

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- BOUNDARY IS BASED ON A FIELD RUN MONUMENTED SUBURBAN BOUNDARY SURVEY PERFORMED BY JOHN MILDREBERG IN MARCH 2006.
- THE EXISTING TOPOGRAPHY SHOWN ON SITE IS BASED ON AN AERIAL TOPOGRAPHIC SURVEY PERFORMED BY WINGS AERIAL MAPPING CO., INC. FLOWN ON OR ABOUT JANUARY, 2006. CONTOUR INTERVAL IS 2'.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 16E1 AND 0012 WERE USED FOR THIS PROJECT.
- WATER IS PUBLIC. THE CONTRACT NUMBER IS 24-4549-D. THE DRAINAGE AREA IS LITTLE PATUXENT.
- SEWER IS PUBLIC. THE CONTRACT NUMBER IS 24-4549-D. THE DRAINAGE AREA IS LITTLE PATUXENT.
- STORMWATER MANAGEMENT QUALITY AND QUANTITY CONTROL IS PROVIDED WITHIN EXISTING SWMF #4 (P-1 MICRO-POOL ED POND) AND EXISTING SWMF #6 (F-1 SURFACE SAND FILTER WITH DRY DETENTION POND) BOTH CONSTRUCTED UNDER F-08-084 AND BY THE SITE 4501 STORMWATER CONTROL LOCATED ON SITE. PONDS AND STORMWATER SHALL BE PRIVATELY OWNED AND MAINTAINED.
- EXISTING UTILITIES SHOWN ARE BASED ON CONTRACT DRAWINGS, AERIAL AND FIELD SURVEYED LOCATIONS.
- THERE ARE NO WETLANDS, STREAMS, STREAM BUFFERS OR 100-YEAR FLOODPLAINS ON THE SITE.
- A NOISE STUDY IS NOT REQUIRED FOR COMMERCIAL PROJECTS OR FOR ACCESSORY APARTMENTS LOCATED ON THE SECOND FLOOR ABOVE A COMMERCIAL USE.
- THE SUBJECT PROPERTY IS ZONED PGCC PER THE 2-2-2004 COMPREHENSIVE ZONING PLAN AND THE "COMP LITE" ZONING AMENDMENTS EFFECTIVE 7-28-2006.
- TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO BURIAL GROUNDS, CEMETERIES OR HISTORIC STRUCTURES LOCATED ON THIS SITE.
- THIS PROJECT IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- LANDSCAPING FOR THIS PARCEL IS PROVIDED IN ACCORDANCE WITH A CERTIFIED LANDSCAPE PLAN INCLUDED WITH THIS SITE DEVELOPMENT PLAN SET IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING WILL BE POSTED AS PART OF THE GRADING PERMIT IN THE AMOUNT OF \$14,670.00 (\$6,300.00 FOR 21 SHADE TREES, \$8,250.00 FOR 55 EVERGREENS AND \$120.00 FOR 4 SHRUBS. STREET TREES WERE PROVIDED WITH THE ROAD CONSTRUCTION PLANS, F-08-084.
- THIS PROJECT COMPLIES WITH THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION AS THE FOREST CONSERVATION OBLIGATION WAS CALCULATED AND MET UNDER F-08-084.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE ZONING REGULATIONS EFFECTIVE APRIL 13, 2004. PER SECTION 126(H)(1), PLANNING BOARD APPROVAL IS REQUIRED FOR THE SITE DEVELOPMENT PLAN FOR THIS PROJECT.
- THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP, INC. AND APPROVED UNDER S-86-13. IT WAS UPDATED IN MARCH 2004.
- PREVIOUS PLANNING AND ZONING FILES: S-86-13, P-06-13, S-03-01, SP-05-074, WP-08-009, F-08-060, F-08-084, WP-05-074, WP-09-211, WP-10-159, WP-11-168, WP-12-129
- THERE ARE NO STEEP SLOPES ON THIS SITE.
- ALL EXTERIOR LIGHTING SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOLUME III (1993), ZONING SECTION 134 AND AS SHOWN ON THESE PLANS. ALL EXTERIOR LIGHT FIXTURES SHALL BE ORIENTED TO DIRECT LIGHT UPWARDS AND DOWNWARDS ON-SITE AWAY FROM ALL ADJACENT RESIDENTIAL PROPERTIES AND PUBLIC ROADS IN ACCORDANCE WITH SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNAGE SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- PRIOR TO GRADING PERMIT APPLICATION, THIS PROJECT SHALL COMPLY WITH THE REQUIREMENTS OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SECTION 16.122.
- STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993). A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREETLIGHT AND ANY TREE.
- ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL PERFORATED SQUARE TUBE POST (1 1/2" GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL PERFORATED SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
- TRASH COLLECTION SHALL BE THE RESPONSIBILITY OF THE OWNER THROUGH A PRIVATE TRASH COLLECTOR.
- THE FRONT AND REAR BUILDING RESTRICTION LINES SHOWN ON THIS SITE DEVELOPMENT PLAN WERE APPROVED BY THE HOWARD COUNTY PLANNING BOARD ON APRIL 15, 2010 IN ACCORDANCE WITH SUBSECTION 126.1.3 OF THE ZONING REGULATIONS. THE SIDE BUILDING RESTRICTION LINES SHOWN ON THIS DEVELOPMENT PLAN ARE IN ACCORDANCE WITH THE THIRD AMENDMENT TO THE TURF VALLEY MULTI-USE SUBDISTRICT FINAL DEVELOPMENT PLAN.
- A LETTER FROM THE COLUMBIA GAS TRANSMISSION COMPANY ACKNOWLEDGING THE PROPOSED DEVELOPMENT SHALL BE OBTAINED BY THE DEVELOPER PRIOR TO GRADING PERMIT APPROVAL.

COMMERCIAL SITE DEVELOPMENT PLAN

VILLAGES AT TURF VALLEY

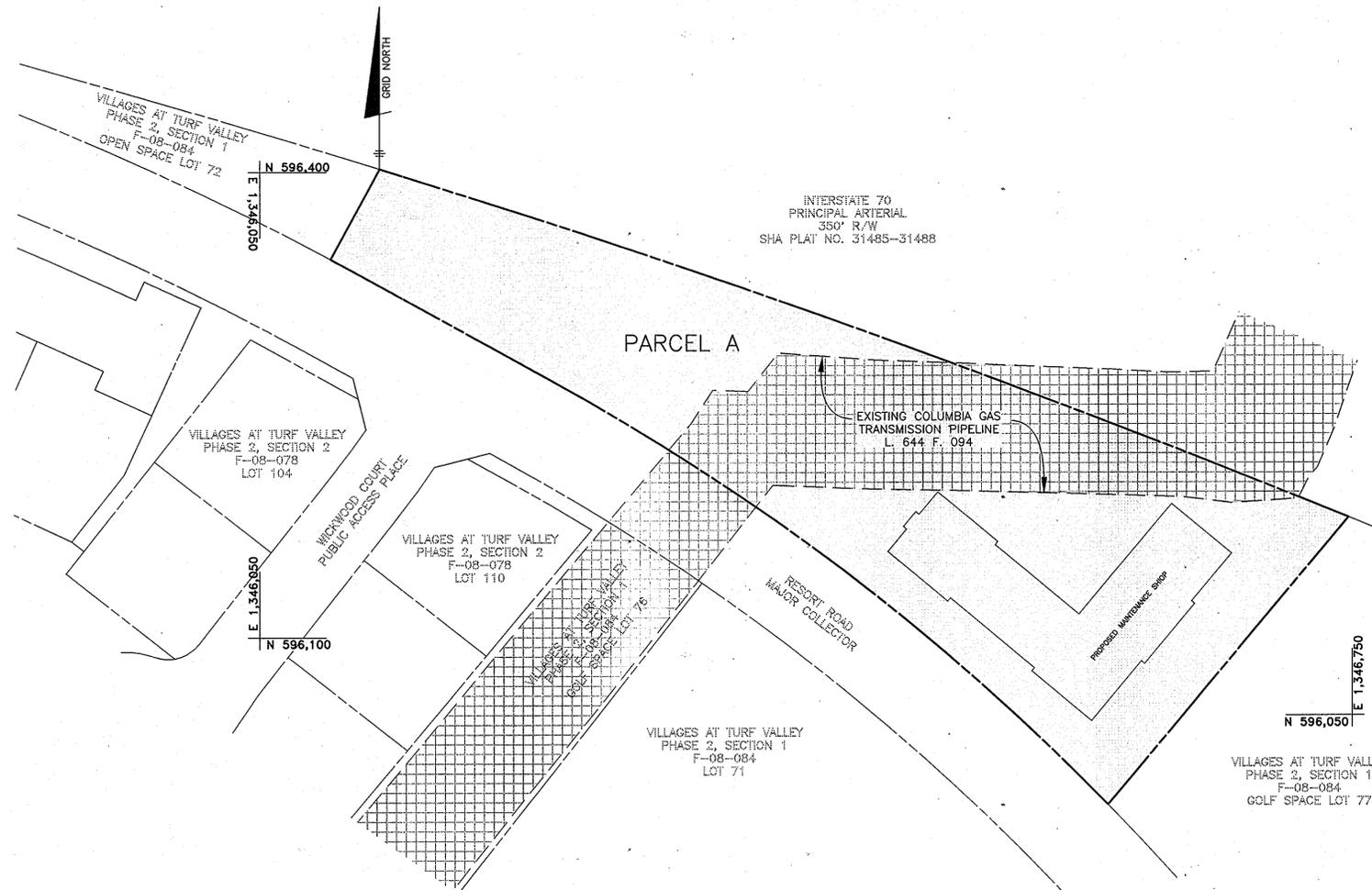
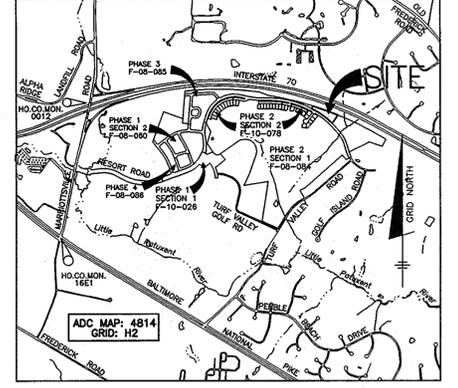
PARCEL 'A'

GOLF COURSE MAINTENANCE SHOP

BENCHMARK NAD'83 HORIZONTAL

HO. CO. #16E1 (AKA: 3438001)
 STAMPED BRASS DISK SET ON TOP OF A 3' DEEP COLUMN OF CONCRETE.
 N 593250.960' E 1340192.70'
 ELEVATION: 463.981'

HO. CO. #0012 (AKA: 3439001)
 STAMPED BRASS DISK SET ON TOP OF A 3' DEEP COLUMN OF CONCRETE.
 N 596502.760' E 1340864.37'
 ELEVATION: 486.298'



