

GENERAL NOTES

- ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- DEED REFERENCES: 5044/333
- THE PROJECT BOUNDARY IS BASED ON A BOUNDARY SURVEY PERFORMED BY FREDERICK WARD ASSOCIATES, INC DATED AUGUST 2003.
- THE TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD RUN SURVEY PROVIDED BY FREDERICK WARD ASSOCIATES, INC DATED MAY 22, 2001.
- COORDINATE DATUM IS BASED ON THE MARYLAND COORDINATE SYSTEM (NAD '83) AS PROJECTED BY THE FOLLOWING H.C.O. GEODETIC CONTROL STATIONS: 31D4 & 31A3
- WATER AND SEWER FOR THIS PROJECT TO TIE TO A PUBLIC SYSTEM.
EXISTING WATER: 12'-W, 24'-4180-0
EXISTING SEWER: 20'-3338, 24'-4180-0
- STORMWATER MANAGEMENT WQV AND Rev IS PROVIDED IN THE DRY SWALES (0-1) OF THE OPEN ROAD SECTION. FROM STA 5+07 TO 8+69. THIS PROJECT IS EXEMPT FROM CPV MANAGEMENT SINCE THE COMPUTED CPV OF 1.99 CFS IS LESS THAN THE MDE CRITERIA OF 2.0 CFS REQUIRING MANAGEMENT. CPV OR OP ARE NOT REQUIRED. STORMWATER MANAGEMENT FOR NEW CUT ROAD CONSTRUCTED UNDER F-04-166 PROVIDED BY PRIVATE BIOTRETENTION FACILITY LOCATED ON OPEN SPACE LOT 1 AND FOR LOT 4, UNDER SDP-04-42, PROVIDED BY PRIVATE MICROPOOL EXTENSION DETENTION FACILITY.
- WETLANDS DELINEATED BY FREDERICK WARD ASSOCIATES, INC. DATED AUGUST 2003.
- AREA OF SLOPES 25% OR GREATER CONTIGUOUS OF 20,000 SF OR MORE: 33,895 SF(0.78 AC.)
- THERE ARE NO FLOODPLAINS ON THIS SITE.
- FOREST STAND DELINEATION PLAN PREPARED BY FREDERICK WARD ASSOCIATES, INC. DATED SEPTEMBER 2003.
- TRAFFIC STUDY PREPARED BY THE TRAFFIC GROUP, DATED JULY 25, 2003.
- A NOISE STUDY IS NOT REQUIRED FOR THIS SITE SINCE IT IS NON-RESIDENTIAL.
- SEDIMENT AND EROSION CONTROL WILL BE PROVIDED FOR THIS SITE.
- THIS PROPERTY IS WITHIN THE METROPOLITAN DISTRICT.
- REFERENCE WP-04-122, APPROVED MAY 14, 2004; TO WAIVE SECTIONS 16.144(a) & (i) TO NOT REQUIRE THE SUBMISSION AND APPROVAL OF SKETCH AND PRELIMINARY PLANS FOR A MAJOR SUBDIVISION OF PARCEL 10 THAT WILL INVOLVE PUBLIC ROAD IMPROVEMENTS, SUBJECT TO THE FOLLOWING CONDITIONS:
 - DEVELOPER WILL BE REQUIRED TO OBTAIN AND MEET ALL TERMS AND CONDITIONS OF A REQUIRED ACCESS PERMIT PRIOR TO ANY CONSTRUCTION IN THE SHM RIGHT-OF-WAY.
- REFERENCE F-04-166 FOR THE STORMWATER MANAGEMENT OF THE EXISTING SECTION OF RELOCATED NEW CUT ROAD AND SDP-04-42 FOR GLEN MAR UNITED METHODIST CHURCH.
- ONLY THE REQUIRED PUBLIC ROAD STREET TREES ARE PROVIDED ON THE CERTIFIED PLANTING PLAN INCLUDED IN THIS ROAD CONSTRUCTION PLAN SET. ALL EXISTING LANDSCAPE/PLANTING OBLIGATIONS HAVE BEEN MET FOR THE APPROVED FINAL ROAD PLAN FOR NEW CUT ROAD (F-04-166) AND THE APPROVED SITE DEVELOPMENT PLAN FOR GLEN MAR UNITED METHODIST CHURCH, LOTS 1-5, (SDP-04-042). ALL OTHER LANDSCAPING/PLANTING OBLIGATIONS FOR THE DEVELOPMENT OF THESE LOTS WILL BE MET AND APPROVED WITH THIS PLAN, OR ANY SUBSEQUENT SITE DEVELOPMENT PLANS FOR THESE LOTS IF THIS PLAN DOES NOT OBTAIN APPROVAL.
- THIS PLAN IS SUBJECT TO BA-02-36C, APPROVED NOVEMBER 18, 2002, FOR CONDITIONAL USES FOR A STRUCTURE USED PRIMARILY FOR RELIGIOUS ACTIVITIES AND FOR A CHILD DAY CARE AND NURSERY SCHOOL IN AN R-20 ZONING DISTRICT, FILED PURSUANT TO SECTIONS 131.N.36 AND SECTION 131.N.13 OF THE HOWARD COUNTY ZONING REGULATION; PROVIDED, HOWEVER, THAT THE CONDITIONAL USES WILL APPLY ONLY TO THE USES AND STRUCTURES AS DESCRIBED IN THE PETITION AND CONDITIONAL USE PLAN SUBMITTED, AS AMENDED HEREBY, AND NOT TO ANY OTHER ACTIVITIES, USES, STRUCTURES, OR ADDITIONS ON THE PROPERTY.

SPECIFIC CRITERIA FOR RELIGIOUS ACTIVITIES, STRUCTURES USED PRIMARILY FOR (SECTION 131.N.36)

 - THE PROPOSED BUILDING WILL COVER APPROXIMATELY 45,635 SF., WHICH IS NO MORE THAN 5% OF THE LOT SIZE. THE LOT COVERAGE WILL THEREFORE NOT EXCEED THE MAXIMUM OF 25% AS REQUIRED BY SECTION 131.N.36(A).
 - THE PROPOSED STRUCTURE WILL BE 43 FEET IN HEIGHT, WHICH IS ABOVE THE MAXIMUM HEIGHT LIMITATION OF 34 FEET IN THE R-20 ZONE. THIS HEIGHT IS PERMITTED UNDER SECTION 131.N.36 OF THE MINIMUM SETBACKS ARE INCREASED BY 9 FEET. THE STRUCTURE IS SET BACK 175 FEET FROM NEW CUT ROAD TO THE EAST AND 49 FEET FROM NEW CUT ROAD TO THE WEST. THESE SETBACKS WILL EXCEED THE MINIMUM OF 59 FEET AND 49 FEET, RESPECTIVELY. THE STRUCTURE WILL THEREFORE COMPLY WITH SECTION 131.N.36(B).

