

GENERAL NOTES

- ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- 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.
- THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING:
 - AT&T 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
- PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE EXISTING WELLS AND SEPTIC SYSTEMS WILL BE PROPERLY ABANDONED IN ACCORDANCE WITH HEALTH DEPARTMENT REGULATIONS.
- THE TOPOGRAPHY SHOWN HEREON IS BASED ON AN AERIAL TOPOGRAPHIC SURVEY PREPARED BY POTOMAC AERIAL SURVEYS, DATED FEBRUARY 2004.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANS COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 3111 AND 37CA WERE USED FOR THIS PROJECT.
 - 3711 N 565,004.699 E 1,381,586.920
 - 37CA N 564,321.638 E 1,382,742.840
- THIS PLAN IS BASED ON A FIELD RUN BOUNDARY SURVEY PERFORMED BY ROBERT H. VOGEL ENGINEERING, INC. NOVEMBER 2008.
- THE SUBJECT PROPERTY IS ZONED R-ED PER THE 02/02/2004 COMPREHENSIVE ZONING PLAN, AND THE COMPREHENSIVE LITE ZONING AMENDMENTS 07/26/2006.
- THIS PLAN IS IN COMPLIANCE WITH THE AMENDED FIFTH EDITION OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- IN ACCORDANCE WITH THE APPROVED SIMPLIFIED ECP FOR THIS RESUBDIVISION, THE STORMWATER PROPOSAL FOR LOTS 45 - 49 INCLUDES THE USE OF ALTERNATIVE SURFACE - PERMEABLE SURFACE DRIVEWAYS AND A MICROSCALE PRACTICE - DRYWELLS IN ACCORDANCE WITH THE 2007 STORMWATER DESIGN MANUAL.
 - AS APPROVED UNDER F 09-122 STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH THE 2000 STORMWATER DESIGN MANUAL. THIS PROJECT MEETS THE CRITERIA OUTLINED IN THE MDE GUIDELINES TO GRANT AN ADMINISTRATIVE WAIVER. F09-122 RECEIVED PRELIMINARY APPROVAL 09-15 ON 10/6/2006 AND A GRADING PERMIT SHALL BE APPROVED PRIOR TO MAY 4, 2013.
 - THIS PLAN IS SUBJECT TO THE EXPIRATION OF THIS WAIVER UNLESS ALL STORMWATER PRACTICES ARE CONSTRUCTED BY MAY 14, 2017.
 - STORMWATER MANAGEMENT IS PROVIDED BY TWO MICROPOOL PONDS (P-5), BIO-RETENTION, RAINGARDENS AND DRYWELLS.
 - THE PONDS ARE OWNED BY THE HOA AND JOINTLY MAINTAINED WITH THE COUNTY THE BIO-RETENTION FACILITY (F-5) IS OWNED AND MAINTAINED BY THE HOA. THE RAINGARDENS AND DRYWELLS ARE PRIVATELY OWNED AND MAINTAINED.
- THE REQUIRED GEOTECHNICAL REPORT WAS APPROVED UNDER SP06-15 AND F09-122.
- 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 PROPOSED AT THE PROPERTY LINE.
- FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-6.01 OR R-6.03.
- THERE IS AN EXISTING DWELLING LOCATED ON LOT 2 TO BE REMOVED AND PREVIOUSLY ON LOT 39 WHICH WAS REMOVED UNDER F 09-122.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 - A) WIDTH - 12 FEET (16 FEET IF SERVING MORE THAN ONE RESIDENCE)
 - B) SURFACE - 6" OF COMPACTED CRUSHER RUN BASE W/ TAR AND CHIP COATING (1-1/2" MIN.)
 - C) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE, AND MINIMUM 45 FOOT TURNING RADIUS
 - D) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING)
 - E) 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
- FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY DRIVE AND NOT TO THE PIPESTEM LOT DRIVEWAY.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE WETLANDS, STREAM(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN.
 - THERE ARE NO WETLANDS, STREAM(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS OR 100 YEAR FLOODPLAIN LOCATED ON THE SUBJECT LOTS.
- THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
- WATER AND SEWER SERVICE TO THESE LOTS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122.B OF THE HOWARD COUNTY CODE.
- WATER AND SEWER SERVICE FOR THIS PROJECT WILL BE PROVIDED THROUGH CONTRACT NO. 14-4412-D.
- SEWER WILL BE PROVIDED THROUGH CONTRACT NO. 14-4412-D.
- PUBLIC WATER AND SEWER ALLOCATION WILL BE GRANTED AT THE TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THAT TIME.
- TO THE BEST OF OUR KNOWLEDGE AND BELIEF, THERE ARE NO HISTORIC STRUCTURES EXIST ON THIS SITE.
- UNDER F09-122 AND F13-055, FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1202 OF THE HOWARD COUNTY FOREST CONSERVATION ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT; HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
- THE FOREST CONSERVATION OBLIGATIONS FOR THIS PROJECT WERE PROVIDED UNDER F-09-122 AND F13-055.
 - THE FOREST CONSERVATION OBLIGATIONS FOR THIS PROJECT HAS BEEN FULFILLED IN ACCORDANCE WITH SECTION 16.1202 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION MANUAL BY
 - 1.00 ACRE OF EXISTING FOREST RETENTION
 - [PLAT 21470, 0.45[SHEET 2] + PLAT 21472, 0.27[SHEET 4] + PLAT 21472, 0.28[SHEET 4]]
 - 1.99 ACRES OF REFORESTATION (4 0.19 AC., F13-055)
 - 0.66 ACRES OF AFFORESTATION (- 0.12 AC., F13-055)
 - 3.65 ACRES TOTAL FOREST CONSERVATION EASEMENT PROVIDED (NET INCREASE 0.07 AC)
- DEED REFERENCE: LOT 2 - L. 7947 - F. 237
LOT 39 - L. 13156 - F. 1
- TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL/CEMETERY LOCATIONS ON THIS SITE.
- THERE IS A 100-YEAR FLOODPLAIN LOCATED ON THIS SITE, SHOWN ON SP 06-15 AND F 09-122.
- AS COMPLETED UNDER SP06-15, F09-122 THE REQUIRED FOREST STAND DELINEATION PLAN PREPARED BY JOHN CANOLES, ECO-SCIENCE PROFESSIONALS, DATED DECEMBER 2005.
- AS COMPLETED UNDER SP06-15, F09-122 THE STREAMS AND/OR WETLANDS SHOWN HEREON WERE DELINEATED BY JOHN CANOLES, ECO-SCIENCE PROFESSIONALS, INC., DATED DECEMBER 2005.
- AS APPROVED UNDER SP 06-15, HOWARD COUNTY POLICY DID NOT REQUIRE A TRAFFIC STUDY. NO APFO INTERSECTION WAS WITHIN THE REQUIREMENTS THAT WOULD WARRANT A STUDY.
- STORMWATER MANAGEMENT AND PERIMETER LANDSCAPING HAS BEEN PROVIDED IN ACCORDANCE WITH F09-122. SURETY WAS POSTED WITH THE DEVELOPER'S AGREEMENT FOR THE F09-122.
- PUBLIC STREET TREES ARE PROVIDED FOR THIS PROJECT IN ACCORDANCE WITH F09-122. FINANCIAL SURETY HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT FOR F09-122.
- F09-122 AND F13-055 OPEN SPACE LOTS 4, 43, AND 44 TO BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
- AS APPROVED UNDER SP 06-15, A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- THE HOMEOWNERS ASSOCIATION DOCUMENTS HAVE BEEN RECORDED WITH THE MARYLAND STATE DEPARTMENT OF ASSESSMENTS AND TAXATION AS RECORDING REFERENCE NUMBER D13445358 ON FEBRUARY 26, 2010.
- HOMEOWNERS ASSOCIATION COVENANTS AND RESTRICTIONS WERE RECORDED SIMULTANEOUSLY WITH F 09-122 AS LIBER 13065 FOLIO 9 ON DECEMBER 9, 2010.
- REFERENCE WAIVER WP-07-100, APPROVED 3/26/07, GRANTING AN EXTENSION TO SUBMIT THE PRELIMINARY EQUIVALENT SKETCH PLANS FOR SIGNATURE.
- IN ACCORDANCE WITH APPROVED SP-06-15, A DESIGN MANUAL WAIVER APPROVED OCTOBER 29, 2009, TO ALLOW A 40' PUBLIC ROAD RIGHT-OF-WAY.
- THE PLANNING BOARD ON FEBRUARY 16, 2012 REVIEWED AND APPROVED SDP-12-034 FOR LOT 1. IT WAS DETERMINED THAT NO FURTHER PLANNING BOARD MEETINGS WERE REQUIRED FOR FUTURE SITE DEVELOPMENT PLANS.
- USE IN COMMON MAINTENANCE AGREEMENTS FOR LOTS 24-29 HAVE BEEN RECORDED IN THE LAND RECORDS OF HOWARD COUNTY, MD AS LIBER 14123 FOLIO 419 ON JULY 6, 2012.
- STREET SIDE LANDSCAPING FOR LOTS 45 SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE LANDSCAPE MANUAL, AS SHOWN 0.50P.12.04.1.
- SURETY SHALL BE PROVIDED WITH THE GRADING PERMIT FOR THE SITE DEVELOPMENT PLAN FOR LOT 45.
- STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURES AND POLES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (2006), SECTION 5.5.A. PLEASE REFER TO APPROVED PLAN F-09-122.
- PLEASE REFER TO F-09-122, ALL SIGNS ARE INSTALLED UNDER F-09-122.
- A PRE-SUBMISSION MEETING WAS HELD WITH THE DEPARTMENT OF PLANNING AND ZONING ON JANUARY 9, 2013 AND THE ATTENDEES WERE MARSHA MCLAUGHLIN DPZ-DIRECTOR, KENT SHEUBROOKS DLD DIVISION CHIEF, CHARLES DAMMERS DED DIVISION CHIEF, CHAD EDMONDSON DED, THE DEVELOPER AND THE ENGINEER.
- IN ACCORDANCE WITH THE R-ED ZONE, THE MINIMUM LOT SIZE ALLOWED FOR THIS SUBDIVISION IS 6,000 SQ.FT.
- THE MINIMUM LOT SIZE CREATED IS 6,549 SQ.FT. (LOT 34)
- THIS PROJECT IS SUBJECT TO PB CASE 400; THE PLANNING BOARD SIGNED THE DECISION AND ORDER ON OCTOBER 17, 2013 APPROVING THE PRELIMINARY EQUIVALENT SKETCH PLAN (SP13-011) FOR THE RESUBDIVISION OF EXISTING LOT 2 AND 39 INTO FIVE BUILDING LOTS ON 1.06 ACRES OF LAND ZONED R-ED.
- THE DEVELOPER'S PROPOSAL FOR LOTS 45-49 IS BEING DEVELOPED AS A RECEIVING PARCEL UNDER THE NEIGHBORHOOD PRESERVATION DENSITY EXCHANGE OPTION AT A 10% BONUS DENSITY IN ACCORDANCE WITH SECTION 107.0.H.2 OF THE ZONING REGULATIONS AND RECEIVING DENSITY UNITS PER SECTION 128.0.K OF THE ZONING REGULATIONS.

