

FINAL ROAD CONSTRUCTION PLAN

PINE ACRES

LOTS 1 THRU 21, AND OPEN SPACE LOTS 22 THRU 28

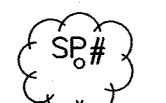
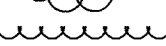


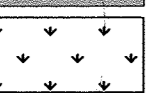
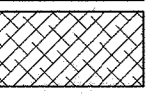
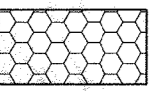
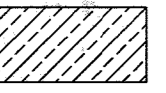
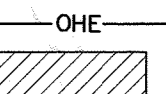

FIRST ELECTION DISTRICT

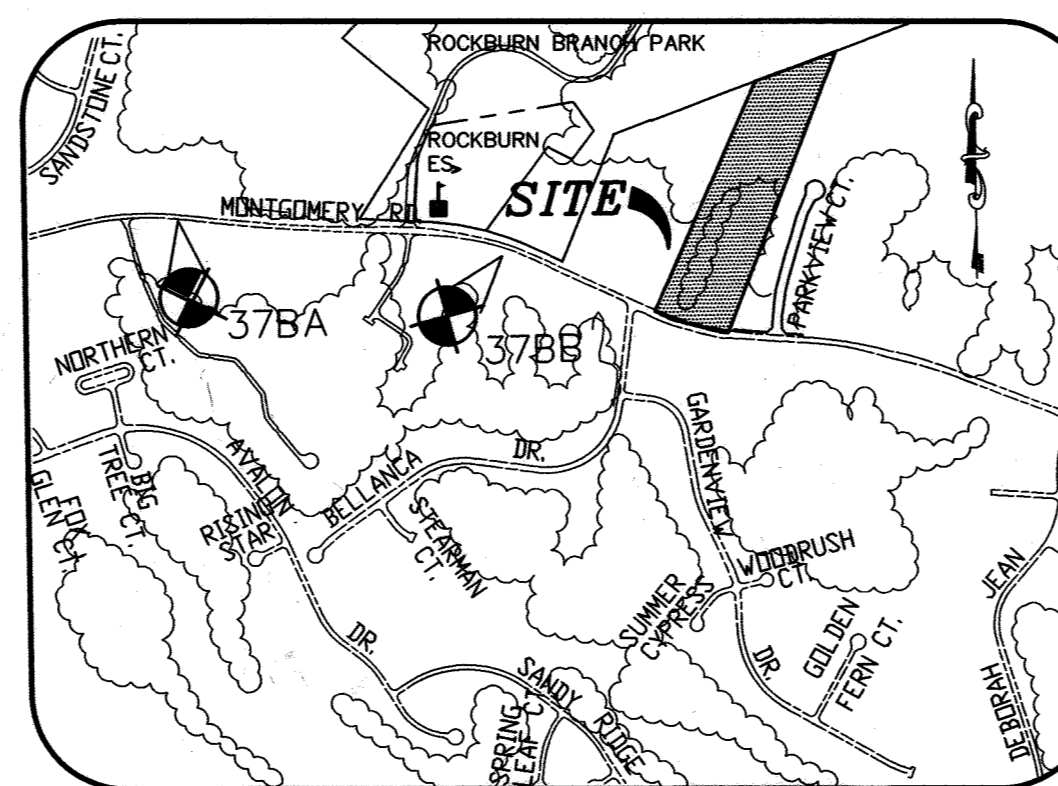
HOWARD COUNTY, MARYLAND

SHEET INDEX

NO	TITLE
1	COVER SHEET
2	ROAD PLAN, PROFILE AND TYPICAL SECTION
3	ROAD IMPROVEMENT PLAN, SECTIONS AND DETAILS
4	SOIL MAP AND GRADING AND SEDIMENT CONTROL PLAN, STAGE 1
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6	SEDIMENT CONTROL NOTES AND DETAILS
7	STORM DRAIN PROFILES
8	STORM DRAIN DRAINAGE AREA MAP
9	STORMWATER MANAGEMENT PLAN
10	STORMWATER MANAGEMENT DETAILS AND SOIL BORINGS
11	FOREST CONSERVATION PLAN
12	LANDSCAPING PLAN

LEGEND

-  SPECIMEN TREE
-  EX. TREE LINE
-  PROP. TREE LINE
-  AREA OF 100 YEAR FLOODPLAIN
-  AREA OF WETLANDS
-  AREA OF 15%-25% SLOPES
-  AREA OF FOREST CONSERVATION EASEMENT
-  AREA OF RECREATIONAL OPEN SPACE
-  EX. OVERHEAD POWER LINE
-  AREA OF ROAD DEDICATION



VICINITY MAP
SCALE: 1"=1000'
ADC MAP: 35 GRID A-1

GENERAL NOTES:

1. THIS SUBJECT PROPERTY IS ZONED R-20 PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
2. THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
3. TOPOGRAPHY WITHIN 200' OF SITE BOUNDARY SHOWN HEREON IS BASED ON FIELD RUN SURVEY PERFORMED BY MILDENBERG, BOENDER & ASSOC., INC. ON OR ABOUT MARCH 2014. OTHER TOPOGRAPHY SHOWN IS BASED ON HOWARD COUNTY GIS.
4. BOUNDARY SHOWN HEREON IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT MARCH 2014 BY MILDENBERG, BOENDER & ASSOC.
5. COORDINATES BASED ON NAD '83 (HORIZONTAL) AND NAVD '88 (VERTICAL) MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS
STA. NO. 378A N 563785.618 E 1376343.172 ELEV. 373.014
STA. NO. 378B N 563663.415 E 1378040.471 ELEV. 393.935
6. PROJECT BACKGROUND:
ADDRESS: 6249 MONTGOMERY ROAD, ELKBRIDGE, MD 21075
LOCATION: TAX MAP - 37 PARCEL: 49 AND 50 GRID: 5
ELECTION DISTRICT: FIRST
DEED REFERENCE : PARCEL 49- 6776/184, PARCEL 50- 4043/703
PREVIOUS PROJECT NUMBERS: ECP-15-001, SP-15-011
7. SITE AREA TABULATION
TOTAL AREA: 12.03 AC±
AREA OF 100 YEAR FLOODPLAIN: 0.1 AC±
TOTAL NET AREA: 11.93 AC±
MINIMUM LOT SIZE PROPOSED: 14,000 S.F.
NUMBER OF BUILDABLE LOTS: 21
NUMBER OF OPEN SPACE LOTS: 6
TYPE OF PROPOSED UNIT: SFD
AREA OF BUILDABLE LOTS: 6.77 AC±
AREA OF ROAD ROW: 1.37 AC±
AREA OF OPEN SPACE REQUIRED: 3.61 AC±
AREA OF OPEN SPACE PROVIDED: 3.89 AC±
AREA OF RECREATIONAL OPEN SPACE REQUIRED: (200 S.F./UNIT) 4.200 S.F.
AREA OF RECREATIONAL OPEN SPACE PROVIDED: 4.200 S.F.
8. WATER IS PUBLIC, CONTRACT NO. 14-4904-D.
9. SEWER IS PUBLIC, CONTRACT NO. 14-4904-D.
10. STORMWATER MANAGEMENT IS PROVIDED BY N-2 NON-ROOFTOP DISCONNECTIONS, M-6 MICRO-BIORETENTION FACILITIES, AND M-5 DRYWELLS IN ACCORDANCE WITH THE 2007 MARYLAND STORMWATER DESIGN MANUAL. NONROOFTOP DISCONNECTIONS (N-2) AND DRYWELLS (M-5) WILL BE PRIVATELY OWNED AND MAINTAINED BY THE PROPERTY OWNERS. MICRO-BIORETENTION FACILITIES (M-6) WILL BE JOINTLY OWNED BY HOWARD COUNTY, MD, AND WILL BE MAINTAINED BY THE HOA.
11. FLOODPLAIN EXISTS ON SITE AS CERTIFIED IN THE FLOODPLAIN STUDY PREPARED BY MILDENBERG, BOENDER & ASSOC., INC. IN JULY 2014 AND WAS APPROVED UNDER SP-15-011 IN MAY 28, 2015.
12. WETLANDS, STREAM AND ITS BUFFER EXIST ON SITE AS CERTIFIED IN THE WETLAND REPORT PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. IN JULY 2014 AND WAS APPROVED UNDER SP-15-011 IN MAY 28, 2015.
13. FOREST STAND DELINEATION PERFORMED BY ECO-SCIENCE PROFESSIONALS, INC. IN JULY, 2014 AND WAS APPROVED UNDER SP-15-011 IN MAY 28, 2015. A TOTAL OF 11 SPECIMEN TREES EXIST ON SITE.
14. APFO ROAD TEST PREPARED BY MARS GROUP IN MAY 2014 AND WAS APPROVED UNDER SP-15-011 IN MAY 5, 2015.
15. NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
16. NO SIGNIFICANT HISTORIC STRUCTURES, CEMETERIES, OR GRAVE SITES EXIST ON-SITE.
17. SITE IS NOT ADJACENT TO A DESIGNATED SCENIC ROAD.
18. ALL EXISTING STRUCTURES WERE REMOVED ON DECEMBER 11, 2015.
19. 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 ON-SITE RETENTION OF 27 ACRES ON EASEMENT "A" AND A PAYMENT OF FEE-IN-LIEU FOR 0.39 ACRES OF REFORESTATION. FEE-IN-LIEU FOR 0.39 ACRES (10,958.40 SQ. FT.) OF REFORESTATION IN THE AMOUNT OF \$ 12,741.30 WILL BE POSTED AT FINAL PLAN STAGE. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT; HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
20. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
21. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING (35 SHADE TREES) AND ADDITIONAL (22 SHADE TREES) PROVIDED IN LIEU OF REMOVING 11 SPECIMEN TREES AS A CONDITION OF APPROVED WAIVER WP-15-079 IN THE AMOUNT OF \$17,100 TO BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT.
22. A SURETY IN THE AMOUNT OF \$ 16,800 FOR (56 SHADE TREES) PUBLIC STREET TREES WILL BE ADDED UNDER DED'S COST ESTIMATE.
23. PER SECTION 16.121(a) OF THE HOWARD COUNTY SUBDIVISION AND LAND USE REGULATIONS, OPEN SPACE FOR THIS SUBDIVISION HAS BEEN PROVIDED THROUGH THE CREATION OF OPEN SPACE LOTS 22 THRU 27.
24. A PRE-SUBMISSION COMMUNITY MEETING FOR THIS PROJECT WAS HELD ON JANUARY 10, 2015 AT 6:00 PM AT THE ELKBRIDGE LIBRARY.
25. DEVELOPMENT REGULATIONS PER COUNCIL BILL 45-2003 AND THE ZONING REGULATIONS AS AMENDED BY COUNCIL BILL 75-2003. DEVELOPMENT OR CONSTRUCTION ON LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE BUILDING / GRADING PERMIT.
26. ALL LOTS/RESIDENTIAL UNITS IN THIS SUBDIVISION ARE SUBJECT TO THE MHU FEE-IN-LIEU REQUIREMENT THAT IS TO BE CALCULATED AND PAID TO THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT THE TIME OF BUILDING PERMIT ISSUANCE BY THE PERMIT APPLICANT.
27. THIS PLAN IS SUBJECT TO WP-15-079, WAIVING SECTIONS 16.1205(a)(9)7) AND 16.1205(a)(10) WHICH REQUIRES THE RETENTION OF SPECIMEN TREES (30" dbh OR GREATER) THAT ARE NOT CONTAINED WITHIN OTHER PRIORITY FOREST RETENTION AREAS AS OUTLINED IN SECTION 16.1205(a)(11-10). WAIVER WAS APPROVED ON FEBRUARY 2, 2015 SUBJECT TO THE FOLLOWING CONDITIONS:
1. WAIVER APPROVAL IS LIMITED TO THE REMOVAL OF SPECIMEN TREES 1-11 AS DEPICTED ON THE WAIVER EXHIBIT. ANY PROPOSAL TO REMOVE ADDITIONAL SPECIMEN TREES WILL REQUIRE A NEW WAIVER REQUEST OR AN AMENDMENT TO THIS WAIVER REQUEST.
2. A MINIMUM OF 22 ADDITIONAL, NATIVE 2-3" CALIPER TREES SHALL BE PROVIDED ON SITE AS PART OF THE MITIGATION FOR THE SPECIMEN TREE REMOVAL. THIS MITIGATION WILL BE ADDRESSED WITH THE PROJECT KNOWN AS "PINE ACRES" AND WILL BE IN ADDITION TO ANY REQUIRED LANDSCAPE OR FOREST CONSERVATION PLANTINGS. THE MITIGATION WILL BE SHOWN ON THE ASSOCIATED LANDSCAPE PLAN AND SURETY FOR THESE ADDITIONAL TREES WILL BE REQUIRED AS PART OF THE FINAL PLAN.
3. SOME OR ALL THE MITIGATION PLANTINGS SHOULD BE PLACED WITHIN THE REAR YARDS OF THE PROPOSED LOTS AFTER GRADING AND FILL OCCURS BUT PRIOR TO SALES OF INDIVIDUAL LOTS.
28. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
29. 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 THE START OF WORK.
30. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
31. TRAFFIC CONTROL DEVICES:
A. THE R1-1 (STOP) SIGN AND STREET NAME (SNS) SIGN ASSEMBLY FOR THIS DEVELOPMENT MUST BE INSTALLED BEFORE THE BASE PAVING IS COMPLETED.
B. THE TRAFFIC CONTROL DEVICE LOCATIONS ON THE PLAN ARE APPROXIMATE AND MUST BE FIELD APPROVED BY THE HOWARD COUNTY TRAFFIC DIVISION (410-313-2430) PRIOR TO INSTALLATION OF ANY TRAFFIC CONTROL DEVICES.
C. ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "MARYLAND MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (MUMUTSD).
D. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT OF WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARED TUBE SLEEVE (12 GAUGE) - 3' LONG. THE ANCHOR SHALL NOT EXTEND MORE THAN TWO "QUICK PUNCH" HOLES ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
32. STREET LIGHT PLACEMENT AND TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (2006) SECTION 5.5.A. A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
33. THE NUMBER OF SIGNS NEEDED AND THE LOCATIONS OF THE "NO PARKING" SIGNS WILL BE DETERMINED IN THE FIELD BY TRAFFIC ENGINEERING.
34. DEVELOPER SHALL NOTIFY DEPARTMENT OF RECREATION AND PARKS BUREAU OF CAPITAL PROJECTS, PARK PLANNING AND CONSTRUCTION 10 WORKING DAYS PRIOR TO THE BEGINNING OF THE PATHWAY CONSTRUCTION, AT PHONE NO. 410-313-1695.

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Signature of Engineer: [Signature] DATE: 8/4/16
R. JACOB HIKMAT, P.E.
PRINTED NAME OF ENGINEER

DEVELOPER'S CERTIFICATE
I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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. HOWARD SOIL CONSERVATION DISTRICT IS AUTHORIZED TO CONDUCT PERIODIC ON-SITE INSPECTION.

Signature of Developer: [Signature] DATE: 8/8/16
Rogert Dorsey Jr.
PRINTED NAME OF DEVELOPER

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Signature of District Director: [Signature] DATE: 8/17/16
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PUBLIC WORKS
Signature of Chief: [Signature] DATE: 8/24/16
CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Signature of Chief: [Signature] DATE: 10-20-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION

Signature of Chief: [Signature] DATE: 11-08-16
CHIEF, DIVISION OF LAND DEVELOPMENT

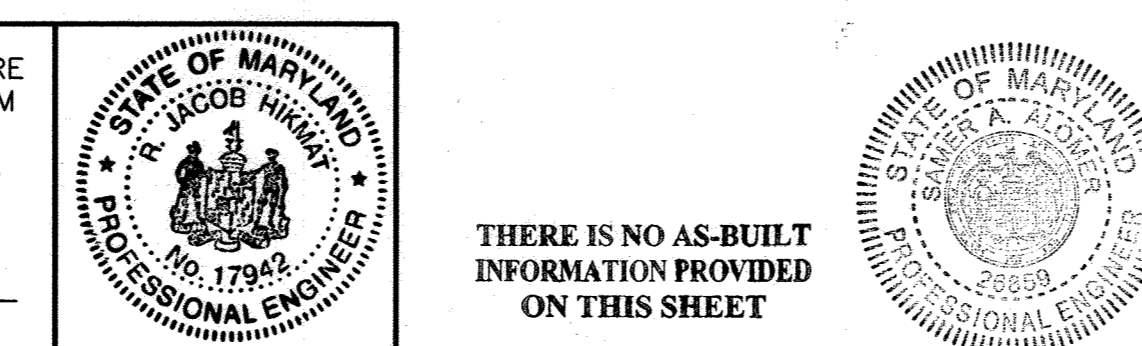
DEVELOPER
C/O DORSEY FAMILY HOMES, INC.
10717-B BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
(410)465-7200

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 09/03/16

Signature: [Signature] DATE: 8/4/16
R. JACOB HIKMAT P.E.

LOT #	ADDRESS	STORMWATER MANAGEMENT PRACTICES														
		GREEN ROOF (Y/N)	PERMEABLE PAVEMENTS (Y/N)	REINFORCED TURF (Y/N)	DISCONNECTION OF ROOFTOP RUNOFF (NUMBER)	DISCONNECTION OF NON-ROOFTOP RUNOFF (NUMBER)	SHEETFLOW TO CONSERVATION AREAS (Y/N)	RAINWATER HARVESTING (NUMBER)	SUBMERGED GRAVEL WETLANDS (NUMBER)	LANDSCAPE INFILTRATION (NUMBER)	INFILTRATION BERMS (NUMBER)	DRY WELLS (NUMBER)	MICRO-BIORETENTION (NUMBER)	RAIN GARDENS (NUMBER)	SWALES (NUMBER)	ENHANCED FILTERS (NUMBER)
1	6203 AUSTIN WAY	N	N	N	0	N	N	0	0	0	0	0	MB-1	0	0	0
2	6207 AUSTIN WAY	N	N	N	0	N	N	0	0	0	0	0	MB-1	0	0	0
3	6211 AUSTIN WAY	N	N	N	0	N	N	0	0	0	0	0	MB-2	0	0	0
4	6215 AUSTIN WAY	N	N	N	0	N	N	0	0	0	0	2	MB-2	0	0	0
5	6219 AUSTIN WAY	N	N	N	0	N	N	0	0	0	0	2	MB-4	0	0	0
6	6223 AUSTIN WAY	N	N	N	0	N	N	0	0	0	0	2	MB-4	0	0	0
7	6227 AUSTIN WAY	N	N	N	0	N	N	0	0	0	0	2	MB-4	0	0	0
8	6231 AUSTIN WAY	N	N	N	0	N	N	0	0	0	0	2	MB-4	0	0	0
9	6235 AUSTIN WAY	N	N	N	0	N	N	0	0	0	0	2	MB-3	0	0	0
10	6239 AUSTIN WAY	N	N	N	0	N	N	0	0	0	0	2	MB-3	0	0	0
11	6244 AUSTIN WAY	N	N	N	0	Y	N	0	0	0	0	2	0	0	0	0
12	6248 AUSTIN WAY	N	N	N	0	N	N	0	0	0	0	2	0	0	0	0
13	6236 AUSTIN WAY	N	N	N	0	N	N	0	0	0	0	2	MB-3	0	0	0
14	6232 AUSTIN WAY	N	N	N	0	N	N	0	0	0	0	2	MB-2	0	0	0
15	6228 AUSTIN WAY	N	N	N	0	N	N	0	0	0	0	2	MB-2	0	0	0
16	6224 AUSTIN WAY	N	N	N	0	N	N	0	0	0	0	2	MB-2	0	0	0
17	6220 AUSTIN WAY	N	N	N	0	N	N	0	0	0	0	2	MB-2	0	0	0
18	6216 AUSTIN WAY	N	N	N	0	N	N	0	0	0	0	2	MB-2	0	0	0
19	6212 AUSTIN WAY	N	N	N	0	N	N	0	0	0	0	2	MB-2	0	0	0
20	6208 AUSTIN WAY	N	N	N	0	N	N	0	0	0	0	0	MB-1	0	0	0
21	6204 AUSTIN WAY	N	N	N	0	N	N	0	0	0	0	0	MB-1	0	0	0

HOUSES ARE NOT ALLOWED TO BE BUILT USING THIS FINAL PLAN DRAWING.



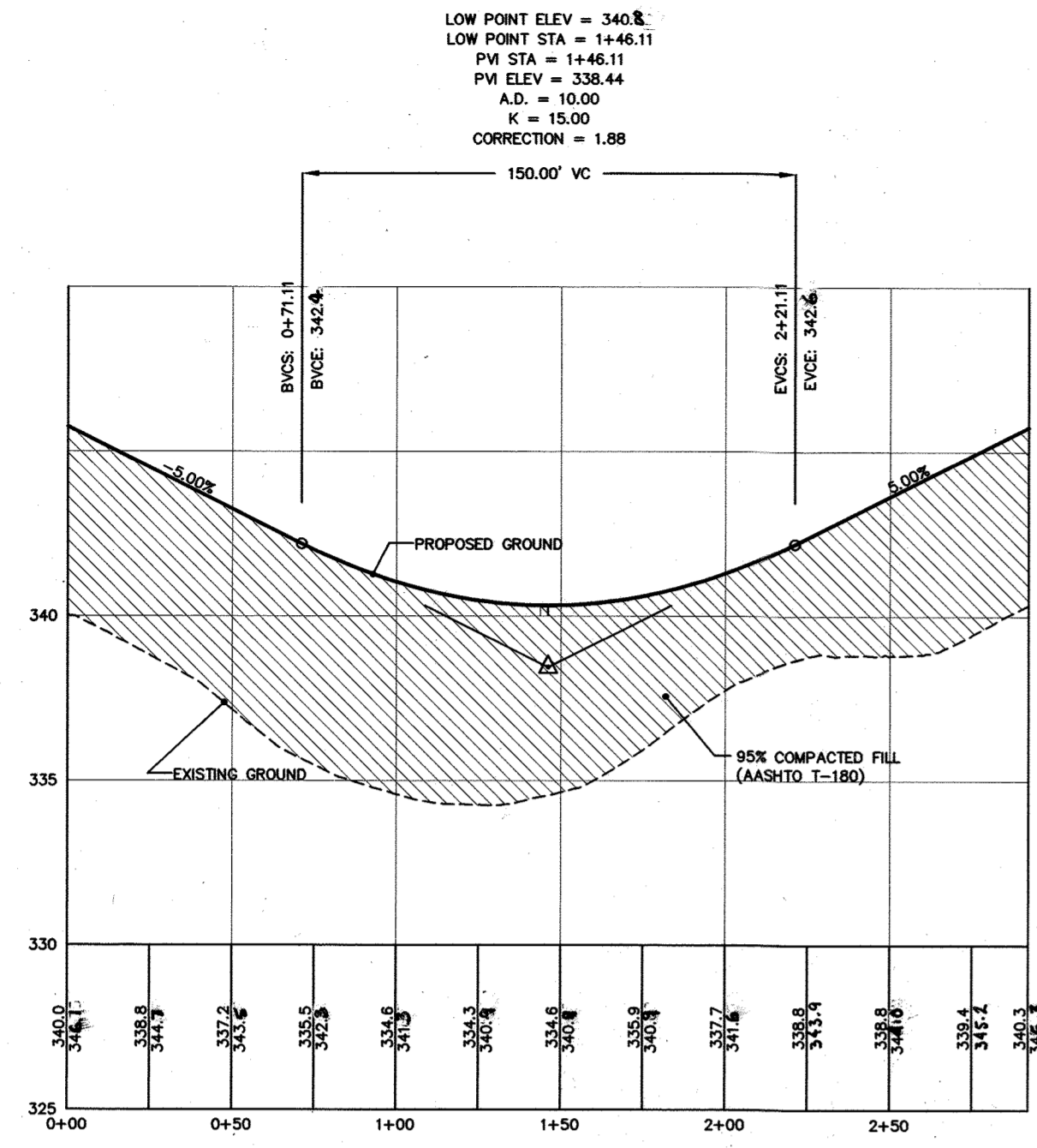
P:\2004\14-013\DWG\PRELIMINARY SKETCH 1

date	AUG. 2016
project	14-013
illustration	MMM
scale	MMM
approval	MMM
revision	NTS
name	RJH

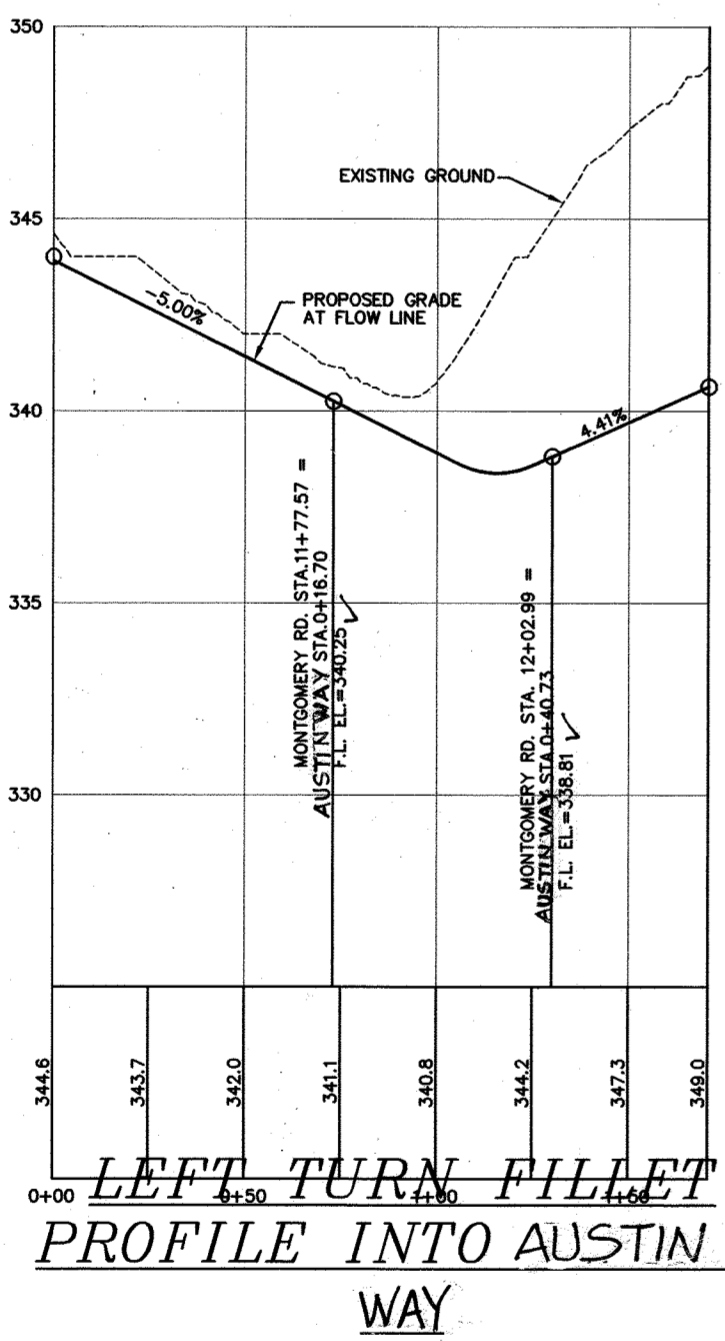
date	
description	
revision	
name	
no.	

