

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY STANDARDS AND SPECIFICATIONS.
- ALL WORK AND MATERIALS SHALL COMPLY WITH O.S.H.A. STANDARDS.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS:
 - MISS UTILITY: 1-800-257-7777
 - VERIZON: 1-800-742-8833
 - BUREAU OF UTILITIES: 410-313-4900
 - AT&T: 1-800-252-1133
 - B.G.&E. (CONSTRUCTION SERVICES): 410-637-8713
 - B.G.&E. (EMERGENCY): 410-685-0123
 - STATE HIGHWAY ADMINISTRATION: 410-531-5533
 - COLONIAL PIPELINE CO.: 410-795-1390
- SITE ANALYSIS:
 - TOTAL PARCEL AREA: 0.69 AC.
 - PRESIDENT: B-2
 - USE OF STRUCTURE: RETAIL BUILDING
 - TOTAL BUILDING COVERAGE (FOOTPRINT AREA): 7,000 SF (0.16 AC. OR 23.19% OF GROSS AREA)
 - PAVED PARKING LOT/AREA ON SITE: 2,230 SF (0.28 AC. OR 40.58% OF GROSS AREA)
 - AREA OF LANDSCAPE ISLAND: 612 SF (0.01 AC. OR 1.45% OF GROSS AREA)
 - AREA OF WETLAND AND BUFFERS: 0.00 AC.
 - AREA OF STREAM AND BUFFERS: 0.00 AC.
 - AREA OF EXISTING FOREST: 0.00 AC.
 - AREA OF STEEP SLOPES: 0.00 AC.
 - AREA OF ERODIBLE SOILS: 0.00 AC.
 - AREA OF FLOODPLAIN: 0.00 AC.
 - LIMIT OF DISTURBED AREA: 0.79 AC
 - CUT: 8,520 CY FILL: 0 CY
- PROJECT BACKGROUND:
 - LOCATION: ELLICOTT CITY, MD.; TAX MAP 24, PARCEL 850, BLOCK 6
 - ZONING: B-2
 - SUBDIVISION: N/A
 - SECTION/AREA: N/A
 - SITE AREA: 0.69 AC.
 - DPZ REFERENCES: L1710/F.535, L15371/F.300, ECP-15-003; AA-16-019, L18375/F.173; WP-18-031, WP-18-121, WP-19-052; **L1882/F.262**
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO START OF WORK.
- ANY DAMAGE TO PUBLIC RIGHT-OF-WAY, EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY, PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATER AND SEWER EXTENSION PLANS AND AVAILABLE RECORD DRAWINGS, APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- ALL REINFORCED CONCRETE FOR STORM DRAIN STRUCTURES SHALL HAVE A MINIMUM OF 28 DAYS STRENGTH OF 3,500 P.S.I.
- TRAFFIC CONTROL DEVICES:
 - A. THE R1-1 SIGN AND THE STREET NAME SIGN (SNS) ASSEMBLY FOR THIS DEVELOPMENT MUST BE INSTALLED BEFORE THE BASE PAVING IS COMPLETED.
 - B. 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.
 - C. 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).
 - D. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT OF WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, 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.
- ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF CALCULATING FEES.
- SOIL COMPACTION SPECIFICATIONS, REQUIREMENTS, METHODS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER. GEOTECHNICAL ENGINEER TO CONFIRM ACCEPTABILITY OF PROPOSED PAVING SECTION, BASED ON SOIL TEST PRIOR TO CONSTRUCTION.
- COORDINATES AND ELEVATIONS ARE BASED ON MARYLAND COORDINATE SYSTEM - NAD83(1991) AS PROJECTED BY HOWARD COUNTY GEODETIC STATIONS 468E AND 468F.
- THE PROPERTY LINES SHOWN HEREON IS BASED ON A FIELD-RUN BOUNDARY SURVEY PERFORMED BY ROBERT H. VOGEL ENGINEERING, INC., DATED MARCH 25, 2014.
- EXISTING TOPOGRAPHY SHOWN HEREON IS TAKEN FROM BOTH A FIELD-RUN TOPOGRAPHIC SURVEY WITH 2-FOOT CONTOUR INTERVALS PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED MARCH 24, 2014, AND SUPPLEMENTAL TOPOGRAPHY FROM HOWARD COUNTY GIS.
- GEOTECHNICAL REPORT PREPARED BY HILLIS-CARNES ENGINEERING ASSOCIATES, INC., DATED JULY 24, 2014.
- THE GEOTECHNICAL ENGINEER TO CONFIRM PAVING SECTION PRIOR TO CONSTRUCTION (SEE GEOTECHNICAL RECOMMENDATIONS, SHEET 3).
- ALL CURB AND GUTTER TO BE HOWARD COUNTY STANDARD DETAIL 3.01 UNLESS OTHERWISE NOTED (SEE DETAIL, SHEET 3).
- WHERE DRAINAGE FLOWS AWAY FROM CURB, CONTRACTOR TO REVERSE THE GUTTER PAN.
- ALL ELEVATIONS ARE TO FLOWLINE/BOTTOM OF CURB UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- CONTRACTOR RESPONSIBLE FOR CONSTRUCTING ALL HANDICAP RAMPS AND HANDICAP ACCESS IN ACCORDANCE WITH CURRENT ADA REQUIREMENTS.
- ALL REINFORCED CONCRETE FOR STORM DRAIN STRUCTURES SHALL HAVE A MINIMUM OF 28 DAYS STRENGTH OF 3500 P.S.I.
- ALL STORMDRAIN PIPE BEDDING IS TO BE CLASS 'C', AS REQUIRED BY AASHTO-180.
- THE PROPOSED BUILDING TO HAVE ROOF LEADERS WHICH COLLECT INTO THE PROVIDED ROOF DRAIN SYSTEM, WHICH EMPTIES INTO THE STORMWATER MANAGEMENT FACILITY BEFORE ULTIMATELY ENTERING THE STORM DRAIN SYSTEM.
- PUBLIC SEWER AVAILABLE THROUGH CONT. 21-S AND PUBLIC WATER AVAILABLE THROUGH CONT. 133-W.
- TRAFFIC IMPACT ANALYSIS PREPARED BY THE TRAFFIC GROUP, DATED DECEMBER 18, 2014; APPROVED 09-01-2016.
- THE SUBJECT PROPERTY IS ZONED B-2 IN ACCORDANCE WITH THE 10/08/13 COMPREHENSIVE ZONING PLAN.
- THIS PROJECT IS SUBJECT TO COMPLIANCE WITH THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, DEVELOPMENT OR CONSTRUCTION ON THIS PROJECT MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION APPLICATION OR BUILDING/GRADING PERMIT APPLICATIONS.
- BALTIMORE NATIONAL PIKE (ROUTE 40) IS CLASSIFIED AS A PUBLIC INTERMEDIATE ARTERIAL ROAD.
- THE ENVIRONMENTAL REPORT WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC., DATED JULY 18, 2014.
- THERE IS NO STEEP SLOPES, WETLANDS, STREAMS, AND THEIR BUFFERS, SPECIEM OR CHAMPION TREES, OR 100-YEAR FLOODPLAIN LOCATED ON-SITE.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE, AND THE LANDSCAPE MANUAL.
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSED AS PART OF THE DEVELOPER'S AGREEMENT FOR THIS SITE DEVELOPMENT PLAN IN THE AMOUNT OF \$6,330.00 FOR THE REQUIRED 17 SHADE TREES, 5 EVERGREEN TREES, AND 16 SHRUBS.
- THIS PROJECT IS EXEMPT FROM THE FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1202(b)(1) OF THE HOWARD COUNTY CODE BECAUSE THIS PROPERTY IS LESS THAN 40,000 SF IN SIZE.
- ANY EXISTING STREET TREES DAMAGED OR DESTROYED DURING CONSTRUCTION WILL BE REPLACED BY THE CONTRACTOR.
- THERE ARE NO ADJACENT LOTS OR LOTS LOCATED ON THIS PROJECT WHICH INCLUDES THE BUELL HOUSE, WHICH DATES TO C. 1946. A SITE VISIT WAS MADE BY THE HOWARD COUNTY ARCHITECTURAL HISTORIAN ON JULY 24, 2016 FOR THE PURPOSE OF PRODUCING AN HISTORIC SITES INVENTORY FORM IN THE FUTURE. THE DEMOLITION OF THE HOUSE WAS APPROVED ON JULY 27, 2015.
- THE PROPOSED BUILDINGS WILL HAVE AN INSIDE METER SETTING. THE BUILDINGS WILL ALSO HAVE AN AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM.
- A KNOX BOX IS PLACED TO BE PLACED TO THE RIGHT OF EACH BUILDING TO THE RIGHT OF THE MAIN ENTRANCE AT A RANGE OF 4-5' IN HEIGHT AND NO MORE THAN 6' LATERALLY FROM THE DOOR. IT'S LOCATION IS SHOWN ON THESE PLANS. THE BOX SHALL BE ELECTRONICALLY SUPERVISED TO NOTIFY THE OWNER THAT IT IS BEING ACCESSED (INTEGRATED WITH THE FIRE ALARM SYSTEM).
- LANDSCAPING IS NOT PERMITTED WITHIN 1/2' OF EACH SIDE OF THE FIRE DEPARTMENT CONNECTION. PROVIDE A CLEAR UNOBSTRUCTED ACCESS PATH TO THE FIRE DEPARTMENT CONNECTION. NFPA-1 13.1.4.
- FIRE LANES HAVE BEEN PROVIDED IN THIS SITE TO ALLOW EMERGENCY VEHICLE ACCESS. EITHER FIRE LANE SIGNAGE SHOULD BE INSTALLED, OR THE CURBS SHOULD BE PAINTED IN RED AND STENCILED TO IDENTIFY THE ROAD AS A FIRE LANE.
- SIGNAGE SHALL BE PROVIDED ON EACH BUILDING IDENTIFYING THE BUILDING ADDRESS.
- TRASH COLLECTION AND RECYCLABLES TO BE PRIVATE.
- STORMWATER MANAGEMENT FOR THIS REDEVELOPMENT PROJECT IS PROVIDED BY THE USE OF MICRO-SCALE PRACTICES IN ACCORDANCE WITH ENVIRONMENTAL SITE DESIGN CRITERIA FOR REDEVELOPMENT. MICRO-SCALE PRACTICES INCLUDE A MICRO-BIORETENTION FACILITY AND PERVIOUS CONCRETE. THESE FACILITIES SHALL BE PRIVATELY OWNED AND MAINTAINED.
- A PRE-SUBMISSION MEETING WAS NOT REQUIRED FOR THIS PROJECT, AS THERE ARE NO RESIDENTIAL ZONED PROPERTIES WITHIN 200 FEET OF THE PROJECT BOUNDARY. PER SECTION 16.156(c) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- ANY WORK WITHIN THE SHARED RIGHT OF WAY WILL REQUIRE A DISTRICT OFFICE PERMIT.
- IF ANY WELL OR SEPTIC COMPONENTS ARE FOUND DURING ANY STAGE OF THE DEMOLITION OR CONSTRUCTION THEY MUST BE PROPERLY ABANDONED WITH DOCUMENTATION OF THE ABANDONMENT SUBMITTED TO THE HEALTH DEPT.
- THIS PROJECT WAS SUBJECT TO A DESIGN ADVISORY PANEL (DAP) REVIEW HELD ON DECEMBER 17, 2014. THE DAP RECOMMENDATIONS FOR THIS PROJECT AREA AS FOLLOWS:
 - THAT THE APPLICANT CONSIDER THE SIDEWALK THAT STAFF HAD RECOMMENDED BE CONSIDERED OR ADDED TO THE SITE PLAN, THE ONE TO THE SOUTHWEST SIDE OF THE DRIVE ISLE.
 - THAT THE APPLICANT DO CANOPIES IN THE STOREFRONT USING BLACK.
 - THAT THE APPLICANT TAKE ANOTHER LOOK AT YOUR Pylon SIGN.
 - THAT THE APPLICANT INCLUDE AT LEAST ONE CROSSWALK, IF NOT TWO, AT THE ENTRY TO ROUTE 40.
 - THAT THE APPLICANT CONSIDER OPTIONS TO EXPAND THE PAVEMENT.
- NO PARKING SHALL BE PERMITTED ALONG THE CURB OR EITHER SIDE OF THE PROPERTY'S DRIVEWAY ENTRANCE AISLE. CONTRACTOR TO PROVIDE SIGNAGE ON BOTH SIDES OF THE ENTRANCE DRIVE TO THIS PROPERTY.
- THERE IS AN EXISTING STRUCTURE (HOUSE) AND PAVED DRIVEWAY/PARKING THAT SHALL BE REMOVED - SEE DEMOLITION PLAN ON SHEET 2.
- REFERENCE AA-16-019, GRANTED MARCH 9, 2017; AN ADMINISTRATIVE ADJUSTMENT FROM SECTION 119.0.0.2.A OF THE HOWARD COUNTY ZONING REGULATIONS TO REDUCE THE SETBACK FROM A PUBLIC STREET RIGHT-OF-WAY FROM 30 FEET TO 24 FEET FOR PORTIONS OF TWO RETAINING WALLS AND A DECK, APPROVED TO THE FOLLOWING CONDITIONS:
 - THE PETITIONER SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND COUNTY LAWS AND REGULATIONS.
 - THE GRANTED ADMINISTRATIVE ADJUSTMENT SHALL APPLY SOLELY TO THE RETAINING WALLS AND DECK AS DEPICTED ON THE ADMINISTRATIVE ADJUSTMENT PLAN SUBMITTED BY THE PETITIONER AND NOT TO ANY OTHER STRUCTURE, ADDITION, BUILDING OR USE.
- REFERENCE WP-18-031, APPROVED OCTOBER 12, 2018; AN ALTERNATIVE COMPLIANCE TO SECTION 16.156(L) AND SECTION 16.156(M) OF THE AMENDED FIFTH EDITION OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. APPROVAL SUBJECT TO THE FOLLOWING CONDITIONS:
 - THE FILING OF THE DPW DEVELOPER AGREEMENT, THE PAYMENT OF FEES AND THE SUBMITTAL OF SDP ORIGINALS MUST BE MADE WITHIN 180 DAYS FROM THE SEPTEMBER 3, 2017 DEADLINE DATE (ON OR BEFORE MARCH 2, 2018).
 - PROVIDE A GENERAL NOTE ON SDP-16-045 THIS ALTERNATIVE COMPLIANCE PETITION FILE NUMBER, REQUEST, APPROVAL DATE, AND CONDITIONS OF APPROVAL.
- REFERENCE WP-18-121, APPROVED JUNE 13, 2018; AN ALTERNATIVE COMPLIANCE TO SECTION 16.156(L) AND SECTION 16.156(M) OF THE AMENDED FIFTH EDITION OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. APPROVAL SUBJECT TO THE FOLLOWING CONDITIONS:
 - THE FILING OF THE DPW DEVELOPER AGREEMENT, THE PAYMENT OF FEES AND THE SUBMITTAL OF SDP ORIGINALS MUST BE MADE WITHIN 180 DAYS FROM THE DATE OF THE APPROVAL LETTER (ON OR BEFORE DECEMBER 10, 2018).
 - PROVIDE A GENERAL NOTE ON SDP-16-045 THIS ALTERNATIVE COMPLIANCE PETITION FILE NUMBER, REQUEST, APPROVAL DATE, AND CONDITIONS OF APPROVAL.
- REFERENCE WP-19-052, APPROVED JANUARY 7, 2019; AN ALTERNATIVE COMPLIANCE TO SECTION 16.156(L) AND SECTION 16.156(M) OF THE AMENDED FIFTH EDITION OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. APPROVAL SUBJECT TO THE FOLLOWING CONDITIONS:
 - THE FILING OF THE DPW DEVELOPER AGREEMENT, THE PAYMENT OF FEES AND THE SUBMITTAL OF SDP ORIGINALS MUST BE MADE WITHIN 180 DAYS FROM THE DATE OF THE APPROVAL LETTER (ON OR BEFORE JULY 6, 2019).
 - PROVIDE A GENERAL NOTE ON SDP-16-045 THIS ALTERNATIVE COMPLIANCE PETITION FILE NUMBER, REQUEST, APPROVAL DATE, AND CONDITIONS OF APPROVAL.

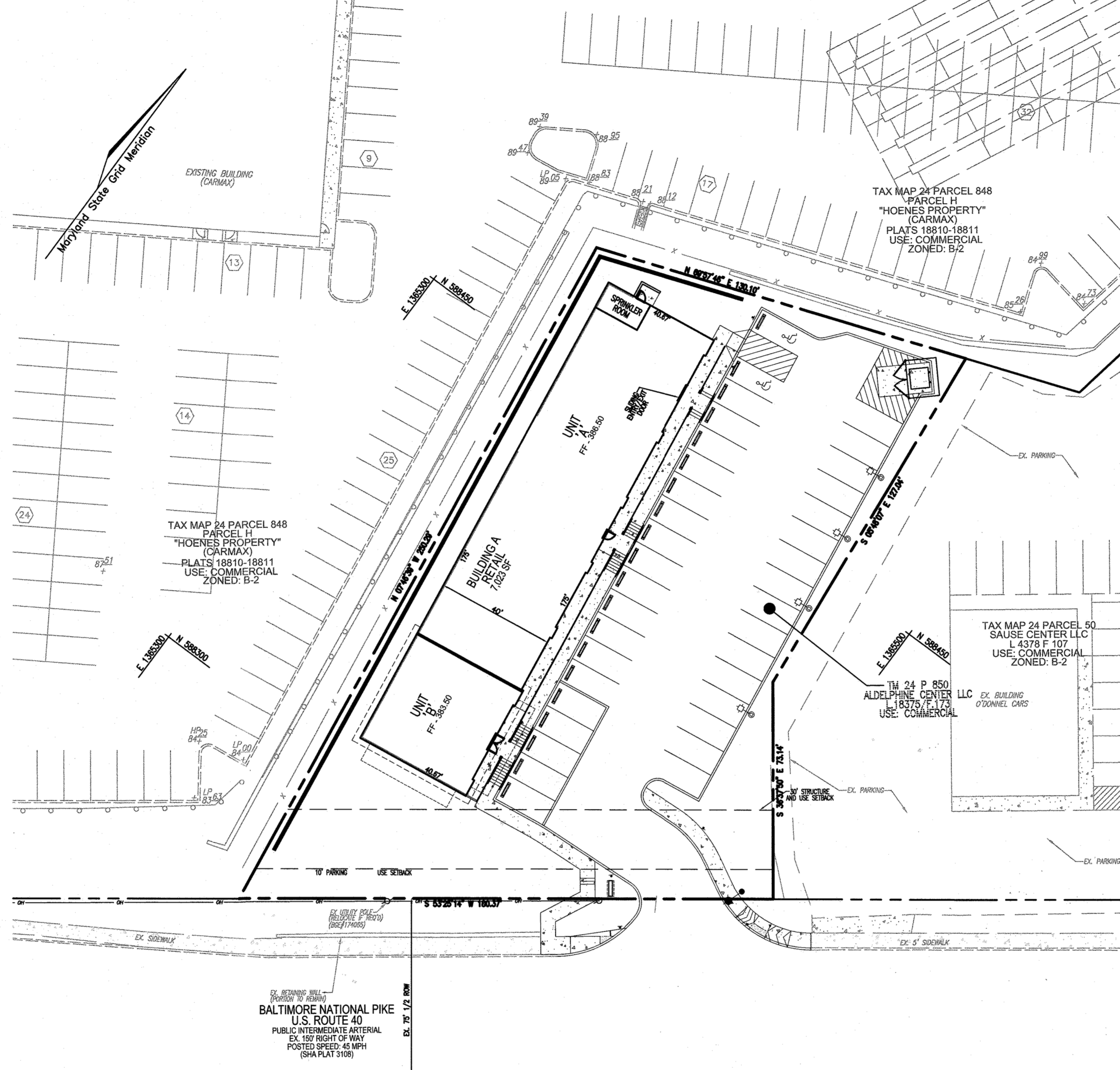
SITE DEVELOPMENT PLAN

ADELPHINE CENTER

8654 BALTIMORE NATIONAL PIKE

PROPOSED RETAIL BUILDING

L.15371 / F.00300



PLAN VIEW
SCALE: 1"=30'

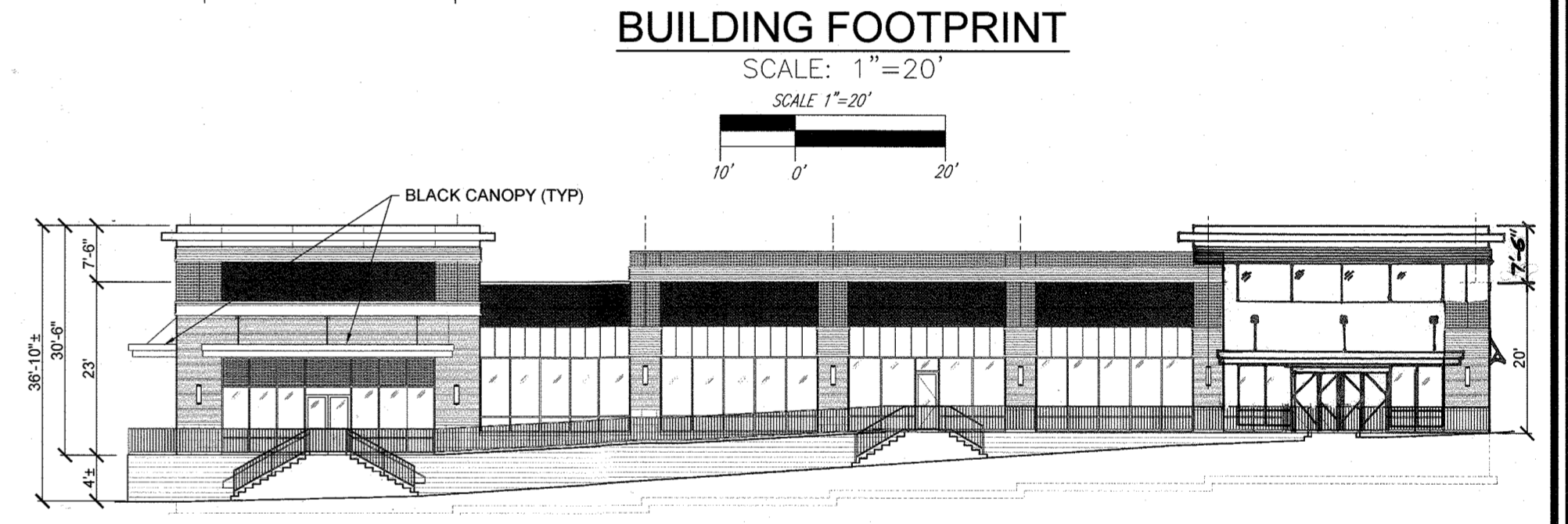
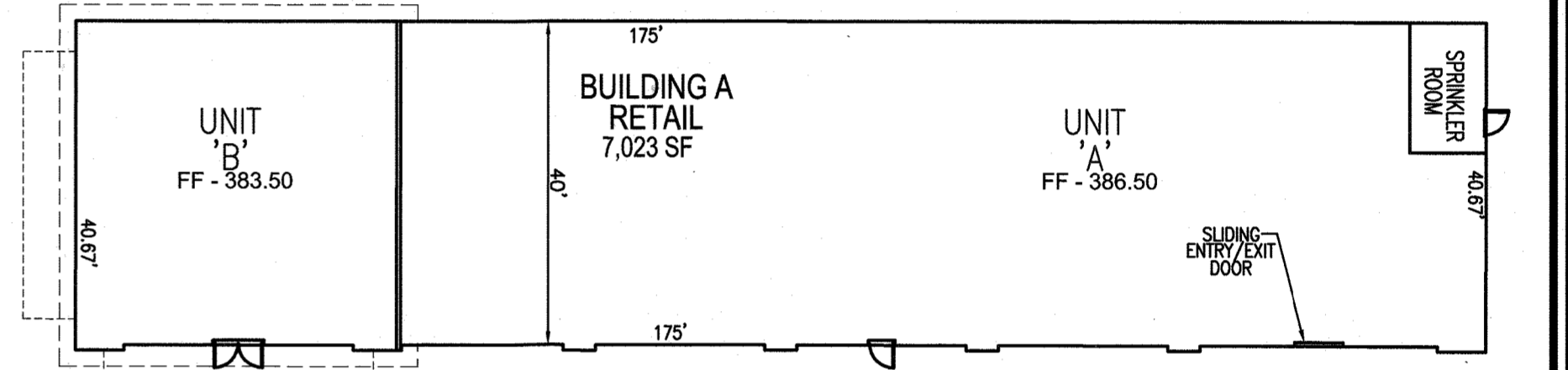
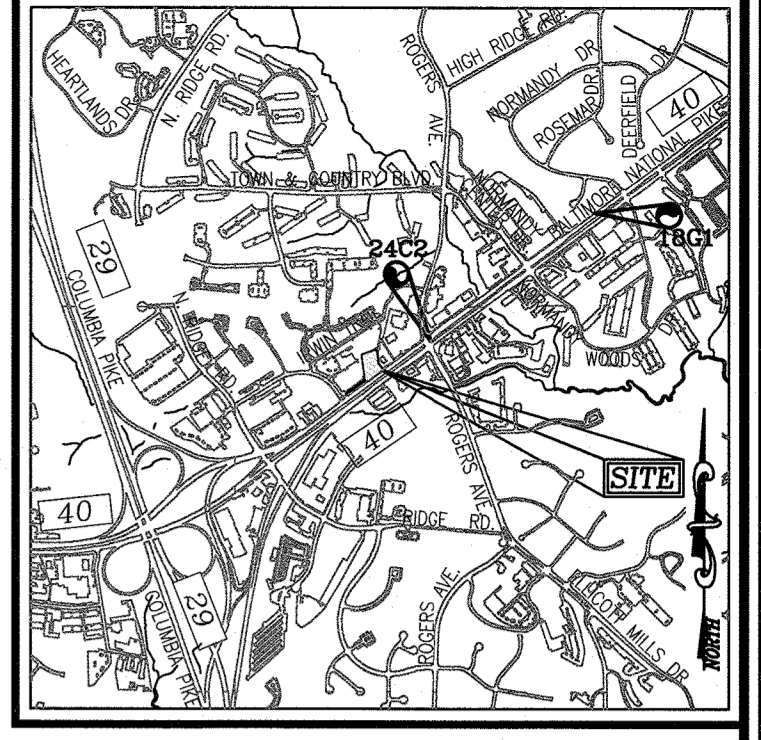
BENCHMARKS

COORDINATES BASED ON NAD 83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS 1861, 24C2.

HOWARD COUNTY BENCHMARK
1861 N 589984.958 E 1367750.246 ELEV. 407.814
24C2 N 588648.324 E 1366038.160 ELEV. 354.089

LEGEND

- PROPERTY LINE
- RIGHT-OF-WAY LINE
- ADJACENT PROPERTY LINE
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- PROPOSED SIDEWALK



SHEET INDEX

DESCRIPTION	SHEET NO.
COVER SHEET	1 OF 15
SITE LAYOUT PLAN AND DEMOLITION PLAN	2 OF 15
SITE DETAILS	3 OF 15
GRADING, SEDIMENT AND EROSION CONTROL PLAN; SOILS MAP	4 OF 15
SEDIMENT AND EROSION CONTROL NOTES AND DETAILS	5 OF 15
STORM DRAIN DRAINAGE AREA MAP AND UTILITY PROFILES	6 OF 15
STORM DRAIN AND UTILITY PROFILES	7 OF 15
STORMWATER MANAGEMENT NOTES AND DETAILS	8 OF 15
LANDSCAPE PLAN, NOTES AND DETAILS	9 OF 15
BORINGS DETAILS	10 OF 15
RETAINING WALL DESIGN	11 OF 15
RETAINING WALL DESIGN	12 OF 15
RETAINING WALL DESIGN	13 OF 15
RETAINING WALL DESIGN	14 OF 15

STORMWATER MANAGEMENT PRACTICE CHART

LOT/PARCEL #	ADDRESS	FACILITY NAME & NUMBER	PRACTICE TYPE (QUANTITY)	PUBLIC	PRIVATE	MAINTAINANCE RESPONSIBILITY
PARCEL 850	8654 BALTIMORE NATIONAL PIKE	SWMF#1	Micro Bioretention (M-6)		X	Owner
PARCEL 850	8654 BALTIMORE NATIONAL PIKE	SWMF#2	Permeous Paving (A-2)		X	Owner
PARCEL 850	8654 BALTIMORE NATIONAL PIKE	25YR FACILITY	Underground Storm Drain Detention		X	Owner

ADDRESS CHART

BUILDING NO.	STREET ADDRESS
A	8654 BALTIMORE NATIONAL PIKE

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NUMBER
N/A	-	PARCEL 850

PLAT OR L/F
L.18375/F.173

GRID NO. ZONING
6 B-2

TAX MAP NO.
24

ELECT. DIST.
2ND

CENSUS TR.
602600

WATER CODE: F-03
SEWER CODE: 1452800

OWNER/DEVELOPER
ADELPHINE CENTER LLC
2233 CHARLESTON PLACE
HYATTSVILLE MD 20783
(240) 381-6579
C/O OLA OYEFUSI

REVISIONS

NO.	REVISION	DATE
2	ADD REZONING TO THE BUILDING AND CHANGE USE OF PART OF BUILDING FROM RETAIL TO LANDSCAPE	08-27-21
1	REVISE WATER PER ADD CONTRACT	10-1-19

SITE DEVELOPMENT PLAN
COVER SHEET

ADELPHINE CENTER
8654 BALTIMORE NATIONAL PIKE
PROPOSED RETAIL BUILDING
(L.18375/F.173)

TAX MAP 24 BLOCK 6
2ND ELECTION DISTRICT

ZONED B-2
PARCEL 850
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS

3300 N. RIDGE ROAD, SUITE 110
ELLICOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961



PROFESSIONAL CERTIFICATE

DESIGN BY: RHW/DZE
DRAWN BY: DZE
CHECKED BY: RHW
DATE: JUNE 2019
SCALE: AS SHOWN
W.O. NO.: 13-34

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. 16193, EXPIRATION DATE 08-27-2028.