USING THE NEIGHBORHOOD PRESERVATION DENSITY EXCHANGE OPTION DESCRIBED IN SECTION 128.L OF THE ZONING REGULATIONS, THE DEVELOPMENT RIGHTS FOR 3 OF THE RESIDENTIAL LOTS SHOWN HEREON HAVE BEEN TRANSFERRED FROM STONE MANOR - SECTION ONE LOT 27; TAX MAP 31, PARCEL NO. 3. SEE TABULATION / EXCHANGE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division
 Chief, Division of Land Development

NOTES:

- 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.

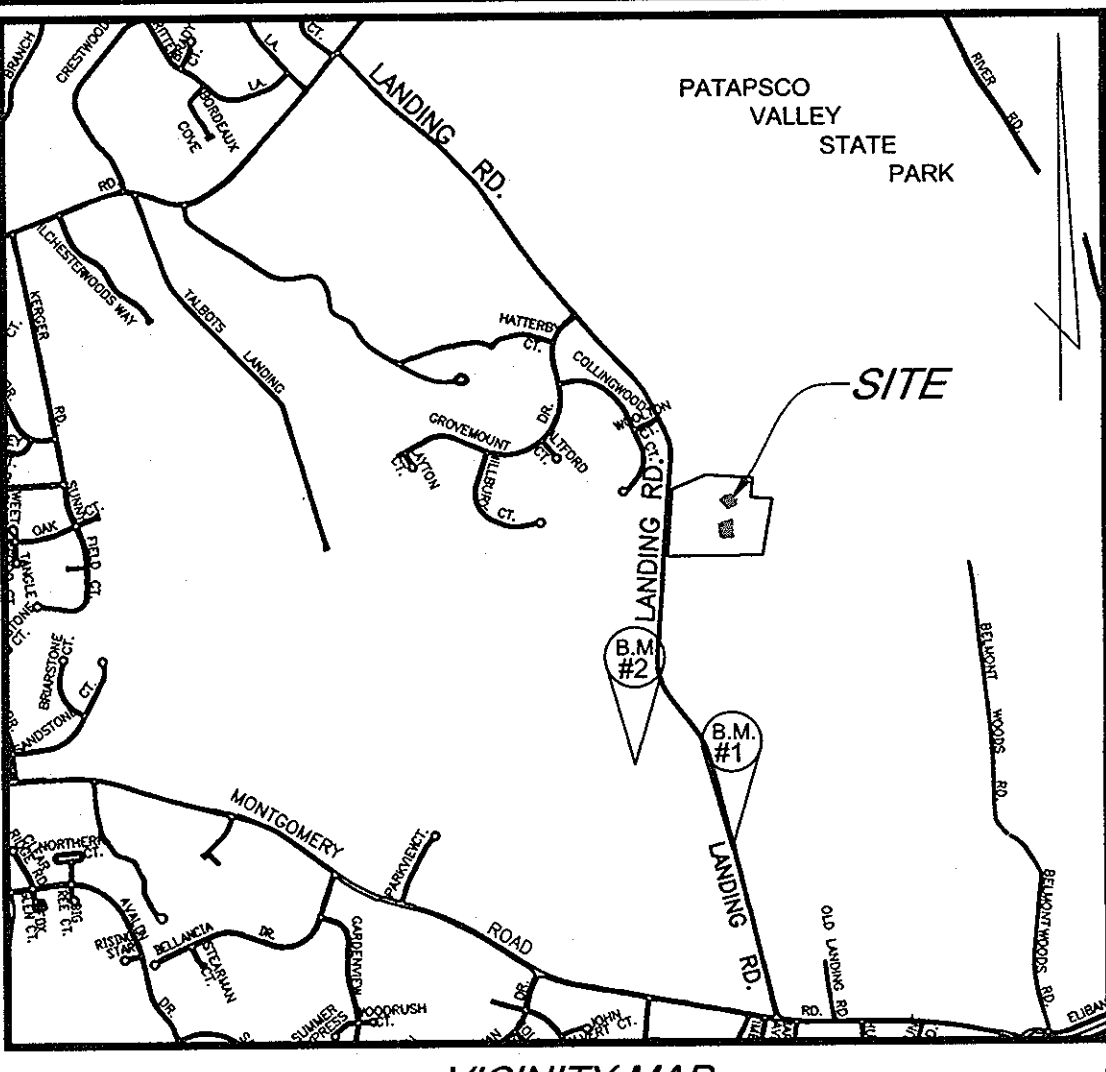
SUPPLEMENTAL INFORMATION PLAN

GROVEMONT OVERLOOK

PHASE 2 - LOTS 45 - 49

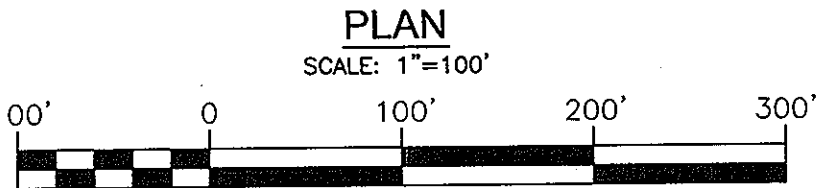
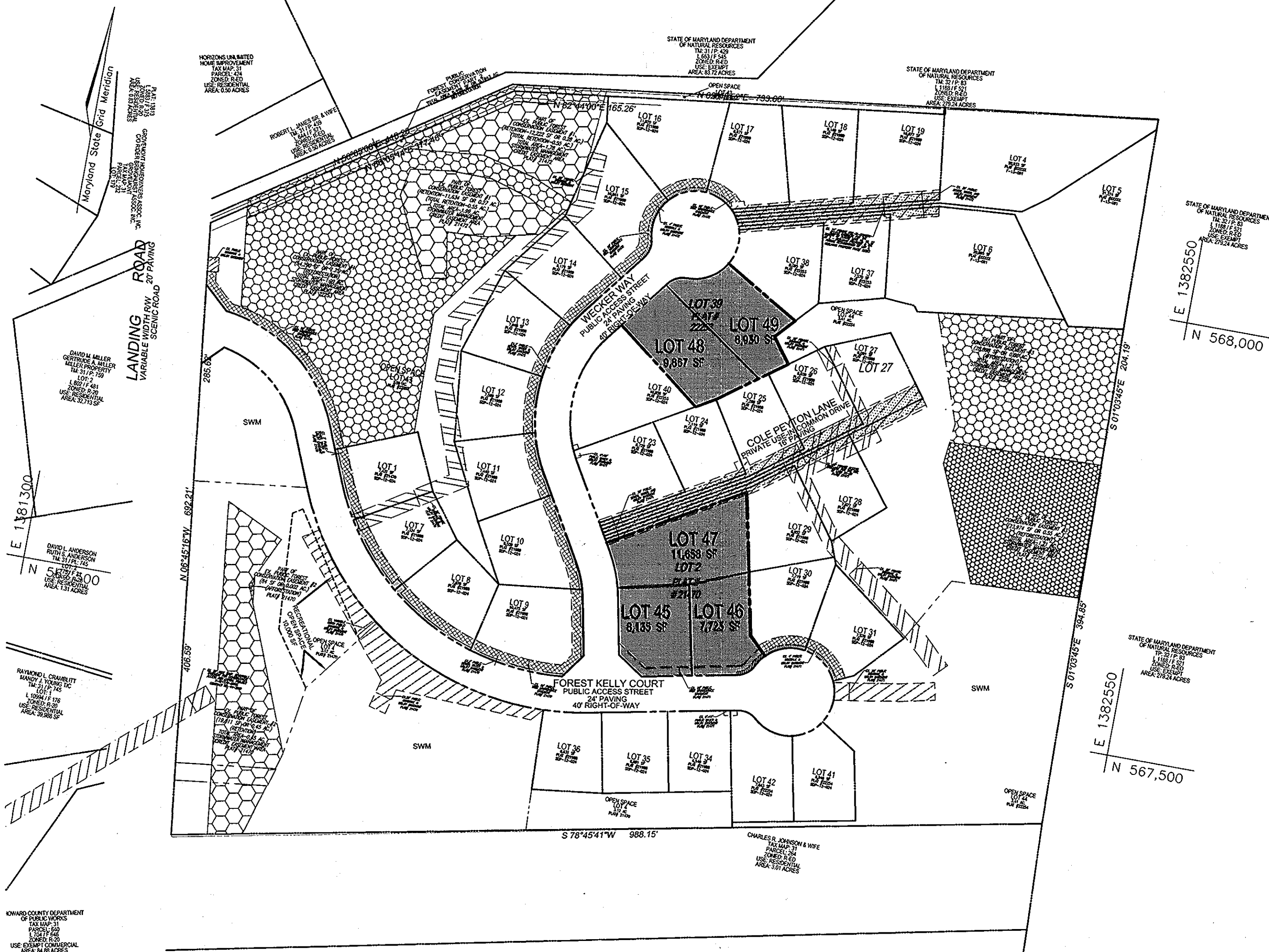
HOWARD COUNTY, MARYLAND

BENCHMARKS			
NO.	NORTHING	EASTING	ELEVATION
1	37CA	564,321.638	1,382,742.840
2	3111	565,004.699	1,381,586.92



VICINITY MAP
SCALE: 1"=2000'

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	LAYOUT PLAN
3	GRADING & SOIL EROSION AND SEDIMENT CONTROL PLAN
4	STORMWATER MANAGEMENT AND LANDSCAPE PLAN NOTES AND DETAILS