PINE ACRES
LOTS 1-21 AND OPEN SPACE LOTS 22-28
TAX MAP 37, PARCEL 49 AND 50, GRID 5, ZONE: R-20
HOWARD COUNTY, MARYLAND
FIRST ELECTION DISTRICT
COVER SHEET

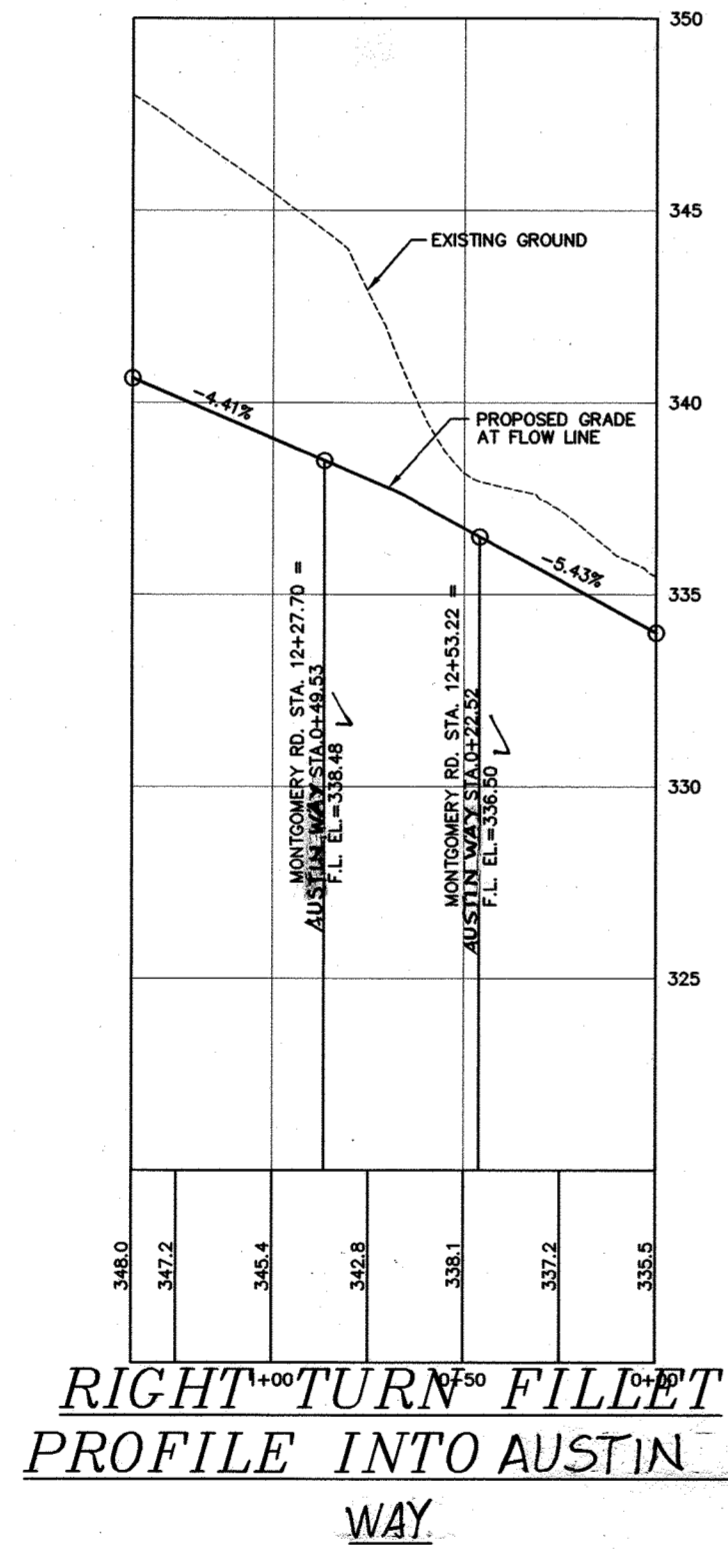
MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
2850-B Grace Drive, Columbia, Maryland, 21044
(410) 397-0286 Fax



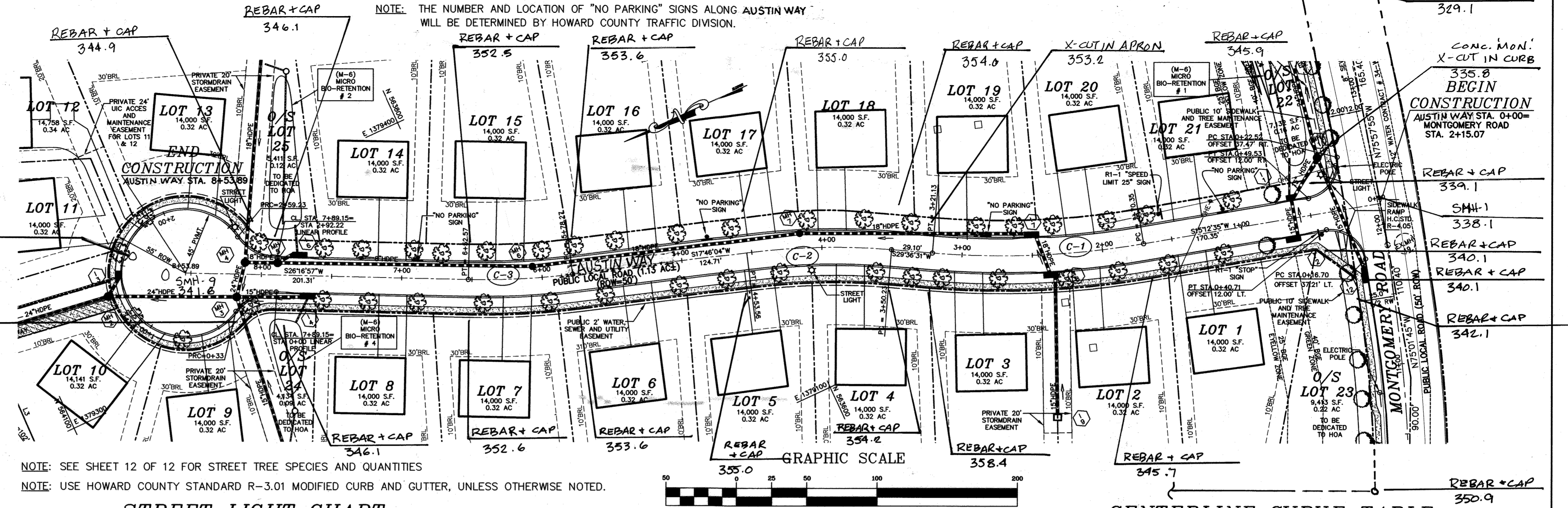
**AUSTIN WAY CUL-DE-SAC
LINEAR PROFILE**
SCALE: HOR. 1"=50'
VER. 1"=5'



**LEFT TURN FILLET
PROFILE INTO AUSTIN
WAY**
SCALE: HOR. 1"=50'
VER. 1"=5'



**RIGHT TURN FILLET
PROFILE INTO AUSTIN
WAY**
SCALE: HOR. 1"=50'
VER. 1"=5'



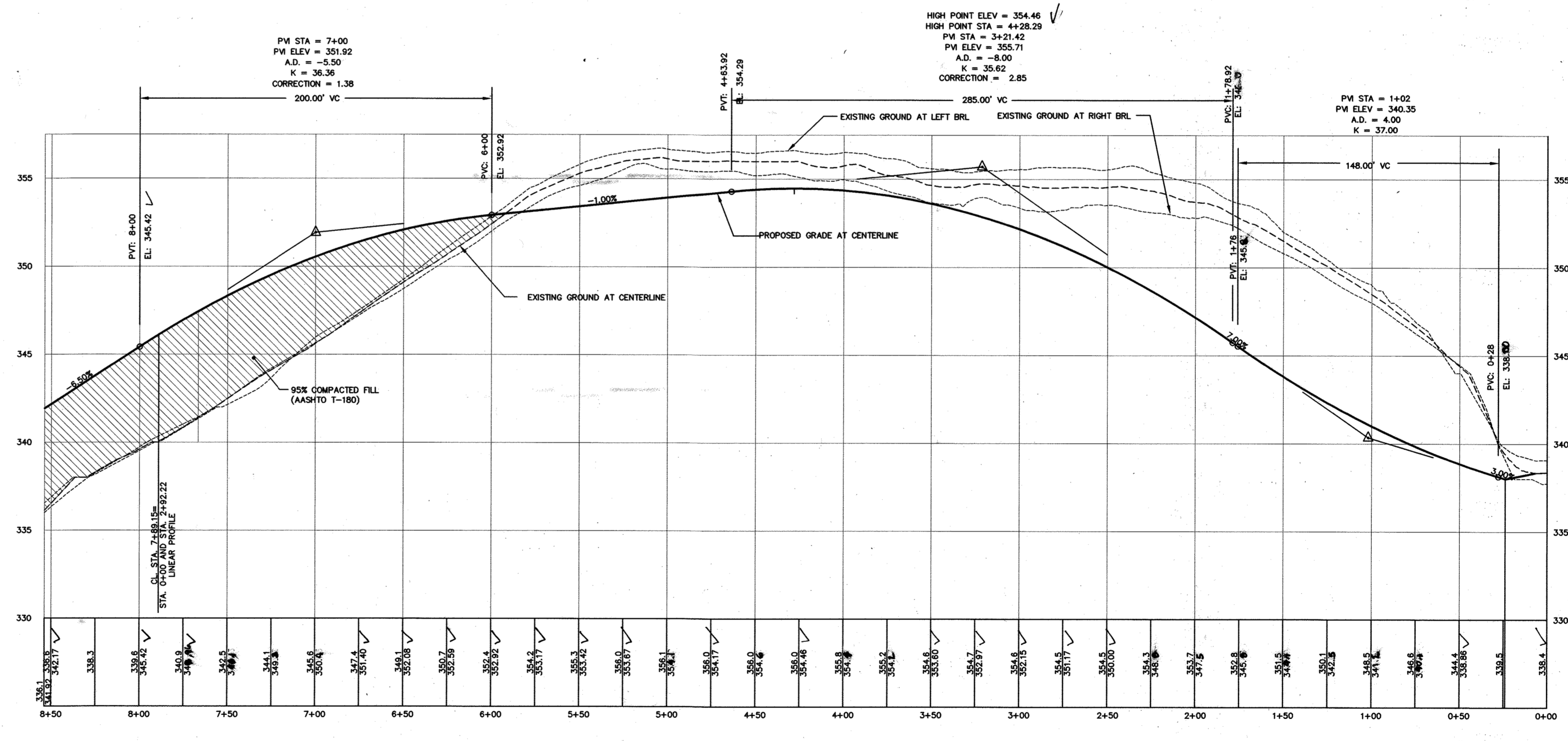
STREET LIGHT CHART

TYPE	LOCATION
LED 150 "COLONIAL" POST TOP FIXTURE	AUSTIN WAY STA. 0+28, OFFSET 37.5' RT.
LED 100 "COLONIAL" POST TOP FIXTURE	AUSTIN WAY STA. 4+07, OFFSET 16.0' LT.
LED 100 "COLONIAL" POST TOP FIXTURE	CUL-DE-SAC STA. 2+53, OFFSET 3.0' LT.

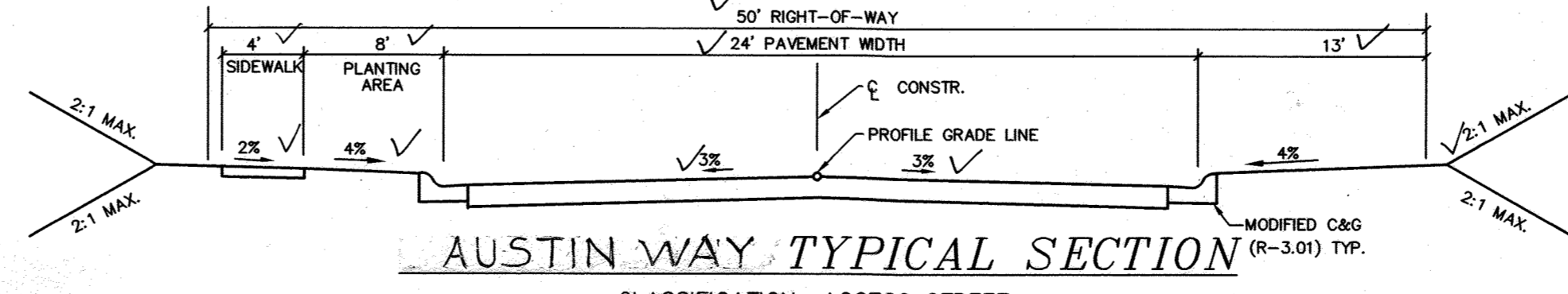
NOTE: ALL STREET LIGHT TO BE MOUNTED ON A 14' BLACK FIBERGLASS POLE.

CENTERLINE CURVE TABLE

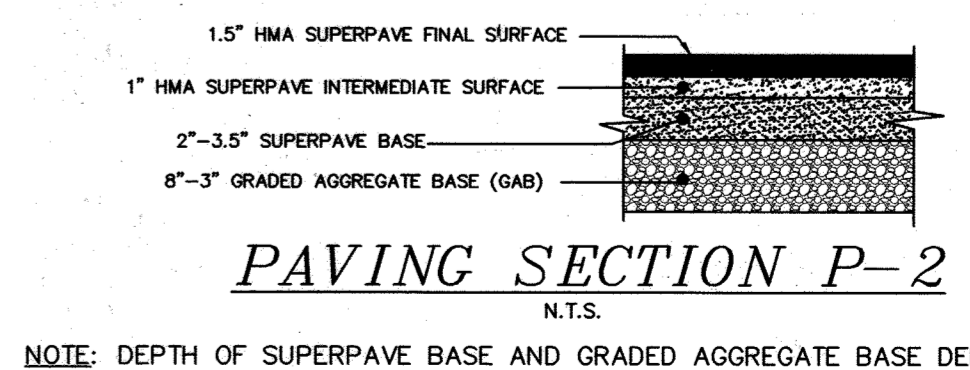
CURVE	LENGTH (FT)	RADIUS (FT)	DELTA	CHORD LENGTH (FT)	CHORD DIR
C1	150.78	600.00	14°23'56"	150.39	N22°24'33"E
C2	103.33	500.00	11°50'27"	103.15	N23°41'17"E
C3	74.31	500.00	8°30'53"	74.24	N22°01'30"E



AUSTIN WAY PROFILE
CLASSIFICATION: ACCESS STREET
DESIGN SPEED: 30 MPH
SCALE: HOR. 1"=50'
VER. 1"=5'



AUSTIN WAY TYPICAL SECTION
CLASSIFICATION: ACCESS STREET
DESIGN SPEED: 30 MPH
HO.CO.STD.R-1.02
N.T.S.



PAVING SECTION P-2
N.T.S.
NOTE: DEPTH OF SUPERPAVE BASE AND GRADED AGGREGATE BASE DEPEND ON CBR.

APPROVED: DEPARTMENT OF PUBLIC WORKS
[Signature] 8/24/16
CHIEF, BUREAU OF HIGHWAYS

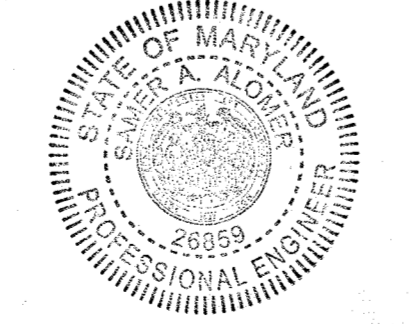
APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature] 10-20-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] 11-08-16
CHIEF, DIVISION OF LAND DEVELOPMENT

DEVELOPER
C/O DORSEY FAMILY HOMES, INC.
10717-B BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
(410)465-7200

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 09/03/16

[Signature] 8/14/16
R. JACOB HIKMAT P.E. DATE:



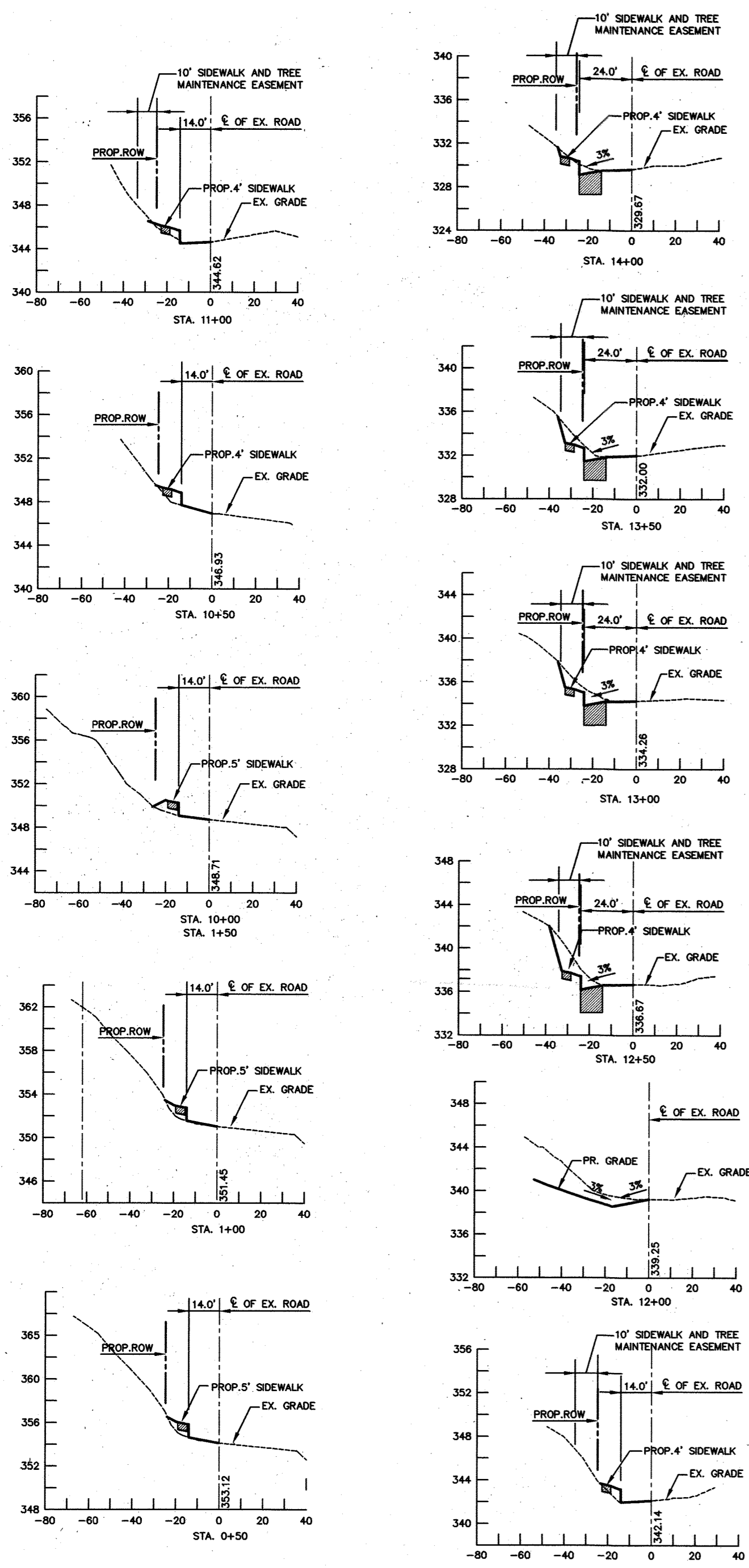
I hereby certify that the facility shown on this plan was constructed as shown on the 'As-Built' plans and meets with the approved plans and specifications.

Project: 14-013
Illustration: MAM
Scale: 1"=50'

Project: 14-013
Illustration: MAM
Scale: 1"=50'

PINE ACRES
LOTS 1-21 AND OPEN SPACE LOTS 22-28
TAX MAP 37, PARCEL 49 AND 50, GRID 5, ZONE: R-20
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
ROAD PLAN, PROFILES AND SECTIONS

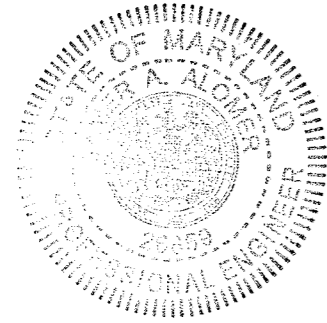
MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
7350-B Cross Drive, Columbia, Maryland, 21044
(410) 997-0286 Fax



MONTGOMERY ROAD IMPROVEMENT CROSS SECTIONS

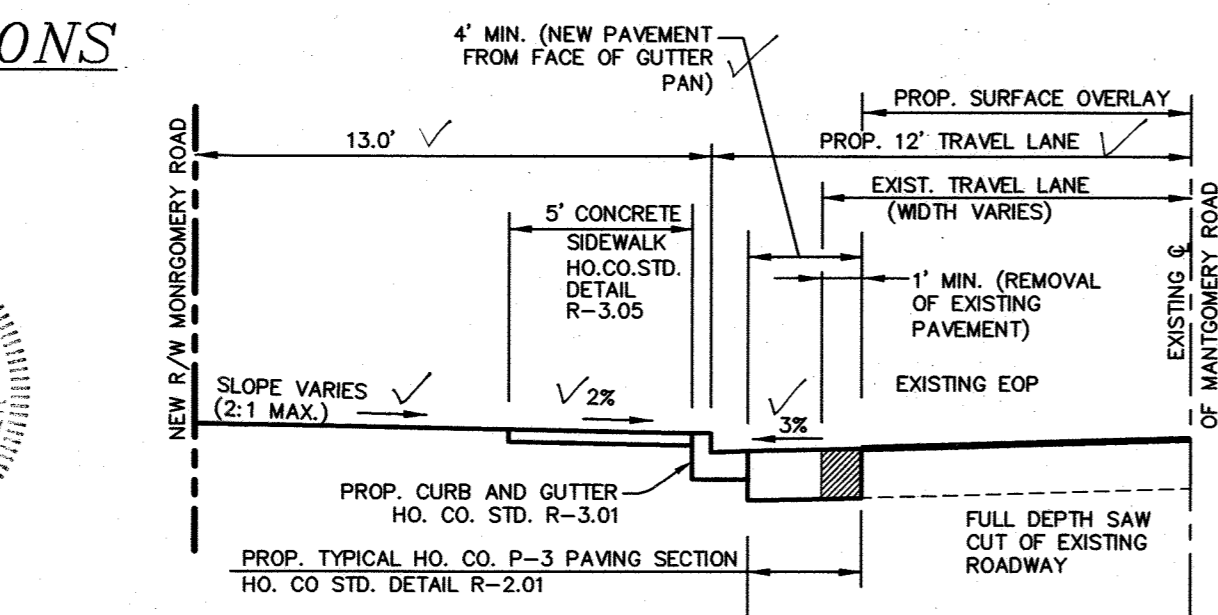
SCALE: HOR. 1"=50'
VER. 1"=10'

I hereby certify that the facility shown on this plan was constructed as shown on the 'As-Built' plans and meets with the approved plans and specifications.



