

GENERAL NOTES:

- ZONING: THE SUBJECT PROPERTIES ARE ZONED R-A-15 PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
- PREVIOUS DEPARTMENT OF PLANNING AND ZONING FILE NUMBERS: 5-04-04, F-06-19, F-01-001, F-04-008, F-11-26, 5-14-003, F-14-054
- SITE ANALYSIS (PHASE 8 ONLY):
 - TOTAL AREA OF SITE: 6.71 ACRES±
 - AREA OF 100 YR. FLOODPLAIN: 0.00 ACRES±
 - AREA OF STEEP SLOPES (OUTSIDE OF FLOODPLAIN): 0.00 ACRES±
 - NET AREA: 6.71 ACRES±
 - AREA OF PROPOSED ROADWAY (PUBLIC): 1.42 ACRES±
 - NO. OF SINGLE FAMILY ATTACHED LOTS: 65
 - AREA OF SINGLE FAMILY ATTACHED LOTS: 2.10 ACRES±
 - NO. OF OPEN SPACE LOTS: 1
 - AREA OF CREDITED OPEN SPACE: 1.13 ACRES±
 - AREA OF NON-CREDITED OPEN SPACE: 0.15 ACRES±
 - TOTAL AREA OF OPEN SPACE: 1.88 ACRES±
 - NO. OF COMMON SPACE LOTS: 2
 - AREA OF COMMON OPEN SPACE (ALLEY): 0.71 ACRES±
 - TOTAL NUMBER OF LOTS: 71
- TOTAL APPROXIMATE LIMIT OF PROP. SITE DISTURBANCE: 6.71 ACRES±
- OPEN SPACE REQUIREMENTS: SEE DETAIL COVER OR TREES, OR PLACEMENT OF NEW STRUCTURES IS PERMITTED WITHIN LIMITS OF WETLANDS, STREAMS OR THEIR REQUIRED BUFFERS, AND 100 YEAR FLOODPLAIN AREAS, UNLESS PERMITTED UNDER AN APPROVED WAIVER PETITION OR DETERMINED TO BE ESSENTIAL OR NECESSARY BY DPZ.
- THIS PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- THE CEMETERY INVENTORY MAP DOES NOT SHOW ANY CEMETERIES WITHIN THE PROJECT LIMITS (PHASE 8).
- THE SCENIC ROADS MAP DOES NOT INDICATE ANY SCENIC ROADS IN THE VICINITY.
- THE HISTORIC SITES MAP DOES NOT SHOW ANY HISTORICAL SITES WITHIN THE PROJECT LIMITS (PHASE 8).
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY BENCHMARKS 316A AND 314A WERE USED FOR THIS PROJECT.
- BOUNDARY INFORMATION IS FROM BOUNDARY SURVEYS BY GUTSCHICK, LITTLE, AND WEBER, P.A., DATED MAY, 2003.
- SOILS DATA WAS TAKEN FROM THE SOIL SURVEY OF HOWARD COUNTY, MARYLAND ISSUED MARCH, 2003.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM AERIAL TOPOGRAPHY PREPARED BY MCENZIE-SMITH DURING MARCH, 2003 AND PREVIOUS SHIPLEY'S GRANT DEVELOPMENT PLANS.
- THE WETLAND DELINEATION STUDY FOR THIS PROJECT WAS PREPARED BY EXPLORATION RESEARCH, INC., JURISDICTIONAL DETERMINATION AND VERIFICATION OF DELINEATION OF WATERS OF THE U.S. BY U.S. ARMY CORPS OF ENGINEERS ON 3/28/03. THE STUDY WAS APPROVED WITH 5-04-04 ON 2/15/05. THERE ARE NO STREAMS OR WETLANDS WITHIN THE LIMITS OF PHASE 8.
- THE 100-YEAR FLOODPLAIN STUDY FOR THIS PROJECT WAS PREPARED BY GUTSCHICK, LITTLE, & WEBER DATED JUNE 2006, AND WAS APPROVED IN SEPTEMBER 2006 AS PART OF F-06-019. THERE IS NO FLOODPLAIN WITHIN THE LIMITS OF PHASE 8.
- A NOISE STUDY WAS PREPARED BY ROBERT H. VOGEL ENGINEERING, INC. DATED JULY 9, 2015. THE STUDY WAS APPROVED ON 8/24/2015. THE NOISE IS BEING MITIGATED BY 6' NOISE FENCES TO REDUCE BACKYARD NOISE LEVELS. THE REMAINDER IS MITIGATED BY ARCHITECTURAL MATERIALS OF THE HOMES THEMSELVES.
- A TRAFFIC STUDY WAS PREPARED BY THE TRAFFIC GROUP IN A REPORT DATED JANUARY 26, 2004 AND WAS APPROVED ON FEBRUARY 15, 2005 WITH 5-04-04. ALL OF THE REQUIRED OFF-SITE IMPROVEMENTS HAVE BEEN COMPLETED. A LETTER FROM THE TRAFFIC GROUP DATED JANUARY 23, 2014 STATES THAT THE TOWNHOUSE UNITS SHOWN IN PHASE 1 AND 8 ON THE FORMER CHAPEL AND OFFICE PARCELS GENERATE LESS TRAFFIC THAN ASSIGNED IN THE ORIGINAL TRAFFIC STUDY. THIS LETTER WAS APPROVED ON JANUARY 20, 2015 WITH 5-15-003.
- THE GEO-TECHNICAL REPORT WAS PROVIDED BY SPECIALIZED ENGINEERING DATED JULY 6, 2015. THIS STUDY WILL BE APPROVED WITH THE FINAL PLANS.
- EXISTING UTILITIES WERE TAKEN FROM AVAILABLE HOWARD COUNTY RECORDS AND PREVIOUS SHIPLEY'S GRANT DEVELOPMENT PLANS.
- THE PROJECT IS WITHIN AN UNINCORPORATED DISTRICT.
 - WATER AND SEWER ARE PUBLIC PER CONTRACT NO. 14-4224-D.
 - EXISTING CONTRACT NUMBERS: 14-4355-D, 14-4334-D, 14-4484-D, 14-4513-D, 14-4604-D, 44-4740-D & 14-4875-D.
 - FINAL LOCATION OF STREET TREES WILL BE DETERMINED AT FINAL PLAN STAGE. CONFLICTS BETWEEN THE STREET TREES AND OTHER DESIGN ELEMENTS WILL BE RESOLVED AT THAT TIME.
 - GRADING, REMOVAL OF VEGEATIVE COVER OR TREES, OR PLACEMENT OF NEW STRUCTURES IS PERMITTED WITHIN LIMITS OF WETLANDS, STREAMS OR THEIR REQUIRED BUFFERS, AND 100 YEAR FLOODPLAIN AREAS, UNLESS PERMITTED UNDER AN APPROVED WAIVER PETITION OR DETERMINED TO BE ESSENTIAL OR NECESSARY BY DPZ.
 - THE FOREST CONSERVATION REQUIREMENT FOR THIS SUBDIVISION AS ESTABLISHED BY F-06-04, IS TO PROVIDE AT LEAST 1.48 ACRES OF RETENTION AND 1.04 ACRES OF OFF AFFORESTATION. THIS REQUIREMENT WAS PREVIOUSLY ADDRESSED BY PROVIDING 1.48 ACRES OF ON-SITE NET TRACT FOREST RETENTION, 560 ACRES OF ON-SITE AFFORESTATION, 130 ACRES OF OFF-SITE AFFORESTATION AND AN ABANDONMENT FEE HAS BEEN PAID FOR THE 0.14 ACRES. THE ON-SITE FOREST CONSERVATION WAS RECORDED WITH F-06-04, F-08-11, F-09-08B, F-10-660 AND F-11-026. THE 130 ACRES OF OFF-SITE AFFORESTATION IS PROVIDED BY AN APPROVED FOREST CONSERVATION PLAN AND PLAT OF FOREST CONSERVATION EASEMENT (F-11-026F) ENTITLED HOBART MILLINEAUX PROPERTY AND RECORDED AS PLAT NO. 2123.
- AS PART OF PHASE 8, 0.10 ACRES OF THE EXISTING FOREST CONSERVATION EASEMENT #5 ON PARCEL D-2 (PN: 21017) WILL BE ABANDONED. 0.12 AC. OF NEW CREDITED FOREST CONSERVATION EASEMENT WILL BE CREATED ON SITE WITH PHASE 8 TO OFF-SET/MITIGATE A PORTION OF THE TOTAL FOREST CONSERVATION EASEMENT AREA TO BE ABANDONED, AND THE REMAINDER OF THE ABANDONMENT WILL BE MITIGATED WITH THE PAYMENT OF A FOREST ABANDONMENT FEE FOR 0.50 ACRES. THE FOREST ABANDONMENT WILL BE PROCESSED THROUGH DPZ WITH THE FINAL PLANS.
- ALL BUFFERING AND OTHER LANDSCAPING REQUIREMENTS/FEATURES WILL BE PROVIDED AT THE SITE DEVELOPMENT PLAN STAGE AND/OR THE FINAL PLAN STAGE AND WILL BE PROVIDED IN ACCORDANCE WITH THE SUBDIVISION REGULATIONS (AMENDED 5TH EDITION).
- A PRE-REVISIONS COMMUNITY MEETING WAS HELD FOR THIS PROJECT ON 11/26/2015 IN COMPLIANCE WITH SECTION 16.128 OF THE REGULATIONS.
- STORMWATER MANAGEMENT FOR THIS PHASE IS PROVIDED BY EXISTING FACILITY 'D' LOCATED ON OPEN SPACE LOT D-1. FACILITY 'D' IS A PERMANENT POOL, NET FACILITY TYPE P-2 PER MDE 2000. THIS FACILITY PROVIDES 100 CPM, AND SAFE PASSAGE OF THE 100 YEAR STORM. FACILITY 'D' WAS DESIGNED AND APPROVED UNDER F-01-88. FACILITY 'D' IS JOINTLY MAINTAINED BY HOWARD COUNTY AND THE HOA. THE RECHARGE REQUIREMENT FOR THE DRAINAGE AREA TO FACILITY 'D' HAS BEEN DEFERRED TO THIS PHASE. THE RECHARGE VOLUME IS PROVIDED BY AN INFILTRATION TRENCH LOCATED ON OPEN SPACE LOT D-220. THE INFILTRATION TRENCH WILL BE PRIVATELY OWNED AND MAINTAINED BY THE HOA.
- STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH THE 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUMES I AND II. A STORMWATER MANAGEMENT ADMINISTRATIVE WAIVER DATED JUNE 6, 2012 DETERMINED THAT THE PROJECT MET THE CRITERIA OUTLINED IN THE MDE STORMWATER MANAGEMENT REGULATIONS GUIDELINES FOR IMPLEMENTATION FOR ACCEPTANCE OF THE 2000 DESIGN CRITERIA. STORMWATER MANAGEMENT FOR THIS SITE IS PROVIDED BY FACILITY 'D' (SEE NOTE 21). FACILITY 'D' WAS PRELIMINARILY APPROVED WITH 5-04-04 ON 2/15/05, AND RECEIVED FINAL APPROVAL WITH F-04-039 ON 10/23/04. FACILITY 'D' IS CURRENTLY FUNCTIONING AS A BASIN FOR TEMPORARY STORMWATER MANAGEMENT AND ALL CONSTRUCTION FOR FACILITY 'D' WILL BE COMPLETED PRIOR TO MAY 4, 2017.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 - WIDTH - 12' (6' SERVING MORE THAN ONE RESIDENCE)
 - SURFACE - 6" OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATINGS (1-1/2" MIN)
 - GEOMETRY - MAX. 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS
 - STRUCTURE (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25,000 LBS (125 TONS)
 - DRAINAGE ELEMENTS - SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE
 - MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE
- PER ZONING SECTION 133.0.6, 10% OF THE TOTAL NUMBER OF UNITS, 7 UNITS, MUST BE DEDICATED AS MIHUs. THE MIHUs LOTS WILL BE LOTS D-154, D-162, D-163, D-172, D-173, D-178, & D-179. SEE THE UNIT TABULATION ON THIS SHEET FOR ADDITIONAL INFORMATION.
- THE MINIMUM WIDTH OF COMMON OPEN SPACE LOTS THAT CONTAIN ALLEYS SHALL BE 24 FEET, THE MINIMUM WIDTH OF ALLEY DRIVE LANES SHALL BE 16 FEET.
- ALL PRIVATE ALLEYS ARE DESIGNED TO SUPPORT 2-WAY TRAFFIC.
- ALL PUBLIC STREETS WITHIN THIS DEVELOPMENT SHALL HAVE SIDEWALKS ON BOTH SIDES OF THE ROADWAY. SFA LOTS MAY NOT BE ENCUMBERED WITH SIDEWALKS AND/OR SIDEWALK EASEMENTS.
- ON JULY 14, 2004, MP 04-105, A WAIVER OF SECTION 16.120.C(4) WAS GRANTED WHICH REQUIRES SINGLE FAMILY ATTACHED LOTS TO HAVE AT LEAST 15' OF FRONTAGE ONTO A PUBLIC ROAD RIGHT-OF-WAY, SECTION 16.116.E(1), WHICH REQUIRES TRUNCATION OF PUBLIC ROAD RIGHT-OF-WAY BOUNDARIES WHERE PUBLIC ROADS INTERSECT (AT CORNER LOTS), AND SECTION 16.116.A.2.(1) WHICH PROHIBITS DISTURBANCE TO STREAMS AND STREAM BUFFERS, TO ALLOW CONSTRUCTION OF TWO PEDESTRIAN BRIDGES TO CROSS THE STREAMS. SUBJECT TO THE FOLLOWING 2 CONDITIONS IN THE APPROVAL LETTER.
 - THE DISTURBANCE TO THE STREAM AND STREAM BUFFER RELATED TO THE PEDESTRIAN BRIDGES SHALL BE MINIMIZED. THE PRELIMINARY PLAN SHALL SHOW THE LIMIT OF DISTURBANCE AND PROPOSED GRADING ASSOCIATED WITH THE BRIDGES, AND SHALL BE SUBJECT TO REVIEW AND APPROVAL BY THE SUBDIVISION REVIEW COMMITTEE.
 - IF IT IS DETERMINED BY THE DED THAT SIGHT DISTANCE IS INADEQUATE AT THE INTERSECTIONS FOR WHICH TRUNCATION AS WAIVED, THEN THE APPROPRIATE EASEMENTS MUST BE ADDED TO THE PLAN/PLAT.
- THE PROPOSED POOL SIZE IS 1800 SF, A MAXIMUM OF 5' DEEP, AND CAN ACCOMMODATE A MAXIMUM OF 150 PEOPLE AS CONFIRMED BY AN EMAIL FROM THE HEALTH DEPARTMENT ON OCT. 22-23, 2014.
- THE POOL AND HOBART AMENITIES, SUCH AS AN AREA OF PUBLIC ASSEMBLY, ADDITIONAL PARKING MAY BE REQUIRED. IF USES OF THE BUILDING EXTEND BEYOND CHANGING ROOMS FOR THE POOL.
- THE FINAL USE OF THE COMMUNITY CENTER AND THE ABILITY TO OBTAIN CREDIT FOR RECREATIONAL AMENITIES WILL BE FURTHER EVALUATED BY DPZ AT THE FINAL PLAN STAGE.
- ALL UNITS HAVE 2 CAR GARAGES WITH THE EXCEPTION OF THE 1 PROPOSED MODERATE INCOME HOUSING UNITS (MIHUs), LOTS 154, 162, 163, 172, 173, 178 AND 179, WHICH HAVE ONE-CAR GARAGES. LOTS 154, 178, AND 179 WILL HAVE A DRIVEWAY PROVIDING A SECOND SPACE. LOTS 162, 163, 172, AND 173 WILL HAVE A SURFACE PARKING SPACE PROVIDED NEARBY AND THESE SPACES WILL BE RESERVED FOR EACH INDIVIDUAL UNIT ONLY. THE RESERVED PARKING WILL BE ENFORCED BY THE HOMEOWNERS ASSOCIATION. ALL UNITS WITH 1 OR 2 CAR GARAGES MUST USE THEIR GARAGES FOR AUTOMOBILE PARKING ONLY AND ENFORCEMENT OF THIS PARKING RESTRICTION IS THE RESPONSIBILITY OF THE HOA.
- Shipley's Grant Phase VIII is grandfathered to the exception for Traditional Residential Neighborhood Development noted in Section 133.C.4 of the 2004 Zoning Regulations which allows driveways less than 9 feet in length from the garage to the flowline of the curb.

