Detached Dwellings = 38

SITE PROPOSAL:
38 Proposed Single Unit Dwellings
26 Proposed Townhouse Units shown
64 Total Proposed Units

Total area of open space lot (to Street R/W Line) = 9.297 acres
Stormwater Basin Area = (-) 0.831 acres
Townhouse Area* = (-) 1.841 acres
Net area of open space = 6.625 acres

* Townhouse Area
Paving = 40,289 Sq. Ft.
Townhouse = (20 ea x 1182 sf + 4 ea x 1118 sf) 28,112 Sq. Ft.
Garages = (24 x 336 SF) 8,064 Sq. Ft.
Decks = (24 x 156 SF) 3,744 Sq. Ft.
TOTAL = 80,209 Sq. Ft. 1.841 Acres

PLAN RECORDING NOTE:
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SHEET 4 OF 40
NATURAL RESOURCE PROTECTION PLAN

SUBDIVISION PLAN

ROLLING MEADOWS

NEW HANOVER TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

ASTON
SURVEYORS/ ENGINEERS , INC.
BOYERTOWN , PA 19512

plan date 4 - 10 - 00
scale 1" = 50'
fld. wk. date 2 - 11 - 00
fld. bk. 127 pg 36
fin. pl. comp. ck. 00 - 00 - 00 XX
plan no. 2323 - RMD

Rev #21	12 - 11 - 20
Rev #20	11 - 20 - 20
Rev #19	10 - 29 - 20
Rev #18	01 - 24 - 20
Rev #17	08 - 29 - 19
Rev #16	03 - 14 - 19
Rev #15	01 - 30 - 19
Rev #14	11 - 29 - 18
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Rev #5	12 - 22 - 05
Rev #4	07 - 14 - 04
Rev #3	03 - 31 - 03
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(T-458) SPECHT ROAD (ULT R/W - 60')

ULT R/W LINE

MATCHLINE

Proposed Driveway to "Pestcoe/Robinson" (A non-building lot) 6

Additional 5' Bikeway and Utility Easement

(T-493) MOYER ROAD (ULT R/W - 60')

WINWOOD COURT

MORRISON STREET (52' WIDE)

Add'l 5' Utility Esmnt.

Drain Basin

STORMTANK 1 OUTLET

Soil Type PeB

Soil Type PkB

Soil Type PeC

Soil Type ApB

Soil Type RnB

Soil Type Rt (floodplain soils)

Soil Type PrD

Soil Type PgB

ASSOCIATION AREA LOT
Area = 9.297 acres

TWO TOWNHOUSE UNITS VOLUNTARILY RESTRICTED BY THE OWNER TO NOT BE BUILT

22' stream corridor setback (each side of stream) no alteration, re-grading, building or cleaning

Flared End Section

Rain Garden 3

Rain Garden 2

Rain Garden 1

Conc. Mon Fd

HAYWARD COURT

HAYWARD STREET

RG 1 Underground Detention

INFILTRATION BED

Drain Basin

Swale

Townhouse

Proposed Stone/Storm Tank Trench Townhouses

IP fd

spad fd

(T-454) YARNAL ROAD
ULT R/W LINE

ULT R/W LINE
(ULT. R/W - 60')

ROOFDRAINS TO TIE DIRECTLY INTO UNDERGROUND SYSTEM OR PIPE

PLAN LEGEND

- = SANITARY SEWER LINE
- = D.I.P. WATER LINE
- = CURB CUT RAMP
- = WATER VALVE
- = FIRE HYDRANT
- = BLOW OFF VALVE
- = EXISTING CONTOUR
- = PROPOSED CONTOUR
- = INLET
- = 8" CONCRETE CURB
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- = Limit of Required Perimeter Buffer
- = Delineated "Waters of the U.S."
- = Soil Type Rt - floodplain soils
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- = proposed pole mounted light
- = proposed street light
- = proposed cleanout assembly w/ vent box
- = proposed cleanout assembly
- = proposed sewer lateral
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- = proposed sanitary sewer
- = proposed 8" or 12' Ø water main
- = proposed 6" Ø water main
- = proposed 4" Ø water main
- = proposed retaining wall
- = proposed guide rail
- = proposed split rail fence

CLEANOUT ASSEMBLY NOTE:
ALL CLEANOUT ASSEMBLIES LOCATED WITHIN PAVED AREAS OF THE TOWNHOUSE PORTION OF THE DEVELOPMENT SHALL BE CONSTRUCTED WITH PROTECTIVE BOXES AND THE BOX COVERS DRILLED WITH TWO (¾ INCH DIAMETER) HOLES TO ALLOW AIR TO PASS INTO THE VENT.

0' 25' 50' 100' 150'
GRAPHIC SCALE

Rev #18	01 - 24 - 20
Rev #17	08 - 29 - 19
Rev #16	03 - 14 - 19
Rev #15	01 - 30 - 19
Rev #14	11 - 29 - 18
Rev #13	07 - 20 - 18
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Rev #5	12 - 22 - 05
Rev #4	07 - 14 - 04
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Rev #2	01 - 09 - 03
Rev #1	05 - 15 - 01

SHEET 6 OF 40
UTILITY PLAN

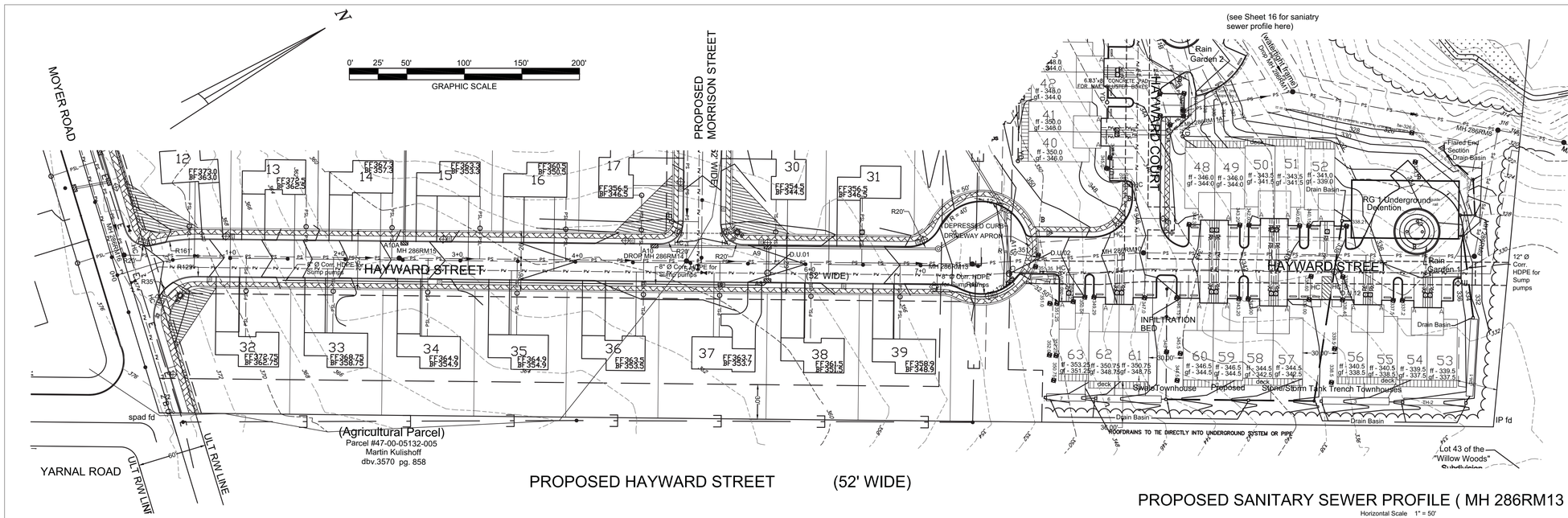
SUBDIVISION PLAN

ROLLING MEADOWS

NEW HANOVER TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

ASTON
SURVEYORS/ ENGINEERS , INC.
BOYERTOWN , PA 19512

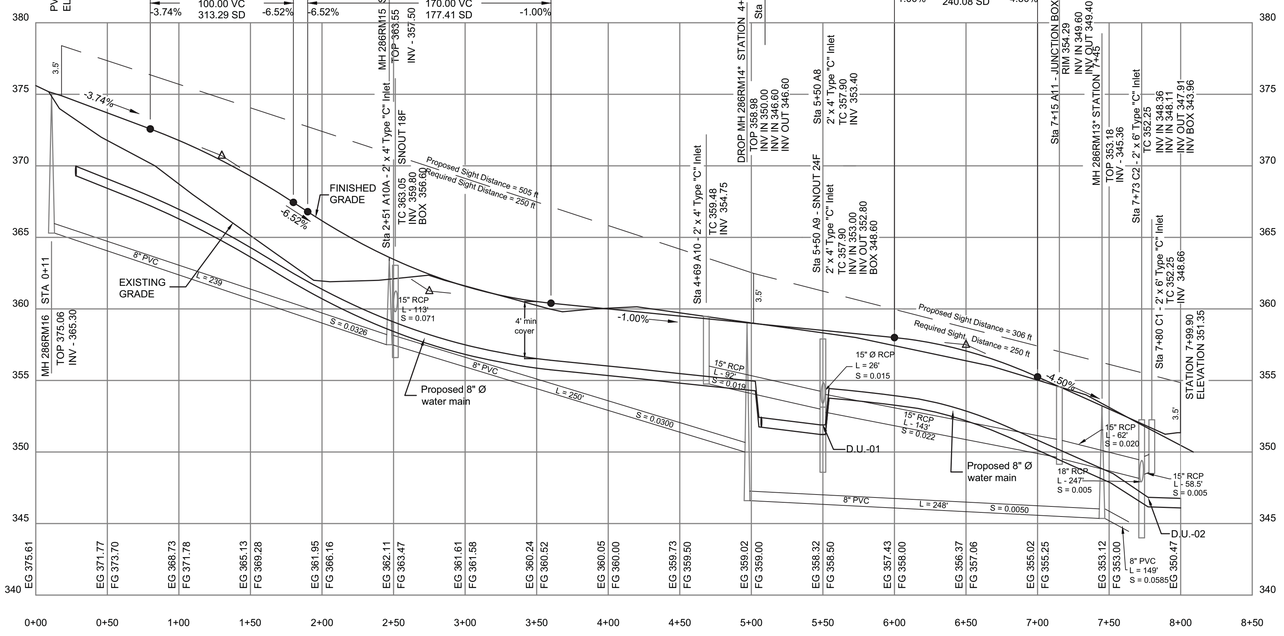
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scale	1" = 50'
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fld. bk.	127 pg. 36
fin. pl. comp. ck.	00 - 00 - 00 XX
plan no.	2323 - RMH



PROPOSED HAYWARD STREET (52' WIDE)

PROPOSED HAYWARD STREET

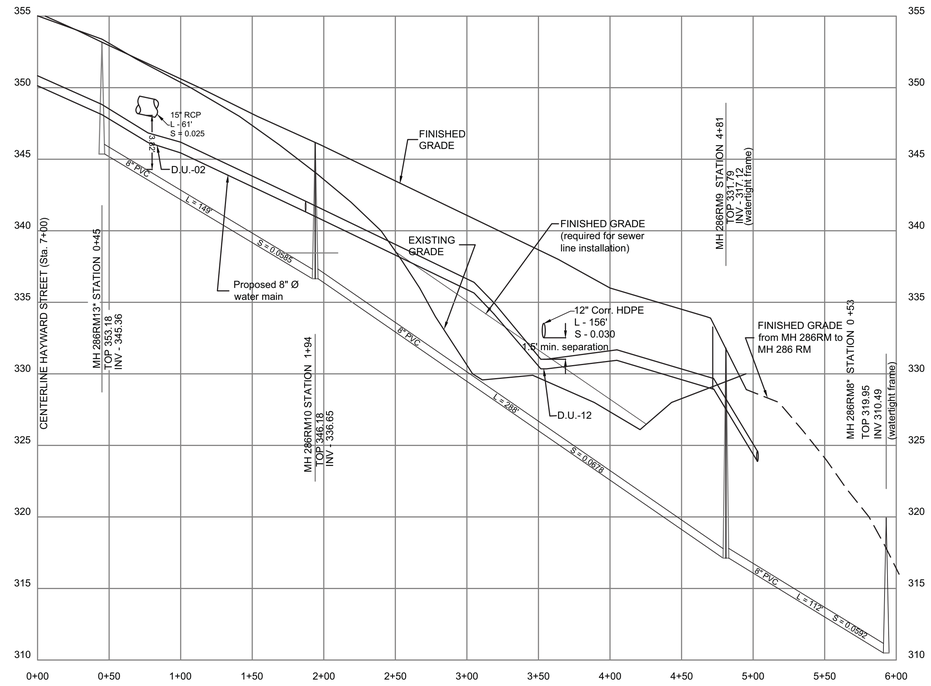
Horizontal Scale 1" = 50'
Vertical Scale 1" = 5'



*MANHOLE SHALL BE CONSTRUCTED WITH AN EPOXY MANHOLE LINING SYSTEM.

PROPOSED SANITARY SEWER PROFILE (MH 286RM13 TO MH 286RM8)

Horizontal Scale 1" = 50'
Vertical Scale 1" = 5'



Rev #18	01 - 24 - 20
Rev #17	08 - 29 - 19
Rev #16	03 - 14 - 19
Rev #15	01 - 30- 19
Rev #14	11 - 29 - 18
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Rev #4	07 - 14 - 04
Rev #3	03 - 31 - 03
Rev #2	01 - 09 - 03
Rev #1	05 - 15 - 01

SHEET 7 OF 40
PROFILE HAYWARD STREET

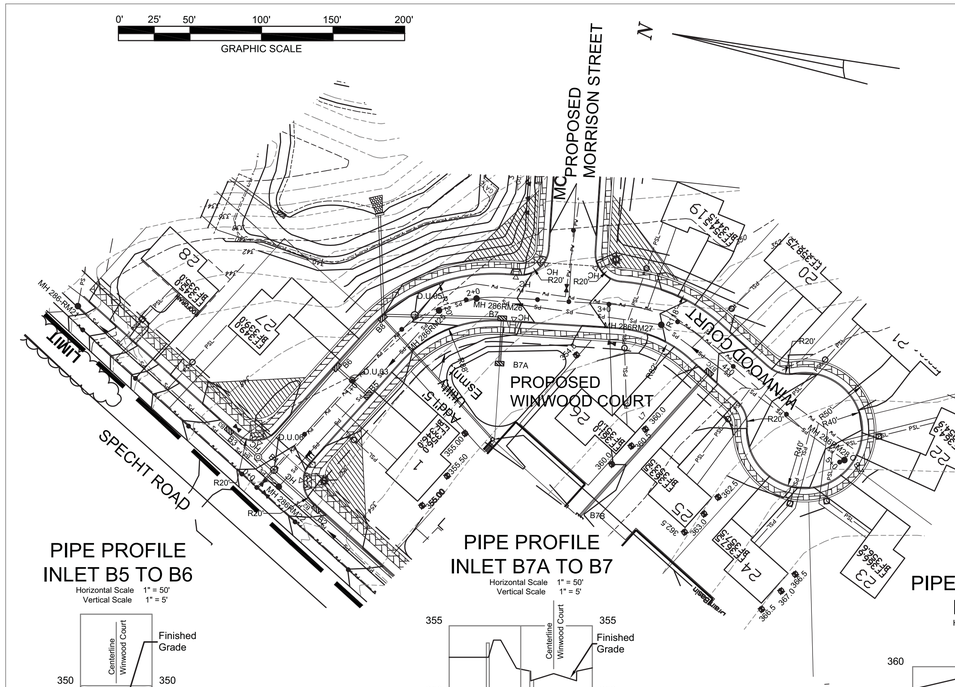
SUBDIVISIONH PLAN

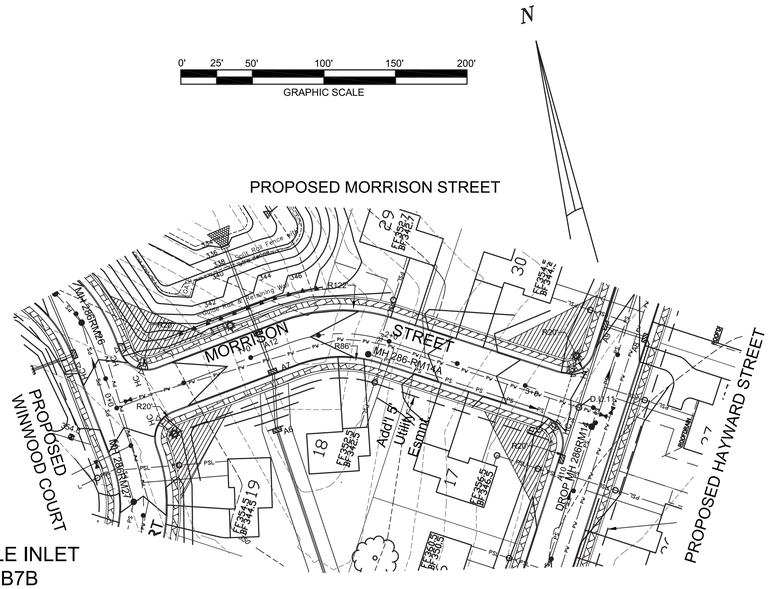
ROLLING MEADOW

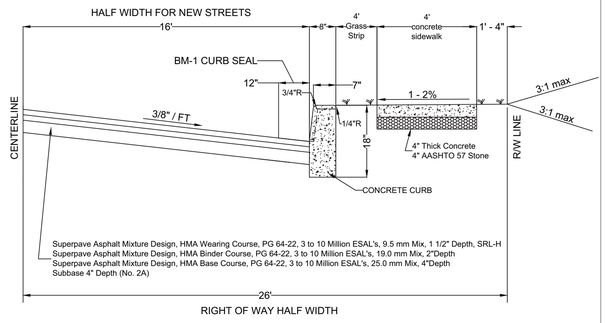
NEW HANOVER TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

ASTON
SURVEYORS/ ENGINEERS , INC.
BOYERTOWN , PA 19512

plan date	4 - 10 - 00
scale	1" = 50'
fld. wk. date	2 - 11 - 00
fld. bk. 127	pg 36
fin. pl. comp. ck.	00 - 00 - 00 XX
plan no.	2323 - RMI







TYPICAL ROAD HALF - SECTION FOR NEW STREETS

Provide ½" premolded expansion joint on curb and sidewalk at 30' intervals at curve radii, structures and at the end of days work.

Provide contraction joints as follows:
curb - 3/16" wide x 1" deep @ 15' intervals
sidewalk - 3/16" wide x ½" deep @ 5' intervals

BM-1 curb seal to be applied around inlets, manholes, and water valve boxes.

Curb and sidewalk to have min. mix design concrete for compressive strength of 2,750 psi at 7 days and 3,300 psi in 28 days.

Curb alignment not to deviate more than ¼" from line and grade in any 10 foot section.

* Symmetrical around centerline

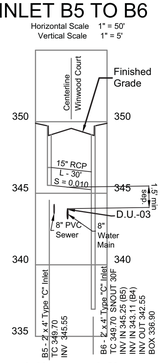
The water line are not to be constructed at the sidewalk locations.

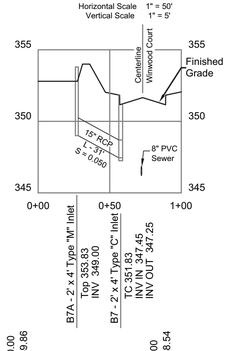
Underdrains shall be installed at locations where required by the Township Engineer

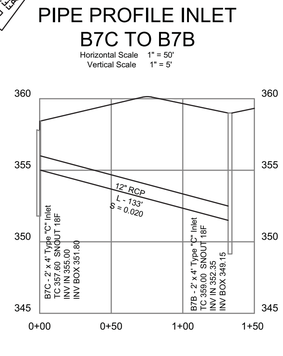
Sidewalk and driveway aprons shall be coated with a surface sealer to protect against salt damage.

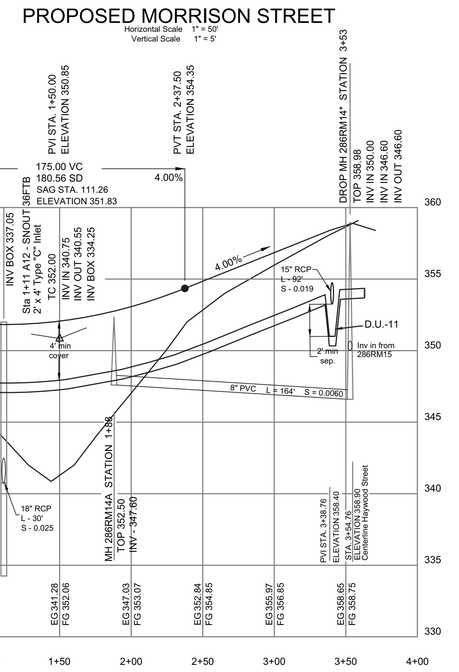
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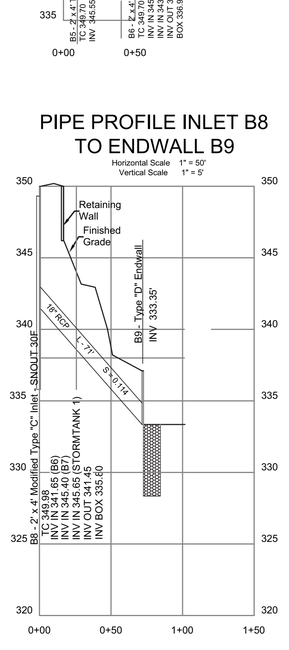
- = SANITARY SEWER LINE
- = D.I.P. WATER LINE
- = CURB CUT RAMP
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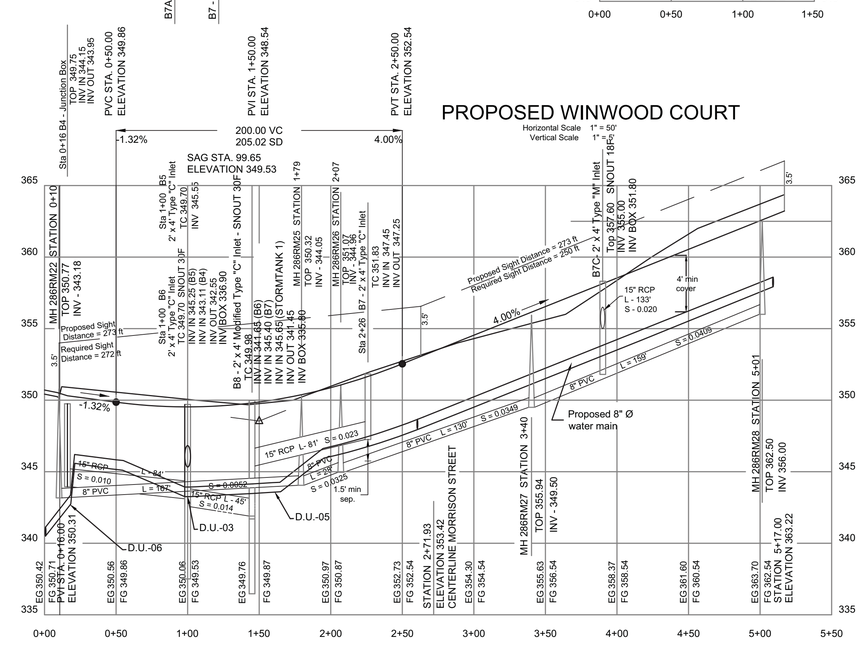












*MANHOLE SHALL BE CONSTRUCTED WITH AN EPOXY MANHOLE LINING SYSTEM.

SHEET 8 OF 40
PROFILE WINWOOD COURT
and MORRISON STREET

Rev	date
Rev #18	01 - 24 - 20
Rev #17	08 - 29 - 19
Rev #16	03 - 14 - 19
Rev #15	01 - 30 - 19
Rev #14	11 - 29 - 18
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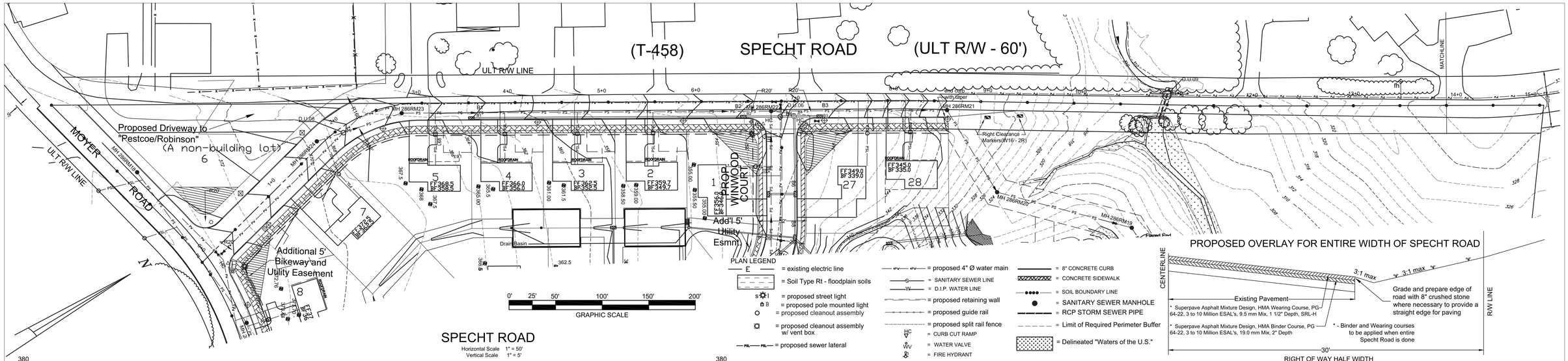
SUBDIVISION PLAN

ROLLING MEADOWS

NEW HANOVER TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

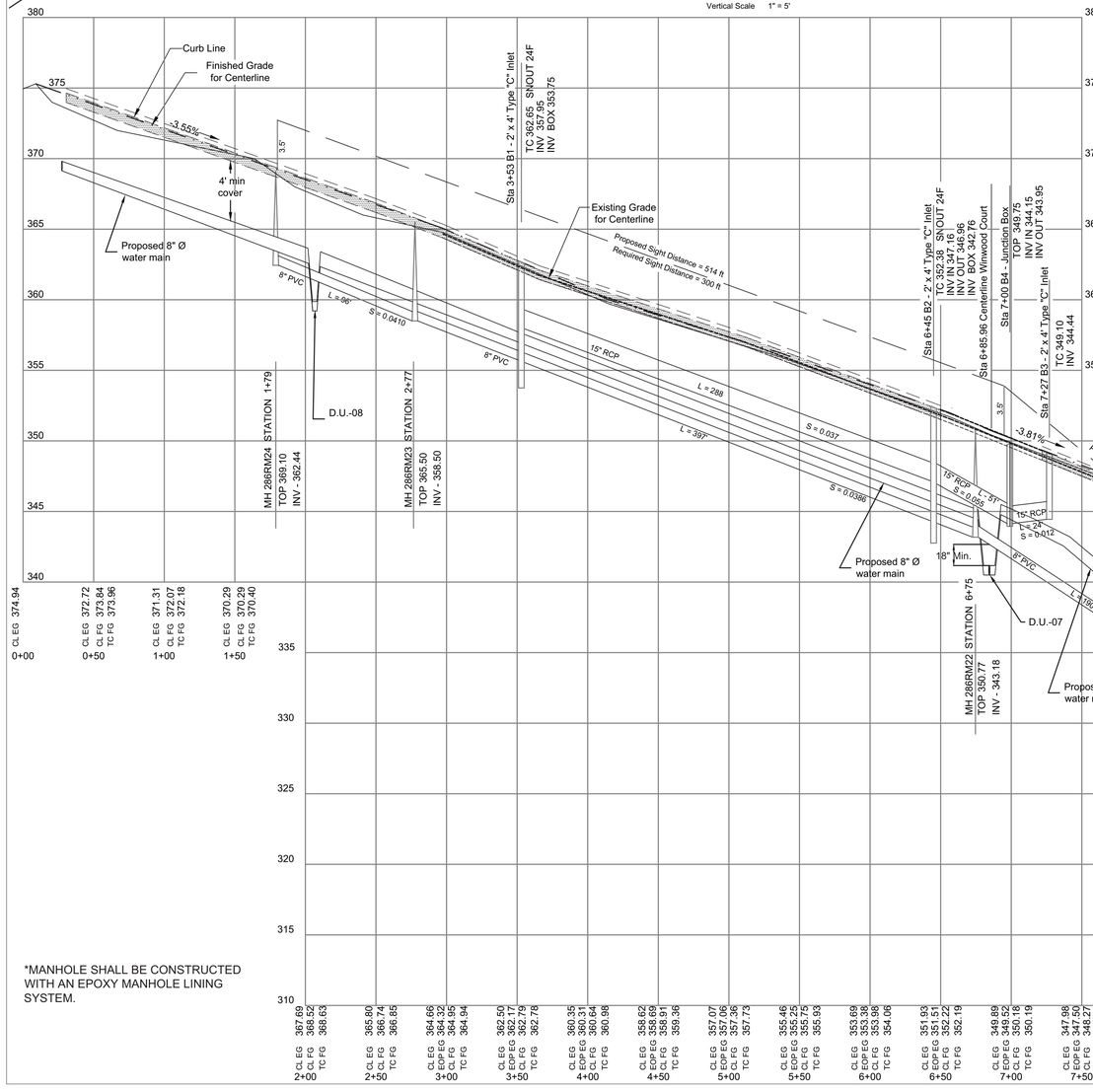
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fld. wk. date	2 - 11 - 00
fld. bk.	127 pg. 36
fin. pl. comp. ck.	00 - 00 - 00 XX
plan no.	2323 - RMJ

ASTON
SURVEYORS/ ENGINEERS , INC.
BOYERTOWN , PA 19512



SPECHT ROAD

Horizontal Scale 1" = 50'
Vertical Scale 1" = 5'



*MANHOLE SHALL BE CONSTRUCTED WITH AN EPOXY MANHOLE LINING SYSTEM.

PLAN LEGEND

- = existing electric line
- = Soil Type Rt - floodplain soils
- = proposed street light
- = proposed pole mounted light
- = proposed cleanout assembly
- = proposed cleanout assembly w/ vent box
- = proposed sewer lateral
- = proposed water lateral
- = proposed sanitary sewer
- = proposed 8" or 12" Ø water main
- = proposed 6" Ø water main
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- = RCP STORM SEWER PIPE
- = Limit of Required Perimeter Buffer
- = Delineated "Waters of the U.S."
- top of curb / bottom of curb - Proposed Curb

IMPROVEMENTS TO EXISTING PORTION OF SPECHT ROAD

- Leveling Course - Superpave Asphalt Mixture Design, HMA Binder Course, PG 64-22, 3 to 10 Million ESAL's, 19.0 mm Mix, 2" Depth
- Overlay Course - Superpave Asphalt Mixture Design, HMA Wearing Course, PG 64-22, 3 to 10 Million ESAL's, 9.5 mm Mix, 1 1/2" Depth, SRL-H

SPECHT ROAD IMPROVEMENTS

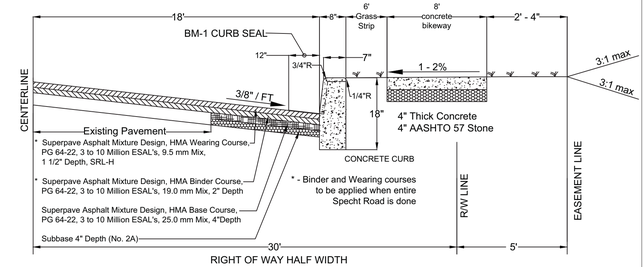
1. The realignment of the proposed intersection of Specht Road with Moyer Road is considered an on-site improvement.
2. The improvements along Specht Road, from Moyer Road to the limits of the proposed residential lots (at Lot 28), are as shown on the plans. These are considered as on-site improvement. Beyond the residential lots to the intersection with Buchert Road, Specht Road, leveling and overlay pavement courses and line painting are to be provided on the entirety of Specht Road from the realigned area to Buchert Road. This work is considered an off-site improvement.

TYPICAL ROAD WIDENING AT RESIDENTIAL LOTS

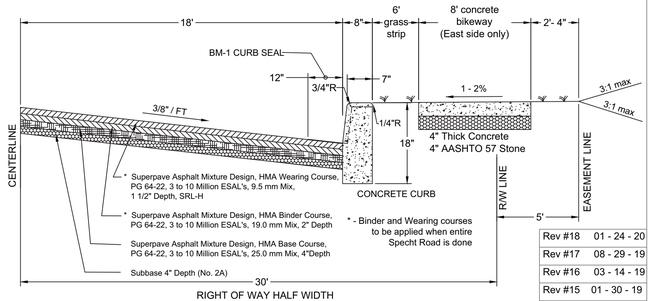
- Provide ½" premolded expansion joint on curb and sidewalk at 30' intervals, at curve radii, structures, and at the end of days work.
- Provide contraction joints as follows:
  curb - 3/16" wide x 1" deep @ 10' intervals
  sidewalk - 3/16" wide x ½" deep @ 5' intervals
- BM-1 curb seal to be applied around inlets, manholes, and water valve boxes.
- Curb and sidewalk to have min. mix design concrete for compressive strength of 2,750 psi at 7 days and 3,300 psi in 28 days.
- Curb alignment not to deviate more than ¼° from line and grade in any 10 foot section.
- The water lines are not to be constructed at the sidewalk locations.
- Underdrains shall be installed at locations where required by the Township Engineer
- Sidewalk and driveway aprons shall be coated with a surface sealer to protect against salt damage.

PROPOSED OVERLAY FOR ENTIRE WIDTH OF SPECHT ROAD

PROPOSED HALF WIDTH FOR EXISTING PORTION OF SPECHT ROAD WITH CURB



PROPOSED HALF WIDTH FOR REALIGNED PORTION OF SPECHT ROAD



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Rev #12	05 - 02 - 18
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Rev #7	04 - 01 - 08
Rev #6	04 - 01 - 07
Rev #5	12 - 22 - 05
Rev #4	07 - 14 - 04
Rev #3	03 - 31 - 03
Rev #2	01 - 09 - 03
Rev #1	05 - 15 - 01

SHEET 9 OF 40
SPECHT ROAD PROFILE
STA 0+00 TO 15+00

SUBDIVISION PLAN

ROLLING MEADOWS

NEW HANOVER TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

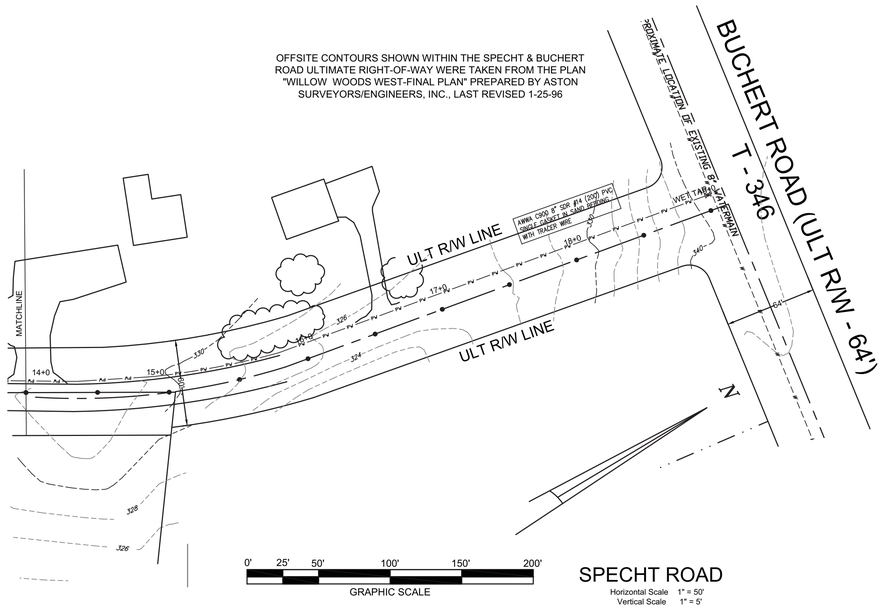
ASTON
SURVEYORS/ ENGINEERS , INC.
BOYERTOWN , PA 19512

plan date	4 - 10 - 00
scale	1" = 50'
fld. wk. date	2 - 11 - 00
fld. bk.	127 pg. 36
fin. pl. comp. ck.	00 - 00 - 00 XX
plan no.	2323 - RMK

PLAN LEGEND

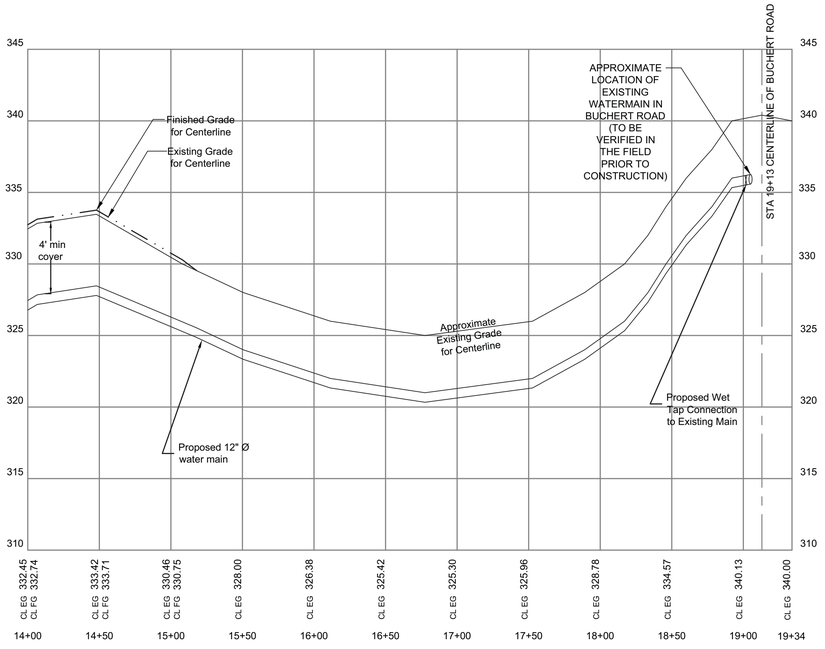
- E = existing electric line
- = Soil Type Rt - floodplain soils
- sI = proposed street light
- B = proposed pole mounted light
- = proposed cleanout assembly w/ vent box
- O = proposed cleanout assembly
- PSL = proposed sewer lateral
- PWL = proposed water lateral
- PS = proposed sanitary sewer
- PW = proposed 8" or 12" Ø water main
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- S = SANITARY SEWER LINE
- W = D.I.P. WATER LINE
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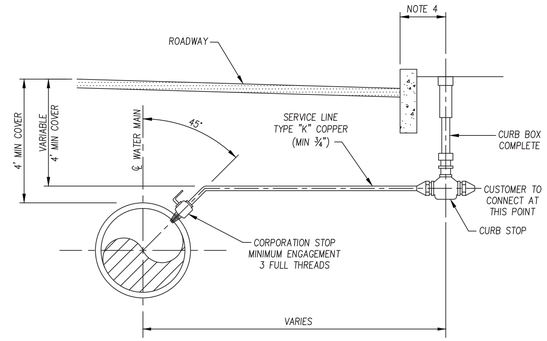
OFFSITE CONTOURS SHOWN WITHIN THE SPECHT & BUCHERT ROAD ULTIMATE RIGHT-OF-WAY WERE TAKEN FROM THE PLAN "WILLOW WOODS WEST-FINAL PLAN" PREPARED BY ASTON SURVEYORS/ENGINEERS, INC., LAST REVISED 1-25-96



0' 25' 50' 100' 150' 200'
GRAPHIC SCALE

SPECHT ROAD
Horizontal Scale 1" = 50'
Vertical Scale 1" = 5'



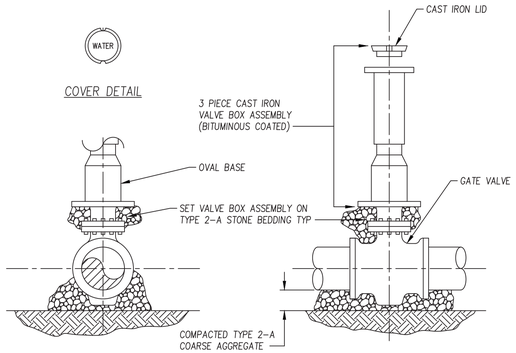


NOTES:

1. FOR STANDARD ¾" CONNECTION, PROVIDE A TAPPED COUPLING WITH THREADED INSERT OR DOUBLE-STRAPPED SADDLE CLAMP.
2. DO NOT PLACE CURB STOP IN PAVED AREAS.
3. ALL SERVICE CONNECTIONS SHALL BE LOCATED AT THE MIDPOINT BETWEEN SIDE LOT LINES OR AS DIRECTED BY A AQUA PA FIELD REPRESENTATIVE.
4. WHERE SIDEWALK PARALLELS ROADWAY, THE CURB BOX SHALL BE PLACED BETWEEN THE CURB AND SIDEWALK. ALL OTHER LOCATIONS, CURB BOX TO BE PLACED AS DIRECTED BY A AQUA PA FIELD REPRESENTATIVE.

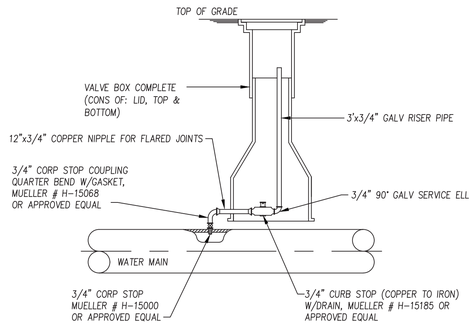
STANDARD SERVICE CONNECTION

NTS



STANDARD GATE VALVE AND VALVE BOX ASSEMBLY DETAIL

NTS



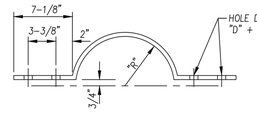
STANDARD ¾" MAV & CL2 ASSEMBLY

NTS

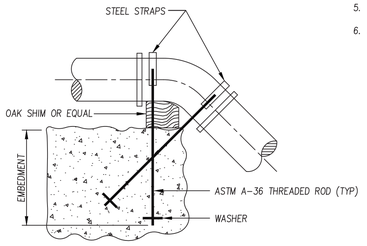
MINIMUM CONCRETE VOLUMES AND STEEL STRAP SIZES REQUIRED FOR BLOCKING 6", 8", & 12" VERTICAL BENDS

KEY	PIPE DIAMETER	PRESSURE (PSI)	BEND ANGLE	CONCRETE REQUIRED (CU YD)	STEEL STRAP SIZE	"R" STRAP RADIUS	ANCHOR BOLT DIAMETER "D" AND NUMBER REQUIRED PER STRAP	EMBEDMENT LENGTH
A	6"	0 – 100	ALL	1.0	1/4" x 2 1/2"	3 5/8"	(2) 3/4"	24"
A-1	6"	101 – 200	ALL	2.5	1/4" x 2 1/2"	3 5/8"	* (2) 1"	36"
B	8"	0 – 100	ALL	2.0	3/8" x 3"	4 3/4"	* (2) 1"	36"
B-1	8"	101 – 200	45°	3.0	3/8" x 3"	4 3/4"	* (2) 1"	36"
B-2	8"	101 – 200	90°	4.0	3/8" x 3"	4 3/4"	(4) 1"	36"
C	12"	0 – 100	ALL	4.5	1/2" x 3"	6 3/4"	(4) 1"	36"
C-1	12"	101 – 200	45°	6.0	(2) 1/2" x 3"	6 3/4"	(4) 1"	36"
C-2	12"	101 – 200	90°	8.5	(2) 1/2" x 3"	6 3/4"	(4) 1"	36"

* – WHERE (2) 1" DIAMETER BOLTS ARE REQUIRED (4) 3/4" DIAMETER BOLTS MAY BE USED



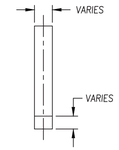
STRAP DETAIL



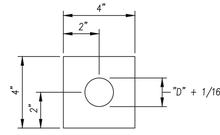
TYPICAL ANCHOR DETAIL

NOTES:

1. ALL STEEL SHALL CONFORM TO ASTM A-36
2. (2) STRAPS ARE REQUIRED, EACH WITH (4)-1" DIAMETER ANCHOR BOLTS FOR CASES C-1 AND C-2
3. REFER TO AQUA DRAWING E-4453 FOR USE AS PIPE AND VALVE CLAMP
4. CONTRACT ENGINEERING DEPARTMENT FOR DESIGN ON PRESSURE EXCEEDING 200 PSI OR IF PIPE SIZE IS LARGER THAN 12"
5. COAT ALL EXPOSED METAL WITH 12 MILS OF ROSKOTE.
6. BOLT LENGTH WILL EQUAL "EMBEDMENT LENGTH" +SHIM +1/2" OD OF PIPE +3-1/2".



STRAP SECTION



WASHER DETAIL

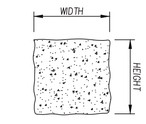
REVISED: PRESSURE CHART, VALUES WERE 101 TO 150; NOW 101 TO 200
SBP 8/17/2016

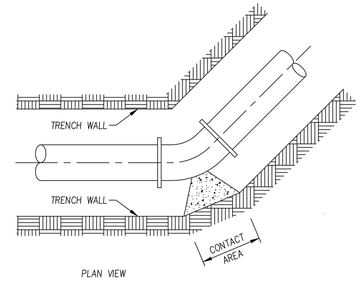
MINIMUM THRUST BLOCK AREAS REQUIRED (SQUARE FEET OF CONTACT SURFACE AREA ALONG TRENCH WALL)

PIPE DIAMETER (INCHES)	HYDRANTS, TEES & BLOW-OFFS 0-100 PSI	HYDRANTS, TEES & BLOW-OFFS 101-150 PSI	HYDRANTS, TEES & BLOW-OFFS 151-200 PSI	90° BENDS 0-100 PSI	90° BENDS 101-150 PSI	90° BENDS 151-200 PSI	45° BENDS 0-100 PSI	45° BENDS 101-150 PSI	45° BENDS 151-200 PSI	11 1/4° & 22 1/2° BENDS 0-100 PSI	11 1/4° & 22 1/2° BENDS 101-150 PSI	11 1/4° & 22 1/2° BENDS 151-200 PSI
6	3	4	5	3	5	6	2	3	4	1	2	2
8	4	6	8	6	8	11	3	5	6	2	3	3
12	9	13	17	12	18	24	7	10	13	4	5	7
16	15	23	30	21	32	43	12	17	23	6	9	12
24	36	54	72	48	72	96	26	39	52	13	20	26

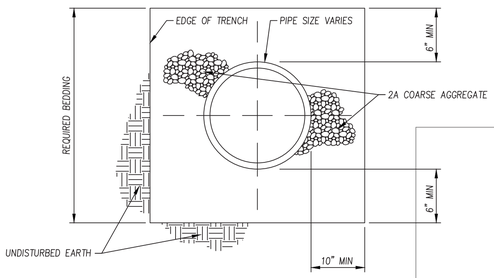
NOTE:

REFER TO ENGINEERING DEPT FOR ALL VERTICAL BENDS AND HORIZONTAL BENDS HAVING ANGLES, PRESSURES OR PIPE DIAMETERS NOT LISTED ABOVE





PLAN VIEW



STANDARD PIPE BEDDING DETAIL

NTS

SHEET 10 OF 40
SPECHT ROAD PROFILE STA 15+00 TO 19+13 AND WATER DETAILS

		Rev #15	01 - 30 - 19
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		Rev #13	07 - 20 - 18
Rev #18	01 - 24 - 20	Rev #12	05 - 02 - 18
Rev #17	08 - 29 - 19	Rev #11	01 - 31 - 18
Rev #16	03 - 14 - 19	Rev #10	11 - 27 - 17

SUBDIVISION PLAN

ROLLING MEADOWS

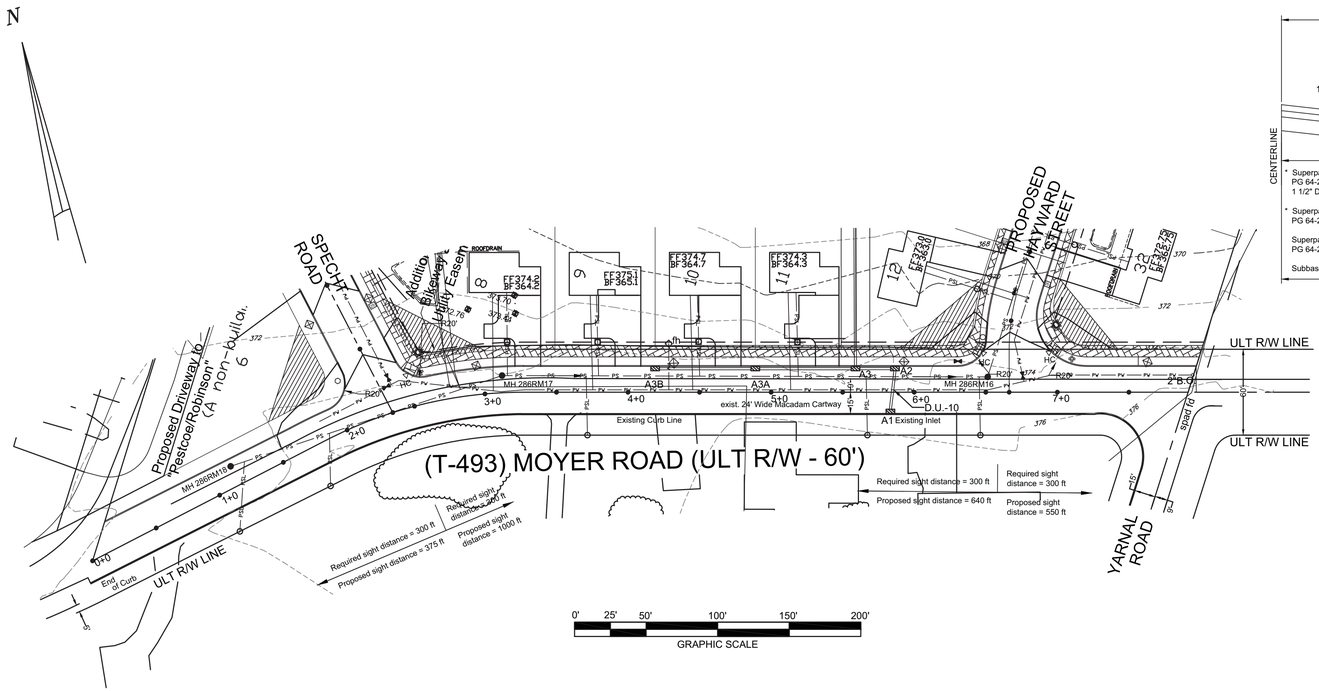
NEW HANOVER TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

ASTON SURVEYORS/ ENGINEERS , INC.
BOYERTOWN , PA 19512

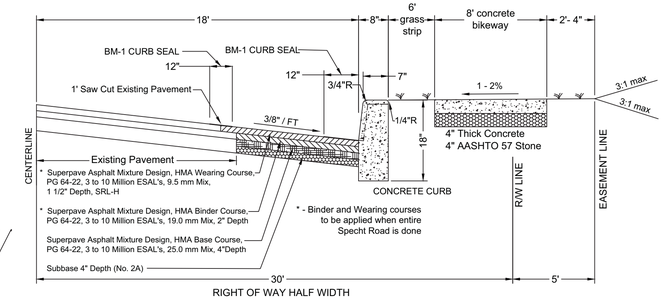
plan date 11-27-17
scale 1" = 50'
fld. wk. date 2 - 11 - 00
fld. bk. 127 pg. 36
fin. pl. comp. ck. 00 - 00 - 00 XX
plan no. 2323 - RMK

PLAN LEGEND

- = SANITARY SEWER LINE
- = D.I.P. WATER LINE
- = CURB CUT RAMP
- = WATER VALVE
- = FIRE HYDRANT
- = BLOW OFF VALVE
- = EXISTING CONTOUR
- = PROPOSED CONTOUR
- = INLET
- = 8" CONCRETE CURB
- = CONCRETE SIDEWALK
- = SOIL BOUNDARY LINE
- = SANITARY SEWER MANHOLE
- = RCP STORM SEWER PIPE
- = Limit of Required Perimeter Buffer
- = Delineated "Waters of the U.S."
- = existing electric line
- = Soil Type Rt - floodplain soils
- = proposed street light
- = proposed pole mounted light
- = proposed cleanout assembly w/ vent box
- = proposed cleanout assembly
- = proposed sewer lateral
- = proposed water lateral
- = proposed sanitary sewer
- = proposed 8" or 12" Ø water main
- = proposed 6" Ø water main
- = proposed 4" Ø water main
- = proposed retaining wall
- = proposed guide rail
- = proposed split rail fence



PROPOSED HALF WIDTH FOR EXISTING MOYER ROAD WITH CURB



TYPICAL ROAD WIDENING AT RESIDENTIAL LOTS

Provide ½" premolded expansion joint on curb and sidewalk at 30' intervals at curve radii, structures and at the end of days work.

Provide contraction joints as follows:
curb - 3/16" wide x 1" deep @ 15' intervals
sidewalk - 3/16" wide x ½" deep @ 5' intervals

BM-1 curb seal to be applied around inlets, manholes, and water valve boxes.

Curb and sidewalk to have min. mix design concrete for compressive strength of 2,750 psi at 7 days and 3,300 psi in 28 days.

Curb alignment not to deviate more than ¼" from line and grade in any 10 foot section.

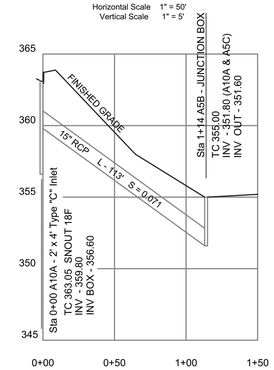
The water lines are not to be constructed at the sidewalk locations.

Underdrains shall be installed at locations where required by the Township Engineer

Sidewalk and driveway aprons shall be coated with a surface sealer to protect against salt damage.

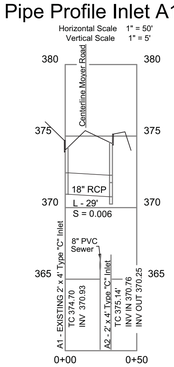
STORM SEWER A10A TO A5B

Horizontal Scale 1" = 50'
Vertical Scale 1" = 5'



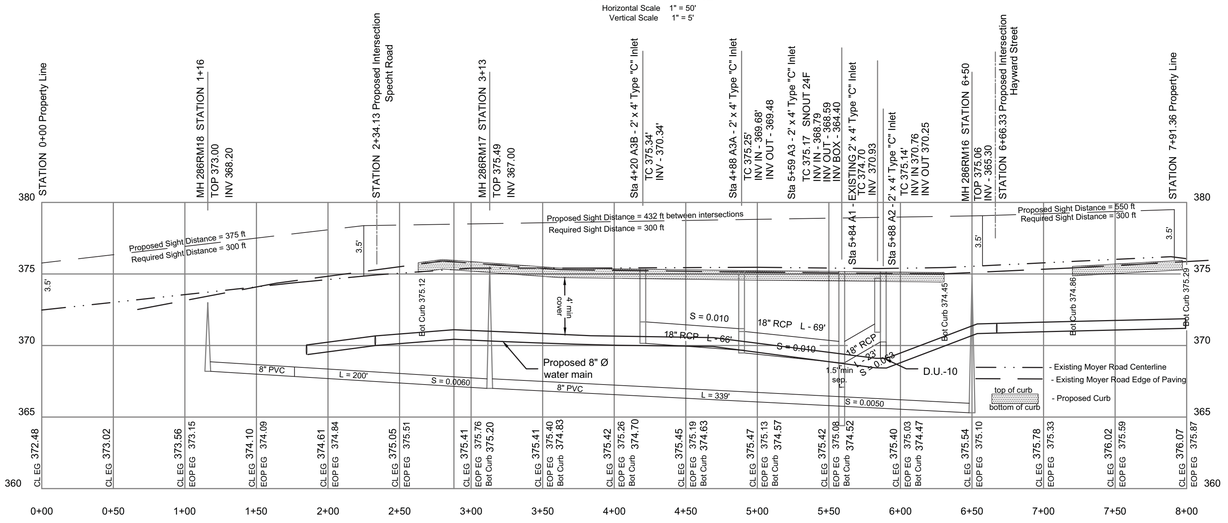
Pipe Profile Inlet A1 to A2

Horizontal Scale 1" = 50'
Vertical Scale 1" = 5'



MOYER ROAD

Horizontal Scale 1" = 50'
Vertical Scale 1" = 5'



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Rev #15	01 - 30 - 19
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Rev #7	04 - 01 - 08
Rev #6	04 - 01 - 07
Rev #5	12 - 22 - 05
Rev #4	07 - 14 - 04
Rev #3	03 - 31 - 03
Rev #2	01 - 09 - 03
Rev #1	05 - 15 - 01

SHEET 11 OF 40
MOYER ROAD PROFILE

SUBDIVISION PLAN

ROLLING MEADOWS

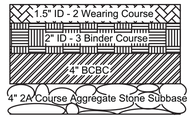
NEW HANOVER TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

ASTON
SURVEYORS/ ENGINEERS , INC.
BOYERTOWN , PA 19512

plan date	4 - 10 - 00
scale	1" = 50'
fld. wk. date	2 - 11 - 00
fld. bk.	127 pg. 36
fin. pl. comp. ck.	00 - 00 - 00 XX
plan no.	2323 - RML

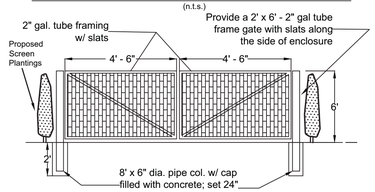
Proposed Paving Specification for Townhouse Drives and Parking

(N.T.S.)



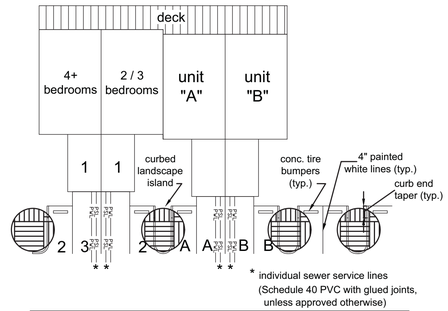
DUMPSTER ENCLOSURE DETAIL

(n.t.s.)



TYPICAL PARKING SPACE CONFIGURATION FOR TOWNHOUSE UNITS

4 Bedrooms or more ==> 3 required parking spaces
3 Bedroom or less ==> 2 required parking spaces



PARKING SPACE DESIGNATION

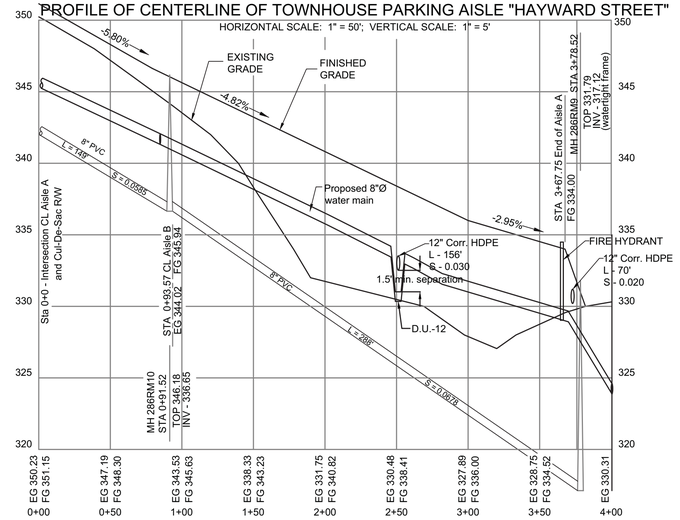
Regardless of the number of bedrooms proposed, the two spaces directly in front of each unit shall be designated for use by that unit. The assigned house number shall be painted on the paving near the aisle end of the parking spaces. The additional paved spaces throughout the parking areas shall remain unmarked.

TIRE BUMPERS, LINE STRIPING, & CURBING

Concrete tire bumpers shall be provided at all spaces which do not enter a garage. Concrete curbing shall be provided at the "island" gaps between all parking spaces adjacent to the townhouse units. Also, 4" wide painted white lines shall be provided, 20 ft. long, between all parking spaces.

