

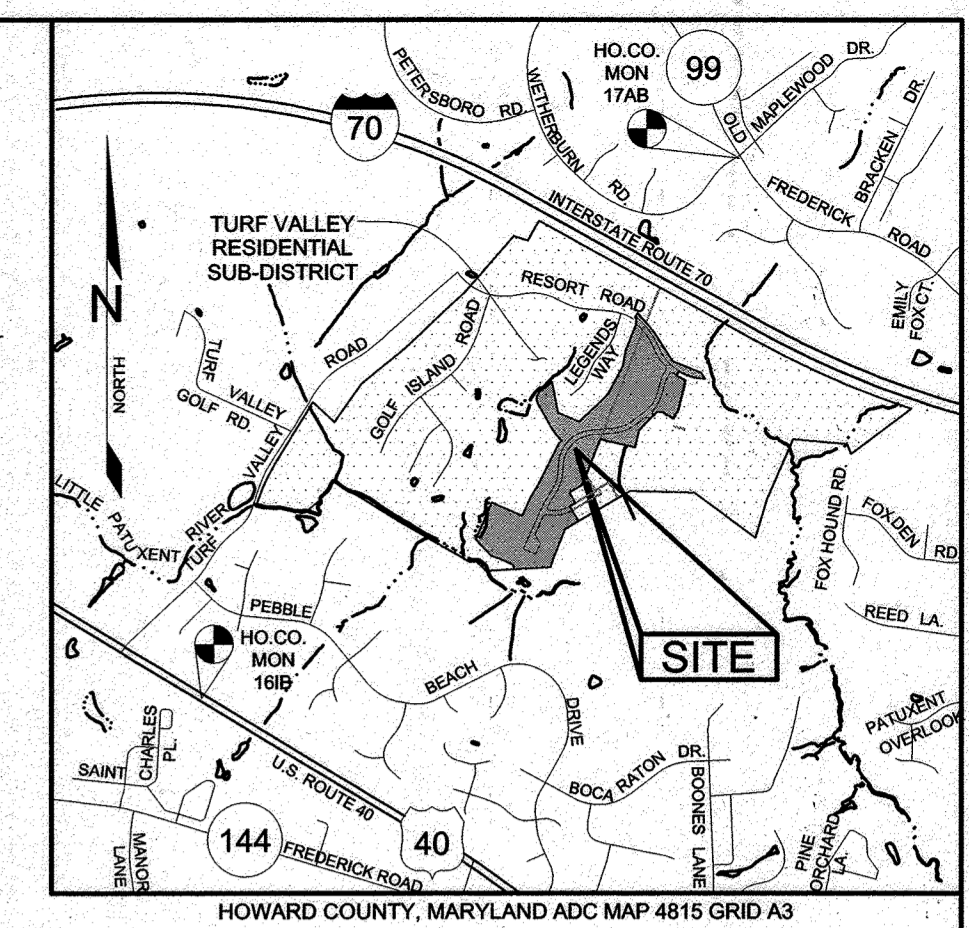
GENERAL NOTES

- 1. SUBJECT PROPERTY IS ZONED "PGCC" PER THE 10-6-2013 COMPREHENSIVE ZONING PLAN.
2. GROSS AREA OF SITE SUBJECT TO SUBDIVISION = 36.21 AC.±
3. AREA OF PROPOSED PUBLIC RW: 2.06 AC.±
4. NUMBER OF PROPOSED BUILDABLE LOTS: 3
5. AREA OF PROPOSED BUILDABLE LOTS: 0.00 AC.±
6. NUMBER OF PROPOSED GOLF/FOR OPEN SPACE LOTS: 7
7. AREA OF PROPOSED GOLF/FOR OPEN SPACE LOTS: 20.81 AC.±
8. NUMBER OF PROPOSED NON-BUILDABLE BULK PARCELS: 4
9. AREA OF PROPOSED NON-BUILDABLE BULK PARCELS: 13.54 AC.±
10. THIS PROPERTY IS WITHIN THE METROPOLITAN DISTRICT.
11. PUBLIC WATER AND PUBLIC SEWER WILL BE USED WITHIN THIS SITE AND ARE SHOWN UNDER CONTRACT NO. 24-4354-D.
12. HOWARD COUNTY SOILS MAP 15.
13. TOPOGRAPHY IS BASED ON WINGS AERIAL MAPPING CO., INC. ON OR ABOUT JANUARY, 2006.
14. THE BOUNDARY SHOWN HEREON IS BASED ON A FIELD SURVEY MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT MARCH 2006 BY MILDENBERG, BOENDER & ASSOC., INC. ALL LOT AREAS ARE MORE OR LESS (+/-).
15. THERE ARE NO STEEP SLOPES, HISTORIC STRUCTURES, FLOODPLAINS, OR CEMETERIES ON-SITE.
16. MARYLAND DEPARTMENT OF THE ENVIRONMENT NON-TIDAL WETLANDS AND WATERWAYS PERMIT 02-NR-0009200261454. U.S. ARMY CORPS OF ENGINEERS PERMITS 02-454-15.
17. WETLANDS ARE BASED ON A STUDY CONDUCTED BY EXPLORATION RESEARCH, INC. WETLANDS INDICATED ARE BASED ON APPROVED STUDIES AS SHOWN ON THE FOURTH AMENDED COMPREHENSIVE SKETCH PLAN OF TURF VALLEY, (S-86-013, PB 368). THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS.
18. STATE HIGHWAY ADMINISTRATION 410.531.5533
BGE(CONTRACTOR SERVICES) 410.950.4620
BGE(UNDERGROUND DAMAGE CONTROL) 410.787.9989
MISS UTILITY 1.800.257.7777
COLONIAL PIPELINE COMPANY 410.795.1390
HOWARD COUNTY DEPT. OF PUBLIC WORKS, BUREAU OF UTILITIES 410.313.4800
HOWARD COUNTY HEALTH DEPARTMENT 410.313.2640
AT&T 1.800.252.1133
VERIZON 1.800.743.0033/410.224.9210
19. PREVIOUS HOWARD COUNTY FILE NUMBERS: S-86-013; S-94-045; S-94-012; SP-97-012; SP-06-013; F-94-005; F-96-107; F-98-150; F-98-151; SDP-95-121; CONTR.#24-1562-D; CONTR.#24-354-D; CONTR.#24-4485-D; CONTR.#24-4486-D; PB-294; PB-300; PB-351; PB-368; WP-09-048-PLAT #20286 & 20287
20. THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
21. 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 410-313-1990) PRIOR TO THE START OF WORK.
22. THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
23. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY IN ADDITION TO MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
24. THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
25. 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.
26. ALL HOPE PIPE SPECIFICATION AND INSTALLATION SHALL MEET AASHTO M-252 TYPE S, M-294 TYPE S AND ASTM D2321, RESPECTIVELY.
27. 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 P-1 PAVING SECTION. GEOTECHNICAL ENGINEER TO CONFIRM ACCEPTABILITY OF PROPOSED PAVING SECTION, BASED ON SOIL TEST.
28. PRIOR TO CONSTRUCTION, ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF CALCULATING FEES.
29. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS NUMBERS 108B AND 178B WERE USED FOR THIS PROJECT.
30. DRIVEWAYS (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 (HSLOADING);
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
31. 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.
32. ALL DITCHES AND SWALES WILL HAVE EROSION CONTROL MATTING.
33. STORMWATER MANAGEMENT FOR THIS PROJECT IS PROVIDED BY A REGIONAL STORMWATER MANAGEMENT POND CONSTRUCTED UNDER SDP-95-121, DRY SWALES (O-1) AND A BIORETENTION FACILITY (F-6). WOV, REV AND CPV REQUIREMENTS ARE PROVIDED FOR THE AREAS THAT DRAIN TO THE REGIONAL STORMWATER MANAGEMENT FACILITY BY THE FACILITY. WOV AND REV REQUIREMENTS ARE PROVIDED FOR THE AREAS THAT DO NOT DRAIN TO THE REGIONAL FACILITY BY DRY SWALES AND A BIORETENTION FACILITY. CPV IS NOT REQUIRED FOR THESE AREAS BECAUSE THE 1-YEAR PEAK RUNOFF IS LESS THAN 2 CFS. DRY SWALES 4 & 5 ARE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION. BIORETENTION 1 IS OWNED BY MANGIONE ENTERPRISES OF TURF VALLEY, LIMITED PARTNERSHIP, AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION. SEE THE STORMWATER MANAGEMENT REPORT FOR SDP-95-121 FOR DESIGN COMPUTATIONS FOR THE REGIONAL STORMWATER MANAGEMENT FACILITY.
34. THIS SITE IS SERVICED BY WATER/SEWER CONTRACT NO. 24-4485-D. THIS PROJECT IS SUBJECT TO SECTION 18.122B OF THE HOWARD COUNTY CODE. PUBLIC WATER AND/OR SEWER SERVICE HAS BEEN GRANTED UNDER THE TERMS AND PROVISIONS, THEREOF, EFFECTIVE 03/01/07. ON WHICH DATE DEVELOPER F0715824-4354-D WAS FILED AND ACCEPTED.
35. STREET TREES SHALL BE PLANTED AT THE SITE DEVELOPMENT PLAN STAGE.
36. THE PORTION OF THIS PROJECT LOCATED ON PARCEL 8 IS EXEMPT FROM FOREST CONSERVATION REQUIREMENTS UNDER SECTION 16.122D(1)(iv) 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. THE FOREST CONSERVATION REQUIREMENT FOR THE PORTION OF THIS PROJECT LOCATED ON PARCEL 706 WAS PROVIDED UNDER F-16-087.
37. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURES AND POLES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (2006), SECTION 5.5.A. A MINIMUM OF 20" SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
38. TRAFFIC CONTROL DEVICES:
A. THE R1-1 (STOP) SIGN AND THE STREET NAME SIGN (SNS) ASSEMBLY FOR THIS DEVELOPMENT MUST BE INSTALLED BEFORE THE BASE PAVING IS COMPLETED.
B. THE TRAFFIC CONTROL DEVICE LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MUST BE FIELD APPROVED BY HOWARD COUNTY TRAFFIC DIVISION (410-313-2430) PRIOR TO THE INSTALLATION OF ANY OF THE TRAFFIC CONTROL DEVICES.
1. ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MMUTCD).
D. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED ("QUICK PUNCH"), SQUARE TUBE POST (14 gauge) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 gauge) - 3' LONG. THE ANCHOR SHALL NOT EXTEND MORE THAN TWO "QUICK PUNCH" HOLES ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
40. 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.
41. 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 ADT OF TEN THOUSAND (10,000) VEHICLES.
42. THE ARTICLES OF INCORPORATION FOR THE FAIRWAYS AT TURF VALLEY NEIGHBORHOOD ASSOCIATION, INC. WAS ACCEPTED BY THE STATE DEPARTMENT OF ASSESSMENTS AND TAXATION ON APRIL 30, 2016 IDMD13513999. THE ARTICLES FOR THE TURF VALLEY PROPERTY OWNERS ASSOCIATION WAS ACCEPTED BY THE STATE DEPARTMENT OF ASSESSMENTS AND TAXATION ON JUNE 30, 2006 IDMD00180951.
43. ANY EXISTING WELLS FOUND ON-SITE DURING CONSTRUCTION SHALL BE PROPERLY SEALED AND ABANDONED BY A LICENSED WELL DRILLER.
44. THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND TO THE ZONING REGULATIONS EFFECTIVE APRIL 13, 2004. PER SECTION 126(h)(4), PLANNING BOARD APPROVAL IS REQUIRED FOR THE SITE DEVELOPMENT PLAN FOR THIS PROJECT AND FOR FDP AMENDMENT SUBSEQUENT TO SIGNATURE APPROVAL OF S-86-013 (PB-368).
45. THE SIDEWALK RAMPS SHALL BE PER THE HOWARD COUNTY DESIGN MANUAL VOLUME IV, DETAILS R-4.01 AND R-4.05. INCLUDE DETECTABLE WARNING SURFACES ON ALL HANDICAP RAMPS PER MARYLAND STATE HIGHWAY ADMINISTRATION STANDARD DETAIL MD-855.40.
46. THE FLOODPLAIN STUDY FOR THIS PROJECT WAS PREPARED BY BERNARD JOHNSON INCORPORATED, DATED MAY 1986, AND WAS APPROVED BY HOWARD COUNTY UNDER THE LITTLE PATUXENT RIVER WATERSHED MODEL UPDATE ULTIMATE WATERSHED DEVELOPMENT CAPITAL PROJECT D-1065.
47. ACCESS TO THE REGIONAL STORMWATER MANAGEMENT FACILITY SHOWN IS PROVIDED FOR UNDER SDP-95-121.
48. REFER TO SHEET 9 ENTITLED GRADING, SEDIMENT AND EROSION CONTROL PLAN FOR DISPOSITION OF THE RE-USE MATERIAL PURSUANT TO THE HALEHAM STOCKPILE AGREEMENT.
49. RESORT ROAD IS CLASSIFIED AS A LOCAL ROAD PER THE HOWARD COUNTY GENERAL PLAN. IT WILL BE DESIGNED AND CONSTRUCTED TO MINOR COLLECTOR ROAD STANDARDS.
50. NON-BUILDABLE BULK PARCELS A, B, C, & D WILL BE RESUBDIVIDED UNDER A FUTURE PHASE.
51. THIS PLAN IS SUBJECT TO WAIVER PETITION, WP-09-048, TO WAIVE SECTION 16.122D(a)(1) OF THE HOWARD COUNTY CODE AND WAS APPROVED ON NOVEMBER 26, 2008, SUBJECT TO THE FOLLOWING CONDITIONS:
1. PETITIONER IS ADVISED THAT WAIVER PETITION APPROVAL APPLIES ONLY TO TEMPORARY DEFERRAL FOR ESTABLISHING ON-OR OFF-SITE FOREST CONSERVATION EASEMENTS FOR DEVELOPMENT OF TURF VALLEY 4TH AMENDED CSP, PARCEL 706. EACH SUBSEQUENT PHASE OF DEVELOPMENT MUST ESTABLISH THE REQUIRED AREAS AND FOREST CONSERVATION EASEMENTS AND PROVIDE THE NECESSARY AREA OF FOREST RETENTION AND AFForestation PLANTING AS REQUIRED BY THE FOREST CONSERVATION WORKSHEET FOR THE DEVELOPMENT TO SATISFY ITS OBLIGATION. THE ENTIRE AREA OF FOREST CONSERVATION OBLIGATION FOR PARCEL 706 MUST BE PROVIDED WITH THE PROCESSING AND RECORDING OF THE LAST PHASE OF DEVELOPMENT LOCATED ON PARCEL 706.
2. PETITIONER MUST MEET ALL APPLICABLE DEADLINE AND MILESTONE DATES IN ACCORDANCE WITH SECTIONS 16.144 AND 16.156 OF THE HOWARD COUNTY CODE.

FINAL ROAD CONSTRUCTION PLAN
FAIRWAYS AT TURF VALLEY
PHASE 1 SECTION 1: RESORT ROAD AND GOLF SPACE LOTS 50 & 51
PHASE 1 SECTION 2: OPEN SPACE LOTS 117, & 118
GOLF SPACE LOTS 52 THRU 56, AND NON-BUILDABLE BULK PARCELS A, B, C, & D
PODS 'F' AND PART OF 'H' SECTION IV : RESIDENTIAL PHASE IV D
AND A RESUBDIVISION OF GOLF SPACE LOT 124
HOWARD COUNTY, MARYLAND

LEGEND

- PROJECT BOUNDARY
PHASE LINE
STREAMS



VICINITY MAP
SCALE: 1"=2000'

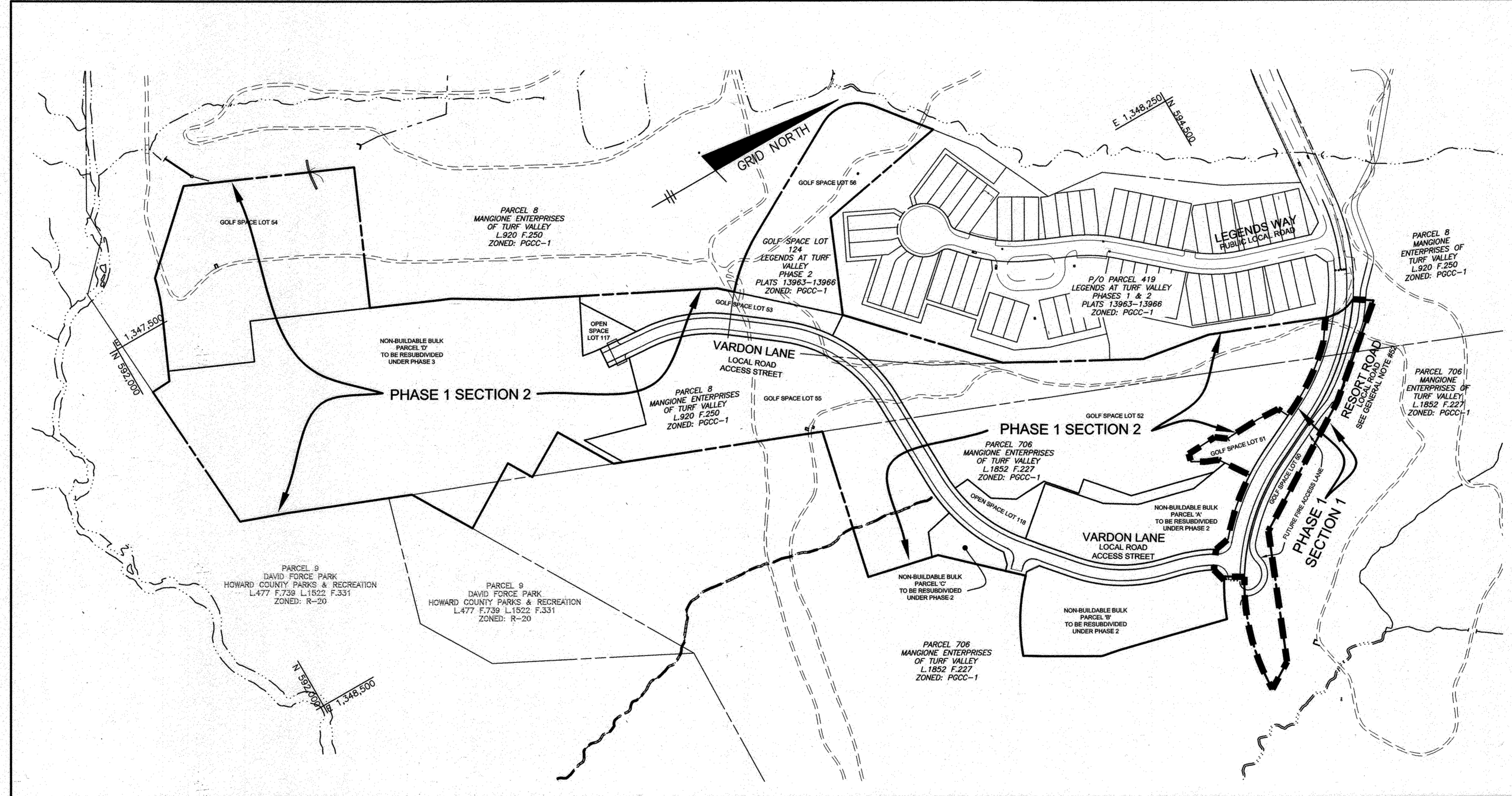
AS-BUILT NOTES:

- 1) HORIZONTAL AND VERTICAL DATUM FOR THIS AS-BUILT IS BASED ON THE MARYLAND STATE REFERENCE SYSTEM NAD 83 / ADJ OTAS PROJECTED FROM NAD 83 GEODETIC CONTROL STATIONS IGB1 AND 17AB.
2) THE INSTRUMENTS USED IN PERFORMING THIS AS-BUILT WERE A TOTAL STATION AND TRIS, AND RTK-GPS.
3) THIS AS-BUILT WAS PERFORMED BY BENCHMARK ENGINEERS, INC.

BENCHMARKS table with columns: NUMBER, NORTHING, EASTING, ELEVATION, DESCRIPTION

SHEET INDEX

SHEET INDEX table with columns: SHEET NO., DESCRIPTION



CENTERLINE ROAD CURVE DATA table with columns: CURVE, RADIUS, ARC LENGTH, DELTA, CHORD BEARING, CHORD LENGTH

NOTE: FOR AS-BUILT NOTES AND RIGHT-OF-WAY CHART SEE SHEET NO. 5

STORMWATER MANAGEMENT SUMMARY TABLE with columns: D.A., WATER QUALITY, RECHARGE, CHANNEL PROTECTION

LOCATION MAP
SCALE: 1"=200'

STREET LIGHT TABLE with columns: FIXTURE TYPE, POLE TYPE, LOCATION, STREET, PHASE

STREET SIGN CHART table with columns: SYMBOL, ROAD NAME, STATION, OFFSET, DESCRIPTION, PHASE

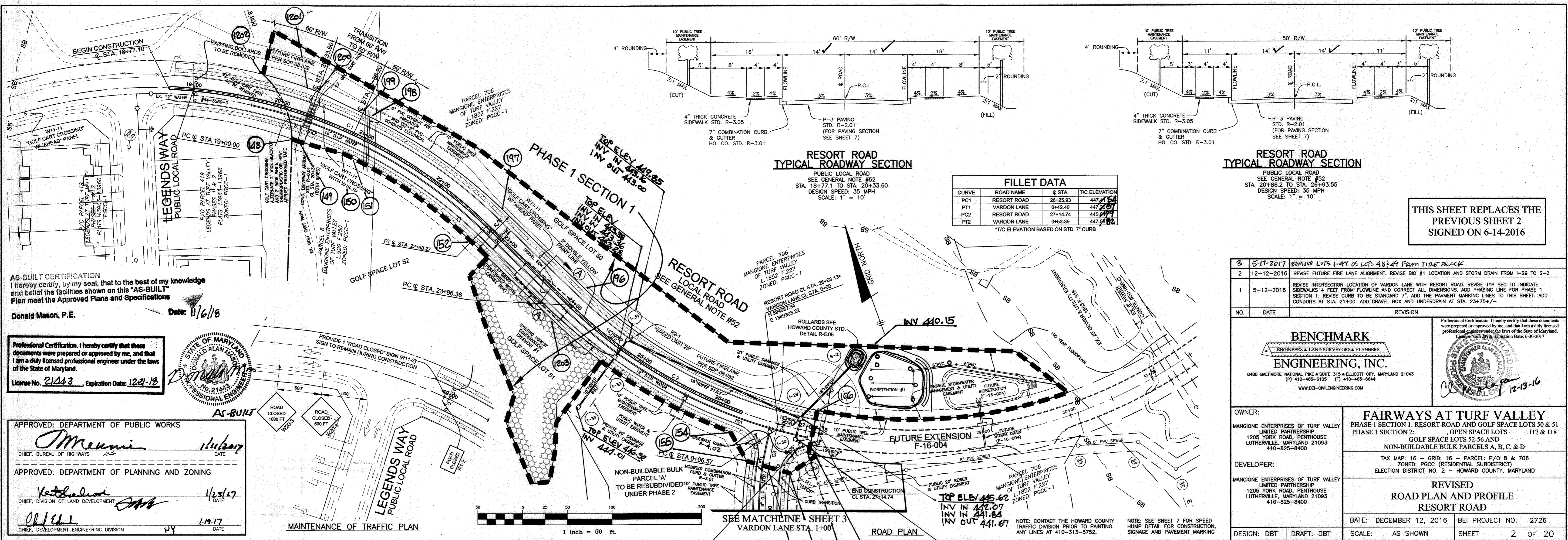
- 1) PROVIDED UNDER REGIONAL SWM FACILITY SDP-95-121.
2) WOV AND REV HAVE BEEN CALCULATED FOR THE AREAS SUBJECT TO GRADING AND LAND COVER CHANGE. TREATMENT FOR WOV AND REV WILL BE PROVIDED FOR AS FOLLOWS:
- DRAINAGE AREA 'C' AND 'D' BY A DRY SWALE (O-1)
- DRAINAGE AREA 'F' BY A BIORETENTION FACILITY (F-6)
- DRAINAGE AREA 'B' IS A BY-PASS AREA. NO NEW DEVELOPMENT PROPOSED. WOV AND REV NOT REQUIRED.
3) CPV IS NOT REQUIRED FOR THESE DRAINAGE AREAS SINCE THE COMPUTED, POST-DEVELOPED 1-YEAR RUNOFF IS LESS THAN 2.0cfs OR LESS THAN THE EXISTING RUNOFF. DRAINAGE AREA 'B' IS A BY-PASS AREA. NO NEW DEVELOPMENT IS PROPOSED. CPV IS NOT REQUIRED.
4) OVERBANK FLOOD PROTECTION VOLUME, Qd, IS NOT REQUIRED FOR THIS SITE.
5) EXTREME FLOOD VOLUME, Qe, IS NOT REQUIRED FOR THIS SITE.

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

ROAD CLASSIFICATION table with columns: ROAD NAME, CLASSIFICATION, PAVING TYPE, DESIGN SPEED, LIMITS OF CONSTRUCTION, RW, PHASE

Professional Certification and approval stamps from the Department of Public Works and Department of Planning and Zoning.

BENCHMARK ENGINEERING, INC. logo and contact information, along with owner and developer details for Fairways at Turf Valley.



**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: 11/6/18

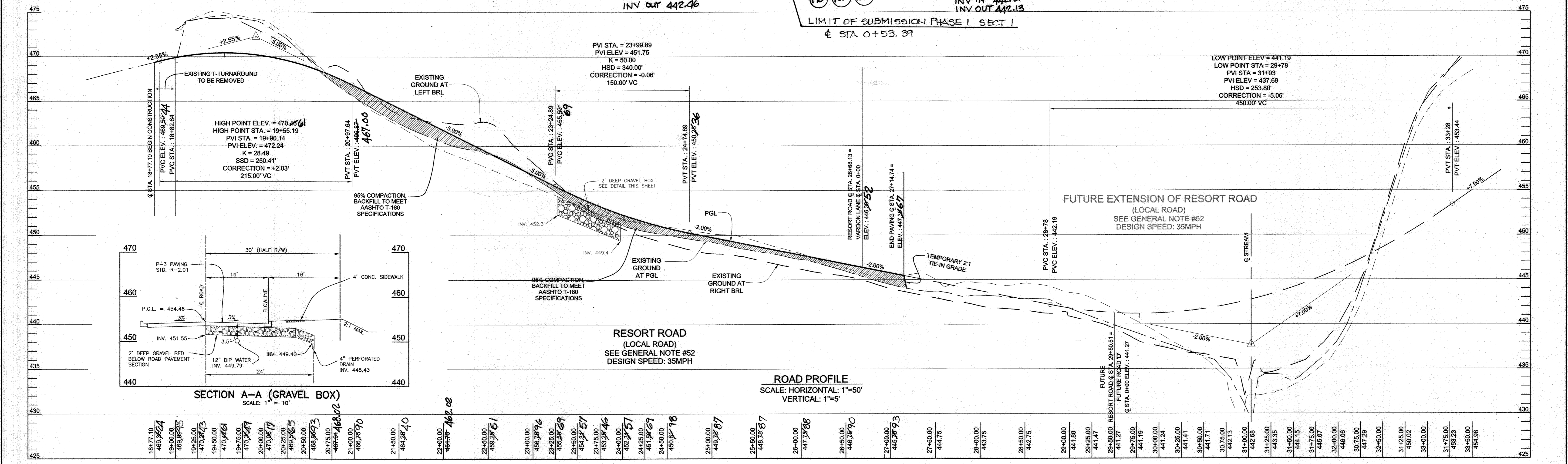
**Professional Certification** I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 21443 Expiration Date: 12-31-18

**APPROVED: DEPARTMENT OF PUBLIC WORKS**  
 CHIEF, BUREAU OF HIGHWAYS

**APPROVED: DEPARTMENT OF PLANNING AND ZONING**  
 CHIEF, DIVISION OF LAND DEVELOPMENT

**APPROVED: MAINTENANCE OF TRAFFIC PLAN**



NO.	DATE	REVISION
3	5-17-2017	REMOVE LOTS 1-47 OF LOTS 48+49 FROM TITLE BLOCK
2	12-12-2016	REVISE FUTURE FIRE LANE ALIGNMENT. REVISE BIO #1 LOCATION AND STORM DRAIN FROM 1-29 TO S-2
1	5-12-2016	REVISE INTERSECTION LOCATION OF VARON LANE WITH RESORT ROAD. REVISE TYP SEC TO INDICATE SIDEWALKS 4 FEET FROM FLOWLINE AND CORRECT ALL DIMENSIONS. ADD PHASING LINE FOR PHASE 1 SECTION 1. REVISE CURB TO BE STANDARD 7". ADD THE PAVEMENT MARKING LINES TO THIS SHEET. ADD CONDUITS AT STA. 21+00. ADD GRAVEL BOX AND UNDERDRAIN AT STA. 23+75+/-

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.

