ENVIRONMENTAL CONCEPT PLAN

FOXLEIGH

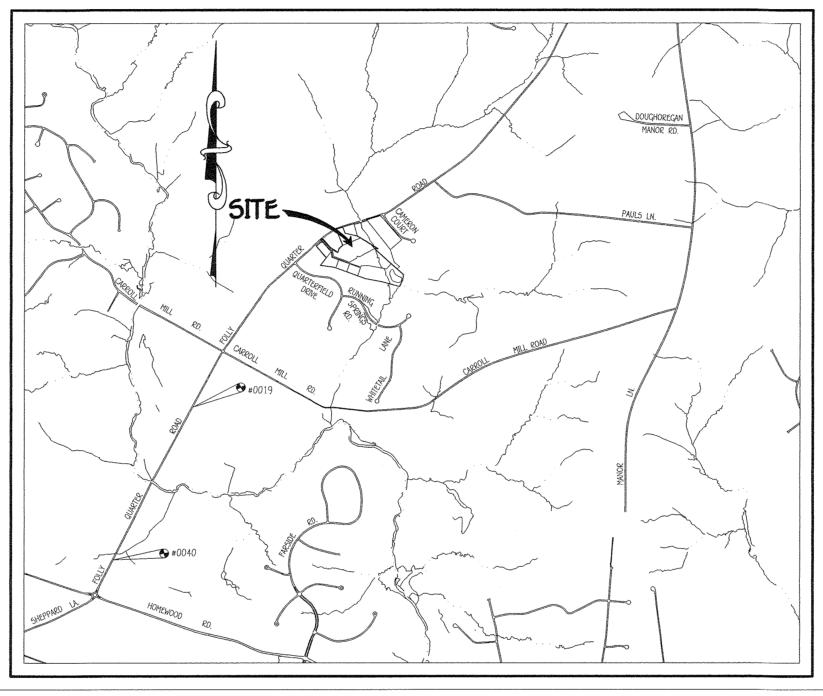
NON-BUILDABLE PRESERVATION PARCEL 'A'

ZONING: RC-DEO

TAX MAP No. 23

GRID No. 9

PARCEL No. 112



REFER TO HOWARD CO. ADC MAP 19 B-8

VICINITY MAP 5CALE: 1" = 2000"

THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SWM NARRATIVE:

THE PROPOSED SWM FACILITY FOR THIS PORTION OF THIS PROJECT WILL CONSIST OF A SINGLE MICRO BIO-RETENTION SYSTEM. THE PROJECT IS FOR SWM TO INSTALL THE PRIVATE DRIVEWAY FOR THE SHARED SEPTIC AREA. THIS FACILITY WILL PROVIDE THE REQUIRED Pe AND ESDV VOLUMES AND RUNOFF AMOUNTS TO MEET THE ENVIRONMENTAL SITE DESIGN TO THI MAXIMUM EXTENT POSSIBLE (ESD TO THE MEP) TO REFLECT A WOODED CONDITION FOR THIS SITE AS WELL AS THE REQUIRED GROUND WATER RECHARGE AMOUNT. THE 5WM REPORT FOR THIS PROJECT CONTAINS A SUMMARY TABLE TO INDICATE THE VOLUMES PROVIDED BY THESE FACILITIES.

FISHER, COLLINS & CARTER, INC.

IVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

ELLICOTT CITY, MARYLAND 21042

THE SITE EXISTS AS AN UNIMPROVED PARCEL OF LAND AND IS

DESIGN NARRATIVE:

IDENTIFYED AS TAX PARCEL #112 ON TAX MAP #23. PER THIS ECP PLAN, THERE ARE NO OTHER PLANNED LOTS AT THIS TIME. THIS PLAN IS PROVIDING SWM FOR THE PROPOSED PRIVATE DRIVEWAY ACCESS TO THE SHARED SEPTIC AREA THERE ARE NOT ANY AREAS OF FLOODPLAIN AND WETLANDS LOCATED ONSITE. THERE IS AN AREA OF 100' TOP OF STREAM BANK BUFFER LOCATED IN THE NORTHEAST CORNER OF THE SITE. THERE ARE AREAS OF STEEP SLOPES LOCATED ON THIS SITE. THE ERODIBLE SOILS HAVE BEEN IDENTIFIED IN THE SOILS CHART AND IN THE SITE ANALYSIS. THE TOTAL AREA OF THE PROJECT IS 5.463 AC. THE LIMITS OF DISTURBANCE AREA IS 3.79 AC. THE MAJORITY OF THIS SITE WILL BE DEVELOPED AND PROVIDE 3.50 ACRES OF GREEN SPACE. THE PROPOSED IMPERVIOUS AREAS INCLUDE THE PRIVATE DRIVEWAY EXTENSION. THERE IS A SINGLE SMALL FORESTED AREA LOCATED TOWARD THE REAR OF THE PROPERTY. THE CREATION OF NON-BUILDABLE PRESERVATION PARCEL 'A' IS EXEMPT FROM FORREST CONSERVATION OBLIGATION IN ACCORDANCE WITH SECTION 16.1202(b)(1)(vii) OF THE HOWARD COUNTY CODE. SEE GENERAL NOTE NO. 18. THE DISTURBANCE TO THE FORESTED AREA IS 0.07 ACRES WHICH IS MINIMAL TO EFFECT SITE IMPROVEMENTS. THE PRESERVATION OF GREEN SPACE PROVIDES THE NATURAL RESOURCE PROTECTION FOR THIS 5.463 AC PARCEL OF LAND. THE PROPERTY DRAINS TOWARDS MIDDLE PATUXENT RIVER FROM THE EASTERN SIDE OF THE SITE AND INTO THE MIDDLE PATUXENT RIVER SYSTEM DESIGNATED AS 2131106.6. THE NATURAL FLOW PATTERNS HAVE BEEN MAINTAINED. WE ARE FOLLOWING THE REQUIREMENT TO PROVIDE WOODS IN GOOD CONDITION IN ACCORDANCE WITH THE CHAPTER 5 SWM REGULATIONS BY THE USE OF A MICRO BIO-RETENTION FACILITY. IN ADDITION, WE HAVE SHOWN SUPER SILT FENCE FOR THE CONSTRUCTION OF THIS SEPTIC LINE. THE ESD PLANNING TECHNIQUES AND PRACTICES IMPLEMENTED WERE THE USE OF A SINGLE MICRO BIO-RETENTION FACILITY.

