

ESD NARRATIVE

1. NO NATURAL RESOURCES SUCH AS STEEP SLOPES, WETLANDS, STREAMS, OR VALUABLE FOREST LAND EXIST ON SITE. THE SMALL AREA OF WETLAND BUFFER THAT EXISTS ON SITE WILL NOT BE DISTURBED AND WILL BE DEDICATED TO HOWARD COUNTY FOR USE AS OPEN SPACE. THE PROPOSED DISCONNECTIONS AND MICRO-BIORETENTION FACILITIES WILL PROVIDE STORMWATER QUALITY TREATMENT FOR THE NEW DEVELOPMENT, WHICH WILL BE AN IMPROVEMENT OVER EXISTING CONDITIONS. ADDITIONAL TREATMENT FOR THE EXISTING STRUCTURE AND DRIVEWAY SHOWN FROM WHAT HAS BEEN CONSTRUCTED PER F-99-163 WILL BE PROVIDED BY THE NEW ESD MEASURES.
2. THE IMPROVEMENTS AND DEVELOPED AREA WILL MAINTAIN THE EXISTING DRAINAGE PATTERNS AS CLOSELY AS POSSIBLE. NO IMPACT IS PROPOSED THAT WOULD ALTER ANY NATURAL FLOW PATTERNS.
3. NON-STRUCTURAL PRACTICES WERE USED TO THE FULL EXTENT POSSIBLE. ROOF-TOP AND NON-ROOFTOP DISCONNECTION WAS UTILIZED WHERE FEASIBLE. DUE TO THE LIMITED SIZE OF THE PROPOSED LOTS, NON-STRUCTURAL PRACTICES WERE NOT FEASIBLE ON EVERY LOT.
4. THE REQUIRED EROSION AND SEDIMENT CONTROL MEASURES WILL BE IN ACCORDANCE WITH THE LATEST MDE STANDARDS AND SPECIFICATIONS UTILIZING SUPER SILT FENCES. NO SEDIMENT TRAPS OR BASINS ARE REQUIRED.
5. TABLE 5.2, SUMMARY OF SITE DEVELOPMENT STRATEGIES WAS UTILIZED TO THE EXTENT ALLOWABLE BY THE CURRENT HOWARD COUNTY ZONING AND LAND DEVELOPMENT REGULATIONS BY UTILIZING SHARED DRIVEWAY AND MINIMIZING EARTH DISTURBANCE.
6. IN DESIGNING THIS PROJECT, AND AFTER WE PLAN THE PROJECT TO MINIMIZE IMPERVIOUS AREAS, WE UTILIZED ESD MEASURES IN THE FOLLOWING ORDER OF PREFERENCE:
 - A. DISCONNECTION OF ROOFTOP (N-1)
 - B. DISCONNECTION OF NON-ROOFTOP (N-2)
 - C. MICRO-SCALE PRACTICES (M-6)

SITE ANALYSIS DATA:

