

SOILS TABLE

SYMBOL	RATING	NAME	K FACTOR	SOIL MAP #	COMMENTS
ChB	(B)	CHILLUM-RUSSETT LOAMS, 2 TO 5% SLOPES	0.37	24	

SWM PRACTICES SCHEDULE

AREA	PROPOSED PRACTICES	REQUIRED ESDV	PROVIDED ESDV
PARCELS 731, 732	M-5, (7) DRYWELLS N-2, (1) NON-ROOFTOP DISCONNECTION	1,034 C.F.	1,053 C.F.

SITE ANALYSIS DATA:

1. AREA OF THE SITE = 1.21± AC (GROSS)
2. LIMIT OF DISTURBANCE = 36,450 S.F. (0.84 AC±)
3. AREA OF ROAD DEDICATION = 0
4. AREA OF WETLANDS AND ITS BUFFERS = 0
5. AREA OF 100 YEAR FLOODPLAIN = 0
6. AREA OF STREAM BUFFER = 0
7. AREA OF STEEP SLOPES (25% OR GREATER AT VERTICAL DISTANCE OF 10 FEET OR MORE) = 0
8. AREA OF 15%-24.99% SLOPES = 0
9. AREA OF SLOPES 20% OR GREATER = 0
10. AREA OF FOREST = 0
11. TOTAL ENVIRONMENTAL SENSITIVE AREA = 0
12. AREA OF HIGHLY ERODIBLE SOILS = 52,707 S.F. (1.21 AC±)
13. PROPOSED GREEN OPEN SPACE = 42,740 S.F. (0.98 AC±)
14. ONE (1) NEW SINGLE FAMILY DETACHED RESIDENTIAL UNIT IS PROPOSED.
15. AREA OF PROPOSED IMPERVIOUS = 8,550 SF

SWM CALCULATIONS

ESD REQUIRED
 LOT AREA = 52,493 SF
 HOUSE AREA = 4,530 SF
 DRIVEWAY AREA = 4,020 SF

TOTAL IMPERVIOUS AREA = 8,550 SF
 IMPERVIOUS RATIO = 16.3%
 SOIL TYPE: B (100%)
REQUIRED Pe = 1.2' [TABLE 5.3]
 Rv = 0.197
 REQUIRED ESDV = 1,034 CF