**BENCHMARK ENGINEERING, INC.**  
 8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043  
 (7) 410-465-4105 (F) 410-465-6844  
 WWW.BEI-CIVILENGINEERING.COM

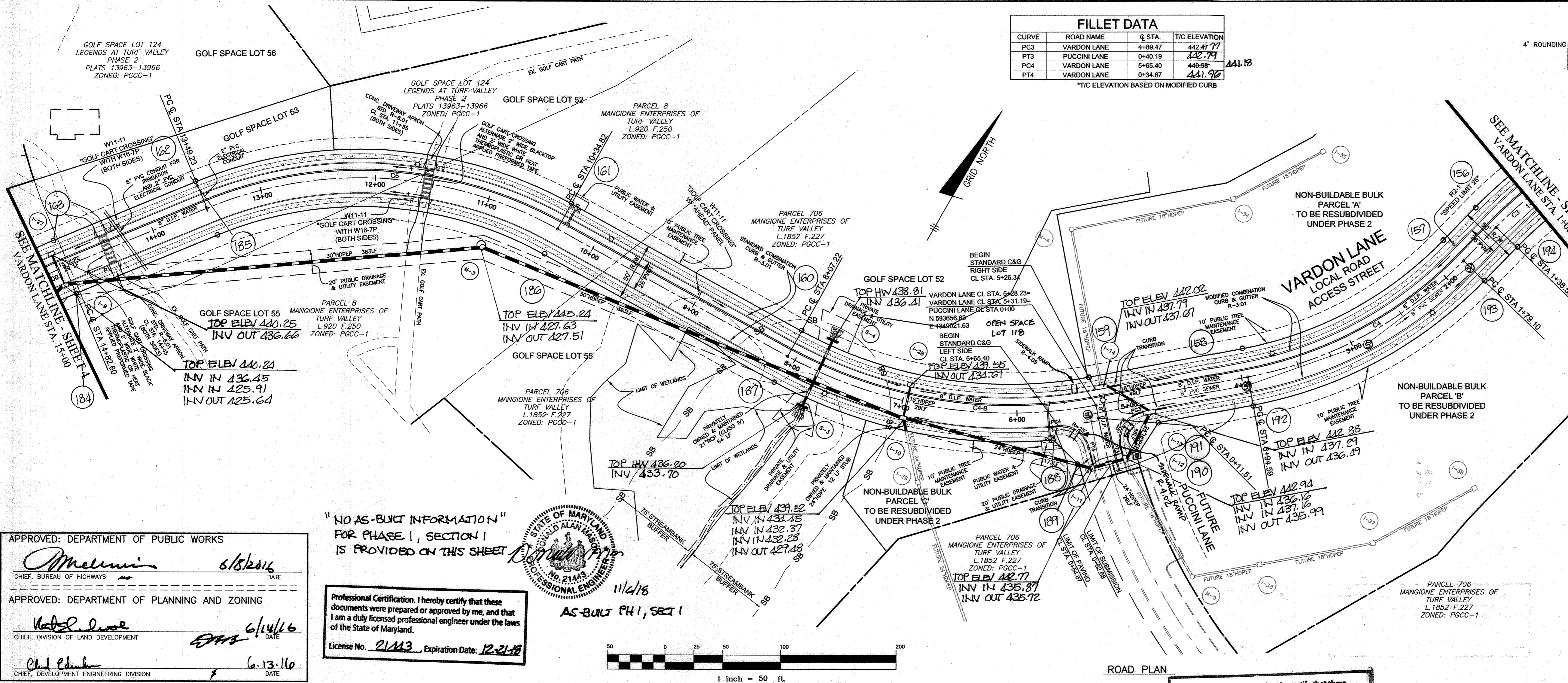
**OWNER:**  
 MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP  
 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400

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

**FAIRWAYS AT TURF VALLEY**  
 PHASE 1 SECTION 1: RESORT ROAD AND GOLF SPACE LOTS 50 & 51  
 PHASE 1 SECTION 2: OPEN SPACE LOTS 117 & 118  
 GOLF SPACE LOTS 52-56 AND NON-BUILDABLE BULK PARCELS A, B, C, & D

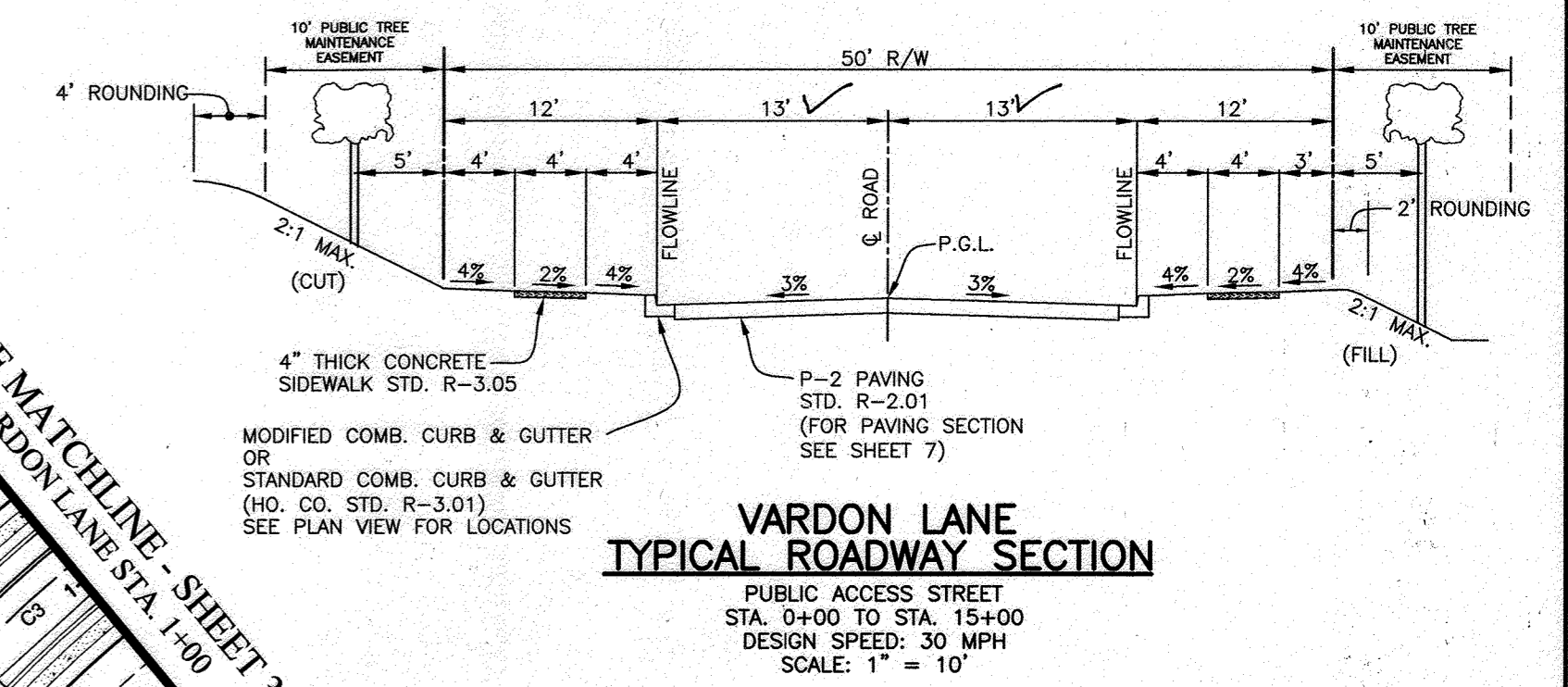
TAX MAP: 16 - GRID: 16 - PARCEL: P/O B & 706  
 ZONED: PGCC (RESIDENTIAL SUBDISTRICT)  
 ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND

**REVISED ROAD PLAN AND PROFILE RESORT ROAD**  
 DATE: DECEMBER 12, 2016 BEI PROJECT NO. 2726  
 DESIGN: DBT DRAFT: DBT SCALE: AS SHOWN SHEET 2 OF 20



FILET DATA			
CURVE	ROAD NAME	Q STA	TIC ELEVATION
PC3	VARDON LANE	4+89.47	442.4777
PT3	PUCCHINI LANE	0+40.19	442.79
PC4	VARDON LANE	5+65.40	440.98
PT4	VARDON LANE	0+34.67	441.90

\*TIC ELEVATION BASED ON MODIFIED CURB



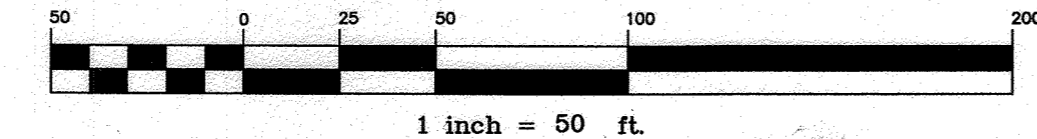
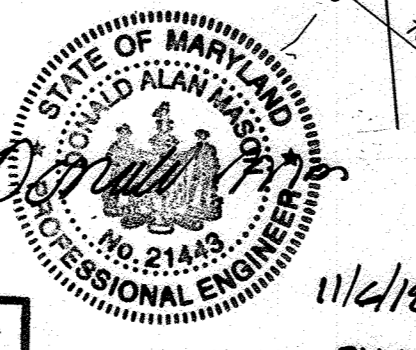
APPROVED: DEPARTMENT OF PUBLIC WORKS  
*Melvin* 6/18/16  
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*Robert* 6/14/16  
 CHIEF, DIVISION OF LAND DEVELOPMENT

*Chad* 6.13.16  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

"NO AS-BUILT INFORMATION" FOR PHASE 1, SECTION 1 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: 12-21-18



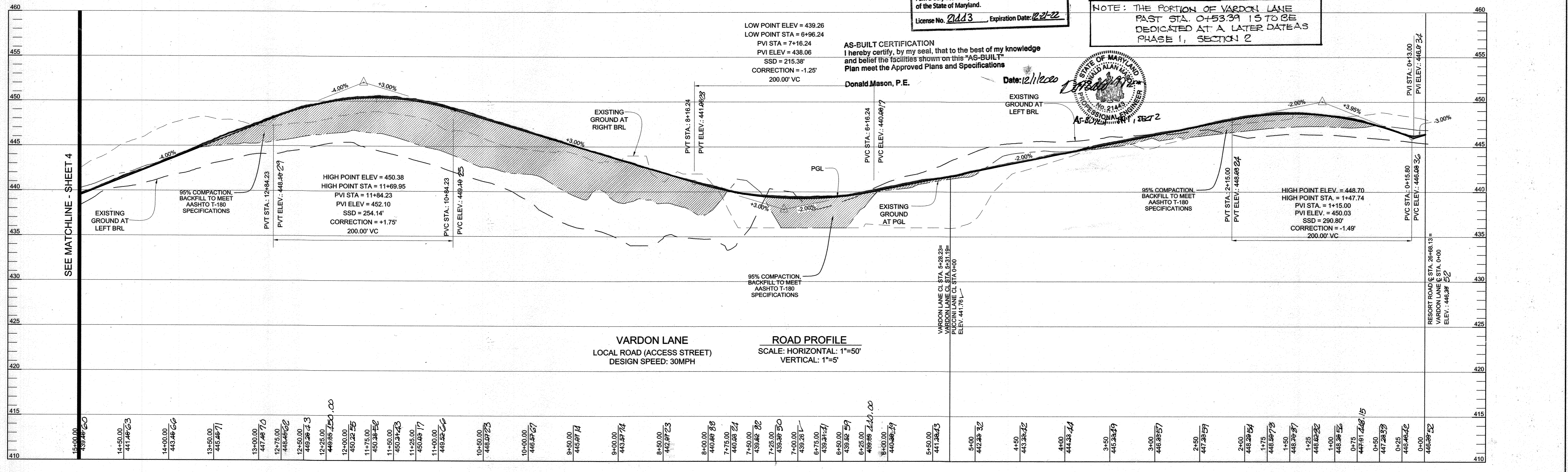
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 21443, Expiration Date: 12-21-22

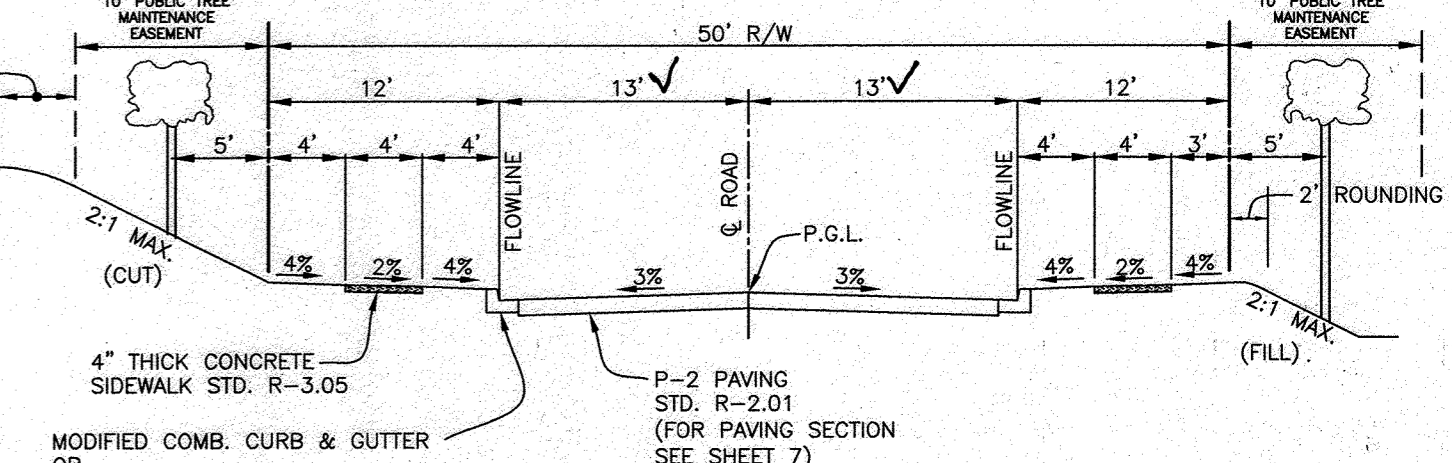
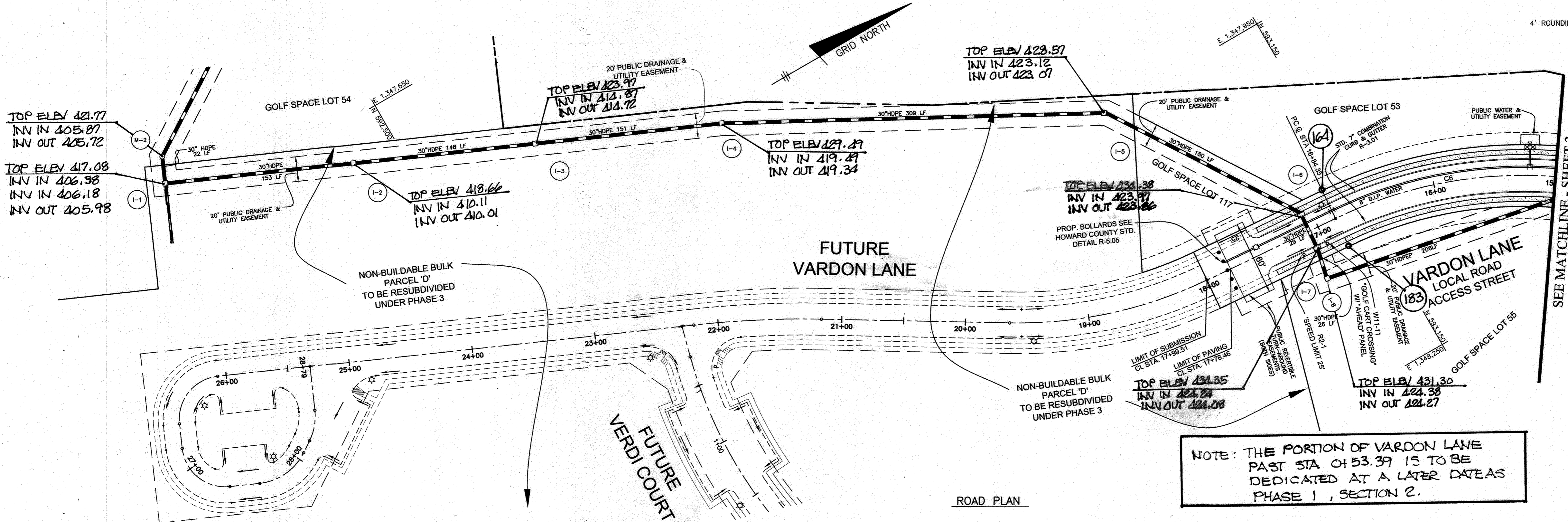
NO.	DATE	REVISION
3	5-17-2017	REMOVE LOTS 1-47 AND OS LOTS 48-49 FROM TITLE BLOCK
2	12-12-2016	ADD OPEN SPACE LOT 118. UPDATE TITLE BLOCK & SHEET NUMBER
1	5-12-2016	REVISE VARDON LANE ALIGNMENT UP TO PUCCHINI LANE. REVISE TYP SEC TO INDICATE SIDEWALKS 4 FEET FROM FLOWLINE AND REVISE CURB TYPE. DELETE THE FUTURE PRIVATE ROAD LOCATED ALONG EAST SIDE OF VARDON LANE. ADD CONDUITS AT STA. 13+40 AND 14+40.

OWNER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP  
 DEVELOPER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP

FAIRWAYS AT TURF VALLEY  
 PHASE 1 SECTION 1: RESORT ROAD AND GOLF SPACE LOTS 50 & 51  
 PHASE 1 SECTION 2: OPEN SPACE LOTS 117, GOLF SPACE LOTS 52-56 AND NON-BUILDABLE BULK PARCELS A, B, C, & D

REVISOR: BEI PROJECT NO. 2726  
 DATE: FEBRUARY 29, 2016  
 SCALE: AS SHOWN  
 SHEET 3 OF 20





NO.	DATE	REVISION
3	5-17-2017	REMOVE LOTS 1-47 AND RELOCATE TO F-10-086 PLANS. TERMINATE VARDON LANE AT STATION 18+00 AND MOVE REMAINING PORTION INTO F-10-086
2	12-12-2016	ADD OPEN SPACE LOT 117. UPDATE TITLE BLOCK AND SHEET NUMBER.
1	5-12-2016	REVISE TYP SEC AND PLAN VIEW TO INDICATE SIDEWALKS 4 FEET FROM FLOWLINE AND REVISE CURB TYPE. REVISE LOT LINES FOR LOTS 1-47. REMOVE HOUSES, DRIVEWAYS AND LOT AREAS.

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: 12-31-16

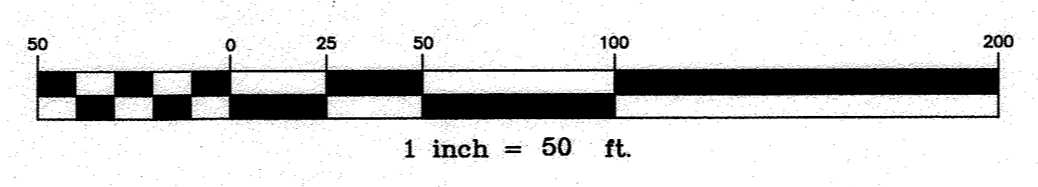
**BENCHMARK ENGINEERING, INC.**  
 8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043  
 (P) 410-485-8105 (F) 410-485-8444  
 WWW.BEI-CIVILENGINEERING.COM

OWNER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400	FAIRWAYS AT TURF VALLEY PHASE 1 SECTION 1: RESORT ROAD AND GOLF SPACE LOTS 50 & 51 PHASE 1 SECTION 2: OPEN SPACE LOTS 117 & 118, GOLF SPACE LOTS 52-56 AND NON-BUILDABLE BULK PARCELS A, B, C, & D TAX MAP 16 - GRID: 16 - PARCEL: 5/0 B & 706 ZONING: PCCC (RESIDENTIAL SUBDISTRICT) ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND
DEVELOPER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400	REVISED ROAD PLAN AND PROFILE VARDON LANE DATE: MAY 17, 2017 BEI PROJECT NO. 2726
DESIGN: DBT DRAFT: DBT	SCALE: AS SHOWN SHEET 4 OF 20

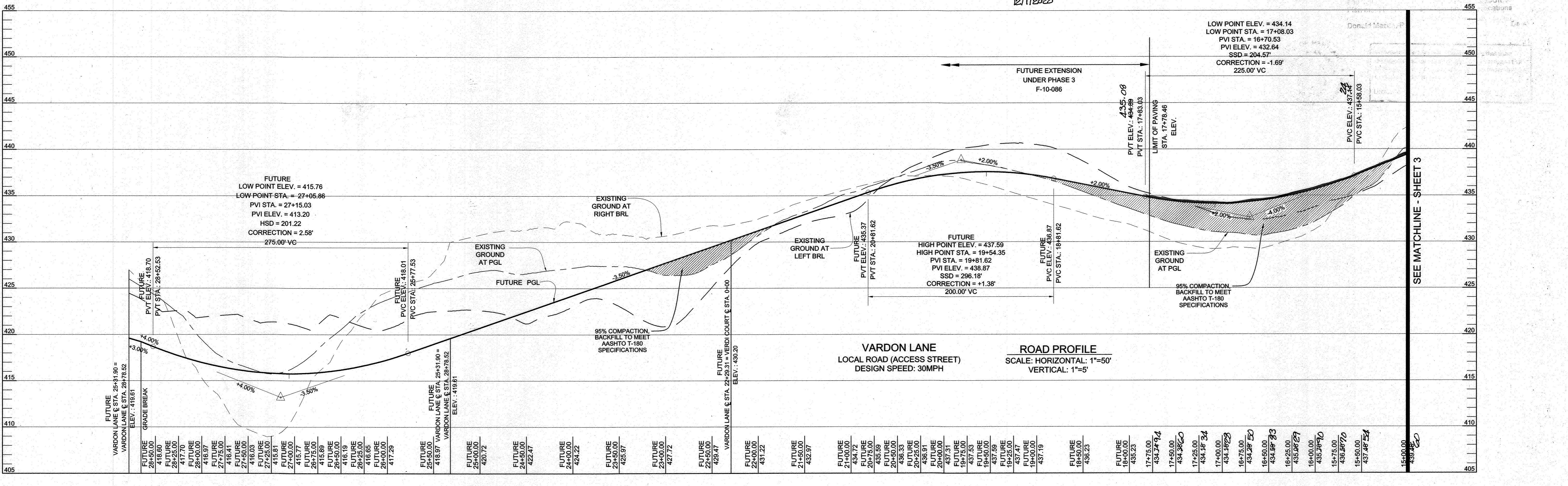
APPROVED: DEPARTMENT OF PUBLIC WORKS  
 [Signature] DATE: 6-22-17  
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature] DATE: 6-22-17  
 CHIEF, DIVISION OF LAND DEVELOPMENT

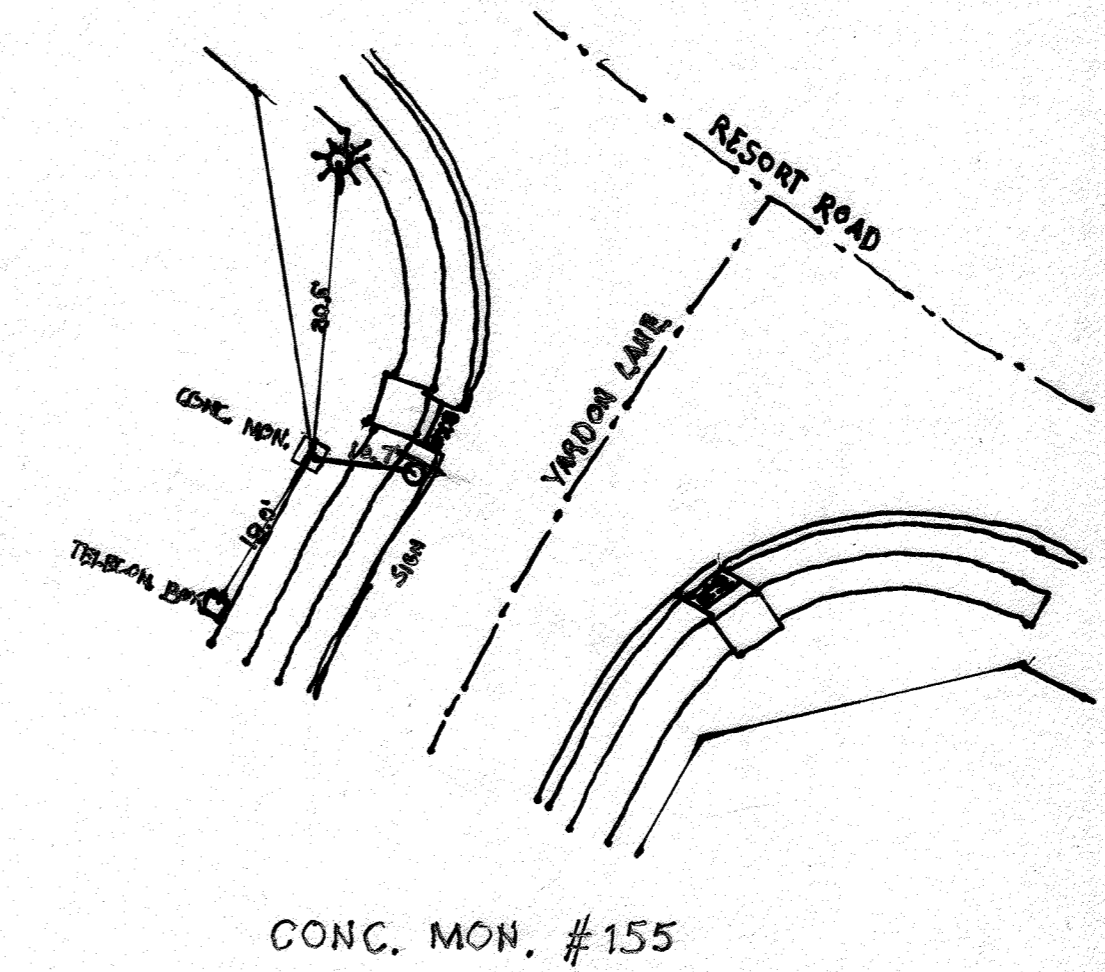
[Signature] DATE: 6-22-17  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION



AS-BUILT PH 1, SECT 1  
 AS-BUILT PH 1, SECT 2  
 12/12/2020



- AS-BUILT NOTES:**
- 1.) HORIZONTAL AND VERTICAL DATUM FOR THIS AS-BUILT IS BASED ON THE MARYLAND STATE REFERENCE SYSTEM HAD 83 / ADJUSTAS PROJECTED FROM H.O. CO. GEODETIC CONTROL STATION'S 108 AND 17AB.
  - 2.) THE INSTRUMENTS USED IN PERFORMING THE AS-BUILT WERE A 5" TOTAL STATION AND PRISM AND RTK GPS.
  - 3.) THIS AS-BUILT WAS PERFORMED BY BENCHMARK ENGINEERING, INC.