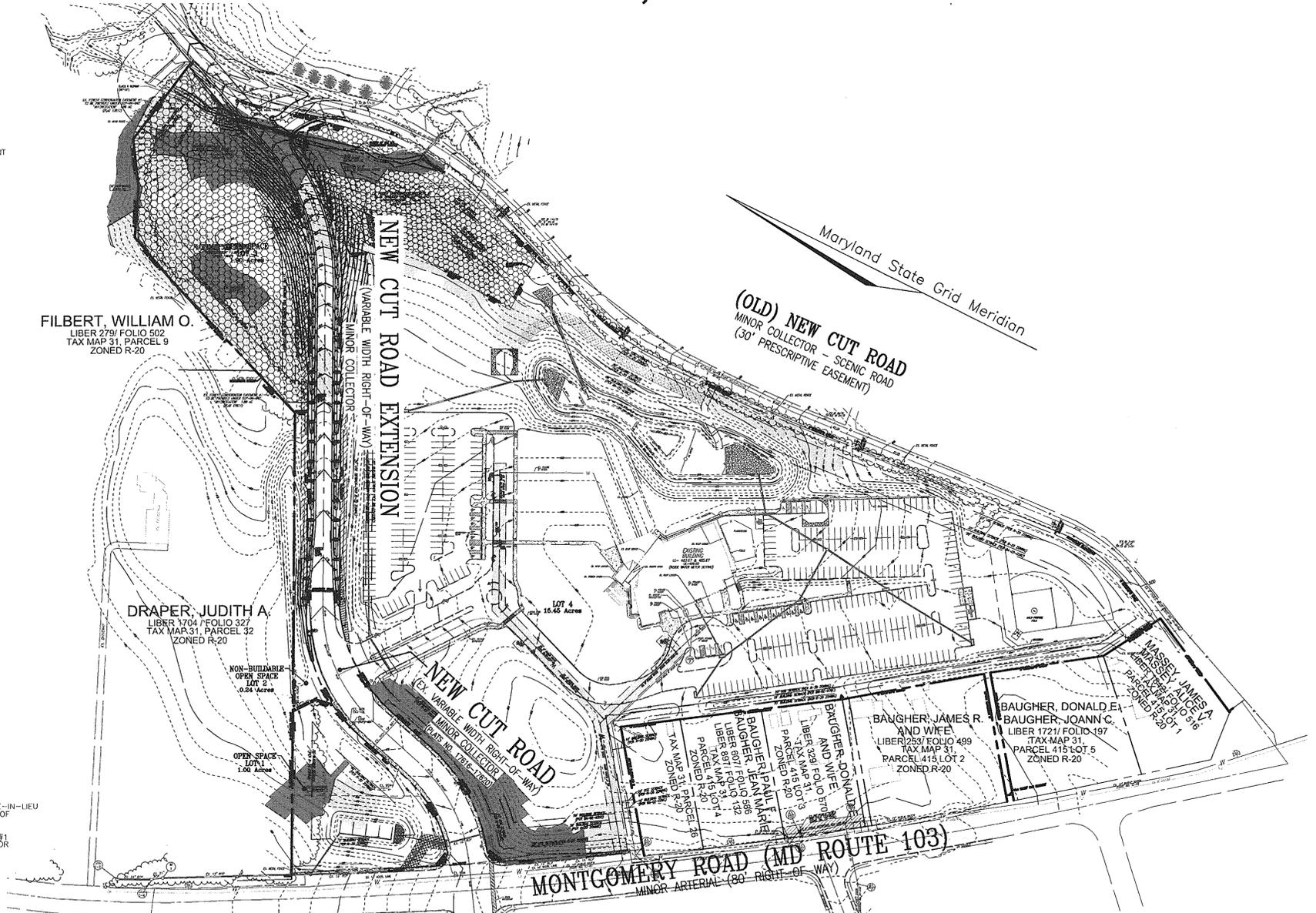
SPECIFIC CRITERIA FOR CHILD DAY CARE CENTERS AND NURSERY SCHOOLS, DAY TREATMENT AND CARE FACILITIES (SECTION 131.N.13)

