ENVIRONMENTAL CONCEPT PLAN
THE VILLAGE AT TOWN SQUARE

LOTS 1-96, OPEN SPACE LOT 97, BULK PARCELS A TO D
A SUBDIVISION OF PARCEL 8 & A RESUBDIVISION OF
TURF VALLEY PROFESSIONAL BUILDINGS PARCELS J2 & I-3
HOWARD COUNTY, MARYLAND

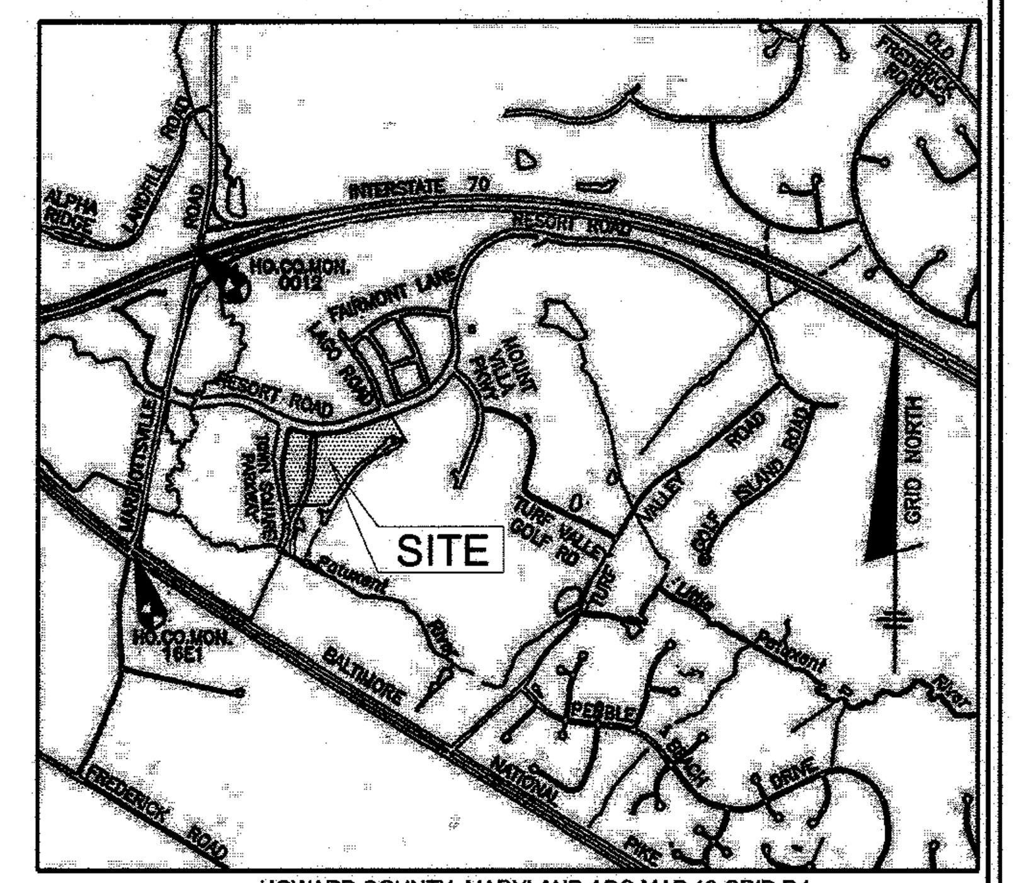
GENERAL NOTES

1. SUBJECT PROPERTY IS ZONED "PGCC" PER THE 10/6/2013 COMPREHENSIVE ZONING PLAN.
2. GROSS AREA OF SITE SUBJECT TO SUBDIVISION = 16.019 AC.±
3. AREA OF PROPOSED PUBLIC R/W: 1.223 AC±
4. NUMBER OF PROPOSED BUILDABLE LOTS AND PARCELS: 100
5. AREA OF PROPOSED BUILDABLE LOTS: 7.023 AC±
6. NUMBER OF OPEN SPACE LOTS: 1
7. AREA OF PROPOSED OPEN SPACE LOT: 7.773 AC±
8. OPEN SPACE REQUIRED:
   (15% OF GROSS AREA OF SITE SUBJECT TO SUBDIVISION): 16.019 AC. x 15% = 2.402 AC.
   TOTAL OPEN SPACE PROVIDED: 7.773 AC.±
9. OPEN SPACE LOTS 97 TO BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
10. NUMBER OF PROPOSED TOWN HOUSES: 96
11. NUMBER OF PROPOSED APARTMENT UNITS: 57
12. THIS PROPERTY IS WITHIN THE METROPOLITAN DISTRICT.
13. WATER IS PUBLIC. THE CONTRACT NUMBER IS 44-4653-D AND W-8951. THE DRAINAGE AREA IS LITTLE PATUXENT.
14. SEWER IS PUBLIC. THE CONTRACT NUMBER IS 24-34-47. THE DRAINAGE AREA IS LITTLE PATUXENT.
15. SOILS HAVE BEEN TAKEN FROM THE NRCS WEB SOIL SURVEY WEBSITE.
16. TOPOGRAPHY IS BASED ON WINGS AERIAL MAPPING CO., INC. ON OR ABOUT JANUARY, 2006.
17. BOUNDARY SURVEY PREPARED BY MILDENBERG, BOENDER & ASSOCIATES ON OR ABOUT MARCH, 2006.
18. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 16E1 AND 0012 WERE USED FOR THIS PROJECT.
19. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO HISTORIC STRUCTURES OR CEMETERIES WITHIN THE PROJECT BOUNDARY.
20. THERE IS NO FLOODPLAIN WITHIN THE PROPERTY.
21. THERE ARE NO WETLANDS WITHIN THE PROPERTY. THE WETLANDS DELINEATION FOR THIS PROJECT WAS PREPARED BY EXPLORATION RESEARCH FOR S-86-13 AND VERIFIED BY ECO-SCIENCE PROFESSIONALS, INC. IN FEBRUARY 2017.
22. PREVIOUS HOWARD COUNTY FILE NUMBERS: F-15-056, F-12-055
23. THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
24. EXISTING UTILITIES ARE LOCATED BY THE USE OF ANY OR ALL OF THE FOLLOWING: ROAD CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATER AND SEWER PLANS AND OTHER AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF THE EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO THE CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
25. PRELIMINARY GEOTECHNICAL INFORMATION HAS BEEN TAKEN FROM THE NRCS WEB SOIL SURVEY WEBSITE. IF FUTURE INVESTIGATIONS SHOW UNSATISFACTORY SOIL CONDITIONS FOR ANY OF THE STORMWATER MANAGEMENT TREATMENTS SHOWN, EITHER UNDERDRAINS WILL BE PROVIDED OR A DIFFERENT PRACTICE WILL BE SUBSTITUTED.
26. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS, OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS.
27. STORMWATER MANAGEMENT IS PROVIDED FOR THIS PROJECT IN ACCORDANCE WITH THE 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUMES I AND II, AS AMENDED BY THE MARYLAND STORMWATER ACT OF 2007. STORMWATER OBLIGATIONS ARE BEING MET BY THE USE OF MICRO BIO-RETENTION FACILITIES, BIO-RETENTION FACILITIES, AND SUBMERGED GRAVEL WETLAND. ALL FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED. WE ARE ABLE TO MEET THE SITE'S TARGET Pe AND RCN NUMBERS BY THE USE OF THESE PRACTICES.
28. THE STORMWATER MANAGEMENT SYSTEM SHOWN ON THESE PLANS IS AN APPROXIMATION OF THE SIZE, SHAPE, AND LOCATION. IT IS UNDERSTOOD THAT THIS SYSTEM HAS NOT BEEN DESIGNED AND THE ACTUAL DESIGN MAY CHANGE, ALTERING THE NUMBER OF UNITS ALLOCATED FOR THIS DEVELOPMENT.
29. A PRELIMINARY LANDSCAPE PLAN WILL BE PROVIDED AT THE PRELIMINARY PLAN STAGE IN ACCORDANCE WITH SECTION 16.124 OF THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL.
30. THIS PROJECT IS EXEMPT FROM HOWARD COUNTY FOREST CONSERVATION REQUIREMENTS UNDER SECTION 16.1202(b)(1)(iv) OF THE COUNTY CODE SINCE IT IS A PLANNED UNIT DEVELOPMENT WHICH HAD PRELIMINARY DEVELOPMENT PLAN APPROVAL AND 50% OR MORE OF THE LAND WAS RECORDED AND SUBSTANTIALLY DEVELOPED BEFORE DECEMBER 31, 1992.
31. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993)". A MINIMUM SPACING OF TWENTY FEET (20') SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
32. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A TWO INCH (2") GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A TWO AND A HALF INCH (2-1/2") GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) THREE FEET (3') LONG. a GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
33. THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY TRAFFIC GROUP, DATED JANUARY 07, 2005 AND WAS APPROVED UNDER THE 4TH AMENDED COMPREHENSIVE SKETCH PLAN ON APRIL 27, 2006.
34. A NOISE STUDY FOR THIS PROJECT IS NOT REQUIRED SINCE NONE OF PROPOSED LOTS ARE LOCATED WITHIN 500 FEET OF INTERSTATE 70 OR ROUTE 40 RIGHT-OF-WAY.
35. PARKING REQUIRED: TOWNHOUSE UNITS = 96
    TOTAL PARKING SPACES REQUIRED (2.5 SPACES PER UNIT) = 96 X 2.5 = 240 SPACES

    PARKING REQUIRED: APARTMENT UNITS = 57
    TOTAL PARKING SPACES REQUIRED (2.3 SPACES PER UNIT) = 57 X 2.3 = 131 SPACES

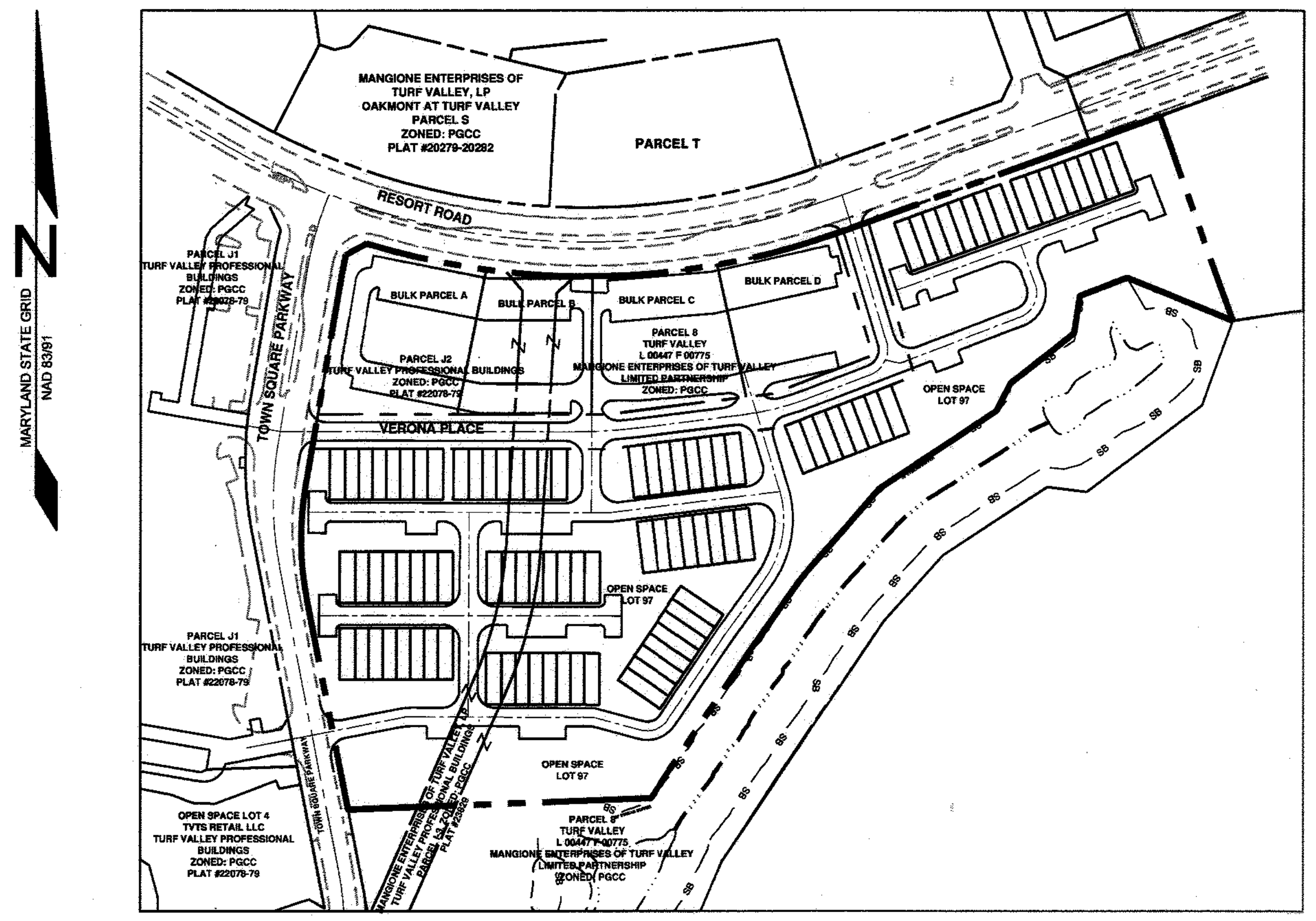
    PARKING PROVIDED: SPACES WITHIN GARAGES/DRIVEWAYS OF TOWNHOUSE (2 SPACES EACH TOWNHOUSE) = 2X 96 = 192
    SPACES WITHIN THE PARKING LOTS/OFF-STREET PARKING = 49
    TOTAL PARKING SPACES PROVIDED = 241
    HANDICAP REQUIRED = 7
    HANDICAPPED PROVIDED = 7