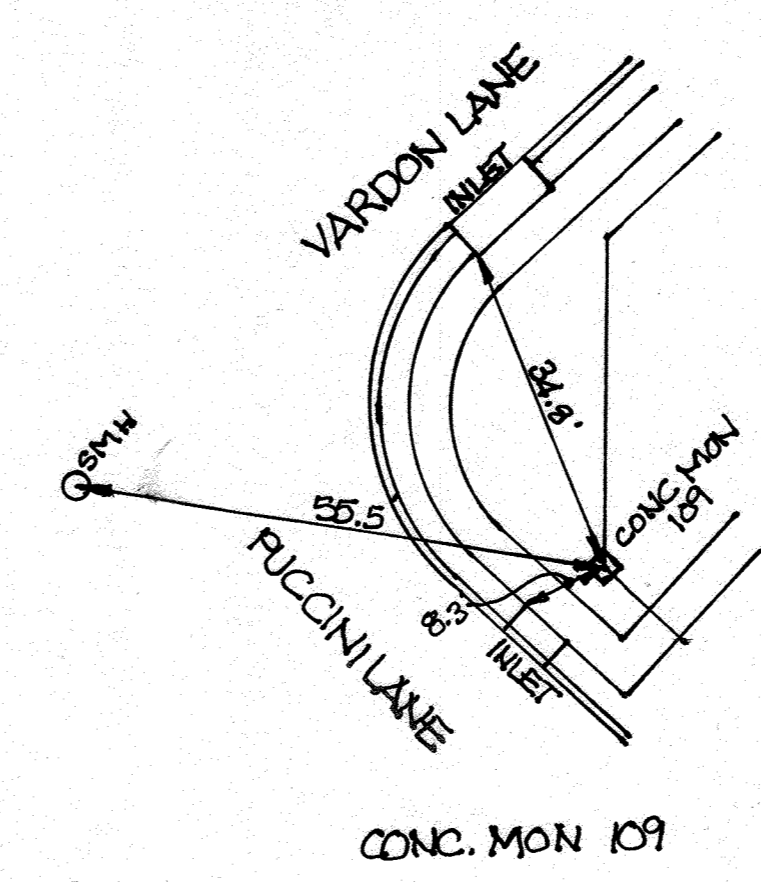


**PHASE 1, SECTION 1**  
RIGHT OF WAY ELEVATION  
CHART NAD 83

R/W PT. NO.	DESCRIPTION	ELEVATION
106	REBAR & CAP	446.24'
107	REBAR & CAP	446.01'
108	REBAR & CAP	445.00'
148	REBAR & CAP	469.81'
149	X-MARK IN DW	469.71'
150	REBAR & CAP	467.63'
151	REBAR & CAP	467.53'
152	REBAR & CAP	458.71'
154	REBAR & CAP	449.71'
155	CONC. MON.	447.57'
195	REBAR & CAP	417.04'
196	REBAR & CAP	453.11'
197	REBAR & CAP	452.00'
198	REBAR & CAP	467.52'
199	REBAR & CAP	468.04'
1200	MANHOLE	469.70'
1201	REBAR & CAP	470.52'
1202	REBAR & CAP	471.31'
1203	REBAR & CAP	452.96'

**PHASE 1, SECTION 2**  
RIGHT OF WAY ELEVATION

R/W PT. NO.	DESCRIPTION	ELEVATION
156	X-CUT	449.08'
157	X-CUT	448.82'
158	X-CUT	444.64'
159	REBAR & CAP	442.391'
160	REBAR & CAP	441.46'
161	REBAR & CAP	448.30'
162	REBAR & CAP	446.84'
163	REBAR & CAP	441.43'
164	REBAR & CAP	434.52'
183	REBAR & CAP	434.73'
184	REBAR & CAP	440.51'
185	REBAR & CAP	446.66'
186	REBAR & CAP	448.43'
187	REBAR & CAP	441.75'
188	REBAR & CAP	441.41'
189	REBAR & CAP	442.45'
190	CONC. MON.	443.16'
191	REBAR & CAP	443.08'
192	X-CUT	442.65'
193	X-CUT	448.82'
194	REBAR & CAP	448.96'



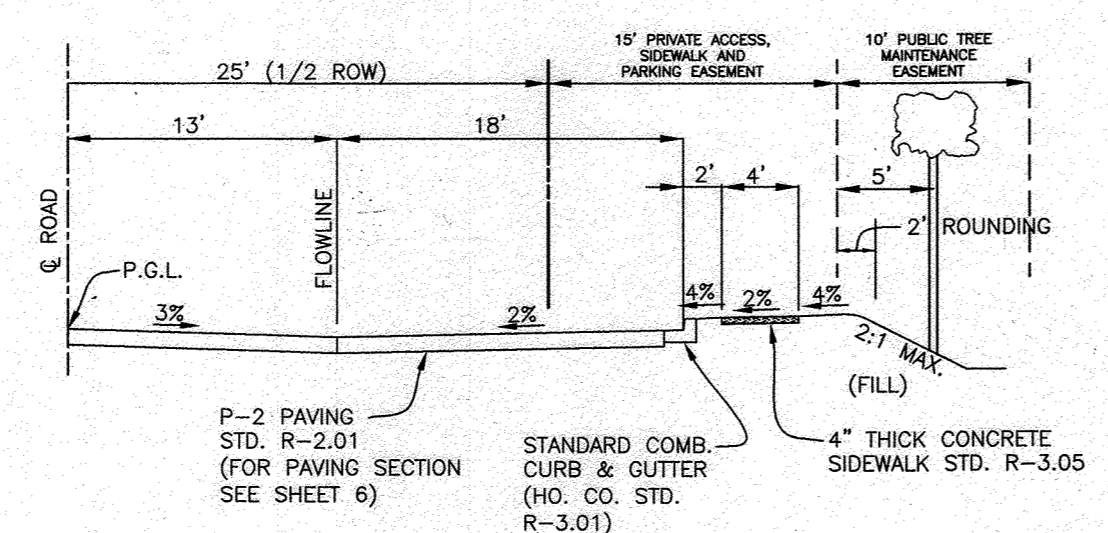
**AS-BUILT CERTIFICATION**  
I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications

Donald Mason, P.E. Date: 11/6/16  
PHASE 1, SECT 2 12/1/2020

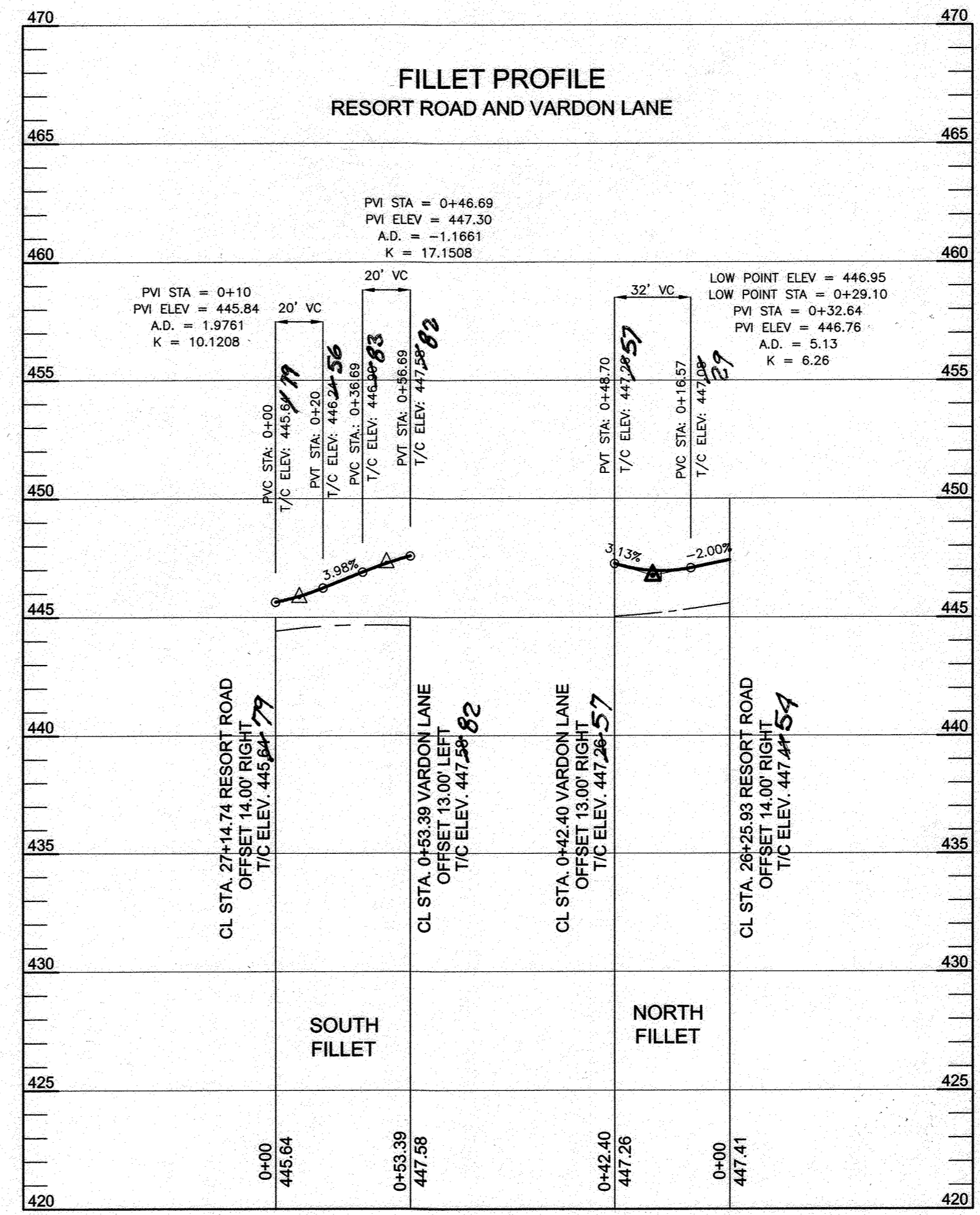


Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21443, Expiration Date: 12/1/20

THIS SHEET REPLACES THE PREVIOUS SHEET 5 SIGNED ON 6-14-2016



**TYPICAL HALF PARKING SECTION ALONG VARDON LANE**  
SCALE: 1" = 10'



NO.	DATE	REVISION
3	5-17-2017	REMOVE VERDI COURT PLAN, PROFILE, FILLET PROFILES AND TYPICAL SECTION. UPDATE TITLE BLOCK.
2	12-12-2016	UPDATE TITLE BLOCK AND SHEET NUMBER
1	5-12-2016	REVISE FILLET PROFILES FOR VARDON LANE & RESORT ROAD. REVISE TYPICAL SECTION FOR PARKING SPACES.

**BENCHMARK ENGINEERING, INC.**  
ENGINEERS LAND SURVEYORS PLANNERS  
6480 BALTIMORE NATIONAL PIKE & SUITE 315 ELLICOTT CITY, MARYLAND 21043  
(P) 410-485-6105 (F) 410-485-8844  
WWW.BEI-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 1 SECTION 1: RESORT ROAD AND GOLF SPACE LOTS 50 & 51  
PHASE 1 SECTION 2: OPEN SPACE LOTS 117 & 118, GOLF SPACE LOTS 52-56 AND NON-BUILDABLE BULK PARCELS A, B, C, & D

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

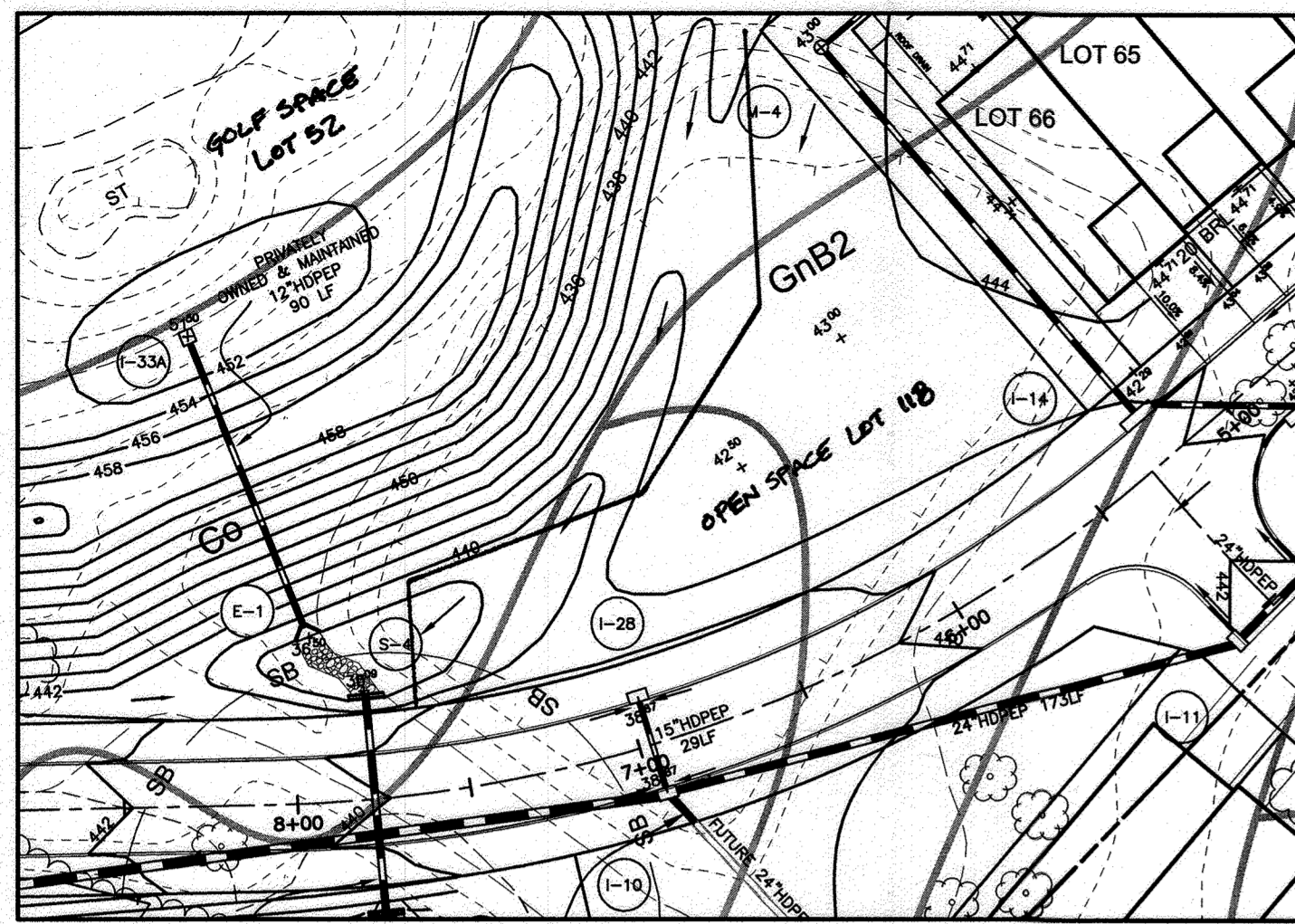
**REVISED ROAD PLAN AND PROFILE VERDI COURT**

DATE: MAY 17, 2017 BEI PROJECT NO. 2726  
DESIGN: DBT DRAFT: DBT SCALE: AS SHOWN SHEET 5 OF 20

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*M. Mearns* 6/14/2017  
CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*K. Schuler* 6-22-17  
CHIEF, DIVISION OF LAND DEVELOPMENT

*D. J. C. L.* 6-20-17  
CHIEF, DEVELOPMENT ENGINEERING DIVISION



ULTIMATE GRADING CONDITIONS AFTER REMOVAL OF SEDIMENT TRAP #1  
SCALE: 1" = 50'

NOTE: FOR SEDIMENT TRAP #1 INFORMATION AND CONFIGURATION SEE SHEET 8.

LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOURS
- SOILS DELINEATION
- SOILS TYPE
- SILT FENCE
- SUPER SILT FENCE
- LIMIT OF DISTURBANCE
- EXISTING TREELINE
- PROPOSED TREELINE
- HYDROLOGIC GROUP 'B' SOILS
- HYDROLOGIC GROUP 'C' SOILS
- HYDROLOGIC GROUP 'D' SOILS



"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: 12-21-18

**ENGINEER'S CERTIFICATE**  
I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.  
*C. Malagan* 10-6-16  
ENGINEER DATE

**DEVELOPER'S CERTIFICATE**  
I, WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*[Signature]* 10-6-2016  
DEVELOPER DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*[Signature]* 10/18/16  
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 10/25/2016  
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 10-27-16  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 10-27-16  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

SYMBOL	NAME / DESCRIPTION	GROUP
Bs	BAILE SILT LOAM	D
BrB2	BRANDYWINE LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
BrC3	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
E4B2	ELIOAK SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
EC3	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	B
MgB2	MANOR GRAVELLY LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
MgC3	MANOR GRAVELLY LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	C
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
MID2	MANOR LOAM, 15 TO 25 PERCENT SLOPES, MODERATELY ERODED	B
MID3	MANOR LOAM, 15 TO 25 PERCENT SLOPES, SEVERELY ERODED	B

NO.	DATE	REVISION
1	5-17-2017	REMOVE LOTS 1-47 & 05 LOT 48 & 49 FROM TITLE BLOCK
2	12-12-2016	ADD OPEN SPACE LOT 119. UPDATE TITLE BLOCK AND SHEET NUMBER
3	10-6-2016	REVISE GOLF COURSE FAIRWAY/GREEN GRADING. REVISE ULTIMATE GRADING CONDITION.
4	5-12-2016	UPDATE TITLE BLOCK AND SHEET NO.

**BENCHMARK ENGINEERING, INC.**  
ENGINEERS & LAND SURVEYORS & PLANNERS  
6480 BALTIMORE NATIONAL PIKE & SUITE 315 • ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-8105 (F) 410-465-8644  
WWW.BEI-ENGINEERING.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.  
*[Signature]* 10-27-16  
PROFESSIONAL ENGINEER 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

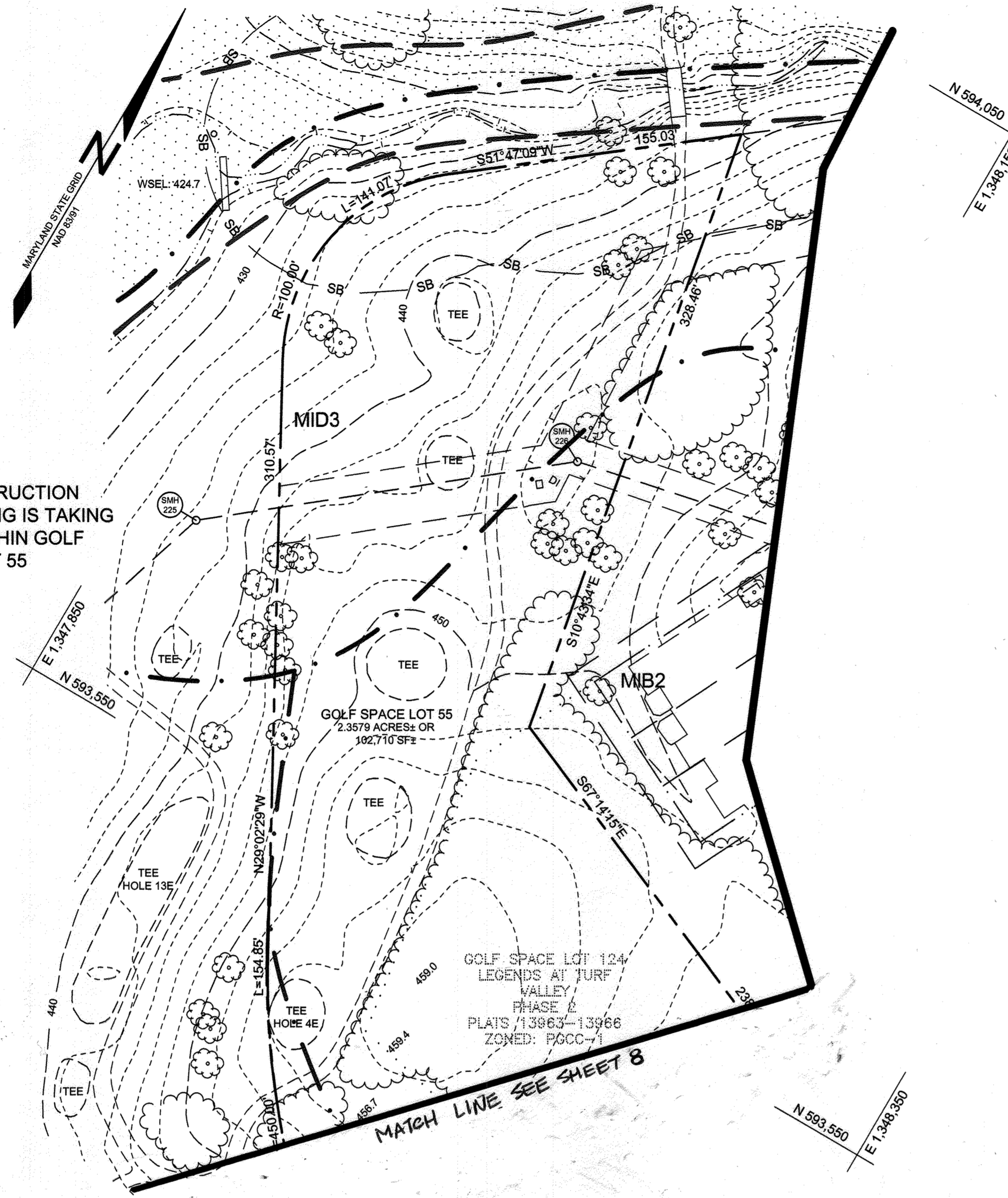
FAIRWAYS AT TURF VALLEY  
PHASE 1 SECTION 1: RESORT ROAD AND GOLF SPACE LOTS 50 & 51  
PHASE 1 SECTION 2: OPEN SPACE LOTS 117 & 118 GOLF SPACE LOTS 52-56 AND NON-BUILDABLE BULK PARCELS A, B, C, & D

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

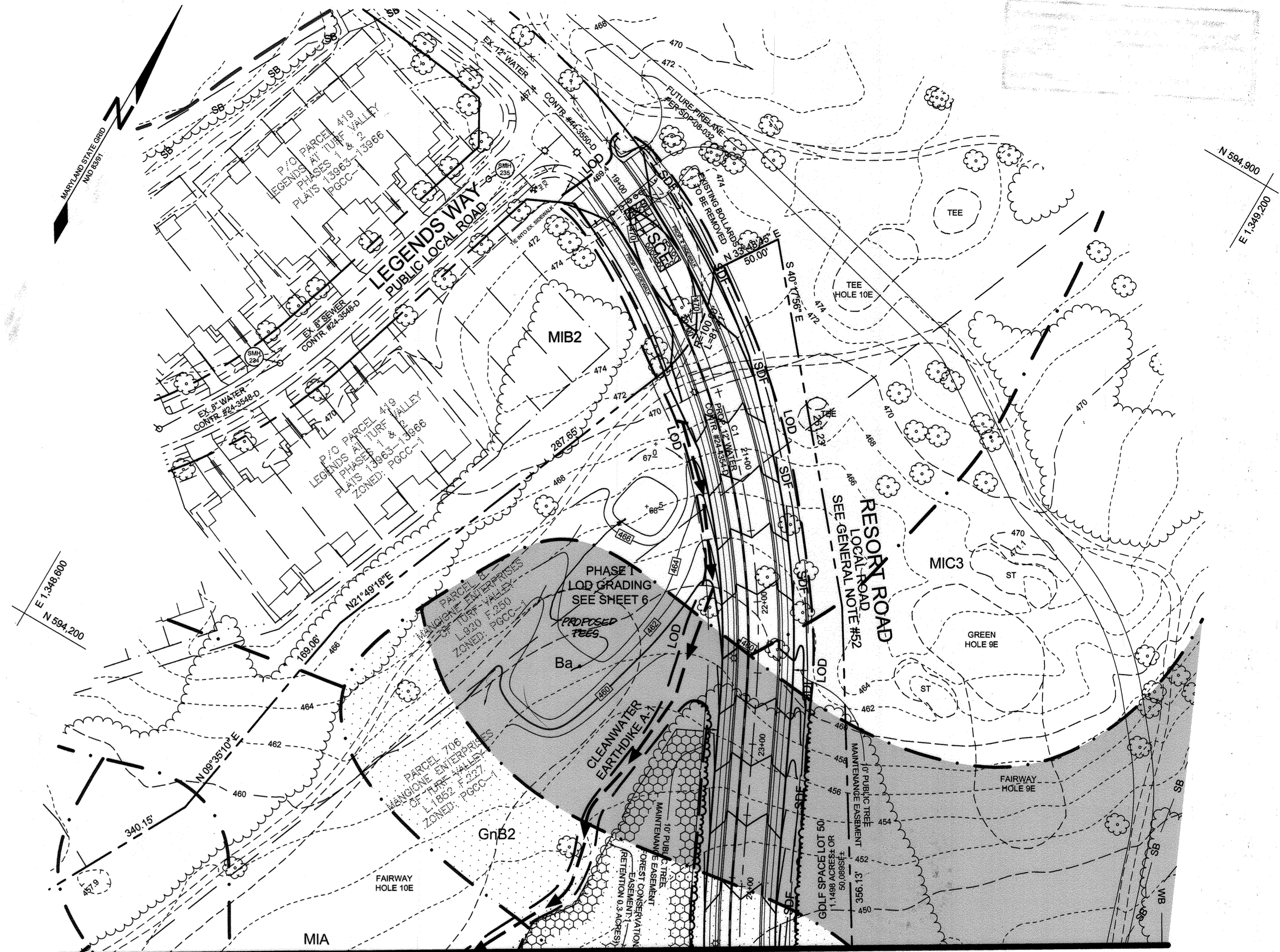
DATE: OCTOBER 6, 2016 BEI PROJECT NO.: 2726  
SCALE: AS SHOWN SHEET 6 OF 20

THIS SHEET REPLACES THE PREVIOUS SHEET 6 SIGNED ON 3-22-2010

NOTE: NO CONSTRUCTION OR GRADING IS TAKING PLACE WITHIN GOLF SPACE LOT 55



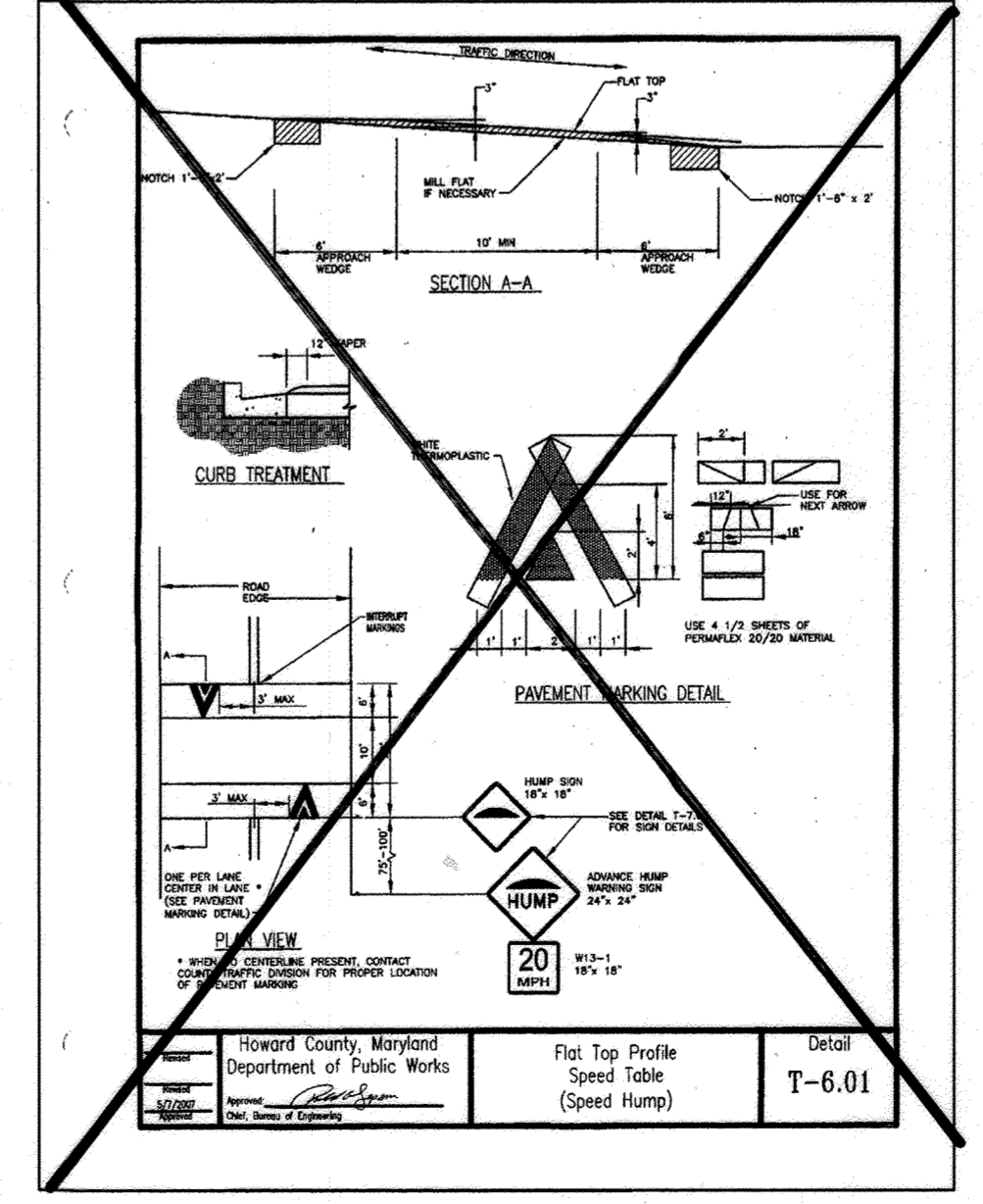
PLAN VIEW  
SCALE: 1"=50'



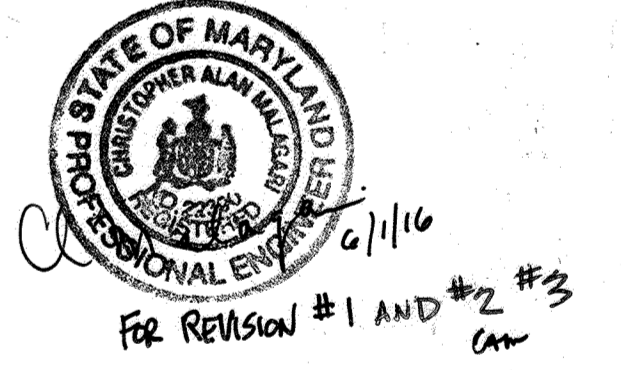
PLAN VIEW  
SCALE: 1"=50'

SEC. NO.	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR)					
		3 TO <5	5 TO <7	7 TO <10	10 TO <15	15 TO <20	20 TO <30
P-2	PARKING DRIVE AISLES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY	HMA SUPERPAVE FINAL SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL)					
	LOCAL ROADS: ACCESS PLACE, ACCESS STREET	HMA SUPERPAVE INTERMEDIATE SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL)					
	CUL-DE-SACS: RESIDENTIAL	HMA SUPERPAVE BASE 19.0 MM, PG 64-22, LEVEL 1 (ESAL)					
		GRADED AGGREGATE BASE (GAB) 6.0 4.0 3.0 4.0 4.0 4.0					
P-3	PARKING DRIVE AISLES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY	HMA SUPERPAVE FINAL SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL)					
	LOCAL ROADS: ACCESS PLACE, ACCESS STREET	HMA SUPERPAVE INTERMEDIATE SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL)					
	CUL-DE-SACS: NON-RESIDENTIAL	HMA SUPERPAVE BASE 19.0 MM, PG 64-22, LEVEL 1 (ESAL)					
	MINOR COLLECTORS: RESIDENTIAL	GRADED AGGREGATE BASE (GAB) 10.0 6.0 3.0 6.0 6.0 6.0					