DEVELOPER

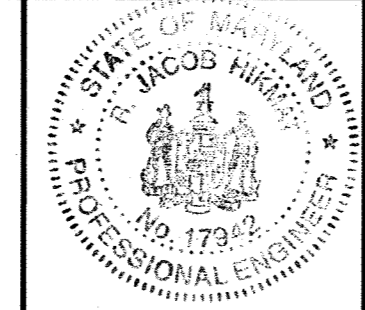
C/O DORSEY FAMILY HOMES, INC.
10717-B BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
(410)465-7200



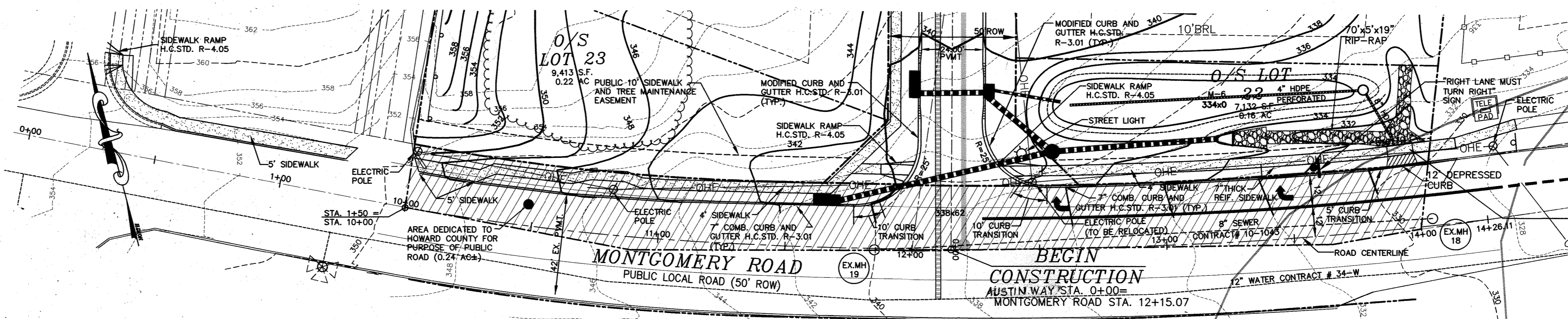
MONTGOMERY ROAD IMPROVEMENTS DETAIL

1. WHEN EXISTING TRAVEL LANE IS LESS THAN THE REQUIRED 12' LANE, CONTRACTOR SHALL REMOVE A MINIMUM OF 1' FULL DEPTH OF THE EXISTING ROADWAY. IF CURB AND GUTTER IS INSTALLED, PROVIDE A MINIMUM OF 4" OF WIDENING FROM FACE OF GUTTER PAN.
2. THE EXISTING PAVEMENT TO BE RESURFACED SHALL BE MILLED AT A DEPTH OF 1.5" (MINIMUM).
3. THE RESURFACING SHALL BE PLACED TO THE CENTERLINE OF THE ROADWAY.
4. RESURFACING COURSE TO BE EQUAL TO THE SURFACE COURSE OF THE TYPICAL PAVEMENT SECTION.
5. REFER TO HO. CO. DESIGN MANUAL VOLUME IV, STANDARD DETAIL R-1.08 FOR ADDITIONAL DETAILS

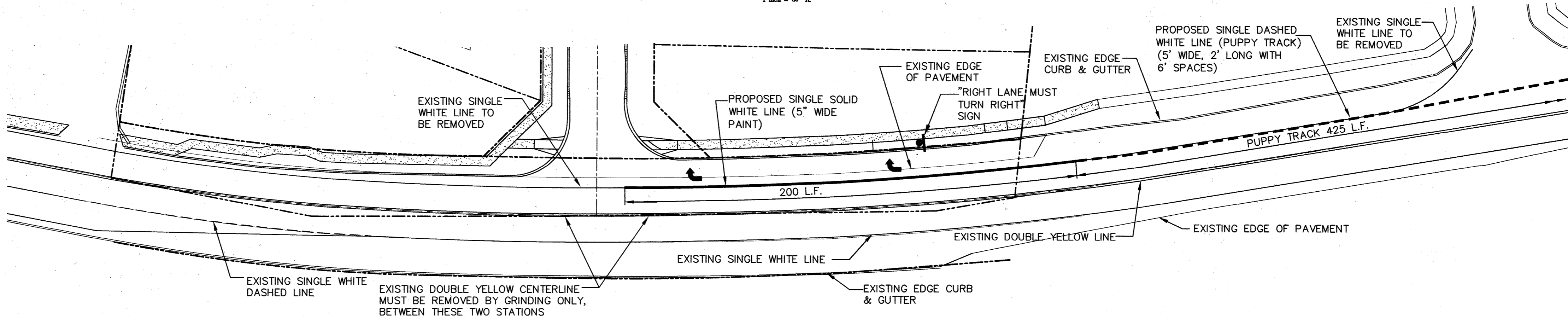
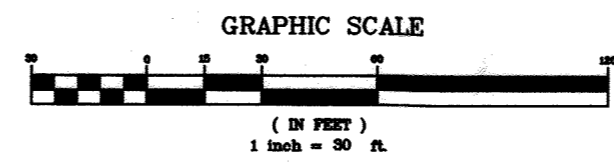
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17942, EXP DATE 09/03/18



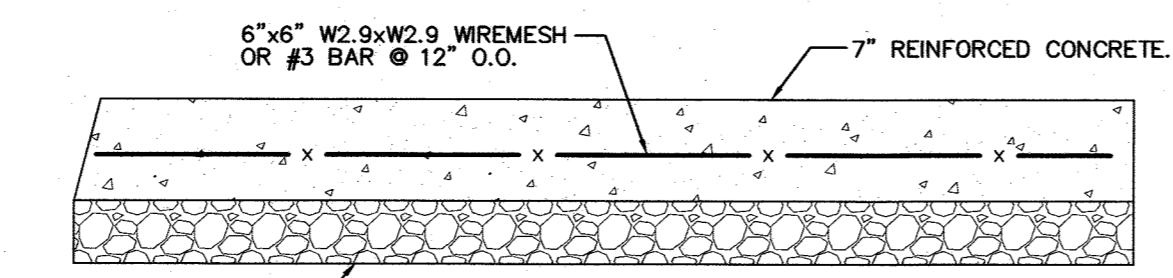
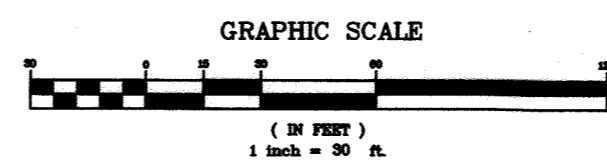
R. JACOB HIKMAT P.E. DATE: 10/19/16



MONTGOMERY ROAD IMPROVEMENT PLAN



PAVEMENT MARKING PLAN



TRAFFIC BEARING SIDEWALK DETAIL

TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATION

IMPORTANT: THIS DRAWING SHALL BE USED IN CONJUNCTION WITH THE GENERAL STANDARD DETAILS NO. 104.00-19 AND NO. 104.01-01.

NOTE: FLAGGER SHALL NEVER BE STATIONED MORE THAN 100' AWAY FROM THE ADVANCE FLAGGER SIGN.

THE ENGINEER SHOULD CONSIDER ADDITIONAL ADJACENT LANE CLOSURES WHEN THE POSSIBILITY OF UNPLANNED TRAVELWAY ENCROACHMENTS EXISTS.

KEY:

- CHANNELLED DEVICES
- SIGN SUPPORT
- FACE OF SIGN
- DIRECTION OF TRAFFIC
- WORK SITE
- FLAGGER

OVER 12' HRL. NIGHTTIME USE ONLY

OVER 12' HRL. DAYTIME USE ONLY

OVER 12' HRL. DAYTIME USE ONLY

OVER 12' HRL. DAYTIME USE ONLY

TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATION

IMPORTANT: THIS DRAWING SHALL BE USED IN CONJUNCTION WITH THE GENERAL STANDARD DETAILS NO. 104.00-19 AND NO. 104.01-01.

NOTES:

SHOULDER CLOSED SIGNS ARE REQUIRED IN PLACE OF SHOULDER WORK SIGNS WHEN THE SHOULDER IS CLOSED BY POSITIVE PROTECTION (TEMPORARY CONCRETE BARRIER OR SIMILAR DEVICE). REFER TO STANDARD NO. 104.06-18.

WHEN WORK INVOLVES A PAVEMENT EDGE DROP-OFF, REFER TO STANDARD NO. 104.06-15 TO NO. 104.06-19.

THERE SHALL BE A MINIMUM OF SEVEN CHANNELLED DEVICES IN THE SHOULDER TAPER.

THE ENGINEER SHOULD CONSIDER ADDITIONAL ADJACENT LANE CLOSURES WHEN THE POSSIBILITY OF UNPLANNED TRAVELWAY ENCROACHMENTS EXISTS.

KEY:

- CHANNELLED DEVICES
- SIGN SUPPORT
- FACE OF SIGN
- DIRECTION OF TRAFFIC
- WORK SITE

OVER 12' HRL. NIGHTTIME USE ONLY

OVER 12' HRL. DAYTIME USE ONLY

OVER 12' HRL. DAYTIME USE ONLY

OVER 12' HRL. DAYTIME USE ONLY

Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES
FLAGGING OPERATION-2-LANE, 2-WAY
EQL/LESS THAN 40 MPH
STANDARD NO. MD 104.02-10

TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATION

IMPORTANT: THIS DRAWING SHALL BE USED IN CONJUNCTION WITH THE GENERAL STANDARD DETAILS NO. 104.00-19 AND NO. 104.01-01.

NOTES:

SHOULDER CLOSED SIGNS ARE REQUIRED IN PLACE OF SHOULDER WORK SIGNS WHEN THE SHOULDER IS CLOSED BY POSITIVE PROTECTION (TEMPORARY CONCRETE BARRIER OR SIMILAR DEVICE). REFER TO STANDARD NO. 104.06-18.

WHEN WORK INVOLVES A PAVEMENT EDGE DROP-OFF, REFER TO STANDARD NO. 104.06-15 TO NO. 104.06-19.

THERE SHALL BE A MINIMUM OF SEVEN CHANNELLED DEVICES IN THE SHOULDER TAPER.

THE ENGINEER SHOULD CONSIDER ADDITIONAL ADJACENT LANE CLOSURES WHEN THE POSSIBILITY OF UNPLANNED TRAVELWAY ENCROACHMENTS EXISTS.

KEY:

- CHANNELLED DEVICES
- SIGN SUPPORT
- FACE OF SIGN
- DIRECTION OF TRAFFIC
- WORK SITE

OVER 12' HRL. NIGHTTIME USE ONLY

OVER 12' HRL. DAYTIME USE ONLY

OVER 12' HRL. DAYTIME USE ONLY

OVER 12' HRL. DAYTIME USE ONLY

TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATION

IMPORTANT: THIS DRAWING SHALL BE USED IN CONJUNCTION WITH THE GENERAL STANDARD DETAILS NO. 104.00-19 AND NO. 104.01-01.

NOTES:

SHOULDER CLOSED SIGNS ARE REQUIRED IN PLACE OF SHOULDER WORK SIGNS WHEN THE SHOULDER IS CLOSED BY POSITIVE PROTECTION (TEMPORARY CONCRETE BARRIER OR SIMILAR DEVICE). REFER TO STANDARD NO. 104.06-18.

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THERE SHALL BE A MINIMUM OF SEVEN CHANNELLED DEVICES IN THE SHOULDER TAPER.

THE ENGINEER SHOULD CONSIDER ADDITIONAL ADJACENT LANE CLOSURES WHEN THE POSSIBILITY OF UNPLANNED TRAVELWAY ENCROACHMENTS EXISTS.

KEY:

- CHANNELLED DEVICES
- SIGN SUPPORT
- FACE OF SIGN
- DIRECTION OF TRAFFIC
- WORK SITE

OVER 12' HRL. NIGHTTIME USE ONLY

OVER 12' HRL. DAYTIME USE ONLY

OVER 12' HRL. DAYTIME USE ONLY

OVER 12' HRL. DAYTIME USE ONLY

Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES
SHOULDER WORK-2-LANE, 2-WAY
EQL/LESS THAN 40 MPH
STANDARD NO. MD 104.02-02

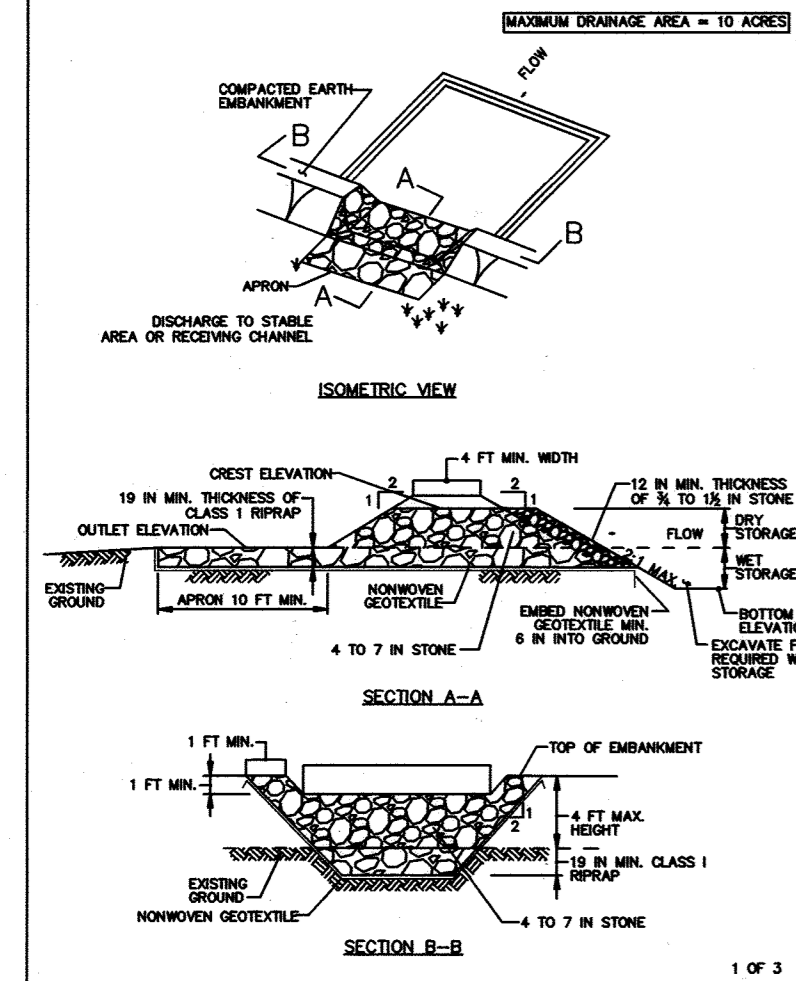
date	AUG 2016	engineering	MM	approval	AS SHOWN RH
project	14-013	illustration	MM	scale	AS SHOWN RH

date	APR 2017	description	REVISED
no.	1	description	REVISED

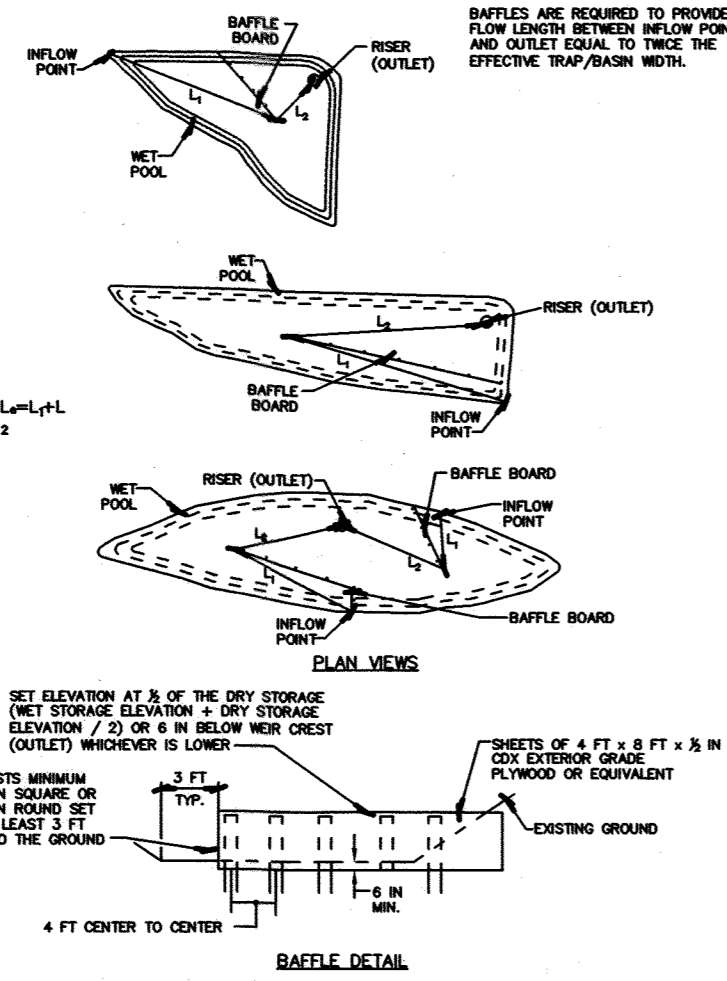
PINE ACRES
LOTS 1-21 AND OPEN SPACE LOTS 22-28
TAX MAP 37, PARCEL 49 AND 50, GRID 5, ZONE: R-20
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
ROAD IMPROVEMENT PLAN, SECTIONS AND DETAILS

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

DETAIL G-1-2 STONE/RIPRAP OUTLET SEDIMENT TRAP ST-II



DETAIL G-2-4 BAFFLE BOARDS



SEDIMENT TRAP #1 (ST I)

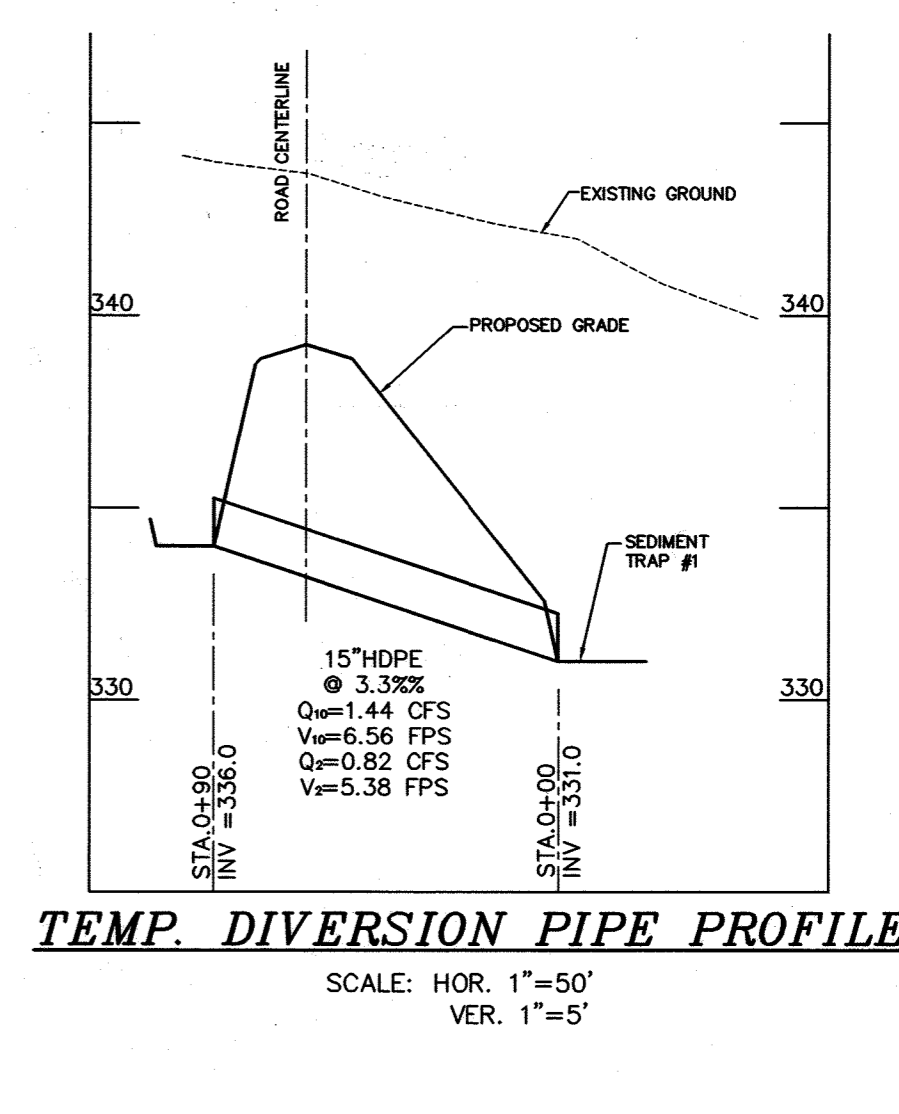
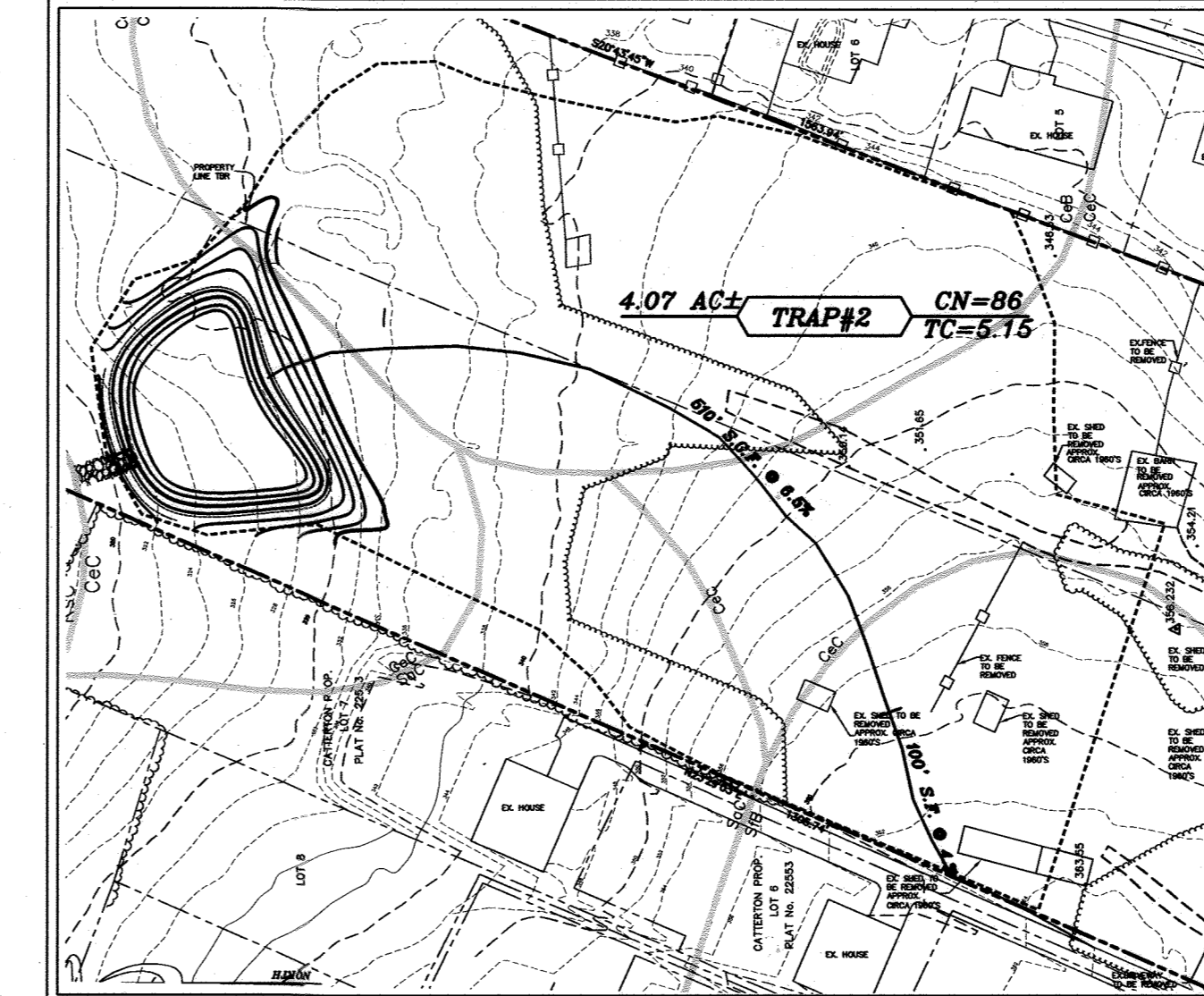
Drainage area, total storage required, wet storage required, dry storage provided, etc. for ST I.

SEDIMENT TRAP #2 (ST II)

Drainage area, total storage required, wet storage required, dry storage provided, etc. for ST II.

SEDIMENT TRAP #3 (ST II)

Drainage area, total storage required, wet storage required, dry storage provided, etc. for ST II.



CONSTRUCTION SPECIFICATIONS for sediment traps, detailing materials, grading, and installation procedures.

Table with columns for Stone/Riprap Outlet Sediment Trap ST-II, Trap No., and various metrics like Drainage Area, Wet Storage, and Dry Storage.

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS...

Signature and date of Engineer: R. JACOB HIKMAT, PE. 8/4/16

DEVELOPERS CERTIFICATE: I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN...

Signature and date of Developer: Robert Dorsey, Jr. 8/4/16

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: DEPARTMENT OF PUBLIC WORKS. Chief, Bureau of Highways. 8/26/16

APPROVED: DEPARTMENT OF PLANNING AND ZONING. Chief, Development Engineering Division. 10-20-16. Chief, Division of Land Development. 11-02-16

APPROVED: DEPARTMENT OF PUBLIC WORKS. Chief, Bureau of Highways. 8/26/16

DETAIL G-1-2 STONE/RIPRAP OUTLET SEDIMENT TRAP ST-II

Table with columns for Stone/Riprap Outlet Sediment Trap ST-II, Trap No., and various metrics like Drainage Area, Wet Storage, and Dry Storage.

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS...