SITE ANALYSIS DATA CHART

A. TOTAL AREA OF THIS SUBMISSION = 5.463 ac. ±. LIMIT OF DEVELOPABLE AREA = 0.27 AC. + (PRIVATE DRIVEWAY ONLY) LIMIT OF DISTURBED AREA = 165,092 5q. Ft. or 3.79 Ac+. PRESENT ZONING DESIGNATION = RC-DEO (PER 10/06/13 COMPREHENSIVE ZONING PLAN). PROPOSED USE: SHARED SEPTIC FACILITY OPEN SPACE REQUIRED ON SITE: NONE RECREATIONAL AREA REQUIRED: NONE. BUILDING COVERAGE OF SITE: NONE. PREVIOUS HOWARD COUNTY FILES: 50-4980-D AND WP-16-011 TOTAL AREA OF FLOODPLAIN: 0.00 Ac. K. TOTAL AREA OF SLOPES: 25% or GREATER = 0.03 Ac. 15%-24.99% = 0.20 Ac.L. NET TRACT AREA = 5.433 Ac± (TOTAL SITE AREA - FLOODPLAIN - STEEP SLOPES AREA) M. TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 0.00 Act TOTAL AREA OF STREAMS (INCLUDING BUFFER) = 0.00 Ac+ TOTAL AREA OF FOREST = 3.35 Ac. ± TOTAL GREEN OPEN AREA = 3.50 Ac. ±

AREA OF ERODIBLE SOILS = 0.91 Ac. + (WITHIN AREA OF DEVELOPMENT)

OWNER LAWRENCE R. HYMAN AND LOIS W. HYMAN 3681 FOLLY QUARTER ROAD

FLLICOTT CITY, MARYLAND 21042

DEVELOPER 8318 FORREST STREET SUITE 200 ELLICOTT CITY, MD 21043 ATT: DON REUWER 410-992-4600

TOTAL IMPERVIOUS AREA = 0.24 Ac. ±

GENERAL NOTES

- 1. THIS SUBDIVISION PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AS AMENDED ON OCTOBER, 2003.
- 2. SUBJECT PROPERTY ZONED RC-DEO PER 10/06/13 COMPREHENSIVE ZONING PLAN.
- 3. a. GROSS AREA OF TRACT = 5.463 AC.± b. AREA OF FLOODPLAIN = 0.00 AC. ±
- c. AREA OF 25% OR GREATER SLOPES = 0.03 AC.± d. NET AREA OF TRACT = 5.433 AC. ±
- 4. AREA OF PUBLIC ROAD R/W = 0.00 AC.±
- 5. a. AREA OF PROPOSED BUILDABLE LOTS = 0.00 AC. ± b. AREA OF PROPOSED NON-BUILDABLE PRESERVATION PARCEL 'A' = 5.463 AC. *
- c. TOTAL LOT AREA (BUILDABLE AND NON-BUILDABLE) = 5.463 AC. ± 6. TOTAL NUMBER OF PROPOSED LOTS AND PARCELS:
- a. BUILDABLE LOTS = 0 b. NON-BUILDABLE PRESERVATION PARCELS = 1
- 7. HOWARD COUNTY PROJECT NUMBERS FOR THIS SITE: 50-4980-D AND WP-16-011
- 8. THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- 9. NO NOISE STUDY IS REQUIRED FOR THIS PROJECT.
- 10. SOILS INFORMATION TAKEN FROM SOIL SURVEY MAP NUMBER 18, HOWARD COUNTY, MARYLAND.
- 11. BOUNDARY OUTLINE BASED ON A FIELD SURVEY THAT WAS PERFORMED BY FISHER, COLLINS AND CARTER, INC. DATED 01/11/2016.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

7-16.18

- 12. THERE IS NO EXISTING OR PROPOSED RESIDENTIAL DWELLINGS LOCATED ON TAX PARCEL #112, MAP #23 ALL SHEDS ARE TO BE REMOVED.
- 13. TOPOGRAPHIC CONTOURS BASED ON FIELD RUN TOPOGRAPHY BY FISHER, COLLINS AND CARTER DATED 01/11/2016.
- 14. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL NAD 63 WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 0019 AND 0040 WERE USED FOR THIS PROJECT.

HOWARD COUNTY STATION 0019 HOWARD COUNTY STATION 0040 N 580,468.128 FEET N 577,270.584 FEET E 1.333.675.518 FEET E 1,332,002.575 FEET

ELEVATION: 365.305 ELEVATION: 385.842

- 15. THERE ARE AREAS OF STEEP SLOPES LOCATED ON THIS PROPERTY AS DEFINED BY THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, SECTION 16.116.b
- 16. STORMWATER MANAGEMENT WILL BE PROVIDED IN ACCORDANCE WITH HOWARD COUNTY AND MARYLAND 378 SPECIFICATIONS. RECHARGE VOLUME WILL BE PROVIDED THROUGH THE USE OF A STONE RESERVOIR LOCATED BENEATH THE PROPOSED MICRO BIO-RETENTION AREA. THE SINGLE (1) MICRO BIO-RETENTION FACILITY WILL PROVIDE THE REQUIRED WATER QUALITY VOLUMES FOR ROAD IMPROVEMENTS PROPOSED. THE DESIGN IS IN COMPLIANCE WITH MDE CHAPTER 5. OVERBANK FLOOD PROTECTION VOLUME AND EXTREME FLOOD VOLUMES ARE NOT REQUIRED FOR THIS SITE. THE SINGLE (1) MICRO BIO-RETENTION FACILITY WILL BE PRIVATELY OWNED AND MAINTAINED BY HOWARD COUNTY THE PROPOSED 2' GRAVEL DIAPHRAGM AND PROPOSED GRASS SWALE CREDIT AREA ARE PRIVATELY OWNED AND MAINTAINED
- 17. THERE IS NO FLOODPLAIN WITHIN NON-BUILDABLE PRESERVATION PARCEL 'A'.
- 18. THIS PLAN IS EXEMPT FROM FOREST CONSERVATION IN ACCORDANCE WITH SECTION 16.1202(b)(1)(vii) OF THE HOWARD COUNTY CODE ALLOWING "RESUBDIVISIONS, THAT DO NOT CREATE ADDITIONAL LOTS, EXEMPT SUBDIVISIONS AND PLAT CORRECTIONS AS PROVIDED FOR IN SECTION 16.102 AND 16.103 OF THIS TITLE".
- 19. THIS PROPERTY IS NOT LOCATED WITHIN THE METROPOLITAN DISTRICT.
- 20. FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND THE ROAD R/W LINE AND NOT THE PIPESTEM LOT DRIVEWAY.
- 21. NO CEMETERIES OR HISTORIC STRUCTURES EXIST WITHIN THIS SUBDIVISION
- 22. A SCENIC ROADS REPORT OR RECREATIONAL OPEN SPACE ARE NOT REQUIRED BECAUSE WE ARE NOT RECORDING ANY BUILDABLE LOTS.
- 23. APPROVAL OF THIS ECP DOES NOT CONSTITUTE APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN, SITE DEVELOPMENT PLAN OR GRADING OR BUILDING PERMIT PLAN. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBDIVISION, SITE DEVELOPMENT PLAN, OR GRADING AND BUILDING PERMIT STAGES. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.
- 24. THE PURPOSE OF THIS PLAN IS TO PROVIDE A SWM FACILITY FOR THE SHARED PRIVATE DRIVEWAY.