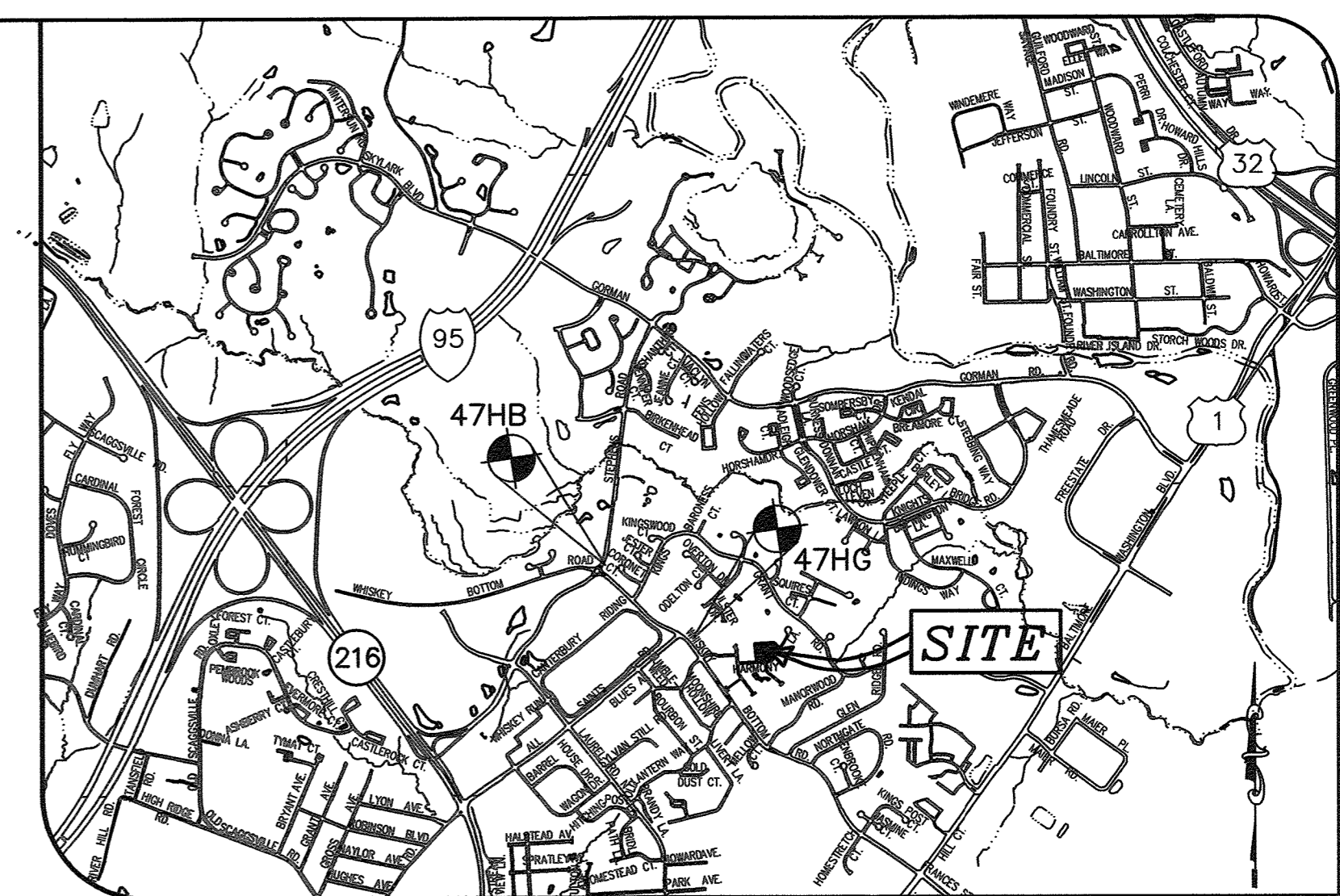
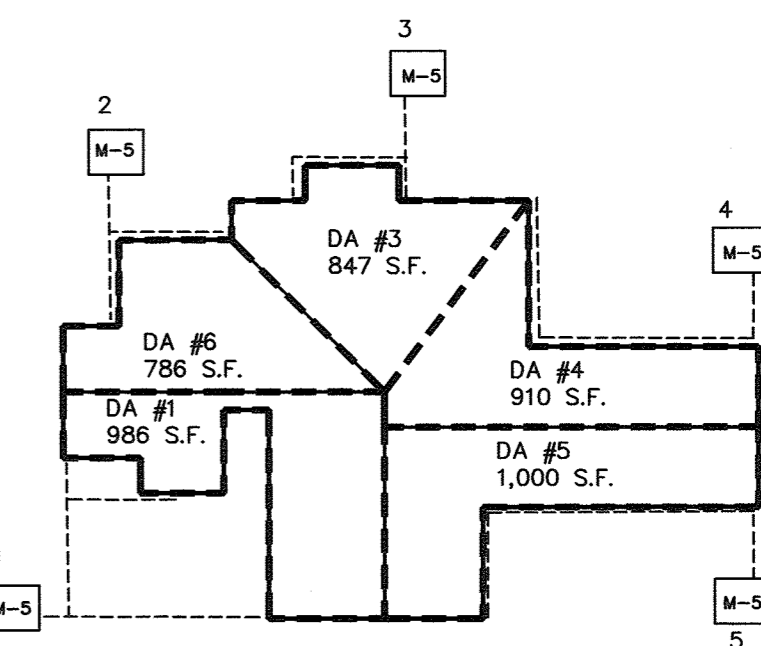
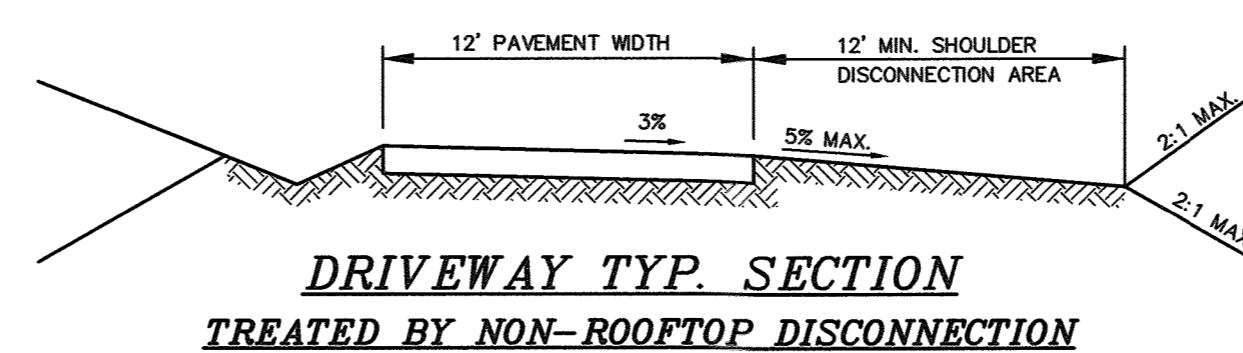
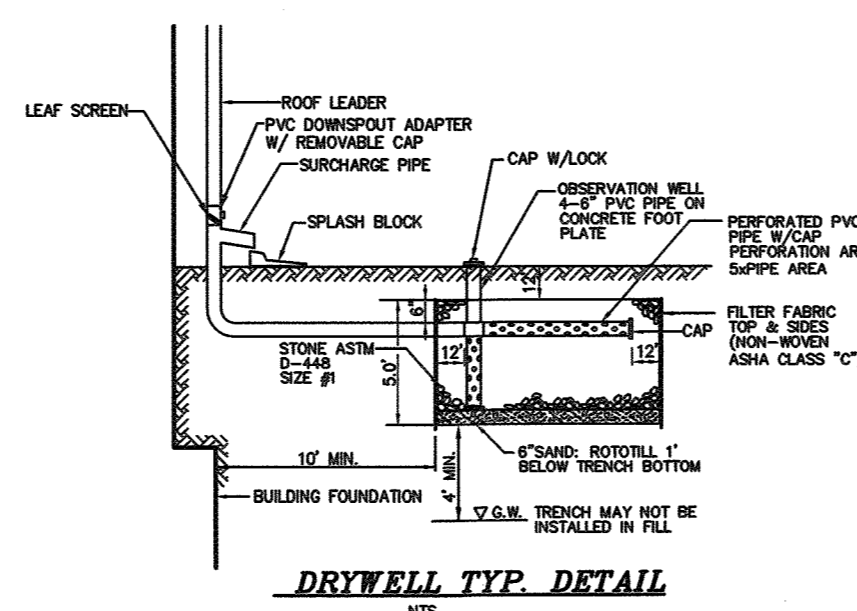