PRELIMINARY SUBDIVISION PLAN

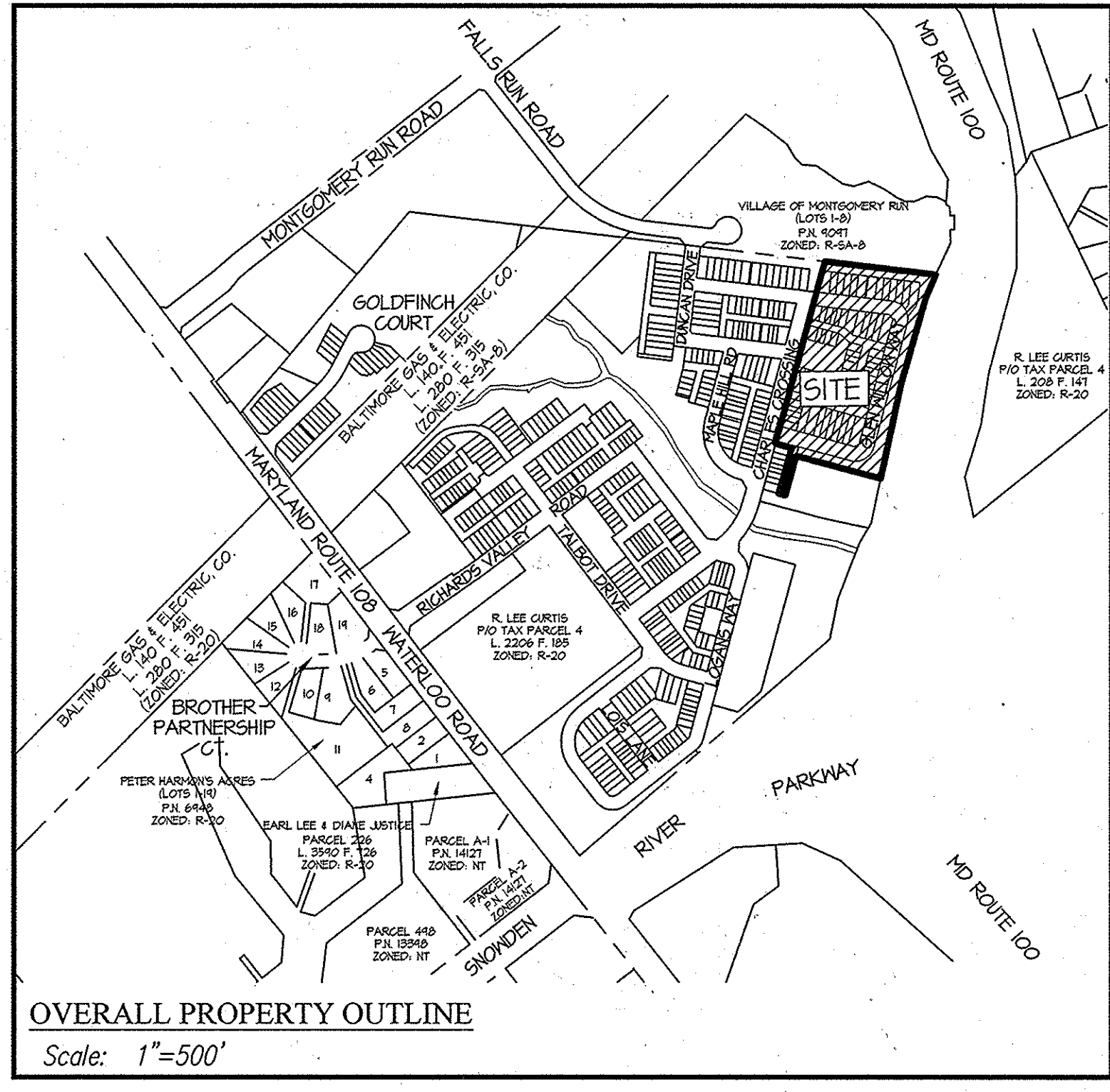
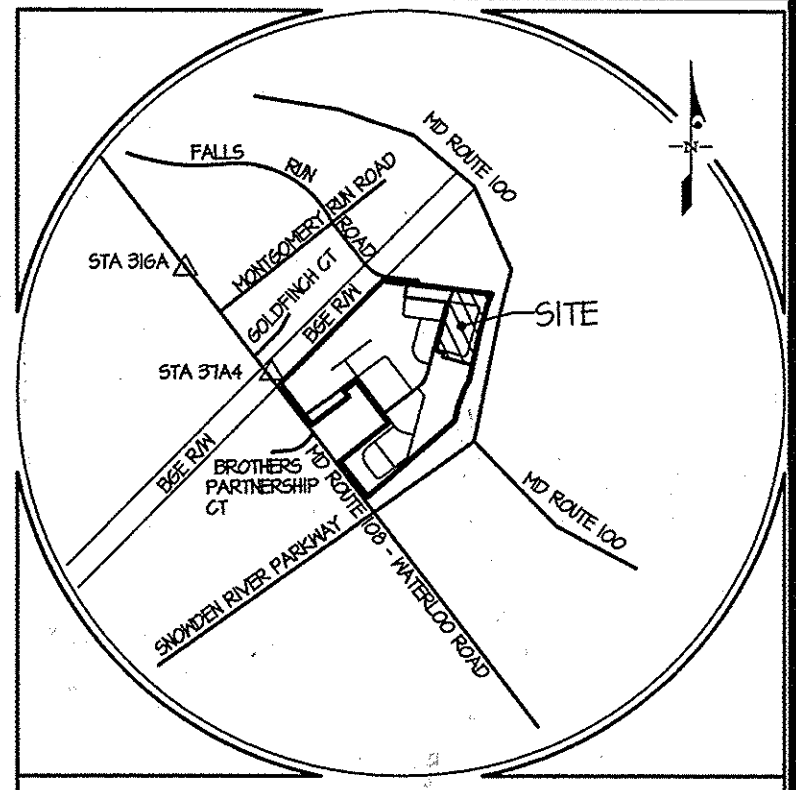
SHIPLEY'S GRANT

PHASE VIII

LOTS D-151 - D-215, OPEN SPACE LOTS D-216 - D-219, COMMON OPEN SPACE LOT D-220 & D-221

Howard County Control Stations
 316A ELEV. = 511.65
 STANDARD DISC ON CONCRETE MONUMENT
 N 564,925.15, E 1,367,061.65

314A ELEV. = 431.28
 STANDARD DISC ON CONCRETE MONUMENT
 N 563,835.41, E 1,361,471.65



Parking Tabulations
Pool Parking Calculations:
 Total number of persons permitted in the pool at one time by the Health Department = 1800 sf x 1 person / 12 sf = 150 people
 Pool parking required @ 1 space / 10 persons permitted in the pool at one time by the Health Department = 15 spaces

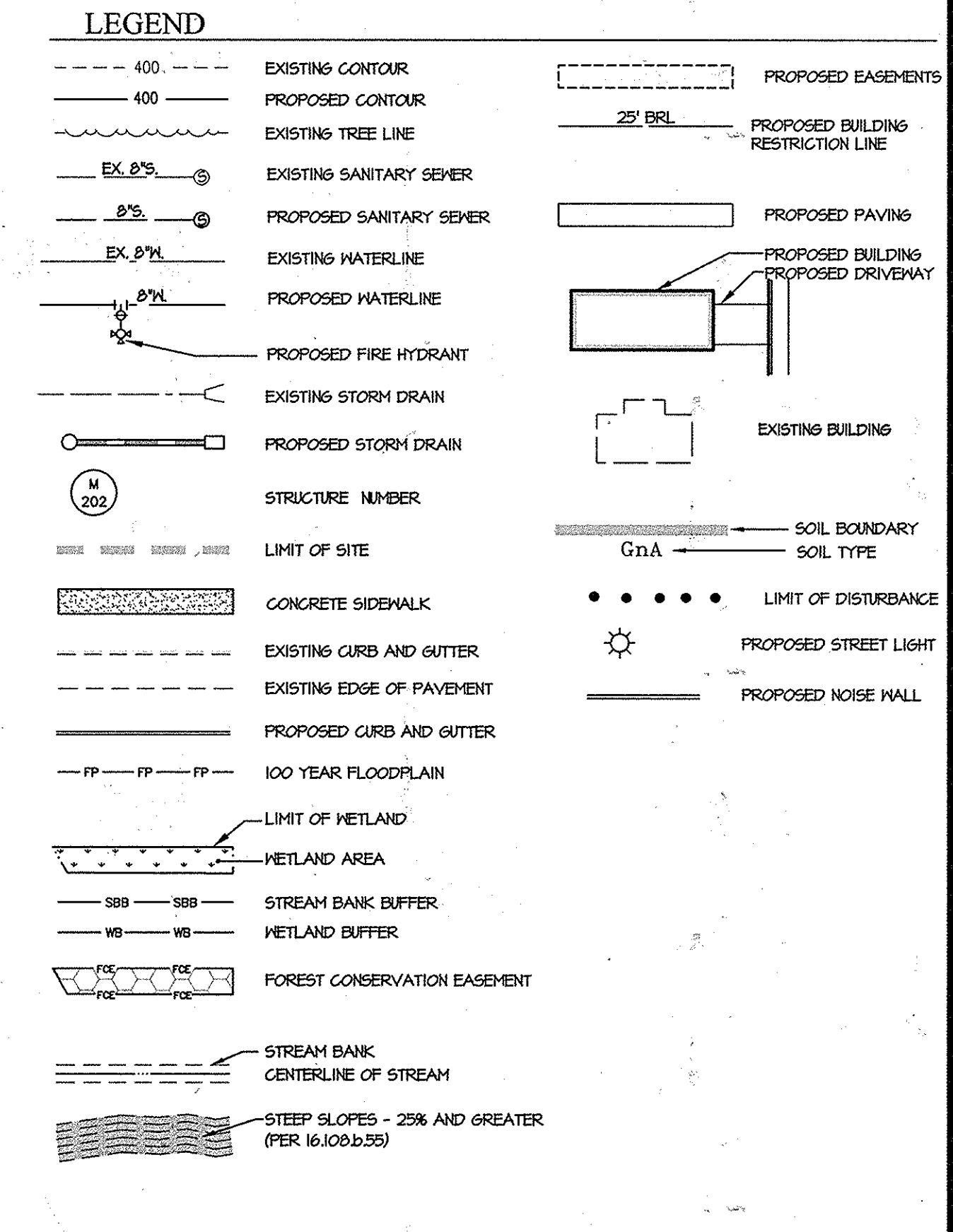
Pool Parking:
 Standard Units - 58 x 2.0 = 116 spaces
 MIHUs - 7 x 2.0 = 14 spaces
 Guest Parking - 65 x 0.5 = 33 spaces
 Pool Parking - 15 spaces (see Pool Calculations above)*
 Total - 118 spaces

Parking Proposed:
 Standard Units - 58 x 2 Sp / Garage = 116 spaces
 MIHUs - 7 x 1 Sp / Garage + 1 Sp / driveway or surface parking** = 14 spaces
 Guest and Pool - 43 parallel spaces on Glen Willow Way
 Total - 178 spaces

* The pool size is 1800 sf, a maximum of 5' deep, and can accommodate a maximum of 150 people as confirmed by an email from the Health Department on Oct. 22-23, 2014.
 ** One car per surface parking spaces are provided for units 162, 163, 172, & 173 and will be reserved parking for these units only and enforced by the Homeowners Association.