TAX MAP #23 ZONED: RC-DEO THIRD ELECTION DISTRICT

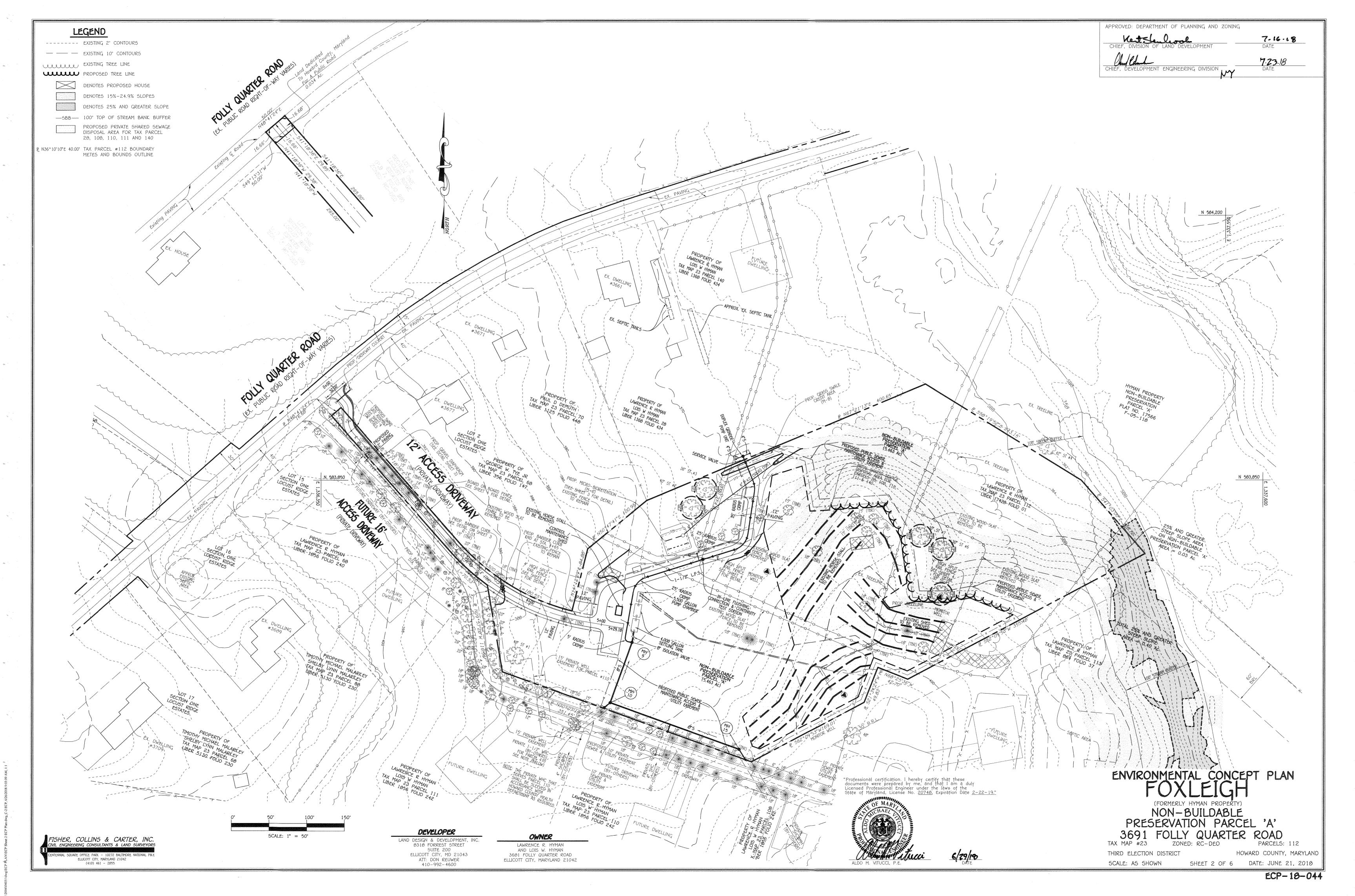
PARCELS: 112 HOWARD COUNTY, MARYLAND SCALE: AS SHOWN SHEET 1 OF 6 DATE: JUNE 21, 2018

"Professional certification. I hereby certify that these

documents were prepared by me, and that I am a duly

Licensed Professional Engineer under the laws of the State of Maryland, License No. 20748, Expiration Date 2-22-19."

ECP-18-044



PERMANENT SEEDING NOTES (B-4-5)

A. SEED MIXTURES

1. GENERAL USE

A. 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 CONDITION OR PURPOSE FOUND ON TABLE B.2. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN. B. ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS,

OR DUNES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USDA-NRCS TECHNICAL FIELD OFFICE GUIDE, SECTION 342 - CRITICAL AREA PLANTING. C. FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY. D. FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 3 1/2 POUNDS PER 1000 SQUARE FEET (150 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 MIXTURE(5), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.

I. KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASTERN SHORE. RECOMMENDED CERTIFIED 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. II. KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE: FOR USE IN FULL SUN AREAS WHERE RAPID

ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MANAGEMENT. CERTIFIED PERENNIAL RYEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 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. III. 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 MIXTURE INCLUDES; CERTIFIED TALL FESCUE CULTIVARS 95 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET. ONE OR MORE CULTIVARS MAY BE BLENDED.