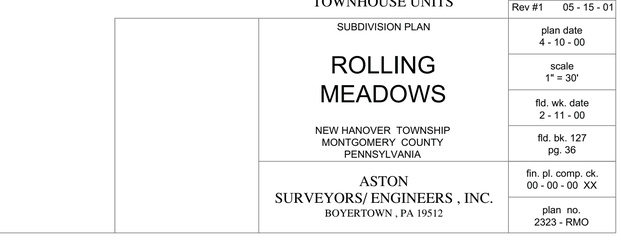
PROFILE OF CENTERLINE OF TOWNHOUSE PARKING AISLE "HAYWARD STREET"

HORIZONTAL SCALE: 1" = 50'; VERTICAL SCALE: 1" = 5'



PROFILE OF CENTERLINE OF TOWNHOUSE PARKING AISLE "HAYWARD COURT"

HORIZONTAL SCALE: 1" = 50'; VERTICAL SCALE: 1" = 5'



PLAN LEGEND

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- W = D.I.P. WATER LINE
- HC = CURB CUT RAMP
- WV = WATER VALVE
- FH = FIRE HYDRANT
- BO = BLOW OFF VALVE
- = EXISTING CONTOUR
- = PROPOSED CONTOUR
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- = SOIL BOUNDARY LINE
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- = proposed split rail fence

Rev #	date
Rev #18	01 - 24 - 20
Rev #17	08 - 29 - 19
Rev #16	03 - 14 - 19
Rev #15	01 - 30 - 19
Rev #14	11 - 29 - 18
Rev #13	07 - 20 - 18
Rev #12	05 - 02 - 18
Rev #11	01 - 31 - 18
Rev #10	11 - 27 - 17
Rev #9	12 - 25 - 09
Rev #8	03 - 30 - 09
Rev #7	04 - 01 - 08
Rev #6	04 - 01 - 07
Rev #5	12 - 22 - 05
Rev #4	07 - 14 - 04
Rev #3	03 - 31 - 03
Rev #2	01 - 09 - 03
Rev #1	05 - 15 - 01

SHEET 12 OF 40
ENLARGED SITE PLAN FOR TOWNHOUSE UNITS

SUBDIVISION PLAN

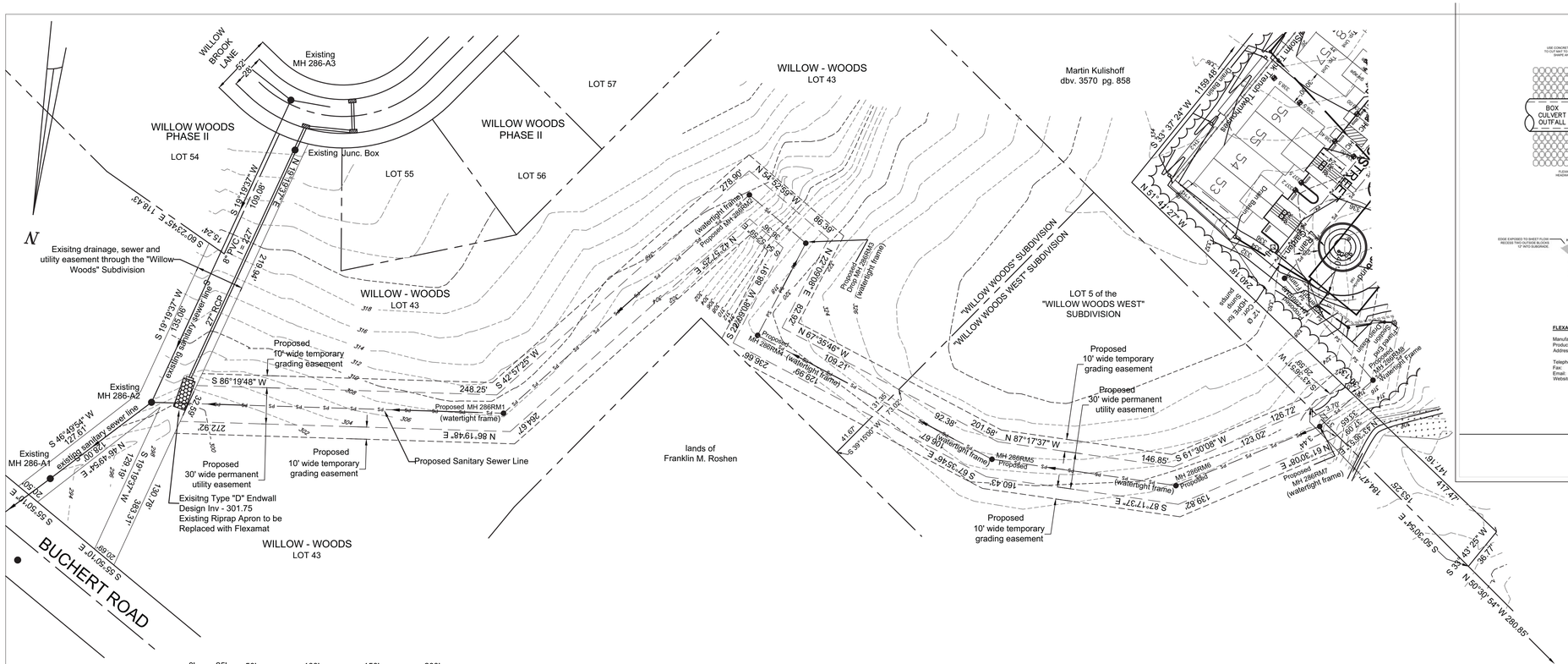
ROLLING MEADOWS

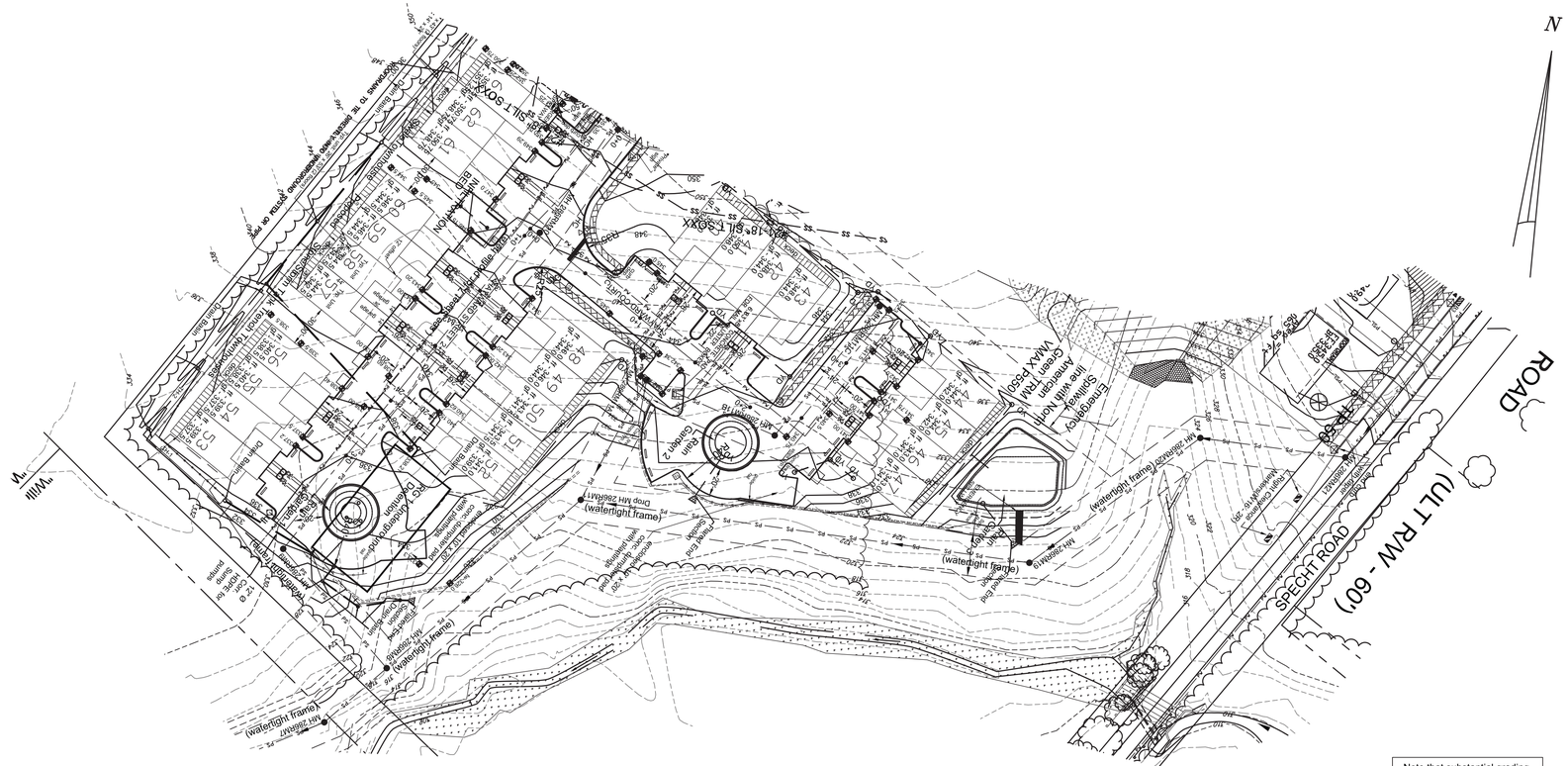
NEW HANOVER TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

ASTON
SURVEYORS/ ENGINEERS , INC.
BOYERTOWN , PA 19512

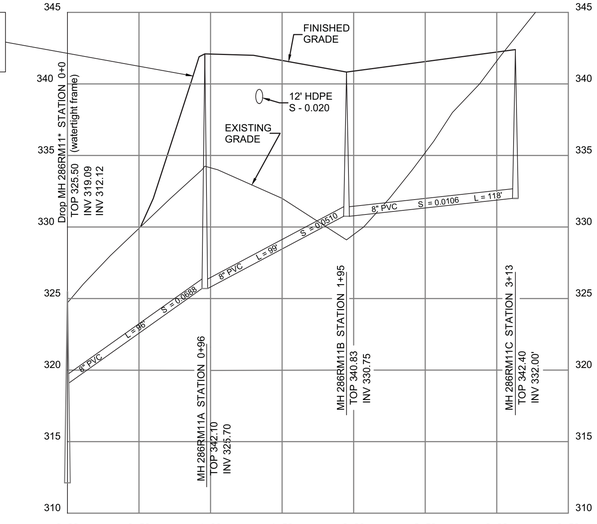
plan date 4 - 10 - 00
scale 1" = 30'
fld. wk. date 2 - 11 - 00
fld. bk. 127 pg. 36
fin. pl. comp. ck. 00 - 00 - 00 XX
plan no. 2323 - RMO

0' 15' 30' 60' 90' 120'
GRAPHIC SCALE

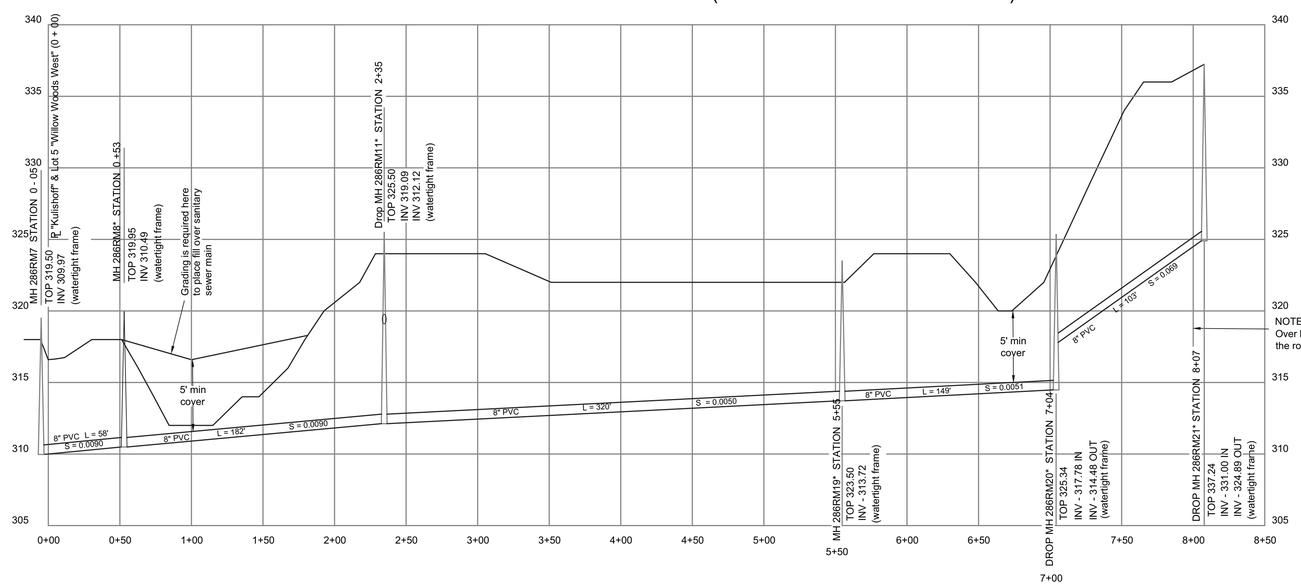

WILLOW BROOK LANE
Existing MH 286-A3
WILLOW WOODS PHASE II
LOT 54
LOT 55
LOT 56
LOT 57
Existing Junc. Box
WILLOW - WOODS LOT 43
Martin Kulishoff dbv. 3570 pg. 858
"WILLOW WOODS" SUBDIVISION
"WILLOW WOODS WEST" SUBDIVISION
LOT 5 of the "WILLOW WOODS WEST" SUBDIVISION
Exisitng drainage, sewer and utility easement through the "Willow-Woods" Subdivision
existing sanitary sewer line
Existing MH 286-A2
Existing MH 286-A1
Proposed 10' wide temporary grading easement
Proposed 30' wide permanent utility easement
Proposed MH 286RM1 (watertight frame)
Proposed Sanitary Sewer Line
Exisitng Type "D" Endwall Design Inv - 301.75 Existing Riprap Apron to be Replaced with Flexamat
BUCHERT ROAD
lands of Franklin M. Roshen
Proposed MH 286RM2 (watertight frame)
Proposed MH 286RM3 (watertight frame)
Proposed MH 286RM4 (watertight frame)
MH 286RM5 Proposed
MH 286RM6 Proposed
Proposed MH 286RM7 (watertight frame)
Proposed 10' wide temporary grading easement
Proposed 30' wide permanent utility easement
Proposed 10' wide temporary grading easement
Proposed 10' wide temporary grading easement
Existing Inlet
Existing Manhole
Proposed Inlet
Proposed Manhole
Proposed Endwall
Existing Endwall
Existing Riprap Apron
Existing Junc. Box
Existing Concrete Slope
Existing Concrete Headwall
Existing Concrete Wingwall
Existing Concrete Apron
Existing Concrete Curb
Existing Concrete Sidewalk
Existing Concrete Curb Ramp
Existing Concrete Curb Ramp
Existing Concrete Curb Ramp



PROPOSED SANITARY SEWER PROFILE (MH 286RM11 TO MH 286RM11C)



PROPOSED SANITARY SEWER PROFILE (MH 286RM21 TO MH 286RM7)



NOTE:
Over land stationing does not correspond to the road stationing on Sheet 7.

*MANHOLE SHALL BE CONSTRUCTED WITH AN EPOXY MANHOLE LINING SYSTEM.

SHEET 14 OF 40
ON-SITE OVERLAND and
TOWNHOUSE UNIT
SANITARY SEWER PROFILE

Rev #18	01 - 24 - 20
Rev #17	08 - 29 - 19
Rev #16	03 - 14 - 19
Rev #15	01 - 30 - 19
Rev #14	11 - 29 - 18
Rev #13	07 - 20 - 18
Rev #12	05 - 02 - 18
Rev #11	01 - 31 - 18
Rev #10	11 - 27 - 17
Rev #9	12 - 25 - 09
Rev #8	03 - 30 - 09
Rev #7	04 - 01 - 08
Rev #6	04 - 01 - 07
Rev #5	12 - 22 - 05
Rev #4	07 - 14 - 04
Rev #3	03 - 31 - 03
Rev #2	01 - 09 - 03
Rev #1	05 - 15 - 01

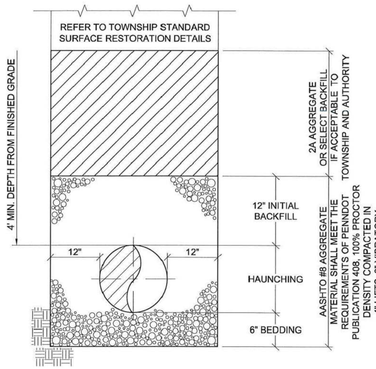
SUBDIVISION PLAN

ROLLING MEADOWS

NEW HANOVER TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

ASTON
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BOYERTOWN , PA 19512

plan date	4 - 10 - 00
scale	1" = 50'
fld. wk. date	2 - 11 - 00
fld. bk.	127 pg. 36
fin. pl. comp. ck.	00 - 00 - 00 XX
plan no.	2323 - RMQ



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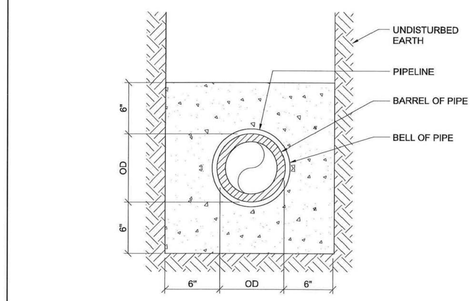
Pottsville p: 570.628.5655 | Mountaintop p: 570.868.0275 | Lititz p: 717.626.6666 | Pittsburgh p: 412.264.2800

NEW HANOVER TOWNSHIP AUTHORITY
2990 FAGLEYSVILLE RD. GILBERTSVILLE, PA 19525
STANDARD DETAIL
TYPICAL BACKFILL TRENCH RESTORATION DETAIL

PREPARED BY	CHECKED BY	APPROVED BY	DATE:	SCALE:	DRAWING NO.
ZM	JDB	CMH	FEB. 2014	N.T.S.	S-1

REV. / DATE	PROJECT NO.
- -	4602.15

Entech Engineering - Printed: Jun. 2, 2014 H:\4602.15\CDS\Sewer Details\S-1.dwg



NOTES:

1. ALL CONCRETE SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT THE END OF 28 DAYS.

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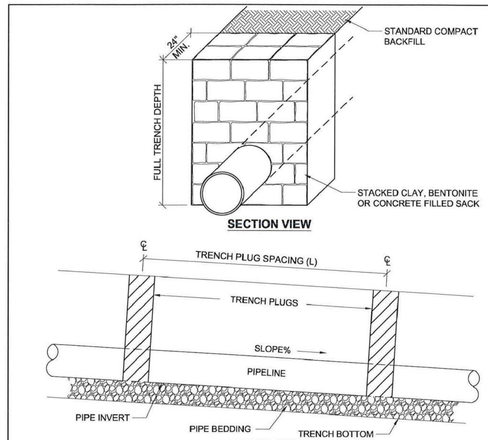
Pottsville p: 570.628.5655 | Mountaintop p: 570.868.0275 | Lititz p: 717.626.6666 | Pittsburgh p: 412.264.2800

NEW HANOVER TOWNSHIP AUTHORITY
2990 FAGLEYSVILLE RD. GILBERTSVILLE, PA 19525
STANDARD DETAIL
CONCRETE ENCASEMENT DETAIL

PREPARED BY	CHECKED BY	APPROVED BY	DATE:	SCALE:	DRAWING NO.
ZM	JDB	CMH	FEB. 2014	N.T.S.	S-3

REV. / DATE	PROJECT NO.
- -	4602.15

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MAXIMUM SPACING AND MATERIAL FOR TRENCH PLUGS		
TRENCH SLOPE (%)	SPACING L (FT)	PLUG MATERIAL
< 5	1,000	* CLAY, BENTONITE, OR CONCRETE FILLED SACK
5 - 15	500	* CLAY, BENTONITE, OR CONCRETE FILLED SACK
15 - 25	300	* CLAY, BENTONITE, OR CONCRETE FILLED SACK
25 - 35	200	* CLAY, BENTONITE, OR CONCRETE FILLED SACK
35 - 100	100	* CLAY, BENTONITE, OR CONCRETE FILLED SACK
> 100	50	CEMENT FILLED BAGS (WETTED) OR MORTARED STONE

* TOPSOIL MAY NOT BE USED TO FILL SACKS.

IMPERVIOUS TRENCH PLUGS ARE REQUIRED FOR ALL STREAM, RIVER, WETLAND, OR OTHER WATER BODY CROSSING.

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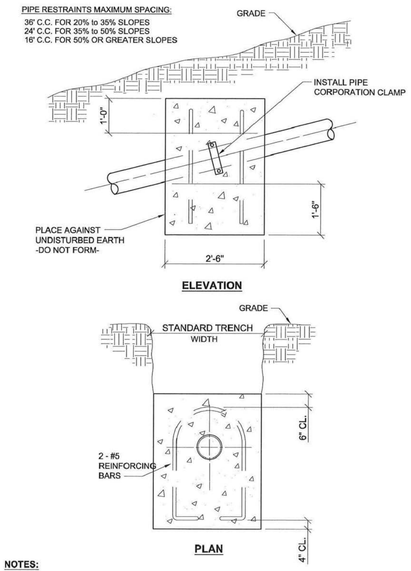
Pottsville p: 570.628.5655 | Mountaintop p: 570.868.0275 | Lititz p: 717.626.6666 | Pittsburgh p: 412.264.2800

NEW HANOVER TOWNSHIP AUTHORITY
2990 FAGLEYSVILLE RD. GILBERTSVILLE, PA 19525
STANDARD DETAIL
TYPICAL TRENCH PLUG INSTALLATION DETAIL

PREPARED BY	CHECKED BY	APPROVED BY	DATE:	SCALE:	DRAWING NO.
ZM	JDB	CMH	FEB. 2014	N.T.S.	S-4

REV. / DATE	PROJECT NO.
- -	4602.15

Entech Engineering - Printed: Jun. 3, 2014 H:\4602.15\CDS\Sewer Details\S-4.dwg



NOTES:

1. ALL CONCRETE SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT THE END OF 28 DAYS.

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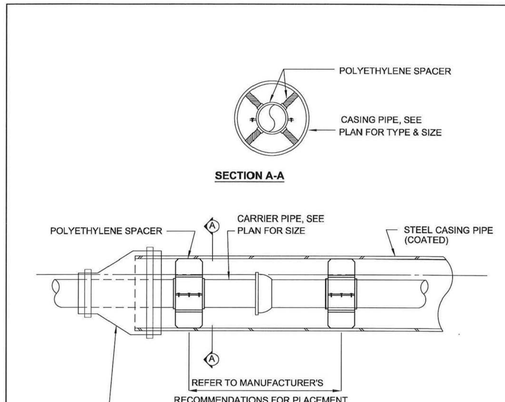
Pottsville p: 570.628.5655 | Mountaintop p: 570.868.0275 | Lititz p: 717.626.6666 | Pittsburgh p: 412.264.2800

NEW HANOVER TOWNSHIP AUTHORITY
2990 FAGLEYSVILLE RD. GILBERTSVILLE, PA 19525
STANDARD DETAIL
TYPICAL PIPE SLOPE RESTRAINT DETAIL

PREPARED BY	CHECKED BY	APPROVED BY	DATE:	SCALE:	DRAWING NO.
ZM	JDB	CMH	FEB. 2014	N.T.S.	S-5

REV. / DATE	PROJECT NO.
- -	4602.15

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NOTES:

1. DESIGN ENGINEER IS RESPONSIBLE FOR PROPER SIZING OF THE CASING PIPE TO HOUSE CARRIER PIPE AND TO WITHSTAND LOADING DEMANDS.

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NEW HANOVER TOWNSHIP AUTHORITY
2990 FAGLEYSVILLE RD. GILBERTSVILLE, PA 19525
STANDARD DETAIL
GRAVITY AND FORCE MAIN PIPE CASING DETAIL

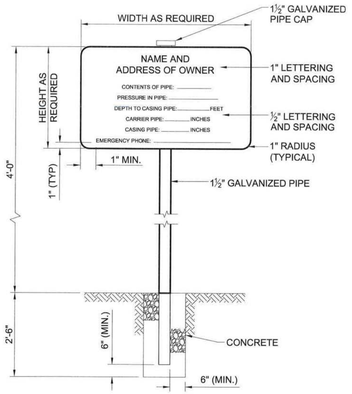
PREPARED BY	CHECKED BY	APPROVED BY	DATE:	SCALE:	DRAWING NO.
ZM	JDB	CMH	FEB. 2014	N.T.S.	S-9

REV. / DATE	PROJECT NO.
- -	4602.15

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NOTES:

1. ALL SPECIFIC INFORMATION REQUIRED AT EACH APPLICABLE LOCATION WILL BE FURNISHED BY THE ENGINEER.



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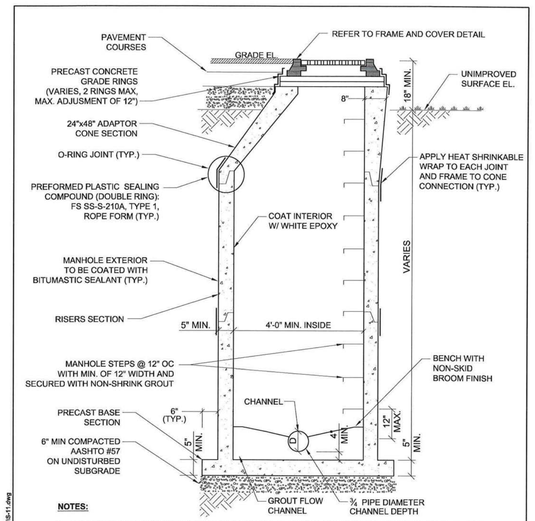
Pottsville p: 570.628.5655 | Mountaintop p: 570.868.0275 | Lititz p: 717.626.6666 | Pittsburgh p: 412.264.2800

NEW HANOVER TOWNSHIP AUTHORITY
2990 FAGLEYSVILLE RD. GILBERTSVILLE, PA 19525
STANDARD DETAIL
CROSSING SIGN DETAIL

PREPARED BY	CHECKED BY	APPROVED BY	DATE:	SCALE:	DRAWING NO.
ZM	JDB	CMH	FEB. 2014	N.T.S.	S-10

REV. / DATE	PROJECT NO.
- -	4602.15

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NOTES:

1. ALL PIPE TO MANHOLE CONNECTIONS SHALL BE MADE WITH A CAST-IN-PLACE GASKET. (TYP.) (A-LOK OR APPROVED EQUAL)
2. MANHOLES EXCEEDING A DEPTH OF 16 FEET SHALL PROVIDE PRE-CAST LANDING PLATFORM.
3. THE 48"Ø MANHOLE SHALL BE USED ON PIPE SIZES 8" TO 18"
4. FINISH GRADE SHALL BE FLUSH WITH TOP OF COVER, UNLESS OTHERWISE NOTED. MANHOLES INSTALLED OUTSIDE OF PAVED AREAS SHOULD BE RAISED A MINIMUM OF 18" ABOVE GROUND ELEVATION.

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NEW HANOVER TOWNSHIP AUTHORITY
2990 FAGLEYSVILLE RD. GILBERTSVILLE, PA 19525
STANDARD DETAIL
MANHOLE DETAIL

PREPARED BY	CHECKED BY	APPROVED BY	DATE:	SCALE:	DRAWING NO.
ZM	JDB	CMH	FEB. 2014	N.T.S.	S-11

REV. / DATE	PROJECT NO.
- -	4602.15

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SANITARY SEWER NOTES

1.) 8" P.V.C. SDR 35 pipe will be used with 6" AASHTO No.8 Aggregate under the pipe and 12" AASHTO No.8 Aggregate over the pipe. Laterals to be 6" P.V.C.
2.) All new manholes are to be precast using an "A-LOK" gasket or approved equal. Two strips of Butyl-rubber rope are to be used between the manhole sections and between the frame and top sections.
3.) All laterals to be installed in accordance with the New Hanover Township Authority Specifications and shall be located 10' from any property line.
4.) The frames and covers shall be in accordance with the New Hanover Township Authority Specifications.
5.) All materials and construction methods will conform to the latest edition of the sanitary sewer specifications of the New Hanover Township Authority and all other state and federal regulations.
6.) The developer will furnish the authority with as built drawings upon completion of construction showing the sewer and lateral locations.
7.) All manholes not located in the paved areas must be equipped with watertight frames and covers to prevent the inflow of surface waters into the sanitary sewers. Manholes in non-improved areas should be extended 18" above finished grade.
8.) Sanitary sewer near water mains:
   a. Horizontal Separation - Sewers shall be at least 10 feet horizontally from any existing pr roposed water main. Should conditions not allow a separation of 10 feet, a sewer main may be laid closer to a watermain if (1) it is laid on a separate trench , or if required by the Authority's Engineer (2) it is laid in the same trench with the water mains located at one side of the bench of udnisturbed earth and if in either case the elevation of the crown of the sewer is at least 18 inches below the invert of the water main.
   b. Vertical Separation - Whenever sewers must cross under water mains, the sewer shall be placed so the top of the sewer is at least 18 inches below the bottom of the water main. When the elevation of the sewer cannot be meet the separation requirement, the water main shall be relocated to provide the requirement, or the main shall be constructed with mechanical joint pipe for a distance of 10 feet to each side of the crossing. One full length of water main should be centered over the sewer.
   c. When both horizontal and vertical separation between sewer and water mains cannot be maintained, both mains shall be constructed of mechanical joint ductile iron pipe and shall be pressure tested to assure watertightness; or the sewer shall be encased in concrete for a distance of 10 feet on either side of the water main as specified by the Authority Engineer.
9.) All wells must be placed a minimum of 50' from sanitary sewer lines, laterals and building sewers.
10.) Basements will be provided with gravity sewer service only where grades permit. Grinder pumps shall not be permitted in this development.
11.) No planting will be done in the sanitary sewer easement, and no fences, structures, or permanent fixtures may be placed in the sanitary sewer easement.
12.) A laser must be used to set the pipe grade.
13.) In accordance with New Hanover Township Authority Construction Specifications, shop drawings of all material to be used in the construction of the sanitary sewer system must be submitted.
14.) All contours and elevations shown on the plans are per sewer datum.
15.) Prior to commencing construction, all materials to be used on the job must be inspected by a representative of New Hanover Township. This inspection is to insure conformance with the approved shop drawings.
16.) Before the Township accepts ownership and maintenance responsibilities for any sanitary sewer, the developer must provide an acceptable sanitary sewer right-of-way and execute all applicable right-of-way agreements, complete with legal description and drawing in a form acceptable to the Township and its solicitor.
17.) Cleanout assemblies located in paved areas of the Townshouse section shall be constructed with a protective box. The vents shall be drilled with two (½ inch diameter) holes to allow air into the vent.

SHEET 15 OF 40
SANITARY SEWER DETAILS

Rev	Date
Rev #18	01 - 24 - 20
Rev #17	08 - 29 - 19
Rev #16	03 - 14 - 19
Rev #15	01 - 30 - 19
Rev #14	11 - 29 - 18
Rev #13	07 - 20 - 18
Rev #12	05 - 02 - 18
Rev #11	01 - 31 - 18
Rev #10	11 - 27 - 17
Rev #9	12 - 25 - 09
Rev #8	03 - 30 - 09
Rev #7	04 - 01 - 08
Rev #6	04 - 01 - 07
Rev #5	12 - 22 - 05
Rev #4	07 - 14 - 04
Rev #3	03 - 31 - 03
Rev #2	01 - 09 - 03
Rev #1	05 - 15 - 01

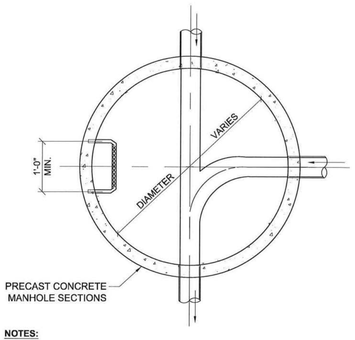
SUBDIVISION PLAN

ROLLING MEADOWS

NEW HANOVER TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

ASTON
SURVEYORS/ ENGINEERS , INC.
BOYERTOWN , PA 19512

plan date	4 - 10 - 00
scale	as noted
fld. wk. date	2 - 11 - 00
fld. bk.	127
	pg. 36
fin. pl. comp. ck.	00 - 00 - 00 XX
plan no.	2323 - RMR



NOTES:

1. THE BENCH SHALL SLOPE TO INVERT CHANNEL AT THE RATE OF 1" PER FOOT (MIN.)
2. THE DEPTH OF THE INVERT CHANNEL SHALL BE NOT LESS THEN ¾ OF THE DIAMETER OF THE PIPE.

PRECAST MANHOLE DIAMETER REQUIREMENT TABLE

MANHOLE DIAMETER	45° DEFLECTION MAXIMUM SIZE OF PIPE	90° DEFLECTION MAXIMUM SIZE OF PIPE
48"	18"	18"
60"	36"	27"
72"	42"	30"

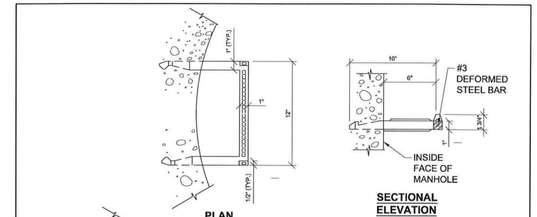
NOTE: MANHOLES GREATER THAN 20 FEET DEEP SHALL BE A MINIMUM OF 5 FOOT DIAMETER.

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NEW HANOVER TOWNSHIP AUTHORITY
2990 FAGLEYSVILLE RD. GILBERTSVILLE, PA 19525
STANDARD DETAIL
TYPICAL MANHOLE BASE CHANNEL CONFIGURATION DETAIL

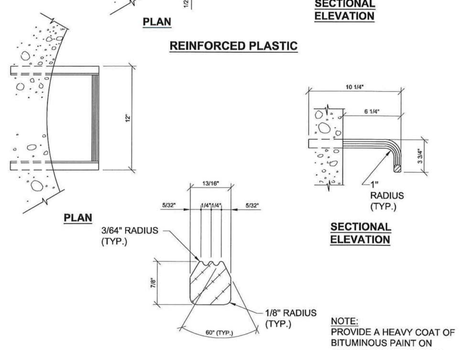
PREPARED BY	CHECKED BY	APPROVED BY	REV. / DATE	DATE	SCALE	PROJECT NO.	DRAWING NO.
ZM	JDB	CMH	- -	FEB. 2014	N.T.S.	4602.15	S-13

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PLAN — SECTIONAL ELEVATION

REINFORCED PLASTIC



PLAN — SECTIONAL ELEVATION

TYPICAL SECTION THRU ALUMINUM MANHOLE STEP

6061-T6 ALUMINUM ALLOY

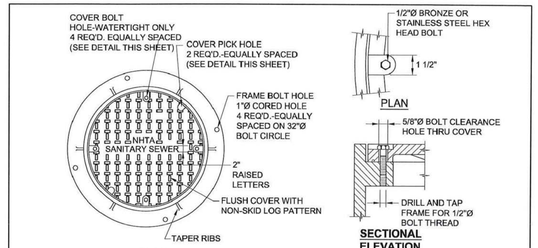
NOTE:
PROVIDE A HEAVY COAT OF BITUMINOUS PAINT ON ALUMINUM SURFACES IN CONTACT WITH CONCRETE.

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NEW HANOVER TOWNSHIP AUTHORITY
2990 FAGLEYSVILLE RD. GILBERTSVILLE, PA 19525
STANDARD DETAIL
MANHOLE STEPS DETAIL

PREPARED BY	CHECKED BY	APPROVED BY	REV. / DATE	DATE	SCALE	PROJECT NO.	DRAWING NO.
ZM	JDB	CMH	- -	FEB. 2014	N.T.S.	4602.15	S-17

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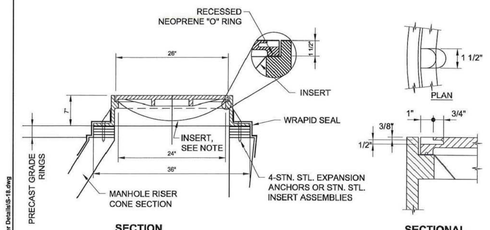


PLAN — SECTIONAL ELEVATION

COVER BOLT HOLE

REQUIRED ONLY ON MANHOLES DESIGNATED TO HAVE "WATERTIGHT" COVERS

NOTE:
ALL MANHOLE FRAMES AND COVERS SHALL BE FOR HEAVY DUTY TRAFFIC, AASHTO HIGHWAY LOADING CLASS HS-20.



SECTION — SECTIONAL ELEVATION

COVER PICK HOLE

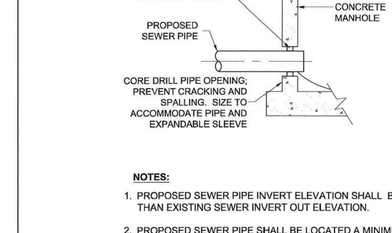
NOTE:
INSERTS TO BE INSTALLED IN STANDARD FRAME AND COVERS ONLY. THE INSERT SHOULD BE FULLY SEATED AROUND THE MANHOLE FRAME RIM TO INSURE AGAINST WATER SEEPAGE BETWEEN THE INSERT AND THE MANHOLE FRAME RIM.

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NEW HANOVER TOWNSHIP AUTHORITY
2990 FAGLEYSVILLE RD. GILBERTSVILLE, PA 19525
STANDARD DETAIL
CAST IRON MANHOLE FRAME AND COVER DETAIL

PREPARED BY	CHECKED BY	APPROVED BY	REV. / DATE	DATE	SCALE	PROJECT NO.	DRAWING NO.
ZM	JDB	CMH	- -	FEB. 2014	N.T.S.	4602.15	S-18

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NOTES:

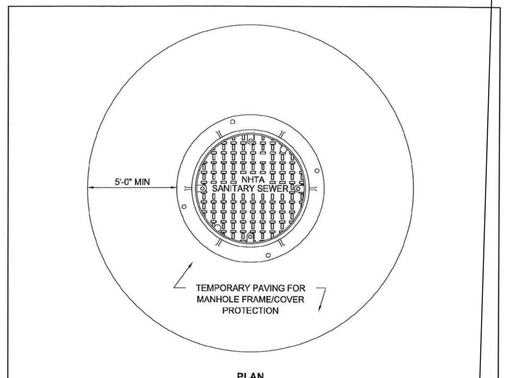
1. PROPOSED SEWER PIPE INVERT ELEVATION SHALL BE 0.2' HIGHER THAN EXISTING SEWER INVERT OUT ELEVATION.
2. PROPOSED SEWER PIPE SHALL BE LOCATED A MINIMUM OF 8" ABOVE OR BELOW EXISTING MANHOLE JOINT.
3. AFTER CONNECTION OF PIPE TO MANHOLE, REMOVE CONCRETE CHANNEL AS REQUIRED AND RECONSTRUCT CHANNEL.
4. KEEP GROUNDWATER, SURFACE WATER AND DEBRIS FROM ENTERING EXISTING FACILITIES.
5. MAINTAIN EXISTING FLOW DURING CONSTRUCTION.
6. DROPS OVER 2 FT WILL REQUIRE AN OUTSIDE DROP CONNECTION.
7. SEAL EXTERIOR PIPE PENETRATION WITH NON-SHRINK GROUT.
8. MODULAR SEAL REQUIRES STAINLESS STEEL HARDWARE.

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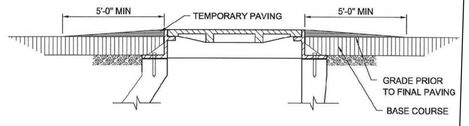
NEW HANOVER TOWNSHIP AUTHORITY
2990 FAGLEYSVILLE RD. GILBERTSVILLE, PA 19525
STANDARD DETAIL
TIE-IN TO EXISTING MANHOLE DETAIL

PREPARED BY	CHECKED BY	APPROVED BY	REV. / DATE	DATE	SCALE	PROJECT NO.	DRAWING NO.
ZM	JDB	CMH	- -	FEB. 2014	N.T.S.	4602.15	S-19

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PLAN



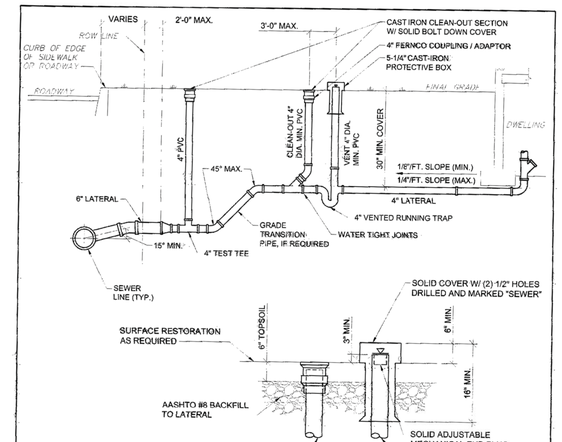
SECTION

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NEW HANOVER TOWNSHIP AUTHORITY
2990 FAGLEYSVILLE RD. GILBERTSVILLE, PA 19525
STANDARD DETAIL
MANHOLE FRAME / COVER PROTECTION DETAIL - (TEMPORARY PAVING)

PREPARED BY	CHECKED BY	APPROVED BY	REV. / DATE	DATE	SCALE	PROJECT NO.	DRAWING NO.
ZM	JDB	CMH	- -	FEB. 2014	N.T.S.	4602.15	S-22

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NOTES:

1. CONTINUOUS SUPPORT OF BARREL OF PIPE TO BE MAINTAINED. PIPE SHALL NOT BE SUPPORTED ON BLOCKING TO GRADE.
2. ANY PLUMBING PASSING UNDER A FOOTING SHALL BE PROVIDED WITH A RELIEVING ARCH.
3. ALL PRIVATELY OWNED SEWER LATERAL PIPE SHALL BE SOLID WALL SDR 35 OR SCH 40 PVC WITH A MINIMUM 4" INSIDE DIAMETER. A 5 PSI PRESSURE TEST OR 10' HYDROSTATIC TEST MUST BE COMPLETED OVER A 10 MINUTE PERIOD TO DEMONSTRATE A WATER TIGHT LATERAL SYSTEM.
4. MINIMUM 4" OF AASHTO #8 STONE TO BE PLACED BELOW AND A MINIMUM OF 12" ABOVE SEWER LATERAL PIPE.
5. JOINTS FOR BELL AND SPIGOT PVC SDR 35 PIPE AND FITTINGS SHALL BE USED WITH AN APPROVED COMPRESSION GASKET THAT IS COMPRESSED WHEN THE SPIGOT IS INSERTED INTO THE HUB OF THE PIPE.
6. WATER SERVICES SHALL BE LOCATED IN A SEPARATE TRENCH FROM THE SEWER LATERAL IF SDR PIPE IS USED. GLUED SCH. 40 SEWER PIPE AND WATER SERVICE LINE CAN BE IN SAME TRENCH. BENCHED IF POSSIBLE WITH 18" MIN. VERTICAL AND HORIZONTAL SEPARATION.
7. THIS DETAIL IS FOR A TYPICAL INSTALLATION. EACH CASE MAY VARY.
8. PROTECTIVE BOXES AND COVERS SHALL BE HS20 LOAD RATED. WHERE HOLES ARE REQUIRED IN COVER TO VENT, HOLES SHALL BE PLACED TOWARDS OUTER DIAMETER.
9. CLEAN-OUTS ARE ALSO REQUIRED AT EACH ACCUMULATIVE 90 DEGREE CHANGE IN DIRECTION AND EVERY 100 FOOT INTERVAL.

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NEW HANOVER TOWNSHIP AUTHORITY
2990 FAGLEYSVILLE RD. GILBERTSVILLE, PA 19525
STANDARD DETAIL
TYPICAL HOUSE CONNECTION DETAIL

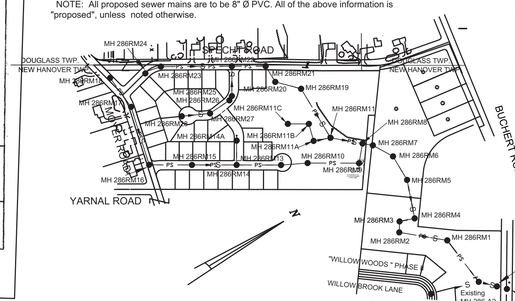
PREPARED BY	CHECKED BY	APPROVED BY	REV. / DATE	DATE	SCALE	PROJECT NO.	DRAWING NO.
PDM	JDB	CMH	1 4/2017	FEB. 2017	N.T.S.	4602.01	S-24

Entech Engineering - Printed: Apr. 24, 2017 - H:\4602.01\NTA Standards\Sewer Lateral Edits\S-24.dwg

Sanitary Sewer Schedule

Manhole	Top	Inv.	Distance	Grade	Dest. MH
MH286RM28	362.50	356.00	159	0.0409	MH286RM27
MH286RM27	355.94	349.50	130	0.0349	MH286RM26
MH286RM26	351.07	344.96	28	0.0325	MH286RM25
MH286RM25	350.32	344.05	167	0.0052	MH286RM22
MH286RM24	369.10	362.44	96	0.0410	MH286RM23
MH286RM23	365.50	358.50	397	0.0386	MH286RM22
MH286RM22	350.77	343.18	190	0.0641	MH286RM21
(drop)MH286RM21	337.19	331.00(in)	103	0.0690	MH286RM20
324.89(out)					
(drop)MH286RM20	325.34	317.78(in)	149	0.0051	MH286RM19
314.48(out)					
MH286RM19	323.50	313.72	320	0.0050	MH286RM11
(drop)MH286RM11	325.50	319.09(in)			
		312.12(in/out)	182	0.0090	MH286RM8
MH286RM8	319.95	310.49	58	0.0090	MH286RM7
MH286RM7	319.50	309.97	128	0.0050	MH286RM6
MH286RM6	319.50	309.34	154	0.0050	MH286RM5
MH286RM5	325.25	308.57	219	0.0050	MH286RM4
MH286RM4	320.60	307.48	86	0.0050	MH286RM3
(drop)MH286RM3	318.94	307.05(in)			
		299.80(out)	61	0.0393	MH286RM2
MH286RM2	311.07	297.40	272	0.0050	MH286RM1
MH286RM1	309.90	296.04	291	0.0050	MH286-A2(existing)
(existing)MH286-A2	303.49	294.58			
MH286RM14A	353.19	347.42	136	0.0060	MH286RM14
MH286RM18	373.00	368.20	200	0.0060	MH286RM17
MH286RM17	375.49	367.00	339	0.0050	MH286RM16
MH286RM16	375.06	365.30	239	0.0326	MH286RM15
MH286RM15	363.55	357.50	250	0.0300	MH286RM14
(drop)MH286RM14	358.98	350.00(in)			
		346.60(in/out)	248	0.0050	MH286RM13
MH286RM13	353.18	345.36	149	0.0585	MH286RM10
MH286RM10	346.18	336.65	288	0.0678	MH286RM9
MH286RM9	331.79	317.12	112	0.0592	MH286RM8
MH286RM8	319.95	310.49			
MH286RM11C	342.40	332.00	118	0.0106	MH286RM11B
MH286RM11B	340.83	330.75	99	0.0510	MH286RM11A
MH286RM11A	342.10	325.70	96	0.0688	MH286RM11
(drop)MH286RM11	325.50	319.09(in)			
		312.12(in/out)	182	0.0090	MH286RM8

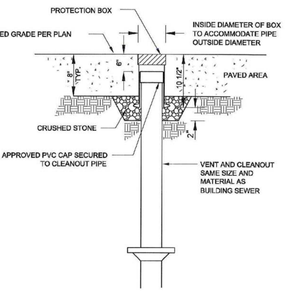
NOTE: All proposed sewer mains are to be 8" Ø PVC. All of the above information is "proposed", unless noted otherwise.



400 SCALE PLAN OF SANITARY SEWER MAINS

NOTES:

1. PROTECTION BOX TO BE SET FLUSH WITH PAVING SURFACE
2. PROTECTION BOX AND COVER TO BE SUITABLE FOR TRAFFIC LOADING
3. IF PROTECTION BOX IS INSTALLED OVER A VENT, THEN INSERT DISH WILL BE REQUIRED TO LIMIT INFLOW INTO THE VENT.



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NEW HANOVER TOWNSHIP AUTHORITY
2990 FAGLEYSVILLE RD. GILBERTSVILLE, PA 19525
STANDARD DETAIL
TRAP AND VENT PROTECTION BOX DETAIL

PREPARED BY	CHECKED BY	APPROVED BY	REV. / DATE	DATE	SCALE	PROJECT NO.	DRAWING NO.
ZM	JDB	CMH	- -	FEB. 2014	N.T.S.	4602.15	S-25

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SANITARY SEWER NOTES (CONT'D FROM DRAWING #15)

17.) All construction methods must be in accordance with latest edition and standard construction and material specifications for Sanitary Sewer extensions.
18.) The Contractor shall furnish the Authority's Engineer, promptly after the award or execution of the Contract, with a complete statement of the origin, composition, and manufacture of all materials to be used in the construction of the Project.
19.) Connections to existing manholes should be made by cutting required opening in such methods so as to prevent cracking and spalling concrete. Make openings of sufficient size to accommodate pipe with PVC waterstop installed and one-inch annular grout space. Grout annular space using non-shrink, non-metallic grout.
20.) As per the Township's Standard Specifications, "as-built" record drawings must be submitted and approved before any sewers are accepted for dedication. A letter must accompany the drawings from the developer's engineer attesting to their correctness.
21.) The Contractor shall contact all existing homeowners to identify the best location for laterals.
22.) Where sewers are constructed in fill, the requirements of Section 02221-Trenching, Backfilling, and compacting, Item 3.02, Paragraph C. of the Standard construction and Material Specifications for Sanitary Sewer Extensions must be strictly adhered to.
23.) The laterals are not permitted to connect to manholes.
24.) The laterals proposed to connect to the existing residences along Moyer Road shall be installed with a water tight cap at the end and a stake in the ground to mark the location of the end of the lateral.
25.) Sanitary Sewer service shall not be extended to the existing Douglass Township residences along Specht Rd.
26.) All sections of ductile iron pipe have an interior epoxy lining.
27.) Slope anchors and trench plugs shall be used to keep sanitary sewer mains in place and prevent water from draining through initial backfill.
28.) An Epoxy Manhole Lining System shall be required on the following manholes: MH286RM2, MH286RM3, MH286RM8, MH286RM11, MH286RM13, MH286RM14, MH286RM19, MH286RM20, and MH286RM21.

SHEET 16 OF 40
SANITARY SEWER NOTES & DETAILS

Rev #18	01 - 24 - 20
Rev #17	08 - 29 - 19
Rev #16	03 - 14 - 19
Rev #15	01 - 30 - 19
Rev #14	11 - 29 - 18
Rev #13	07 - 20 - 18
Rev #12	05 - 02 - 18
Rev #11	01 - 31 - 18
Rev #10	11 - 27 - 17
Rev #9	12 - 25 - 09
Rev #8	03 - 30 - 09
Rev #7	04 - 01 - 08
Rev #6	04 - 01 - 07
Rev #5	12 - 22 - 05
Rev #4	07 - 14 - 04
Rev #3	03 - 31 - 03
Rev #2	01 - 09 - 03
Rev #1	05 - 15 - 01

SUBDIVISION PLAN

ROLLING MEADOWS

NEW HANOVER TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

plan date	4 - 10 - 00
scale	as noted
fld. wk. date	2 - 11 - 00
fld. bk. 127	pg. 36
fin. pl. comp. ck.	00 - 00 - 00 XX
plan no.	2323 - RMS

ASTON
SURVEYORS/ ENGINEERS , INC.
BOYERTOWN , PA 19512

Permittee: New Hanover Township Authority
2943 N. Charlotte Street
Gilbertsville, PA 19525

Permit #4673411

PLAN LEGEND

= SANITARY SEWER LINE
= D.I.P. WATER LINE
= CURB CUT RAMP
= WATER VALVE
= FIRE HYDRANT
= BLOW OFF VALVE
= EXISTING CONTOUR
= PROPOSED CONTOUR
= INLET
= 8" CONCRETE CURB
= CONCRETE SIDEWALK
= SOIL BOUNDARY LINE
= SANITARY SEWER MANHOLE
= RCP STORM SEWER PIPE
= Limit of Required Perimeter Buffer = limit of disturbance
= Delineated "Waters of the U.S."
= existing electric line
= Soil Type Rt - floodplain soils
= proposed street light
= proposed pole mounted light
= proposed cleanout assembly
= proposed cleanout assembly w/ vent box
= proposed sewer lateral
= proposed water lateral
= proposed sanitary sewer
= proposed 8" or 12" Ø water main
= proposed 6" Ø water main
= proposed 4" Ø water main
= proposed retaining wall
= proposed guide rail
= proposed split rail fence
= proposed limit of disturbance
= ERNST-180-1 SEED MIX PLANTING AREA WITH CURLED WOOD MATTING LINER
= Lawn Areas
= Meadow Areas

All other areas of disturbance shall be seeded with grass seed as specified in the recommendations for revegatation on the Erosion Control Details".

REQUIRED STREET TREES: (one tree per 60 ft of road)
1. Length of Winwood Court = 517'
   Required number of trees = 9 X 2 = 18
   Proposed number of trees = 18
2. Length of Morrison Street = 358
   Required number of trees = 6 X 2 = 12
   Proposed number of trees = 12
3. Length of Hayward Street = 796
   Required number of trees = 14 X 2 = 28
   Proposed number of trees = 28

REQUIRED STREET TREES: (one tree per 60 ft of road)
NOTE: Moyer Road and Specht Road provide a buffer yard type "A" which requires one tree per 40 ft. This requirement is greater than that required for street trees and therefore the number of trees provided along Moyer Road and Specht Road complies with the buffer requirements and the street tree requirements.

GRADING NOTE:
No grading is to occur within 5 feet of any outer property line

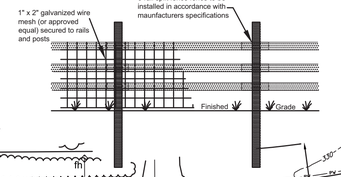
ROOFDRAIN NOTE:
No roofdrains are to discharge stormwater directly onto a sidewalk or street.

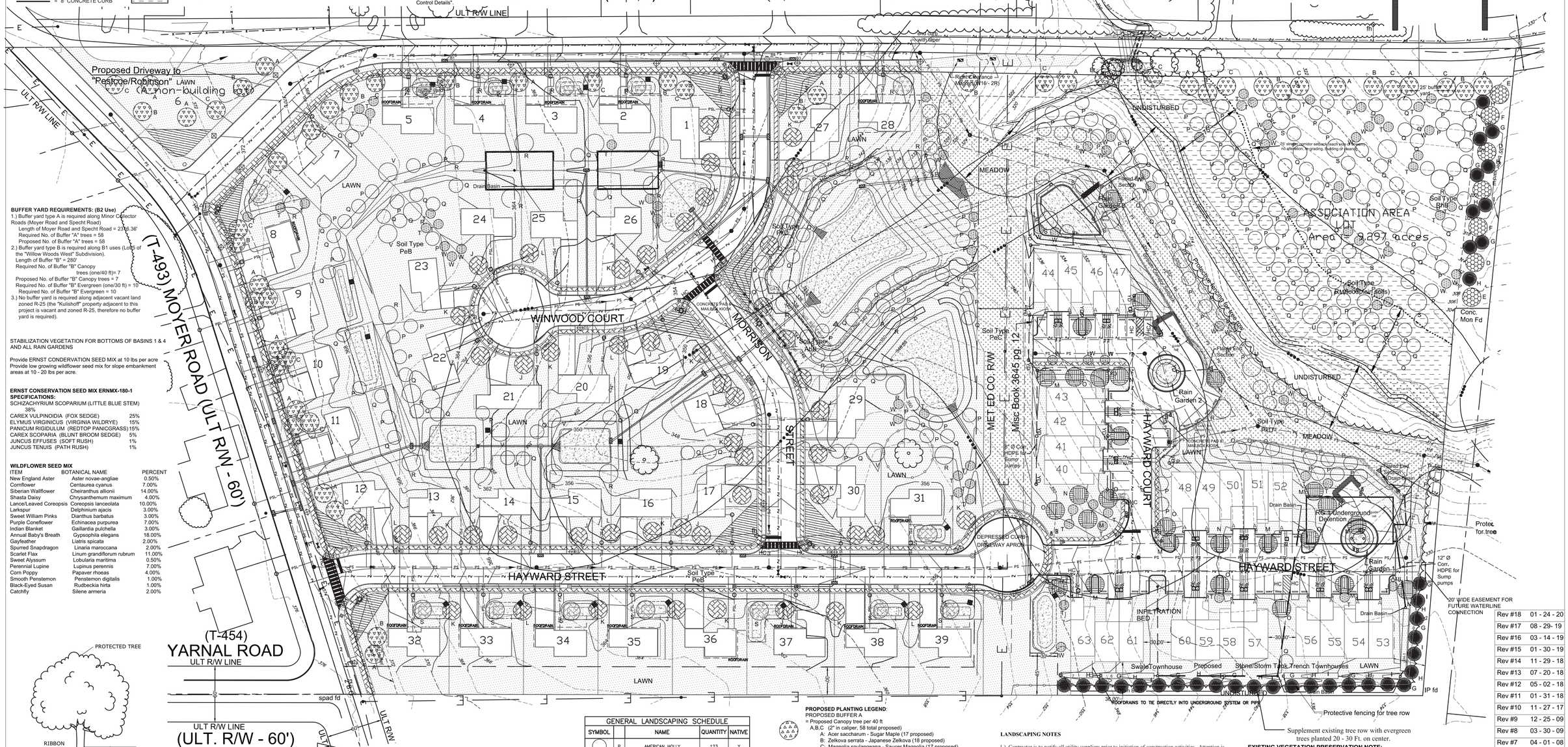
TREE PROTECTION NOTE:
For existing trees to be preserved, no grading is permitted within 15 feet of the tree trunk or within the dripline of the tree (whichever is greater). Protective fencing shall be placed in accordance with Section 921 of the Subdivision and Land Development Ordinance and the Tree Protection Detail below.

= Tree Protection Fencing

0' 25' 50' 100' 150'
GRAPHIC SCALE

STORMWATER BASIN PROTECTIVE FENCING
(n.t.s.)





BUFFER YARD REQUIREMENTS: (B2 Use)
1.) Buffer yard type A is required along Minor Collector Roads (Moyer Road and Specht Road)
Length of Moyer Road and Specht Road = 2318.36'
Required No. of Buffer "A" trees = 58
Proposed No. of Buffer "A" trees = 58
2.) Buffer yard type B is required along B1 uses (Lots of the "Willow Woods West" Subdivision).
Length of Buffer "B" = 280'
Required No. of Buffer "B" Canopy trees (one/40 ft)= 7
Proposed No. of Buffer "B" Canopy trees = 7
Required No. of Buffer "B" Evergreen (one/30 ft) = 10
Required No. of Buffer "B" Evergreen = 10
3.) No buffer yard is required along adjacent vacant land zoned R-25 (the "Kulishoff" property adjacent to this project is vacant and zoned R-25, therefore no buffer yard is required).

STABILIZATION VEGETATION FOR BOTTOMS OF BASINS 1 & 4 AND ALL RAIN GARDENS

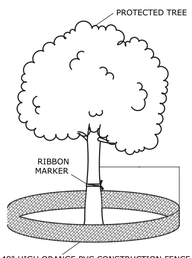
Provide ERNST CONDERVATION SEED MIX at 10 lbs per acre
Provide low growing wildflower seed mix for slope embankment areas at 10 - 20 lbs per acre.

ERNST CONSERVATION SEED MIX ERNMX-180-1 SPECIFICATIONS:

SCHIZACHYRIUM SCOPARIUM (LITTLE BLUE STEM)	38%
CAREX VULPINOIDIA (FOX SEDGE)	25%
ELYMUS VIRGINICUS (VIRGINIA WILDRYE)	15%
PANICUM RIGIDULUM (REDTOP PANICGRASS)	15%
CAREX SCOPARIA (BLUNT BROOM SEDGE)	5%
JUNCUS EFFUSES (SOFT RUSH)	1%
JUNCUS TENUIS (PATH RUSH)	1%

WILDFLOWER SEED MIX

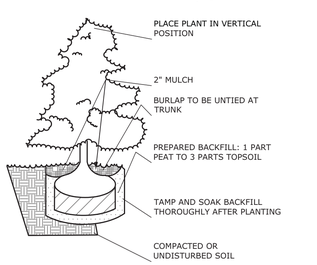
ITEM	BOTANICAL NAME	PERCENT
New England Aster	Aster novae-angliae	0.50%
Cornflower	Centaurea cyanus	7.00%
Siberian Wallflower	Cheiranthus allionii	14.00%
Shasta Daisy	Chrysanthemum maximum	4.00%
Lance/Leaved Coreopsis	Coreopsis lanceolata	10.00%
Larkspur	Delphinium ajacis	3.00%
Sweet William Pinks	Dianthus barbatus	3.00%
Purple Coneflower	Echinacea purpurea	7.00%
Indian Blanket	Gaillardia pulchella	3.00%
Annual Baby's Breath	Gypsophila elegans	18.00%
Gayfeather	Liatris spicata	2.00%
Spurred Snapdragon	Linaria maroccana	2.00%
Scarlet Flax	Linum grandiflorum rubrum	11.00%
Sweet Alyssum	Lobularia maritima	0.50%
Perennial Lupine	Lupinus perennis	7.00%
Corn Poppy	Papaver rhoeas	4.00%
Smooth Penstemon	Penstemon digitalis	1.00%
Black-Eyed Susan	Rudbeckia hirta	1.00%
Catchfly	Silene armeria	2.00%



48" HIGH ORANGE PVC CONSTRUCTION FENCE

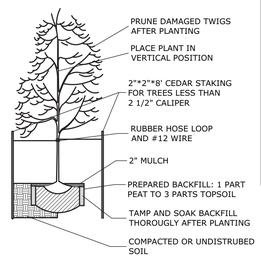
NOTES:
1. MARK TREE TO BE PROTECTED WITH RIBBON PRIOR TO CONSTRUCTION.
2. INSTALL PROTECTION FENCE AT LEAST 15 FEET FROM THE TRUNK OR AT THE DRIP LINEOF THE CANOPY, WHICHEVER IS GREATER.
3. USE METAL STAKES DRIVEN 12" INTO THE GROUND TO HOLD FENCE IN PLACE.
4. WHEN CONSTRUCTION IS COMPLETED, REMOVE FENCING.
5. ANY DAMAGE, DESTRUCTION OF FALLING OF A TREE SLATED FOR PROTECTION SHALL REQUIRE REPLACEMENT WITH A TREE OF SIMILAR CALIPER OR SUCH NUMBER OF TREES AS ARE REQUIRED TO EQUAL THE CIRCUMFERENCE OF THE AFFECTED TREE.

TREE PROTECTION
NO SCALE



TREE SHALL BE 4" CALIPER OR LARGER

CONIFEROUS TREE PLANTING DETAIL
NO SCALE



TREE SHALL BE 4" CALIPER OR LARGER

DECIDUOUS TREE PLANTING DETAIL
NO SCALE

GENERAL LANDSCAPING SCHEDULE				
SYMBOL		NAME	QUANTITY	NATIVE
	P	AMERICAN HOLLY	123	Y
	Q	EASTERN WHITE PINE	130	Y
	R	WHITE OAK	21	Y
	S	SILVER MAPLE	9	Y
	T	EASTERN REDBUD	77	Y
	U	AMERICAN SYCAMORE	8	Y
	V	RED MAPLE	16	Y
	W	SWEETBAY MAGNOLIA	36	Y

PROPOSED PLANTING LEGEND:

PROPOSED BUFFER A
= Proposed Canopy tree per 40 ft
A,B,C (2" in caliper, 58 total proposed)
A: Acer saccharum - Sugar Maple (17 proposed)
B: Zelkova serrata - Japanese Zelkova (18 proposed)
C: Magnolia soulangeana - Saucer Magnolia (17 proposed)
R: Quercus bicolor - Swamp White Oak (6 proposed)

PROPOSED BUFFER B
= Proposed Canopy tree per 40 ft
D,E,F (2" in caliper, 7 total proposed)
D: Acer rubrum - Red Maple (2 proposed)
E: Quercus alba - White Oak (3 proposed)
F: Glesditsia triacanthos inermis - Thornless Honeylocust (2 proposed)

= Proposed evergreen per 30 ft
G,H,I (4' min height at planting; 35 total proposed)
G: Picea abies - Norway Spruce (12proposed)
H: Ilex opaca - American Holly (12proposed)
I: Pseudotsuga menziesii - Douglass fir (11 proposed)

= STREET TREES (proposed flowering street tree)
J,K,L (2" in calipe, 59 proposed)
J: Malus 'Adirondack' - Adirondack Crabapple (18 proposed)
K: Prunus serrulata 'Kwanzan' - Kwanzan Cherry (17 proposed)
L: Magnolia soulangeana - Saucer Magnolia (16 proposed)
S: Acer saccharius - Silver Maple (8 proposed)

= PARKING AREA TREES (proposed shade tree)
M,N,O (2" in caliper, 36 proposed)
M: Acer Rubrum - Red Maple (9 proposed)
N: Acer Saccarum - Sugar Maple (9 proposed)
O: Ulmus americana 'Valley Forge' - Valley Forge American Elm (9 proposed)

= Proposed Screen Plantings around dumpster pad stockade fence (viburnum plicatum var. tomentosum planted 3 ft on center, 4' min height at planting; 26 proposed)

LANDSCAPING NOTES

1.) Contractor is to notify all utility suppliers prior to initiation of construction activities. Attention is called to the "CALL BEFORE YOU DIG" NOTE AT 1-800-242-1776
2.) Contractor is to verify all distances, grades, quantities, lines and elevations prior to the start of construction. Any discrepancies must be reported prior to commencement of work.
3.) The contractor shall supply all plant materials in quantities sufficient to complete the planting shown.
4.) All materials shall conform to the guidelines established by the current AMERICAN STANDARD FOR NURSERY STOCK published by the American Association of Nurserymen.
5.) No plant shall be put into the ground before grading has been finished and approved by the Owner's representative.
6.) All plants shall bear the same relationship to the finished grade as the plant's original grade before digging.
7.) All plants shall be balled and wrapped or container grown as specified. No container grown stock will be accepted if it is rootbound. All root wrapping material made of synthetics or plastics shall be removed at the time of planting.
8.) No plants shall be pruned at time of planting except to remove dead or broken branches.
9.) All plants shall be sprayed with anti-desiccant within 24 hours of planting or a the beginning of their first watering. All plants shall be watered thoroughly twice during the first 24 hour period after planting.
10.) All plant material shall be guaranteed by the contractor for a period of 18 months from the date of acceptance by Owner.
11.) All shrubs are to be planted in continuous mulch bed. Apply pre-emergent herbicide, such as 'Preen' in all planing beds and planting pit prior to installation of 3" of aged double shredded hardwood mulch.
12.) Substitutions in the proposed plantings may be made if approved by New Hanover Township.
13.) Right of refusal by the Township representative for unacceptable plant materials, handling, or planting procedures.
14.) The locations of trees and shrubs are to be marked in the field for approval by the Township's representative before planting. Substitutions may be made with prior approval of the Township.
15.) The developer shall provide maintenance of seeded areas and plantings until acceptable by the Township.
16.) Construction wastes shall be recycled/disposed of in compliance with DEP solid waste disposal regulations.
17.) All proposed trees should be located greater than 10 ft. from water and sewer utilities.
18.) A minimum of four inches of topsoil shall be in place after final grading is complete, and prior to planting seed or plant material.