    PARKING PROVIDED: SPACES WITHIN GARAGES OF APARTMENT BLOCKS = 4 X 10 = 40
    SPACES WITHIN THE PARKING LOTS/OFF-STREET PARKING = 164
    TOTAL PARKING SPACES PROVIDED = 204
    HANDICAP REQUIRED = 7
    HANDICAPPED PROVIDED = 7
36. THIS PROJECT HAS BEEN DESIGNED IN COMPLIANCE WITH THE THIRD AMENDMENT TO THE TURF VALLEY MULTI-USE SUB-DISTRICT FINAL DEVELOPMENT PLAN.
37. APPROVED PHASING CHART FOR THIS DEVELOPMENT IS ON RECORD IN DPZ FILES.
38. APARTMENT BUILDING #1 SHOWS 3 DENSITY UNITS UNDER THIS PLAN. BUILDING #1 WILL BE CONSTRUCTED WHEN ADDITIONAL 15 DENSITY UNITS ARE MADE AVAILABLE.
39. THE ENVIRONMENTAL CONCEPT PLAN IS FOR STORMWATER MANAGEMENT PURPOSES ONLY. APPROVAL OF THIS ECP DOES NOT CONSTITUTE APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION OR SITE DEVELOPMENT PLANS. REVIEW OF THE PLAN BY THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAT AND SITE DEVELOPMENT PLAN STAGES. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVER SITE DESIGN) AS THIS PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.



HOWARD COUNTY, MARYLAND ADC MAP 19 GRID D4

VICINITY MAP
SCALE: 1"=2000'



LOCATION MAP
SCALE: 1"=200'

BENCHMARKS

NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
16E1	593,250.960	1,340,192.70	463.981	STAMPED BRASS DISK SET ON TOP OF A 3 FT. DEEP COLUMN OF CONCRETE
0012	596,502.760	1,340,864.37	486.298	STAMPED BRASS DISK SET ON TOP OF A 3 FT. DEEP COLUMN OF CONCRETE

SITE ANALYSIS DATA SHEET

ENVIRONMENTAL AREA	SIZE OR USE
TOTAL PROJECT AREA	16.019 ACRES±
LIMIT OF DISTURBANCE	16.019 ACRES±
GREEN OPEN AREA (LAWN)	6.47 ACRES±
IMPERVIOUS AREA	9.55 ACRES±
PROPOSED SITE USES	RESIDENTIAL
WETLANDS	0.00 ACRES±
WETLAND BUFFERS	0.00 ACRES±
FLOODPLAINS	0.00 ACRES±
FLOODPLAIN BUFFERS	0.00 ACRES±
EXISTING FOREST	0.00 ACRES±
SLOPES GREATER THAN 15%	4.46 ACRES±
HIGHLY ERODIBLE SOILS	8.10 ACRES±

SOIL CONDITIONS

HSG	RCN	AREA	PERCENT
A	38	10.17 AC.	63%
C	70	5.85 AC.±	37%

TOTAL SITE AREA = 16.019 AC.±

STORMWATER MANAGEMENT NOTES AND DESIGN NARRATIVE

THIS SITE IS PART OF THE PLANNED GOLF COURSE COMMUNITY LOCATED AROUND THE TURF VALLEY GOLF COURSE AND IS ZONED PGCC. 16.02± ACRE PROPERTY WILL BE SUBDIVIDED INTO A TOTAL OF 100 RESIDENTIAL LOTS CONSISTING OF TOWN HOUSES AND APARTMENT DWELLINGS. VERONA PLACE, A PUBLIC ROAD WILL BE EXTENDED THROUGH THE PROPERTY. ALL OTHER PLANNED ROADS WILL BE PRIVATE. PROPOSED LOT 97 WILL BE OPEN SPACE LOT.

NATURAL RESOURCE PROTECTION AND ENHANCEMENT IS BEING ACHIEVED AS NO ENVIRONMENTAL AREAS OR BUFFERS ARE BEING DISTURBED.

NATURAL FLOW PATTERN HAVE BEEN MAINTAINED BY USING ESD PRACTICES AROUND THE SITE WITH ULTIMATE DISCHARGE POINT AT SITE BOUNDARY IN ORDER TO PRESERVE/MIMIC EXISTING CONDITION OF FLOW PATTERN.

REDUCTION OF IMPERVIOUS AREA HAVE BEEN ACCOMPLISHED BY AVOIDING STREET LOOPS, NARROWEST POSSIBLE ROAD WIDTHS, MINIMUM DRIVEWAY AND SIDEWALK WIDTHS IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL AND REGULATIONS. ALTERNATE ESD PRACTICES ARE NOT PRACTICAL DUE TO EXISTING AND PROPOSED SLOPES. DRIVEWAYS AND SIDEWALKS ARE LOCATED CLOSE TO BUILDING FOUNDATIONS, AND THEREFORE ARE NOT CONDUCIVE TO BE DESIGNED AS PERMEABLE PAVEMENTS.