SITE ANALYSIS DATA CHART

A.) TOTAL PROJECT AREA	2.01 AC.												
B.) AREA OF PLAN SUBMISSION	2.01 AC.												
C.) LIMIT OF DISTURBED AREA	1.65 AC.												
D.) PRESENT ZONING	PGCC MULTI-USE SUBDISTRICT												
E.) PROPOSED USE OF SITE	2-STORY MAINTENANCE SHOP, OFFICES, ACCESSORY APARTMENT, EQUIPMENT STORAGE												
F.) FLOOR SPACE ON EACH LEVEL OF BLDG PER USE	<table border="1"> <tr> <td>1st FLOOR (OFFICE)</td> <td>2,502 S.F.±</td> </tr> <tr> <td>1st FLOOR (SHOP)</td> <td>4,148 S.F.±</td> </tr> <tr> <td>1st FLOOR (STORAGE)</td> <td>6,142 S.F.±</td> </tr> <tr> <td>2nd FLOOR (ACCESSORY APARTMENT)</td> <td>2,489 S.F.±</td> </tr> <tr> <td>LOWER LEVEL (STORAGE)</td> <td>3,260 S.F.±</td> </tr> </table>	1st FLOOR (OFFICE)	2,502 S.F.±	1st FLOOR (SHOP)	4,148 S.F.±	1st FLOOR (STORAGE)	6,142 S.F.±	2nd FLOOR (ACCESSORY APARTMENT)	2,489 S.F.±	LOWER LEVEL (STORAGE)	3,260 S.F.±		
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G.) TOTAL NUMBER OF UNITS ALLOWED AS SHOWN ON FINAL PLAT(S)	1												
H.) TOTAL NUMBER OF UNITS PROPOSED	1												
I.) MAXIMUM NUMBER OF EMPLOYEES, TENANTS ON SITE PER USE	25 (in season)												
J.) NUMBER OF PARKING SPACES REQUIRED BY HO. CO. ZONING REGS AND/OR FOP CRITERIA	<table border="1"> <tr> <td>OFFICE: 2,502 SF (0.3 SPACES PER 1000 SF)</td> <td>9</td> </tr> <tr> <td>SHOP: 4,148 SF (0.5 SPACES PER 1000 SF)</td> <td>3</td> </tr> <tr> <td>STORAGE: 9,402 SF (0.5 SPACES PER 1000 SF)</td> <td>5</td> </tr> <tr> <td>ACCESSORY APARTMENT (1 SPACE PER APT.)</td> <td>1</td> </tr> <tr> <td>TOTAL REQUIRED:</td> <td>18</td> </tr> </table>	OFFICE: 2,502 SF (0.3 SPACES PER 1000 SF)	9	SHOP: 4,148 SF (0.5 SPACES PER 1000 SF)	3	STORAGE: 9,402 SF (0.5 SPACES PER 1000 SF)	5	ACCESSORY APARTMENT (1 SPACE PER APT.)	1	TOTAL REQUIRED:	18		
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K.) NUMBER OF PARKING SPACES PROVIDED ON-SITE (INCLUDES 2 HANDICAPPED SPACES)	18												
L.) OPEN SPACE ON-SITE	N/A												
PERCENTAGE OF GROSS AREA	N/A												
M.) AREA OF RECREATIONAL OPEN SPACE REQUIRED	N/A												
AREA OF RECREATIONAL OPEN SPACE PROVIDED	N/A												
N.) BUILDING COVERAGE OF SITE	13,147 S.F.±												
PERCENTAGE OF GROSS AREA	14.6%												
O.) APPLICABLE DPZ FILE REFERENCES:	<table border="1"> <tr> <td>S-86-13</td> <td>P-06-13</td> </tr> <tr> <td>S-03-01</td> <td>SP-05-074</td> </tr> <tr> <td>F-08-060</td> <td>F-08-084</td> </tr> <tr> <td>WP-08-009</td> <td>WP-05-074</td> </tr> <tr> <td>WP-09-211</td> <td>WP-10-159</td> </tr> <tr> <td>WP-11-168</td> <td>WP-12-129</td> </tr> </table>	S-86-13	P-06-13	S-03-01	SP-05-074	F-08-060	F-08-084	WP-08-009	WP-05-074	WP-09-211	WP-10-159	WP-11-168	WP-12-129
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PESTICIDE BEST MANAGEMENT PRACTICES (TAKEN FROM MDA PESTICIDE INFORMATION SHEET)

KNOW THE APPLICATION SITE - SCOUT THE AREA TO EVALUATE THE EXTENT OF THE PEST PROBLEM IN ORDER TO SELECT THE APPROPRIATE CONTROL METHOD. IDENTIFY ENVIRONMENTALLY SENSITIVE AREAS AND LEARN HOW THE SOIL TYPES AND THE LAYOUT OF EACH APPLICATION SITE AFFECT THE MOVEMENT OF WATER, BOTH THROUGH AND ACROSS SOIL.

READ AND FOLLOW LABEL DIRECTIONS - PESTICIDE LABELS CONTAIN IMPORTANT INFORMATION ABOUT APPLICATOR AND ENVIRONMENTAL SAFETY, INCLUDING WATER QUALITY PROTECTION. ALWAYS FOLLOW LABEL DIRECTIONS.

MATCH APPLICATION RATES TO THE PEST PROBLEM - EVERY PESTICIDE LABEL SPECIFIES APPLICATION RATES. CAREFULLY CONSIDER ALL ASPECTS OF THE PEST PROBLEM, SUCH AS THE PEST OR PESTS, LEVEL OF INFESTATION, LOCATION, AND ENVIRONMENTAL CONSIDERATIONS (i.e., SOIL TYPE, ORGANIC MATTER).

DO NOT MIX AND LOAD NEAR WATER - PESTICIDES CAN REACH GROUNDWATER AND SURFACE WATER AS A RESULT OF DISCHARGES OR SPILLS THAT OCCUR DURING MIXING AND LOADING OPERATIONS. MIXING AND LOADING SHOULD BE DONE AS FAR AS POSSIBLE (AT LEAST 50 FEET) FROM WELLS, LAKES, STREAMS, RIVERS AND STORM DRAINS. WHEN POSSIBLE, MIX AND LOAD THE PESTICIDES AT THE SITE OF APPLICATION. APPLICATORS SHOULD ALSO CONSIDER THE USE OF A LIQUID-TIGHT MIXING AND LOADING PAD. BE SURE ALL CONTAINERS BEING TRANSPORTED ARE SECURED.

PREVENT BACKSPINNING - WHEN FILLING ANY PESTICIDE SPRAY TANK FROM A WELL OR OTHER WATER SOURCE BE SURE THE END OF THE HOSE STAYS ABOVE THE SPRAY SOLUTION IN THE TANK. BACKSPINNING CAN OCCUR WHEN THE END OF THE FILL HOSE OR PIPE FALLS BELOW THE LEVEL OF THE SOLUTION IN THE TANK AND THERE IS A DROP IN WATER PRESSURE. USE AN APPROVED ANTI-BACKSPINNING DEVICE OR AN AIR BREAK IN THE WATER SYSTEM.

CALIBRATE APPLICATION EQUIPMENT PROPERLY - FREQUENTLY CHECK AND MAINTAIN SPRAY NOZZLES, HOSES, GAUGES AND TANKS. PROPER CALIBRATION IS THE KEY TO APPLYING ACCURATE RATES OF PESTICIDES. IMPROPER CALIBRATION CAN RESULT IN TOO MUCH OR TOO LITTLE PRODUCT APPLIED, IRREGULAR DISTRIBUTION AND POOR PEST CONTROL. INACCURATE TANK VOLUMES AND PRESSURE GAUGES OR WORN NOZZLES ALSO MAY CAUSE IMPROPER APPLICATION. INSPECT APPLICATION EQUIPMENT BEFORE EVERY USE.

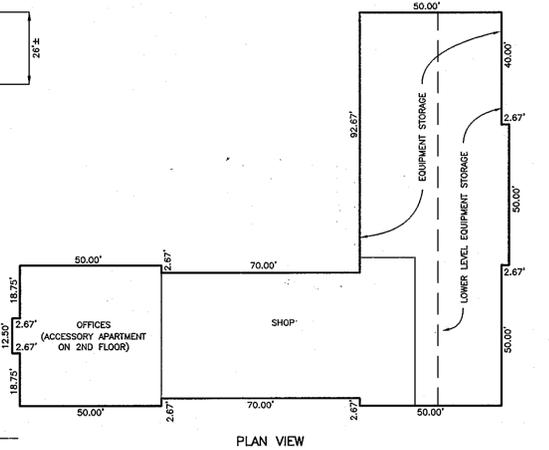
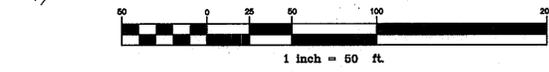
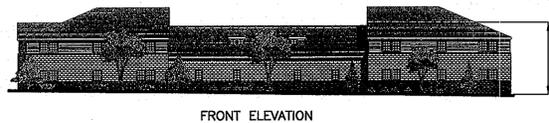
DELAY PESTICIDE APPLICATIONS IF HEAVY RAIN IS FORECAST - PESTICIDES ARE MOST SUSCEPTIBLE TO RUNOFF FROM HEAVY RAINS DURING THE FIRST SEVERAL HOURS AFTER APPLICATION.

AVOID OVSERSPRAY AND DRIFT - CHECK THE PESTICIDE LABEL FOR APPLICATION PRECAUTIONS OR RESTRICTIONS DURING WINDY CONDITIONS. WIND SPEED, TEMPERATURE AND HUMIDITY ALL AFFECT PESTICIDE SPRAY DRIFT. DRIFT CAN BE REDUCED BY LOWERING BOOM HEIGHTS AND USING NOZZLES THAT PRODUCE LARGE DROPLET SIZES.

STORE PESTICIDES IN A SAFE PLACE - PESTICIDES NEED TO BE STORED IN A SECURE PLACE AND SHOULD BE STORED IN THEIR ORIGINAL CONTAINERS WITH THE LABELS CLEARLY VISIBLE. PESTICIDES MUST BE STORED AT LEAST 50 FEET FROM ANY WELLS UNLESS THEY ARE STORED IN SECONDARY CONTAINMENT.

PROPERLY DISPOSE OF PESTICIDE CONTAINERS - INFORMATION ABOUT CONTAINER DISPOSAL IS ON THE PESTICIDE LABEL. CONTAINERS SHOULD BE TRIPLE OR PRESSURED-RINSE THOROUGHLY AFTER USE. PUNCTURED AND DISPOSED OF IN ACCORDANCE WITH LABEL DIRECTIONS OR OFFERED FOR RECYCLING AS PART OF THE MARYLAND DEPARTMENT OF AGRICULTURE'S PROGRAM. SPRAYERS SHOULD BE CLEANED AT THE APPLICATION SITE WHENEVER POSSIBLE, AND AT A SAFE DISTANCE FROM WELLS, LAKES, STREAMS AND STORM DRAINS. THE RESIDUE SHOULD BE SPRAYED ON A SITE THAT IS LISTED ON THE PESTICIDE LABEL OR USED AS MAKEUP WATER IN THE NEXT TANK MIX. BE SURE LABEL RATES ARE NOT EXCEEDED.

DEVELOP AN EMERGENCY RESPONSE PLAN - ANYONE WHO STORES, HANDLES OR USES PESTICIDES SHOULD HAVE AN EMERGENCY RESPONSE PLAN IN CASE AN ACCIDENT OCCURS.



SHEET INDEX

SHEET	TITLE
1	TITLE SHEET
2	SITE DEVELOPMENT & GRADING PLAN
3	SEDIMENT & EROSION CONTROL PLAN, NOTES & DETAILS
4	SEDIMENT & EROSION CONTROL NOTES AND STORMWATER DETAILS
5	STORM DRAIN PROFILES, DETAILS AND MAP
6	LANDSCAPE PLAN AND MISCELLANEOUS DETAILS

ADDRESS CHART

LOT	STREET ADDRESS
A	10790 RESORT ROAD

PERMIT INFORMATION CHART

SUBDIVISION NAME:	SECTION/AREA:	LOT/PARCEL #
VILLAGES AT TURF VALLEY	PHASE 2 SECTION 1	PARCEL 'A'
PLAT No. OR L/F	GRID No.	ZONE
22270-22285	17	PGCC
TAX MAP NO	ELECTION DISTRICT	CENSUS TRACT
16	3rd	6030.00

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division: *[Signature]* 3/21/13

Chief, Division of Land Development: *[Signature]* 3/28/13

Director: *[Signature]* 4/25/13

APPROVED: PLANNING BOARD OF HOWARD COUNTY

DATE: 4/15/10

[Signature]

MAINTENANCE SHOP PLAN AND ELEVATION VIEWS.
 SCALE: 1" = 30'

BENCHMARK ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE & SUITE 418 • ELICOTT CITY, MARYLAND 21043
 (P) 410-465-6105 (F) 410-465-8644
 60 THOMAS JOHNSON DRIVE & FREDERICK, MARYLAND 21702
 (P) 301-371-5506 (F) 301-371-5506
 WWW.BE-CMDENGINERING.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. 222-2013.