EXISTING VEGETATION PRESERVATION NOTE:
The existing wooded area located along the drainageway in the Open Space Lot and along the tract boundary line are to remain except in the area proposed for the construction of the sanitary sewer line. The existing mature trees located on Lots 16 and 31 shall be preserved, if possible, with protective fencing.
= protective fencing

SHEET 17 OF 40
LANDSCAPING AND BUFFER YARD PLANTINGS PLAN

Rev	
Rev #18	01 - 24 - 20
Rev #17	08 - 29- 19
Rev #16	03 - 14 - 19
Rev #15	01 - 30 - 19
Rev #14	11 - 29 - 18
Rev #13	07 - 20 - 18
Rev #12	05 - 02 - 18
Rev #11	01 - 31 - 18
Rev #10	11 - 27 - 17
Rev #9	12 - 25 - 09
Rev #8	03 - 30 - 09
Rev #7	04 - 01 - 08
Rev #6	04 - 01 - 07
Rev #5	12 - 22 - 05
Rev #4	07 - 14 - 04
Rev #3	03 - 31 - 03
Rev #2	01 - 09 - 03
Rev #1	05 - 15 - 01

SUBDIVISION PLAN

ROLLING MEADOWS

NEW HANOVER TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

ASTON
SURVEYORS/ ENGINEERS , INC.
BOYERTOWN , PA 19512

plan date
4 - 10 - 00

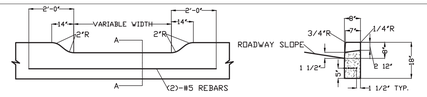
scale
1" = 50'

fld. wk. date
2 - 11 - 00

fld. bk. 127
pg. 36

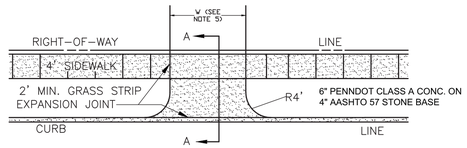
fin. pl. comp. ck.
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plan no.
2323 - RMT



DEPRESSED CURB FOR DRIVES

ACCORDING TO PENNDOT RC-64
NO SCALE

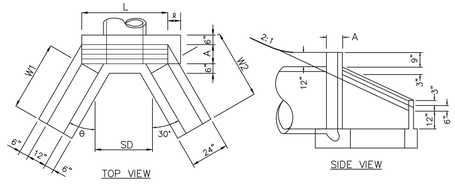


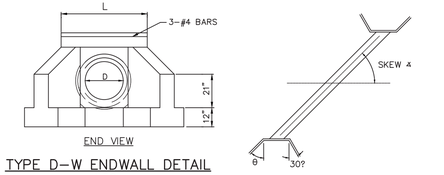
DRIVEWAY APRON DETAIL WITH GRASS STRIP

NO SCALE

Sidewalk and driveway aprons shall be coated with a surface sealer to protect against salt damage.

PIPE DIAMETER	SKEW ∅ =90° TO 60° θ = 30°			SKEW ∅ = 55° θ = 35°			SKEW ∅ = 50° θ =40°			SKEW ∅ = 45° θ = 45°			SKEW ∅ = 40° θ = 50°			SKEW ∅ = 30° θ = 60°			SKEW ∅ = 20° θ = 70°			SKEW ∅ = 10° θ = 80°				
d	L	Q	W1	L	Q	W1	L	Q	W1	L	Q	W1	L	Q	W1	L	Q	W1	L	Q	W1	L	Q	W1	W2	A
(in)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(FT)	(IN)
12	3.5	0	2.0	3.5	.33	2.0	3.6	.5	2.0	3.7	.67	2.0	3.9	.75	2.0	4.3	1.33	2.0	5.2	1.75	2.0	8.1	5.0	2.0	2.0	12
15	3.7	0	2.0	3.8	.33	2.0	3.9	.5	2.0	4.1	.67	2.0	4.2	.75	2.0	4.8	1.33	2.0	6.0	1.75	2.0	9.5	5.0	2.9	2.0	12
18	4.0	0	2.0	4.1	.33	2.0	4.3	.5	2.0	4.4	.67	2.0	4.6	.75	2.0	5.3	1.33	2.0	6.7	1.75	2.9	10.9	5.0	5.8	2.0	12
24	4.6	0	2.3	4.7	.33	2.4	4.9	.5	2.6	5.1	.67	2.8	5.4	.75	3.1	6.3	1.33	4.0	8.1	1.75	5.8	13.8	5.0	11.5	2.3	12
30	5.2	0	3.5	5.4	.33	3.7	5.6	.5	3.9	5.8	.67	4.2	6.4	.75	4.7	7.3	1.33	6.0	9.6	1.75	8.8	16.7	5.0	17.3	3.5	12
36	5.8	0	4.6	6.0	.33	4.9	6.2	.5	5.2	6.5	.67	5.7	7.0	.75	6.2	8.3	1.33	8.0	11.1	1.75	11.7	19.6	5.0	23.0	4.6	12
42	6.3	0	5.8	6.6	.33	6.1	6.9	.5	6.5	7.3	.67	7.1	7.8	.75	7.8	9.3	1.33	10.0	12.5	1.75	14.6	22.5	5.0	28.8	5.8	12
48	6.9	0	6.9	7.2	.33	7.3	7.5	.5	7.8	8.0	.67	8.5	8.5	.75	9.4	10.3	1.33	12.0	14.0	1.75	17.5	25.3	5.0	34.6	6.9	12
54	7.5	0	8.0	7.8	.33	8.5	8.2	.5	9.1	8.7	.67	9.9	9.3	.75	10.9	11.3	1.33	14.0	15.5	1.75	20.5	28.2	5.0	40.3	8.0	12
60	8.1	0	9.2	8.4	.33	9.8	8.8	.5	10.4	9.4	.67	11.3	10.1	.75	12.5	12.3	1.33	16.0	16.9	1.75	23.4	31.1	5.0	46.0	9.2	15
72	9.2	0	11.5	9.6	.33	12.2	10.1	.5	13.0	10.8	.67	14.1	11.7	.75	15.6	14.3	1.33	20.0	19.8	1.75	29.2	36.9	5.0	57.6	11.5	15

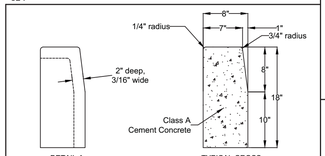


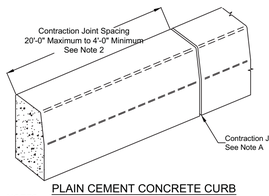


TYPE D-W ENDWALL DETAIL

N.T.S.

NOTES
1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 630 FOR PLAIN CONCRETE CURB AND DEPRESSED CURB, SECTION 640 FOR PLAIN CONCRETE CURB AND FOR PLAIN CONCRETE CURB GUTTER.
2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
3. PLACE 3/4-INCH PREMOLDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY. CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO CONFORM TO CROSS SECTIONAL AREA OF CURB.
4. SEE RC-50 FOR PLAIN CONCRETE CURB SLOPED TOP TREATMENT AT END OF STRUCTURES.
5. WIDTH FOR TYPICAL SINGLE-FAMILY RESIDENTIAL DRIVEWAY IS 16', 18' OR 20'.
WIDTH FOR ROAD ENTRANCE TO TOWNHOUSE DEVELOPMENT IS 32'.





PLAIN CEMENT CONCRETE CURB

NOTES:
1. Materials and construction shall meet the requiremnets of Publication 408, Section 630 for Plain Cement Concrete Curb, Sectio 640 for Plain Cement Concrete Gutter and Section 641 for Plain Cement Concrete Curb Gutter.
2. Space conctractio joints in uniform legths or sections.
3. Place 3/4 - inch premolded expansion joint filler material at structures and at the end of the work day. Cut materials to conform to area adjacent to curb or to conform to cross sectional area of curb.
4. Provide 4" AASHTO No. 57 stone base

BASIN OR TRAP NO.	PIPE SIZE (IN)	S (IN)	NO. OF COLLARS	RISER TO FIRST COLLAR (FT)	COLLAR SPACING (FT)
1	24	86.4	2	8	36.4

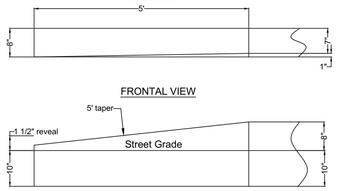
NOTES:

ALL COLLARS SHALL BE INSTALLED SO AS TO BE WATERTIGHT.

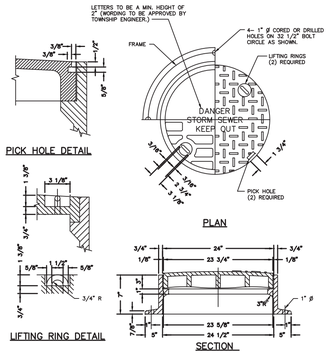
COLLAR SIZE AND SPACING SHALL BE AS INDICATED WITHIN TABLE.

STANDARD CONSTRUCTION DETAIL #7-16
CONCRETE ANTI-SEEP COLLAR FOR PERMANENT BASINS OR TRAPS

NOT TO SCALE



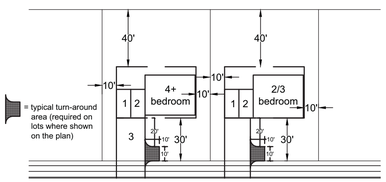
CURB END TAPER

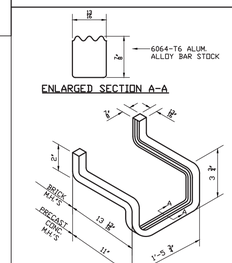


CAST IRON MANHOLE FRAME AND COVER DETAIL

TYPICAL LOT PARKING SPACE CONFIGURATION

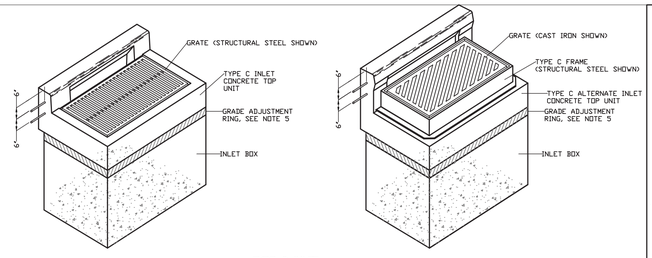
4 Bedrooms or more ==> 3 required parking spaces
3 Bedrooms or less ==> 2 required parking spaces





NO SCALE

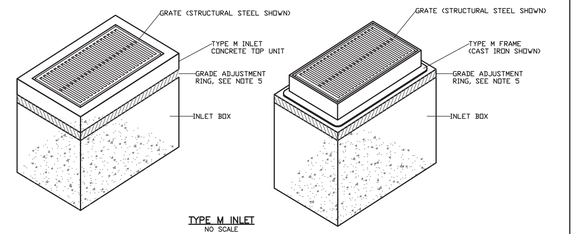
NOTES
1. PRECAST MANHOLES MEETING THE REQUIREMENTS OF PUBLICATION 408/2000. SECTION ON 714, MAYBE SUBSTITUTED FOR THE PRECAST CAST-IN-PLACE MANHOLE.
2. FOR CONSTRUCTION REQUIREMENTS SEE NOTE 1, SHEET 1. FOR DESIGN REQUIREMENTS SEE NOTE 1, SHEET 5.
3. FOR PERMISSIBLE LOCATION OF PIPES SEE PLAN VIEW AND NOTE 3, SHEET 1.
4. FOR RISERS OR BASE SECTIONS WITH OPENINGS. PROVIDE A MINIMUM HEIGHT OF SECTION SO AS TO PROVIDE AN UNCUT WALL EQUAL TO 20% OF THE OPENING BUT NO LESS THAN 203 (8"). BETWEEN THE OPENING AND THE CLOSEST JOINT BETWEEN RISERS - SEE DETAIL B.
5. FOR PRECAST RISER OR BASE SECTIONS WITH ONE OPENING LOCATED AT DEPTHS TO 18.0 m (60') . PROVIDE CIRCUMFERENTIAL REINFORCEMENT IN ACCORDANCE WITH SECTION 5.8. FOR SECTIONS WITH TWO OR MORE OPENINGS, LOCATED AT DEPTH OF 3.0 m (10') AND LESS, PROVIDE CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 340 mm2/VERTICAL m (0.16 sq in/VERTICAL FT.) FOR THE HEIGHT OF RISER OR BASE SECT ION.
6. FOR RISERS OR BASE SECTIONS WITH TWO OR MORE OPENINGS, LOCATED AT A DEPTH GREATER THAN 3.0 m (10') , BUT LESS THAN OR EQUAL TO 1.6 m (25') , PROVIDE CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 410 mm2/VERTICAL m (0.22 sq in/VERTICAL FT.) EACH FACE.
7. FOR RISERS OR BASE SECTIONS WITH TWO OR MORE OPENINGS, LOCATED AT DEPTHS GREATER THAN 1.6 m (25') . USE A 254 (10") THICK WALL RISER OR BASE SECTION WITH CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 410 sq in/VERTICAL m (0.22 sq in/VERTICAL FT.) EACH FACE.
8. MARK RISERS OR BASE SECTIONS WITH HOLES CLEARLY WITH MAXIMUM ALLOWABLE DEPTH.
9. PROVIDE ADDITIONAL REINFORCEMENT BARS AROUND OPENINGS AS SHOWN ON REINFORCEMENT DETAILS AT OPENINGS SHEET 1.
10. FOR CHANNEL DETAILS IN PRECAST MANHOLE SEE CAST- IN-PLACE MANHOLE SHEET 1.
11. PROVIDE MANHOLE STEPS MEETING THE REQUIREMENTS OF PUBLICATION 408/2000, SECTION 60S. 2(c). ALTERNATE CONFIGURATIONS AND DIMENSIONS, AS APPROVED BY THE ENGINEER, MAY BE USED.
12. PROVIDE MINIMUM 25 (1") SECTION DIMENSION FOR METAL STEPS. PROVIDE MINIMUM 19 (1¼") SECTION DIMENSION FOR NON-DETERIORATING MATERIAL STEPS.
13. MECHANICAL ANCHOR REQUIRED FOR INSTALLATION OF STEPS WITHOUT HOOKS.
14. THE ALTERNATE OPENING REINFORCEMENT DETAIL IS NOT DESIRABLE BY DESIGN. USE IT TO MEET EXISTING PIPE ELEVATIONS.



TYPE C INLET

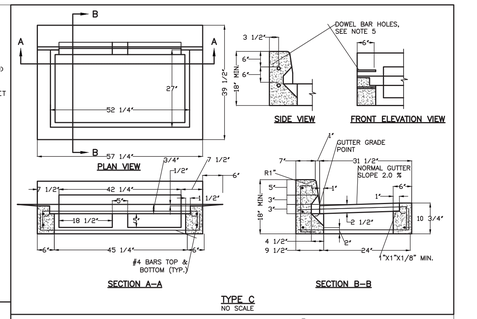
NO SCALE

ONLY CAST IRON GRATES IN LAWN AREAS **"DRAINS TO CREEK" DESIGNATION ON ALL INLETS**



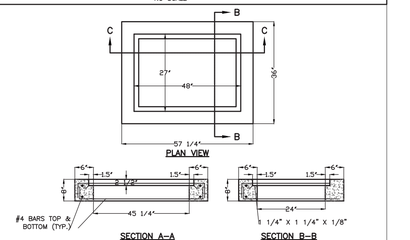
TYPE M INLET

NO SCALE



TYPE C

NO SCALE

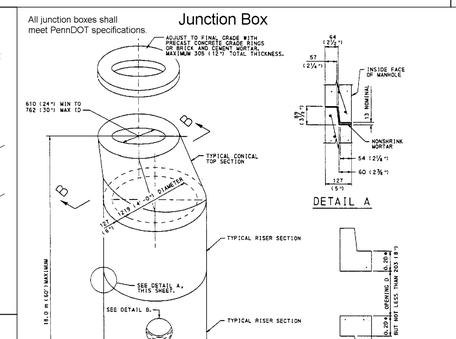


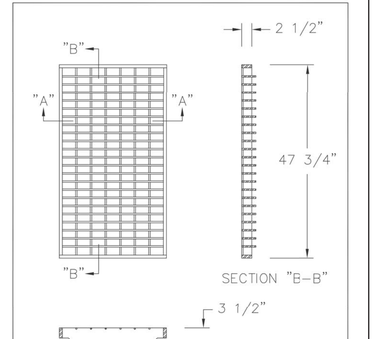
TYPE M

NO SCALE

All junction boxes shall meet PennDOT specifications.

Junction Box





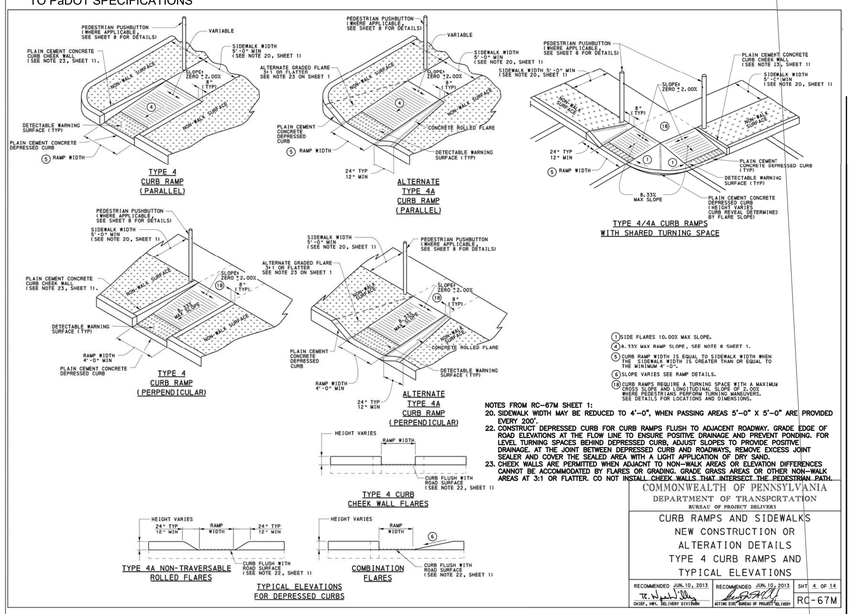
ONLY BICYCLE SAFE GRATES WILL BE USED ON INLETS IN PAVED AREAS

PPCA CERTIFIED PLANT

MONARCH PRECAST CONCRETE CORP.
425 NORTH DAUPHIN STREET ALLENTOWN, PA. 18109 PHONE (610) 435-6746
WWW.MONARCHPRECAST.COM FAX (610) 437-7133

PENNDOT STRUCTURAL STEEL BICYCLE SAFE GRATE PER RC-45M

ALL CONSTRUCTION SHALL CONFORM TO PaDOT SPECIFICATIONS

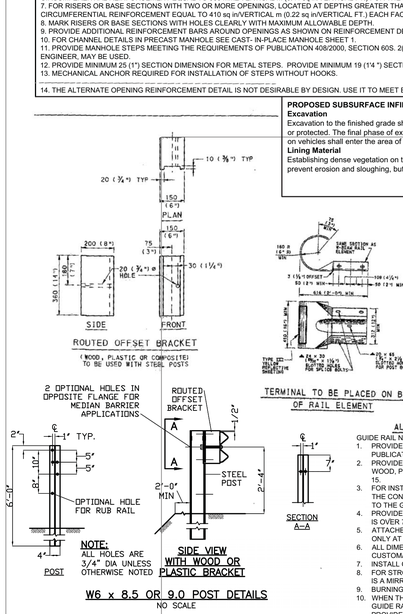


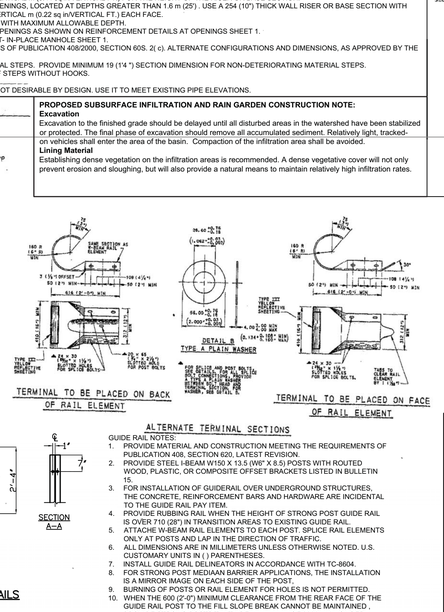
NOTES FROM RC-67M SHEET 1:
20. SIDEWALK WIDTH MAY BE REDUCED TO 4'-0", WHEN PASSING AREAS 5'-0" X 5'-0" ARE PROVIDED EVERY 200'.
22. CONSTRUCT DEPRESSED CURB FOR CURB RAMPS FLUSH TO ADJACENT ROADWAY. GRADE EDGE OF ROAD ELEVATIONS AT THE FLOW LINE TO ENSURE POSITIVE DRAINAGE AND PREVENT PONDING. FOR LEVEL TURNING SPACES BEHIND DEPRESSED CURB, ADJUST SLOPES TO PROVIDE POSITIVE DRAINAGE. AT THE JOINT BETWEEN DEPRESSED CURB AND ROADWAYS, REMOVE EXCESS JOINT SEALER AND COVER THE SEALED AREA WITH A LIGHT APPLICATION OF DRY SAND.
23. CHECK WALLS ARE PERMITTED WHEN ADJACENT TO NON-WALK AREAS OR ELEVATION DIFFERENCES CANNOT BE ACCOMMODATED BY FLARES OR GRADING. GRADE GRASS AREAS OR OTHER NON-WALK AREAS AT 3:1 OR FLATTER. CO NOT INSTALL CHECK WALLS THAT INTERSECT THE PEDESTRIAN PATH.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
BUREAU OF PROJECT DELIVERY

CURB RAMPS AND SIDEWALKS
NEW CONSTRUCTION OR ALTERATION DETAILS
TYPE 4 CURB RAMPS AND TYPICAL ELEVATIONS

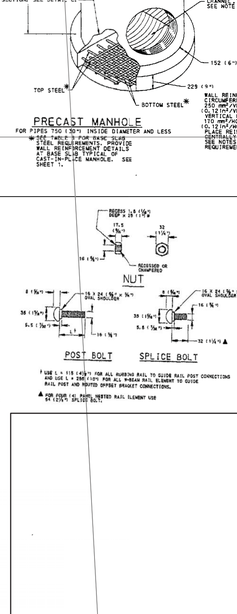
RECOMMENDED JUN. 10, 2013 — CHIEF, ENG. DISTRICT DIVISION
RECOMMENDED JUN. 10, 2013 — ACTING DEP. SECRETARY OF PROJECT DELIVERY
SHT. 4 OF 14
RC-67M



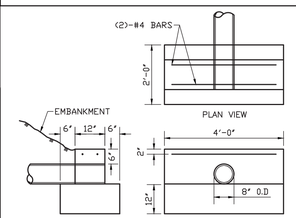


ALTERNATE TERMINAL SECTIONS

GUIDE RAIL NOTES:
1. PROVIDE MATERIAL AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 620, LATEST REVISION.
2. PROVIDE STEEL I-BEAM W150 X 13.5 (WF X 8.5) POSTS WITH ROUTED WOOD, PLASTIC, OR COMPOSITE OFFSET BRACKETS LISTED IN BULLETIN 15.
3. FOR INSTALLATION OF GUIDERAIL OVER UNDERGROUND STRUCTURES, THE CONCRETE, REINFORCEMENT BARS AND HARDWARE ARE INCIDENTAL TO THE GUIDE RAIL PAY ITEM.
4. PROVIDE RUBBING RAIL WHEN THE HEIGHT OF STRONG POST GUIDE RAIL IS OVER 710 (28") IN TRANSITION AREAS TO EXISTING GUIDE RAIL.
5. ATTACHE W-BEAM RAIL ELEMENTS TO EACH POST. SPLICE RAIL ELEMENTS ONLY AT POSTS AND LAP IN THE DIRECTION OF TRAFFIC.
6. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED. U.S. CUSTOMARY UNITS IN ( ) PARENTHESES.
7. INSTALL GUIDE RAIL DELINEATORS IN ACCORDANCE WITH TC-8604.
8. FOR STRONG POST MEDIAN BARRIER APPLICATIONS, THE INSTALLATION IS A MIRROR IMAGE ON EACH SIDE OF THE POST.
9. BURNING OF POSTS OR RAIL ELEMENT FOR HOLES IS NOT PERMITTED.
10. WHEN THE 600 (2'-0") MINIMUM CLEARANCE FROM THE REAR FACE OF THE GUIDE RAIL POST TO THE FILL SLOPE BREAK CANNOT BE MAINTAINED , PROVIDE STRONG POSTS THAT ARE A MINIMUM OF 300(1'-0") LONGER.



PROPOSED SUBSURFACE INFILTRATION AND RAIN GARDEN CONSTRUCTION NOTE:
Excavation
Excavation to the finished grade should be delayed until all disturbed areas in the watershed have been stabilized or protected. The final phase of excavation should remove all accumulated sediment. Relatively light, tracked-on vehicles shall enter the area of the basin. Compaction of the infiltration area shall be avoided.
Lining Material
Establishing dense vegetation on the infiltration areas is recommended. A dense vegetative cover will not only prevent erosion and sloughing, but will also provide a natural means to maintain relatively high infiltration rates.



TYPE D ENDWALL

NO SCALE

Rev #18	01 - 24 - 20
Rev #17	08 - 29 - 19
Rev #16	03 - 14 - 19
Rev #15	01 - 30 - 19
Rev #14	11 - 29 - 18
Rev #13	07 - 20 - 18
Rev #12	05 - 02 - 18
Rev #11	01 - 31 - 18
Rev #10	11 - 27 - 17
Rev #9	12 - 25 - 09
Rev #8	03 - 30 - 09
Rev #7	04 - 01 - 08
Rev #6	04 - 01 - 07
Rev #5	12 - 22 - 05
Rev #4	07 - 14 - 04
Rev #3	03 - 31 - 03
Rev #2	01 - 09 - 03
Rev #1	05 - 15 - 01

SHEET 18 OF 40
CONSTRUCTION DETAILS

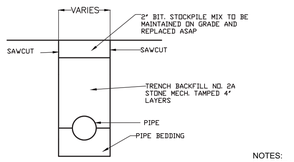
SUBDIVISION PLAN

ROLLING MEADOWS

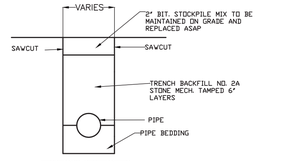
NEW HANOVER TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

ASTON
SURVEYORS/ ENGINEERS , INC.
BOYERTOWN , PA 19512

plan date	4 - 10 - 00
scale	as noted
fld. wk. date	2 - 11 - 00
fld. bk.	127
pg.	36
fin. pl. comp. ck.	00 - 00 - 00 XX
plan no.	2323 - RMU

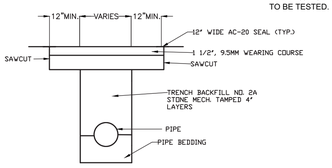


TEMPORARY RESTORATION

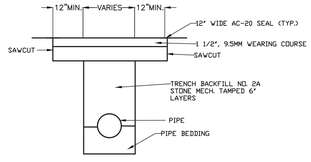


TEMPORARY RESTORATION

NOTES:
1.) COMPACTION / DENSITY TESTING EVERY 50'. SERVICE LATERAL LINES TO BE TESTED.



PERMANENT RESTORATION



PERMANENT RESTORATION

TYPICAL TRENCH RESTORATION DETAILS FOR EXISTING PAVED STREET

NO SCALE

TYPICAL TRENCH RESTORATION DETAILS FOR NEW PAVED STREET

NO SCALE

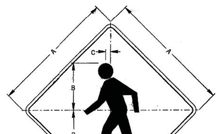
W11–2

PEDESTRIAN SIGN

The Pedestrian Sign (W11-2) may be used to warn of the unexpected hazard of pedestrians entering, or sharing the use of, or crossing the roadway. The W11-2 sign may be installed in advance of the crossing, in which case it may be supplemented with the Distance Ahead Plaque (W16-103P) or the Ahead Plaque (W16-9P).

If the sign is used at the crossing, the W11-2 sign shall be supplemented with a Diagonal Downward Pointing Arrow Plaque (W16-7P) showing the location of the crossing, which may or may not have crosswalk marking. If a W11-2 sign has been post-mounted at the crosswalk location where a Yield Here To Pedestrians sign (R1-5i, or R1-5ii) is used on the approach, the R1-5i, or R1-5ii sign shall not be placed on the same post as, or block the road user's view of, the W11-2 sign.

Fluorescent yellow-green background may be used for the W11-2 Sign, in which case all associated plaques shall be the same color.



SIGN SIZE A x A	B	C	MAR-GIN	BOR-DER	BLANK 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" x 36"	16.3	1.8	0.6	0.8	B3-36

COLOR:

SYMBOL AND BORDER:
BLACK (NON-REFLECTORIZED)

BACKGROUND:
YELLOW OR FLUORESCENT YELLOW GREEN (REFLECTORIZED)

APPROVED FOR THE SECRETARY OF TRANSPORTATION

By : Dr. C Rowe Date : 02-29-12
Chief, Traffic Engineering and Permits Section
Bureau of Maintenance and Operations

W11_2.DGN

R7–8

RESERVED PARKING SIGN

The Reserved Parking Sign (R7-8) is authorized to mark the location of a parking space which is reserved for handicapped persons or severely disabled veterans.

When used the R7–8 sign should generally be installed at the front of each reserved parking stall; except in the case of parallel parking, it should be installed at intervals not exceeding 100' along the side of the stalls. When installed at the front of the parking stalls, the single or double headed arrow may be deleted from the R7–8 sign and the message may be spaced accordingly.

The Reserved Parking Penalties Sign (R7–8P) shall be posted in conjunction with the R7–8 sign. When used, the R7–8P sign shall be placed below the R7–8 sign.



NOTE:
SEE STANDARD ARROW FOR DIMENSIONS OF ARROWHEAD

SIGN SIZE A x B	C	D	E	F	G	H	J	K	L	M	N	F	Q	MAR-GIN	BOR-DER	BLANK STD.
12" x 18"	2	2C	1	6	1.6	2.4	4.9	4.3	3	0.4	4	3.8	0.8	0.4	0.4	B5-1218

* REDUCE SPACING 50%
** REDUCE SPACING 33%

COLOR:

LEGEND, ARROW AND BORDER:
GREEN (REFLECTORIZED)

BACKGROUND AND SYMBOL:
WHITE (REFLECTORIZED)

SYMBOL BACKGROUND:
BLUE (REFLECTORIZED)

APPROVED FOR THE SECRETARY OF TRANSPORTATION

By : Dr. C Rowe Date : 02-29-12
Chief, Traffic Engineering and Permits Section
Bureau of Maintenance and Operations

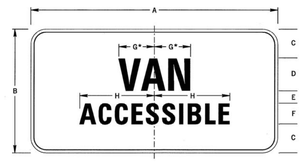
R7_8.DGN

R7–8P

VAN ACCESSIBLE SIGN

The Van Accessible Sign (R7-8P) may be used as a supplemental sign to indicate that a parking space signed with the Reserved Parking Sign (R7-8) is of sufficient size for use by the disabled to accommodate vans displaying a handicapped or severely disabled veteran registration plate or placard.

One in every eight reserved parking spaces for the disabled, but not less than one, shall be designated with the R7-8P sign. When used, the R7-8P sign shall be placed immediately below the Reserved Parking Sign (R7-8).



SIGN SIZE A x B	C	D	E	F	G	H	MAR-GIN	BOR-DER	BLANK STD.
12" x 6"	1.4	1.6D	0.6	1D	2.1	4	0.4	0.4	B5-1206

* INCREASE SPACING 50%

COLOR:

LEGEND AND BORDER:
GREEN (REFLECTORIZED)

BACKGROUND:
WHITE (REFLECTORIZED)

APPROVED FOR THE SECRETARY OF TRANSPORTATION

By : Dr. C Rowe Date : 02-29-12
Chief, Traffic Engineering and Permits Section
Bureau of Maintenance and Operations

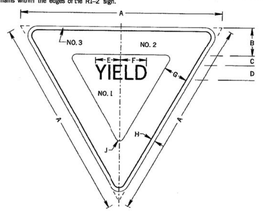
R7_8P.DGN

R1–2

YIELD SIGN

(a) Justification. The Yield Sign (R1-2) shall be authorized for use when it is necessary to assign the right-of-way but when a full stop is not necessary at all times; however, it should not be used when an adequate acceleration lane is provided. For a yield-controlled channelized right-turn movement onto a roadway without an acceleration lane and for an entrance ramp onto a freeway or expressway without an acceleration lane, a No Merge Area (W4-5P) supplemental plaque may be mounted below a R1-2 sign when engineering judgment indicates that road users would expect an acceleration lane to be present.

(b) Size. The standard size of the R1-2 sign for single lane conventional highways shall be 36" per side. The minimum size for multi-lane conventional highways and expressways shall be 48" per side. See General Notes for additional guidance. A sign mounted back-to-back with a R1-2 should stay within the edges of the R1-2 sign. If necessary, the size of the R1-2 sign should be increased so that any other sign installed back-to-back with it remains within the edges of the R1-2 sign.



SIGN SIZE A x A	B	C	D	E	F	G	H	J	MAR-GIN	BOR-DER	BLANK STD.
18" x 18"	2	1	1.5C	2.4	2.2	2	0.4	0.6	——		
36" x 36"	5.8	2	3C	4.8	4.4	5	0.8	1.2			B2-36
48" x 48"	7	2.8	4C	6.3	5.8	6	1	2			B2-48
60" x 60"	9.6	3.6	5C	7.9	7.4	8	1.6	2.4			B2-60

COLOR:

NO. 1 – LEGEND:
RED (REFLECTORIZED)
BACKGROUND:
WHITE (REFLECTORIZED)

NO. 2 – BORDER:
RED (REFLECTORIZED)

NO. 3 – MARGIN:
WHITE (REFLECTORIZED)

APPROVED FOR THE SECRETARY OF TRANSPORTATION

By : Dr. C Rowe Date : 02-29-12
Chief, Traffic Engineering and Permits Section
Bureau of Maintenance and Operations

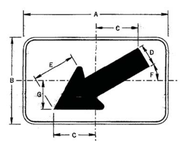
R1_2.DGN

W16–7P

DIAGONAL DOWNWARD POINTING ARROW PLAQUE

The Diagonal Downward Pointing Arrow Plaque (W16-7P) may be used below the Pedestrian Sign (W11-2), the School Sign (S1-1) and other crossing signs when the crossing sign is installed at the crossing location.

The W16-7P sign may be used below any standard warning or regulatory sign, when used with a warning sign, the W16-7P sign shall have the same legend, border and background color as the warning sign with which it is displayed. When used with a regulatory sign , the W16-7P sign shall have a black legend and border on a white background.



SIGN SIZE A x B	C	D	E	F	G	MAR-GIN	BOR-DER	BLANK STD.
24" x 12"	5.8	3	5.9	30°	3.9	0.4	0.6	B5-2412
30" x 18"	8.7	4.5	8.8	30°	5.9	0.6	0.8	B5-3018

COLOR:

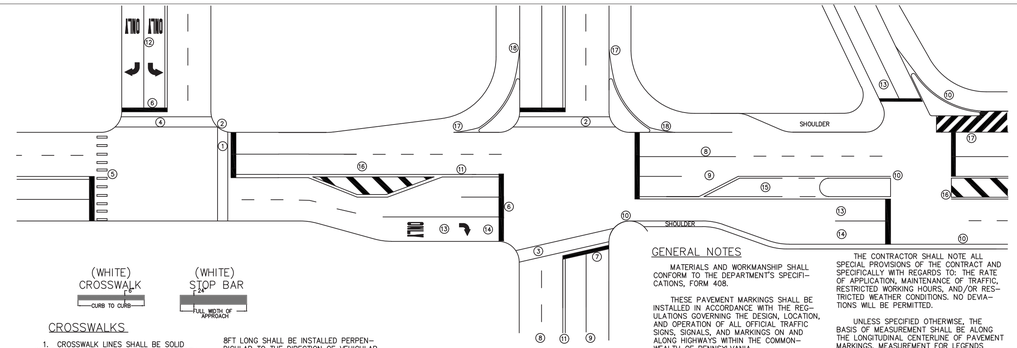
ARROW AND BORDER:
BLACK (NON-REFLECTORIZED)

BACKGROUND:
YELLOW OR FLUORESCENT YELLOW GREEN (REFLECTORIZED) OR WHITE (REFLECTORIZED)

APPROVED FOR THE SECRETARY OF TRANSPORTATION

By : Dr. C Rowe Date : 02-29-12
Chief, Traffic Engineering and Permits Section
Bureau of Maintenance and Operations

W16_7P.DGN



(WHITE) CROSSWALK
CURB TO CURB

(WHITE) STOP BAR
FULL WIDTH OF APPROACH

NOTES

CROSSWALKS

1. CROSSWALK LINES SHALL BE SOLID WHITE LINES, 6 INCHES WIDE, MARKING BOTH EDGES OF THE CROSSWALK AREA.

2. CROSSWALK LINES SHALL EXTEND FROM FACE OF CURB TO FACE OF CURB OR EDGE OF SHOULDER AS APPLICABLE.

3. LINES FORMING A CROSSWALK SHALL BE PARALLEL.

4. THE WIDTH OF CROSSWALKS IS NORMALLY 8FT.

5. WHEN SPECIFIED ON THE PLANS, 24 INCH WIDE CONSECUTIVE WHITE RECTANGLES 8FT LONG SHALL BE INSTALLED PERPENDICULAR TO THE DIRECTION OF VEHICULAR TRAVEL. SPACING SHALL BE APPROXIMATELY 4FT C-C. THEY SHALL BE LOCATED SO AS TO AVOID NORMAL WHEEL PATHS.

STOP BARS

6. STOP BARS, SOLID WHITE LINES BEING 24 INCHES WIDE, SHALL COMPLETELY TRAVERSE ALL TRAFFIC LANES ON EACH APPROACH.

7. STOP BARS SHALL BE LOCATED AT A MINIMUM OF 4FT IN ADVANCE OF AND PARALLEL TO THE CROSSWALK LINES, UNLESS SPECIFIED OTHERWISE ON THE PLANS.

GENERAL NOTES

MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE DEPARTMENT'S SPECIFICATIONS, FORM 408.

THESE PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE REGULATIONS GOVERNING THE DESIGN, LOCATION, AND OPERATION OF ALL OFFICIAL TRAFFIC SIGNS, SIGNALS, AND MARKINGS ON AND ALONG HIGHWAYS WITHIN THE COMMONWEALTH OF PENNSYLVANIA.

ALL PAVEMENT MARKINGS SHALL BE REFLECTORIZED.

THE CONTRACTOR SHALL PREPARE THE PAVEMENT SURFACE FOR THE PROPER ADHESION. ANY SWEEPING OR REMOVAL OF DEBRIS, GRAVEL, DIRT, OR OTHER FOREIGN MATERIALS SHALL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE NEW PAVEMENT MARKINGS, AND NO SEPARATE PAYMENT SHALL BE MADE THEREFORE.

THE CONTRACTOR SHALL REMOVE ALL PREVIOUS PAVEMENT MARKINGS, WHICH IN THE OPINION OF THE ENGINEER CONFLICT WITH THE NEW PAVEMENT MARKINGS. UNLESS SPECIFICALLY STATED OTHERWISE THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE NEW PAVEMENT MARKINGS, AND NO SEPARATE PAYMENT WILL BE MADE THEREFORE.

THE CONTRACTOR SHALL NOTE ALL SPECIAL PROVISIONS OF THE CONTRACT AND SPECIFICALLY WITH REGARDS TO: THE RATE OF APPLICATION, MAINTENANCE OF TRAFFIC, RESTRICTED WORKING HOURS, AND/OR RESTRICTED WEATHER CONDITIONS. NO DEVIATIONS WILL BE PERMITTED.

UNLESS SPECIFIED OTHERWISE, THE BASIS OF MEASUREMENT SHALL BE ALONG THE LONGITUDINAL CENTERLINE OF PAVEMENT MARKINGS. MEASUREMENT FOR LEGENDS SHALL BE PER MESSAGE, COMPLETE AND IN PLACE.

PRIOR TO APPLICATION, THE CONTRACTOR SHALL FIELD CHECK AND LOCATE ALL PAVEMENT MARKINGS TO THE SATISFACTION OF THE ENGINEER.

ALL MARKINGS IMPROPERLY APPLIED OR LOCATED SHALL BE COMPLETELY REMOVED AND CORRECTLY RE-APPLIED, AT THE SOLE EXPENSE OF THE CONTRACTOR.

WHERE BITUMINOUS SEALANTS PREVENTS OR MAKES IMPRACTICAL THE EXTENDING OF LINES TO THE FACE OF THE CURB, THE CONTRACTOR SHALL EXTEND LINES TO EDGE OF SEALANT OR WITHIN ONE FOOT OF THE FACE OF CURB, WHICHEVER IS LESS.

ALL INTERSECTION PAVEMENT MARKINGS (SHORT LINES & LEGENDS) SHALL BE HOT THERMOPLASTIC. ALL LONG LINES SHALL BE EPOXY.

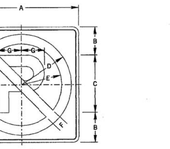
R8–3

NO PARKING SYMBOL SIGN

(a) Justification. The No Parking Symbol Sign (R8-3) shall be authorized for use to prohibit parking along a given highway. If the restriction applies to a limited area or zone, supplemental signs or messages shall be authorized to show the limits of the restriction. Authorized supplemental signs include, but are not limited to the Restricted Hours Plaque (R10-20AP), No Parking Restricted Hours Plaque (R8-3hP-1), No Parking Loading Zone Plaque (R8-3GP-1), No Parking Arrow Plaque (R7-30J), Tow-Away Zone Sign (R7-201AP) and No Parking On Pavement Sign (R8-3CP). As an alternate to the use of supplemental signs, the appropriate supplemental message and the no parking symbol may be incorporated into a single sign.

(b) Size. The standard size R8-3 sign shall be 12" x 12" in business, residential, or park areas and 24" x 24" in rural areas. The standard size for expressways shall be 36" x 36", and on freeways shall be 48" x 48".

(c) Placement. Signs should be set at an angle of not less than 30° or more than 45° with a line parallel to the flow of traffic so as to be visible to approaching traffic. Care should be taken to ensure that supplemental arrows point in the proper direction to indicate the regulated area. Signs shall be placed at the beginning of and at reasonable intervals throughout the restriction.



SIGN SIZE A x A	B	C	D	E	F	G	MAR-GIN	BOR-DER	BLANK STD.
12" x 12"	3	6E(M)	4.9	3.9	1	2.4	0.4	0.4	——
24" x 24"	6	12E(M)	10.5	8.5	2	4.8	0.4	0.6	B3-24
36" x 36"	9	18E(M)	15.8	12.8	3	7.2	0.6	0.8	B3-36
48" x 48"	12	24E(M)	21	17	4	9.6	0.8	1.2	B3-48

ALL "NO PARKING " SIGNS ARE TO BE DOUBLE SIDED

COLOR:

SYMBOL AND BORDER:
BLACK (NON-REFLECTORIZED)

CIRCLE AND DIAGONAL:
RED (REFLECTORIZED)

BACKGROUND:
WHITE (REFLECTORIZED)

APPROVED FOR THE SECRETARY OF TRANSPORTATION

By : Dr. C Rowe Date : 02-29-12
Chief, Traffic Engineering and Permits Section
Bureau of Maintenance and Operations

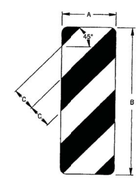
R8_3.DGN

OM–3R

RIGHT CLEARANCE MARKER

(a) Justification. The Right Clearance Marker (OM-3R) may be used to delineate bridge abutments, parapets, handrails, underpass piers and culvert headwalls within or adjacent to the roadway where traffic is required to pass to the left of the obstruction or object.

(b) Placement. The left edge of the OM-3R marker shall be in line with the left edge of the obstruction or object. When used at bridges with a wheel guard, the left edge of the marker should be in line with the left edge of the wheel guard. The bottom of the marker should be at a height of 3' to 5' above the near edge of the pavement.



SIGN SIZE A x B	C	BLANK STD.
12" x 36"	4 TO 6.5	B5-1236
18" x 36"	4 TO 6.5	B5-3618

COLOR:

STRIPES:
BLACK (NON-REFLECTORIZED)

BACKGROUND:
YELLOW (REFLECTORIZED)

APPROVED FOR THE SECRETARY OF TRANSPORTATION

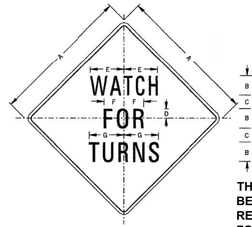
By : Dr. C Rowe Date : 02-29-12
Chief, Traffic Engineering and Permits Section
Bureau of Maintenance and Operations

OM_3R.DGN

W11–107

WATCH FOR TURNS SIGN

The Watch For Turns Sign (W11-107) may be used in advance of a location where geometric conditions are such that slight distance for opposing turning movements is restricted, and a protected turn phase has not been provided if the intersection is signalized.



THIS SIGN IS TO BE MODIFIED TO READ: "WATCH FOR U-TURNS"

SIGN SIZE A x A	B	C	D	E	F	G	MAR-GIN	BOR-DER	BLANK STD.
30" x 30"	4C	3	2	6.8	4	7	0.5	0.8	B3-30
36" x 36"	5C	3.5	2.5	8.6	5.1	8.7	0.6	0.8	B3-36

COLOR:

LEGEND AND BORDER:
BLACK (NON-REFLECTORIZED)

BACKGROUND:
YELLOW (REFLECTORIZED)

APPROVED FOR THE SECRETARY OF TRANSPORTATION

By : Dr. C Rowe Date : 02-29-12
Chief, Traffic Engineering and Permits Section
Bureau of Maintenance and Operations



W14–2
NO OUTLET SIGN
NO SCALE

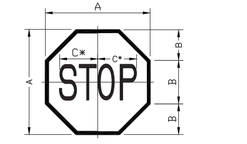
DIMENSIONS (IN)									
SIGN SIZE A X A	B	C	D	E	F	G	MARGIN	BORDER	BLANK STD.
30" X 30"	6D	4	1	4.8	14	14.5	0.4	0.8	B3–30

COLOR:

LEGEND AND BORDER:
BLACK (NON–REFLECTORIZED)

BACKGROUND:
YELLOW (REFLECTORIZED)

ALL SIGNS SHALL BE PROVIDED WITH HIGH INTENSITY BACKING.

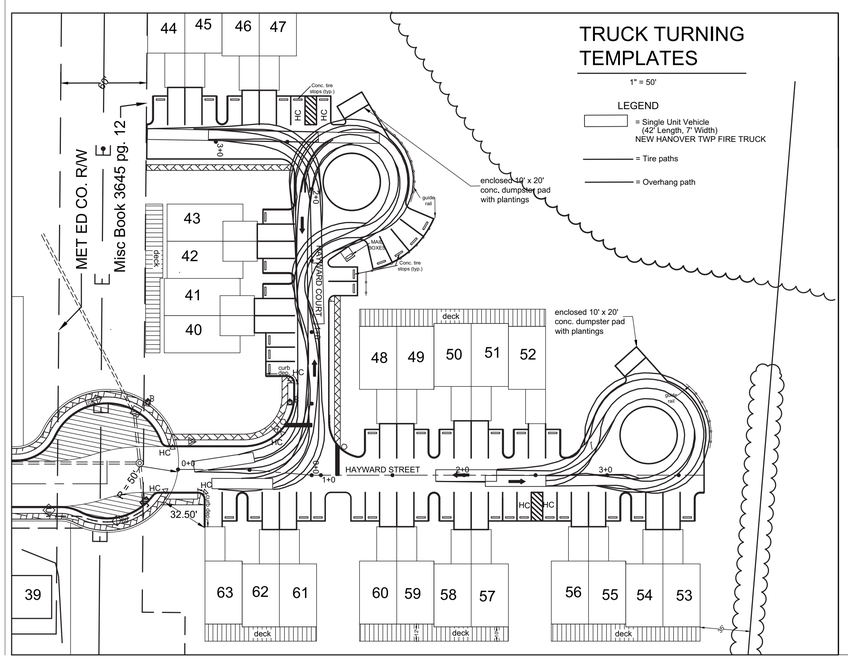


COLOR: LEGEND AND BORDER WHITE (REFLECTORIZED)
BACKGROUND RED (REFLECTORIZED)

SIGN SIZE	DIMENSIONS A	B	C	SERIES	BORDER	BLANK STD
24x24	24	8	10	C	5/8	BI–24
30x30	30	10	12.5	C	3/4	BI–30
36x36	36	12	15	C	7/8	BI–36
48x48	48	16	20	C	1 1/4	BI–48

* REDUCE SPACING 40%

R1–1 STOP SIGN
NO SCALE



TRUCK TURNING TEMPLATES

1" = 50'

LEGEND

= Single Unit Vehicle (42' Length, 7' Width) NEW HANOVER TWP FIRE TRUCK

= Tire paths

= Overhang path

Rev	Date
Rev #18	01 - 24 - 20
Rev #17	08 - 29 - 19
Rev #16	03 - 14 - 19
Rev #15	01 - 30 - 19
Rev #14	11 - 29 - 18
Rev #13	07 - 20 - 18
Rev #12	05 - 02 - 18
Rev #11	01 - 31 - 18
Rev #10	11 - 27 - 17
Rev #9	12 - 25 - 09
Rev #8	03 - 30 - 09
Rev #7	04 - 01 - 08
Rev #6	04 - 01 - 07
Rev #5	12 - 22 - 05
Rev #4	07 - 14 - 04
Rev #3	03 - 31 - 03
Rev #2	01 - 09 - 03
Rev #1	05 - 15 - 01

SHEET 19 OF 40
CONSTRUCTION DETAILS

SUBDIVISION PLAN

ROLLING MEADOWS

NEW HANOVER TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

ASTON
SURVEYORS/ ENGINEERS , INC.
BOYERTOWN , PA 19512

plan date
4 - 10 - 00

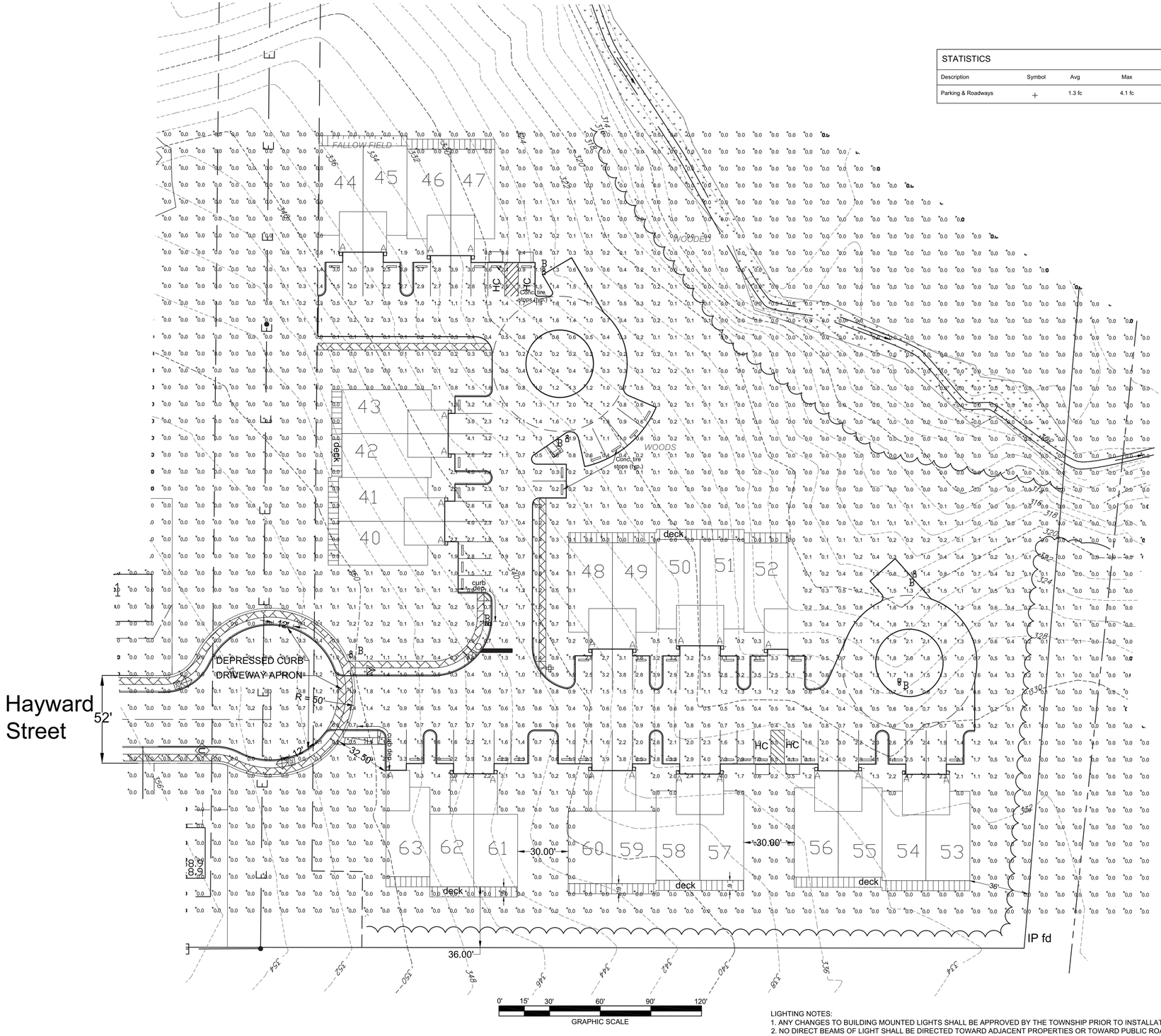
scale
as noted

fld. wk. date
4 - 10 - 00

fld. bk. 127
pg. 36

fin. pl. comp. ck.
00 - 00 - 00 XX

plan no.
2323 - RMV



STATISTICS

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Parking & Roadways	+	1.3 fc	4.1 fc	0.1 fc	41.0:1	13.0:1

PLAN LEGEND

- S = SANITARY SEWER LINE
- W = D.I.P. WATER LINE
- HC = CURB CUT RAMP
- WV = WATER VALVE
- = FIRE HYDRANT
- BO = BLOW OFF VALVE
- = EXISTING CONTOUR
- = PROPOSED CONTOUR
- = INLET
- = 8" CONCRETE CURB
- = CONCRETE SIDEWALK
- = SOIL BOUNDARY LINE
- = SANITARY SEWER MANHOLE
- = RCP STORM SEWER PIPE
- = Limit of Required Perimeter Buffer
- = Delineated "Waters of the U.S."
- E = existing electric line
- = Soil Type Rt - floodplain soils
- = proposed street light
- B = proposed pole mounted light
- = proposed cleanout assembly w/ vent box
- = proposed cleanout assembly
- PSL PSL = proposed sewer lateral
- PWL PWL = proposed water lateral
- PS = proposed sanitary sewer
- PW PW = proposed 8" or 12" Ø water main
- 6PW 6PW = proposed 6" Ø water main
- 4PW 4PW = proposed 4" Ø water main
- = proposed retaining wall
- = proposed guide rail
- = proposed split rail fence
- B = Spaulding Lighting – Pole Mount
- A = Hubbell Outdoor Lighting – Wall Mount

FIXTURE SCHEDULE

ENVIRONMENT: CR – CORROSIVE; DL – DAMP LOCATION; HZ – HAZARDOUS; IN – INDOOR; WL – WET LOCATION
MOUNTING TYPE: B – BOLLARD; P – PENDANT; PL – POLE; R – RECESSED; S – SURFACE; T – TRACK; W – WALL

TYPE	MANUFACTURER	CAT NO	DESCRIPTION	LAMPS				MNTG TYPE	MNTG HEIGHT	LLF	LOAD IN WATTS	REMARKS	IES FILE NAME
				NO	TYPE	LUMENS	ENVR						
A	Hubbell Outdoor Lighting	LMC – 30LU – 4K – 4 – 035	Laredo LMC, 30 LED, 4200K, TYPE 4, 350mA	30	LED – 4000K – 70 CRI	ABSOLUTE	WL	W	10'–0"	0.79	70	24 REQUIRED – SEE LIGHTING NOTES 1	CL1–30L–4K–3.IES
B	Spaulding Lighting	CL1 – 30L – 4K – 3	Cimarron CL1	30	NICHIA 4K LED	ABSOLUTE	WL	PL	20'–0"	0.79	35.5	MOUNT ON 20'–0" POLE – 6 REQUIRED	LMC–30LU–4K–4–035.IES

LIGHTING NOTES:
1. ANY CHANGES TO BUILDING MOUNTED LIGHTS SHALL BE APPROVED BY THE TOWNSHIP PRIOR TO INSTALLATION.
2. NO DIRECT BEAMS OF LIGHT SHALL BE DIRECTED TOWARD ADJACENT PROPERTIES OR TOWARD PUBLIC ROADS.
3. LIGHTING FIXTURES THAT SHIELD THE REFLECTOR OR LENS OR ANY HIGH BRIGHTNESS SURFACE FROM VIEWING ANGLES ABOVE 60 DEGREES FROM HORIZONTAL SHALL BE UTILIZED.
4. IF THERE IS ANY CHANGE TO THE PROPOSED TOWNHOUSE LIGHTING, THE DEVELOPER OF THE TOWNHOUSE UNITS SHALL SHOW COMPLIANCE WITH SECTION 22-823.6 - ILLUMINATION OF PARKING AREAS BY PROVIDING A PLAN TO THE TOWNSHIP FOR REVIEW THAT DEPICTS MAINTAINED ILLUMINATION LEVELS ON A 10' GRID. THE ILLUMINATION GRID SHALL EXTEND TO ZERO FOOTCANDLE LOCATION. THE LIGHTING PLAN SHALL INCLUDE DESIGN DATA SUCH AS MAXIMUM, MINIMUM, AND AVERAGE ILLUMINATION CALCULATIONS AS WELL AS THE LIGHT LOS FACTOR USED TO PERFORM THE CALCULATIONS. IN ADDITION TO THESE REQUIREMENTS, THE LIGHTING DESIGN SHALL COMPLY WITH IESNA RECOMMENDED PRACTICES FOR PARKING LOTS. PARKING AREAS FOR PERFORMANCE STANDARD DEVELOPMENTS SHALL BE LIGHTED TO A MINIMUM MAINTAINED ILLUMINATION LEVEL OF ONE FOOTCANDLE LIGHTING STANDARDS SHALL BE LOCATED NOT LESS THAN 2 FEET FROM THE PAVING OF PARKING SPACES, DRIVES OR STREETS. THE LIGHTING PLAN SHALL BE SUBMITTED TO THE TOWNSHIP AT THE TIME OF BUILDING PERMIT APPLICATION.

Rev #18	01 - 24 - 20
Rev #17	08 - 29 - 19
Rev #16	03 - 14 - 19
Rev #15	01 - 30 - 19
Rev #14	11 - 29 - 18
Rev #13	07 - 20 - 18
Rev #12	05 - 02 - 18
Rev #11	01 - 31 - 18
Rev #10	11 - 27 - 17
Rev #9	12 - 25 - 09
Rev #8	03 - 30 - 09
Rev #7	04 - 01 - 08
Rev #6	04 - 01 - 07
Rev #5	12 - 22 - 05
Rev #4	07 - 14 - 04
Rev #3	03 - 31 - 03
Rev #2	01 - 09 - 03
Rev #1	05 - 15 - 01

SHEET 20 OF 40
ENLARGED SITE PLAN FOR
TOWNHOUSE UNITS LIGHTING

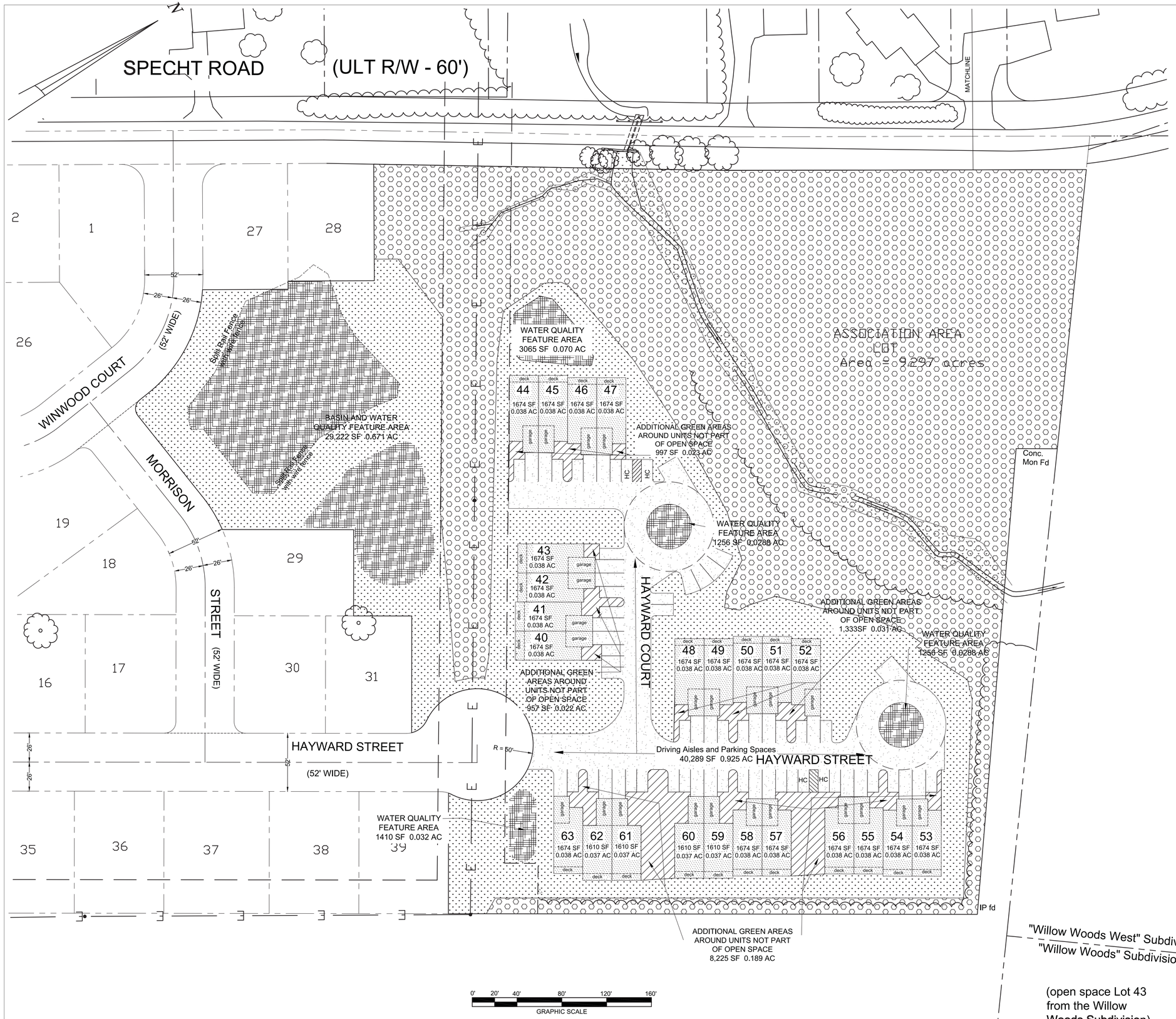
SUBDIVISION PLAN

ROLLING MEADOWS

NEW HANOVER TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

ASTON
SURVEYORS/ ENGINEERS , INC.
BOYERTOWN , PA 19512

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scale	1" = 30'
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TOWNHOUSE AREA

Area of Townhouse Units:

Unit No.	Area	Unit No.	Area
40	1,674 Sq. Ft.	52	1,674 Sq. Ft.
41	1,674 Sq. Ft.	53	1,674 Sq. Ft.
42	1,674 Sq. Ft.	54	1,674 Sq. Ft.
43	1,674 Sq. Ft.	55	1,674 Sq. Ft.
44	1,674 Sq. Ft.	56	1,674 Sq. Ft.
45	1,674 Sq. Ft.	57	1,674 Sq. Ft.
46	1,674 Sq. Ft.	58	1,674 Sq. Ft.
47	1,674 Sq. Ft.	59	1,610 Sq. Ft.
48	1,674 Sq. Ft.	60	1,610 Sq. Ft.
49	1,674 Sq. Ft.	61	1,610 Sq. Ft.
50	1,674 Sq. Ft.	62	1,610 Sq. Ft.
51	1,674 Sq. Ft.	63	1,674 Sq. Ft.

