

SITE ANALYSIS DATA CHART

- a. DEED REFERENCE: 03492/0022 PLAT REFERENCE: N/A
- b. TOTAL PROJECT AREA (GROSS TRACT AREA): 1.371± ACRES (59,720 SF)
- c. AREA OF PLAN SUBMISSION: 1.61± ACRES (70,227 SF)
- d. APPROXIMATE WETLANDS AREA INCLUDING BUFFER: N/A
- e. APPROXIMATE AREA OF 100 YEAR FLOODPLAIN: N/A
- f. APPROXIMATE EXISTING FOREST AREA: 0.00± AC.
- g. APPROXIMATE AREA OF STEEP SLOPES (25% OR GREATER): 0.02± AC.
- h. APPROXIMATE AREA OF STEEP SLOPES (15% TO 25%): 0.02± AC.
- i. APPROXIMATE AREA OF ERODIBLE SOILS: N/A
- j. NET AREA OF TRACT: 1.351 ACRES (59,850 SF)
- k. LIMIT OF DISTURBED AREA: 1.61± ACRES (70,227 SF)
- l. PRESENT ZONING: B-2
- m. PROPOSED USE: RETAIL
- n. TOTAL FLOOR SPACE: 14,550 S.F.
- o. RETAIL 14,550 S.F.
- p. MAXIMUM NUMBER OF EMPLOYEES: 40 TOTAL/15 PER SHIFT
- q. MINIMUM STRUCTURE AND USE SETBACKS:
 - 1. FROM EXTERNAL PUBLIC STREET RIGHT-OF-WAY: 30'
 - EXCEPT FOR PARKING USES: 10'
 - 2. FROM RESIDENTIAL DISTRICTS OTHER THAN PUBLIC RIGHT-OF-WAY: 30'
- r. MAXIMUM HEIGHT LIMITATIONS:
 - 1. STRUCTURE WITH MINIMUM SETBACK: 40'
- s. PROPOSED BUILDING HEIGHT:
 - 1. RETAIL (ONE STORY): ±26'
- t. PARKING CALCULATIONS:
 - 1. REQUIRED:
 - a. PER ZONING REQUIREMENTS: 73 SPACES
 - i. RETAIL 5.0 SPACES PER 1,000 SF 14,550 SF / 1,000 x 5.0 = 73 SPACES
 - b. PER PARKING NEEDS STUDY WITHIN APPROVED TIS 43 SPACES. *Parking reduction approved by Planning Director on 11/13/13.*
 - 2. PARKING PROVIDED: 45 SPACES INCLUDING 3 HC SPACES
- u. BUILDING COVERAGE OF SITE: 14,550 S.F. AND ±25% OF GROSS AREA.
- v. APPLICABLE DPZ FILE REFERENCES: ECP-13-010, WP-13-177, WP-14-088

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
2. 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.
3. THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
4. TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
5. ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED. ALL CURB RADII ARE 5' UNLESS OTHERWISE NOTED.
6. BOUNDARY AND TOPOGRAPHIC SURVEY ARE BASED ON A FIELD RUN SURVEY COMPLETED BY PROFESSIONAL SURVEYS, LLC. IN JULY 2012 AND HAS BEEN SUPPLEMENTED WITH HOWARD COUNTY GIS.
7. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM, HOWARD COUNTY MONUMENT NO. 244M1 AND 24B5 WERE USED FOR THIS PROJECT.
8. WATER SERVICE IS PUBLIC.
9. SEWER SERVICE IS PUBLIC.
10. THIS PROPERTY IS WITHIN THE METROPOLITAN DISTRICT.
11. ALL EXISTING WATER AND SEWER PER CONTRACTS 411-S AND 24-1726-A.
12. STORMWATER MANAGEMENT IS ADDRESSED BY THREE M-6 MICRO-BIORETENTION FACILITIES. THESE STRUCTURES ARE PRIVATELY OWNED AND THEREFORE MAINTENANCE IS THE RESPONSIBILITY OF THE OWNER.
13. THERE IS NO FLOODPLAIN ON THIS SITE.
14. THE ARE NO WETLANDS ON THIS SITE.
15. A TRAFFIC STUDY WAS PERFORMED BY LENHART TRAFFIC CONSULTING, INC., DATED NOVEMBER 26, 2012.
16. THIS PROJECT COMPLIES WITH THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BY PAYING A FEE IN LIEU OF \$784.80 FOR THE REQUIRED OBLIGATION OF 0.24 ACRES OF AFFORESTATION.
17. THE SUBJECT PROPERTY IS ZONED B-2 IN ACCORDANCE WITH THE 2010/14 COMPREHENSIVE ZONING PLAN AND THE COMP LITE ZONING REGULATIONS EFFECTIVE 7/28/06.
18. THERE ARE NO KNOWN CEMETERIES, HISTORIC STRUCTURES OR SCENIC ROADS ON OR ADJACENT TO THIS PROPERTY.
19. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN.
20. THIS PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
21. SEDIMENT AND EROSION CONTROL MEASURES ARE PROVIDED IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
22. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.12A OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL.
23. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPM DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$19,710 FOR 27 SHADE TREES, 15 EVERGREEN TREES AND 112 SHRUBS.
24. GEOTECHNICAL STUDY WAS PREPARED BY HILLIS-CARNES ENGINEERING ASSOCIATES AND IS DATED OCTOBER 19, 2012.
25. OUTDOOR LIGHTING SHALL BE IN COMPLIANCE WITH THE OUTDOOR LIGHTING REQUIREMENTS STANDARDS SPECIFIED IN THE HOWARD COUNTY ZONING REGULATIONS.
26. TRASH COLLECTION WILL BE PRIVATE, UTILIZING COMPACTORS AT THE REAR OF THE BUILDING.
27. DAP FOR THE ROUTE 40 DESIGN MANUAL WAS HELD ON SEPTEMBER 12, 2012.
28. THE PROPOSED BUILDING WILL HAVE AN AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM.
29. a) THE TRAFFIC CONTROL DEVICE LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MUST BE FIELD APPROVED BY HOWARD COUNTY TRAFFIC CONTROL DEVICES (MUTCD).
 b) ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
 c) ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED (QUICK PUNCH) TYPE, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. THE ANCHOR SHALL NOT EXTEND MORE THAN TWO (2) QUICK PUNCH HOLES ABOVE GROUND LEVEL. ALL GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
 d) PER THE HOWARD COUNTY DESIGN MANUAL VOLUME III SECTION 5.2.E, 5 STACKING SPACES ARE REQUIRED FOR THE DRIVE-THRU. EACH SPACE SHOULD BE A MINIMUM OF 22'.

DAP SUMMARY

10097 BALTIMORE NATIONAL PIKE, CURRENTLY OCCUPIED BY AN AMERIGAS PROPANE FACILITY, IS LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF RT. 40 AND CENTENNIAL LANE. THE PROPERTY HAS BEEN OCCUPIED BY THE EXISTING USE FOR AT LEAST 45 YEARS, AND IS BOTH DATED AESTHETICALLY AS WELL AS NOT IN KEEPING WITH THE CHARACTER OF RT. 40 AS A COMMERCIAL RETAIL CORRIDOR.

THE REDEVELOPMENT OF THIS UNDERUTILIZED PARCEL WITH A NEW WALGREENS WOULD NOT ONLY DRAMATICALLY IMPROVE THE PHYSICAL APPEARANCE OF THE SITE, IT WOULD UNIFY THE LOOK AND CHARACTER OF THE INTERSECTION AS A RETAIL COMMERCIAL HUB, PROVIDE INTERIOR BANK WITH THE 1ST MARINER BANK PARCEL TO THE EAST AND ALLOW THE UPGRADING OF THE PROPERTY'S STORMWATER MANAGEMENT FACILITIES AND IMPLEMENTATION OF THE LATEST SUSTAINABILITY PRINCIPLES AND PRACTICES.

APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>Chief Edman</i>	3-7-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>Kurt Schuler</i>	3-13-14
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>Mark J. Gagle</i>	3/17/14
DIRECTOR	DATE

DAP COMMENT RESPONSE

THE FOLLOWING ARE RESPONSES TO DAP COMMENTS ISSUED SEPTEMBER 12, 2012 FOR SDP-13-028.

COMMENT 1: THAT THE APPLICANT TAKES ANOTHER LOOK AT THE MONUMENT SIGN AND DO IT IN A MORE INTEGRATED WAY, SO IT IS NOT JUST THREE SIGN BOXES ON TOP OF A BRICK BASE.

RESPONSE: APPLICANT HAS INCORPORATED ADDITIONAL METAL PANELS AND ACCENT BANDS ALONG THE TOP AND BASE OF THE SIGN STRUCTURE TO BETTER MIMIC THE BUILDING FACADE. UPDATED ELEVATIONS HAVE BEEN SUBMITTED AND ARE SHOWN ON SHEET 4.

COMMENT 2: THAT THE NORTH SIDE OF THE BUILDING BE MADE PARALLEL, IN SOME FASHION, TO ROUTE 40 THIS CREATING AN EXTERIOR PATIO AREA THAT COULD BE LANDSCAPED WITH SEATING AND BIKE RACKS.

RESPONSE: AS IT'S NOT POSSIBLE TO REORIENT THE NORTH SIDE OF THE BUILDING GIVEN WALGREENS' REQUIREMENTS, APPLICANT WILL ADDRESS THIS ISSUE IN ITS RESPONSE TO COMMENT 3 IMMEDIATELY BELOW.

COMMENT 3: THAT THE APPLICANT CONSIDER LOOKING AT WAYS TO REDUCE PAVING AT THE CENTENNIAL LAND ENTRANCE - IN AND AROUND THE SERVICE AREA TO THE SOUTH OF THE BUILDING - AND BY REORIENTING THE PARKING TO BE PARALLEL TO ROUTE 40 AT THE NORTH END OF THE BUILDING.

RESPONSE: APPLICANT HAS REDUCED THE AMOUNT OF PAVING AT THE CENTENNIAL LANE ENTRANCE TO THE MINIMUM REQUIRED FOR A 65' TRACTOR-TRAILER TO NEGOTIATE THE SITE, AS WELL AS REORIENTED THE PARKING AT THE NORTH END OF THE BUILDING TO BE PARALLEL TO RT. 40 AND INCLUDE A GREEN AREA AT THE NORTHWEST CORNER OF THE BUILDING. APPLICANT HAS ALSO REDUCED THE SIZE OF THE SERVICE AREA AT THE SOUTH END OF THE BUILDING.

COMMENT 4: THAT THE APPLICANT REQUEST THAT THE PARKING REQUIREMENTS BE REDUCED TO A NUMBER YOU FIND ACCEPTABLE.

RESPONSE: APPLICANT HAS REDUCED PARKING TO A NUMBER WALGREENS FINDS ACCEPTABLE. THE CURRENT SITE PLAN SHOWS 45 SPACES AND A PARKING NEEDS ANALYSIS HAS BEEN SUBMITTED AS PART OF THIS APPLICATION.

COMMENT 5: TO ENFORCE THE STAFF'S COMMENTS CONNECTING THE SIDEWALKS INTO THE SITE FOR PEDESTRIAN MOVEMENT.

RESPONSE: APPLICANT HAS INCORPORATED A CONNECTION FROM THE EXISTING SIDEWALK IN ROUTE 40, INTO THE SITE TO PROVIDE FOR EASIER PEDESTRIAN MOVEMENT. IN ADDITION A SIDEWALK CONNECTION HAS BEEN PROVIDED TO THE BANK SITE.

COMMENT 6: THAT THE APPLICANT CONSIDER BRINGING IN HORIZONTALITY, MORE INTEREST IN THE ELEVATIONS WHETHER THRU WINDOWS OR MATERIALS, AND INTRODUCTIONS OF TREES WHEN LANDSCAPING AT THE WEST END OF THE BUILDING.

RESPONSE: APPLICANT WILL UTILIZE BRICK SOLDIER COURSING AND/OR OTHER HORIZONTAL ACCENT BANDS TO PROVIDE ADDITIONAL RELIEF ON THE EXTERIOR ELEVATIONS. THE USE OF LANDSCAPING ALONG THE WEST END OF THE BUILDING IS NOT POSSIBLE DUE TO THE INHERENT PHYSICAL RESTRICTIONS OF THE PARCEL, I.E. NARROWNESS OF THE SITE AND THE MINIMUM BUILDING, PARKING AND DRIVE AISLE WIDTHS, AN ADDITIONAL GLASS BAY HAS BEEN EXTENDED ON THE NORTHERN AND EASTERN ELEVATIONS.

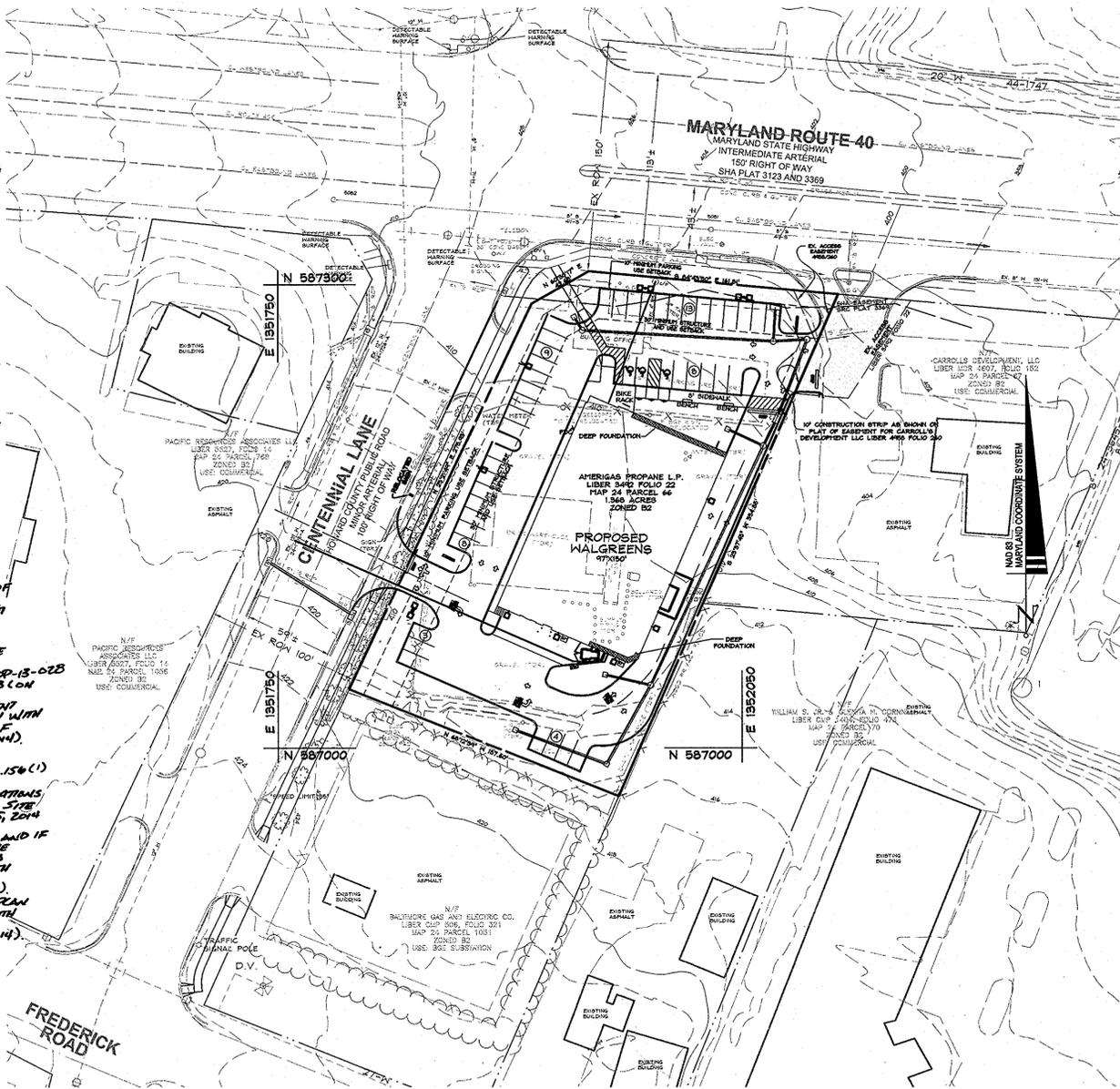
31. WP-13-179 REQUESTING EXTENSIONS FOR SECTION 16.154(K), 16.154(L) AND 16.154(M) WHICH ESTABLISHES DEADLINES FOR THE SUBMISSION OF DEVELOPER'S AGREEMENT, FEES, POSTING OF FINANCIAL OBLIGATIONS, AND SUBMISSION OF PLAN ORIGINALS IN RELATION TO SITE DEVELOPMENT PLANS WAS APPROVED JULY 12, 2013 WITH THE FOLLOWING CONDITIONS:
 1. THE DEVELOPER MUST SUBMIT DEVELOPER'S AGREEMENTS, POST FINANCIAL SURETIES AND IF APPLICABLE SUBMIT PAYMENT TO DPM, RES OF THE BALANCE OF THE DEPARTMENT OF PUBLIC WORKS ENGINEERING REVIEW FEE IN ASSOCIATION WITH SDP-13-028 WITHIN 6 MONTHS OF THE DATE OF AUGUST 10, 2013 (ON OR BEFORE FEBRUARY 10, 2014).
 2. THE DEVELOPER MUST SUBMIT SITE DEVELOPMENT PLAN ORIGINALS FOR SIGNATURE IN ASSOCIATION WITH SDP-13-028 WITHIN 6 MONTHS OF THE DATE OF AUGUST 10, 2013 (ON OR BEFORE FEBRUARY 10, 2014).

32. WP-14-088 REQUESTING EXTENSIONS FOR SECTION 16.154(K), 16.154(L) AND 16.154(M) WHICH ESTABLISHES DEADLINES FOR THE SUBMISSION OF DEVELOPER'S AGREEMENT, FEES, POSTING OF FINANCIAL OBLIGATIONS, AND SUBMISSION OF PLAN ORIGINALS IN RELATION TO SITE DEVELOPMENT PLANS WAS APPROVED FEBRUARY 25, 2014 WITH THE FOLLOWING CONDITIONS:
 1. THE DEVELOPER MUST SUBMIT DEVELOPER'S AGREEMENTS, POST FINANCIAL SURETIES AND IF APPLICABLE SUBMIT PAYMENT TO DPM, RES OF THE BALANCE OF THE DEPARTMENT OF PUBLIC WORKS ENGINEERING REVIEW FEE IN ASSOCIATION WITH SDP-13-028 WITHIN 60 DAYS OF THE DATE OF FEBRUARY 10, 2014 (ON OR BEFORE APRIL 11, 2014).
 2. THE DEVELOPER MUST SUBMIT SITE DEVELOPMENT PLAN ORIGINALS FOR SIGNATURE IN ASSOCIATION WITH SDP-13-028 WITHIN 60 DAYS OF THE DATE OF FEBRUARY 10, 2014 (ON OR BEFORE APRIL 11, 2014).

33. WP-14-088 REQUESTING EXTENSIONS FOR SECTION 16.154(K), 16.154(L) AND 16.154(M) WHICH ESTABLISHES DEADLINES FOR THE SUBMISSION OF DEVELOPER'S AGREEMENT, FEES, POSTING OF FINANCIAL OBLIGATIONS, AND SUBMISSION OF PLAN ORIGINALS IN RELATION TO SITE DEVELOPMENT PLANS WAS APPROVED FEBRUARY 25, 2014 WITH THE FOLLOWING CONDITIONS:
 1. THE DEVELOPER MUST SUBMIT DEVELOPER'S AGREEMENTS, POST FINANCIAL SURETIES AND IF APPLICABLE SUBMIT PAYMENT TO DPM, RES OF THE BALANCE OF THE DEPARTMENT OF PUBLIC WORKS ENGINEERING REVIEW FEE IN ASSOCIATION WITH SDP-13-028 WITHIN 60 DAYS OF THE DATE OF FEBRUARY 10, 2014 (ON OR BEFORE APRIL 11, 2014).
 2. THE DEVELOPER MUST SUBMIT SITE DEVELOPMENT PLAN ORIGINALS FOR SIGNATURE IN ASSOCIATION WITH SDP-13-028 WITHIN 60 DAYS OF THE DATE OF FEBRUARY 10, 2014 (ON OR BEFORE APRIL 11, 2014).

SITE DEVELOPMENT PLAN for WALGREENS 10097 BALTIMORE NATIONAL PIKE

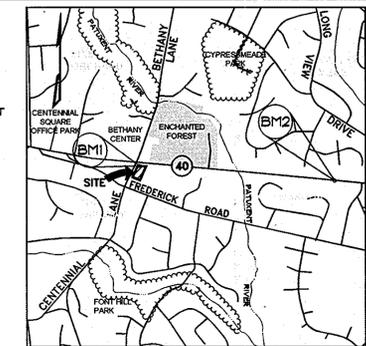
TAX MAP 24, GRID 2, PARCEL 66
2ND ELECTION DISTRICT HOWARD COUNTY, MD



BENCHMARK

BENCHMARK #1	N. 58707.76
E. 135148.67	
B.M.	244M1 - CONCRETE MONUMENT
ELEV.	407.49
BENCHMARK #2	N. 584656.273
E. 1564570.784	
B.M.	24B5 - CONCRETE MONUMENT
ELEV.	390.17

APC MAP COORDINATES
MAP 4810 CG
N 89°16'30"
E 76°52'00"



VICINITY MAP
SCALE: 1"=2000'

SHT #	DRAWING LIST
1	COVER SHEET
2	EXISTING CONDITIONS/DEMOLITION PLAN
3	EXTERIOR ELEVATIONS
4	EXTERIOR SIGN DATA
5	SITE LAYOUT PLAN
6	GRADING PLAN
7	SEDIMENT & EROSION CONTROL PLAN
8	SEDIMENT & EROSION CONTROL NOTES & DETAILS
9	SITE PLAN DETAILS
10	STORM DRAIN DRAINAGE AREA MAP
11	STORM DRAIN PROFILES AND DETAILS
12	STORMWATER MANAGEMENT PLAN
13	STORMWATER MANAGEMENT PROFILES, NOTES & DETAILS
14	LANDSCAPE PLAN
15	LANDSCAPE NOTES & DETAILS
16	FOREST CONSERVATION PLAN & DETAILS
17	MAINTENANCE OF TRAFFIC PLAN
18	SIGNAGE AND MARKING PLAN

DATA SOURCES:
 EXISTING OFFSITE TOPOGRAPHY SHOWN PER HOWARD COUNTY GIS, BASED ON MARYLAND COORDINATE SYSTEM, NAD-83(HR1), NAVD-88. EXISTING ONSITE TOPOGRAPHY AND BOUNDARY SHOWN PER FIELD RUN SURVEY PERFORMED BY PROFESSIONAL SURVEYS, LLC COMPLETED IN JULY 2012. EXISTING SOILS SHOWN PER USDA WEB SOIL SURVEY.

