

**APRIL 4, 2016 DAP REVIEW**

-THAT THE APPLICANT LOOK AT THE AMENITY SPACE ON THE SOUTHWEST SIDE OF THE BUILDING AND EXTEND IT ACROSS TO THE NORTH SIDE OF THE PROPERTY WITH A SIDEWALK AND USE IT AS A DOG PARK.  
VOTE: 6-0

AT THE SITE DEVELOPMENT PLAN STAGE THE AMENITY AREA LOCATED ON THE SOUTHWEST SIDE OF THE BUILDING WILL BE EXPANDED AND POSSIBLY UTILIZED AS A DOG PARK. DETAILS OF THE AMENITY AREAS WILL BE PROVIDED AT THAT STAGE OF THE DEVELOPMENT AS WELL.  
A TRAFFIC AND SIGHT DISTANCE ANALYSIS WILL BE PROVIDED AT SITE DEVELOPMENT PLAN TO DETERMINE IF THE ENTRANCE WILL MEET FULL FUNCTION FOR TURNING AND IF THE ENTRANCE CAN BE RELOCATED. THE SECOND ENTRANCE IS REQUIRED BY FIRE AND RESCUE IN ORDER TO HAVE 2 POINTS OF EGRESS OUT OF THE DEVELOPMENT TO A PUBLIC ROAD. WITH THE SITE DEVELOPMENT PLAN THE SECOND ENTRANCE PAVING WIDTH MAY BE REDUCED.

-THAT THE APPLICANT LOOK AT HOW YOU CAN SIMPLY TURNING MOVEMENTS ONTO DORSEY ROAD, AND IF SITE DISTANCE IS AN ISSUE, THAT YOU LOOK AT HOW FAR UP YOU NEED TO GO TO HAVE TWO WAY TURNING MOVEMENTS AND TURN THE SECOND ENTRANCE INTO A GREEN FIRE LANE THAT EXTENDS THE VISUAL DEPTH OF THE PARK AND PROVIDES A MUCH NEER EDGE TO THE CEMETERY.  
VOTE: 6-0

AT THE SITE DEVELOPMENT PLAN STAGE THE WEST ELEVATION FACING ROUTE 1 WILL MOST LIKELY HAVE ENHANCED LANDSCAPING AS REQUESTED TO PROVIDE A MORE ALLURING APPEARANCE AT THAT BUILDING ENTRANCE. THE ARCHITECT AGREES WITH THIS SUGGESTION AND WILL ENHANCE THE FACADE OF THE WEST BUILDING WING ELEVATION BY ADDING MORE MASONRY, VARYING AND INCREASING THE CORNICE HEIGHTS AND ADDING EXTERIOR ENVIRONMENTAL GRAPHICS/FIGHTING.

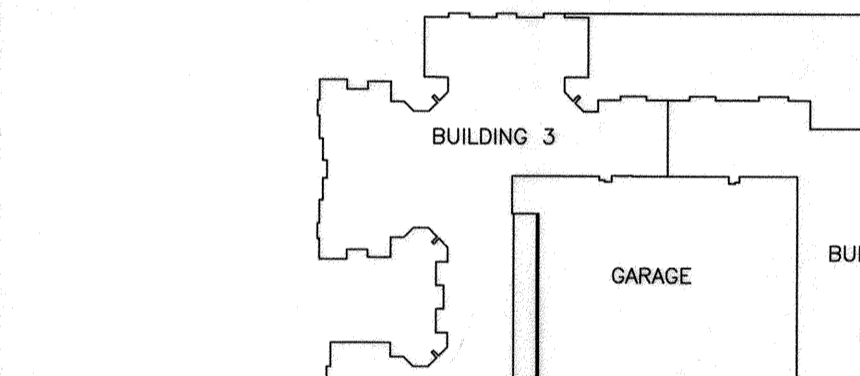
-THAT THE APPLICANT LOOK AT THE WEST ELEVATION FACING ROUTE 1 AND THINK OF IT AS A SYMBOLIC ENTRANCE TO THE DEVELOPMENT. TREATED WITH GRASS AND TREES EVEN IF TEMPORARY.  
VOTE: 6-0

THAT THE APPLICANT THINK ABOUT THE SOUTH FACADE MORE TO BREAK UP THE SKYLINE AND THE LONG FACADE, AND THAT THE APPLICANT THINK OF A DIFFERENT MATERIAL FOR THE MAIN ENTRANCE TO HIGHLIGHT IT MORE.  
VOTE: 6-0

THE ARCHITECT AGREES WITH MR. MISHRA IN THAT THE LONG NORTH AND SOUTH FACADES NEED MORE "POINTS OF EMPHASIS" WHERE ADDITIONAL MASONRY IS APPLIED, THE WINDOW PATTERN CHANGES, AND THE CORNICE IS MORE PRONOUNCED SIMILAR TO THE MAIN ENTRANCE BUILDING FACADE.

**GENERAL NOTES CONTINUED:**

- RIGHT-OF-WAY AND STREETSCAPE IMPROVEMENTS, PER THE ROUTE 1 MANUAL AND IN COORDINATION WITH DPZ AND DPW, WILL BE REQUIRED ALONG DORSEY ROAD AND ROUTE 1 AS PART OF THE SDP PROCESS FOR THE AREA SHOWN AS PARCEL B ON SDP-18-002.
  - THIS PLAN IS SUBJECT TO WP-18-006 APPROVED SEPTEMBER 11, 2017 TO SECTION 16.119(g)(1) REQUIRING THE PROPERTY OWNER TO PROVIDE ADDITIONAL RIGHT-OF-WAY TO MEET THE MINIMUM REQUIREMENTS WHEN THE EXISTING RIGHT-OF-WAY IS INSUFFICIENT.
- APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
- COMPLIANCE WITH COMMENTS FROM THE DEVELOPMENT ENGINEERING DIVISION DATED AUGUST 23, 2017.
  - ROAD IMPROVEMENTS MUST BE PROVIDED ALONG U.S. ROUTE 1 FOR PARCEL B AS PART OF A FUTURE SITE DEVELOPMENT PLAN FOR DEVELOPMENT OF THAT PARCEL.
  - THE ALTERNATIVE COMPLIANCE NUMBER (WP-18-006) AND ITS CONDITIONS OF APPROVAL MUST BE ADDED TO ALL FUTURE SUBDIVISION PLATS AND SITE DEVELOPMENT PLANS AS A GENERAL NOTE.
  - COMPLIANCE WITH SRC COMMENTS FOR SDP-18-002 AND F-18-005.
  - ON NOVEMBER 9, 2016, MARYLAND DEPARTMENT OF NATURAL RESOURCES DETERMINED THAT THERE ARE NO OFFICIAL STATE OR FEDERAL RECORDS FOR LISTED PLANTS OR ANIMAL SPECIES WITHIN THE SITE.
  - ON SEPTEMBER 13, 2017, THE PLANNING DIRECTOR APPROVED THE PARKING REDUCTION REQUEST OF 1.82 SPACES PER UNIT INSTEAD OF THE REQUIRED 2.3 SPACES PER UNIT.
  - THIS PLAN IS SUBJECT TO WP-18-052 APPROVED DECEMBER 18, 2017 FOR AN ALTERNATIVE COMPLIANCE OF SECTION 16.1205(a)(7), PROTECTION OF SPECIMEN TREES, WHICH REQUIRES THE RETENTION OF SPECIMEN TREES (30" DBH OR GREATER).
- APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
- A MINIMUM OF 6 ADDITIONAL, NATIVE, 3"-3.5" CALIPER TREES SHALL BE PROVIDED ON-SITE AS PART OF THE MITIGATION FOR THE REMOVAL OF SPECIMEN TREES #1, #3, AND #4. THE MITIGATION WILL BE SHOWN ON THE ASSOCIATED LANDSCAPE PLAN FOR SDP-18-002 AND SURETY FOR THESE ADDITIONAL TREES WILL BE REQUIRED WITH THE DEVELOPERS AGREEMENT.
  - AN INDIVIDUAL TREE PROTECTIVE DEVICE (TREE FENCING) SHALL BE PLACED COMPLETELY AROUND SPECIMEN TREE #2 PRIOR TO THE COMMENCEMENT OF ANY GRADING AND SHALL BE OUTLINED ON THE SDP.
  - COMPLIANCE WITH THE SRC AGENCY COMMENTS THROUGHOUT THE PLAN PROCESS FOR SDP-18-002.
  - THIS DEVELOPMENT IS SUBJECT TO AA-17-011 (ZONING LINE ADJUSTMENT) APPROVED JULY 27, 2017.
  - HEALTH DEPARTMENT APPROVAL OF THIS SITE DEVELOPMENT PLAN (SDP) DOES NOT ENSURE REMOVAL OF BUILDING PERMIT APPLICATIONS ASSOCIATED WITH THIS PLAN. PERMIT PLANS FOR CERTAIN FACILITIES TO BE CONSTRUCTED WITHIN THE LIMITS DESCRIBED BY THE SDP WILL REQUIRE REVIEW AND APPROVAL BY THE HEALTH DEPARTMENT. SUCH FACILITIES MAY INCLUDE, BUT ARE NOT LIMITED TO, THOSE WHICH HAVE SWIMMING POOLS, OR THAT SELL PREPARED OR PACKAGED FOOD, OR THAT MAY HAVE EQUIPMENT THAT EMITS RADIATION.



**PARKING DECK SPACES:**

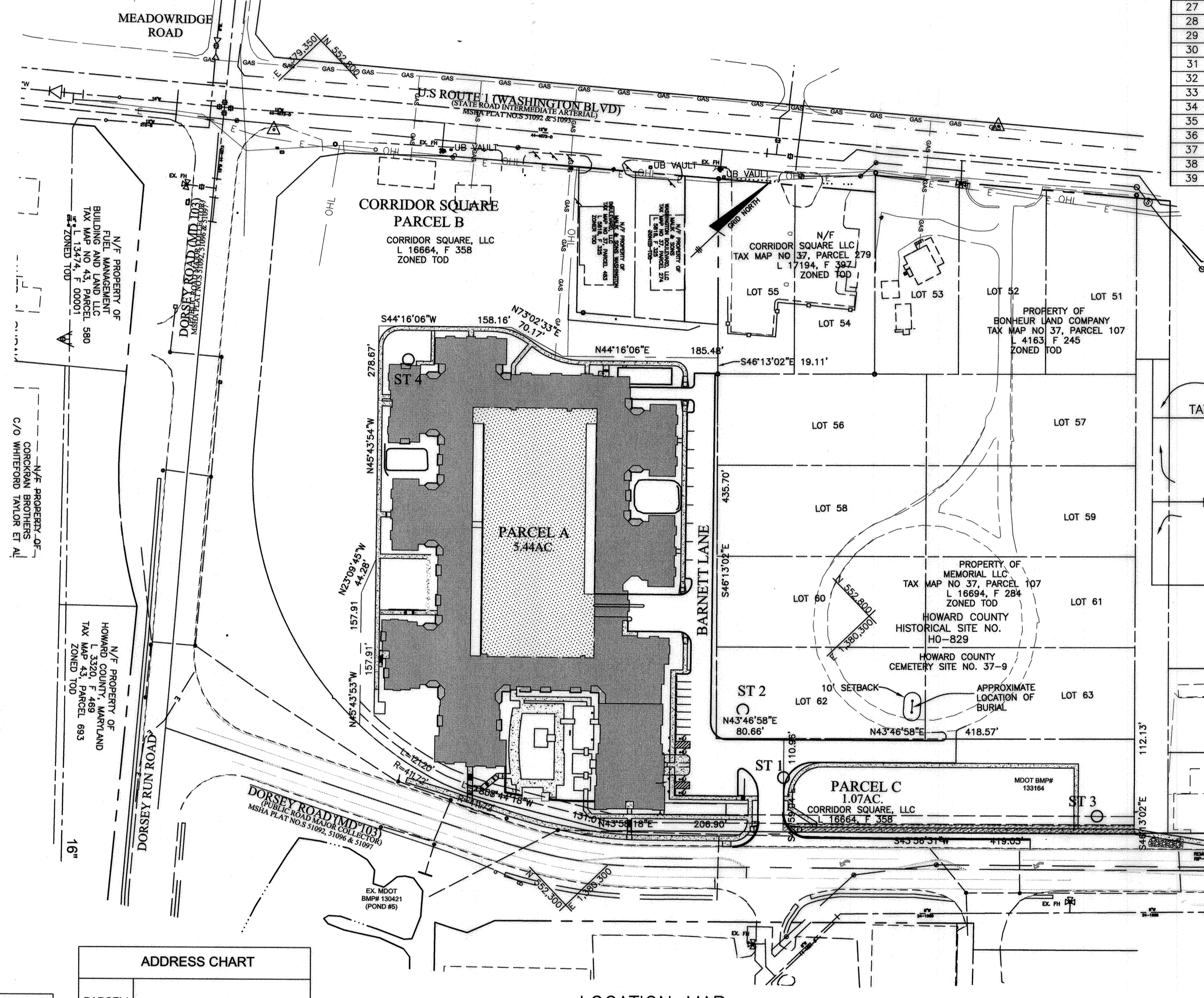
GROUND LEVEL: 69 SPACES  
SECOND LEVEL: 111 SPACES  
THIRD LEVEL: 117 SPACES  
FOURTH LEVEL: 135 SPACES  
FRONT BUILDING: 21 SPACES  
453 SPACES

UNITS/LEVEL	
LEVEL	NO. UNITS
1	54
2	64
3	66
4	66
<b>Total</b>	<b>250</b>

**BUILDING FOOTPRINT**  
SCALE: 1" = 100'

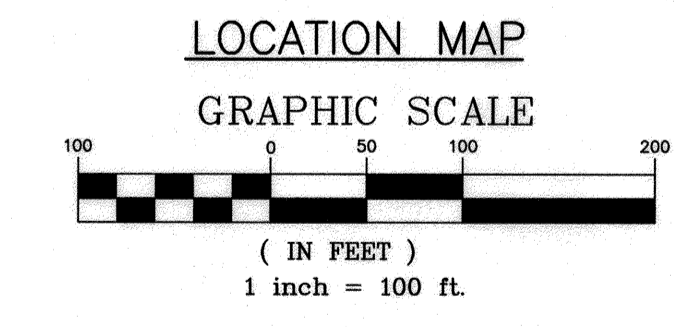
APPROVED: FOR PUBLIC WATER AND SEWERAGE SYSTEMS.  
 COUNTY HEALTH OFFICER: William J. Manna 10/11/2018  
 COUNTY HEALTH DEPARTMENT  
 APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION: Chad Chabon 10-12-18  
 CHIEF, DIVISION OF LAND DEVELOPMENT: Vincent J. Lewis 10-18-18  
 DIRECTOR: Natalie J. Lewis 10-18-18

# SITE DEVELOPMENT PLAN CORRIDOR SQUARE PARCELS A & C RESIDENTIAL APARTMENT BUILDING 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND



**ADDRESS CHART**

PARCEL/BUILDING	ADDRESS
A	7000 BARNETT LANE
BLDG 1	7000 BARNETT LANE
BLDG 2	7004 BARNETT LANE
BLDG 3	7008 BARNETT LANE
BLDG 4	7012 BARNETT LANE
GARAGE	7014 BARNETT LANE
POOL SHED	7002 BARNETT LANE
C	6741 DORSEY ROAD



**"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"**

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 21443 Expiration Date: 12/21/22  
 Corrad Manna  
 PROFESSIONAL ENGINEER  
 AS-BUILT 10/19/21

**ONSITE ESD**  
ESD SUMMARY TABLE

D.A.	MDE Type	Inches		Qe	Af		Depth	ESDv		RV	Pe		
		Total DA(SF)	Impervious Area(SF)		Required	Provided		Required	Provided			75% ESDv	
MBR 1	(M-6)	18,400	18,400	1.81	368	2057	PASS	1.0	2076	3147	PASS	0.95	2.16
MBR 2	(M-6)	9,120	9,120	1.81	182	967	PASS	1.0	1029	1553	PASS	0.95	2.15
MBR 3	(M-6)	6,200	6,200	1.81	124	915	PASS	1.0	699	1493	PASS	0.95	3.04
MBR 4	(M-6)	8,920	8,920	1.81	178	1065	PASS	1.0	1006	1700	PASS	0.95	2.41
MBR 5	(M-6)	7,720	4,900	1.81	154	650	PASS	1.0	570	867	PASS	0.95	1.42
MBR-6	(M-6)	35,220	9,071	1.81	704	1664	PASS	1.0	1179	2243	PASS	0.95	0.80
<b>Totals</b>		<b>85,580</b>	<b>56,611</b>						<b>6,558</b>	<b>11,003</b>			

**SHEET INDEX**

NO.	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS AND SOILS MAP
3	OVERALL LAYOUT PLAN
4	SITE DIMENSION PLAN
5	ROAD WIDENING AND IMPROVEMENT PLAN
6	GRADING AND SEDIMENT CONTROL PLAN
7	SEDIMENT CONTROL NOTES AND DETAILS
8	STORM DRAIN DRAINAGE AREA MAP
9	STORM DRAIN PRIVATE WATER & SEWER PROFILES AND DRAINAGE DETAILS
10	10 YEAR AND 100 YEAR STORAGE AND SANDFILTER UNDERGROUND STORMWATER MANAGEMENT DETAILS
11	STORMWATER MANAGEMENT DETAILS
12	ON-SITE STORMWATER DRAINAGE AREA MAP
13	LANDSCAPE PLAN
14	LANDSCAPE PLAN AND NOTES
15	STORMWATER MANAGEMENT PLANTING PLANS
16	DETAILS-PLANTING
17	KEY PLAN
18	HARDSCAPE PLAN - A
19	HARDSCAPE PLAN - B
20	HARDSCAPE PLAN - C
21	HARDSCAPE PLAN - D
22	HARDSCAPE PLAN - E
23	FOUR SEASONS AMENITY-ENLARGEMENT PLAN
24	PLAYGROUND ENLARGEMENT PLAN
25	DOG/PARK ENLARGEMENT PLAN
26	DETAILS - PAVING
27	DETAILS - ENTRANCE WALL
28	DETAILS - PIER & PADDOCK FENCE
29	DETAILS - POOL COURTYARD WALL
30	DETAILS - PLAY WALL
31	DETAILS - OVERLOOK DECK
32	DETAILS - PLAYGROUND & DOG/PARK
33	BUILDING ELEVATION PLAN
34	BUILDING ELEVATION PLAN
35	PARKING DECK PLAN AND DETAILS
36	PARKING DECK PLAN AND DETAILS

**PROJECT BACKGROUND INFORMATION**  
 PRESENT ZONING: T.O.D.  
 LOCATION: TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65)  
 TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79  
 APPLICABLE DPZ FILE REFERENCES: SDP-78-019, SDP-74-072, ECP-16-053, SDP-17-009, WP-18-006, F-18-005, WP-18-052, AA-17-011  
 DEED REFERENCES: L. 17551, F. 102, L. 16664, F. 358, PROPOSED USE OF SITE: RESIDENTIAL APARTMENTS (SFA)  
 PROPOSED WATER AND SEWER SYSTEMS: ON-SITE-PRIVATE WATER & SEWER

**SITE DATA TABULATION**

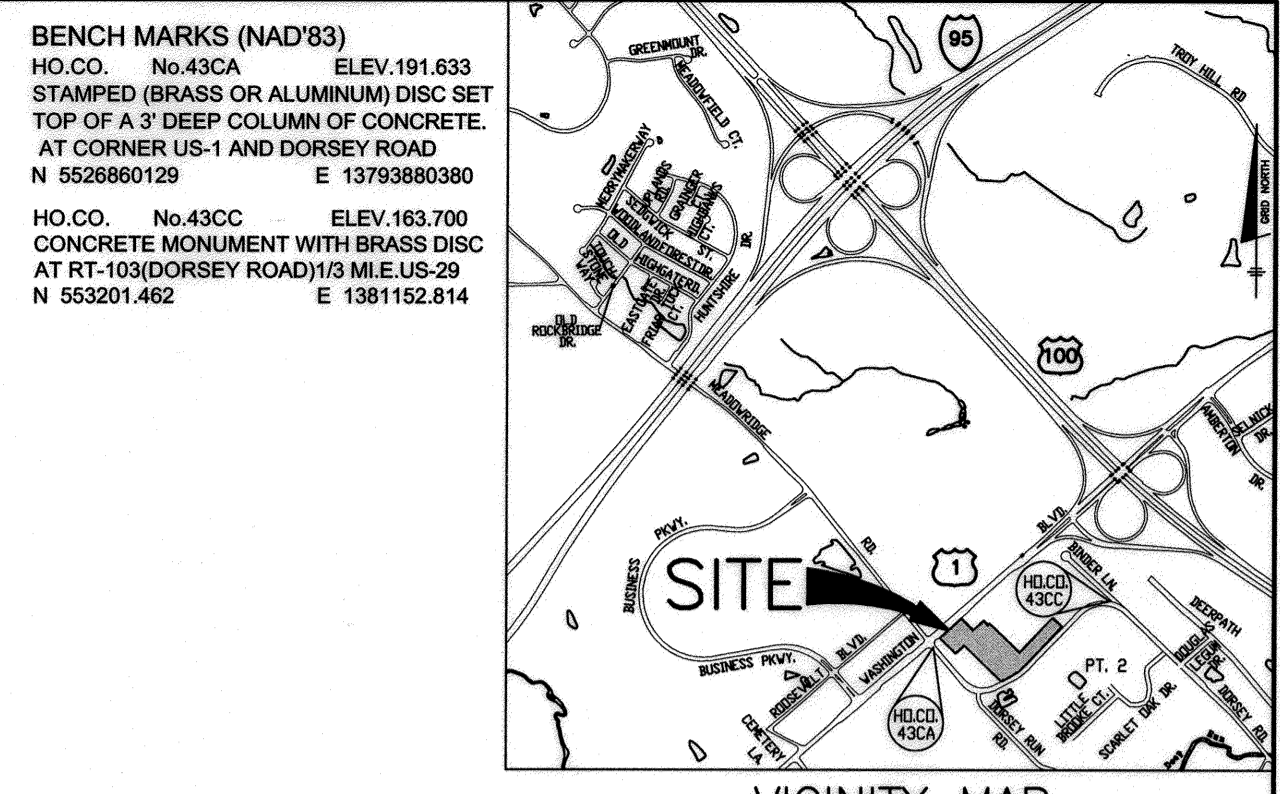
1) TOTAL PROJECT AREA.....	9.66 AC.±
2) AREA OF 100-YR. FLOODPLAIN.....	0.00 AC.±
3) AREA OF STEEP SLOPES (15% OR GREATER).....	0.00 AC.±
4) AREA OF EXISTING FOREST.....	3.81 AC.±
5) AREA OF ERODIBLE SOILS.....	4.38 AC.±
6) AREA OF WETLANDS (INCLUDING BUFFER).....	N/A
7) AREA OF STREAM BUFFER.....	N/A
8) NET AREA OF PROJECT.....	9.66 AC.±
9) AREA OF PROPOSED DEVELOPMENT.....	6.51 AC.±
10) MINIMUM RESIDENTIAL DENSITY (20 PER NET ACRE).....	134.4 UNITS
11) NUMBER OF UNITS PROPOSED.....	250 UNITS
12) NUMBER OF PARCELS.....	2
13) APPROXIMATE LIMIT OF DISTURBANCE.....	7.35 AC.±
14) PRESENT ZONING DESIGNATION.....	T.O.D.
15) PROPOSED USES FOR THE SITE & STRUCTURES.....	RESIDENTIAL APARTMENTS-SFA
16) MINIMUM LOT SIZE.....	N/A
17) AMENITY AREA REQUIRED (10% DEVELOPMENT AREA).....	0.65 ACRES
18) AMENITY AREA PROPOSED.....	0.99 ACRES (15%)
19) RESIDENTIAL AREA ALLOWED (50%).....	3.26 ACRES
20) RESIDENTIAL AREA PROVIDED.....	0.99 ACRE AMENITY AREA + 3.16 ACRES (48%) RESIDENTIAL AREA

**LEGEND**

EXISTING CONTOURS	---
EXISTING TREELINE	---
EXISTING BUILDING	EX. BUILDING
EXISTING BGE GAS (APPROXIMATE LOCATION)	GAS
EXISTING FIBER OPTIC (APPROXIMATE LOCATION)	---
EXISTING BGE ELECTRIC OVERHEAD	OHL
EXISTING BGE ELECTRIC UNDERGROUND (APPROXIMATE LOCATION)	E
EXISTING SEWER	---
EXISTING WATER	---
EXISTING STORMDRAIN	---

**PERMIT INFORMATION CHART**

PROJECT NAME:	SECTION/AREA:	LOT/PARCEL#			
CORRIDOR SQUARE	N/A	PARCELS A & C			
PLAT No.	GRID No.	ZONE	TAX MAP	ELECTION DISTRICT	CENSUS TRACT
24667-24669	23	T.O.D.	37	1ST	6012.03



- GENERAL NOTES**
- THE SUBJECT PROPERTY IS ZONED TOD PER THE 10/06/13 COMPREHENSIVE ZONING PLAN.
  - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
  - 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 CURBS UNLESS OTHERWISE NOTED.
  - ALL EXISTING TOPOGRAPHY IS TAKEN FROM FIELD A RUN SURVEY WITH 2 FOOT CONTOUR INTERVALS PREPARED BY BENCHMARK ENGINEERING, INC. DATED NOVEMBER 2016.
  - THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS 43CA AND 43CC WERE USED FOR THIS PROJECT.
  - ON-SITE WATER IS PRIVATE TIED TO CONTRACT 14-5029-D.
  - ON-SITE SEWER IS PRIVATE/PUBLIC TIES TO CONTRACT 14-5029-D.
  - STORMWATER MANAGEMENT FOR THIS DEVELOPMENT WILL BE PROVIDED BY ESD PRACTICES TO INCLUDE MICRO-BIOTENTION FACILITIES AS WELL AS AN UNDERGROUND SANDFILTER AND UNDERGROUND STORAGE FOR THE REQUIRED 10 & 100 YEAR MANAGEMENT. THE ESD FOR THIS DEVELOPMENT WAS APPROVED ON JUNE 20, 2016; REFERENCE ECP-16-053.
  - EXISTING UTILITIES LOCATIONS ARE BASED ON FIELD LOCATIONS, MARKINGS BY MISS UTILITY AND AS-BUILT DRAWINGS.
  - THERE IS NO FLOODPLAIN LOCATED ON THE PROPERTY.
  - THERE ARE NO WETLANDS LOCATED ON THE PROPERTY BASED ON A FIELD ANALYSIS PERFORMED BY HILLS-CARNEY ENGINEERING ASSOCIATED DATED MARCH 2016.
  - TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP DATED AUGUST 2016.
  - A FOREST STAND DELINEATION FIELD STUDY WAS PERFORMED BY MICHAEL J. KLEBASO (A LICENSED PROFESSIONAL UNDER COMAR 08.19.06.01) DATED MARCH 25, 2016 AND SEPTEMBER 23, 2016.
  - THE FOREST CONSERVATION OBLIGATIONS OF 3.29 ACRES OF AFFORESTATION FOR THIS PROJECT HAVE BEEN MET BY OFFSITE FOSTER BANK LOCATED ON FOREVER A FARM PROPERTY SDP-14-005.
  - THIS DEVELOPMENT WAS PRESENTED TO THE DESIGN ADVISORY PANEL (DAP) DATED APRIL 13, 2016, REFERENCE #18-08. THE RECOMMENDATIONS WERE ACCEPTED BY THE DIRECTOR DATED MAY 11, 2016. SEE DAP REVIEW NOTES THIS SHEET.
  - THIS DEVELOPMENT WAS PRESENTED TO THE HISTORIC PRESERVATION COMMISSION DATED JUNE 2, 2016, REFERENCE 16-31.
  - THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY ZONING REGULATIONS AND LANDSCAPE MANUAL. SURETY IN THE AMOUNT OF \$47,700 FOR 93 SHADE TREES, 132 EVERGREEN/ORNAMENTAL TREES HAS BEEN POSTED WITH THE DEVELOPER'S AGREEMENT.
  - THE 650BA NOISE LEVEL ESTABLISHED BY HOWARD COUNTY TO ALERT DEVELOPERS, BUILDERS AND FUTURE RESIDENTS THAT AREAS BEYOND THIS THRESHOLD MAY EXCEED GENERAL ACCEPTED NOISE LEVELS ESTABLISHED BY THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.
  - THE ADJACENT BONEHUR PROPERTY WAS SUBJECT TO A GEOPHYSICAL SURVEY (BY OTHERS) TO DETERMINE THE APPROXIMATE LOCATION OF HUMAN REMAINS.
  - A PRE-SUBMISSION COMMUNITY MEETING FOR THIS PROJECT WAS HELD ON MARCH 28, 2016 IN ACCORDANCE WITH SECTION 16.128 AND 16.147(b)(1) OF THE SUBDIVISION REGULATIONS.
  - THE SUBJECT PARCEL IS NOT LOCATED WITHIN THE BOUNDARIES OF THE 1998 BALTIMORE/WASHINGTON INTERNATIONAL AIRPORT (BWI), AIRPORT NOISE ZONE, AS WELL AS THE FOUR MILE RADIUS OF BWI AIRPORT. THEREFORE, NO APPROVAL FROM THE MARYLAND AVIATION ADMINISTRATION IS REQUIRED.
  - PROPOSED EXTERIOR LIGHTING SHALL BE DIRECTED/REFLECTED AWAY FROM ALL ADJACENT PUBLIC ROADS AND RESIDENTIAL ZONING DISTRICTS IN ACCORDANCE WITH SECTION 13.4.0 OF THE HOWARD COUNTY ZONING REGULATIONS.
  - IN ACCORDANCE WITH SECTION 127.0.F.Z.C. OF THE ZONING REGULATIONS, AT LEAST 15% OF THE DWELLING UNITS SHALL BE MODERATE INCOME HOUSING UNITS. MIHU UNITS WILL BE PROVIDED BY ON-SITE UNITS. *MIHU allocations were recorded on 10/17/18.*
  - KNOX BOX SHALL BE PLACED ON THE FRONT OF ALL BUILDINGS NO MORE THAN 6' TO THE RIGHT OF THE MAIN ENTRANCE AT A HEIGHT OF 4'-5'. IT SHALL BE ELECTRONICALLY SUPERVISED TO NOTIFY THE OWNER THAT IT IS BEING ACCESSED (INTEGRATED WITH THE FIRE SYSTEM).
  - TRASH PICK-UP FOR THIS DEVELOPMENT WILL BE PRIVATE.
  - A NOISE STUDY WAS PREPARED BY HUSH ACOUSTICS LLC AND SUBMITTED AS PART OF THIS SITE DEVELOPMENT PLAN. UNMITIGATED NOISE CONTOUR PROVIDED BY HUSH ACOUSTICS, LLC.
  - TRAFFIC CONTROL DEVICES:
    - THE R1-1 ("STOP") SIGNS FOR THIS DEVELOPMENT MUST BE INSTALLED BEFORE THE BASE PAVING IS COMPLETED.
    - ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES"(MUMUTCD).
    - ANY SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED (QUICK PUNCH), 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.
    - 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.
  - A PLAT OF CONSOLIDATION FOR THE PARCELS THAT ARE INCLUDED IN THIS DEVELOPMENT WAS PROCESSED CONCURRENTLY WITH THE SITE DEVELOPMENT PLAN. REFERENCE F-18-005.

**BENCHMARK ENGINEERING, INC.**  
 8480 BALTIMORE NATIONAL PIKE A SUITE 315 • ELK RIDGE CITY, MARYLAND 21043  
 (P) 410-465-6105 (F) 410-465-6644  
 WWW.BEI-ENGINEERING.COM

**CORRIDOR SQUARE PARCELS A & C**  
 RESIDENTIAL APARTMENT BUILDING

**OWNER:**  
 CORRIDOR SQUARE, LLC  
 6800 DEERPATH ROAD  
 ELK RIDGE, MD 21075  
 410.579.2442

**DEVELOPER:**  
 MURN DEVELOPMENT  
 6800 DEERPATH ROAD  
 ELK RIDGE, MD 21075  
 410.579.2442

**DESIGN:** JCO **DRAFT:** JCO

**DATE:** SEPTEMBER 2018 **BEI PROJECT NO.:** 2695  
**SCALE:** AS NOTED **SHEET:** 1 OF 39

**AS-BUILT SDP-18-002**

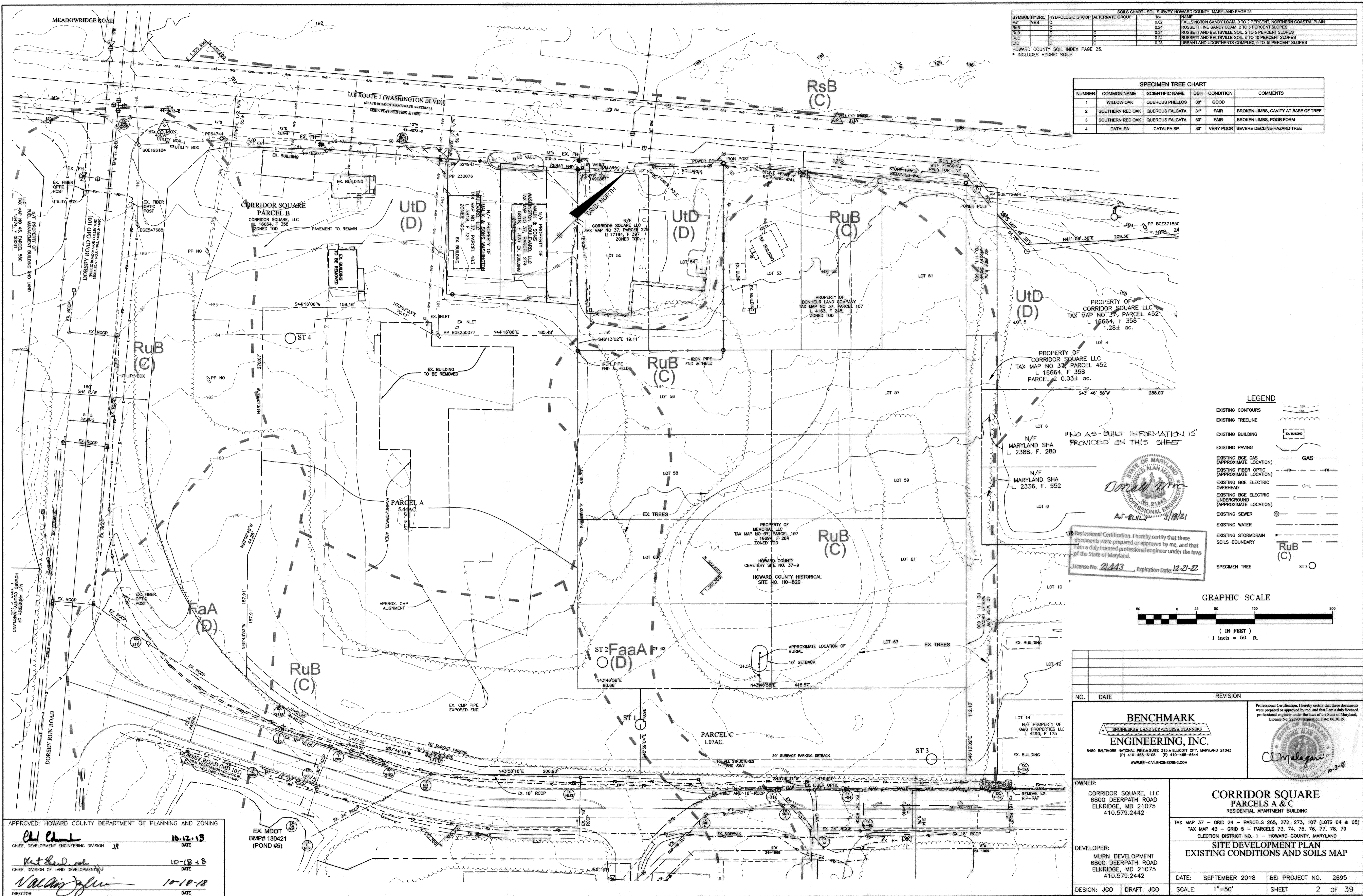
SOILS CHART - SOIL SURVEY HOWARD COUNTY, MARYLAND PAGE 25

SYMBOL	HYDRIC	HYDROLOGIC GROUP	ALTERNATE GROUP	Kw	NAME
Fa*	YES	D		0.02	FALLSINGTON SANDY LOAM, 0 TO 2 PERCENT, NORTHERN COASTAL PLAIN
RuB	C	C		0.24	RUSSETT FINE SANDY LOAM, 2 TO 5 PERCENT SLOPES
RuB	C	C		0.24	RUSSETT AND BELTSVILLE SOIL, 2 TO 5 PERCENT SLOPES
RuB	C	C		0.24	RUSSETT AND BELTSVILLE SOIL, 5 TO 10 PERCENT SLOPES
Ud	D	D		0.28	URBAN LAND-UDORTHERTS COMPLEX, 0 TO 15 PERCENT SLOPES

HOWARD COUNTY SOIL INDEX PAGE 25.  
\* INCLUDES HYDRIC SOILS

SPECIMEN TREE CHART

NUMBER	COMMON NAME	SCIENTIFIC NAME	DBH	CONDITION	COMMENTS
1	WILLOW OAK	QUERCUS PHELLOS	38"	GOOD	
2	SOUTHERN RED OAK	QUERCUS FALCATA	31"	FAIR	BROKEN LIMBS, CAVITY AT BASE OF TREE
3	SOUTHERN RED OAK	QUERCUS FALCATA	30"	FAIR	BROKEN LIMBS, POOR FORM
4	CATALPA	CATALPA SP.	30"	VERY POOR	SEVERE DECLINE-HAZARD TREE



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*Chad E. ...* 10-12-18  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

*Kit ...* 10-18-18  
CHIEF, DIVISION OF LAND DEVELOPMENT

*Val ...* 10-18-18  
DIRECTOR

EX. MDOT BMP# 130421 (POND #5)

NO.	DATE	REVISION

**BENCHMARK ENGINEERING, INC.**  
8480 BALTIMORE NATIONAL PIKE & SUITE 315 • ELICOTT CITY, MARYLAND 21043  
(P) 410-465-8105 (F) 410-465-6644  
WWW.BEI-CIVILENGINEERING.COM

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 21443, Expiration Date: 12-21-22.