 - THE INTERNAL DRIVEWAY LEADS TO TWO DROP-OFF AREAS ADJACENT TO SIDEWALKS LOCATED NEAR THE MAIN ENTRANCE AND NEAR THE EDUCATIONAL WING, PROVIDING SAFE CIRCULATION IN ACCORDANCE WITH SECTION 131.N.13.A.
 - THE PROPOSED FACILITY IS NOT LOCATED IN AN INDUSTRIAL COMMERCIAL DISTRICT; THEREFORE, SECTION 131.N.13.B DOES NOT APPLY.
 - AT 500 GROSS FEET AREA OF LOT PER CHILD, A LOT OF 3.95 ACRES WOULD BE REQUIRED TO ACCOMMODATE THE 344 CHILDREN (184 DAYCARE CHILDREN PLUS 160 NURSERY SCHOOL CHILDREN) WHO WILL USE THE SITE. THE 22.38 ACRE SITE IS MORE THAN ADEQUATE TO MEET THE STANDARD OF SECTION 131.N.13.C.
 - THE TWO PROPOSED PLAYGROUNDS WILL BE FENCED AND LOCATED TO THE SIDES OF THE PRINCIPAL STRUCTURES. EACH WILL BE LOCATED MORE THAN 230 FEET FROM THE NEAREST DWELLING AND SCREENED BY PERIMETER LANDSCAPING. THE PLAYGROUNDS THEREFORE MEET THE REQUIREMENTS OF SECTION 131.N.13.D.
 - THE PARKING AREAS WILL BE LOCATED TOWARD THE CENTER OF THE SITE AND WILL BE WELL SET BACK FROM ADJACENT RESIDENTIAL PROPERTIES. THEY ARE ALSO ADEQUATELY BUFFERED BY THE LANDSCAPING, IN ACCORDANCE WITH SECTION 131.N.13.E.
 - THE DESIGN AND MASSING OF THE BUILDING, GIVEN THE SIZE OF THE SITE AND THE EXTENSIVE SETBACKS AND LANDSCAPING TO BE PROVIDED, WILL BE GENERALLY COMPATIBLE WITH THE RESIDENTIAL PROPERTIES IN THE VICINITY, IN ACCORDANCE WITH SECTION 131.N.13.F.
 - THE PROPOSED FACILITY WILL BE IN A RESIDENTIAL DISTRICT AND HAVE A CAPACITY OF MORE THAN 30 CHILDREN.
 - THE PROPERTY FRONTS ON MONTGOMERY ROAD, A MINOR ARTERIAL, AND WILL FRONT ON THE NEW NEW CUT ROAD, A MAJOR COLLECTOR. THIS SITE WILL HAVE DIRECT ACCESS TO NEW CUT ROAD. THE SITE THEREFORE COMPLIES WITH SECTION 131.N.13.G(1).
 - THE PROPOSED BUILDING AND PLAY AREAS ARE LOCATED MORE THAN 50 FEET FROM ADJOINING PROPERTIES, IN COMPLIANCE WITH THE SETBACK REQUIREMENT OF SECTION 131.N.13.G(2). THE PARKING AREA IN THE SOUTHWEST PORTION OF THE LOT, HOWEVER, IS 29 FEET FROM THE ADJACENT PROPERTIES. I MAY REDUCE THIS SETBACK TO NO LESS THAN 20 FEET IF THE PROPERTY IS PROPERLY BUFFERED IN ACCORDANCE WITH SECTION 131.N.13.G(2)(B). I FIND THAT THE TYPE C LANDSCAPE BUFFER PROPOSED FOR THE SOUTH END OF THE LOT, COMBINED WITH THE PROPOSED SETBACK OF 29 FEET, WILL PROVIDE AN EFFECTIVE AND ATTRACTIVE BUFFER FOR NEIGHBORING RESIDENTIAL PROPERTIES IN ACCORDANCE WITH THIS SECTION.
 - APPROXIMATELY 5.6 ACRES OF THE 11.51 ACRE BUILDING ENVELOPE, OR 48%, WILL BE GREEN SPACE. THIS EXCEEDS THE MINIMUM OF 20% GREEN SPACE REQUIRED BY SECTION 131.N.13.G(3).
- THIS PROJECT IS SUBJECT TO COMPLIANCE WITH THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- PLANNING AND ZONING FILE NUMBERS: S-02-03; F-99-25; F-86-13; P-03-02, BA-02-036C, SDP-04-042, WP-04-122, F-04-166.
- LOT 7 IS NOT BUILDABLE SINCE IT DOES NOT MEET BULK REGULATIONS ON ITS OWN. NON-BUILDABLE OPEN SPACE LOT 7 IS INTENDED TO BE CONVEYED TO THE ADJACENT PROPERTY OWNER.
- WETLANDS DELINEATED BY FREDERICK WARD ASSOCIATES, DATED AUGUST 2003.
- ANY ADDITIONAL PARKING AREAS THAT ARE ADDED IN FUTURE PHASES WILL REQUIRE A REVISED SWM PLAN.
- NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE REQUIRED STREAM(S) OR THEIR BUFFERS, AREAS OF STEEP SLOPES GREATER THAN OR EQUAL TO 20,000 SF, AND FOREST CONSERVATION EASEMENT AREAS.
- THE 95% COMPACTION IN FILL AREAS IS REQUIRED PER AASHTO-180 STANDARD.
- ALL SIGN POST USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL PERFORATED SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED SQUARE TUBE SLEEVE (12 GAUGE - 3" LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
- A MINIMUM OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
- THE FOREST CONSERVATION OBLIGATION OF 3.21 ACRES OF AFFORESTATION PROVIDED WITH SDP-04-042 AND F-04-166 WAS SATISFIED BY PROVIDING 2.99 ACRES OF ONSITE AFFORESTATION IN FCE'S #1 & 2, AND A FEE-IN-LIEU PAYMENT OF \$4,791.80 MADE TO THE H.O. CO. FOREST CONSERVATION FUND FOR THE REMAINING 0.22 ACRES OF AFFORESTATION (ADDRESSED BY SDP-04-042). THIS RESUBDIVISION/REVISION PLAN, F-04-166, ABANDONS ONSITE AFFORESTATION FCE #1 OF 1.8946 AC. AND CREATES NEW ONSITE AFFORESTATION FCE'S OF 1.88581 AC. THAT IS 382.90 SWFT SMALLER THAN FCE#1 IT REPLACES AND A FEE-IN-LIEU OF \$382.90 SHALL BE PAID TO THE H.O.CO. FOREST CONSERVATION FUND FOR THE 382.90 SQFT OF AFFORESTATION NOT PLACED.
- THE CONSTRUCTION OF THE NEW CUT ROAD EXTENSION SHOWN ON THESE PLANS IS PART OF CAPITAL PROJECT NO. J-4168.

FINAL ROAD CONSTRUCTION PLAN

NEW CUT ROAD RIGHT-OF-WAY, LOTS 1 THROUGH 5

A RESUBDIVISION OF NON-BUILDABLE OPEN SPACE LOT 5 OF GLEN MAR UNITED METHODIST CHURCH LOTS 1 THROUGH 5 PARCEL 10, LOTS 1-5



BENCHMARKS

HOWARD COUNTY BENCHMARK 31D4 (CONCRETE MONUMENT)
N 571700.65900 E 1369606.28100 ELEV. 495.179

HOWARD COUNTY BENCHMARK 31A3 (CONCRETE MONUMENT)
N 573217.87700 E 1368237.66200 ELEV. 487.641



LEGEND

Existing Contour: - - - - -382

Proposed Contour: - - - - -382.56

Existing Spot Elevation: +382.56

Proposed Spot Elevation: +382.53

Direction of Flow: —————>

Existing Trees to Remain: [Symbol]

Light Poles: —○— Single Overhead —○— Double Overhead

Concrete: [Symbol]

Check Dam, see sht 6 & 7 for detail: [Symbol]

SITE DATA

LOCATION: TAX MAP 31, BLOCK 1 & 7, PARCEL '10', LOTS 2-5
5TH ELECTION DISTRICT
EXISTING ZONING: R-20
SUBDIVISION: GLEN MAR METHODIST CHURCH
DPZ REFERENCES: BA-02-36C; WP-04-122; F-04-166; SDP-04-042
GROSS AREA OF PROJECT: 21.0966 AC (918,868 SF)
AREA OF STEEP SLOPES: 1.04 AC (45,229 SF)
NET AREA OF PROJECT: 21.0966 AC
APPROXIMATE LIMIT OF DISTURBANCE: 3.08 AC (134,133 SF±)
APPROXIMATE LOT 5: 42,019 SF, OR 0.9646 AC.

