

**GENERAL NOTES -- NON-RESIDENTIAL SITE DEVELOPMENT PLAN:**

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS (IF APPLICABLE) UNLESS WAIVERS OR ALTERNATIVE COMPLIANCE REQUESTS HAVE BEEN APPROVED.
- 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.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH ONE FOOT CONTOUR INTERVALS PREPARED BY HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS. THE INFORMATION SHOWN HEREON IS A COMBINATION OF THREE SURVEY TASKS. FIELDWORK FOR THE REAR OF THE LIBRARY BUILDING AND PARKING AREA WAS PERFORMED IN JANUARY, 2018. THE WEST AND NORTH SIDES WERE PERFORMED IN FEBRUARY, 2019. EAST SIDE WAS PERFORMED IN AUGUST, 2019. OFFSITE TOPOGRAPHY IS FROM HOWARD COUNTY GIS.
- 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 NOS. 36EA (N:556986.803/E:1354535.280) AND 36HA (N:555116.606/E:1354381.451) WERE USED FOR THIS PROJECT.
- EXISTING WATER IS PUBLIC (CONTRACT NO. 24-3157). PROPOSED WATER IS A COMBINATION OF PUBLIC AND PRIVATE. WATER FOR THIS PROJECT IS TO BE SERVICE CONNECTIONS FROM CONTRACT NO. 486-D.
- EXISTING AND PROPOSED SEWER IS PRIVATE. SEWER FOR THIS PROJECT IS TO BE SERVICE CONNECTIONS FROM CONTRACT NO. 795-15.
- STORMWATER MANAGEMENT REQUIREMENTS WILL BE MET VIA FOUR (4) MICRO-BIORETENTION FACILITIES, WHICH WILL BE OWNED AND MAINTAINED BY HOWARD COUNTY.
- EXISTING UTILITIES ARE BASED ON:
  - THE FIELD LOCATION OF OBSERVED ABOVE GROUND EVIDENCE AND FIELD MEASURED INVERTS FOR SANITARY SEWER AND STORM DRAIN.
  - THE FIELD LOCATION OF PAINT MARKINGS MADE BY AMT (A.MORTON THOMAS & ASSOCIATES) IN FEBRUARY & AUGUST, 2019. (GAS, ELECTRIC, WATER, AND FIBER/COMMS LINES SHOWN HEREON).
 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.
- PER FEMA MAP 24027C015D0, THE PROJECT AREA IS CLASSIFIED AS "ZONE X", AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
- THE WETLANDS DELINEATION STUDY FOR THIS PROJECT WAS PREPARED BY A. MORTON THOMAS & ASSOCIATES, INC., DATED OCTOBER 2019. THERE ARE NO WETLANDS ON THIS SITE.
- TRAFFIC STUDY #021 WAS PERFORMED BY THE TRAFFIC GROUP, INC. ON JANUARY 21, 2021.
- THE PROJECT BOUNDARY IS BASED ON PARCEL 0275 - PLAT 10361.
- THE SUBJECT PROPERTY IS ZONED "NT-OPEN SPACE" IN ACCORDANCE WITH THE 10/6/13 COMPREHENSIVE ZONING REGULATIONS AND FDP-212-A.
- 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.
- THIS PROJECT IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
- SLOPES GREATER THAN 15% ARE LOCATED ON SITE. SEE SHEET VF-101 FOR APPROXIMATE LOCATIONS. THERE ARE SLOPES GREATER THAN 15% WITHIN THE LIMIT OF DISTURBANCE.
- THIS PROPERTY IS ZONED NT (NEW TOWN) AND THEREFORE EXEMPT FROM FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1202(b)(1)(iv) FOR A PLANNED UNIT DEVELOPMENT WHICH HAS PRELIMINARY DEVELOPMENT PLAN APPROVAL AND IS 50% OR MORE DEVELOPED BEFORE DECEMBER 31, 1992. THE PROJECT IS ALSO EXEMPT VIA 16.1202(b)(1)(ii).
- EXISTING FOREST CONSERVATION IS A DEPARTMENT OF RECREATION AND PARKS CREATED EASEMENT USING FEE-IN-LIEU FUNDS AND NOT TO FULFILL AN OBLIGATIONS FROM DEVELOPMENT ON THE SITE.
- TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL GROUNDS, CEMETERIES OR HISTORIC STRUCTURES LOCATED ON THIS PROPERTY.
- LANDSCAPING IS PROVIDED IN ACCORDANCE WITH THE LANDSCAPE MANUAL.
- A FIRE DEPARTMENT CONNECTION FOR FIRE PROTECTION SYSTEMS SHALL BE LOCATED: (A) ON THE SIDE OF THE STRUCTURE DISPLAYING THE ADDRESS CLEARLY VISIBLE TO THE RESPONDING UNITS; (B) WITHIN 100 FT. OF A FIRE HYDRANT; (II) THE APPROPRIATE SIGN SHALL BE MOUNTED ON THE BUILDING'S WALL BETWEEN 8 AND 12 FEET ABOVE THE FIRE DEPARTMENT CONNECTION; (III) A FREE-STANDING FIRE DEPARTMENT CONNECTION SHALL HAVE THE SIGN MOUNTED ON A POLE DIRECTLY BEHIND THE CONNECTION APPROXIMATELY 6 FEET HIGH; (IV) SIGNS SHALL HAVE A WHITE REFLECTIVE BACKGROUND WITH A RED REFLECTIVE BORDER, RED REFLECTIVE LETTERS AND A RED REFLECTIVE ARROW. THE BORDER SHALL HAVE A 3/8" STROKE. THE LETTERS SHALL BE 6" HIGH WITH A 1" STROKE. THE ARROW SHALL HAVE A STROKE LESS THAN 2". THE OVERALL SIGN MEASUREMENTS SHALL BE 12" BY 18"; (V) ANY OBSTRUCTION OR CONDITION THAT DETERS OR HINDERS ACCESS TO A FDC IS PROHIBITED. A MINIMUM CLEAR SPACE OF 15 FEET (7.5 FEET ON ALL SIDES) SHALL BE MAINTAINED.
- KNOX BOXES SHALL BE LOCATED WITHIN 6' TO THE RIGHT OF THE MAIN ENTRANCE AT A RANGE OF 4-5' IN HEIGHT. THE CONTRACTOR SHOULD CONTACT THE OFFICE OF THE FIRE MARSHAL PRIOR TO PURCHASING AND INSTALLING KNOX BOXES TO DETERMINE IF ADDITIONAL KNOX BOXES WILL BE REQUIRED AS WELL AS TO VERIFY THE LOCATION(S) WHERE THEY ARE TO BE MOUNTED.

- NOTE:**
- PROPERTY PREVIOUSLY DESIGNED AND APPROVED UNDER SDP-92-075
  - THE FOREST CONSERVATION EASEMENT IS SHOWN ON COUNTY GIS AS AN EASEMENT WITH RECREATION AND PARKS. THE EASEMENT WAS CREATED WITH FEE-IN-LIEU FUNDS.
  - THERE HAS BEEN COORDINATION WITH RECREATION AND PARKS TO RELOCATE THE PORTION OF THE FOREST CONSERVATION EASEMENT DISTURBED BY THE PROPOSED WORK.
  - PER FDP-212-A, NO STRUCTURES WITHIN OPEN SPACE LAND USE AREAS SHALL BE LOCATED WITHIN 30' OF A PUBLIC RIGHT-OF-WAY OR WITHIN 25' OF ANY PROPERTY LINE UNLESS APPROVED BY HOWARD COUNTY PLANNING BOARD.
  - LEED PROJECT REGISTRATION NUMBER : 1000120063.
  - THE OWEN BROWN VILLAGE BOARD REVIEWED AND ACCEPTED THE PROJECT AT THEIR NOVEMBER 4, 2020 MEETING.

**APPROVED**  
**PLANNING BOARD OF HOWARD COUNTY**  
 DATE April 1, 2021

**APPROVED: DEPARTMENT OF PLANNING AND ZONING**

*Chad Elchard* 6/4/21  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Dee L. Mann* 6/16/21  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*Shy Gove* 4/21/21  
 DIRECTOR DATE

# EAST COLUMBIA 50+ CENTER

## Tax Map 36, Parcel 0275, Lot A-1/B-1

### 6610 CRADLEROCK WAY

### COLUMBIA, MD 21045

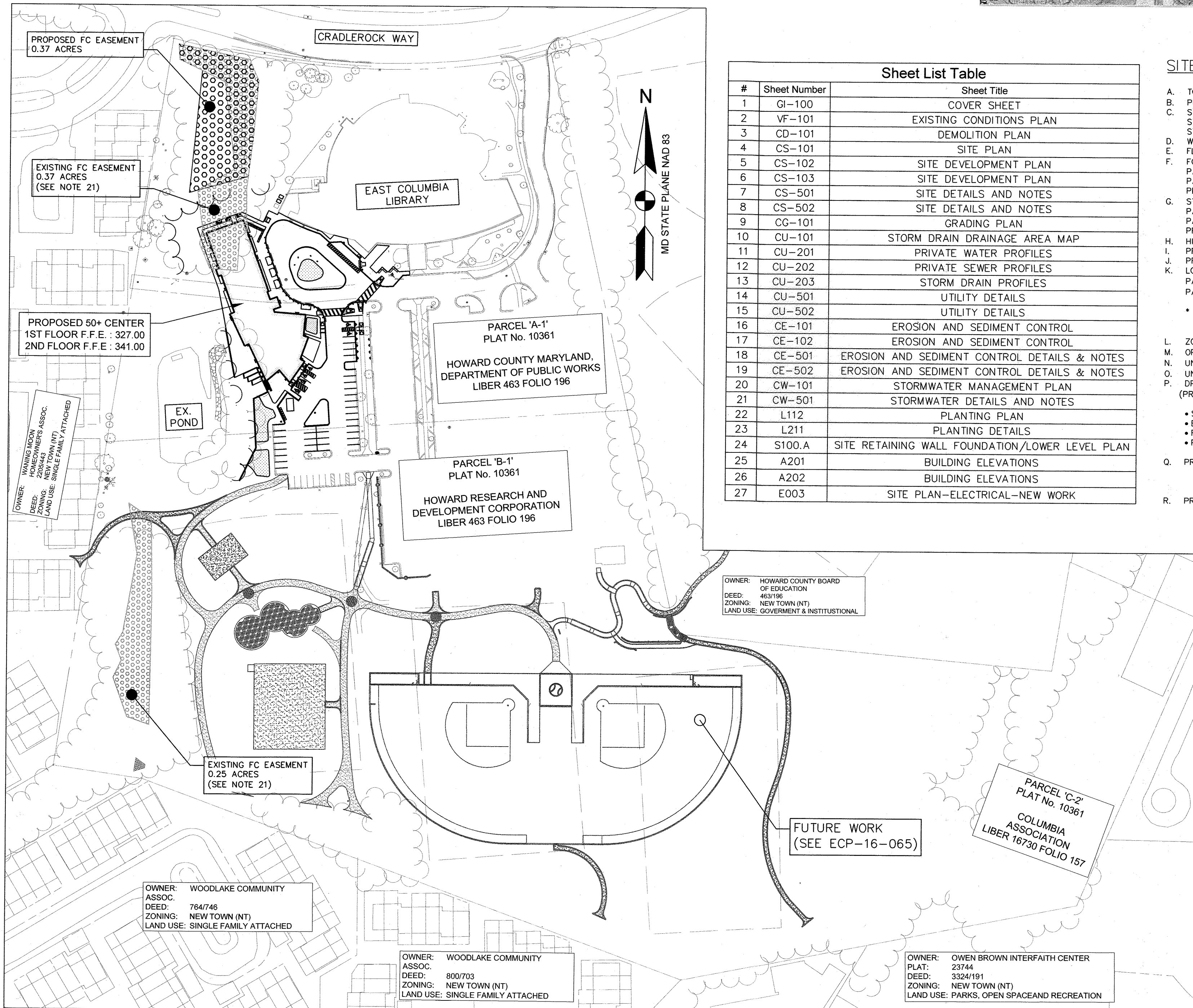
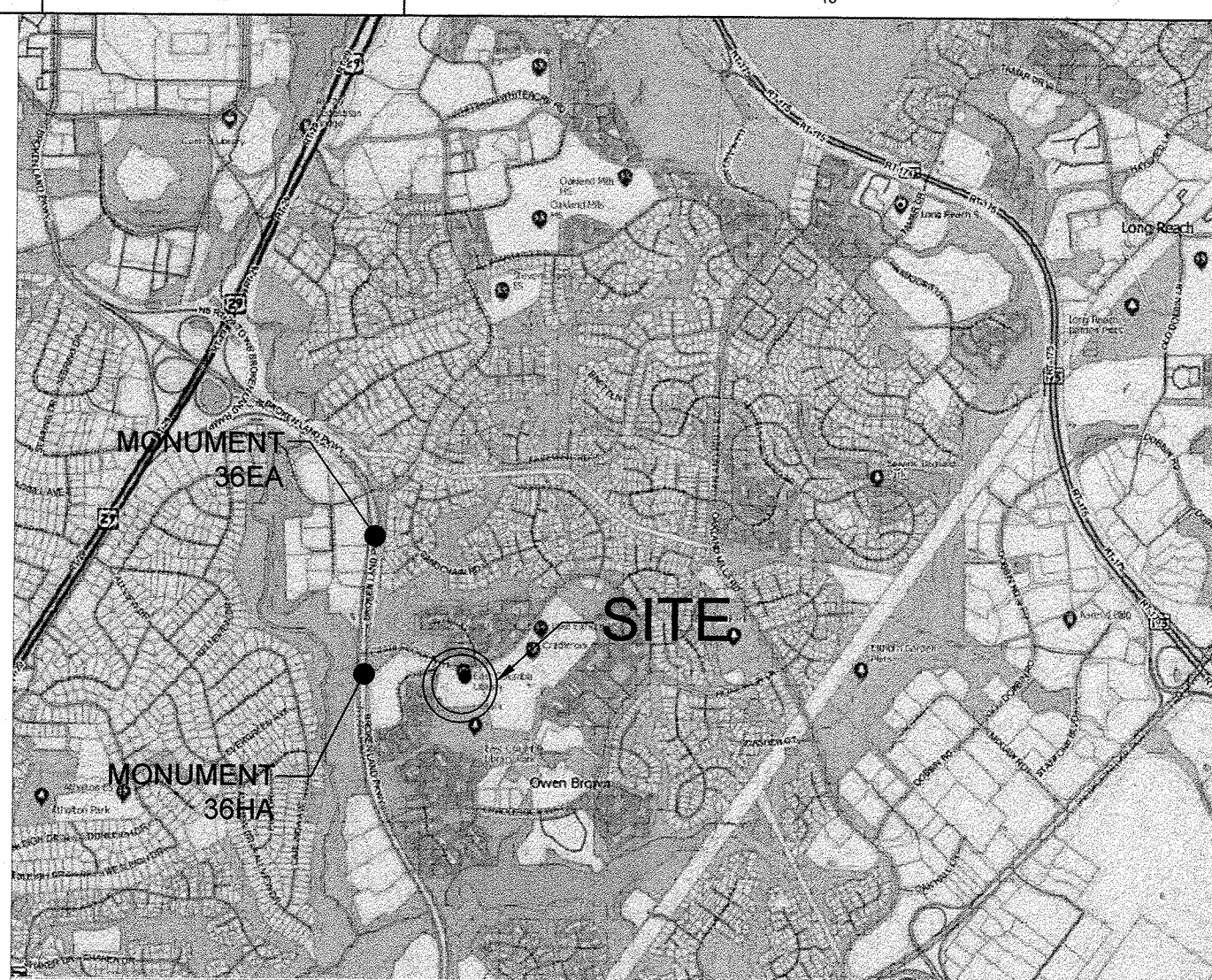
## CAPITAL PROJECT # C0355

**OWNER / APPLICANT**  
 BUREAU OF FACILITIES, DESIGN & CONSTRUCTION DIVISION  
 9250 BENDIX ROAD  
 COLUMBIA, MD 21045  
 ATTN: MRS. SHARON R. WALSH, CHIEF DIVISION  
 TEL: 410-313-5386 MOBILE: 301-717-8417

**DESIGN ENGINEER**  
 A. MORTON THOMAS & ASSOCIATES, INC.  
 800 KING FARM BLVD, 4TH FLOOR  
 ROCKVILLE, MD 20850  
 ATTN: MR. PHILIP RHODES, PE  
 TEL: 301-881-2545

**OWNER-PARCEL A-1**  
 HOWARD COUNTY MARYLAND  
 DEPARTMENT OF PUBLIC WORKS  
 3459 COURT HOUSE DR.  
 ELLICOTT CITY, MD 21043  
 (410) 313-4401

**OWNER-PARCEL B-1**  
 THE HOWARD RESEARCH AND  
 DEVELOPMENT CORPORATION  
 P.O. BOX 833  
 COLUMBIA, MD 21044  
 (410) 992-4377



Sheet List Table		
#	Sheet Number	Sheet Title
1	GI-100	COVER SHEET
2	VF-101	EXISTING CONDITIONS PLAN
3	CD-101	DEMOLITION PLAN
4	CS-101	SITE PLAN
5	CS-102	SITE DEVELOPMENT PLAN
6	CS-103	SITE DEVELOPMENT PLAN
7	CS-501	SITE DETAILS AND NOTES
8	CS-502	SITE DETAILS AND NOTES
9	CG-101	GRADING PLAN
10	CU-101	STORM DRAIN DRAINAGE AREA MAP
11	CU-201	PRIVATE WATER PROFILES
12	CU-202	PRIVATE SEWER PROFILES
13	CU-203	STORM DRAIN PROFILES
14	CU-501	UTILITY DETAILS
15	CU-502	UTILITY DETAILS
16	CE-101	EROSION AND SEDIMENT CONTROL
17	CE-102	EROSION AND SEDIMENT CONTROL
18	CE-501	EROSION AND SEDIMENT CONTROL DETAILS & NOTES
19	CE-502	EROSION AND SEDIMENT CONTROL DETAILS & NOTES
20	CW-101	STORMWATER MANAGEMENT PLAN
21	CW-501	STORMWATER DETAILS AND NOTES
22	L112	PLANTING PLAN
23	L211	PLANTING DETAILS
24	S100.A	SITE RETAINING WALL FOUNDATION/LOWER LEVEL PLAN
25	A201	BUILDING ELEVATIONS
26	A202	BUILDING ELEVATIONS
27	E003	SITE PLAN-ELECTRICAL-NEW WORK

**SITE ANALYSIS DATA CHART:**

- A. TOTAL PROJECT AREA: 24.46 AC (PARCEL A-1/B-1)
  - B. PROJECT AREA (LOD): 2.59 AC
  - C. STREAM & BUFFERS: 0.00 AC
  - STREAM: 0.00 AC
  - STREAM BUFFER: 0.00 AC
  - D. WETLAND: 0.00 AC
  - E. FLOODPLAIN: 0.00 AC
  - F. FOREST CONSERVATION: 0.62 AC (PARCEL A-1/B-1)
  - PARCEL A-1: 0.37 AC
  - PARCEL B-1: 0.25 AC
  - PROJECT AREA: 0.19 AC
  - G. STEEP SLOPES (>15%): 3.76 AC (PARCEL A-1/B-1)
  - PARCEL A-1: 1.50 AC
  - PARCEL B-1: 2.26 AC
  - PROJECT AREA: 0.67 AC
  - H. HIGHLY ERODIBLE SOILS: 1.33 AC (PROJECT AREA)
  - I. PROPOSED PERVIOUS: 0.99 AC
  - J. PROPOSED IMPERVIOUS: 1.60 AC
  - K. LOT COVERAGE \*
    - PARCEL A-1: 18% (1.43 AC / 7.87 AC)
    - PARCEL B-1: 0% (0.03 AC / 16.59 AC)
- \* LOT COVERAGE OVER 10% REQUIRES PLANNING BOARD APPROVAL
- L. ZONING DESIGNATION: NEW TOWN (NT)
  - M. OPEN SPACE REQUIRED: N/A
  - N. UNITS ALLOWED: N/A
  - O. UNITS PROPOSED: N/A
  - P. DPZ REFERENCE FILES: (PREVIOUSLY APPROVED)
    - SDP-92-075 + SDP-20-059
    - ECP-16-065 + ECP-20-033
    - FDP-212-A + 44-5129-D
    - PLAT 10361
  - Q. PROPOSED BUILDING SF: 1ST FLOOR: 14,719 SF  
 2ND FLOOR: 14,749 SF  
 TOTAL: 29,468 SF
  - R. PROPOSED BUILDING USE: SENIOR CENTER

	PARKING SUMMARY			
	LIBRARY	ATHLETIC FIELDS	50+ CENTER	TOTAL
EXISTING	-	-	-	410
REQUIRED	165	112	92	369
PROPOSED	-	-	-	366
HOURS OF OPERATOR	M-TH 10AM-9PM, F-SA 10AM-6PM, SU 12PM-5PM	DAWN TO DUSK	M-TH 8:30AM-9PM, F 8:30AM-4:30PM, SA SPECIAL EVENTS ONLY	-
PEAK USE TIMES	M-SA 4PM-6PM	SA-SU 10AM-4PM	M-FR 12PM-CLOSE	-

NOTE: THE COMBINED PEAK USAGE AT ANY ONE TIME FALLS BELOW THE SUM OF THE PARKING SPACES FOR THE SITE. SEE PARKING ANALYSIS STUDY FOR FURTHER INFORMATION.

PERMIT INFORMATION CHART					
SUBDIVISION NAME	SECTION / AREA	LOT / PARCEL NO.			
EAST COLUMBIA	VILLAGE OF OWEN BROWN	A1 / 0275			
PLAT # OR L/F	GRID #	ZONING	TAX MAP NO.	ELECT DISTRICT	CENSUS TRACT
10361	0021	NT	0036	6	24027606704
WATER CODE			SEWER CODE		

ADDRESS CHART	
LOT/PARCEL	STREET ADDRESS
A-1	EX. LIBRARY: 6600 CRADLEROCK WAY, COLUMBIA, MD 21045 50+ CENTER: 6610 CRADLEROCK WAY, COLUMBIA, MD 21045
B-1	6600 Cradlerock Way, Columbia, MD 21045

HOWARD COUNTY DEPT. OF PUBLIC WORKS  
 BUREAU OF FACILITIES, DESIGN &  
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9200 BERGER ROAD  
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**ARCHITECTS**  
 QUINN EVANS ARCHITECTS  
 100 N CHARLES STREET  
 14TH FLOOR  
 BALTIMORE, MD 21201  
 410-576-0440

**STRUCTURAL ENGINEER**  
 CARROLL ENGINEERING, INC.  
 215 SCHILLING CIRCLE, SUITE 102  
 HUNT VALLEY, MD 21031

**MEP ENGINEER**  
 JAMES POSEY AND ASSOCIATES, INC.  
 3112 LORD BALTIMORE DRIVE,  
 BALTIMORE, MD 21244

**CIVIL ENGINEER**  
 A. MORTON THOMAS & ASSOCIATES, INC.  
 800 KING FARM BOULEVARD, 4TH FLOOR,  
 ROCKVILLE, MD 20852

**LANDSCAPE ARCHITECT**  
 SITE RESOURCES, INC.  
 14315 JARRETTVILLE PIKE, PO BOX 249  
 PHOENIX, MD 21131-0249

**AV ENGINEER**  
 CONVERGENT TECHNOLOGIES DESIGN  
 GROUP  
 6501 YPRK ROAD, BALTIMORE, MD 21212

**KITCHEN CONSULTANT**  
 NYIKOS ASSOCIATES INC  
 18219 A FLOWER HILL WAY  
 GAITHERSBURG, MD 20879

**GEOTECHNICAL ENGINEERING**  
 SCHNABEL ENGINEERING DC, INC  
 4200 WASHINGTON AVE, NW, SUITE LL9  
 WASHINGTON, DC 20016



SEAL  
 PROFESSIONAL CERTIFICATION  
 I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR  
 APPROVED BY ME, AND THAT I AM A FULLY LICENSED  
 ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.  
 LICENSE NUMBER 37865, EXPIRATION DATE 07/13/2021

**REVISION BLOCK**

MARK	DATE	DESCRIPTION
△	1/24/22	REVISE PLANS TO ADD ROOFTOP SOLAR PANELS

PERMIT SUBMISSION  
 01/25/2021

PROJECT NAME:  
**EAST COLUMBIA 50+ CENTER**  
 ADDRESS: 6610 CRADLEROCK WAY  
 COLUMBIA, MD 21045  
 TAX MAP: 36 / GRID: 21 / PARCEL: 275  
 LOT: A1 & B1  
 ZONING: NEW TOWN (NT)  
 ELECTION DISTRICT: 6  
 GREEN BUILDING

**COVER SHEET**

**GI-100**

SHEET 01 OF 27

SDP-20-059







WAVING MOON HOMEOWNERS  
ASSOCIATION INC.  
LIBER 2205 FOLIO 443

PARCEL 'A-1'  
VILLAGE OF OWEN BROWN  
SECTION 1, AREA 4  
PLAT No. 10361




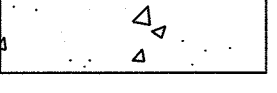


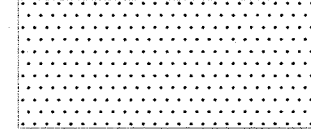



HOWARD COUNTY MARYLAND,  
DEPARTMENT OF PUBLIC WORKS

N 555,040

E 1,355,850



**DEMO LEGEND:**

-  LOD LIMIT OF DISTURBANCE
-  PROPERTY LINE
-  EXISTING TREE TO BE REMOVED
-  EXISTING CONCRETE TO BE REMOVED
-  UTILITY TO BE ABANDONED IN PLACE
-  UTILITY TO BE REMOVED
-  EXISTING ASPHALT TO BE REMOVED
-  EXISTING CURB AND GUTTER TO BE REMOVED
-  HOWARD COUNTY RECREATION AND PARKS  
FEE-IN-LIEU FOREST CONSERVATION EASEMENT  
(PLAT: 00463/0196)
-  FORESTED AREA TO BE REMOVED

**DEMOLITION KEYNOTES**

1. EXISTING CURB AND GUTTER TO BE DEMOLISHED AND REMOVED
2. EXISTING WATER LINE TO BE DEMOLISHED AND REMOVED
3. EXISTING SANITARY TO BE DEMOLISHED AND REMOVED
4. EXISTING SIGNS TO BE REMOVED
5. EXISTING TREES TO BE DEMOLISHED AND REMOVED
6. EXISTING STORM STRUCTURE TO BE DEMOLISHED AND REMOVED
7. EXISTING SIDEWALK TO BE DEMOLISHED AND REMOVED
8. EXISTING RIP RAP TO BE REMOVED
9. EXISTING CONCRETE PAD TO BE DEMOLISHED AND REMOVED
10. EXISTING LIGHT POLE TO BE REMOVED AND SALVAGED
11. EXISTING COMMUNICATION LINE TO BE REMOVED
12. EXISTING TRANSFORMER TO REMAIN
13. EXISTING BOLLARDS TO REMAIN
14. EXISTING STEP TO REMAIN
15. EXISTING SANITARY MANHOLE TO REMAIN
16. EXISTING STORM DRAIN OUTFALL AND OUTFALL TO REMAIN
17. EXISTING ELECTRIC PANEL TO BE RELOCATED, SEE ELECTRICAL PLANS
18. EXISTING BENCH TO BE REMOVED AND SALVAGED
19. EXISTING MAILBOX TO BE RELOCATED
20. EXISTING FIBER OPTIC LINE TO BE DEMOLISHED AND REMOVED.

**DEMOLITION NOTES**


1. REMOVE FROM THE SITE AND LEGALLY DISPOSE OF ANY AND ALL DEMOLISHED/DELETERIOUS MATERIALS.
2. INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO ANY DEMOLITION/CONSTRUCTION.
3. EXISTING PAVEMENT SHALL BE SAWCUT PRIOR TO REMOVAL. ALL SAWCUTS SHALL BE STRAIGHT, EVEN CUTS. JAGGED EDGES SHALL NOT BE PERMITTED. SAWCUT DEPTH SHALL EXTEND AT LEAST 2/3 TIMES THE THICKNESS OF THE EXISTING PAVEMENT THAT REMAINS IN PLACE.
4. CONTRACTOR SHALL COORDINATE DEMOLITION WORK WITH OTHER PLANS TO ESTABLISH THE LIMITS OF DEMOLITION AS REQUIRED.
5. ANY EXCAVATION WHICH EXTENDS BELOW THE FOUNDATION ELEVATIONS FOR STRUCTURES SHALL BE BACKFILLED WITH "STRUCTURAL FILL" MATERIALS. STRUCTURAL FILL SHALL BE AS DEFINED IN THE SPECIFICATIONS.
6. TREE DEMOLITION FOR CONSTRUCTION WITHIN THE EXISTING FORESTED AREAS SHOULD BE MINIMIZED WHERE POSSIBLE.


PARCEL 'B-1'  
VILLAGE OF OWEN BROWN  
SECTION 1, AREA 4  
PLAT No. 10361


SCALE: 1"=30'

APPROVED  
PLANNING BOARD OF HOWARD COUNTY  
DATE April 1, 2021

APPROVED: DEPARTMENT OF PLANNING AND ZONING

 5/17/21  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

 6/16/21  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

 6/21/21  
DIRECTOR DATE

HOWARD COUNTY DEPT. OF PUBLIC WORKS  
BUREAU OF FACILITIES, DESIGN &  
CONSTRUCTION DIVISION

9200 BERGER ROAD  
COLUMBIA, MD 21046

ATTN: MRS. SHARON R. WALSH,  
CHIEF DIVISION  
TEL: 410-313-5386 / MOBILE: 301-717-8417

**ARCHITECTS**  
QUINN EVANS ARCHITECTS  
100 N. CHARLES STREET  
14TH FLOOR  
BALTIMORE, MD 21201  
410 - 576 - 0440

**STRUCTURAL ENGINEER**  
CARROLL ENGINEERING, INC.  
215 SCHILLING CIRCLE, SUITE 102  
HUNT VALLEY, MD 21031

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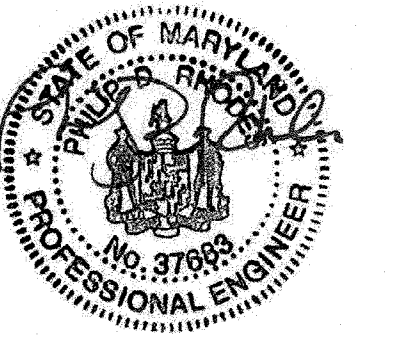
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CONVERGENT TECHNOLOGIES DESIGN  
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6501 YPRK ROAD, BALTIMORE, MD 21212

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MYKOS ASSOCIATES INC  
15219 A FLOWER HILL WAY  
GAITHERSBURG, MD 20879

**GEOTECHNICAL ENGINEERING**  
SCHNABEL ENGINEERING DC, INC  
4200 WASHINGTON AVE, NW, SUITE 1LL9  
WASHINGTON, DC 20016



SEAL  
PROFESSIONAL CERTIFICATION  
I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR  
APPROVED BY ME, AND THAT I AM A DULY LICENSED  
ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.  
LICENSE NUMBER 37888, EXPIRATION DATE 07/13/2021

REVISION BLOCK		
MARK	DATE	DESCRIPTION

PERMIT SUBMISSION  
01/25/2021

PROJECT NAME:  
**EAST COLUMBIA 50+ CENTER**  
ADDRESS: 6610 GRADLEROCK WAY  
COLUMBIA, MD 21046  
TAX MAP: 36 / GRID: 21 / PARCEL: 275  
LOT: A1 & B1  
ZONING: NEW TOWN (NT)  
ELECTION DISTRICT: 6  
GREEN BUILDING

DEMOLITION PLAN

**CD-101**

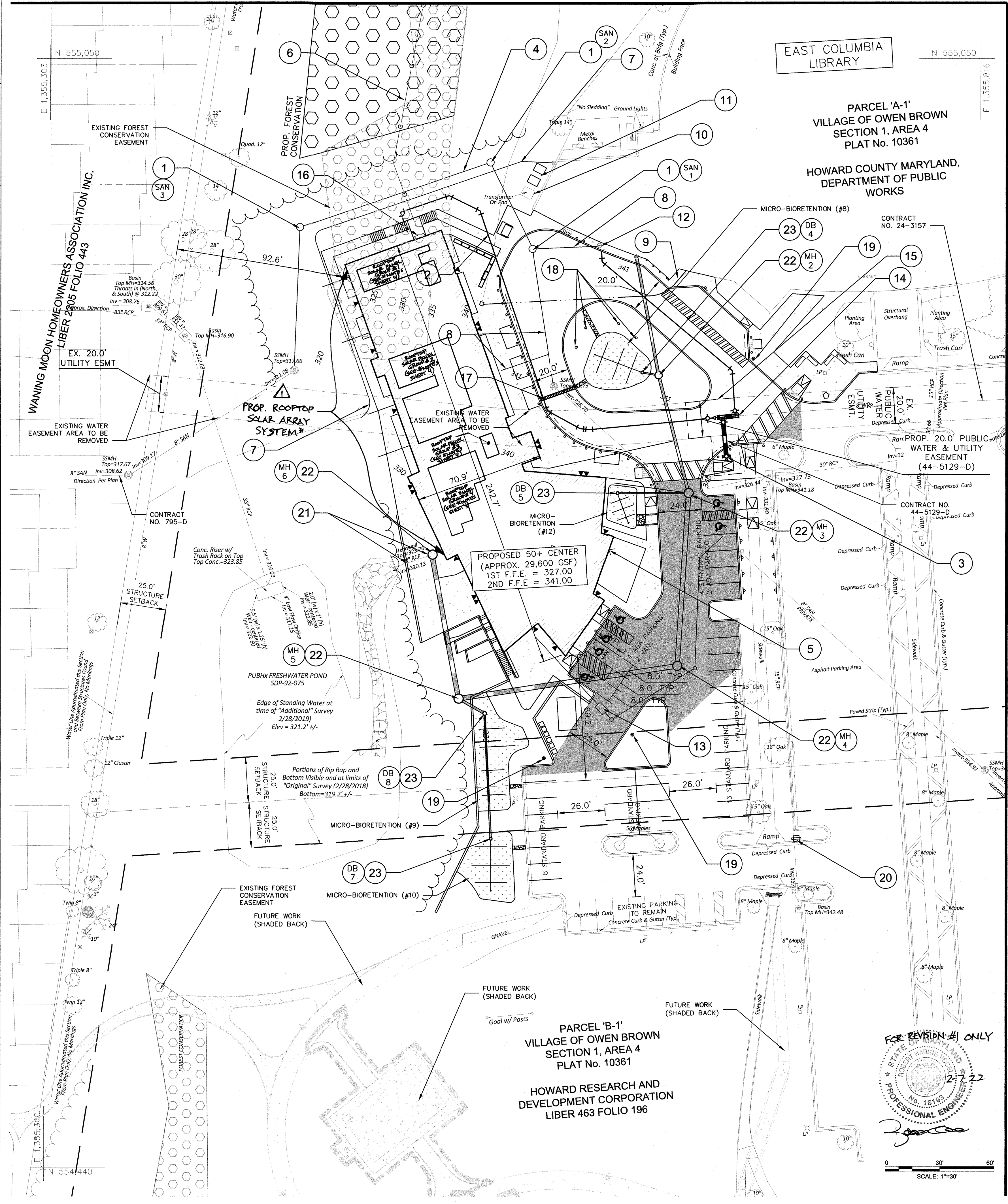
SHEET 03 OF 27

SDP-20-059









MATCH LINE - SEE SHEET CS-103

**LEGEND**

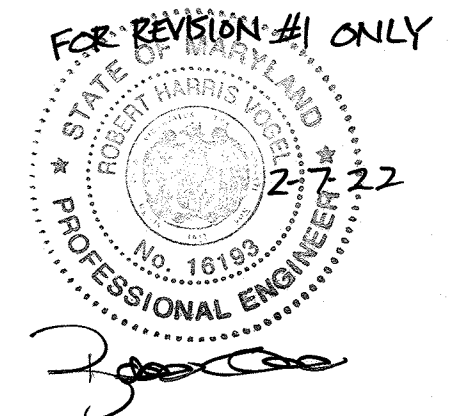
	LOD	LIMIT OF DISTURBANCE		STAIRS (SEE DETAILS ON SHEET CS-502)
	390	EXISTING CONTOURS		TRANSFORMER
		PROPERTY LIMITS		ADA PARKING SPACE (SEE DETAILS ON SHEET CS-502)
		PROPOSED WATER EASEMENT		PARKING SIGN (SEE DETAILS ON SHEET CS-502)
		NEW BUILDING		FIRE HYDRANT
		STORMWATER MANAGEMENT FACILITY		FIRE DEPARTMENT CONNECTION
		FOREST CONSERVATION EASEMENT (PLAT: 00463/0196)		RIP-RAP
		PROPERTY SETBACK LINE		CROSSWALK (SEE DETAILS ON SHEET CS-502)
		CONCRETE PAVEMENT (SEE DETAILS ON SHEET CS-501)		NEW STORM PIPE
		HEAVY DUTY CONCRETE PAVEMENT (SEE DETAILS ON SHEET CS-502)		NEW SANITARY LINE
		RETAINING WALL		NEW WATER LINE
		BOLLARDS (SEE LANDSCAPE & ELECTRICAL PLANS)		NEW SANITARY MANHOLE
		ASPHALT PAVEMENT (SEE DETAILS ON SHEET CS-501)		NEW GAS LINE
		CURB RAMP (SEE DETAILS ON SHEET CS-501)		NEW COMMUNICATION LINE
		TREELINE		TO BE REMOVED
		CURB & GUTTER (SEE DETAILS ON SHEET CS-501)		FIRE HYDRANT
		LIGHT POLE		

**UTILITY KEYNOTES**

- |   |  |
|---|--|
| 1. NEW PRIVATE 4" SANITARY MANHOLES                   | 13. NEW PRIVATE 4" PVC GREASE INTERCEPTOR          |
| 2. NEW 4" PVC-C900 WATER LINE                         | 14. CONNECT TO EXISTING 8" WATER MAIN              |
| 3. NEW FIRE HYDRANT & 6" SERVICE                      | 15. PROPOSED 20' WATER EASEMENT                    |
| 4. NEW PRIVATE 8" SANITARY LINE                       | 16. NEW GAS METER, SEE MEP PLANS                   |
| 5. NEW FDC SERVICE LINE                               | 17. NEW TRENCH DRAIN, SEE DETAIL ON SHEET C-14     |
| 6. NEW PRESSURIZED GAS LINE, TO BE COORDINATED BY BGE | 18. NEW TREE UPLIGHTS (SEE ELECTRICAL PLANS)       |
| 7. NEW 2" COMMUNICATION LINE, TO BE RELOCATED BY BGE  | 19. NEW POLE MOUNTED LIGHTS (SEE ELECTRICAL PLANS) |
| 8. NEW PRIVATE 4" SEWER LINE                          | 20. RELOCATED TRANSFORMER (SEE ELECTRICAL PLANS)   |
| 9. NEW FIBER OPTIC LINE, TO BE RELOCATED BY BGE       | 21. FLEXIBLE JOINTS TO BE PROVIDED                 |
| 10. EXISTING TRANSFORMER TO REMAIN                    | 22. NEW STORM MANHOLE                              |
| 11. NEW TRANSFORMERS, SEE MEP PLANS FOR DETAILS       | 23. NEW STORM DRAIN BASIN                          |
| 12. NEW SEWER CLEANOUT                                |  |

**UTILITY NOTES**

- UTILITY INFORMATION SHOWN HEREON WAS OBTAINED FROM AVAILABLE UTILITY RECORDS PROVIDED TO A. MORTON THOMAS AND ASSOCIATES, INC. UTILITIES HAVE BEEN LOCATED IN THE FIELD TO THE EXTENT POSSIBLE. UTILITY INFORMATION MUST BE CONSIDERED APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF ANY DEMOLITION/CONSTRUCTION.
- LOCATE AND PROTECT ANY AND ALL EXISTING STRUCTURES AND UTILITIES, WHETHER SHOWN HEREON OR NOT, FROM DAMAGE.
- LIVE UNDERGROUND AND OVERHEAD ELECTRIC UTILITIES MAY BE LOCATED WITHIN AND ADJACENT TO THE CONSTRUCTION SITE. CONTRACTOR SHALL TAKE APPROPRIATE PRECAUTIONS TO PROTECT PEOPLE AND PROPERTY.
- IF UTILITIES NOT LOCATED ON PLANS ARE ENCOUNTERED, NOTIFY A. MORTON THOMAS AND ASSOCIATES, INC. AND THE OWNERS REPRESENTATIVE IMMEDIATELY.
- CONTRACTOR SHALL HAND DIG TEST PITS AT ALL UTILITY CROSSINGS TO DETERMINE THEIR EXACT LOCATION, WELL IN ADVANCE OF ANY DEMOLITION/CONSTRUCTION.
- CONTRACTOR SHALL ABANDON, REMOVE OR RELOCATE EXISTING UTILITIES AS REQUIRED FOR THE CONSTRUCTION OF PROPOSED IMPROVEMENTS. CONTRACTOR SHALL COORDINATE ACTIVITIES WITH THE APPROPRIATE UTILITY OWNER PRIOR TO ANY UTILITY DISTURBANCE.
- THE CONTRACTOR SHALL DISCONNECT AND/OR ABANDON ALL UTILITY SERVICES CONNECTIONS ACCORDING TO THE STANDARDS AND SPECIFICATIONS OF THE RESPECTIVE UTILITY SERVICES PROVIDERS.
- CONTRACTOR SHALL ADJUST ALL UTILITY FRAMES AND COVERS TO MATCH FINISHED GRADE.
- EXISTING FIRE HYDRANTS SHALL REMAIN OPERATIONAL THROUGHOUT ALL PHASES OF DEMOLITION/CONSTRUCTION UNLESS OTHERWISE NOTED.
- SEE UTILITY PLANS, PROFILE & DETAIL SHEETS FOR MORE INFORMATION ON UTILITY PATHWAY.