**CORRIDOR SQUARE PARCELS A & C**  
RESIDENTIAL APARTMENT BUILDING

TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65)  
TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79  
ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND

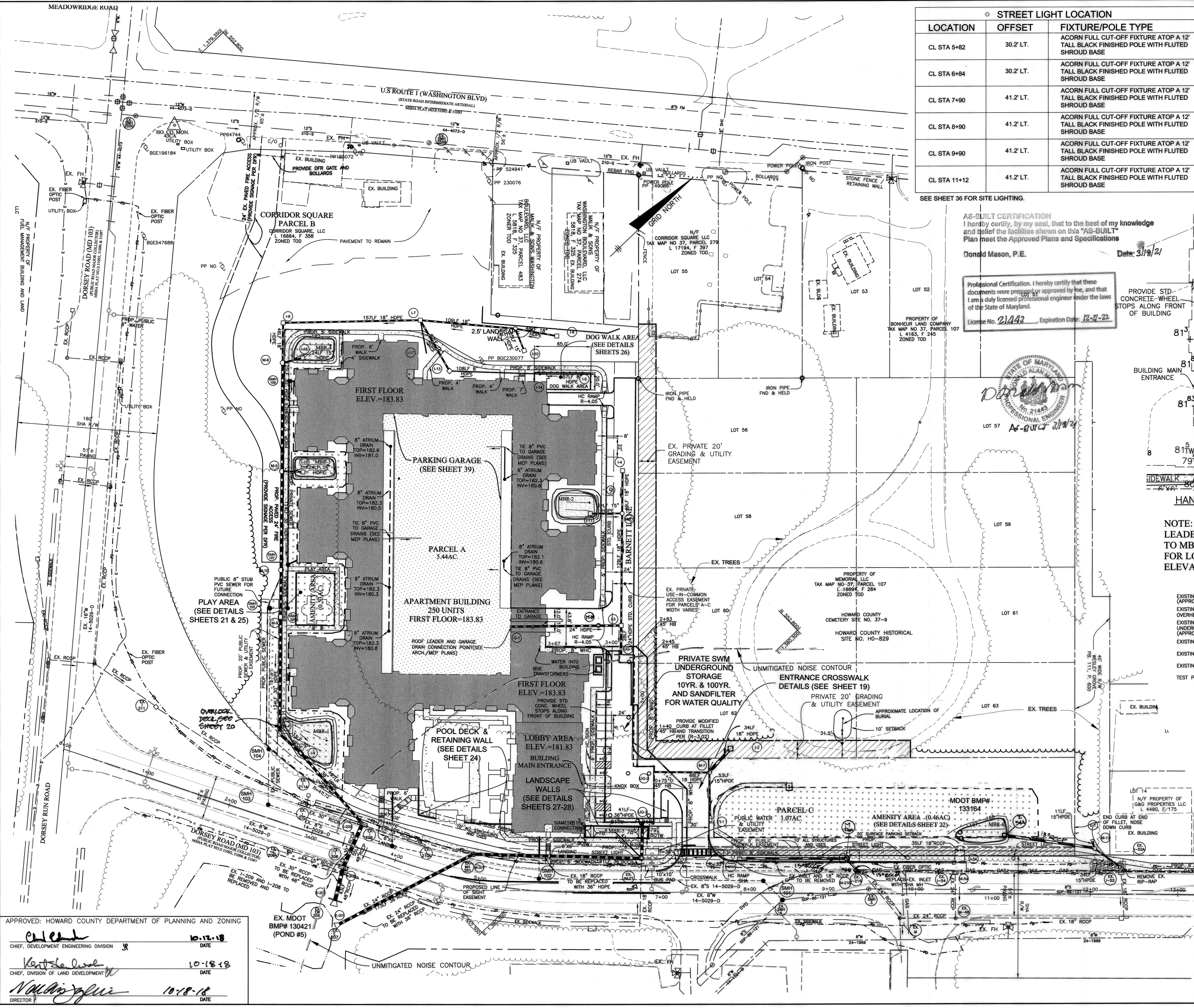
**SITE DEVELOPMENT PLAN**  
**EXISTING CONDITIONS AND SOILS MAP**

OWNER: CORRIDOR SQUARE, LLC  
6800 DEERPATH ROAD  
ELKCRIDGE, MD 21075  
410.579.2442

DEVELOPER: MURN DEVELOPMENT  
6800 DEERPATH ROAD  
ELKCRIDGE, MD 21075  
410.579.2442

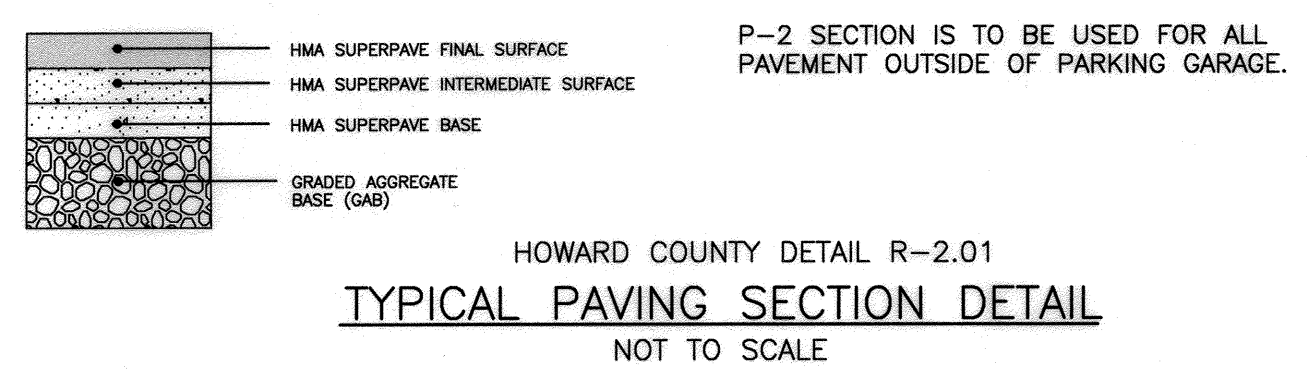
DESIGN: JCO DRAFT: JCO

DATE: SEPTEMBER 2018 BEI PROJECT NO. 2695  
SCALE: 1"=50' SHEET 2 OF 39



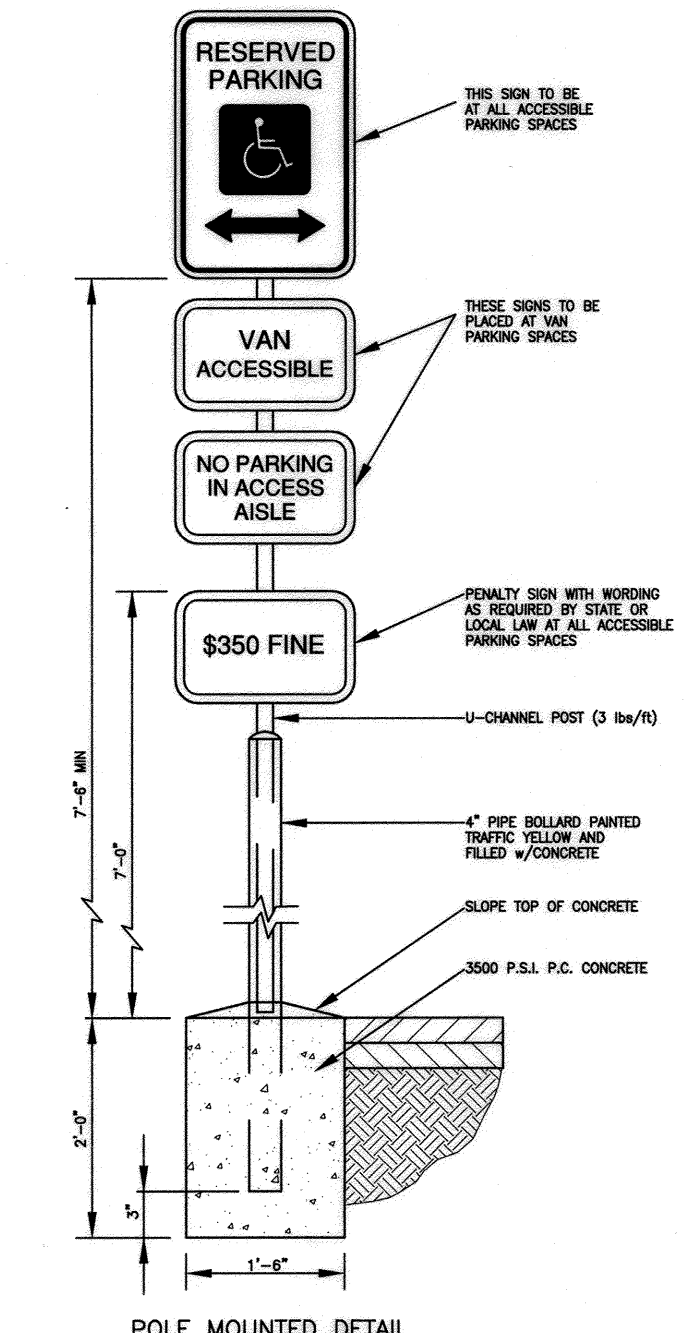
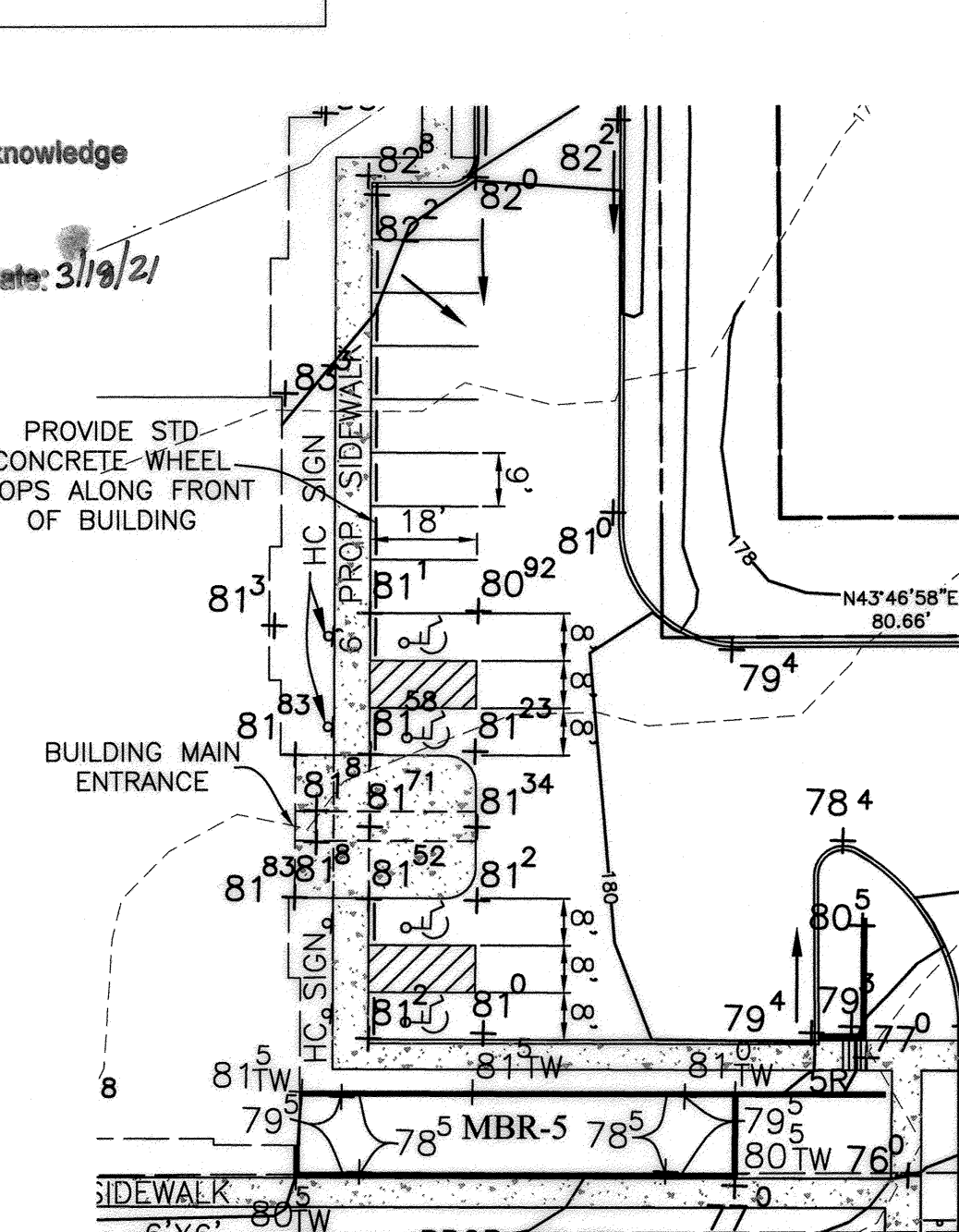
★ STREET LIGHT LOCATION		
LOCATION	OFFSET	FIXTURE/POLE TYPE
CL STA 5+82	30.2' LT.	ACORN FULL CUT-OFF FIXTURE ATOP A 12' TALL BLACK FINISHED POLE WITH FLUTED SHROUD BASE
CL STA 6+84	30.2' LT.	ACORN FULL CUT-OFF FIXTURE ATOP A 12' TALL BLACK FINISHED POLE WITH FLUTED SHROUD BASE
CL STA 7+90	41.2' LT.	ACORN FULL CUT-OFF FIXTURE ATOP A 12' TALL BLACK FINISHED POLE WITH FLUTED SHROUD BASE
CL STA 8+90	41.2' LT.	ACORN FULL CUT-OFF FIXTURE ATOP A 12' TALL BLACK FINISHED POLE WITH FLUTED SHROUD BASE
CL STA 9+90	41.2' LT.	ACORN FULL CUT-OFF FIXTURE ATOP A 12' TALL BLACK FINISHED POLE WITH FLUTED SHROUD BASE
CL STA 11+12	41.2' LT.	ACORN FULL CUT-OFF FIXTURE ATOP A 12' TALL BLACK FINISHED POLE WITH FLUTED SHROUD BASE

SECTION NUMBER	CALIFORNIA BEARING RATIO (CBR)		3 TO <= 5 TO < 7		7 TO <= 15 TO < 27	
	MIN HMA WITH GAB	HMA WITH CONSTANT GAB	MIN HMA WITH GAB	HMA WITH CONSTANT GAB	MIN HMA WITH GAB	HMA WITH CONSTANT GAB
P-2	PAVEMENT MATERIAL (INCHES)		1.5	1.5	1.5	1.5
	HMA SUPERPAVE FINAL SURFACE		1.0	1.0	1.0	1.0
	HMA SUPERPAVE INTERMEDIATE SURFACE		2.0	2.0	2.0	2.0
	HMA SUPERPAVE BASE		2.0	2.0	3.5	2.0
GRADED AGGREGATE BASE (GAB)		8.0	4.0	3.0	4.0	



**AS-BUILT CERTIFICATION**  
I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications.  
Date: 3/19/21  
Donald Mason, P.E.

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21443 Expiration Date: 12-2-22



**NOTE: FOR EXTERIOR ROOF LEADER MANIFOLD PIPE DRAINS TO MBR'S, SEE SHEET 12 OF 39 FOR LOCATION AND INVERT ELEVATIONS.**

**LEGEND**

- EXISTING CONTOURS
- EXISTING TREELINE
- PROPOSED TREELINE
- EXISTING BUILDING
- EXISTING PAVING
- PROPOSED BUILDING
- PROPOSED PARKING DECK
- AMENITY AREA
- UNDERGROUND FACILITY
- EX. CURB
- GRAPHIC SCALE

1 inch = 50 ft.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

10-12-18  
10-18-18  
10-18-18

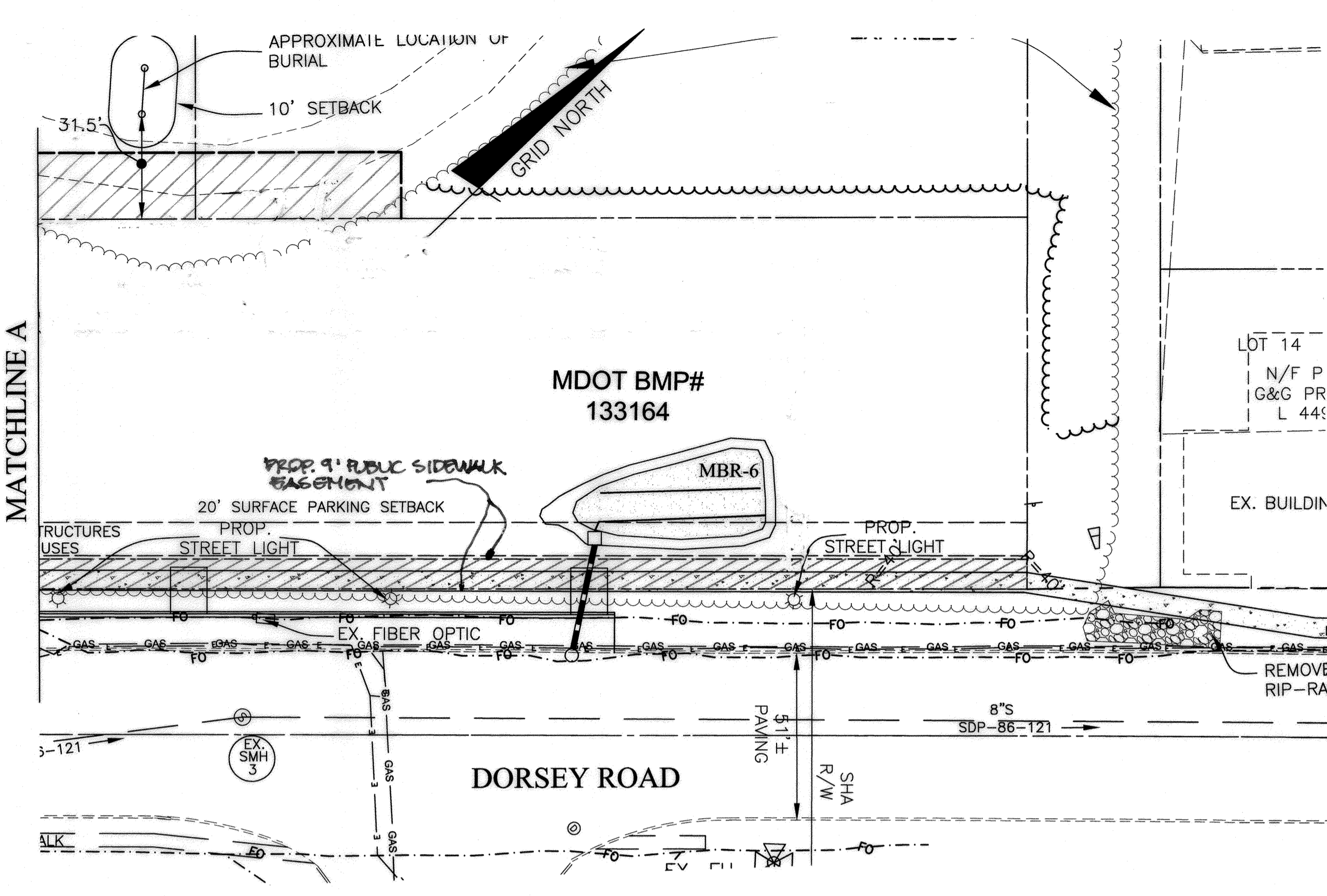
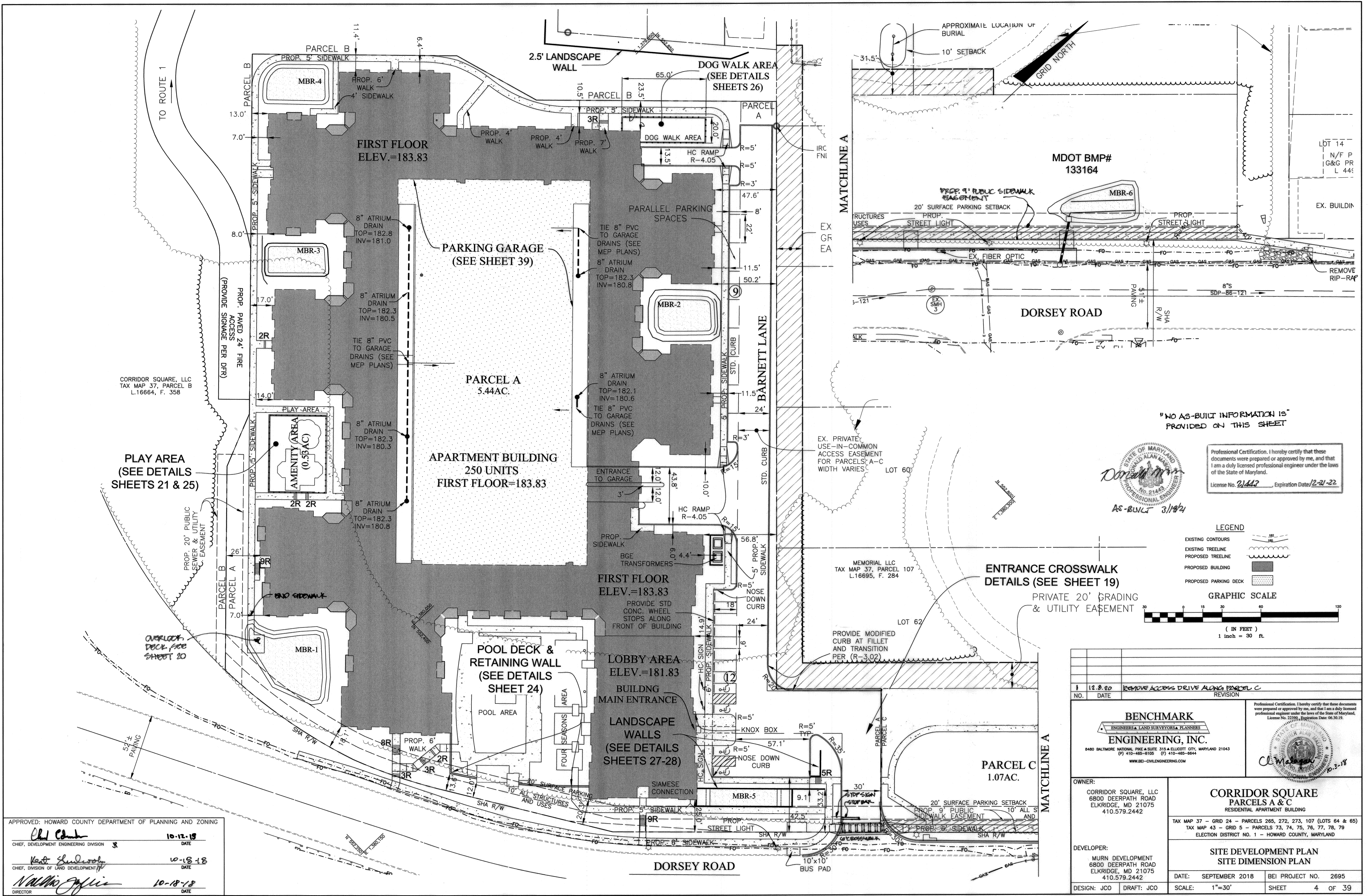
NO.	DATE	REVISION
2	2.25.21	REVISE STORM DRAIN FOR AS-BUILT
1	12.9.20	RELOCATE I-2 & REMOVE ACCESS DRIVE ALONG PARCEL C

**BENCHMARK ENGINEERING, INC.**  
8480 BALTIMORE NATIONAL PIKE SUITE 315 ELLICOTT CITY, MARYLAND 21043  
(P) 410-485-8105 (F) 410-485-6644  
WWW.BDO-CIVILENGINEERING.COM

**CORRIDOR SQUARE PARCELS A & C**  
RESIDENTIAL APARTMENT BUILDING

**SITE DEVELOPMENT PLAN**  
OVERALL LAYOUT PLAN

DATE: SEPTEMBER 2018 BEI PROJECT NO. 2695  
SCALE: 1"=50' SHEET 3 OF 39



"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 21447 Expiration Date 12-21-22  
 AS-BUILT 3/18/21

<b>BENCHMARK ENGINEERING, INC.</b> 8480 BALTIMORE NATIONAL, PHASE 3, SUITE 315 & ELICOTT CITY, MARYLAND 21043 (P) 410-660-8100 (F) 410-660-8644 WWW.BE-CIVILENGINEERING.COM		
OWNER: CORRIDOR SQUARE, LLC 6800 DEERPATH ROAD ELKCRIDGE, MD 21075 410.579.2442	<b>CORRIDOR SQUARE PARCELS A &amp; C</b> RESIDENTIAL APARTMENT BUILDING TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65) TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND	
DEVELOPER: MURN DEVELOPMENT 6800 DEERPATH ROAD ELKCRIDGE, MD 21075 410.579.2442	<b>SITE DEVELOPMENT PLAN</b> <b>SITE DIMENSION PLAN</b> DATE: SEPTEMBER 2018 BEI PROJECT NO. 2695 SCALE: 1"=30' SHEET 4 OF 39	

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

10-12-18 DATE  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

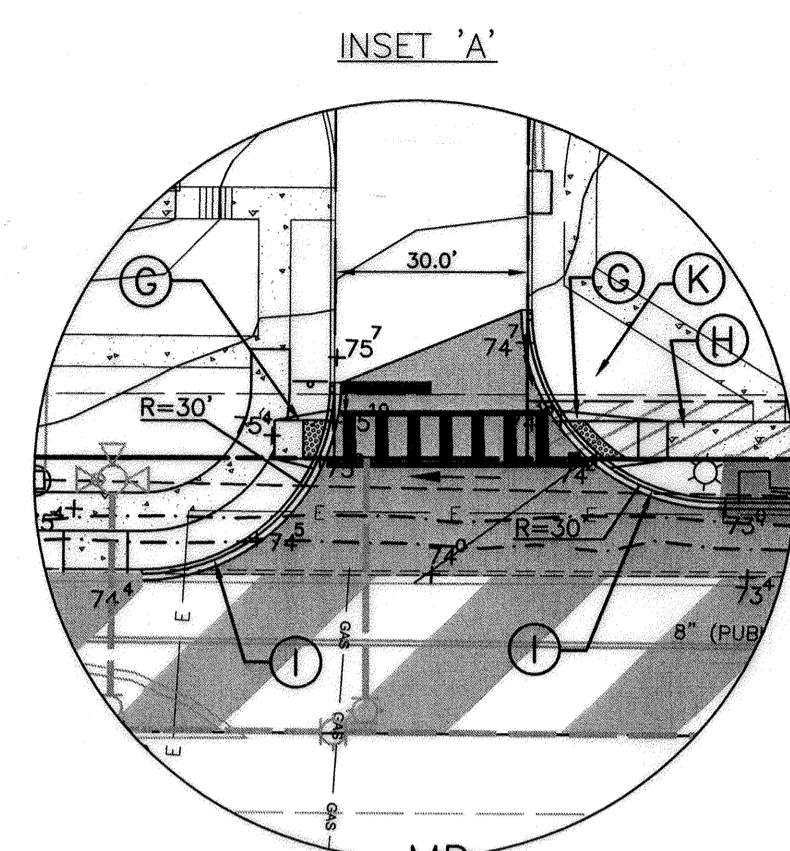
10-18-18 DATE  
 CHIEF, DIVISION OF LAND DEVELOPMENT

10-18-18 DATE  
 DIRECTOR

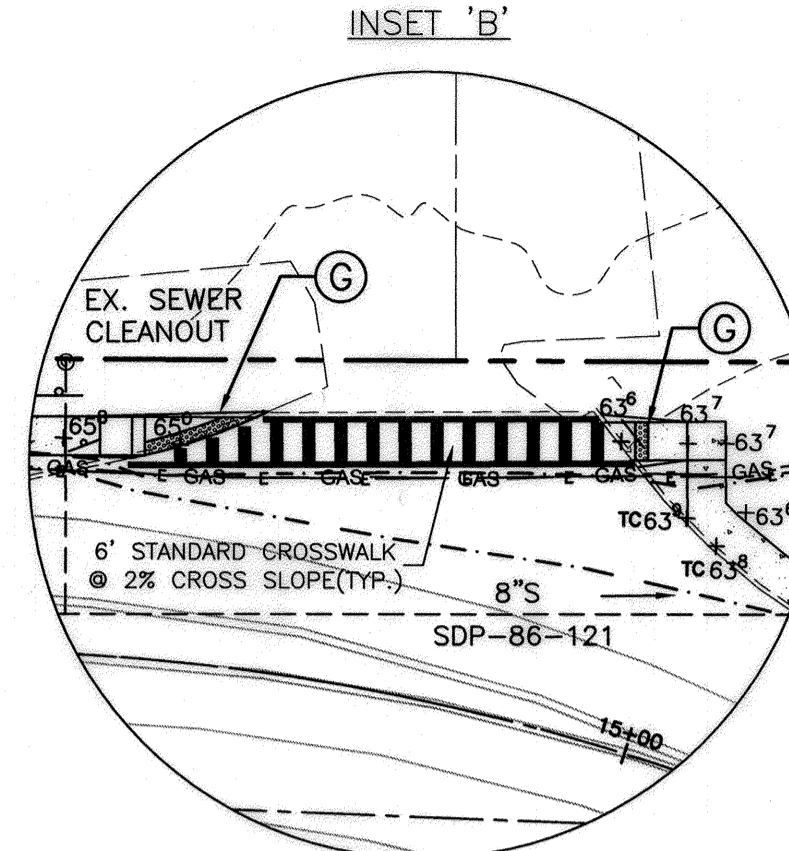
**NOTES:**  
 THE FOLLOWING STANDARDS (CONSTRUCTION AND TEMPORARY TRAFFIC CONTROL) ARE REQUIRED FOR THIS PROJECT:  
 MD 104.03-06 - RIGHT LANE CLOSURE/UNDIVIDED UNCON. EQUAL/LESS THAN 40 MPH  
 MD 655.11 - SIDEWALK RAMPS PERPENDICULAR  
 MD 655.12 - SIDEWALK RAMPS PARALLEL  
 MD 655.40 - DETECTABLE WARNING SURFACES  
 MD-620.02 - STANDARD TYPES A AND B CONCRETE CURB AND COMBINATION CONCRETE CURB & GUTTER  
 MD 104.06-09A - PED AND CURB-LANE CONTROL/MULTILANE UNDIV. SPEED LESS THAN OR EQUAL TO 40 MPH/OVER 12 HRS. OR NIGHTTIME USE  
 MD SHA ACCESS MANUAL STANDARD FOR TYPICAL CLOSED SECTION STREET CONNECTION ALL PAVEMENT MARKINGS TO BE THERMOPLASTIC.

FOR ALL STANDARDS REFERRED TO ON THE PLANS THE CONTRACTOR MUST GO TO THE BOOK OF STANDARDS WHICH WILL HAVE THE MOST CURRENT VERSION. THE BOOK OF STANDARDS CAN BE ACCESS AT: <http://apps.roads.maryland.gov/businesswithsha/bizStdsSoecs.desManualStdPub/publicationonline/ohd/bookstd/index.asp>

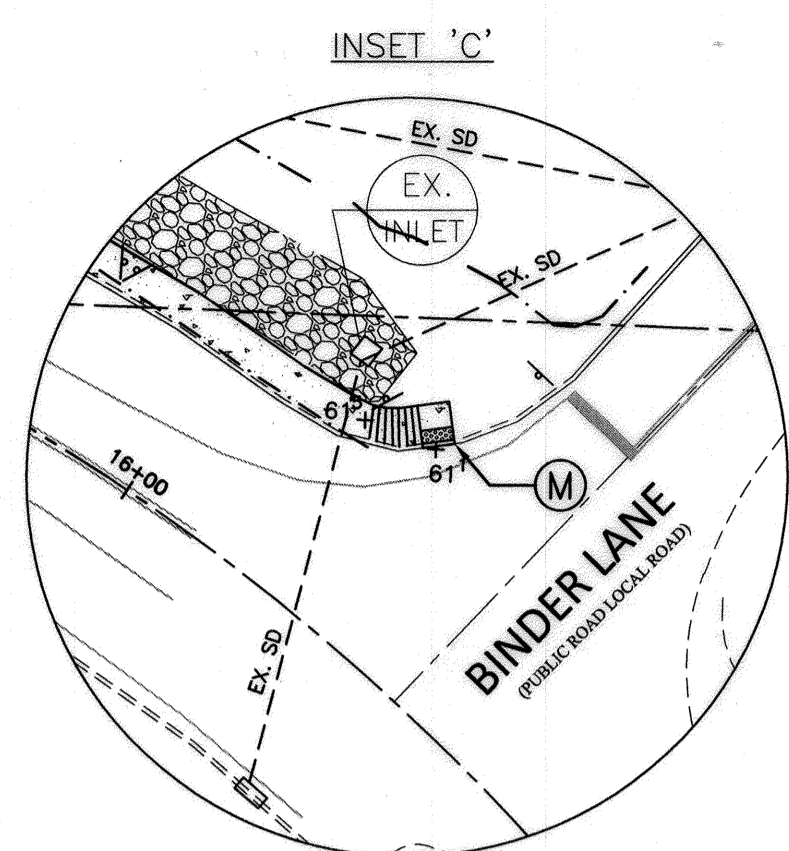
ALL ITEMS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT VERSION OF THE REFERENCED STANDARDS AT THE TIME OF CONSTRUCTION.



