

6-11-19
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SHEET INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ENVIRONMENTAL CONCEPT PLAN
3	SEDIMENT AND EROSION CONTROL PLAN

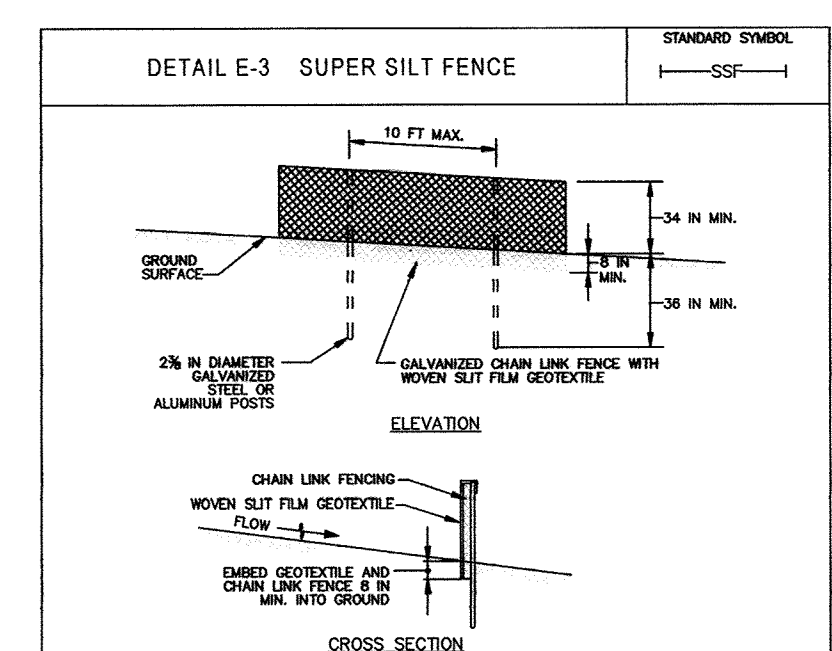
ENVIRONMENTAL CONCEPT PLAN

SHIRAZ PROPERTY

BUILDABLE LOTS 1 & 2

ZONING: R-SC

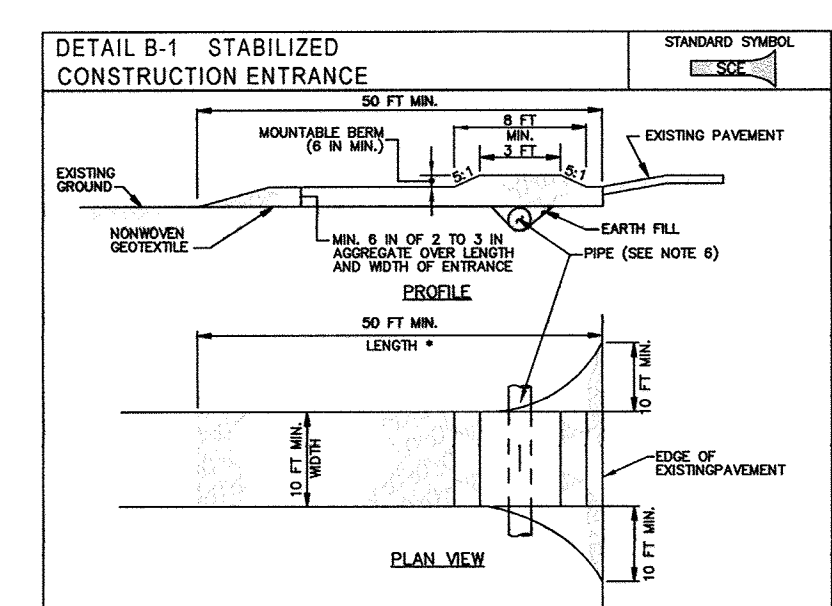
TAX MAP No. 37 GRID No. 8 PARCEL No. 401