Signature and date of Engineer: R. JACOB HIKMAT, PE. 8/4/16

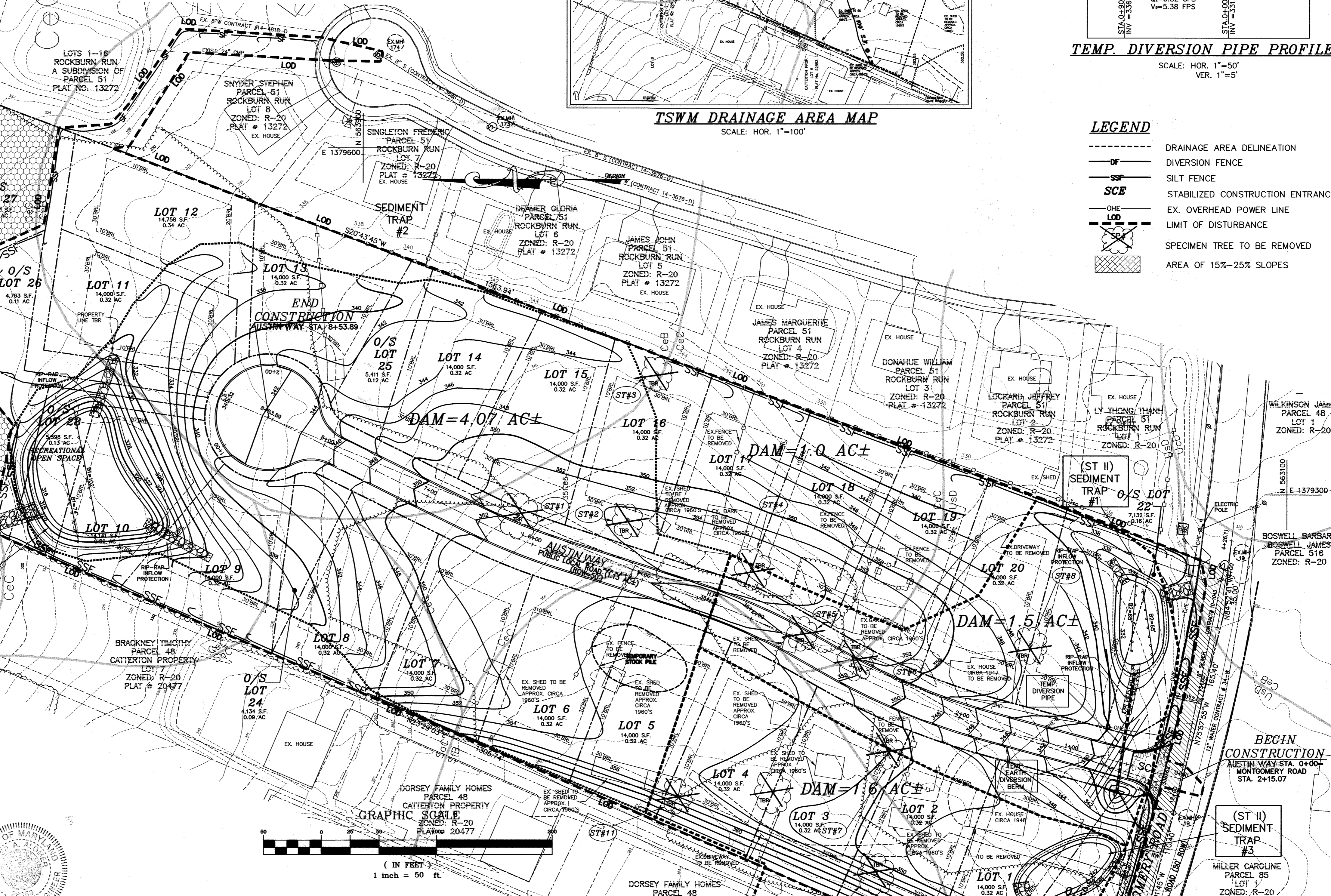
DEVELOPERS CERTIFICATE: I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN...

Signature and date of Developer: Robert Dorsey, Jr. 8/4/16

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APPROVED: DEPARTMENT OF PLANNING AND ZONING. Chief, Development Engineering Division. 10-20-16. Chief, Division of Land Development. 11-02-16



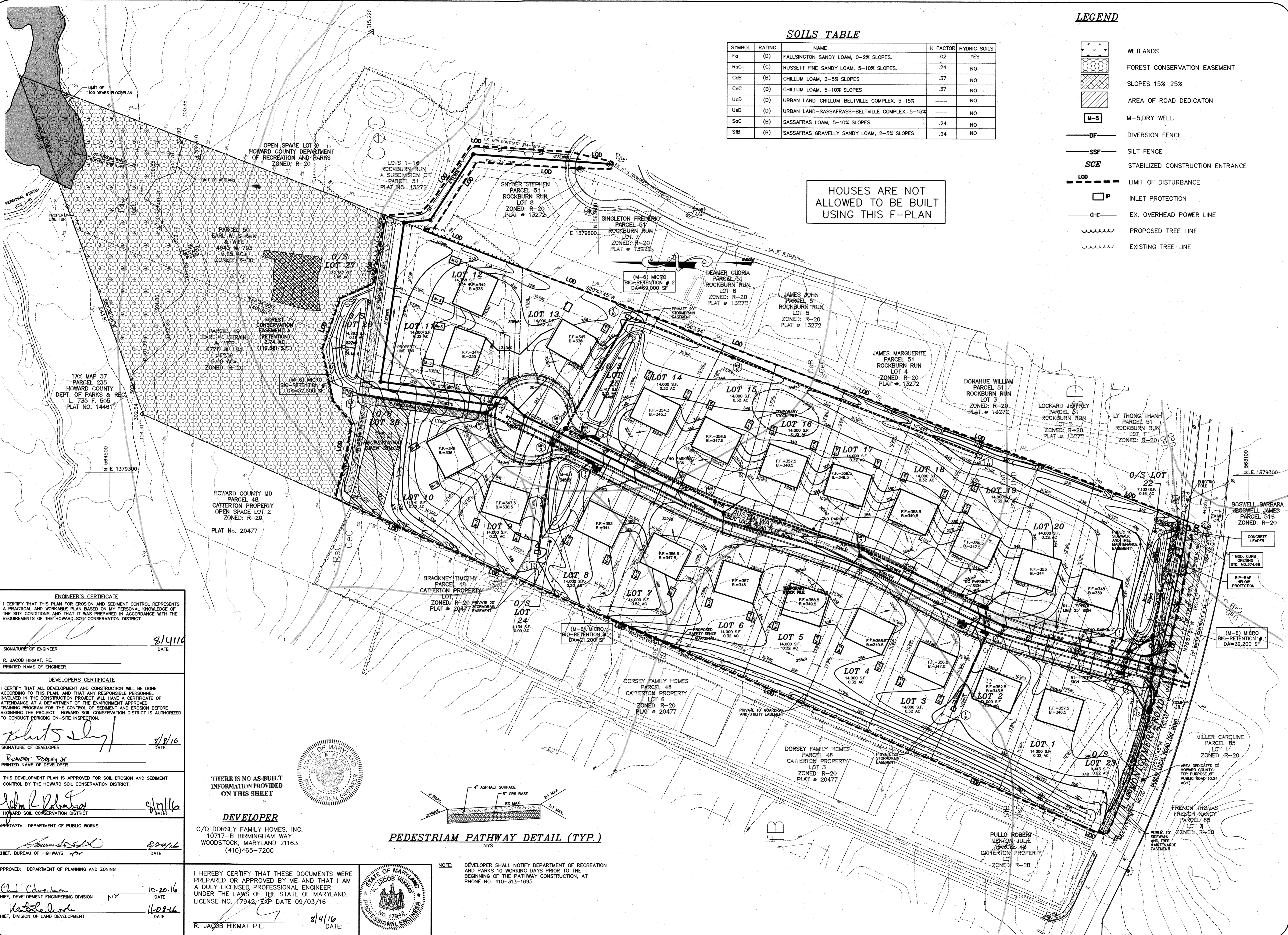
SOILS TABLE

Table with columns: SYMBOL, RATING, NAME, K FACTOR, MAP #, COMMENTS. Lists soil types like FALLSINGTON SANDY LOAM and RUSSETT FINE SANDY LOAM.

THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET

PINE ACRES. LOTS 1-21 AND OPEN SPACE LOTS 22-28. TAX MAP 37, PARCELS 49 AND 50, GRID 5, ZONE: R-20. SOIL MAP AND GRADING AND SEDIMENT CONTROL PLAN, STAGE 1.

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



SOILS TABLE

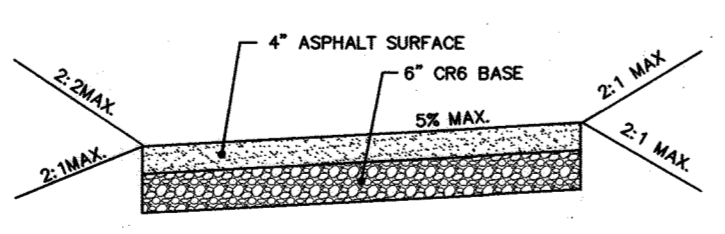
SYMBOL	RATING	NAME	K FACTOR	HYDRIC SOILS
Fa	(D)	FALLSINGTON SANDY LOAM, 0-2% SLOPES.	.02	YES
RaC	(C)	RUSSETT FINE SANDY LOAM, 5-10% SLOPES.	.24	NO
CaB	(B)	CHILLUM LOAM, 2-5% SLOPES	.37	NO
CaC	(B)	CHILLUM LOAM, 5-10% SLOPES	.37	NO
UoD	(D)	URBAN LAND-CHILLUM-BELVILLE COMPLEX, 5-15%	---	NO
UoD	(D)	URBAN LAND-SASSAFRAS-BELVILLE COMPLEX, 5-15%	---	NO
SoC	(B)	SASSAFRAS LOAM, 5-10% SLOPES	.24	NO
SiB	(B)	SASSAFRAS GRAVELLY SANDY LOAM, 2-5% SLOPES	.24	NO

LEGEND

- WETLANDS
- FOREST CONSERVATION EASEMENT
- SLOPES 15%-25%
- AREA OF ROAD DEDICATION
- M-5 DRY WELL.
- DIVERSION FENCE
- SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- LIMIT OF DISTURBANCE
- INLET PROTECTION
- EX. OVERHEAD POWER LINE
- PROPOSED TREE LINE
- EXISTING TREE LINE

HOUSES ARE NOT ALLOWED TO BE BUILT USING THIS F-PLAN

PEDESTRIAN PATHWAY DETAIL (TYP.)



NOTE: DEVELOPER SHALL NOTIFY DEPARTMENT OF RECREATION AND PARKS TO WORKING DAYS PRIOR TO THE BEGINNING OF THE PATHWAY CONSTRUCTION, AT PHONE NO. 410-513-1695.

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF ENGINEER: *R. Jacob Hikmat, PE.* DATE: 8/14/16
R. JACOB HIKMAT, PE.
PRINTED NAME OF ENGINEER

DEVELOPER'S CERTIFICATE
I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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. HOWARD SOIL CONSERVATION DISTRICT IS AUTHORIZED TO CONDUCT PERIODIC ON-SITE INSPECTION.

SIGNATURE OF DEVELOPER: *John P. Roberts* DATE: 8/8/16
JOHN P. ROBERTS
PRINTED NAME OF DEVELOPER

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED: DEPARTMENT OF PUBLIC WORKS
DATE: 8/17/16

APPROVED: DEPARTMENT OF PLANNING AND ZONING
DATE: 8/24/16

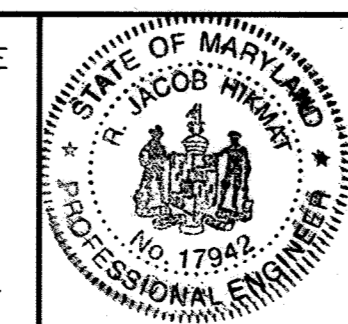
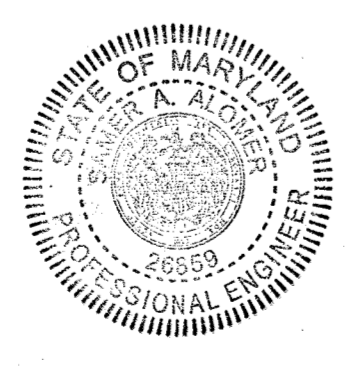
DATE: 10-20-16
DATE: 11-22-16

THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET

DEVELOPER
C/O DORSEY FAMILY HOMES, INC.
10717-B BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
(410)465-7200

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 09/03/16

R. JACOB HIKMAT P.E. DATE: 8/14/16



Project	date	engineering	approval
14-013	AUG-2016	MMM	MMM
Illustration	scale	1"=50'	RH

1	Rev 5/28/17	description	revisions

PINE ACRES
LOTS 1-21 AND OPEN SPACE LOTS 22-28
TAX MAP 37, PARCEL 49 AND 50, GRID 5, ZONE: R-20
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
FINAL GRADING AND SEDIMENT CONTROL PLAN

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

(B-4-2) STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

DEFINITION THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION. PURPOSE TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. CONDITIONS WHERE PRACTICE APPLIES WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED. CRITERIA A. SOIL PREPARATION 1. TEMPORARY STABILIZATION a. SEEDING PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT...

(B-4-3) STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING

DEFINITION THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER. PURPOSE TO PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION. CONDITIONS WHERE PRACTICE APPLIES TO THE SURFACE OF ALL PERIMETER CONTROLS, SLOPES, AND ANY DISTURBED AREA NOT UNDER ACTIVE GRADING. CRITERIA A. SEEDING 1. SPECIFICATIONS a. ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW...

(B-4-5) STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

DEFINITION TO STABILIZE DISTURBED SOIL WITH PERMANENT VEGETATION. PURPOSE TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER OF DISTURBED EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE. CRITERIA A. SEED MIXTURES 1. GENERAL a. SELECT ONE OR MORE OF THE SPECIES OF MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE PLANT HARDNESS ZONE...

TEMPORARY SEEDING FOR SITE STABILIZATION TABLE with columns for PLANT SPECIES, SEEDING RATE (LB/AC), SEEDING DEPTH (INCHES), and RECOMMENDED SEEDING DATES BY PLANT HARDNESS ZONE.

PERMANENT SEEDING SUMMARY TABLE with columns for NO., SPECIES, APPLICATION RATE (LB/AC), SEEDING DATES, SEEDING DEPTHS, N, P2O5, K2O, and LIME RATE.

(B-4-4) STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

DEFINITION TO STABILIZE DISTURBED SOIL WITH VEGETATION FOR UP TO 6 MONTHS. PURPOSE TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURB SOIL. CRITERIA 1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE APPROPRIATE PLANT HARDNESS ZONE...

(B-4-8) STANDARDS AND SPECIFICATION FOR STOCKPILE AREA

DEFINITION A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND SEDIMENT CONTROL MEASURES. PURPOSE TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT CONTROLS THE POTENTIAL FOR EROSION, SEDIMENTATION, AND CHANGES TO DRAINAGE PATTERNS. CRITERIA 1. THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN.

SEQUENCE OF CONSTRUCTION

- 1. OBTAIN GRADING PERMIT (1 DAY). 2. PERFORM CLEARING AND GRUBBING AS NECESSARY FOR THE INSTALLATION OF PERIMETER CONTROLS (5 DAYS). 3. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AT LOCATION INDICATED (1 DAY).

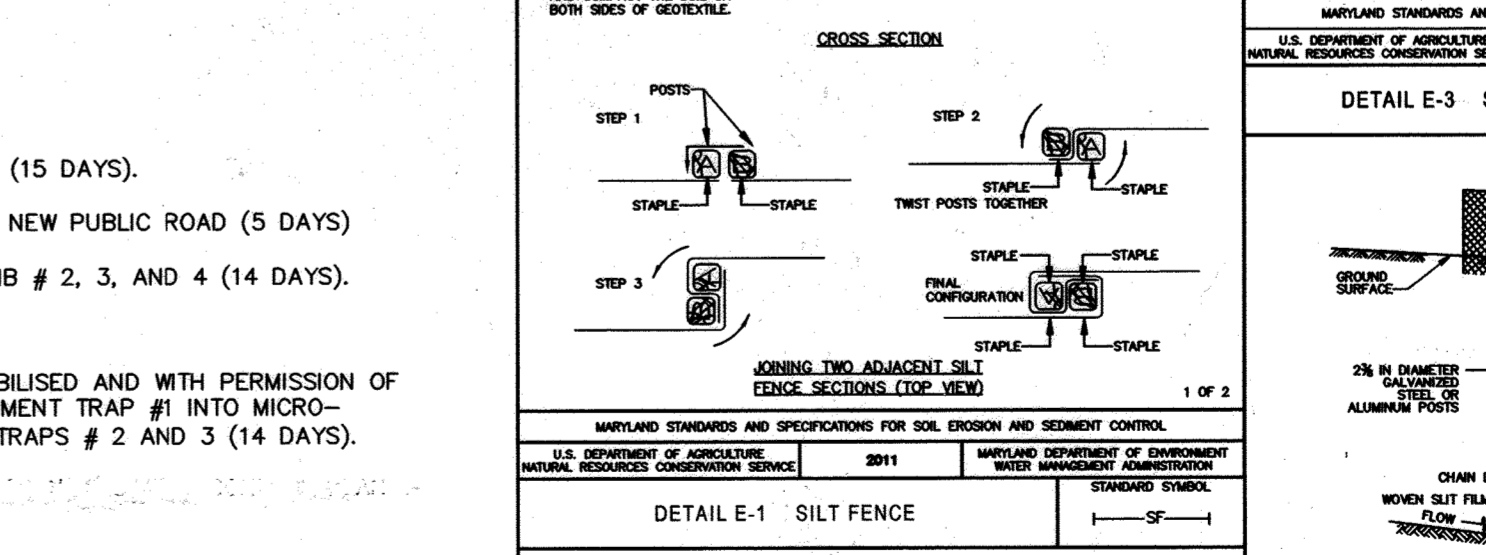
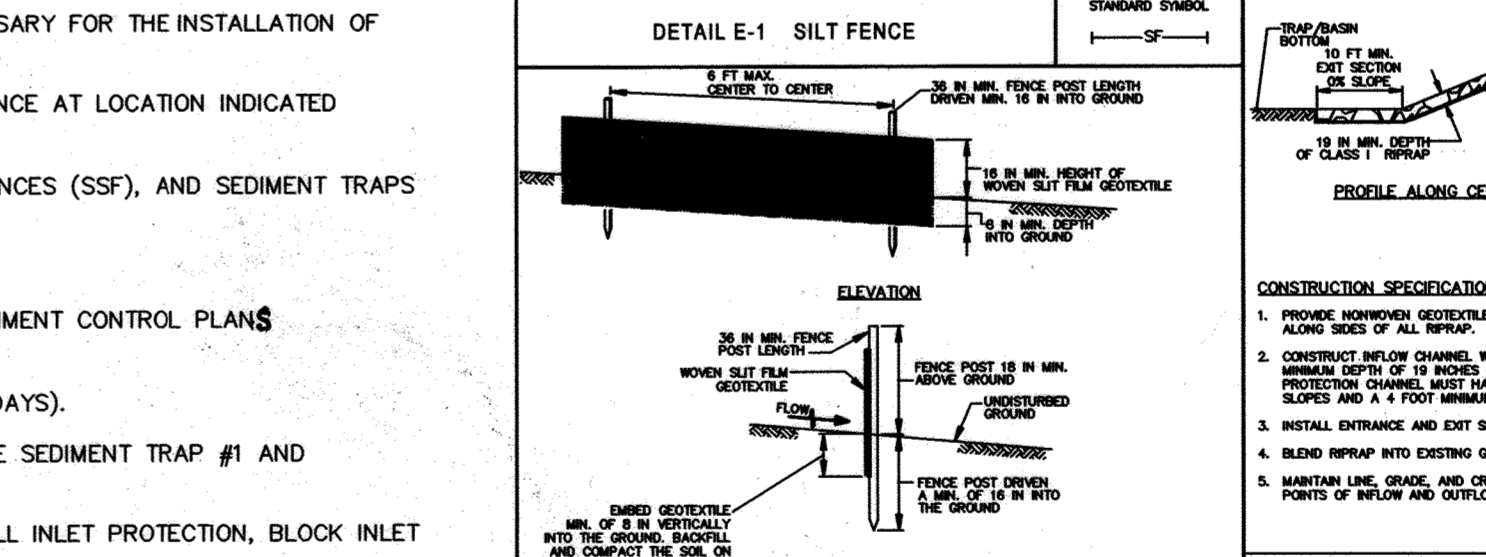
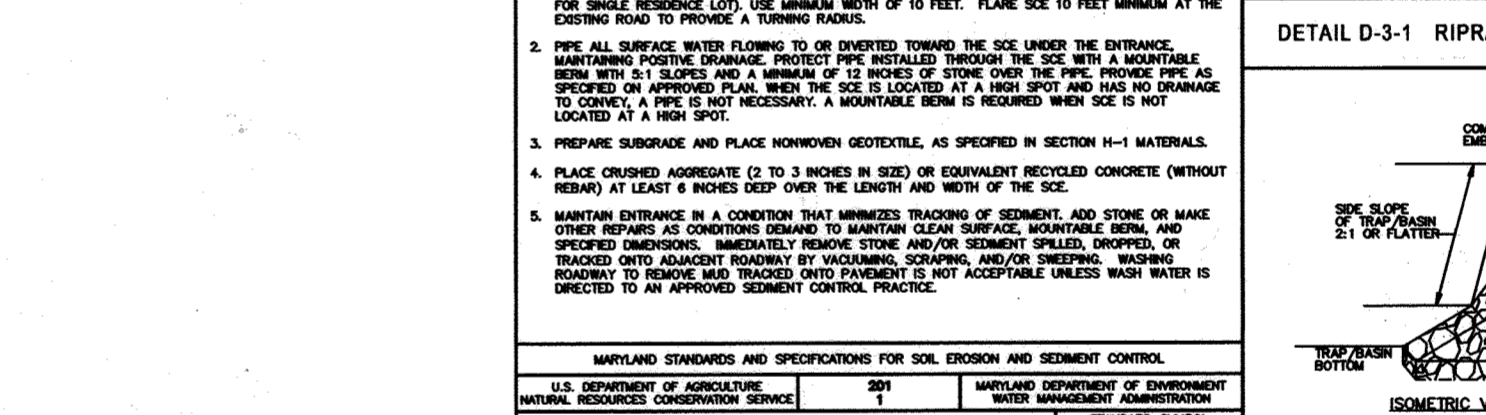
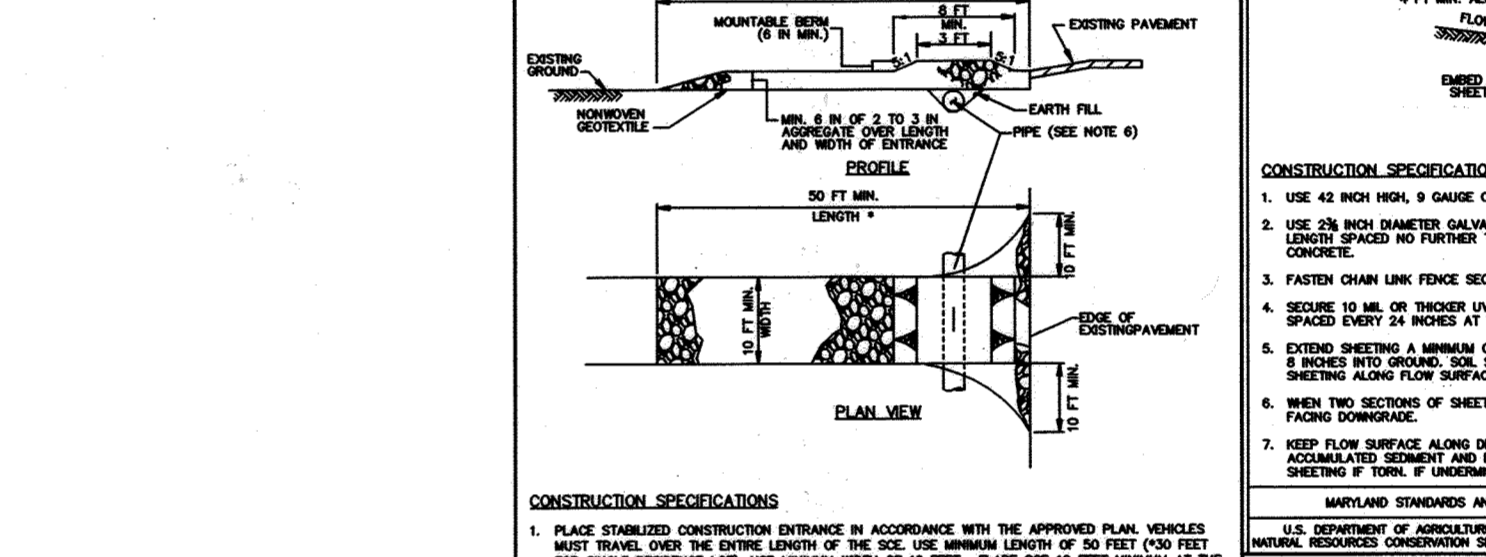
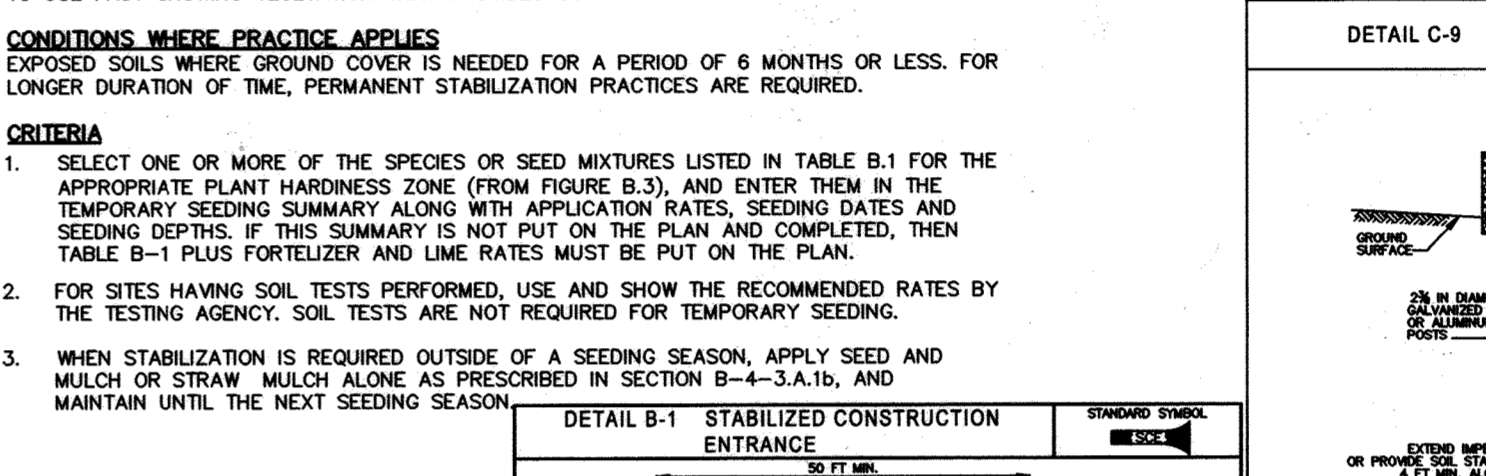
1. TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. 2. TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS...