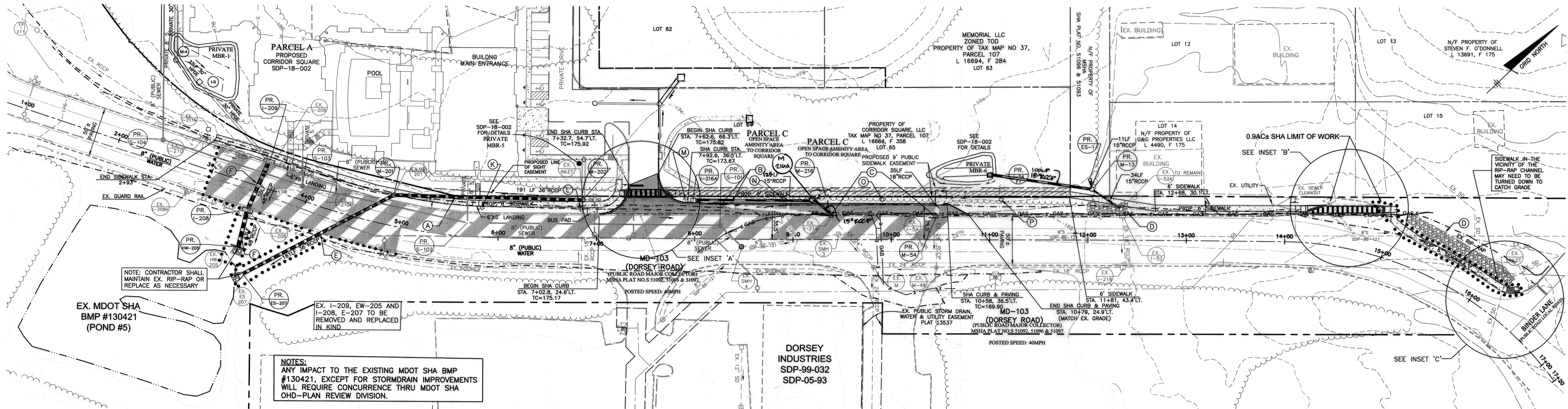
SCALE: 1" = 30'



SCALE: 1" = 30'

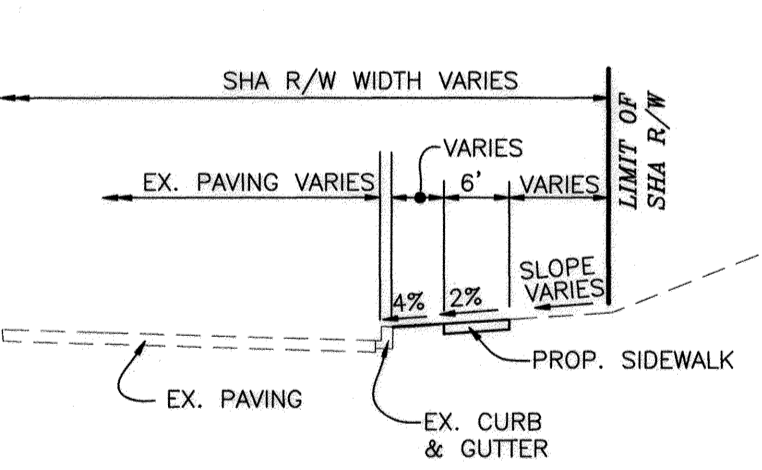


SCALE: 1" = 30'

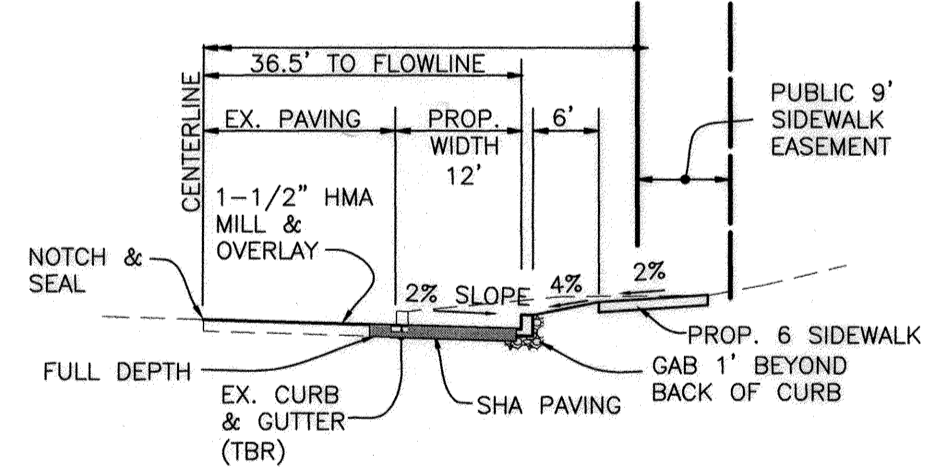


**NOTES:**  
 ANY IMPACT TO THE EXISTING MDOT SHA BMP #130421, EXCEPT FOR STORMDRAIN IMPROVEMENTS WILL REQUIRE CONCURRENCE THRU MDOT SHA OHD-PLAN REVIEW DIVISION.

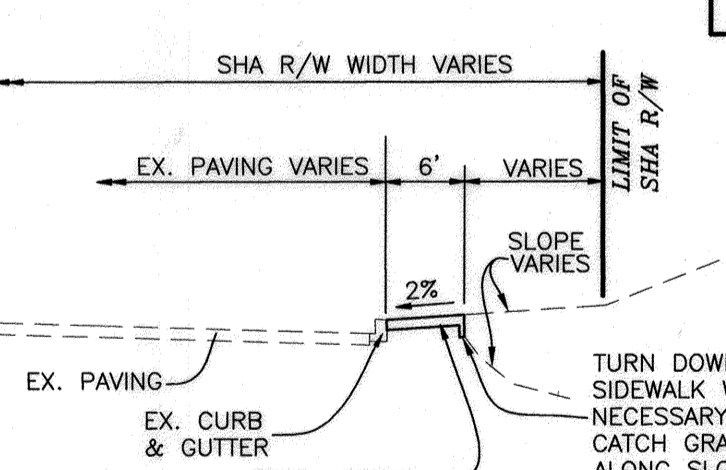
**ROAD WIDENING PLAN**  
 SCALE: 1" = 50'



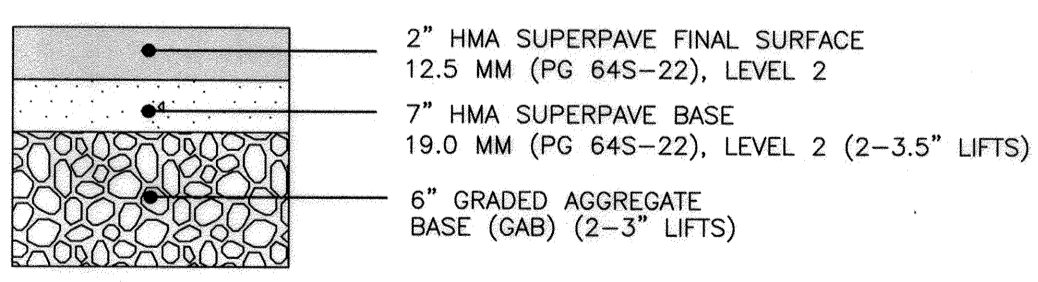
**TYPICAL SIDEWALK SECTION MD-103 (DORSEY ROAD)**  
 CENTERLINE STATION 10+79 TO 14+09  
 NOT TO SCALE



**TYPICAL ROADWAY SECTION MD-103 (DORSEY ROAD)**  
 MAJOR COLLECTOR-POSTED SPEED: 40MPH  
 CENTERLINE STATIONS 7+92 TO 10+58  
 NOT TO SCALE



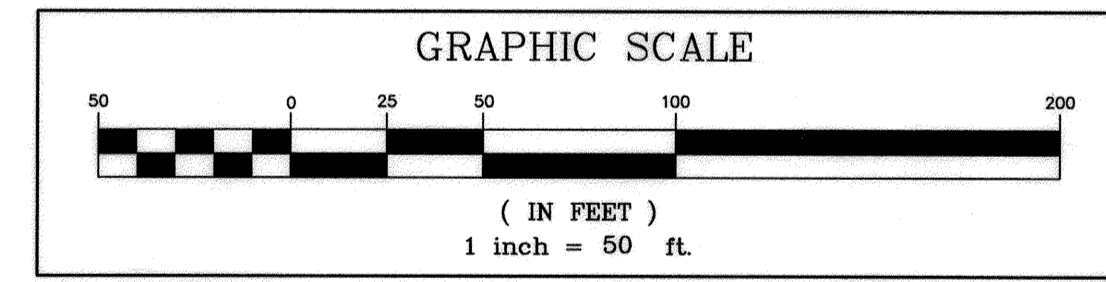
**TYPICAL SIDEWALK SECTION MD-103 (DORSEY ROAD)**  
 CENTERLINE STATION 15+04 TO 16+24  
 NOT TO SCALE



**FULL DEPTH PAVING DETAIL**  
 NOT TO SCALE

- CONSTRUCTION DETAILS**
- A. EX. 18" RCCP TO BE REPLACED WITH 36" RCCP.
  - B. EX. INLET AND 18" RCCP TO BE REMOVED.
  - C. EX. INLET TO BE CONVERTED TO MANHOLE.
  - D. EX. RIP-RAP TO BE REMOVED.
  - E. EX. 24" RCCP TO BE REPLACED WITH 36" RCCP.
  - F. EX. 30" RCCP TO BE REPLACED WITH 48" RCCP.
  - G. INSTALL SIDEWALK RAMP (MD 655.11) WITH DETECTABLE WARNING SURFACE (MD 655.40).
  - H. INSTALL 6" SIDEWALK.
  - I. INSTALL TYPE 'A' COMBINATION CURB AND GUTTER.
  - K. ACORN FULL CUT-OFF FIXTURE ATOP A 12' TALL BLACK FINISHED POLE WITH FLUTE SHROUD BASE. (5+82, 30.2' LT.).
  - L. ACORN FULL CUT-OFF FIXTURE ATOP A 12' TALL BLACK FINISHED POLE WITH FLUTE SHROUD BASE. (6+84, 30.2' LT.).
  - M. ACORN FULL CUT-OFF FIXTURE ATOP A 12' TALL BLACK FINISHED POLE WITH FLUTE SHROUD BASE. (7+90 41.2' LT.).
  - N. ACORN FULL CUT-OFF FIXTURE ATOP A 12' TALL BLACK FINISHED POLE WITH FLUTE SHROUD BASE. (8+90, 41.2' LT.).
  - O. ACORN FULL CUT-OFF FIXTURE ATOP A 12' TALL BLACK FINISHED POLE WITH FLUTE SHROUD BASE. (9+90, 41.2' LT.).
  - P. ACORN FULL CUT-OFF FIXTURE ATOP A 12' TALL BLACK FINISHED POLE WITH FLUTE SHROUD BASE. (11+12, 41.2' LT.).

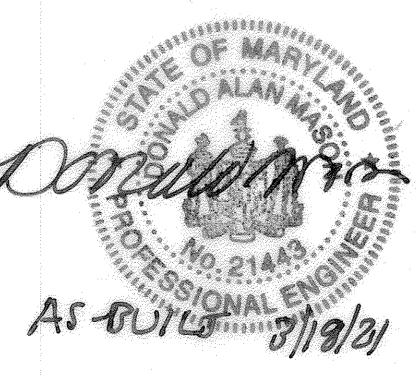
- LEGEND**
- PAVEMENT FULL DEPTH
  - MILL & OVERLAY/WEDGE & LEVEL
  - PUBLIC SIDEWALK EASEMENT
  - PROPOSED SIDEWALK
  - SHA STD. NO. MD 620.02 TYPE A CONCRETE CURB & GUTTER
  - SHA LIMIT OF DISTURBANCE
  - FLOW ARROWS
  - EXISTING INLET
  - PROPOSED INLET



**NOTES:**  
 CONTRACTOR SHALL ADJUST ALL EXISTING MANHOLE RIM ELEVATIONS TO MATCH PROPOSED PAVING/GRADE.  
 THIS IS NOT THE ACCESS PERMIT PLAN. AN ACCESS PERMIT PLAN WILL BE PREPARED AND SUBMITTED WITH THE ACCESS PERMIT APPLICATION PRIOR TO BEGINNING CONSTRUCTION.

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 21467, Expiration Date: 12-31-22



SHA TRACKING NO 17APH0004XX

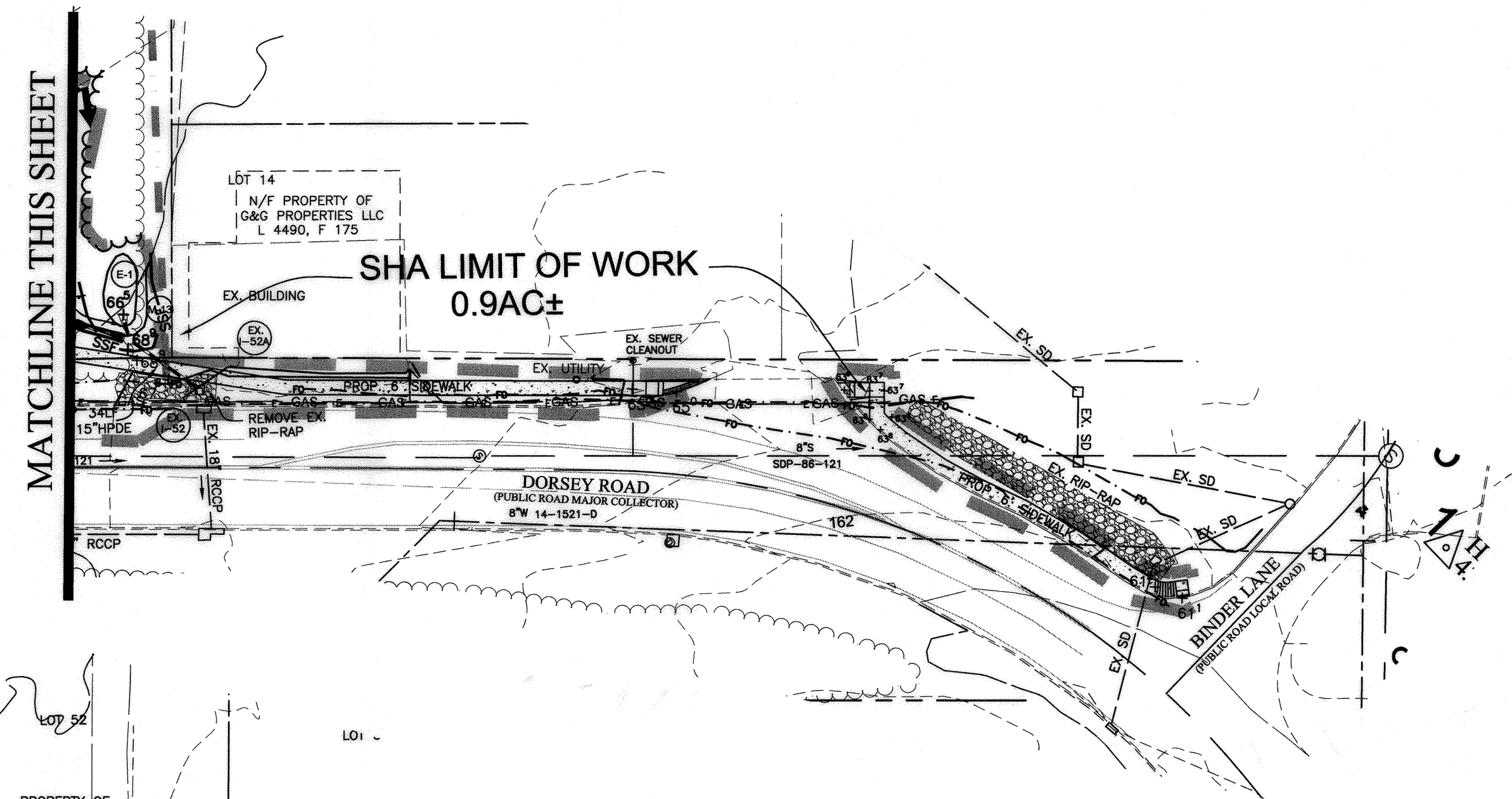
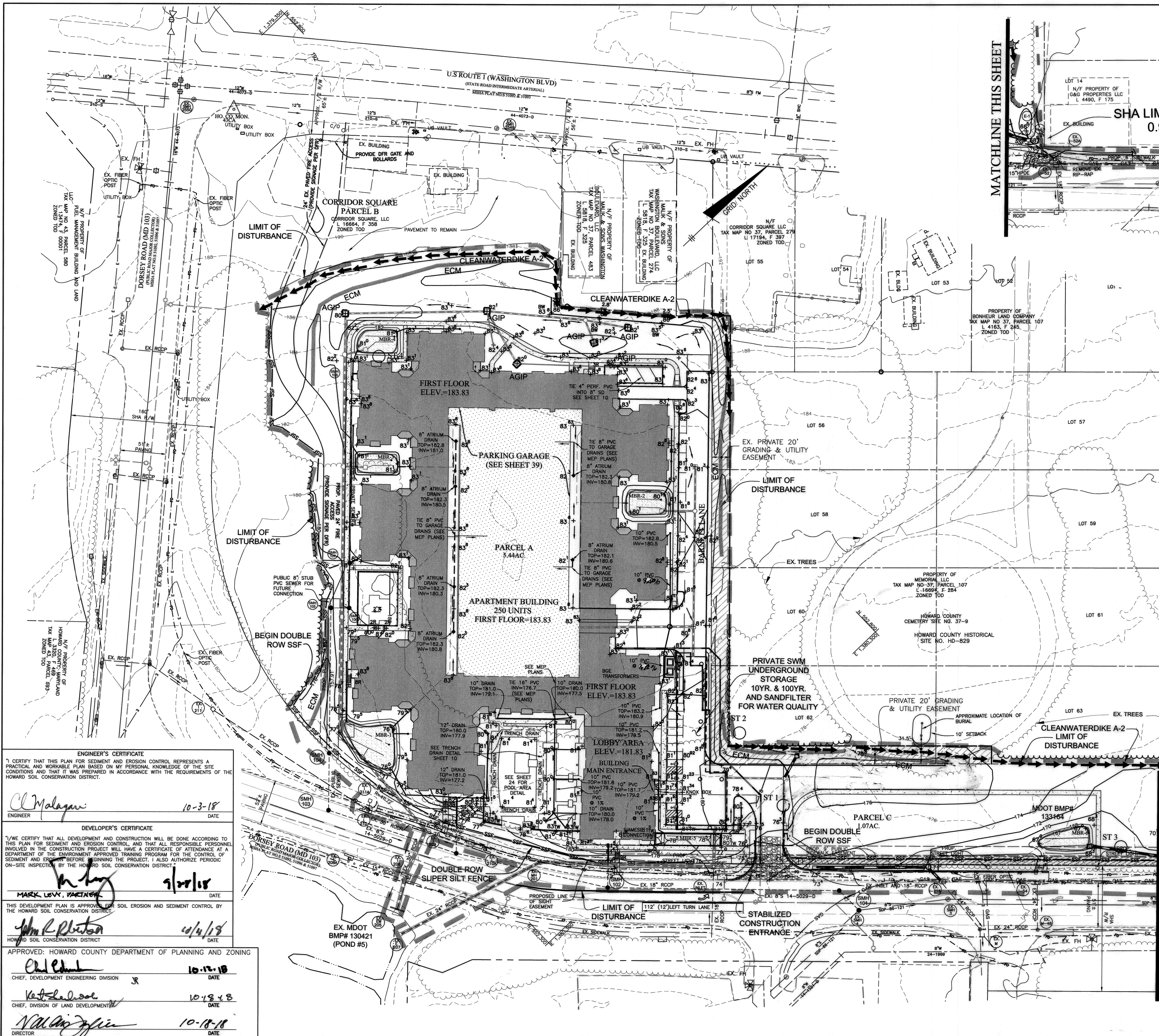
NO.	DATE	REVISION
2	2.25.21	REMOVE STORM DRAIN PER AS-BUILT
1	11.8.20	RELOCATE I-2 & REMOVE ACCESS DRIVE ALONG PARCEL C

**BENCHMARK ENGINEERING, INC.**  
 ENGINEERS • LAND SURVEYORS • PLANNERS  
 8480 BALTIMORE NATIONAL PIKE & SUITE 315 • ELICOTT CITY, MARYLAND 21043  
 (P) 410-485-8108 (F) 410-485-6844  
 WWW.BE-CIVLENGINEERING.COM

OWNER: CORRIDOR SQUARE, LLC 6800 DEERPATH ROAD ELK RIDGE, MD 21075 410.579.2442	PROGRESS SET 10.03.2018, PROJECT NO. 2016.05 <b>CORRIDOR SQUARE PARCELS A &amp; C</b> RESIDENTIAL APARTMENT BUILDING TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65) TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND
DEVELOPER: MURN DEVELOPMENT 6800 DEERPATH ROAD ELK RIDGE, MD 21075 410.579.2442	<b>SITE DEVELOPMENT PLAN ROAD WIDENING AND IMPROVEMENT PLAN</b> DATE: SEPTEMBER 2018 BEI PROJECT NO. 2695
DESIGN: JCO DRAFT: JCO	DATE: AS NOTED SHEET: 5 OF 39

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

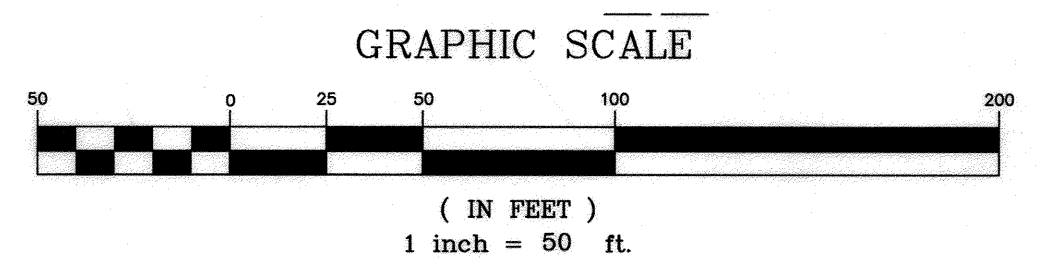
	10-12-19
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
	10-13-18
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
	10-18-18
DIRECTOR	DATE



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 21443, Expiration Date: 12-31-22

AS-BUILT CERTIFICATION  
 I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications.  
 Donald Mason, P.E. Date: 3/19/21

- LEGEND**
- EXISTING CONTOURS
  - EXISTING TREELINE
  - PROPOSED TREELINE
  - EXISTING BUILDING
  - EXISTING PAVING
  - PROPOSED BUILDING
  - PROPOSED PARKING DECK
  - LIMIT OF DISTURBANCE
  - SUPER SILT FENCE
  - CLEANWATER DIVERSION
  - STABILIZED CONSTRUCTION ENTRANCE
  - INLET PROTECTION
  - EROSION CONTROL MATTING



NOTE: FOR EXTERIOR ROOF LEADER MANIFOLD PIPE DRAINS TO MBR'S, SEE SHEET 12 OF 39 FOR LOCATION AND INVERT ELEVATIONS.

**ENGINEER'S CERTIFICATE**  
 I, CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.  
 Cl Malagan 10-3-18  
 ENGINEER DATE

**DEVELOPER'S CERTIFICATE**  
 I, WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 Mark Levy, FACTOR 9/10/18  
 DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 John R. Platon 4/4/19  
 HOWARD SOIL CONSERVATION DISTRICT DATE

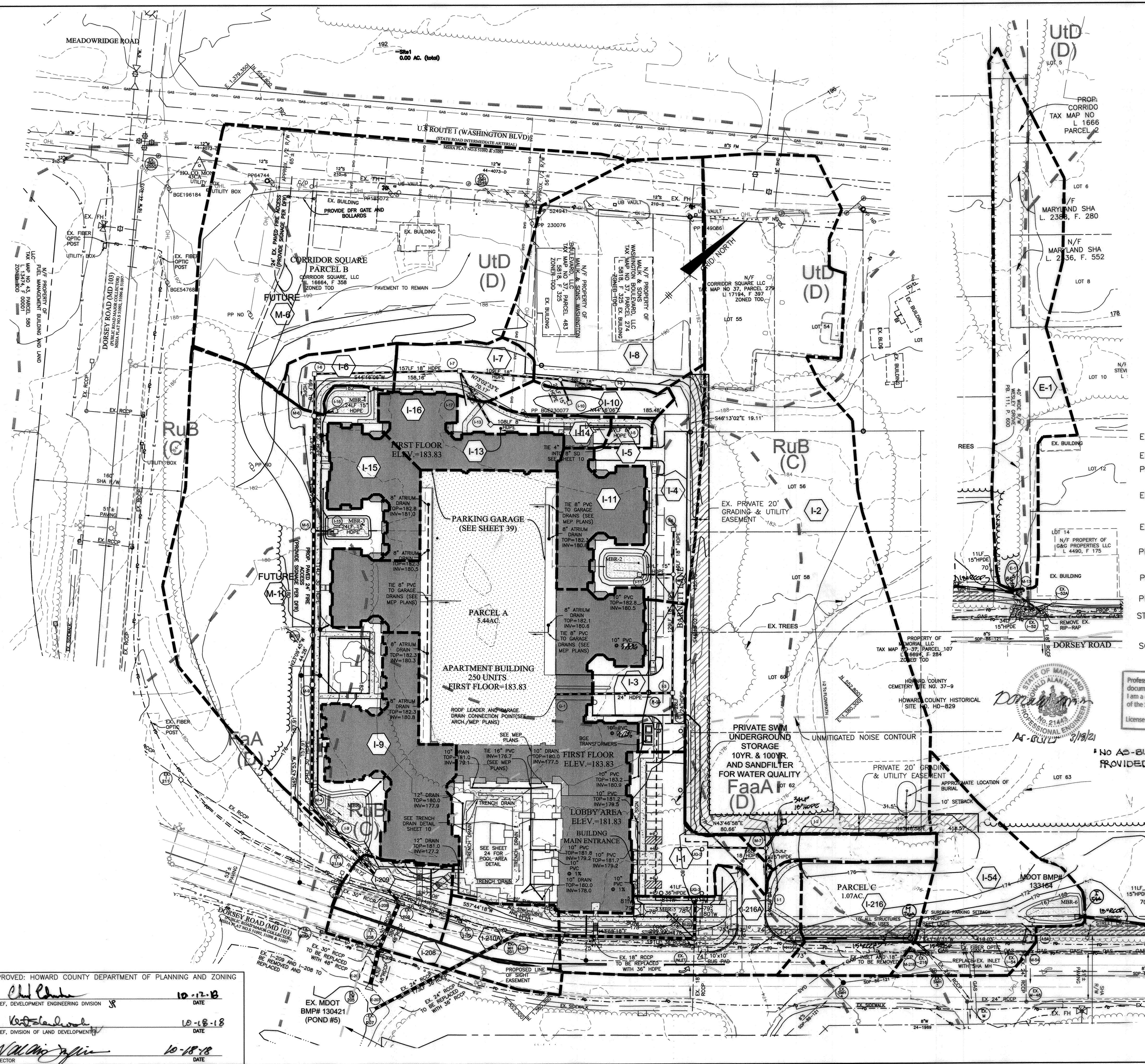
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 Chief, Development Engineering Division 10-12-18  
 DATE

Chief, Division of Land Development 10-18-18  
 DATE

Director 10-18-18  
 DATE

NO.	2	DATE	2.25.21	REVISION	REVISE STORM DRAIN PER AS-BUILT
<p align="center"><b>BENCHMARK</b>          ENGINEERS &amp; LAND SURVEYORS &amp; PLANNERS  <b>ENGINEERING, INC.</b>          8400 BALTIMORE NATIONAL PIKE SUITE 315 &amp; ELLICOTT CITY, MARYLAND 21043          (P) 410-465-6105 (F) 410-465-6644          WWW.BEI-CIVILENGINEERING.COM</p>					
OWNER:			CORRIDOR SQUARE PARCELS A & C RESIDENTIAL APARTMENT BUILDING		
DEVELOPER:			MURN DEVELOPMENT 6800 DEERPATH ROAD ELKRIDGE, MD 21075 410.579.2442		
DESIGN:			JCO DRAFT: JCO		
DATE:			SEPTEMBER 2018		
SCALE:			1"=50'		
SHEET:			6 OF 39		
PROJECT NO.:			2695		
SHEET NO.:			SDP-18-002		





SHA STORM DRAINAGE AREA DATA		STORM DRAINAGE AREA DATA	
AREA = 0.08 AC	ES-1 ZONE = T.O.D.	AREA = 0.31 AC	1-1 ZONE = T.O.D.
"C" FACTOR = 0.24	IMPERVIOUS = 41%	"C" FACTOR = 0.86	IMPERVIOUS = 100%
AREA = 0.36 AC	216 ZONE = T.O.D.	AREA = 3.22 AC	1-2 ZONE = T.O.D.
"C" FACTOR = 0.44	IMPERVIOUS = 41%	"C" FACTOR = 0.36	IMPERVIOUS = 23%
AREA = 0.15 AC	54 ZONE = T.O.D.	AREA = 0.26 AC	1-3 ZONE = T.O.D.
"C" FACTOR = 0.76	IMPERVIOUS = 68%	"C" FACTOR = 0.86	IMPERVIOUS = 100%
AREA = 0.48 AC	216A ZONE = T.O.D.	AREA = 0.36 AC	1-4 ZONE = T.O.D.
"C" FACTOR = 0.49	IMPERVIOUS = 48%	"C" FACTOR = 0.86	IMPERVIOUS = 100%
AREA = 0.39 AC	211A ZONE = T.O.D.	AREA = 0.08 AC	1-5 ZONE = T.O.D.
"C" FACTOR = 0.24	IMPERVIOUS = 0%	"C" FACTOR = 0.37	IMPERVIOUS = 23%
AREA = 6.37 AC	210 ZONE = T.O.D.	AREA = 0.13 AC	1-6 ZONE = T.O.D.
"C" FACTOR = 0.54	IMPERVIOUS = 50%	"C" FACTOR = 0.86	IMPERVIOUS = 100%
AREA = 0.17 AC	210A ZONE = T.O.D.	AREA = 0.19 AC	1-7 ZONE = T.O.D.
"C" FACTOR = 0.55	IMPERVIOUS = 46%	"C" FACTOR = 0.86	IMPERVIOUS = 100%
AREA = 0.19 AC	209 ZONE = T.O.D.	AREA = 1.02 AC	1-8 ZONE = T.O.D.
"C" FACTOR = 0.47	IMPERVIOUS = 37%	"C" FACTOR = 0.72	IMPERVIOUS = 91%
AREA = 0.15 AC	208 ZONE = T.O.D.	AREA = 0.44 AC	1-9 ZONE = T.O.D.
"C" FACTOR = 0.86	IMPERVIOUS = 100%	"C" FACTOR = 0.86	IMPERVIOUS = 100%
AREA = 0.32 AC	208A ZONE = T.O.D.	AREA = 0.12 AC	1-10 ZONE = T.O.D.
"C" FACTOR = 0.86	IMPERVIOUS = 100%	"C" FACTOR = 0.86	IMPERVIOUS = 100%
AREA = 0.32 AC	208A ZONE = T.O.D.	AREA = 0.23 AC	1-11 ZONE = T.O.D.
"C" FACTOR = 0.86	IMPERVIOUS = 100%	"C" FACTOR = 0.86	IMPERVIOUS = 100%
AREA = 0.81 AC	MBR 6 ZONE = T.O.D.	AREA = 0.13 AC	1-12 ZONE = T.O.D.
"C" FACTOR = 0.42	IMPERVIOUS = 26%	"C" FACTOR = 0.86	IMPERVIOUS = 100%
		AREA = 0.06 AC	1-13 ZONE = T.O.D.
		"C" FACTOR = 0.37	IMPERVIOUS = 21%
		AREA = 0.05 AC	1-14 ZONE = T.O.D.
		"C" FACTOR = 0.35	IMPERVIOUS = 17%
		AREA = 0.22 AC	1-15 ZONE = T.O.D.
		"C" FACTOR = 0.86	IMPERVIOUS = 100%
		AREA = 0.13 AC	1-16 ZONE = T.O.D.
		"C" FACTOR = 0.86	IMPERVIOUS = 100%
		AREA = 1.97 AC	M-6 ZONE = T.O.D.
		"C" FACTOR = 0.72	IMPERVIOUS = 85%
		AREA = 1.37 AC	M-10 ZONE = T.O.D.
		"C" FACTOR = 0.34	IMPERVIOUS = 65%
		AREA = 0.78 AC	E-1 ZONE = T.O.D.
		"C" FACTOR = 0.24	IMPERVIOUS = 0%

**LEGEND**

- EXISTING CONTOURS
- EXISTING TREELINE
- PROPOSED TREELINE
- EXISTING BUILDING
- EXISTING PAVING
- PROPOSED BUILDING
- PROPOSED PARKING DECK
- PROPOSED STORM DRAIN
- STORM DRAIN DRAINAGE AREA
- SOILS BOUNDARY

**GRAPHIC SCALE**  
1 inch = 50 ft.

Professional Certification, I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21247 Expiration Date: 12-21-22

**BENCHMARK ENGINEERING, INC.**  
8480 BALTIMORE NATIONAL PIKE SUITE 315 & ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-6105 (F) 410-465-8644  
WWW.BEI-CIVILENGINEERING.COM