CONSTRUCTION SPECIFICATIONS

- INSTALL 2 1/2 INCH DIAMETER GALVANIZED STEEL POSTS OF 0.085 INCH WALL THICKNESS AND 36 FOOT LENGTH SPACED NO FURTHER THAN 10 FEET AWAY FROM THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
- FASTEN 8 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (24 INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR LUG RINGS.
- FASTEN WOVEN SILT FENCE GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS SECURELY TO THE UNDERSIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.
- WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 8 INCHES, FOLDED, AND STAPLED TO PREVENT SEPARATION BY PASS.
- EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPDRAPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
- PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
- REMOVE AGGREGATED STONES AND DEBRIS FROM THE SURFACE OF THE SUPER SILT FENCE. REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

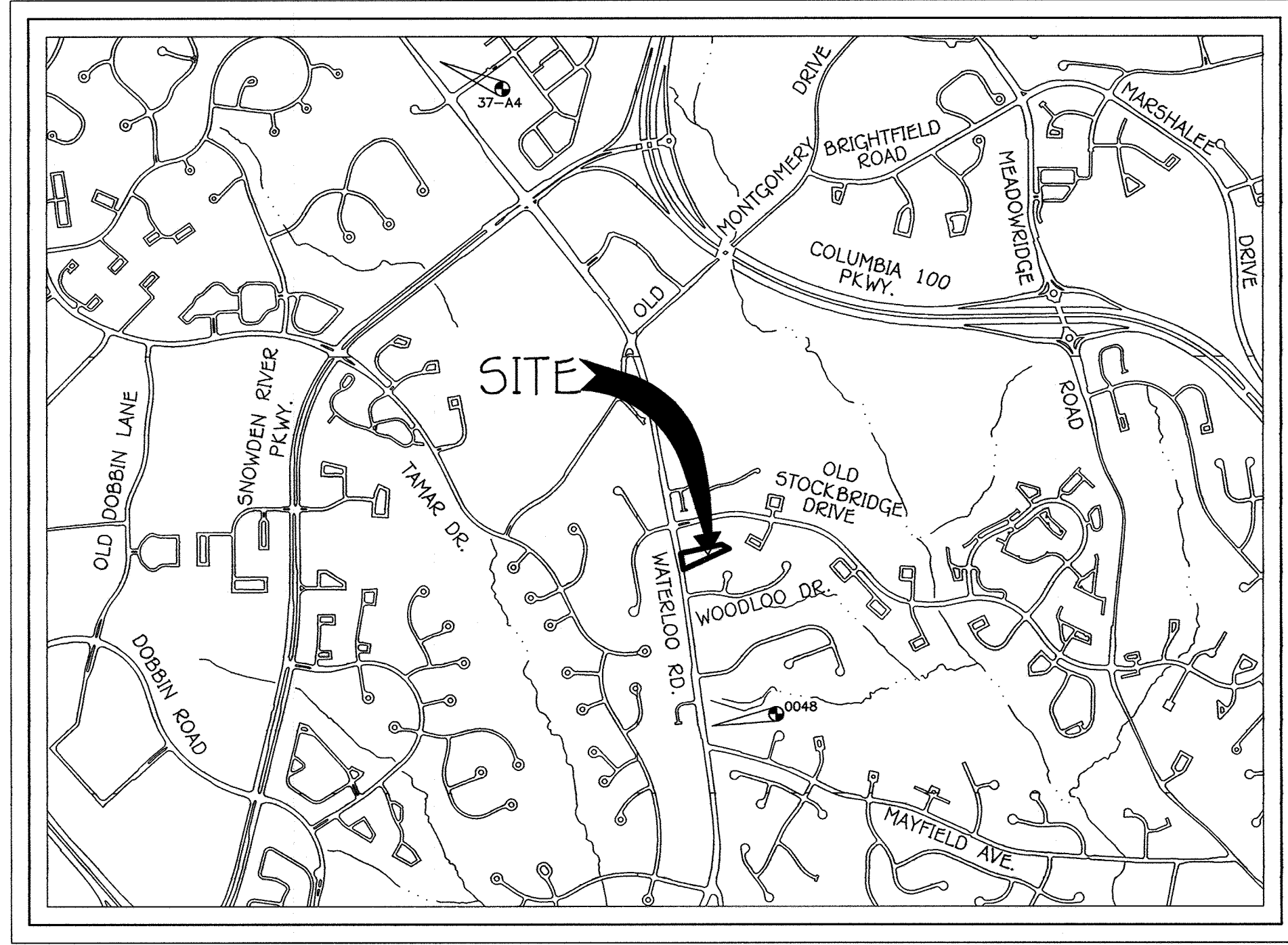
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
U.S. DEPARTMENT OF AGRICULTURE 2011 MARYLAND DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES CONSERVATION SERVICE WATER MANAGEMENT ADMINISTRATION