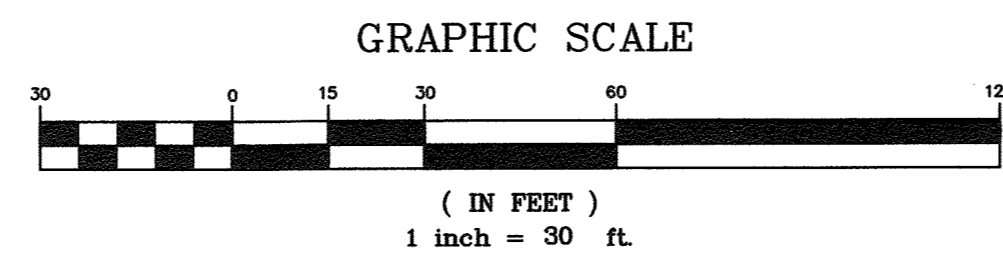
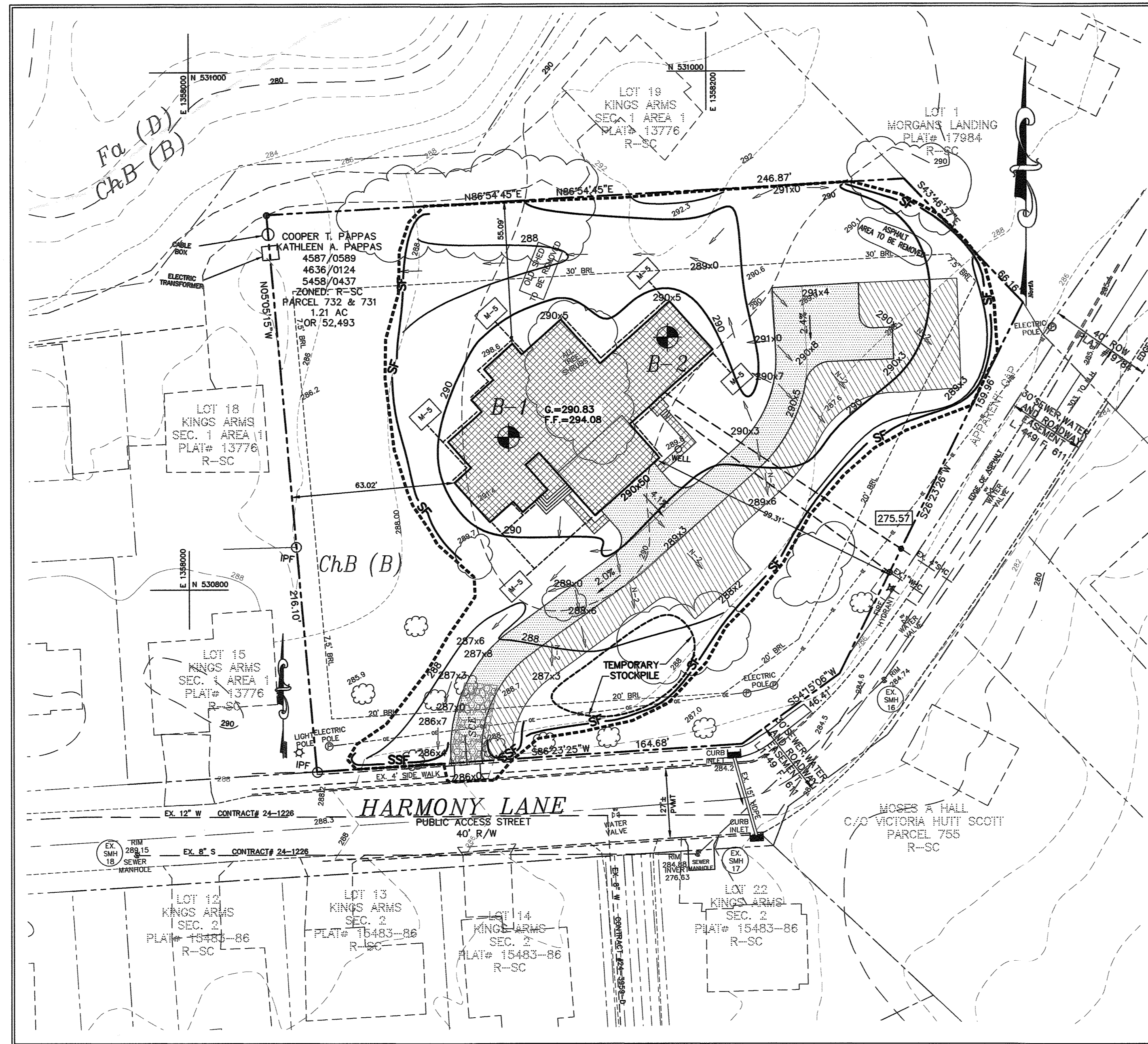
DRIVEWAY:
 NON-ROOFTOP DISCONNECTIONS AT 1:1 RATIO OF CONTRIBUTING IMPERVIOUS LENGTH TO DISCONNECTION LENGTH AND PERVIOUS LENGTH RATIO TO DISCONNECTION LENGTH OF MORE THAN 0.5:1, (N-1) OF THE MDE DESIGN MANUAL AREA OF N-1 NON-ROOFTOP DISCONNECTION = 4,020 SF
 ESDV PROVIDED 318 CF

