NEW MEMORY CARE FACILITY
for
MEADOWOOD SENIOR LIVING

PRELIMINARY LAND DEVELOPMENT PLAN
TOWNSHIP of WORCESTER – MONTGOMERY COUNTY – PENNSYLVANIA

Meadowood

OWNER'S CERTIFICATE

I, _____ HEREBY CERTIFY THAT I AM AUTHORIZED TO ACT ON BEHALF OF MEADOWOOD CORPORATION AND THAT SAID CORPORATION DOES HEREBY CONSENT TO THE APPROVAL OF THIS PLAN THAT HAS BEEN GRANTED AND THAT THE CORPORATION DESIRES THE SAME TO BE RECORDED.

_____

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF MONTGOMERY

ON THIS, THE _____ DAY OF _____, 2018, BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC PERSONALLY APPEARED PAUL NORDEMAN, PRESIDENT/CEO OF MEADOWOOD CORPORATION, WHO, BEING DULY SWORN ACCORDING TO LAW, DID DEPOSE AND SAY THAT HE IS AUTHORIZED TO DO SO, EXECUTED THE WITHIN INSTRUMENT ON BEHALF OF THE CORPORATION BY HIMSELF / HERSELF AS SUCH OFFICER FOR THE PURPOSES THEREIN CONTAINED.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND OFFICIAL SEAL.

(NOTARY PUBLIC) _____

(MY COMMISSION EXPIRES ON) _____

TOWNSHIP ENGINEER CERTIFICATE

REVIEWED BY THE TOWNSHIP ENGINEER OF THE TOWNSHIP OF WORCESTER CERTIFYING THAT THIS PLAN CONFORMS TO THE TOWNSHIP SUBDIVISION & LAND DEVELOPMENT REGULATIONS ON THIS _____ DAY OF _____, 20____.

TOWNSHIP ENGINEER _____

PLANNING COMMISSION CERTIFICATE

RECOMMENDED FOR APPROVAL BY THE TOWNSHIP PLANNING COMMISSION OF THE TOWNSHIP WORCESTER ON THIS _____ DAY OF _____, 20____.

SECRETARY (ATTEST) _____

BOARD OF SUPERVISORS CERTIFICATE

APPROVED BY THE TOWNSHIP BOARD OF SUPERVISORS OF THE TOWNSHIP OF WORCESTER ON THIS _____ DAY OF _____, 20____.

SECRETARY (ATTEST) _____

SURVEYOR'S CERTIFICATION

I, KEVIN R. GRIGGINS, DO HEREBY CERTIFY THAT I AM A REGISTERED PROFESSIONAL SURVEYOR, LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF PENNSYLVANIA, THAT THIS PLAN CORRECTLY REPRESENTS A SURVEY MADE BY MYSELF OR UNDER MY SUPERVISION AND THAT ALL DIMENSIONAL AND GEODETIC DETAILS SHOWN ARE CORRECT.

SIGNATURE: _____

DATE: _____

044650-E
LIC. No:

REGISTERED PROFESSIONAL LAND SURVEYOR KEVIN R. GRIGGINS IN PENNSYLVANIA

ENGINEER'S CERTIFICATION

I, TIMOTHY R. MOORHEAD, DO HEREBY CERTIFY THAT I AM A REGISTERED PROFESSIONAL ENGINEER, LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF PENNSYLVANIA, THAT THIS PLAN WAS PREPARED BY MYSELF OR UNDER MY SUPERVISION AND THAT SAID PLAN COMPLIES WITH ALL ORDINANCES AND REGULATIONS OF THE TOWNSHIP.

SIGNATURE: _____

DATE: _____

039735-E
LIC. No:

REGISTERED PROFESSIONAL ENGINEER TIMOTHY R. MOORHEAD IN PENNSYLVANIA

RECORDER OF DEEDS

RECORDED THIS _____ DAY OF _____, 20____ IN THE OFFICE FOR THE RECORDING OF DEEDS, IN AND FOR THE COUNTY of MONTGOMERY, PENNSYLVANIA IN PLAN BOOK _____, PAGE NUMBER _____.

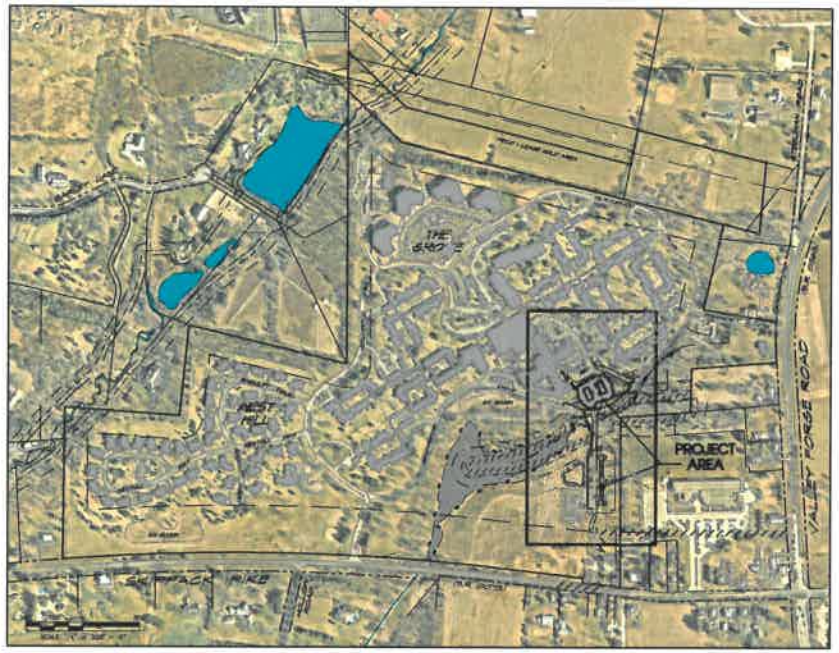
RECORDER OF DEEDS: _____

MCPC No.: _____

PROCESSED and REVIEWED. A report has been prepared by the Montgomery County Planning Commission in accordance with the Municipalities Planning Code.

Certified this date: _____

_____
For the Director
Montgomery County Planning Commission



SITE LAYOUT

OVERALL SITE STATISTICS

- PROJECT TRACT AREA SCHEDULE:

PARCEL 'A' (Block 28 Unit 28)	112.2863 Acres
PARCEL 'B' (Block 28 Unit 26)	3.3545 Acres
PARCEL 'C' (Block 29 Unit 1)	0.8078 Acres
PARCEL 'D' (Block 29 Unit 2)	2.7562 Acres
PECO Lease Hold Area (Block 28 Unit 66)	12.8781 Acres
GROSS PROJECT AREA: [1]	131.8827 Acres
Legal/Ultimate Right-of-Way	-0.2543 Acres
Right-of-Way of Overhead Utility	-12.8781 Acres
Existing Easements (Sec., Water)	-3.0388 Acres
Floodplains, Wetlands, Lands Covered by Water	-5.1351 Acres
DEVELOPABLE AREA:	108.7864 Acres

- SITE DENSITY:

EXISTING:	Apartments	260 Units
	Beds (113/2) [2]	57 Units
	West Hill Carriage Homes	60 Units
	ALU Grove Units	53 Units
	Proposed Memory Care Units:	20 Units
TOTAL DWELLING UNITS:		428 Units

- BUILDING COVERAGE:

Existing Residential/Community Buildings	7.5304 Acres
Existing West Hill Homes	2.4729 Acres
Existing Accessory Buildings	1.1389 Acres
Existing Grove Buildings	1.2338 Acres
Proposed Memory Care Building	0.4380 Acres
TOTAL BUILDING AREA: [1]	12.8180 Acres (11.8% %)

- IMPERVIOUS COVERAGE:

Total Building Area:	12.8180 Acres
Cover Walks/Pads/Decks/Patios:	0.0054 Acres
Site Asphalt Paving:	12.4031 Acres
Agenda (Pervious) Trail Area:	0.8183 Acres
Stone Parking/Aux. Yard:	1.3560 Acres
Memory Care – Impervious Demo Area:	-0.0937 Acres
Memory Care – New Impervious Area:	+0.6004 Acres
Parking Lot – Impervious Demo Area:	-0.3948 Acres
Parking Lot – New Impervious Area:	+1.1038 Acres
TOTAL IMPERVIOUS: [1]	33.0000 Acres (30.07 %)

[1] Building & impervious ratio are based on Developable Area of the lot.
[2] 2 Non-Handicapped Beds = 1 Dwg. Unit
[3] Parcels A, C & D merged into main Parcel A (Block 28 Unit 28).

SITE ZONING DATA SCHEDULE

EXISTING/PROPOSED SITE USE: RESIDENTIAL LIFE CARE FACILITY
(LUE APPROVED per CONDITIONAL USE – Z.O. Section 150-11(D)(7))

ZONING DISTRICT: LPD – LAND PRESERVATION DISTRICT (SECTION 150-110.10)
(AREA REQUIREMENTS USED PER Z.O. SECTION 150-110.1(C))

ORDINANCE ITEM	SECTION No.:	REQUIREMENT:	PROVIDED:
MINIMUM LOT AREA:	150-110(D)(7)	75 Acres	131.8817 Acres
MINIMUM LOT WIDTH	150-13(B)(1)	250 Ft.	>250 Ft.
MINIMUM FRONT YARD:	150-13(B)(2)	250 Ft.	>250 Ft.
MINIMUM SIDE YARD:	150-13(B)(3)	125 Ft.	>125 Ft. [3]
MINIMUM REAR YARD:	150-13(B)(2)	125 Ft.	>125 Ft.
MINIMUM PARKING SETBACK:	150-16(B)(2)	100 Ft.	>100 Ft.
MAXIMUM BUILDING HEIGHT	150-15	35 Ft.	[2]
MAXIMUM IMPERVIOUS: BUILDING	150-11(D)(7)	15 %	11.88 %
TOTAL LOT	150-11(D)(7)	40 %	30.07 %
PARKING SPACE QTY. (HEALTHCARE ONLY – EXCLUDES WEST HILL CARRIAGE HOMES)			
EX. APARTMENTS	150-153(B)(1)	1/Every 3 Beds (260 Apts @ 3 Beds Ea.) = 173 Required	
EX. HEALTH CARE BEDS	150-153(B)(3)	1/Every 2 Beds (113 Beds) = 57 Required	
EX. EMPLOYEES	150-153(B)(3)	1/Employee on 2 largest shifts (60 Employees)	
EX. GROVE UNITS	150-153(B)(3)	1/Every 2 Beds (52 Units @ 2 Beds Ea.) = 52 Required	
TOTAL		345 Spaces	587 Spaces [1]

[1] Provided Parking Space Count:
469 Lot Spaces + 137 Carport Spaces + 53 Garage Spaces = 581 Existing Spaces
New Memory Care Parking + New Parking Lot = +96 Net Proposed Spaces

[2] Guildfinch Bldg = 33'-0" / 3 Stories; Hearon Bldg = 33'-6" / 3 Stories
Mulford Bldg = 37'-6" / 3 Stories (*); Cross Bldg = 34'-6" / 3 Stories (*)
* Variance Granted by the Zoning Hearing Board at their 10/24/17 meeting to allow for 3 Story Buildings, and exceeding height of 35'-Ft.

[3] Variance Granted from ZO 150-13(B)(3) to encroach 20' into the required Side Yard setback & from ZO 150-16(B.3) to encroach not more than 40' into required Riparian Corridor by the Zoning Hearing Board on their 12/08/20 meeting (§2020-04).

WAIVER LIST (Requested):

The following is a list of the Waivers from the Worcester Township Subdivision & Land Development Ordinance for the Meadowood Land Development application:

1. SLDO 129-16.D: One-year/24-hour storm event shall take a minimum of 24 hours to drain from Basins
2. SLDO 130-17.C(11): To allow for proposed parking spaces to be 8'x18', & to allow for 22' Wide Parking Lot Access Drive
3. SLDO 130-23.A: Requirement to set monuments on right-of-way lines or corners and angle points.
4. SLDO 130-24.B.3.a: Storm systems designed to carry 50-year peak flow rate
5. SLDO 130-24.B.3.h: Minimum allowable headwater depth of 1-foot for inlets.
6. SLDO 130-24.B.3.j: Minimum 3 feet of cover over all storm pipes.
7. SLDO 130-24.B.3.k: Requires crowns of all pipes lying into an inlet or manhole be set at equal elevations.
8. SLDO 130-24.B.4.f.2: Minimum freeboard of 2-feet over Emergency Spillway and top of berm
9. SLDO 130-24.B.4.l.1.b: Minimum 100-foot distance from highest tree water surface to dwelling unit.
10. SLDO 130-38.E.1: Existing tree survey
11. SLDO 130-38.C.4: Required street trees
12. SLDO 130-33.C: Show existing features within 400 feet

PRIOR APPROVALS

The Meadowood Property has been subject to several previously implemented Land Development applications and approvals as noted below:

1. Conditional Use Order for the Development of the West Hill Cottages and the Laurel House Healthcare Expansion. Conditional Use approved on April 30, 2001.
2. Resolution #22-05 for the Development of the West Hill Cottages (Phase 1) and the Laurel House Healthcare Expansion (Phase 2). Approval for Phase 1 dated March 20, 2002.
3. Resolution #26-04 for the Development of the West Hill Cottages (Phase 1) and the Laurel House Healthcare Expansion (Phase 2). Approval for Phase 2 dated January 19, 2005.
4. Resolution #2015-31 for the Development of the Schultz Community Center & Courtyard Expansion. Approval dated November 18, 2015.
5. Resolution #2017-11 for the Development of the Schultz Community Center – Office Suite Additions at Meadowood (aka Marketing Suite Additions).
6. ZHB Application #2017-12 for Variance from 150-13, to allow the (4) Buildings at the Grove to be 3-Stories, with Bldg 3 to be 38'-8" in height, and Bldg 4 to be 37'-10" in height.
7. Final Land Development Approval of The Grove at Meadowood per Resolution #2018-25.
8. Final Land Development Approval of the Emergency Generator Project & Parcel Consolidation at Meadowood per Resolution #2020/-____.
9. Conditional Use Order for the crossing of the Riparian Corridor with a new Access Drive to Victory Garden site. Conditional Use approved March 20, 2018 (CUA #2018-01).
10. Variance from ZO 150-13.B(3) to encroach 20' into the required Side Yard setback & from ZO 150-16.E to encroach not more than 40' into required Riparian Corridor. Granted by the Zoning Hearing Board at their 03/08/20 meeting (§2020-04).
11. Conditional Use Order for installation of a Pedestrian Bridge crossing the Riparian Corridor and modification of the Access Drive to the proposed Parking Lot. Conditional Use approved ____ ___, 2020 (CUA #2020-__).

PROJECT SHEET INDEX

The Cover Sheet (Sheet 1) and Record Plan – Overall Tract (Sheet 2) are to be recorded together with the Montgomery County Recorder of Deeds. The Index Sheet (Sheet 3) contains a copy of Worcester Township Staff Comments & is not to be recorded & not of the Approved Final Plan, as it is Recorded with some.

SHEET No.:	SHEET DESCRIPTION:	SHEET No.:	SHEET DESCRIPTION:
1 of 27	COVER – INDEX SHEET	15 of 27	EROSION & SEDIMENT CONTROL DETAILS
2 of 27	RECORD PLAN – OVERALL TRACT	16 of 27	(PCSM) POST-CONSTRUCTION STORMWATER MANAGEMENT PLAN
3 of 27	LAYOUT PLAN – MEMORY CARE	17 of 27	(PCSM) BMP CONSTRUCTION DETAILS 'A'
4 of 27	LAYOUT PLAN – PARKING LOT	18 of 27	(PCSM) BMP CONSTRUCTION DETAILS 'B'
5 of 27	EXISTING FEATURES PLAN – OVERALL TRACT	19 of 27	PROJECT CONSTRUCTION DETAILS 'A'
6 of 27	EXISTING FEATURES & DEMOLITION – PROJECT AREA	20 of 27	PROJECT CONSTRUCTION DETAILS 'B'
7 of 27	SITE IMPROVEMENTS PLAN – MEMORY CARE	21 of 27	PROFILE SHEET – DRIVEWAY RELOCATION
8 of 27	SITE IMPROVEMENTS PLAN – PARKING LOT	22 of 27	PROFILE SHEET – PARKING LOT DRIVEWAY
9 of 27	PROJECT UTILITIES PLAN	23 of 27	PROFILE SHEET – CROSS LOT UTILITIES 'A'
10 of 27	(PCSM) LANDSCAPING & LIGHTING PLAN – MEMORY CARE	24 of 27	PROFILE SHEET – CROSS LOT UTILITIES 'B'
11 of 27	(PCSM) LANDSCAPING & LIGHTING PLAN – PARKING LOT		
12 of 27	EROSION & SEDIMENT CONTROL PLAN – PHASE 1A & 1B	25 of 27	DRAINAGE AREA BOUNDARY – PRE-DEVELOPMENT
13 of 27	EROSION & SEDIMENT CONTROL PLAN – PHASE 2	26 of 27	DRAINAGE AREA BOUNDARY – POST-DEVELOPMENT
14 of 27	EROSION & SEDIMENT CONTROL SPECIFICATIONS & NOTES	27 of 27	DRAINAGE AREA BOUNDARY – DESIGN SUB-AREAS

REVISIONS

No.:	DATE:	DESCRIPTION

PLAN NORTH
150' 0' 300'
Scale in Feet (1" = 300')

PA1 PLANS MODIFIED/SEALED BASED ON PRELIMINARY, FINAL OR CONSTRUCTION PLAN SUBMISSIONS TO BE SEPARATELY SEALED.

THE PLAN THE PREV PREPARED AND SEALED BY THE ENGINEER AND THE ENGINEER'S SEAL, SIGNATURE OR SIGNATURE BLOCK WHICH COMPLY WITH THE LAWS OF THE COMMONWEALTH OF PENNSYLVANIA.

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WOODRUFF & ASSOCIATES, INC.
ALL RIGHTS RESERVED.

CALL 1-800-242-1776
PROJECT SIGNS MARKER FOR DESIGN.

Applicant:
THE MEADOWOOD CORPORATION
c/o Paul Nordeman
President/CEO
3305 Skippack Pike
(PO Box 676)
Worcester, PA 19490

Parcel Information:
TP: 67-00-03185-00-9 (B 28 U 28) PARCEL 'A'
TP: 67-00-01009-00-4 (B 28 U 34) PARCEL 'B'
TP: 67-00-03186-00-6 (B 29 U 1) PARCEL 'C'
TP: 67-00-03188-00-1 (B 29 U 2) PARCEL 'D'

Net Tract:	118.2064 Acres
PECO Lease:	12.8781 Acres
GROSS Area:	131.0817 Acres

MEMORY CARE FACILITIES EXPANSION
COVER – INDEX SHEET
MEADOWOOD SENIOR LIVING
WORCESTER TOWNSHIP – MONTGOMERY COUNTY – PENNSYLVANIA

WOODRUFF & ASSOCIATES, INC.
Consulting Engineers
1105 North Bethlehem Pike, P.O. Box 1000, Lansdale, PA 19446
Phone: (215) 362-4600 Fax: (215) 362-4619

Layer List:
D07-01_Cover

Job No:
00-0606 D18

Plan Date:
JULY 13, 2020

Sheet No:
1 of 27

GENERAL PLAN NOTES

BASE EXISTING FEATURES AND SURVEY NOTES:

1. The boundary information illustrated on this plan was taken from a plan entitled ALTA/NSPS – Land Title Survey for Meadowood as prepared for the Meadowood Corp. as prepared by Woodrow & Assoc., Inc., Lower Gwynedd, PA., Plan dated October 12, 2018, and revised October 17, 2018. Bearings shown reflect a "-00 Deg. 33 Min. 05 Sec. direction rotated from the above referenced plan to match Pennsylvania South Zone 3702 State Plane Coordinate Bearing Basis.

   Boundary information updated per Subdivision – Land Development Plan, prepared by Woodrow & Assoc., Inc. dated December 18, 2019 (as amended) to include Parcel D, C & D.

2. The base existing features and project topography illustrated on this plan was compiled from Aerial Survey data prepared by PROMAPS, Inc., Manalapan, PA (Feb 2020). Additional field survey has been performed to target on-site project locations to verify and reflect accurate information.

3. The site benchmark is an existing sanitary sewer manhole located in the existing Loop Road directly in front of the Sanitary Sewer Pump Station having a rim elevation of 345.18' and floor elevation of 338.06'.

4. This plan was prepared utilizing the following references:
   a. Tax maps and deeds of record as obtained from the Recorder of Deeds online resources.
   b. Existing Site classifications and mapping has been plotted from maps obtained from the USDA Web Soil Survey website (http://websoilsurvey.nrcs.usda.gov/) unless otherwise noted.
   c. Vertical datum references provided by the PA Spatial Data Access system (PASDA). PNAMP data is based on PA State Plane (South) NAD83 horizontal, NAVD88 vertical datums.
   d. Aerial imagery provided by Keystone, Inc. for the subject project tracts. Aerial imagery from flight dated FEB. 17, 2020.

5. The areas identified as Wetland & Waters illustrated on this plan have been mapped by Penna Trail Environmental, Hatfield, PA (through field delineations) during the month of March 2018.

6. There are no identified flood Plain areas within the project site as illustrated on Community Panel Number 42091C-0253 G (March 2, 2016) of the flood insurance Rate Map, prepared by the Federal Emergency Management Association for the Township of Worcester, Pennsylvania.

7. All persons digging on the site shall comply with the requirements of Section 6 of PA act 287 as amended by PA Act 181. State law requires a three (3) business day notice prior to any digging (does not include state holidays or weekends). Dial 8-1-1 or go to www.paonecall.org.

8. Existing subsurface utility information illustrated on these plans were based upon visual field locations obtained during a site walkover. Actual locations, depths, and configurations may differ from those of subsurface utilities in importance in nature and has been included as an aid for the project design. The information provided is representative of subsurface conditions only at locations and depths where such information was available. There is no expressed or implied agreement that subsurface utility connections exist between exposed locations. Accordingly, utility information shown should not be relied upon for construction purposes. It is incumbent upon the contractor to verify subsurface utilities prior to excavation.

9. All of the stormwater management facilities, including the compounds system and stormwater basins are to be owned and maintained by the Meadowood Corporation. Any repairs needed, as may be determined by Township inspection, are to be at the sole cost of the Meadowood Corporation.

10. All of the sanitary sewer facilities (gravity grid), including the main conveyance system and building laterals are to be owned and maintained by the Meadowood Corporation. Any repairs needed, as may be determined by Township inspection, are to be at the sole cost of the Meadowood Corporation.

11. A utility easement in favor of North Penn Water Authority, 20-Ft in width, over the existing water main along the perimeter of the Meadowood Drive loop driveway and is recorded in Deed Book 4635, Page 108.

PRIOR APPROVALS

The Meadowood Property has been subject to several previously implemented Land Development applications and approvals as noted below:

1. Conditional Use Order for the Development of the West Hill Cottages and the Laurel House Healthcare Expansion. Conditional Use approved on April 30, 2001.
2. Resolution #03-05 for the Development at the West Hill Cottages (Phase 1) and the Laurel House Healthcare Expansion (Phase 2). Approval for Phase 1 dated March 30, 2003.
3. Resolution #06-04 for the Development of the West Hill Cottages (Phase 1) and the Laurel House Healthcare Expansion (Phase 2). Approval for Phase 2 dated January 16, 2006.
4. Resolution #2015-31 for the Development of the Schultz Community Center & Courtyard Expansion. Approval dated November 18, 2015.
5. Resolution #2017-11 for the Development of the Schultz Community Center – Office Suite Additions of Meadowood (aka Marketing Suite Additions).
6. Zoning Application #2017-12 for Variance from 150-15, to allow the (4) Buildings in the Grove to be 1-Stories, with Bldg 3 to be 36'-0" in height, and Bldg 4 to be 37'-10" in height.
7. Final Land Development Approval of The Grove at Meadowood per Resolution #2018-23.
8. Final Land Development Approval of the Emergency Generator Project & Parcel Consolidation at Meadowood per Resolution #2020-___.
9. Conditional Use Order for the creation of the Riparian Corridor with a new Access Drive to Victory Garden site. Conditional Use approved March 20, 2019 (CUA #2018-01).
10. Variance from 20 150-14.B(3) to encroach 20' into the required Side Yard setback & from 20 150-14.B.6 to encroach not more than 40' into required Riparian Corridor. Granted by the Zoning Hearing Board at their 03/06/20 meeting (#2020-04).
11. Conditional Use Order for installation of a Pedestrian Bridge crossing the Riparian Corridor and modification of the Access Drive to the proposed Parking Lot. Conditional Use approved ———— 2020 (CUA #2020-___).

SITE ZONING DATA SCHEDULE

EXISTING/PROPOSED SITE USE: RETIREMENT LIFE CARE FACILITY
(USE APPROVED per CONDITIONAL USE – 2.C. Section 150-11(D)(7))

ZONING DISTRICT: LRD – LAND PRESERVATION DISTRICT (SECTION 150-140.16)
(AREA REQUIREMENTS USED PER 2.C. SECTION 150-11(E.1)(C))

ORDINANCE ITEM	SECTION No.:	REQUIREMENT:	PROVIDED:
MINIMUM LOT AREA	150-11(D)(7)	75 Acres	131.0817 Acres
MINIMUM LOT WIDTH	150-13(B)(1)	250 Ft.	>250 Ft.
MINIMUM FRONT YARD:	150-13(B)(2)	250 Ft.	>250 Ft.
MINIMUM SIDE YARD:	150-13(B)(2)	125 Ft.	>125 Ft. [3]
MINIMUM REAR YARD:	150-13(B)(2)	125 Ft.	>125 Ft.
MINIMUM PARKING SETBACK:	150-14(B)(2)	100 Ft.	>100 Ft.
MAXIMUM BUILDING HEIGHT	150-15	35 Ft.	[5]
MAXIMUM IMPERVIOUS: BUILDING	150-11(D)(7)	15 %	11.06 %
TOTAL LOT	150-11(D)(7)	40 %	30.07 %
PARKING SPACE QTY. (HEALTHCARE ONLY – EXCLUDES WEST HILL CARRIAGE HOMES)			
EX. APARTMENTS	150-153(K)(2)	1/Bedroom 1 beds (260 Apts @ 2 Beds Ea.) = 172 Required	
EX. HEALTH CARE BEDS	150-153(K)(3)	1/Every 3 beds (113 Beds) = 38 Required	
EX. EMPLOYEES	150-153(K)(5)	1/Employee on largest shift (52 Employees)	
EX. GROWE UNITS	150-153(K)(3)	1/Every 3 beds (52 Units @ 2 Beds Ea.) = 35 Required	
TOTAL		348 Spaces	667 Spaces [1]

[1] Provided Parking Space Count:
408 Lot Spaces + 137 Carport Spaces + 52 Garage Spaces = 581 Existing Spaces
New Memory Care Parking + New Parking Lot = 168 Net Proposed Spaces

[2] Goldfinch Bldg = 33'-6" / 3 Stories (*) Heron Bldg = 33'-6" / 3 Stories
Mallard Bldg = 33'-6" / 3 Stories (*) Grove Bldg = 33'-6" / 3 Stories (*)
* Variance Granted by the Zoning Hearing Board at their 10/24/17 meeting to allow for 3 Story Buildings, and exceeding height of 35'-0".

[3] Variance Granted from 20 150-13.D(2) to encroach 20' into the required Side Yard setback & from 20 150-14.B.6 to encroach not more than 40' into required Riparian Corridor by the Zoning Hearing Board at their 03/06/20 meeting (#2020-04).

WAIVER LIST (Requested):

The following is a list of the Waivers from the Worcester Township Subdivision & Land Development Ordinance for the Meadowood Land Development application:

1. SLDO 126-18.B: One-year/24-hour storm event shall take a minimum of 24 hours to drain from BMPs
2. SLDO 126-17.D(11): To allow for proposed parking spaces to be 8'x18', & to allow for 22' Wide Parking Lot Access Drive
3. SLDO 130-23.N: Requirement to set monuments on right-of-way lines at corners and angle points.
4. SLDO 130-24.B.3.ii: Storm systems designed to carry 50-year peak flow rate
5. SLDO 130-24.B.3.iv: Maximum allowable headwater depth of 1-foot for inlets.
6. SLDO 130-24.B.3.j: Minimum 3 foot of cover over all storm pipes.
7. SLDO 130-24.B.3.k: Requires crowns at all pipes tying into an inlet or manhole be set at equal elevations.
8. SLDO 130-24.B.4.f.2: Minimum freeboard of 2-feet over Emergency Spillway and top of berm
9. SLDO 130-24.B.4.f.13: Minimum 100-foot distance from highest tree water surface to dwelling unit.
10. SLDO 130-26.E.1: Existing tree survey
11. SLDO 130-26.E.4: Required street trees
12. SLDO 130-33.C: Show existing features within 400 feet

MEADOWOOD – OVERALL SITE STATISTICS

- PROJECT TRACT AREA SCHEDULE:

PARCEL 'A' (Block 28 Unit 28)	112.2532 Acres
PARCEL 'B' (Block 28 Unit 39)	2.3564 Acres
PARCEL 'C' (Block 29 Unit 1)	0.8079 Acres
PARCEL 'D' (Block 29 Unit 2)	2.7542 Acres
PECO Lease Hold Area (Block 28 Unit 66)	12.8761 Acres
GROSS PROJECT AREA: [1]	131.0817 Acres
Legal/Ultimate Right-of-Way	–0.2542 Acres
Right-of-Way of Overhead Utility	–12.8761 Acres
Existing Easements (San., Water)	–3.0369 Acres
Floodplains, Wetlands, Lands Covered by Water	–5.1531 Acres
DEVELOPABLE AREA:	109.7564 Acres

- SITE DENSITY:

EXISTING:	Apartments	260 Units
	Beds (113/2) [2]	57 Units
	West Hill Carriage Homes	40 Units
	ILU Grove Units	52 Units
	Proposed Memory Care Units:	20 Units
TOTAL DWELLING UNITS:		629 Units

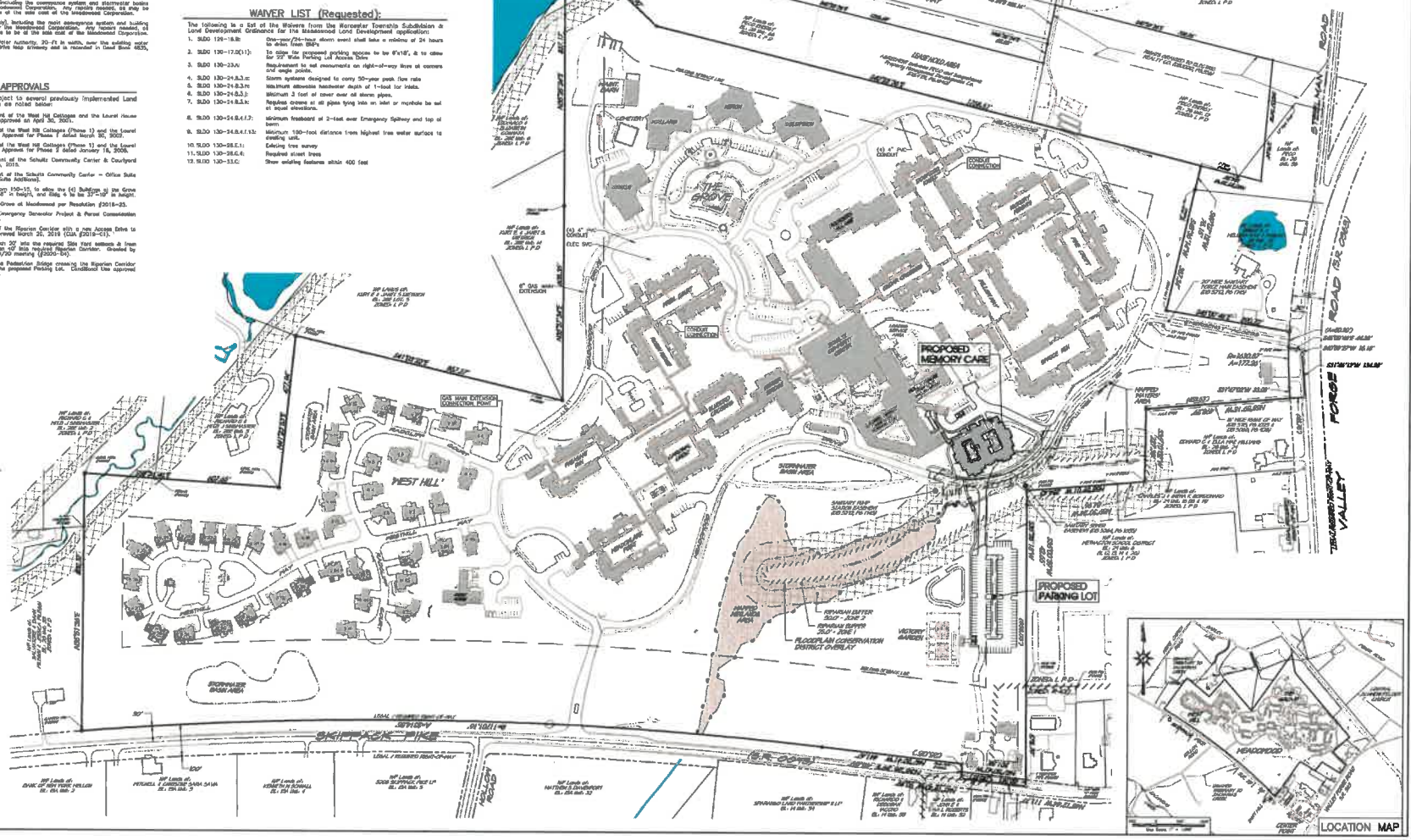
- BUILDING COVERAGE:

Existing Residential/Community Buildings	7.5304 Acres
Existing West Hill Homes	2.4729 Acres
Existing Accessory Buildings	1.1389 Acres
Existing Grove Buildings	1.2336 Acres
Proposed Memory Care Building	0.4390 Acres
TOTAL BUILDING AREA: [1]	12.8150 Acres (11.68 %)

- IMPERVIOUS COVERAGE:

Total Building Area:	12.8150 Acres
Conc Walks/Pads/Decks/Patios:	3.0004 Acres
Site Asphalt Paving:	12.4021 Acres
Asphalt (Previous) Trail Area:	0.8183 Acres
Stone Parking/Aprnt. Yard:	1.3500 Acres
Memory Care – Impervious Demo Area:	–0.6927 Acres
Memory Care – New Impervious Area:	+0.6004 Acres
Parking Lot – Impervious Demo Area:	–0.3548 Acres
Parking Lot – New Impervious Area:	+1.1039 Acres
TOTAL IMPERVIOUS: [1]	33.0036 Acres (30.07 %)

[1] Building & impervious ratio are based on Developable Area of the lot.
[2] 2 Non-independent Beds = 1 Dwlg. Unit
[3] Parcels B, C & D merged into main Parcel A (Block 28 Unit 28).



PLAN LEGEND

- Tract Boundary Line
- Legal Right-of-Way Line
- Existing Roadway Centerline
- Zoning District Boundary
- Riparian Buffer Limit
- Riparian Wetland Limits
- Stepped Waters' Limits

REVISIONS

SCALE: 75' 0' 150'
Scale in Feet (1" = 150')

THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE SURVEYING PROCEDURES AND PRACTICE STANDARDS DEEMED TO BE OF THE SAME QUALITY AS UPON WHICH THE PROFESSIONAL LICENSURE OF THE WORKER IS BASED, AS DEFINED IN THE PENNSYLVANIA LICENSING LAW.

THIS PLAN WAS PREPARED BY WOODROW & ASSOCIATES, INC. ALL RIGHTS RESERVED

CALL 1-800-242-1776
PROJECT SERIAL NUMBER FOR DESIGN

Applicant:
THE MEADOWOOD CORPORATION
c/o Paul Herdeman
President/CEO
3305 Skippack Pike
(PO Box 870)
Worcester, PA 19490

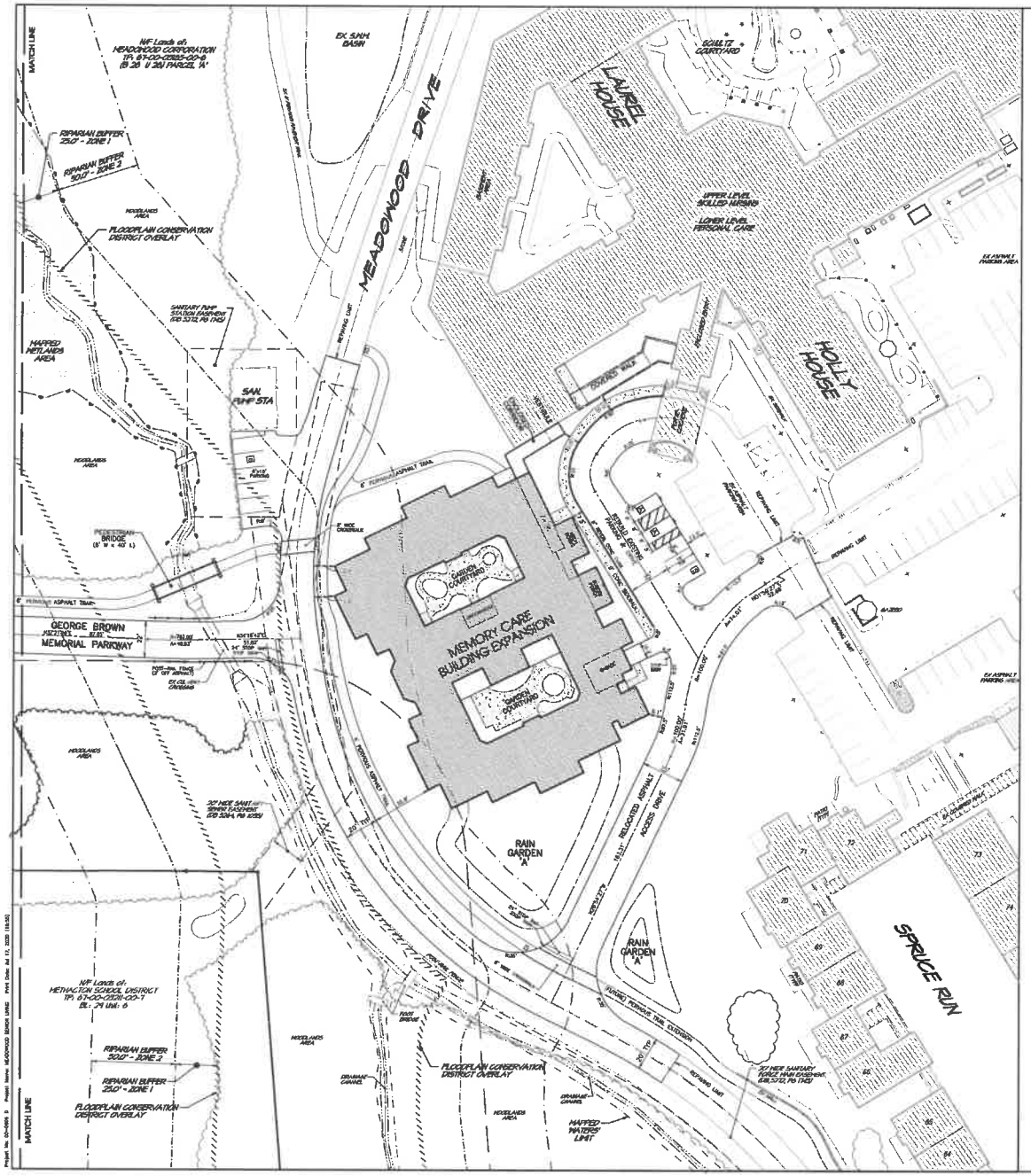
Parcel Information:
TPI: 67-00-03185-00-2 (B 28 U 28) PARCEL "A"
TPI: 67-00-01069-00-1 (B 28 U 39) PARCEL "B"
TPI: 67-00-03186-00-1 (B 29 U 1) PARCEL "C"
TPI: 67-00-03190-00-1 (B 29 U 2) PARCEL "D"

Ad Tech: 118.2054 Acres
PECO Lease: 12.8761 Acres
GROSS Area: 131.0817 Acres

MEMORY CARE FACILITIES EXPANSION
RECORD PLAN – OVERALL TRACT
MEADOWOOD SENIOR LIVING
WORCESTER TOWNSHIP – MONTGOMERY COUNTY – PENNSYLVANIA

WOODROW & ASSOCIATES, INC.
CIVIL ENGINEERS / LAND SURVEYORS / LAND PLANNERS
1109 Main Street / P.O. Box 244 / Lansdale, PA 19446-0244
Phone: (215) 362-4440 Fax: (215) 362-5679

Layer List: 01B-02_Record
Job No: 00-0606 018
Plan Date: JULY 13, 2020
Sheet No: 2 of 27



GENERAL PLAN NOTES

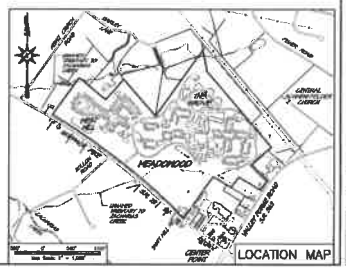
Refer to plan sheet 2 "RECORD PLAN – OVERALL TRACT" for all "BASE EXISTING FEATURES and SURVEY NOTES".