CONSTRUCTION SPECIFICATIONS

- PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST BE KEPT OFF THE ENTRANCE. THE ENTRANCE SHALL BE 50 FEET MINIMUM LENGTH (50 FEET MINIMUM TURNING RADIUS) WITH A MINIMUM WIDTH OF 18 INCHES. FLARE SIZE IS 15 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
- PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SITE UNDER THE ENTRANCE. MAINTAIN POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SITE WITH A MOUNTABLE BEAM. USE A MINIMUM OF 2 TO 3 INCHES OF EARTH FILL OVER THE PIPE. THE PROPOSED PIPE SHALL BE 6 INCHES IN DIAMETER. WHEN THE PIPE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE CORNER, A PIPE AT A HIGH SPOT IS NECESSARY. A MOUNTABLE BEAM IS REQUIRED WHEN THE PIPE IS NOT LOCATED AT A HIGH SPOT.
- PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
- PLACE CURBED CONCRETE TO 3 INCHES IN THICKNESS OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SITE.
- MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT AND STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BEAM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY WASHING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL FACILITY.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
U.S. DEPARTMENT OF AGRICULTURE 2011 MARYLAND DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES CONSERVATION SERVICE WATER MANAGEMENT ADMINISTRATION



VICINITY MAP
SCALE: 1" = 1200'

FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

LEGEND	
SYMBOL	DESCRIPTION
- - - - -	EXISTING CONTOUR 2' INTERVAL
- - - - -	EXISTING CONTOUR 10' INTERVAL
- - - - -	PROPOSED CONTOUR 2' INTERVAL
- - - - -	PROPOSED CONTOUR 10' INTERVAL
+499.50	SPOT ELEVATION
-SF-	SILT FENCE
-SSF-	SUPER SILT FENCE
---	DRAINAGE LIMITS
---	SOILS LIMIT
---	L.O.D. LIMIT OF DISTURBANCE
---	PROPOSED STREET TREE
---	RECREATIONAL OPEN SPACE
---	SLOPES (24.9% AND GREATER)
---	SLOPES (15% TO 24.9%)
---	EXISTING TREELINE
---	PROPOSED TREELINE
E	EX. ELECTRIC LINES

SWM NARRATIVE:

THE PROPOSED SWM FACILITIES FOR THIS PROJECT WILL CONSIST OF AN ENHANCED MICRO-BIORETENTION FACILITY THAT INCORPORATES A SECOND CELL #2 TO PROVIDE FOR SWM MANAGEMENT. THE HYDROLOGIC SOIL GROUPS PRECLUDE THE USE OF DRYWELLS. THE PROJECT IS STILL TOO STEEP TO UTILIZE ANY DISCONNECTIONS. UTILIZING THIS FACILITY WILL ALLOW US TO PROVIDE THE REQUIRED P₆₀ AND ESD VOLUMES AND RUNOFF AMOUNTS TO MEET THE ENVIRONMENTAL SITE DESIGN TO THE 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 SWM REPORT FOR THIS PROJECT CONTAINS A SUMMARY TABLE TO INDICATE THE VOLUMES PROVIDED TO THIS FACILITY.

