

NOTE:
Approval of this Environmental Concept Plan (ECP) does not constitute an approval of any subsequent or associated subdivision and/or site development plan. Review of this project for compliance with the Howard County Subdivision and Land Development Regulations and the Howard County Zoning Regulations shall occur at the subdivision and site plan stages. Therefore, the applicant and consultant should expect additional and more detailed comments (including those that may alter overall site design) as this project progresses.

CONCEPT PLAN PROPOSAL
The Stormwater proposal for this project will utilize non-structural ESD including permeable paving (A-2), rooftop disconnection (N-1) and rain gardens (M-7). Utilization of these treatment methods will reduce proposed Impervious Area and place the Developed Area back to woods in "good" condition. The properties adjoining the developed area will be protected by placement of silt fence at the Limit of Disturbance during construction.

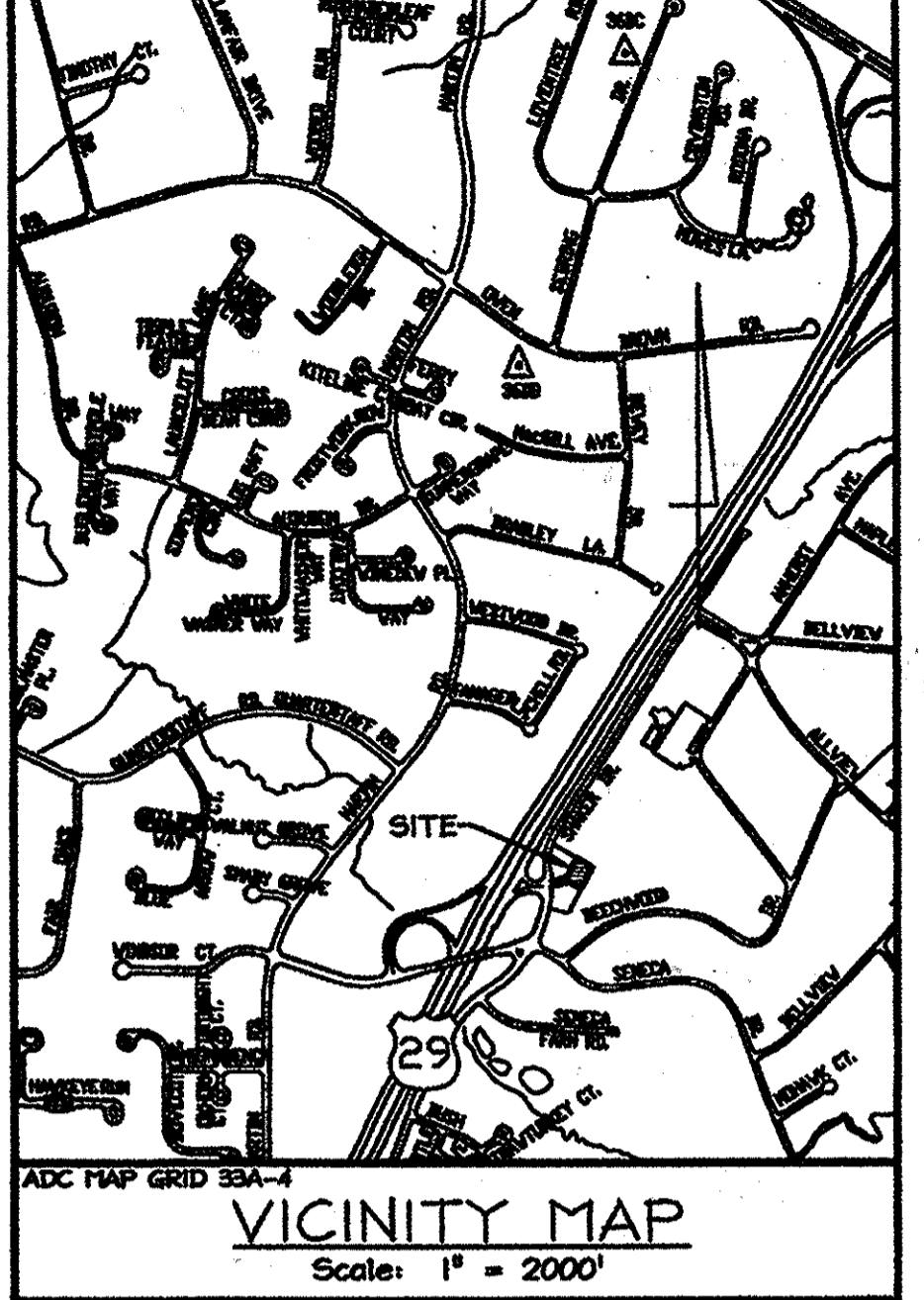
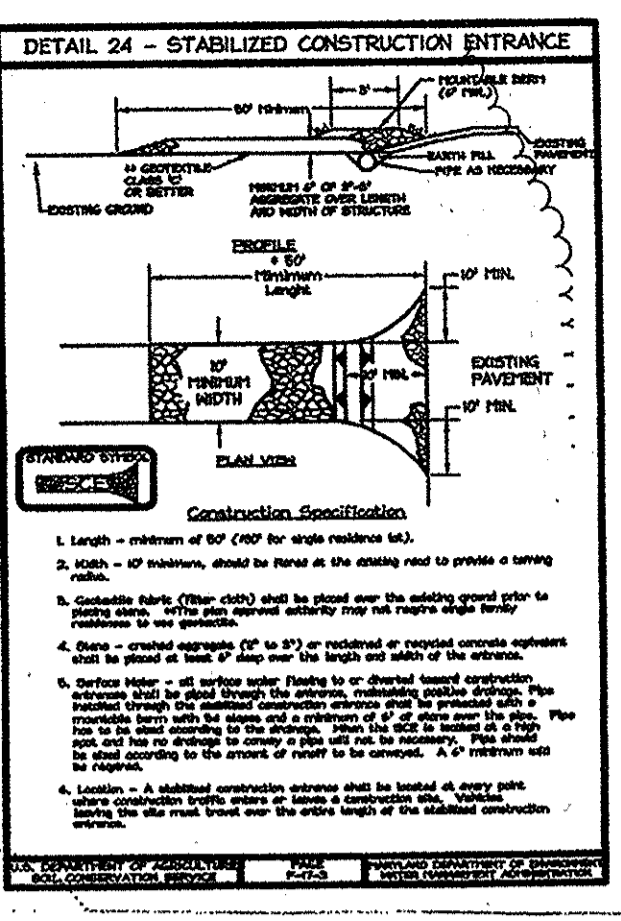
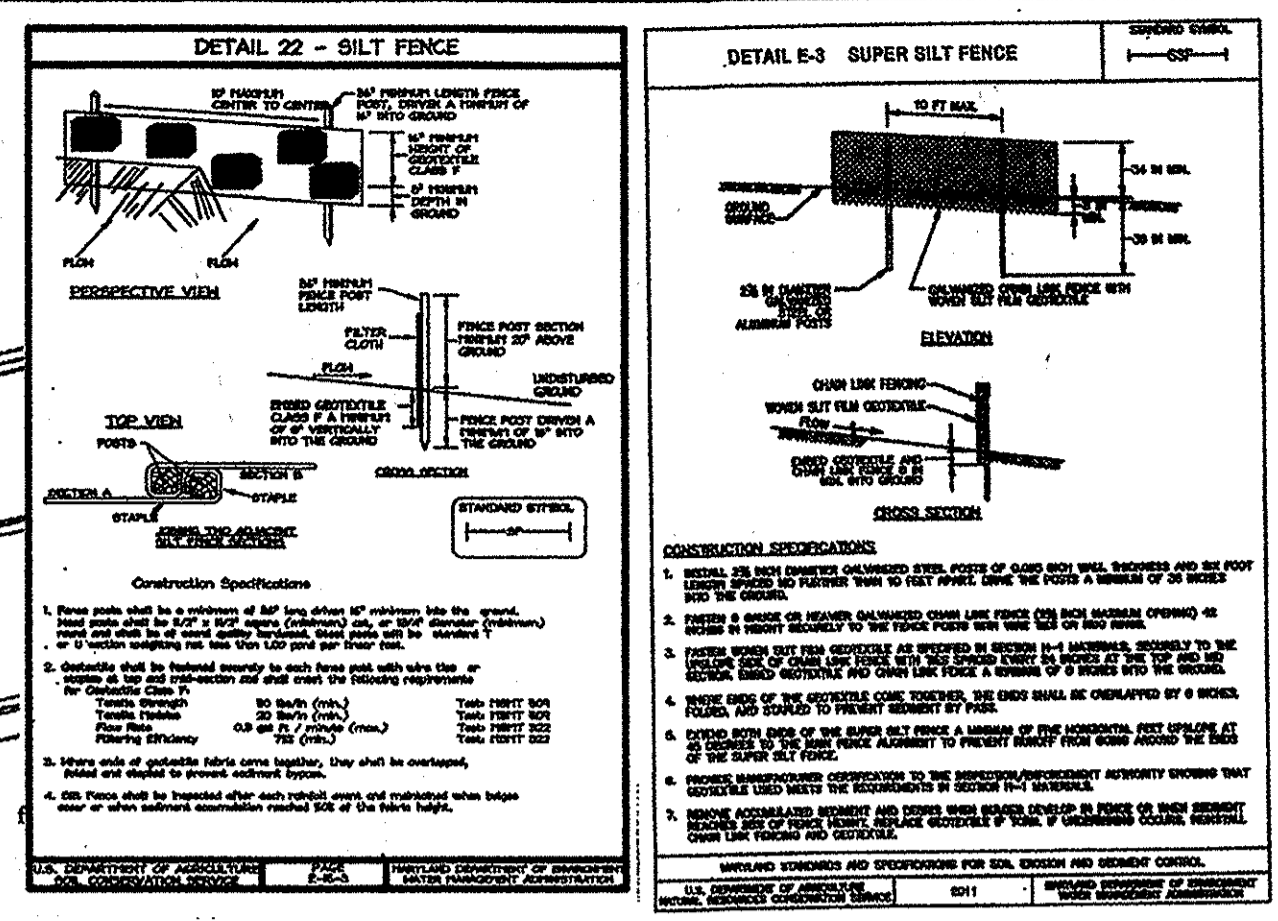
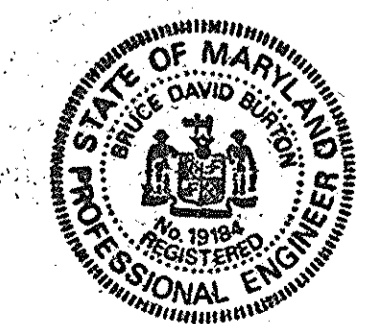
APPROVED: DEPARTMENT OF PLANNING AND ZONING
9/9/14
9/23/14