1 SHEET OF 15

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 7.25.19
CHIEF, DEVELOPMENT ENGINEERING DIVISION

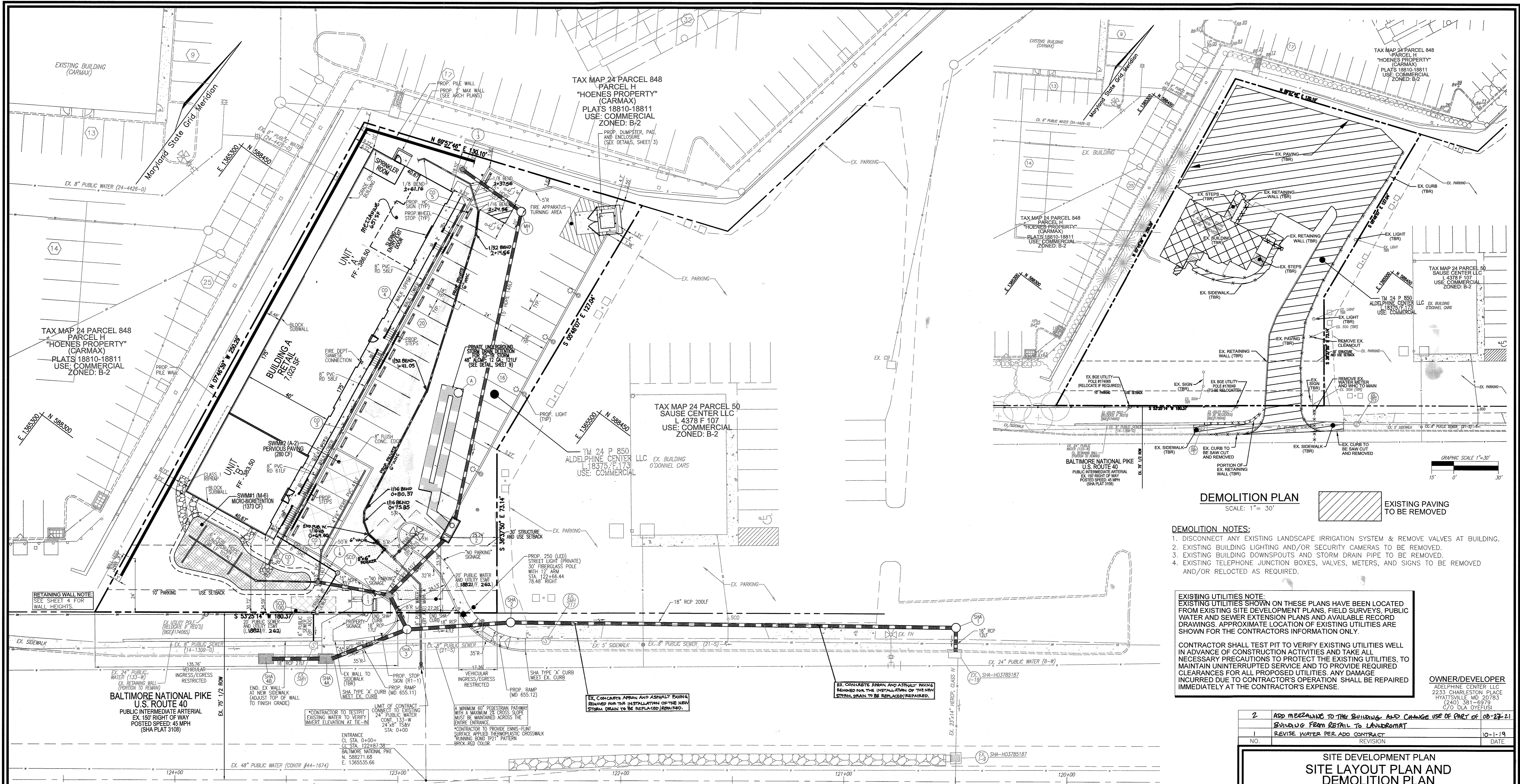
[Signature] 8/2/19
CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 8-2-19
DIRECTOR

PARKING TABULATION

BUILDING A (TOTAL 7675 SF)
LANDSCAPE (5285 + 651 MEZZ) @ 4 SF/1000 SF 24 SPACES
RETAIL (1765 @ 5 SF/1000 SF) 9 SPACES
TOTAL PARKING SPACES REQUIRED: 33 SPACES
TOTAL PARKING SPACES PROVIDED: 36 SPACES
INCLUDING 2 HANDICAP SPACES

* THE DEPARTMENT OF PLANNING AND ZONING HAS APPROVED THE PARKING RATIO FOR LANDSCAPE (4.0 SF/1000 SF) ON 06/20/21



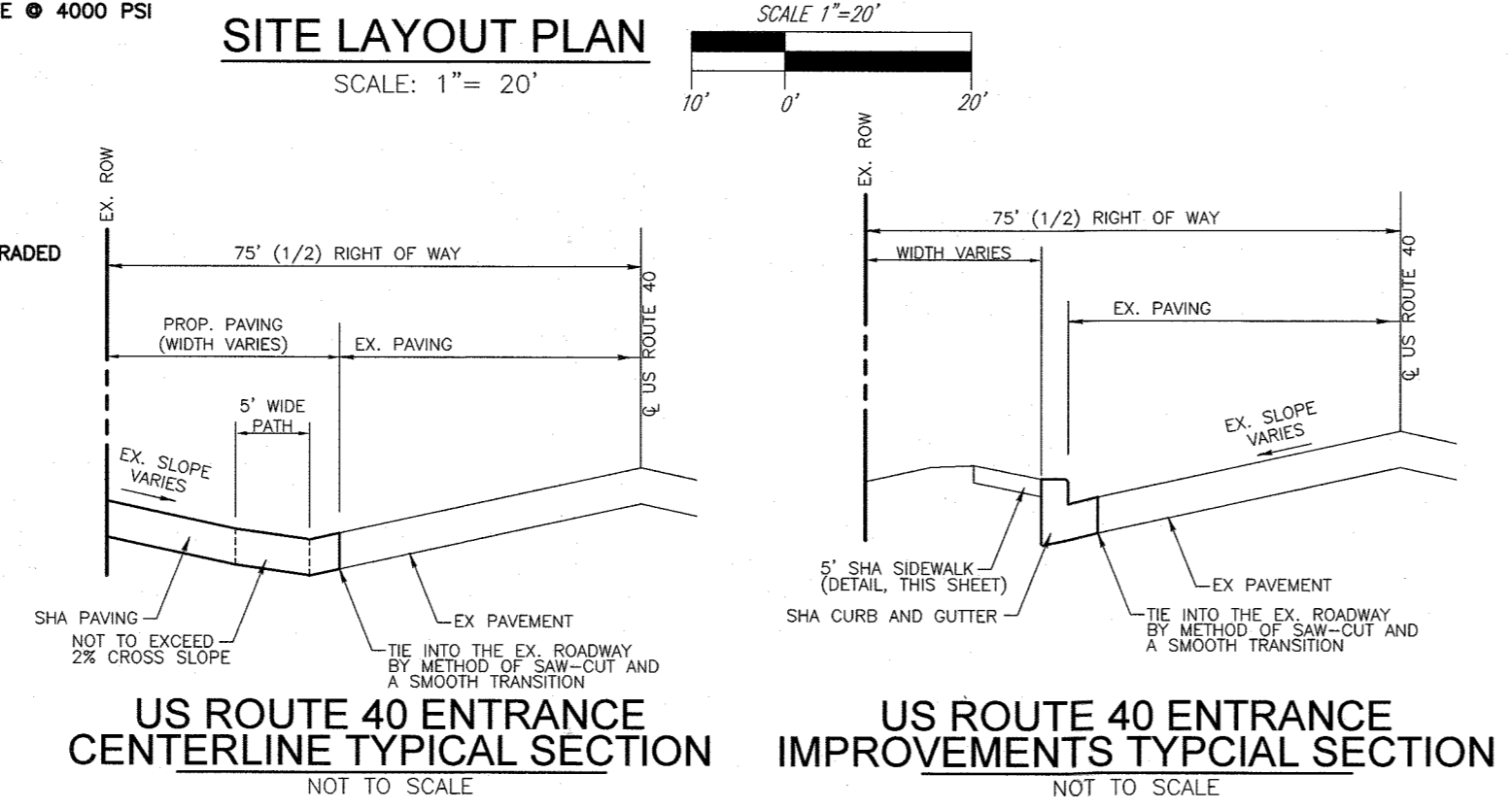
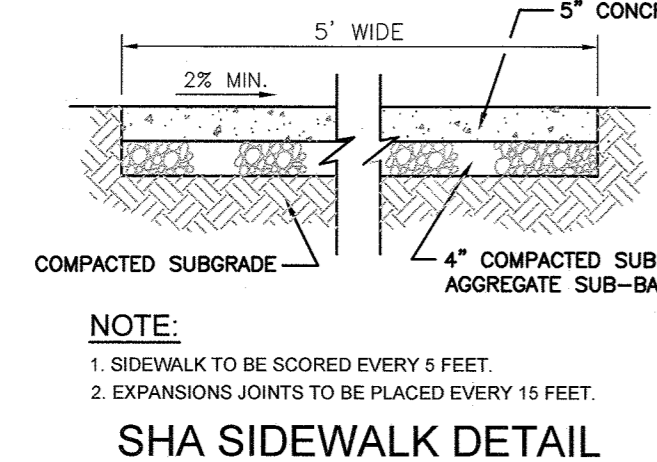
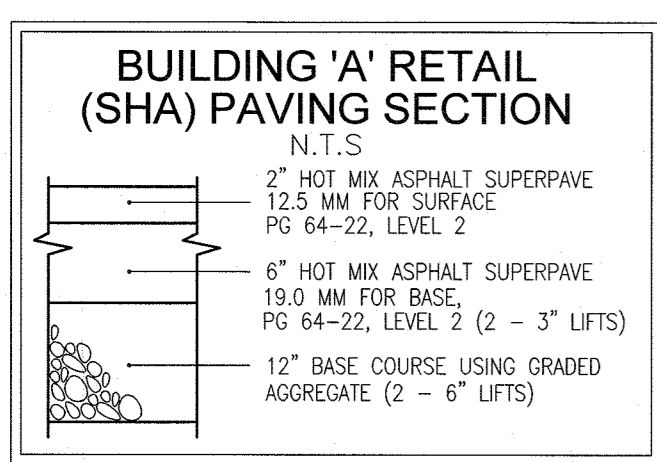
DEMOLITION PLAN
SCALE: 1" = 30'

- DEMOLITION NOTES:**
- DISCONNECT ANY EXISTING LANDSCAPE IRRIGATION SYSTEM & REMOVE VALVES AT BUILDING.
 - EXISTING BUILDING LIGHTING AND/OR SECURITY CAMERAS TO BE REMOVED.
 - EXISTING BUILDING DOWNSPOUTS AND STORM DRAIN PIPE TO BE REMOVED.
 - EXISTING TELEPHONE JUNCTION BOXES, VALVES, METERS, AND SIGNS TO BE REMOVED AND/OR RELOCATED AS REQUIRED.

EXISTING UTILITIES NOTE:
EXISTING UTILITIES SHOWN ON THESE PLANS HAVE BEEN LOCATED FROM EXISTING SITE DEVELOPMENT PLANS, FIELD SURVEYS, PUBLIC WATER AND SEWER EXTENSION PLANS AND AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION ONLY.

CONTRACTOR SHALL TEST PIT TO VERIFY EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES, TO MAINTAIN UNINTERRUPTED SERVICE AND TO PROVIDE REQUIRED CLEARANCES FOR ALL PROPOSED UTILITIES. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.

OWNER/DEVELOPER
ADELPHINE CENTER LLC
2233 CHARLESTON PLACE
HYATTSVILLE, MD 20783
(240) 381-6979
C/O OLA OYEFUSI



SHA PAVING NOTE:

- THE UTILITY CONNECTIONS FOR THE 8" WATER, INLET AND STORM DRAIN WILL NEED TO BE PATCHED WITH FULL DEPTH HEAVY DUTY PAVING SECTION (SEE ROUTE 40 PAVING SECTION, THIS SHEET).
- ANY DISTURBED MARKINGS WILL NEED TO BE REPLACED IN KIND AS REQUIRED AND SHALL USE MATERIALS TO MATCH EXISTING MARKINGS.
- MILL TO A DEPTH OF 2" WEDGE AND RESURFACE FOR CROSS SLOPE TRANSITION FOR THE ENTRANCE MODIFICATION ALONG BALTIMORE NATIONAL PIKE (US ROUTE 40).

LEGEND:

EXISTING OVERHEAD LINES	PROPOSED SANITARY LINE
EXISTING WATERLINE LINE	PROPOSED WATER LINE
EXISTING GAS LINE	EXISTING FENCE
EXISTING CURB AND RAIL	PROPERTY LINE
EXISTING METAL FENCE	ADJACENT PROPERTY LINE
EXISTING WOOD FENCE	RIGHT-OF-WAY LINE
EXISTING ELECTRICAL BOX	PROPOSED SIDEWALK
EXISTING POLE	EXISTING CURB AND GUTTER
EXISTING LIGHT POLE WITH CONCRETE BASE	PROPOSED CURB AND GUTTER
EXISTING MAILBOX	PROPOSED WHEEL STOP
EXISTING SIGN	PROPOSED STORM DRAIN INLET
EXISTING SANITARY MANHOLE	PROPOSED STORM DRAIN
EXISTING CLEANOUT	20" PUBLIC WATER AND UTILITY EASEMENT PLATE
EXISTING FIRE HYDRANT	PROP. MICRO BRETENTION AREA (M-B)
PROPOSED PARKING POINT	PROPOSED TEST PIT

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 7-28-19
CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] 8/2/19
CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 8-2-19
DIRECTOR

2	ADD MEZZANINE TO THE BUILDING AND CHANGE USE OF PART OF	08-27-21
1	BUILDING FROM RETAIL TO LABORATORY	
1	REVISE WATER PER ADD CONTRACT	10-1-19
NO.	REVISION	DATE

**SITE DEVELOPMENT PLAN
SITE LAYOUT PLAN AND
DEMOLITION PLAN**

ADELPHINE CENTER
8654 BALTIMORE NATIONAL PIKE
PROPOSED RETAIL BUILDING
(L 18375/F 173)

TAX MAP 24 BLOCK 6
2ND ELECTION DISTRICT

ZONED B-2
PARCEL 850
HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL
ENGINEERS, INC.**
ENGINEERS • SURVEYORS • PLANNERS

3800 N. RIDGE ROAD, SUITE 110
ELLIGOTT CITY, MD 21143
Tel: 410.461.7666
Fax: 410.461.8961

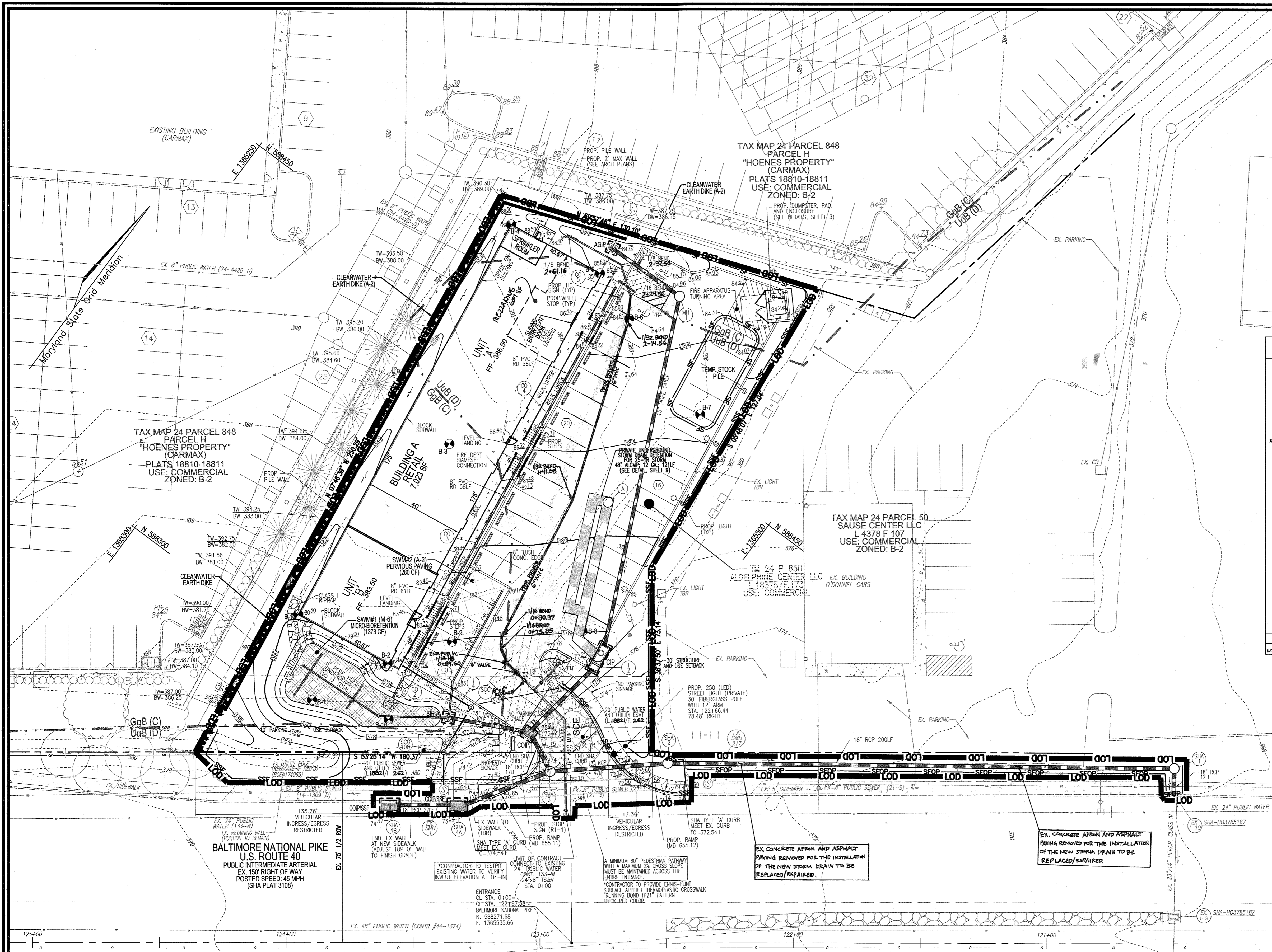
PROFESSIONAL CERTIFICATE

STATE OF MARYLAND
ROBERT H. VOGEL
NO. 16193
REGISTERED PROFESSIONAL ENGINEER

DESIGN BY: RHV/DZE
DRAWN BY: DZE
CHECKED BY: RHV
DATE: JUNE 2019
SCALE: AS SHOWN
W.O. NO.: 13-34

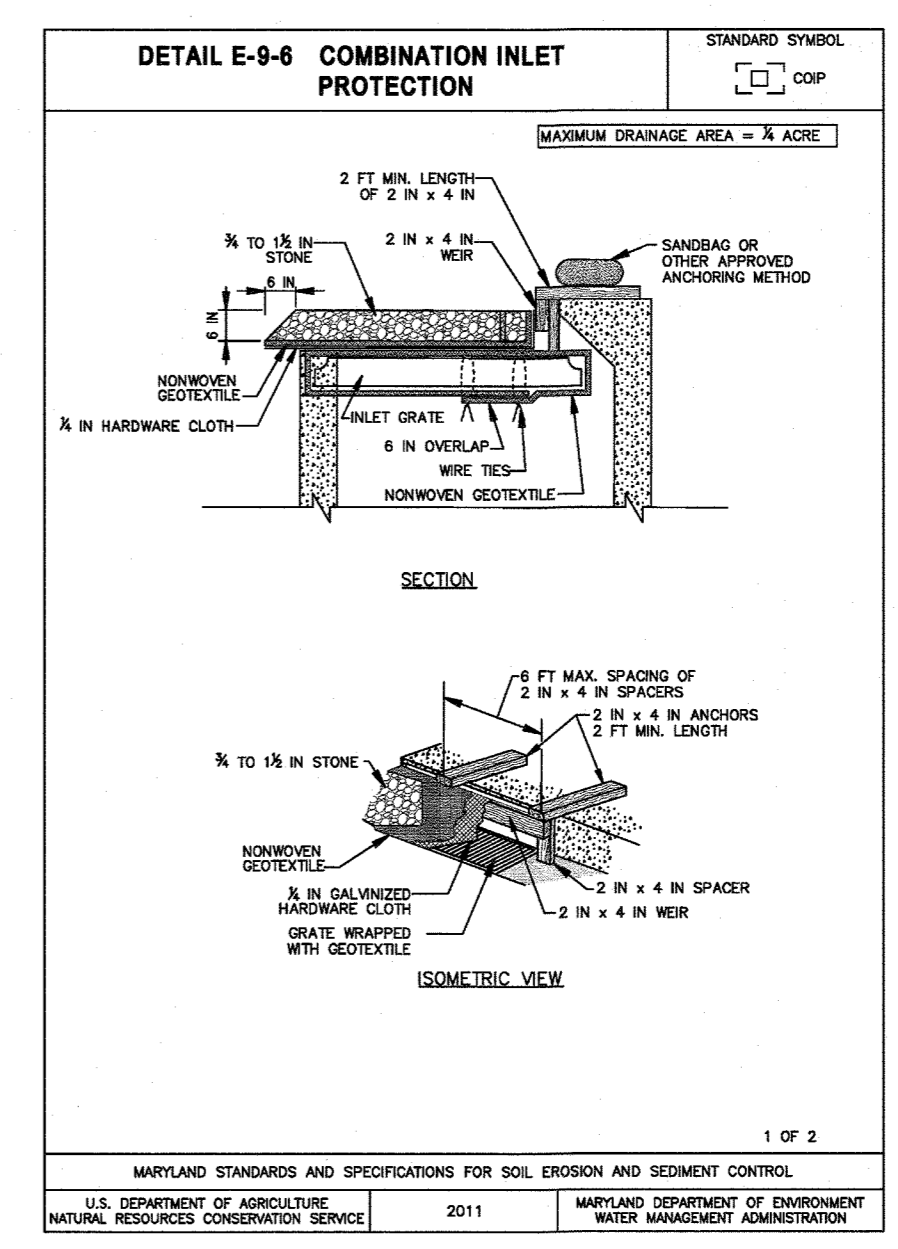
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE 08-27-2028.

2 SHEET OF 15



LEGEND:

	PROPOSED CONTOUR		PROPERTY LINE
	EXISTING CONTOUR		ADJACENT PROPERTY LINE
	EXISTING OVERHEAD LINES		RIGHT-OF-WAY LINE
	EXISTING WATERLINE		PROPOSED SIDEWALK
	EXISTING GAS LINE		EXISTING CURB AND GUTTER
	EXISTING GUARD RAIL		PROPOSED CURB AND GUTTER
	EXISTING METAL FENCE		PROPOSED WHEEL STOP
	EXISTING WOOD FENCE		PROPOSED STORM DRAIN INLET
	EXISTING ELECTRICAL BOX		PROPOSED STORM DRAIN
	EXISTING POLE		SILT FENCE
	EXISTING LIGHT POLE WITH CONCRETE BASE		SILT FENCE ON PAVEMENT
	EXISTING MAILBOX		SUPER SILT FENCE
	EXISTING SIGN		LIMIT OF DISTURBANCE
	EXISTING SANITARY MANHOLE		CURB INLET PROTECTION
	EXISTING CLEANOUT		STANDARD INLET PROTECTION
	EXISTING FIRE HYDRANT		STABILIZED CONSTRUCTION ENTRANCE
	PROPOSED PARKING COUNT		20' PUBLIC WATER AND UTILITY EASEMENT
	PROPOSED TEST PIT		PROP. MICRO BREENTION AREA (M-9)
	PROPOSED SANITARY LINE		
	PROPOSED WATER LINE		
	SOILS BOUNDARY		
	EXISTING FENCE		



- CONSTRUCTION SPECIFICATIONS**
- USE NOMINAL 2 INCH x 4 INCH LUMBER.
 - USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
 - LET GRATE, AND WRAP WITH NONWOVEN GEOTEXTILE TO COMPLETELY COVER ALL OPENINGS THEN SET.
 - ATTACH A CONTINUOUS PIECE OF 3/8 INCH GALVANIZED HARDWARE CLOTH WITH A MINIMUM WIDTH OF 30 INCHES AND A MINIMUM LENGTH OF 4 FEET LONGER THAN THE THROAT OPENING, TO THE 2x4 WER, EXTENDING 2 FEET BEYOND THROAT ON EACH SIDE.
 - PLACE A CONTINUOUS PIECE OF NONWOVEN GEOTEXTILE THE SAME DIMENSIONS AS THE HARDWARE CLOTH OVER THE HARDWARE CLOTH AND SECURELY ATTACH IT TO THE WER.
 - NAIL THE 2x4 WER TO THE TOP OF A 9 INCH LONG VERTICAL SPACER TO BE LOCATED BETWEEN THE WER AND THE INLET FACE (MAXIMUM 4 FEET APART).
 - PLACE THE GEOTEXTILE AGAINST THE INLET THROAT AND NAIL TO 2x4 ANCHORS MINIMUM 3 FEET LENGTHS OF 2x4 INCH TO THE TOP OF THE WER AT SPACER LOCATIONS, EXTEND 2x4 ANCHORS ABOVE THE INLET TOP AND HOLD IN PLACE BY SANDBAGS OR OTHER APPROVED ANCHORING METHOD.
 - INSTALL END SPACERS A MINIMUM OF 1 FOOT BEYOND BOTH ENDS OF THE THROAT OPENING.
 - FORM THE 3/8 INCH HARDWARE CLOTH AND THE GEOTEXTILE TO THE CONCRETE CURB AND AGAINST THE FACE OF THE CURB ON BOTH SIDES OF THE INLET. PLACE AGAIN 3/8 TO 1/2 INCH STONE CO-FORMULA REINFORCED CONCRETE OVER THE HARDWARE CLOTH AND GEOTEXTILE AFTER A STORM EVENT, IF IT CLOGGED, STOP.
 - AT NON-SUMP LOCATIONS, INSTALL A TEMPORARY SANDBAG OR ASPHALT BERM TO PREVENT INLET BYPASS.
 - STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH MAJOR EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOSING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. STOP. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STORM.

- SEDIMENT CONTROL NOTES:**
- SEDIMENT CONTROLS INTERRUPTED BY THE INSTALLATION OF STORM DRAINS ARE TO BE REPAIRED IMMEDIATELY.
 - A DOUBLE ROW OF "SUPER" SILT FENCE IS TO BE INSTALLED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.
 - STOCKPILES EXCEEDING 15 FEET IN HEIGHT SHALL BE BENCHED.
 - SILT FENCE SHALL BE CURLED UPHILL WHEREVER IT RUNS DOWNHILL.
 - EITHER TEMPORARY OR PERMANENT SEEDING AND STABILIZATION IS TO BE PERFORMED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR OR AT THE INTERVALS PROVIDED IN THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, WHICHEVER IS MORE STRINGENT.

OWNER/DEVELOPER
ADELPHINE CENTER LLC
2233 CHARLESTON PLACE
HYATTSVILLE, MD 20783
(240) 381-6979
C/O OLA OYEYEMI

NO.	REVISION	DATE
2	ADD MEZZANINE TO THE BUILDING AND CHANGE THE USE OF PART OF BUILDING FROM RETAIL TO LANDCOMET	10-1-19
1	REVISE WATER PER ADD CONTRACT	

SITE DEVELOPMENT PLAN
GRADING, SEDIMENT AND EROSION CONTROL PLAN AND DETAILS
ADELPHINE CENTER
8654 BALTIMORE NATIONAL PIKE
PROPOSED RETAIL BUILDING
(L 18375/F 173)
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERS & SURVEYORS • PLANNERS
3900 N. RIDGE ROAD, SUITE 110 ELLIGOTT CITY, MD 21043
TEL: 410.461.7666 FAX: 410.461.8961



DESIGN BY: RHW/DZE
DRAWN BY: DZE
CHECKED BY: RHW
DATE: JUNE 2019
SCALE: AS SHOWN
W.O. NO.: 13-34

PROFESSIONAL CERTIFICATE
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. 16193, EXPIRATION DATE 09-27-2026.

4 SHEET OF 15

SOILS LEGEND
HOWARD COUNTY SOILS MAP #13

SYMBOL	DESCRIPTION	GROUP	ERODIBLE	K _f FACTOR
Uub	URBAN LAND - UNIFORMS COMPLEX, 0 TO 8 PERCENT SLOPES	D	NO	0.28
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	C	NO	0.20

NOTE: BASED ON HOWARD SOIL SURVEY

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 7/25/19
CHIEF, DEVELOPMENT ENGINEERING DIVISION JR DATE

[Signature] 8/2/19
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 8-2-19
DIRECTOR DATE

OWNER/DEVELOPER CERTIFICATION:
I/WE CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE.

[Signature] 7/1/19
OWNER/DEVELOPER SIGNATURE DATE

[Signature]
PRINTED NAME & TITLE

DESIGN CERTIFICATION:
I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT I HAVE PREPARED A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

[Signature] 7/1/19
DESIGNER'S SIGNATURE DATE

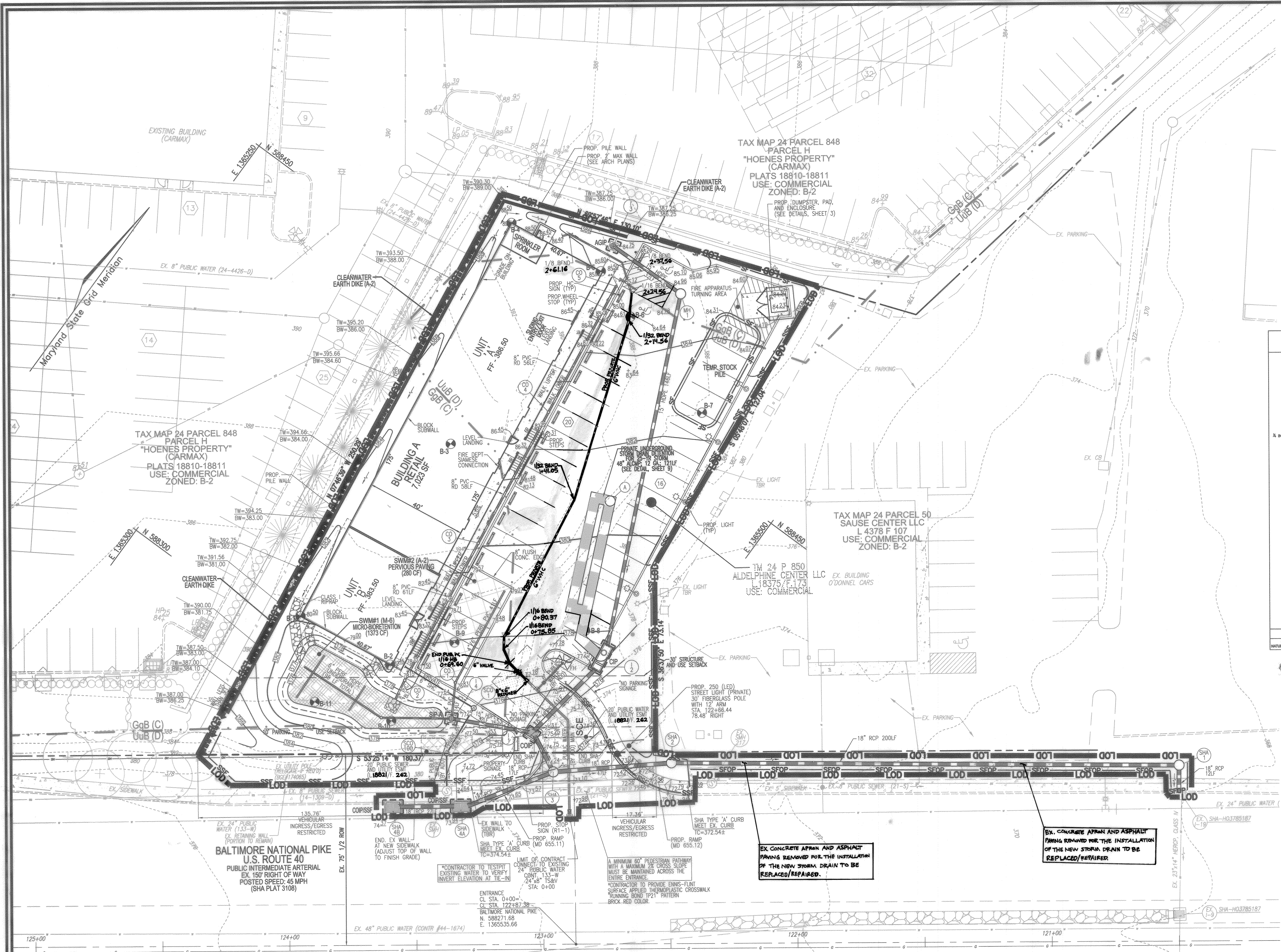
ROBERT H. VOGEL
PRINTED NAME
MD REGISTRATION NO. 16193
(E) R.L.S. OR R.L.A. (circle one)

US ROUTE 40 FRONTAGE AND ENTRANCE IMPROVEMENTS SEDIMENT CONTROL NOTE:
SAME-DAY STABILIZATION IS TO BE PERFORMED FOR ANY AREAS THAT WILL NO DRAIN TO AN APPROVED SEDIMENT CONTROL DEVICE (i.e. ENTRANCE AREA CONSTRUCTION, WHICH MAY CONVEY SEDIMENT-LADEN WATER TO THE SHA RIGHT-OF-WAY).