MINIMUM LOT SIZE CHART			
LOT No.	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
1	18,255 Sq.Ft.	-----	18,253 Sq.Ft.
2	21,077 Sq.Ft.	3,359 Sq.Ft.	17,718 Sq.Ft.

DESIGN NARRATIVE:

THERE ARE NO NATURAL AREAS OF THIS PROJECT LOCATED ON-SITE. THE SITE EXISTS AS A SINGLE FAMILY DWELLING AND ASSOCIATED DRIVEWAY LOCATED ON-SITE. PLANNED IS AN ADDITIONAL LOT AND HOUSE AT THE REAR OF THE PROPERTY. THERE ARE NOT ANY AREAS OF FLOODPLAIN EASEMENTS LOCATED ON-SITE. IN ADDITION, THERE ARE NEAR ANY AREAS OF WETLANDS LOCATED ON-SITE. THERE ARE NO AREAS OF STEEP SLOPES LOCATED ON THIS SITE. THE SITE IS RELATIVELY FLAT. THE ERODIBLE SOILS HAVE BEEN IDENTIFIED IN THE SOILS CHART AND IN THE SITE ANALYSIS. THE TOTAL AREA OF THE PROJECT IS 1.00 AC. THE LIMITS OF DISTURBANCE AREA IS 0.25 AC. THE MAJORITY OF THIS SITE WILL BE DEVELOPED AND PROVIDE 0.25 ACRES OF GREEN SPACE. THE PROPOSED IMPERVIOUS AREAS INCLUDE THE DRIVEWAY EXTENSION AND PROPOSED HOUSE. THERE ARE NO FORESTED AREAS LOCATED ON THIS PROPERTY. THERE IS NOT A FEE-IN-LIEU SURETY FOR THE REQUIRED FORESTATION FOR THIS PROJECT. THE PRESERVATION OF GREEN SPACE PROVIDES THE NATURAL RESOURCE PROTECTION FOR THIS 1.00 AC PARCEL OF LAND. THE PROPERTY DRAINS TOWARDS DEEP RUN FROM THE REAR OF THE SITE AND INTO THE LOWER NORTH BRANCH OF THE PATAPUSCO RIVER (2130906). THE NATURAL FLOW PATTERNS HAVE BEEN MAINTAINED. WE ARE MIMICKING THE REQUIREMENT TO PROVIDE WOODS IN GOOD CONDITION IN ACCORDANCE WITH THE CHAPTER 9 SWM REGULATIONS BY THE USE OF RAIN WATER HARVESTING. IN ADDITION, WE HAVE SHOWN SUPER SILT FENCE FOR THE CONSTRUCTION OF THIS HOME. THE ESD PLANNING TECHNIQUES AND PRACTICES IMPLEMENTED WERE THE USE OF A SINGLE RAIN WATER HARVESTING FACILITY.

SITE ANALYSIS DATA CHART

- A. TOTAL AREA OF THIS SUBDIVISION = 1.00 AC.±
- B. LIMIT OF DEVELOPABLE AREA = 1.00 AC.± (LOTS ONLY)
- C. LIMIT OF DISTURBED AREA = 10,890 Sq. Ft. or 0.25 AC.±
- D. PRESENT ZONING DESIGNATION = R-SC (PER 10/06/13 COMPREHENSIVE ZONING PLAN).
- E. PROPOSED USE: RESIDENTIAL SUBDIVISION (SINGLE FAMILY DETACHED)
- F. OPEN SPACE REQUIRED ON SITE: 0.25 AC. (FEE-IN-LIEU IS PROPOSED.)
- G. RECREATIONAL AREA REQUIRED: THERE IS NONE REQUIRED SINCE < 10 LOTS.
- H. BUILDING COVERAGE OF SITE: 3,006 SQ.FT. OR 0.07 AC.±
- I. PREVIOUS HOWARD COUNTY FILES: N/A
- J. TOTAL AREA OF FLOODPLAIN: 0.00 AC.
- K. TOTAL AREA OF SLOPES: 25% OR GREATER = 0.00 AC.±
15%-24.99% = 0.00 AC.±
- L. NET TRACT AREA = 1.00 AC.±
- M. TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 0.00 AC.±
- N. TOTAL AREA OF STREAMS (INCLUDING BUFFER) = 0.00 AC.±
- O. TOTAL AREA OF FOREST = 0.00 AC.±
- P. TOTAL GREEN OPEN SPACE = 0.00 AC.±
- Q. TOTAL IMPERVIOUS AREA = 0.11 AC.±
- R. AREA OF ERODIBLE SOILS = 0.91 AC.± (WITHIN AREA OF DEVELOPMENT)