Total Area = 39,920 SQ. FT. = 0.916 ACRES

Area of Driving Aisles and Parking Spaces:

Area = 40,289 SQ. FT. = 0.925 ACRES

Total Townhouse Area = 80,209 SQ. FT. = 1.841 ACRES

STORMWATER AREA

Area of Stormwater Basin and Water Quality Feature:
Area = 29,222 SQ. FT. = 0.671 ACRES
Area of Water Quality Feature:
Area = 1256 SQ. FT. = 0.029 ACRES
Area of Water Quality Feature:
Area = 1256 SQ. FT. = 0.029 ACRES
Area of Water Quality Feature:
Area = 1410 SQ. FT. = 0.032 ACRES
Area of Water Quality Feature:
Area = 3066 SQ. FT. = 0.070 ACRES

Total Stormwater Area = 35,763 SQ. FT. = 0.831 ACRES

ADDITIONAL GREEN AREAS AROUND UNITS NOT PART OF OPEN SPACES

Area of Green next to Units 44-47:
Area = 977 SQ. FT. = 0.023 ACRES
Area of Green next to Units 40-43:
Area = 957 SQ. FT. = 0.022 ACRES
Area of Green next to Units 48-52:
Area = 1,333 SQ. FT. = 0.031 ACRES
Area of Green next to Units 53-63:
Area = 8,225 SQ. FT. = 0.189 ACRES

Total Additional Green Areas Around Units Not Part Of Open Spaces = 11,492 SQ. FT. = 0.265 ACRES

OPEN SPACE DETERMINATION

Total area of Association Lot (to Street R/W Line) = 9.297 Acres

Townhouse Area = (-) 1.841 Acres

Stormwater Basin Area = (-) 0.831 Acres

Additional Green Areas Around Units Not Part Of Open Spaces = (-) 0.265 Acres

---

Net area of Open Space = 6.360 Acres

Open Space (lawn) =

Open Space (natural area) =

Required Open Space = 6.316 Acres;
therefore the proposed Open Space complies

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Rev #15	01 - 30 - 19
Rev #14	11 - 29 - 18
Rev #13	07 - 20 - 18
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Rev #11	01 - 31 - 18
Rev #10	11 - 27 - 17
Rev #9	12 - 25 - 09

SHEET 21 OF 40
OPEN SPACE PLAN

SUBDIVISION PLAN

ROLLING MEADOWS

NEW HANOVER TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

ASTON
SURVEYORS/ ENGINEERS , INC.
BOYERTOWN , PA 19512

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scale	1" = 40'
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(T-458) SPECHT ROAD (ULT R/W - 60')

ULT R/W LINE

MATCHLINE

N 33°16'05" E 319.65'

Proposed Driveway to "Pestcoe/Robinson" 117.63'

(A non-building lot)

N 11°13'55" W 129.86'

N 11°13'55" W 87.87'

N 33°16'05" E 601.47'

921.12'

N 34°34'05" E

601.14'

N 34°34'05" E

Right Clearance Markers(W16 - 2R)

N 33°25'07" E 356.40'

N 33°25'07" E 356.44'

N 33°25'07" E 324.64'

N 33°25'07" E 321.66'

S 50°30'54" E 30.17'

S 50°30'54" E 250.08'

S 50°30'54" E 280.85'

S 33°43'25" W 36.77'

S 51°14'27" E

S 33°37'24" W 437.44'

IP fd

417.47'

ASSOCIATION AREA
LOT
Area = 9.297 acres

Conc. Mon Fd

Split Rail Fence

enclosed 10' x 20' conc. dumpster pad with plantings

enclosed 10' x 20' conc. dumpster pad with plantings

(T-493) MOYER ROAD (ULT R/W - 60')

N 20°49'40" E 168.81'

N 75°55'52" W 159.48'

N 20°49'40" E 168.81'

N 75°55'52" W 159.48'

spad fd

ULT R/W LINE

(ULT. R/W - 60')

WINWOOD COURT

R = 50'

(52' WIDE)

MORRISON STREET (52' WIDE)

HAYWARD COURT

HAYWARD STREET (52' WIDE)

R40'

R35'

R25'

DEPRESSED CURB DRIVEWAY APRON

"Private" sign

Typ end unit single garage: 14' x 24'

12' offset

Typ. Unit 2' min offset

Typ. Unit

AB. unit: 26' x 43' (2 floors) with garage: 14' x 24'

Typ. unit: 26' x 53' (2 floors) with garage: 14' x 24'

36.00'

30.00'

1128.02'

1159.48'

(T-454)
YARNAL ROAD
ULT R/W LINE

ULT R/W LINE
(ULT. R/W - 60')

ULT R/W LINE

ULT R/W LINE

1 2 3 4 5 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63

PLAN LEGEND

- = SANITARY SEWER LINE
- = D.I.P. WATER LINE
- HC = CURB CUT RAMP
- WV = WATER VALVE
- = FIRE HYDRANT
- BO = BLOW OFF VALVE
- = EXISTING CONTOUR
- = PROPOSED CONTOUR
- = INLET
- = 8" CONCRETE CURB
- = CONCRETE SIDEWALK
- = SOIL BOUNDARY LINE
- = SANITARY SEWER MANHOLE
- = RCP STORM SEWER PIPE
- = Limit of Required Perimeter Buffer
- = Delineated "Waters of the U.S."

E = existing electric line

= Soil Type Rt - floodplain soils

B = proposed pole mounted light

SL = proposed street light

= proposed cleanout assembly

sl = proposed sewer lateral

wl = proposed water lateral

PSL = proposed sewer lateral for townhouse unit

PWL = proposed water lateral for townhouse unit

PS = proposed sanitary sewer

PW = proposed 8" Ø water main

6"W = proposed 6" Ø water main

4"W = proposed 4" Ø water main

= proposed retaining wall

= proposed guide rail

= proposed split rail fence

PROPOSED SIGN LEGEND:

NOTE: Street name signs and traffic control signs shall be consistent in design and specification with those in general use by the Township. All signs shall be provided with high intensity backing. Sign types, locations and installation shall be subject to the determination, approval and inspection of the Township Engineer and installed at the cost of the developer. (See Sheet 22 for Traffic Control Sign Details)

- = STOP SIGN [Type R1-1] (6 required)
- = NO PARKING SIGN (23 required)
- = STREET SIGN (6 required)
- = RIGHT CLEARANCE MARKERS (2 required)
- = NO OUTLET SIGN (2 required)
- = SPEED LIMIT 25 SIGN (19 required)
- = SPEED LIMIT 15 SIGN (6 required)
- = WATCH FOR U-TURN SIGN [Type W11-21-2 modified] (1 required)
- = YIELD SIGN [Type R1-2] (1 required)
- P = PEDESTRIAN CROSSING Sign [Type W11-2] (2 required)
- = DOWNWARD DIRECTIONAL ARROW Sign [Type W16-7P] (2 required)
- HC = "RESERVED HANDICAPPED PARKING" WITH "VAN ACCESSIBLE" Sign (4 required) Post mounted at minimum 60" height to bottom of sign

PAVEMENT MARKING

= STOP BAR

= CROSS WALK

610 (24") WIDE AREA OF DETECTABLE WARNING TRUNCATED DOMES SEE DETAIL

SIDEWALK AREA

PEDESTRIAN CROSSWALK

4'-0" MIN

PEDESTRIAN CROSSWALK LINE

DEPRESSED CURB

PEDESTRIAN CROSSWALK LINE

PLAN
SINGLE CURB RAMP
WITH
CROSSWALK MARKINGS

C

C

PLAN

SECTION C—C

1. ALIGN DETECTABLE WARNING DOMES ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN THE DOMES.
2. PROVIDE DETECTABLE WARNING SURFACES THAT CONTRAST (70%) IN LIGHT REFLECTANCE WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT OR SAFETY YELLOW.

DETECTABLE WARNING TRUNCATED DOME DETAIL
NO SCALE

0' 25' 50' 100' 150'

GRAPHIC SCALE

SHEET 22 OF 40
PAVEMENT MARKING & SIGNAGE PLAN

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Rev #17	08 - 29 - 19
Rev #16	03 - 14 - 19
Rev #15	01 - 30 - 19
Rev #14	11 - 29 - 18
Rev #13	07 - 20 - 18
Rev #12	05 - 02 - 18

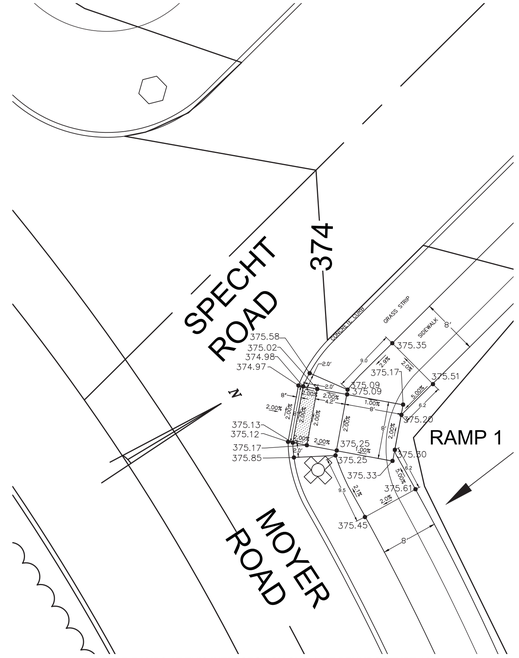
SUBDIVISION PLAN

ROLLING MEADOWS

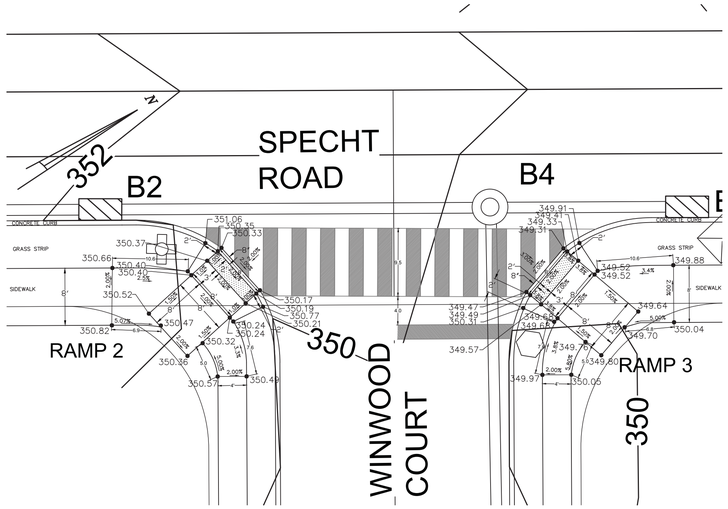
NEW HANOVER TOWNSHIP
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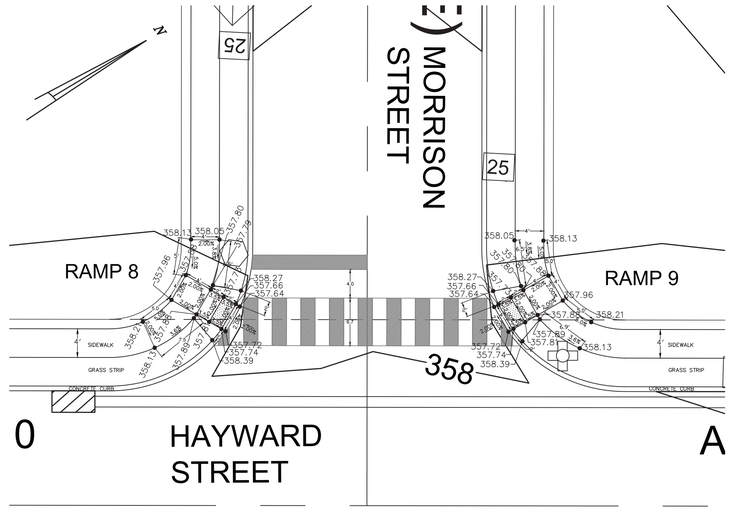
plan date	05 - 02 - 18
scale	1" = 50'
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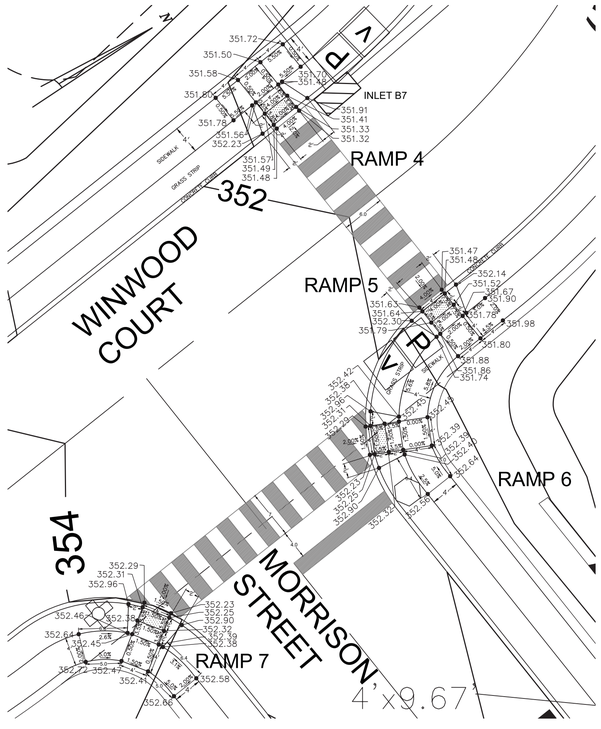
ALL CURB RAMPS AT THIS INTERSECTION SHALL BE PENNDOT TYPE 4A



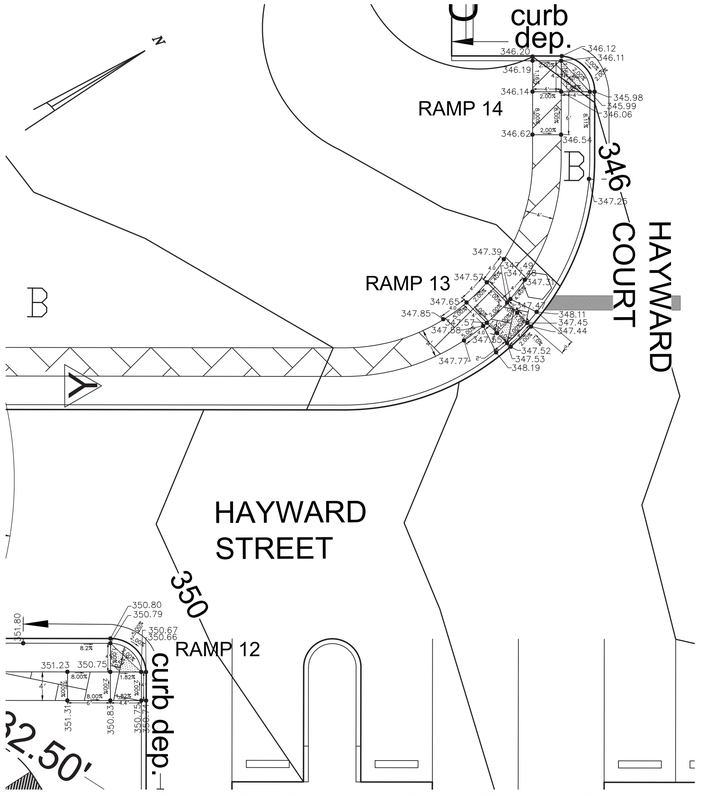
ALL CURB RAMPS AT THIS INTERSECTION SHALL BE PENNDOT TYPE 4A



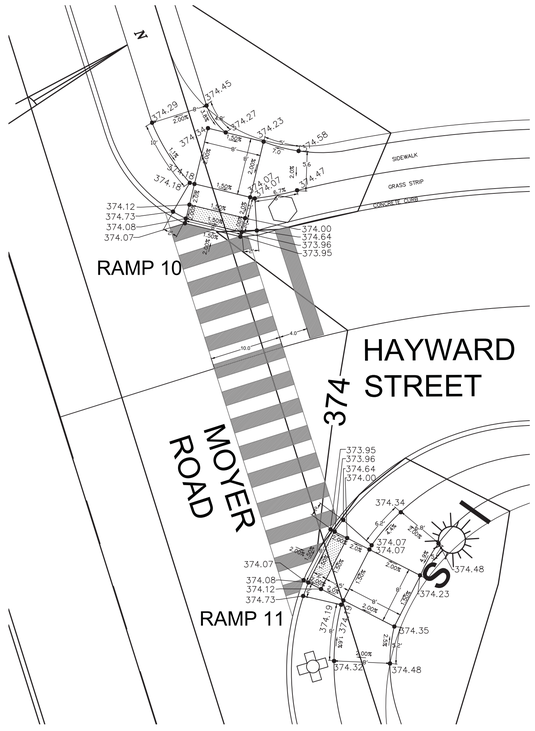
ALL CURB RAMPS AT THIS INTERSECTION SHALL BE PENNDOT TYPE 4A



ALL CURB RAMPS AT THIS INTERSECTION SHALL BE PENNDOT TYPE 4A



THE CURB RAMP 13 SHALL BE PENNDOT TYPE 4A. THE CURB RAMPS 12 and 14 AT THE PARKING AISLES SHALL BE PENNDOT TYPE 1A.



ALL CURB RAMPS AT THIS INTERSECTION SHALL BE PENNDOT TYPE 4A

NOTES:
1. ALL SIDEWALKS SHALL BE 4 FEET WIDE EXCEPT FOR SIDEWALKS ALONG MOYER AND SPECHT ROADS WHICH SHALL BE 8 FEET WIDE.
2. ALL SIDEWALKS CROSS SLOPES SHALL BE A 2% SLOPE TOWARD THE ROAD, UNLESS OTHERWISE INDICATED ON THE THE CURB RAMP DETAILS ON THIS DRAWING.
3. ALL CURB RAMPS WITHIN THE PUBLIC ROAD RIGHT OF WAYS SHALL CONFORM TO CURRENT ADA GUIDELINES.

0' 5' 10' 20' 30' 40'
GRAPHIC SCALE

- = STOP SIGN [Type R1-1] (7 required)
- = NO PARKING SIGN (22 required)
- = STREET SIGN (5 required)
- = RIGHT CLEARANCE MARKERS (2 required)
- = NO OUTLET SIGN (2 required)
- = SPEED LIMIT 25 SIGN (19 required)
- = SPEED LIMIT 15 SIGN (6 required)
- = WATCH FOR U-TURN SIGN [Type W11-21-2 modified] (1 required)
- = YIELD SIGN [Type R1-2] (1 required)
- = PEDESTRIAN CROSSING Sign [Type W11-2] (2 required)
- = DOWNWARD DIRECTIONAL ARROW Sign [Type W16-17P] (2 required)

PAVEMENT MARKING
= STOP BAR
= CROSS WALK

PLAN LEGEND
= existing electric line
= PROPOSED CONTOUR
= INLET
= CONCRETE SIDEWALK
= proposed street light
= proposed pole mounted light
= Detectable Warning Tiles

SHEET 23 OF 40
CURB RAMP DETAILS

Rev #18	01 - 24 - 20
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Rev #15	01 - 30 - 19
Rev #14	11 - 29 - 18
Rev #13	07 - 20 - 18
Rev #12	05 - 02 - 18

SUBDIVISION PLAN

ROLLING MEADOWS

NEW HANOVER TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

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* DOUGLASS TOWNSHIP THIS SIDE

(T-458) SPECHT ROAD (ULT R/W - 60')

ULT R/W LINE

LIMIT OF NPDES PERMIT

* NEW HANOVER TOWNSHIP THIS SIDE

D. BLK.47 U.60 | D. BLK.47 U.45 | D. BLK.47 U.46 | D. BLK.47 U.47 | D. BLK.47 U.48 | D. BLK.47 U.74 | D. BLK.47A U.10 | D. BLK.47 U.59 | D. BLK.47 U.58 | D. BLK.47A U.9 | D. BLK.47 U.57

MATCHLINE

TP 36 TP 48 TP 42 TP 49 TP 43 TP 40 TP 50 TP 35 TP 37 TP 38 TP 39 TP 51 TP 34 TP 33 TP 52 TP 22 TP 29 TP 23 TP 31 TP 32 TP 30 TP 24 TP 21 TP 28 TP 44 TP 27 TP 45 TP 26 TP 46 TP 25 TP 47 TP 41 TP 20 TP 19 TP 18

SW1 SW3 SW6 SW8 SW10 SW12 SW13 SW14 SW15 SW17

MINIMIZED DISTURBANCE/ REDUCED GRADING

PROTECTED STEEP SLOPES

MINIMIZED DISTURBANCE/ REDUCED GRADING/SOIL AMENDMENT

PROTECTED WOODED AREA

PROTECTED FLOODPLAIN

Soil Type PeB

Soil Type PkD STEEP SLOPES

Soil Type AbB

Soil Type PeC

Soil Type RhB

Soil Type Rt (floodplain soils)

Soil Type PkD

Stream/Intermittent Subject

Protective fencing for tree row

PROPERTY LINE BETWEEN BLOCK 66 UNITS 99 AND 100

WOODED AREA TO BE REMOVED

tree to be removed

tree to be preserved

EXISTING TREE TO BE PROTECTED NOT INCLUDED UNDER NON-STRUCTURAL BMP 5.6.3 CREDIT

EXISTING TREE TO BE PROTECTED UNDER NON-STRUCTURAL BMP 5.6.3 CREDIT CANOPY AREA =559 S.F.

EXISTING TREES TO BE PROTECTED UNDER NON-STRUCTURAL BMP 5.6.3 CREDIT CANOPY AREA = 8485 S.F.

Conc. Mon Fd

Lot 5 of the "Willow Woods West" Subdivision (pbv. A57 pg. 17) N/L Douglas J. Jones dbv.5394 pg.1697 N.H. BLK. 59B U.48 Parcel #47-00-00832-165

Protective fencing for tree row

"Willow Woods West" Subdivision

"Willow Woods" Subdivision Mark L. Heydt & Sandra B. Vitabile dbv.5370 pg.1844 (pbv.A-57 pg. 15,16) N.H.BLK.59 U.92 Parcel #47-00-07832-464

N.H. BLK.66 U.93 | N.H. BLK.66 U.95 | N.H. BLK.66 U.96 | N.H. BLK.66 U.1 | N.H. BLK.66 U.94

(T-493) MOYER ROAD (ULT R/W - 60')

(T-454) YARNAL ROAD ULT R/W LINE

ULT R/W LINE (ULT. R/W - 60')

(Agricultural Parcel)

spad fd | fd

PERIMETER OF LOCATION OF GRAVEL DRIVE

APPROXIMATE LOCATION OF SEDIMENT BARRIER

APPROXIMATE LOCATION OF SOIL STOCKPILE

18" RCP

SOURCE OF TITLE
TAX BLOCK 66 UNIT 98 (PARCEL #47-00-07678-033)
TAX BLOCK 66 UNIT 99 (PARCEL #47-00-05128-018)
TAX BLOCK 66 UNIT 100 (PARCEL #47-00-07678-042)

"MOYER FARM" Subdivision- PBV. A-55 PG. 353, 354

Being the same property as that which Nick & Les, Inc. by a deed dated September 24, 2019 and recorded in deed book 6158 page 01275 in the Montgomery County Records granted and conveyed unto Wexford Court, LLC.

NPDES PERMIT #PAC460042

OWNER & DEVELOPER:
Wexford Court, LLC
356 Hidden Farm Drive
Exton, PA 19431
PH: 610-960-9220
Contact: Joseph Margusity

MATURE TREE PRESERVATION NOTE:
A count of mature trees on-site indicates there are approximately 62 mature trees on this tract. No more than 40% of these may be removed. Only two trees (3%) are indicated for removal.

SOIL LEGEND:

AbB - Abbottstown silt loam, 3 to 8% slopes,
Depth to restrictive feature: 15 to 30 inches to fragipan
40 to 60 inches to lithic bedrock
Depth to water table: 6 to 18 inches
Residential Development - Very Limited
Lawns and Landscaping - Very Limited
Local Roads and Streets - Somewhat Limited

PeB - Penn silt loam, 3 to 8% slopes,
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Depth to water table: More than 80 inches
Residential Development - Very Limited
Lawns and Landscaping - Moderate,
Local Roads and Streets - Moderate

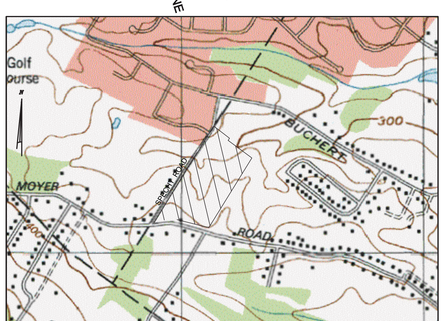
PeC - Penn silt loam, 8 to 15% slopes,
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Depth to water table: More than 80 inches
Residential Development - Very Limited
Lawns and Landscaping - Somewhat Limited
Local Roads and Streets - Somewhat Limited

PkD - Penn-Klinesville channery silt loams, 15 to 25% slopes,
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Depth to water table: More than 80 inches
Residential Development - Very Limited
Lawns and Landscaping - Very Limited
Local Roads and Streets - Very Limited

RhB - Reaville silt loam, 3 to 8% slopes,
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Depth to water table: 6 to 36 inches
Residential Development - Very Limited
Lawns and Landscaping - Somewhat Limited
Local Roads and Streets - Very Limited

Rt - Rowland silt loam, terrace, 0 to 3% slopes,
Depth to restrictive feature: 60 to 90 inches to lithic bedrock
Depth to water table: 12 to 36 inches
Residential Development - Very Limited
Lawns and Landscaping - Somewhat Limited
Local Roads and Streets - Very Limited

NOTE: The soil types are taken from the Montgomery County Soil Survey maps.



LOCATION MAP
SCALE: 1"=1000'

PLAN LEGEND

= PROPERTY LINE
= ADJOINER LINE
= SANITARY SEWER LINE
= D.I.P. WATER LINE
= CURB CUT RAMP
= WATER VALVE
= FIRE HYDRANT
= BLOW OFF VALVE
= EXISTING CONTOUR
= PROPOSED CONTOUR
= INLET
= 8" CONCRETE CURB
= CONCRETE SIDEWALK
= SOIL BOUNDARY LINE
= SANITARY SEWER MANHOLE
= RCP STORM SEWER PIPE
= Limit of Required Perimeter Buffer
= Areas of 15% slopes or greater
= Areas of 25% slopes or greater
= Delineated "Waters of the U.S."
= existing electric line
= Existing Electric Easement
= Soil Type Rt - flodplain soils

EXISTING WOODLINE
PROPOSED WOODLINE
EXISTING FENCE
EXISTING TREE
TREE PROTECTION FENCE
NPDES PERMIT LIMIT
SW## = INFILTRATION TEST PIT LOCATION & LABEL (2014)
TP # = INFILTRATION TEST PIT LOCATION & LABEL (2016 &2018)
= AREA OF MINIMIZED DISTURBANCE REDUCED GRADING

POST CONSTRUCTION STORMWATER MANAGEMENT PLAN SET:

NR115170	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN—NATURAL RESOURCE PLAN
PC115170	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN—STRUCTURAL BMP LAYOUT & NOTES
PC215170	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN—LANDSCAPE RESTORATION
PC315170	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN—DETAILS
PC415170	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN—DETAILS
DA115170	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN—PREDEVELOPED DRAINAGE AREAS
DA215170	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN—POSTDEVELOPED DRAINAGE AREAS
DA315170	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN—SUBBASIN DRAINAGE AREAS

EROSION AND SEDIMENTATION CONTROL PLAN SET:

DA415170	EROSION CONTROL PLAN—EROSION CONTROL DRAINAGE AREAS
ES115170	EROSION AND SEDIMENTATION CONTROL PLAN—GENERAL SITE
ES215170	EROSION AND SEDIMENTATION CONTROL PLAN—INDIVIDUAL LOTS & TOWNHOUSES
ES315170	EROSION AND SEDIMENTATION CONTROL PLAN—OFFSITE SEWER
ES415170	EROSION AND SEDIMENTATION CONTROL PLAN—NARRATIVE
ES515170	EROSION AND SEDIMENTATION CONTROL PLAN—NARRATIVE
ES615170	EROSION AND SEDIMENTATION CONTROL PLAN—DETAILS
ES715170	EROSION AND SEDIMENTATION CONTROL PLAN—DETAILS
GP115170	GENERAL PERMIT PLAN

0' 25' 50' 100' 150' 200'
GRAPHIC SCALE

TOTAL GROSS AREA = 21.294 acres
TOTAL NET AREA = 19.444 acres
NPDES LIMIT = 22.7 acres
DISTURBED ACREAGE = 18.2 acres

NO.	REVISION	DATE	BY	APP.
13.	REVISED OWNERSHIP INFORMATION	01-24-20	JCE	BDB
12.	REVISED PER GILMORE (08-22-19) AND MCMAHON (08-27-19, 08-28-19)	08-29-19	JCE	BDB
11.	REVISED PER GILMORE (03-06-19), ALTA (03-05-19), MCMAHON (03-07-19)	03-14-19	JCE	BDB
10.	REVISED PER GILMORE 901-04-19), ALTA (01-04-19), MCMAHON (01-04-19), ENTECH (01-02-19)	01-30-19	JCE	BDB
9.	REVISED PER GILMORE (9-6-18), ALTA (9-21-18), MCMAHON (9-10-18, FIRE MARSHAL (7-23-18 & 11-29-18)	11-29-18	JCE	BDB
8.	REVISED PER GILMORE (6-15-18), ALTA (6-21-18), MCMAHON (6-15-18), ENTECH (6-6-18) LETTERS	07-20-18	JCE	BDB
7.	REVISED SHEET SET NUMBERS	05-02-18	JCE	BDB
6.	REVISED SHEET # AND SET # PER GILMORE REVIEW LETTER DATED 01-31-18	01-31-18	JCE	BDB
5.	REVISED PER MONTGOMERY CCD REVIEW LETTER DATED 10/13/17	10/17/17	JCE	BDB
4.	REVISED PER MONTGOMERY CCD REVIEW LETTER DATED 7/18/17	9/14/17	JCE	BDB
3.	REVISED PER MONTGOMERY CCD REVIEW LETTER DATED 2/7/17	5/8/17	JCE	BDB
2.	RISED PER MONTGOMERY CCD LETTER DATED 4/4/16	11/10/16	JCE	BDB
1.	REV. PER MONTGOMERY CCD LETTER DATED 11/12/15	1/8/16	JCE	BDB

CLIENT
STEWART & CONTI DEVELOPMENT CO.
3801 GERMANTOWN PIKE
COLLEGEVILLE, PA
19426

SUBJECT
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN
NATURAL RESOURCE PLAN

ROLLING MEADOWS

NEW HANOVER TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

SEAL

SEAL

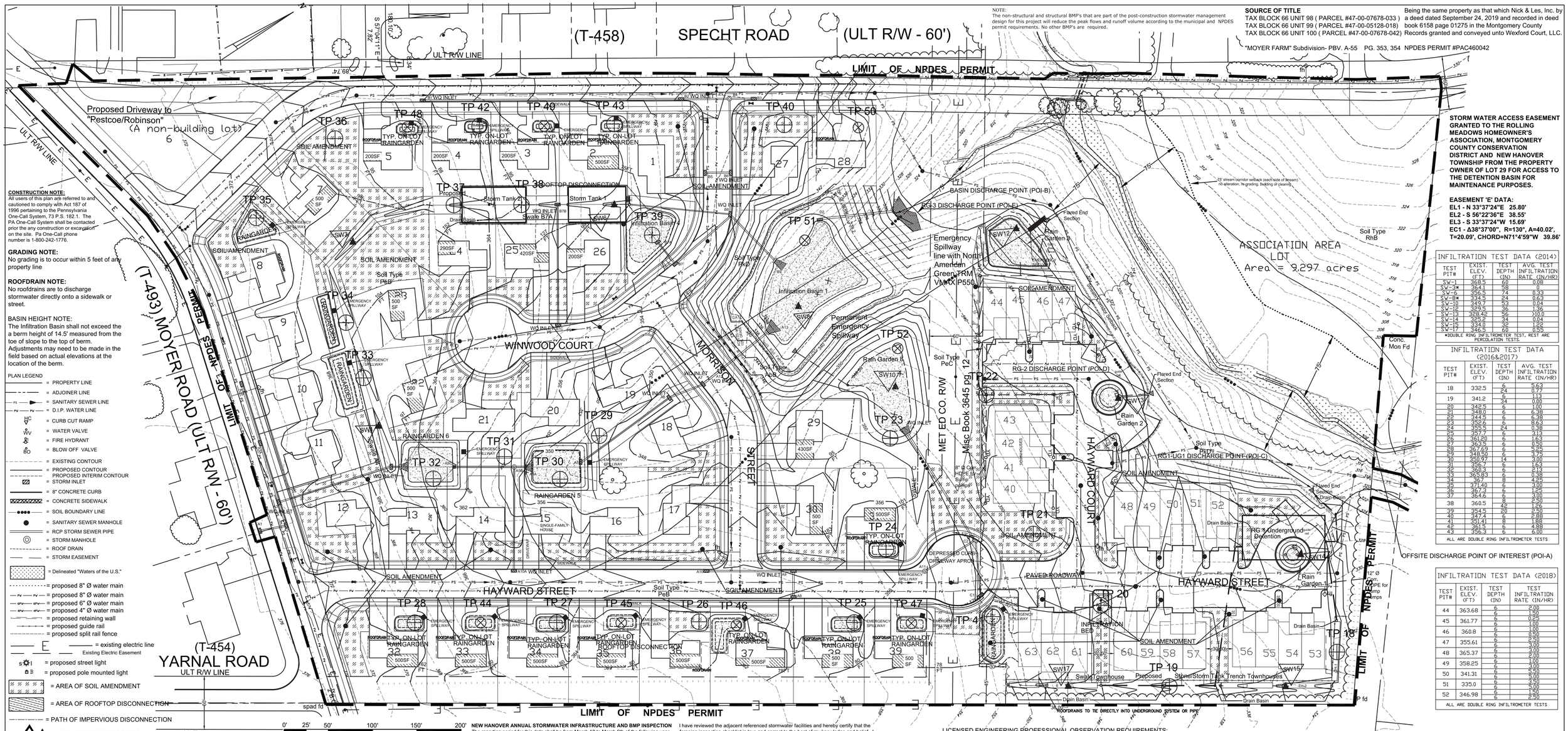
Boyer ENGINEERING LLC

1860 WEAVERTOWN ROAD, SUITE 100
DOUGLASSVILLE, PA 19518
PHONE: 610-689-8021
FAX: 610-689-4538

DESIGN BDB	CHKD. BY BDB
DRAWN BY WJD	CHKD. BY
DATE 2015-06-29	SCALE 1"=50'

PROJECT NO. 15-170
DWG. NO. NR115170
SHEET NO. 24 OF 40

P:\PROJECTS\15-170\ Rolling Meadows\dwg\24-NR1-Natural Resource Plan.dwg, 2/7/2020 10:29:20 AM



NOTE:
The non-structural and structural BMP's that are part of the post-construction stormwater management design for this project will reduce the peak flows and runoff volume according to the municipal and NPDES permit requirements. No other BMP's are required.

SOURCE OF TITLE
TAX BLOCK 66 UNIT 98 (PARCEL #47-00-07678-033)
TAX BLOCK 66 UNIT 99 (PARCEL #47-00-05128-018)
TAX BLOCK 66 UNIT 100 (PARCEL #47-00-07678-042)
"MOYER FARM" Subdivision- PBV. A-55 PG. 353, 354 NPDES PERMIT #PAC460042

Being the same property as that which Nick & Les, Inc. by a deed dated September 24, 2019 and recorded in deed book 6158 page 01275 in the Montgomery County Records granted and conveyed unto Wexford Court, LLC.

STORM WATER ACCESS EASEMENT GRANTED TO THE ROLLING MEADOWS HOMEOWNER'S ASSOCIATION, MONTGOMERY COUNTY CONSERVATION DISTRICT AND NEW HANOVER TOWNSHIP FROM THE PROPERTY OWNER OF LOT 29 FOR ACCESS TO THE DETENTION BASIN FOR MAINTENANCE PURPOSES.

EASEMENT 'E' DATA:
EL1 - N 33°37'24"E 25.80'
EL2 - S 56°22'36"E 38.55'
EL3 - S 33°37'24"W 15.69'
EC1 - A38°7'00", R=130', A=40.02', T=20.09', CHORD=N71°4'59"W 39.86'

CONSTRUCTION NOTE:
All users of this plan are referred to and cautioned to comply with Act 187 of 1996 pertaining to the Pennsylvania One-Call System, 73 P.S. 182.1. The PA One-Call System shall be contacted prior the any construction or excavation on the site. Pa One-Call phone number is 1-800-242-1776.

GRADING NOTE:
No grading is to occur within 5 feet of any property line

ROOFDRAIN NOTE:
No roofdrains are to discharge stormwater directly onto a sidewalk or street.

BASIN HEIGHT NOTE:
The Infiltration Basin shall not exceed the a berm height of 14.5' measured from the toe of slope to the top of berm. Adjustments may need to be made in the field based on actual elevations at the location of the berm.

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- = SANITARY SEWER LINE
- = D.I.P. WATER LINE
- = CURB CUT RAMP
- = WATER VALVE
- = FIRE HYDRANT
- = BLOW OFF VALVE
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- = PROPOSED CONTOUR / PROPOSED INTERIM CONTOUR
- = STORM INLET
- = 8" CONCRETE CURB
- = CONCRETE SIDEWALK
- = SOIL BOUNDARY LINE
- = SANITARY SEWER MANHOLE
- = RCP STORM SEWER PIPE
- = STORM MANHOLE
- = ROOF DRAIN
- = STORM EASEMENT
- = Delineated "Waters of the U.S."
- = proposed 8" Ø water main
- = proposed 8" Ø water main
- = proposed 6" Ø water main
- = proposed 4" Ø water main
- = proposed retaining wall
- = proposed guide rail
- = proposed split rail fence
- = existing electric line / Existing Electric Easement
- = proposed street light
- = proposed pole mounted light
- = AREA OF SOIL AMENDMENT
- = AREA OF ROOFTOP DISCONNECTION
- = PATH OF IMPERVIOUS DISCONNECTION
- = INFILTRATION TEST PIT 2014
- TP # = INFILTRATION TEST PIT 2016 & 2018
- = WATERSHED AREA
- = PROTECTION FENCE
- = STONE RIPRAP
- EXISTING WOODLINE / PROPOSED WOODLINE
- EXISTING TREE
- NPDES PERMIT LIMIT
- LIMIT OF DISTURBANCE
- = ERNST-180-1 SEED MIX PLANTING AREA WITH CURLED WOOD MATTING LINER
- = EASEMENT AREA

ASSOCIATION NOTE:
Units 40 through 63 AND the Association Area shall be governed by the provisions of an Association Agreement. Limited provisions will also be provided for Lots 1 thru 39 (excluding Lot 6) which governs the continued maintenance, use, upkeep, repair, and replacement of stormwater/ stormsewer/ DEP NPDES related items.

The terms "Owner" or "Lot Owner" as they appear on this sheet are as specified in the above referenced documents.

0' 25' 50' 100' 150' 200'
GRAPHIC SCALE

Impervious Area Minimization

The proposed lot layout and road location are based on an existing municipally approved subdivision plan. The layout was required to provide two access points and improvement of the existing intersection and widening of Specht and Moyer Roads. The proposed roads conform to the minimum required road widths and cul-de-sac bulb radius per New Hanover Township ordinances. The houses are located as close to the front yard setback lines as possible to reduce length of driveways. Lots with frontage along Specht and Moyer Roads are provided with paved turn around areas so cars can safely access these roads without having to back out onto them as per township ordinance. Each townhouse is provided with the minimum required number (2) of parking spaces. The minimum number of guest and handicapped spaces is provided at the standard dimensions. Sidewalks are required on both sides of the street and are at the minimum required width and distance from the curb. In the Townhouse section a waiver was granted to not provide sidewalks thereby reducing the impervious paving. The area on the north side of the UNT crossing the site is developable area but is not proposed for development. This area is reserved for landscape restoration.

Existing Drainage Features and Vegetation Protection

The Wetland Delineation Report prepared by Del Val Soil Environmental Consultants identified sensitive drainage features onsite. These areas are provided with a 75 feet wide buffer per the municipal ordinance; no alterations to grading are permitted within this buffer. The Flood plain on the north side of the stream is protected. The buffer also includes the majority of the onsite woodlands. A count of mature trees on-site indicates there are approximately 62 mature trees on this tract. No more than 40% of these may be removed by ordinance. Only two trees (3%) are indicated for removal. The offsite sanitary sewer runs through wooded areas. Tree removal will be limited to only those necessary for placement of the pipes and manholes.

Land Clearing and Grading Minimization

Land Clearing and Grading (LC&G) is not proposed within a minimum of 75 feet of wetlands and streams, and in most cases the distance is farther. LC&G is not proposed within the Electric Line Easement that crosses the site. LC&G is unavoidable for the installation of the sanitary sewer system, Specht and Moyer Roads widening, and upgrading of the existing intersection. These areas of disturbance would be required no matter what development is proposed. The remaining areas are cleared and graded according to allowable lot sizes, minimum/maximum road and driveway grades and maximum cut/fill slopes. It is the goal of this development to reduce the amount of earthwork based on the ordinance mandated criteria mentioned above. The plan does not propose developing the area of the site north of stream or providing access to it by crossing the stream.

NEW HANOVER ANNUAL STORMWATER INFRASTRUCTURE AND BMP INSPECTION
The reporting period for this data shall be from March 10 to March 9th of the following year.

The following Stormwater Inspection Report must be provided to New Hanover Township by March 15th of each year in compliance with the requirements for the Township MS4 Program. Failure of any landowner with a property containing a stormwater management facility to submit a complete checklist by March 15th of every year may result in the Township completing the inspection and assessing the costs associated therewith to the to the property.

Regular maintenance and inspection of stormwater management facilities is necessary to ensure proper functioning of the facilities. Stormwater management facilities include both in ground recharge systems and retention ponds. Stormwater management facilities help control potential flooding and are designed to improve water quality. Poorly maintained basins, regardless of their design, lose their ability to control flooding on private property and prevent pollutants from entering creeks and streams.

Property Address: Property Owner:

YES	NO	
		STRUCTURAL INTEGRITY
___	___	Does the facilty show signs of settling, cracking, bulging, misalignment, or other structural deterioration?
___	___	Do embankments, emergency spillways, side slopes, or inlet/outlet structures show signs of excessive erosion or slumping?
___	___	Is the outlet pipe damaged or otherwise not functioning properly?
___	___	Do impoundment and inlet areas show erosion, low spots, or lack of stabilization?
___	___	Are trees or saplings present on the embankment?
___	___	Are animal burrows present?
___	___	Are contributing areas unstabilized with evidence of erosion?
___	___	Do grass areas require mowing and/or are clippings building up?
		WORKING CONDITIONS
___	___	Are there significant amounts of trash and/or sediment accumulated in the vaults or tanks?
___	___	Is there standing water on inappropriate areas for prolonged periods?
		OTHER INSPECTION ITEMS
___	___	Is there evidence of encroachments or improper use of impounded areas?
___	___	Do the fence, gate, lock, or other saftey devices need repair?
___	___	Is there excessive algae growth, or has one type of vegetation taken over the facility?
___	___	Is there any evidence of contaminants?

Other observations:

I have reviewed the adjacent referenced stormwater facilities and hereby certify that the forgoing inspection checklist is true and correct to the best of my knowledge and belief. I further understand that false statements made herein are subject to the penalties of 18 PA. C.S. Section 4094 relating to unsworn falsifications to authorities.

Date: Signature:

STORMWATER BASIN NOTE:
The retention/detention basins and stormwater facilities (as shownon this plan) are a basic and perpetual part of the storm drainage system of the Township of New Hanover, and as such are to be protected and preserved, in accordance with the approved final plan by the owner(s) on whose lands the structure(s) is (are) located. The Township of New Hanover and/or its agents reserves the right and privilege to enter upon such lands from time to time for the purpose of inspection of said retention/detention basin(s) in order to determine that the structural and design integrity are being maintained by the owner(s).

In the event that maintenance and structural integrity are not maintained by the owner as required by the Township, the owner hereby grants to the Township the right to enter upon such property and to perform any and all improvements, revisions or maintenance as may be determined necessary by the Township and to recover the costs thereof from the property owner by all lawful means including, but not limited to, the imposition of a municipal lien on the subject property.

LICENSED ENGINEERING PROFESSIONAL OBSERVATION REQUIREMENTS:

(1). PRECONSTRUCTION MEETING
(2) AFTER NEW E&S CONTROLS ARE INSTALLED BUT PRIOR TO NEW CONSTRUCTION IN THAT AREA
(3) PRIOR TO CONSTRUCTING THE 3 SAMPLE HOMES
(4) AT SANITARY SEWER CROSSINGS
(5) AT INSTALLATION OF INFILTRATION BASINS/BEDS/TRENCHES, RAIN GARDENS, AND SOIL AMENDMENT.
(6) DURING INSTALLATION OF ALL PERMANENT WATER QUALITY INSERTS.
(7) PRIOR TO REMOVAL OF ANY E&S CONTROLS.
(8) DURING THE CONVERSION OF THE SEDIMENT BASIN TO THE PERMANENT INFILTRATION BASIN 1.

OVERALL SITE BMP SEQUENCE OF INSTALLATION:

1. LANDSCAPE RESTORATION OF UNDISTURBED AREAS
2. INFILTRATION BASIN 1 AS SEDIMENT BASIN 1
3. RAIN GARDEN 8 AS SEDIMENT TRAP 1
4. SWALE C
5. INFILTRATION BED STORM TANK 1
6. INFILTRATION BED STORM TANK 2
7. SWALES A4 AND B7A
8. INFILTRATION BASIN 4
9. RAIN GARDEN 5
10. RAIN GARDEN 6
11. RAIN GARDENS LOT 2, 3, 4, 5, 6, 8, 9, 10, 31, 32, 33, 34, 35, 37, 38, AND 39
12. RAIN GARDEN LOT 28
23. LANDSCAPE RESTORATION OF LOTS AND STREET TREES
24. RG 1 UNDERGROUND DETENTION
25. INFILTRATION TRENCH STORM TANK TH-1
26. INFILTRATION TRENCH STONE BED TH-2
27. INFILTRATION TRENCH STORM TANK 3
28. INFILTRATION TRENCH STORM TANK 6
29. INFILTRATION TRENCH STORM TANK 7
30. SWALE TOWNHOUSE
31. INFILTRATION BED @ TP-20
32. RAIN GARDENS 1, 2, AND 3
33. RAIN GARDEN 7
34. SOIL AMENDMENTS
35. LANDSCAPE RESTORATION OF TOWNHOUSE COMMON AREAS.

INFILTRATION TEST DATA (2014)

TEST PIT#	EXIST. ELEV. (FT)	TEST DEPTH (IN)	AVG. TEST INFILTRATION RATE (IN/HR)
SW-1	368.5	60	0.08
SW-2*	364.1	18	0
SW-6	356.5	74	0.33
SW-8*	348.5	54	0.04
SW-9	349.7	53	0.04
SW-12	329.5	36	1.36
SW-13	328.42	36	0.010
SW-14	335.2	34	0.04
SW-15	334.9	32	1.65
SW-17	346.5	36	0.04

*DOUBLE RING INFILTROMETER TEST, REST ARE PERCOLATION TESTS.

INFILTRATION TEST DATA (2016&2017)

TEST PIT#	EXIST. ELEV. (FT)	TEST DEPTH (IN)	AVG. TEST INFILTRATION RATE (IN/HR)
18	332.5	6 24	0.54 0.77
19	341.2	6 34	1.13 0.06
20	342.5	6	1.00
21	348.0	6	0.30
22	344.5	6	0.38
23	336.6	6	0.63
24	339.5	24	0.88
25	357.7	6	3.13
26	361.20	6	1.63
27	362.75	6	2.50
28	367.63	6	3.75
29	348.90	6	1.25
30	350.97	14	3.00
31	356.56	6	1.50
32	360.3	6	3.13
33	365.83	6	0.38
34	367	6	4.50
35	371.40	6	3.00
36	357.2	6	1.25
37	364.6	6	3.00
38	360.5	6 12	1.25 2.50
39	354.5	20	2.50
40	347.4	6	2.50
41	351.41	8	1.88
42	361.5	6	4.88
43	356.3	6	5.00

ALL ARE DOUBLE RING INFILTROMETER TESTS

INFILTRATION TEST DATA (2018)

TEST PIT#	EXIST. ELEV. (FT)	TEST DEPTH (IN)	TEST INFILTRATION RATE (IN/HR)
44	363.68	6	2.00
45	361.77	6 6	1.50 0.25
46	360.8	6 6	1.00 1.00
47	355.61	6 6	0.50 2.50
48	365.37	6 6	5.00 3.00
49	358.25	6 6	2.00 1.00
50	341.31	6 6	5.00 5.00
51	335.0	6 6	5.00 3.50
52	346.98	6 6	5.00 2.50

ALL ARE DOUBLE RING INFILTROMETER TESTS

NO.	REVISION	DATE	BY	APP.
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SEAL

SEAL

Boyer ENGINEERING LLC

1860 WEAVERTOWN ROAD, SUITE 100
DOUGLASSVILLE, PA 19518
PHONE: 610-689-8021
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3801 GERMANTOWN PIKE
COLLEGEVILLE, PA
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SUBJECT
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN
STRUCTURAL BMP LAYOUT & NOTES

ROLLING MEADOWS

NEW HANOVER TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

DESIGN BDB	CHKD. BY BDB
DRAWN BY WJD	CHKD. BY
DATE 2015-06-29	SCALE 1"=50'

PROJECT NO. 15-170
DWG. NO. PC115170
SHEET NO. 25 OF 40

P:\PROJECTS\15-170 Rolling Meadows\Dwg\25-PC1 PS6-PCSM.dwg, 2/7/2020 10:29:32 AM

(T-458) SPECHT ROAD (ULT R/W - 60')

(T-493) MOYER ROAD (ULT R/W - 60')

(T-454) YARNAL ROAD ULT R/W LINE

HAYWARD STREET

WINWOOD COURT

MORRISON STREET

HAYWARD COURT

LIMIT OF NPDES PERMIT

ASSOCIATION AREA LOT Area = 9.297 acres

Barn

Proposed Driveway to "Pestcoe/Robinson" c (A non-building lot)

Edge of Curb

ULT R/W LINE

Existing Chip Line

Approx. Wall

Twin 36" RCP

Inv - 308.55'

Inv - 308.58'

Inv - 307.17'

Inv - 307.17'

Guard Rail

Flared End Section

Rain Garden 3

Rain Garden 2

Rain Garden 1

RG-1 Underground Detention

Drain Basin

BASIN DISCHARGE POINT

RG-3 DISCHARGE POINT

RG-2 DISCHARGE POINT

RG-1 DISCHARGE POINT

8" Ø Corr. HDPE for Sump pumps

12" Ø Corr. PIPE for Sump pumps

DEPRESSED CURB DRIVEWAY APRON

Proposed SwbleTownhouse Stone/Storm Tank Trench Townhouses

INFILTRATION BED

WOODRAINS TO TIE DIRECTLY INTO UNDERGROUND SYSTEM OR PIPE

FALLOW FIELD

WOODED

WOODS

TP 20 TP 21 TP 22 TP 23 TP 24 TP 25 TP 26 TP 27 TP 28 TP 29 TP 30 TP 31 TP 32 TP 33 TP 34 TP 35 TP 36 TP 37 TP 38 TP 39 TP 40 TP 42 TP 43 TP 44 TP 45 TP 46 TP 47 TP 48 TP 49 TP 50 TP 51 TP 52

SW1 SW2 SW3 SW4 SW5 SW6 SW7 SW8 SW9 SW10 SW11 SW12 SW13 SW14 SW15 SW16 SW17

Drain Basin

Conc. Mon Fd

spad fd

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= AREA OF SOIL AMENDMENT
= AREA OF ROOFTOP DISCONNECTION
= PATH OF IMPERVIOUS DISCONNECTION
= INFILTRATION TEST PIT 2014
TP # = INFILTRATION TEST PIT 2016 & 2018
= WATERSHED AREA
= PROTECTION FENCE
= STONE RIPRAP
EXISTING WOODLINE
PROPOSED WOODLINE
EXISTING TREE
NPDES PERMIT LIMIT
LIMIT OF DISTURBANCE
= ERNST-180-1 SEED MIX PLANTING AREA WITH CURLED WOOD MATTING LINER

PENNDOT LIMIT OF R/W

Width 24' Wide Macadam Cartway

Width 24' Wide Macadam Cartway

PROTECTED TREE
RIBBON MARKER
CONSTRUCTION FENCE

NOTES:
1. MARK TREE TO BE PROTECTED WITH RIBBON PRIOR TO CONSTRUCTION.
2. INSTALL CONSTRUCTION FENCE 12 TIMES DIAMETER (EX. 6"=6') OF THE MARKED TREES. (FOR TREE CLUSTERS INSTALL ALONG COMBINED PERIMETER.)
3. WHEN CONSTRUCTION IS COMPLETED, REMOVE FENCING.
4. ANY DAMAGE, DESTRUCTION OF FALLING OF A TREE SLATED FOR PROTECTION SHALL REQUIRE REPLACEMENT WITH A TREE OF SIMILAR CALIPER OR SUCH NUMBER OF TREES AS ARE REQUIRED TO EQUAL THE CIRCUMFERENCE OF THE AFFECTED TREE.

TREE PROTECTION
NO SCALE

CONSTRUCTION NOTE:
All users of this plan are referred to and cautioned to comply with Act 187 of 1996 pertaining to the Pennsylvania One-Call System, 73 P.S. 182.1. The PA One-Call System shall be contacted prior the any construction or excavation on the site. Pa One-Call phone number is 1-800-242-1776.

GRADING NOTE:
No grading is to occur within 5 feet of any property line

ROOFDRAIN NOTE:
No roofdrains are to discharge stormwater directly onto a sidewalk or street.

BASIN HEIGHT NOTE:
The Infiltration Basin 1 shall not exceed the a berm height of 14.5' measured from the toe of slope to the top of berm. Adjustments may need to be made in the field based on actual elevations at the location of the berm.

LANDSCAPING SCHEDULE

SYMBOL		NAME	QUANTITY	NATIVE
	A	FLOWERING DOGWOOD	17	Y
	B	CALLERY PEAR	18	
	C	SAUCER MAGNOLIA	17	
	D	RED MAPLE	2	Y
	E	WHITE OAK	3	
	F	THORNLESS HONEYLOCUST	2	
	G	NORWAY SPRUCE	12	
	H	AMERICAN HOLLY	12	Y
	I	DOUGLASS FIR	11	
	J	ADIRONDAC CRABAPPLE	18	
	K	KWANZAN CHERRY	17	
	L	SAUCER MAGNOLIA	16	
	M	RED MAPLE	9	Y
	N	SUGAR MAPLE	9	
	O	VALLEY FORGE AMERICAN ELM	9	
	P	AMERICAN HOLLY	123	Y
	Q	EASERN WHITE PINE	130	Y
	R	WHITE OAK	27 (6 WITHIN RG'S)	Y
	S	SILVER MAPLE	17 (8 WITHIN RG'S)	Y
	T	EASTERN REDBUD	77	Y
	U	AMERICAN SYCAMORE	8	Y
	V	RED MAPLE	16	Y
	W	SWEETBAY MAGNOLIA	36	Y

RAIN GARDEN PLANTING SCHEDULE

SPECIES	RG 1	RG 2	RG 3	RG 5	RG 6	RG 7	RG 8	LOT 2	LOT 3	LOT 4	LOT 5	LOT 8	LOT 9	LOT 10	LOT 28	LOT 31	LOT 32	LOT 33	LOT 34	LOT 35	LOT 37	LOT 38	LOT 39	TOTAL
SILVER MAPLE, ACER SACCHARIUM				1	1	1	1										1	1	1	1	1	1	1	11
SWAMP WHITE OAK, QUERCUS BICOLOR							3	1	1	1	1	1			1	1								10
BLACKGUM, NYSSA SYLVATICA			2	1	2	1	2					1		1										10
RIVER BIRCH, BETULA NIGRA	1	1	2	2	1		4						1	1										13
TREES PER RAIN GARDEN	1	1	4	4	4	2	10	1	1	1	1	2	1	2	1	1	1	1	1	1	1	1	1	44
INKBERRY HOLLY, ILEX GLABRA	1	2			3			1	1			3								1			2	14
SWEET PEPPERBUSH, CLETHRA ALNIFOLIA			3		3		5			1	1		2								3			18
GRAY DOGWOOD, CORNUS RACEMOSA			3	3		2	6							3					2			2		21
ARROWWOOD VIBURNUM, VIBURNUM DENTATUM			3	3		2	6								1			2						17
SWEETBAY MAGNOLIA, MAGNOLIA VIRGINIANA				3	4		5									2	2							16
SHRUBS PER RAIN GARDEN	1	2	9	9	10	4	22	1	1	1	1	3	2	3	1	2	2	2	2	1	3	2	2	86
FOWL MANNAGRASS BULRUSH	ON SIDES FROM BOTTOM ELEVATION TO RISER/EMERGENCY SPILLWAY CREST ELEVATION (TYPICAL RANGE 0.5 FT TO 1FT)																							
INDIAN GRASS	ON SIDES FROM RISER/EMERGENCY SPILLWAY CREST ELEVATION TO TOP OF BERM																							

SOURCE OF TITLE
TAX BLOCK 66 UNIT 98 (PARCEL #47-00-07678-033)
TAX BLOCK 66 UNIT 99 (PARCEL #47-00-05128-018)
TAX BLOCK 66 UNIT 100 (PARCEL #47-00-07678-042)

"MOYER FARM" Subdivision PBV. A-55 PG. 353, 354

Being the same property as that which Nick & Les, Inc. by a deed dated September 24, 2019 and recorded in deed book 6158 page 01275 in the Montgomery County Records granted and conveyed unto Wexford Court, LLC.

NPDES PERMIT #PAC460042

NO.	REVISION	DATE	BY	APP.
13.	REVISED OWNERSHIP INFORMATION	01-24-20	JCE	BDB
12.	REVISED PER GILMORE (08-22-19) AND MCMAHON (08-27-19, 08-28-19)	08-29-19	JCE	BDB
11.	REVISED PER GILMORE (03-06-19), ALTA (03-05-19), MCMAHON (03-07-19)	03-14-19	JCE	BDB
10.	REVISED PER GILMORE 901-04-19), ALTA (01-04-19), MCMAHON (01-04-19), ENTECH (01-02-19)	01-30-19	JCE	BDB
9.	REVISED PER GILMORE (9-6-18), ALTA (9-21-18), MCMAHON (9-10-18, FIRE MARSHAL (7-23-18 & 11-29-18)	11-29-18	JCE	BDB
8.	REVISED PER GILMORE (6-15-18), ALTA (6-21-18), MCMAHON (6-15-18), ENTECH (6-6-18) LETTERS	07-20-18	JCE	BDB
7.	REVISED SHEET SET NUMBERS	05-02-18	JCE	BDB
6.	REVISED SHEET # AND SET # PER GILMORE REVIEW LETTER DATED 01-31-18	01-31-18	JCE	BDB
5.	REVISED PER MONTGOMERY CCD REVIEW LETTER DATED 10/13/17	10/17/17	JCE	BDB
4.	REVISED PER MONTGOMERY CCD REVIEW LETTER DATED 7/18/17	9/14/17	JCE	BDB
3.	REVISED PER MONTGOMERY CCD REVIEW LETTER DATED 2/7/17	5/8/17	JCE	BDB
2.	RISED PER MONTGOMERY CCD LETTER DATED 4/4/16	11/10/16	JCE	BDB
1.	REV. PER MONTGOMERY CCD LETTER DATED 11/12/15	1/8/16	JCE	BDB

PLACE PLANT IN VERTICAL POSITION
2" MULCH
BURLAP TO BE UNTIED AT TRUNK
PREPARED BACKFILL: 1 PART PEAT TO 3 PARTS TOPSOIL
TAMP AND SOAK BACKFILL THOROUGHLY AFTER PLANTING
COMPACTED OR UNDISTURBED SOIL
TREE SHALL BE 4" CALIPER OR LARGER

CONIFEROUS TREE PLANTING DETAIL
NO SCALE

PRUNE DAMAGED TWIGS AFTER PLANTING
PLACE PLANT IN VERTICAL POSITION
2"*2"*8' CEDAR STAKING FOR TREES LESS THAN 2 1/2" CALIPER
RUBBER HOSE LOOP AND #12 WIRE
2" MULCH
PREPARED BACKFILL: 1 PART PEAT TO 3 PARTS TOPSOIL
TAMP AND SOAK BACKFILL THOROUGLY AFTER PLANTING
COMPACTED OR UNDISTRUBED SOIL
TREE SHALL BE 4" CALIPER OR LARGER

DECIDUOUS TREE PLANTING DETAIL
NO SCALE

THIN BRANCHES AND FOLIAGE (NOT ALL END BY 1/3, RETAINING NATURAL PLANT SHAPE
TRUNK STEM AND BRANCHES SPRAYED WITH ANTI-DESICANT WAX
SHRUB SHALL BEAR THE SAME RELATION TO FINISHED GRADE AS IT DID TO PREVIOUS EXISTING GRADE, EXCEPT PRIVEDT SHALL BE PLANTED 2" DEEPER.
MINIMUM 2" WOOD MULCH
FINISHED GRADE
SAUCER
CUT AND REMOVE CLOTH BURLAP FROM TOP 1/3 OF BALL. REMOVE ANY WIRE BASKETS OR NYLON BURLAP FROM BALL
LIMIT OF BEAR-ROOT SPREAD
TOPSOIL MIXTURE AS SPECIFIED FOR PLANTING
VARIES
6" MIN.
6" 2"
VARIES

SHRUB PLANTING DETAIL
BALLED OR BARE SHRUB-NO SCALE

CLIENT

STEWART & CONTI DEVELOPMENT CO.
3801 GERMANTOWN PIKE
COLLEGEVILLE, PA
19426

SEAL

SEAL

SUBJECT

POST CONSTRUCTION STORMWATER MANAGEMENT PLAN
LANDSCAPE RESTORATION PLAN

ROLLING MEADOWS

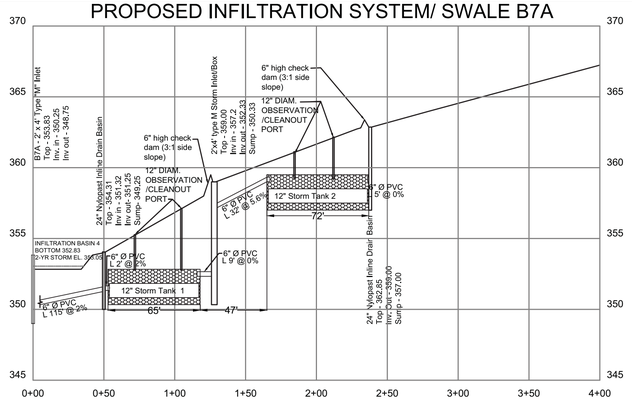
NEW HANOVER TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

Boyer ENGINEERING LLC
1860 WEAVERTOWN ROAD, SUITE 100
DOUGLASSVILLE, PA 19518
PHONE: 610-689-8021
FAX: 610-689-4538

PROJECT NO.	15-170
DESIGN BDB	CHKD. BY BDB
DRAWN BY WJD	CHKD. BY
DATE 2015-06-29	SCALE 1"=50'
DWG. NO.	PC215170
SHEET NO.	26 OF 40

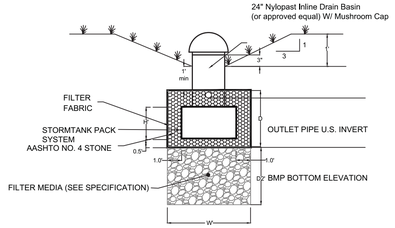
P:\PROJECTS\15-170 Rolling Meadows\Dwg\26-PC2 PSB-PCSM.dwg, 2/7/2020 10:29:40 AM

PROPOSED INFILTRATION SYSTEM/ SWALE B7A



PROPOSED STORM TANK CROSS SECTION

(N.T.S.)