DDC
Development Design Consultants

Planners
Surveyors
Engineers
Landscape Architects

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410.386.0564 (Fax)
DDC@DDCinc.us
www.DDCinc.us

OWNER:
AMERIGAS PROPANE LP
DON LYNCH
PO BOX 793
VALLEY FORGE, PA 19482
(301)920-1878

DEVELOPER:
MEADOWOOD-DORSEY RUN, LLC
THOM MOORE
1202 SHADY CREEK ROAD
MARRIOTTVILLE, MD 21104
(410)489-5380

SITE ADDRESS:
10097 BALTIMORE NATIONAL PIKE
BALTIMORE, MD

WALGREENS
10097 BALTIMORE NATIONAL PIKE

COVER SHEET

1st Council District, 2nd Election District

Revisions table:

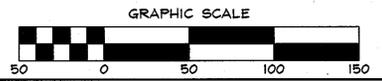
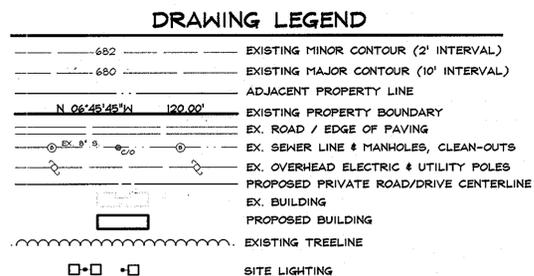
NO.	DESCRIPTION OF CHANGES	DRN.	REV.	DATE

ADDRESS CHART

Parcel 66	10097 BALTIMORE NATIONAL PIKE
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PERMIT INFORMATION CHART

SUBDIVISION NAME:	SECTION/AREA:	LOT/PARCEL NO.:
N/A	N/A	PARCEL 66
PLAT/ OR L/F:	GRID:	ZONING:
3452/22	2	B-2
WATER CODE:	ELECT. DISTRICT:	CENSUS TRACT:
N/A	2ND	8023.04
SEWER CODE:	SEWER CODE:	
N/A	N/A	



February 24, 2014
DATE

Professional Certification:
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. 22020, Expiration Date 12/31/16.

PAUL G. CAVANAUGH
PAUL G. CAVANAUGH
P.E. 27020

DRAWING LEGEND

- 682 EXISTING MINOR CONTOUR (2' INTERVAL)
- 680 EXISTING MAJOR CONTOUR (10' INTERVAL)
- ADJACENT PROPERTY LINE
- EXISTING PROPERTY BOUNDARY
- EX. ROAD / EDGE OF PAVING
- EX. SEWER LINE & MANHOLES, CLEAN-OUTS
- EX. OVERHEAD ELECTRIC & UTILITY POLES
- PROPOSED PRIVATE ROAD/DRIVE CENTERLINE
- PROPOSED EDGE OF PAVEMENT
- PROPOSED CURB
- PROPOSED STORM DRAIN W/ INLETS & MANHOLE
- PROPOSED WATER LINE & HYDRANT
- PROPOSED SEWER AND MANHOLES
- EX. BUILDING
- PROPOSED BUILDING
- EXISTING TREELINE
- STEEP SLOPES 15%-25% (0.27± AC.)
- STEEP SLOPES 25% (0.04± AC.)
- SITE LIGHTING
- TO BE REMOVED (TBR)
- EX. TREE TO REMAIN
- EX. TREE TO BE REMOVED

DATA SOURCES:
 EXISTING OFFSITE TOPOGRAPHY SHOWN PER HOWARD COUNTY OIT/GIS, BASED ON MARYLAND COORDINATE SYSTEM, NAD-83(1991), NAVD-88. EXISTING ONSITE TOPOGRAPHY AND BOUNDARY SHOWN PER FIELD RUN SURVEY PERFORMED BY PROFESSIONAL SURVEYS, LLC COMPLETED IN JULY 2012. EXISTING SOILS SHOWN PER USDA WEB SOIL SURVEY.

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 (410)489-5080

SITE ADDRESS:
 10097 BALTIMORE NATIONAL PIKE
 BALTIMORE, MD

WALGREENS
 10097 BALTIMORE NATIONAL PIKE
EXISTING CONDITIONS
DEMOLITION PLAN

1st Council District
 2nd Election District

Deed 3492/22
 Howard County, MD

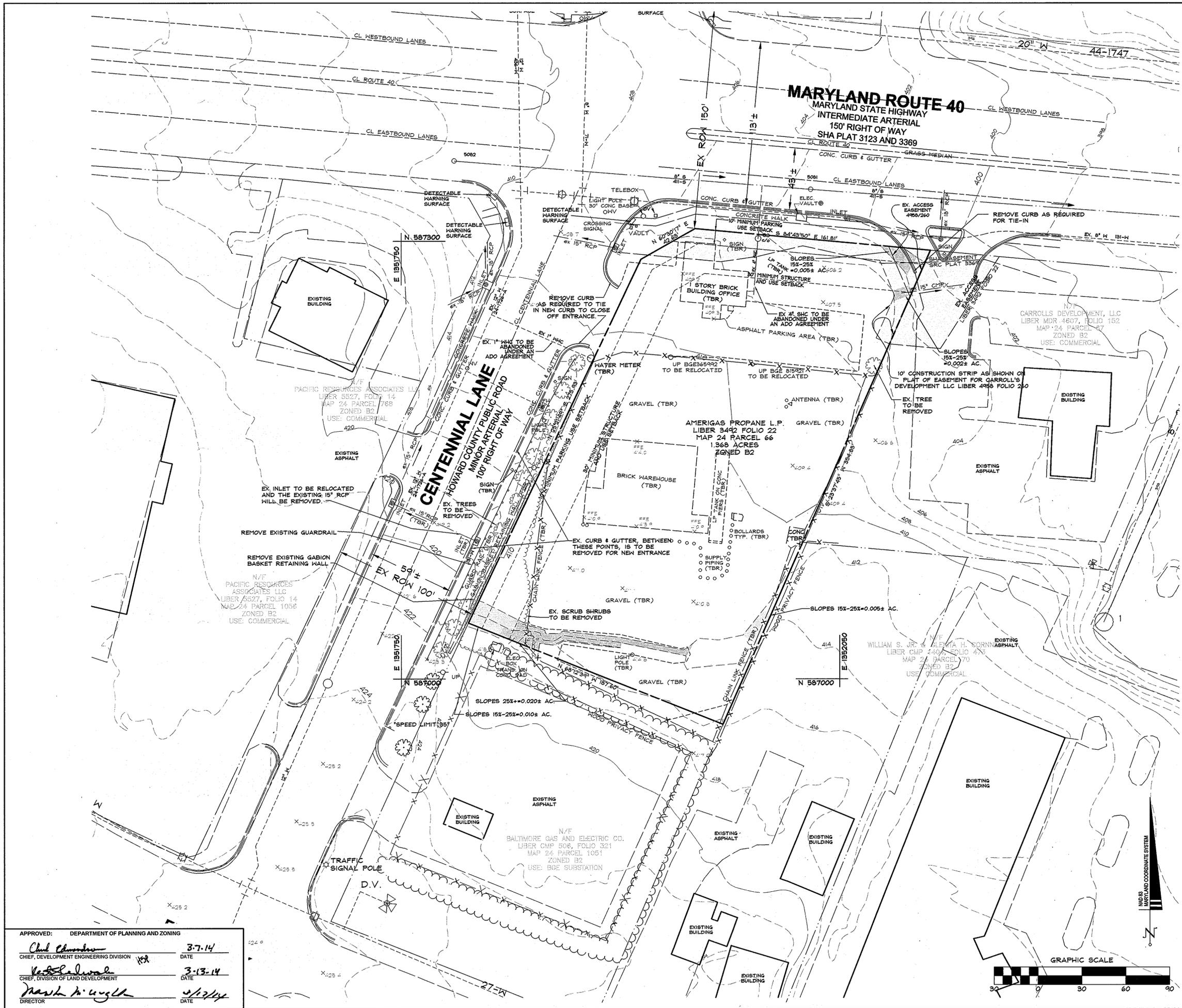
REVISIONS			
NO.	DESCRIPTION OF CHANGES	DRN.	REV. DATE

DATE	February 24, 2014
CO. FILE #	DES. BY: BKC
TAX ACC. # 02-235900	DRN. BY: CTS
TAX MAP: 24	CHK. BY: PGC
BLOCK / GRID: 2	DATE: 2/24/14
PARCEL # 66	DDC JOB#: 11092.1
ZONE / USE: B-2	SHEET NUMBER:
DWG. SCALE: 1"=30'	2 of 18

February 24, 2014
 DATE

Professional Certification:
 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. 22020. Expiration Date: 12/31/2016.

STATE OF MARYLAND
ENGINEER
 P.E. 27020

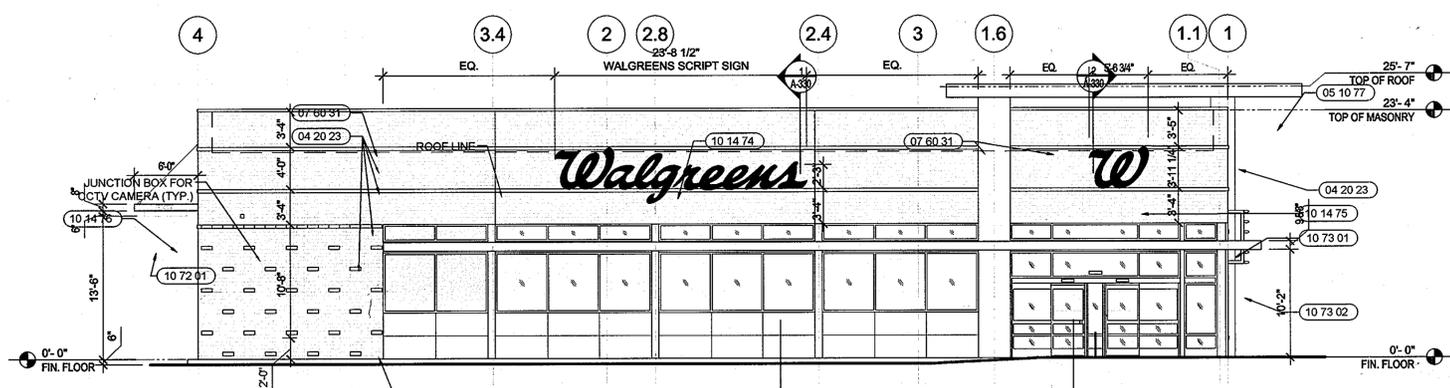


APPROVED: DEPARTMENT OF PLANNING AND ZONING

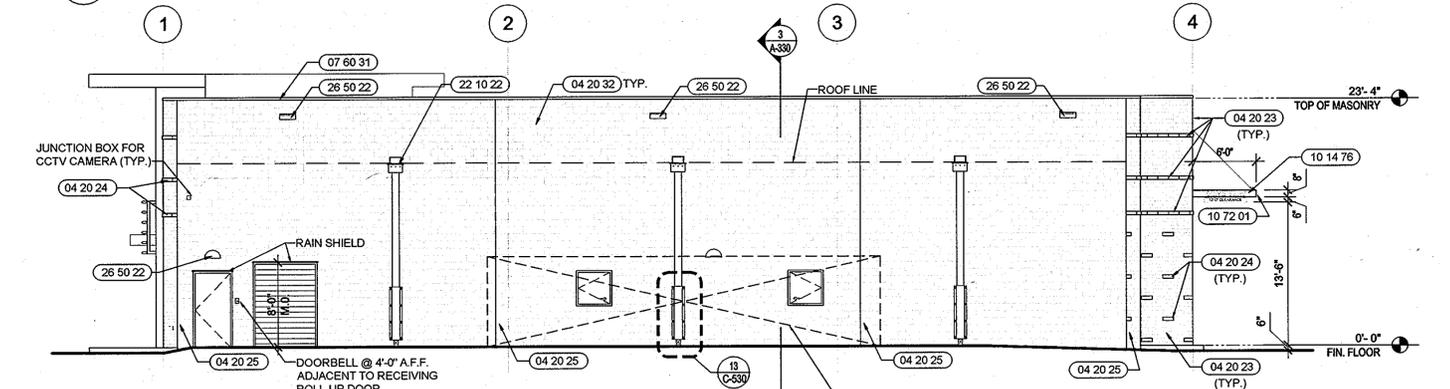
Chad Chambers
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 3-7-14

Mark A. Weyl
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 3-13-14

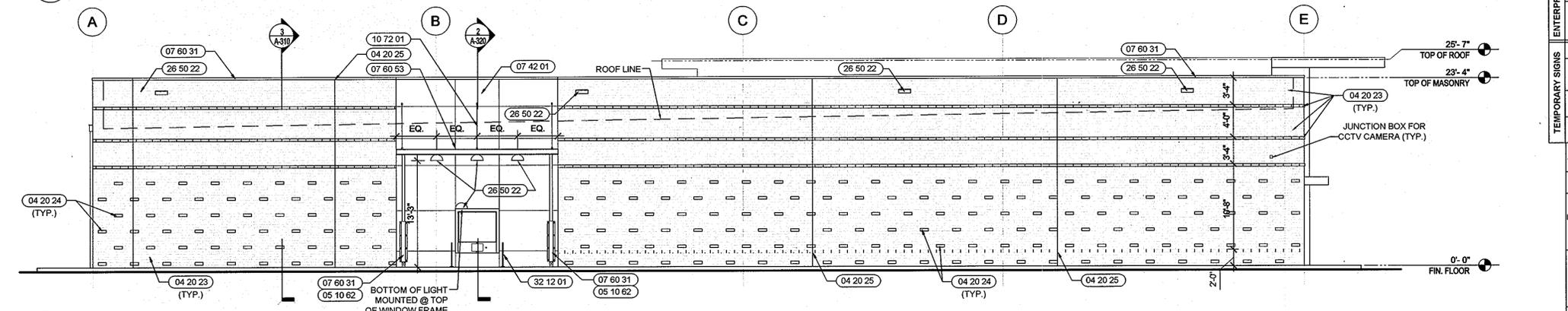
Mark A. Weyl
 DIRECTOR
 DATE: 3/12/14



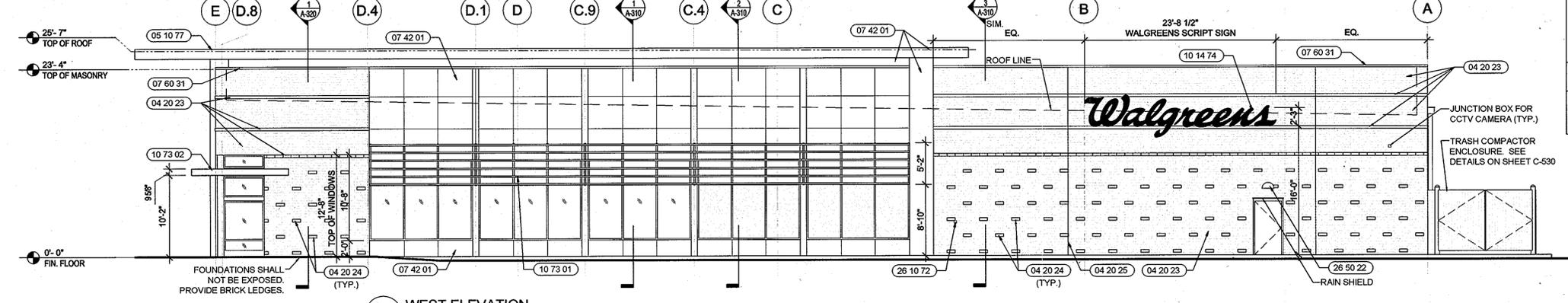
1 NORTH ELEVATION
1/8" = 1'-0"



4 SOUTH ELEVATION
1/8" = 1'-0"



3 EAST ELEVATION
1/8" = 1'-0"



2 WEST ELEVATION
1/8" = 1'-0"

DIVISION 04 - MASONRY

04 20 23 UTILITY SIZE FACE BRICK (TYPE 1) COLOR: "TOPAZ", FINISH: "VELOUR" 1/3 RUNNING BOND.

04 20 24 UTILITY SIZE FACE BRICK (TYPE 2) COLOR: "PEBBLE BEACH", FINISH: "VELOUR" 1/3 RUNNING BOND.

04 20 25 CONTROL JOINT WITH BACKER ROD AND SEALANT - COLOR TO MATCH ADJACENT MATERIAL.

04 20 32 CMU (SEE STRUCTURAL ENGINEERING DWGS) WITH INTEGRAL WATER REPELLANT IN CMU AND MORTAR AND EXTERIOR STAIN. JOINTS TO BE CONCAVE. HEAD JOINTS MUST BE FULL.

DIVISION 05 - METAL

05 10 77 ENTRY CANOPY. SEE SECTION SHEETS.

05 10 62 1/8" THICK BENT STEEL PLATE. (TO PROTECT DOWNSPOUT), BOLTED TO MASONRY. COPE AROUND BULLNOSE. PAINT TO MATCH ADJACENT MATERIAL.

DIVISION 06 - WOOD, PLASTICS AND COMPOSITES

06 10 52 TOTE ROOF. SEE DETAIL 11/C-530

DIVISION 07 - THERMAL AND MOISTURE PROTECTION

07 42 01 ALUMINUM COMPOSITE PANEL.

07 60 31 PARAPET WITH SHEET METAL COPING. SEE SECTION SHEETS.

07 60 53 FLASHING AND COUNTERFLASHING.

07 61 04 TOTE STORAGE ROOF.

DIVISION 10 - SPECIALTIES

10 14 74 RED "WALGREENS" SCRIPT SIGN, INTERNALLY ILLUMINATED. SEE DETAILS ON SHEET A-730.

10 14 75 INDIVIDUAL LETTER SIGN. SEE SHEET A-730.

10 14 76 BOX SIGN. SEE SHEET A-730.

10 72 01 ROD SUPPORTED CANOPY.

10 73 01 VERTICAL EXTERIOR SUN CONTROL DEVICE.

10 73 02 HORIZONTAL EXTERIOR SUN CONTROL DEVICE.

DIVISION 22 - PLUMBING

22 10 12 WH-1, WALL HYDRANT.

22 10 22 DOWNSPOUT TO STORM SEWER.

DIVISION 26 - ELECTRICAL

26 10 72 JUNCTION BOX FOR RED BOX. FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.

26 50 22 WALL MOUNTED LIGHT. SEE ELECTRICAL DRAWING.

DIVISION 32 - EXTERIOR IMPROVEMENTS

32 12 01 YELLOW DELINEATION POSTS AT DRIVE-UP WINDOW. FASTEN TO CONCRETE WITH BOLTS.

PERMIT OFFICIAL: NAME: N/A
PHONE: 410-313-2350
ZONING / CODE: B-2
OVERLAY DISTRICT: ROUTE 40

NOTES	ALLOWED	PROPOSED
BUILDING MOUNTED SIGNS:	YES	SEE BELOW
# OF BLDG MOUNTED SIGNS ALLOWED?:	2 SQ. FT. PER FOOT OF BUILDING OR UNIT WIDTH	
AREA OF BLDG MOUNTED SIGNS ALLOWED?:	2 SQ. FT. PER FOOT OF BUILDING OR UNIT WIDTH	
SCRIPT SIGN AREA TYPE CALCULATED?:	TYPE "A"	
BUILDING ELEVATION SIGNAGE AREAS		
A. ELEVATION #1		
1. WALGREENS SCRIPT SIGN		124.96 sq. ft.
2. PHOTO SIGN		0
3. 24 HR SIGN		0
4. PHARMACY SIGN		0
5. TOWER SIGN		21.90 sq. ft.
6. DRIVE-THRU / EXIT		1.8 sq. ft.
7. TENANT SIGNAGE		0
TOTAL ELEVATION #1	291.00 sq. ft.	148.66 sq. ft.
B. ELEVATION #2		
1. WALGREENS SCRIPT SIGN		124.96 sq. ft.
2. PHOTO SIGN		0
3. 24 HR SIGN		0
4. PHARMACY SIGN		0
5. TOWER SIGN		0
6. DRIVE-THRU / EXIT		0
7. TENANT SIGNAGE		0
TOTAL ELEVATION #2	450.00 sq. ft.	124.96 sq. ft.
C. ELEVATION #3		
1. WALGREENS SCRIPT SIGN		0
2. DRIVE-THRU / EXIT		0
3. TENANT SIGNAGE		0
TOTAL ELEVATION #3	N/A	0
D. ELEVATION #4		
1. WALGREENS SCRIPT SIGN		0
2. DRIVE-THRU / EXIT		1.8 sq. ft.
3. TENANT SIGNAGE		0
TOTAL ELEVATION #4	N/A	1.8 sq. ft.
TOTAL BUILDING MOUNTED SIGNAGE:	741.00 sq. ft.	275.42 sq. ft.

UNIT TYPE	ASTM DESIG.	VERTICAL CONTROL JOINT SPACING	HORIZONTAL REQUIREMENTS	MISC. REFERENCES
CLAY, LIMESTONE, CALCIUM SILICATE	C 216, C 568, C 73-99A	30'-0" O.C. (MAX) - 10'-0" FROM CORNER (MAX)	SLIP PLANE BETWEEN CMU AND CAST STONE	SEE BIA TECHNICAL NOTE 18A
CONCRETE MASONRY	C 90	SPACING = 1.5 X WALL - 20'-0" O.C. (MAX) - HEIGHT - 4'-0" TO 6'-0" FROM CORNER (MAX)	WALL TIES @ 16" VERT. MAX. SLIP PLANE BETWEEN BRICK AND CAST STONE	UNITS INSTALLED DRY. SEE NCMA TEK 10-1A, 10-4, 12-1A
CAST STONE	C 1364	SPACING = 1.5 X WALL - 20'-0" O.C. (MAX) - HEIGHT - 4'-0" TO 6'-0" FROM CORNER (MAX)	WALL TIES @ 16" VERT. MAX. SLIP PLANE BETWEEN BRICK AND CMU	UNITS INSTALLED WET WITH RAKED JOINTS. JOINTS ARE POINTED AFTER SET. EXPOSED HEAD JOINTS TO SET BACKER ROD & SEALANT. SEE CAST STONE TECHNICAL BULLETINS 33, 43 & 44

- EXTERIOR DOOR COLORS ARE TO MATCH BRICK COLOR.
- SEE SHEET A-610 AND A-620 FOR WINDOW & DOOR SCHEDULES.

DRAWING PREPARED BY

GTM

7735 OLD GEORGETOWN ROAD
SUITE 700
BETHESDA, MD 20814
(240)333-2000
(240)333-2001 FAX

Planners
Surveyors
Engineers
Landscape Architects

192 East Main Street
Westminster, MD 21157
410.386.0560
410.386.0564 (Fax)
DDC@DDCinc.us
www.DDCinc.us

DDC
Development Design Consultants

OWNER:
AMERIGAS PROPANE LP
THOM WILSON
PO BOX 793
VALLEY FORGE, PA 19482
(301)820-1879

DEVELOPER:
MEADOWOOD-CORSEY RUN, LLC
THOM WILSON
1202 SHADY CREEK ROAD
MARRIOTTSVILLE, MD 21104
(410)469-5068

SITE ADDRESS:
10097 BALTIMORE NATIONAL PIKE
BALTIMORE, MD

WALGREENS
10097 BALTIMORE NATIONAL PIKE

EXTERIOR ELEVATIONS

1st Council District
2nd Election District

Deed 3492/22
Howard County, MD

NO.	DESCRIPTION OF CHANGES	DRN.	REV.	DATE
CO. FILE #	TAX ACC. # 02-235900	DES. BY: GTM		
TAX MAP: 24	BLOCK / GRID: 2	CHK. BY: GTM		
PARCEL # 66	ZONE / USE: B-2	DATE: 2/24/14		
DWG. SCALE: AS NOTED		DDC JOB#: 11092.1		
		SHEET NUMBER:		
		3 of 18		

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division
3-7-14
DATE

Chief, Division of Land Development
3-13-14
DATE

Director
3/27/14
DATE

ARCHITECTURAL ELEVATIONS AND SIGNAGE DETAILS ARE PROVIDED FOR AGENCY REVIEW ONLY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL BUILDING CONSTRUCTION DETAILS WITH THE APPROVED ARCHITECTURAL DRAWINGS.

February 24, 2014
DATE

Professional Certification
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. 27020.