OWNER & DEVELOPER
MR. AHMED H. SHIRAZ
6135 WATERLOO ROAD
ELLICOTT CITY, MARYLAND 21043
443-538-8229



Aldo M. Vitucci, P.E.
Date: 6/19/19
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. 20248, Expiration Date 2-22-19.

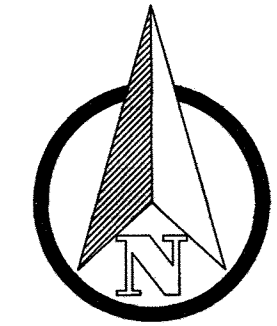
ENVIRONMENTAL CONCEPT PLAN
SHIRAZ PROPERTY
ZONING: R-SC
TAX MAP No. 37 GRID No. 8 PARCEL No. 401
1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE: JUNE 5, 2019
SHEET 1 OF 3

SOILS LEGEND

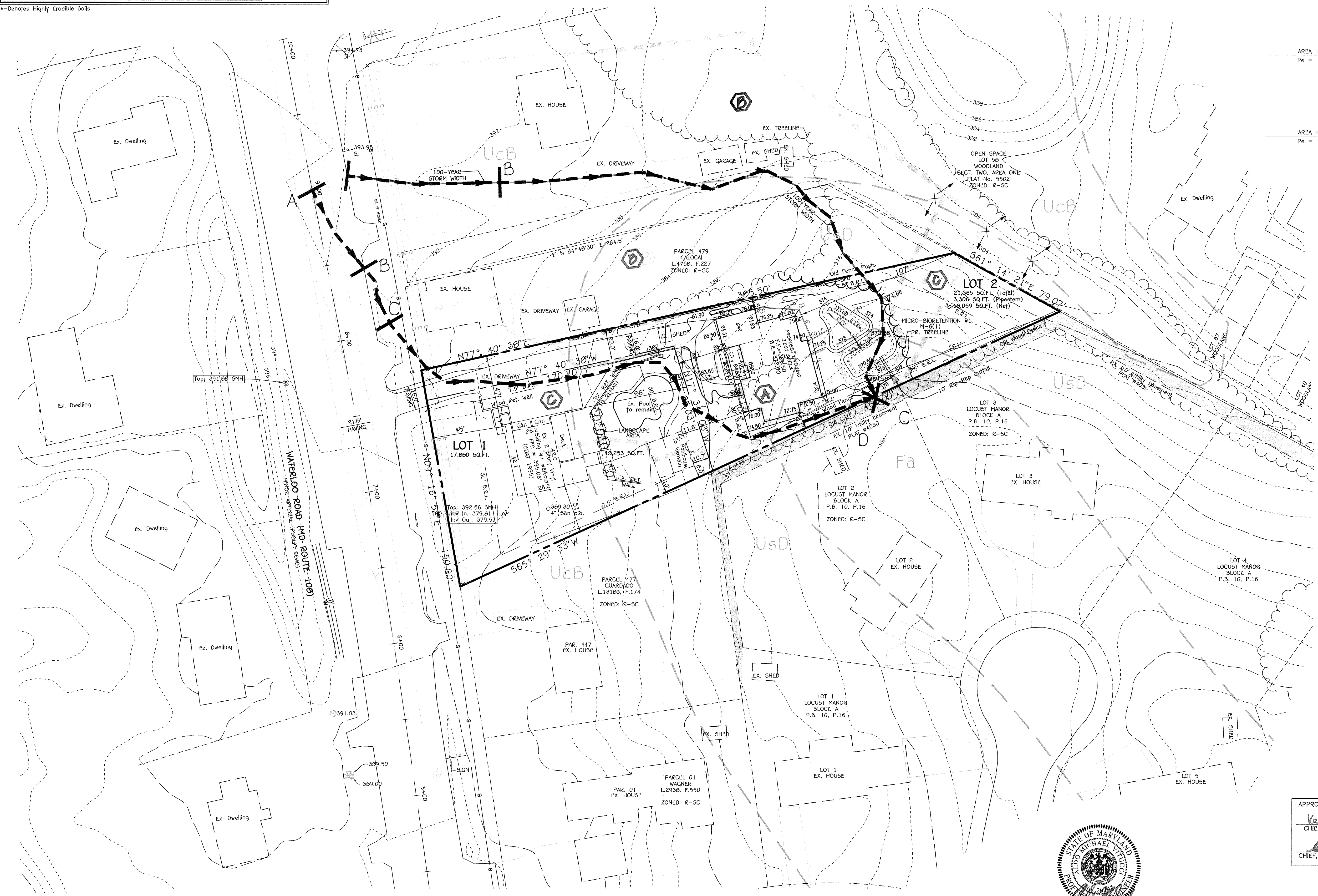
SOIL	NAME	CLASS	K FACTOR
Fa	Fallsington sandy loam, 0 to 2 percent slopes	D	0.20
UcB	Urban land-Chillum-Beltsville complex, 0 to 5 percent slopes	D	---
UsD	Urban land-Sassafraz-Beltsville complex, 5 to 1 percent slopes	D	---

