

GENERAL NOTES

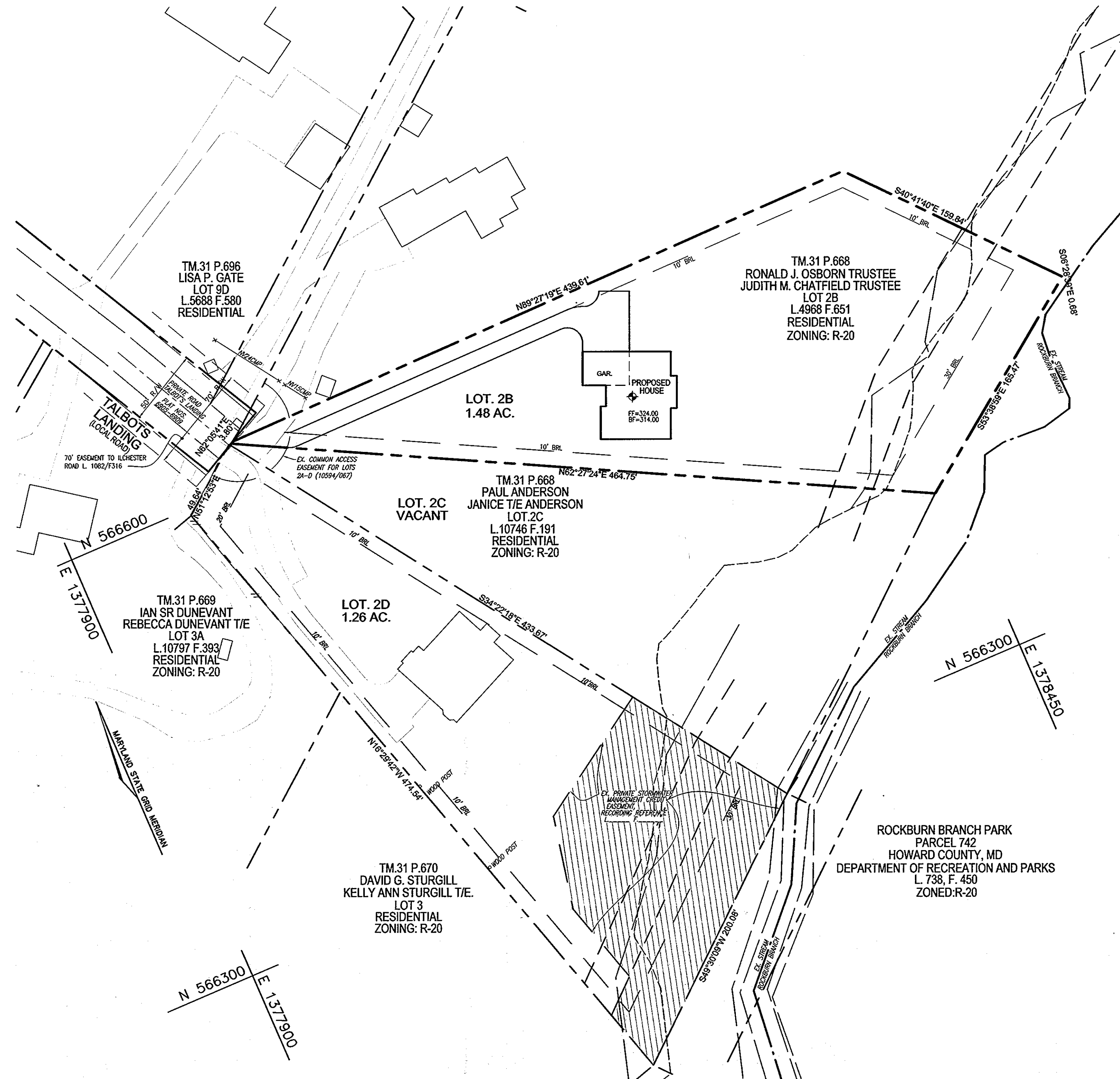
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS:
 MISS UTILITY 1-800-257-7777
 VERIZON TELEPHONE COMPANY: 1-410-954-0281
 HOWARD COUNTY BUREAU OF UTILITIES: 410-313-2366
 AT&T CABLE LOCATION DIVISION: 1-800-543-1553
 B.G.&E. CO. CONTRACTOR SERVICES: 410-850-4620
 B.G.&E. CO. UNDERGROUND DAMAGE CONTROL: 410-787-4620
 STATE HIGHWAY ADMINISTRATION: 410-531-5533
- PROPERTY BOUNDARY PREPARED BY DEED AND TOPOGRAPHY FROM HOWARD COUNTY GIS
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- 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.
- ANY DAMAGE TO PUBLIC RIGHT-OF-WAY, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO CEMETERIES OR GRAVE SITES LOCATED ON THE SUBJECT PROPERTY.
- STORM WATER MANAGEMENT TO BE PROVIDED FOR THIS DEVELOPMENT BY ENVIRONMENTAL SITE DESIGN UTILIZING DRYWELLS & NON-ROOFTOP DISCONNECTION.
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. DEVELOPMENT OR CONSTRUCTION OF THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION, OR BUILDING AND GRADING PERMITS.
- THE SUBJECT PROPERTY IS ZONED "R-20" IN ACCORDANCE WITH THE 2/2/04 COMPREHENSIVE ZONING PLAN AND THE COMP. LITE ZONING REGULATIONS EFFECTIVE ON 7/28/06.
- THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT, NOR ARE THERE ANY HISTORIC STRUCTURES ON SITE.
- THE PROPOSED FACILITY AND RELATED CONSTRUCTION WILL NOT AFFECT ENVIRONMENTAL FEATURES OR BUFFERS.
- EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATER AND AND SEWER EXTENSION 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 INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- WATER AND SEWER FOR THIS PROJECT WILL BE PUBLIC WATER WILL BE PROVIDED THROUGH CONTRACT #44-3727-D. SEWER WILL BE PROVIDED THROUGH CONTRACT #10-3697-D.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 31EB AND 31B WERE USED FOR THIS PROJECT.
- NO RARE, THREATENED OR ENDANGERED SPECIES WERE NOT OBSERVED ON THE PROPERTY.
- THERE IS 100-YR FLOODPLAIN WITHIN THE LIMITS OF THIS SITE.
- SEDIMENT AND EROSION CONTROL WILL BE PROVIDED FOR THIS SITE.
- A NOISE STUDY IS NOT REQUIRED FOR THIS SUBDIVISION.
- THERE ARE EXISTING STRUCTURES LOCATED ON SITE. ALL EXISTING STRUCTURES LOCATED ON-SITE SHALL BE REMOVED.
- TALBOT'S LANDING IS NOT A SCENIC ROAD.
- APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN/PLAN AND/OR SITE DEVELOPMENT PLAN AND/OR RED-LINE REVISION 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 PLAN/PLAN AND/OR SITE DEVELOPMENT PLAN STAGES AND/OR RED-LINE REVISION PROCESS. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.
- FOREST CONSERVATION IS NOT REQUIRED FOR THIS SITE. THE FOREST CLEARING IS LESS THAN 20,000 SF.
- NO ENVIRONMENTAL FEATURES (WETLANDS, STREAMS, STEEP SLOPES AND BUFFERS) EXIST ON SITE.
- STOCKPILING DURING CONSTRUCTION WILL BE PERMITTED ON SITE.