VILLAGES AT TURF VALLEY
PARCEL 'A'
GOLF COURSE MAINTENANCE SHOP

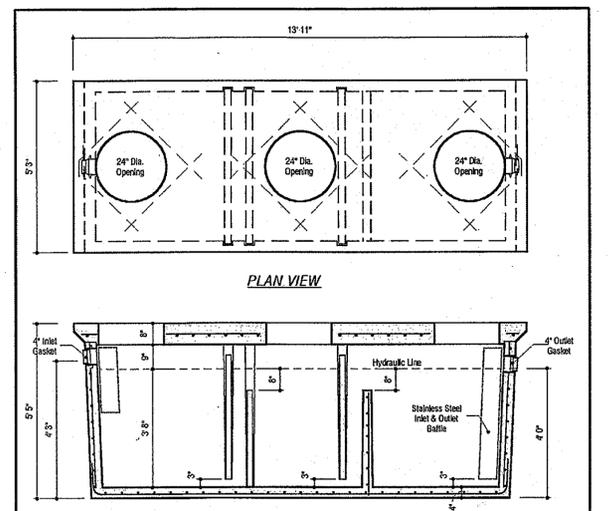
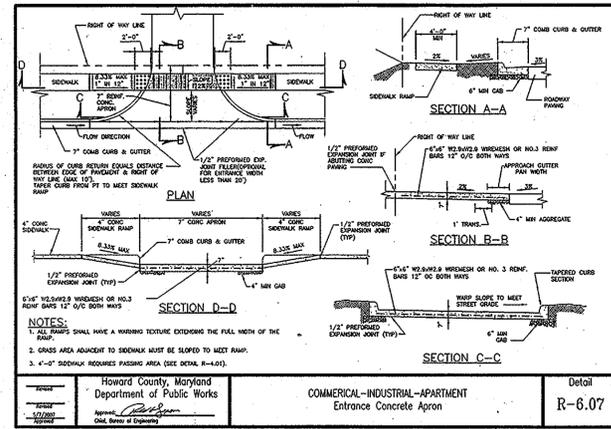
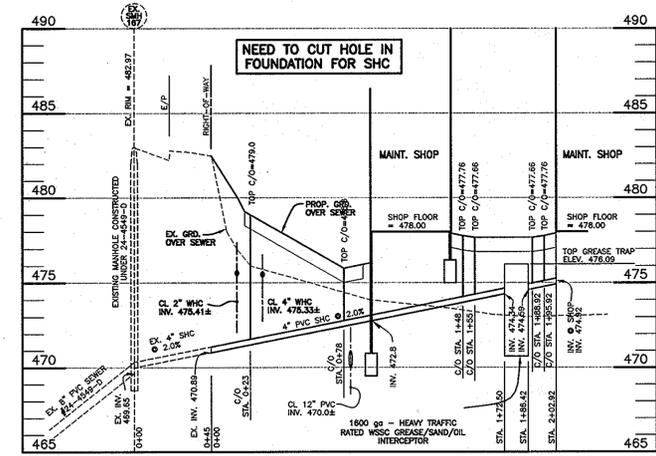
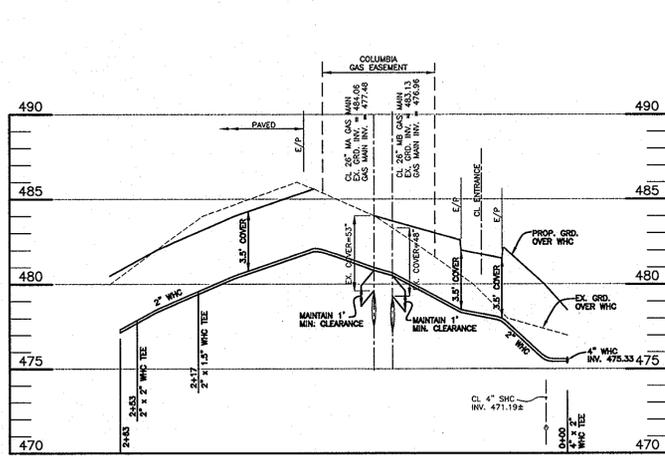
TAX MAP: 16 GRID: 17 PARCEL: A ZONED: PGCC
 ELECTION DISTRICT NO. 3 HOWARD COUNTY, MARYLAND

TITLE SHEET

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

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

DATE: FEBRUARY, 2013 BEI PROJECT NO: 2085
 SCALE: AS SHOWN SHEET 1 OF 6

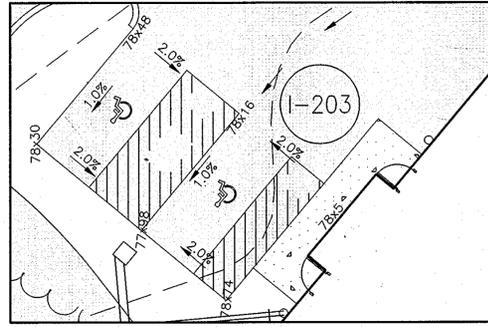
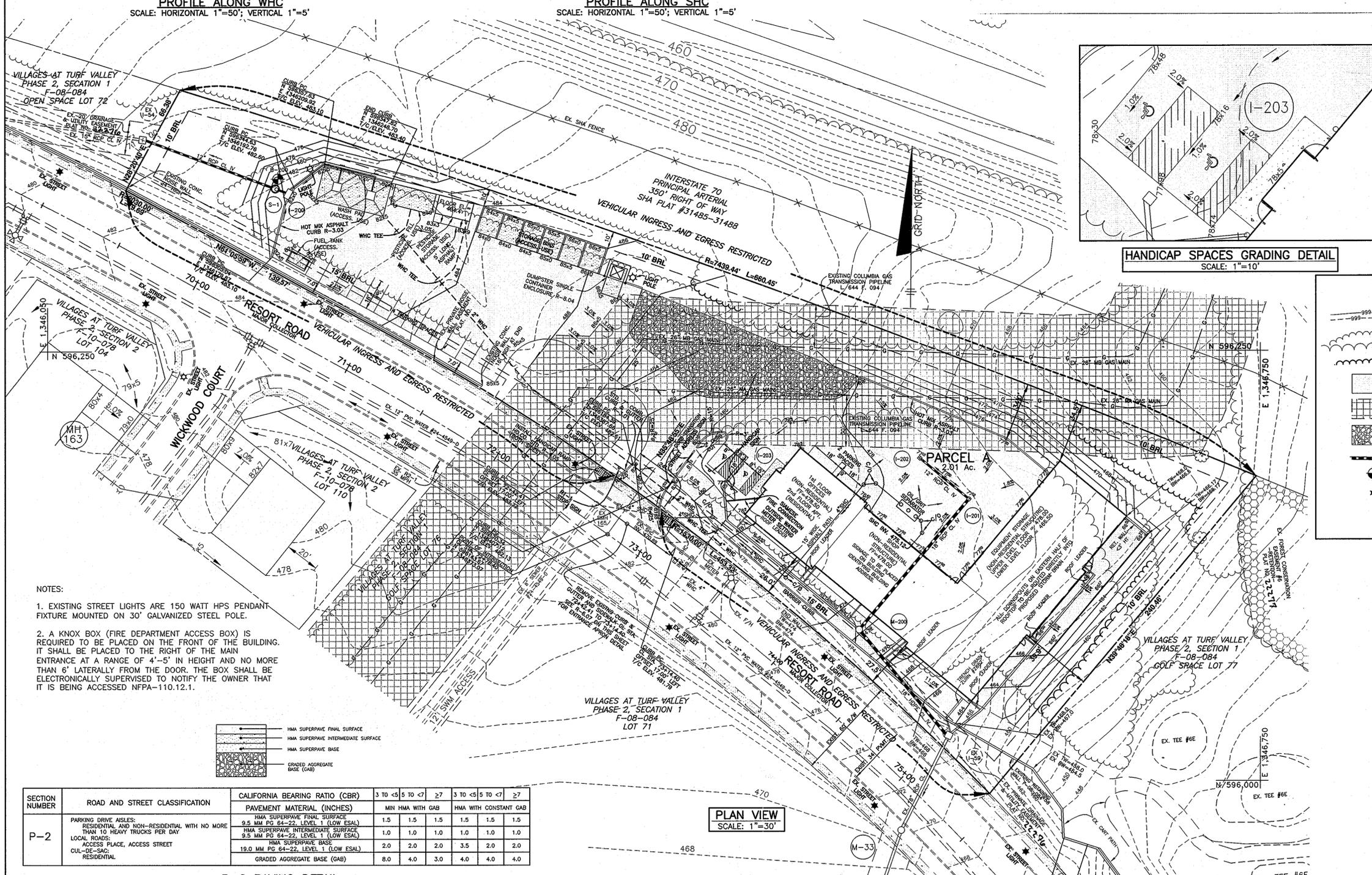


DESIGN DATA & GENERAL NOTES

- Concrete strength $f_c = 5,000$ p.s.i. @ 28 days. Density = 150 pcf.
- Cement - Portland Type IV per ASTM C 150-92.
- Admixtures & plasticizers per ASTM C 260-98 & C 494-92.
- Reinforcing per ASTM A615, Grade 60, domestic. Min. 1-1/2" cover.
- Walls, base, & top slab designed for 15-20 loading.
- Top slab sealed with butyl rope mastic.
- Maximum 9" of earth cover over top slab.
- Approved by WSSC.

WSSC GREASE/SAND/OIL INTERCEPTOR #1
1600 Gallon - Heavy Traffic Rated BUILDING

Dwg. No. M527 No Scale October 29, 2001



LEGEND

- EXISTING CONTOURS (Aerial Jan. 2006 AND F-08-084)
- EXISTING BRUSH
- EXISTING TREETLINE
- PROPOSED TREETLINE
- PROPOSED P-2 PAVEMENT
- EXISTING GAS EASEMENT
- PROPOSED PERMANENT STONE
- PROPOSED STORM DRAIN
- SOIL BORING LOCATION
- EXISTING STREET LIGHTS INSTALLED UNDER F-08-084.

NOTE: SEE GENERAL NOTE 30 ON SHEET 1 REGARDING BUILDING RESTRICTION LINES

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE 4/15/10
DM

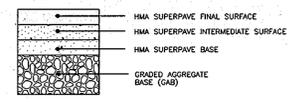
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 3/27/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 3/28/13
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 3/28/13
DIRECTOR DATE

- NOTES:**
- EXISTING STREET LIGHTS ARE 150 WATT HPS PENDANT FIXTURE MOUNTED ON 30' GALVANIZED STEEL POLE.
 - A KNOX BOX (FIRE DEPARTMENT ACCESS BOX) IS REQUIRED TO BE PLACED ON THE FRONT OF THE BUILDING. IT SHALL BE PLACED TO THE RIGHT OF THE MAIN ENTRANCE AT A RANGE OF 4'-5" IN HEIGHT AND NO MORE THAN 6' LATERALLY FROM THE DOOR. THE BOX SHALL BE ELECTRONICALLY SUPERVISED TO NOTIFY THE OWNER THAT IT IS BEING ACCESSED NFPA-110.12.1.