[Signature] 7/19/19
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
HOWARD S.C.D.

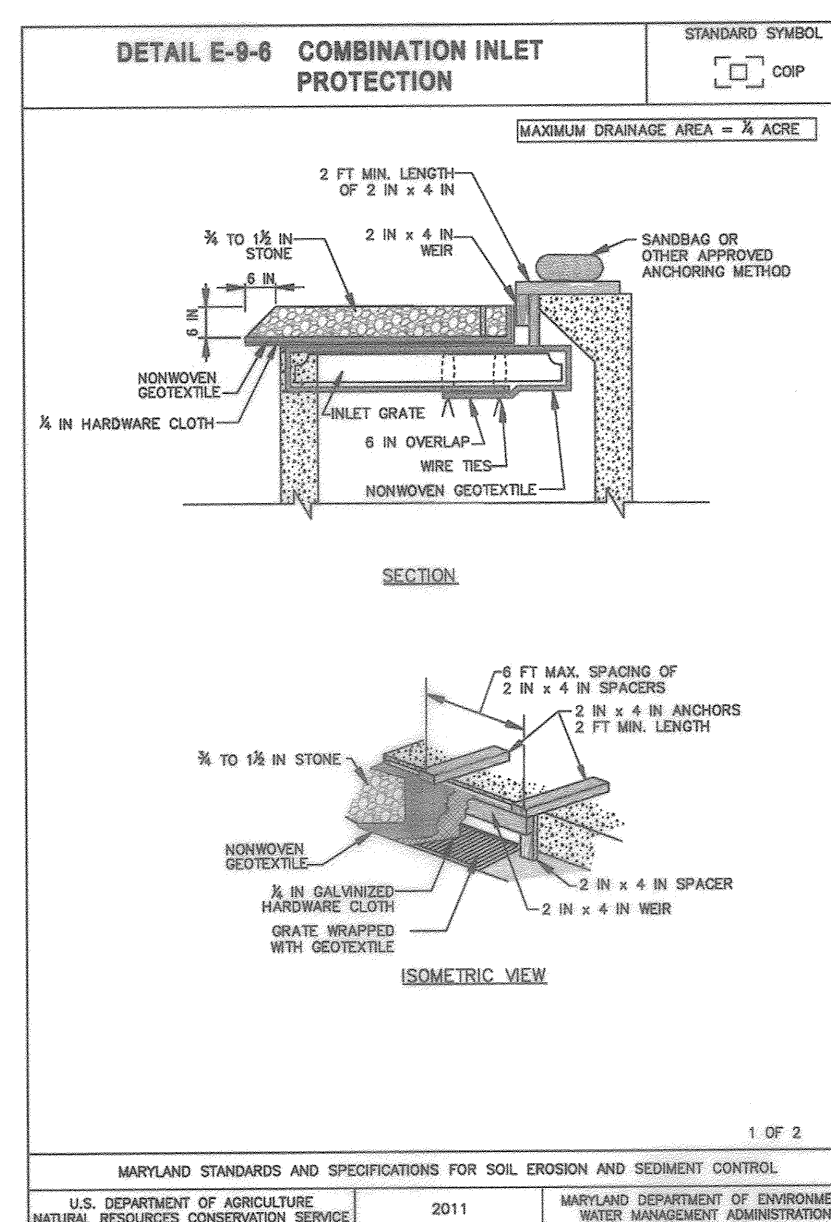
EXISTING UTILITIES NOTE:
EXISTING UTILITIES SHOWN ON THESE PLANS HAVE BEEN LOCATED FROM EXISTING SITE DEVELOPMENT PLANS, FIELD SURVEYS, PUBLIC WATER AND SEWER EXTENSION PLANS AND AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S INFORMATION ONLY.

CONTRACTOR SHALL TEST PIT TO VERIFY EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES, TO MAINTAIN UNINTERRUPTED SERVICE AND TO PROVIDE REQUIRED CLEARANCES FOR ALL PROPOSED UTILITIES. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.



LEGEND:

---	PROPOSED CONTOUR	---	PROPERTY LINE
---	EXISTING CONTOUR	---	ADJACENT PROPERTY LINE
---	EXISTING OVERHEAD LINES	---	RIGHT-OF-WAY LINE
---	EXISTING WATERLINE	---	PROPOSED SIDEWALK
---	EXISTING GAS LINE	---	EXISTING CURB AND GUTTER
---	EXISTING GUARD RAIL	---	PROPOSED METAL FENCE
---	EXISTING METAL FENCE	---	PROPOSED WHEEL STOP
---	EXISTING WOOD FENCE	---	PROPOSED STORM DRAIN INLET
---	EXISTING ELECTRICAL BOX	---	PROPOSED STORM DRAIN
---	EXISTING POLE	---	SILT FENCE
---	EXISTING LIGHT POLE WITH CONCRETE BASE	---	SILT FENCE ON PAVEMENT
---	EXISTING MAILBOX	---	SUPER SILT FENCE
---	EXISTING SIGN	---	LIMIT OF DISTURBANCE
---	EXISTING SANITARY MANHOLE	---	CURB INLET PROTECTION
---	EXISTING CLEANOUT	---	STANDARD INLET PROTECTION
---	EXISTING FIRE HYDRANT	---	STABILIZED CONSTRUCTION ENTRANCE
---	PROPOSED PARKING COUNT	---	20' PUBLIC WATER AND UTILITY EASEMENT
---	PROPOSED TEST PIT	---	PROP. MICRO BORETATION AREA (M-6)
---	PROPOSED SANITARY LINE	---	
---	PROPOSED WATER LINE	---	
---	SOILS BOUNDARY	---	
---	EXISTING FENCE	---	



CONSTRUCTION SPECIFICATIONS

- USE NOMINAL 2 INCH x 4 INCH LUMBER.
- USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
- LIFT GRATE, AND WRAP WITH NONWOVEN GEOTEXTILE TO COMPLETELY COVER ALL OPENINGS, THEN SET GRATE BACK IN PLACE.
- ATTACH A CONTINUOUS PIECE OF 3/8 INCH GALVANIZED HARDWARE CLOTH WITH A MINIMUM WIDTH OF 30 INCHES AND A MINIMUM LENGTH OF 4 FEET LONGER THAN THE THROAT OPENING, TO THE 2X4 SIDE, EXTENDING 2 FEET BEYOND THROAT OF EACH SIDE.
- PLACE A CONTINUOUS PIECE OF NONWOVEN GEOTEXTILE THE SAME DIMENSIONS AS THE HARDWARE CLOTH OVER THE HARDWARE CLOTH AND SECURELY ATTACH IT TO THE WEIR.
- MAIL THE 2X4 WEIR TO THE TOP OF A HIGH-LONG VERTICAL SPACER TO BE LOCATED BETWEEN THE WEIR AND THE INLET FACE (MAXIMUM 4 FEET APART).
- PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL TO 2X4 ANCHORS (MINIMUM 2 FOOT LENGTHS OF 2X4 NAILS TO THE TOP OF THE WEIR AT SPACER LOCATIONS) EXTERIOR SIDE ANCHORS ACROSS THE INLET TOP AND HOLD IN PLACE BY SANDBAGS OR OTHER APPROVED ANCHORING METHOD.
- INSTALL END SPACERS A MINIMUM OF 1 FOOT BEYOND BOTH ENDS OF THE THROAT OPENING.
- FORM THE 3/8 INCH HARDWARE CLOTH AND THE GEOTEXTILE TO THE CONCRETE GUTTER AND AGAINST THE FACE OF THE CURB ON BOTH SIDES OF THE INLET. PLACE CLEAN 3/4 INCH HIGH STONE OR EQUIVALENT RECYCLED CONCRETE OVER THE HARDWARE CLOTH AND GEOTEXTILE IN SUCH A MANNER TO PREVENT WATER FROM ENTERING THE INLET ONCE OR AROUND THE GEOTEXTILE.
- AT NON-SLUMP LOCATIONS, INSTALL A TEMPORARY SANDBAG OR ASPHALT BEAM TO PREVENT INLET BYPASS.
- FORM THE 3/8 INCH HARDWARE CLOTH AND THE GEOTEXTILE TO THE CONCRETE GUTTER AND AGAINST THE FACE OF THE CURB ON BOTH SIDES OF THE INLET. PLACE CLEAN 3/4 INCH HIGH STONE OR EQUIVALENT RECYCLED CONCRETE OVER THE HARDWARE CLOTH AND GEOTEXTILE IN SUCH A MANNER TO PREVENT WATER FROM ENTERING THE INLET ONCE OR AROUND THE GEOTEXTILE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

SEDIMENT CONTROL NOTES:

- SEDIMENT CONTROLS INTERRUPTED BY THE INSTALLATION OF STORM DRAINS ARE TO BE REPAIRED IMMEDIATELY.
- A DOUBLE ROW OF "SUPER" SILT FENCE IS TO BE INSTALLED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.
- STOCKPILES EXCEEDING 15 FEET IN HEIGHT SHALL BE BENCHED.
- SILT FENCE SHALL BE CURLED UPHILL WHEREVER IT RUNS DOWNHILL.
- EITHER TEMPORARY OR PERMANENT SEEDING AND STABILIZATION IS TO BE PERFORMED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR AT THE INTERVALS PROVIDED IN THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, WHICHEVER IS MORE STRINGENT.

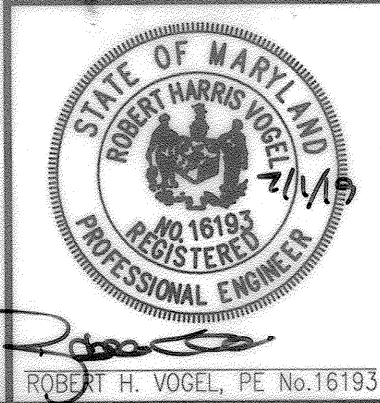
OWNER/DEVELOPER
 ADELPHINE CENTER LLC
 2233 CHARLESTON PLACE
 HYATTSVILLE, MD 20783
 (240) 381-8979
 6/2 QLA (04/2018)

NO.	REVISION	DATE
1	REVISE WATER PER ADD CONTRACT	10-1-19

**SITE DEVELOPMENT PLAN
 GRADING, SEDIMENT AND EROSION
 CONTROL PLAN AND DETAILS**

ADELPHINE CENTER
 8654 BALTIMORE NATIONAL PIKE
 PROPOSED RETAIL BUILDING
 (L18375/F.173)

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 3300 N. RIDGE ROAD, SUITE 110 TEL: 410.461.7666
 ELLICOTT CITY, MD 21043 FAX: 410.461.8961



PROFESSIONAL CERTIFICATE

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. 16193, EXPIRATION DATE: 08-27-2020.

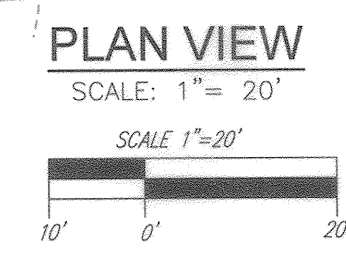
DESIGN BY:	RHV/DZE
DRAWN BY:	DZE
CHECKED BY:	RHV
DATE:	JUNE 2019
SCALE:	AS SHOWN
W.O. NO.:	13-34

4 SHEET OF 15

**SOILS LEGEND
 HOWARD COUNTY SOILS MAP #13**

SYMBOL	GROUP	ERODIBLE	K' FACTOR
U _{ub}	URBAN LAND - UDDERTHENTS COMPLEX, 0 TO 8 PERCENT SLOPES	D	NO
G _{gb}	GLENELOM LOAM, 3 TO 8 PERCENT SLOPES	C	0.20

NOTE: BASED ON HOWARD SOIL SURVEY



US ROUTE 40 FRONTAGE AND ENTRANCE IMPROVEMENTS SEDIMENT CONTROL NOTE:
 SAME-DAY STABILIZATION IS TO BE PERFORMED FOR ANY AREAS THAT WILL NOT DRAIN TO AN APPROVED SEDIMENT CONTROL DEVICE (i.e. ENTRANCE AREA CONSTRUCTION, WHICH MAY CONVEY SEDIMENT-LOADED WATER TO THE SHA RIGHT-OF-WAY).

EXISTING UTILITIES NOTE:
 EXISTING UTILITIES SHOWN ON THESE PLANS HAVE BEEN LOCATED FROM EXISTING SITE DEVELOPMENT PLANS, FIELD SURVEYS, PUBLIC WATER AND SEWER EXTENSION PLANS AND AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION ONLY.

CONTRACTOR SHALL TEST PIT TO VERIFY EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES, TO MAINTAIN UNINTERRUPTED SERVICE AND TO PROVIDE REQUIRED CLEARANCES FOR ALL PROPOSED UTILITIES. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 7-25-19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] 8/2/19
 CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 8-2-19
 DIRECTOR

OWNER/DEVELOPER CERTIFICATION:
 I/WE CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENTATION PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND MDE.

[Signature] 7/1/19
 OWNER/DEVELOPER SIGNATURE
 OLA OJEFUSI
 PRINTED NAME & TITLE

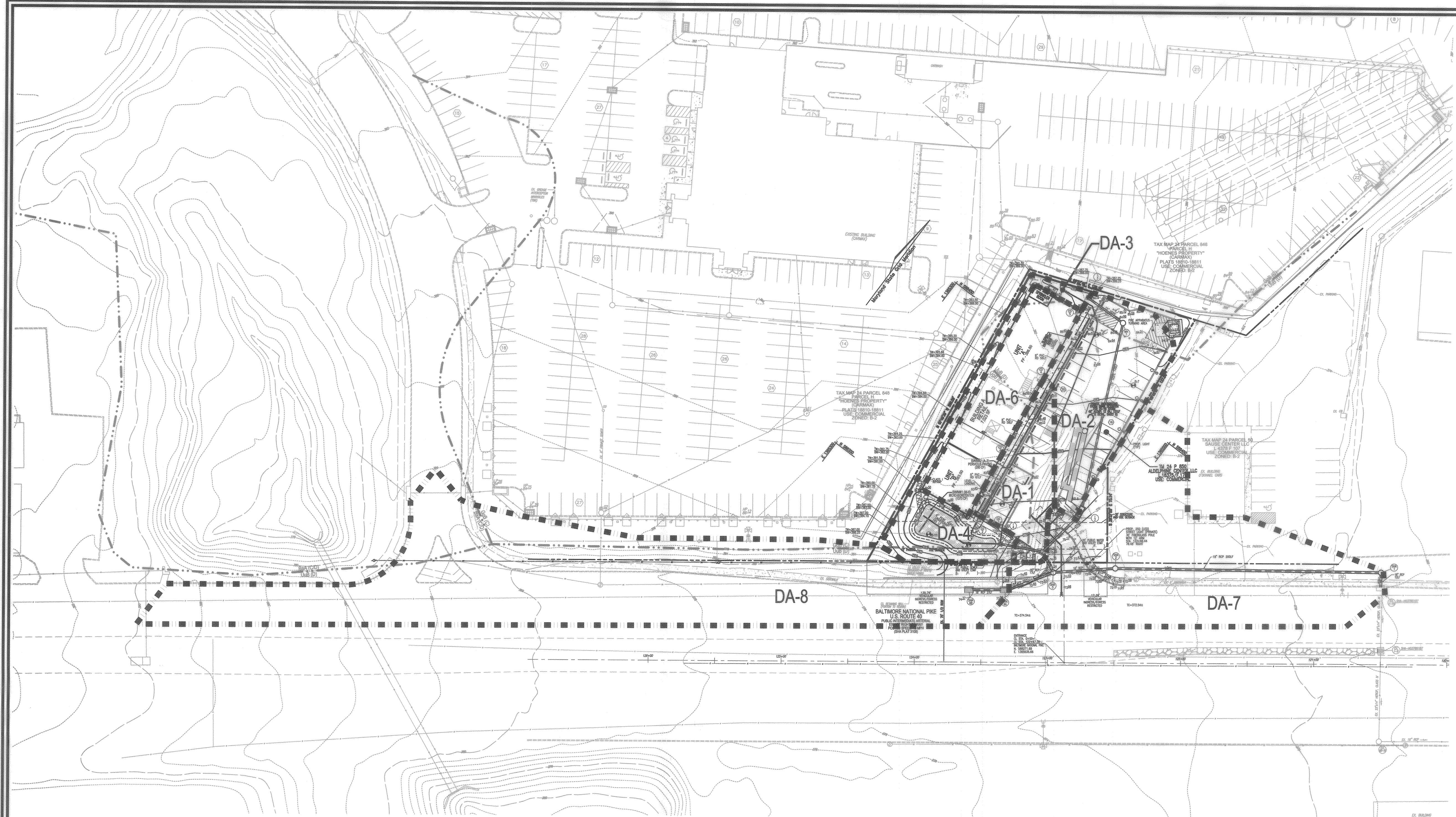
DESIGN CERTIFICATION:
 I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

[Signature] 7/1/19
 DESIGNER'S SIGNATURE
 ROBERT H. VOGEL
 PRINTED NAME
 NO REGISTRATION NO. 16193
 (P.E.) R.L.S., OR R.L.A. (circle one)
 HOWARD S.C.D.
 DATE

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

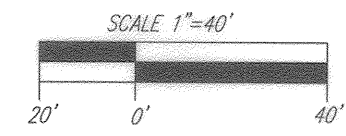
[Signature] 7/19/19
 DATE

SD Drainage Area			
DRAINAGE AREA	AREA AC	C	IMP
DA-1	0.11	0.83	95%
DA-2	0.21	0.82	92%
DA-3	0.01	0.19	0%
DA-4	0.11	0.22	3%
DA-6	0.06	0.86	100%
DA-7	0.56	0.79	88%
DA-8	0.85	0.69	73%



STORM DRAIN DRAINAGE AREA MAP

SCALE: 1" = 40'

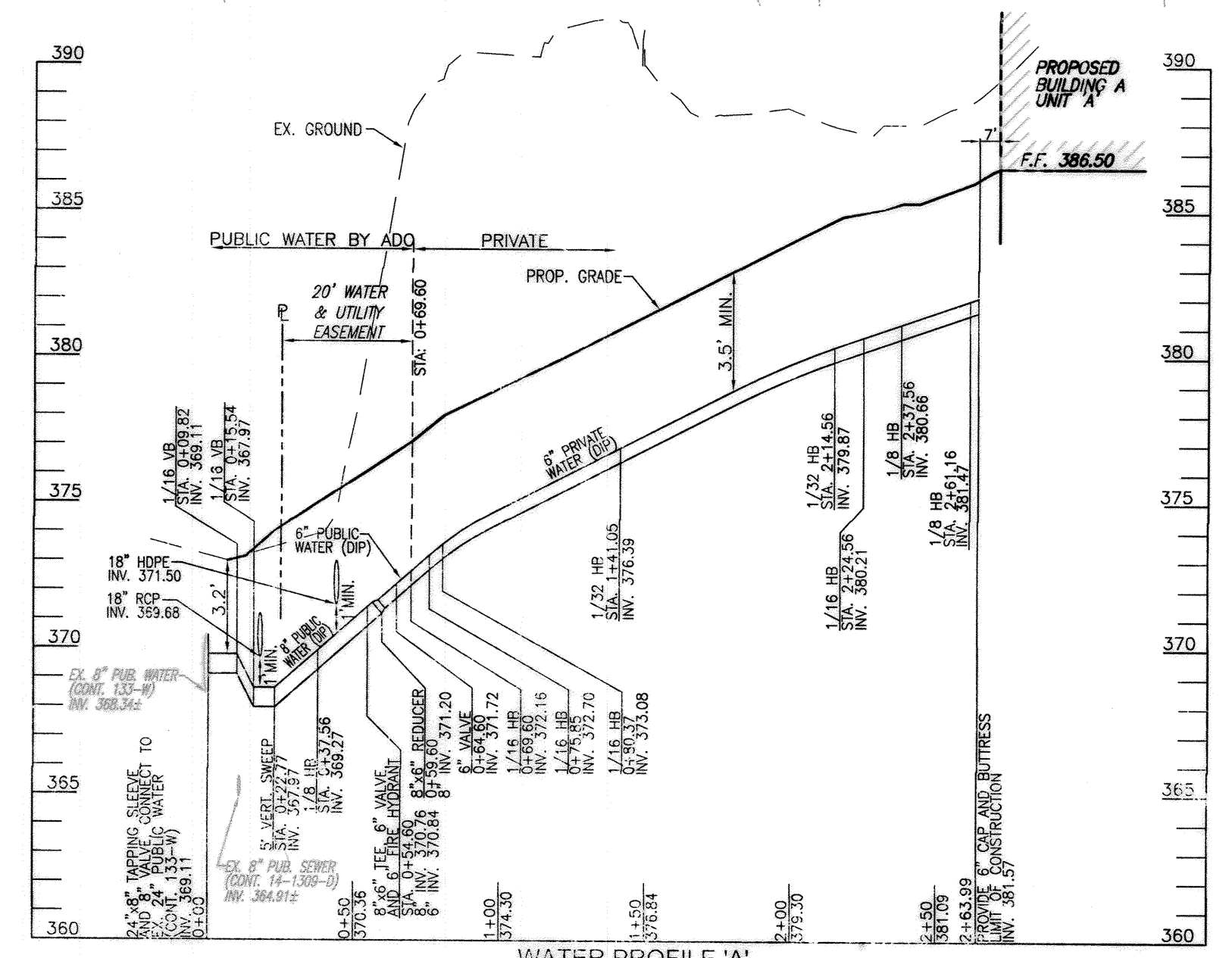


LEGEND:

- | | |
|---|---|
| <ul style="list-style-type: none"> --- PROPOSED CONTOUR --- EXISTING CONTOUR --- EXISTING OVERHEAD LINES --- EXISTING WATERLINE LINE --- EXISTING GAS LINE --- EXISTING GUARD RAIL --- EXISTING METAL FENCE --- EXISTING WOOD FENCE --- EXISTING ELECTRICAL BOX --- EXISTING POLE --- EXISTING LIGHT POLE WITH CONCRETE BASE --- EXISTING MAILBOX --- EXISTING SIGN --- EXISTING SANITARY MANHOLE --- EXISTING CLEANOUT --- EXISTING FIRE HYDRANT | <ul style="list-style-type: none"> Ⓜ PROPOSED PARKING COUNT Ⓜ PROPOSED TEST PIT --- PROPOSED SANITARY LINE --- PROPOSED WATER LINE --- SOILS BOUNDARY --- EXISTING FENCE --- PROPERTY LINE --- ADJACENT PROPERTY LINE --- RIGHT-OF-WAY LINE --- PROPOSED SIDEWALK --- EXISTING CURB AND GUTTER --- PROPOSED CURB AND GUTTER --- PROPOSED WHEEL STOP --- PROPOSED STORM DRAIN INLET --- PROPOSED STORM DRAIN --- STORM DRAIN DRAINAGE DIVIDE |
|---|---|

