

ESD NARRATIVE

1. NO NATURAL RESOURCES SUCH AS STEEP SLOPES, WETLANDS, STREAMS, OR VALUABLE FOREST LAND EXIST ON-SITE. THE PROPOSED DISCONNECTIONS AND MICRO-BIORETENTION FACILITIES WILL BE PROVIDED TO PROVIDE STORMWATER QUALITY TREATMENT FOR THE NEW DEVELOPMENT, WHICH WILL BE AN IMPROVEMENT OVER EXISTING CONDITIONS. NO EXISTING TREATMENT EXISTS FOR THE EXISTING DILAPIDATED STRUCTURES AND DRIVEWAYS. IN ADDITION, THE EXISTING SITE IS COVERED WITH TRASH AND DEBRIS WHICH WILL BE REMOVED ONCE THE PROPOSED PROJECT COMMENCES.
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 FULLY EXTENT POSSIBLE. ROOF-TOP AND NON-ROOF-TOP 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 SILT FENCES AND SUPER SILT FENCES. NO CONCENTRATION FLOW IS PROPOSED. 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 = 1.84 ±ACRE, LIMIT OF DISTURBANCE = 1.88 ± ACRE
2. AREA OF WETLANDS AND ITS BUFFERS = 0
3. AREA OF FLOODPLAIN = 0
4. AREA OF STREAM BUFFER = 0
5. AREA OF STEEP SLOPES = 0 ACRES
6. AREA OF FOREST = 0.5 ACRES ±
7. TOTAL ENVIRONMENTAL SENSITIVE AREA = 0 ±ACRES
8. DEVELOPABLE AREA = 1.84 ±ACRES (ON-SITE)
 NEW IMPERVIOUS AREA: 12,000 SF / 0.28 Ac (HOUSES AND STOOPS)
 5,629 SF / 0.13 Ac (USE-IN-COMMON DRIVEWAY)
 1,883 SF / 0.04 Ac (PINE ROAD FRONTAGE IMPROVEMENTS---SIDEWALK, CURB AND GUTTER, NEW ASPHALT)
 4,503 SF / 0.10 Ac (LOT DRIVEWAYS)
 24,015 SF / 0.55 Ac (TOTAL NEW IMPERVIOUS)
9. NO SLOPES OF 15%-24.99% OR SLOPES OF 25% OR GREATER EXIST ONSITE.
10. NO ERODABLE SOILS EXISTS ON SITE.
11. ONE SINGLE FAMILY DETACHED DWELLING PER LOT IS PROPOSED.
12. DUE TO THE SMALL SIZE OF THE PROJECT AND IN ACCORDANCE WITH HOWARD COUNTY REGULATIONS, FEE IN LIEU OF OPEN SPACE WILL BE PAID. HOWARD COUNTY WILL USE THAT FEE TO BETTER IMPLEMENT OPEN SPACE AREAS WITHIN THE COUNTY.

LEGEND

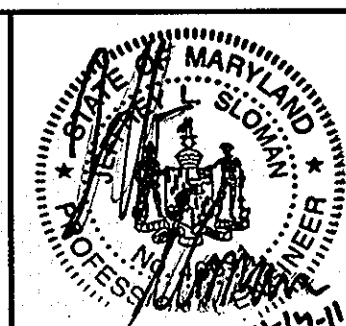
- AREA OF PAVEMENT TREATED BY N-2, NON-ROOFTOP DISCONNECTION
- AREA OF N-2, NON-ROOFTOP DISCONNECTION
- AREA TREATED BY M-6, MICRO-BIORETENTION AND / OR N-1, ROOFTOP DISCONNECTION
- N-1, ROOFTOP DISCONNECTION FLOW PATH WITH LENGTH, SLOPE, AND TREATED AREA
- M-6, MICRO-BIORETENTION I.D.
- DRAINAGE AREA
- LIMIT OF DISTURBANCE
- SUPER SILT FENCE
- SILT DIVERSION FENCE
- STABILIZED CONSTRUCTION ENTRANCE

PROPERTY OWNER

SUSIE FERGUSON, PERSONAL REPRESENTATIVE FOR THE ESTATE OF FAREED ALI ABDULLAH ZAHARAH NABEEHAH ABDULLAH
 C/O MILDENBERG BOENDER AND ASSOCIATES
 6800 DEERPATH ROAD, SUITE 150
 ELKBRIDGE, MD 21075
 (410)997-0296