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

10-12-18 DATE

10-18-18 DATE

10-18-18 DATE

OWNER: CORRIDOR SQUARE, LLC  
6800 DEERPATH ROAD  
ELKRIDGE, MD 21075  
410.579.2442

DEVELOPER: MURN DEVELOPMENT  
6800 DEERPATH ROAD  
ELKRIDGE, MD 21075  
410.579.2442

DESIGN: JCO DRAFT: JCO

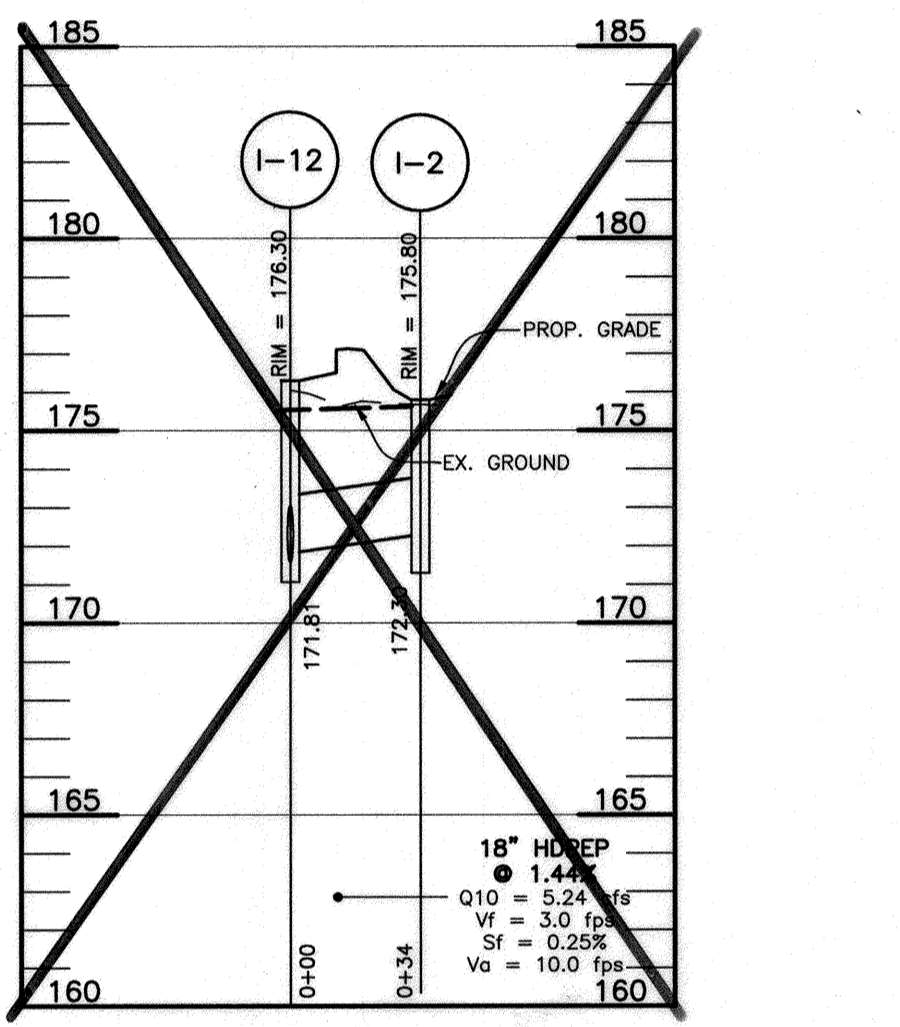
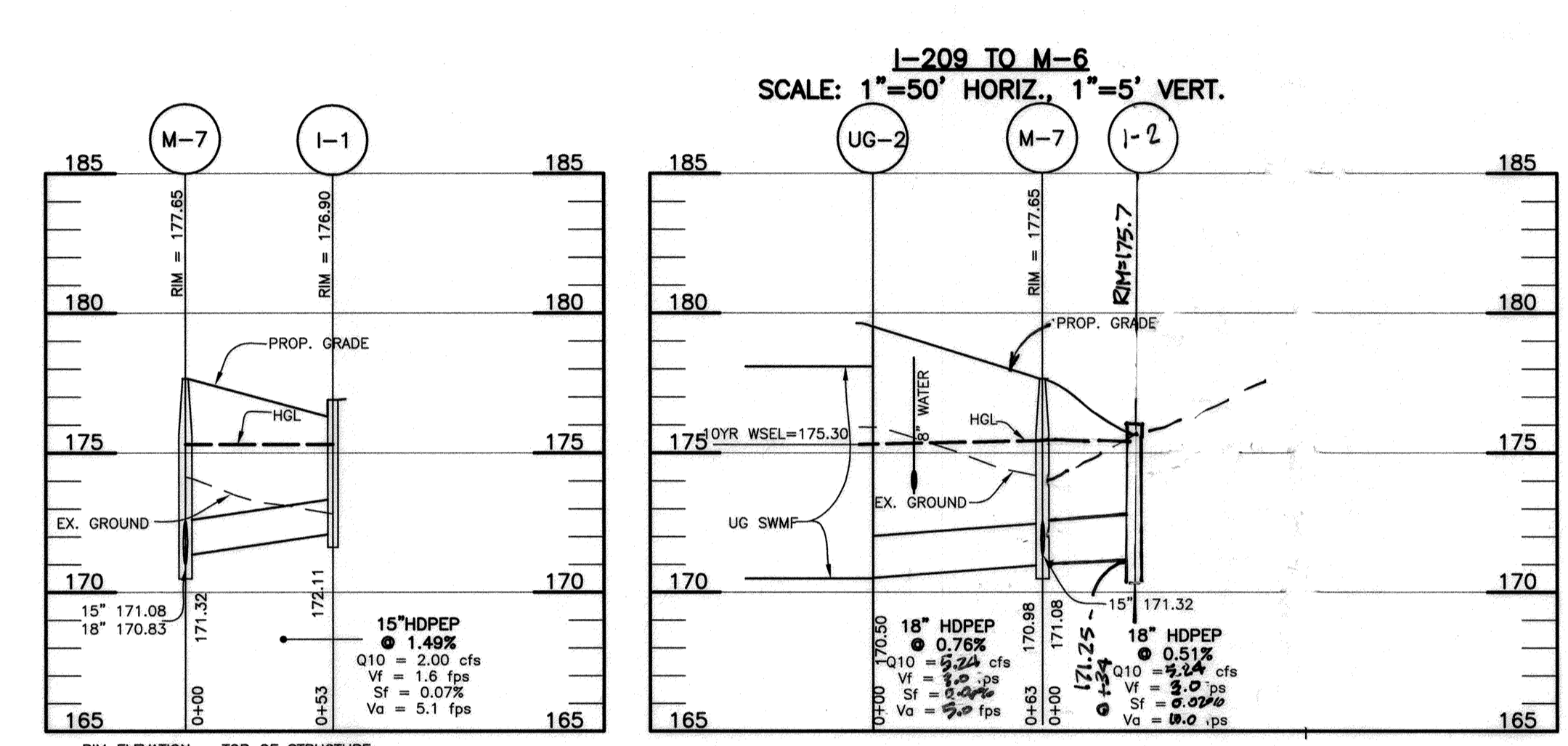
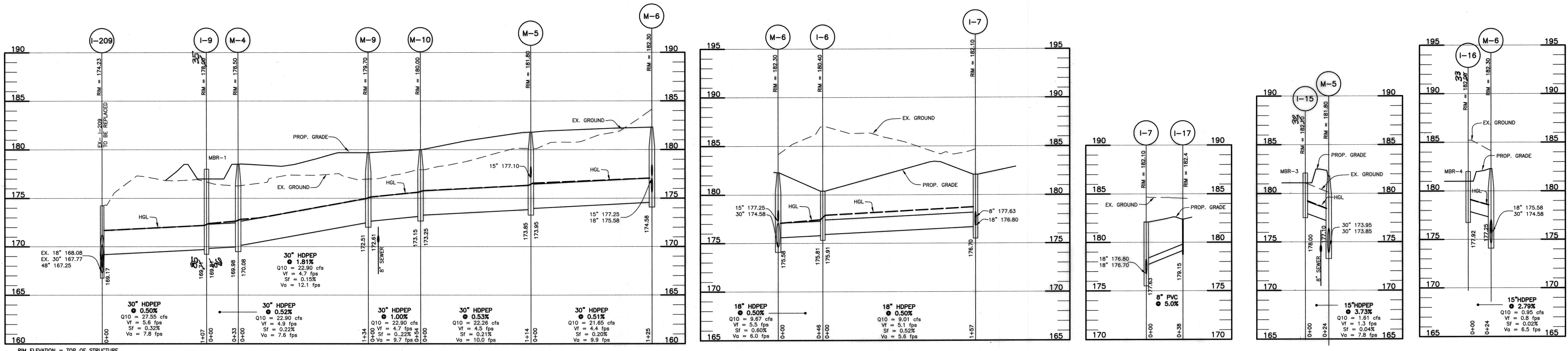
**CORRIDOR SQUARE PARCELS A & C**  
RESIDENTIAL APARTMENT BUILDING

TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65)  
TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79  
ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND

**SITE DEVELOPMENT PLAN**  
**STORM DRAIN DRAINAGE AREA MAP**

DATE: SEPTEMBER 2018 BEI PROJECT NO. 2695  
SCALE: 1"=50' SHEET 8 OF 39





**M-6 TO I-7**  
SCALE: 1"=50' HORIZ., 1"=5' VERT.

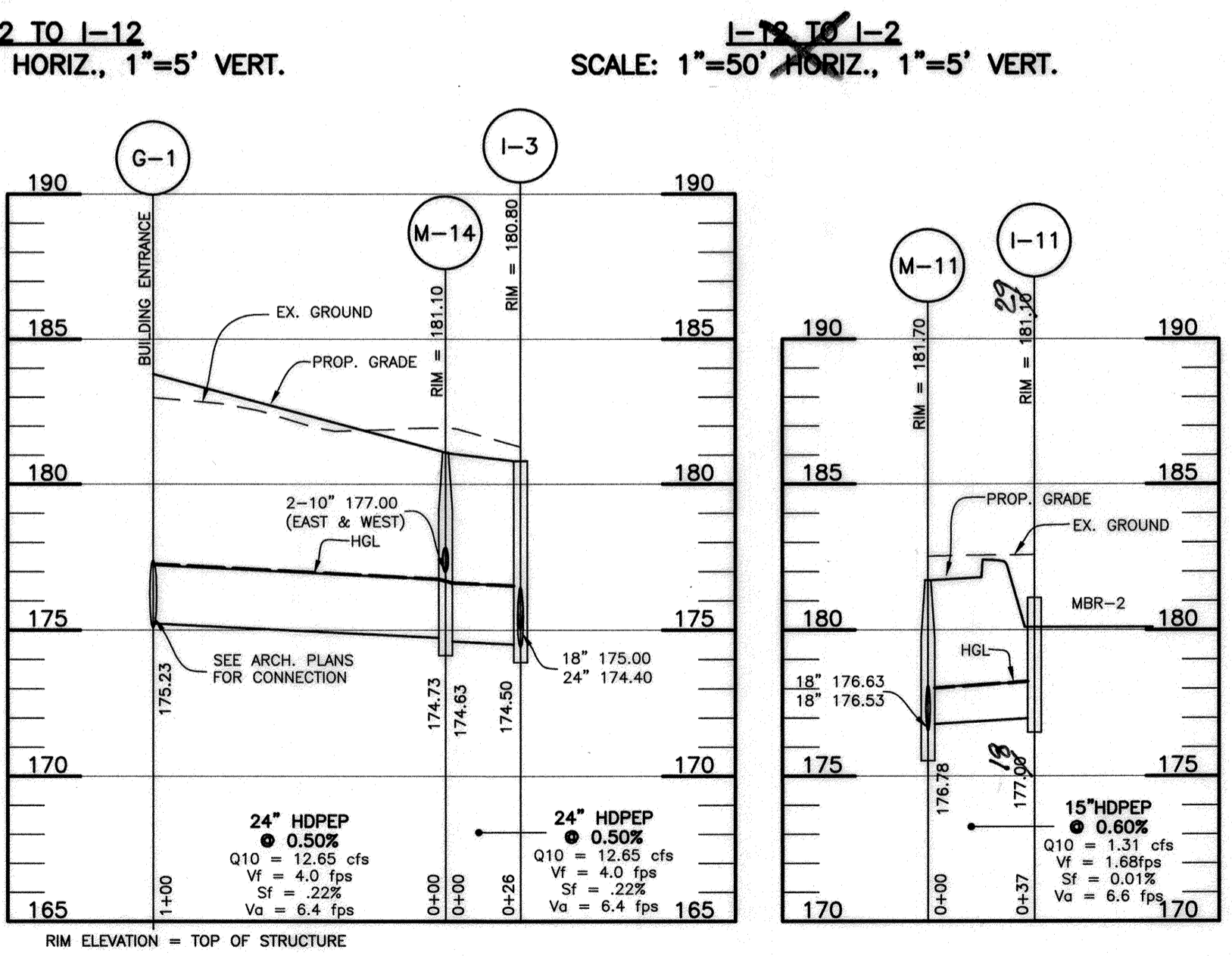
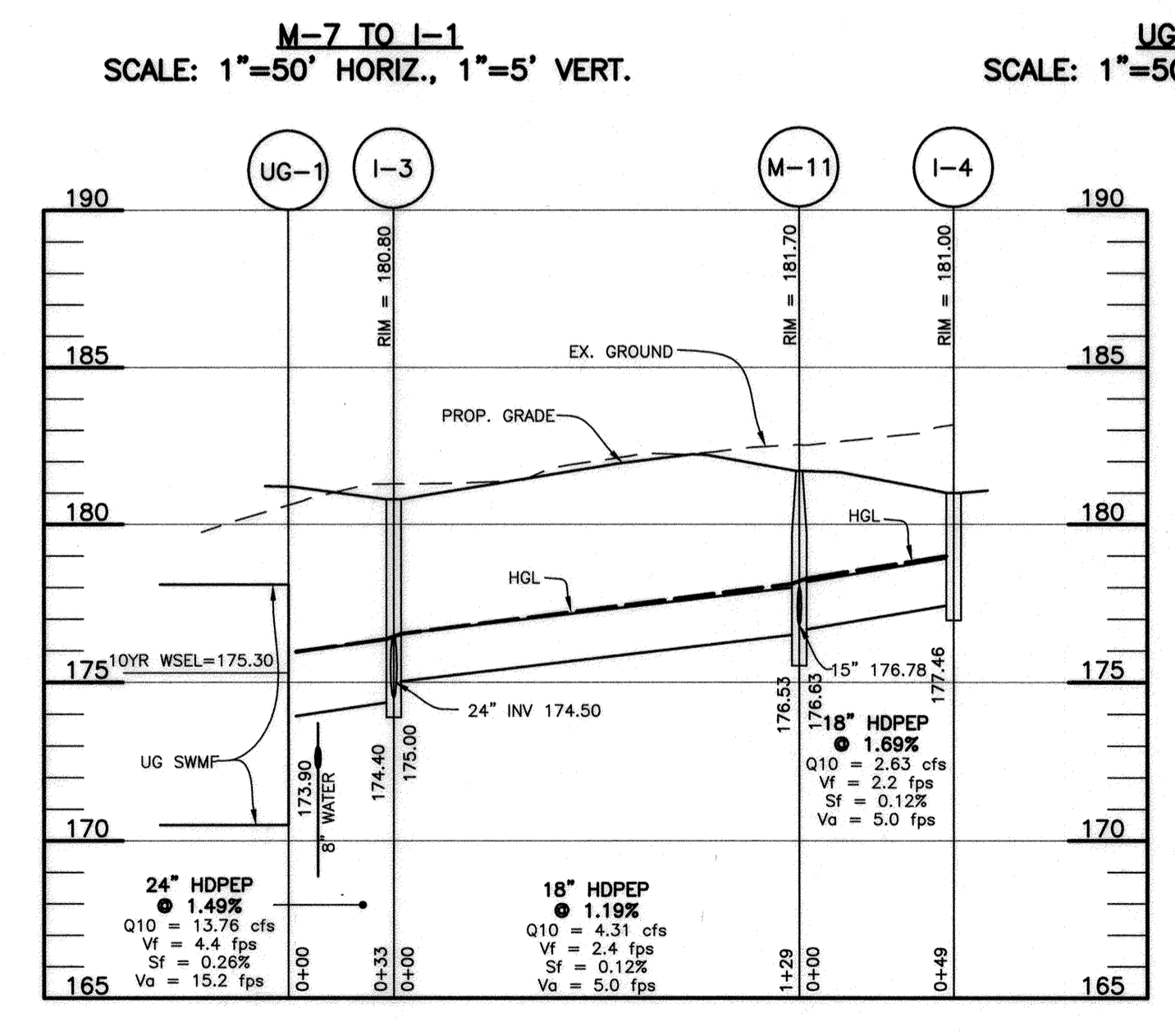
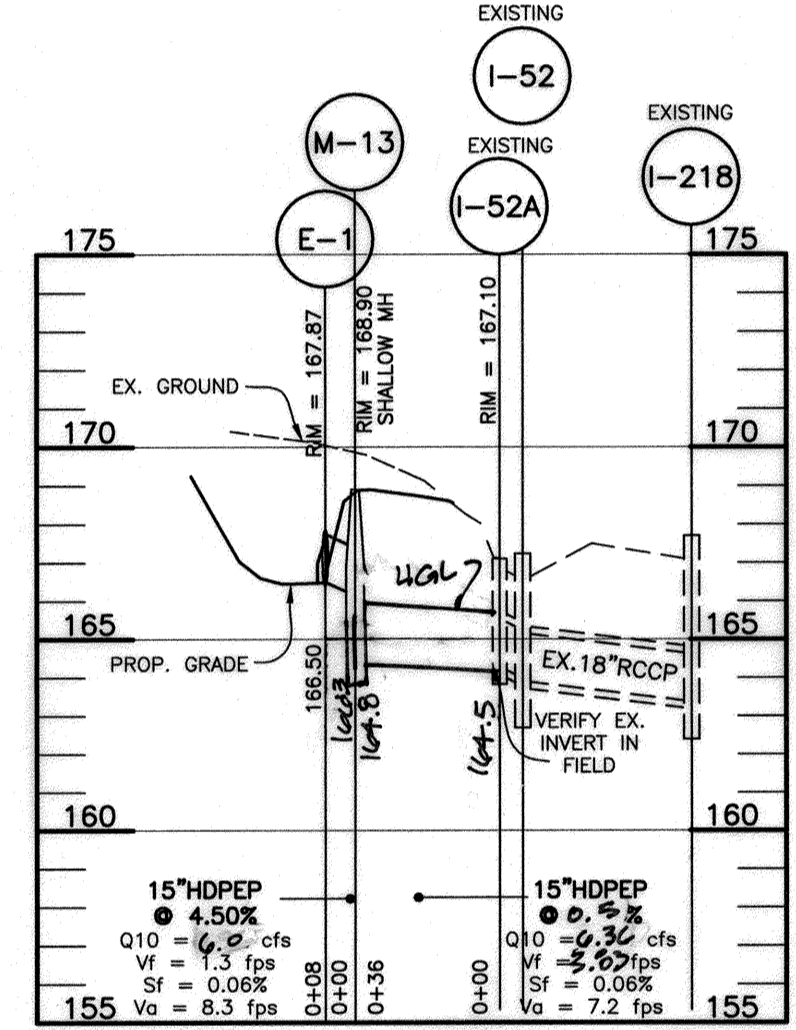
**I-17 TO I-7**  
SCALE: 1"=50' HORIZ., 1"=5' VERT.

**M-5 TO I-15**  
SCALE: 1"=50' HORIZ., 1"=5' VERT.

**M-6 TO I-16**  
SCALE: 1"=50' HORIZ., 1"=5' VERT.

NUMBER	TYPE	LOCATION	INVERT IN	INVERT OUT	TOP ELEV.	STD. DETAIL	OWNER	REMARKS
I-1	A-5	N 552578.6750 E 1380366.8855	172.11(15")	176.90	D-4.02			
I-2	D	N 552658.3769 E 1380156.3359	175.00(18") 174.50(24")	174.40(24")	180.80	D-4.24		OPEN ON 4 SIDES
I-3	S	N 552782.4194 E 1380029.0846	177.46(18")	181.00	D-4.24			
I-4	S	N 552834.9158 E 1379925.9336	179.27(18")	183.00	D-4.24			SEE 8" STANDARD GRATE DETAIL SHEET 10
I-5	S	N 552619.1513 E 1379637.9985	175.91(18")	175.81(18")	180.40	D-4.24		
I-6	S	N 552734.7416 E 1379744.3623	176.80(18") 177.63(18")	176.70(18")	182.10	D-4.24		
I-7	S	N 552838.5225 E 1379862.9018	178.60(15")	182.10	D-4.24			
I-8	D	N 552292.2368 E 1380008.1843	169.8(30")	178.0(24")	D-4.10			OPEN ON 4 SIDES
I-9	S	N 552796.5787 E 1379851.5346	177.00(15")	181.30	D-4.24			OPEN ON 4 SIDES
I-10	S	N 552721.7258 E 1380038.9494	177.00(15")	181.30	D-4.10			OPEN ON 4 SIDES
I-11	S	N 552718.7275 E 1379809.4851	178.60(8")	177.96(18")	182.00	D-4.24		SEE 8" DOME DETAIL SHEET 10
I-12	A-5	N 552793.9853 E 1379886.3753	178.70(8")	178.60(8")	182.00			
I-13	D	N 552517.1127 E 1379777.1857	178.00(15")	182.00	D-4.10			OPEN ON 4 SIDES
I-14	D	N 552607.5688 E 1379882.3675	177.92(15")	182.00	D-4.10			OPEN ON 4 SIDES
I-15	A-5	N 552718.7275 E 1379809.4851	178.60(8")	177.96(18")	182.00	D-4.24		SEE 8" DOME DETAIL SHEET 10
I-16	A-5	N 552793.9853 E 1379886.3753	178.70(8")	178.60(8")	182.00			
I-17	A-5	N 552517.1127 E 1379777.1857	178.00(15")	182.00	D-4.10			OPEN ON 4 SIDES
M-1	48" MH	N 552806.7944 E 1379826.6617	177.60(15") 177.60(15")	177.35(18")	183.20	G-5.12		
M-2	60" MH	N 552289.9944 E 1379975.6671	170.08(30")	169.98(30")	178.50	G-5.13		
M-3	60" MH	N 552500.3317 E 1379759.8907	173.95(30") 177.10(15")	173.85(30")	181.80	G-5.13		
M-4	60" MH	N 552587.1480 E 1379670.6330	175.58(18") 177.25(15")	174.58(30")	182.30	G-5.13		
M-5	48" MH	N 552614.5484 E 1380348.0442	171.32(15") 171.08(18")	170.98(18")	177.65	G-5.12		
M-6	60" MH	N 552383.4835 E 1379879.7605	172.61(30")	172.51(30")	179.70	G-5.13		
M-7	60" MH	N 552421.0378 E 1379841.2350	173.25(30")	173.15(30")	180.00	G-5.13		
M-8	48" MH	N 552748.2125 E 1380064.1763	176.63(18") 176.78(15")	176.53(18")	181.70	G-5.12		
M-9	48" MH	N 552869.0061 E 1380718.7375	166.1(15")	166.0(15")	168.90	G-5.12		SHALLOW MANHOLE
M-10	48" MH	N 552639.6169 E 1380138.6975	174.73(24") 172.00(2-10")	174.63(24")	181.10	G-5.12		
M-11	48" MH	N 552635.0916 E 1380180.2235	173.90(24")	177.98	-			TOP OF BOX
M-12	48" MH	N 552523.8833 E 1380332.1142	170.40(36")	177.98	-			TOP OF BOX
M-13	48" MH	N 552567.6802 E 1380302.0860	170.50(18")	177.98	-			TOP OF BOX

SIZE / MATERIAL	LENGTH
15" HDPEP	255 LF
18" HDPEP	752 LF
24" HDPEP	159 LF
30" HDPEP	567 LF
15" RCP	138 LF
36" RCP	409 LF
48" RCP	94 LF
8" PVC	203 LF



**UG-1 TO I-4**  
SCALE: 1"=50' HORIZ., 1"=5' VERT.

**I-3 TO G-1**  
SCALE: 1"=50' HORIZ., 1"=5' VERT.

**M-11 TO I-11**  
SCALE: 1"=50' HORIZ., 1"=5' VERT.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Engineering  
 Chief, Division of Land Development  
 Director

10-12-18  
 10-18-18  
 10-18-18

AS-BUILT CERTIFICATION  
 I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications

Donald Mason, P.E.  
 Date: 3/18/21

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 21642, Expiration Date: 12-31-22

NUMBER	TYPE	LOCATION	INVERT IN	INVERT OUT	TOP ELEV.	STD. DETAIL	OWNER	REMARKS
HW-205	MDOT SHA B-48	N 552200.2036 E 1380155.4436	166.64	-	MD-352.01			
E-207	16" CONC. END STRUCTURE	N 552201.1181 E 1380193.1504	167.30	-	MD-354.01			
E-1	15" CONC. END STRUCTURE	N 552875.5525 E 1380709.4482	166.50(15")	167.87	D-5.51			
REPLACE EX. I-208	STD. COG/COS 10"	N 552236.4867 E 1380136.5959	166.97(48")	166.87(48")	174.41	MD-374.61		TO BE REPLACED
REPLACE EX. I-209	STD. COG/COS 20"	N 552287.4419 E 1380115.5383	EX.167.77(18") EX.167.77(30") 169.17(30")	167.25(48")	174.23	MD-374.61		TO BE REPLACED
EX. I-210	48" MH	N 552737.6637 E 1380625.8540	EX.165.20(24")	165.20(18")	169.80*	MD-384.01		TO BE CONVERTED TO A MANHOLE
EX. I-211	48" MH	N 552661.6525 E 1380551.7585	167.48(18")	EX.167.38(24")	171.20*	MD-384.01		TO BE CONVERTED TO A MANHOLE
I-216A	STD. COG/COS 10"	N 552571.2001 E 1380447.0073	169.40(15")	173.44	MD-374.61			
I-216 FT	10" COG/COS OPENING	N 552749.9497 E 1380620.5276	171.00	170.71	171.83	MD-374.68		FLOW THRU INLET 14" DEEP
I-54 FT	10" COG/COS OPENING	N 552663.4516 E 1380536.9006	169.30	169.01	170.13	MD-374.68		FLOW THRU INLET 14" DEEP
REPLACE M-201	60" MH	N 552355.1050 E 1380228.5120	168.26(36")	168.16(36")	175.04*	MD-384.02		TO BE RELOCATED & REPLACED
M-202	60" MH	N 552490.6868 E 1380365.1021	169.32(36")	169.22(36")	175.64*	MD-384.02		

Professional Engineer, 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. 10112, Expiration Date: 06.30.19.

**BENCHMARK ENGINEERING, INC.**  
 6840 BALTIMORE NATIONAL PIKE & SUITE 315 ELLICOTT CITY, MARYLAND 21043  
 (P) 410-465-6105 (F) 410-465-6644  
 WWW.BE-CIVILENGINEERING.COM

OWNER: CORRIDOR SQUARE, LLC  
 6800 DEERPATH ROAD  
 ELKBRIDGE, MD 21075  
 410.579.2442

DEVELOPER: MURN DEVELOPMENT  
 6800 DEERPATH ROAD  
 ELKBRIDGE, MD 21075  
 410.579.2442

DESIGN: JCO DRAFT: JCO

DATE: SEPTEMBER 2018  
 SCALE: SEE PLAN

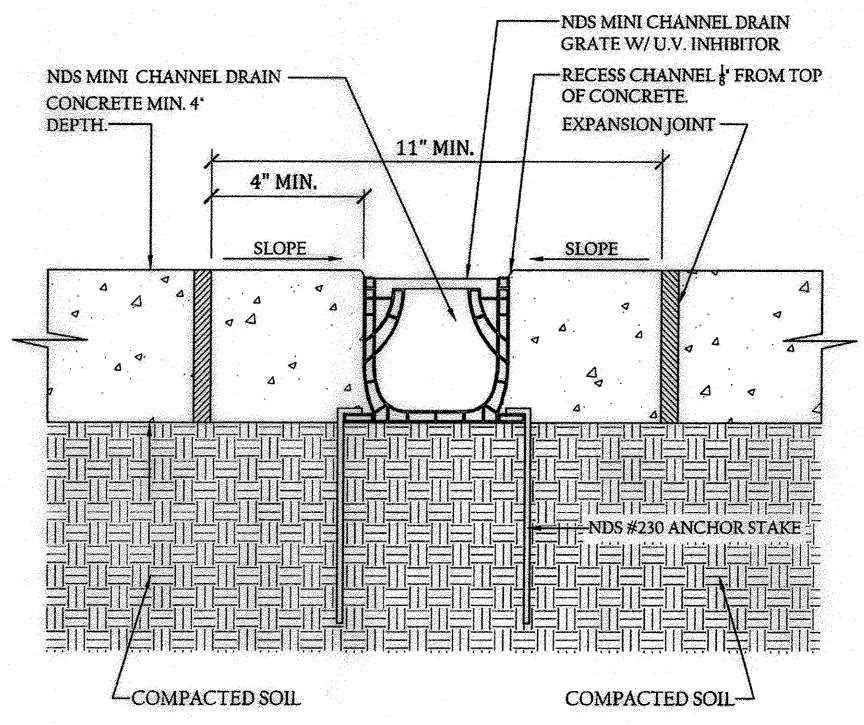
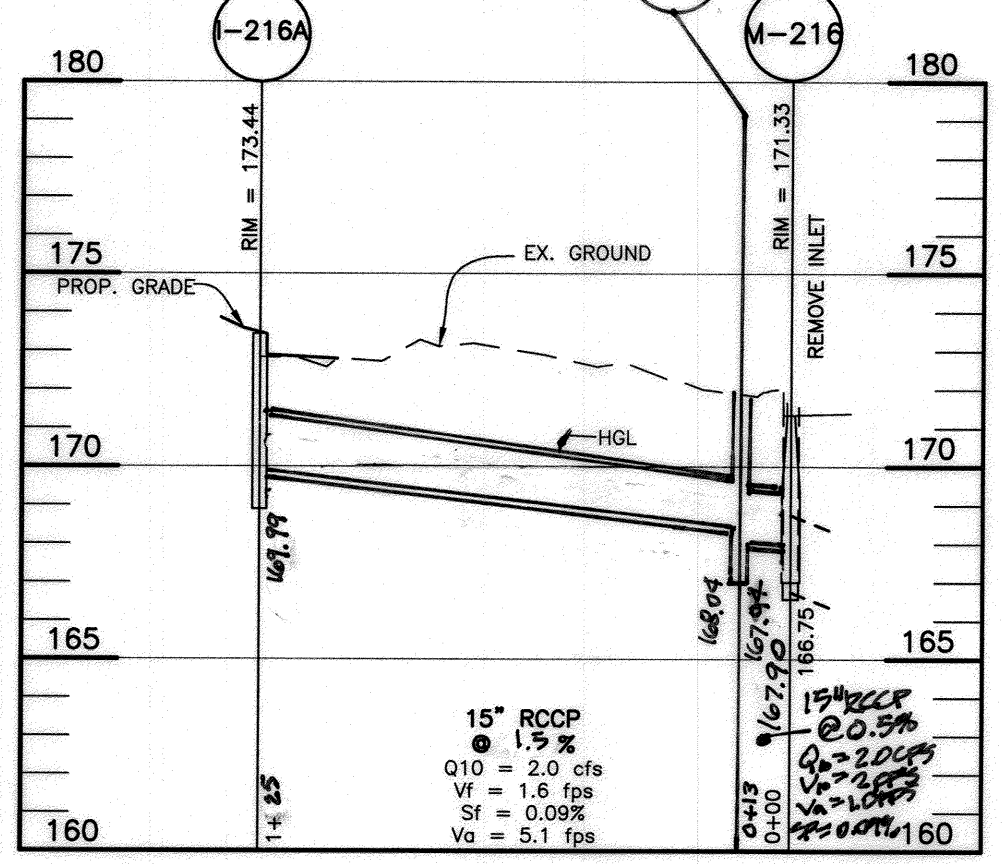
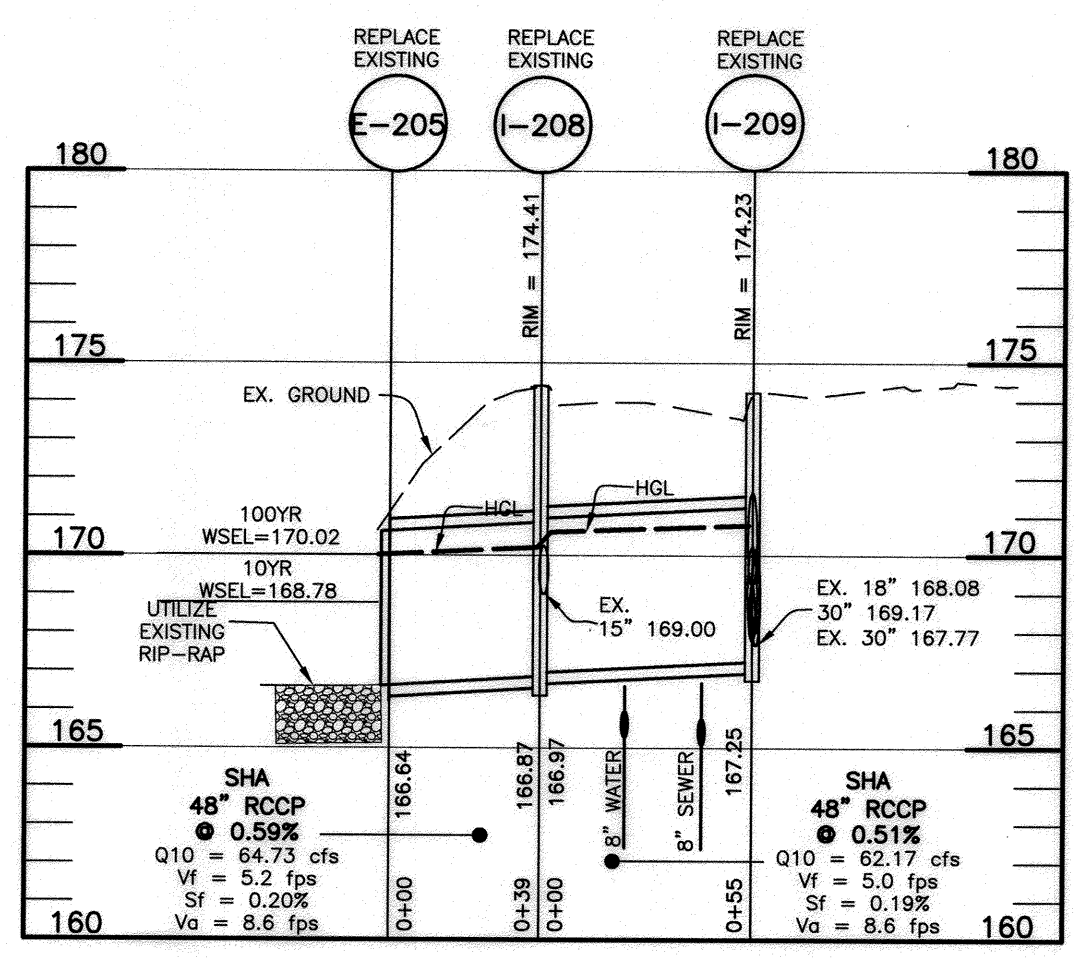
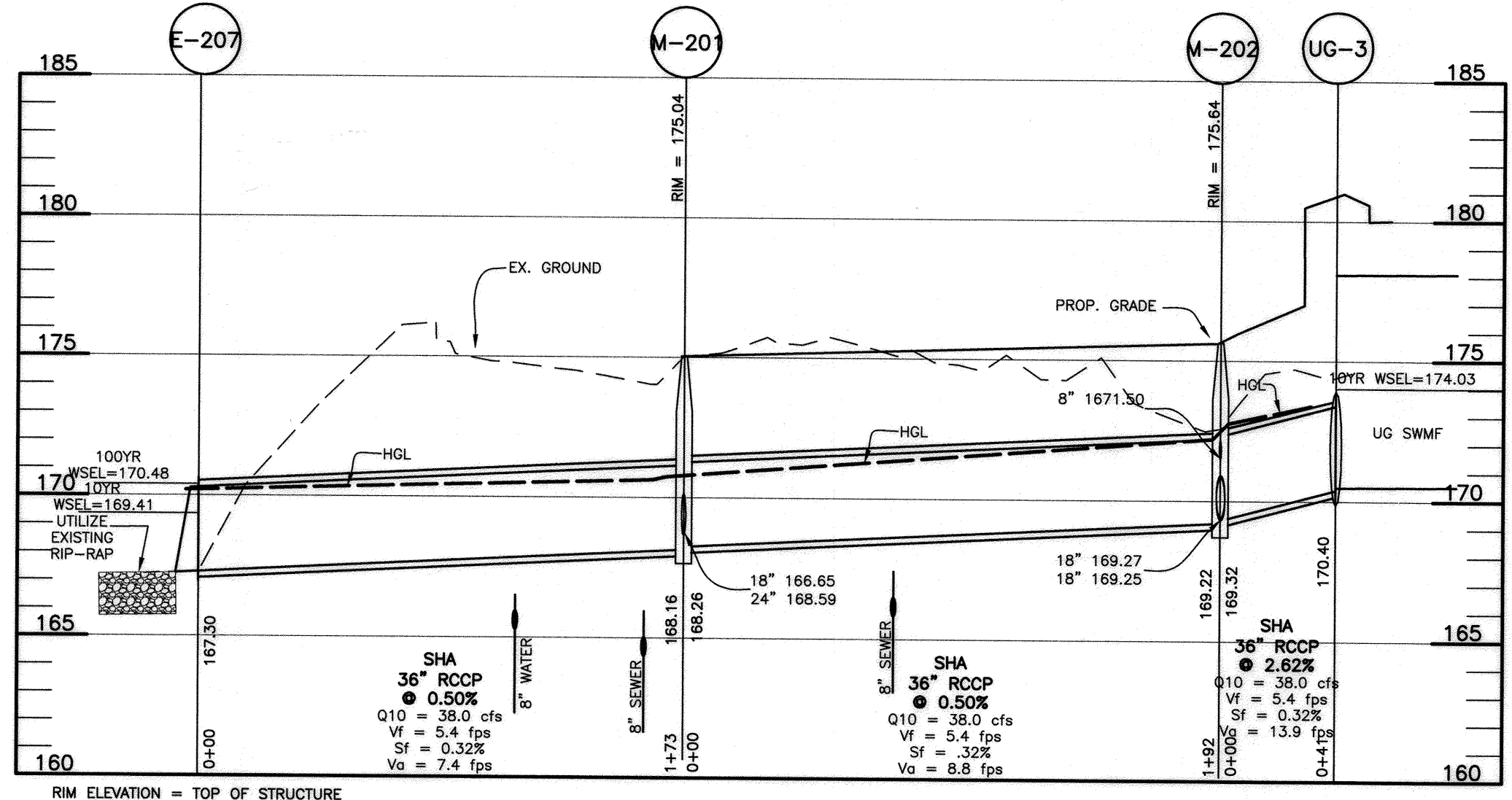
BEI PROJECT NO. 2695  
 SHEET 9 OF 39