1. MULCH MATERIALS (IN ORDER OF PREFERENCE) a. STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, RYE, OAT, OR BARLEY AND REASONABLY BRIGHT IN COLOR. b. WOOD CELLULOSE FIBER MULCH (WCFM) CONSISTING OF SPECIALLY PREPARED WOOD CELLULOSE PROCESSED INTO A FIBER FIBROUS PHYSICAL STATE.

ENGINEER'S CERTIFICATE and DEVELOPER'S CERTIFICATE sections with signatures and dates for R. JACOB HIKMAT, PE. and J. BOENDER & ASSOC., INC.

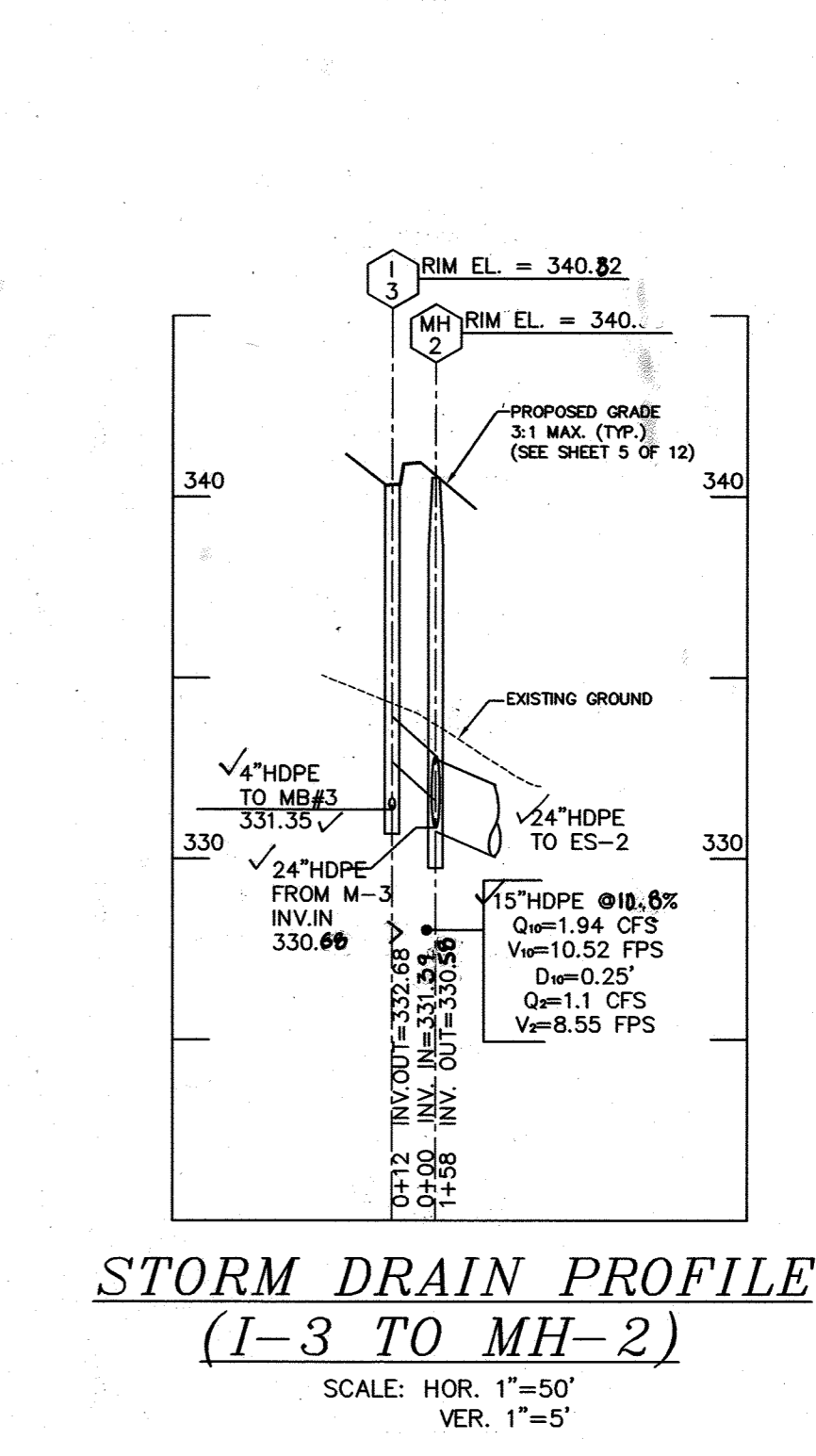
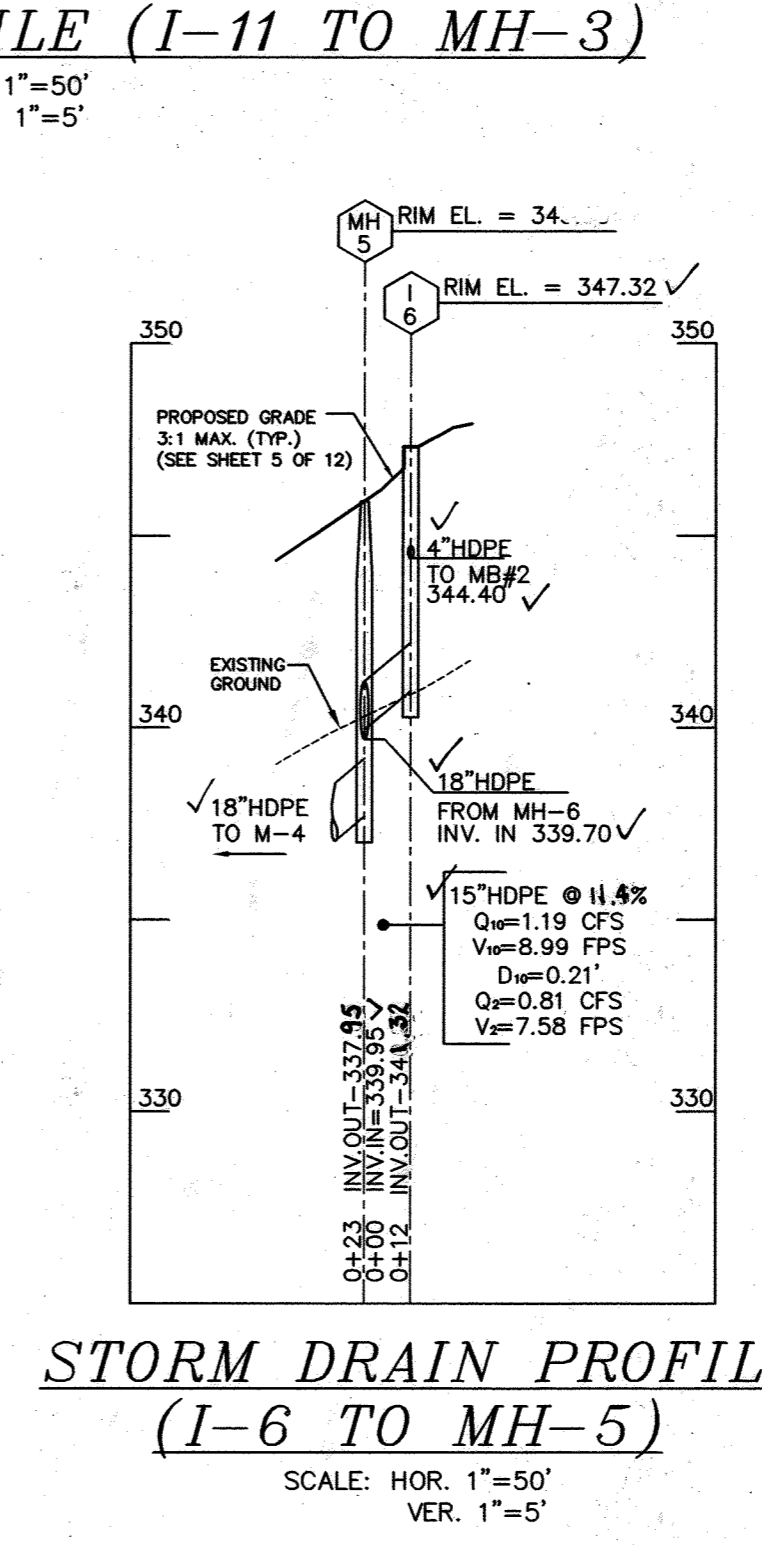
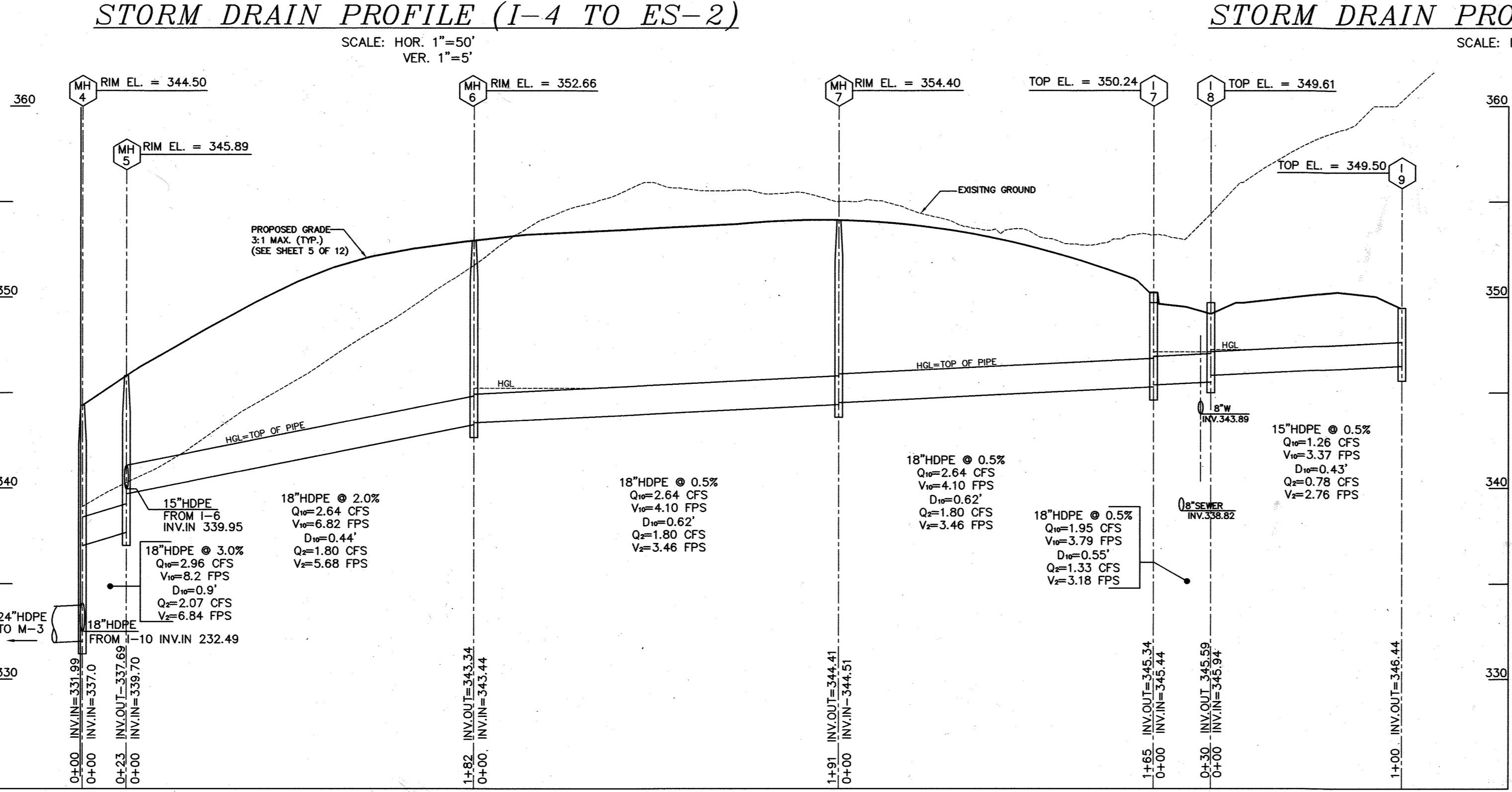
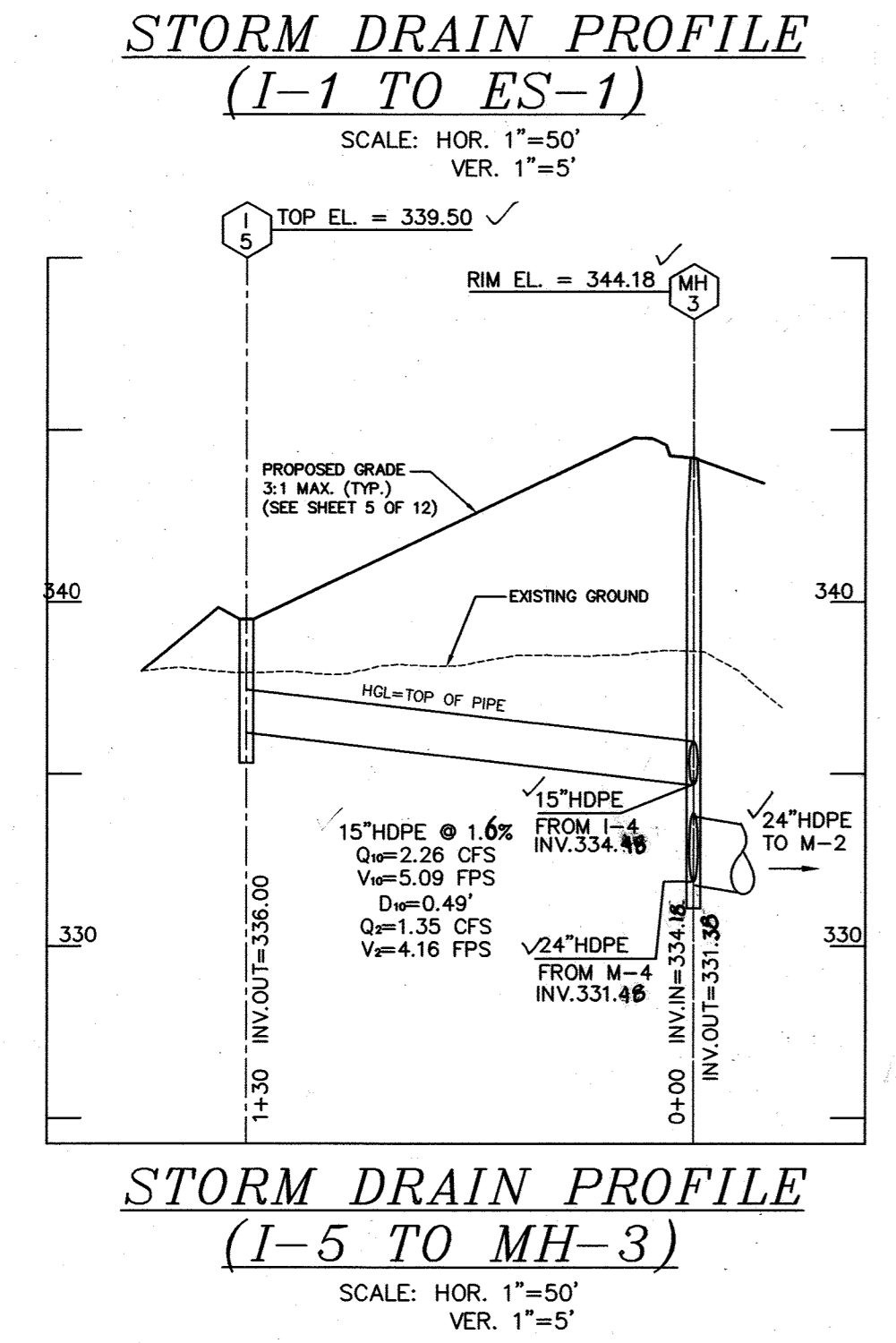
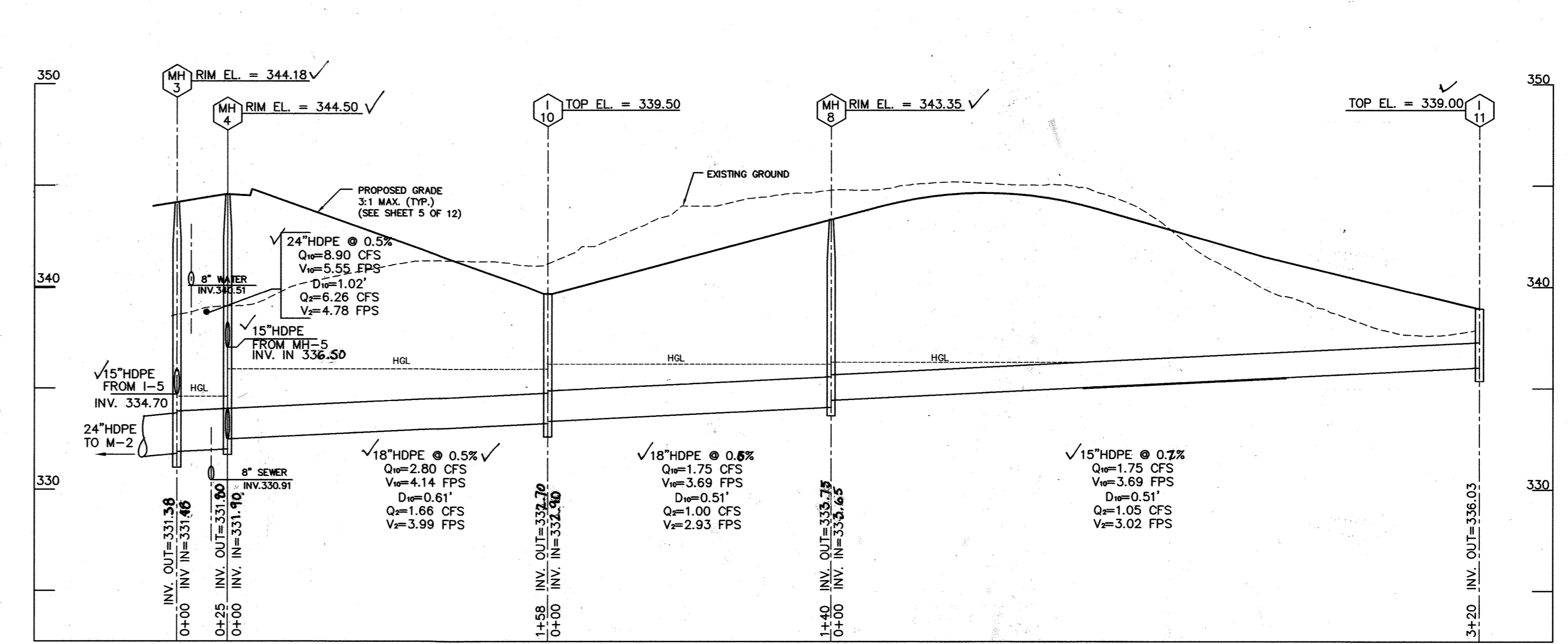
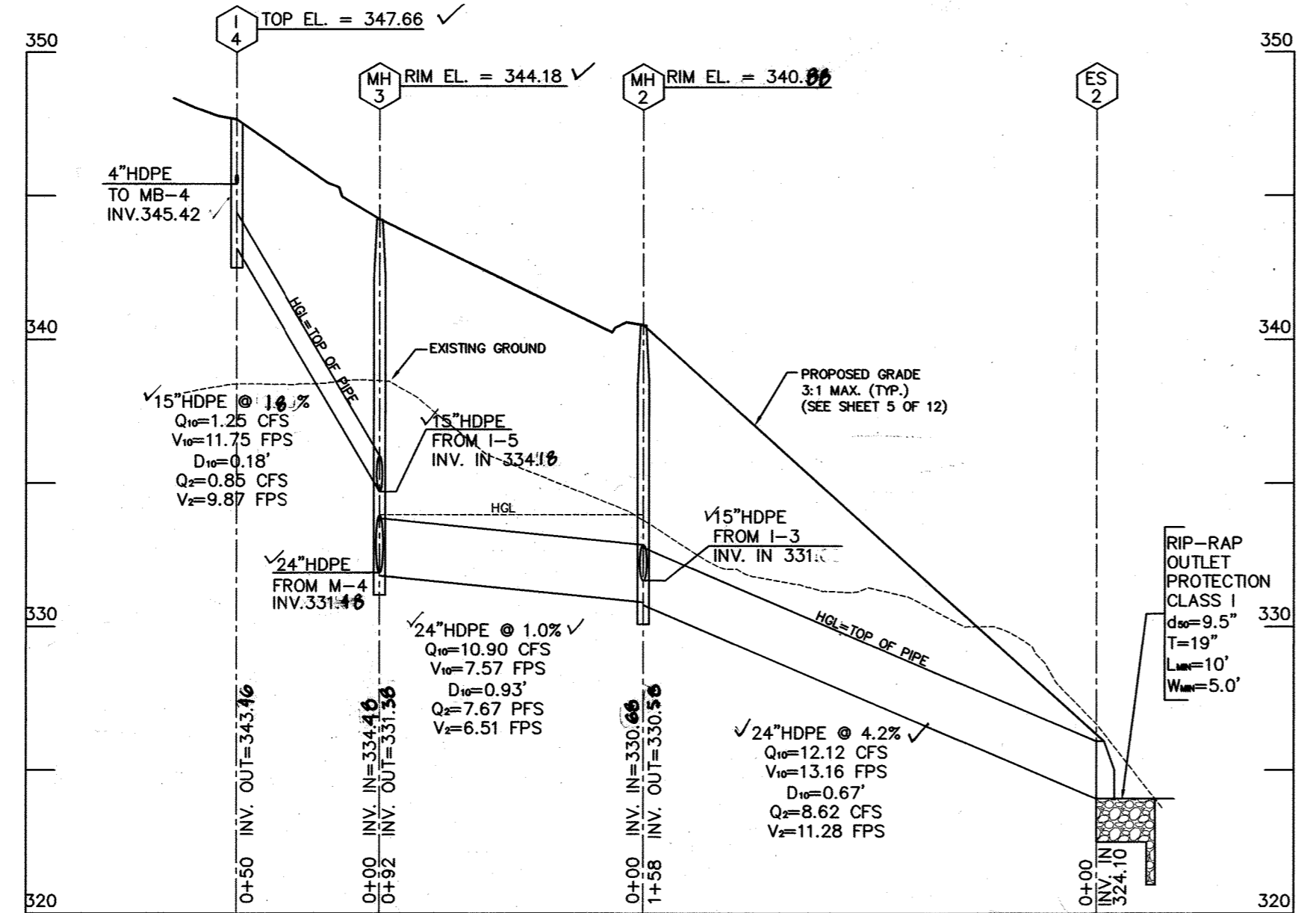
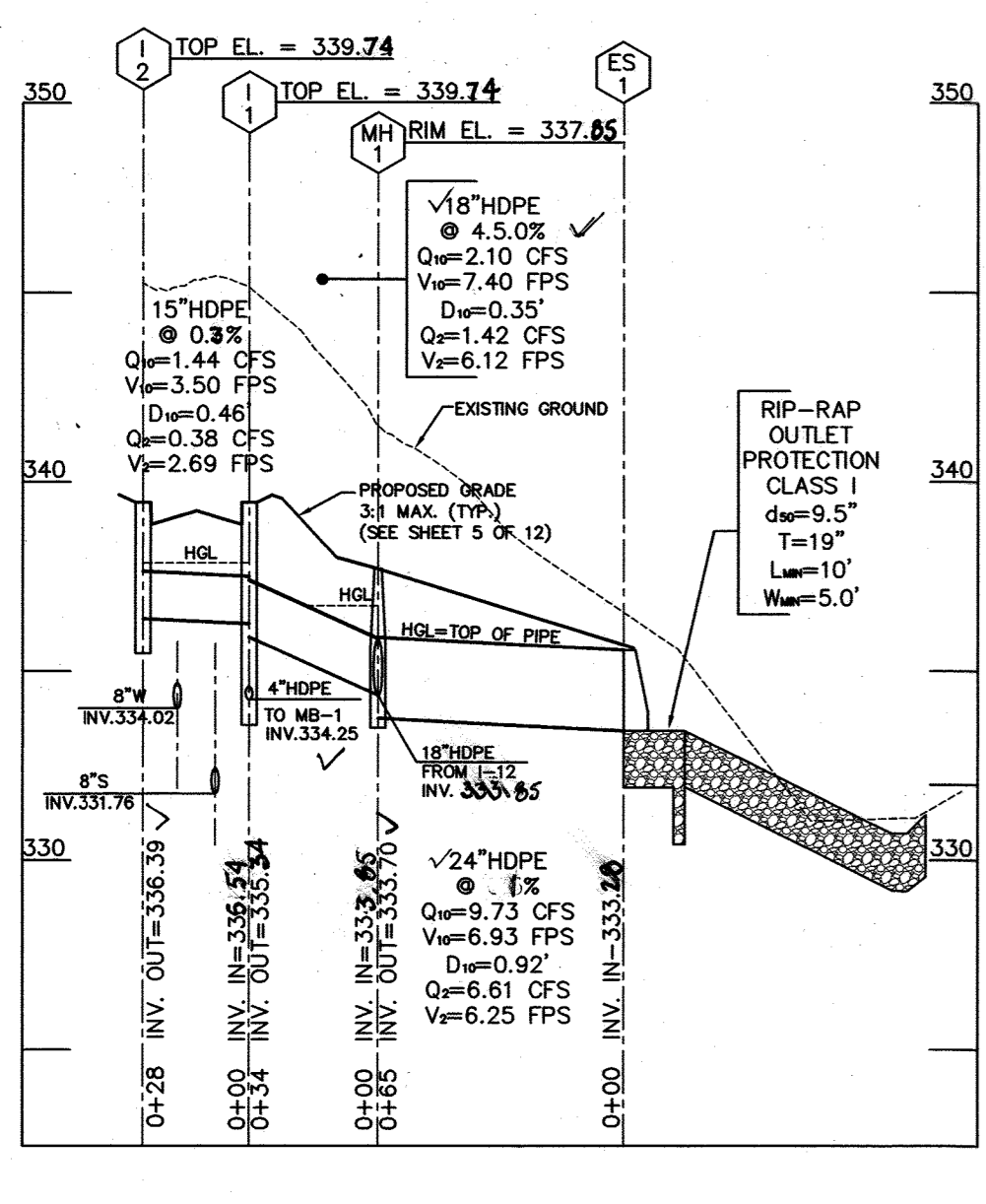
STANDARD SEDIMENT CONTROL NOTES section with 10 numbered items detailing construction and sediment control requirements.