NOTE: THE EARTH DIKE MAY BE REPLACED BY SUPER DIVERSION FENCE AT CONTRACTOR'S OPTION



ROAD NAME	STATION
RESORT ROAD	20+36.10
FAIRWAY LANE	48+19.73
VARDEAN LANE	14+33.2



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. 22370, Expiration Date: 6/30/17

OWNER/DEVELOPER  
MANGIONE ENTERPRISES OF TURF VALLEY, LP  
1205 YORK ROAD, PENTHOUSE  
LUTHERVILLE, MARYLAND 21093  
410.825.8400

GRADING, SEDIMENT AND EROSION CONTROL  
PLAN AND DETAILS  
FAIRWAYS AT TURF VALLEY  
PHASE I SECTION 1: RESORT ROAD AND GOLF SPACE LOTS 52 THRU 56  
PHASE I SECTION 2: OPEN SPACE LOTS 117/118 GOLF SPACE LOTS 52 THRU 56  
AND NON-BUILDABLE BULK PARCELS A, B, C, & D. PODS 'F' AND PART OF 'H'  
SECTION IV: RESIDENTIAL PHASE IV D & A RESUBDIVISION OF GOLF SPACE LOT 124  
TAX MAP 16 GRID 16 PART OF PARCELS 8 AND 706  
2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

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

DESIGN BY: PS/MRM  
DRAWN BY: PS/MRM  
CHECKED BY: PS  
SCALE: AS SHOWN  
DATE: FEBRUARY 22, 2010  
PROJECT #: 06-025  
SHEET #: 7 of 20

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
3-22-10  
CHIEF, DIVISION OF LAND DEVELOPMENT  
3-18-10  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
3-16-10  
CHIEF, BUREAU OF HIGHWAYS

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS  
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND  
SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
3/9/10  
HOWARD SCD

ENGINEERS CERTIFICATE  
"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL  
REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY  
PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS  
PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD  
SOIL CONSERVATION DISTRICT."  
2/22/10  
SIGNATURE OF ENGINEER  
PAUL M. SILL, PE, LEED AP

DEVELOPER'S CERTIFICATE  
"I HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE  
ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT  
ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT  
WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE  
ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF  
SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE  
PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."  
2/22/10  
SIGNATURE OF DEVELOPER

NO.	DATE	REVISION	BY
3	5-17-2017	REMOVE LOTS 1-47 AND OS LOTS 48-49 FROM TITLE BLOCK	BE1
2	12-12-2016	UPDATE MATCHLINE TITLE BLOCK AND SHEET NUMBER	BE1
1	5-27-16	REMOVE SPEED HUMP DETAIL FROM TITLE BLOCK & SHEET NO. 4	BE1

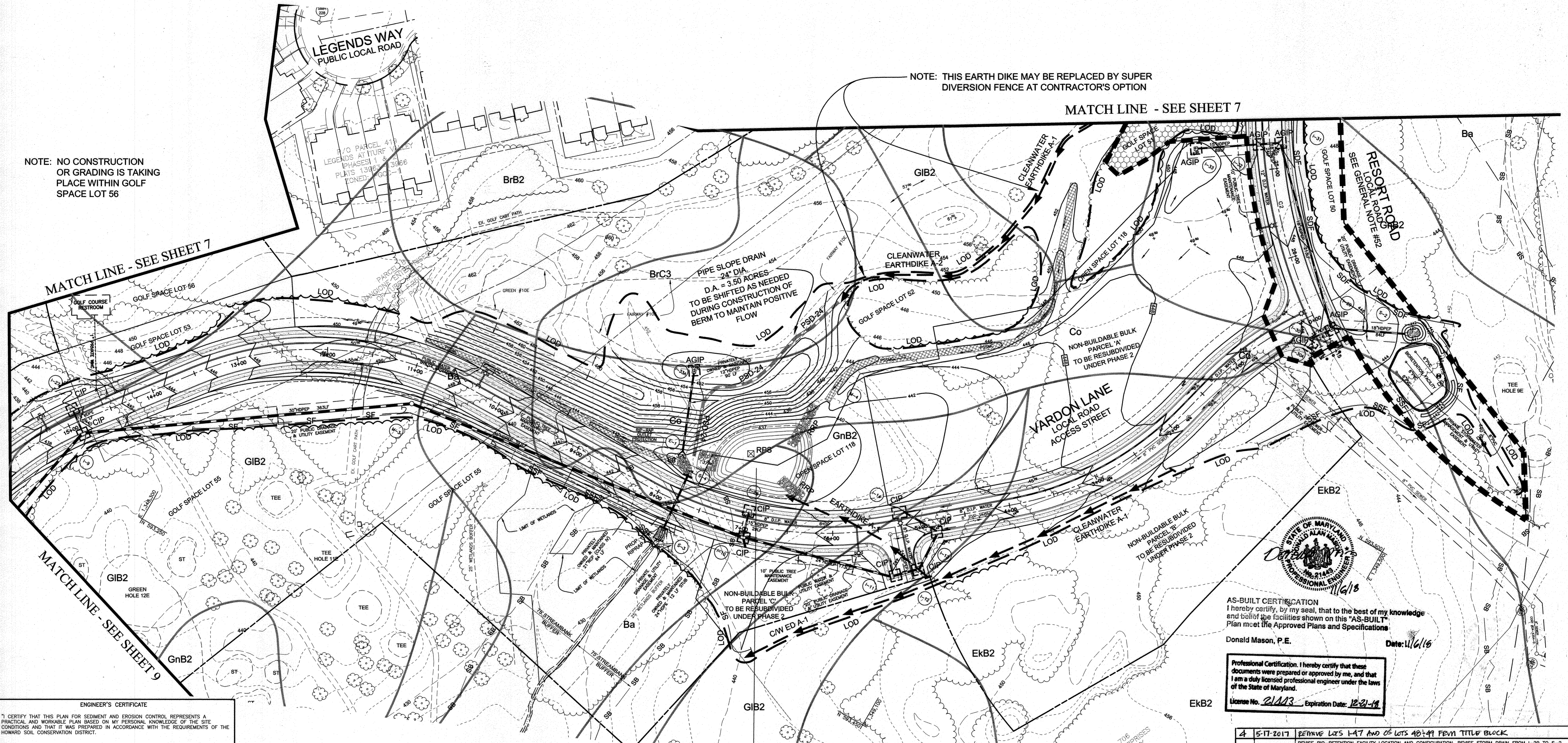
NOTE: NO CONSTRUCTION OR GRADING IS TAKING PLACE WITHIN GOLF SPACE LOT 56

NOTE: THIS EARTH DIKE MAY BE REPLACED BY SUPER DIVERSION FENCE AT CONTRACTOR'S OPTION

MATCH LINE - SEE SHEET 7

MATCH LINE - SEE SHEET 7

MATCH LINE - SEE SHEET 9



**ENGINEER'S CERTIFICATE**

I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*Donald Mason* 12/13/16  
ENGINEER DATE

**DEVELOPER'S CERTIFICATE**

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

*John R. Blanton* 1/3/17  
DEVELOPER DATE

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

*John R. Blanton* 1/3/17  
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

*John R. Blanton* 1/4/2017  
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*John R. Blanton* 1/23/17  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*John R. Blanton* 1/19/17  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

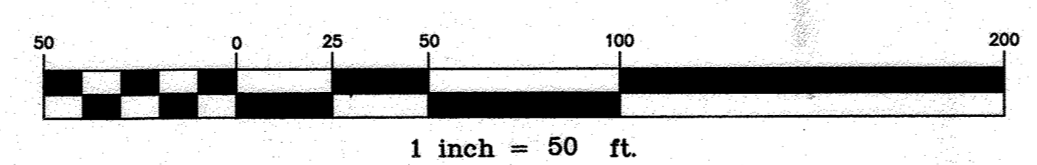
**LEGEND**

- EXISTING CONTOURS
- - - PROPOSED CONTOURS
- - - SOILS DELINEATION
- SOILS TYPE
- SF SILT FENCE
- SSF SUPER SILT FENCE
- LIMIT OF DISTURBANCE
- EXISTING TREELINE
- PROPOSED TREELINE
- PSD-24 EARTH DIKE/CLEANWATER DIVERSION DIKE
- PIPE SLOPE DRAIN
- PERMANENT SOIL STABILIZATION MATTING

**SEDIMENT TRAP #1 (ST-I)**

EXISTING DRAINAGE AREA: 7.40AC±  
PROPOSED DRAINAGE AREA: 3.39AC±  
WET STORAGE REQUIRED: 6,102CF  
WET STORAGE PROVIDED: 6,102CF  
DRY STORAGE REQUIRED: 6,102CF  
DRY STORAGE PROVIDED: 6,102CF  
WEIR LENGTH: 20.0'  
STORAGE DEPTH BELOW OUTLET: 6.0'  
CLEANOUT ELEVATION: 431.02  
EMBANKMENT HEIGHT: 2.0'  
TRAP BOTTOM: 430.00  
TRAP DIMENSIONS: 60'X45'  
WET STORAGE ELEVATION: 432.03  
CREST ELEVATION: 437.00

NOTE: AN ADDITIONAL 17,108.5CF OF STORAGE HAS BEEN PROVIDED FOR WITHIN THIS TRAP TO STORE THE TEMPORARY STORMWATER MANAGEMENT REQUIREMENTS. -SEE SHEET 6 FOR ULTIMATE GRADING



**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: 11/6/16

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. 21113 Expiration Date: 12-31-19

NO.	DATE	REVISION
4	5-17-2017	REMOVE LOTS L47 AND 05 LOTS 40-49 FROM TITLE BLOCK
3	12-12-2016	REVISE BIO-RETENTION FACILITY LOCATION AND CONFIGURATION. REVISE STORM DRAIN FROM I-29 TO S-2. ADD OPEN SPACE LOT 118. UPDATE TITLE BLOCK AND SHEET NUMBER. SHOW WHC TO GOLF RESTROOM.
2	10-6-2016	REVISE GRADING AROUND GOLF COURSE HOLE #10. ADD STORM DRAIN FROM I-33A TO E-1. ADD PIPE SLOPE DRAIN.
1	5-12-2016	REVISE VARDON LANE ALIGNMENT FROM RESORT ROAD TO PUCCHINI LANE. UPDATE MASS GRADING ACCORDINGLY. REVISE LOD TO SHOW MORE TREE SAVE AREA ON GOLF SPACE LOT 51 (NORTH OF VARDON LANE). REMOVE UNNECESSARY FUTURE LAYOUT. UPDATE TITLE BLOCK AND SHEET NUMBER.

**BENCHMARK ENGINEERING, INC.**

ENGINEERS & LAND SURVEYORS & PLANNERS

8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-6105 (F) 410-465-6644  
WWW.BE-CIVILENGINEERING.COM

*Donald Mason* 12-13-16  
PROFESSIONAL ENGINEER

**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 I SECTION 1: RESORT ROAD AND GOLF SPACE LOTS 50 & 51  
PHASE I SECTION 2: OPEN SPACE LOTS 117, & 118, GOLF SPACE LOTS 52-56 AND NON-BUILDABLE BULK PARCELS A, B, C, & D

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

**GRADING, SEDIMENT AND EROSION CONTROL PLAN**

DATE: DECEMBER 12, 2016 BEI PROJECT NO. 2726  
SCALE: AS SHOWN SHEET 8 OF 20

THIS SHEET REPLACES THE PREVIOUS SHEET 8 SIGNED ON 10-31-2016

J:\2726 Fairways at Turf Valley\dwg\c.dwg - Fairways\7026\_57-9.dwg, 12/13/2016 3:13:31 PM

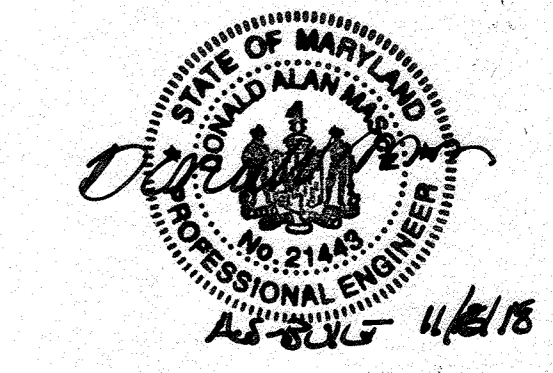




**LEGEND**

- EXISTING CONTOURS
- PROPOSED CONTOURS
- SOILS DELINEATION
- GnB2** SOILS TYPE
- SF SILT FENCE
- SUPER SILT FENCE
- SSF LIMIT OF DISTURBANCE
- EXISTING TREELINE
- PROPOSED TREELINE
- EARTH DIKE/CLEANWATER DIVERSION DIKE
- PSD-24 PIPE SLOPE DRAIN
- PERMANENT SOIL STABILIZATION MATTING

"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: 12-21-18

THIS SHEET REPLACES THE PREVIOUS SHEET 9 SIGNED ON 3-22-2010

**ENGINEER'S CERTIFICATE**

I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*C. Malagan* 5-22-17  
 ENGINEER DATE

**DEVELOPER'S CERTIFICATE**

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

*[Signature]* 5/22/17  
 DEVELOPER DATE

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

*[Signature]* 5/24/17  
 HOWARD SOIL CONSERVATION DISTRICT DATE

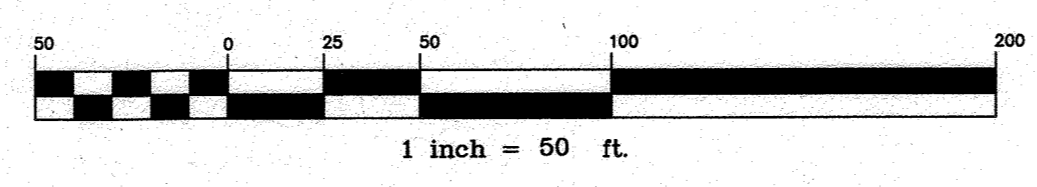
APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 4/14/2017  
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 6-22-17  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 6-20-17  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

**SEDIMENT BASIN #1**  
 SEE PROFILES AND DETAILS SHEETS 10, 11, 12

EXISTING DRAINAGE AREA: 6.75 AC±  
 PROPOSED DRAINAGE AREA: 8.75 AC±  
 PERMANENT POOL ELEVATION: 398.19  
 BASIN CLEANOUT ELEVATION: 397.90  
 BARREL DIAMETER: 15"  
 RISER DIAMETER: 21"  
 TRASH RACK DIAMETER: 30"  
 RISER CREST ELEVATION: 401.35  
 EMERGENCY SPILLWAY CREST: 402.50  
 DRAW-DOWN ORIFICE INVERT: 398.50  
 BASIN BOTTOM: 396.30  
 DESIGN HIGH WATER: 403.00



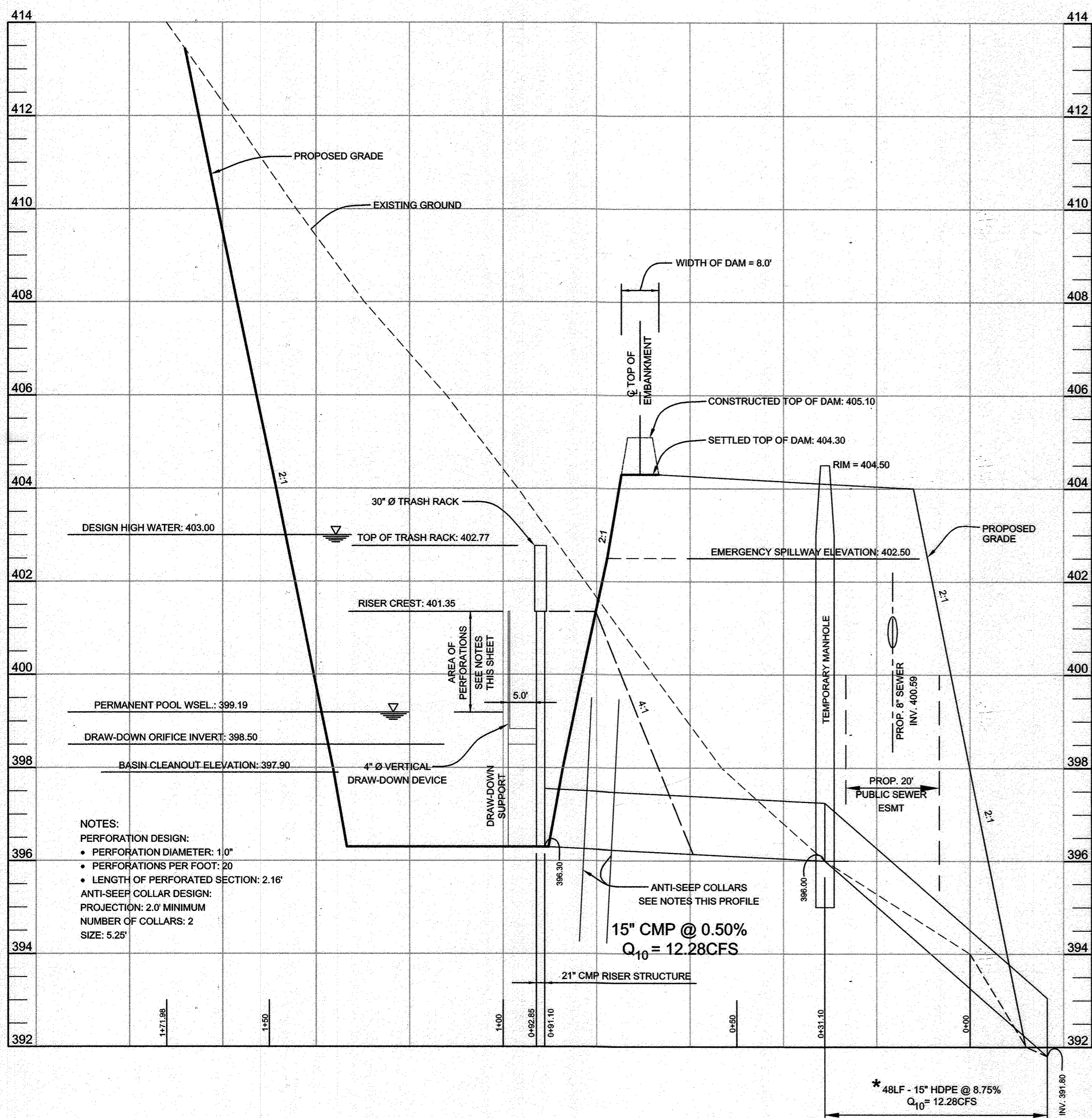
**BENCHMARK ENGINEERING, INC.**  
 ENGINEERS LAND SURVEYORS PLANNERS

8480 BALTIMORE NATIONAL PIKE SUITE 315 A ELICOTT CITY, MARYLAND 21043  
 (P) 410-465-6105 (F) 410-465-6644  
 WWW.BE-CIVILENGINEERING.COM

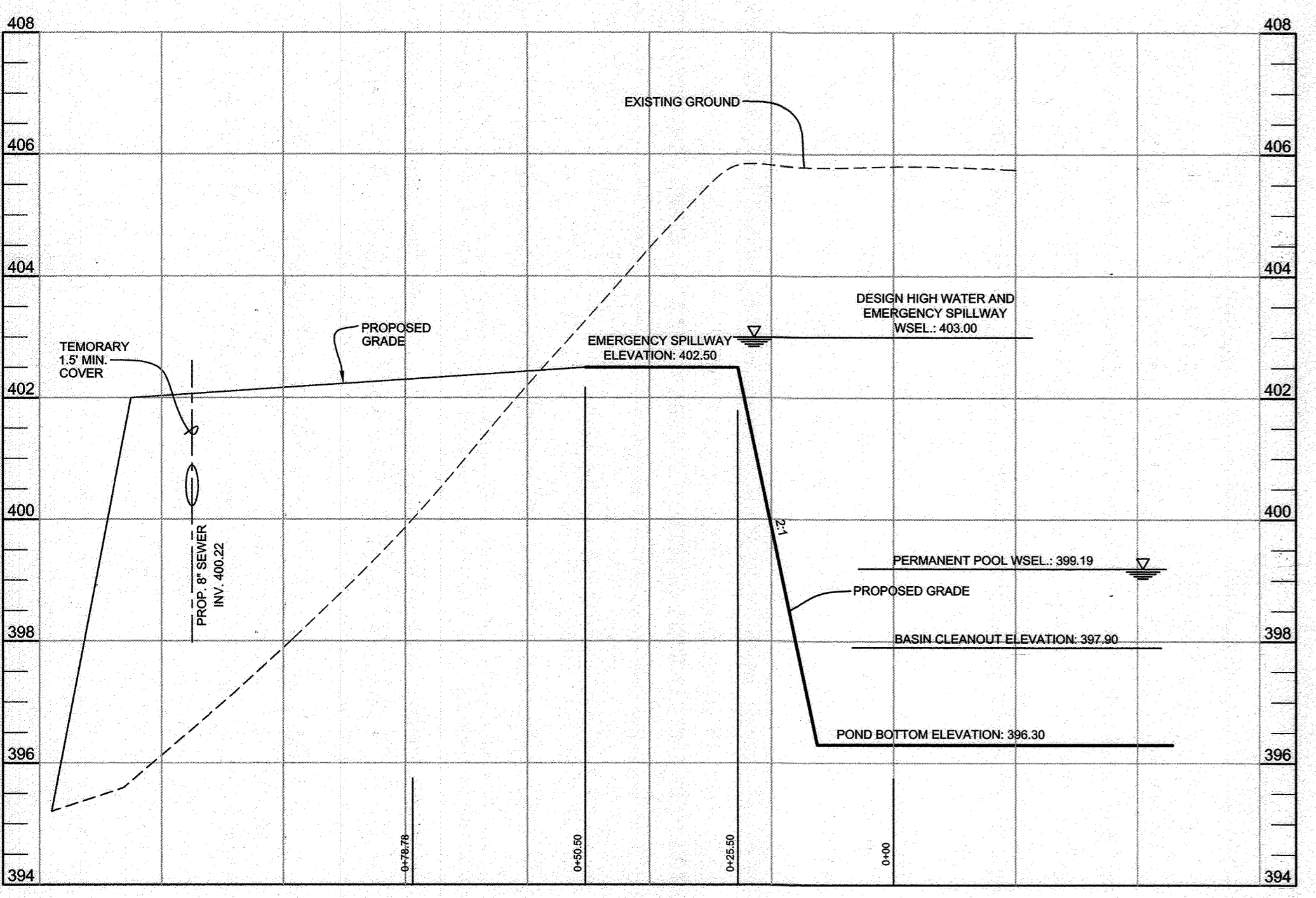
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 21443, Registration Date: 6-30-2017

3	5-17-2017	DELETE LOTS 1-47 AND RELOCATE TO PHASE 3 (F-10-086).
2	12-12-2016	ADD OS LOT 117. UPDATE TITLE BLOCK AND SHEET NUMBER
1	5-27-2015	DELETE S.D. FROM S-5 TO S-6. UPDATE TITLE BLOCK AND SHEET NUMBER
NO.	DATE	REVISION
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		
<b>FAIRWAYS AT TURF VALLEY</b> PHASE I SECTION 1: RESORT ROAD AND GOLF SPACE LOTS 50 & 51 PHASE I SECTION 2: OPEN SPACE LOTS 117, & 118 GOLF SPACE LOTS 52-56 AND NON-BUILDABLE BULK PARCELS A, B, C, & D		
TAX MAP: 16 - GRID: 16 - PARCEL: P/O 8 & 706 ZONED: PGCC (RESIDENTIAL SUBDISTRICT) ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND		
<b>GRADING, SEDIMENT AND EROSION CONTROL PLAN</b>		
DESIGN: DBT	DRAFT: DBT	DATE: MAY 17, 2017
SCALE: AS SHOWN	SHEET 9 OF 20	BEI PROJECT NO. 2726

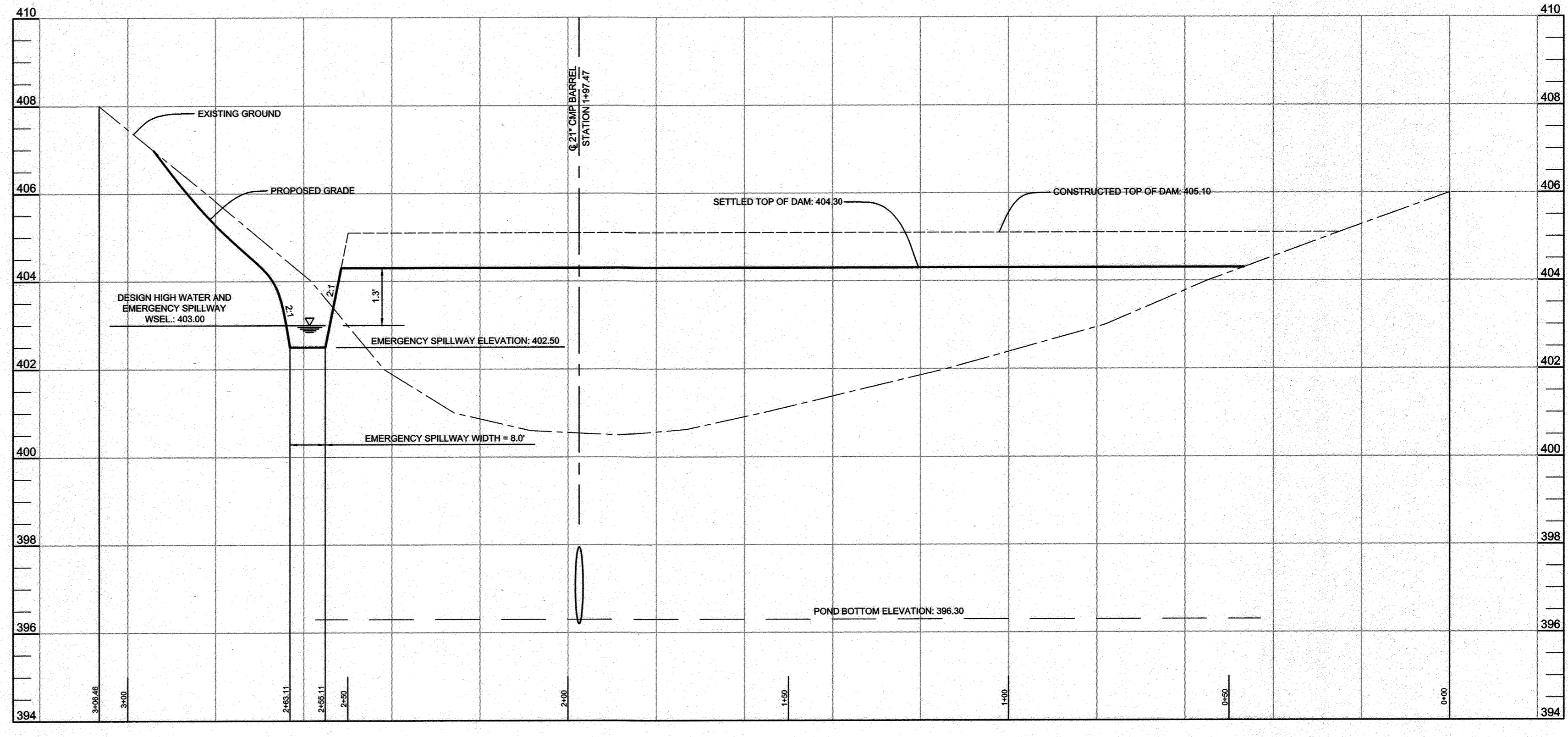




**SEDIMENT BASIN SECTION THROUGH PRINCIPAL SPILLWAY**  
SCALE: HORIZONTAL: 1"=20'  
VERTICAL: 1"=2'



**SEDIMENT BASIN SECTION THROUGH EMERGENCY SPILLWAY**  
SCALE: HORIZONTAL: 1"=20'  
VERTICAL: 1"=2'

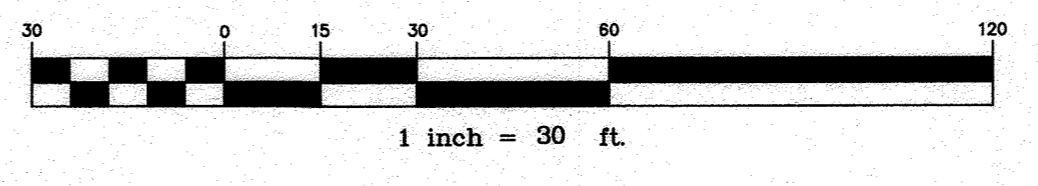
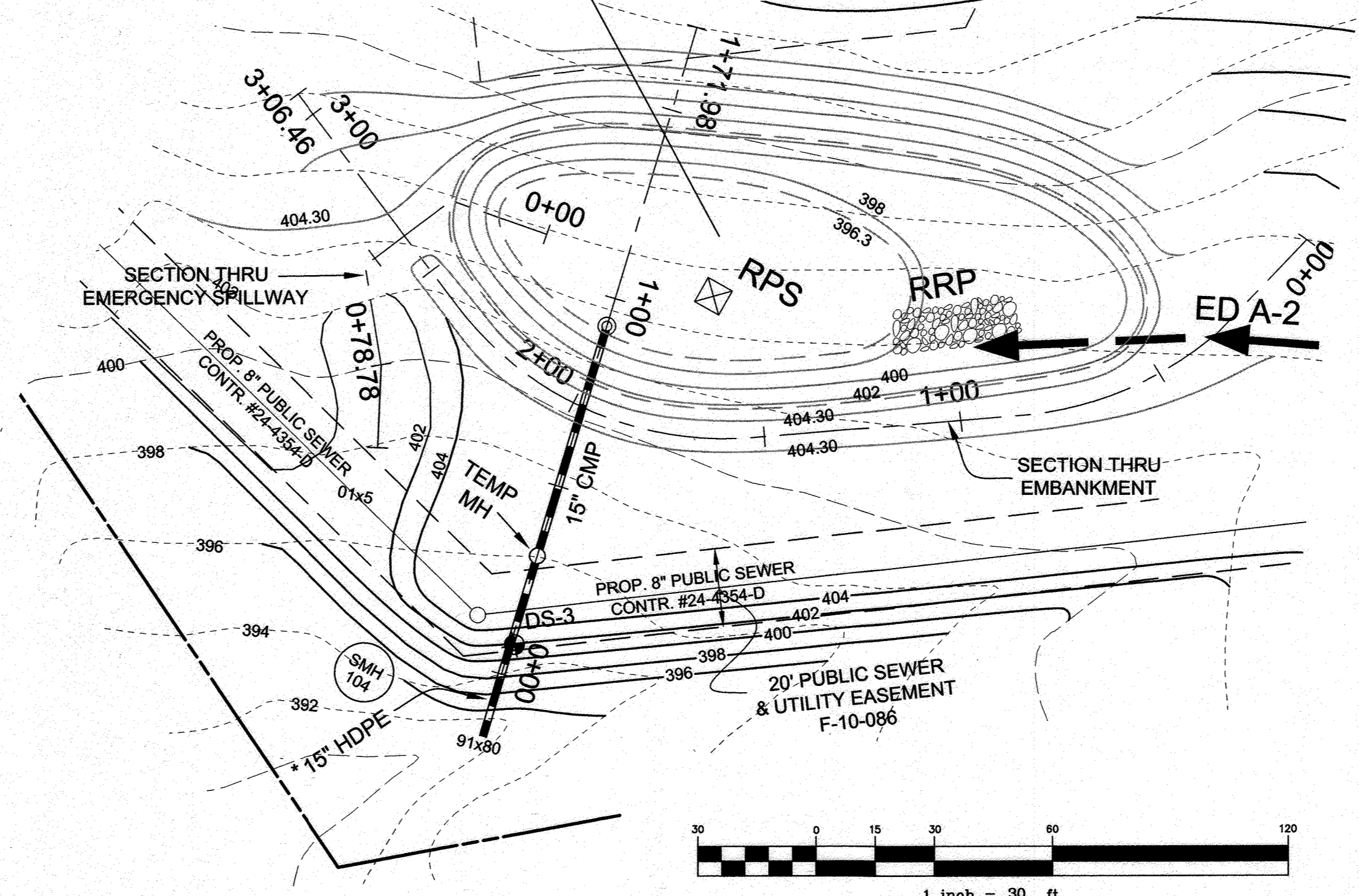


**SEDIMENT BASIN SECTION THROUGH EMBANKMENT**  
SCALE: HORIZONTAL: 1"=20'  
VERTICAL: 1"=2'

**\* NOTE:**  
UPON REMOVAL AND BACKFILL OF SEDIMENT BASIN, THE PORTION OF HDPE PIPE WITHIN THE SEWER EASEMENT IS TO BE FILLED WITH FLOWABLE FILL. PORTION OUTSIDE EASEMENT TO BE REMOVED.