SECTION NUMBER	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR)		3 TO <5		5 TO <7		7 TO <10	
		MIN	HMA WITH GAB	HMA WITH CONSTANT GAB	MIN	HMA WITH GAB	HMA WITH CONSTANT GAB	MIN	HMA WITH GAB
P-2	PARKING DRIVE ASILES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY LOCAL ROADS ACCESS PLACE, ACCESS STREET CUL-DE-SAC, RESIDENTIAL	PAVEMENT MATERIAL (INCHES)		MIN HMA WITH GAB		HMA WITH CONSTANT GAB		MIN HMA WITH GAB	
		HMA SUPERPAVE FINAL SURFACE		1.5	1.5	1.5	1.5	1.5	1.5
		HMA SUPERPAVE INTERMEDIATE SURFACE		1.0	1.0	1.0	1.0	1.0	1.0
		HMA SUPERPAVE BASE		2.0	2.0	2.0	3.5	2.0	2.0
		GRADED AGGREGATE BASE (GAB)		8.0	4.0	3.0	4.0	4.0	4.0

P-2 PAVING DETAIL

BENCHMARK ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE SUITE 418 ELLICOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6444
60 THOMAS JOHNSON DRIVE A FREDERICK, MARYLAND 21702
(P) 301-371-3505 (F) 301-371-3508
WWW.BE-ENGINEERING.COM

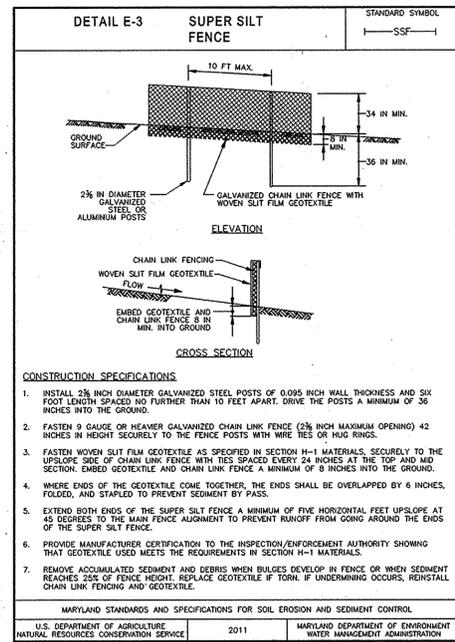
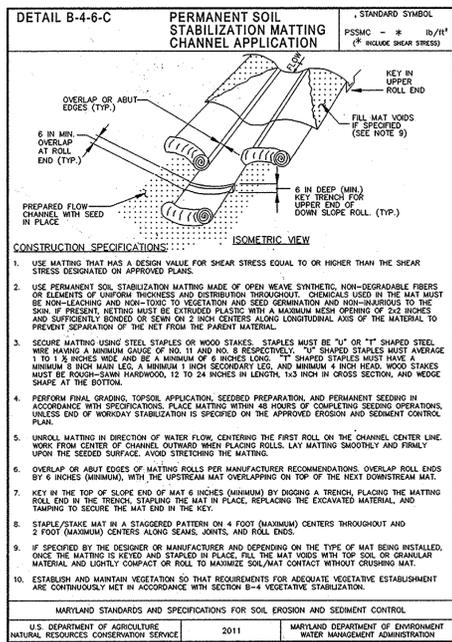
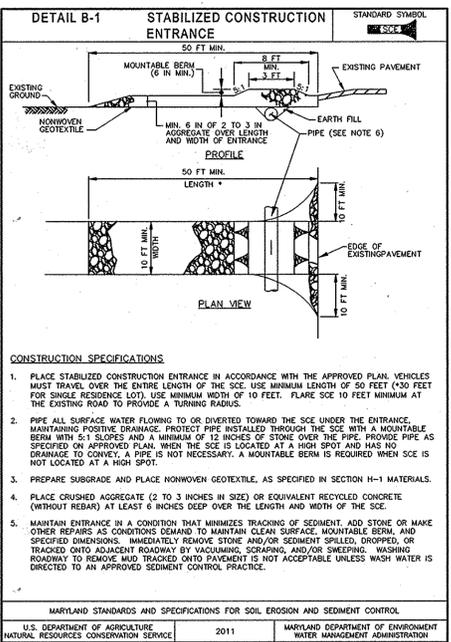
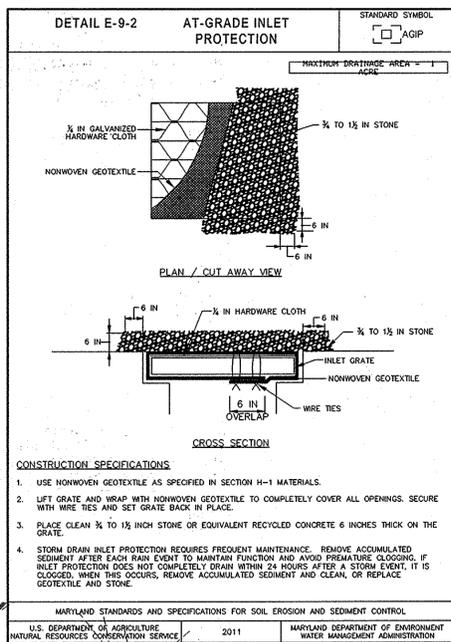
VILLAGES AT TURF VALLEY PARCEL 'A'
GOLF COURSE MAINTENANCE SHOP
TAX MAP: 16 GRID: 17 PARCEL: A ZONED: PGCC
10790 RESORT ROAD ELECTION DISTRICT NO. 3 HOWARD COUNTY, MARYLAND

SITE DEVELOPMENT AND GRADING PLAN

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

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

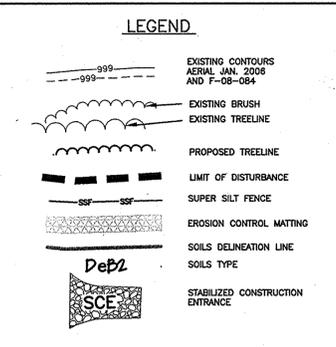
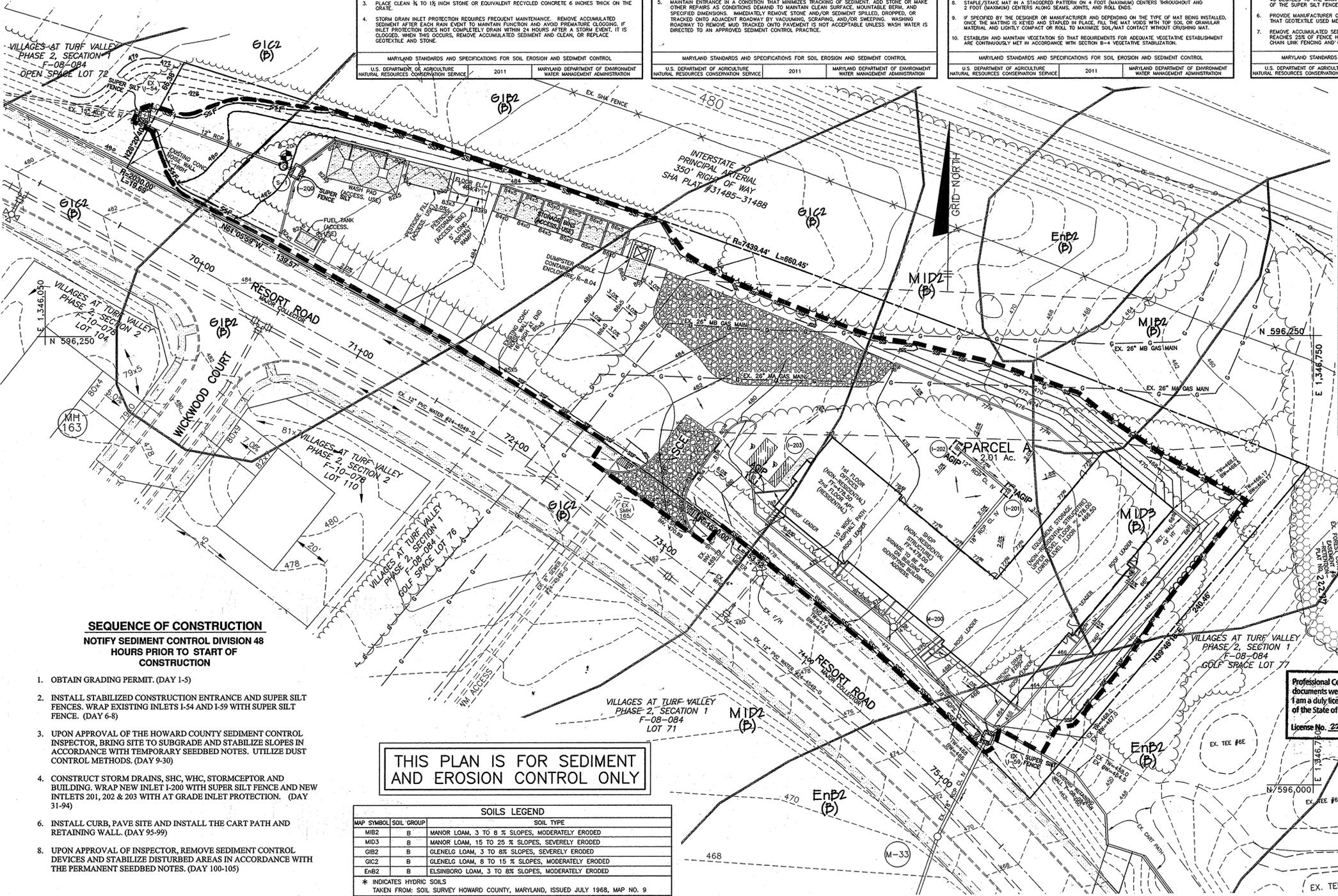
DATE: FEBRUARY, 2013 BEI PROJECT NO: 2085
SCALE: AS SHOWN SHEET 2 OF 6



SEDIMENT CONTROL NOTES

- A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTION, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION. (315-1850).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL, REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERMETER SLOPES AND ALL AREAS GREATER THAN 3 X 1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE VENCED, AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 51) SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:

TOTAL AREA OF SITE	2.01	ACRES
AREA DISTURBED	1.65	ACRES
AREA TO BE ROOFED OR PAVED	1.09	ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.56	ACRES
TOTAL CUT	391	CY
TOTAL FILL	6,430	CY
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.



APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE: 4/15/10
[Signature]

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: [Signature] DATE: 2/8/2013

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 OF THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENT BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER: [Signature] DATE: 2/8/13

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
[Signature] DATE: 2/14/13
[Signature] DATE: 3/27/13
[Signature] DATE: 2/28/13
[Signature] DATE: 2/28/13

- ### SEQUENCE OF CONSTRUCTION
- NOTIFY SEDIMENT CONTROL DIVISION 48 HOURS PRIOR TO START OF CONSTRUCTION
- OBTAIN GRADING PERMIT. (DAY 1-5)
 - INSTALL STABILIZED CONSTRUCTION ENTRANCE AND SUPER SILT FENCES. WRAP EXISTING INLETS I-54 AND I-59 WITH SUPER SILT FENCE. (DAY 6-8)
 - UPON APPROVAL OF THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, BRING SITE TO SUBGRADE AND STABILIZE SLOPES IN ACCORDANCE WITH TEMPORARY SEEDBED NOTES. UTILIZE DUST CONTROL METHODS. (DAY 9-30)
 - CONSTRUCT STORM DRAINS, SHC, WHC, STORMCEPTOR AND BUILDING. WRAP NEW INLET I-200 WITH SUPER SILT FENCE AND NEW INLETS 201, 202 & 203 WITH AT GRADE INLET PROTECTION. (DAY 31-94)
 - INSTALL CURB, PAVE SITE AND INSTALL THE CART PATH AND RETAINING WALL. (DAY 95-99)
 - UPON APPROVAL OF INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT SEEDBED NOTES. (DAY 100-105)

THIS PLAN IS FOR SEDIMENT AND EROSION CONTROL ONLY

SOILS LEGEND

MAP SYMBOL	SOIL GROUP	SOIL TYPE
MB2	B	MANOR LOAM, 3 TO 8% SLOPES, MODERATELY ERODED
MB3	B	MANOR LOAM, 15 TO 25% SLOPES, SEVERELY ERODED
GB2	B	GLENELG LOAM, 3 TO 8% SLOPES, SEVERELY ERODED
GB3	B	GLENELG LOAM, 8 TO 15% SLOPES, MODERATELY ERODED
EB2	B	ELLSBORO LOAM, 3 TO 8% SLOPES, MODERATELY ERODED

* INDICATES HYDRIC SOILS
TAKEN FROM: SOIL SURVEY HOWARD COUNTY, MARYLAND, ISSUED JULY 1968, MAP NO. 9



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: 6-30-15

BENCHMARK ENGINEERING, INC.