SETBACK REQUIREMENTS
 PER 122.4 (R-A-15) AND 128.6.4 (TRADITIONAL RESIDENTIAL NEIGHBORHOODS)

SETBACK TYPE	SETBACK (SINGLE FAMILY ATTACHED)
FROM EXTERNAL ARTERIAL OR MAJOR COLLECTOR PUBLIC STREET RIGHT OF WAY	
(1) STRUCTURES	
(a) FRONT OR SIDE	30'
(b) REAR	50'
(2) USES	30'
FROM OTHER EXTERNAL PUBLIC STREET RIGHT OF WAY	
(1) STRUCTURES	
(a) SFA FRONT OR SIDE	20'
(b) REAR	40'
(2) USES	20'
FROM INTERNAL PUBLIC STREET RIGHT OF WAY	
FRONT OR SIDE	0'
FROM INTERNAL ALLEY RIGHT OF WAY	
SIDE OR REAR	0'
FROM VICINAL PROPERTIES - FOR ALL STRUCTURES AND USES IN A SPA DEVELOPMENT PROJECTS	
1. FROM R-15, R-20, R-12, R-ED OR R-SC DISTRICT OR A SINGLE FAMILY AREA OF A PCC, HI OR MVD DISTRICT	
(a) SFA	75'
(b) OTHER STRUCTURE OR USES	50'
2. FROM R-A-15 AND OTHER ZONING DISTRICT	
2 IF IT IS DETERMINED BY THE DED THAT SIGHT DISTANCE IS INADEQUATE AT THE INTERSECTIONS FOR WHICH TRUNCATION AS WAIVED, THEN THE APPROPRIATE EASEMENTS MUST BE ADDED TO THE PLAN/PLAT.	
(a) SFA	25'
(b) OTHER STRUCTURE OR USES	20'
BUILDINGS TO BUILDING	
FACE TO FACE	30'
FACE TO SIDE/REAR TO SIDE	30'
SIDE TO SIDE	15'
REAR TO REAR	60'
REAR TO REAR ACROSS AN ALLEY	100'
REAR TO FACE	100'



- SHEET INDEX**
- COVER SHEET
 - PRELIMINARY EQUIVALENT SKETCH PLAN
 - PRELIMINARY GRADING PLAN
 - PRELIMINARY STORM DRAIN DRAINAGE AREA MAP
 - PRELIMINARY LANDSCAPE PLAN
 - PRELIMINARY SEDIMENT CONTROL PLAN
 - LAND USE PLAN

OPEN SPACE TABULATION*

LOCATION	CREDITED O.S.	NON-CREDITED O.S.	TOTAL O.S.
LOT D-216	2,363 SF	2,360 SF	23,123 SF
LOT D-217	2,011 SF	123 SF	2,140 SF
LOT D-218	0 SF	484 SF	484 SF
LOT D-219	51,961 SF	2,711 SF	54,738 SF
TOTALS	15,341 SF	6,343 SF	21,690 SF

RECREATION OPEN SPACE TABULATION

LOCATION	AREA (Sq. Ft.)
0/5 D-216	2,361

Traditional Neighborhood Development (TND) Open Space Tabulation

LOCATION	PERIMETER (L.F.)	PUBLIC/PRIV. ROAD FRONTAGE REQUIRED	PUBLIC/PRIV. ROAD FRONTAGE PROPOSED	AREA REQUIRED	AREA PROPOSED
0/5 D-216	1000	250 L.F. (25%)	255 L.F. (25.5%)	***	2,361 SF.

*** THE TND AREA REQUIREMENT IS MET FOR SHIPLEY'S GRANT AS AN ENTIRE SUBDIVISION SEE DEVELOPMENT TRACKING CHART FOR CUMULATIVE OPEN SPACE TABULATIONS.

DEVELOPMENT TRACKING CHART AND SITE ANALYSIS FOR R-A-15 ZONE AREAS

PHASE	PARCEL NUMBER OR HOWARD COUNTY FILE No.	PLAN STATUS	DEVELOPMENT TRACKING CHART AND SITE ANALYSIS FOR R-A-15 ZONE AREAS									
			GROSS	100 YR. FLOODPLAIN	NET	MIN. O/S ¹ REQ'D	O/S PROV. ²	MIN. REC. O/S REQ'D	REC. O/S PROVIDED	MIN. REQ'D. TND O/S ³	TND O/S PROVIDED	
1	F 07-043/SDP-07-047	APPROVED	13.63 AC.	1.36 AC.	12.27 AC.	3.41 AC.	8.23 AC. (60%)	24,800 S.F.	55,307 S.F.	0.68 AC./29,686 S.F.	0.99 AC./43,157 S.F.	
2	F 07-059/SDP-07-048	APPROVED	5.81 AC.	0.00 AC.	5.81 AC.	1.45 AC.	0.65 AC. (11%)	24,800 S.F.	28,248 S.F.	0.29 AC./12,654 S.F.	0.85 AC./37,124 S.F.	
3	F 08-006/SDP-10-082	APPROVED	12.94 AC.	0.50 AC.	12.44 AC.	3.24 AC.	6.19 AC. (48%)	26,000 S.F.	27,840 S.F.	0.65 AC./28,183 S.F.	0.37 AC./16,126 S.F.	
4	F 09-088/SDP-10-082, SDP-10-87	APPROVED	5.77 AC.	0.00 AC.	5.77 AC.	1.44 AC.	1.68 AC. (30%)	26,000 S.F.	6,591 S.F.	0.29 AC./12,567 S.F.	0.15 AC./6,591 S.F.	
5	F 10-048/SDP-12-061, SDP-12-045	APPROVED	5.50 AC.	0.00 AC.	5.50 AC.	1.38 AC.	0.44 AC. (9%)	23,600 S.F.	9,396 S.F.	0.21 AC./9,148 S.F.	0 AC./0 S.F.	
6	F 11-026/SDP-12-061, SDP-12-045	APPROVED	4.20 AC.	0.00 AC.	4.20 AC.	1.05 AC.	0.00 AC.	33,200 S.F.	19,396 S.F.	0.04 AC./1,633 S.F.	0 AC./0 S.F.	
7	F 14-123/SDP-14-063 ⁵	PLANS SUBMITTED	6.60 AC.	0.00 AC.	6.60 AC.	1.65 AC.	1.73 AC. (26%)	36,200 S.F.	21,361 S.F.	0.33 AC./14,375 S.F.	0.49 AC./21,361 S.F.	
8	PARCEL D-2/5-14-003/P-15-002	PLANS SUBMITTED	6.60 AC.	0.00 AC.	6.60 AC.	1.65 AC.	1.73 AC. (26%)	36,200 S.F.	45,875 S.F.			
---	AMENITY CREDITS ^{7,8}											
CUMULATIVE TOTAL			55.20 AC.	1.86 AC.	53.34 AC.	13.80 AC.	18.92 AC. (35%)	203,700 S.F.	204,618 S.F.	2.76 AC./120,224 SF	2.85 AC./124,359 S.F.	

- DEVELOPMENT TRACKING CHART AND SITE ANALYSIS NOTES:**
- MINIMUM REQUIRED OPEN SPACE (O/S) IS CALCULATED AS 25% OF THE GROSS AREA.
 - PERCENT OPEN SPACE PROVIDED IS OF THE GROSS AREA.
 - MINIMUM REQUIRED RECREATION OPEN SPACE (ROS) FOR PHASE I-VI IS CALCULATED AS 400 SF PER UNIT.
 - MINIMUM REQUIRED TRADITIONAL NEIGHBORHOOD O/S IS CALCULATED AS 20% OF THE REQUIRED OPEN SPACE.
 - MINIMUM REQUIRED RECREATION OPEN SPACE FOR PHASE VII (PER THE 2013 COMPREHENSIVE ZONING PLAN WHICH REQUIRES AN ADDITIONAL 300 SF ROS PER LOT FOR LOTS WITHOUT A 15 FT USABLE YARD) - 13 LOTS x 700 SF = 9,100 SF.
 - MINIMUM REQUIRED RECREATION OPEN SPACE FOR PHASE VIII (PER THE 2013 COMPREHENSIVE ZONING REGULATIONS EFFECTIVE 10/06/13 WHICH REQUIRES AN ADDITIONAL 300 SF ROS PER LOT FOR LOTS D-151 THRU D-154, D-161 THRU D-180 AND D-186 THRU D-194 WHICH DO NOT HAVE A 15 FT USABLE YARD) - 34 LOTS x 700 SF = 23,800 SF + 31 LOTS x 400 SF = 12,400 SF FOR A TOTAL OF 36,200 SF. SEE REQUIRED RECREATION OPEN SPACE CALCULATIONS IN SITE ANALYSIS ABOVE.
 - 13,520 SF OF RECREATION OPEN SPACE HAS BEEN INCLUDED USING AMENITY FEATURE AREA CREDITS APPROVED BY DPZ (PER THE 6/15/2012 POLICY MEMO), INCLUDING 3,960 SF FOR A COMMUNITY CENTER, 3,960 SF FOR A COMMUNITY POOL, 2,000 SF FOR A GAZEBO, 2000SF FOR A TOT LOT, AND 1,600 SF FOR BENCHES AS OUTLINED IN A LETTER TO DPZ DATED 1/17/2013. CREDITS FOR THE COMMUNITY CENTER AND POOL MAY BE INCREASED IF A REGULATION OR A DPZ POLICY INCREASES THE VALUE FOR THESE MAJOR RECREATIONAL FACILITIES. IF A CREDIT VALUE IS INCREASED, A REDLINE TO THIS PLAN WILL BE REQUIRED TO UPDATE THE CHART AND THE CREDIT VALUES.
 - 32,355 SF OF RECREATION OPEN SPACE HAS BEEN INCLUDED USING AMENITY FEATURE AREA CREDITS APPROVED BY DPZ (PER THE 6/15/2012 POLICY MEMO), INCLUDING 5,520 SF FOR A COMMUNITY CENTER, 5,520 SF FOR A COMMUNITY POOL (4,740 SF EACH FOR THE POOL AND COMMUNITY CENTER IN PHASE 8 AND 780 SF EACH WAS ADDED FOR THE COMMUNITY CENTER AND POOL ON LOT C-135 FOR THE 78 LOTS IN PHASES 7 & 8 THAT WERE NOT INCLUDED IN THE ORIGINAL CREDIT) AND 21,315 SF FOR ASPHALT PATHWAYS AS OUTLINED IN A LETTER TO DPZ DATED 10/1/2014 CREDITS FOR THE COMMUNITY CENTER AND POOL MAY BE INCREASED IF A REGULATION OR A DPZ POLICY INCREASES THE VALUE FOR THESE MAJOR RECREATIONAL FACILITIES. IF A CREDIT VALUE IS INCREASED, A REDLINE TO THIS PLAN WILL BE REQUIRED TO UPDATE THE CHART AND THE CREDIT VALUES.
 - INCLUDES ADDITIONAL TND OS ADDED BY REDLINE TO SDP-07-047 IN JANUARY 2013
 - INCLUDES ADDITIONAL TND OS ADDED BY REDLINE TO SDP-10-082 IN JANUARY 2013

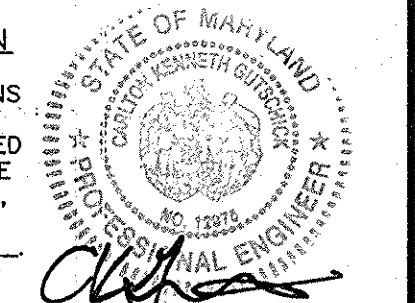
TENTATIVELY APPROVED DEPT. OF PLANNING AND ZONING OF HOWARD COUNTY
 11-13-15
 PLANNING DIRECTOR DATE

GLWGutschick Little & Weber, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20886
 TEL: 301-421-4024 BALT. 410-880-1820 DC/WA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APPR.