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

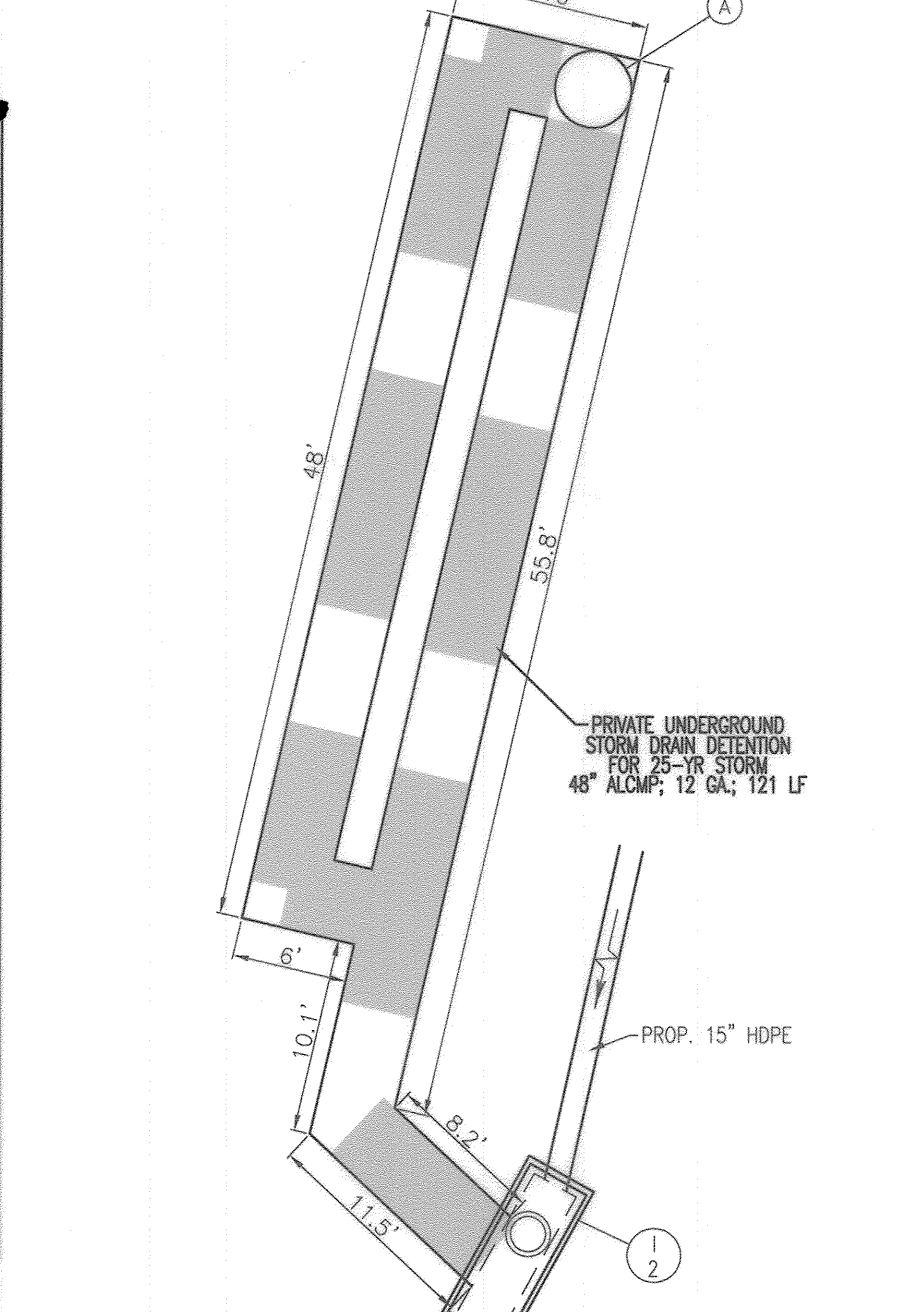
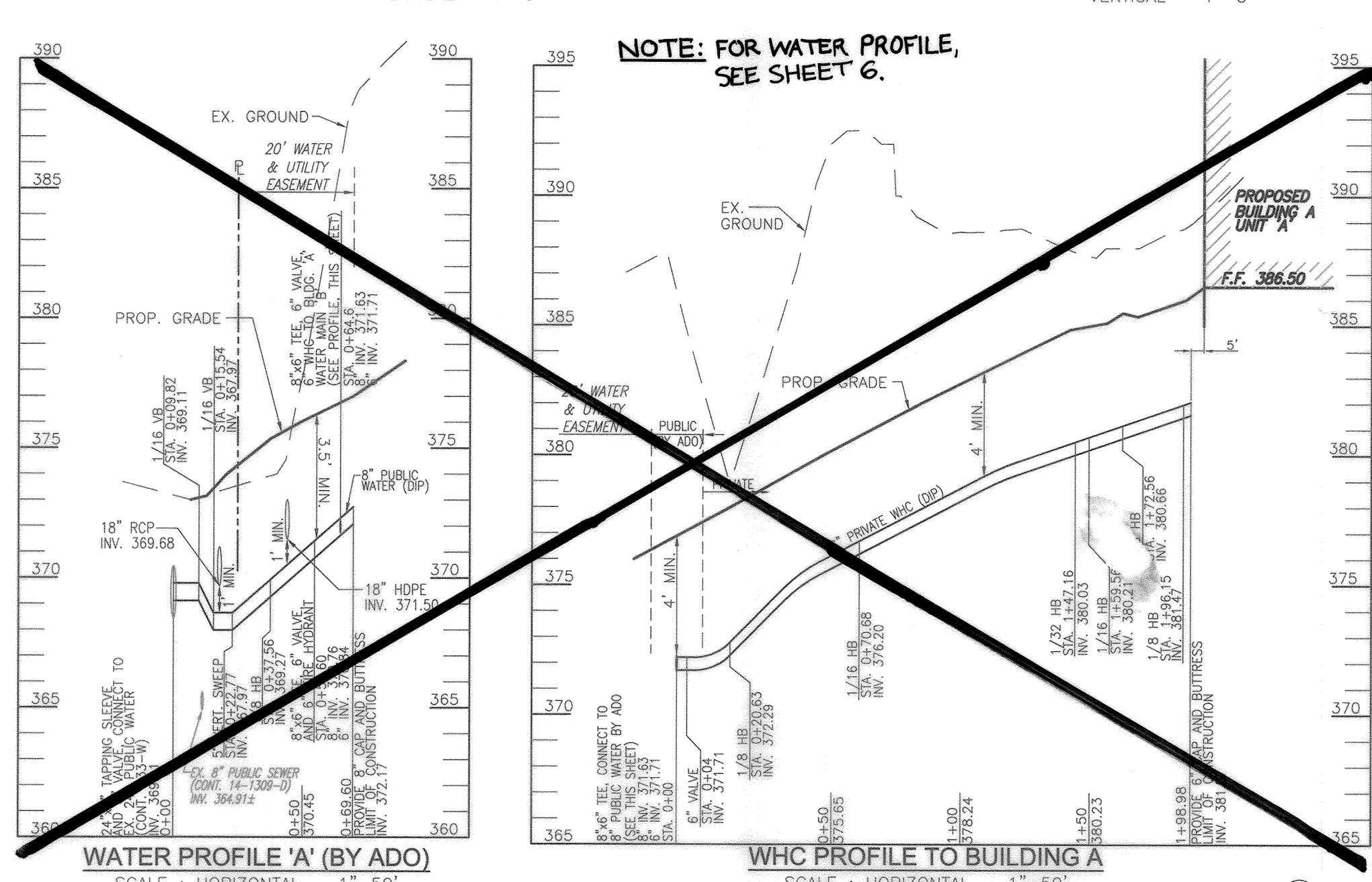
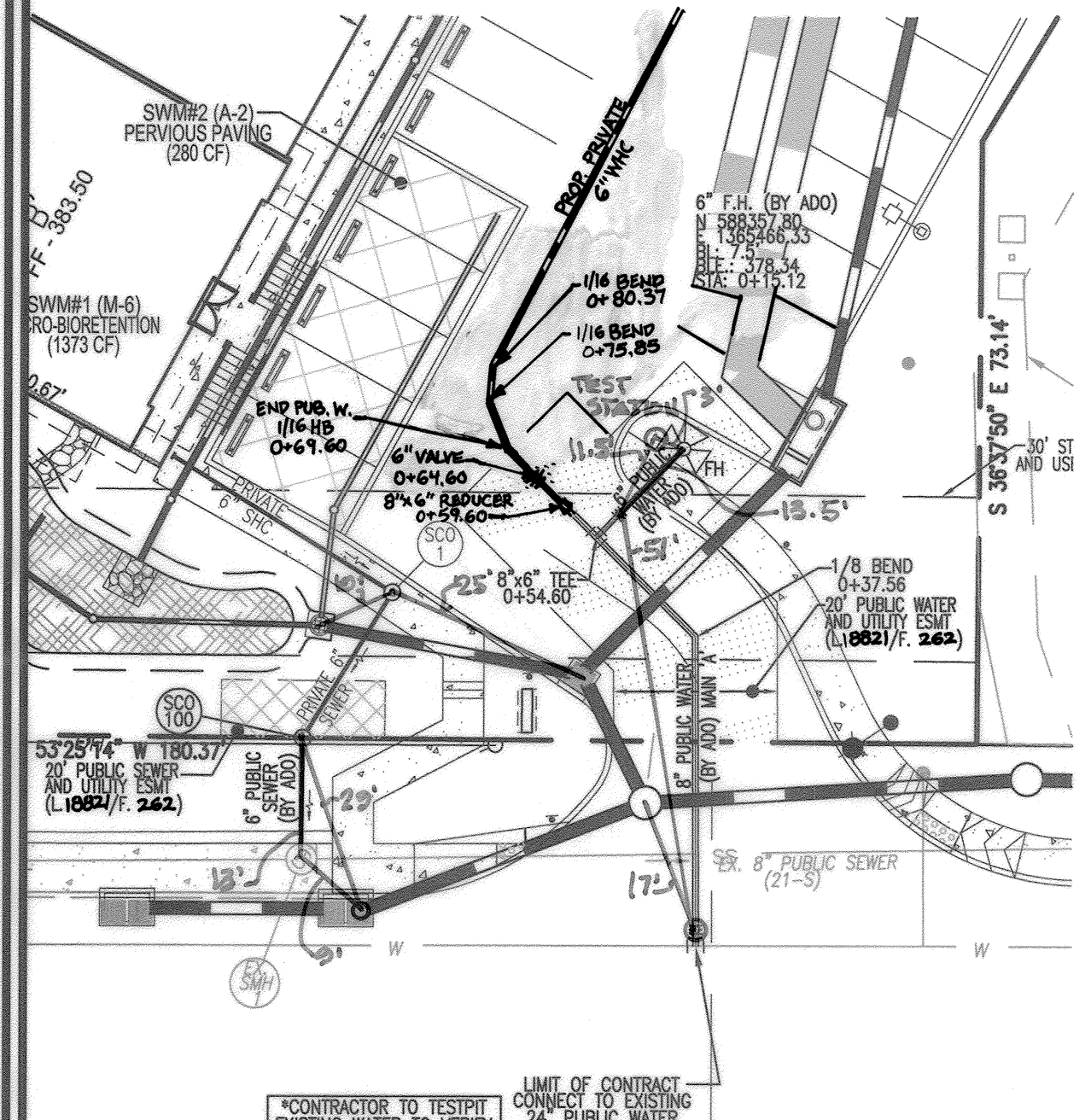
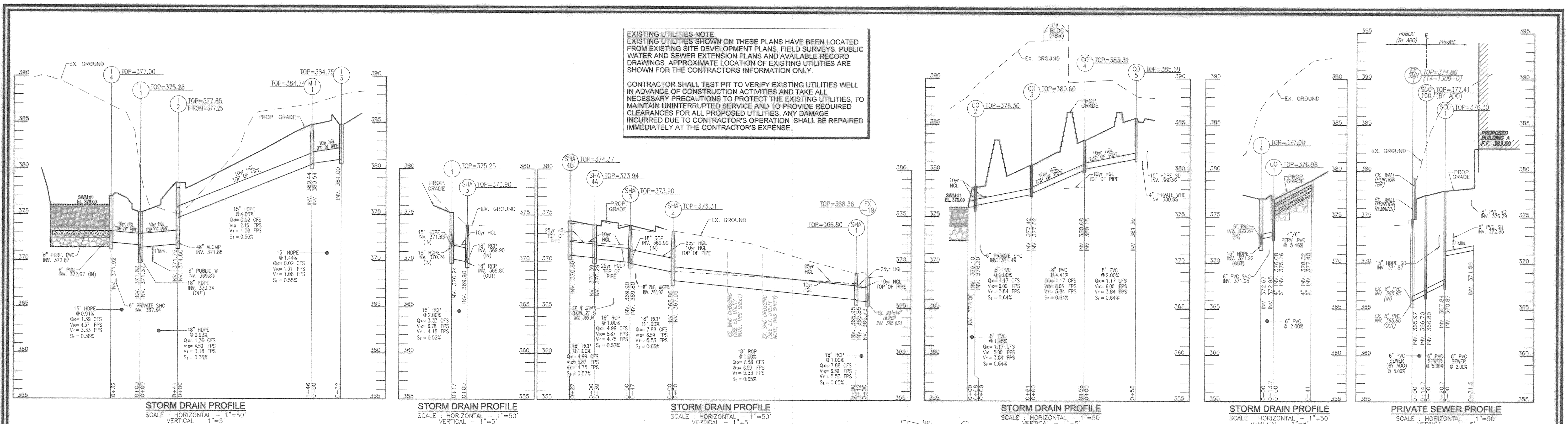
Ch. [Signature]
 CHIEF, DEVELOPMENT ENGINEERING DIVISION 7.25.19 DATE
[Signature]
 CHIEF, DIVISION OF LAND DEVELOPMENT 8/2/19 DATE
[Signature]
 DIRECTOR 8-2-19 DATE



WATER PROFILE 'A'
SCALE: HORIZONTAL = 1" = 50'
VERTICAL = 1" = 5'

OWNER/DEVELOPER
ADELPHINE CENTER LLC
2233 CHARLESTON PLACE
HYATTSVILLE MD 20783
(240) 381-6979
C/O OLA OYEFUSI

NO. REVISE WATER PER ADD CONTRACT		10-1-19
REVISION		DATE
SITE DEVELOPMENT PLAN STORM DRAIN DRAINAGE AREA MAP AND UTILITY PROFILES		
ADELPHINE CENTER 8654 BALTIMORE NATIONAL PIKE PROPOSED RETAIL BUILDING (L 18375/F-173)		
TAX MAP 24 BLOCK 6 2ND ELECTION DISTRICT	ZONED B-2 PARCEL 850	HOWARD COUNTY, MARYLAND
ROBERT H. VOGEL ENGINEERS • SURVEYORS • PLANNERS		
3300 N. RIDGE ROAD, SUITE 310 TEL: 410.461.7666 ELLCOTT CITY, MD 21043 FAX: 410.461.8961		
	DESIGN BY: RHV/DZE	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. 16193 EXPIRATION DATE 01-27-2020
	DRAWN BY: DZE	
	CHECKED BY: RHV	
	DATE: JUNE 2019	
SCALE: AS SHOWN	W.O. NO.: 13-34	6 SHEET OF 15



STRUCTURE SCHEDULE (PRIVATE)

NO.	TYPE	LOCATION	TOP ELEV.	THROAT ELEV.	INV. IN	INV. OUT	COMMENTS
1-1	SINGLE 'WR' INLET	N 588327.9 E 1365472.9	375.31	375.31	370.24	370.24	HO. CO. STD. SD-4.32
1-2	TYPE 'A'-10' INLET	N 588370.2 E 1365476.9	377.85	377.25	371.75	371.75	HO. CO. STD. SD-4.03
1-3	YARD INLET	N 588500.8 E 1365385.7	384.75	384.75	381.00	381.00	HO. CO. STD. SD-4.12
1-4	YARD INLET	N 588513.9 E 1365443.8	377.00	377.00	371.92	371.92	HO. CO. STD. SD-4.12
CO-1	CLEANOUT	N 588315.1 E 1365420.1	378.50	378.50	376.10	376.10	HO. CO. STD. S-2.22
CO-2	CLEANOUT	N 588375.5 E 1365411.7	380.60	380.60	377.52	377.52	HO. CO. STD. S-2.22
CO-3	CLEANOUT	N 588433.3 E 1365403.6	383.31	383.31	380.18	380.18	HO. CO. STD. S-2.22
CO-4	CLEANOUT	N 588488.6 E 1365395.9	385.69	385.69	381.30	381.30	HO. CO. STD. S-2.22
CO-5	CLEANOUT	N 588501.4 E 1365418.1	384.74	384.74	380.54	380.54	HO. CO. STD. S-2.22
MH-1	4'-0" STANDARD PRECAST MANHOLE	N 588322.4 E 1365448.4	377.09	377.09	370.87	370.87	HO. CO. STD. S-2.22
SC0-100	SEWER CLEANOUT	N 588301.8 E 1365450.4	377.41	377.41	366.80	366.70	HO. CO. STD. S-2.22

SANITARY STRUCTURE SCHEDULE (PUBLIC-ADO)

SHA STORM DRAIN STRUCTURE SCHEDULE (MD SHA)

SHA	TYPE	LOCATION	TOP ELEV.	THROAT ELEV.	INV. IN	INV. OUT	COMMENTS
SHA-1	48" SQUARE STANDARD SHALLOW MANHOLE	N 588468.5 E 1365685.4	368.80	368.80	365.95	365.85	MD 383.00
SHA-2	48" DIAMETER PRECAST MANHOLE	N 588351.1 E 1365523.9	373.31	373.31	368.96	367.95	MD 384.01
SHA-3	48" DIAMETER PRECAST MANHOLE	N 588320.8 E 1365488.5	373.90	373.90	369.90	369.80	MD 384.01
SHA-4A	STANDARD 'WR' INLET	N 588288.5 E 1365467.0	373.94	373.94	370.39	370.29	MD 374.04
SHA-4B	STANDARD 'WR' INLET	N 588272.5 E 1365445.7	374.37	374.37	370.66	370.66	MD 374.04

CONSTRUCTION NOTES FOR ADO

PART I - GENERAL CONSTRUCTION NOTES

- FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS USE, HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION), 410-551-5513, AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK ON THIS ADO.
- THE ADO CONSTRUCTION WORK MUST BE PERFORMED UNDER THE CONTINUOUS INSPECTION OF THE CONSTRUCTION INSPECTIONS DIVISION OF HIE DEPARTMENT OF PUBLIC WORKS. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTIONS DIVISION (410) 313-1800 AT LEAST (5) WORKING DAYS PRIOR TO THE START OF ANY CONSTRUCTION FOR THIS ADO.
- THE CONTRACTOR SHALL NOTIFY ALL UTILITY AND AGENCIES AND MISS UTILITY AT TWO (2) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS.
- WORK PERFORMED WITHIN MARYLAND STATE HIGHWAY ADMINISTRATION (MSHA) RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE MSHA PERMIT ISSUED FOR THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE MARYLAND STATE HIGHWAY ADMINISTRATION, 410-551-5513, AT LEAST FIVE (5) WORKING DAYS BEFORE EXCAVATING WITHIN THE MARYLAND STATE HIGHWAY RIGHT-OF-WAY FOR LAYING WATER OR SEWER MAINS OR SERVICE CONNECTIONS.
- EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON DRAWINGS. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- EXCAVATIONS MUST BE SUPPORTED FOR THE PROTECTION OF WORKERS. THE CONSTRUCTION WORK AREA AND ADJACENT PROPERTY, REFER TO TEMPORARY EXCAVATION SUPPORT SYSTEMS UNDER SECTION 1000.03.03 OF THE STANDARD SPECIFICATIONS.
- EXCAVATIONS MUST BE KEPT WELL DRAINED AT ALL TIMES. EXCESS WATER DRAINAGE IS REQUIRED DURING CONSTRUCTION. REFER TO DEMATERIALING, DRAINAGE AND PUMPING UNDER SECTION 1000.03.03 OF THE STANDARD SPECIFICATIONS. PUMPS MUST BE THE PROPER TYPE AND CAPACITY TO MAINTAIN A DRY WORK AREA.
- THE USE OF STEEL PLATES TO PROTECT THE TRENCH AND ROADWAY SHALL BE AS SPECIFIED UNDER SECTION 1000.03.05, SECTION 104 AND STANDARD DETAIL G-4.02 OF THE STANDARD SPECIFICATIONS.
- TEMPORARY AND PERMANENT REPAIR OF ROADWAY OPENINGS SHALL BE AS SPECIFIED UNDER SECTION 1000.03.09 AND STANDARD DETAIL G-4.01 OF THE STANDARD SPECIFICATIONS UNLESS OTHERWISE SPECIFIED BY PERMIT FROM THE AUTHORITY HAVING JURISDICTION. TEMPORARY PAVING SHALL CONSIST OF NOT LESS THAN 12 (TWELVE) INCHES OF CRUSHED STONE AND 2 (TWO) INCHES OF BITUMINOUS COAT PATCH MATERIAL.

PART II - WATER CONSTRUCTION NOTES

- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- THE CONTRACTOR SHALL NOTIFY THE DPW BUREAU OF UTILITIES (410-313-4900) AT LEAST 48 HOURS IN ADVANCE OF SCHEDULE SHUTDOWNS OF THE EXISTING WATER MAIN. SHUT DOWN OF THE EXISTING WATER MAIN FOR NEW CONNECTIONS REQUIRES REMOVAL OF EXISTING SERVICE CONNECTIONS SHALL BE AS SPECIFIED UNDER SECTION 1002.06 - CONNECTIONS OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- THE 6-INCH WATER SERVICE SHALL BE D.I.P. AND ALL JOINTS SHALL BE RESTRAINED BETWEEN WATER MAIN AND THE PROPERTY LINE.
- WATER SERVICE CONNECTIONS SHALL BE AS SPECIFIED UNDER SECTION 1004 - WATER HOUSE SERVICE AND APPURTENANCES OF THE STANDARD SPECIFICATIONS.
- THE NEW WATER METER ASSEMBLY SHALL BE THE INSIDE COMBINED FIRE/DOMESTIC PER HOWARD COUNTY DETAIL W-3.44. INSTALLATION OF THE WATER METER IS NOT PART OF THE ADO CONSTRUCTION WORK.

PART III - SEWER CONSTRUCTION NOTES

- SEWER HOUSE CONNECTIONS SHALL BE AS SPECIFIED UNDER SECTION 1008.03 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAILS.
- SIC CONNECTIONS TO EXISTING MANHOLES: IF THE EXISTING MANHOLE HAS A STUB CONNECTION, THE CONTRACTOR SHALL MATCH THE EXISTING PIPE MATERIAL OR REPLACE THE STUB IF THE PIPE MATERIAL IS NOT ONE OF THE APPROVED PIPE MATERIALS. IF THE EXISTING MANHOLE DOES NOT HAVE AN OPENING OR A KNOCKOUT FOR A FUTURE CONNECTION, THE MANHOLE SHALL BE CORED, THE INVERT CHANNEL FORMED AND A FIELD GASKET CONNECTOR INSTALLED TO SECURE THE NEW SEWER PIPE TO THE EXISTING MANHOLE.

WATER MAIN LOCATION CHART (PUBLIC-ADO)
SCALE: 1"=20'

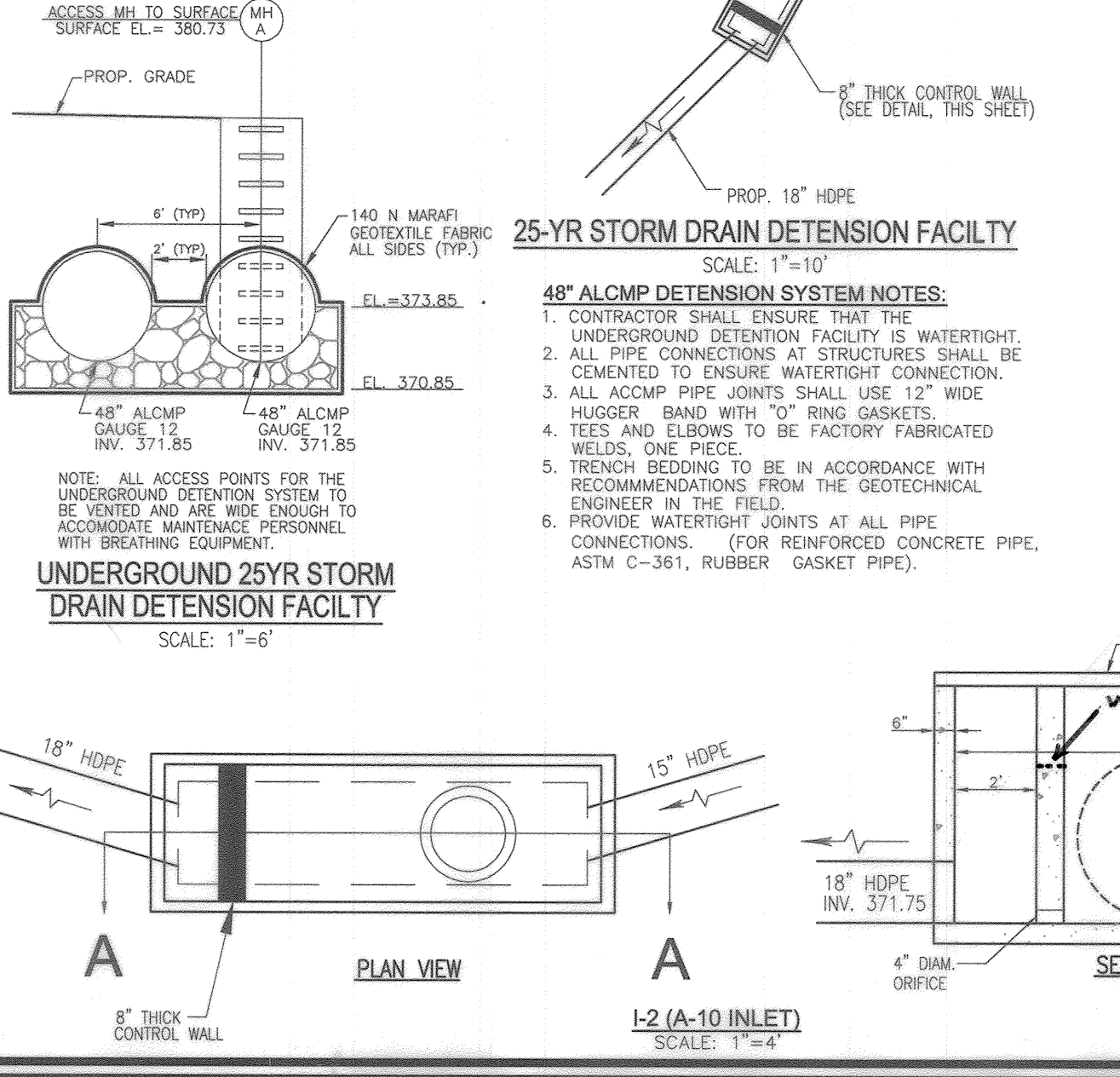
WL STA.	APURTENANCE
WL STA. 0+00.00	12"x8" TAPPING SLEEVE AND 8" VALVE
WL STA. 0+09.82	8"-1/16 VERTICAL BEND
WL STA. 0+13.18	8"-1/16 VERTICAL BEND
WL STA. 0+22.77	8"-5" VERTICAL SWEEP
WL STA. 0+37.56	8"-1/8 VERTICAL BEND
WL STA. 0+59.60	8"x6" REDUCER
WL STA. 0+64.60	6" VALVE
WL STA. 0+69.60	6" VALVE

PIPE SCHEDULE (PUBLIC-ADO)

SIZE	TYPE	LENGTH
6"	DIP - WATER	25 LF
8"	DIP - WATER	60 LF
6"	PVC - SEWER	15 LF

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

7-25-19 DATE
3/2/19 DATE
8-2-19 DATE



OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED UNDERGROUND FACILITIES

- THE UNDERGROUND STORMWATER FACILITY IS PRIVATELY OWNED AND IT SHALL BE THE RESPONSIBILITY OF THE OWNER TO PERIODICALLY INSPECT AND CLEAN THE FACILITY TO MAINTAIN ITS OPERATION AND FUNCTIONALITY.
- THE UNDERGROUND STORMWATER MANAGEMENT FACILITY SHALL BE INSPECTED YEARLY AT A MINIMUM AND AFTER ESPECIALLY SEVERE STORM EVENTS.
- WHEN SEDIMENT ACCUMULATION OF MORE THAN 2" IS OBSERVED OR ANY DEBRIS THAT MIGHT OBSTRUCT THE OUTFALL IS OBSERVED, THE FACILITY SHALL BE CLEANED.
- THE FACILITY SHALL BE CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. THE OWNER SHALL CONTACT THE APPROPRIATE REGULATORY AGENCIES NOTIFYING THEM OF THE SPILL AND CLEANUP OPERATION.
- THE SEDIMENT AND DEBRIS SHALL BE REMOVED FROM THE UNDERGROUND STORMWATER MANAGEMENT FACILITY BY VACUUM TRUCK OR OTHER MANUAL MEANS. THE OWNER SHALL FOLLOW PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIAL AND LIQUID.
- THE INLET AND OUTLET PIPES SHALL BE CHECKED FOR ANY OBSTRUCTIONS AT LEAST ONCE EVERY SIX (6) MONTHS. IF OBSTRUCTIONS ARE FOUND, THE OWNER SHALL HAVE THEM REMOVED AND PROPERLY DISPOSED OF.

OWNER/DEVELOPER
ADELPHINE CENTER LLC
2233 CHARLESTON PLACE
HYATTSVILLE, MD 20783
(240) 381-8978
C/O OLA OYEFUSI

REVISION

NO.	REVISION	DATE
1	REVISE WATER PER ADO CONTRACT	10-1-19

SITE DEVELOPMENT PLAN
STORM DRAIN AND UTILITY PROFILES

ADELPHINE CENTER
8654 BALTIMORE NATIONAL PIKE
PROPOSED RETAIL BUILDING
(L 18375F-173)

TAX MAP 24 BLOCK 6
2ND ELECTION DISTRICT

ZONED B-2
PARCEL 850

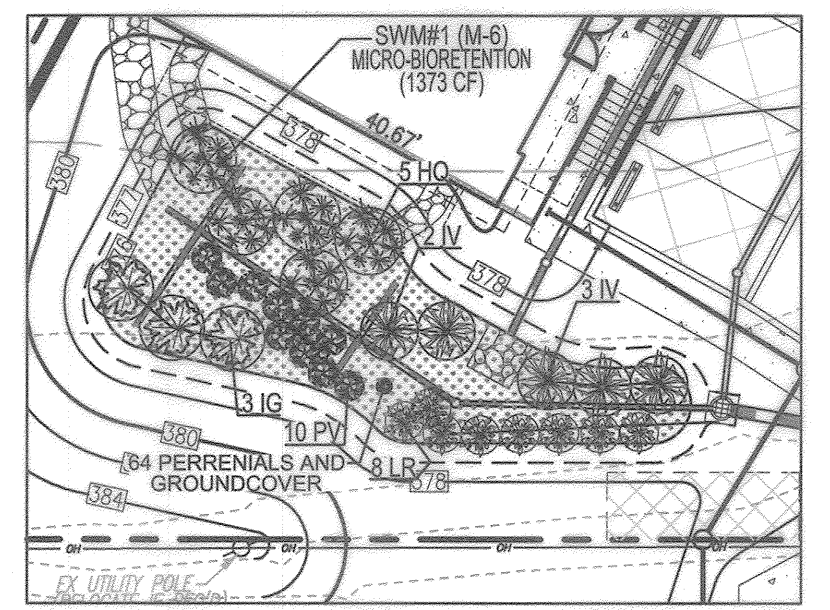
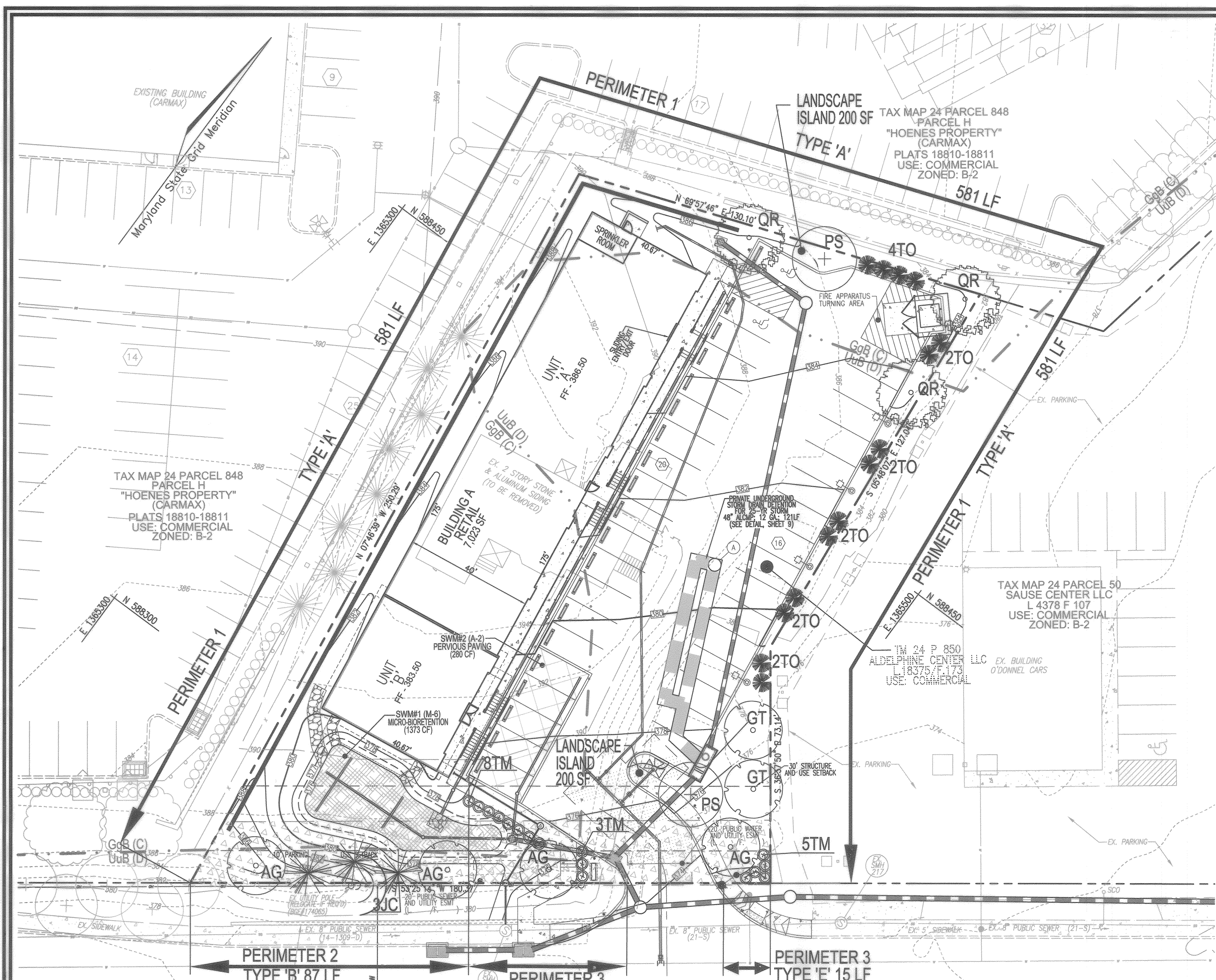
ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
3300 N. RIDGE ROAD, SUITE 110
ELICOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961

PROFESSIONAL CERTIFICATE

DESIGN BY: RHW/DZE
DRAWN BY: DZE
CHECKED BY: RHW
DATE: JUNE 2019
SCALE: AS SHOWN
W.O. NO.: 13-34

HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 11818 EXPIRATION DATE 08-27-2028

7 SHEET OF 15



BIORETENTION PLANTING PLAN (SWM #1)
SCALE: 1" = 20"

SCHEDULE 'B' PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PARKING SPACES	36
NUMBER OF TREES REQUIRED (1/20 SPACES)	2
NUMBER OF TREES PROVIDED	2
SHADE TREES (2:1 SUBSTITUTION)	2
OTHER TREES (10:1 SUBSTITUTION)	2

SCHEDULE 'A' PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO PERIMETER PROPERTIES AND ROADS				TOTAL
	1	2	3	4	
PERIMETER/FRONTAGE DESIGNATION	A	B	C	D	
LINEAR FEET OF ROADWAY	581'	97'	64'	32'	
FRONTAGE/PERIMETER	NO	NO	NO	NO	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	
NUMBER OF PLANTS REQUIRED	1:60 10*	1:50 2	1:40 2	1:40 1	15
SHADE TREES	-	1:40 3	-	1:20 2	5
EVERGREEN TREES	-	-	1:40 16	-	16
NUMBER OF PLANTS PROVIDED	5	2	2	0**	9
SHADE TREES	10*	3	-	4*	17
OTHER TREES (2:1 SUBSTITUTION)	-	-	-	-	0
SHRUBS (10:1 SUBSTITUTION)	-	-	16	-	16
SHRUBS (10:1 SUBSTITUTION) CREDITS BELOW IF NEEDED	-	-	-	-	-

LANDSCAPE SCHEDULE

KEY	QUAN	BOTANICAL NAME	SIZE	CAT
QR	3	QUERCUS RUBRA NORTHERN RED OAK	2 1/2"-3" CAL	B & B
PS	2	PRUNUS SARGENTII SARGENT CHERRY	2 1/2"-3" CAL	B & B
AG	4	ACER GINNALA AMUR MAPLE	2"-3" CAL	B & B
TO	14	THILIA OCCIDENTALIS 'GREEN EMERALD' WHITE CEDAR	6"-8" HT.	B & B
JC	3	LUNIPUS CHINENSIS ROBUSTA GREEN	18"-24" SPREAD	B & B
GT	2	GLECHOMIA TRICANTHOS 'IMPERIAL' IMPERIAL THORNLESS HONEY LOCUST	1 1/2"-2" CAL	B & B
TM	16	TAXUS MEDIA 'HICKS' HICKS YEW	4"-6" HT. (MAX. HEIGHT=25')	B & B

BIORETENTION PERENNIALS/GROUNDCOVER PLANTING SCHEDULE

LEGEND	QTY	BOTANICAL NAME/COMMON NAME	SIZE	REMARKS
[Symbol]	32	BAPTISIA AUSTRALIS FALSE INDIGO	4" POT	12"-15" O.C. FOR SIDES AND BOTTOM OF MBR. MIX ALL VARIETIES IN A NATURALIZED RANDOM PATTERN THROUGHOUT. PLANT IN GROUPS OF NO LESS THAN 9 PLANTS PER CLUMP.
[Symbol]	32	ACORUS GRAMINEUS 'OGON' GOLDEN VARIEGATED SWEET FLAG	1 QT.	