8450 BALTIMORE NATIONAL PIKE SUITE 418 ELLETTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6644
60 THOMAS JOHNSON DRIVE AFFRICKSBURG, MARYLAND 21702
(P) 301-371-3605 (F) 301-371-3608
WWW.BE-CIVILENGINEERING.COM

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

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

VILLAGES AT TURF VALLEY PARCEL 'A' GOLF COURSE MAINTENANCE SHOP
TAX MAP: 16 GRID: 17 PARCEL: A ZONED: PGCC
10790 RESORT ROAD, ELECTION DISTRICT NO. 3 HOWARD COUNTY, MARYLAND

SEDIMENT & EROSION CONTROL PLAN, NOTES AND DETAILS
DATE: FEBRUARY, 2013 BEI PROJECT NO: 2085
SCALE: AS SHOWN SHEET 3 OF 6

TOPSOIL SPECIFICATIONS

I. Topsoil salvaged from the existing site may be used provided that it meets that standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experiment Station.

II. Topsoil Specifications - Soil to be used as topsoil must meet the following:
 1. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand, or loam. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textures and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1-1/2" in diameter.

2. Topsoil must be free of plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nutcracker, poison ivy, bitula, or others as specified.
 3. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/core (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.

III. For sites having disturbed areas under 5 acres:
 1. Place topsoil (if required) and apply soil amendments as specified in 2.0.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.

IV. For sites having disturbed areas over 5 acres:
 1. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 a. pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 b. Organic content or topsoil shall be not less than 1.5 percent by weight.
 c. Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 d. No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials.

Note: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.

2. Place topsoil (if required) and apply soil amendments as specified in 2.0.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.

V. Topsoil Application
 1. When topsoiling, maintain needed erosion and sediment control practices such as diversions, grass stabilization structures, earth ditches, slope silts fence and sediment traps and basins.
 2. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 8" higher in elevation.
 3. Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4". Seeding shall be performed in such a manner that seeding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.

4. Topsoil shall not be placed with the topsoil or subsoil in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seeded preparation.

VI. Alternative for Permanent Seeding - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below.

1. Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:
 a. Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.05.
 b. Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium, have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.
 c. Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.

2. Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.

References: Guidelines Specifications, Soil Preparation and Seeding, MD-VA, Pub. #1, Cooperative Extension Services, University of Maryland and Virginia, Washington, Revised 1972.

B-4-4 STANDARDS AND SPECIFICATIONS

FOR TEMPORARY STABILIZATION

Definition
 To stabilize disturbed soils with vegetation for up to 6 months.

Purpose
 To use fast growing vegetation that provides cover on disturbed soils.

Conditions Where Practice Applies
 Exposed soils where ground cover is needed for a period of 6 months or less. For longer duration of time, permanent stabilization practices are required.

Criteria

- Select one or more of the species or seed mixtures listed in Table B.1 for the appropriate Plant Hardiness Zone (from Figure B.3), and enter them in the Temporary Seeding Summary below along with application rates, seeding dates and seeding depths. If the Summary is not on the plan and completed, then Table B.1 plus fertilizer and lime rates must be put on the plan.
- For sites having soil tests performed, use and show the recommended rates by the testing agency. Soil tests are required for Temporary Stabilization, and seeding dates are required.
- When stabilization is required outside of a seeding season, apply seed and mulch or straw mulch alone as prescribed in Section B-4-3.A.1.b and maintain until the next seeding season.

B-4-5 STANDARDS AND SPECIFICATIONS

FOR PERMANENT STABILIZATION

Definition
 To stabilize disturbed soils with permanent vegetation.

Purpose
 To use long-lived perennial grasses and legumes to establish permanent ground cover on disturbed soils.

Conditions Where Practice Applies
 Exposed soils where ground cover is needed for 6 months or more.

Criteria

- General Use
 - Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardiness Zone (from Figure B.3) and based on the site conditions or purpose found on Table B.2. Enter selected mixtures, application rates, and seeding dates in the Permanent Seeding Summary. The Summary is to be placed on the plan.
 - Additional planting specifications for exceptional sites such as shorelines, stream banks, or dunes or for special purposes such as wildlife or esthetic treatment may be found in USDO-NEPC Technical Field Office Code, Section 342 - Critical Area Planting.
 - For sites having disturbed areas over 5 acres, use and show the rates recommended by the soil testing agency.
 - For areas receiving low maintenance, apply urea form fertilizer (46-0-0) at 3 1/2 pounds per 1000 square feet (50 pounds per acre) at the time of seeding in addition to the soil amendments shown in the Permanent Seeding Summary.

2. Turfgrass Mixtures
 a. Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenance.
 b. Select one or more of the species or mixtures listed below based on the site conditions or purpose. Enter selected mixtures, application rates, and seeding dates in the Permanent Seeding Summary. The Summary is to be placed on the plan.

1. Kentucky Bluegrass: Full Sun Mixture: For use in areas that receive intensive management. Intensive management is defined as frequent mowing, frequent fertilization, and frequent irrigation. Recommended Kentucky Bluegrass Cultivars Seeding Rate: 1.5 to 2.0 pounds per 1000 square feet. Choose a minimum of three Kentucky Bluegrass Cultivars with each ranging from 10 to 35 percent of the total mixture by weight.

2. Kentucky Bluegrass/Perennial Ryegrass: Full Sun Mixture: For use in full sun areas where rapid establishment is necessary and when turf will receive medium to intensive management. Recommended Kentucky Bluegrass Cultivars Seeding Rate: 2.0 pounds mixture per 1000 square feet. Choose a minimum of three Kentucky Bluegrass Cultivars with each ranging from 10 to 35 percent of the total mixture by weight.

3. Tall Fescue/Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. Recommended Kentucky Bluegrass Cultivars Seeding Rate: 1.5 to 2.0 pounds per 1000 square feet. Choose a minimum of three Kentucky Bluegrass Cultivars to 5 percent Seeding Rate: 5 to 8 pounds per 1000 square feet. One or more cultivars may be blended.

4. Kentucky Bluegrass/Fine Fescue: Shade Mixture: For use in areas with shade in Bluegrass lawns. For establishment in high quality, intensively managed turf area. Mixture includes Certified Kentucky Bluegrass Cultivars 30 to 40 percent and Certified Fine Fescue and 60 to 70 percent. Seeding Rate: 1 1/2 to 2 pounds per 1000 square feet.

Note: Select turfgrass varieties from those listed in the most current University of Maryland Publication, Agronomy Memo #77, "Turfgrass Cultivar Recommendations for Maryland". Choose certified material. Certified material is the best guarantee of cultivar purity. The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of consumer protection and assures a pure genetic line.

5. Ideal Times of Seeding for Turf Grass Mixtures
 Western MD: March 15 to June 1, August 1 to October 1 (Hardiness Zones: 5b, 6a)
 Central MD: March 1 to May 15, August 15 to October 15 (Hardiness Zones: 6b)
 Southern MD, Eastern Shore: March 1 to May 15, August 15 to October 15 (Hardiness Zones: 7a, 7b)

6. Till areas to receive seed by disk or other approved methods to a depth of 2 to 4 inches, level and rake the areas to prepare a proper seedbed. Remove stones and debris over 1 1/2 inches in diameter. The resulting seedbed must be in such condition that future mowing of grasses will pose no difficulty.

7. If soil moisture is deficient, supply new seedings with adequate water for plant growth (1/2 to 1 inch every 3 to 4 days depending on soil texture) until they are firmly established. This is not especially true when seedings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

8. Sod to provide quick cover on disturbed areas (2-1 grade or flatter)

1. General Specifications
 a. Class of turfgrass must be Maryland State Certified. Sod tubs must be made available to the job foreman and inspector.
 b. Sod must be machine cut at a uniform thickness of 1/2 inch, plus or minus 1/4 inch, at the time of cutting. Measurement for thickness must exclude top growth and thatch. Broken pads and torn or uneven ends will not be acceptable.
 c. Standard size sections of sod must be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section.
 d. Sod must not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival.
 e. Sod must be harvested, delivered, and installed within a period of 30 hours. Sod not transplanted within this period must be approved by an agronomist or soil scientist prior to its installation.

2. Sod Installation
 a. During periods of excessively high temperature or in areas having dry subsoil, lightly irrigate the subsoil immediately prior to laying the sod.
 b. Lay the first row of sod in a straight line with subsequent rows placed parallel to it and tightly wedged against each other. Stagger lateral joints to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots.
 c. Whenever possible, lay sod with the long edges parallel to the contour and with staggering joints. Roll and tamp, peg or otherwise secure the sod to prevent slippage on slopes. Ensure solid contact exists between sod roots and the underlying soil surface.
 d. Water the sod immediately following rolling and tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. Complete the operations of laying, tamping and irrigating for any piece of sod within eight hours.

3. Sod Maintenance
 a. In the absence of adequate rainfall, water daily during the first week or so often and sufficiently as necessary to maintain moist soil to a depth of 4 inches. Water sod during the heat of the day to prevent wilting.
 b. After the first week, sod watering is required as necessary to maintain adequate moisture content.
 c. Do not mow until the sod is firmly rooted. No more than 1/3 of the grass leaf must be removed by the initial cutting or subsequent cuttings. Maintain a grass height of at least 3 inches unless otherwise specified.

B-4-3 STANDARDS AND SPECIFICATIONS

FOR SEEDING AND MULCHING

Definition
 The application of seed and mulch to establish vegetative cover.

Purpose
 To protect disturbed soils from erosion during and at the end of construction.

Conditions Where Practice Applies
 To the surface of all perimeter controls, slopes, and any disturbed area not under active grading.

Criteria

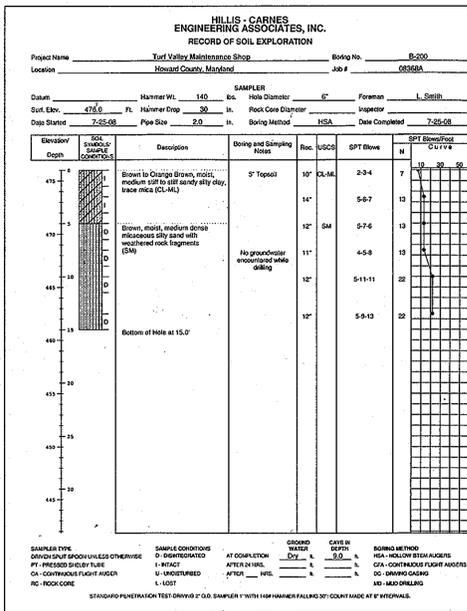
1. All seed must meet the requirements of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory. All seed must have been tested within the 6 months immediately preceding the date of sowing such material on any project. Refer to table B.4 regarding the quality of seed. Seed tags must be available upon request to the inspector to verify type of seed and seeding rate.
2. Mulch alone may be applied between the fall and spring seeding dates only if the ground is frozen. The appropriate seeding mixture must be applied when the ground thaws.
3. Inoculants: The inoculant for treating legume seed in the seed mixtures must be a pure culture of nitrogen fixing bacteria prepared specifically for the species. Inoculants must not be used later than the date indicated on the container. Add fresh inoculants as direct on the package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until application, especially above 75 to 80 degrees Fahrenheit can weaken bacteria and make the inoculant less effective.
4. Sod or seed must not be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials.