IV. 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 3 POUNDS PER 1000 SQUARE FEET. 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, TURE AND SEED SECTION. PROVIDES A RELIABLE MEANS OF CONSUMER PROTECTION AND ASSURES A PURE GENETIC LINE C. IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES WESTERN MD: MARCH 15 TO JUNE 1, AUGUST 1 T OCTOBER 1 (HARDINESS ZONES: 58, 6A) CENTRAL MD: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE: 6B) SOUTHERN MD, EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15

D. TILL AREAS TO RECEIVE SEED BY DISKING 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.

E. 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 ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASONS, OR ON ADVERSE SITES.

PERMANENT SEEDING SUMMARY

HARDINESS ZONE (FROM FIGURE B.3): 6B FERTILIZER RAT SEED MIXTURE (FROM TABLE B.3): 8					R RATE (10	LIME RATE		
NO.	SPECIE5	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	N	P205	K ₂ 0	:
8	TALL FESCUE	100	MAR. 1-MAY 15 AUG. 15-OCT. 15	1/4-1/2 IN.	45 LBS. PER ACRE (1.0 LB/ 1000 SF)	90 LB/AC (2 LB/ 1000 SF)	(2 LB/	2 TON5/AC (90 LB/ 1000 SE)

B. SOD: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER).

A. CLASS OF TURFGRASS SOD MUST BE MARYLAND STATE CERTIFIED. SOD LABELS MUST BE MADE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR B. SOD MUST BE MACHINE CUT AT A UNIFORM SOIL THICKNESS TO 3/4 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 OF WET) MAY ADVERSELY AFFECT ITS SURVIVAL.

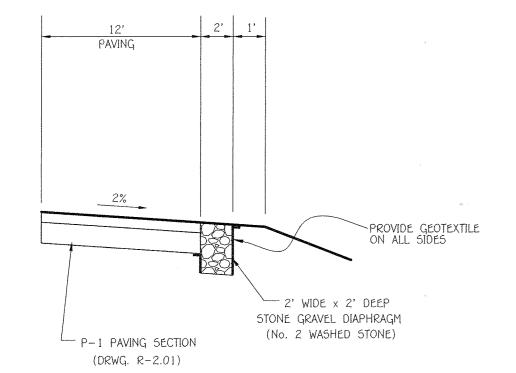
E. SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPLANTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION. A. DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE

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 TIGHTL 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. WHEREVER 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 SOO ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING, AND IRRIGATING FOR ANY PIECE OF SOD WITHIN EIGHT HOURS.

A. IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS 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, 500 WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT. C. DO NOT MOW UNTIL THE 50D 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



TYPICAL DRIVEWAY SECTION (5TA. 0+00 TO 5TA. 2+00)

TEMPORARY SEEDING NOTES (B-4-4)

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.

1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE 8.3), AND ENTER THEM IN THE TEMPORARY SEEDING SUMMARY BELOW ALONG WITH APPLICATION RATES. SEEDING DATES AND SEEDING DEPTHS IF THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED, THEN TABLE B.1 PLUS FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN.

2. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.

3. 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.

TEMPORARY SEEDING SUMMARY

	ZONE (FROM FIGURE RE (FROM TABLE B.1)		-	FERTILIZER RATE (10-20-20)	LIME RATE
SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS		
BARLEY	96		777	436 10 /46	2 TONG /AC
OAT5	72	3/1 - 5/15, 8/15 - 10/15	4 27 2	436 LB/AC (10 LB/ 1000 SF)	2 TONS/AC (90 LB/ 1000 SF)
RYE	112		1"	1000 31)	1000 31)

Operation And Maintenance Schedule For Bio-retention Areas (M-6)

1. The owner shall maintain the plant material, mulch layer and soil layer annually. 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. Acceptable replacement plant material is limited to the following: 2000 Maryland stormwater design

2. The owner shall perform a plant in the spring and in the fall each year. during the inspection, the owner shall remove dead and diseased vegetation considered beyond treatment, replace dead plant material with acceptable replacement plant material. Treat diseased trees and shrubs and replace all deficient stakes and

3. The owner shall inspect the mulch each spring. The mulch shall be replaced every two to three years, The previous mulch layer shall be removed before the new layer is applied. 4. The owner shall correct soil erosion on an as needed basis, with a minimum of once per month and after

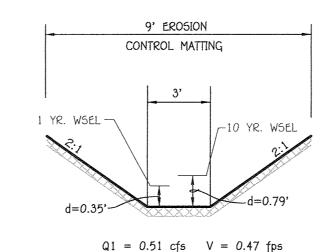
PROPERTY O PAUL D DEMUTH

TAX MAP 23 PARCEL 70

LIBER 1125 FOLIO 448

MICRO BIO-RETENTION PLANT MATERIAL BOTANICAL NAME QTY. SIZE CONT. REMARKS COMMON NAME Aster laevis 'Bluebird' Cont. 18" O.C. Smooth Aster Hamamelis virginiana 36" O.C. 24"-30" ht. Cont. Common Witch-Hazle

		CRO	BIC)-RE	ETEN	TION	DA	TA		
MICRO	BIO-RETENTION FILTER	А	В	С	D	E	F	G	Н	I
	#1	376.00	376.00	375.25	375.00	373.00	372.67	372.00	371.00	371.



TYPICAL GRASS SWALE SECTION

 $Q10 = 2.19 \text{ cfs} \quad V = 0.75 \text{ fps}$

PROPERTY OF

LAWRENCE R HYMAN

LOIS W HYMAN

TAX MAP 23 PARCEL 28

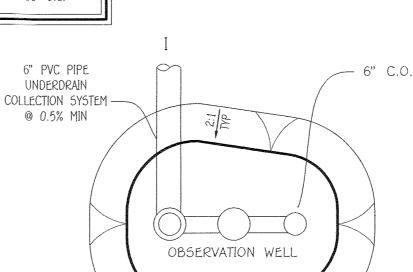
LIBER 1368 FOLIO 434

MICRO BIO-RETENTION

(M-6)

30' x 25' Bott.