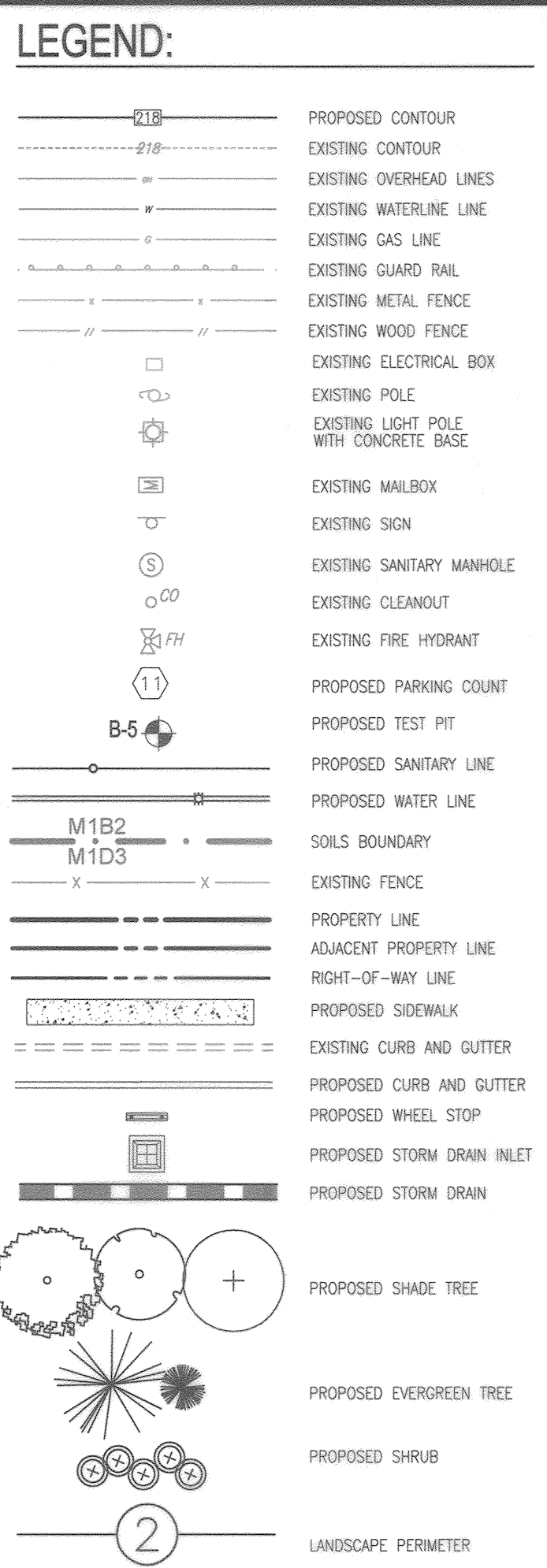
BIORETENTION PLANTING SCHEDULE (SHRUB/ORNAMENTAL GRASSES)

LEGEND/KEY	QTY	BOTANICAL NAME/COMMON NAME	SIZE	REMARKS
IG	3	ILEX GLABRA 'SHAMROCK' INKBERRY HOLLEY	1 GALLON	
IV	5	ITEA VIRGINICA 'HENRY'S GARNETT' VIRGINIA SWEETSPIRE	1 GALLON	
HQ	5	HYDRANGEA QUERCIFOLIA OAKLEAF HYDRANGEA	1 GALLON	
LR	8	LEUCOTHOE RACEMOSA FETTERBUSH	1 GAL.	
PV	10	PANICUM VIRGATUM SWITCHGRASS	1 GAL.	

MICRO-BIORETENTION PLANTING REQUIREMENTS

MBR #	LF	AREA	STEMS REQUIRED (10,029/STEM)	STEMS PROVIDED
1	353	361	22	31
TOTALS:	155	161	22	31

BIORETENTION AREA MUST BE PLANTED WITH A MINIMUM DENSITY OF 3000 STEMS PER PLANTED ACRE (10,029 STEMS PER SQUARE FOOT).



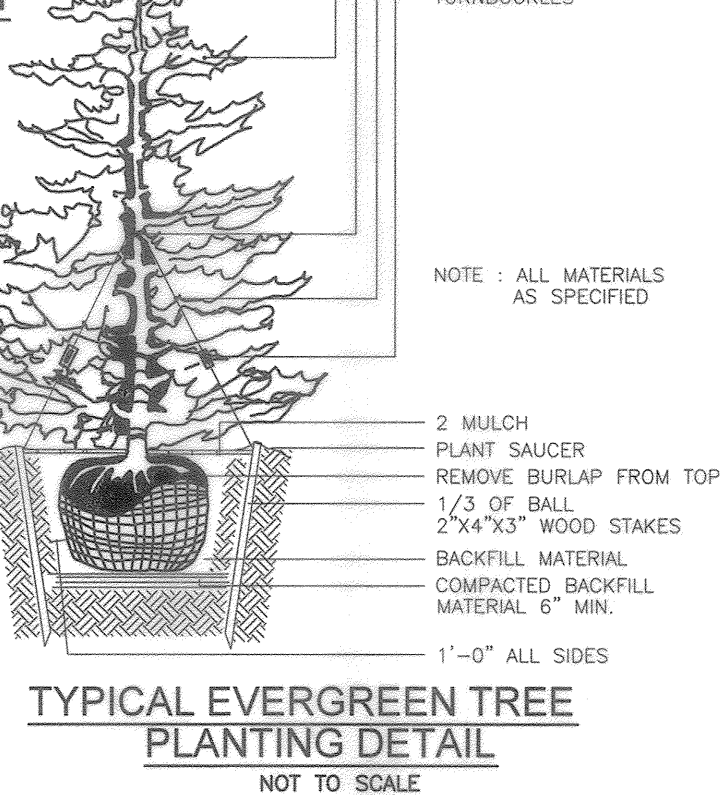
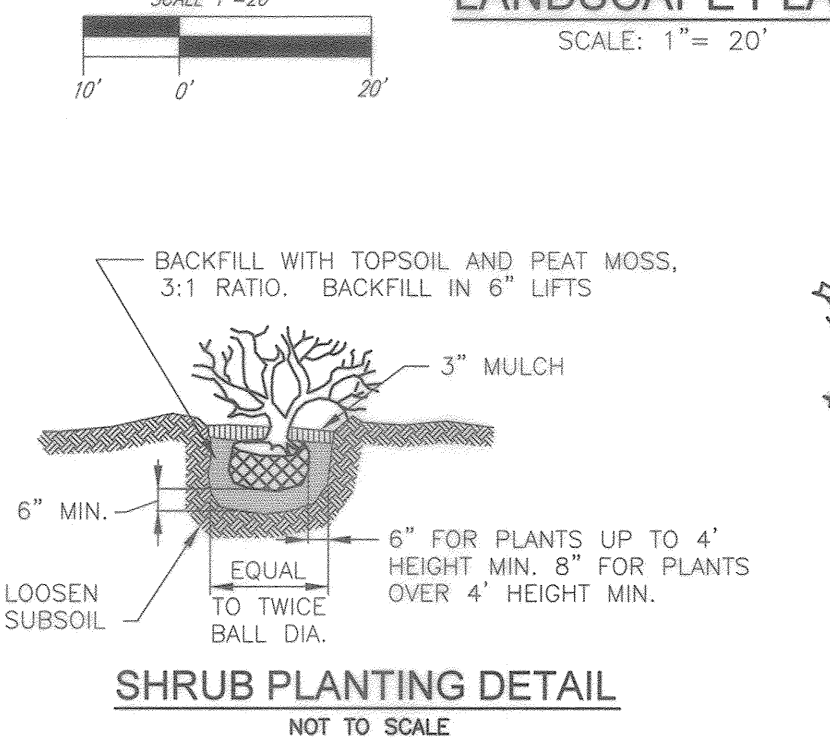
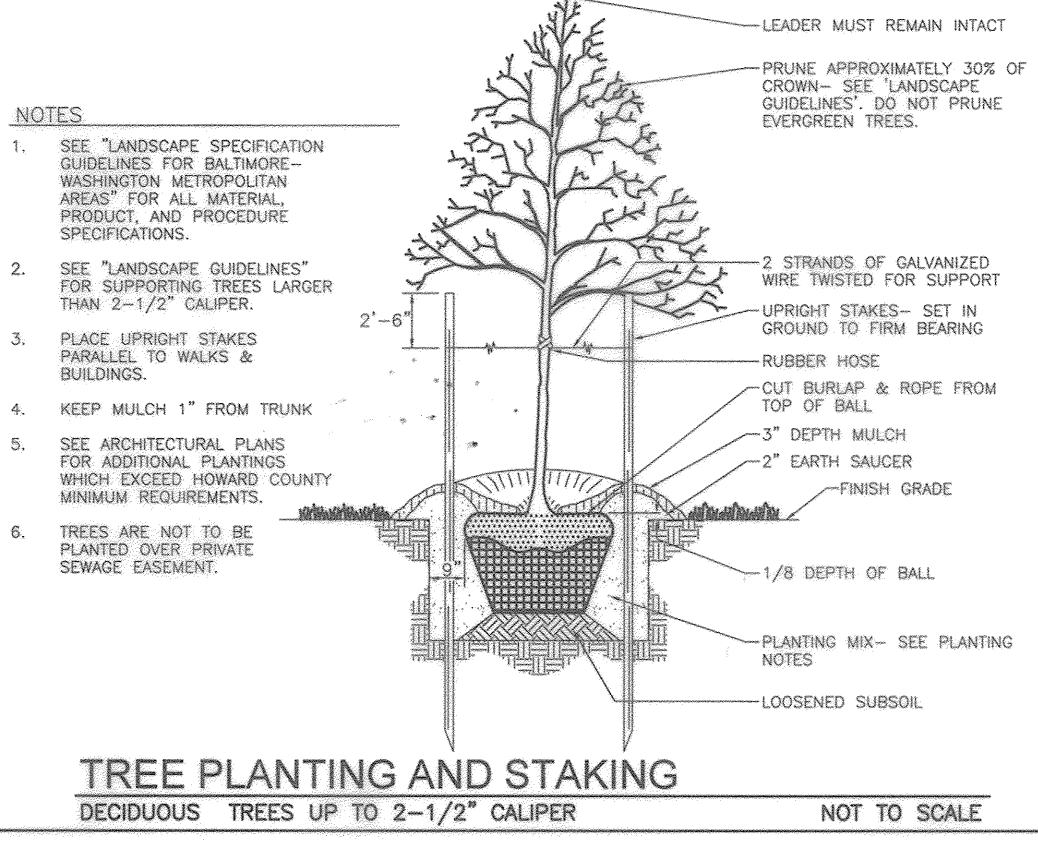
GENERAL NOTES:

- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 18.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. THE REQUIRED PARKING AND PERIMETER THE REQUIRED PARKING AND PERIMETER LANDSCAPING WILL BE BONDED PER THIS SUBMISSION.
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSED AS PART OF THE DEVELOPER'S AGREEMENT FOR THIS SITE DEVELOPMENT PLAN IN THE AMOUNT OF \$6,330.00 FOR THE REQUIRED 17 SHADE TREES, 5 EVERGREEN TREES, AND 16 SHRUBS.
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, DEVELOPMENT OR CONSTRUCTION OF THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION, OR BUILDING AND GRADING PERMITS.
- THERE ARE NO BURIAL GROUNDS, CEMETERIES, OR HISTORIC STRUCTURES LOCATED ON THIS PROPERTY.
- NO LANDSCAPING TO BE INSTALLED WITHIN ANY PUBLIC EASEMENT FOR WATER, SEWER, OR STORMDRAIN.
- ANY EXISTING STREET TREES DAMAGED OR DESTROYED DURING CONSTRUCTION WILL BE REPLACED BY THE CONTRACTOR.
- LANDSCAPING IS NOT PERMITTED WITHIN 7.5' ON EACH SIDE OF THE FIRE DEPARTMENT CONNECTION, PROVIDE A CLEAR, UNOBSTRUCTED ACCESS PATH TO THE FIRE DEPARTMENT CONNECTION, NFPA-1, 1.3.1.4.

LANDSCAPE NOTES

- AT THE TIME OF PLANT INSTALLATION, ALL SHRUBS AND TREES LISTED AND APPROVED ON THE LANDSCAPE PLAN, SHALL COMPLY WITH THE PROPER HEIGHT REQUIREMENT IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATIONS OF THE REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THE 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 THE APPLICABLE PLANS.
- 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.
- SHOULD ANY TREE DESIGNATED FOR PRESERVATION FOR WHICH LANDSCAPING CREDIT IS GIVEN, DIE PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE EQUIVALENT SPECIES OR WITH A TREE WHICH WILL OBTAIN THE SAME HEIGHT, SPREAD, AND GROWTH CHARACTERISTICS. THE REPLACEMENT TREE MUST BE A MINIMUM OF 3 INCHES IN CALIPER AND INSTALLED AS REQUIRED IN THE HOWARD COUNTY LANDSCAPE MANUAL.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
- FINAL LOCATION OF PLANT MATERIAL MAY NEED TO VARY TO MEET FINAL FIELD CONDITIONS. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF DRAINAGE SWALES.
- CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLAN DIFFERS FROM LANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.

OWNER/DEVELOPER
ADELPHINE CENTER LLC
2233 CHARLESTON PLACE
HYATTSVILLE, MD 20783
(240) 381-6979
C/O OLA OYEFUSI



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chad... 7-25-19
CHIEF, DEVELOPMENT ENGINEERING DIVISION & DATE

Kurt... 8/2/19
CHIEF, DIVISION OF LAND DEVELOPMENT & DATE

Val... 8-2-19
DIRECTOR & DATE

DEVELOPER'S/BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 18.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE (1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Olga... 7/1/19
SIGNATURE OF DEVELOPER & DATE

SITE DEVELOPMENT PLAN
LANDSCAPE PLAN

ADELPHINE CENTER
8654 BALTIMORE NATIONAL PIKE
PROPOSED RETAIL BUILDING
(L 18375/F 173)