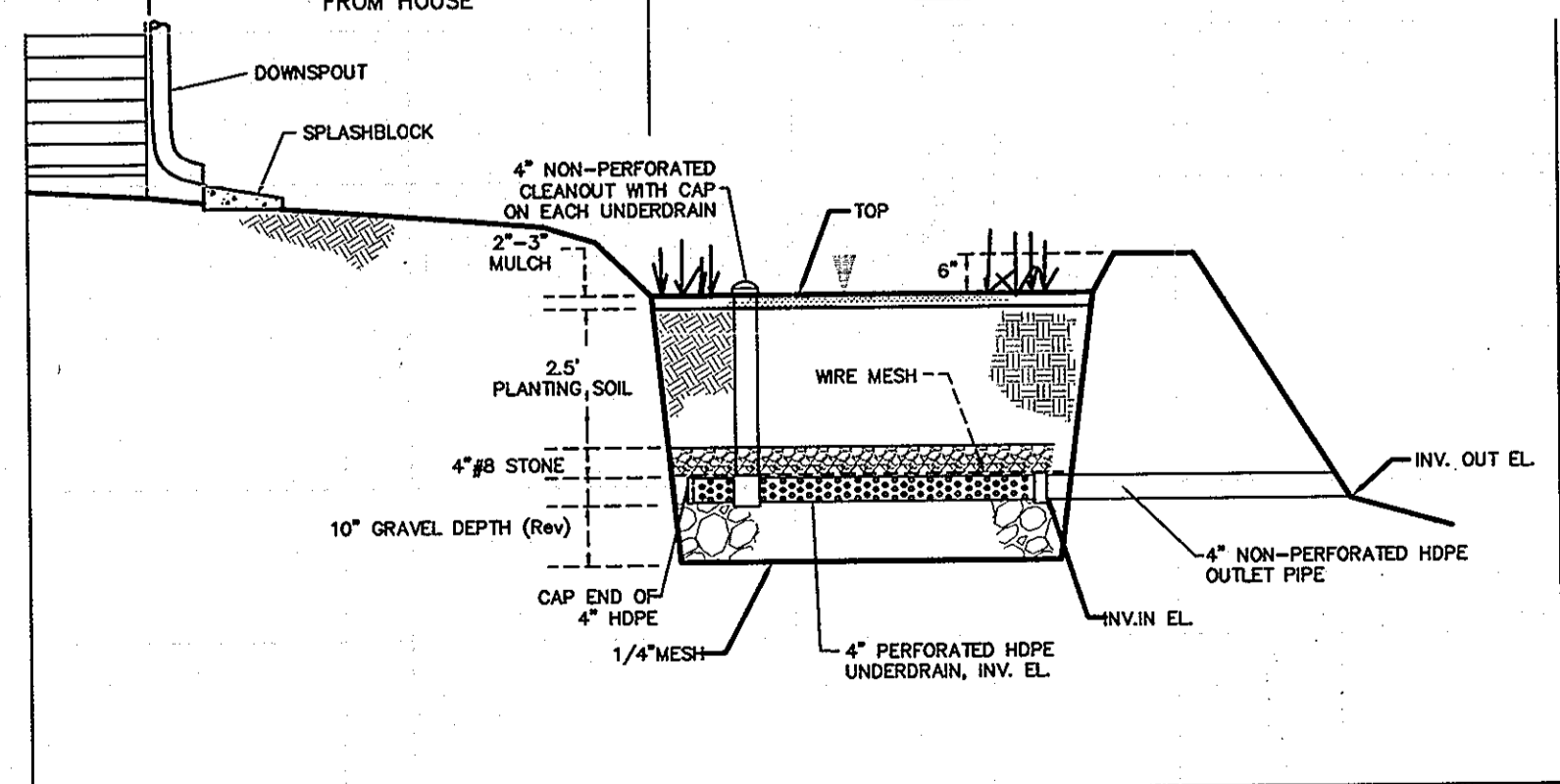
1. AREA OF THE SITE = 3.53± ACRES (GROSS)
LIMIT OF DISTURBANCE = 3.32± ACRES
2. AREA OF WETLANDS AND ITS BUFFERS = 0.02± ACRES (BUFFER ONLY - NO WETLAND ON SITE)
3. AREA OF FLOODPLAIN = 0
4. AREA OF STREAM BUFFER = 0
5. AREA OF STEEP SLOPES = 0 ACRES
6. AREA OF FOREST = 0.52 ACRES ±
7. TOTAL ENVIRONMENTAL SENSITIVE AREA = 0.02± ACRES (WILL BE DEDICATED TO HOWARD COUNTY FOR USE AS OPEN SPACE)
8. DEVELOPABLE AREA = 3.51± ACRES (ON SITE)
NEW IMPERVIOUS AREA: 18,782 SF / 0.43 AC (HOUSES AND STOOPS)
9,342 SF / 0.21 AC (USE-IN-COMMON DRIVEWAY)
2,600 SF / 0.06 AC (MONTGOMERY ROAD FRONTAGE IMPROVEMENTS---OFFSITE SIDEWALK, CURB AND GUTTER)
5,373 SF / 0.12 AC (LOT DRIVEWAYS, LOT 43 PORCH)
36,097 SF / 0.83 AC (TOTAL NEW IMPERVIOUS)
PERVIOUS/GREEN AREA: 119,354 SF / 2.74 AC
9. NO SLOPES OF 25% OR GREATER EXIST ON SITE.
10. NO HIGHLY ERODABLE SOILS EXISTS ON SITE.
11. ONE SINGLE FAMILY DETACHED DWELLING PER LOT IS PROPOSED.
12. FOREST CONSERVATION FOR THIS SUBDIVISION HAS BEEN ADDRESSED PER THE ORIGINAL CONSTRUCTION PLANS FOR THE SUBDIVISION (F-99-163). FOREST CONSERVATION AREAS HAVE BEEN SHOWN ON THE RECORDED PLAT.