3' TOP OF EMBANKMENT



-PROPOSED GROUND ATRIUM GRATE __12" PONDING PROVIDE 50D-DEPTH ABOVE MULCH 3" MULCH LAYER -- 6" OVERFLOW DISTRIBUTION PIPE 24" PLANTING SOIL PROVIDE FILTER FABRIC (SEE PLANTING SOIL-(SIDES ONLY) CHARACTERISTICS) 4" PEA GRAVEL LAYER (1/8" - 3/8" STONE) 8" #57 WASHED STONE - PERF. PIPE THROUGH STONE RESERVOIR 6" PERF. UNDER DRAIN TO OUTFALL 12" #57 WASHED STONE-- (SEE PLANS) TO PROVIDE THE 25% E5DV REQ.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

HIEF, DEVELOPMENT ENGINEERING DIVISION

7-16-18

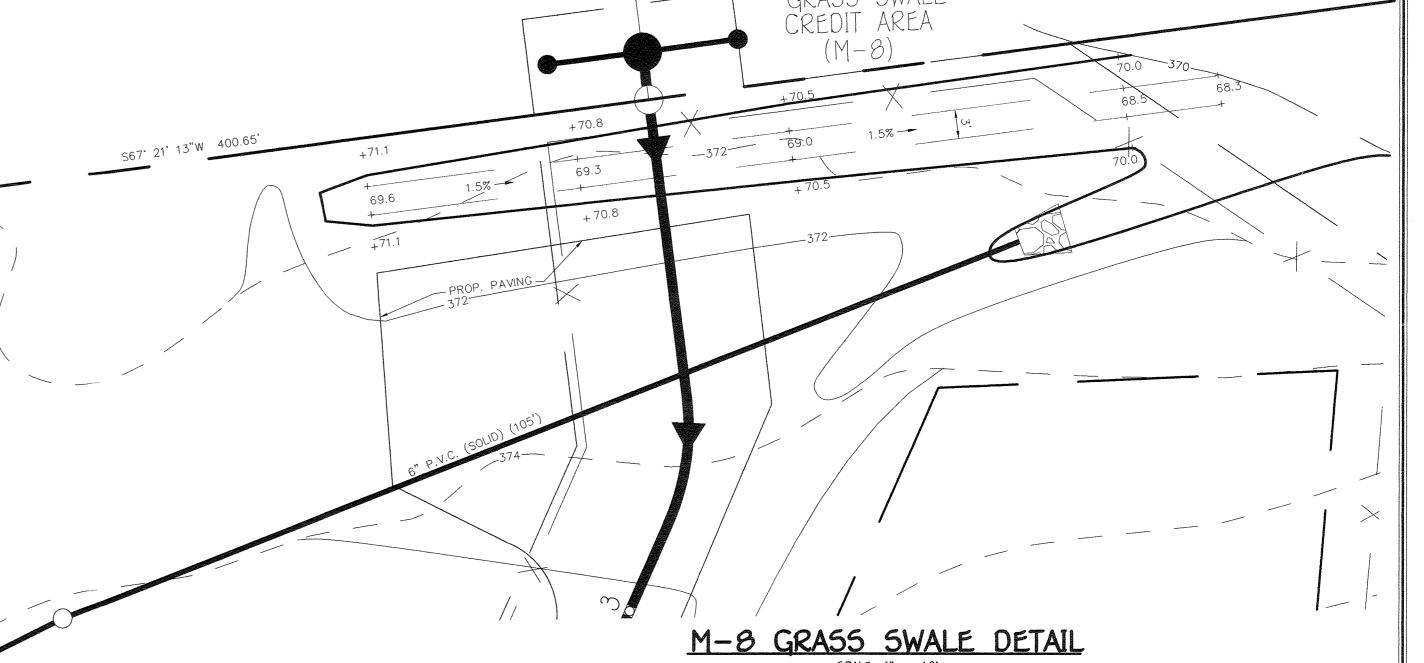
7.23.18

MICRO BIO-RETENTION SECTION WITH 6" OVERFLOW DISTRIBUTION PIPE

NO SCALE

MICRO BIO-RETENTION PLANTING DETAIL

NOT TO SCALE



Operation And Maintenance Schedule For Privately Owned And Open Channel Systems Grass Swales

And Wet Swales, (M-8) 1. The open channel system shall be inspected annually and after major storms. Inspections shall be performed during wet weather to determine if the facility is functioning properly.

2. The open channel shall be mowed a minimum of as needed during the growing season to

maintain a maximum grass height of less than 6 inches. Debris and litter shall be removed during regular mowing operations and as needed.

4. Visible signs of erosion in the open channel system shall be repaired as soon as it is noticed.

5. Remove silt in the open channel system when it exceeds 25% of the original WQV.

6. Inspect check dams twice a year for structural integrity. Restore check dams to original condition as applicable.

NOTES & SWM DETAILS

NON-BUILDABLE PRESERVATION PARCEL 'A' FOLLY QUARTER ROAD

TAX MAP #23

PARCELS: 112 HOWARD COUNTY, MARYLAND THIRD ELECTION DISTRICT SHEET 3 OF 6 DATE: JUNE 21, 2018 SCALE: AS SHOWN

FISHER, COLLINS & CARTER, INC.

LAWRENCE R. HYMAN AND LOIS W. HYMAN 3681 FOLLY QUARTER ROAD ELLICOTT CITY, MARYLAND 21042

LAND DESIGN & DEVELOPMENT, INC. 8318 FORREST STREET ELLICOTT CITY, MD 21043 ATT: DON REUWER 410-992-4600

M-6 MICRO BIO-RETENTION DETAIL

6" P.V.C. (PERFORATED)