TAX MAP 24 BLOCK 8
2ND ELECTION DISTRICT

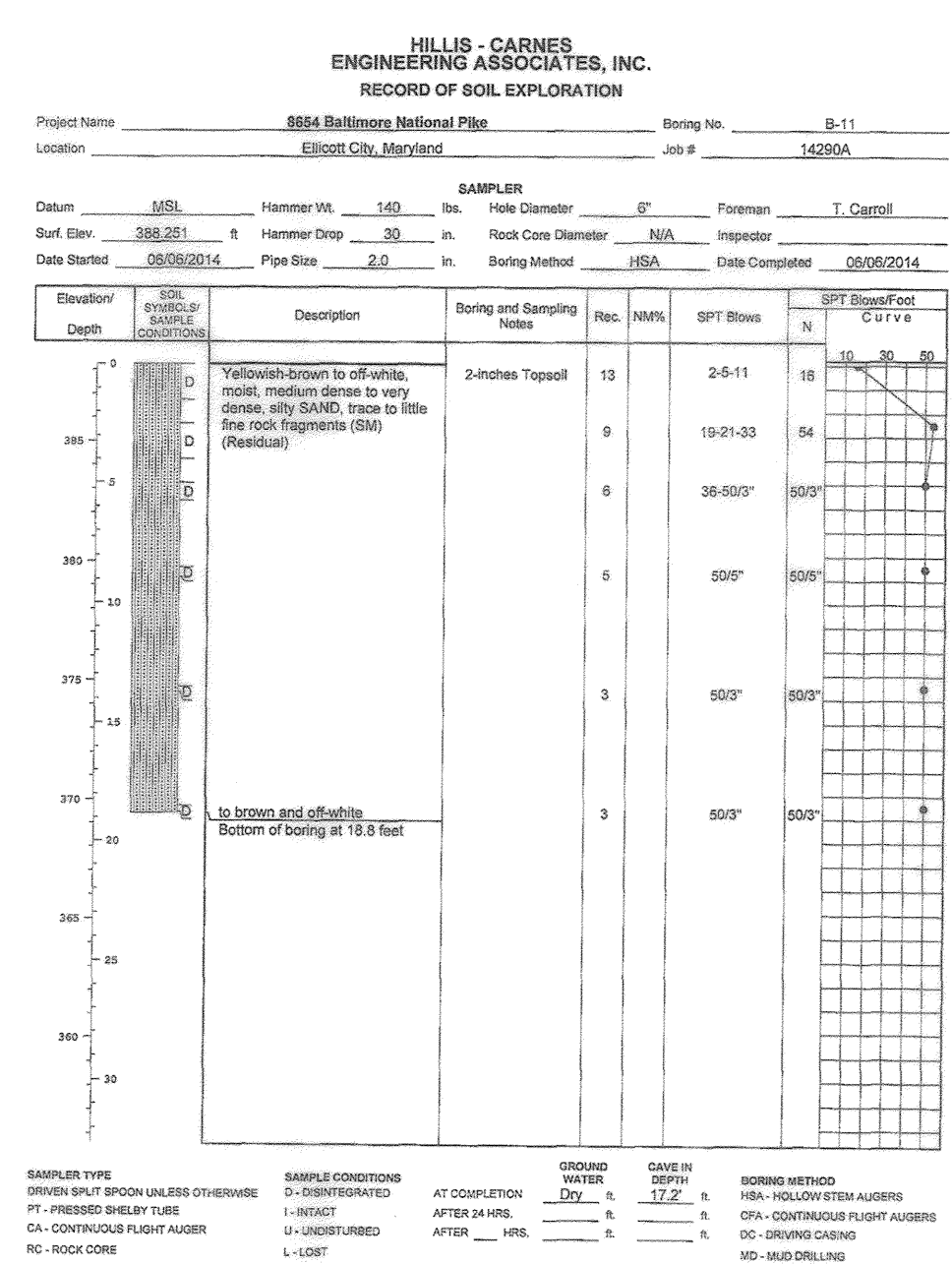
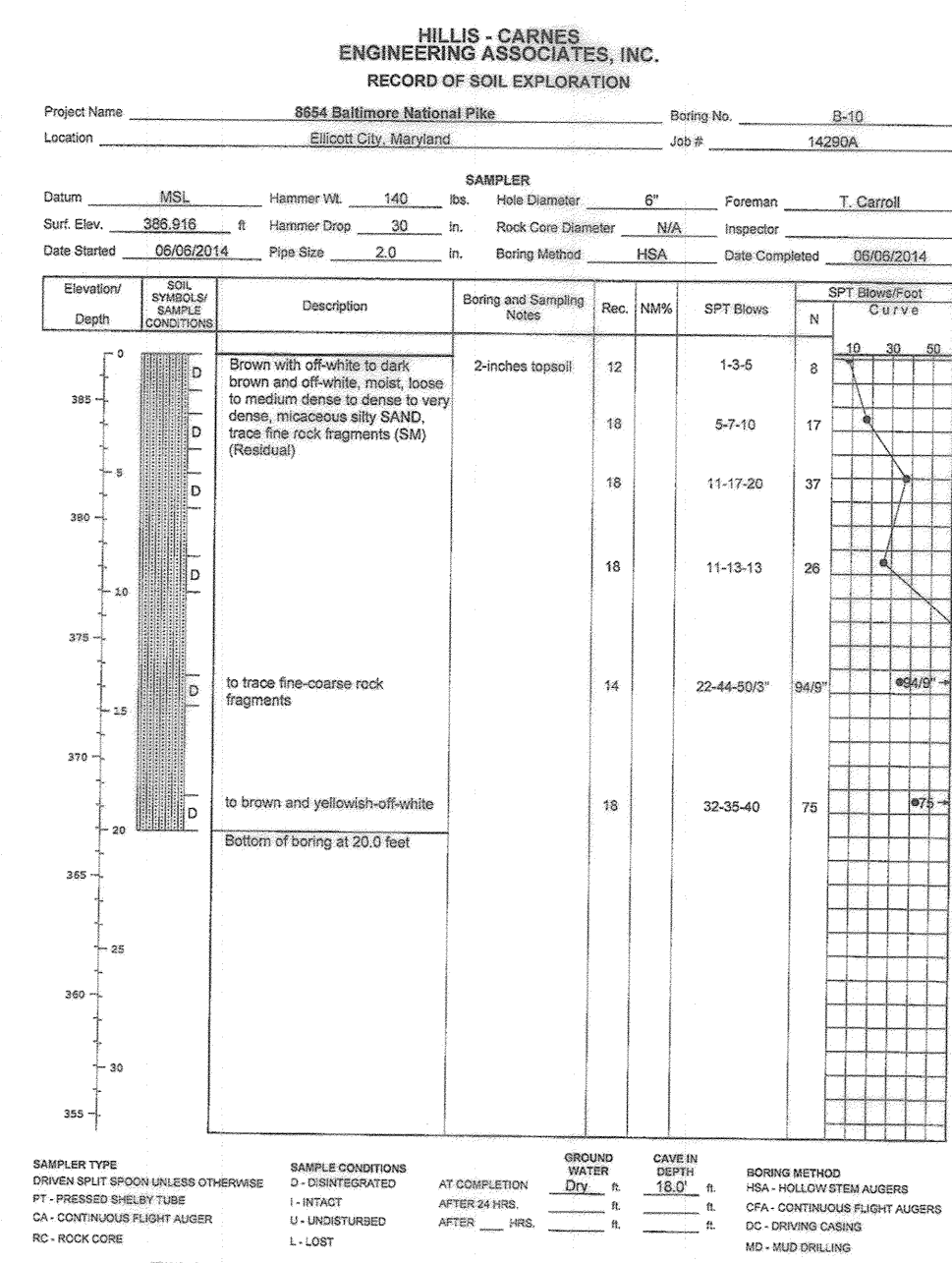
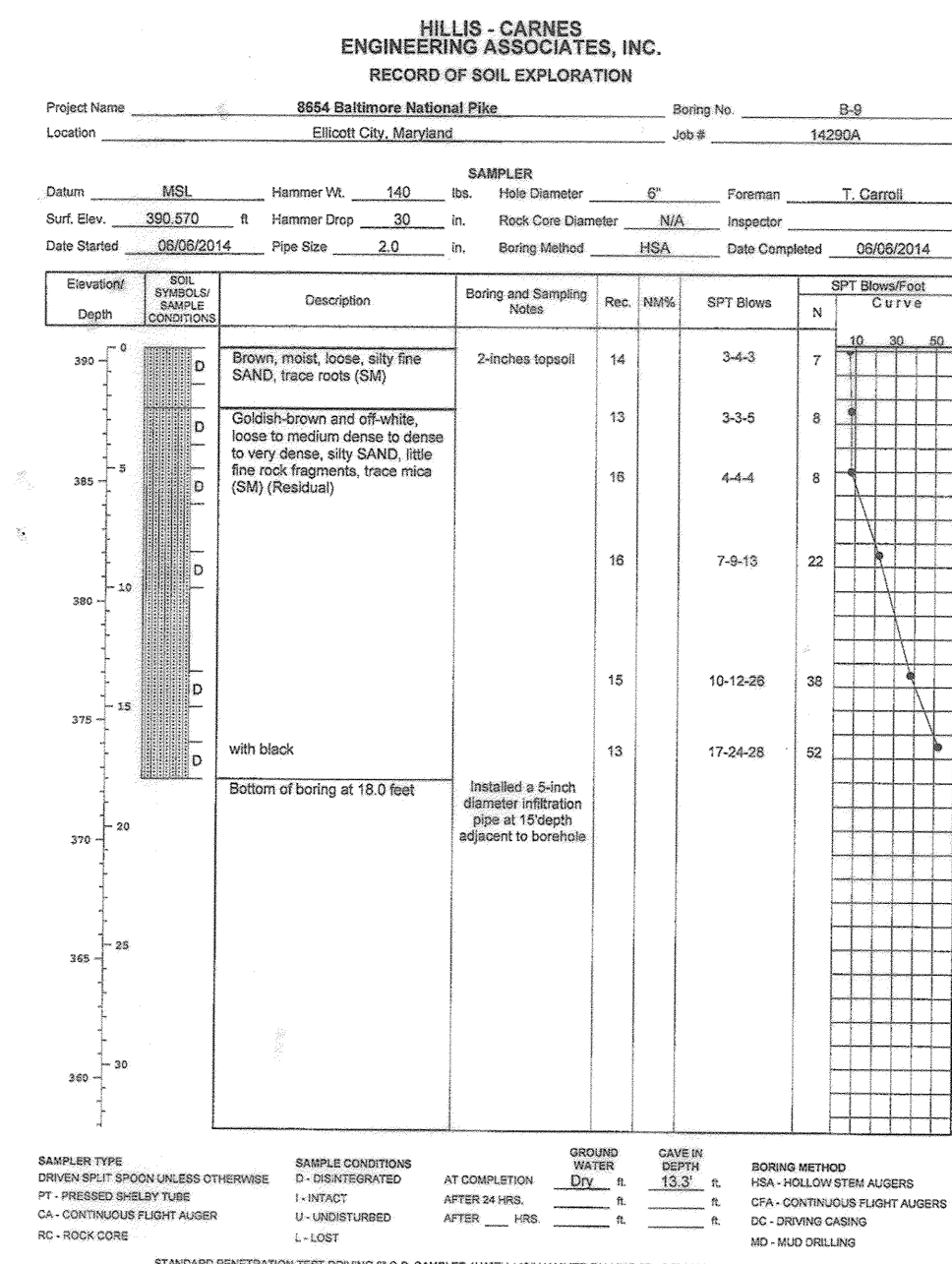
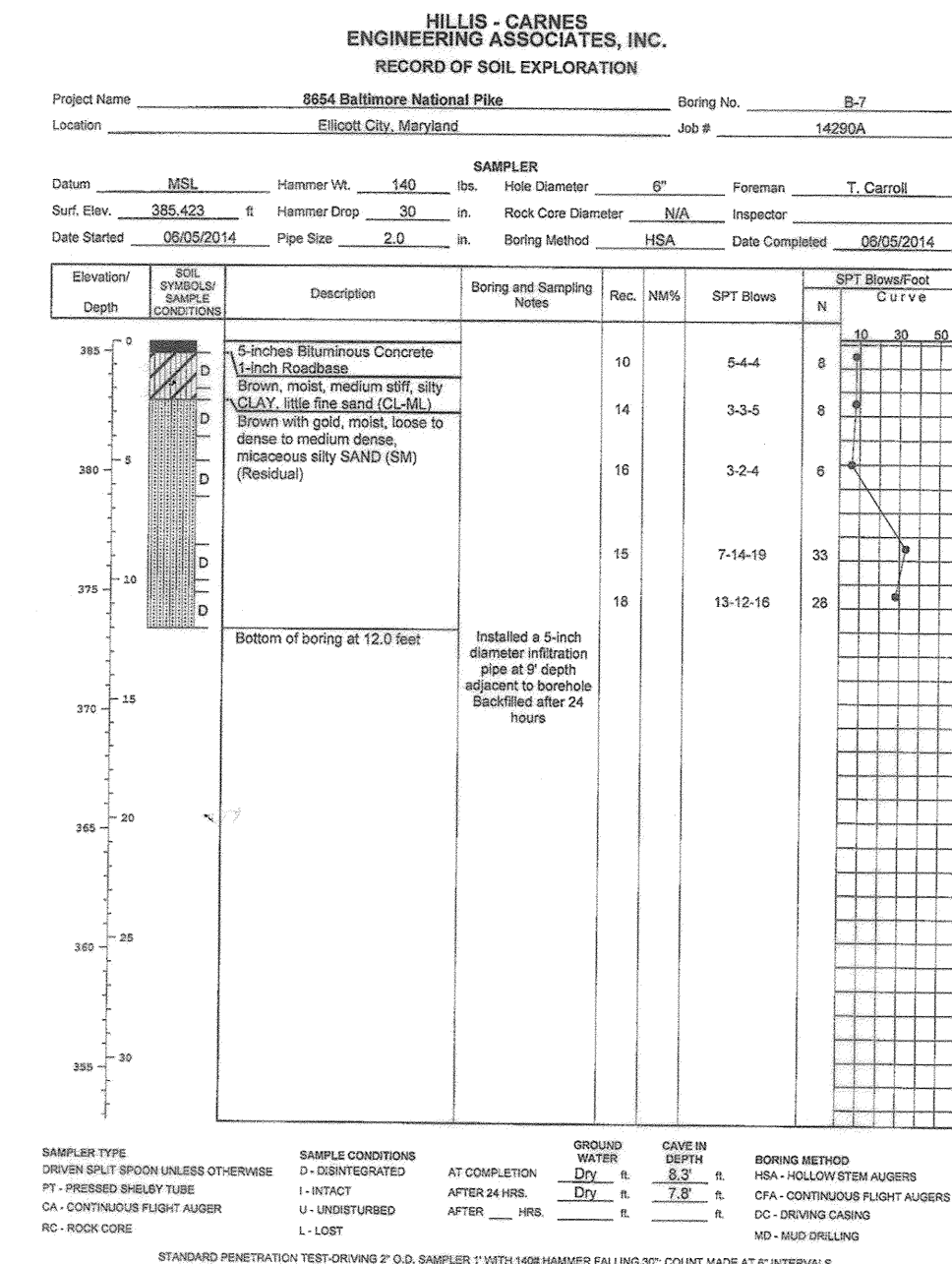
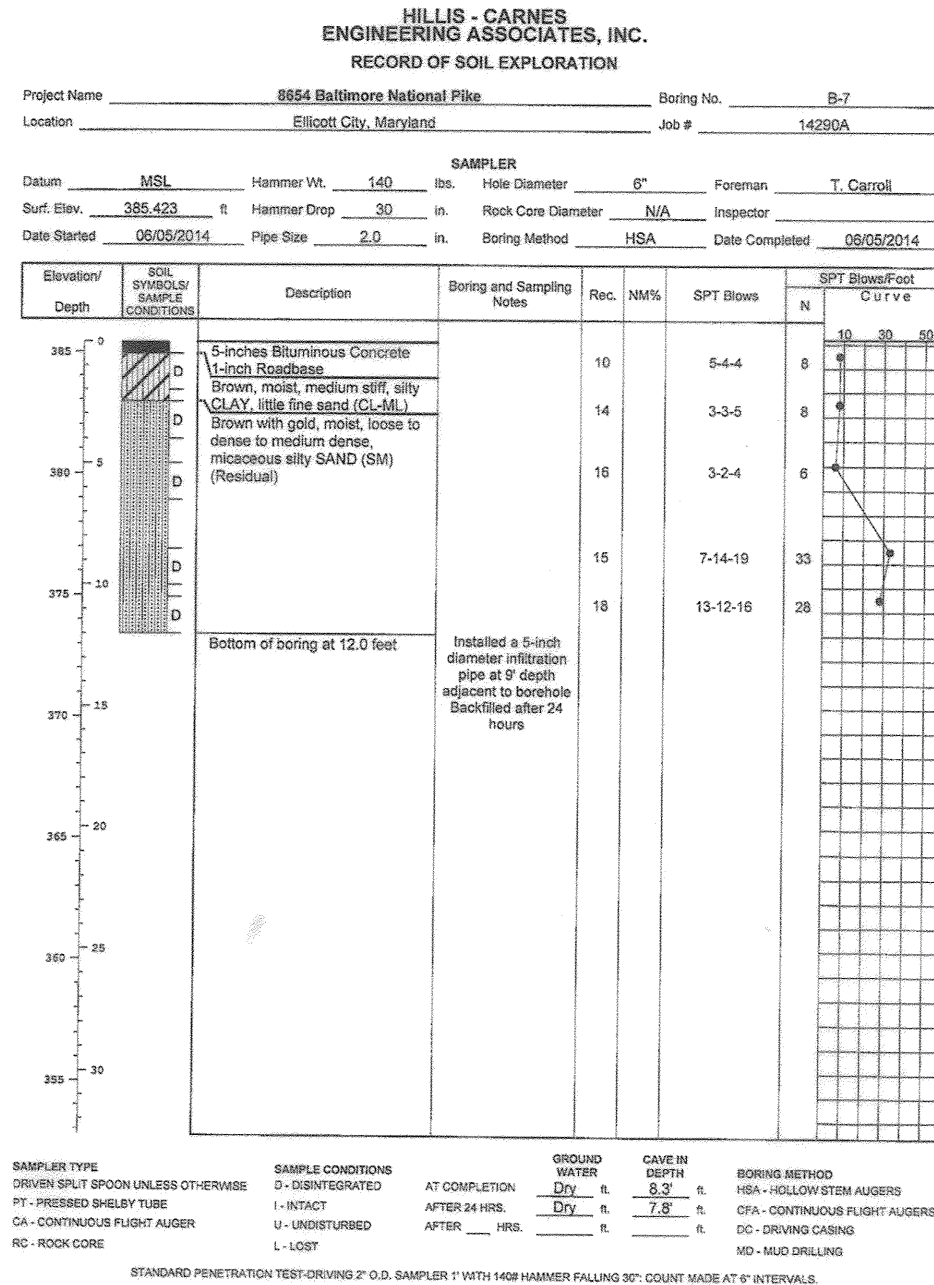
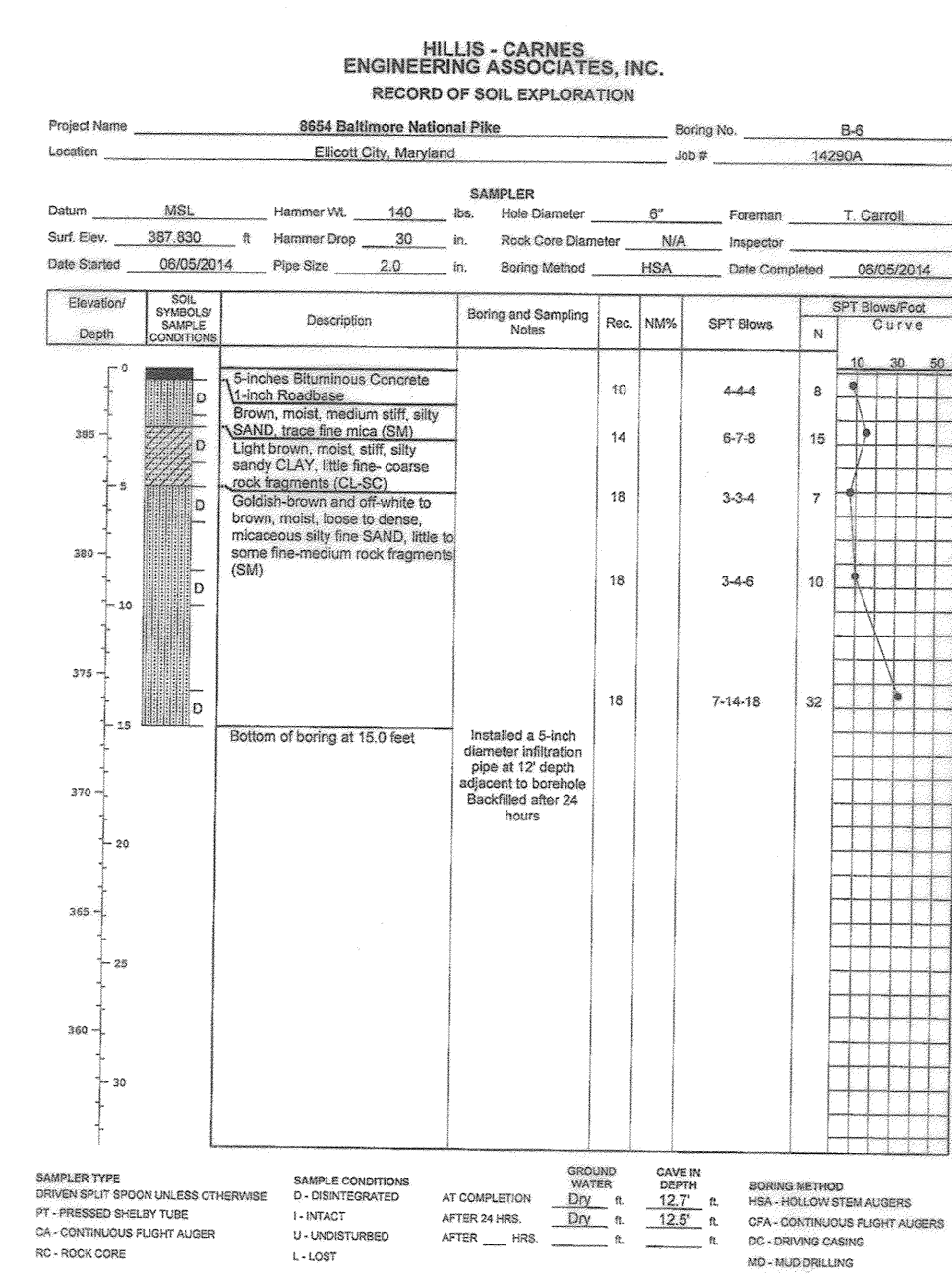
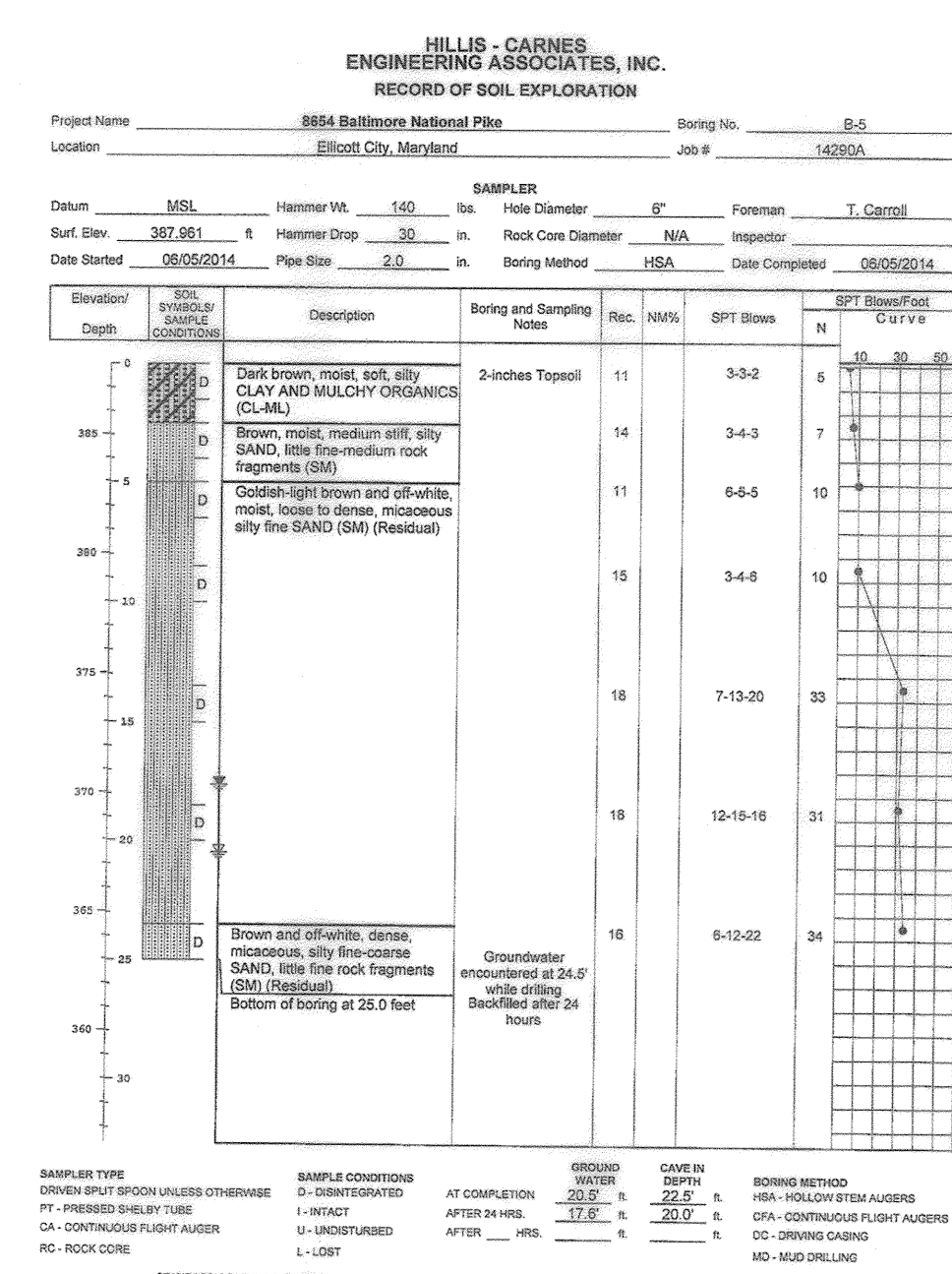
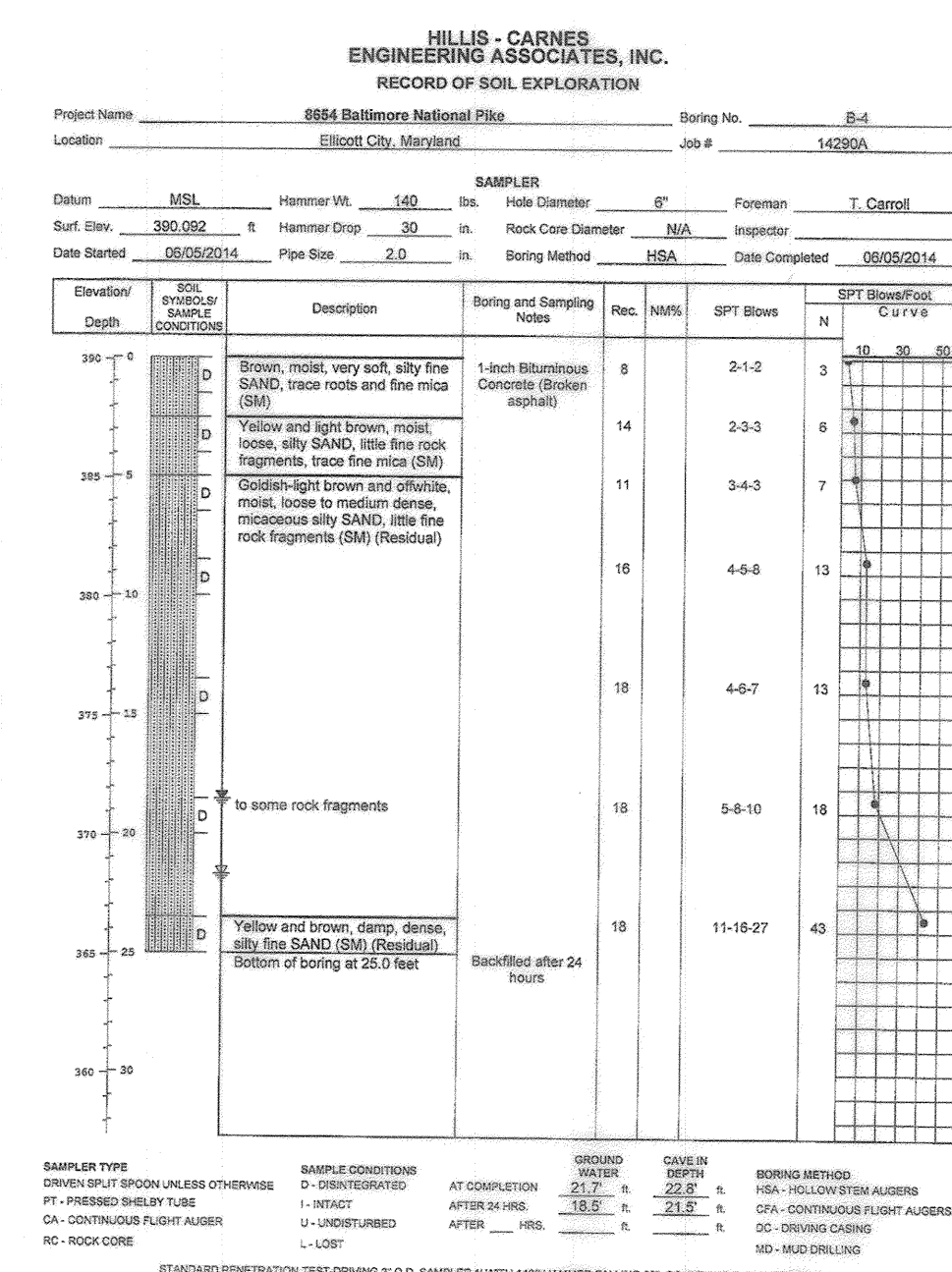
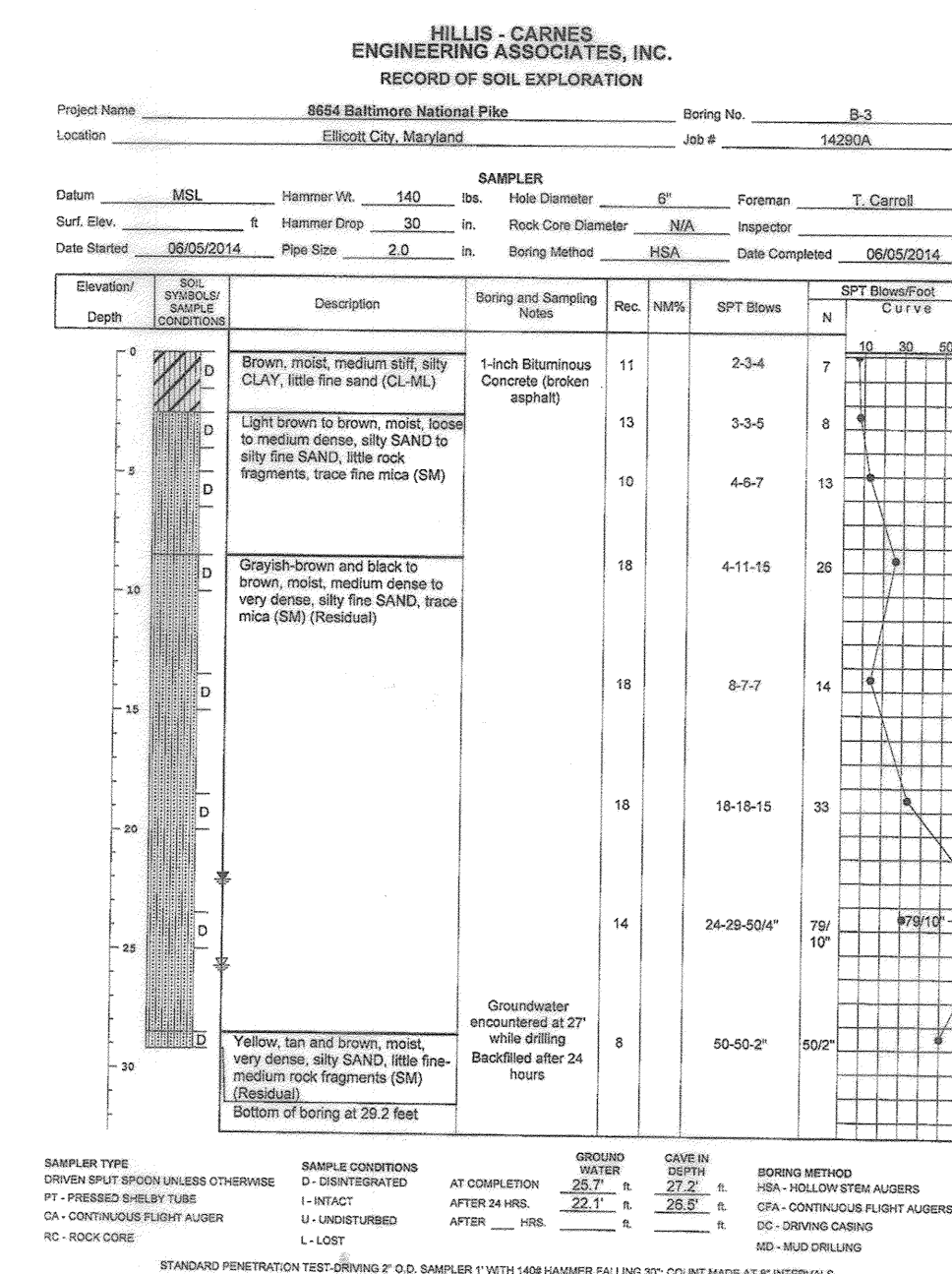
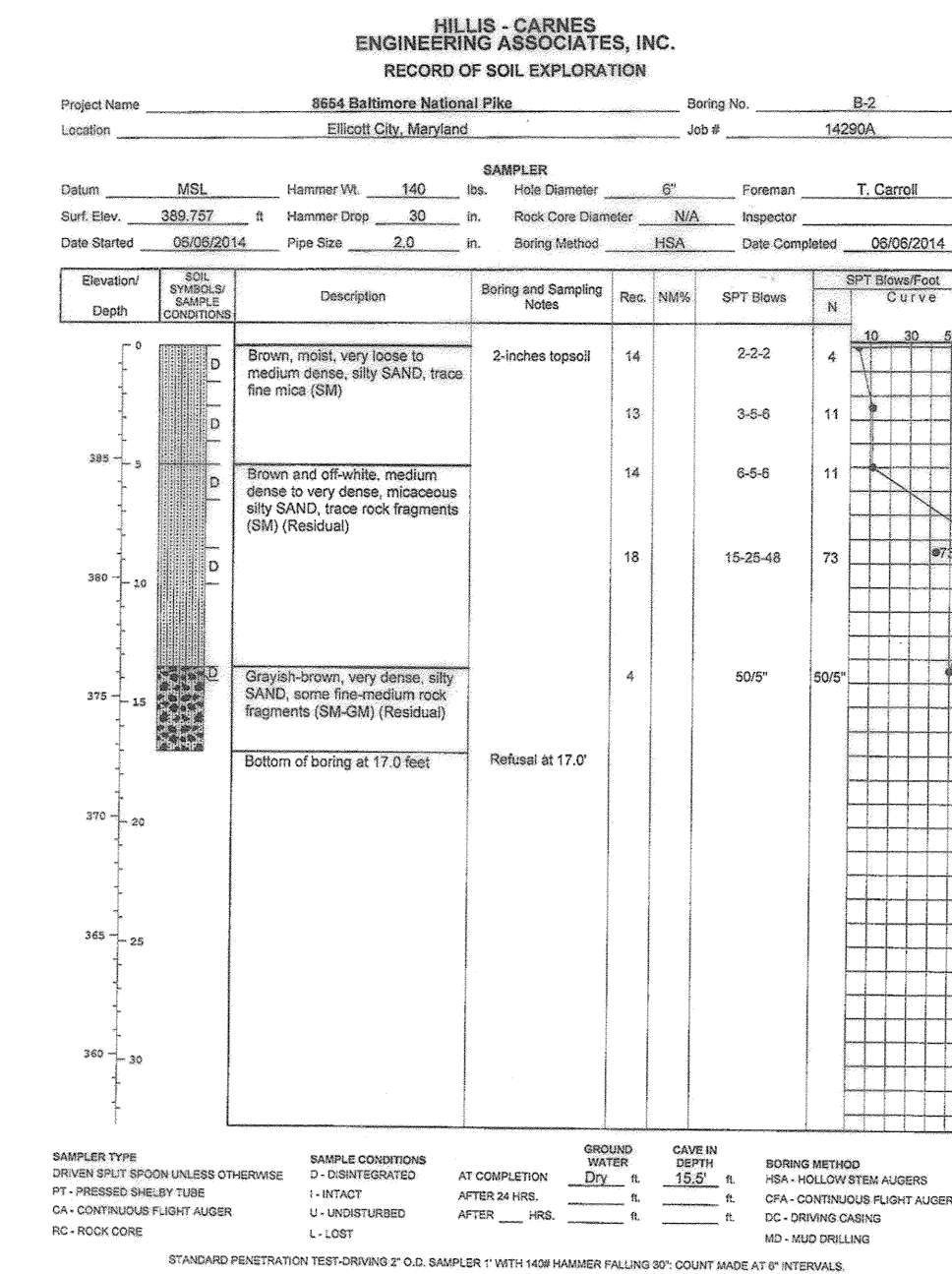
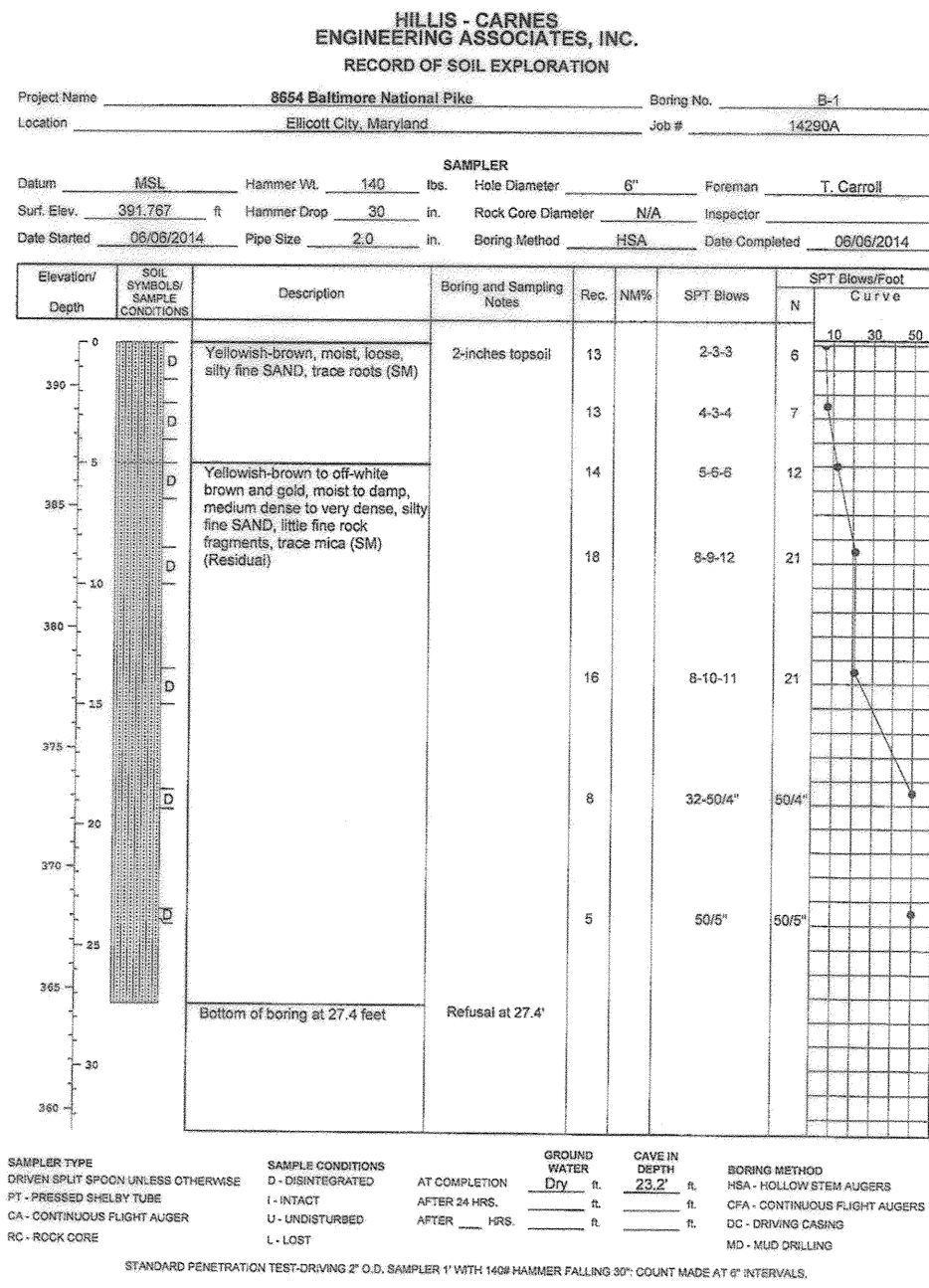
ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
3300 N. RIDGE ROAD, SUITE 110
ELLICOTT CITY, MD 21043

PROFESSIONAL CERTIFICATE

DESIGN BY: RHV/DZE
DRAWN BY: DZE
CHECKED BY: RHV
DATE: JUNE 2019
SCALE: AS SHOWN
W.O. NO.: 13-34

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. 16193, EXPIRATION DATE: 08-27-2020.

9 SHEET OF 15



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division: *[Signature]* 7-25-19

Chief, Division of Land Development: *[Signature]* 8/2/19

Director: *[Signature]* 8-2-19

OWNER/DEVELOPER: ADELPHINE CENTER LLC, 2233 CHARLESTON PLACE, HYATTSVILLE, MD 20783

TAX MAP 24 BLOCK 6, 2ND ELECTION DISTRICT

ZONED B-2, PARCEL 880, HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC. ENGINEERS • SURVEYORS • PLANNERS

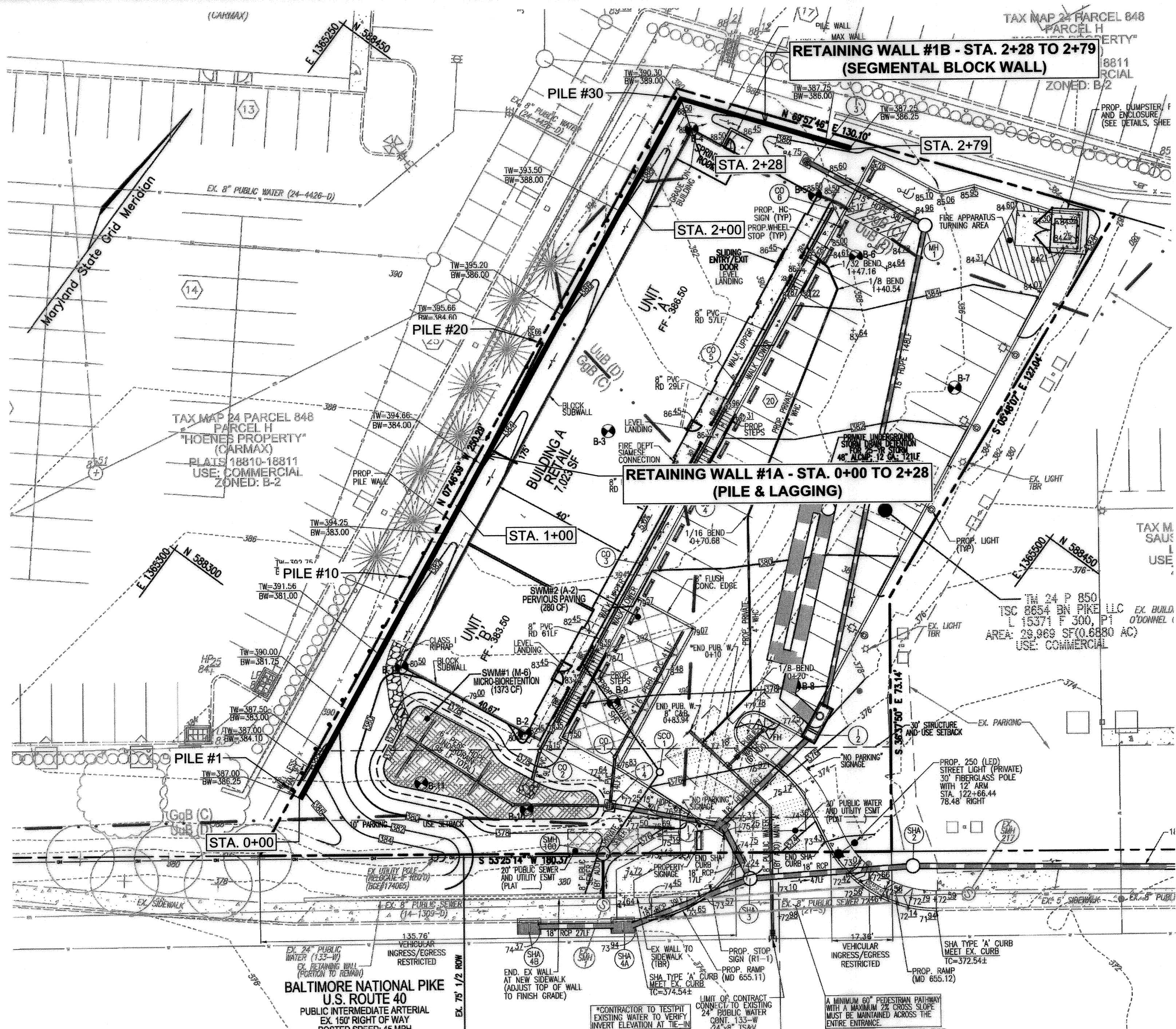
3300 N. RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043

TEL: 410.461.7666, FAX: 410.461.8961

DESIGN BY: RHV/DZE, DRAWN BY: DZE, CHECKED BY: RHV, DATE: JUNE 2019, SCALE: AS SHOWN, W.O. NO.: 13-34

PROFESSIONAL CERTIFICATE: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE: 09-27-2020

10 SHEET OF 15



WALL LOCATION PLAN
1" = 20'

- PILE & LAGGING WALL NOTES:**
- 1.) TIMBER LAGGING TO BE 3" ROUGH CUT CONSTRUCTION-GRADE HARDWOOD.
 - 2.) STRUCTURAL STEEL FOR THE SOLDIER PILES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A992, GRADE 50.
 - 3.) TOP OF SOLDIER PILE ELEVATION TO BE 6" BELOW FINISHED GRADE.
 - 4.) SOLDIER PILES TO BE AUGERED AND ENCASED WITH 1000 PSI (NOM.) LEAN CONCRETE. BACK-BATTER PILES 1/16" PER FT.
 - 5.) SEGMENTAL BLOCK WALL BACKFILL AND FILLED VOIDS BEHIND LAGGING SHALL BE COMPACTED TO 95% OF T-99.
 - 6.) DESIGN SOIL BEARING VALUE OF 2000 PSF SHALL BE FIELD VERIFIED AT STONE LEVELING PADS.
 - 7.) ALL WALL DIMENSIONS, ANGLES AND LOCATIONS SHALL BE FIELD VERIFIED. RESOLVE ANY DISCREPANCIES.
 - 8.) BASED ON THE WALL TYPE AND CONSTRUCTION METHOD, NO EASEMENT IS REQUIRED.