BASE DEVELOPMENT NOTES:

1. The contractor shall ensure that all necessary permits and approvals have been obtained prior to commencement of any site construction activities.
2. Demolition, ground site clearing, grading and topsoil stripping may not commence in any stage or phase of the project until the Erosion and Sedimentation control measures are in place and functional as described on the (APPROV) Erosion & Sediment Control Plan.
3. Nothing shall be permitted to be set on, placed or planted within, the area of any utility or storm sewer easement except lawns or suitable low ground cover.
4. Construction materials and procedures shall follow Pennsylvania Department of Transportation Specifications and Standard Drawings (latest edition).
5. All building materials and wastes shall be removed from the site and recycled or disposed of in accordance with the Department's Solid Waste Management Regulations at 25Pa. Code 260.1 et seq., 271.1, and 287.1 et. seq. No building materials or wastes or unused building materials shall be burned, buried, dumped or disposed of on site.
6. Any/all storm water conveyance system(s) and detention facilities shown on these plans are a basic and perpetual part of the storm water management system for the Township, and as such, are to be protected, maintained and preserved in adherence with the approved final plans. The Township staff/or its agents may reserve the right and privilege to enter upon such lands from time to time for the purpose of inspection of said storm water management system in order to determine that the structural design and integrity are being maintained.
7. TRAFFIC CONTROL SIGNAGE:
   Building driveway & access signage to be provided by Meadowood subject to submission and approval of Worcester Township prior to installation.
8. Contractor to ensure compliance with ADA regulations.
9. This project shall be served by public sanitary sewer by Worcester Township and water services by North Penn Water Company.

PLAN LEGEND

- Tract Boundary Line
- Legal Right-of-Way Line
- Existing Roadway Centerline
- Zoning District Boundary
- Riparian Buffer Line
- Mapped 'Wetland' Line
- Mapped 'Waters' Line
- Existing Vegetation Line



REVISIONS

No.	DATE	DESCRIPTION

PLAN NORTH

15' 0' 30'
Scale in Feet (1" = 30')

THIS PLAN, THEIR SPECIFICATIONS & DESIGNS PREPARED FOR THIS PROJECT ARE TO BE OFFICIAL FOR USE ON THIS PROJECT ONLY.

THIS PLAN AND THE PERT PLAN NOTES SPECIFICALLY FOR THE APPROVAL AND PROJECT SCHEDULE HEREIN, MAY NOT BE REPRODUCED, DISTRIBUTED OR USED WITHOUT WRITTEN CONSENT OF WOODROW & ASSOCIATES, INC.

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CALL 1-800-242-1776
PROJECT SERIAL NUMBER FOR DESIGN

Applicant:
THE MEADOWOOD CORPORATION
c/o Paul Nordeman
President/CEO
3205 Skippack Pike
(PO Box 270)
Worcester, PA 19490

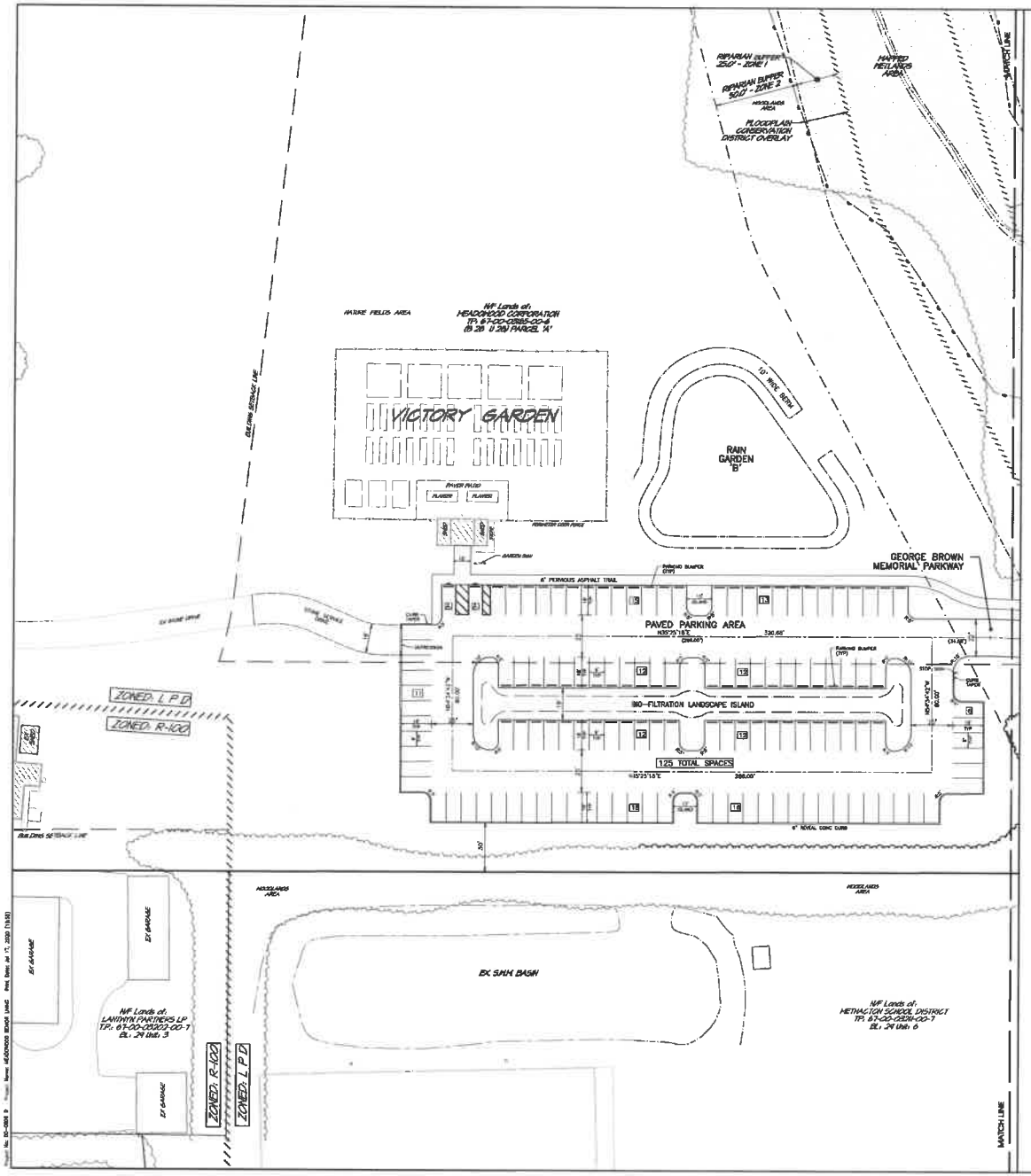
Parcel Information:
TP: 67-00-03185-00-6
(B: 28 U: 28) PARCEL 'A'
TP: 67-00-01089-00-4
(B: 28 U: 28) PARCEL 'B'
TP: 67-00-03186-00-5
(B: 28 U: 1) PARCEL 'C'
TP: 67-00-03188-00-1
(B: 29 U: 2) PARCEL 'D'

Net Tracts 118.2086 Acres
PCCD Lease 12.5281 Acres
GROSS Area: 131.0917 Acres

MEMORY CARE FACILITIES EXPANSION
LAYOUT PLAN – MEMORY CARE
MEADOWOOD SENIOR LIVING
WORCESTER TOWNSHIP • MONTGOMERY COUNTY • PENNSYLVANIA

WOODROW & ASSOCIATES, INC.
MUNICIPAL CIVIL CONSULTING ENGINEERS
1180 Northwest Drive, Plymouth Meeting, PA 19462
Phone: (215) 542-9488 Fax: (215) 542-8474

Layer List: D18-03_Layout-MC
Job No: 00-0606 D18
Plan Date: JULY 13, 2020
Sheet No: 3 of 27



GENERAL PLAN NOTES

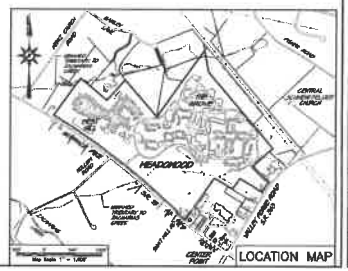
Refer to plan sheet 2 'RECORD PLAN – OVERALL TRACT' for as 'BASE EXISTING FEATURES and SURVEY NOTES'.

BASE DEVELOPMENT NOTES:

1. The contractor shall ensure that all necessary permits and approvals have been obtained prior to commencement of any site construction activities.
2. Demolition, general site clearing, grubbing and topsoil stripping may not commence in any stage or phase of the project until the Erosion and Sedimentation control measures are in place and functional as described on the (NPDES) Erosion & Sediment Control Plan.
3. Nothing shall be permitted to be set on, placed or planted within, the area of any utility or storm water easement except lawns or suitable low ground cover.
4. Construction materials and procedures shall follow Pennsylvania Department of Transportation Specifications and Standard Drawings (latest edition).
5. All building materials and wastes shall be removed from the site and recycled or disposed of in accordance with the Department's Solid Waste Management Regulations at 25Pa. Code 260.1 et seq., 271.1 and 287.1 et. seq. No building materials or wastes or unused building materials shall be burned, buried, dumped, or deposited at the site.
6. Any/all storm water conveyance system(s) and detention facilities shown on these plans are a basic and permanent part of the storm water management system for the township, and as such, are to be protected, maintained and preserved in accordance with the approved Rec plans. The Township and/or its agents may reserve the right and privilege to enter upon such lands from time to time for the purpose of inspection of said storm water management system in order to determine that the structural design and integrity are being maintained.
7. TRAFFIC CONTROL SIGNAGE:
   Building driveway & access signage to be provided by Meadowood subject to submission and approval of Worcester Township prior to installation.
8. Contractor to ensure compliance with ADA requirements.
9. This project shall be served by public sanitary sewer by Worcester Township and water services by North Penn Water Company.

PLAN LEGEND

- Tract Boundary Line
- Legal Right-of-Way Line
- Existing Roadway Centerline
- Zoning District Boundary
- Riparian Buffer Limit
- Mapped "Wetland" Limit
- Mapped "Waters" Limit
- Existing Vegetation Limit



LOCATION MAP

REVISIONS

Rev.	Date	Description

Scale in Feet (1" = 30')

CALL 1-800-242-1776 PROJECT SERIAL NUMBER FOR DESIGN

Applicant:
THE MEADOWOOD CORPORATION
c/o Paul Nordeman
President/CEO
3305 Skippack Pike
(PO Box 870)
Worcester, PA 19490

Parcel Information:
TP: 67-00-03185-00-6 (B 28 U 28) PARCEL 'A'
TP: 67-00-01089-00-4 (B 28 U 30) PARCEL 'B'
TP: 67-00-03198-00-5 (B 28 U 1) PARCEL '1'
TP: 67-00-03199-00-1 (B 28 U 2) PARCEL '2'

Site Tract: 118.2054 Acres
NCCD Limit: 112.8781 Acres
GROSS Area: 131.0813 Acres

MEMORY CARE FACILITIES EXPANSION
LAYOUT PLAN – PARKING LOT
MEADOWOOD SENIOR LIVING
WORCESTER TOWNSHIP – MONTGOMERY COUNTY – PENNSYLVANIA

WOODROW & ASSOCIATES, INC.
CIVIL CONSULTING ENGINEERS
1100 Bethlehem Pike, P.O. Box 1486, North Wales, PA 19454-0000
Phone: (215) 362-5420 Fax: (215) 362-5819

Layout List: D16-04_Layout-Prk
Job No: 00-0606 D18
Plan Date: JULY 13, 2020
Sheet No: 4 of 27

GENERAL PLAN NOTES

BASE EXISTING FEATURES AND SURVEY NOTES:

1. The boundary information illustrated on this plan was taken from a plan entitled ALTA/NSPS - Land Title Survey for Meadowood as prepared for the Meadowood Corp. as prepared by Woodrow & Assoc., Inc., Lansdale Corporate, PA. Plan dated October 12, 2018, last revised October 17, 2018. Bearings shown reflect a "-06 Deg. 33 min. 06 Sec." clockwise rotation from the above referenced plan to match Pennsylvania South Zone 3702 State Plane Coordinate Bearing Basis.

   Boundary information updated per Subdivision + Land Development Plan prepared by Woodrow & Assoc., Inc. dated December 18, 2018 (as amended) to include Parcel B, C & D.

2. The base existing features and project topography illustrated on this plan was compiled from Aerial Survey data prepared by PREMAPS, Inc., Manheim, PA (Feb 2020). Additional field survey has been performed to target on-site project locations to verify and reflect accurate information.

3. The site benchmark is an existing sanitary sewer manhole located in the existing Lane Road directly in front of the Sanitary Sewer Pump Station having a rim elevation of 248.18' and flow elevation of 235.63'.

4. This plan was prepared utilizing the following references:
   a. Tax maps and deeds of record as obtained from the Recorder of Deeds online resources.
   b. Existing Soils classifications and mapping has been plotted from maps obtained from the USDA Web Soil Survey website (http://websoilsurvey.nrcs.usda.gov/) unless otherwise noted.
   c. Vertical datum references supplied by the PA Spatial Data Access system (PASDA). PAMAP data is based on PA State Plane (South) NAD83 horizontal, NAVD88 vertical datum.
   d. Aerial imagery provided by Nearmap, Inc. for the subject project basis. Aerial imagery from Flight dated FEB. 17, 2020.

5. The areas identified as Wetland & Waters illustrated on this plan have been mapped by Penna Trail Environmental, Hatfield, PA through field investigations during the month of March 2018.

6. There are no identifiable Flood Plain areas within the project site as illustrated on Community Panel Number 42091C0253 G (March 2, 2016) of the Flood Insurance Rate Map, prepared by the Federal Emergency Management Association for the Township of Worcester, Pennsylvania.

7. All persons digging on this site shall comply with the requirements of Section 5 of PA Act 287 as amended by PA Act 181. State law requires 1 three (3) business day notice prior to any digging (does not include state holidays or weekends). Call #-1-1 or go to www.paonecall.org.

8. Existing subsurface utility information illustrated on these plans were based upon field locations obtained on part of site survey operations. Information pertaining to underground utilities, including subsurface utilities is approximate in nature and has been obtained as an aid for the project design. The information provided is representative of subsurface conditions only at locations and depths where such information was available. There is no expressed or implied agreement that subsurface utility connections exist between expired locations. Accordingly, utility information shown should not be relied upon for construction purposes. It is incumbent upon the contractor to verify subsurface utilities prior to excavation.

9. All of the stormwater management facilities, including the conveyance systems and stormwater basins are to be owned and maintained by the Meadowood Corporation. Any repairs needed, as may be determined by Township inspection, are to be at the sole cost of the Meadowood Corporation.

10. All of the sanitary sewer facilities (gravity only), including the main conveyance system and building laterals are to be owned and maintained by the Meadowood Corporation. Any repairs needed, as may be determined by township inspection, are to be at the sole cost of the Meadowood Corporation.

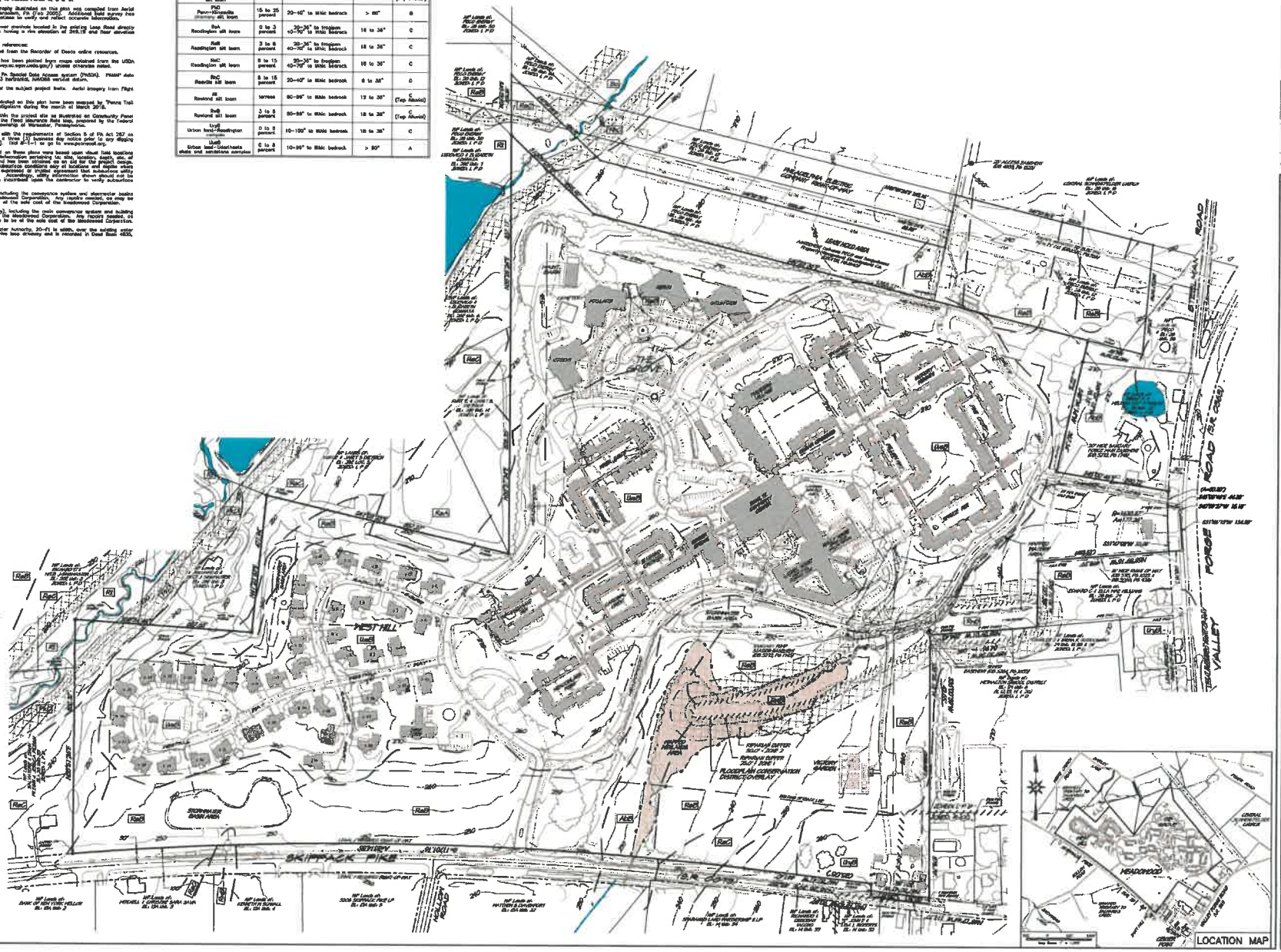
11. A utility easement in favor of North Penn Water Authority, 20-ft in width, over the existing water main into the perimeter of the Meadowood Drive loop driveway and is recorded in Deed Book 4835, Page 195.

PROJECT SOILS DATA

Soils Type:	Depth:	Depth to Restrictive Features:	Depth to Water Table:	Hydrologic Soil Group:
AbB Abbottstown silt loam	3 to 8 percent	18-27" to fragipan 40-80" to lithic bedrock	6 to 18"	D
Bu Bowmansville-Knouse silt loam	N/A	72-98" to lithic bedrock	0 to 18"	C/D (Top Alluvial)
PkD Penn-Klinesville silt loam	15 to 25 percent	20-40" to lithic bedrock	> 80"	B
RaA Readington silt loam	0 to 3 percent	20-36" to fragipan 40-70" to lithic bedrock	18 to 36"	C
RaB Readington silt loam	3 to 8 percent	20-36" to fragipan 40-70" to lithic bedrock	18 to 36"	C
RaC Readington silt loam	8 to 15 percent	20-36" to fragipan 40-70" to lithic bedrock	18 to 36"	C
ReD Reaville silt loam	8 to 15 percent	20-40" to lithic bedrock	6 to 36"	D
Ro Rowland silt loam	Verrace	60-96" to lithic bedrock	12 to 36"	C (Top Alluvial)
RoB Rowland silt loam	3 to 8 percent	60-96" to lithic bedrock	18 to 36"	C
UrrB Urban land-Readington complex	0 to 8 percent	10-100" to lithic bedrock	18 to 36"	C
UwB Urban land-Udorthents shale and sandstone complex	0 to 8 percent	10-96" to lithic bedrock	> 80"	A

PLAN LEGEND

- Tract Boundary Line
- Legal Right-of-Way Line
- Existing Roadway Centerline
- Parking Contour Boundary
- Riparian Buffer Limit
- Mapped "Wetland" Limit
- Mapped "Waters" Limit
- Riparian Buffer Centerline
- Existing Soil Series Limits
- Existing Data / Paving Limit
- Existing Vegetation Limit
- Existing Storm Sewer Piping
- Existing Sanitary Sewer Piping
- Existing Gas Main
- Existing Water Main / Service
- Existing Overhead Utility Wires
- Existing Underground Telephone



REVISIONS

No.	Date	Description

PLAN NORTH

25' 0' 150'

Scale in Feet (1" = 150')

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CALL 1-800-242-1776
PROJECT SERIAL NUMBER FOR SCHeDule

Applicant:
THE MEADOWOOD CORPORATION
c/o Paul Handerman
President/CEO
3200 Skippack Pike
(PO Box 910)
Worcester, PA 19490

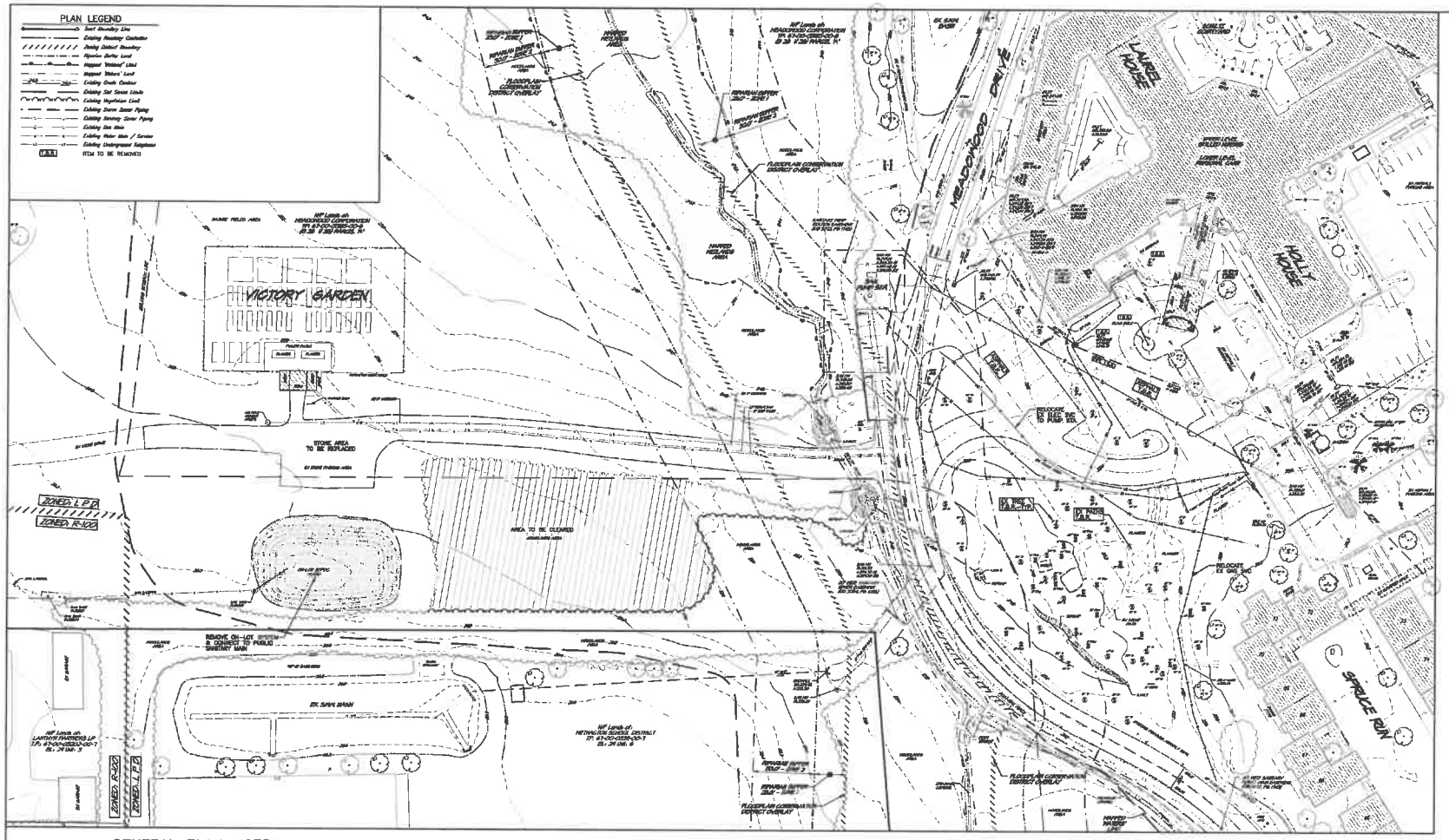
Parcel Information:
TP: 67-00-03185-00-3
(S 28 U 26) PARCEL "A"
TP: 67-00-01069-00-4
(S 28 U 26) PARCEL "B"
TP: 67-00-03156-00-4
(S 29 U 1) PARCEL "C"
TP: 67-00-03109-00-1
(S 29 U 2) PARCEL "D"

Net Tracts 118.2054 Acres
PECO Lease 13.8761 Acres
GROSS Area 131.8017 Acres

MINORITY CARE FACILITIES EXPANSION
EXISTING FEATURES PLAN
OVERALL TRACT
MEADOWOOD SENIOR LIVING
WORCESTER TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

WOODROW & ASSOCIATES, INC.
CIVIL ENGINEERS - LAND SURVEYORS - LAND DEVELOPMENT CONSULTANTS
1100 Bethlehem Pike, P.O. Box 1708, Lansdale, PA 19446
Phone: (215) 362-5400 Fax: (215) 362-5679

Layer List: D18-05_ExFea
Job No: 00-0906 018
Plan Date: JULY 13, 2020
Sheet No: 5 of 27



GENERAL PLAN NOTES

Refer to plan sheet 2 "RECORD PLAN – OVERALL TRACT" for all "BASE EXISTING FEATURES and SURVEY NOTES".

EXISTING FEATURES and DEMOLITION NOTES:

1. The contractor shall ensure that all necessary permits and approvals have been obtained prior to commencement of any site construction activities.
2. Demolition, general site clearing, grubbing and topsoil stripping may not commence in any stage or phase of the project until the Erosion and Sedimentation control measures are in place and functional as described on the (NPDES) Erosion & Sediment Control Plan.
3. Nothing shall be permitted to be set on, placed or planted within, the area of any utility or storm water easement except snow or suitable low ground cover.
4. Construction materials and procedures shall follow Pennsylvania Department of Transportation Specifications and Standard Drawings (latest edition).
5. All building materials and wastes shall be removed from the site and recycled or disposed of in accordance with the Department's Solid Waste Management Regulations at 25Pa. Code, 260.1 et seq., 271.1, and 287.1 et. seq. No building materials or wastes or unused building materials shall be burned, buried, dumped, or discharged at the site.

TREE REMOVAL SCHEDULE

Existing trees to be removed within the designated Project Limits.

MEMORY CARE BUILDING AREA:

Caliper:	Quantity:	Total Caliper:	Caliper:	Quantity:	Total Caliper:
2"	1	2"	18"	9	162"
4"	5	20"	20"	3	60"
6"	4	24"	22"	3	66"
8"	9	72"	24"	2	48"
10"	5	50"	30"	1	30"
12"	5	60"	34"	1	34"
14"	9	126"	TOTAL:	63	850"
16"	6	96"			

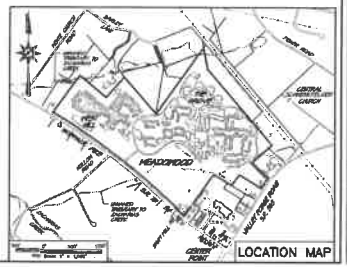
PARKING LOT AREA:

Caliper:	Quantity:	Total Caliper:	Caliper:	Quantity:	Total Caliper:
5"	9	54"	14"	2	28"
7"	8	56"	16"	2	32"
8"	12	96"	18"	3	54"
9"	10	90"	22"	1	22"
10"	7	70"	TOTAL:	63	825"
11"	1	11"			
12"	1	12"			

Parking lot area trees reviewed on 5/7/20. Trees that are dead, diseased or severely structurally damaged are not included in the tree inventory.

PROJECT SOILS DATA WITHIN PROPOSED LIMIT OF DISTURBANCE

Soils Type:	Slopes:	Depth to Restrictive Feature:	Depth to Water Table:	Hydrologic Soil Group
ReB Readington silt loam	3 to 8 percent	20–38" to fragipan 40–70" to lithic bedrock	18 to 36"	C
RvB Rowland silt loam	3 to 8 percent	60–96" to lithic bedrock	18 to 36"	C (Top Ribbed)
UuB Urban land – Udorthents shale and semiderm complex	0 to 8 percent	10–96" to lithic bedrock	more than 80"	*



REVISIONS

No.	DATE	DESCRIPTION

PLAN NORTH

Scale in Feet (1" = 40')

THIS PLAN, THIS MAP, THIS SURVEY IS NOT VALID UNLESS IT IS SIGNED IN BLUE INK BY THE PROFESSIONAL WHOSE SEAL IS AFFIXED HERE.

THIS PLAN, THIS MAP, THIS SURVEY, WITHOUT WRITTEN PERMISSION, IS NOT TO BE REPRODUCED IN WHOLE OR IN PART, NOR SHALL INFORMATION BE GIVEN TO OTHERS, NOR SHALL IT BE REVEALED IN ANY MANNER, OR USED FOR ANY PURPOSE WHATSOEVER, WITHOUT WRITTEN PERMISSION.

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ALL RIGHTS RESERVED

CALL 1-800-242-1776
PROJECT SERIAL NUMBER FOR DESIGN

Applicant:
THE MEADOWOOD CORPORATION
c/o Paul Nordemon
President/CEO
1265 Sippewissett Road
(PO Box 870)
Worcester, PA 19490

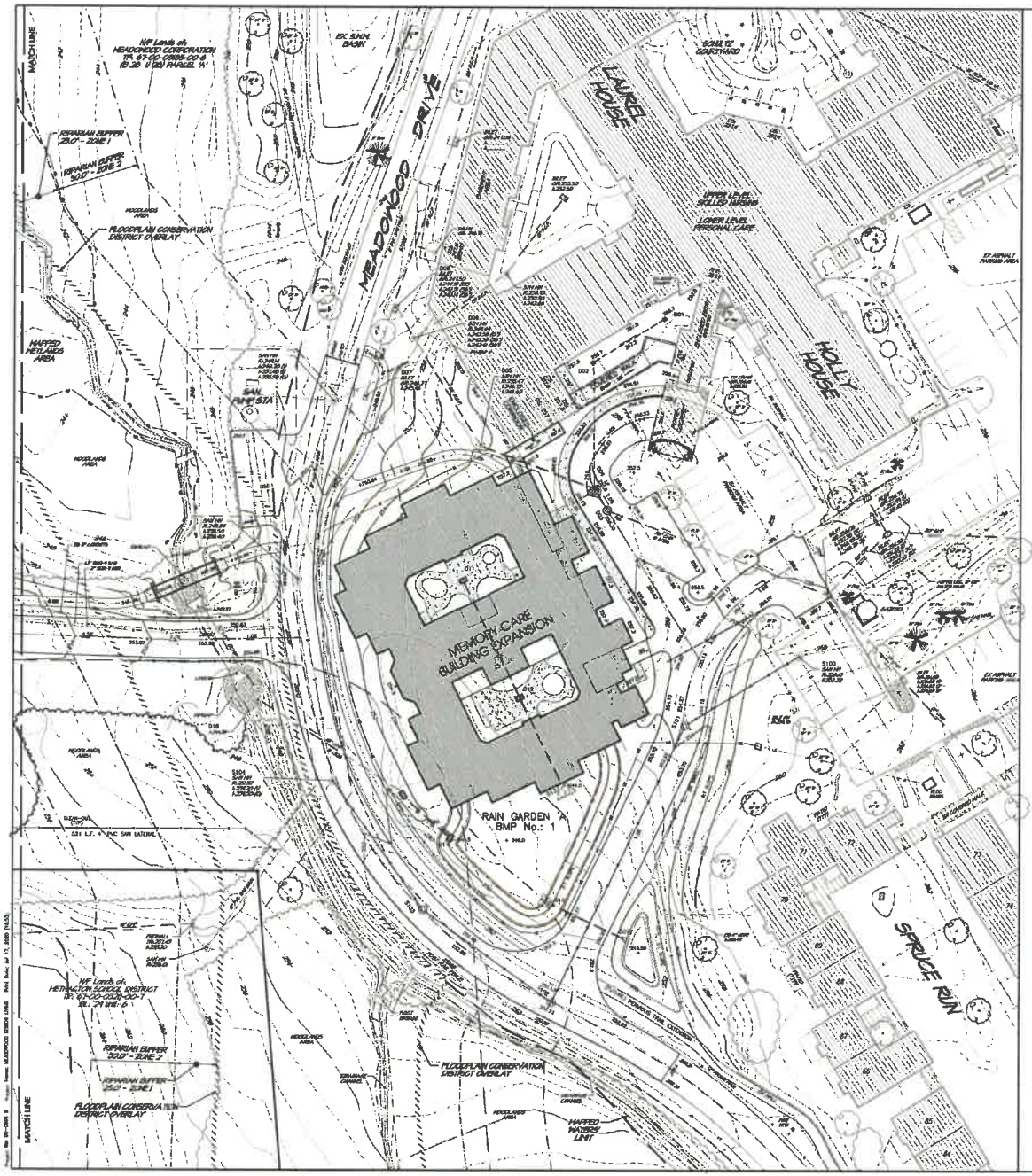
Parcel information:
TP: 67-00-03185-00-5 (U 28 U 26) PARCEL 'A'
TP: 67-00-01989-00-4 (U 28 U 38) PARCEL 'B'
TP: 67-00-03198-00-4 (U 29 U 1) PARCEL 'C'
TP: 67-00-03198-00-1 (U 29 U 2) PARCEL 'D'

Net Tract: 119.2016 Acres
RCO Lands: 12.8011 Acres
GROSS Area: 131.0017 Acres

MEMORY CARE FACILITIES EXPANSION
EXISTING FEATURES & DEMOLITION – PROJECT AREA
MEADOWOOD SENIOR LIVING
WORCESTER TOWNSHIP – MONTGOMERY COUNTY – PENNSYLVANIA

WOODRUFF & ASSOCIATES, INC.
Consulting Engineers
1130 North Bethlehem Pike / P.O. Box 1-1, Lansdale, PA 19446
Phone (215) 362-5819 Fax (215) 362-5819
Web: www.woodruffinc.com

Layer List: D18-06_Demo
Job No: 00-0506 D18
Plan Date: JULY 13, 2020
Sheet No: 6 of 27



GENERAL PLAN NOTES

Refer to plan sheet 2 "RECORD PLAN – OVERALL TRACT" for all "BASE EXISTING FEATURES and SURVEY NOTES".

Refer to plan sheet 3 "LAYOUT PLAN – MEMORY CARE FACILITY" for all "BASE DEVELOPMENT NOTES".

BASE CONSTRUCTION DESIGN NOTES:

1. The contractor shall ensure that all necessary permits and approvals have been obtained prior to commencement of any site construction activities.
2. Erosion and sedimentation control measures shall be in place and functional prior to any earth disturbance or grading work.
3. Contractor to ensure compliance with ADA requisitions.
4. This project shall be served by public sanitary sewer by Worcester Township and water services by North Penn Water Authority.
5. Nothing shall be permitted to be set on, placed or planted within, the area of any utility or storm water easement, except lawns or additional low ground cover.
6. Construction materials and procedures shall follow Pennsylvania Department of Transportation Specifications and Standard Drawings (latest edition).
7. Any/all above water conveyance system(s) and detention facilities shown on these plans are a basic and perpetual part of the storm water management system for this Township, and as such, are to be protected, maintained and preserved in accordance with the approved final plans. The Township and/or its agents may reserve the right and privilege to enter upon such lands from time to time for the purpose of inspecting the above water conveyance system(s) in order to determine that the structural design and integrity are being maintained.
8. The proposed finished grading shown on this plan has been based on the proposed building(s) finished floor elevations and has been used to design the storm water management facilities. The contractor shall comply with the grading scheme indicated unless otherwise approved by the Township and the Project design engineers.
9. A minimum of six (6) inches of clean topsoil shall be provided on all lawn and planting areas.
10. Site grading shall be performed in accordance with these plans. The contractor shall be responsible for removing and replacing all soft, yielding or unsuitable materials and replacing with suitable materials. Fill material shall be placed in uniform horizontal layers of compacted material meeting density per ASTM Test D-1557, moisture content controlled to within -2 and +2 percent of optimum. Fill above per 25 below optimum, contractor shall submit a compaction report prepared by a licensed soils engineer, registered within the state where the work is performed, certifying that all fill areas and subgrade areas within the building pad area and areas to be paved have been compacted in accordance with these plans.
11. Subbase material for sidewalks, curb, or asphalt shall be free of organics and other unsuitable materials. Should subbase be deemed unsuitable, subbase is to be removed and filled with approved fill material compacted to 95% optimum density (as determined by modified proctor method).
12. The minimum slope in pressed areas shall not be less than 2% and the minimum in paved areas shall not be less than 1.
13. Erosion control matting shall be provided on all earth slopes at 3:1 or greater.