ENVIRONMENTAL CONCEPT PLAN

TALBOT'S LAST SHIFT

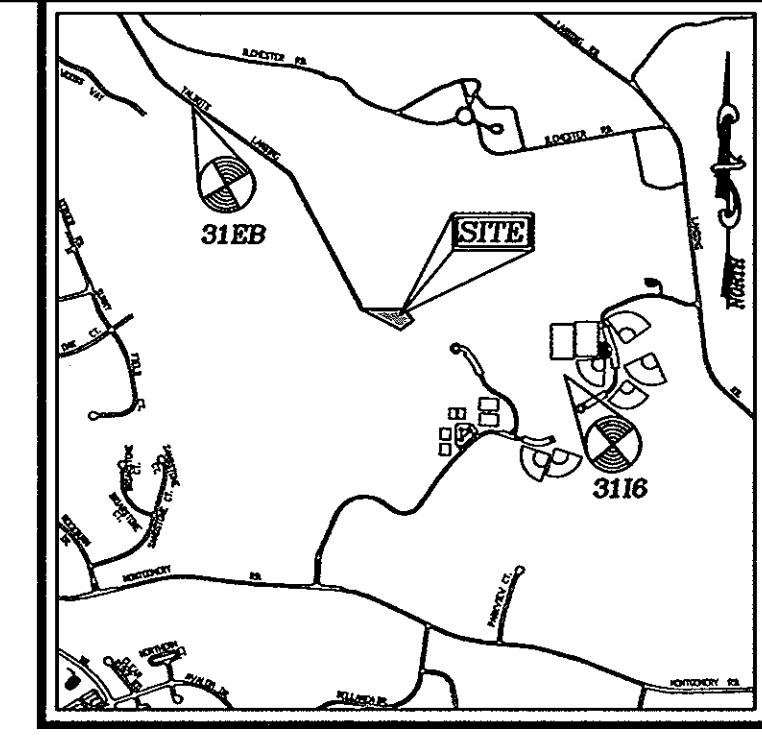
LOT 2B

HOWARD COUNTY, MARYLAND



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 TREE LINE
- EXISTING FENCE
- PROPOSED TREE LINE
- EXISTING SOILS
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PROPOSED SILT FENCE
- PROPOSED LIMIT OF DISTURBANCE
- DRYWELL



VICINITY MAP
 SCALE: 1"=2,000'
 ADC MAP COORDINATE: 4936/H5

BENCHMARKS
 HOWARD COUNTY BENCHMARK 31EB (CONC. MON.)
 N 568730.9925 E 1376273.5708 ELEV. 452.700
 HOWARD COUNTY BENCHMARK 3116 (CONC. MON.)
 N 565933.3904 E 1380153.4594 ELEV. 344.125

ENVIRONMENTAL SITE DESIGN NARRATIVE:

TALBOT'S LANDING PROPERTY ENVIRONMENTAL CONCEPT PLAN

I. Introduction
 The subject site is located at the terminus of Talbot's Landing in Ellicott City, Maryland. The site is zoned R-20 and is identified as Tax Map 31, Parcel 668, lot 2B. The site area is 1.48 acres and access will be provided via a private common access easement to Talbot's Landing.

The site is currently undeveloped. It is proposed to develop one single family detached house on the lot. The new houses will consist of a driveway and both public water and sewer. Forest conservation will not be applicable on this site due to clearing of less than 20,000 sf. There is a stream located just east of the property which has a floodplain designation indicated on the plan, this area will not be disturbed during construction.

Environmental Site Design for the proposed lot is based on the proposed limit of disturbance is considered new development. The ESDv is based on the reduction of runoff to mimic "woods in good condition".

II. METHODOLOGY
 Stormwater management for the project has been provided in accordance with the 2000 Maryland Stormwater Design Manual, 2007 Stormwater Management Act, MDE Design Computations and Howard County requirements. The proposed improvements consist of one single family detached house.

The site slopes from west to east. The Maryland Department of the Environment, Environmental Site Design criteria has been implemented. The Environmental Concept Plan addresses the overall requirements for the site. There is one drainage areas which has been delineated by ESD treatment. The attached spreadsheet tabulates the ESDv by drainage area (minimum, maximum and target). The Environmental Concept Plan utilizes non-roof top disconnection (N-2) and dry wells (M-5) to accommodate the total ESD volume required for the project.

The offsite drainage flowing to the site will remain undisturbed and flow through the existing stream area this area will not be managed or treated.

The site consists of Hydrologic Soil Group type 'B' & 'D' soils. The weighted P₆ to mimic "woods in good condition" is 1.0 based on an overall development impervious percentage of 25.8. The resulting recharge factor (R_v) is 0.28. Applying an overall limit of disturbance of 0.54 acres, the total ESDv required for this project is 552 cf. The Rev required is 112 cf.

Disconnection of Non-Rooftop (N-2) runoff and dry wells (M-5) will be utilized to fulfill the ESDv requirement. Each drainage area provides ESDv which exceeds the minimum (P₆ = 1.0") and does not exceed the maximum (P₆=2.6"). Additionally, Rev is provided via these practices.

III. CONCLUSION

The ESDv requirement of 552 cf for the proposed project is provided utilizing disconnection of non-roof top practices (N-2) and dry wells (M-5). The required Rev of 112 cf will be provided by the same practice. Considering the size and configuration of the development we anticipate sediment control will be accommodated by perimeter reinforced silt fence.