Soil Map: 19 (Savage, NE)
 *Denotes Highly Erodible Soils

AREA = 0.18 AC. * Pe = 1.2 INCHES	A	IMP. AREA = 0.1171 AC. * PROV. PE = 1.2 INCHES
AREA = 1.39 AC. * Pe = 1.2 INCHES	B*	IMP. AREA = 0.000 AC. * PROV. PE = 1.2 INCHES 100-YEAR STORM STORAGE = 1,353 CU.FT.
AREA = 0.59 AC. * Pe = 1.2 INCHES	C	IMP. AREA = 0.000 AC. * PROV. PE = 1.2 INCHES



LEGEND	
SYMBOL	DESCRIPTION
---492---	EXISTING CONTOUR 2' INTERVAL
---490---	EXISTING CONTOUR 10' INTERVAL
---492---	PROPOSED CONTOUR 2' INTERVAL
---490---	PROPOSED CONTOUR 10' INTERVAL
+499.50	SPOT ELEVATION
-SF - SF	SILT FENCE
-SSF - SSF	SUPER SILT FENCE
---	DRAINAGE LIMITS
---	SOILS LIMIT
L.O.D.	LIMIT OF DISTURBANCE
	PROPOSED STREET TREE
	RECREATIONAL OPEN SPACE
	SLOPES (24.9% AND GREATER)
	SLOPES (15% TO 24.9%)
	EXISTING TREELINE
	PROPOSED TREELINE
-E -	EX. ELECTRIC LINES
-U -	EX. UTILITY EASEMENT
	EX. 100-YEAR FLOODPLAIN WIDTH = 0.52'

