#### GENERAL NOTES

- 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 START OF WORK. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED. THE SUBJECT PROPERTY IS ZONED R-ED-MXD-3 IN ACCORDANCE WITH THE 10/6/13 ZONING REGULATIONS, AND IS SUBJECT TO THE SUBDIVISION
- AND LAND DEVELOPMENT REGULATIONS EFFECTIVE 10/2/03 PER COUNCIL BILL 75-2003 DEVELOPMENT OR CONSTRUCTION OF THESE LÓTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION, OR BUILDING AND GRADING PERMITS.
- THE PROJECT BOUNDARY IS BASED ON A BOUNDARY SURVEY PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED APRIL 30, 2014.
- THE EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON F-16-021. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE

NOTE

THE EXISTING GRADES SHOWN HEREON WILL BE

PHASE 1 - SECTION 1 F16-021

ESTABLISHED UNDER THE FINAL ROAD AND STORM

DRAIN CONSTRUCTION PLANS FOR MAPLE LAWN SOUTH

- COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 41GE AND 46AA WERE USED FOR THIS PROJECT. THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. DEVELOPMENT OR CONSTRUCTION OF THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE
- DEVELOPMENT PLAN, WAIVER PETITION, OR BUILDING AND GRADING PERMITS. THIS PLAN IS SUBJECT TO PLANNING BOARD CASE # PB 415. ON JUNE 30, 2015, THE PLANNING BOARD OF HOWARD COUNTY, MARYLAND APPROVED
- SP-15-014 FOR THE SUBDIVISION OF 176 SINGLE-FAMILY DETACHED RESIDENTIAL LOTS AND THIRTEEN OPEN SPACE LOTS ON 91.31 ACRES OF LAND STORMWATER MANAGEMENT FOR THE PROJECT IS PROVIDED BY THE USE OF ON-LOT NON STRUCTURAL PRACTICES & MICRO-SCALE PRACTICES IN ACCORDANCE WITH ENVIRONMENTAL SITE DESIGN CRITERIA. ON-LOT MICRO-SCALE PRACTICES INCLUDE RAIN BARRELS AND DRYWELLS.
- -ONLOT FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED F-16-021 OFF-LOT MICRO-SCALE PRACTICES INCLUDE MICRO-BIORETENTION FACILITIES AND BIO SWALES. OFF-LOT MICRO-SCALE FACILITIES MANAGING ROAD RUNOFF SHALL BE DESIGNATED AS PRIVATELY OWNED AND JOINTLY MAINTAINED (H.O.A. AND HOWARD COUNTY); HOWARD COUNTY WILL MAINTAIN OUTLET STRUCTURES AND PIPES WHILE THE H.O.A. SHALL MAINTAIN MULCH, WEEDING, PLANTINGS, PERFORATED UNDERDRAINS, FEEDER PIPES, AND ROUTINE SOIL REPLACEMENT.
- THE PROPOSED UNITS SHALL HAVE AN AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM. EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS AND AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES
- AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE TO THE COUNTY'S RIGHTS-OF-WAY, PAVING, OR EXISTING UTILITIES SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE SHC ELEVATIONS ARE LOCATED AT THE PROPERTY LINE/EDGE OF EASEMENT.
- THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING
  - 1-800-252-1133 BGE (CONSTRUCTION SERVICES) 410-637-8713 BGE (EMERGENCY) 410-685-0123
  - BUREAU OF UTILITIES 410-313-4900 COLONIAL PIPELINE CO 410-795-1390 MISS UTILITY 1-800-257-7777
- STATE HIGHWAY ADMINISTRATION 410-531-5533 VERIZON 1-800-743-0033 THERE ARE NO EXISTING DWELLING/STRUCTURES LOCATED ON THIS SITE.
- IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS, OR EXTERIOR STAIRWAYS NOT MORF THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS. PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT FRONT OR REAR YARD SETBACK. - SECTION 128.A.1.; OF THE ZONING REGULATIONS (CB-2-2012) WHICH ALLOWS SUNROOMS AND ROOM EXTENSIONS TO EXTEND NOT MORE THAN 10 FEET INTO THE REAR SETBACK ALONG NOT MORE THAN 60% OF THE REAR FACE OF A DWELLING ON A LOT WHICH ADJOINS OPEN SPACE ALONG A
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE

MAJORITY OF THE REAR LOT LINE FOR R-ED LOTS RECORDED AFTER THE EFFECTIVE DATE OF CB-2-2012 (MAY 13, 2012).

- FOLLOWING MINIMUM REQUIREMENTS: WIDTH - 12 FEET (16 FEET IF SERVING MORE THAN ONE RESIDENCE)
- SURFACE 6" OF COMPACTED CRUSHER RUN BASE W/TAR AND CHIP COATING (1-1/2" MIN.) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE, AND MINIMUM 45 FOOT
- D) STRUCTURES (CULVERTS/BRIDGES) CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD EVENTS WITH NO MORE
- THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE F) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE
- ALL DRIVEWAY ENTRANCES SHALL UTILIZE HOWARD COUNTY STANDARD DETAIL NO. R-6.03.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(S) OR THEIR BUFFERS. FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN.
- TRASH & RECYCLING COLLECTION WILL BE AT THE COUNTY ROADWAYS WITHIN FIVE FEET (5') OF THE COUNTY ROADWAY.
- THIS PROPERTY WAS INCORPORATED INTO THE METROPOLITAN DISTRICT BY CB-19-2016 BY THE COUNTY COUNCIL ON MAY 2, 2016 AND SHALL BECOME EFFECTIVE AS LAW ON JULY 5, 2016. WATER FOR THIS PROJECT IS TO BE PUBLIC EXTENSIONS OF CONTRACT NO. 44-3505-W. REFER TO CONTRACT 24-4914-D SEWER FOR THIS PROJECT IS TO BE PUBLIC EXTENSIONS OF CONTRACT NO. 20-3506-S. REFER TO CONTRACT 24-4914-D
- THE AMENDMENT TO THE WATER AND SEWER MASTER PLAN WAS PASSED BY A COUNTY COUNCIL RESLOUTION (CR-36-2016) ON MAY 2, 2016 AND BECOME EFFECTIVE ON MAY 5, 2016. WATER AND SEWER SERVICE TO THESE LOTS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122.B OF THE HOWARD COUNTY CODE.

PUBLIC WATER AND SEWER ALLOCATION WILL BE GRANTED AT THE TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT

- ALL WATER HOUSE CONNECTIONS SHALL BE OUTSIDE METER SETTING UNLESS OTHERWISE NOTED ON THE PLANS OR IN SPECIFICATIONS.
- TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL GROUNDS OR CEMETERIES LOCATED ON THIS PROPERTY OR THE COUNTY'S CEMETERY SITE MAP.
- THERE IS A HISTORIC HOUSE (AS DEFINED BY HDC) LOCATED ON PARCEL 113 TO BE DEMOLISHED, THAT IS LOCATED AT THE SITE OF PROPOSED LOT 58. THIS PLAN WAS PRESENTED TO THE HISTORIC PRESERVATION COMMISSION IN DECEMBER 2014. THE COMMISSION WANTED THE HOUSE TO REMAIN ON-SITE. THE HOUSE IS NOT LISTED ON THE HISTORIC SITES INVENTORY.
- AN INSPECTION OF THIS HOUSE WAS CONDUCTED BY A CONSULTANT IN 2014 AND IT WAS DETERMINED THAT THIS HOUSE IS IN VERY POOR CONDITION, IS BEYOND LIFE EXPECTANCY AND SHOULD BE REMOVED FOR SAFETY REASONS. ACCORDING TO THE HOWARD COUNTY CEMETERY INVENTORY, THIS PARCEL DOES NOT CONTAIN A CEMETERY. TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL GROUNDS OR CEMETERIES LOCATED ON THE PROJECT SITE. AS MENTIONED PREVIOUSLY IN THE
- HISTORIC PRESERVATION COMMISSION MEETING, THERE ARE RECORDS THAT SHOW A CEMETERY ONCE EXISTED ON THE PROPERTY. AS THE LAND HAS BEEN SUBDIVIDED BY DEED (PRIOR TO THE ENACTION OF THE HOWARD COUNTY SUBDIVISION REGULATIONS), THE CEMETERY MAY NO LONGER BE PART OF THIS ACTUAL SITE AS THE LOCATION IS NOT KNOWN.
- MD ROUTE 216/SCAGGSVILLE ROAD IS CLASSIFIED AS A MINOR ARTERIAL. THE PROPOSED ACCESS POINT IS SHOWN HEREON. THE PROPOSED STREETS ARE CLASSIFIED AS PUBLIC MINOR COLLECTOR, ACCESS STREET OR ACCESS PLACE.
- MURPHY ROAD IS CLASSIFIED AS A MINOR COLLECTOR WETLANDS AND STREAMS SHOWN ONSITE ARE BASED ON THE DELINEATION BY ENVIRONMENTAL SYSTEMS ANALYSIS, INC. (ESA). AUGUST 2013. FOREST STAND DELINEATION PLAN PREPARED BY KLEBASKO ENVIRONMENTAL, LLC. C/O MR. MICHAEL J. KLEBASKO, P.W.S., DATED MAY 2014.
- FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL A PORTION OF THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY FOREST CONSERVATION MANUAL -NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENTS HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
- TOTAL FOREST CONSERVATION OBLIGATION OF THIS PROJECT TO BE FULFILLED BY: TOTAL ONSITE RETENTION = 7.88 AC, CREDITED FOREST RETENTION = 6.96 ACRES
- REFORESTATION / AFFORESTATION OF 6.99 AC.
- FINANCIAL SURETY WAS POSTED WITH THE DEVELOPERS AGREEMENTS UNDER F-16-021. 2. A TRAFFIC STUDY FOR THIS PROJECT PREPARED BY THE TRAFFIC GROUP, INC., DATED DECEMBER 19, 2014, WAS APPROVED APRIL 2015. A NOISE STUDY BEEN PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED JANUARY 2015. THE STUDY UTILIZES PROPOSED BERMS AND PROPOSED HOMES AS SHIELDING BARRIERS TO REDUCE THE NOISE EXPOSURE TO ACCEPTABLE LEVELS. -THE 65 DBA NOISE CONTOUR LINE DRAWN ON THIS SUBDIVISION PLAN IS ADVISORY AS REQUIRED BY THE HOWARD COUNTY DESIGN MANUAL, CHAPTER 5. REVISED FEBRUARY. 1992 AND CANNOT BE CONSIDERED TO EXACTLY LOCATE THE 65 DBA NOISE EXPOSURE. THE 65 DBA NOISE LINE WAS
- ESTABLISHED BY HOWARD COUNTY TO ALERT DEVELOPERS, BUILDERS AND FUTURE RESIDENTS THAT AREAS BEYOND THIS THRESHOLD MAY EXCEED GENERALLY ACCEPTED NOISE LEVELS ESTABLISHED BY THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.
- 4. A TEST PIT REPORT FOR THIS PROJECT WAS PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED FEBRUARY 2015 THE OFFICIAL PRE-SUBMISSION COMMUNITY MEETING WAS HELD FOR THIS PROJECT ON JUNE 5, 2014 AT NORTH LAUREL COMMUNITY CENTER.
- AN ENVIRONMENTAL CONCEPT PLAN (ECP-14-093) WAS APPROVED ON NOVEMBER 21, 2014. 77. A PRELIMINARY EQUIVALENT SKETCH PLAN (SP-15-014) WAS APPROVED ON SEPTEMBER 18, 2015.
- 38. A FINAL PLAN (F-16-021) WAS APPROVED ON AUGUST 11, 2016. 39. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. - FINANCIAL SURETY FOR THE REQUIRED STREET SIDE LANDSCAPING IN THE AMOUNT OF \$ 4,650 FOR THE 9 SHADE TREES AND 13 EVERGREEN TREES
- SHALL BE POSTED WITH THE GRADING PERMIT FOR THIS PLAN. SEE SHEETS 2, 4 AND 6. PUBLIC STREET TREES AND PERIMETER LANDSCAPING WAS PROVIDED FOR THIS PROJECT UNDER F-16-021 IN ACCORDANCE WITH SECTION 16.124(e)(1) OF THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL. FINANCIAL SURETY WAS POSTED AS PART OF THE F-16-021 DEVELOPER'S AGREEMENTS
- THE PROPOSED SUBDIVISION AND RELATED CONSTRUCTION WILL NOT IMPACT ENVIRONMENTAL FEATURES OR BUFFERS. SOIL TYPES SHOWN HEREON ARE IN ACCORDANCE WITH THE WEB SOIL SURVEY HOWARD COUNTY, MARYLAND — CLARKSVILLE SE MAP #23.
- 43. NO FLOODPLAINS EXIST ON THE BUILDABLE LOTS SHOWN HEREON. THERE ARE NO STEEP SLOPES WHERE BUILDABLE LOTS (1-64) ARE TO BE LOCATED.
- IN ACCORDANCE WITH DESIGN MANUAL-VOLUME 3, CHAPTER 2 SECTION 2.9.B. PARKING IS REQUIRED AT TWO (2) SPACES PER UNIT OFF STREET PARKING TO INCLUDE GARAGE SPACE, DRIVEWAY AND PARKING PADS. GARAGES COUNT AS A FULL SPACE. THE ONE (1) GARAGE SPACE MAY NOT BE CONVERTED TO LIVING SPACE AND SHALL ONLY BE UTILIZED FOR VEHICULAR PARKING SPACE
- REFER TO PARKING TABULATION. THE HOMEOWNERS ASSOCIATION DOCUMENTS HAVE BEEN RECORDED WITH THE MARYLAND STATE DEPARTMENT OF ASSESSMENTS AND TAXATION AS RECORDING REFERENCE NUMBER D17891086 ON MARCH 22, 2017. HOMEOWNERS ASSOCIATION COVENANTS AND RESTRICTIONS WERE RECORDED SIMULTANEOUSLY WITH F-16-021 AS LIBER 17594 FOLIO 473,
- THIS PROJECT IS SUBJECT TO WP-15-136. ON MAY 26, 2015, THE PLANNING DIRECTOR APPROVED THE REQUEST TO WAIVE SECTION 16.1205(A)(7) OF THE AMENDED FIFTH EDITION WHICH REQUIRES THE RETENTION OF SPECIMEN TREES HAVING A DIAMETER OF 30" OR MORE AND SECTION 16.121(e)(1) OF THE AMENDED FIFTH EDITION WHICH REQUIRES OPEN SPACE LOTS TO HAVE A MINIMUM OF 40 FEET OF FRONTAGE ON A PUBLIC ROAD FOR ACCESS BY PEDESTRIANS AND MAINTENANCE VEHICLES.
  - APPROVAL IS SUBJECT TO THE FOLLOWING FIVE (5) CONDITIONS: 1) REMOVAL OF THE ELEVEN (11) SPECIMEN TREES WILL REQUIRE MITIGATION WITH THE PLANTING OF 2 TO 1 REPLACEMENT TREES (22 TOTAL) WITH A MINIMUM 3" CALIPER TRUNK. THE REPLACEMENT TREES SHALL BE BONDED AND SHOWN ON EITHER THE LANDSCAPE OR FOREST CONSERVATION PLAN WITH THE FINAL PLAN.
  - 2) THE FORTY-THREE (43) REMAINING SPECIMEN TREES MUST REMAIN UNDISTURBED, UNLESS A NEW WAIVER PETITION IS FILED WITH ADEQUATE `3) ANY SPECIMEN TREE THAT SHALL REMAIN ONSITE (THAT ARE WITHIN THE LIMIT OF DISTURBANCE) MUST BE PROTECTED WITH TREE
  - PROTECTION DEVICES AND, SUCH DEVICES MUST BE DEPICTED ON FOREST CONSERVATION PLANS AND THE SITE DEVELOPMENT PLAN.
  - ALL PROPOSED OPEN SPACE LOTS MUST PROVIDE THE MINIMUM PUBLIC ROAD FRONTAGE AS SHOWN AND APPROVED ON THE SP PLAN (SP-15-014). OPEN SPACE LOTS 177, 178 AND 179 SHOULD HAVE AT LEAST ONE PUBLIC ROAD FRONTAGE STRIP OF 20 FEET IN WIDTH. PROVIDE A NOTE ON SP-15-014, THE FINAL PLAN AND THE SITE DEVELOPMENT PLAN THAT INCLUDES THIS WAIVER'S FILE NUMBER THE
  - SECTIONS TO BE WAIVED, THE WAIVER DECISION, THE DATE OF THE DECISION AND ALL CONDITIONS OF APPROVAL.

## APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING CHIEF, DEVELOPMENT ENGINEERING DIVISION CHIEF, DIVISION OF LAND DEVELOPMENT 6-15-17

# SITE DEVELOPMENT PLAN MAPLE LAWN SOUTH

LOTS 1-64

(SFD RESIDENTIAL) HOWARD COUNTY, MARYLAND

#### MAPLE LAWN SOUTH APFO PHASING PHASE ALLOCATION TOTAL NO. OF NUMBER YEAR ALLOCATIONS

175 GRANTED HOUSING UNIT ALLOCATIONS + 1 EXISTING = 176 TOTAL ALLOCATIONS

COVER SHEET

ITE LAYOUT AND LANDSCAPE PLAN

HOUSE TYPES & HOUSE BOX MATRIX PLAN

HOWARD COUNTY BENCHMARK 46AA N 540,396.42 E 1,335,505.31 ELEV.: 447.01 FT. RT. 216, 33.2' WEST OF BG& E POLE#315163 HOWARD COUNTY BENCHMARK 41GE N 541,559.78 E 1,333,698.38 ELEV.: 465.05 FT. RT. 216, 82.4' WEST OF BG & E#557787

SHEET INDEX

DESCRIPTION

GRADING AND SOIL EROSION & SEDIMENT CONTROL - NOTES AND DETAILS

TORMWATER MANAGEMENT - NOTES AND DETAILS, AND HOUSE TYPES

**BENCHMARKS** 

MAPLE LAWN SOUTH - DENSITY TABULATION									
PHASE	GROSS AREA	FLOODPLAIN STEEP SLOPES	NET AREA	UNITS PERMITTED BY NET	UNITS PROPOSED	OPEN SPACE REQUIRED	TOTAL OPEN SPACE PROVIDED	NON CREDITED OPEN SPACE PROVIDED	CREDITED OPEN SPACE PROVIDED
F-16-021 - PH 1/SEC 1	51.8736 AC±	1.5400 AC±	50.3336 AC±	101	64 SFD	25.9329 AC±	33.2899 AC±	0.42 AC±	32.8699 AC±
FUTURE PH 1/SEC 2	38.6936 AC±	0.0000 AC±	38.6936 AC±	77	108 SFD	19.3507 AC±	TBD	TBD	TBD
FUTURE PHASE 2*	0.7464 AC±	0.0000 AC±	0.7464 AC±	1	4 SFD	0.3732 AC±	TBD	TBD	TBD
TOTAL	91.3136 AC±	1.5400 AC±	89.7736 AC±	179	176 SFD	45.6568 AC±	TBD	TBD	TBD

GRADING AND SOIL EROSION & SEDIMENT CONTROL PLAN

SCAGS RT. P. O. P.			
LIME KILN ROAD 300 216 SCAGGS	VILLE N 540300		DIVINO DEL
SITE			
MURPHY ROAD OSSMEN		1337250	0
N 537750	N 537750	<u>u</u>	ROAD
RESERVOIR	MC	JRPHY ROAD	

#### **LOCATION MAP**

SCALE: 1"=600'

48. THIS PROJECT IS SUBJECT TO A DESIGN MANUAL WAIVER. ON MAY 22, 2015, THE CHIEF OF THE DEVELOPMENT ENGINEERING DIVISION:

GENERAL NOTES CONTINUED:

- APPROVED THE REQUEST TO WAIVE VOL. III SECTION 2.5.B.9 AND 2.2D TABLE 2.01, WHICH REQUIRES THAT A NEWLY PROPOSED INTERSECTION MUST MEET THE MINIMUM REQUIREMENTS FOR INTERSECTION AND/OR STOPPING SIGHT DISTANCE. APPROVAL IS SUBJECT TO THE FOILOWING DPW RECOMMENDATIONS: A. PROVIDING SIGHT DISTANCE EASEMENTS AS SHOWN ON THE SIGHT DISTANCE ANALYSIS. APPROVED THE REQUEST TO WAIVE VOL. III - SECTION 2.3.A.1.A (AND APPENDIX A) TO REDUCE THE MINIMUM ROAD RADIUS FOR NUMEROUS ROADWAYS WITHIN THE SUBDIVISION. THE WAIVER FOR ROADWAYS B AND E
- ARE APPROVED SUBJECT TO THE FOLLOWING DPW REQUIREMENTS: A. ROAD B - DPW REQUESTS 26' PAVEMENT WIDTH ALONG THE REDUCED CURVE AND FLATTENING THE NW INTERSECTION FILLET ROAD E - DPW REQUESTS 26' PAVEMENT WIDTH ALONG THE REDUCED CURVES. ESPECIALLY FROM
- STATION 0+00 TO 16+00 THE REQUESTED WAIVER FOR ROAD G IS DENIED. ROAD G IS TO CONNECT TO MURPHY ROAD. THIS ROAD WILL SERVE AS THE SECONDARY ACCESS TO THIS MAJOR DEVELOPMENT.
- APPROVED THE REQUEST TO WAIVE VOL. III SECTION 2.2.C AND 2.4.A TO REVISE THE TYPICAL SECTIONS FOR AN ACCESS PLACE, ACCESS STREET, AND MINOR COLLECTOR TO INCLUDE A 5-FOOT SIDEWALK ADJACENT TO THE CURB. APPROVAL SUBJECT TO THE FOLLOWING DPW REQUIREMENTS: A. PLEASE ENSURE THAT NO STREET TREES ARE PLANTED WITHIN 50 FEET OF ANY STOP SIGN.
- 49. PER SECTION 107.0.E OF THE ZONING REGULATIONS, AT LEAST 10% OF THE DWELLINGS IN A R-ED DEVELOPMENT SHALL BE MODERATE INCOME HOUSING UNITS (MIHU). 176 x 10% = 17.6. -18 UNITS OR THE EQUIVALENT SHALL BE PROVIDED FOR THIS PROJECT.

# SITE ANALYSIS DATA

#### TOTAL PROJECT AREA: AREA OF PLAN SUBMISSION: LIMIT OF DISTURBANCE: PRESENT ZONING DESIGNATION:

- PROPOSED USES FOR SITE AND STRUCTURES: FLOOR SPACE ON EACH LEVEL
- OF BUILDING PER USE: G. TOTAL NUMBER OF UNITS ALLOWED FOR PROJECT AS SHOWN ON FINAL PLAT: H. TOTAL NUMBER OF UNITS PROPOSED:

ON THIS SUBMISSION:

- MAXIMUM NUMBER OF EMPLOYEES, TENANTS ON SITE PER USE: NUMBER OF PARKING SPACES REQUIRED BY HO.CO. ZONING REGULATIONS:
- OPEN SPACE ON SITE: AREA OF RECREATION OPEN SPACE REQUIRED BY SUBDIVISION & LAND

K. NUMBER OF PARKING SPACES PROVIDED

- DEVELOPMENT REGULATIONS: BUILDING COVERAGE OF SITE: APPLICABLE DPZ FILE REFERENCES:
- P. ANY OTHER INFORMATION WHICH MAY BE RELEVANT:
- Q. FLOOR AREA RATIO:

- PHASE 1 SECTION 1 51.87 AC PHASE 1 - SECTION 1 - 11.49 AC = AREA OF BUIDABLE LOTS R-ED-MXD-3
- SINGLE FAMILY DETACHED
- REFER TO DENSITY TABULATION 64 BUILDABLE LOTS
- 2.5 PER SFD HOUSE SEE PARKING TABULATION HEREON - 2.5+ PER SFD HOUSE
- REFER TO F-16-021 = 33.29 AC REFER TO F-16-021
- ECP-14-093, WP-15-136, PB#415,

SP-15-014, F-16-021, F-16-072, CONT# 20-4955-D TAX MAP 42, GRID 2, PARCEL 113 5TH ELECTION DISTRICT

### OWNER

MAPLE LAWN FARMS, INC. MAPLE LAWN PARTNERS, LLC 11788 SCAGGSVILLE ROAD 2661 RIVA ROAD, SUITE 220 9720 PATUXENT WOODS DRIVE FULTON, MD 20759-0562 ANNAPOLIS, MARYLAND 21401 COLUMBIA, MARYLAND 21046 301-725-2074 443-472-2846

**DEVELOPER** 

C/O CHRIS MURN

410-379-5956 C/O TAYLOR FARIS

**BUILDER** 

# VICINITY MAP SCALE: 1"=2000 ADC MAP COORDINATES: 18H 5, 6 18J 5, 6

LOT NO.	STREET ADDRESS	FACILITY TYPE & MDE NO.	LOT	STREET ADDRESS	FACILITY TYPE & MDE NO.
1	11149 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	37	11073 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
2	11145 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	38	11069 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
3	11141 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	39	11065 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
4	11137 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	40	11061 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
5	11148 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	41	11057 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
6	11020 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	42	8204 GUNNAR DRIVE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
7	11024 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	43	8208 GUNNAR DRIVE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
8	11028 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	44	8212 GUNNAR DRIVE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
9	11032 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	45	8211 GUNNAR DRIVE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
10	11036 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	46	8207 GUNNAR DRIVE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
11	11040 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	47	11051 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
12	11044 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	48	11047 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
13	11048 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	49	11043 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
14	11052 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	50	11039 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
15	11056 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	51	11035 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
16	11064 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	52	11031 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
17	11072 MARTHA WAY	DRYWELL $(M-5)$ , ROOFTOP DISCONNECT $(N-1)$ RAIN BARREL $(M-1)$	53	11027 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
18	11080 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	54	11023 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
19	11088 MARTHA WAY	DRYWELL $(M-5)$ , ROOFTOP DISCONNECT $(N-1)$ RAIN BARREL $(M-1)$	55	11019 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
20	11092 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	56	11011 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
21	11096 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	57	11007 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
22	11102 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	58	8220 SOUTH MAPLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
23	11106 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)		LAWN BOULEVARD	
24	11110 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	59	8224 SOUTH MAPLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
. 25	11114 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)		LAWN BOULEVARD	•
26	11118 MARTHA WAY	DRYWELL $(M-5)$ , ROOFTOP DISCONNECT $(N-1)$ RAIN BARREL $(M-1)$	60	8228 SOUTH MAPLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
27	11122 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)		LAWN BOULEVARD	
28	11126 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	61	8227 SOUTH MAPLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
29	11132 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)		LAWN BOULEVARD	
30	11136 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	62	8223 SOUTH MAPLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
31	11140 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)		LAWN BOULEVARD	
32	11144 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	63	8219 SOUTH MAPLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
33	11089 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)		LAWN BOULEVARD	
34	11085 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)	64	8215 SOUTH MAPLE	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)
35	11081 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)		LAWN BOULEVARD	
36	11077 MARTHA WAY	DRYWELL (M-5), ROOFTOP DISCONNECT (N-1) RAIN BARREL (M-1)		İ	

ADDRESS CHART / STORMWATER MANAGEMENT PRACTICES

SHEET NO.

1 OF 14

-110F 14

12 OF 14

#### PHASE 1 - SECTION 1 PARKING TABULATION:

TOTAL NUMBER OF DWELLING UNITS PROPOSED: 64 TOTAL PARKING REQUIRED: 160 (64 X 2.5)
TOTAL PARKING PROVIDED: 192

OFF-STREET PARKING SPACES REQUIRED: 2 SPACES PER UNIT = PARKING SPACES PROVIDED: SFD = 1 GARAGE/2 DRIVEWAY

1 SPACE IN GARAGE(\*) = 64 SPACES (FOR 64 UNITS)

2 SPACES ON DRIVEWAY = 128 SPACES (FOR 64 UNITS) TOTAL PARKING SPACES PROVIDED: = 192 SPACES OFF-STREET OVERFLOW / GUEST PARKING SPACES REQUIRED: 0.5 SPACES PER SFD UNIT X 64 = 32 SPACES REQUIRED TOTAL OVERFLOW PARKING SPACES PROVIDED: = 32 SPACES (DRIVEWAY) REFER TO OFF-STREET EXCESS.

ONSTREET PARKING AS DIRECTED BY TRAFFIC ENGINEERING \*THE H.O.A SHALL BE RESPONSIBLE FOR ENFORCING THE PARKING REQUIREMENTS ON EACH RESIDENTIAL LOT. ONE (1) GARAGE SPACE

SHALL REMAIN OPEN FOR VEHICLE PARKING USE. THE GARAGE

SPACE MAY NOT BE CONVERTED TO LIVING SPACE AND SHALL ONLY

PERMIT INFORMATION CHART						
SUBDIVISION NAME MAPLE LAWN SOUTH				SECTION/AREA N/A		TS/PARCEL #
<b>PLAT # OR L/F</b> F-16-021	BLOCK NO.	ZONE	TAX MAP	ELECT	. DIST.	CENSUS TR.
PLATS #24201-24214	2	R-ED MXD-3	46	5	TH	605102

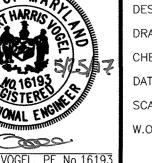
BE UTILIZED FOR VEHICULAR PARKING SPACE

# ROBERT H. VOGEL, PE No.1619

ENGINEERS • SURVEYORS • PLANNERS 8407 MAIN STREET TEL: 410.461.7666 ELLICOTT CITY, MD 21043 FAX: 410.461.8961 PROFESSIONAL CERTIFICATE DESIGN BY: FRE PREPARED OR APPROVED BY ME AND

ROBERT H. VOGEL

ENGINEERING, INC.