STORM TANK DATA						
ID	D X L X W (FEET)	H (FEET)	BOTTOM ELEVATION	D2 (FEET)	OUTLET PIPE U.S. INVERT	OUTLET PIPE
1	2.5 X 65 X 40	1.00	350.33	2.00	351.32	(3) 2'-6" PVC @ 2%
2	2.5 X 72 X 40	1.00	357.00	2.00	359.00	(2) 32'-6" PVC @ 5%
3	2.5 X 58 X 6	1.00	332.35	2.00	334.05	10.8'-6" PVC @ 2%
6	2.75 X 56 X 6	1.00	341.50	2.00	343.30	12.5'-6" PVC @ 4%
7	3 X 34 X 6	1.50	343.80	2.00	345.50	8'-6" PVC @ 2%
TH 1	2.5 X 67 X 6	1.00	330.50	2.00	332.3	(2) 1'-6" PVC @ 2%
BED @ TP-20	2.5 X 32 X 24	1.00	342.00	2.00	343.90	80'-4" PVC @ 7.5%

PROPOSED INFILTRATION BED/TRENCH AND RAIN GARDEN CONSTRUCTION NOTE:
Excavation
Excavation to the finished grade should be delayed until all disturbed areas in the watershed have been stabilized or protected. The final phase of excavation should remove all accumulated sediment. Relatively light, tracked-equipment is recommended for this operation to avoid compaction of the "No mow - Filtration area". At the time of the sediment basin cleanout no construction vehicles shall enter the area of the basin. Compaction of the infiltration area shall be avoided.
Lining Material
Establishing dense vegetation on the infiltration areas is recommended. A dense vegetative cover will not only prevent erosion and sloughing, but will also provide a natural means to maintain relatively high infiltration rates.
Raingardens and open infiltration basin bottoms shall be planted with Ernst Conservation Seeds Mix ERNMX-180-1 or approved equal.

FILTER MEDIA SPECIFICATION:
Media shall be washed and well graded according to the following Particle Size Distribution (PSD): Clay & Silt <3% (<0.05 mm), Very Fine Sand 5-30% (0.05-0.15 mm), Fine Sand 10-30% (0.15-0.25 mm), Medium to Coarse Sand 40-60% (0.25-1.0 mm), Coarse Sand 7-10% (1.0-2.0 mm), and Fine Gravel <3% (2.0-3.4 mm) . The material shall not be missing any component of the PSD in order to prevent particle migration. Media shall be installed in a minimum of two lifts and shall be lightly compacted during installation by a single pass with a vibrating plate to prevent material migration.

STABILIZATION VEGETATION FOR BOTTOMS OF BASINS 1 & 4 AND ALL RAIN GARDENS

Provide ERNST CONDERVATION SEED MIX at 10 lbs per acre
Provide low growing wildflower seed mix for slope embankment areas at 10 - 20 lbs per acre.

ERNST CONSERVATION SEED MIX ERNMX-180-1
SPECIFICATIONS:

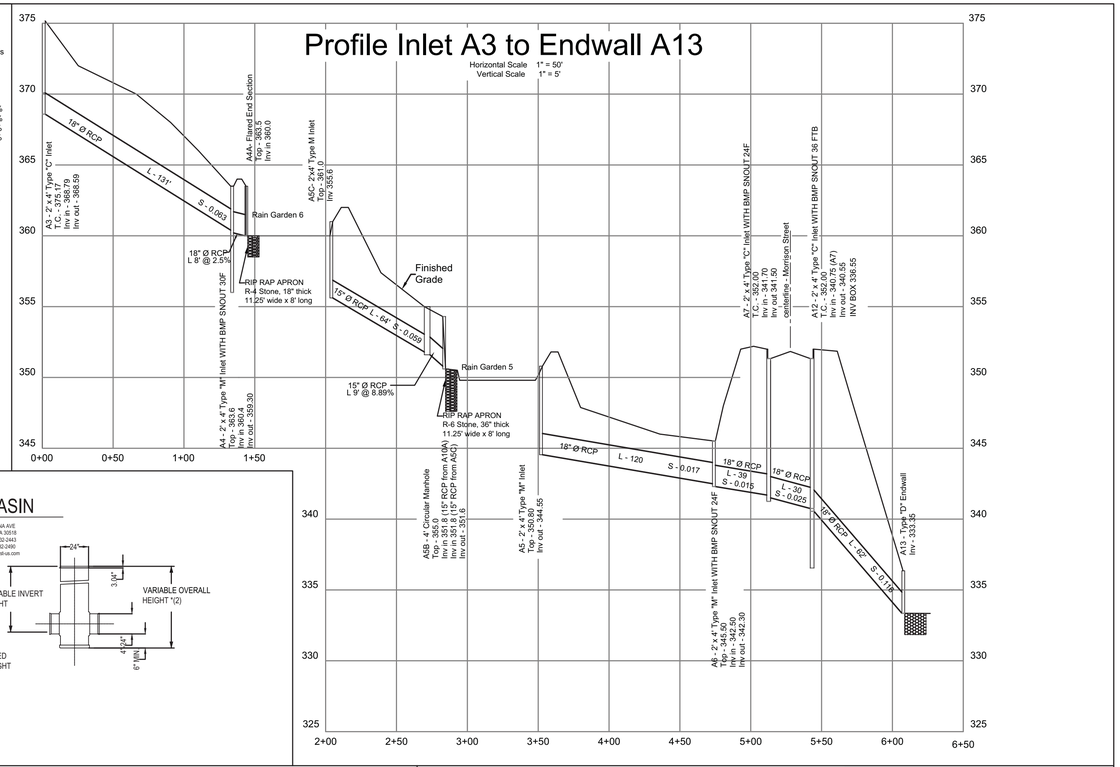
SCHIZACHYRIUM SCOPARIUM (LITTLE BLUE STEM)		38%
CAREX VULPINOIDIA	(FOX SEDGE)	25%
ELYMUS VIRGINICUS	(VIRGINIA WILDRYE)	15%
PANICUM RIGIDULUM	(REDTOP PANICGRASS)	15%
CAREX SCOPARIA	(BLUNT BROOM SEDGE)	5%
JUNCUS EFFUSES	(SOFT RUSH)	1%
JUNCUS TENUIS	(PATH RUSH)	1%

WILDFLOWER SEED MIX

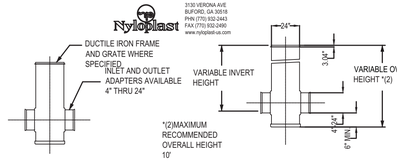
ITEM	BOTANICAL NAME	PERCENT
New England Aster	Aster novae-angliae	0.50%
Cornflower	Centaurea cyanus	7.00%
Siberian Wallflower	Cheiranthus allionii	14.00%
Shasta Daisy	Chrysanthemum maximum	4.00%
Lance/Leaved Coreopsis	Coreopsis lanceolata	10.00%
Larkspur	Delphinium ajacis	3.00%
Sweet William Pinks	Dianthus barbatus	3.00%
Purple Coneflower	Echinacea purpurea	7.00%
Indian Blanket	Gaillardia pulchella	3.00%
Annual Baby's Breath	Gypsophila elegans	18.00%
Gayfeather	Liatris spicata	2.00%
Spurred Snapdragon	Linaria maroccana	2.00%
Scarlet Flax	Linum grandiflorum rubrum	11.00%
Sweet Alyssum	Lobularia maritima	0.50%
Perennial Lupine	Lupinus perennis	7.00%
Corn Poppy	Papaver rhoeas	4.00%
Smooth Penstemon	Penstemon digitalis	1.00%
Black-Eyed Susan	Rudbeckia hirta	1.00%
Catchfly	Silene armeria	2.00%

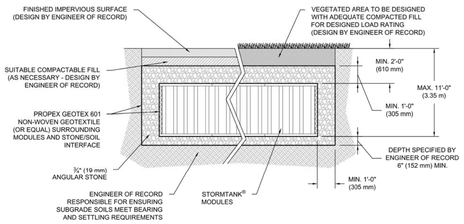
Profile Inlet A3 to Endwall A13

Horizontal Scale 1" = 50'
Vertical Scale 1" = 5'



24" DRAIN BASIN





EACH UNDERGROUND FACILITY SHALL BE EQUIPPED WITH OBSERVATION PORT(S) FOR CLEAN OUT AND MAINTENANCE. QUANTITY AND PLACEMENT SHALL BE AS RECOMMENDED BY THE MANUFACTURER. (MINIMUM ONE PER FACILITY)

NOTES:
1. REFERENCE CURRENT INSTALLATION INSTRUCTIONS FOR PROPER INSTALLATION PRACTICES.

NO.	DESCRIPTION / PRODUCT STRUCTURE	DATE	BY
A	NOTE REVISIONS, FORMATTING UPDATES & SIZES, NO. UPDATE	JAN	JAR
B	FORMATTING & SIZES, NO. UPDATE	JUL	YA
C	INITIAL RELEASE	ELL	YA
REV.	DATE	REVISED BY CHANGES	BY / APPR'D

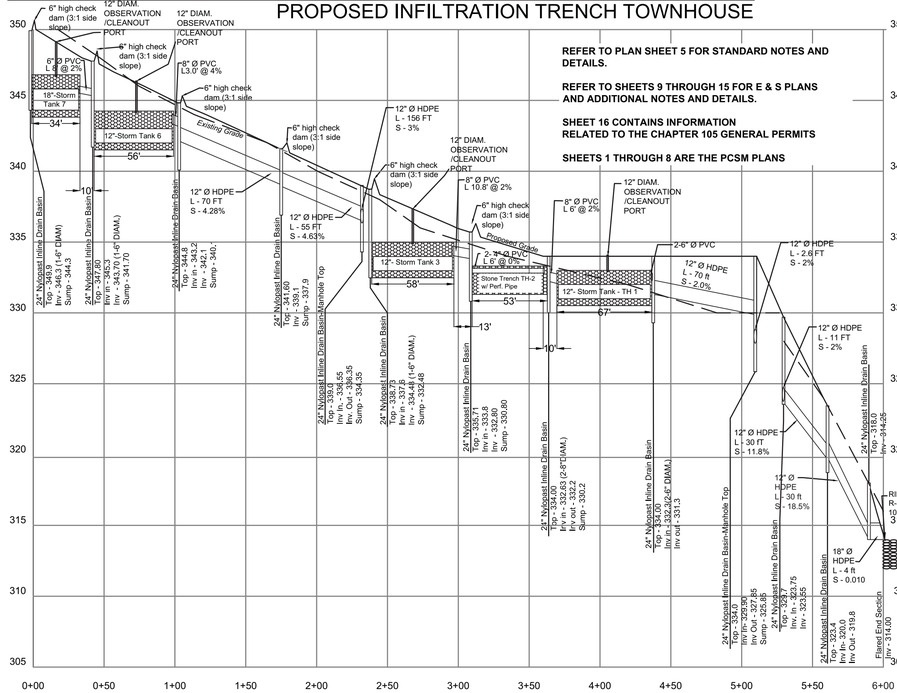
This drawing is copyrighted by Brentwood Industries, Inc. It may not be reproduced or used for any purpose other than in connection with products manufactured by Brentwood Industries. Export restrictions may apply to this drawing.

DRAWING: TYPICAL SINGLE STK. INFILTRATION BASIN CROSS-SECTION DETAIL
STORMTANK® MODULE

BRENTWOOD®
670 Kingsdown Road
Reading, PA 19611 U.S.A.
Phone: (610) 374-5109
Fax: (610) 374-8422
www.brentwoodindustries.com

SIZE: N/S | SHEET: 1 of 1 | DATE: 1/31/13
DRAWN BY: ELANE | CHECKED BY: ETM-0001-02 | APPROVED BY: ACE

PROPOSED INFILTRATION TRENCH TOWNHOUSE



REFER TO PLAN SHEET 5 FOR STANDARD NOTES AND DETAILS.

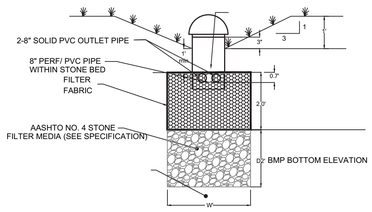
REFER TO SHEETS 9 THROUGH 15 FOR E & S PLANS AND ADDITIONAL NOTES AND DETAILS.

SHEET 16 CONTAINS INFORMATION RELATED TO THE CHAPTER 105 GENERAL PERMITS

SHEETS 1 THROUGH 8 ARE THE PCSM PLANS

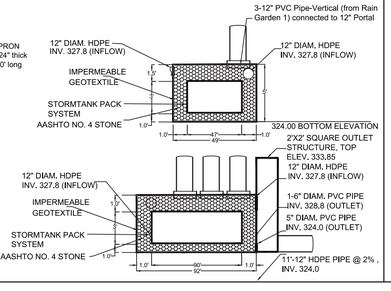
PROPOSED STONE TRENCH TOWNHOUSE CROSS SECTION (STONE & PIPE)

(N.T.S.)

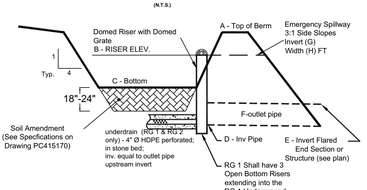


INFILTRATION TRENCH DATA					
ID	D X L X W (FEET)	BOTTOM ELEVATION	D2 (FEET)	OUTLET PIPE U.S. INVERT	OUTLET PIPE
TH 2	2.0 X 53 X 6	331.30	2.00	332.63	(2) 6"-5" SOLID PVC @ 2%

PROPOSED UNDERGROUND DETENTION CROSS-SECTIONS (N.T.S.)



PROPOSED RAINGARDEN/BIORETENTION FACILITY
(N.T.S.)



CROSS SECTION

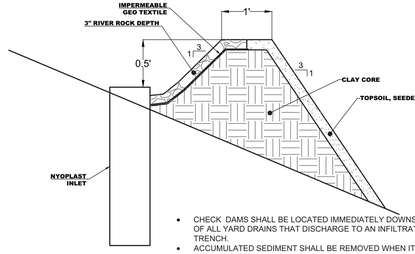
NOTE: SAFETY FENCE SHALL BE INSTALLED AROUND RAIN GARDEN AREAS TO PROTECT THEM AGAINST COMPACTION PRIOR TO THEM BEING INSTALLED.

RAIN GARDEN DATA							
RAIN GARDEN ID	BERM (A)	RISER TYPE AND ELEV. (B)	BOTTOM (C)	OUTLET PIPE U.S. INVERT (D)	OUTLET PIPE D.S. INVERT (E)	OUTLET PIPE (F)	SPILLWAY INVERT (G)	SPILLWAY WIDTH (H)
1	334.00	3-12" Diam. 331.8	331.00	329.50	324.90	4.6'-12"PVC	333.8	7
2	340.00	6" Diam. 339.0	338.00	332.00	323.95	35'-6"HDPE	339.9	5
3	329.50	6" Diam. 328.5	327.50	325.50	322.00	42'-8" HDPE	329.0	5
5	352.00	12" Diam. 350.8	349.80	344.55	342.50	120'-18" RCP	351.5	5
6	362.50	2'X2' 361.0	360.00	355.60	351.80	64'-15" RCP	362.0	5
7	351.75	N/A	350.75	N/A	N/A	N/A	351.4	5
LOT 2	356.80	N/A	355.80	N/A	N/A	N/A	356.3	5
LOT 3	358.80	N/A	357.80	N/A	N/A	N/A	358.3	5
LOT 4	362.00	N/A	361.00	N/A	N/A	N/A	361.5	5
LOT 5	366.40	N/A	365.40	N/A	N/A	N/A	365.9	5
LOT 8	371.90	N/A	370.90	N/A	N/A	N/A	371.6	3
LOT 9	368	N/A	367	N/A	N/A	N/A	367.7	5
LOT 10	367.50	N/A	366.50	N/A	N/A	N/A	367.0	5
LOT 31	356.00	N/A	355.00	N/A	N/A	N/A	355.7	2
LOT 32	370.00	N/A	369.00	N/A	N/A	N/A	369.7	1
LOT 33	364.70	N/A	363.70	N/A	N/A	N/A	364.4	1
LOT 34	364.00	N/A	363.00	N/A	N/A	N/A	363.6	1
LOT 35	363.90	N/A	362.90	N/A	N/A	N/A	363.4	2
LOT 37	362.30	N/A	361.30	N/A	N/A	N/A	361.80	1
LOT 38	358.20	N/A	357.20	N/A	N/A	N/A	357.85	1
LOT 39	357.40	N/A	356.40	N/A	N/A	N/A	357.05	1
8	350.00	15" Diam. 348.65	346.65	346.0	335.50	87.7'-12"PVC	349.5	8

STORMWATER STRUCTURE INSTALLATION NOTE:
The use of mastic or equivalent is recommended on all inlets/yard drains located within grass areas and PCSM BMP'S (i.e. rain garden risers and outlet structures) to prevent soil from washing into the storm sewer system or infiltration area through unsealed joints in the inlet box or top. This includes, but is not limited to, the following storm sewer structures: A1, A4, A5, A5b, A5c, A6, A7a, B7B, C4, D2, Rain Gardens 1, 2, 3, and 8 outlet risers, and all yard drain basins connected to the underground infiltration beds and trenches.

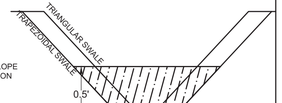
STORMWATER MAINTENANCE NOTE:
The property owner shall be responsible for the proper installation, operation and maintenance of all stormwater management facilities located on their property. If in the opinion of the Township, the stormwater system is not functioning properly, the landowner or developer shall be required to make the necessary improvements/corrections to the system or provide an alternate stormwater management facility which is functional.

The property owner shall enter into an Operations and Maintenance Agreement with the Municipality that covers all stormwater structures and BMP's that are privately owned.



CHECK DAM
NTS

- CHECK DAMS SHALL BE LOCATED IMMEDIATELY DOWNSLOPE OF ALL YARD DRAINS THAT DISCHARGE TO AN INFILTRATION TRENCH.
- ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES ½ THE HEIGHT OF THE DAM.
- DAMS SHALL BE INSPECTED AFTER EACH RAINFALL EVENT



SWALE CROSS SECTION
NTS

SOURCE OF TITLE
TAX BLOCK 66 UNIT 98 (PARCEL #47-00-07678-033)
TAX BLOCK 66 UNIT 99 (PARCEL #47-00-05128-018)
TAX BLOCK 66 UNIT 100 (PARCEL #47-00-07678-042)
"MOYER FARM" Subdivision PBV. A-55 PG. 353, 354

Being the same property as that which Nick & Les, Inc. by a deed dated September 24, 2019 and recorded in deed book 6158 page 01275 in the Montgomery County Records granted and conveyed unto Wexford Court, LLC.

NPDES PERMIT #PAC460042

NO.	REVISION	DATE	BY	APP.
13.	REVISED OWNERSHIP INFORMATION	01–24–20	JCE	BDB
12.	REVISED PER GILMORE (08–22–19) AND MCMAHON (08–27–19, 08–28–19)	08–29–19	JCE	BDB
11.	REVISED PER GILMORE (03–06–19), ALTA (03–05–19), MCMAHON (03–07–19)	03–14–19	JCE	BDB
10.	REVISED PER GILMORE 901–04–19), ALTA (01–04–19), MCMAHON (01–04–19), ENTECH (01–02–19)	01–30–19	JCE	BDB
9.	REVISED PER GILMORE (9–6–18), ALTA (9–21–18), MCMAHON (9–10–18, FIRE MARSHAL (7–23–18 & 11–29–18)	11–29–18	JCE	BDB
8.	REVISED PER GILMORE (8–15–18), ALTA (8–21–18), MCMAHON (8–15–18), ENTECH (8–6–18) LETTERS	07–20–18	JCE	BDB
7.	REVISED SHEET SET NUMBERS	05–02–18	JCE	BDB
6.	REVISED SHEET # AND SET # PER GILMORE REVIEW LETTER DATED 01–31–18	01–31–18	JCE	BDB
5.	REVISED PER MONTGOMERY CCD REVIEW LETTER DATED 10/13/17	10/17/17	JCE	BDB
4.	REVISED PER MONTGOMERY CCD REVIEW LETTER DATED 7/18/17	9/14/17	JCE	BDB
3.	REVISED PER MONTGOMERY CCD REVIEW LETTER DATED 2/7/17	5/8/17	JCE	BDB
2.	RISED PER MONTGOMERY CCD LETTER DATED 4/4/16	11/10/16	JCE	BDB
1.	REV. PER MONTGOMERY CCD LETTER DATED 11/12/15	1/8/16	JCE	BDB

CLIENT
STEWART & CONTI DEVELOPMENT CO.
3801 GERMANTOWN PIKE
COLLEGEVILLE, PA
19426

SUBJECT
POST CONSTRUCTION STORMWATER MANAGEMENT PLAN DETAILS

ROLLING MEADOWS

NEW HANOVER TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

SEAL

SEAL

Boyer ENGINEERING LLC
1860 WEAVERTOWN ROAD, SUITE 100
DOUGLASSVILLE, PA 19518
PHONE: 610-689-8021
FAX: 610-689-4538

DESIGN BDB	CHKD. BY BDB
DRAWN BY WJD	CHKD. BY
DATE 2015–06–29	SCALE 1"=50'

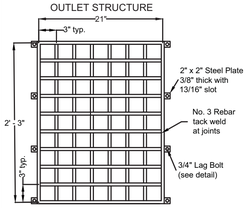
PROJECT NO. 15–170
DWG. NO. PC315170
SHEET NO. 27 OF 40

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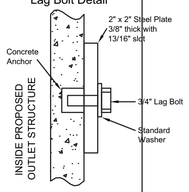
TRASH RACK DETAIL

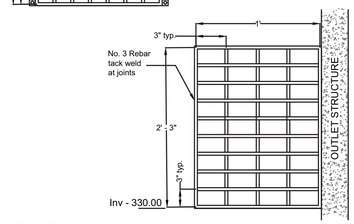
(n.t.s.)

OUTLET STRUCTURE

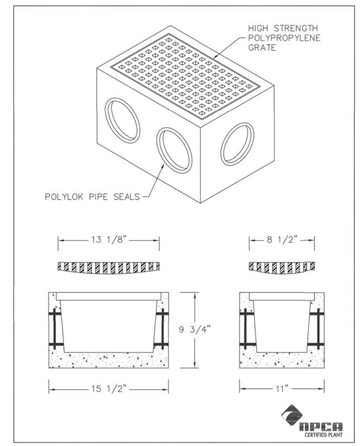


Lag Bolt Detail



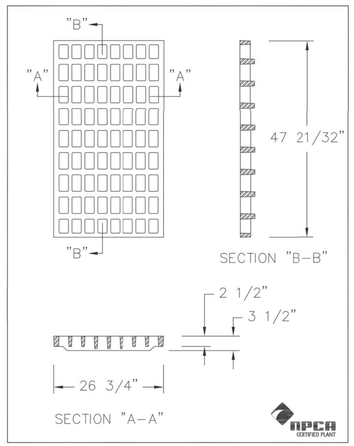


SOURCE OF TITLE
TAX BLOCK 66 UNIT 98 (PARCEL #47-00-07678-033)
TAX BLOCK 66 UNIT 99 (PARCEL #47-00-05128-018)
TAX BLOCK 66 UNIT 100 (PARCEL #47-00-07678-042)
"MOYER FARM" Subdivision- PBV. A-55 PG. 353, 354
Being the same property as that which Harold L. Smale, Hazel S. Leaven, and Mary S. Van Dike by her attorney in fact Harold L. Smale by a deed dated October 19, 1999 and recorded in deed book 5297 page 1227 in the Montgomery County Records granted and conveyed unto Nick & Les, Inc.
NPDES PERMIT #PAC460042



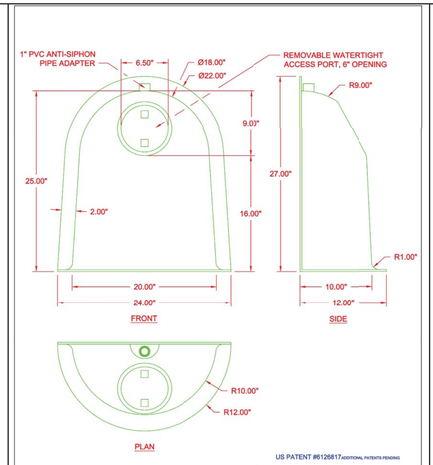
MONARCH PRECAST CONCRETE CORP.
425 NORTH DAUPHIN STREET ALLENTOWN, PA. 18109 PHONE (610) 435-6746
WWW.MONARCHPRECAST.COM FAX (610) 437-7133

LIGHT-DUTY YARD DRAIN



MONARCH PRECAST CONCRETE CORP.
425 NORTH DAUPHIN STREET ALLENTOWN, PA. 18109 PHONE (610) 435-6746
WWW.MONARCHPRECAST.COM FAX (610) 437-7133

PENNDOT CAST IRON BICYCLE SAFE GRATE PER RC-45M

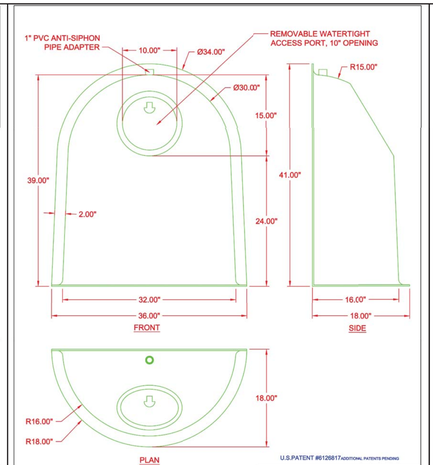


US PATENT #6126817ADDITIONAL PATENTS PENDING

SNOUT INLET PROTECTION DEVICES:
- INLETS B7B, B7C AND A10A REQUIRE AN 18F DEVICE
- INLETS A3, A6, A7, A9, B1, AND B2 REQUIRE A 24F DEVICE
- INLETS A4, C4, B6, AND B8 REQUIRE A 30F DEVICE
- INLET A12 REQUIRES A 36FTB DEVICE

BMP, INC.
53 MT. ARCHER ROAD, LYME, CT. 06371
(800) 504-8008 FAX: (860)434-3195

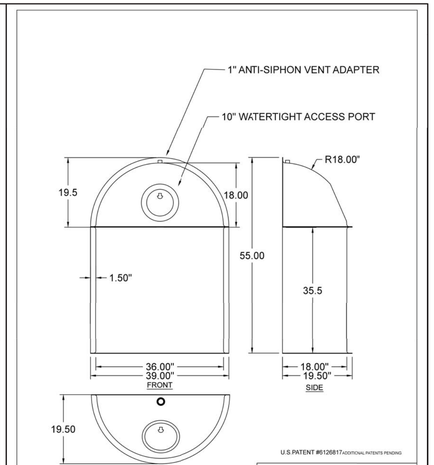
DESCRIPTION	DATE	SCALE
18F SNOUT OIL & DEBRIS STOP	09/14/99	NONE
	DRAWING NUMBER	18F



U.S.PATENT #6126817ADDITIONAL PATENTS PENDING

BMP, INC.
53 MT. ARCHER ROAD, LYME, CT. 06371
(800) 504-8008 FAX: (860)434-3195

DESCRIPTION	DATE	SCALE
30F SNOUT OIL & DEBRIS STOP	09/15/99	NONE
	DRAWING NUMBER	30F



U.S.PATENT #6126817ADDITIONAL PATENTS PENDING

BMP, INC.
53 MT. ARCHER ROAD, LYME, CT. 06371
(800) 504-8008 FAX: (860)434-3195

DESCRIPTION	DATE	SCALE
36FTB SNOUT OIL & DEBRIS STOP	03/28/05	NONE
	DRAWING NUMBER	36FTB

NPDES Permit Notes

1. Upon reduction, loss or failure of the BMP, the permittee and co-permittee shall take immediate action to restore the BMPs or provide an alternative method of treatment.
2. Where E&S BMPs are found to be inoperative or ineffective during an inspection, or any other time, the permitee and co-permitee shall immediately contact the Montgomery County Conservation District, by phone or personal contact, followed by the submission of a written report within 5 days of the initial contact.
3. Permittees requesting a renewal of coverage under general permit must submit to the Montgomery County Conservation District an administratively complete and acceptable NOI, at least 90 days prior to the expiration date of the coverage.
4. Notice of Termination. Where all Storm water discharges associated with construction activity that are authorized by this permit are eliminated, and BMPs identified in the Post Construction Storm water Management (PCSM) Plan have been installed, the permitee or co-permitee of the facility must submit a Notice of Termination (NOT) form that is signed in accordance with Part B.1.c (Signatory Requirements) of this permit to the Montgomery County Conservation District.
5. The NPDES boundary is equal to the limits of disturbance of the site and any offsite areas within the limits of disturbance that are the responsibility of the developer to install. Off-site facilities include the utility installations.

OPERATION AND MAINTENANCE NOTES: (Failure of an infiltration BMP occurs when the draw-down time exceeds 72 hours measured from the end of the storm event)

A. Infiltration/Detention Basin (Owned by Homeowner's Association) Basins 1 &4

- The overlying vegetation of Infiltration Basin features should be maintained in good condition, bare spots shall be seeded immediately.
- Vehicular access on Infiltration Basin areas should be prohibited, and care should be taken to avoid excessive compaction by mowers. If access is needed, use of permeable, turf reinforcement should be considered.
- The Basin shall be inspected every two years by an appropriately licensed professional for proper operation and infiltration.
- Sediment and debris shall be removed from the basin after every rainfall event.
- The Basin Berm and Outlet Structure shall be inspected every two years by an appropriately licensed professional for proper operation and structural stability.
- The Property Owner shall inspect the basin after every significant rainfall event. Inspections shall look for evidence of rilling or erosion of slopes, accumulation of sediment and debris, standing water longer than 72 hours after the end of the rainfall event and damage to the outlet structure and discharge pipe. Should standing water be evident, the owner shall immediately contact a professional engineer to evaluate the basin and determine a course of action to remedy the situation.

B. Subsurface Infiltration Trench/Bed (Owned by Homeowner's Association) Storm Tank 1, 2, 3, 6, 7, TH 1, TH 2, and @ TP-20.

- Vehicular access on Subsurface Infiltration areas should be prohibited, and care should be taken to avoid excessive compaction. If access is needed, use of permeable reinforcement mat should be considered.
- The risers/observation ports shall be inspected after every significant rainfall event and cleared of debris and accumulated sediment.
- The trenches shall be inspected every two years by an appropriately licensed professional for proper operation and infiltration.
- If inspection via observation ports discovers accumulated debris and/or sediment that hinders the function of the trench, or standing water longer than 72 hours after the end of the rainfall event, the system shall be cleaned or replaced immediately.

C. Rain Gardens (#1, #2, #3, #5, #6, #7 and # 8 Owned by Homeowner's Association) RG's on Lot 2, 3, 4, 5, 8, 9, 10, 28, 31, 32, 33, 34, 35, 37, 38, and 39 shall be owned and maintained by the individual lot owner.

- While vegetation is being established, pruning and weeding may be required.
- Once every 2 to 3 years the entire area shall be mulched.
- Retention areas shall be inspected twice a year for erosion, invasive species, sediment build-up, and vegetative conditions. If found the problem shall be corrected immediately.
- During periods of extended drought the rain gardens shall be watered.
- Trees and shrubs shall be inspected twice per year for health and replaced if necessary.
- If inspections find standing water longer than 72 hours after the end of the rainfall event, the owner shall immediatey contact a professional engineer to evaluate the BMP and determine a course of action to remedy the situation.

D. Landscaping Restoration (Responsibility of Homeowner's Association or Individual Lot Owner based on location)

- Inspect trees annually for damage to vegetation and disease.
- Trim limbs to maintain health and growth.
- Should a tree die, it shall be replaced with an equivalent native species tree during the upcoming season for planting.

E. Soil Amendment Areas (Responsibility of Homeowner's Association or Individual Lot Owner based on location)

- The overlying vegetation of the Amended features should be maintained in good condition, bare spots shall be seeded immediately.
- Vehicular access on amended areas should be prohibited, and care should be taken to avoid excessive compaction by mowers. If access is needed, use of permeable, turf reinforcement should be considered.
- The amended areas shall be inspected every two years by an appropriately licensed professional for compaction. Signs of failure include excessive water retention in soil for extended periods of time (48-72 hours after end of rainfall), lack of infiltration due to compaction, and erosion of soil.
- Additional amendment may be necessary to mitigate compaction or revision to soil mixture to reduce water retention in excess of 72 hours.

F. Riparian Buffer Protection (Owned by Homeowner's Association) Area within 75' wetland/stream corridor setback.

- Inspect annually and immediately following severe storms for evidence of sediment deposit, erosion, or concentrated flow channels. Corrective action should be taken within 30 days of inspection.
- Avoid excessive use of fertilizers, pesticides, or other chemicals; vehicular traffic or excessive pedestrian traffic; and removal or disturbance of vegetation.
- Remove vegetation or litter only when necessary for avoidance or mitigation of hazardous conditions.
- Seasonal mowing may be required in addition to occasional reseeding/replanting to maintain 60% vegetation coverage.
- Remove non-native, invasive species annually. Replace with native species as necessary.

G. Vegetated Swale/Check Dams (Owned by Homeowner's Association) Swales A4, B7A, C, and TOWNHOUSE

- Inspect and correct erosion problems, damage to vegetation, and sediment and debris accumulation (address when > 3 inches at any spot or covering vegetation).
- Mow and trim vegetation to ensure safety, aesthetics, proper swale operation, or to suppress weeds. Mow only when swale is dry to avoid ruts and remove litter and debris prior to mowing.

H. Snout Inlet Protection Devices (Structures located within the road right-of-way shall be owned by the municipality - A3, A7, A9, A10A, A12, B1, B2, B6, B8. Structures located within storm water easement shall be owned by the Homeowner's Association - A4, A6, B7B, C4)

- Monthly monitoring for the first year of a new installation after the site has been stabilized.
- Measurements should be taken after each rain event of .5 inches or more, or monthly, as determined by local weather conditions. checking sediment depth and noting the surface pollutants in the structure will be helpful in planning maintenance.
- The pollutants collected in Snout equipped structures will consist of floatable debris and oils on the surface of the captured water, and grit and sediment on the bottom of the structure.
- Optimally, the structure should be cleaned when the sump is half full (e.g. when 2 feet of material collects in a 4 foot sump, clean it out).
- Structures should also be cleaned if a spill or other incident causes a larger than normal accumulation of pollutants in a structure.
- Maintenance is best done with a vacuum truck.
- In the case of an oil spill, the structure should be serviced immediately.
- All collected wastes must be handled and disposed of according to local environmental requirements.
- To maintain the Snout hoods themselves, an annual inspection of the anti-siphon vent and access hatch are recommended. A simple flushing of the vent, or a gentle rodding with a flexible wire are all that's typically needed to maintain the anti-siphon properties. opening and closing the access hatch once a year.

I. Sumped Inlet Protection (Owned by Homeowner's Association) In-line Yard Drains

- Inspect structures annually for damage.
- Inspect after rainfall events for clogging and debris and sediment accumulation.
- Clean when sediment and debris accumulate to a depth 18" below the invert of the outlet pipe.

J. Underground Detention (Owned by the Homeowner's Association) below RG 1

- Inspect structures annually for damage.
- Inspect inlet structures and observation porTs after rainfall events for clogging and debris and sediment accumulation that hinders the function of the outlet structure and pipe or capacity of the detention system.
- Remove debris and sediment at every two years.

K. Protect Sensitive & Special Value Features (Homeowner' Association and Individual Lot Owners depending on location)

- Alteration of Woodland, streams, steep slopes, floodplains, and wetlands is prohibited unless the appropriate local, state, and/or federal permits are obtained where applicable.

L. Rooftop Disconnection (Individual Lot Owners) Lots 2-5, 7, 22-26, 29-39

- Roof drain discharge locations, distances, and paths to BMP's shall be maintained as shown on the plan.

INFILTRATION BEDS (Storm Tank 1 and 2 and Bed @ TP-20)

After the tributary areas are stabilized, install infiltration bed according to the following sequence (Tank 1 must be installed before Tank 2):

a. The existing subgrade under the bed area should NOT be compacted or subject to excessive construction equipment traffic prior to geotextile and stone bed placement.
b. Remove voided rock to the depth required by the details.
c. Where erosion of subgrade has caused accumulation of fine materials and/or surface ponding, this material should be removed with light equipment and the underlying soils scarified to a minimum depth of 6 inches with a York rake (or equivalent) and light tractor.
d. Install the Engineered Filter Media to the required depth. All fine grading should be done by hand. All bed bottoms should be at level grade.
e. Geotextile and bed aggregate should be placed immediately after approval of subgrade preparation and installation of structures. Geotextile should be placed in accordance with manufacturer's standards and recommendations. Adjacent strips of geotextile should overlap a minimum of 16 inches. It should also be secured at least 4 feet outside of bed in order to prevent any runoff or sediment from entering the storage bed. This edge strip should remain in place until all bare soils contiguous to beds are stabilized and vegetated. As the site is fully stabilized, excess geotextile along bed edges can be cut back to the edge of the bed.
f. Clean-washed, uniformly graded aggregate should be placed in the bed. Construction equipment shall be kept off the bed bottom as much as possible.
g. Storm Tank Pack placement and connections shall be made according to the manufacturer's recommendations and with water tight joints and seals to prevent leakage.
h. Approved soil media should be placed over infiltration bed in maximum 6-inch lifts.
i. Riser shall be temporarily capped to prevent water and sediment from entering infiltration trenches during individual lot construction.

INFILTRATION BASIN 4

After tributary areas are stabilized and any temporary sediment control removed construct the basin according to the following procedures:

a. The existing subgrade under the bed area should NOT be compacted or subject to excessive construction equipment traffic prior to geotextile and stone bed placement.
b. Where erosion of subgrade has caused accumulation of fine materials and/or surface ponding, this material should be removed with light equipment and the underlying soils scarified to a minimum depth of 6 inches with a York rake (or equivalent) and light tractor. All fine grading should be done by hand. All bed bottoms should be at level grade.
c. Install outlet pipe and riser.
d. Seed and stabilize topsoil.

INFILTRATION BASIN 1 (Converted from Sediment Basin 1)

After tributary areas are stabilized and any temporary sediment control removed construct the basin according to the following procedures:

a. The existing subgrade under the bed area should NOT be compacted or subject to excessive construction equipment traffic prior to geotextile and stone bed placement.
b. Remove 1 foot of the original soil below the bottom elevation of the sediment basin. The underlying soils shall be scarified to a minimum depth of 6 inches with a York rake (or equivalent) and light tractor. All fine grading should be done by hand. All bed bottoms should be at level grade.
c. Where erosion of subgrade has caused accumulation of fine materials and/or surface ponding, this material should be removed with light equipment and the underlying soils scarified to a minimum depth of 6 inches with a York rake (or equivalent) and light tractor. All fine grading should be done by hand. All bed bottoms should be at level grade.
d. An infiltration test shall be performed at the final bottom elevation of the infiltration basin.
e. The temporary riser and pipe shall be removed.
f. The permanent outlet structure shall be converted to the final stage.
g. Approved soil amendment media should be placed over the infiltration areas according to the Soil Amendment Notes.
h. Seed and stabilize topsoil.

RAIN GARDENS IN COMMON AREAS (RG 1, 2, 3, 5, 6, 7)

Install upon completion and stabilization of tributary areas. Any sediment entering the Rain Garden during construction shall be removed with light equipment.

a. The Raingarden shall be excavated to the prescribed depth shown on the plan details. The bottom of the excavation shall be level. Use the lightest equipment possible. The bottom of the excavation shall not be compacted and shall be free from rocks and debris.
b. The underlying soil shall be scarified a minimum of twelve (12) inches with a York rake, subsoiler or other suitable equipment. If unforeseen conditions such as bedrock or sinkholes are uncovered or the infiltration rate is not achieved, the engineer shall be consulted.
c. The bottom of the rain garden shall have the amended soil installed according to the Soil Amendment Notes.
d. Install the outlet riser and pipe, if proposed.
e. Install the specified liner on the emergency spillway of the rain garden.
f. Stabilize the disturbed areas with permanent seeding, specified plantings, and mulch immediately upon completion of the conversion.

RAIN GARDEN 8 (Converted from Sediment Trap 1)

After tributary areas are stabilized and any temporary sediment control removed construct the basin according to the following procedures:

a. The existing subgrade under the bed area should NOT be compacted or subject to excessive construction equipment traffic prior to geotextile and stone bed placement.
b. Remove 1 foot of the original soil below the bottom elevation of the sediment trap. The underlying soils shall be scarified to a minimum depth of 6 inches with a York rake (or equivalent) and light tractor. All fine grading should be done by hand. All bed bottoms should be at level grade.
c. An infiltration test shall be performed at the final bottom elevation of the rain garden.
d. Install the riser, outlet pipe, and riprap apron beginning on the downstream end.
e. Amended soil shall be placed to a depth of 24" in the bottom of the Rain Garden 8.
f. The temporary spillway shall be removed and the permanent spillway constructed to discharge to the Infiltration Basin 1.
g. Approved soil amendment media should be placed over the infiltration areas according to the Soil Amendment Notes.
h. Plant trees, shrubs, seed and stabilize topsoil.

INDIVIDUAL LOT RAIN GARDEN (Lots 1, 2, 3, 4, 5, 8, 9, 10, 31, 32, 33, 34, 35, 37, 38, 39)

Install upon completion and stabilization of tributary areas. Can be constructed in any order with the exception of Lot 28, which can only be constructed after removal of temporary Sediment Trap 2. Any sediment entering the Rain Garden during construction shall be removed with light equipment.

a. The Raingarden shall be excavated to the prescribed depth shown on the plan details. The bottom of the excavation shall be level. Use the lightest equipment possible. The bottom of the excavation shall not be compacted and shall be free from rocks and debris.
b. The underlying soil shall be scarified a minimum of twelve (12) inches with a York rake, subsoiler or other suitable equipment. If unforeseen conditions such as bedrock or sinkholes are uncovered or the infiltration rate is not achieved, the engineer shall be consulted.
c. The bottom of the rain garden shall have the amended soil installed according to the Soil Amendment Notes.
d. Install the specified liner on the emergency spillway of the rain garden.
e. Stabilize the disturbed areas with permanent seeding, specified plantings, and mulch immediately upon completion of the conversion.

INFILTRATION TRENCH (Storm Tanks TH-1, 2, 3, 6, and 7 and Stone Pit TH-2)

After tributary areas are stabilized and any temporary sediment control removed construct each trench according to the following procedures, beginning at the downstream end (Storm Tank TH-1):

a. The existing subgrade under the bed areas should NOT be compacted or subject to excessive construction equipment traffic prior to geotextile and stone bed placement.
b. Remove voided rock to the depth specified on the details.
c. Where erosion of subgrade has caused accumulation of fine materials and/or surface ponding, this material should be removed with light equipment and the underlying soils scarified to a minimum depth of 6 inches with a York rake (or equivalent) and light tractor. All fine grading should be done by hand. All bed bottoms should be at level grade.
d. Place engineered filter media to the depth specified in the details.
e. Geotextile and bed aggregate should be placed immediately after approval of subgrade preparation and installation of structures. Geotextile should be placed in accordance with manufacturer's standards and recommendations. Adjacent strips of geotextile should overlap a minimum of 16 inches. It should also be secured at least 4 feet outside of bed in order to prevent any runoff or sediment from entering the storage bed. This edge strip should remain in place until all bare soils contiguous to beds are stabilized and vegetated. As the site is fully stabilized, excess geotextile along bed edges can be cut back to the edge of the bed.
f. Clean-washed, uniformly graded aggregate should be placed in the bed in maximum 8-inch lifts. Each layer should be lightly compacted.
g. Storm Tanks shall be installed according to the manufacturer's recommendations.
h. Inlet and outlet pipe placement and connections and storm inlet placement shall be made according to the manufacturer's recommendations.
i. Approved soil media should be placed over infiltration trench in maximum 6-inch lifts.
j. Storm Inlet shall be temporarily capped to prevent water and sediment from entering infiltration trenches during construction and until tributary areas are stabilized.
k. Connect outlet pipe from Storm Tank 5 to the outlet structure of Storm Tank TH-1.
l. Install check dams and stabilize, then remove riser caps.

UNDERGROUND DETENTION AT RAIN GARDEN 1

a. Impermeable Geotextile should be placed in accordance with manufacturer's standards and recommendations. Adjacent strips of geotextile should overlap a minimum of 16 inches. It should also be secured at least 4 feet outside of bed in order to prevent any runoff or sediment from entering the storage bed. This edge strip should remain in place until all bare soils contiguous to beds are stabilized and vegetated. As the site is fully stabilized, excess geotextile along bed edges can be cut back to the edge of the bed.
b. Clean-washed, uniformly graded aggregate should be placed in the bed in maximum 8-inch lifts. Each layer should be lightly compacted.
c. Storm Tanks shall be installed according to the manufacturer's recommendations.
d. Inlet and outlet pipe placement and connections and storm inlet placement shall be made according to the manufacturer's recommendations.
e. Approved soil media should be placed over infiltration trench in maximum 6-inch lifts.
f. Storm Inlet Risers shall be temporarily capped to prevent water and sediment from entering during construction and until tributary areas are stabilized and Rain Garden 1 is ready to be constructed and connected to the system.

LANDSCAPE RESTORATION

Proposed trees located on the north side of the valley in the undisturbed area and as riparian buffer improvement on the south side of the valley may be planted at any time throughout the construction process.

Proposed trees not included in rain gardens or basins or as street trees shall be planted according to the construction and stabilization of each individual lot.

Street trees not included in individual lot rain gardens shall be planted after lot construction and stabilization and binding course paving of proposed roads.

Proposed trees located within the Townhouse development disturbed areas may be planted after the disturbed areas have been stabilized.

SNOUT INLET PROTECTION DEVICES

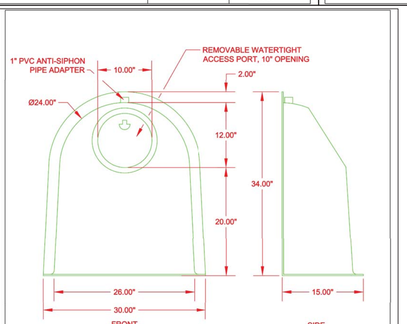
Installed after stabilization of tributary areas according to the manufacturers recommendations

VEGETATED SWALES (A4, B7A, C, and TOWNHOUSE)

a. Grading begins at the downstream end.
b. Place temporary liner and secure.
c. Seed and mulch with permanent seeding specification

WASTES AND RECYCLING

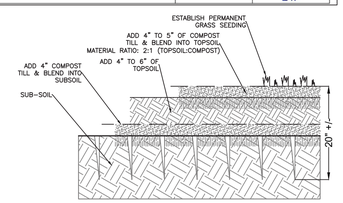
Sediment, organic waste (leaf debris, grass clippings, sticks), and inorganic waste (cans, plastics, paper, trash and other debris) may accumulate within filters and BMP's onsite. Accumulated sediment shall be redistributed in landscaped areas of the site. Other organic wastes can be sent to be composted whether available onsite or offsite. Recyclable trash and debris shall be sent to a recycling facility according to local and state regulations. All other trash and debris shall be disposed of properly according to local, state, and federal regulations.



U.S.PATENT #6126817ADDITIONAL PATENTS PENDING

BMP, INC.
53 MT. ARCHER ROAD, LYME, CT. 06371
(800) 504-8008 FAX: (860)434-3195

DESCRIPTION	DATE	SCALE
24F SNOUT OIL & DEBRIS STOP	09/20/99	NONE
	DRAWING NUMBER	24F



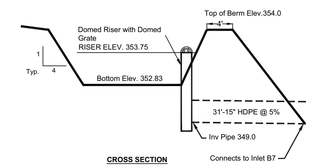
RIPPING SHALL BE DONE WITH A SOLID SHANK RIP TEETH ON REAR OF TRACK MACHINE. DO NOT RIP SOIL THAT IS WET. AVOID RIPPING EXISTING TREE ROOTS, SPACE RIP CHANNELS 12"TO 36" APART. TILLING AND BLENDING MAY BE DONE WITH ROTOTILLER, DISK HARROW, CHISEL PLOW, SPRING TOOTH HARROW, OR THER SUITABLE EQUIPMENT.

SOIL RESTORATION MAINTENANCE: WATER GRASS AS NEEDED FOR VIGOROUS HEALTH. APPLY ADDITIONAL COMPOST AS NEEDED FOR NOURISHMENT. AVOID COMMERCIAL FERTILIZER AND PESTICIDES.

SOIL AMENDMENT & RESTORATION DETAIL

NO SCALE

PROPOSED INFILTRATION BASIN 4 (N.T.S.)

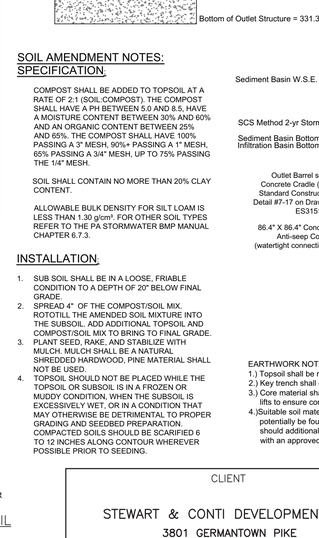


CROSS SECTION

NO.	REVISION	DATE	BY	APP.
13.	REVISED OWNERSHIP INFORMATION	01-24-20	JCE	BDB
12.	REVISED PER GILMORE (08-22-19) AND MCMAHON (08-27-19, 08-28-19)	08-29-19	JCE	BDB
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8.	REVISED PER GILMORE (6-15-18), ALTA (6-21-18), MCMAHON (6-15-18), ENTECH (6-6-18) LETTERS	07-20-18	JCE	BDB
7.	REVISED SHEET SET NUMBERS	05-02-18	JCE	BDB
6.	REVISED SHEET # AND SET # PER GILMORE REVIEW LETTER DATED 01-31-18	01-31-18	JCE	BDB
5.	REVISED PER MONTGOMERY CCD REVIEW LETTER DATED 10/13/17	10/17/17	JCE	BDB
4.	REVISED PER MONTGOMERY CCD REVIEW LETTER DATED 7/18/17	9/14/17	JCE	BDB
3.	REVISED PER MONTGOMERY CCD REVIEW LETTER DATED 2/7/17	5/8/17	JCE	BDB
2.	RISED PER MONTGOMERY CCD LETTER DATED 4/4/16	11/10/16	JCE	BDB
1.	REV. PER MONTGOMERY CCD LETTER DATED 11/12/15	1/8/16	JCE	BDB

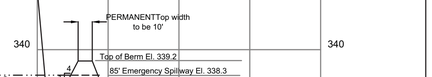
PROPOSED BASIN 1 OUTLET STRUCTURE

(n.t.s.)



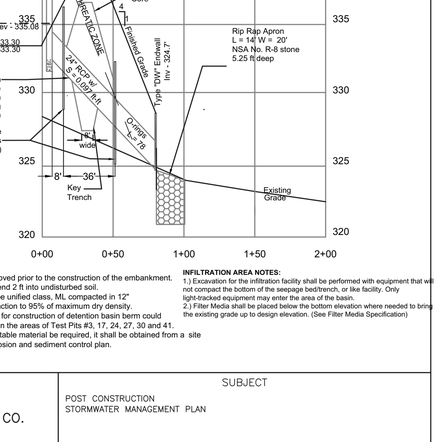
Proposed BASIN 1 Emergency Spillway

(N.T.S.)



PROPOSED BASIN 1 PROFILE

Hor Scale 1" = 50'
Vert Scale 1" = 5'



SOIL AMENDMENT NOTES: SPECIFICATION

COMPOST SHALL BE ADDED TO TOPSOIL AT A RATE OF 2:1 (SOIL:COMPOST). THE COMPOST SHALL HAVE A PH BETWEEN 5.0 AND 8.5, HAVE A MOISTURE CONTENT BETWEEN 30% AND 60% AND AN ORGANIC CONTENT BETWEEN 25% AND 65%. THE COMPOST SHALL HAVE 100% PASSING A 3" MESH, 90%+ PASSING A 1" MESH, 65% PASSING A 3/4" MESH, UP TO 75% PASSING THE 1/4" MESH.

SOIL SHALL CONTAIN NO MORE THAN 20% CLAY CONTENT.

ALLOWABLE BULK DENSITY FOR SILT LOAM IS LESS THAN 1.30 g/cm³. FOR OTHER SOIL TYPES REFER TO THE PA STORMWATER BMP MANUAL CHAPTER 6.7.3.

INSTALLATION

1. SUB SOIL SHALL BE IN A LOOSE, FRIABLE CONDITION TO A DEPTH OF 20" BELOW FINAL GRADE.
2. SPREAD 4" OF THE COMPOST/SOIL MIX. ROTOTILL THE AMENDED SOIL MIXTURE INTO THE SUBSOIL. ADD ADDITIONAL TOPSOIL AND COMPOST/SOIL MIX TO BRING TO FINAL GRADE.
3. PLANT SEED, RAKE, AND STABILIZE WITH MULCH. MULCH SHALL BE A NATURAL SHREDDED HARDWOOD, PINE MATERIAL SHALL NOT BE USED.
4. TOPSOIL SHOULD NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION. COMPACTED SOILS SHOULD BE SCARIFIED 6 TO 12 INCHES ALONG CONTOUR WHEREVER POSSIBLE PRIOR TO SEEDING.

EARTHWORK NOTES:
1.) Topsoil shall be removed prior to the construction of the embankment.
2.) Key trench shall extend 2 ft into undisturbed soil.
3.) Core material shall be unified class, ML compacted in 12" lifts to ensure compaction to 95% of maximum dry density.
4.)Suitable soil material for construction of detention basin berm could potentially be found in the areas of Test Pits #3, 17, 24, 27, 30 and 41. should additional suitable material be required, it shall be obtained from a site with an approved erosion and sediment control plan.

INFILTRATION AREA NOTES:
1.) Excavation for the infiltration facility shall be performed with equipment that will not compact the bottom of the seepage bed/trench, or like facility. Only light-tracked equipment may enter the area of the basin.
2.) Filter Media shall be placed below the bottom elevation where needed to bring the existing grade up to design elevation. (See Filter Media Specification)

CLIENT	SUBJECT
STEWART & CONTI DEVELOPMENT CO. 3801 GERMANTOWN PIKE COLLEGEVILLE, PA 19426	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN ROLLING MEADOWS NEW HANOVER TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

SEAL

SEAL

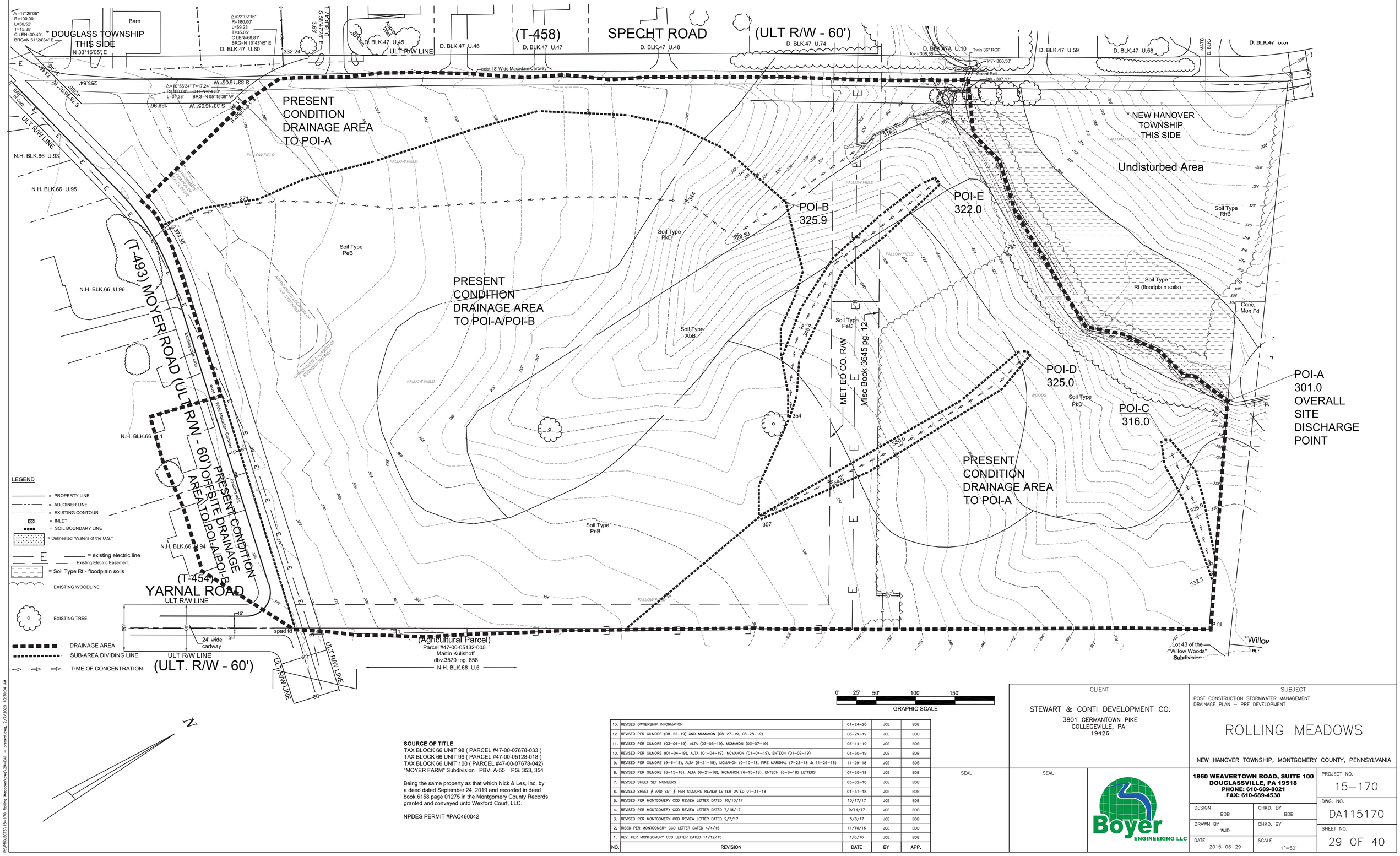
Boyer ENGINEERING LLC

1860 WEAVERTOWN ROAD, SUITE 100
DOUGLASSVILLE, PA 19518
PHONE: 610-689-8021
FAX: 610-689-4538

DESIGN	CHKD. BY
BDB	BDB
DRAWN BY	CHKD. BY
WJD	
DATE	SCALE
2015-06-29	1"=50'

PROJECT NO.
15-170
DWG. NO.
PC415170
SHEET NO.
28 OF 40

P:\PROJECTS\15-170 Rolling Meadows\Dwg\28-PC4-Construction Details.dwg, 2/7/2020 10:29:52 AM



NO.	REVISION	DATE	BY	APP.
13.	REVISED OWNERSHIP INFORMATION	01-24-20	JCE	BDB
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1.	REV. PER MONTGOMERY CCD LETTER DATED 11/12/15	1/8/16	JCE	BDB

SOURCE OF TITLE
TAX BLOCK 66 UNIT 98 (PARCEL #47-00-07678-033)
TAX BLOCK 66 UNIT 99 (PARCEL #47-00-05128-018)
TAX BLOCK 66 UNIT 100 (PARCEL #47-00-07678-042)
"MOYER FARM" Subdivision PBV. A-55 PG. 353, 354

Being the same property as that which Nick & Les, Inc. by a deed dated September 24, 2019 and recorded in deed book 6158 page 01275 in the Montgomery County Records granted and conveyed unto Wexford Court, LLC.