STORM WATER MANAGEMENT FOR THE PROPOSED DEVELOPMENT IS ADDRESSED BY IMPLEMENTING ENVIRONMENTAL SITE DESIGN (ESD) TO THE MAXIMUM EXTENT PRACTICABLE (MEP) IN ACCORDANCE WITH THE REVISED MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) STORM WATER DESIGN MANUAL CHAPTER 5. ESD CONSISTS OF COMBINATION OF THE FOLLOWING PRACTICES: MICRO-BIORETENION (M-6); BIORETENTION (F-6) AND SUBMERGED GRAVEL WETLAND (M-2).

THE SEDIMENT AND EROSION CONTROL PRACTICES FOR THIS DEVELOPMENT WILL BE DESIGNED IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. AT THE FINAL PLAN STAGE, THE PLANS WILL INCORPORATE SILT FENCE, SUPER SILT FENCE AND EARTH DIKES AROUND THE LIMIT OF DISTURBANCE TO ELIMINATE THE POSSIBILITY OF SEDIMENT LADEN RUNOFF FROM LEAVING THE SITE. THE IMPLEMENTATION OF THIS SEDIMENT AND EROSION CONTROL PLAN WILL ENSURE THE CONSTRUCTION PHASE OF THIS DEVELOPMENT HAS NO NEGATIVE EFFECTS ON THE ADJACENT PARCELS.

UTILIZING THE METHODS DESCRIBED ABOVE, WILL SATISFY REQUIRED STORMWATER MANAGEMENT OBLIGATIONS TO THE MAXIMUM EXTENT PRACTICABLE.

HOUSING TYPE CHART

APARTMENTS	TOWNHOUSE
57 UNITS	96

CENTERLINE ROAD CURVE DATA

CURVE	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C1	101.10'	810.00'	07°09'05"	N 86°34'25" E	101.03'
C2	100.43'	410.00'	14°02'03"	N 75°58'51" E	100.18'
C3	59.98'	40.00'	85°54'42"	N 26°00'28" E	54.52'

ROAD CLASSIFICATION

ROAD NAME	CLASSIFICATION	PAVING TYPE	DESIGN SPEED	R/W
VERONA PLACE	ACCESS STREET	P-2	30	50'
CAPULET LANE	PRIVATE STREET	P-2	25	-
MONTAGUE LANE	PRIVATE STREET	P-2	25	-
TREVISO LANE	PRIVATE STREET	P-2	25	-
PARMA LANE	PRIVATE STREET	P-2	25	-
LUCCA LANE	PRIVATE STREET	P-2	25	-
DANTE LANE	PRIVATE STREET	P-2	25	-

SHEET INDEX

LEGEND

EXISTING CONTOUR	382
PROPOSED CONTOUR	382
EXISTING SPOT ELEVATION	382.3
PROPOSED SPOT ELEVATION	+382 50
DIRECTION OF FLOW	
EXISTING TREELINE	
PROPOSED TREELINE	
EXISTING STREAM BUFFER	SB
PROPERTY BOUNDARY	
SLOPES 15.00% TO 24.99%	
SLOPES GREATER THAN 25.00%	
EXISTING STREAM BANK	
EX. WATER	
EX.. SEWER	
PROP. WATER	
PROP. SEWER	
PROP. SEWER MANHOLE	
PROP. STORM DRAIN	
LIMIT OF DISTURBANCE	LOD
SOIL BOUNDARY	
SOIL BOUNDARY	SSF
CURB INLET PROTECTION	CIP
AT GRADE INLET PROTECTION	AGIP
TYPICAL OUTFALL END SECTION WITH RIP-RAP	
STABILIZED CONSTRUCTION ENTRANCE	SCE

SWM Practice Chart Summary Table

Pe=	2.0 inches	Qe=	1.19 inches	ESDv=	68,139 Cubic Feet		Rv=	0.59		
Practice	DA #	DA to practice	Imp Area to practice	Af (sq.ft.) Provided	Af (sq.ft.) 2% DA?	ESDv Provided	ESDv Pe	Rev Required	Rev Provided	Ownership
(M-6) Micro-Bioretention #1	1	20,400 Sqft	11,250 Sqft	1,633 Sqft	OK	2,035 cf	2.19		653 cf	Private
(F-6) Bioretention #1	2	16,670 Sqft	8,010 Sqft	1,500 Sqft	OK	1,734 cf	2.6		600 cf	Private
(M-6) Micro-Bioretention #2	3	22,115 Sqft	17,300 Sqft	1,260 Sqft	OK	1,572 cf	1.13086		504 cf	Private
(F-6) Bioretention #2	4	66,300 Sqft	51,630 Sqft	6,204 Sqft	OK	10,774 cf	2.6		2482 cf	Private
(M-6) Micro-Bioretention #3	5	17,250 Sqft	11,700 Sqft	1,302 Sqft	OK	1,623 cf	1.70986		521 cf	Private
(F-6) Bioretention #3	6	39,320 Sqft	19,500 Sqft	2,375 Sqft	OK	4,250 cf	2.6		950 cf	Private
(F-6) Bioretention #4	7	27,670 Sqft	16,500 Sqft	1,973 Sqft	OK	3,435 cf	2.6		1244 cf	Private
(F-6) Bioretention #5	8	36,500 Sqft	26,600 Sqft	3,110 Sqft	OK	5,615 cf	2.6		1244 cf	Private
(F-6) Bioretention #6	9	35,800 Sqft	26,500 Sqft	3,130 Sqft	OK	5,470 cf	2.55		1252 cf	Private
(M-6) Micro-Bioretention #4	10	15,500 Sqft	4,900 Sqft	1,691 Sqft	OK	1,123 cf	2.6		676 cf	Private
(F-6) Bioretention #7	11	35,270 Sqft	21,900 Sqft	2,575 Sqft	OK	4,662 cf	2.6		1030 cf	Private
(F-6) Bioretention #8	12	26,540 Sqft	17,000 Sqft	3,003 Sqft	OK	3,623 cf	2.6		1201 cf	Private
(M-6) Micro-Bioretention #5	13	18,500 Sqft	9,800 Sqft	1,661 Sqft	OK	2,013 cf	2.48		664 cf	Private
(M-6) Micro-Bioretention #6	14	15,700 Sqft	12,500 Sqft	1,060 Sqft	OK	1,284 cf	1.28		424 cf	Private
(M-2) Submerged Gravel Wetland	15	226,500 Sqft	148,100 Sqft	16,190 Sqft	OK	25,519 cf	2.16		3484 cf	Private
Total Treated		620,035 Sqft	403,190 Sqft			74,731 cf		9,822 cf	13,446 cf	