OWNER/DEVELOPER

GLEN MAR METHODIST CHURCH
8430 GLENMAR RD
ELLICOTT CITY, MD 21043
AL HAMMER
(410) 465-4995

NO.	REVISION	DATE
1	REMOVE ENDWALLS ON DOWN SLOPE OF DRY SWALE	12/30/04

ROAD CONSTRUCTION PLANS

COVER SHEET

NEW CUT ROAD RIGHT-OF-WAY, NON-BUILDABLE
OPEN SPACE LOT 2, OPEN SPACE LOT 3, LOT 4 AND
NON-BUILDABLE OPEN SPACE LOT 5

A RESUBDIVISION OF NON-BUILDABLE OPEN SPACE LOT 5 OF
GLEN MAR UNITED METHODIST CHURCH LOTS 1 THROUGH 5
TAX MAP 31 BLOCK 1 & 7 PARCEL '10', LOTS 1-5
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET TEL: 410.461.7666
ELLICOTT CITY, MD 21043 FAX: 410.461.8961

DESIGN BY: WGS/DZ
DRAWN BY: DZ
CHECKED BY: WGS
DATE: MARCH 20, 2007
SCALE: AS SHOWN
W.O. NO.: 04-64

1 SHEET OF 8

LOCATION MAP
SCALE: 1"=100'

SHEET INDEX

DESCRIPTION	SHEET NO.
COVER SHEET	1 OF 8
ROAD PLAN AND LANDSCAPE PLAN	2 OF 8
ROAD PROFILES	3 OF 8
SITE LAYOUT, GRADING, SEDIMENT AND EROSION CONTROL PLAN	4 OF 8
SITE LAYOUT, GRADING, SEDIMENT AND EROSION CONTROL PLAN	5 OF 8
EROSION AND SEDIMENT CONTROL NOTES AND DETAILS	6 OF 8
CULVERT DRAINAGE AREA MAP AND SWM DETAILS	7 OF 8
PAVEMENT MARKING	8 OF 8

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

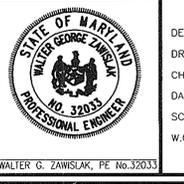
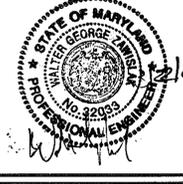
Walter G. Zwiask, Chief, Bureau of Highways, dated 4-16-07

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division, dated 4/10/07

Chief, Division of Land Development, dated 4/10/07

Director, dated 4/10/07



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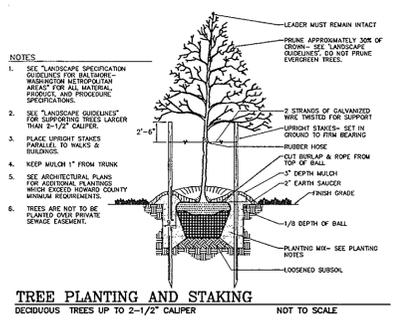
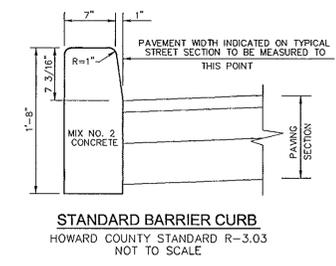
I hereby certify that to the best of my knowledge that this "As-Built" truly represents existing conditions, including but not limited to sizes, diameters, line and grade, and elevations shown.

Dennis M. Miller
Maryland Property Line Surveyor #579



LEGEND:

---	EXISTING CONTOUR
---	PROPOSED CONTOUR
+	PROPOSED SPOT ELEVATION
+	EXISTING SPOT ELEVATION
---	EXISTING CURB AND GUTTER
---	PROPOSED CURB AND GUTTER
○	EXISTING UTILITY POLE
○	EXISTING LIGHT POLE
○	EXISTING MAILBOX
○	EXISTING SIGN
○	EXISTING SANITARY MANHOLE
○	EXISTING SANITARY LINE
○	EXISTING CLEANOUT
○	EXISTING FIRE HYDRANT
○	EXISTING WATER LINE
○	EXISTING STORMDRAIN
○	EXISTING FENCE
---	PROPERTY LINE
---	RIGHT-OF-WAY LINE
---	SOILS BOUNDARY
---	PROPOSED STORM DRAIN
---	PROPOSED STORM DRAIN INLET
---	PROPOSED SIDEWALK
---	PROPOSED SIGN
---	PROPOSED STREET LIGHT
+	PROPOSED STREET TREE



CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA ANGLE	TANGENT	CHORD DIRECTION	CHORD LENGTH
C1	320.00	231.17	41°23'26"	120.89	N43°10'40"E	226.17
C2	308.00	222.50	41°23'26"	116.35	N43°10'40"E	217.69
C3	332.00	209.59	36°10'17"	108.42	N54°47'15"E	206.13
C4	100.00	95.57	54°45'28"	51.79	S40°08'18"E	91.97
C5	92.00	81.07	50°29'17"	43.38	S38°23'16"E	78.47
C5	112.00	91.86	46°59'28"	81.07	S42°00'09"E	89.30

STREET TREE CALCULATIONS

STREET NAME	LINEAR FEET	REQUIRED	PROVIDED
RELOCATED NEW CUT ROAD	1795	45	45

ROAD CLASSIFICATION

STREET NAME	CLASSIFICATION	DESIGN SPEED	LIMITS
RELOCATED NEW CUT ROAD	MINOR COLLECTOR	35 MPH	15'

PLANT SCHEDULE

KEY	QUAN.	BOTANICAL NAME	SIZE	CAT
QA	45	Quercus acutissima Sawtooth Oak	2 1/2" - 3" Col.	B & B

PLANTING SCHEDULE NOTE:

- ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE MOST CURRENT AAN SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH LCAMV PLANTING SPECIFICATIONS.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
- FINAL LOCATION OF PLANT MATERIAL MAY NEED TO VARY TO MEET FINAL FIELD CONDITIONS. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF DRAINAGE SWALES.
- CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLAN DIFFERS FROM PLANT SCHEDULE, THE PLAN SHALL GOVERN.
- FINANCIAL SURETY FOR THE REQUIRED PUBLIC ROAD STREET TREES SHALL BE POSTED WITH THE DEVELOPER'S AGREEMENT, IN THE AMOUNT OF \$13,500 FOR THE REQUIRED 45 SHADE TREES.

GENERAL NOTES:

- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. THE REQUIRED PARKING AND PERIMETER LANDSCAPING WILL BE BONDED FOR THIS SUBMISSION.
- REQUIREMENT FOR PERIMETER LANDSCAPING HAS BEEN PROVIDED WITH SDP-04-42.