NPDES PERMIT #PAC460042

CLIENT
STEWART & CONTI DEVELOPMENT CO.
3801 GERMANTOWN PIKE
COLLEGEVILLE, PA
19426

SUBJECT
POST CONSTRUCTION STORMWATER MANAGEMENT
DRAINAGE PLAN – PRE DEVELOPMENT

ROLLING MEADOWS

NEW HANOVER TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

SEAL

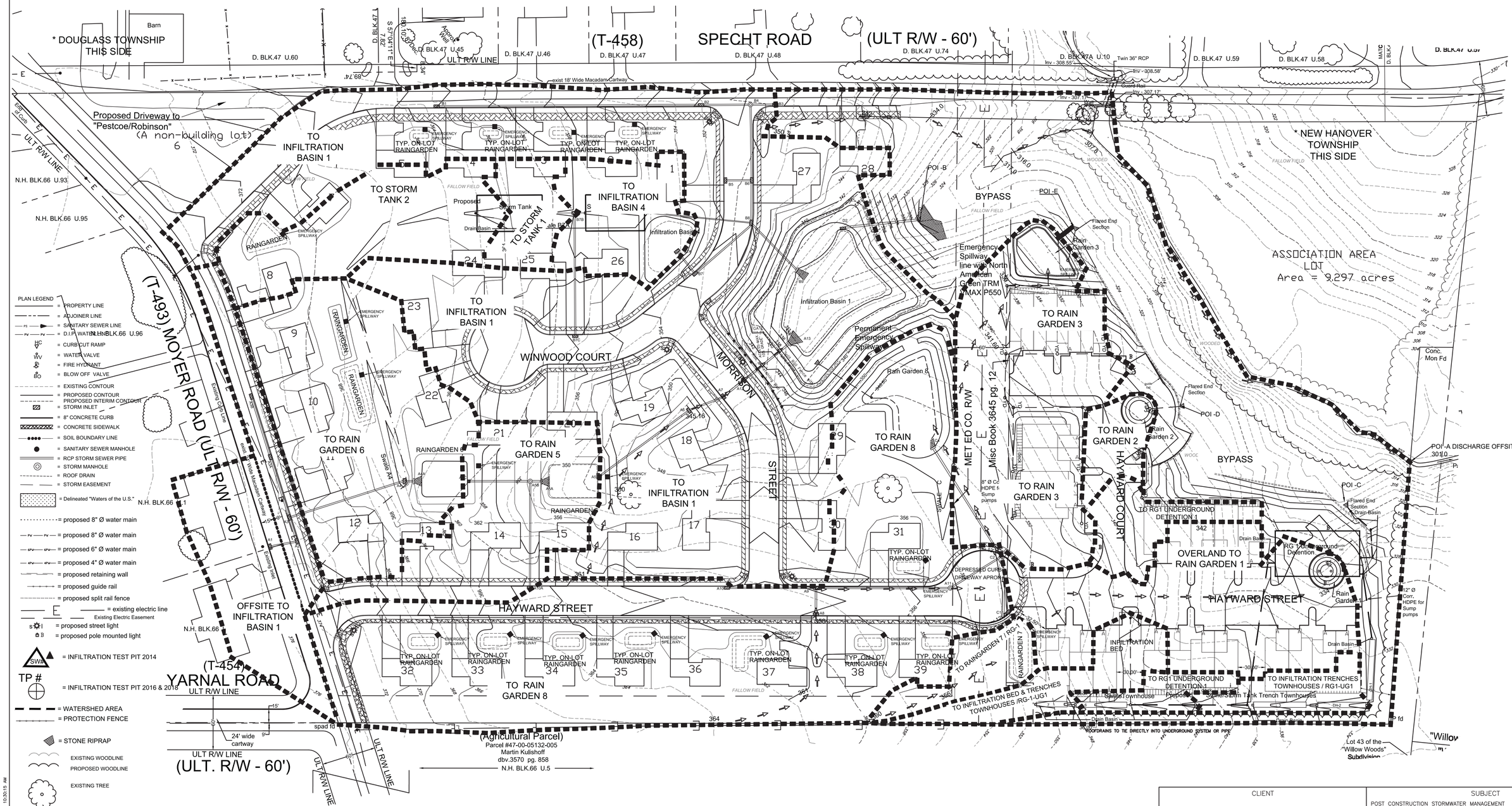
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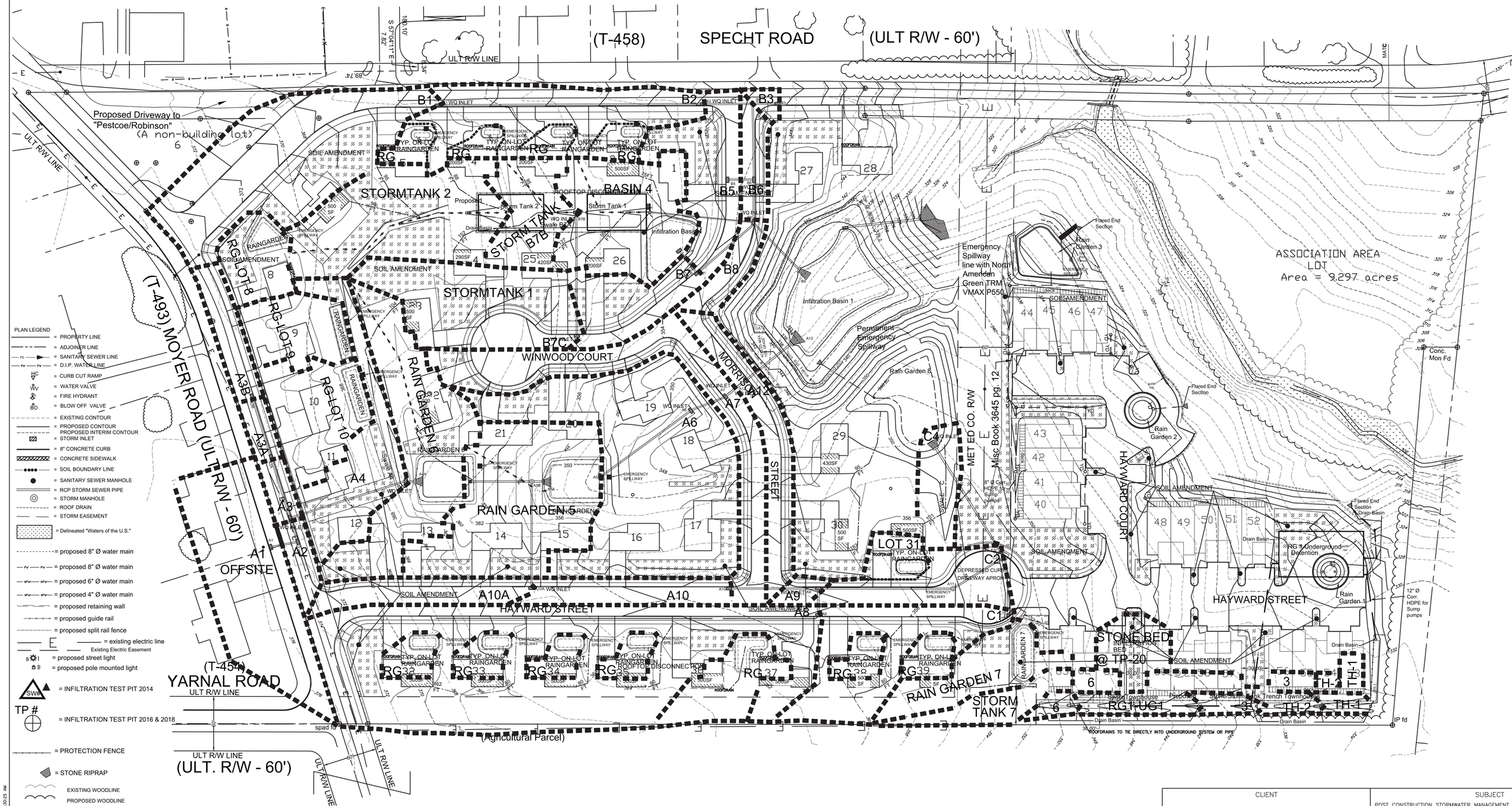
Boyer ENGINEERING LLC

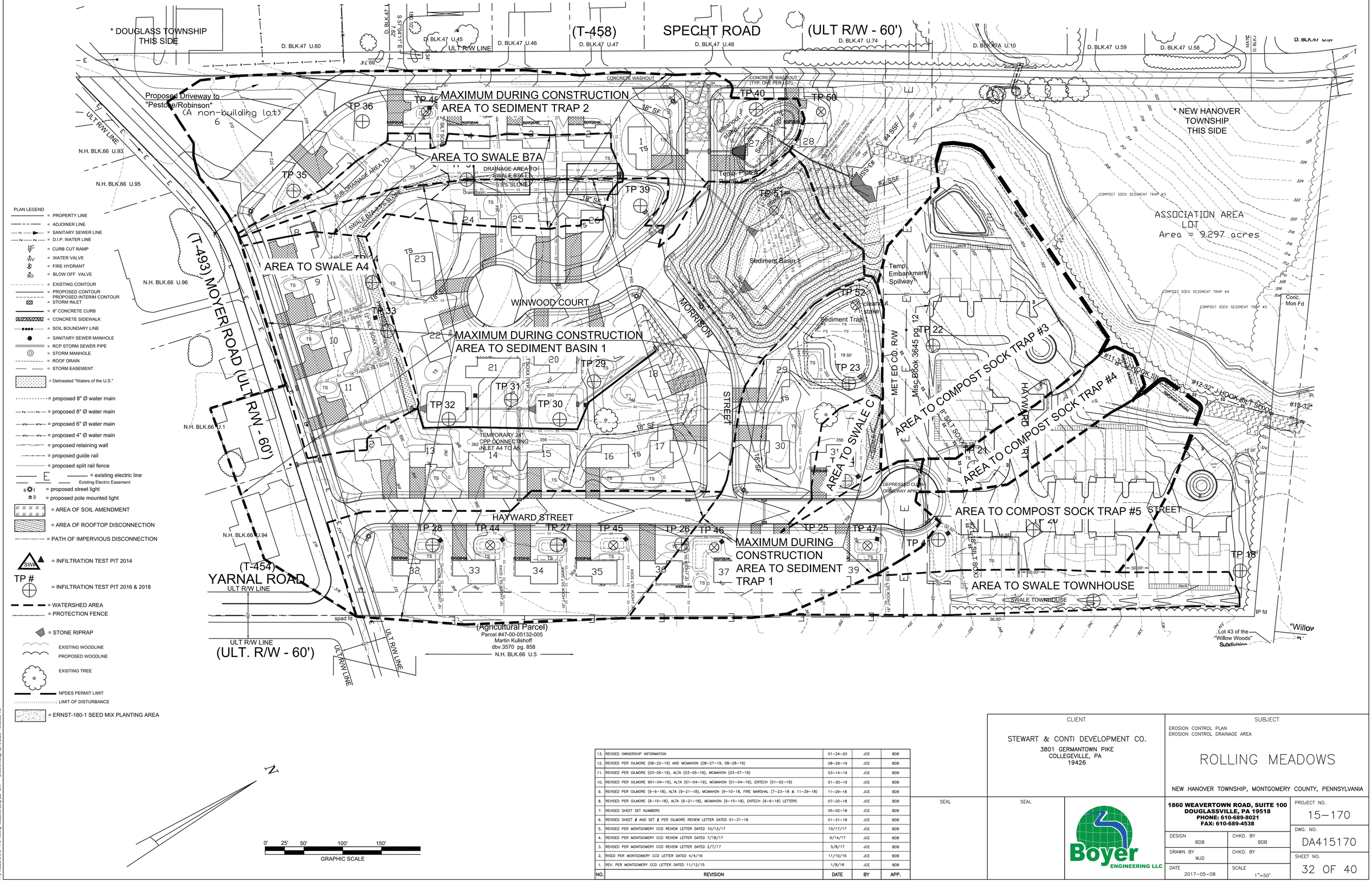
1860 WEAVERTOWN ROAD, SUITE 100
DOUGLASSVILLE, PA 19518
PHONE: 610-689-8021
FAX: 610-689-4538

DESIGN BDB	CHKD. BY BDB	PROJECT NO.	15-170
DRAWN BY WJD	CHKD. BY	DWG. NO.	DA115170
DATE 2015-06-29	SCALE 1"=50'	SHEET NO.	29 OF 40

P:\PROJECTS\15-170 Rolling Meadows\Dwg\29-DA1 - present.dwg, 2/7/2020 10:30:04 AM


* DOUGLASS TOWNSHIP THIS SIDE
Barn
D. BLK.47 U.60
D. BLK.47 U.45
D. BLK.47 U.46
D. BLK.47 U.47
D. BLK.47 U.48
D. BLK.47 U.74
D. BLK.47A U.10
D. BLK.47 U.59
D. BLK.47 U.58
(T-458) SPECHT ROAD (ULT R/W - 60')
ULT R/W LINE
exist 18' Wide Macadam Cartway
Twin 36" RCP
Inv - 308.55'
Inv - 308.58'
Inv - 307.17'
Inv - 307.11'
Ground Rise
Proposed Driveway to "Pestcoe/Robinson"
(A non-building lot)
6
TO INFILTRATION BASIN 1
TYP. ON-LOT RAINGARDEN
TO STORM TANK 2
TO STORM TANK 1
Proposed Storm Tank
Drain Basin
Inlet B
Infiltration Basin
TO INFILTRATION BASIN 4
FALLOW FIELD
WOODED
POI -B
POI -E
BYPASS
Emergency Spillway line with North American Green TRM MAX P550
Flared End Section
Rain Garden 3
TO RAIN GARDEN 3
ASSOCIATION AREA LOT
Area = 9.297 acres
* NEW HANOVER TOWNSHIP THIS SIDE
N.H. BLK.66 U.93
N.H. BLK.66 U.95
N.H. BLK.66 U.96
(T-493) MOYER ROAD (ULT R/W - 60')
TO INFILTRATION BASIN 1
WINWOOD COURT
MORRISON STREET
Infiltration Basin 1
Permanent Emergency Spillway
Rain Garden 8
TO RAIN GARDEN 8
TO RAIN GARDEN 6
TO RAIN GARDEN 5
RAINGARDEN 6
TO INFILTRATION BASIN 1
RAINGARDEN
HAYWARD STREET
TO RAIN GARDEN 2
Rain Garden 2
POI -D
POI -C
POI -A DISCHARGE OFFSITE
TO RG1 UNDERGROUND DETENTION 1
OVERLAND TO RAIN GARDEN 1
RG 1 Underground Detention
Rain Garden 1
Flared End Section
Drain Basin
12" Ø Corr. HDPE for Sump pumps
Conc. Mon Fd
OFFSITE TO INFILTRATION BASIN 1
N.H. BLK.66
(T-454) YARNAL ROAD
ULT R/W LINE
(ULT. R/W - 60')
24' wide cartway
spad fd
(Agricultural Parcel)
Parcel #47-00-05132-005
Martin Kulishoff
dbv.3570 pg. 858
N.H. BLK.66 U.5
N.H. BLK.66 U.1
TYP. ON-LOT RAINGARDEN
DEPRESSED CURB DRIVEWAY APRON
TO RAINGARDEN 7 / RG-1
RAINGARDEN 7
INFILTRATION BED
TO INFILTRATION BED & TRENCHES TOWNHOUSES /RG-1-UG1
TO INFILTRATION TRENCHES TOWNHOUSES / RG1-UG1
Swm Townhouse
Proposed Swm Tank Trench Townhouses
ROOFDRAINS TO TIE DIRECTLY INTO UNDERGROUND SYSTEM OR PIPE
Lot 43 of the "Willow Woods" Subdivision
MET ED CO. R/W
Misc Book 3645 pg. 12
8" Ø CC HDPE fr Sump pumps
Existing Dwl
Existing Dwl
Existing Dwl


(T-458)
SPECHT ROAD
(ULT R/W - 60')
ULT R/W LINE
Proposed Driveway to "Pestcoe/Robinson" (A non-building lot)
B1
B2
B3
B4
B5
B6
B7
B7A
B7B
B8
STORMTANK 2
STORMTANK 1
BASIN 4
Proposed Storm Tank 2
Storm Tank 1
Infiltration Basin
WQ INLET
Swale B7B
SOIL AMENDMENT
ROOFTOP DISCONNECTION
TYP. ON-LOT RAINGARDEN
RAINGARDEN
EMERGENCY SPILLWAY
ROOFDRAIN
RG-LOT 8
RG-LOT 9
RG-LOT 10
RAIN GARDEN 5
RAIN GARDEN 6
WINWOOD COURT
MORRISON AVENUE
STREET
A1 OFFSITE
A2
A3
A3A
A3B
A4
A5
A6
A7
A8
A9
A10
A10A
A11
A12
A13
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A50



PLAN LEGEND

- = PROPERTY LINE
- = ADJOINER LINE
- = SANITARY SEWER LINE
- = D.I.P. WATER LINE
- = CURB CUT RAMP
- = WATER VALVE
- = FIRE HYDRANT
- = BLOW OFF VALVE
- = EXISTING CONTOUR
- = PROPOSED CONTOUR
- = PROPOSED INTERIM CONTOUR
- = STORM INLET
- = 8" CONCRETE CURB
- = CONCRETE SIDEWALK
- = SOIL BOUNDARY LINE
- = SANITARY SEWER MANHOLE
- = RCP STORM SEWER PIPE
- = STORM MANHOLE
- = ROOF DRAIN
- = STORM EASEMENT
- = Delineated "Waters of the U.S."
- = proposed 8" Ø water main
- = proposed 8" Ø water main
- = proposed 6" Ø water main
- = proposed 4" Ø water main
- = proposed retaining wall
- = proposed guide rail
- = proposed split rail fence
- = existing electric line (Existing Electric Easement)
- = proposed street light
- = proposed pole mounted light
- = AREA OF SOIL AMENDMENT
- = AREA OF ROOFTOP DISCONNECTION
- = PATH OF IMPERVIOUS DISCONNECTION
- = INFILTRATION TEST PIT 2014
- = INFILTRATION TEST PIT 2016 & 2018
- = WATERSHED AREA
- = PROTECTION FENCE
- = STONE RIPRAP
- EXISTING WOODLINE
- PROPOSED WOODLINE
- EXISTING TREE
- NPDES PERMIT LIMIT
- LIMIT OF DISTURBANCE
- = ERNST-180-1 SEED MIX PLANTING AREA

N

0' 25' 50' 100' 150'

GRAPHIC SCALE

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CLIENT

STEWART & CONTI DEVELOPMENT CO.
3801 GERMANTOWN PIKE
COLLEGEVILLE, PA
19426

SUBJECT

EROSION CONTROL PLAN
EROSION CONTROL DRAINAGE AREA

ROLLING MEADOWS

NEW HANOVER TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

SEAL

SEAL

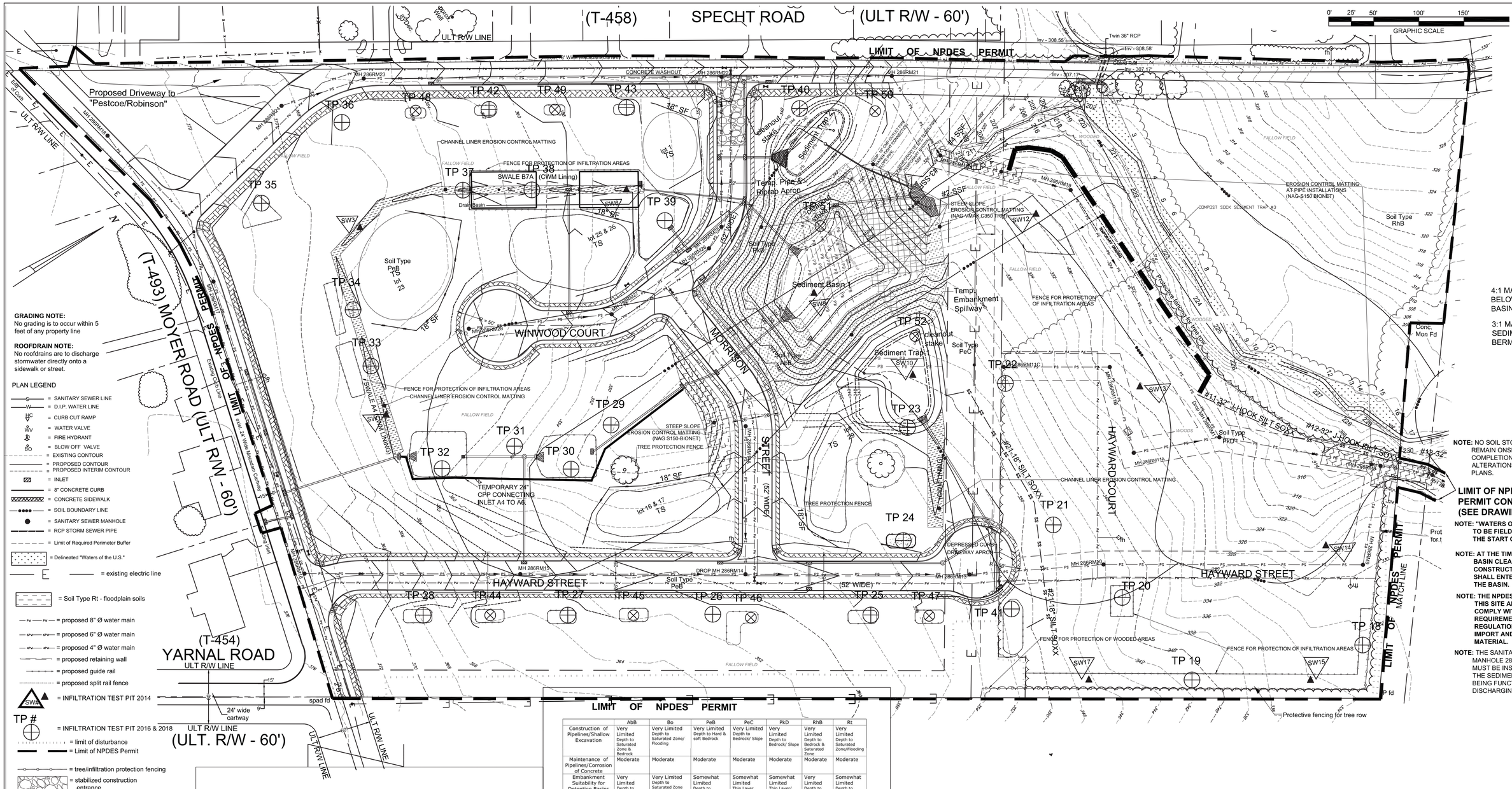
Boyer ENGINEERING LLC

1860 WEAVERTOWN ROAD, SUITE 100
DOUGLASSVILLE, PA 19518
PHONE: 610-689-8021
FAX: 610-689-4538

DESIGN BDB	CHKD. BY BDB
DRAWN BY WJD	CHKD. BY
DATE 2017-05-08	SCALE 1"=50'

PROJECT NO. 15-170
DWG. NO. DA415170
SHEET NO. 32 OF 40

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GRADING NOTE:
No grading is to occur within 5 feet of any property line

ROOFDRAIN NOTE:
No roofdrains are to discharge stormwater directly onto a sidewalk or street.

PLAN LEGEND

- = SANITARY SEWER LINE
- = D.I.P. WATER LINE
- = CURB CUT RAMP
- = WATER VALVE
- = FIRE HYDRANT
- = BLOW OFF VALVE
- = EXISTING CONTOUR
- = PROPOSED CONTOUR
- = PROPOSED INTERIM CONTOUR
- = INLET
- = 8" CONCRETE CURB
- = CONCRETE SIDEWALK
- = SOIL BOUNDARY LINE
- = SANITARY SEWER MANHOLE
- = RCP STORM SEWER PIPE
- = Limit of Required Perimeter Buffer
- = Delineated "Waters of the U.S."
- = existing electric line
- = Soil Type Rt - floodplain soils
- = proposed 8" Ø water main
- = proposed 6" Ø water main
- = proposed 4" Ø water main
- = proposed retaining wall
- = proposed guide rail
- = proposed split rail fence
- = INFILTRATION TEST PIT 2014
- = INFILTRATION TEST PIT 2016 & 2018
- = limit of disturbance
- = Limit of NPDES Permit
- = tree/infiltration protection fencing
- = stabilized construction entrance
- = standard silt fence
- = super silt fence
- = compost silt sock
- = topsoil stockpile
- = erosion control mat
- = North American Green TRM VMAX P550 (or approved equivalent)
- = curled wood mat temporary lining / grass permanent lining
- = FACW Wetland Meadow mix with mod. soil
- = SEDIMENT BASIN BAFFLE
- = COMPOST SOCK SEDIMENT TRAP
- = North American Green S150-BIONET (or approved equivalent)
- EXISTING WOODLINE
- PROPOSED WOODLINE
- EXISTING TREE

4:1 MAX SLOPE BELOW SEDIMENT BASIN 1 BERM ELEV.

3:1 MAX SLOPE ABOVE SEDIMENT BASIN 1 BERM ELEV.

NOTE: NO SOIL STOCKPILE SHALL REMAIN ONSITE AFTER COMPLETION OF THE PROPOSED ALTERATIONS SHOW ON THESE PLANS.

LIMIT OF NPDES PERMIT CONTINUES OFFSITE (SEE DRAWING ES315170)

NOTE: "WATERS OF THE US" AREAS TO BE FIELD STAKED PRIOR TO THE START OF CONSTRUCTION

NOTE: AT THE TIME OF SEDIMENT BASIN CLEANOUT NO CONSTRUCTION VEHICLES SHALL ENTER THE AREA OF THE BASIN.

NOTE: THE NPDES PERMITEE(S) FOR THIS SITE ARE REQUIRED TO COMPLY WITH ALL CURRENT REQUIREMENTS AND REGULATIONS REGARDING THE IMPORT AND EXPORT OF FILL MATERIAL.

NOTE: THE SANITARY SEWER FROM MANHOLE 286RM19 TO 286RM20 MUST BE INSTALLED PRIOR TO THE SEDIMENT BASIN OUTLET BEING FUNCTIONAL AND DISCHARGING.

LIMIT OF NPDES PERMIT

	AbB	Bo	PeB	PeC	PkD	RhB	Rt
Construction of Pipelines/Shallow Excavation	Very Limited Depth to Saturated Zone & Bedrock	Very Limited Depth to Saturated Zone/ Flooding	Very Limited Depth to Hard & soft Bedrock	Very Limited Depth to Bedrock/ Slope	Very Limited Depth to Bedrock/ Slope	Very Limited Depth to Bedrock & Saturated Zone	Very Limited Depth to Saturated Zone/Flooding
Maintenance of Pipelines/Corrosion of Concrete	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Embankment Suitability for Detention Basins	Very Limited Depth to Saturated Zone	Very Limited Depth to Saturated Zone	Somewhat Limited Depth to Saturated Zone	Somewhat Limited Thin Layer	Somewhat Limited Thin Layer/ Seepage	Very Limited Depth to Saturated Zone	Somewhat Limited Depth to Saturated Zone
Landscaping and Lawn Suitability	Somewhat Limited Depth to Saturated Zone	Very Limited Depth to Saturated Zone	Somewhat Limited Depth to Bedrock	Somewhat Limited Depth to Bedrock/Slope	Very Limited Slope	Somewhat Limited Low Exchange/ Depth to Saturated Zone	Somewhat Limited Flooding
Home Site Suitability with Basement	Very Limited Wetness	Very Limited Depth to Saturated Zone/ Ponding	Very Limited Depth to Bedrock	Very Limited Depth to Bedrock/ Slope	Very Limited Depth to Bedrock/ Slope	Very Limited Rock Fragments/ Wetness	Very Limited Rock Flooding/ Depth to Saturated Zone
Hydrologic Soil Group	C	B/D	C	C	C	C	C

NOTE: SUITABLE SOIL MATERIAL FOR CONSTRUCTION OF DETENTION BASIN BERMS COULD POTENTIALLY BE FOUND IN THE AREAS OF TEST PITS #3, 17, 24, 27, 30 AND 41. SHOULD ADDITIONAL SUITABLE MATERIAL BE REQUIRED, IT SHALL BE OBTAINED FROM A SITE WITH AN APPROVED EROSION AND SEDIMENT CONTROL PLAN.

Soil Characteristics

Soil Symbol	AbB	Bo	PeB	PeC	PkD	RhB	Rt
Soil Name	Abbottstown Silt Loam	Bowmansville-Knauers Silt Loam	Penn Silt Loam	Penn Silt Loam	Penn-Klinesville Channery Silt Loam	Reaville Silt Loam	Rowland Silt Loam
Slopes	3 to 8%	0 to 3%	3 to 8 %	8 to 15%	15 to 25%	3 to 8%	0 to 3%
Depth to Seasonal Water Table (in)	6 to 18	0 to 18	More than 80	More than 80	More than 80	6 to 36	12 to 36
Depth to Bedrock (in)	40 to 60	72 to 99 Lithic bedrock	20 to 40 Lithic Bedrock	20 to 40 Lithic Bedrock	20 to 40 Lithic Bedrock	20 to 40 Lithic Bedrock	60 to 99 Lithic Bedrock
pH	Test Soil	Test Soil	Test Soil	Test Soil	Test Soil	Test Soil	Test Soil
Suitability for Winter Grading	Poor	Poor	Good	Good	Good	Poor	Poor
Susceptibility to Frost Action	Poor	Poor	Fair	Fair	Fair	Poor	Poor
Topsoil Suitability	Fair Rock Fragments/ Wetness	Poor Wetness/Rock Fragments	Fair Depth to Bedrock	Fair Rock Fragments	Poor Slope/Rock	Poor Slope/Rock	Fair Rock Fragments/ Wetness
Road Fill Suitability	Poor Low Strength/ Wetness	Poor Low Strength/ Wetness	Poor Depth to Bedrock/ Low Strength	Poor Depth to Bedrock/ Low Strength	Poor Depth to Bedrock/ Low Strength	Poor Depth to Bedrock/ Low Strength	Poor Low Strength/ Wetness
Local Road and Streets	Very Limited Depth to Cemented Pan/ Frost Action	Very Limited Depth to Saturated Zone/ Frost Action/ Flooding	Very Limited Depth to Bedrock/ Low Strength	Very Limited Depth to Bedrock/ Low Strength	Very Limited Depth to Bedrock/Slope/ Low Strength	Very Limited Frost Action/ Low Strength	Very Limited Frost Action/ Flooding/Low Strength

NO.	REVISION	DATE	BY	APP.
13.	REVISED OWNERSHIP INFORMATION	01–24–20	JCE	BDB
12.	REVISED PER GILMORE (08–22–19) AND MCMAHON (08–27–19, 08–28–19)	08–29–19	JCE	BDB
11.	REVISED PER GILMORE (03–06–19), ALTA (03–05–19), MCMAHON (03–07–19)	03–14–19	JCE	BDB
10.	REVISED PER GILMORE 901–04–19), ALTA (01–04–19), MCMAHON (01–04–19), ENTECH (01–02–19)	01–30–19	JCE	BDB
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6.	REVISED SHEET # AND SET # PER GILMORE REVIEW LETTER DATED 01–31–18	01–31–18	JCE	BDB
5.	REVISED PER MONTGOMERY CCD REVIEW LETTER DATED 10/13/17	10/17/17	JCE	BDB
4.	REVISED PER MONTGOMERY CCD REVIEW LETTER DATED 7/18/17	9/14/17	JCE	BDB
3.	REVISED PER MONTGOMERY CCD REVIEW LETTER DATED 2/7/17	5/8/17	JCE	BDB
2.	RISED PER MONTGOMERY CCD LETTER DATED 4/4/16	11/10/16	JCE	BDB
1.	REV. PER MONTGOMERY CCD LETTER DATED 11/12/15	1/8/16	JCE	BDB

CLIENT

STEWART & CONTI DEVELOPMENT CO.
3801 GERMANTOWN PIKE
COLLEGEVILLE, PA
19426

SUBJECT

EROSION AND SEDIMENTATION CONTROL PLAN – GENERAL SITE

ROLLING MEADOWS

NEW HANOVER TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

SEAL

SEAL

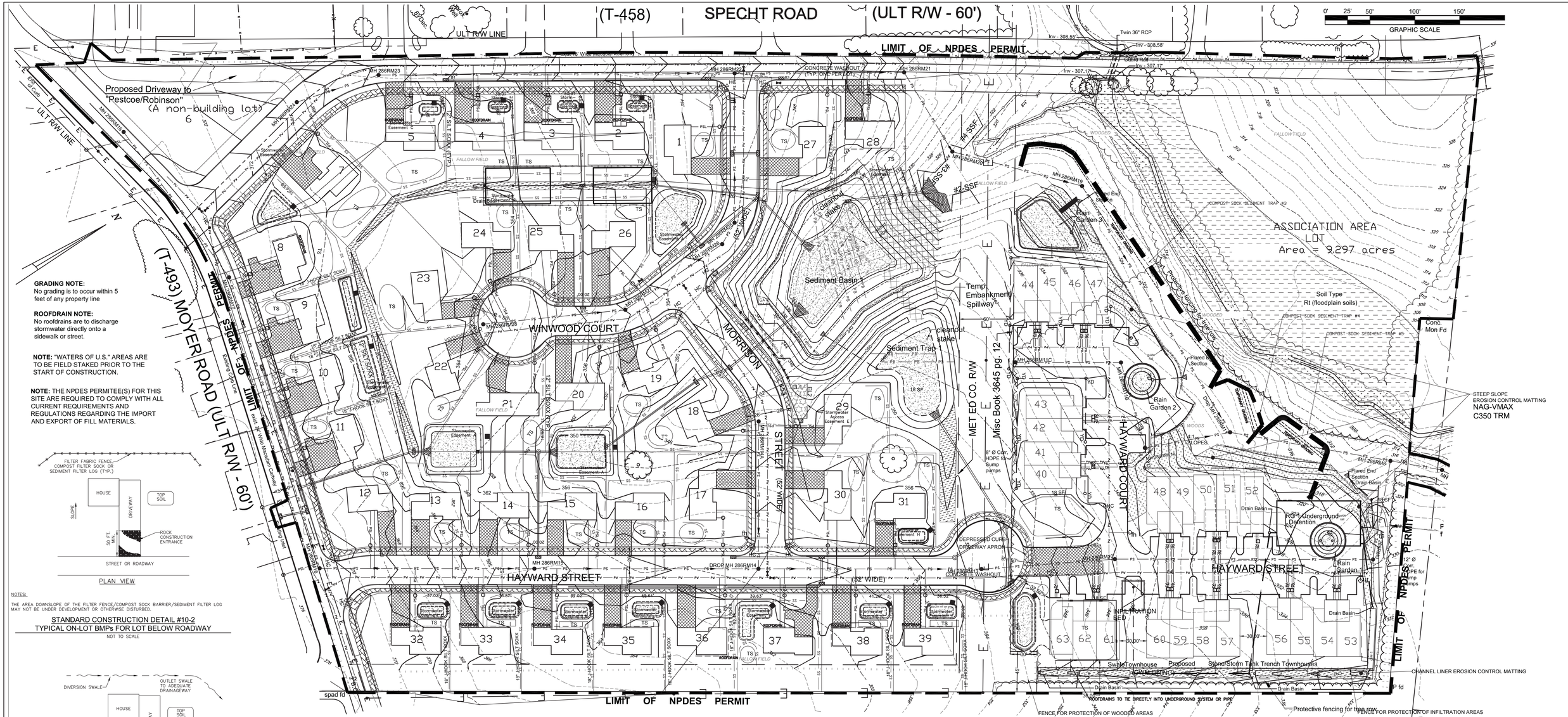
Boyer ENGINEERING LLC

1860 WEAVERTOWN ROAD, SUITE 100
DOUGLASSVILLE, PA 19518
PHONE: 610-689-8021
FAX: 610-689-4538

DESIGN BDB	CHKD. BY BDB
DRAWN BY WJD	CHKD. BY
DATE 2015–06–29	SCALE 1"=50'

PROJECT NO. 15–170
DWG. NO. ES115170
SHEET NO. 33 OF 40

P:\PROJECTS\15-170 Rolling Meadows\dwg\33-ES1-E-S-Site Imp.dwg, 2/7/2020 10:30:45 AM



GRADING NOTE:
No grading is to occur within 5 feet of any property line

ROOFDRAIN NOTE:
No roofdrains are to discharge stormwater directly onto a sidewalk or street.

NOTE: "WATERS OF U.S." AREAS ARE TO BE FIELD STAKED PRIOR TO THE START OF CONSTRUCTION.

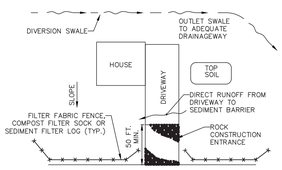
NOTE: THE NPDES PERMITEE(S) FOR THIS SITE ARE REQUIRED TO COMPLY WITH ALL CURRENT REQUIREMENTS AND REGULATIONS REGARDING THE IMPORT AND EXPORT OF FILL MATERIALS.

PLAN VIEW

NOTES:

THE AREA DOWNSLOPE OF THE FILTER FENCE/COMPOST SOCK BARRIER/SEDIMENT FILTER LOG MAY NOT BE UNDER DEVELOPMENT OR OTHERWISE DISTURBED.

STANDARD CONSTRUCTION DETAIL #10-2
TYPICAL ON-LOT BMPs FOR LOT BELOW ROADWAY
NOT TO SCALE



PLAN VIEW

NOTES:

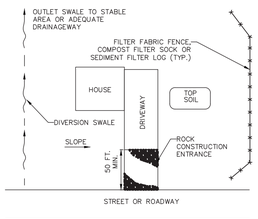
THE UPSLOPE DIVERSION CHANNEL SHOULD BE INSTALLED WHEREVER THE LOT EXTENDS MORE THAN 150 FEET ABOVE THE ROADWAY OR WHERE RUNOFF FORM AREAS ABOVE THE LOT IS NOT OTHERWISE DIVERTED AWAY FROM THE LOT. THE CHANNEL SHOULD BE PROPERLY SIZED AND PROVIDED WITH A SUITABLE PROTECTIVE LINING. THE DESIGNER AND/OR CONTRACTOR MUST EXERCISE CAUTION TO PROTECT ALL DOWNSTREAM PROPERTY OWNERS WHEN SELECTING A DISCHARGE POINT FOR THIS CHANNEL.

STANDARD CONSTRUCTION DETAIL #10-1
TYPICAL ON-LOT BMPs FOR LOT ABOVE ROADWAY
NOT TO SCALE

STORM WATER ACCESS EASEMENT GRANTED TO THE ROLLING MEADOWS HOMEOWNER'S ASSOCIATION, MONTGOMERY COUNTY CONSERVATION DISTRICT AND NEW HANOVER TOWNSHIP FROM THE PROPERTY OWNER OF LOT 29 FOR ACCESS TO THE DETENTION BASIN FOR INSPECTION AND MAINTENANCE PURPOSES.

EASEMENT DATA:
EL1 - N 33°37'24"E 25.80'
EL2 - S 56°22'36"E 38.55'
EL3 - S 33°37'24"W 15.69'
EC4 - Δ38°37'00", R=130', A=40.02', T=20.09', CHORD=N71°4'59"W 39.86'

= EASEMENT AREA



PLAN VIEW

NOTES:

THE AREA DOWNSLOPE OF THE FILTER FENCE/COMPOST SOCK BARRIER/SEDIMENT FILTER LOG MAY NOT BE UNDER DEVELOPMENT OR OTHERWISE DISTURBED.

THE UPSLOPE DIVERSION CHANNEL SHOULD BE INSTALLED WHEREVER RUNOFF FROM AREAS ABOVE THE LOT ARE NOT OTHERWISE DIVERTED AWAY FROM THE LOT. THE CHANNEL SHOULD BE PROPERLY SIZED AND PROVIDED WITH A SUITABLE PROTECTIVE LINING. THE DESIGNER AND/OR CONTRACTOR MUST EXERCISE CAUTION TO PROTECT ALL DOWNSTREAM PROPERTY OWNERS WHEN SELECTING A DISCHARGE POINT FOR THIS CHANNEL.

IN AREAS WHERE SLOPE IS AT AN OBLIQUE ANGLE TO THE ROADWAY, BMPS SHALL BE ADJUSTED ACCORDINGLY.

DIVERSION CHANNEL MAY OUTLET TO ROADSIDE DITCH OR STORM SEWER SYSTEM, BUT NOT ONTO STREET OR ROADWAY.

STANDARD CONSTRUCTION DETAIL #10-3
TYPICAL ON-LOT BMPs FOR LOT
ALONG ASCENDING OR DESCENDING ROADWAY
NOT TO SCALE

PLAN LEGEND

- = SANITARY SEWER LINE
- = D.I.P. WATER LINE
- = CURB CUT RAMP
- = WATER VALVE
- = FIRE HYDRANT
- = BLOW OFF VALVE
- = EXISTING CONTOUR
- = PROPOSED CONTOUR
- = INLET
- = 8" CONCRETE CURB
- = CONCRETE SIDEWALK
- = SOIL BOUNDARY LINE
- = SANITARY SEWER MANHOLE
- = RCP STORM SEWER PIPE
- = Limit of Required Perimeter Buffer
- = Delineated "Waters of the U.S."
- EXISTING WOODLINE
- PROPOSED WOODLINE
- = existing electric line
- = Soil Type Rt - floodplain soils
- = proposed street light
- = proposed pole mounted light
- sl = proposed sewer lateral
- wl = proposed sewer lateral
- = proposed sewer lateral for townhouse unit
- = proposed water lateral for townhouse unit
- = proposed sanitary sewer
- = proposed 8" Ø water main
- = proposed 6" Ø water main
- = proposed 4" Ø water main
- = proposed retaining wall
- = proposed guide rail
- = proposed split rail fence

EROSION CONTROL LEGEND:

- = EXISTING CONTOUR
- = PROPOSED CONTOUR
- = PROPOSED INTERIM CONTOUR
- = soil boundary
- = LIMIT OF DISTURBANCE
- = Limit of NPDES Permit
- = drainage area to BMP
- = tree/infiltration protection fencing
- = stabilized construction entrance
- = silt soxx (12" on individual lots)
- = standard silt fence
- = super silt fence
- TS = topsoil stockpile
- = erosion control mat NAG VMAX C350
- = North American Green TRM VMAX P550 (or approved equivalent)
- = curled wood mat temporary lining / grass permanent lining
- = ERNST CONSERVATION SEED MIX
- = proposed baffle

FENCE FOR PROTECTION OF WOODED AREAS

FENCE FOR PROTECTION OF INFILTRATION AREAS

ROOFDRAINS TO TIE DIRECTLY INTO UNDERGROUND SYSTEM OR PIPE

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CLIENT

STEWART & CONTI DEVELOPMENT CO.
3801 GERMANTOWN PIKE
COLLEGEVILLE, PA
19426

SUBJECT

EROSION AND SEDIMENTATION CONTROL PLAN
INDIVIDUAL LOTS & TOWNHOUSES

ROLLING MEADOWS

NEW HANOVER TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

SEAL

SEAL

Boyer ENGINEERING LLC

1860 WEAVERTOWN ROAD, SUITE 100
DOUGLASSVILLE, PA 19518
PHONE: 610-689-8021
FAX: 610-689-4538

DESIGN BDB	CHKD. BY BDB
DRAWN BY WJD	CHKD. BY
DATE 2015-06-29	SCALE 1"=50'
PROJECT NO. 15-170	
DWG. NO. ES215170	
SHEET NO. 34 OF 40	

P:\PROJECTS\15-170 Rolling Meadows\dwg\34-ES2-O&E-S-Home Sites.dwg, 2/7/2020 10:30:58 AM

NOTE:
All detention basin embankments shall be placed in maximum of 8 inch lifts to a minimum of 95% of maximum dry density as established by ASTM D-1557, PTM No. 112 or PTM No. 402. Prior to proceeding to the next lift, the compaction shall be checked by the Township Engineer or soils engineer. The developer's contractor shall obtain the services of a qualified laboratory or technician to conduct compaction tests on the leading and trailing edge of the berm along with the top of the berm. All tests shall be furnished to the township for review.
-ALSO-
Provide ERNST Conservation Seed mix ERNMX-180-1 at 10 lbs per acre for the basin floor. Provide low growing wildflower seed mix for slope embankment areas at 10 - 20 lbs per acre.

PLAN LEGEND

- = SANITARY SEWER LINE
- = D.I.P. WATER LINE
- HC = CURB CUT RAMP
- WV = WATER VALVE
- fh = FIRE HYDRANT
- BO = BLOW OFF VALVE
- = EXISTING CONTOUR
- = PROPOSED CONTOUR
- = PROPOSED INTERIM CONTOUR
- = STORM INLET
- = 8" CONCRETE CURB
- = CONCRETE SIDEWALK
- = SOIL BOUNDARY LINE
- = SANITARY SEWER MANHOLE
- = RCP STORM SEWER PIPE
- = Delineated "Waters of the U.S."
- = existing electric line
- = Soil Type Rt - floodplain soils
- s l = street light
- = proposed 8" Ø water main
- = proposed 6" Ø water main
- = proposed 4" Ø water main
- = proposed retaining wall
- = proposed guide rail
- = proposed split rail fence
- sl = proposed sewer lateral
- wl = proposed water lateral
- = proposed sewer lateral for townhouse unit
- = proposed water lateral for townhouse unit
- = proposed sanitary sewer

EROSION CONTROL LEGEND:

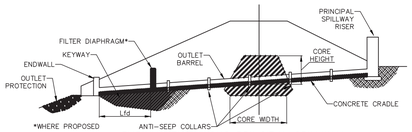
- = soil boundary
- = limit of disturbance
- = compost silt sock
- = Limit of NPDES Permit
- = drainage area to BMP
- = tree protection fencing
- = stabilized construction entrance
- = Proposed baffle
- TS = topsoil stockpile
- = erosion control mat
- = North American Green S150-BIONET (or approved equivalent)
- = curled wood mat
- IP = inlet protection

NATURAL FEATURES SHADING LEGEND:

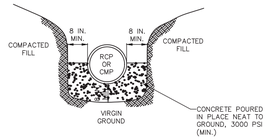
- = 15 - 25% slopes
- = 25% + slopes
- = drainageway
- = limit of woodlands

NOTE: The utility easement area is entirely woodland between limits shown. Tree removal will be limited to only what is necessary for installation of sanitary sewer.

SEE GENERAL PERMIT PLANS FOR SPECIFIC EROSION CONTROLS IN THIS AREA



EMBANKMENT ALONG PRINCIPAL SPILLWAY

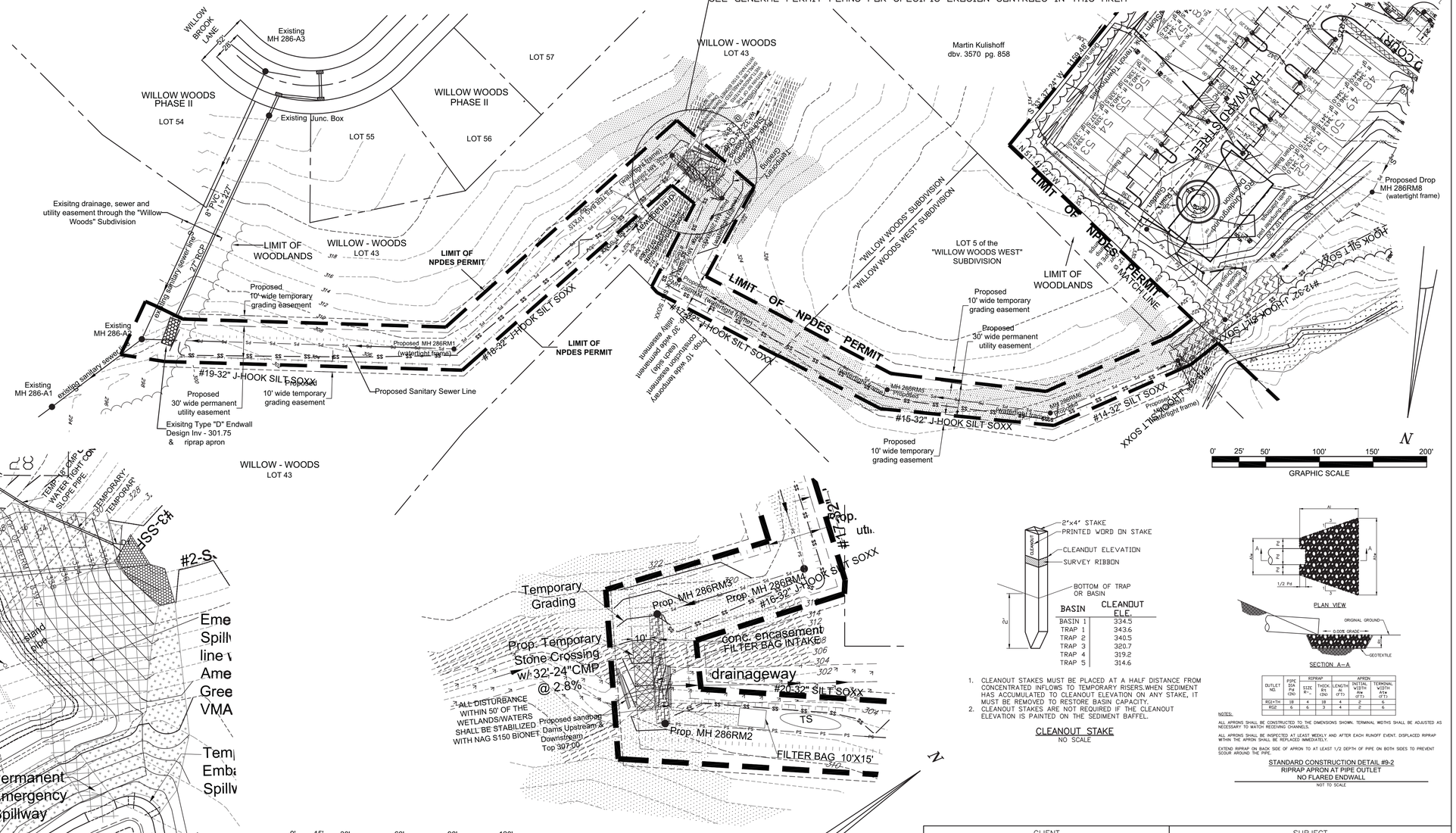


CROSS-SECTION AT OUTLET BARREL

NOTES:

A CONCRETE CRADLE MAY BE USED IN CONJUNCTION WITH ANTI-SEEP COLLARS AND/OR FILTER DIAPHRAGM.
ANTI-SEEP COLLAR NUMBER, SIZE AND SPACING SHALL BE AS SHOWN ELSEWHERE IN PLAN.
FILTER DIAPHRAGM LOCATION (Lfd) SHALL BE AS SHOWN IN FIGURE 7.8 OF THE PA DEP EROSION CONTROL MANUAL.

STANDARD CONSTRUCTION DETAIL #7-17
CONCRETE CRADLE FOR BASIN OR TRAP OUTLET BARREL
NOT TO SCALE
FOR USE ON OUTLET BARREL AT INFILTRATION BASIN 1


WILLOW BROOK LANE
Existing MH 286-A3
WILLOW WOODS PHASE II
LOT 54
LOT 55
LOT 56
LOT 57
Existing Junc. Box
8" PVC @ 2.27%
27" RCP
Exisitng drainage, sewer and utility easement through the "Willow Woods" Subdivision
existing sanitary sewer line
Existing MH 286-A2
Existing MH 286-A1
existing sanitary sewer
LIMIT OF WOODLANDS
WILLOW - WOODS LOT 43
LIMIT OF NPDES PERMIT
Proposed 10' wide temporary grading easement
Proposed MH 286RM1 (watertight frame)
#18-32" J-HOOK SILT SOXX
#19-32" J-HOOK SILT SOXX
Proposed 30' wide permanent utility easement
Proposed 10' wide temporary grading easement
Proposed Sanitary Sewer Line
Exisitng Type "D" Endwall Design Inv - 301.75 & riprap apron
WILLOW - WOODS LOT 43
WILLOW - WOODS LOT 43
Martin Kulishoff dbv. 3570 pg. 858
"WILLOW WOODS" SUBDIVISION
"WILLOW WOODS WEST" SUBDIVISION
LOT 5 of the "WILLOW WOODS WEST" SUBDIVISION
LIMIT OF WOODLANDS
LIMIT OF NPDES PERMIT
MATCH LINE
Proposed 10' wide temporary grading easement
Proposed 30' wide permanent utility easement
Proposed 10' wide temporary grading easement
Proposed MH 286RM5 (watertight frame)
Proposed MH 286RM6 (watertight frame)
#14-32" SILT SOXX
#15-32" J-HOOK SILT SOXX
#16-32" J-HOOK SILT SOXX
#17-32" J-HOOK SILT SOXX
#20-32" J-HOOK SILT SOXX
#21-32" J-HOOK SILT SOXX
#22-32" J-HOOK SILT SOXX
Proposed Drop MH 286RM8 (watertight frame)
HAWARDEN STREET
CUL-DE-SAC
Proposed 10' wide temporary grading easement
Proposed 10' wide temporary grading easement
Proposed 30' wide permanent utility easement
Proposed MH 286RM4 (watertight frame)
Proposed MH 286RM3 (watertight frame)
Proposed MH 286RM2 (watertight frame)
Proposed 10' wide temporary grading easement
Proposed 10' wide temporary grading easement
Proposed 10' wide temporary grading easement

II. 102.4(b)(5)(II) – THE TYPES, DEPTH, SLOPE, LOCATIONS AND LIMITATIONS OF THE SOILS.

THE SOILS BOUNDARIES, TYPES, DEPTH ARE SHOWN ON THE EROSION CONTROL PLAN. THE SOILS MAPPING AND INFORMATION HAS BEEN TAKEN FROM THE UNITED STATES DEPARTMENT OF AGRICULTURE NATIONAL COOPERATIVE SOIL SURVEY FOR MONTGOMERY COUNTY, PA. ALL SOIL GROUPS ONSITE ARE CLASSIFIED AS BEING HYDRIC OR HAVING HYDRIC COMPONENTS, ACCORDING TO THE EROSION CONTROL MANUAL TABLE E.1. A COPY OF THE SOIL REPORT IS INCLUDED IN APPENDIX B.

SOIL RESOLUTIONS:

PH – THE TOPSOIL SHALL BE TESTED PRIOR TO APPLYING THE SEED AND MULCH. LIME SHALL BE ADDED TO THE SOIL UNTIL IT REACHES A PH OF 7 TO 7.5.

WINTER GRADING – THE SOILS SHALL BE STABILIZED WITH MULCH UNTIL IT IS APPROPRIATE TO APPLY THE SEED.

FROST ACTION – SOILS CONTAINING FROST SHALL NOT BE UTILIZED AS STRUCTURAL BACKFILL.

TOPSOIL – THE TOPSOIL SHALL HAVE LIME APPLIED AS NECESSARY TO HAVE A PH OF 7 TO 7.5. COMPOST SHALL BE MIXED WITH THE TOPSOIL PER THE AMENDED SOIL SPECIFICATION TO INCREASE ITS ORGANIC CONTENT AND WATER HOLDING CAPACITY. ADDITIONAL TOPSOIL SHALL BE IMPORTED FROM A SITE WITH AN APPROVED EROSION CONTROL PLAN.

ROAD FILL – SUITABLE MATERIAL SHALL BE FOUND ONSITE OR IMPORTED FROM A SITE WITH AN APPROVED EROSION CONTROL PLAN. PROPER COMPACTION IS ESSENTIAL TO PROVIDE STABLE SOILS.

LOCAL STREETS CONSTRUCTION –IF BEDROCK IS ENCOUNTERED IT SHALL BE REMOVED TO AN APPROPRIATE DEPTH AND THE STONE BASE FOR THE ROAD SHALL BE INSTALLED. ROADS SHALL NOT BE CONSTRUCTED WHEN THE TEMPERATURE IS BELOW FREEZING UNLESS THE FROZEN SOILS ARE REMOVED. SUITABLE MATERIAL SHALL BE FOUND ONSITE OR IMPORTED FROM A SITE WITH AN APPROVED EROSION CONTROL PLAN.

PIPELINE CONSTRUCTION –UTILITY TRENCHES SHALL BE PUMPED TO KEEP THE WORKING AREA DRY. ALL PUMPED WATER SHALL BE DISCHARGED TO A SEDIMENT FILTERING DEVICE. IF BEDROCK IS ENCOUNTERED IT SHALL BE REMOVED TO AN APPROPRIATE DEPTH.

DETENTION BASIN EMBANKMENTS –SUITABLE MATERIAL SHALL BE FOUND ONSITE OR IMPORTED FROM A SITE WITH AN APPROVED EROSION CONTROL PLAN.

LANDSCAPING AND LAWN – LIMITATIONS INCLUDE POOR AND LIMITED AMOUNTS OF TOPSOIL AND WET SOILS. SOIL AMENDMENT WITH COMPOST AND SAND SHALL BE USED TO PROVIDE ADEQUATE PLANTING SOIL. ANY SOIL THAT IS IMPORTED SHALL COME FROM A SITE WITH AN APPROVED EROSION CONTROL PLAN. SLOPED AREAS SHALL BE MULCHED AND HAVE THE APPROPRIATE EROSION CONTROL NETTING INSTALLED WHERE NECESSARY TO PREVENT EROSION.

BASEMENT CONSTRUCTIONS – BEDROCK SHALL BE REMOVED TO THE APPROPRIATE DEPTH AND WET SOILS REMOVED AND PUMPED TO KEEP THE CONSTRUCTION ARE DRY. BASEMENT DRAINS/SUMP PUMPS MAY BE NECESSARY.

AGRICULTURAL TILE DRAINS – DURING EXCAVATION IF TILE DRAINS ARE ENCOUNTERED THEY SHALL BE REMOVED TO A LENGTH OF 5 FEET IN EITHER DIRECTION BEYOND THE AREA OF EXCAVATION. BOTH THE UPSTREAM AND DOWNSTREAM EXPOSED ENDS SHALL BE CAPPED OR SEALED. THE DAYLIGHTED ENDS OF DRAINS SHALL BE REMOVED FOR AN UPSTREAM DISTANCE OF 5 FEET AND THE REMAINING END CAPPED OR SEALED.

III. 102.4(B)(5)(III) – THE CHARACTERISTICS OF THE EARTH DISTURBANCE ACTIVITY, INCLUDING THE PAST, PRESENT AND PROPOSED LAND USES AND THE PROPOSED ALTERATION TO THE PROJECT SITE.

THE PRESENT LAND USE IS AGRICULTURAL. THE PAST LAND USE IS AGRICULTURAL WITH NO EVIDENCE OF USE AS AN ORCHARD AFTER 1992. CROP USE PRIOR TO 1992 IS NOT AVAILABLE. THE PROPOSED LAND USE IS RESIDENTIAL. THE LAND WILL BE REGRADED TO CONSTRUCT THE IMPROVEMENTS INCLUDING ROADS AND STORM DETENTION SYSTEMS. THE ADJACENT LAND USES ARE CURRENTLY RESIDENTIAL.

IV. 102.4(B)(5)(IV) – THE AMOUNT OF RUNOFF FROM THE PROJECT AREA AND ITS UPSTREAM AREA.

THE POST–DEVELOPMENT PEAK FLOWS WILL BE REDUCED TO PRE–DEVELOPMENT PEAK FLOWS ACCORDING TO THE MUNICIPAL ORDINANCE REQUIREMENTS. A PEAK FLOW SUMMARY AND SUPPORTING DOCUMENTATION IS INCLUDED IN THIS REPORT.

V. 102.4(B)(5)(V) – THE LOCATION OF WATERS OF THE COMMONWEALTH WHICH MAY RECEIVE RUNOFF WITHIN OR FROM THE PROJECT SITE AND THEIR CLASSIFICATION PURSUANT TO CHAPTER 93 OF THIS TITLE.

THE SITE IS TRIBUTARY TO THE MINISTER CREEK/SWAMP CREEK, PA CODE CHAPTER 93 CLASSIFICATION OF TSF, MF.

VI. 102.4(B)(5)(VI) – A WRITTEN DEPICTION OF THE LOCATION AND TYPE OF PERIMETER AND ON SITE BMP'S USED BEFORE, DURING, AND AFTER THE EARTH DISTURBANCE ACTIVITY.

THE LOCATION OF THE PROPOSED TEMPORARY AND PERMANENT BMP'S AND THEIR CONSTRUCTION DETAILS ARE SHOWN ON THE EROSION CONTROL PLANS AND DETAIL SHEET. THE WORKSHEETS AND CALCULATIONS ARE PROVIDED IN APPENDIX C.

GENERAL NOTES

1. ONLY LIMITED DISTURBANCE WILL BE PERMITTED TO PROVIDE ACCESS TO (CONSTRUCT SEDIMENT TRAPS, DIVERSION TERRACES, ETC.) FOR GRADING AND ACQUIRING BORROW TO CONSTRUCT THOSE CONTROLS.
2. EROSION AND SEDIMENTATION CONTROLS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE WITHIN THE TRIBUTARY AREAS OF THOSE CONTROLS.
3. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENTATION CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE STABILIZED IMMEDIATELY.
4. VEHICLES AND EQUIPMENT MUST USE THE DESIGNATED DRIVEWAY ENTRANCES ONTO SPECHT ROAD AND MOYER ROAD. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE OF THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS MAY BEGIN.
5. AT THE END OF EACH WORKING DAY, ANY SEDIMENT TRACKED OR CONVEYED ONTO A PUBLIC ROADWAY OR SIDEWALK WILL BE REMOVED AND RE-DEPOSITED ONTO THE CONSTRUCTION SITE. REMOVAL CAN BE COMPLETED THROUGH USE OF MECHANICAL OR HAND TOOLS, BUT MUST NEVER BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
6. SEDIMENT REMOVED FROM E&SPC CONTROLS & FACILITIES SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF WETLANDS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED OR PLACED ON TOPSOIL STOCKPILES.
7. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A DIRT BAG FILTRATION DEVICE OR EQUIVALENT SEDIMENT REMOVAL FACILITY, OVER NON-DISTURBED VEGETATED AREAS. DISCHARGE POINTS SHOULD BE ESTABLISHED TO PROVIDE FOR MAXIMUM DISTANCE TO ACTIVE WATERWAYS.
8. VEHICULAR TRAFFIC IS RESTRICTED FROM AREAS TO BE SEEDED TO PREVENT SOIL COMPACTION.
9. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL.
10. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
11. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILL.
12. FILL SLOPES SHOULD BE SEEDED AND MULCHED AT REGULAR VERTICAL INCREMENTS -- 15 TO 25 FEET MAXIMUM -- AS THE FILL IS BEING CONSTRUCTED. THIS WILL ALLOW THE BOTTOM OF THE FILL TO PROGRESS TOWARD STABILIZATION WHILE WORK CONTINUES ON THE UPPER PORTION, MAKING FINAL STABILIZATION EASIER TO ACHIEVE AND PROVIDING SOME VEGETATIVE BUFFERING AT THE BOTTOM OF THE SLOPE.
13. STEEP SLOPES (GREATER THAN 15%) SHALL BE TEMPORARILY STABILIZED WITH EROSION CONTROL MATTING IMMEDIATELY AFTER REACHING FINAL GRADE AND BE SEEDED WITH THE APPROPRIATE SEED MIX AS DESCRIBED IN WORKSHEET #21.
14. THE ONLY PROPOSED DISTURBANCE WITHIN 50 FEET OF WETLANDS OR STREAM CHANNELS IS PLACEMENT OF COMPOST FILTER SOCK AND SANITARY SEWER LINES. IN THESE AREAS A PROTECTIVE BLANKET (NAG SC150 BIONET OR EQUAL) SHOULD BE PROVIDED FOR ALL SEEDED AREAS.
15. ALL EXCAVATION FOR UTILITY LINE INSTALLATION SHALL BE LIMITED TO THE AMOUNT THAT CAN BE EXCAVATED, INSTALLED, BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY. ALL EXCAVATED MATERIAL SHALL BE DEPOSITED ON THE UPSLOPE SIDE OF THE TRENCH.
16. THE USE OF MASTIC OR EQUIVALENT IS RECOMMENDED ON ALL INLETS/YARD DRAINS LOCATED WITHIN GRASS AREAS AND PCSM BMPS (I.E. RAIN GARDEN RISERS AND OUTLET STRUCTURES) TO PREVENT SOIL FROM WASHING INTO THE STORM SEWER SYSTEM OR INFILTRATION AREAS THROUGH UNSEALED JOINTS IN THE INLET BOX OR TOP. THIS INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING STORM SEWER STRUCTURES: A1, A4, A5, A5B, A5C, A6, B7A, B7B, C4, D2, RAIN GARDENS 1, 2, 3, AND 8 OUTLET RISERS, AND ALL YARD DRAIN BASINS CONNECTED TO THE UNDERGROUND INFILTRATION BEDS AND TRENCHES.
17. 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 MONTGOMERY COUNTY CONSERVATION DISTRICT AND/OR REGIONAL DEP OFFICE. STOCKPILES OF WOOD CHIPS, HAY BALES, CRUSHED STONE AND OTHER MULCHES SHALL BE HELD IN READINESS TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OF EROSION.
18. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.
19. A COPY OF THIS EROSION AND SEDIMENTATION CONTROL REPORT AND PLANS MUST BE POSTED AT THE CONSTRUCTION SITE.
20. FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/ OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO $10,000 PER DAY IN CIVIL PENALTIES, UP TO $10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO $25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.

