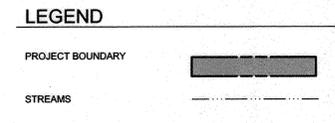
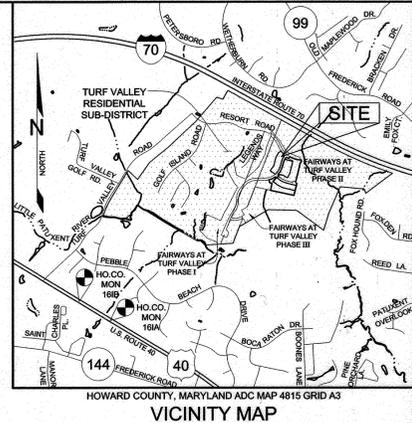


GENERAL NOTES

- SUBJECT PROPERTY IS ZONED "PGCC" PER THE 10-6-2013 COMPREHENSIVE ZONING PLAN.
- GROSS AREA OF SITE SUBJECT TO SUBDIVISION = 10.08 AC±
- AREA OF PROPOSED PUBLIC RW: 0.61 AC±
- NUMBER OF PROPOSED BUILDABLE LOTS: 33
- AREA OF PROPOSED BUILDABLE LOTS: 3.29 AC±
- NUMBER OF PROPOSED BULK PARCELS: 2
- AREA OF PROPOSED BULK PARCEL: 2.50 AC±
- NUMBER OF PROPOSED GOLF SPACE/OPEN SPACE LOTS: 6
- OPEN SPACE REQUIRED (15% OF GROSS AREA OF SITE SUBJECT TO SUBDIVISION): 10.42 AC. x 15% = 1.56 AC.
- CREDITED OPEN SPACE PROVIDED: 3.26 AC±
- NON-CREDITED OPEN SPACE PROVIDED: 0.44 AC±
- TOTAL OPEN SPACE PROVIDED: 3.70 AC±
- OPEN SPACE LOTS 90-92 TO BE OWNED AND MAINTAINED BY THE FAIRWAYS AT TURF VALLEY NEIGHBORHOOD ASSOCIATION, INC. THE ARTICLES OF INCORPORATION WERE ACCEPTED BY THE STATE DEPARTMENT OF ASSESSMENT AND TAXATION ON 4-13-2010 ID #D1551399.
- OPEN SPACE LOTS 89 AND 93 TO BE OWNED AND MAINTAINED BY THE TURF VALLEY MASTER HOMEOWNERS ASSOCIATION, INC. THE ARTICLES OF INCORPORATION WERE ACCEPTED BY THE STATE DEPARTMENT OF ASSESSMENT AND TAXATION ON 3-8-2013 ID #D13514013.
- GOLF SPACE LOT 94 TO BE OWNED AND MAINTAINED BY MANGIONE ENTERPRISES OF TURF VALLEY, LIMITED PARTNERSHIP.
- THIS PROPERTY IS WITHIN THE METROPOLITAN DISTRICT.
- THIS DEVELOPMENT IS SUBJECT TO SECTION 16-122 OF THE HOWARD COUNTY CODE - PUBLIC WATER AND/OR SEWER SERVICES HAS BEEN GRANTED UNDER THE TERMS AND PROVISIONS THEREOF EFFECTIVE _____ ON _____ DATE DEVELOPER AGREEMENT #04-107-1-D WAS FILED AND ACCEPTED.
- HOWARD COUNTY SOILS MAP 15.
- TOPOGRAPHY IS BASED ON AN AERIAL TOPOGRAPHIC SURVEY BY WINGS AERIAL MAPPING CO., INC. ON OR ABOUT JANUARY, 2006.
- BOUNDARY SURVEY PREPARED BY MILDBERG, BOENDER & ASSOCIATES ON OR ABOUT MARCH, 2006.
- THERE ARE NO WETLANDS, STREAMS, OR THEIR REQUIRED BUFFERS, 100 YEAR FLOODPLAIN OR STEEP SLOPES LOCATED WITHIN THIS PROJECT'S BOUNDARY.
- TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO HISTORIC STRUCTURES OR CEMETERIES WITHIN THE PROJECT'S BOUNDARY.
- WETLAND LIMITS SHOWN ARE BASED ON A STUDY CONDUCTED BY EXPLORATION RESEARCH, INC. AND VERIFIED BY ECO-SCIENCE PROFESSIONALS, INC. ON OCTOBER 24, 2007.
- 100-YEAR FLOODPLAIN LIMITS SHOWN ARE BASED ON A STUDY PREPARED BY MILDBERG, MOCHI AND ASSOCIATES, INC. WETLAND AND 100-YEAR FLOODPLAIN LIMITS SHOWN ARE IN ACCORDANCE WITH THE FOURTH AMENDMENT TO THE TURF VALLEY COMPREHENSIVE SKETCH PLAN (S-86-13, PB 368), APPROVED JULY 26, 2008.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
STATE HIGHWAY ADMINISTRATION 410.531.5533
BGE(CONTRACTOR SERVICES) 410.850.4620
BGE(UNDERGROUND DAMAGE CONTROL) 410.787.9068
MISS UTILITY 1.800.257.7777
COLONIAL PIPELINE COMPANY 410.795.1390
HOWARD COUNTY, DEPT. OF PUBLIC WORKS, BUREAU OF UTILITIES 410.313.4900
HOWARD COUNTY HEALTH DEPARTMENT 410.313.2640
AT&T 1.800.252.1133
VERIZON 1.800.743.0033/410.224.9210
- PREVIOUS HOWARD COUNTY FILE NUMBERS: S-86-013; S-94-045; S-04-012; SP-07-012; SP-06-013; F-94-006; F-06-107; F-98-150; F-96-151; F-07-156; SDP-95-121; CONTR. #24-4354-D; PB-181; PB-294; PB-300; PB-351; PB-368; WP-09-048; WP-09-211; PLAT #20286 & 20287
- THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- ANY DAMAGE TO PUBLIC RIGHT-OF-WAYS, PAVING OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY IN ADDITION TO MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- EXISTING UTILITIES ARE LOCATED BY THE USE OF ANY OR ALL OF THE FOLLOWING: ROAD CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATERS AND SEWER PLANS AND OTHER AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF THE EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S 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.
- ALL HDPE PIPE SPECIFICATION AND INSTALLATION SHALL MEET AASHTO M-252 TYPE S, M-294 TYPE S AND ASTM D2321, RESPECTIVELY.
- SOIL COMPACTION SPECIFICATIONS, REQUIREMENTS, METHODS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER. DRIVEWAY PAVING TO BE HOWARD COUNTY STANDARD R-1 PAVING SECTION. GEOTECHNICAL ENGINEER TO CONFIRM ACCEPTABILITY OF PROPOSED PAVING SECTION, BASED ON SOIL TEST, PRIOR TO CONSTRUCTION.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NUMBERS 101A AND 101B WERE USED FOR THIS PROJECT.
- DRIVEWAY(S) SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING REQUIREMENTS:
1) WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE);
2) SURFACE - SIX (6") INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MINIMUM);
3) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND 45-FOOT TURNING RADIUS;
4) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25-LOADING);
5) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
6) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE
- 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.
- ALL DITCHES AND SWALES WILL HAVE EROSION CONTROL MATTING.
- STORMWATER MANAGEMENT FOR THIS PHASE IS PROVIDED BY A REGIONAL STORMWATER MANAGEMENT POND CONSTRUCTED UNDER SDP-95-121. WOV, REV AND CPV REQUIREMENTS ARE PROVIDED FOR THE AREAS THAT DRAIN TO THE REGIONAL STORMWATER MANAGEMENT FACILITY BY THAT FACILITY. THE AREAS NOT DRAINING TO THE REGIONAL SWM FACILITY CONTAIN LESS THAN 5,000 SF OF IMPERVIOUS AREA. THIS AREA HAS NOT BEEN TREATED UNDER THESE PLANS DUE TO THIS. THE UNTREATED AREA WILL BE COMBINED WITH FUTURE DEVELOPMENT AND WILL BE TREATED AT THAT TIME. CPV IS NOT REQUIRED FOR THIS AREA BECAUSE THE 1 YEAR PEAK RUNOFF IS LESS THAN 2 CFS. SEE THE STORMWATER MANAGEMENT REPORT FOR SDP-95-121 FOR DESIGN COMPUTATIONS FOR THE REGIONAL STORMWATER MANAGEMENT FACILITY.
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING WILL BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$9,600 (32 SHADE TREES @ \$300.00 EACH). STREET TREES AND INTERNAL LANDSCAPE TREES WILL BE PLANTED AT THE SITE DEVELOPMENT PLAN STAGE. LANDSCAPING FOR LOTS 1 THRU 33 WILL BE PROVIDED FOR AT THE SITE DEVELOPMENT PLAN STAGE IN ACCORDANCE WITH SECTION 16.124 OF THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL.
- 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.
- PARKING FOR THIS DEVELOPMENT AT THE RATE OF 2.3 SPACES PER UNIT (TWO SPACES FOR EACH UNIT STANDARD AND 0.3 SPACES FOR EACH UNIT OVERFLOW),
REQUIRED PARKING: 76 (33 LOTS X 2.3)
PROPOSED PARKING: 85 (66 SPACES WITHIN GARAGES/ON DRIVEWAYS + 19 PARKING SPACES ALONG PUCCINI LANE
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT SINCE IT IS MORE THAN FIVE HUNDRED FEET (500') FROM A PRINCIPAL OR INTERMEDIATE ARTERIAL HIGHWAY AND SINCE THE HEAVY TRUCK TRAFFIC ON INTERSTATE ROUTE 70 DOES NOT EXCEED AN AADT OF TEN THOUSAND (10,000) VEHICLES.
- STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (2006), SECTION 5.5.A. A MINIMUM SPACING OF TWENTY FEET (20') SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE. SEE STREET LIGHT CHART, THIS SHEET.
- THIS PROJECT IS SUBJECT TO THE CRITERIA ESTABLISHED BY THE SECOND AMENDMENT TO THE TURF VALLEY RESIDENTIAL SUBDISTRICT FINAL DEVELOPMENT PLAN, RECORDED IN THE LAND RECORDS OF HOWARD COUNTY, MARYLAND AS PLAT NUMBER 20286 AND 20287.
- A WAIVER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME III, SECTION 2.3.A.3.1, WAS APPROVED ON JANUARY 18, 2008. THIS ALLOWS THE INTERSECTION OF PUCCINI LANE AND ROAD "D" TO BE USED AS A TURNAROUND AREA RATHER THAN A TEMPORARY TEE TURNAROUND.
- THE 1.12 ACRE OF REFORESTATION OBLIGATION REQUIRED FOR FAIRWAYS AT TURF VALLEY, PHASE II WILL BE MET USING 0.71 ACRES OF OFF-SITE REFORESTATION AND 0.82 ACRES OF OFFSITE RETENTION IN PCE #9 WHICH IS LOCATED ON OPEN SPACE LOT 104 OF THE VILLAGES OF TURF VALLEY PHASE 2 (F-08-084) AND WILL BE PLACED IN A FOREST CONSERVATION EASEMENT ON THE FINAL PLAT OF THE VILLAGES OF TURF VALLEY, PHASE 2 (F-08-084). THESE AREAS WILL BE POSTED WITH APPROPRIATE PROTECTIVE SIGNAGE.

FINAL ROAD CONSTRUCTION PLAN FAIRWAYS AT TURF VALLEY

PHASE 2: LOTS 57-89, OPEN SPACE LOTS 90-94, GOLF SPACE LOT 95, AND NON-BUILDABLE BULK PARCELS E & F A RESUBDIVISION OF PARCEL 706 AND FAIRWAYS AT TURF VALLEY NON-BUILDABLE BULK PARCELS A, B & C POD 'E-1' SECTION IV: RESIDENTIAL PHASE IV E HOWARD COUNTY, MARYLAND



BENCHMARKS

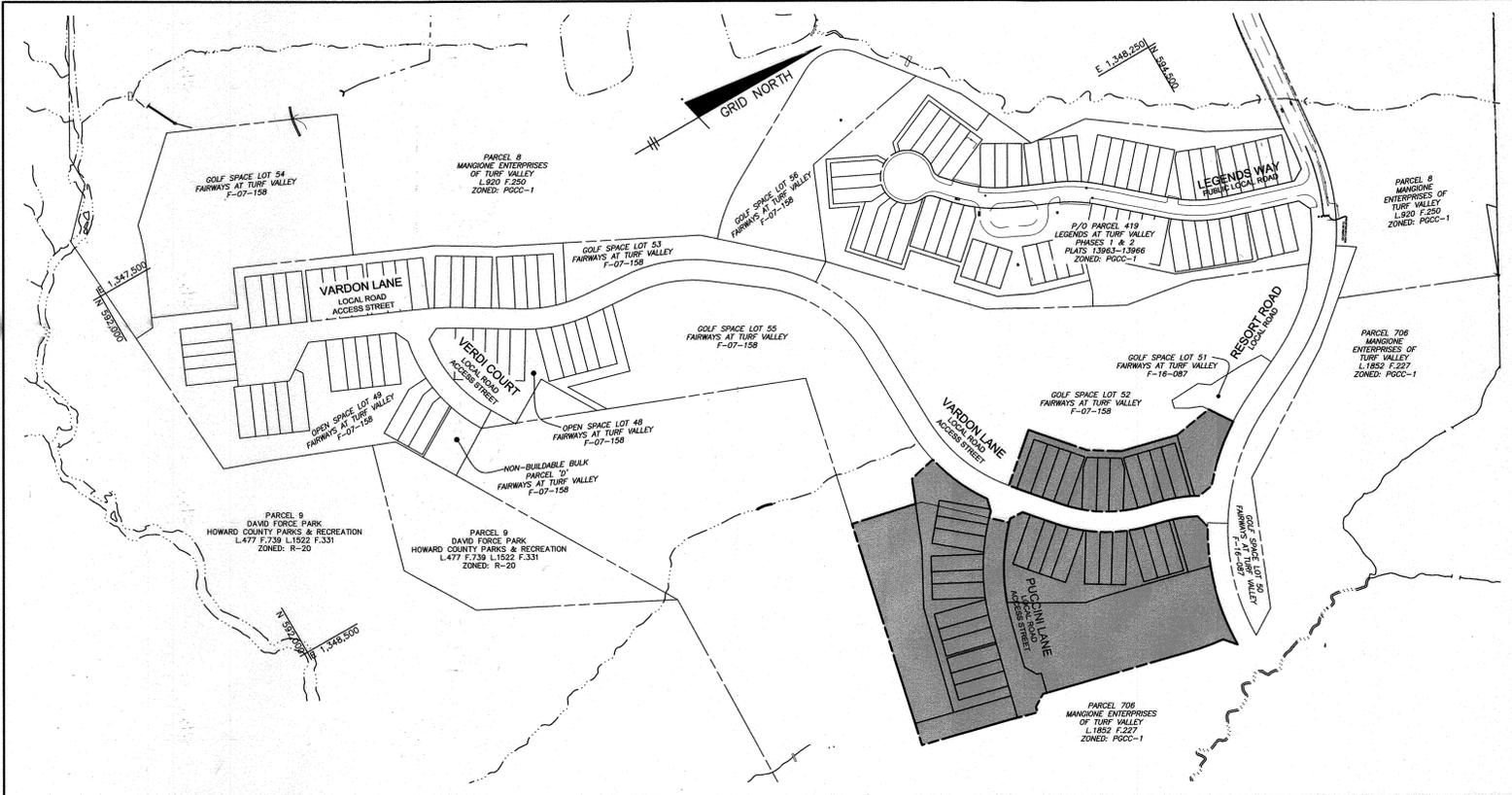
NUMBER	NORTHING	EASTING	ELEVATION	DESCRIPTION
161B	590,475.2538	1,344,753.9350	469.892	11.5' SOUTHWEST OF WBL RT. 40, 20.8' WEST OF PK NAIL IN SHOULDER, 86.4' SOUTH OF LAST POST IN GUARDRAIL SE OF INTERSECTION OF RTE. 99 AND WETHERSBURN ROAD, 14.8' WEST OF FENCE POST, 35' NE OF MANHOLE
171A	598,435.249	1,348,615.2482	508.469	