TO REVISE HOUSE TYPE AND GRADING ON LOT 34

X MAP 46 - GRID 2 - PARCEL 113 TH ELECTION DISTRICT PZ REF: ECP-14-093, WP-15-136, PB#415, SP-15-014, F-16-021

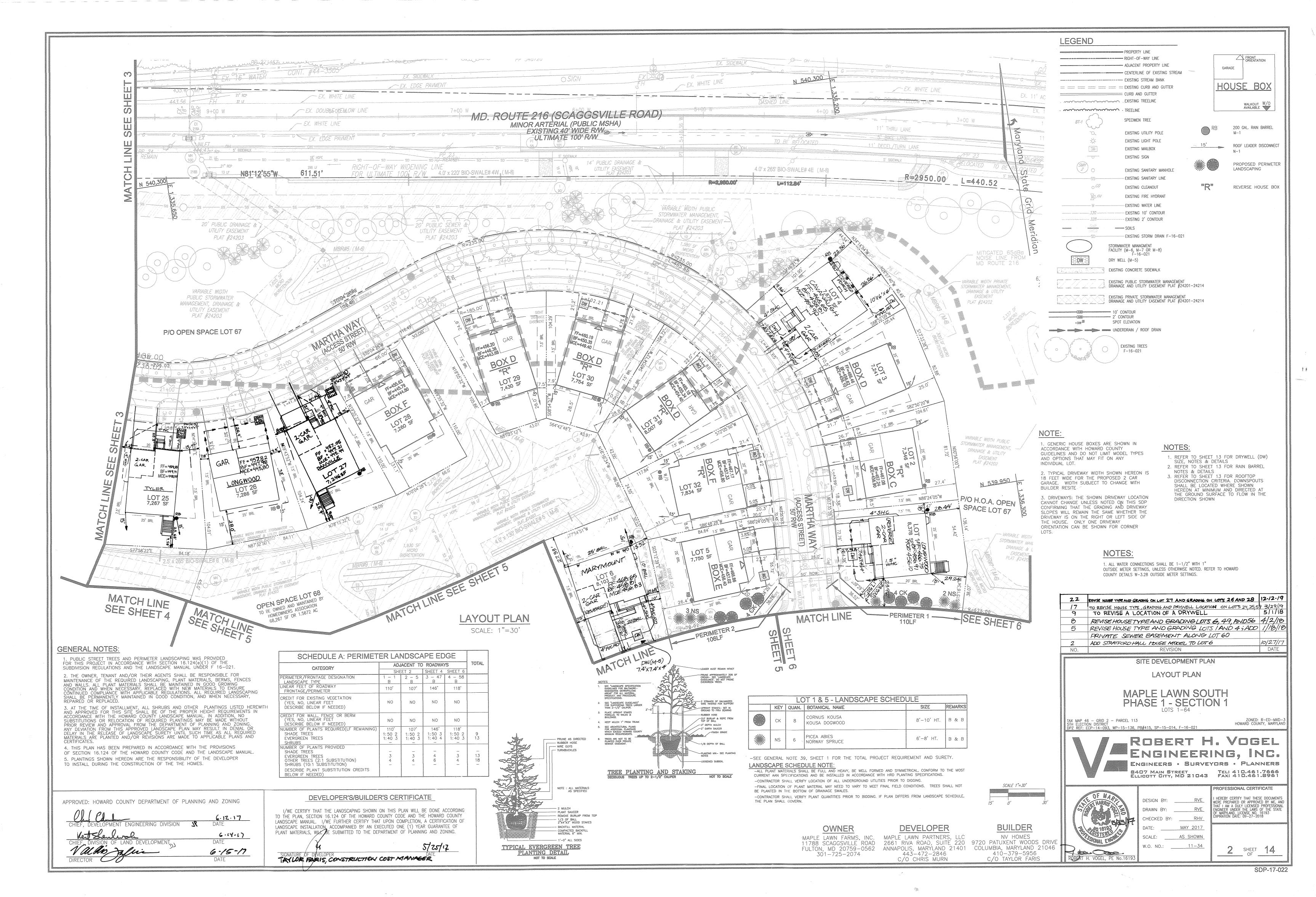
SITE DEVELOPMENT PLAN

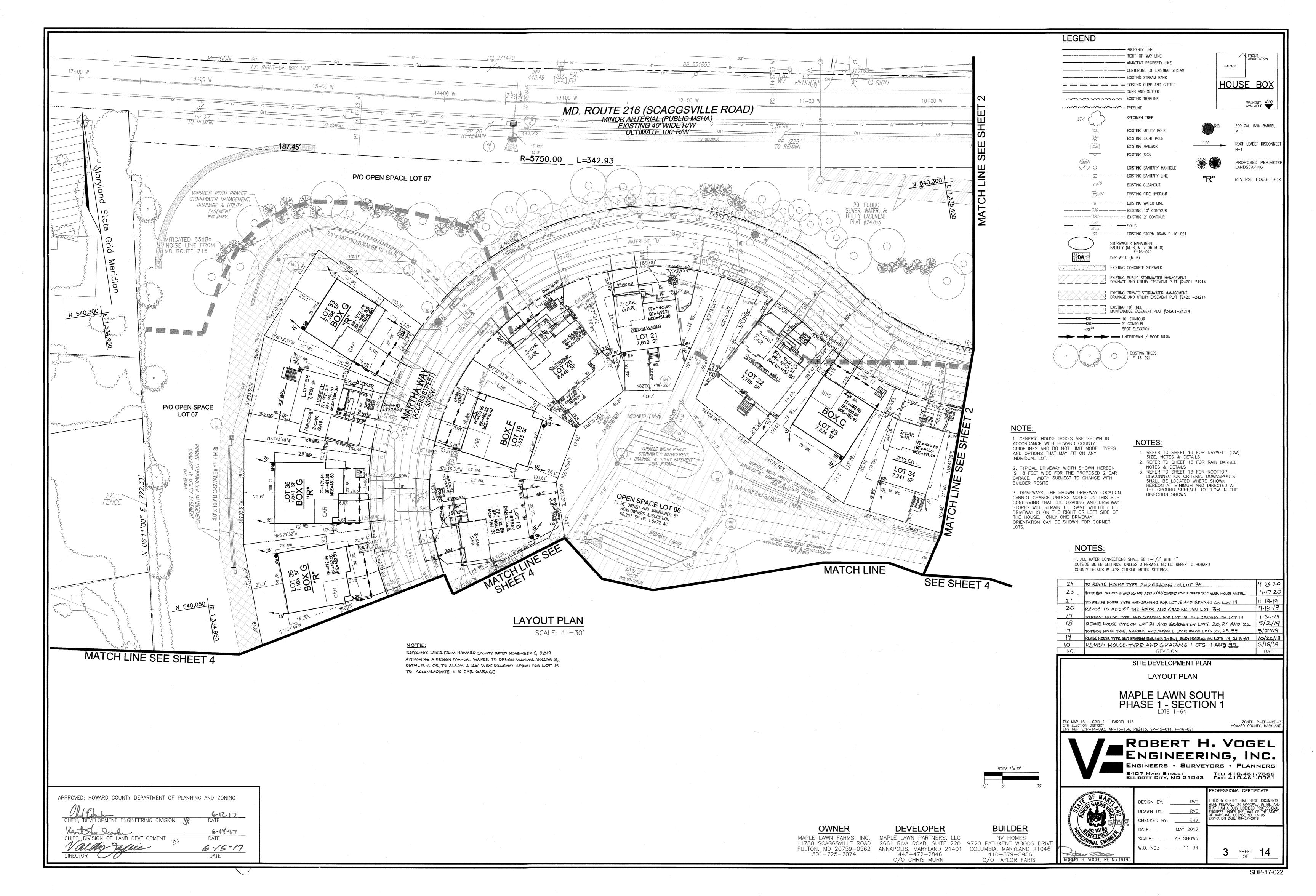
**COVER SHEET** 

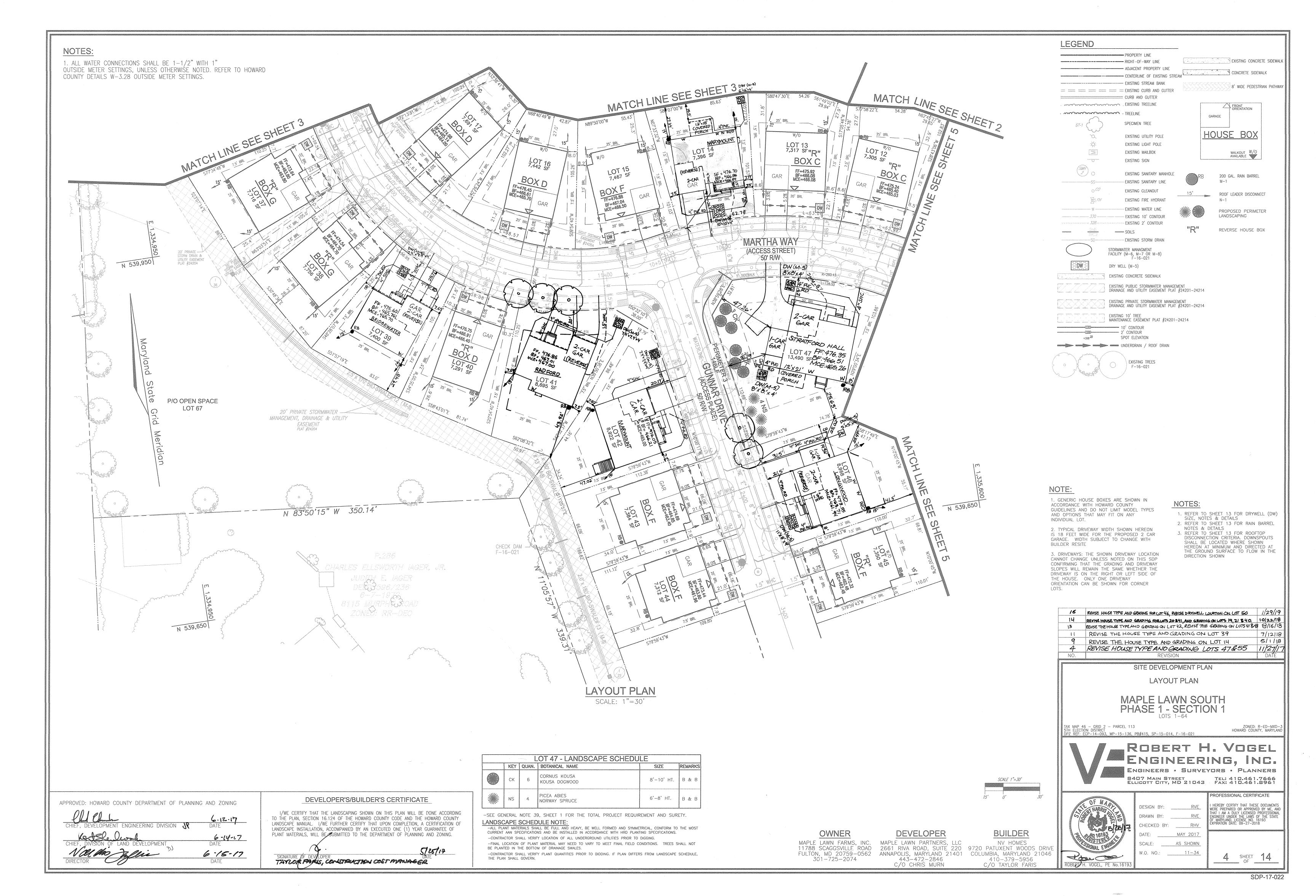
MAPLE LAWN SOUTH

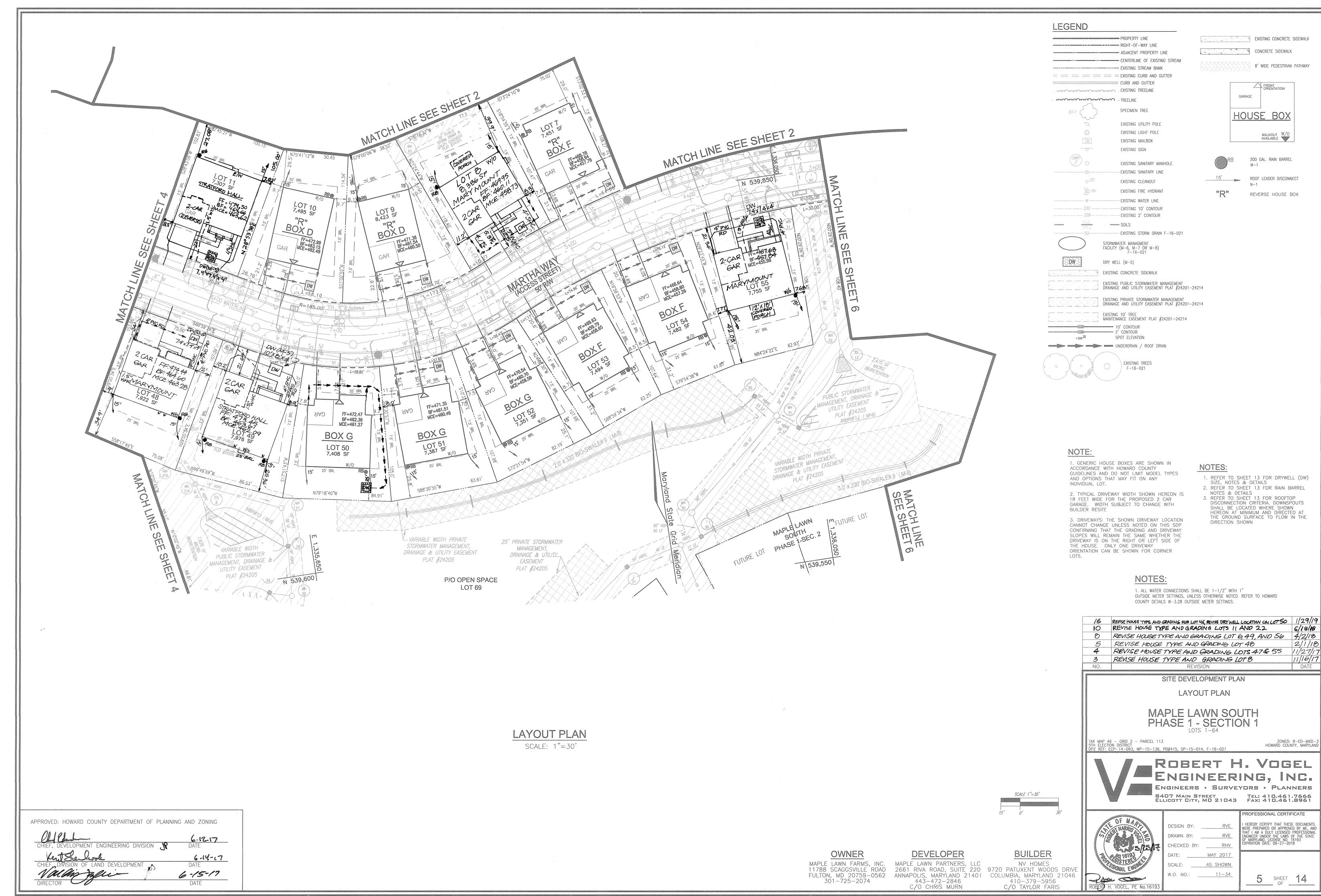
PHASE 1 - SECTION

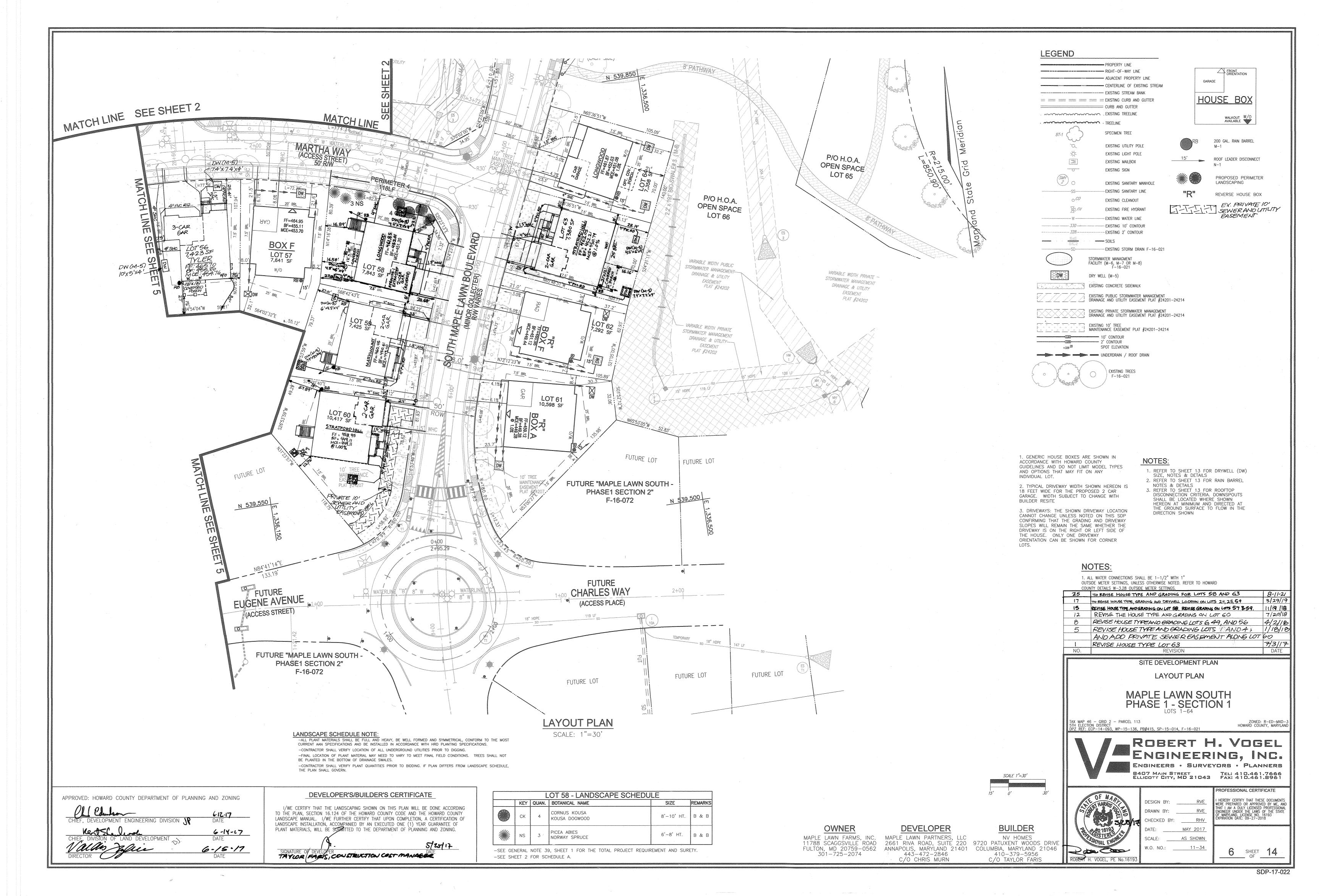
DRAWN BY: CHECKED BY: SCALE: AS SHOWN W.O. NO.:

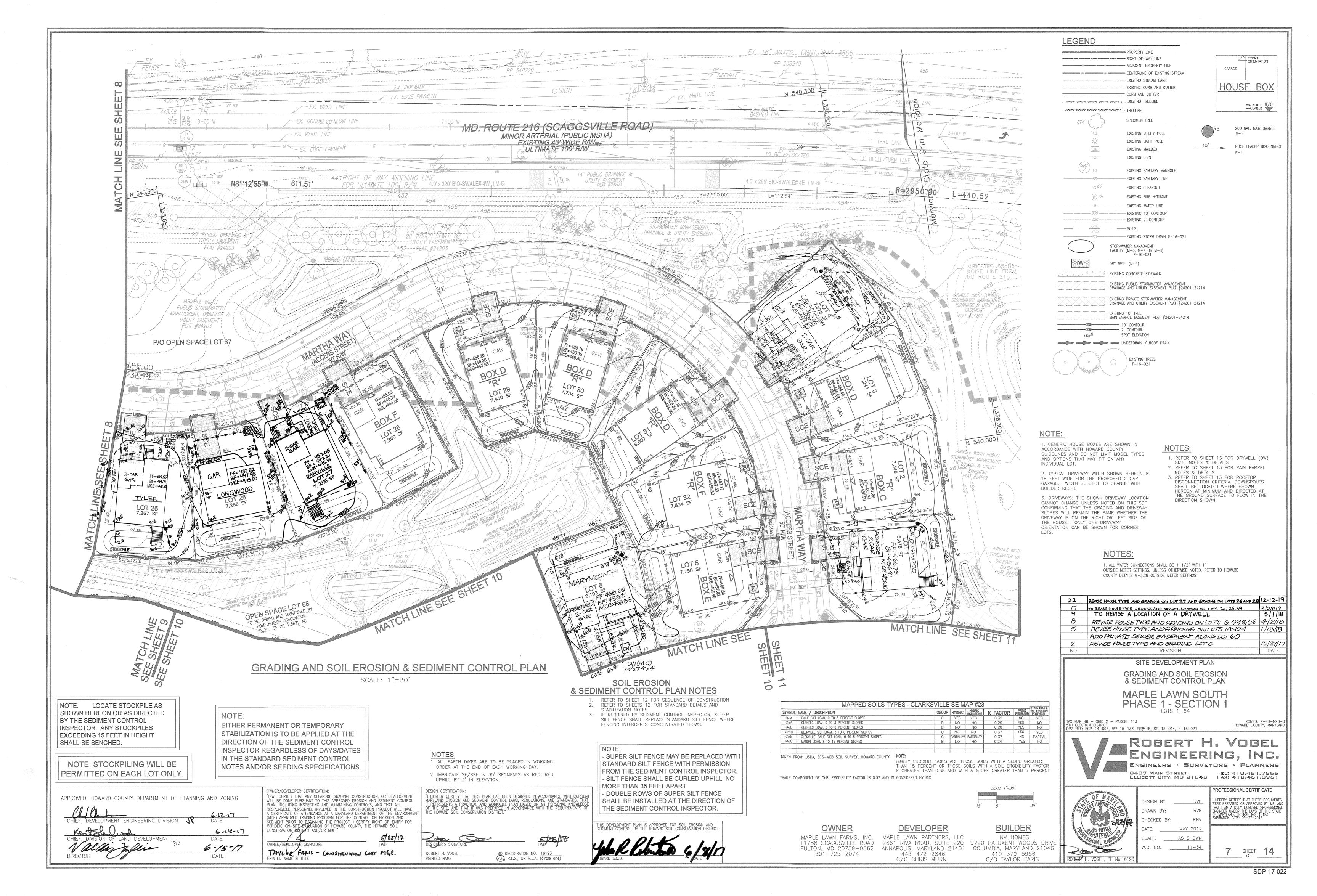


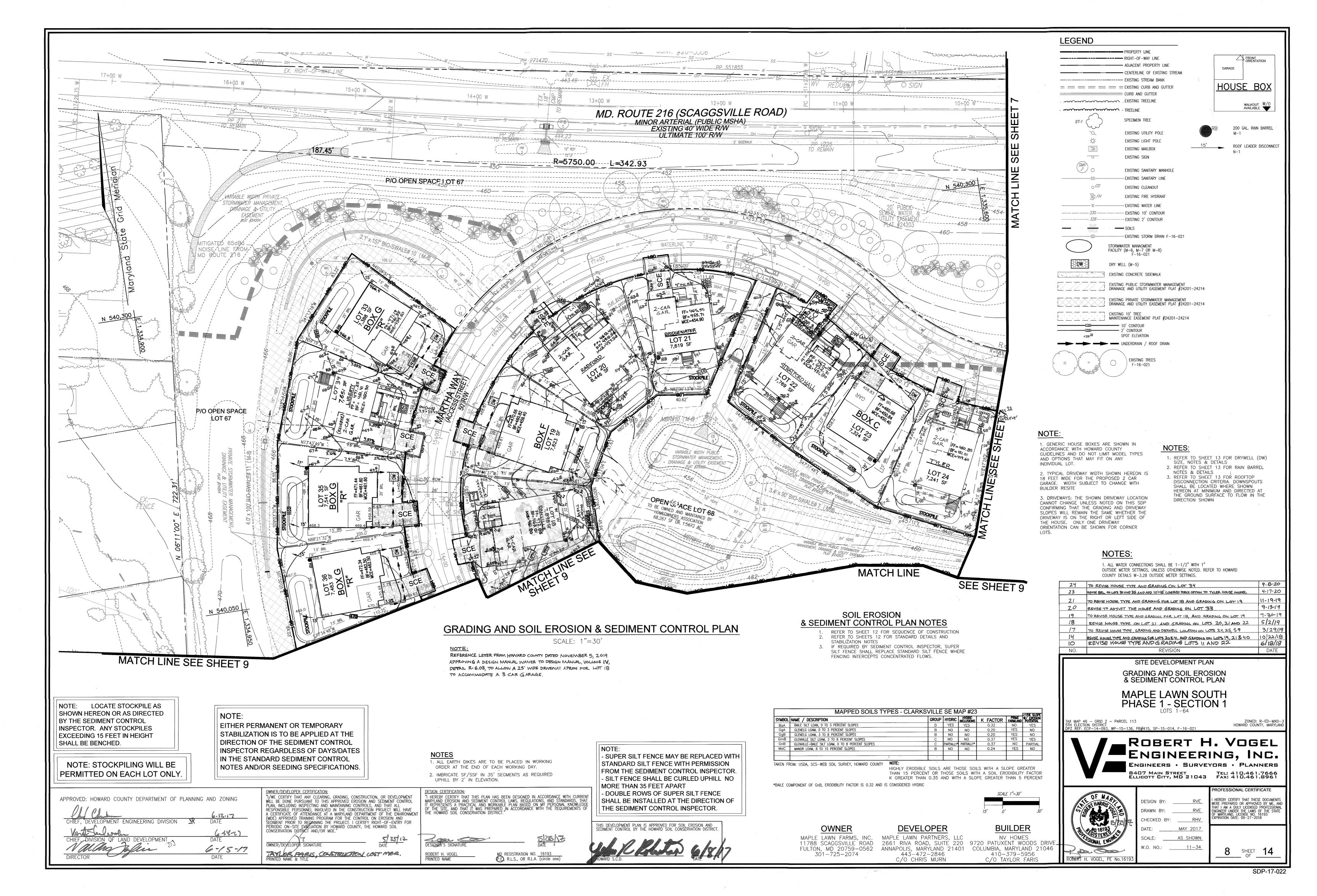


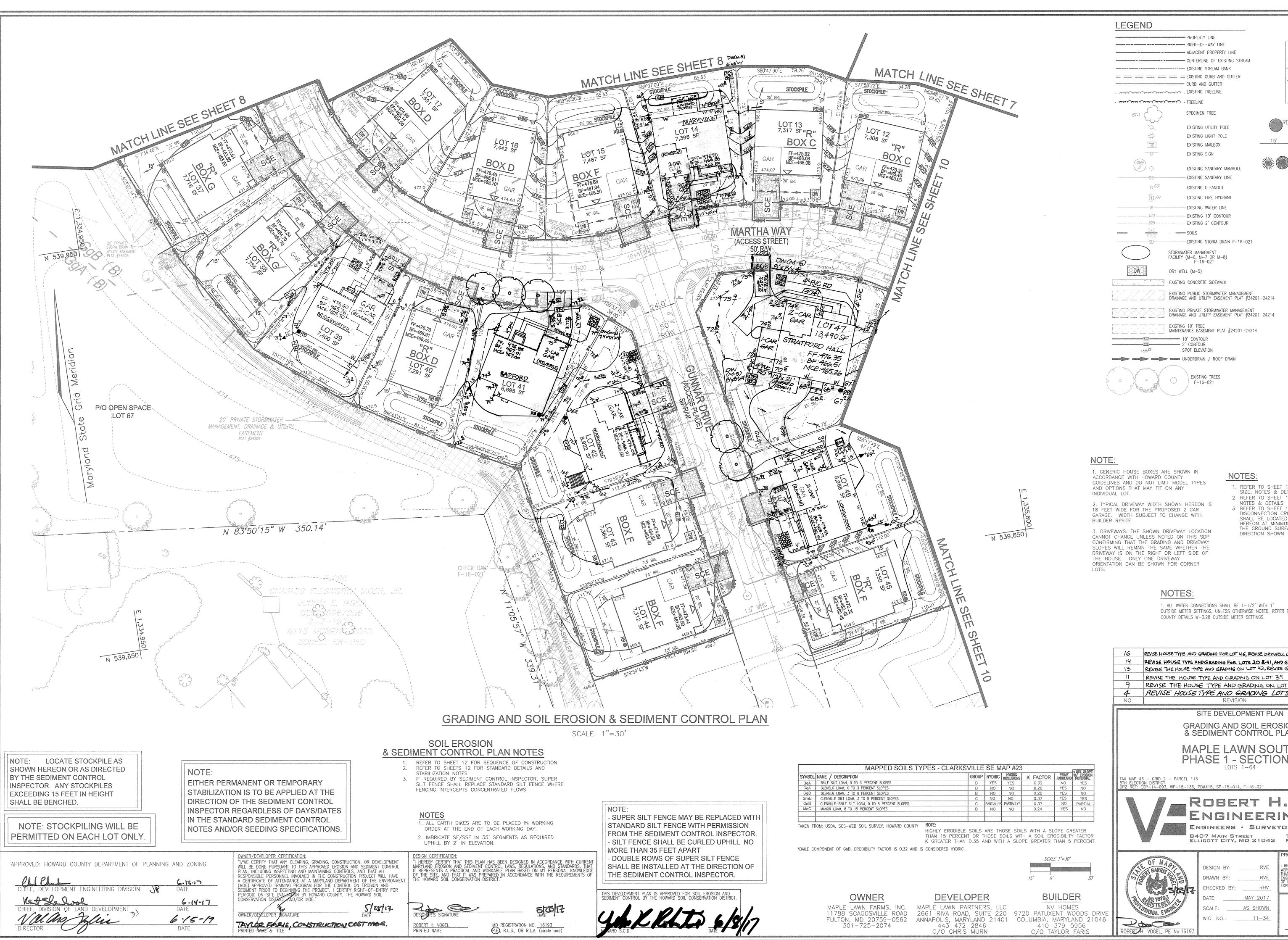












FRONT GARAGE HOUSE BOX WALKOUT W/O AVAILABLE 200 GAL. RAIN BARREL ROOF LEADER DISCONNECT PROPOSED PERIMETER LANDSCAPING DRAINAGE AND UTILITY EASEMENT PLAT #24201-24214 DRAINAGE AND UTILITY EASEMENT PLAT #24201-24214

- 1. REFER TO SHEET 13 FOR DRYWELL (DW) SIZE, NOTES & DETAILS 2. REFER TO SHEET 13 FOR RAIN BARREL
- NOTES & DETAILS 3. REFER TO SHEET 13 FOR ROOFTOP DISCONNECTION CRITERIA, DOWNSPOUTS SHALL BE LOCATED WHERE SHOWN HEREON AT MINIMUM AND DIRECTED AT THE GROUND SURFACE TO FLOW IN THE

1. ALL WATER CONNECTIONS SHALL BE 1-1/2" WITH 1" OUTSIDE METER SETTINGS, UNLESS OTHERWISE NOTED. REFER TO HOWARD COUNTY DETAILS W-3.28 OUTSIDE METER SETTINGS.