**CORRIDOR SQUARE PARCELS A & C**  
 RESIDENTIAL APARTMENT BUILDING

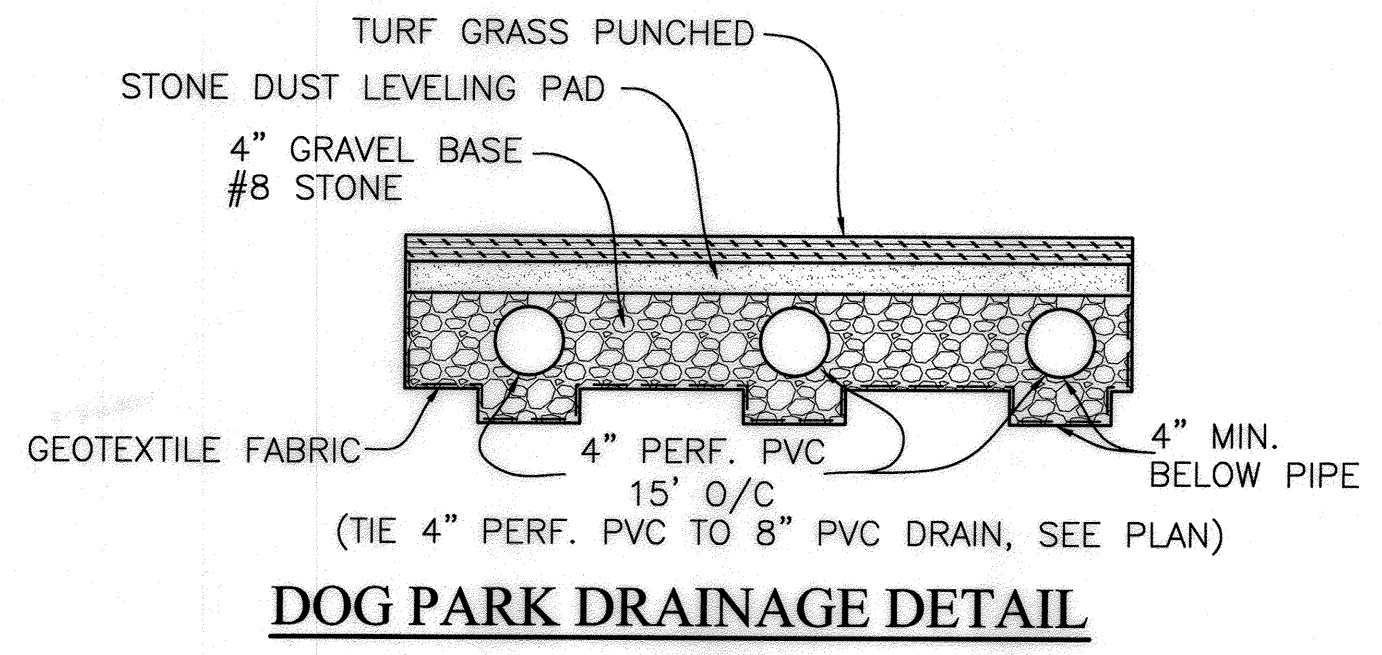
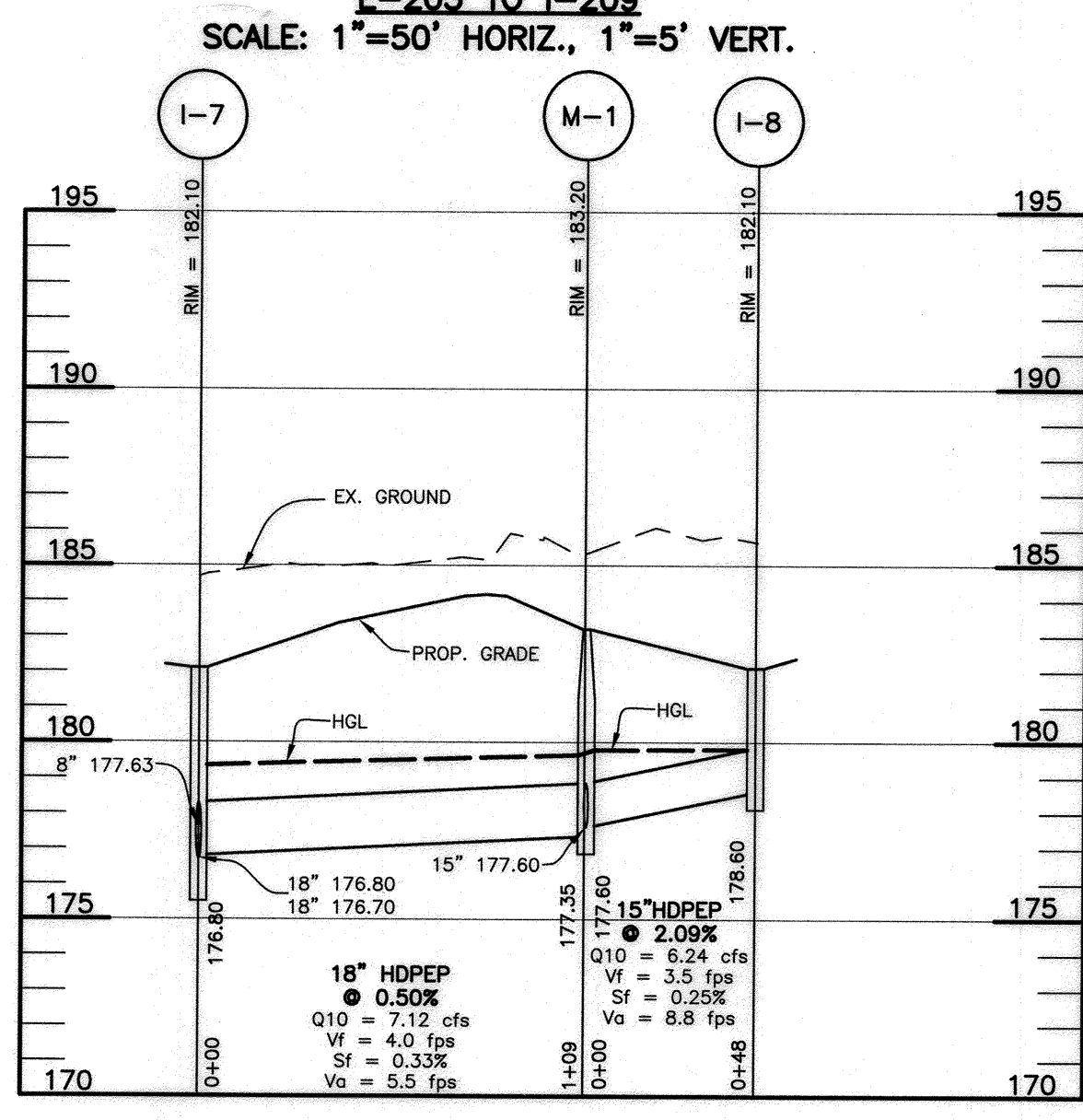
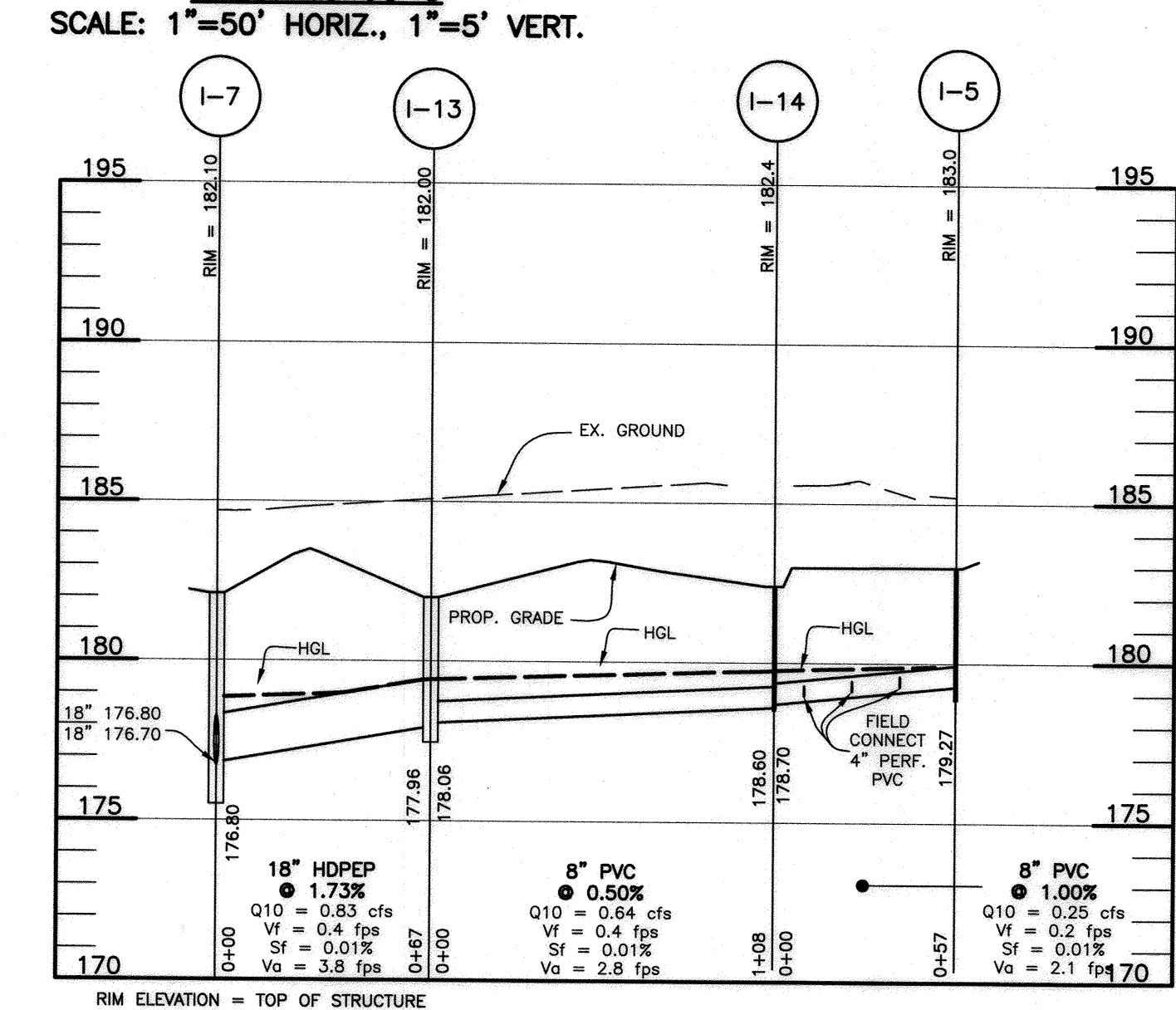
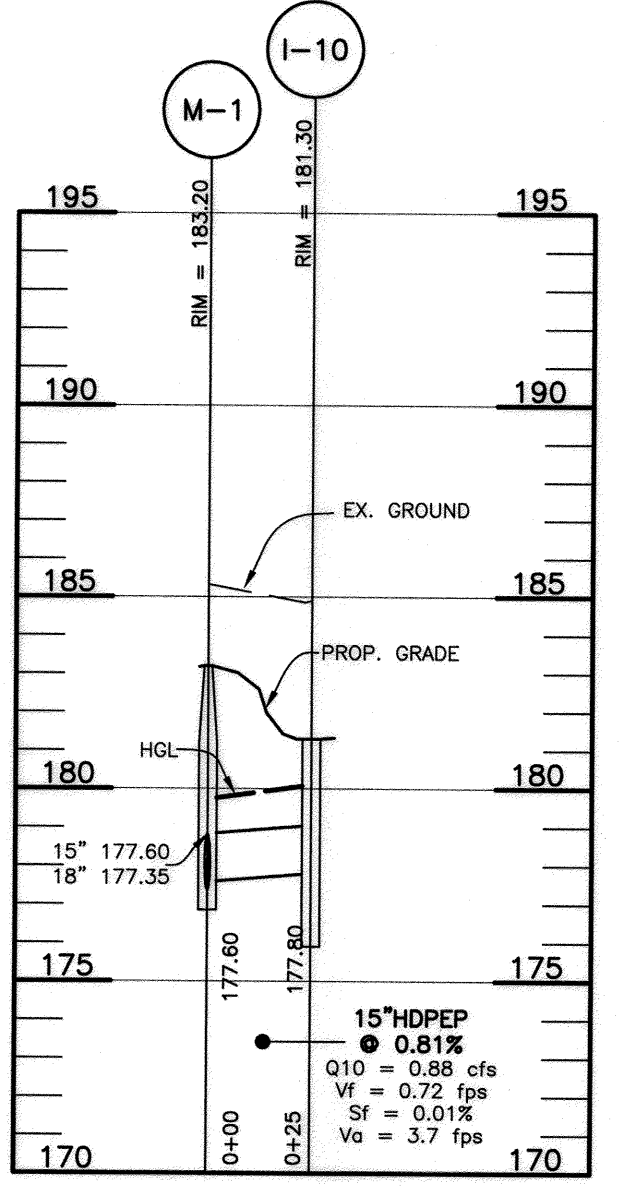
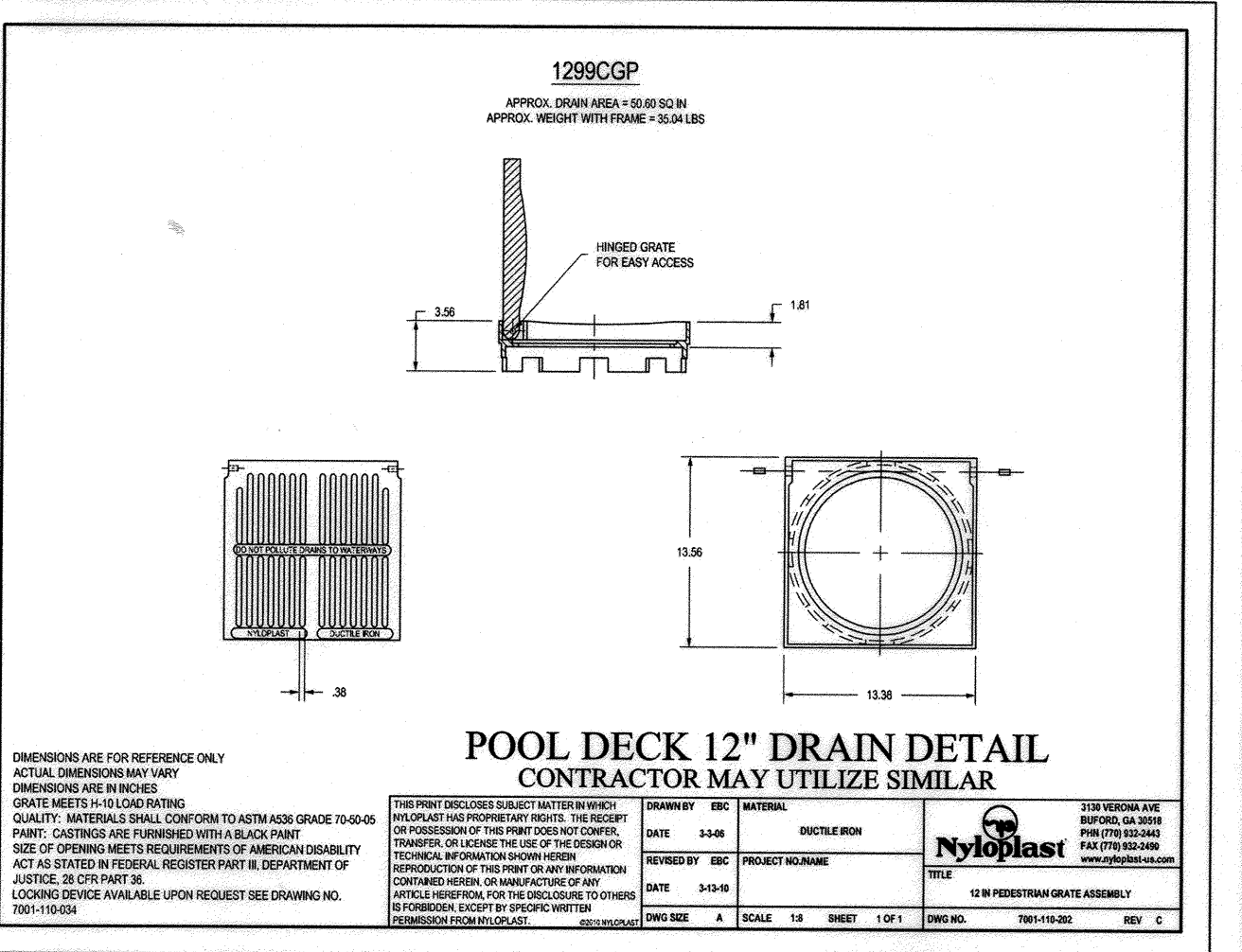
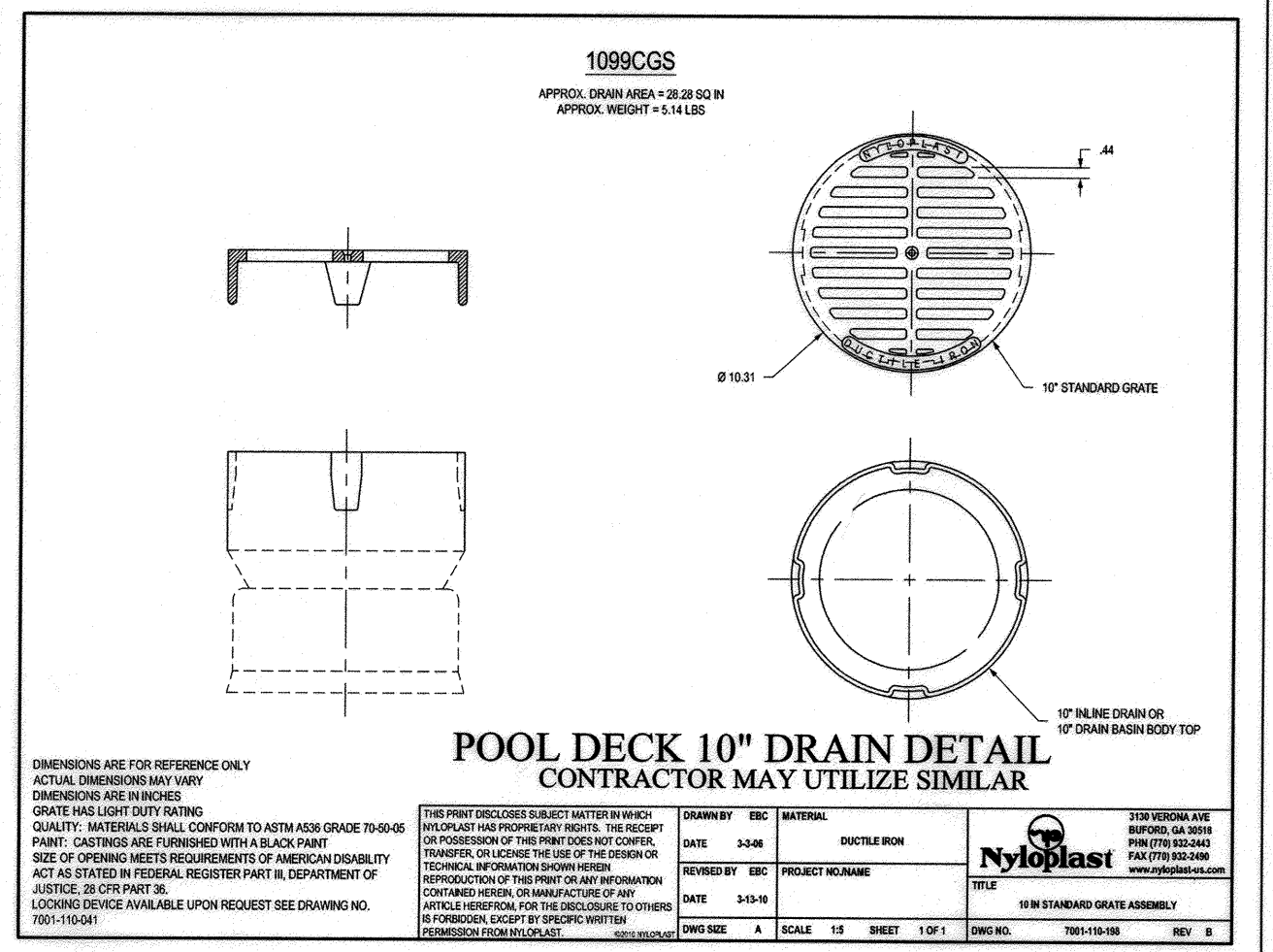
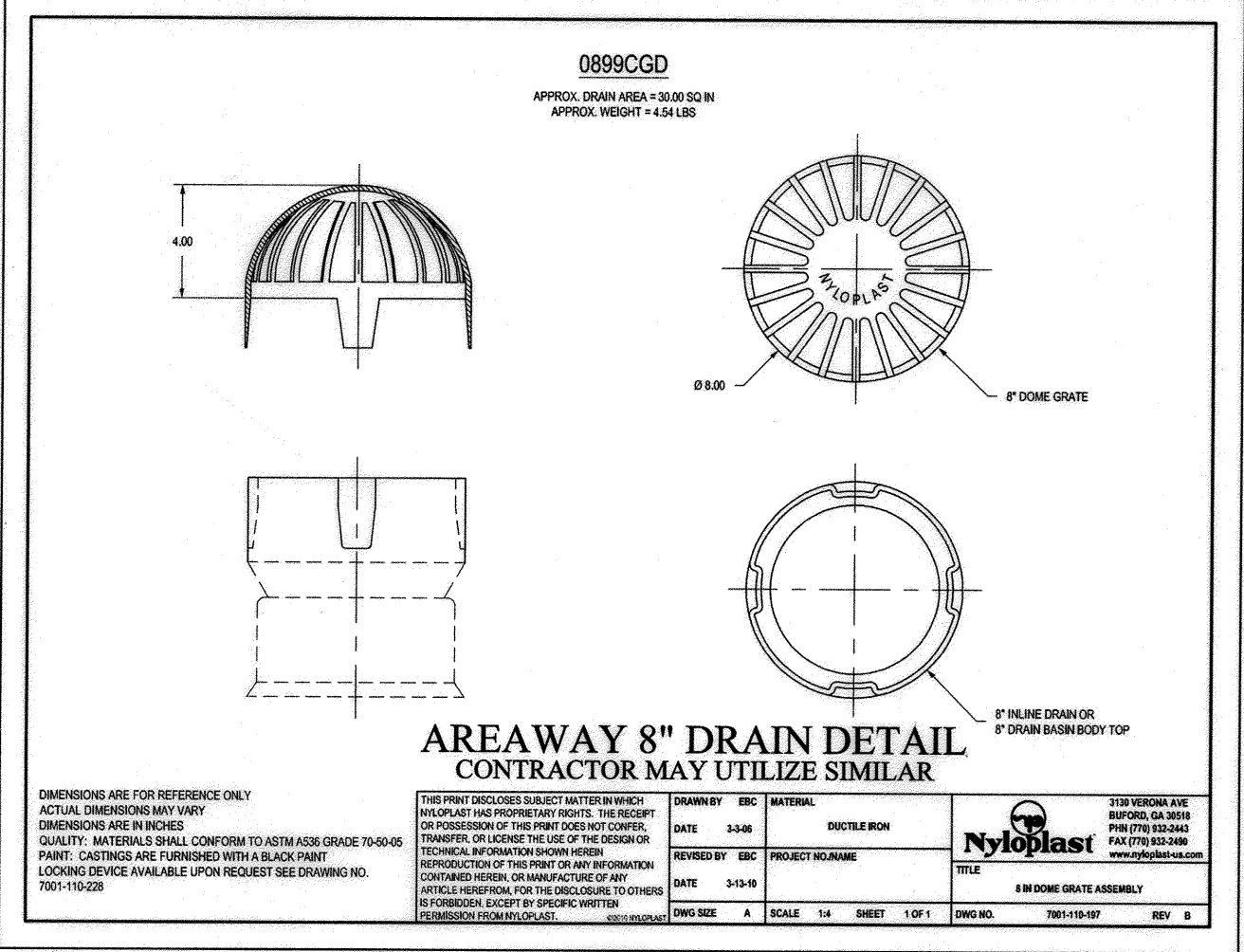
TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65)  
 TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79  
 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND

**SITE DEVELOPMENT PLAN STORM DRAIN PROFILES**

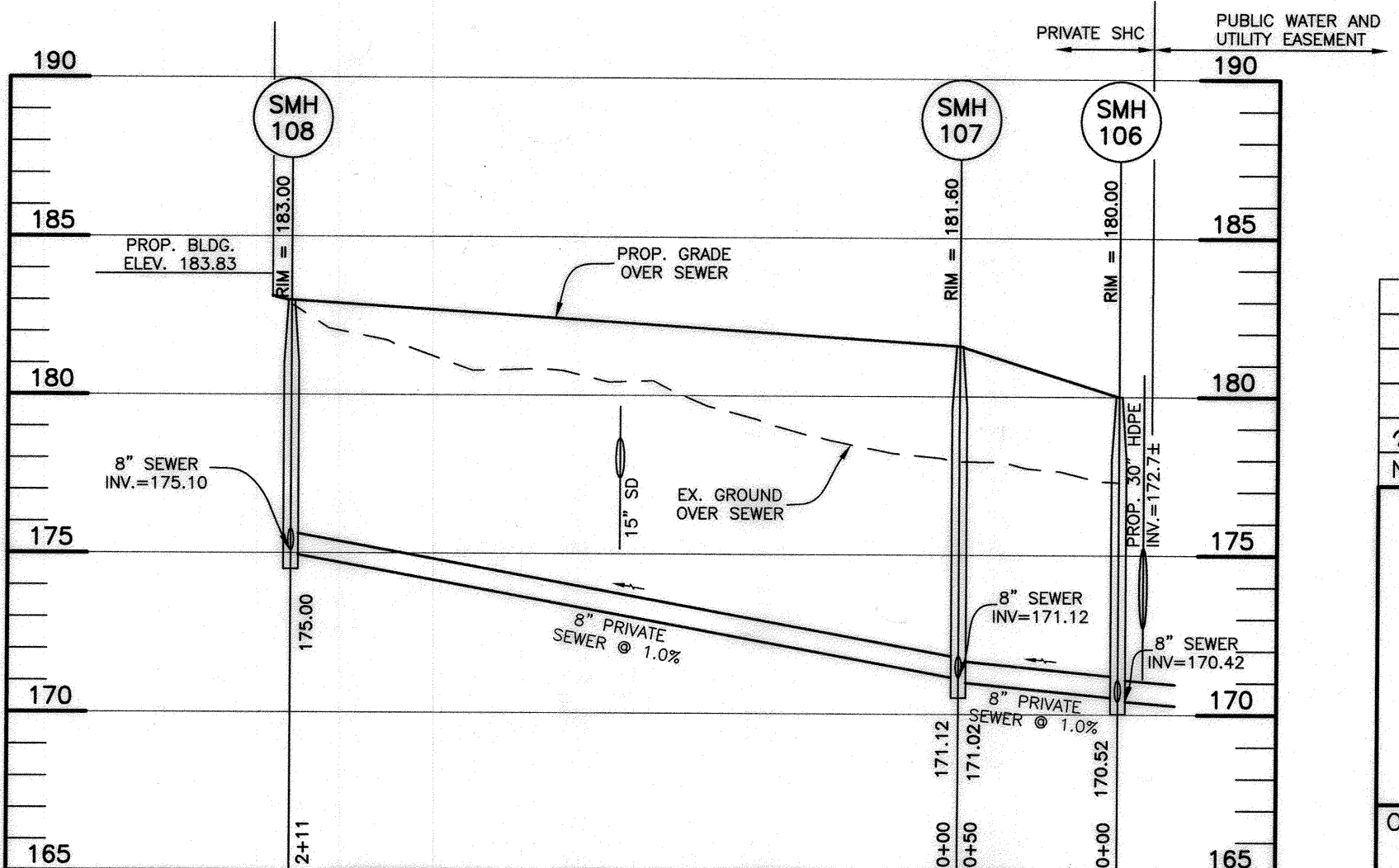
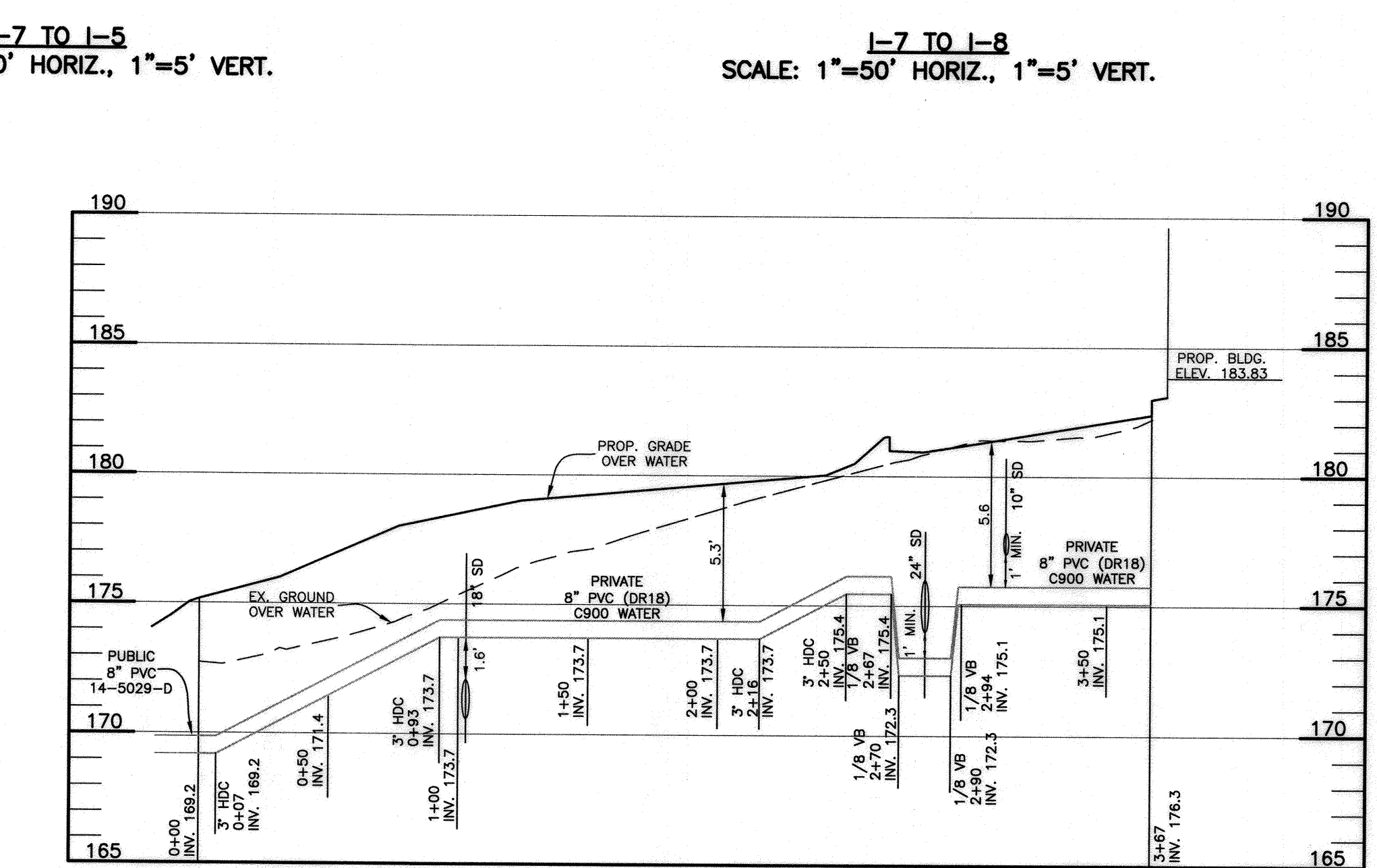
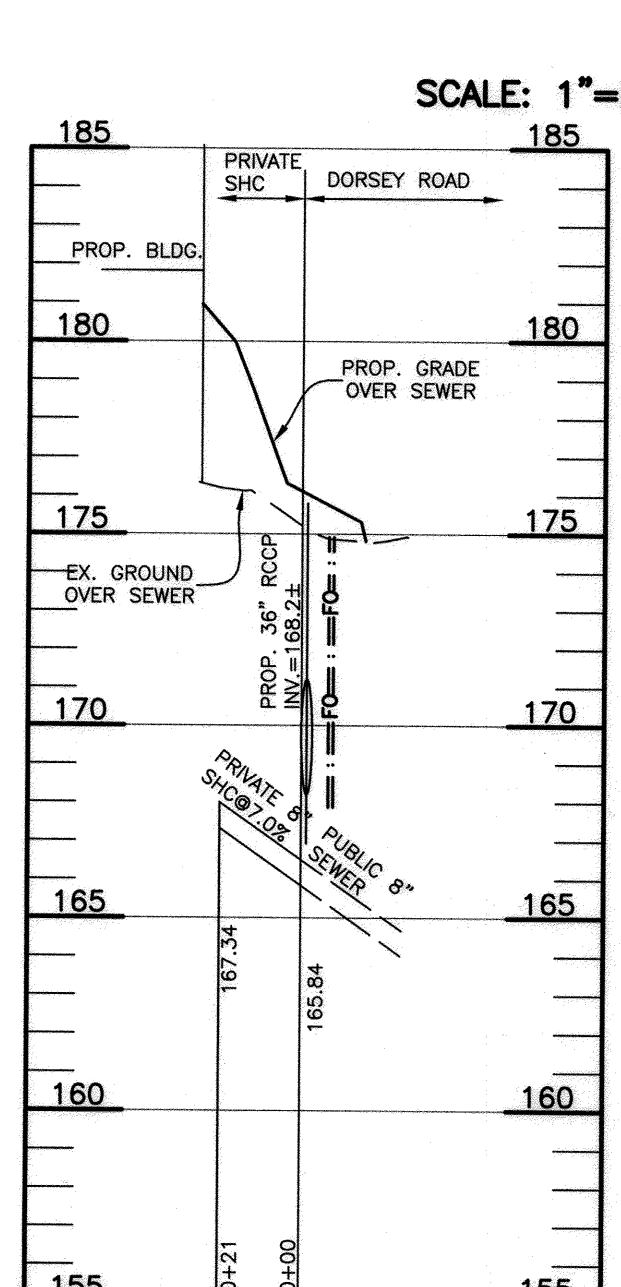
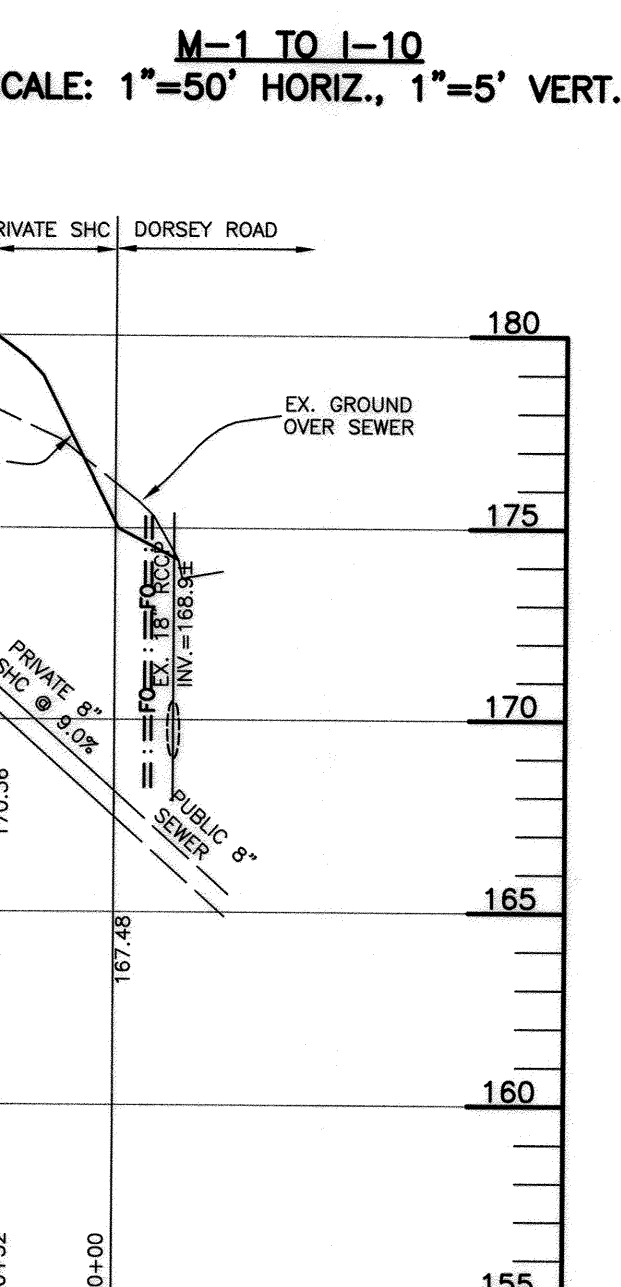
AS-BUILT SDP-18-002