APPROVED  
PLANNING BOARD OF HOWARD COUNTY

DATE April 1, 2021

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 5-17-21  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 6/21/21  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 6/21/21  
DIRECTOR DATE

HOWARD COUNTY DEPT. OF PUBLIC WORKS  
BUREAU OF FACILITIES, DESIGN & CONSTRUCTION DIVISION  
9200 BERGER ROAD  
COLUMBIA, MD 21046  
ATTN: MRS. SHARON R. WALSH,  
CHIEF DIVISION  
TEL: 410-313-8386 / MOBILE: 301-717-8417

**ARCHITECTS**  
QUINN EVANS ARCHITECTS  
100 N. CHARLES STREET  
14TH FLOOR  
BALTIMORE, MD 21201  
410 - 576 - 0440

**STRUCTURAL ENGINEER**  
CARROLL ENGINEERING, INC.  
215 SCHILLING CIRCLE, SUITE 102  
HUNT VALLEY, MD 21031

**MEP ENGINEER**  
JAMES POSEY AND ASSOCIATES, INC.  
3112 LORD BALTIMORE, DRIVE,  
BALTIMORE, MD 21244

**CIVIL ENGINEER**  
A. MORTON THOMAS & ASSOCIATES, INC.  
800 KING FARM BOULEVARD, 4TH FLOOR,  
ROCKVILLE, MD 20852

**LANDSCAPE ARCHITECT**  
SITE RESOURCES, INC.  
14315 JARRETTVILLE PIKE, PO BOX 249  
PHOENIX, MD 21131-0249

**AV ENGINEER**  
CONVERGENT TECHNOLOGIES DESIGN GROUP  
6501 YPRK ROAD, BALTIMORE, MD 21212

**KITCHEN CONSULTANT**  
NYIKOS ASSOCIATES INC  
18219 A FLOWER HILL WAY  
GAITHERSBURG, MD 20879

**GEOTECHNICAL ENGINEERING**  
SCHNABEL ENGINEERING DC, INC  
4200 WASHINGTON AVE, NW, SUITE LL9  
WASHINGTON, DC 20016



**REVISION BLOCK**

MARK	DATE	DESCRIPTION
Δ	1-24-22	REVISE PLANS TO ADD ROOFTOP SOLAR PANELS

PERMIT SUBMISSION  
01/25/2021

PROJECT NAME:  
**EAST COLUMBIA 50+ CENTER**  
ADDRESS: 6610 CRADLEROCK WAY  
COLUMBIA, MD 21045  
TAX MAP: 36 / GRID: 21 / PARCEL: 275  
LOT: A1 & B1  
ZONING: NEW TOWN (NT)  
ELECTION DISTRICT: 6  
GREEN BUILDING

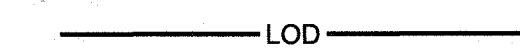
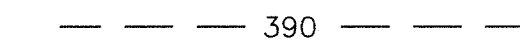
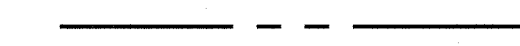
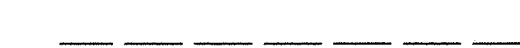
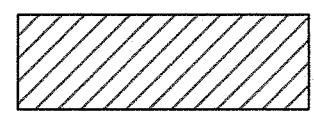



SITE DEVELOPMENT  
PLAN

**CS-102**

SHEET 05 OF 27



**LEGEND**

-  LOD LIMIT OF DISTURBANCE
-  390 EXISTING CONTOURS
-  PROPERTY LIMITS
-  PROPOSED WATER EASEMENT
-  FOREST CONSERVATION EASEMENT (PLAT: 00463/0196)
-  PROPERTY SETBACK LINE
-  ASPHALT PAVEMENT (SEE DETAILS ON SHEET C-10)
-  FIRE HYDRANT

**UTILITY KEYNOTES**

1. NEW FIRE HYDRANT & 6" SERVICE
2. NEW PRESSURIZED GAS LINE, TO BE COORDINATED BY BGE
3. NEW 8" PVC-C900 WATER LINE
4. CONNECT TO EXISTING 8" WATER MAIN
5. PROPOSED 20' WATER EASEMENT

**UTILITY NOTES**

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HOWARD COUNTY DEPT. OF PUBLIC WORKS  
BUREAU OF FACILITIES, DESIGN &  
CONSTRUCTION DIVISION

9200 BERGER ROAD  
COLUMBIA, MD 21046  
ATTN: MRS. SHARON R. WALSH,  
CHIEF DIVISION  
TEL: 410-313-5386 / MOBILE: 301-717-8417

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410 - 576 - 0440

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**MEP ENGINEER**  
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3112 LORD BALTIMORE, DRIVE,  
BALTIMORE, MD 21244

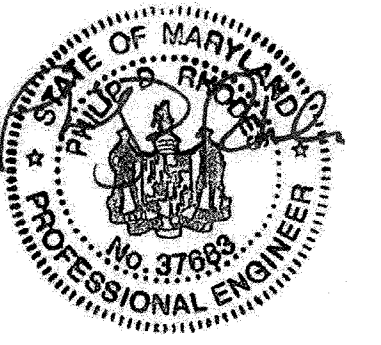
**CIVIL ENGINEER**  
A. MORTON THOMAS & ASSOCIATES, INC.  
800 KING FARM BOULEVARD, 4TH FLOOR,  
ROCKVILLE, MD 20852

**LANDSCAPE ARCHITECT**  
SITE RESOURCES, INC.  
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PHOENIX, AZ 85024-0249

**AV ENGINEER**  
CONVERGENT TECHNOLOGIES DESIGN  
GROUP  
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**KITCHEN CONSULTANT**  
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GAITHERSBURG, MD 20879

**GEOTECHNICAL ENGINEERING**  
SCHNABEL ENGINEERING DC, INC  
4200 WASHINGTON AVE. NW, SUITE LL9  
WASHINGTON, DC 20016



SEAL  
PROFESSIONAL CERTIFICATION:  
I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR  
APPROVED BY ME, AND THAT I AM A DULY LICENSED  
ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.  
LICENSE NUMBER 37088, EXPIRATION DATE 07/13/2021

**REVISION BLOCK**

MARK	DATE	DESCRIPTION

PERMIT SUBMISSION  
01/25/2021

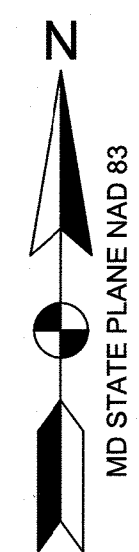
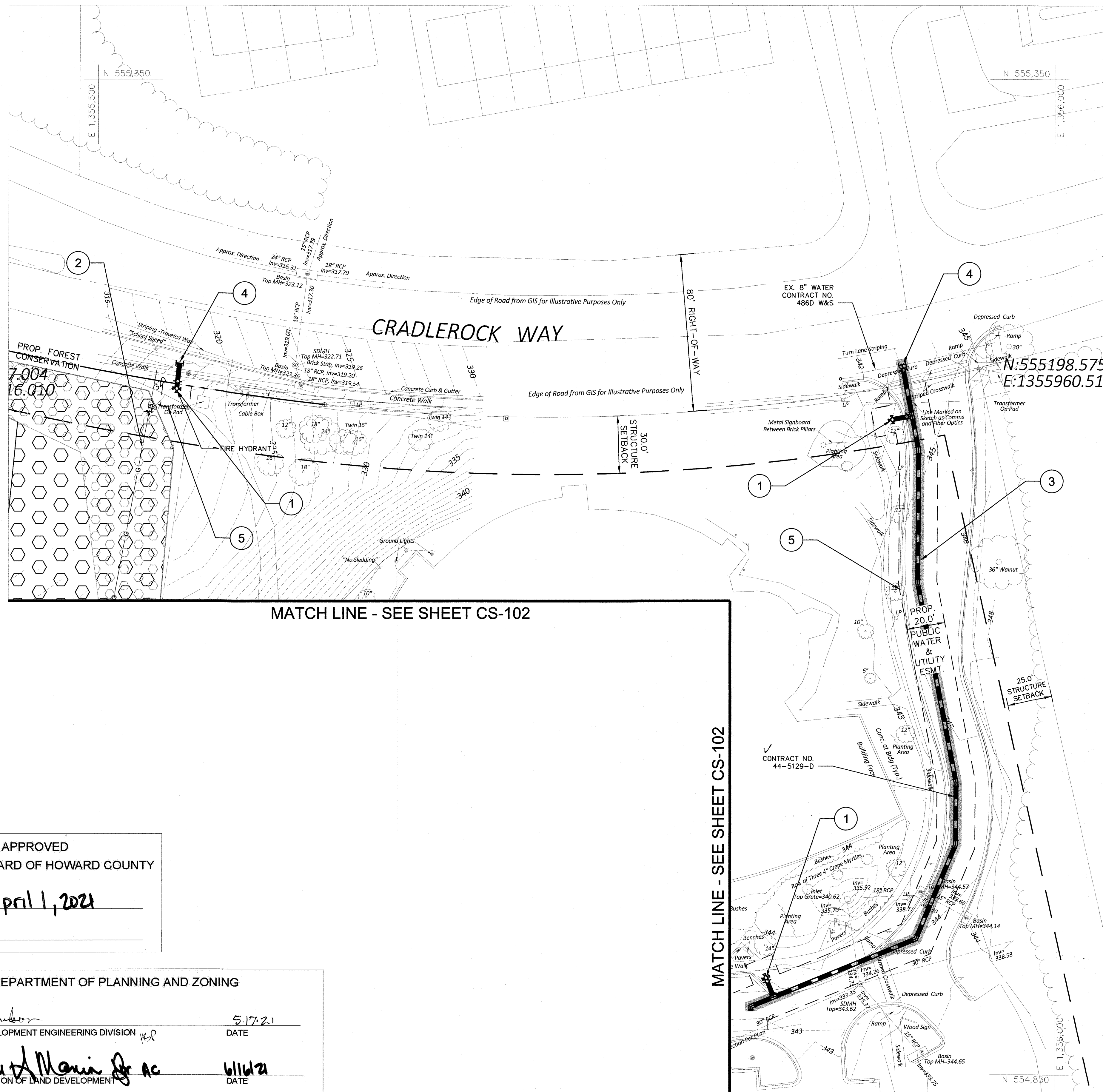
PROJECT NAME:  
**EAST COLUMBIA 50+ CENTER**  
ADDRESS: 6610 CRADLEROCK WAY  
COLUMBIA, MD 21046  
TAX MAP: 36 / GRID: 21 / PARCEL: 275  
LOT: A1 & B1  
ZONING: NEW TOWN (NT)  
ELECTION DISTRICT: 6  
GREEN BUILDING

**SITE DEVELOPMENT PLAN**

**CS-103**

SHEET 06 OF 27

SDP-20-059



APPROVED  
PLANNING BOARD OF HOWARD COUNTY  
DATE April 1, 2021

APPROVED: DEPARTMENT OF PLANNING AND ZONING

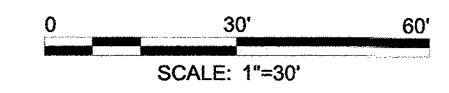
*Chad Anderson* 5/17/21  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Donna Marie* 6/16/21  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

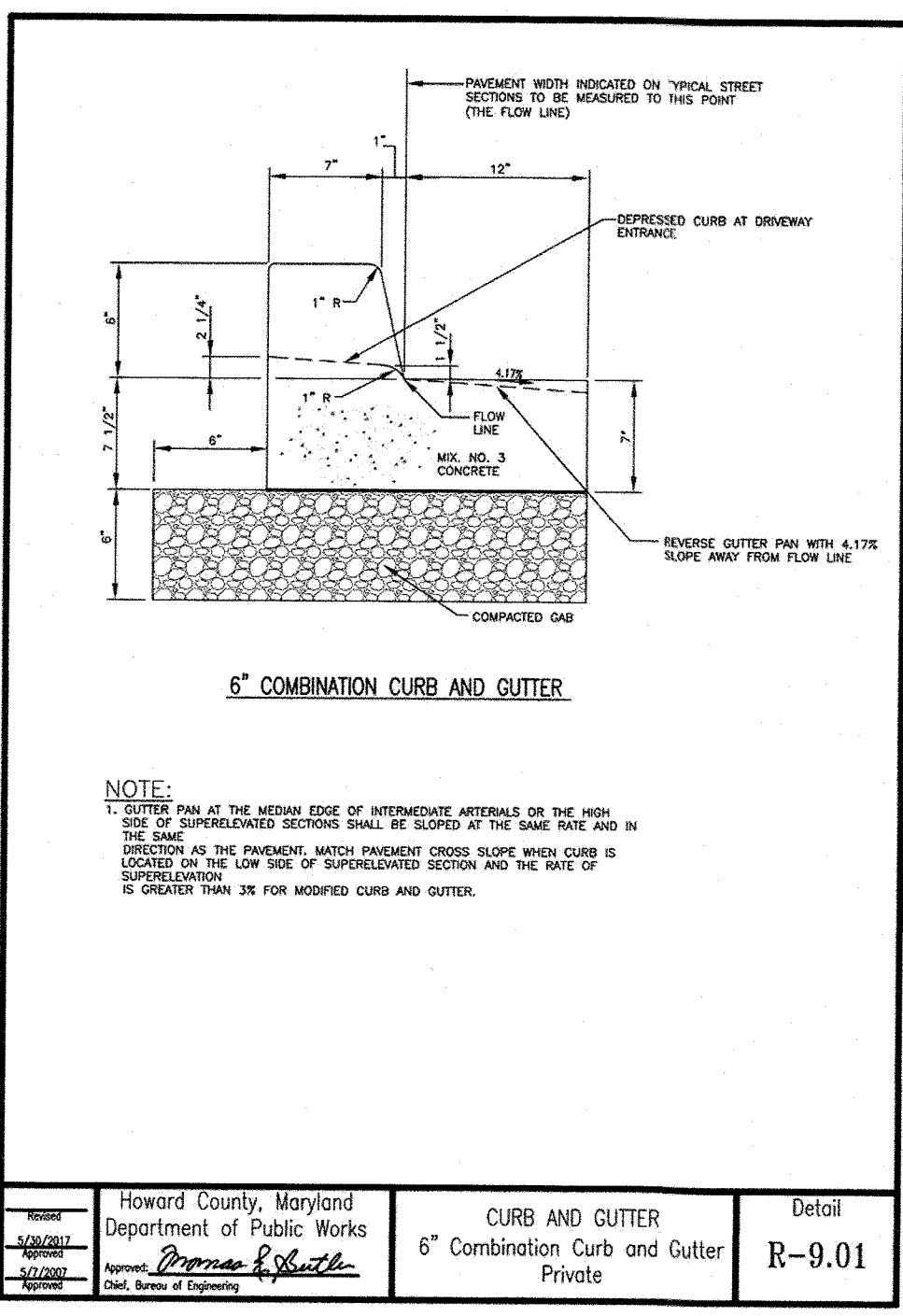
*John Gove* 6/21/21  
DIRECTOR DATE

MATCH LINE - SEE SHEET CS-102

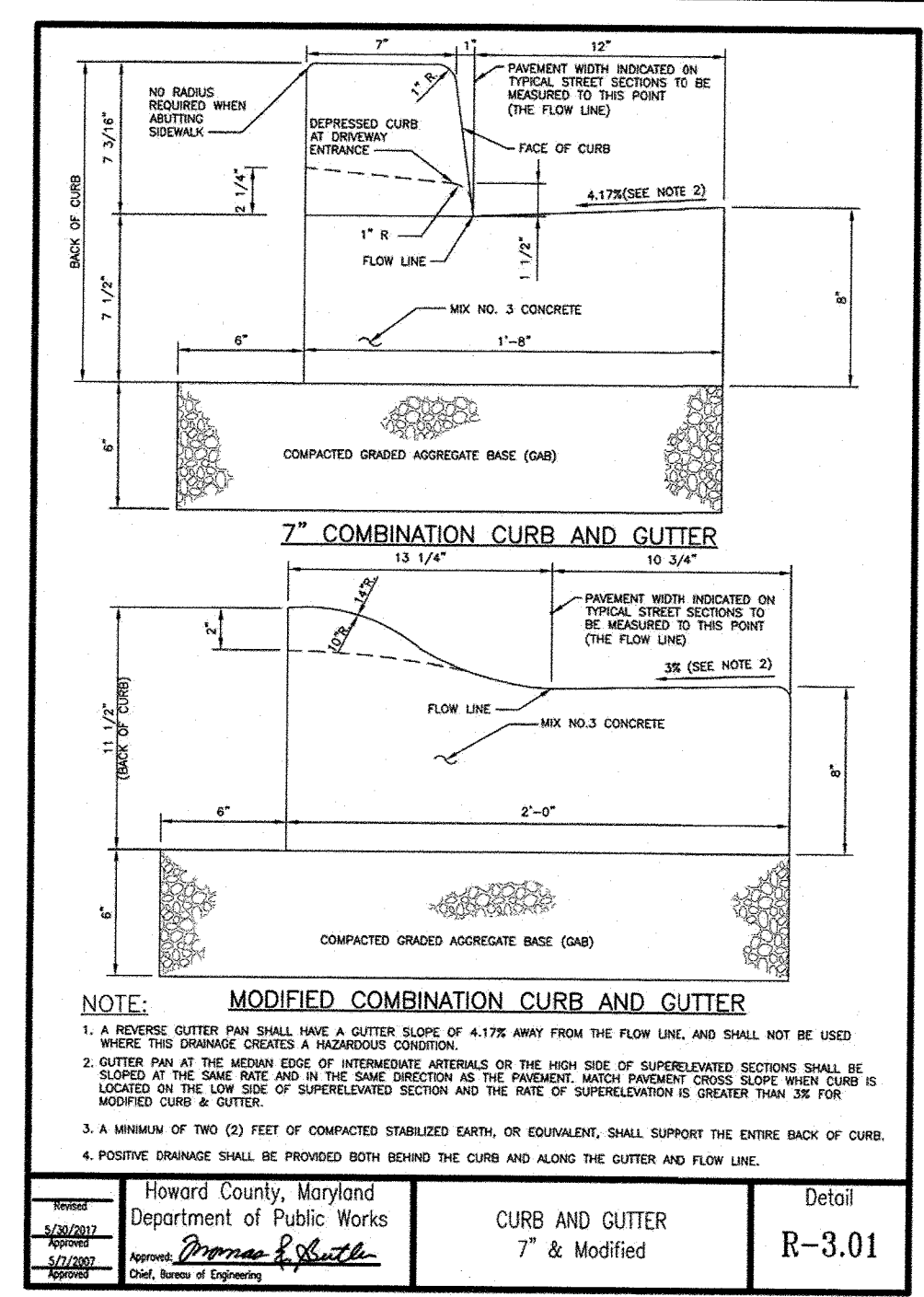
MATCH LINE - SEE SHEET CS-102



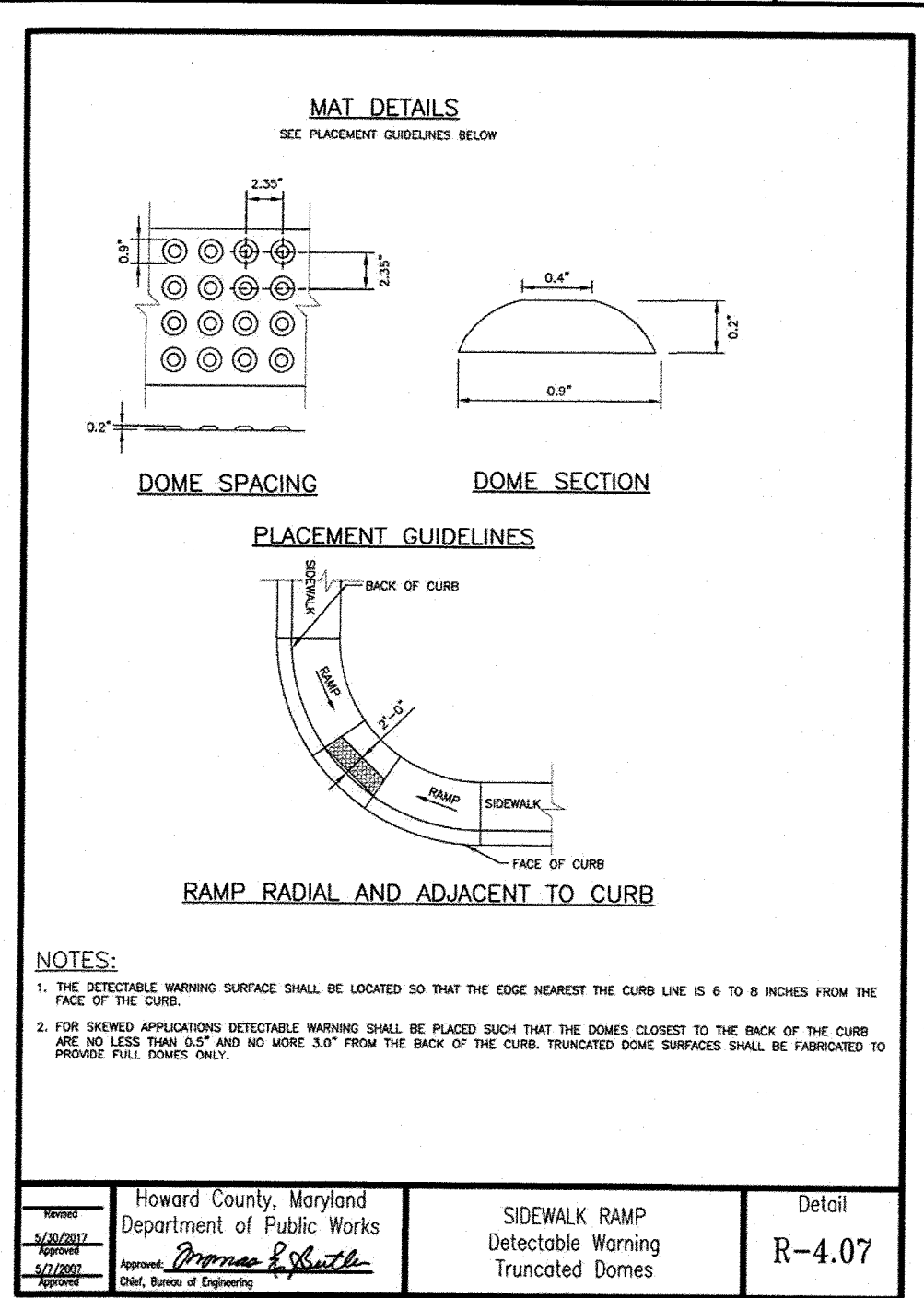




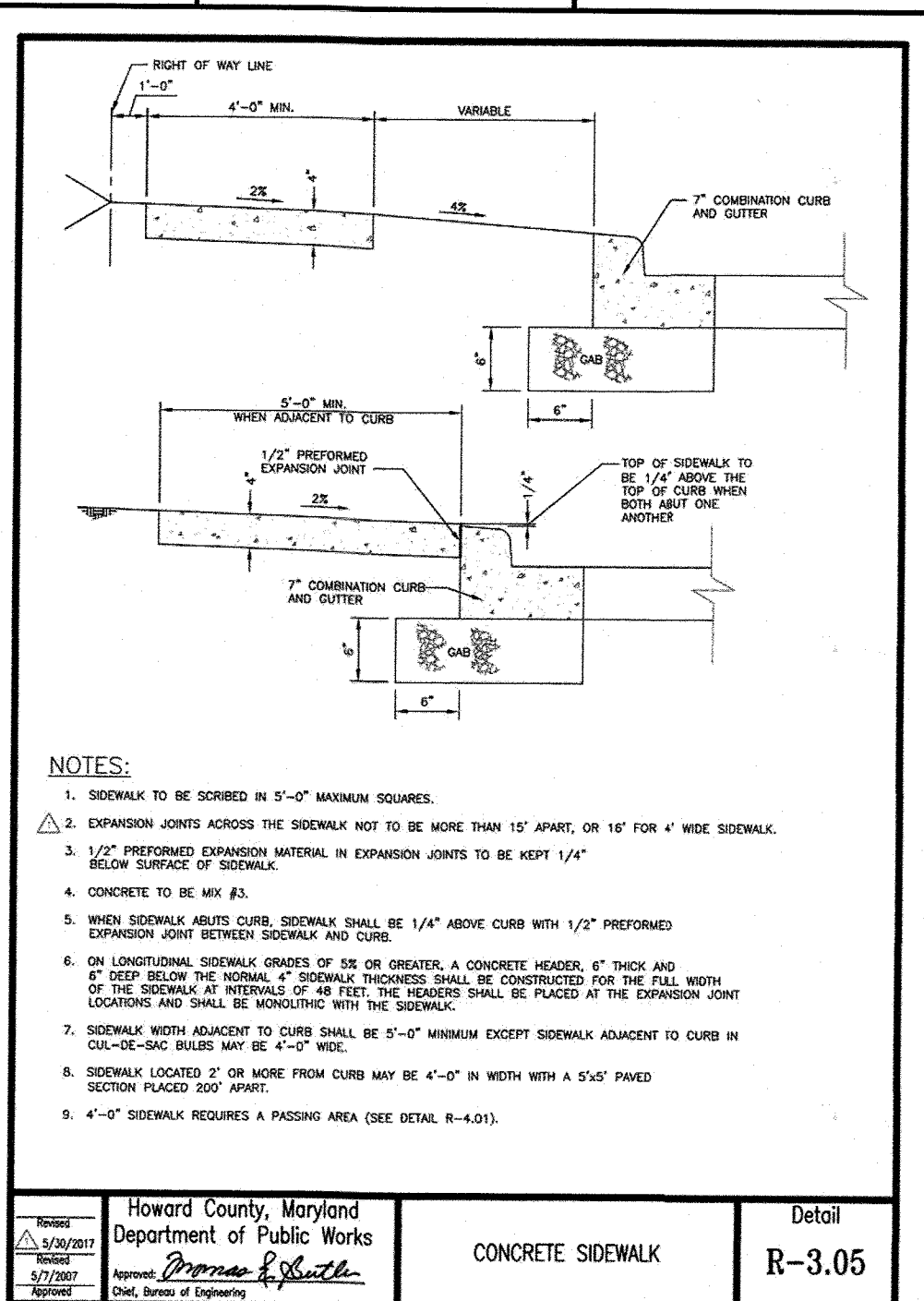
HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS APPROVED: <i>Prerna R. Senthil</i> DATE: 5/12/2021 TITLE: Chief, Bureau of Engineering	CURB AND GUTTER 6" Combination Curb and Gutter Private	Detail R-9.01
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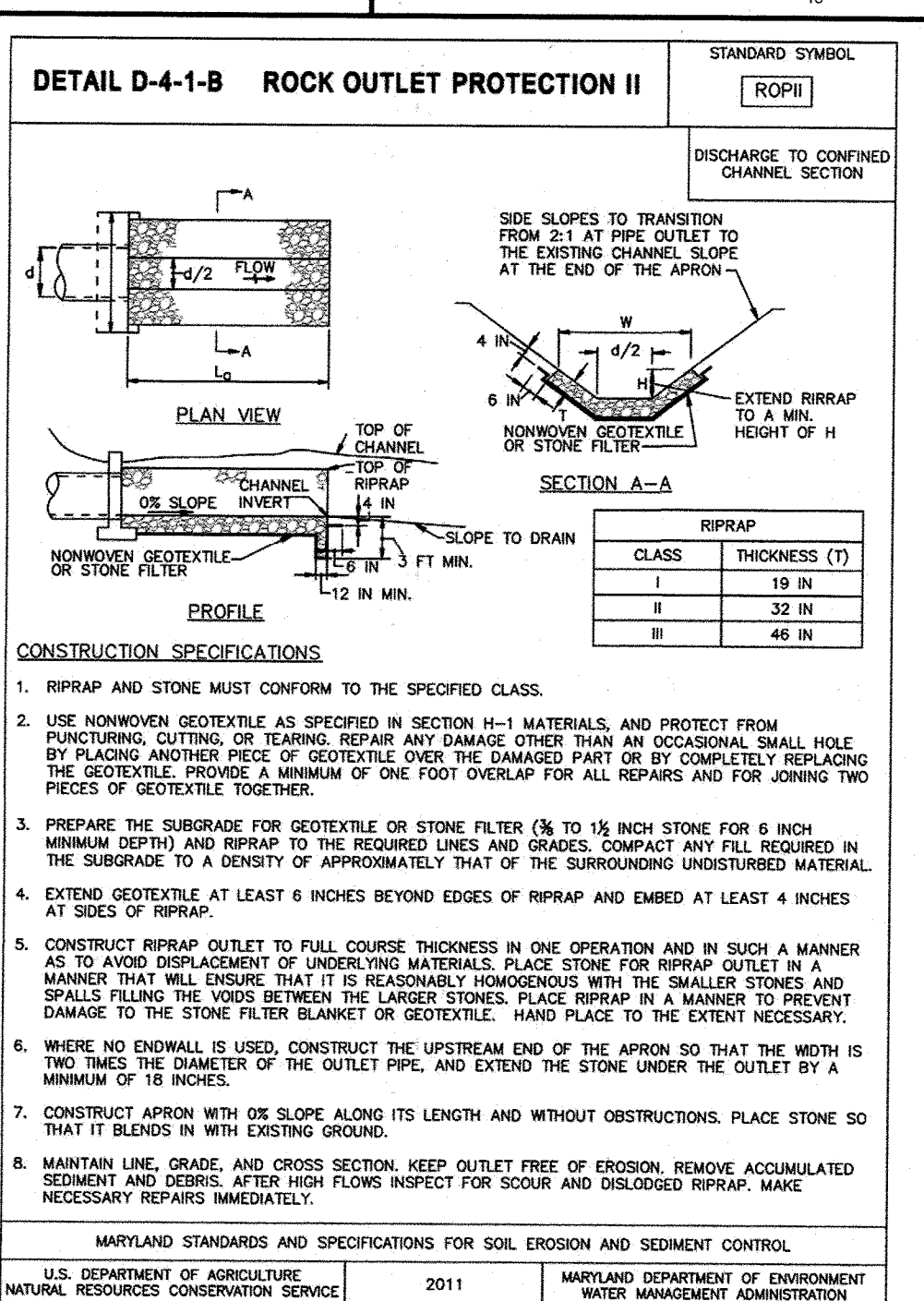
HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS APPROVED: <i>Prerna R. Senthil</i> DATE: 5/12/2021 TITLE: Chief, Bureau of Engineering	CURB AND GUTTER 7" & Modified Private	Detail R-3.01
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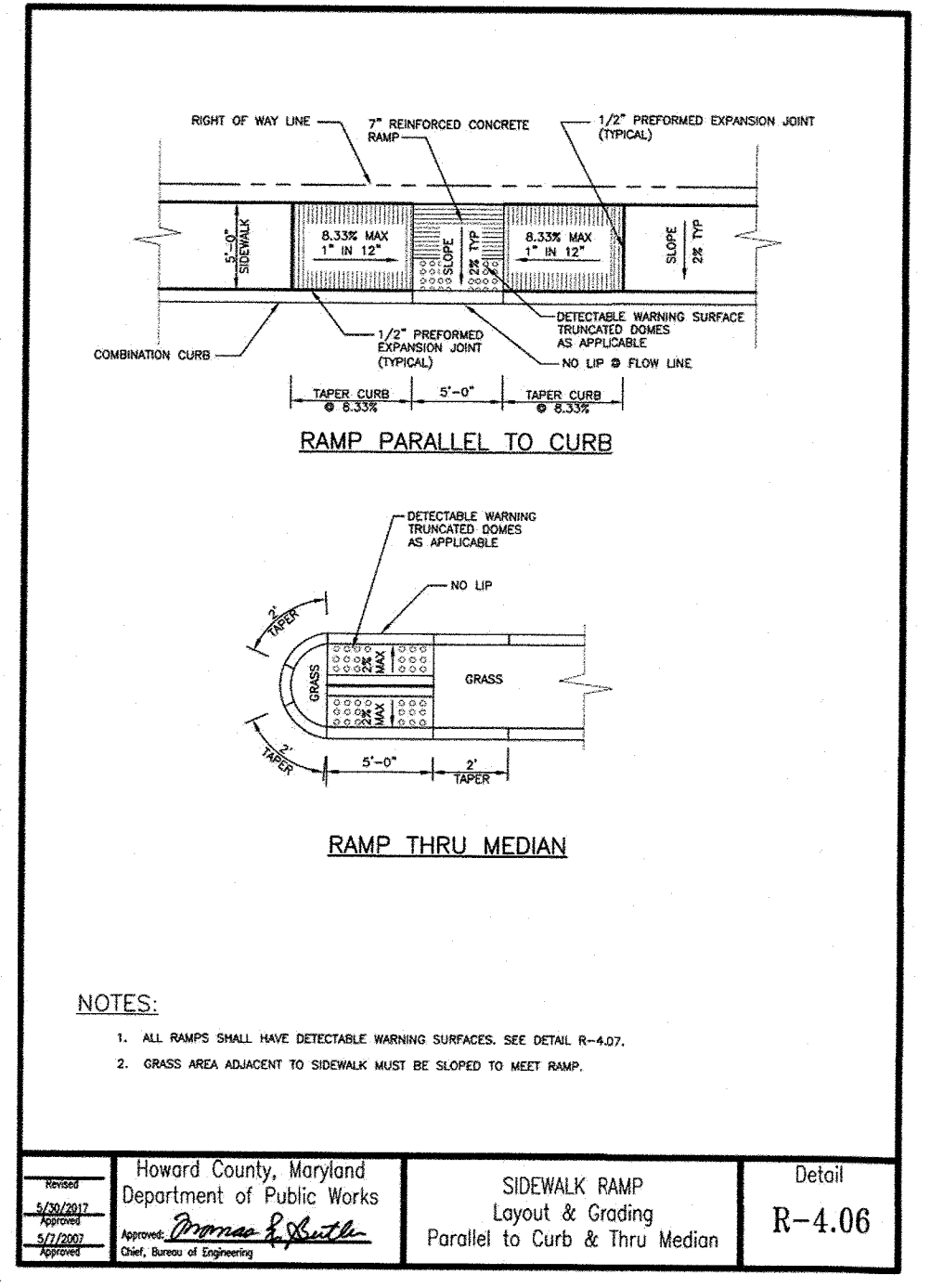
HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS APPROVED: <i>Prerna R. Senthil</i> DATE: 5/12/2021 TITLE: Chief, Bureau of Engineering	SIDEWALK RAMP Detectable Warning Truncated Domes	Detail R-4.07
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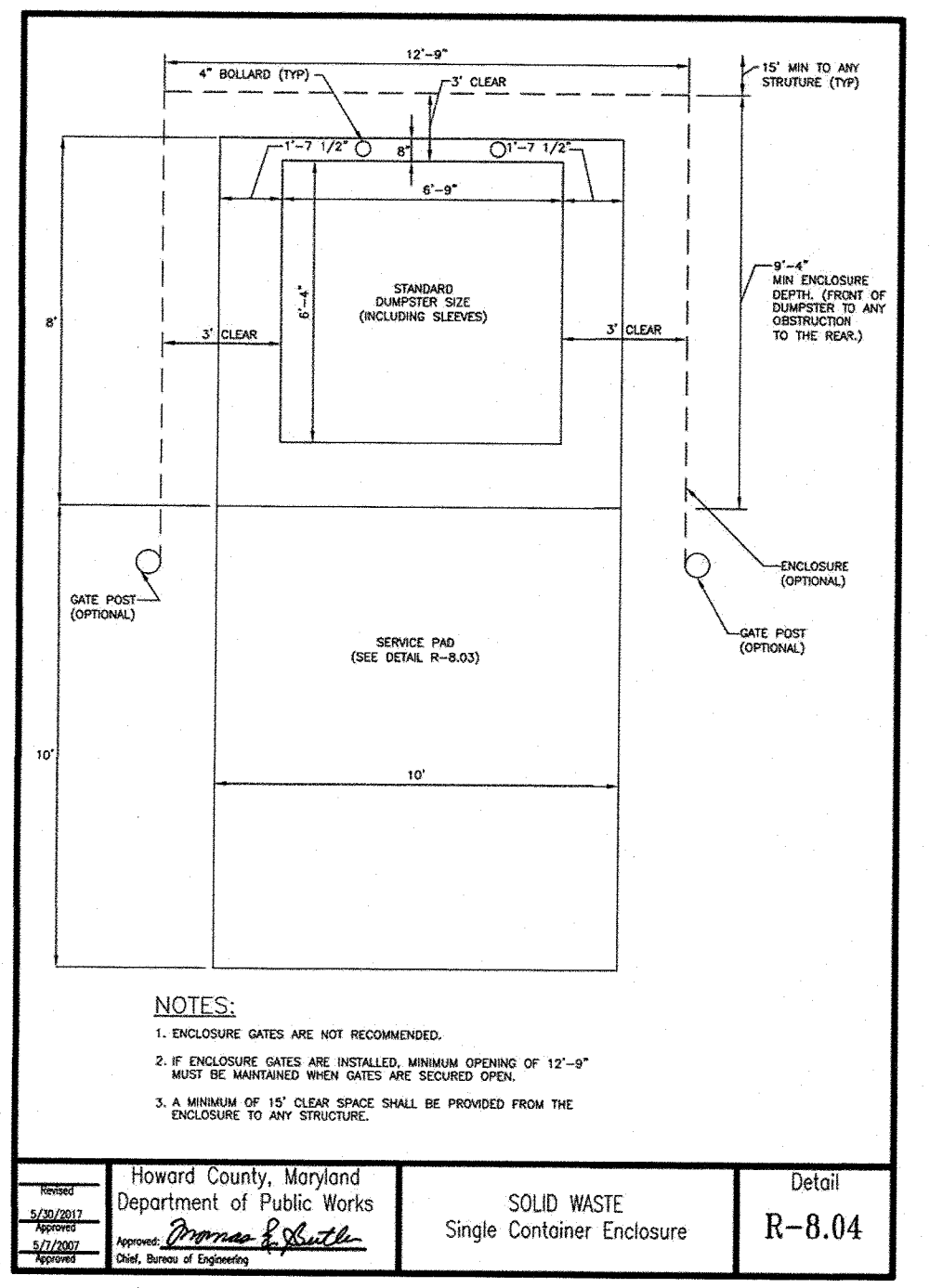
HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS APPROVED: <i>Prerna R. Senthil</i> DATE: 5/12/2021 TITLE: Chief, Bureau of Engineering	CONCRETE SIDEWALK	Detail R-3.05
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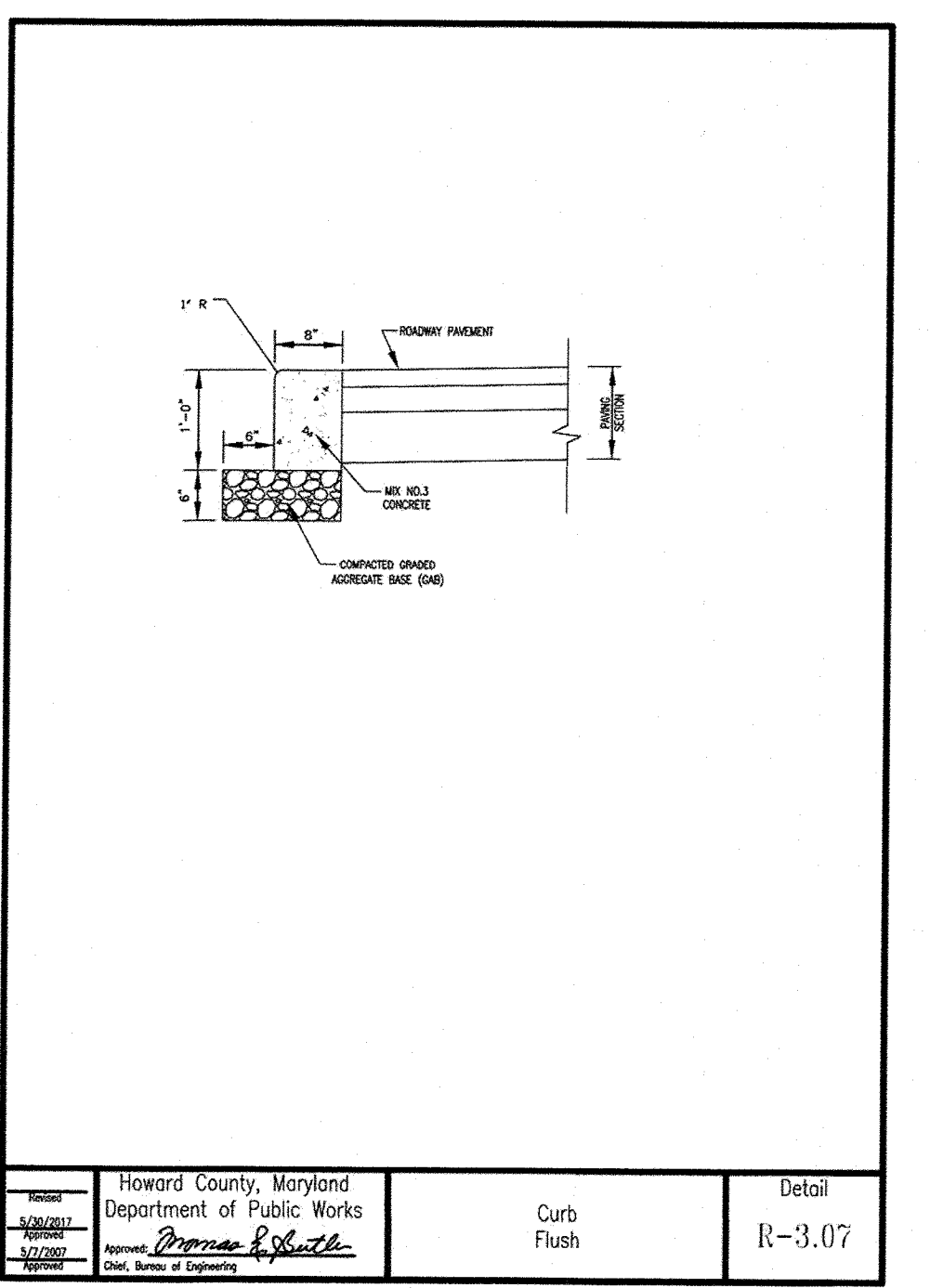
HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS APPROVED: <i>Prerna R. Senthil</i> DATE: 5/12/2021 TITLE: Chief, Bureau of Engineering	CURB AND GUTTER Modified Combination Transition for Inlets	Detail R-3.06
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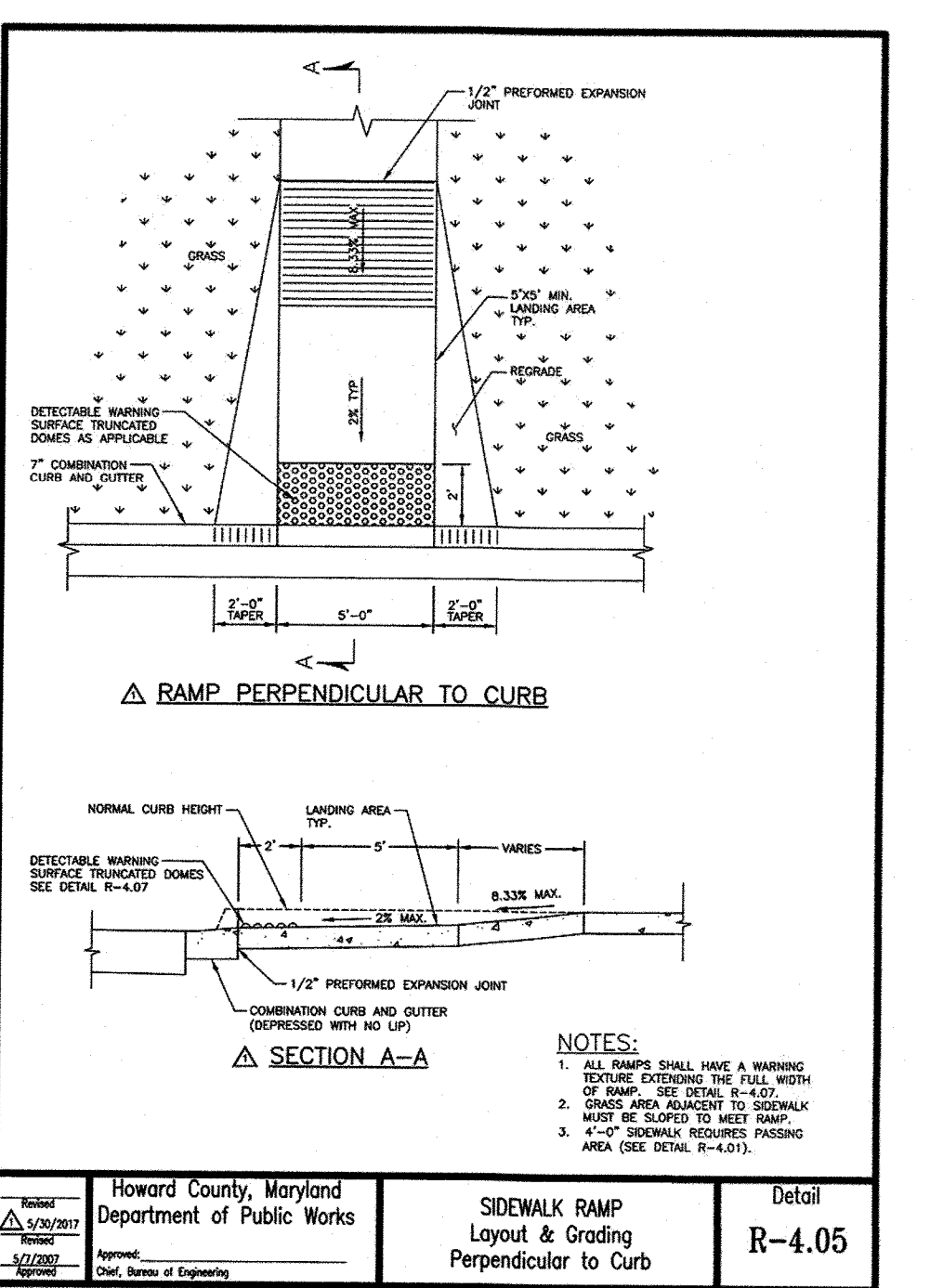
HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS APPROVED: <i>Prerna R. Senthil</i> DATE: 5/12/2021 TITLE: Chief, Bureau of Engineering	SIDEWALK RAMP Layout & Grading Parallel to Curb & Thru Median	Detail R-4.06
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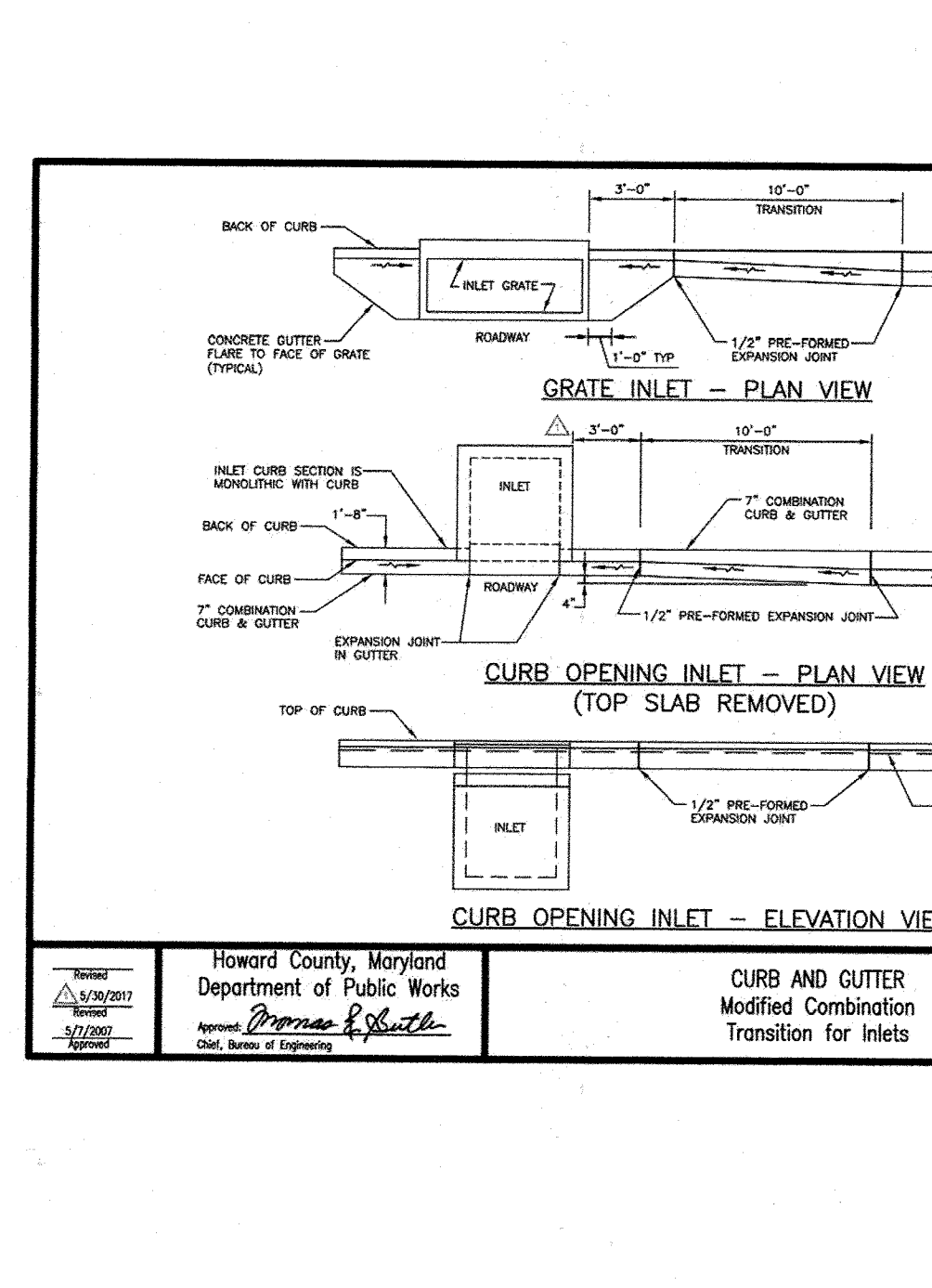
HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS APPROVED: <i>Prerna R. Senthil</i> DATE: 5/12/2021 TITLE: Chief, Bureau of Engineering	SOLID WASTE Single Container Enclosure	Detail R-8.04
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HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS APPROVED: <i>Prerna R. Senthil</i> DATE: 5/12/2021 TITLE: Chief, Bureau of Engineering	CURB Flush	Detail R-3.07
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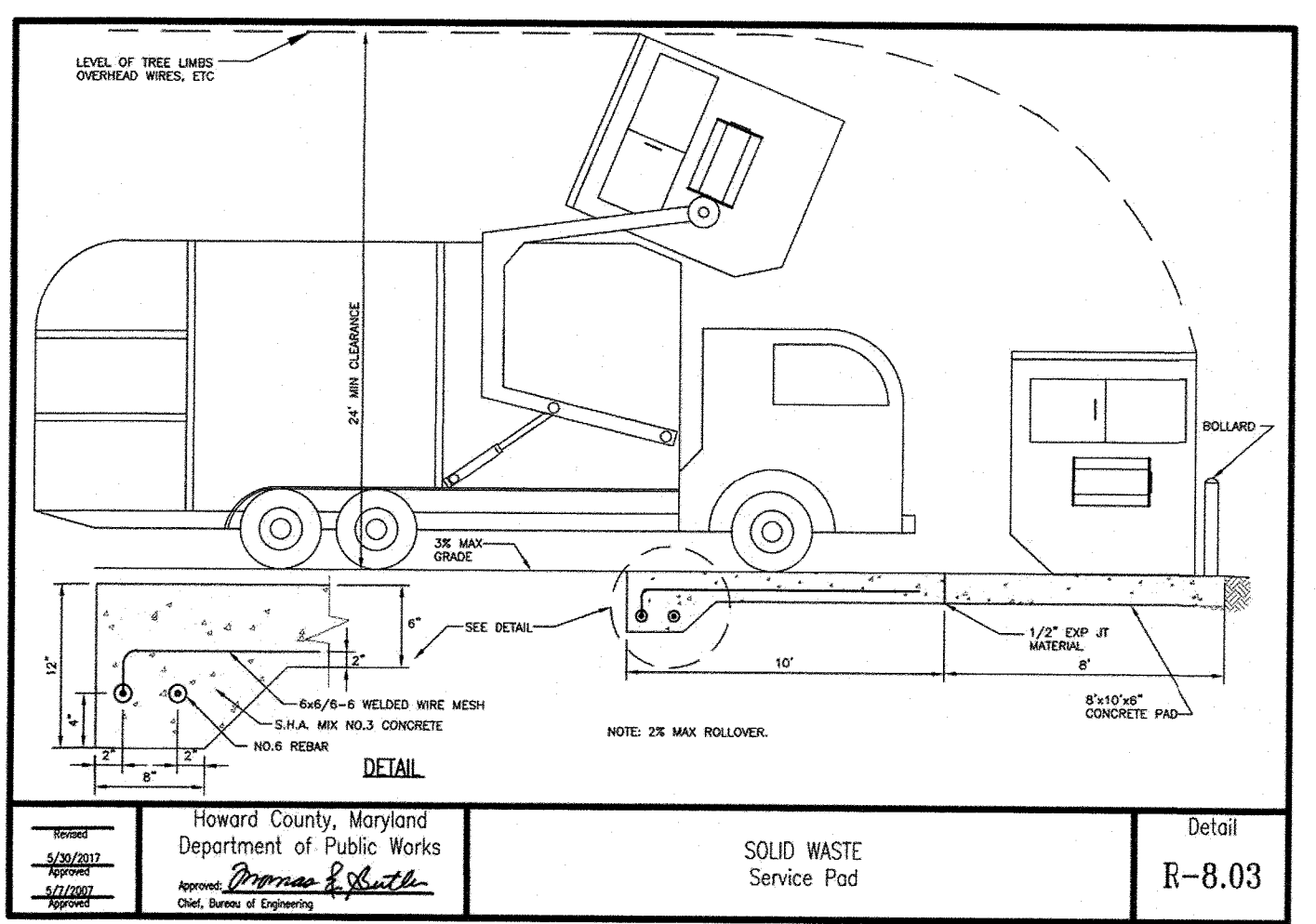
HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS APPROVED: <i>Prerna R. Senthil</i> DATE: 5/12/2021 TITLE: Chief, Bureau of Engineering	SIDEWALK RAMP Layout & Grading Perpendicular to Curb	Detail R-4.05
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HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS APPROVED: <i>Prerna R. Senthil</i> DATE: 5/12/2021 TITLE: Chief, Bureau of Engineering	CURB AND GUTTER Modified Combination Transition for Inlets	Detail R-3.06
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SECTION NUMBER	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR)					
		3 TO <3	5 TO <7	≥ 7	3 TO <3	5 TO <7	≥ 7
P-1	PARKING DRIVE ASIDES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 2 HEAVY TRUCKS PER DAY	SUPERPAVE ASPHALT MIX FINAL SURFACE 9.5 MM PG 64-225, LEVEL 1 (ESAL)	1.5	1.5	1.5	1.5	1.5
		SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE 12.5 MM PG 64-225, LEVEL 2 (ESAL)	NA	NA	NA	NA	NA
		SUPERPAVE ASPHALT MIX BASE 19.0 MM PG 64-225, LEVEL 1 (ESAL)	2.0	2.0	2.0	3.5	3.0
P-2	PARKING DRIVE ASIDES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 2 HEAVY TRUCKS PER DAY LOCAL ROADS: ACCESS PLACE, ACCESS STREET CUL-DE-SACS: RESIDENTIAL	SUPERPAVE ASPHALT MIX FINAL SURFACE 9.5 MM PG 64-225, LEVEL 1 (ESAL)	1.5	1.5	1.5	1.5	1.5
		SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE 12.5 MM PG 64-225, LEVEL 2 (ESAL)	1.5	1.5	1.5	1.5	1.5
		SUPERPAVE ASPHALT MIX BASE 19.0 MM PG 64-225, LEVEL 1 (ESAL)	2.0	2.0	2.0	3.5	2.0
P-3	PARKING DRIVE ASIDES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 2 HEAVY TRUCKS PER DAY LOCAL ROADS: ACCESS PLACE, ACCESS STREET CUL-DE-SACS: NON-RESIDENTIAL MINOR COLLECTIONS: RESIDENTIAL	SUPERPAVE ASPHALT MIX FINAL SURFACE 9.5 MM PG 64-225, LEVEL 1 (ESAL)	1.5	1.5	1.5	1.5	1.5
		SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE 12.5 MM PG 64-225, LEVEL 2 (ESAL)	1.0	1.0	1.0	1.0	1.0
		SUPERPAVE ASPHALT MIX BASE 19.0 MM PG 64-225, LEVEL 1 (ESAL)	2.0	3.0	3.0	4.5	3.0
P-4	MINOR COLLECTIONS: NON-RESIDENTIAL MAJOR COLLECTIONS	SUPERPAVE ASPHALT MIX FINAL SURFACE 9.5 MM PG 64-225, LEVEL 1 (ESAL)	2.0	2.0	2.0	2.0	2.0
		SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE 12.5 MM PG 64-225, LEVEL 2 (ESAL)	2.0	2.0	2.0	2.0	2.0
		SUPERPAVE ASPHALT MIX BASE 19.0 MM PG 64-225, LEVEL 1 (ESAL)	4.0	4.0	4.0	8.0	5.0

HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS APPROVED: <i>Prerna R. Senthil</i> DATE: 5/12/2021 TITLE: Chief, Bureau of Engineering	PAVING SECTIONS P-1 to P-4	Detail R-2.01
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HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS APPROVED: <i>Prerna R. Senthil</i> DATE: 5/12/2021 TITLE: Chief, Bureau of Engineering	SOLID WASTE Service Pad	Detail R-8.03
---	----------------------------	------------------

APPROVED  
 PLANNING BOARD OF HOWARD COUNTY  
 DATE: April 1, 2021

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Chad Clark*  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE: 6/21/21

*Joe J. Moore*  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE: 6/16/21

*Jim Guma*  
 DIRECTOR  
 DATE: 6/21/21

HOWARD COUNTY DEPT. OF PUBLIC WORKS  
 BUREAU OF FACILITIES, DESIGN & CONSTRUCTION DIVISION  
 9200 BERGER ROAD  
 COLUMBIA, MD 21046  
 ATTN: MRS. SHARON R. WALSH  
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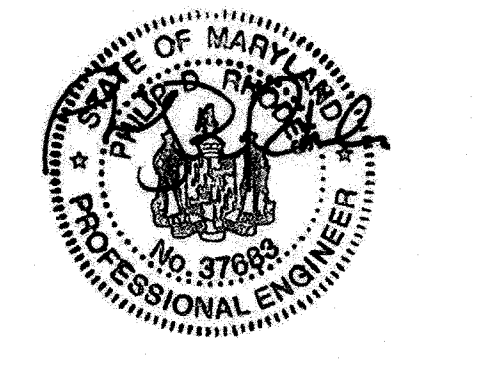
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GEOTECHNICAL ENGINEERING  
 SCHNABEL ENGINEERING DC, INC  
 4200 WASHINGTON AVE, NW, SUITE LL9  
 WASHINGTON, DC 20016



REVISION BLOCK		
MARK	DATE	DESCRIPTION

PERMIT SUBMISSION  
 01/25/2021

PROJECT NAME:  
**EAST COLUMBIA 50+ CENTER**  
 ADDRESS: 6610 CRADLEROCK WAY  
 COLUMBIA, MD 21045  
 TAX MAP: 36 / GRID: 21 / PARCEL: 275  
 LOT: A1 & B1  
 ZONING: NEW TOWN (NT)  
 ELECTION DISTRICT: 6  
 GREEN BUILDING

SITE DETAILS AND NOTES

**CS-501**  
 SHEET 07 OF 27











**LEGEND**

- LOD — LIMIT OF DISTURBANCE
- NEW STORM PIPE
- S — NEW SANITARY LINE
- W — NEW WATER LINE
- ⊙ NEW SANITARY MANHOLE
- NEW SWM FACILITY
- NEW BUILDING
- G — NEW GAS LINE
- COMM — NEW COMM. LINE
- /// S /// TO BE REMOVED
- ⊕ FIRE HYDRANT
- - - DRAINAGE DIVIDE

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- SEE UTILITY PLAN AND UTILITY DETAIL SHEET FOR MORE INFORMATION ON UTILITY PATHWAY.

**MAPPED SOIL TYPES**

SYMBOL	NAME/DESCRIPTION	GROUP	'K' FACTOR
GhB	Glenn-Urban land Complex	B	0.43
UuB	Urban Land-Urthents Complex	D	-

SOILS INFORMATION TAKEN FROM USDA NRCS FOR HOWARD COUNTY

**811**  
Know what's below.  
Call before you dig.

**MISS UTILITY**  
48 HOURS BEFORE YOU DIG  
CALL "MISS UTILITY" AT 811  
OR LOG ON TO [www.missutility.net](http://www.missutility.net)

APPROVED  
PLANNING BOARD OF HOWARD COUNTY

DATE April 1, 2021

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 5/17/21  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 6/16/21  
CHIEF DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 6/21/21  
DIRECTOR DATE

HOWARD COUNTY DEPT. OF PUBLIC WORKS  
BUREAU OF FACILITIES, DESIGN & CONSTRUCTION DIVISION  
9200 BERGER ROAD  
COLUMBIA, MD 21046  
ATTN: MRS. SHARON R. WALSH,  
CHIEF DIVISION  
TEL: 410-313-5386 / MOBILE: 301-717-8417

**ARCHITECTS**  
QUINN EVANS ARCHITECTS  
100 N. CHARLES STREET  
14TH FLOOR  
BALTIMORE, MD 21201  
410 - 576 - 0440

**STRUCTURAL ENGINEER**  
CARROLL, ENGINEERING, INC.  
215 SCHILLING CIRCLE, SUITE 102  
HUNT VALLEY, MD 21031

**MEP ENGINEER**  
JAMES POSEY AND ASSOCIATES, INC.  
3112 LORD BALTIMORE, DRIVE,  
BALTIMORE, MD 21244

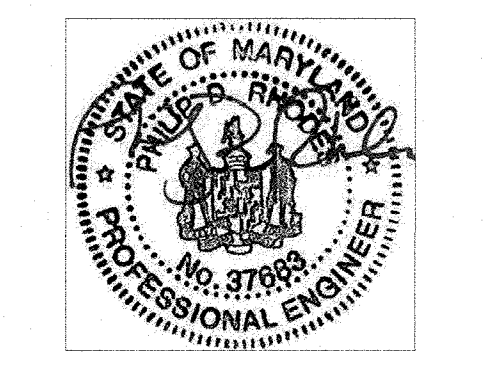
**CIVIL ENGINEER**  
A. MORTON THOMAS & ASSOCIATES, INC.  
800 KING FARM BOULEVARD, 4TH FLOOR,  
ROCKVILLE, MD 20852

**LANDSCAPE ARCHITECT**  
SITE RESOURCES, INC.  
14315 JARRETTVILLE PIKE, PO BOX 249  
PHOENIX, MD 21131-0249

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NYIKOS ASSOCIATES INC  
18219 A FLOWER HILL WAY  
GAITHERSBURG, MD 20879

**GEOTECHNICAL ENGINEERING**  
SCHNABEL ENGINEERING DC, INC  
4200 WASHINGTON AVE. NW, SUITE LL9  
WASHINGTON, DC 20016



SEAL  
PROFESSIONAL CERTIFICATION  
I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NUMBER 37683, EXPIRATION DATE 07/31/2021

**REVISION BLOCK**

MARK	DATE	DESCRIPTION

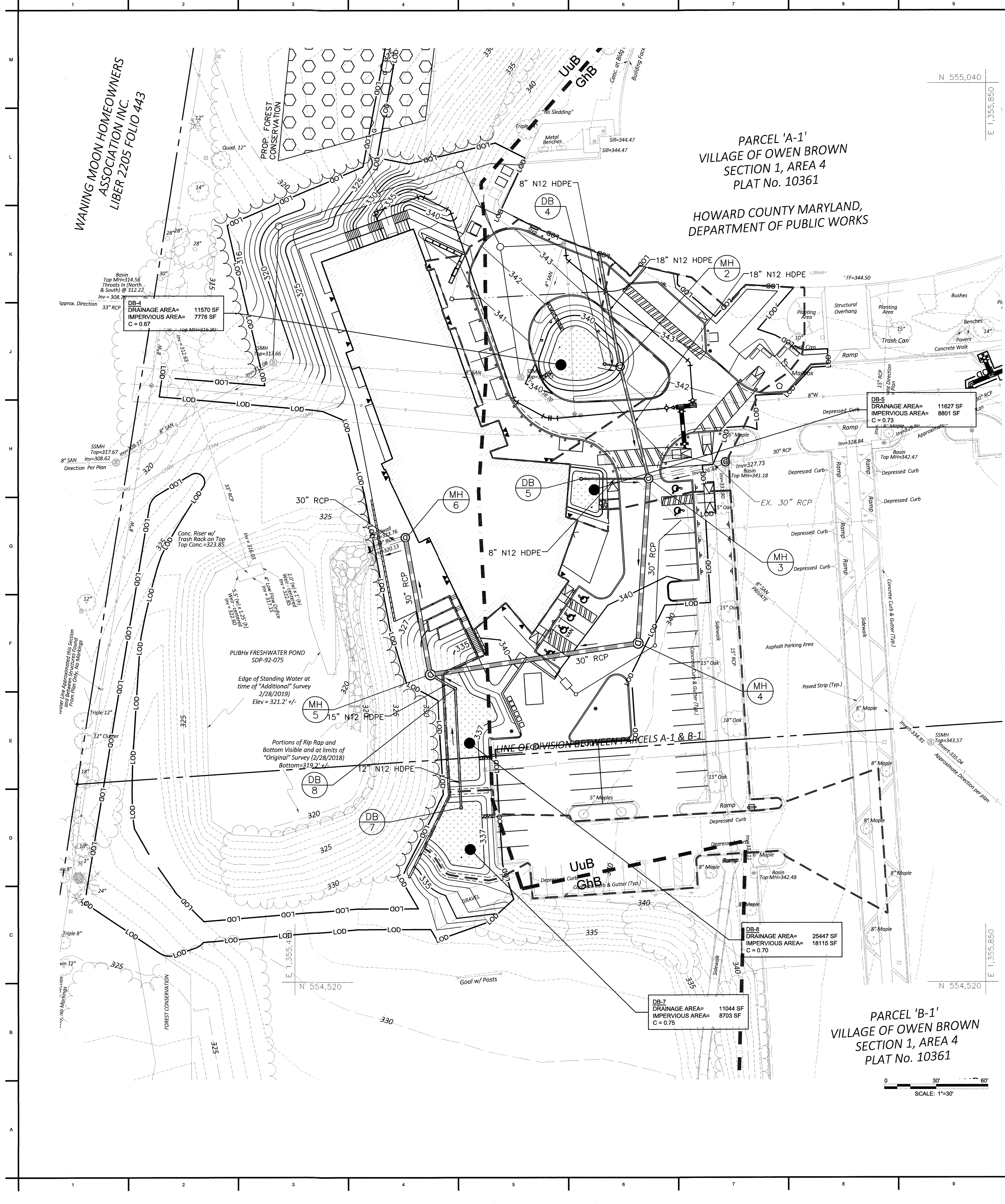
PERMIT SUBMISSION  
01/25/2021

PROJECT NAME:  
**EAST COLUMBIA 50+ CENTER**  
ADDRESS: 6610 CRADLEROCK WAY  
COLUMBIA, MD 21045  
TAX MAP: 36 / GRID: 21 / PARCEL: 275  
LOT: A1 & B1  
ZONING: NEW TOWN (NT)  
ELECTION DISTRICT: 6  
GREEN BUILDING

**STORM DRAIN DRAINAGE AREA MAP**

**CU-101**  
SHEET 10 OF 27

SDP-20-059

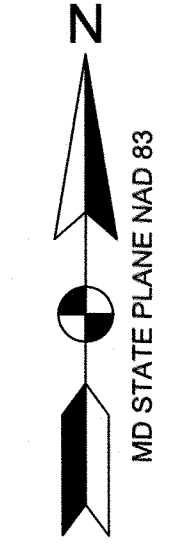


PARCEL 'A-1'  
VILLAGE OF OWEN BROWN  
SECTION 1, AREA 4  
PLAT No. 10361  
HOWARD COUNTY MARYLAND,  
DEPARTMENT OF PUBLIC WORKS

PARCEL 'B-1'  
VILLAGE OF OWEN BROWN  
SECTION 1, AREA 4  
PLAT No. 10361

SCALE: 1"=30'

N 555,040  
E 1,355,850



N 554,520  
E 1,355,520

N 554,520  
E 1,355,850

WAVING MOON HOMEOWNERS  
ASSOCIATION INC.  
LIBER 2205 FOLIO 443

DB-4  
DRAINAGE AREA= 11570 SF  
IMPERVIOUS AREA= 7776 SF  
C = 0.87

DB-5  
DRAINAGE AREA= 11627 SF  
IMPERVIOUS AREA= 8801 SF  
C = 0.73

DB-8  
DRAINAGE AREA= 25447 SF  
IMPERVIOUS AREA= 18115 SF  
C = 0.70

DB-7  
DRAINAGE AREA= 11044 SF  
IMPERVIOUS AREA= 8703 SF  
C = 0.75

PUBHC FRESHWATER POND  
SDP-92-075  
Edge of Standing Water at  
time of "Additional" Survey  
2/28/2019)  
Elev = 321.2' +/-

Portions of Rip Rap and  
Bottom Visible and at limits of  
"Original" Survey (2/28/2018)  
Bottom=319.2' +/-

Water Use: All Areas within this Section  
and Beyond are to be used for  
Agriculture Only. No Other  
Uses are Permitted.

Conc. Riser w/  
Trash Rack on Top  
Top Conc.=323.85

Basin  
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PURPOSE STATEMENT: THIS REVISED SDP SHEET IS TO REPLACE THE PROFILE ASSOCIATED WITH THE 4" SANITARY LATERAL. THIS LATERAL IS BEING RELOCATED FROM THE FRONT TO THE BACK OF THE NEW BUILDING.

HOWARD COUNTY DEPT. OF PUBLIC WORKS  
BUREAU OF FACILITIES, DESIGN & CONSTRUCTION DIVISION  
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COLUMBIA, MD 21046  
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**MEP ENGINEER**  
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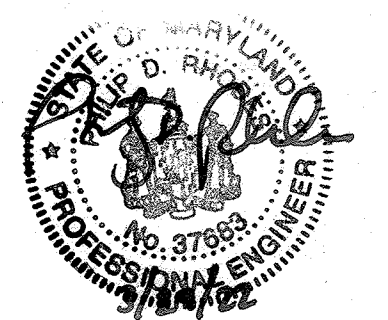
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800 KINGS FARM BOULEVARD, 4TH FLOOR,  
ROCKVILLE, MD 20852

**LANDSCAPE ARCHITECT**  
SITE RESOURCES, INC.  
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**AV ENGINEER**  
CONVERGENT TECHNOLOGIES DESIGN  
GROUP  
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**KITCHEN CONSULTANT**  
NYIKOS ASSOCIATES INC  
18219 A FLOWER HILL WAY  
GAITHERSBURG, MD 20879

**GEOTECHNICAL ENGINEERING**  
SCHNABEL ENGINEERING DC, INC  
4200 WASHINGTON AVE, NW, SUITE LL9  
WASHINGTON, DC 20016



SEAL  
PROFESSIONAL CERTIFICATION:  
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REVISION BLOCK		
MARK	DATE	DESCRIPTION
A	4/4	Revise sewer alignment

REVISED SITE DEVELOPMENT PLAN  
3/24/2022

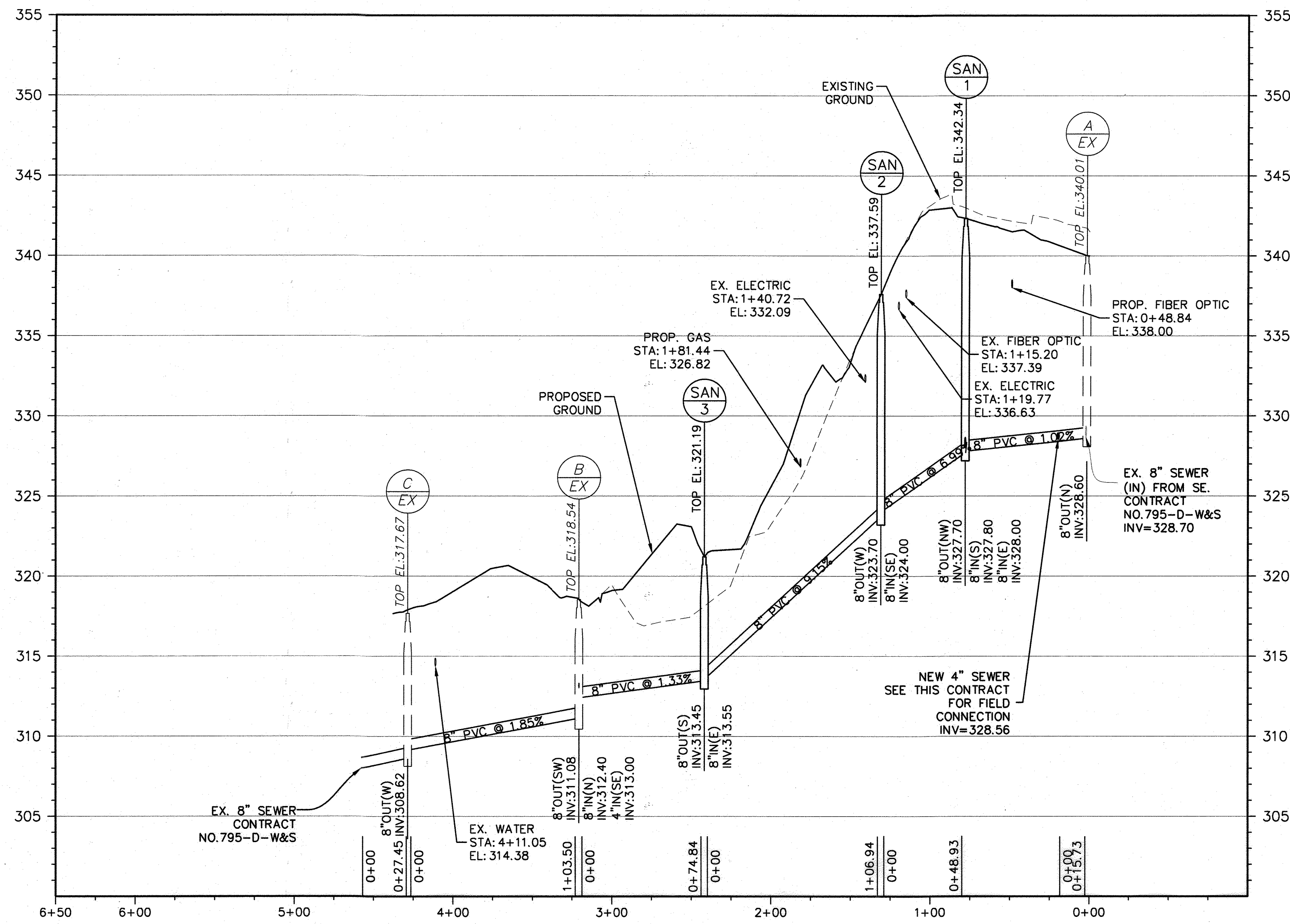
PROJECT NAME:  
**EAST COLUMBIA 50+ CENTER**  
ADDRESS: 6610 GRADLEROCK WAY  
COLUMBIA, MD 21045  
TAX MAP: 35 / GRID: 21 / PARCEL: 275  
LOT: A1 & B1  
ZONING: NEW TOWN (NT)  
ELECTION DISTRICT: 6  
GREENBUILDING

PRIVATE SEWER PROFILES

**CU-202**

SHEET 12 OF 27

SDP-20-059

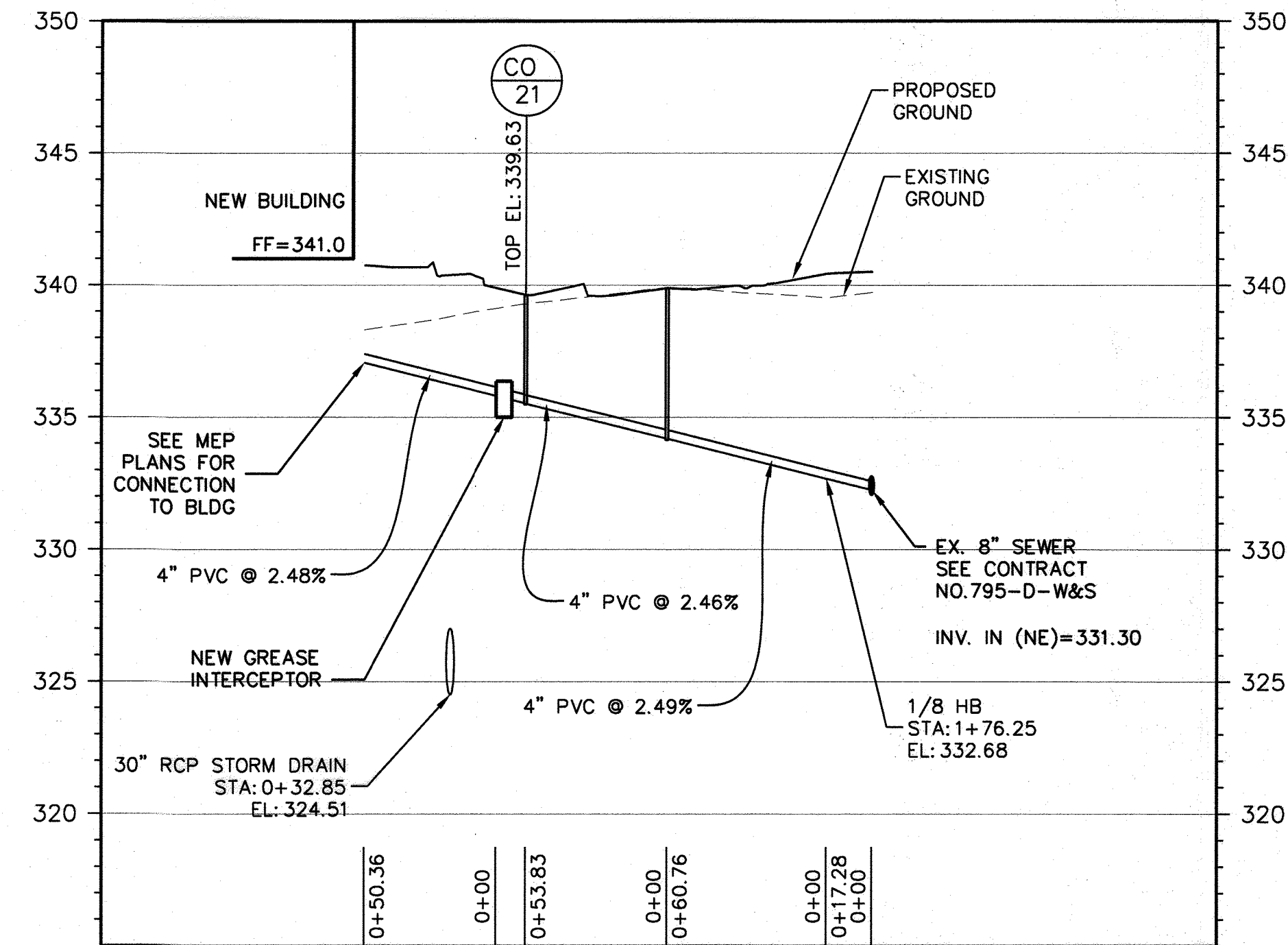


8" SEWER MAIN REROUTING

SCALE: HORIZ 1"=50'  
VERT 1"=5'

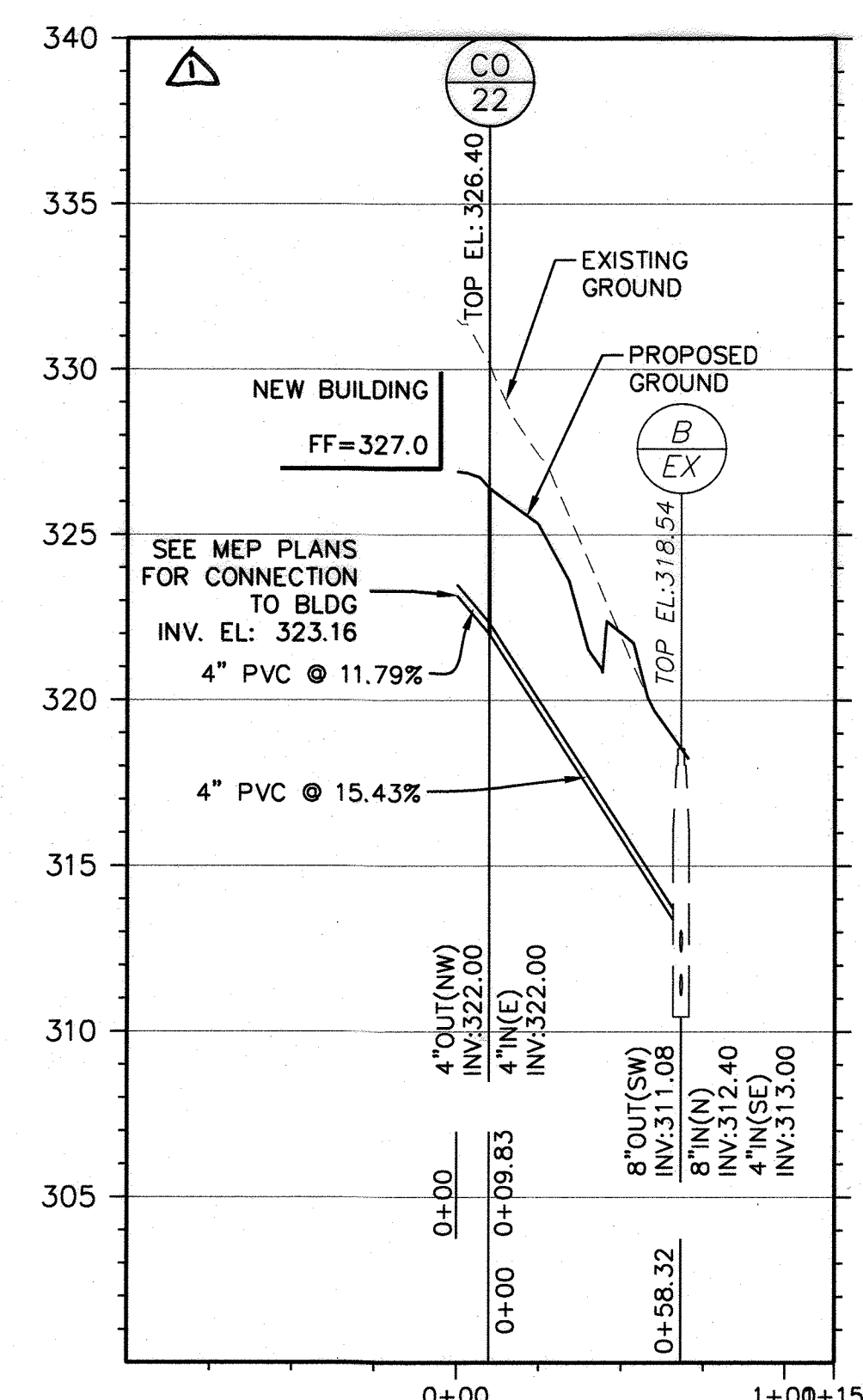
UTILITY NOTES

- UTILITY INFORMATION SHOWN HEREON WAS OBTAINED FROM AVAILABLE UTILITY RECORDS PROVIDED TO A. MORTON THOMAS AND ASSOCIATES, INC. UTILITIES HAVE BEEN LOCATED IN THE FIELD TO THE EXTENT POSSIBLE. UTILITY INFORMATION MUST BE CONSIDERED APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF ANY DEMOLITION/CONSTRUCTION.
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- SEE SITE DEVELOPMENT, STORM DRAIN AND UTILITY DETAIL SHEETS FOR MORE INFORMATION ON UTILITY PATHWAY.