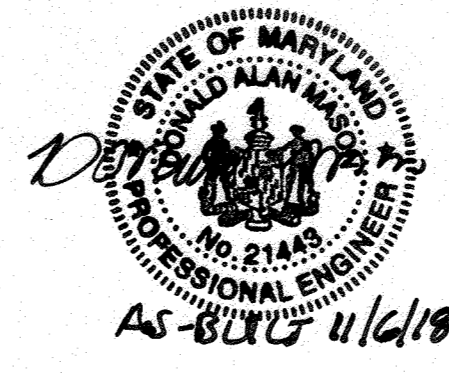
**SEDIMENT BASIN #1**

EXISTING DRAINAGE AREA: 6.75 AC+  
PROPOSED DRAINAGE AREA: 6.75 AC+  
PERMANENT POOL ELEVATION: 399.19  
BASIN CLEANOUT ELEVATION: 397.90  
BARREL DIAMETER: 15"  
RISER DIAMETER: 21"  
TRASH RACK DIAMETER: 30"  
RISER CREST ELEVATION: 401.35  
EMERGENCY SPILLWAY CREST: 402.50  
DRAW-DOWN ORIFICE INVERT: 398.50  
BASIN BOTTOM: 396.30  
DESIGN HIGH WATER: 403.00



**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: 12-21-19



**ENGINEER'S CERTIFICATE**  
I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.  
ENGINEER: *Cl Malagan* DATE: 5-22-17

**DEVELOPER'S CERTIFICATE**  
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC, ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.  
DEVELOPER: *[Signature]* DATE: 5/22/17

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
HOWARD SOIL CONSERVATION DISTRICT: *[Signature]* DATE: 5/20/17

APPROVED: DEPARTMENT OF PUBLIC WORKS  
CHIEF, BUREAU OF HIGHWAYS: *[Signature]* DATE: 6/14/2017

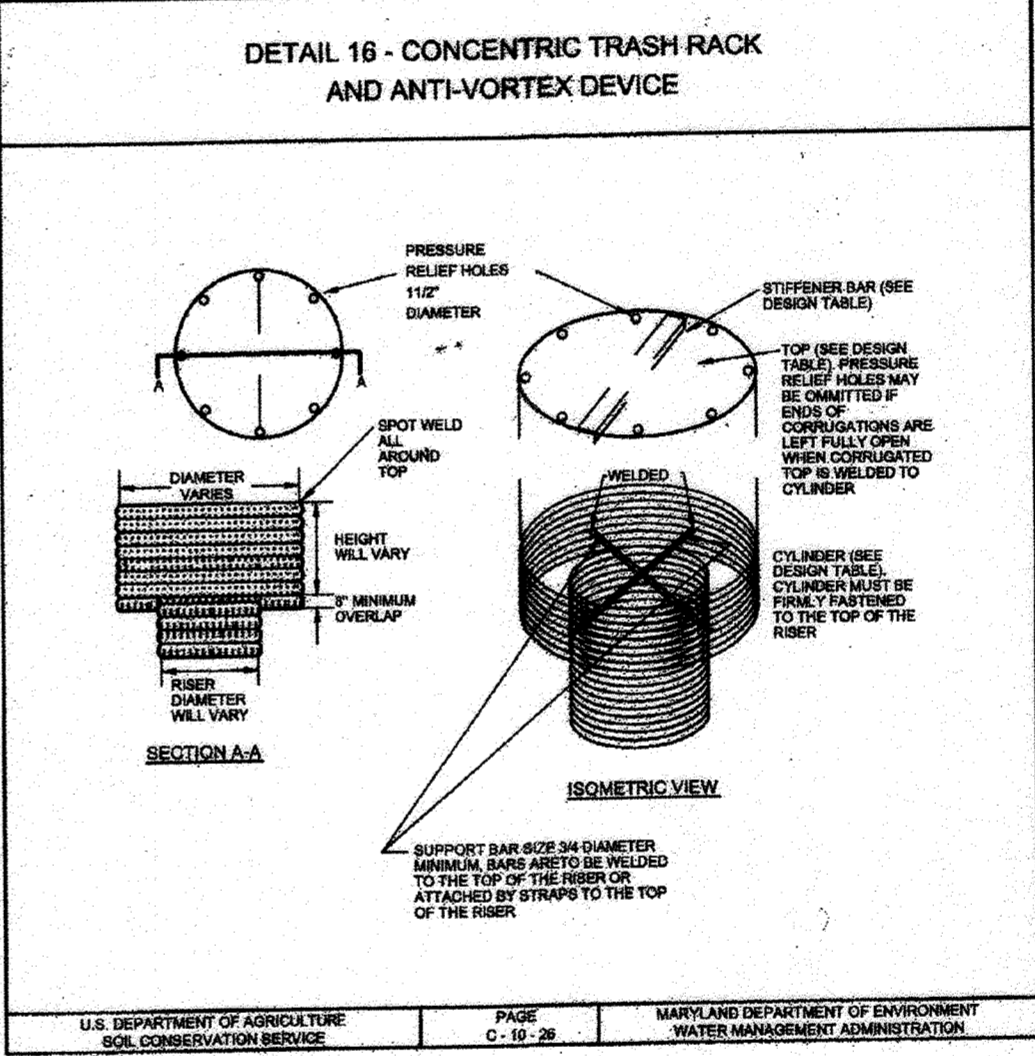
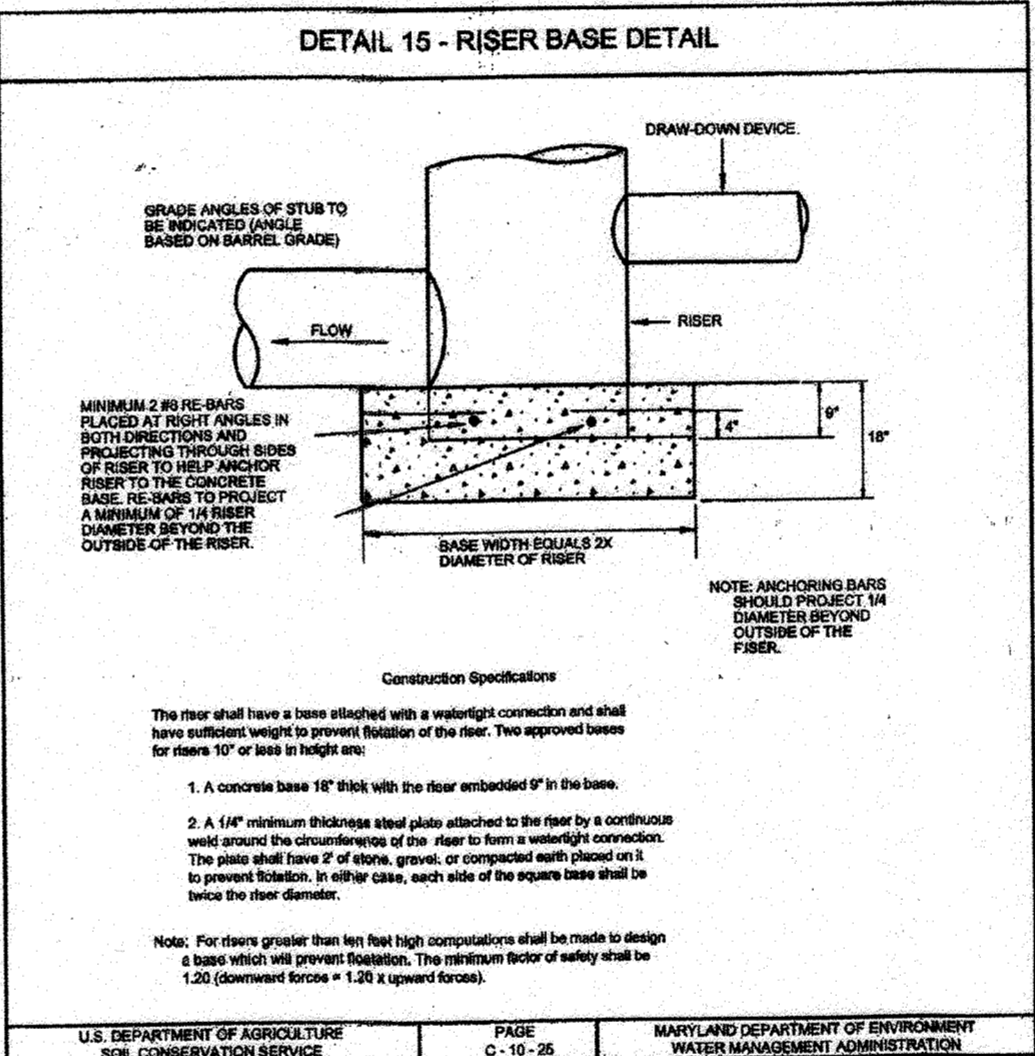
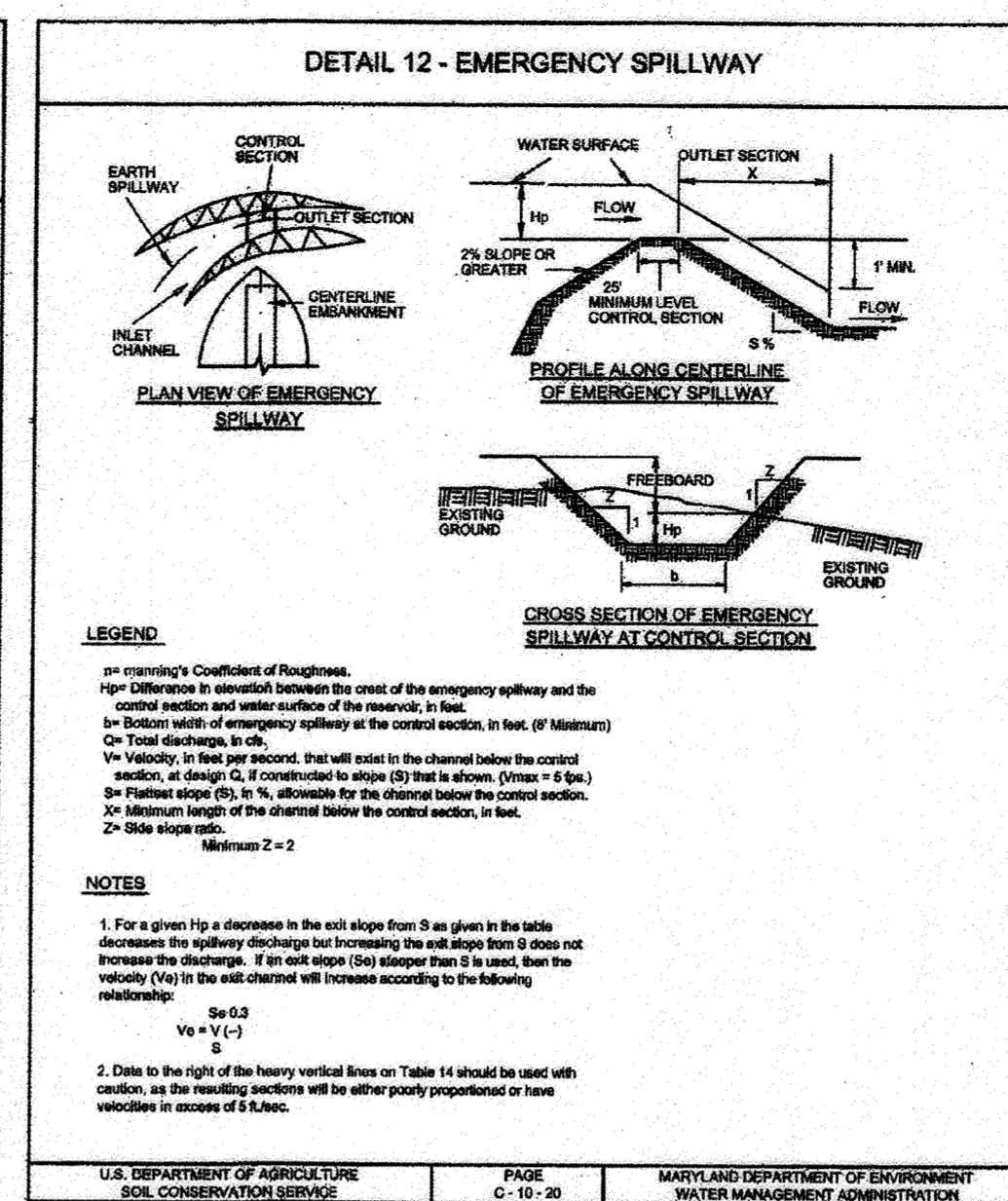
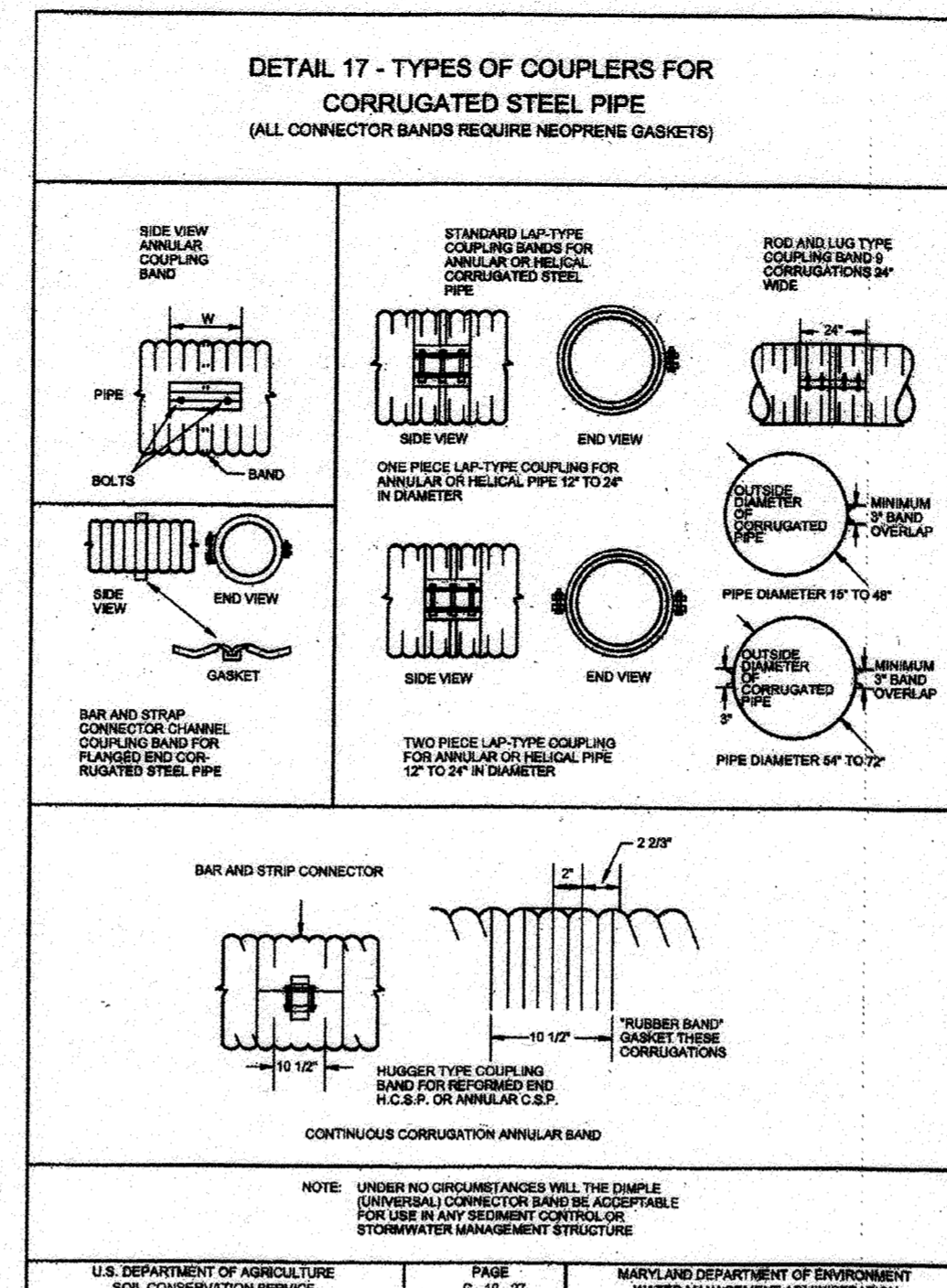
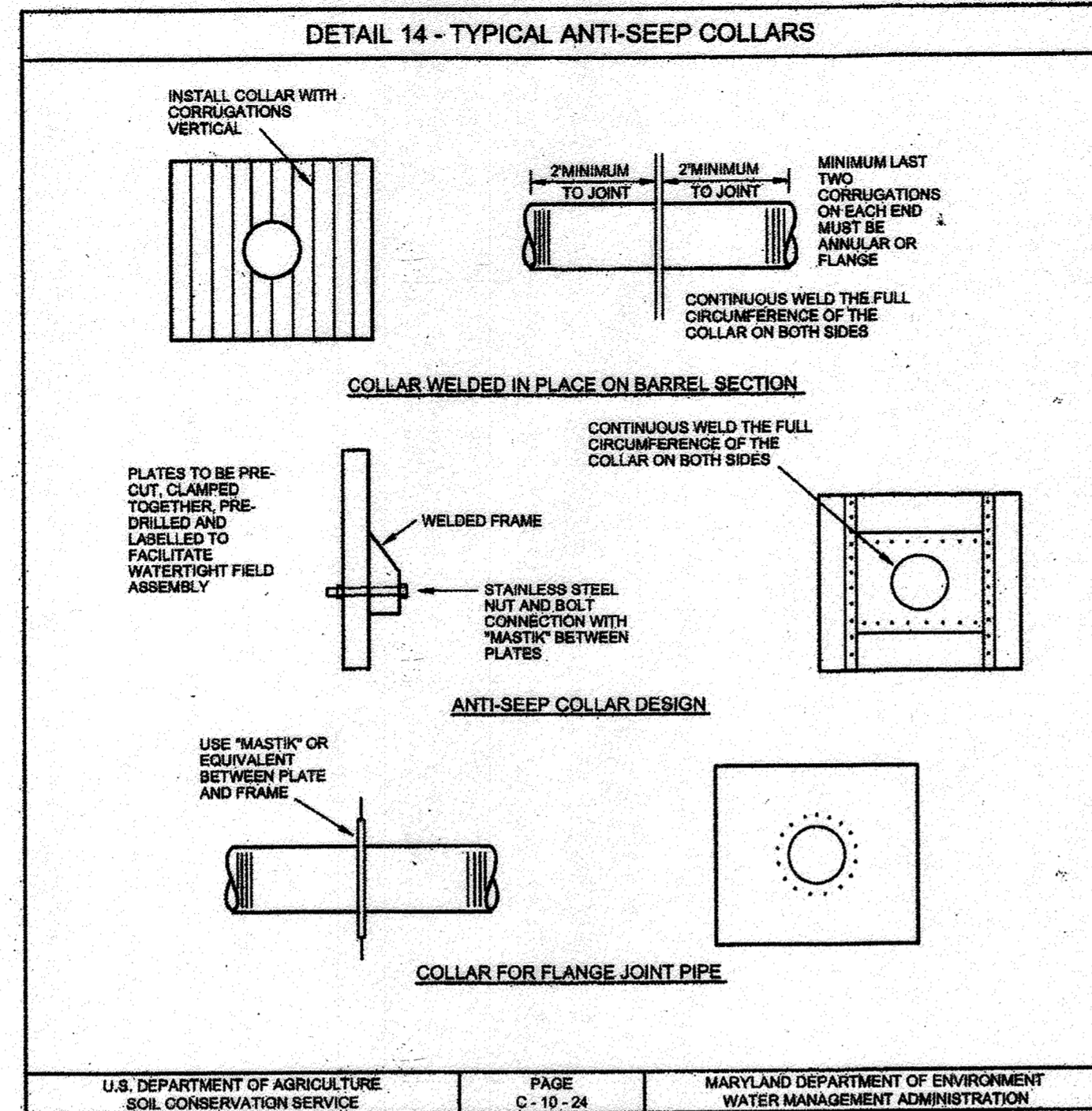
APPROVED: DEPARTMENT OF PLANNING AND ZONING  
CHIEF, DIVISION OF LAND DEVELOPMENT: *[Signature]* DATE: 6-22-17  
CHIEF, DEVELOPMENT ENGINEERING DIVISION: *[Signature]* DATE: 6-20-17

3	5-17-2017	REVISE SEDIMENT BASIN DETAILS PER HSCD APPROVAL ON 2-13-2017
2	12-12-2016	UPDATE TITLE BLOCK AND SHEET NO.
1	5-27-2016	UPDATE TITLE BLOCK AND SHEET NO.
NO.	DATE	REVISION
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. 20290, Expiration Date: 6-30-2017		
<b>BENCHMARK ENGINEERING, INC.</b> ENGINEERS LAND SURVEYORS PLANNERS 8480 BALTIMORE NATIONAL PIKE & SUITE 315A ELICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6844 WWW.BEI-CIVILENGINEERING.COM		
OWNER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400		FAIRWAYS AT TURF VALLEY PHASE 1 SECTION 1: RESORT ROAD AND GOLF SPACE LOTS 50 & 51 PHASE 1 SECTION 2: OPEN SPACE LOTS 117, & 118 GOLF SPACE LOTS 52-56 AND NON-BUILDABLE BULK PARCELS A, B, C, & D TAX MAP: 16 - GRID: 16 - PARCEL: P/O 8 & 706 ZONED: PGCC (RESIDENTIAL SUBDISTRICT) ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND
DEVELOPER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400		SEDIMENT BASIN PROFILES AND DETAILS
DESIGN: DBT	DRAFT: DBT	DATE: MAY 17, 2017 SCALE: AS SHOWN SHEET 11 OF 20

10.0 STANDARDS AND SPECIFICATIONS FOR SEDIMENT BASINS

C-10-6 & C-10-7: CONSTRUCTION SPECIFICATIONS

- Site Preparation:** Perimeter sediment control devices must be installed prior to clearing and grubbing. Areas where the embankment is to be placed shall be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots or other objectionable material. The pool area shall not be cleared until completion of the dam embankment unless the pool area is to be used for borrow. In order to facilitate clean-out and restoration, the pool area (measured at the top of the pipe spillway) shall be cleared of all brush, trees, and other objectionable materials.
- Cut-off Trench:** A cut-off trench shall be excavated along the centerline of earth fill embankments. The minimum depth shall be four feet. The cut-off trench shall extend up both abutments to the riser crest elevation. The minimum bottom width shall be two feet, but wide enough to permit operation of excavation and compaction equipment. The side slopes shall be no steeper than 1:1. Compaction requirements shall be the same as those for the embankment. The trench shall be dewatered during the backfilling-compaction operation. For dewatering see Section D.
- Embankment:** The fill material shall be taken from approved areas shown on the plans. It shall be clean mineral soil free of roots, woody vegetation, oversized stones, rocks, or other objectionable material. Relatively pervious materials such as sand or gravel (Unified Soil Classes GW, GP, SW & SP) or organic materials (Unified Soil Classes OL and OH) shall not be placed in the embankment. Areas on which fill is to be placed shall be scarified prior to placement of fill. The fill material shall contain sufficient moisture so that it can be formed by hand into a ball without crumbling. If water can be squeezed out of the ball, it is too wet for proper compaction. Fill material shall be placed in six-inch to eight-inch thick continuous lifts over the entire length of the fill. Compaction shall be obtained by routing and hauling the construction equipment over the fill so that the entire surface of each layer of the fill is traversed by at least one wheel or tread track of the equipment or by the use of a compactor. The embankment shall be constructed to an elevation 10 percent higher than the design height to allow for settlement.
- Principal Spillway:** Steel risers shall be securely attached to the barrel or barrel stub by welding the full circumference making a watertight structural connection. Concrete risers shall be poured with the principal spillway in place or precast with voids around the principal spillway filled with concrete or strik proof grout for watertight connection. The barrel stub must be attached to the riser at the same percent (angle) of grade as the outlet conduit. The connection between the riser and the riser base shall be watertight. All connection between barrel sections must be achieved by approved watertight band assemblies. The barrel and riser shall be placed on a firm, smooth foundation of impervious soil as the embankment is constructed. Breaching the embankment to install the barrel is unacceptable. Pervious materials such as sand, gravel, or crushed stone shall not be used as backfill around the pipe or anti-seep collars. The fill material around the pipe spillway shall be placed in four inch lifts and hand compacted under and around the pipe to at least the same density as the adjacent embankment. A depth of 1.5 times the pipe diameter (min.) shall be backfilled over the principal spillway and hand compacted before crossing it with construction equipment.
- Emergency Spillway:** The emergency spillway shall be installed in undisturbed ground. The achievement of planned elevations, grades, design width, entrance and exit channel slopes are critical to the successful operation of the emergency spillway and must be constructed within a tolerance of +/- 0.2 feet.
- Vegetative Treatment:** Stabilize the embankment in accordance with the appropriate vegetative Standard and Specifications immediately following construction. In no case shall the embankment remain unstabilized for more than seven (7) days. Once constructed, the top and outside face of the embankment shall be stabilized with seed and mulch. The remainder of the interior slopes should be stabilized (one time) with seed and mulch upon basin completion and monitored and maintained erosion free during the life of the basin.
- Safety:** Local requirements concerning fencing and signs shall be met, warning the public of hazards of soft sediment and floodwater.
- Maintenance:** Repair all damage caused by soil erosion and construction equipment at or before the end of each working day. Sediment shall be removed from the basin when it reaches the specified distance below the top of the riser as shown on the riser. This sediment shall be placed in such a manner that it will not erode from the site. The sediment shall not be deposited downstream from the embankment, adjacent to a stream or floodplain. Disposal area must be stabilized.
- Final Disposal:** When temporary structures have served their intended purpose and the contributing drainage area has been properly stabilized, the embankment and resulting sediment deposits are to be leveled or otherwise disposed of in accordance with the approved sediment control plan. The proposed use of a sediment basin site will often dictate final disposition of the basin and any sediment contained therein. If the site is scheduled for future construction, then the basin material and trapped sediments must be removed and safely disposed of and the basin shall be backfilled with a structural fill. When the basin area is to remain open space, the pond may be pumped dry (using methods in Section D - Dewatering), graded, and back filled.
- Conversion to Stormwater Management Structure:** After the permanent stabilization of all disturbed contributory drainage areas, temporary sediment basins, if initially built and certified to meet permanent standards, may be converted to permanent stormwater management structures. To convert the basin from temporary to permanent use, the outlet structure must be modified in accordance with approved stormwater management design plans. Additional grading may also be necessary to provide the required storage volume in the basin. Conversion can only take place after all disturbed areas have been permanently stabilized to the satisfaction of the inspection authority and storm drains have been flushed.