DEVELOPER section with project information for C/O DORSEY FAMILY HOMES, INC. and a stamp from the State of Maryland.



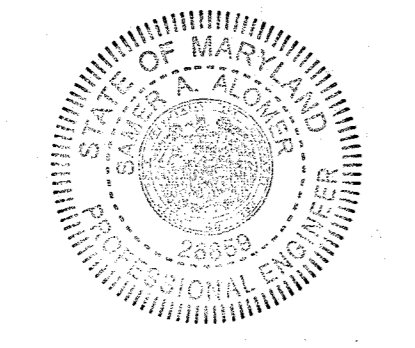
CONSTRUCTION SPECIFICATIONS section with 15 numbered items detailing construction requirements for various structures.

Vertical project information on the right margin including project number 14-013, date AUG 2016, and project name PINE ACRES.



PIPE SCHEDULE

PIPE SIZE	QUANTITY
15" HDPE	652 L.F.
18" HDPE	1,170 L.F.
24" HDPE	340 L.F.



DEVELOPER
 C/O DORSEY FAMILY HOMES, INC.
 10717-B BIRMINGHAM WAY
 WOODSTOCK, MARYLAND 21163
 (410) 465-7200

I hereby certify that the facility shown on this plan was constructed as shown on the 'As-Built' plans and meets with the approved plans and specifications.

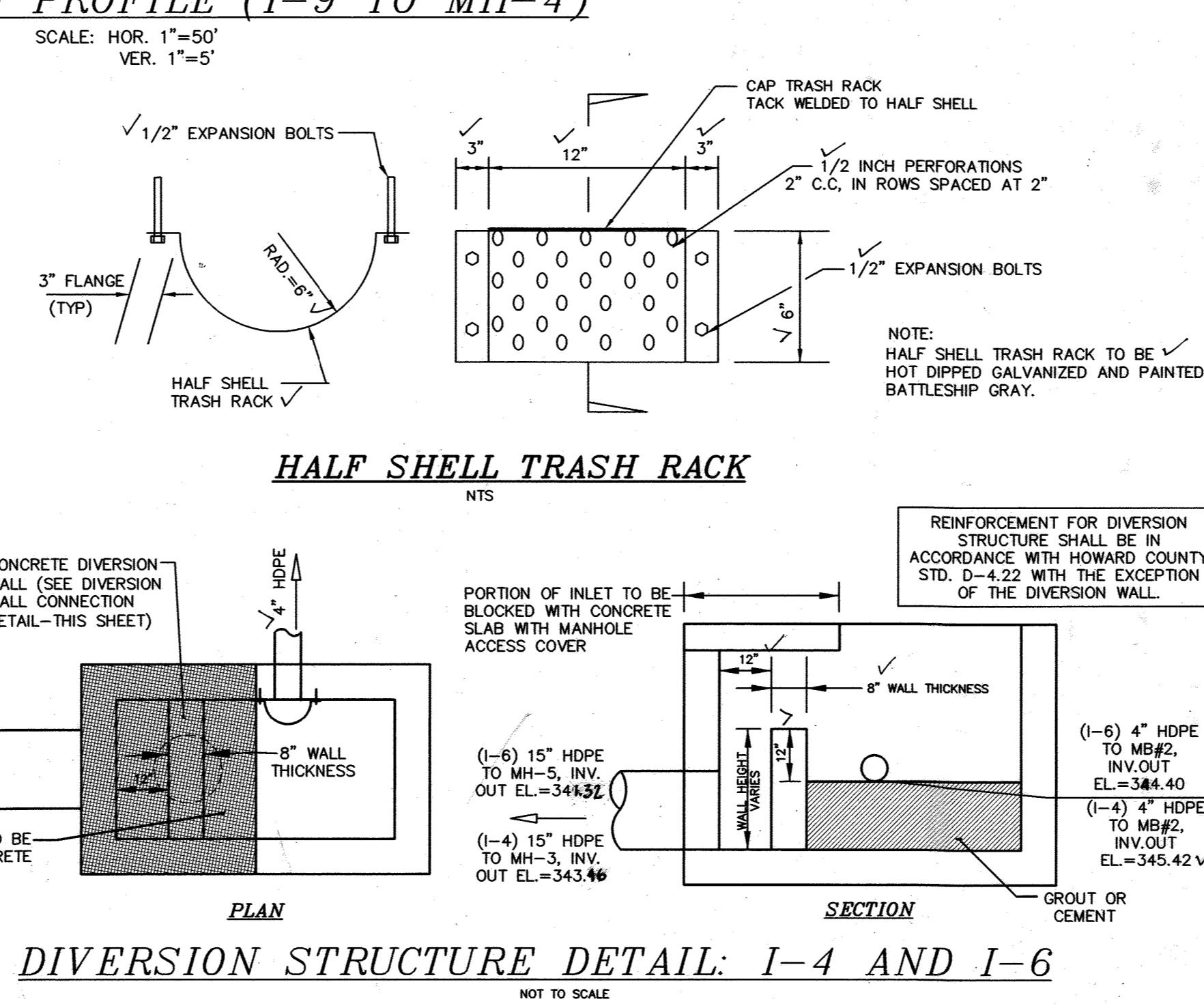
APPROVED: DEPARTMENT OF PUBLIC WORKS
 [Signature] 8/24/16
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 10-20-16
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] 11-08-16
 CHIEF, DIVISION OF LAND DEVELOPMENT

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 09/03/16

R. JACOB HIKMAT P.E. 8/4/16



STRUCTURE SCHEDULE

NO.	LOCATION*	TOP**	INV. IN	INV. OUT	COMMENTS
ES-1	N 563,200.4 E 1,379,163.3	✓	333.26	-	24" HDPE END SECTION
ES-2	N 564,195.5 E 1,379,397.5	✓	324.10	-	24" HDPE END SECTION
I-1	AUSTIN WAY STA. 0+62.35, OFFSET 12.43' RT. ✓	✓	339.74	335.54	INLET TYPE A-5 (HO. CO. STD D-4.01)
I-2	AUSTIN WAY STA. 0+64.85, OFFSET 12.43' LT. ✓	✓	339.74	-	INLET TYPE A-10 (HO. CO. STD D-4.03)
I-3	AUSTIN WAY LINEAR PROF. STA. 1+43.76, OFFSET 0.43' ✓	✓	340.82	-	INLET TYPE A-5 (HO. CO. STD D-4.01)
I-4	AUSTIN WAY STA. 7+66.95, OFFSET 12.43' LT. ✓	✓	347.66	-	INLET TYPE A-10 (HO. CO. STD D-4.03)
I-5	N 563,973.1 E 1,379,203.7	✓	339.50	-	YARD INLET (HO. CO. STD D-4.14)
I-6	AUSTIN WAY STA. 7+72.98, OFFSET 12.43' RT. ✓	✓	347.32	-	INLET TYPE A-10 (HO. CO. STD D-4.03)
I-7	AUSTIN WAY STA. 2+50.00, OFFSET 12.43' RT. ✓	✓	350.24	345.84	INLET TYPE A-10 (HO. CO. STD D-4.03)
I-8	AUSTIN WAY STA. 2+37.53, OFFSET 12.43' LT. ✓	✓	349.61	345.59	INLET TYPE A-10 (HO. CO. STD D-4.03)
I-9	N 563,462.0 E 1,379,012.6	✓	349.26	-	YARD INLET (HO. CO. STD D-4.14)
I-10	N 563,862.6 E 1,379,493.5	✓	339.00	333.00	YARD INLET (HO. CO. STD D-4.14)
I-11	N 563,432.0 E 1,379,323.8	✓	339.00	-	YARD INLET (HO. CO. STD D-4.14)
I-12	N 563,219.9 E 1,379,011.4	✓	341.44	-	INLET TYPE A-15 (HO. CO. STD D-4.03)
MH-1	AUSTIN WAY STA. 0+38.66, OFFSET 39.50' RT. ✓	✓	337.86	333.85	MH (HO. CO. STD G 5.12)
MH-2	N 564,038.7 E 1,379,374.7	✓	340.88	330.56	MH (HO. CO. STD G 5.12)
MH-3	AUSTIN WAY STA. 8+17.13, OFFSET 16.32' LT. ✓	✓	344.18	331.56	MH (HO. CO. STD G 5.12)
MH-4	AUSTIN WAY STA. 8+11.80, OFFSET 8.83' RT. ✓	✓	344.50	331.80	MH (HO. CO. STD G 5.12)
MH-5	AUSTIN WAY STA. 7+88.62, OFFSET 8.60' RT. ✓	✓	346.25	337.93	MH (HO. CO. STD G 5.12)
MH-6	AUSTIN WAY STA. 6+06.45, OFFSET 8.22' RT. ✓	✓	352.66	343.21	MH (HO. CO. STD G 5.12)
MH-7	AUSTIN WAY STA. 4+15.30, OFFSET 10.45' RT. ✓	✓	354.24	344.75	MH (HO. CO. STD G 5.12)
MH-8	N 563,734.9 E 1,379,443.4	✓	343.35	333.65	MH (HO. CO. STD G 5.12)

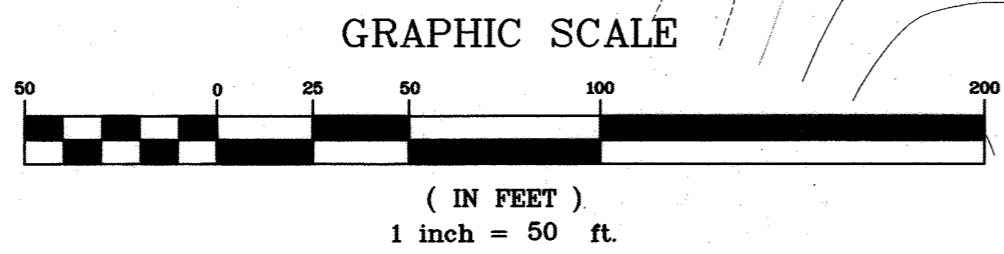
NOTES:
 1. STATIONS GIVEN TO CENTERLINE FACE OF INLET AT TOP OF CURB FOR INLETS LOCATED WITHIN THE ROAD RIGHT-OF-WAY.
 2. STATIONS FOR YARD INLETS TO CL OF INLET.
 3. LOCATION OF MANHOLES IS TO CL OF MANHOLE COVER.
 4. LOCATION OF END SECTION GIVEN TO THE CENTERLINE OF PIPE AT THE CONNECTION OF THE STORM DRAIN PIPE TO THE END SECTION.
 5. ELEVATIONS MEASURED TO CENTER OF ALL INLETS.

SOILS TABLE

SYMBOL	RATING	NAME	K FACTOR	HYDRIC SOILS
Fa	(D)	FALLSINGTON SANDY LOAM, 0-2% SLOPES.	.02	YES
RaC	(C)	RUSSETT FINE SANDY LOAM, 5-10% SLOPES.	.24	NO
CeB	(B)	CHILLUM LOAM, 2-5% SLOPES	.37	NO
CeC	(B)	CHILLUM LOAM, 5-10% SLOPES	.37	NO
UcD	(D)	URBAN LAND-CHILLUM-BELTVILLE COMPLEX, 5-15%	---	NO
UaD	(D)	URBAN LAND-SASSAFRAS-BELTVILLE COMPLEX, 5-15%	---	NO
SoC	(B)	SASSAFRAS LOAM, 5-10% SLOPES	.24	NO
SfB	(B)	SASSAFRAS GRAVELLY SANDY LOAM, 2-5% SLOPES	.24	NO



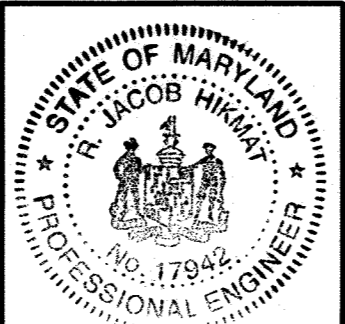
DEVELOPER
 C/O DORSEY FAMILY HOMES, INC.
 10717-B BIRMINGHAM WAY
 WOODSTOCK, MARYLAND 21163
 (410)465-7200



APPROVED: DEPARTMENT OF PUBLIC WORKS
Howard S. ... 8/24/16
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chad Edmonson 10-20-16
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
Kristin ... 11-08-16
 CHIEF, DIVISION OF LAND DEVELOPMENT

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 R. JACOB HIKMAT P.E. 8/9/16 DATE:



THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET

date	AUG. 2016	approval	RH
project	14-013	engineering	MMM
illustration	MMM	scale	1"=50'

no.	1	description	MMMF
date	7/16/17	revisions	

PINE ACRES
 LOTS 1-21 AND OPEN SPACE LOTS 22-28
 TAX MAP 37, PARCEL 49 AND 50, GRID 5, ZONE: R-20
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
STORM DRAIN DRAINAGE AREA MAP

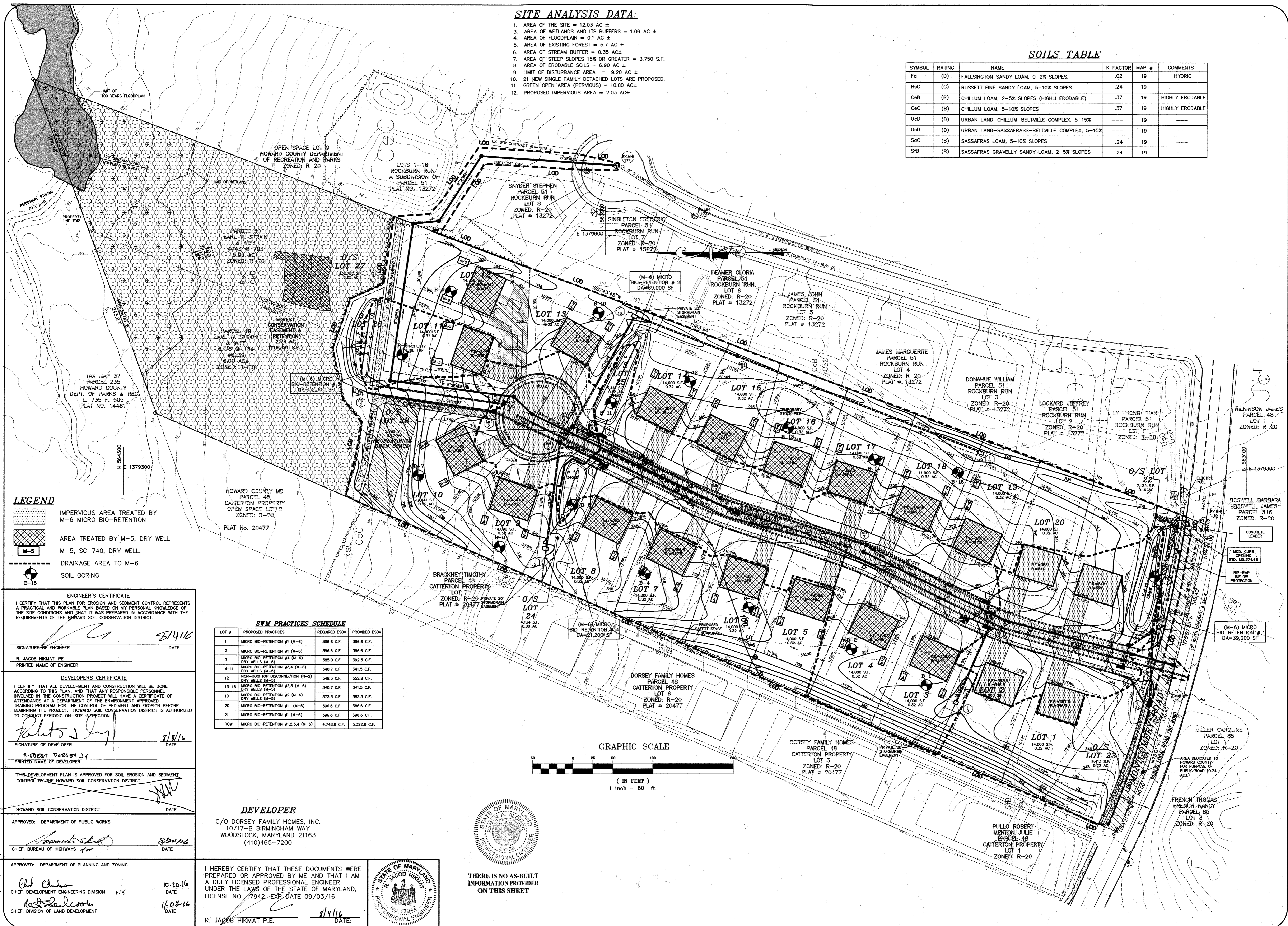
MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 7350-P Croce Drive, Columbia, Maryland, 21044
 (410) 997-0286 Tel. (410) 997-0288 Fax

SITE ANALYSIS DATA:

1. AREA OF THE SITE = 12.03 AC ±
2. AREA OF WETLANDS AND ITS BUFFERS = 1.06 AC ±
3. AREA OF FLOODPLAIN = 0.1 AC ±
4. AREA OF EXISTING FOREST = 5.7 AC ±
5. AREA OF STREAM BUFFER = 0.35 AC ±
6. AREA OF STEEP SLOPES 15% OR GREATER = 3,750 SF.
7. AREA OF ERODABLE SOILS = 6.90 AC ±
8. LIMIT OF DISTURBANCE AREA = 9.20 AC ±
9. LIMIT OF DISTURBANCE AREA = 9.20 AC ±
10. 21 NEW SINGLE FAMILY DETACHED LOTS ARE PROPOSED.
11. GREEN OPEN AREA (PERVIOUS) = 10.00 AC ±
12. PROPOSED IMPERVIOUS AREA = 2.03 AC ±

SOILS TABLE

SYMBOL	RATING	NAME	K FACTOR	MAP #	COMMENTS
Fa	(D)	FALLSINGTON SANDY LOAM, 0-2% SLOPES.	.02	19	HYDRIC
RaC	(C)	RUSSETT FINE SANDY LOAM, 5-10% SLOPES.	.24	19	----
CeB	(B)	CHILLUM LOAM, 2-5% SLOPES (HIGHLY ERODABLE)	.37	19	HIGHLY ERODABLE
CeC	(B)	CHILLUM LOAM, 5-10% SLOPES	.37	19	HIGHLY ERODABLE
UcD	(D)	URBAN LAND-CHILLUM-BELTVILLE COMPLEX, 5-15%	----	19	----
UsD	(D)	URBAN LAND-SASSAFRAS-BELTVILLE COMPLEX, 5-15%	----	19	----
SoC	(B)	SASSAFRAS LOAM, 5-10% SLOPES	.24	19	----
SfB	(B)	SASSAFRAS GRAVELLY SANDY LOAM, 2-5% SLOPES	.24	19	----



LEGEND

- IMPERVIOUS AREA TREATED BY M-6 MICRO BIO-RETENTION
- AREA TREATED BY M-5, DRY WELL
- M-5, SC-740, DRY WELL.
- DRAINAGE AREA TO M-6
- SOIL BORING

ENGINEER'S CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 SIGNATURE OF ENGINEER: R. JACOB HIKMAT, PE. DATE: 8/14/16

DEVELOPER'S CERTIFICATE
 I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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. HOWARD SOIL CONSERVATION DISTRICT IS AUTHORIZED TO CONDUCT PERIODIC ON-SITE INSPECTION.
 SIGNATURE OF DEVELOPER: Robert Dorsey, Jr. DATE: 8/8/16

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 DATE: 8/24/16

APPROVED: DEPARTMENT OF PUBLIC WORKS
 DATE: 8/24/16

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 DATE: 10-20-16

SWM PRACTICES SCHEDULE

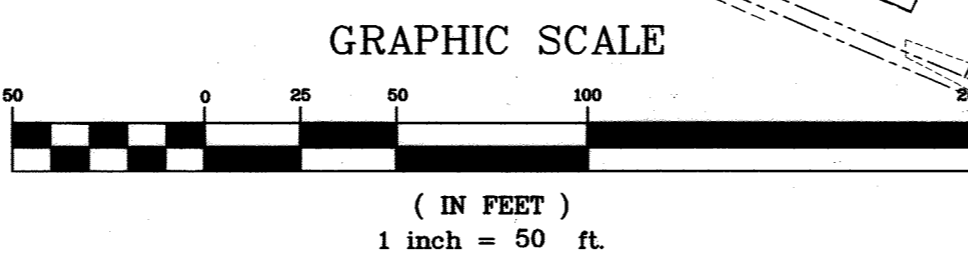
LOT #	PROPOSED PRACTICES	REQUIRED ESV	PROMISED ESV
1	MICRO BIO-RETENTION #1 (M-6)	396.6 C.F.	396.6 C.F.
2	MICRO BIO-RETENTION #1 (M-6)	396.6 C.F.	396.6 C.F.
3	MICRO BIO-RETENTION #4 (M-6)	385.0 C.F.	392.5 C.F.
4-11	MICRO BIO-RETENTION #3.4 (M-6)	340.7 C.F.	341.5 C.F.
12	NON-ROOFTOP DISCONNECTION (N-2)	548.3 C.F.	552.8 C.F.
13-18	MICRO BIO-RETENTION #2.3 (M-6)	340.7 C.F.	341.5 C.F.
19	MICRO BIO-RETENTION #2 (M-6)	373.3 C.F.	383.5 C.F.
20	MICRO BIO-RETENTION #1 (M-6)	396.6 C.F.	396.6 C.F.
21	MICRO BIO-RETENTION #1 (M-6)	396.6 C.F.	396.6 C.F.
ROW	MICRO BIO-RETENTION #2.3.4 (M-6)	4,748.8 C.F.	5,322.6 C.F.