PROF. L. CAVANAUGH
P.E. 27020

GENERAL NOTE:
 THE DEVELOPER SHALL ENTER INTO AN ADVANCE DEPOSIT ORDER (ADO) WITH HOWARD COUNTY FOR THE FOLLOWING:
 1. NEW 6" WATER HOUSE CONNECTION
 2. REMOVAL OF EXISTING 1" WATER HOUSE CONNECTION ABANDONED AT THE MAIN
 3. NEW 4" SANITARY HOUSE CONNECTION AND MANHOLE
 4. EXISTING ON-SITE SANITARY HOUSE CONNECTIONS SHALL BE SEALED WITHIN THE MANHOLE

DRAWING LEGEND

- 682 --- EXISTING MINOR CONTOUR (2' INTERVAL)
- 680 --- EXISTING MAJOR CONTOUR (10' INTERVAL)
- ADJACENT PROPERTY LINE
- EXISTING PROPERTY BOUNDARY
- EX. ROAD / EDGE OF PAVING
- EX. SEWER LINE & MANHOLES, CLEAN-OUTS
- EX. OVERHEAD ELECTRIC & UTILITY POLES
- PROPOSED PRIVATE ROAD/DRIVE CENTERLINE
- PROPOSED CURB OF PAVEMENT
- PROPOSED STORM DRAIN W/ INLETS & MANHOLE
- PROPOSED WATER LINE & HYDRANT
- PROPOSED SEWER AND MANHOLES
- EX. BUILDING
- PROPOSED BUILDING
- EXISTING TREELINE (TO REMAIN)
- STEEP SLOPES 15%-25% (0.2± AC.)
- STEEP SLOPES 25%+ (0.02± AC.)
- SITE LIGHTING
- EXISTING TREE TO REMAIN
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED RETAINING WALL

DATA SOURCES:
 EXISTING OFFSITE TOPOGRAPHY SHOWN PER HOWARD COUNTY OIT/GIS, BASED ON MARYLAND COORDINATE SYSTEM, NAD-83(1911), NAVD-88. EXISTING ONSITE TOPOGRAPHY AND BOUNDARY SHOWN PER FIELD RUN SURVEY PERFORMED BY PROFESSIONAL SURVEYS, LLC COMPLETED IN JULY 2012. EXISTING SOILS SHOWN PER USDA WEB SOIL SURVEY.

DDC
 Development Design Consultants

Planners
 Surveyors
 Engineers
 Landscape Architects

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 Westminster, MD 21157
 410.386.0560
 410.386.0564 (Fax)
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 www.DDCinc.us

OWNER:
 AMERIGAS PROPANE LP
 DON LYNCH
 PO BOX 783
 VALLEY FORGE, PA 19482
 (301)620-1879

DEVELOPER:
 MEADOWOOD DORSEY RUN, LLC
 THOM MOKEE
 1202 SHADY CREEK ROAD
 MARRIOTTVILLE, MD 21104
 (410)489-0380

SITE ADDRESS:
 10097 BALTIMORE NATIONAL PIKE
 BALTIMORE, MD

WALGREENS
 10097 BALTIMORE NATIONAL PIKE
SITE LAYOUT PLAN

1st Council District
 2nd Election District

Deed 3492/22
 Howard County, MD

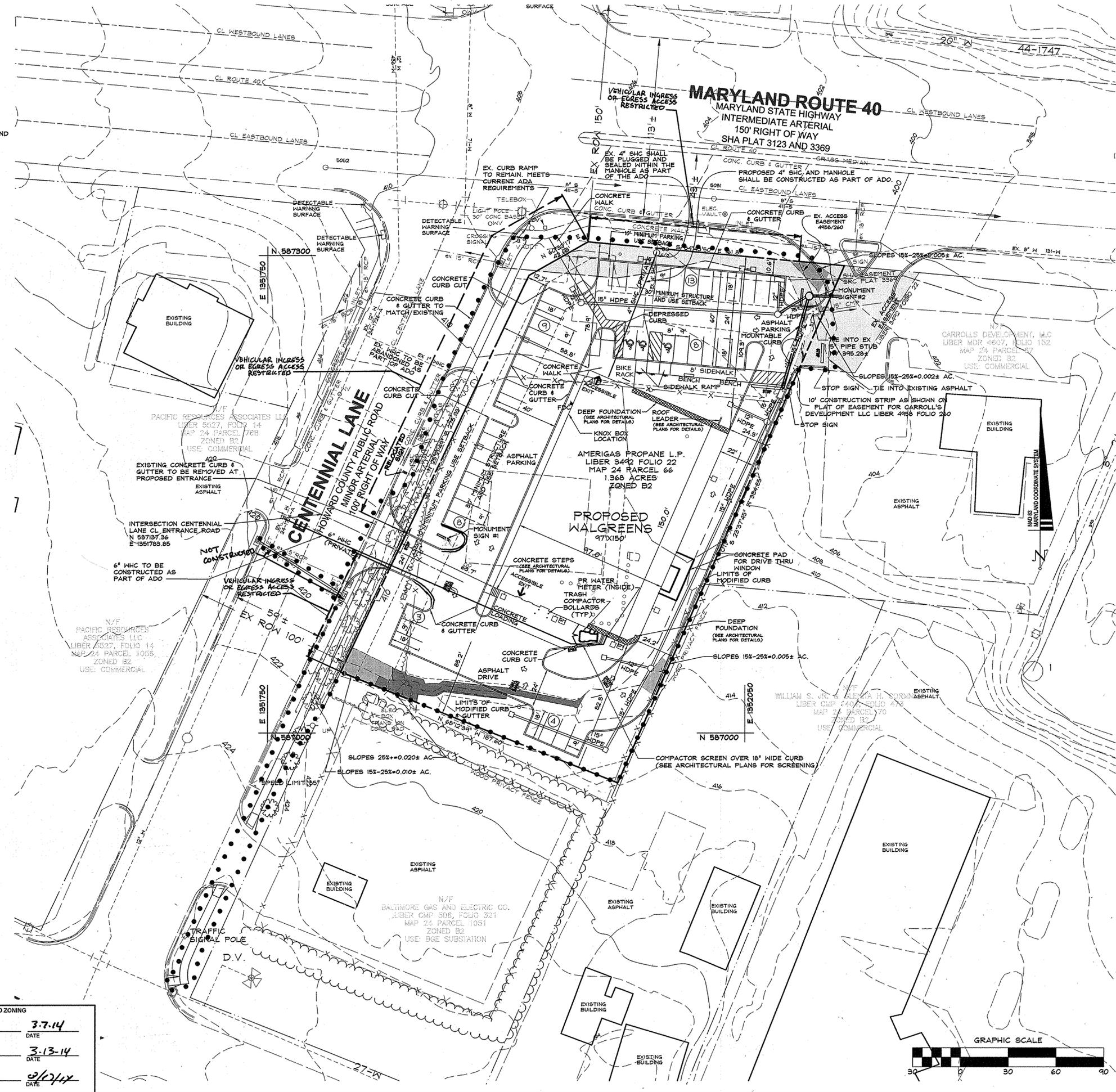
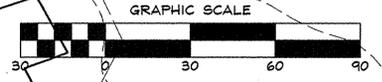
REVISIONS	
NO.	DESCRIPTION OF CHANGES
1	PER AS-BUILT DATA WME 4-23-14

CO. FILE #:	DES. BY: BKC
TAX ACC. #: 02-235900	DRN. BY: CTS
TAX MAP: 24	CHK. BY: PGC
BLOCK / GRID: 2	DATE: 2/24/14
PARCEL #: 66	DDC JOB#: 11092.1
ZONE / USE: B-2	SHEET NUMBER:
DWG. SCALE: 1"=30'	5 of 18

February 24, 2014
 DATE

Professional Certification:
 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. 22020. Enclosure

PROF. G. GAVRANAUGH
 P.E. 27020

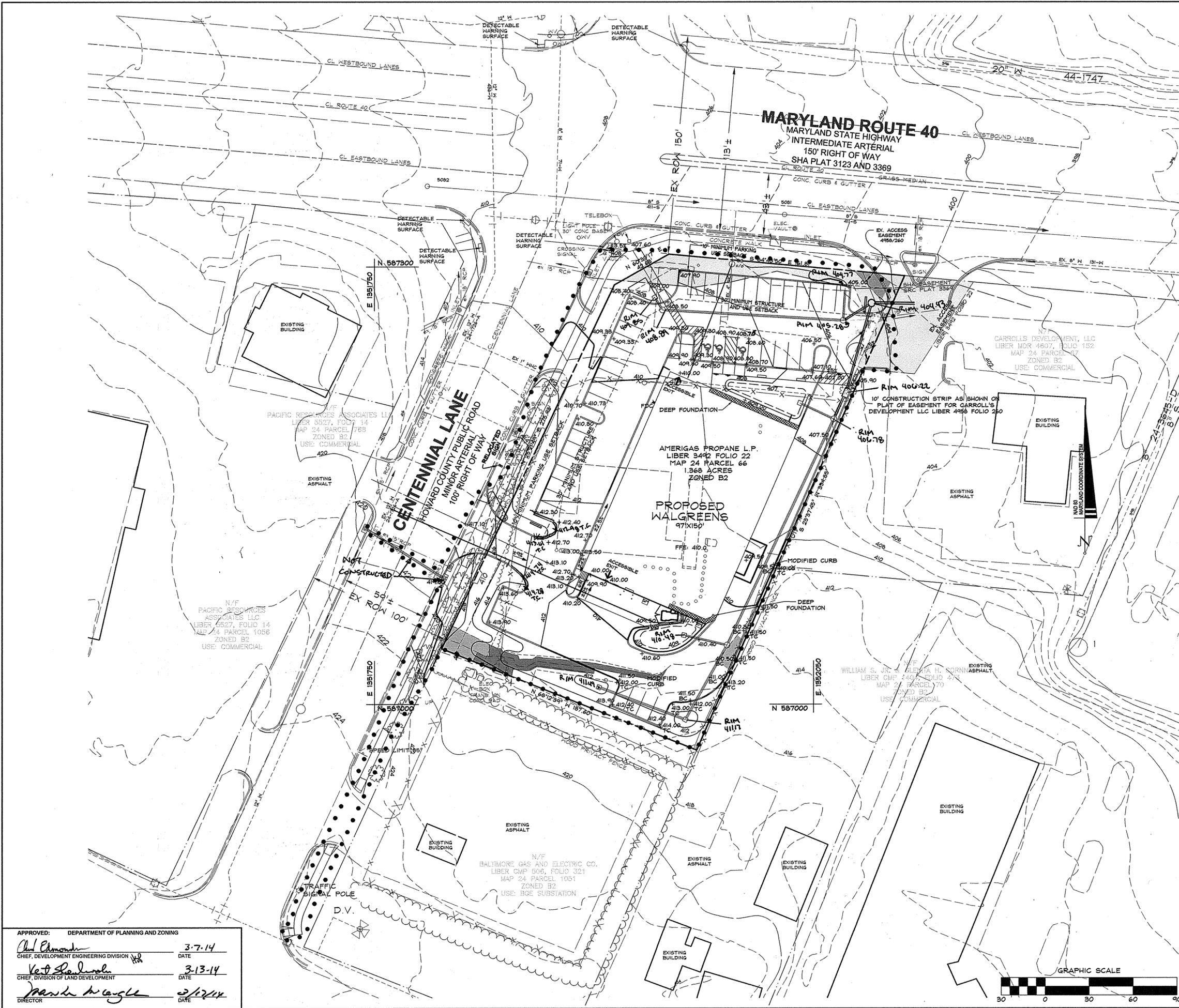


APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Chmura 3-7-14
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Kate S. Ingle 3-13-14
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Paula M. Wright 2/27/14
 DIRECTOR DATE



DRAWING LEGEND

	EXISTING MINOR CONTOUR (2' INTERVAL)
	EXISTING MAJOR CONTOUR (10' INTERVAL)
	ADJACENT PROPERTY LINE
	EXISTING PROPERTY BOUNDARY
	EX. ROAD / EDGE OF PAVING
	EX. SEWER LINE & MANHOLES, CLEAN-OUTS
	EX. OVERHEAD ELECTRIC & UTILITY POLES
	PROPOSED MINOR CONTOUR (2' INTERVAL)
	PROPOSED MAJOR CONTOUR (10' INTERVAL)
	PROPOSED PRIVATE ROAD/DRIVE CENTERLINE
	EX. BUILDING
	PROPOSED BUILDING EXPANSION
	PROPOSED SPOT ELEVATION & FLOW ARROW
	EXISTING TREELINE
	SOIL DELINEATION LINE
	STEEP SLOPES 15%-25% (0.27± Ac.)
	STEEP SLOPES 25%+ (0.04± Ac.)
	SITE LIGHTING
	PROPOSED LIMIT OF DISTURBANCE

DATA SOURCES:
 EXISTING OFF-SITE TOPOGRAPHY SHOWN PER HOWARD COUNTY OIT/GIS, BASED ON MARYLAND COORDINATE SYSTEM, NAD-83(1981), NAVD-88.
 EXISTING ON-SITE TOPOGRAPHY AND BOUNDARY SHOWN PER FIELD RUN SURVEY PERFORMED BY PROFESSIONAL SURVEYS, LLC COMPLETED IN JULY 2012. EXISTING SOILS SHOWN PER USDA WEB SOIL SURVEY.

DDC
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 Surveyors
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 192 East Main Street
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OWNER:
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 DON LYNCH
 PO BOX 793
 VALLEY Forge, PA 19482
 (301)620-1879

DEVELOPER:
 MEADOWOOD-DORSEY RUN, LLC
 THOM MOORE
 1202 SHADY CREEK ROAD
 MARRIOTTVILLE, MD 21104
 (410)469-3380

SITE ADDRESS:
 10097 BALTIMORE NATIONAL PIKE
 BALTIMORE, MD

WALGREENS
 10097 BALTIMORE NATIONAL PIKE

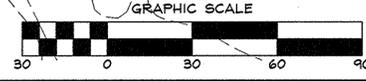
GRADING PLAN

let, Council District 2nd Election District Deed 3492/22
 District Howard County, MD

February 24, 2014
 DATE

Professional Certification
 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. 27020. Expiration Date 02/24/2017

W.S. JIR
 P.E. 27020



APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION
 3-7-14
 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT
 3-13-14
 DATE

DIRECTOR
 3/17/14
 DATE

NO.	DESCRIPTION OF CHANGES	DRN.	REV.	DATE
1	PER AS-BUILT DATA	WHE	4-27-15	
CO. FILE #:	DES. BY: BKC			
TAX ACC. #: D2-235900	DRN. BY: CTS			
TAX MAP: 24	CHK. BY: PGC			
BLOCK / GRID: 2	DATE: 2/24/14			
PARCEL #: 66	DDC JOB#: 11092.1			
ZONE / USE: B-2	SHEET NUMBER:			
DWG. SCALE: 1"=30'	6 of 18			

MARYLAND ROUTE 40
 MARYLAND STATE HIGHWAY
 INTERMEDIATE ARTERIAL
 150' RIGHT OF WAY
 SHA PLAT 3123 AND 3369

DRAWING LEGEND

- 682 EXISTING MINOR CONTOUR (2' INTERVAL)
- 680 EXISTING MAJOR CONTOUR (10' INTERVAL)
- ADJACENT PROPERTY LINE
- N 06°45'45" W 120.00' EXISTING PROPERTY BOUNDARY
- EX. ROAD / EDGE OF PAVING
- EX. SEWER LINE & MANHOLES, CLEAN-OUTS
- EX. OVERHEAD ELECTRIC & UTILITY POLES
- 682 PROPOSED MINOR CONTOUR (2' INTERVAL)
- 680 PROPOSED MAJOR CONTOUR (10' INTERVAL)
- PROPOSED PRIVATE ROAD/DRIVE CENTERLINE
- EX. BUILDING
- PROPOSED BUILDING EXPANSION
- PROPOSED SPOT ELEVATION & FLOW ARROW
- EXISTING TREELINE
- SOIL DELINEATION LINE
- PROPOSED DRAINAGE DIVIDE
- DF DF DF CLEAN WATER DIVERSION FENCE
- SSF SSF SSF SUPER SILT FENCE
- PROPOSED LIMIT OF DISTURBANCE

- STABILIZED CONSTRUCTION ENTRANCE WITH MOUNTABLE BERM
- SIP STANDARD INLET PROTECTION
- AGIP AT GRADE INLET PROTECTION
- CIP CURB INLET PROTECTION

BY THE DEVELOPER:
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL 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. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Thomas B. McKee 2/27/14
 DEVELOPER (SIGNATURE) DATE
 THOMAS B. MCKEE 2/27/14
 DEVELOPER (PRINT) DATE

ENGINEER
 I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION 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.

Paul G. Cavanaugh 2/27/14
 ENGINEER (SIGNATURE) DATE
 PAUL G. CAVANAUGH 2/27/14
 ENGINEER (PRINT) DATE

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

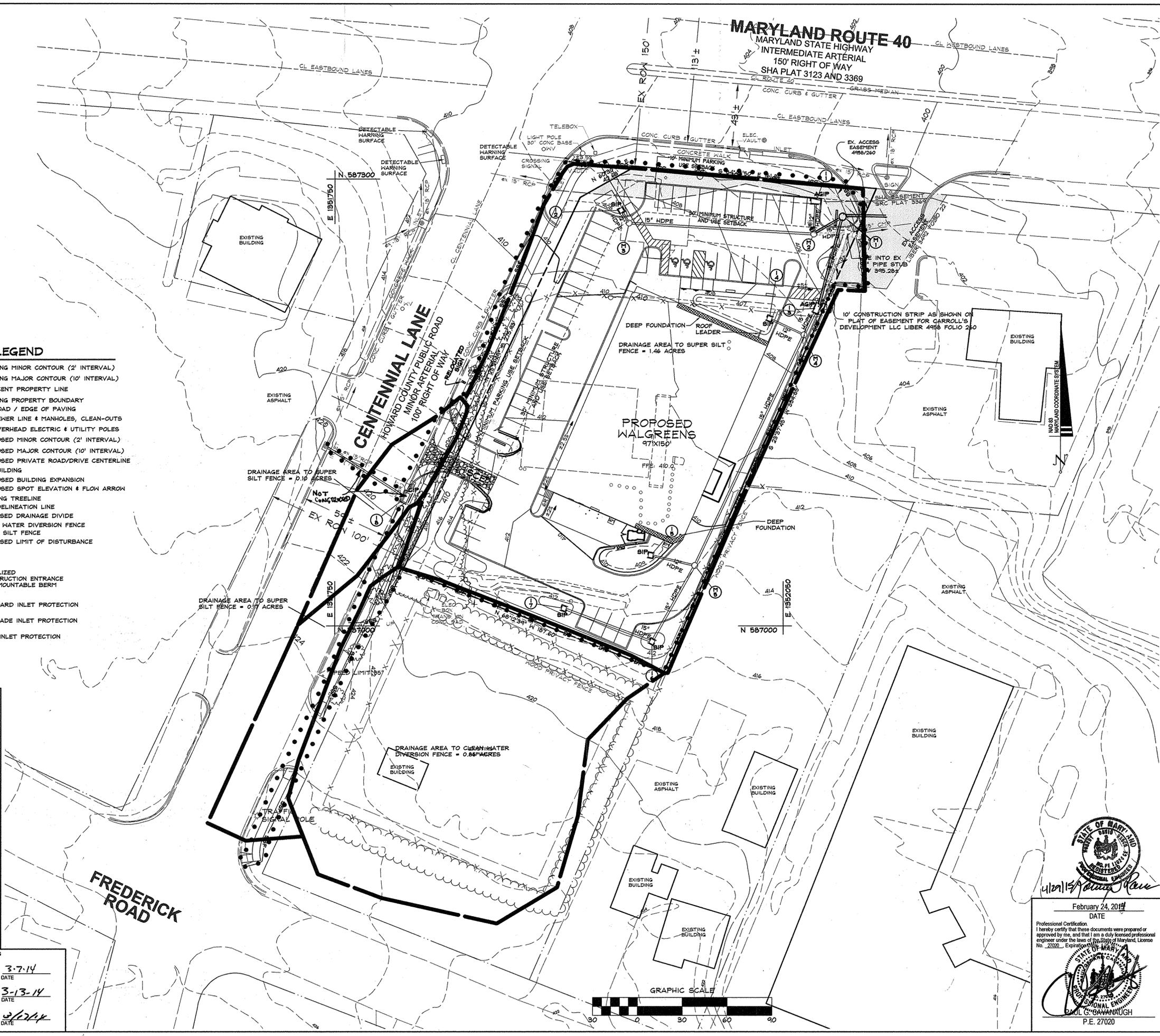
John B. Roberts 2/27/14
 HOWARD SOIL CONSERVATION DISTRICT (SIGNATURE) DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Clendenen 3-7-14
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Kevin J. Leland 3-13-14
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Patrick A. Gagle 3/27/14
 DIRECTOR DATE



STOCKPILE NOTE:
 1. STOCKPILING WILL NOT BE PERMITTED ON THIS SITE.

DATA SOURCES:
 EXISTING OFFSITE TOPOGRAPHY SHOWN PER HOWARD COUNTY OIT/GIS, BASED ON MARYLAND COORDINATE SYSTEM, NAD-83(1991), NAVD-88. EXISTING ON-SITE TOPOGRAPHY AND BOUNDARY SHOWN PER FIELD RUN SURVEY PERFORMED BY PROFESSIONAL SURVEYS, LLC COMPLETED IN JULY 2012. EXISTING SOILS SHOWN PER USDA WEB SOIL SURVEY.

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DEVELOPER:
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 THOM MCKEE
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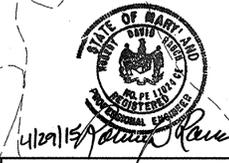
SITE ADDRESS:
 10097 BALTIMORE NATIONAL PIKE
 BALTIMORE, MD

10097 BALTIMORE NATIONAL PIKE
SEDIMENT & EROSION CONTROL PLAN

1st Council District 2nd Election District Deed 3492/22 Howard County, MD

NO.	DESCRIPTION OF CHANGES	DRN.	REV.	DATE
1	PER AS-BUILT DATA			4-23-15

CO. FILE #:	DES. BY: BKC
TAX ACC. #: 02-235900	DRN. BY: CTS
TAX MAP: 24	CHK. BY: PGC
BLOCK / GRID: 2	DATE: 2/24/14
PARCEL #: 66	DDC JOB #: 11092.1
ZONE / USE: B-2	SHEET NUMBER:
DWG. SCALE: 1"=30'	7 of 18



February 24, 2014
 DATE

Professional Certification
 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. 22020. Expiration 01/01/2015.

Paul G. Cavanaugh
 PAUL G. CAVANAUGH
 P.E. 27020



STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

- A. Adequate Vegetative Establishment**
- Insect areas for vegetative establishment and make necessary repairs, replacements, and reseeding within the planting season.
 - Adequate vegetative stabilization requires 95 percent groundcover.
 - If an area has less than 40 percent groundcover, restabilize following the original recommendations for lime, fertilizer, seedbed preparation, and seeding.
 - Maintenance fertilizer rates for permanent seeding are shown in Table B.6.
- B. Soil Preparation**
- Temporary Stabilization**
 - Seedbed preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened, it must not be rolled or dragged smooth but left in the roughened condition. Slopes 3:1 or flatter one to be tracked with ridges running parallel to the contour of the slopes.
 - Apply fertilizer and lime as prescribed on the plans.
 - Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable means.
 - Permanent Stabilization**
 - A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishments are:
 - Soil pH between 6.0 and 7.0.
 - Soluble salts less than 500 parts per million (ppm).
 - Soil contains less than 40 percent clay but enough fine grained material (greater than 30 percent silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception: if leucoglossa will be planted, then a sandy soil less than 30 percent silt plus clay would be acceptable.
 - Soil contains 1.5 percent minimum organic matter by weight.
 - Soil contains sufficient pore space to permit adequate root penetration.
 - Application of amendments or topsoil is required if on-site soils do not meet the above conditions.
 - Graded areas must be maintained in a true and even grade as specified on the approved plan, then scarified or otherwise loosened to a depth of 3 to 5 inches.
 - Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test.
 - Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Rotate lawn areas to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface where site conditions will not permit normal seedbed preparation. 3:1 or flatter with tracked equipment leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. Leave the top 1 to 2 inches of soil loose. Excessive loosening may be unnecessary on newly disturbed areas.