16 REVISE HOUSE TYPE AND GRADING FOR LOT 46, REVISE DRYWELL LOCATION ON LOTSO 1/29/19 14 REVISE HOUSE TYPE AND GRADING FOR LOTS 20 841, AND GRADING ON LOTS 19,21,40 10/22/18 REVISE THE HOUSE TYPE AND GRADING ON LOT 42, REVISE GRADING ON LOTS 416,43 8/16/18 7/12/18 REVISE THE HOUSE TYPE AND GRADING ON LOT 39 5/1/18 REVISE THE HOUSE TYPE AND GRADING ON LOT 14 11/27/17 DATE REVISE HOUSETYPE AND GRADING LOTS 47 & 55

> GRADING AND SOIL EROSION & SEDIMENT CONTROL PLAN

MAPLE LAWN SOUTH PHASE 1 - SECTION '

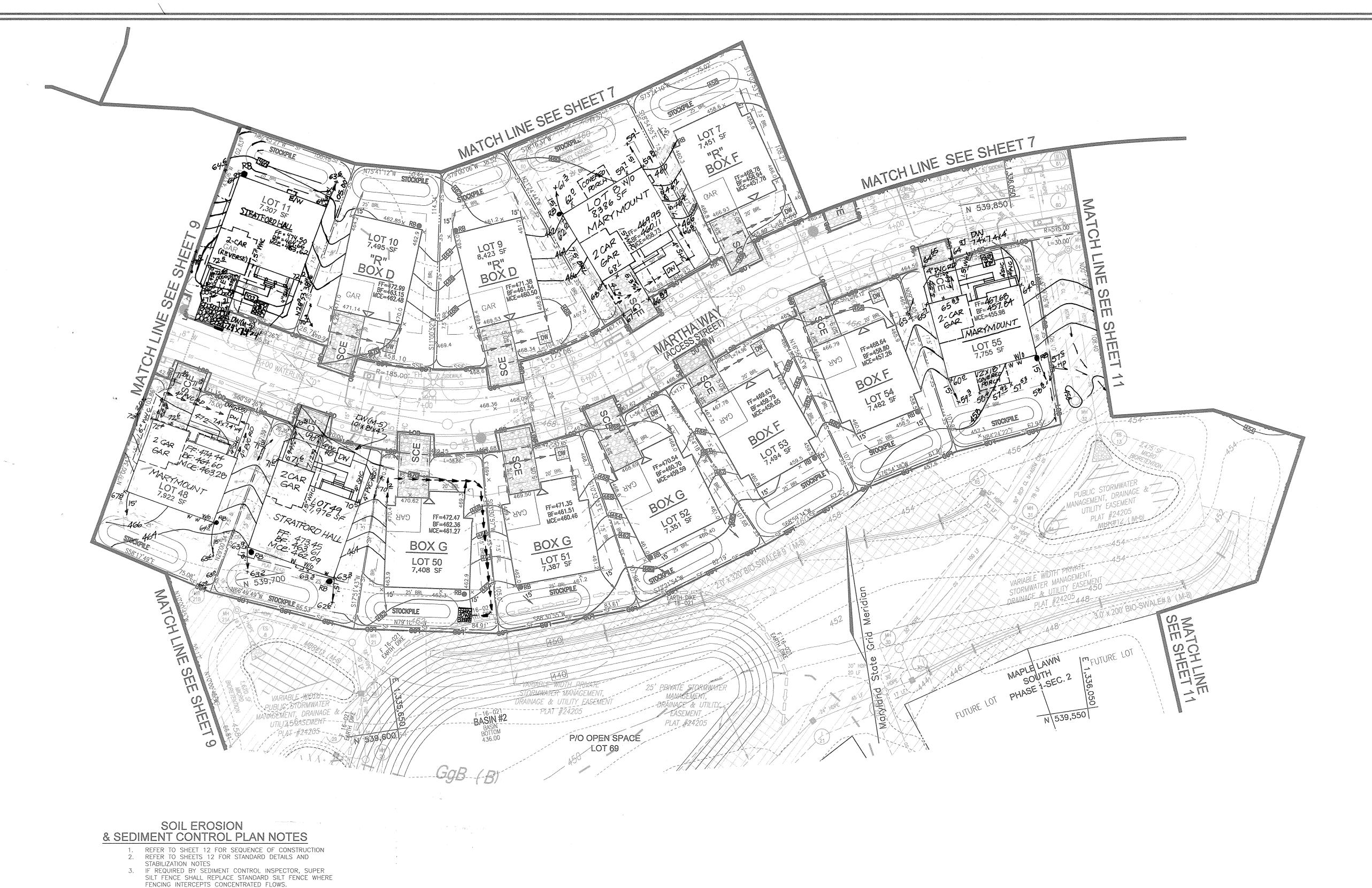
ZONED: R-ED-MXD-C HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL Engineering, Inc. ENGINEERS · SURVEYORS · PLANNERS 8407 MAIN STREET TEL: 410.461.7666 ELLICOTT CITY, MD 21043 FAX: 410.461.8961

> RHV AS SHOWN

PROFESSIONAL CERTIFICATE 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. 16193 EXPIRATION DATE: 09-27-2018

9 SHEET 14



#### GRADING AND SOIL EROSION & SEDIMENT CONTROL PLAN

SCALE: 1"=30'

NOTE: LOCATE STOCKPILE AS SHOWN HEREON OR AS DIRECTED BY THE SEDIMENT CONTROL INSPECTOR. ANY STOCKPILES **EXCEEDING 15 FEET IN HEIGHT** SHALL BE BENCHED.

NOTE: STOCKPILING WILL BE PERMITTED ON EACH LOT ONLY

CHIEF, DEVELOPMENT ENGINEERING DIVISION

6-14-67

6-15-17

EITHER PERMANENT OR TEMPORARY STABILIZATION IS TO BE APPLIED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR REGARDLESS OF DAYS/DATES IN THE STANDARD SEDIMENT CONTROL NOTES AND/OR SEEDING SPECIFICATIONS.

OWNER/DEVELOPER CERTIFICATION: APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

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

TAYLOR HORES, CONSTRUCTION COST MER.

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

UPHILL BY 2' IN ELEVATION.

MD REGISTRATION NO. 16193
(P.E), R.L.S., OR R.L.A. (circle one)

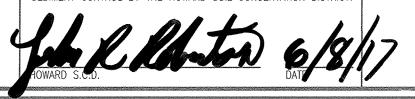
1. ALL EARTH DIKES ARE TO BE PLACED IN WORKING

2. IMBRICATE SF/SSF IN 35' SEGMENTS AS REQUIRED

ORDER AT THE END OF EACH WORKING DAY.

NOTE: - SUPER SILT FENCE MAY BE REPLACED WITH STANDARD SILT FENCE WITH PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR. - SILT FENCE SHALL BE CURLED UPHILL NO MORE THAN 35 FEET APART - DOUBLE ROWS OF SUPER SILT FENCE SHALL BE INSTALLED AT THE DIRECTION OF

THE SEDIMENT CONTROL INSPECTOR



SYMBOL	NAME / DESCRIPTION	GROUP	HYDRIC	HYDRIC INCLUSIONS	K FACTOR	PRIME FARMLAND	<b>WARRS</b>
BaA	BAILE SILT LOAN, O TO 3 PERCENT SLOPES	D	YES	YES	0.32	NO	YES
GgA	GLENELG LOAM, O TO 3 PERCENT SLOPES	В	NO	NO	0.20	YES	NO
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	8	NO	NO	0.20	YES	NO
GmB	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES	С	NO	NO	0.37	YES	YES
GnB	GLENVILLE-BAILE SILT LOAM, O TO 8 PERCENT SLOPES	С	PARTIALLY*	PARTIALLY*	0.37	NO	PARTIA
MaC	MANOR LOAM, 8 TO 15 PERCENT SLOPES	В	NO	NO	0.24	YES	NO

TAKEN FROM: USDA, SCS-WEB SOIL SURVEY, HOWARD COUNTY NOTE: HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT

SCALE 1"=30'

**OWNER** 

\*BAILE COMPONENT OF GnB, ERODIBILITY FACTOR IS 0.32 AND IS CONSIDERED HYDRIC

301-725-2074

DEVELOPER MAPLE LAWN FARMS, INC. MAPLE LAWN PARTNERS, LLC NV HOMES
11788 SCAGGSVILLE ROAD 2661 RIVA ROAD, SUITE 220 9720 PATUXENT WOODS DRIVE FULTON, MD 20759-0562 ANNAPOLIS, MARYLAND 21401 COLUMBIA, MARYLAND 21046 443-472-2846 C/O CHRIS MURN

410-379-5956 C/O TAYLOR FARIS

FRONT HOUSE BOX

WALKOUT W/O 200 GAL. RAIN BARREL

15' ROOF LEADER DISCONNECT

EXISTING FIRE HYDRANT -EXISTING WATER LINE - EXISTING 10' CONTOUR --- EXISTING 2' CONTOUR SOILS EXISTING STORM DRAIN F-16-021

STORMWATER MANAGMENT FACILITY (M-6, M-7 OR M-8) F-16-021

RIGHT-OF-WAY LINE

= = = = = EXISTING CURB AND GUTTER

CURB AND GUTTER . EXISTING TREELINE

. TREELINE

---- EXISTING STREAM BANK

EXISTING UTILITY POLE EXISTING LIGHT POLE

EXISTING SANITARY MANHOLE -EXISTING SANITARY LINE EXISTING CLEANOUT

EXISTING SIGN

LEGEND

DRY WELL (M-5) EXISTING CONCRETE SIDEWALK EXISTING PUBLIC STORMWATER MANAGEMENT

DRAINAGE AND UTILITY EASEMENT PLAT #24201-24214 EXISTING PRIVATE STORMWATER MANAGEMENT DRAINAGE AND UTILITY EASEMENT PLAT #24201-24214

EXISTING 10' TREE MAINTENANCE EASEMENT PLAT #24201-24214 --- 2' CONTOUR SPOT ELEVATION

UNDERDRAIN / ROOF DRAIN

#### NOTE:

1. GENERIC HOUSE BOXES ARE SHOWN IN ACCORDANCE WITH HOWARD COUNTY GUIDELINES AND DO NOT LIMIT MODEL TYPES AND OPTIONS THAT MAY FIT ON ANY INDIVIDUAL LOT.

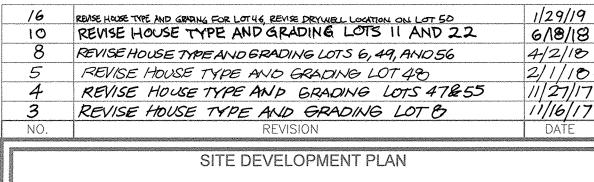
2. TYPICAL DRIVEWAY WIDTH SHOWN HEREON IS 18 FEET WIDE FOR THE PROPOSED 2 CAR GARAGE. WIDTH SUBJECT TO CHANGE WITH BUILDER RESITE

3. DRIVEWAYS: THE SHOWN DRIVEWAY LOCATION CANNOT CHANGE UNLESS NOTED ON THIS SDP CONFIRMING THAT THE GRADING AND DRIVEWAY SLOPES WILL REMAIN THE SAME WHETHER THE DRIVEWAY IS ON THE RIGHT OR LEFT SIDE OF THE HOUSE. ONLY ONE DRIVEWAY ORIENTATION CAN BE SHOWN FOR CORNER

- 1. REFER TO SHEET 13 FOR DRYWELL (DW) SIZE, NOTES & DETAILS 2. REFER TO SHEET 13 FOR RAIN BARREL
- NOTES & DETAILS 3. REFER TO SHEET 13 FOR ROOFTOP DISCONNECTION CRITERIA. DOWNSPOUTS SHALL BE LOCATED WHERE SHOWN HEREON AT MINIMUM AND DIRECTED AT THE GROUND SURFACE TO FLOW IN THE DIRECTION SHOWN

#### NOTES:

1. ALL WATER CONNECTIONS SHALL BE 1-1/2" WITH 1" OUTSIDE METER SETTINGS, UNLESS OTHERWISE NOTED. REFER TO HOWARD COUNTY DETAILS W-3.28 OUTSIDE METER SETTINGS.