SHEET INDEX

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	ROAD PLAN AND PROFILE: PUCCINI LANE
3	SEDIMENT AND EROSION CONTROL DETAILS
4	GRADING, SEDIMENT AND EROSION CONTROL PLAN
5	GRADING, SEDIMENT AND EROSION CONTROL NOTES AND DETAILS
6	STORM DRAIN DRAINAGE AREA MAP
7	STORM DRAIN PROFILES
8	LANDSCAPE PLAN
9	FOREST CONSERVATION PLAN AND DETAILS
10	FOREST CONSERVATION PLAN - NOTES AND DETAILS
11	FOREST CONSERVATION PLAN - OFFSITE EASEMENTS

AS-BUILT NOTES:

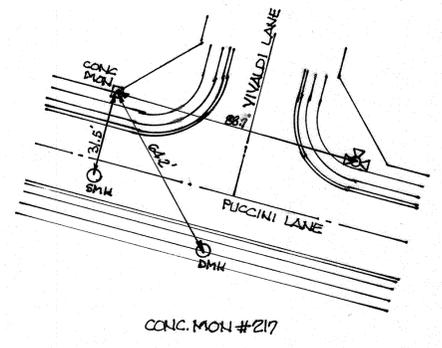
- HORIZONTAL AND VERTICAL DATUM FOR THIS AS-BUILT IS BASED ON THE MARYLAND STATE REFERENCE SYSTEM NAD 83. ALL OF AS PROJECTED FROM HO. CO. GEODETIC CONTROL STATION 161B AND 171A.
- THE INSTRUMENTS USED IN PERFORMING THE AS-BUILT WERE A 5" TOTAL STATION AND PRISM AND REF. COPS.
- THIS AS-BUILT WAS PERFORMED BY BENCHMARK ENGINEERING, INC.



LOCATION MAP
SCALE: 1"=200'

**PHASE 2, F-10-084
RIGHT OF WAY ELEVATION**

R/W P.T. NO.	DESCRIPTION	ELEVATION
114	X-CUT	443.37'
115	X-CUT	443.20'
207	REBAR & CAP	455.92'
208	REBAR & CAP	457.72'
209	REBAR & CAP	458.10'
210	REBAR & CAP	459.81'
211	REBAR & CAP	459.74'
216	REBAR & CAP	456.47'
217	CONC. MON	458.61'
218	P.K. WALL	000.00'



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. 21443, Expiration Date: 12-31-22

AS-BUILT CERTIFICATION
I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications
Donald Mason, P.E. Date: 12-1-2020

THIS SHEET REPLACES THE PREVIOUS SHEET 1 SIGNED ON 11-19-2010

APPROVED: DEPARTMENT OF PUBLIC WORKS
Matthew M... 6/8/2016
CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Paul P... 6-13-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION

1 5-12-2016 REVISE LOCATION MAP BASED ON REVISED VARDON LANE ALIGNMENT AND LOT LAYOUT AND REMOVAL OF PRIVATE DRIVE, RELOCATE STREET LIGHT, CENTERLINE, FILLET, AND ROAD CLASSIFICATION CHARTS TO SHEET 2 UPDATE GENERAL NOTES BASED ON NEW LAYOUT.

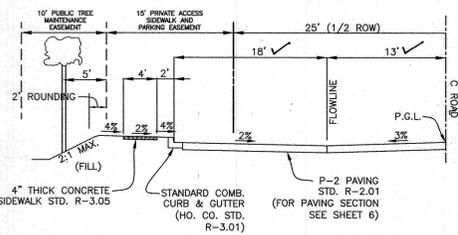
BENCHMARK ENGINEERING, INC.
840 BALTIMORE NATIONAL PIKE & SUITE 315 A ELICOTT CITY, MARYLAND 21043
(P) 410-465-8105 (F) 410-465-8444
WWW.BE-CVLENGINEERING.COM

FAIRWAYS AT TURF VALLEY
PHASE 2: LOTS 57-89, OPEN SPACE LOTS 90-94, GOLF SPACE LOT 95 & NON-BUILDABLE BULK PARCELS E & F

TAX MAP: 16 - GRID: 16 - PARCEL: P/O 8 & 706
ZONED: PGCC (RESIDENTIAL SUBDISTRICT)
ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND

REvised COVER SHEET

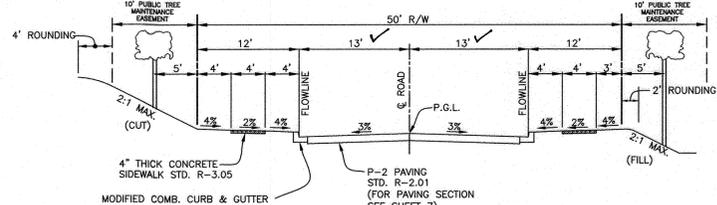
DATE: MAY 12, 2016 BEI PROJECT NO. 2726
SCALE: AS SHOWN SHEET 1 OF 11



ROAD CLASSIFICATION					
ROAD NAME	CLASSIFICATION	PAVING TYPE	DESIGN SPEED	LIMITS OF CONSTRUCTION	R/W
PUCCINI LANE	ACCESS STREET	P-2	30	0+00 TO 5+47.32	50'

CENTERLINE ROAD CURVE DATA				
CURVE	RADIUS	ARC LENGTH	DELTA	CHORD BEARING
C1	500'	303.01'	35°16'37"	S58°16'42"E
				307.85'

STREET LIGHT CHART			
FIXTURE TYPE	POLE TYPE	LOCATION	STREET
LED-100 COLONIAL POST TOP	14' BLACK FIBERGLASS	± STA. 1+60 15.33' LEFT	PUCCINI LANE
LED-100 COLONIAL POST TOP	14' BLACK FIBERGLASS	± STA. 2+95 15.33' LEFT	PUCCINI LANE
LED-100 COLONIAL POST TOP	14' BLACK FIBERGLASS	± STA. 3+97 15.33' LEFT	PUCCINI LANE
LED-100 COLONIAL POST TOP	14' BLACK FIBERGLASS	± STA. 5+27 15.33' LEFT	PUCCINI LANE



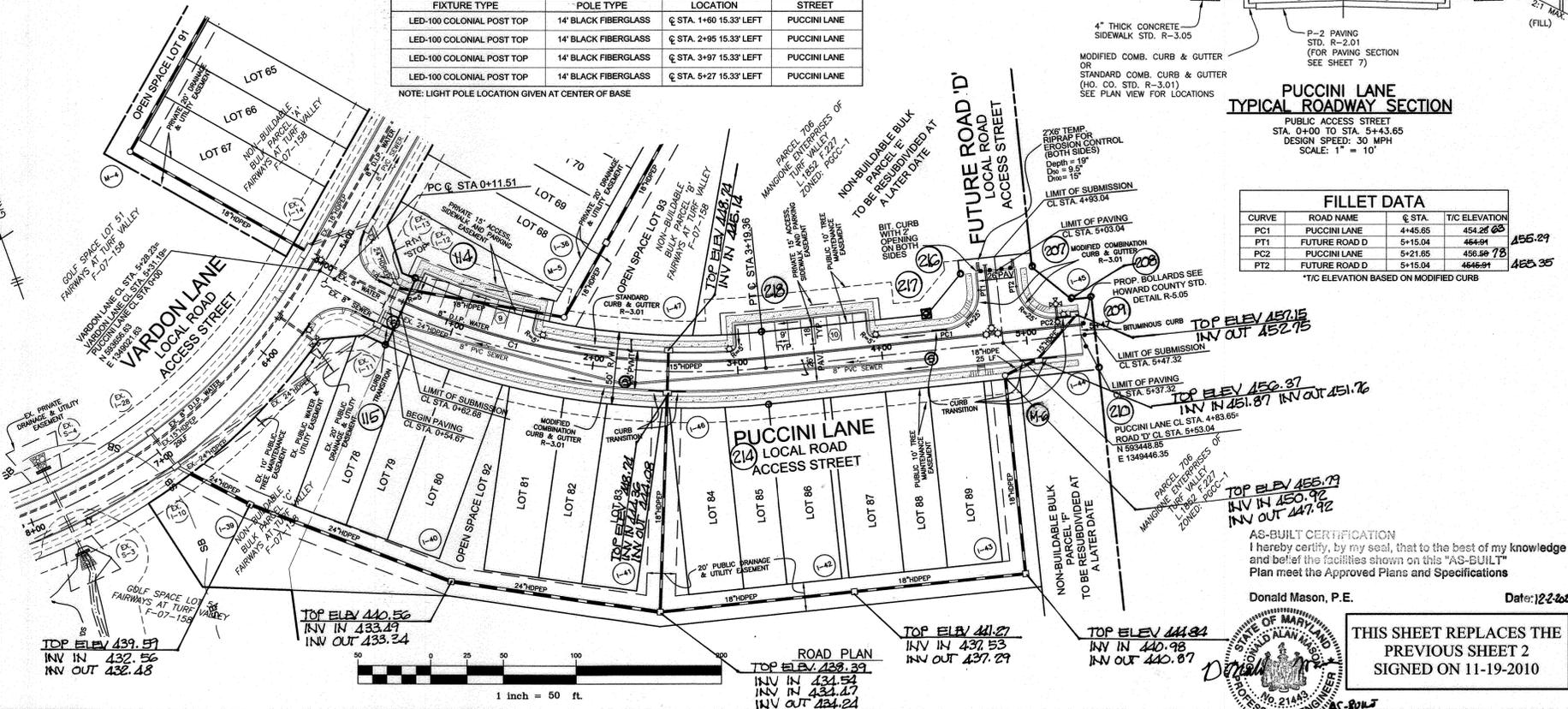
FILLET DATA			
CURVE	ROAD NAME	± STA.	T/C ELEVATION
PC1	PUCCINI LANE	4+45.65	454.27
PT1	FUTURE ROAD D	5+15.04	464.94
PC2	PUCCINI LANE	5+21.65	456.69
PT2	FUTURE ROAD D	5+15.04	464.61

PAVING SECTIONS						
SEC. NO.	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR)	3 TO <5> TO <7>	27	3 TO <5> TO <7>	27
P-2	PARKING DRIVE AISLES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY LOCAL ROADS: ACCESS STREET, CHURCH LANE, RESIDENTIAL	PAVEMENT MATERIAL (INCHES)	MIN	HMA WITH GAB	MIN	HMA WITH CONSTANT GAB
		HMA SUPERPAVE FINAL SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL)	1.5	1.5	1.5	1.5
		HMA SUPERPAVE INTERMEDIATE SURFACE 12.5 MM, PG 64-22, LEVEL 1 (ESAL)	1.0	1.0	1.0	1.0
		HMA SUPERPAVE BASE 19.0 MM, PG 64-22, LEVEL 1 (ESAL)	2.0	2.0	2.0	2.0
		GRADED AGGREGATE BASE (GAB)	8.0	4.0	3.0	4.0

APPROVED: DEPARTMENT OF PUBLIC WORKS
Meunier 6/8/2016
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Vatshel 6/16/16
 CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: DEPARTMENT OF ENGINEERING
Chen 6-13-16
 CHIEF, DEVELOPMENT ENGINEERING DIVISION



1 5-12-2016 REVERSE HALF PARKING SECTION, REVISE CURB TO STD 7" ON LEFT SIDE OF ROAD. REVISE PLAN VIEW PER REVISIONS MADE IN F-07-158. REMOVE THE PRIVATE DRIVE PARALLEL WITH RESORT ROAD. CORRECT FILLET PROFILE ELEVATIONS, ADD STREET LIGHT, ROAD, CL CURVE CHARTS TO THIS SHEET.