PREPARED FOR:
 BA WATERLOO TOWNHOUSES, LLC
 C/O BOZOTTO HOMES, INC.
 6406 IVY LANE, SUITE 700
 GREENBELT, MARYLAND 20770
 ATTN: CHRIS BLOCK
 301-623-3672

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE PLANS 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. 12925
 EXPIRATION DATE: MAY 28, 2016



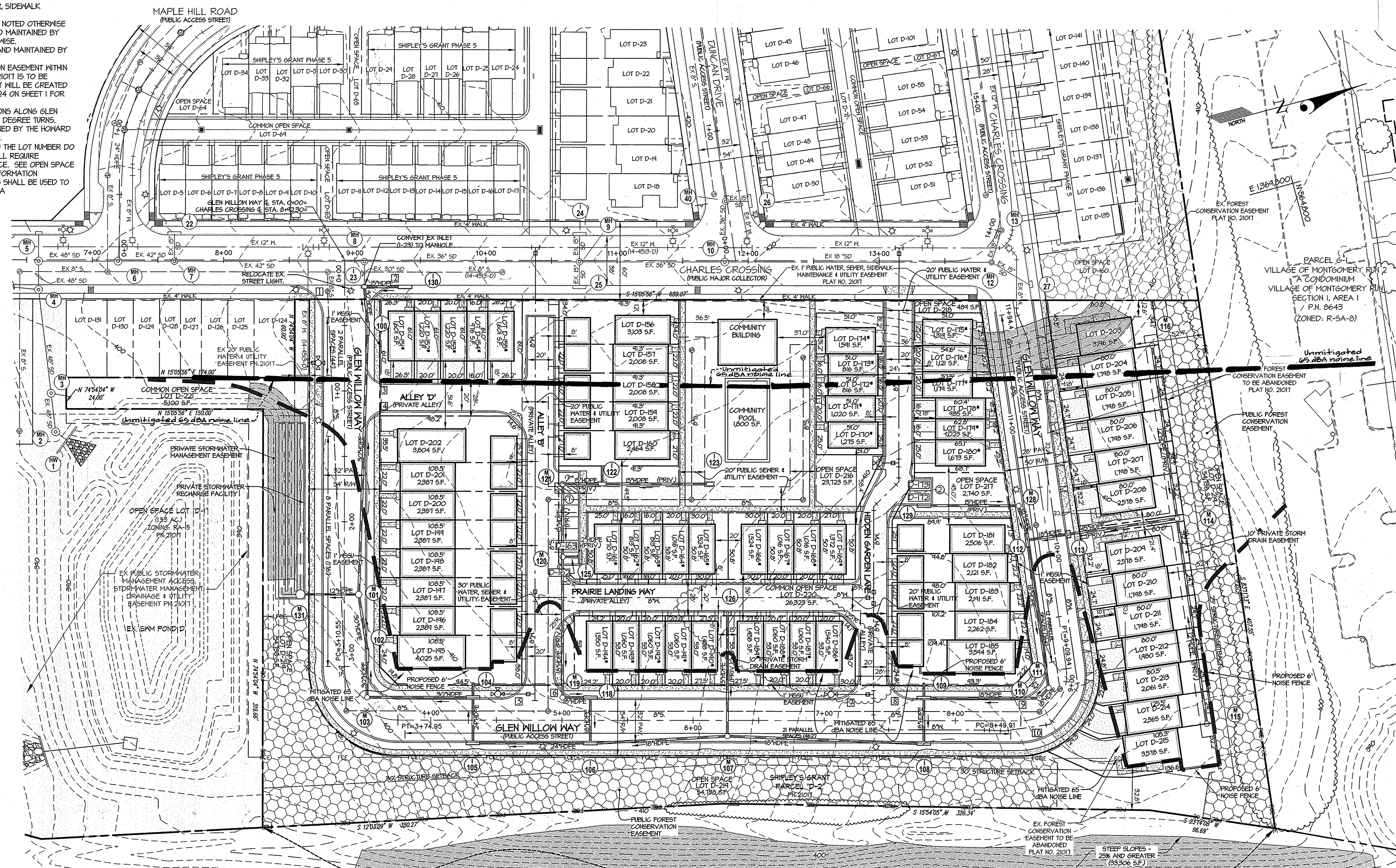
COVER SHEET
PHASE VIII
SHIPLEY'S GRANT
 Lots D-151 - D-215, Open Space Lots D-216 - D-219,
 Common Open Space Lot D-220 & D-221
 A Resubdivision of Parcel D-2 (PN: 21017) and Common Open Space Lot D-134 (PN: 21270)
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT No. 1

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	R-A-15	13063
DATE	TAX MAP - GRID	SHEET
OCT, 2015	37-1&2	1 OF 7

- NOTES:
1. MSSU DENOTES PUBLIC WATER, SEWER, SIDEWALK MAINTENANCE & UTILITY EASEMENT
 2. ALL STORM DRAIN IS PUBLIC UNLESS NOTED OTHERWISE
 3. ALL PUBLIC ROADS ARE OWNED AND MAINTAINED BY HOWARD COUNTY UNLESS NOTED OTHERWISE.
 4. ALL PRIVATE ALLEYS ARE OWNED AND MAINTAINED BY THE HOME OWNER'S ASSOCIATION.
 5. THE EXISTING FOREST CONSERVATION EASEMENT WITHIN PARCEL D-2 SHOWN ON PLAT NUMBER 21017 IS TO BE ABANDONED. A NEW FOREST EASEMENT WILL BE CREATED WITH THIS PHASE. SEE GENERAL NOTE 24 ON SHEET 1 FOR ADDITIONAL INFORMATION.
 6. THERE WILL BE PARKING RESTRICTIONS ALONG GLEN WILLOW WAY PARTICULARLY AT THE 90 DEGREE TURNS. THESE RESTRICTIONS WILL BE DETERMINED BY THE HOWARD COUNTY TRAFFIC DIVISION IN THE FIELD.
 7. LOTS WITH AN ASTERISK (*) NEXT TO THE LOT NUMBER DO NOT HAVE A 15' USABLE YARD AND WILL REQUIRE ADDITIONAL RECREATIONAL OPEN SPACE. SEE OPEN SPACE CHART ON SHEET 1 FOR ADDITIONAL INFORMATION.
 8. BUILDING CONSTRUCTION MATERIALS SHALL BE USED TO REDUCE THE INTERIOR SOUND TO 45 DBA

STREET LIGHT LOCATIONS			
STREET	STATION	OFFSET	TYPE
CHARLES CROSSING	8+48	22.67' RIGHT	100 MATT
GLEN WILLOW WAY	1+22	20.10' RIGHT	100 MATT
GLEN WILLOW WAY	4+85	20.10' RIGHT	100 MATT
GLEN WILLOW WAY	7+40	20.10' RIGHT	100 MATT
GLEN WILLOW WAY	10+50	20.10' LEFT	100 MATT

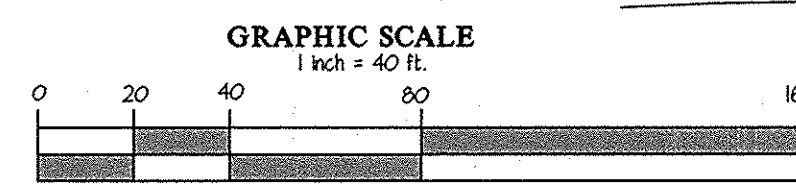
NOTE:
ALL STREET LIGHTS TO BE HPS VAPOR PREMIER POST-TOP FIXTURE MOUNTED ON A 1 1/2" BLACK FIBERGLASS POLE.



CURB FILLET TABLE			
NO.	RADIUS	LENGTH	END
1	25.00'	34.21'	PT: 0+44.00 16'R (C)
2	25.00'	34.21'	PT: 9+33.30 14'R (C)
3	15.00'	23.56'	PT: 0+95.00 31'L (G)
4	15.00'	23.56'	PT: 1+30.00 16'L (G)
5	20.00'	31.42'	PT: 4+13.45 36'L (G)
6	20.00'	31.42'	PT: 5+13.45 16'L (G)
7	20.00'	31.42'	PT: 4+21.64 36'L (G)
8	20.00'	31.42'	PT: 7+69.64 16'L (G)
9	25.00'	42.84'	PT: 8+44.93 16'L (G)
10	51.00'	87.44'	PT: 8+47.88 16'R (G)

NOTE: (G) = GLEN WILLOW WAY (C) = CHARLES CROSSING

CURVE DATA CHART - GLEN WILLOW WAY							
CURVE	STREET NAME	PC STA.	PT STA.	RADIUS	TANGENT	ARC	BEARING
C1	GLEN WILLOW WAY	3+10.55	3+74.95	41.00'	41.00'	64.40'	N 60°05'56" E 40°00'00"
C2	GLEN WILLOW WAY	8+44.91	9+04.94	35.00'	40.47'	60.04'	N 34°02'34" W 48°10'15"



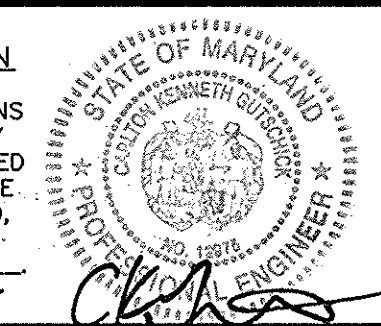
TENTATIVELY APPROVED DEPT. OF PLANNING AND ZONING OF HOWARD COUNTY
Valm... 11-15-15
 PLANNING DIRECTOR DATE

GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20886
 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APPR.

PREPARED FOR:
 BA WATERLOO TOWNHOUSES, LLC
 C/O BOZZUTO HOMES, INC.
 6406 IVY LANE, SUITE 700
 GREENBELT, MARYLAND 20770
 ATTN: CHRIS BLOCK
 301-623-3672

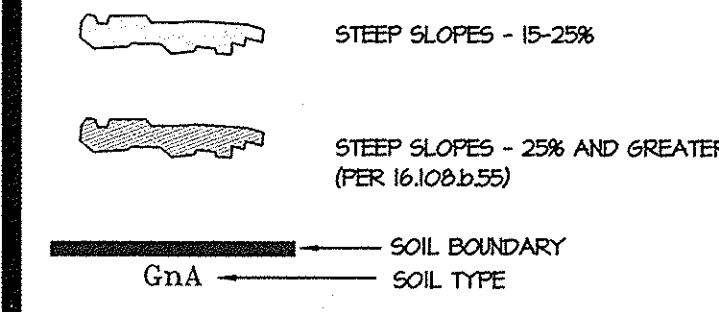
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 12375, EXPIRATION DATE: MAY 26, 2016



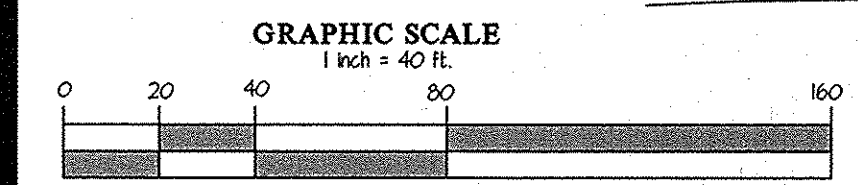
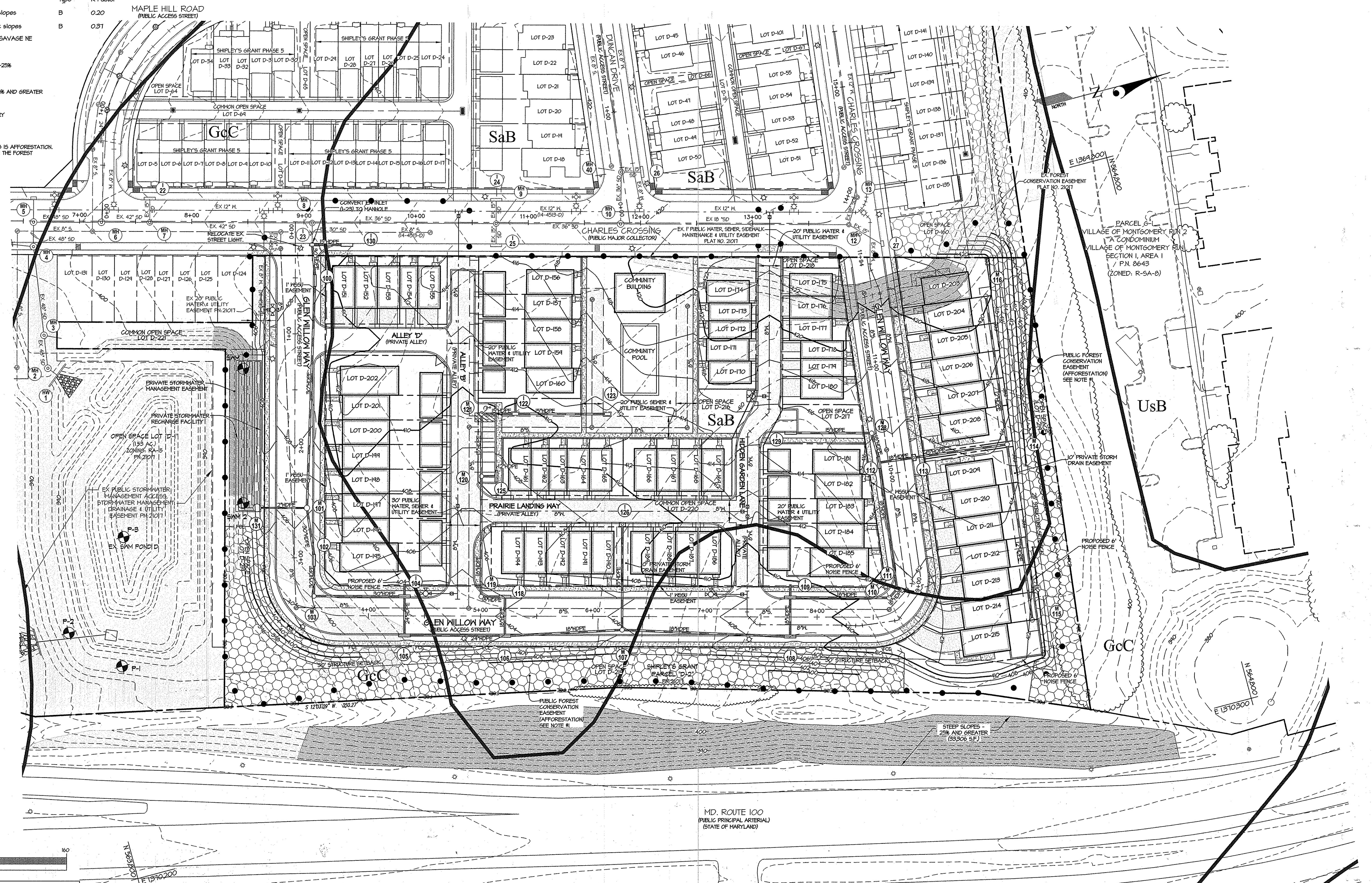
PRELIMINARY PLAN
PHASE VIII
SHIPLEY'S GRANT
 Lots D-151 - D-215, Open Space Lots D-216 - D-219,
 Common Open Space Lot D-220 & D-221
 A Resubdivision of Parcel D-2 (PN: 21017) and Common Open Space Lot D-134 (PN:21720)
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT No. 1

SCALE	ZONING	G. L. W. FILE NO.
1"=40'	R-A-15	13063
DATE	TAX MAP - GRID	SHEET
OCT, 2015	37- 1&2	2 OF 7

SOIL S (on site)
 Map Unit Name Type K Factor
 GgC Glenelg loam, 8 to 15 percent slopes B 0.20
 SaB Sassafras loam, 2 to 5 percent slopes B 0.31
 HOWARD COUNTY SOIL MAP NUMBER: 14 - SAVAGE NE



NOTES:
 1. ALL FOREST CONSERVATION ON PHASE 8 IS AFFORESTATION.
 ALL GRADING SHOWN WILL OCCUR BEFORE THE FOREST CONSERVATION EASEMENT IS PLANTED.