APPROVED: DEPARTMENT OF PLANNING AND ZONING

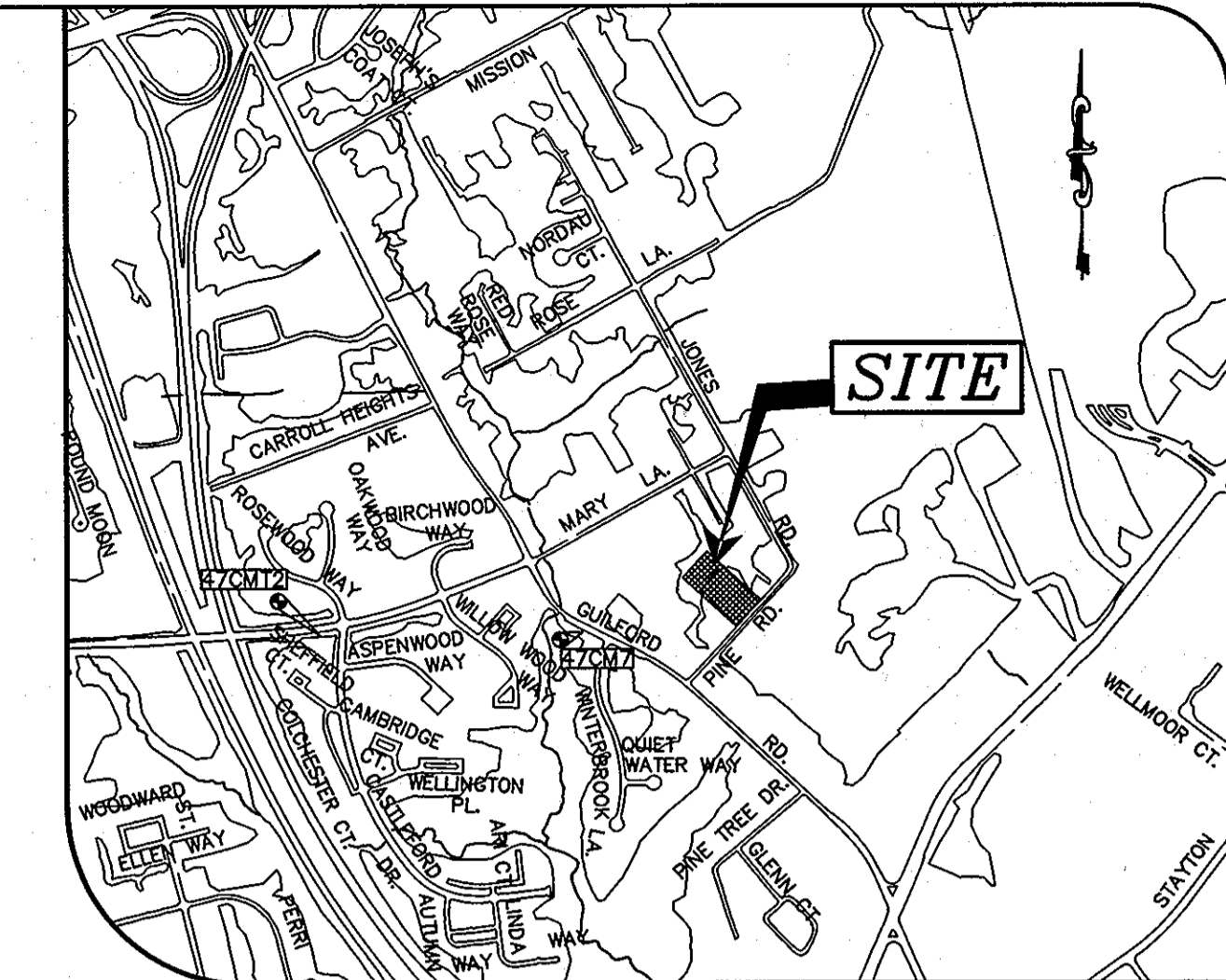
CHIEF, DEVELOPMENT ENGINEERING DIVISION *[Signature]* 4/21/11 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT *[Signature]* 4/23/11 DATE



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.