SANITARY STRUCTURE SCHEDULE

Structure: S100
Loc: Lo. Parking Lot
Type: Sid Box/ Grd MH
Rim: 258.13
Inv: 252.32 (I)
Inv: 252.32 (O)

Structure: S101
Loc: Loop Rd. Drive
Type: STD Grd MH
Rim: 254.12
Inv: 248.15 (I)
Inv: 248.25 (O)

Structure: S102
Loc: Loop Rd. @ New Drive
Type: STD Grd MH
Rim: 252.73
Inv: 245.24 (I)
Inv: 245.34 (O)

Structure: S103
Loc: Loop Rd.
Type: Grd Box w/ Grt
Rim: 253.47
Inv: 244.80 (I)
Inv: 244.16 (O)

Structure: S104
Loc: Loop Rd.
Type: STD Grd MH
Rim: 251.32
Inv: 238.30 (Nw. I)
Inv: 238.20 (Ex. I)
Inv: 238.30 (Ex. O)

SANITARY PIPE SCHEDULE

Structure (Fr)	Structure (To)	Length (L.F.)	Size (Dia.)	Material	Slope (%)
S100	S101	79	8"	P.V.C (Sch 26)	4.77
S101	S102	183	8"	P.V.C (Sch 26)	1.37
S102	S103	94	8"	P.V.C (Sch 26)	1.00
S103	S104	94	8"	P.V.C (Sch 26)	5.00

WATER MAIN CONSTRUCTION:

Refer to North Penn Water Authority design plans for existing water main relocation and construction of proposed water main loop.

STORMWATER STRUCTURE SCHEDULE

Structure ID: D01
Type: YARD DRAIN
Loc: Front of Holly Hse
Gr: 258.70
Inv: 254.20 (O)

Structure ID: D02
Type: YARD DRAIN
Loc: Front of Holly Hse
Gr: 258.70
Inv: 253.93 (I)
Inv: 253.73 (O)

Structure ID: D03
Type: DGHSE STM MH
Loc: Front MC Drive
R: 255.18
Inv: 247.43 (I)
Inv: 247.23 (O)

Structure ID: D04
Type: Std Box w/M' Top
Loc: Front MC Drive
Gr: 255.90
Inv: 252.80 (12" I)
Inv: 247.15 (36" I)
Inv: 246.96 (36" O)

Structure ID: D05
Type: Exist. STM MH
Loc: Side MC Bldg
R: 253.47
Inv: 248.72 (I)
Inv: 248.62 (O)

Structure ID: D06
Type: Exist. STM MH
Loc: Side MC Bldg
R: 249.49
Inv: 242.5 (15" I)
Inv: 242.5 (36" I)
Inv: 242.41 (36" O)

Structure ID: D07
Type: Exist. Inlet
Loc: Loop Rd Shoulder
Gr: 249.07
Inv: 245.98 (O)

Structure ID: D08
Type: Exist. Inlet
Loc: Loop Rd Shoulder
Gr: 247.50
Inv: 244.31 (15" I)
Inv: 242.31 (36" I)
Inv: 242.14 (36" O)

Structure ID: D09
Type: Flared End Section
Loc: Loop Rd @ New Drive
Inv: 248.30 (O)

Structure ID: D10
Type: Flared End Section
Loc: Rain Garden 'A'
Inv: 246.50 (O)

Structure ID: D11
Type: Std Box, w/M' Top
Loc: Memory Care Courtyard
Gr: 253.11
Inv: 252.11 (I)
Inv: 250.09 (O)

Structure ID: D12
Type: Std Box, w/M' Top
Loc: Memory Care Courtyard
Gr: 256.45
Inv: 251.73 (I)
Inv: 251.58 (O)

Structure ID: D13
Type: Retaining Wall Outflow
Loc: Rain Garden 'A'
Inv: 251.30 (O)

Structure ID: D14
Type: Rain Garden 'A' Outlet Structure
Loc: Rain Garden 'A'
Gr: 251.20
Inv: 249.00 (1-8" C.O.)
Inv: 248.33 (O)

Structure ID: D15
Type: Std Box w/M' Top
Loc: Loop Rd Shoulder
Gr: 251.50
Inv: 245.95 (I)
Inv: 245.71 (O)

Structure ID: D16
Type: Ex Pipe Outlet
Loc: Channel
Inv: 244.30 (O)

Structure ID: D17
Type: Std Box w/M' Top
Loc: Parking Lot
Gr: 253.95
Inv: 253.10 (O)

Structure ID: D18
Type: Std Box w/M' Top
Loc: Parking Lot
Gr: 253.85
Inv: 253.10 (O)

Structure ID: D19
Type: Std Box w/M' Top
Loc: Parking Lot
Gr: 252.85
Inv: 252.25 (I x2)
Inv: 252.18 (O)

Structure ID: D20
Type: Std Box w/M' Top
Loc: Parking Lot
Gr: 256.57
Inv: 252.06 (O)

Structure ID: D21
Type: Std Box w/M' Top
Loc: Parking Lot
Gr: 256.37
Inv: 251.48 (I x2)
Inv: 251.33 (O)

Structure ID: D22
Type: D-W Endwall
Loc: Rain Garden 'B'
T.W.: 253.50
Inv: 251.00 (O)

Structure ID: D23
Type: Rain Garden 'B' Outlet Structure
Loc: Rain Garden 'B'
Gr: 252.00
Inv: 251.55 (12" Reet Weir)
Inv: 247.08 (O)

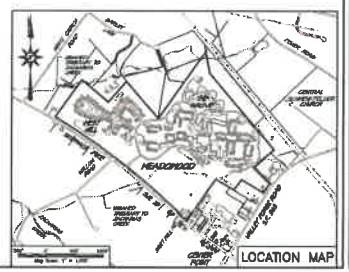
Structure ID: D24
Type: D-W Endwall
Loc: Rain Garden 'B'
T.W.: 249.00
Inv: 248.48 (O)

STORMWATER PIPE SCHEDULE

Structure (Fr)	Structure (To)	Length (L.F.)	Size (Dia.)	Material	Slope (%)
D01	D02	50	12"	H.D.P.E.	0.50
D01	D04	74	12"	H.D.P.E.	0.50
D03	D04	14	36"	R.C.P.	0.50
D04	D05	71	36"	R.C.P.	0.34
D05	D06	71	36"	R.C.P.	0.69
D06	D08	17	36"	R.C.P.	0.59
D07	D08	50	15"	R.C.P.	1.30
D09	D10	47	18"	H.D.P.E.	0.00
D11	D12	78	18"	H.D.P.E.	0.50
D12	D13	58	18"	H.D.P.E.	0.50
D14	D15	38	15"	H.D.P.E.	1.00
D15	D16	104	18"	C.M.P.	1.30
D17	D18	75	15"	H.D.P.E.	1.00
D18	D19	75	15"	H.D.P.E.	1.00
D19	D21	70	15"	H.D.P.E.	1.00
D20	D21	27	18"	H.D.P.E.	0.90
D21	D22	20	15"	H.D.P.E.	3.00
D23	D24	30	15"	H.D.P.E.	2.00

PLAN LEGEND

- Tract Boundary Line
- Existing Roadway Centerline
- Zoning District Boundary
- Riparian Buffer Limit
- Hayfield "Wetland" Limit
- Hayfield "Waters" Limit
- 248 / 250 — Existing Grade Contour
- Existing Soil Series Limits
- Existing Vegetation Limit
- Existing Storm Sewer Piping
- Existing Sanitary Sewer Piping
- Existing Gas Main
- Existing Water Main / Service
- Existing Underground Telephone
- + 257.3 — PROPOSED SPOT ELEVATION
- 248 / 250 — PROPOSED GRADE CONTOUR
- PROPOSED STORM PIPING



REVISIONS

Scale in Feet (1" = 30')

CALL 1-800-242-1776

Applicant:
THE MEADOWOOD CORPORATION
c/o Paul Handerman
President/CEO
3305 Skippack Pike
(PO Box 610)
Worcester, PA 19490

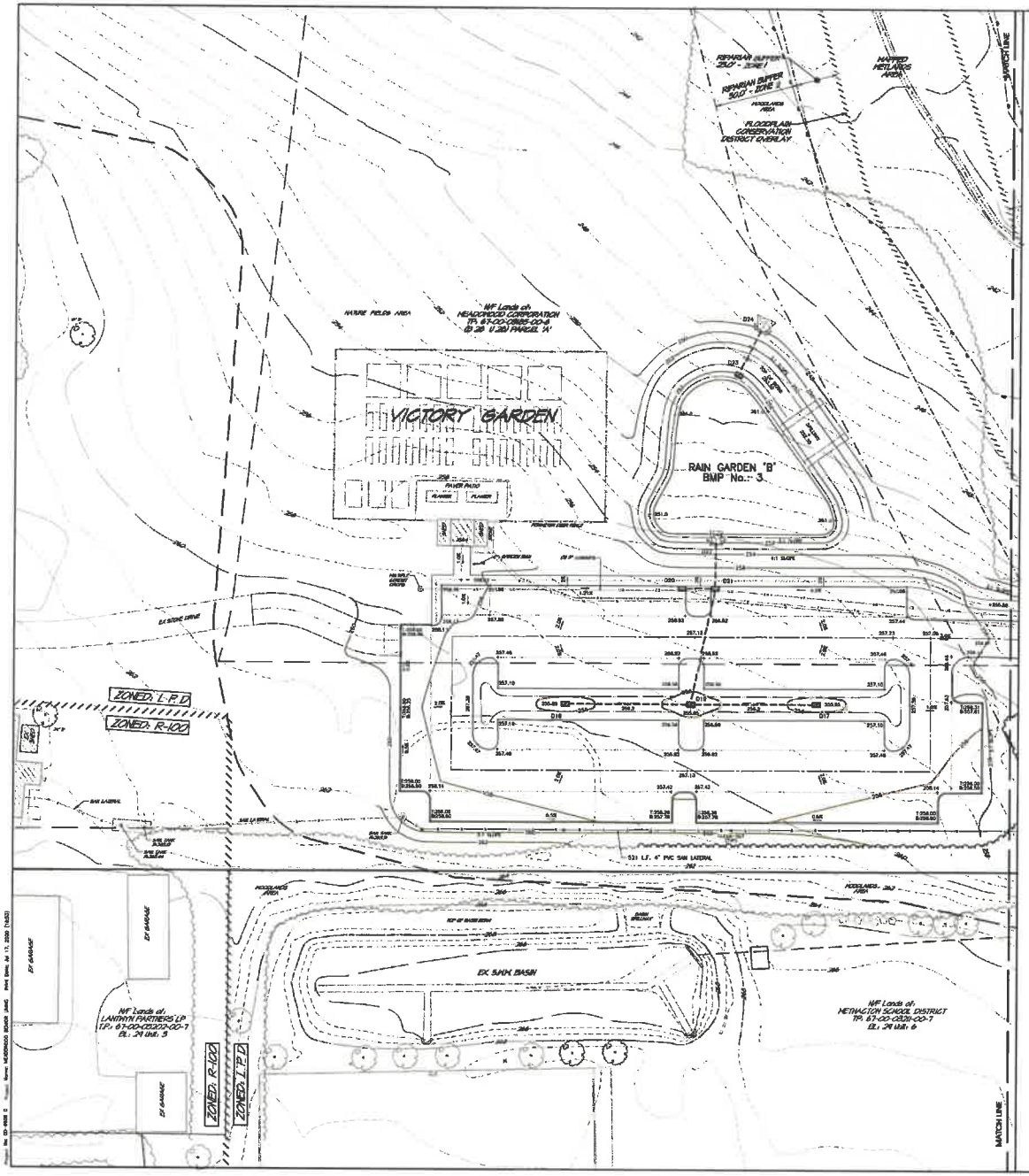
Parcel Information:
TP: 67-00-03195-00-5
(9 28 J 26) PARCEL "A"
TP: 67-00-01029-00-4
(9 28 U 36) PARCEL "B"
TP: 67-00-03196-00-6
(9 29 U 1) PARCEL "C"
TP: 67-00-03198-00-1
(9 29 U 2) PARCEL "E"

Net Tract: 118.3066 Acres
Prior Roads: 0.4000 Acres
Gross Area: 131.6817 Acres

MEMORY CARE FACILITIES EXPANSION
SITE IMPROVEMENTS PLAN
MEMORY CARE
MEADOWOOD SENIOR LIVING
WORCESTER TOWNSHIP – MONTGOMERY COUNTY – PENNSYLVANIA

WOODROW & ASSOCIATES, INC.
CIVIL ENGINEERS – LAND SURVEYORS
1126 North Bethlehem Pike, Suite 1 – Lower Gwynedd – PA 19002
Phone: (215) 542-9000 – Fax: (215) 542-9619
Web: www.woodrowassociates.com

Logo Lib: D18-07_Grade-MC
Job No: 00-0606 D18
Plan Date: JULY 13, 2020
Sheet No: 7 of 27



GENERAL PLAN NOTES

Refer to plan sheet 2 'RECORD PLAN – OVERALL TRACT' for all 'BASE EXISTING FEATURES and SURVEY NOTES'.

Refer to plan sheet 3 'LAYOUT PLAN – MEMORY CARE FACILITY' for all 'BASE DEVELOPMENT NOTES'.

BASE CONSTRUCTION DESIGN NOTES:

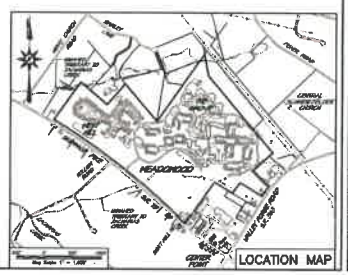
1. The contractor shall ensure that all necessary permits and approvals have been obtained prior to commencement of any site construction activities.
2. Erosion and sedimentation control measures shall be in place and functional prior to any earth disturbance or grading work.
3. Contractor to ensure compliance with ADA regulations.
4. This project shall be served by public sanitary sewer by Worcester Township and water services by North Penn Water Authority.
5. Nothing shall be permitted to be set on, placed or planted within, the area of any utility or storm water easement except lawns or suitable low ground cover.
6. Construction materials and procedures shall follow Pennsylvania Department of Transportation Specifications and Standard Drawings (latest edition).
7. Any/all storm water conveyance system(s) and detention facilities shown on these plans are a basic and perpetual part of the storm water management system for this Township, and as such, are to be protected, maintained and preserved in accordance with the approved final plans. The Township and/or its agents may reserve the right and privilege to enter upon such lands from time to time for the purpose of inspection of said storm water management system in order to determine that the structural design and integrity are being maintained.
8. The proposed finished grading shown on this plan has been based on the proposed building(s) finished floor elevations and has been used to design the storm water management facilities. The contractor shall comply with the grading schemes indicated unless otherwise approved by the Township and the Project design engineers.
9. A minimum of six (6) inches of clean topsoil shall be provided on all lawn and planting areas.
10. Site grading shall be performed in accordance with these plans. The contractor shall be responsible for removing and receiving all such, existing or unsuitable materials and replacing with suitable materials. All excavated or filled areas shall be compacted to 95% of modified proctor maximum density per A.S.T.M. Test D-1557, moisture content at time of placement shall be no more than 2% above optimum moisture content. The contractor shall submit a compaction report prepared by a qualified soils engineer, indicating compliance with the state where the work is performed, verifying that all filled areas and subgrade areas within the building pad area and areas to be paved have been compacted in accordance with these plans.
11. Subbase material for sidewalks, curb, or asphalt shall be free of organics and other unsuitable materials. Should subbase be deemed unsuitable, subbase is to be removed and filled with approved fill material compacted to 95% optimum density (as determined by modified proctor method).
12. The minimum slope in grassed areas shall not be less than 2% and the minimum in paved areas shall not be less than 1.
13. Erosion control matting shall be provided on all earth slopes at 3:1 or greater.

WATER MAIN CONSTRUCTION:

Refer to North Penn Water Authority design plans for existing water main relocation and construction of proposed water main loop.

PLAN LEGEND

- Tract Boundary Line
- Existing Housing Centerline
- Zoning District Boundary
- Riparian Buffer Limit
- Mapped "Wetland" Limit
- Mapped "Waters" Limit
- Existing Creek Centerline
- Existing Soil Series Limits
- Existing Inspection Limit
- Existing Storm Sewer Piping
- Existing Sanitary Sewer Piping
- Existing Gas Main
- Existing Water Main / Service
- Existing Underground Telephone
- 257.3 PROPOSED SPOT ELEVATION
- 248 250 PROPOSED GRADE CONTOUR
- PROPOSED STORM PIPING



REVISIONS

No.	DATE	DESCRIPTION

15' 0' 30'
Scale in Feet (1" = 30')

THE PLANS PRESENTED IN THIS DOCUMENT WERE PREPARED BY OR UNDER THE DIRECTION OF THE PERSON WHOSE SEAL APPEARS ON THIS PAGE.

THE PLAN THE SEAL PRESENTED HERE WAS PREPARED BY OR UNDER THE DIRECTION OF THE PERSON WHOSE NAME APPEARS ON THIS PAGE.

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CALL 1-800-242-1776
PROJECT SERIAL NUMBER FOR DESIGN:

Applicant:
THE MEADOWOOD CORPORATION
c/o Paul Hondorman
President/CEO
3305 Kilpatrick Pike
PO Box 230
Worcester, PA 19490

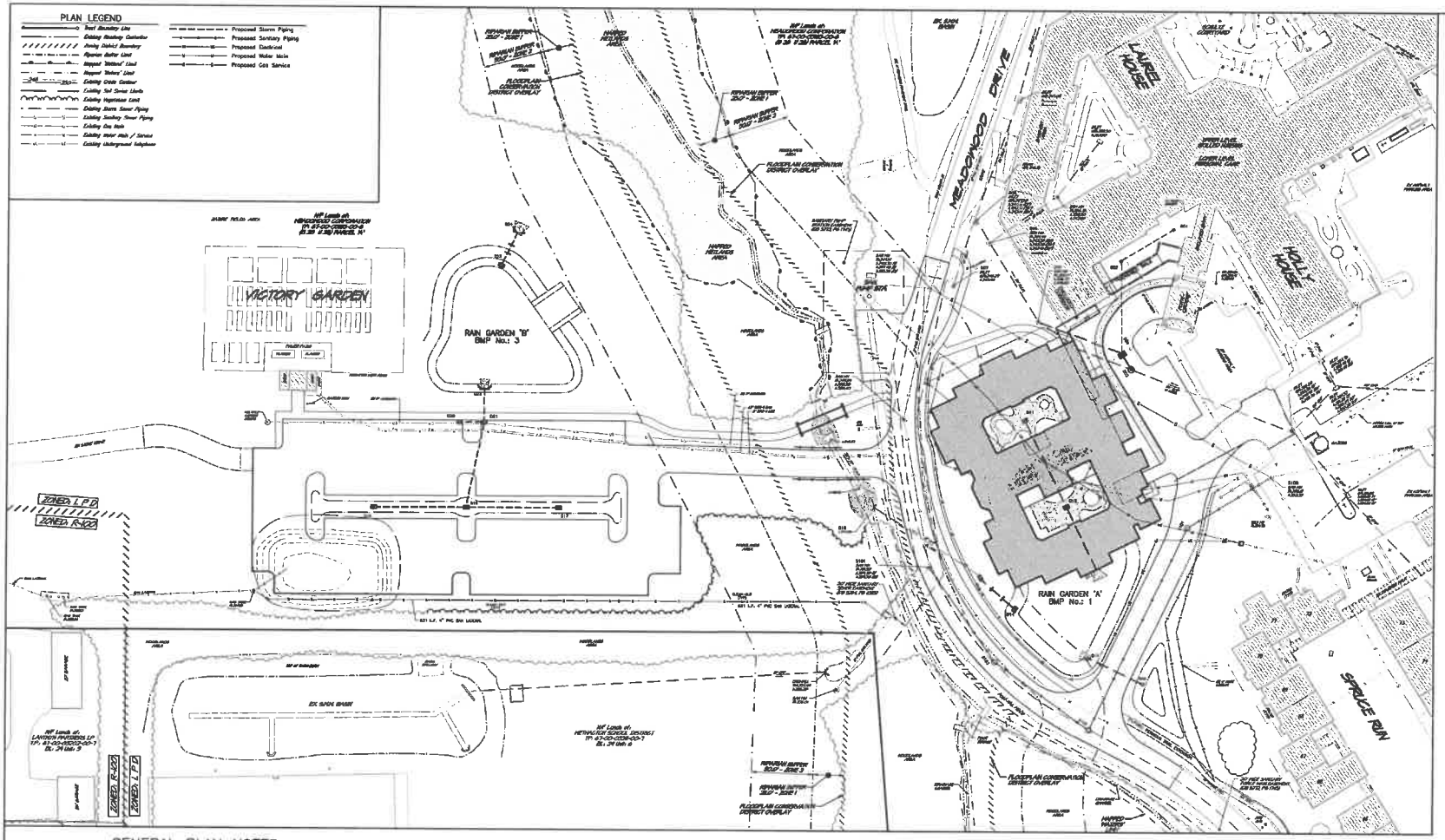
Parcel information:
TP: 67-00-03165-00-6 (B 28 U 26) PARCEL 'A'
TP: 67-00-01069-00-4 (B 28 U 30) PARCEL 'B'
TP: 67-00-03158-00-4 (B 29 U 1) PARCEL 'C'
TP: 67-00-03182-00-1 (B 29 U 2) PARCEL 'D'

Net Tract: 113.2076 Acres
PROS Area: 17.9241 Acres
GROS Area: 131.0317 Acres

MEMORY CARE FACILITIES EXPANSION
SITE IMPROVEMENTS PLAN
PARKING LOT
MEADOWOOD SENIOR LIVING
WORCESTER TOWNSHIP – MONTGOMERY COUNTY – PENNSYLVANIA

WOODROW & ASSOCIATES, INC.
CIVIL ENGINEERS • LAND SURVEYORS
1128 North Bethlehem Pike, Lansdale, PA 19446
Phone: (215) 362-5690 • Fax: (215) 362-5699

Layer List: D18-08_Grace-Pr
Job No.: 00-0606 018
Plan Date: JULY 13, 2020
Sheet No.: 8 of 27



GENERAL PLAN NOTES

Refer to plan sheet 2 "RECORD PLAN – OVERALL TRACT" for all "BASE EXISTING FEATURES and SURVEY NOTES".

Refer to plan sheet 3 "LAYOUT PLAN – MEMORY CARE FACILITY" for all "BASE DEVELOPMENT NOTES".

Refer to plan sheet 7 "SITE IMPROVEMENTS – MEMORY CARE FACILITY" for all "BASE CONSTRUCTION DESIGN NOTES".

BASE CONSTRUCTION DESIGN NOTES:

1. The contractor shall ensure that all necessary permits and approvals have been obtained prior to commencement of any site construction activities.
2. Erosion and sedimentation control measures shall be in place and functional prior to any earth disturbance or grading work.
3. Contractor to ensure compliance with ADA regulations.
4. This project shall be served by public sanitary sewer by Worcester Township and water services by North Penn Water Authority.
5. Nothing shall be permitted to be set on, places or planted within, the area of any utility or storm water easement except lawns or surface low ground cover.
6. Construction materials and procedures shall follow Pennsylvania Department of Transportation Specifications and Standard Drawings (latest edition).
7. Any/all storm water conveyance system(s) and detention facilities shown on these plans are a basic and perpetual part of the storm water management system for this Township, and as such, are to be protected, maintained and preserved in accordance with the approved final plans. The Township shall at its opinion may reserve the right and privilege to enter upon such lands from time to time for the purpose of inspection of said storm water management system in order to determine that the structural design and integrity are being maintained.
8. The proposed finished grading shown on this plan has been based on the proposed building(s) finished floor elevations and has been used to design the storm water management facilities. The contractor shall comply with the grading scheme indicated unless otherwise approved by the Township and the Project design engineers.
9. A minimum of six (6) inches of clean topsoil shall be provided on all lawn and planting areas.
10. Site grading shall be performed in accordance with these plans. The contractor shall be responsible for removing and replacing all soil, planting or unsuitable materials and replacing with suitable materials. A minimum of 12 inch cover shall be compacted to 95% or modified proctor maximum density. A.S.T.M. D-1557 or equivalent. Compaction of areas of pavement shall be as more than 2% above or 2% below optimum. contractor shall provide a geotechnical report prepared by a qualified soils engineer, registered within the state where the work is to be performed. Areas to be utilized under and walkways areas which the building pad area and areas to be paved have been compacted in accordance with these plans.
11. Subbase material for sidewalks, curb, or aisles shall be free of organics and other unsuitable materials. Should subbase be deemed unsuitable, subbase is to be removed and filled with approved fill material compacted to 95% maximum density (as determined by modified proctor method).
12. The minimum slope in grassed areas shall not be less than 2% and the minimum in paved areas shall not be less than 1.
13. Erosion control matting shall be provided on all earth slopes at 3:1 or greater.

SANITARY STRUCTURE SCHEDULE

Structure: S100
Loc: Lot Parking Lot
Type: 48" SAN MH
Gr: 256.73
Inv: 223.22 (I)
Inv: 223.22 (O)

Structure: S101
Loc: Lot Drive
Type: 48" SAN MH
Gr: 254.12
Inv: 248.45 (I)
Inv: 248.35 (O)

Structure: S102
Loc: Lot Drive & New Drive
Type: 48" SAN MH
Gr: 252.73
Inv: 243.74 (I)
Inv: 243.64 (O)

Structure: S103
Loc: Lot Drive
Type: 48" SAN MH
Gr: 253.83
Inv: 244.40 (I)
Inv: 244.40 (O)

Structure: S104
Loc: Lawn Rd
Type: 48" SAN MH
Gr: 252.50
Inv: 239.70 (New I)
Inv: 239.70 (Ex I)
Inv: 239.60 (Ex O)

SANITARY PIPE SCHEDULE

Structure (FY)	Structure (To)	Length (L.F.)	Size (Dia.)	Material	Slope (%)
S100	S101	79	8"	P.V.C (Sch 26)	4.77
S101	S102	183	8"	P.V.C (Sch 26)	1.37
S102	S103	94	8"	P.V.C (Sch 26)	1.00
S103	S104	94	8"	P.V.C (Sch 26)	5.00

STORMWATER STRUCTURE SCHEDULE

Structure ID: D01
Type: YARD DRAIN
Loc: Front of Holly Hse
Gr: 258.50
Inv: 254.00 (O)

Structure ID: D02
Type: YARD DRAIN
Loc: Front of Holly Hse
Gr: 258.50
Inv: 253.50 (I)
Inv: 253.50 (O)

Structure ID: D03
Type: DOMES SIN MH
Loc: Front MC Drive
Gr: 258.18
Inv: 247.23 (I)
Inv: 247.23 (O)

Structure ID: D04
Type: Std Box w/ 4' Top
Loc: Front MC Drive
Gr: 258.04
Inv: 247.30 (I)
Inv: 246.98 (W' O)

Structure ID: D05
Type: Comb. DI&I MH
Loc: Front MC Bldg
Gr: 253.35
Inv: 248.73 (I)
Inv: 248.63 (O)

Structure ID: D06
Type: Comb. DI&I MH
Loc: Front MC Bldg
Gr: 249.66
Inv: 242.5 (12" I)
Inv: 242.5 (18" I)
Inv: 242.41 (36" O)

Structure ID: D07
Type: Catch Inlet
Loc: Long Rd Shoulder
Gr: 248.37
Inv: 245.95 (O)

Structure ID: D08
Type: Catch Inlet
Loc: Long Rd Shoulder
Gr: 247.50
Inv: 243.33 (I)
Inv: 243.14 (36" O)

Structure ID: D09
Type: Flared End Section
Loc: Long Rd @ New Drive
Inv: 247.30 (O)

Structure ID: D10
Type: Flared End Section
Loc: Rain Garden "A"
Inv: 249.50 (O)

Structure ID: D11
Type: Std Box w/ 4' Top
Loc: Memory Care Courtyard
Gr: 252.42
Inv: 252.14 (I)
Inv: 250.09 (O)

Structure ID: D12
Type: Std Box w/ 4' Top
Loc: Memory Care Courtyard
Gr: 258.43
Inv: 251.73 (I)
Inv: 251.36 (O)

Structure ID: D13
Type: Retaining Wall Outflow
Loc: Rain Garden "A"
Inv: 251.30 (O)

Structure ID: D14
Type: Rain Garden "A" Outlet Structure
Loc: Rain Garden "A"
Gr: 256.50
Inv: 248.33 (I) (6" C.O.)
Inv: 248.33 (O)

Structure ID: D15
Type: Std Box w/ 4' Top
Loc: Long Rd Shoulder
Gr: 251.50
Inv: 247.98 (O)

Structure ID: D16
Type: Ex Pipe Outlet
Loc: Channel
Inv: 244.30 (O)

Structure ID: D17
Type: Std Box w/ 4' Top
Loc: Parking Lot
Gr: 253.85
Inv: 253.10 (O)

Structure ID: D18
Type: Std Box w/ 4' Top
Loc: Parking Lot
Gr: 253.83
Inv: 253.10 (O)

Structure ID: D19
Type: Std Box w/ 4' Top
Loc: Parking Lot
Gr: 253.83
Inv: 252.95 (I)
Inv: 252.95 (I,x3)
Inv: 252.18 (O)

Structure ID: D20
Type: Std Box w/ 4' Top
Loc: Parking Lot
Gr: 256.50
Inv: 252.06 (O)

Structure ID: D21
Type: Std Box w/ 4' Top
Loc: Parking Lot
Gr: 256.50
Inv: 251.63 (I)
Inv: 251.33 (O)

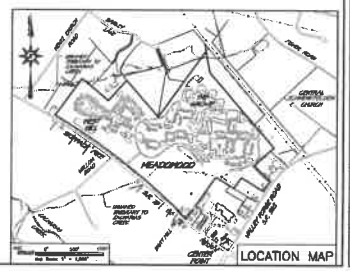
Structure ID: D22
Type: D-4' Endwall
Loc: Rain Garden "B"
T.W.: 253.50
Inv: 251.00 (O)

Structure ID: D23
Type: Rain Garden "B" Outlet Structure
Loc: Rain Garden "B"
Gr: 253.25
Inv: 251.00 (12" Bact Weir)
Inv: 247.08 (O)

Structure ID: D24
Type: D-4' Endwall
Loc: Rain Garden "B"
T.W.: 249.00
Inv: 246.48 (O)

STORMWATER PIPE SCHEDULE

Structure (FY)	Structure (To)	Length (L.F.)	Size (Dia.)	Material	Slope (%)
D01	D02	56	12"	H.D.P.E.	0.50
D01	D04	74	12"	H.D.P.E.	0.50
D02	D04	14	36"	R.C.P.	0.50
D04	D05	71	36"	R.C.P.	0.34
D05	D06	71	36"	R.C.P.	5.09
D06	D08	17	36"	R.C.P.	0.59
D07	D08	59	15"	R.C.P.	3.30
D09	D10	47	18"	H.D.P.E.	0.00
D11	D12	78	18"	H.D.P.E.	0.50
D12	D13	58	18"	H.D.P.E.	0.50
D14	D15	38	15"	H.D.P.E.	1.00
D15	D16	104	18"	C.M.P.	1.30
D17	D19	75	15"	H.D.P.E.	1.00
D18	D19	75	15"	H.D.P.E.	1.00
D19	D21	70	15"	H.D.P.E.	1.00
D20	D21	27	18"	H.D.P.E.	0.90
D21	D22	20	15"	H.D.P.E.	3.00
D23	D24	30	15"	H.D.P.E.	3.00



REVISIONS

Scale in Feet (1" = 40')

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CALL 1-800-242-1776
PROJECT SERIAL NUMBER FOR DESIGN

Applicant:
THE MEADOWOOD CORPORATION
c/o Paul Handeman
President/CEO
3320 Sidpeck Pike
(Po Box 820)
Wayneboro, PA 19490

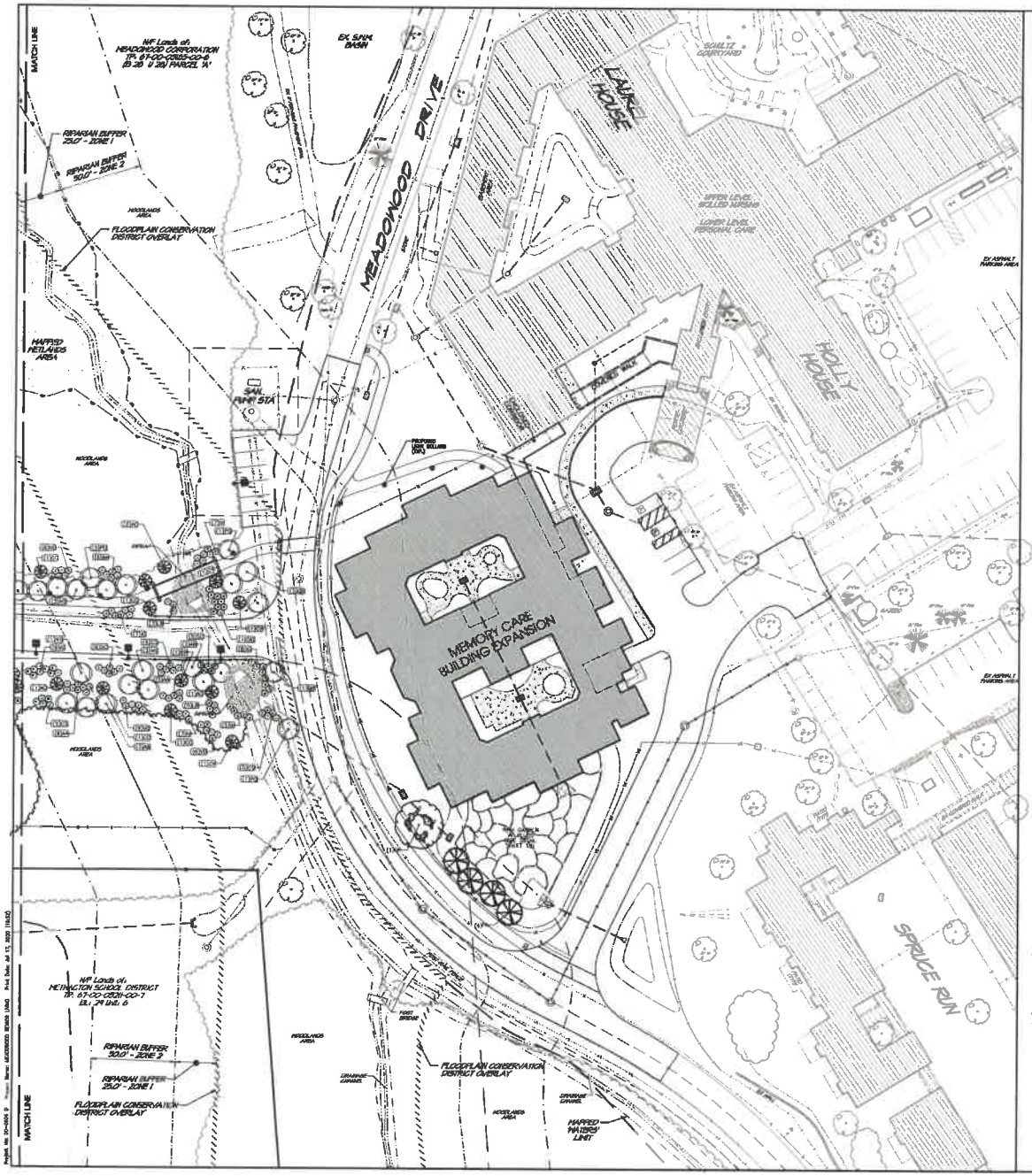
Parcel Information:
TP: 67-00-03185-00-6 (B 26 U 26) PARCEL "A"
TP: 67-00-01099-00-4 (B 26 U 30) PARCEL "B"
TP: 67-00-03196-00-6 (B 29 U 1) PARCEL "C"
TP: 67-00-03198-00-1 (B 29 U 2) PARCEL "D"

Net Tract: 118.2568 Acres
PHS Lease: 12.6761 Acres
Gross Area: 131.0817 Acres

MEMORY CARE FACILITIES EXPANSION
PROJECT UTILITY LAYOUT PLAN
MEADOWOOD SENIOR LIVING
WORCESTER TOWNSHIP – MONTGOMERY COUNTY – PENNSYLVANIA

WOODROW & ASSOCIATES, INC.
MUNICIPAL / CIVIL CONSULTING ENGINEERS
1146 MUNICIPAL DRIVE, SUITE 100, LANSDALE, PA 19446
Phone: (215) 362-5649 Fax: (215) 362-5679

Layout List: D18-09_UKI
Job No: 00-0606 D16
Plan Date: JULY 13, 2020
Sheet No: 9 of 27



GENERAL PLAN NOTES

Refer to plan sheet 3 "RECORD PLAN – OVERALL TRACT" for all "BASE EXISTING FEATURES and SURVEY NOTES".

Refer to plan sheet 3 "LAYOUT PLAN – MEMORY CARE FACILITY" for all "BASE DEVELOPMENT NOTES".

Refer to plan sheet 7 "SITE IMPROVEMENTS – MEMORY CARE FACILITY" for all "BASE CONSTRUCTION DESIGN NOTES".