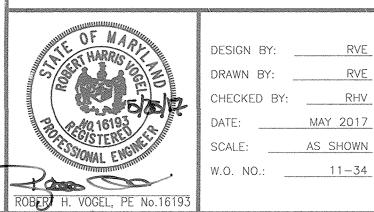


GRADING AND SOIL EROSION & SEDIMENT CONTROL PLAN

MAPLE LAWN SOUTH PHASE 1 - SECTION '

AX MAP 46 - GRID 2 - PARCEL 113 ITH ELECTION DISTRICT IPZ REF: ECP-14-093, WP-15-136, PB#415, SP-15-014, F-16-021 ZONED: R-ED-MXD-3 HOWARD COUNTY, MARYLAND

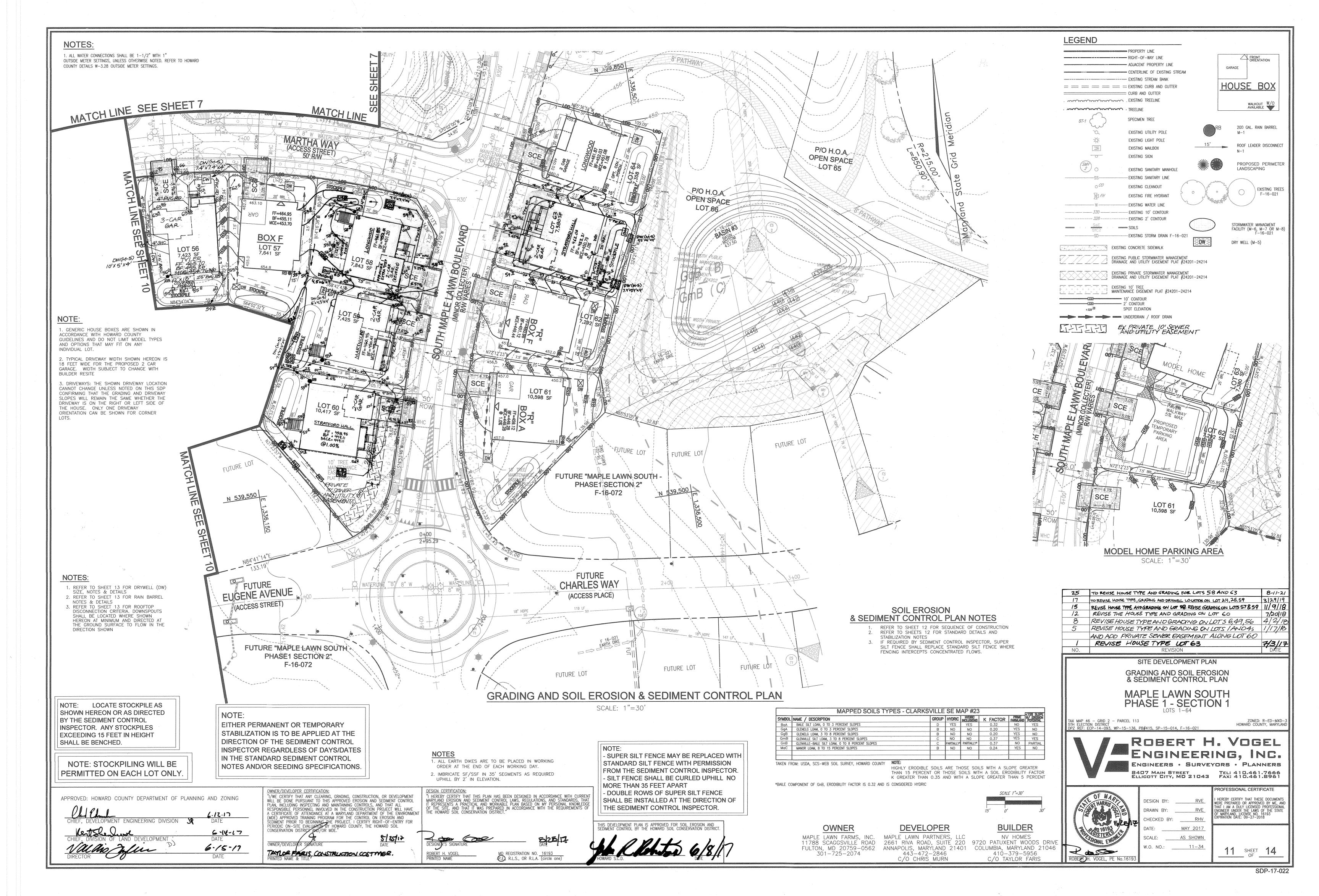
ROBERT H. VOGEL ENGINEERING, INC. ENGINEERS · SURVEYORS · PLANNERS 8407 MAIN STREET TEL: 410.461.7666 ELLICOTT CITY, MD 21043 FAX: 410.461.8961



DESIGN BY: DRAWN BY: CHECKED BY: SCALE: AS SHOWN

PROFESSIONAL CERTIFICATE HEREBY CERTIFY THAT THESE DOCUMENTS HEREBIT CERTIFY THAT THESE DUCUMENTS 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. 16193 EXPIRATION DATE: 09-27-2018

10 SHEET 14



HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

A PRE-CONSTRUCTION MEETING MUST OCCUR WITH THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS, CONSTRUCTION INSPECTION DIVISION (CID), 410-313-1855 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 UPON COMPLETION OF THE INSTALLATION OF PERIMETER EROSION AND

SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. PRIOR TO THE START OF ANOTHER PHASE OF CONSTRUCTION OR OPENING OF ANOTHER GRADING UNIT D. PRIOR TO THE REMOVAL OR MODIFICATION OF SEDIMENT CONTROL

OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE, OTHER RELATED STATE FEDERAL PERMITS SHALL BE REFERENCED, TO ENSURE COORDINATION AND TO AVOID CONFLICTS WITH THIS PLAN.

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 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 LINDER ACTIVE GRADING ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR TOPSOIL (SEC. B-4-2). PERMANENT SEEDING (SEC. B-4-5), TEMPORARY SEEDING (SEC. B-4-4) AND MULCHING (SEC. B-4-3). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES IF THE GROUND IS FROZEN. INCREMENTAL STABILIZATION (SEC. B-4-1) SPECIFICATIONS SHALL BE ENFORCED IN AREAS WITH >15' OF CUT AND/OR FILL. STOCKPILES (SEC. B-4-8) IN EXCESS OF 20 FT. MUST BE BENCHED WITH STABLE OUTLET. ALL CONCENTRATED FLOW, STEEP SLOPE, AND HIGHLY ERODIBLE AREAS SHALL RECEIVE SOIL STABILIZATION MATTING (SEC. B-4-6) ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE, AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN

\_\_ ACRES AREA DISTURBED: AREA TO BE ROOFED OR PAVED: \_ ACRES \_ ACRES AREA TO BE VEGETATIVELY STABILIZED: OFFSITE WASTE/BORROW AREA LOCATION: F16-072

#### I) REFER TO ITEM 11 BELOW

OBTAINED FROM THE CID.

ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE. 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:

- INSPECTION DATE INSPECTION TYPE (ROUTINE, PRE-STORM EVENT, DURING RAIN EVENT) NAME AND TITLE OF INSPECTOR WEATHER INFORMATION (CURRENT CONDITIONS AS WELL AS TIME AND AMOUNT OF LAST RECORDED PRECIPITATION) BRIEF DESCRIPTION OF PROJECT'S STATUS (E.G., PERCENT COMPLETE)
- AND/OR CURRENT ACTIVITIES EVIDENCE OF SEDIMENT DISCHARG IDENTIFICATION OF PLAN DEFICIENCIES
- IDENTIFICATION OF SEDIMENT CONTROLS THAT REQUIRE MAINTENANCE IDENTIFICATION OF MISSING OR IMPROPERLY INSTALLED SEDIMENT CONTROLS COMPLIANCE STATUS REGARDING THE SEQUENCE OF CONSTRUCTION AND STABILIZATION REQUIREMENTS
- MONITORING/SAMPLING

MAINTENANCE AND/OR CORRECTIVE ACTION PERFORMED OTHER INSPECTION ITEMS AS REQUIRED BY THE GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES (NPDES, MDE). 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 ANY MAJOR CHANGES OR REVISIONS TO THE PLAN OR SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE HSCO PRIOR TO PROCEEDING WITH CONSTRUCTION, MINOR REVISIONS MAY ALLOWED BY THE CID PER THE LIST OF

HSCD-APPROVED FIELD CHANGES. DISTURBANCE SHALL NOT OCCUR OUTSIDE THE L.O.D. A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 AC. PER GRADING UNIT) AT A TIME. WORK MAY PROCEED TO A Subsequent grading unit when at least 50 percent of the disturbed area IN THE PRECEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE CID. UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE HSCD, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME. WASH WATER FROM ANY EQUIPMENT, VEHICLES, WHEELS, PAVEMENT, AND OTHER SOURCES MUST BE TREATED IN A SEDIMENT BASIN OR OTHER APPROVED WASHOUT

TOPSOIL SHALL BE STOCKPILED AND PRESERVED ON—SITE FOR REDISTRIBUTION ONTO 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. STREAM CHANNELS MUST NOT BE DISTURBED DURING THE FOLLOWING RESTRICTED TIME PERIODS (INCLUSIVE):

 USE I AND IP MARCH 1 — JUNE 15 USE III AND IIIP OCTOBER 1 - APRIL 30 USE IV MARCH 1 - MAY 31 A COPY OF THIS PLAN, THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL FROSION AND SEDIMENT CONTROL AND ASSOCIATED PERMITS SHALL BE

ON-SITE AND AVAILABLE WHEN THE SITE IS ACTIVE.

#### B-4-5 STANDARDS AND SPECIFICATIONS PERMANENT STABILIZATION

TO STABILIZE DISTURBED SOILS WITH PERMANENT VEGETATION.

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.

A. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE 8.3 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE 8.3) AND BASED ON THE SITE CONDITION OR PURPOSE FOUND ON TABLE 8.2. ENTER SELECTED MIXTURE(S) APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. TH 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

A. AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENAN B. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE SITE CONDITIONS OR PURPOSE, ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED

KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN AREAS THAT 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 F 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 QUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT. III. TALE FESCUE/KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN DROUGH PRONE AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FLIT 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 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: 11/2 TO 3 POUNDS PER 1000 SQUARE FEET. SELECT TUREGRASS 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. HE CERTIFICATION PROGRAM OF THE MARYLAND DEPARTMENT OF AGRICULTURE, TURF AND SEEI SECTION, PROVIDES A RELIABLE MEANS OF CONSUMER PROTECTION AND ASSURES A PURE GENETIC

C. IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES

WESTEM MD: MARCH 15 TO JUNE 1, AUGUST ITO OCTOBER 1 (HARDINESS ZONES: SB, 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 (HARDINESS ZONES: 7A, 7B)

2 TO 4 INCHES, LEVEL AND RAKE THE AREAS TO PREPARE A PROPER SEEDBED. REMOVE STONES AND DEBRIS OVER 11/4 INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY. 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.

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 OF 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 TOM 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 SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. OD 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 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. 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. ). 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. COMPLETI HE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY PIECE OF SOD WITHIN EIGHT

3. SOD MAINTENANCE 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. 3. 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.

#### PERMANENT SEEDING SUMMARY

HARDINESS ZONE (FROM FIGURE 8.3): ZONE 6b SEED MIXTURE (FROM TABLE 8.3): 9						Fertilizer Rate (10-20-20)		LIME RATE
NO	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	N	P <sub>2</sub> 0 <sub>5</sub>	к <sub>2</sub> 0	
1	COOL SEASON TALL FESCUE & KENTUCKY BLUEGRASS OR EQUAL	T.F. 60 LB / AC K.B. 40 LB / AC	MAR 1 TO MAY 15 AUG 15 TO OCT 15	1/4-1/2 IN.	(1 LB PER	(2 LB PER	(2 LB PER	2 TONS/AC (90 LB PER 1000 SF )

EITHER PERMANENT OR TEMPORARY STABILIZATION IS TO BE APPLIED AT THE DIRECTION OF THE SEDIMENT CONTROL **INSPECTOR REGARDLESS OF DAYS/DATES** IN THE STANDARD SEDIMENT CONTROL NOTES AND/OR SEEDING SPECIFICATIONS.

#### R-4-2 STANDARDS AND SPECIFICATIONS SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS

THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION.

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH.

CONDITIONS WHERE PRACTICE APPLIES WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED.

CRITERIA A. SOIL PREPARATION

A. SEEDBED PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHE:
BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT AFTER THE SOIL IS LOOSENED, IT MUST NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE TRACKED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. B. APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.
C. INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING

OR OTHER SUITABLE MEANS. 2. PERMANENT STABILIZATION A. A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE 1. SOIL PH BETWEEN 6.0 AND 7.0.

II. SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM). III. SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL (GREATER THAN 30 PERCENT SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD À MODERATE AMOUNT OF MOISTURE. AN EXCEPTION: IF LOVEGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD

IV. SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT V. SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION B. APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET C. GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO

D. APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST E. MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. RAKE LAWN AREAS TO SMOOTH THE SURFACE, REMOVE LARGE OBJECTS IKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER FOUIPMENT TO ROUGHEN. HE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRIABLE. SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.

I. TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCEM HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.
2. TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-

3. TOPSOILING IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE A. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH. B. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FLIRNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT

THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH. D. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE. 4. AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING

TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. TOPSOIL MUST NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND MUST CONTAIN LESS THAN 5 PERCENT BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1½ INCHES IN DIAMETER. B. TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA

GRASS, QUACK GRASS, JOHNSON GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS 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. A. EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING

UNIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT TO A MINIMUM THICKNESS OF 4 INCHES. SPREADING IS TO BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE, ANY IRREGULARITIES IN THE SURFACE RESULTING FROM OPSOILING OR OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS. C. TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL OR SUBSOIL IS 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 SEEDBED PREPARATION.

C. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS) I SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSIS MAY BE PERFORMED BY A RECOGNIZED PRIVATE OR COMMERCIAL LABORATORY, SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSES. FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIATE FOUIPMENT, MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY. FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE NAME. TRADE NAME OR TRADEMARK AND WARRANTY OF THE PRODUCER.

3. LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED EXCEPT WHEN HYDROSEEDING) WHICH CONTAINS AT LEAST 50 PERCENT TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE MUST BE GROUND TO SUCH FINENESS THAT AT LEAST 50 PERCENT WILL PASS THROUGH A #100 MESH SIEVE AND 98 TO 100 PERCENT WILL PASS THROUGH A #20 MESH SIEVE. 4. LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. 5. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, SPREAD GROUND LIMESTONE AT THE RATE OF 4 TO 8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL.

#### DETAIL B-1 STABILIZED CONSTRUCTION SCE S ENTRANCI - EXISTING PAVEMENT 4000 Kg 777 -EARTH FILL -PIPE (SEE NOTE 6) **PROFILE** 50 FT MIN. LENGTH \* PLAN VIEW

CONSTRUCTION SPECIFICATIONS

PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (\*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.

PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE, PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGTO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.

PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR

TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, 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 PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MARYLAND DEPARTMENT OF ENVIRONMEN WATER MANAGEMENT ADMINISTRATION 2011

#### B-4-3 STANDARDS AND SPECIFICATIONS SEEDING AND MULCHING

DEFINITION

THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER.

TO PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION.

TO THE SURFACE OF ALL PERIMETER CONTROLS, SLOPES, AND ANY DISTURBED AREA NOT UNDER ACTIVE

1.SPECIFICATIONS

A. ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED MUST BE TO RE-TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED USED MUST HAVE BEEN TESTED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON AN 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. B. 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

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 NOCULANTS AS DIRECTED ON THE PACKAGE. USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEEDING. NOTE: IT IS VERY IMPORTANT TO KEEP INOCULANT AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 75 TO 80 DEGREES FAHRENHEIT CAN WEAKEN BACTERIA AND MAKE ). 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 PHYTO—TOXIC MATERIALS 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 8.1, PERMANENT SEEDING TABLE 8.3, OR SITE-SPECIFIC SEEDING SUMMARIES. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER, APPLY HALF THE SEEDIN RATE IN EACH DIRECTION, ROLL THE SEEDED AREA WITH A WEIGHTED ROLLER TO PROVIDE GOOD SEED TO SOIL CONTACT. B. DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL.