SWM PRACTICES SCHEDULE

AREA	PROPOSED PRACTICES	REQUIRED ESDv / TARGET ESDv	PROVIDED ESDv
LOT 13	N-1, ROOFTOP DISCONNECTION M-6, MICRO-BIORETENTION (MB-A)	371 CF (TARGET)	765 CF
LOT 14	M-6, MICRO-BIORETENTION (MB-B)	439 CF (TARGET)	462 CF
LOT 15	N-1, ROOFTOP DISCONNECTION N-2, NON-ROOFTOP DISCONNECTION M-6, MICRO-BIORETENTION (MB-C)	398 CF (TARGET)	644 CF
LOT 16	M-6, MICRO-BIORETENTION (MB-D)	397 CF (TARGET)	293 CF
LOT 17	N-1, ROOFTOP DISCONNECTION M-6, MICRO-BIORETENTION (MB-E)	418 CF (TARGET)	682 CF
LOT 18	N-1, ROOFTOP DISCONNECTION M-6, MICRO-BIORETENTION (MB-F)	373 CF (TARGET)	479 CF
USE-IN-COMMON (EAST)	N-2, NON-ROOFTOP DISCONNECTION	409 CF (TARGET)	125 CF
USE-IN-COMMON (WEST)	N-2, NON-ROOFTOP DISCONNECTION	408 CF (TARGET)	125 CF
PINE ROAD IMPROVEMENTS	NONE	273 CF (TARGET)	0 CF
TOTAL		3,486 CF (REQ'D)	3,575 CF