BASE LANDSCAPING NOTES:

1. All topsoil shall be a minimum 4" in all sod areas and 8" in tree, shrub and groundcover beds, including parking lot island beds.
2. Planting behind perpendicular parking is to be located a minimum of 3' behind the curb line.
3. All landscape and grass areas are to be hand raked and left clear of all stones, rock, construction debris and any unfeasible materials.
4. Landscape contractor will locate all underground utilities prior to any planting installations.
5. All areas to be landscaped must be treated with a pre-emergence herbicide (surflan, dacthal or approved equal) in accordance with applicable federal, state regulations and manufacture's instructions.
6. Landscape contractor to supply and install a pervious weed barrier (Dewitt, DuPont or approved equal) in accordance with manufacturer's installation within all landscape bed mulch beds. All weed barrier will be overlapped a minimum of 6" at all seams. At bed locations, barrier should be cut in an "X" pattern to accommodate root ball and replaced after plant has been installed.
7. All proposed landscaping to be nursery grown, typical of their species or variety. They are to have normal vigorous root systems, free from defects and infestations and in accordance with ANSI Z60.1.
8. All proposed plantings should be installed per standards of the "American Association of Nurserymen" and state nursery/ landscape associations with regard to planting, pit size, backfill mixture, staking and guying.
9. All planting containers and baskets shall be removed during planting. All plants shall be set plumb and positioned so that the top of the root collar material, or is no more than 1 in (25 mm) below adjacent finished grade. Replace amended backfill in 6-inch layers and compact backfill to eliminate voids. Contractor shall provide a four-inch high earthen watering saucer along the perimeter of each planting pit. Contractor shall water newly planted vegetation prior to mulching planting pit. All voids shall be filled and settling mitigated as required.
10. After initial watering and prior to mulching, contractor shall apply herbicides and pre-emergent herbicides as required to eliminate any weed seeds or plants present on root ball.
11. All planting beds and pits except for landscape islands adjacent to the building shall be mulched with double ground hardwood mulch at a minimum depth of 3".
12. Plant material shall be guaranteed for 18 Months from the date of substantial completeness. The contractor shall replace plants, dead, unhealthy, dying or damaged through loss of branches and/or foliage. Loam that are not in good condition at the end of the guarantee period shall be repaired until a good lawn results.
13. It is understood that the owner shall assume responsibility for watering all plant material and lawn area beginning with the date of substantial completeness.
14. Seedbed Preparation:
   a. Apply limestone and fertilizer according to soil tests or fertilizer may be applied at the rate of 200 pounds per acre or 4 pounds per 1000 square feet using 10-20-10 or equivalent. In addition, 200 pounds 4-1-3 per acre or equivalent of slow release nitrogen may be used in lieu of lightening.
   b. Work lime and fertilizer into the soil as practical to a depth of 4-inches with a disc, spring tooth harrow or other suitable equipment. The final harrowing or disking operation should be parallel to the general contour. Continue tillage until a reasonable uniform, fine seedbed is prepared. All hard, clay or silty soils and coarse soils should be rolled to firm the seedbed whenever feasible.
   c. Inspect seedbed just before seeding. If traffic has left the topsoil compacted, the area must be ratilled and firmed as outlined below.
   d. Grass seeding mixture and application rate:

Percentage of Total weight	Application Rate	Seed Type	Minimum Germination Allowed
50 %	5-7 lbs per 1000 Sq. Ft.	"REBEL" Tall Fescue	90-97
35 %		"FORETOWN" Perennial Rye	90-95
5 %		"SHEDDER" Rectop	90-92

   e. In areas designated as sod, Nexius sod is to be installed on minimum 4" topsoil. Areas to be seeded are to be prepared as noted above for seeded areas.

RIPARIAN CORRIDOR MITIGATION PLANT SCHEDULE

Plan Symbol	Quantity	Botanical Name	Common Name	Minimum Planting Height	Minimum Planting Caliper	Minimum Planting Height	Remarks
AR	10	Acer rubrum	Red Maple	1.5'-2'	–	10-12'	B&B
NS	11	Nyssa sylvatica	Blackgum	1.5'-2'	–	10-12'	B&B
PO	7	Platanus occidentalis	American Sycamore	1.5'-2'	–	10-12'	B&B
QB	4	Quercus bicolor	Swamp White Oak	1.5'-2'	–	10-12'	B&B
AC	9	Amelanchier canadensis	Shadblow Serviceberry	–	3"-4"	6'-8'	B&B
RB	5	Betula nigra	River Birch	–	3"-4"	6'-8'	B&B
CC	8	Cornus canadensis	Eastern Redbud	–	3"-4"	6'-8'	B&B
CV	6	Chionanthus virginicus	Fringetree	–	3"-4"	6'-8'	B&B
PA	18	Aronia arbutifolia	Red Chokeberry	–	–	18-24"	CONT
CS	19	Cornus sericea	Red Twig Dogwood	–	–	18-24"	CONT
IB	36	Ilex glabra	Inkberry	–	–	12-18"	CONT
IV	27	Ilex verticillata	Winterberry	–	–	18-24"	CONT
LB	11	Lindera benzoin	Spicebush	–	–	18-24"	CONT
SC	15	Sambucus canadensis	Common Elderberry	–	–	18-24"	CONT
VD	34	Viburnum dentatum	Arrowwood Viburnum	–	–	18-24"	CONT
	230	TOTAL TREES & SHRUBS					

* RIPARIAN BUFFER PLANTING TO BE WITH SPECIES ACCORDING TO ALL GUIDELINES AND RECOMMENDATIONS WITHIN PA DEP BMP MANUAL CHAPTER 6.7.1 – Riparian BUFFER RESTORATION 363-0300-001

PLAN LEGEND

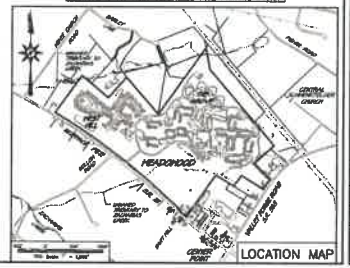
- Base Boundary Line
- Existing Boundary Centerline
- Zoning District Boundary
- Riparian Buffer Limit
- Mapped Wetland Limit
- Mapped Waters' Limit
- Existing Vegetation Limit
- Existing Storm Sewer Piping
- Existing Sanitary Sewer Piping
- Existing Gas Main
- Existing Water Main / Service
- Existing Underground Telephone
- Proposed Storm Piping
- Proposed Sanitary Piping
- Proposed Electrical
- Proposed Water Main
- Proposed Gas Service

LIGHTING INFORMATION

Luminaire Schedule: Lumark – Ridgeview

Symbol	Qty	Catalog Number	IES File	Color Temperature	Mounting Height	Avg. Lighting Level (Lux) (Fc)
		LDN-Lard-D22-C-MCSL-BK-MA1205-M2	Lumark IES Test File Pending	3000K	12'	0.0 fc

Refer to (PCSM) PROJECT CONSTRUCTION DETAILS (Sheet 1) for Rain Garden "A" Plug Planting Details.



LOCATION MAP

REVISIONS

DATE | DESCRIPTION

Scale in Feet (1" = 30')

CALL PLAN INFORMATION & PLANS ARE TO BE STRICTLY FOLLOWED AS SHOWN, TO BE STRICTLY FOLLOWED AS SHOWN.

THE PLAN AND PLANS PROVIDED ARE INTENDED FOR USE ONLY FOR THE PROJECT AS SPECIFIED. ANY OTHER USE, ALTERATION OR ADDITION TO THE PLAN OR PLANS IS PROHIBITED WITHOUT WRITTEN PERMISSION.

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

CALL 1-800-242-1776
PROJECT SERIAL NUMBER FOR SERIMA

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL TIMOTHY P. WOODROW ENGINEER No. 43979-E

Applicant:

THE MEADOWOOD CORPORATION
c/o Paul Masterson
President/CEO
1400 Stimson Ave
(PO Box 870)
Worcester, PA 19490

Parcel Information:

TP. 67-00-03186-00-8
(B 26 U 26) PARCEL "A"
TP. 67-00-01069-00-4
(B 26 U 30) PARCEL "B"
TP. 67-00-03188-00-1
(B 26 U 1) PARCEL "C"
TP. 67-00-03189-00-1
(B 26 U 2) PARCEL "D"

Bd Tract: 113.3058 Acres
PCCC Acres: 12.8761 Acres
GROSS Area: 131.0819 Acres

MEMORY CARE FACILITES EXPANSION
(PCSM) LANDSCAPING & LIGHTING PLAN – MEMORY CARE
MEADOWOOD SENIOR LIVING
WORCESTER TOWNSHIP – MONTGOMERY COUNTY – PENNSYLVANIA

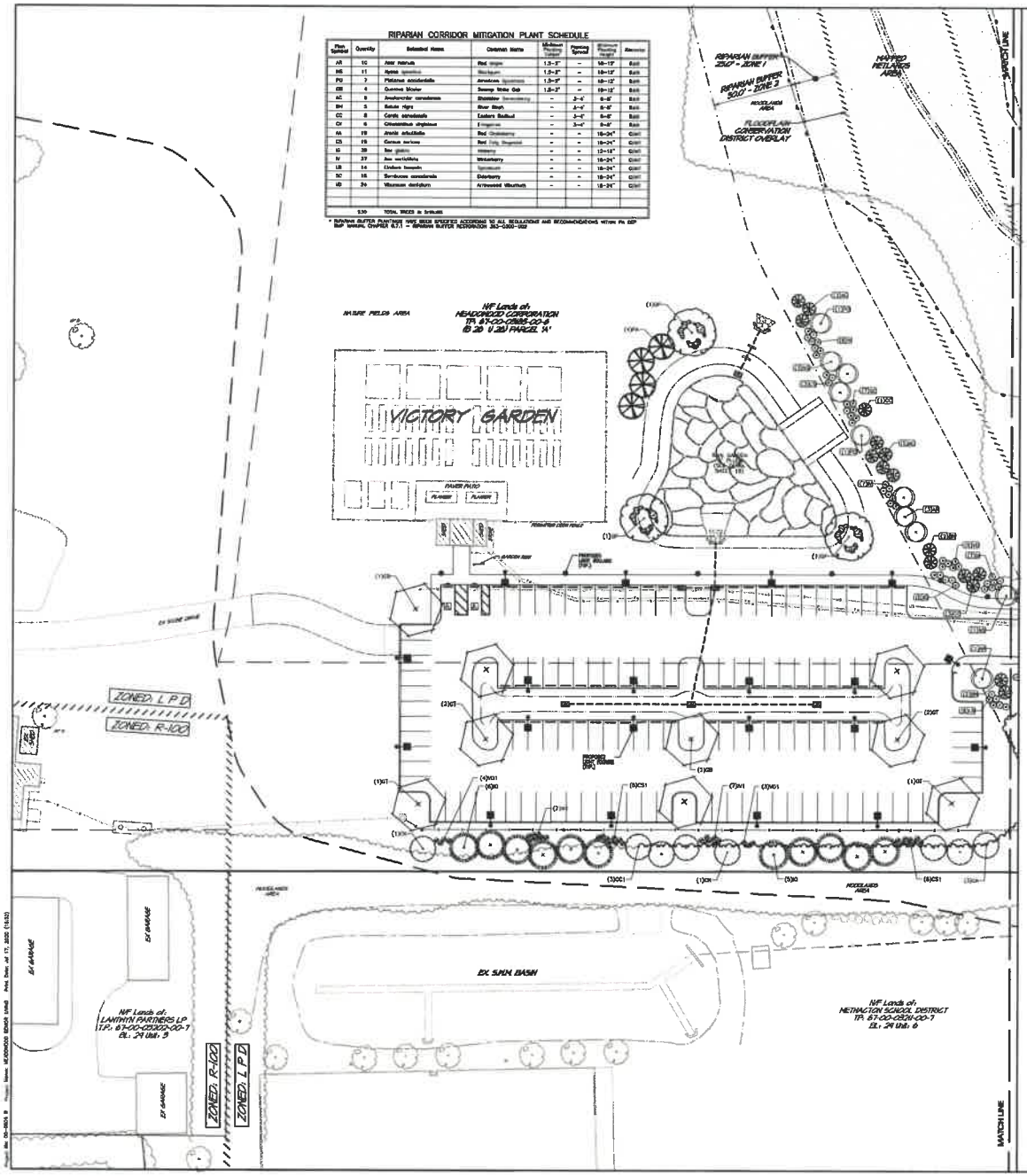
WOODROW & ASSOCIATES, INC.
CIVIL ENGINEERS – PLANNERS – SURVEYORS
1100 North Bethlehem Pike, Suite 2, Lansdale, PA 19446
Phone: (215) 362-5619 Fax: (215) 362-5619

Layer List: D18-10_Lard-MC
Job No: 00-0506 D18
Plan Date: JULY 13, 2020
Sheet No: 10 of 27

RIPARIAN CORRIDOR MITIGATION PLANT SCHEDULE

Plan Symbol	Quantity	Botanical Name	Common Name	Ht.@Root Planting Height	Planting Spread	Minimum Mature Height	Remarks
AR	10	Acer rubrum	Red Maple	1.5-2"	–	50-70'	B&B
NS	11	Nyssa sylvatica	Blackgum	1.5-2"	–	50-70'	B&B
PU	7	Platanus occidentalis	American Sycamore	1.5-2"	–	60-75'	B&B
QB	4	Quercus bicolor	Swamp White Oak	1.5-2"	–	60-75'	B&B
AC	9	Amelanchier canadensis	Shadblow Serviceberry	–	3-4'	6-8'	B&B
BM	5	Betula nigra	River Birch	–	3-4'	6-8'	B&B
CC	8	Cercis canadensis	Eastern Redbud	–	3-4'	6-8'	B&B
CV	6	Chionanthus virginicus	Fringetree	–	3-4'	6-8'	B&B
HA	19	Hydrangea arborescens	Red Chokeberry	–	–	18-24"	Cont
CS	19	Cornus sericea	Red Twig Dogwood	–	–	18-24"	Cont
IG	38	Ilex glabra	Inkberry	–	–	12-15"	Cont
IV	37	Ilex verticillata	Winterberry	–	–	18-24"	Cont
LB	14	Lindera benzoin	Spicebush	–	–	18-24"	Cont
SC	16	Symphoricarpos orbiculatus	Coralberry	–	–	18-24"	Cont
VD	36	Viburnum dentatum	Arrowwood Viburnum	–	–	18-24"	Cont
	230	TOTAL TREES & SHRUBS					

* RIPARIAN BUFFER PLANTINGS WERE MADE SPECIFIC ACCORDING TO ALL REGULATIONS AND RECOMMENDATIONS within PA DEP BMP MANUAL CHAPTER 6.7.1 – RIPARIAN BUFFER RESTORATION 363-2000-002



GENERAL PLAN NOTES

Refer to plan sheet 2 "RECORD PLAN – OVERALL TRACT" for all "BASE EXISTING FEATURES and SURVEY NOTES".

Refer to plan sheet 3 "LAYOUT PLAN – "MEMORY CARE FACILITY" for all "BASE DEVELOPMENT NOTES".

Refer to plan sheet 7 "SITE IMPROVEMENTS – "MEMORY CARE FACILITY" for all "BASE CONSTRUCTION DESIGN NOTES".

BASE LANDSCAPING NOTES:

1. All lawns shall be a minimum 4" in all sod areas and 8" in tree, shrub and groundcover beds, including parking lot island beds.
2. Planting behind perpendicular parking is to be located a minimum of 3' behind the curb line.
3. All landscape and grass areas are to be hand raked and left clear of all stones, rock, construction debris and any unsuitable materials.
4. Landscape contractor will locate all underground utilities prior to any planting installations.
5. All areas to be landscaped must be treated with a pre-emergence herbicide (portion, dacial or suprend equal) in accordance with applicable federal, state regulations and manufacturer's instructions.
6. Landscape contractor to supply and install a previous area barrier (Dowtle, DuPont or approved equal) in accordance with manufacturer's instructions under all landscape and mulch beds. 24" wood barrier will be overlapped a minimum of 6" at all seams. At sand locations, barrier should be cut in an "X" pattern so to accommodate root ball and replaced after plant has been installed.
7. All proposed landscaping to be nursery grown, tagged at their species or variety. They are to have normal vigorous root systems, free from defects and infestations and in accordance with ANSI Z60.1.
8. All proposed plantings should be installed per standards of the "American Association of Nurserymen" and state nursery/landscape associations with regard to planting, pit size, backfill mixture, staking and guying.
9. All planting containers and baskets shall be removed during planting. All plants shall be set plumb and positioned so that the top of the root collar material, or be no more than two (2") inches above finished grade. Contractor shall provide a four-inch high x 48-inch diameter mulch ring around each plant. Contractor shall provide an four-inch high x 48-inch diameter mulch ring around each planting pit. Contractor shall water newly planted vegetation prior to mulching planting pit. All voids shall be filled and settling mitigated as required.
10. After initial watering and prior to mulching, contractor shall apply herbicides and pre-emergent herbicides as required to eliminate any weed seeds or plants present on root ball.
11. All planting beds and pits except for landscape islands adjacent to the building shall be mulched with double ground hardwood mulch at a minimum depth of 3".
12. Plant material shall be guaranteed for 15 months from the date of substantial completeness. The contractor shall replace plants, dead, unsightly, dying or damaged through loss of blossoms and/or foliage. Leaves that are not in good condition at the end of the guarantee period shall be replaced until a good best results.
13. It is understood that the owner shall assume responsibility for watering all plant material and lawn area beginning with the date of substantial completeness.
14. Seeded Preparation:
   a. Apply amendments and fertilizer according to soil tests or fertilizer may be applied at the rate of 780 pounds per acre or 8 pounds per 1000 square feet using 10-20-10 or equivalent. In addition, 300 pounds 4-1-3 per acre or equivalent of slow release nitrogen may be used in lieu of topdressing.
   b. Work lime and fertilizer into the soil as practical to a depth of 4-inches with a disc, spring tooth harrow or other suitable equipment. The final harrowing or disking operation should be parallel to the contours of the site. Continue tilling until a reasonable uniform, fine seedbed is prepared. All hot stone or silty soils and scarce subsoil should be raked to form the seedbed wherever feasible.
   c. Inspect seedbed just before seeding. If traffic has left the topsoil compacted, the area must be raked and turned as outlined below.
   d. Grass seeding mixture and application rate:

Percentage of total weight	Application Rate	Seed type	Minimum Germination Allowed
50 %	5-7 lbs	"REBEL" Tall Fescue	80-97
30 %	3 lbs	"VORSTONE" Perennial Rye	80-88
5 %	1000 Sq. ft.	"STREAKER" Bluegrass	80-92

   e. In areas designated as sod, fescue sod is to be installed at minimum 4" topsoil. Areas to be seeded are to be prepared as noted above for seeded areas.

LANDSCAPING REQUIREMENTS

Item	Requirement	Provided
SALDO Section 130-38(F) Tree Replacement	Less than 20% of the trees on site are proposed to be removed, therefore no replacement trees are required.	N / A
SALDO Section 130-26.5(D)(4)(c) Street Trees	Quantity, based on 25 feet on center for each side of the street No new streets proposed, therefore street trees are not required.	N / A
SALDO Section 130-26.5(D)(5) Buffering Buffer	Along the side and rear property lines of all developments, where existing vegetation is not sufficient: One (1) Evergreen tree for each 30' One (1) Ornamental/Shade tree for each 50' One (1) Shrub for each 10' 365' adjacent to proposed parking requires additional buffering. 365/30 = 11 Evergreen trees 365/50 = 8 Ornamental/Shade trees 365/10 = 37 Shrubs	Satisfied by Existing Vegetation 11 Evergreen trees 8 Ornamental trees 37 Shrubs
SALDO Section 130-26.2(B) Off-street parking	Parking area greater than 2,000 of shall have a min. of 10% planted to landscaping. Total parking area: 43,540 sf Landscaping area: 8,080 8080/43540 = 17% One tree shall be provided per 15 parking spaces. 135 parking spaces: 135/15 = 9 trees	17% 9 Shade trees
SALDO Section 130-26.2(F) Drainage basin and detention basin landscaping	One shade tree for each 50 L.f. of basin perimeter. Up to 20% of the shade trees may be substituted with an option of two flowering trees, one evergreen or 10 shrubs for every shade tree. Rain Garden 'A' (RGA) + Rain Garden 'B' (RGB) = 587 Total Perimeter 587/50 = 12 Tree Equivalent Plugs for Rain Garden A Plugs for Rain Garden B	4 Shade trees 8 Evergreen trees 12 Total 3184 plugs 3153 plugs
SALDO Section 130-26.2(G) Individual Dwelling Unit Landscaping	Each multifamily dwelling unit shall have one deciduous or evergreen tree. No Additional Dwelling Units	N / A
	TOTAL PLANTINGS PROVIDED	13 Shade Trees 19 Evergreen Trees 12 Flowering Trees 37 Shrubs 77 TOTAL + plugs

PLANTING SCHEDULE

Plan Symbol	Quantity	Botanical Name	Common Name	Ht.@Root Planting Height	Planting Spread	Minimum Mature Height	Remarks
GS	3	Gleditsia triacanthos 'Sunburst'	'Princeton Sentry' Ginkgo	3.5"	8'-9'	14'-18'	B&B
GT	9	Gleditsia triacanthos var. inermis	'Halloween Honeylocust'	3.5"	8'-9'	14'-18'	B&B
QP	4	Quercus palustris	Pin Oak	3.5"	8'-9'	14'-18'	B&B
CC1	3	Cercis canadensis 'Forest Pansy'	'Forest Pansy' Eastern Redbud	2.5"	4'-6'	8'	B&B
CK	5	Cornus kousa	Chinese Dogwood	2.5"	4'-6'	8'	B&B
IC	11	Ilex opaca	American Holly	–	5'-6'	6'	B&B
PA	8	Picea abies	Norway Spruce	–	6'-7'	8'	B&B
CS1	16	Cornus sericea	Red Twig Dogwood	–	–	36"	CONT.
IV1	14	Ilex verticillata 'Jim Dandy'	'Jim Dandy' Winterberry	–	–	30"	CONT.
VD1	7	Viburnum dentatum	Arrowwood Viburnum	–	–	30"	CONT.
	72	TOTAL PLANTINGS					

SEE SHEET 18 FOR RAIN GARDEN PLUG PLANTING SCHEDULES

PLAN LEGEND

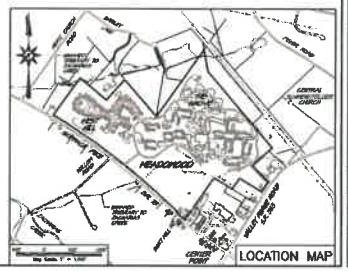
- Proposed Storm Piping
- Proposed Sanitary Piping
- Proposed Electrical
- Proposed Water Main
- Proposed Gas Service
- Property Boundary Line
- Existing Roadway Centerline
- Zoning District Boundary
- Riparian Buffer Limit
- Mapped 'Wetland' Limit
- Mapped 'Stream' Limit
- Existing Vegetation Limit
- Existing Storm Sewer Piping
- Existing Sanitary Sewer Piping
- Existing Gas Main
- Existing Water Main / Service
- Existing Underground Telephone

LIGHTING INFORMATION

Luminaire Schedule: Lumark – Ridgeview/ TEVA Apollo Bollard

Symbol	Qty	Catalog Number	IES File	Color Temperature	Mounting Height	Lighting Power Watts
	34	LTBR-SL-6-CSD-E-7LED-1000	LTBR-SL-6-CSD-7LED-1000.IES	3000K	13'	1.7 to
	15	APB-LED-104	APB-LED-104-119x38x4.87.ies	4000K*	3.3'	

* CONFIRM COLOR TEMPERATURE (3000K has the warm and available)



REVISIONS

No.	DATE	DESCRIPTION

SCALE: 1" = 20'

ONLY PLANS WATERMARKED A SHARP PROFESSIONAL SEAL OF COMMONWEALTH OF PENNSYLVANIA IS AN OFFICIAL DOCUMENT.

THE PLAN THE SEAL PERTAINS TO, IS THE PROPERTY OF THE OWNER AND PROJECT MANAGER, WOODRUFF & ASSOCIATES, INC. THE USE OF THIS PLAN FOR ANY PURPOSE OTHER THAN THE INTENDED PROJECT WITHOUT WRITTEN PERMISSION IS PROHIBITED.

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CALL 1-800-242-1776 PROJECT SERIAL NUMBER FOR DESIGN

Applicant:
THE MEADOWOOD CORPORATION
c/o Paul Nenderman
President/CEO
3305 Skippack Pike
(PO Box 400)
Worcester, PA 19490

Parcel Information:
TP: 67-00-03185-00-3
(B: 29 U: 28) PARCEL 'A'
TP: 67-00-01029-00-4
(B: 29 U: 28) PARCEL 'B'
TP: 67-00-03158-00-1
(B: 29 U: 1) PARCEL 'C'
TP: 67-00-03159-00-1
(B: 29 U: 2) PARCEL 'D'

Net Tract: 118.5058 Acres
ROW Lands: 13.8781 Acres
GROSS Area: 131.3817 Acres

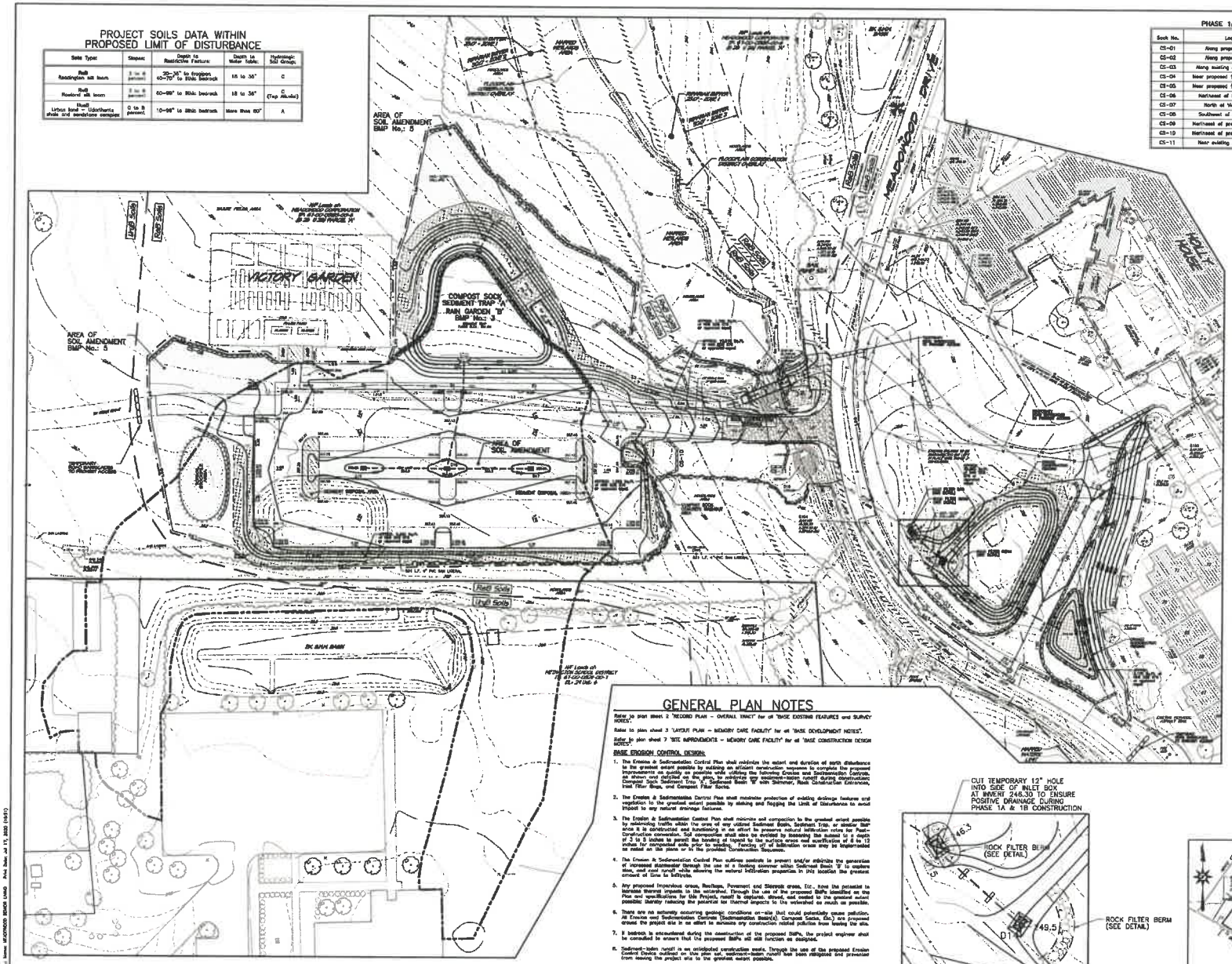
MEMORY CARE FACILITIES EXPANSION
(PCSM) LANDSCAPING & LIGHTING PLAN – PARKING LOT
MEADOWOOD SENIOR LIVING
WORCESTER TOWNSHIP – MONTGOMERY COUNTY – PENNSYLVANIA

WOODRUFF & ASSOCIATES, INC.
MUNICIPAL / CIVIL CONSULTING ENGINEERS
1186 Morris Avenue, Box 1000, Schwenksville, PA 19473
Phone: (610) 942-2448 Fax: (610) 942-2819

Layer List: D18-11_Land-PL
Job No.: 00-0606 D18
Plan Date: JULY 13, 2020
Sheet No.: 11 of 27

PROJECT SOILS DATA WITHIN PROPOSED LIMIT OF DISTURBANCE

Soils Type:	Slopes:	Depth to Restrictive Feature:	Depth to Water Table:	Hydrologic Soil Group:
RwB Readington silt loam	3 to 8 percent	30–36" to fragipan, 60–70" to lithic bedrock	18 to 36"	C
RvB Rowland silt loam	3 to 8 percent	60–99" to lithic bedrock	18 to 36"	C (Top Stratum)
HuaB Urban land – Udorthents, shale and sandstone complex	0 to 8 percent	10–99" to lithic bedrock	More than 80"	A



PHASE 1A & 1B – COMPOST FILTER SOCK SCHEDULE

Sock No.	Location	Sock Size	Slope Length Above Sock	Slope % Above Sock	Sock Length (L.F.)
CS-01	Along proposed roadway	12"	248	3.80%	113
CS-02	Along proposed roadway	12"	105	7.62%	234
CS-03	Along existing Meadowood Drive	12"	233	4.72%	278
CS-04	Near proposed footbridge crossing	12"	49	7.43%	55
CS-05	Near proposed footbridge crossing	24"	580	4.04%	96
CS-06	Northeast of Rain Garden 'B'	24"	513	4.32%	114
CS-07	North of Victory Gardens	24"	480	5.00%	252
CS-08	Southwest of Victory Gardens	12"	343	2.80%	128
CS-09	Northwest of proposed parking lot	18"	422	3.20%	88
CS-10	Northwest of proposed parking lot	12"	35	8.57%	42
CS-11	Near existing culvert crossing	12"	77	4.22%	38

PLAN LEGEND

- Tract Boundary Line
- Existing Roadway Centerline
- Floodplain Conservation District Limits
- Riparian Buffer Limit
- Mapped 'Wetland' Limit
- Mapped 'Water' Limit
- 248 / 250 — Existing Grade Contour
- Existing Soil Series Limits
- Existing Vegetation Limit
- Existing Storm Sewer Piping
- Existing Sanitary Sewer Piping
- Existing Gas Main
- Existing Water Main / Service
- Existing Underground Telephone
- + 257.3 — Proposed Spot Elevation
- 258 / 250 — Final Grade Contour
- Proposed Storm Piping
- Proposed Sanitary Piping
- NPDES Permit Limit
- Compost Filter Sock
- Orange Construction Fencing
- LOD — Limit of Disturbance
- E&S BMP Drainage Area
- Area of Soil Amendment
- Area of Sediment Disposal
- Erosion Control Blanketing

GENERAL PLAN NOTES

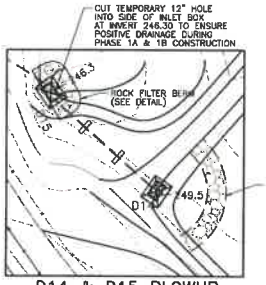
Refer to plan sheet 2 "RECORD PLAN – OVERALL TRACT" for all "BASE EXISTING FEATURES and SURVEY NOTES".

Refer to plan sheet 3 "LAYOUT PLAN – MEMORY CARE FACILITY" for all "BASE DEVELOPMENT NOTES".

Refer to plan sheet 7 "SITE IMPROVEMENTS – MEMORY CARE FACILITY" for all "BASE CONSTRUCTION DESIGN NOTES".

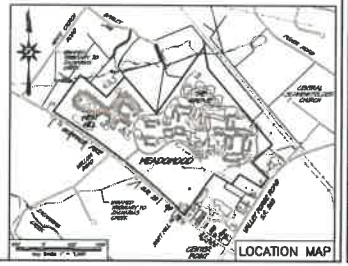
BASIC EROSION CONTROL DESIGN:

1. The Erosion & Sedimentation Control Plan shall minimize the extent and duration of earth disturbance to the greatest extent possible by outlining an efficient construction sequence to complete the proposed improvements as quickly as possible while utilizing the following Erosion and Sedimentation Controls, as shown and detailed on the plans, to minimize any sediment-laden runoff during construction: Compost Filter Sock, Sediment Trap, Sediment Basin 'B' with Skimmer, Rock Construction Entrances, Inlet Filter Bags, and Compost Filter Socks.
2. The Erosion & Sedimentation Control Plan shall maximize protection of existing drainage features and vegetation to the greatest extent possible by staking and flagging the Limit of Disturbance to avoid impact to any natural drainage features.
3. The Erosion & Sedimentation Control Plan shall minimize soil compaction to the greatest extent possible by restricting traffic within the area of any utilized Sediment Basin, Sediment Trap, or similar BMP once it is constructed and functioning in an effort to preserve natural infiltration rates for Post-Construction conversion. Soil compaction shall also be avoided by loosening the subsoil to a depth of 3 to 5 inches to permit the bonding of topsoil to the surface areas and scarification of 8 to 12 inches for compacted soils prior to seeding. Fencing of alteration areas may be implemented as noted on the plans or in the provided Construction Sequence.
4. The Erosion & Sedimentation Control Plan outlines controls to prevent and/or minimize the generation of increased stormwater through the use of a floating skimmer within Sediment Basin 'B' to capture silt, and oil and runoff while allowing the natural infiltration properties in this location the greatest amount of time to infiltrate.
5. Any proposed impervious areas, Rooftops, Pavement and Sidewalk areas, Etc., have the potential to increase thermal impacts to the watershed. Through the use of the proposed BMPs identified on the Plan and specifications for this Project, runoff is captured, stored and treated to the greatest extent possible thereby reducing the potential for thermal impacts to the watershed as much as possible.
6. There are no naturally occurring geologic conditions on-site that could potentially cause pollution. All Erosion and Sedimentation Controls (Sedimentation Basin(s), Compost Socks, Etc) are proposed around the project site in an effort to minimize any construction related pollution from leaving the site.
7. If bedrock is encountered during the construction of the proposed BMPs, the project engineer shall be consulted to ensure that the proposed BMPs will still function as designed.
8. Sediment-laden runoff is an anticipated construction waste. Through the use of the proposed Erosion Control Device outlined on this plan set, sediment-laden runoff has been mitigated and prevented from leaving the project site to the greatest extent possible.
9. The project site can be referenced on the LANSDALE U.S.G.S. Quadrangle map.



D14 & D15 BLOWUP

Scale: 1" = 15'



LOCATION MAP

NPDES Permit Boundary: 5.30 ACRES

Project Disturbance: * 4.94 ACRES

* Re-paving of the existing campus roadway is not considered disturbance.

Drainage Area to COMPOST SOCK SEDIMENT TRAP 'A': 2.99 ACRES

REVISIONS

Scale in Feet (1" = 40')

CALL 1-800-242-1776 PROJECT REFERENCE NUMBER FOR DESIGN

REGISTERED PROFESSIONAL TIMOTHY P. WOODROW ENGINEER No. 43075

Applicant:
THE MEADOWOOD CORPORATION
c/o Paul Wanderman
President/CEO
3305 Skippack Pike
(P.O. Box 213)
Worcester, PA 19490

Parcel Information:
TP: 67-00-03185-00-4, (S 28 U 26) PARCEL 'A'
TP: 67-00-01009-00-4, (S 28 U 36) PARCEL 'B'
TP: 67-00-03188-00-1, (S 29 U 1) PARCEL 'C'
TP: 67-00-03189-00-1, (S 29 U 2) PARCEL 'D'

Net Tract: 113.3058 Acres
PRCD Area: 61.5241 Acres
GROS Area: 53.0817 Acres

MEMORY CARE FACILITIES EXPANSION
EROSION & SEDIMENT CONTROL PLAN PHASE 1A & 1B
MEADOWOOD SENIOR LIVING
WORCESTER TOWNSHIP – MONTGOMERY COUNTY – PENNSYLVANIA

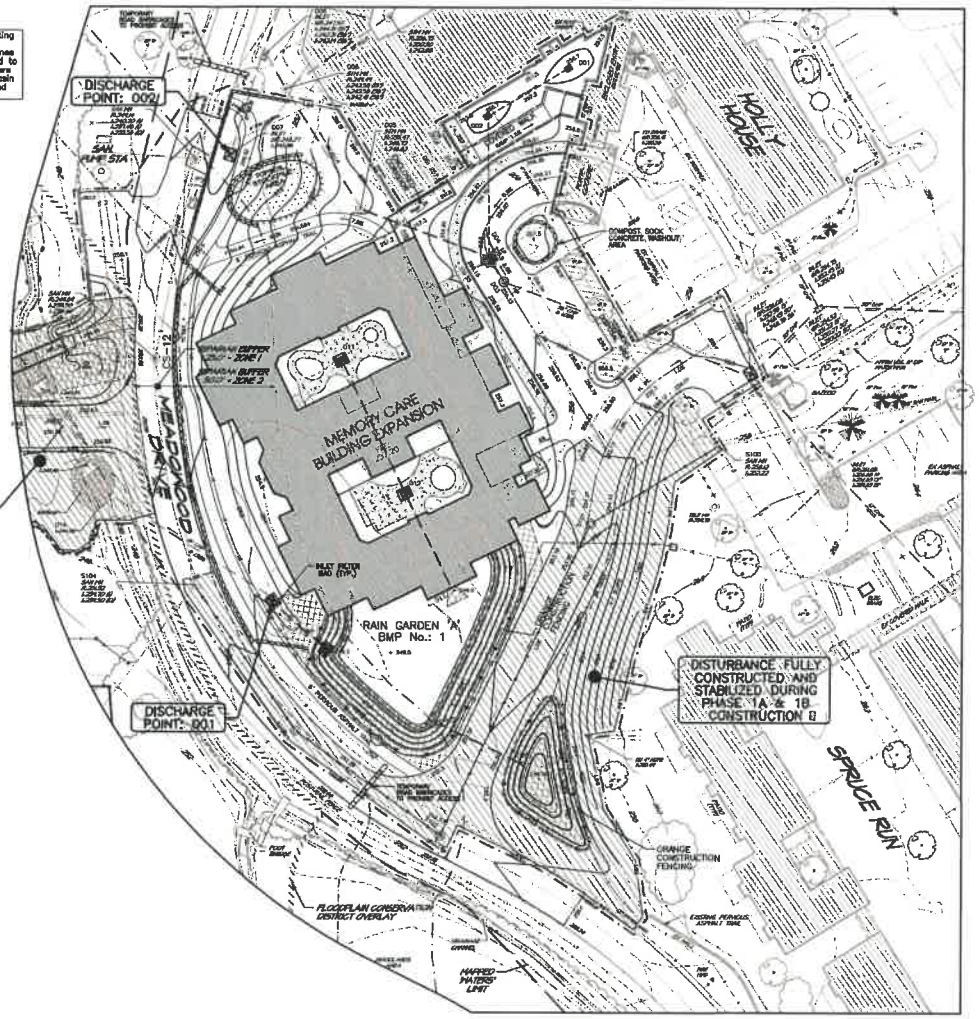
WOODROW & ASSOCIATES, INC.
CIVIL ENGINEERS – LAND SURVEYORS
1100 North Bethlehem Pike, Suite 1, Lansdale, PA 19446
Phone: (215) 362-0445 Fax: (215) 362-3819
www.woodrowassociates.com

Layer List: D16-12_E&S-PH1
Job No: 00-0606 D18
Plan Date: JULY 13, 2020
Sheet No: 12 of 27

PLAN LEGEND

- Tract Boundary Line
- Existing Roadway Centerline
- Floodplain Conservation District Limits
- Riparian Buffer Limit
- Stopped Stations' Limit
- Stopped Stations' Limit
- Existing Grade Contour
- Existing Vegetation Limit
- Existing Storm Sewer Piping
- Existing Sanitary Sewer Piping
- Existing Gas Main
- Existing Water Main / Service
- Existing Underground Telephone
- Proposed Spot Elevation
- Proposed Grade Contour
- Proposed Storm Piping
- Proposed Sanitary Piping
- Proposed Electrical
- Proposed Water Main
- Proposed Gas Service
- NPDES Permit Limit
- Orange Construction Fence
- Compost Filter Sock
- Limit of Disturbance
- Inlet Filter Bag
- Area of Soil Amendment
- Area of Sediment Disposal
- Erosion Control Blanketing (Permanently installed during Phase 1A & 1B construction)
- Disturbance fully constructed and stabilized during Phase 1A & 1B construction

Design Point: 002 discharges to an existing Basin on the Meadowood Campus. Post-development runoff rates and volumes to this basin are reduced when compared to predevelopment conditions, therefore, there is no negative impact to this existing Basin with the implementation of the proposed improvements.