SITE DATA

LOCATION: TAX MAP 31, GRID 24 & 23, PARCELS 619 & 749
 1ST ELECTION DISTRICT
 EXISTING ZONING: R-ED
 GROSS AREA OF PROJECT: 1.0632 AC (PART OF ORIGINAL 17.9588 AC)
 AREA OF 100-YEAR FLOODPLAIN DRAINAGE & UTILITY EASEMENT: 0.0000 AC
 AREA OF STEEP SLOPES: 0.0000 AC
 AREA OF WETLANDS AND BUFFERS: 0.0000 AC
 AREA OF FOREST: 0.0000 AC
 NET AREA OF PROJECT: 1.0632 AC
 ERODIBLE SOILS: N/A
 AREA OF PROPOSED BUILDABLE LOTS: 1.0632 AC
 AREA OF OPEN SPACE REQUIRED: 50% x 17.9588 AC = 8.9794 AC (F13-055)
 AREA OF OPEN SPACE PROVIDED: 9.0862 AC (F13-055)
 AREA OF RECREATIONAL OPEN SPACE REQUIRED: 300 SF x 36 LOTS = 10,800 SF
 AREA OF RECREATIONAL OPEN SPACE PROVIDED: 11,000 SQ.FT. (10,000 [F09-122] + 1,000 AMENITY)
 - REFER TO ALLOWED AMENITIES POLICY DATED JUNE 15, 2012
 RECREATIONAL AMENITIES ARE TWO (2) PICNIC TABLES WITH BENCHES OF EQUAL FOR A 1,000 SF CREDIT TO BE LOCATED ON OPEN SPACE LOT 4, WHICH WILL ACCOUNT FOR THE REQUIRED 800 SF SHORTAGE OF THE DUE TO THE ADDITIONAL 3 DENSITY RECEIVING UNITS TO BE TRANSFERRED FROM THE HARRY GRANT PROPERTY.
 AREA OF RIGHT-OF-WAY: 1.6520 AC (F 09-122)
 NUMBER OF LOTS/PARCELS ALLOWED (2 PER NET ACRE): 33 BUILDABLE LOTS (16.8588 AC. X 2 = 33.7)
 NUMBER OF LOTS/PARCELS PROPOSED: 33 BUILDABLE LOTS (F09-122, F12-064, F13-055)
 NUMBER OF LOTS/PARCELS PROPOSED THIS PLAN: 5 BUILDABLE LOTS (5 - 2 EXISTING - 3 PROPOSED)
 TOTAL NUMBER OF LOTS/PARCELS PROPOSED: 36 BUILDABLE LOTS
 TOTAL APPROXIMATE LIMIT OF DISTURBANCE: 1.5 AC +/-
 * ONLY LOT (11 AC +/-) AND RIGHT-OF-WAY WORK FOR SERVICE CONNECTIONS
 PROPOSED WATER SYSTEM: PUBLIC
 PROPOSED SEWER SYSTEM: PUBLIC
 PROPOSED USES FOR SITE AND STRUCTURES: RESIDENTIAL SINGLE FAMILY DETACHED (SFD)

OWNER - LOT 2
 JERICHO LLC
 5331 LANDING ROAD
 ELKRIE, MD 21075
 ATTN: MR. GARY CALTON
 443-367-0422

OWNER - LOT 39
 JERICHO LLC
 ELICOTT CITY LAND HOLDINGS, INC.
 5300 DORSEY HALL DRIVE, SUITE 102
 ELICOTT CITY, MD 21042-7819
 ATTN: MR. DON REUWER
 443-367-0422

DEVELOPER
 LAND DESIGN & DEVELOPMENT, INC.
 5300 DORSEY HALL DRIVE
 SUITE 102
 ELICOTT CITY, MD 21042
 ATTN: MR. DON REUWER
 (443) 367-0422

OPEN SPACE TABULATION:

IN ACCORDANCE WITH SECTION 16.121(A)(2) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS THE OPEN SPACE REQUIREMENTS FOR THIS R-ED PROJECT IS 50% OF GROSS AREA

PHASE	DESCRIPTION	GROSS AREA	50% OPEN SPACE	OPEN SPACE PROVIDED
PHASE 1 F09-122	(17.8523 AC. GROSS AREA x 50% = 8.9262 AC.)	17.8523 AC.	8.9262 AC.	8.9262 AC.
PHASE 2 F12-064	(17.8523 AC. GROSS AREA x 50% = 8.9262 AC.)	17.8523 AC.	8.9262 AC.	9.0361 AC.
PHASE 2 F13-055	(17.9588 AC. GROSS AREA x 50% = 8.9794 AC.)	17.9588 AC.	8.9794 AC.	9.0862 AC.
PHASE 2 LOTS 45 - 49	(17.9588 AC. GROSS AREA x 50% = 8.9794 AC.)	17.9588 AC.	8.9794 AC.	9.0862 AC.

DENSITY EXCHANGE TABULATION

RECEIVING PARCEL INFORMATION	GROVEMONT OVERLOOK-PHASE 2
SECTION 107.0.H.2 OF THE ZONING REGULATIONS AND SECTION 128.0.K OF THE ZONING REGULATIONS	F 14-061
TOTAL PARCEL ACREAGE	17.9588 ACRES
NET ACREAGE OF SUBDIVISION	17.9588 AC (- 100 YR FLOODPLAIN = 0.12 AC) = 16.86 ACRES
MAXIMUM DENSITY UNITS	16.86 ACRES x 2 = 33 UNITS
ALLOWED BONUS UNITS	33 x 10% = 3.3
PROPOSED DENSITY UNITS	33 + 3 = 36
NUMBER OF BONUS UNITS REQUIRED BY NEIGHBORHOOD PRESERVATION DENSITY EXCHANGE OPTION	3 UNITS REQUIRED
SENDING PARCEL INFORMATION	3 GEO UNITS FROM STONE MANOR - SECTION ONE - LOT 27 1 W 31, GRID 1, PWE 2

GROVEMONT OVERLOOK - DENSITY TABULATION

PROJECT	TOTAL SUBDIVISION AREA (GROSS AREA)	FLOODPLAIN	STEEP SLOPES	NET AREA	UNITS PERMITTED BY NET (NETX2)	UNITS PROPOSED	TOTAL UNITS REMAINING
PHASE 1 - F09-122	17.8523 ACRES	0.11 ACRES	0.98 ACRES	16.76 AC.	33	3 (1 PROP, 2 EX)	30
PHASE 2 - F12-064	17.8523 ACRES	0.11 ACRES	0.98 ACRES	16.76 AC.	33	3 F09-122 + 30	0
PHASE 2 - F13-055	17.9588 ACRES	0.12 ACRES	0.98 ACRES	16.86 AC.	33	3 F09-122 + 30 F12-064	0
PHASE 3 - F14-061	17.9588 ACRES	0.12 ACRES	0.98 ACRES	16.86 AC.	33	30	0

* LOTS 45 - 49 = 5 UNITS [2 EXISTING UNITS (F09-122) RAZED = 3 PROPOSED UNITS]
 THE DENSITY FOR THE 3 PROPOSED UNITS SHALL BE TRANSFERRED FROM STONE MANOR - SECTION ONE - LOT 27 COUNCIL BILL NUMBER 33-2012 (ZRA141)

SUPPLEMENTAL INFORMATION PLAN

GROVEMONT OVERLOOK
 PHASE 2 - LOTS 45-49
 A RESUBDIVISION OF PHASE 1 - LOT 2 AND PHASE 2 - LOT 39
 TAX MAP 31 BLOCK 24 PARCELS '749'
 1ST ELECTION DISTRICT ZONED R-ED HOWARD COUNTY, MARYLAND

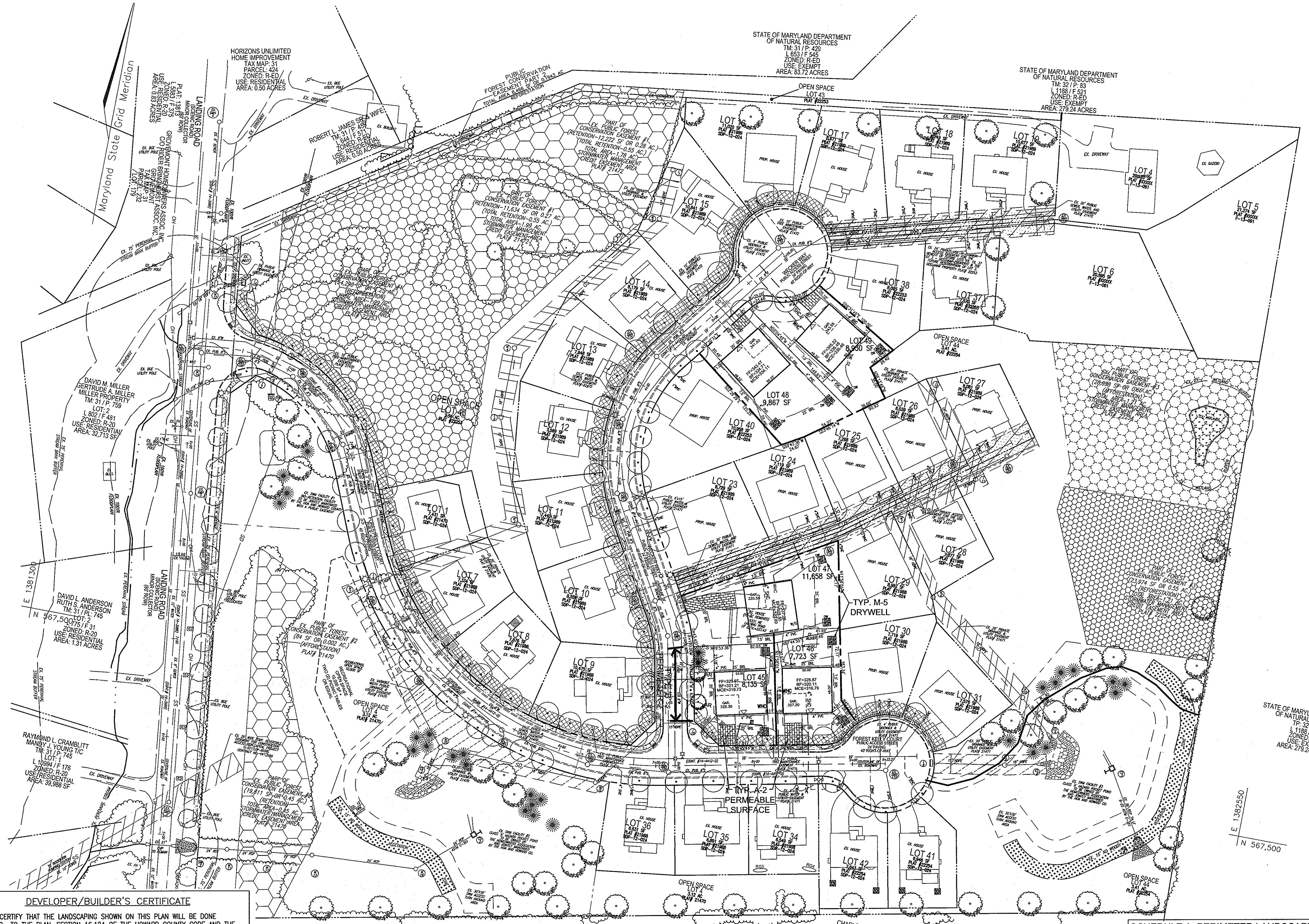
PREVIOUS SUBMITTALS: WP-07-100, SP-06-15, F-78-80/LEGAL PROPERTY, LOTS 1 & 2, F-07-87/LEGAL PROPERTY, LOTS 3 & 4, F-04-21/LEGAL PROPERTY, LOT 1, F-09-122, SDP-12-024, SDP-12-034, F-12-064, F-13-055, ECP 13-048, SP13-011, PB CASE 400