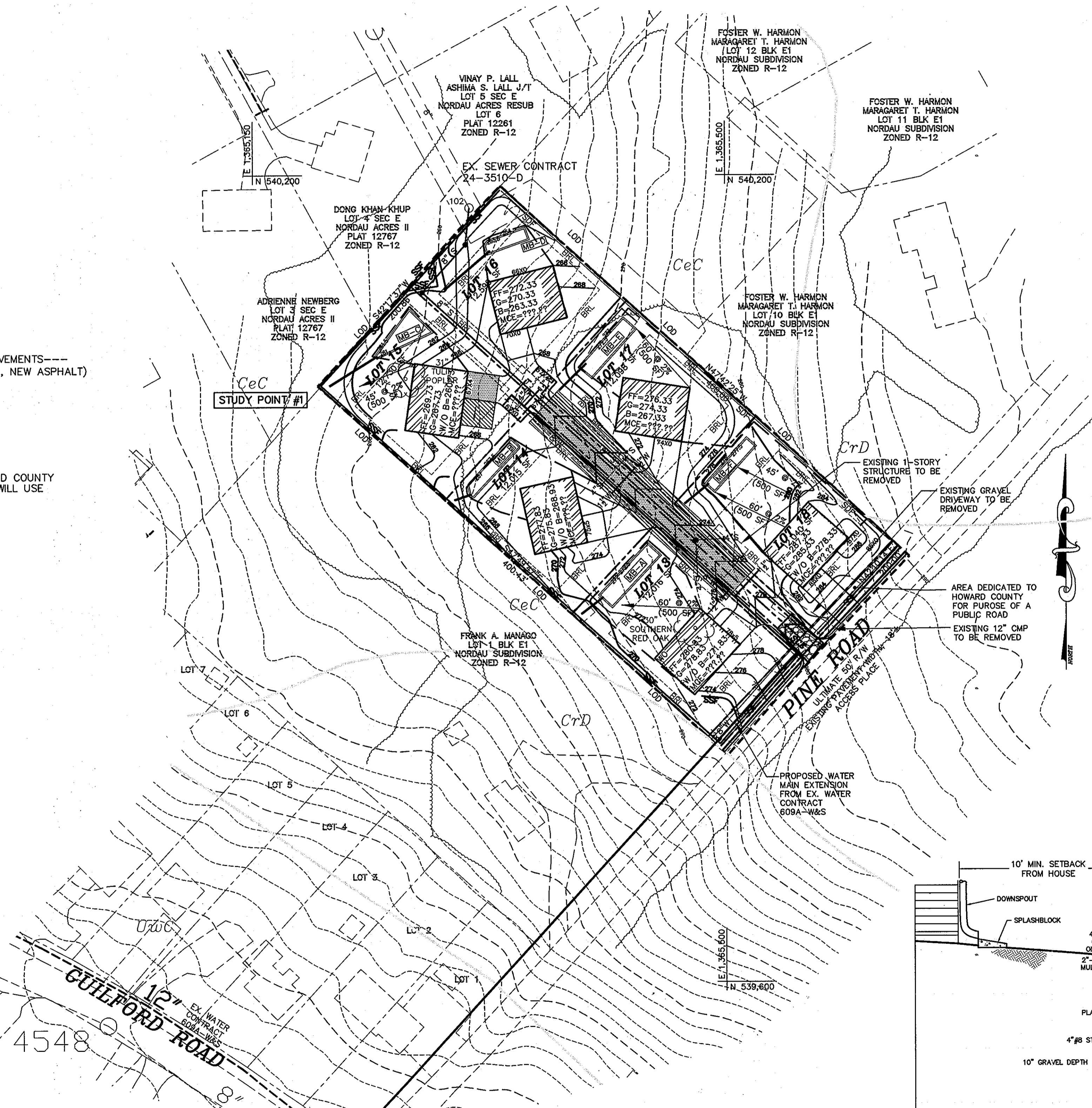


VICINITY MAP

SCALE: 1" = 100'
 ADC MAP 5053 - GRID K7

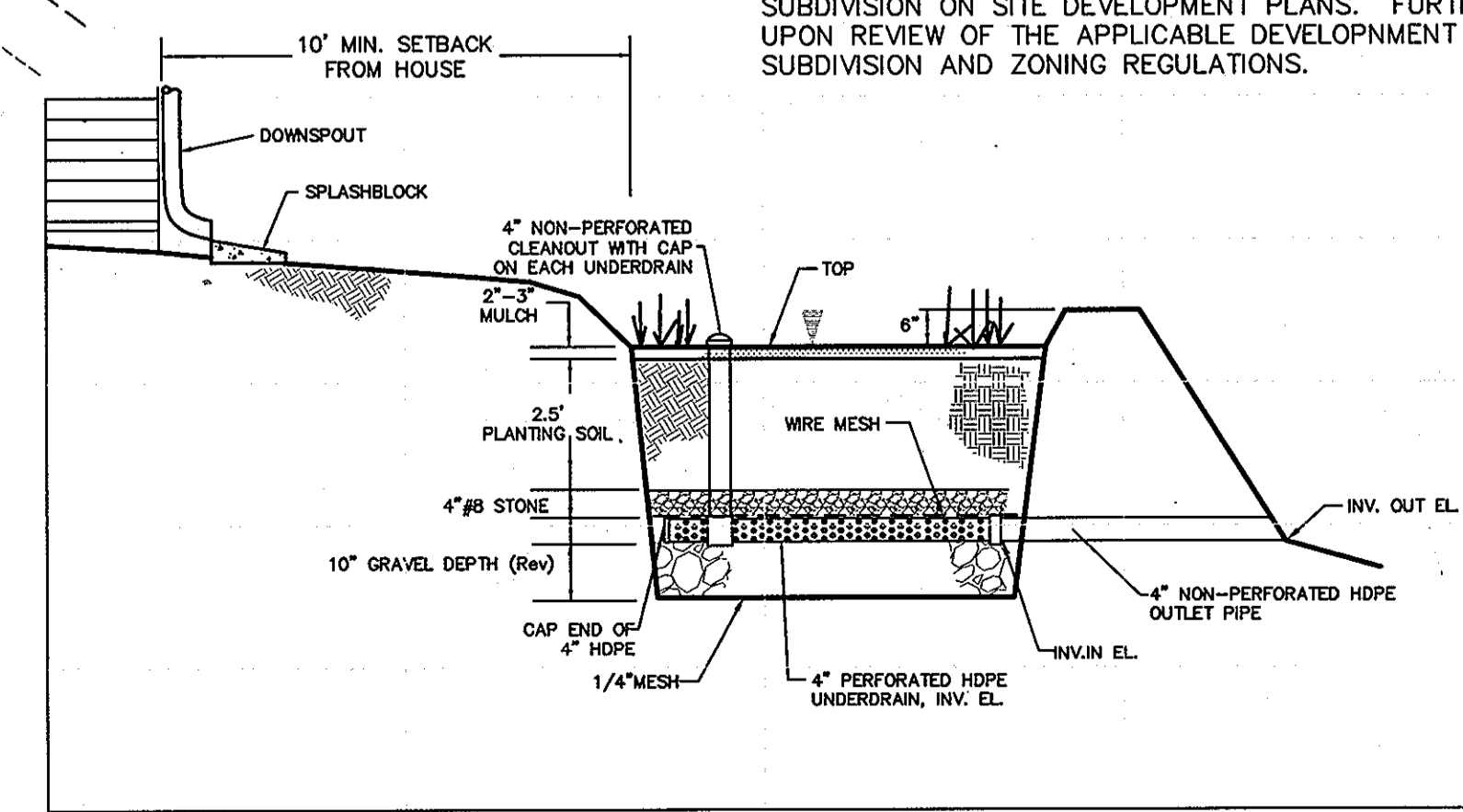
NOTES:

1. SITE ANALYSIS DATA:
 LOCATION: TAX MAP : 47 PARCEL: 668 GRID 6 LOT 2
 ELECTION DISTRICT : SIXTH
 ZONING: R-12
 TOTAL AREA: 1.84 AC.±
 LIMIT OF DISTURBED AREA: 1.88 AC.±
 PROPOSED USE FOR SITE : RESIDENTIAL
 TOTAL NUMBER OF UNITS : 6
 TYPE OF PROPOSED UNIT : SFD
 DEED REFERENCE: 944 / 685
2. HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS NO. 47CM7 & 47CM2
 STA. No. 47CM7 EL. 207.49
 STA. No. 47CM2 EL. 281.63
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 A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT SEPTEMBER 2011
7. TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD RUN SURVEY PERFORMED ON OR ABOUT SEPTEMBER 2011
8. FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT FOR THIS SUBDIVISION WILL BE FULFILLED BY OFF-SITE FOREST CONSERVATION
9. THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT.
10. NO WETLAND EXISTS ON SITE AS CERTIFIED BY ECO SCIENCE IN WETLAND CERTIFICATION LETTER DATED OCTOBER 2011. FOREST STAND DELINEATION INCLUDED WITH ECP SUBMITTAL
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. A WAIVER WILL BE APPLIED FOR TO ALLOW FOR THE REMOVAL OF THE TWO ON-SITE SPECIMEN TREES (32" SOUTHERN RED OAK, 31" TULIP POPLAR)
14. IMPROVEMENTS TO PINE ROAD WILL INCLUDE THE CONSTRUCTION OF A 4' WIDE CONCRETE SIDEWALK, 2' WIDE CURB AND GUTTER, THE CONSTRUCTION OF APPROXIMATELY 200 SF OF NEW ASPHALT PAVEMENT, AND THE REMOVAL AND REPLACEMENT OF EXISTING PAVEMENT PER HOWARD COUNTY'S ROADWAY WIDENING DETAIL.
15. APPROVAL OF THIS ECP DOES NOT CONSTITUTE ANY APPROVAL OF SUBSEQUANT SUBDIVISION ON SITE DEVELOPMENT PLANS. FURTHER COMMENTS WILL BE GENERATED UPON REVIEW OF THE APPLICABLE DEVELOPMENT PLANS IN ACCORDANCE WITH THE SUBDIVISION AND ZONING REGULATIONS.



SOILS DESCRIPTION

- CeC (B) CHILLUM LOAM, 5 TO 10% SLOPES
- CrD (C) CROOM AND EVESBORO, 10 TO 15% SLOPES



TYPICAL MICRO-BIORETENTION PROFILE

R:11-017 PINE ROAD.DWG:17-CONCEPT-COMM-MTC.DWG

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 (410) 997-0296 Ext. (410) 997-0296 Fax.

NORDAU SUBDIVISION LOTS 13 THRU 18
 RESUBDIVISION OF LOT 2
 TAX MAP: 47 PARCEL: 668
 HOWARD COUNTY, MARYLAND
 ENVIRONMENTAL CONCEPT PLAN (ECP)

project date: 11-017 OCT 2011
 illustration: JLS JLS JLS
 score: JLS
 1"=50'
 date: OCT 2011
 description: revisions
 no.:

1 OF 1
 ECP 12-020