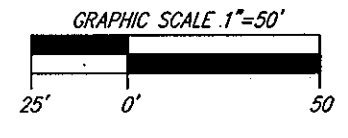
The Environmental Site Design for this project successfully incorporates the methodology present in the MDE stormwater Design Manual, Chapter 5. This report and the associated Plan successfully address the following:

- Map if all site resources
- Field verification of the natural resource map
- Proposed limits of clearing and grading
- Location of proposed impervious areas
- Location of existing and proposed utilities
- Estimates of stormwater requirements
- Location of ESD practices
- Stable conveyance of stormwater at potential outfall locations
- Narrative addresses:
 - Natural resource protection and enhancement
 - Maintenance of natural flow patterns
 - Reduction of impervious areas through better site design, alternative surfaces, and non-structural practices
 - Integration of erosion and sediment control into the stormwater strategy
 - Implementation of ESD planning techniques and practices to the MEP

LOCATION MAP
 1" = 50'

SITE ANALYSIS DATA

A. TOTAL PROJECT AREA:	1.48 AC.
B. AREA OF PLAN SUBMISSION:	1.48 AC.
C. AREA OF WETLANDS AND BUFFERS:	0.00 AC.
D. AREA OF FLOODPLAIN & BUFFERS:	0.19 AC.
E. AREA OF FOREST:	1.04 AC.
F. AREA OF FOREST TO BE REMOVED:	0.42 AC. (18,252 SF)
G. AREA OF FOREST TO BE REMAIN:	0.62 AC.
H. AREA OF STEEP SLOPES (15% & GREATER):	0.38 AC.
I. ERODIBLE SOILS:	0.00 AC.
J. LIMIT OF DISTURBED AREA:	0.53 AC.
K. PROPOSED IMPERVIOUS AREA:	0.14 AC.
L. PRESENT ZONING DESIGNATION:	R-20
M. OPEN SPACE REQUIRED:	0.00 AC.
N. TOTAL NUMBER OF UNITS ALLOWED:	1
O. TOTAL NUMBER OF UNITS PROPOSED:	1
P. DPZ REFERENCES: CONT. #10-3697 (SEWER) & 44-3727-D (WATER)	



SHEET INDEX

DESCRIPTION	SHEET NO.
COVER SHEET	1 OF 2
SITE LAYOUT, GRADING & SOIL EROSION AND SEDIMENT CONTROL PLAN	2 OF 2

OWNER
 RONALD J. OSBORN & JUDITH M. CHATFIELD, TRUSTEE
 2306 LAKE CIRCLE DRIVE
 ELDERSBURG, MD 21784-6331
 (410) 795-0850

CONTRACT PURCHASER
 GLENN & PATRICIA LIVINGSTON
 5127 ILCHESTER ROAD
 ELLICOTT CITY, MD 21043
 (410) 465-1628

NO.	REVISION	DATE

ENVIRONMENTAL CONCEPT PLAN
COVERSHEET
TALBOT'S LAST SHIFT
LOT 2B

TAX MAP 31 BLOCK 22
 1ST ELECTION DISTRICT

PARCEL 668, LOT 2B
 HOWARD COUNTY, MARYLAND
 ZONE R-20

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET
 ELLICOTT CITY, MD 21043
 TEL: 410.461.7666
 FAX: 410.461.8966

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. 10073, EXPIRATION DATE: 07-21-2015.