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET ELICOTT CITY, MD 21043
 TEL: 410-461-7666 FAX: 410-461-8961

DESIGN BY: EDS
 DRAWN BY: EDS
 CHECKED BY: RHV
 DATE: JANUARY 2014
 SCALE: 1"=50'
 W.O. NO.: 04-57

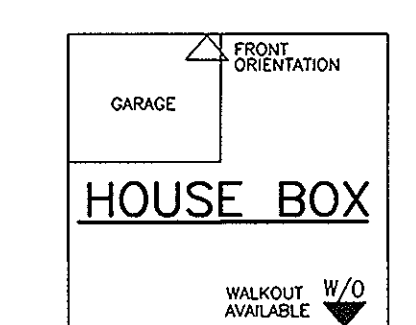
PROFESSIONAL CERTIFICATE
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193
 EXPIRATION DATE: 09-27-2014

1 SHEET OF 4



LEGEND:

- EXISTING CURB AND GUTTER
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING MAILBOX
- EXISTING SIGN
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY LINE
- EXISTING CLEANOUT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- EXISTING STORM DRAIN
- STORM DRAIN FLOW THROUGH STRUCTURE
- EXISTING TREE LINE
- EXISTING FENCE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- EXISTING SIDEWALK
- EXISTING STREET TREE
- STREAM CENTERLINE
- STREAM BUFFER
- EXISTING 30' TEMPORARY BORROWABLE EASEMENT FOR PUBLIC UTILITY CONTRACT NUMBER 14-3986
- EX. PUBLIC FOREST CONSERVATION EASEMENT (RETENTION) (F-09-122)
- EX. PUBLIC FOREST CONSERVATION EASEMENT (REFORESTATION) (F-09-122)
- EX. PUBLIC DRAINAGE AND UTILITY EASEMENT (F-09-122)
- EX. 10' PUBLIC TREE MAINTENANCE EASEMENT (F-09-122)
- EX. PRIVATE DRAINAGE AND UTILITY EASEMENT (F-09-122)
- EX. 1' PUBLIC WATER AND UTILITY EASEMENT (F-09-122)
- EX. BALTIMORE GAS AND ELECTRIC RED ZONE
- S/WC - EXISTING SEWER CONNECTION
- M/WC - EXISTING WATER CONNECTION
- EX. 15' NO WOODY VEGETATION (F-09-122)
- S/D - SOILS BOUNDARY



OWNER - LOT 2
 JERICHO LLC
 5331 LANDING ROAD
 ELICOTT CITY, MD 21075
 ATTN: MR. GARY CALTON
 443-367-0422

OWNER - LOT 39
 JERICHO LLC
 5300 DORSEY HALL DRIVE, SUITE 102
 ELICOTT CITY, MD 21042-7819
 ATTN: MR. DON REUWER
 443-367-0422

DEVELOPER
 LAND DESIGN & DEVELOPMENT, INC.
 5300 DORSEY HALL DRIVE
 SUITE 102
 ELICOTT CITY, MD 21042
 ATTN: MR. DON REUWER
 (443) 367-0422

NO.	REVISION	DATE

SUPPLEMENTAL INFORMATION PLAN
 LAYOUT PLAN
GROVEMONT OVERLOOK
 PHASE 2 - LOTS 45-49
 A RESUBDIVISION OF PHASE 1 - LOT 2 AND PHASE 2 - LOT 39
 TAX MAP 31 BLOCK 24 PARCELS '749'
 1ST ELECTION DISTRICT ZONED R-ED HOWARD COUNTY, MARYLAND

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

PROFESSIONAL CERTIFICATE
 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. 16193 EXPIRATION DATE: 09-27-2014

DESIGN BY: _____ EDS
 DRAWN BY: _____ EDS
 CHECKED BY: _____ RHY
 DATE: JANUARY 2014
 SCALE: 1" = 50'
 W.O. NO.: 04-57

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

DATE: 1/31/14
 SIGNATURE OF DEVELOPER: *Donna Reuwer*

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chad Edwards 2/14/14
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Donna Reuwer 2/18/14
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DIRECTOR: *N/A* DATE: *DXE*

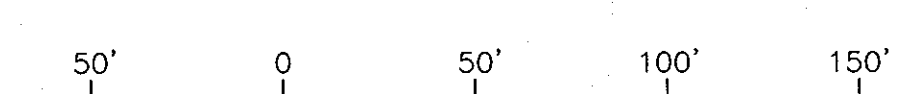
- NOTES:**
- UNDER F09-122 AND F13-055, FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF HOWARD COUNTY FOREST CONSERVATION ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT; HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
 - THE FOREST CONSERVATION OBLIGATIONS FOR THIS PROJECT WERE PROVIDED UNDER F-09-122 AND F13-055. SURETY WAS POSTED WITH THE DEVELOPER'S AGREEMENT FOR F09-122.
 - STORMWATER MANAGEMENT AND PERIMETER LANDSCAPING HAS BEEN PROVIDED IN ACCORDANCE WITH F09-122. SURETY WAS POSTED WITH THE DEVELOPER'S AGREEMENT FOR F09-122.
 - PUBLIC STREET TREES ARE PROVIDED FOR THIS PROJECT IN ACCORDANCE WITH F09-122. FINANCIAL SURETY HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT FOR F09-122.
 - STREET SIDE LANDSCAPING FOR LOTS 45 SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE LANDSCAPE MANUAL. SURETY SHALL BE PROVIDED WITH THE GRADING PERMIT FOR THE SITE DEVELOPMENT PLAN FOR LOT 45.
 - REFER TO SHEET 4 FOR LANDSCAPE NOTES AND DETAILS.

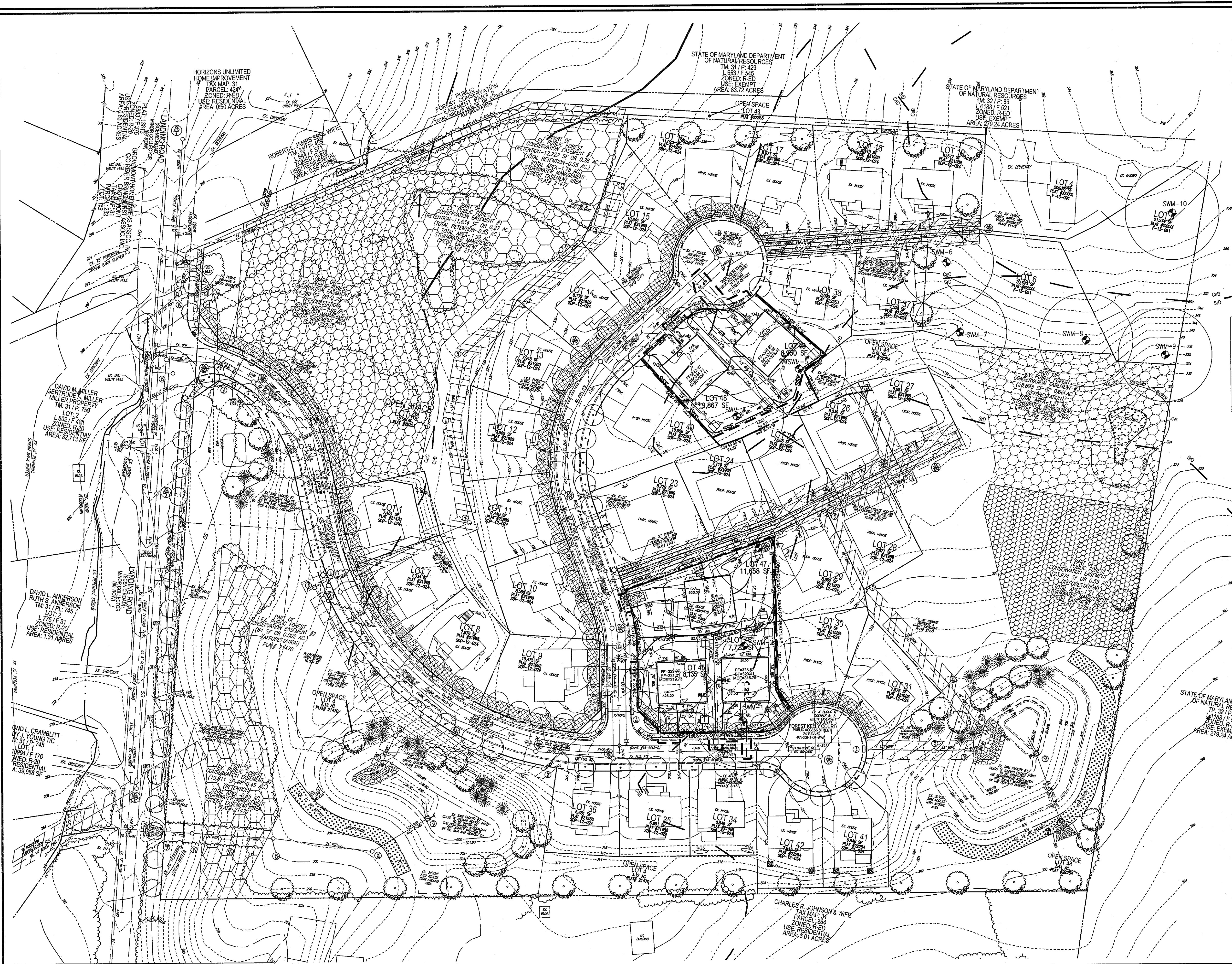
LANDSCAPE SCHEDULE

KEY	QUAN.	BOTANICAL NAME	SIZE	REMARKS
AR	2	ACER RUBRUM OCTOBER GLORY RED MAPLE	2 1/2"-3" CAL.	B & B
PS	2	PINUS STROBUS EASTERN WHITE PINE	6'-8" HT.	B & B

SCHEDULE A: PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO PERIMETER PROPERTIES/ROADWAYS
PERIMETER/FRONTAGE DESIGNATION	LOT 45
LANDSCAPE TYPE	B
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	77'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO
NUMBER OF PLANTS REQUIRED (IF REMAINING)	77'
SHADE TREES	1:50 2
EVERGREEN TREES	1:40 2
SHRUBS	2
NUMBER OF PLANTS PROVIDED	2
SHADE TREES	1
EVERGREEN TREES	1
OTHER TREES (2:1 SUBSTITUTION) SHRUBS (10:1 SUBSTITUTION) DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	1





NOTES

- SUPER SILT FENCE CAN BE SUBSTITUTED WITH STANDARD SILT FENCE WITH PERMISSION FROM SEDIMENT CONTROL INSPECTOR.