SITE ANALYSIS DATA

- Total project Area: 0.49 Ac. ±
- Wetlands and Wetland Buffer Area: 0.00 Ac. ±
- 100 Year Floodplain and Buffer Area: 0.00 Ac. ±
- Forested Area: 0.00 Ac. ±
- Steep Slope Area (15% or greater): 0.00 Ac. ±
- Erodible Soil Area: 0.02 Ac. ±
- Limit of Disturbance: 0.42 Ac. ±
- Proposed Site Use: Single Family Residential
- Green Open Area: 0.30 Ac. ±
- Impervious Area: 0.12 Ac. ±

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND MEASURABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
BRUCE D. BURTON 8/28/14
SIGNATURE OF ENGINEER DATE

DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPER AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERSONNEL ON-SITE INSPECTIONS BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.
Thomas E. Smith 09/03/2014
SIGNATURE OF DEVELOPER DATE



- HOWARD COUNTY SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES**
- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (EIS-1002).
 - All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
 - Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within:
 - 30 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 25%.
 - 7 days as to all other disturbed or graded areas on the project site.
 - 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, permanent seeding (Section D-4-6), temporary seeding (Section D-4-4), and mulching (Section D-4-5). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
 - All sediment control structures are to remain in place and are to be maintained in operation until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
 - Site Analysis:

Total Area of Site	0.49 Acres
Area Disturbed	0.42 Acres
Area to be roofed or paved	0.02 Acres
Area to be vegetatively stabilized	0.50 Acres
Total Cu. Yds.	500 Cu. Yds.
Total Fill	0.00 Cu. Yds.
 - Office map or location: N/A
 - 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 Howard County Sediment Control Inspector.
 - On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other grading or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
 - Transects for the construction of utilities is limited to three pipe lengths or that which can be installed and stabilized by the end of each working day, whichever is shorter.
 - On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other grading or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
 - Transects for the construction of utilities is limited to three pipe lengths or that which can be installed and stabilized by the end of each working day, whichever is shorter.
 - Any change or revisions to the sequence of construction must be reviewed and approved by the plan approval authority prior to proceeding with construction.
 - A project is to be sequenced so that grading activities begin on one grading unit (minimum average 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 enforcement authority. Unless otherwise specified and approved by the approval authority, no more than 20 acres cumulatively may be disturbed at a given time.