**POOL TRENCH DRAIN DETAIL**  
NOT TO SCALE

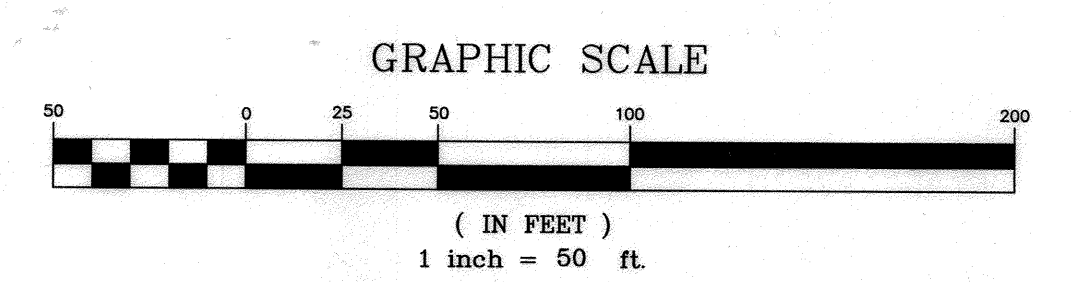


Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21443, Expiration Date: 12-31-22



**PRIVATE WATER APPURTENANCE SCHEDULE**

APPURTENANCE	WATER LINE STATION	LOCATION
45' HORIZONTAL BEND	WL STA. 0+75	N 5582.9 E 1380343.9
45' HORIZONTAL BEND	WL STA. 1+40	N 552581.4 E 1380279.7
45' HORIZONTAL BEND	WL STA. 2+45	N 552654.5 E 1380203.4
45' HORIZONTAL BEND	WL STA. 2+63	N 552654.1 E 1380185.5



2.25.21 REUSE STORM DRAIN PER AS-BUILT

**BENCHMARK ENGINEERING, INC.**  
8480 BALTIMORE NATIONAL PIKE & SUITE 315 ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-6105 (F) 410-465-6644  
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**CORRIDOR SQUARE PARCELS A & C**  
RESIDENTIAL APARTMENT BUILDING

TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65)  
TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79  
ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND

**SITE DEVELOPMENT PLAN**  
STORM DRAIN, PRIVATE WATER & SEWER PROFILES  
AND DRAINAGE DETAILS

DATE: SEPTEMBER 2018 BEI PROJECT NO. 2695  
DESIGN: JCO DRAFT: JCO SCALE: SEE PLAN SHEET 10 OF 39

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*Howard County Department of Planning and Zoning*  
10-12-18 DATE

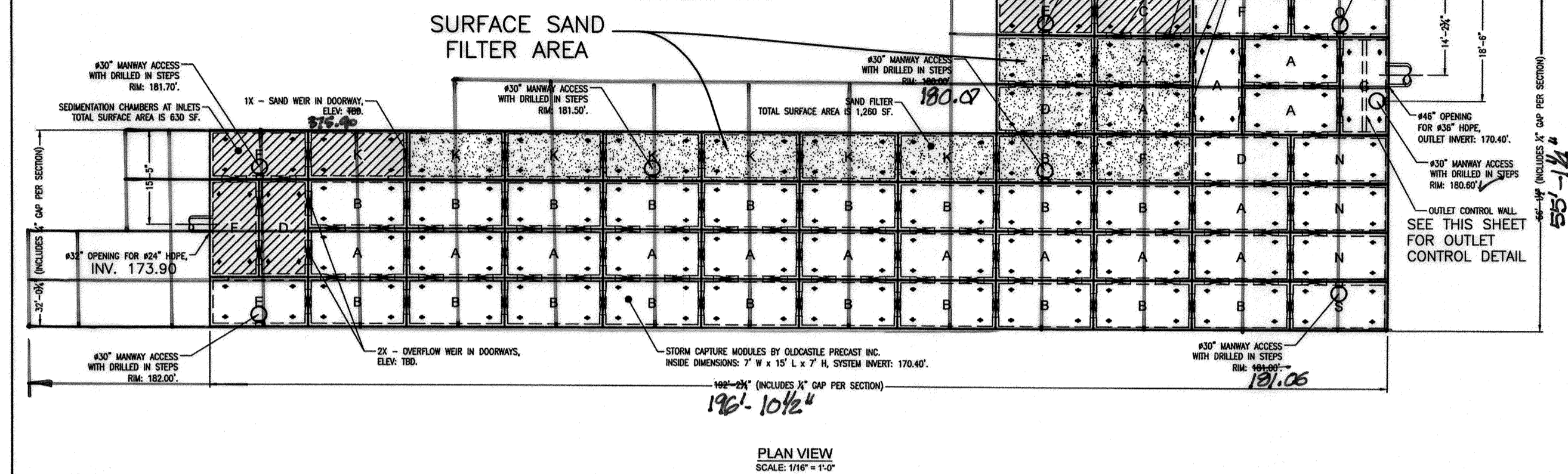
*West Shelewood*  
10-18-18 DATE

*Nadine J. J. J.*  
10-18-18 DATE

REVISION	DATE	REV BY	DESCRIPTION OF REVISION
1	08/17/18	WH	ADDED MODULES TO MEET NEW DETENTION REQUIREMENTS AND ACCORD STAGE-STORAGE CURVE. REVISED LAYOUT FOR INLETS.
2	08/17/18	WH	REVISED LAYOUT FOR UPDATED DETENTION VOLUME REQUIREMENTS.
3	08/17/18	WH	ADDED RIM ELEVATIONS.

STAGE	HEIGHT (FT)	VOLUME (CU FT)	PERCENT
1	1.5	1,250	2.5%
2	3.0	4,500	9.0%
3	4.5	10,500	21.0%
4	6.0	18,000	36.0%
5	7.5	27,000	54.0%
6	9.0	37,500	75.0%
7	10.5	49,500	99.0%
8	12.0	63,000	126.0%

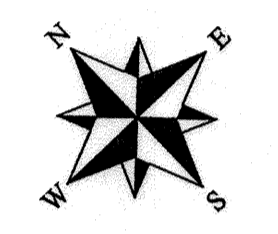
NOTE:  
PER THE MANUFACTURE CONEAL BUTYL RUBBER SEALANT IS PROVIDED ON THE HORIZONTAL JOINTS AND CONEAL 8" WIDE (MIN.) JOINT WRAP IS PROVIDED FOR THE VERTICAL JOINTS AND TOP SEAM. MANUFACTURE RECOMMENDS CONEAL CS-1500 ELASTOMERIC SEALANT TO FILL DOOR AND WINDOW JOINTS. SYSTEM SHALL BE WRAPPED IN A GEOTEXTILE FABRIC ON A COMPACTED BASE.



DESIGN NOTES:  
1. DESIGN LOADINGS:  
A. ASHTO HS-20-44 W IMPACT.  
B. DEPTH OF COVER = 4'-0\"/>

NOTES TO REVIEWING ENGINEER:  
1. THIS SYSTEM IS DESIGNED TO THE PARAMETERS NOTED. PLEASE VERIFY THAT THESE PARAMETERS MEET PROJECT REQUIREMENTS (I.E. LIVE LOAD AND FILL RANGES, # DESIGN PARAMETERS ARE INCORRECT NOTIFY OLDCASTLE IMMEDIATELY FOR REVISION AND RE-PRICEING.  
2. REVIEWING ENGINEER TO CONFIRM ALL PIPE PENETRATION LOCATIONS, SIZES, AND INVERTS.  
3. REVIEWING ENGINEER TO CONFIRM ALL MANWAY ACCESS LOCATIONS AND RIM ELEVATIONS.  
4. UNLESS OTHERWISE NOTED, ALL PIPE SUPPLIED AND INSTALLED BY OTHERS.  
5. THIS SYSTEM IS DESIGNED FOR A GROUNDWATER TABLE BELOW SYSTEM INVERT. REVIEWING ENGINEER TO VERIFY THAT THE DESIGN GROUNDWATER TABLE IS BELOW INVERT OF PRECAST. IF DESIGN PARAMETERS ARE INCORRECT NOTIFY OLDCASTLE IMMEDIATELY FOR REVISION AND RE-PRICEING.  
6. THIS SYSTEM IS DESIGNED WITHOUT A CONTAINMENT MEMBRANE LINER. IF A LINER IS NEEDED PLEASE CONTACT OLDCASTLE TO PROVIDE THIS OPTION IN THE FINAL DESIGN.

**Underground Stormwater Treatment and Detention System**



- PRELIMINARY - NOT FOR CONSTRUCTION

**Oldcastle Precast**  
2400 Oldcastle Plaza, Suite 200, Elkridge, MD 21027  
410-465-6644

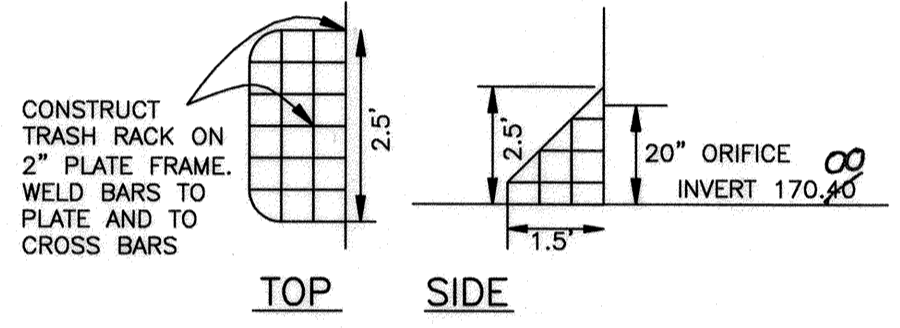
Stormwater  
SC2 Sand Filter/Detention System

SCDD-0429-3\_SCF2\_SFDOT

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED UNDERGROUND STORMWATER DETENTION FACILITY

ROUTINE MAINTENANCE:  
1. FACILITY SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHALL BE PERFORMED DURING WET WEATHER TO DETERMINE IF THE FACILITY IS FUNCTIONING PROPERLY.  
2. DEBRIS AND LITTER SHALL BE REMOVED DURING REGULAR INSPECTIONS AND AS NEEDED.  
3. ANY DETERIORATION IN MATERIAL AND/OR VISIBLE SIGNS OF EROSION IN THE RIPRAP OUTLET AREA SHALL BE REPAIRED AS SOON AS IT IS NOTICED.

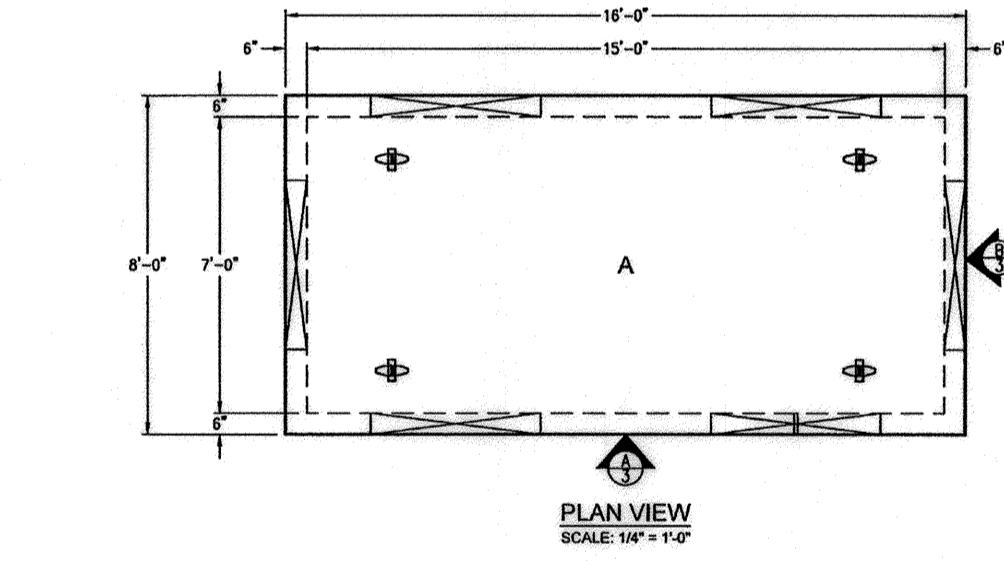
NON - ROUTINE MAINTENANCE:  
1. STRUCTURAL COMPONENTS OF THE FACILITY SUCH AS THE PIPES, THE RISERS, AND THE OUTFALL PIPES SHALL BE REPAIRED UPON THE DETECTION OF ANY DAMAGE. THE COMPONENTS SHALL BE INSPECTED DURING ROUTINE MAINTENANCE OPERATIONS.  
2. SEDIMENT SHALL BE REMOVED FROM THE FACILITY WHEN THE ACCUMULATIONS MEET A DEPTH OF SIX INCHES (6").



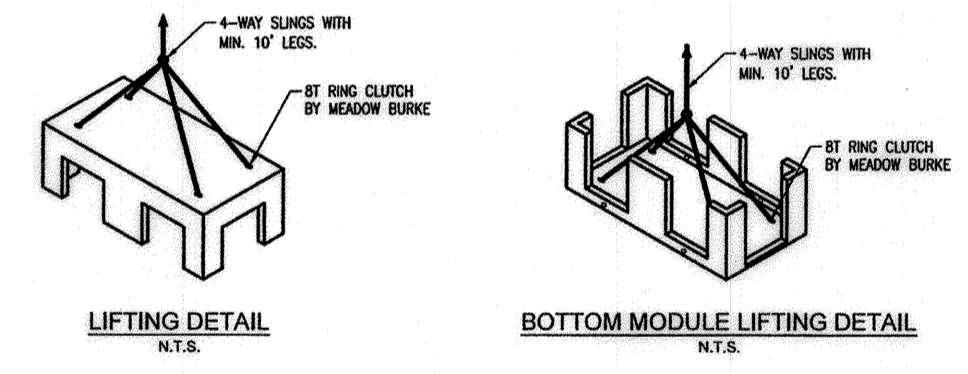
TRASH RACK DETAIL  
NOT TO SCALE

UNDERGROUND STORMWATER MANAGEMENT FACILITY NOTES:  
1. ALL PIPE CONNECTIONS SHALL BE WATERPROOF/GASEKETED.  
2. CONTRACTOR SHALL ENSURE THAT DEBRIS SHALL BE KEPT FROM ENTERING THE SYSTEM DURING THE SITE CONSTRUCTION PERIOD.  
3. POST CONSTRUCTION, THE OWNER SHALL ENSURE THAT TRASH AND DEBRIS DOES NOT ENTER THE FACILITY.  
4. RISERS SHALL BE 48\"/>

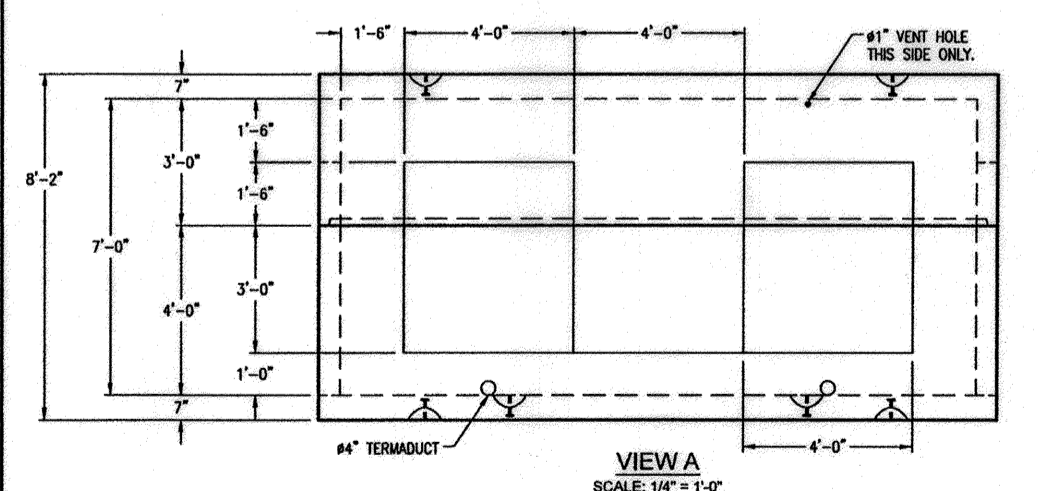
Underground Sand Filter Calculations			
<b>Water Quality Facility</b>			
A =	2.12 Area in Acres	R(v) =	0.95 Runoff Coefficient
I =	100 Percent Impervious	Q(a) =	1.14 Watershed Inches
P =	1.2 Rainfall in Inches	WQ(v) =	10528 R <sup>3</sup> /s
tc =	0.1 Time of Conc. (hr) from TR-55	CN =	99.48
<b>Figure D-11.1 (Ho. Co. Storm Drain Manual)</b>			
l(a) =	0.0104	Q(p) =	3.78 cfs
q(u) =	1000 Unit Peak Q (csm/in)	l(a)P =	0.0086
<b>Orifice Sizing</b>			
C =	0.6	g =	32.2 ft/s
Pipe Dia =	14 Inches	a =	1.0690 R <sup>2</sup>
		h =	0.54 ft
<b>Pretreatment</b>			
w =	21 ft	V(p) =	2632 R <sup>3</sup>
l =	30 ft	A(s) =	2 ft
d =	5 ft	A(sp) =	85 ft <sup>2</sup>
V(p-actual) =	3150 ft <sup>3</sup>	Chamber	OK
<b>Treatment</b>			
d(t) =	18 inches	V(temp) =	7896 R <sup>3</sup>
k =	3.5 /day	h(f) =	2 ft
h(f) =	1.87 days	A(f) =	771.9 R <sup>2</sup>
d(pond) =	4 ft	WEIR	60
WQ(v) Provided =	17184 R <sup>3</sup>	l =	60
V(f-actual) =	6930 R <sup>3</sup>	minimum length to provide filter area A(f)	
<b>Volume</b>			
V(p-actual) =	3150 R <sup>3</sup>	Chamber dimensions are based on the Pretreatment width x length to provide the 75% required volume	
V(f-actual) =	6930 R <sup>3</sup>		
V(temp) =	10080 R <sup>3</sup>	VOID RATIO =	40%
Vtemp (target) =	7896 R <sup>3</sup>	Chamber	OK



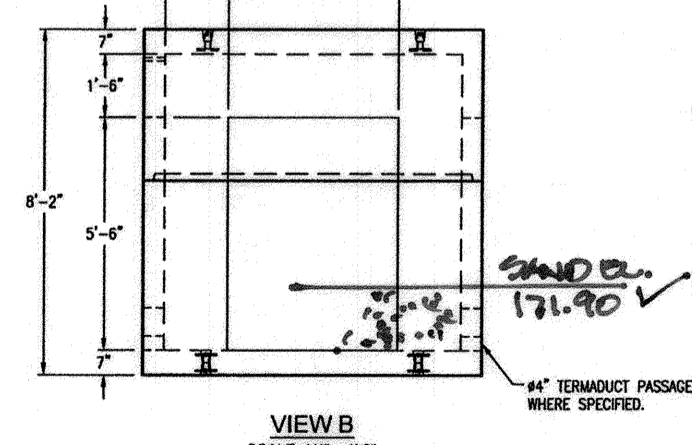
PLAN VIEW  
SCALE: 1/4" = 1'-0"



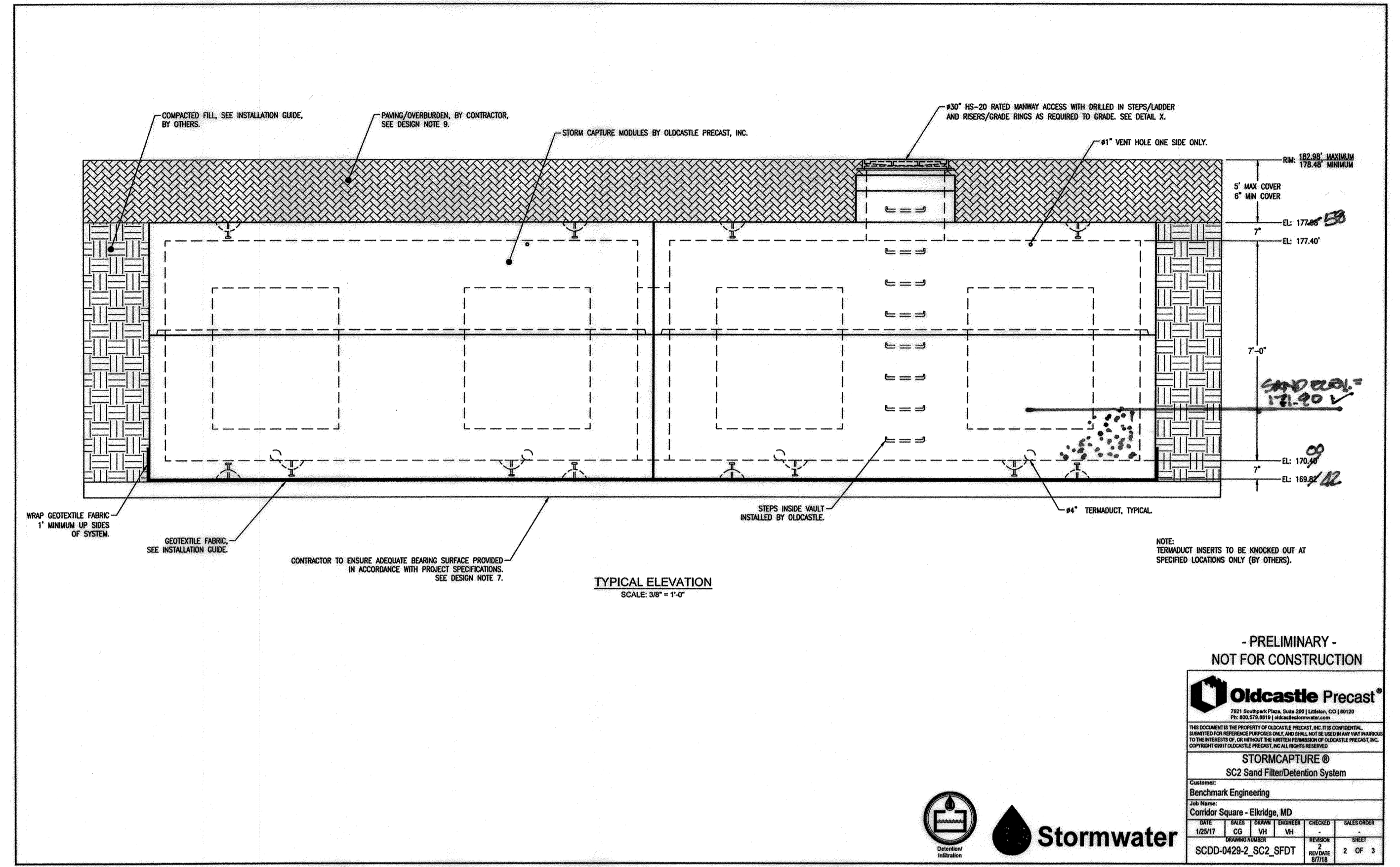
HEAVIEST PICK WEIGHT = 24,000 LBS



VIEW A  
SCALE: 1/4" = 1'-0"



VIEW B  
SCALE: 1/4" = 1'-0"



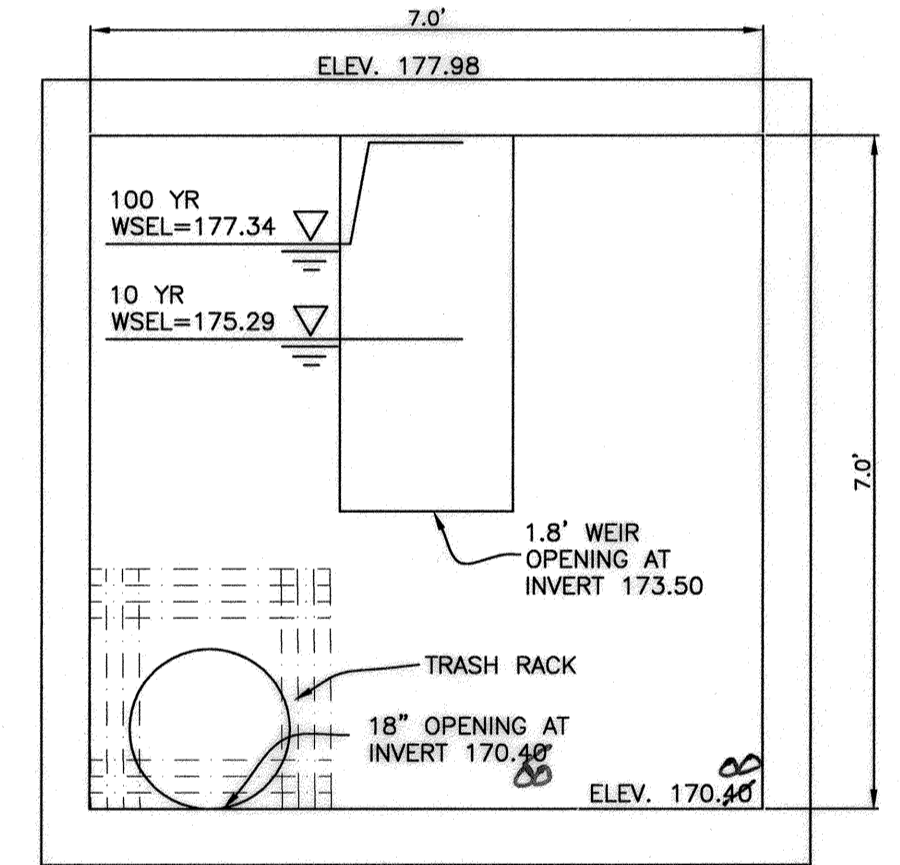
TYPICAL ELEVATION  
SCALE: 3/8" = 1'-0"

- PRELIMINARY - NOT FOR CONSTRUCTION

**Oldcastle Precast**  
2400 Oldcastle Plaza, Suite 200, Elkridge, MD 21027  
410-465-6644

Stormwater  
SC2 Sand Filter/Detention System

SCDD-0429-2\_SCF2\_SFDOT



OUTLET CONTROL DETAIL  
SCALE: 1" = 2'

**SWM DATA**

EX. 10YR RUNOFF: 19.94 CFS  
DEV. 10YR RUNOFF W/SWM: 17.23 CFS

EX. 100YR RUNOFF: 37.00 CFS  
DEV. 100YR RUNOFF W/SWM: 36.61 CFS

10YR STORAGE: 19,240 CF @ 175.29  
100YR STORAGE: 28,454 CF @ 177.34

\*BEI SIGNATURE/SEAL IS FOR CONFIRMATION THAT THE OLDCASTLE PRECAST DESIGN MEETS THE VOLUME REQUIREMENTS FOR THE STORMWATER MANAGEMENT. CONTRACTOR SHALL OBTAIN SEALED SHOP DRAWINGS FROM OLDCASTLE PRECAST BEFORE ORDERING STRUCTURES AND CONSTRUCTION COMMENCES.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*Chad Edwards* 10-16-18  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

*Kent Raulo* 10-18-18  
CHIEF, DIVISION OF LAND DEVELOPMENT

*Nathan Joffe* 10-18-18  
DIRECTOR

AS-BUILT CERTIFICATION  
I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications

Donald Mason, P.E. Date: 3/19/21

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 21443, Expiration Date: 12-31-22

NO. DATE REVISION

**BENCHMARK ENGINEERS & LAND SURVEYORS PLANNERS**  
ENGINEERING, INC.  
6840 BALTIMORE NATIONAL PIKE & SUITE 315 • ELK COTT CITY, MARYLAND 21043  
(P) 410-465-6105 (F) 410-465-6644  
WWW.BEI-CIVIL-ENGINEERING.COM

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 21443, Expiration Date: 06-30-19.

**CORRIDOR SQUARE PARCELS A & C**  
RESIDENTIAL APARTMENT BUILDING

TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65)  
TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79  
ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND

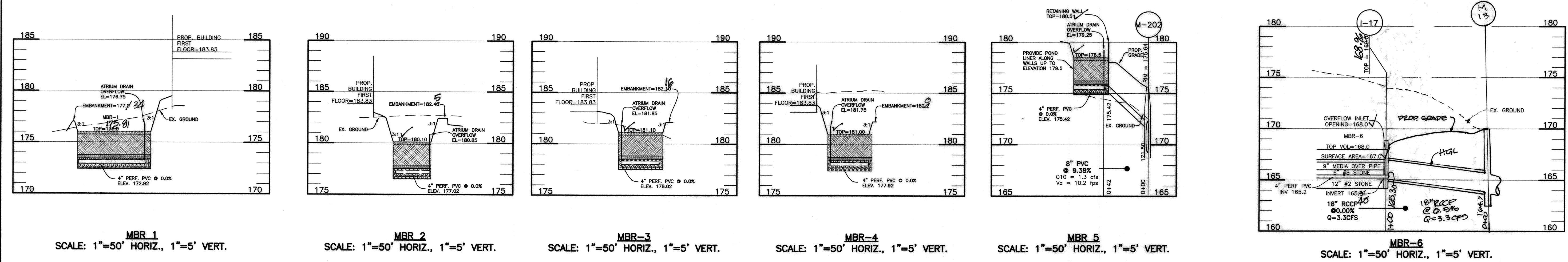
**SITE DEVELOPMENT PLAN**  
10 YEAR & 100 YEAR STORAGE AND SANDFILTER UNDERGROUND STORMWATER MANAGEMENT DETAILS