OWNER/DEVELOPER

MANGIONE ENTERPRISES OF TURF VALLEY, LP	TVTS RETAIL, LLC.
1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410.825.8400	1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410.825.8400

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 10.4.17

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 10-3-17

Z:\TURF VALLEY POD L\Drawings\Sketch and ECP Plan.dwg

COVER SHEET
THE VILLAGE AT TOWN SQUARE

LOTS 1-96, OPEN SPACE LOT 97, BULK PARCELS A TO D
A SUBDIVISION OF PARCEL 8 & A RESUBDIVISION OF TURF VALLEY PROFESSIONAL BUILDINGS PARCELS J2 & I-3

TAX MAP 16 GRID 16 & 17 — PART OF PARCEL 8
2ND ELECTION DISTRICT — ZONED: PGCC — HOWARD COUNTY, MARYLAND

STATE OF MARYLAND — DHARAM VIR KATHURIA — NO. 8818 — REGISTERED PROFESSIONAL ENGINEER — 9/27/17

KCI TECHNOLOGIES
ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS
3300 NORTH RIDGE ROAD
ELLICOTT CITY, MD 21043
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FAX: (410) 203-9228
www.kci.com

DESIGN BY: MG/SK
DRAWN BY: MG/SK
CHECKED BY: DVK
SCALE: AS SHOWN
DATE: SEPT. 29, 2017
PROJECT #: 131604129
SHEET #: 1 of 3

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME , AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 8818, EXPIRATION DATE: OCT. 17, 2018

ECP-17-047

OWNER/DEVELOPER

MANGIONE ENTERPRISES OF TURF VALLEY, LP	TVTS RETAIL, LLC.
1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410.825.8400	1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410.825.8400

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 10.4.17

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 10-3-17

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	K FACTOR
GbB	GLADSTONE LOAM, 3 TO 8 PERCENT SLOPES	A	0.28
GbC	GLADSTONE LOAM, 8 TO 15 PERCENT SLOPES	A	0.28
GmB	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES	C	0.37
GmA	GLENVILLE SILT LOAM, 0 TO 3 PERCENT SLOPES	C	0.43

GRAPHIC SCALE
50' 0 50' 100
(IN FEET)
SCALE: 1"= 50'

ENVIRONMENTAL CONCEPT PLAN
THE VILLAGE AT TOWN SQUARE

LOTS 1-96, OPEN SPACE LOT 97, BULK PARCELS A TO D
A SUBDIVISION OF PARCEL 8 & A RESUBDIVISION OF TURF VALLEY PROFESSIONAL BUILDINGS PARCELS J2 & I-3

TAX MAP 16 GRID 16 & 17 — PART OF PARCEL 8
2ND ELECTION DISTRICT — ZONED: PGCC — HOWARD COUNTY, MARYLAND

STATE OF MARYLAND — DHANAM VIN KATHURIA — NO. 8818 — REGISTERED PROFESSIONAL ENGINEER — 9/28/17

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www.kci.com

DESIGN BY:	MG/SK
DRAWN BY:	MG/SK
CHECKED BY:	DVK
SCALE:	AS SHOWN
DATE:	SEPT. 29, 2017
PROJECT #:	131604129
SHEET #:	2 of 3

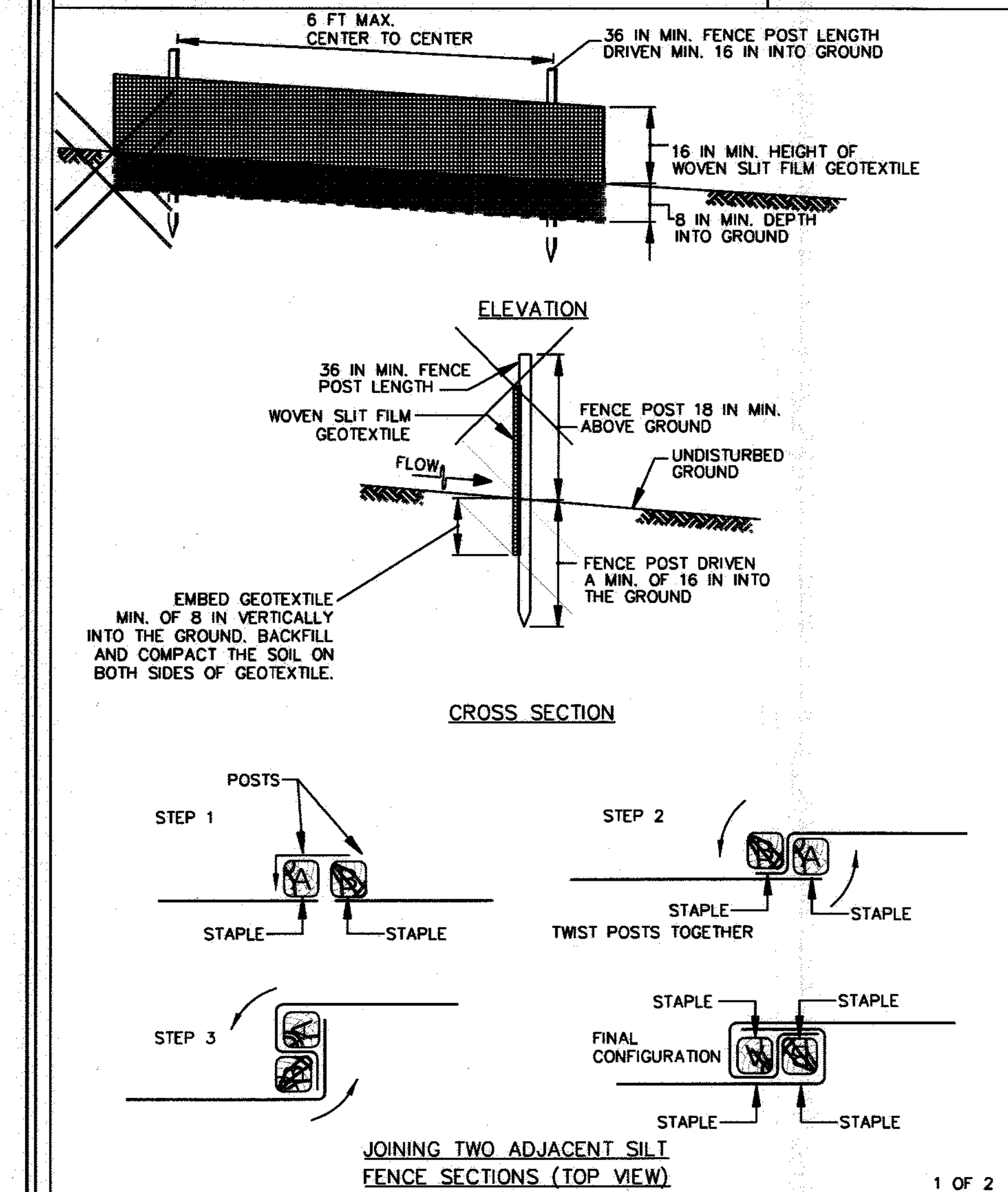
PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 8818, EXPIRATION DATE: OCT. 17, 2018