NO. DATE REVISION

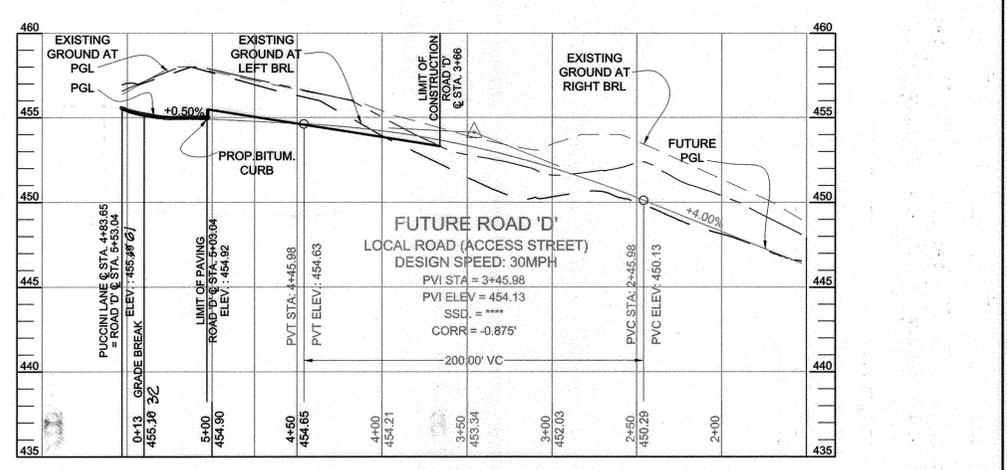
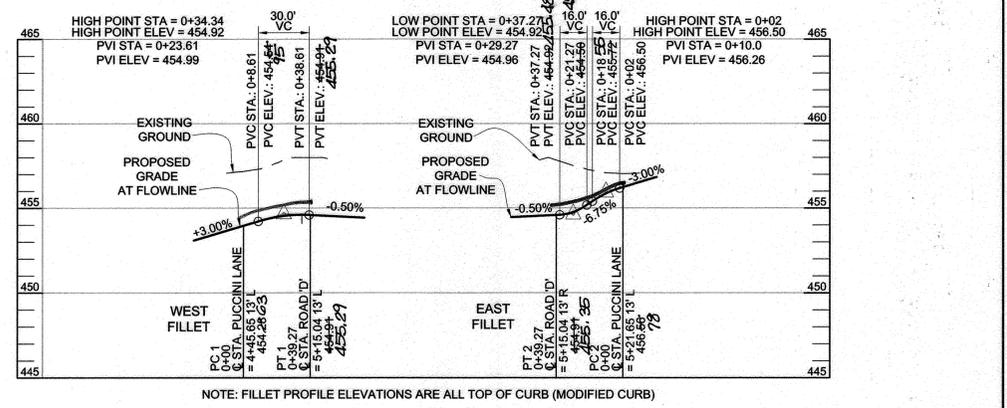
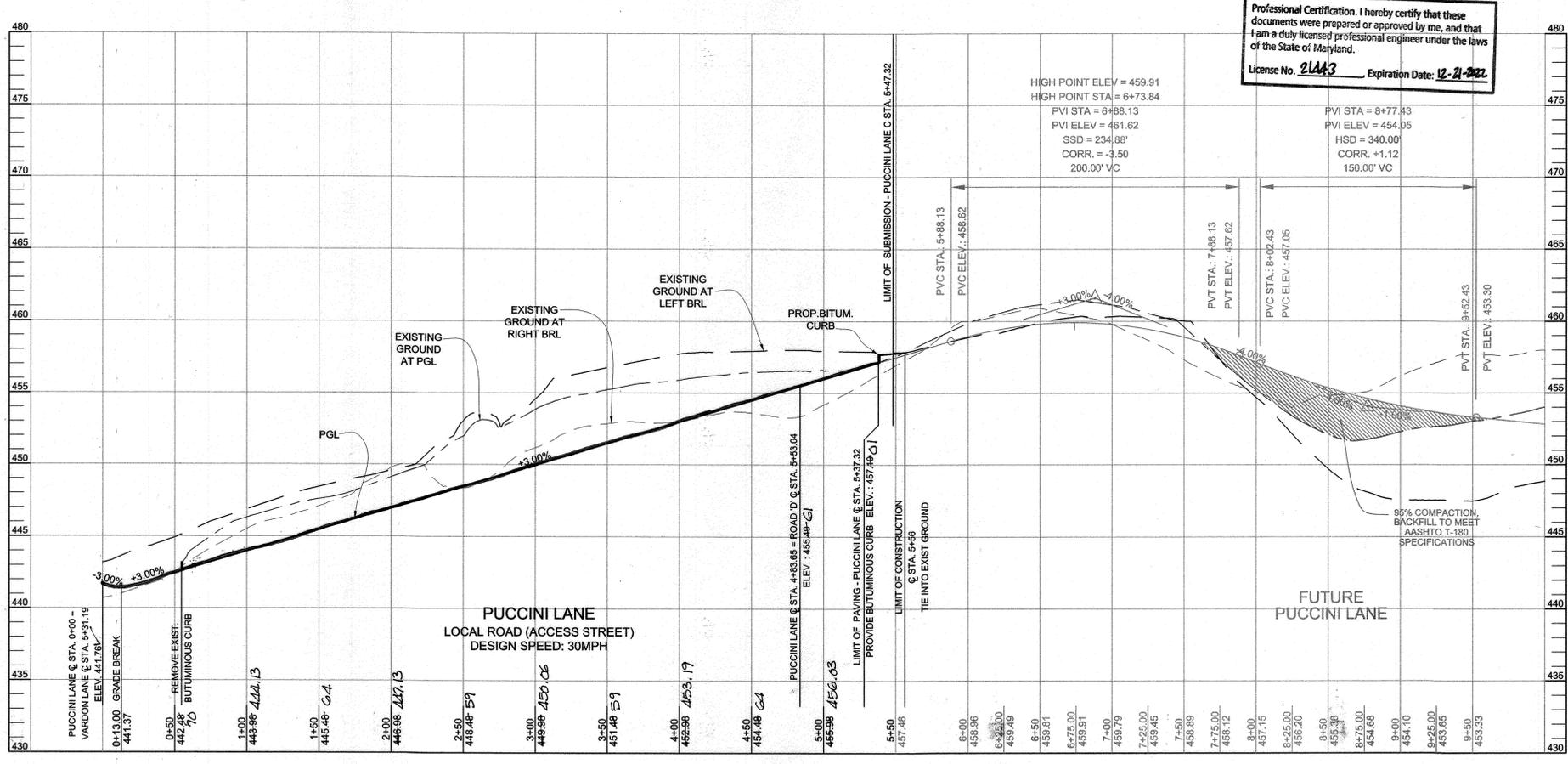
BENCHMARK ENGINEERING, INC.
 8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043
 (7) 410-465-4105 (7) 410-465-6644
 WWW.BEI-CIVILENGINEERING.COM

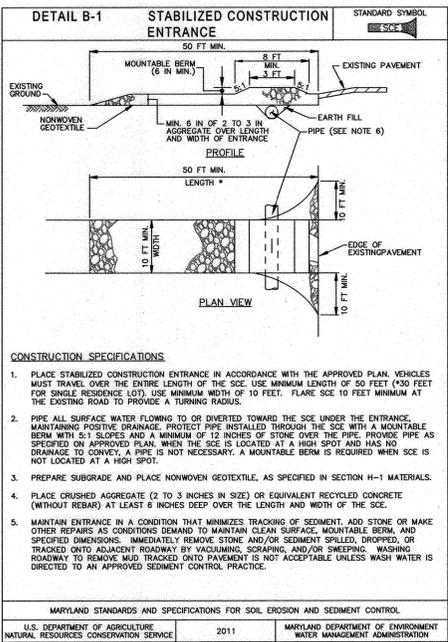
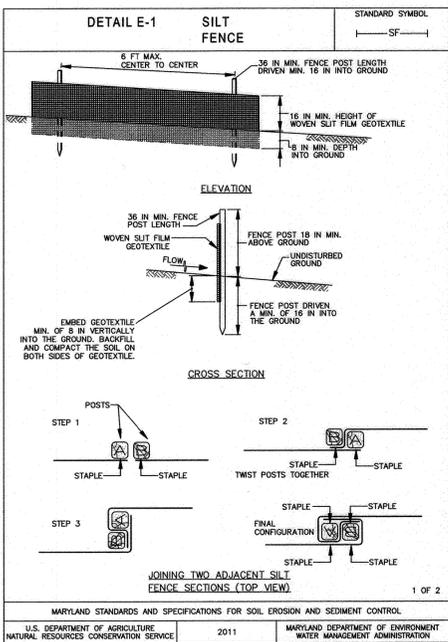
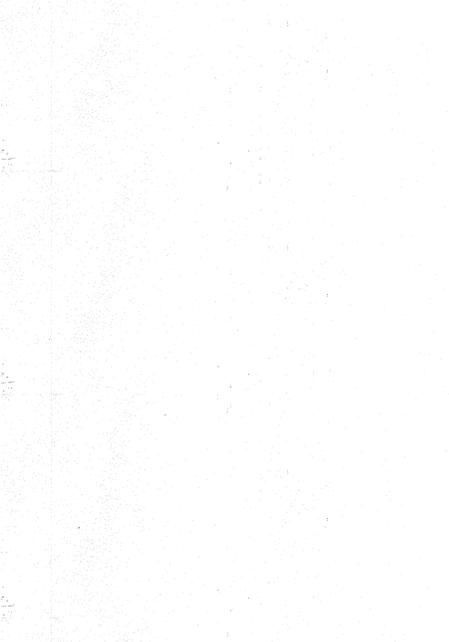
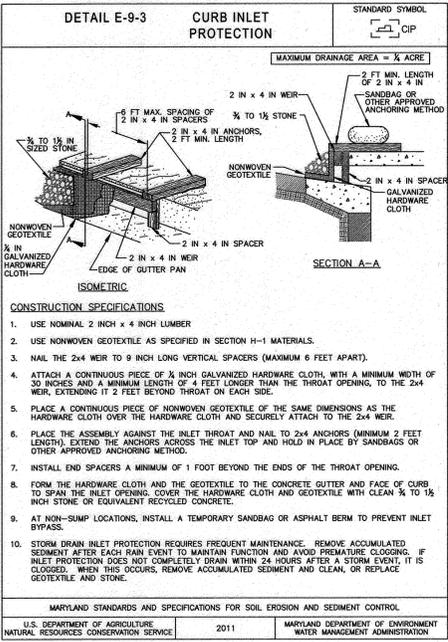
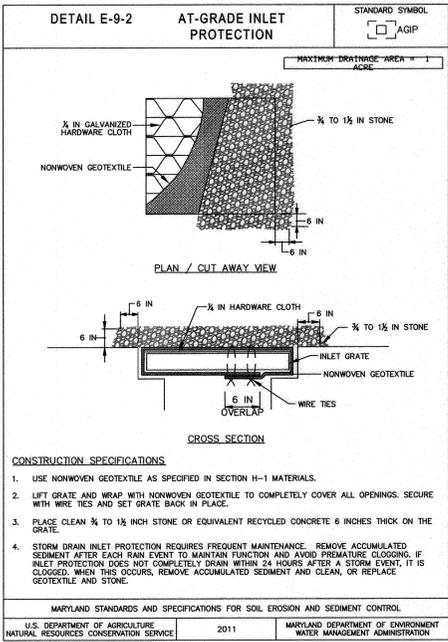
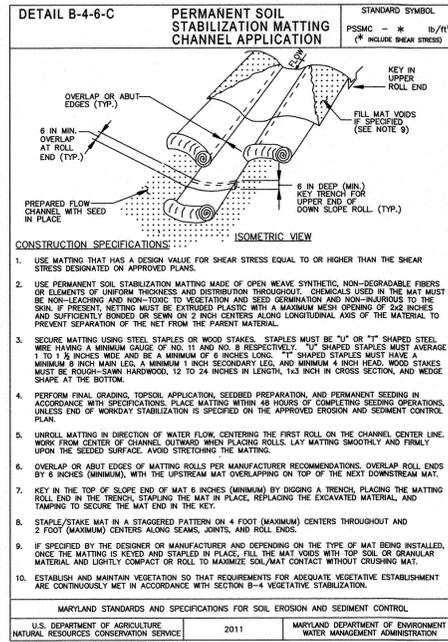
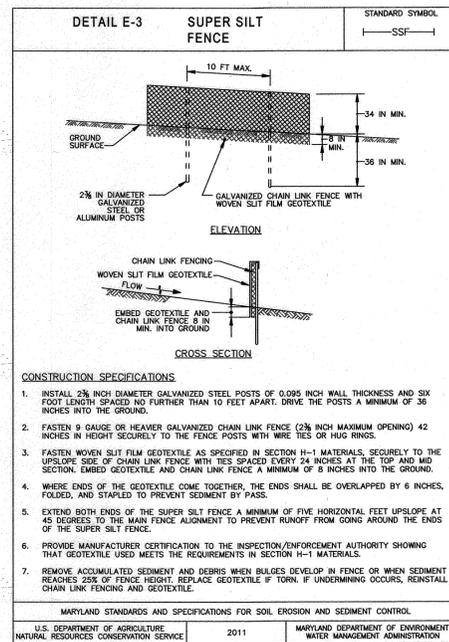
FAIRWAYS AT TURF VALLEY
 PHASE 2: LOTS 57-89, OPEN SPACE LOTS 90-94, GOLF SPACE LOT 95 AND NON-BUILDABLE BULK PARCELS E & F

OWNER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP
 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400

DEVELOPER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP
 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400

DESIGN: DBT DRAFT: DBT SCALE: AS SHOWN SHEET 2 OF 11





ENGINEER'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Cl. Malagan 5/26/16
ENGINEER DATE

DEVELOPER'S CERTIFICATE

I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDC.

John R. Robert 5/26/16
DEVELOPER DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

John R. Robert 6/1/16
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

McLeary 6/8/2016
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

John R. Robert 6/14/16
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

John R. Robert 6.13.16
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

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. 21443, Expiration Date: 12-21-2022

AS-BUILT 12/20/20

NO.	DATE	REVISION
1	5-12-2016	REMOVE PRIVATE DRIVE PLAN, PROFILE AND DETAILS. ADD UPDATED SEDIMENT AND EROSION CONTROL DETAILS PER MDE 2011 STD'S AND SPECS.
<p>BENCHMARK ENGINEERING, INC.</p> <p>ENGINEERS & LAND SURVEYORS & PLANNERS</p> <p>8480 BALTIMORE NATIONAL PIKE SUITE 315A ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BE-CIVILENGINEERING.COM</p>		
OWNER:		FAIRWAYS AT TURF VALLEY
MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400		PHASE 2: LOTS 57-89, OPEN SPACE LOTS 90-94, GOLF SPACE LOT 95 & NON-BUILDABLE BULK PARCELS E & F
DEVELOPER:		TAX MAP: 16 - GRID: 16 - PARCEL: P/O B & 706 ZONED: PGCC (RESIDENTIAL SUBDISTRICT) ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND
MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400		REVISION SEDIMENT AND EROSION CONTROL DETAILS
DATE:	MAY 12, 2016	BEI PROJECT NO. 2726
DESIGN:	DBT	SHEET 3 OF 11
DRAFT:	DBT	SCALE: AS SHOWN

THIS SHEET REPLACES THE PREVIOUS SHEET 3 SIGNED ON 11-19-2010



SOILS LEGEND		
SYMBOL	NAME / DESCRIPTION	GROUP
Ba	BAILE SILT LOAM	D
Bb2	BRANDYWINE LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
Bc3	BRANDYWINE LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	C
Co	CODORUS SILT LOAM	B
CuB	COMUS SILT LOAM, LOCAL ALLUVIUM, 3 TO 8 PERCENT SLOPES	B
EaB2	ELIOAK SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
EiC3	ELIOAK SILTY CLAY LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	B
GIB2	GLENELG LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
GIC3	GLENELG LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	B
GnB2	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
MgB2	MANOR GRAVELLY LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
MgC3	MANOR GRAVELLY LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	B
MIA	MANOR LOAM, 0 TO 3 PERCENT SLOPES	B
MIB2	MANOR LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
MIC3	MANOR LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED	B
MIC3	MANOR LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	B
MID2	MANOR LOAM, 15 TO 25 PERCENT SLOPES, MODERATELY ERODED	B
MID3	MANOR LOAM, 15 TO 25 PERCENT SLOPES, SEVERELY ERODED	B

LEGEND	
	EXISTING CONTOURS
	PROPOSED CONTOURS
	SOILS LINE
	SOILS TYPE
	EXISTING TREELINE
	PROPOSED TREELINE
	STORM DRAINS
	SILT FENCE
	SUPER SILT FENCE
	LIMIT OF DISTURBANCE
	AGIP AT-GRADE INLET PROTECTION
	STABILIZED CONSTRUCTION ENTRANCE

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"



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. 21443, Expiration Date: 12-2-2020

ENGINEER'S CERTIFICATE
 I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 ENGINEER: *Cl Malaga* DATE: 5/26/16

DEVELOPER'S CERTIFICATE
 I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE.
 DEVELOPER: *[Signature]* DATE: 5/26/16

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: DEPARTMENT OF PUBLIC WORKS
[Signature] DATE: 6/1/16

APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature] DATE: 6/13/16

NO.	DATE	REVISION
1	5-12-2016	REVISE LAYOUT BASED ON REALIGNMENT OF VARDON LANE BETWEEN PUCCINI LANE AND RESORT ROAD PER F-07-158. ELIMINATE THE PRIVATE DRIVE AND PARKING SPACES PARALLEL TO VARDON LANE. REVISE MASS GRADES AND ADJUST SEDIMENT CONTROL LOD, SF, AND SSF ACCORDINGLY.