2. Application
 a. Dry Seeding: This includes use of conventional drop or broadcast spreaders.
 i. Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table B.1, Permanent Seeding Table B.3, or the specific seeding summary.
 ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. Roll the seeded area with a weighted roller to provide good seed to soil contact.
 iii. Cut/packer seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must be firm after planting.
 iv. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction.
 v. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer).
 i. Fertilizer is being applied at the time of seeding, the application rates should not exceed the following: nitrate, 100 pounds per acre total of soluble nitrogen; P₂O₅ (phosphorus), 200 pounds per acre; K₂O (potassium), 200 pounds per acre.
 ii. Lime: Use only ground agricultural limestone (up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when by hydroseeding.
 iii. Mix seed and fertilizer on site and seed immediately and without interruption.
 iv. When hydroseeding do not incorporate seed into the soil.

b. Mulching
 1. Mulch Materials (in order of preference)
 i. Straw consisting of thoroughly threshed wheat, rye, oat, or barley and reasonably light in color. Straw to be free of noxious weed seeds as specified in the Maryland Seed Law and not moldy, matted, caked, decayed, or excessively dusty. Note: Use sterile straw mulch in areas where one species of grass is desired.
 ii. Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into a uniform fibrous physical state.
 i. WCFM is to be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly green slurry.
 ii. WCFM, including dye, must contain no germination or growth-inhibiting factors.
 iii. WCFM materials are to be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material must form a moisture seal around the seed and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
 iv. WCFM material must not contain elements or compounds at concentrations levels that will be phytotoxic.
 v. WCFM must conform to the following physical requirements: fiber length of approximately 10 millimeters, diameter approximately 1 millimeter, pH range of 4.0 to 8.5, ash content of 1.8 percent maximum and water holding capacity of 90 percent minimum.

2. Application
 a. Apply mulch to all seeded areas immediately after seeding.
 b. When straw mulch is used, spread 8" over all seeded areas at the rate of 2 tons per acre to a uniform loose depth of 1 1/2 inches. Apply mulch to achieve a uniform distribution and depth so that the soil surface is not exposed. When using a mulch anchoring tool, increase the application rate to 2.5 tons per acre.
 c. Wood cellulose fiber used as mulch must be applied at a net dry weight of 1500 pounds per acre. Mix the wood cellulose fiber with water to attain a mixture with a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.

3. Anchoring
 a. Perform mulch anchoring immediately following application of mulch to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon the size of the area and erosion hazard:
 i. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of 2 inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should follow the contour.
 ii. Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a net dry weight of 750 pounds per acre. Mix the wood cellulose fiber with water at a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
 iii. Synthetic binders such as Acrylic DLR (Ago-Tack, DCA-70), Petrosol, Terra Tex II, Terra Tack-AR or other approved equal may be used. Follow application rates as specified by the manufacturer. Application of liquid binders needs to be heavier at the edges where wind catches mulch, such as in valleys and on crests of berms. Use of asphalt binders is strictly prohibited.
 iv. Lightweight plastic netting may be stapled over mulch according to manufacturer recommendations. Netting is usually available in rolls 4 to 10 feet wide and 300 to 3,000 feet long.



Precast Concrete Stormceptor® Order Request Form

CONTRACTOR INFORMATION
 Name: JFC INC.
 Address: 10376 BALTIMORE MILITARY RD
 City: BALTIMORE, MD
 State: MARYLAND
 Zip: 21045
 Contact: JIM SINGELAS
 Phone: 410-461-2266
 Fax: 410-461-1824

GENERAL/PRIME CONTRACTOR
 Name: SAME AS ABOVE
 Phone: 410-835-2600

OWNER INFORMATION
 Name: MANGIONE ENTERPRISES OF TURF VALLEY
 Phone: 410-835-2600

Stormceptor® Model
 450 500 1200 1800 2400 3500 4800 5900 7200 11800 13000 16000

Project Name: VILLAGES AT TURF VALLEY GOLF COURSE MAINTENANCE SHOP
 Designer: DAVID THOMPSON
 Designer Company: BENCHMARK ENGINEERING, INC.
 Phone: 410-865-6105
 Fax: 410-865-6044

Rinker HYDRO CONDUIT
 PLEASE FILL OUT COMPLETELY AND FAX TO:
 ATTN: BRIAN GINGRICH FAX: (301)698-5351, PHONE: (800)414-7960 EXT. 240

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED STORMCEPTOR WATER QUALITY DEVICE

A. THE STORMCEPTOR WATER QUALITY STRUCTURE SHALL BE PERIODICALLY INSPECTED AND CLEANED TO MAINTAIN OPERATION AND FUNCTION. THE OWNER SHALL INSPECT THE STORMCEPTOR UNIT YEARLY AT A MINIMUM, UTILIZING THE STORMCEPTOR INSPECTION/MONITORING FORM. INSPECTIONS SHALL BE DONE BY USING A CLEAR PLEXIGLASS TUBE ("SLUDGE JUDGE") TO EXTRACT A WATER COLUMN SAMPLE WHEN THE SEDIMENT DEPTHS EXCEED THE LEVEL SPECIFIED IN TABLE E OF THE STORMCEPTOR TECHNICAL MANUAL, THE UNIT MUST BE CLEANED.

B. THE STORMCEPTOR WATER QUALITY STRUCTURE SHALL BE CHECKED AND CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. THE OWNER SHALL CONTACT THE APPROPRIATE REGULATORY AGENCIES.

C. THE MAINTENANCE OF THE STORMCEPTOR UNIT SHALL BE DONE USING A VACUUM TRUCK WHICH WILL REMOVE THE WATER, SEDIMENT, DEBRIS, FLOATING HYDROCARBONS AND OTHER MATERIALS IN THE UNIT. PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED BY THE OWNER.

D. THE INLET AND OUTLET PIPES SHALL BE CHECKED FOR ANY OBSTRUCTIONS AT LEAST ONCE EVERY SIX MONTHS. IF OBSTRUCTIONS ARE FOUND THE OWNER SHALL HAVE THEM REMOVED. STRUCTURAL PARTS OF THE STORMCEPTOR UNIT SHALL BE REPAIRED AS NEEDED.

E. THE OWNER SHALL RETAIN AND MAKE THE STORMCEPTOR INSPECTION/MONITORING FORMS AVAILABLE TO THE HOWARD COUNTY OFFICIALS UPON THEIR REQUEST.

STORMCEPTOR® SPECIFICATION - STC 450i
 The oil/sediment separator unit must be a "Stormceptor®" model manufactured by Rinker Stormceptor® or other approved unit.

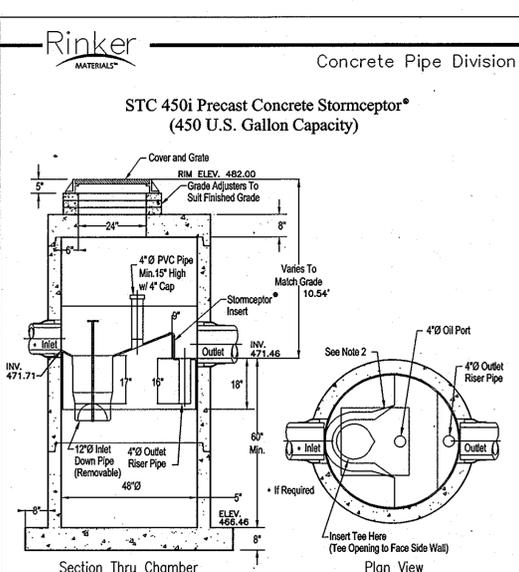
The separator must remove oil and sediment from storm water during frequent wet weather events. It should treat a minimum of 75 to 90 percent of the annual runoff volume and be capable of removing 50 to 80 percent of the total suspended sediment load as well as more than 90 percent of floatable free oil. The separator should be capable of trapping silt and clay size particles, in addition to large particles. It should be installed underground as part of the storm sewer system and be structurally designed for (15-20 min.) traffic loading at the surface, with the storage in the separator vertically oriented. The separator should be maintained from the surface via one access point.

The separator should be equipped with an internal high flow bypass that regulates the flow rate into the treatment chamber and conveys high flows directly to the outlet so the scour and/or re-suspension of material previously collected in the separator does not occur. External bypasses are not acceptable. The bypass area must be physically separated from the separation area to prevent mixing with the separator circular and constructed from either fiberglass or precast concrete risers. The concrete separator is designed and manufactured in accordance with ASTM C-478. The concrete joints are oil resistant, water tight and meet the design criteria according to ASTM C-443. In the concrete Stormceptor®, a fiberglass insert, bolted and sealed watertight to the inside of the bypass chamber, will divert low to normal storm water flows into the treatment chamber. A minimum of 12 inches of oil storage should be lined with fiberglass to provide secondary containment of any hydrocarbon materials.

The difference between the separator inlet pipe elevation and the separator outlet pipe elevation must be 3 inches (75mm). The separator will be able to be used as a bend structure in the storm sewer system. The access cover for all non-inlet type separators should clearly indicate that it is an oil/sediment separator.

The separator must be capable of floatable substance spills including free oil and must not be compromised by temporary backwater conditions (i.e. trapped pollutants should not be re-suspended and occurred from the separator during backwater conditions). The capabilities of the selected separator must be documented with scientific studies and reports. Preference will be given to reports that have been verified by a state or federal storm water verification program.

For more information, contact Stormceptor at 800.909.7763.



- Notes:**
1. The Use of Flexible Connection is Recommended at the Inlet and Outlet Where Applicable.
 2. The Cover Should be Positioned Over the Inlet Drop Pipe and the Oil Port.
 3. The Stormceptor System is protected by one or more of the following U.S. Patents: #4985148, #5498331, #5725760, #5753115, #5849181, #6068765, #6371690.
 4. Contact a Concrete Pipe Division representative for further details not listed on this drawing.

APPROVED
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 4/15/10
 [Signature]

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: [Signature] DATE: 2/18/2013

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: 2/18/13

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION: [Signature] DATE: 2/14/13
 CHIEF, DIVISION OF LAND DEVELOPMENT: [Signature] DATE: 2/14/13

CHIEF, DIVISION OF LAND DEVELOPMENT: [Signature] DATE: 2/27/13
 DIRECTOR: [Signature] DATE: 2/28/13

30.0 DUST CONTROL

Definition
 Controlling dust blowing and movement on construction sites and roads.

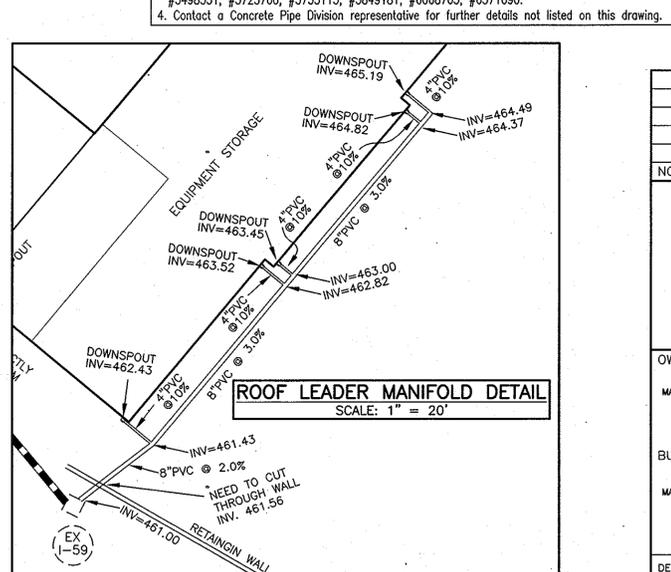
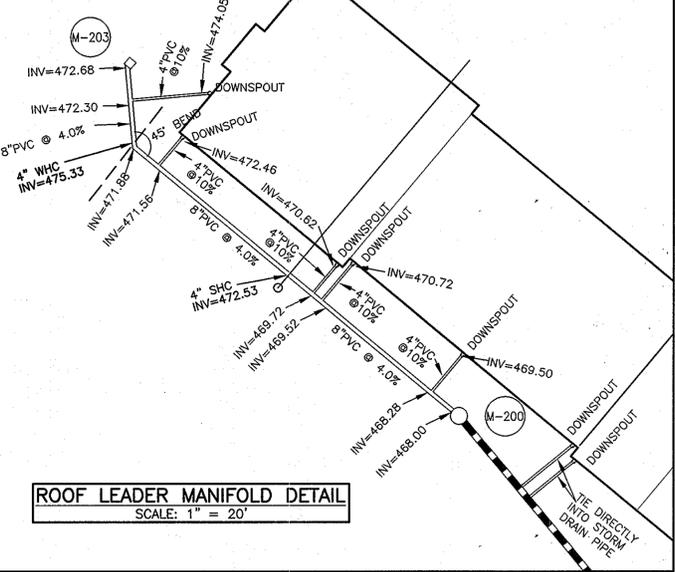
Purpose
 To prevent blowing and movement of dust from exposed soil surfaces, reduce on and off-site damage, health hazards, and improve traffic safety.