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 8430 GLENMAR RD
 ELLICOTT CITY, MD 21043
 AL HAMMER
 (410) 465-4995

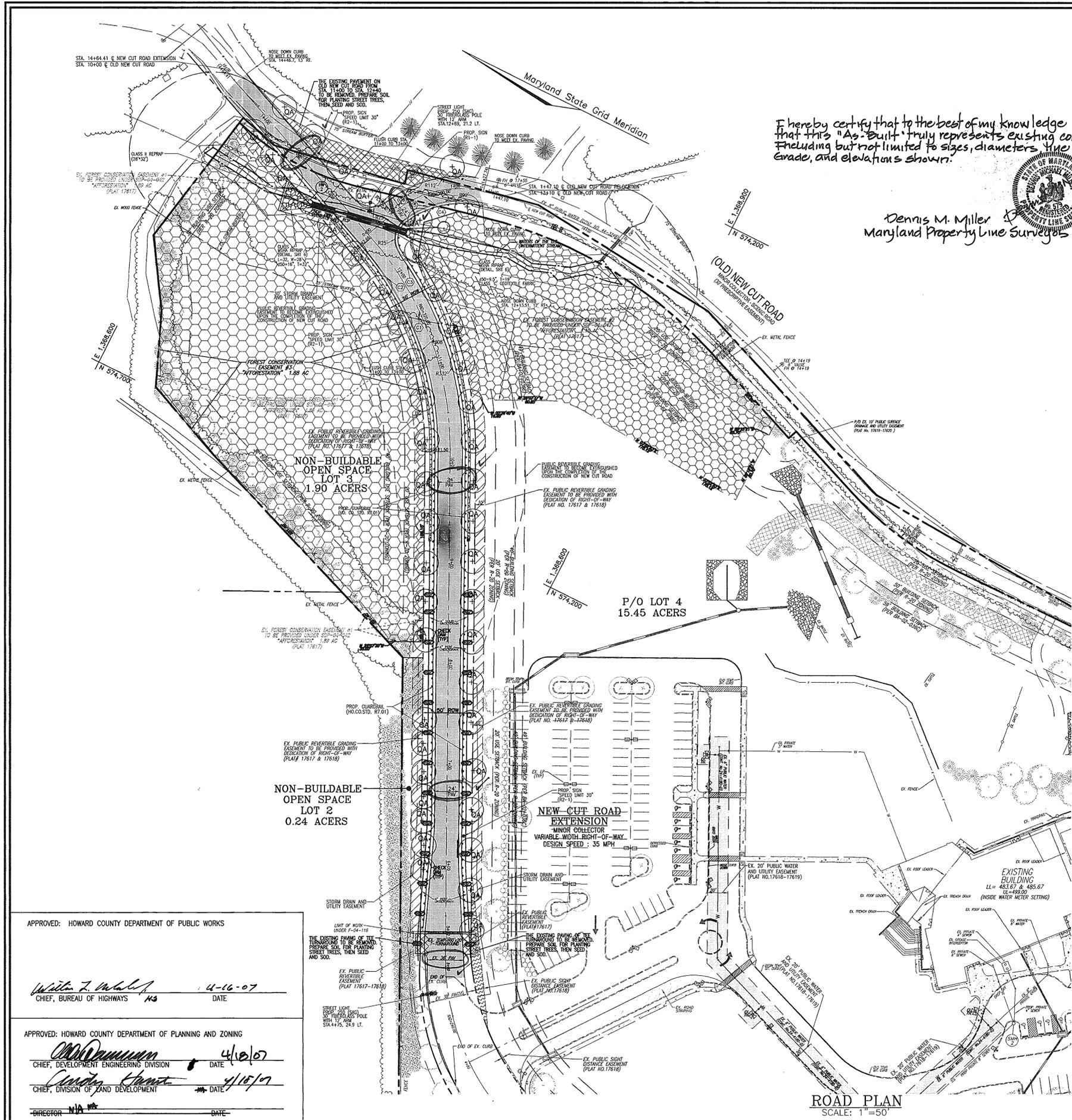
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ROAD CONSTRUCTION PLANS
ROAD PLAN AND PLANTING PLAN
 NEW CUT ROAD RIGHT-OF-WAY, NON-BUILDABLE
 OPEN SPACE LOT 2, OPEN SPACE LOT 3, LOT 4 AND
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DESIGN BY: WJG/DZ
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 DATE: MARCH 20, 2007
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2 SHEET OF 8