TEMPORARY CONTROL MEASURES AND FACILITIES FOR USE DURING EARTHMOVING

1. COMPOST FILTER SOCKS AND/OR SILT FENCE SHALL BE INSTALLED AT LOCATIONS NOTED ON THE PLAN PRIOR TO ANY DISTURBANCE OF THE EXISTING GROUND COVER. DURING THE CONSTRUCTION PHASE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING OR REPLACING COMPOST FILTER SOCKS AND SILT FENCE AFTER EACH RAINFALL EVENT TO INSURE CONTINUED OPERATION.
2. SWALES SHOULD BE CONSTRUCTED AND STABILIZED PRIOR TO EARTHMOVING, UNLESS OTHERWISE NOTED.
3. STONE BASE COURSES FOR ROADS AND DRIVEWAYS SHALL BE PLACED AS SOON AS PRACTICAL.
4. STOCKPILES OF MULCHES, SUCH AS WOOD CHIPS, CRUSHED STONE, STRAW AND JUTE MESH SHALL BE KEPT ONSITE AND BE AVAILABLE TO DEAL WITH EROSIVE CONDITIONS AS THEY ARISE.
5. ALL CUT AND FILL SLOPE AREAS WHOSE SURFACES ARE SUBJECT TO EROSIVE ACTION SHALL BE PROTECTED WITH ONE OF THE MULCHES IN ITEM 4 ABOVE.
6. UPON TEMPORARY CESSATION OR COMPLETION OF AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY WHERE A CESSATION OF EARTH DISTURBANCE ACTIVITIES EXCEED 4 DAYS, THE OPERATOR SHALL IMMEDIATELY SEED AND MULCH OR OTHERWISE PROTECT THE SITE FROM ACCELERATED EROSION AND SEDIMENTATION PENDING FURTHER EARTH DISTURBANCE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN 1 YEAR MAY BE STABILIZED IN ACCORDANCE WITH TEMPORARY SEEDING SPECIFICATIONS. DISTURBED AREAS, WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE RE-DISTURBED WITHIN 1 YEAR, MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS.
7. ALL TEMPORARY CONTROLS ARE TO REMAIN IN PLACE DURING THE ENTIRE CONSTRUCTION PHASE UNTIL THE SOIL HAS BEEN STABILIZED, UNLESS OTHERWISE NOTED.

STABILIZATION NOTES

1. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATION SHOWN ON THE PLAN. IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED BY SILT FENCE. STOCKPILE HEIGHTS MUST NOT EXCEED 35'. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
2. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES, 6 TO 12 INCHES ON COMPACTED SOILS, AND PRIOR TO PLACEMENT OF TOPSOIL AREAS TO BE VEGETATED SHALL HAVE A MINIMUM OF 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
3. UPON TEMPORARY CESSATION OR COMPLETION OF AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY WHERE A CESSATION OF EARTH DISTURBANCE ACTIVITIES EXCEED 4 DAYS, THE OPERATOR SHALL IMMEDIATELY SEED AND MULCH OR OTHERWISE PROTECT THE SITE FROM ACCELERATED EROSION AND SEDIMENTATION PENDING FURTHER EARTH DISTURBANCE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE-DISTURBED WITHIN 1 YEAR MAY BE STABILIZED IN ACCORDANCE WITH TEMPORARY SEEDING SPECIFICATIONS. DISTURBED AREAS, WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE RE-DISTURBED WITHIN 1 YEAR, MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS.
4. DIVERSION CHANNELS, SEDIMENTATION BASINS, SEDIMENT TRAPS, AND STOCKPILES MUST BE STABILIZED IMMEDIATELY.
5. HAY OR STRAW MULCH MUST BE APPLIED AT RATES OF AT LEAST 3.0 TONS PER ACRE.
6. 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 OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE PLAN.
7. FILL SLOPES SHOULD BE SEEDED AND MULCHED AT REGULAR VERTICAL INCREMENTS -- 15 TO 25 FEET MAXIMUM -- AS THE FILL IS BEING CONSTRUCTED. THIS WILL ALLOW THE BOTTOM OF THE FILL TO PROGRESS TOWARD STABILIZATION WHILE WORK CONTINUES ON THE UPPER PORTION, MAKING FINAL STABILIZATION EASIER TO ACHIEVE AND PROVIDING SOME VEGETATIVE BUFFERING AT THE BOTTOM OF THE SLOPE.
8. SURFACE ROUGHENING SHOULD BE APPLIED TO SLOPES 3H:1V IN SOILS CHARACTERIZED TO HAVE LOW STRENGTH EITHER BY STAIR-STEP GRADING AND TRACKING SLOPES.
9. STAIR-STEP GRADING SHALL BE PERFORMED IN CUT SLOPES WHERE BEDROCK IS SOFT ENOUGH TO BE RIPPED BY A BULLDOZER. IT IS APPROPRIATE FOR CUT SLOPES 3H:1V OR STEEPER THAT WILL NOT BE MOWED. WHEREVER STAIR STEP GRADING IS USED, THE SIZE OF THE HORIZONTAL CUT SHOULD EXCEED THAT OF THE VERTICAL CUT BY AT LEAST 10 INCHES. INDIVIDUAL VERTICAL CUTS SHOULD NOT EXCEED 30 INCHES IN SOFT MATERIALS OR 40 INCHES IN HARDER ROCK. THE HORIZONTAL CUT SHOULD BE GRADED TOWARD THE VERTICAL CUT (I.E. INTO THE CUT).
10. TRACK SLOPES 3H:1V BY RUNNING TRACKED MACHINERY UP AND DOWN THE SLOPE, LEAVING TREAD MARKS PARALLEL TO THE CONTOUR. NOTE: IF A BULLDOZER IS USED, THE BLADE SHOULD BE UP.
11. IN NO CASE SHOULD AN AREA EXCEEDING 15,000 SQUARE FEET, WHICH IS TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED.
12. INDIVIDUAL LOTS SHALL BE STABILIZED WITH TOPSOIL AND PERMANENT SEEDING IMMEDIATELY AFTER COMPLETION OF BULK GRADING.
13. UNTIL THE SITE HAS ACHIEVED FINAL STABILIZATION THE OWNER AND/OR CONTRACTOR SHALL PROPERLY IMPLEMENT, OPERATE AND MAINTAIN ALL THE BEST MANAGEMENT PRACTICES. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION CONTROL AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING, MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
14. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM OF 70% UNIFORM PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING OR OTHER MOVEMENTS.
15. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES GREATER THAN 3:1.
16. AREAS WITHIN 50 FEET OF A STREAM SHALL BE STABILIZED USING SEED, MULCH, AND MATTING.

TOPSOIL SPECIFICATIONS

GRADED AREAS SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES TO PERMIT BONDING OF THE TOPSOIL TO THE SURFACE AREAS AND TO PROVIDE A ROUGHENED SURFACE TO PREVENT TOPSOIL FROM SLIDING DOWN SLOPE.

LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL.

TOPSOIL SHOULD BE UNIFORMLY DISTRIBUTED ACROSS THE DISTURBED AREA TO A DEPTH OF 4 TO 8 INCHES MINIMUM – 2 INCHES ON FILL OUTSLOPES. SPREADING SHOULD BE DONE IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL PREPARATION OR TILLAGE. IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOIL PLACEMENT SHOULD BE CORRECTED IN ORDER TO PREVENT FORMATION OF DEPRESSIONS UNLESS SUCH DEPRESSIONS ARE PART OF THE PCSM PLAN.

TOPSOIL SHOULD NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION. COMPACTED SOILS SHOULD BE SCARIFIED 6 TO 12 INCHES ALONG CONTOUR WHEREVER POSSIBLE PRIOR TO SEEDING.

TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND AND SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS, AND SHALL CONTAIN LESS THAN 5 % BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2 " IN DIAMETER.

TOPSOIL SHALL BE TESTED AND AMENDED AS PER SOIL TEST TO ACHIEVE A RECOMMENDED PH RANGE BETWEEN 6.5 AND 7.5 AND A MINIMUM ORGANIC MATTER CONTENT OF 5% FOR SILT LOAMS AND 4% FOR LOAMS.

PERMANENT CONTROL MEASURES AND FACILITIES FOR LONG TERM PROTECTION

THE FOLLOWING ACTIVITIES SHALL BE UNDERTAKEN TO ACHIEVE PERMANENT STABILIZATION OF ALL EXPOSED AND DISTURBED SOIL AREAS AS REQUIRED OR DIRECTED.

PERMANENT VEGETATIVE SURFACE STABILIZATION

SITE PREPARATION - INCORPORATE LIME AND FERTILIZER (RATE BASED UPON SOIL TESTING) AS DEEPLY INTO THE SOIL AS POSSIBLE. IF SOIL TESTS ARE NOT AVAILABLE, APPLY FOUR TONS PER ACRE OF AGRICULTURAL LIMESTONE AND 10-20-20 FERTILIZER AT A RATE OF 500 POUNDS PER ACRE.

SEEDING - ALL DISTURBED AREAS SHALL BE PREPARED AND SEEDED WITH THE SPECIES THE NOTED SEEDING RATE FOLLOWING THE FINAL GRADING.

TEMPORARY AND PERMANENT STABILIZATION SPECIFICATIONS

TEMPORARY SEEDING

SPECIES:	ANNUAL RYEGRASS
%PURE LIVE SEED:	89%
APPLICATION RATE:	40 LBS. PER ACRE
FERTILIZER TYPE:	10-10-20
FERTILIZER APPLICATION RATE:	1000 LBS. PER ACRE
LIMING RATE:	AGRICULTURAL GRADE LIMESTONE A AT 1 TON PER ACRE
MULCH TYPE:	HAY OR STRAW
MULCHING RATE:	3 TONS PER ACRE
ANCHOR METHOD:	CLEAT WITH DEEP CLEATS

PERMANENT SEEDING

TOPSOIL REPLACEMENT DEPTH: 6 INCHES MINIMUM OR TO PREDEVELOPMENT DEPTH.

SPECIES:	TALL FESCUE (39%), FINE FESCUE (38%), ALSIKE CLOVE (20%), REDTOP (3%)
%PURE LIVE SEED:	89%
APPLICATION RATE:	20, 10, 20 AND 12 LBS. PER ACRE, RESPECTIVELY
FERTILIZER TYPE:	AS PER SOIL TESTING RESULTS
FERTILIZER APPLICATION RATE:	AS PER SOIL TESTING RESULTS
LIMING RATE:	AGRICULTURAL GRADE LIMESTONE A AT 6 TONS PER ACRE OR PER SOIL TEST RESULTS.
MULCH TYPE:	HAY OR STRAW
MULCHING RATE:	3 TONS PER ACRE
ANCHOR MATERIAL:	NONE
ANCHORING METHOD:	CLEAT WITH DEEP CLEATS
SEEDING SEASON DATES:	MARCH THROUGH JUNE, SEPTEMBER, OCTOBER

PERMANENT **STEEP SLOPE** SEEDING

SPECIES:	TALL FESCUE ALSIKE
%PURE LIVE SEED:	89%
APPLICATION RATE:	20 AND 10 LBS. PER ACRE, RESPECTIVELY
FERTILIZER TYPE:	AS PER SOIL TESTING RESULTS
FERTILIZER APPLICATION RATE:	AS PER SOIL TESTING RESULTS
LIMING RATE:	AGRICULTURAL GRADE LIMESTONE A AT 6 TONS PER ACRE OR PER SOIL TEST RESULTS.
MULCH TYPE:	HAY OR STRAW
MULCHING RATE:	3 TONS PER ACRE
ANCHOR MATERIAL:	NORTH AMERICAN GREEN VMAX C350 OR EQUAL
ANCHORING METHOD:	STAPLES
SEEDING SEASON DATES:	MARCH THROUGH JUNE, SEPTEMBER, OCTOBER

A NURSE CROP OF OATS SHALL BE USED WITH THE PERMANENT SEEDING AT A RATE OF 45 LBS PER ACRE.

CHANNEL NOTES

1. ALL CHANNELS MUST BE KEPT FREE OF OBSTRUCTIONS SUCH AS FILL GROUND, FALLEN LEAVES & WOODY DEBRIS, ACCUMULATED SEDIMENT, AND CONSTRUCTION MATERIALS/WASTES. CHANNELS SHOULD BE KEPT MOWED AND/OR FREE OF ALL WEEDY, BRUSHY OR WOODY GROWTH. ANY UNDERGROUND UTILITIES RUNNING ACROSS/ THROUGH THE CHANNEL(S) SHALL BE IMMEDIATELY BACKFILLED AND THE CHANNEL(S) REPAIRED AND STABILIZED PER THE CHANNEL CROSS-SECTION DETAIL.
2. VEGETATED CHANNELS SHALL BE CONSTRUCTED FREE OF ROCKS, TREE ROOTS, STUMPS OR OTHER PROJECTIONS THAT WILL IMPEDE NORMAL CHANNEL FLOW AND/OR PREVENT GOOD LINING TO SOIL CONTACT. THE CHANNEL SHALL BE INITIALLY OVER-EXCAVATED TO ALLOW FOR THE PLACEMENT OF TOPSOIL.

UTILITY LINE TRENCH EXCAVATION

1. LIMIT ADVANCE CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
2. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION AND BACKFILLING WILL BE SELF-CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING AND SITE RESTORATION AND STABILIZATION OPERATIONS.
3. LIMIT THE DAILY TRENCH EXCAVATION TO THE LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
4. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND/OR BACKFILLING BEGINS. THE SEEPAGE MUST BE PUMPED TO A FACILITY FOR REMOVAL OF SEDIMENT. THIS FACILITY MUST BE LOCATED OUTSIDE OF THE CHANNEL IF EXCAVATION TRENCHES ARE UNDERNEATH OR ADJOINING SMALL STREAMS.
5. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND MEASURES/FACILITIES SHALL BE INSTALLED. SEEDING AND MULCHING OF ALL DISTURBED AREAS SHALL BE COMPLETED AT THE END OF EACH WEEK.
6. IN CERTAIN CASES, TRENCHES CANNOT BE BACKFILLED UNTIL THE PIPE IS HYDROSTATICALLY TESTED, OR ANCHORS AND OTHER PERMANENT FEATURES ARE INSTALLED. IN THESE CASES, ALL OF THE REQUIREMENTS UNDER ITEMS 1 THROUGH 5 WILL REMAIN IN EFFECT WITH THE FOLLOWING EXCEPTIONS:
   a. DAILY BACKFILLING OF THE TRENCH MAY BE DELAYED FOR SIX DAYS. ALL PRESSURE TESTING AND THE COMPLETE BACKFILLING OF THE OPEN TRENCH MUST BE COMPLETED BY THE SEVENTH WORKING DAY.
   b. IF DAILY BACKFILLING IS DELAYED, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS, APPROPRIATE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES/FACILITIES WILL BE INSTALLED AND THE AREA SEEDED AND MULCHED WITHIN THE NEXT TWO CALENDAR DAYS.

IN-CHANNEL WORK

1. WHENEVER POSSIBLE, WORK SHOULD BE SCHEDULED FOR LOW FLOW SEASONS. NORMAL FLOW SHOULD BE CONVEYED PAST THE WORK AREA BY MEANS OF A BYPASS CHANNEL, PIPE, PUMP, OR COFFERDAM. ALL SUCH BYPASSES SHOULD BE COMPLETED AND STABILIZED PRIOR TO DIVERTING FLOW.
2. ANY IN-CHANNEL EXCAVATIONS SHOULD BE DONE FROM THE TOP OF BANKS WHEREVER POSSIBLE. WHERE THIS IS NOT POSSIBLE, A TEMPORARY CROSSING SHOULD BE PROVIDED FOR ANY EQUIPMENT WORKING FROM WITHIN THE CHANNEL. UPON COMPLETION, ALL CHANNEL ENTRANCES SHOULD BE RESTORED TO PRE-CONSTRUCTION CONFIGURATIONS, AS MUCH AS POSSIBLE, AND STABILIZED.
3. ALL EXCAVATED CHANNEL MATERIALS THAT WILL BE SUBSEQUENTLY USED AS BACKFILL SHOULD BE PLACED IN A TEMPORARY STOCKPILE LOCATED OUTSIDE THE CHANNEL. A SEDIMENT BARRIER SHOULD BE INSTALLED BETWEEN THE STORAGE PILE AND THE STREAM CHANNEL.
4. ALL EXCAVATED MATERIALS THAT WILL NOT BE USED ON SITE MUST BE IMMEDIATELY REMOVED TO A DISPOSAL SITE HAVING AN APPROVED EROSION AND S

CONTINUED FROM DRAWING ES415170

- INSTALL THE CLEANOUT STAKE AND MARK THE SEDIMENT CLEANOUT ELEVATION ON THE STAKE WITH SURVEY RIBBON.
- INSTALL BAFFLES.
- STABILIZE THE DISTURBED AREAS WITH PERMANENT SEEDING AND MULCH.

7. IMMEDIATELY AFTER CONSTRUCTION OF SEDIMENT TRAP 1, INSTALL STORM SEWER COLLECTION SYSTEM C3-C4-C2-A11-C1, INCLUDING THE RIPRAP APRON. TEMPORARILY GRADE SURROUNDING AREAS TO DIRECT STORM WATER FLOWS TOWARD INLETS C1 AND C2. STABILIZE DISTURBED AREAS.
8. GRADE SWALE C AND STABILIZE WITH SPECIFIED LINER.
9. CONSTRUCT SEDIMENT BASIN 1.
   - THE SUBSOIL SHALL NOT BE COMPACTED OR RECEIVE EXCESSIVE HEAVY EQUIPMENT TRAFFIC. THE AREA SHALL BE PROTECTED FROM SEDIMENT AT ALL TIMES DURING CONSTRUCTION. THE AREA SHALL BE PROTECTED DURING AND AFTER THE INSTALLATION BY USING TAPE, FENCING OR OTHER SUITABLE METHOD.
   - THE TOPSOIL SHALL BE STRIPPED AND BE PLACED WHERE SHOWN ON THE PLAN.
   - INSTALL THE OUTLET PIPE, CONCRETE CRADLE (SEE STANDARD DETAIL #7-17), ENDWALL, RIPRAP, COLLARS, AND PERMANENT AND TEMPORARY STRUCTURES/RISERS BEGINNING ON THE DOWNSTREAM END. EXCAVATE THE BASIN FROM THE SIDES TO PREVENT COMPACTION OF THE BASIN BOTTOM AND PLACE AND COMPACT THE FILL FOR THE BERM.
   - EXCAVATE FOR THE EMBANKMENT SPILLWAY AND INSTALL THE GEOTEXTILE PER THE PLAN DETAILS.
   - INSTALL THE CLEANOUT STAKE AND MARK THE SEDIMENT CLEANOUT ELEVATION ON THE STAKE WITH SURVEY RIBBON.
   - INSTALL BAFFLES.
   - STABILIZE THE DISTURBED AREAS WITH PERMANENT SEEDING AND MULCH.

A LICENSED PROFESSIONAL ENGINEER SHALL BE PRESENT TO CONFIRM THE CORRECT INSTALLATION OF CONTROLS PRIOR TO CONTINUING WITH THE SEQUENCE.

4. CLEAR AND GRUB THE AREAS OF ROAD CONSTRUCTION. ALL OF THE MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH THE APPLICABLE REGULATIONS.
5. STRIP AND STOCKPILE TOPSOIL.
6. BEGIN ROUGH GRADING PROPOSED ROADS.
7. INSTALL COMPOST FILTER SOCKS #15 THROUGH #20 AT THE LOCATIONS SHOWN ON THE PLANS.
8. INSTALL OFF SITE SANITARY SEWER FROM EXISTING MH286-A2 THROUGH PROPOSED MH286RM6. FOLLOW THE SEQUENCE OUTLINED IN **UTILITY LINE TRENCH EXCAVATION** AND **IN-CHANNEL WORK** NOTES IN SECTION VIII.

PROPOSED TEMPORARY MINOR ROAD CROSSING & UTILITY CROSSING STREAM

STEPS #15 THROUGH #17 SHALL BE COMPLETED WITHIN 3 DAYS. WORK WITHIN THE WATERWAY SHALL BE PERFORMED DURING DRY CONDITIONS. COMPLY WITH UTILITY LINE TRENCH EXCAVATION AND IN-CHANNEL CONTROL NOTES. A LICENSED PROFESSIONAL ENGINEER SHALL BE PRESENT AT THE INSTALLATION OF THE SANITARY SEWER PIPE CROSSING WETLANDS OR STREAMS.

9. INSTALL SANDBAG COFFERDAM AND PIPE ON UPSTREAM SIDE OF WORK AREA AND INSTALL SANDBAG COFFERDAM ON THE DOWNSTREAM SIDE OF THE WORK AREA. PIPE SHALL EXTEND PAST PROPOSED SANITARY SEWER LOCATION. (SEE STANDARD DETAIL #13-1). IMMEDIATELY REPLACE THE TOPSOIL ON DISTURBED AREAS, SEED AND MULCH.
10. INSTALL THE SANITARY SEWER PIPE CROSSING THE STREAM. BACKFILL. IMMEDIATELY REPLACE TOPSOIL, PLACE EROSION CONTROL BLANKET, SEED, AND MULCH.
11. INSTALL TEMPORARY MINOR ROAD CROSSING TO PROVIDE ACCESS TO REMAINING SANITARY SEWER INSTALLATION AREAS. IMMEDIATELY REPLACE TOPSOIL, PLACE EROSION CONTROL BLANKET, SEED, AND MULCH.

PROPOSED SITE IMPROVEMENTS (CONT'D)

12. OFFSITE SILT SOXX SHALL BE REMOVED UPON FINAL STABILIZATION OF DISTURBED AREAS USED FOR CONSTRUCTION OF THE SANITARY SEWER.
13. INSTALL #14 SILT SOCK.
14. INSTALL SANITARY SEWER SYSTEM FROM PROPOSED MH286RM6 TO MH286RM7. STABILIZE DISTURBED AREAS PRIOR TO PROCEEDING.
15. REMOVE #14 SILT SOCK. STABILIZE ANY DISTURBED AREAS. INSTALL SILT SOCKS #11, #12, #13 AND COMPOST FILTER SOCK SEDIMENT TRAP #3.
16. INSTALL SANITARY SEWER SYSTEM FROM PROPOSED MH286RM7 THROUGH TO MH286RM8, MH286TM9, MH286RM11, MH286RM19, MH286RM20, AND MH286RM21. A LICENSED PROFESSIONAL ENGINEER SHALL BE PRESENT AT THE INSTALLATION OF THE PIPE CROSSING WETLANDS BETWEEN MANHOLE MH286RM19 & MH286RM20.
17. BEGIN INSTALLATION OF UTILITIES (SANITARY SEWER, WATER, TELEPHONE, CABLE, INTERNET, ETC.) AS NECESSARY. COMPLY WITH THE UTILITY LINE TRENCH EXCAVATION NOTES. SPECIFIC INSTALLATION SEQUENCING OF STORM WATER FACILITIES IS SPECIFIED IN THE FOLLOWING STEPS.
18. INSTALL STORM SEWER COLLECTION SYSTEM A8, A9, AND A10. TEMPORARILY GRADE SURROUNDING AREAS TO DIRECT STORM WATER TO THESE INLETS.
19. INSTALL STORM SEWER COLLECTION SYSTEM B1, B2, B3, B4, B5, B6, B8, B7, B7A, B9 AND TEMPORARY PIPE AND OUTLET B. IMMEDIATELY INSTALL RIPRAP APRON AT OUTLET B AND ENDWALL B9. AFTER INSTALLATION OF THE STORM SEWER SECTION FROM B8 TO B6 THE PIPE OPENING IN INLET B6 CONNECTING TO INLET B8 SHALL BE BLOCKED WITH A WATER-TIGHT SEAL. TEMPORARILY GRADE SURROUNDING AREAS TO DIRECT STORM WATER TO THESE INLETS.
20. INSTALL STORM SEWER COLLECTION SYSTEMS A2 CONNECTING TO THE EXISTING INLET A1, A3, A3A, A3B, A4 AND A4A; A6, A7, A12 AND A13. IMMEDIATELY INSTALL RIPRAP APRON AT ENDWALLS A4A AND A13. TEMPORARILY GRADE SURROUNDING AREAS TO DIRECT STORM WATER TO THESE INLETS.
21. INSTALL A TEMPORARY 24" DIAMETER CORRUGATED PLASTIC PIPE BETWEEN A4 AND A6 WHICH IS PLACED TO AVOID THE AREAS OF RAIN GARDENS 5 AND 6.
22. INSTALL INLETS A10A AND B7C ONLY. THESE INLETS SHALL BE BLOCKED TO PREVENT CAPTURE OF STORM WATER UNTIL DOWNSTREAM BMP'S AND PIPES ARE OPERATIONAL.
23. INSTALL STORM TANK 1 OUTLET PIPE CONNECTION TO INLET B8 AND TEMPORARILY CAP UPSTREAM END.
24. INSTALL CURB.
25. INSTALL STONE BASE AND BASE COURSE IN ROADWAYS TO STABILIZE.
26. INSTALL SIDEWALKS.
27. BACKFILL AND FINISH GRADE REMAINING DISTURBED AREAS. PLACE TOPSOIL (REFER TO THE TOPSOIL SPECIFICATIONS SECTION) AND STABILIZE IMMEDIATELY.
28. A LICENSED PROFESSIONAL ENGINEER SHALL BE PRESENT FOR THIS STEP.

    AFTER THE TRIBUTARY AREAS ARE STABILIZED, INSTALL INFILTRATION BEDS STORM TANK 1 AND 2 BEGINNING AT THE DOWNSTREAM ENDS ACCORDING TO THE FOLLOWING SEQUENCE:

    a. THE EXISTING SUBGRADE UNDER THE BED AREA SHOULD NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO GEOTEXTILE AND STONE BED PLACEMENT.
    b. REMOVE VOIDED ROCK TO THE DEPTH REQUIRED BY THE DETAILS.
    c. WHERE EROSION OF SUBGRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING, THIS MATERIAL SHOULD BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE (OR EQUIVALENT) AND LIGHT TRACTOR.
    d. INSTALL THE ENGINEERED FILTER MEDIA TO THE REQUIRED DEPTH. ALL FINE GRADING SHOULD BE DONE BY HAND. ALL BED BOTTOMS SHOULD BE AT LEVEL GRADE.
    e. GEOTEXTILE AND BED AGGREGATE SHOULD BE PLACED IMMEDIATELY AFTER APPROVAL OF SUBGRADE PREPARATION AND INSTALLATION OF STRUCTURES. GEOTEXTILE SHOULD BE PLACED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS. ADJACENT STRIPS OF GEOTEXTILE SHOULD OVERLAP A MINIMUM OF 16 INCHES. IT SHOULD ALSO BE SECURED AT LEAST 4 FEET OUTSIDE OF BED IN ORDER TO PREVENT ANY RUNOFF OR SEDIMENT FROM ENTERING THE STORAGE BED. THIS EDGE STRIP SHOULD REMAIN IN PLACE UNTIL ALL BARE SOILS CONTIGUOUS TO BEDS ARE STABILIZED AND VEGETATED. AS THE SITE IS FULLY STABILIZED, EXCESS GEOTEXTILE ALONG BED EDGES CAN BE CUT BACK TO THE EDGE OF THE BED.
    f. CLEAN-WASHED, UNIFORMLY GRADED AGGREGATE SHOULD BE PLACED IN THE BED. CONSTRUCTION EQUIPMENT SHALL BE KEPT OFF THE BED BOTTOM AS MUCH AS POSSIBLE.
    g. STORM TANK PACK PLACEMENT AND CONNECTIONS SHALL BE MADE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS AND WITH WATER TIGHT JOINTS AND SEALS TO PREVENT LEAKAGE.
    h. APPROVED SOIL MEDIA SHOULD BE PLACED OVER INFILTRATION BED IN MAXIMUM 6-INCH LIFTS.
    i. RISER SHALL BE TEMPORARILY CAPPED TO PREVENT WATER AND SEDIMENT FROM ENTERING INFILTRATION TRENCHES DURING INDIVIDUAL LOT CONSTRUCTION.
29. INSTALL STORM SEWER COLLECTION SYSTEM B7C AND B7B. BLOCK THE GRATE AT INLET B7B WITH A WATER TIGHT SEAL.
30. INSTALL AND STABILIZE SWALE A4 AND B7A. LINE WITH CURLED WOOD MAT.
31. A LICENSED PROFESSIONAL ENGINEER SHALL BE PRESENT FOR THIS STEP.

    INSTALL INFILTRATION BASIN 4 AT INLET B7A.

    a. THE EXISTING SUBGRADE UNDER THE BED AREA SHOULD NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO GEOTEXTILE AND STONE BED PLACEMENT.
    b. WHERE EROSION OF SUBGRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING, THIS MATERIAL SHOULD BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE (OR EQUIVALENT) AND LIGHT TRACTOR. ALL FINE GRADING SHOULD BE DONE BY HAND. ALL BED BOTTOMS SHOULD BE AT LEVEL GRADE.
    c. SEED AND STABILIZE TOPSOIL.
32. MAINTAIN TEMPORARY CPP DISCHARGE TO INLET 6 THROUGHOUT THE INSTALLATION OF RAIN GARDENS 5 AND 6.
33. A LICENSED PROFESSIONAL ENGINEER SHALL BE PRESENT FOR THIS STEP.

    INSTALL RAIN GARDENS 5 UPON COMPLETION AND STABILIZATION OF ITS TRIBUTARY AREAS. ANY SEDIMENT ENTERING THE RAIN GARDEN DURING CONSTRUCTION SHALL BE REMOVED WITH LIGHT EQUIPMENT.

    a. THE RAINGARDEN SHALL BE EXCAVATED TO THE PRESCRIBED DEPTH SHOWN ON THE PLAN DETAILS. THE BOTTOM OF THE EXCAVATION SHALL BE LEVEL. USE THE LIGHTEST EQUIPMENT POSSIBLE. THE BOTTOM OF THE EXCAVATION SHALL NOT BE COMPACTED AND SHALL BE FREE FROM ROCKS AND DEBRIS.
    b. THE UNDERLYING SOIL SHALL BE SCARIFIED A MINIMUM OF TWELVE (12) INCHES WITH A YORK RAKE, SUBSOILER OR OTHER SUITABLE EQUIPMENT. IF UNFORESEEN CONDITIONS SUCH AS BEDROCK OR SINKHOLES ARE UNCOVERED OR THE INFILTRATION RATE IS NOT ACHIEVED, THE ENGINEER SHALL BE CONSULTED.
    c. THE BOTTOM OF THE RAIN GARDEN SHALL HAVE THE AMENDED SOIL INSTALLED ACCORDING TO THE SOIL AMENDMENT NOTES.
    d. INSTALL THE OUTLET RISER AND PIPE.
    e. INSTALL THE SPECIFIED LINER ON THE EMERGENCY SPILLWAY OF THE RAIN GARDEN.
    f. STABILIZE THE DISTURBED AREAS WITH PERMANENT SEEDING, SPECIFIED PLANTINGS, AND MULCH IMMEDIATELY UPON COMPLETION OF THE CONVERSION.
34. INSTALL STORM SEWER COLLECTION SYSTEM A5A, A5B, AND A10A INCLUDING RIPRAP APRON.
35. A LICENSED PROFESSIONAL ENGINEER SHALL BE PRESENT FOR THIS STEP.

    INSTALL RAIN GARDEN 6 UPON COMPLETION AND STABILIZATION OF ITS TRIBUTARY AREAS. ANY SEDIMENT ENTERING THE RAIN GARDEN DURING CONSTRUCTION SHALL BE REMOVED WITH LIGHT EQUIPMENT.

    g. THE RAINGARDEN SHALL BE EXCAVATED TO THE PRESCRIBED DEPTH SHOWN ON THE PLAN DETAILS. THE BOTTOM OF THE EXCAVATION SHALL BE LEVEL. USE THE LIGHTEST EQUIPMENT POSSIBLE. THE BOTTOM OF THE EXCAVATION SHALL NOT BE COMPACTED AND SHALL BE FREE FROM ROCKS AND DEBRIS.
    h. THE UNDERLYING SOIL SHALL BE SCARIFIED A MINIMUM OF TWELVE (12) INCHES WITH A YORK RAKE, SUBSOILER OR OTHER SUITABLE EQUIPMENT. IF UNFORESEEN CONDITIONS SUCH AS BEDROCK OR SINKHOLES ARE UNCOVERED OR THE INFILTRATION RATE IS NOT ACHIEVED, THE ENGINEER SHALL BE CONSULTED.
    i. THE BOTTOM OF THE RAIN GARDEN SHALL HAVE THE AMENDED SOIL INSTALLED ACCORDING TO THE SOIL AMENDMENT NOTES.
    j. INSTALL THE OUTLET RISER AND PIPE.
    k. INSTALL THE SPECIFIED LINER ON THE EMERGENCY SPILLWAY OF THE RAIN GARDEN.
    l. STABILIZE THE DISTURBED AREAS WITH PERMANENT SEEDING, SPECIFIED PLANTINGS, AND MULCH IMMEDIATELY UPON COMPLETION OF THE CONVERSION.
36. REMOVE TEMPORARY CPP AND INSTALL PIPE, ENDWALL, AND RIPRAP APRON AT A4A.
37. BACKFILL AND FINISH GRADE REMAINING DISTURBED AREAS. PLACE TOPSOIL (REFER TO THE TOPSOIL SPECIFICATIONS SECTION) AND STABILIZE IMMEDIATELY.

PROPOSED INDIVIDUAL LOT CONSTRUCTION (CONSTRUCTION OF LOTS 27 AND 28 MUST BE THE LAST LOTS CONSTRUCTED)

A LICENSED PROFESSIONAL ENGINEER SHALL BE PRESENT BEFORE CONSTRUCTION OF THE CONFIRM READINESS OF SITE TO PROCEED WITH CONSTRUCTION.

38. INDIVIDUAL LOT CONSTRUCTION SHALL BE COMPLETED ACCORDING TO THE FOLLOWING SEQUENCE:

    a. THE INDIVIDUAL LOT ROCK CONSTRUCTION ENTRANCE (RCE) SHALL BE INSTALLED WHERE SHOWN ON THE PLAN, INCLUDING THE CONCRETE WASH AREA. THE INDIVIDUAL LOT RCE SHALL BE THE ONLY ENTRANCE AND EXIT FROM THE LOT FOR THE CONSTRUCTION VEHICLES.
    b. INSTALL SILT FENCE AT LOT PERIMETER AND DOWNSLOPE OF SOIL STOCKPILE.
    c. CLEAR LOT VEGETATION.
    d. STRIP AND STOCKPILE TOPSOIL.
    e. CONSTRUCT RESIDENCE.
    f. BACKFILL AND FINISH GRADE ON LOT. TOPSOIL SHALL BE REPLACED IN DISTURBED AREAS AT A MINIMUM DEPTH OF 6 INCHES OR EQUAL TO PREDEVELOPMENT DEPTHS IF GREATER. PERFORM SOIL AMENDMENT ACCORDING TO THE SOIL AMENDMENT NOTES. STABILIZE DISTURBED AREAS WITH APPROPRIATE SEEDING.
    g. IMMEDIATELY STABILIZE WITH PERMANENT VEGETATION AND MULCH DISTURBED AREAS. NO MORE THAN 15,000 SQUARE FEET OF DISTURBED AREA SHALL REACH FINAL GRADE BEFORE INITIATING STABILIZATION OPERATIONS.
    h. CONSTRUCT INDIVIDUAL LOT RAIN GARDEN, IF PROPOSED, ACCORDING TO THE FOLLOWING PROCEDURES:
    i. THE RAINGARDEN SHALL BE EXCAVATED TO THE PRESCRIBED DEPTH SHOWN ON THE PLAN DETAILS. THE BOTTOM OF THE EXCAVATION SHALL BE LEVEL. USE THE LIGHTEST EQUIPMENT POSSIBLE. THE BOTTOM OF THE EXCAVATION SHALL NOT BE COMPACTED AND SHALL BE FREE FROM ROCKS AND DEBRIS.
    ii. THE UNDERLYING SOIL SHALL BE SCARIFIED A MINIMUM OF TWELVE (12) INCHES WITH A YORK RAKE, SUBSOILER OR OTHER SUITABLE EQUIPMENT. IF UNFORESEEN CONDITIONS SUCH AS BEDROCK OR SINKHOLES ARE UNCOVERED OR THE INFILTRATION RATE IS NOT ACHIEVED, THE ENGINEER SHALL BE CONSULTED.
    iii. THE BOTTOM OF THE RAIN GARDEN SHALL HAVE THE AMENDED SOIL INSTALLED ACCORDING TO THE SOIL AMENDMENT NOTES.
    iv. INSTALL THE SPECIFIED LINER ON THE EMERGENCY SPILLWAY OF THE RAIN GARDEN.
    v. STABILIZE THE DISTURBED AREAS WITH PERMANENT SEEDING, SPECIFIED PLANTINGS, AND MULCH IMMEDIATELY UPON COMPLETION OF THE CONVERSION.
    i. PAVE DRIVEWAYS.
    j. A LICENSED PROFESSIONAL ENGINEER SHALL BE PRESENT FOR THIS STEP.

       PERFORM SOIL AMENDMENT ACCORDING TO THE SOIL AMENDMENT NOTES. STABILIZE DISTURBED AREAS WITH APPROPRIATE SEEDING.

    k. INSTALL LANDSCAPING INCLUDING SPECIFIED LOT AND STREET TREE PLANTINGS.

PROPOSED SITE IMPROVEMENTS (CONT'D)

39. UPON STABILIZATION OF TRIBUTARY AREAS TO SWALE B7A, THE SWALE CHECK DAMS SHALL BE INSTALLED AND STABILIZED; THEN THE TEMPORARY CAPS ON THE INFILTRATION BED RISERS AND INLET B7B SHALL BE REMOVED.
40. A LICENSED PROFESSIONAL ENGINEER SHALL BE PRESENT FOR THIS STEP.

    AFTER THE TRIBUTARY AREAS ARE STABILIZED, THE SEDIMENT BASIN 1 SHALL BE CONVERTED TO THE INFILTRATION BASIN 1 USING THE FOLLOWING PROCEDURE:

    a. THE EXISTING SUBGRADE UNDER THE BOTTOM OF THE BASIN SHOULD NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO SOIL AMENDMENT.
    b. REMOVE 1 FOOT OF THE ORIGINAL SOIL BELOW THE BOTTOM ELEVATION OF THE SEDIMENT BASIN. THE UNDERLYING SOILS SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE (OR EQUIVALENT) AND LIGHT TRACTOR. ALL FINE GRADING SHOULD BE DONE BY HAND. ALL BED BOTTOMS SHOULD BE AT LEVEL GRADE.
    c. AN INFILTRATION TEST SHALL BE PERFORMED AT THE FINAL BOTTOM ELEVATION OF THE OF THE INFILTRATION BASIN.
    d. THE TEMPORARY RISER AND PIPE SHALL BE REMOVED.
    e. THE PERMANENT OUTLET STRUCTURE SHALL BE CONVERTED TO THE FINAL STAGE.
    f. APPROVED SOIL AMENDMENT MEDIA SHOULD BE PLACED OVER THE INFILTRATION AREAS ACCORDING TO THE SOIL AMENDMENT NOTES.
    g. SEED AND STABILIZE TOPSOIL.
41. A LICENSED PROFESSIONAL ENGINEER SHALL BE PRESENT FOR THIS STEP.

    AFTER THE TRIBUTARY AREAS ARE STABILIZED, THE SEDIMENT TRAP 1 SHALL BE CONVERTED TO RAIN GARDEN 8 USING THE FOLLOWING PROCEDURE:

    a. THE EXISTING SUBGRADE UNDER THE BOTTOM OF THE TRAP SHOULD NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO SOIL AMENDMENT.
    b. REMOVE 1 FOOT OF THE ORIGINAL SOIL BELOW THE BOTTOM ELEVATION OF THE SEDIMENT TRAP. THE UNDERLYING SOILS SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE (OR EQUIVALENT) AND LIGHT TRACTOR. ALL FINE GRADING SHOULD BE DONE BY HAND. ALL BED BOTTOMS SHOULD BE AT LEVEL GRADE.
    c. AN INFILTRATION TEST SHALL BE PERFORMED AT THE FINAL BOTTOM ELEVATION OF THE OF THE INFILTRATION BASIN.
    d. AMENDED SOIL SHALL BE PLACED TO A DEPTH OF 24" IN THE BOTTOM OF THE RAIN GARDEN 8.
    e. THE TEMPORARY SPILLWAY SHALL BE REMOVED AND THE PERMANENT SPILLWAY CONSTRUCTED TO DISCHARGE TO THE INFILTRATION BASIN 1.
    f. APPROVED SOIL AMENDMENT MEDIA SHOULD BE PLACED OVER THE INFILTRATION AREAS ACCORDING TO THE SOIL AMENDMENT NOTES.
    g. PLANT TREES, SHRUBS, SEED AND STABILIZE TOPSOIL.
42. AFTER THE TRIBUTARY AREAS ARE STABILIZED, THE PIPE CONNECTION BETWEEN INLETS B6 AND B8 SHALL BE OPENED AND SEDIMENT TRAP 2 SHALL BE REMOVED.
43. LOTS 27 AND 28 CAN BE CONSTRUCTED ACCORDING THE PROCEDURES IN STEP #37.
44. INSTALL LANDSCAPING INCLUDING BUFFER, STREET AND OPEN SPACE TREE PLANTINGS AS SPECIFIED ON THE PLANS IN AREAS NOT TO BE REDISTURBED DURING TOWNHOUSE CONSTRUCTION.
45. STREETS SHALL BE PAVED TO FINAL ELEVATION WHEN CONSTRUCTION VEHICLES WILL NO LONGER USE THEM TO ACCESS DISTURBED AREAS OF THE SITE.
46. A LICENSED PROFESSIONAL ENGINEER SHALL BE PRESENT FOR THIS STEP.

    INSTALL ALL WATER QUALITY INLET FILTERS IMMEDIATELY AFTER STABILIZATION OF THE ROADS AND TRIBUTARY AREAS.

PROPOSED TOWNHOUSE CONSTRUCTION

47. INSTALL ROCK CONSTRUCTION ENTRANCE AT THE END OF THE HAYWARD STREET CUL-DE-SAC TO PREVENT SEDIMENT FROM BEING TRACKED ONTO PAVED/STABILIZED STREETS WITHIN THE SINGLE-FAMILY SECTION OF THE DEVELOPMENT.
48. INSPECT AND MAINTAIN SILT SOXX #12 AND COMPOST SOCK SEDIMENT TRAP #3 AS SHOWN ON THE PLAN PRIOR TO EARTHMOVING ACTIVITIES IN THIS SECTION. REMOVE SILT SOXX #21 NEAR THE HAYWARD STREET CUL-DE-SAC.
49. INSTALL COMPOST SOCK SEDIMENT TRAPS #4 AND #5.
50. CLEAR DEVELOPMENT AREA.
51. STRIP TOPSOIL AND STOCKPILE UPSLOPE OF SILT FENCE.
52. ROUGH GRADE FOR DRIVEWAYS AND TOWNHOUSE UNITS.
53. INSTALL CONCRETE WASHOUT AREAS.
54. INSTALL UTILITIES AND CONNECTIONS (WATER, SEWER, CABLE, TELEPHONE, GAS, ETC.)
55. A LICENSED PROFESSIONAL ENGINEER SHALL BE PRESENT FOR THIS STEP.

    INSTALL RG 1 UNDERGROUND DETENTION SYSTEM, BLOCK RISER PIPES TO PREVENT SEDIMENT-LADEN WATER FROM ENTERING SYSTEM.

56. INSTALL RETAINING WALL AND ROOF DRAIN LINES.
57. INSTALL DRIVEWAY STONE BASE.
58. CONSTRUCT TOWNHOUSE UNITS.
59. A LICENSED PROFESSIONAL ENGINEER SHALL BE PRESENT FOR THIS STEP.

    INSTALL INFILTRATION TRENCH SYSTEMS AT THE REAR OF UNITS #53-#63 BY THE FOLLOWING PROCEDURE:

    a. THE EXISTING SUBGRADE UNDER THE BED AREAS SHOULD NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO GEOTEXTILE AND STONE BED PLACEMENT.
    b. WHERE EROSION OF SUBGRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING, THIS MATERIAL SHOULD BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE (OR EQUIVALENT) AND LIGHT TRACTOR. ALL FINE GRADING SHOULD BE DONE BY HAND. ALL BED BOTTOMS SHOULD BE AT LEVEL GRADE.
    c. GEOTEXTILE AND BED AGGREGATE SHOULD BE PLACED IMMEDIATELY AFTER APPROVAL OF SUBGRADE PREPARATION AND INSTALLATION OF STRUCTURES. GEOTEXTILE SHOULD BE PLACED IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDATIONS. ADJACENT STRIPS OF GEOTEXTILE SHOULD OVERLAP A MINIMUM OF 16 INCHES. IT SHOULD ALSO BE SECURED AT LEAST 4 FEET OUTSIDE OF BED IN ORDER TO PREVENT ANY RUNOFF OR SEDIMENT FROM ENTERING THE STORAGE BED. THIS EDGE STRIP SHOULD REMAIN IN PLACE UNTIL ALL BARE SOILS CONTIGUOUS TO BEDS ARE STABILIZED AND VEGETATED. AS THE SITE IS FULLY STABILIZED, EXCESS GEOTEXTILE ALONG BED EDGES CAN BE CUT BACK TO THE EDGE OF THE BED.
    d. CLEAN-WASHED, UNIFORMLY GRADED AGGREGATE SHOULD BE PLACED IN THE BED IN MAXIMUM 8-INCH LIFTS. EACH LAYER SHOULD BE LIGHTLY COMPACTED, WITH CONSTRUCTION EQUIPMENT KEPT OFF THE BED BOTTOM AS MUCH AS POSSIBLE.
    e. PERFORATED PIPE AND RISER PLACEMENT AND CONNECTIONS SHALL BE MADE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
    f. APPROVED SOIL MEDIA SHOULD BE PLACED OVER INFILTRATION TRENCH IN MAXIMUM 6-INCH LIFTS.
    g. RISER SHALL BE TEMPORARILY CAPPED TO PREVENT WATER AND SEDIMENT FROM ENTERING INFILTRATION TRENCHES DURING CONSTRUCTION AND UNTIL TRIBUTARY AREAS ARE STABILIZED.
    h. INSTALL CHECK DAMS AND STABILIZE, THEN REMOVE RISER CAPS.
60. A LICENSED PROFESSIONAL ENGINEER SHALL BE PRESENT FOR THIS STEP.

    INSTALL RAIN GARDENS 1, 2, AND 3 UPON COMPLETION AND STABILIZATION OF THEIR TRIBUTARY AREAS. CONNECT RAIN GARDEN 1 TO RG 1 UNDERGROUND DETENTION SYSTEM. ANY SEDIMENT ENTERING THE RAIN GARDENS DURING CONSTRUCTION SHALL BE REMOVED WITH LIGHT EQUIPMENT.

    a. THE RAINGARDENS SHALL BE EXCAVATED TO THE PRESCRIBED DEPTH SHOWN ON THE PLAN DETAILS. THE BOTTOM OF THE EXCAVATION SHALL BE LEVEL. USE THE LIGHTEST EQUIPMENT POSSIBLE. THE BOTTOM OF THE EXCAVATION SHALL NOT BE COMPACTED AND SHALL BE FREE FROM ROCKS AND DEBRIS.
    b. THE UNDERLYING SOIL SHALL BE SCARIFIED A MINIMUM OF TWELVE (12) INCHES WITH A YORK RAKE, SUBSOILER OR OTHER SUITABLE EQUIPMENT. IF UNFORESEEN CONDITIONS SUCH AS BEDROCK OR SINKHOLES ARE UNCOVERED OR THE INFILTRATION RATE IS NOT ACHIEVED, THE ENGINEER SHALL BE CONSULTED.
    c. THE BOTTOM OF THE RAIN GARDEN SHALL HAVE THE AMENDED SOIL INSTALLED ACCORDING TO THE SOIL AMENDMENT NOTES.
    d. INSTALL THE OUTLET RISER AND PIPE.
    e. INSTALL THE SPECIFIED LINER ON THE EMERGENCY SPILLWAY OF RAIN GARDEN 3. INSTALL DRIVEWAY TO BASE COURSE AT THE SPILLWAY LOCATION OF RAIN GARDENS 1 AND 2.
    f. STABILIZE THE DISTURBED AREAS WITH PERMANENT SEEDING, SPECIFIED PLANTINGS, AND MULCH IMMEDIATELY UPON COMPLETION OF THE CONVERSION.
61. A LICENSED PROFESSIONAL ENGINEER SHALL BE PRESENT FOR THIS STEP.

    PERFORM SOIL AMENDMENT ACCORDING TO THE SOIL AMENDMENT NOTES. STABILIZE DISTURBED AREAS WITH APPROPRIATE SEEDING.

62. PAVE DRIVEWAYS AND PARKING AREAS.
63. INSTALL LANDSCAPING INCLUDING BUFFER, STREET, AND OPEN SPACE TREE PLANTINGS.
64. STABILIZE DISTURBED AREAS WITH PERMANENT SEEDING AND MULCH.

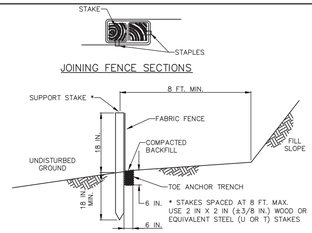
WHEN ALL OF THE DISTURBANCES ON THE SITE ARE COMPLETELY STABILIZED (A MINIMUM OF 70% UNIFORM PERENNIAL VEGETATIVE COVER), ALL TEMPORARY BMP'S SHOULD BE REMOVED FROM THE SITE (INCLUDING ALL SILT SOCKS AND THE INLET PROTECTION) AND ANY DISTURBANCE CREATED WHEN REMOVING THEM SHALL IMMEDIATELY BE PERMANENTLY SEEDED AND MULCHED. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING GERMINATING SEASON. THE COVER OVER THE PERMANENT DOME RISER SHALL BE REMOVED.

UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE MONTGOMERY COUNTY CONSERVATION DISTRICT TO SCHEDULE A FINAL INSPECTION.

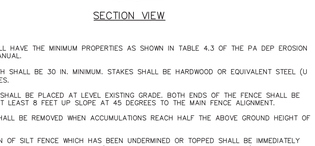
IX. 102.4(B)(5)(X) - *A MAINTENANCE PROGRAM WHICH PROVIDES FOR INSPECTION OF BMP'S ON A WEEKLY BASIS AND AFTER EACH MEASURABLE RAINFALL EVENT, INCLUDING THE REPAIR OF THE BMP'S TO ENSURE EFFECTIVE AND EFFICIENT OPERATION.*

MAINTENANCE PROGRAM

1. THE CONTRACTOR AND/OR OWNER SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL FACILITIES.
2. ALL EROSION CONTROL FACILITIES SHALL BE INSPECTED AFTER EACH RAINFALL EVENT AND WEEKLY TO ENSURE THAT THEY ARE IN GOOD REPAIR AND IN WORKING CONDITION. ANY DAMAGED FACILITY SHALL BE REPAIRED IMMEDIATELY.
3. SEEDED AREAS THAT HAVE ERODED SHALL BE FILLED AND GRADED AS NECESSARY AND THEN RESEEDED AND MULCHED.
4. THE INSPECTIONS AND MAINTENANCE SHALL CONTINUE AFTER EACH SIZABLE STORM EVENT UNTIL SIGNS OF EROSION ARE GONE. INSPECTIONS AND NECESSARY CLEANING AND MAINTENANCE SHALL BE PERFORMED MONTHLY THEREAFTER.
5. A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
6. E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE MONTGOMERY COUNTY CONSERVATION DISTRICT.
7. THE SILT THAT HAS ACCUMULATED SHALL BE REMOVED FROM THE EROSION CONTROL STRUCTURE, ALLOWED TO DRY AND THEN IT CAN BE USED AS FILL WHERE NEEDED ON THE SITE. INSPECT THE INLET PROTECTION, ROCK FILTER OUTLETS, SILT FENCE, SEDIMENT TRAPS AND SWALES WEEK



JOINING FENCE SECTIONS



NOTES:

FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.

FABRIC WIDTH SHALL BE 30 IN. MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U OR T) STAKES.

SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.

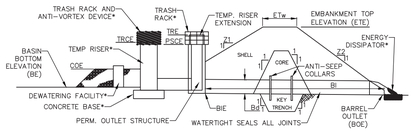
SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET (STANDARD CONSTRUCTION DETAIL # 4–6).

FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

STANDARD CONSTRUCTION DETAIL #4-7
STANDARD SILT FENCE (18" HIGH)

NOT TO SCALE



* ALSO REFER TO SEDIMENT BASIN TEMPORARY RISER, EMERGENCY SPILLWAY, ENERGY DISSIPATER, TRASH RACK AND ANTI-VORTEX DEVICE, AND SEDIMENT STORAGE DEWATERING FACILITY DETAILS.

EMBANKMENT SECTION ALONG PRINCIPAL SPILLWAY

BASIN NO.	Z1 (FT)	Z2 (FT)	TEMPORARY RISER				BARREL			
			DIA TRd (IN)	CREST ELEV TRCE (FT)	MAT'L	TEMP. RISER EXT. ELEV TRE (FT)	DIA Bd (IN)	INLEY ELEV BIE (FT)	MAT'L	LENGTH Bl (FT)	OUTLET ELEV BOE (FT)
1	4	4	48	337.5	CMP	n/a	24	332.3	RCP	78	324.7

EMBANKMENT				CLEANOUT ELEV COE (FT)	BOTTOM ELEV BE (FT)
TOP ELEV ETE (FT)	TOP WIDTH ETw (FT)	KEY TRENCH DEPTH (FT)	KEY TRENCH WIDTH (FT)		
339.2	10	2	8	334.50	333.3

NOTES:

SEDIMENT BASINS, INCLUDING ALL APPURTENANT WORKS, SHALL BE CONSTRUCTED TO THE DETAIL AND DIMENSIONS SHOWN ON THE E&S PLAN DRAWINGS.

AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO A DEPTH OF TWO FEET PRIOR TO ANY PLACEMENT AND COMPACTION OF EARTHEN FILL. FILL MATERIAL FOR THE EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN LAYERED LIFTS OF NOT MORE THAN 6 TO 9 IN. THE MAXIMUM ROCK SIZE SHALL BE NO GREATER THAN 2/3 THE LIFT THICKNESS. UPON COMPLETION, THE EMBANKMENT SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED ACCORDING TO THE SPECIFICATIONS OF THE E&S PLAN DRAWINGS. TREES SHALL NOT BE PLANTED ON THE EMBANKMENT.

ALL SEDIMENT BASINS SHALL BE INSPECTED ON AT LEAST A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT.

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

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

BASIN EMBANKMENTS, SPILLWAYS, AND OUTLETS SHALL BE CHECKED FOR EROSION, PIPING AND SETTLEMENT. NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY. DISPLACED RIPRAP WITHIN THE OUTLET ENERGY DISSIPATER SHALL BE REPLACED IMMEDIATELY. ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISTURBED AREAS INSIDE THE BASIN STABILIZED BEFORE CONVERSION TO A STORMWATER MANAGEMENT FACILITY. THE DEVICE SHOWN IN STANDARD CONSTRUCTION DETAIL #7–16 MAY BE USED TO DEWATER SATURATED SEDIMENT PRIOR TO ITS REMOVAL. ROCK FILTERS SHALL BE ADDED AS NECESSARY.

SOILS ACCEPTABLE FOR EMBANKMENT CONSTRUCTION SHOULD BE LIMITED TO GC, GM, SC, SM, CL OR ML AS DESCRIBED IN ASTMD-2487 (UNIFIED SOILS CLASSIFICATION). OTHER SOILS MAY BE ACCEPTABLE ON A CASE–BY–CASE BASIS FOR TEMPORARY BASINS, OR PERMANENT BASINS WITH DRAINAGE AREAS LESS THAN 10 ACRES. ON THIS SITE SUITABLE SOILS COULD POTENTIALLY BE FOUND IN THE AREAS OF TEST PITS #3, 17, 24, 27, 30 AND 41. SHOULD ADDITIONAL SOIL MATERIAL BE NEEDED, IT SHALL BE OBTAINED FROM A SITE WITH AN APPROVED EROSION AND SEDIMENT CONTROL PLAN.

ALL BASIN EMBANKMENTS SHOULD BE COMPACTED BY SHEEPSFOOT OR PAD ROLLER. THE LOOSE LIFT THICKNESS SHOULD BE 9 INCHES OR LESS, DEPENDING ON ROLLER SIZE, AND THE MAXIMUM PARTICLE SIZE IS 6 INCHES OR LESS –– 2/3 LIFT THICKNESS. FIVE PASSES OF THE COMPACTION EQUIPMENT OVER THE ENTIRE SURFACE OF EACH LIFT IS REQUIRED. EMBANKMENT COMPACTION TO VISIBLE NON–MOVEMENT IS ALSO REQUIRED.

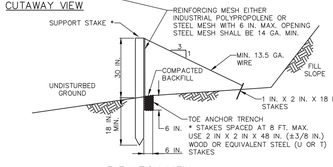
STANDARD CONSTRUCTION DETAIL #7-8
SEDIMENT BASIN DETENTION POND EMBANKMENT AND SPILLWAY DETAILS

NOT TO SCALE



CUTAWAY VIEW

JOINING FENCE SECTIONS



ELEVATION VIEW

NOTES:

FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.

FABRIC WIDTH SHALL BE 42 IN. MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U OR T) STAKES. AN 18 IN. SUPPORT STAKE SHALL BE DRIVEN 12 IN. MINIMUM INTO UNDISTURBED GROUND.

SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.

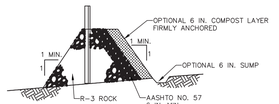
SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET (STANDARD CONSTRUCTION DETAIL # 4–6).

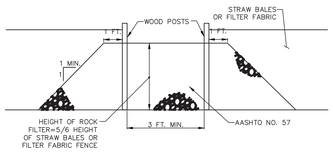
FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

STANDARD CONSTRUCTION DETAIL #4-8
REINFORCED SILT FENCE (30" HIGH)

NOT TO SCALE



OUTLET CROSS–SECTION



UP–SLOPE FACE

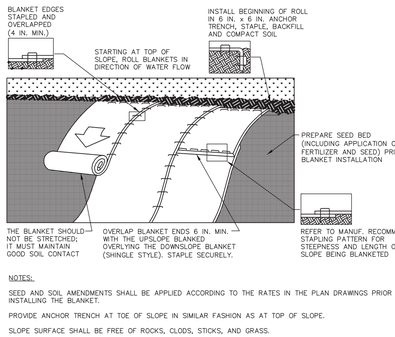
NOTES:

A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A SILT FENCE OR STRAW BALE BARRIER HAS OCCURRED DUE TO CONCENTRATED FLOW. ANCHORED COMPOST LAYER SHALL BE USED ON UPSLOPE FACE IN HQ AND EV WATERSHEDS.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.

STANDARD CONSTRUCTION DETAIL #4-6
ROCK FILTER OUTLET

NOT TO SCALE



NOTES:

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

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

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

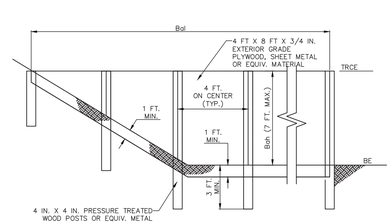
BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.

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

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

STANDARD CONSTRUCTION DETAIL #11-1
EROSION CONTROL BLANKET INSTALLATION

NOT TO SCALE



BASIN OR TRAP NO.	BAFFLE		TEMPORARY RISER	BOTTOM
	LENGTH Bsl (FT)	HEIGHT Bsh (FT)	CREST ELEV. TRCE (FT)	BOTTOM ELEV BE (FT)
BASIN 1	388'	4.2	337.5	333.3
BASIN 2	293'	4.2	337.5	333.3
BASIN 3	288'	4.2	337.5	333.3
BASIN 4	87'	4.2	337.5	333.3
BASIN 5	100'	4.2	337.5	333.3
TRAP 1	82, 73	2.0	349.0	347.0
TRAP 2	87	2.0	341.5	339.5

NOTES:

SEE APPROPRIATE BASIN DETAIL FOR PROPER LOCATION AND ORIENTATION.

IN POOLS WITH DEPTHS EXCEEDING 7', THE TOP OF THE PLYWOOD BAFFLE DOES NOT NEED TO EXTEND TO THE TEMPORARY RISER CREST.

BAFFLES SHALL BE TIED INTO ONE SIDE OF THE BASIN UNLESS OTHERWISE SHOWN ON THE PLAN DRAWINGS.

SUBSTITUTION OF MATERIALS NOT SPECIFIED IN THIS DETAIL SHALL BE APPROVED BY THE DEPARTMENT OR THE LOCAL CONSERVATION DISTRICT BEFORE INSTALLATION.

DAMAGED OR WARPED BAFFLES SHALL BE REPLACED WITHIN 7 DAYS OF INSPECTION.

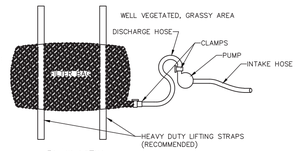
BAFFLES REQUIRING SUPPORT POSTS SHALL NOT BE INSTALLED IN BASINS REQUIRING IMPERVIOUS LINERS.

STANDARD CONSTRUCTION DETAIL #7-14
BAFFLE

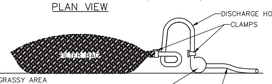
NOT TO SCALE

ALL BAG SIZES BASED ON 80 GPM/SF FILTRATION RATE:

- UTILITY TRENCH-USE MINIMUM 6'X6' SIZE BAG
- MINOR ROAD CROSSING-USE 10'X15' SIZE BAG OR CUSTOM SIZE PROVIDING 84 SF OF FILTRATION AREA.



PLAN VIEW



ELEVATION VIEW

NOTES:

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

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

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

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

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

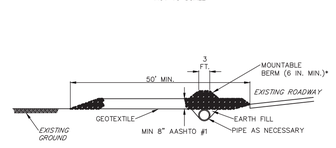
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

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

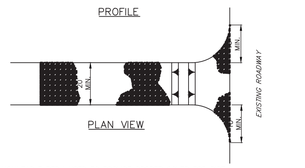
FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

STANDARD CONSTRUCTION DETAIL #3-16
PUMPED WATER FILTER BAG

NOT TO SCALE



PROFILE



PLAN VIEW

* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

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

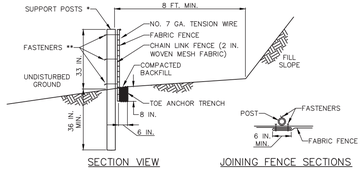
RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

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

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

STANDARD CONSTRUCTION DETAIL #3-1
ROCK CONSTRUCTION ENTRANCE

NOT TO SCALE



SECTION VIEW JOINING FENCE SECTIONS

* POSTS SPACED AT 10 FT. MAX. USE 2–1/2 IN. DIA HEAVY DUTY GALVANIZED OR ALUMINUM POSTS.

** CHAIN LINK TO POST FASTENERS SPACED AT 14 IN. MAX. USE NO. 9 GA. ALUMINUM WIRE OR NO. 9 GALVANIZED STEEL WIRE. FABRIC TO SHAIN FASTENERS SPACED AT 24 IN. MAX. ON CENTER.

NOTES:

FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3 OF THE PA DEP EROSION CONTROL MANUAL.