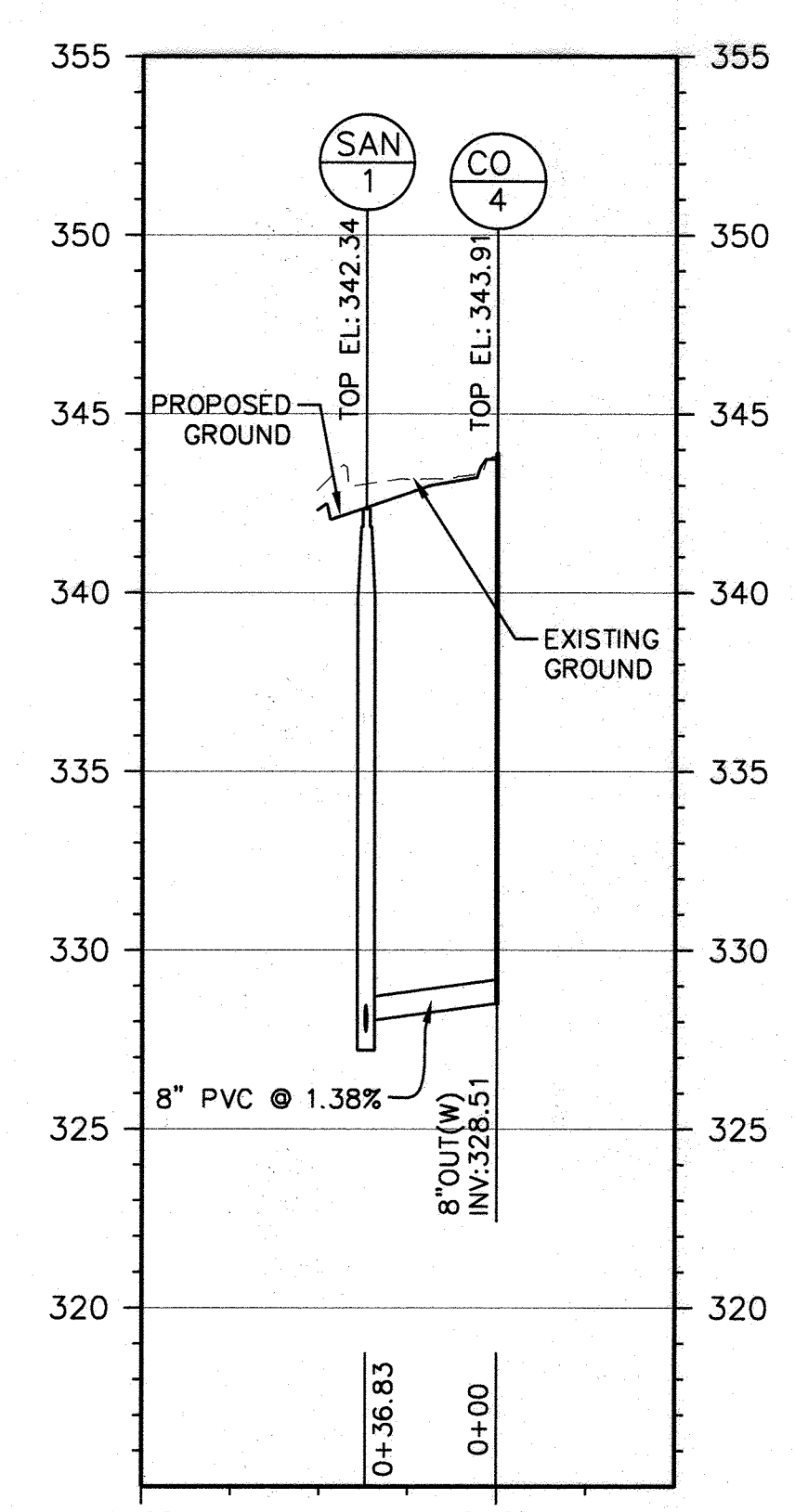
4" GREASE INTERCEPTOR PROFILE

SCALE: HORIZ 1"=50'  
VERT 1"=5'



4" SEWER HOUSE CONNECTION

SCALE: HORIZ 1"=50'  
VERT 1"=5'



EX. SEWER CLEANOUT TO MH1

SCALE: HORIZ 1"=50'  
VERT 1"=5'

**811 MISS UTILITY**  
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OR LOG ON TO [www.missutility.net](http://www.missutility.net)  
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APPROVED  
PLANNING BOARD OF HOWARD COUNTY  
DATE April 1, 2021

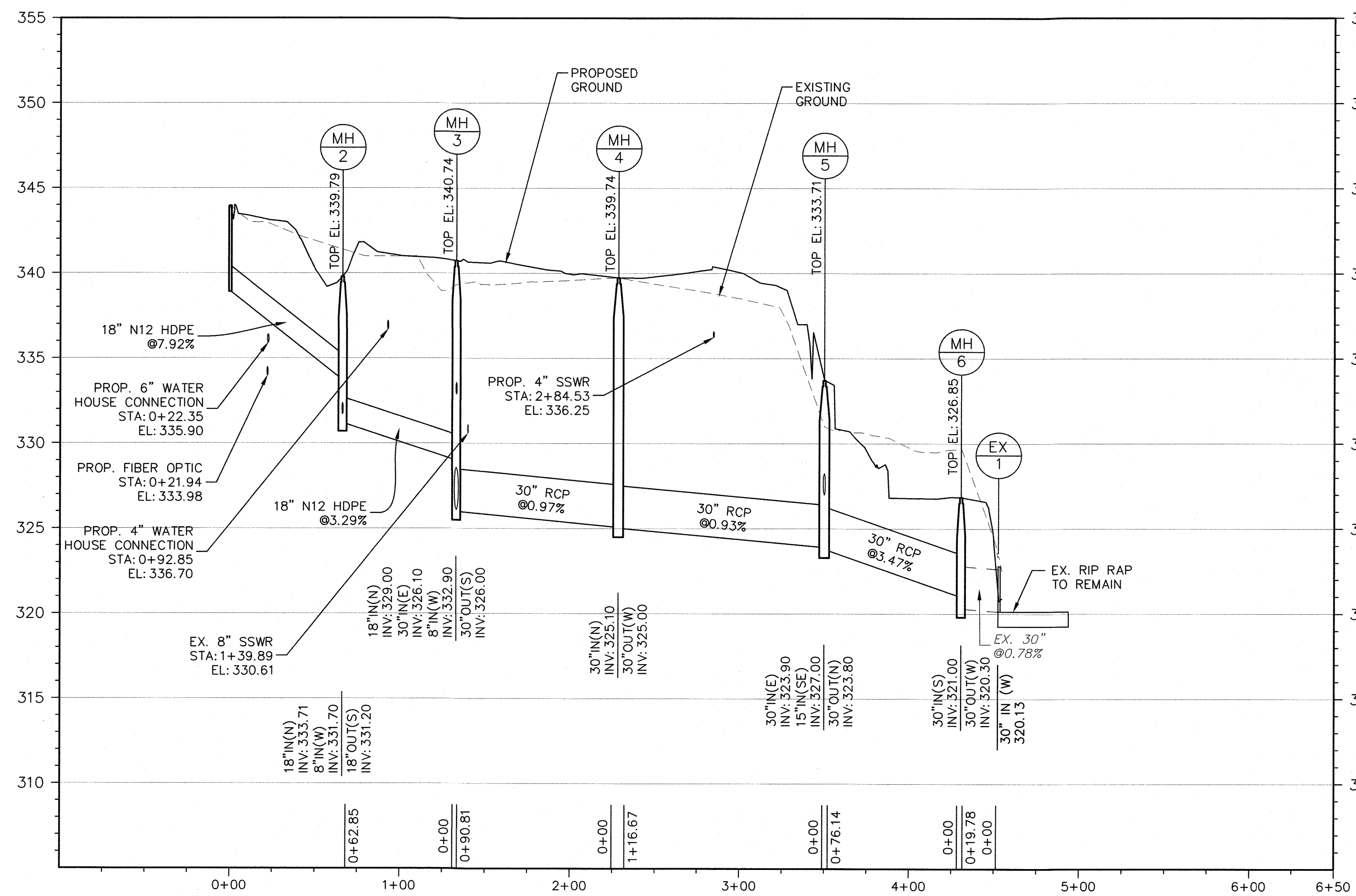
APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Chd Edna* 4.6.22  
CHIEF, DEVELOPMENT ENGINEERING DIVISION HSA DATE

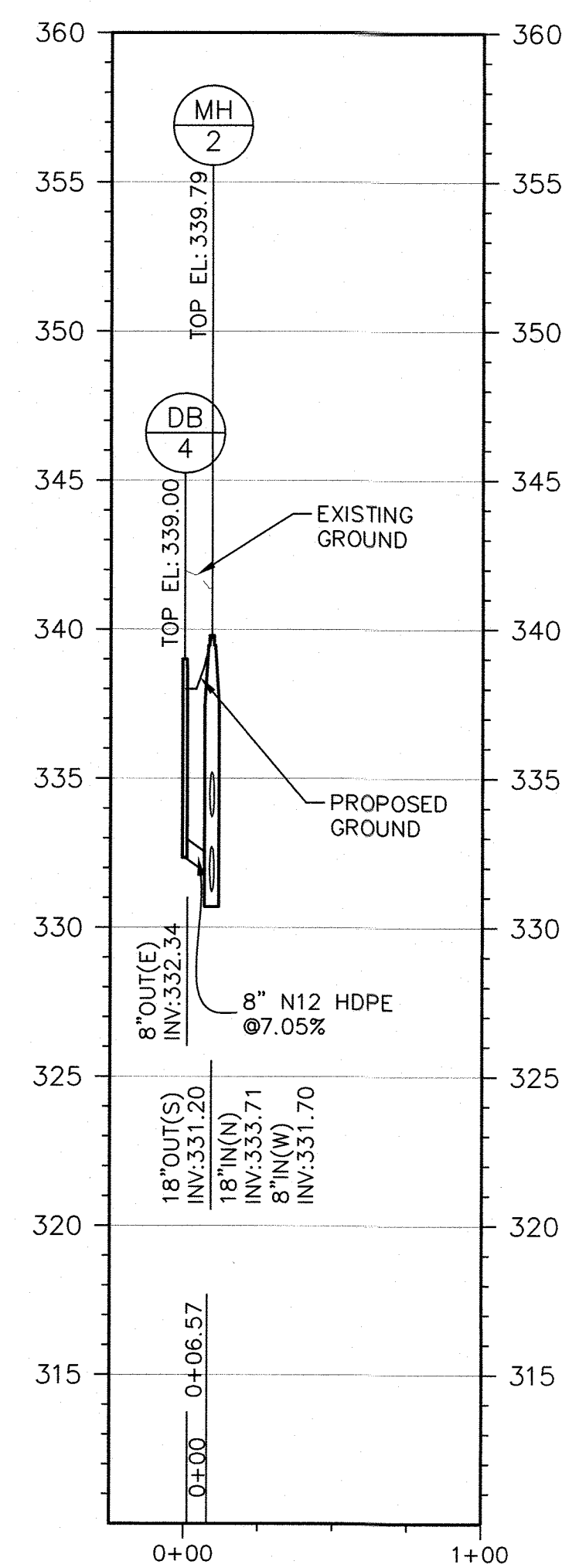
*Dir. Morris* 4-11-22  
CHIEF, DIVISION OF LAND DEVELOPMENT gsm DATE

*B.H.* 4.12.22  
DIRECTOR c/o Amy Gardner DATE





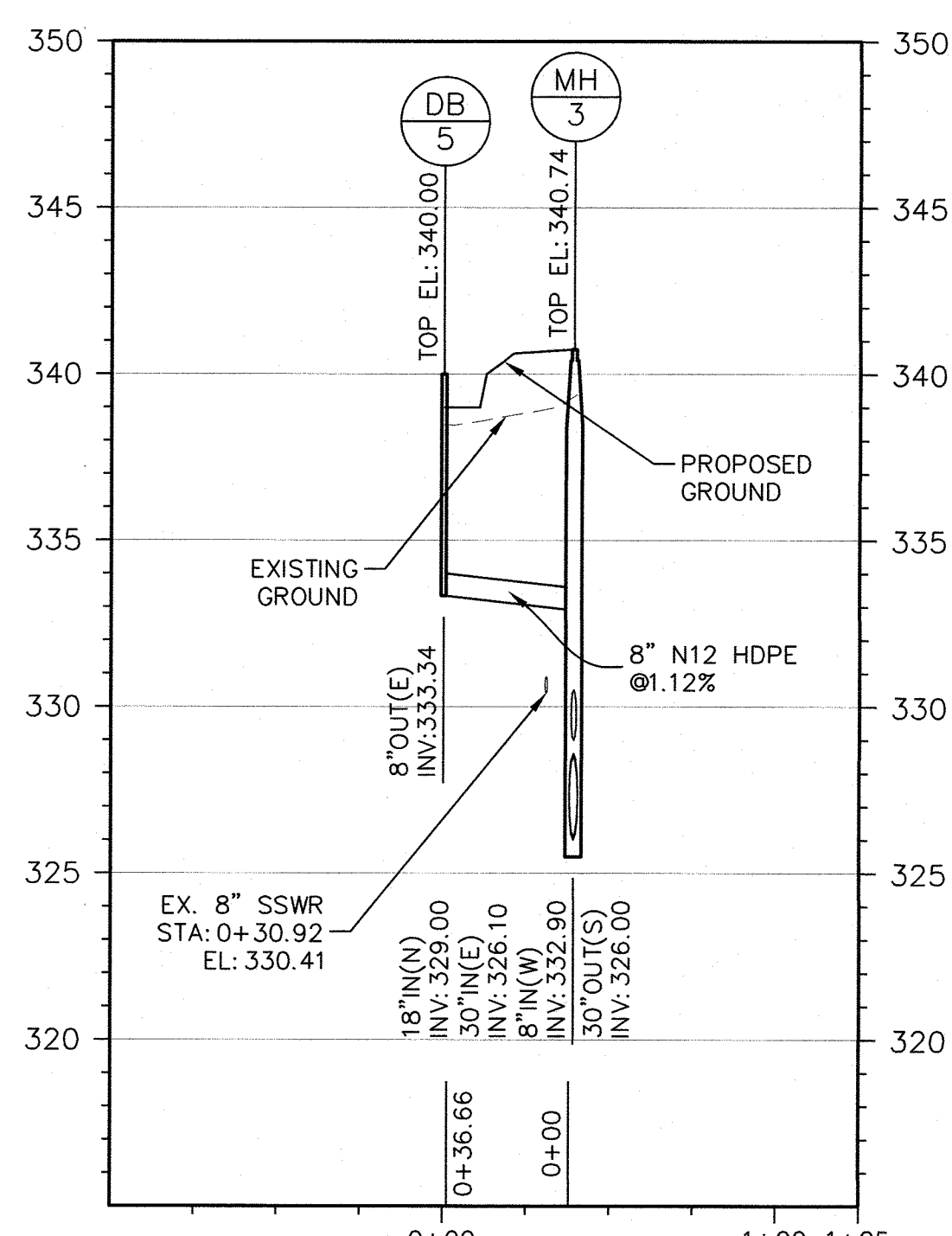
DB-1 TO EX-1  
SCALE: HORIZ 1"=50'  
VERT 1"=5'



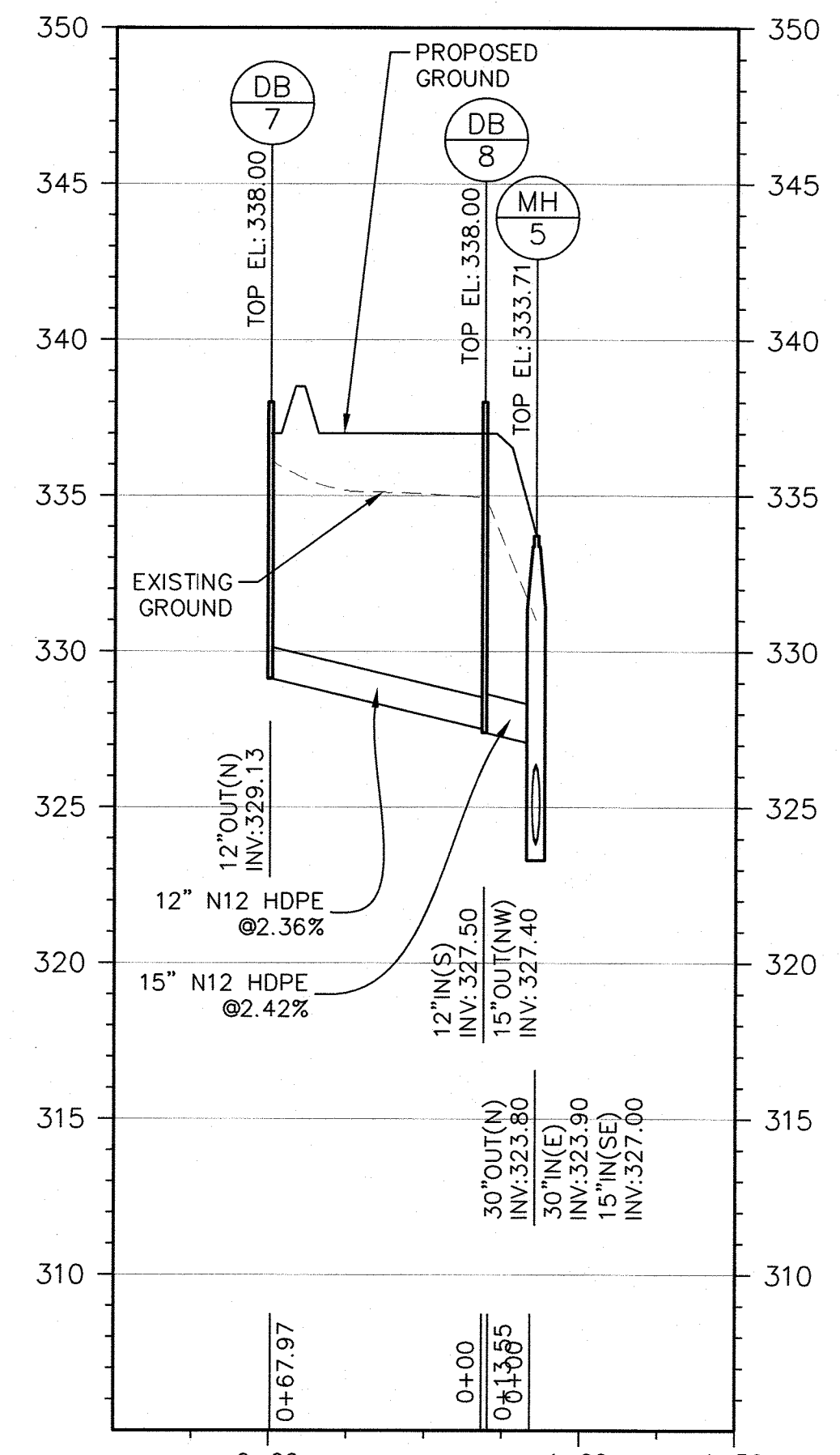
DB-4 TO MH-2  
SCALE: HORIZ 1"=50'  
VERT 1"=5'

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DB-5 TO MH-3  
SCALE: HORIZ 1"=50'  
VERT 1"=5'



DB-7 TO MH-5  
SCALE: HORIZ 1"=50'  
VERT 1"=5'

STORM STRUCTURE SCHEDULE							
STRUCTURE NO.	STRUCTURE TYPE	DETAIL	TOP ELEV.	INV. IN	INV. OUT	NORTHING	EASTING
MH-2	PRECAST MANHOLE	DETAIL G-5.12/5.13 ON CU-502	339.79	18"(N): 333.71 8"(W): 331.70	331.20	554876.02	1355638.27
MH-3	PRECAST MANHOLE	DETAIL G-5.12/5.13 ON CU-502	340.74	18"(N): 329.00 30"(E): 326.10 8"(W): 332.90	326.00	554811.25	1355654.85
MH-4	PRECAST MANHOLE	DETAIL G-5.12/5.13 ON CU-502	339.74	325.10	325.00	554716.14	1355648.73
MH-5	PRECAST MANHOLE	DETAIL G-5.12/5.13 ON CU-502	333.71	30"(E): 323.90 15"(SE): 327.00	323.80	554697.97	1355528.43
MH-6	PRECAST MANHOLE	DETAIL G-5.12/5.13 ON CU-502	326.85	321.00	320.30	554777.30	1355513.92
DB-4	DRAIN BASIN	DETAIL 2 ON CW-501	339.00	-	332.34	554877.48	1355629.31
DB-5	DRAIN BASIN	DETAIL 2 ON CW-501	340.00	-	333.34	554811.13	1355615.68
DB-7	DRAIN BASIN	DETAIL 2 ON CW-501	338.00	-	329.13	554620.96	1355546.29
DB-8	DRAIN BASIN	DETAIL 2 ON CW-501	338.00	327.50	327.40	554689.84	1355542.84

PIPE SCHEDULE				
FROM	TO	SIZE (IN)	MATERIAL	LENGTH (FT)
CLEANOUT	MH-2	18	HDPE	66.37
MH-2	MH-3	18	HDPE	66.89
MH-3	MH-4	30	RCP	92.41
MH-4	MH-5	30	RCP	118.77
MH-5	MH-6	30	RCP	80.69
DB-4	MH-2	8	HDPE	9.10
DB-5	MH-3	8	HDPE	39.17
DB-7	DB-8	12	HDPE	68.99
DB-8	MH-5	15	HDPE	16.55

PIPE SUMMARY		
SIZE	MATERIAL	LENGTH (LF)
8	HDPE	48.27
12	HDPE	68.99
15	HDPE	16.55
18	HDPE	133.26
30	RCP	291.87

HOWARD COUNTY DEPT. OF PUBLIC WORKS  
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**ARCHITECTS**  
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100 N. CHARLES STREET  
14TH FLOOR  
BALTIMORE, MD 21201  
410-576-0440

**STRUCTURAL ENGINEER**  
CARROLL ENGINEERING, INC.  
215 SCHILLING CIRCLE, SUITE 102  
HUNT VALLEY, MD 21031

**MEP ENGINEER**  
JAMES POSEY AND ASSOCIATES, INC.  
3112 LORD BALTIMORE, DRIVE,  
BALTIMORE, MD 21244

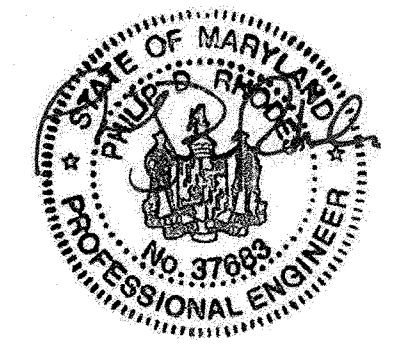
**CIVIL ENGINEER**  
A. MORTON THOMAS & ASSOCIATES, INC.  
800 KING FARM BOULEVARD, 4TH FLOOR,  
ROCKVILLE, MD 20852

**LANDSCAPE ARCHITECT**  
SITE RESOURCES, INC.  
14315 JARRETTSVILLE PIKE, PO BOX 249  
PHOENIX, MD 21131-0249

**AV ENGINEER**  
CONVERGENT TECHNOLOGIES DESIGN  
GROUP  
6501 YPRK ROAD, BALTIMORE, MD 21212

**KITCHEN CONSULTANT**  
NYIKOS ASSOCIATES INC  
18219 A FLOWER HILL WAY,  
GAITHERSBURG, MD 20878

**GEOTECHNICAL ENGINEERING**  
SCHNABEL ENGINEERING DC, INC  
4200 WASHINGTON AVE, NW, SUITE LL9  
WASHINGTON, DC 20016



SEAL  
PROFESSIONAL CERTIFICATION  
I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR  
APPROVED BY ME, AND THAT I AM A DULY LICENSED  
ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.  
LICENSE NUMBER 37899, EXPIRATION DATE 07/13/2021

REVISION BLOCK		
MARK	DATE	DESCRIPTION

PERMIT SUBMISSION  
01/25/2021

PROJECT NAME:  
**EAST COLUMBIA 50+ CENTER**  
ADDRESS: 6610 CRADLEROCK WAY  
COLUMBIA, MD 21045  
TAX MAP: 36 / GRID: 21 / PARCEL: 275  
LOT: A1 & B1  
ZONING: NEW TOWN (NT)  
ELECTION DISTRICT: 6  
GREEN BUILDING

APPROVED  
PLANNING BOARD OF HOWARD COUNTY  
DATE April 1, 2021

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 5-17-21  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 6/16/21  
CHIEF DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 6/21/21  
DIRECTOR DATE

**811**  
Know what's below.  
Call before you dig.

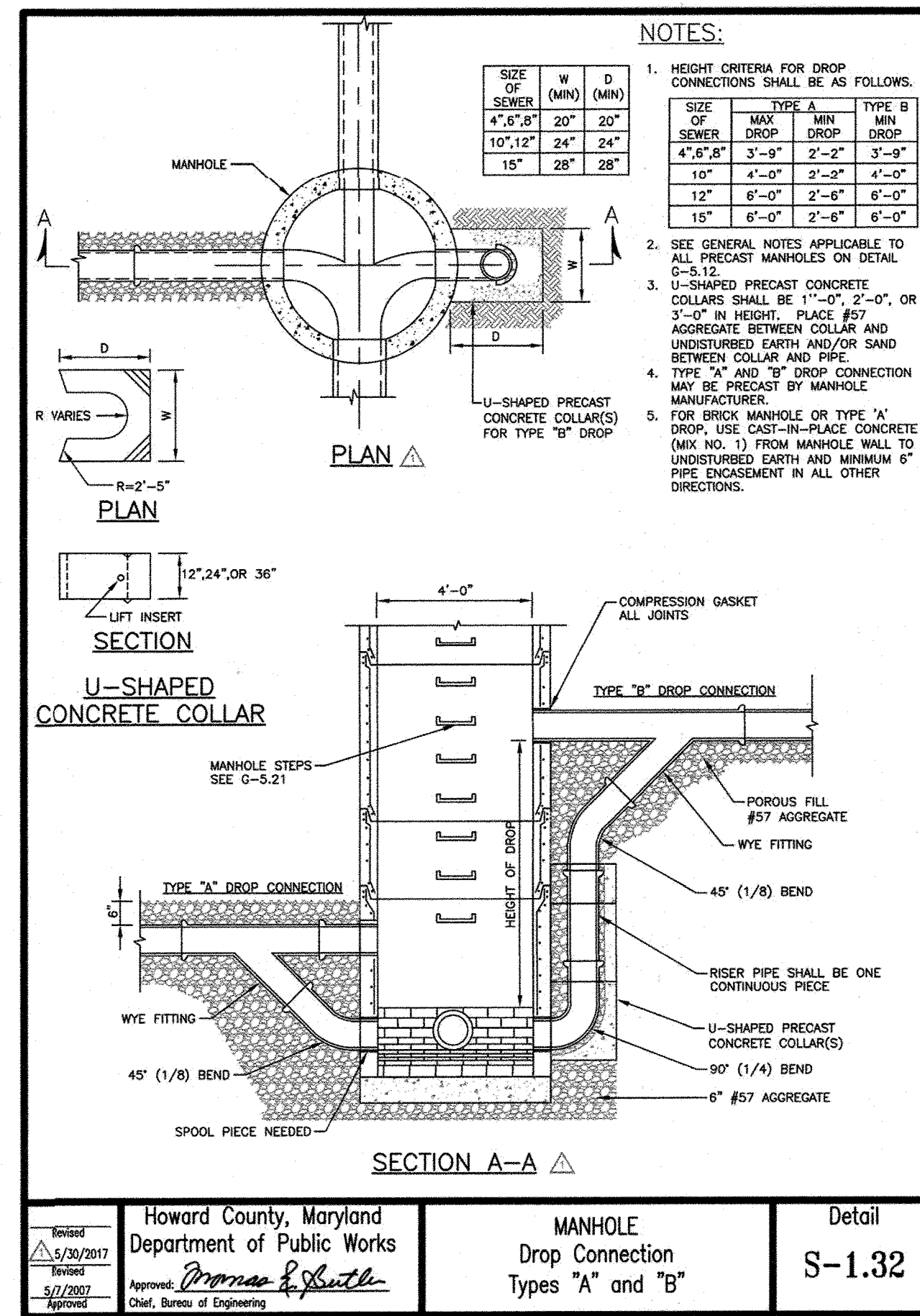
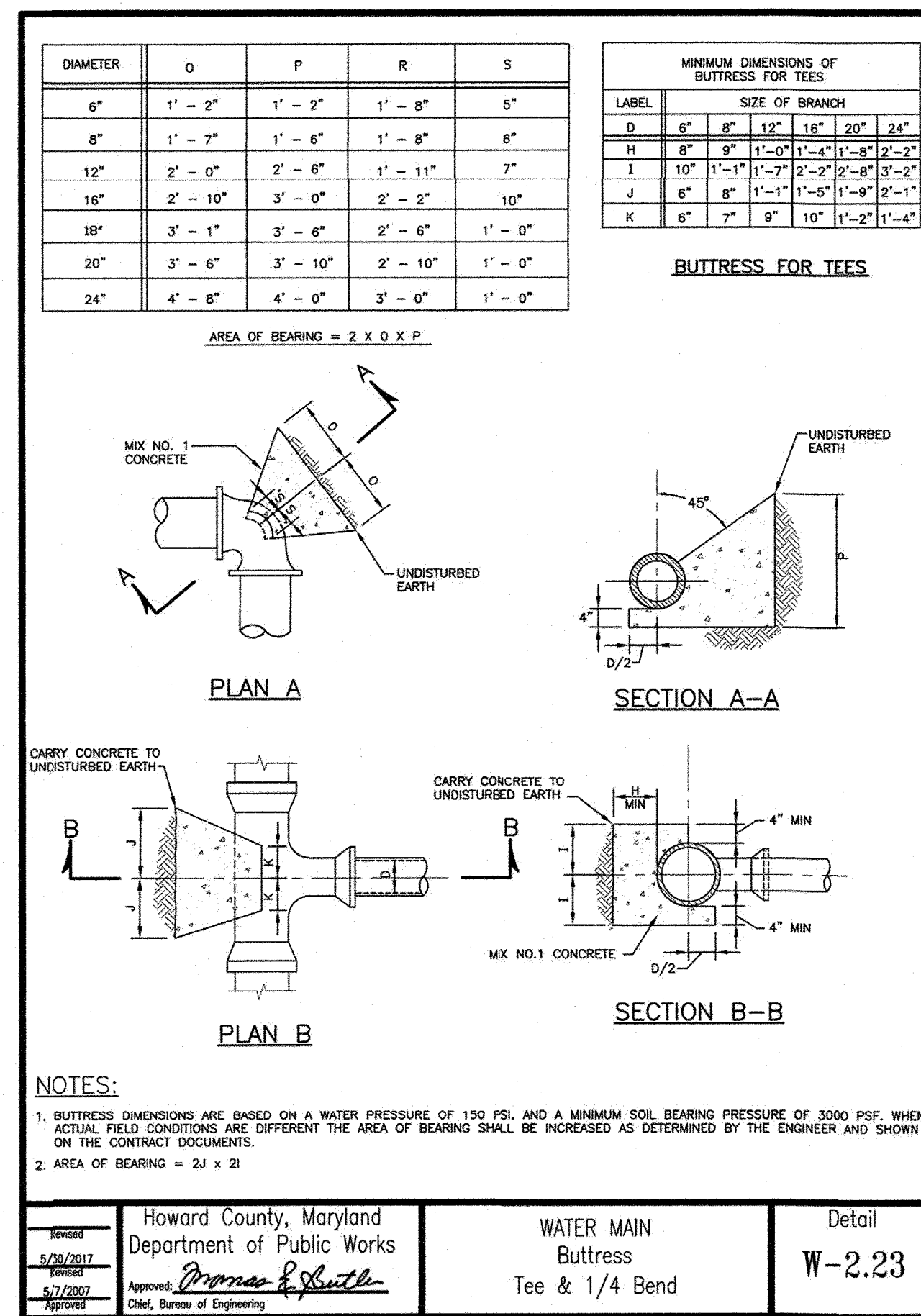
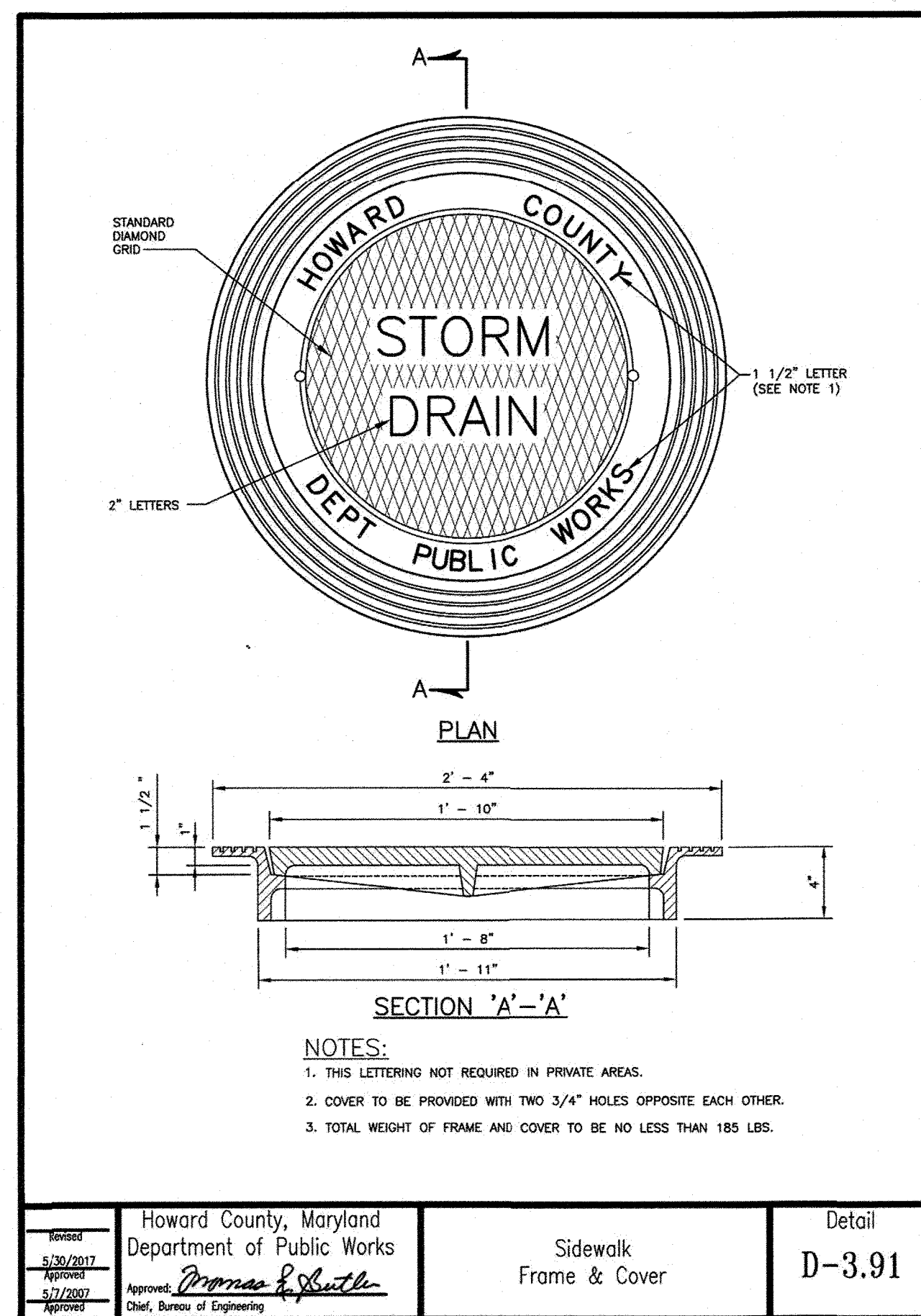
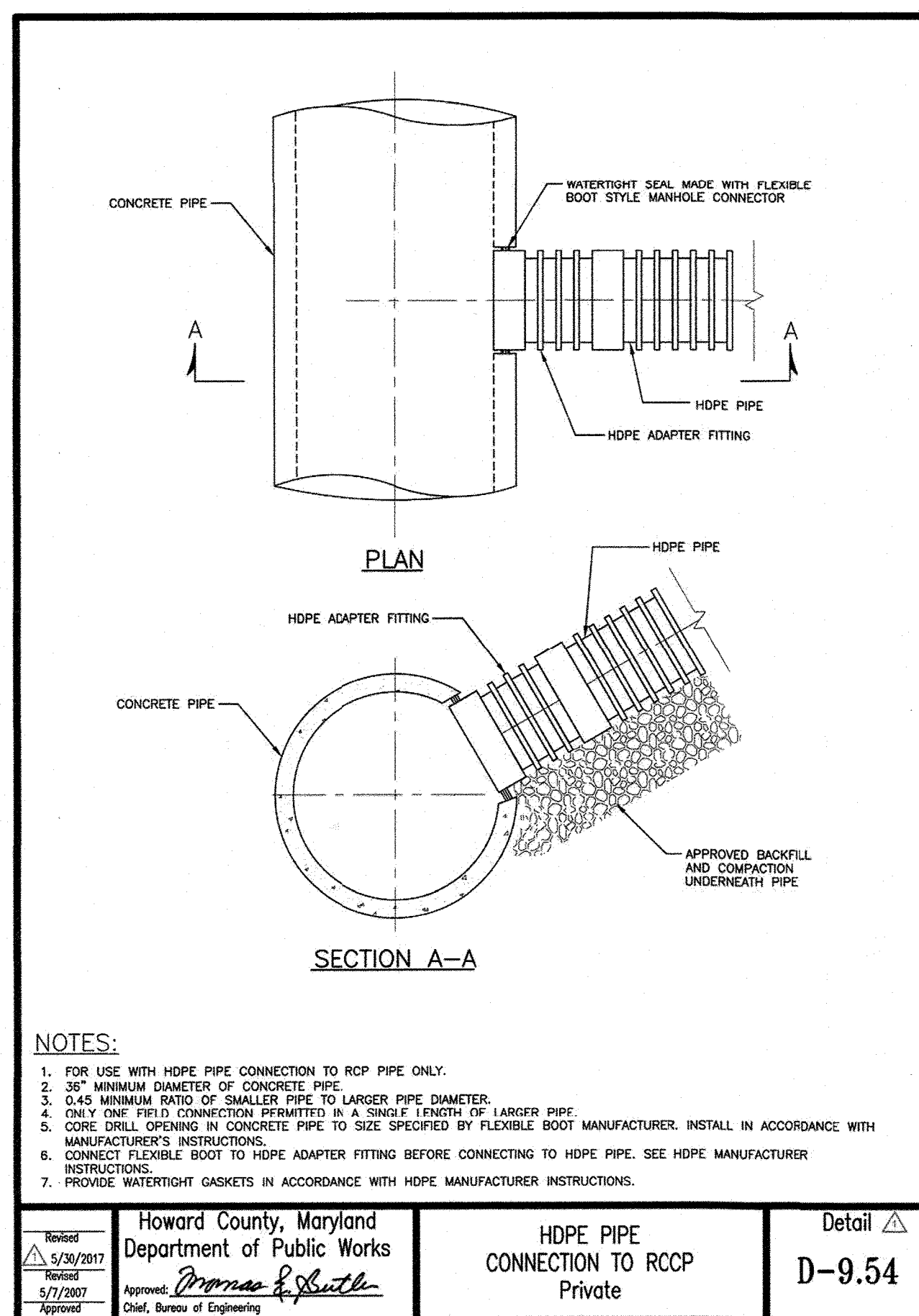
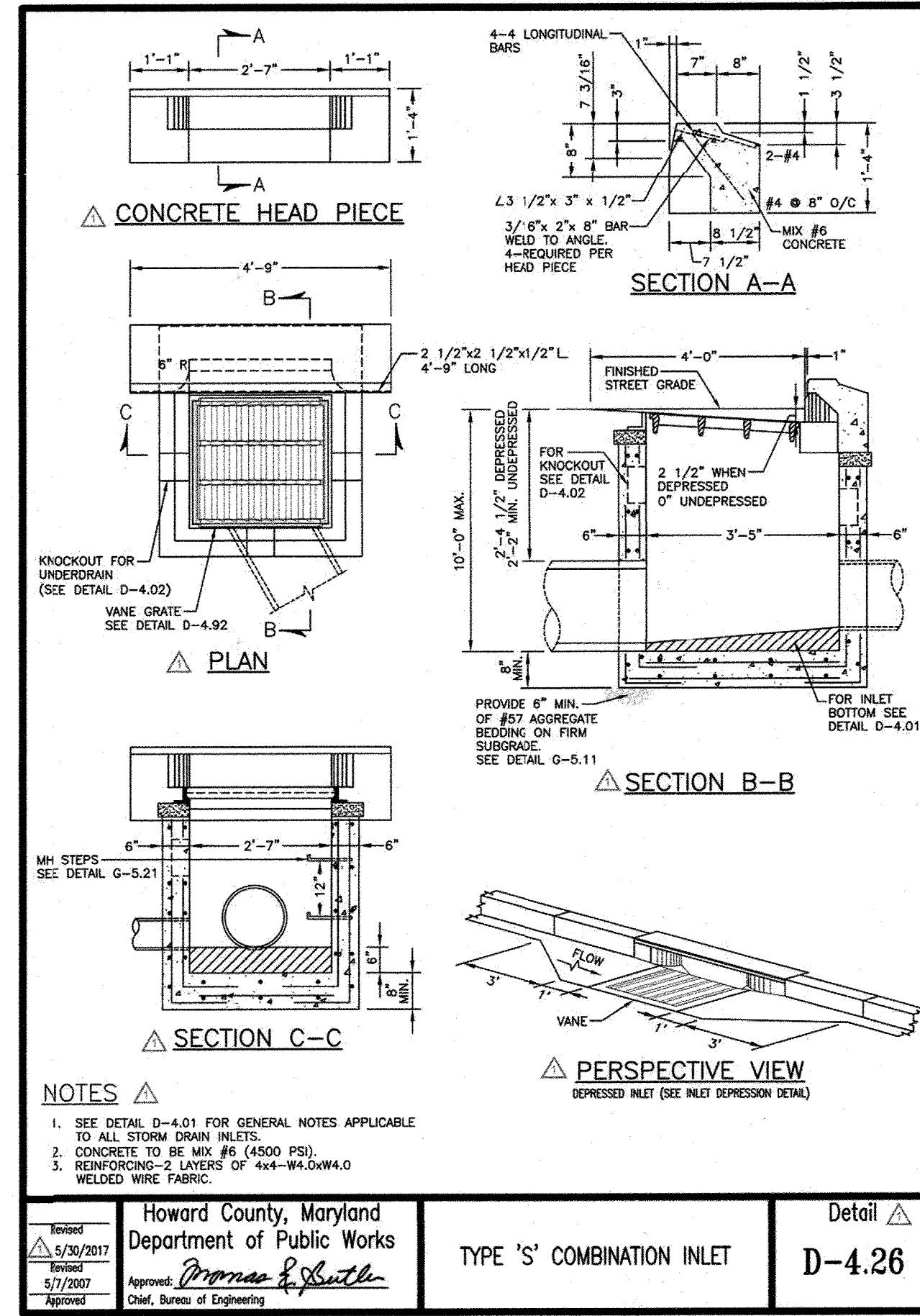
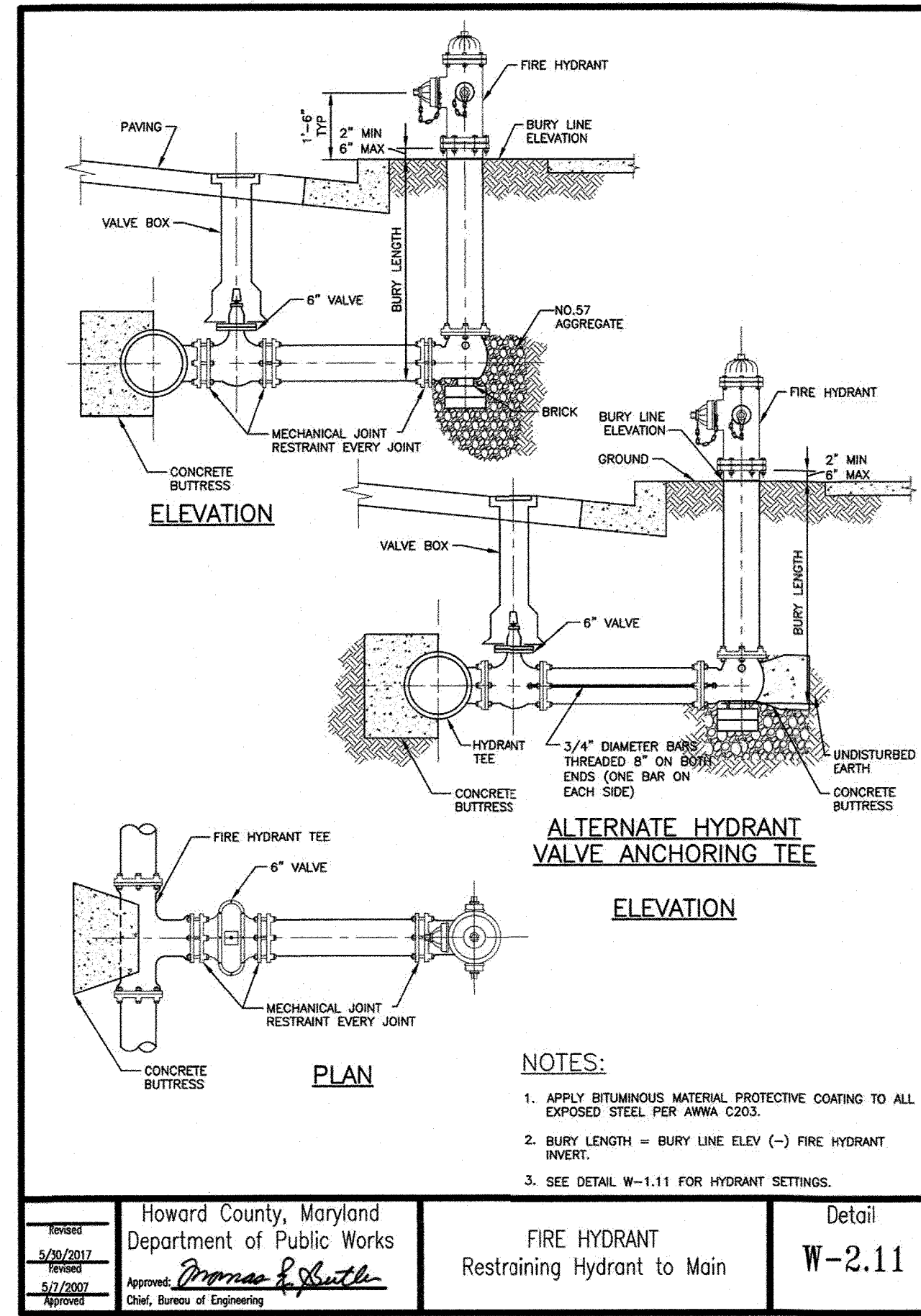
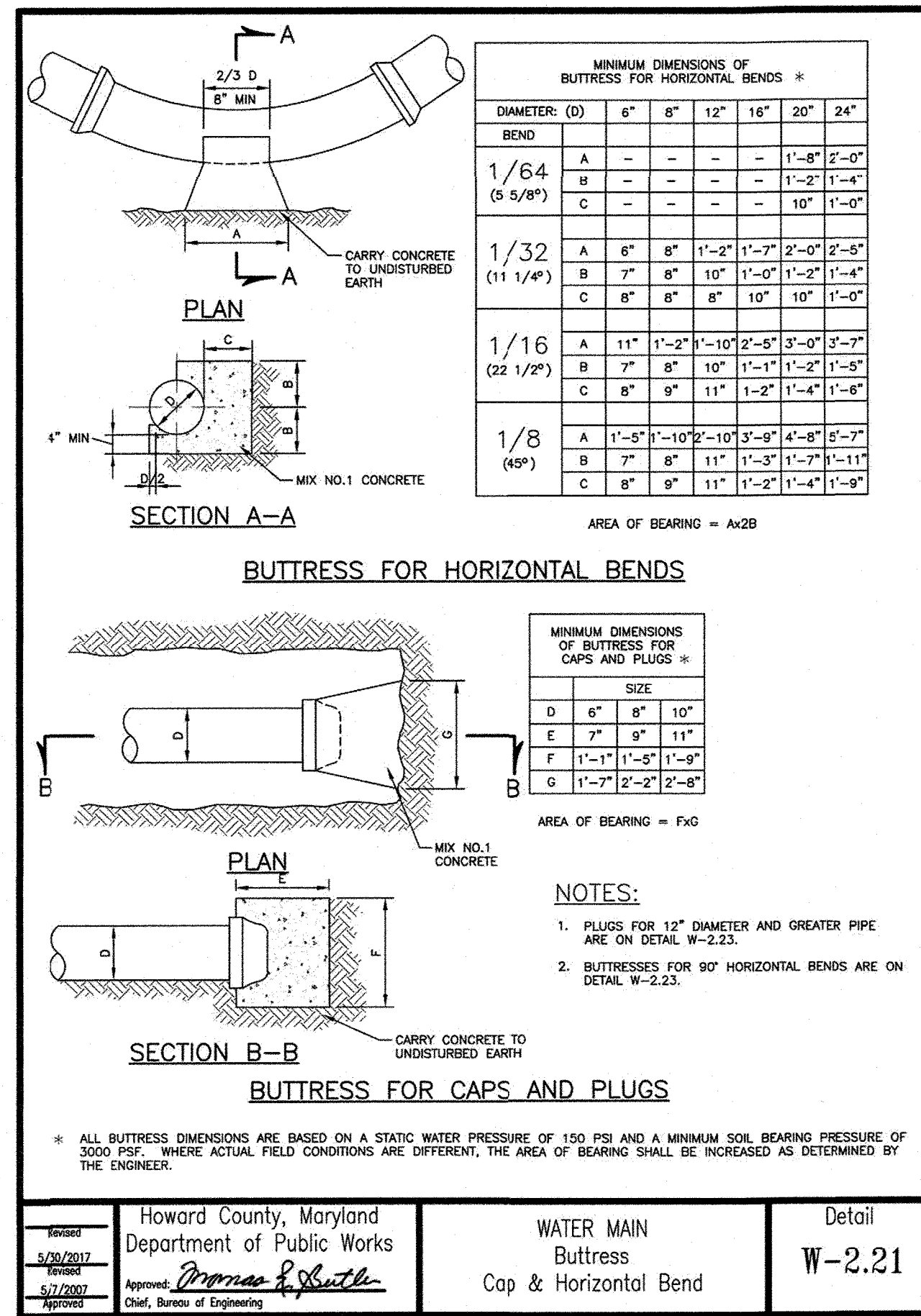
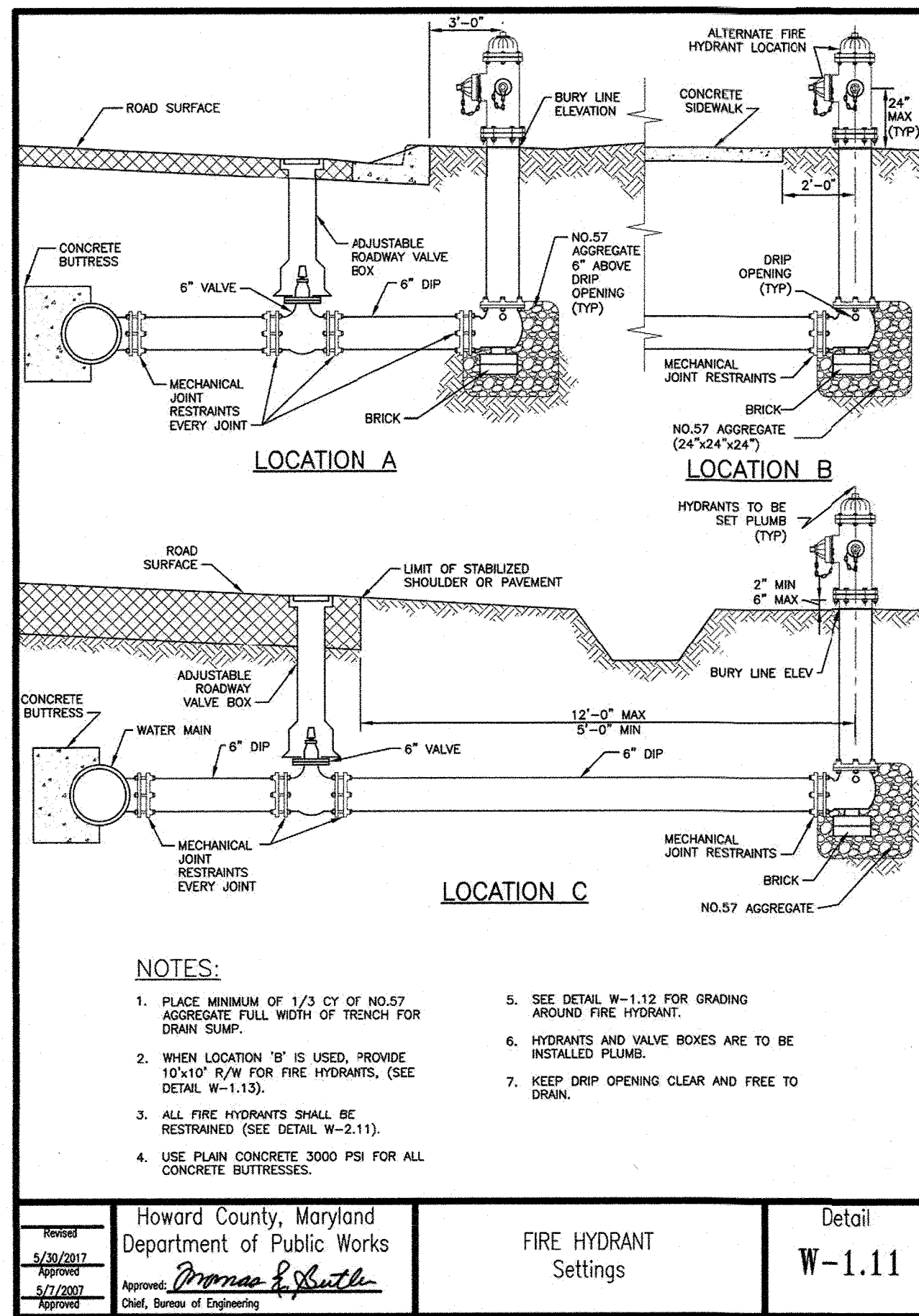
**MISS UTILITY**  
48 HOURS BEFORE YOU DIG  
CALL "MISS UTILITY" AT 811  
OR LOG ON TO [www.missutility.net](http://www.missutility.net)