- A. Topsoiling**
- Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, material toxic to plants, and/or unacceptable soil gradation.
 - Topsoil salvaged from an existing site may be used provided it meets the standards set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the regional soil profile section in the Soil Survey published by USDA-NRCS.
 - Topsoiling is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so acidic that treatment with limestone is not feasible.
 - Areas having slopes steeper than 2:1 require special consideration and design.
 - Topsoil Specifications: Soil to be used as topsoil must meet the following criteria:
 - Topsoil must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate authority. Topsoil must be a mixture of contrasting textured subsoils and must contain less than 5 percent by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1/2 inches in diameter.
 - Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, thistle, or others as specified.
 - Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
 - Erosion and sediment control practices must be maintained when applying topsoil.

BY THE DEVELOPER:
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE RECEIVED CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEGINNING THE PROJECT. I/WE ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

DEVELOPER(S) SIGNATURE(S) DATE
THOMAS B. MCKEE 2/21/14

DEVELOPER PRINT NAME DATE
THOMAS B. MCKEE 2/21/14

ENGINEER:
I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION 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.

ENGINEER(S) SIGNATURE(S) DATE
Paul G. Cavanaugh 2/27/14

ENGINEER PRINT NAME DATE
PAUL G. CAVANAUGH 2/27/14

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

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Engineering Division DATE
3-7-14

Chief, Division of Land Development DATE
3-13-14

Director DATE
3/13/14

- Uniformly distribute topsoil in a 5 to 8 inch layer and lightly compact to a minimum thickness of 4 inches. Spreading is to be performed in such a manner that seedbed preparation proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from the above operations must be corrected in order to prevent the formation of depressions or water pockets.
 - Topsoil must not be placed if the topsoil or subsoil is a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.
- C. Soil Amendments (Fertilizer and Lime Specifications)**
- Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas of 5 acres or more. Soil analysis may be performed by a recognized private or commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
 - Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers must all be delivered to the site fully labeled according to the applicable laws and must bear the name, trade name or trademark and warranty of the producer.
 - Lime materials must be ground limestone (hydrated or burnt lime) may be substituted except when hydroseeding, which contains at least 50 percent total oxides (calcium oxide plus magnesium oxide). Limestone must be ground to such fineness that at least 50 percent will pass through a #100 mesh sieve and 98 to 100 percent will pass through a #200 mesh sieve.
 - Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by disking or other suitable means.
 - Where the subsoil is either highly acidic or composed of heavy clay, ground limestone at the rate of 3 to 5 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil.

- D. Seeding**
- Specifications**
 - All seed must meet the requirements of the Maryland State Seed Laboratory. All seed used must have been tested within the 6 months immediately preceding the date of sowing such material or any seed. Refer to Table 4 regarding the quality of seed. Seed tags must be available upon request to the inspector to verify type of seed and seeding rate.
 - Mulch alone may be applied between the fall and spring seeding dates only if the ground receiving the seed mixture must be applied when the ground thaws.
 - Incubants: The incubant for treating legume seed in the seed mixtures must be a pure culture of rhizobium fixing bacteria prepared specifically for the species. Incubants must not be used later than the date indicated on the container. Add fresh incubants as directed on the package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep incubants as cool as possible until application. Incubants above 75 to 80 degrees Fahrenheit can weaken bacteria and make the inoculant less effective.
 - Sod or seed must not be placed on soil which has been treated with herbicides or other chemicals. The herbicide must be sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials.
 - Application**
 - Dry Seeding:** This includes use of conventional drop or broadcast spreaders.
 - Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table B.1, Permanent Seeding Table B.3, or site-specific seeding summaries.
 - Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction.
 - Drill or Cultipacker Seeding:** Mechanized seeders that apply and cover seed with soil.
 - Cultipacker seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seeded must be firm after planting.
 - Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction.
 - Hydroseeding:** Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer).
 - If fertilizer is being applied at the time of seeding, the application rates should not exceed the following: nitrogen, 100 pounds per acre total of soluble nitrogen; P2O5 (phosphorus), 200 pounds per acre; K2O (potassium), 200 pounds per acre.
 - Lime: Use only ground agricultural limestone (up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.
 - Mix seed and fertilizer on site and seed immediately and without interruption.
 - When hydroseeding do not incorporate seed into the soil.

- E. Mulching**
- Mulch Materials (in order of preference)**
 - Straw consisting of thoroughly threshed wheat, rye, oat, or barley and reasonably bright in color. Straw is to be free of noxious weed seeds as specified in the Maryland Seed Law and not musty, moldy, caked, decayed, or excessively dusty. Note: Use only sterile straw mulch in areas where one species of grass is desired.
 - Wood Cellulose Fiber Mulch (WCFFM) consisting of specially prepared wood cellulose processed into a uniform fibrous physical state.
 - WCFFM is to be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry.
 - WCFFM, including dye, must contain no germination or growth inhibiting factors.
 - WCFFM materials are to be manufactured and processed in such a manner that the wood cellulose fibers will remain in uniform suspension in water under agitation and will blend with seed, fertilizer, and other additives to form a homogeneous slurry. The resulting seedbed must form a blatter-like ground cover, on application, having moisture absorption and retention properties and must cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
 - WCFFM material must not contain elements or compounds at concentration levels that will be phytotoxic.
 - Fiber length of approximately 1 millimeter, diameter approximately 1 millimeter, pH range of 4.0 to 8.5, ash content of 1.6 percent maximum and water holding capacity of 90 percent minimum.

- Application**
 - Apply mulch to all seeded areas immediately after seeding.
 - When straw mulch is used, spread it over all seeded areas at the rate of 2 tons per acre to a uniform loose depth of 1 to 2 inches. Apply mulch to achieve a uniform distribution and depth such that the soil surface is not exposed. If mulch is applied without anchoring tool, increase the application rate to 2.5 tons per acre.
 - Wood cellulose fiber used as mulch must be applied at a net dry weight of 1500 pounds per acre. Mix the wood cellulose fiber with water to attain a mixture with a maximum of 80 pounds of wood cellulose fiber per 100 gallons per water.
- Anchoring**
 - Perform mulch anchoring immediately following applications of mulch to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon the size of the area and the nature of the soil:
 - A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of 2 inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should follow the contour.
 - Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a rate of 100 to 150 pounds per acre. Mix the wood cellulose fiber with water at a maximum of 80 pounds of wood cellulose fiber per 100 gallons of water.
 - Synthetic binders such as Acrylic Latex (Agro-Tack), DCA-70, Petro-tack, Terra Top II, Terra Tack AR or other approved equal may be used. Follow application rates as approved by the manufacturer. Application of liquid binders needs to be heavier at the edges where wind catches, such as in valleys and on valley sides. Use of synthetic binders is strictly prohibited.
 - Lightweight plastic netting may be stapled over the mulch according to manufacturer's instructions. Netting is usually available in rolls 4 to 15 feet wide and 300 to 500 feet long.

Hardness Zone (from Figure B.3):
Seed Mixture (from Table B.1):

No.	Species	Application Rate (lb/acre)	Seeding Dates	Seeding Depths	Fertilizer Rate (10-20-20)	Lime Rate
					48 lb/acre (10 lb/1000 sq ft)	2 tons/acre (90 lb/1000 sq ft)

Hardness Zone (from Figure B.3):
Seed Mixture (from Table B.3):

No.	Species	Application Rate (lb/acre)	Seeding Dates	Seeding Depths	N	P2O5	K2O	Lime Rate
			1/4-1/2 in	45 lb/acre (10 lb/1000 sq ft)	90 lb/acre (2 lb/1000 sq ft)	90 lb/acre (2 lb/1000 sq ft)	2 tons/acre (90 lb/1000 sq ft)	
			1/4-1/2 in	45 lb/acre (10 lb/1000 sq ft)	90 lb/acre (2 lb/1000 sq ft)	90 lb/acre (2 lb/1000 sq ft)	2 tons/acre (90 lb/1000 sq ft)	

- G. Permanent Stabilization**
Long-lived perennial grasses and legumes used on exposed soils to establish permanent ground cover where needed for 6 months or more.
- H. Seed Mixtures**
- General Use**
 - Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardness Zone (from Figure B.3) and based on the site condition and purpose found in Table B.2. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The Summary is to be placed on the plan.
 - Additional planting specifications for exceptional sites such as shorelines, stream banks or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-NRCS Technical Field Office Guide, Section 542 - Critical Area Planning.
 - For sites having disturbed area over 5 acres, use and show the rates recommended by the soils testing agency.
 - For areas receiving low maintenance, apply urea form fertilizer (46-0-0) at 3 to 12 pounds per 1000 square feet (150 pounds per acre) at the time of seeding in addition to the soil amendments shown in the Permanent Seeding Summary.
 - Turfgrass Mixtures**
 - Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenance.
 - Select one or more of the species or mixtures listed below placed on the site conditions or purpose. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The summary is to be placed on the plan.
 - Kentucky Bluegrass: Full Sun Mixture:** For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and Eastern Shore. Seeding rate: Certified Kentucky Bluegrass Cultivars Seeding Rate: 15 to 2.8 pounds per 1000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.
 - Kentucky Bluegrass/Perennial Ryegrass: Full Sun Mixture:** For use in areas where intensive management is necessary and when turf will receive medium to intensive management. Seeding rate: Certified Kentucky Bluegrass Cultivars Seeding Rate: 2 pounds mixture per 1000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.
 - Tall Fescue/Kentucky Bluegrass: Full Sun Mixture:** For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixtures include: Certified Tall Fescue Cultivars 95 to 100 percent, Certified Kentucky Bluegrass Cultivars 0 to 5 percent. Seeding Rate: 5 to 8 pounds per 1000 square feet. One or more cultivars may be selected.
 - Kentucky Bluegrass/Fine Fescue: Shade Mixture:** For use in areas with shade and/or in areas receiving low to medium management in full sun to medium shade. Recommended mixtures include: Certified Kentucky Bluegrass Cultivars 30 to 40 percent and Certified Fine Fescue and 60 to 70 percent. Seeding Rate: 1 1/2 to 3 pounds per 1000 square feet.

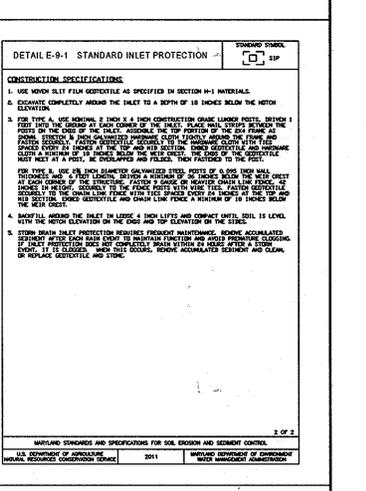
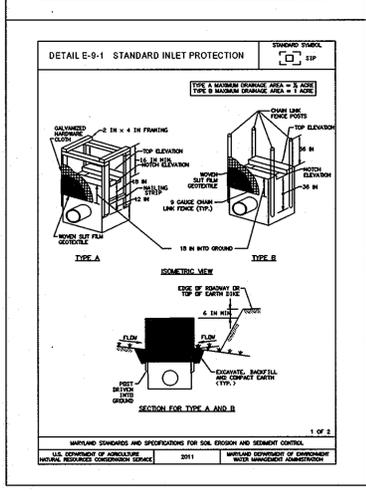
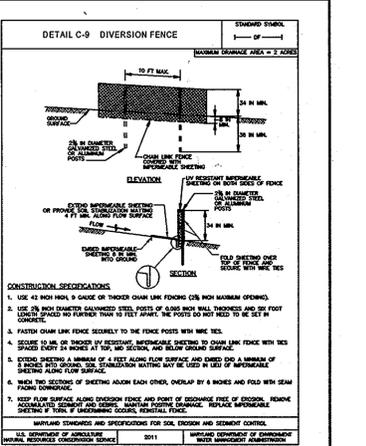
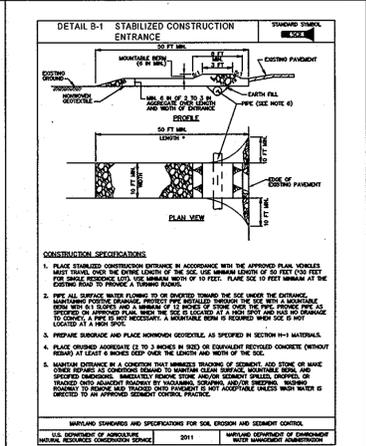
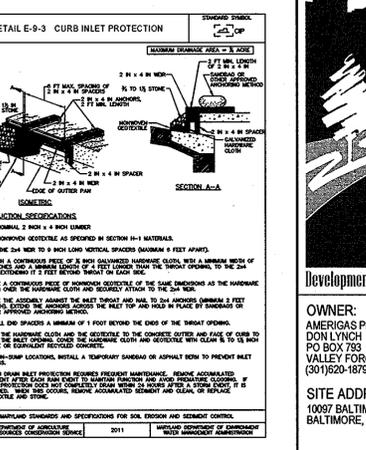
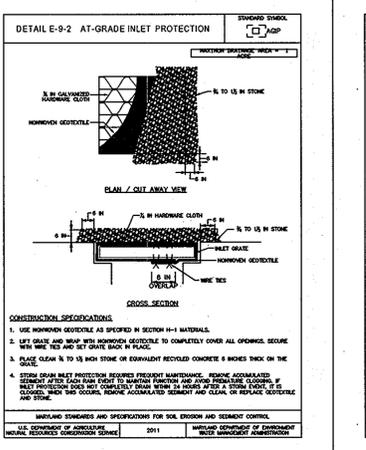
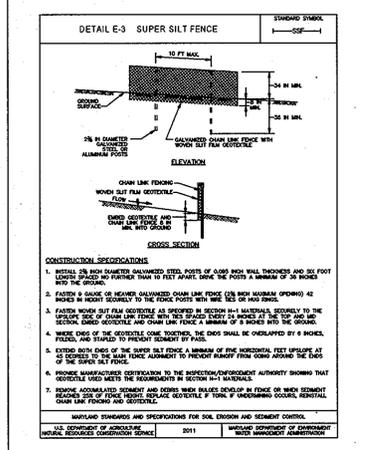
- I. Ideal Times of Seeding for Turf Grass Mixtures**
- Western MD:** March 15 to June 1, August 1 to October 1 (Hardness Zones: 5b, 6a)
- Central MD:** March 1 to May 15, August 15 to October 15 (Hardness Zones: 6b)
- Southern MD, Eastern Shore:** March 1 to May 15, August 15 to October 15 (Hardness Zones: 6b, 7b)
- Till areas to receive seed by disking or other approved methods to a depth of 2 to 4 inches, level and rake the areas to prepare a proper seedbed. Remove stones and debris over 1/2 inches in diameter. The resulting seedbed must be in such condition that future mowing of grasses will pose no difficulty.
 - If soil moisture is deficient, supply new seedlings with adequate water for plant growth (1/2 to 1 inch every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.
 - Sod: To provide quick cover on disturbed areas (2:1 grade or flatter):
 - Class of turfgrass sod must be Maryland State Certified. Sod should be made available to the job foreman on 3/4 inch.
 - Sod must be machine cut at a uniform soil thickness of 3/4 inch, plus or minus 1/4 inch, at the time of cutting. Breakover for machines must include a depth of 4 inches. Mower pads and torn or uneven edges will not be acceptable.
 - Standard size sections of sod must be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section.
 - Sod must not be harvested or transported when moisture (excessively dry or wet) may adversely affect its survival.
 - Sod must be harvested, delivered, and installed within a period of 36 hours. Sod not transported within this period must be approved by an agronomist or soil scientist prior to its installation.

- Sod Installation**
 - During periods of excessively high temperature or in areas having dry subsoil, lightly irrigate the subsoil immediately prior to laying the sod.
 - Lay the first row of sod in a straight line with subsequent rows placed parallel to it and tightly wedged against each other. Stagger lateral joints to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots.
 - Whenever possible, lay sod with the long edges parallel to the contour and with staggering joints. Roll and tamp, peg or otherwise secure the sod to prevent slippage on slopes. Ensure solid contact exists between sod roots and the underlying soil surface.
 - Water the sod immediately following rolling and tamping until the underside of the new sod and soil surface below the sod are fully moist. Do not use a depth of watering less than 2 inches and irrigating for any piece of sod within eight hours.
- Sod Maintenance**
 - In the absence of adequate rainfall, water daily during the first weeks or so often and sufficiently as necessary to maintain moist soil to a depth of 4 inches. Water sod during the rest of the day to prevent wilting.
 - After the first week, soil watering is required as necessary to maintain adequate moisture content.
 - Do not mow until the sod is firmly rooted. No more than 1/3 of the grass leaf must be cut by the initial cutting or subsequent cuttings. Maintain a grass height of at least 3 inches unless otherwise specified.

- Sequence of construction**
- Obtain a Grading Permit. (1 day)
 - Notify "Miss Utility" at least 48 hours before beginning any work at 1-800-257-7777. Notify Howard County Department of Inspections, Licenses and Permits, Sediment Control Division at 410-313-1855 at least 24 hours before starting any work. (2 days)
 - Install stabilized construction entrance. (1 day)
 - Install perimeter super silt fence and diversion fence. (2 days)
 - With perimeter sediment control devices installed and with permission from the Sediment Control Inspector, clear site. (1 week)
 - Dust control will be provided for all disturbed areas, refer to "2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control", Pg. H.22, for acceptable methods and applications for dust control. (Ongoing)
 - Install storm drain system and provide inlet protection at structures. Inlets 1-3 and 1-5 are to have standard inlet protection, Type-B. (2 weeks)
 - With all contributing areas stabilized, install micro-bioretenation areas. (2 weeks)
 - With all disturbed areas stabilized, and with permission from the sediment control inspector, remove sediment control devices and clean out storm drains. (1 week)
 - Notify Howard County Office of Inspections and Permits for a final inspection of the completed site. (2 days)

Howard County Soil Conservation District Standard Sediment Control Notes

- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (919-1855).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
- Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days for all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 7 of the HOWARD COUNTY DESIGN MANUAL, Sediment and Erosion Control.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding, sod, temporary seeding and mulching, all in section B-4. Temporary stabilization with mulch alone can only be done when recommended seeding rates do not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- Site analysis**
Total area of site: 1.871± Acres
Area disturbed: 1.87± Acres
Area to be seeded or paved: 1.24± Acres
Area to be vegetatively stabilized: 0.53± Acres
Total cut: 258'± CY
Total fill: 258'± CY
Offsite waste/borrow area location: N/A
- All quantities shown on plans are for reviewing agency only. Contractor shall verify quantities for bidding.
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
- All sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of the installation of perimeter erosion and sediment controls but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspecting agency is made.
- Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized by the end of each work day, whichever is shorter.



DDC Development Design Consultants

Planners
Surveyors
Engineers
Landscape Architects

192 East Main Street
Westminster, MD 21157
410.386.0560
410.386.0564 (Fax)
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(30)1920-1879

DEVELOPER:
MEADOWOOD-DORSEY RUN, LLC
THOM MCKEE
1202 SHADY CREEK ROAD
MARRIOTTVILLE, MD 21104
(410)469-5080

SITE ADDRESS:
10977 BALTIMORE NATIONAL PIKE
BALTIMORE, MD

WALGREENS
10977 BALTIMORE NATIONAL PIKE

SEDIMENT & EROSION CONTROL NOTES & DETAILS

1st Council District, 2nd Election District, Dred 3492/22, Howard County, MD

REVISIONS

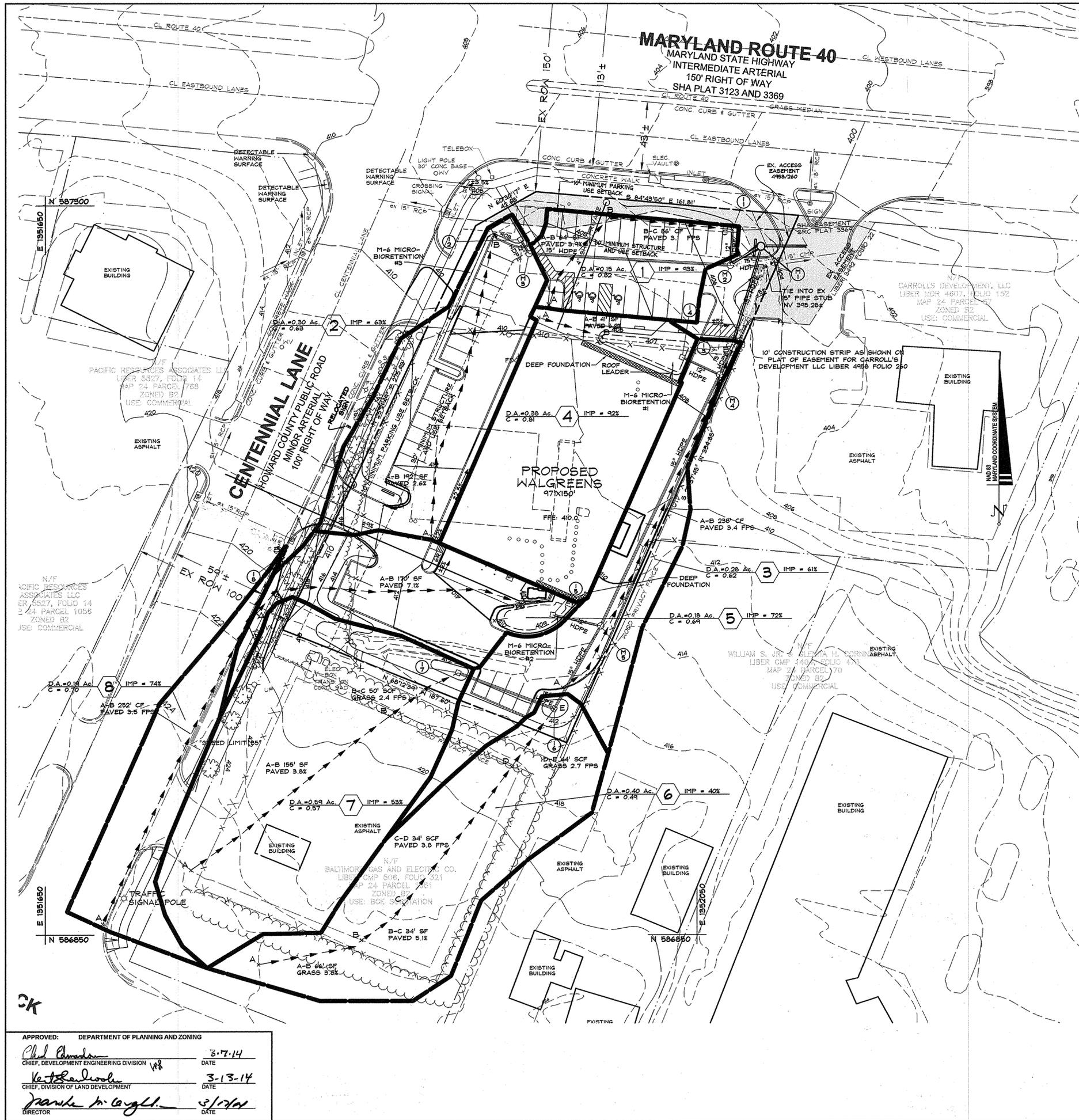
NO.	DESCRIPTION OF CHANGES	DRN.	REV.	DATE
CO. FILE #		DRN. BY: BKC		
TAX ACC. # 02-23590		DRN. BY: CTS		
TAX MAP: 24		CHK. BY: PGC		
BLOCK / GRID: 2		DATE: 2/24/14		
PARCEL # 66		DDC JOB#: 11092.1		
ZONE / USE: B-2		SHEET NUMBER:		
DWG. SCALE: NOT TO SCALE				

February 24, 2014
DATE

Professional Certification
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. 20020. Expired 12/31/2014.