SHEET INDEX

No.	Title
1	Environmental Concept Plan

GENERAL NOTES

- The subject property is zoned R-20 per the 2/2/04 Comprehensive Zoning Plan and the Comp Lite Zoning Regulations effective 7/28/06.
- Project Background:
 - Subdivision: David N. Elliott II Property
 - Location: 10548 Shaker Drive, Columbia, Maryland 21046
 - Tax Map: Map 36, Grid 19, Parcel 56
 - Election District: 6th
 - Current Deed Reference: L. 9925, F. 136
 - Plat Reference: 22556-1
 - Tax ID Nos. 06-581501
- The Boundary shown hereon is based on a field run monumented boundary survey by J. E. Clark Company dated August 2001 & June 2002 (Plat 17848).
- The existing topography is taken from a field run survey with two foot contour intervals prepared by LDE, Inc. in April 2013 and supplemented with Howard County Aerial Photogrammetry.
- Horizontal and Vertical Datums are related to the Maryland State Plane Coordinate System (NAD 83) as projected from Howard County Control Stations Nos. 36DC & 36DD.
- This property was investigated for wetlands by Eco-Science, Inc. in January 2003 as part of FO4-138. No wetlands were identified on-site.
- Soils shown hereon are based on the Howard County, MD Soil Survey, sheet MD 0027.
- This site is located within the Howard County Metropolitan District. Public water and sewer connections are available for Lot 2 via Water and Sewer Contract No. 24-3108.
- Stormwater Management for the proposed improvements on Lot 2 is provided by privately owned and maintained Rain Gardens (M-7) as previously approved under F04-138, Permeable Paving (A-2) and Rooftop Disconnection (N-1).
- This project complies with the requirements of Section 16.1200 of the Howard County Code for Forest Conservation by the payment of a fee-in-lieu of \$4,573.80 to the Forest Conservation Fund for the afforestation obligation of 0.21 acres addressed under F04-138.
- The owner certifies, to the best of their knowledge, there are no historic structures or cemeteries located on Lot 2.
- There are no wetlands, streams, their buffers, 100 year floodplain, or steep slopes (25% or greater with a contiguous on-site and off-site area greater than 20,000 square feet) located on Lot 2 (par F04-138).
- The maintenance agreement for the shared driveway for Lot 2 and Lot 3 is recorded in Liber 9666 Folio 589.
- This plan is subject to WPO5-073. On June 30, 2005, the Planning Director approved the Waiver Request to Section 16.120.b.5.1 Lot Layout, Excessive Noise Levels for Residential Subdivision, which states that a Noise Study may be required in accordance with the Design Manual and where residential lots are impacted by excessive noise levels from the highway, noise mitigation shall be provided subject to the following conditions:
 - The Site Development Plan for Lot 2 and Lot 3 shall propose specific measures which will provide for a usable rear yard which may include but not limited to those discussed in the Noise Assessment Report (F04-138).
 - Building construction materials shall be used to reduce interior sound to 45dB(A).
- Lot 2 is located within a 65dB(A) noise contour line drawn on this plan in advisory as required by the Howard County Design Manual, Chapter 5, revised February 1992 and cannot be considered to exactly locate the 65dB(A) noise exposure. The 65dB(A) 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 Department of Housing and Urban Development. The Noise assessment Study and Noise Line Detail for this project was approved as part of F04-138 (Plat#17848).