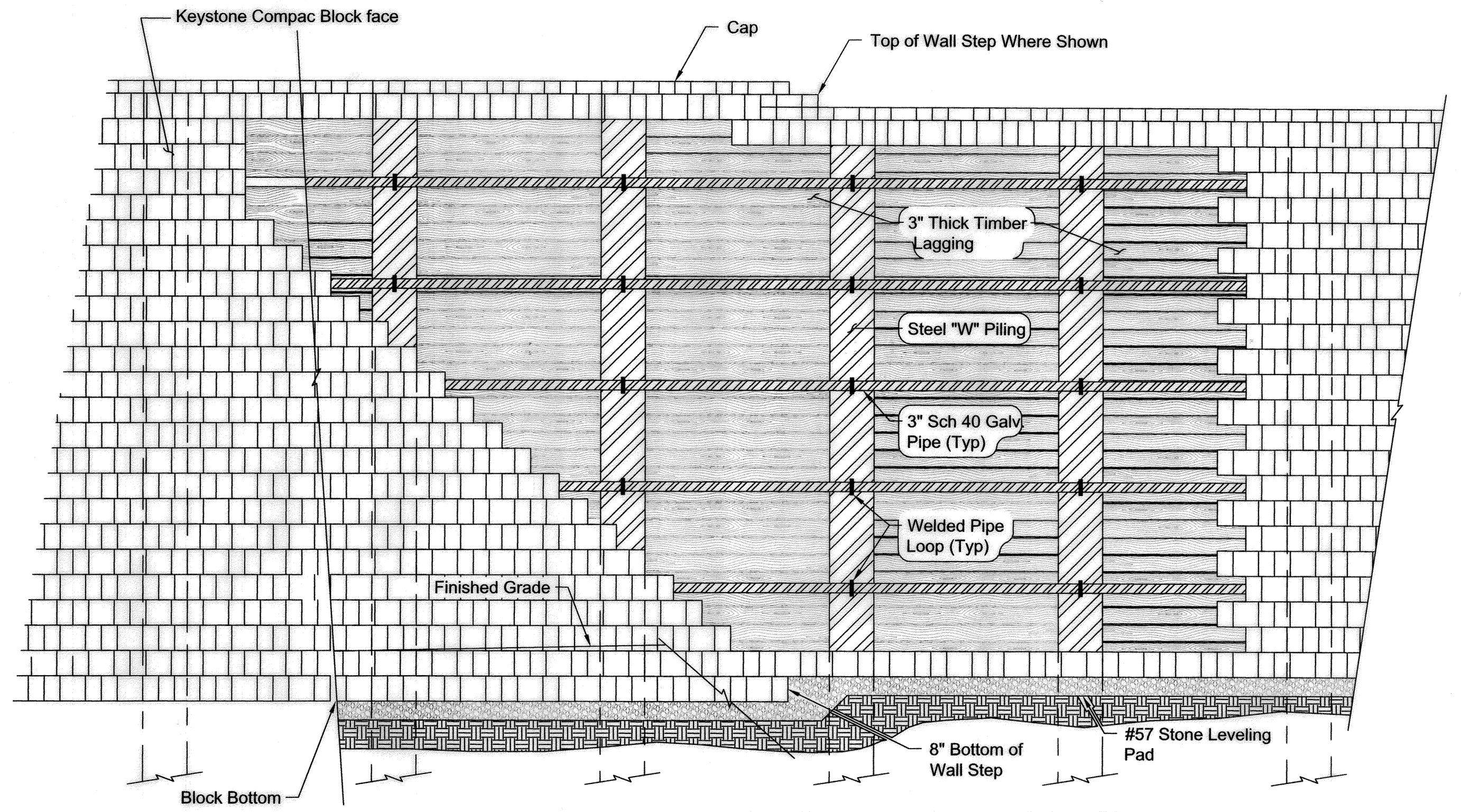
- PILE & LAGGING WALL INSTALLATION SEQUENCE:**
- 1.) ESTABLISH THE LIMITS OF CONSTRUCTION. PREPARE AND STOCKPILE CONSTRUCTION MATERIALS.
 - 2.) STAKE OUT THE PILE BORE HOLES. BORE THE 24" OR 30" VERTICAL HOLES TO THE SPECIFIED DEPTH FOR THE SOLDIER PILE. USE TEMPORARY CASING AS NEEDED TO LIMIT RAVELING AND STABILIZE THE HOLES.
 - 3.) INSTALL THE PILE, PLUMB AND PROPERLY ALIGNED TO THE WALL FACE.
 - 4.) BACKFILL THE BOREHOLE WITH LEAN CONCRETE. CONTINUE STEPS 3 AND 4 TO INSTALL ALL PILES.
 - 5.) EXCAVATE SOIL IN FRONT OF THE PILES IN APPROXIMATELY 2 FT. LIFTS, INSTALLING LAGGING BOARDS BETWEEN THE PILES AS THE EXCAVATION PROGRESSES. REPACK ANY DISLODGED SOIL TIGHTLY BEHIND THE LAGGING BOARDS.
 - 6.) WITH FRONT SOIL EXCAVATED AND LAGGING INSTALLED TO THE BASE OF THE WALL, PREPARE THE LEVELING PAD FOR THE STONE BLOCK FACING.
 - 7.) POSITION THE HORIZONTAL PIPE ACROSS THE FACE OF THE SOLDIER PILES AT THE SPECIFIED ELEVATIONS AND SECURE THE PIPES WITH U-BARS WELDED TO THE FLANGES OF THE SOLDIER PILES.
 - 8.) INSTALL THE FACING BLOCKS IN ONE TO TWO-COURSES LIFTS, LOOPING GEOGRID AROUND THE HORIZONTAL PIPES AND INSTALLING THE GRAVEL INTERSTITIAL FILL. CONTINUE TO THE TOP COURSE.
 - 9.) CONSTRUCT THE BUILDING. PLACE AND FINISH-GRADE (SWALE) THE FRONT FILL.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

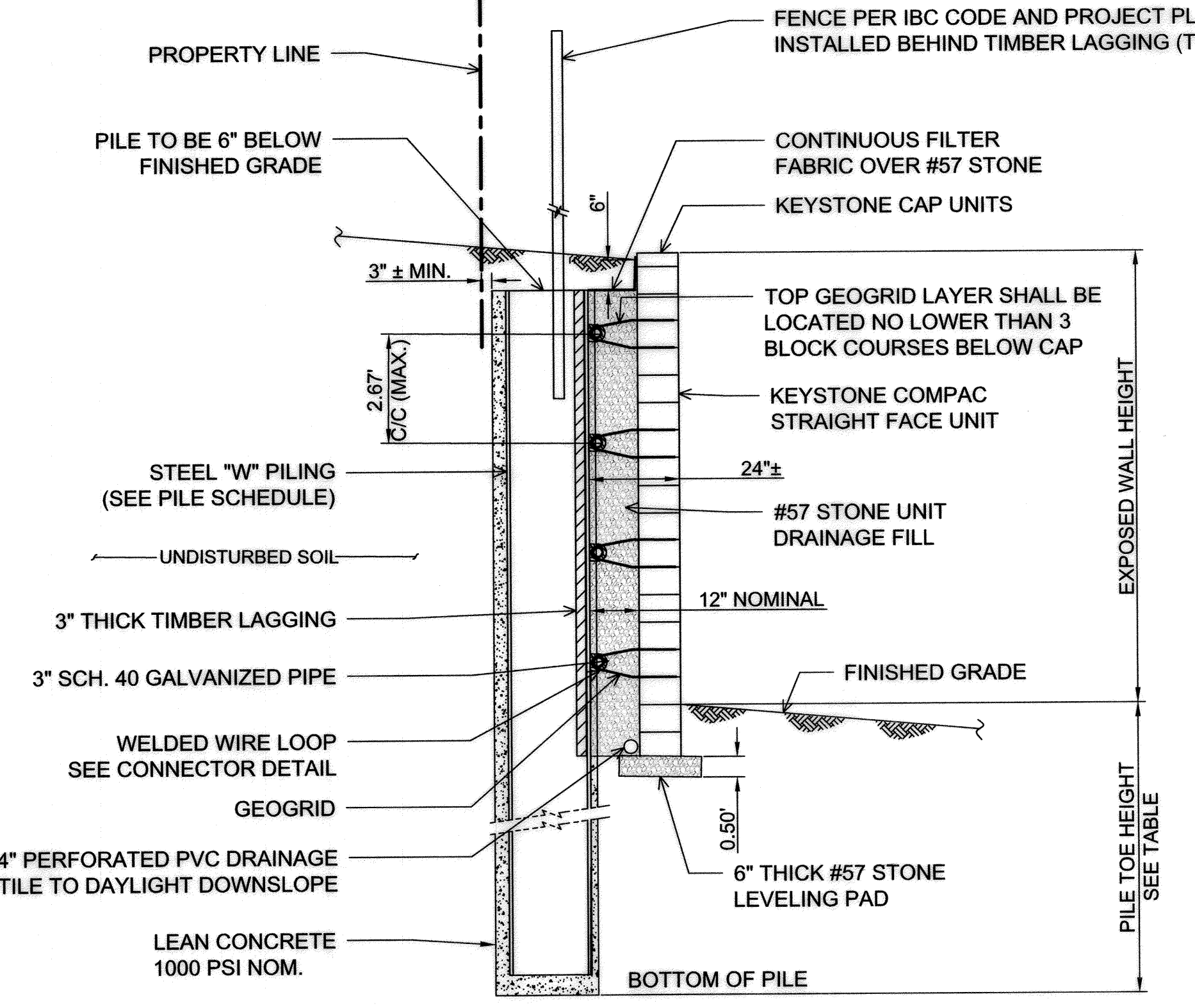
[Signature] 7-25-19
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 8-21-19
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 8-2-19
DIRECTOR DATE



TYPICAL WALL #1A ELEVATION (PILE & LAGGING)
N.T.S.



TYPICAL WALL #1A SECTION (PILE & LAGGING)
N.T.S.

OWNER/DEVELOPER
ADELPHINE CENTER LLC
2233 CHARLESTON PLACE
HYATTSVILLE, MD 20783
(240) 381-9979
C/O OLA OYEYUSI

NO.	REVISION	DATE

SITE DEVELOPMENT PLAN
RETAINING WALL LOCATION PLAN
AND CONSTRUCTION DETAILS

ADELPHINE CENTER
8654 BALTIMORE NATIONAL PIKE
PROPOSED RETAIL BUILDING
(L. 18375/F. 173)

TAX MAP 24 BLOCK 6
2ND ELECTION DISTRICT

ZONED B-2
PARCEL 850
HOWARD COUNTY, MARYLAND

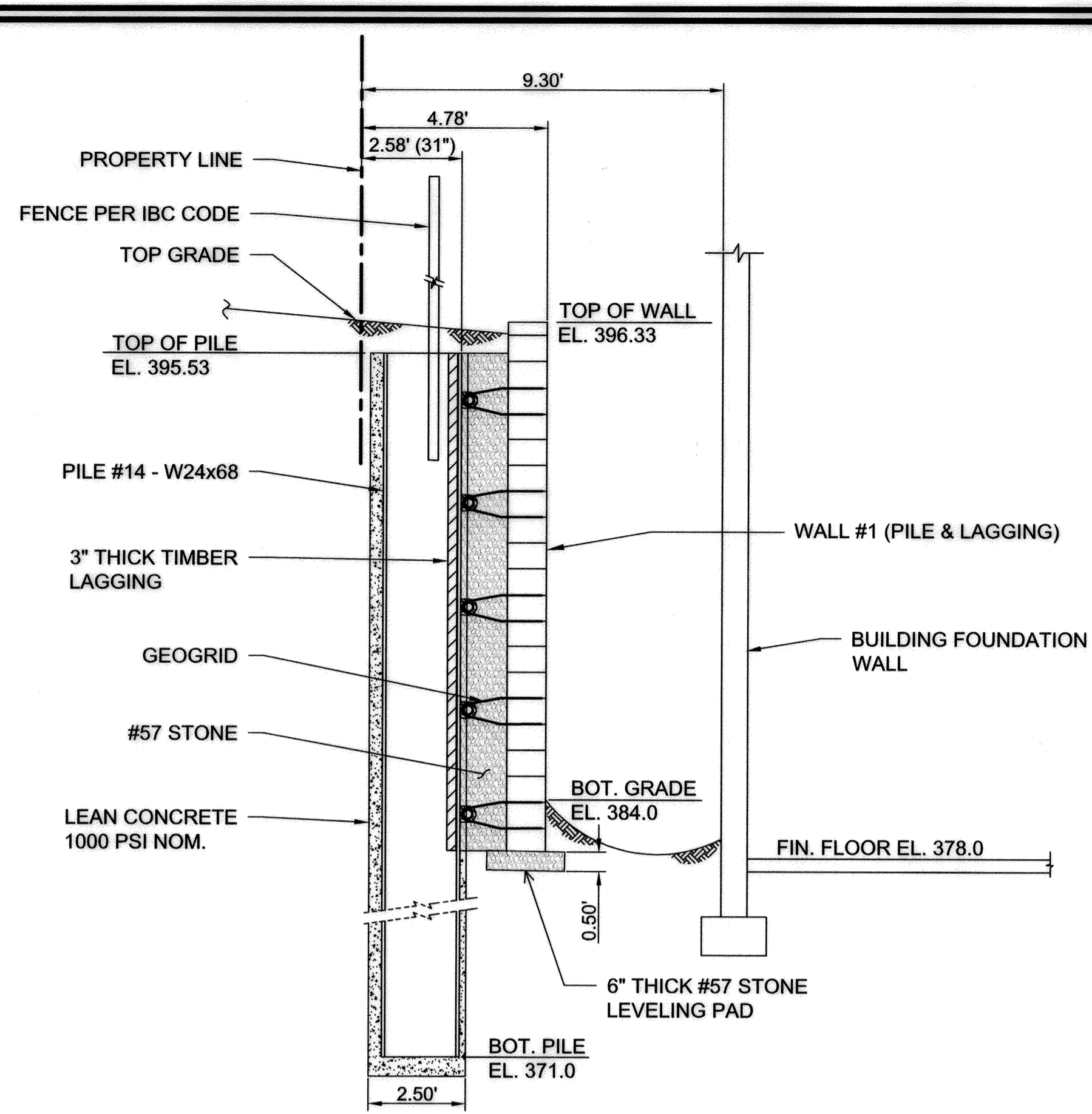
HILLIS-CARNES
ENGINEERING ASSOCIATES
10975 Guilford Road, Suite A Annapolis Junction, Maryland
(410) 880-4788 WWW.HCEA.COM Fax: (410) 880-4098

PROFESSIONAL CERTIFICATE
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. 0028925, EXPIRATION DATE: 01-15-2020

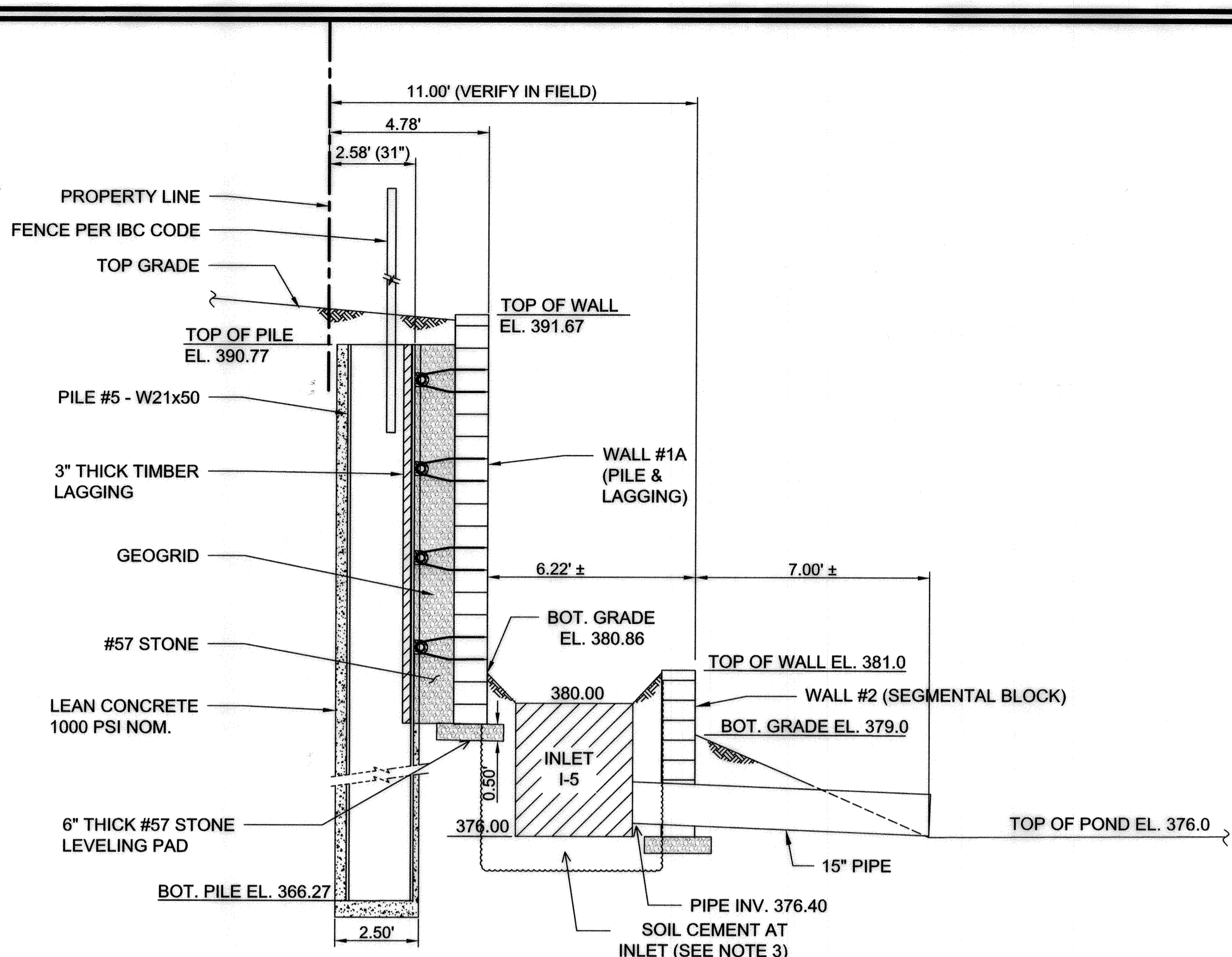
DESIGN BY: _____ PR
DRAWN BY: _____ HM
CHECKED BY: _____ PR
DATE: JUNE, 2019
SCALE: AS SHOWN
PROJECT NO.: 18041-A

PAUL J. REICHERT, PE No. 0028925

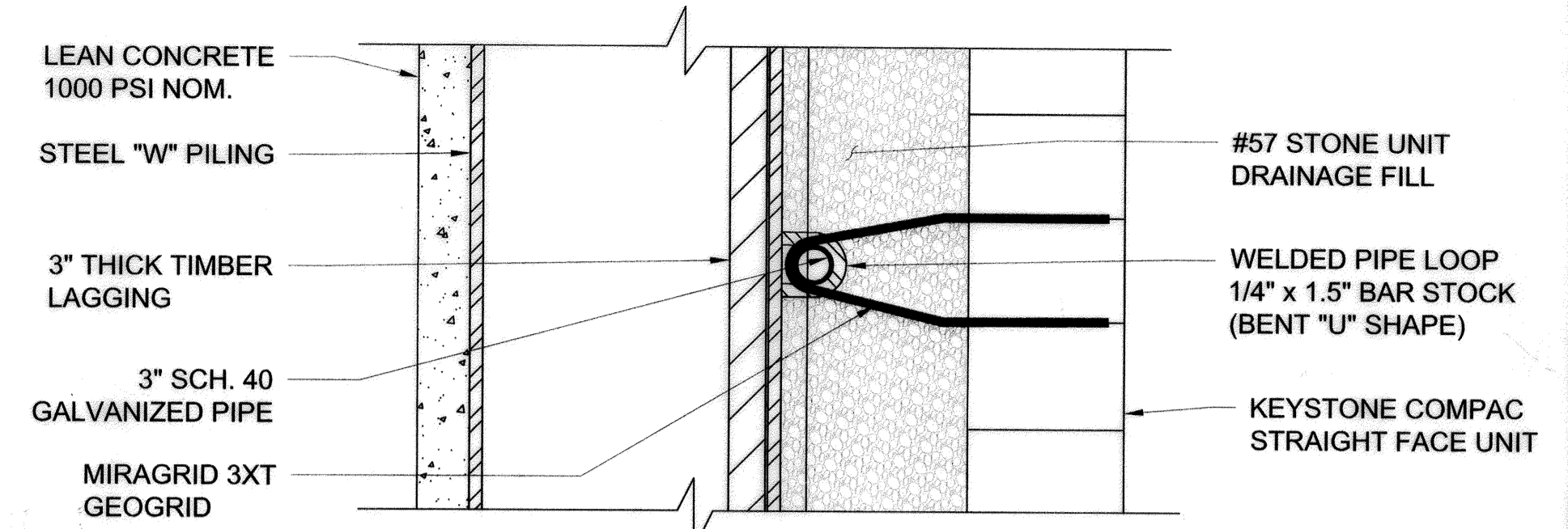
11 SHEET OF **15**



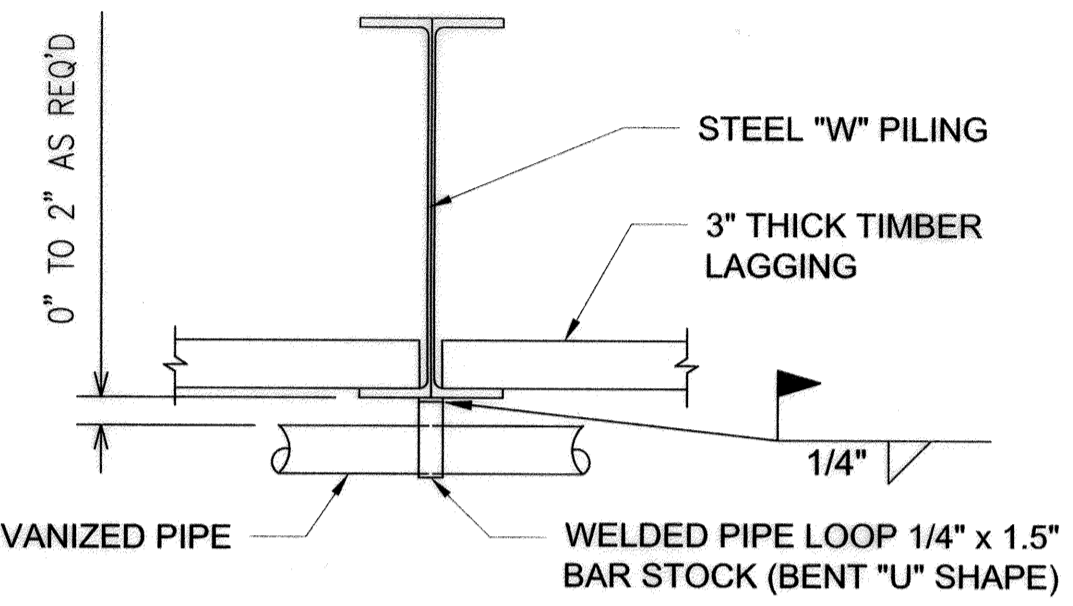
SECTION A-A
N.T.S.



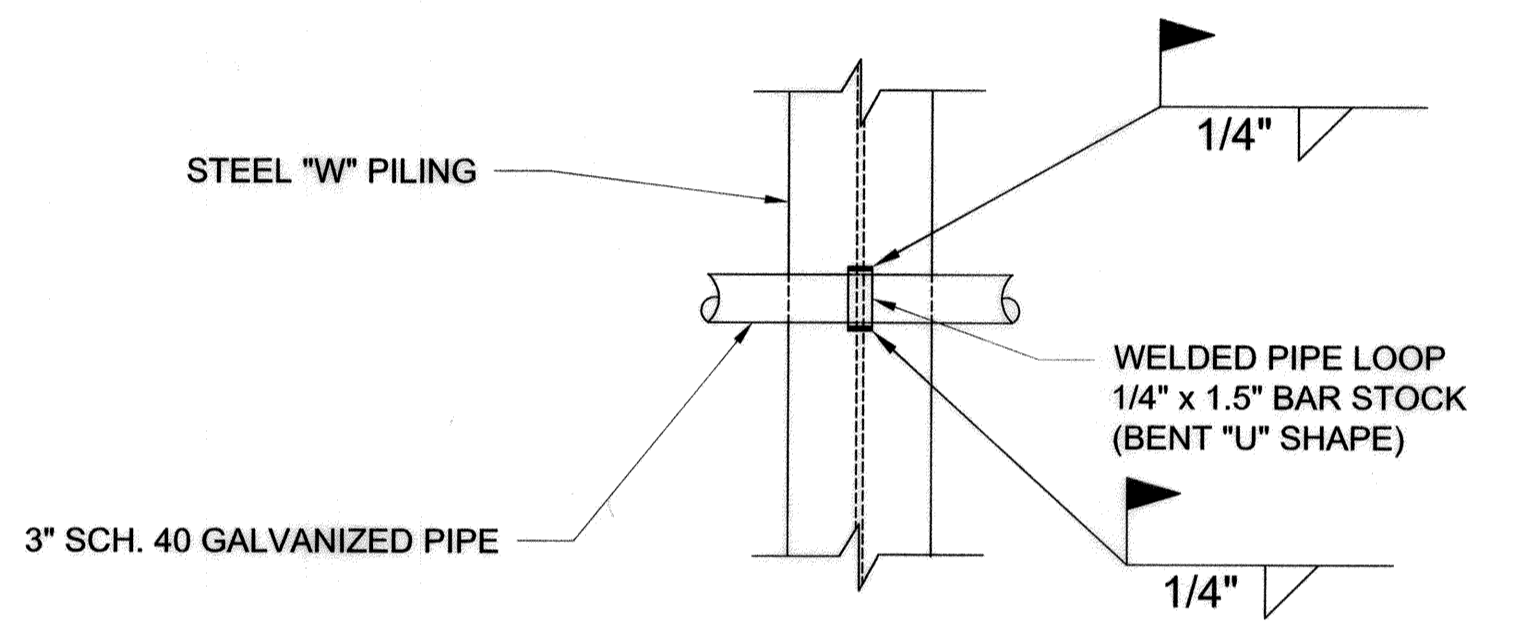
SECTION B-B
N.T.S.



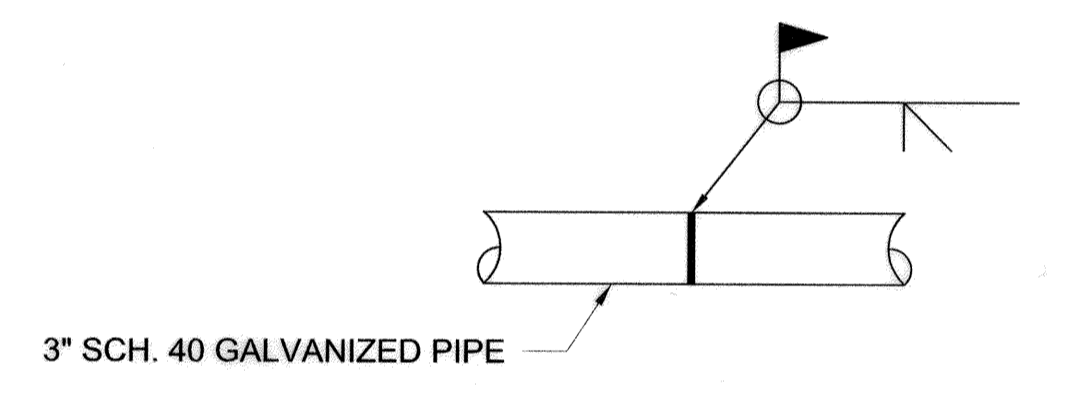
CONNECTOR DETAIL - SECTION VIEW
N.T.S.



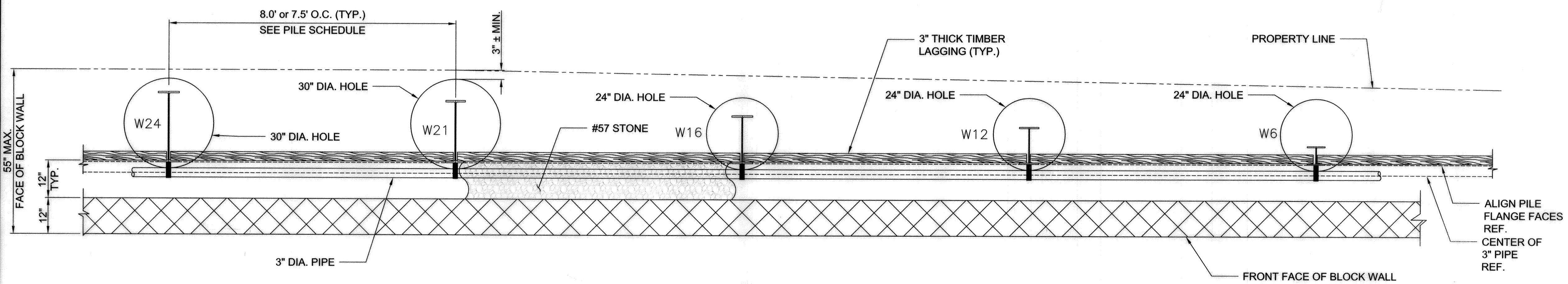
CONNECTOR DETAIL - PLAN VIEW
N.T.S.



CONNECTOR DETAIL - ELEVATION VIEW
N.T.S.



PIPE SPLICE DETAIL (AS NEEDED)
N.T.S.