OBSERVATION WELL

TOP=575.75

ECP-18-044

ELLICOTT CITY, MARYLAND 21042

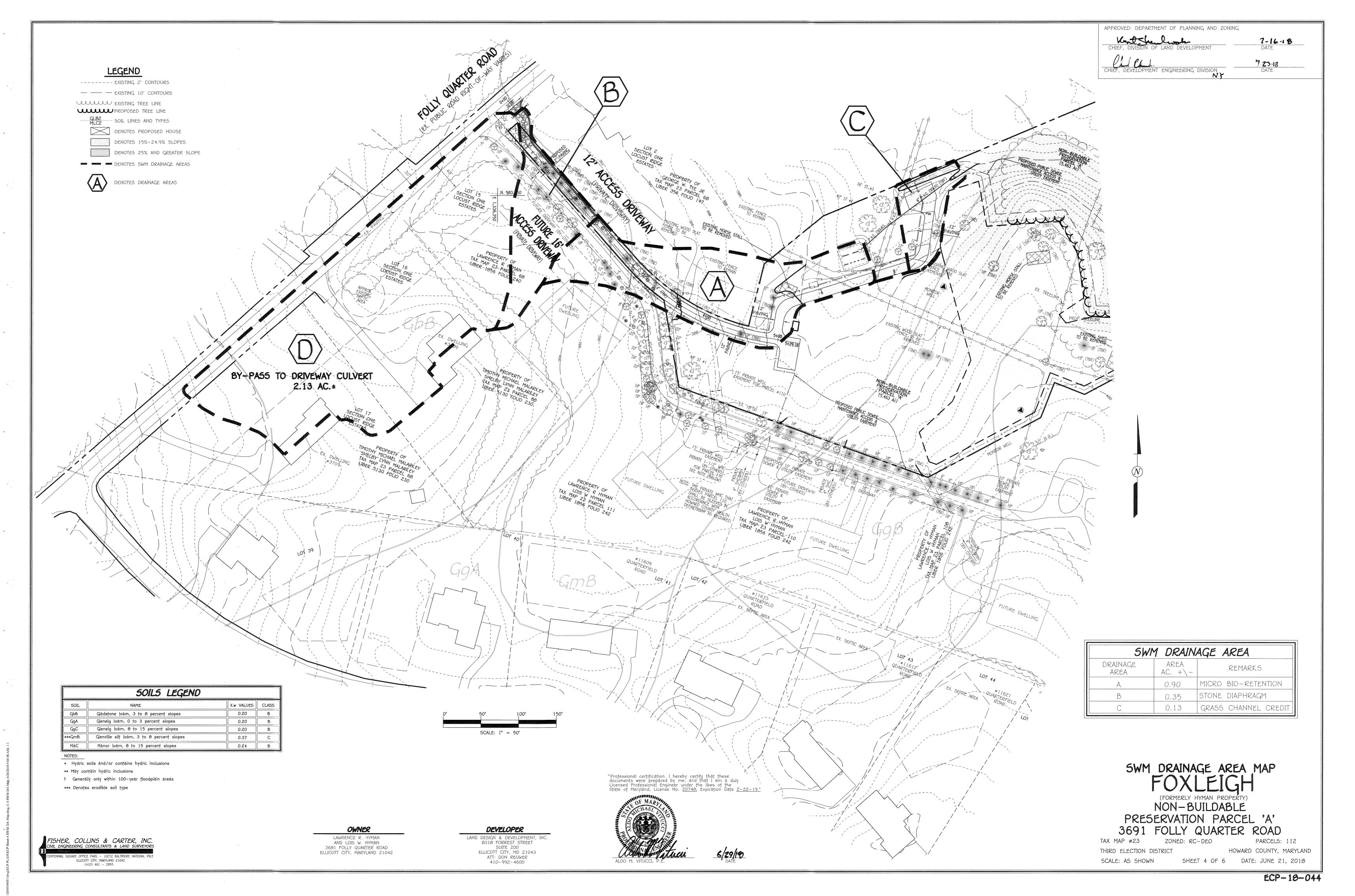
OWNER

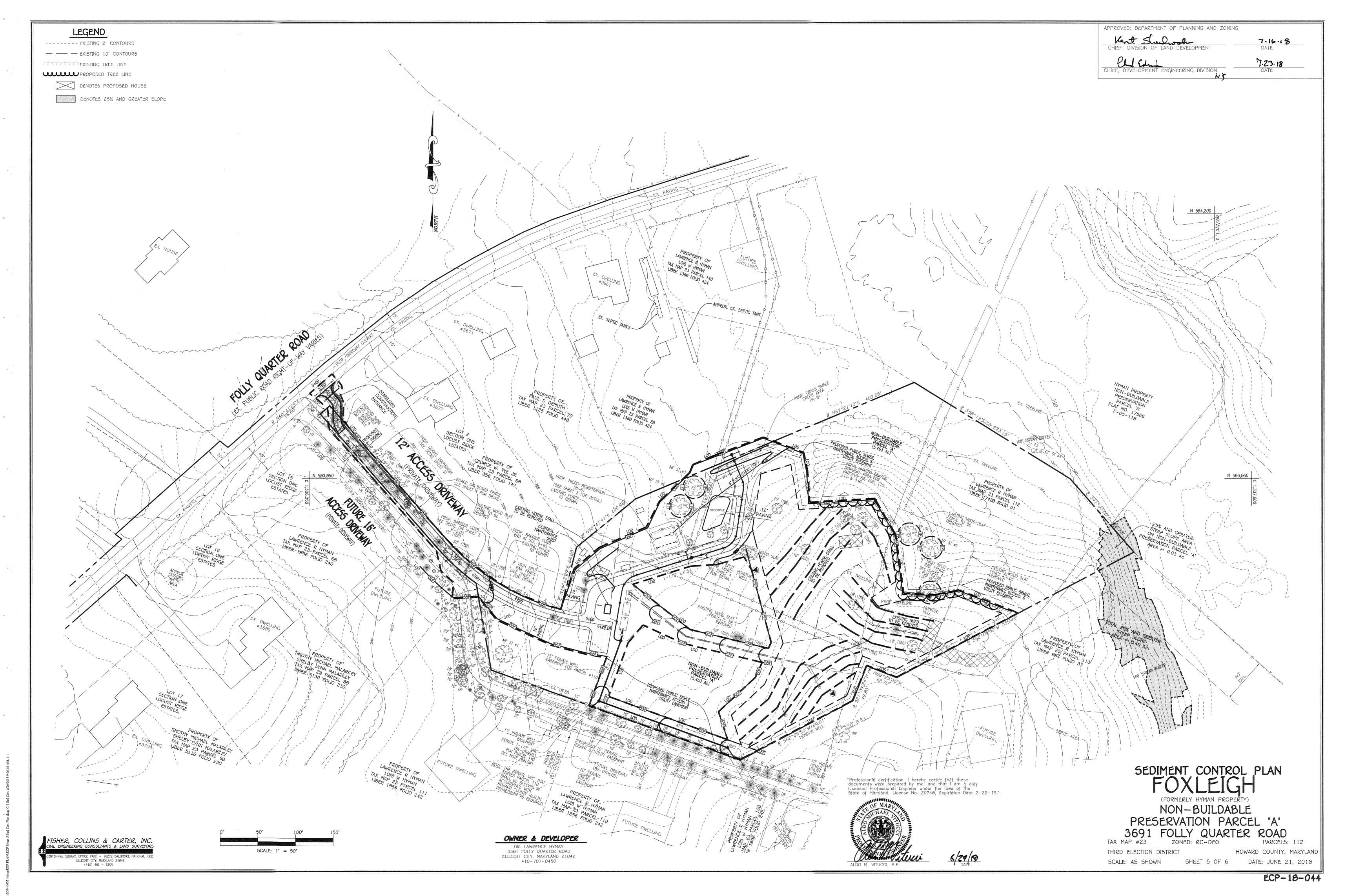
DEVELOPER

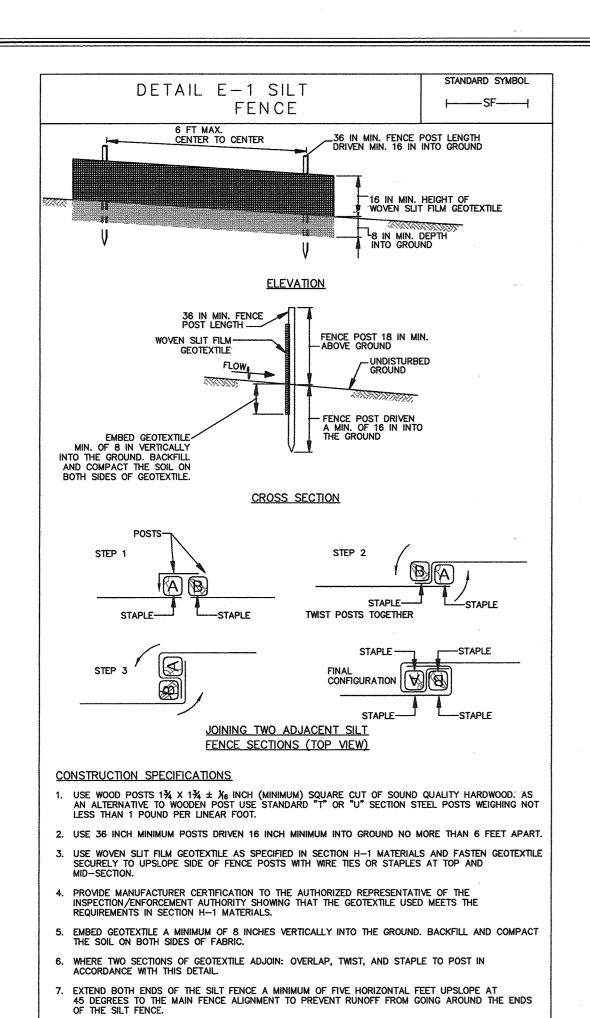
TOP=575.5

"Professional certification. I hereby certify that these documents were prepared by me, and that I am a duly

Licensed Professional Engineer under the laws of the State of Maryland, License No. 20748, Expiration Date 2-22-19."