OWNER

ELEANORA A. MICHAEL L/E
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ELK RIDGE, MD 21075
(410)997-0296 (P)
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LEGEND

- IMPERVIOUS AREA TREATED BY N-2, NON-ROOFTOP DISCONNECTION
- AREA OF N-2, NON-ROOFTOP DISCONNECTION
- IMPERVIOUS AREA TREATED BY M-6, MICRO-BIORETENTION AND / OR N-1, ROOFTOP DISCONNECTION
- N-1, ROOFTOP DISCONNECTION FLOW PATH WITH LENGTH, SLOPE, AND TREATED AREA
- M-6, MICRO-BIORETENTION I.D.
- DRAINAGE AREA DIVIDE (TO STUDY POINT)
- LOD
- LIMIT OF DISTURBANCE
- SUPER SILT FENCE
- SILT DIVERSION FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- 10' MIN. SETBACK FROM HOUSE
- UNMITIGATED 65dBA NOISE LINE PER F-99-163
- ROOF DRAIN LEADER
- DRAINAGE AREA DIVIDE (TO MICRO-BIORETENTION)
- EXISTING TREELINE
- PROPOSED TREELINE
- CHECK DAM
- SLOPES BETWEEN 15-24.99%



TYPICAL MICRO-BIORETENTION PROFILE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION

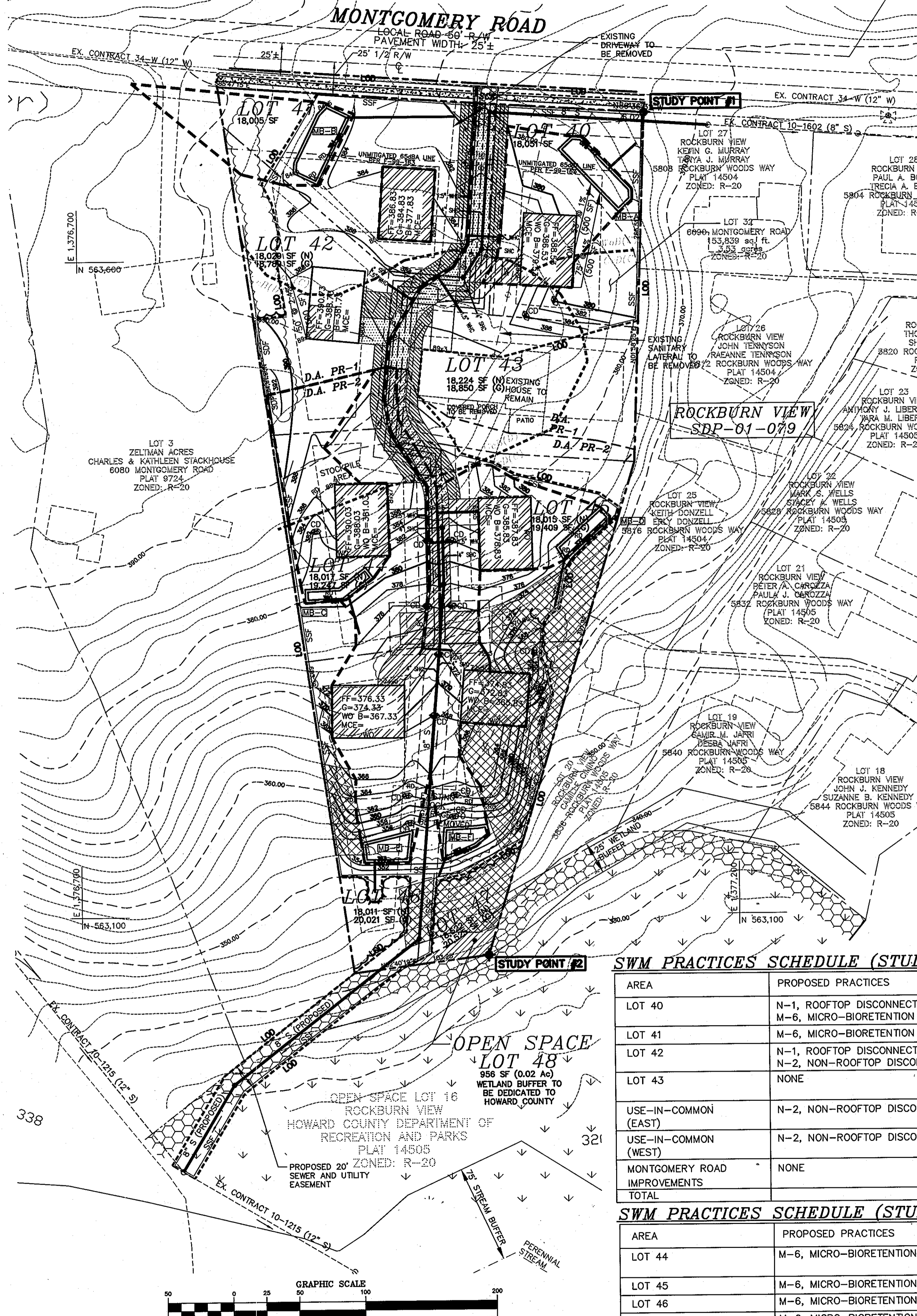
3/14/12 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT

3/07/12 DATE

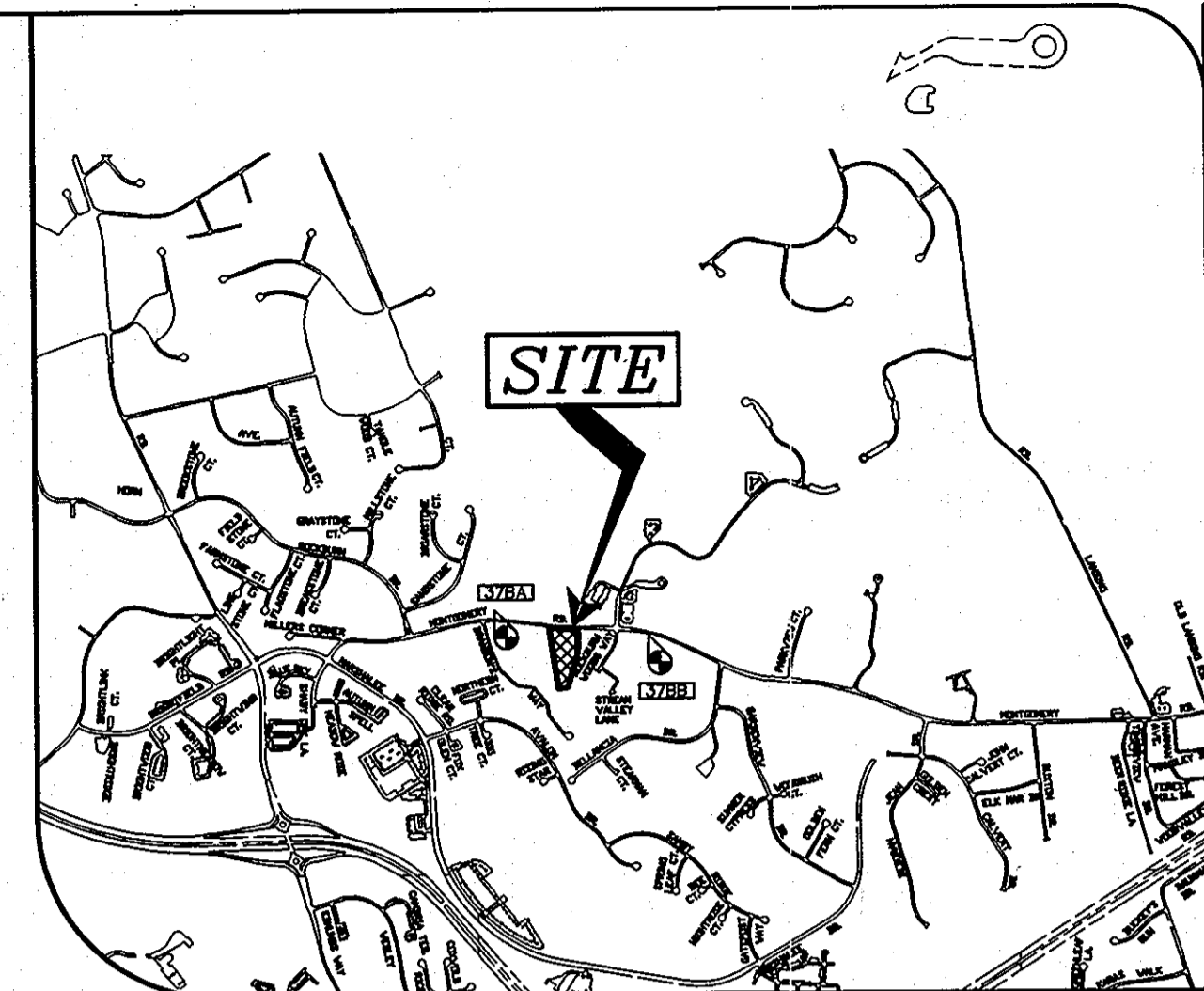


I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 40091, EXP DATE 2/13/13.



SOILS DESCRIPTION

- CrD (C) CROOM AND EVESBORO, 10 TO 15% SLOPES
- UcB (D) URBAN LAND-CHILLUM-BELTSVILLE, 0-5% SLOPES
- WoB (C) WOODSTOWN SANDY LOAM, 2 TO 5% SLOPES



VICINITY MAP

NOTES:

1. SITE ANALYSIS DATA:
LOCATION: TAX MAP : 37 PARCEL: 563 GRID 4 LOT 32
ELECTION DISTRICT : SECOND
ZONING: R-20
TOTAL GROSS SITE AREA: 3.53 AC±
AREA OF WETLAND BUFFER TO BE DEDICATED TO HOWARD COUNTY: 0.02 AC±
TOTAL NET SITE AREA: 3.51 AC±
AREA OF 15-24.99% SLOPES: 0.42 AC± (18,489 SF)
AREA OF >25% SLOPES: 0
LIMIT OF DISTURBED AREA: 3.01 AC± (0.19 AC OFFSITE)
PROPOSED USE FOR SITE : RESIDENTIAL
TOTAL NUMBER OF UNITS : 8 (INCL. 1 EXISTING)
TYPE OF PROPOSED UNIT : SFD
DEED REFERENCE: 11401 / 00100
PREVIOUS DPZ FILE NUMBERS : S-97-00, P-98-16, F-99-163, PLAT 14503-14508
2. HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS NO. 37BA & 37BB
STA. No. 37BA EL. 393.94 N 563785.6421' E 1376343.2088
STA. No. 37BB EL. 373.01 N 563663.4488' E 1378040.5059
3. THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS (COUNCIL BILL 45-2003). 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/GRADING PERMIT.
4. SITE DEVELOPMENT PLAN APPROVAL BY THE DEPARTMENT OF PLANNING AND ZONING IS REQUIRED PRIOR TO BUILDING PERMITS BEING ISSUED FOR THE CONSTRUCTION OF RESIDENTIAL DWELLINGS ON THESE LOTS.
5. THIS DEVELOPMENT IS DESIGNED TO BE IN ACCORDANCE WITH SECTION 16.127 RESIDENTIAL INFILL DEVELOPMENT OF SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. THE DEVELOPERS OF THIS PROJECT SHALL CREATE COMPATIBILITY WITH EXISTING NEIGHBORHOOD THROUGH THE USE OF ENHANCED PERIMETER LANDSCAPING, BERMS, FENCES, SIMILAR HOUSING UNIT TYPES AND THE DIRECTIONAL ORIENTATION OF THE PROPOSED HOUSES.