AUGERED HOLE AND PILE ALIGNMENT DETAIL
N.T.S.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 7-25-19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 8-2-19
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 8-2-19
 DIRECTOR

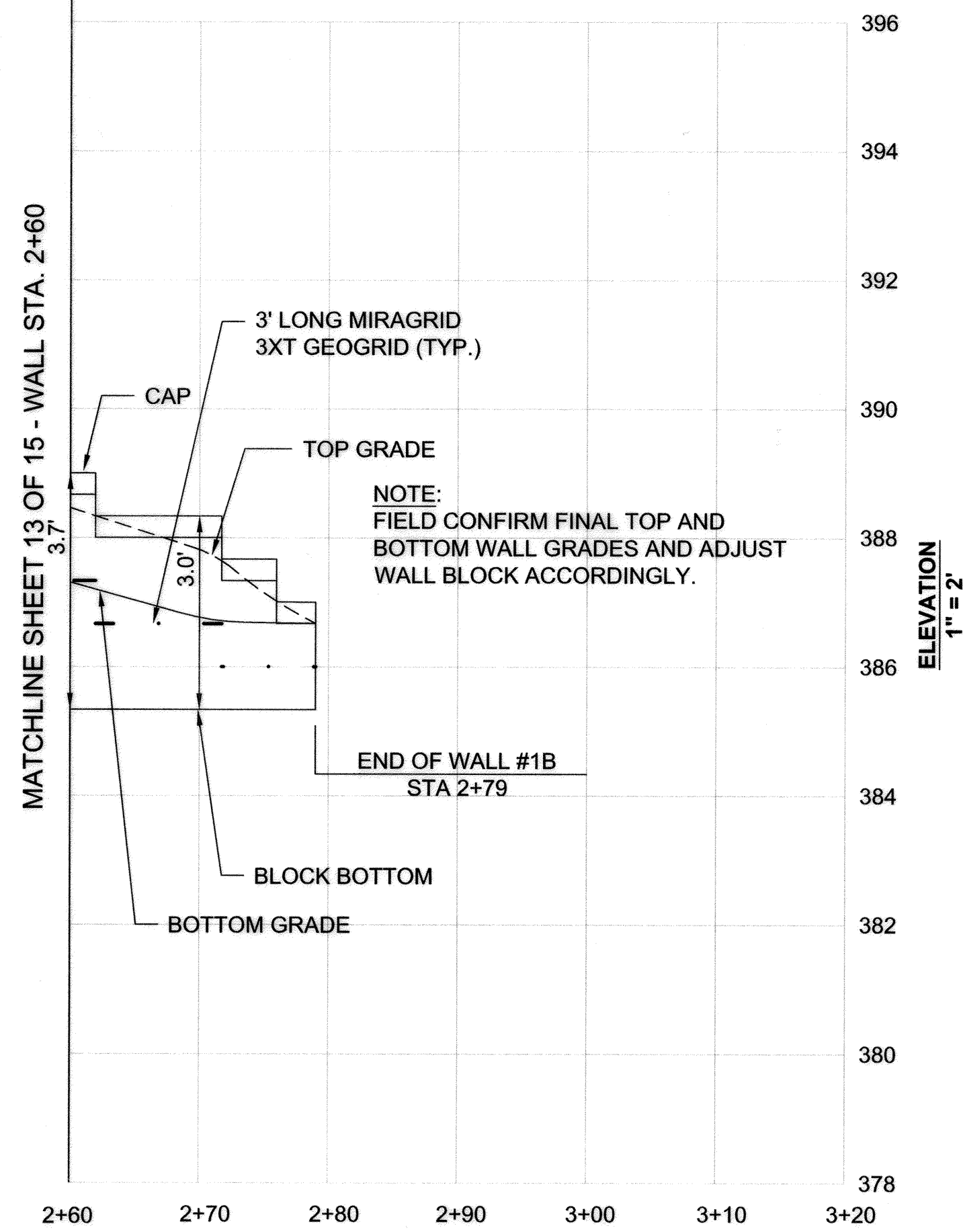
OWNER/DEVELOPER		
ADELPHINE CENTER LLC 2233 CHARLESTON PLACE HYATTSVILLE, MD 20783 (240) 381-8979 C/O OLA OYEYUSI		
NO.	REVISION	DATE

SITE DEVELOPMENT PLAN
RETAINING WALL #1 (PILE AND LAGGING)
CONSTRUCTION DETAILS
 ADELPHINE CENTER
 8654 BALTIMORE NATIONAL PIKE
 PROPOSED RETAIL BUILDING
 (L-18375/F-173) ZONED B-2
 PARCEL 850
 TAX MAP 24 BLOCK 6
 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

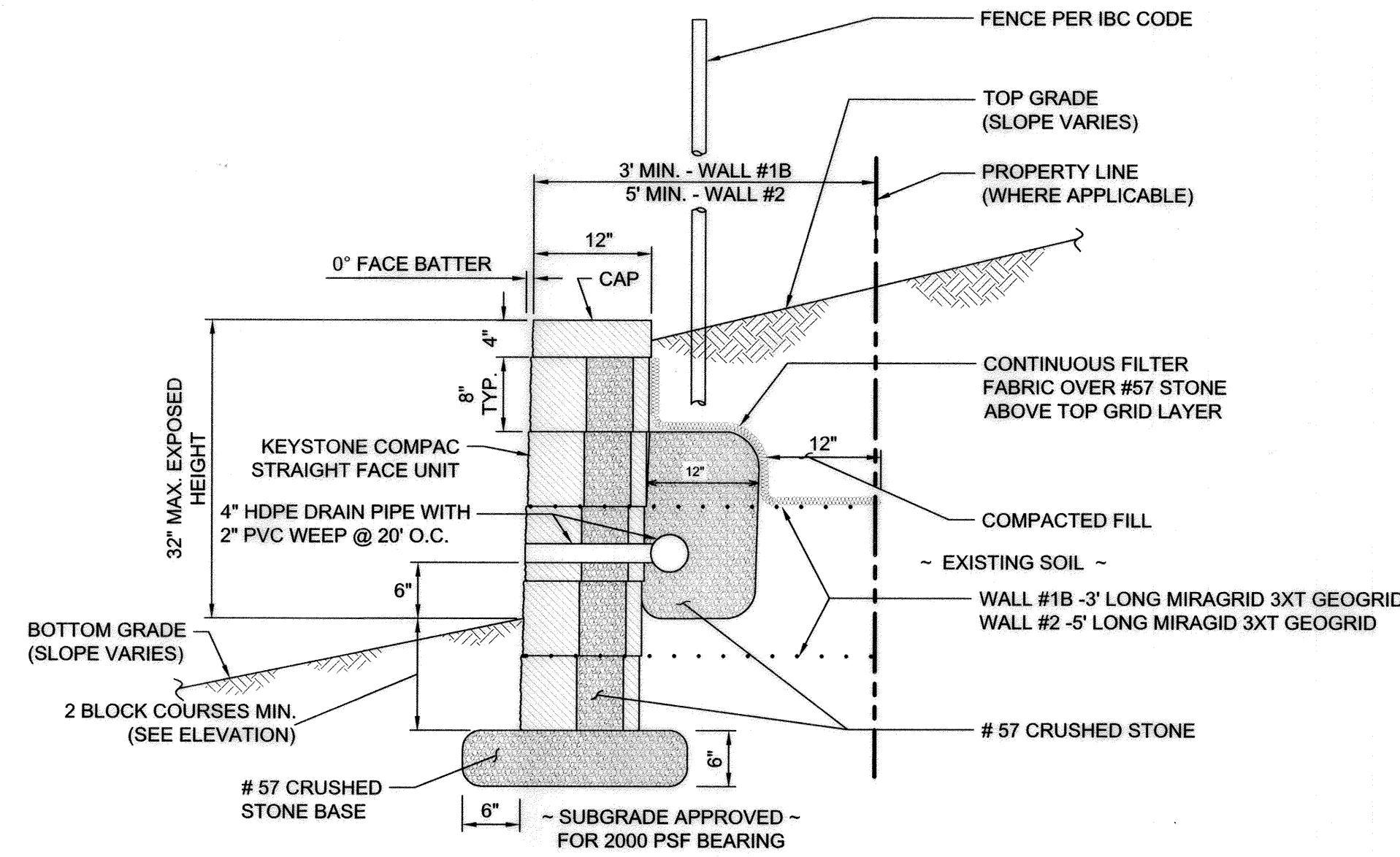
HILLIS-CARNES
ENGINEERING ASSOCIATES
 10975 Guilford Road, Suite A Annapolis Junction, Maryland
 (410) 880-4788 WWW.HCEA.COM Fax: (410) 880-4098

PROFESSIONAL CERTIFICATE
 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. 0008925 EXPIRATION DATE: 01-15-2020
 DESIGN BY: P.R.
 DRAWN BY: H.M.
 CHECKED BY: P.R.
 DATE: JUNE, 2019
 SCALE: AS SHOWN
 PROJECT NO.: 16041-A
 12 SHEET OF 15
 PAUL J. REICHERT, PE No.0028925

MATCHLINE SHEET 13 OF 15 - WALL STA. 2+60



WALL #1B ELEVATION



**TYPICAL SEGMENTAL BLOCK WALL #1B
(WITHOUT PILE & LAGGING)
N.T.S.**

**SPECIFICATIONS
MODULAR CONCRETE BLOCK RETAINING WALL**

- PART 1: GENERAL**
- 1.01 DESCRIPTION**
- A. WORK SHALL CONSIST OF FURNISHING AND CONSTRUCTION OF A MODULAR RETAINING WALL SYSTEM IN ACCORDANCE WITH THESE SPECIFICATIONS AND IN REASONABLY CLOSE CONFORMITY WITH THE LINES, GRADES, DESIGN, AND DIMENSIONS SHOWN ON THE PLANS.
 - B. WORK INCLUDES PREPARING FOUNDATION SOIL, FURNISHING AND INSTALLING LEVELING PAD, UNIT DRAINAGE FILL AND BACKFILL TO THE LINES AND GRADES SHOWN ON THE CONSTRUCTION DRAWINGS.
 - C. WORK INCLUDES FURNISHING AND INSTALLING GEOGRID SOIL REINFORCEMENT OF THE TYPE, SIZE, LOCATION, AND LENGTHS DESIGNATED ON THE CONSTRUCTION DRAWINGS.
- 1.02 DELIVERY, STORAGE AND HANDLING**
- A. CONTRACTOR SHALL CHECK ALL MATERIALS UPON DELIVERY TO ASSURE THAT THE PROPER TYPE, GRADE, COLOR, AND CERTIFICATION HAS BEEN RECEIVED.
 - B. CONTRACTOR SHALL PROTECT ALL MATERIALS FROM DAMAGE DUE TO JOB SITE CONDITIONS AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. DAMAGED MATERIALS SHALL NOT BE INCORPORATED INTO THE WORK.
- PART 2: PRODUCTS**
- 2.01 MODULAR CONCRETE RETAINING WALL UNITS**
- A. MODULAR CONCRETE UNITS SHALL CONFORM TO THE FOLLOWING ARCHITECTURAL REQUIREMENTS:
FACE FINISH - SCULPTURED ROCK FACE IN ANGULAR TRI-PLANE OR FLAT CONFIGURATION. OTHER FACE FINISHES WILL NOT BE ALLOWED WITHOUT WRITTEN APPROVAL OF OWNER.
 - B. MODULAR CONCRETE MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C1322 - STANDARD SPECIFICATIONS FOR SEGMENTAL RETAINING WALL UNITS.
 - C. MODULAR CONCRETE UNITS SHALL CONFORM TO THE FOLLOWING STRUCTURAL AND GEOMETRIC REQUIREMENTS MEASURED IN ACCORDANCE WITH APPROPRIATE REFERENCES:
COMPRESSIVE STRENGTH = 3000 PSI MINIMUM.
ABSORPTION = 5% MAXIMUM (6% IN NORTHERN STATES) FOR STANDARD WEIGHT AGGREGATES.
DIMENSIONAL TOLERANCES = ±1/8" FROM NOMINAL UNIT DIMENSIONS NOT INCLUDING ROUGH SPLIT FACE, ±1/16"
UNIT HEIGHT - TOP AND BOTTOM PLANES; UNIT SIZE - 8" (H) X 18" (W) X 12" (D) MINIMUM.
- 2.02 SHEAR CONNECTORS (IF APPLICABLE)**
- A. SHEAR CONNECTORS SHALL BE 1/2 INCH DIAMETER THERMOSET ISOPHTHALIC POLYESTER RESIN-PROTRUDED FIBERGLASS REINFORCEMENT RODS OR EQUIVALENT TO PROVIDE CONNECTION BETWEEN VERTICALLY AND HORIZONTALLY ADJACENT UNITS. STRENGTH OF SHEAR CONNECTORS BETWEEN VERTICAL ADJACENT UNITS SHALL BE APPLICABLE OVER A DESIGN TEMPERATURE OF 10 DEGREES F TO + 100 DEGREES F. B. SHEAR CONNECTORS SHALL BE CAPABLE OF HOLDING THE GEOGRID IN THE PROPER DESIGN POSITION DURING GRID PRE-TENSIONING AND BACKFILLING.
- 2.03 BASE LEVELING PAD MATERIAL**
- A. MATERIAL SHALL CONSIST OF A COMPACTED #57 CRUSHED STONE BASE AS SHOWN ON THE CONSTRUCTION DRAWINGS.
- 2.04 UNIT DRAINAGE FILL**
- A. UNIT DRAINAGE FILL SHALL CONSIST OF #57 CRUSHED STONE.
- 2.05 REINFORCED BACKFILL**
- A. REINFORCED BACKFILL SHALL TYPE SM, BE FREE OF DEBRIS AND MEET THE FOLLOWING GRADATION TESTED IN ACCORDANCE WITH ASTM D-422 AND MEET OTHER PROPERTIES SHOWN ON THE PLAN:
- | SIEVE SIZE | PERCENT PASSING |
|------------|-----------------|
| 2 INCH | 100-75 |
| 3/4 INCH | 100-75 |
| NO. 40 | 0-60 |
| NO. 200 | 0-35 |
- PLASTICITY INDEX (PI) <10 AND LIQUID LIMIT <35 PER ASTM D-4318.
- B. MATERIAL CAN BE SITE EXCAVATED SOILS WHERE THE ABOVE REQUIREMENTS CAN BE MET. UNSUITABLE SOILS FOR BACKFILL (HIGH PLASTIC CLAYS OR ORGANIC SOILS) SHALL NOT BE USED IN THE REINFORCED SOIL MASS.
- 2.06 GEOGRID SOIL REINFORCEMENT**
- A. GEOSYNTHETIC REINFORCEMENT SHALL CONSIST OF GEOGRIDS MANUFACTURED SPECIFICALLY FOR SOIL

- REINFORCEMENT APPLICATIONS AND SHALL BE MANUFACTURED FROM HIGH TENACITY POLYESTER YARN.**
- 2.07 DRAINAGE PIPE**
- A. THE DRAINAGE PIPE SHALL BE PERFORATED CORRUGATED HDPE PIPE MANUFACTURED IN ACCORDANCE WITH ASTM D-1548.
- PART 3: EXECUTION**
- 3.01 EXCAVATION**
- A. CONTRACTOR SHALL EXCAVATE TO THE LINES AND GRADES SHOWN ON THE CONSTRUCTION DRAWINGS. OWNER'S REPRESENTATIVE SHALL BE RESPONSIBLE FOR INSPECTING AND APPROVING THE EXCAVATION PRIOR TO PLACEMENT OF LEVELING MATERIAL OR FILL SOILS.
- 3.02 BASE LEVELING PAD**
- A. LEVELING PAD MATERIAL SHALL BE PLACED TO THE LINES AND GRADES SHOWN ON THE CONSTRUCTION DRAWINGS, TO A MINIMUM THICKNESS OF 6 INCHES AND EXTEND LATERALLY A MINIMUM OF 6" IN FRONT AND BEHIND THE MODULAR WALL UNIT.
 - B. LEVELING PAD SHALL BE PREPARED TO INSURE FULL CONTACT TO THE BASE SURFACE OF THE CONCRETE UNITS.
- 3.03 MODULAR UNIT INSTALLATION**
- A. FIRST COURSE OF UNITS SHALL BE PLACED ON THE LEVELING PAD AT THE APPROPRIATE LINE AND GRADE. ALIGNMENT AND LEVEL SHALL BE CHECKED IN ALL DIRECTIONS AND INSURE THAT ALL UNITS ARE IN FULL CONTACT WITH THE BASE AND PROPERLY SEATED.
 - B. PLACE THE FRONT OF UNITS SIDE-BY-SIDE. DO NOT LEAVE GAPS BETWEEN ADJACENT UNITS. LAYOUT OF CORNERS AND CURVES SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 - C. INSTALL SHEAR/CONNECTING DEVICES PER MANUFACTURER'S RECOMMENDATIONS.
 - D. PLACE AND COMPACT DRAINAGE FILL WITHIN AND BEHIND WALL UNITS. PLACE AND COMPACT BACKFILL SOIL BEHIND DRAINAGE FILL. FOLLOW WALL ERECTION AND DRAINAGE FILL CLOSELY WITH STRUCTURE BACKFILL.
 - E. MAXIMUM STACKED VERTICAL HEIGHT OF WALL UNITS, PRIOR TO UNIT DRAINAGE FILL AND BACKFILL PLACEMENT AND COMPACTION, SHALL NOT EXCEED THREE COURSES.
- 3.04 STRUCTURAL GEOGRID INSTALLATION**
- A. GEOGRID SHALL BE ORIENTED WITH THE HIGHEST STRENGTH AXIS PERPENDICULAR TO THE WALL ALIGNMENT.
 - B. GEOGRID REINFORCEMENT SHALL BE PLACED AT THE STRENGTHS, LENGTHS, AND ELEVATIONS SHOWN ON THE CONSTRUCTION DESIGN DRAWINGS OR AS DIRECTED BY THE ENGINEER.
 - C. THE GEOGRID SHALL BE LAID HORIZONTALLY ON COMPACTED BACKFILL AND ATTACHED TO THE MODULAR WALL UNITS. PLACE THE NEXT COURSE OF MODULAR CONCRETE UNITS OVER THE GEOGRID. THE GEOGRID SHALL BE PULLED TAUT, AND ANCHORED PRIOR TO BACKFILL PLACEMENT ON THE GEOGRID.
- 3.05 REINFORCED BACKFILL PLACEMENT**
- A. REINFORCED BACKFILL SHALL BE PLACED, SPREAD, AND COMPACTED IN SUCH A MANNER THAT MINIMIZES THE DEVELOPMENT OF SLACK IN THE GEOGRID AND INSTALLATION DAMAGE.
 - B. REINFORCED BACKFILL SHALL BE PLACED AND COMPACTED IN LIFTS NOT TO EXCEED 6 INCHES WHERE HAND COMPACTION IS USED, OR 8 - 10 INCHES WHERE HEAVY COMPACTION EQUIPMENT IS USED. LIFT THICKNESS SHALL BE DECREASED TO ACHIEVE THE REQUIRED DENSITY AS REQUIRED.
 - C. REINFORCED BACKFILL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY ASTM D698. THE MOISTURE CONTENT OF THE BACKFILL MATERIAL PRIOR TO AND DURING COMPACTION SHALL BE UNIFORMLY DISTRIBUTED THROUGHOUT EACH LAYER AND SHALL BE + 3% TO - 3% OF OPTIMUM.
 - D. ONLY LIGHTWEIGHT HAND-OPERATED EQUIPMENT SHALL BE ALLOWED WITHIN 3 FEET FROM THE TAIL OF THE MODULAR CONCRETE UNIT.
 - E. TRACKED CONSTRUCTION EQUIPMENT SHALL NOT BE OPERATED DIRECTLY UPON THE GEOGRID REINFORCEMENT. A MINIMUM FILL THICKNESS OF 6 INCHES IS REQUIRED PRIOR TO OPERATION OF TRACKED VEHICLES OVER THE GEOGRID. TRACKED VEHICLE TURNING SHOULD BE KEPT TO A MINIMUM TO PREVENT TRACKS FROM DISPLACING THE FILL AND DAMAGING THE GEOGRID.
 - F. RUBBER Tired EQUIPMENT MAY PASS OVER GEOGRID REINFORCEMENT AT SLOW SPEEDS, LESS THAN 10 MPH. SUDDEN BRAKING AND SHARP TURNING SHALL BE AVOIDED.
 - G. AT THE END OF EACH DAY'S OPERATION, THE CONTRACTOR SHALL SLOPE THE LAST LIFT OF REINFORCED BACKFILL AWAY FROM THE WALL UNITS TO DIRECT RUNOFF AWAY FROM WALL FACE. THE CONTRACTOR SHALL NOT ALLOW SURFACE RUNOFF FROM ADJACENT AREAS TO ENTER THE WALL CONSTRUCTION SITE.
- 3.06 CAP INSTALLATION**
- A. CAP UNITS SHALL BE GLUED TO UNDERLYING UNITS WITH AN ALL-WEATHER ADHESIVE RECOMMENDED BY THE MANUFACTURER.
- 3.07 FIELD QUALITY CONTROL**
- A. THE OWNER SHALL ENGAGE INSPECTION AND TESTING SERVICES, INCLUDING INDEPENDENT LABORATORIES, TO PROVIDE QUALITY ASSURANCE AND TESTING SERVICES DURING CONSTRUCTION.
 - B. AS A MINIMUM, QUALITY ASSURANCE TESTING SHOULD INCLUDE FOUNDATION SOIL INSPECTION, SOIL AND BACKFILL TESTING, VERIFICATION OF DESIGN PARAMETERS, AND OBSERVATION OF CONSTRUCTION FOR GENERAL COMPLIANCE WITH DESIGN DRAWINGS AND SPECIFICATIONS.

OWNER/DEVELOPER
ADELPHINE CENTER LLC
2233 CHARLESTON PLACE
HYATTSVILLE, MD 20783
(240) 381-8979
C/O OLA OYEYUSI

NO.	REVISION	DATE

**SITE DEVELOPMENT PLAN
SEGMENTAL WALL #1B
AND CONSTRUCTION DETAILS**

ADELPHINE CENTER
8654 BALTIMORE NATIONAL PIKE
PROPOSED RETAIL BUILDING
(L.18375/F.173)

TAX MAP 24 BLOCK 6
2ND ELECTION DISTRICT

ZONED B-2
PARCEL 850
HOWARD COUNTY, MARYLAND

**HILLIS-CARNES
ENGINEERING ASSOCIATES**

10975 Guilford Road, Suite A Annapolis Junction, Maryland
(410) 880-4788 WWW.HCEA.COM Fax: (410) 880-4098

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 7-25-19

[Signature]
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 8/2/19

[Signature]
DIRECTOR
DATE: 8-2-19

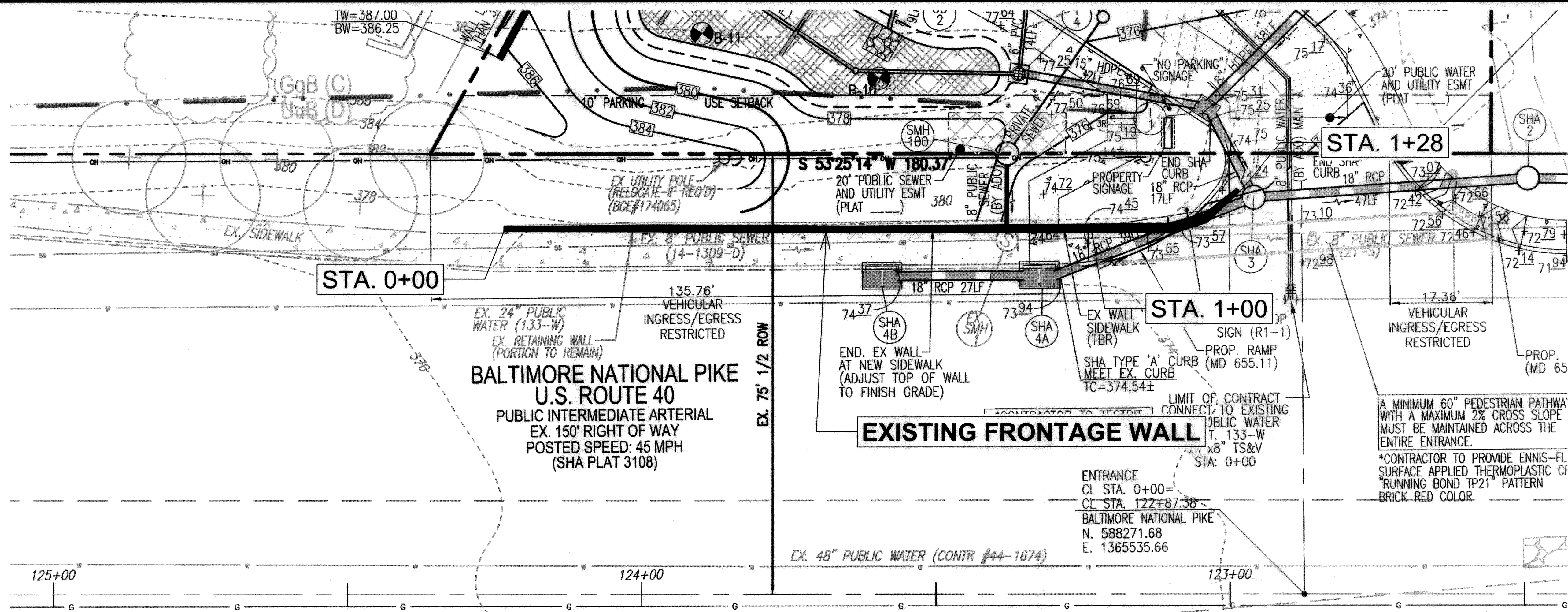


PROFESSIONAL CERTIFICATE

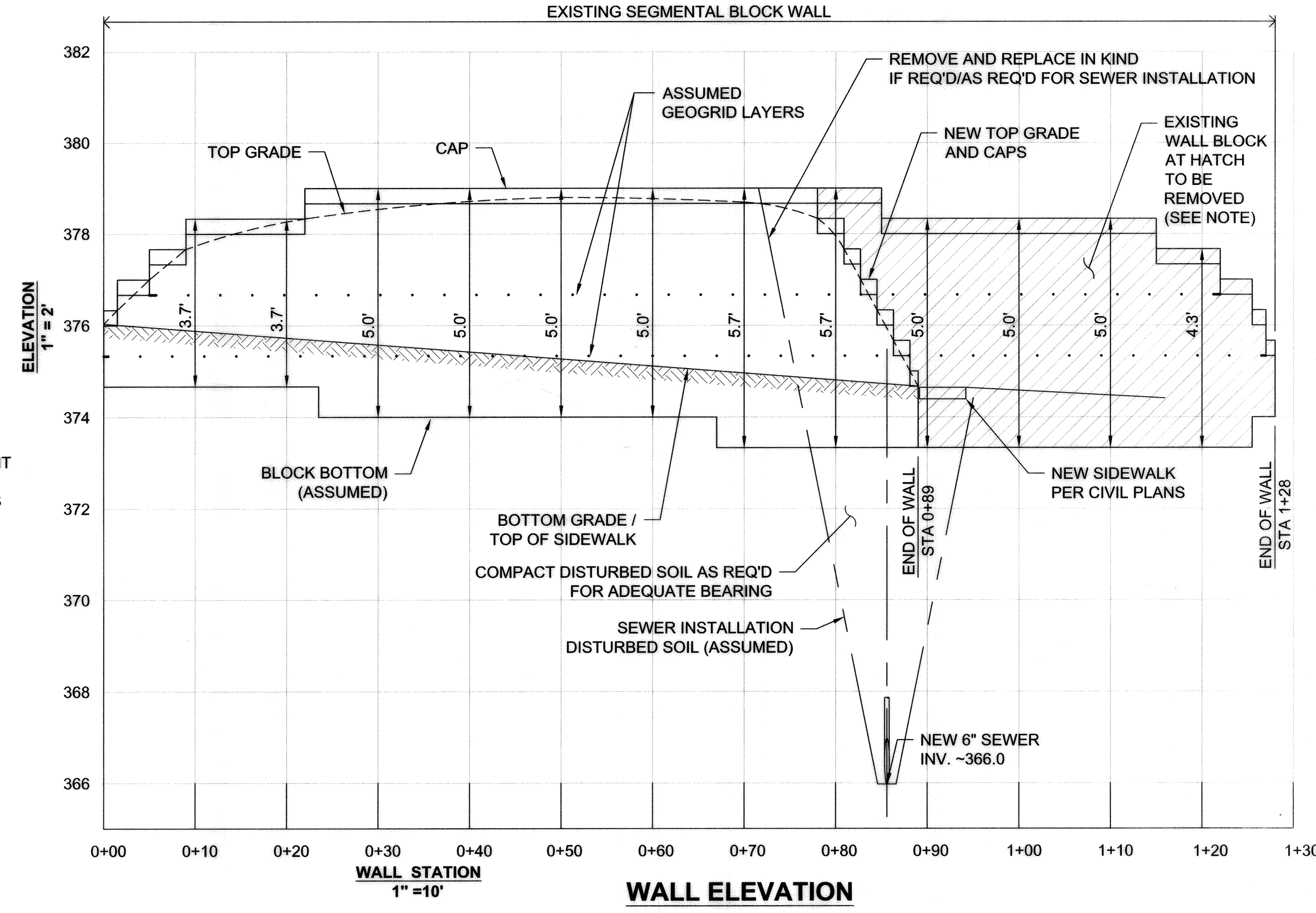
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 0028925 EXPIRATION DATE: 07-15-2020

DESIGN BY: _____ PR
DRAWN BY: _____ HM
CHECKED BY: _____ PR
DATE: JUNE, 2019
SCALE: AS SHOWN
PROJECT NO.: 16041-A

14 SHEET OF **15**



WALL LOCATION PLAN
1" = 10'



WALL ELEVATION
1" = 10'

NOTE:
REMOVE EXISTING WALL BLOCK AS SHOWN.
CAREFULLY REGRADE WALL TO REMAIN
EXPOSING EXISTING GEOGRID REINFORCEMENT
LAYERS. TRIM GEOGRID LAYERS TO MATCH
WALL BLOCK TO REMAIN. ADD NEW WALL CAPS
AS NEEDED AND ESTABLISH FINAL GRADE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 7-25-19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 8/2/19
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 8-2-19
 DIRECTOR

OWNER/DEVELOPER
 ADELPHINE CENTER LLC
 2233 CHARLESTON PLACE
 HYATTSVILLE, MD 20783
 (240) 381-8979
 C/O OLA OYEFUSI

NO.	REVISION	DATE

SITE DEVELOPMENT PLAN
**EXISTING FRONTAGE SEGMENTAL WALL
 PLAN AND CONSTRUCTION DETAILS**

ADELPHINE CENTER
 8654 BALTIMORE NATIONAL PIKE
 PROPOSED RETAIL BUILDING
 (L.18375/F.173)

TAX MAP 24 BLOCK 6
 2ND ELECTION DISTRICT

ZONED B-2
 PARCEL 830
 HOWARD COUNTY, MARYLAND

**HILLIS-CARNES
 ENGINEERING ASSOCIATES**
 10975 Guilford Road, Suite A Annapolis Junction, Maryland
 (410) 880-4788 WWW.HCEA.COM Fax: (410) 880-4098

PROFESSIONAL CERTIFICATE
 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. 0228925
 EXPIRATION DATE: 01-15-2020

DESIGN BY: PR
 DRAWN BY: HM
 CHECKED BY: PR
 DATE: JUNE, 2019
 SCALE: AS SHOWN
 PROJECT NO.: 16041-A

15 SHEET OF 15

PAUL J. REICHERT, P.E. No. 0028925