DEVELOPER
 C/O DORSEY FAMILY HOMES, INC.
 10717-B BIRMINGHAM WAY
 WOODSTOCK, MARYLAND 21163
 (410)465-7200

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 R. JACOB HIKMAT P.E. DATE: 8/14/16



THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET

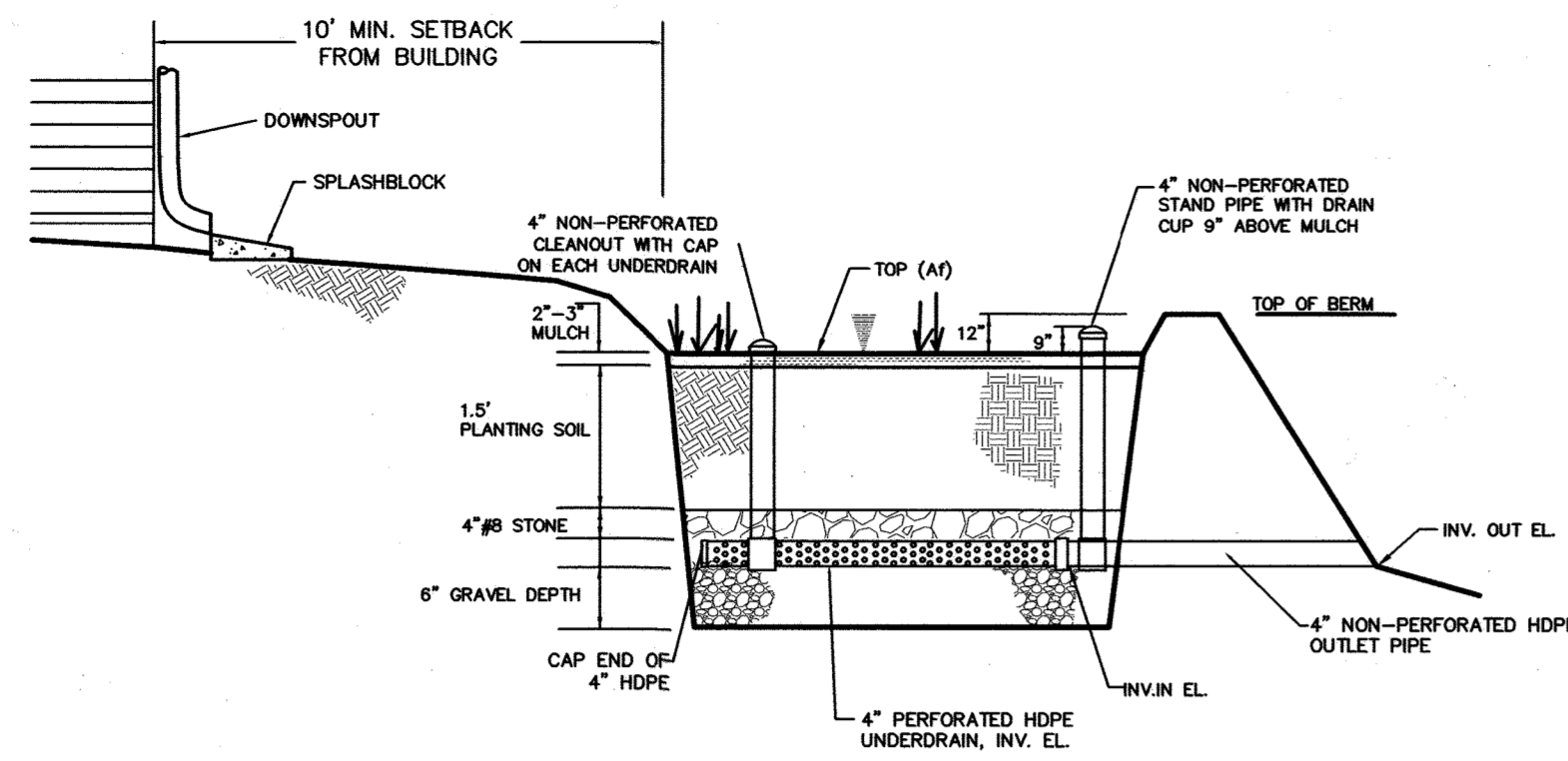


MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 7350-B Grace Drive, Columbia, Maryland, 21044
 (410) 997-0296 Tel. (410) 997-0296 Fax

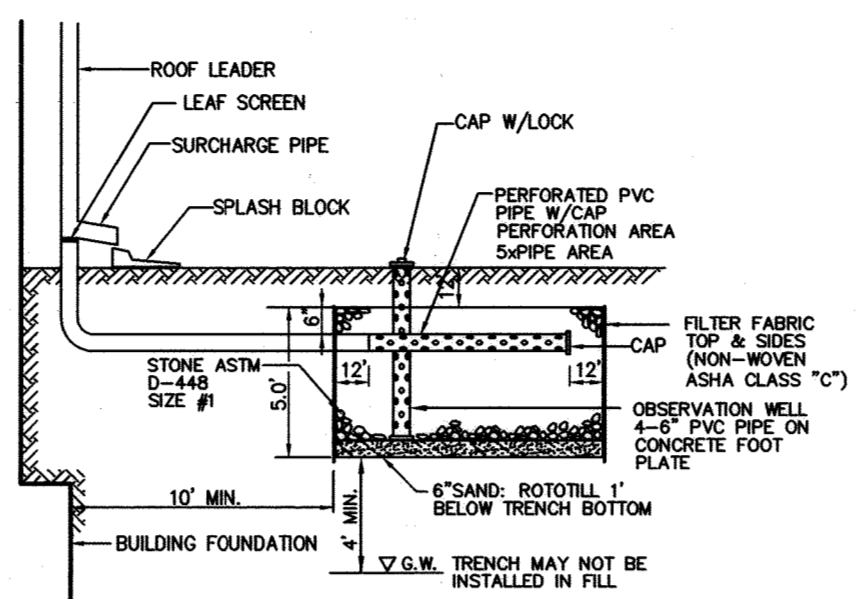
PINE ACRES
 LOTS 1-21 AND OPEN SPACE LOTS 22-28
 TAX MAP 37, PARCELS 49 AND 50, GRID 5, ZONE R-20
 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 STORMWATER MANAGEMENT PLAN

date: AUG 2016
 project: 14-013
 illustration: MAM
 scale: 1"=50'
 approval: RH
 description: z/e/l/r
 revisions: no.

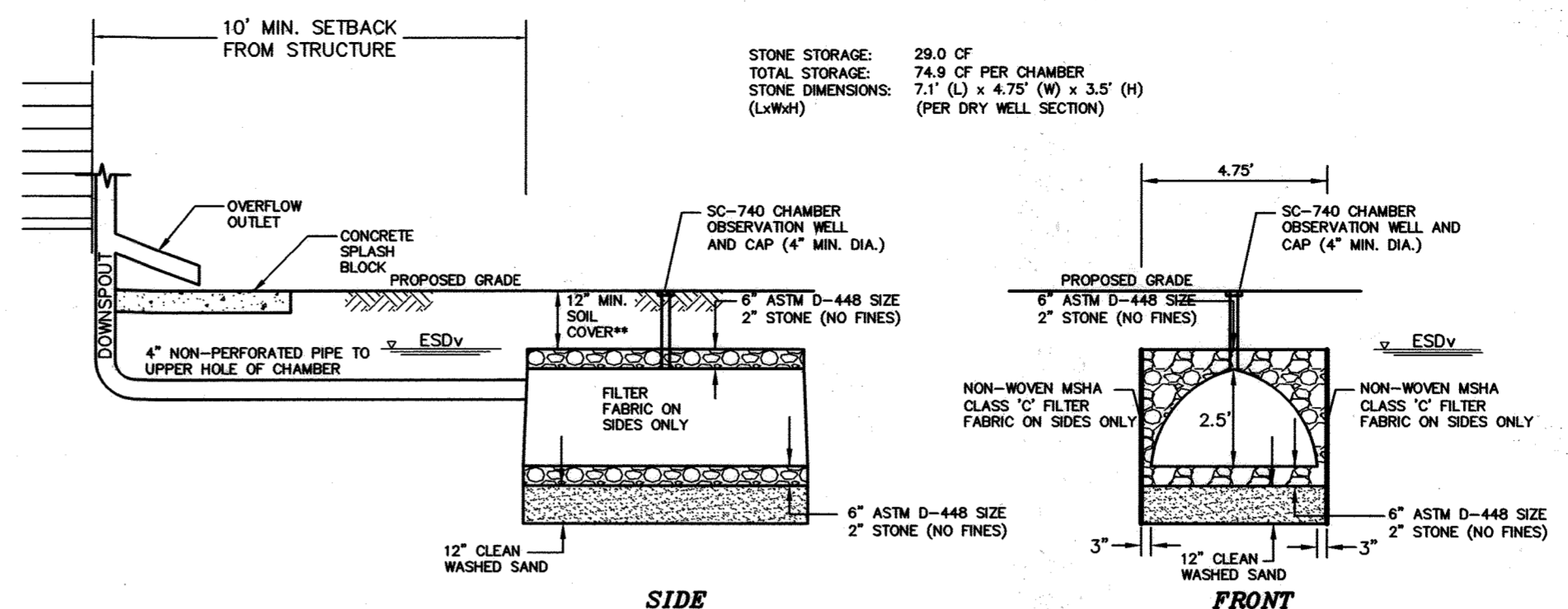
9 OF 12
 F-16-024



MICRO-BIORETENTION (M-6) DETAIL
SCALE: NTS

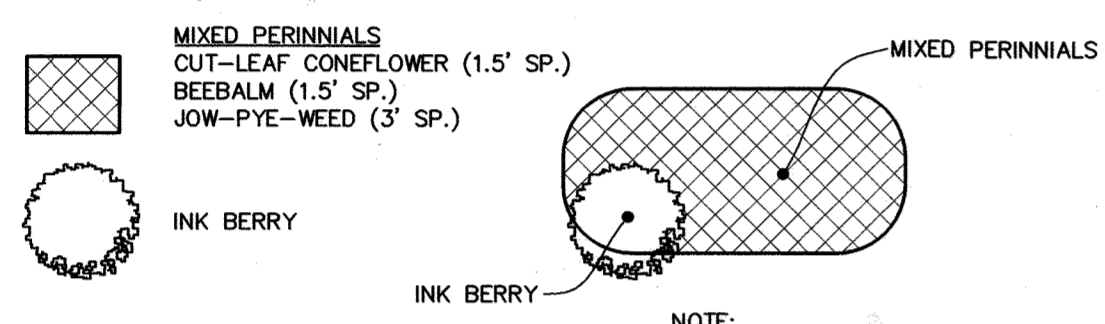


DRYWELL TYP. DETAIL
NTS



MODIFIED DRYWELL (M-5) DETAIL
NOT TO SCALE

NOTE: ADJUST COVER OVER CHAMBER TO ENSURE THAT THE CLEAN WASHED SAND LAYER IS NOT PLACED IN FILL.



TYP. MICRO-BIORETENTION (M-6) DETAIL
SCALE: NTS

MICRO-BIORETENTION SCHEDULE

FACILITY	TOP EL.	TOP OF BERM	INV. IN	INV. OUT	AREA AT TOP EL.
MB #1	334.00	335.00	330.90	330.70	1,530 SF
MB #2	344.00	345.00	340.90	340.70	1,620 SF
MB #3	326.8	327.8	323.7	323.5	1,430 SF
MB #4	344.8	345.8	341.7	341.5	1,035 SF

OPERATION AND MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION (M-6)

ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUME II, TABLE A.4.1 AND 2.

SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT. TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES.

MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.

SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.

NOTE: TYPE AND NUMBER OF DRYWELLS TO BE DETERMINE AT SITE DEVELOPMENT PLAN

1 STANDARD DRYWELL CAN BE REPLACED WITH MOD. DRYWELLS (SC-740 STORMTECH CHAMBERS)

DRYWELL REPLACEMENT SCHEDULE

LOT #	SIZE OF STANDARD DRYWELL	NO. OF DRYWELLS	VOLUME IN STANDARD DRYWELLS	NO. OF MOD. DRYWELLS (SC-740)	VOLUME IN MOD. DRYWELLS (SC-740)
3	11.5'x7.5'x5.0'	2	345.0 C.F.	5	374.5 C.F.
4-11	10.5'x7.0'x5.0'	2	294.0 C.F.	4	299.6 C.F.
12	13.0'x8.5'x5.0'	2	442.0 C.F.	6	449.4 C.F.
13-18	10.5'x7.0'x5.0'	2	294.0 C.F.	4	299.6 C.F.
19	12.0'x7.0'x5.0'	2	336.0 C.F.	5	374.5 C.F.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DRY WELLS (M-5)

- THE OWNER SHALL INSPECT THE MONITORING WELLS AND STRUCTURES ON A QUARTERLY BASIS AND AFTER EVERY HEAVY STORM EVENT.
- THE OWNER SHALL RECORD THE WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS OVER A PERIOD OF SEVERAL DAYS TO INSURE TRENCH DRAINAGE.
- THE OWNER SHALL MAINTAIN A LOG BOOK TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN A SEVENTY-TWO (72) HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.
- THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
- ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION FACILITY HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

DEVELOPER

C/O DORSEY FAMILY HOMES, INC.
10717-B BIRMINGHAM WAY
WOODSTOCK, MARYLAND 21163
(410)465-7200

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

8/14/16
R. JACOB HIKMAT, PE.
PRINTED NAME OF ENGINEER

DEVELOPER'S CERTIFICATE
I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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. HOWARD SOIL CONSERVATION DISTRICT IS AUTHORIZED TO CONDUCT PERIODIC ON-SITE INSPECTION.

8/14/16
Robert Dorsey Jr.
PRINTED NAME OF DEVELOPER

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PUBLIC WORKS

8/24/16
CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING

10-20-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION

11-08-16
CHIEF, DIVISION OF LAND DEVELOPMENT

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8/14/16
R. JACOB HIKMAT P.E.



I hereby certify that the facility shown on this plan was constructed as shown on the 'As-Built' plans and meets with the approved plans and specifications.

GEOTECHNICAL & ENVIRONMENTAL CONSULTANTS, INC.
P.O. Box 2071
Columbia, MD 21045-2071
Phone: (410) 381-5330
Fax: (410) 381-1064
e-mail: mounir54@yahoo.com

January 19, 2015

Mildenberg, Brender & Associates, Inc.
7250-B Grace Drive
Columbia, Maryland 21044

Attn: Ms. Maya M. Mildenberg
Vice President

Ref: Limited Subsurface Exploration
Proposed Development
Pine Acres
Tax Map 37, Parcels 49 and 50, Grid 5
Howard County, Maryland
GE&T Project No. G-243

Dear Ms. Mildenberg:

On December 22nd, 2014, GE&T Consultants, Inc. utilized a Geoprobe to bore sixteen (16) soil borings at the locations shown on the attached Borings Location Map. The purpose of the borings was to evaluate the presence/absence of bedrock and local groundwater at the locations shown. The number, location, and depth of the borings were determined by others and the borings were stake-out in the field by others.

Our field observations are summarized in Table 1 below:

Boring No.	Depth to Groundwater (ft)	Depth to Refusal (ft)	Boring Termination Depth (ft)	Remarks
B-1	N/A	N/A	18.0	--
B-2	N/A	N/A	16.0	--
B-3	N/A	N/A	16.0	--
B-4	N/A	N/A	12.0	--
B-5	N/A	N/A	4.0	--
B-6	N/A	N/A	8.0	--

B-7	N/A	N/A	4.0	--
B-8	N/A	N/A	8.0	--
B-9	N/A	N/A	10.0	--
B-10	N/A	N/A	10.0	--
B-11	N/A	N/A	4.0	--
B-12	N/A	N/A	8.0	--
B-13	N/A	N/A	8.0	--
B-14	N/A	N/A	6.0	--
B-15	N/A	N/A	6.0	--
B-16	N/A	N/A	8.0	Offset 11 ft N

Note: All depths are below existing site grades

It should be noted that the actual level of groundwater and the amount and level of perched water should be anticipated to fluctuate through the year, depending on variations in precipitation, surface run-off, infiltration, site topography, drainage, and other factors not evident at the time of our exploration. GE&T can not be responsible for changes in groundwater conditions at the site due to seasonal variations and changes caused by other factors such as grading operations at the site.

GE&T appreciates the opportunity to provide this geotechnical engineering service to you. Should you have any questions regarding this letter report, or require additional services, please feel free to contact our office.

Sincerely,
GE&T Consultants, Inc.
Mounir Akouzakhm, PE

date	project	engineering	scale	approval
AUG. 2016	14-013	MMM	1"=50'	RJH

date	description	revisions
8/14/16	AS-BUILT DATA	

PINE ACRES
LOTS 1-21 AND OPEN SPACE LOTS 22-28
TAX MAP 37, PARCELS 49 AND 50, GRID 5, ZONE R-20
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SWM DETAILS AND SOIL BORINGS

MILDENBERG, BENDER & ASSOC., INC.
Engineers Planners Surveyors
7250-B Grace Drive, Columbia, Maryland, 21044
(410) 381-5330 Fax (410) 381-1064

FSD NOTES:

- 1. NO RARE, THREATENED OR ENDANGERED SPECIES OR THEIR HABITATS WERE OBSERVED ON THE PROPERTY.
2. SURROUNDING LAND USE IS PRIMARILY LOW DENSITY RESIDENTIAL DEVELOPMENT AND AGRICULTURE.
3. APPROXIMATELY 3.4 ACRES OF FOREST IS PRESENT WITHIN 100 FEET OF THE SUBJECT PROPERTY.
4. ALL WETLANDS AND STREAMS ON THE PROPERTY ARE PART OF A USE 1 WATERSHED. PERENNIAL STREAMS WILL REQUIRE 75 FOOT BUFFERS, INTERMITTENT STREAMS WILL REQUIRE 50 FOOT BUFFERS AND WETLANDS WILL REQUIRE 25 FOOT BUFFERS. APPROXIMATELY 0.1 ACRES OF 100 YEAR FLOODPLAIN IS PRESENT ON THE SUBJECT PROPERTY.
5. THERE ARE NO STEEP SLOPES (25% OR GREATER) ON THE PROPERTY.
6. THERE ARE NO KNOWN HISTORIC STRUCTURES OR CEMETERIES ON THE PROPERTY.
7. THERE ARE SPECIMEN TREES ON THE PROPERTY. THERE ARE NO KNOWN TREES THAT ARE STATE CHAMPION TREES AND OR TREES 75% OF THE SIZE OF THE STATE CHAMPION TREE ON THE PROPERTY.

CONSTRUCTION PERIOD PROTECTION AND MANAGEMENT PROGRAM

- 1. ALL FOREST RETENTION AREAS AND ISOLATED POTENTIAL SPECIMEN TREES SHALL BE TEMPORARILY PROTECTED BY WELL ANCHORED, BLAZE ORANGE PLASTIC MESH FENCING AND SIGNAGE AS INDICATED ON THE PLANS. THE DEVICES SHALL BE INSTALLED ALONG THE FOREST RETENTION BOUNDARY AND AROUND ISOLATED POTENTIAL SPECIMEN TREES PRIOR TO ANY LAND CLEARING, GRUBBING, OR GRADING ACTIVITIES.
2. SUPER SILT FENCE SHALL BE INSTALLED AS SHOWN ON THE PLAN. BLAZE ORANGE PLASTIC MESH FENCING SHALL BE INSTALLED ALONG THE FOREST RETENTION BOUNDARY WHERE THERE IS NO SUPER SILT FENCE PROPOSED, AFTER THE PLANTING OF THE EASEMENT.
3. THE FOREST PROTECTION DEVICES SHALL BE INSTALLED SUCH THAT THE CRITICAL ROOT ZONES OF ALL TREES WITHIN THE RETENTION AREA NOT OTHERWISE PROTECTED WILL BE WITHIN FOREST PROTECTION DEVICES. IT IS UNDERSTOOD THAT THE INSTALLATION OF THE FENCING IN THIS MANNER WILL CREATE AN IRREGULAR EDGE.
4. ALL PROTECTION DEVICES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. ALL DEVICES SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION HAS CEASED IN THE IMMEDIATE VICINITY.
5. ATTACHMENT OF SIGNS, OR ANY OTHER OBJECTS TO TREES IS PROHIBITED. NO EQUIPMENT, MACHINERY, VEHICLES, MATERIALS OR EXCESSIVE PEDESTRIAN TRAFFIC SHALL BE ALLOWED WITHIN THE PROTECTED AREAS.
6. INSTALLATION AND MAINTENANCE OF PROTECTIVE FENCING AND SIGNAGE SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL TAKE THE UTMOST CARE TO PROTECT TREE ROOT SYSTEMS DURING ALL CONSTRUCTION ACTIVITIES. TREE ROOT SYSTEMS SHALL BE PROTECTED FROM SMOTHERING, FLOODING, EXCESSIVE WETTING FROM DE-WATERING OPERATIONS, OFF-SITE RUN OFF, SPILLAGE AND DRAINING OF MATERIALS THAT MAY BE HARMFUL TO TREES.

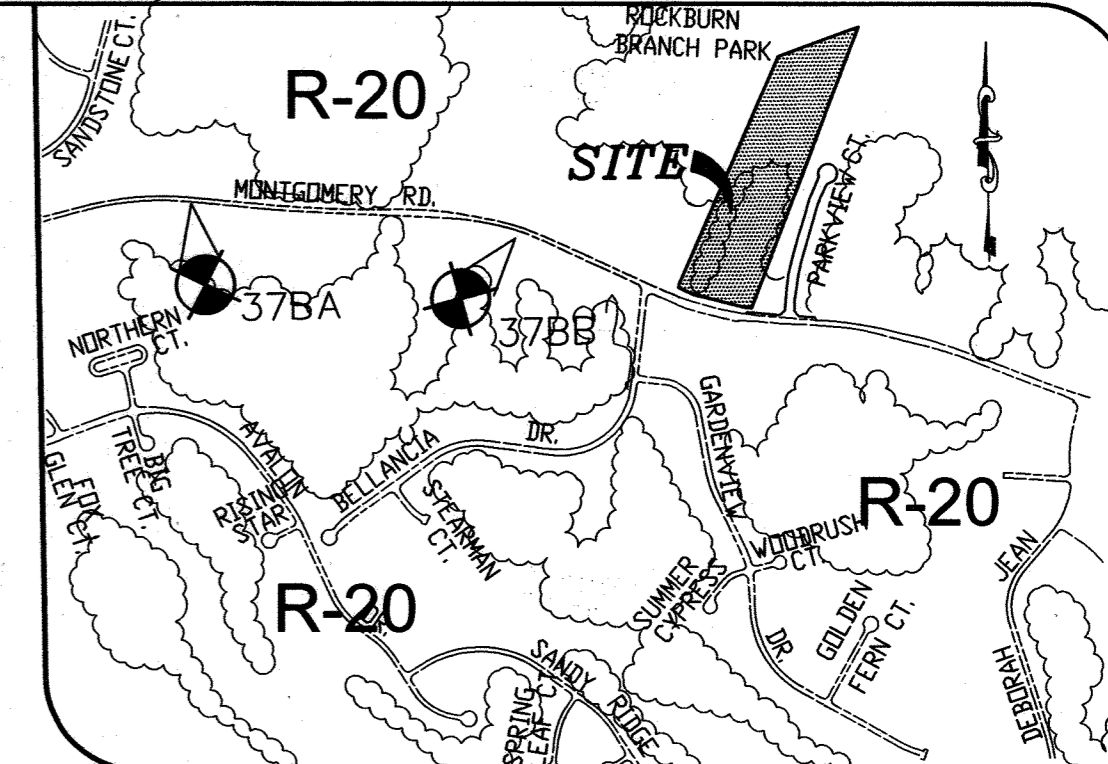
- 7. THE GENERAL CONTRACTOR SHALL PREVENT PARKING OF CONSTRUCTION VEHICLES AND EQUIPMENT, AND THE STORAGE OF BUILDING SUPPLIES OR STOCKPILING OF EARTH WITHIN FOREST CONSERVATION EASEMENTS. REMOVAL OF TOPSOIL OR ROOT MAT WITHIN THE TREE PRESERVATION AREA SHALL BE PROHIBITED.
8. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TREES DAMAGED OR DESTROYED WITHIN THE FOREST CONSERVATION EASEMENTS. ROOT PRUNING SHALL BE USED AT THE LIMIT OF DISTURBANCE OR LIMIT OF GRADING WITHIN AN ADJACENT TO ALL FORESTED AREAS. PLEASE REFER TO ROOT PRUNING DETAIL, THIS SHEET.
9. AFTER THE BOUNDARIES OF THE FOREST RETENTION AREAS HAVE BEEN FIELD LOCATED AND MARKED, AND AFTER THE FOREST PROTECTION DEVICES HAVE BEEN INSTALLED, BUT BEFORE ANY OTHER DISTURBANCE HAS TAKEN PLACE ON SITE, A PRE-CONSTRUCTION MEETING SHALL TAKE PLACE ON SITE. THE DEVELOPER, CONTRACTOR OR PROJECT MANAGER, AND HOWARD COUNTY INSPECTORS SHALL ATTEND. THE PURPOSE OF THIS MEETING WILL BE:
A. TO IDENTIFY THE LOCATIONS OF THE FOREST RETENTION AREAS, SPECIMEN TREES WITHIN 50 FEET OF THE LIMIT OF DISTURBANCE, LIMITS OF CONSTRUCTION, EMPLOYEE PARKING AREAS AND EQUIPMENT STAGING AREAS;
B. INSPECT ALL FLAGGED BOUNDARIES AND PROTECTION DEVICES;
C. MAKE ALL NECESSARY ADJUSTMENTS;
D. ASSIGN RESPONSIBILITIES AS APPROPRIATE AND DISCUSS PENALTIES.

- 1. THE SITE SHALL BE INSPECTED PERIODICALLY DURING THE CONSTRUCTION PHASE OF THE PROJECT. A QUALIFIED PROFESSIONAL SHALL BE RESPONSIBLE FOR IDENTIFYING DAMAGE TO PROTECTED FOREST AREAS OR INDIVIDUAL TREES WHICH MAY HAVE BEEN CAUSED BY CONSTRUCTION ACTIVITIES, SUCH AS SOIL COMPACTION, ROOT INJURY, TRUNK WOUNDS, LIMB INJURY OR STRESS CAUSED BY FLOODING OR DROUGHT CONDITIONS. ANY SUCH DAMAGE THAT MAY OCCUR SHALL BE REMEDIATED IMMEDIATELY USING APPROPRIATE MEASURES. SEVERE PROBLEMS MAY REQUIRE CONSULTATION WITH A PROFESSIONAL ARBORIST.
2. THE CONSTRUCTION PROCEDURE SHALL NOT DAMAGE AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE AS DESIGNATED ON THE PLANS. ANY DAMAGE SHALL BE RESTORED BY THE CONTRACTOR AT HIS EXPENSE AND TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.