LEGEND:

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- ADJACENT PROPERTY LINE
- EXISTING CURB AND GUTTER
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING MAILBOX
- EXISTING SIGN
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY LINE
- EXISTING CLEANOUT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- SOILS
- EXISTING TREE LINE
- PROPOSED 10' CONTOUR
- PROPOSED 2' CONTOUR
- SILT FENCE
- SUPER SILT FENCE
- LIMIT OF DISTURBANCE
- STABILIZED CONSTRUCTION ENTRANCE
- DIVERSION FENCE
- SPOT ELEVATION
- DIRECTION OF FLOW
- TEST PIT

NOTE:
 - 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.

Standard Stabilization Note
 Following initial soil disturbance or re-disturbance, permanent or temporary stabilization must be completed within:
 a. Three (3) calendar days as to the surface of all perimeter dikes, swales, ditches, perimeter slopes, and all slopes steeper than 3 horizontal to 1 vertical (3:1); and
 b. Seven (7) calendar days as to all other disturbed or graded areas on the project site not under active grading.

NOTE:
 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 - LOT 2
 JERICHO LLC
 5331 LANDING ROAD
 ELKBRIDGE, MD 21075
 ATTN: MR. GARY CALTON
 443-367-0422

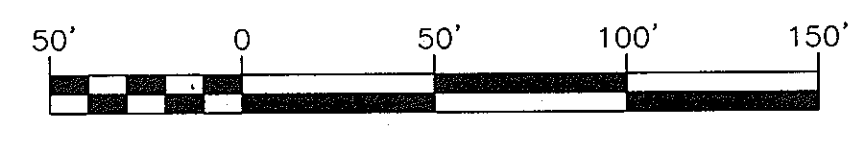
OWNER - LOT 39
 JERICHO LLC
 ELLICOTT CITY LAND HOLDING, INC.
 5300 DORSEY HALL DRIVE, SUITE 102
 ELLICOTT CITY, MD 21042-7619
 ATTN: MR. DON REUWER
 443-367-0422

DEVELOPER
 LAND DESIGN & DEVELOPMENT, INC.
 5300 DORSEY HALL DRIVE
 SUITE 102
 ELLICOTT CITY, MD 21042
 ATTN: MR. DON REUWER
 (443) 367-0422

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 2-14-14

 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 2/10/14



GRADING PLAN
 SCALE: 1" = 50'

NOTE: STOCKPILING WILL BE PERMITTED ON EACH LOT ONLY.

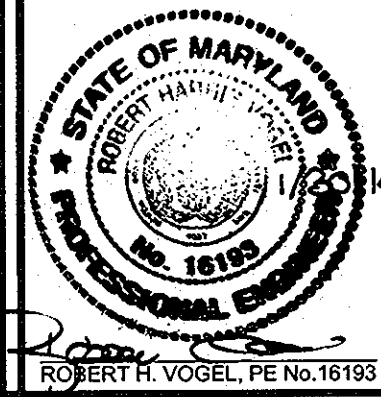
MAPPED SOILS TYPES

SYMBOL / DESCRIPTION	GROUP	HYDRIC	MOISS	MOISS	K-FACTOR	PERCENT	PERCENT	PERCENT
CeB CHILLUM LOAM, 2 TO 5 PERCENT SLOPES	B	NO	NO	NO	0.28	YES	NO	NO
CeC CHILLUM LOAM, 5 TO 10 PERCENT SLOPES	B	NO	NO	NO	0.28	YES	NO	NO
ChB CHILLUM-RUSSETT LOAMS, 2 TO 5 PERCENT SLOPES	B	NO	NO	NO	0.32	YES	NO	NO
LmB LEGORE-MONTALTO SILT LOAM, 3 TO 8 PERCENT SLOPES	B	NO	NO	NO	0.32	YES	NO	NO
Sd SASSAFRAS AND CROOM, 10 TO 15 PERCENT SLOPES	B	NO	NO	NO	0.26	NO	YES	NO

TAKEN FROM: USDA, SCS-WEB SOIL SURVEY, HOWARD COUNTY
 K-FACTOR = $K_e \times (0.4 - S)$ DEPTH
 NOTE: HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL COHERSIVITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT

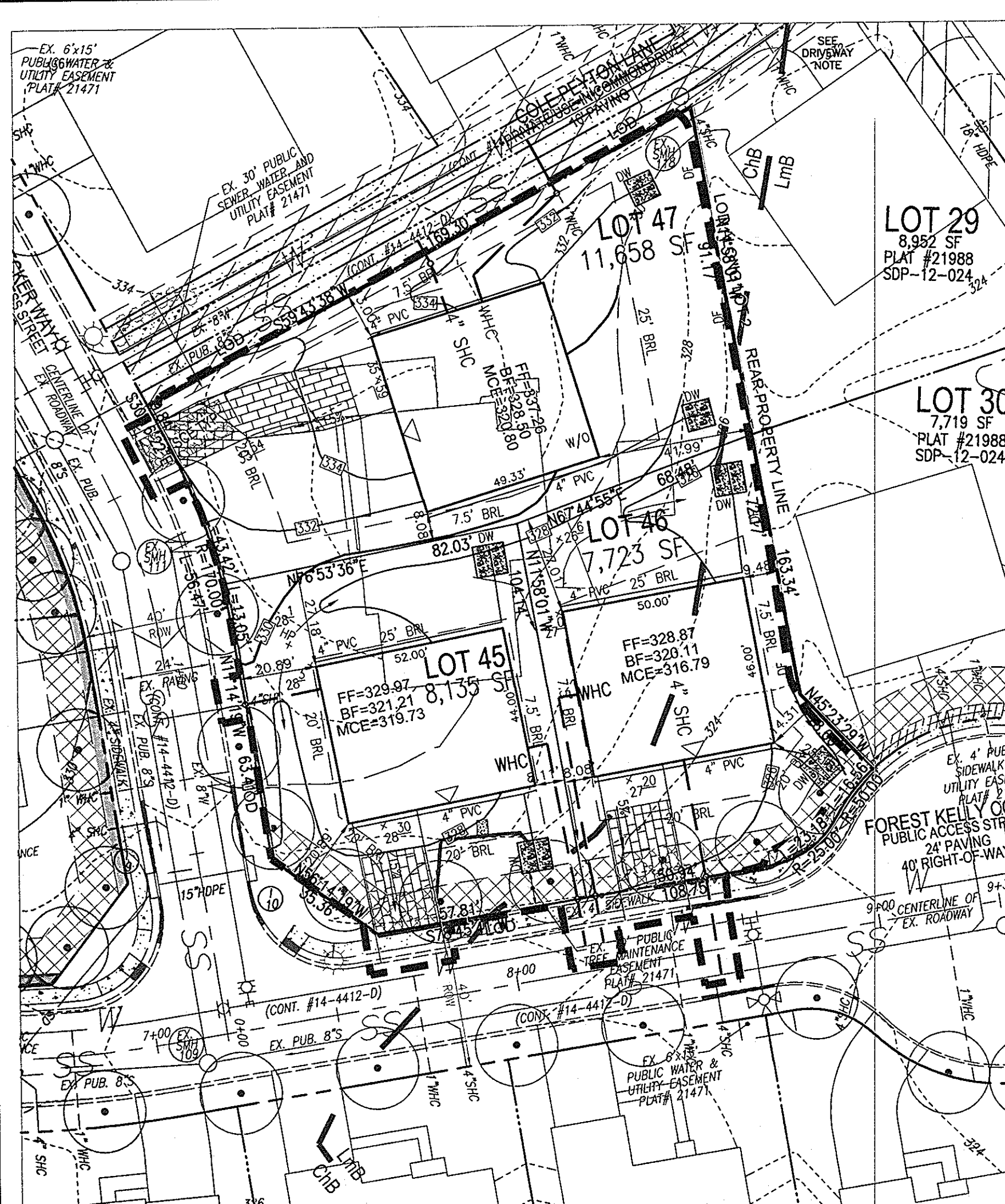
SUPPLEMENTAL INFORMATION PLAN
 GRADING, SOIL EROSION AND SEDIMENT CONTROL - PLAN
GROVEMONT OVERLOOK
 PHASE 2 - LOTS 45-49
 A RESUBDIVISION OF PHASE 1 - LOT 2 AND PHASE 2 - LOT 39
 TAX MAP 31 BLOCK 24 PARCELS '749'
 1ST ELECTION DISTRICT ZONED R-ED HOWARD COUNTY, MARYLAND