NPDES Permit Boundary: 5.30 ACRES

Project Disturbance: * 4.94 ACRES

* Re-paving of the existing campus roadway is not considered disturbance.

PHASE 2 – COMPOST FILTER SOCK SCHEDULE

Sock No.	Location	Sock Size	Slope Length Above Sock	Slope % Above Sock	Sock Length (L.F.)
CS-12	Along existing Meadowood Drive	12"	324	3.30%	236
CS-13	Along existing Meadowood Drive	12"	117	5.53%	152

* CS-01 through CS-11 previously installed for Phase 1A & 1B construction

PROJECT SOILS DATA WITHIN PROPOSED LIMIT OF DISTURBANCE

Soils Type:	Slopes:	Depth to Restrictive Features:	Depth to Water Table:	Hydrologic Soil Group:
RuB Readington silt loam	3 to 8 percent	30-36" to fragipan 40-70" to lithic bedrock	18 to 36"	C
RvB Rowland silt loam	3 to 8 percent	60-80" to lithic bedrock	18 to 36"	D (Top Should)
UnB Urban land – Udorthents shale and mudstone complex	0 to 8 percent	10-99" to lithic bedrock	More than 80"	A

LIMITATION OF SOILS PERTAINING TO EARTHMOVING

SOILS NAME:	CUTBANKS CAVE	CORROSIVE TO CONCRETE/STEEL	DROUGHTY	EASILY ERODIBLE	FLOODING	DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE	HYDROLOGIC INCLUSIONS	LOW STRENGTH/ LIMITED FOUNDATION	LOW PERCOLATION	PIPING	NON-SOURCE OF TOPSOIL	FROST ACTION	SHRINK – SWELL	MATERIAL SUITABLE	PIPING	NOTES
Readington	X	C/S		X		X	X	X	X	X	X	X				X
Rowland	X	C/S		X	X	X	X	X	X	X	X	X				X
Udorthents	X	C/S	X	X				X	X	X		X				

SPECIFIC LIMITATION RESOLUTIONS:

- **CUTBANKS CAVE**
  Trench wall reinforcement shall be provided on-site if necessary to stabilize construction related trenching.
- **CORROSIVE TO CONCRETE/STEEL**
  Soils testing should be conducted to determine the actual risk of corrosion to concrete or steel and if necessary, concrete mixes adjusted and steel coated to withstand the soil corrosiveness.
- **DROUGHTY**
  Special consideration should be applied to ensure that seed mixes and proposed plantings have sufficient water and nutrients within the soil to establish growth.
- **EASILY ERODIBLE**
  Additional erosion control blanketing shall be considered to control any potential erosion in sloped areas.
- **DEPTH TO SATURATED ZONE/SEASONAL HIGH WATER TABLE**
  Special considerations shall be taken in the design of all proposed BMPs to ensure that any existing saturated zones or high water tables will not impact the proposed design.
- **HYDRIC/HYDRIC INCLUSIONS**
  Hydric soils shall be excavated and mixed with a planting soils mixture and/or topsoil to improve the vegetative properties of the soil.
- **LOW STRENGTH/LIMITED FOUNDATION**
  Additional erosion control mats or other slope reinforcement shall be considered to assist in stabilize and erosion prevention.
- **SLOW PERCOLATION**
  Scarification of the subsoil shall be a consideration during final grading and topsoil placement to improve the infiltration rates of the subsoil.
- **PIPING**
  Extra care must be taken in site grading to locate and identify any potential sinkhole areas, and if discovered, immediate measures shall be taken to remediate any sinkhole locations.
- **NON SOURCE OF TOPSOIL**
  In on-site stockpiles are deemed to be poor for use in topsoil, improved topsoil shall be imported to the site and utilized for final site grading.
- **FROST ACTION**
  Special care must be taken to ensure that the soil is not frozen solid when grading the site to the proposed elevations. If large areas of the project site appear to be frozen, the soil shall be thawed before being set to final design elevations.
- **SHRINKS**
  Scarification of the subsoil shall be a consideration during final grading and topsoil placement to improve the infiltration rates of the subsoil. Additional plantings shall be considered to be placed on-site to assist in removing extra moisture from the soil.

MAINTENANCE PROGRAM for EROSION & SEDIMENT CONTROL MEASURES

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

TEMPORARY ROCK CONSTRUCTION ENTRANCE: (CONSTANT MAINTENANCE)

Rock construction entrance thickness shall be constantly maintained to the specified dimensions by adding rock. A stockpile shall be maintained on site for this purpose. All sediment deposited on public roadways shall be removed by shoveling or sweeping. Care must be taken not to impact adjacent trees. Washing of sediment are being deposited on roadway, extend length of rock construction entrance by 50-foot increments until stabilized is eliminated or install wash rack. Blocking the roadway or pumping the sediment into roadway ditches, sewers, culverts, or other drainage courses is not acceptable.

PUMPED WATER FILTER BAG: (DAILY MAINTENANCE)

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

COMPOST SOCK CONCRETE WASHOUT AREA: (DAILY MAINTENANCE)

1. All concrete washout facilities should be inspected daily. Damaged or leaking washouts should be deactivated and repaired or replaced immediately.
2. Accumulated materials should be removed when they reach 75% capacity.
3. Plastic liners should be replaced with each cleaning of the washout facility.

ROCK FILTER OUTLET: (DAILY MAINTENANCE)

Sediment shall be removed when accumulations reach 1/3 the height of the outlet.

RIPRAP APRON: (WEEKLY MAINTENANCE & AFTER EACH RUNOFF EVENT)

All aprons shall be inspected at least weekly and after each runoff event. Displaced riprap within the apron shall be replaced immediately.

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

Blankets shall be inspected weekly and after each runoff event until perennial vegetation is established to a minimum uniform 75% average throughout the blanketed area. Damaged or displaced blankets shall be repaired or replaced within 4 calendar days.

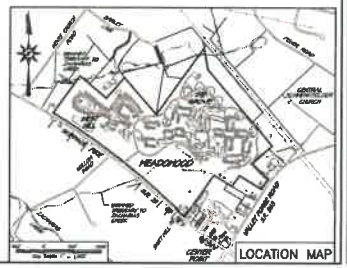
COMPOST FILTER SOCK: (WEEKLY MAINTENANCE & AFTER EACH RUNOFF EVENT)

Compost filter socks shall be inspected weekly and after each runoff event. Damaged socks shall be repaired according to manufacturer's specifications or replaced within 24 hours of inspection. Biodegradable filter socks shall be replaced after 6 months; photodegradable socks after 1 year. Polypropylene socks shall be replaced according to manufacturer's specifications.

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

Inspect all Compost Sock Sediment Traps on at least a weekly basis and after each runoff event. Provide access for sediment removal and other required maintenance activities. Sediment shall be removed when it reaches 1/2 the height of the socks. Dispose of materials removed from the trap in the manner described on the E&S Plans.

Photodegradable and biodegradable socks shall not be used for more than 1 year.



REVISIONS

Scale in Feet (1" = 30')

CALL 1-800-242-1776
PROJECT SERIAL NUMBER FOR DESIGN

Applicant:
THE MEADOWOOD CORPORATION
c/o Paul Nordamon
President/CEO
3305 Skippack Pike
(PO box 826)
Worcester, PA 19490

Parcel information:
TP: 67-00-03185-00-5 (B 28 U 26) PARCEL "A"
TP: 67-00-01928-00-4 (B 28 U 36) PARCEL "B"
TP: 67-00-03196-00-1 (B 29 U 1) PARCEL "C"
TP: 67-00-03193-00-1 (B 29 U 2) PARCEL "D"

Net Tract: 118.3006 Acres
ROW Acres: 12.6781 Acres
GROSS Area: 131.0817 Acres

MEMORY CARE FACILITIES EXPANSION
EROSION & SEDIMENT CONTROL PLAN
PHASE 2
MEADOWOOD SENIOR LIVING
WORCESTER TOWNSHIP – MONTGOMERY COUNTY – PENNSYLVANIA

WOODROW & ASSOCIATES, INC.
CONSULTING ENGINEERS
1108 North Bethlehem Pike, Lansdale, PA 19446
Phone (215) 362-5689 Fax (215) 362-5619

Layer List: D18-13_E&S-PH2
Job #: 00-0606 D18
Plan Date: JULY 13, 2020
Sheet No. 13 of 27

STANDARD EROSION CONTROL PLAN NOTES

1. All earth disturbances, including clearing and grubbing as well as cuts and fills shall be done in accordance with the approved E&S plan. A copy of the approved drawings (stamped "approved") kept on file by the receiving agency) must be available at the project site at all times. The receiving agency shall be notified of any changes to the approved plan prior to implementation of these changes. The receiving agency may require a written submittal of these changes for review and approval at its discretion.
2. At least 7 days prior to starting any earth disturbance activities, including clearing and grubbing, the owner and/or operator shall invite all contractors, the landowner, appropriate municipal officials, the E&S plan preparer, the PCSM plan preparer, the licensed professional responsible for oversight of critical stages of implementation of the PCSM plan, and a representative from the local conservation district to an on-site preconstruction meeting.
3. At least 3 days prior to starting any earth disturbance activities, or expanding into an area previously unwarned, the Pennsylvania One Call System Inc. shall be notified at 1-800-242-1776 or 811 for the location of existing underground utilities.
4. All earth disturbance activities shall proceed in accordance with the sequence provided on the plan drawings. Deviation from that sequence must be approved in writing from the local conservation district or by the Department prior to implementation.
5. Areas to be filled are to be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots and other objectionable material.
6. Clearing, grubbing, and topsoil stripping shall be limited to areas areas described in each stage of the plan construction sequence. General site clearing, grubbing and topsoil stripping may not commence in any stage or phase of the project until the E&S BMPs specified by the BMP sequence for that stage or phase have been installed and are functioning as described in the E&S plan.
7. At no time shall construction vehicles be allowed to enter areas outside the limit of disturbance boundaries shown on the plan maps. These areas must be clearly marked and fenced off before clearing and grubbing operations begin.
8. Topsoil required for the establishment of vegetation shall be stockpiled at the location(s) shown on the plan map(s) in the amount necessary to complete the finish grading of all exposed areas that are to be stabilized by vegetation. Each stockpile shall be protected in the manner shown on the plan drawings. Stockpile heights shall not exceed 35 feet. Stockpile slopes shall be 3H:1V or flatter.
9. Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator also implements appropriate best management practices to minimize the potential for erosion and sediment pollution and notify the local conservation district and/or the regional office of the Department.
10. All building materials and wastes shall be removed from the site and recycled or disposed of in accordance with the Department's Solid Waste Management Regulations (25Pa. Code 288.1 et seq., 277.1, and 287.1 et seq.). No building materials or wastes or unused building materials shall be burned, buried, dumped, or discharged at the site.
11. All off-site waste and borrow areas must have an E&S plan approved by the local conservation district or the Department fully implemented prior to being activated.
12. The contractor is responsible for ensuring that any material brought on site is clean fill. Form FP-001 must be received by the property owner or one fill material affected by a spill or release of a regulated substance but qualifying as clean fill due to analytical testing.
13. All pumping of water from any work area shall be done according to the procedure described in this plan, and/or individually approved plans.
14. Until the site is stabilized, all erosion and sediment BMPs shall be maintained properly. Maintenance shall include inspections of all erosion and sediment BMPs after each runoff event on a weekly basis. All preventative and remedial maintenance work, including dredging, removal of accumulated sediments, cleaning, repairing and replacing shall be completed immediately. If the E&S BMPs fail to perform as expected, replacement BMPs, or modifications of those installed will be required.
15. A less stringent date that E&S BMPs were inspected as well as any deficiencies found and the date they were corrected shall be recorded in the logbook to be kept available to regulatory agency officials at the time of inspection. All sediment removed from E&S BMPs shall be hauled onto ABP farm 315E-Pa-Bedford's dated 5/2/012 and kept on site at all times.
16. Sediment tracked onto any public roadway or sidewalk shall be returned to the construction site by the end of each work day and disposed in the manner described in the plan. In no case shall the sediment be washed, shoveled, or swept into any roadside ditch, storm sewer, or surface water.
17. All sediment removed from E&S BMPs shall be disposed of in the manner described on the plan drawings.
18. Areas which are to be topsoiled shall be scarified to a minimum depth of 3 to 5 inches. A 4 to 12 inches an compacted soils — 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. All subsoiling shall have a minimum of 12 inches of topsoil.
19. All fills shall be compacted as required to reduce erosion, slippage, settlement, subsidence or other related problems. Fill intended to support buildings, structures and conduits, etc. shall be compacted in accordance with local requirements or codes.
20. All earthen fills shall be placed in compacted layers not to exceed 8 inches in thickness.
21. Fill materials shall be free of frozen particles, brush, roots, sod, or other foreign or objectionable materials that would interfere with or prevent construction of a competent fill.
22. Frozen materials or soil, muck, or highly compressible materials shall not be incorporated into fills.
23. Fill shall not be placed on saturated or frozen surfaces.
24. Seeps or springs encountered during construction shall be handled in accordance with the standard and specification for subsurface drain or other approved method.
25. All graded areas shall be permanently stabilized immediately upon reaching finished grade. Cut slopes in compacted soil/rock and rock fill need not be vegetated. Seeded areas within 50 feet of a surface water shall be stabilized within the time shown on the plan drawings, shall be protected by temporary diversions until they are stabilized.
26. Immediately after earth disturbance activities cease in any area or subarea of the project, the operator shall stabilize all disturbed areas. During non-germinating months, mulch or protective blanketing shall be applied as described in the plan. Areas not to be brought to final grade and left in a stable condition within 1 year, may be stabilized in accordance with the temporary stabilization specifications. These areas shall not be considered stabilized within 1 year and be maintained in accordance with the permanent stabilization specifications.
27. Permanent stabilization is defined as a minimum uniform, perennial 70% vegetative cover or other permanent non-vegetative cover with a density sufficient to resist accelerated erosion. Cut and fill slopes shall be designed and constructed to reduce erosion slippage, or other movement.
28. E&S BMPs shall remain functional as such until all areas tributary to them are permanently stabilized or until they are replaced by another BMP approved by the local conservation district or the Department.
29. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operator shall contact the local conservation district for an inspection prior to removal/conversion of the E&S BMPs.
30. After final site stabilization has been achieved, temporary erosion and sediment BMPs must be withdrawn or converted to a permanent post construction stormwater management BMP. Areas disturbed during removal or conversion of the BMPs shall be stabilized immediately. In order to ensure rapid revegetation of disturbed areas, both removal/conversions are to be done only during the germinating season.
31. Upon completion of all earth disturbance activities and permanent stabilization of all disturbed areas, the owner and/or operator shall contact the local conservation district for a final inspection.
32. Failure to correctly install E&S BMPs, failure to prevent sediment-laden runoff from leaving the construction site, or failure to take immediate corrective action to resolve failure of E&S BMPs may result in administrative, civil and/or criminal penalties being instituted by the Department as defined in Section 605 of the 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 $20,000 in misdemeanor criminal penalties for each violation.

SITE SPECIFIC NOTES:

33. Concrete wash water shall be handled in the manner described on the plan drawings. In no case shall it be allowed to enter any surface waters or groundwater systems.
34. All chemicals shall be kept free of obstructions including but not limited to fill, rocks, leaves, woody debris, accumulated sediment, excess vegetation, and construction materials/wastes.
35. Underground utilities cutting through any active channel shall be immediately backfilled and the channel restored to the original cross-section and protective lining. Any trees like within the channel shall be removed past the work area in the manner described in the plan until such restoration is complete.
36. Sediment traps shall be kept free of all construction waste, wash water, and other debris having potential to clog the basin/trap outlet structures and/or impair the surface water.
37. Sediment trap shall be protected from unauthorized acts by third parties.
38. Any damage that occurs in whole or in part as a result of sediment trap failure shall be immediately repaired by the permittee in a permanent manner satisfactory to the municipality, local conservation district, and the owner of the damaged property.
39. Upon request, the applicant or his contractor shall provide an on-built (record drawing) for any sediment trap to the municipal inspector, local conservation district or the Department.
40. Erosion control blankets shall be installed on all slopes 3H:1V or steeper within 50 feet of a surface water and on all other disturbed areas specified on the plan maps and/or detail sheets.
41. Fill material for embankments shall be free of roots, or other woody vegetation, organic material, large stones, and other objectionable materials. The embankment shall be compacted in maximum 9 inches lifts at 95 % density.

DUST CONTROL:

42. Dust control measures must be implemented upon the generation of enough dust whereas it blows the project site on an as-needed basis or upon direction of a municipal representative and/or a representative of the local Conservation District.

Water Control:

The exposed soil surface shall be maintained until the surface has been adequately reclaimed in proved dust.

Vegetative Cover Control:

The exposed soil surface shall be seeded and mulched according to the recommended rates per the Temporary Seeding Specification.

Calcium Chloride Placement:

Shall be in the form of beads, dry granules or flakes like enough to blend through a spreader at a rate that will keep the surface moist but not cause pollution or plant damage.

EROSION and SEDIMENTATION CONTROL

I. GENERAL NOTES:

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

II. RECEIVING WATERSHED:

The receiving watershed for this development is an unnamed tributary to Tenmiles Creek to Skippack Creek. The Chapter 93 designation for the receiving watershed is "TSF to UT".

III. INTENT OF CONSERVATION PROGRAM:

The intent of this program is to implement conservation practices at the exposed site soils during the construction and permitted the periods of the development. The program requires retention of all sediments on the construction site while minimizing the impact of development on existing streams and adjacent properties.

These objectives will be achieved by minimizing exposure time of potentially erosive soils to runoff and by implementing the erosion and sediment control conservation practices in proper sequence with construction. The intent of BMP programmed conservation practices is proper sequence with entire development. The various construction phases should be composed of this program and should be present under statements of proposed and preferred sequence.

IV. SURFACE STABILIZATION CRITERIA:

All denuded soil surfaces including soil stockpiles that are subject to erosion shall be stabilized immediately, either temporarily or permanently. Crushed stone on pavement subgrades is considered adequate protection. Stabilized areas which are not at finished grade and which will be redisturbed within one (1) year may be stabilized with a quick growing, temporary seeding mixture and mulch. Areas at finished grade but to remain idle for one (1) year or longer shall be stabilized with a permanent seeding. Germination period shall be from April 1st to June 15th and August 16th to October 15th, during non-germination periods mulches alone shall be used, fertilized, seeded and mulched immediately.

Contractor/Applicant shall assume responsibility for the maintenance and operation of all erosion and sediment control facilities.

SEI forms must be installed parallel to existing contours and constructed in level alignments. The ends of the forms shall be extended a minimum of eight (8) feet up slope and at forty-five (45) degrees to the main fence alignment.

If any of the measures contained within this plan prove inadequate at removing sediment from flows prior to discharge or stabilizing of the surfaces involved, additional measures must be immediately implemented by the Contractor/Applicant to eliminate all such problems. Said measures shall be approved by the local soil conservation district.

A reserve supply of crushed stone, silt fence, temporary seed and hay bales shall be maintained on site for emergency replacement of any failing erosion and sediment control measures.

V. EROSION CONTROL DEVICES / MAINTENANCE PROGRAM:

STABILIZED CONSTRUCTION ENTRANCE:

Entrances are to be constructed Ch. 102 Standard Construction Detail #16 and the details provided with this plan set. The stabilized construction entrance(s) shall be maintained so that the roadway safety does not become hazardous. Any buildup of mud or soil on the street shall be removed immediately by hand or mechanical sweeping.

COMPOST FILTER SOCKS:

Compost Socks shall be installed per Ch. 102 Standard Construction Details #4-1 and the details provided with this plan set. Socks shall be inspected weekly and after each runoff event. Damaged socks shall be repaired according to manufacturer's specifications or replaced within 24 hours of inspection.

COMPOST SOCK SEDIMENT TRAPS:

Sediment Traps shall be constructed per Ch. 102 Standard Construction Details #3-11 and the details provided with the plan set. Sediment traps shall be placed near the center of each tree. Accumulated sediment shall be removed when it reaches the clean-out elevation marked on the stake.

STORM INLETS PROTECTION:

Inlet protection devices shall be constructed per Ch. 102 Standard Construction Details #38-35 and the details provided with this plan set. Inlet protection shall be maintained until all earthwork within the tributary drainage area has been completely stabilized.

SEDIMENT DISPOSAL:

All removed from temporary erosion and sediment control devices shall be disposed of on-site in landscaped areas located outside the 100 year flood plains, wetlands, steep slopes and drainage swales. Areas of sediment disposal shall be considered a critical vegetation area requiring immediate stabilization.

Each drainage sub-area will require separate and unique erosion and sediment control measures. The contractor shall follow the specific construction sequence deemed appropriate by the local soil conservation district.

All BMP field changes requires inspection weekly and after each runoff event. All required repairs and or replacement of BMPs must be done immediately.

VI. UTILITY TRENCH EXCAVATION:

GENERAL REQUIREMENTS:

Trenched trench excavations have high potential for accelerated erosion and sediment pollution. Since these excavations are usually located of lower elevation along or across earth disturbance sites, open trenches serve as the conveyance channel for increased water runoff and allowing it to pick sediments or wastewater. The trenching and specific scheduling of work activities.

CONSTRUCTION REQUIREMENTS:

Until advance clearing and grubbing operations to a distance equal to two times the length of pipe installation that can be completed in one day.

Work crews and equipment for trenching, placement of pipe, plug construction and backfilling will be staff coordinated and separate from clearing and work areas site restoration and stabilization operations.

All soils excavated from the trench shall be placed on uphill side of the trench.

Limit daily trench excavation to the length of pipe placement, plug installation and backfilling that can be completed the same day.

Water which accumulates in the open trench will be completely removed by pumping before pipe placement and/or backfilling begins. Water removed from the trench shall be pumped through a filtration device.

On the day following pipe placement and trench backfilling, the disturbed area will be graded to final surface and immediately stabilized.

Soils excavated from the existing surface layer should be stockpiled separately and returned as final surface layer following trench backfilling.

VII. FERTILIZATION, SEEDING AND MULCHING:

TEMPORARY COVER ON DISTURBED AREAS:

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

PERMANENT COVER ON DISTURBED AREAS:

Disturbed areas within are either of finish grade or will not be redisturbed a while are (1) year period must be seeded and mulched with a permanent seed mixture.

All disturbed areas shall be stabilized immediately with a temporary seed and mulch mixture applied at the recommended rates. Site preparation of mulch and maintenance shall be performed in accordance with the Penn State University's Erosion Control & Conservation Plantings on Noncropland manual and Pennsylvania Department of Transportation publication Form 408 specifications (latest edition). During non-germination periods, mulch shall be applied at the recommended rates.

Crushed stone shall be aerated or otherwise loosened to a depth of 3" to 5" prior to topsoil placement to permit the bonding of new topsoil.

MULCHING:

All seeded areas should be mulched or blankets to minimize the potential for failure to establish adequate vegetational cover. Mulches only also be used as a temporary stabilization of disturbed areas in non-germinating seasons. Mulch shall be applied immediately after seeding or at the termination of grading operations during non-germinating seasons.

Straw and hay mulch should be anchored or installed immediately after application to prevent being displaced. A crusher-drawn implement should be used to "crimp" the straw or hay into the soil about 3 inches deep. This method should be limited to slopes no steeper than 3H:1V. The mulching shall be operated on the contour.

Polymeric and gum tackifiers mixed and applied according to manufacturer's recommendations may be used to tack mulch. Apply application during calm and on windy days. A 24 hour curing period is required before any rain event. Do not apply tackifiers to areas of heavy concentration of water or areas of concentrated flow. Do not apply tackifiers to areas where water may collect and freeze. Do not apply tackifiers on slopes and areas to be mowed less. The remainder of the seed bed should be loose and uniform. Tackifiers may be applied after mulch is spread or sprayed onto the mulch as it is being blown onto the soil.

Synthetic binders, or chemical binders, may be used as recommended by the manufacturer in areas where mulch provided that sufficient documentation is provided to show they are non-toxic to native plant and animal species.

Mulch on slopes of 6H or steeper should be held in place with netting, light-weight plastic fiber, or paper nets must be stapled over the mulch according to manufacturer's recommendations.

Shredded paper hydromulch should not be used on slopes steeper than 5H. Wood fiber hydromulch may be used on any slopes slopes provided a tackifier is used. The application for any hydromulch should be 2000 lbs per acre at a minimum.

MULCH APPLICATION RATES

Mulch Type	Application Rate (dry) Per Acre	Per 1,000 S.F.	Per 1,000 S.Y.	Notes
Straw	3 tons	140 lbs.	1,260 lbs.	Other wheat or oat straw, hay or straw, not always or less tested
Hay	3 tons	140 lbs.	1,260 lbs.	Timothy, mixed clover and timothy or other native grasses
Wood Chips	4-6 tons	185-275 lbs.	1,650-2500 lbs.	May prevent germination of grasses and legumes
Hydromulch	1 ton	47 lbs.	415	See Stabilizer above

VIII. SEEDING SCHEDULE:

Seeding to conform to specifications outlined in Section 804 - Seeding and Soil Supplements at PADOT Publication 408/2003 (latest revision).

A soils test should be performed in order to determine actual lime and fertilizer needs of the project site instead of using the generic application rates listed below.

TEMPORARY SEEDING SPECIFICATION — FORMULA E:

100% ANNUAL RYEGRASS (CULTIVAR MULTIFLORUM): 10.0 lbs./1,000 sq.

PERMANENT SEEDING SPECIFICATION — FORMULA B:

50% Tall Fescue (Fortuna Announcer var., Kentucky 31): 15.0 lbs./1,000 sq.
50% Creeping Red Fescue: 8.0 lbs./1,000 sq.

SEEDING RATES FOR THE ABOVE MIXTURES:

Spread seeds where indicated and at the rates specified above (and Table A, Pub 408, Section 804). Spread seeds within the following dates, or as otherwise directed or directed:

- Formula B: → March 15 to June 01
  → August 01 to 10 October
- Formula E: → March 15 to October 15

Extend seeding dates where project conditions warrant. Apply soil treatment or apply only 50% of the permanent seeding and soil amendments and apply the remaining 50% within the next seeding date.

Place mulch, hay or straw immediately after seeding. Anchor all hours after seeding is completed. Place hay or straw uniformly in a continuous blanket, until seedlings are established. Adjust the rate of application, depending upon the material used, season, site conditions of method of application.

SOIL SUPPLEMENTS:

Provide agricultural limestone and commercial fertilizer shall be applied to all disturbed areas which are to be seeded in both temporary and permanent conditions at the following rates:

SOIL AMENDMENT APPLICATION RATE EQUIVALENTS

Soil Amendment	Permanent Seeding Application Rate Per Acre	Per 1,000 S.F.	Per 1,000 S.Y.	Notes
Agricultural Lime	6 tons	242 lb.	2,683 lb.	Or as per soil test; they not be required in agricultural fields
10-10-10 Fertilizer	1,000 lb.	25 lb.	210 lb.	Or as per soil test; they not be required in agricultural fields
Temporary Seeding Application Rate				
Agricultural Lime	1 ton	40 lb.	410 lb.	Typically not required for temporary stabilization
10-10-10 Fertilizer	500 lb.	12.5 lb.	103 lb.	Typically not required for temporary stabilization

Adapted from Penn State, "Erosion Control and Conservation Plantings on Noncropland"

IX. SOILS RESOLUTIONS:

Winter Grading:

Contractor to ensure proper stabilization. Methods to include, seeding and mulching at the recommended rates and where necessary, the placement of an approved erosion control blanket.

Road Fill:

Contractor to ensure all fill used for roadway construction is placed and compacted in appropriate lifts. Should material not be suitable for roadway construction the contractor may import suitable material from an area within the permitted area.

Topsoil:

Contractor to ensure proper stabilization. Methods to include, seeding and mulching at the recommended rates and where necessary the placement of an approved erosion control blanket.

Contractor shall consider soils testing to ensure topsoil is suitable to produce and sustain proper growth. Should the topsoil be lacking or deficiency in proper nutrients to produce growth the contractor shall consider applying lime and/or fertilizer at the rates recommended by the project landscape consultant and/or the local conservation district.

Topsoil may be imported from an area within the permitted area proven to be suitable.

Plants, Grass and Ground Embankments:

Contractor to ensure all fill used for basin embankment construction is placed and compacted in appropriate lifts. Should material not be suitable for basin embankment construction the contractor may import suitable material from an area within the permitted area.

Contractor to ensure proper stabilization. Methods to include, seeding and mulching at the recommended rates and where necessary the placement of an approved erosion control blanket.

Terraces, diversions and waterways:

Contractor to ensure all workmanship associated with swales, diversion berms and/or waterways is performed in accordance with an approved construction sequence. Should any of these structures be damaged by any seeding and mulching applied at the recommended rates.

Should erosion continue the contractor shall consult the design engineer, the local conservation district, and take appropriate measures to correct the problems. Corrective measures may include but are not limited to the following:

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

X. POST-CONSTRUCTION MAINTENANCE PROGRAM:

Post-Construction maintenance of all implemented BMP's shall include but not be limited to the following:

1. Check vegetated areas after any runoff events to identify any areas showing accelerated erosion. If any area is identified as eroding, these areas are to be stabilized using details described on the plan.
2. All storm structures shall be inspected and cleaned of debris annually or as necessary to maintain full capacity of the storm system.

XI. STANDARD NOTE TO COMPLY WITH NPDES CHECKLIST ITEM #3b.iv:

(#3b.iv For an Individual NPDES Permit)

If the site will need to import or export material from the site, the responsibility for performing environmental due diligence and determination of clean fill will rest with the permittee.

1. Clean Fill is defined as: uncontaminated, non-water soluble, non-decomposable, inert, solid material. The term includes soil, rock, stone, dredged material, asphalt, glass, brick, block or concrete from demolition and demolition activities that is separate from other waste and is recognized as such. The term does not include materials placed in or on the waters of the Commonwealth unless otherwise permitted by law.
2. Clean Fill affected by a spill or release of a regulated substance: PA materials affected by a spill or release of a regulated substance will qualify as clean fill provided the testing results that the PA material contains no more than the regulated substances that are below the residential limits in Table FP-1a and FP-1b found in the Department's policy "Management of Fill".
3. Any person placing clean fill that has been affected by a spill or release of a regulated substance must use form FP-001 to certify the origin of the fill material and the results of the analytical testing to qualify the material as clean fill. Form FP-001 must be released by the owner of the property receiving the fill.
4. Environmental due diligence: The contractor must perform environmental due diligence to determine if the fill material associated with the project meets the definition of clean fill. Environmental due diligence includes an investigation including, but not limited to, visual property inspection, a review of the site's base mapping, review of property ownership, review of property use history, environmental questionnaire, environmental screening, analytical testing, environmental assessment or equivalent. Analytical testing is not a required part of due diligence unless visual inspection and/or review of the site's base mapping, property ownership, property use history and environmental questionnaire reveal evidence of regulated substances. If the fill material is affected by a spill or release of regulated substances, it must be tested to determine if it qualifies as clean fill. Testing must be performed in accordance with Appendix A of the Department's policy "Management of Fill".

Fill material that does not qualify as clean fill is regulated fill. Regulated fill is waste and must be managed in accordance with the Department's municipal or residual waste regulations based on 25 Pa. Code Chapter 287 Residual Waste Management or 271 Municipal Waste Management, whichever is applicable. These regulations are available on-line at www.pacode.com

XII. MONITORING, INSPECTION, AND REPORTING REQUIREMENTS:

Visual Inspection:

The permittee or co-permittee(s) must ensure that visual site inspections are conducted weekly, and within 24 hours after each measurable rainfall event throughout the duration of construction, until the receipt and acknowledgement of the N.O.T. by the department or authorized conservation district. The visual site inspections and reports shall be completed in a format provided by the department, and completed by a licensed professional engineer, trained and experienced in erosion and sediment control, to include an evaluation of the BMPs and PCSM BMPs. Any BMPs not properly constructed and maintained to adequately minimize pollution, or any of the requirements of this permit, shall be repaired, within report of each inspection shall be kept and dated at a minimum:

(1) A summary of site conditions, E&S BMP and PCSM BMP, implementation and maintenance and compliance actions; and

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

Noncompliance Reporting:

Where E&S, PCSM or PPC BMP's are found to be inoperative or ineffective during an inspection or any other time, the permittee and co-permittee(s) shall within 24 hours, contact the department or authorized conservation district, and shall within 5 days of the initial contact, submit a written report within 5 days of the initial contact. Noncompliance reports shall include the following information:

(1) Any condition on the project site which may endanger public health, safety, or the environment, or involved incidents which cause or threaten pollution;

(2) The period of noncompliance, including exact dates and times and/or anticipated time when the activity will return to compliance;

(3) Steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance; and

(4) The date or schedule of dates, and identifying remedies for correcting noncompliance conditions.

Reduction, Loss, or Failure of the BMP's:

Upon reduction, loss or failure of the BMP's, the permittee and co-permittee shall take immediate action to restore the BMP to operation or alternate action at location to achieve similar results. Such replacement BMP's or alternative installment must be at least as effective as the original BMP's.

Termination of Coverage:

N.O.T.: Upon permanent stabilization of earth disturbance activities associated with the permit, including the permanent stabilization of the site and proper installation of PCSM BMP's in accordance with the approved PCSM Plan, or upon submittal of the N.O.T. by a new owner, the permittee shall file with the department or authorized conservation district a statement signed by a licensed professional and by the permittee certifying that all earth disturbance activities have been completed in accordance with the terms and conditions of the NPDES permit and the approved E&S and PCSM Plans.

CONSTRUCTION SEQUENCE

At least 7 days before starting any earth disturbance activities, the operator shall invite all contractors involved in these activities, the landowner, all municipal officials, the E&S plan preparer, the PCSM plan preparer, the licensed professional responsible for oversight of critical stages of implementation of the PCSM plan, and a representative from the local conservation district to an on-site preconstruction meeting. At least 3 days before starting any earth disturbance activities, all contractors involved in these activities shall be notified of the location of existing underground utilities by the Pennsylvania One Call System, Inc. at 1-800-242-1776.

All earth disturbance activities shall proceed in accordance with the outlined sequence on these plans. Each stage shall be completed before the following stage is initiated. Clearing and grubbing shall be limited only to those areas described in each stage. General site clearing, grubbing and topsoil stripping may not commence in any stage or phase of the project until the E&S BMPs specified by the Construction Sequence for that stage or phase have been installed and are functioning as described in this document. Deviation from the sequence must be approved in writing from the local Conservation District or the Department.

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

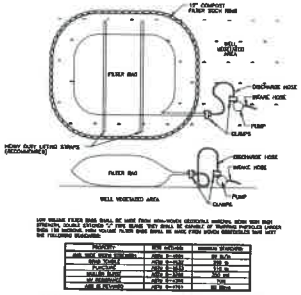
For NPDES requirements "Upon the installation or stabilization of all perimeter sediment control BMPs and at least 3 days prior to proceeding to other earth disturbance activities, the permittee or co-permittee shall provide notification to the Department or delegated conservation district.

PHASE 1A CONSTRUCTION:

1. Stakeout and flag the limit of Disturbance as shown on the plans.
2. Install Rock Construction Entrance on the existing state driveway as shown and detailed on the plans. Ensure Rock Construction Entrance maintains a minimum length of 100-feet as detailed on the plans. Install Temporary Road Stabilization on the existing state driveway to provide access to the project site from Skippack Pike.
3. Install "Temporary Road Barricades" on the existing driveway cross along Meadowood Drive to prevent any employee or resident driving onto the area of work.
4. Install Compost Filter Sock CS-01 through CS-11 as shown and detailed on the plans.
5. Install new storm structures D14 and D15 along with associated piping and anti-seep collars as shown, profiled and detailed. Install temporary 12" pipe in storm structure D15 to cut to the proposed invert elevation of the future pipe. Install temporary Rock Pipe Flow Barrier around structures D14 and D15 as shown and detailed on the plans. Install temporary Rock Pipe Flow Barrier around structure D15 as shown and detailed on the plans. Install temporary pump jack for storm structure D14 as shown on the plans. Temporarily plug any exposed pipe stubs. Temporary Stockpile Area located near the Victory Garden. Stockpile must be stabilized immediately with a temporary seed and mulch mixture applied at the recommended rates. Install Erosion Control Blanket on all slopes 3:1 or greater as shown and detailed on the plans. Immediately stabilize all disturbance with a temporary seed and mulch mixture applied at the recommended rates. Install Temporary Pump Jack as shown and detailed on the plans. Install temporary vehicular trestle through this area.
6. Begin construction of new driveway connection to the Holly House parking lot as shown and detailed on the plans. Install sanitary main from existing sanitary manhole 5100 to existing cleanout manhole 5104 as shown, detailed, and profiled on the plans. Leave existing manhole 5100 in place. Install temporary sanitary pump jack. Place 2 to movable the existing parking lot for employee/resident use. Install gas main relocation as shown, detailed, and profiled on the plans. Install new storm structure D16 and associated piping as shown, profiled and detailed on the plans. Install storm structure D17 and section D08 and D09 and associated piping as shown, profiled, detailed, and profiled on the plans. Construct bump area at Bend and section D18 as shown and detailed on the plans. Install temporary Rock Pipe Flow Barrier around D17 as shown and detailed on the plans. Temporarily plug any exposed pipe stubs. Temporary Stockpile Area of the new driveway up to the binder course. Immediately seed any exposed soil to the Topsoil Stockpile area located near the Victory Garden. Stockpile must be stabilized immediately with a temporary seed and mulch mixture applied at the recommended rates. Install Erosion Control Blanket on all slopes 3:1 or greater as shown and detailed on the plans. Immediately stabilize all disturbance with a temporary seed and mulch mixture applied at the recommended rates. Install temporary Rock Pipe Flow Barrier around and inlet D17 as shown and detailed on the plans. Install temporary Rock Pipe Flow Barrier around D17 as shown and detailed on the plans. Install temporary Rock Pipe Flow Barrier around D17 as shown and detailed on the plans. Install temporary Rock Pipe Flow Barrier around D17 as shown and detailed on the plans. Stage construction of parking lot area as shown and detailed on the plans.
7. Upon complete installation and stabilization of all Phase 1A improvements the contractor may proceed to Phase 1B.