ECP-17-047

Z:\TURF VALLEY POD L\Drawings\Sketch and ECP Plan.dwg

DETAIL E-1 SILT FENCE

STANDARD SYMBOL: ├──SF──┤



1 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-1 SILT FENCE

STANDARD SYMBOL: ├──SF──┤

CONSTRUCTION SPECIFICATIONS

1. USE WOOD POSTS 1¾ X 1¾ ± 1/16 INCH (MINIMUM) SQUARE CUT OF SOUND QUALITY HARDWOOD. AS AN ALTERNATIVE TO WOODEN POST USE STANDARD "T" OR "U" SECTION STEEL POSTS WEIGHING NOT LESS THAN 1 POUND PER LINEAR FOOT.
2. USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART.
3. USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION.
4. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
5. EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.
6. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.
7. EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.
8. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

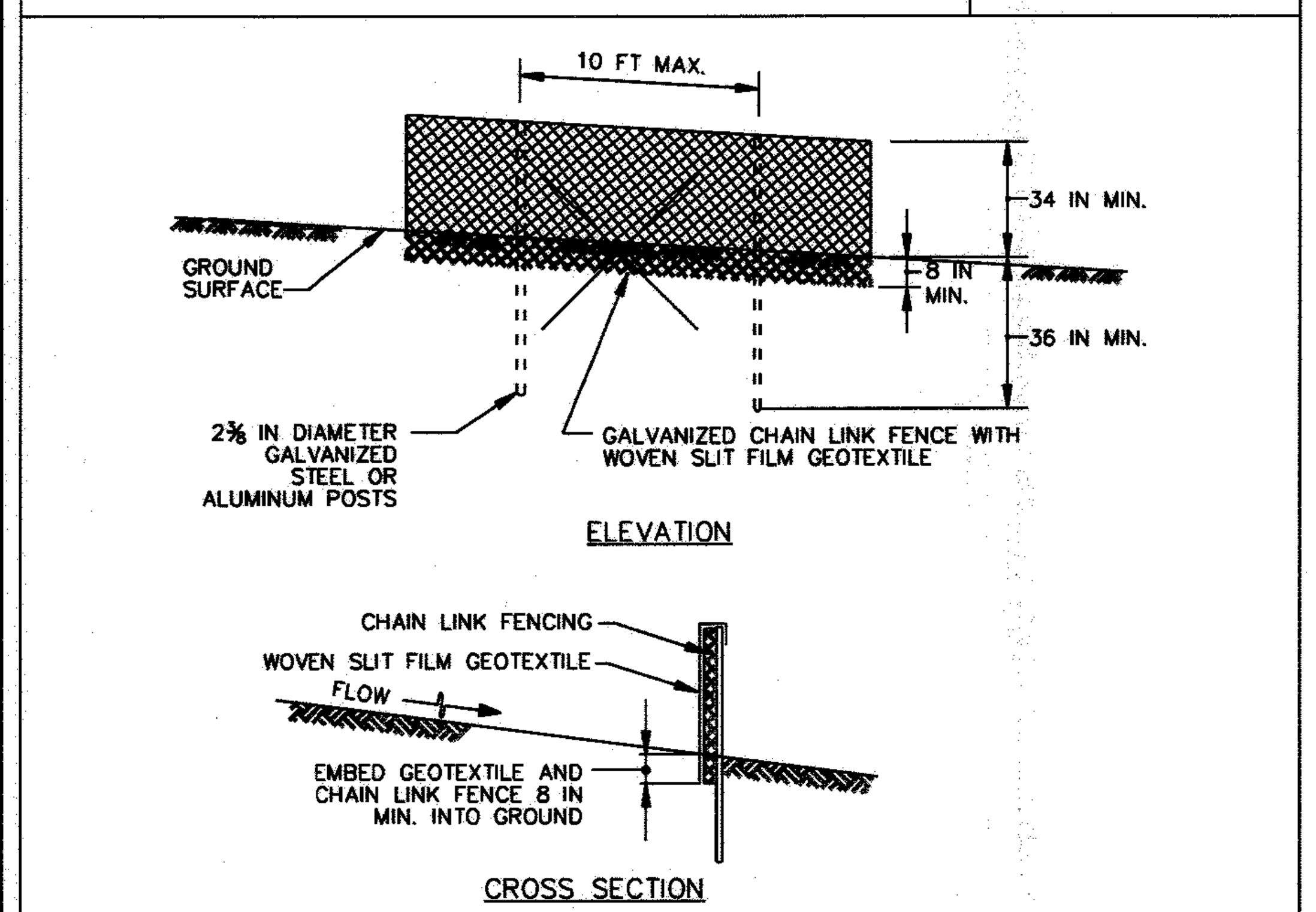
2 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-3 SUPER SILT FENCE