BENCHMARK ENGINEERING, INC.
 ENGINEERS & LAND SURVEYORS & PLANNERS
 8480 BALTIMORE NATIONAL PIKE & SUITE 315 A ELLICOTT CITY, MARYLAND 21104
 (P) 410-465-6105 (F) 410-465-6644
 WWW.BE-CIVILENGINEERING.COM

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. 23199, Expiration Date: 6-30-2017

OWNER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP
 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093
 410-825-8400

DEVELOPER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP
 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093
 410-825-8400

FAIRWAYS AT TURF VALLEY
 PHASE 2: LOTS 56-88, OPEN SPACE LOTS 89-93, GOLF SPACE LOT 94 AND NON-BUILDABLE BULK PARCELS E & F

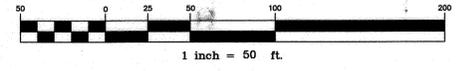
TAX MAP: 16 - GRID: 16 - PARCEL: P/O 8 & 706
 ZONED: PGCC (RESIDENTIAL SUBDISTRICT)
 ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND

REVISED GRADING, SEDIMENT AND EROSION CONTROL PLAN

DATE: MAY 12, 2016 BEI PROJECT NO. 2726
 SCALE: AS SHOWN SHEET 4 OF 11

DESIGN: DBT DRAFT: DBT

THIS SHEET REPLACES THE PREVIOUS SHEET 4 SIGNED ON 11-19-2010



**HOWARD SOIL CONSERVATION DISTRICT (HSCD)
STANDARD SEDIMENT CONTROL NOTES**

- Pre-construction meeting must occur with the Howard County Department of Public Works, Construction Inspection Division (CID), 410-313-1855 after the future LUD and protected areas are marked clearly in the field. A minimum of 48 hours notice to CID must be given at the following stages:
 - Prior to the start of earth disturbance,
 - Upon completion of the installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading,
 - Prior to the start of another phase of construction or opening of another grading unit,
 - Prior to the removal or modification of sediment control practices.
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
 - When stabilization is required outside of a seeding season, apply seed and mulch or straw mulch alone as prescribed in Section B-4.3.A.1.b and maintain until the next seeding season.
 - 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 Topsoil (Sec. B-4-2), 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 applied between the fall and spring seeding dates if the ground is frozen, incremental stabilization (Sec. B-4-1) specifications shall be enforced in areas with >15% of cut and/or fill. Topsoil (Sec. B-4-2) in excess of 20 cubic feet must be benchtop with stable cut. All concentrated flow, steep slope, and highly erodible areas shall receive soil stabilization matting (Sec. B-4-6).
 - 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 CID.

Total Area of Site:	10.95 Acres
Area Disturbed:	6.46 Acres
Area to be roofed or paved:	0.75 Acres
Area to be vegetatively stabilized:	5.70 Acres
Total cut:	18,600 Cu Yds
Total fill:	530 Cu Yds

Off-site waste/borrow area location:
SITE WITH AN ACTIVE GRADING PERMIT

- The stockpile location and all related sediment control practices must be clearly indicated on the erosion and sediment control plan.
 - The footprint of the stockpile must be sized to accommodate the anticipated volume of material and based on a side slope ratio no steeper than 2:1. Benching must be provided in accordance with Section B-3 Land Grading.
 - Runoff from the stockpile area must drain to a suitable sediment control practice.
 - Access the stockpile area from the upgrade side.
 - Clear water runoff into the stockpile area must be minimized by use of a diversion device such as an earth dike, temporary swale or diversion fence. Provisions must be made for discharging concentrated flow in a non-erosive manner.
 - Where runoff concentrates along the toe of the stockpile fill, an appropriate erosion/sediment control practice must be used to intercept the discharge.
 - Stockpiles must be stabilized in accordance with the 3:1 grade stabilization requirement as well as Standard B-4-1 Incremental Stabilization and Standard B-4-4 Temporary Stabilization.
 - If the stockpile is located on an impervious surface, a liner should be provided below the stockpile to facilitate cleanup. Stockpiles containing contaminated material must be covered with impermeable sheeting.
- Maintenance
The stockpile area must continuously meet the requirements for Adequate Vegetative Establishment in accordance with Section B-4 Vegetative Stabilization. Side slopes must be maintained at no steeper than 2:1 ratio. The stockpile area must be kept free of erosion. If the vertical height of a stockpile exceeds 20 feet for 2:1 slopes, 30 feet for 3:1 slopes, or 40 feet for 4:1 slopes, benching must be provided in accordance with Section B-3 Land Grading.

- H-5 STANDARDS AND SPECIFICATIONS FOR DUST CONTROL**
- Definition**
Controlling the suspension of dust particles from construction activities.
- Purpose**
To prevent blowing and movement of dust from exposed soil surfaces to reduce on and off-site damage including health and traffic hazards.
- Conditions Where Practice Applies**
Areas subject to dust blowing and movement where on and off-site damage is likely without treatment.
- Mulches:** See Section B-4-2 Soil Preparation, Topsoiling, and Soil Amendments, and Section B-4-3 Seeding and Mulching, and Section B-4-4 Temporary Stabilization. Mulch must be anchored to prevent blowing.
 - Vegetative Cover:** See Section B-4-4 Temporary Stabilization.
 - Tillage:** Till to roughen surface and bring clods to the surface. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart, spring-tipped harrows, and similar plows are examples of equipment that may produce the desired effect.
 - Irrigation:** Sprinkle site with water until the surface is moist. Repeat as needed. The site must not be irrigated to the point that runoff occurs.
 - Barriers:** Solid board fences, silt fences, snow fences, burlap fences, straw bales, and similar material can be used to control air currents and soil blowing.
 - Chemical Treatment:** Use of chemical treatment requires approval by the appropriate plan review authority.

- Disturbance shall not occur outside the L.O.D. 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 been stabilized and approved by the CID. Unless otherwise specified and approved by the CID, no more than 30 acres cumulatively may be disturbed at a given time.
- Wash water from any equipment, vehicles, wheels, pavement, and other sources must be treated in a sediment basin or other approved structure.
- Topsoil shall be stockpiled and preserved on-site for redistribution until final grade.
- All silt fence and super silt fence shall be placed on the contour, and be imbricated at 25' minimum intervals, with lower ends curled up by 2' in elevation.
- Stream channels must not be disturbed during the following restricted time periods (inclusive):
 - Use I and IP March 1 - June 15
 - Use II and IP April 15 - April 30
 - Use IV March 1 - May 31

A copy of this plan, the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and associated permits shall be on-site and available when the site is active.

***UT/ILL NUMBERS ARE FOR SEDIMENT CONTROL PURPOSES ONLY. CONTRACTOR TO VERIFY.**

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. 21443 Expiration Date: 8-21-2022



"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

NO.	DATE	REVISION
1	5-12-2016	UPDATE SEDIMENT CONTROL NOTES TO THE LATEST HSCD REQUIREMENTS.

SEQUENCE OF CONSTRUCTION

NOTIFY SEDIMENT CONTROL DIVISION 48 HOURS PRIOR TO START OF WORK

- Obtain grading permit. Notify D.I.L.P. at 410-313-1880 at least 24 hours before starting any work. (1 day)
- Hold on-site pre-construction meeting. (1 day)
- Install stabilized construction entrance, silt fences, super silt fences and inlet protection to existing inlets I-13 and I-14. (1 week)
- Rough grade site and begin road construction. (3 weeks)
- Construct storm drain system, water and sewer. Add inlet protection to all inlets as constructed. Inlets 34-38 to be wrapped with super silt fence. (2 months)
- Fine grade site and complete road construction (1 month).
- Upon approval from the Howard County Sediment Control Inspector, remove all sediment control devices and stabilize any remaining disturbed areas in accordance with the permanent seeded notes. (1 week)

BENCHMARK ENGINEERING, INC.
8490 BALTIMORE NATIONAL PIKE SUITE 315 ELICOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6644
WWW.BE-CIVILENGINEERING.COM

OWNER:
MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP
1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400

DEVELOPER:
MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP
1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400

FAIRWAYS AT TURF VALLEY
PHASE 2: LOTS 57-89, OPEN SPACE LOTS 90-94, GOLF SPACE LOT 95 & NON-BUILDABLE BULK PARCELS E & F

TAX MAP: 16 - GRID: 16 - PARCEL: P/O B & 706
ZONED: PGCC (RESIDENTIAL SUBDISTRICT)
ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND

REVISED SEDIMENT AND EROSION CONTROL NOTES

DATE: MAY 12, 2016 BEI PROJECT NO. 2726
DESIGN: DBT DRAFT: DBT SCALE: AS SHOWN SHEET 5 OF 11

AS-BUILT F-10-084

B-4 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

Definition
Using vegetation as cover to protect exposed soil from erosion.

Purpose
To promote the establishment of vegetation on eroded soil.

Conditions Where Practice Applies
On all disturbed areas not stabilized by other methods. This specification is divided into sections on incremental stabilization; soil preparation, soil amendments and topsoiling; seeding and mulching; temporary stabilization; and permanent stabilization.

Effects on Water Quality and Quantity
Stabilization practices are used to promote the establishment of vegetation on eroded soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall, thereby reducing sediment loads and runoff to downstream areas. Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff, infiltration, evaporation, transpiration, percolation, and groundwater recharge. Over time, vegetation will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth. Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present within the root zone. Sediment control practices must remain in place during grading, seeded preparation, seeding, mulching, and vegetative establishment.

Adequate Vegetative Establishment
Inspect seeded areas for vegetative establishment and make necessary repairs, replacements, and reseedings within the planting season.

- Adequate vegetative stabilization requires 95 percent groundcover.
- If an area has less than 40 percent groundcover, reestablish using the original recommendations for lime, fertilizer, seeded preparation, and seeding.
- If an area has between 40 and 94 percent groundcover, over-seed and fertilize using half of the rates originally specified.
- Maintenance fertilizer rates for permanent seeding are shown in Table B.6.

B-4-1 STANDARDS AND SPECIFICATIONS FOR INCREMENTAL STABILIZATION

Definition
Establishment of vegetative cover on cut and fill slopes.

Purpose
To provide timely vegetative cover on cut and fill slopes as work progresses.

Conditions Where Practice Applies
Any cut or fill slope greater than 15 feet in height. This practice also applies to stockpiles.

- Incremental Stabilization - Cut Slopes**
 - Excavate and stabilize out slopes in increments not to exceed 15 feet in height. Prepare seedbed and apply seed and mulch on all cut slopes as the work progresses.
 - Construction sequence example (Refer to Figure B.1):
 - Construct and stabilize all temporary swales or dikes that will be used to convey runoff around the excavation.
 - Perform Phase 1 excavation, prepare seedbed, and stabilize.
 - Perform Phase 2 excavation, prepare seedbed, and stabilize. Overseed Phase 1 areas as necessary.
 - Perform final phase excavation, prepare seedbed, and stabilize. Overseed previously seeded areas as necessary.
- Incremental Stabilization - Fill Slopes**
 - Construct and stabilize fill slopes in increments not to exceed 15 feet in height. Prepare seedbed and apply seed and mulch on all slopes as the work progresses.
 - Stabilize slopes immediately when the vertical height of a fill reaches 15 feet, or when the grading operation ceases as prescribed in the plans.
 - At the end of each day, install temporary water conveyance practice(s), as necessary, to intercept surface runoff and convey it down the slope in a non-erosive manner.
 - Construction sequence example (Refer to Figure B.2):
 - Construct and stabilize all temporary swales or dikes that will be used to divert runoff around the fill. Construct silt fence on low side of fill unless other methods shown on the plans address this area.
 - At the end of each day, install temporary water conveyance practice(s), as necessary, to intercept surface runoff and convey it down the slope in a non-erosive manner.
 - Place Phase 1 fill, prepare seedbed, and stabilize.
 - Place Phase 2 fill, prepare seedbed, and stabilize.
 - Place final phase fill, prepare seedbed, and stabilize. Overseed previously seeded areas as necessary.

Note: Once excavation has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.

B-4-2 STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

Definition
The process of preparing the soils to sustain adequate vegetative stabilization.

Purpose
To provide a suitable soil medium for vegetative growth.

Conditions Where Practice Applies
Where vegetative stabilization is to be established.

- Soil Preparation**
 - Temporary Stabilization**
 - Seeded preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or ripper mounted on construction equipment. After the soil is loosened, it must not be rolled or dragged smooth but left in the roughened condition. Slopes 3:1 or flatter are to be tracked with ridges running parallel to the contour of the slope.
 - Apply fertilizer and lime as prescribed on plans.
 - Incorporate lime and fertilizer into the top 3 to 5 inches of soil by diskng or other suitable means.
 - Permanent Stabilization**
 - A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are:
 - Soil pH between 6.0 and 7.0.
 - Soluble salts less than 500 parts per million (ppm).
 - Soil contains less than 40 percent clay but enough fine grained material (greater than 30 percent silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception: If loess soils will be planted, then a sandy soil (less than 30 percent silt plus clay) would be acceptable.
 - Soil contains 1.5 percent minimum organic matter by weight.
 - Soil contains sufficient pore space to permit adequate root penetration.
 - Application of amendments or topsoil is required if on-site soils do not meet the above conditions.
 - Graded areas must be maintained in a true and even grade as specified on the approved plan, then scarified or otherwise loosened to a depth of 3 to 5 inches.
 - Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test.
 - Mix soil amendments into the top 3 to 5 inches of soil by diskng or other suitable means. Make lawn areas to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface where site conditions will not permit normal seeded preparation. Track slopes 3:1 or flatter with tracked equipment leaving soil in an irregular condition with ridges running parallel to the contour of the slope. Leave the top 1 to 3 inches of soil loose and friable. Seeded loosening may be unnecessary on newly disturbed areas.
- Topsoiling**
 - Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a suitable soil medium for vegetative growth. Soils of concern have low nutrient content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.
 - Topsoil salvaged from an existing site may be used provided 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-NRCS.
 - Topsoiling is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - 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.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so acidic that treatment with limestone is not feasible.
 - Areas having slopes steeper than 2:1 require special consideration and design.

ENGINEER'S CERTIFICATE
I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

CE Malaga 5/26/16
ENGINEER DATE

DEVELOPER'S CERTIFICATE
I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE.