DATE: SEPTEMBER 2018 BEI PROJECT NO. 2695  
DESIGN: JCO DRAFT: JCO SCALE: 1" = 50' SHEET 11 OF 39

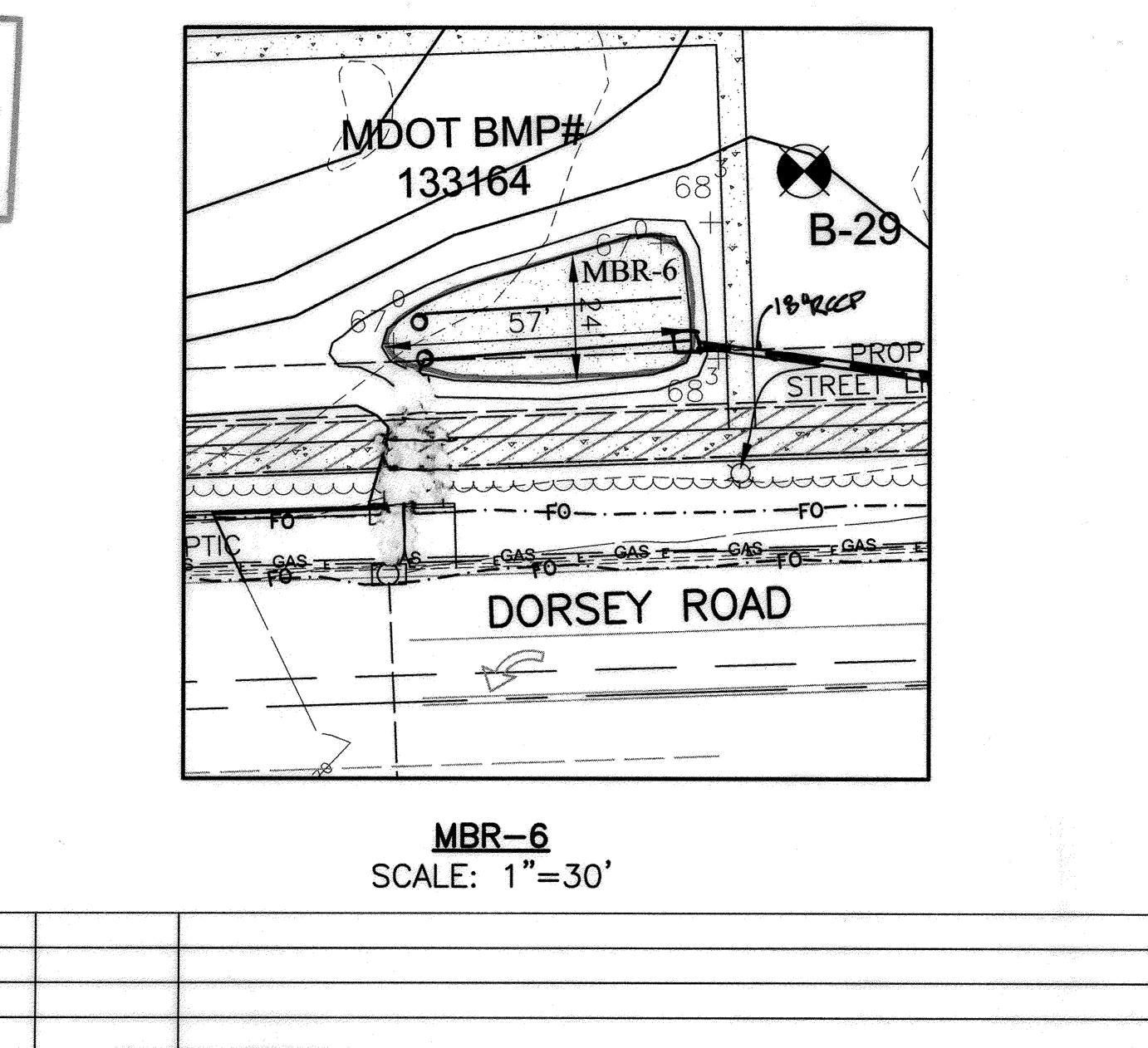
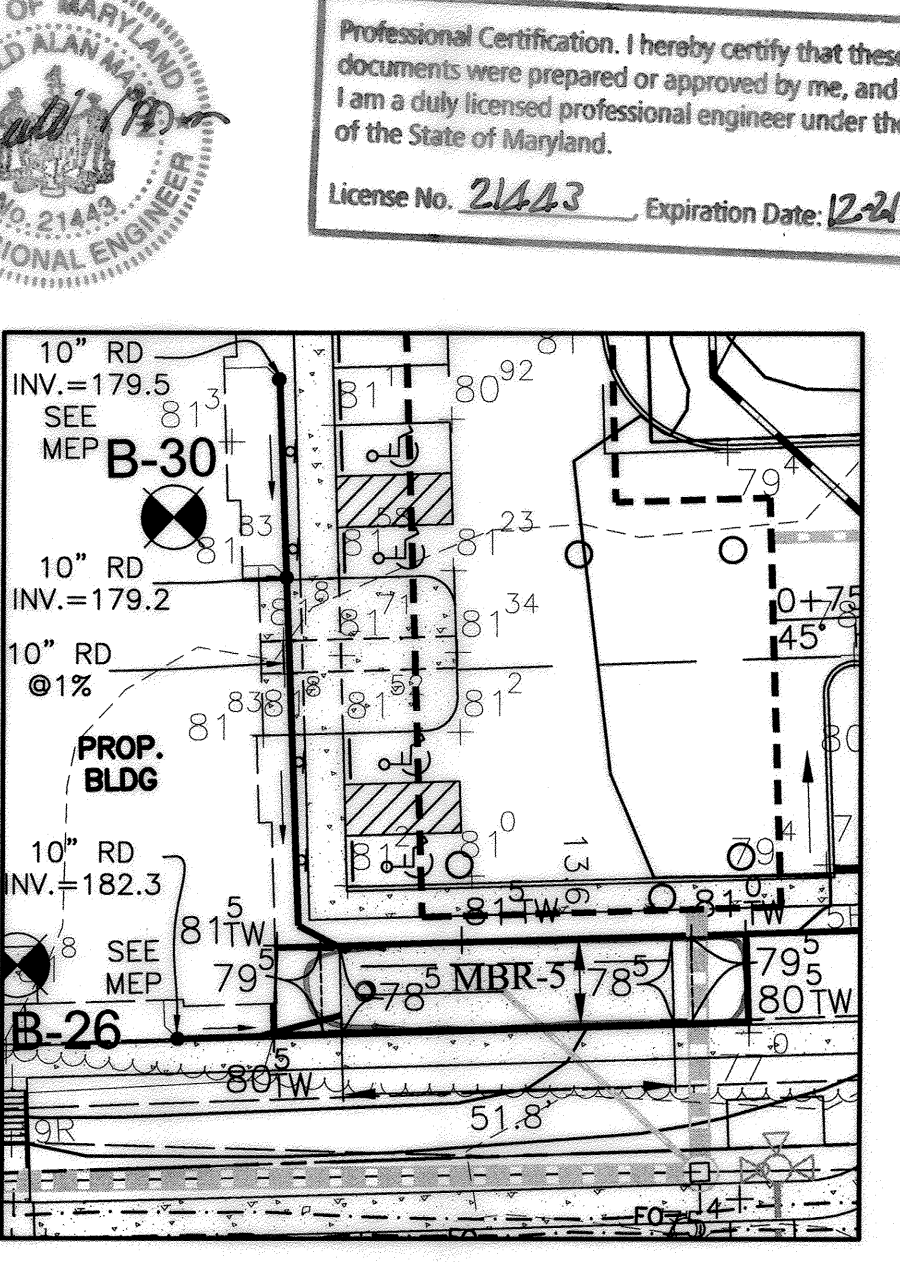
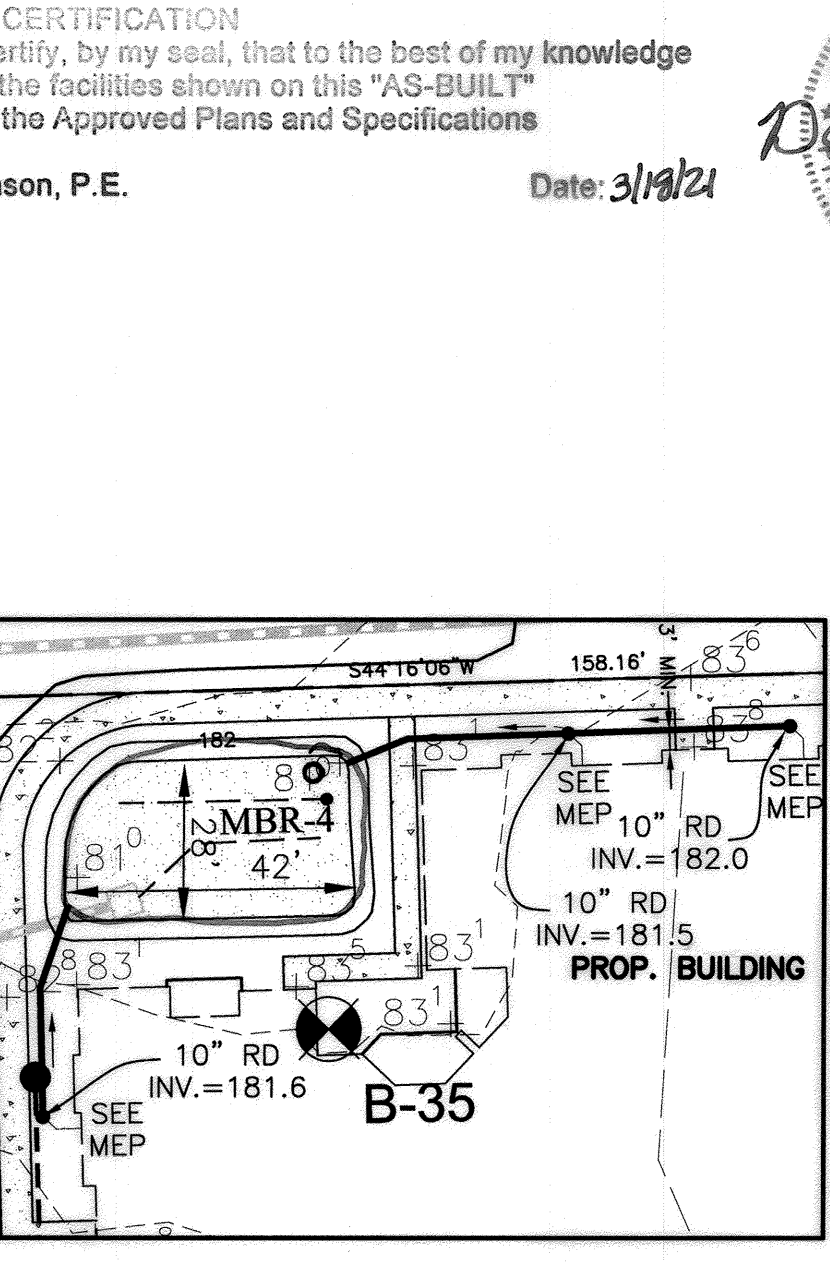
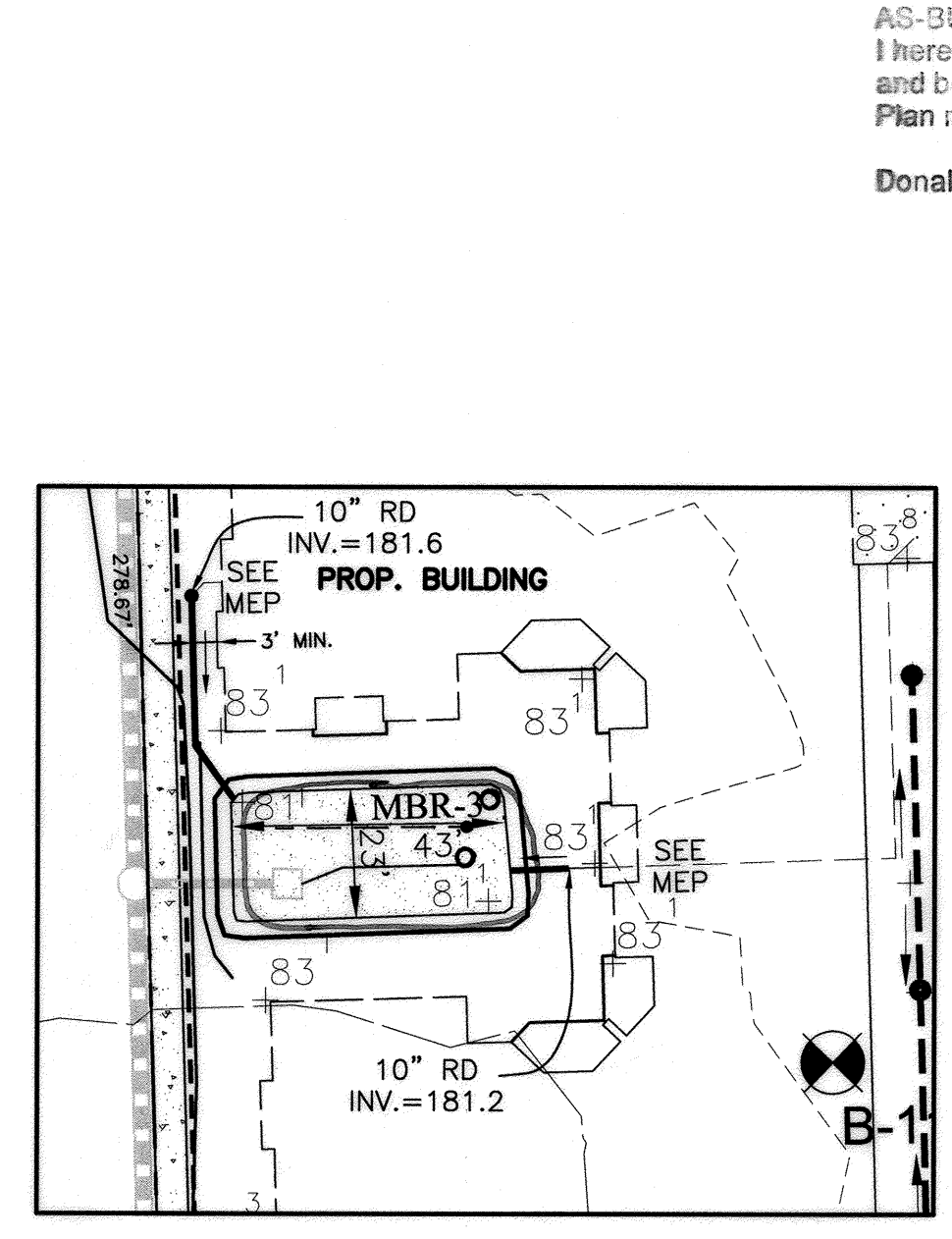
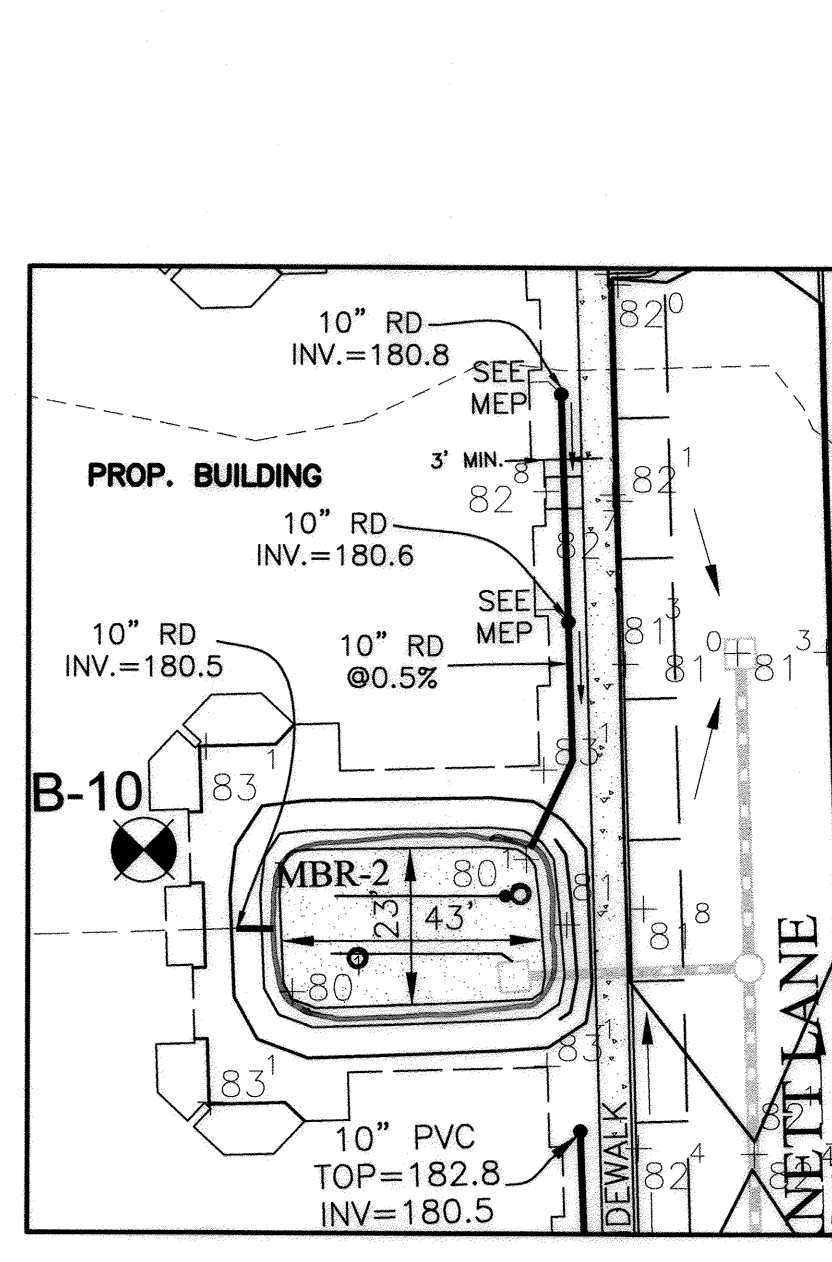
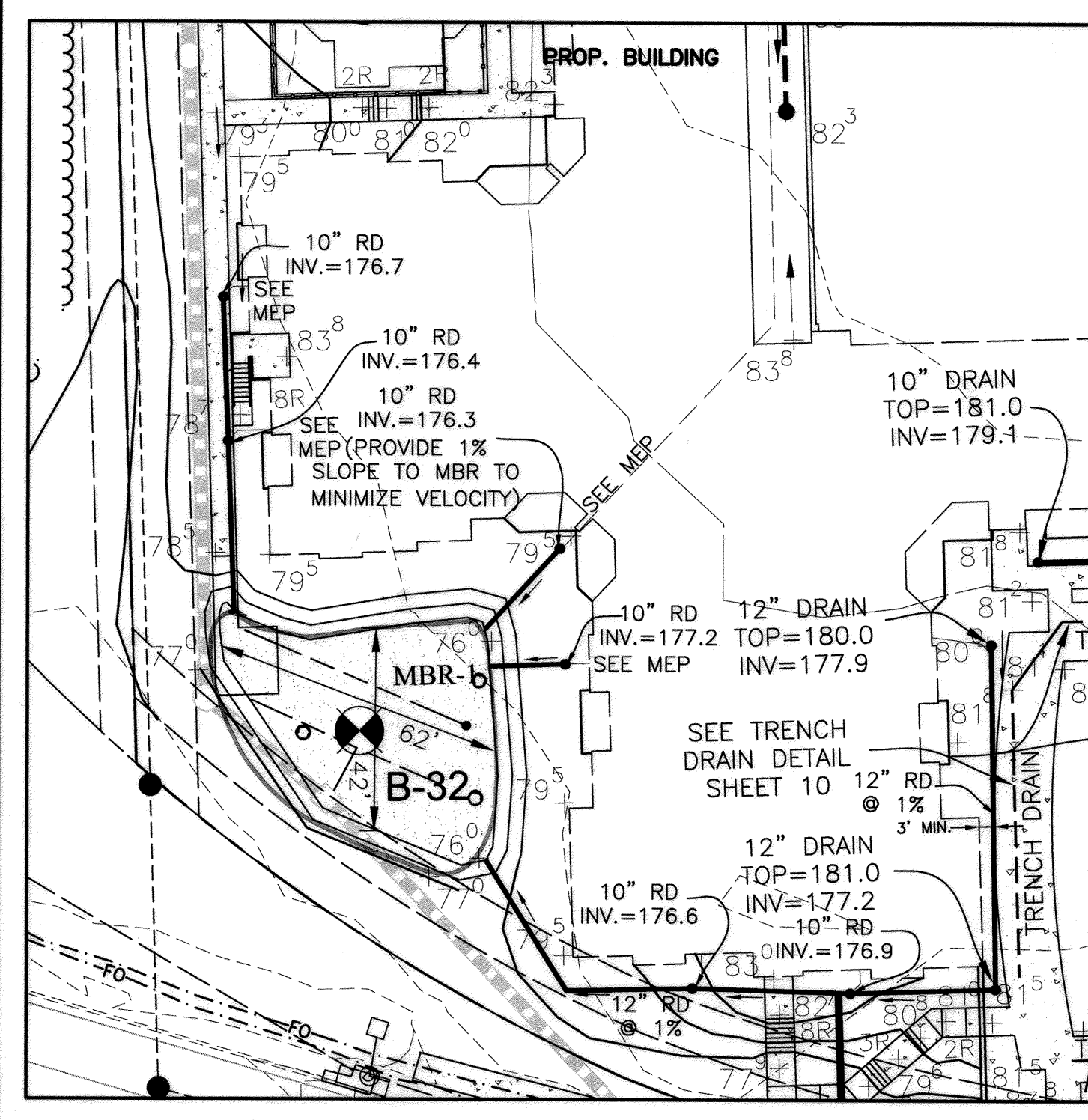
HILLIS-CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION									
Project Name	Location	Sheet No.	Total Sheets	Date	Scale	Drawn By	Checked By	Approved By	Notes
Corridor Square	Elkridge, MD	10-1	10	10/18/18	AS-BUILT	JCO	JCO	JCO	See notes on sheet 10-1
Corridor Square	Elkridge, MD	10-2	10	10/18/18	AS-BUILT	JCO	JCO	JCO	See notes on sheet 10-2
Corridor Square	Elkridge, MD	10-3	10	10/18/18	AS-BUILT	JCO	JCO	JCO	See notes on sheet 10-3
Corridor Square	Elkridge, MD	10-4	10	10/18/18	AS-BUILT	JCO	JCO	JCO	See notes on sheet 10-4
Corridor Square	Elkridge, MD	10-5	10	10/18/18	AS-BUILT	JCO	JCO	JCO	See notes on sheet 10-5
Corridor Square	Elkridge, MD	10-6	10	10/18/18	AS-BUILT	JCO	JCO	JCO	See notes on sheet 10-6

MATERIALS & SPECIFICATIONS FOR ESD PRACTICES			
MATERIAL	SPECIFICATION	SIZE	NOTES
PLANTINGS	SEE APPENDIX A TABLE A.4	N/A	PLANTINGS ARE SITE SPECIFIC
PLANTING SOIL	LOAMY SAND 60-65% COMPOST 35-40%	N/A	USDA SOIL TYPES LOAMY SAND OR SANDY LOAM; CLAY CONTENT < 5%
ORGANIC CONTENT	SHREDDED HARDWOOD MULCH (CLASS "C")	N/A	AGED 6 MONTHS, MINIMUM, NO PINE OR WOOD CHIPS
GEOTEXTILE (CLASS "C")	MR 108 BY DRY WEIGHT	N/A	PE TYPE 1 NONWOVEN
UNDERDRAIN GRVEL	ASTM M-43	1/4" WIRE MESH	1/4" WIRE MESH
UNDERDRAIN PIPING	F 75E TYPE PS 28 OR 40	4" TO 8" RIGID	3/8" PERFORATED 4 HOLES PER ROW; MINIMUM 20' HOLE SPACING; NO CALCIUM SULFATE OR POLYESTER UNDERDRAIN PIPES
IMPERVIOUS LINER	ASTM-D-412 (TENSILE STRENGTH 1,100 LB. ELONGATION 200%)	30 MIL THICK	30 MIL THICK
GEOTEXTILE (BELOW IMPERV. LINER)	ASTM-D-471 (WATER ADSORPTION: +8 TO -25 MASS)	N/A	ASTM-D-471 (WATER ADSORPTION: +8 TO -25 MASS)
FLOWER BED PLACE CONCRETE	ASTM-D-4832 (TENSILE STRENGTH 1250 LB.)	N/A	CONCRETE TESTING OF STRENGTH IN PLACE REQUIRED; 28 DAY STRENGTH AND SLUMP TEST; ALL CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE ACI 308R AND APPROVED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED BY THE STATE OF MARYLAND. DESIGN TO INCLUDE MEETING ACI CODE 308R/85 VERTICAL LOADING (10-10 OR H-10) ALLOWABLE HORIZONTAL LOADING (BASED ON SOIL PRESSURES); AND ANALYSIS OR DESIGN CRACKING
SAND	ASTM M-6 OR ASTM-C-33	0.075" TO .425"	SAND SUBSTITUTIONS SUCH AS DABBAE AND GRAYSTONE (ASTM D 2875) ARE NOT ACCEPTABLE. NO CALCIUM CARBONATE OR POLYESTER SAND SUBSTITUTIONS ARE ACCEPTABLE. NO ROCK DUST CAN BE USED FOR SAND.

GEOTECH ANALYSIS PROVIDED BY HILLIS-CARNES ENGINEERING ASSOCIATES DATED 1/2017



- OPERATION AND MAINTENANCE SCHEDULE FOR BIORETENTION (M-6)
- 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 WASHOUT. 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.
  - THE OWNER SHALL PERFORM A PLANT 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.
  - THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE NEW LAYER IS APPLIED.
  - THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.



AS-BUILT CERTIFICATION  
I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications  
Donald Mason, P.E. Date: 3/19/21

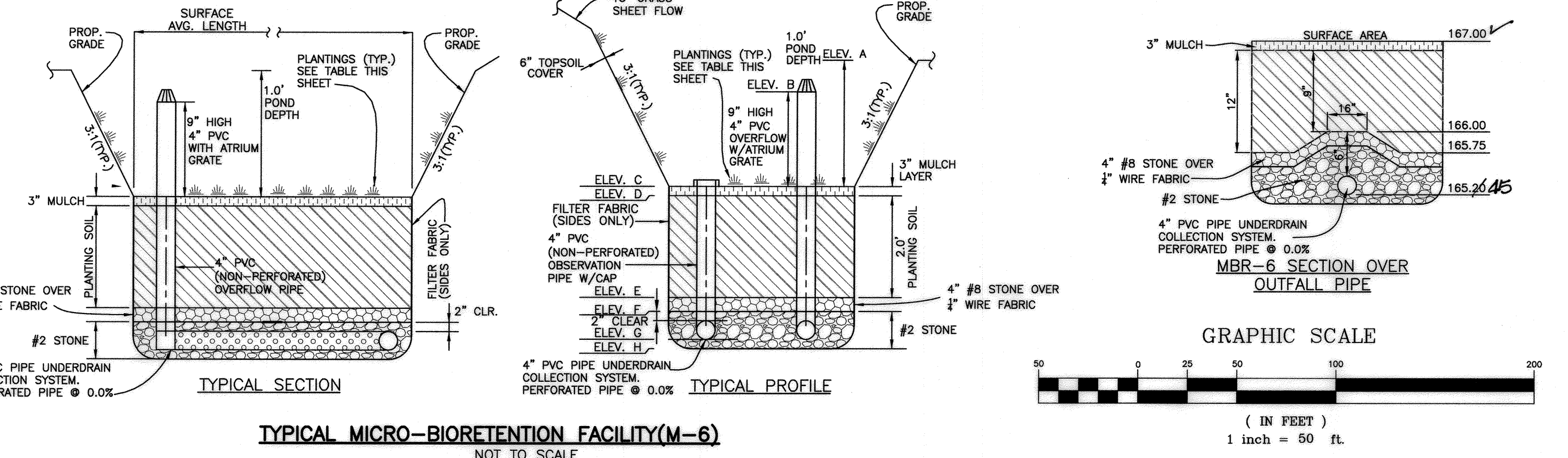
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21643 Expiration Date: 12/31/22

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
10-12-18  
10-18-18  
10-18-18

(M-6) MICRO-BIORETENTION DESIGN TABLES

	MBR-1	MBR-2	MBR-3	MBR-4	MBR-5	MBR-6
ELEV. A	177.00	180.85	182.10	182.00	179.50	168.00
ELEV. B	176.25	180.85	181.85	181.75	179.25	168.00
ELEV. C	175.50	180.10	181.10	181.00	178.50	167.00
ELEV. D	175.75	179.85	180.85	180.75	178.25	166.75
ELEV. E	173.75	177.85	178.85	178.75	176.25	165.75
ELEV. F	173.42	177.52	178.52	178.42	175.92	165.42
ELEV. G	172.92	177.02	178.02	177.92	175.42	165.20
ELEV. H	171.42	175.52	176.52	176.42	173.92	164.20

THROAT OPENING TYPE "D" INLET \* 166.00 ABOVE UNDERDRAIN PIPE 16" WIDE (SEE DETAIL) \*\*



**BENCHMARK ENGINEERING, INC.**  
8480 BALTIMORE NATIONAL PARK AVE SUITE 315A BELLIOTT GRT, MARYLAND 21043  
(7) 410-465-8105 (7) 410-465-8644  
WWW.BEI-ENGINEERING.COM

**CORRIDOR SQUARE PARCELS A & C**  
RESIDENTIAL APARTMENT BUILDING

**SITE DEVELOPMENT PLAN**  
STORMWATER MANAGEMENT DETAILS

OWNER: CORRIDOR SQUARE, LLC  
6800 DEERPATH ROAD  
ELK RIDGE, MD 21075  
410.579.2442

DEVELOPER: MURN DEVELOPMENT  
6800 DEERPATH ROAD  
ELK RIDGE, MD 21075  
410.579.2442

DESIGN: JCO DRAFT: JCO

DATE: SEPTEMBER 2018  
SCALE: 1"=50'

TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65)  
TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79  
ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND

DATE: SEPTEMBER 2018  
SCALE: 1"=50'

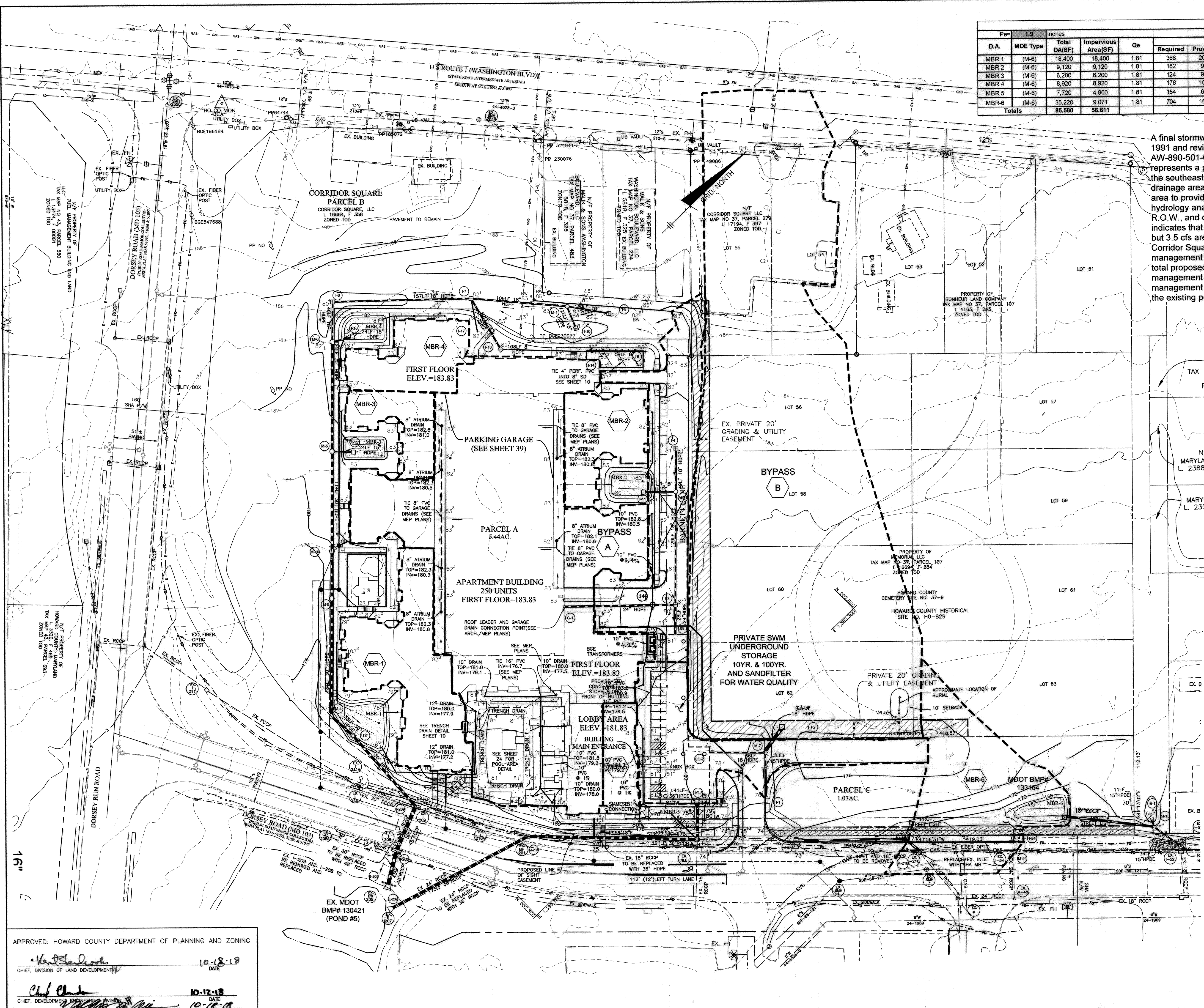
BEI PROJECT NO. 2695  
SHEET 12 OF 39

**ONSITE ESD**

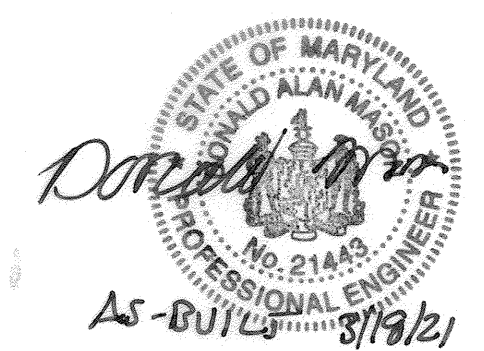
ESD SUMMARY TABLE													
D.A.	MDE Type	Total DA(SF)	Impervious Area(SF)	Qe	At				ESDv				
					Required	Provided	% DA	Depth	Required	Provided	75% ESDv	RV	Pe
MBR 1	(M-6)	18,400	18,400	1.81	368	2057	PASS	1.0	2076	3147	PASS	0.95	2.16
MBR 2	(M-6)	9,120	9,120	1.81	182	967	PASS	1.0	1029	1553	PASS	0.95	2.15
MBR 3	(M-6)	6,200	6,200	1.81	124	915	PASS	1.0	699	1493	PASS	0.95	3.04
MBR 4	(M-6)	8,920	8,920	1.81	178	1065	PASS	1.0	1006	1700	PASS	0.95	2.41
MBR 5	(M-6)	7,720	4,900	1.81	154	650	PASS	1.0	570	867	PASS	0.95	1.42
MBR 6	(M-6)	35,220	9,071	1.81	704	1664	PASS	1.0	1179	2243	PASS	0.95	0.90
<b>Totals</b>		<b>85,580</b>	<b>56,611</b>						<b>6,558</b>	<b>11,003</b>			

**SWM NARRATIVE**

A final stormwater management report was prepared by KCI Technologies, Inc. dated August 1991 and revised February 1992 for the MD Route 100 (I-95 to west of MD 295) Contract No. AW-890-501-070 within the Dorsey Road area. Based on that report, Drainage Area 'A' represents a portion of the drainage area that flows to SHA BMP# 130421 which is located in the southeast quadrant of the intersection of Dorsey Run Road and Dorsey Road. This drainage area consists of 24.05 acres. This existing retention pond has been designed for this area to provide quantitative and qualitative control. Based on the SHA approved report, the hydrology analysis shows the drainage area being analyzed as commercial, residential, paved R.O.V., and open space. A weighted CN value of 84 was determined. The TR-20 model indicates that the 2, 10 and 100YR storms are being managed in SHA BMP# 130421 and all but 3.5 cfs are being managed for the 100 year storm. Corridor Square will be providing ESD practices on-site as well as providing 10 and 100yr management for the new development in the proposed underground SWM facility on-site. The total proposed area draining to SHA BMP# 130421 was analyzed for 10 year and 100 year management to include the Corridor facility. Based on this analysis the 10 year and 100 year management flows and water surface elevations do not comprise the freeboard elevations in the existing pond. Therefore, there are no detrimental impacts to the existing pond.