PHASE 1B CONSTRUCTION:

8. Ensure the Rock Construction Entrance installed during Phase 1A construction maintains its minimum length of 100-feet as outlined on the detail. Clear and grub areas necessary for Compost Sock Sediment Trap 'A' installation. Install Compost Sock Sediment Trap 'A' as detailed on the plans. Stockpile cover to stabilized immediately with a temporary seed and mulch mixture applied at the recommended rates.
9. Begin construction of Compost Sock Sediment Trap 'A'. Install Compost Sock in a pyramid configuration as shown and detailed on the plans.
10. Upon the completed installation of Compost Sock Sediment Trap 'A', clear and grub the areas necessary for the construction of the Rain Garden 'A'. Install temporary Rock Pipe Flow Barrier around structures D14 and D15 as shown and detailed on the plans. Stockpile must be stabilized immediately with a temporary seed and mulch mixture applied at the recommended rates.
11. Begin removal of existing Septic Mound and begin construction of 4" sanitary lateral from existing main to existing building. Install temporary Rock Pipe Flow Barrier around structures D14 and D15 as shown and detailed on the plans. Immediately stabilize all disturbance with a temporary seed and mulch mixture applied at the recommended rates.
12. Begin installation of new storm structures and associated piping including inlets D17 through D21, manhole D22 and all associated piping as shown, detailed, and profiled on the plans. Stage construction of parking lot area as shown and detailed on the plans. Install temporary Rock Pipe Flow Barrier around D17 as shown and detailed on the plans.
13. Begin construction of pavement strength and placement of stream crossing bridge as shown and detailed on the plans. Installation of all utilities crossing around the parking lot and sidewalk areas as shown on the plans. Install erosion control blanket on all slopes 3:1 or greater as shown and detailed on the plans. Immediately stabilize disturbance with a permanent seed and mulch mixture applied at the recommended rates.
14. ORITICAL STAGE #1:
    Upon the completed completion and stabilization of all phase 1B grading begin construction of Rain Garden 'B' as shown and detailed on the plans. Install temporary Rock Pipe Flow Barrier around structures D14 and D15 as shown and detailed on the plans. Install Rock Garden Outlet Structure D23, orifices D24, all associated piping, and the stone apron as shown and detailed on the plans. Install temporary Soil Stockpile area to all disturbed areas as shown and detailed on the plans. Immediately stabilize all disturbance with a permanent seed and mulch mixture applied at the recommended rates.
15. Upon completion and stabilization of Rain Garden 'B' berm and spillway areas a representative of the Montgomery County Conservation District and Woodrow & Associates must be notified that Sediment Trap final conversion is about to take place.
16. ORITICAL STAGE #2:
    Begin conversion of Compost Sock Sediment Trap 'A' to Rain Garden 'A' configuration. The storm system installed within the grading must be tested free of any sediment prior to proceeding. Remove Compost Sock Sediment Trap 'A' accumulated sediment with Compost Sock Sediment Trap 'A' must be removed and disposed of in the areas designated on the plans. Install temporary Rock Pipe Flow Barrier around structures D14 and D15 as shown and detailed on the plans. Install temporary Rock Pipe Flow Barrier around structure



LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL WITH HIGH WET STRENGTH. GRADE DEPENDS ON THE PUMP BEING USED. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN THE MATERIAL FROM WHICH FLOWS HAVE BEEN IN WORK FROM WOODS CONSTRUCTION SITES MEET THE FOLLOWING STANDARDS.

PROPERTY	NEW MATERIAL	MINIMUM STANDARD
AVE. MASS WIDTH STRENGTH	ASTM D-4884	90 lb/in
MIN. STRENGTH	ASTM D-4884	205 lb
MULLEN BURST	ASTM D-3786	570 lb
MULLEN BURST	ASTM D-3786	300 lb
AP MINIMUM	ASTM D-4491	40 lb/ft²
AOS (% RETAINED)	ASTM D-4751	80 lb/in

A SUITABLE BAGGING OF ASSEMBLING THE BAG WITH INCREASED HEIGHT FOR SUCTION PURPOSES SHALL BE PROVIDED. THE BAG SHALL BE CAPABLE OF FILTERING THE SEDIMENT-LADEN WATER. THE BAG SHALL BE CAPABLE OF THE FLOW RATE. THE BAG SHALL BE KEPT WELL-MAINTAINED AND REPLACED IF THEY BECOME DAMAGED OR BECOME INEFFECTIVE. BAGS SHALL BE PLACED ON GRASS TO PREVENT ERSION. WHEN BAGS COME INTO LIVING SURFACE AVOIDING ATTACHED.

HOSE SHALL BE LOCATED IN WELL-VEGETATED DRAINAGE AREA, AND DISCHARGE INTO STABLE CHANNEL OR STABLE AREA. THE HOSE SHALL BE AT LEAST 6 FEET LONG. A SUCTION HOSE, DISCHARGE HOSE AND FILTER BAG SHALL BE PROVIDED. THE HOSE SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PUMPING. THE HOSE MAY BE PLACED ON GRASS BELOW THE FILTER BAG TO PREVENT SCOUR. THE HOSE SHALL BE REMOVED AND NON-ERODIBLE AND NON-VEGETATED MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLURRY DISPERSION.

NO DISCHARGE TO-SHORT BARRIER AS REQUIRED FOR SURE INSTALLATION. SEDIMENT BEING THE CONTROL FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN THE OR BY INSTRUCTION. WITHIN 100 FEET OF ANY DISTURBED SURFACE BASED ON WHERE SEDIMENT AREA IS NOT AVAILABLE.

THE PUMP DISCHARGE HOSE SHALL BE PROTECTED WITH 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 MORE THAN 750 GPM OR 1/2 THE MINIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKE SHALL BE FLOATING AND SCREENED.

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEMS IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND THE PROBLEM LOCATED THE PROBLEM IS CORRECTED.

(PADEP EROSION and SEDIMENT POLLUTION CONTROL PROGRAM MANUAL - MARCH 2012)
STANDARD CONSTRUCTION DETAIL #4-18

SEDIMENT FILTER BAG FOR PUMPED WATER

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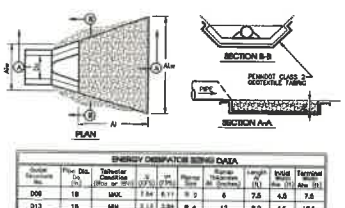

ENERGY DISSIPATOR SIZING DATA								
Outlet Structure No.	Flow Dia. (in)	Tailwater Condition (Pick or Min)	(FT)	(FT)	Riprap Type	Length (ft)	Width (ft)	Thickness (in)
D08	18	MAX.	1.64	6.11	R 3	6	7.5	4.5
D13	18	MIN.	3.13	3.94	R 4	12	8.0	4.5
D22	18	MAX.	8.44	7.85	R 3	6	7.5	4.5
D24	15	MIN.	1.82	4.77	R 4	12	8.0	3.75

NOTE:

ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

EXTEND RIPRAP ON BACK SIDE OF APRON TO AT LEAST 1/2 DEPTH OF PIPE ON BOTH SIDES TO PREVENT SCOUR AROUND THE PIPE.

(PADEP EROSION and SEDIMENT POLLUTION CONTROL PROGRAM MANUAL - MARCH 2012)
STANDARD CONSTRUCTION DETAIL #4-20

RIPRAP APRON OUTLET PROTECTION

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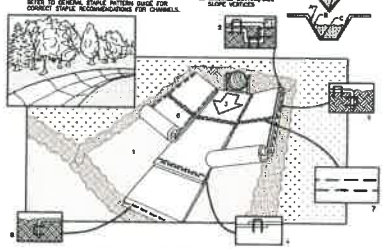
CHANNEL INSTALLATION

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

REFER TO GENERAL STAPLE PATTERN GUIDE FOR CONSULT STAPLE RECOMMENDATIONS FOR CHANNELS.



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH, BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW ON BOTTOM OF CHANNEL.
4. PLACE BLANKETS END OVER END (TRIANGLE STYLE) WITH A 6" OVERLAP. USE A DOUBLE ROW OF STAGGERED STAPLES 4" APART TO SECURE BLANKETS.
5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. BLANKETS ON SIDE SLOPES MUST BE OVERLAPPED 4" OVER THE CENTER BLANKET AND STAPLED (3" FOR C350 MATRIX).
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A ROW OF STAPLES 4" APART OVER ENTIRE WIDTH OF THE CHANNEL. PLACE A SECOND ROW 4" BELOW THE FIRST ROW IN A STAGGERED PATTERN.
8. END TERMINAL END OF THE BLANKETS MUST BE ANCHORED IN A 6" DEEP X 6" WIDE TRENCH, BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

STRAW EROSION CONTROL BLANKET

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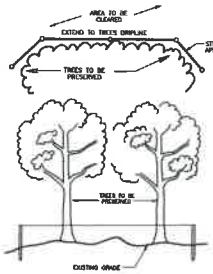

1. TREE PROTECTION TO PROTECT TRUNK, BRANCHES AND ROOT SYSTEM.
2. TREE PROTECTION IS TO BE IN PLACE PRIOR TO ANY CONSTRUCTION IN THE VICINITY.
3. MAINTAIN FENCING IN VERTICAL POSITION AT ALL TIMES.
4. FENCING SHALL NOT BE NAILED TO ANY TREES OR SHRUBS.
5. FABRIC SHALL BE "ORANGE PLAIN CONSTRUCTION" MIN. HEIGHT SAFETY OR APPROVED EQUAL, SUPPORTED BY STEEL POSTS LOCATED 6 FT. ON CENTER.
6. FENCING SHALL BE REMOVED FOLLOWING COMPLETE STABILIZATION OF THE AREA.
7. GRADE CHANGES AND EXCAVATIONS SHALL NOT ENCROACH WITHIN THE TREE PROTECTION AREA.
8. NO TOXIC MATERIALS SHALL BE STORED WITHIN 100 FT. OF A TREE AND/OR DRAIN AREA, INCLUDING PETROLEUM BASED AND/OR SEPARATED PRODUCTS.
9. TREES SHALL NOT BE USED FOR ROPING, CABLES, SIGNS OR FENCING. NAILS AND SPIKES SHALL AND BE DRIVEN INTO ANY TREES.

TREE PROTECTION FENCING DETAIL

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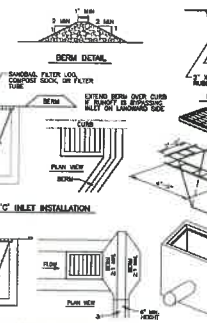


'M' INLET INSTALLATION

* ADAPTED FROM PENNDOT RC-70, 2008 EDITION
* EARTHEN BERM TO BE STABILIZED WITH TEMPORARY OR PERMANENT VEGETATION

MAXIMUM DRAINAGE AREA = 1/8 ACRE.

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

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD BARRIER BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SEE BACK MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL MINIMUM SURFACE RECEIVER FROM EDGE.

AS A MINIMUM, THE EARTHEN BERM SHALL HAVE A MINIMUM CROWN HEIGHT OF 12" AND A MINIMUM RUNOFF STRENGTH OF 200 PSI, AND A MINIMUM TEMPORARY TOP STRENGTH OF 50 PSI. FILTER SOCK BERM SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A No. 50 SIEVE.

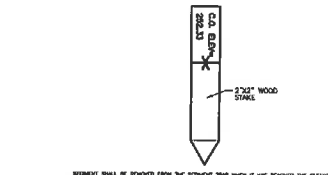
INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND REPLACED OR REPLACED WHEN HALF FULL OF SEDIMENT. FILTER SOCK CONTAINS HAS BEEN REDUCED 50 AS TO CAUSE FLOODING OR DAMAGING OF THE INLET. DAMAGED OR DEFORMED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL PARTIALLY DEFORMED BAGS SHALL BE REPAIRED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS NEEDED. AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

** DO NOT USE ON INLETS THAT BYPASS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS **

(PADEP EROSION and SEDIMENT POLLUTION CONTROL PROGRAM MANUAL - MARCH 2012)
STANDARD CONSTRUCTION DETAIL #4-15 and #4-16

FILTER BAG INLET PROTECTION

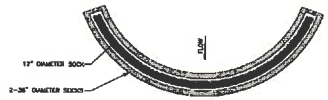
Not To Scale



SEDIMENT SHALL BE REMOVED FROM THE SEDIMENT TRAP WHEN IT HAS REACHED THE CLEANOUT STAKE. REMOVED ON THE DRAINAGE SIDE. SEDIMENT SHALL BE STABILIZED OR TRANSPORTED TO A SITE WHERE IT WILL NOT CAUSE ADVERSE IMPACTS. THE SEDIMENT USED ON THE PLANS AND THE TRAP SHALL BE RESTORED TO ITS ORIGINAL DESIGN DIMENSIONS.

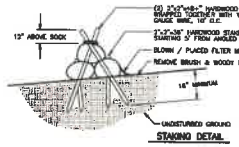
SEDIMENT TRAP CLEAN-OUT STAKE DETAIL

Not To Scale



1. COMPOST SOCK SEDIMENT TRAP SHALL BE SIZED TO PROVIDE 2,000 CUBIC FEET OF STORAGE CAPACITY FOR EACH ACRE TRIBUTARY TO THE TRAP.
2. MINIMUM BASE WIDTH IS EQUIVALENT 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 THAN THE DIAMETER OF THE SUCCESSIVE LAYERS AS INDICATED TO THE LEFT.
5. EDGE 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.

PLAN VIEW



STAKING DETAIL

SOCK MATERIAL SHALL MEET THE STANDARDS OF TABLE 4.1. COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2.

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 BASIN 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.

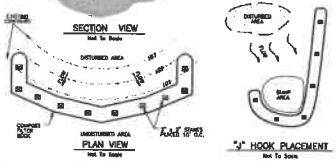
COMPOST SOCK SEDIMENT TRAPS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/3 THE HEIGHT OF THE SOCKS.

PHOTODEGRADABLE AND BIODEGRADABLE SOCKS SHALL NOT BE USED FOR MORE THAN 1 YEAR.

(PADEP EROSION and SEDIMENT POLLUTION CONTROL PROGRAM MANUAL - MARCH 2012)
STANDARD CONSTRUCTION DETAIL #2-11

COMPOST SOCK SEDIMENT TRAP

Not To Scale



Not To Scale

Not To Scale

Sock fabric shall meet standards of Table 4.1 of the Pennsylvania Department of Environmental Protection Erosion and Sediment Pollution Control Program Manual (Technical Guidance Number 363-2134-008).

Compost shall meet standards of Table 4.2 of the Pennsylvania Department of Environmental Protection Erosion and Sediment Pollution Control Program Manual (Technical Guidance Number 363-2134-008).

Compost filter sock shall be placed at existing level grade. Both ends of the sock shall be extended at least 8' up slope to prevent runoff from flowing around the ends. Compost filter sock shall be staked. Stakes shall not exceed that shown of Figure 4.3 of the Pennsylvania Department of Environmental Protection Erosion and Sediment Pollution Control Program Manual (Technical Guidance Number 363-2134-008). Stakes may be installed downslope downslope of the sock if so specified by the manufacturer.

Traffic shall not be permitted to cross filter socks.

Accumulated sediment shall be removed when it reaches half the aboveground height of the sock and disposed in the same manner described elsewhere in the plan.

Socks shall be inspected weekly and after each rainfall event. Damaged socks shall be repaired according to manufacturer's specifications or replaced within 24 hours of inspection.

Biodegradable filter socks shall be replaced after 5 months; photodegrade socks after 1 year. Polypropylene socks shall be replaced according to manufacturer's recommendations.

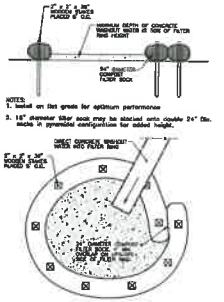
Upon stabilization of the area tributary to the sock, socks shall be removed. The sock may be left in place and vegetated or removed. In the latter case, the sock shall be cut open and the mulch spread as a soil supplement.

TABLE 4.1 Compost Sock Fabric Minimum Specifications					
Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (UV-R)	Heavy Duty Multi-Filament Polypropylene
Material Characteristics	Photo-degradable	Photo-degradable	Non-photodegradable	Photo-degradable	Photo-degradable
Sock Diameters	12" 18" 24"	12" 18" 24"	12" 18" 24"	12" 18" 24"	12" 18" 24"
Mesh Opening	1/2"	1/2"	1/2"	1/2"	1/2"
Tensile Strength		20 psi	20 psi	44 psi	222 psi
Unexposed Strength & Elongation Retained (minimum)	336 hr. 1000 hr.	336 hr. 1000 hr.		1000 hr. 1500 hr.	1000 hr. 1500 hr.
Functional Longevity	6 months	9 months	1 month	1 year	2 years
Fabric Specifications					
Inner Containment Matting	HDPE woven net Continuously woven Vertical protrusions				
Outer Filtration Mesh	1/4" x 1/4" max. aperture size Woven monofilament polypropylene fabric Permanently heat or ultra sonically welded Minimum 4 oz. per square yard				
Sock Fabrics	1/16" max. aperture size				

Fabrics & Mesh

TABLE 4.2 Compost Standards	
Organic Matter Content	80% - 100% (dry weight basis)
Organic Portion	Fibrous and elongated
pH	5.5 - 8.5
Moisture Content	30% - 55%
Particle Size	98% pass through 1" screen
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum

Filtrex



NOTES:
1. Install on flat grade for optimum performance
2. 18" diameter filter sock may be stacked onto double 24" dia. socks in pyramidal configuration for added height.

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

COMPOST SOCK CONCRETE WASHOUT AREA

Not To Scale

TABLE 4.1 Compost Sock Fabric Minimum Specifications					
Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (UV-R)	Heavy Duty Multi-Filament Polypropylene
Material Characteristics	Photo-degradable	Photo-degradable	Non-photodegradable	Photo-degradable	Photo-degradable
Sock Diameters	12" 18" 24"	12" 18" 24"	12" 18" 24"	12" 18" 24"	12" 18" 24"
Mesh Opening	1/2"	1/2"	1/2"	1/2"	1/2"
Tensile Strength		20 psi	20 psi	44 psi	222 psi
Unexposed Strength & Elongation Retained (minimum)	336 hr. 1000 hr.	336 hr. 1000 hr.		1000 hr. 1500 hr.	1000 hr. 1500 hr.
Functional Longevity	6 months	9 months	6 months	1 year	2 years
Fabric Specifications					
Inner Containment Matting	HDPE woven net Continuously woven Vertical protrusions				
Outer Filtration Mesh	1/4" x 1/4" max. aperture size Woven monofilament polypropylene fabric Permanently heat or ultra sonically welded Minimum 4 oz. per square yard				
Sock Fabrics	1/16" max. aperture size				

Fabrics & Mesh

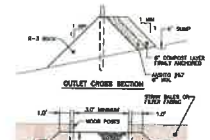
TABLE 4.2 Compost Standards	
Organic Matter Content	80% - 100% (dry weight basis)
Organic Portion	Fibrous and elongated
pH	5.5 - 8.5
Moisture Content	30% - 55%
Particle Size	98% pass through 1" screen
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum

Filtrex

(PADEP EROSION and SEDIMENT POLLUTION CONTROL PROGRAM MANUAL - MARCH 2012)

COMPOST FILTER SOCK

Not To Scale



UP-SLOPE FACE

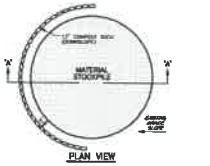
A ROCK FILTER OUTLET SHALL BE INSTALLED WHERE FAILURE OF A COMPOST ROCK OR STONE BALE BARRIER AND DITCHES DUE TO CONCENTRATED FLOW. ENGINEERED SEDIMENT LAYER SHALL BE USED ON UPSLOPE FACE IN LIEU OF MATERIALS.

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE DETAIL.

STANDARD CONSTRUCTION DETAIL #4-6

ROCK FILTER BERM DETAIL

NOT TO SCALE



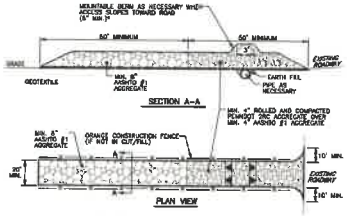
PLAN VIEW

CROSS SECTION 'A-A'

1. STOCKPILE HEIGHTS MUST NOT EXCEED 25 FEET.
2. THE TOTAL SLOPE MUST BE NO GREATER THAN 3:1, 2 FEET HORIZONTALLY TO ONE FOOT VERTICALLY.
3. 12" COMPOST SOCK SHALL BE PLACED AT THE TOE OF THE SLOPE WITH 4' OF THE STOCKPILE MATERIAL PLACED ON THE SOCK.
4. STOCKPILE MUST BE ENTIRELY COVERED WITH SEDIMENT, WOVEN AND NONWOVEN GEOTEXTILE FABRIC, PLASTIC SHEETING, OR OTHER EQUIVALENT EROSION CONTROL MATERIAL.
5. STOCKPILE MUST BE STABILIZED WITHIN 7 DAYS OF INITIAL STOCKPILING OR BE PROTECTED IMMEDIATELY AFTER THE PLACEMENT OF ANY ADDITIONAL MATERIAL.

TEMPORARY STOCKPILE AREA

Not To Scale



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

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

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

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROVIDE PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT EXCEEDED. 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. EXCESSIVE AMOUNTS OF SEDIMENT NOT 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 DIVERTING THE RUNOFF INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

ROCK CONSTRUCTION ENTRANCE

NOT TO SCALE

REVISIONS

No.	DATE	DESCRIPTION

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WOODBURY & ASSOCIATES, INC. CONSULTING ENGINEERS
MUNICIPAL/CIVIL CONSULTING ENGINEERS
1146 North Mountain Road, Harrisburg, PA 17112
Phone: (717) 652-1509 Fax: (717) 652-9151
Web: www.woodburyassociates.com

CALL 1-800-242-1776
PROJECT SERIAL NUMBER FOR DESIGN

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL ENGINEER
TIMOTHY P. WOODBURY
No. 048304

Applicant:
THE MEADOWOOD CORPORATION
c/o Paul Hershman
President/CEO
3325 Skippack Pike
(PO Box 629)
Worcester, PA 19490

Parcel Information:
TP: 67-00-03180-00-6 (U 26) PARCEL "A"
TP: 67-00-01000-00-4 (U 25) PARCEL "B"
TP: 67-00-01180-00-3 (U 1) PARCEL "C"
TP: 67-00-03190-00-1 (U 23) PARCEL "D"

Net Tract: 118.2053 Acres
ROW Lease: 12.6741 Acres
GROSS AREA: 131.0813 Acres

MEMORY CARE FACILITIES EXPANSION
EROSION & SEDIMENT CONTROL DETAILS
MEADOWOOD SENIOR LIVING
WORCESTER TOWNSHIP – MONTGOMERY COUNTY – PENNSYLVANIA

Layer List: D18-15_E&S-Det
Job No: 00-0606 018
Plan Date: JULY 13, 2020
Sheet No: 15 of 27

PROFILE: D___ TO D___
SCALE: 1" = 30'-0" HORIZONTAL
1" = 3'-0" VERTICAL

PROFILE: D___ TO D___
SCALE: 1" = 30'-0" HORIZONTAL
1" = 3'-0" VERTICAL

PROFILE: D___ TO D___
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1" = 3'-0" VERTICAL

PROFILE: D___ TO D___
SCALE: 1" = 30'-0" HORIZONTAL
1" = 3'-0" VERTICAL

RESERVED FOR FUTURE SUBMISSION

REVISIONS

15' 0' 30'
Scale in Feet (1" = 30')

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CALL 1-800-242-1776
PROJECT SERIAL NUMBER FOR DESIGN

Applicant:
THE MEADOWOOD CORPORATION
c/o Paul Mendenhall
President/CEO
3305 Skippack Pike
(PO Box 690)
Worcester, PA 19490

Parcel Identifier:
TP: 67-00-03185-00-8
(9 28 U 28) PARCEL "A"
TP: 67-00-01068-00-4
(9 28 U 30) PARCEL "B"
TP: 67-00-03108-00-0
(9 29 U 1) PARCEL "C"
TP: 67-00-03109-00-1
(9 29 U 2) PARCEL "D"

Net Tract: 118.3054 Acres
FLOD Lands: 13.8761 Acres
GROSS Area: 131.0817 Acres

MEMORY CARE FACILITIES EXPANSION
PROFILES SHEET
CROSS LOT UTILITIES – 'B'
MEADOWOOD SENIOR LIVING
WORCESTER TOWNSHIP – MONTGOMERY COUNTY – PENNSYLVANIA

WOODROW & ASSOCIATES, INC.
LAND SURVEYING / CIVIL CONSULTING ENGINEERS
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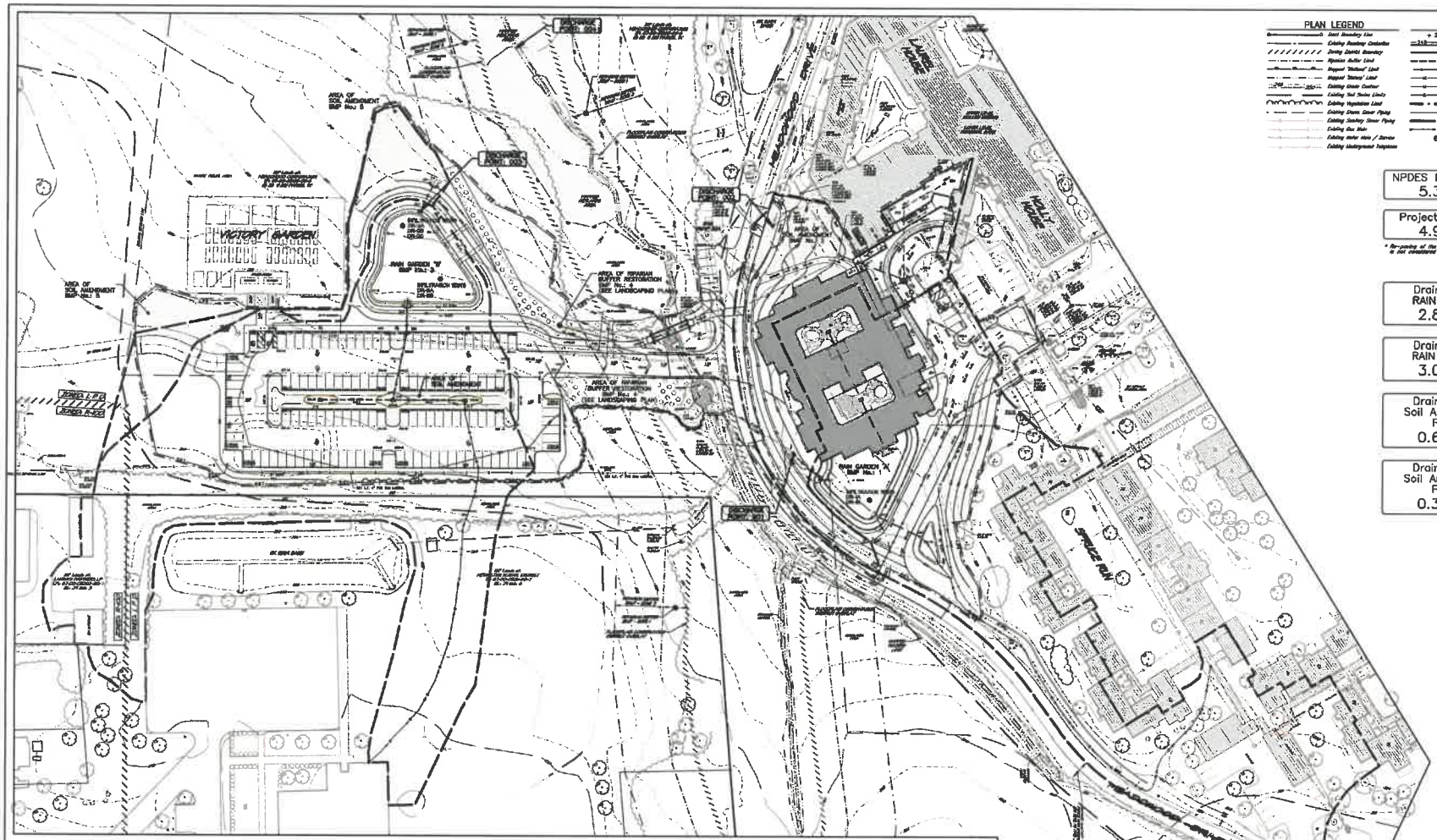
Layer Use: D18-24_Profile
Job No: 00-0506 D18
Plan Date: JULY 13, 2020
Sheet No: 24 of 27

Project No: 00-0506 D Project Name: MEADOWOOD SENIOR LIVING Print Date: Jul 13, 2020 (10:49)



PLAN LEGEND

Lot/ Boundary Line	Proposed Spot Elevation
Existing Roadway Centerline	Field Grade Contour
Zoning District Boundary	Temporary Grade Contour
Riparian Buffer Limit	Proposed Storm Piping
Stopped "Wetland" Limit	Proposed Sanitary Piping
Stopped "Stream" Limit	Proposed Electrical
Existing Grade Contour	Proposed Water Main
Existing Tree Drains Limits	Proposed Gas Service
Existing Vegetation Limit	NPDES Permit Limit
Existing Storm Sewer Piping	Limit of Disturbance
Existing Sanitary Sewer Piping	Drainage Area to proposed BMP's
Existing Gas Main	Drainage Area Flowpath
Existing Water Main / Service	Infiltration Test Location
Existing Underground Telephone	

NPDES Permit Boundary:
5.30 ACRES

Project Disturbance: *
4.94 ACRES

* Re-grading of the existing campus roadway is not considered disturbance.

Drainage Area to RAIN GARDEN 'A':
2.81 ACRES

Drainage Area to RAIN GARDEN 'B':
3.04 ACRES

Drainage Area to Soil Amendments at POI #002:
0.67 ACRES

Drainage Area to Soil Amendments at POI #004:
0.38 ACRES

GENERAL PLAN NOTES

Refer to plan sheet 2 "RECORD PLAN – OVERALL TRACT" for all "BASE EXISTING FEATURES and SURVEY NOTES".

Refer to plan sheet 3 "LAYOUT PLAN – MEMORY CARE FACILITY" for all "BASE DEVELOPMENT NOTES".

Refer to plan sheet 7 "SITE IMPROVEMENTS – MEMORY CARE FACILITY" for all "BASE CONSTRUCTION DESIGN NOTES".

POST-CONSTRUCTION NOTES:

1. Sediment notes runoff is an anticipated construction waste. Due to the implementation of numerous BMPs around the project site, there are no anticipated project wastes other than those either noted since the site is stabilized and complete.
2. Runoff from the project site enters an unnamed tributary to Zacharias Creek to Skippack Creek. Skippack Creek is classified by Title 25 Environmental Resources Chapter 93 as TSF & MF.
3. The project site can be referenced on the Lansdale U.S.G.S. Quadrangle Map.
4. The proposed BMPs are proposed to preserve the integrity of stream channels and maintain and protect the physical, biological, and chemical qualities of the receiving stream through the use of the proposed BMPs to capture, store, and cool runoff before releasing it in a predevelopment direction but at a reduced linear and volume.
5. The proposed BMPs shall prevent an increase in the rate and volume of stormwater runoff to the greatest extent possible by utilizing a slow-release methodology within the proposed BMPs to capture and slow runoff to the greatest extent possible.
6. Impervious cover has been minimized to the greatest extent possible by limiting proposed impervious coverage only to the needs of the proposed development. Open spaces and lawn area has been maximized in an effort to balance both an aesthetically pleasing design and water quality requirements made still providing for a viable development.
7. Maximum protection of existing drainage features and existing vegetation to the greatest extent possible by limiting disturbances to only the areas needed to complete the proposed development.
8. Minimize land clearing and grading to the greatest extent possible by staking and flagging the limit of disturbance as the first step in the construction sequence to avoid any unnecessary disturbance.
9. Soil compaction has been minimized to the greatest extent possible by scarifying on areas of new topsoil placement with a deeper scarification required in areas that appear to be compacted.
10. Through the use of the proposed BMPs, the flowrate and volume of runoff have been reduced to the greatest extent possible when compared to predevelopment conditions. Therefore, as designed, the project site will preserve the integrity of stream channels within the watershed and help minimize and protect the physical, biological, and chemical qualities of the receiving stream.

SEDIMENT DISPOSAL:

11. Silt removed from permanent BMPs shall be disposed of on-site in landscaped areas located outside the 100 year flood plains, wetlands, steep slopes and drainage swales. Areas of sediment disposal shall be considered a critical vegetation area requiring immediate stabilization.
12. All BMP shows above require inspection weekly and after each runoff event. All required repairs and or replacement of BMP's must be done immediately.

RECYCLING and DISPOSAL METHODS:

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

INFILTRATION TESTING RESULTS

Test Pit No.:	Existing Grade Elevation of Test Location:	Depth to Water:	Depth to Rock Refusal:	Test Depth:	Tested Infiltration Rate (in/hr):	Bottom Elevation of BMP in this Location:	Clearance to Limiting Zone:
DR-1A	248.40	Water and/or Rock were not encountered within this test pit to a depth of 3.5' [244.90] where the test pit was stopped.		1.4' [247.00]	1.25 in/hour	247.00	3.10'
DR-1B	248.40			1.4' [247.00]	1.00 in/hour	247.00	3.10'
DR-2A	248.50	3.5' [244.00]	5.6' [243.70]	0.9' [248.40]	1.75 in/hour	249.00	3.00'
DR-2B	248.50	3.5' [244.00]	5.8' [243.70]	1.3' [248.20]	0.75 in/hour	249.00	3.00'
DR-2C	248.50	3.5' [244.00]	5.8' [243.70]	1.7' [247.80]	0.20 in/hour	249.00	3.00'
DR-3A	252.20	NE	4.5' [247.70]	2.3' [250.00]	0.25 in/hour	249.00	1.30'
DR-3B	252.20	NE	4.5' [247.70]	2.3' [250.00]	0.00 in/hour	249.00	1.30'

BMP INSTALLATION

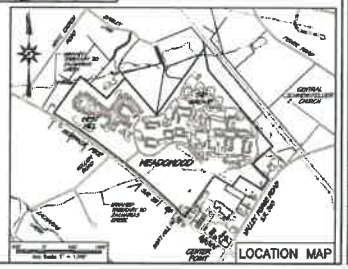
A licensed professional or the PCSM designee shall be present on-site during construction of the following BMP's to ensure proper installations.

Rain Garden 'A'
Rain Garden 'B'
Amended Soils within Lawn Areas
Riparian Buffer Restoration Landscaping Areas

ACKNOWLEDGEMENT:

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

Signature: _____ Date: _____



REVISIONS

No.	DATE:	DESCRIPTION

Scale in Feet (1" = 50')

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CALL 1-800-242-1775
PROJECT REFRN. NUMBER FOR DESIGN

Applicant:
THE MEADOWOOD CORPORATION
c/o Paul Nestorman
President/CEO
3305 Skippack Pike
(PO Box 270)
Worcester, PA 19490

Parcel information:
TP: 67-00-03185-00-6 (9 28 U 28) PARCEL 'A'
TP: 67-00-01069-00-4 (9 28 U 30) PARCEL 'B'
TP: 67-00-03186-00-3 (9 29 U 1) PARCEL 'C'
TP: 67-00-03188-00-1 (9 29 U 2) PARCEL 'D'

Net Tract: 118.3058 Acres
PCSD Lease: 12.8261 Acres
GROSS Area: 131.0817 Acres

MEMORY CARE FACILITIES EXPANSION
(PCSM) POST-CONSTRUCTION STORMWATER MANAGEMENT PLAN
MEADOWOOD SENIOR LIVING
WORCESTER TOWNSHIP – MONTGOMERY COUNTY – PENNSYLVANIA

WOODROW & ASSOCIATES, INC.
MUNICIPAL / CIVIL CONSULTING ENGINEERS
1180 Matsonford Road, Suite 100, West Conshohocken, PA 19428
Phone: (215) 242-4646 Fax: (215) 242-4679

Logo List: D18-16_PostCon
Job No: 00-0606 018
Plan Date: JULY 13, 2020
Sheet No: 16 of 27

CONSTRUCTION SEQUENCE

At least 7 days before starting any earth disturbance activities, the operator shall invite all contractors involved in these activities, the landowner, all appropriate municipal officials, the owners and assigned earth disturbance permit, the designated Licensed Professional, and the Hazel Conservation District to an on-site meeting. Also, at least 3 days before starting any earth disturbance activities, all contractors involved in these activities shall notify the Pennsylvania One Call Independent System at 811 or 1-800-242-1776 for buried utilities location.

All earth disturbance activities shall proceed in accordance with the outlined sequence on these plans. Each stage shall be completed before any following stage is initiated. Clearing and grubbing shall be limited only to those areas described in each stage. General site clearing, grubbing, and topsoil stripping may not commence on any stage or phase of the project until the E&S BMPs specified by the Construction Sequence for that stage or phase have been installed and the inspection of the installed BMPs described in this document, verified to have been approved in writing from the Hazel Conservation District or by DEP prior to implementation.

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

Per NPDES requirements 3days the installation or stabilization of all perimeter sediment control BMPs and all least 3 days prior to proceeding with the basin earth disturbance activities, the permitee or co-permittee shall provide notification to the Department or authorized conservation district.