STORM DRAIN  
PROFILES

**CU-203**

SHEET 13 OF 27





APPROVED  
PLANNING BOARD OF HOWARD COUNTY  
DATE April 1, 2021

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
DATE 5/17/21  
DATE 6/21/21

HOWARD COUNTY DEPT. OF PUBLIC WORKS  
BUREAU OF FACILITIES, DESIGN & CONSTRUCTION DIVISION  
9200 BERGER ROAD  
COLUMBIA, MD 21046  
ATTN: MRS. SHARON R. WALSH,  
CHIEF DIVISION  
TEL: 410-313-5386 / MOBILE: 301-717-8417

**ARCHITECTS**  
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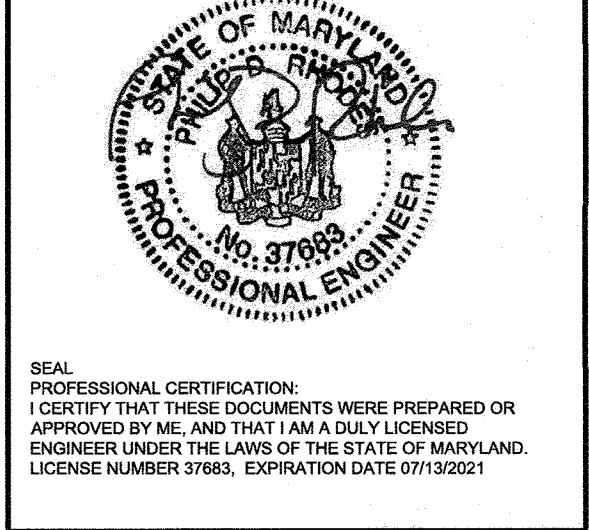
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WASHINGTON, DC 20016



REVISION BLOCK

MARK	DATE	DESCRIPTION

PERMIT SUBMISSION  
01/25/2021

PROJECT NAME:  
**EAST COLUMBIA 50+ CENTER**  
ADDRESS: 8610 CRADLEROCK WAY  
COLUMBIA, MD 21045  
TAX MAP: 36 / GRID: 21 / PARCEL: 275  
LOT: A1 & B1  
ZONING: NEW TOWN (NT)  
ELECTION DISTRICT: 6  
GREEN BUILDING

UTILITY DETAILS

**CU-501**  
SHEET 14 OF 27  
SDP-20-059

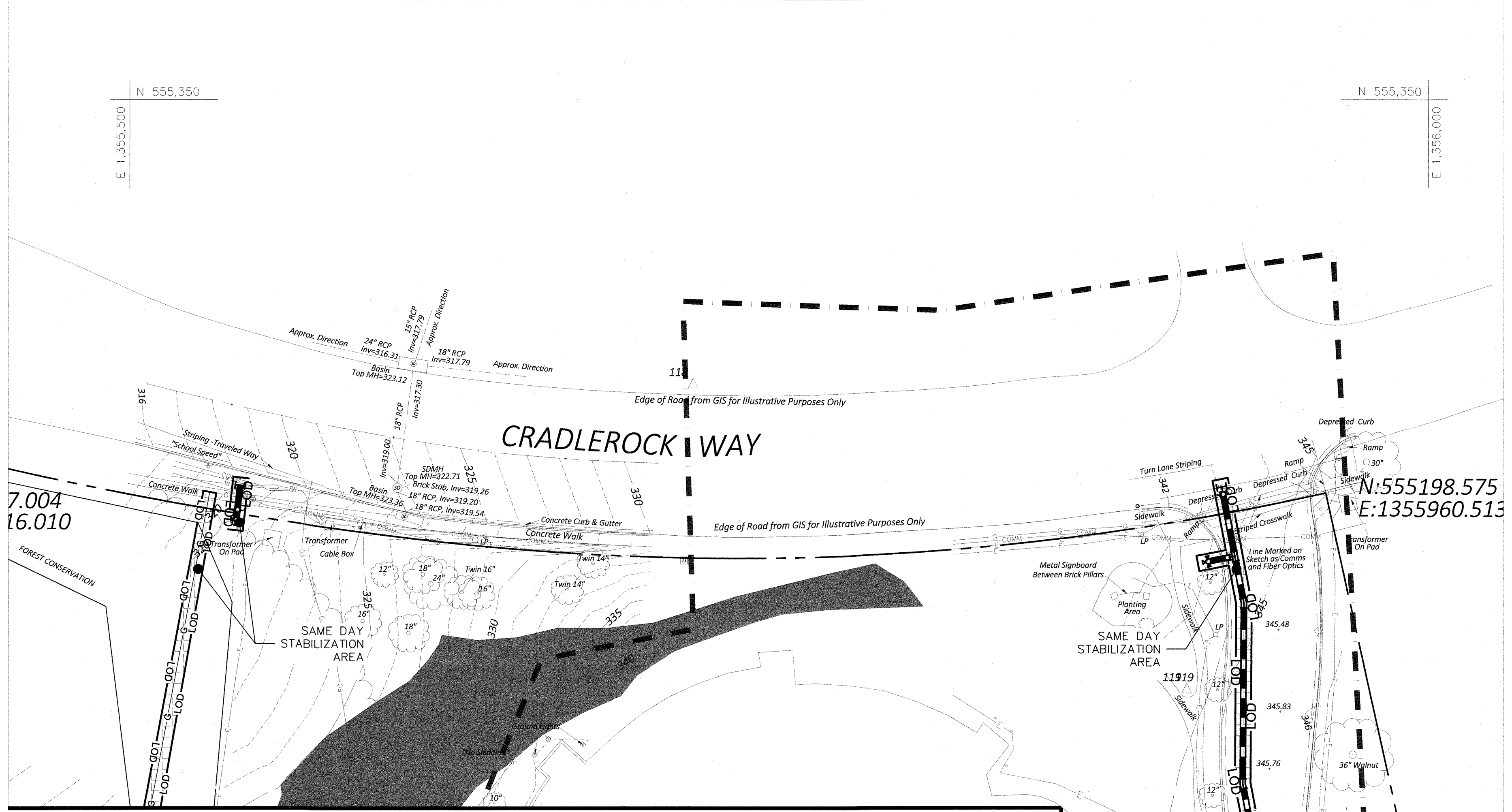












**LEGEND**

- LIMIT OF DISTURBANCE  LOD
- SUPER SILT FENCE WITH IMBRICATION POINTS  SSF
- CURB INLET PROTECTION  CIP
- INLET PROTECTION  IP
- STABILIZED CONSTRUCTION ENTRANCE  SCE
- WASH RACK  WR
- PROPERTY LIMITS
- TREE PROTECTION FENCE
- STEEP SLOPES (15%-25%)
- STEEP SLOPES (>25%)
- COMPACTED STRUCTURAL FILL
- SOIL BOUNDARY  UuB  
 GhB
- SAME DAY STABILIZATION AREA
- CONSTRUCTION FENCE  X

**NOTES:**

1. ALL HIGHLY ERODIBLE SOILS WITHIN THE PROJECT AREA (LOD) SHALL BE STABILIZED WITH TEMPORARY SOIL STABILIZATION MATTING (2.0 LB/SF). HIGHLY ERODIBLE SOILS ARE SOILS WITH A K-FACTOR > 0.35 AND STEEPER THEN 5% , OR SOILS WITH A K-FACTOR < 0.35 AND SLOPES GREATER THEN 15%.
2. ALL SEDIMENT AND EROSION CONTROL DETAILS CAN BE FOUND ON SHEET CE-501 AND CE-502.

MATCH LINE - SEE SHEET CE-103

MATCH LINE - SEE SHEET CE-103

**OWNERS/DEVELOPER CERTIFICATION**

I/WE HEREBY 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 THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON 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.

Designed by: Mark Stromdahl / 4/16/2021

OWNER'S / DEVELOPER SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

Mark Stromdahl AIA, Chief, Bureau of Facilities  
PRINTED NAME & TITLE

**DESIGNER 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.

Philip D. Rhodes / 4/16/2021

DESIGNER'S SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

Philip Rhodes, P.E. / 37683

PRINTED NAME \_\_\_\_\_ MD REGISTRATION NO. P.E. / R.L.S. / R.L.A. (CIRCLE ONE)

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

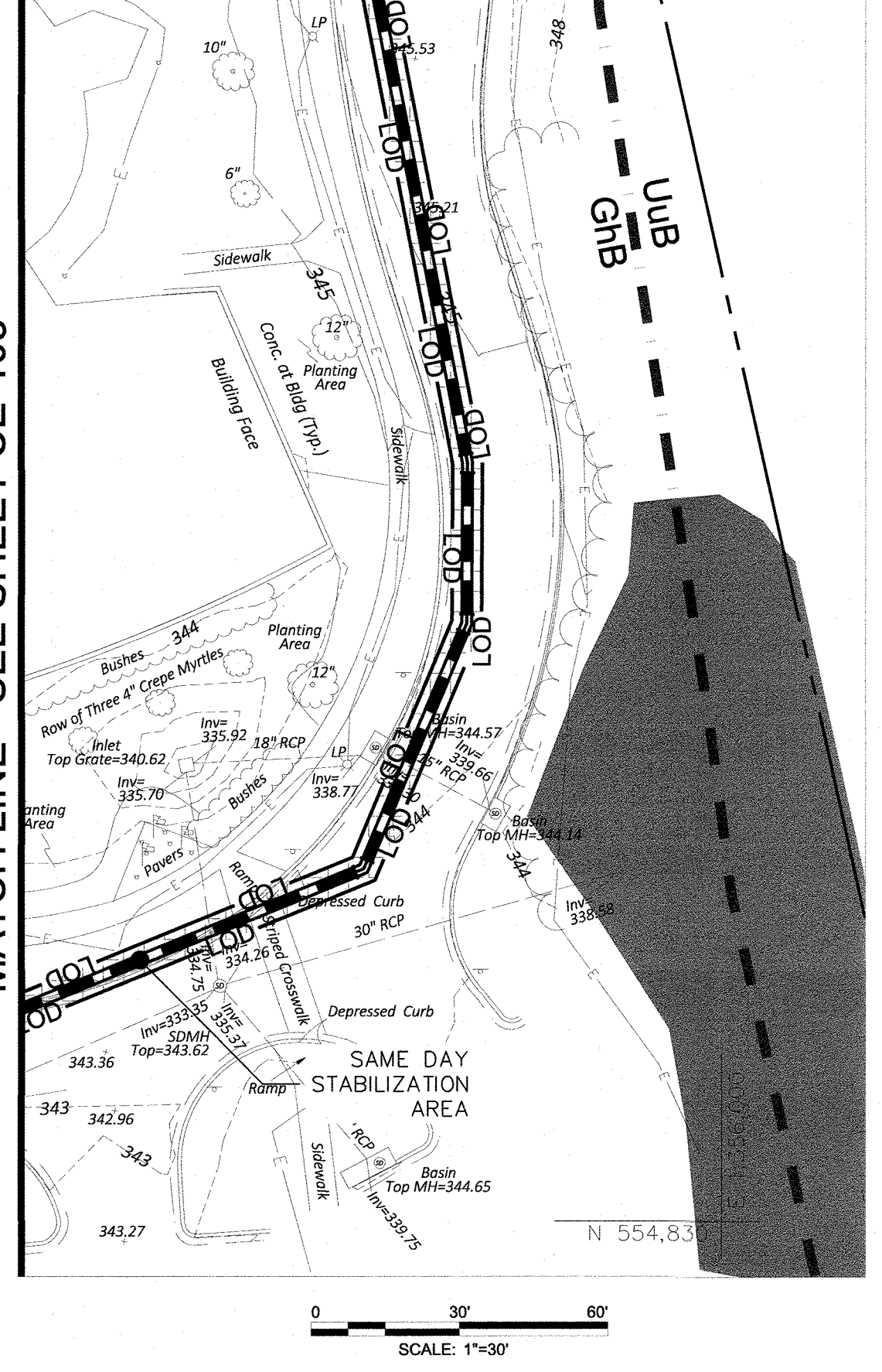
[Signature] / 5/6/21

HOWARD SOIL CONSERVATION DISTRICT \_\_\_\_\_ DATE \_\_\_\_\_

**MAPPED SOIL TYPES**

SYMBOL	NAME/DESCRIPTION	GROUP	'K' FACTOR
GhB	Glenn-Urban land Complex	B	0.43
UuB	Urban Land-Urban Complex	D	-

SOILS INFORMATION TAKEN FROM USDA NRCS FOR HOWARD COUNTY



SCALE: 1"=30'

**APPROVED: DEPARTMENT OF PLANNING AND ZONING**

[Signature] / 5/17/21  
CHIEF, DEVELOPMENT ENGINEERING DIVISION \_\_\_\_\_ DATE \_\_\_\_\_

[Signature] / 6/16/21  
CHIEF, DIVISION OF LAND DEVELOPMENT \_\_\_\_\_ DATE \_\_\_\_\_

[Signature] / 4/21/21  
DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

**APPROVED**  
**PLANNING BOARD OF HOWARD COUNTY**

DATE April 1, 2021

HOWARD COUNTY DEPT. OF PUBLIC WORKS  
BUREAU OF FACILITIES, DESIGN & CONSTRUCTION DIVISION  
9200 BERGER ROAD  
COLUMBIA, MD 21046

ATTN: MRS. SHARON R. WALSH,  
CHIEF DIVISION  
TEL: 410-313-5386 / MOBILE: 301-717-8417

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WASHINGTON, DC 20016



SEAL  
PROFESSIONAL CERTIFICATION  
I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NUMBER 37683. EXPIRATION DATE 07/15/2021