WETLAND DATA

Table with 4 columns: WETLAND SYSTEM, COWARDIN CLASSIFICATION, DOMINANT VEGETATION, GENERAL CONDITION, PRIORITY. Row 1: A, PFO1A-E R3/AUB, LIRIODENDRON TULIPIFERA QUERCUS ALBA, NYSSA SYLVATICA, ACER RUBRUM, FAGUS GRANDIFOLIA, PRUNUS SEROTINA, GOOD, 1.0 #.

VICINITY MAP

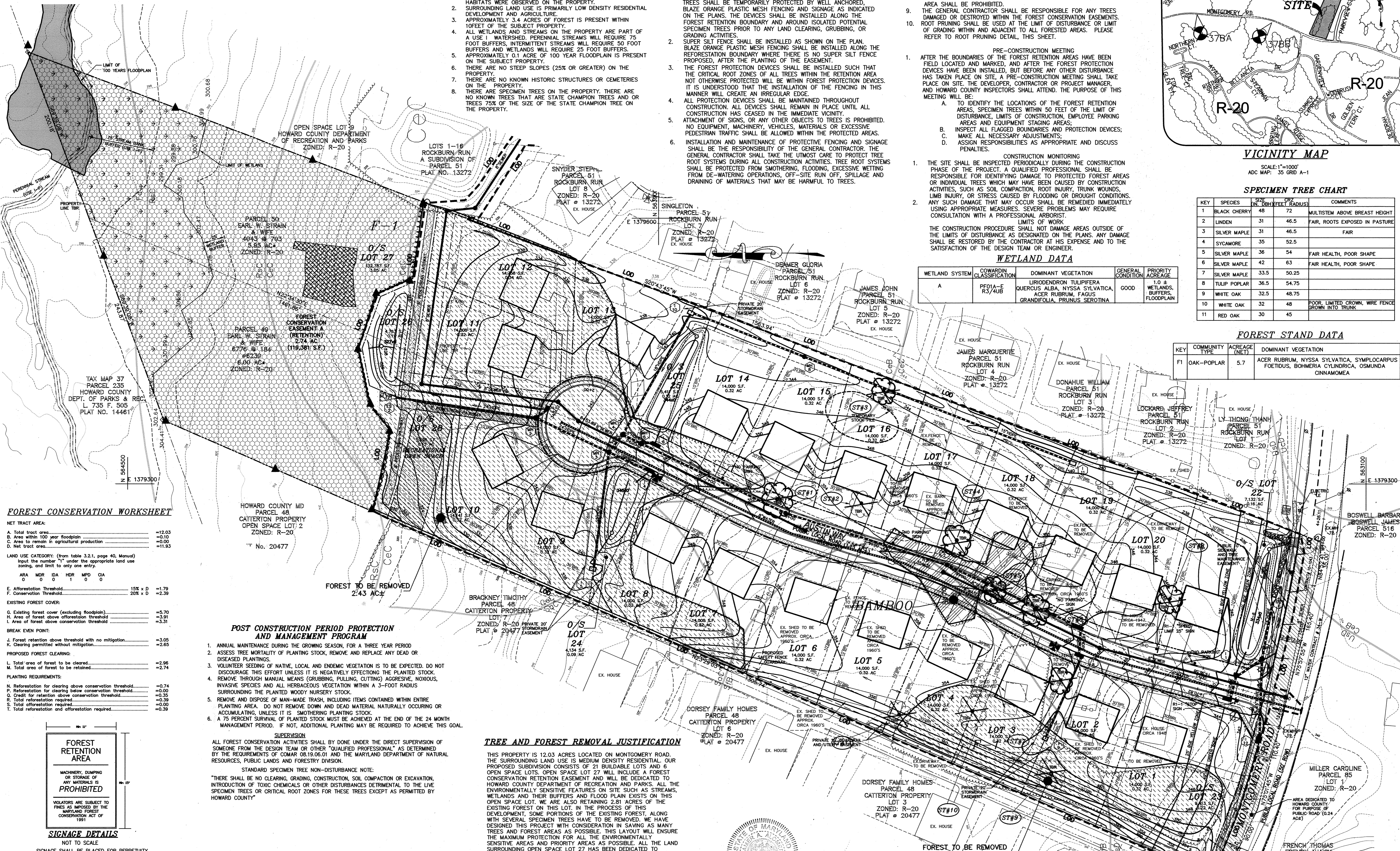


SPECIMEN TREE CHART

Table with 4 columns: KEY, SPECIES, DBH (INCHES), HEIGHT (FEET), COMMENTS. Rows include Black Cherry, Linden, Silver Maple, Sycamore, Silver Maple, Silver Maple, Tulip Poplar, White Oak, and Red Oak.

FOREST STAND DATA

Table with 3 columns: KEY, COMMUNITY TYPE, ACREAGE (NET), DOMINANT VEGETATION. Row 1: F1, OAK-POPLAR, 5.7, ACER RUBRUM, NYSSA SYLVATICA, SYMLOCARPUS FOETIDUS, BOHMERIA CYLINDRICA, OSMUNDA CINNAMOMEA.



FOREST CONSERVATION WORKSHEET

Worksheet with sections: NET TRACT AREA, LAND USE CATEGORY, EXISTING FOREST COVER, BREAK EVEN POINT, PROPOSED FOREST CLEARING, PLANTING REQUIREMENTS. Includes numerical values and units.

POST CONSTRUCTION PERIOD PROTECTION AND MANAGEMENT PROGRAM

- 1. ANNUAL MAINTENANCE DURING THE GROWING SEASON, FOR A THREE YEAR PERIOD.
2. ASSESS TREE MORTALITY OF PLANTING STOCK, REMOVE AND REPLACE ANY DEAD OR DISEASED PLANTINGS.
3. VOLUNTEER SEEDING OF NATIVE, LOCAL AND ENDEMIC VEGETATION IS TO BE EXPECTED. DO NOT DISCOURAGE THIS EFFORT UNLESS IT IS NEGATIVELY EFFECTING THE PLANTED STOCK.
4. REMOVE THROUGH MANUAL MEANS (GRUBBING, PULLING, CUTTING) AGGRESSIVE, NOXIOUS, INVASIVE SPECIES AND ALL HERBACEOUS VEGETATION WITHIN A 3-FOOT RADIUS SURROUNDING THE PLANTED WOODY NURSERY STOCK.
5. REMOVE AND DISPOSE OF MAN-MADE TRASH, INCLUDING ITEMS CONTAINED WITHIN ENTIRE PLANTING AREA. DO NOT REMOVE DOWN AND DEAD MATERIAL NATURALLY OCCURRING OR ACCUMULATING, UNLESS IT IS SMOTHERING PLANTING STOCK.
6. A 75 PERCENT SURVIVAL OF PLANTED STOCK MUST BE ACHIEVED AT THE END OF THE 24 MONTH MANAGEMENT PERIOD. IF NOT, ADDITIONAL PLANTING MAY BE REQUIRED TO ACHIEVE THIS GOAL.

TREE AND FOREST REMOVAL JUSTIFICATION

THIS PROPERTY IS 12.03 ACRES LOCATED ON MONTGOMERY ROAD. THE SURROUNDING LAND USE IS MEDIUM DENSITY RESIDENTIAL. OUR PROPOSED SUBDIVISION CONSISTS OF 21 BUILDABLE LOTS AND 6 OPEN SPACE LOTS. OPEN SPACE LOT 27 WILL INCLUDE A FOREST CONSERVATION RETENTION EASEMENT AND WILL BE DEDICATED TO HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS. ALL THE ENVIRONMENTALLY SENSITIVE FEATURES ON SITE SUCH AS STREAMS, WETLANDS AND THEIR BUFFERS AND FLOOD PLAIN EXISTS ON THIS OPEN SPACE LOT. WE ARE ALSO RETAINING 2.81 ACRES OF THE EXISTING FOREST ON THIS LOT. IN THE PROCESS OF THIS DEVELOPMENT, SOME PORTIONS OF THE EXISTING FOREST, ALONG WITH SEVERAL SPECIMEN TREES HAVE TO BE REMOVED. WE HAVE DESIGNED THIS PROJECT WITH CONSIDERATION IN SAVING AS MANY TREES AND FOREST AREAS AS POSSIBLE. THIS LAYOUT WILL ENSURE THE MAXIMUM PROTECTION FOR ALL THE ENVIRONMENTALLY SENSITIVE AREAS AND PRIORITY AREAS AS POSSIBLE. ALL THE LAND SURROUNDING OPEN SPACE LOT 27 HAS BEEN DEDICATED TO HDRPP. WITH LOT 27 DEDICATED, IT WILL CREATE A CONTIGUOUS AREA OF PROTECTED LAND. WE BELIEVE THAT EVEN THOUGH WE ARE REMOVING SOME FOREST AND TREES IN THE PROCESS OF THIS DEVELOPMENT, IN THE LONG RUN WE ARE PROVIDING A GREATER PROTECTION FOR ALL THE ENVIRONMENTALLY SENSITIVE AND PRIORITY AREAS ON SITE.

LEGEND

- 15% TO 25% SLOPES, FLOODPLAIN, ROAD DEDICATION, WETLANDS, AREA OF FOREST TO BE REMOVED 2.93 AC±, FOREST CONSERVATION EASEMENT (RETENTION), AREA OF 15%-25% SLOPES, FOREST CONSERVATION, SPECIMEN TREE TO BE REMOVED-TBR, PROPOSED TREE LINE, EXISTING TREE LINE, LIMIT OF DISTURBANCE, SUPER-SILT FENCE.



Forest Retention Area signage details including a diagram of a tree and text: 'MACHINERY, DUMPING OR STORAGE OF ANY MATERIALS IS PROHIBITED. VIOLATORS ARE SUBJECT TO FINES AS IMPOSED BY THE MANDATORY FOREST CONSERVATION ACT OF 1991.'

Approval stamps from Department of Public Works and Department of Planning and Zoning, including signatures and dates.

Professional Engineer seal for R. Jacob Hikmat, P.E., and a certification statement: '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 09/03/16.'

Developer information for Dorsey Family Homes, Inc., including address and phone number: 'C/O DORSEY FAMILY HOMES, INC. 10717-B BIRMINGHAM WAY WOODSTOCK, MARYLAND 21163 (410)465-7200'.

Project information sidebar including project number (14-013), date (AUG 2016), engineer (MMM), scale (1"=50'), and company logo for Mildenberg, Boender & Assoc., Inc. with address and phone number.

SCHEDULE A - PERIMETER LANDSCAPED EDGE

LANDSCAPE TYPE	B (PERIMETER 1)*	A (PERIMETER 2)	A (PERIMETER 3)	A (PERIMETER 4)	TOTAL
LINEAR FEET OF PERIMETER	400 LF	1,280 LF	444 LF	1,538 LF	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	N/A	YES, 265 LF.	YES, 444 LF.	YES, 490 LF.	
CREDIT FOR WALL FENCE, OR BERM (YES, NO, LINEAR FEET)	N/A	NO	NO	NO	
NUMBER OF PLANTS REQUIRED	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	17 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	18 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	35 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS
NUMBER OF PLANTS PROVIDED	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	** 28 SHADE TREE 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	** 29 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	**57 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS

* PERIMETER 1 IS EXEMPT FROM LANDSCAPING BECAUSE IT IS OPEN SPACE ADJACENT TO A ROADWAY.
 ** ADDITIONAL 22 SHADE TREES TO BE PROVIDED ON THE BACKYARDS OF LOTS 1-10 AND 12-21 FOR REMOVING 11 SPECIMEN TREES.

STREET TREE PLANTING SCHEDULE

ROAD NAME	MONTGOMERY ROAD*	ADJ. ST. WAY	TOTAL
ROAD LENGTH	350 LF.	(850)(2)=1,700 LF.	
NUMBER OF PLANTS REQUIRED	0 LARGE SHADE TREES 12 SMALL SHADE TREES	43 LARGE SHADE TREES 0 SMALL SHADE TREES	43 LARGE SHADE TREES 12 SMALL SHADE TREES
NUMBER OF PLANTS PROVIDED	0 LARGE SHADE TREES 12 SMALL SHADE TREES	42 LARGE SHADE TREES 2 SMALL SHADE TREES	42 LARGE SHADE TREES 14 SMALL SHADE TREES

* AS PER BGE'S REQUIREMENT SMALLER TREES HAVE BEEN PROVIDED ALONG MONTGOMERY ROAD.

STREET TREE PLANTING SCHEDULE

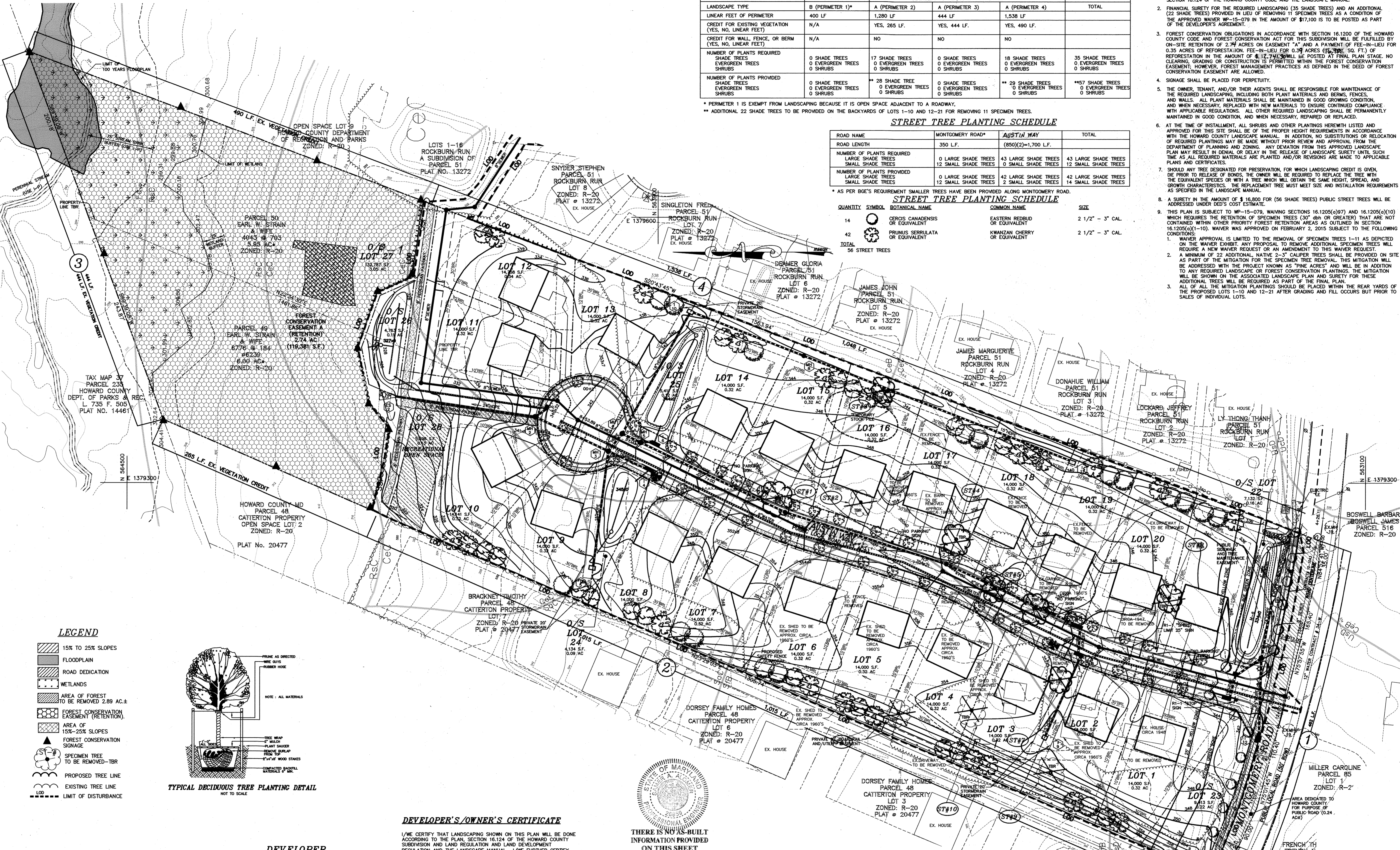
QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
14	(Symbol)	CERCIS CANADENSIS OR EQUIVALENT	EASTERN REDBUD OR EQUIVALENT	2 1/2" - 3" CAL.
42	(Symbol)	PRUNUS SERRULATA OR EQUIVALENT	KWANZAN CHERRY OR EQUIVALENT	2 1/2" - 3" CAL.
TOTAL				56 STREET TREES

PERIMETER LANDSCAPE REQUIREMENT PLANTING SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
20	(Symbol)	ACER RUBRUM 'RED SUNSET' OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL.	RED SUNSET RED MAPLE OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL.	2 1/2" - 3" CAL.
20	(Symbol)	QUERCUS RUBA 'RED OAK' OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL.	RED OAK OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL.	2 1/2" - 3" CAL.
17	(Symbol)	PRUNUS SARGENTI OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL.	SARGENT CHERRY OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL.	2 1/2" - 3" CAL.
TOTAL				57 TREES (57 SHADE TREES)

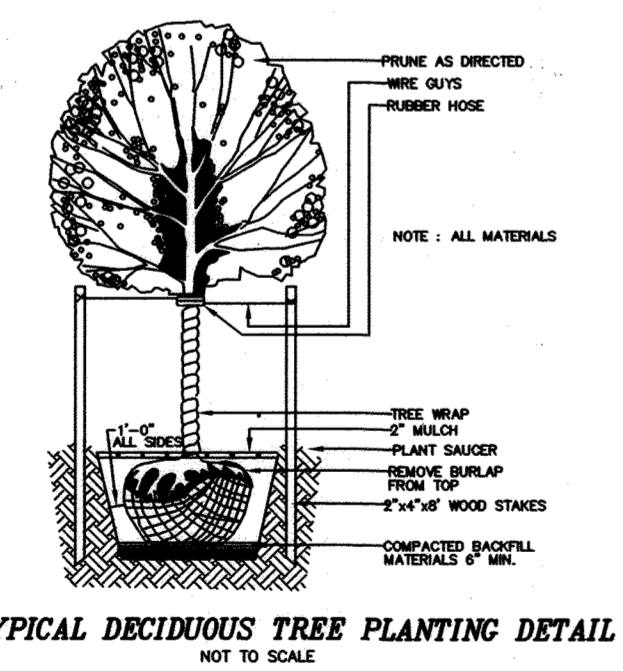
NOTES:

- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING (35 SHADE TREES) AND AN ADDITIONAL (22 SHADE TREES) PROVIDED IN LIEU OF REMOVING 11 SPECIMEN TREES AS A CONDITION OF THE APPROVED WAIVER WP-15-079 IN THE AMOUNT OF \$17,100 IS TO BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT.
- 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 ON-SITE RETENTION OF 2.74 ACRES ON EASEMENT "A" AND A PAYMENT OF FEE-IN-LIEU FOR 0.35 ACRES OF REFORESTATION. FEE-IN-LIEU FOR 0.35 ACRES (16,730 SQ. FT.) OF REFORESTATION IN THE AMOUNT OF \$12,740 WILL BE POSTED AT FINAL PLAN STAGE. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT; HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
- SIGNAGE SHALL BE PLACED FOR PERPETUITY.
- THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES, AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
- AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HERETHIN LISTED AND APPROVED FOR THIS SITE SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DELAY IN THE RELEASE OF LANDSCAPE PLANT MATERIALS WILL BE THE RESPONSIBILITY OF THE DEVELOPER. PLANTINGS SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
- SHOULD ANY TREE DESIGNATED FOR PRESERVATION, FOR WHICH LANDSCAPING CREDIT IS GIVEN, PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE EQUIVALENT SPECIES 2-3" CALIBER TREES SHALL BE PROVIDED ON SITE AS PART OF THE MITIGATION FOR THE SPECIMEN TREE REMOVAL. THIS MITIGATION WILL BE ADDRESSED WITH THE PROJECT KNOWN AS "PINE ACRES" AND WILL BE IN ADDITION TO ANY REQUIRED LANDSCAPE OR FOREST CONSERVATION PLANTINGS. THE MITIGATION WILL BE SHOWN ON THE ASSOCIATED LANDSCAPE PLAN AND SURETY FOR THESE ADDITIONAL TREES WILL BE REQUIRED AS PART OF THE FINAL PLAN.
- A SURETY IN THE AMOUNT OF \$16,800 FOR (56 SHADE TREES) PUBLIC STREET TREES WILL BE ADDRESSED UNDER DEED'S COST ESTIMATE.
- THIS PLAN IS SUBJECT TO WP-15-079, WAIVING SECTIONS 16.1205(a)(97) AND 16.1205(a)(10) WHICH REQUIRE THE RETENTION OF SPECIMEN TREES (30" DBH OR GREATER) THAT ARE NOT CONTAINED WITHIN OTHER PRIORITY FOREST RETENTION AREAS AS OUTLINED IN SECTION 16.1205(a)(10). WAIVER WAS APPROVED ON FEBRUARY 2, 2015 SUBJECT TO THE FOLLOWING CONDITIONS:
 - WAIVER APPROVAL IS LIMITED TO THE REMOVAL OF SPECIMEN TREES 1-11 AS DEPICTED ON THE WAIVER EXHIBIT. ANY PROPOSAL TO REMOVE ADDITIONAL SPECIMEN TREES WILL REQUIRE A NEW WAIVER REQUEST OR AN AMENDMENT TO THIS WAIVER REQUEST.
 - A MINIMUM OF 22 ADDITIONAL NATIVE 2-3" CALIBER TREES SHALL BE PROVIDED ON SITE AS PART OF THE MITIGATION FOR THE SPECIMEN TREE REMOVAL. THIS MITIGATION WILL BE ADDRESSED WITH THE PROJECT KNOWN AS "PINE ACRES" AND WILL BE IN ADDITION TO ANY REQUIRED LANDSCAPE OR FOREST CONSERVATION PLANTINGS. THE MITIGATION WILL BE SHOWN ON THE ASSOCIATED LANDSCAPE PLAN AND SURETY FOR THESE ADDITIONAL TREES WILL BE REQUIRED AS PART OF THE FINAL PLAN.
 - ALL OF ALL THE MITIGATION PLANTINGS SHALL BE PLACED WITHIN THE REAR YARDS OF THE PROPOSED LOTS 1-10 AND 12-21 AFTER GRADING AND FILL OCCURS BUT PRIOR TO SALES OF INDIVIDUAL LOTS.



LEGEND

- 15% TO 25% SLOPES
- FLOODPLAIN
- ROAD DEDICATION
- WETLANDS
- AREA OF FOREST TO BE REMOVED 2.89 AC.±
- FOREST CONSERVATION EASEMENT (RETENTION)
- AREA OF 15%-25% SLOPES
- FOREST CONSERVATION SIGNAGE
- SPECIMEN TREE TO BE REMOVED-TBR
- PROPOSED TREE LINE
- EXISTING TREE LINE
- LIMIT OF DISTURBANCE



DEVELOPER'S/OWNER'S CERTIFICATE

I/WE CERTIFY THAT LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION AND LAND REGULATION AND LAND DEVELOPMENT REGULATION AND THE LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ON YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET

APPROVED: DEPARTMENT OF PUBLIC WORKS
 [Signature] 8/24/16
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 10-20-16
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] 11-28-16
 CHIEF, DIVISION OF LAND DEVELOPMENT

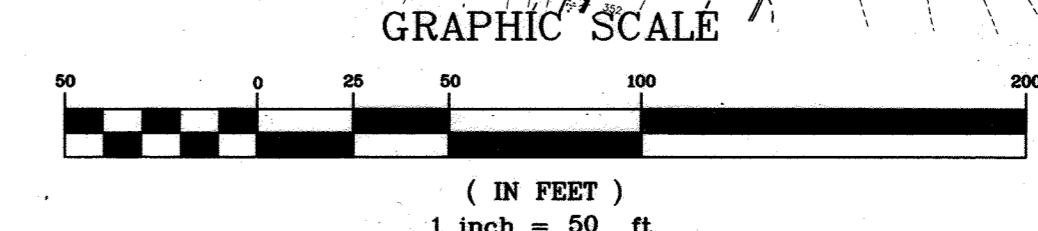
DEVELOPER
 C/O DORSEY FAMILY HOMES, INC.
 10717-B BIRMINGHAM WAY
 WOODSTOCK, MARYLAND 21163
 (410)465-7200

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 09/03/16

R. JACOB HIKMAT P.E. 8/4/16 DATE:



MD DNR QUALIFIED PROFESSIONAL
 [Signature] MASHID TRINGA



date	AUG. 2016	approval	MMM	1"=50'
project	14-013	illustration	MMM	

date	8/12/16	description	revisions
no.	1	REV STREET NAME	

PINE ACRES
 LOTS 1-21 AND OPEN SPACE LOTS 22-28
 TAX MAP 37, PARCEL 49 AND 50, GRID 5, ZONE: R-20
 FIRST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 LANDSCAPING PLAN

MILDENBERG, BOENDER & ASSOC., INC.
 Planners & Surveyors
 7350-B Cruso Drive, Columbia, Maryland, 21044
 (410) 987-0296 Fax