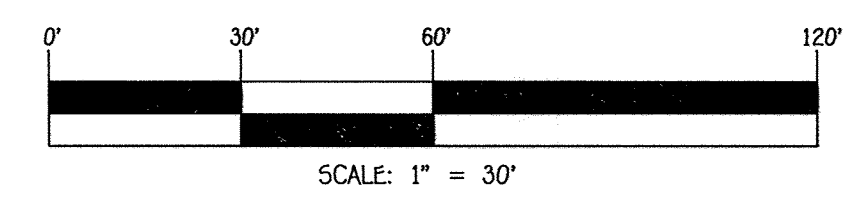


APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 6-11-19
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
 [Signature] 6-19-19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



Aldo M. Vitucci, P.E.
 Date: 6/15/19
 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. 20748, Expiration Date 2-22-19.

OWNER & DEVELOPER
 MR. AHMED M. SHIRAZ
 6135 WATERLOO ROAD
 ELLICOTT CITY, MARYLAND 21043
 443-538-9229

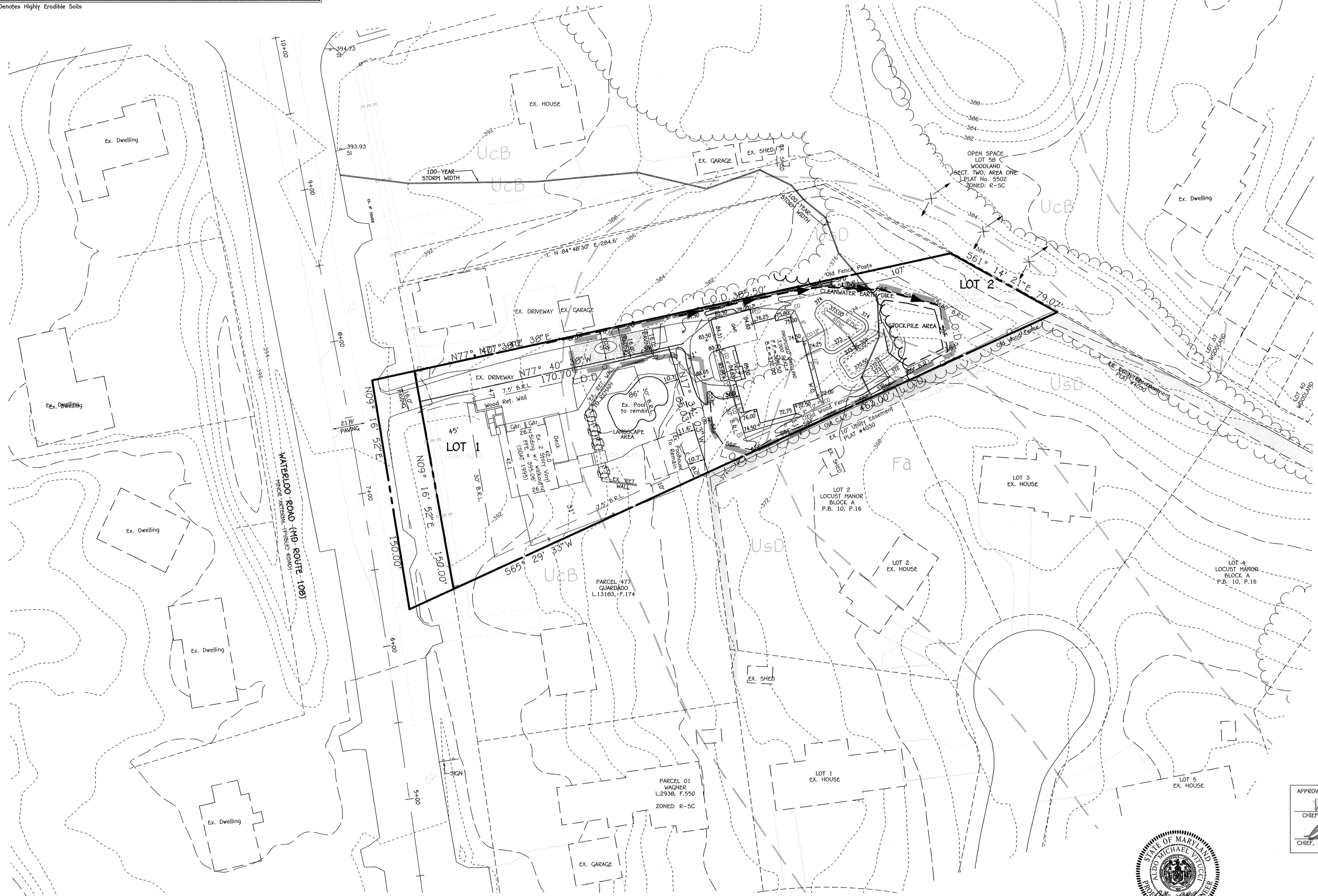
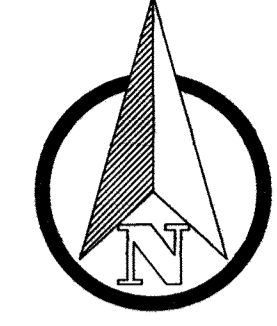