HOUSE:
 FIVE (5) DRYWELLS AT 126 OF EACH OF STORAGE, DIMENSIONS: (5')(10.5')(7'), (M-5) OF THE MDE DESIGN MANUAL ESDV PROVIDED 735 CF

TOTAL ESDV PROVIDED 1,053 CF
 BY PROVIDING THE NON-ROOFTOP DISCONNECTIONS (N-2), AND DRYWELLS (M-5) THE ENTIRE TARGET RUNOFF HAS BEEN TREATED VIA NON-STRUCTURAL PRACTICES.

LEGEND

- MINOR CONTOUR
- MAJOR CONTOUR
- SF PROPOSED SUPER SILT FENCE
- SCF STABILIZED CONSTRUCTION ENTRANCE
- LOD LIMIT OF DISTURBANCE
- IMPERVIOUS AREA TREATED BY NON-ROOFTOP DISCONNECTION (N-2)
- NON-ROOFTOP DISCONNECTION (N-2)
- IMPERVIOUS AREA TREATED BY DRYWELLS (M-5)
- M-5 DRYWELL (M-5)
- OE EXISTING TREE LINE
- OE EXISTING OVERHEAD ELECTRIC



NOTES:

1. SITE ANALYSIS DATA:
 ADDRESS: 9910 HARMONY LANE, LAUREL, MD. 20723
 LOCATION: TAX MAP : 47 PARCEL: 731 & 732 GRID 22
 ELECTION DISTRICT : SIXTH
 ZONING: R-SC
 TOTAL AREA: 1.21 AC±
 TOTAL NUMBER OF UNITS : 1
 TYPE OF PROPOSED UNIT : SFD
 PROPOSED USE FOR SITE : RESIDENTIAL.
2. HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS NO. 47HG & 47HB
 STA. No. 47HB EL. 296.82 N 531,895.744 E 1,356,076.346
 STA. No. 47HG EL. 294.55 N 531,085.007 E 1,357,060.425
3. PROJECT BOUNDARY IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT OCTOBER, 2018 BY VYFHUIS & ASSOCIATES.
4. ON SITE TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD RUN SURVEY PERFORMED ON OR ABOUT OCTOBER, 2018 BY VYFHUIS & ASSOCIATES. OFF SITE IS AS PER 2011 HOWARD COUNTY GIS
5. PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. PUBLIC WATER AND SEWER WILL BE UTILIZED UNDER CONTRACT # 24-1126-D.
6. NO CEMETERIES EXIST ON SITE.
7. THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT.
8. NO FOREST EXISTS ON-SITE.
9. NO WETLANDS, WETLAND BUFFERS, FLOODPLAIN, STREAM, STREAM BUFFER OR ERODIBLE SOILS EXISTS ON-SITE.
10. APPROVAL OF THIS ECP DOES NOT CONSTITUTE ANY APPROVAL OF SUBSEQUENT SUBDIVISION OR SITE DEVELOPMENT PLANS. FURTHER COMMENTS WILL BE GENERATED UPON REVIEW OF THE APPLICABLE DEVELOPMENT PLANS IN ACCORDANCE WITH THE SUBDIVISION AND ZONING REGULATIONS. 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.
11. 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.
12. FOREST CONSERVATION OBLIGATION FOR THIS PROJECT WILL BE PROVIDED VIA A PAYMENT OF FEE-IN-LEIU.
13. THERE IS AN EXISTING SHED TO BE REMOVED.

ESD NARRATIVE

1. THE AREA OF THIS PROJECT IS APPROXIMATELY 1.21 ACRES. NO FOREST, FLOODPLAIN, WETLANDS, WETLAND BUFFER, STREAMS, STREAM BUFFER OR STEEP SLOPES EXIST ON SITE.
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 MAXIMUM EXTENT POSSIBLE. DRYWELL (M-5) AND NON-ROOFTOP DISCONNECTIONS (N-2) HAVE BEEN UTILIZED.
4. THE REQUIRED EROSION AND SEDIMENT CONTROL MEASURES WILL BE IN ACCORDANCE WITH THE LATEST MDE STANDARDS AND SPECIFICATIONS. SILT FENCES WILL BE UTILIZED. 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.
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 NON-ROOFTOP (N-2)
 B. DRYWELLS

OWNER
 COOPER T. PAPPAS
 KATHLEEN A. PAPPAS
 9007 CYGNET PL. LAUREL
 MD. 20723
 301-725-7680

DEVELOPER
 KEITH BUTLER
 NOW OR LATER CONSULTING SERVICES, LLC
 14701 DANTON CT.
 BOWIE, MD 20721
 301-390-5877

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature]
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature]
 CHIEF, DIVISION OF LAND DEVELOPMENT

DATE: 2/26/19
 DATE: 2/19/19

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. 17942, EXP. DATE 9/03/20.
 [Signature]
 R. JACOB HIKMAT, P.E.
 DATE: 2/18/19

Project: 18-019
 date: FEB. 2019
 illustration: MMM
 engineering: MMM
 scale: 1"=30'
 approval: RHH

description: ENVIRONMENTAL CONCEPT PLAN
 revisions: [blank]

PAPPAS PROPERTY
 TAX MAP 47, PARCEL 731 & 732, GRID 22
 HOWARD COUNTY, MARYLAND
 SIXTH ELECTION DISTRICT
ENVIRONMENTAL CONCEPT PLAN

MILDENBERG, BOENDER & ASSOC., INC.
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 7350-B Grace Drive, Columbia, Maryland 21044
 (410) 997-0296 Tel. (410) 997-0298 Fax.