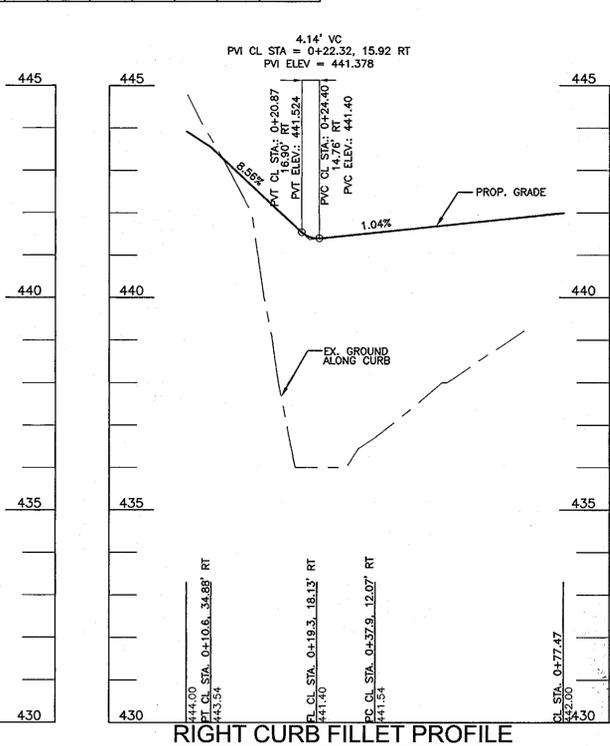
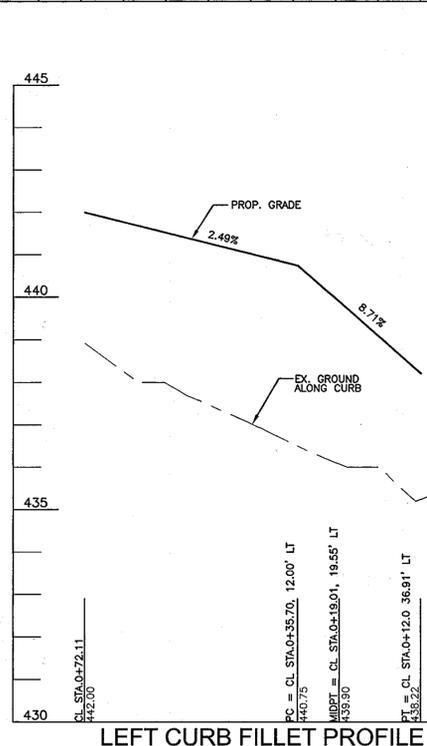
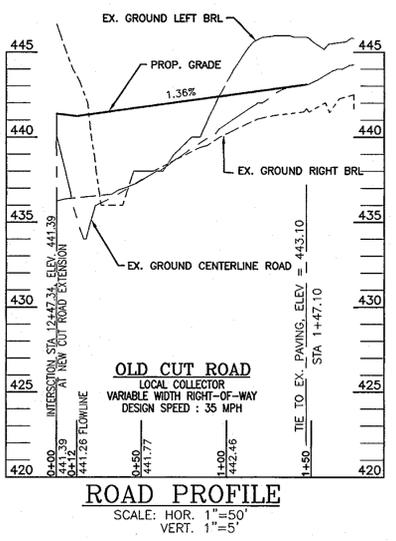
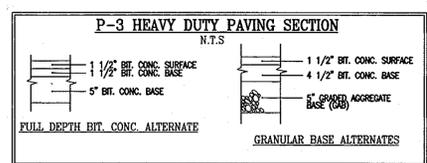
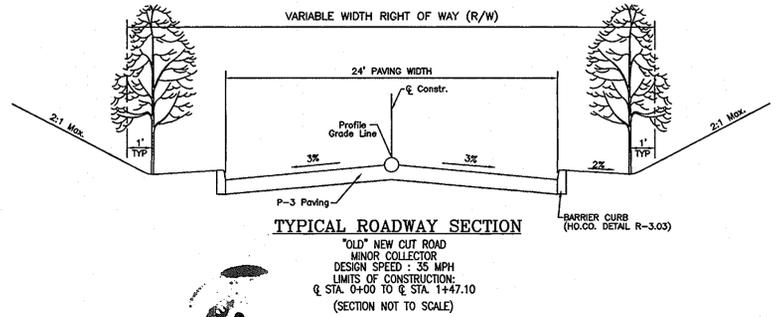
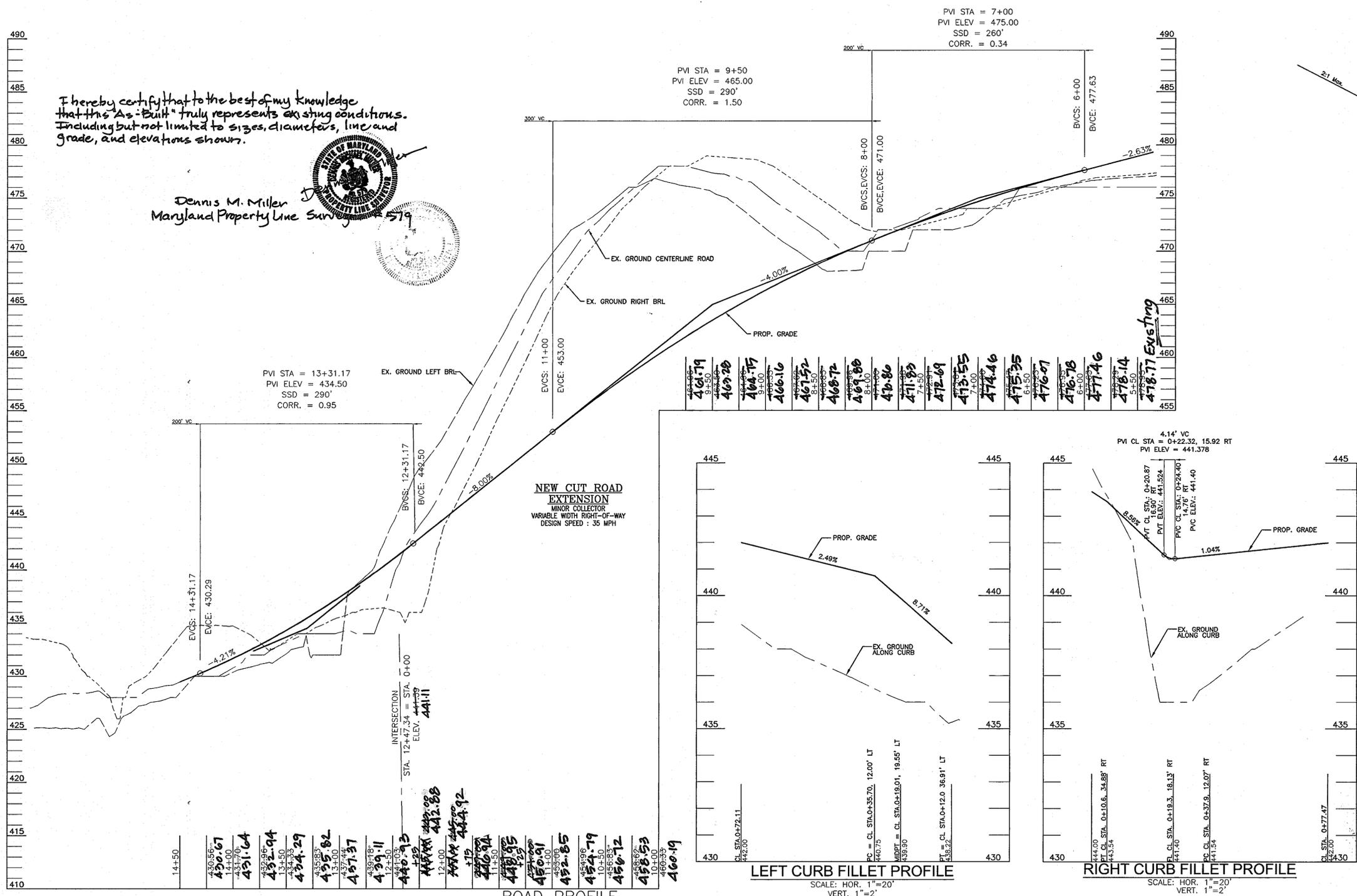
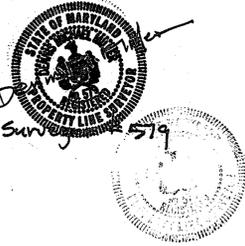
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 WALTER Z. WILSON, CHIEF, BUREAU OF HIGHWAYS, 4-16-07
 APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 DENNIS M. MILLER, CHIEF, DEVELOPMENT ENGINEERING DIVISION, 4/18/07
 CINDY HUNT, CHIEF, DIVISION OF LAND DEVELOPMENT, 4/18/07

ROAD PLAN
 SCALE: 1"=50'

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I hereby certify that to the best of my knowledge that the "As-Built" truly represents existing conditions. Including but not limited to sizes, diameters, line and grade, and elevations shown.