PHASE 1A CONSTRUCTION:

1. Sideload and flag the Limit of Disturbance as shown on the plans.
2. Install Rock Construction Entrance on the existing stone driveway as shown and detailed on the plans. Ensure Rock Construction Entrance maintains a minimum length of 100-feet as outlined on the detail. Install Temporary Road Barricades on the existing stone driveway to prohibit access to the project site from Skippack Pike.
3. Install Temporary Road Barricades on the existing driveway cross drains downstream of the Rock Construction Entrance to prevent any employee or resident access to the area of work.
4. Install Compost Filter Sock CS-01 through CS-11 as shown and detailed on the plans.
5. Install new storm structures D14 and D15 along with associated piping and anti-seep collars as shown, profiled and detailed on the plans. Ensure temporary 12" Pipe in storm structure D15 is set to drain the site for the entire Phase 1A construction activities. Immediately place Rock Filter Stone around structures D14 and D15 as shown and detailed on the plans. Install Inlet Filter Bag within D14 and D15 as shown and detailed on the plans. Construct sump area for storm structure D14 as shown on the plans. Immediately hand any unstabilized soil to the Topsoil Stockpile Area. Install Silt Fence and Hickory Corners Stockpile Area. Immediately seed a temporary seed and mulch mixture applied at the recommended rates. Install Erosion Control Blanket on all slopes 3:1 or greater as shown and detailed on the plans. Immediately stabilize all disturbance with a temporary seed and mulch mixture applied at the recommended rates. Place orange construction fencing around sump area to prevent any further vehicular traffic through the area.
6. Begin construction of new driveway connection to the Hatfy House parking lot as shown and detailed on the plans. Install temporary 12" Pipe in storm structure D13 as set to drain the site for the entire Phase 1A construction activities. Immediately place Rock Filter Stone around structures D14 and D15 as shown and detailed on the plans. Install Inlet Filter Bag within D14 and D15 as shown and detailed on the plans. Construct sump area for storm structure D14 as shown on the plans. Immediately hand any unstabilized soil to the Topsoil Stockpile Area. Install Silt Fence and Hickory Corners Stockpile Area. Immediately seed a temporary seed and mulch mixture applied at the recommended rates. Install Erosion Control Blanket on all slopes 3:1 or greater as shown and detailed on the plans. Immediately stabilize all disturbance with a temporary seed and mulch mixture applied at the recommended rates. Place orange construction fencing around sump area to prevent any further vehicular traffic through the area.
7. Begin construction of new sanitary sewer connection to the Hatfy House parking lot as shown and detailed on the plans. Install underground electric connection to the Hatfy House parking lot as shown and detailed on the plans. Install underground electric connection to the Hatfy House parking lot as shown and detailed on the plans. Install Silt Fence and Hickory Corners Stockpile Area. Construct sump area to divert and isolate D20 as shown and detailed on the plans. Construct temporary construction fencing around sump area to prevent any further vehicular traffic through the area. Complete site grading to complete construction access and haul road to the Topsoil Stockpile Area. Immediately hand any unstabilized soil to the Topsoil Stockpile Area. Install Silt Fence and Hickory Corners Stockpile Area. Immediately seed a temporary seed and mulch mixture applied at the recommended rates. Install Erosion Control Blanket on all slopes 3:1 or greater as shown and detailed on the plans. Immediately stabilize all disturbance with a temporary seed and mulch mixture applied at the recommended rates.
8. Begin installation of the parking lot storm sewer system, including Inlet D17 through D21, and Inlet D22 and all associated piping as shown, detailed, and profiled on the plans. Begin stabilization of parking lot area as shown and detailed on the plans up to the paving binder course.
9. Begin construction of concrete sidewalk and placement of concrete wheelchair bridge as shown and detailed on the plans. Finish all site grading around the parking lot and adjacent areas as shown on the plans. Install Inlet Filter Bag within Inlet D21 and D22 as shown and detailed on the plans. Immediately stabilize disturbance with a permanent seed and mulch mixture applied at the recommended rates.
10. CRITICAL STAGE #1
Upon completion and stabilization of all phase 1B grading begin construction of Rain Garden "A" as shown and detailed on the plans. Install the Rain Garden Berm, Compost Sock Sediment Trap and Compost Filter Sock around the perimeter of the Rain Garden "A" as shown and detailed on the plans. Install Rock Filter Stone around the Rain Garden "A" inlet structure as shown and detailed on the plans. Install Inlet Filter Bag within Inlet D14 and D15 as shown and detailed on the plans. Install erosion control blanket on all designated Topsoil Stockpile areas. Immediately stabilize all disturbance with a permanent seed and mulch mixture applied at the recommended rates.
11. Upon completion and stabilization of Rain Garden "A" berm and spillway construct a representative of the Montgomery County Conservation District and Developer & Associates must be notified that Sediment Trap first convertion is about to take place.
12. CRITICAL STAGE #2
Begin removal of Compost Sock Sediment Trap "A" to Rain Garden "B" configuration. The storm system installed within the parking lot shall be flushed free of any accumulated sediment prior to Sediment Trap conversion. All sediment removed from the storm system shall be disposed of in the designated Topsoil Stockpile area located on the plans. Remove Compost Sediment Trap "A" and place in the designated Topsoil Stockpile area as shown and detail on the plans. Install the Rain Garden Berm, Compost Sock Sediment Trap and Compost Filter Sock around the perimeter of the Rain Garden "B" as shown and detailed on the plans. Install Rock Filter Stone around the Rain Garden "B" inlet structure as shown and detailed on the plans. Install Inlet Filter Bag within Inlet D21 as shown and detailed on the plans. Install erosion control blanket on all designated Topsoil Stockpile areas. Immediately stabilize all disturbance with a permanent seed and mulch mixture applied at the recommended rates.
13. Upon completion and stabilization of Rain Garden "B" berm and spillway construct a representative of the Montgomery County Conservation District and Developer & Associates must be notified that Sediment Trap first convertion is about to take place.
14. CRITICAL STAGE #3
Upon completion of the concrete pad for the proposed building finalize all remaining site grading associated with sidewalk construction and finalize proposed driveway and parking lot up to the binder course. Construct concrete sidewalk and wheelchair ramp as shown on the plans. Apply "Soil Amendment" to all designated lawn areas as shown and detailed on the plans. Install Inlet Filter Bag within Inlet D17 and D18 as shown and detailed on the plans. Immediately stabilize all disturbance with a permanent seed and mulch mixture applied at the recommended rates.
15. Upon completion and stabilization of all proposed Phase 2 grading begin final installation of Rain Garden "A" as shown and detailed on the plans. Install Rain Garden Berm, Compost Sock Sediment Trap and Compost Filter Sock around the perimeter of the area designated on the plans. Remove Rain Garden Berm, Compost Sock Sediment Trap and Compost Filter Sock around the perimeter of the Rain Garden "B" as shown and detailed on the plans. Remove Compost Sock Sediment Trap "B" and place in the designated Topsoil Stockpile area located on the plans. Install Rock Filter Stone around the Rain Garden "A" inlet structure as shown and detailed on the plans. Install Inlet Filter Bag within Inlet D14 and D15 as shown and detailed on the plans. Install erosion control blanket on all designated Topsoil Stockpile areas. Immediately stabilize all disturbance with a permanent seed and mulch mixture applied at the recommended rates.
16. Vegetated areas shall be considered permanently stabilized when a uniform 70% vegetative cover or erosion resistant perennial species have been achieved, or the disturbed area is covered with an acceptable BMP which permanently minimizes accelerated erosion and sedimentation. Until such time as this standard is achieved, interim stabilization measures and temporary erosion and sediment control BMPs are used to treat project runoff may not be removed. If soil areas appear to be compacted, scarify 8 to 12 inches prior to seeding. New topsoil shall be placed on the disturbed areas and shall be scarified to a depth of 4 inches prior to seeding. New topsoil shall be placed with a minimum depth of 6 inches. Upon completed stabilization of all Phase 1A & 1B construction remove Compost Sediment Traps and Compost Filter Sock and place in the designated Topsoil Stockpile area located on the plans. Install Silt Fence below. Sediment removal from the control devices should be kept to a minimum. Sediment removed from the Compost Sock Concrete Washout Area should be retained from the project site and disposed of according to all local and federal guidelines. Immediately stabilize any disturbance associated with the removal of erosion control devices with a permanent seed and mulch mixture applied at the recommended rates.
17. Upon complete Phase 1B stabilization and removal of all erosion control devices remove the Rock Construction Entrance and begin the paving process to the parking lot and driveway area as shown and detailed on the plans. Install all traffic control devices. (i.e. signage and striping.)

PHASE 2 CONSTRUCTION:

18. Install Compost Filter Sock CS-12 and CS-13 as shown and detailed on the plans. Install Inlet Filter Bags within existing Inlet D17 and the existing Inlet within the existing Hatfy House parking lot as shown and detailed on the plans.
20. Relocate Temporary Road Barricades as shown on the Phase 2 plan to provide employee/resident access to the Hatfy House on the newly constructed driveway while prohibiting access to the rest of work.
21. Begin removal of all existing driveway and parking lot areas noted on the plans. Remove previously disconnected sanitary mains, water lines, and underground electric lines and immediately re-grade disturbed Inlet Section that is disturbed to remove the utilities. Remove existing storm sewer piping and structures from proposed sewer mainline D23 to existing storm manhole D20 and Inlet D21 and D22 and storm line D24 along with all associated piping as shown on the plans, profiles, and details. Immediately place an Inlet Filter Bag in Inlet D21, D22 and Inlet D24 as shown and detailed on the plans.
22. Clear and grub remainder of Phase 2 area to begin construction of the proposed building. Seal temporary 12" Pipe in Inlet D14 with a water-tight seal, as site grading is brought up to construct the proposed building. Remove and stockpile topsoil in the designated "topsoil stockpile" area as shown and detailed on the plans. Stockpile must be stabilized immediately with a temporary seed and mulch mixture applied at the recommended rates. Begin construction of proposed driveway and parking lot as shown and detailed on the plans. Install Rain Garden "A" area to final contours as finished construction of building (including roof, drains and downspouts) and install Rain Garden "A" with the Basin Soil Mix as shown on the plans, profiles, and detailed on the plans. Place in Inlet Filter Bag into Inlet D11 and D12 to remove sediment and debris. Immediately stabilize all disturbance with a permanent seed and mulch mixture applied at the recommended rates.
23. CRITICAL STAGE #3
Upon completion of the concrete pad for the proposed building finalize all remaining site grading associated with sidewalk construction and finalize proposed driveway and parking lot up to the binder course. Construct concrete sidewalk and wheelchair ramp as shown on the plans. Apply "Soil Amendment" to all designated lawn areas as shown and detailed on the plans. Install Inlet Filter Bag within Inlet D17 and D18 as shown and detailed on the plans. Immediately stabilize all disturbance with a permanent seed and mulch mixture applied at the recommended rates.
24. CRITICAL STAGE #4
Upon final stabilization of all proposed Phase 2 grading begin final installation of Rain Garden "A" as shown and detailed on the plans. Install Rain Garden Berm, Compost Sock Sediment Trap and Compost Filter Sock around the perimeter of the area designated on the plans. Remove Rain Garden Berm, Compost Sock Sediment Trap and Compost Filter Sock around the perimeter of the Rain Garden "B" as shown and detailed on the plans. Remove Compost Sock Sediment Trap "B" and place in the designated Topsoil Stockpile area located on the plans. Install Rock Filter Stone around the Rain Garden "A" inlet structure as shown and detailed on the plans. Install Inlet Filter Bag within Inlet D14 and D15 as shown and detailed on the plans. Install erosion control blanket on all designated Topsoil Stockpile areas. Immediately stabilize all disturbance with a permanent seed and mulch mixture applied at the recommended rates.
25. Vegetated areas shall be considered permanently stabilized when a uniform 70% vegetative cover or erosion resistant perennial species have been achieved, or the disturbed area is covered with an acceptable BMP which permanently minimizes accelerated erosion and sedimentation. Until such time as this standard is achieved, interim stabilization measures and temporary erosion and sediment control BMPs are used to treat project runoff may not be removed. If soil areas appear to be compacted, scarify 8 to 12 inches prior to seeding. New topsoil shall be placed on the disturbed areas and shall be scarified to a depth of 4 inches prior to seeding. New topsoil shall be placed with a minimum depth of 6 inches. Upon completed stabilization of all Phase 2 construction remove Compost Sediment Traps and Compost Filter Sock and place in the designated Topsoil Stockpile area located on the plans. Install Silt Fence below. Sediment removal from the control devices should be kept to a minimum. Sediment removed from the Compost Sock Concrete Washout Area should be retained from the project site and disposed of according to all local and federal guidelines. Immediately stabilize any disturbance associated with the removal of erosion control devices with a permanent seed and mulch mixture applied at the recommended rates.
26. CRITICAL STAGE #5
Upon completion and stabilization and removal of all erosion control devices apply final wearing course to the driveway and parking lot areas as shown and detailed on the plans. Install all traffic control devices (i.e. signage and striping). Install as Riprap Outlet Protection plantings and any remaining site work shown and detailed on the plans and detailed on the plans.
27. Within 30 days after the completion of earth disturbance activities authorized by the NPDES permit, including the permanent stabilization of the site and proper installation of PCSM BMPs in accordance with the approved PCSM plan, or upon submission of the NOT if sooner, the permittee shall file with the department or authorized conservation district a statement signed by a licensed professional and by the permittee certifying that work has been completed in accordance with the terms and conditions of the NPDES permit and the approved E&S and PCSM Plans. Construction certificates are needed to ensure that all work has been performed in accordance with the terms and conditions of the NPDES permit and the approved E&S and PCSM Plans.

B.M.P. MAINTENANCE PROGRAM

GENERAL NOTES:

The stormwater detention facility shown hereon is a permanent BMP, structure and is not to be removed alone or converted to any use without the approval of the applicable municipality and/or the local County Conservation District and D.E.P.

All B.M.P.'s such as the basin and conveyance system require yearly inspection and maintenance to ensure that the facility functions properly for its intended purpose. Maintenance of the system will include the removal of any debris and backwash from the outlet structure. An inspection report should be provided by a qualified Engineering firm under the direction of a licensed Professional Engineer. The inspection report should be provided on a yearly basis or immediately after the first storm event in which the system has been overwhelmed with the heaviest rainfall expected for that locality. Inspection reports should be retained with the system, engineering files and efficiently any costs associated with recommended repairs and/or maintenance of said facilities. Copies of the inspection report and the recommended repairs should be forwarded to the applicable municipality for review and record in keeping with State regulations.

During the construction period, the contractor shall be responsible for the proper construction, installation, and maintenance of all erosion and sedimentation control measures. The permittee shall be responsible for the proper construction, installation and maintenance of all post construction stormwater management BMPs described in the PCSMM Plan. The applicant, its assigns will assume responsibility for the operation and maintenance responsibilities of all post construction stormwater management BMPs.

A cut pond point Rain Garden "A", Basin "B", or its Forebay Area fail to develop the storage volume within 72 hours, the remaining water shall be immediately pumped into the Basin Outlet Structure and a certified professional contacted to investigate the cause and recommend a solution to the failure.

MAINTENANCE NOTES & SCHEDULE:

1. Maintenance of Rain Gardens: (Semi-annually)
The owner, its assigns and the individual homeowner shall be responsible to ensure that the Rain Garden are in operational condition, particularly the solution at the embankments, outlet structures, trash racks, riprap aprons, inlets, and other safety related items. Shrub vegetation (weed mows, prune, and plantings) are both seasonal pruning and weeding may be required. Inspection shall be completed quarterly and after major rainfall events. Maintenance shall be performed when the basin is completely dry. Any removed sediment should be disposed of properly and the disturbed areas must be seeded and mulched. Inlet structures and riprap aprons shall be cleaned and revegetated. Debris may also need to be removed from the riprap apron. Trash and debris may be left down in the bottom of the grading region. Mulch, if utilized, should be re-spread when erosion is evident and be replenished as needed. Once every two to three years the entire area may require mulch replacement. Maintenance of Rain Garden berms and perimeter areas on a weekly basis. NO HOT mole pesticides or fertilizers where stormwater will be conveyed. Use hot-filter planting area and Rain Garden Berm as a mulch bed. Mulch should be replenished annually. Mulch should be applied after the winter dormancy period and after the last frost. Mulch should be applied to a depth of 3 inches to keep a member from restarting in sunshine, but may not be sufficient to deter weeds from germinating. Invasive, diseased and overfloured plants, leaving more than twice a year will only encourage and season cross species and create additional weed issues. Recommended dates for pruning are early and late fall with another second cutting in March up to April 15th. This will minimize bird and related habitat and promote desirable and attractive vegetation. Over these areas when the ground is dry, the soil should be tilled to a depth of approximately 4 inches to relieve compaction. Fertilizer such as Nutrite, Earthtrate Nitrate or other organic or inorganic fertilizers may be applied if appropriate, herbicide, or manual or mechanical pulling. Herbicides, pesticides, fertilizers, or other chemicals should be used sparingly. Trees and shrubs should be inspected twice per year to evaluate health. During periods of extreme drought, Rain/Rain Garden areas may require watering. Inflow and outflow structures shall be inspected at least two times per year for damage. Riprap loose or these structures shall be replaced to design specifications if necessary.

Maintenance of the Site-Planting Areas:

1st Year:
New plantings must be closely monitored on a weekly basis during the 1st year of establishment in order to quickly identify and correct problems. Dead or dying plants must be replaced. Invasive species shall be immediately cut and re-sealed with a permanent seed mixture. Any plantings that die off within the first year shall be immediately replaced. All proposed plantings shall be watered during the first year in order to promote vigorous growth and establishment of all bio-basin and filtering areas. Weather stops for bitumen by limited points such as Visible. Eliminate boulders by spot mowing, spot spraying, or visit application of appropriate herbicide, or manual pulling.

6. Maintenance to be done on an "as needed" basis for the entire project site:
   - Plant alternative grass species in the event of serious pest infestation of assign grass.
   - Remove bare areas; install appropriate erosion control measures when native soil is exposed or erosion channels are forming.
   - Reroll and repeat sweet 8 drive down time is more than 48 hours.
   - Water during dry periods, fertilize and apply pesticide only when absolutely necessary.

RAIN GARDEN 'A' CONSTRUCTION SEQUENCE

*per PA DEP BMP Manual - Chapter 6.4.5

1. Complete Phase 1B site improvements that have a potential to create sediment runoff.
2. Stabilize grading within the limit of disturbance.
3. Remove Rain Garden Filter Berm at Inlet D14 and manually any sediment within Rain Garden "A" sump area that has been deposited during construction and dispose of in the designated area.
4. Excavate Rain Garden "A" area to final design depths and modify subgrade. Backfill Rain Garden "A" with the Basin Soil Mix as shown on the plans and specifications. Overfilling is recommended to account for settlement. Light hand tamping is acceptable if necessary.
5. Preseed the planting soil prior to planting vegetation to aid in settlement.
6. Complete final grading to achieve proposed design elevations, leaving space for upper layer of compost, mulch or topsoil as specified on the plans. Install all plantings and plugs as shown and detailed on the plans.

RAIN GARDEN 'B' CONSTRUCTION SEQUENCE

*per PA DEP BMP Manual - Chapter 6.4.5

1. Complete Phase 1B site improvements that have a potential to create sediment runoff.
2. Stabilize grading within the limit of disturbance.
3. Remove remove accumulated sediment from Compost Sock Sediment Trap "A" and dispose of in the designated area. Remove Compost Sock perimeter and re-establish Rain Garden berm area that may have been disturbed during sock removal.
4. Excavate Rain Garden "B" area to final design depths and modify subgrade. Backfill Rain Garden "B" with the Basin Soil Mix as shown on the plans and specifications. Overfilling is recommended to account for settlement. Light hand tamping is acceptable if necessary.
5. Preseed the planting soil prior to planting vegetation to aid in settlement.
6. Complete final grading to achieve proposed design elevations, leaving space for upper layer of compost, mulch or topsoil as specified on the plans. Install all plantings and plugs as shown and detailed on the plans.

LAWN AREA SOIL AMENDMENT CONSTRUCTION SEQUENCE

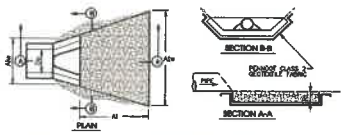
*per PA DEP BMP Manual - Chapter 6.7.3

1. All site construction, including Soil BMP conversion/installation, shall be completed and stabilized prior to lab restoration of all lawn areas.
2. Soil areas to be amended shall be dry prior to manification.
3. Compost should be added in a 4" layer with the subsoil tilled up to 8" for areas of minor compaction. Compost should be placed in a 10" layer and tilled up to 20" for areas of major compaction. Upon completion of subsoil amendments, add 4" to 8" of topsoil. Apply 4" lay layer containing 2:1 topsoil to compost ratio and till at or 8" depth into previously placed layer. Apply topsoil amendment and mulch mixture applied at the recommended rates.
4. Water lawn areas as necessary to establish vigorous and healthy seed growth.

RIPARIAN BUFFER RESTORATION CONSTRUCTION SEQUENCE

*per PA DEP BMP Manual - Chapter 6.7.3

1. All site construction, including Soil BMP conversion/installation, shall be completed and stabilized prior to the planting of all Riparian Buffer Restoration landscaping.
2. Prepare the planting soil prior to planting vegetation to aid in settlement. Plant all proposed Riparian Buffer Restoration plantings according to the plans and specifications. Immediately stabilize all disturbance with a permanent seed and mulch mixture applied at the recommended rates.



ENERGY DISSIPATOR SIZING DATA

Outlet Structure No.	Pipe Dia. (in)	Tailwater Condition (Min or Max)	Q (CFS)	Riprap Size (Ft)	Apron Length (Ft)	Apron Width (Ft)	Initial Depth (Ft)	Terminal Depth (Ft)
D09	18	MAX.	7.54	R-11	R 3	5	7.5	4.5	7.5
D13	18	MIN.	2.13	3.84	R 2	12	6.0	4.0	12.0
D22	18	MAX.	8.44	7.65	R 3	5	7.5	4.5	7.5
D24	15	MIN.	1.52	0.77	R 1	8.0	3.75	12.5

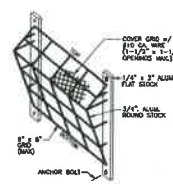
NOTE:
ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

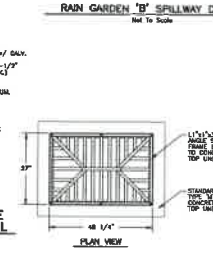
EXTEND RIPRAP ON EACH SIDE OF APRON TO AT LEAST 1/2 DEPTH OF PIPE ON BOTH SIDES TO PREVENT SCOUR AROUND THE PIPE.

(PAPER EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL - MARCH 2012)

RIPRAP APRON OUTLET PROTECTION
Not To Scale

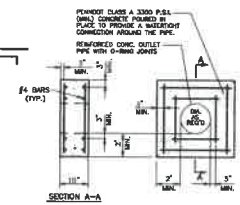


OUTLET STRUCTURE TRASH RACK DETAIL
Not to Scale



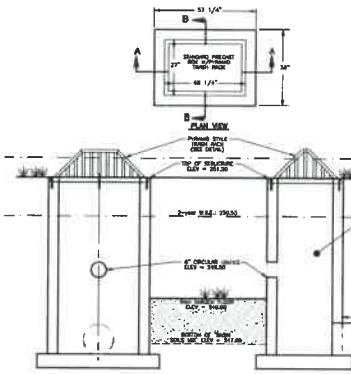
1. TRASH GRATE
   1/8"x3/8"x18" ANGLE STEEL FRAME w/9/16" DIA. STEEL GRATE BARS AT 1 1/2" O.C. (dim) WELDED WITH ANTI-SKIDT COMPONENTS.
2. ATTACH TO CONCRETE TOP WITH (6) 3/8" x 3" LAG BOLTS SET IN LEAD EXPANSION.
3. WELD ALL GRATE BAR CONNECTIONS.
4. SIZE TRASH GRATE TO FIT IN PLACE OF STANDARD 'A' STEEL GRATE.

PYRAMID STYLE - TRASH RACK TOP
Not To Scale

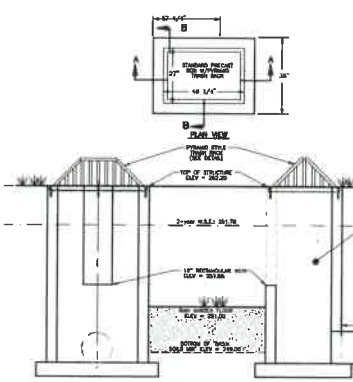


NOTE:
ANTI-SEEP COLLARS SHOULD NOT BE LOCATED CLOSER THAN TWO (2) FEET TO A PIPE JOINT

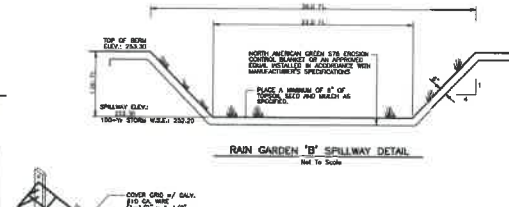
REINFORCED CONCRETE ANTI-SEEP COLLAR
Not To Scale

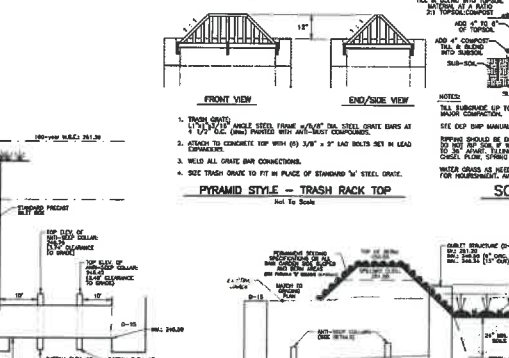


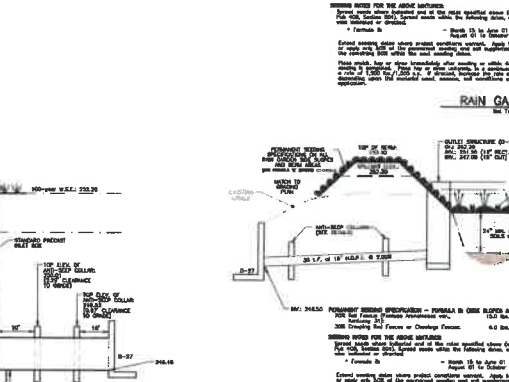
RAIN GARDEN "A" - OUTLET STRUCTURE (D-14)
Not to Scale

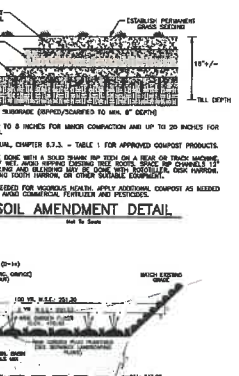


RAIN GARDEN "B" - OUTLET STRUCTURE (D-23)
Not to Scale









REVISIONS

DEP/PCSM MAINTENANCE & SHARE OF REPORTING FOR THE PERMANENT PCSM BMPs IN THE BMP

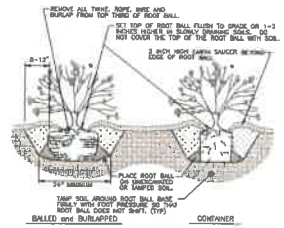
THE PLAN WAS PREPARED AND SEALED BY DAVID A. WOODROW, JR. PE, PLS, CFM, CEPSCI, CPESC, CPSWQ, CPSWQ, CPSWQ

NOTES:

1. APPLY THE PLASTIC SHEETING LOOSELY AROUND THE TRUNK TO LEAVE A 0.5 INCH GAP BETWEEN THE TRUNK AND THE SHEETING.
2. THE TREE WRAP SHOULD BE INSTALLED AT TIME OF PLANTING AND BE REMOVED WHEN DIRECTED BY THE LANDSCAPE ARCHITECT, BUT NO LATER THAN 12 MONTHS AFTER PLANTING.
3. TREES WHOSE NORTH ORIENTATION IS NOT CHANGED FROM THE NURSERY DO NOT NEED TO BE WRAPPED EXCEPT TREES WITH VERY THIN BARK. SUCH AS RED MAPLE, SHOULD BE WRAPPED IF APPROVED BY THE LANDSCAPE ARCHITECT.

TREE WRAPPING DETAIL

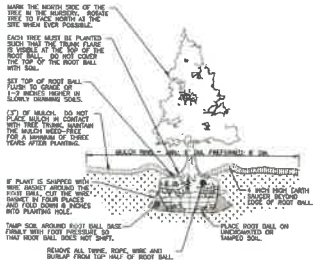
Not To Scale



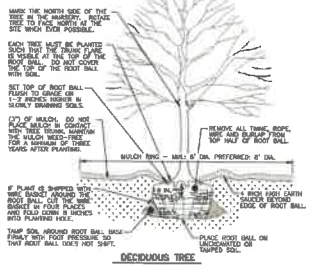
1. THREE INCHES (3") OF MULCH. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK. MAINTAIN THE MULCH WEED-FREE FOR A MINIMUM OF THREE YEARS AFTER PLANTING.
2. PLANTS WITH POOR QUALITY ROOT BALLS OR ROOT BALLS THAT HAVE BEEN CRACKED OR DAMAGED SHALL BE REJECTED.
3. PLANTS THAT DO NOT DISPLAY THE NORMAL CHARACTERISTICS FOR THEIR SPECIES SHALL BE REJECTED.
4. DO NOT HEAVILY PRUNE THE SHRUBS AT PLANTING. PRUNE ONLY BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED, HOWEVER DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.
5. MARK THE NORTH SIDE OF THE TREE IN THE NURSERY. ROTATE TREE TO FACE NORTH AT THE SITE WHEN EVER POSSIBLE.

DECIDUOUS & EVERGREEN SHRUB PLANTING

Not To Scale



EVERGREEN TREE



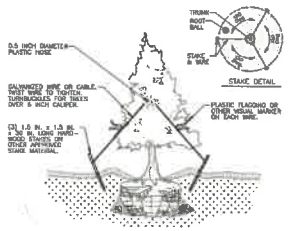
DECIDUOUS TREE

1. TREES WITH POOR QUALITY ROOT BALLS OR ROOT BALLS THAT HAVE BEEN CRACKED OR DAMAGED SHALL BE REJECTED.
2. TREES THAT HAVE GROWN TOO CLOSE TOGETHER IN THE NURSERY, RESULTING IN WEAK TRUNKS SHALL BE REJECTED.
3. TREES WITH CENTRAL LEADER BROKEN SHALL BE REJECTED.
4. TREES THAT DO NOT DISPLAY THE NORMAL CHARACTERISTICS SHALL BE REJECTED.
5. DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS AND BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED, HOWEVER DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.
6. STAKE TREES ONLY UPON APPROVAL FROM THE LANDSCAPE ARCHITECT. (SEE STAKING DETAIL AS APPROPRIATE)
7. REPLENISHMENT OF MULCH IS ONLY TO REPLACE MULCH LOST. MULCH DEPTH TO BE 3" MAXIMUM AND NOT INCREASED WITH ADDITIONAL LAYERS OF MULCH.

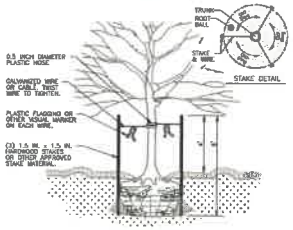
THIS DETAIL ASSUMES THAT THE PLANTING SPACE IS LARGER THAN 8 FEET SQUARE, OPEN TO THE SKY, AND NOT CENSORED BY ANY PAVING OR GRADING.

TREE PLANTING DETAIL

Not To Scale



EVERGREEN TREE



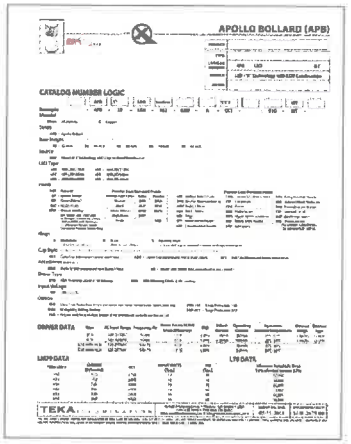
DECIDUOUS TREE

1. ALL STAKES SHALL BE DRIVEN OUTSIDE THE EDGE OF THE ROOT BALL.
2. ASSURE THAT THE BEARING SURFACE OF THE PROTECTIVE COVERING OF THE WIRE OR CABLE AGAINST THE TREE TRUNK IS A MINIMUM 0.5 INCH.
3. REMOVE ALL STAKING AS SOON AS THE TREE HAS GROWN SUFFICIENT ROOTS TO OVER-COME THE DISTURBANCE OF TRANSPLANTING. THIS MAY BE 12 MONTHS. STAKES SHALL BE REMOVED NO LATER THAN THE END OF THE TREES GROWING SEASON.
4. TREES NORMALLY DO NOT NEED TO BE STAKED AND STAKING CAN BE HARMFUL TO THE TREE. STAKING SHOULD BE DONE ONLY WITH THE APPROVAL OF THE LANDSCAPE ARCHITECT IF IT IS EXPECTED THAT THE TREE WILL NOT BE ABLE TO SUPPORT ITSELF.
5. WIRE OR CABLE SIZES SHALL BE AS FOLLOWS:
   TREES UP TO 3.5 INCH CALIPER - 14 GAUGE
   TREES 3.5 INCH TO 3 INCH CALIPER - 12 GAUGE
6. TIGHTEN WIRE OR CABLE ONLY ENOUGH TO KEEP TREE FROM SLIPPING. ALLOW FOR SOME TRUNK MOVEMENT. PLASTIC HOSE SHALL BE LONG ENOUGH TO ACCOMMODATE 1.5 INCH CALIPER OF TRUNK MOVEMENT.
7. TUCK ANY LOOSE ENDS OF THE WIRE OR CABLE INTO THE WIRE WRAP SO THAT NO SHARP WIRE ENDS ARE EXPOSED.

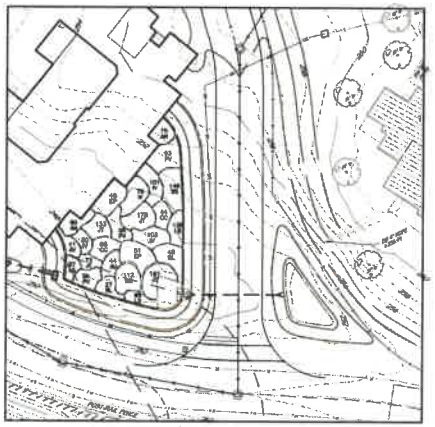
TREE STAKING DETAIL

Not To Scale

SITE LIGHT CUT SHEET



LIGHT BOLLARD CUT SHEET



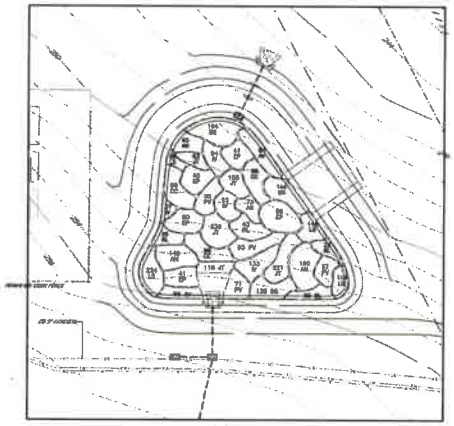
RAIN GARDEN 'A' PLUG PLANTING DETAIL

SCALE: 1"=30'

RAIN GARDEN 'A' PLUG SCHEDULE

Plan Symbol	Quantity	Botanical Name	Common Name	Remarks	Comments
AR	180	Acer rubrum cinnifrax	New England Aster	PLUG	Space 18" on center
AV	133	Andropogon virginicus	Broomsedge	PLUG	Space 18" on center
CC	150	Carex comosa	Bristly Sedge	PLUG	Space 18" on center
EP	89	Eupatorium purpureum	Joe Pye-weed	PLUG	Space 24" on center
IV	254	Iris versicolor	Blue Flag Iris	PLUG	Space 15" on center
JI	588	Juncus tenuis	Slender Rush	PLUG	Space 12" on center
LS	211	Liatris spicata	Gayfeather	PLUG	Space 12" on center
PV	203	Panicum virgatum	Switchgrass	PLUG	Space 18" on center
RL	79	Rudbeckia laciniata	Cutleaf Coneflower	PLUG	Space 24" on center
SS	358	Sorghastrum nutans	Little Bluestem	PLUG	Space 18" on center
	2164	TOTAL PLUGS			

UPON COMPLETION OF PLUG INSTALLATION, THE RAIN FLOOR SHALL BE COVERED IN 3" SHREDDED, HARDWOOD BARK MULCH. NO MULCH SUBSTITUTIONS WILL BE ACCEPTED.



RAIN GARDEN 'B' PLUG PLANTING DETAIL

SCALE: 1"=30'

RAIN GARDEN 'B' PLUG SCHEDULE

Plan Symbol	Quantity	Botanical Name	Common Name	Remarks	Comments
AR	312	Acer rubrum cinnifrax	New England Aster	PLUG	Space 18" on center
AV	148	Andropogon virginicus	Broomsedge	PLUG	Space 18" on center
CC	276	Carex comosa	Bristly Sedge	PLUG	Space 18" on center
EP	246	Eupatorium purpureum	Joe Pye-weed	PLUG	Space 24" on center
IV	358	Iris versicolor	Blue Flag Iris	PLUG	Space 15" on center
JI	585	Juncus tenuis	Slender Rush	PLUG	Space 12" on center
LS	779	Liatris spicata	Gayfeather	PLUG	Space 12" on center
PV	343	Panicum virgatum	Switchgrass	PLUG	Space 18" on center
RL	129	Rudbeckia laciniata	Cutleaf Coneflower	PLUG	Space 24" on center
SS	172	Sorghastrum nutans	Little Bluestem	PLUG	Space 18" on center
	3153	TOTAL PLUGS			

UPON COMPLETION OF PLUG INSTALLATION, THE RAIN FLOOR SHALL BE COVERED IN 3" SHREDDED, HARDWOOD BARK MULCH. NO MULCH SUBSTITUTIONS WILL BE ACCEPTED.

PENNSYLVANIA
DAVID SEAN WARD
LANDSCAPE ARCHITECT
REGISTERED LANDSCAPE ARCHITECT

REVISIONS

No.	DATE	DESCRIPTION

ONLY PLANS BEARING AN ORIGINAL SIGNATURE AND SEAL OF THE ENGINEER SHALL BE ACCEPTED AS THE OFFICIAL PLAN.

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PENNSYLVANIA ONE CALL SYSTEM, INC.
CALL 1-800-242-1776
PROJECT SERIAL NUMBER FOR DESIGN

COMMONWEALTH OF PENNSYLVANIA
PROFESSIONAL
TIMOTHY P. WOODROW
ENGINEER
No. 48578

Applicant:
THE MEADOWOOD CORPORATION
c/o Paul Nordenson
President/CEO
3305 Skippack Pike
(PO Box 830)
Worcester, PA 19490

Parcel Information:
TP: 67-00-03185-00-5 (9 28 U 28) PARCEL 'A'
TP: 67-00-01089-00-4 (9 28 U 36) PARCEL 'B'
TP: 67-00-03186-00-4 (9 29 U 1) PARCEL 'C'
TP: 67-00-03189-00-1 (9 29 U 2) PARCEL 'D'

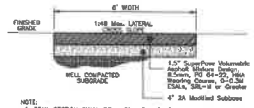
Net Tract: 118.2056 Acres
PECO Easement: 12.8761 Acres
GROSS Area: 131.0817 Acres

MEMORY CARE FACILITIES EXPANSION
BMP CONSTRUCTION DETAILS 'B' (PCSM)
MEADOWOOD SENIOR LIVING
WORCESTER TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

WOODROW & ASSOCIATES, INC.
CIVIL ENGINEERS - LAND SURVEYORS - LANDSCAPE ARCHITECTS
1108 North Bethlehem Pike / P.O. Box 1-L, Lansdale, PA 19446
Phone: (215) 362-3000 Fax: (215) 362-3219
www.woodrowinc.com

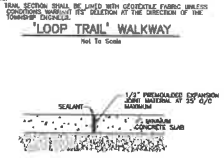
Layer List: D18-18_PCSM-Details
Job No: 00-0508 D18
Plan Date: JULY 13, 2020
Sheet No: 18 of 27

Project No: 00-0508 D Project Name: MEADOWOOD SLIDER (MAS) Plot Date: Jul 24, 2020 7:13:11

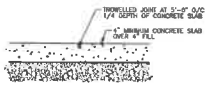


NOTE:
1. TRAIL SECTION SHALL BE LINED WITH GEOTEXTILE FABRIC UNLESS CONDITIONS WARRANT ITS SELECTION AT THE DIRECTION OF THE TOWNSHIP ENGINEER.