CONCEPT PLAN NARRATIVE

- Natural resource protection: The owner proposes construction of a Single Family Detached Residence on a platted lot of record. There are no natural resource protection areas located on the lot.
- Maintenance of Natural Flow Patterns: No disturbance of natural flow patterns is proposed.
- Reduction of impervious area: The reduction in impervious area through site design is achieved through Environmental Site Design (ESD). The ESD concept includes permeable paving (A-2), rooftop disconnection (N-1) and rain gardens (M-7).
- Erosion and Sediment Control: The Limit of Disturbance will be protected by perimeter controls typically associated with single family house construction.
- Implementation of ESD planning techniques and practices to MEP: The ESD practices for this project include permeable paving (A-2), rooftop disconnection (N-1) and rain gardens (M-7). The design shall meet the ESD requirements to the maximum extent practical for the project.
- Request for Design Manual and Waiver Petition for environmental and stormwater design: None requested.

STORMWATER MANAGEMENT SUMMARY TABLE

PRACTICE	LOCATION	AREA TREATED	VOLUME (ESD)
Permeable Paving (A-2)	Front Driveway	1475 sf	289 cf
Rooftop Disconnection (N-1)	Rear Rooftop	756 sf	60 cf
Rain Garden #1 (M-7)	Left Front House	656 sf	85 cf
Rain Garden #2 (M-7)	Right Front House	600 sf	76 cf
Rain Garden #3 (M-7)	South Lot Corner	171 sf	217 cf
Total		6200 sf	725 cf

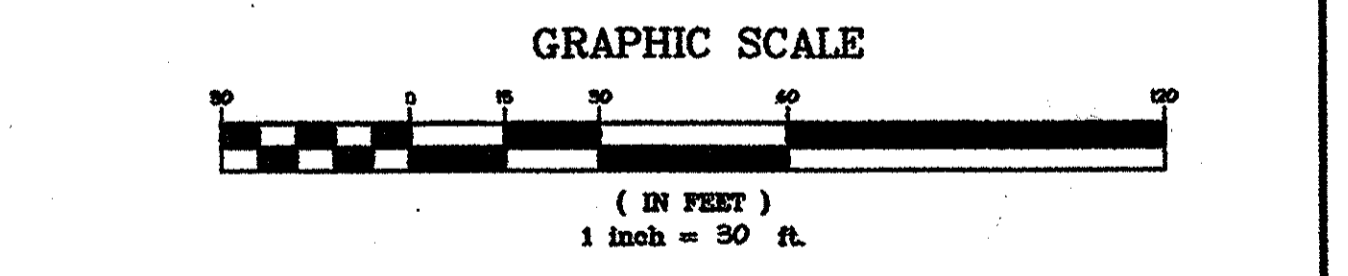
SOILS LEGEND

MAP SYMBOL	SOIL GROUP NAME & DESCRIPTION	HYDROLOGIC TYPE
GfB	Gladstone-Urbans Land Complex, 0% - 8% slopes	B
GfB	Gladstone-Urbans Land Complex, 0% - 8% slopes	C
Uf	Urbans, Highway 0% - 65% slopes	C

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. 19184, EXPIRATION DATE: 6/30/15.
SIGNED BRUCE D. BURTON DATE 8/28/14
BRUCE D. BURTON

REVISIONS

No.	Date	Description



Subdivision Name: David N. Elliott II Property Section: --- Lot No. 2

Plat No.	Grid No.	Zoning	Tax Map No.	Election District	Carroll Tract
PLAT #22556	19	R-20	36	6th	6.067.01

LDE inc.
Engineers • Surveyors • Planners
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(410)795-6391 • (410)795-6392 • FAX(410)795-6340 • www.Landsurveyord.com

DESIGNED: B.D.B. ENVIRONMENTAL CONCEPT PLAN RESIDENTIAL SINGLE FAMILY DETACHED SCALE: 1" = 30'

DRAWN: L.D.E. David N. Elliott II Property Lot 2 DRAWING: 1 of 1

CHECKED: B.D.B. Plat No. 22556 Tax Map 36 Grid 19 Parcel 56 JOB NO.: 13-002
6th Election District - Howard County, Maryland Previous Submittals: F04-138, WPO5-073, F14-027, WPI4-125

DATE: 7/2014 OWNER/DEVELOPER: Thomas E. & Eva May B. Smith 8221 Lexington Drive Severn, Maryland 21144-2714 443-219-0277 FILE NO.: SDP 14-023