Dennis M. Miller
Maryland Property Line Surveyor #579

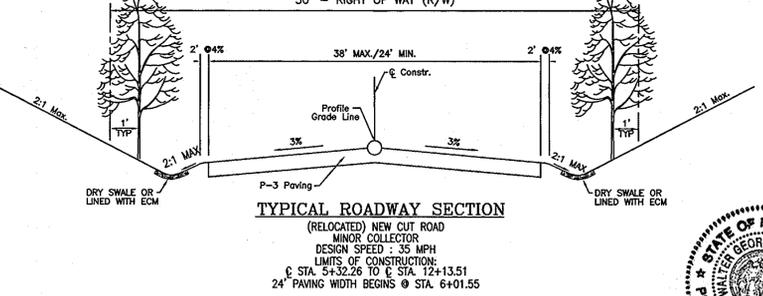
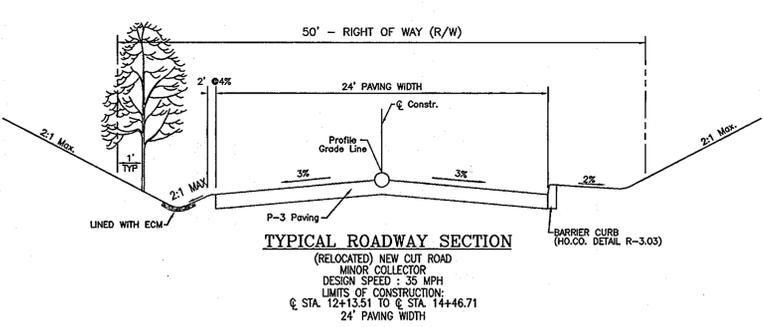


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APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William F. Walsh 4-16-07
CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Chris Hammer 4/10/07
CHIEF, DEVELOPMENT ENGINEERING DIVISION

Chris Hammer 4/10/07
CHIEF, DIVISION OF LAND DEVELOPMENT



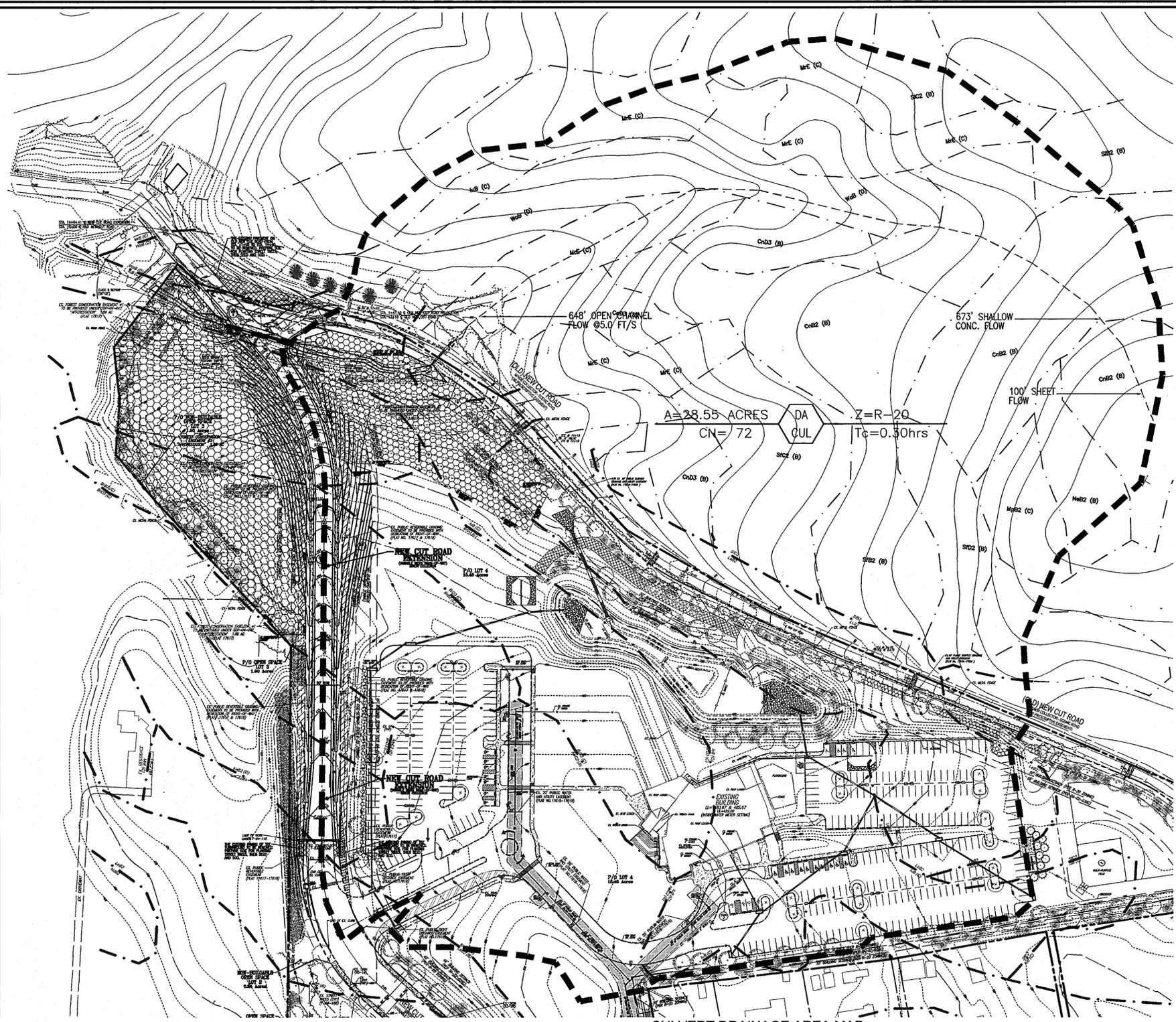
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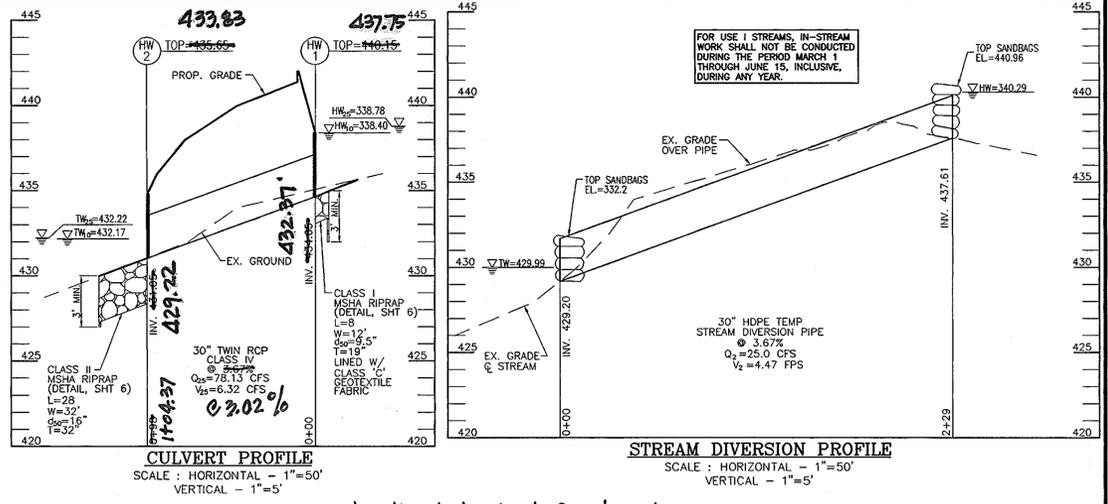
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3 SHEET OF 8