I. CULTIPACKING 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. II. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING

RATE IN EACH DIRECTION. C. HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED AND I. IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES SHOULD NOT EXCEED THE FOLLOWING: NITROGEN, 100 POUNDS PER ACRE TOTAL OF SOLUBLE NITROGEN; P205 (PHOSPHOROUS), 200 POUNDS PER ACRE; K20 (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 LISE BURNT OR HYDRATED LIME WHEN HYDROSEDING III. MIX SEED AND FERTILIZER ON SITE AND SEED IMMEDIATELY AND WITHOUT INTERRUPTION. v. When hydroseeding do not incorporate seed into the soil.

B. MULCHING MULCH MATERIALS (IN ORDER OF PREFERENCE)
 A. STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, LYE, OAT, OR BARLEY AND REASONABLY BRIGHT IN COLOR, STRAW IS TO BE FREE OF NOXIOUS WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT MUSTY, MOLDY, CAKED, DECAYED, OR EXCESSIVELY DUSTY. NOTE: USE ONLY STERILE STRAW MULCH IN AREAS WHERE ONE SPECIES OF GRASS IS DESIRED.

B. 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 SPREAD 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 BLOTTER-LIKE GROUND COVER, ON APPLICATION, HAVING MOISTURE ABSORPTION AND PERCOLATION PROPERTIES AND MUST COVER 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 CONCENTRATION LEVELS THAT WILL BE 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 1.6

A. APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING.

B. WHEN STRAW MULCH IS USED, SPREAD IT OVER ALL SEEDED AREAS AT THE RATE OF 2 TONS
PER ACRE TO A UNIFORM LOOSE DEPTH OF 1 TO 2 INCHES. APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO THAT THE SOIL SURFACE IS NOT EXPOSED. WHEN USING

PERCENT MAXIMUM AND WATER HOLDING CAPACITY OF 90 PERCENT MINIMUM.

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. 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 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 (AGRO-TACK), DCA-70, PETROSET, TERRA TAX 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 BANKS. USE OF ASPHALT BINDERS IV. LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER

RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4 TO 15 FEET WIDE AND 300 TO 3,000 FEET

B-4-4 STANDARDS AND SPECIFICATIONS TEMPORARY STABILIZATION

DETAIL E-1 SILT FENCE

ELEVATION

CROSS SECTION

JOINING TWO ADJACENT SIL

FENCE SECTIONS (TOP VIEW)

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

2011

CENTER TO CENTER

WAY!

STEP 3

36 IN MIN. FENCE POST LENGTH DRIVEN MIN. 16 IN INTO CROUND

STAPLE -

STAPLE-

STAPLE

16 IN MIN. HEIGHT OF WOVEN SLIT FILM GEOTEXTILE

TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS.

TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS.

DEFINITION

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 8.1 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 THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED, THEN TABLE 8.1 PLUS FERTILIZER AND LIME RATES MUST BE PUT

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

NO   SPECIES   APPLICATION   SEEDING   DEPTHS   (10-20-20)	de references de enchalment	HARDINESS Z SEED MIXTUR	FERTILIZER RATE	LIME RATE			
1 ANNUAL RYEGRASS OR EQUAL 40 LB / AC AUG 1 TO OCT 15 1/2 IN. (10 LB PER 1000 SF ) (90 LB 1000 SF )  2 WARM SEASON FOXTAIL 30 LB / AC MAY 16 TO JUL 31 1/2 IN.	NO	SPECIES		1			
FOXTAIL 30 LB / AC MAY 16 TO 1/2 IN.	1	ANNUAL RYEGRASS	40 LB / AC	MAY 15 AUG 1 TO	1/2 IN.	(10 LB PER	2 TONS/AC (90 LB PEI 1000 SF
OK EQUAL	2	FOXTAIL	30 LB / AC		1/2 IN.		**************************************

B-4-8 STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREA

DETAIL E-1 SILT FENCE

. USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART

USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND

EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND, BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.

EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DECREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.

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

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL FROSION AND SEDIMENT CONTROL

PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.

WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.

ONSTRUCTION SPECIFICATIONS

----SF----

A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND

TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT CONTROLS THE POTENTIAL FOR EROSION, SEDIMENTATION, AND CHANGES TO DRAINAGE PATTERNS CONDITIONS WHERE PRACTICE APPLIES

STOCKPILE AREAS ARE UTILIZED WHEN IT IS NECESSARY TO SALVAGE AND STORE SOIL

1. THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN. THE FOOTPRINT OF THE STOCKPILE MUST BE SIZED TO ACCOMMODATE THE ANTICIPATED VOLUME OF MATERIAL AND BASED ON A SIDE SLOPE RATIO NO STEEPER THAN 2:1. BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING RUNOFF FROM THE STOCKPILE AREA MUST DRAIN TO A SUITABLE SEDIMENT

ACCESS THE STOCKPILE AREA FROM THE UPGRADE SIDE. CLEAR WATER RUNOFF INTO THE STOCKPILE AREA MUST BE MINIMIZED BY USE OF A DIVERSION DEVICE SUCH AS AN EARTH DIKE, TEMPORARY SWALE OR DIVERSION FENCE. PROVISIONS MUST BE MADE FOR DISCHARGING CONCENTRATED FLOW IN A NON-EROSIVE MANNER. 6. WHERE RUNOFF CONCENTRATES ALONG THE TOE OF THE STOCKPILE FILL. AN APPROPRIATE EROSION/SEDIMENT CONTROL PRACTICE MUST BE USED TO

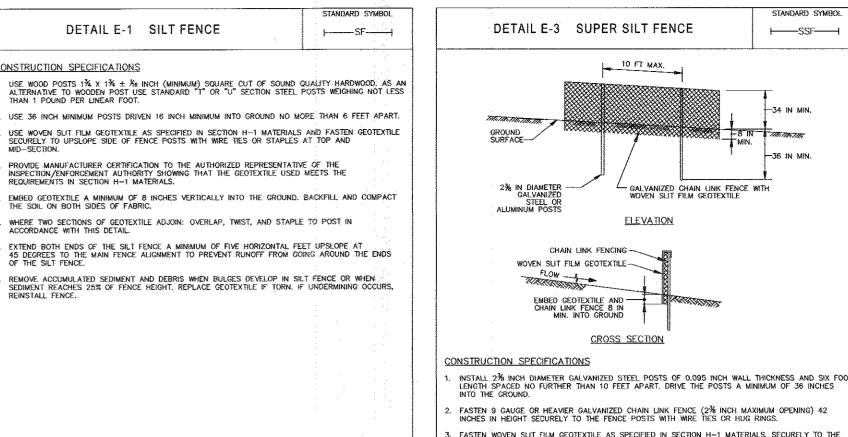
 STOCKPILES MUST BE STABILIZED IN ACCORDANCE WITH THE 3/7 DAY STABILIZATION REQUIREMENT AS WELL AS STANDARD B-4-1 INCREMENTAL STABILIZATION AND STANDARD B-4-4 TEMPORARY STABILIZATION. 8. IF THE STOCKPILE IS LOCATED ON AN IMPERVIOUS SURFACE, A LINER SHOULD BE PROVIDED BELOW THE STOCKPILE TO FACILITATE CLEANUP. STOCKPILES CONTAINING CONTAMINATED MATERIAL MUST BE COVERED WITH IMPERMEABLE

#### MAINTENANCE THE STOCKPILE AREA MUST CONTINUOUSLY MEET THE REQUIREMENTS FOR ADEQUATE

CONTROL PRACTICE.

INTERCEPT THE DISCHARGE.

VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. SIDE SLOPES MUST BE MAINTAINED AT NO STEEPER THAN A 2:1 RATIO, THE STOCKPILE AREA MUST BE KEPT FREE OF EROSION. IF THE VERTICAL HEIGHT OF A STOCKPILE EXCEEDS 20 FEET FOR 2:1 SLOPES, 30 FEET FOR 3:1 SLOPES, OR 40 FEET FOR 4:1 SLOPES, BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING.



FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE 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 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.

EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE 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 ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN, IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

MÁRYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

#### SEQUENCE OF CONSTRUCTION

OBTAIN GRADING PERMIT. (1 DAY) NOTIFY HOWARD COUNTY BUREAU OF INSPECTIONS AND PERMITS (410-313-1880) AT LEAST 24 HOURS BEFORE STARTING ANY WORK. (1 DAY) DRY UTILITIES (CABLE, GAS ELECTRIC) MUST BE INSTALLED AFTER ROAD CONSTRUCTION AND PRIOR TO THE INSTALLATION OF THE F-16-021

ANY F-16-021 STORMWATER MANAGEMENT FACILITIES IN PLACE SHALL BE PROTECTED FROM RECEIVING SEDIMENT LADEN WATERS FROM HOME CONSTRUCTION ACTIVITIES.

STAKEOUT LIMITS OF DISTURBANCE. (1 DAY) INSTALL STABILIZED CONSTRUCTION ENTRANCE. (1 DAY) IN ACCORDANCE WITH DETAILS HEREON, INSTALL SEDIMENT CONTROL MEASURES AS SHOWN IN PLAN VIEW.

MICRO BIO RETENTION AND BIOSWALE FACILITIES.

EXISTING GRADES SHOWN HEREON ARE THE PROPOSED GRADES FROM F-16-021 CONTRACTOR SHALL UTILIZE THE EXISTING CONTROLS INSTALLED UNDER F-16-021 AS SHOWN HEREON (SHEET 10 & 11) IF BASINS ARE IN PLACE.

F-16-021 SEDIMENT BASINS ARE TO BE BACKFILLED AS PART OF F-16-021. IF BASIN #2 & #3 HAVE BEEN BACKFILLED, CONTRACTOR SHALL USE ONLOT CONTROLS AFTER OBTAINING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR TO PROCEED,

ROUGH GRADE INDIVIDUAL LOT FOR HOUSE CONSTRUCTION. (1 DAY) STOCKPILING SHALL BE LIMITED TO ONLOT OR AS SHOWN HEREON. STOCKPILES SHALL BE STABILIZED AS DETAILED HEREON. (1 DAY) CONSTRUCT HOUSES. THE FIRST FLOOR ELEVATIONS CANNOT BE MORE THAN 1' HIGHER

OR 0.2' LOWER THAN THE FLEVATIONS SHOWN ON THIS PLAN. (6 MONTHS) 10. FINE GRADE LOT AS DETAILED HEREIN AND PER SPOT ELEVATIONS AS SHOWN TO BE IN CONFORMANCE WITH STORMWATER MANAGEMENT SCHEME APPROVED FOR THE

PROJECT. (1 DAY) 11. UPON COMPLETION OF HOME CONSTRUCTION AND WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, COMPLETE ANY REMAINING FINE GRADING, INSTALL ONLOT STORMWATER MANAGEMENT FACILITIES TO INCLUDE: DRYWELLS, RAIN BARRELS & ROOFTOP DISCONNECTIONS. INSTALL ROOF GUTTER DOWNSPOUTS TO DIRECT ROOFTOP RUNOFF AS DIRECTED. LOT GRADING WHERE ROOFTOP DISCONNECTIONS ARE PROPOSED SHALL BE 5% OR LESS FOR THE DETAILED LENGTH FOR PROPER "DISCONNECTION CREDIT".

12. ADD TOPSOIL PER THE SPECIFICATIONS SHOWN HEREON. (1 DAY) 13. WITH ALL ONLOT DISTURBANCES COMPLETED, STABILIZE WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH OR EQUAL STABILIZATION. (1 DAY)

14. AFTER PERMISSION HAS BEEN GIVEN BY SEDIMENT CONTROL INSPECTOR, REMOVE ANY REMAINING E/S CONTROLS AND STABILIZE THE DISTURBED AREAS FROM THE AFOREMENTIONED DISTURBANCES WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH. (1 DAY)

NOTE: ANY CHANGES OR REVISIONS TO THE SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION

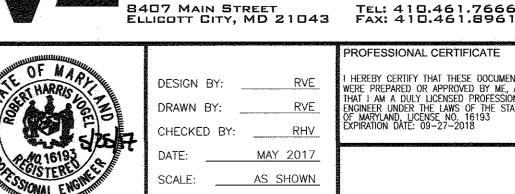
SITE DEVELOPMENT PLAN

**GRADING AND SOIL EROSION &** SEDIMENT CONTROL PLAN - NOTES & DETAILS MAPLE LAWN SOUTH

PHASE 1 - SECTION 1

TAX MAP 46 - GRID 2 - PARCEL 113 5TH ELECTION DISTRICT ZONED: R-ED-MXD-HOWARD COUNTY, MARYLANI REF: ECP-14-093, WP-15-136, PB#415, SP-15-014, F-16-021 ROBERT H. VOGEL Engineering, Inc.

ENGINEERS . SURVEYORS . PLANNERS



2 derector

DESIGN BY: DRAWN BY CHECKED BY: SCALE: W.O. NO.:

HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME. AND HAT I AM A DULY LICENSED PROFESSIONAL RHV \_\_\_\_AS SHOWN 11-34

12 SHEET 14

PROFESSIONAL CERTIFICATE

Chil Camba 6.12.17 DEVELOPMENT ENGINEERING DIVISION ... 6-14-17 DATE 6-15-17

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

OWNER/DEVELOPER CERTIFICATION: I/WE CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND R MDE." OWNER/DEVELOPE TAYLOR FARUS, CONSTRUCTION COST MER.