**ENGINEER'S CERTIFICATE**

I, CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*CE Malayan* 5-22-17  
ENGINEER DATE

**DEVELOPER'S CERTIFICATE**

I, WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

*Jordan* 5/22/17  
DEVELOPER DATE

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

*John R. Blanton* 5/30/17  
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

*McCombs* 6/16/2017  
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*V. J. DeLoach* 6-22-17  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*Chel* 6-22-17  
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: 12-31-19

AS-BUILT 11-6-18

NO.	DATE	REVISION
3	5-17-2017	REMOVE SWM OPEN CHANNEL AND DRY SWALE PROFILES, NOTES AND DETAILS. UPDATE TITLE BLOCK.
2	12-12-2016	UPDATE TITLE BLOCK AND SHEET NUMBER.
1	5-27-2016	UPDATE TITLE BLOCK AND SHEET NUMBER.

**BENCHMARK ENGINEERING, INC.**  
ENGINEERS LAND SURVEYORS PLANNERS  
6480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043  
(P) 410-485-8105 (F) 410-485-8044  
WWW.BE-CIVILENGINEERING.COM

**FAIRWAYS AT TURF VALLEY**  
PHASE 1 SECTION 1: RESORT ROAD AND GOLF SPACE LOTS 50 & 51  
PHASE 1 SECTION 2: OPEN SPACE LOTS 117, & 118  
GOLF SPACE LOTS 52-56 AND  
NON-BUILDABLE BULK PARCELS A, B, C, & D

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

REVISOR  
SEDIMENT BASIN NOTES AND DETAILS

DATE: MAY 17, 2017 BEI PROJECT NO. 2726  
DESIGN: DBT DRAFT: DBT SCALE: AS SHOWN SHEET 12 OF 20

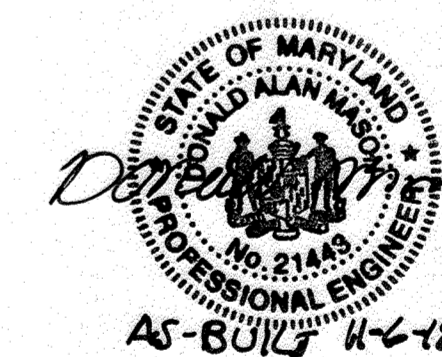
THIS SHEET REPLACES THE PREVIOUS SHEET 12 SIGNED ON 3-22-2010

AS-BUILT F-07-158

SOILS LEGEND		
SYMBOL	NAME / DESCRIPTION	GROUP
Ba	BAILE SILT LOAM	D
BrB2	BRANDYWINE LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
BrC3	BRANDYWINE LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	C
Cc	CODORIUS SILT LOAM	C
CuB	COMIUS SILT LOAM, LOCAL ALLUVIUM, 3 TO 8 PERCENT SLOPES	B
ElB2	ELIOAK SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
ElC3	ELIOAK SILTY CLAY LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	B
GnB2	GLENELG LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
GnC3	GLENELG LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	B
GnB2	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
MIA	MANOR LOAM, 0 TO 3 PERCENT SLOPES	B
MEB2	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-34 THRU I-47 WILL BE CONSTRUCTED UNDER FAIRWAYS AT TURF VALLEY, PHASE 2.

"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: 12-21-16

NO.	DATE	REVISION
4	5-17-2017	REMOVE LOTS 1-47 AND OS LOTS 48149 FROM TITLE BLOCK
3	12-12-2016	UPDATE TITLE BLOCK AND SHEET NUMBER
2	10-6-2016	REVISE GOLF COURSE GRADING, ADD STORM DRAIN FROM I-33A TO E-1. SHOW DRAINAGE AREA TO I-33A.
1	5-12-2016	REVISE VARDON LANE ALIGNMENT AND LOT CONFIGURATION BETWEEN PUCCINI LANE AND RESORT ROAD. REVISE GRADES AND DRAINAGE AREAS ACCORDINGLY. UPDATE A, C, AND P NUMBERS WHERE NECESSARY.

**BENCHMARK**  
ENGINEERS & LAND SURVEYORS & PLANNERS  
ENGINEERING, INC.  
8480 BALTIMORE NATIONAL PIKE SUITE 315 ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-8105 (F) 410-465-8644  
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

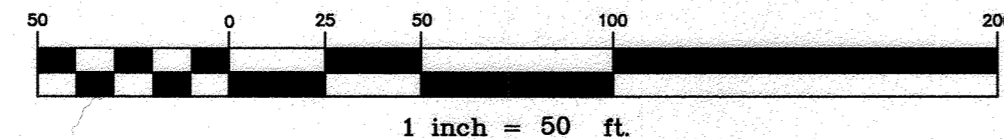
OWNER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400		FAIRWAYS AT TURF VALLEY PHASE 1 SECTION 1: RESORT ROAD AND GOLF SPACE LOTS 50 & 51 PHASE 1 SECTION 2: OPEN SPACE LOTS 117 & 118, GOLF SPACE LOTS 52-56 AND NON-BUILDABLE BULK PARCELS A, B, C, & D	
DEVELOPER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400		TAX MAP: 16 - GRID: 16 - PARCEL: P/O B & 706 ZONED: PGCC (RESIDENTIAL SUBDISTRICT) ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND	
DATE: OCTOBER 6, 2016		BEI PROJECT NO. 2726	
DESIGN: DBT	DRAFT: DBT	SCALE: AS SHOWN	SHEET 13 OF 20

THIS SHEET REPLACES THE PREVIOUS SHEET 13 SIGNED ON 6-14-2016

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 10/25/2016  
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 10-31-16  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 10-27-16  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

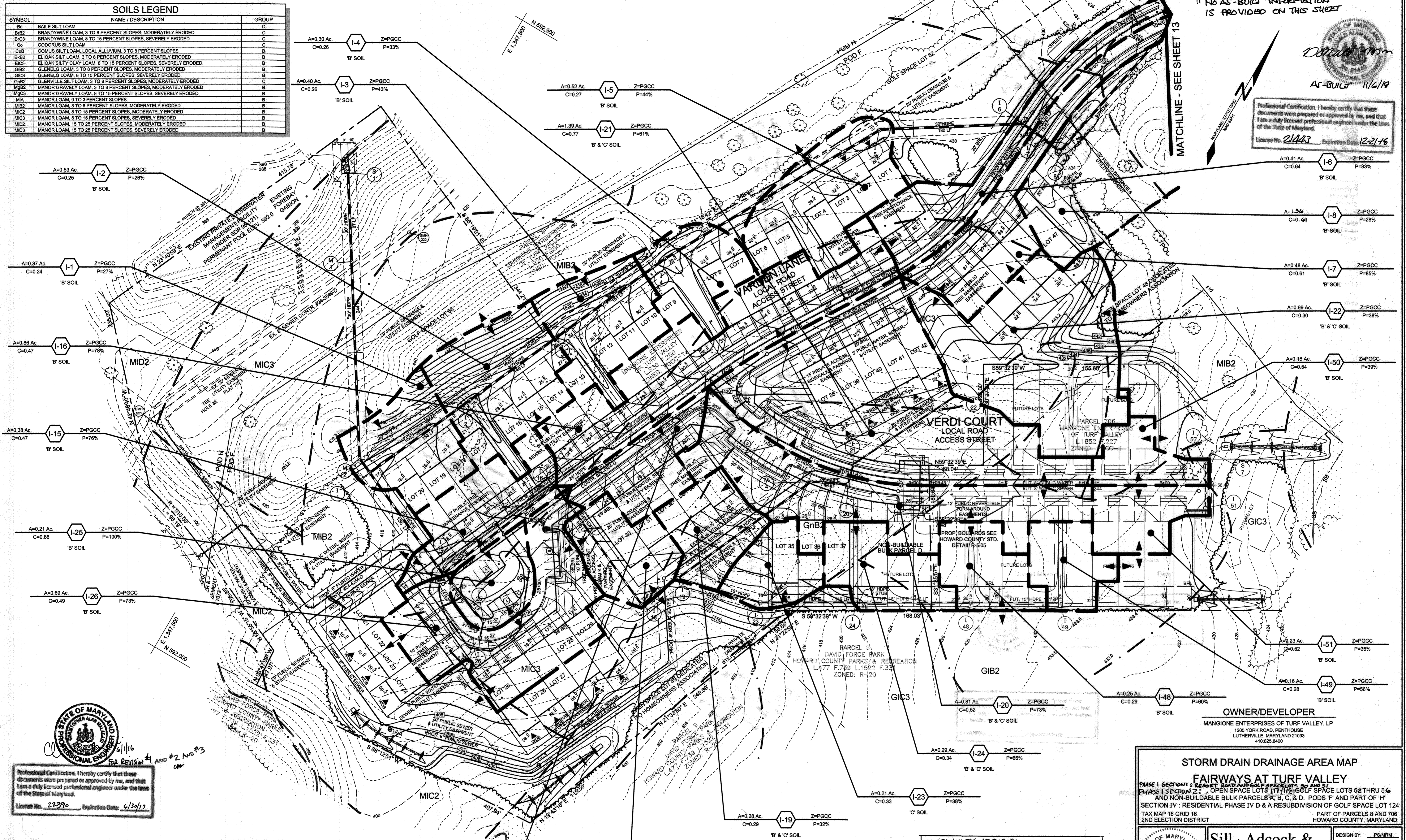


SYMBOL	NAME / DESCRIPTION	GROUP
Ba	BAILE SILT LOAM	D
Bb2	BRANDYWINE LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
Bc3	BRANDYWINE LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	C
Cc	CODORUS SILT LOAM	C
CuB	COMUS SILT LOAM, LOCAL ALLUVIUM, 3 TO 8 PERCENT SLOPES	B
EkB2	ELIOAK SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
Ec3	ELIOAK SILTY CLAY LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	B
GcB2	GLENELG LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
Gc3	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, SEVERELY ERODED	B
MgC3	MANOR GRAVELLY LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	B
MIA	MANOR LOAM, 0 TO 3 PERCENT SLOPES	B
MB2	MANOR LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
MC2	MANOR LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED	B
MC3	MANOR LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED	B
MD2	MANOR LOAM, 15 TO 25 PERCENT SLOPES, MODERATELY ERODED	B
MD3	MANOR LOAM, 15 TO 25 PERCENT SLOPES, SEVERELY ERODED	B

"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: 12-21-16



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. 22390 Expiration Date: 4/30/17

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 Chief, Division of Land Development  
 DATE: 3-22-10

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 Chief, Bureau of Highways  
 DATE: 3-16-10

A=0.28 Ac. C=0.68 I-17 Z=PGCC P=78% 'B' SOIL

A=0.28 Ac. C=0.25 I-18 Z=PGCC P=32% 'B' & 'C' SOIL

NO.	DATE	REVISION
3	5-17-2017	REMOVE LOTS 1-17 AND 65 LOTS 48-49 FROM TITLE BLOCK
2	12-12-2016	UPDATE TITLE BLOCK AND SHEET NUMBER
1	5-27-16	UPDATE TITLE BLOCK & SHEET NUMBER. DELETE 55 TO 56

NOTE: INLETS 15 THRU 26 AND INLETS 1-48 THRU I-51 WILL BE CONSTRUCTED UNDER FAIRWAYS AT TURF VALLEY, PHASE III (F-10-086)

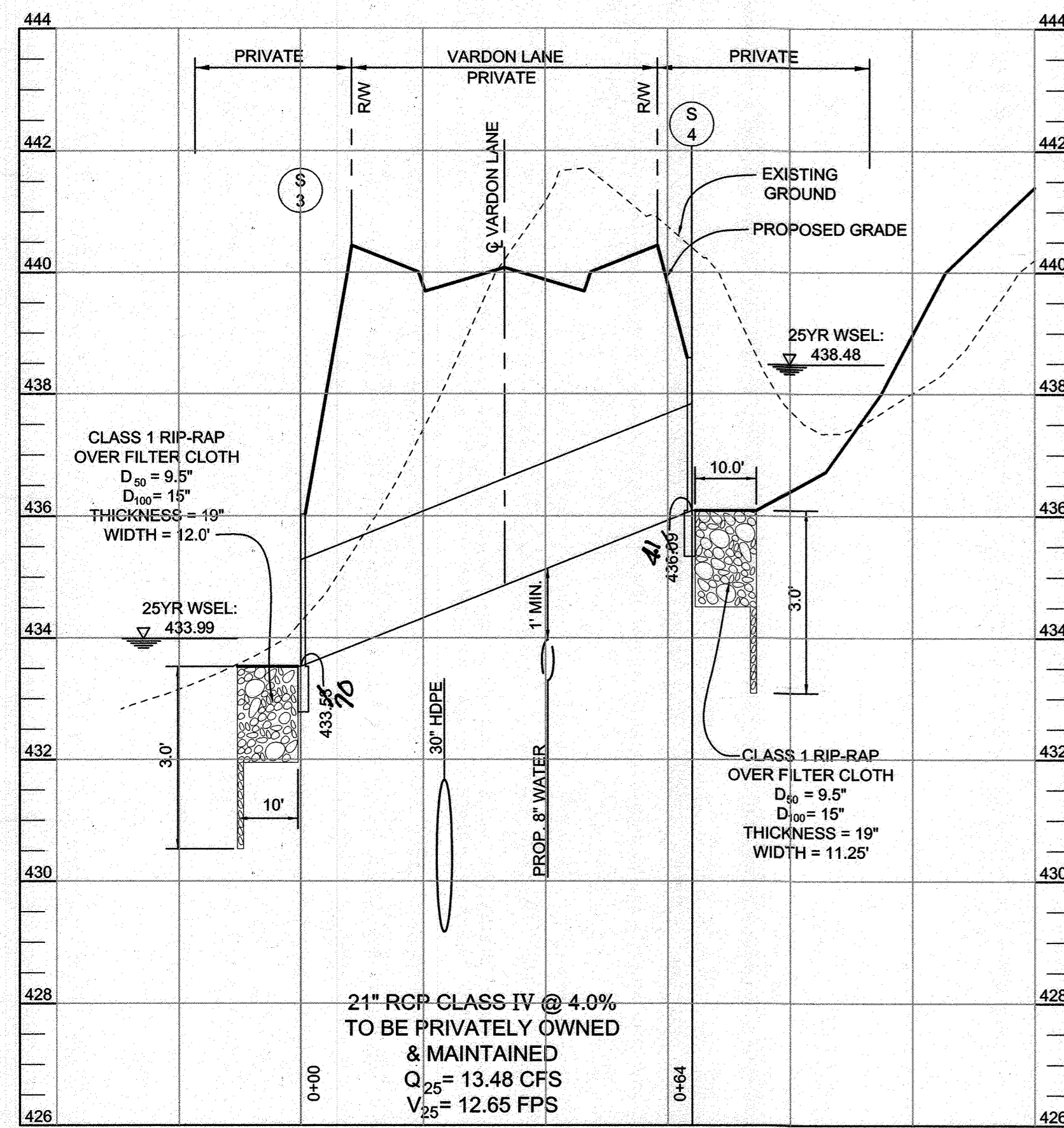
STORM DRAIN DRAINAGE AREA MAP  
 FAIRWAYS AT TURF VALLEY

PHASE I SECTION I: RESORT ROAD AND GOLF SPACE LOTS 50 AND 51  
 PHASE I SECTION 2: OPEN SPACE LOTS 17 THRU 26, GOLF SPACE LOTS 52 THRU 56 AND NON-BUILDABLE BULK PARCELS A, B, C, & D. PODS F' AND PART OF 'H'  
 SECTION IV: RESIDENTIAL PHASE IV D & A RESUBDIVISION OF GOLF SPACE LOT 124  
 TAX MAP 16 GRID 16 PART OF PARCELS 8 AND 708 HOWARD COUNTY, MARYLAND  
 2ND ELECTION DISTRICT

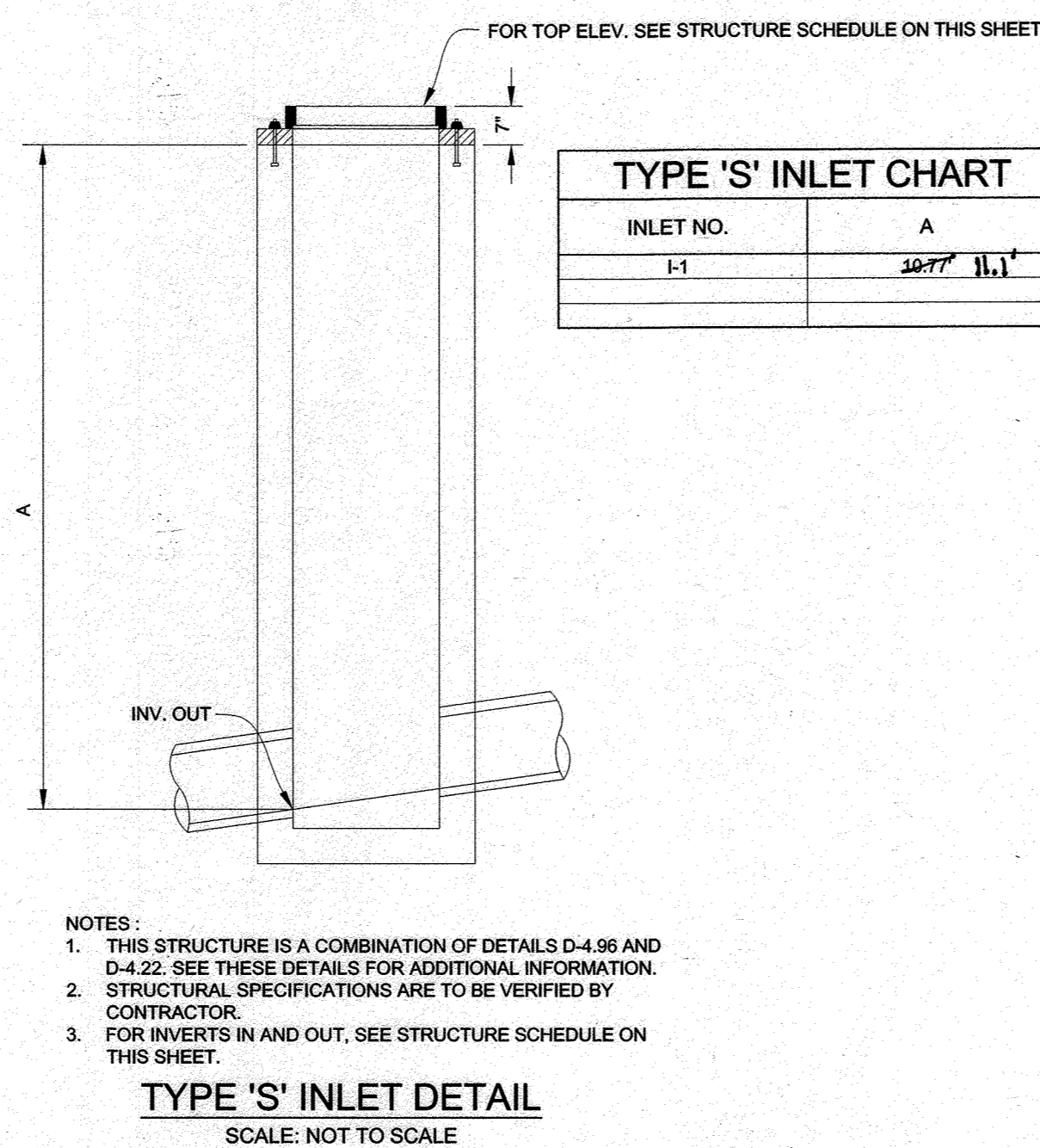
OWNER/DEVELOPER  
 MANGIONE ENTERPRISES OF TURF VALLEY, LP  
 1205 YORK ROAD, PENTHOUSE  
 LUTHERVILLE, MARYLAND 21093  
 410.825.8400

DESIGN BY: PSMRM  
 DRAWN BY: PSMRM  
 CHECKED BY: PS  
 SCALE: 1" = 50'  
 DATE: FEBRUARY 22, 2010  
 PROJECT #: 05-025  
 SHEET #: 14 of 20

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

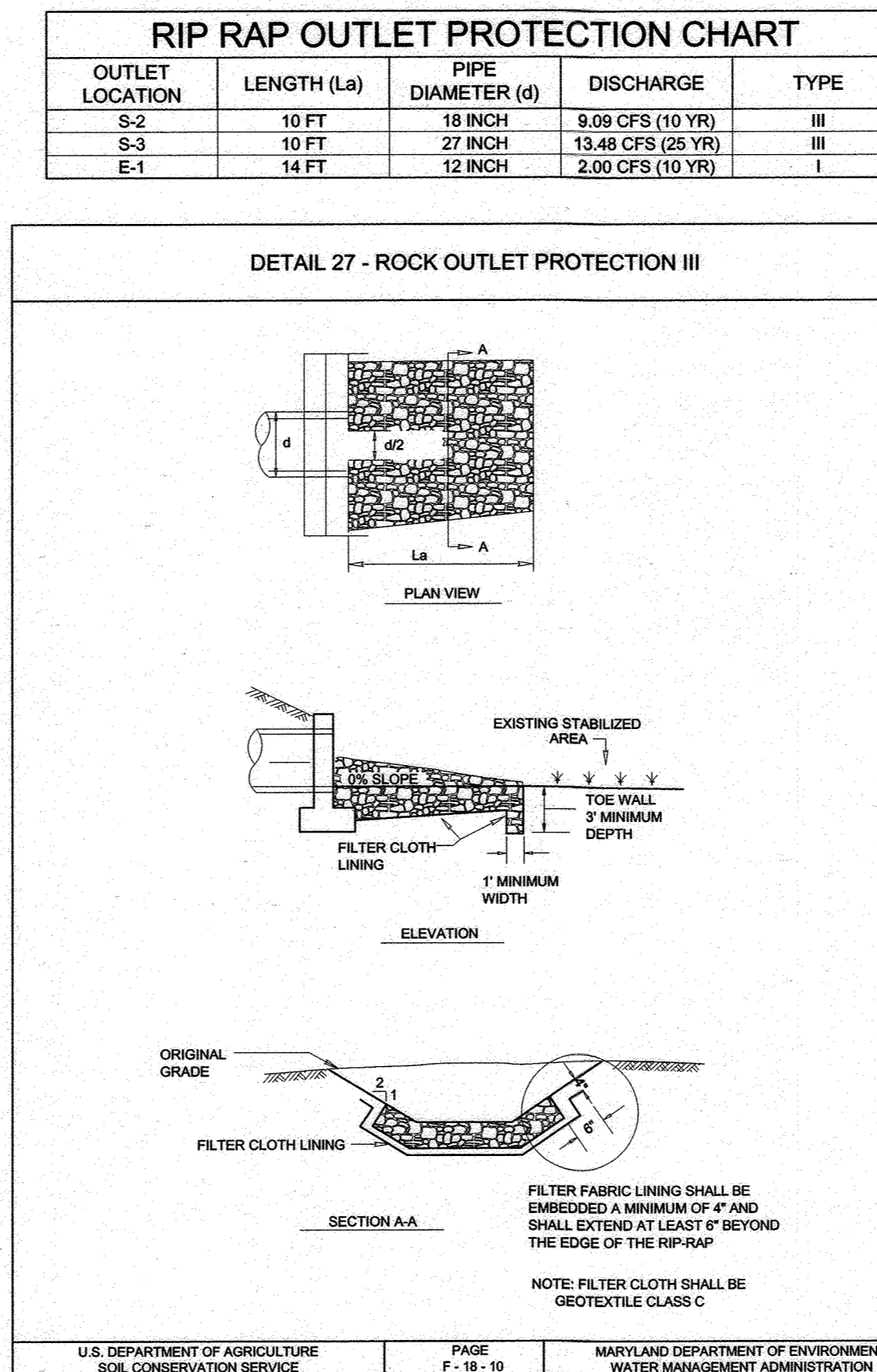


CULVERT PROFILE STATION 7+77.58 (P1S2)  
SCALE: 1" = 20' HORIZ., 1" = 2' VERT.



NOTES:  
1. THIS STRUCTURE IS A COMBINATION OF DETAILS D-4-86 AND D-4-22. SEE THESE DETAILS FOR ADDITIONAL INFORMATION.  
2. STRUCTURAL SPECIFICATIONS ARE TO BE VERIFIED BY CONTRACTOR.  
3. FOR INVERTS IN AND OUT, SEE STRUCTURE SCHEDULE ON THIS SHEET.