PAUL G. CAVANAUGH
P.E. 27020

8 of 18

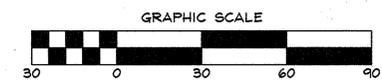


STORM DRAIN STRUCTURE SCHEDULE						
NO.	TYPE	DETAIL	INV. IN	INV. OUT	RIM	LOCATION
M-1	48" STD PRECAST MH	G-5.12	400.89, 401.02	395.28	404.25	N 587264.49 E 1352092.16
M-2	48" STD PRECAST MH	G-5.12	401.70, 401.30	401.10	405.28	N 587263.19 E 1352070.30
M-3	48" STD PRECAST MH	G-5.12	402.92	402.67	409.19	N 587270.47 E 1351946.7685
M-4	48" STD PRECAST MH	G-5.12	402.71, 401.84	401.60	407.04	N 587195.59 E 1352063.75
M-5	48" STD PRECAST MH	G-5.12	407.63, 403.82	403.57	410.38	N 587040.66 E 1351990.79
I-1	TYPE 'S' COMBO	D-4.32	-	401.90	GRATE=405.00	N 587285.25 E 1352071.67
I-2	TYPE 'D'	D-4.11	403.17	402.97	RIM=409.83 WEIR=409.00	N 587278.98 E 1351941.52
I-3	TYPE 'S' COMBO	D-4.32	401.49	401.29	GRATE=406.31	N 587213.41 E 1352072.53
I-4	TYPE 'D'	D-4.11	402.17	401.97	RIM=408.83 WEIR=408.00	N 587206.45 E 1352040.70
I-5	TYPE 'D'	D-4.11	404.17	403.97	RIM=410.43 WEIR=409.60	N 587053.53 E 1351963.45
I-6	YARD INLET	D-4.14	408.43	408.23	GRATE=411.50	N 586989.49 E 1351962.28
I-7	YARD INLET	D-4.14	-	408.75	GRATE=411.50	N 587011.80 E 1351903.26
I-8	TYPE A-10	D-4.03	-	414.95	FLOWLINE=418.95	N 587086.26 E 1351797.53

DRAINAGE AREA COMPS			
DA	"C" FACTOR	% IMPERVIOUS	ACRES
1(1-1)	0.82	93%	0.15
2(1-2/MB-3)	0.63	63%	0.30
3(1-3)	0.62	61%	0.28
4(1-4/MB-1)	0.81	92%	0.38
5(1-5/MB-2)	0.69	72%	0.18
6(1-6)	0.49	40%	0.40
7(1-7)	0.57	53%	0.59
8(1-8)	0.70	74%	0.19

PIPE SCHEDULE		
SIZE(IN.)	CATEGORY	LINEAR FT
12"	HDPE	88
15"	HDPE	514
15"	RCP	64

DATA SOURCES:
 EXISTING OFFSITE TOPOGRAPHY SHOWN PER HOWARD COUNTY CITY/GIS, BASED ON MARYLAND COORDINATE SYSTEM, NAD-83(1981), NAVD-88. EXISTING ONSITE TOPOGRAPHY AND BOUNDARY SHOWN PER FIELD RUN SURVEY PERFORMED BY PROFESSIONAL SURVEYS, LLC COMPLETED IN JULY 2012. EXISTING SOILS SHOWN PER USDA WEB SOIL SURVEY.



SOILS CHART			
CODE (CLASS)	NAME	HYDRIC (Y/N/INCL.)	K VALUE
U&B(D)	URBAN LAND-UDORTHERNTS COMPLEX	N	0.30

DDC
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 Engineers
 Landscape Architects

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HALGREENS
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STORM DRAIN DRAINAGE AREA MAP

1st Council District
 2nd Election District

Deed 3442/22
 Howard County, MD

REVISIONS			
NO.	DESCRIPTION OF CHANGES	DRN.	REV. DATE
1	PER AS-BUILT DATA	WHE	4-27-15

CO. FILE #:	DES. BY: BKC
TAX ACC. #: 02-235900	DRN. BY: CTS
TAX MAP: 24	CHK. BY: PGC
BLOCK / GRID: 2	DATE: 2/24/14
PARCEL #: 66	DDC JOB#: 11092.1
ZONE / USE: B-2	SHEET NUMBER:
DWG. SCALE: 1"=30'	10 of 18

February 24, 2014
 DATE

Professional Certification
 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. 22020. Expire 12/31/2017.

[Signature]
 P.E. 27020

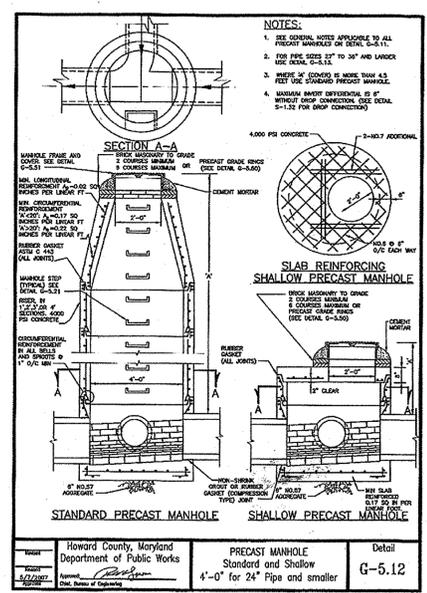
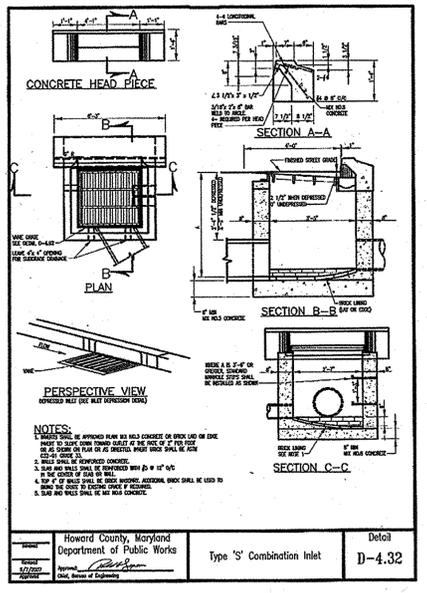
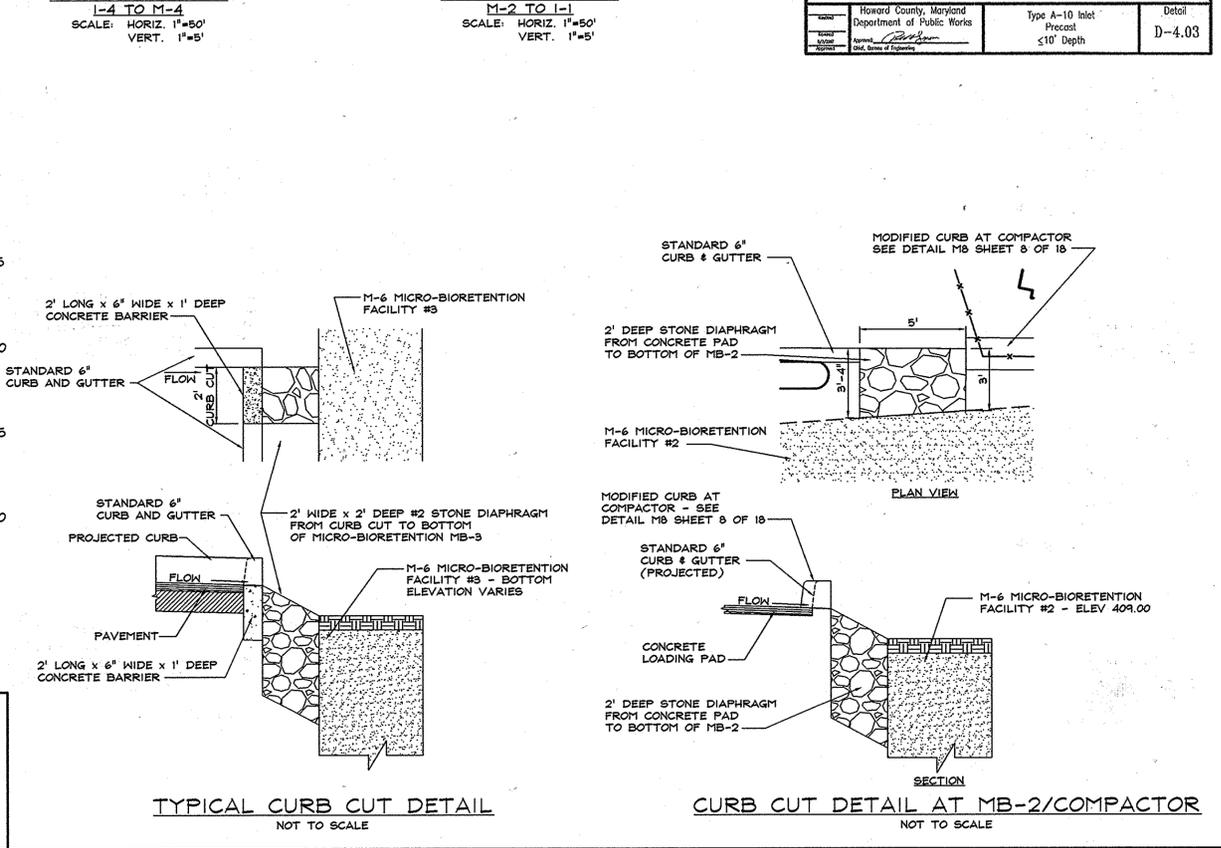
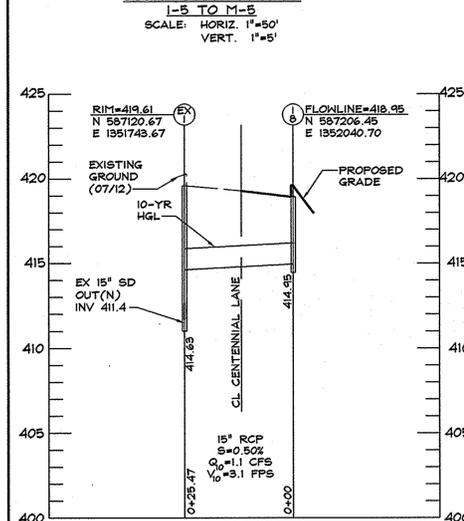
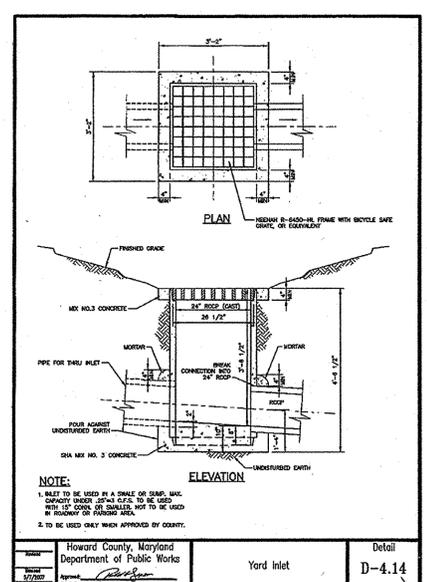
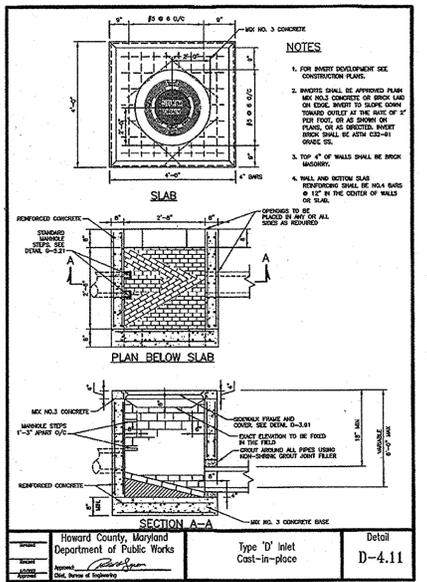
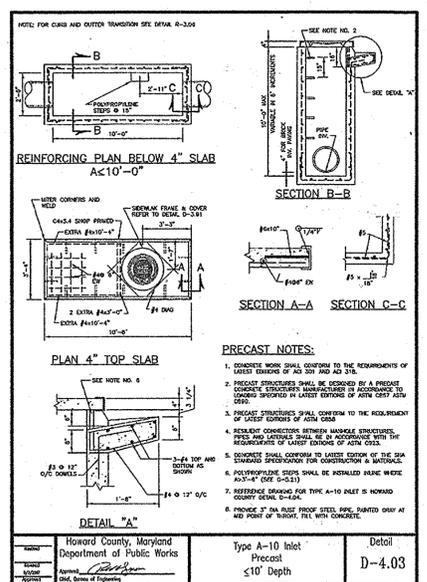
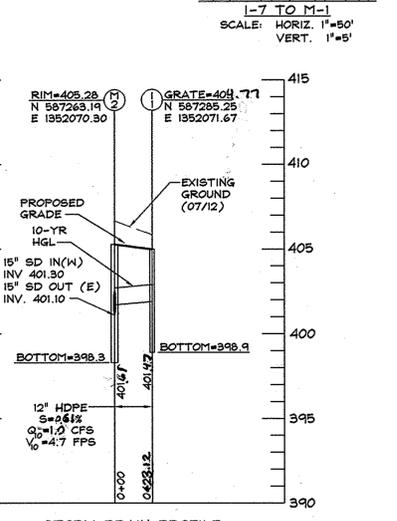
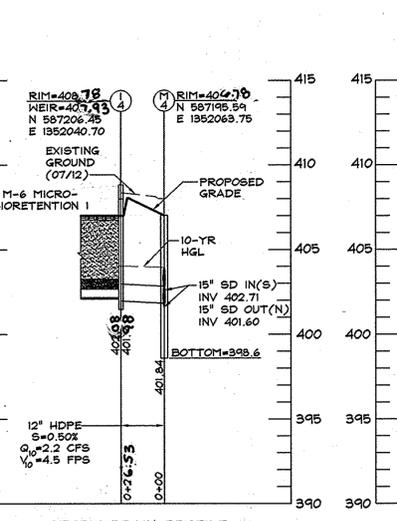
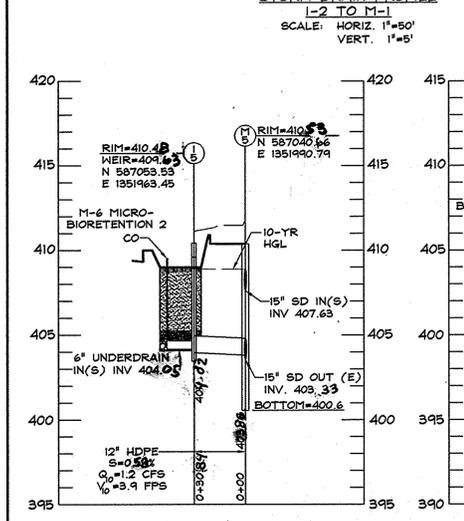
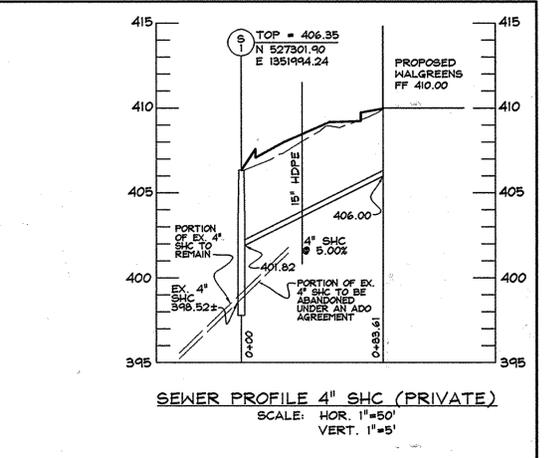
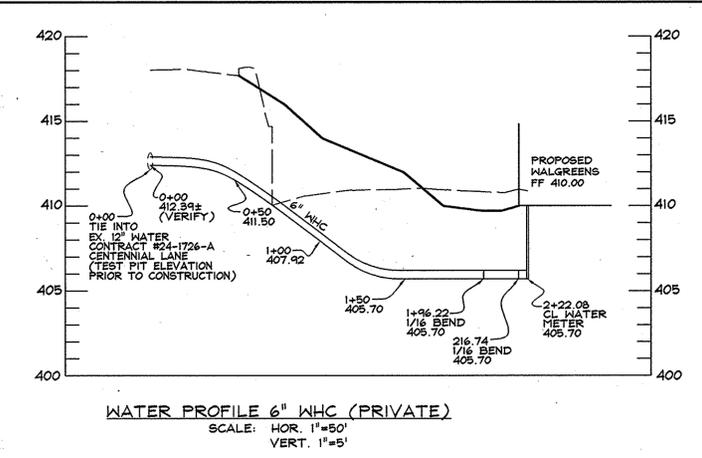
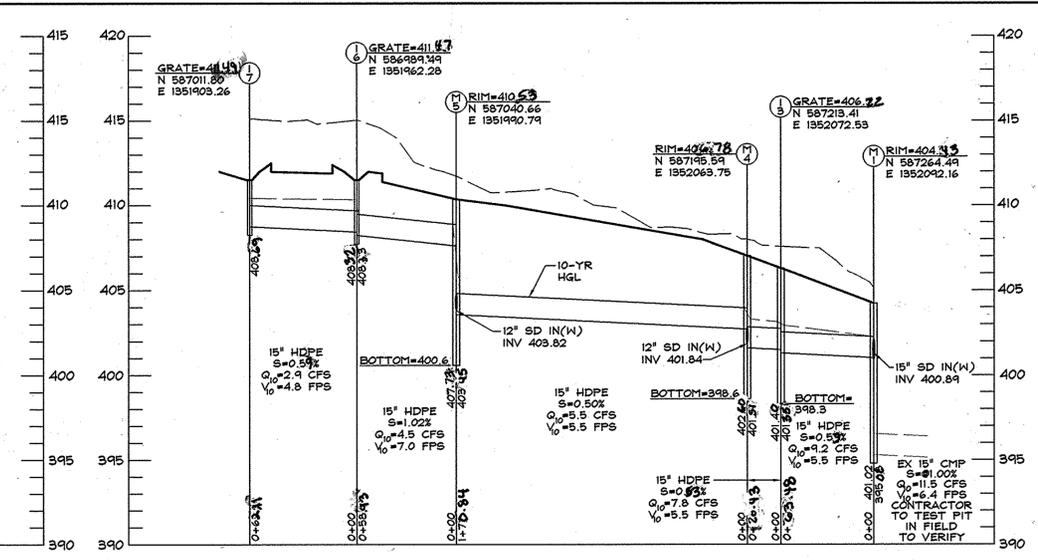
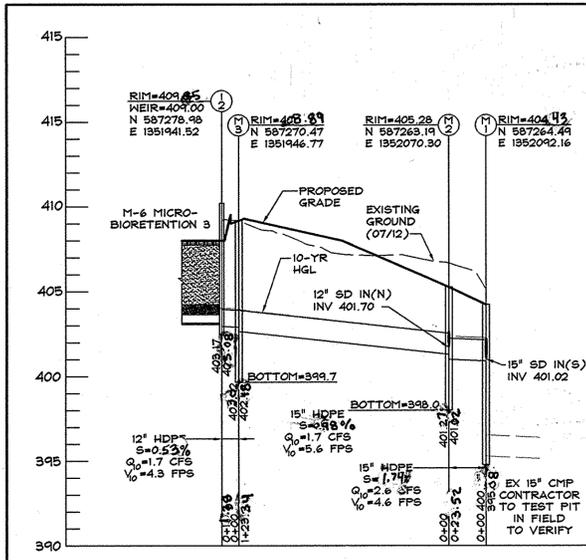


APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 3-7-14
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 3-13-14
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 3/17/14
 DIRECTOR DATE



DATA SOURCES:
EXISTING OFFSITE TOPOGRAPHY SHOWN PER HOWARD COUNTY OIT/GIS, BASED ON MARYLAND COORDINATE SYSTEM, NAD-83 (1983), NAVD-88. EXISTING ON-SITE TOPOGRAPHY AND BOUNDARY SHOWN PER FIELD SURVEY PERFORMED BY PROFESSIONAL SURVEYS, LLC COMPLETED IN JULY 2012. EXISTING SOILS SHOWN PER USDA WEB SOIL SURVEY.

DDC
Development Design Consultants

Planners
Surveyors
Engineers
Landscape Architects

192 East Main Street
Westminster, MD 21157
410.386.0560
410.386.0564 (Fax)
DDC@DDCinc.us
www.DDCinc.us

OWNER: AMERICAS PROPANE LP
DON LYNCH
PO BOX 793
VALLEY FORGE, PA 19482
(301)620-1879

DEVELOPER: MEADOWOOD-DORSEY RUN, LLC
TOM MCKEE
1202 SHADY CREEK ROAD
MARRIOTTVILLE, MD 21104
(410)659-5060

SITE ADDRESS: 10097 BALTIMORE NATIONAL PIKE
BALTIMORE, MD

WALGREENS
10097 BALTIMORE NATIONAL PIKE
STORM DRAIN
PROFILES AND
DETAILS

1st Council District
2nd Election District

Dead 3492/22
Howard County, MD

REVISIONS	
NO.	DESCRIPTION OF CHANGES
1	PER AS-BUILT DATA
CO. FILE #	DES. BY: CTS
TAX ACC. # 02-235900	DRN. BY: CTS
TAX MAP: 24	CHK. BY: PGC
BLOCK / GRID: 2	DATE: 2/24/14
PARCEL #: 66	DDC JOB#: 11092.1
ZONE / USE: B-2	SHEET NUMBER:
DWG. SCALE: AS SHOWN	11 of 18

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division
3-7-14
DATE

Chief, Division of Land Development
3-13-14
DATE

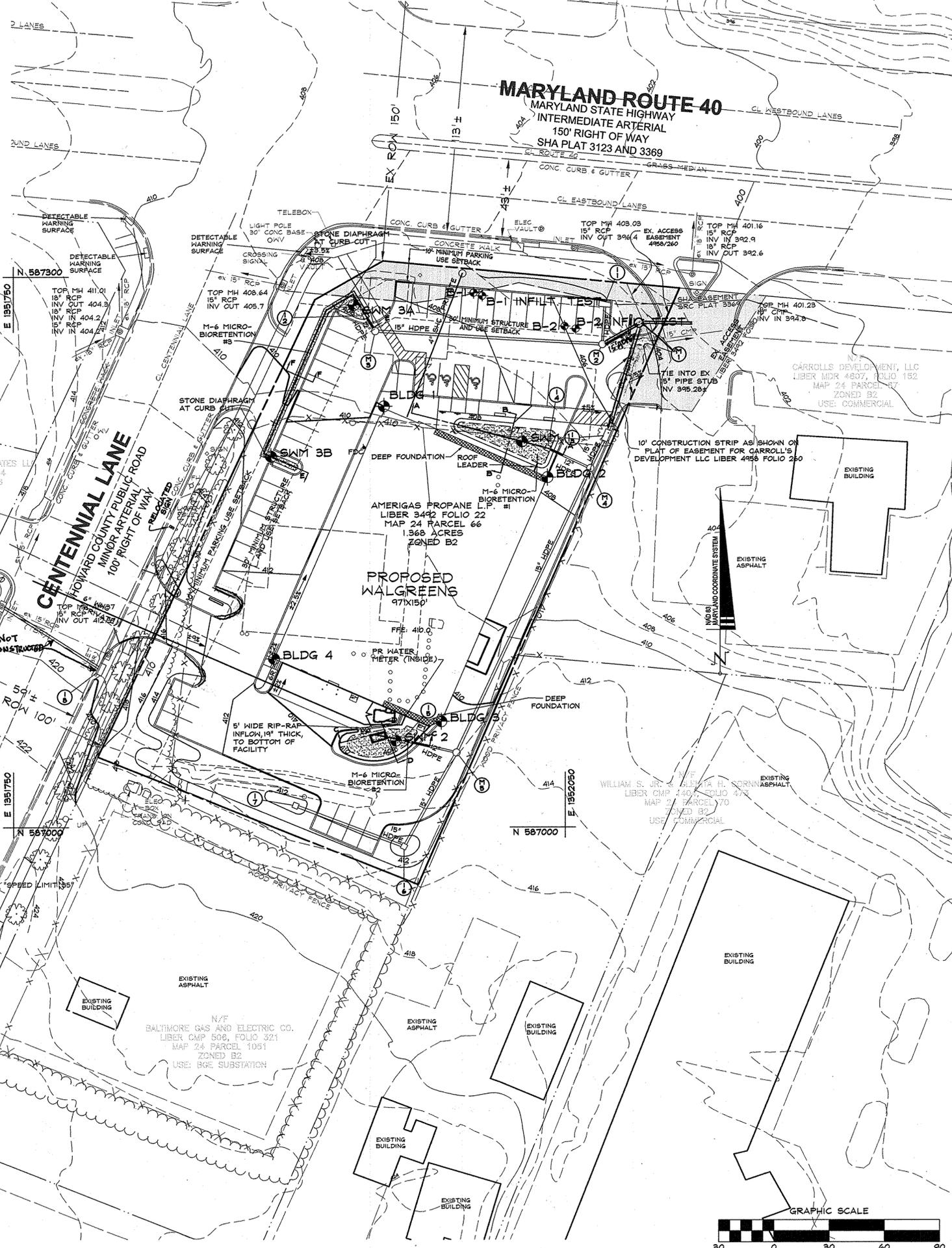
Director
3/17/14
DATE

February 24, 2014
DATE

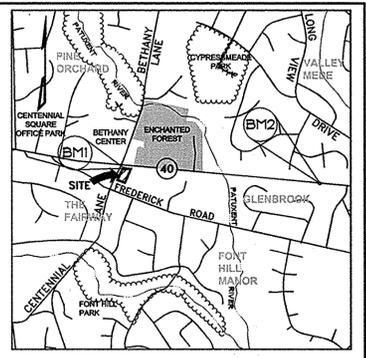
Professional Certification
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 27020. Expiration 08/17/2016.