STANDARD SYMBOL: ├──SSF──┤



CONSTRUCTION SPECIFICATIONS

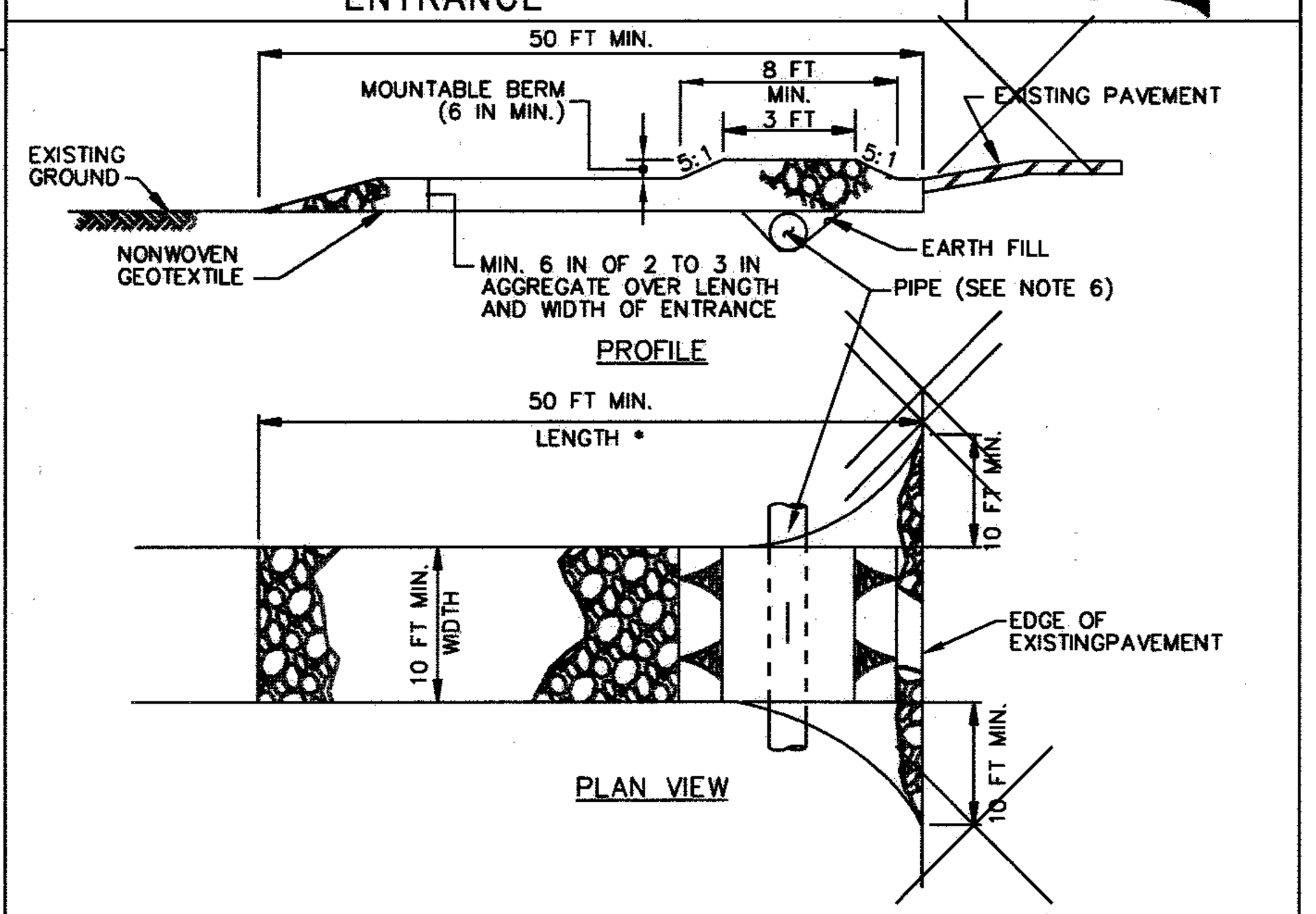
1. INSTALL 2⅜ INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
2. FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2⅜ INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.
3. FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.
4. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.
5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
6. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
7. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE

STANDARD SYMBOL: SCE



CONSTRUCTION SPECIFICATIONS

1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 10.4.17

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 10/3/17

STANDARDS AND SPECIFICATIONS FOR TOPSOIL

DEFINITION

PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT

PURPOSE

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

CONDITIONS WHERE PRACTICE APPLIES

I. THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
  A. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.
  B. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.
  C. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.
  D. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.

II. FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

I. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.

II. TOPSOIL SPECIFICATIONS – SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
  i. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR A SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1.5-INCH IN DIAMETER.
  ii. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS, SUCH AS BERMUDA GRASS QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
  iii. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.

III. FOR THIS SITE, WHICH HAS A DISTURBED AREA UNDER 5 ACRES:
  i. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION – SECTION 1 – VEGETATIVE STABILIZATION METHODS AND MATERIALS.

IV. FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:
  I. ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:
    A. PH FOR TOPSOIL SHALL BE BETWEEN 6.0 AND 7.5. IF THE TESTED SOIL DEMONSTRATES A PH PF LESS THAN 6.0, SUFFICIENT LIME SHALL BE PRESCRIBED TO RAISE THE PH TO 6.5 OR HIGHER.
    B. ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.
    C. TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.
    D. NO SOD OR SEED SHALL BE PLACED ON SOIL. SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.

NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.

  II. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMMENDMENTS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION-SECTION I-VEGETATIVE STABILIZATION METHODS AND METERIALS.

V. TOPSOIL APPLICATION
  i. WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, SILT FENCE, SEDIMENT TRAPS AND BASINS.
  ii. GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4" – 8" HIGHER IN ELEVATION.
  iii. TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4" – 8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH MINIMUM ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
  iv. TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules:

1. Preferred – Apply 2 tons/acre dolomitic limestone (92 lbs/1000 sq. ft.) and 600 lbs/acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.) before seeding. Harrow or disk into upper three inches of soil. At time of seeding, apply 400 lbs/acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq. ft.)
2. Acceptable – Apply 2 tons/acre dolomitic limestone (92 lbs/1000 sq. ft.) and 1000 lbs/acre 10-10-10 fertilizer (23 lbs/1000 sq. ft.) before seeding. Harrow or disk into upper three inches of soil.