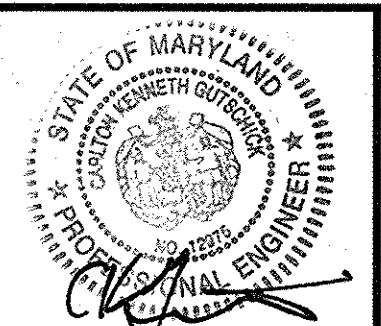
TENTATIVELY APPROVED DEPT. OF PLANNING AND ZONING OF HOWARD COUNTY
 11-13-15
 PLANNING DIRECTOR DATE

GLWGUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20866
 TEL: 301-421-4024 BALT: 410-880-1820 DC/WA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	DRN. dds	CHK.

PREPARED FOR:
 BA WATERLOO TOWNHOUSES, LLC
 C/O BOZUTTO HOMES, INC.
 6408 IVY LANE, SUITE 700
 GREENBELT, MARYLAND 20770
 ATTN: CHRIS BLOCK
 301-623-3672

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE PLANS 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. 129, 2016
 EXPIRATION DATE: MAY 28, 2016
 10/6/15



PRELIMINARY GRADING PLAN
 PHASE VIII
SHIPLEY'S GRANT
 Lots D-151 - D-215, Open Space Lots D-216 - D-219,
 Common Open Space Lot D-220 & D-221
 A Resubdivision of Parcel D-2 (PN: 21017) and Common Open Space Lot D-134 (PN:21720)
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT No. 1

SCALE	ZONING	G. L. W. FILE No.
1"=40'	R-A-15	13063
DATE	TAX MAP - GRID	SHEET
OCT, 2015	37- 1&2	3 OF 7

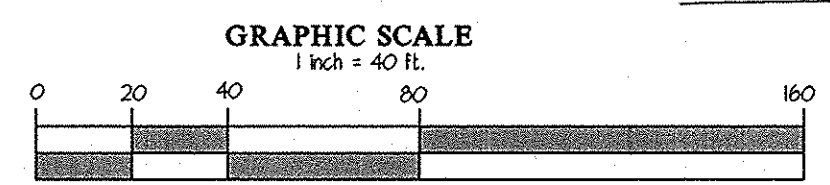
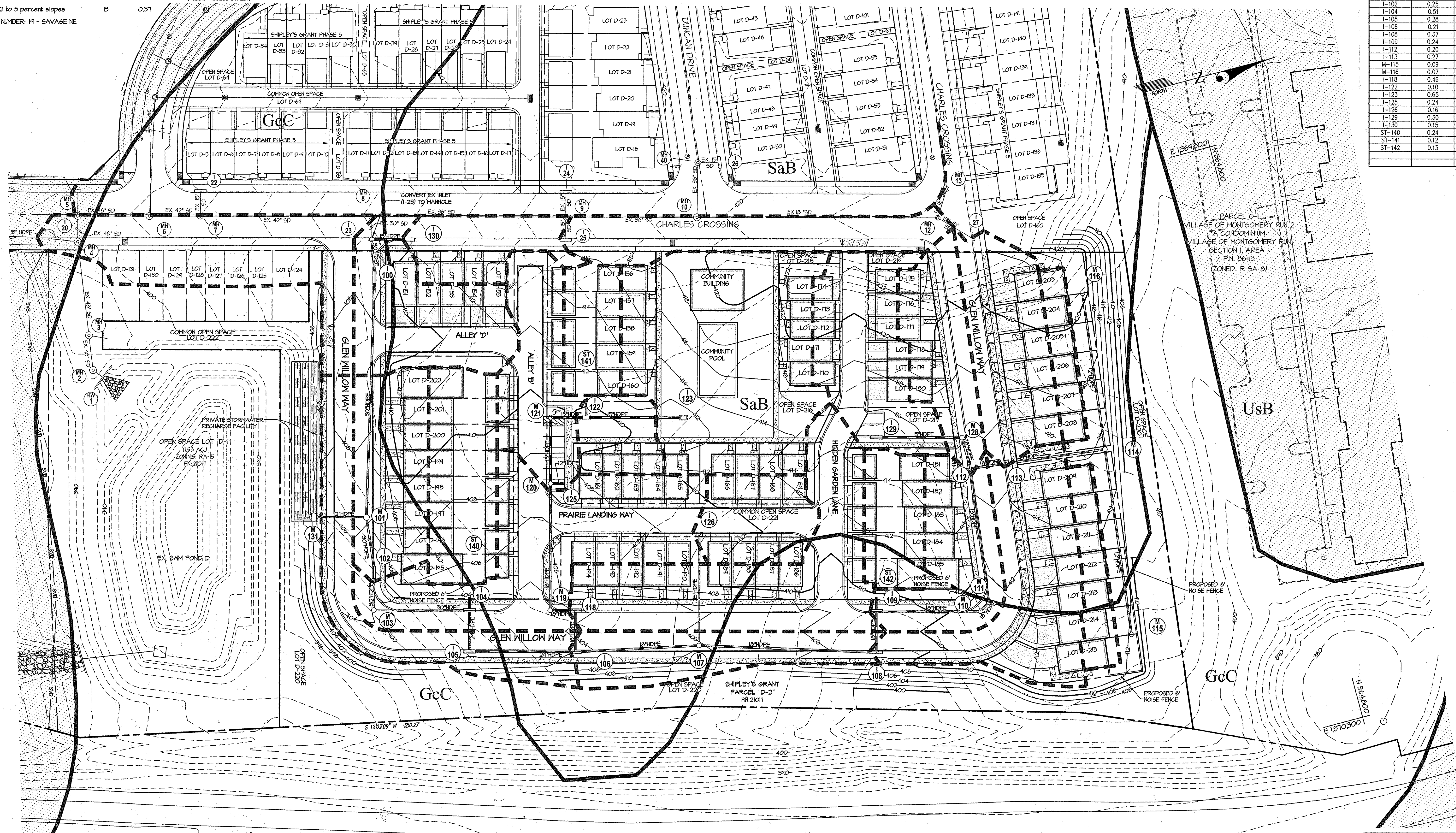
Soils (on site)
 Map Unit Name
 GgC Glenely loam, 8 to 15 percent slopes
 SaB Sassafras loam, 2 to 5 percent slopes
 HOWARD COUNTY SOIL MAP NUMBER: 14 - SAVAGE NE

Type
 B
 B

K Factor
 0.20
 0.37

MAPLE HILL ROAD
 (PUBLIC ACCESS STREET)

'C' FACTOR COMPUTATIONS			
STRUCTURE	AREA (AC.)	'C'	IMPERVIOUS
I-100	0.29	0.76	85%
I-102	0.25	0.76	85%
I-104	0.51	0.76	85%
I-105	0.28	0.76	85%
I-106	0.21	0.76	85%
I-108	0.37	0.76	85%
I-109	0.24	0.76	85%
I-112	0.20	0.76	85%
I-113	0.27	0.76	85%
M-115	0.09	0.76	85%
M-116	0.07	0.76	85%
I-118	0.46	0.76	85%
I-122	0.10	0.76	85%
I-123	0.65	0.76	85%
I-125	0.24	0.76	85%
I-126	0.16	0.76	85%
I-129	0.30	0.76	85%
I-130	0.15	0.76	85%
ST-140	0.24	0.76	85%
ST-141	0.12	0.76	85%
ST-142	0.13	0.76	85%



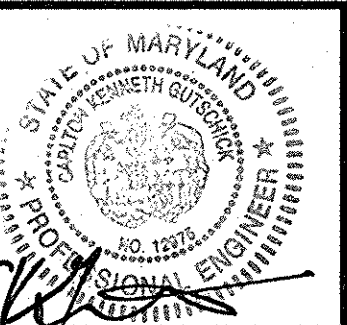
TENTATIVELY APPROVED DEPT. OF PLANNING AND ZONING OF HOWARD COUNTY
 11-13-15
 PLANNING DIRECTOR DATE

GLWGUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20866
 TEL: 301-421-4024 BALT: 410-880-1820 DC/WA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APPR.

PREPARED FOR:
 BA WATERLOO TOWNHOUSES, LLC
 C/O BOZZUTO HOMES, INC.
 6406 IVY LANE, SUITE 700
 GREENBELT, MARYLAND 20770
 ATTN: CHRIS BLOCK
 301-623-3672

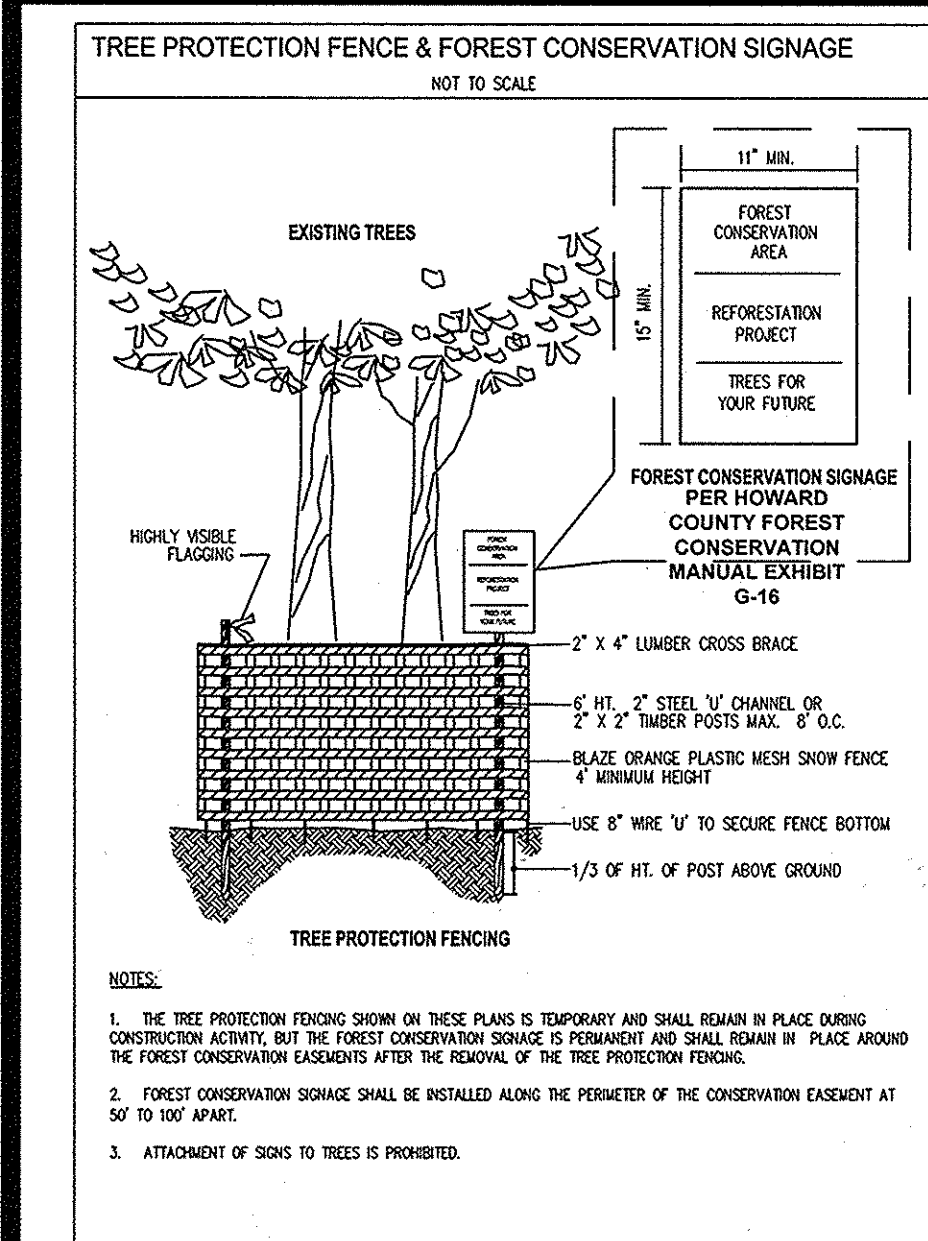
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 12975
 EXPIRATION DATE: MAY 28, 2015
 10/6/15



PRELIMINARY STORM DRAIN DRAINAGE AREA MAP
 PHASE VIII
SHIPLEY'S GRANT
 Lots D-151 - D-215, Open Space Lots D-216 - D-219,
 Common Open Space Lot D-220 & D-221
 A Resubdivision of Parcel D-2 (PN: 21017) and Common Open Space Lot D-134 (PN: 21720)
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT No. 1

LEGEND		
	STORM DRAIN DRAINAGE DIVIDE	
	'B' TYPE SOILS	
	'D' TYPE SOILS	

SCALE	ZONING	G. L. W. FILE No.
1"=40'	R-A-15	13063
DATE	TAX MAP - GRID	SHEET
OCT, 2015	37- 1&2	4 OF 7



TREE PLANTING AND MAINTENANCE CALENDAR

TASKS	MONTHS											
	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
TRANSPLANT OF 2" DBH OR GREATER												
PLANTING SEEDLINGS, WHIPS												
MINIMUM MONITORING												
FERTILIZER + (IF NEEDED)												
WATER ++												
PRUNING												

KEY

- * ACTIVITIES DURING THESE MONTHS ARE DEPENDENT UPON GROUND CONDITIONS
- GREATLY RECOMMENDED
- ▨ RECOMMENDED WITH ADDITIONAL CARE
- ▩ RECOMMENDED
- DEPENDENT UPON SITE CONDITIONS
- ++ DEPENDENT UPON SITE CONDITIONS; WEEKLY WATERING IS GREATLY RECOMMENDED FROM MAY THROUGH OCTOBER UNLESS WEEKLY RAINFALL EQUALS 1"

NOTE: THE PLANTING AND CARE OF TREES IS MOST SUCCESSFUL WHEN COORDINATED WITH THE LOCAL CLIMATE CONDITIONS. THIS CALENDAR SUMMARIZES SOME OF THE RECOMMENDED TIME FRAMES FOR BASIC REFORESTATION AND CARE ACTIVITIES.