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

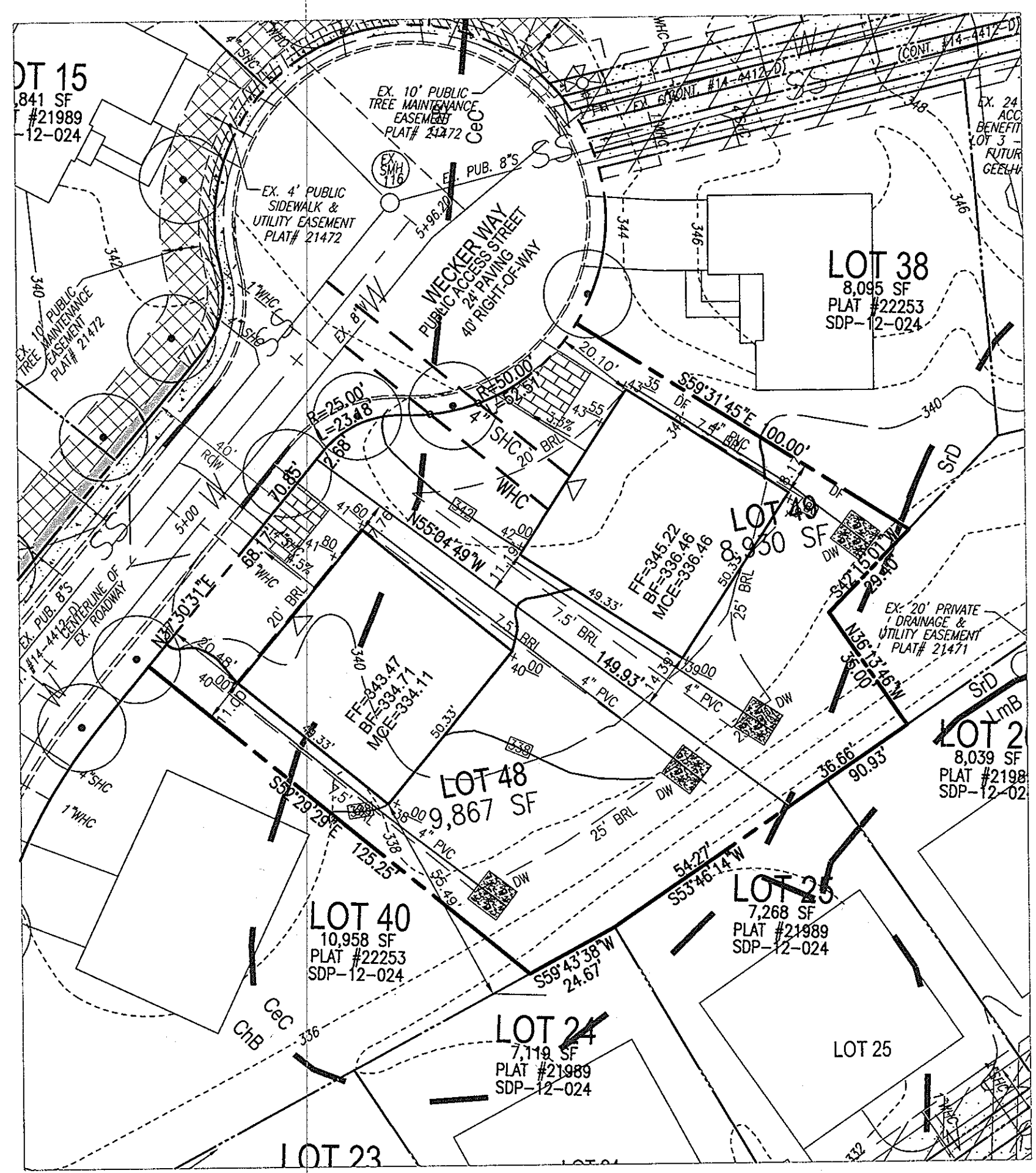


DESIGN BY: EDS
 DRAWN BY: EDS
 CHECKED BY: RHV
 DATE: JANUARY 2014
 SCALE: 1" = 50'
 W.O. NO.: 04-57

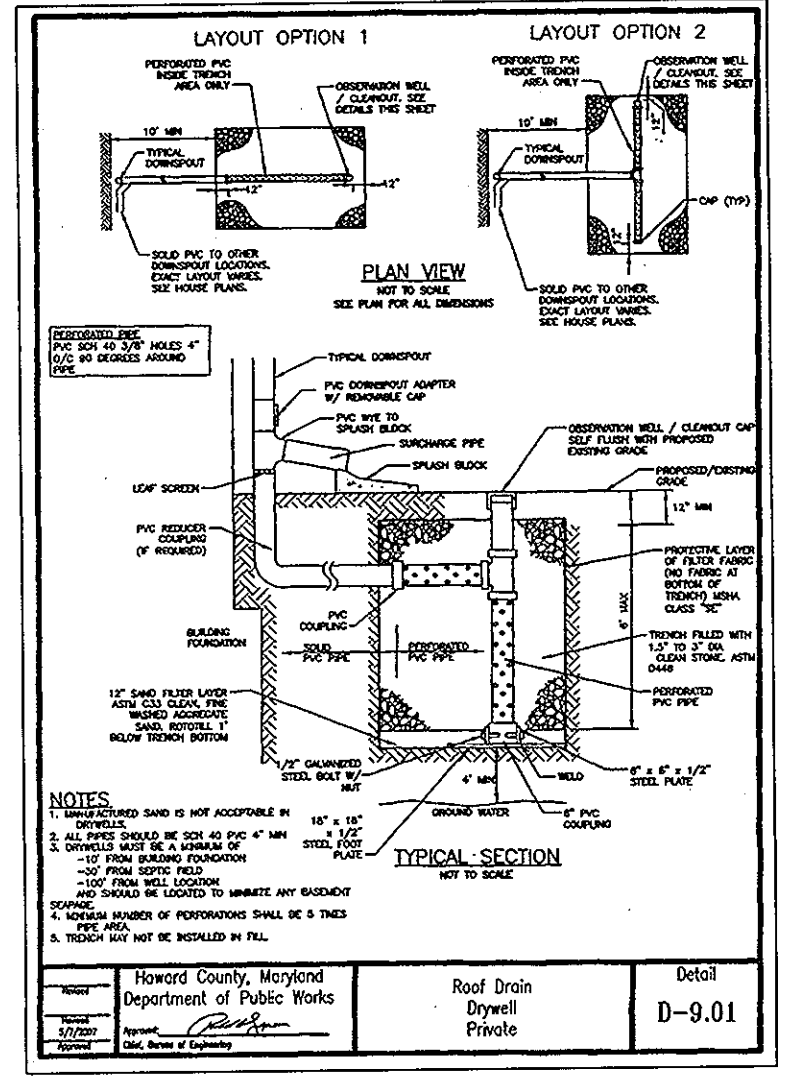
PROFESSIONAL CERTIFICATE
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193 EXPIRATION DATE: 09-27-2014



SWM LAYOUT PLAN - LOTS 45-47
SCALE: 1"=30'



SWM LAYOUT PLAN - LOTS 48 & 49
SCALE: 1"=30'



GENERAL NOTES:

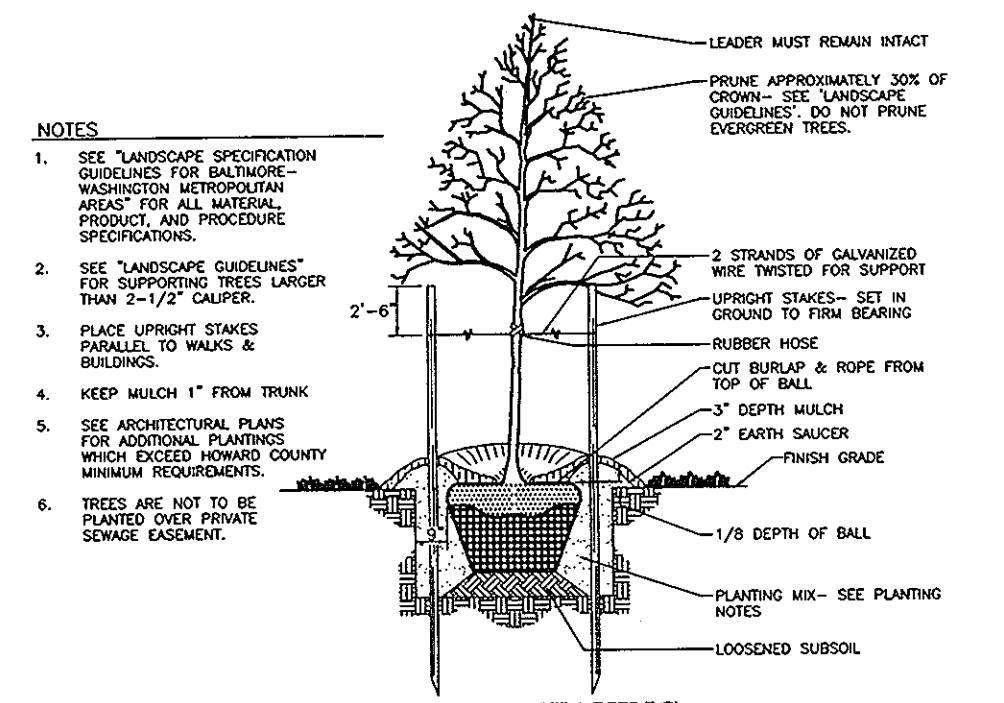
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY IN THE AMOUNT OF \$10,000 FOR THE REQUIRED 6" SHADE & 3" EVERGREEN TREES ON LOT 45 SHALL BE DEPOSITED WITH THE DEVELOPER PRIOR TO THE START OF CONSTRUCTION.
- PUBLIC STREET TREES PROVIDED FOR THIS PROJECT IN ACCORDANCE WITH SECTION 16.124(a)(1) OF THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL UNDER 1-09-122.
- THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, PLANT MATERIALS, BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
- AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS LISTED HEREWITH AND APPROVED FOR THIS SITE SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.