FABRIC WIDTH SHALL BE 42 IN. MINIMUM.

POSTS SHALL BE INSTALLED USING A POSTHOLE DRILL.

CHAIN LINK SHALL BE GALVANIZED NO. 11.5 GA. STEEL WIRE WITH 2–1/4 IN. OPENING, NO. 11 GA. ALUMINUM COATED STEEL WIRE IN ACCORDANCE WITH ASTM–A–491, OR GALVANIZED NO. 9 GA. STEEL WIRE TOP AND BOTTOM WITH GALVANIZED NO. 11 GA. STEEL INTERMEDIATE WIRES. NO. 7 GAGE TENSION WIRE TO BE INSTALLED HORIZONTALLY THROUGH HOLES AT TOP AND BOTTOM OF CHAIN–LINK FENCE OR ATTACHED WITH HOG RINGS AT 5 FT MAX. CENTERS.

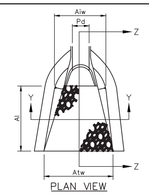
SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

STANDARD CONSTRUCTION DETAIL #4-10
SUPER SILT FENCE

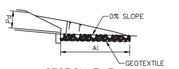
NOT TO SCALE



PLAN VIEW



SECTION Y–Y



SECTION Z–Z

OUTLET NO.	PIPE DIA Pd (IN)	R-PRAP SIZE R–	R-PRAP THICK Rt (IN)	APRON LENGTH Ai (FT)	APRON INITIAL WIDTH Aw (FT)	APRON TERMINAL WIDTH At (FT)
A13	18	8	63	12	4.5	16.5
B9	18	8	63	12	4.5	9.3
C4	18	4	18	9	4.5	12.5
D1	24	8	63	14	6	20
A5A	15	6	36	8	3.75	11.25
A4A	18	4	18	8	4.5	11.25
RG3	8	5	24	4	2	6
TEMP 9	15	6	36	18	3.75	11
RG8	12	8	63	11	3	14

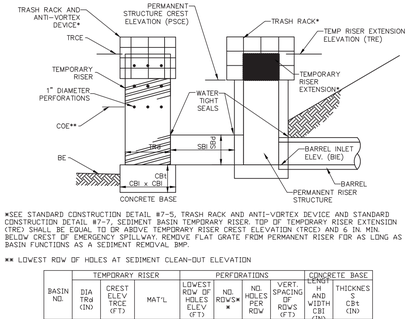
NOTES:

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.

STANDARD CONSTRUCTION DETAIL #9-1
RIPRAP APRON AT PIPE OUTLET WITH FLARED END SECTION OR ENDWALL

NOT TO SCALE



*SEE STANDARD CONSTRUCTION DETAIL #7–5, TRASH RACK AND ANTI–VORTEX DEVICE AND STANDARD CONSTRUCTION DETAIL #7–7, SEDIMENT BASIN TEMPORARY RISER. TOP OF TEMPORARY RISER EXTENSION (TRE) SHALL BE EQUAL TO OR ABOVE TEMPORARY RISER CREST ELEVATION (TRCE) AND 6 IN. MIN. BELOW CREST OF EMERGENCY SPILLWAY. REMOVE FLAT GRATE FROM PERMANENT RISER FOR AS LONG AS BASIN FUNCTIONS AS A SEDIMENT REMOVAL BMP.

** LOWEST ROW OF HOLES AT SEDIMENT CLEAN–OUT ELEVATION

BASIN NO.	TEMPORARY RISER			PERFORATIONS			CONCRETE BASE	
	DIA TRd (IN)	CREST ELEV TRCE (FT)	MAT'L	LOWEST ROW OF HOLES ELEV (FT)	NO. ROWS *	NO. HOLES PER ROW	VERT. SPACING OF ROWS (FT)	LENGTH H AND WIDTH CBI (IN)	THICKNESS CBt (IN)
1	48	337.5	CMP	334.5	3	2	1.0	63	24

BASIN NO.	TEMPORARY STUB			PERMANENT STRUCTURE			BARREL
	DIA SBd (IN)	INVERT ELEV SBIE (FT)	MAT'L	LENGTH SBl (FT)	CREST ELEV PSCE (FT)	CREST ELEV TRE (FT)	OUTLET ELEV PSOE (FT)	INLET ELEV BIE (FT)
1	24	333.3	CMP	5	337.5	n/a	332.3	332.3

NOTES:

A MINIMUM OF 2–#8 REBAR SHALL BE PLACED AT RIGHT ANGLES AND PROJECTING THROUGH SIDES OF RISER TO ANCHOR IT TO CONCRETE BASE. REBAR SHALL PROJECT A MINIMUM OF 1/4 RISER DIAMETER BEYOND OUTSIDE OF RISER.

CONCRETE BASE SHALL BE POURED IN SUCH A MANNER SO AS TO INSURE THAT CONCRETE FILLS BOTTOM OF RISER TO INVERT OF THE OUTLET PIPE TO PREVENT RISER FROM BREAKING AWAY FROM THE BASE. MINIMUM BASE WIDTH EQUALS 2 TIMES RISER DIAMETER.

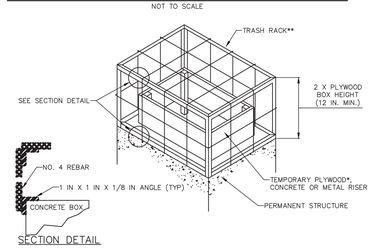
EMBEDDED SECTION OF ALUMINUM OR ALUMINIZED PIPE SHALL BE PAINTED WITH ZINC CHROMATE OR EQUIVALENT.

CLOGGED OR DAMAGED SPILLWAYS SHALL BE REPAIRED IMMEDIATELY. TRASH AND OTHER DEBRIS SHALL BE REMOVED FROM THE BASIN AND RISER.

ALL POST–CONSTRUCTION ORIFICES ON THE PERMANENT RISER SHALL BE BLOCKED WITH A WATERTIGHT SEAL AND STEEL PLATE (MARINE GRADE PLYWOOD IS ALSO ACCEPTABLE).

STANDARD CONSTRUCTION DETAIL #7-9
SEDIMENT BASIN/DETENTION POND RISER STRUCTURES

NOT TO SCALE



SECTION DETAIL

* 3/4 IN. PRESSURE TREATED PLYWOOD BOX WITH 2 IN. X 2 IN. PRESSURE TREATED CORNER SUPPORTS, SET INTO 1–1/2 IN. GRATE OFFSETS, CAULK ALL SEAMS TO FORM WATERTIGHT SEALS.
** TRASH RACK COMPOSED OF 1 IN. X 1 IN. X 1/8 IN. L (TYP.) AND #4 BARS (TYP.) WELDED TO THE ANGLES AND AT EACH INTERSECTION OF THE BARS. #4 BARS SPACED AT HALF THE DIAMETER OF THE BARREL MAX.

NOTES:

BOX SHALL BE BOLTED, STRAPPED, OR OTHERWISE SECURED TO THE PERMANENT RISER.

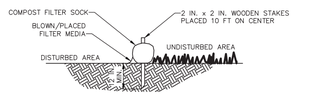
TOP OF TEMPORARY RISER EXTENSION SHALL BE AT LEAST AS HIGH AS SEDIMENT BASIN TEMPORARY RISER AND SHALL BE 6 IN. (MINIMUM) BELOW CREST OF EMERGENCY SPILLWAY.

ALL JOINTS SHALL BE WATER TIGHT.

CLOGGED OR DAMAGED SPILLWAYS SHALL BE REPAIRED IMMEDIATELY. TRASH AND OTHER DEBRIS SHALL BE REMOVED FROM THE BASIN AND RISER.

STANDARD CONSTRUCTION DETAIL #7-10
TEMPORARY RISER EXTENSION AND TRASH RACK FOR PERMANENT STRUCTURE

NOT TO SCALE





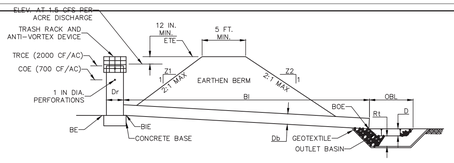
NOTES:

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

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

TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.

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



TRAP NO.	Z1 (FT)	Z2 (FT)	RISER					BARREL					EMBANKMENT		CLEAN OUT ELEV COE (FT)	BOTTOM ELEV BE (FT)
			MAT'L	DIA Dr (IN)	CREST ELEV RCE (FT)	BOT PERF ELEV (FT)		MAT'L	DIA Bd (IN)	INLET ELEV BIE (FT)	LENGTH BI (FT)	OUTLET ELEV BOE (FT)	TOP ELEV ETE (FT)	TOP WIDTH E1w (FT)		
2	3	12	CMP	18	341.50	340.50		CMP	18	339.3	49	338.00	343.00	5	340.50	339.50

TRAP NO.	CONCRETE BASE			OUTLET BASIN					
	LENGTH C1B1 (IN)	WIDTH C1w (IN)	THICK C1t (IN)	RIPRAP SIZE (R-_)	ROCK THICK Rt (IN)	DEPTH D (IN)	WIDTH DBW (FT)	LENGTH OBL (FT)	
2	30	30	6	TO TEMP. SLOPE PIPE					

NOTES:

SEE DETAIL #8-3 TEMPORARY RISER FOR DETAILS OF THE TEMPORARY RISER CONSTRUCTION.

FILL MATERIAL FOR THE EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN LAYERED LIFTS OF NOT MORE THAN 6 TO 9 IN. THE MAXIMUM ROCK SIZE SHALL BE NO GREATER THAN 2/3 THE LIFT THICKNESS.

UPON COMPLETION, THE EMBANKMENT SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED ACCORDING TO THE SPECIFICATIONS OF THE E&S PLAN DRAWINGS.

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

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

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

CHECK EMBANKMENTS, SPILLWAYS, AND OUTLETS FOR EROSION, PIPING AND SETTLEMENT. CLOGGED OR DAMAGED SPILLWAYS AND/OR EMBANKMENTS SHALL BE IMMEDIATELY RESTORED TO THE DESIGN SPECIFICATIONS.
DISPLACED RIPRAP WITHIN THE OUTLET PROTECTION SHALL BE REPLACED IMMEDIATELY.

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

STANDARD CONSTRUCTION DETAIL #8-2
BARREL/RISER SEDIMENT TRAP

NOT TO SCALE

SILT SOXX DETAIL AT RETAINING WALLS
(NOT TO SCALE)

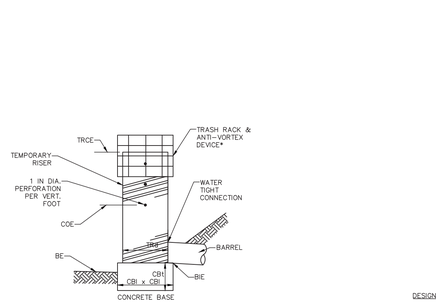
THIS DETAIL IS FOR ALL RETAINING WALLS AT THE LOWER SIDE OF THE TOWNHOUSE UNIT AREA.

SILT SOXX BELOW RETAINING WALLS TO BE INSTALLED PRIOR TO INSTALLING THE WALL.

SILT SOXX ABOVE RETAINING WALLS TO BE INSTALLED AFTER BACKFILLING AND STABILIZATION SEEDING IS COMPLETED.

Filtrexx ® SiltSoxx ™ Detail
(n.t.s.)

NOTES:
1. All material to meet Filtrexx ® specifications.
2. SiltSoxx ™ compost/soil/rock/seed fill to meet application requirements.
3. Compost material is to be dispersed on site, or SiltSoxx ™ are to be left in place.
4. The contractor shall maintain the SiltSoxx ™ in a functional condition at all times and it shall be routinely inspected.
5. Where SiltSoxx ™ requires repair, it will be routinely repaired.
6. The contractor shall remove sediment collected at the base of the SiltSoxx ™ when accumulations reach 1/2 of the exposed height of the SiltSoxx ™. Alternatively rather than create a soil disturbing activity, additional SiltSoxx ™ may be added at areas of high sedimentation, placed immediately on top of the existing sediment laden SiltSoxx ™.
7. SiltSoxx ™ must be installed on existing level grade. Both ends of the SiltSoxx ™ section must be extended at least 8 feet upslope at 45 degrees to the main SiltSoxx ™ alignment.



* SEE STANDARD CONSTRUCTION DETAIL #7-5, TRASH RACK AND ANTI-VORTEX DEVICE
** LOWEST HOLE AT SEDIMENT CLEAN-OUT ELEVATION

TRAP NO.	TEMPORARY RISER			CONCRETE BASE			BARREL
	DIA Trd (IN)	CREST ELEV TRCE (FT)	MAT'L	CLEAN OUT ELEV. COE (FT)	LENGTH C1B1 (IN)	WIDTH C1w (IN)	THICK. C1t (IN)	INLET ELEV BIE (FT)
2	18	341.5	CMP	340.5	30	30	6	339.3

NOTES:

A MINIMUM OF 2-#8 REBAR SHALL BE PLACED AT RIGHT ANGLES AND PROJECTING THROUGH SIDES OF RISER TO ANCHOR IT TO CONCRETE BASE. REBAR SHALL PROJECT A MINIMUM OF 1/4 RISER DIAMETER BEYOND OUTSIDE OF RISER.

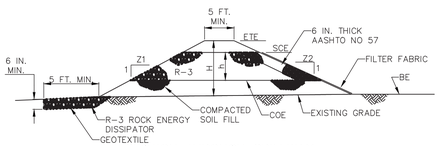
CONCRETE BASE SHALL BE POURED IN SUCH A MANNER SO AS TO INSURE THAT CONCRETE FILLS BOTTOM OF RISER TO INVERT OF THE OUTLET PIPE TO PREVENT RISER FROM BREAKING AWAY FROM THE BASE. MINIMUM BASE WIDTH EQUALS 2 TIMES RISER DIAMETER.

EMBEDDED SECTION OF ALUMINUM OR ALUMINIZED PIPE SHALL BE PAINTED WITH ZINC CHROMATE OR EQUIVALENT.

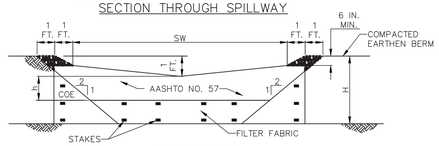
CLOGGED OR DAMAGED SPILLWAYS SHALL BE REPAIRED IMMEDIATELY. TRASH AND OTHER DEBRIS SHALL BE REMOVED FROM THE BASIN AND RISER.

STANDARD CONSTRUCTION DETAIL #8-3
SEDIMENT TRAP TEMPORARY RISER

NOT TO SCALE



SECTION THROUGH SPILLWAY



INSIDE FACE

TRAP NO.	Z1 (FT)	Z2 (FT)	H (FT)	h (FT)	EMBANK. TOP ELEV. ETE (FT)	SPILLWAY CREST ELEV. SCE (FT)	CLEAN OUT ELEV. COE (FT)	BOTTOM ELEV. BE (FT)	SPILLWAY WIDTH SW (FT)
1	4	3	3.0	1	350.0	349.0	348.0	347.0	9

NOTES:

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

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

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

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

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

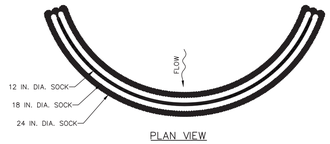
CHECK EMBANKMENTS, SPILLWAYS, AND OUTLETS FOR EROSION, PIPING AND SETTLEMENT. CLOGGED OR DAMAGED SPILLWAYS AND/OR EMBANKMENTS SHALL BE IMMEDIATELY RESTORED TO THE DESIGN SPECIFICATIONS.

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

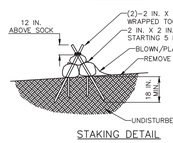
ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISTURBED AREAS INSIDE THE TRAP SHALL BE STABILIZED BEFORE CONVERSION TO A STORMWATER MANAGEMENT FACILITY. TO ASSIST IN REMOVING SEDIMENT, WHICH MAY BE SATURATED, A DEVICE SUCH AS IS SHOWN IN STANDARD CONSTRUCTION DETAIL #7-18 MAY BE USED TO DEWATER THE SEDIMENT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

STANDARD CONSTRUCTION DETAIL #8-1
EMBANKMENT SEDIMENT TRAP

NOT TO SCALE



PLAN VIEW



STAKING DETAIL

DESIGN NOTES:

1. COMPOST SOCK SEDIMENT TRAP SHALL BE SIZED TO PROVIDE 2000 CUBIC FEET OF STORAGE CAPACITY FOR EACH ACRE TRIBUTARY TO THE TRAP.
2. MINIMUM BASE WIDTH IS EQUAL TO THE HEIGHT.
3. SEDIMENT ACCUMULATION SHALL NOT EXCEED 1/3 THE TOTAL HEIGHT OF THE TRAP.
4. SOCKS SHALL BE OF LARGER DIAMETER AT THE BASE OF THE TRAP AND DECREASE IN DIAMETER FOR SUCCESSIVE LAYERS AS SHOWN ON THE PLAN VIEW.
5. ENDS OF THE TRAP SHALL BE A MINIMUM OF 1 FOOT HIGHER IN ELEVATION THAN THE MID-SECTION, WHICH SHALL BE LOCATED AT THE POINT OF DISCHARGE.

NOTES:

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

COMPOST SOCK SEDIMENT TRAPS SHALL NOT EXCEED THREE SOCKS IN HEIGHT AND SHALL BE STACKED IN PYRAMIDAL FORM AS SHOWN ABOVE. MINIMUM TRAP HEIGHT IS ONE 24" DIAMETER SOCK. ADDITIONAL STORAGE MAY BE PROVIDED BY MEANS OF AN EXCAVATED SUMP 12" DEEP EXTENDING 1 TO 3 FEET UPSLOPE OF THE SOCKS ALONG THE LOWER SIDE OF THE TRAP.

COMPOST SOCK SEDIMENT TRAPS SHALL PROVIDE 2,000 CUBIC FEET STORAGE CAPACITY WITH 12" FREEBOARD FOR EACH TRIBUTARY DRAINAGE ACRE. (SEE MANUFACTURER FOR ANTICIPATED SETTLEMENT.)

THE MAXIMUM TRIBUTARY DRAINAGE AREA IS 5.0 ACRES. SINCE COMPOST SOCKS ARE "FLOW-THROUGH," NO SPILLWAY IS REQUIRED.

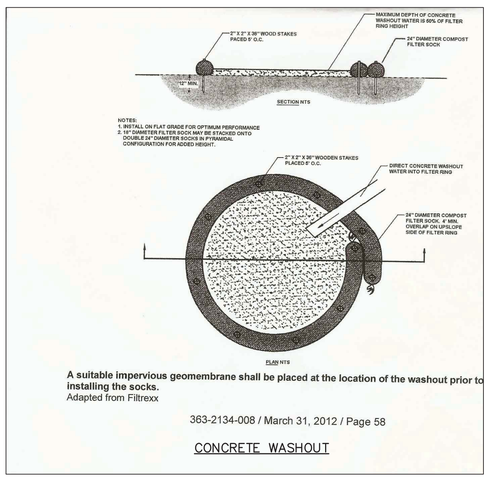
COMPOST SOCK SEDIMENT TRAPS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/3 THE HEIGHT OF THE SOCKS.

PHOTODEGRADABLE AND BIODEGRADABLE SOCKS SHALL NOT BE USED FOR MORE THAN 1 YEAR.

COMPOST SOCK SEDIMENT TRAP DATA				
TRAP #	BOTTOM ROW 1 DIAM.	ROW 2 DIAM.	ROW 3 DIAM.	MINIMUM HEIGHT (IN)
3	18"	8"	N/A	26"
4	24"	1'-6"	N/A	42"
5	32"	24"	N/A	56"

STANDARD CONSTRUCTION DETAIL #3-11
COMPOST SOCK SEDIMENT TRAP

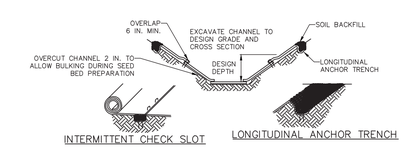
NOT TO SCALE



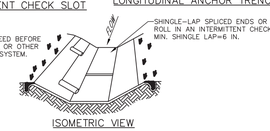
A suitable impervious geomembrane shall be placed at the location of the washout prior to installing the socks.
Adapted from Filtrexx

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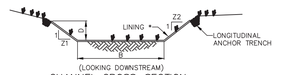
CONCRETE WASHOUT



PREPARE SOIL AND APPLY SEED BEFORE INSTALLING BLANKETS, MATS, OR OTHER TEMPORARY CHANNEL LINER SYSTEM.



ISOMETRIC VIEW



CHANNEL CROSS-SECTION

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

CHANNEL NO.	STATIONS	BOTTOM WIDTH B (FT)	DEPTH D (FT)	TOP WIDTH W (FT)	Z1 (FT:FT)	Z2 (FT:FT)	TEMPORARY/PERMANENT LINING *
A4	ALL	-	1.40	9	3	3	CURLED WOOD/GRASS
B7A	ALL	-	1.28	9	3	3	CURLED WOOD/GRASS
C	ALL	-	1.10	6.6	3	3	CURLED WOOD/GRASS
TOWNHOUSE	ALL	2	1.10	8.6	3	3	CURLED WOOD/GRASS

NOTES:

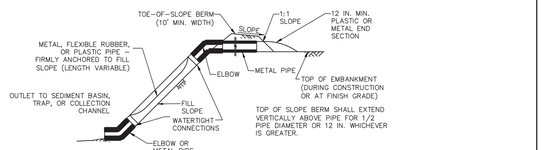
ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.

CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION.
SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. DAMAGED LINING SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY.

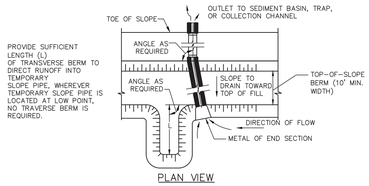
NO MORE THAN ONE THIRD OF THE SHOOT (GRASS LEAF) SHALL BE REMOVED IN ANY MOWING. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED. EXCESS VEGETATION SHALL BE REMOVED FROM PERMANENT CHANNELS TO ENSURE SUFFICIENT CHANNEL CAPACITY.

STANDARD CONSTRUCTION DETAIL #6-1
VEGETATED CHANNEL

NOT TO SCALE



SLOPE PIPE WITH TRANSVERSE BERM



PLAN VIEW

SLOPE PIPE NO.	OUTLET PROTECTION TYPE	RIPRAP SIZE OR MATERIAL	APRON LENGTH H (FT)	APRON WIDTH W (FT)
@ SEDIMENT TRAP 2	RIPRAP APRON @ D1	R-8	14	20

NOTES:

THE MAXIMUM DISTANCE BETWEEN ANCHOR STAKES SHALL BE 10 FEET.

TRANSVERSE BERM SHALL BE USED WHENEVER TEMPORARY SLOPE PIPE IS NOT LOCATED AT LOW POINT.

SLOPE PIPES SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. ANY ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE INLET IMMEDIATELY.

DAMAGED PIPE SECTIONS SHALL BE REPLACED WITHIN 24 HOURS. LEAKING CONNECTIONS SHALL BE REPAIRED IMMEDIATELY.

STANDARD CONSTRUCTION DETAIL #6-5
TEMPORARY SLOPE PIPE

NOT TO SCALE

NO.	REVISION	DATE	BY	APP.
13.	REVISED OWNERSHIP INFORMATION	01-24-20	JCE	BDB
12.	REVISED PER GILMORE (08-22-19) AND MCMAHON (08-27-19, 08-28-19)	08-29-19	JCE	BDB
11.	REVISED PER GILMORE (03-06-19), ALTA (03-05-19), MCMAHON (03-07-19)	03-14-19	JCE	BDB
10.	REVISED PER GILMORE 901-04-19), ALTA (01-04-19), MCMAHON (01-04-19), ENTECH (01-02-19)	01-30-19	JCE	BDB
9.	REVISED PER GILMORE (9-6-18), ALTA (9-21-18), MCMAHON (9-10-18, FIRE MARSHAL (7-23-18 & 11-29-18)	11-29-18	JCE	BDB
8.	REVISED PER GILMORE (6-15-18), ALTA (6-21-18), MCMAHON (6-15-18), ENTECH (6-6-18) LETTERS	07-20-18	JCE	BDB
7.	REVISED SHEET SET NUMBERS	05-02-18	JCE	BDB
6.	REVISED SHEET # AND SET # PER GILMORE REVIEW LETTER DATED 01-31-18	01-31-18	JCE	BDB
5.	REVISED PER MONTGOMERY CCD REVIEW LETTER DATED 10/13/17	10/17/17	JCE	BDB
4.	REVISED PER MONTGOMERY CCD REVIEW LETTER DATED 7/18/17	9/14/17	JCE	BDB
3.	REVISED PER MONTGOMERY CCD REVIEW LETTER DATED 2/7/17	5/8/17	JCE	BDB
2.	RISED PER MONTGOMERY CCD LETTER DATED 4/4/16	11/10/16	JCE	BDB
1.	REV. PER MONTGOMERY CCD LETTER DATED 11/12/15	1/8/16	JCE	BDB

CLIENT

STEWART & CONTI DEVELOPMENT CO.
3801 GERMANTOWN PIKE
COLLEGEVILLE, PA
19426

SUBJECT

EROSION AND SEDIMENTATION CONTROL DETAILS

ROLLING MEADOWS

NEW HANOVER TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

SEAL

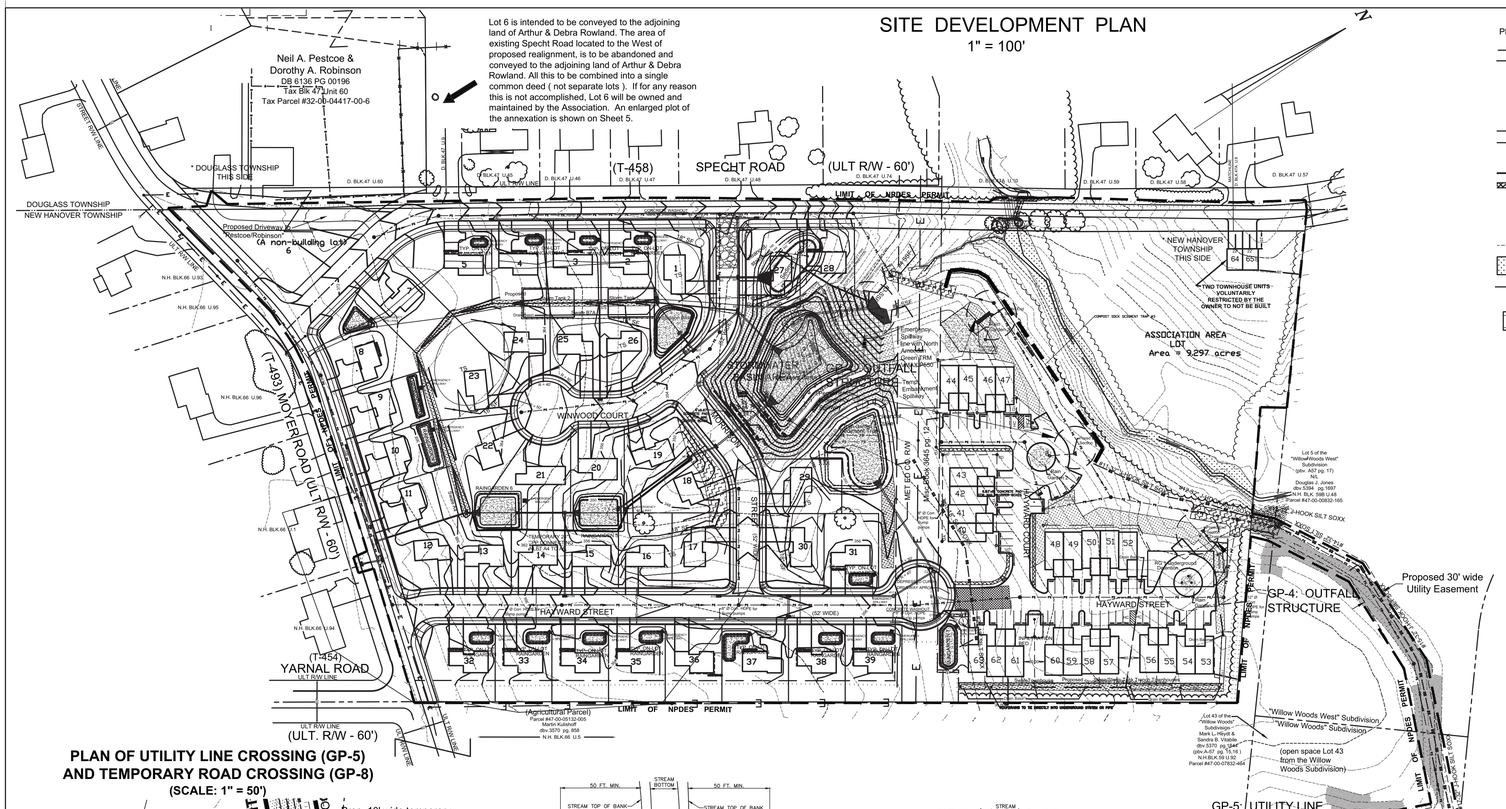
SEAL

Boyer ENGINEERING LLC
1860 WEAVERTOWN ROAD, SUITE 100
DOUGLASSVILLE, PA 19518
PHONE: 610-689-8021
FAX: 610-689-4538

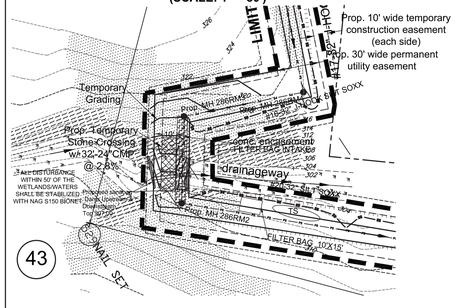
PROJECT NO.	15-170
DWG. NO.	ES715170
SHEET NO.	39 OF 40
DESIGN BDB	CHKD. BY BDB
DRAWN BY WJD	CHKD. BY
DATE 2015-06-29	SCALE 1"=50'

P:\PROJECTS\15-170 Rolling Meadows\dwg\39-EST-E-S Details .dwg, 2/7/2020 10:31:55 AM

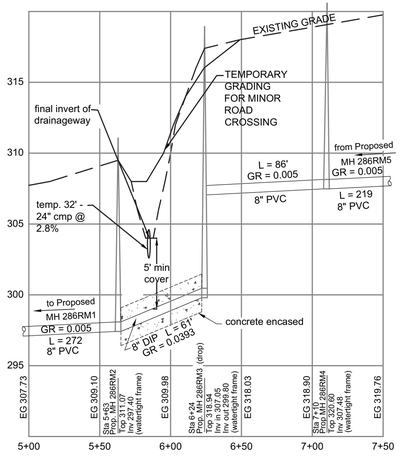
SITE DEVELOPMENT PLAN
1" = 100'



PLAN OF UTILITY LINE CROSSING (GP-5) AND TEMPORARY ROAD CROSSING (GP-8)
(SCALE: 1" = 50')



PROPOSED SANITARY SEWER PROFILE AT UTILITY LINE CROSSING
(HORIZ. SCALE: 1" = 50'; VERT. SCALE: 1" = 5')



NOTES:

GRUBBING SHALL NOT TAKE PLACE WITHIN 50 FEET OF TOP–OF–BANK UNTIL ALL MATERIALS REQUIRED TO COMPLETE CROSSING ARE ON SITE AND PIPE IS READY FOR INSTALLATION.

PIPE CULVERT FOR ACCESS ROAD AND FLUME PIPE MAY BE ONE CONTINUOUS PIPE.

TRENCH PLUGS SHALL BE INSTALLED WITHIN THE TRENCH ON BOTH SIDES OF THE STREAM CHANNEL (STANDARD CONSTRUCTION DETAIL #3-4).

WATER ACCUMULATING WITHIN THE WORK AREA SHALL BE PUMPED TO A PUMPED WATER FILTER BAG OR SEDIMENT TRAP PRIOR TO DISCHARGING INTO ANY SURFACE WATER.

HAZARDOUS OR POLLUTANT MATERIAL STORAGE AREAS SHALL BE LOCATED AT LEAST 100 FEET BACK FROM THE TOP OF STREAMBANK.

ALL EXCESS EXCAVATED MATERIAL SHALL BE IMMEDIATELY REMOVED FROM THE STREAM CROSSING AREA.

ALL DISTURBED AREAS WITHIN 50 FEET OF TOP–OF–BANK SHALL BE BLANKETED OR MATTED WITHIN 24 HOURS OF INITIAL DISTURBANCE FOR MINOR STREAMS OR 48 HOURS OF INITIAL DISTURBANCE FOR MAJOR STREAMS UNLESS OTHERWISE AUTHORIZED. APPROPRIATE STREAMBANK PROTECTION SHALL BE PROVIDED WITHIN THE CHANNEL.

STANDARD CONSTRUCTION DETAIL #13-1
TYPICAL UTILITY LINE STREAM CROSSING WITH OPTIONAL ACCESS ROAD
NOT TO SCALE

NOTES:

GRUBBING SHALL NOT TAKE PLACE WITHIN 50 FEET OF TOP–OF–BANK UNTIL ALL MATERIALS REQUIRED TO COMPLETE CROSSING ARE ON SITE AND PIPE IS READY FOR INSTALLATION.

BYPASS PUMP INTAKE SHALL BE MAINTAINED A SUFFICIENT DISTANCE FROM THE BOTTOM TO PREVENT PUMPING OF CHANNEL BOTTOM MATERIALS.

TRENCH PLUGS SHALL BE INSTALLED WITHIN THE TRENCH ON BOTH SIDES OF THE STREAM CHANNEL (STANDARD CONSTRUCTION DETAIL #3–4).

WATER ACCUMULATING WITHIN THE WORK AREA SHALL BE PUMPED TO A PUMPED WATER FILTER BAG OR SEDIMENT TRAP PRIOR TO DISCHARGING INTO ANY SURFACE WATER.

HAZARDOUS OR POLLUTANT MATERIAL STORAGE AREAS SHALL BE LOCATED AT LEAST 100 FEET BACK FROM THE TOP OF STREAMBANK.

ALL EXCESS EXCAVATED MATERIAL SHALL BE IMMEDIATELY REMOVED FROM THE STREAM CROSSING AREA.

ALL DISTURBED AREAS WITHIN 50 FEET OF TOP–OF–BANK SHALL BE BLANKETED OR MATTED WITHIN 24 HOURS OF INITIAL DISTURBANCE FOR MINOR STREAMS OR 48 HOURS OF INITIAL DISTURBANCE FOR MAJOR STREAMS UNLESS OTHERWISE AUTHORIZED.

APPROPRIATE STREAMBANK PROTECTION SHALL BE PROVIDED WITHIN THE CHANNEL.

STANDARD CONSTRUCTION DETAIL #13-2
TYPICAL UTILITY LINE STREAM CROSSING WITH PUMP BYPASS
NOT TO SCALE

EROSION AND SEDIMENT CONTROLS FOR IN-CHANNEL WORK

1. Whenever possible, work should be scheduled for low flow seasons. Normal flow should be conveyed past the work area by means of a bypass channel, pipe, pump, or cofferdam. All such bypasses should be completed and stabilized prior to diverting flow.
2. Any in-channel excavations should be done from the top of banks wherever possible. Where this is not possible, a temporary crossing should be provided for any equipment working from within the channel. Upon completion, all channel entrances should be restored to pre-construction configurations, as much as possible, and stabilized.
3. All excavated channel materials that will be subsequently used as backfill should be placed in a temporary stockpile located outside the channel. A sediment barrier should be installed between the storage pile and the stream channel.
4. All excavated materials that will not be used on site must be immediately removed to a disposal site having an approved erosion and sediment pollution control plan.
5. Any pumped water from excavated areas must be filtered prior to discharging into waters of the Commonwealth. The use of filter bags is another acceptable method if located on a relatively flat (< 5% slope), well-vegetated area. The bag should be designed to trap particles larger than 150 microns. The pump discharge hose shall be inserted into the bags in the manner specified by the manufacturer and securely clamped. When the bag has been filled to ½ its total capacity, it should be replaced with a new bag and properly disposed. Wherever well-vegetated areas are not available, a geotextile underlayment should be used. Consideration should be given to how the bag will be accessed and removed once it has been 1/2 filled with sediment.
6. All disturbed areas within the existing channel should be completed and stabilized before flow is redirected into it. Suitable protection should be provided for the stream channel from any disturbed areas that have not yet achieved stabilization.

SOURCE OF TITLE

TAX BLOCK 66 UNIT 98 (PARCEL #47-00-07678-033)
TAX BLOCK 66 UNIT 99 (PARCEL #47-00-05128-018)
TAX BLOCK 66 UNIT 100 (PARCEL #47-00-07678-042)
"MOYER FARM" Subdivision PBV. A-55 PG. 353, 354

Being the same property as that which Nick & Les, Inc. by a deed dated September 24, 2019 and recorded in deed book 6158 page 01275 in the Montgomery County Records granted and conveyed unto Wexford Court, LLC.

NPDES PERMIT #PAC460042

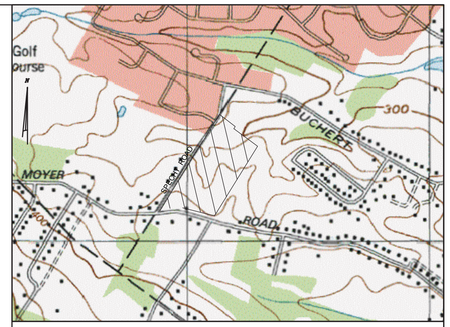
PLAN LEGEND

- = SANITARY SEWER LINE
- = D.I.P. WATER LINE
- = CURB CUT RAMP
- = WATER VALVE
- = FIRE HYDRANT
- = BLOW OFF VALVE
- = EXISTING CONTOUR
- = PROPOSED CONTOUR
- = INLET
- = 8" CONCRETE CURB
- = CONCRETE SIDEWALK
- = SOIL BOUNDARY LINE
- = SANITARY SEWER MANHOLE
- = RCP STORM SEWER PIPE
- = Limit of Required Perimeter Buffer
- = Delineated "Waters of the U.S."
- E = existing electric line
- = Soil Type Rt - floodplain soils
- = proposed street light
- = proposed pole mounted light
- sl = proposed sewer lateral
- wl = proposed water lateral
- = proposed sewer lateral for townhouse unit
- = proposed water lateral for townhouse unit
- = proposed sanitary sewer
- = proposed 8" Ø water main
- = proposed 6" Ø water main
- = proposed 4" Ø water main
- = proposed retaining wall
- = proposed guide rail
- = proposed split rail fence

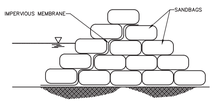
EROSION CONTROL LEGEND:

- = existing contour
- = proposed contour
- = soil boundary
- = limit of disturbance
- = Limit of NPDES Permit
- = drainage area to BMP
- = tree protection fencing
- = stabilized construction entrance
- = standard silt fence
- = super silt fence
- = compost silt sock
- TP = infiltration test pit locaton
- TS = topsoil stockpile
- = erosion control mat
- = North American Green S150-BIONET (or approved equivalent)
- = curled wood mat
- = ERNST Conservation Seed Mix ERNMX 180-1 WITH CURLED WOOD MAT LINING
- IP = inlet protection
- = 15 - 25% slopes
- = 25% + slopes
- = drainageway
- = limit of woodlands

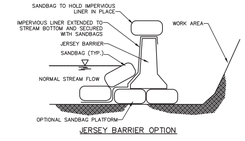
0' 50' 100' 200' 300' 400'
GRAPHIC SCALE



LOCATION MAP
SCALE: 1"=1000'



STACKED SANDBAGS OPTION



JERSEY BARRIER OPTION

STANDARD CONSTRUCTION DETAIL #3-15
SANDBAG DIVERSION DAM OR COFFERDAM
NOT TO SCALE

NARRATIVE

The Rolling Meadows" subdivision proposes a 38 lot residential subdivision with 38 single-family home lots, 1 lot containing 24 Townhouse units, and 1 annexation parcel to be joined with an adjacent residential property for a total of 62 new residential units in New Hanover Township, Montgomery County. The site is located at the northeastern corner of the intersection of Specht Road and Moyer Road. The proposed stormwater management facilities will discharge toward the wetlands area at five locations (GP-4). The extension of existing sanitary sewer facilities located off-site is proposed to service the project. The sanitary sewer extension will cross a wetlands area off-site (GP5) and a temporary road crossing will be required for this installation (GP-8). The previous and present use of the property is mostly vacant farm ground. The existing ground cover is a combination of woodland and open meadow. New dwellings, driveways are proposed for all of the proposed lots. The adjacent land uses are residential lots.

Site tributary to the Minister Creek / Swamp Creek (TSF, MF chapter 93 designation)

NOTE: Each step of the construction sequence shall be completed prior to the start of the next step of the sequence.

- ALSO-

Construction on this site shall take place during periods of dry weather .

-ALSO-

Straw bales shall be kept on site for emergency use.

-ALSO-

Wetland areas are to be located in the field and staked prior to the start of construction. During construction, the wetlands areas are to be physically protected from access by construction equipment and personal except where shown on the plans. Erosion control blankets shall be used in close proximately to the Wetlands.

ASSOCIATION NOTE:
Units 40 through 63 AND the Association Area shall be governed by the provisions of an Association Agreement.

NEW HANOVER TOWNSHIP CONSTRUCTION NOTE:
All construction shall be done in accordance with the standards and specifications of New Hanover Township.

CONSTRUCTION NOTE:
All users of this plan are referred to and cautioned to comply with Act 187 of 1996 pertaining to the Pennsylvania One-Call System, 73 P.S. 182.1. The PA One-Call System shall be contacted prior the any construction or excavation on the site. Pa One-Call phone number is 1-800-242-1776.

MET ED CO. RIGHT-OF-WAY NOTE:
The previously approved "Moyer Farm" Subdivision (PBV. A55 PG.353, 354) notes the "Right to trim, cut or remove trees adjacent to right-of-way that may in the judgment of MET ED Co. interfere with or endanger their facilities.

Utility Line Trench Excavation

1. Limit advance clearing and grubbing operations to a distance equal to two times the length of pipe installation that can be completed in one day.
2. Work crews and equipment for trenching, placement of pipe, plug construction and backfilling will be self contained and separate from clearing and grubbing and site restoration and stabilization operations.
3. Limit the daily trench excavation to the length of pipe placement, plug installation and backfilling that can be completed the same day.
4. Water which accumulates in the open trench will be completely removed by pumping before pipe placement and/or backfilling begins. The seepage must be pumped to a facility for removal of sediment. This facility must be located outside of the channel if excavation trenches are underneath or adjoining small streams. (Typically a 6'x6' filter bag)
5. On the day following pipe placement and trench backfilling, the disturbed area will be graded to final contours and measures/facilities shall be installed. Seeding and mulching of all disturbed areas shall be completed at the end of each week.
6. In certain cases trenches cannot be backfilled until the pipe is hydrostatically tested, or anchors and other permanent features are installed. In these cases, all of the requirements under Items 1 through 5 will remain in effect with the following exceptions:
   a. Daily backfilling of the trench may be delayed for six days. All pressure testing and the complete backfilling of the open trench must be completed by the seventh working day.
   b. If daily backfilling is delayed, the disturbed area will be graded to final contours, appropriate temporary erosion and sediment control measures/facilities will be installed and the area seeded and mulched within the next two calendar days.

"WATERS OF THE U.S." NOTE:
The limit of "Waters of the U.S." shown hereon were field delineated in December 1999 by:
DelVal Soil & Environmental Consultants, Inc.
P.O. BOX 298
Doylestown, PA 18901
PH: 215 - 345-5545
There may be no construction or earth disturbance within a "Waters of the U.S." area without the required DEP/Army Corp permits.

8.) Each lot owner is subject to the payment of the applicable impact fee by the owner at the time a building permit is obtained from the township.
9.) It shall be the responsibility of the developer to install and maintain the required soil erosion and sediment controls.
10.) Curbs, sidewalks, roads and other public improvements are to be constructed in accordance with the New Hanover Township standards and specifications.
11.) The adjacent properties located in New Hanover Township are zoned R-15 Residential. The adjacent properties located in Douglass Township are zoned R-1 Residential. All adjoining properties are used for single family homes except the "Agricultural Parcel" and "open space Lot 43 from the Willow Woods Subdivision" noted on the plan view above.
12.) No grading shall occur within 5 ft of any outer boundary property line.
13.) No roof drains are to discharge stormwater directly onto a sidewalk or street.
14.) Driveways shall be located a minimum of five (5) feet from any side or rear lot line.
15.) Wetland areas are to be located in the field and staked prior to the start of construction.

NOTES:

1.) Total Site area = 21.294 acres
2.) Total no. of lots = 40; Total no. units = 64
   38 "single family detached" lots
   1 lot with 26 townhouse units
   1 Annexation Parcel (Lot 6)
   Average Lot size = 8,840 sq ft
   Minimum Lot size = 8,000 sq ft
3.) Lots are to be served by underground utility service.
4.) Lots are to be served by public sewer and public wells.
5.) The contours shown are taken from actual field survey elevations.
   Local benchmark: invert of san. MH286-A
   located in Buchert Road (refer to sheet 16)
   Top EL. = 293.20; Inv. EL = 284.00 sewer authority datum
6.) For Lots 1 through 39, the lot owner is responsible for solid waste storage and disposal; For Lots 40 through 63, the Association shall be responsible for solid waste storage and disposal.
7.) The portion of this tract located within the Ult. R/W of Specht Road and Moyer Road, not previously dedicated, as well as all new streets, are hereby offered for dedication to the agency having jurisdiction.

NO.	REVISION	DATE	BY	APP.
13.	REVISED OWNERSHIP INFORMATION	01–24–20	JCE	BDB
12.	REVISED PER GILMORE (08–22–19) AND MCMAHON (08–27–19, 08–28–19)	08–29–19	JCE	BDB
11.	REVISED PER GILMORE (03–06–19), ALTA (03–05–19), MCMAHON (03–07–19)	03–14–19	JCE	BDB
10.	REVISED PER GILMORE 901–04–19), ALTA (01–04–19), MCMAHON (01–04–19), ENTECH (01–02–19)	01–30–19	JCE	BDB
9.	REVISED PER GILMORE (9–6–18), ALTA (9–21–18), MCMAHON (9–10–18, FIRE MARSHAL (7–23–18 & 11–29–18)	11–29–18	JCE	BDB
8.	REVISED PER GILMORE (6–15–18), ALTA (6–21–18), MCMAHON (6–15–18), ENTECH (6–6–18) LETTERS	07–20–18	JCE	BDB
7.	REVISED SHEET SET NUMBERS	05–02–18	JCE	BDB
6.	REVISED SHEET # AND SET # PER GILMORE REVIEW LETTER DATED 01–31–18	01–31–18	JCE	BDB
5.	REVISED PER MONTGOMERY CCD REVIEW LETTER DATED 10/13/17	10/17/17	JCE	BDB
4.	REVISED PER MONTGOMERY CCD REVIEW LETTER DATED 7/18/17	9/14/17	JCE	BDB
3.	REVISED PER MONTGOMERY CCD REVIEW LETTER DATED 2/7/17	5/8/17	JCE	BDB
2.	RISED PER MONTGOMERY CCD LETTER DATED 4/4/16	11/10/16	JCE	BDB
1.	REV. PER MONTGOMERY CCD LETTER DATED 11/12/15	1/8/16	JCE	BDB

CLIENT

STEWART & CONTI DEVELOPMENT CO.
3801 GERMANTOWN PIKE
COLLEGEVILLE, PA
19426

SEAL

SEAL

SUBJECT

GENERAL PERMIT PLAN

ROLLING MEADOWS

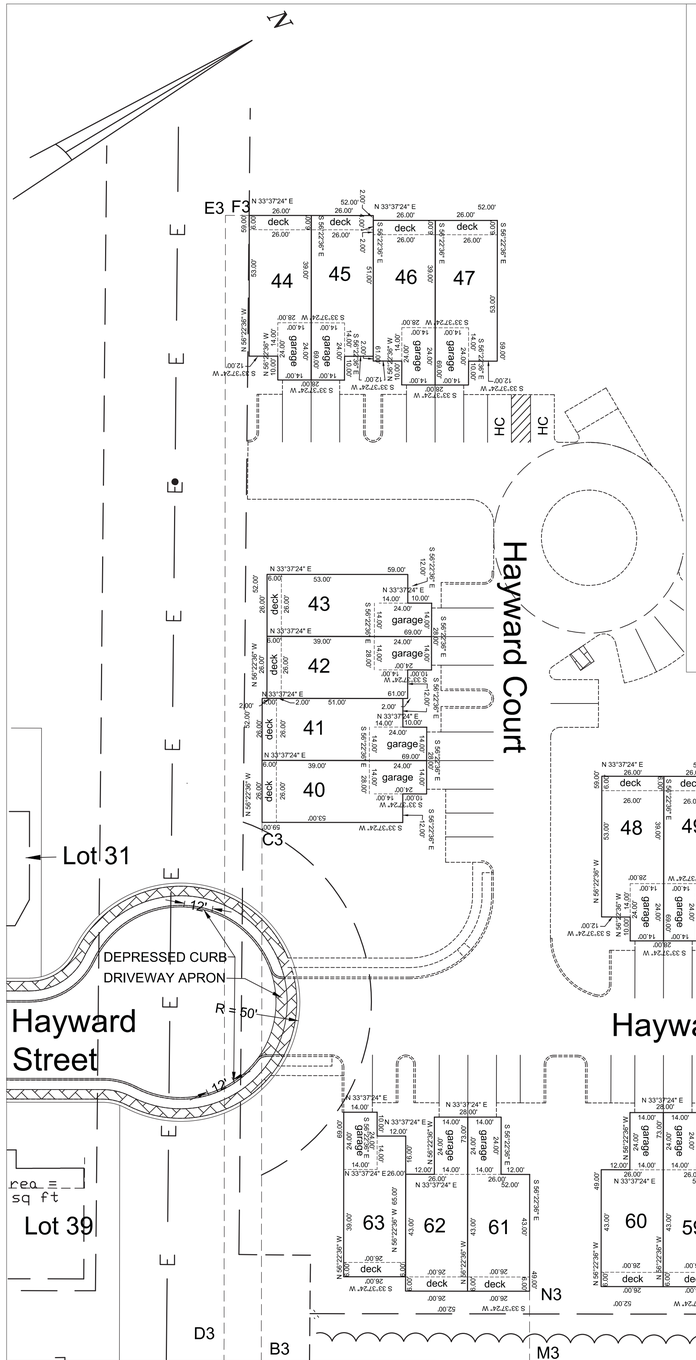
NEW HANOVER TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

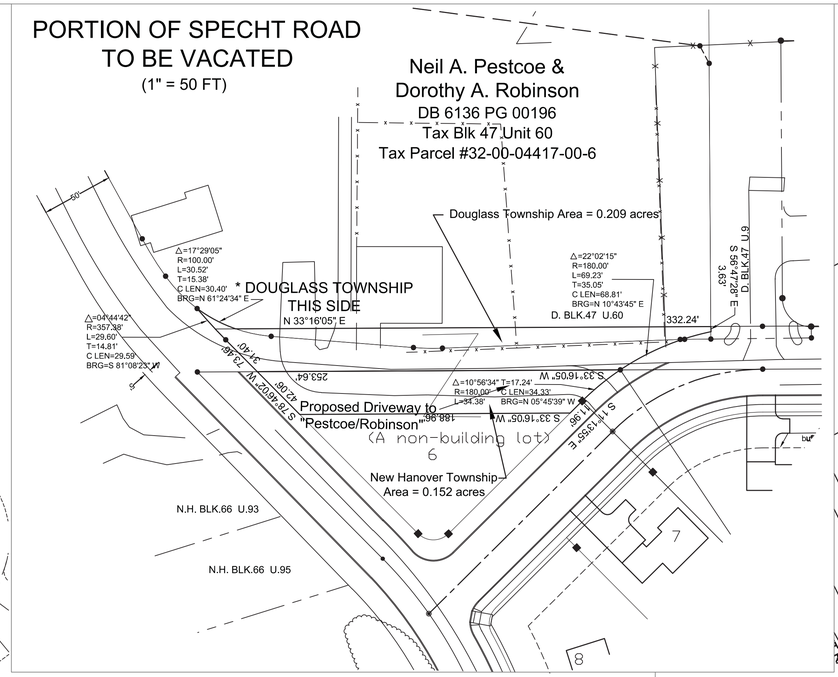
1860 WEAVERTOWN ROAD, SUITE 100
DOUGLASSVILLE, PA 19518
PHONE: 610-689-8021
FAX: 610-689-4538

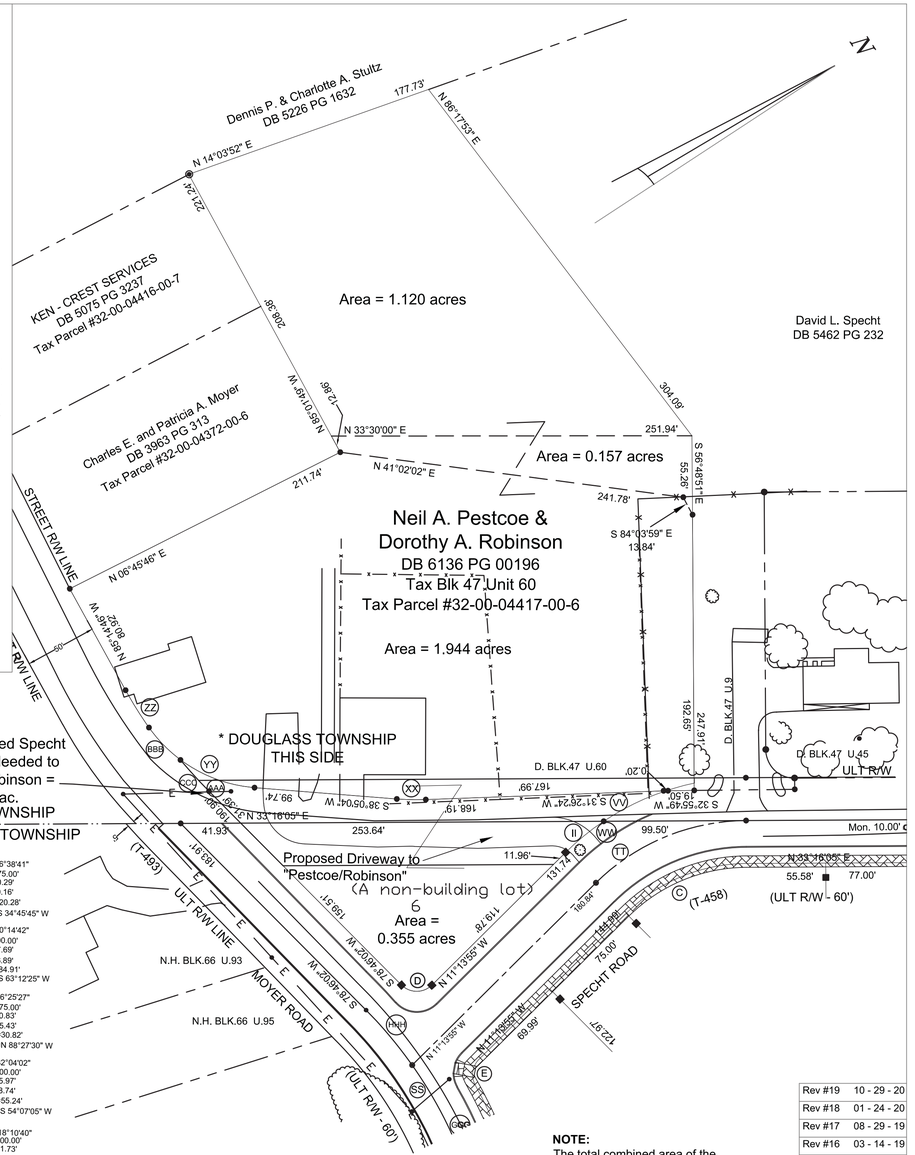
Boyer ENGINEERING LLC

DESIGN BDB	CHKD. BY BDB
DRAWN BY WJD	CHKD. BY
DATE 2015–06–29	SCALE 1"=100'
PROJECT NO. 15–170	
DWG. NO. GP115170	
SHEET NO. 40 OF 40	

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C Δ=44°30'00" R=120.00' A=93.20' T=49.09' CH=90.88' CB=N 11°01'05" E

D Δ=89°59'58" R=15.00' A=23.56' T=15.00' CH=21.21' CB=S 33°46'03" W

E Δ=74°01'05" R=15.00' A=19.38' T=11.31' CH=18.06' CB=N 48°14'28" W

II Δ=10°56'34" R=180.00' A=34.38' T=17.24' CH=34.33' CB=N 05°45'38" W

TT Δ=44°30'00" R=150.00' A=116.50' T=61.37' CH=113.59' CB=N 11°01'05" E

VV Δ=15°29'45" R=180.00' A=48.68' T=24.49' CH=48.53' CB=N 07°27'31" E

WW Δ=26°26'19" R=180.00' A=83.06' T=42.28' CH=82.32' CB=N 01°59'14" E

XX Δ=06°38'41" R=175.00' A=20.29' T=10.16' CH=20.28' CB=S 34°45'45" W

YY Δ=50°14'42" R=100.00' A=87.69' T=46.89' CH=84.91' CB=S 63°12'25" W

ZZ Δ=06°25'27" R=275.00' A=30.83' T=15.43' CH=30.82' CB=N 88°27'30" W

AAA Δ=32°04'02" R=100.00' A=55.97' T=28.74' CH=55.24' CB=S 54°07'05" W

BBB Δ=18°10'40" R=100.00' A=31.73' T=16.00' CH=31.59' CB=S 79°14'26" W

CCC Δ=04°44'42" R=357.38' A=29.60' T=14.81' CH=29.59' CB=S 81°08'24" W

HHH Δ=09°35'34" R=300.00' A=50.23' T=25.17' CH=50.17' CB=S 83°33'49" W

PLAN LEGEND
- S = SANITARY SEWER LINE
- W = D.I.P. WATER LINE
- HC = CURB CUT RAMP
- WV = WATER VALVE
- FH = FIRE HYDRANT
- BO = BLOW OFF VALVE
- = EXISTING CONTOUR
- = PROPOSED CONTOUR
- = INLET
- = 8" CONCRETE CURB
- = CONCRETE SIDEWALK
- = SOIL BOUNDARY LINE
- = SANITARY SEWER MANHOLE
- = RCP STORM SEWER PIPE
- = Limit of Required Perimeter Buffer
- = Delineated "Waters of the U.S."
- E = existing electric line
- = Soil Type Rt - floodplain soils
- = proposed pole mounted light
- = proposed street light
- sl = proposed sewer lateral
- wl = proposed water lateral
- PSL = proposed sewer lateral for townhouse unit
- PWL = proposed water lateral for townhouse unit
- PS = proposed sanitary sewer
- PV = proposed 8" Ø water main
- PW = proposed 6" Ø water main
- PW = proposed 4" Ø water main
- = proposed retaining wall
- = proposed guide rail
- = proposed split rail fence

NOTE:
The total combined area of the Pestcoe/Robinson Tract will be 3.706 acres.

NEIL A. PESTCOE & DOROTHY A. ROBINSON ANNEXATION DETAIL
(1" = 50 FT)

PLAN RECORDING NOTE:
Sheets 1 through 5 of this set of plans shall be recorded in the Montgomery County Records after municipal approval.

DIMENSION PLAN FOR TOWNHOUSE UNITS
(1" = 30 FT)

TOWNHOUSE AREA (Including garages and decks)

Unit No.	Area	Unit No.	Area
40	1,674 Sq. Ft.	52	1,674 Sq. Ft.
41	1,674 Sq. Ft.	53	1,674 Sq. Ft.
42	1,674 Sq. Ft.	54	1,674 Sq. Ft.
43	1,674 Sq. Ft.	55	1,674 Sq. Ft.
44	1,674 Sq. Ft.	56	1,674 Sq. Ft.
45	1,674 Sq. Ft.	57	1,674 Sq. Ft.
46	1,674 Sq. Ft.	58	1,674 Sq. Ft.
47	1,674 Sq. Ft.	59	1,610 Sq. Ft.
48	1,674 Sq. Ft.	60	1,610 Sq. Ft.
49	1,674 Sq. Ft.	61	1,610 Sq. Ft.
50	1,674 Sq. Ft.	62	1,610 Sq. Ft.
51	1,674 Sq. Ft.	63	1,674 Sq. Ft.

TIE DIMENSIONS TO TOWNHOUSE UNITS

to Unit 40 -
A3 - B3: S 33°37'24" W 412.68'
B3 - C3: N 56°22'36" W 226.50'

to Unit 44 -
A3 - D3: S 33°37'24" W 428.32'
D3 - E3: N 56°22'36" W 481.01'
E3 - F3: N 33°37'24" E 10.00'

to Unit 52 -
A3 - G3: N 51°41'27" W 244.68'
G3 - H3: S 34°23'11" W 160.24'

to Unit 53 -
A3 - I3: S 33°37'24" W 32.25'
I3 - J3: N 56°22'36" W 34.00'

to Unit 57 -
A3 - K3: S 33°37'24" W 166.25'
K3 - L3: N 56°22'36" W 34.00'

to Unit 61 -
A3 - M3: S 33°37'24" W 300.25'
M3 - N3: N 56°22'36" W 30.00'

ANNEXATION NOTE:
Lot 6 is intended to be conveyed to the adjoining land of Neil A. Pestcoe & Dorothy A. Robinson. The area of existing Specht Road located to the West of proposed realignment, is to be abandoned and conveyed to the adjoining land of Neil A. Pestcoe & Dorothy A. Robinson. All this to be combined into a single common deed (not separate lots). If for any reason this is not accomplished, Lot 6 will be owned and maintained by the Association. An enlarged plot of the annexation is shown on Sheet 5.

ACKNOWLEDGEMENT OF INTENTION TO ANNEX LOT 6:
I hereby certify that I am the owner of the parcel #32-00-04417-006, located in Douglass Township, Montgomery County and it is my intention to accept the annexation parcel identified on this plan as Lot 6 and to join it in common deed with the property aforementioned.

Neil A. Pestcoe _____ date _____

Dorothy A. Robinson _____ date _____

Rev	
Rev #19	10 - 29 - 20
Rev #18	01 - 24 - 20
Rev #17	08 - 29 - 19
Rev #16	03 - 14 - 19
Rev #15	01 - 30 - 19
Rev #14	11 - 29 - 18
Rev #13	07 - 20 - 18
Rev #12	05 - 02 - 18
Rev #11	01 - 31 - 18
Rev #10	11 - 27 - 17
Rev #9	12 - 25 - 09
Rev #8	03 - 30 - 09
Rev #7	04 - 01 - 08
Rev #6	04 - 01 - 07
Rev #5	12 - 22 - 05
Rev #4	07 - 14 - 04
Rev #3	03 - 31 - 03
Rev #2	01 - 09 - 03
Rev #1	05 - 15 - 01

SHEET 5 OF 40
DIMENSION PLAN FOR TOWNHOUSES, ANNEXATION LOT 6, AND VACATED SPECHT ROAD

SUBDIVISION PLAN
ROLLING MEADOWS
NEW HANOVER TOWNSHIP
MONTGOMERY COUNTY
PENNSYLVANIA

ASTON
SURVEYORS/ ENGINEERS , INC.
BOYERTOWN , PA 19512

plan date	4 - 10 - 00
scale	as noted
fld. wk. date	2 - 11 - 00
fld. bk.	127 pg. 36
fin. pl. comp. ck.	2 - 5 - 10 MA
plan no.	2323 - RME