SOURCE: ADAPTED FROM THE MARYLAND STATE FOREST CONSERVATION MANUAL

GENERAL NOTES

- THIS REFORESTATION PLAN IS PROVIDED IN ACCORDANCE WITH THE REQUIREMENTS OF SUBTITLE 12 "FOREST CONSERVATION" OF THE HOWARD COUNTY CODE.
- IMPLEMENTATION OF THIS PLAN MUST BE PERFORMED BY A CONTRACTOR THAT IS KNOWLEDGEABLE AND EXPERIENCED IN AFFORESTATION/REFORESTATION TECHNIQUES AND PRACTICES.
- THE OWNER IS RESPONSIBLE FOR A 2-YEAR (MIN.) POST-CONSTRUCTION MAINTENANCE PERIOD WHICH INVOLVES ACTIVITIES NECESSARY TO ENSURE SURVIVAL AND GROWTH OF THE CONSERVATION AREA. TWO INSPECTIONS PER YEAR BY A QUALIFIED PROFESSIONAL AT BEGINNING AND END OF THE GROWING SEASON, ARE RECOMMENDED IN ORDER TO TAKE REMEDIAL STEPS AS NECESSARY. IF, AFTER ONE YEAR, THE POSSIBILITY EXISTS THAT THE ORIGINAL PLANTING (IF APPLICABLE) WILL NOT MEET SURVIVAL RATE STANDARDS, THE APPLICANT MAY CHOOSE TO ESTABLISH REINFORCEMENT PLANTINGS.
- AT THE END OF THE POST-CONSTRUCTION MANAGEMENT AND PROTECTION PERIOD, CERTIFICATION BY A QUALIFIED CONSULTANT WILL BE REQUIRED BEFORE THE OWNER CAN BE RELEASED FROM HIS/HER FOREST CONSERVATION OBLIGATION TO THE ADMINISTRATOR OF THE HOWARD COUNTY FOREST CONSERVATION PROGRAM.
- THE DEVELOPER/BUILDER SHALL (IN WRITING) NOTIFY ALL LOT OWNERS OF THIS DEVELOPMENT OF THE EXISTENCE OF FOREST CONSERVATION AREAS AND THAT DISTURBANCE TO THE FOREST CONSERVATION AREAS OR THE REMOVAL OF FOREST CONSERVATION SIGNAGE IS PROHIBITED.
- REFORESTATION/AFFORESTATION TREE PLANTINGS SHOULD BE INSTALLED IN A CURVILINEAR PATTERN TO FACILITATE MAINTENANCE BUT AVOID A GRID APPEARANCE. EACH SPECIES OF TREE SHALL BE DISTRIBUTED EVENLY WITHIN EACH FOREST CONSERVATION EASEMENT AREA.
- THE FOREST CONSERVATION EASEMENT SHALL BE ESTABLISHED AT FINAL PLAN STAGE TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION MANUAL. 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 BUFFERS SHOWN IN THE SCHEDULES ARE IN ACCORDANCE WITH THE LANDSCAPE MANUAL, CHAPTER IV, TABLE 1:

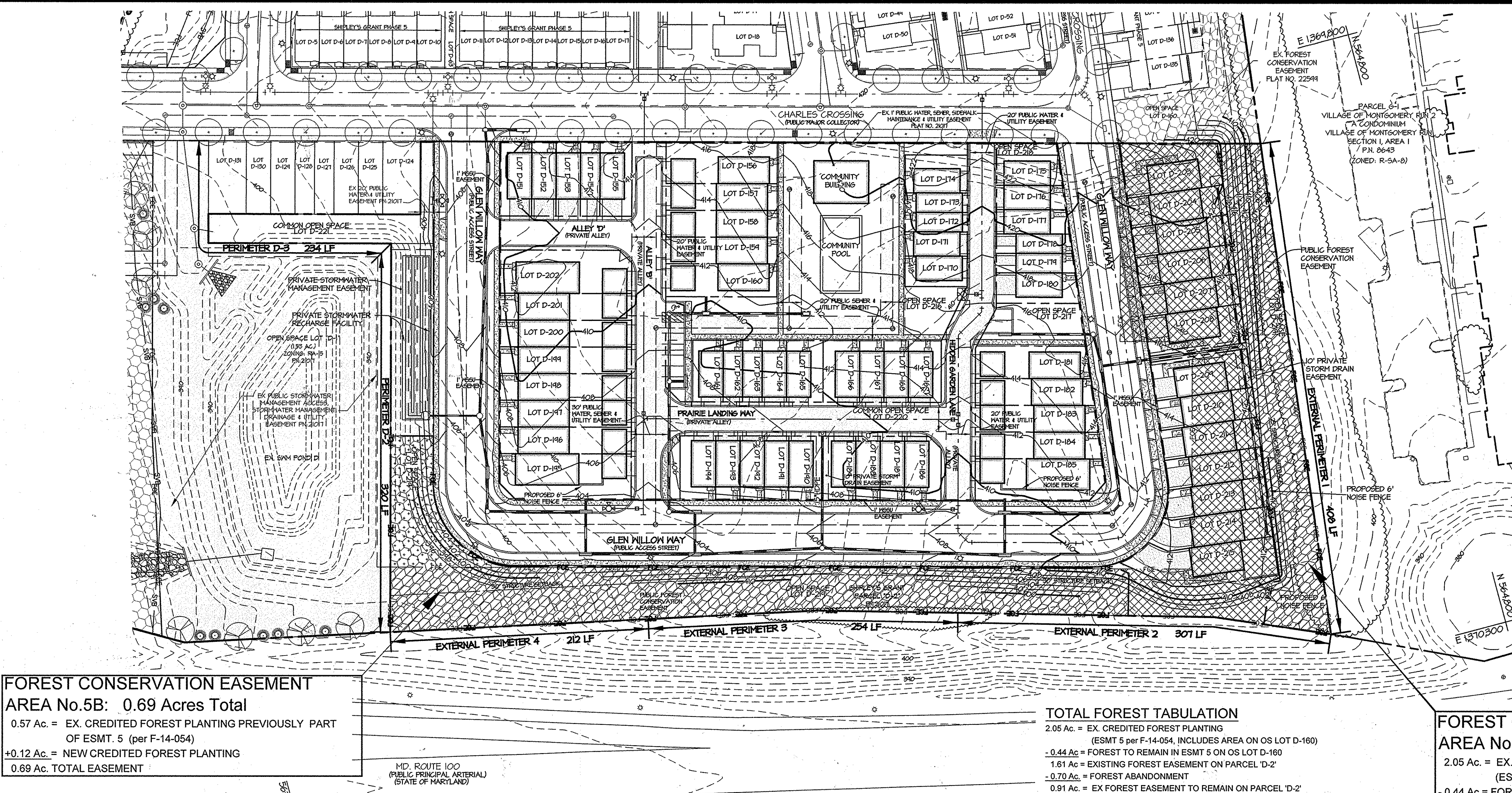
EDGE TYPE	LANDSCAPE CHARACTER	SHADE TREES/LF	EVERGREEN/LF	SHRUBS/LF
A	LIGHT BUFFER	1:60	0	0
B	MODERATE BUFFER	1:50	1:40	0
C	HEAVY BUFFER	1:40	1:20	0

NOTE: STREET TREES SHALL BE PROVIDED AT FINAL PLAN STAGE.

TENTATIVELY APPROVED DEPT. OF PLANNING AND ZONING OF HOWARD COUNTY

William J. ... 11-13-15
PLANNING DIRECTOR **DATE**

GLWGutschick Little & Weber, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTOWNSVILLE OFFICE PARK
 BURTOWNSVILLE, MARYLAND, 20868
 TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186



FOREST CONSERVATION EASEMENT AREA No. 5B: 0.69 Acres Total
 0.57 Ac. = EX. CREDITED FOREST PLANTING PREVIOUSLY PART OF ESMT. 5 (per F-14-054)
 +0.12 Ac. = NEW CREDITED FOREST PLANTING
 0.69 Ac. TOTAL EASEMENT

FOREST CONSERVATION EASEMENT AREA No. 5A: 0.34 Acres Total
 2.05 Ac. = EX. CREDITED FOREST PLANTING (ESMT 5 per F-14-054, INCLUDES AREA ON OS LOT D-160)
 -0.44 Ac = FOREST TO REMAIN IN ESMT 5 ON OS LOT D-160
 1.61 Ac = EXISTING FOREST EASEMENT ON PARCEL 'D-2'
 -0.70 Ac = FOREST ABANDONMENT
 0.91 Ac = EX FOREST EASEMENT TO REMAIN ON PARCEL 'D-2'
 +0.12 Ac = NEW CREDITED FOREST EASEMENT
 1.03 Ac = TOTAL CREDITED FOREST EASEMENT IN PHASE 8
 +0.58 Ac = TOTAL FOREST ABANDONMENT FEE
 1.61 Ac.

CONSTRUCTION PERIOD PROTECTION PROGRAM (at Final Plan stage)

- THE LIMIT OF FOREST RETENTION SHALL BE STAKED AND FLAGGED.
- A PRE-CONSTRUCTION MEETING AT THE SITE SHOULD BE HELD TO CONFIRM THE LIMITS OF CLEARING SPECIFIED. THE MEETING SHOULD INCLUDE THE OWNER OR THE OWNER'S REPRESENTATIVE, THE ON-SITE FOREMAN IN CHARGE OF LAND DISTURBANCE, THE ENVIRONMENTAL CONSULTANT AND THE APPROPRIATE HOWARD COUNTY INSPECTORS.
- FOREST PROTECTION DEVICES AND SIGNS (SEE DETAILS) SHALL BE INSTALLED PRIOR TO ANY CLEARING OR GRADING. THE PROTECTION DEVICES AND SIGNS SHALL BE MAINTAINED DURING THE ENTIRE CONSTRUCTION PERIOD. NONE OF THE DEVICES SHALL BE ANCHORED OR ATTACHED IN ANY WAY TO THE TREES TO BE SAVED.
- EQUIPMENT, VEHICLES AND BUILDING MATERIALS SHALL NOT BE WITHIN THE PROTECTED AREA. ACTIVITIES STRICTLY TO IMPLEMENT ANY REFORESTATION PLANTING AND MAINTENANCE (I.E. WATERING, FERTILIZING, THINNING, PRUNING, REMOVAL OF DEAD AND DISEASED TREES WHERE NECESSARY, ETC.) OF THE CONSERVATION AREA ARE PERMITTED. CLEARING FOR THE PURPOSE OF SOODING OR PLANTING GRASS IS NOT PERMITTED WITHIN THE FOREST CONSERVATION AREAS ONCE THEY'RE ESTABLISHED.
- AT THE END OF THE CONSTRUCTION PERIOD, THE DESIGNATED QUALIFIED PROFESSIONAL SHALL CONVEY TO THE ADMINISTRATOR OF THE HOWARD COUNTY FOREST CONSERVATION PROGRAM CERTIFICATION THAT ALL FOREST RETENTION AREAS HAVE BEEN PRESERVED, ALL REFORESTATION AND/OR AFFORESTATION PLANTINGS (IF APPLICABLE) HAVE BEEN INSTALLED AS REQUIRED BY THE FOREST CONSERVATION PLAN, AND THAT ALL PROTECTION MEASURES REQUIRED FOR THE POST-CONSTRUCTION PERIOD HAVE BEEN INSTALLED. UPON REVIEW OF THE FINAL CERTIFICATION DOCUMENT FOR COMPLETENESS AND ACCURACY, THE PROGRAM COORDINATOR WILL NOTIFY THE OWNER OF RELEASE FROM THE CONSTRUCTION PERIOD OBLIGATIONS. THE 2-YEAR (MIN.) POST-CONSTRUCTION MANAGEMENT AND PROTECTION PERIOD THEN COMMENCES.