LANDSCAPE NOTES

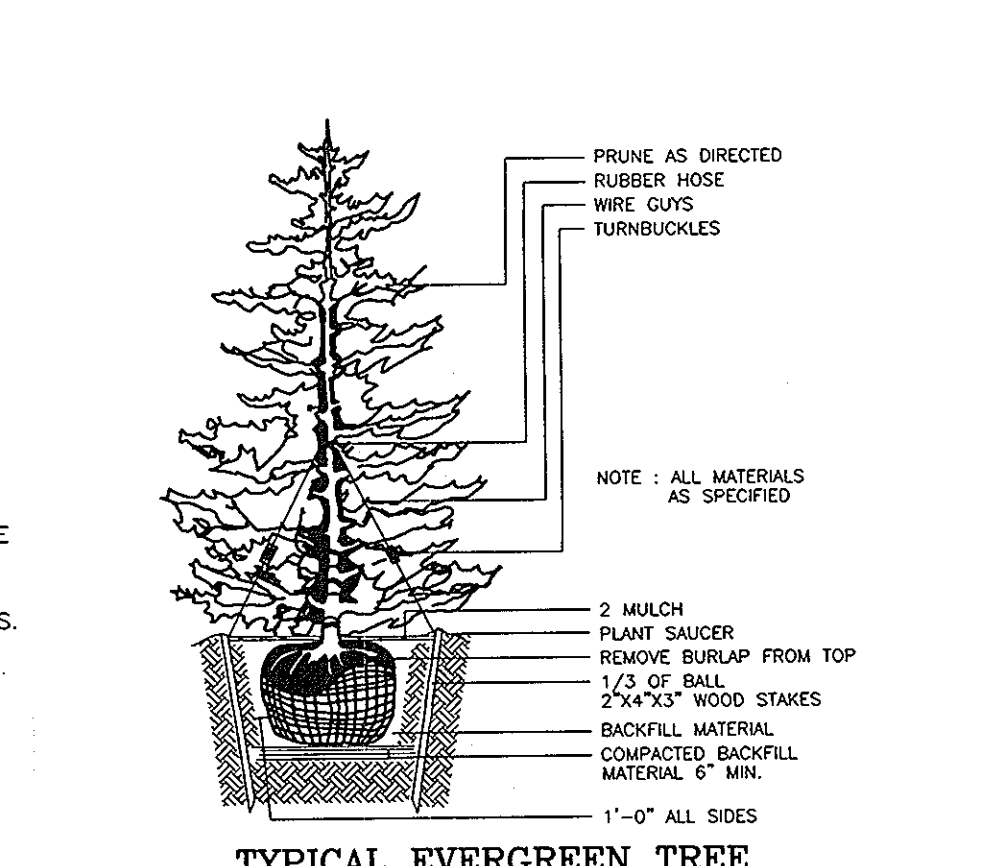
- THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
- ANY TREE DESIGNATED FOR PRESERVATION FOR WHICH LANDSCAPING CREDIT IS GIVEN, DIE PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE EQUIVALENT SPECIES OR WITH A TREE WHICH WILL OBTAIN THE SAME HEIGHT, SPREAD, AND GROWTH CHARACTERISTICS. THE REPLACEMENT TREE MUST BE A MINIMUM OF 3 INCHES IN CALIPER AND INSTALLED AS REQUIRED IN THE HOWARD COUNTY LANDSCAPE MANUAL.
- PLANTINGS SHOWN HEREON ARE THE RESPONSIBILITY OF THE BUILDER TO INSTALL DURING THE CONSTRUCTION OF THE HOME ON LOT 45

LANDSCAPE SCHEDULE NOTE:

- ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE MOST CURRENT AN SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH HRD PLANTING SPECIFICATIONS.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF DRAINAGE SWALES.
- CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLAN DIFFERS FROM LANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.



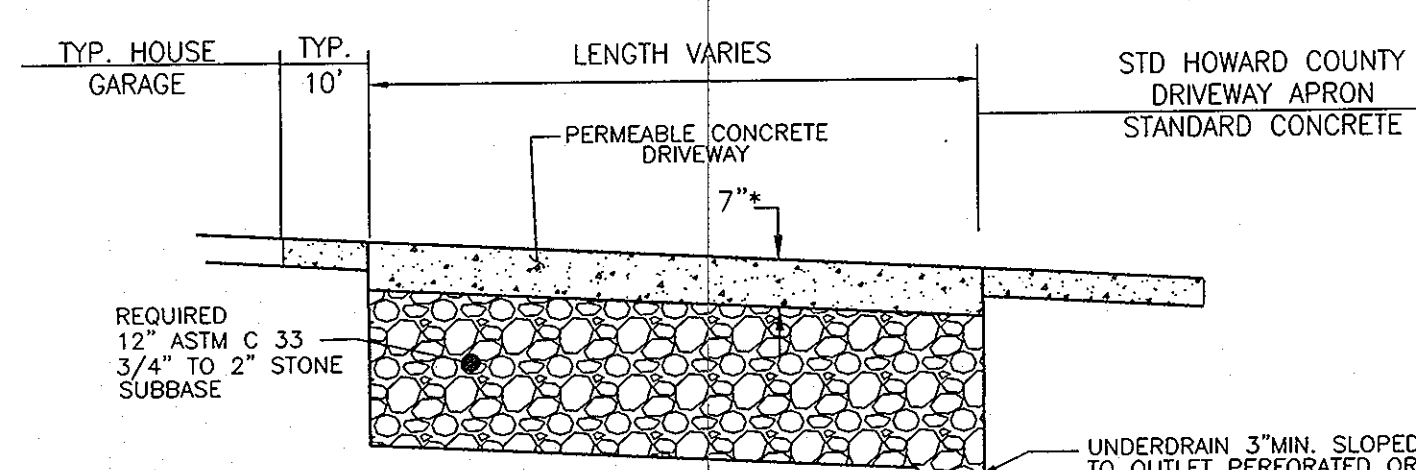
TREE PLANTING AND STAKING
DECIDUOUS TREES UP TO 2-1/2" CALIPER
NOT TO SCALE



TYPICAL EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE

Appendix B.4. Construction Specifications for Environmental Site Design Practices

Material	Specification	Size	Notes
Plantings	see Appendix A, Table A.4	n/a	plantings are site-specific
Planting soil	loamy sand (60 - 65%) & compost (35 - 40%) or sandy loam (30%) coarse sand (30%) & compost (40%)	n/a	USDA soil types loamy sand or sandy loam; clay content < 5%
Organic content	Min. 10% by dry weight (ASTM D 2974)	n/a	
Mulch	shredded hardwood	n/a	aged 6 months, minimum; no pine or wood chips
Pea gravel diaphragm	pea gravel: ASTM-D-448	NO. 8 OR NO. 9 (1/8" to 3/8")	
Curtain drain	ornamental stone: washed cobbles	stone: 2" to 5"	PE Type I nonwoven
Geotextile	AASHTO M-43	NO. 57 OR NO. 6 (3/8" to 3/4")	
Underdrain piping	F 758, Type PS 28 or AASHTO M-278	4" to 6" rigid schedule 40 PVC or SDR35	Slotted or perforated pipe; 3/8" perf. @ 6" on center, 4 holes per row, minimum of 3" of gravel over pipes; not necessary underneath pipes. Perforated pipe shall be wrapped with 1/2-inch galvanized hardware cloth on-site testing of poured-in-place concrete required: 28 day strength and slump test; all concrete design (cast-in-place or pre-cast) not using previously approved State or local standards requires design drawings sealed and approved by a professional structural engineer licensed in the State of Maryland - design to include meeting ACI Code 308 R.09; vertical loading (H-10 or H-20); allowable horizontal loading (based on soil pressure); and analysis of potential cracking.
Poured in place concrete (if required)	MSHA Mix No. 3; f' = 3500 psi @ 28 days, normal weight, air-entrained, reinforcing to meet ASTM-615-60	n/a	
Sand	AASHTO-M-6 or ASTM-C-33	0.02" to 0.04"	Sand substitutions such as Diabase and Graystone (AASHTO #10 are not acceptable. No calcium carbonated or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand).



NOTE:

- PAVEMENT CROSS SECTION TO BE CONFIRMED BY GEOTECHNICAL ENGINEER
- UNDERDRAIN SHALL BE LOCATED SUCH THAT IT CAN DAYLIGHT TO THE CURB INTO A BIO-RETENTION FACILITY OR TO THE REAR OF THE LOT
- OVERDRAIN SHALL COMBINE WITH UNDERDRAIN OR DAYLIGHT AS DETAILED FOR UNDERDRAIN, SEE NOTE 2.

DETAIL - PERMEABLE CONCRETE DRIVEWAY - 5% OR LESS
NOT TO SCALE
* ALL PERMEABLE CONCRETE THICKNESS, MIX AND SUB-BASE TO BE DETERMINED BY GEOTECHNICAL ENGINEER ON-SITE.

B.4.B SPECIFICATIONS FOR PERMEABLE PAVEMENTS & REINFORCED TURF
THESE SPECIFICATIONS INCLUDE INFORMATION ON ACCEPTABLE MATERIALS FOR TYPICAL APPLICATIONS AND ARE NOT EXCLUSIVE OR LIMITING. THE DESIGNER IS RESPONSIBLE FOR DEVELOPING SPECIFICATIONS FOR INDIVIDUAL PROJECTS AND SPECIFIC CONDITIONS.

1. PERVIOUS CONCRETE SPECIFICATIONS
DESIGN THICKNESS - PERVIOUS CONCRETE APPLICATIONS SHALL BE DESIGNED SO THAT THE THICKNESS OF THE CONCRETE SLAB SHALL SUPPORT THE TRAFFIC AND VEHICLE TYPES THAT WILL BE CARRIED. APPLICATIONS MAY BE DESIGNED USING EITHER STANDARD PAVEMENT PROCEDURES (E.G., AASHTO, ACI 308.9R, ACI 308R) OR USING STRUCTURAL VALUES DERIVED FROM FLEXIBLE PAVEMENT DESIGN PROCEDURES.

2. PERMEABLE INTERLOCKING CONCRETE PAVEMENTS (PICP)
PAVER BLOCKS - BLOCKS SHOULD BE EITHER 3" OR 4" IN THICK AND MEET ASTM C 836 OR CSA 433.1 REQUIREMENTS. APPLICATIONS SHOULD HAVE 20% OR MORE (AIR PREPARED) OF THE SURFACE AREA OPEN. INSTALLATION SHOULD FOLLOW MANUFACTURER'S INSTRUCTIONS, EXCEPT THAT INFILL AND BASE COURSE MATERIALS AND DIMENSIONS SPECIFIED IN THIS APPENDIX SHALL BE FOLLOWED.

INFILL MATERIALS AND LEVELING COURSE - OPENINGS SHALL BE FILLED WITH ASTM C-33 GRADED SAND OR SANDY LOAM. PICP BLOCKS SHALL BE PLACED ON A ONE-INCH THICK LEVELING COURSE OF ASTM C-33 SAND.

3. REINFORCED TURF
REINFORCED GRASS PAVEMENT (RGP) - WHETHER USED WITH GRASS OR GRAVEL, THE RGP THICKNESS SHALL BE AT LEAST 1-3/4" THICK WITH A LOAD CAPACITY CAPABLE OF SUPPORTING THE TRAFFIC AND VEHICLE TYPES THAT WILL BE CARRIED.