SOILS LEGEND

SOIL	NAME	CLASS	K FACTOR
Fa	Fallsington sandy loam, 0 to 2 percent slopes	D	0.20
UcB	Urban land-Chillum-Beltville complex, 0 to 5 percent slopes	D	0.37
UsD	Urban land-Sassafras-Beltville complex, 5 to 1 percent slopes	D	0.37

Soil Map: 19 (Savage, NE)

• Denotes Highly Erodible Soils



LEGEND	
SYMBOL	DESCRIPTION
---492---	EXISTING CONTOUR 2' INTERVAL
---490---	EXISTING CONTOUR 10' INTERVAL
-492-	PROPOSED CONTOUR 2' INTERVAL
-490-	PROPOSED CONTOUR 10' INTERVAL
+499.50	SPOT ELEVATION
-5F-5F	SILT FENCE
-55F-55F	SUPER SILT FENCE
---	DRAINAGE LIMITS
---	SOILS LIMIT
L.O.D.	LIMIT OF DISTURBANCE
⊗	PROPOSED STREET TREE
▨	RECREATIONAL OPEN SPACE
▨	SLOPES (24.9% AND GREATER)
▨	SLOPES (15% TO 24.9%)
~	EXISTING TREELINE
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-E-	EX. ELECTRIC LINES
---	EX. UTILITY EASEMENT
---	EX. 100-YEAR FLOODPLAIN WIDTH = 0.52'

APPROVED: DEPARTMENT OF PLANNING AND ZONING

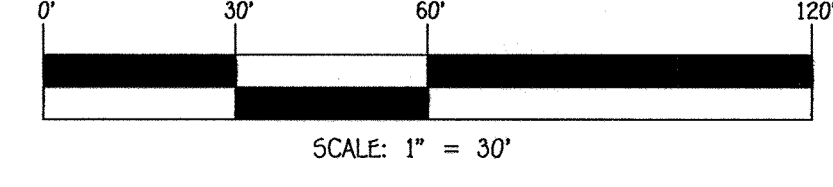
Karl Steinhilber
 CHIEF, DIVISION OF LAND DEVELOPMENT *gs* 6-11-19
 DATE

Michael V. Vucelja
 CHIEF, DEVELOPMENT ENGINEERING DIVISION *mv* 6-18-19
 DATE



MR. AHMED M. SHIRAZ, P.E.
 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. 20746, Expiration Date 2-22-21.

OWNER & DEVELOPER
 MR. AHMED M. SHIRAZ
 6135 WATERLOO ROAD
 ELLICOTT CITY, MARYLAND 21043
 443-538-8229



FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 481-2000

SEDIMENT CONTROL PLAN
SHIRAZ PROPERTY
 ZONING: R-5C
 TAX MAP No. 37 GRID No. 8 PARCEL No. 401
 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: JUNE 5, 2019
 SHEET 3 OF 3

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