'LOOP TRAIL' WALKWAY
Not To Scale

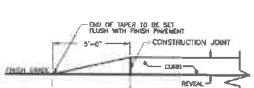


TYPICAL EXPANSION JOINT DETAIL
Not To Scale

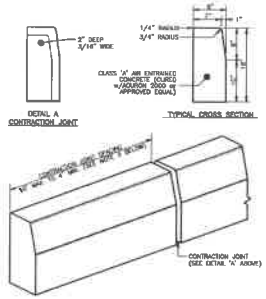


TYPICAL CONTROL JOINT DETAIL
Not To Scale

CONCRETE SIDEWALK
Not To Scale

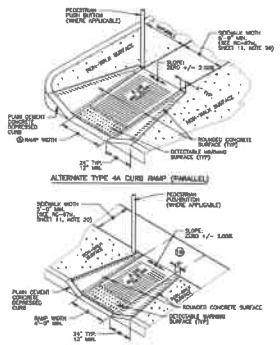


5' CONCRETE CURB END TAPER
Not To Scale



DETAIL NOTES:
1. MATERIALS AND CONSTRUCTION SHALL MEET THE REQUIREMENTS OF PUBLICATION 408, SECTION 630 FOR PLAIN CEMENT CONCRETE CURB. SECTION 640 FOR PLAIN CEMENT CONCRETE GUTTER AND SECTION 641 FOR PLAIN CEMENT CONCRETE CURB GUTTER.
2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR SECTIONS.
3. PLACE 1/4 inch PREMOLDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT LOCATIONS WHERE NEW CURB JOINS EXISTING CURB. JOINTS SHALL BE AND ALIGNED TO CURB AS TO CONFORM TO CURB SECTIONAL AREA OF CURB.

PLAIN CONCRETE CURB
Not To Scale



ALTERNATE TYPE 4A CURB RAMP (PARALLEL)

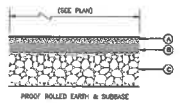
ALTERNATE TYPE 4A CURB RAMP (PERPENDICULAR)

① CURB RAMP WIDTH IS 36inch. NO SIDEWALK WIDTH WHICH THE SIDEWALK WIDTH IS GREATER THAN OR EQUAL TO THE MINIMUM (4'-0").

② CURB RAMPS REQUIRE A 4'-0" MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 5.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SEE DETAILS FOR LOCATIONS AND DIMENSIONS.

RAMP MUST CONFORM TO RC-67M REQUIREMENTS, LATEST REVISION

ALTERNATE TYPE 4A CURB RAMP
Not To Scale



PROOF ROLLED EARTH & SUBBASE

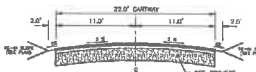
A = 1.5" SuperPave Volumetric Asphalt Mixture Design, 9.5mm, PG 64-22, Wearing Course, 0-0.3M ESALs, W or Greater

B = 1.5" SuperPave Volumetric Asphalt Mixture Design, 25mm, PG 64-22, Base Course, 0-0.3M ESALs

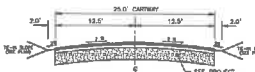
C = 6" 2A Modified Subbase or Geotextile Class IV

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

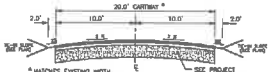
PROJECT PAVING SECTION
Not To Scale



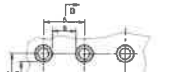
CROSS-SECTION
GEORGE BROWN MEMORIAL PARKWAY
Not To Scale



CROSS-SECTION
RELOCATED MEMORY CARE DRIVE
Not To Scale



CROSS-SECTION
MEADOWOOD DRIVE
Not To Scale



PLAN VIEW

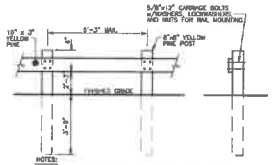
TRUNCATED DOME DIMENSIONS		
DIM	MIN mm (inch)	MIN mm (inch)
A	61 (1.5")	61 (2.4")
B	17 (0.65")	37 (1.5")
C	(3)	(3)
D	22 (0.9")	38 (1.4")

(1) The C Dimension is 50% to 65% of the D Dimension

(2) Place adjacent DWS Tiles with Manufactured Surface to Manufactured Surface. Cut Tiles along the perimeter only.

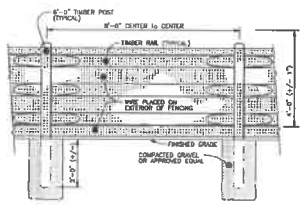
(3) Locate one corner of the DWS at the back of the curb. No other point on the leading edge of the DWS may be more than 152.0 (60") away from the back of the curb.

DETECTABLE WARNING SURFACE (DWS) TRUNCATED DOME DETAIL
Not To Scale



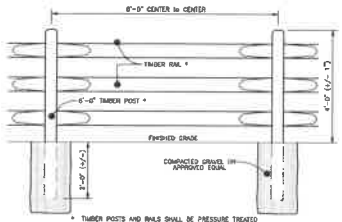
NOTES:
1. POSTS AND RAILS SHALL BE PRESSURE TREATED WITH WATER-BORNE PRESERVATIVES, CCA TREATMENT (LP-22) @ 0.60 PCF. (40 YEAR)
2. ALL MOUNTING HARDWARE SHALL BE IN ACCORDANCE w/ ASTM-A307 AND GALVANIZED IN ACCORDANCE WITH ASTM-A153 OR ASTM-B695.
3. ENDS OF GUARDRAIL TO BE ANGLED TO Dbg PER SECTION AWAY FROM PROPOSED ROADWAYS. TWO (3) SECTIONS SHALL COMPRISE EACH END. (28 Dbg. ANGLE TOTAL)

TIMBER GUIDE RAIL
Not To Scale



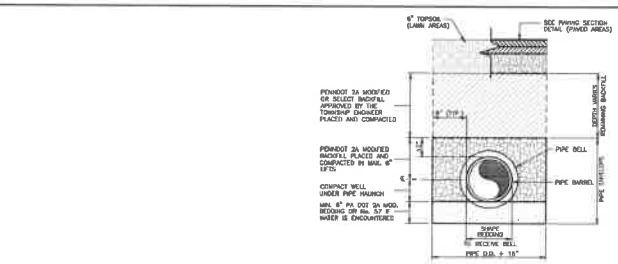
FENCING NOTES:
1. TIMBER POSTS AND RAILS SHALL BE PRESSURE TREATED WITH WATER-BORNE PRESERVATIVES, CCA TREATMENT (LP-22) @ 0.60 pcf (40 YEAR) OR APPROVED EQUAL.
2. FENCE SHALL BE NOT LESS THAN 4 FEET IN HEIGHT.
3. WIRE MATERIAL SHALL BE NINE (9) GAUGE WIRE AND A MAXIMUM OF TWO (2) INCHES APART. WIRE SHALL NOT BE ATTACHED TO THE EXTERIOR SIDE OF THE FENCE AND NOT BE FREE STANDING.
4. FENCE SHALL CONTAIN NO VERTICAL INTERSPACE OF MORE THAN TWO (2) INCHES, AND NO HORIZONTAL RAIL OR COMPONENT ON THE OUTSIDE USABLE AS A FOOTSTEP.
5. GATES: SHALL BE SELF-CLOSING AND SELF-LATCHING, AND ANY SUCH LATCHES SHALL BE LOCATED FROM THE EXTERIOR WITH ACCESS GAINED ONLY BY KEY OR COMBINATION MECHANISM. ANY SUCH LOCK SHALL BE SET AT LEAST THREE and ONE-HALF (3.5) FEET FROM THE GROUND.

BASIN PERIMETER FENCE
Not To Scale

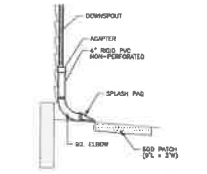


* TIMBER POSTS AND RAILS SHALL BE PRESSURE TREATED WITH WATER-BORNE PRESERVATIVES, CCA TREATMENT (LP-22) @ 0.60 pcf (40 YEAR) OR APPROVED EQUAL

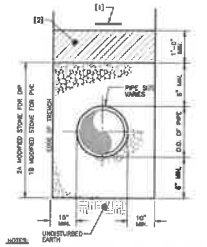
TIMBER SPLIT RAIL FENCE
Not To Scale



STORM SEWER TRENCH and BEDDING DETAIL
Not To Scale

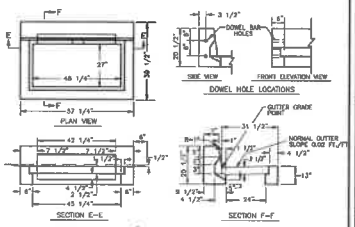


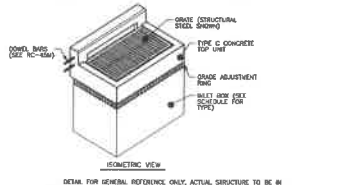
DOWNSPOUT SOD PATCH DETAIL
Not To Scale



NOTES:
[1] EARLY WARNING TAPE SHALL BE TWO (3) INCH WIDE GREEN COLORED, METALLIC LINER PRINTED PLASTIC TAPE WITH THE WORDS "CAUTION BURIED SEWER LINE BELOW" STENCILED OR TAPE EVERY TWO (2) FEET. (USED IN PVC PIPE BEDDING)
[2] HAND TAMPED BACKFILL AS SPECIFIED. (2A MODIFIED STONE UNDER ALL BIGHOMES, DRIVEWAYS & PARKING LOTS)

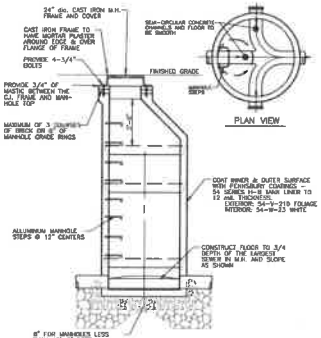
STANDARD SANITARY SEWER PIPE BEDDING DETAIL
Not To Scale



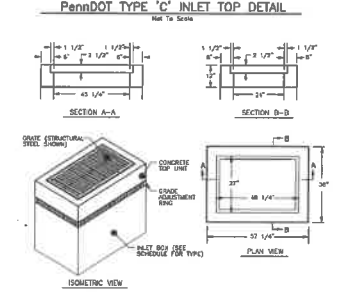


DETAIL FOR GENERAL REFERENCE ONLY. ACTUAL STRUCTURE TO BE IN COMPLIANCE WITH PennDOT PUB 72, RC-43M, JUN. 1, 2010 OR LATEST EDITION.

PennDOT TYPE 'C' INLET TOP DETAIL
Not To Scale



PRE-CAST SANITARY MANHOLE and BASE
Not To Scale



DETAIL FOR GENERAL REFERENCE ONLY. ACTUAL STRUCTURE TO BE IN COMPLIANCE WITH PennDOT PUB 72, RC-43M, JUN. 1, 2010 OR LATEST EDITION.

PennDOT TYPE 'M' INLET TOP DETAIL
Not To Scale

ALL INLETS IN AREAS TO BE PAVED ARE TO BE BACKFILLED WITH 2A MATERIAL

REVISIONS

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CALL 1-800-242-1776
PROJECT SIGNAL NUMBER FOR DESIGN

Applicant:
THE MEADOWOOD CORPORATION
c/o Paul Nordeman
President/CEO
3005 Skippack Pike
(PO Box 670)
Worcester, PA 19490

Parcel information:
TP: 67-00-03105-00-6
(D 29 U 24) PARCEL 'A'
TP: 67-00-01009-00-4
(D 29 U 38) PARCEL 'B'
TP: 67-00-03168-00-4
(D 29 U 1) PARCEL 'C'
TP: 67-00-03169-00-1
(D 29 U 2) PARCEL 'D'

Net Tract: 118.2705 Acres
PCCD Lease: 12.8293 Acres
GROSS Area: 131.0817 Acres

MEMORY CARE FACILITIES EXPANSION

PROJECT CONSTRUCTION DETAILS 'A'

MEADOWOOD SENIOR LIVING

WORCESTER TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

WOODBURY & ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
1135 Harry Bishop Drive, Suite 2, Lansdale, PA 19446
Phone (215) 362-4000 Fax (215) 362-5679

Layer Link: D18-19_Details
Job No: 00-0606 D18
Plan Date: JULY 13, 2020
Sheet No: 19 of 27

Project No: 00-0606 D Project Name: MEADOWOOD SENIOR LIVING Plot Date: Jul 13, 2020 (13:47)

PAVEMENT MARKINGS NOTES

GENERAL:

- 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 EXISTING PAVEMENT SURFACE FOR PROPER ADHESION. THESE PREPARATIONS MAY INCLUDE, BUT MAY NOT BE LIMITED TO, ANY SWEEPING AND REMOVAL OF DEBRIS, DIRT OR OTHER MATERIALS.
- THE CONTRACTOR SHALL REMOVE ALL PREVIOUS EXISTING PAVEMENT MARKINGS WITHIN THE CONFINES OF THE PROJECT AREA.
- UNLESS SPECIFIED OTHERWISE, THE BASIS OF MEASUREMENT SHALL BE ALONG THE LONGITUDINAL CENTERLINE OF PAVEMENT MARKINGS.
- PRIOR TO APPLICATION, THE CONTRACTOR SHALL FIELD CHECK AND LOCATE ALL PAVEMENT MARKINGS TO THE SATISFACTION OF THE ENGINEER.
- WHERE BITUMINOUS SEALANTS PROVIDED OR WHICH IMPACTUAL THE EXTENDED OF EDGES TO THE FACE OF THE CURB, THE CONTRACTOR SHALL EXTEND LINES NO LOCK 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.

CROSSWALKS:

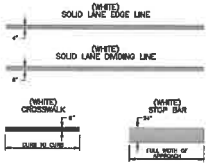
1. CROSSWALK LINES SHALL BE SOLID WHITE LINES, SIX (6) INCHES WIDE, MARKING BOTH EDGES OF THE CROSSWALK AREA.
2. CROSSWALK LINES SHALL EXTEND FROM FACE OF CURB TO FACE OF CURB OR EDGE OF SHOULDER AS APPLICABLE.
3. LINES FORMING A CROSSWALK SHALL BE PARALLEL.
4. THE WIDTH OF THE CROSSWALK IS NORMALLY SIX (6) FEET.

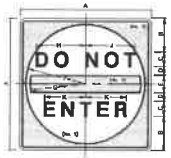
STOP BARS:

5. STOP BARS, SOLID WHITE LINES BEING 24 INCHES WIDE, SHALL COMPLETELY TRANSVERSE ALL TRAFFIC LANES ON EACH APPROACH.
6. STOP BARS SHALL BE LOCATED AT A MINIMUM OF FOUR (4) FEET IN ADVANCE OF AND PARALLEL TO THE CROSSWALK LINES, UNLESS OTHERWISE NOTED ON THE PLAN.

LANE and EDGE LINES:

7. LANE LINES, EITHER SOLID OR BROKEN WHITE, SHALL BE SIX (6) INCHES WIDE.
8. EDGE LINES, WHEN NOTED ON THE PLANS, SHALL BE SOLID WHITE LINES FOUR (4) INCHES WIDE.





COLORS LEGEND:

LEGEND (No. 1) WHITE (REFLECTORIZED)
BACKGROUND RED (REFLECTORIZED)
BACKGROUND (No. 1) WHITE (REFLECTORIZED)

| Sign size | Dimensions | | |

RESERVED FOR FUTURE SUBMISSION

No.	DATE	DESCRIPTION

REVISIONS

15' 0' 30'

Scale In Feet (1" = 30')

ONLY PLANS PRESENTED A SIGNED ENGINEERING SEAL AND SIGNATURE IS TO BE VIEWED AS VALID AND ENFORCEABLE.

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CALL 1-800-242-1776

PROJECT SERIAL NUMBER FOR DESIGN

Applicant:

THE MEADOWOOD CORPORATION
c/o Paul Nordenson
President/CEO
3305 Ellsworth Drive
(PO Box 87)
Worcester, PA 19490

Parcel Information:

TP: 67-00-03185-00-5
(B 28 U 30) PARCEL "A"
TP: 67-00-01069-00-4
(B 28 U 30) PARCEL "B"
TP: 67-00-03188-00-1
(B 29 U 1) PARCEL "C"
TP: 67-00-03188-00-1
(B 29 U 2) PARCEL "D"

Old Tract: 118.2714 Acres
PROP. Area: 17.8317 Acres
GROSS Area: 131.2817 Acres

MEMORY CARE FACILITIES EXPANSION

PROFILE SHEET
DRIVEWAY RELOCATION
MEADOWOOD SENIOR LIVING

WORCESTER TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

WOODRUFF & ASSOCIATES, INC.
Municipal Civil Consultants
1100 North Bethlehem Pike / Suite 1 - Lower Gwynedd - PA 19002
Phone (215) 646-8000 - Fax (215) 646-8001 - 347-368-9

Layer List: D18-21_Profile

Job No: 00-0605 D18

Plan Date: JULY 13, 2020

Sheet No: 21 of 27

RESERVED FOR FUTURE SUBMISSION

No.	DATE	DESCRIPTION

REVISIONS

15' 0' 30'
Scale in Feet (1" = 30')

ONLY PLANS INCORPORATING A RAISED ENGINEERING SEAL SHALL BE CONSIDERED TO BE OFFICIAL PLANS UPON BY PLANS.

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PROJECT SERIAL NUMBER FOR DESIGN:

Applicant:

THE MEADOWOOD CORPORATION
c/o Paul Nordeman
President/CEO
3265 Skippack Pike
(PO Box 836)
Worcester, PA 19490

Parcel Information:

TP: 57-00-03155-00-6
(B 28 U 36) PARCEL 'A'
TP: 57-00-01029-00-4
(B 28 U 36) PARCEL 'B'
TP: 57-00-03166-00-4
(B 29 U 1) PARCEL 'C'
TP: 57-00-03169-00-1
(B 29 U 2) PARCEL 'D'

Net Tract: 118.2056 Acres
Right of Way: 12.6761 Acres
GROSS Area: 131.8817 Acres

NEWARK CARE FACILITIES EXPANSION
PROFILE SHEET
PARKING LOT DRIVEWAY
MEADOWOOD SENIOR LIVING
WORCESTER TOWNSHIP - MONTGOMERY COUNTY - PENNSYLVANIA

WOODROW & ASSOCIATES, INC.
WORCESTER, PA 19490
1136 North Bethlehem Pike / P.O. Box 1 - (215) 362-3000
Phone (215) 362-3000 Fax (215) 362-3419
Web: www.woodrowinc.com

Layer List: D18-22_Profile
Job No: 00-0506 D18
Plan Date: JULY 13, 2020
Sheet No: 22 of 27

Project No: 00-0506 D Project Name: MEADOWOOD SENIOR LIVING Plot Date: Jul 13, 2020 (13:45)

PROFILE: D___ TO D___
SCALE: 1" = 30'-0" HORIZONTAL
1" = 3'-0" VERTICAL

PROFILE: D___ TO D___
SCALE: 1" = 30'-0" HORIZONTAL
1" = 3'-0" VERTICAL

PROFILE: D___ TO D___
SCALE: 1" = 30'-0" HORIZONTAL
1" = 3'-0" VERTICAL

PROFILE: D___ TO D___
SCALE: 1" = 30'-0" HORIZONTAL
1" = 3'-0" VERTICAL

PROFILE: D___ TO D___
SCALE: 1" = 30'-0" HORIZONTAL
1" = 3'-0" VERTICAL

RESERVED FOR FUTURE SUBMISSION

REVISIONS

No.	DATE:	Description

15' 0' 30'
Scale in Feet (1" = 30')

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CALL 1-800-242-1776
PROJECT SERIAL NUMBER FOR DESIGN:

Applicant:
THE MEADOWOOD CORPORATION
c/o Paul Nordeman
President/CEO
3305 Skippack Pike
(PO Box 476)
Worcester, PA 19490

Parcel Information:
TP: 67-00-03155-00-8
(B 28 U 28) PARCEL 'A'
TP: 67-00-01926-00-4
(B 28 U 39) PARCEL 'B'
TP: 67-00-03158-00-1
(B 29 D 1) PARCEL 'C'
TP: 67-00-04148-00-1
(B 29 U 2) PARCEL 'D'

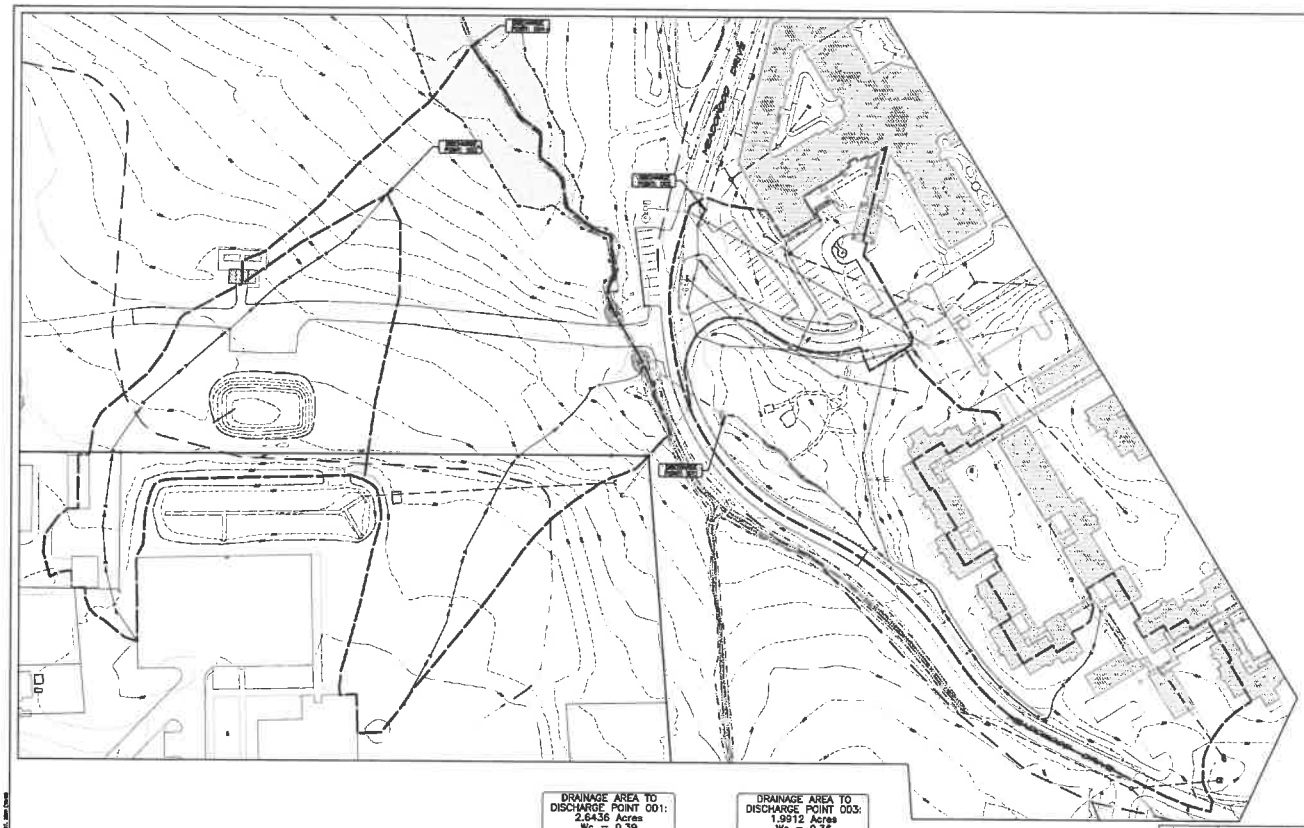
Gal Tract: 118.3056 Acres
NET Usable: 13.5761 Acres
GROSS Avail: 131.0817 Acres

MEMORY CARE FACILITIES DIVISION
PROFILE SHEET
CROSS LOT UTILITIES 'A'
MEADOWOOD LIVING
WORCESTER TOWNSHIP • MONTGOMERY COUNTY • PENNSYLVANIA

WOODBROW & ASSOCIATES, INC.
CONSULTING ENGINEERS
WAINGRAU / CRAIG
1108 North Bethlehem Pike / P.O. Box 1 – Lansdale, PA 19446-0001
Phone: (215) 362-3000 Fax: (215) 362-3219
Web: www.Woodbrow.com

Layer List: D18-23_Profile
Job No: 00-0505 D18
Plan Date: JULY 13, 2020
Sheet No: 23 of 27

Project No: 00-0505 D Project Name: MEADOWOOD SENIOR LIVING Print Date: Jul 11, 2020 (11:48)



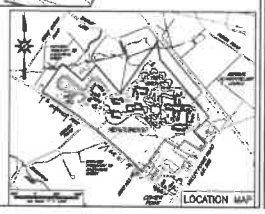
DRAINAGE AREA TO DISCHARGE POINT 001:
2.6436 Acres
Wc = 0.39
Tc = 15.5 min.

DRAINAGE AREA TO DISCHARGE POINT 002:
0.9167 Acres
Wc = 0.61
Tc = 10.5 min.

DRAINAGE AREA TO DISCHARGE POINT 003:
1.9912 Acres
Wc = 0.36
Tc = 15.0 min.

DRAINAGE AREA TO DISCHARGE POINT 004:
3.6388 Acres
Wc = 0.33
Tc = 17.5 min.

PLAN LEGEND



LOCATION MAP

REVISIONS

Scale: 1" = 50'

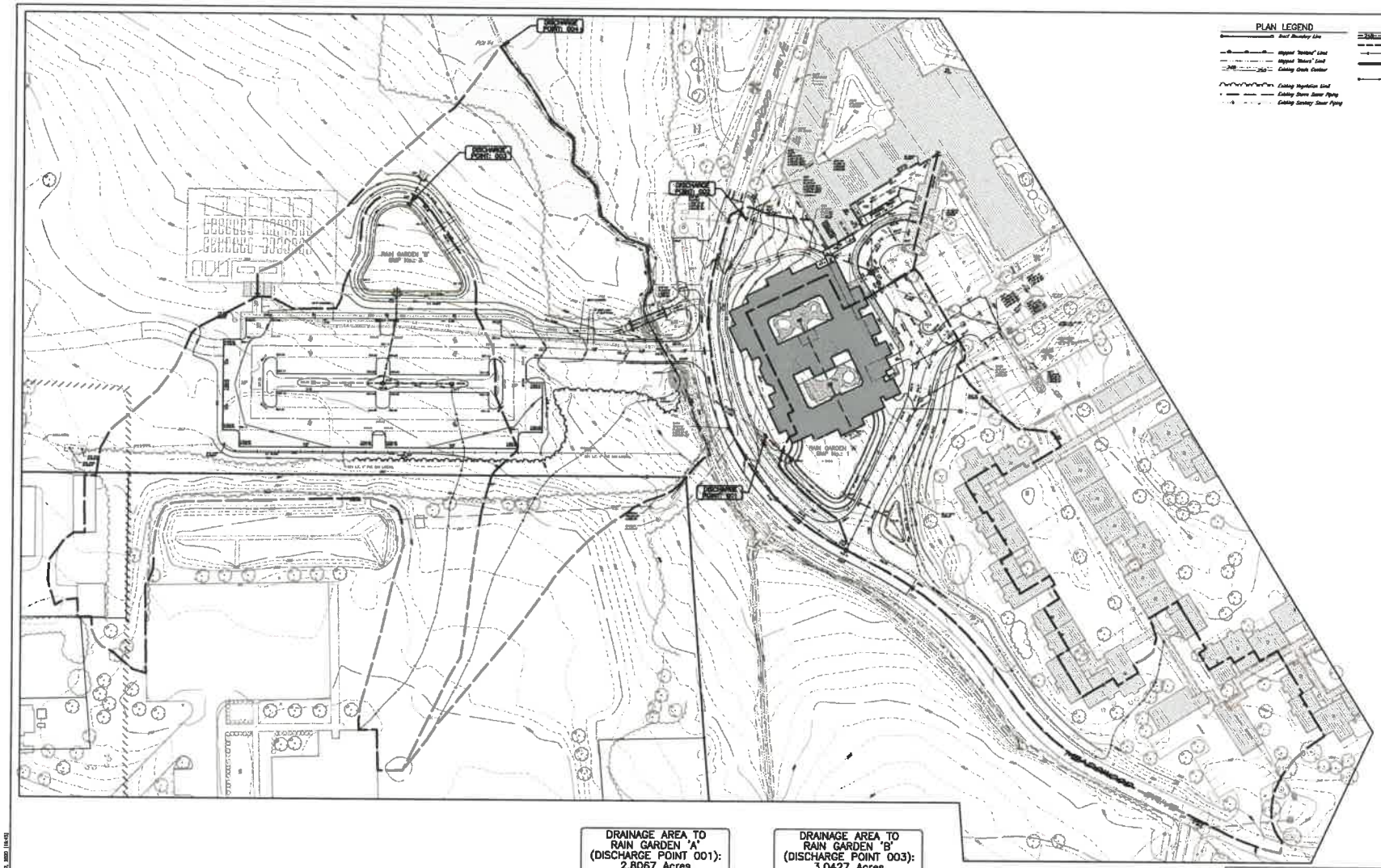
CALL 1-800-242-1776

Applicant:
THE MEADOWOOD CORPORATION
c/o Paul Sandman
President/CEO
1000 Wilson Blvd
Suite 2500
Arlington, VA 22209

Parcel Information

MONTY, LAKE, FAULTS, CONNOR
DRAINAGE AREA BOUNDARY
PRE-DEVELOPMENT
MEADOWOOD SENIOR LIVING
WOODROW & ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
1000 WILSON BLVD. SUITE 2500
ARLINGTON, VA 22209
PHONE: 703-243-6700
FAX: 703-243-6701

Job No. 318-25_DAB-Pre
Dwg. No. 00-0808 D18
Date: JULY 13, 2009
Sheet No. 25 of 27



PLAN LEGEND

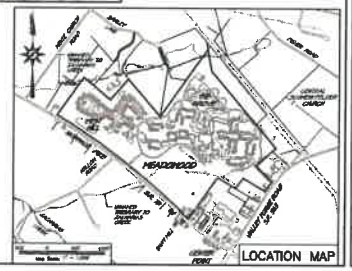
- Boat Boundary Line
- Adjacent "Parcelized" Limit
- Adjacent "Waters" Limit
- Existing Grade Contour
- Existing Vegetation Limit
- Existing Storm Sewer Piping
- Existing Sanitary Sewer Piping
- Final Grade Contour
- Proposed Storm Piping
- Proposed Sanitary Piping
- Post-development Drainage Area Boundary
- Drainage Area Flowpaths

DRAINAGE AREA TO RAIN GARDEN 'A' (DISCHARGE POINT 001):
2.8067 Acres
Wc = 0.56
Tc = 14.5 min.

DRAINAGE AREA TO RAIN GARDEN 'B' (DISCHARGE POINT 003):
3.0427 Acres
Wc = 0.42
Tc = 14.0 min.

DRAINAGE AREA TO DISCHARGE POINT 002 BYPASS AREA:
0.7537 Acres
Wc = 0.57
Tc = 7.0 min.

DRAINAGE AREA TO DISCHARGE POINT 004 BYPASS AREA:
2.5873 Acres
Wc = 0.35
Tc = 17.5 min.



REVISIONS

No.	DATE	DESCRIPTION

SCALE IN FEET (1" = 50')

CALL 1-800-242-1776
PROJECT SIGNAL MARKER FOR DESIGN

Applicant:
THE MEADOWOOD CORPORATION
c/o Paul Vandersen
President/CEO
3002 Sassafras Pike
(PO Box 270)
Wertsville, PA 19560

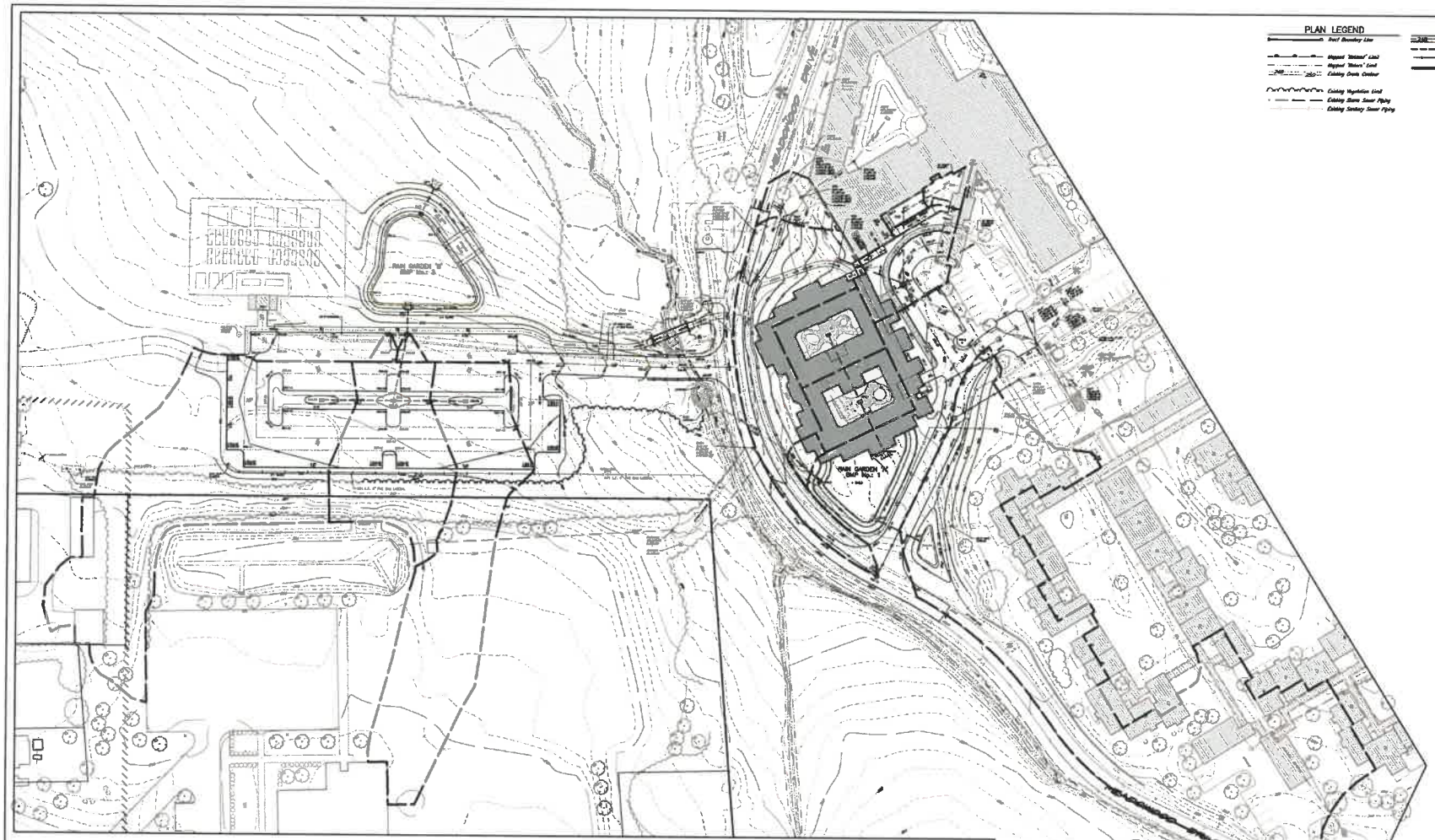
Parcel Information:
TP: 87-00-03185-00-5
(B 28 U 26) PARCEL 'A'
TP: 87-00-01085-00-4
(B 28 U 36) PARCEL 'B'
TP: 87-00-02198-00-1
(B 29 U 1) PARCEL 'C'
TP: 87-00-03192-00-1
(B 29 U 2) PARCEL 'D'

Old Tract: 118.2056 Acres
ROW Areas: 13.0161 Acres
GROSS Area: 131.0817 Acres

HEMPHILL CARE FACILITIES EXPANSION
DRAINAGE AREA BOUNDARY
POST-DEVELOPMENT
MEADOWOOD SENIOR LIVING
WORCESTER TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA

WOODBURY & ASSOCIATES, INC.
CIVIL ENGINEERS • LAND PLANNERS • SURVEYORS
1128 North Bethlehem Pike / P.O. Box 1 / Lansdale, PA 19446
Phone: (215) 362-0510 Fax: (215) 362-0819
Web: www.Woodbury-Inc.com

Layer Unit: D18-26_DAB-Post
Job No: 00-0505 D18
Plan Date: JULY 13, 2020
Sheet No: 26 of 27



PLAN LEGEND

- Tract Boundary Line
- Adjacent "Between" Land
- Adjacent "Others" Land
- Existing Grade Contour
- Existing Vegetation Line
- Existing Storm Sewer Piping
- Existing Sanitary Sewer Piping
- Final Grade Contour
- Proposed Storm Piping
- Proposed Sanitary Piping
- Post-development Inlet Drainage Area Boundary

Inlet D01:
Area = 0.03 Acres
Wc = 0.48
Tc = 5 min.

Inlet D02:
Area = 0.02 Acres
Wc = 0.34
Tc = 5 min.

Inlet D03:
Storm Manhole

Inlet D04:
Area = 0.18 Acres
Wc = 0.75
Tc = 5 min.

Inlet D05:
Storm Manhole

Inlet D06:
Storm Manhole

Inlet D07:
Area = 0.52 Acres
Wc = 0.61
Tc = 5 min.

Inlet D08:
Area = 0.07 Acres
Wc = 0.37
Tc = 5 min.

F.E.S.: D09:
Area = 1.92 Acres
Wc = 0.50
Tc = 5 min.

Endwall D10:
Storm Endwall

Inlet D11:
Area = 0.16 Acres
Wc = 0.88
Tc = 5 min.

Inlet D12:
Area = 0.16 Acres
Wc = 0.87
Tc = 5 min.

Inlet D13:
Retaining Wall Pipe into Rain Garden 'A'

Inlet D14:
Rain Garden 'A' Outlet Structure

Inlet D15:
Area = 0.03 Acres
Wc = 0.44
Tc = 5 min.

Endwall D16:
Storm Endwall

Inlet D17:
Area = 0.79 Acres
Wc = 0.36
Tc = 5 min.

Inlet D18:
Area = 1.21 Acres
Wc = 0.43
Tc = 5 min.

Inlet D19:
Area = 0.44 Acres
Wc = 0.56
Tc = 5 min.

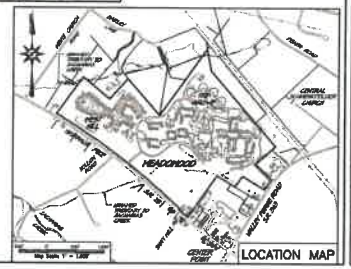
Inlet D20:
Area = 0.01 Acres
Wc = 0.88
Tc = 5 min.

Inlet D21:
Area = 0.01 Acres
Wc = 0.89
Tc = 5 min.

Endwall D22:
Storm Endwall

Inlet D23:
Rain Garden 'B' Outlet Structure

Endwall D24:
Storm Endwall



LOCATION MAP

REVISIONS

DATE | DESCRIPTION

Scale in Feet (1" = 50')

CALL 1-800-242-1776
PROJECT SERIAL NUMBER FOR OCSIDIG

Applicant:
THE MEADOWOOD CORPORATION
c/o Paul Mortimore
President/CEO
3402 Tilbrook Plac
(PO Box 270)
Worcester, PA 19490

Parcel Information:
TP: 67-00-03185-00-5
(B 28 U 26) PARCEL 'A'
TP: 67-00-01208-00-4
(B 28 U 36) PARCEL 'B'
TP: 67-00-02186-00-1
(B 29 U 1) PARCEL 'C'
TP: 67-00-02189-00-1
(B 29 U 2) PARCEL 'D'

Net Tract: 118.3756 Acres
DEP Lands: 12.6761 Acres
GROSS Area: 131.0517 Acres

MEMORY CARE FACILITIES EXPANSION
DRAINAGE AREA BOUNDARY
POST-DEVELOPMENT INLET
MEADOWOOD AT WORCESTER
WORCESTER TOWNSHIP • MONTGOMERY COUNTY, PENNSYLVANIA

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