A-2. PERMEABLE PAVEMENTS

CONSTRUCTION CRITERIA:

- EROSION AND SEDIMENT CONTROL - FINAL GRADING FOR INSTALLATION SHOULD NOT TAKE PLACE UNTIL THE SURROUNDING SITE IS STABILIZED. IF THIS CANNOT BE ACCOMPLISHED, RUNOFF FROM DISTURBED AREAS SHALL BE DIVERTED AROUND PROPOSED PAVEMENT LOCATIONS.
- SOIL COMPACTION - SUB SOILS SHALL NOT BE COMPACTED. CONSTRUCTION SHOULD BE PERFORMED WITH LIGHTWEIGHT, WIDE TRACKED EQUIPMENT TO MINIMIZE COMPACTION. EXCAVATED MATERIALS SHOULD BE PLACED IN A CONTAINED AREA.
- DISTRIBUTION SYSTEMS - OVERDRAIN, UNDERDRAIN AND DISTRIBUTION PIPES SHALL BE CHECKED TO ENSURE THAT BOTH THE MATERIAL AND REPAIRS MEET SPECIFICATIONS (SEE APPENDIX B.4). THE UPSTREAM ENDS OF PIPES SHOULD BE CAPPED PRIOR TO INSTALLATION. ALL UNDERDRAIN OR DISTRIBUTION PIPES USED SHOULD BE INSTALLED FLAT ALONG THE BED BOTTOM.
- SUBBASE INSTALLATION - SUBBASE AGGREGATE SHALL BE CLEAN AND FREE OF FINES. THE SUBBASE SHALL BE PLACED IN LIFTS AND LIGHTLY ROLLED ACCORDING TO THE SPECIFICATIONS (SEE APPENDIX B.4).

INSPECTION:

REGULAR INSPECTIONS SHALL BE MADE DURING THE FOLLOWING STAGES OF CONSTRUCTION:

- DURING EXCAVATION TO SUB GRADE.
- DURING PLACEMENT AND FINISHING OF ANY CONCRETE OR DISTRIBUTION SYSTEMS.
- DURING PLACEMENT OF THE CRUSHED STONE SUBBASE MATERIAL.
- DURING PLACEMENT OF THE SURFACE MATERIAL.
- UPON COMPLETION OF FINAL GRADING AND ESTABLISHMENT OF PERMANENT STABILIZATION.

MAINTENANCE CRITERIA:

THE FOLLOWING PROCEDURES SHOULD BE CONSIDERED ESSENTIAL FOR MAINTAINING PERMEABLE PAVEMENT SYSTEMS:

- PAVEMENTS SHOULD BE USED ONLY WHERE REGULAR MAINTENANCE CAN BE PERFORMED. MAINTENANCE AGREEMENTS SHOULD CLEARLY SPECIFY HOW TO CONDUCT ROUTING TASKS TO ENSURE LONG-TERM PERFORMANCE.
- PAVEMENT SURFACES SHOULD BE SWEEP AND MAINTAINED TO REDUCE SEDIMENT ACCUMULATION AND ENSURE CONTINUED SURFACE POROSITY. SWEEPING SHOULD BE PERFORMED AT LEAST TWICE ANNUALLY WITH A COMMERCIAL CLEANING UNIT. WASHING OR COMPRESSED AIR UNITS SHOULD NOT BE USED TO PERFORM SURFACE CLEANING.
- DRAINAGE PIPES, INLETS, STONE EDGE DRAINS, AND OTHER STRUCTURES WITHIN OR DRAINING TO THE SURFACE SHOULD BE CLEANED OUT AT REGULAR INTERVALS.
- TRUCKS AND OTHER HEAVY VEHICLES CAN GRIND DIRT AND GRIT INTO THE PORE SPACES, LEADING TO CLOGGING AND PREMATURE FAILURE. THESE VEHICLES SHOULD BE PREVENTED FROM TRUCKING AND SPILLING MATERIAL ONTO THE PAVEMENT.
- DECIDERS SHOULD BE USED IN MODERATION WHEN USED. DECIDERS SHOULD BE NON-TOXIC AND GRINDING AND CAN BE APPLIED EITHER AS CALCIUM MAGNESIUM ACETATE OR AS PRETREATED SALT. SNOW BLOWING SHOULD BE DONE CAREFULLY WITH BLADES SET ONE-INCH HIGHER THAN NORMAL. FLOWED SNOW PILES AND SNOW MELT SHOULD NOT BE DIRECTED TO PERMEABLE PAVEMENT.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED PERMEABLE PAVEMENT (A-2)

- THE OWNER SHALL PERIODICALLY SWEEP (OR VACUUM POROUS CONCRETE PAVEMENT) THE PAVEMENT SURFACES TO REDUCE SEDIMENT ACCUMULATION AND ENSURE CONTINUED SURFACE POROSITY. SWEEPING SHOULD BE PERFORMED AT LEAST TWICE ANNUALLY WITH A COMMERCIAL CLEANING UNIT. WASHING OR COMPRESSED AIR UNITS SHOULD NOT BE USED TO PERFORM SURFACE CLEANING.
- THE OWNER SHALL PERIODICALLY CLEAN DRAINAGE PIPES, INLETS, STONE EDGE DRAINS AND OTHER STRUCTURES WITHIN OR DRAINING TO THE SURFACE.
- THE OWNER SHALL USE DECIDERS IN MODERATION. DECIDERS SHOULD BE NON-TOXIC AND BE APPLIED EITHER AS CALCIUM MAGNESIUM ACETATE OR AS PRETREATED SALT.
- THE OWNER SHALL ENSURE SNOW BLOWING IS PERFORMED CAREFULLY WITH BLADES SET ONE-INCH ABOVE THE SURFACE. FLOWED SNOW PILES AND SNOW MELT SHOULD NOT BE DIRECTED TO PERMEABLE PAVEMENT.

PROJECT:		GOVERNMENT PHASE 2 LOTS 45-49 - SITE DATA							
TOTAL AREA (LOD):	0.63 AC NEW DEVELOPMENT	TOTAL AREA (LOD):	0.63 AC NEW DEVELOPMENT						
TARGET Pp:	1.80 IN	TARGET Pp:	1.80 IN						
IMPERVIOUS:	36.5 PERCENT	IMPERVIOUS:	36.5 PERCENT						
SITE RV:	0.3786	SITE RV:	0.3786						
SITE ESDv:	1558 CF	SITE ESDv:	866 CF for 1"						
LOT AREA	IMPERVIOUS AREA	GRASS AREA	TOTAL AREA	PERCENT IMPERVIOUS	RV	ESDv (MINI")	ESDv (MAXI")	ESDv (SITE)	PERCENT OF ESDv
45	3210	4924	8134	0.39	0.41	275	714	494	0.30
PERMEABLE SURFACE DRIVEWAY		384 SF		0.196		75 CF		203 CF	
DRYWELL		2		9.2		9.2		4	
TOTAL		278 CF PROV.							
46	3210	4513	7723	0.42	0.42	273	710	491	0.28
PERMEABLE SURFACE DRIVEWAY		403 SF		0.196		79 CF		194 CF	
DRYWELL		2		9.0		9.0		4	
TOTAL		273 CF PROV.							
47	3600	8058	11658	0.31	0.33	319	828	573	0.42
PERMEABLE SURFACE DRIVEWAY		810 SF		0.196		159 CF		161 CF	
DRYWELL		2		8.2		8.2		4	
TOTAL		320 CF PROV.							
10020	TOTAL AREA	27515 SF	0.63 AC	MINI")	MAXI")	1.80"	866	2252	1559
				CUFT	CUFT	CUFT	872 CF PROV.		

OWNER - LOT 2
JERICHO LLC
5331 LANDING ROAD
ELK RIDGE, MD 21075
ATTN: MR. GARY CALTON
443-367-0422

OWNER - LOT 39
JERICHO LLC
ELICOTT CITY LAND HOLDING, INC.
5300 DORSEY HALL DRIVE, SUITE 102
ELICOTT CITY, MD 21042-7819
ATTN: MR. DON REUWER
443-367-0422

DEVELOPER
LAND DESIGN & DEVELOPMENT, INC.
5300 DORSEY HALL DRIVE
SUITE 102
ELICOTT CITY, MD 21042
ATTN: MR. DON REUWER
(443) 367-0422

PROJECT:		GOVERNMENT PHASE 2 LOTS 45-49 - SITE DATA							
TOTAL AREA (LOD):	0.43 AC NEW DEVELOPMENT	TOTAL AREA (LOD):	0.43 AC NEW DEVELOPMENT						
TARGET Pp:	1.80 IN	TARGET Pp:	1.80 IN						
IMPERVIOUS:	31.18 PERCENT	IMPERVIOUS:	31.18 PERCENT						
SITE RV:	0.3306	SITE RV:	0.3306						
SITE ESDv:	929 CF	SITE ESDv:	516 CF for 1"						
LOT AREA	IMPERVIOUS AREA	GRASS AREA	TOTAL AREA	PERCENT IMPERVIOUS	RV	ESDv (MINI")	ESDv (MAXI")	ESDv (SITE)	PERCENT OF ESDv
48	2900	6247	9867	0.30	0.32	290	676	468	0.52
PERMEABLE SURFACE DRIVEWAY		188 SF		0.196		37 CF		226 CF	
DRYWELL		2		9.7		9.7		4	
TOTAL		263 CF PROV.							
49	2920	6010	8930	0.33	0.34	256	666	461	0.48
PERMEABLE SURFACE DRIVEWAY		236 SF		0.196		46 CF		212 CF	
DRYWELL		2		9.4		9.4		4	
TOTAL		258 CF PROV.							
5840	TOTAL AREA	18797 SF	0.43 AC	MINI")	MAXI")	1.80"	516	1342	929
				CUFT	CUFT	CUFT	521 CF PROV.		

NOTE:
1. These lots drain toward an existing Stormwater Management Facility designed for the Government Overlook F 09-122 project. Stormwater Management for this lot is provided for 1" as quantity management has been provided.

DEVELOPER/BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE (1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

SIGNATURE OF DEVELOPER: David Reuwer DATE: 1/31/14

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF DEVELOPMENT ENGINEERING DIVISION: 2/14/14 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT: 2/18/14 DATE

DIRECTOR: N/A DATE

SUPPLEMENTAL INFORMATION PLAN
STORMWATER MANAGEMENT AND LANDSCAPING
NOTES AND DETAILS
GOVERNMENT OVERLOOK
PHASE 2 - LOTS 45-49

A RESUBDIVISION OF PHASE 1 - LOT 2 AND PHASE 2 - LOT 39
TAX MAP 31 BLOCK 24 PARCELS '749'
1ST ELECTION DISTRICT ZONED R-ED HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELICOTT CITY, MD 21043
TEL: 410-461-7666
FAX: 410-461-8961

PROFESSIONAL CERTIFICATE
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. 16183
EXPIRATION DATE: 09-27-2014

DESIGN BY: EDS
DRAWN BY: EDS
CHECKED BY: RHV
DATE: JANUARY 2014
SCALE: 1"=50'
W.O. NO.: 04-57