Conditions Where Practice Applies
 This practice is applicable to areas subject to dust blowing and movement where on and off-site damage is likely without treatment.

Specifications
 1. Mulches - See standards for vegetative stabilization with mulches only. Mulch should be crimped or trenched to prevent blowing.
 2. Vegetative Cover - See standards for temporary vegetative cover.
 3. Tillage - To roughen surface and bring clods to the surface. This is an emergency measure which should be used before soil blowing starts. Begin plowing on windward side of site. Chisel-type plows spaced about 2' apart, spring-toothed harrows, and similar plows are examples of equipment which may produce the desired effect.
 4. Irrigation - This is generally done as an emergency treatment. Site is sprinkled with water until the surface is moist. Repeat as needed. At no time should the site be irrigated to the point that runoff begins to flow.
 5. Barriers - Solid board fences, silt fences, snow fences, burp fences, straw bales, and similar material can be used to control air currents and soil blowing. Barriers placed at right angles to prevailing currents at intervals of about 10 times their height are effective in controlling soil blowing.
 6. Colcium Chloride - Apply at rates that will keep surface moist. May need retreatment.

Permanent Methods
 1. Permanent Vegetation - See standards for permanent vegetative cover, and permanent stabilization with soil. Existing trees or large shrubs may afford valuable protection if left in place.
 2. Topsoiling - Covering with less erodible soil materials. See standards for topsoiling.
 3. Stone - Cover surface with crushed stone or coarse gravel.

References
 1. Agriculture Handbook 346. Wind Erosion Forces in the United States and Their Use in Predicting Soil Loss.
 2. Agriculture Information Bulletin 354. How to Control Wind Erosion, USDA-ARS.



NO.	DATE	REVISION

BENCHMARK ENGINEERS & LAND SURVEYORS & PLANNERS
 ENGINEERING, INC.
 8480 BALTIMORE NATIONAL FIRE ACADEMY RD BALTIMORE, MARYLAND 21043
 (P) 410-465-6105 (F) 410-465-6144
 60 THOMAS JOHNSON DRIVE & FREDERICK, MARYLAND 21702
 (P) 301-371-3505 (F) 301-371-3506
 WWW.BED-ENGLANDENGINEERING.COM

VILLAGES AT TURF VALLEY
 PARCEL 'A'
 GOLF COURSE MAINTENANCE SHOP
 TAX MAP: 16 GRID: 17 PARCEL: A ZONED: PGCC
 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400
 ELECTION DISTRICT NO. 3 HOWARD COUNTY, MARYLAND

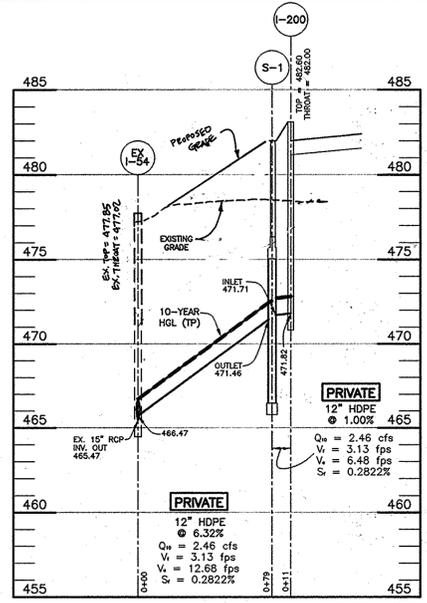
SEDIMENT & EROSION CONTROL NOTES AND STORMCEPTOR DETAILS
 DATE: FEBRUARY, 2013 BEI PROJECT NO: 2085
 SCALE: AS SHOWN SHEET 4 OF 6

STRUCTURE TABLE									
NUMBER	TYPE	LOCATION	INVERT IN	INVERT OUT	TOP ELEV.	THROAT ELEV.	HO. CO. STD.	DETAIL	MAINTENANCE
INLETS									
I-200	A-5	N 594340.62 E 1346190.55	NA	NA	471.82	482.60	482.00	D-4.03 & D-4.04	PRIVATE
I-201	S	N 596163.95 E 1346581.74	472.66	NA	467.97	477.10	NA	D-4.22	PRIVATE
I-202	S	N 596187.65 E 1346553.32	NA	NA	473.40	477.10	NA	D-4.22	PRIVATE
I-203	YARD	N 596171.56 E 1346440.83	NA	NA	472.68	477.60	NA	D-4.14	PRIVATE
MANHOLES									
M-200	4" DIA	N 596087.90 E 1346518.30	465.00	NA	463.29	472.24	NA	G-5.12	PRIVATE
STRUCTURES									
S-1	STORMCEPTOR*	N 596344.24 E 1346182.31	471.71	NA	471.46	482.00	NA	SEE DETAIL	PRIVATE

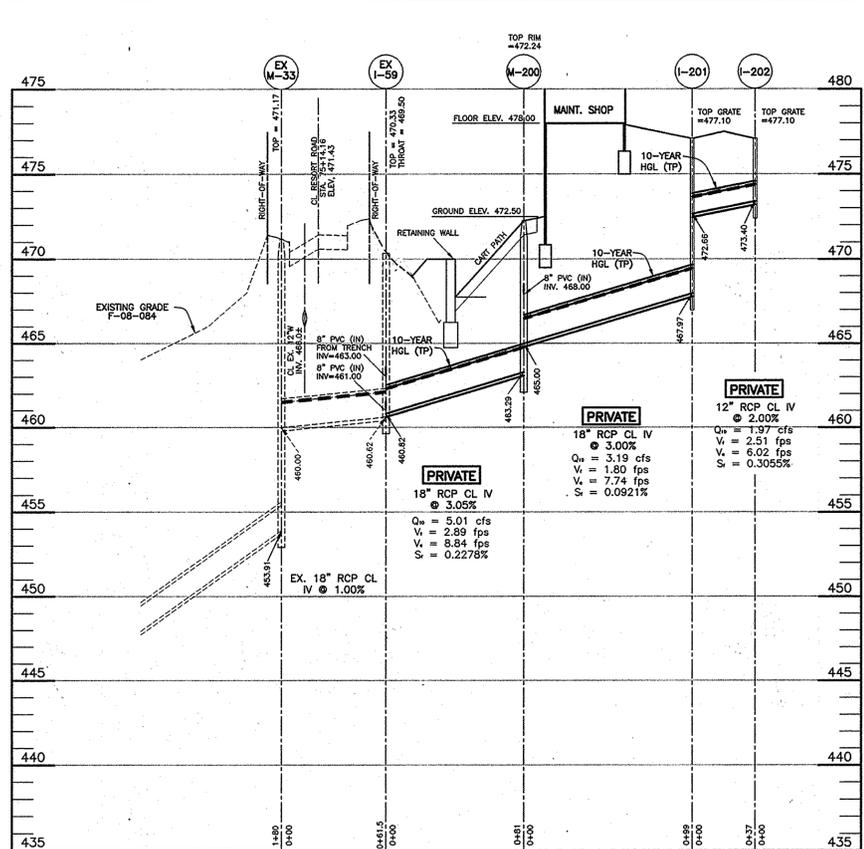
STRUCTURE ELEVATION AND LOCATION FOR INLETS IS AT THE CENTER OF GRADE
STRUCTURE ELEVATION AND LOCATION FOR MANHOLES IS AT THE TOP AND CENTER OF THE RIM
PRECAST STRUCTURES MEETING HS-20 LOADING MAY BE USED.

PIPE SCHEDULE			
SIZE	TYPE	LENGTH (LF)	MAINTENANCE
12"	RCCP CLASS IV	37	PRIVATE
18"	RCCP CLASS IV	180	PRIVATE
12"	HDPE	90	PRIVATE
4"	PVC	92	PRIVATE
8"	PVC	241	PRIVATE

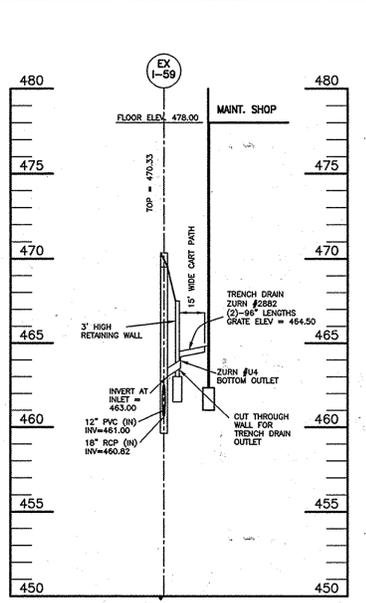
STORM DRAIN DATA				
INLET #	ZONING (Z)	AREA (AC) (A)	"C" FACTOR (<25 YR (C))	% IMPERVIOUS (P)
I-200	PGCC	0.35	0.72	85
I-201	PGCC	0.18	0.72	85
I-202	PGCC	0.28	0.72	85
I-203	PGCC	0.21	0.72	85
ROOF	PGCC	0.09	0.86	100
ROOF 2	PGCC	0.08	0.86	100
TRENCH	PGCC	0.14	0.72	85



STORM DRAIN PROFILE EX I-54 TO I-200
SCALE: HORIZONTAL 1"=50'; VERTICAL 1"=5'



STORM DRAIN PROFILE I-59 TO I-203
SCALE: HORIZONTAL 1"=50'; VERTICAL 1"=5'



TRENCH DRAIN PROFILE
SCALE: HORIZONTAL 1"=50'; VERTICAL 1"=5'



* SEE SHEET 4 OF 6 FOR ROOF LEADER MANIFOLD DETAIL.