John K. Robertson 6/1/16
DEVELOPER DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS
APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, BUREAU OF HIGHWAYS DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Permanent Seeding Summary

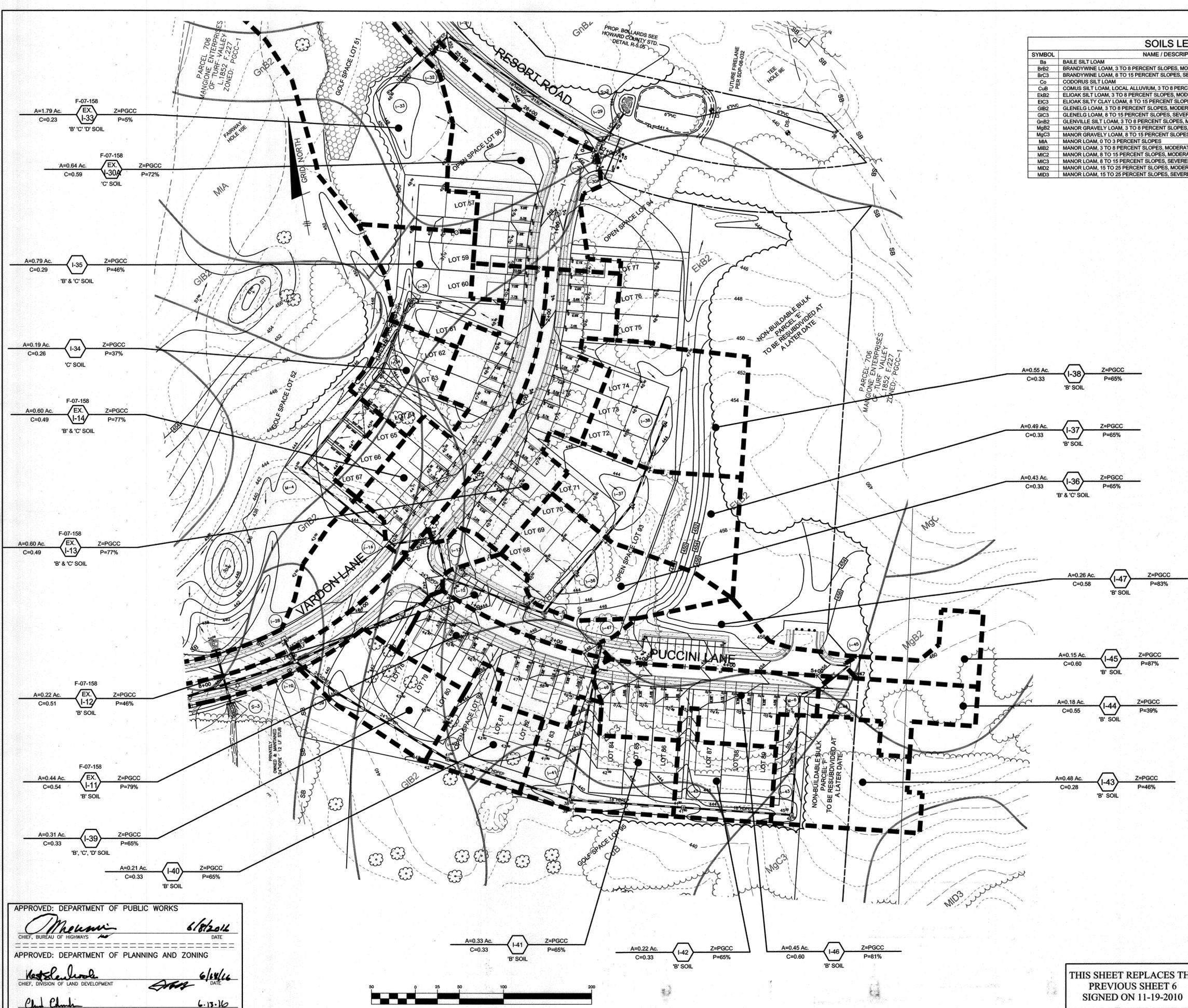
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	Fertilizer Rate (10-20-20)			Lime Rate
					N	P2O5	K2O	
9	Bluegrass, Kentucky	40	Mar 1 to May 15 Aug 1 to Oct 15	1/4 - 1/2 in	45 pounds per acre (1.0 lb/100 sf)	90 lb/ac (2 lb/100 sf)	90 lb/ac (2 lb/100 sf)	2 tons/ac (90 lb/1000 sf)

Table B.1: Temporary Seeding for Site Stabilization

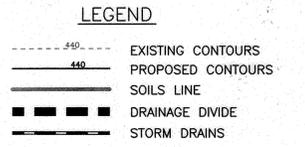
Plant Species	Seeding Rate 1/ (lb/ac)	Seeding Depth 2/ (inches)	Recommended Seeding Dates by Plant Hardiness Zone 3/		
			5b and 6a	6b	7a and 7b
Cool-Season Grasses					
Annual Ryegrass (Lolium perenne ssp.)	40	1.0	0.5	Mar 1 to May 15; Aug 1 to Oct 31	
Barley (Hordeum vulgare)	96	2.2	1.0	Mar 1 to May 15; Aug 1 to Oct 31	
Oats (Avena sativa)	72	1.7	1.0	Mar 1 to May 15; Aug 1 to Oct 31	
Wheat (Triticum aestivum)	120	2.8	1.0	Mar 1 to May 15; Aug 1 to Oct 31	
Cereal Rye (Secale cereale)	112	2.8	1.0	Mar 1 to May 15; Aug 1 to Nov 15	
Warm-Season Grasses					
Foxtail Millet (Serataria italica)	30	0.7	0.5	May 16 to Jul 31	
Pennisetum Millet (Pennisetum glaucum)	20	0.5	0.5	May 16 to Jul 31	

Notes:

- Seeding rates for the warm-season grasses are in pounds of Pure Live Seed (PLS). Actual planting rates shall be adjusted to reflect percent seed germination and purity, as tested. Adjustments are usually not needed for the cool-season grasses.
- Seeding rates listed above are for temporary seedings, when planted alone. When planted as a nurse crop with permanent seed mixes, use 1/3 of the seeding rate listed above for barley, oats, and wheat. For smaller-seeded grasses (annual ryegrass, pearl millet, foxtail millet), do not exceed more than 5% (by weight) of the overall permanent seed mix. Cereal rye generally should not be used as a nurse crop, unless planting will occur very late fall beyond the seeding dates for other temporary seedings. Cereal rye has allelopathic properties that inhibit the germination and growth of other plants. If it must be used as a nurse crop, seed at 1/3 of the rate listed above.
- Oats are the recommended nurse crop for warm-season grasses.
- For sandy soils, plant seeds at twice the depth listed above.
- The planting dates listed are averages for each zone and may require adjustment to reflect local conditions, especially near the boundaries of the zone.



SOILS LEGEND		
SYMBOL	NAME / DESCRIPTION	GROUP
Ba	BAILE SILT LOAM	D
BbB2	BRANDYWINE LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
BbC3	BRANDYWINE LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	C
Co	CODORUS SILT LOAM	C
CuB	COMUS SILT LOAM, LOCAL ALLUVIUM, 3 TO 8 PERCENT SLOPES	B
EKB2	ELIOAK SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
EIC3	ELIOAK SILTY CLAY LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	B
GIB2	GLENELG LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
GIC3	GLENELG LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	B
Ghb2	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
MgB2	MANOR GRAVELY LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
MgC3	MANOR GRAVELY LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	B
MJA	MANOR LOAM, 0 TO 3 PERCENT SLOPES	B
MB2	MANOR LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
MIC2	MANOR LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED	B
MIC3	MANOR LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	B
MID2	MANOR LOAM, 15 TO 25 PERCENT SLOPES, MODERATELY ERODED	B
MID3	MANOR LOAM, 15 TO 25 PERCENT SLOPES, SEVERELY ERODED	B

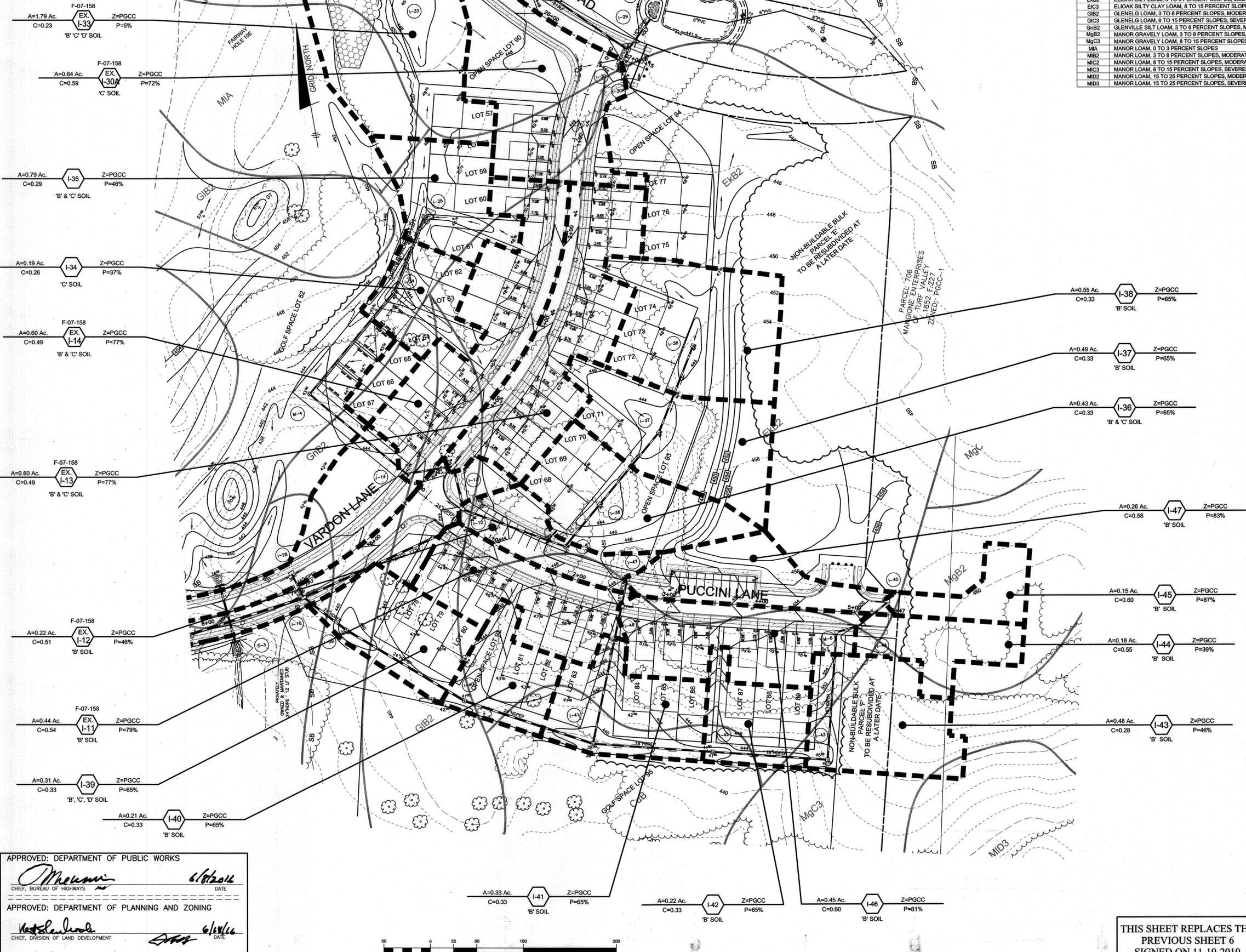


NOTE:
 INLETS I-11, I-12, I-13, I-14, I-30A, AND I-33 WHICH WILL RECEIVE RUNOFF FROM FAIRWAYS AT TURF VALLEY, PHASE 2 WERE ALL PREVIOUSLY DESIGNED AND CONSTRUCTED UNDER FAIRWAYS AT TURF VALLEY, PHASE 1 SECTIONS 1 AND 2, F-07-158.

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"



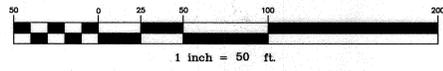
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 21443, Expiration Date: 12-21-2022



APPROVED: DEPARTMENT OF PUBLIC WORKS
Macowan 6/12/16
 CHIEF, BUREAU OF HIGHWAYS
 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Katzel 6/12/16
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE

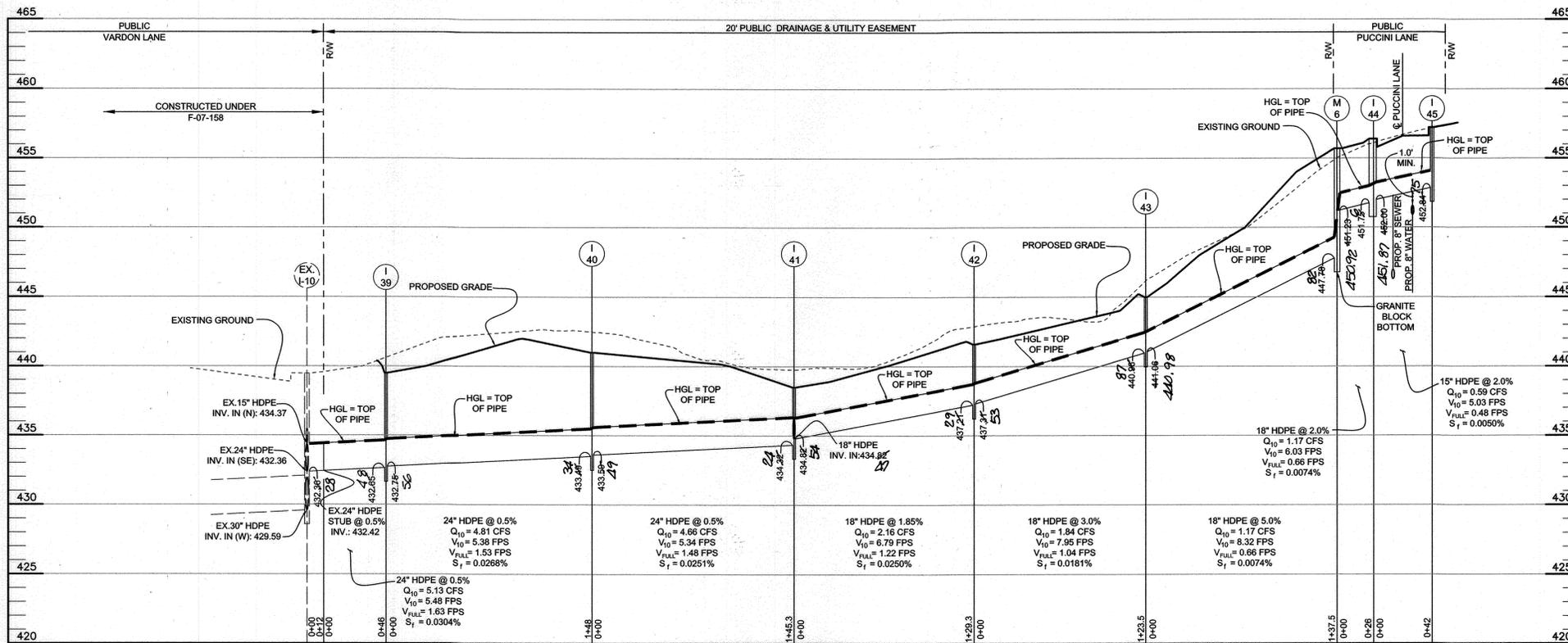
Chil 6-13-16
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE



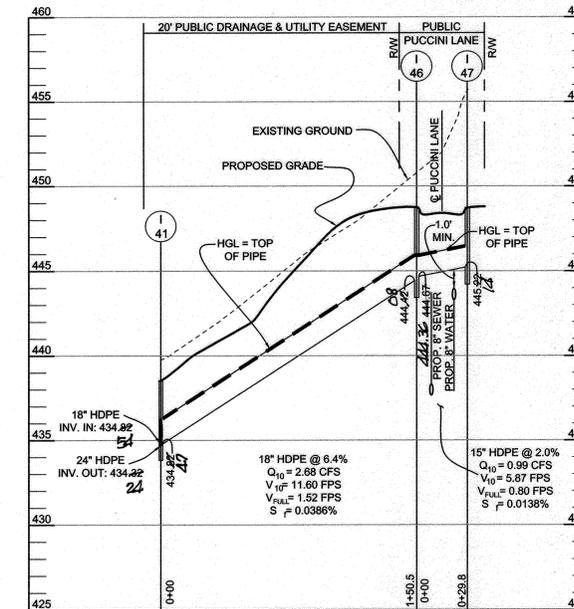
THIS SHEET REPLACES THE PREVIOUS SHEET 6 SIGNED ON 11-19-2010

NO.	DATE	REVISION
1	5-12-2016	UPDATE LAYOUT, GRADING, DRAINAGE AREAS BASED ON REALIGNMENT OF VARDON LANE BETWEEN PUCCINI LANE AND RESORT ROAD PER F-07-158. UPDATE A, C, AND P NUMBERS WHERE NECESSARY.
BENCHMARK ENGINEERING, INC. ENGINEERS & LAND SURVEYORS & PLANNERS 8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLIOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BE-CIVILENGINEERING.COM		
OWNER:		FAIRWAYS AT TURF VALLEY PHASE 2: LOTS 57-89, OPEN SPACE LOTS 90-94, GOLF SPACE LOT 95 & NON-BUILDABLE BULK PARCELS E & F
MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400		
DEVELOPER:		TAX MAP: 16 - GRID: 16 - PARCEL: P/O 8 & 706 ZONED: PGCC (RESIDENTIAL SUBDISTRICT) ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND
MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400		
REVISED STORM DRAIN DRAINAGE AREA MAP		
DATE:	MAY 12, 2016	BEI PROJECT NO. 2726
DESIGN:	DBT	DRAFT: DBT
SCALE:	AS SHOWN	SHEET 6 OF 11

AS-BUILT F-10-084

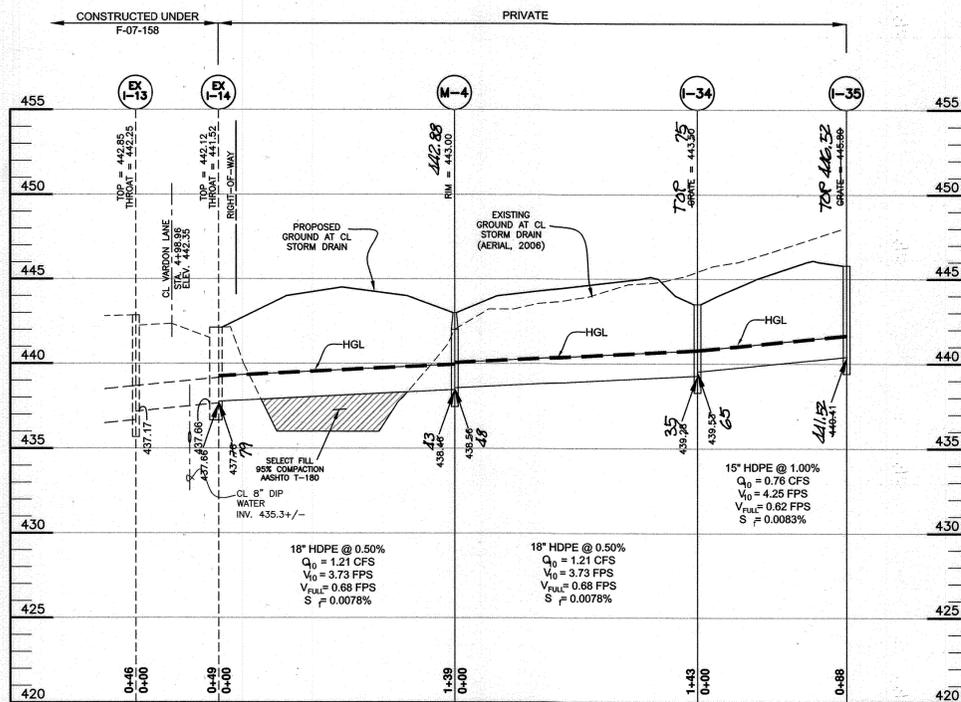


STORM DRAIN PROFILE
SCALE: 1" = 50' HORIZ., 1" = 5' VERT.

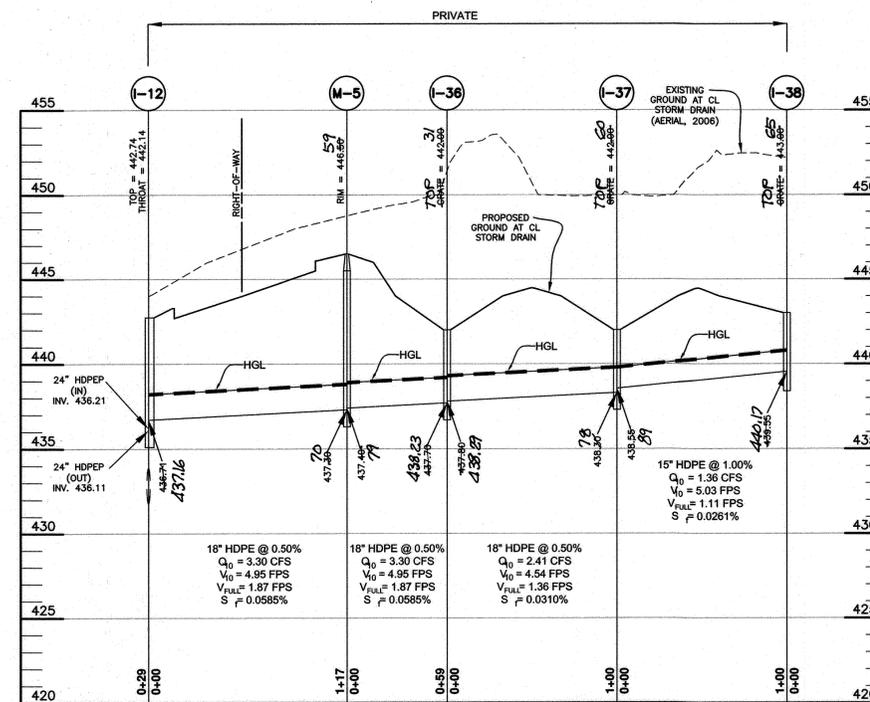


STORM DRAIN PROFILE
SCALE: 1" = 50' HORIZ., 1" = 5' VERT.

PIPE SCHEDULE		
SIZE	TYPE	LENGTH
15" PRIVATE	HDPE	55 LF
15" PUBLIC	HDPE	30 LF
18" PRIVATE	HDPE	39 LF
18" PUBLIC	HDPE	26 LF
24" PUBLIC	HDPE	45 LF



STORM DRAIN PROFILE
SCALE: 1" = 50' HORIZ., 1" = 5' VERT.



STORM DRAIN PROFILE
SCALE: 1" = 50' HORIZ., 1" = 5' VERT.

STRUCTURE SCHEDULE						
NO.	TYPE & OWNERSHIP	LOCATION	TOP ELEV.	INV. IN	INV. OUT	REMARKS
I-34	YARD INLET PRIVATE	N 593,871.04 E 1,349,034.85	443.65	439.65	435.65	D-4.14
I-35	YARD INLET PRIVATE	N 593,945.69 E 1,349,081.22	442.81	438.81	434.81	D-4.14
I-36	YARD INLET PRIVATE	N 593,607.85 E 1,349,213.43	442.81	438.81	434.81	D-4.14
I-37	YARD INLET PRIVATE	N 593,673.03 E 1,349,289.28	442.81	438.81	434.81	D-4.14
I-38	YARD INLET PRIVATE	N 593,758.24 E 1,349,341.61	443.66	439.66	435.66	D-4.14
I-39	YARD INLET PUBLIC	N 593,521.35 E 1,348,921.32	439.66	435.66	431.66	D-4.14
I-40	YARD INLET PUBLIC	N 593,424.40 E 1,349,033.37	441.50	437.50	433.50	D-4.14
I-41	YARD INLET PUBLIC	N 593,355.28 E 1,349,161.19	438.81	434.81	430.81	D-4.14
I-42	YARD INLET PUBLIC	N 593,323.87 E 1,349,286.68	441.50	437.50	433.50	D-4.14
I-43	YARD INLET PUBLIC	N 593,293.88 E 1,349,406.54	443.66	439.66	435.66	D-4.14
I-44	TYPE 'A-5' INLET PUBLIC	PUCCINI LANE - @ STA. 5+06.64 - 13.0' RT	452.80	448.80	444.80	D-4.01
I-45	TYPE 'A-5' INLET PUBLIC	PUCCINI LANE - @ STA. 5+34.48 - 13.0' LT	448.81	444.81	440.81	D-4.01
I-46	TYPE 'A-5' INLET PUBLIC	PUCCINI LANE - @ STA. 2+51.88 - 13.0' RT	448.81	444.81	440.81	D-4.01
I-47	TYPE 'A-5' INLET PUBLIC	PUCCINI LANE - @ STA. 2+51.88 - 13.0' LT	448.81	444.81	440.81	D-4.01
M-6	STD. PRECAST MANHOLE (4')	PUCCINI LANE - @ STA. 4+82.65 - 22.5' RT	455.20	451.20	447.20	G-5.13
M-5	STD. PRECAST MANHOLE (4')	PRIVATE	446.50	442.50	438.50	G-5.13
M-4	STD. PRECAST MANHOLE (4')	PRIVATE	443.00	439.00	435.00	G-5.13

- NOTES:
1. TOP ELEVATIONS FOR YARD INLET ARE TO THE CENTER TOP OF GRATE.
 2. TOP ELEVATIONS FOR TYPE 'A-5' INLETS ARE TO THE CENTER OF INLET, TOP OF FACE OF CURB.
 3. TOP ELEVATIONS FOR PRECAST MANHOLES ARE TO THE CENTER TOP OF MANHOLE COVER.
 4. TOP SLOPE OF STRUCTURES TO CONFORM TO SLOPE OF PAVING.

APPROVED: DEPARTMENT OF PUBLIC WORKS

 CHIEF, BUREAU OF HIGHWAYS
 DATE: 6/12/16

APPROVED: DEPARTMENT OF PLANNING AND ZONING

 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 6/13/16

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. 21443, Expiration Date: 12-21-2022



AS-BUILT CERTIFICATION
 I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications
 Donald Mason, P.E. Date: 12-2-2020

THIS SHEET REPLACES THE PREVIOUS SHEET 7 SIGNED ON 11-19-2010

1 5-12-2016 REVISE PROFILES TO MATCH REVISE LAYOUT AND SO STRUCTURE NUMBERS MATCH THAT UNDER F-07-158. UPDATE THE STORM DRAIN COMPUTATION INFO AS NECESSARY. UPDATE STRUCTURE SCHEDULE AND PIPE SCHEDULE ACCORDINGLY.

BENCHMARK ENGINEERING, INC.
 8480 BALTIMORE NATIONAL PIKE & SUITE 315 ELLICOTT CITY, MARYLAND 21043
 (P) 410-465-8105 (F) 410-465-6644
 WWW.BE-CIVILENGINEERING.COM

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. 21443, Expiration Date: 6-30-2017

OWNER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP
 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093
 410-825-8400

DEVELOPER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP
 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093
 410-825-8400

FAIRWAYS AT TURF VALLEY
 PHASE 2: LOTS 57-59, OPEN SPACE LOTS 90-94, GOLF SPACE LOT 95 & NON-BUILDABLE BULK PARCELS E & F

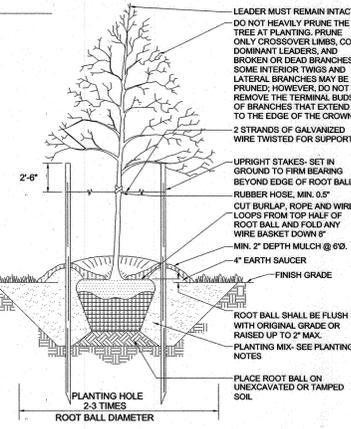
TAX MAP: 16 - GRID: 16 - PARCEL: P/O 8 & 706
 ZONED: PGCC (RESIDENTIAL SUBDISTRICT)
 ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND

REVISED STORM DRAIN PROFILES, DETAILS AND CHARTS

DATE: MAY 12, 2016 BEI PROJECT NO. 2601
 DESIGN: DBT DRAFT: DBT SCALE: AS SHOWN SHEET 7 OF 11

NOTES

- CONSULT INTERNATIONAL SOCIETY OF ARBORICULTURE GUIDELINES FOR FURTHER DETAILS OF PLANTING SPECIFICATIONS, OR CONSULT WITH A QUALIFIED PROFESSIONAL.
- EACH TREE SHALL BE PLANTED SUCH THAT THE TRUNK FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL.
- STAKES SHALL BE REMOVED NO LATER THAN THE END OF THE FIRST GROWING SEASON AFTER PLANTING.
- PLACE UPRIGHT STAKES PARALLEL TO WALKS & BUILDINGS.
- KEEP MULCH 1" FROM TRUNK.
- SEE ARCHITECTURAL PLANS FOR ADDITIONAL PLANTINGS WHICH EXCEED HOWARD COUNTY MINIMUM REQUIREMENTS.
- TREES ARE NOT TO BE PLANTED OVER PRIVATE SEWAGE EASEMENT.