Seeding – For the periods March 1 – April 20, and August 1 – October 20, inclusive, seed the appropriate seed mixtures:
Seed Mixture No. 1 – (relatively flat areas regularly mowed and exposed to normal conditions) with 192 lbs PLS/acre of 85% certified turf-type Tall Fescue, 28 lbs PLS/acre of 10% certified Kentucky Bluegrass and 14 lbs PLS/acre of 5% Perennial Ryegrass. Supplemental seed – Annual Ryegrass 25 lbs PLS/acre.
Seed Mixture No. 2 – (sloped areas not subject to regular mowing) with 85 lbs PLS/acre of 75% Hard Fescue, 23 lbs PLS/acre of 20% Chewings Fescue and 7 lbs PLS/acre of 5% Kentucky Bluegrass. Supplemental seed – Redtop 3 lbs PLS/acre.
Seed Mixture No. 3 – (wetland areas and their associated buffer zones) with 83 lbs PLS/acre of 60% Fowl Meadow Grass, 34 lbs PLS/acre of 30% Chewings Fescue and 14 lbs PLS/acre of 10% Perennial Ryegrass. Supplemental seed – Redtop 3 lbs PLS/acre.
Seeding performed after October 20 should be a temporary cover of annual ryegrass and followed by overseeding of the appropriate seed mixture during the spring seeding season.

Mulching – Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slope 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq. ft.) for anchoring.

Maintenance – Inspect all seeding areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be re-disturbed where a short-term vegetative cover is needed.

Seedbed preparation: – Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

Soil Amendments: – Apply 600 lbs/acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.).

Seeding: – For periods March 1 – April 30 and from August 1 – November 30, inclusive, seed with 2-1/2 bushel per acre of Annual Rye/ Redtop (3.2 lbs/1000 sq. ft.). For the period May 1 – July 31, inclusive, seed with 13.6 lbs PLS/acre of Little Bluestem. For the period November 16 – February 28, protect site by applying 2 tons/acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: – Apply 1-1/2 to 2 tons/acre (70 to 90 lbs/1000 sq. ft.) of unrotted weed-free, small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal/1000 sq. ft.) of emulsified asphalt on flat areas. On slope 8 ft. or higher, use 348 gal. per acre (8 gal/1000 sq. ft.) for anchoring.

Refer to the "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" for additional rates and methods not covered.

SEDIMENT CONTROL NOTES

1. A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (313-1855).

2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.

3. Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within: a) 3 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 7 days as to all other disturbed or graded areas on the project site.

4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol 1, Chapter 12 of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.

5. All disturbed areas must be stabilized within the time period specified above in accordance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (Sec. B-4-5), temporary seeding (Sec. B-4-4) and mulching (Sec.B-4-3). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.

6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.

7. Site Analysis:
Total Area of Site 16.019 Acres
Area Disturbed: 16.019 Acres
Area to be roofed or paved: 9.55 Acres
Area to be vegetatively stabilized: 6.47 Acres
Total Cut: TBD Cu. Yds.
Total Fill: TBD Cu. Yds.
Excess/Borrow material to be hauled to/from an approved site.

8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.

9. Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.

10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.

11. Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized by the end of each work day, whichever is shorter.

12. Any changes or revisions to the sequence of construction must be reviewed and approved by the plan approval authority prior to proceeding with construction.

13. A project is to be sequenced so that grading activities begin on one grading unit (maximum acreage of 20 ac. per grading unit) at a time. Work may proceed to a subsequent grading unit when at least 50 percent of the disturbed area in the preceding grading unit has be stabilized and approved by the enforcement authority. Unless otherwise specified and approved by the approval authority, no more than 30 acres cumulatively may be disturbed at a given time.

SEQUENCE OF CONSTRUCTION

	SEQUENCE OF CONSTRUCTION	DURATION
1.	Obtain grading permit.	1 DAY
2.	Notify Howard County Bureau of Inspections and Permits (313-1880) at least 48 hours before starting any work.	1 DAY
3.	Construct stabilized construction entrance.	1 DAY
4.	Install super silt fence as shown on the drawing.	2 DAY
5.	With Inspector's approvals, clear and grub site to LOD.	3 WEEK
6.	Rough grade site.	6 WEEK
7.	Construct roads and storm drain structures	15 WEEKS
8.	Install inlet protections as shown on the drawings	2 WEEKS
9.	Construct all improvements	40 WEEKS
10.	Stabilize all disturbed areas with seed and mulch.	1 WEEK
11.	With approval of Inspector, remove sediment control devices.	1 DAY

N/A
GRAPHIC SCALE
50' 0 50' 100
(IN FEET)
SCALE: 1"= 50'

OWNER/DEVELOPER

MANGIONE ENTERPRISES OF TURF VALLEY, LP	TVTS RETAIL, LLC.
1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410.825.8400	1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410.825.8400

EROSION AND SEDIMENT CONTROL NOTES AND DETAILS THE VILLAGE AT TOWN SQUARE

LOTS 1-96, OPEN SPACE LOT 97, BULK PARCELS A TO D
A SUBDIVISION OF PARCEL 8 & A RESUBDIVISION OF TURF VALLEY PROFESSIONAL BUILDINGS PARCELS J2 & I-3

TAX MAP 16 GRID 16 & 17 — 2ND ELECTION DISTRICT — ZONED: PGCC — PART OF PARCEL 8 — HOWARD COUNTY, MARYLAND

STATE OF MARYLAND — DHARMVIR KATHURIA — NO. 8818 REGISTERED — PROFESSIONAL ENGINEER — 9/29/17

KCI TECHNOLOGIES — ENGINEERS, PLANNERS, SCIENTISTS, CONSTRUCTION MANAGERS
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FAX: (410) 203-9228
www.kci.com

DESIGN BY:	MG/SK
DRAWN BY:	MG/SK
CHECKED BY:	DVK
SCALE:	AS SHOWN
DATE:	SEPT. 29, 2017
PROJECT #:	131604129
SHEET #:	3 of 3

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 8818, EXPIRATION DATE: OCT. 17, 2018

Z:\TURF VALLEY POD L\Drawings\Sketch and ECP Plan.dwg