TYPE 'S' INLET DETAIL  
SCALE: NOT TO SCALE



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE 18-10 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

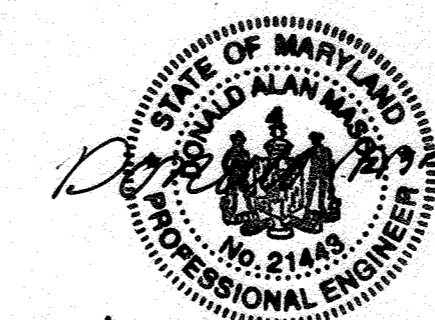
STRUCTURE SCHEDULE						
NO.	TYPE & OWNERSHIP	LOCATION	TOP ELEV.	INV. IN.	INV. OUT.	REMARKS PHASE
I-1	MODIFIED MH (NOTE 7) PUBLIC	N 592,321.4 E 1,347,620.6	417.00	406.25	406.25	G-5.13 P1S2
I-2	MODIFIED MH (NOTE 7) PUBLIC	N 592,461.5 E 1,347,682.1	418.00	410.20	410.20	G-5.13 P1S2
I-3	MODIFIED MH (NOTE 7) PUBLIC	N 592,597.0 E 1,347,741.5	423.00	414.00	414.00	G-5.13 P1S2
I-4	MODIFIED MH (NOTE 7) PUBLIC	N 592,735.7 E 1,347,802.4	429.00	419.00	419.00	G-5.13 P1S2
I-5	MODIFIED MH (NOTE 7) PUBLIC	N 593,007.0 E 1,347,950.5	435.00	423.00	423.00	G-5.13 P1S2
I-6	TYPE 'A-5' INLET (3.0' width) PUBLIC	Q STA. 17+08.0 - 14.7' RIGHT	434.30	424.00	424.00	D-4.02 P1S2
I-7	TYPE 'A-5' INLET (3.0' width) PUBLIC	Q STA. 17+08.0 - 14.7' LEFT	434.30	424.00	424.00	D-4.02 P1S2
I-8	MODIFIED MH (NOTE 7) PUBLIC	N 593,096.3 E 1,348,157.0	439.00	424.00	424.00	G-5.13 P1S2
I-9	TYPE 'A-5' INLET (4.0' width) PUBLIC	Q STA. 14+89.0 - 14.7' LEFT	440.00	436.00	436.00	D-4.02 P1S2
I-10	TYPE 'A-5' INLET (4.0' width) PUBLIC	Q STA. 6+96.2 - 14.7' LEFT	439.00	429.00	429.00	D-4.01 P1S2
I-11	TYPE 'A-10' INLET (3.0' width) PUBLIC	CL STA. 0+51.81 13.0' RIGHT	442.50	435.00	435.00	D-4.22 P1S2
I-12	TYPE 'A-5' INLET (3.0' width) PUBLIC	CL STA. 0+51.81 13.0' LEFT	443.00	436.00	436.00	D-4.01 P1S2
I-13	TYPE 'A-10' INLET (3.0' width) PUBLIC	Q STA. 4+84.14 - 13.0' LEFT	442.50	436.00	436.00	D-4.32 P1S2
I-14	TYPE 'A-10' INLET (3.5' width) PUBLIC	Q STA. 5+21.01 - 13.0' RIGHT	442.50	437.00	437.00	D-4.22 P1S2
I-27	TYPE 'A-5' INLET (3.0' width) PUBLIC	Q STA. 14+89.0 - 14.7' RIGHT	440.20	436.00	436.00	D-4.01 P1S2
I-28	TYPE 'A-5' INLET (3.0' width) PUBLIC	Q STA. 6+96.2 - 14.7' RIGHT	439.00	434.50	434.50	D-4.01 P1S2
I-29	TYPE 'S' INLET PUBLIC	Q STA. 26+91.3 - 12' LEFT	445.50	441.00	441.00	D-4.22 P1S1
I-30	TYPE 'S' INLET COVERED WITH MH LID PUBLIC	Q STA. 26+91.3 - 12' RIGHT	445.50	442.00	442.00	D-4.22 P1S1
I-30A	TYPE 'S' COMBINATION INLET PUBLIC	Q STA. 26+98.57 - 18.65' RIGHT	445.50	442.00	442.00	D-4.22 P1S1
I-31	TYPE 'S' COMBINATION INLET PUBLIC	Q STA. 24+71.9 - 12' LEFT	449.00	443.00	443.00	D-4.32 P1S1
I-32	TYPE 'S' COMBINATION INLET PUBLIC	Q STA. 24+71.9 - 12' RIGHT	449.00	443.00	443.00	D-4.32 P1S1
I-33	TYPE 'S' INLET PRIVATE	N 594,182.8 E 1,349,100.0	446.50	443.78	443.78	D-4.22 P1S1
M-1	STANDARD PRECAST MANHOLE (4') PUBLIC	N 592,535.0 E 1,347,468.6	413.36	403.21	393.21	G-5.13 P1S2
M-2	STANDARD PRECAST MANHOLE (4') PUBLIC	N 592,330.2 E 1,347,600.5	422.43	405.99	405.99	G-5.13 P1S2
M-3	STANDARD PRECAST MANHOLE (4') PUBLIC	N 593,509.0 E 1,348,493.0	442.57	427.62	427.62	G-5.13 P1S2
S-1	30" TYPE E ENDWALL PUBLIC	N 592,627.3 E 1,347,409.1	-	-	392.00	MD 356.01 P1S2
S-2	18" HDPE END SECTION PUBLIC	N 594,121.99 E 1,349,404.01	-	-	440.00	MANHOLE OR EQUIVALENT P1S1
S-3	21" TYPE C ENDWALL PRIVATE	Q STA. 7+77.58 - 33.4' LEFT	-	-	433.53	D-5.21 P1S2
S-4	21" TYPE C ENDWALL PRIVATE	Q STA. 7+77.6 - 30.3' RIGHT	-	-	436.09	D-5.21 P1S2
I-33A	NYOPLAST 21" DRAIN BASIN - PRIVATE	N 593694.83 E 1348744.30	451.50	447.50	447.50	NYOPLAST P1S2
E-1	12" TYPE 'A' ENDWALL - PRIVATE	N 593608.60 E 1348778.95	439.00	436.50	436.50	D-5.11 P1S2

- NOTES:
- TOP ELEVATIONS FOR TYPE 'S' INLETS ALONG CURB AND GUTTERS ARE TO THE CENTER, EDGE OF GRATE AT THE FLOW LINE. TOP ELEVATIONS FOR TYPE 'S' INLETS IN GRASS AREAS ARE TO THE CENTER TOP OF GRATE.
  - TOP ELEVATIONS FOR TYPE 'A-5' INLETS ARE TO THE CENTER OF INLET, TOP OF CURB.
  - TOP ELEVATIONS FOR PRECAST MANHOLES ARE TO THE CENTER TOP OF MANHOLE COVER.
  - TOP OF PIPE OF STRUCTURES TO CONFORM TO SLOPE OF PAVING.
  - FOR ALL TYPE 'S' INLETS WITHIN THE TRAFFIC LANES, USE A BICYCLE-SAFE GRATE PER HOWARD COUNTY STANDARD DETAIL D-4-96 (WR INLET FRAME, GRATE & SUPPORT).
  - INVERT AT END OF PIPE.
  - UTILIZE HOWARD COUNTY STANDARD DETAIL G-5.13. REPLACE MANHOLE COVER WITH NEENAH TYPE 'G' GRATE PER DETAIL THIS SHEET.
  - 12" SQUARE PEDESTRIAN GRATE TO BE UTILIZED ON THE NYOPLAST DRAIN BASIN (I-33A).

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.

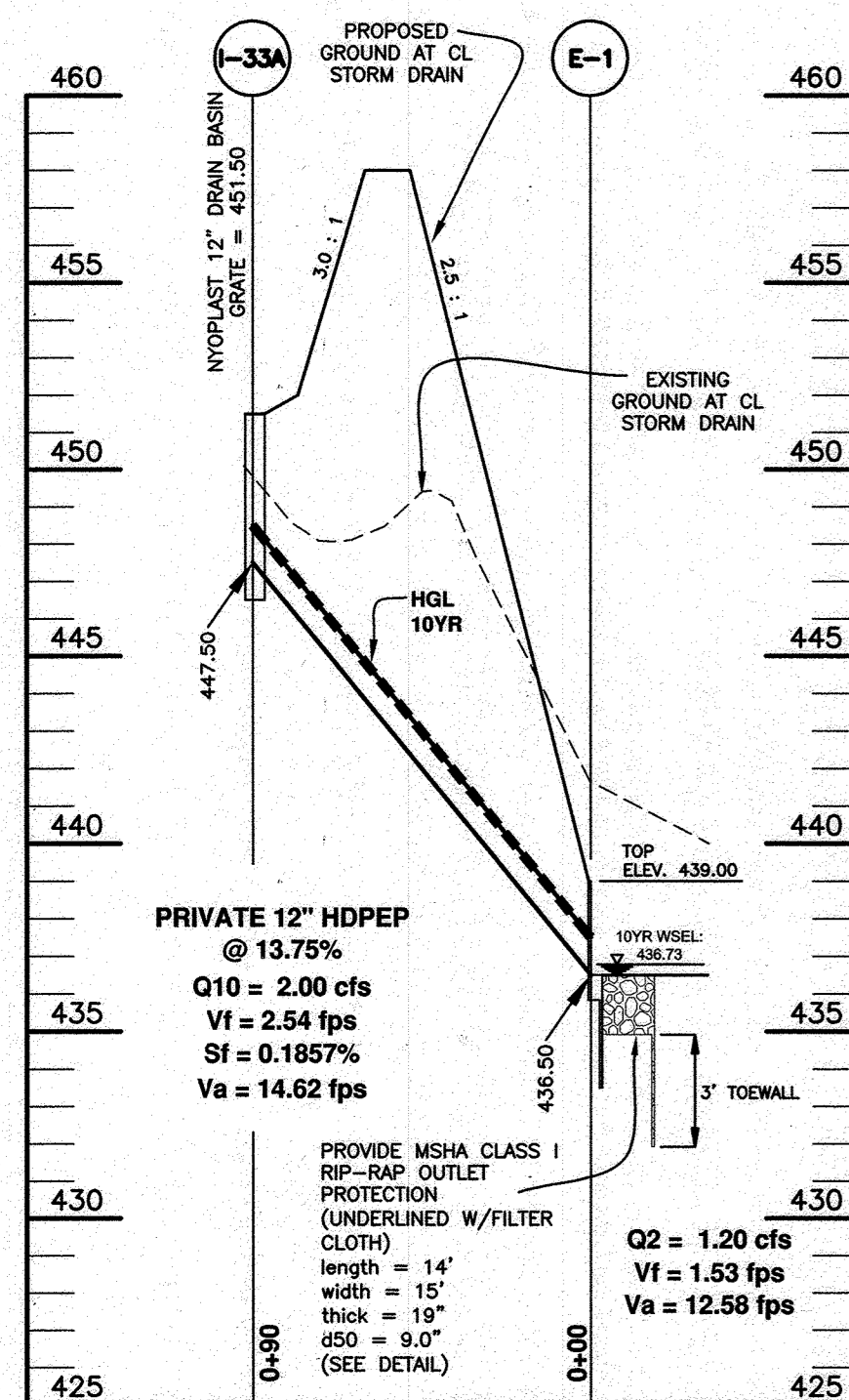
Date: 11-6-18  
12-1-2020



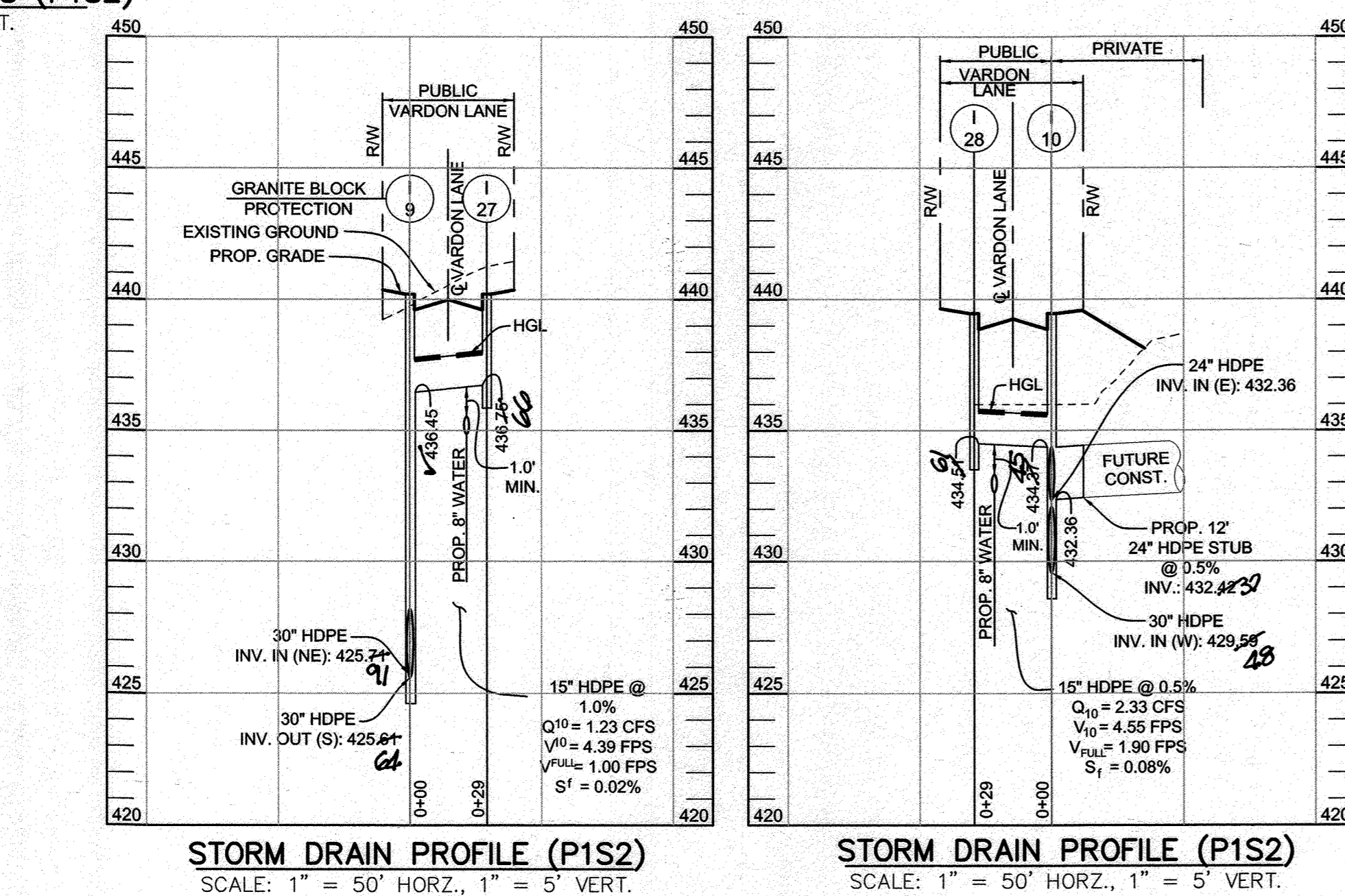
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 21143 Expiration Date: 12-31-2020

PIPE SCHEDULE			
SIZE	TYPE	P1S1	P1S2
15" PUBLIC	HDPE	33 LF	58 LF
15" PRIVATE	HDPE	69 LF	--
18" PUBLIC	HDPE	321 LF	49 LF
24" PUBLIC	HDPE	--	248 LF
30" PUBLIC	HDPE	--	2,334 LF
12" PRIVATE	HDPE	--	90 LF
21" PRIVATE	RCP (CLASS IV)	--	64 LF

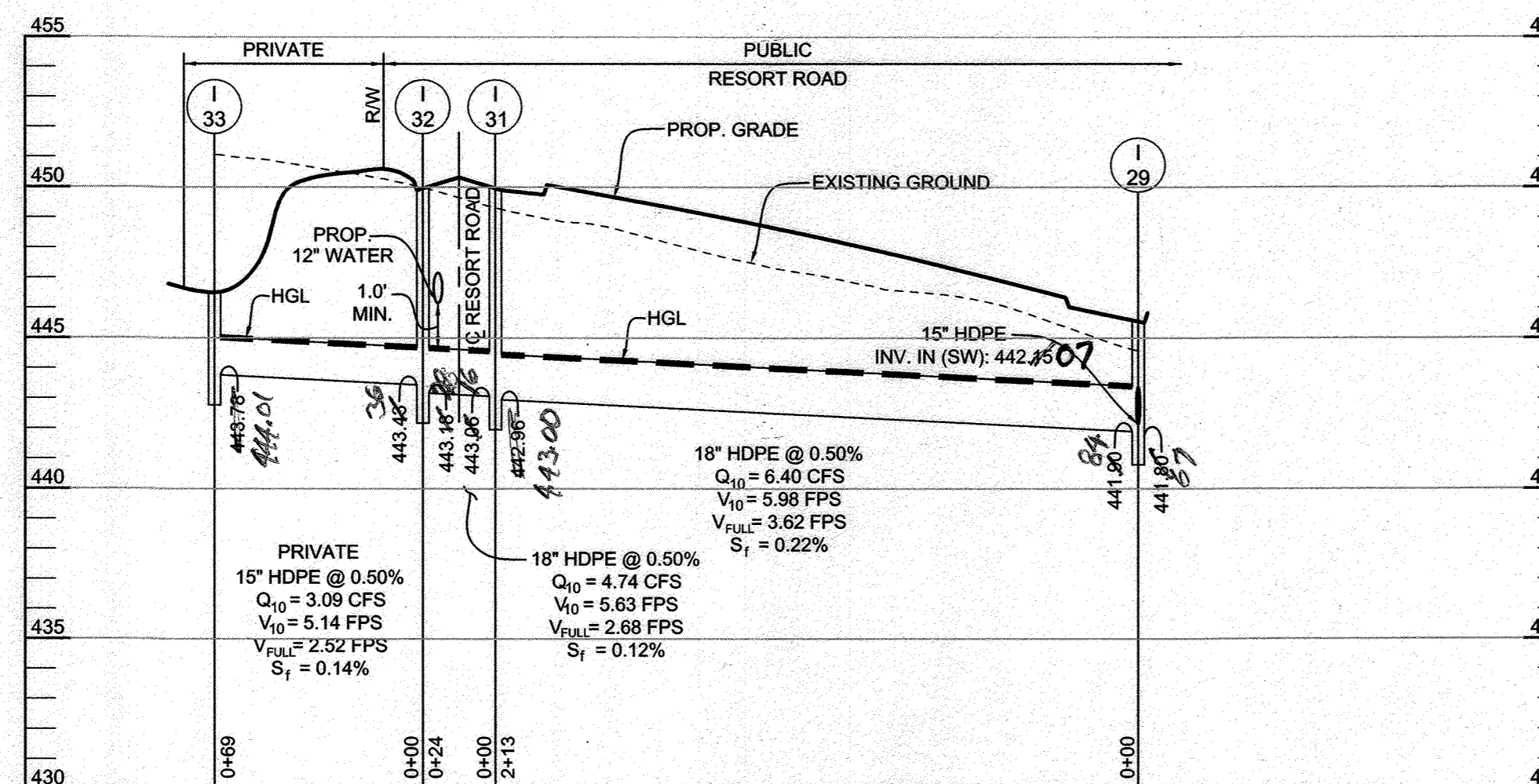


STORM DRAIN PROFILE (P1S2)  
SCALE: 1" = 50' HORIZ., 1" = 5' VERT.

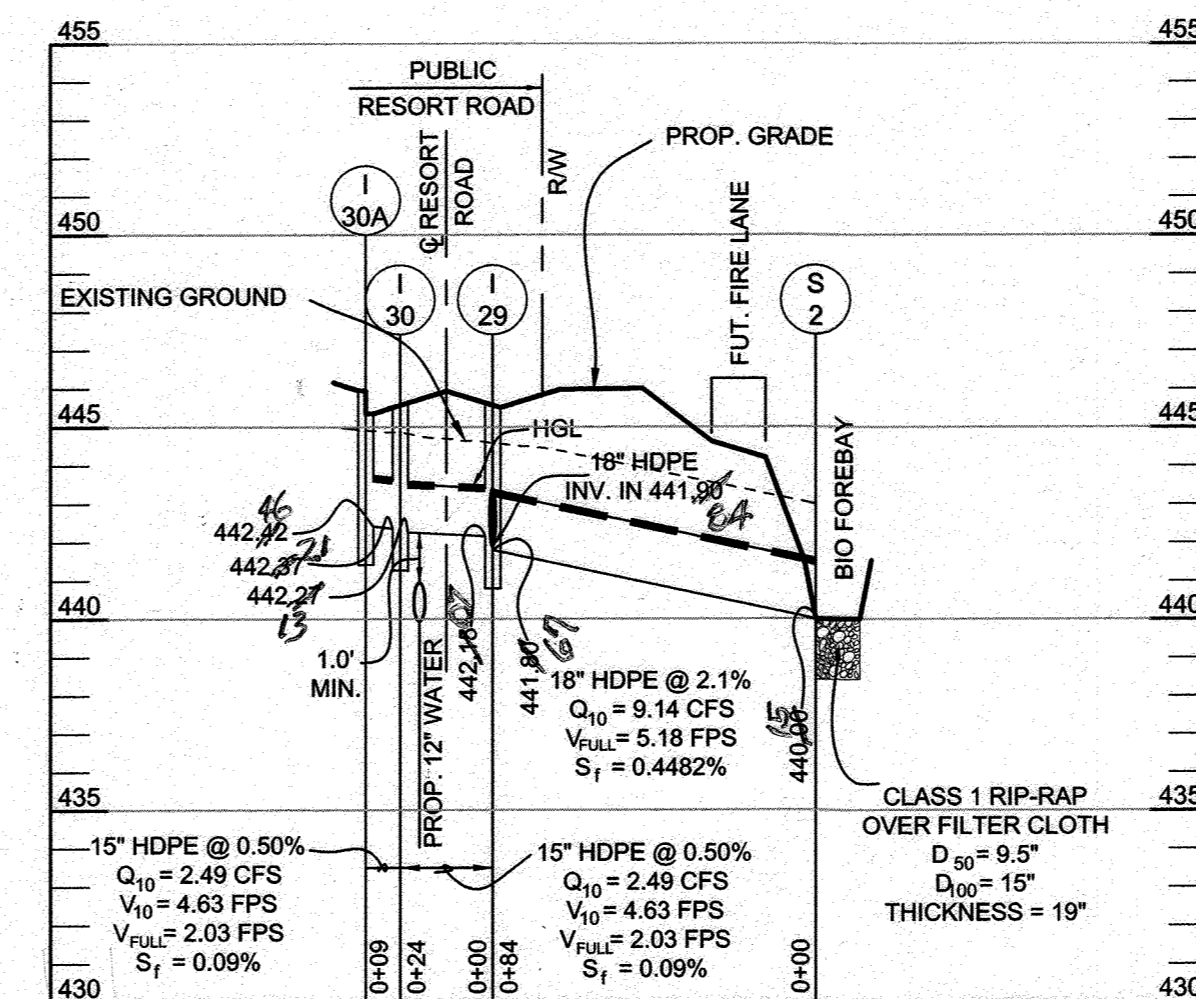


STORM DRAIN PROFILE (P1S2)  
SCALE: 1" = 50' HORIZ., 1" = 5' VERT.

STORM DRAIN PROFILE (P1S1)  
SCALE: 1" = 50' HORIZ., 1" = 5' VERT.



STORM DRAIN PROFILE (P1S1)  
SCALE: 1" = 50' HORIZ., 1" = 5' VERT.



STORM DRAIN PROFILE (P1S1)  
SCALE: 1" = 50' HORIZ., 1" = 5' VERT.

THIS SHEET REPLACES THE PREVIOUS SHEET 15 SIGNED ON 10-31-2016

APPROVED: DEPARTMENT OF PUBLIC WORKS  
DATE: 6/14/2017  
APPROVED: DEPARTMENT OF PLANNING AND ZONING  
DATE: 6-22-17

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. 21143 Expiration Date: 12-31-2020

**BENCHMARK ENGINEERING, INC.**  
840 BALTIMORE NATIONAL PIKE & SUITE 315 ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-0105 (F) 410-465-6844  
WWW.BEI-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 1 SECTION 1: RESORT ROAD AND GOLF SPACE LOTS 50 & 51  
PHASE 1 SECTION 2: OPEN SPACE LOTS 117, & 118  
GOLF SPACE LOTS 52-56 AND NON-BUILDABLE BULK PARCELS A, B, C, & D

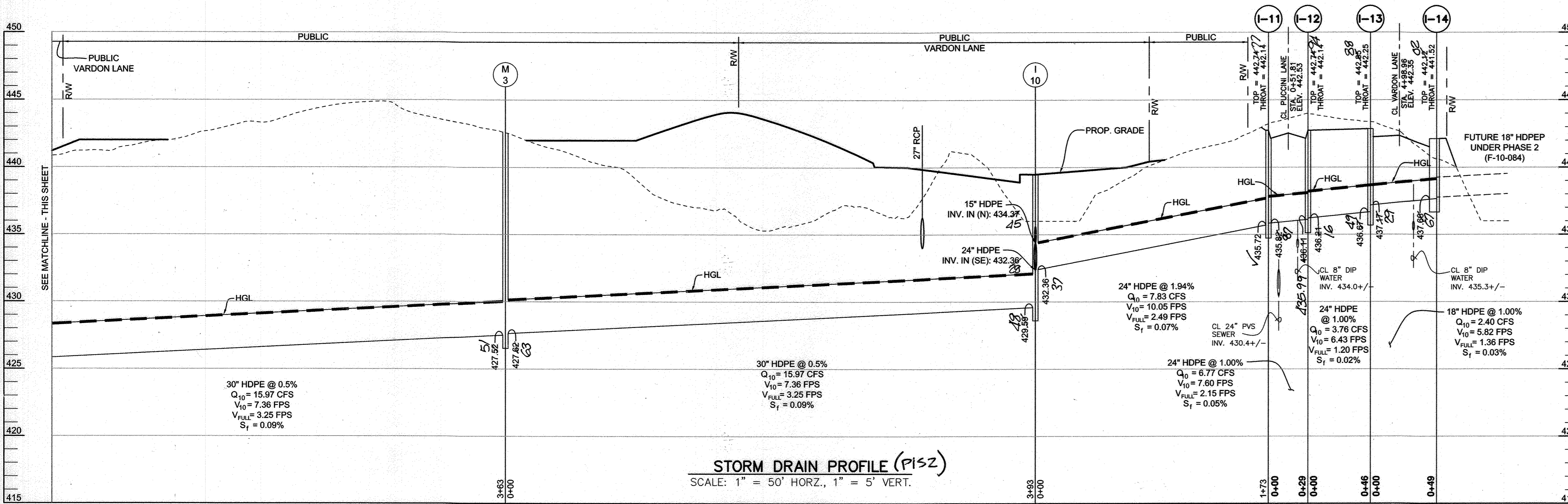
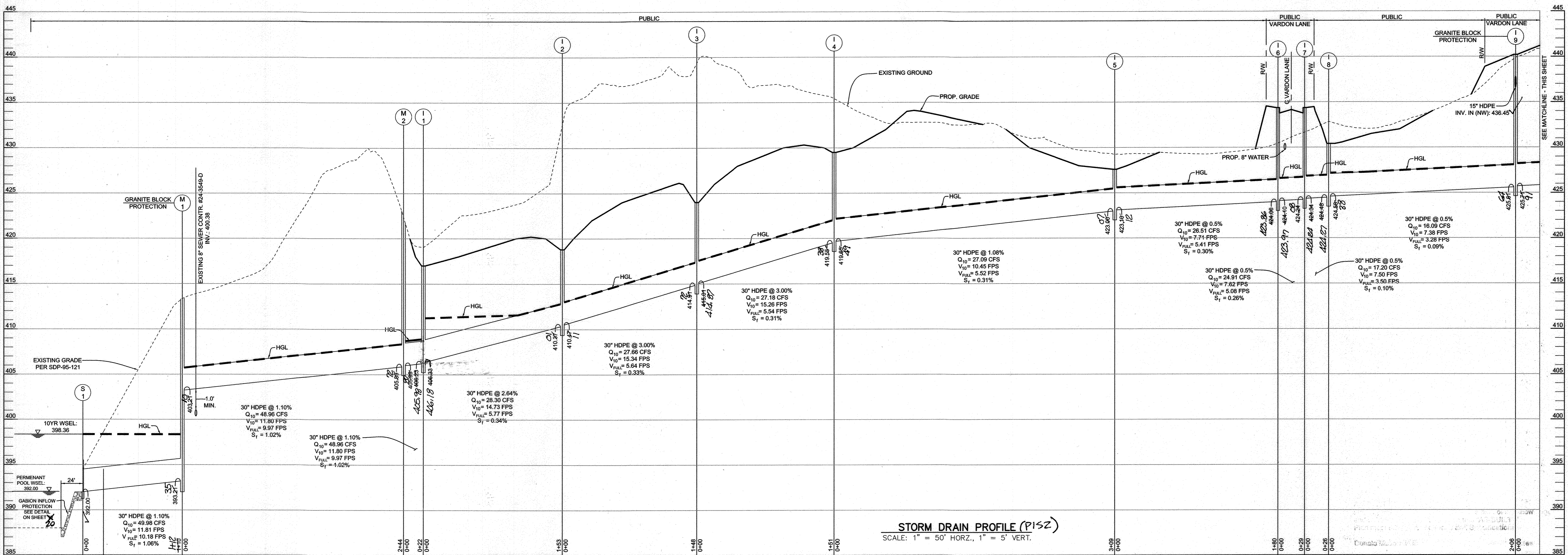
TAX MAP: 16 - GRID: 16 - PARCEL: P/O 8 & 706  
ZONED: PGCC (RESIDENTIAL SUBDISTRICT)  
ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND

REVISED STORM DRAIN PROFILES

DATE: MAY 17, 2017 BEI PROJECT NO. 2601  
DESIGN: DBT DRAFT: DBT SCALE: AS SHOWN SHEET 15 OF 20

AS-BUILT

F-07-158



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  
Date: 12/1/2020  
Donald Mason, P.E.

"NO AS-BUILT INFORMATION FOR" PHASE 1, SECTION 1 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: 12/31/2022

NO.	DATE	REVISION
3	5-17-2017	REMOVE LOTS 1-47 AND CELETS 117, 118 FROM TITLE BLOCK. REMOVE 30" HDPE AT I-1
2	12-12-2016	UPDATE TITLE BLOCK AND SHEET NO.
1	5-12-2016	UPDATE STORM DRAIN PROFILE FROM I-11 TO I-14. UPDATE COMPS (Q,V,S) FOR STORM DRAIN UPSTREAM OF I-7. REMOVE PROFILE FOR I-9 TO I-27 AND ADD IT TO SHEET 15.