PAUL G. LAMANAUGH
P.E. 27020

SWM SUMMARY TABLE			
	MICRO-BIORETENTION 1	MICRO-BIORETENTION 2	MICRO-BIORETENTION 3
FACILITY OWNERSHIP/MAINT.	PRIVATE	PRIVATE	PRIVATE
OWNER NAME	WALGREENS	WALGREENS	WALGREENS
DRAINAGE AREA TO FACILITY (Ac)	0.36	0.22	0.30
IMPERVIOUS AREA TREATED (Ac)	0.35	0.13	0.20
ESDV PROVIDED (cu-ft)	1,586	929	703
1-YR STORM, EXISTING AT DP (cfs)		3.8	
1-YR STORM, PR OUTFLOW (cfs)	1.1	0.5	0.7
1-YR WATER SURFACE ELEV (ft)	407.23	404.05	408.08
10-YR STORM, PR OUTFLOW (cfs)	2.2	1.2	1.7
10-YR WATER SURFACE ELEV (ft)	407.46	404.12	408.20
100-YR STORM, PR OUTFLOW (cfs)	2.9	1.8	2.4
100-YR WATER SURFACE ELEV (ft)	407.63	404.17	408.32
WATERSHED	0213105 - LITTLE PATUXENT RIVER		
ESDV REQUIRED IS 1,810 CF TREATING 0.53 AC. OF IMPERVIOUS - PONDING STORAGE REQUIRED IS 1,358 CF (75% OF ESDV)			
ESDV PROVIDED IS 3,176 CF TREATING 0.67 AC. OF IMPERVIOUS - PONDING STORAGE PROVIDED 1,365 CF			



BENCHMARK	
BENCHMARK #1	587307.78
N.	156148.67
E.M.	24471 - CONCRETE MONUMENT
ELEV.	407.44
BENCHMARK #2	584556.273
N.	156570.784
E.M.	2485 - CONCRETE MONUMENT
ELEV.	390.17
ADJ. MAP COORDINATES	
MAP 4815 C6	
N	391'63.00"
E	76'52.00"



DRAWING LEGEND	
---	EXISTING MINOR CONTOUR (2' INTERVAL)
---	EXISTING MAJOR CONTOUR (10' INTERVAL)
---	ADJACENT PROPERTY LINE
---	EXISTING PROPERTY BOUNDARY
---	EX. ROAD / EDGE OF PAVING
---	EX. SEWER LINE & MANHOLES, CLEAN-OUTS
---	EX. OVERHEAD ELECTRIC & UTILITY POLES
---	PROPOSED MINOR CONTOUR (2' INTERVAL)
---	PROPOSED MAJOR CONTOUR (10' INTERVAL)
---	PROPOSED PRIVATE ROAD/DRIVE CENTERLINE
---	EX. BUILDING
---	PROPOSED BUILDING EXPANSION
---	PROPOSED SPOT ELEVATION & FLOW ARROW
---	EXISTING TREELINE
---	SOIL DELINEATION LINE
---	PROPOSED MICRO-BIORETENTION FACILITY
+	PROPOSED OBSERVATION WELL
o	PROPOSED CLEANOUT

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WALGREENS
10097 BALTIMORE NATIONAL PIKE
STORMWATER MANAGEMENT PLAN

1st Council District
2nd Election District

Deed 3492/22
Howard County, MD

REVISIONS

NO.	DESCRIPTION OF CHANGES	DRN.	REV. DATE
1	PER AS-BUILT DATA	WMS	4-21-15

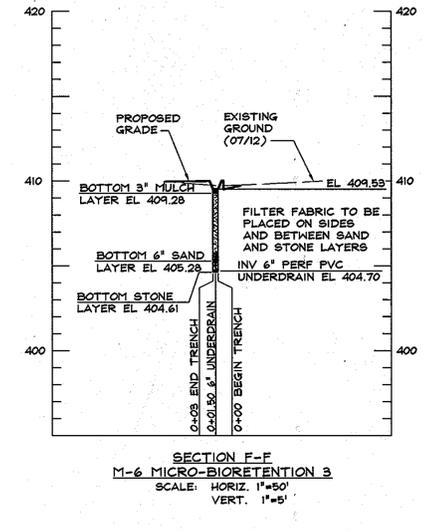
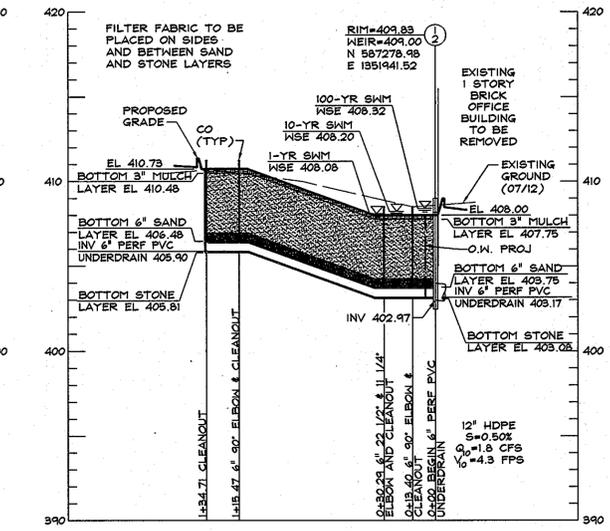
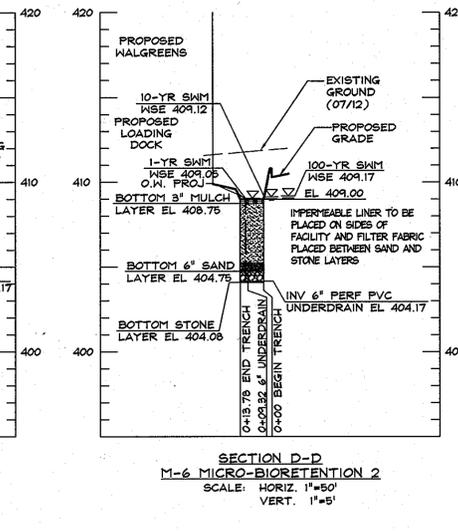
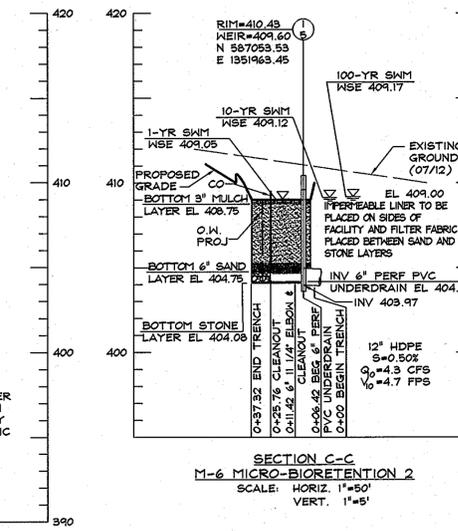
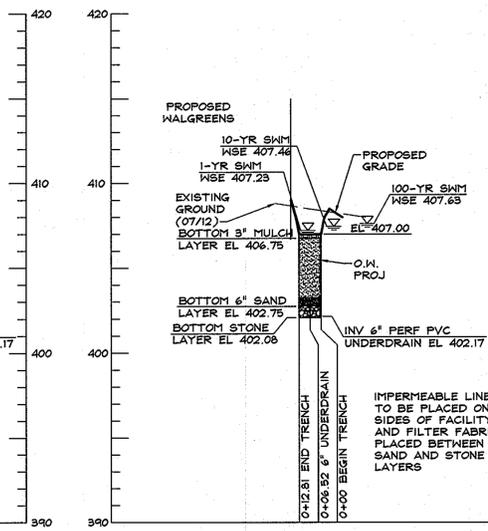
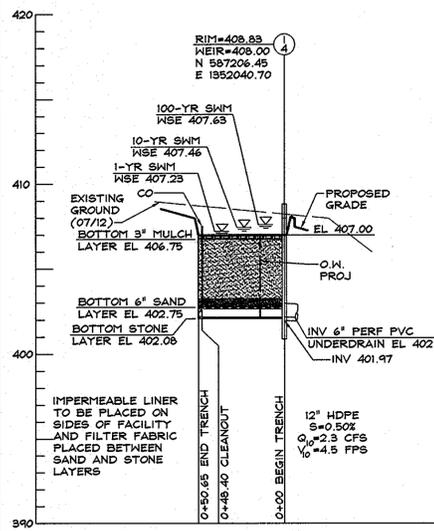
Professional Certification
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 27020 - Expiration Date 12-31-16

February 24, 2014
DATE

4/29/15 *Adrian K...*

Professional Engineer
FRANK J. LAVANNAUGH
P.E. 27020

HILLI-GARNER ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXAMINATION	
Project Name: 10097 Baltimore National Pike, Baltimore, MD	Sheet No: 01111A
Client: AMERIGAS PROPANE LP	Scale: AS SHOWN
Location: 10097 Baltimore National Pike, Baltimore, MD	Date: 02/24/14
Soil Type: CLAY	Moisture Content: 22.5%
Soil Description: 10' CLAY, 10' SILT CLAY	Soil Color: 10YR 5/1
Soil Test Results: 10' CLAY, 10' SILT CLAY	Soil Strength: 1.5
Soil Test Results: 10' CLAY, 10' SILT CLAY	Soil Permeability: 1.5
Soil Test Results: 10' CLAY, 10' SILT CLAY	Soil Compaction: 1.5
Soil Test Results: 10' CLAY, 10' SILT CLAY	Soil Settlement: 1.5
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Soil Test Results: 10' CLAY, 10' SILT CLAY	Soil Shrinkage: 1.5
Soil Test Results: 10' CLAY, 10' SILT CLAY	Soil Plasticity: 1.5
Soil Test Results: 10' CLAY, 10' SILT CLAY	Soil Liquid Limit: 1.5
Soil Test Results: 10' CLAY, 10' SILT CLAY	Soil Plasticity Index: 1.5
Soil Test Results: 10' CLAY, 10' SILT CLAY	Soil Organic Content: 1.5
Soil Test Results: 10' CLAY, 10' SILT CLAY	Soil Free Water: 1.5
Soil Test Results: 10' CLAY, 10' SILT CLAY	Soil Shrinkage Water: 1.5
Soil Test Results: 10' CLAY, 10' SILT CLAY	Soil Shrinkage Ratio: 1.5
Soil Test Results: 10' CLAY, 10' SILT CLAY	Soil Shrinkage Limit: 1.5
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Soil Test Results: 10' CLAY, 10' SILT CLAY	Soil Shrinkage Ratio: 1.5
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Soil Test Results: 10' CLAY, 10' SILT CLAY	Soil Shrinkage Index: 1.5
Soil Test Results: 10' CLAY, 10' SILT CLAY	Soil Shrinkage Ratio: 1.5
Soil Test Results: 10' CLAY, 10' SILT CLAY	Soil Shrinkage Limit: 1.5
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Soil Test Results: 10' CLAY, 10' SILT CLAY	Soil Shrinkage Ratio: 1.5
Soil Test Results: 10' CLAY, 10' SILT CLAY	Soil Shrinkage Limit: 1.5
Soil Test Results: 10' CLAY, 10' SILT CLAY	Soil Shrinkage Index: 1.5



SECTION A-A
M-6 MICRO-BIORETENTION 1
SCALE: HORIZ. 1"=50'
VERT. 1"=5'

SECTION B-B
M-6 MICRO-BIORETENTION 1
SCALE: HORIZ. 1"=50'
VERT. 1"=5'

SECTION C-C
M-6 MICRO-BIORETENTION 2
SCALE: HORIZ. 1"=50'
VERT. 1"=5'

SECTION D-D
M-6 MICRO-BIORETENTION 2
SCALE: HORIZ. 1"=50'
VERT. 1"=5'

SECTION E-E
M-6 MICRO-BIORETENTION 3
SCALE: HORIZ. 1"=50'
VERT. 1"=5'

SECTION F-F
M-6 MICRO-BIORETENTION 3
SCALE: HORIZ. 1"=50'
VERT. 1"=5'

CONSTRUCTION SPECIFICATIONS FOR MICRO-BIORETENTION, RAIN GARDENS, LANDSCAPE INFILTRATION & INFILTRATION BERMS

1. **Material specifications**
The allowable materials to be used in these practices are detailed in Table B.4.1.

2. **Filtering Media or Planting Soil**
The soil shall be a uniform mix, free of stones, stumps, roots or other similar objects larger than two inches. No other materials or substances shall be mixed or dumped within the micro-bioretenion practice that may be harmful to plant growth, or prove a hindrance to the planting or maintenance operations. The planting soil shall be free of Bermuda grass, Quackgrass, Johnson grass, or other noxious weeds as specified under CQIAR 15.08.01.05.

3. **Soil Component** - Loamy Sand or Sandy Loam (USDA Soil Textural Classification)
4. **Organic Content** - Minimum 10% by dry weight (ASTM D 2974). In general, this can be met with a mixture of loamy sand (60%-65%) and compost (35%-40%) or sandy loam (30%), coarse sand (30%), and compost (40%).
5. **pH Range** - Should be between 5.5 - 7.0. Amendments (e.g., lime, iron sulfate plus sulfur) may be mixed into the soil to increase or decrease pH.

There shall be at least one soil test per project. Each test shall consist of both the standard soil test for pH, and additional tests of organic matter, and soluble salts. A textural analysis is required from the site stockpiled topsoil. If topsoil is imported, then a texture analysis shall be performed for each location where the topsoil was excavated.

3. **Compaction**
It is very important to minimize compaction of both the base of bioretention practices and the required backfill. When possible, use excavation hoers to remove original soil. If practices are excavated using a loader, the contractor should use wide track or marsh track equipment, or light equipment with turf type tires. Use of equipment with narrow tracks or narrow tires, rubber tires with large lugs, or high pressure tires will cause excessive compaction resulting in reduced infiltration rates and is not acceptable. Compaction will significantly contribute to design failure.

Compaction can be alleviated at the base of the bioretention facility by using a primary tilling operation such as a chisel plow, ripper, or subsoiler. These tilling operations are to restructure the soil profiles through the 12 inch compaction zone. Substitute methods must be approved by the engineer. Rototillers typically do not fill deep enough to reduce the effects of compaction from heavy equipment.

Rototill 2 to 3 inches of sand into the base of the bioretention facility before backfilling the optional sand layer. Pump any ponded water before preparing (rototilling) base.

When backfilling the topsoil over the sand layer, first place 3 to 4 inches of topsoil over the sand, then rototill the sand/topsoil to create a gradation zone. Backfill the remainder of the topsoil to final grade.

When backfilling the bioretention facility, place soil in lifts 12" to 18". Do not use heavy equipment within the bioretention basin. Heavy equipment can be used around the perimeter of the basin to supply soils and sand. Grade bioretention materials with light equipment such as a compact loader or a dozer/loader with marsh tracks.

4. **Plant Material**
Recommended plant material for micro-bioretenion practices can be found in Appendix A, Section A.2.3.

5. Plant Installation

Compost is a better organic material source, is less likely to float, and should be placed in the invert and other low areas. Mulch should be placed in surrounding to a uniform thickness of 2" to 3". Shredded or chipped hardwood mulch is the only accepted mulch. Fine mulch and wood chips will float and move to the perimeter of the bioretention area during a storm event and are not acceptable. Shredded mulch must be well aged (6 to 12 months) for acceptance.

Rotastock of the plant material shall be kept moist during transport and on-site storage. The plant root ball should be planted so 1/8th of the ball is above final grade surface. The diameter of the planting pit shall be at least six inches larger than the diameter of the planting process. Set and maintain the plant straight during the entire planting process. Thoroughly water ground bed cover after installation.

Trees shall be braced using 2" by 2" stakes only as necessary and for the first growing season only. Stakes are to be equally spaced on the outside of the tree ball.

Grasses and legume seeds should be drilled into the soil to a depth of at least one inch. Grass and legume plugs shall be planted following the non-grass ground cover planting specifications.

The topsoil specifications provide enough organic material to adequately supply nutrients from natural cycling. The primary function of the bioretention structure is to improve water quality. Adding fertilizers defeats, or at a minimum, impedes this goal. Only add fertilizer if wood chips or mulch are used to amend the soil. Rototill urea fertilizer at a rate of 2 pounds per 1000 square feet.

6. **Underdrains**
Underdrains should meet the following criteria:

-Pipe - Should be 4" to 6" diameter, slotted or perforated rigid plastic pipe (ASTM F 758, Type PS 28 or AASHTO-M-278) in a gravel layer. The preferred material is slotted, 4" rigid pipe (e.g., PVC or HDPE).
-Perforations - If perforated pipe is used, perforations should be 3/8" diameter located 6" on center with a minimum of four holes per row. Pipe shall be wrapped with 1/4" (No. 4 or 4x4) galvanized hardware cloth.
-Gravel - The gravel layer (No. 57 stone preferred) shall be at least 3" thick above and below the underdrain.
-The main collector pipe shall be at a minimum 0.5% slope.
-A rigid, non-perforated observation well must be provided (one every 1,000 square feet) to provide a clean-out port and monitor performance of the filter.
-A 4" layer of pea gravel (1/8" to 3/8" stone) shall be located between the filter media and underdrain to prevent migration of fines into the underdrain. This layer may be considered part of the filter bed when bed thickness exceeds 24".

The main collector pipe for underdrain systems shall be constructed at a minimum slope of 0.5%. Observation wells and/or clean-out pipes must be provided (one minimum per every 1000 square feet of surface area).

7. **Miscellaneous**
These practices may not be constructed until all contributing drainage area has been stabilized.

TABLE B.4.1 Materials Specifications for Micro-Bioretenion, Rain Gardens, & Landscape Infiltration

Material	Specification	Size	Notes
Plantings	see Appendix A, Table A.4	n/a	plantings are site-specific
Planting soil (2' to 4' deep)	loamy sand (60-65%) & compost (35-40%) or sandy loam (30%), coarse sand (30%) & compost (40%)	n/a	USDA soil types loamy sand or sandy loam; clay content <3%
Organic content	Min. 10% by dry weight (ASTM D 2974)		
Mulch	shredded hardwood		aged 6 months, minimum; no pine or wood chips
Pea gravel diaphragm	pea gravel: ASTM-D-448	NO. 8 OR NO. 9 (1/8" TO 3/8")	
Curtain drain	ornamental stone: washed cobbles	stone: 2" to 5"	
Geotextile		n/a	PE Type 1 nonwoven
Gravel (underdrains and infiltration berms)	AASHTO M-48	NO. 57 OR NO. 6 AGGREGATE (3/8" to 3/4")	
Underdrain piping	F 758, Type PS 28 or AASHTO M-278	4" to 6" rigid schedule 40 PVC or SDR35	Slotted or perforated pipe; 3/8" perf. @ 6" on center, 4 holes per row; minimum of 3" of gravel over pipes; not necessary underneath pipes. Perforated pipe shall be wrapped with 1/4" galvanized hardware cloth.
Poured in place concrete (if required)	MSHA Mix No. 3; f'c=3500 psi @ 28 days, normal weight, air-entrained; reinforcing to meet ASTM-615-60	n/a	on-site testing of poured-in-place concrete required: 28 day strength and slump test; all concrete design (cast-in-place or pre-cast) not using previously approved State or local standards requires design drawings sealed and approved by a professional structural engineer licensed in the State of Maryland - design to include meeting ACI Code 350 R/99; vertical loading (H-10 or H-20); allowable horizontal loading (based on soil pressures); and analysis of potential cracking
Sand	AASHTO-M-6 or ASTM-C-35	0.02" to 0.04"	Sand substitutions such as Diabase and Graystone (AASHTO) #10 are not acceptable. No calcium carbonate or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand.



*MICRO-BIORETENTION FACILITIES MB-1 AND MB-2 ARE TO HAVE IMPERMEABLE LINER ON SIDES DUE TO PROXIMITY TO STORE. CONTRACTOR TO PROVIDE MATERIAL DATA SHEETS PRIOR TO INSTALLATION.

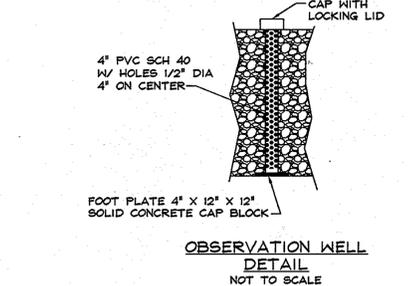
M-6 MICRO-BIORETENTION
TYPICAL SECTION
SCALE: NTS

REQUIRED SEQUENCE OF CONSTRUCTION FOR EACH MICRO-BIORETENTION FACILITY

1. Notify engineer prior to beginning work on micro-bioretenion facility.
2. Install site sediment control. Build site and stabilize with a minimum of 2' stand of dense grass.
3. Pump out all material from structures 1-3 thru 1-5.
4. Excavate micro-bioretenion facilities. The contractor shall inform the engineer prior to each of the following steps for inspection.
5. Install impermeable liner in MB-1 and MB-2.
6. Install stone layer and 6" PVC underdrain.
7. Install filter fabric on top of stone layer.
8. Install planting media layer and stabilize.
9. Once Engineer inspects structure sumps (indicated in Item 3 above), outgoing pipes shall be uncapped and the micro-bioretenion facilities put online.
10. The engineer must submit signed and sealed stormwater management as-built mylars within 30 days of completion of these facilities to the Howard County Bureau of Resource Management.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED STORMWATER BIORETENTION FACILITIES

- A. The Owner shall maintain the plant material, mulch layer and soil layer annually. 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 11, Table A.4.1 and 2.
- B. The Owner shall perform a plant in the spring and in the fall of each year. During the inspection, the Owner shall remove dead and diseased vegetation considered beyond treatment, replace dead plant material with acceptable replacement plant material, treat diseased trees and shrubs, and replace all deficient stakes and wires.
- C. The Owner shall inspect the mulch each spring. The mulch shall be replaced every two to three years. The previous mulch layer shall be removed before the new layer is applied.
- D. The Owner shall correct soil erosion on an as needed basis, with a minimum of once per month and after every heavy storm.