**REVISION BLOCK**

MARK	DATE	DESCRIPTION

PERMIT SUBMISSION  
01/25/2021

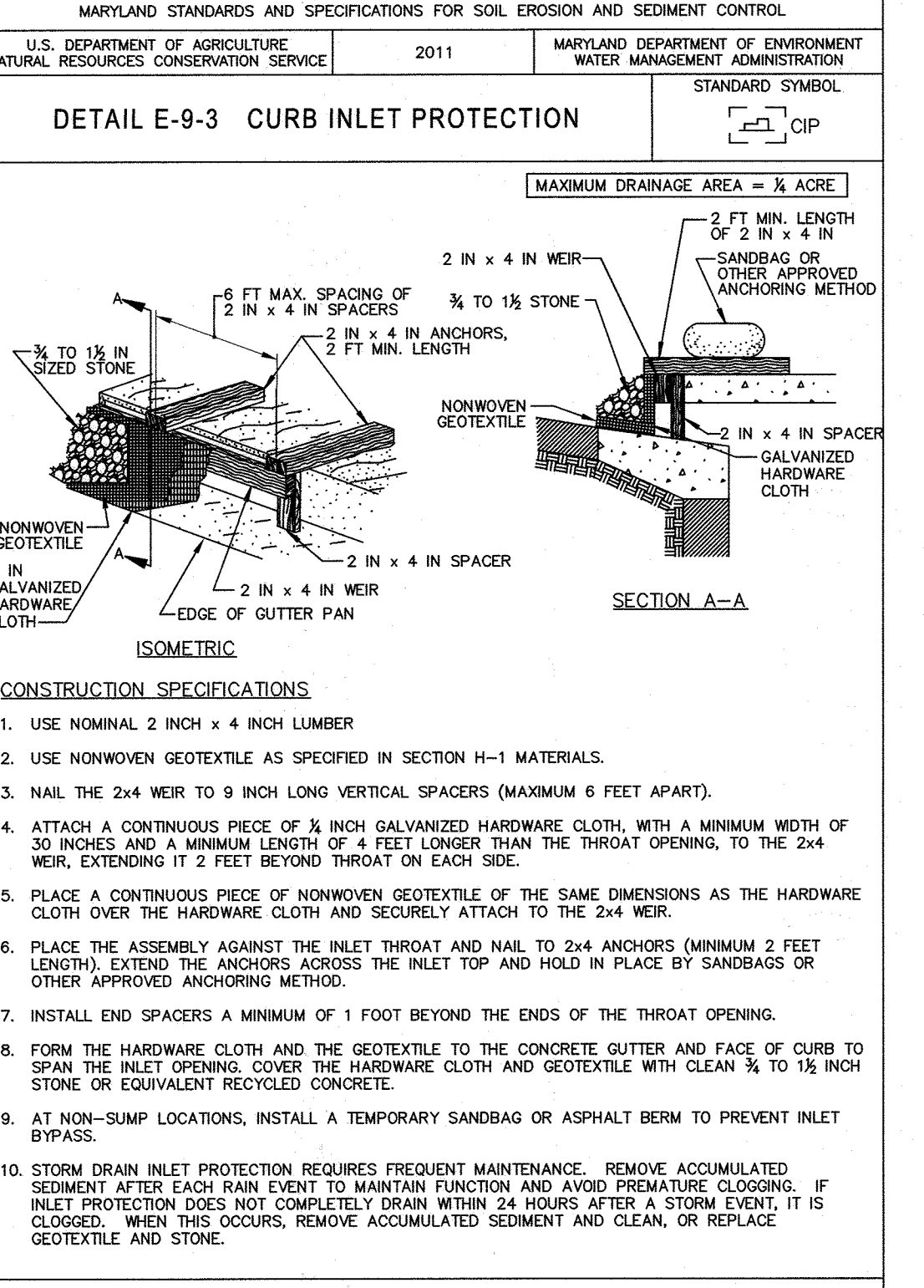
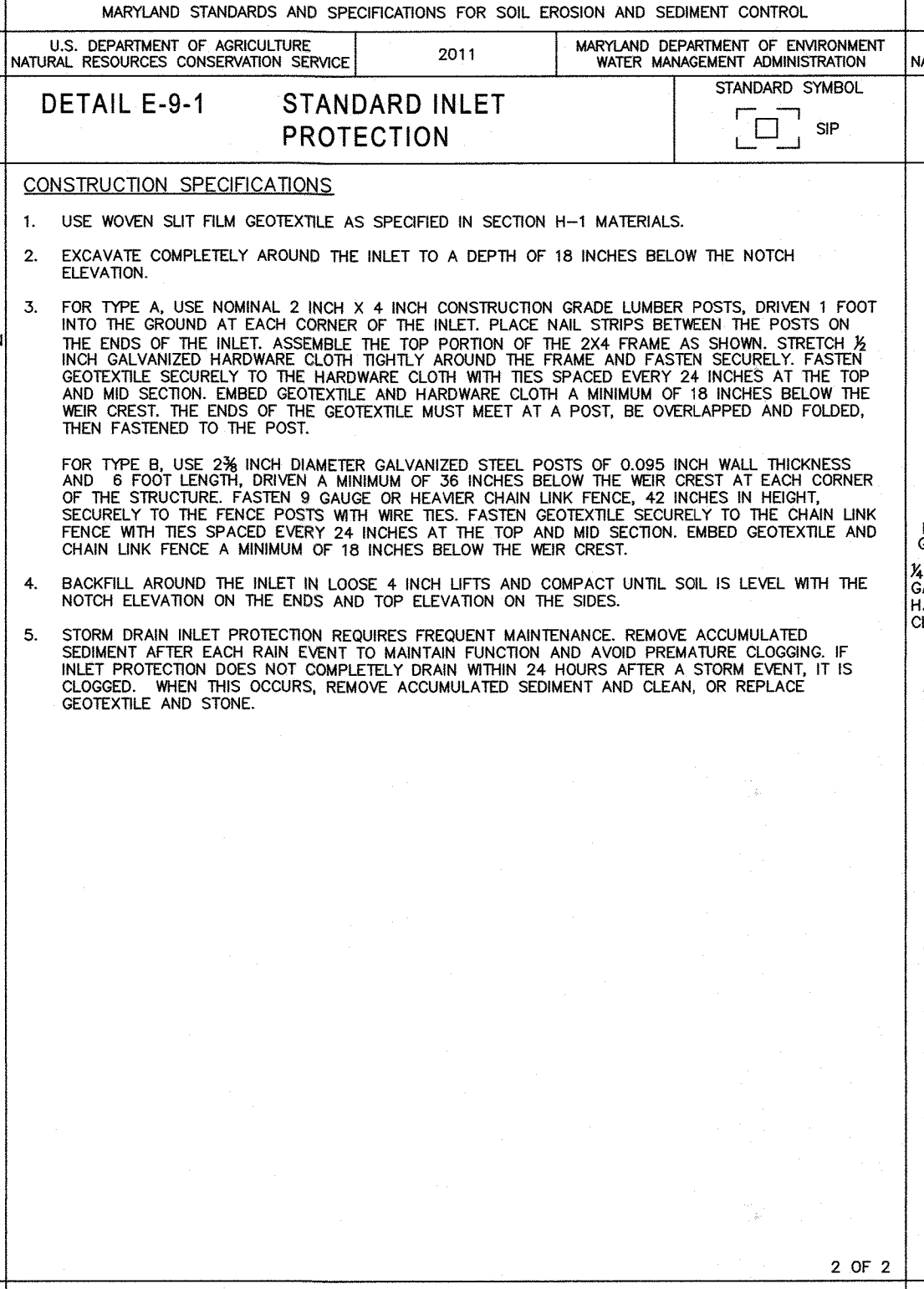
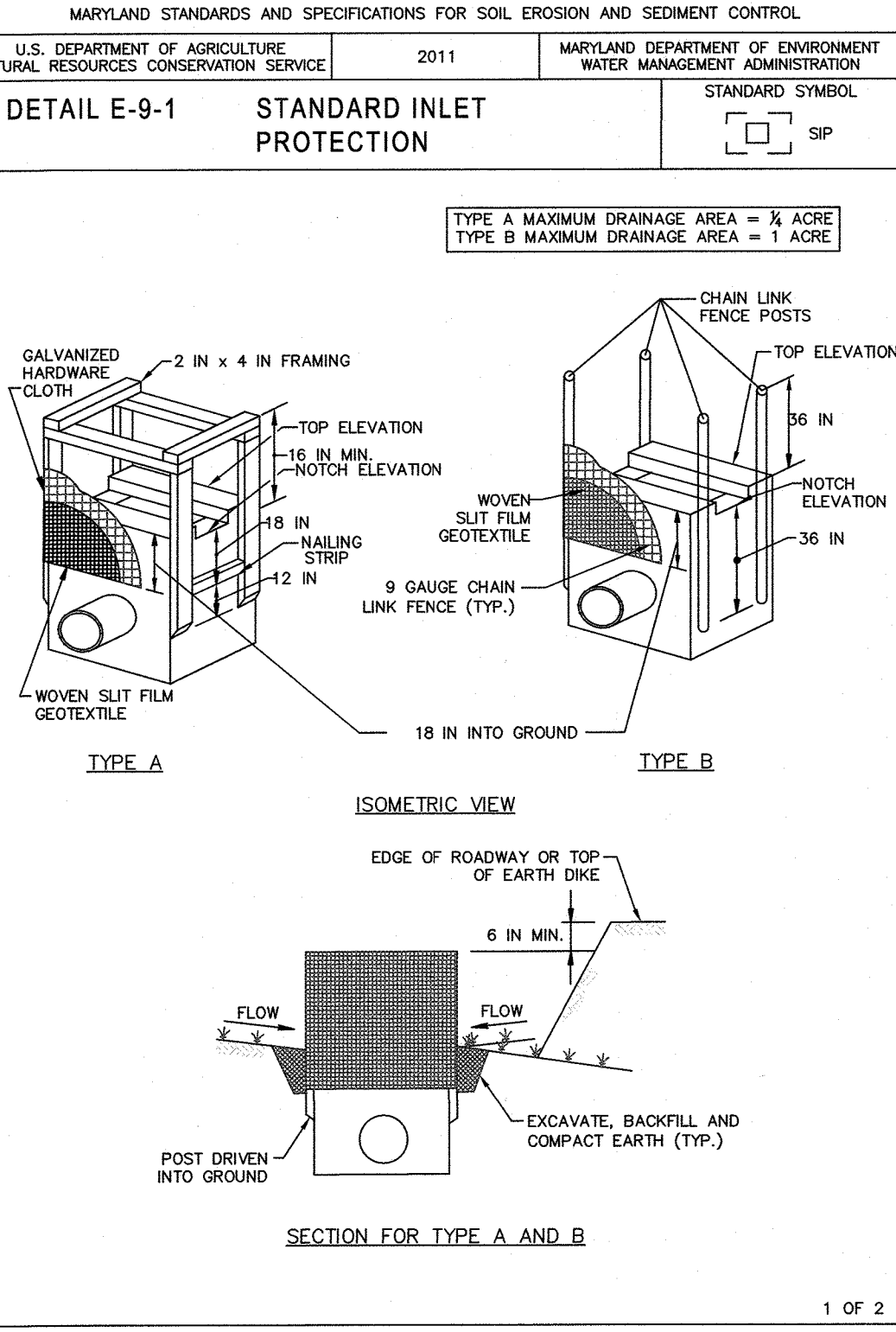
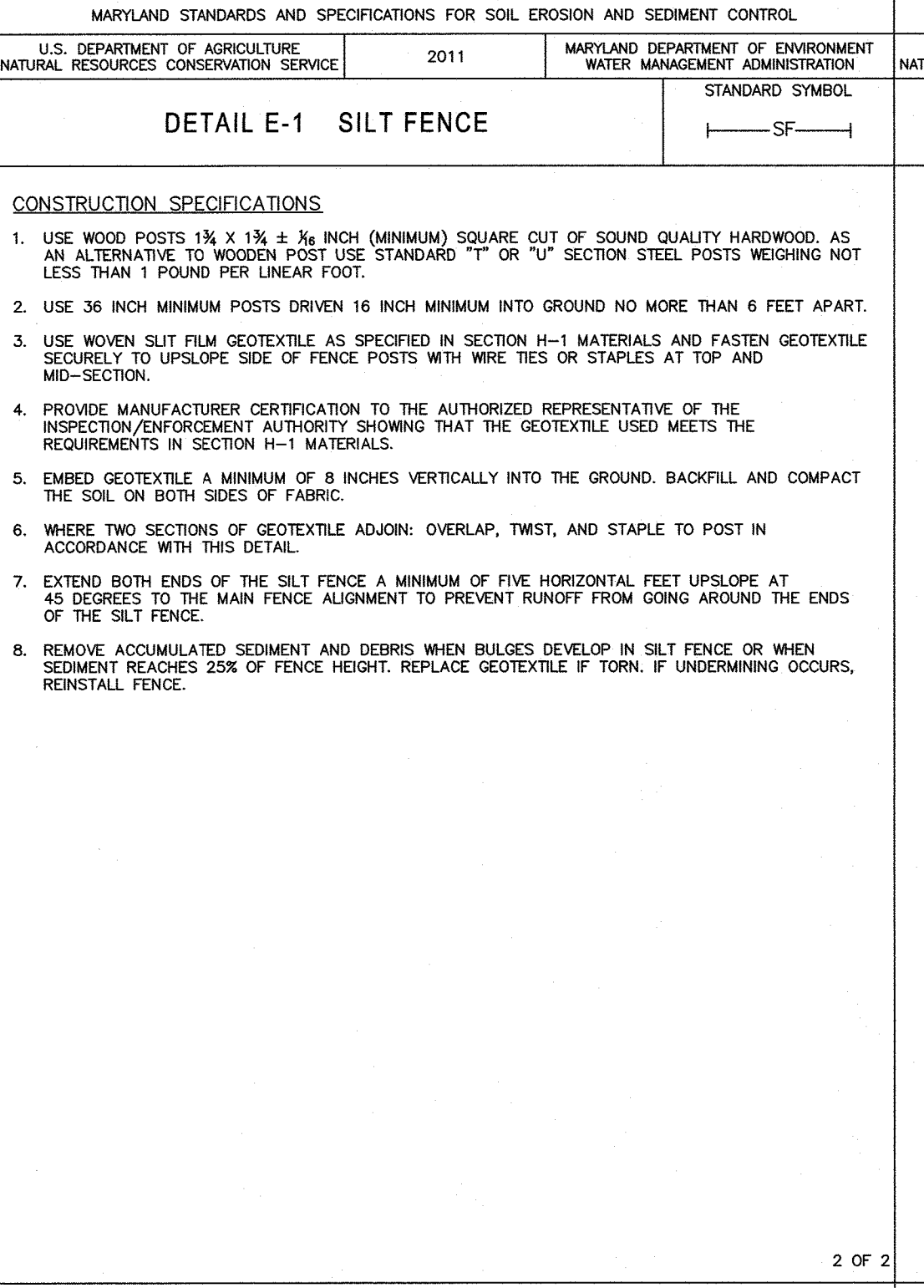
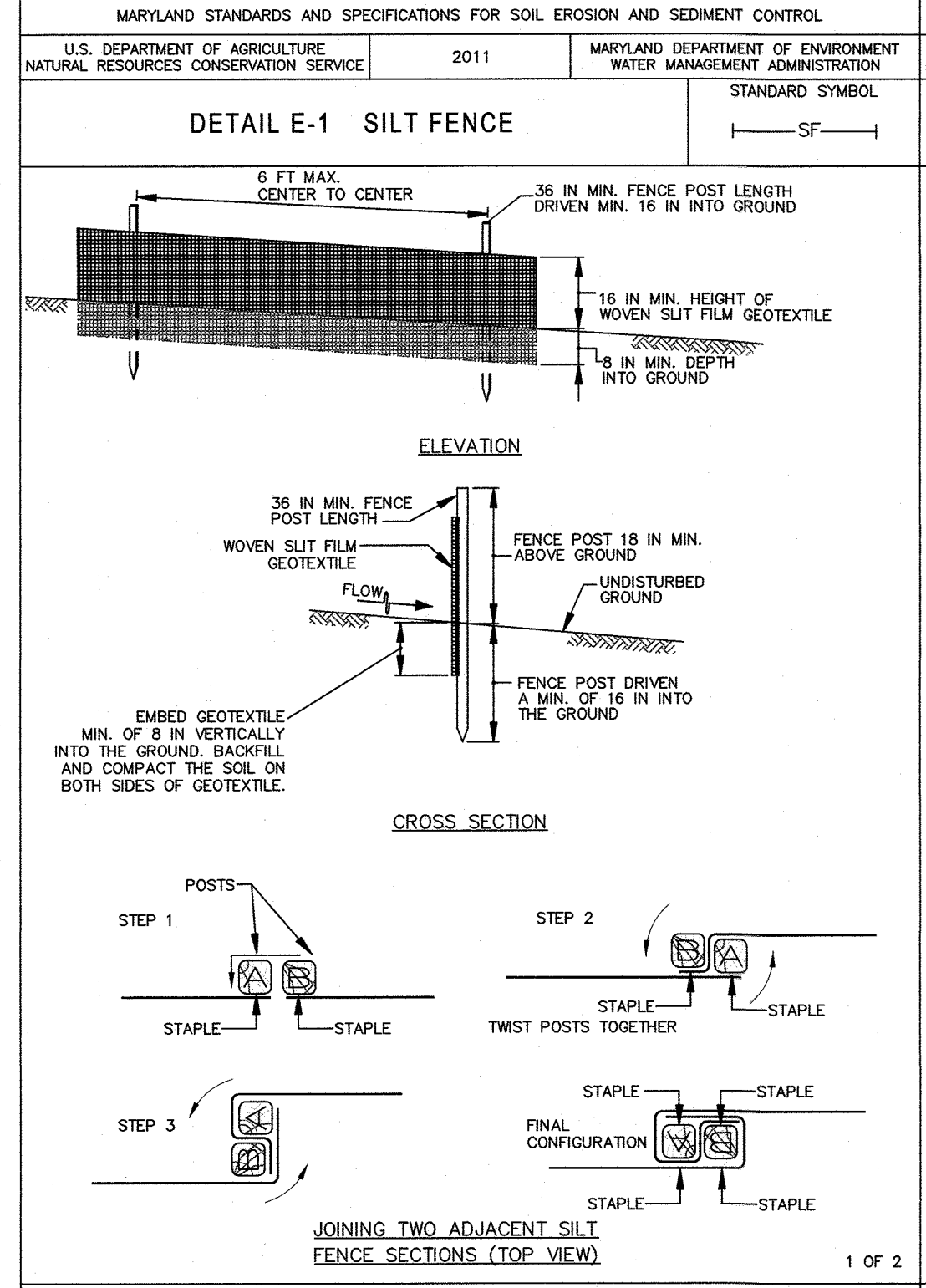
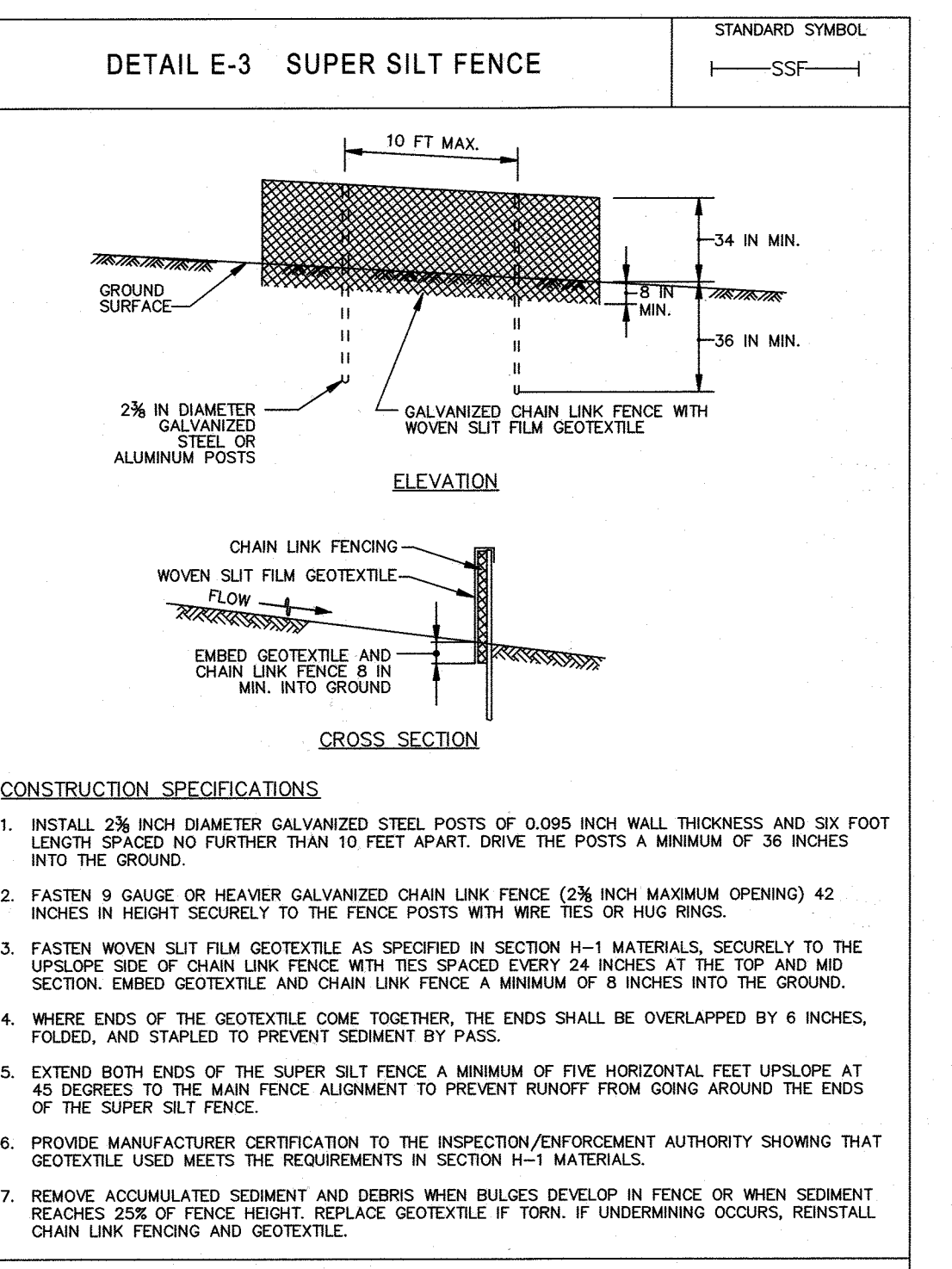
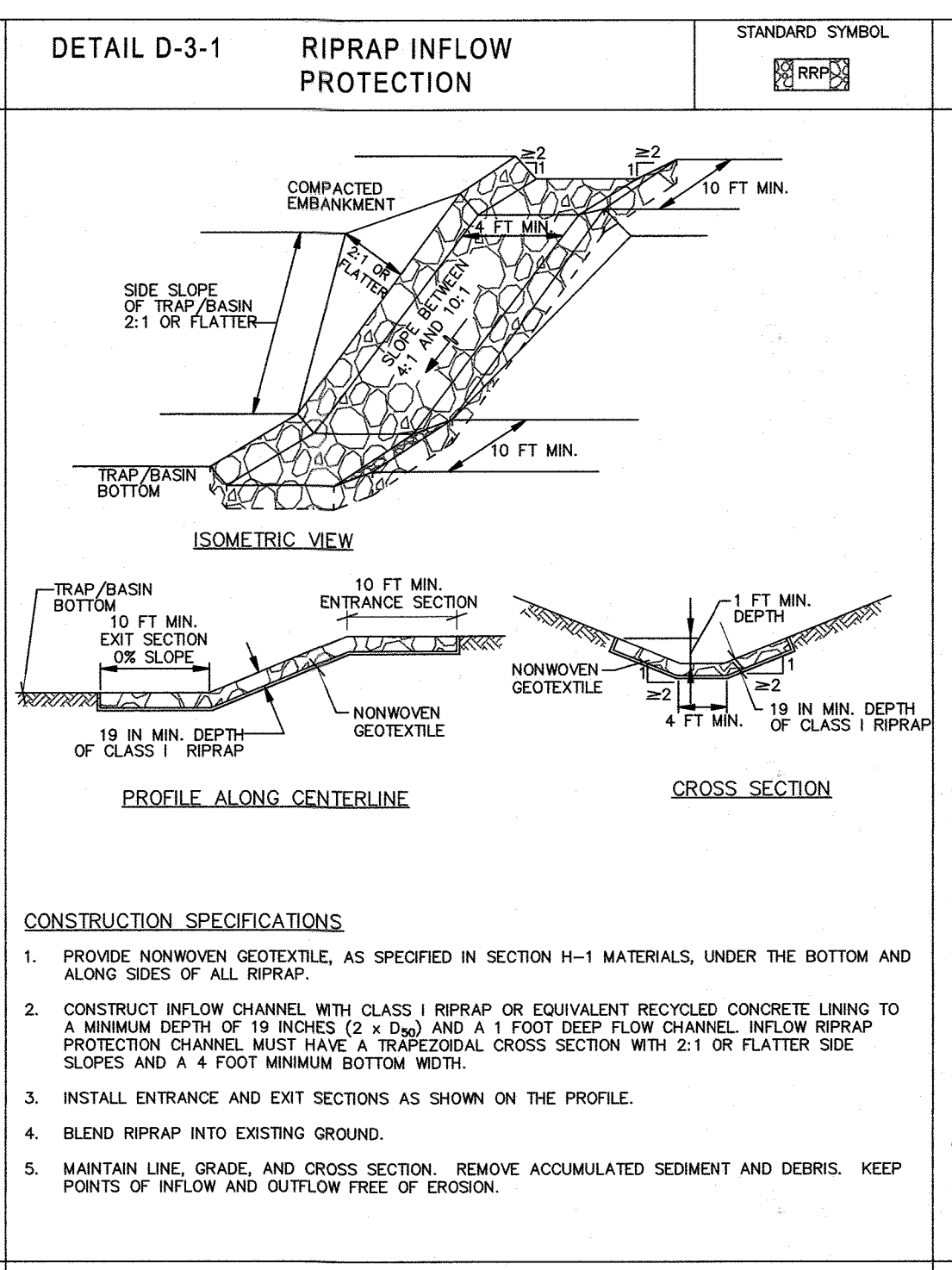
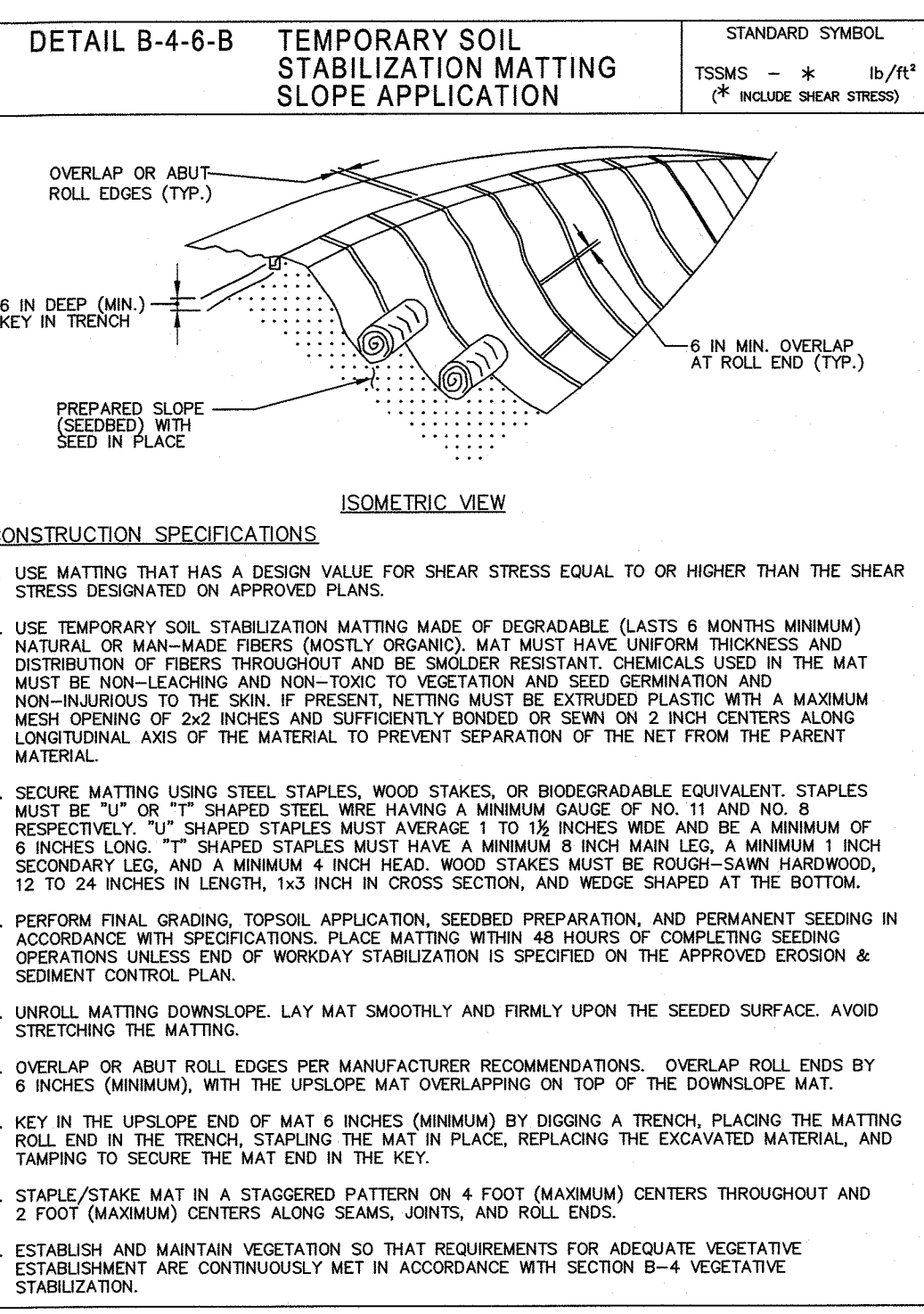
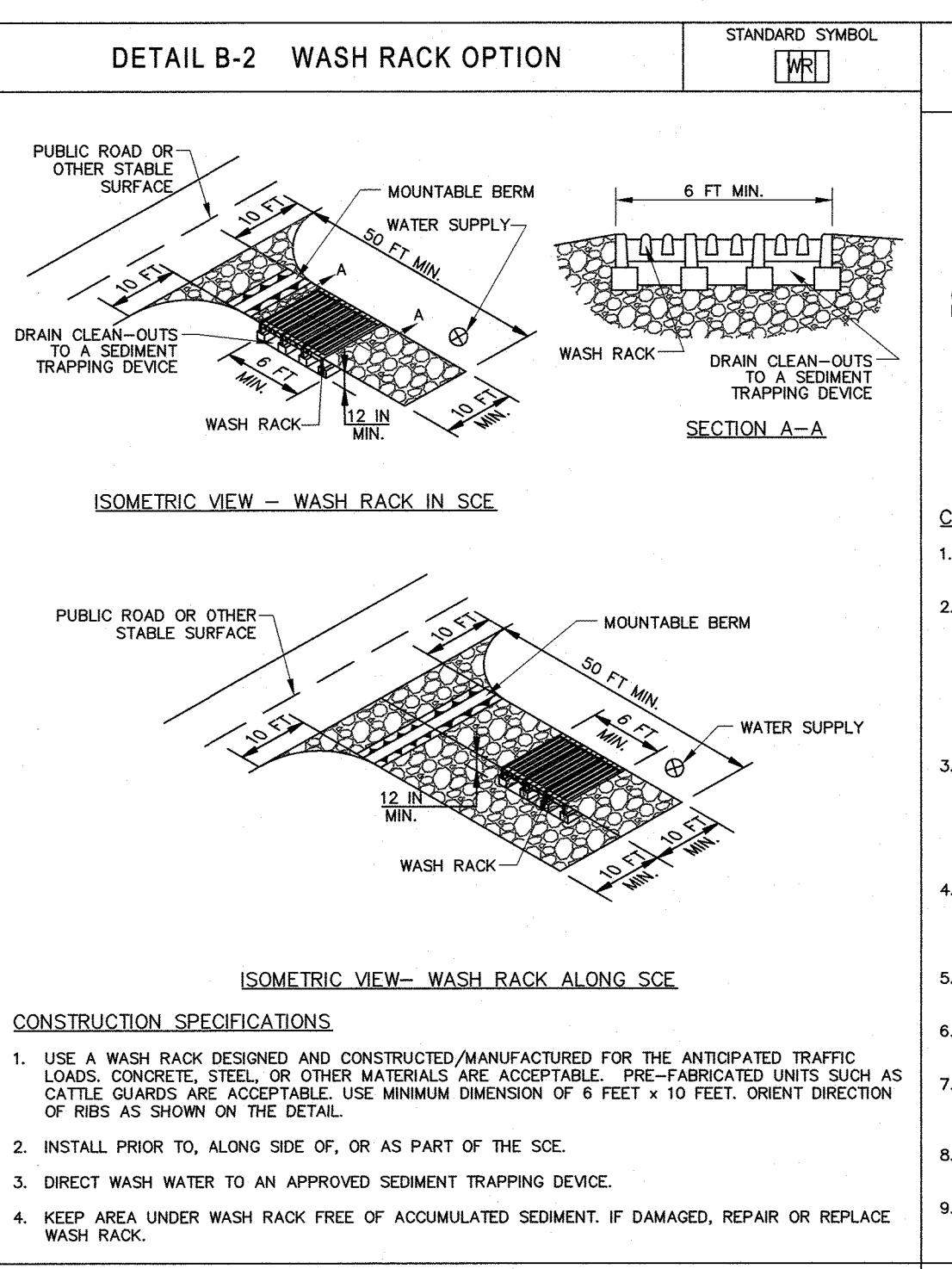
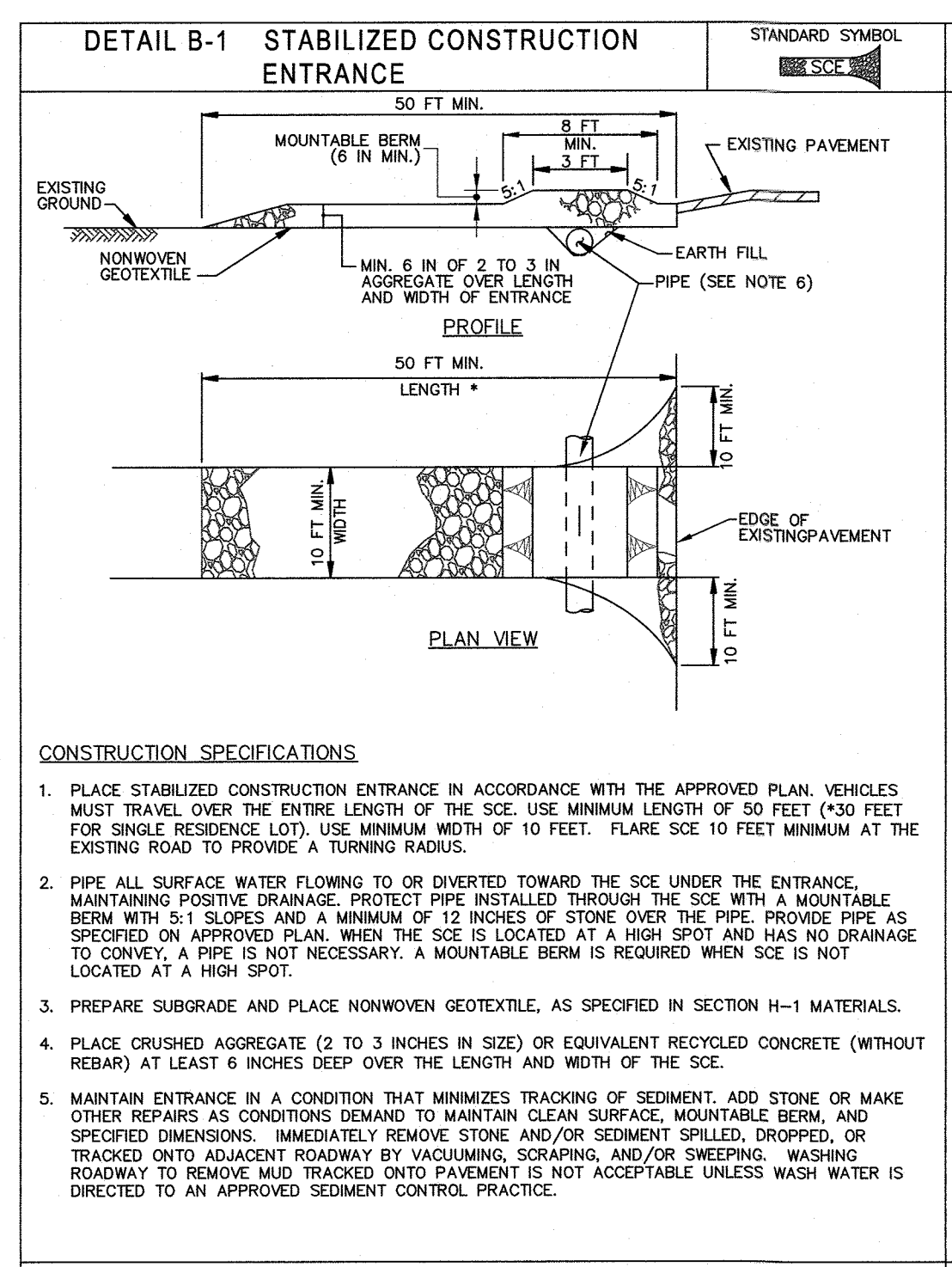
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TAX MAP: 36 / GRID: 21 / PARCEL: 275  
LOT: A1 & B1  
ZONING: NEW TOWN (NT)  
ELECTION DISTRICT: 6  
GREEN BUILDING

**EROSION AND SEDIMENT CONTROL**

**CE-102**

SHEET 17 OF 27





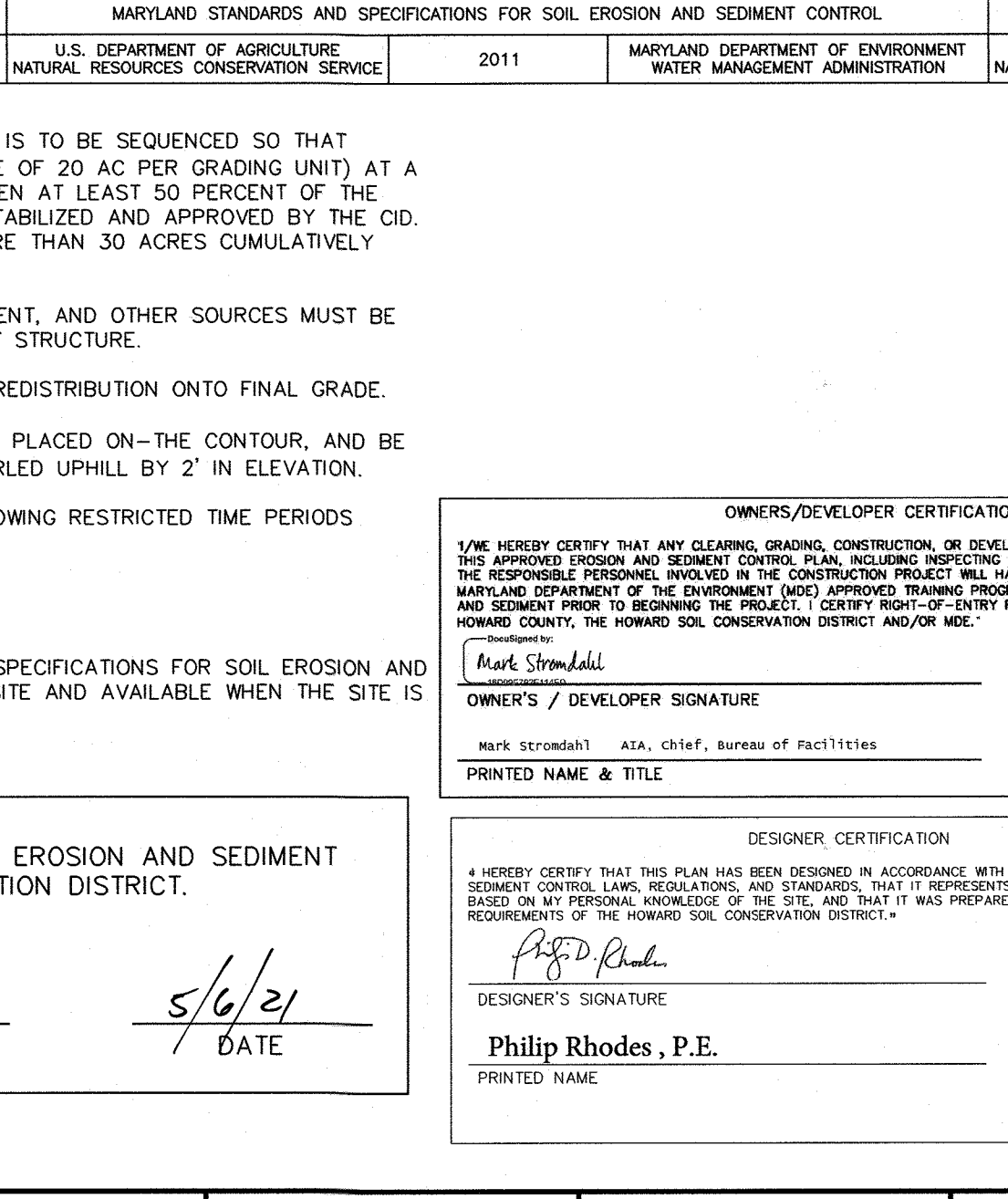
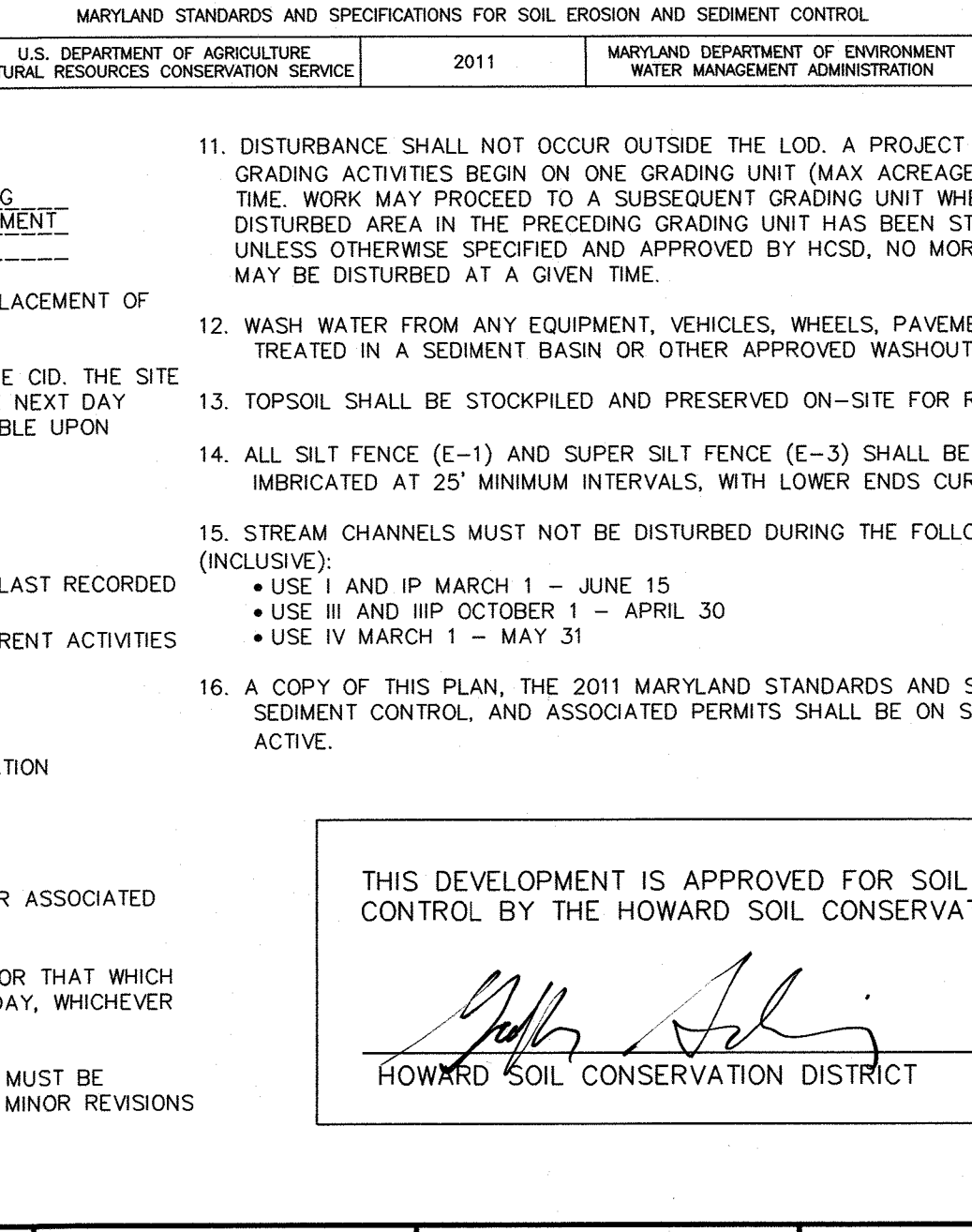
**STANDARD SC NOTES:**

- A PRE-CONSTRUCTION MEETING MUST OCCUR WITH HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS, CONSTRUCTION INSPECTION DIVISION (CID), 410-313-1855 AFTER THE FUTURE LOD AND PROTECTED AREAS ARE MARKED CLEARLY IN THE FIELD. A MINIMUM OF 48 HOUR NOTICE TO CID MUST BE GIVEN A THE FOLLOWING DATES:
  - A- PRIOR TO THE START OF EARTH DISTURBANCE.
  - B- UPON COMPLETION OF THE INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING.
  - C- PRIOR TO THE REMOVAL OR MODIFICATION OF SEDIMENT CONTROL PRACTICES.
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN ARE TO BE IN CONFORMANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION IS REQUIRED WITHIN THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO VERTICAL (3:1) AND SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED AREAS ON THE PROJECT SITE EXCEPT FOR THOSE AREAS UNDER ACTIVE GRADING.
- 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 TOPSOIL (SEC. B-4-2), PERMANENT SEEDING (SEC. B-4-5) TEMPORARY SEEDING (SEC. B-4-4) AND MULCHING (SEC. B-4-3) TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE APPLIED BETWEEN FALL AND SPRING SEEDING DATES IF THE GROUND IS FROZEN. INCREMENTAL STABILIZATION (SEC. B-4-1) SPECIFICATIONS SHALL BE ENFORCED IN AREAS WITH 15' OF CUT AND/OR FILL. STOCKPILES (SEC. B-4-8) IN EXCESS OF 20 FT MUST BE BENCHED WITH STABLE OUTLET, ALL CONCENTRATED FLOW, STEEP SLOPE, AND HIGHLY ERODIBLE AREAS SHALL RECEIVE SOIL STABILIZATION MATTING (SEC. B-4-6).
- 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 CID.
- SITE ANALYSIS:
 

TOTAL AREA OF SITE:	24.46	ACRES
AREA DISTURBED:	1.89	ACRES
AREA TO BE ROOFED OR PAVED:	1.11	ACRES

AREA TO BE VEGETATIVELY STABILIZED	0.78	ACRES
TOTAL CUT:	7,000	CU.YDS
TOTAL FILL:	2,000	CU.YDS
OFFSITE WASTE/BORROW AREA LOCATION	A SITE WITH AN ACTIVE GRADING PERMIT APPROVED BY THE SEDIMENT CONTROL INSPECTOR	

- ANY SEDIMENT CONTROL PRACTICE WHICH 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 CID, THE SITE AND ALL CONTROLS SHALL BE INSPECTED BY THE CONTRACTOR WEEKLY, AND THE NEXT DAY AFTER EACH RAIN EVENT. A WRITTEN REPORT BY THE CONTRACTOR, MADE AVAILABLE UPON REQUEST, IS PART OF EVERY INSPECTION AND SHOULD INCLUDE:
  - INSPECTION DATE
  - INSPECTION TYPE (ROUTINE, PRE STORM, DURING RAIN EVENT)
  - NAME AND TITLE OF INSPECTOR
  - WEATHER INFORMATION (CURRENT CONDITIONS AS WELL AS TIME AND AMOUNT OF LAST RECORDED PRECIPITATION)
  - BRIEF DESCRIPTION OF PROJECT'S STATUS (EG. PERCENT COMPLETE) AND/OR CURRENT ACTIVITIES
  - EVIDENCE OF SEDIMENT DISCHARGES
  - IDENTIFICATION OF PLAN DEFICIENCIES
  - IDENTIFICATION OF SEDIMENT CONTROLS THAT REQUIRE MAINTENANCE
  - IDENTIFICATION OF MISSING OR IMPROPERLY INSTALLED SEDIMENT CONTROLS
  - COMPLIANCE STATUS REGARDING THE SEQUENCE OF CONSTRUCTION AND STABILIZATION REQUIREMENTS
  - PHOTOGRAPHS
  - MONITORING/SAMPLING
  - MAINTENANCE AND/OR CORRECTIVE ACTION PERFORMED
  - OTHER INSPECTION ITEMS AS REQUIRED BY THE GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES (NPDES, UDES)
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN AND SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, WHICHEVER IS SHORTER.
- ANY MAJOR CHANGES OR REVISIONS TO THE PLAN OR SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE HSCD PRIOR TO PROCEEDING WITH CONSTRUCTION. MINOR REVISIONS MAY ALLOWED BY CID PER THE LIST OF HSCD-APPROVED FIELD CHANGES.



**REVISION BLOCK**

MARK	DATE	DESCRIPTION

**APPROVED**  
PLANNING BOARD OF HOWARD COUNTY

DATE: April 1, 2021

**OWNERS/DEVELOPER CERTIFICATION**  
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Mark Stronk  
OWNER'S / DEVELOPER SIGNATURE  
4/16/2021  
DATE

**DESIGNER 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.

Philip Rhodes, P.E.  
DESIGNER'S SIGNATURE  
4/16/2021  
DATE

37683  
MD REGISTRATION NO.  
P.E. / R.L.S. / R.L.A.  
(CIRCLE ONE)

**APPROVED: DEPARTMENT OF PLANNING AND ZONING**  
DATE: 5/17/21  
DATE

John P. Rhodes 5/17/21  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

John P. Rhodes 5/17/21  
DIRECTOR

HOWARD COUNTY DEPT. OF PUBLIC WORKS  
BUREAU OF FACILITIES DESIGN & CONSTRUCTION DIVISION

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ATTN: MRS. SHARON R. WALSH,  
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TEL: 410-313-5386 / MOBILE: 301-717-8417

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SCHNABEL ENGINEERING DC, INC  
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MARK	DATE	DESCRIPTION

**PERMIT SUBMISSION**  
01/25/2021

PROJECT NAME:  
**EAST COLUMBIA 50+ CENTER**  
ADDRESS: 8610 CRADLEROCK WAY  
COLUMBIA, MD 21045  
TAX MAP: 36 / GRID: 21 / PARCEL: 275  
LOT: A1 & B1  
ZONING: NEW TOWN (NT)  
ELECTION DISTRICT: 6  
GREEN BUILDING

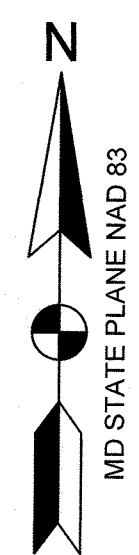
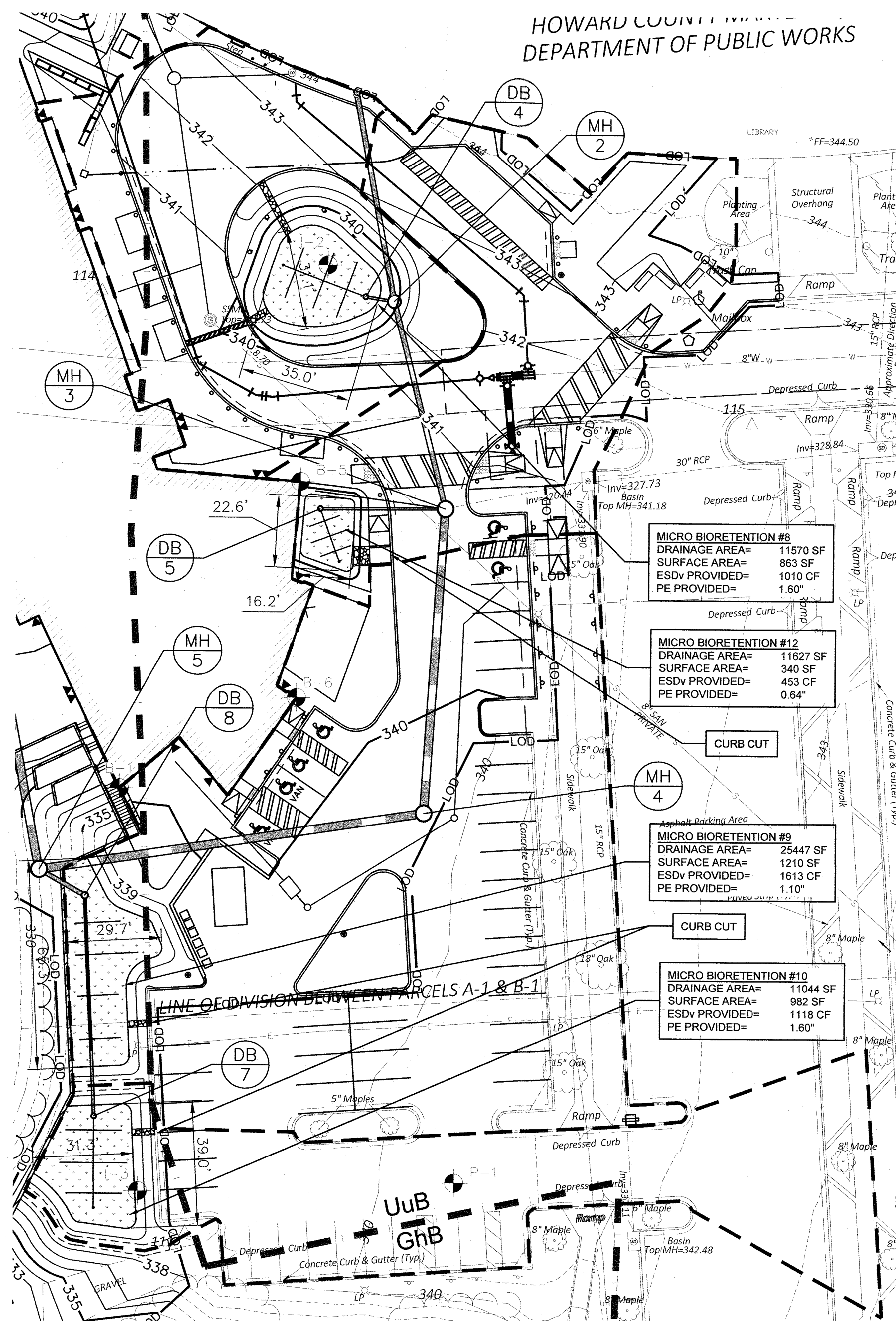
**EROSION AND SEDIMENT CONTROL DETAILS & NOTES**

**CE-501**  
SHEET 18 OF 27  
SDP-20-059









**LEGEND**

- LOD — LIMIT OF DISTURBANCE
- [Hatched Box] NEW BUILDING
- [Dotted Box] NEW STORMWATER FACILITY
- NEW STORM PIPE
- S — NEW SANITARY LINE
- W — NEW WATER LINE
- - - DRAINAGE DIVIDE
- - - 390 EXISTING CONTOUR
- - - 400 NEW CONTOUR
- UuB SOIL BOUNDARY
- GhB SOIL BOUNDARY
- B-1 BORING/INFILTRATION TEST LOCATION

**STORMWATER SUMMARY:**

WE ARE PROVIDING A TOTAL OF 4 MICRO BIORETENTION FACILITIES. EACH FACILITY WILL HAVE AN OVERFLOW NYLOPLAST STRUCTURE WITH A PERFORATED PIPE AND 6-INCH CLEAN OUT.