FOREST CONSERVATION PROGRAM SEQUENCE (at Final Plan stage)

- OBTAIN ALL NECESSARY PERMITS.
- STAKEOUT LIMITS OF DISTURBANCE.
- FIELD MEETING TO REVIEW AND VERIFY LIMIT OF DISTURBANCE FOR THE SITE GRADING AND CONSTRUCTION.
- INSTALL FOREST CONSERVATION SIGNS AND FOREST PROTECTION DEVICES (FENCES) ALONG THE PORTION OF THE LIMIT OF DISTURBANCE (THAT INVOLVES CLEARING AND/OR RETENTION OF TREES).
- COMMENCE SITE CONSTRUCTION.
- PREPARE SITE SOIL BY MULCHING AND REMOVAL OF TRASH AND WEEDS INCLUDING AN APPLICATION OF HERBICIDES TO CONTROL NOXIOUS WEEDS AND INVASIVE SPECIES.
- INSTALL FOREST PLANTING AND THE REMAINDER OF THE CONSERVATION SIGNS ALONG THE EDGE OF THE CONSERVATION EASEMENT. MOVE CONSERVATION SIGNS INSTALLED IN #4 (ABOVE) TO THE EDGE OF THE CONSERVATION EASEMENT.
- INSPECTION AND CERTIFICATION FOR THE RELEASE OF THE CONSTRUCTION PERIOD OBLIGATIONS; START OF POST-CONSTRUCTION MANAGEMENT PERIOD.
- POST-CONSTRUCTION MANAGEMENT FOR A PERIOD OF 2 YEARS (MIN.).
- FINAL INSPECTION AND CERTIFICATION FOR THE RELEASE OF THE OWNER'S FOREST CONSERVATION SURETY.

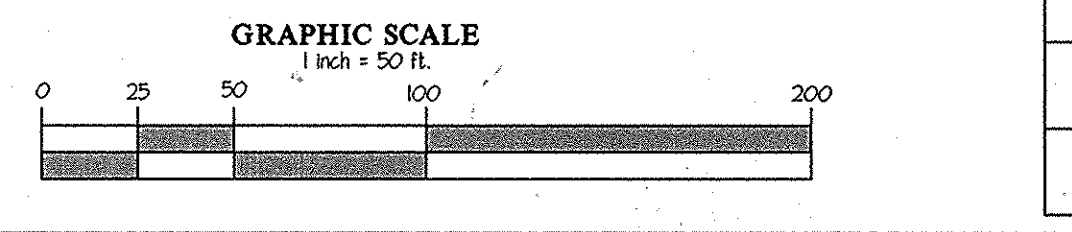
FOREST CONSERVATION NARRATIVE, SURETY, & ABANDONMENT (at Final Plan Stage)

WITH THIS PHASE, EXISTING FOREST CONSERVATION EASEMENT #5 WILL BE SPLIT INTO #5A AND #5B. WITH THIS SPLIT, 0.70 ACRES OF CREDITED FOREST CONSERVATION EASEMENT WILL BE ABANDONED. TO OFFSET THIS, 0.12 ACRES OF ADDITIONAL PLANTING WILL BE ADDED TO EASEMENT #5B AND AN ABANDONMENT FEE WILL BE PAID FOR THE REMAINING 0.58 AC.

NEW PLANTING (NOT PART OF F-06-019)
 FOREST CONSERVATION EASEMENT 5B HAS 0.12 ACRES OF ADDITIONAL PLANTING NOT PART OF F-06-019. THE FOREST CONSERVATION SURETY TO BE POSTED WITH THE DEVELOPER AGREEMENT IS \$0.50/SF OF THE REFORESTATION PLANTING. THE SURETY FOR THE ON-SITE REFORESTATION WOULD BE:
 5,227 S.F. x (\$0.50/SF) = \$2,614.00

ABANDONMENT
 0.58 ACRE OF EXISTING FOREST CONSERVATION EASEMENT WILL BE ABANDONED. THE ABANDONMENT FEE WILL BE:
 (0.58 ac) x (43,560 s.f./ac) x (\$120/S.F.) = \$30,318.00

THE SITE IS IN THE DNR 2109106 WATERSHED (Patapsco River Lower North Branch)



RESIDENTIAL LOT INTERNAL LANDSCAPING - SCHEDULE C

BUILDINGS TYPE	NUMBER OF PLANTS REQUIRED		NOTES
	SHADE TREES	SHRUBS	
SINGLE FAMILY ATTACHED	1 SHADE TREE PER SFA LOT (LOTS D-191 THRU D-216) 65 TREES	NONE REQUIRED	DEFERRED TO SDP
SINGLE FAMILY ATTACHED	B-BUFFER SHALL BE PROVIDED FOR SIDE/REAR OF LOTS ORIENTED TO ROADWAY (LOTS D-191, D-196, D-214, D-215, D-195, 4 D-195)		

PERIMETER PLANTING - SCHEDULE A

PERIMETER	LAND USE	ADJACENT LAND USE	TYPE OF BUFFER	LINEAR FEET OF ROADWAY FRONTAGE/ PERIMETER	CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) DESCRIBE BELOW IF NEEDED.	CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) DESCRIBE BELOW IF NEEDED.	NUMBER OF PLANTS REQUIRED			HOW REQUIRED BUFFER IS BEING PROVIDED
							SHADE TREES	EVERGREEN TREES	SHRUBS	
EXTERNAL PERIMETER 1	SFA SIDE/REAR	OTHER (APARTMENT)	'A' Buffer	400'	NO	NO	1	0	0	PLANTING LOCATION DEFERRED TO FINAL PLAN STAGE
EXTERNAL PERIMETER 2	SFA SIDE/REAR	ROADWAY	'C' Buffer	307'	NO	NO	8	15	0	
EXTERNAL PERIMETER 3	SFA FRONT	ROADWAY	No Buffer	254'	NO	NO	0	0	0	
EXTERNAL PERIMETER 4	SFA SIDE/REAR	ROADWAY	'C' Buffer	212'	NO	NO	5	11	0	

STORMWATER MANAGEMENT AREA - SCHEDULE D'

PERIMETER	LAND USE	ADJACENT LAND USE	TYPE OF BUFFER	LINEAR FEET OF ROADWAY FRONTAGE/ PERIMETER	CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) DESCRIBE BELOW IF NEEDED.	CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) DESCRIBE BELOW IF NEEDED.	NUMBER OF PLANTS REQUIRED			HOW REQUIRED BUFFER IS BEING PROVIDED
							SHADE TREES	EVERGREEN TREES	SHRUBS	
SNM PERIMETER D-2	SNM FACILITY	OPEN SPACE /ROADWAY	'B' Buffer	320'	NO	NO	6	8	0	PLANTING LOCATION DEFERRED TO FINAL PLAN STAGE
SNM PERIMETER D-3	SNM FACILITY	RESIDENTIAL	'B' Buffer	234'	NO	NO	5	6	0	DEFERRED TO SITE PLAN FOR LOTS D-124 THRU D-131

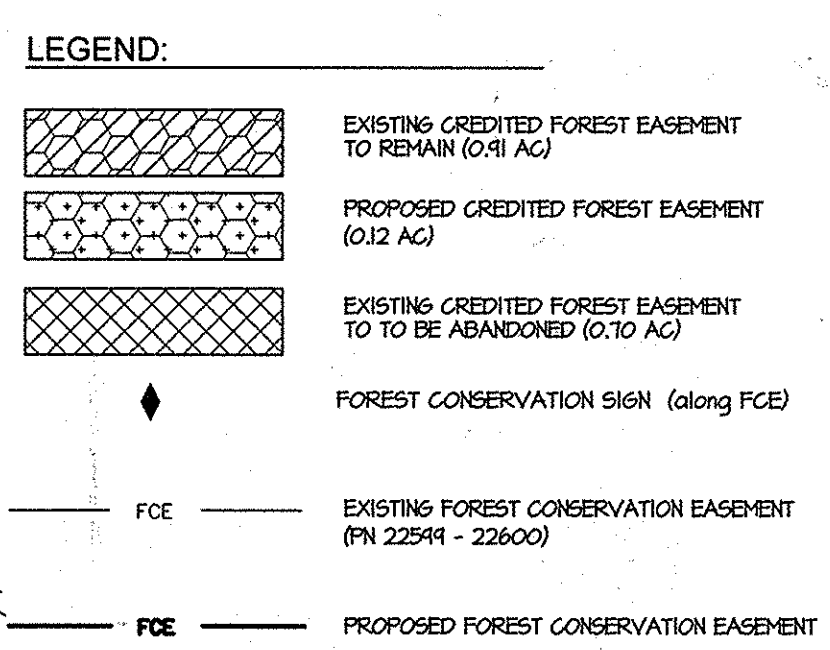
SCHEDULE-B: PARKING LOT INTERNAL LANDSCAPING

	PHASE 8
NUMBER OF PARKING SPACES	9
NUMBER OF SHADE TREES REQUIRED (1 PER 10 SPACES)	1
NUMBER OF ISLANDS REQUIRED	1
NUMBER OF TREES PROVIDED	DEFERRED TO FINAL PLAN STAGE
SHADE TREES	
OTHER TREES (2:1 SUBSTITUTION)	
NUMBER OF ISLANDS PROVIDED	

PUBLIC STREET TREE REQUIREMENTS

LOCATION	LINEAR FT. (CENTERLINE)	NUMBER OF TREES REQUIRED	NUMBER OF TREES PROVIDED
GLEN HOLLOW WAY	1164	58 (at approx. 40' o.c. each side)	58

STREET TREE LOCATIONS TO BE SHOWN ON FINAL PLANS



FOR APPROVED FOREST CONSERVATION WORKSHEET, SEE F-06-019

PRELIMINARY LANDSCAPE & FOREST CONSERVATION PLAN
 PHASE VIII
SHIPLEY'S GRANT
 Lots D-151 - D-215, Open Space Lots D-216 - D-219, Common Open Space Lot D-220 & D-221
 A Resubdivision of Parcel D-2 (PN: 21017) and Common Open Space Lot D-134 (PN:21720)
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT No. 1

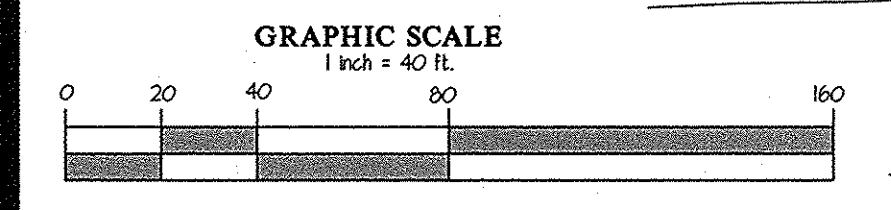
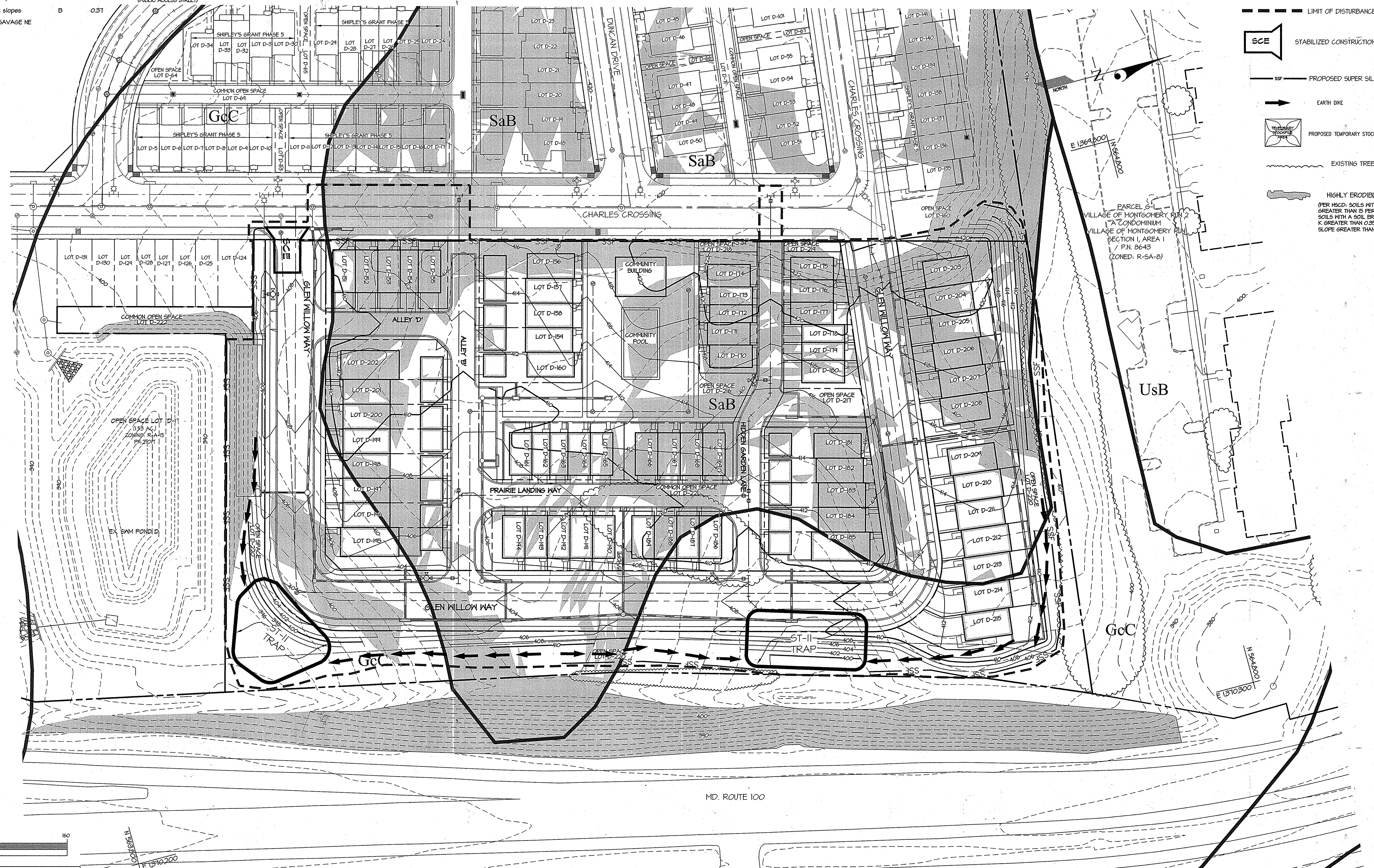
SCALE	ZONING	G. L. W. FILE No.
1"=50'	R-A-15	13063
DATE	TAX MAP - GRID	SHEET
OCT, 2015	37- 1&2	5 OF 7