6. PROJECT BOUNDARY IS BASED ON HOWARD COUNTY GIS (NAD 83)
7. TOPOGRAPHY SHOWN HEREON IS BASED ON HOWARD COUNTY GIS (NAVD 88)
8. FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT FOR THIS SUBDIVISION HAS BEEN FULFILLED UNDER APPROVED PLAN F-99-163 AND AS SHOWN ON RECORDED PLAT 14575
9. THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT.
10. PER RECORDED PLAT 14505 AND APPROVED PLAN F-99-163, NO WETLANDS EXIST ON SITE. THE AREA OF WETLAND BUFFER ON SITE WILL BE DEDICATED TO HOWARD COUNTY FOR USE AS OPEN SPACE.
11. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, OR PLACEMENT OF NEW PAVING OR STRUCTURES IS PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM(S), OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100-YEAR FLOODPLAIN.
12. HORIZONTAL GEOMETRY OF THE MICRO-BIORETENTION MAY BE MODIFIED WHILE MAINTAINING SURFACE AREA.
13. IMPROVEMENTS TO MONTGOMERY ROAD WILL INCLUDE THE CONSTRUCTION OF A 4' WIDE CONCRETE SIDEWALK, 2' WIDE CURB AND GUTTER, THE CONSTRUCTION OF APPROXIMATELY 600 SF OF NEW ASPHALT PAVEMENT, AND THE REMOVAL AND REPLACEMENT OF EXISTING PAVEMENT PER HOWARD COUNTY'S ROADWAY WIDENING DETAIL.
14. APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND 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 THE OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.
15. SECTION 16.121(c)(2) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS ALLOWS FOR A MINIMUM LOT SIZE OF LESS THAN 20,000 SF IN THE R-20 ZONING DEPENDING ON THE OPEN SPACE PROVIDED. AN OPEN SPACE PERCENTAGE OF 30 PERCENT WAS PROVIDED IN THE ORIGINAL ROCKBURN VIEW SUBDIVISION (F-99-163, PLAT 14503-14508) ALLOWING FOR A MINIMUM LOT SIZE OF 14,000 SF.