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CULVERT DRAINAGE AREA MAP
SCALE 1" = 80'

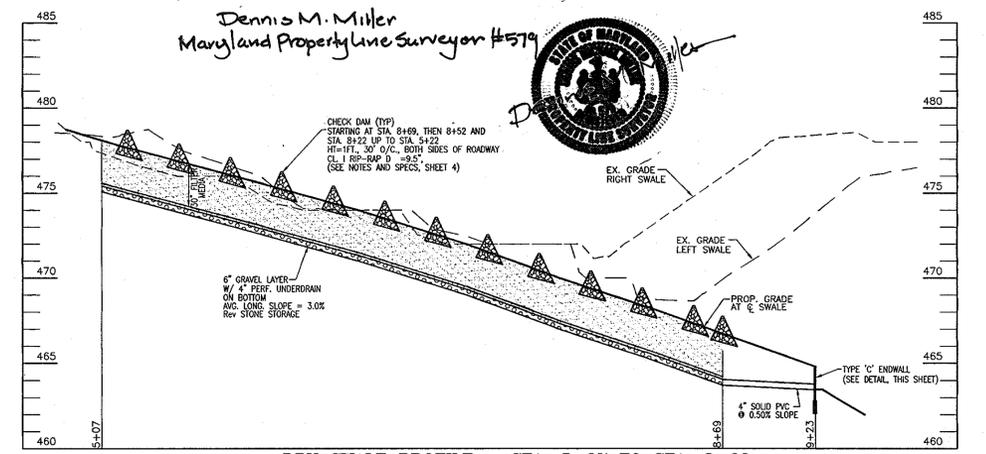


CULVERT PROFILE
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'

STREAM DIVERSION PROFILE
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'

I hereby certify that to the best of my knowledge that this "As-Built" truly represents existing conditions.

Dennis M. Miller
Maryland Property Line Surveyor #579



DRY SWALE PROFILE - STA. 5+07 TO STA. 8+69
(TYPICAL OF BOTH SIDES OF ROADWAY)
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'

STRUCTURE SCHEDULE						
NO.	TYPE	LOCATION	TOP ELEV.	INV. IN	INV. OUT	COMMENT
HW-1	MODIFIED TYPE 'A' HEADWALL	N 574485.80 E 1368851.40	438.40	434.65	-	SEE DETAIL, THIS SHEET
HW-2	MODIFIED TYPE 'A' HEADWALL	N 574582.32 E 1368833.98	434.80	-	431.05	SEE DETAIL, THIS SHEET

NOTE: 1. THE HEADWALL DESIGN SHOWN ON THESE PLANS IS SCHEMATIC. THE HEADWALLS ARE TO BE DESIGNED AND CERTIFIED BY A STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.

PIPE SCHEDULE		
SIZE	TYPE	LENGTH
30"	RCP, CLASS IV	196 LF
30"	HDPE (TEMP. STREAM DIVERSION)	229 LF
4"	PERF. PVC	362 LF
4"	SOLID PVC	54 LF

OWNER/DEVELOPER
GLEN MAR METHODIST CHURCH
8430 GLENMAR RD
ELLCOTT CITY, MD 21043
AL HAMMER
(410) 465-4995

NO.	REVISION	DATE

**ROAD CONSTRUCTION PLANS
CULVERT DRAINAGE AREA MAPS
AND SWM DETAILS**
NEW CUT ROAD RIGHT-OF-WAY, NON-BUILDABLE
OPEN SPACE LOT 2, OPEN SPACE LOT 3, LOT 4 AND
NON-BUILDABLE OPEN SPACE LOT 5
A RESUBDIVISION OF NON-BUILDABLE OPEN SPACE LOT 5 OF
GLEN MAR UNITED METHODIST CHURCH LOTS 1 THROUGH 5
TAX MAP 31 BLOCK 1 & 7 PARCEL '10', LOTS 1-5
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL
ENGINEERING, INC.**
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET TEL: 410.461.7666
ELLCOTT CITY, MD 21043 FAX: 410.461.8961

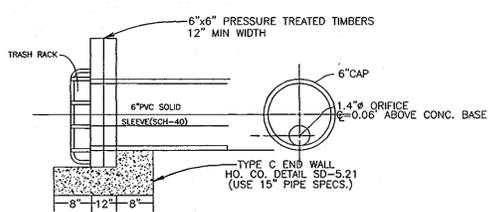
DESIGN BY: WJZ/DZ
DRAWN BY: DZ
CHECKED BY: [Signature]
DATE: MARCH 20, 2007
SCALE: AS SHOWN
W.O. NO.: 04-64
7 SHEET OF 8

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

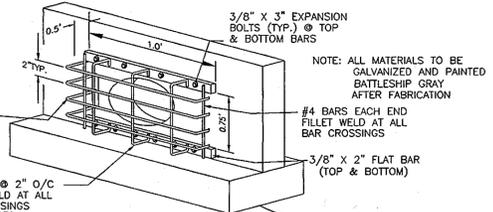
Walter J. [Signature] 4-16-07
CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

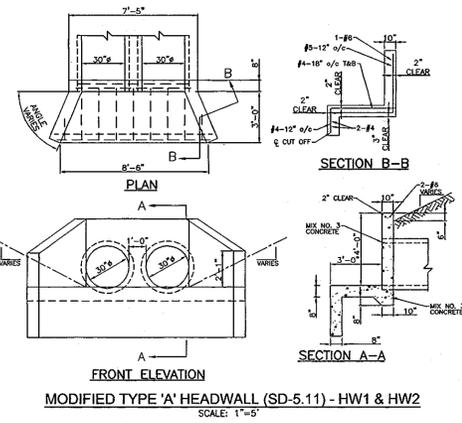
[Signature] 4/16/07
CHIEF, DEVELOPMENT ENGINEERING DIVISION
[Signature] 4/16/07
CHIEF, DIVISION OF LAND DEVELOPMENT



PERMANENT ORIFICE DETAIL IN CHECKDAM
NOT TO SCALE



TRASH RACK DETAIL
NOT TO SCALE



MODIFIED TYPE 'A' HEADWALL (SD-5.11) - HW1 & HW2
SCALE: 1"=5'