WAIVER REQUEST: NO

- MB-8 ESDv= 1010 CF, Rev= 253 CF, 12 INCH PONDING
- MB-9 ESDv= 1613 CF, Rev= 403 CF, 12 INCH PONDING
- MB-10 ESDv= 1118 CF, Rev= 279 CF, 12 INCH PONDING
- MB-12 ESDv= 453 CF, Rev= 113 CF, 12 INCH PONDING

ESDv REQUIRED = 4,074 CF  
ESDv PROVIDED = 4,195 CF

REQUIRED Rev = 193 CF  
PROVIDED Rev = 1,049 CF

**NOTE :**

1. THERE ARE NO FLOODPLAINS OR EXISTING WETLANDS WITHIN THE PROJECT AREA.
2. THE STORM DRAIN SYSTEM CONNECTS AND OUTFALLS TO ONE LOCATION AT THE EXISTING POND IN ORDER TO MIMIC EXISTING CONDITIONS.

**MAPPED SOIL TYPES**

SYMBOL	NAME/DESCRIPTION	GROUP	'K' FACTOR
GhB	Glenn-Urban land Complex	B	0.43
UuB	Urban Land-Udorthents Complex	D	-

SOILS INFORMATION TAKEN FROM USDA NRCS FOR HOWARD COUNTY

HOWARD COUNTY DEPT. OF PUBLIC WORKS  
BUREAU OF FACILITIES, DESIGN & CONSTRUCTION DIVISION  
9200 BERGER ROAD  
COLUMBIA, MD 21046  
ATTN: MRS. SHARON R. WALSH,  
CHIEF DIVISION  
TEL: 410-313-5386 / MOBILE: 301-717-8417

**ARCHITECTS**  
QUINN EVANS ARCHITECTS  
100 N. CHARLES STREET  
14TH FLOOR  
BALTIMORE, MD 21201  
410 - 576 - 0440

**STRUCTURAL ENGINEER**  
CARROLL ENGINEERING, INC.  
215 SCHILLING CIRCLE, SUITE 102  
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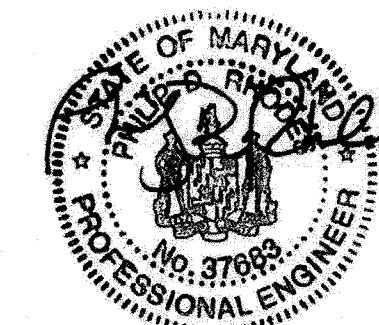
**CIVIL ENGINEER**  
A. MORTON THOMAS & ASSOCIATES, INC.  
800 KING FARM BOULEVARD, 4TH FLOOR,  
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**LANDSCAPE ARCHITECT**  
SITE RESOURCES, INC.  
14315 JARRETTSVILLE PIKE, PO BOX 249  
PHOENIX, MD 21131-0249

**AV ENGINEER**  
CONVERGENT TECHNOLOGIES DESIGN GROUP  
6501 YPRK ROAD, BALTIMORE, MD 21212

**KITCHEN CONSULTANT**  
NYIKOS ASSOCIATES INC  
18219 A FLOWER HILL WAY  
GAITHERSBURG, MD 20879

**GEOTECHNICAL ENGINEERING**  
SCHNABEL ENGINEERING DC, INC  
4200 WASHINGTON AVE, NW, SUITE LL9  
WASHINGTON, DC 20016



SEAL  
PROFESSIONAL CERTIFICATION:  
I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DAILY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NUMBER 37083. EXPIRATION DATE 07/13/2021

**REVISION BLOCK**

MARK	DATE	DESCRIPTION

PERMIT SUBMISSION  
01/25/2021

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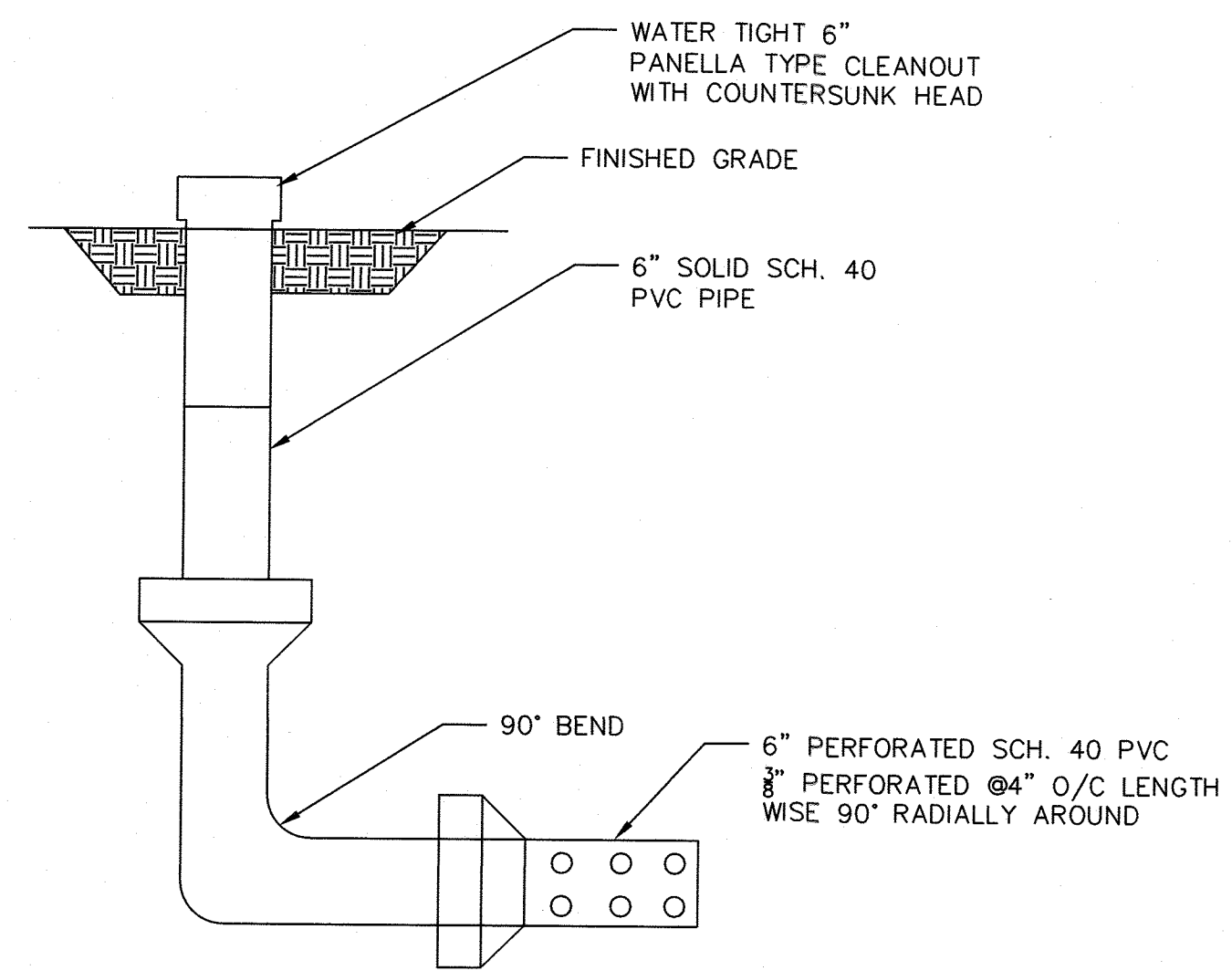
APPROVED  
PLANNING BOARD OF HOWARD COUNTY  
DATE April 1, 2021

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 6.4.21  
CHIEF, DEVELOPMENT ENGINEERING DIVISION #517 DATE  
*[Signature]* 6/16/21  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE  
*[Signature]* 6/21/21  
DIRECTOR DATE

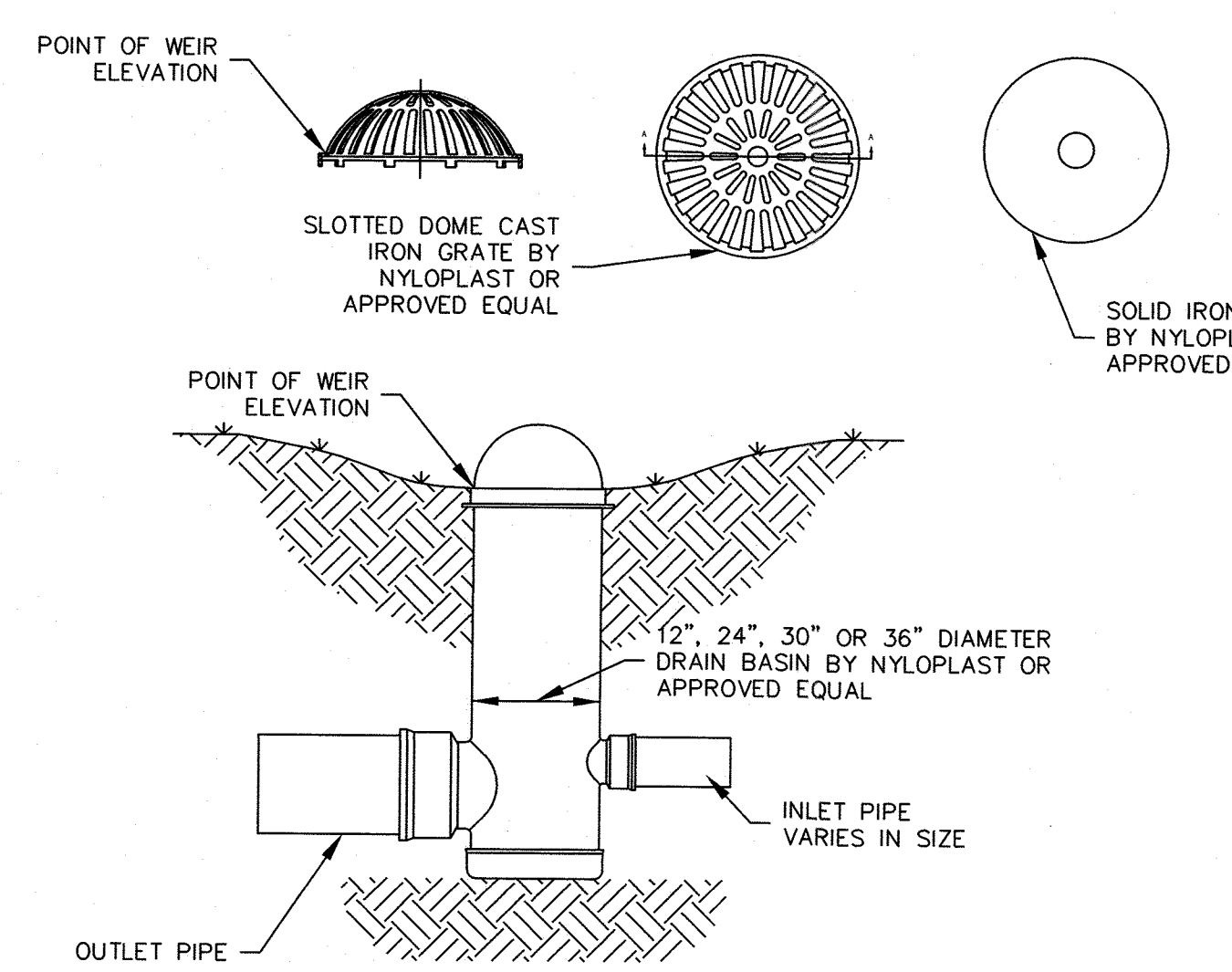
**STORMWATER MANAGEMENT PLAN**

**CW-101**



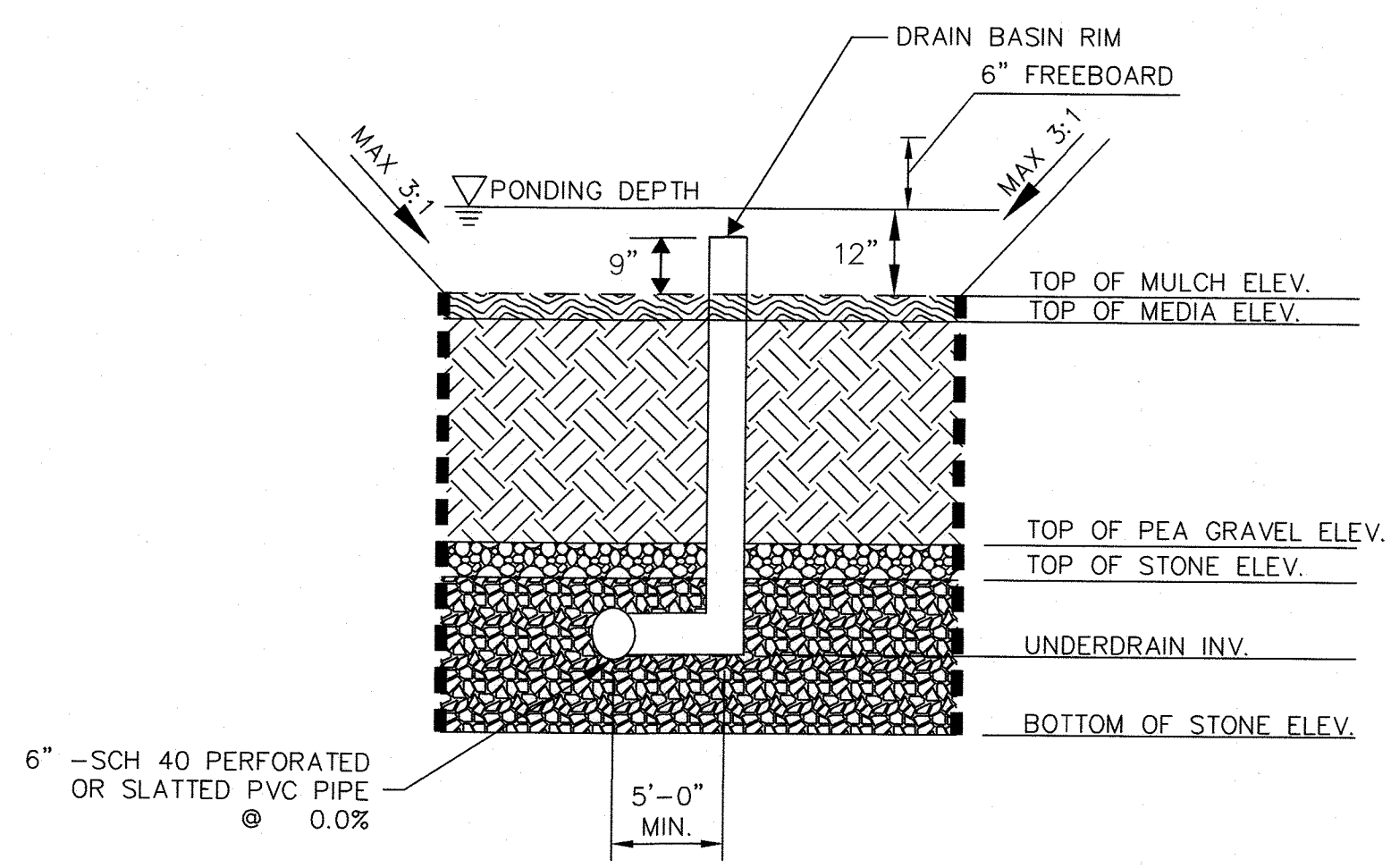


1 6" PVC CLEANOUT

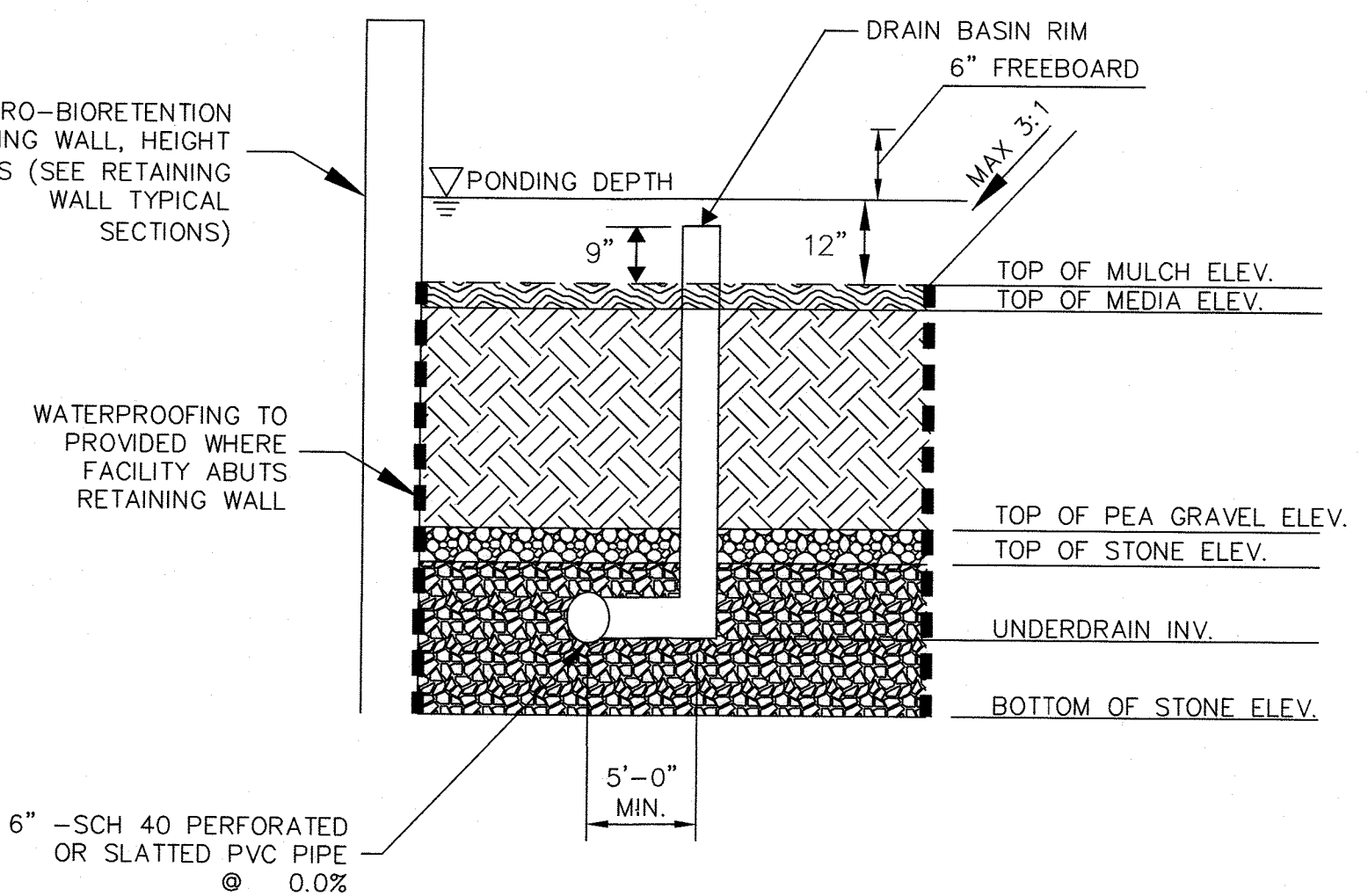


2 DRAIN BASIN

NOTES:  
 1. POUR CONCRETE CHANNEL TO FILL SUMP, USE TYPE 3, 3500 PSI CONCRETE  
 2. REFER TO STRUCTURE SCHEDULE ON CW504 FOR COVER TYPE  
 3. MANUFACTURER TO PROVIDE LOCKING DEVICES FOR LIDS



3 MICRO-BIORETENTION 8 & 12 - TYPICAL SECTION



4 MICRO-BIORETENTION 9 & 10 - TYPICAL SECTION

STORMWATER TABLE							
MICRO BIO NO.	TOP OF MULCH ELEV.	TOP OF MEDIA ELEV.	TOP OF PEA GRAVEL ELEV.	TOP OF STONE ELEV.	UNDERDRAIN INV.	BOTTOM OF STONE	DRAIN RIM ELEV.
8	338.25	338.00	336.00	335.67	334.92	334.08	339.00
9	337.25	337.00	335.00	334.67	333.92	333.08	338.00
10	337.25	337.00	335.00	334.67	333.92	333.08	338.00
12	339.25	339.00	337.00	336.67	335.92	335.08	340.00

**OPERATION AND MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION**

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 II, 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 APPLIED.

D. THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM

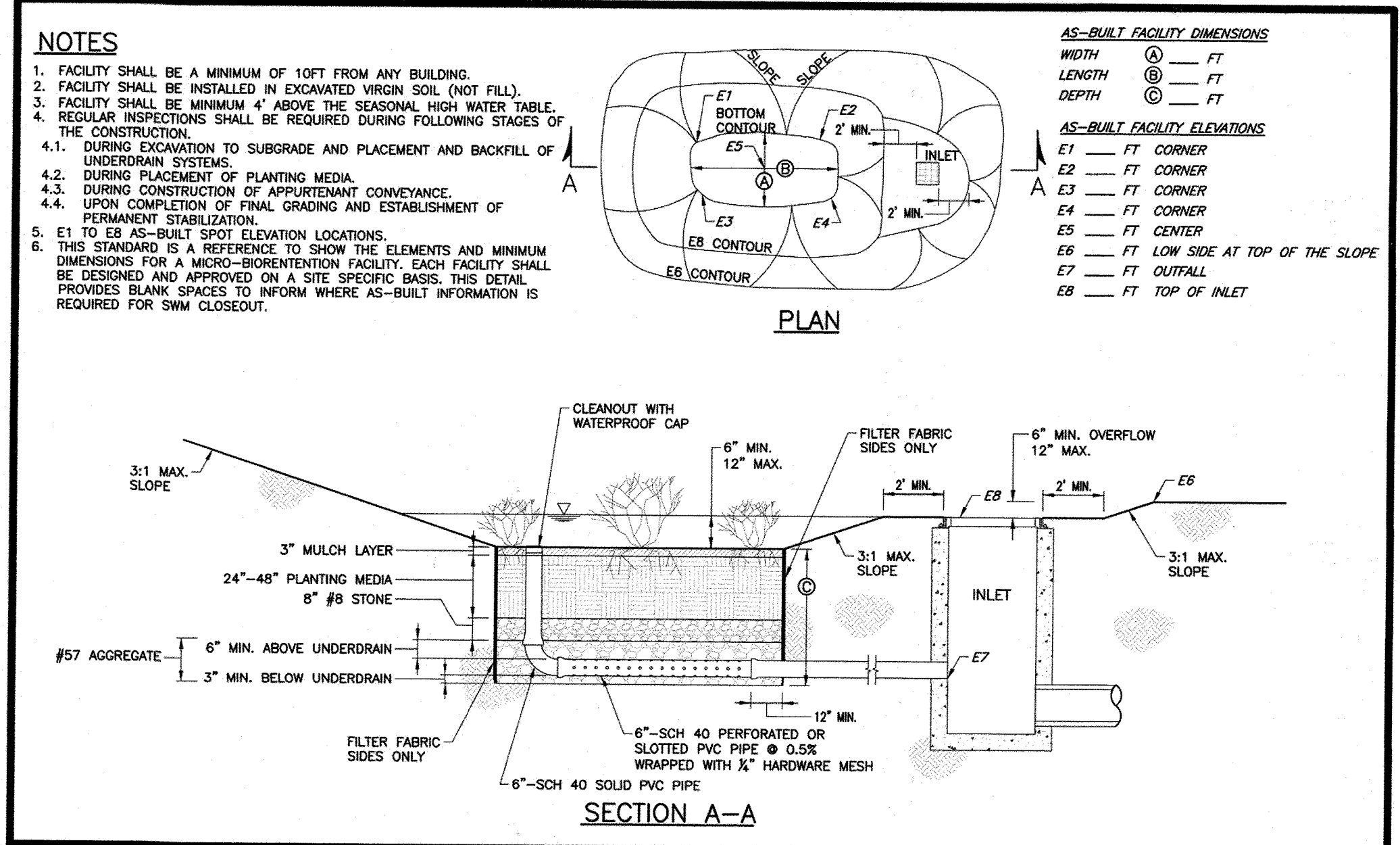
**MARYLAND MDE CONSTRUCTION NOTES:**

A. SOIL COMPACTION: SHOULD BE CONDUCTED IN DRY CONDITIONS WITH EQUIPMENT LOCATED OUTSIDE OF THE PRACTICE TO MINIMIZE BOTTOM AND SIDEWALL COMPACTION. ONLY LIGHTWEIGHT, LOW GROUND-CONTACT EQUIPMENT SHOULD BE USED WITHIN MICRO-BIORETENTION PRACTICES AND THE BOTTOM SCARIFIED BEFORE INSTALLING UNDERDRAINS AND FILTERING MEDIA.

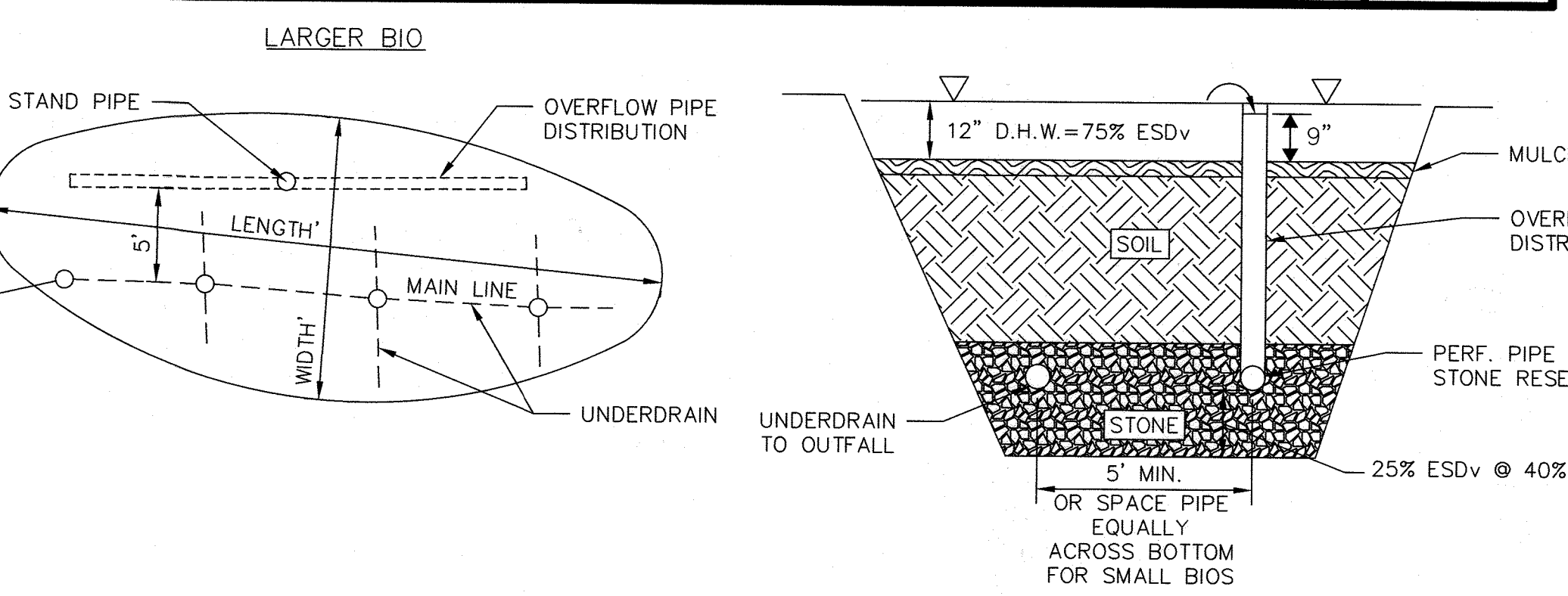
B. UNDERDRAIN INSTALLATION: GRAVEL FOR THE UNDERDRAIN SYSTEM SHOULD BE CLEAN, WASHED, AND FREE OF FINES. UNDERDRAIN PIPES SHOULD BE CHECKED TO ENSURE THAT BOTH MATERIAL AND PERFORATIONS MEET SPECIFICATIONS. THE UPSTREAM ENDS OF THE UNDERDRAIN PIPE SHOULD BE CAPPED PRIOR TO INSTALLATION.

C. FILTER MEDIA INSTALLATION: BIORETENTION SOILS MAY BE MIXED ON-SITE BEFORE PLACEMENT. HOWEVER, SOILS SHOULD NOT BE PLACED UNDER SATURATED CONDITIONS. THE FILTER MEDIA SHOULD BE PLACED AND GRADED USING EXCAVATORS OR BACKHOES OPERATING ADJACENT TO THE PRACTICE AND BE PLACED IN HORIZONTAL LAYERS (12 INCHES PER LIFT MAX). PROPER COMPACTION OF THE MEDIA WILL OCCUR NATURALLY. SPRAYING OR SPRINKLING WATER ON EACH LIFT UNTIL SATURATED MAY QUICKEN SETTLING TIMES.

D. LANDSCAPE INSTALLATION: THE OPTIMUM PLANTING TIME IS DURING FALL. SPRING PLANTING IS ALSO ACCEPTABLE BUT MAY REQUIRE WATERING.



Revised	Howard County, Maryland Department of Public Works	MICRO-BIORETENTION FACILITY Private For Reference	Detail D-9.03
Revised 5/20/2017	Approved: <i>Pratt &amp; Smith</i> Chief, Bureau of Engineering		



Appendix B.4. Construction Specifications for Environmental Site Design Practices

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 < 5%
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-43	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 1/2-inch 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/89; 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-33	0.02" to 0.04"	Sand substitutions such as Diabase and Graystone (AASHTO) #10 are not acceptable. No calcium carbonated or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand.

MICRO BIORETENTION FACILITIES TO CONFORM TO CURRENT MDE STANDARDS AND SPECIFICATIONS

APPROVED  
 PLANNING BOARD OF HOWARD COUNTY  
 DATE April 1, 2021

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Chief*  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE 6/4/21

*Chief*  
 CHIEF DIVISION OF LAND DEVELOPMENT  
 DATE 6/16/21

*Director*  
 DIRECTOR  
 DATE 6/21/21

HOWARD COUNTY DEPT. OF PUBLIC WORKS  
 BUREAU OF FACILITIES, DESIGN & CONSTRUCTION DIVISION  
 9200 BERGER ROAD  
 COLUMBIA, MD 21046  
 ATTN: MRS. SHARON R. WALSH,  
 CHIEF DIVISION  
 TEL: 410-313-5386 / MOBILE: 301-717-8417

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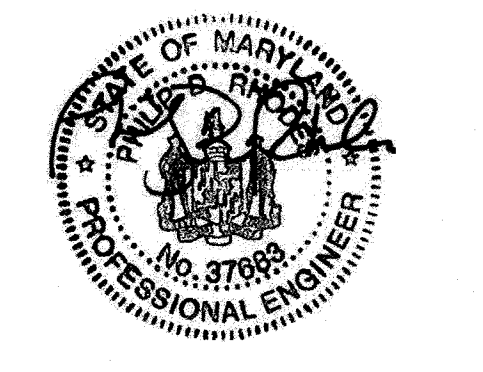
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 14315 JARRETTSVILLE PIKE, PO BOX 249  
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 GAITHERSBURG, MD 20879

**GEOTECHNICAL ENGINEERING**  
 SCHNABEL ENGINEERING DC, INC  
 4200 WASHINGTON AVE. NW, SUITE 119  
 WASHINGTON, DC 20016



SEAL  
 PROFESSIONAL CERTIFICATION  
 I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NUMBER 37685, EXPIRATION DATE 07/13/2021

REVISION BLOCK		
MARK	DATE	DESCRIPTION

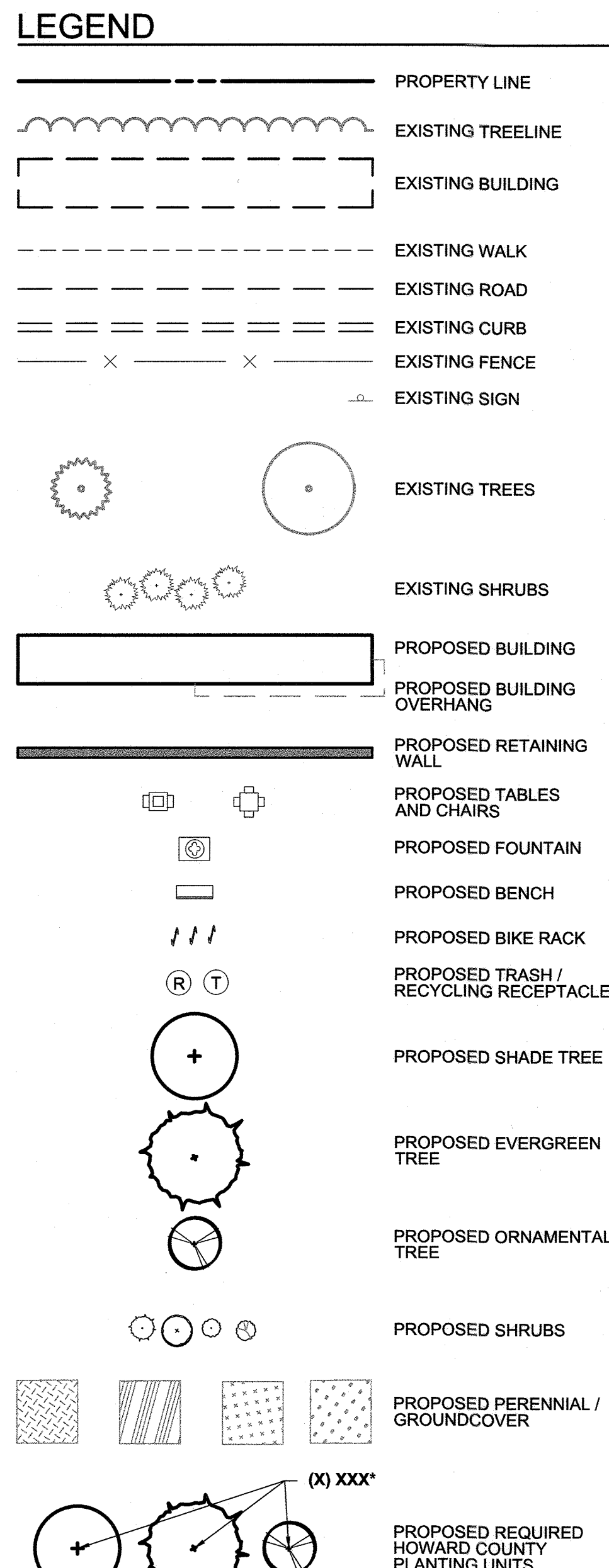
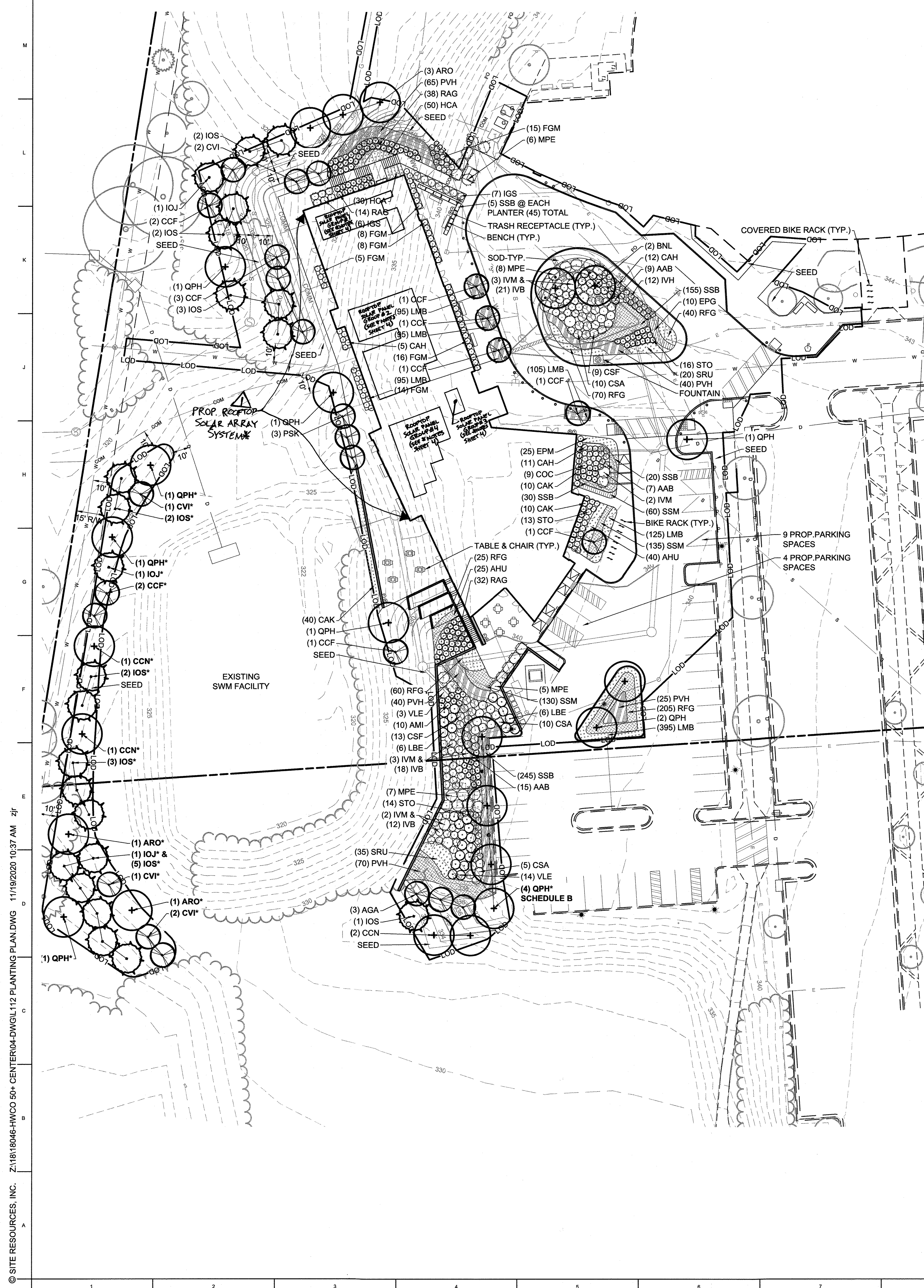
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 TAX MAP: 36 / GRID: 21 / PARCEL: 275  
 LOT: A1 & B1  
 ZONING: NEW TOWN (NT)  
 ELECTION DISTRICT: 6  
 GREEN BUILDING