SWM PRACTICES SCHEDULE (STUDY POINT 1)

| AREA | PROPOSED PRACTICES | REQUIRED ESDV / TARGET ESDV | PROVIDED ESDV |
|------------------------------|--|-----------------------------|---------------|
| LOT 40 | N-1, ROOFTOP DISCONNECTION M-6, MICRO-BIORETENTION (MB-A) | 371 CF (TARGET) | 1,147 CF |
| LOT 41 | M-6, MICRO-BIORETENTION (MB-B) | 352 CF (TARGET) | 1,193 CF |
| LOT 42 | N-1, ROOFTOP DISCONNECTION N-2, NON-ROOFTOP DISCONNECTION | 343 CF (TARGET) | 60 CF |
| LOT 43 | NONE | 653 CF (TARGET) | 0 |
| USE-IN-COMMON (EAST) | N-2, NON-ROOFTOP DISCONNECTION | 279 CF (TARGET) | 171 CF |
| USE-IN-COMMON (WEST) | N-2, NON-ROOFTOP DISCONNECTION | 279 CF (TARGET) | 171 CF |
| MONTGOMERY ROAD IMPROVEMENTS | NONE | 336 CF (TARGET) | 0 |
| TOTAL | | 2,613 CF (REQ'D) | 2,742 CF |

SWM PRACTICES SCHEDULE (STUDY POINT 2)

| AREA | PROPOSED PRACTICES | REQUIRED ESDV / TARGET ESDV | PROVIDED ESDV |
|----------------------|--------------------------------|-----------------------------|---------------|
| LOT 44 | M-6, MICRO-BIORETENTION (MB-C) | 307 CF (TARGET) | 357 CF |
| LOT 45 | M-6, MICRO-BIORETENTION (MB-D) | 296 CF (TARGET) | 393 CF |
| LOT 46 | M-6, MICRO-BIORETENTION (MB-E) | 332 CF (TARGET) | 582 CF |
| LOT 47 | M-6, MICRO-BIORETENTION (MB-F) | 277 CF (TARGET) | 500 CF |
| USE-IN-COMMON (EAST) | M-6, MICRO-BIORETENTION (MB-E) | 280 CF (TARGET) | SEE LOT 46 |
| USE-IN-COMMON (WEST) | M-6, MICRO-BIORETENTION (MB-F) | 280 CF (TARGET) | SEE LOT 47 |
| TOTAL | | 1,772 CF (REQ'D) | 1,832 CF |

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|--------------|--------|-------------|----------|
| project | 11-023 | date | JAN 2012 |
| illustration | JLS | engineering | JLS |
| scale | 1"=50' | approval | RHJ |

| | | | |
|-------------|-----------|------|--|
| description | revisions | date | |
| 1 | | | |

ROCKBURN VIEW LOTS 40 THRU 47 AND O.S. LOT 48
RESUBDIVISION OF LOT 32 (6090 MONTGOMERY ROAD, ELK RIDGE, MD)
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
TAX MAP: 37 PARCEL: 563
ENVIRONMENTAL CONCEPT PLAN

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