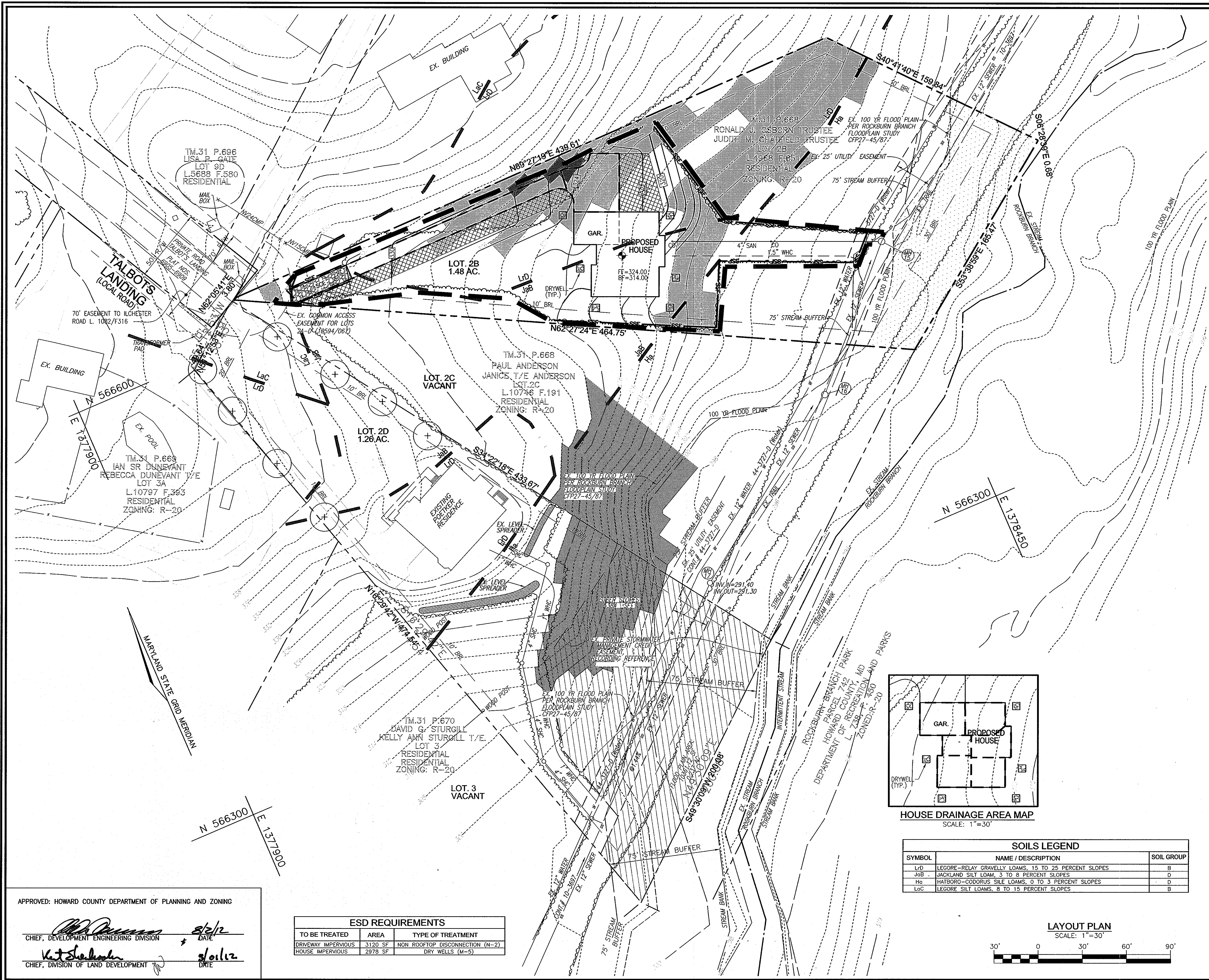
DESIGN BY: RHV
 DRAWN BY: JMR
 CHECKED BY: RHV
 DATE: JUNE 2012
 SCALE: AS SHOWN
 W.O. NO.: N/A

1 SHEET OF 2

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 6/6/12
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] 8/10/12
 CHIEF, DIVISION OF LAND DEVELOPMENT

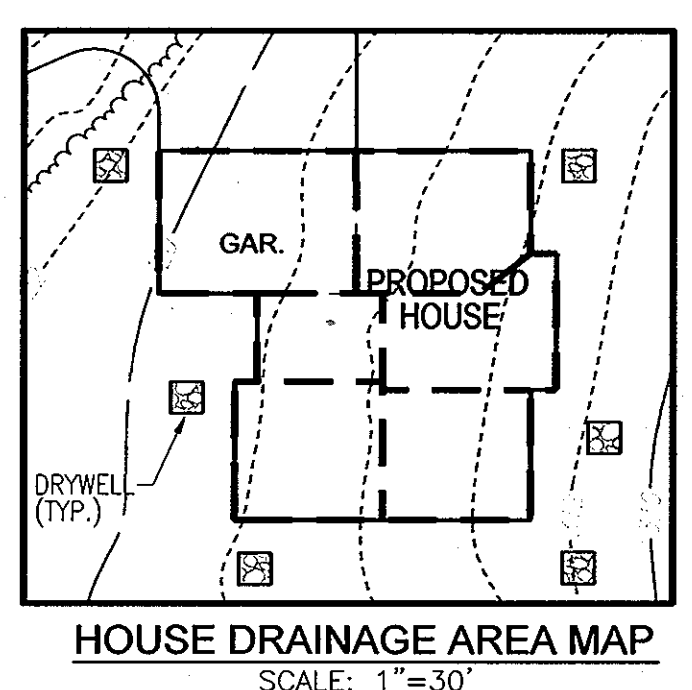


LEGEND:

	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPOSED SPOT ELEVATION
	EXISTING SPOT ELEVATION
	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 TREENLINE (FIELD LOCATED)
	EXISTING TREES
	EXISTING FENCE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	SOILS BOUNDARY
	EXISTING STREAM
	EXISTING STREAM BUFFER
	EXISTING PRIVATE STORM WATER MANAGEMENT CREDIT EASEMENT
	EXISTING 100YR FLOODPLAIN AREA
	PROPOSED TREENLINE
	SILT FENCE
	SUPER SILT FENCE
	LIMIT OF DISTURBANCE
	STABILIZED CONSTRUCTION ENTRANCE
	EXISTING MODERATE SLOPES
	EXISTING STEEP SLOPES
	NON-ROOFTOP DISCONNECTION

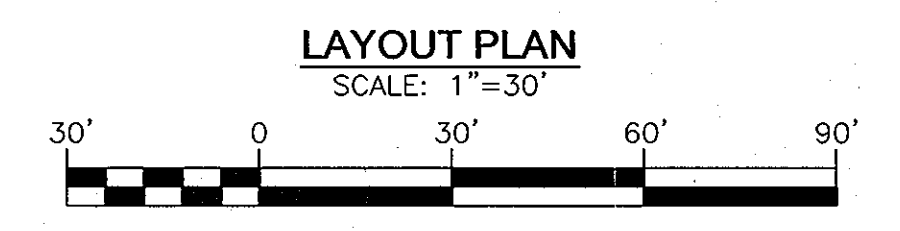
OWNER
 RONALD J. OSBORN & JUDITH M. CHATFIELD, TRUSTEE
 2306 LAKE CIRCLE DRIVE
 ELDERSBURG, MD 21784-6331
 (410) 795-0850

CONTRACT PURCHASER
 GLENN & PATRICIA LIVINGSTON
 5127 ILCHESTER ROAD
 ELLICOTT CITY, MD 21043
 (410) 465-1628



SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	SOIL GROUP
Ld	LEGORE-RELY GRAVELLY LOAMS, 15 TO 25 PERCENT SLOPES	B
Jsb	JACKLAND SILT LOAM, 3 TO 8 PERCENT SLOPES	D
Hs	HATBORO-CODORUS SILT LOAMS, 0 TO 3 PERCENT SLOPES	D
Lsc	LEGORE SILT LOAMS, 8 TO 15 PERCENT SLOPES	B



ESD REQUIREMENTS

TO BE TREATED	AREA	TYPE OF TREATMENT
DRIVEWAY IMPERVIOUS	3120 SF	NON ROOFTOP DISCONNECTION (N-2)
HOUSE IMPERVIOUS	2978 SF	DRY WELLS (M-5)

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 8/2/12
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 8/10/12
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

NO.	REVISION	DATE

**ENVIRONMENTAL CONCEPT PLAN
 SITE LAYOUT, GRADING & SOIL EROSION
 AND SEDIMENT CONTROL PLAN
 TALBOT'S LAST SHIFT
 LOT 2B**

TAX MAP 31 BLOCK 22
 1ST ELECTION DISTRICT

PARCEL 668, LOT 2B
 HOWARD COUNTY, MARYLAND
 ZONE R-20

**ROBERT H. VOGEL
 ENGINEERING, INC.**
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET TEL: 410.461.7666
 ELLICOTT 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 FULLY LICENSED PROFESSIONAL
 ENGINEER UNDER THE LAWS OF THE STATE
 OF MARYLAND, LICENSE NO. 31373
 EXPIRATION DATE 01-21-2015

DESIGN BY: RHV
 DRAWN BY: JMR
 CHECKED BY: RHV
 DATE: JUNE 2012
 SCALE: AS SHOWN
 W.O. NO.: N/A

2 SHEET OF 2