**STORMWATER DETAILS AND NOTES**

**CW-501**  
 SHEET 21 OF 27



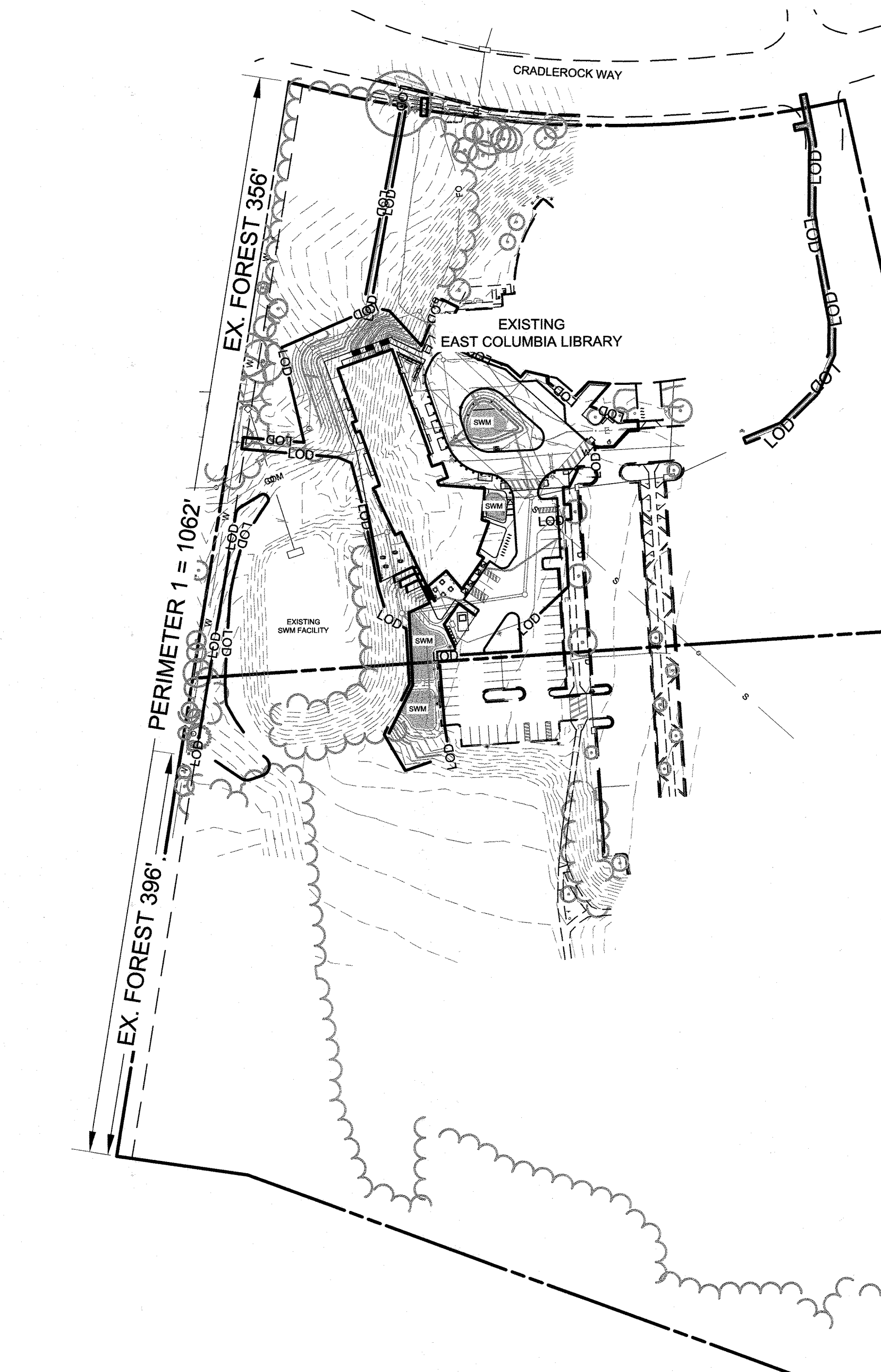
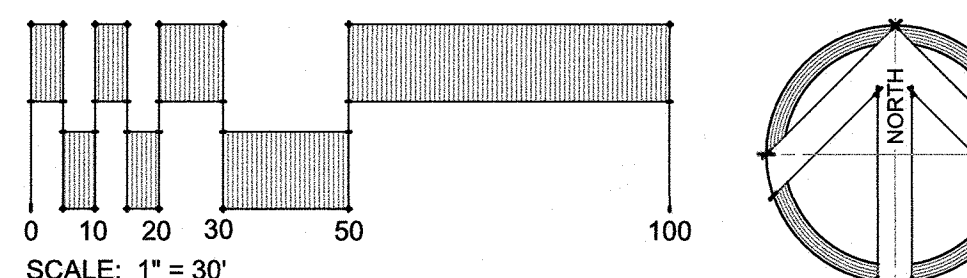


**NOTE:**  
 AT THE TIME OF PLANT INSTALLATION, ALL SHRUBS AND TREE LISTED AND APPROVED ON THE LANDSCAPE PLAN, SHALL COMPLY WITH THE PROPER HEIGHT REQUIREMENT IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF THE REQUIRED PLANTINGS MAY BE MADE WITHOUT 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, TENANTS, 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 MATERIAL TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

**HOWARD COUNTY PROJECTS ARE EXEMPT FROM SURETY BONDS FOR LANDSCAPING.**

**OWEN BROWN VILLAGE BOARD HAS APPROVED THIS PROJECT, AND AN APPROVAL LETTER IS PENDING ON 11/4/2020.**



PREPARED BY: ESRA SOYTUTAN, PLA  
 STATE OF MARYLAND  
 REGISTERED LANDSCAPE ARCHITECT  
 REGISTRATION NO. 3960

SIGNATURE: \_\_\_\_\_

**FOR REVISION #1 ONLY**

DEVELOPER'S/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 SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

SIGNATURE OF DEVELOPER: \_\_\_\_\_ DATE: \_\_\_\_\_  
 (PRINT NAME BELOW)

APPROVED: DEPARTMENT OF PLANNING AND ZONING

\_\_\_\_\_  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 5/12/21

\_\_\_\_\_  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE: 6/10/21

\_\_\_\_\_  
 DIRECTOR DATE: 6/21/21

APPROVED  
 PLANNING BOARD OF HOWARD COUNTY

DATE: April 1, 2021

HOWARD COUNTY DEPT. OF PUBLIC WORKS  
 BUREAU OF FACILITIES, DESIGN & CONSTRUCTION DIVISION  
 9200 BERGER ROAD  
 COLUMBIA, MD 21046  
 ATTN: MRS. SHARON R. WALSH, CHIEF DIVISION  
 TEL: 410-313-5386 / MOBILE: 301-717-8417

**ARCHITECTS**  
 QUINN EVANS ARCHITECTS  
 100 N. CHARLES STREET  
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 BALTIMORE, MD 21201  
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REVISION BLOCK		
MARK	DATE	DESCRIPTION
Δ	1-24-22	REVISE PLANS TO ADD ROOFTOP SOLAR PANELS

PERMIT SUBMISSION  
 01/25/2021

PROJECT NAME:  
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 LOT: A1 & B1  
 ZONING: NEW TOWN (NT)  
 ELECTION DISTRICT: 6  
 GREEN BUILDING

**Planting Plan**

**L112**

SHEET 22 OF 27

SDP-20-059

© SITE RESOURCES, INC. Z:\1818046-HWCO-50+ CENTER\04-DWG\112 PLANTING PLAN.DWG 11/19/2020 10:37 AM 2f







**ARCHITECTS**  
QUINN EVANS  
100 N. CHARLES STREET  
14TH FLOOR  
BALTIMORE, MD 21201  
410-576-0440

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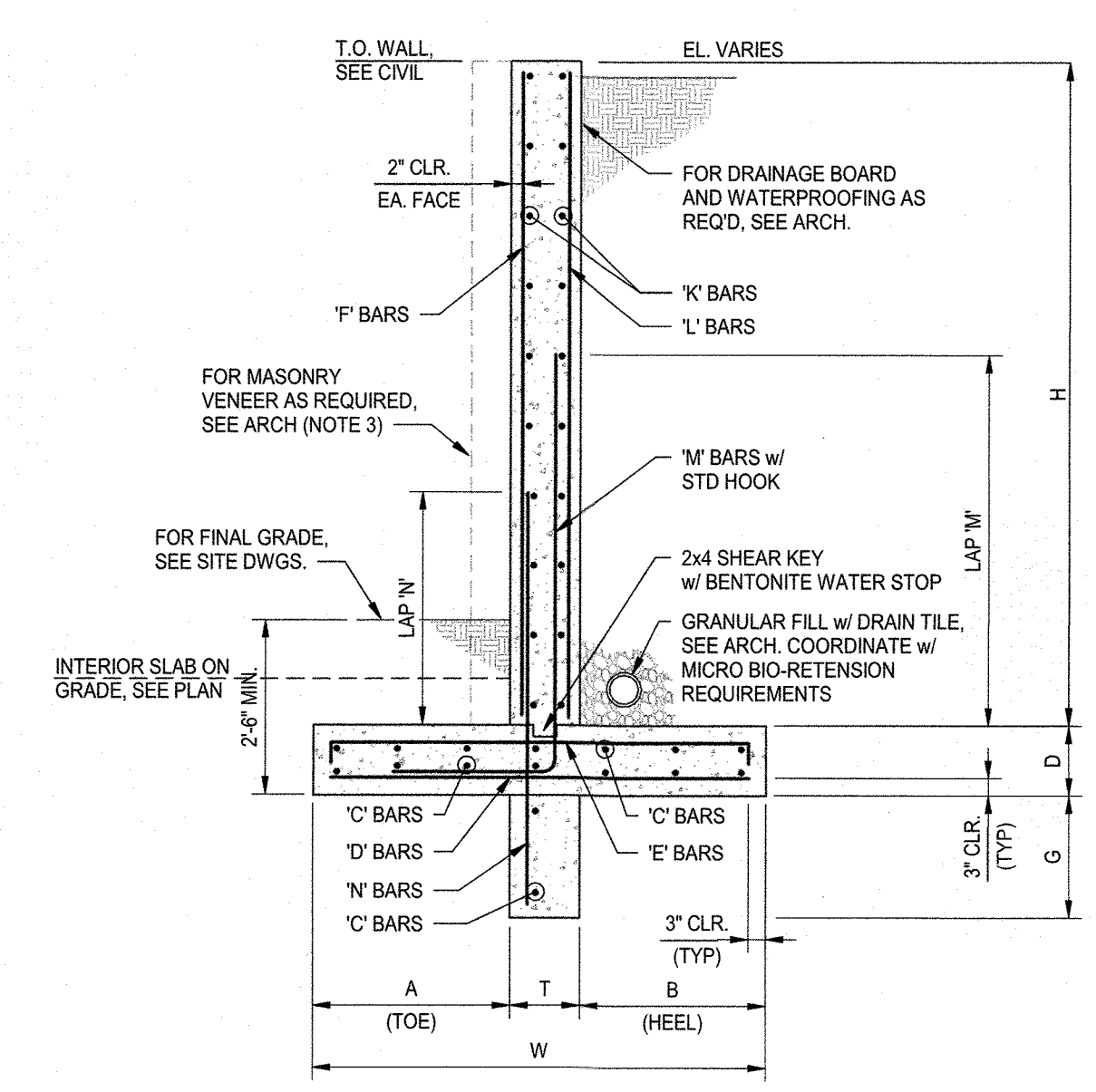
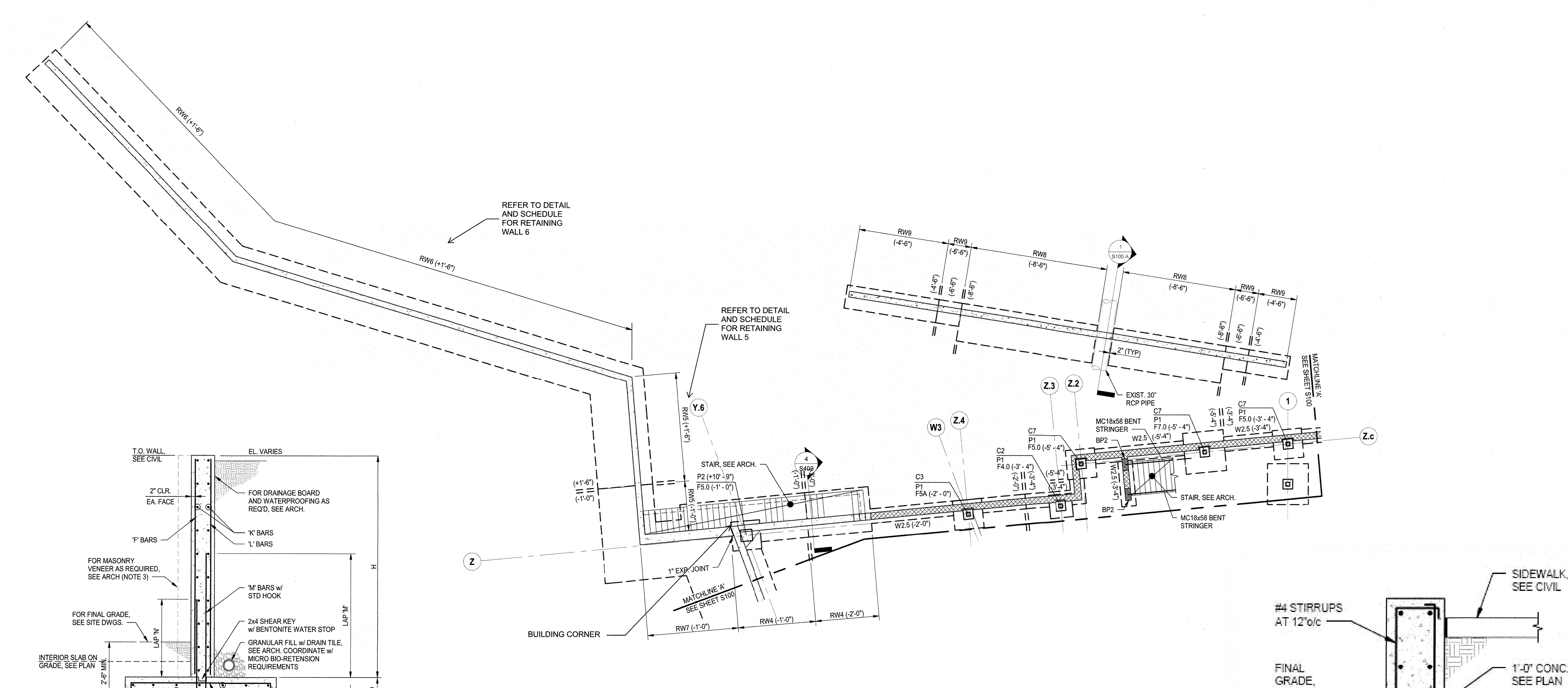
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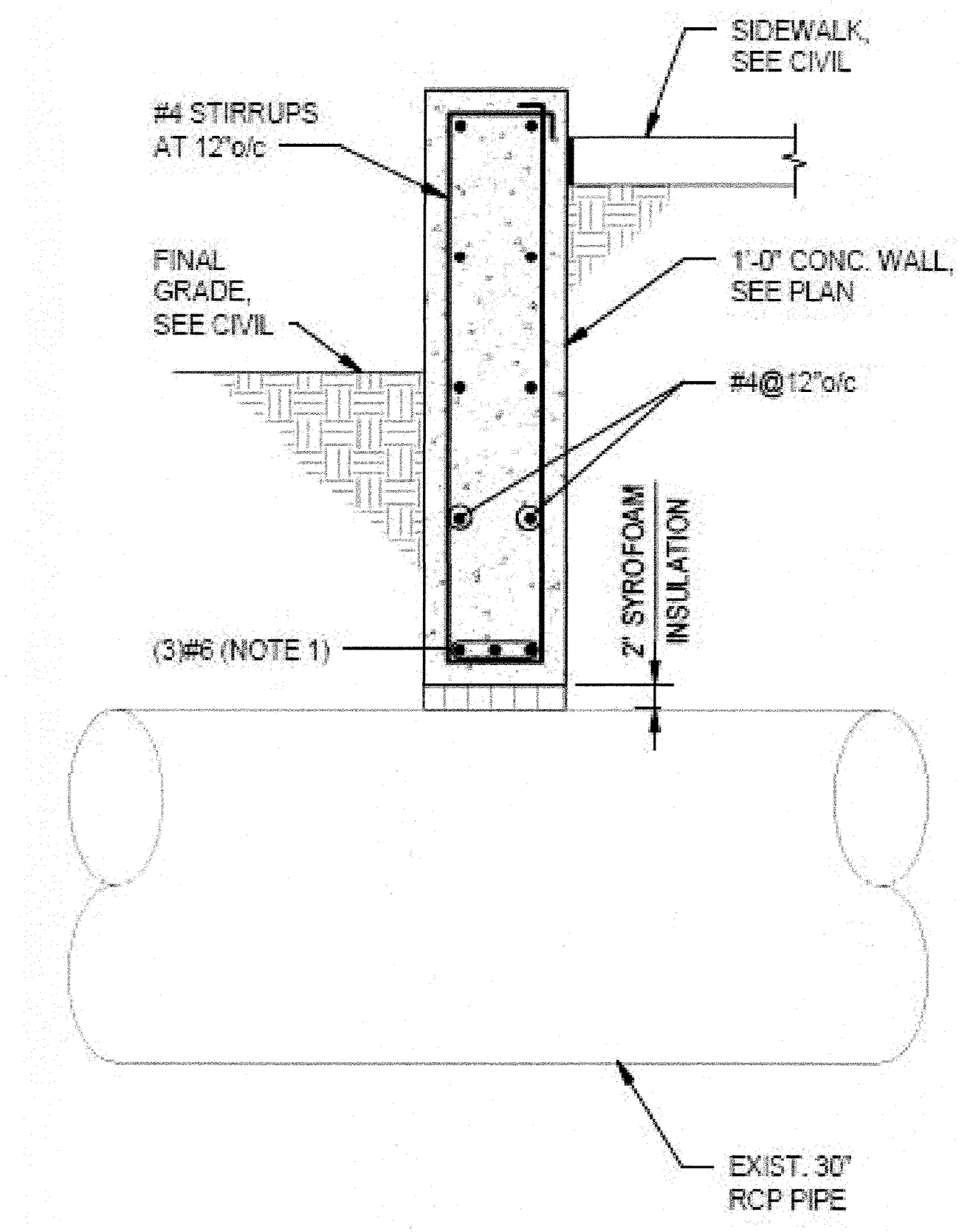
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4200 WISCONSIN AVE. NW, SUITE 119  
WASHINGTON, DC 20016



CONCRETE RETAINING WALL RW5, RW6, RW7  
1/2" = 1'-0"

SITE WALL FOUNDATION / LOWER LEVEL PLAN  
1/8" = 1'-0"

NOTE:  
FOR FOUNDATION PLAN NOTES REFER TO DRAWINGS S100.



SECTION  
3/4" = 1'-0"

- NOTES:
1. EXTEND (3) #6 BARS 3'-6" MINIMUM BEYOND RCP PIPE INTO CONCRETE RETAINING WALL BEYOND.
  2. FOR ADDITIONAL CONCRETE WALL REINFORCING AT PIPE PENETRATION REFER TO DETAIL J / S302.
  3. WATERPROOFING WILL BE PROVIDED ALONG RETAINING WALL WHERE MICRO-BIORETENTION ABUTS THE WALL.

CONCRETE RETAINING WALL SCHEDULE (fm = 4,000 PSI)										
MARK	RW1	RW2	RW3	RW4	RW5	RW6	RW7	RW8	RW9	
W	13'-8"	15'-0"	13'-8"	7'-8"	5'-5"	7'-0"	9'-2"	6'-6"	4'-0"	
A	2'-6"	2'-6"	2'-4"	2'-0"	2'-0"	2'-0"	2'-0"	1'-0"	1'-0"	
B	10'-0"	11'-4"	10'-0"	4'-6"	5'-6"	4'-0"	6'-0"	4'-6"	2'-0"	
T	1'-2"	1'-2"	1'-4"	1'-2"	1'-0"	1'-0"	1'-2"	1'-0"	1'-0"	
D	1'-10"	1'-10"	1'-10"	1'-3"	1'-4"	1'-0"	1'-5"	1'-0"	1'-0"	
H	15'-0" (MAX.)	15'-0" (MAX.)	15'-0" (MAX.)	9'-0" (MAX.)	12'-6" (MAX.)	8'-0" (MAX.)	12'-6" (MAX.)	8'-6" (MAX.)	5'-0" (MAX.)	
G	---	---	---	---	1'-10"	1'-8"	1'-10"	---	---	
C BARS	#7@12"o/c	#7@12"o/c	#7@12"o/c	#4@12"o/c	#4@12"o/c	#4@12"o/c	#4@12"o/c	#4@12"o/c	#4@12"o/c	
D BARS	#7@12"o/c	#7@12"o/c	#7@12"o/c	#5@12"o/c	#5@12"o/c	#5@12"o/c	#4@12"o/c	#4@12"o/c	#4@12"o/c	
E BARS	#8@12"o/c	#8@12"o/c	#8@12"o/c	#6@12"o/c	#7@12"o/c	#5@12"o/c	#7@12"o/c	#5@12"o/c	#4@12"o/c	
F BARS	#6@12"o/c	#6@12"o/c	#6@12"o/c	#6@12"o/c	#5@12"o/c	#5@12"o/c	#5@12"o/c	#4@12"o/c	#4@12"o/c	
K BARS	#5@12"o/c	#5@12"o/c	#5@12"o/c	#5@12"o/c	#4@12"o/c	#4@12"o/c	#5@12"o/c	#4@12"o/c	#4@12"o/c	
L BARS	#7@12"o/c	#8@12"o/c	#7@12"o/c	#7@12"o/c	#7@12"o/c	#5@12"o/c	#8@12"o/c	#5@12"o/c	#4@12"o/c	
M BARS	#9@12"o/c	#10@12"o/c	#9@12"o/c	#7@12"o/c	#7@12"o/c	#5@12"o/c	#8@12"o/c	#5@12"o/c	#4@12"o/c	
N BARS	---	---	---	---	#5@12"o/c	#5@12"o/c	#5@12"o/c	---	---	
LAP-M	6'-0"	6'-0"	6'-0"	4'-6"	4'-6"	2'-6"	5'-0"	2'-6"	2'-0"	
LAP-N	---	---	---	---	2'-6"	2'-6"	2'-6"	---	---	

- NOTES:
1. DO NOT BACKFILL RETAINING WALLS UNTIL SLAB ON GRADE AND WALL HAVE CURED 7 DAYS.
  2. BACKFILL BOTH SIDES OF RETAINING WALL BELOW GRADE SIMULTANEOUSLY AS REQUIRED TO MINIMIZE UNBALANCED SOIL CONDITION DURING CONSTRUCTION.
  3. THICKENED CONCRETE RETAINING WALL BELOW GRADE TO PROVIDE BRICK SHELF AS REQUIRED. PROVIDE ADDITIONAL #4 DOWELVERTICAL AND HORIZONTAL REINFORCING AT 12"o/c IN THICKENED PORTION.
  4. REFER TO TYPICAL DETAILS AS305, B/S305 AND C/S305 FOR CONCRETE WALL JOINT CONSTRUCTION UNLESS OTHERWISE NOTED. REFER TO TYPICAL DETAILS CS305, D/S305 AND E/S305 FOR CONCRETE WALL JOINT CONSTRUCTION AT RW5, RW6 AND RW7.
  5. SECURE MASONRY VENEER TO CONCRETE WALL WITH DOVETAIL ANCHORS. REFER TO GENERAL NOTES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

APPROVED  
PLANNING BOARD OF HOWARD COUNTY  
DATE April 1, 2021

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 5/17/21  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE  
*[Signature]* 6/6/2021  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE  
*[Signature]* 6/21/21  
DIRECTOR DATE

SEAL  
PROFESSIONAL CERTIFICATION  
I 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 NUMBER 21165. EXPIRATION DATE 09/30/2022

REVISION BLOCK		
MARK	DATE	DESCRIPTION

PERMIT SUBMISSION  
01/25/2021

PROJECT NAME:  
**EAST COLUMBIA 50+ CENTER**  
ADDRESS: 6610 CRADLE ROCK WAY  
COLUMBIA, MD 21045  
TAX MAP: 36 / GRID: 21 / PARCEL: 275  
LOT: A1 & B1  
ZONING: NEW TOWN (NT)  
ELECTION DISTRICT: 6  
GREEN BUILDING

SITE RETAINING WALL FOUNDATION / LOWER LEVEL PLAN

**S100.A**  
SHEET 24 OF 27



**ARCHITECTS**

QUINN EVANS  
100 N. CHARLES STREET  
14TH FLOOR  
BALTIMORE, MD 21201  
410 - 576 - 0440

**STRUCTURAL ENGINEER**

CARROLL ENGINEERING, INC.  
215 SCHILLING CIRCLE, SUITE 102  
HUNT VALLEY, MD 21051

**MEP ENGINEER**

JAMES POSEY ASSOCIATES, INC.  
3112 LORD BALTIMORE DRIVE  
BALTIMORE, MD 21244

**CIVIL ENGINEER**

A. MORTON THOMAS & ASSOCIATES, INC.  
800 KING FARM BOULEVARD, 4TH FLOOR  
ROCKVILLE, MD 20852

**LANDSCAPE ARCHITECT**

SITE RESOURCES, INC.  
14215 JARRETTVILLE PIKE, PO BOX 249  
PHOENIX, MD 21131-0249

**AV ENGINEER**

CONVERGENT TECHNOLOGIES DESIGN  
GROUP  
6501 YPRK ROAD, BALTIMORE, MD 21212

**KITCHEN CONSULTANT**

NYKOS ASSOCIATES INC  
18219 A FLOWER HILL WAY  
GAITHERSBURG, MD 20879

**GEOTECHNICAL ENGINEERING**

SCHNABEL ENGINEERING DC, INC  
4520 WISCONSIN AVE., NW, SUITE LL9  
WASHINGTON, DC 20016

SEAL  
PROFESSIONAL CERTIFICATION  
I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR  
APPROVED BY ME, AND THAT I AM A DULY LICENSED  
ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND.  
LICENSE NUMBER: XXXXX, EXPIRATION DATE: XXXXXXXX

**PROJECT NAME:**

**EAST  
COLUMBIA  
50+ CENTER**

PROJECT NO.: 41805530  
LEED PROJECT NO.: 1000120063

HOWARD COUNTY  
6610 Cradlerock Way,  
Columbia, MD 21045

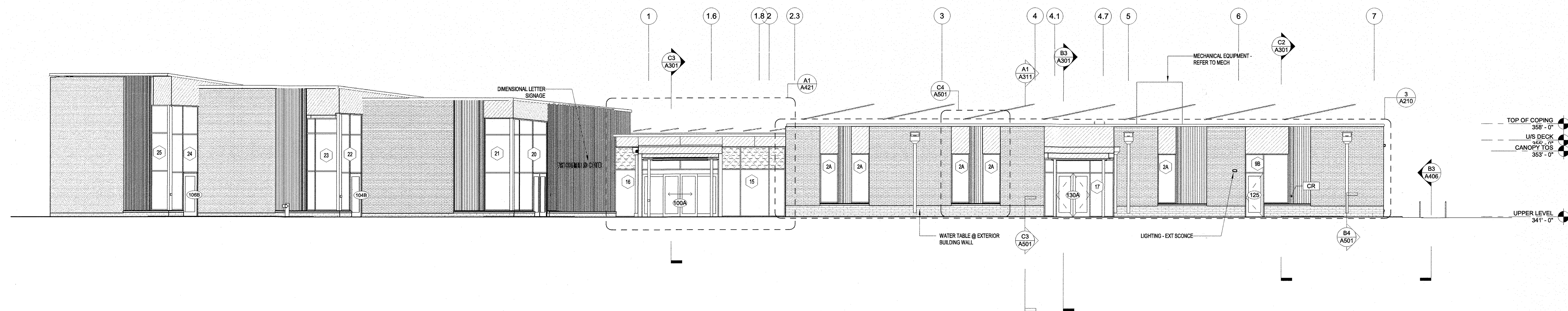
PERMIT SUBMISSION  
01/25/2021

MARK	DATE	DESCRIPTION

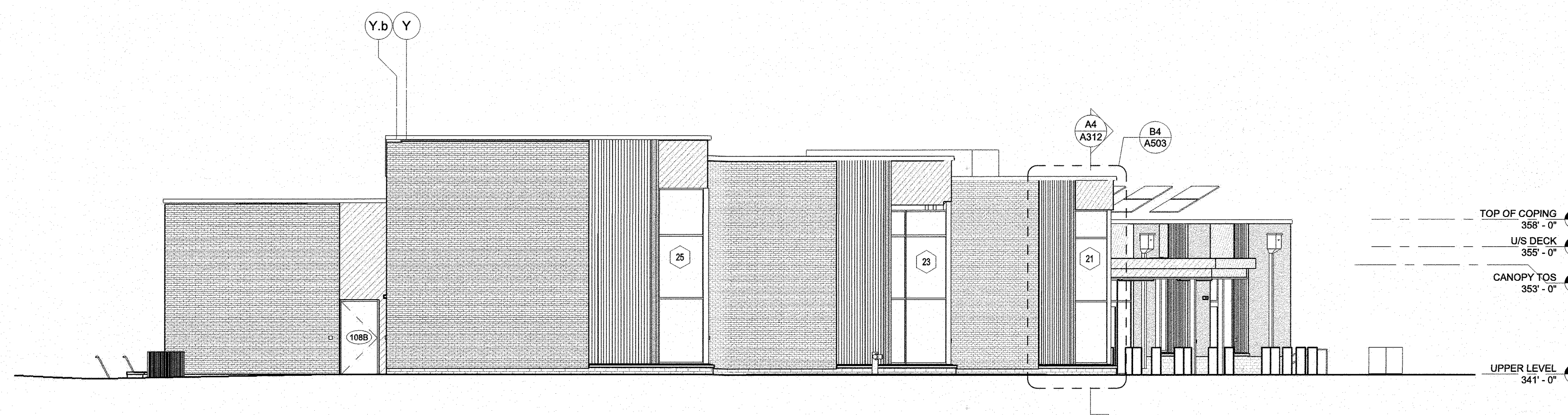
**BUILDING  
ELEVATIONS**

**A201**

SHEET 25 OF 27  
SDP-20-059



**B1 A201** EAST ELEVATION  
1/8" = 1'-0"



**A1 A201** ELEVATION SOUTH - KITCHEN TRUE SHAPE  
1/8" = 1'-0"

**ELEVATION LEGEND**

- |  |                                   |  |  |
|--|-----------------------------------|--|--|
|  | MODULAR BRICK                     |  | GLASS TYPE 1 - (1" CLEAR GLASS IGU)            |
|  | GROUND FACED BLOCK - 4" X 16" NOM |  | GLASS TYPE 1 (1" CLEAR GLASS IGU) WITH BACKPAN |
|  | CORRUGATED METAL PANEL - COLOR 1  |  | 1" FRITTED GLASS IGU                           |
|  | CORRUGATED METAL PANEL - COLOR 2  |  | 1" FRITTED GLASS IGU WITH BACKPAN              |
|  | MODULAR METAL PANEL               |  | 1" SPANDREL GLASS IGU WITH BACKPAN - COLOR 1   |
|  |                                   |  | 1" SPANDREL GLASS IGU WITH BACKPAN - COLOR 2   |

SHEET NOTES:  
1. A STAND ALONE MOCK-UP IS TO BE INCLUDED IN THE SCOPE OF WORK. REFER TO SHEET A502

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION      1/5/21      DATE

*[Signature]* for AC      6/16/21      DATE  
CHIEF, DIVISION OF LAND DEVELOPMENT

*[Signature]*      6/21/21      DATE  
DIRECTOR

APPROVED  
PLANNING BOARD OF HOWARD COUNTY

DATE April 1, 2021



**ARCHITECTS**

QUINN EVANS  
100 N. CHARLES STREET  
14TH FLOOR  
BALTIMORE, MD 21201  
410-576-0440

**STRUCTURAL ENGINEER**

CARROLL ENGINEERING, INC.  
215 SCHILLING CIRCLE, SUITE 102  
HUNT VALLEY, MD 21081

**MEP ENGINEER**

JAMES POSEY ASSOCIATES, INC.  
3112 LORD BALTIMORE DRIVE  
BALTIMORE, MD 21244

**CIVIL ENGINEER**

A. MORTON THOMAS & ASSOCIATES, INC.  
800 KING FARM BOULEVARD, 4TH FLOOR  
ROCKVILLE, MD 20852

**LANDSCAPE ARCHITECT**

SITE RESOURCES, INC.  
14315 JARRETTSVILLE PIKE, PO BOX 249  
PHOENIX, MD 21131-0249

**AV ENGINEER**

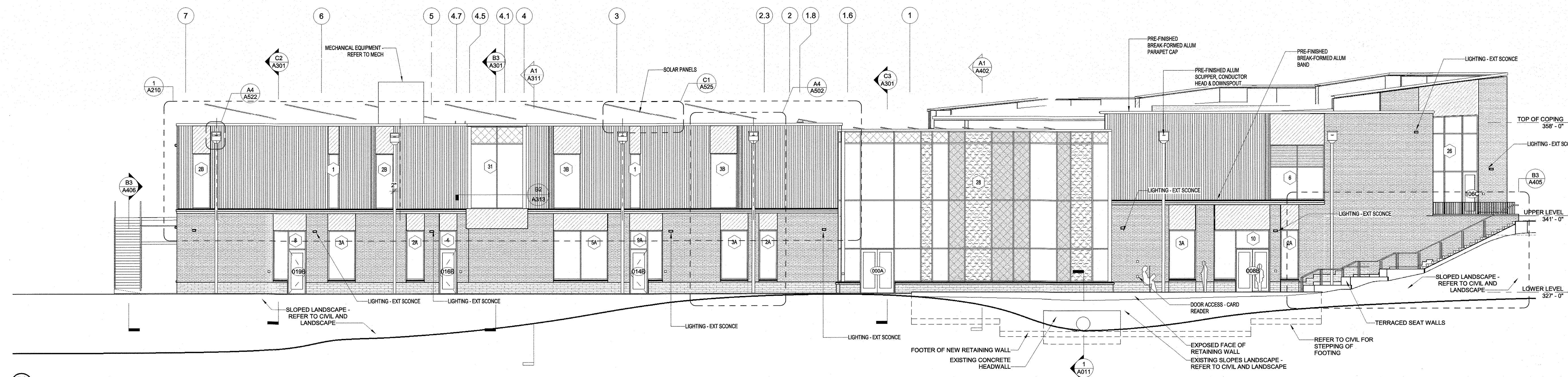
CONVERGENT TECHNOLOGIES DESIGN  
GROUP  
6501 YPRK ROAD, BALTIMORE, MD 21212

**KITCHEN CONSULTANT**

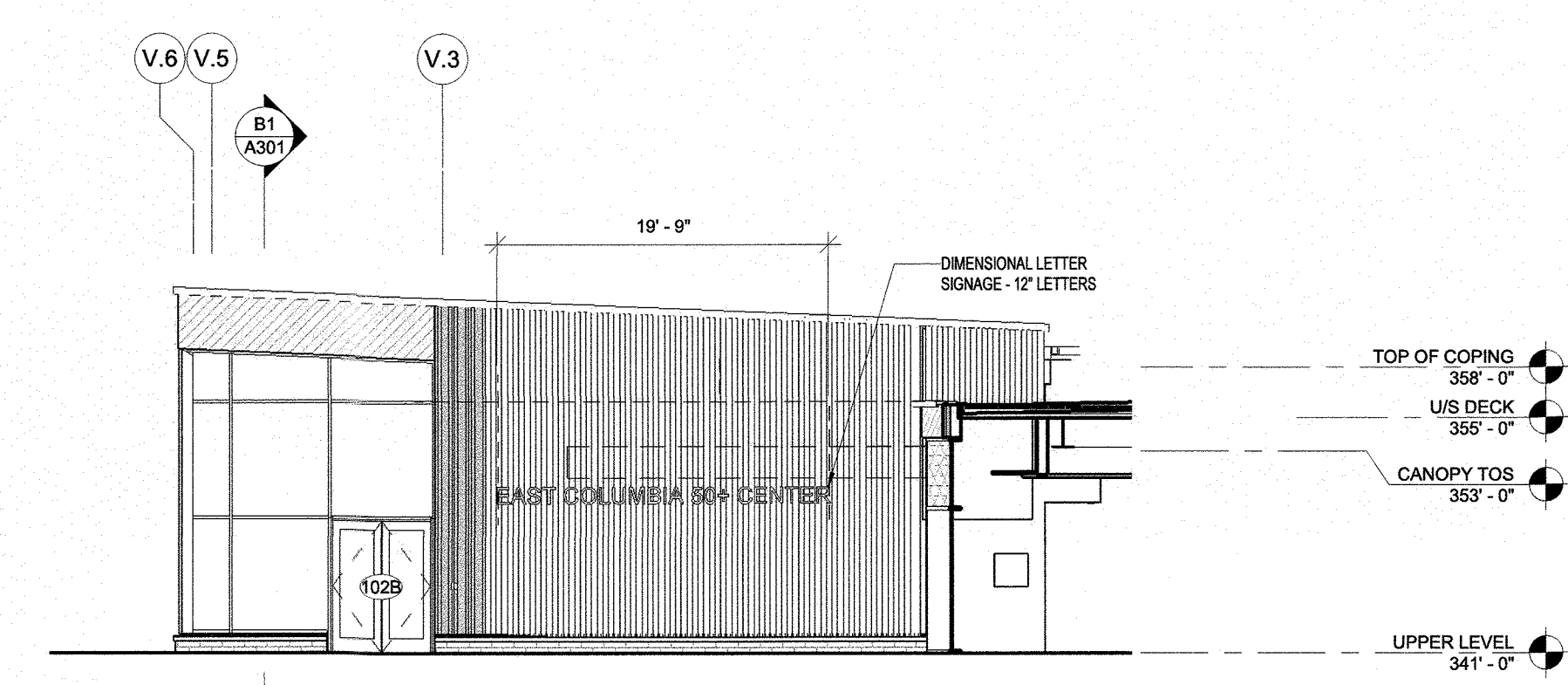
NYKOS ASSOCIATES INC.  
18219 A FLOWER HILL WAY  
GATHERSBURG, MD 20879

**GEOTECHNICAL ENGINEERING**

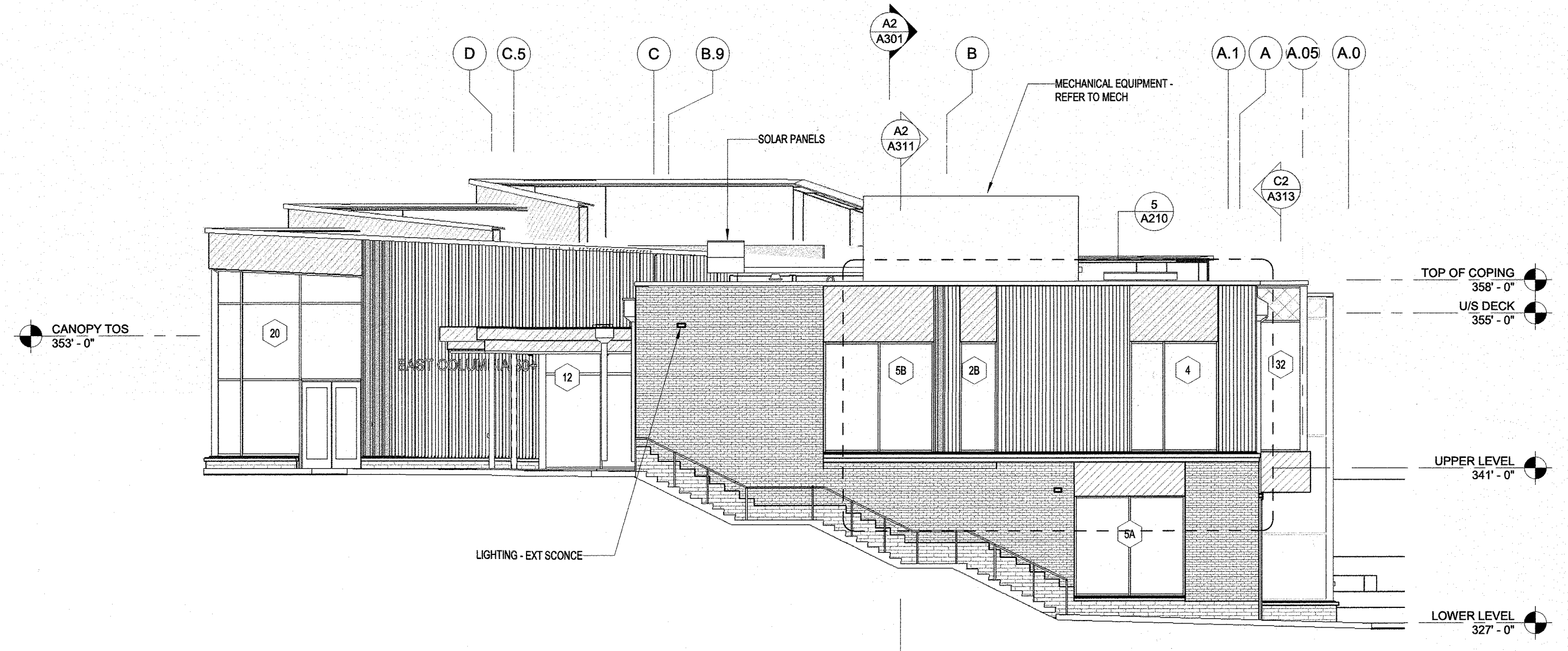
SCHNABEL ENGINEERING DC, INC.  
4200 WISCONSIN AVE, NW, SUITE LL9  
WASHINGTON, DC 20016



**B1 WEST ELEVATION**  
1/8" = 1'-0"



**A2 EXTERIOR ELEVATION - ENTRANCE SIGNAGE**  
1/8" = 1'-0"



**A1 NORTH ELEVATION**  
1/8" = 1'-0"

**ELEVATION LEGEND**

	MODULAR BRICK		GLASS TYPE 1 - (1" CLEAR GLASS IGU)
	GROUND FACED BLOCK - 4" X 16" NOM		GLASS TYPE 1 (1" CLEAR GLASS IGU) WITH BACKPAN
	CORRUGATED METAL PANEL - COLOR 1		1" FRITTED GLASS IGU
	CORRUGATED METAL PANEL - COLOR 2		1" FRITTED GLASS IGU WITH BACKPAN
	MODULAR METAL PANEL		1" SPANDREL GLASS IGU WITH BACKPAN - COLOR 1
			1" SPANDREL GLASS IGU WITH BACKPAN - COLOR 2

**SHEET NOTES:**  
1. A STAND ALONE MOCK-UP IS TO BE INCLUDED IN THE SCOPE OF WORK. REFER TO SHEET A.502

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Chief Development Engineering Division*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION *HPD* 5-17-21  
DATE

*Chief, Division of Land Development*  
CHIEF, DIVISION OF LAND DEVELOPMENT *for AC* 6/16/21  
DATE

*Director*  
DIRECTOR *for AC* 6/21/21  
DATE

APPROVED  
PLANNING BOARD OF HOWARD COUNTY

DATE April 1, 2021

PROJECT NAME:  
**EAST COLUMBIA 50+ CENTER**

PROJECT NO.: 41805330  
LEED PROJECT NO.: 1000120083

HOWARD COUNTY  
6610 Cradlerock Way,  
Columbia, MD 21045

PERMIT SUBMISSION  
01/25/2021

MARK	DATE	DESCRIPTION

**BUILDING ELEVATIONS**

**A202**