SOIL S (on site)
 Map Unit Map Unit Name
 GcC Glenelg loam, 8 to 15 percent slopes
 SaB Sassafras loam, 2 to 5 percent slopes
 HOWARD COUNTY SOIL MAP NUMBER: 14 - SAVAGE NE

Type K Factor
 B 0.20
 B 0.31

MAPLE HILL ROAD
 (PUBLIC ACCESS STREET)

- LEGEND**
- LIMIT OF DISTURBANCE
 - SCE** STABILIZED CONSTRUCTION ENTRANCE
 - SSF PROPOSED SUPER SILT FENCE
 - EARTH DIKE
 - PROPOSED TEMPORARY STOCKPILE AREA
 - EXISTING TREELINE
 - HIGHLY ERODIBLE SOIL
 (PER HSD: SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.25 AND WITH A SLOPE GREATER THAN 5 PERCENT)



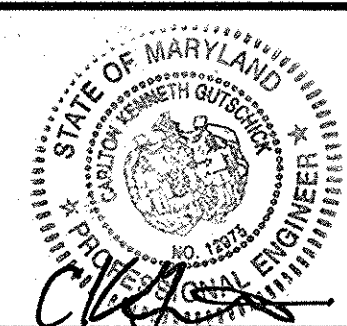
TENTATIVELY APPROVED DEPT. OF PLANNING AND ZONING OF HOWARD COUNTY
N. Collins 11-13-15
 PLANNING DIRECTOR DATE

GLW Gutschick Little & Weber, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTNSVILLE OFFICE PARK
 BURTNSVILLE, MARYLAND 20866
 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APPR.

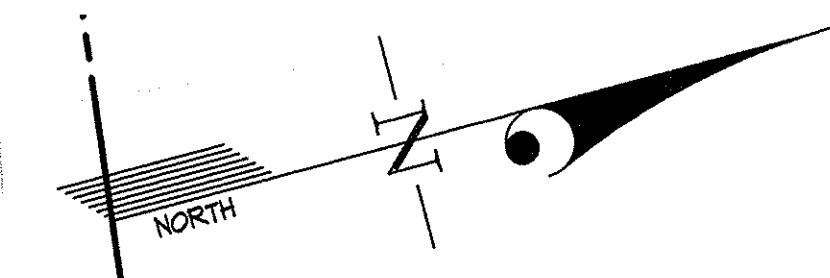
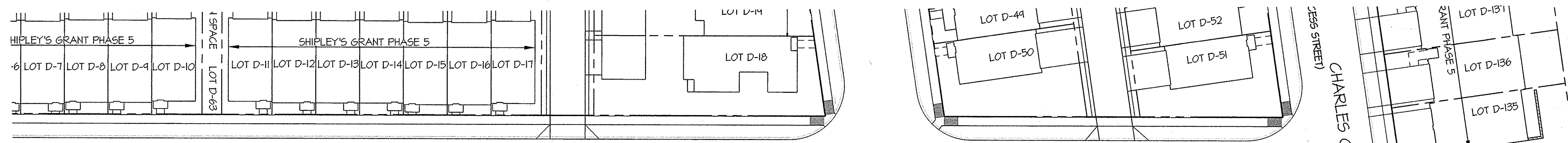
PREPARED FOR:
 BA WATERLOO TOWNHOUSES, LLC
 C/O BOZOTTO HOMES, INC.
 6408 IVY LANE, SUITE 700
 GREENBELT, MARYLAND 20770
 ATTN: CHRIS BLOCK
 301-623-3672

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE PLANS 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. 7295
 EXPIRATION DATE: MAY 28, 2016
 10/6/15



PRELIMINARY SEDIMENT CONTROL PLAN
 PHASE VIII
SHIPLEY'S GRANT
 Lots D-151 - D-215, Open Space Lots D-216 - D-219,
 Common Open Space Lot D-220 & D-221
 A Resubdivision of Parcel D-2 (PN: 21017) and Common Open Space Lot D-134 (PN: 21720)
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT No. 1

SCALE	ZONING	G. L. W. FILE No.
1"=40'	R-A-15	13063
DATE	TAX MAP - GRID	SHEET
OCT, 2015	37- 1&2	6 OF 7

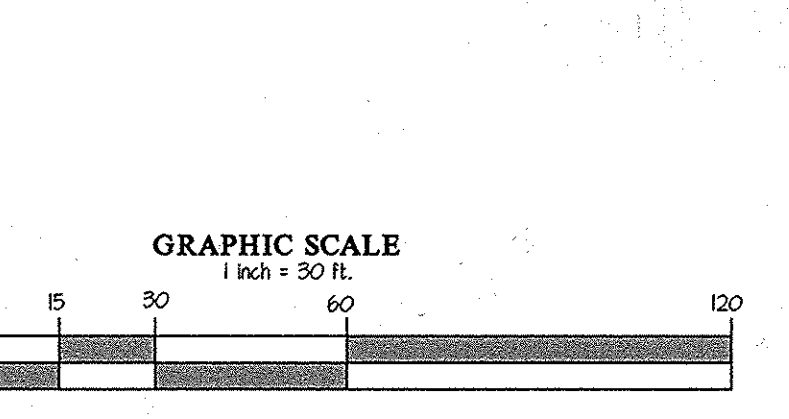
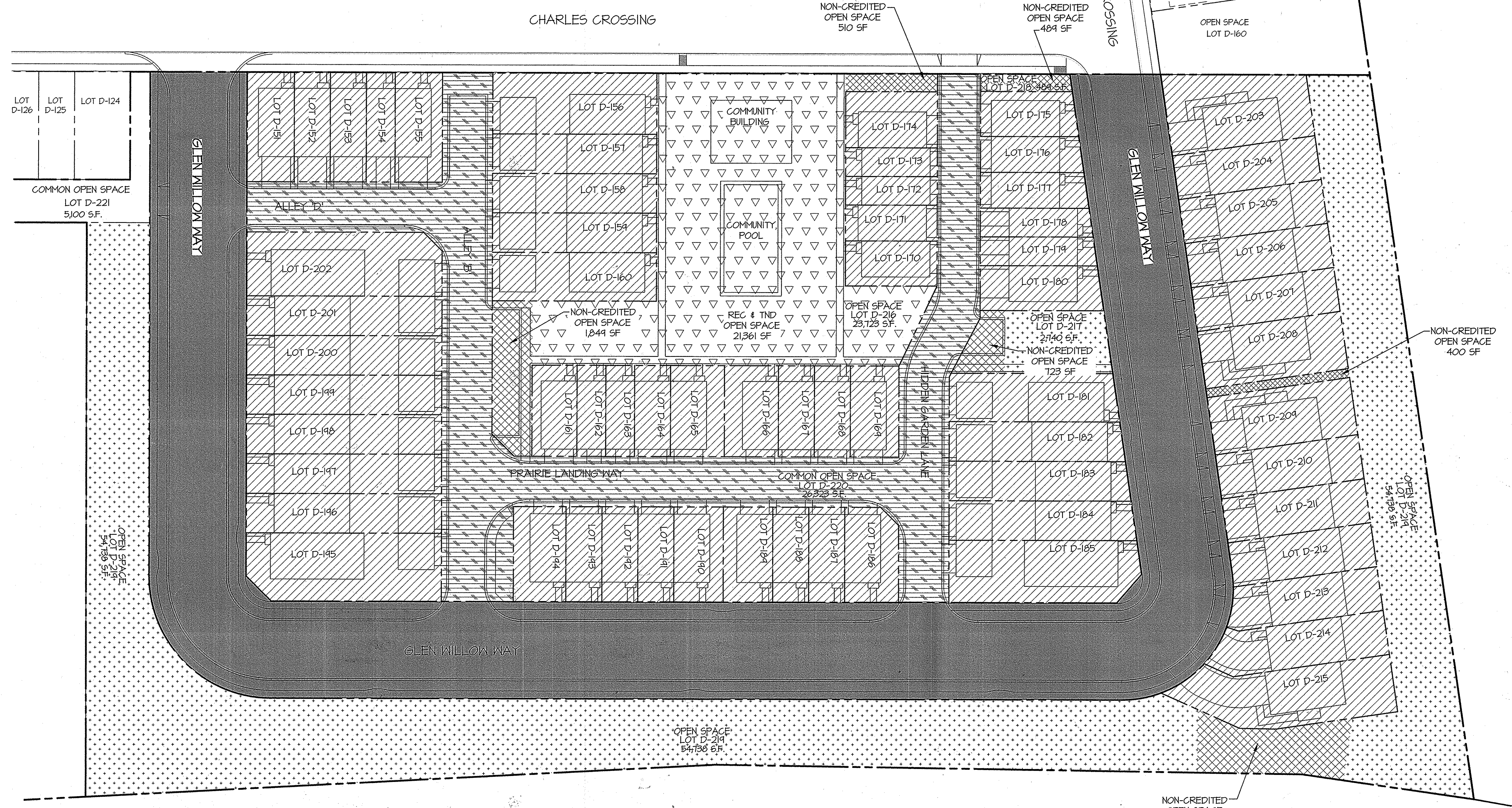


OPEN SPACE TABULATION			
LOCATION	CREDITED O.S.	NON-CREDITED O.S.	TOTAL O.S.
LOT D-216	2,363 SF	2,360 SF	23,123 SF
LOT D-217	2,011 SF	123 SF	2,140 SF
LOT D-218	0 SF	484 SF	484 SF
LOT D-219	5,167 SF	2,711 SF	54,738 SF
TOTALS	75,347 SF	6,343 SF	81,690 SF

RECREATION OPEN SPACE TABULATION	
LOCATION	AREA (Sq. Ft.)
O/S D-216	21,361

Traditional Neighborhood Development (TND) Open Space Tabulation					
LOCATION	PERIMETER (L.F.)	PUBLIC/PRIV. ROAD FRONTAGE REQUIRED	PUBLIC/PRIV. ROAD FRONTAGE PROPOSED	AREA REQUIRED	AREA PROPOSED
O/S D-216	1000	250 L.F. (25%)	255 L.F. (25.5%)	***	21,361 SF.

*** THE TND AREA REQUIREMENT IS MET FOR SHIPLEY'S GRANT AS AN ENTIRE SUBDIVISION. SEE DEVELOPMENT TRACKING CHART (SHEET 1) FOR CUMULATIVE OPEN SPACE TABULATIONS.



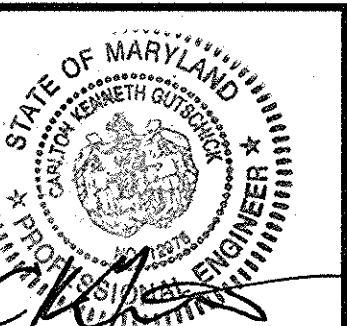
TENTATIVELY APPROVED DEPT. OF PLANNING AND ZONING OF HOWARD COUNTY
William Allen 11-13-15
 PLANNING DIRECTOR DATE

GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20866
 TEL: 301-421-4024 BALT: 410-880-1820 DC/WA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APPR.

PREPARED FOR:
 BA WATERLOO TOWNHOUSES, LLC
 C/O BOZUTTO HOMES, INC.
 6408 IVY LANE, SUITE 700
 GREENBELT, MARYLAND 20770
 ATTN: CHRIS BLOCK
 301-623-3672

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE PLANS 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. 12975
 EXPIRATION DATE: MAY 28, 2018
 10/16/15



LAND USE PLAN
 PHASE VIII
SHIPLEY'S GRANT
 Lots D-151 - D-215, Open Space Lots D-216 - D-219,
 Common Open Space Lot D-220 & D-221
 A Resubdivision of Parcel D-2 (PN: 21017) and Common Open Space Lot D-134 (PN: 21720)
 ELECTION DISTRICT No. 1
 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=30'	R-A-15	13063
DATE	TAX MAP - GRID	SHEET
OCT, 2015	37- 1&2	7 OF 7

LEGEND	LAND USE DESCRIPTION	ACREAGE	(% OF TOTAL)
	SINGLE FAMILY ATTACHED	2.70 AC.	40.4 %
	COMMON OPEN SPACE	0.60 AC.	9.1 %
	ROAD RIGHT-OF-WAY	1.42 AC.	21.5 %
	GENERAL OPEN SPACE	1.24 AC.	18.6 %
	REG. & TND OPEN SPACE	0.44 AC.	6.4 %
	NON-CREDITED OPEN SPACE	0.15 AC.	2.3 %
	TOTAL	6.60 AC.	100 %