TYPICAL TREE PLANTING AND STAKING
DECIDUOUS TREES UP TO 2-1/2" CALIPER NOT TO SCALE

LEGEND

- FIRE HYDRANT
- STREET LIGHT
- EXISTING TREELINE
- PROPOSED TREELINE
- STORM DRAINS
- EXISTING STREET TREE (F-07-158)
- PROPOSED STREET TREE

LANDSCAPE NOTES

- AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPING MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.
- THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
- THE STREET TREES SHOWN ON THIS PLAN WILL BE PLANTED AT THE SITE DEVELOPMENT PLAN STAGE. LANDSCAPING FOR LOTS 59 THRU 88 WILL BE PROVIDED FOR AT THE SITE DEVELOPMENT PLAN STAGE IN ACCORDANCE WITH SECTION 16.124 OF THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL.
- INTERNAL AND SIDE LOT BUFFER LANDSCAPING WILL BE DESIGNED AND ACCOMPANY AT THE SITE DEVELOPMENT PLAN.

LANDSCAPE SCHEDULE

KEY	QUANTITY	BOTANICAL NAME	SIZE	NOTE
	29	ACER RUBRUM (STREET TREES) OCTOBER GLORY RED MAPLE	2 1/2"-3" CAL.	B & B

STREET TREE SCHEDULE

STREET NAME	LF REQUIRED	TREES REQUIRED	TREES PROVIDED
PUCCINI LANE	882	22	22

"NO AS-BUILT INFORMATION IS" PROVIDED ON THIS SHEET



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. 21443, Expiration Date 12-2-2022

DEVELOPER'S/BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE-YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Developer: *[Signature]* DATE: 5/26/16

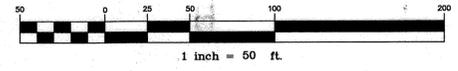
APPROVED: DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Highways: *[Signature]* DATE: 5/12/2016

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development: *[Signature]* DATE: 6/18/16

Chief, Development Engineering Division: *[Signature]* DATE: 6-13-16



THIS SHEET REPLACES THE PREVIOUS SHEET 8 SIGNED ON 11-19-2010

NO.	DATE	REVISION
1	5-12-2016	UPDATE LAYOUT BASED ON REALIGNMENT OF VARDON LANE BETWEEN PUCCINI LANE AND RESORT ROAD PER F-07-158. REVISE STREET TREE LOCATIONS, REMOVE PARKING LOT LANDSCAPING CALCULATIONS, REMOVE CONTOURS AND FUTURE DEVELOPMENT LINES, REVISE STREET TREE REQUIRED BASED ON ROW PERIMETER.

BENCHMARK ENGINEERING, INC.
ENGINEERS & LAND SURVEYORS & PLANNERS
8480 BALTIMORE NATIONAL PIKE SUITE 315 A ELICOTT CITY, MARYLAND 21043
(P) 410-465-8105 (F) 410-465-6844
WWW.BEI-CIVILENGINEERING.COM

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. 21443, Expiration Date 12-2-2022

OWNER:
MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP
1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093
410-825-8400

DEVELOPER:
MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP
1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093
410-825-8400

FAIRWAYS AT TURF VALLEY
PHASE 2: LOTS 57-89, OPEN SPACE LOTS 90-94, GOLF SPACE LOT 95 & NON-BUILDABLE BULK PARCELS E & F

TAX MAP: 16 - GRID: 16 - PARCEL: P/O 8 & 706
ZONED: PGCC (RESIDENTIAL SUBDISTRICT)
ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND

REVISED LANDSCAPE PLAN

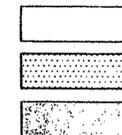
DATE: MAY 12, 2016 BEI PROJECT NO. 2726
SCALE: AS SHOWN SHEET 8 OF 11

Forest Conservation Easement #1
0.3 acres to be retained
Phase I - onsite

FCA Exemption Note

The proposed development of Fairways of Turf Valley will occur on portions of Parcels 8 and 706 (tax map 16). The development occurring on Parcel 8 is exempt from the Forest Conservation Act regulations. Portions of Parcel 706 that occur outside the limits of disturbance for this phase of the project are not included as part of the project for the purpose of the Forest Conservation Act.

'B' SOIL GROUP
'C' SOIL GROUP
'D' SOIL GROUP



SOILS LEGEND		
SYMBOL	NAME / DESCRIPTION	GROUP
1a	BALE SILT LOAM	D
1c	COGONUS SILT LOAM	C
1d	COMUS SILT LOAM, LOCAL ALLUVIUM, 3 TO 8 PERCENT SLOPES	B
2a	ELICK SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
2c	ELICK SILT LOAM, 3 TO 8 PERCENT SLOPES, SEVERELY ERODED	B
2d	GLENNVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
2e	GLENNVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES, SEVERELY ERODED	B
2f	MANOR GRAVELLY LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
2g	MANOR GRAVELLY LOAM, 3 TO 8 PERCENT SLOPES, SEVERELY ERODED	B
2h	MANOR LOAM, 3 TO 8 PERCENT SLOPES	B

FOREST CONSERVATION WORKSHEET
Version 1.0

Project: Fairways at Turf Valley Phase II
Date: July 23, 2010

NET TRACT AREA	
A. Total tract area	89.0 Acres
B. Area within 100 Year Floodplain and future development areas	87.1
C. Area within limits of disturbance associated with Phase I & SDP 89-47	3.2
D. Net Tract Area - LOD not previously addressed by FCA	2.7

LAND USE CATEGORY: (from table 3.2.1, page 40, Manual)			
AREA	MDR	IDA	CA
E. Afforestation Threshold (percentage)	0.15		0.4
F. Conservation Threshold (percentage)	0.15		0.4

EXISTING FOREST COVER:	
G. Existing forest cover (excluding floodplain)	1.7
H. Area of forest above afforestation threshold	1.3
I. Area of forest above conservation threshold	1.3

BREAK EVEN POINT:	
J. Forest retention above threshold with no mitigation	Break-Even Point 0.26
K. Clearing permitted without mitigation	Break-Even Point 1.04

PROPOSED FOREST CLEARING	
L. Total area of forest to be cleared or Retained Outside FCE	1.7
M. Total area of forest to be Retained in FCE	0

PLANTING REQUIREMENTS	
N. Reforestation for clearing above Conservation Threshold	0.325
P. Reforestation for clearing below Conservation Threshold	0.6
Q. Credit for retention above conservation threshold	0
R. Total reforestation required	1.12
S. Total afforestation required	0
T. Total reforestation and afforestation required	1.12

Legend

- LOD Limits of Subject Phase
- SDP Limits of Previous Development - SDP 89-47
- LOD Limits of subject phase included in Fairways at Turf Valley Phase I
- Existing Contours
- Proposed Contours
- Existing Forest Limits
- Proposed Forest Limits/FCE
- Wetlands
- Wetland/Stream Buffer

Area Within Limits of Disturbance of Phase I

Previously Approved Limits of Disturbance SDP 89-47

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

FCA NOTES

- The forest resources have been reported in the forest stand delineation for the Fairways at Turf Valley, Phase II (SDP-08-046)
- Forested areas occurring outside of the FCE shall not be considered part of the FCE and shall not be subject to protective land covenants.
- Limits of disturbance (LOD) shown on this plan represent the limits of this phase of the project. Future phases of the project will be addressed as they are proposed. Portions of this phase of the development have been cleared/graded for Phase I of the development. The FCA obligation for these areas was addressed in the FCP for Phase I. Portions of this phase of the development occur
- There shall be no clearing, grading, construction or disturbance of vegetation in the Forest Conservation Easement, except as permitted by Howard County DPZ.
- Temporary fencing shall be used to protect forest resources during construction. Fencing shall be installed along the approved limits of disturbance occurring within 50 feet of the approved FCE limits.
- Permanent signage will be posted at a 60-100 foot intervals along all approved FCE limits.
- It is proposed that the 1.12 acre Forest Conservation Act reforestation obligation be met by providing 0.71 acre of offsite reforestation and 0.42 acre of onsite retention. The offsite retention area will be on parcel D and will be placed in a Forest Conservation Easement shown on the first plan of the Open Space Lot 72, Village of Turf Valley Phase 2 (F-08-084). The retained area will be posted with appropriate protective signage

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. 21443, Expiration Date 12-21-2022

OWNER/DEVELOPER
MANGIONE ENTERPRISES OF TURF VALLEY, LP
1205 YORK ROAD, PENTHOUSE
LUTHERVILLE, MARYLAND 21083
410.826.5400

**FOREST CONSERVATION PLAN AND DETAILS
FAIRWAYS AT TURF VALLEY**

PHASE II LOTS 87-89 OPEN SPACE LOTS 90-94 GOLF SPACE LOT 95 & NON-BUILDABLE BULK PARCELS E & F, POD E-1 SECTION IV: RESIDENTIAL PHASE IV E A SUBDIVISION OF PARCEL 706 & A RESUBDIVISION OF FAIRWAYS AT TURF VALLEY, PHASE I, NON-BUILDABLE BULK PARCELS A, B, & C
TAX MAP 17 GRID 9
2ND ELECTION DISTRICT
PART OF PARCEL 706
HOWARD COUNTY, MARYLAND

Sill · Adcock & Associates · LLC
Engineers · Surveyors · Planners
3300 North Ridge Road, Suite 160
Baltimore City, Maryland 21043
Phone: 443.325.7052 Fax: 443.325.7058
Email: info@silladcock.com

DESIGN BY: JPC
DRAWN BY: JPC
CHECKED BY: JPC
SCALE: AS SHOWN
DATE: OCTOBER 29, 2010
PROJECT #: 08-026
SHEET #: 2 of 11



MD DNR Qualified Professional
USACOE Wetland Delinicator
Certification # WD0093MD061004B2
John P. Canoles

Eco-Science Professionals, Inc.
Consulting Ecologists
P.O. Box 2006 Glen Arm, Maryland 21037 Telephone (410) 832-2480 Fax (410) 832-2488

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

W. R. MALL 11-17-10
CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

K. S. SHERWOOD 11/10
CHIEF, DIVISION OF LAND DEVELOPMENT
C. D. DUNN 11/10
CHIEF, DEVELOPMENT ENGINEERING DIVISION

PLAN
SCALE: 1" = 50'

1 512-2016 WDR#E LOT NUMBERS IN TITLE BLOCK.

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. 20205, EXPIRATION DATE: JUNE 30, 2011

Planting/Soil Specifications

- Planting of nursery stock shall take place between March 15th and April 30th or September 15th - November 15th.
- A twelve (12) inch layer of topsoil shall be spread over all forestation areas impacted by site grading to assure a suitable planting area. Disturbed areas shall be seeded and stabilized as per general construction plan for project. Planting areas not impacted by site grading shall have no additional topsoil installed.
- All bare-root planting stock shall have their root systems dipped into an anti-desiccant gel prior to planting.
- Plants shall be installed so that the top of root mass is level with the top of existing grade. Backfill in the planting pits shall consist of 3 parts existing soil to 1 part pine fines or equivalent.
- Fertilizer shall consist of Agriform 22-8-2, or equivalent, applied as per manufacturer's specifications.
- A two (2) inch layer of hardwood mulch shall be placed over the root area of all plantings.
- Plant material shall be transported to the site in a tarped or covered truck. Plants shall be kept moist prior to planting.
- All non-organic debris associated with the planting operation shall be removed from the site by the contractor.

Sequence of Construction

- Sediment control and tree protection devices shall be installed in accordance with general construction plan for site. Site shall be graded in accordance with general construction plans.
- Proposed forestation areas impacted by site grading shall be topsoiled and stabilized as per #2 of Planting/Soil Specifications for project.
- Plants shall be installed as per Plant Schedule and the Planting/Soil Specifications for the project.
- Upon completion of the planting, signage shall be installed as per the Forest Protection Devices shown on the Forest Conservation Plan.
- Plantings shall be maintained and guaranteed in accordance with the Maintenance and Guarantee requirements for project.

Maintenance of Plantings

- Maintenance of plantings shall last for a period of 24 months.
- All plant material shall be watered twice a month during the 1st growing season. Watering may be more or less frequent depending on weather conditions. During second growing season, once a month during May-September, if needed.
- Invasive exotics and noxious weeds will be removed from forestation areas. Old field successional species will be retained.
- Plants will be examined a minimum two times during the growing season for serious plant pests and diseases. Serious problems will be treated with the appropriate agent.
- Dead branches will be pruned from plantings.

Guarantee Requirements

- A 75 percent survival rate of forestation plantings will be required at the end of the 24 month maintenance period. All plant material below the 75 percent threshold will be replaced at the beginning of the next growing season.

Surety for Forestation

- The developer shall post a surety (bond, letter of credit) to ensure that forestation plantings are completed. Upon acceptance of the plantings by the County, the bond shall be released.

Multiflora Rose Control Note

Multiflora rose is prevalent in certain areas to be planted. Prior to planting all multiflora rose shall be removed. Removal of the rose may be performed with mowing and herbicide treatments. Physical removal of all top growth following by a periodic herbicide treatment of stump sprouts is recommended. Native tree and shrub species occurring within the rose thickets should be retained whenever possible. Herbicides treatments shall occur on 2 month intervals during the first growing season and once each in the spring and fall for subsequent years. Herbicide used shall be made specifically to address woody plant material and shall be applied as per manufacturer's specifications. Care should be taken not to spray planted trees or naturally occurring native tree/shrub seedlings. It is recommended that initiation of rose removal begin at least six months prior to planting.

PLANTING SCHEDULE

Offsite Planting Location:

FCE # 14 Villages of Turf Valley Phase 2, Open Space Lot 72 - 0.71 acres

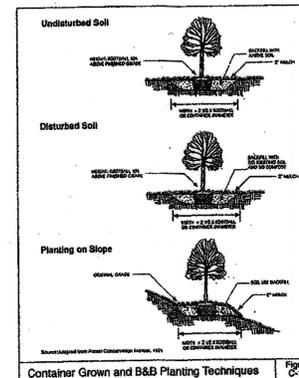
Planting Units Required: 497

Planting Units Provided: 500

Qty	Species	Size	Spacing	Total FCA Units
50	Acer rubrum - Red maple	2-3' whip	11' o.c.	
15	Diospyros virginiana - Persimmon **	2-3' whip	11' o.c.	
50	Liriodendron tulipifera - Tulip poplar **	2-3' whip	11' o.c.	
15	Nyssa sylvatica - Black gum	2-3' whip	11' o.c.	
25	Platanus occidentalis - Sycamore	2-3' whip	11' o.c.	
50	Prunus serotina - Black cherry **	2-3' whip	11' o.c.	
20	Quercus alba - White oak	2-3' whip	11' o.c.	
10	Ulmus rubra - Slippery Elm	2-3' whip	11' o.c.	
15	Viburnum prunifolium - Blackhaw **	2-3' whip	11' o.c.	
250	Total whip plantings x 2 units/tree = FCA unit credit			500
	Total Unit Credit			500

Planting Notes:

- Planting density based on 700 planting units per acre. 2" caliper trees = 7 planting units, 1" caliper trees = 3.6 planting units, whips with shelter = 2 planting units.
- ** - These species should not be planted within the wetland limits.
- 1" caliper trees should be staggered along the outer perimeter of the planting area to serve as demarcation of the boundary. The trees should be no closer than 15 foot spacing.
- Planting shall be made in a curvilinear fashion along contour. The planting should avoid a grid appearance but should be spaced to facilitate maintenance.
- Multiflora rose/heavy brush removal/control may be required prior to installation of planting.
- All whips are required to be installed with tree shelters per Howard County FCA requirements.