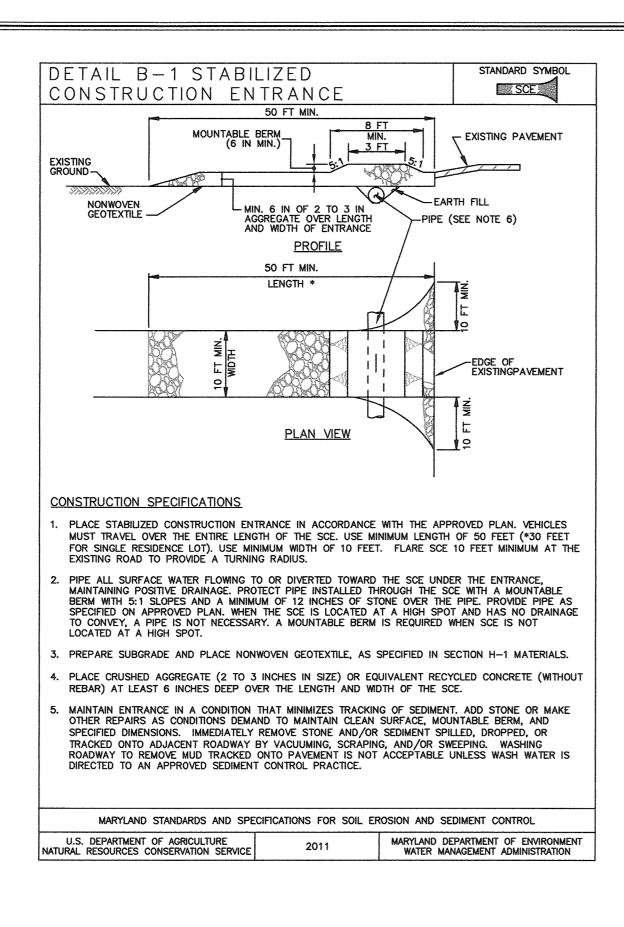


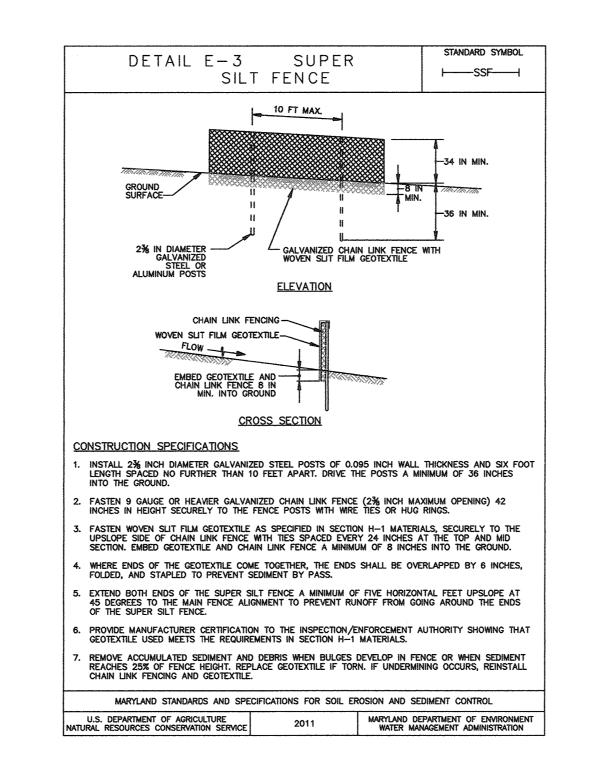


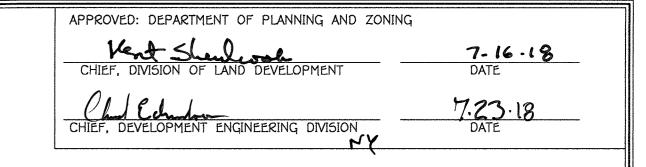


8. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL







HOWARD SOIL CONSERVATION DISTRICT (HSCD) STANDARD SEDIMENT CONTROL NOTES

1. A pre-construction meeting must occur with the Howard County Department of Public Works, Construction Inspection Division (CID), 410-313-1055 after the future LOD and protected areas are marked clearly in the field. A minimum of 48 hour notice to CID must be given at the following stages: a. Prior to the start of earth

b. Upon completion of the installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading,

c. Prior to the start of another phase of construction or opening of another grading unit, d. Prior to

the removal or modification of sediment control practices. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made. Other related state and federal permits shall be referenced, to ensure coordination and to

2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND

SEDIMENT CONTROL, and revisions thereto. 3. Following initial soil disturbance or re-disturbance, permanent or temporary stabilization is required within

three (3) calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes steeper than 3 horizontal to 1 vertical (3:1); and seven (7) calendar days as to all other disturbed areas on the project site except for those areas under active grading. 4. All disturbed areas must be stabilized within the time period specified above in accordance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for topsoil (Sec. B-4-2), permanent seeding (Sec. B-4-5), temporary seeding (Sec. B-4-4) and mulching (Sec. B-4-3). Temporary stabilization with mulch alone can only be applied between the fall and spring seeding dates if the ground is frozen. Incremental stabilization (Sec. B-4-1) specifications shall be enforced in areas with >15'

concentrated flow, steep slope, and highly erodible areas shall receive soil stabilization matting (Sec. B-4-6). 5. All sediment control structures are to remain in place, and are to be maintained in operative condition until permission for their removal has been obtained from the CID

of cut and/or fill. Stockpiles (Sec. B-4-8) in excess of 20 ft. must be benched with stable outlet. All

6. Site Analysis: 5.463 Acres Total Area of Site 3.49 Acres _____1.02___ Acres Area to be roofed or paved: Area to be vegetatively stabilized: 2.47 Acres 3,000 Cu. Yds. Total Cut: Total Fill: 3,000 Cu. Yds.

Offsite waste/borrow area location: N/A 7. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance. 8. Additional sediment control must be provided, if deemed necessary by the CID. The site and all controls shall be inspected by the contractor weekly; and the next day after each rain event. A written report by the

contractor, made available upon request, is part of every inspection and should include:

Inspecțion dațe
Inspecțion type (rouține, pre-storm evenț, during răin evenț)
Năme and țițle of inspecțor
Weather informațion (currenț condițions as well as țime and amounț of last recorded precipitățion)
Brief descripțion of project's status (e.g., percenț complețe) and/or currenț acțivițies
Evidence of sedimenț discharges
Idențificațion of plân deficiencies
Idențificațion of sedimenț controls that require maintenance
Idențificațion of missing or improperty installed sedimenț controls
Compliance status regarding the sequence of construcțion and stabilizațion requirements
Photographs

Photographs
Monitoring/sampling
Maintenance and/or corrective action performed

· Other inspection items as required by the General Permit for Stormwater Associated with Construction

9. Trenches for the construction of utilities is limited to three pipe lengths or that which can and shall be back-filled and stabilized by the end of each workday, whichever is shorter. 10. Any major changes or revisions to the plan or sequence of construction must be reviewed and approved by the HSCD prior to proceeding with construction. Minor revisions may allowed by the HSCD per the list of HSCD-approved field changes.

11. Disturbance shall not occur outside the L.O.D. A project is to be sequenced so that grading activities begin on one grading unit (maximum acreage of 20 ac. per grading unit) at a time. Work may proceed to a subsequent grading unit when at least 50 percent of the disturbed area in the preceding grading unit has been stabilized and approved by the HSCD. Unless otherwise specified and approved by the HSCD, no more than 30 acres cumulatively may be disturbed at a given time.

12. Wash water from any equipment, vehicles, wheels, pavement, and other sources must be treated in a

13. Topsoil shall be stockpiled and preserved on-site for redistribution onto final grade.

14. All Silt Fence and Super Silt Fence shall be placed on-the-contour, and be imbricated at 25' minimum intervals, with lower ends curled uphill by 2' in elevation. 15. Stream channels must not be disturbed during the following restricted time periods

 Use I and IP March 1 - June 15 • Use III and IIIP October 1 - April 30 Use IV March 1 - May 31

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

SEDIMENT CONTROL NOTES & DETAILS

(FORMERLY HYMAN PROPERTY)
NON-BUILDABLE

PRESERVATION PARCEL 'A' 3691 FOLLY QUARTER ROAD

TAX MAP #23

ZONED: RC-DEO THIRD ELECTION DISTRICT

PARCELS: 112 HOWARD COUNTY, MARYLAND

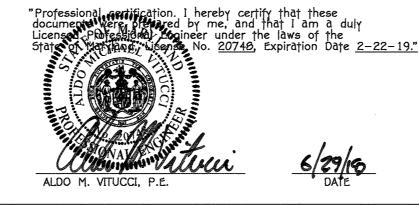
SCALE: AS SHOWN

SHEET 6 OF 6 DATE: JUNE 21, 2018

FISHER, COLLINS & CARTER, INC. IL ENGINEERING CONSULTANTS & LAND SURVEYORS ELLICOTT CITY, MARYLAND 21042 (410) 461 - 2855

OWNER LAWRENCE R. HYMAN AND LOIS W. HYMAN 3601 FOLLY QUARTER ROAD ELLICOTT CITY, MARYLAND 21042

DEVELOPER LAND DESIGN & DEVELOPMENT, INC. 8318 FORREST STREET SUITE 200 ELLICOTT CITY, MD 21043 ATT: DON REUWER 410-992-4600



ECP-18-044