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

REGISTRATION NO. 16193 (P.E.), R.L.S., OR R.L.A. (circle one

**OWNER** 301-725-2074

DEVELOPER MAPLE LAWN FARMS, INC. MAPLE LAWN PARTNERS, LLC 11788 SCAGGSVILLE ROAD 2661 RIVA ROAD, SUITE 220 9720 PATUXENT WOODS DRIVE FULTON, MD 20759-0562 ANNAPOLIS, MARYLAND 21401 COLUMBIA, MARYLAND 21046 443-472-2846

C/O CHRIS MURN

410-379-5956 C/O TAYLOR FARIS

**BUILDER** 

NV HOMES

ROBERT H. VOGEL, PE No.1619

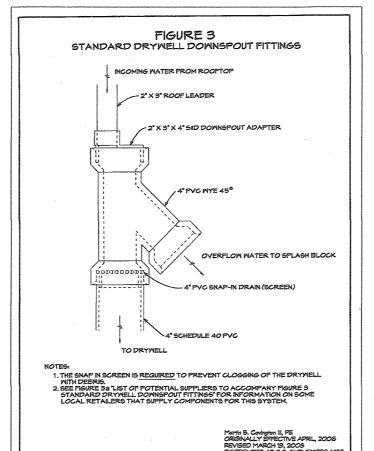
#### ONLOT STORMWATER MANAGEMENT PRACTICES **ON-LOT DRYWELL - DESIGN ELEVATION CHART** LOCATION OF DW'S GRADE\* STONE\* STONE\* SAND\* Rain 451.00 | 450.00 | 446.00 | 445.00 | 7.4' X 7.4' | 4 Lot 2 459.30 458.30 454.30 453.30 7.4' X 7.4' 4 455.20 454.20 450.20 Lot 6 456.00 455.00 451.00 450.00 7.4' X 7.4' 4 450.50 449.50 445.50 Lot 8 468.20 467.20 463.20 469.00 468.00 464.00 457.00 456.00 452.00 451.00 | 7.4' X 7.4' | 4 455.50 454.50 450.50 449.50 | 7.4' X 7.4' | 4 452.00 | 451.00 | 447.00 463.50 462.50 458.50 457.50 | 7.4' X 7.4' | 4 10 Lot 40 Lot 42 Lot 46 2 473.00 472.00 468.00 467.00 7.4' X 7.4' 4 Lot 48 473.50 472.50 468.50 467.50 7.4' X 7.4' 4 Lot 50 464.50 463.50 459.50 | 464.00 | 463.00 | 459.00 | 458.00 | 7.4' X 7.4' | 4 464.50 463.50 459.50 458.50 7.4' X 7.4' 4 465.80 464.80 460.80 459.80 7.4' X 7.4' 4 466.50 465.50 461.50 460.50 7.4' X 7.4' 4 466.50 | 465.50 | 461.50 | 460.50 | 7.4' X 7.4' | 4 Lot 56 465.50 | 464.50 | 460.50 | 459.50 | 7.4' X 7.4' | 4 464.20 | 463.20 | 459.20 | 458.20 | 7.4' X 7.4' | 4 Lot 58 462.50 461.50 457.50 456.50 7.4' X 7.4' 4 Lot 59 461.50 | 460.50 | 456.50 | 455.50 | 7.4' X 7.4' | 4 Lot 60 472.00 471.00 467.00 466.00 7.4' X 7.4' 4 471.20 470.20 466.20 465.20 7.4' X 7.4' 4 43 Lot 62 469.50 468.50 464.50 463.50 7.4' X 7.4' 4 Lot 63 2 468.50 467.50 463.50 462.50 7.4' X 7.4' 4 Lot 64 1 470.50 469.50 465.50 464.50 7.4' X 7.4' 4 20 4 R | 459.00 458.00 453.00 10×6' 4 | \* ELEVATIONS ARE APPROXIMATE AND MAY VARY BASED ON OVERLOT FINE GRADING

LAYOUT OPTION 2 LAYOUT OPTION 1 PERFORATED PVC OBSERVATION WELL
INSIDE TRENCH / CLEANGUT, SEE
AREA ONLY | DETAILS THIS SHEET OSSERVATION WELL
/ CLEANOUT. SEE
DETAILS THIS SHEET PERFORATED PIPE PVC SCH 40 3/8" HOLES 4" 0/C 90 DEGREES AROUND PIC INTE TO
SPLISH ELOCK
SPLISH ELOCK
SPRISH
SPRISH
SPRISH SEAPAGE.

4. MANBIUM NUMBER OF PERFORATIONS SHALL BE 5 TIMES PIPE ARCA.

5. TRENCH MAY NOT BE INSTALLED IN FILL.

Department of Public Works



D-9.01

#### STORMWATER MANAGEMENT TEST PIT DATA

#### Maple Lawn South - Phase 1 Test Pit Data

Test Pit No.	Ex. Ground	Test Pit Prop.	Test Pit Depth	Test Pit
	FIELD	Depth	Excavated	Condition *
	MICROSCA	LE - MBR, DRYWELL AN	D BIOSWALE TEST PITS	
B-2	458.91	16.2	16.2	DRY
B-3	448.62	9.3	9.3	DRY
B-60	454.14	15.5	15.5	DRY
B-62	451.51	8.8	8.8	DRY
B-63	453.14	5.2	8.0	DRY
B-64	458.76	18.9	18.9	DRY
8-65	454.12	11.4	11.4	DRY
B-66	452.99	10.4	10.4	DRY
B-67	470.53	14.9	14.9	DRY
B-68	473.57	12.6	12.6	DRY
B-69	473.66	11.7	11.7	DRY
8-71	466.86	9.0	9.0	DRY
B-72	463.17	7.2	8.0	DRY
B-73	457.49	3.4	8.0	DRY
B-74	449.97	-3.0	8.0	DRY
B-75	447.65	9.7	9.7	DRY
B-76	451.95	13.9	13.9	DRY
B-77	449.19	11.1	11.1	DRY
B-78	450.03	11.2	11.2	DRY
B-79	454.62	8.6	8.6	DRY
B-82	462.80	18.7	18.7	DRY
8-83	463.63	11.7	11.7	DRY
B-84	457.91	19.1	19.1	DRY
B-85	462.12	19.2	19.2	DRY
B-86	463.91	18.8	18.8	DRY '
B-87	462.91	16.9	16.9	DRY
B-88	464.60	13.7	13.7	DRY
B-89	459.87	14.1	14.1	DRY
0 03	755.07	17.7	27,2	
D-1	457.40	7.7	8.0	DRY
D-2	459.44	11.8	11.8	DRY
D-3	458.44	13.0	13.0	DRY
D-42	465.75	12.2	12.2	DRY
D-43	465.63	8.9	8.9	DRY
D-45	468.81	4.9	8.0	DRY
D-40 D-47	469.78	6.9	8.0	DRY
D-47	1	4.9	8.0	DRY
	465.83	-1.2	<del> </del>	DRY
D-49	456.77		8.0	DRY
D-50	452.40	-3.6	<del> </del>	
D-52	458.98	10.9	10.9	DRY
D-53	458.70	12.7	12.7	DRY
D-54	456.27	12.5	12.5	DRY
D-57	459.23	6.3	8.0	DRY
D-58	463.75	9.8	9.8	DRY
D-59	464.71	10.8	10.8	DRY
D-60	464.72	12.8	12.8	DRY
D-62	462.16	6.3	8.0	DRY

REFER TO F-16-021 FOR TEST PIT LOCATIONS

#### OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED STORMWATER DRY WELLS (M-5)

THE MONITORING WELLS AND STRUCTURES SHALL BE INSPECTED ON A QUARTERLY BASIS AND AFTER EVERY LARGE STORM EVENT.

WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS

SHALL BE RECORDED OVER A PERIOD OF SEVERAL DAYS TO INSURE

- TRENCH DRAINAGE. A LOG BOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT
- WHICH THE FACILITY DRAINS. WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN THE 72 HOUR TIME PERIOD, CORRECTIVE ACTION SHALL
- THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
- ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION FACILITY HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

#### DISCONNECTION OF ROOFTOP RUNOFF 18 56 R 1 457.50 456.50 452.50 451.50 VOX 5' 4 1 CONSTRUCTION CRITERIA:

THE FOLLOWING ITEMS SHOULD BE ADDRESSED DURING THE CONSTRUCTION OF PROJECTS WITH PLANNED ROOFTOP DISCONNECTIONS:

- EROSION AND SEDIMENT CONTROL: EROSION AND SEDIMENT CONTROL PRACTICES (E.G., SEDIMENT TRAPS) SHALL NOT BE LOCATED IN VEGETATED AREAS RECEIVING DISCONNECTED RUNOFF
- SITE DISTURBANCE: CONSTRUCTION VEHICLES AND EQUIPMENT SHOULD AVOID AREAS RECEIVING DISCONNECTED RUNOFF TO MINIMIZE DISTURBANCE AND COMPACTION. SHOULD AREAS RECEIVING DISCONNECTED RUNOFF BECOME COMPACTED, SCARIFYING THE SURFACE OR ROTOTILLING THE SOIL TO A DEPTH OF FOUR TO SIX INCHES SHALL BE PERFORMED TO ENSURE PERMEABILITY. ADDITIONALLY, AMENDMENTS MAY BE NEEDED FOR TIGHT, CLAYEY SOILS.

#### **INSPECTION:**

A FINAL INSPECTION SHALL BE CONDUCTED BEFORE USE AND OCCUPANCY APPROVAL TO ENSURE THAT SIZING FOR TREATMENT AREAS HAVE BEEN MET AND PERMANENT STABILIZATION HAS BEEN ESTABLISHED.

#### MAINTENANCE CRITERIA:

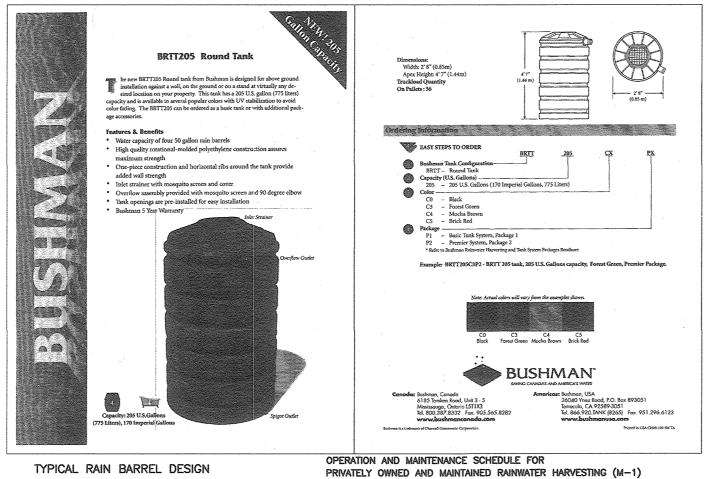
MAINTENANCE OF AREAS RECEIVING DISCONNECTED RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE AREAS RECEIVING RUNOFF SHOULD BE PROTECTED FROM FUTURE COMPACTION (E.G., BY PLANTING TREES OR SHRUBS ALONG THE PERIMETER). IN COMMERCIAL AREAS, FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

#### HOWARD COUNTY - OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DISCONNECTION OF ROOFTOP RUNOFF (N-1), DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2)

MAINTENANCE OF AREAS RECEIVING DISCONNECTED RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE OWNER SHALL ENSURE THE AREAS RECEIVING RUNOFF ARE PROTECTED FROM FUTURE COMPACTION OR DEVELOPMENT OF IMPERVIOUS AREA. IN COMMERCIAL AREAS, FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING HIEF, DEVELOPMENT ENGINEERING DIVISION 🥻 6-14-67 DATE 6-15-17

#### BUSHMAN BRTT205 (200 GALLON) RAIN HARVESTING SYSTEM OR EQUIVALENT RAIN BARREL DETAIL



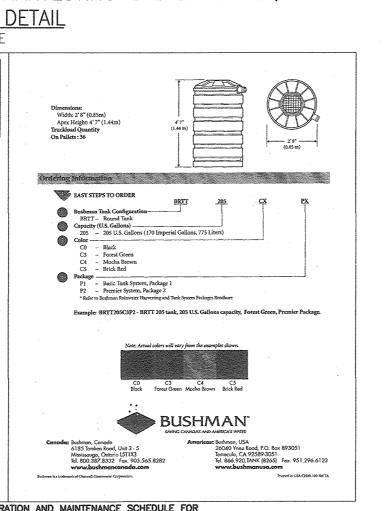
200 GAL

7.48 GAL/CUFT

= 26.7 CUFT

= 27 CUFT

# NOT TO SCALE



A. THE OWNER SHALL EMPTY BARRELS ON A MONTHLY BASIS AND CLEAN

THE OWNER SHALL VERIFY INTEGRITY OF LEAF SCREENS, GUTTERS, DOWNSPOUTS, SPIGOTS, AND MOSQUITO SCREENS, AND CLEAN AND

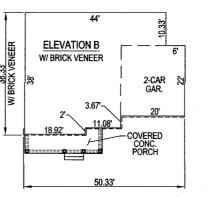
THE OWNER SHALL REPLACE DAMAGED COMPONENTS AS NEEDED.

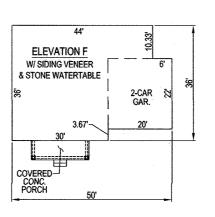
THE OWNER SHALL ALLOW THE BARREL TO DRAIN BY BOTTOM SPIGOT

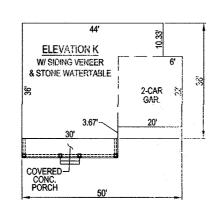
BARREL WITH A HOSE.

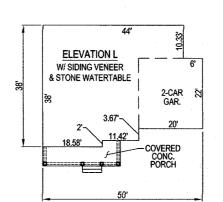
DURING THE WINTER SEASON.

**ELEVATION A** W/ SIDING VENEER & BRICK WATERTABLE

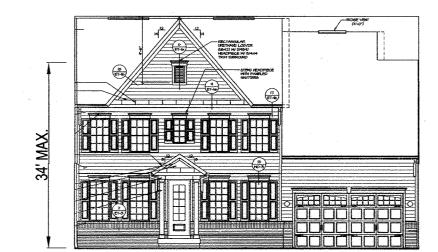








LIBERTY SCALE: 1'=30'



DEVELOPER

MAPLE LAWN FARMS, INC. MAPLE LAWN PARTNERS, LLC NV HOMES
11788 SCAGGSVILLE ROAD 2661 RIVA ROAD, SUITE 220 9720 PATUXENT WOODS DRIVE

FULTON, MD 20759-0562 ANNAPOLIS, MARYLAND 21401 COLUMBIA, MARYLAND 21046

410-379-5956

C/O TAYLOR FARIS

443-472-2846

C/O CHRIS MURN

**OWNER** 

301-725-2074

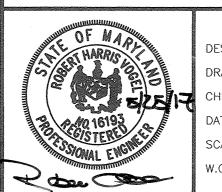
25	TO REVISE HOUSE TYPE AND GRADING FOR LOTS 58 AND 63	8-11-2
24	TO REVISE HOUSE TYPE AND GRADING ON LOT 34	9-8-20
8	REVISE HOUSETYPE AND GRADING ON LOT 6, 49, AND 56	4/2/10
5	REVISE HOUSE TYPE AND GRADING LOR LOT / AND 4;	1/17/1
	AND TO ADD PRIVATE SEWER EASEMENT ALONG LOT GO	þ
4	REVISE HOUSE TYPE AND GRADING LOTS 47 & 55	11/27/1
NO.	REVISION	DATE

SITE DEVELOPMENT PLAN

STORMWATER MANAGEMENT NOTES AND DETAILS, AND HOUSE TYPES MAPLE LAWN SOUTH PHASE 1 - SECTION 1

TAX MAP 46 - GRID 2 - PARCEL 113 "
5TH ELECTION DISTRICT
DPZ REF: ECP-14-093, WP-15-136, PB#415, SP-15-014, F-16-021

ROBERT H. VOGEL Engineering, Inc. ENGINEERS · SURVEYORS · PLANNERS



		PROFESSIONAL CERTIFICATE
BY:	RVE	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND
BY: _	RVE_	THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 16103
D BY:	RHV_	OF MARYLAND, LICENSE NO. 16193 EXPIRATION DATE: 09-27-2018
	MAY 2017	
	AS SHOWN	

8407 MAIN STREET TEL: 410.461.7666 ELLICOTT CITY, MD 21043 FAX: 410.461.8961

SCALE: \_\_\_\_AS\_SHUWN W.O. NO.: 11-34 ROBERT H. VOGEL, PE No.16193

13 SHEET 14

ZONED: R-ED-MXD-HOWARD COUNTY, MARYLAN