Fairways at Turf Valley Forest Conservation Credit Calculations

Phase	Proposed onsite Retention	Reforestation/Afforestation Required	Reforestation/Afforestation Credit Provided Offsite*	FCE Credit Recorded but not Utilized by Phase and Location of FCE easement**
Phase 1	0.3 acres	2.8 acres	3.52 acres	0.22 acres reforestation 1.0 acres retained forest Plat of Revision Parcel D - F-09-22
Phase 2	0 acres	1.12 acres	1.12 acres	0 acres
Phase 3	0 acres	0.22 acres	0.22 acres	0.48 acres retained forest Open Space Lot 72, Villages of Turf Valley Phase 2
Total FCE credit not yet utilized for project				0.96 acres FCE credit

* this credit may be obtained through 1:1 planting or 2:1 offsite retention
** Retention acreage reflects actual easement area and not 0.8 retention credit

Forest Conservation Notes

- The 1.12 acres of reforestation obligation required for Fairways at Turf Valley, Phase II will be met by providing 0.71 acres of reforestation and 0.82 acres of offsite retention in FCE # 14 which is located on Villages of Turf Valley, Phase 2, Open Space Lot 72 and will be placed in a Forest Conservation Easement shown on the final plat of the Villages Phase 2 (F-08-084).
- Development on Parcel 8 is exempt from Howard County Forest Conservation requirements under section 16.1202 (b) of the County code since it is a Planned Unit Development under S-86-13.
- Any Forest Conservation Easement (FCE) area shown hereon is subject to the protective covenants which may be found in the Land Records of Howard County which restrict the disturbance and use of these areas.
- The Forest Conservation Easements shown hereon have been established to fulfill the requirements of section 16.1200 of the Howard County Code, Forest Conservation Area. No clearing, grading, or construction is permitted within the Forest Conservation Easements; however, Forest Management Practices as defined in the Deed of Forest Conservation Easement are allowed.
- Limits of disturbance shall be restricted to areas outside the limits of temporary fencing or the FCE boundary, whichever is greater.
- There shall be no clearing, grading, construction or disturbance of vegetation in the Forest Conservation Easement, except as permitted by Howard County DPZ.
- No stockpiles, parking areas, equipment cleaning areas, etc. shall occur within areas designated as Forest Conservation Easements.
- Temporary fencing shall be used to protect forest resources during construction. Fencing shall be installed along the approved limits of disturbance occurring within 50 feet of the approved FCE limits.
- Permanent signage will be posted at 50-100 foot intervals along the boundaries of all areas included in Forest Conservation Easements.
- Portions of the site occurring within the 100 year floodplain are not included as part of the net tract area of the site. Areas of floodplain forest occurring within the limits of a Forest Conservation Easement may be protected by the easement restrictions but have not/will not be credited toward the project's FCA obligation.
- The site is located in the Little Patuxent River (upper) #1131105A watershed.
- There are no rare, threatened, or endangered species located on this site. There are not specimen or champion trees located on this site. To the best of our knowledge there are no historic structures located on the site.
- The protective signage shall stay on-site in perpetuity.

OFFSITE FCE NOTES:

All or a portion of the FCA obligations for Phases II and III of the Fairways at Turf Valley developments will be met within Forest Conservation Easement #14. FCE # 14 is located on Open Space Lot 72 of the Villages of Turf Valley Phase 2 and will be placed in a Forest Conservation Easement shown on the final plat of the Villages Phase 2 (F-08-084).

FCE #14 has 0.48 acres of retention (0.24 acres of offsite retention credit) that is not being utilized by Fairways at Turf Valley II and III

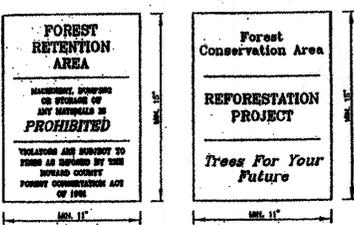
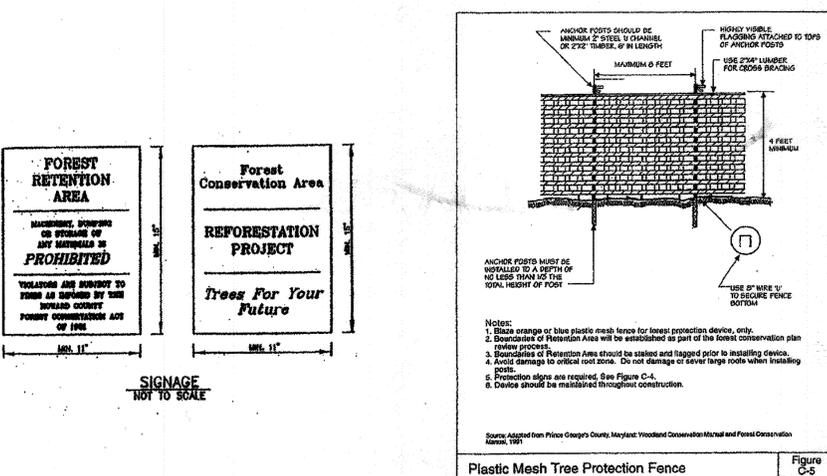
The FCA obligations for each phase will be met as follows:

Fairways at Turf Valley, Phase II

Note the 1.12 acre reforestation obligation for Fairways at Turf Valley, Phase II will be met in FCE #14. This obligation will be met by 0.71 acres of reforestation and 0.82 acres of offsite retention.

Fairways at Turf Valley, Phase III

The 0.22 acre reforestation obligation for Fairways at Turf Valley, Phase III will be met by retaining 0.44 acres of offsite retention in FCE #14.



SIGNAGE NOT TO SCALE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 11/12/10
 CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] 11-17-10
 CHIEF, BUREAU OF HIGHWAYS

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"



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. 21463, Expiration Date 12/2/2022

OWNER/DEVELOPER
 MANIONE ENTERPRISES OF TURF VALLEY, LP
 1225 YORK ROAD, PENTHOUSE
 LUTHERVILLE, MARYLAND 21088
 410.885.0492

FOREST CONSERVATION PLAN - NOTES AND DETAILS
FAIRWAYS AT TURF VALLEY
 PHASE II LOTS 57-59 OPEN SPACE LOTS 70-74 GOLF SPACE LOT 75 & NON-BUILDABLE BULK PARCELS E & F, POD 'E-1' SECTION IV: RESIDENTIAL PHASE IV E A SUBDIVISION OF PARCEL 706 & A SUBDIVISION OF FAIRWAYS AT TURF VALLEY, PHASE I, NON-BUILDABLE BULK PARCELS A, B, & C
 TAX MAP 17 GRID 9 PART OF PARCEL 708
 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

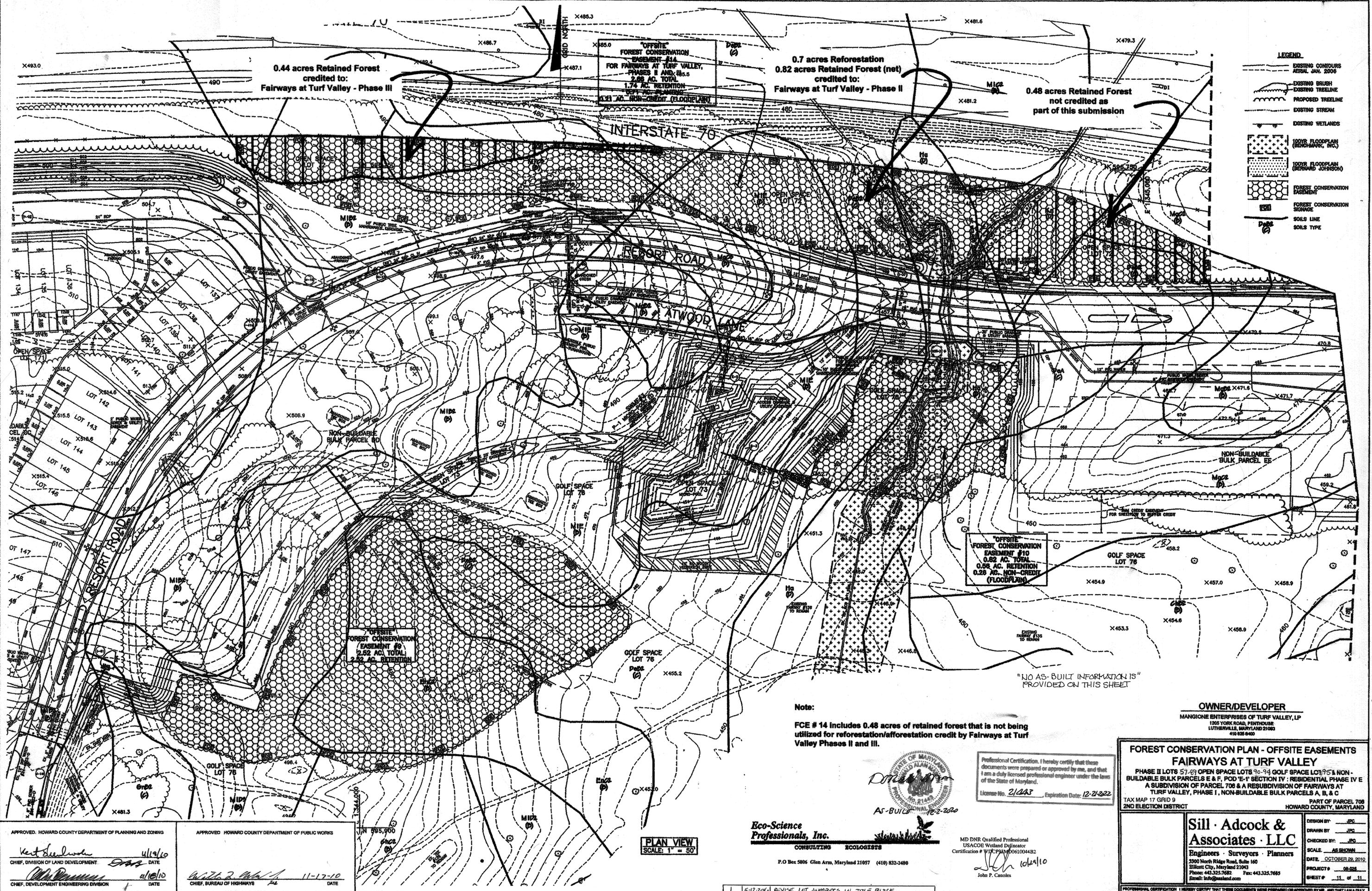
Sill, Adcock & Associates - LLC
 Engineers - Surveyors - Planners
 3300 North Ridge Road, Suite 160
 Elliott City, Maryland 21043
 Phone: 443.325.7682 Fax: 443.325.7685
 Email: info@silladcock.com

DESIGN BY: JPC
 DRAWN BY: JPC
 CHECKED BY: JPC
 SCALE: AS SHOWN
 DATE: OCTOBER 28, 2010
 PROJECT #: 08-026
 SHEET #: 10 of 11

Eco-Science Professionals, Inc.
 Consulting Ecologists
 P.O. Box 2000 Glen Arden, Maryland 21027 Telephone (410) 833-2400 Fax (410) 833-0408

1 5-12-2016 REVISE LOT NUMBERS IN TITLE BLOCK

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. 20023, EXP. DATE 08/31/2011



- LEGEND**
- EXISTING CONTOURS AERIAL JAN. 2008
 - EXISTING BRUSH EXISTING TREELINE
 - PROPOSED TREELINE
 - EXISTING STREAM
 - EXISTING WETLANDS
 - 100YR FLOODPLAIN (BENHARRIS, INC.)
 - 100YR FLOODPLAIN (BERNARD JOHNSON)
 - FOREST CONSERVATION EASEMENT
 - FOREST CONSERVATION SIGNAGE
 - SOILS LINE
 - SOILS TYPE

0.44 acres Retained Forest credited to:
Fairways at Turf Valley - Phase III

"OFFSITE" FOREST CONSERVATION EASEMENT #14 FOR FAIRWAYS AT TURF VALLEY, PHASES II AND III 2.88 AC. TOTAL 1.74 AC. RETENTION 0.26 AC. NON-CREDIT (FLOODPLAIN)

0.7 acres Reforestation 0.82 acres Retained Forest (net) credited to:
Fairways at Turf Valley - Phase II

0.48 acres Retained Forest not credited as part of this submission

INTERSTATE 70

RESORT ROAD

ATWOOD LANE

"OFFSITE" FOREST CONSERVATION EASEMENT #10 0.82 AC. TOTAL 0.58 AC. RETENTION 0.26 AC. NON-CREDIT (FLOODPLAIN)

"OFFSITE" FOREST CONSERVATION EASEMENT #9 2.52 AC. TOTAL 2.52 AC. RETENTION

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

Note:
FCE # 14 includes 0.48 acres of retained forest that is not being utilized for reforestation/afforestation credit by Fairways at Turf Valley Phases II and III.

OWNER/DEVELOPER
MANGIONE ENTERPRISES OF TURF VALLEY, LP
1205 YORK ROAD, PENTHOUSE
LUTHERVILLE, MARYLAND 21093
410 835 0400

**FOREST CONSERVATION PLAN - OFFSITE EASEMENTS
FAIRWAYS AT TURF VALLEY**
PHASE II LOTS 57-69 OPEN SPACE LOTS 70-94 GOLF SPACE LOTS 75 & NON-BUILDABLE BULK PARCELS E & F, POD 'E-1' SECTION IV - RESIDENTIAL PHASE IV E A SUBDIVISION OF PARCEL 708 & A RESUBDIVISION OF FAIRWAYS AT TURF VALLEY, PHASE I, NON-BUILDABLE BULK PARCELS A, B, & C
TAX MAP 17 GRID 9 PART OF PARCEL 708
2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

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. 21223 Expiration Date: 12-21-2022



Eco-Science Professionals, Inc.
CONSULTING ECOLOGISTS

MD DNR Qualified Professional
USACOE Wetland Designer
Certification # WTC 02040601004182
John P. Canoles

P.O. Box 506 Glen Arm, Maryland 21057 (410) 832-2480

Sill · Adcock & Associates · LLC
Engineers · Surveyors · Planners
3500 North Ridge Road, Suite 160
Ellicott City, Maryland 21043
Phone: 443.325.7682 Fax: 443.325.7685
Email: info@silladcock.com

DESIGN BY: JPC
DRAWN BY: JPC
CHECKED BY: JPC
SCALE: AS SHOWN
DATE: OCTOBER 28, 2010
PROJECT: 08-028
SHEET # 11 of 11

APPROVED, HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Chief, Division of Land Development
DATE: 11/19/10

APPROVED, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Chief, Bureau of Highways
DATE: 11-17-10

PLAN VIEW
SCALE: 1" = 50'

5-12-2010 REVISE LOT NUMBERS IN TITLE BLOCK