OBSERVATION WELL
DETAIL
NOT TO SCALE

DATA SOURCES:
EXISTING OFFSITE TOPOGRAPHY SHOWN PER HOWARD COUNTY OIT/GIS, BASED ON MARYLAND COORDINATE SYSTEM, NAD-83(1981), NAVD-88. EXISTING ONSITE TOPOGRAPHY AND BOUNDARY SHOWN PER FIELD RUN SURVEY PERFORMED BY PROFESSIONAL SURVEYS, LLC COMPLETED IN JULY 2012. EXISTING SOILS SHOWN PER USDA WEB SOIL SURVEY.

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Engineers
Landscape Architects

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(301)820-1679

DEVELOPER:
MEADOW-DORSEY RUN, LLC
THOM MORICE
1202 SHADY CREEK ROAD
MARRIOTTVILLE, MD 21104
(410)488-5080

SITE ADDRESS:
10097 BALTIMORE NATIONAL PIKE
BALTIMORE, MD

WALGREENS
10097 BALTIMORE NATIONAL PIKE
STORMWATER MANAGEMENT
PROFILES, NOTES &
DETAILS

1st Council District
2nd Election District

Revised: 3/4/2014
Howd County, MD

REVISIONS

NO.	DESCRIPTION OF CHANGES	DRN.	REV.	DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Edwards 3-7-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Victoria J. Swanson 3-13-14
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Markus J. Laughlin 3/17/14
DIRECTOR DATE

February 24, 2014
DATE

Professional Certification
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. 27020, Expiration 1/1/16.

W. C. K. K. K.
W. C. K. K. K.
P.E. 27020

- General Planting Notes**
- All plant materials to meet A.N.L.A. Standards.
 - The Contractor is to follow specification guidelines for Baltimore & Washington Metropolitan Area as approved by the L.C.A. of Maryland, Washington D.C., & Virginia and described in the latest edition of "Landscape Specification Guidelines".
 - No substitutions are to be made without the consent of the Landscape Architect and/or the Owner.
 - All beds are to be topped with three (3) inches of hardwood mulch.
 - Contractor shall notify Miss Utility at 1 (800) 257-7777, at least 72 hours prior to construction and verify the location of all utilities with the Owner before planting.
 - Landscape Architect/Owner shall select, verify, and/or approve all plant material. At the Owner's discretion, specimen and other plant material may be selected.
 - The Landscape Contractor shall coordinate with the general, lighting, & irrigation contractors regarding timing and installation of plant material. At the time of final inspection with acceptance, all electric, water & drainage utilities, as well as plant material, shall remain undamaged. Likewise, the Landscape Contractor and utilities contractors shall coordinate efforts to ensure that surface utilities are at the proper elevation relative to final grades.
 - 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.
 - This plan has been prepared in accordance with the provisions of Section 16.124 of the Ho. Co. Code, Financial survey for the required landscaping in the amount of \$13,710.00 must be posted as part of the Developer's Agreement (27 shade trees, 15 Evergreen Trees and 112 Shrubs).
 - Developer/Builder's Certificate

I/We certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/We further certify that, upon completion, a letter of landscape installation, accompanied by an executed one-year guarantee of the plant materials, will be submitted to the Department of Planning and Zoning.

[Signature] DATE: 2/27/14

At the time of plant installation, all shrubs and other plantings herewith listed and approved for this site, shall be of the proper height requirements in accordance with the Howard County Landscaping Manual. In addition, no substitutions or relocation of required plantings may be made without prior review and approval from the Department of Planning & Zoning. Any deviation from this approved Landscape Plan may result in denial or delay in the release of landscape surety until such time as all required materials are planted and/or revisions are made to applicable plans and certificates.

SCHEDULE A - PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES		
LANDSCAPE TYPE 'A'		P-3		
LINEAR FEET OF PERIMETER		207 LF.		
LANDSCAPE TYPE 'C'		P-3	P-4	
LINEAR FEET OF PERIMETER		82 LF.	188 LF.	
LANDSCAPE TYPE 'D'				
LINEAR FEET OF PERIMETER				
LANDSCAPE TYPE 'E'	P-1	P-2		
LINEAR FEET OF PERIMETER	252 LF.	195 LF.		
CREDIT FOR EXISTING VEGETATION (DESCRIBE BELOW IF NEEDED)	N/A	N/A	N/A	N/A
CREDIT FOR BERM (DESCRIBE BELOW IF NEEDED)	N/A	N/A	N/A	N/A
NUMBER OF PLANTS REQUIRED				
SHADE TREES	7	5	4	5
EVERGREEN TREES	0	0	0	0
SHRUBS	63	49	0	0
NUMBER OF PLANTS PROVIDED				
SHADE TREES	0	3	4	3
EVERGREEN TREES	0	0	0	0
OTHER TREES (2:1 SUBSTITUTION)	0	0	0	0
SHRUBS	103	66	0	0
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)				

NOTE: P-1 SUBSTITUTED 6 ORNAMENTAL TREES AND 40 SHRUBS FOR 7 SHADE TREES.
P-2 SUBSTITUTED 2 ORNAMENTAL TREES AND 10 SHRUBS FOR 2 SHADE TREES.
P-4 SUBSTITUTED 4 ORNAMENTAL TREES FOR 2 SHADE TREES

SCHEDULE B - PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PARKING SPACES	45
NUMBER OF TREES REQUIRED	3
NUMBER OF TREES PROVIDED	
SHADE TREES	3
OTHER TREES (2:1 SUBSTITUTION)	0
NUMBER OF ISLANDS REQUIRED	3
NUMBER OF ISLANDS PROVIDED	3

PLANT LIST

QTY	SYM	BOTANICAL NAME/ COMMON NAME	SIZE	REMARKS
SHADE TREES				
15	GT	GLEDTISIA TRIACANTHOS INERMIS 'SHADE MASTER'	2 1/2' CAL.	B # B
		SHADE MASTER THORNLESS HONEYLOCUST	12" - 14" HT.	
ORNAMENTAL TREES				
6	AC	ACER CAMPESTRE	2" CAL.	B # B
		HEDGE MAPLE	6' - 8' HT.	
7	CC	CERCIS CANADENSIS	2" CAL.	B # B
		EASTERN REDBUD	6' - 8' HT.	
EVERGREEN TREES				
15	PA	PICEA ABIES	6' HT.	B # B
		NORWAY SPRUCE		HEAVY UNSHEARED
SHRUBS				
138	IM	ILEX X MESERVEAE 'MESOG'	2 1/2'-3' HT.	CONTAINER
		CHINA GIRL HOLLY		
21	IV	ITEA VIRGINICA 'HENRY'S GARNET'	2 1/2'-3' HT.	CONTAINER
		HENRY'S GARNET SHEETSPIRE		
10	TB	TAXUS BACCATA 'NANA'	18"-24" SPACING	CONTAINER
		NANA YEN		

* PROVIDED A PORTION AS ILEX X MESERVEAE 'MESOG' TO PROMOTE FRUIT SET

THIS AREA REPRESENTS 2,242 S.F. OF ERNST CONSERVATION SEED MIX
"RETENTION BASIN FLOOR SEEDING - LOW MAINTENANCE GRASSLIKE SPECIES"
(ERNST-126) APPLIED AT 1/2 LBS PER 1000 S.F.

GENERAL MAINTENANCE

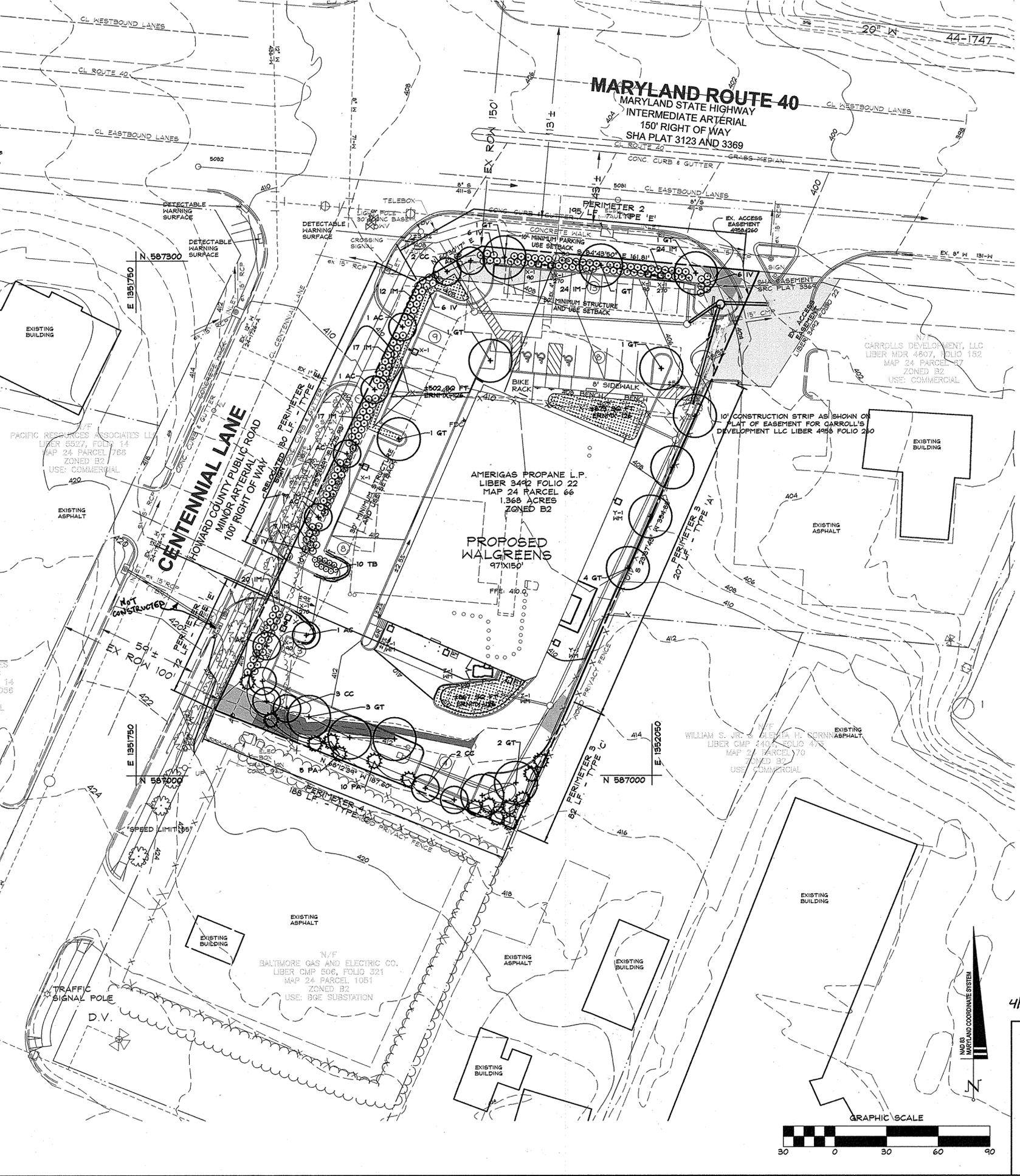
IN ADDITION TO MAINTENANCE OF STRUCTURES AND PIPES, SILTATION WITHIN THE FACILITY SHALL BE REMOVED AS NEEDED. MOWING SHALL OCCUR ONLY WHEN NECESSARY DURING THE GROWING SEASON (TWO TO THREE TIMES AT MOST). THE DECK ON THE MOWING MACHINE SHALL BE SET AS HIGH AS POSSIBLE TO ELIMINATE THE POTENTIAL FOR MOWING TOO CLOSE TO THE SOIL SURFACE. CLOSE MOWING OR EXTENSIVE CHEMICAL USE IS NOT CONDUCTIVE TO WATER QUALITY IMPROVEMENT OR WILDLIFE HABITAT.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 3-7-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 3-13-14
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 3/12/14
DIRECTOR DATE



DRAWING LEGEND

- 682 EXISTING MINOR CONTOUR (2' INTERVAL)
- 680 EXISTING MAJOR CONTOUR (10' INTERVAL)
- ADJACENT PROPERTY LINE
- EXISTING PROPERTY BOUNDARY
- EX. ROAD / EDGE OF PAVING
- EX. SEWER LINE & MANHOLES, CLEAN-OUTS
- EX. OVERHEAD ELECTRIC & UTILITY POLES
- PROPOSED PRIVATE ROAD/DRIVE CENTERLINE
- PROPOSED CURB
- PROPOSED STORM DRAIN W/ INLETS & MANHOLE
- PROPOSED WATER LINE & HYDRANT
- PROPOSED SEWER AND MANHOLES
- EX. BUILDING
- PROPOSED BUILDING
- EXISTING TREELINE
- PROPOSED TREELINE
- PROPOSED ORNAMENTAL TREE
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN TREE
- SITE LIGHTING
- STORMWATER MANAGEMENT PLANTING
- STEEP SLOPES 15%-25% (0.27± Ac.)
- STEEP SLOPES 25%+ (0.04± Ac.)
- EXISTING STREET TREE TO REMAIN
- EXISTING STREET TREE TO BE REMOVED

DATA SOURCES:
EXISTING OFFSITE TOPOGRAPHY SHOWN PER HOWARD COUNTY OIT/GIS, BASED ON MARYLAND COORDINATE SYSTEM, NAD-83(1991), NAVD-88. EXISTING ON-SITE TOPOGRAPHY AND BOUNDARY SHOWN PER FIELD RUN SURVEY PERFORMED BY PROFESSIONAL SURVEYS, LLC COMPLETED IN JULY 2012. EXISTING SOILS SHOWN PER USDA WEB SOIL SURVEY.

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DEVELOPER:
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(410)469-9380

SITE ADDRESS:
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BALTIMORE, MD

WALGREENS
10097 BALTIMORE NATIONAL PIKE

LANDSCAPE PLAN

1st Council District
2nd Election District

Deed 3492/22
Howard County, MD

REVISIONS

February 24, 2014
DATE

1 PER AS-BUILT DATA WMS 4-27-15

NO.	DESCRIPTION OF CHANGES	DRN.	REV.	DATE
CO. FILE #	DES. BY: BKC			
TAX ACC. # 02-235900	DRN. BY: BKC			
TAX MAP: 24	CHK. BY: BKC			
BLOCK / GRID: 2	DATE: 2/24/14			
PARCEL #: 66	DDC JOB#: 11092.1			
ZONE / USE: B-2	SHEET NUMBER:			
DWG. SCALE: 1"=30'	14 OF 18			

STATE OF MARYLAND
BRIAN K. COLLINS
R.L.A. NO. 3171

4/29/15

GRAPHIC SCALE
30 0 30 60 90

FOREST CONSERVATION RECOMMENDATIONS FROM THE FOREST STAND DELINEATION REPORT

THE SUBJECT PROPERTY DOES NOT INCLUDE ANY VEGETATIVE COMMUNITIES THAT WOULD BE CONSIDERED FOREST. DEVELOPMENT OF THE PROPERTY GENERATES AN AFFORESTATION REQUIREMENT OF 0.24 ACRES. THIS PLAN PROPOSES TO SATISFY THE OBLIGATION VIA FEE-IN-LIEU DUE TO THE FACT THAT IT IS LESS THAN 10,000 SQUARE FEET IN SIZE.

HOWARD COUNTY FOREST CONSERVATION WORKSHEET

I. BASIC SITE DATA	ACRES
Gross Site Area	1.37
Area Within 100 Year Floodplain	0.00
Area Within Agricultural Use or Preservation Parcel (if Applicable)	0.00
Net Tract Area	1.61*
Land Use Category (R-RL, R-RMD, R-S, C/VO, I)	0.00

* Includes area of off-site grading per DLD comments dated 11/19/2012

II. INFORMATION FOR CALCULATIONS	
A. Net tract area	1.61
B. Reforestation Threshold (15% x A)	0.24
C. Afforestation Minimum (15% x A)	0.24
D. Existing Forest on Net Tract Area	0.00
E. Forest Areas to be Cleared	0.00
F. Forest Areas to be Retained	0.00

IV. AFFORESTATION CALCULATIONS	
A. Net Tract Area	1.61
B. Afforestation Minimum (15% x A)	0.24
C. Existing Forest on Net Tract Area	0.00
D. Forest Area to be Cleared	0.00
E. Forest Area to be Retained	0.00

No Clearing below the Minimum

If existing forests are less than the afforestation minimum (if D is less than C) and no clearing is proposed, the following calculations apply:

TOTAL AFFORESTATION REQUIRED	0.24 ACRES
TOTAL AFFORESTATION PROVIDED (Fee-In-Lieu)	0.24 ACRES

FOREST CONSERVATION SURETY

A TOTAL OF 0.24± ACRES OF AFFORESTATION IS REQUIRED UNDER THIS PLAN. FEE-IN-LIEU IS BEING PROPOSED TO SATISFY THIS REQUIREMENT. FEE-IN-LIEU IS \$0.75 A SQUARE FOOT WHICH GENERATES AN OBLIGATION OF \$7,840.00.

SITE DATA

- GROSS SITE ACREAGE: 1.368 AC±
- FLOOD PLAIN ACREAGE: 0.0 AC±
- NET SITE ACREAGE: 1.61 AC± *
- ZONING: B-2
- AREA OF EXISTING FOREST: 0.0 AC±
- THERE ARE NO HISTORIC STRUCTURES ON THE SUBJECT PROPERTY.
- THERE IS NO EVIDENCE OF RARE, THREATENED OR ENDANGERED PLANT OR ANIMAL SPECIES ON THE SUBJECT PROPERTY.
- WATERSHED: LITTLE PATUXENT (2131105)
- THERE ARE NO SPECIMEN TREES OR STATE CHAMPION TREES ON THE PROPERTY.
- THERE ARE NO STREAMS, WETLANDS OR ASSOCIATED BUFFERS LOCATED ON THE PROPERTY.
- THERE IS NO FLOODPLAIN LOCATED ON THE PROPERTY.
- NO EVIDENCE OF CEMETERIES OR BURIAL GROUNDS WAS NOTED ON THE PROPERTY DURING THE FIELD INVESTIGATION.
- THERE ARE NO ERODIBLE OR HYDRIC SOILS LOCATED ON THE PROPERTY.

* Includes area of off-site grading per DLD comments dated 11/19/2012.

GENERAL NOTES

- THERE IS ONE SOIL TYPE LOCATED ON THE PROPERTY, UBE(D) SOIL DELINEATION SHOWN PER USDA NATIONAL COOPERATIVE WEB SOIL SURVEY, NOVEMBER 13, 2008, WEB: <http://websoilsurvey.nrcs.usda.gov/app/> & USDA, SOIL CONSERVATION SERVICE, SOIL SURVEY FOR HOWARD COUNTY, MARYLAND, 2008.

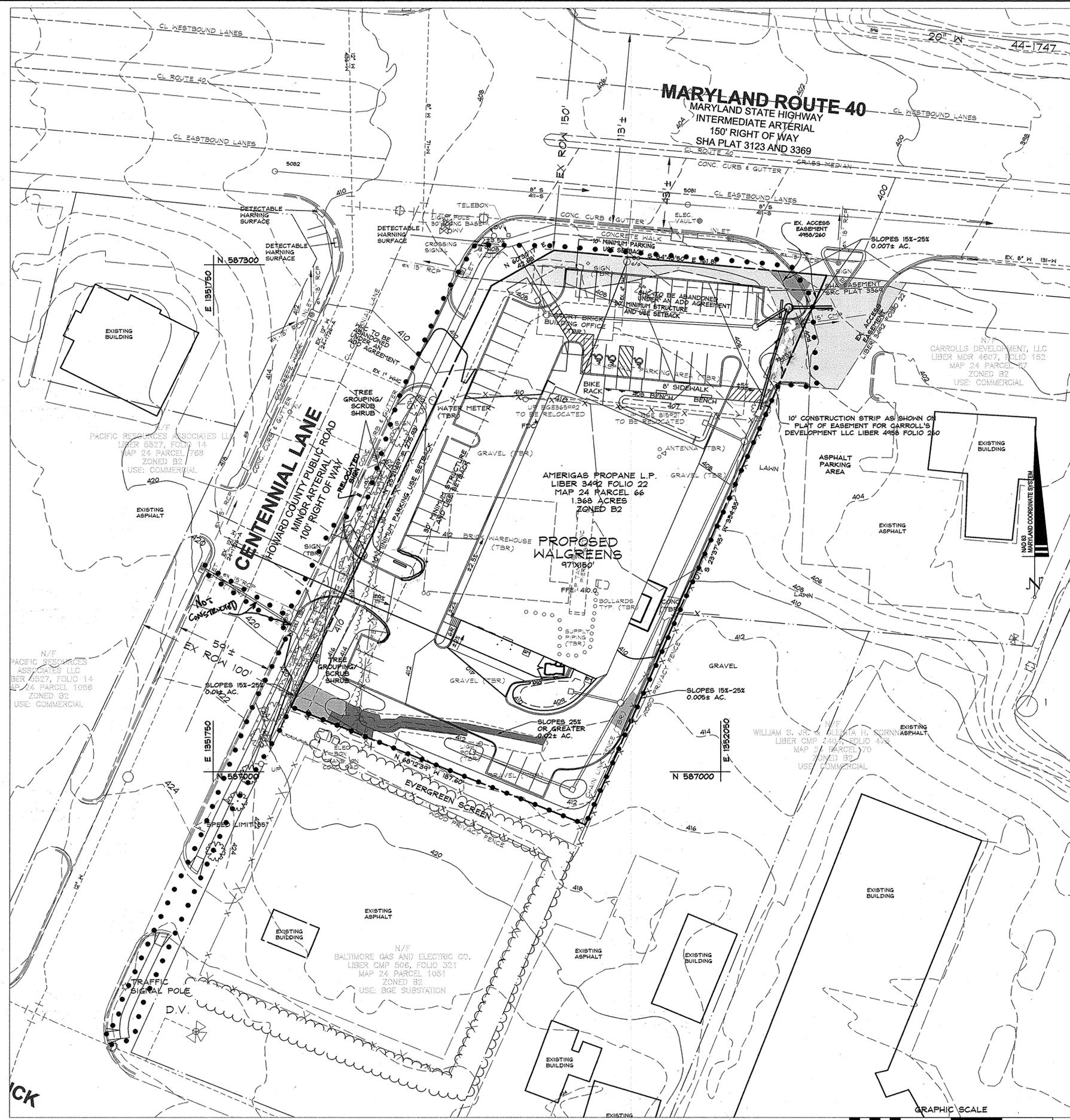
FOREST STAND NARRATIVE

THE SUBJECT PROPERTY DOES NOT INCLUDE ANY VEGETATIVE COMMUNITIES THAT WOULD BE CONSIDERED FOREST. THE PROPERTY HAS BEEN ENTIRELY DEVELOPED AND HAS BEEN IN USE AS AN AMERIGAS DISTRIBUTION PLANT FOR OVER 40 YEARS. THE TWO VEGETATIVE COMMUNITIES THAT DO EXIST ON SITE ARE:

LAWN - THE LAWN AREA OCCUPIES THE NORTHERN PORTION OF THE SITE ALONG ROUTE 40. THERE ARE NO OTHER PLANTINGS ALONG THIS FRONTAGE.

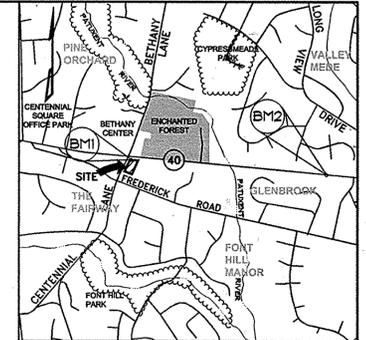
TREE GROUPING - ALONG THE WESTERN EDGE OF THE PROPERTY ALONG CENTENNIAL LANE AND WITHIN THE RIGHT OF WAY ARE TREE GROUPINGS WITH A DENSE UNDERBRUSH. THIS AREA IS NOT CONSISTENTLY MAINTAINED DUE TO THE STEEP SLOPES ALONG THIS EDGE.