**BENCHMARK ENGINEERING, INC.**  
ENGINEERS & LAND SURVEYORS & PLANNERS  
6480 BALTIMORE NATIONAL PIKE SUITE 315 & ELLICOTT CITY, MARYLAND 21043  
(P) 410-485-8105 (F) 410-485-6644  
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 1 SECTION 2: RESORT ROAD AND GOLF SPACE LOTS 50 & 51  
PHASE 1 SECTION 2: OPEN SPACE LOTS 117 & 118  
GOLF SPACE LOTS 52-56 AND NON-BUILDABLE BULK PARCELS A, B, C, & D

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

**REVISED STORM DRAIN PROFILES**

DATE: FEBRUARY 29, 2016 BEI PROJECT NO. 2601  
DESIGN: DBT DRAFT: DBT SCALE: AS SHOWN SHEET 16 OF 20

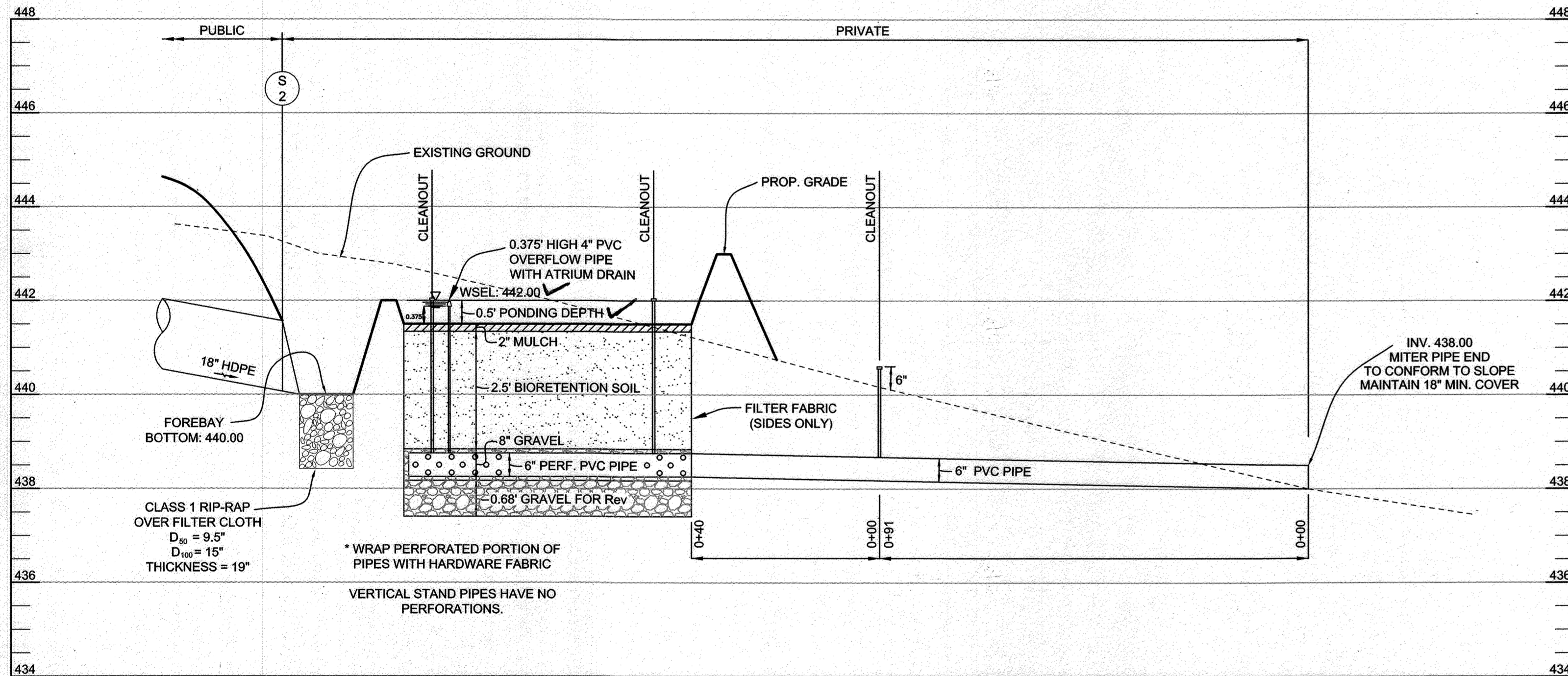
THIS SHEET REPLACES THE PREVIOUS SHEET 16 SIGNED ON 3-22-2010

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 6/8/2016  
CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 6/14/16  
CHIEF, DIVISION OF LAND DEVELOPMENT

*[Signature]* 6-13-16  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

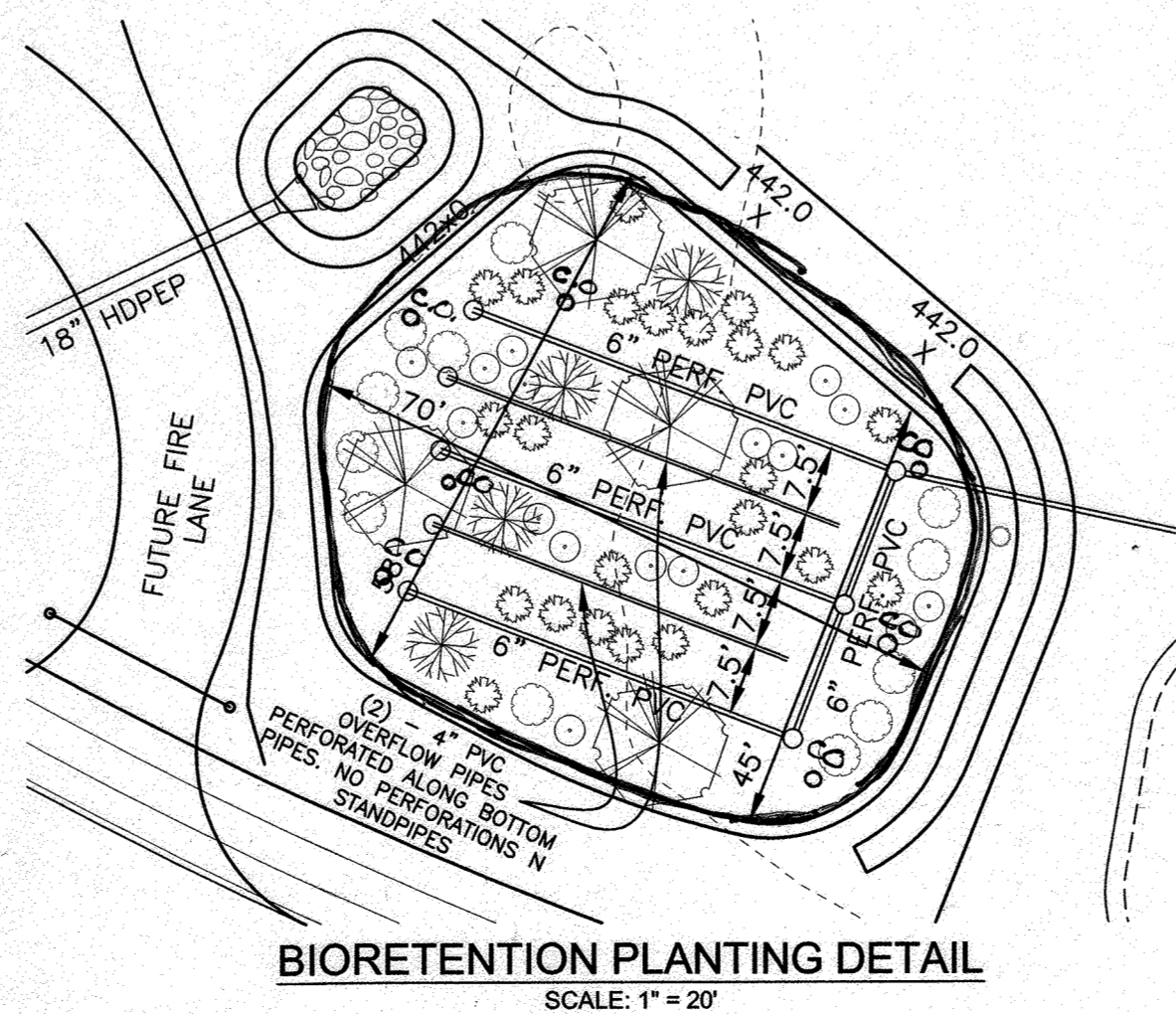




**BIORETENTION FACILITY**  
SCALE - HORIZONTAL: 1"=20'  
VERTICAL: 1"=2'

**OPERATION AND MAINTENANCE SCHEDULE FOR BIO-RETENTION AREAS (F-6)**

- ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING.
- SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES.
- MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.
- SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.



**BIORETENTION PLANTING DETAIL**  
SCALE: 1" = 20'

BIORETENTION PLANT LIST				
QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
4	(Symbol)	PLATANUS x ACERIFOLIA	LONDON PLANE TREE	2-1/2" - 3" CAL.
4	(Symbol)	ILEX GLABRA	INK BERRY	2' - 3' HT.
24	(Symbol)	LOBELIA CARDINALIS	CARDINAL FLOWER LOBELIA	1 GAL. CONTAINER
16	(Symbol)	DRYOPTERIS SP.	WOOD FERN	1 GAL. CONTAINER
12	(Symbol)	ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	1 GAL. CONTAINER

NOTE: -TOTAL - 52 PERENNIALS, 4 SHRUBS, 4 TREES  
-ALL REMAINING SURFACE FILTER AREA TO BE PLANTED WITH NATIVE GRASSES

**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: 1/16/18



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: 12-21-19

THIS SHEET REPLACES THE PREVIOUS SHEET 17 SIGNED ON 1-23-2017

NO.	DATE	REVISION
3	5-17-2017	REMOVE STORM DRAIN PROFILES ADD 4" OVERFLOW PIPES TO BIO DETAILS. REMOVE LOTS 1-47 AND OS LOTS 48 & 49 FROM TITLE BLOCK.
2	12-12-2016	REVISE BIO-RETENTION FACILITY PROFILE AND PLANTING DETAIL BASED ON ITS RECONFIGURATION AND LOCATION ONLY. UPDATE TITLE BLOCK AND SHEET NUMBER.
1	5-27-2016	UPDATE TITLE BLOCK & SHEET NUMBER. FIX DISTANCE FROM I-15 TO I-17, ADD CLEANOUT TO 6" UNDERDRAIN @ BIO-RET. FACILITY.

**BENCHMARK ENGINEERING, INC.**  
ENGINEERS LAND SURVEYORS PLANNERS  
6480 BALTIMORE NATIONAL PIKE SUITE 315 ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-6105 (F) 410-465-6644  
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.



APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 6/19/2017 DATE  
CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 6-22-17 DATE  
CHIEF, DIVISION OF LAND DEVELOPMENT

*[Signature]* 6-22-17 DATE  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

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

**FAIRWAYS AT TURF VALLEY**  
PHASE 1 SECTION 1: RESORT ROAD AND GOLF SPACE LOTS 50 & 51  
PHASE 1 SECTION 2: OPEN SPACE LOTS 117, & 118  
GOLF SPACE LOTS 52-56 AND NON-BUILDABLE BULK PARCELS A, B, C, & D

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

REVISED  
**STORM DRAIN AND BIO-RETENTION PROFILES AND DETAILS**

DATE: MAY 17, 2017 BEI PROJECT NO. 2726  
SCALE: AS SHOWN SHEET 17 OF 20

**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 THE 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.
- STREET TREES SHALL BE PLANTED AT THE SITE DEVELOPMENT PLAN STAGE.

LANDSCAPE SCHEDULE				
KEY	QUANTITY	BOTANICAL NAME	SIZE	NOTE
○	129	ACER RUBRUM (STREET TREES)	2 1/2" - 3" CAL.	B & B
○*	9*	QUERCUS PALUSTRIS (PARKING) "PIN OAK"	2 1/2" - 3" CAL.	B & B

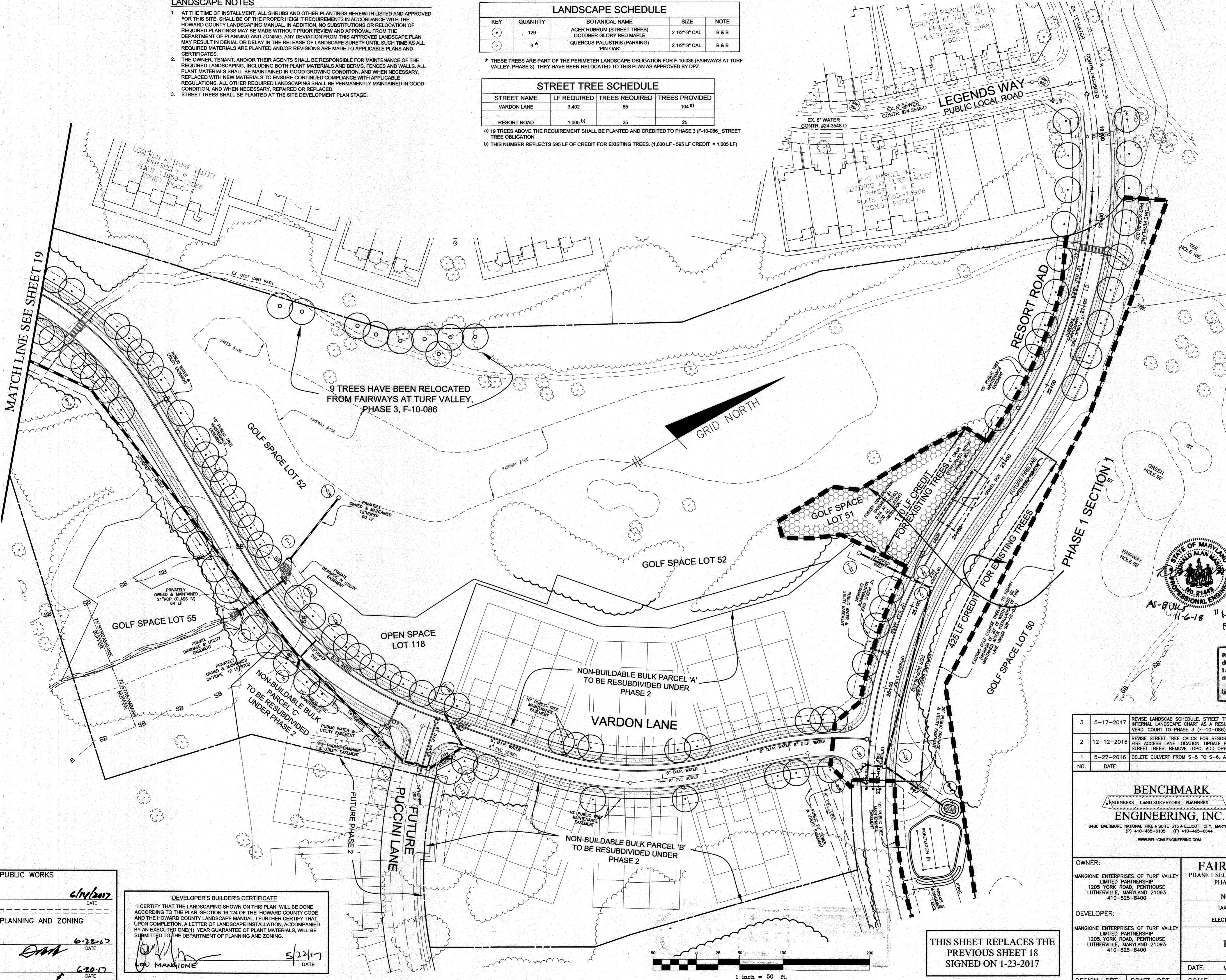
\* THESE TREES ARE PART OF THE PERIMETER LANDSCAPE OBLIGATION FOR F-10-086 (FAIRWAYS AT TURF VALLEY, PHASE 3). THEY HAVE BEEN RELOCATED TO THIS PLAN AS APPROVED BY DPZ.

STREET TREE SCHEDULE			
STREET NAME	LF REQUIRED	TREES REQUIRED	TREES PROVIDED
VARDON LANE	3,402	85	104 <sup>a)</sup>
RESORT ROAD	1,005 <sup>b)</sup>	25	25

a) 19 TREES ABOVE THE REQUIREMENT SHALL BE PLANTED AND CREDITED TO PHASE 3 (F-10-086, STREET TREE OBLIGATION)  
 b) THIS NUMBER REFLECTS 595 LF OF CREDIT FOR EXISTING TREES. (1,000 LF - 595 LF CREDIT = 1,005 LF)

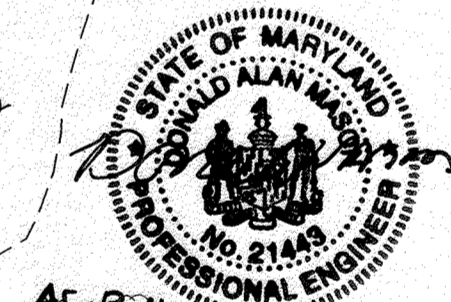
LEGEND	
	EXISTING TREE
	EXISTING TREELINE
	PROPOSED TREELINE
	PROPOSED STORM DRAIN PIPE
	PROPOSED FIRE HYDRANT
	PROPOSED STREET LIGHT
	PROPOSED PERIMETER TREE
	PROPOSED STREET TREE
	FOREST CONSERVATION EASEMENT (RETENTION)

MATCH LINE SEE SHEET 19



9 TREES HAVE BEEN RELOCATED FROM FAIRWAYS AT TURF VALLEY, PHASE 3, F-10-086

425 LF CREDIT FOR EXISTING TREES



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: 12-21-19

NO.	DATE	REVISION
3	5-17-2017	REVISE LANDSCAPE SCHEDULE, STREET TREE SCHEDULE AND LANDSCAPE NOTES AND DELETE PARKING LOT INTERNAL LANDSCAPE CHART AS A RESULT OF RELOCATING LOTS 1-47 AND PORTION OF VARDON LANE AND VERDI COURT TO PHASE 3 (F-10-086).
2	12-12-2016	REVISE STREET TREE CALCS FOR RESORT ROAD TO TAKE CREDIT FOR EXISTING TREES. SHOW NEW FUTURE FIRE ACCESS LANE LOCATION. UPDATE PLAN TO 50 SCALE FOR BETTER REPRESENTATION OF LOCATION OF STREET TREES. REMOVE TOPO. ADD OPEN SPACE LOT 118.
1	5-27-2016	DELETE CULVERT FROM S-5 TO S-6, ADD 9 PERIMETER TREES THAT WERE RELOCATED FROM F-10-086.

**BENCHMARK ENGINEERING, INC.**  
 6480 BALTIMORE NATIONAL PIKE & SUITE 315 ELLICOTT CITY, MARYLAND 21043  
 (P) 410-465-6105 (F) 410-465-6644  
 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: 6-30-2017

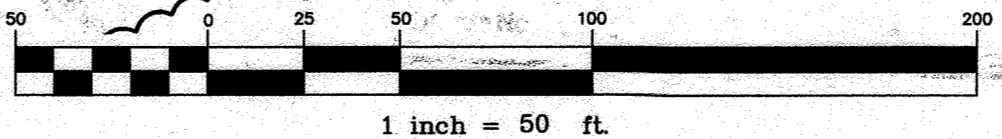
OWNER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400		FAIRWAYS AT TURF VALLEY PHASE 1 SECTION 1: RESORT ROAD AND GOLF SPACE LOTS 50 & 51 PHASE 1 SECTION 2: OPEN SPACE LOTS 117, & 118 GOLF SPACE LOTS 52-56 AND NON-BUILDABLE BULK PARCELS A, B, C, & D	
DEVELOPER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400		TAX MAP: 16 - GRID: 16 - PARCEL: P/O 8 & 706 ZONED: PGCC (RESIDENTIAL SUBDISTRICT) ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND	
DESIGN: DBT DRAFT: DBT		REVISOR: DBT	
DATE: MAY 17, 2017		BEI PROJECT NO.: 2726	
SCALE: AS SHOWN		SHEET 18 OF 20	

APPROVED: DEPARTMENT OF PUBLIC WORKS  
  
 CHIEF, BUREAU OF HIGHWAYS  
 DATE: 6/22/17

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE: 6-20-17

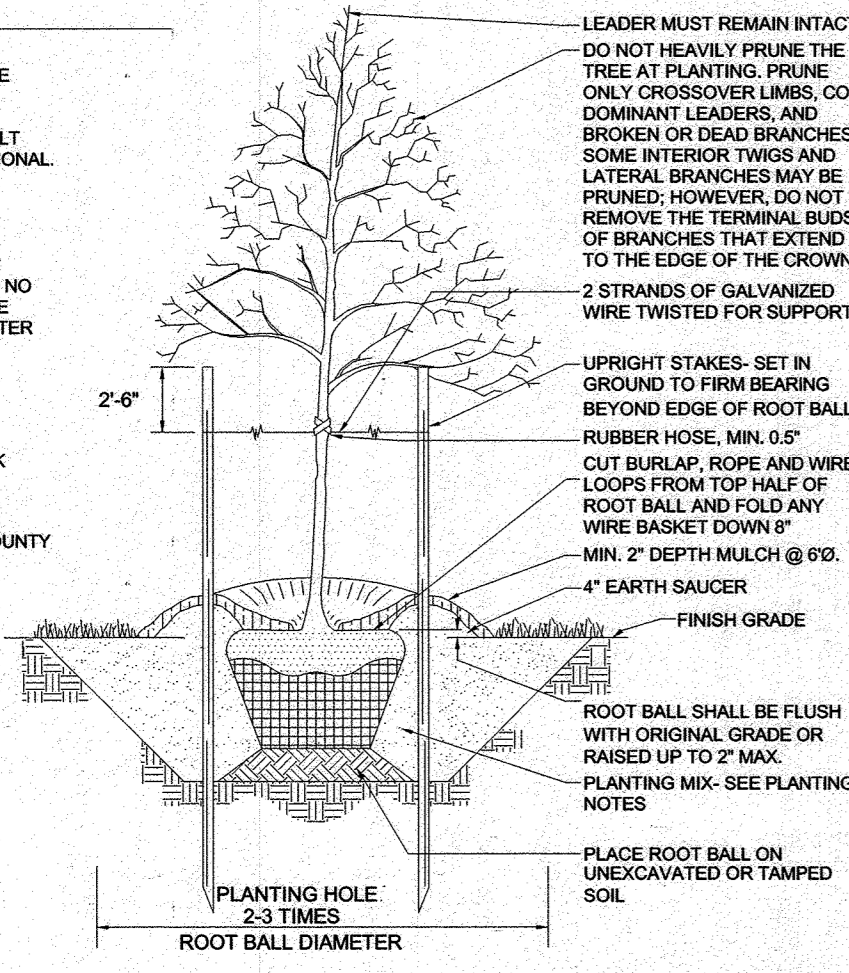
DEVELOPER'S BUILDER'S CERTIFICATE  
 I CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. FURTHER CERTIFY THAT UPON COMPLETION, A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE(1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.  
  
 LOU MANGIONE  
 DATE: 5/22/17

THIS SHEET REPLACES THE PREVIOUS SHEET 18 SIGNED ON 1-23-2017

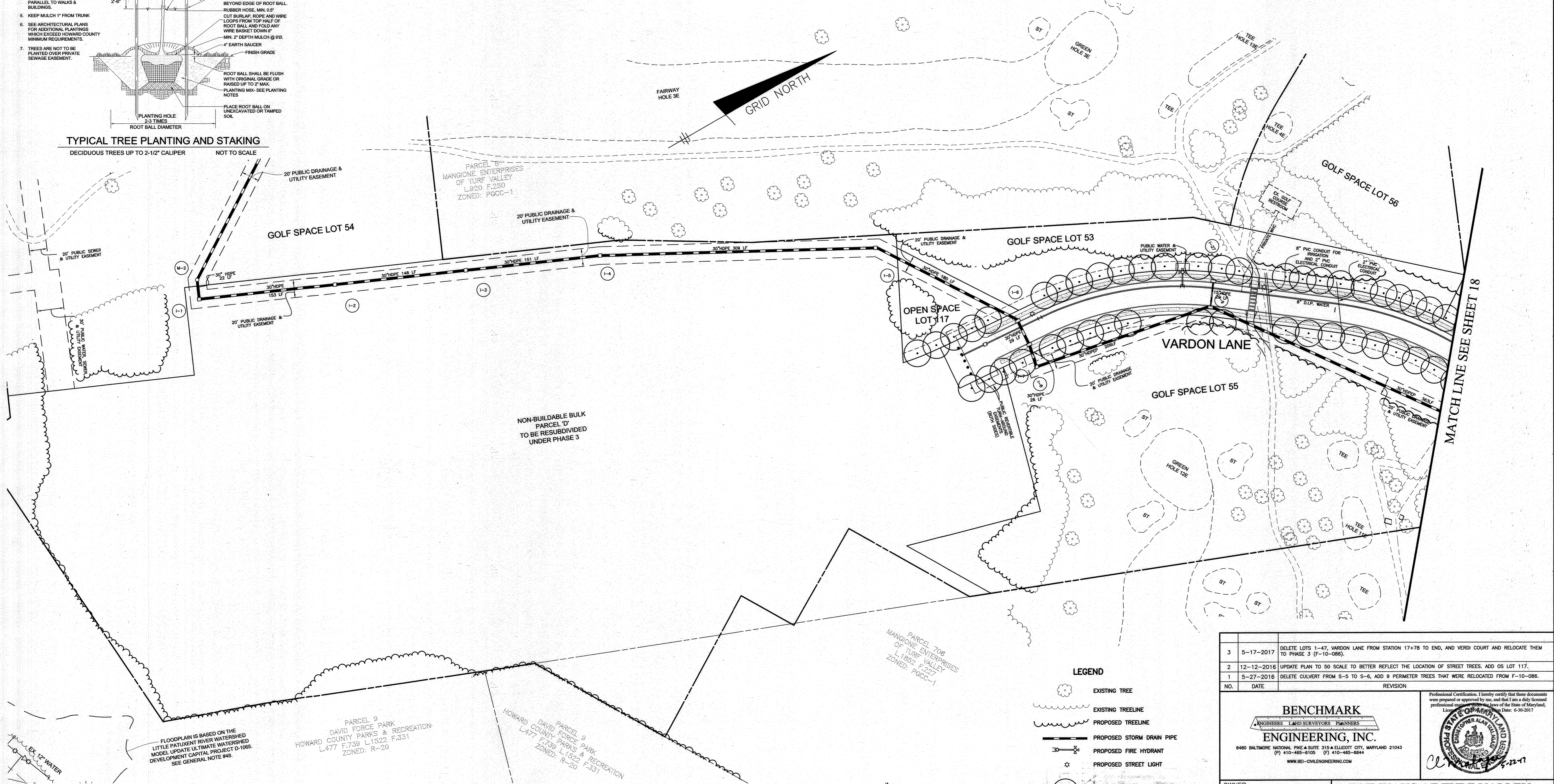


**NOTES**

- CONSULT INTERNATIONAL SOCIETY OF ARBORICULTURE GUIDELINES FOR FURTHER 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**

- EXISTING TREE
- EXISTING TREELINE
- PROPOSED TREELINE
- PROPOSED STORM DRAIN PIPE
- PROPOSED FIRE HYDRANT
- PROPOSED STREET LIGHT
- PROPOSED PERIMETER TREE
- PROPOSED STREET TREE

NO.	DATE	REVISION
3	5-17-2017	DELETE LOTS 1-47, VARDON LANE FROM STATION 17+78 TO END, AND VERDI COURT AND RELOCATE THEM TO PHASE 3 (F-10-086).
2	12-12-2016	UPDATE PLAN TO 50 SCALE TO BETTER REFLECT THE LOCATION OF STREET TREES. ADD OS LOT 117.
1	5-27-2016	DELETE CULVERT FROM S-5 TO S-6, ADD 9 PERIMETER TREES THAT WERE RELOCATED FROM F-10-086.

**BENCHMARK ENGINEERING, INC.**  
ENGINEERS LAND SURVEYORS PLANNERS  
6480 BALTIMORE NATIONAL PIKE & SUITE 315A ELICOTT CITY, MARYLAND 21043  
(P) 410-685-6105 (F) 410-685-6844  
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. 21263, Expiration Date: 6-30-2017.*

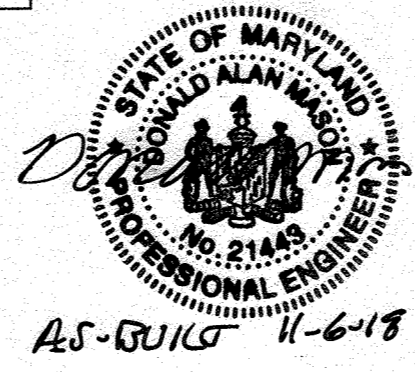
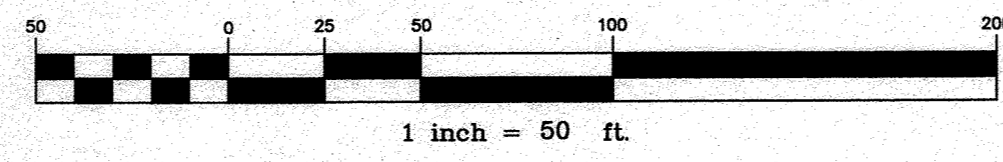
APPROVED: DEPARTMENT OF PUBLIC WORKS  
*McNamee* 6/14/2017  
CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*Veit* 6-22-17  
CHIEF, DIVISION OF LAND DEVELOPMENT

*Chick* 6-20-17  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

**DEVELOPER'S BUILDER'S CERTIFICATE**  
I CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16-124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I FURTHER CERTIFY THAT UPON COMPLETION, A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE(1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

*Loi Mangione* 5/22/17  
LOI MANGIONE DATE



**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. 21263, Expiration Date: 12-31-18

**THIS SHEET REPLACES THE PREVIOUS SHEET 19 SIGNED ON 1-23-2017**

OWNER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400		FAIRWAYS AT TURF VALLEY PHASE 1 SECTION 1: RESORT ROAD AND GOLF SPACE LOTS 50 & 51 PHASE 1 SECTION 2: OPEN SPACE LOTS 117, & 118 GOLF SPACE LOTS 52-56 AND NON-BUILDABLE BULK PARCELS A, B, C, & D	
DEVELOPER: MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400		TAX MAP: 16 - GRID: 16 - PARCEL: P/O 8 & 706 ZONED: POC (RESIDENTIAL SUBDISTRICT) ELECTION DISTRICT NO. 2 - HOWARD COUNTY, MARYLAND	
<b>REVISED LANDSCAPE PLAN</b>			
DESIGN: DBT	DRAFT: DBT	DATE: MAY 17, 2017	BEI PROJECT NO. 2726
SCALE: AS SHOWN		SHEET 19 OF 20	