LEGEND

- PROPOSED STORM DRAIN
- - - DRAINAGE DIVIDE
- (I-200) DRAINAGE AREA DESIGNATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 3/21/13
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 3/28/13
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 3/21/13
 DIRECTOR

APPROVED
 PLANNING BOARD OF HOWARD COUNTY
 DATE 4/15/10
 [Signature]

PLAN VIEW
 SCALE: 1"=30'

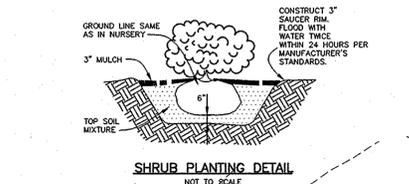
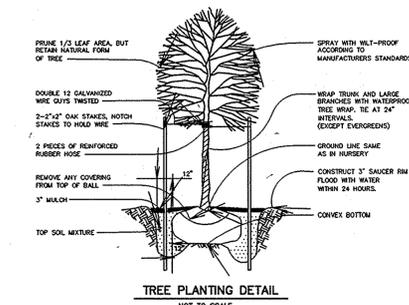
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 22370 Expiration Date: 6-30-15

NO.	DATE	REVISION
1	12-9-2014	REVISE GRACES AND DRAINAGE AREA AROUND I-54 PER AS-BUILT CONDITIONS. UPDATE PROFILE. BY [Signature]

BENCHMARK ENGINEERING, INC.
 ENGINEERS & LAND SURVEYORS & PLANNERS
 8450 BALTIMORE NATIONAL PIKE SUITE 414 ELLODD CITY, MARYLAND 21043
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 60 THOMAS JOHNSON DRIVE & FREDERICK, MARYLAND 21702
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 WWW.BE-ENGINEERING.COM

VILLAGES AT TURF VALLEY
 PARCEL 'A'
 GOLF COURSE MAINTENANCE SHOP
 TAX MAP: 16 GRID: 17 PARCEL: A ZONED: PGCC
 10790 RESORT ROAD
 ELECTION DISTRICT NO. 3
 HOWARD COUNTY, MARYLAND

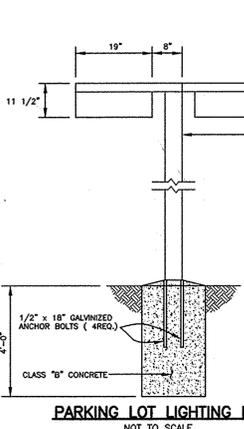
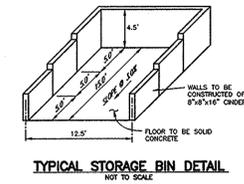
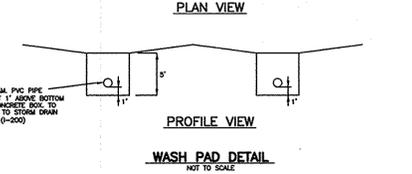
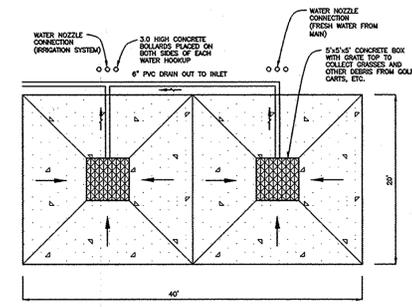
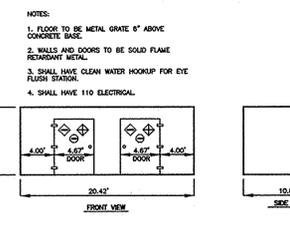
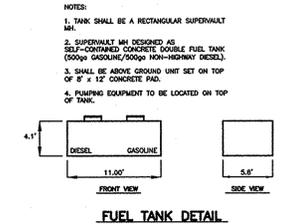
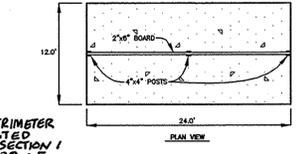
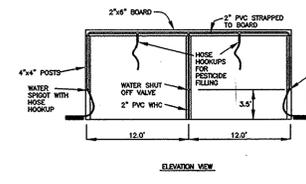
SITE DEVELOPMENT PLAN
STORM DRAIN PROFILES, DETAILS & MAP
 DATE: FEBRUARY, 2013 BEI PROJECT NO: 2085
 SCALE: AS SHOWN SHEET 5 OF 6



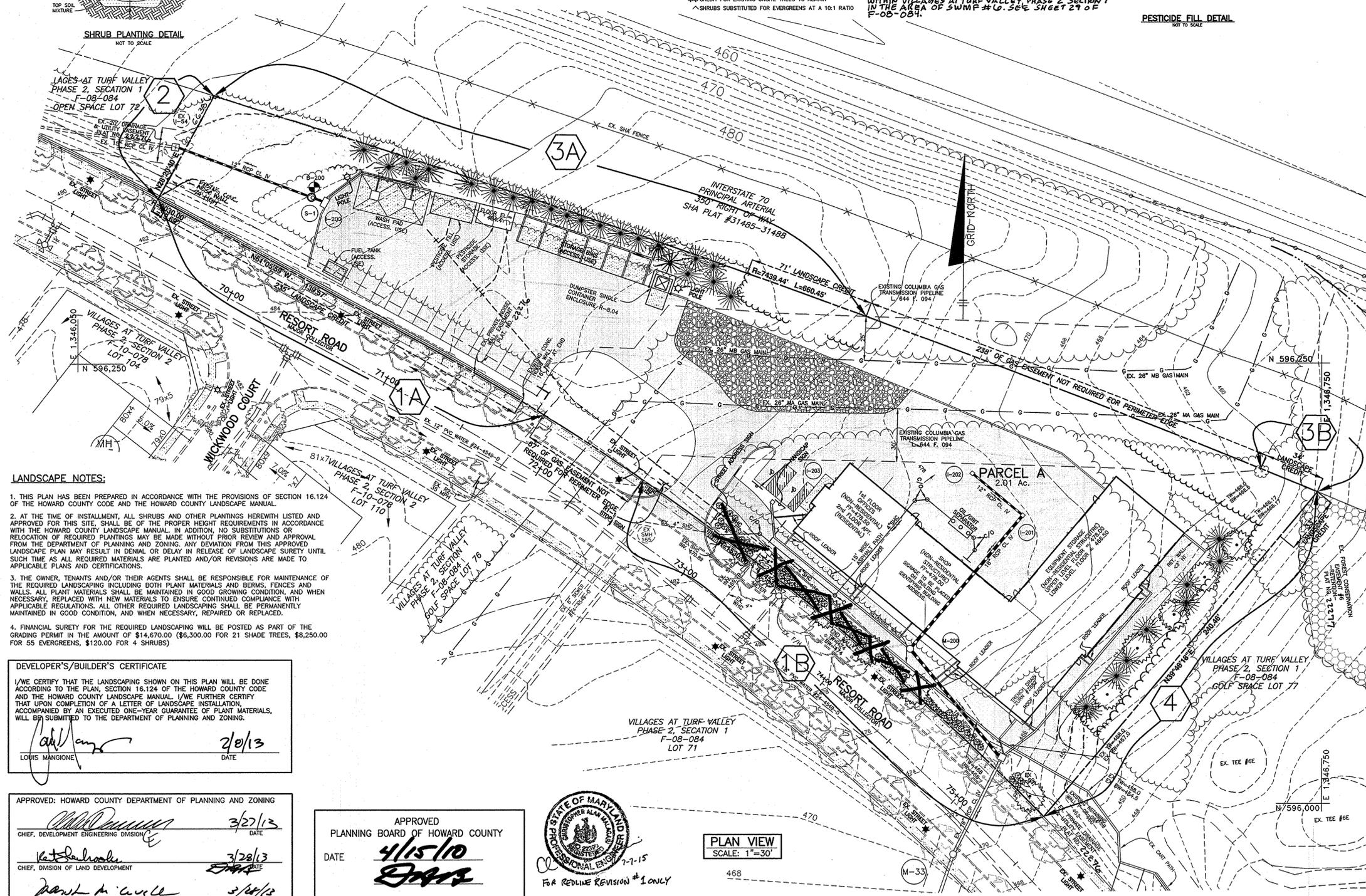
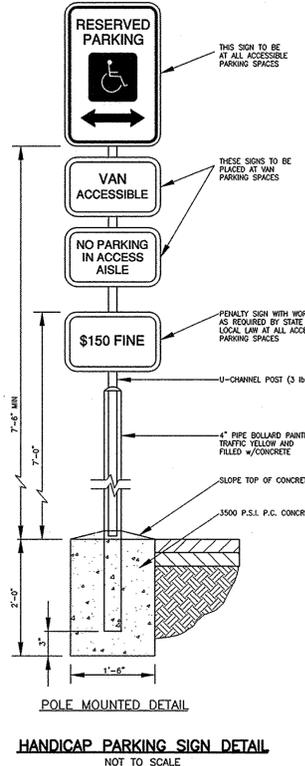
LANDSCAPE PLANTING LIST				
SYMBOL	QUANT.	NAME	SIZE	DESCRIPTION
	6	QUERCUS COCCINEA (Scarlet Oak)	2-1/2" - 3" cal.	SHADE TREES ALONG PERIMETER TO BE PROVIDED BY THE DEVELOPER
	30	CUPRESSOCYPRIS LEYLANDI (Leyland Cypress)	5' - 6' ht.	EVERGREEN TREES ALONG PERIMETER TO BE PROVIDED BY THE DEVELOPER
	18	AZALEA 'Delaware Valley White' (Delaware Valley White Azalea)	18"-24" sp.	SHRUBS ALONG PERIMETER TO BE PROVIDED BY THE DEVELOPER

CATEGORY	SCHEDULE A PERIMETER LANDSCAPE EDGE - NON RESIDENTIAL USE						TOTALS
	ADJ TO ROADWAY parking lot 1A	ADJ TO ROADWAY front 1B	ADJ TO residential 2	ADJ TO ROADWAY REAR/LOADING 3A	ADJ TO ROADWAY REAR/LOADING 3B	ADJ TO residential 4	
LANDSCAPE TYPE	E	B	C	D	D	C	
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	1:40 shade 1:4 shrub	1:50 shade 1:40 evergreen	1:40 shade 1:20 evergreen	1:60 shade 1:10 evergreen	1:60 shade 1:10 evergreen	1:40 shade 1:20 evergreen	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	** YES, 71'	** YES, 34'	** YES, 33'	
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	YES, 235'	NO	NO	NO	NO	NO	
NUMBER OF PLANTS REQUIRED	14 LF	296 LF	66 LF	317 LF	0 LF	207 LF	21
SHADE TREES	1	6	4	6	0	6	55
EVERGREEN TREES	1	8	4	32	0	11	4
OTHER TREES (2:1 SUBSTITUTE)	1	1	1	1	1	1	4
SHRUBS	4	1	1	1	1	1	18+
NUMBER OF PLANTS PROVIDED	0	1	0	0	0	6+	30+
SHADE TREES	0	1	0	0	0	6+	30+
EVERGREEN TREES	0	1	0	0	0	11	18+
OTHER TREES (2:1 SUBSTITUTE)	0	1	0	0	0	1	4
SHRUBS	0	1	0	0	0	1	18+

*CREDIT FOR EXISTING NOSE WALL
**CREDIT FOR EXISTING ONSITE TREES TO REMAIN
+ THE MISSING TREES NEEDED TO FULFILL THE PERIMETER LANDSCAPING OBLIGATION HAVE BEEN RELOCATED WITHIN VILLAGES AT TURF VALLEY PHASE 2 SECTION 1 IN THE AREA OF SWMP # 6. SEE SHEET 2 OF F-08-084.



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. 21390, Expiration Date: 6-30-17
Prof. RE OLIVER REVISION # 1 ONLY



7-6-2015 DELETE PORTION OF THE PERIMETER LANDSCAPE TREES REQUIREMENT WHICH SHALL INSTEAD BE PLANTED NEAR SWMP # 6 ON F-08-084			
NO.	DATE	REVISION	
<p>BENCHMARK ENGINEERS & LAND SURVEYORS & PLANNERS</p> <p>8480 BALTIMORE NATIONAL PIKE & SUITE 418 & ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644</p> <p>60 THOMAS JOHNSON DRIVE & FREDERICK, MARYLAND 21702 (P) 301-371-3505 (F) 301-371-3506 WWW.BE-CIVILENGINEERING.COM</p> <p>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. 21390, Expiration Date: 7-22-2013.</p> <p>2/8/2013</p>			
OWNER:	MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400	VILLAGES AT TURF VALLEY PARCEL 'A' GOLF COURSE MAINTENANCE SHOP TAX MAP: 16 GRID: 17 PARCELS: A ZONED: PGCC 10790 RESORT ROAD ELECTION DISTRICT NO. 3 HOWARD COUNTY, MARYLAND	
BUILDER:	MANGIONE ENTERPRISES OF TURF VALLEY LIMITED PARTNERSHIP 125 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400	SITE DEVELOPMENT PLAN LANDSCAPE PLAN AND MISC DETAILS DATE: FEBRUARY, 2013 BEI PROJECT NO: 2085 SCALE: AS SHOWN SHEET 6 OF 6	
DESIGN:	DBT	DRAWN:	DBT