IN ADDITION TO NOT CONTAINING ANY FOREST, THE SUBJECT PROPERTY ALSO DOES NOT HAVE ANY SPECIMEN OR CHAMPION TREES.



BENCHMARK

BENCHMARK #1	N. 507507.76
E. 1351948.67	
B.M. 244M1 - CONCRETE MONUMENT	
ELEV. 407.44	
BENCHMARK #2	N. 564956.273
E. 1356570.784	
B.M. 2485 - CONCRETE MONUMENT	
ELEV. 390.17	
ADC MAP COORDINATES	
MAP 4815 C6	
N 39°16'30"	
E 76°52'00"	



DRAWING LEGEND

682	EXISTING MINOR CONTOUR (2' INTERVAL)
680	EXISTING MAJOR CONTOUR (10' INTERVAL)
---	ADJACENT PROPERTY LINE
N 06°45'45" W 120.00'	EXISTING PROPERTY BOUNDARY
---	EX. ROAD / EDGE OF PAVING
○	EX. SEWER LINE & MANHOLES, 'CLEAN-OUTS
○	EX. OVERHEAD ELECTRIC & UTILITY POLES
---	PROPOSED PRIVATE ROAD/DRIVE CENTERLINE
---	PROPOSED EDGE OF PAVEMENT
---	PROPOSED CURB
---	PROPOSED STORM DRAIN W/ INLETS & MANHOLE
---	PROPOSED WATER LINE & HYDRANT
---	PROPOSED SEWER AND MANHOLES
---	PROPOSED LIMIT OF DISTURBANCE
---	EX. BUILDING
---	PROPOSED BUILDING
---	EXISTING TREELINE
---	STEEP SLOPES 15%-25% (0.02± Ac.)
---	STEEP SLOPES 25%+ (0.02± Ac.)
○	EXISTING STREET TREE TO REMAIN
○	EXISTING STREET TREE TO BE REMOVED

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Engineers
Landscape Architects

192 East Main Street
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OWNER: AMERIGAS PROPANE LP
DON LYNCH
PO BOX 785
VALLEY FORGE, PA 19482
(301)620-1879

DEVELOPER: MEADOWOOD-DORSEY RUN, LLC
THOM MOSE
1202 SHADY CREEK ROAD
MARRIOTTVILLE, MD 21104
(410)489-0080

SITE ADDRESS: 10097 BALTIMORE NATIONAL PIKE
BALTIMORE, MD

**WALGREENS
10097 BALTIMORE NATIONAL PIKE
FOREST CONSERVATION
PLAN**

1st Council District
2nd Election District

Deed 3492/22
Howard County, MD

REVISIONS	
NO.	DESCRIPTION OF CHANGES
1	PER AG-BUILT DATA NME 4-27-15
CO. FILE #	DES. BY: BKC
TAX ACC. #: 02-235900	DRN. BY: BKC
TAX MAP: 24	CHK. BY: BKC
BLOCK / GRID: 2	DATE: 2/24/14
PARCEL #: 66	DDC JOB#: 11092.1
ZONE / USE: B-2	SHEET NUMBER:
DWG. SCALE: 1"=30'	16 of 18

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Coleman 3-7-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

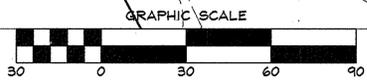
Walter Deane 3-13-14
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Maude McLaughlin 3/17/14
DIRECTOR DATE

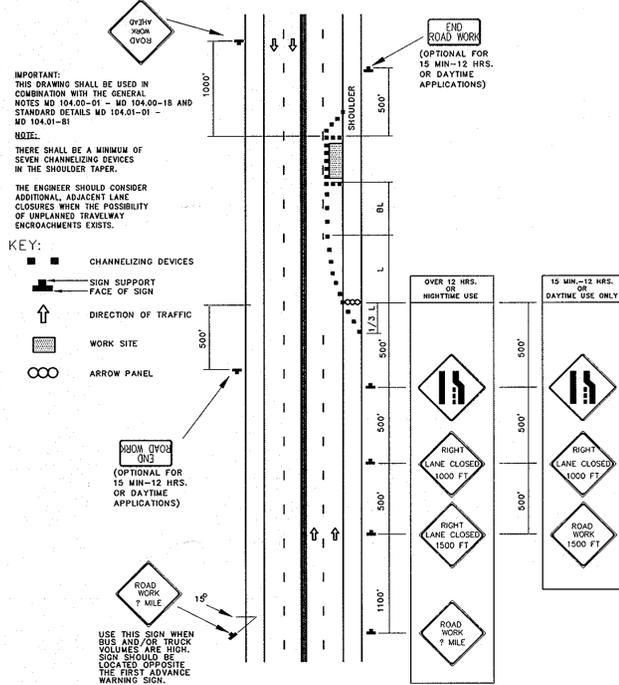
February 24, 2014
DATE

4/24/15

BRIAN K. COLLINS
R.L.A. NO. 3171

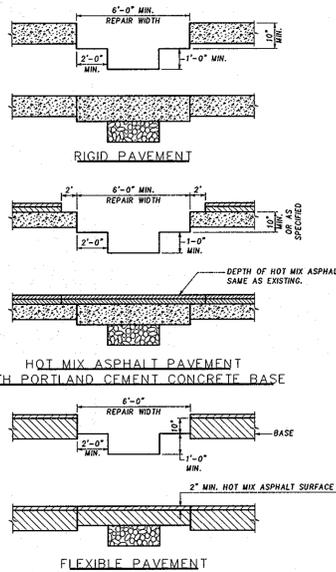


TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATION



RIGHT LANE CLOSURE/MULTILANE UNDIV. EQL/LESS THAN 40 MPH

STANDARD NO. MD 104.03-06
NOT TO SCALE



NOTES

- THIS STANDARD IS TO BE USED IN ACCORDANCE WITH SECTIONS 505 AND 522. THE ROADWAY SHALL BE PATCHED WITH THE SAME TYPE MATERIAL UNLESS NOTED IN THE SPECIFICATIONS. PORTLAND CEMENT CONCRETE PAVEMENT REPAIR SHALL BE IN ACCORDANCE WITH STANDARDS 577.03, 577.04, 577.05, 577.06, OR 577.10.
- THE TOP 1 FT. OF THE TRENCH SHALL BE FILLED WITH NO. 57 AGGREGATE. TRENCH TO BE EXTENDED TO DITCH LINE.
- WHEREVER A TRENCH CROSSES A CONCRETE ROADWAY THAT HAS JOINT INSTALLATIONS THE ENTIRE SLAB BETWEEN THE EDGE OF THE TRENCH AND NEAREST JOINT SHALL BE REMOVED IF THE DISTANCE IS LESS THAN 6 FT.
- CLEAN AND WET EDGES OF CUT AND SUBBASE BEFORE PLACING CONCRETE.
- ALL WORK SUCH AS TRENCH BACKFILL, CURING OF CONCRETE, MATERIALS USED, ETC. SHALL BE IN ACCORDANCE WITH SECTIONS 201, 305 AND 522 OF THE SPECIFICATIONS OR AS SPECIFIED IN THE PERMITS.
- ALL COSTS FOR SAWCUTS, TRENCH EXCAVATION, BACKFILL, HOT MIX ASPHALT, CONCRETE, NO. 57 AGGREGATE, MATERIALS, TOOLS, LABOR AND INCIDENTALS SHALL BE INCLUDED IN THE PRICE OF THE UTILITY ITEMS.
- ROAD PAVEMENT REPAIRS AS SHOWN SHALL BE MADE USING CONCRETE MIX NO. 9 (ONE) MEETING THE REQUIREMENTS OF SECTION 902 OF THE SPECIFICATIONS UNLESS OTHERWISE SPECIFIED IN THE SPECIAL PROVISIONS, ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

REPAIRING PAVEMENT OPENINGS FOR UTILITY TRENCHES

STANDARD NO. MD 578.01
NOT TO SCALE

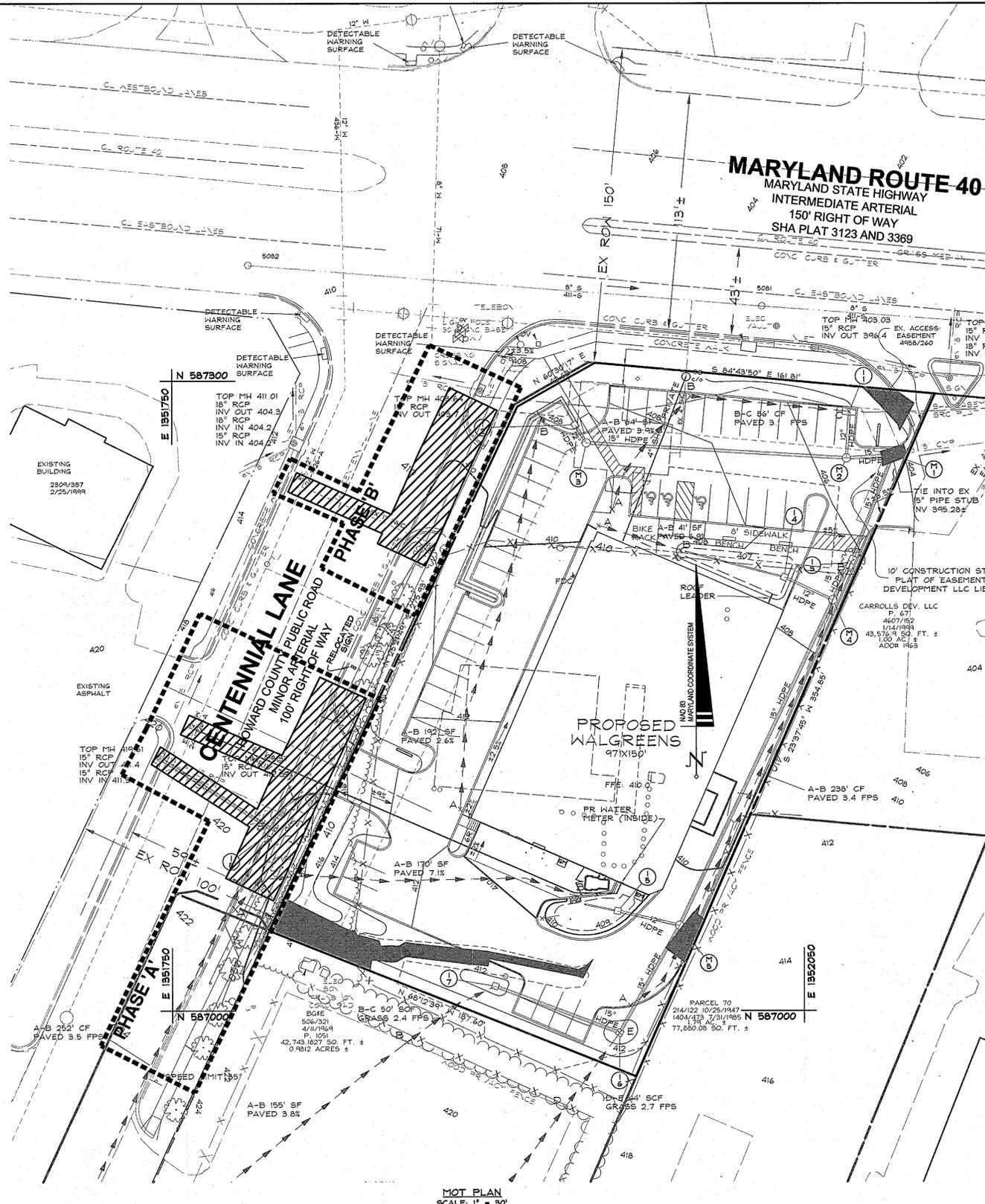
APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Clum 3-7-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION
Kurt Schaefer 3-13-14
CHIEF, DIVISION OF LAND DEVELOPMENT
Mark D. Coughlin 3/27/14
DIRECTOR

SEQUENCE OF CONSTRUCTION - PHASE 'A'
INSTALLATION OF INLET I-8 AND WATER CONNECTION

- INSTALL WORK ZONE WARNING SIGNS AS DIRECTED BY TRAFFIC CONTROL MANAGER.
- INSTALL TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH MD 104.03-06 (ON THIS SHEET).
- PROCEED WITH WORK IN SOUTHBOUND LANE FIRST. SAWCUT PAVEMENT TO EXISTING WATER LINE AND EXISTING INLET.
- CONSTRUCT WATER LINE AND STORM DRAIN IN SOUTHBOUND LANE TO CENTER OF CENTENNIAL LANE. MOVE TRAFFIC CONTROLS TO NORTHBOUND LANE ONCE WATER LINE & STORM DRAIN HAVE BEEN CONSTRUCTED TO CENTER OF CENTENNIAL LANE.
- REMOVE EXISTING CURB AND CONSTRUCT CURB AND INLET I-8. COMPLETE WATER LINE AND STORM DRAIN.
- INSTALL COMMERCIAL ENTRANCE.
- HILL FOR EDGE OF ROAD REPAIR PER MSHA STD DETAIL MD 578.01 (ON THIS SHEET).
- REMOVE SIGNS AND TRAFFIC CONTROL DEVICES.

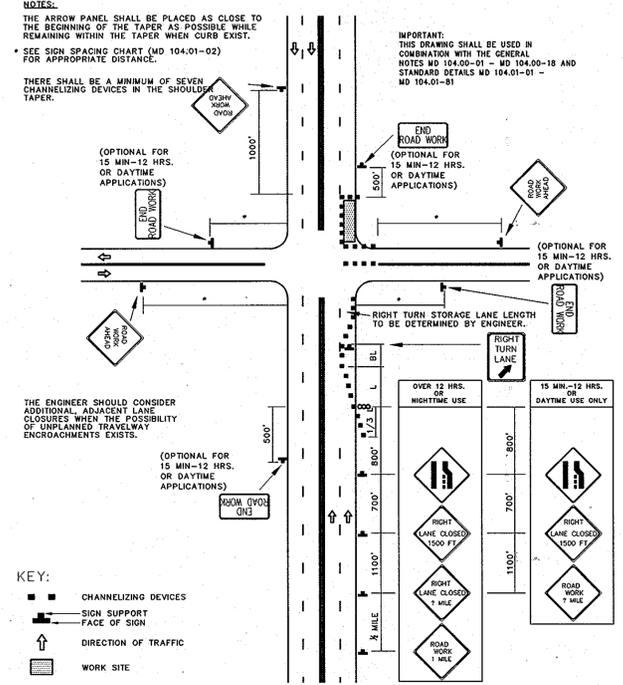
NOTE: ROADSIDE EXCAVATION SHALL ADHERE TO SHA STANDARDS FOR PAVEMENT EDGE DROP-OFFS. ALL TEMPORARY PAVEMENT REPAIRS SHALL BE FLUSH WITH EXISTING ROAD UNTIL PERMANENT PAVING IS INSTALLED.



SEQUENCE OF CONSTRUCTION - PHASE 'B'
INSTALLATION OF CURB AT EXISTING ENTRANCE

- INSTALL WORK ZONE WARNING SIGNS AS DIRECTED BY TRAFFIC CONTROL MANAGER.
- INSTALL TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH MD 104.03-06 (ON THIS SHEET).
- PROCEED WITH WORK IN SOUTHBOUND LANE FIRST. SAWCUT PAVEMENT TO EXISTING WATER LINE INLET.
- ABANDON 1" INLET AT THE MAIN.
- REMOVE EXISTING CURB AT TIE-IN POINTS AND CONSTRUCT NEW CURB.
- HILL FOR EDGE OF ROAD REPAIR PER MSHA STD DETAIL MD 578.01 (ON THIS SHEET).
- REMOVE SIGNS AND TRAFFIC CONTROL DEVICES.

TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATION



INTER-FAR-RIGHT LANE CLOSURE/MULTILANE UNDIV. GREATER THAN 40 MPH

STANDARD NO. MD 104.03-11
NOT TO SCALE

DATA SOURCES:
EXISTING OFFSITE TOPOGRAPHY SHOWN PER HOWARD COUNTY OIT/GIS, BASED ON MARYLAND COORDINATE SYSTEM, NAD-83(1981), NAVD-88. EXISTING ON-SITE TOPOGRAPHY AND BOUNDARY SHOWN PER FIELD RUN SURVEY PERFORMED BY PROFESSIONAL SURVEYS, LLC COMPLETED IN JULY 2012. EXISTING SOILS SHOWN PER USDA WEB SOIL SURVEY.

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Surveyors
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DEVELOPER: MEADOWOOD-DORSEY RUN, LLC
THOM MOGEE
1202 YONCH CREEK ROAD
MARRIOTTVILLE, MD 21104
(410)469-5080

SITE ADDRESS:
1007 BALTIMORE NATIONAL PIKE
BALTIMORE, MD

WALGREENS
1007 BALTIMORE NATIONAL PIKE
MAINTENANCE OF TRAFFIC PLAN

1st Council District
2nd Election District

Dead 3492/22
Howard County, MD

NO.	DESCRIPTION OF CHANGES	DRN.	REV.	DATE
CO. FILE #	TAX ACC. # 02-235900	DES. BY: PGC	DRN. BY: CTS	
TAX MAP: 24	BLOCK / GRID: 2	CHK. BY: PGC	DATE: 2/24/14	
PARCEL # 66	ZONE / USE: B-2	DDC JOB#: 11092.1	SHEET NUMBER:	
DWG. SCALE: AS SHOWN			17 of 18	

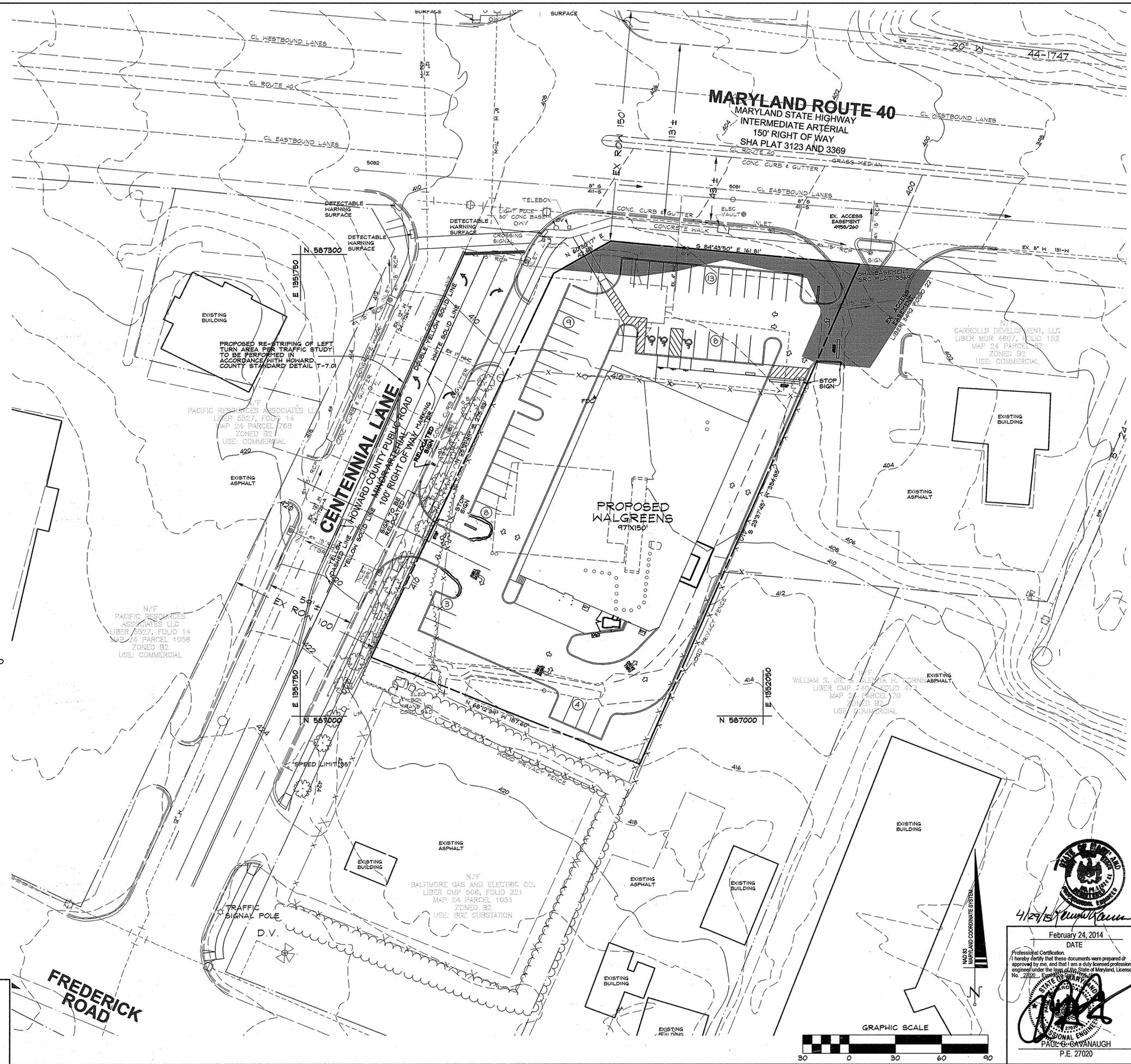
February 24, 2014
DATE

Professional Certification:
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. 22020 - Employment of Professional Engineer

Paul G. Gavanaugh
P.E. 27020

NOTE: ALL LONG LINE PAVEMENT MARKINGS ARE 5 INCHES WIDE. OLD MARKING SHALL BE REMOVED VIA GRINDING. CONTACT THE TRAFFIC DIVISION PRIOR TO IMPLEMENTATION OF FINAL MARKINGS AT 410-313-2430.

- GENERAL NOTES:
- A. THE TRAFFIC CONTROL DEVICE LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MUST BE FIELD APPROVED BY HOWARD COUNTY TRAFFIC DIVISION (410-313-2430) PRIOR TO THE INSTALLATION OF ANY OF THE TRAFFIC CONTROL DEVICES.
 - B. ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MDMUTCD).
 - C. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED ("QUICK PUNCH" TYPE), SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE 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.



DATA SOURCES:
 EXISTING OFFSITE TOPOGRAPHY SHOWN PER HOWARD COUNTY OIT/GIS, BASED ON MARYLAND COORDINATE SYSTEM, NAD-83(1991), NAVD-88. EXISTING ON-SITE TOPOGRAPHY AND BOUNDARY SHOWN PER FIELD SURVEY PERFORMED BY PROFESSIONAL SURVEYS, LLC COMPLETED IN JULY 2012. EXISTING SOILS SHOWN PER USDA WEB SOIL SURVEY.

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SITE ADDRESS:
 10097 BALTIMORE NATIONAL PIKE
 BALTIMORE, MD

WALGREENS
 10097 BALTIMORE NATIONAL PIKE
SIGNAGE AND MARKING PLAN

1st Council District, 2nd Election District Deed 3492/22
 Howard County, MD

4/29/15
 February 24, 2014
 DATE

Professional Certification:
 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. 27020. Expiration Date: 4/29/15

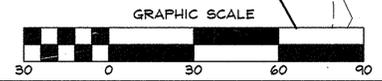
PAUL C. GAVANAUGH
 P.E. 27020

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Clark 3-7-14
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Wesley L. ... 3-13-14
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

David M. ... 3/12/14
 DIRECTOR DATE



REVISIONS	
NO.	DESCRIPTION OF CHANGES
1	PER AS-BUILT DATA

CO. FILE #:	DES. BY: PGC
TAX ACC. #: 02-235900	DRN. BY: LIC
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