"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

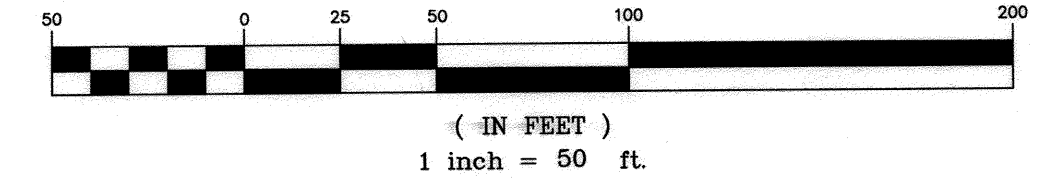


Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21662, Expiration Date: 12-31-22

**LEGEND**

- EXISTING CONTOURS
- EXISTING TREELINE
- PROPOSED TREELINE
- STORMWATER MANAGEMENT DRAINAGE DIVIDE

**GRAPHIC SCALE**



NO.	DATE	REVISION
2	2.23.21	REUSE STORM DRAIN FOR AS-BUILT
1	12.8.20	RELOCATE I-2 & REMOVE ACCESS DRIVE ALONG PARCEL C

**BENCHMARK ENGINEERING, INC.**  
8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLOTT CITY, MARYLAND 21043  
(P) 410-465-8100 (F) 410-465-8444  
WWW.BE-ONLINEENGINEERING.COM

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 22390, Expiration Date: 06-30-19

**OWNER:**  
CORRIDOR SQUARE, LLC  
6800 DEERPATH ROAD  
ELKRIDGE, MD 21075  
410.579.2442

**DEVELOPER:**  
MURN DEVELOPMENT  
6800 DEERPATH ROAD  
ELKRIDGE, MD 21075  
410.579.2442

**DESIGN:** JCO **DRAFT:** JCO

**CORRIDOR SQUARE PARCELS A & C**  
RESIDENTIAL APARTMENT BUILDING  
TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65)  
TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79  
ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND

**SITE DEVELOPMENT PLAN**  
**ONSITE STORMWATER DRAINAGE AREA MAP**

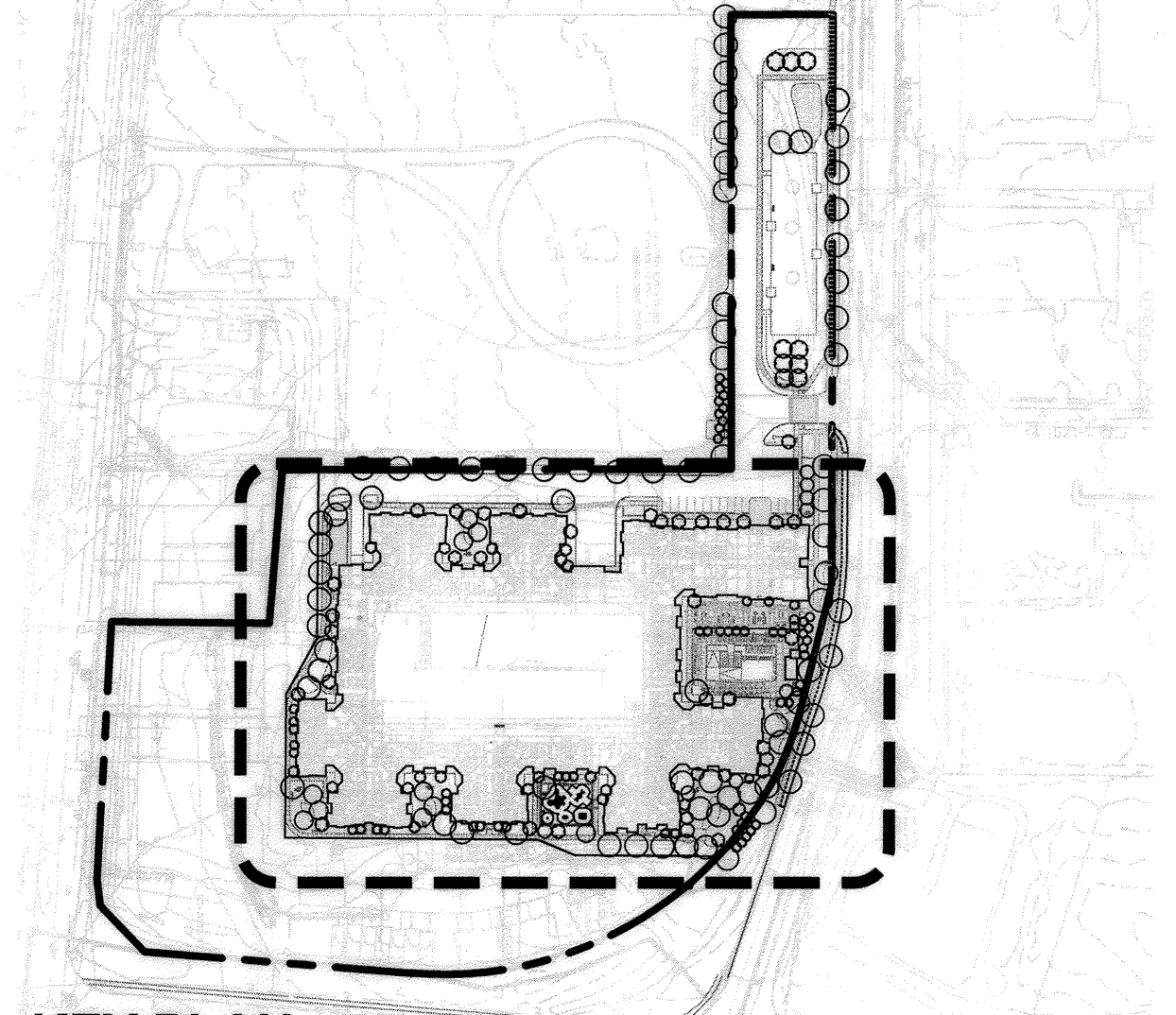
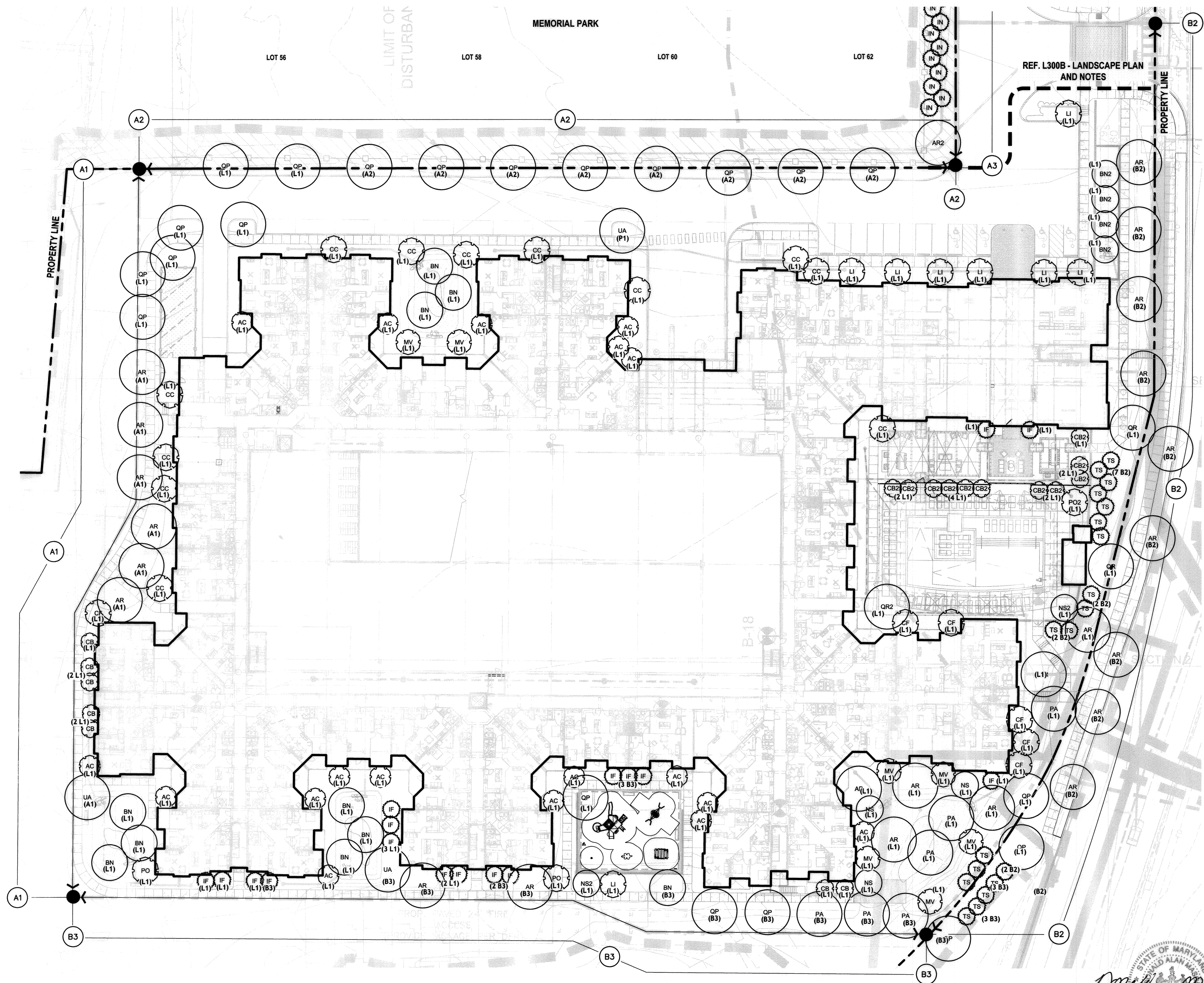
DATE: SEPTEMBER 2018 BEI PROJECT NO. 2695  
SCALE: 1"=50' SHEET 13 OF 39

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*Chief of Division* 10-18-18 DATE  
CHIEF, DIVISION OF LAND DEVELOPMENT

*Chief of Development* 10-12-18 DATE  
CHIEF, DEVELOPMENT DIVISION

*Director* 10-18-18 DATE  
DIRECTOR

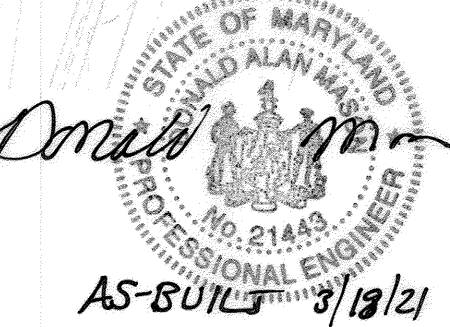


**KEY PLAN**

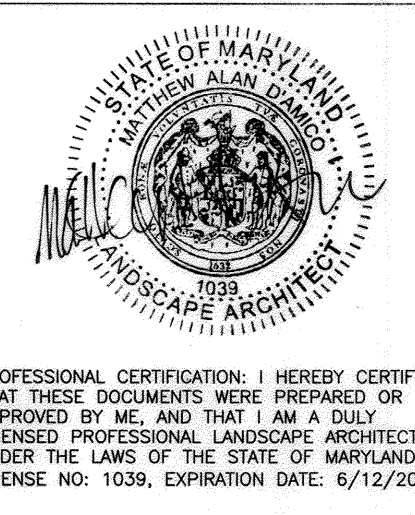
**PLANT SCHEDULE**

DECIDUOUS TREES	QTY	BOTANICAL NAME	CONT	CAL	SIZE	REMARKS
AR	22	Acer rubrum Red Maple	B & B	3"Cal		
AR2	10	Acer rubrum Red Maple	B & B	4"Cal		
BN	10	Betula nigra 'Cully' TM Heritage River Birch	B & B		12-14' HT.	Multi-stem
BN2	4	Betula nigra 'Duraheat' Duraheat River Birch	B & B	2.5"Cal		
NS	3	Nyssa sylvatica Black Gum	B & B	2.5"Cal		Fall Dug
NS2	2	Nyssa sylvatica Black Gum	B & B	3"Cal		Fall Dug
PA	15	Platanus x acerifolia 'Exclamation' TM Exclamation London Plane Tree	B & B	3"Cal		Strong main leader, fall dug
QP	22	Quercus phellos Willow Oak	B & B	3"Cal		Strong main leader, fall dug
QR	3	Quercus rubra Red Oak	B & B	3"Cal		Strong main leader, fall dug
QR2	1	Quercus rubra Red Oak	B & B	4"Cal		Strong main leader, fall dug
UA	4	Ulmus americana 'Princeton' Princeton Elm	B & B	3"Cal		
EVERGREEN TREES	QTY	BOTANICAL NAME	CONT	CAL	SIZE	REMARKS
IF	17	Ilex x attenuata 'Foster' Foster's Holly	B & B		8-10' HT.	
IN	11	Ilex x 'Nellee R Stevens' Nellee Stevens Holly	B & B		8-10' HT.	Species to match
TS	19	Thuja x 'Steeplechase' Steeplechase Arborvitae	B & B		8-10' HT.	Species to match
FLOWERING TREES	QTY	BOTANICAL NAME	CONT	CAL	SIZE	REMARKS
AC	18	Amelanchier canadensis 'Autumn Brilliance' Autumn Brilliance Serviceberry	B & B		10-12' HT.	Multi-stem
CB	7	Carpinus betulus 'Fastigiata' Pyramidal European Hornbeam	B & B	2.5"Cal		
CB2	11	Carpinus betulus 'Fastigiata' Pyramidal European Hornbeam	B & B	3"Cal		
CC	12	Cercis canadensis Eastern Redbud	B & B	2.5"Cal		Single stem
CF	6	Cornus florida 'Appalachian Spring' Appalachian Spring Eastern Dogwood	B & B		10-12' HT.	
CK	9	Cladrasis kentukea American Yellowwood	B & B	3"Cal		
LI	8	Lagerstroemia indica 'Apalachee' Apalachee Crape Myrtle	B & B		10' HT.	
MV	7	Magnolia virginiana Sweet Bay	B & B		10' HT.	
PO	2	Prunus x okame Okame Cherry	B & B	2"Cal		
PO2	1	Prunus x okame Okame Cherry	B & B	3"Cal		

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21449 Expiration Date: 12-21-22



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 Chief, Development Engineering Division  
 10-12-18  
 Chief, Division of Land Development  
 10-18-18  
 Director  
 10-18-18

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 CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION OF 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.  
 Developer/Owner: Mark Levy, Partner  
 Date: 9/25/18

**BENCHMARK ENGINEERING, INC.**  
 ARCHITECTURE PLANNING INTERIORS  
 DESIGN COLLECTIVE

OWNER: CORRIDOR SQUARE, LLC  
 6800 DEERPATH ROAD  
 ELK RIDGE, MD 21075  
 410.579.2442

DEVELOPER: MURN DEVELOPMENT  
 6800 DEERPATH ROAD  
 ELK RIDGE, MD 21075  
 410.579.2442

**CORRIDOR SQUARE PARCELS A & C**  
 RESIDENTIAL APARTMENT BUILDING

TAX MAP 43 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65)  
 TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79  
 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND

**SITE DEVELOPMENT PLAN LANDSCAPE PLAN**

DATE: SEPTEMBER 2018 BEI PROJECT NO. 2695  
 DESIGN: BR DRAFT: MM SCALE: 1" = 30' SHEET 14 OF 39

CONSTRUCTION SET - REF. L300A

AS-BUILT SDP-18-002

REFERENCE 18 FOR SCHEDULES A, B, AND C

SCHEDULE A - PERIMETER LANDSCAPE EDGE							
CATEGORY	ADJACENT TO ROADWAYS		ADJACENT TO PERIMETER PROPERTIES				
PERIMETER/FRONTAGE DESIGNATION	B1	B2	B3	A1	A2	A3	A4
LANDSCAPE TYPE							
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	419'	519'	481'	414'	454'	500'	112'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	NO	NO	NO
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	NO	NO	NO
NUMBER OF PLANTS PROVIDED							
SHADE TREES	1:50 (8)	1:50 (10)	1:50 (10)	1:80 (7)	1:80 (8)	1:80 (9)	1:80 (2)
EVERGREEN TREES	1:40 (11)	1:40 (13)	1:40 (12)	0 (0)	0 (0)	0 (0)	0 (0)
SHRUBS				0 (0)	0 (0)	0 (0)	0 (0)
NUMBER OF PLANTS PROVIDED							
SHADE TREES	(8)	(10)	(10)	(7)	(8)	(9)	(2)
EVERGREEN TREES	(10)	(12)	(12)	(*)	(0)	(0)	(0)
OTHER TREES (2:1 SUBSTITUTION)	(7)	(7)	(7)	(*)	(0)	(0)	(0)
SHRUBS (10:1 SUBSTITUTION)	(7)	(7)	(7)	(*)	(0)	(0)	(0)
DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED							

LANDSCAPE EDGE TYPE	LANDSCAPE EDGE TYPE - LENGTHS	
<b>A</b> LANDSCAPE EDGE TYPE A LIGHT BUFFER, 1 SHADE TREE / 60 LF	<b>A1</b> LENGTH = 414'	<b>B1</b> LENGTH = 419'
<b>B</b> LANDSCAPE EDGE TYPE B MODERATE BUFFER, 1 SHADE TREE / 50 LF AND 1 EVERGREEN TREE / 40 LF	<b>A2</b> LENGTH = 454'	<b>B2</b> LENGTH = 519'
	<b>A3</b> LENGTH = 500'	<b>B3</b> LENGTH = 481'
	<b>A4</b> LENGTH = 112'	

SCHEDULE B - PARKING LOT INTERNAL LANDSCAPING	
NUMBER OF PARKING SPACES	21
NUMBER OF TREES REQUIRED (1 TREE PER 10 SPACES)	3
NUMBER OF TREES PROVIDED	
SHADE TREES	3
OTHER TREES (2:1 SUBSTITUTION)	0 (0)
ISLAND REQUIREMENT - 200 SF MIN. (1 TREE @ 200 SF)	
ISLAND SPACE PROVIDED - 365 SF + 365 SF PER TREE	

SCHEDULE C - RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING	
CATEGORY	APARTMENT
NUMBER OF DWELLING UNITS	250
NUMBER OF TREES / ISLANDS REQUIRED	1:3 DU @ 4
NUMBER OF PLANTS PROVIDED	
SHADE TREES	36
EVERGREEN TREES (2:1 SUB)	10 (6)
OTHER TREES (2:1 SUB)	86 (43)
SHRUB (10:1 SUB)	0 (0)

TOTAL SITE PLANTING UNITS REQUIRED AND PROVIDED			
CATEGORY	UNITS	REQUIRED	PROVIDED
SCHED. A - PERIMETER LANDSCAPE EDGE	SHADE TREES	54	54
	EVERGREEN TREES	36	36
SCHED. B - PARKING LOT INTERNAL LANDSCAPING	SHADE TREES	3	3
SCHED. C - RESIDENTIAL DEVELOP. LANDSCAPING	SHADE TREES	84	36
	EVERGREEN TREES (2:1 SUB)	0 (0)	10 (6)
	OTHER TREES (2:1 SUB)	0 (0)	86 (43)
	SHRUB (10:1 SUB)	0 (0)	0 (0)
SITE TOTAL	SHADE TREES	140	93
	EVERGREEN TREES	36	36
	OTHER TREES (2:1 SUB)	0 (0)	10 (6)
	SHRUB (10:1 SUB)	0 (0)	86 (43)
	SHRUB (10:1 SUB)	0 (0)	0 (0)

MICROBIORETENTION PLANTING REQUIREMENTS			
MIR	AREA	STEMS REQUIRED	STEMS PROVIDED
#1	2440 SF	56	1109
#2	966 SF	29	425
#3	915 SF	21	436
#4	1065 SF	25	446

NOTE: STEMS PROVIDED AS CALCULATED BASED ON QUANTITY OF SHRUBS PLANTED WITHIN THE LIMITS OF THE MICROBIORETENTION AREAS. PERENNIALS AND GROUNDCOVERS NOT INCLUDED IN ABOVE CALCULATIONS.

BIORETENTION AREAS ARE TO BE PLANTED BASED ON A MINIMUM DENSITY OF 1000 STEMS PER PLANTED ACRE (0.0229 STEMS PER SQUARE FOOT).

**LANDSCAPE SCHEDULE NOTE:**

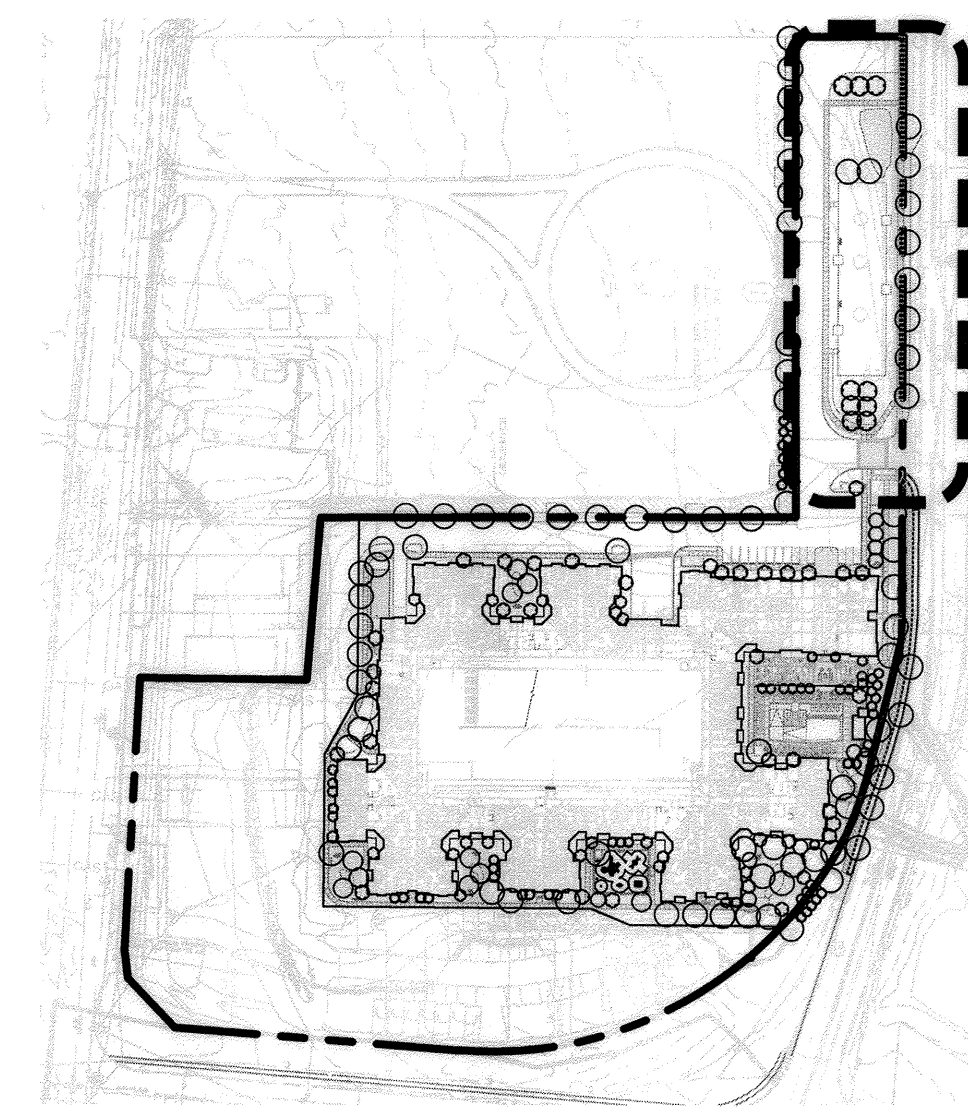
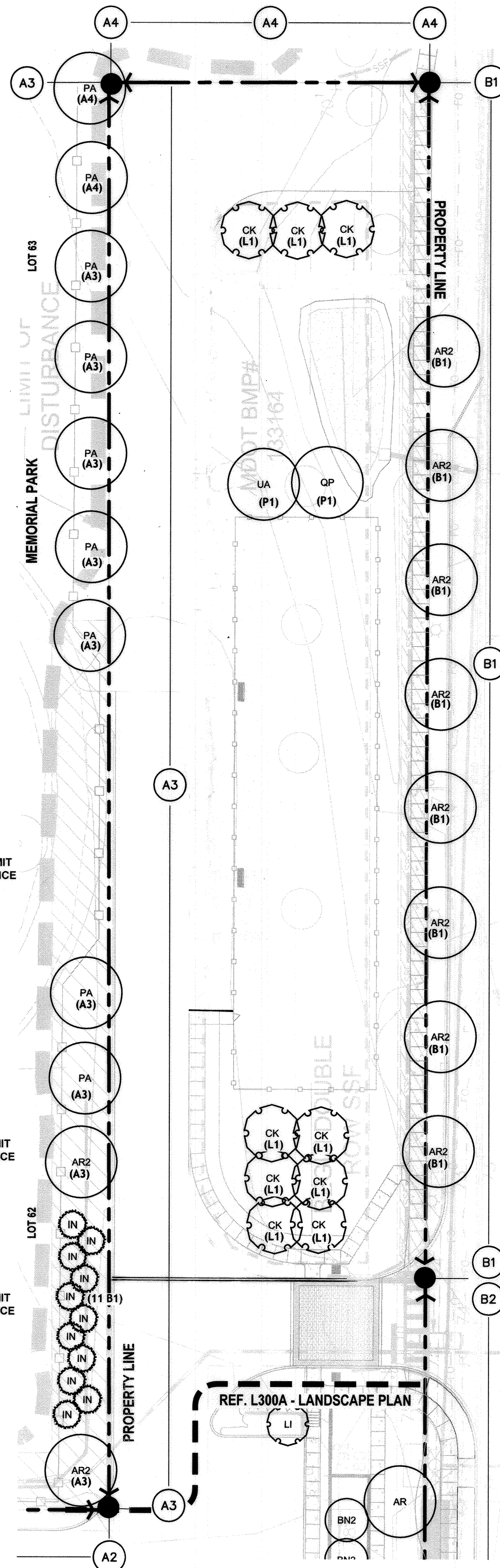
1. ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE MOST CURRENT AAN SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH HOWARD COUNTY PLANTING SPECIFICATIONS.
2. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
3. FINAL LOCATION OF PLANT MATERIAL MAY NEED TO VARY TO MEET FINAL FIELD CONDITIONS. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF DRAINAGE SWALES.
4. CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLAN DIFFERS FROM LANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.

**GENERAL NOTES:**

1. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. THE REQUIRED PARKING AND PERIMETER LANDSCAPING WILL BE BONDED PER THIS SUBMISSION.
2. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$117,000 FOR THE REQUIRED 93 SHADE TREES (\$1300ea) AND 10 EVERGREEN TREES (\$1500ea). ALL LANDSCAPING AND AMENITY FEATURES MUST BE IN PLACE BEFORE BOND IS RELEASED FOR SDP-19-002.
3. MAINTENANCE OF THE REQUIRED LANDSCAPING, PLANT MATERIALS, 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 REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
4. AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS LISTED HERewith AND APPROVED FOR THIS SITE SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.
5. SHOULD ANY TREE DESIGNATED FOR PRESERVATION FOR WHICH LANDSCAPING CREDIT IS GIVEN, DUE 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.
6. 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 WHEN NECESSARY, REPAIRED OR REPLACED.

FOREST CONSERVATION WORKSHEET						LOD
NET TRACT AREA:						5-Aug-02
A. Total tract area ...					7.35	
B. Land dedication acres (parks, county facility, etc.) ...					0.00	
C. Land dedication for roads or utilities (not being constructed by this plan) ...					0.00	
D. Area to remain in commercial agricultural production/use ...					0.00	
E. Other deductions (specify) ... FLOODPLAIN					0.00	
F. Net Tract Area					7.35	
LAND USE CATEGORY: (from Trees Technical Manual)						
Input the number "1" under the appropriate land use, limit to only one entry.						
ARA	MDR	IDA	HDR	MPD	CIA	
0	0	0	1	0	0	
G. Afforestation Threshold ...				15% x F =	1.10	
H. Conservation Threshold ...				20% x F =	1.47	
EXISTING FOREST COVER:						
I. Existing forest cover ...					2.88	
J. Area of forest above afforestation threshold ...					1.78	
K. Area of forest above conservation threshold ...					1.41	
BREAK EVEN POINT:						
L. Forest retention above threshold with no mitigation ...					1.75	
M. Clearing permitted without mitigation ...					1.13	
PROPOSED FOREST CLEARING:						
N. Total area of forest to be cleared ...					2.88	
O. Total area of forest to be retained ...					0.00	
PLANTING REQUIREMENTS:						
P. Reforestation for clearing above conservation threshold ...					0.35	
Q. Reforestation for clearing below conservation threshold ...					2.94	
R. Credit for retention above conservation threshold ...					0.00	
S. Total reforestation required ...					3.29	
T. Total afforestation required ...					0.00	
U. Credit for landscaping (may not exceed 20% of "S") ...					0.00	
V. Total reforestation and afforestation required ...					3.29	

NOTE: THE FOREST CONSERVATION OBLIGATIONS OF 3.29 ACRES OF AFFORESTATION/REFORESTATION WILL BE MET BY OFFSITE FOREST BANK LOCATED ON THE FOREVER A FARM PROPERTY, SDP-14-005.

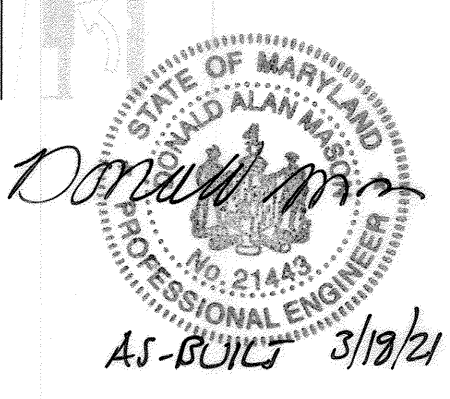


**KEY PLAN**

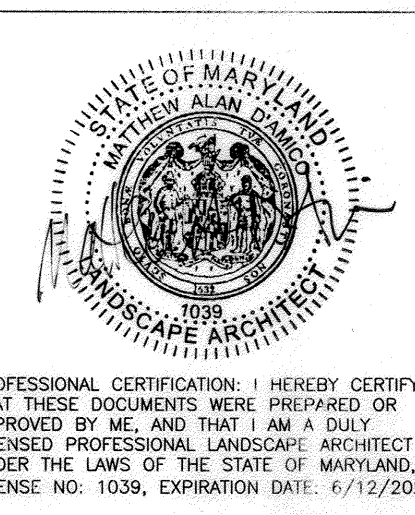
**PLANT SCHEDULE**

DECIDUOUS TREES	QTY	BOTANICAL NAME	CONT	CAL	SIZE	REMARKS
AR	22	Acer rubrum	B & B	3"	3"Cal	
AR2	10	Acer rubrum	B & B	4"	4"Cal	
BN	10	Betula nigra 'Cully' TM	B & B		12-14' HT.	Multi-stem
BN2	4	Heritage River Birch	B & B	2.5"	2.5"Cal	
NS	3	Betula nigra 'Durahat'	B & B	2.5"	2.5"Cal	
NS2	2	Nyssa sylvatica	B & B	3"	3"Cal	Fall Dug
PA	15	Black Gum	B & B	3"	3"Cal	Strong main leader, fall dug
QP	22	Platanus x acerifolia 'Exclamation' TM	B & B	3"	3"Cal	Strong main leader, fall dug
QR	3	Quercus phellos	B & B	3"	3"Cal	Strong main leader, fall dug
QR2	1	Quercus rubra	B & B	4"	4"Cal	Strong main leader, fall dug
UA	4	Willow Oak	B & B	3"	3"Cal	
		Ulmus americana 'Princeton'	B & B	3"	3"Cal	
		Princeton Elm	B & B	3"	3"Cal	
EVERGREEN TREES	QTY	BOTANICAL NAME	CONT	CAL	SIZE	REMARKS
IF	17	Ilex x attenuata 'Fosteri'	B & B		8-10' HT.	
IN	11	Foster's Holly	B & B		8-10' HT.	Species to match
TS	19	Ilex x 'Nellie R Stevens'	B & B		8-10' HT.	Species to match
		Nellie Stevens Holly	B & B		8-10' HT.	Species to match
		Thuja x 'Steeplechase'	B & B		8-10' HT.	Species to match
		Steeplechase Arborvitae	B & B		8-10' HT.	Species to match
FLOWERING TREES	QTY	BOTANICAL NAME	CONT	CAL	SIZE	REMARKS
AC	18	Amelanchier canadensis 'Autumn Brilliance'	B & B		10-12' HT.	Multi-stem
CB	7	Autumn Brilliance Serviceberry	B & B		10-12' HT.	Multi-stem
CB2	11	Carpinus betulus 'Fastiglata'	B & B	3"	3"Cal	
CC	12	Pyramidal European Hornbeam	B & B	2.5"	2.5"Cal	
CF	6	Cercis canadensis	B & B	2.5"	2.5"Cal	Single stem
CK	9	Eastern Redbud	B & B		10-12' HT.	
LI	8	Cornus florida 'Appalachian Spring'	B & B	3"	3"Cal	
MV	7	Appalachian Spring Eastern Dogwood	B & B		10' HT.	
PO	2	Cladrastis kentuckia	B & B	2"	2"Cal	
PO2	1	American Yellowwood	B & B	2"	2"Cal	
		Lagerstroemia indica 'Apalachee'	B & B		10' HT.	
		Apalachee Crape Myrtle	B & B		10' HT.	
		Magnolia virginiana	B & B		10' HT.	
		Sweet Bay	B & B		10' HT.	
		Prunus x okame	B & B		2"Cal	
		Okame Cherry	B & B		2"Cal	
		Prunus x okame	B & B		3"Cal	
		Okame Cherry	B & B		3"Cal	

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21443 Expiration Date: 12-21-22



PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 1036, EXPIRATION DATE: 6/12/2020

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 Chief, Development Engineering Division: 10-12-18  
 Chief, Division of Land Development: 10-18-18  
 Director: 10-18-18

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 CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION OF 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.  
 Developer/Owner: Mark ... DATE: 9/28/18

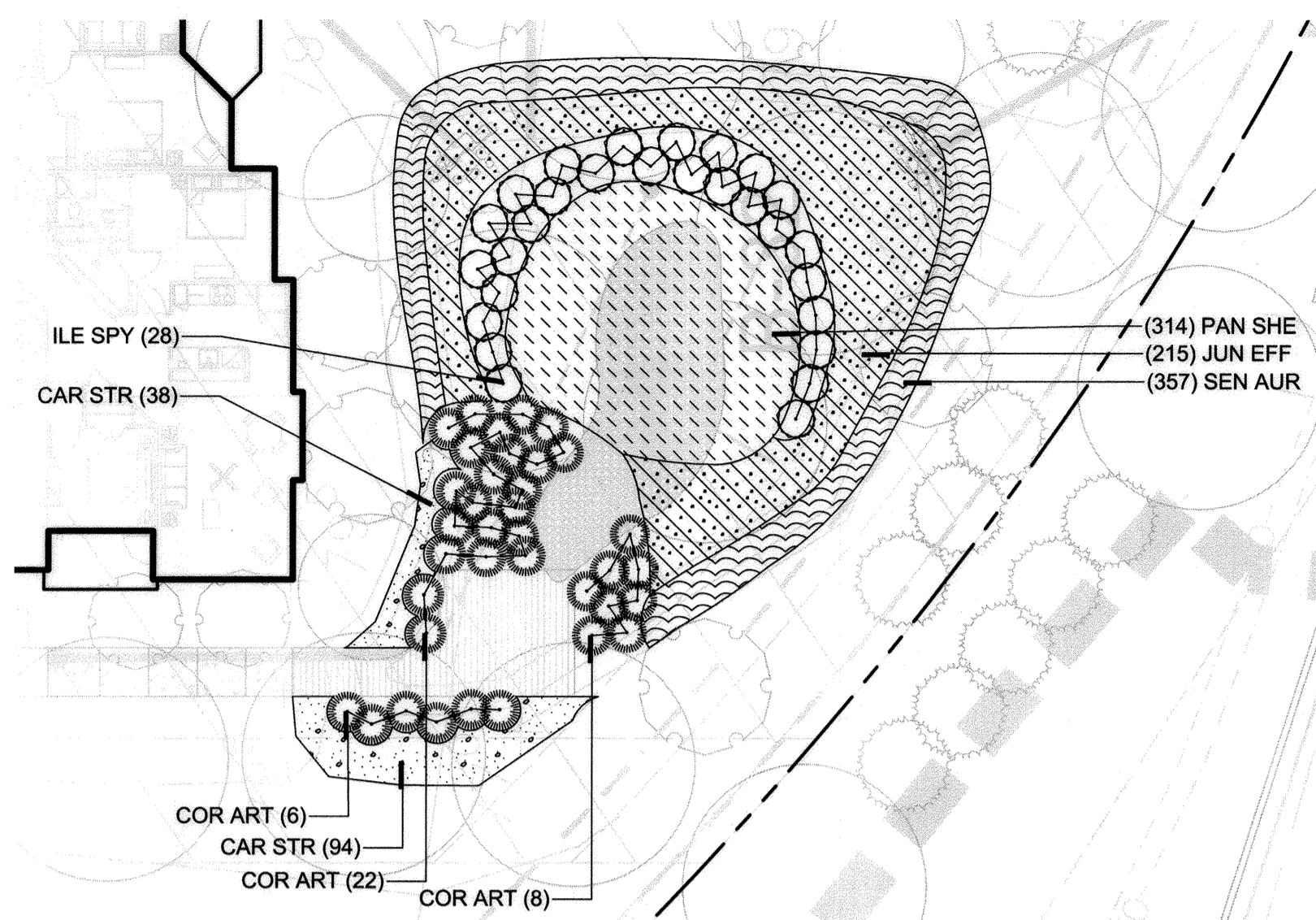
**BENCHMARK ENGINEERING, INC.**  
 ARCHITECTURE PLANNING INTERIORS  
 ENGINEERS & LAND SURVEYORS & PLANNERS  
 6490 BALTIMORE NATIONAL PIKE SUITE 310 ELLICOTT CITY, MARYLAND 21043  
 (P) 410-885-8655 (F) 410-885-8644  
 WWW.BEI-CVLENGINEERING.COM

**CORRIDOR SQUARE PARCELS A & C**  
 RESIDENTIAL APARTMENT BUILDING  
 TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65)  
 TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79  
 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND

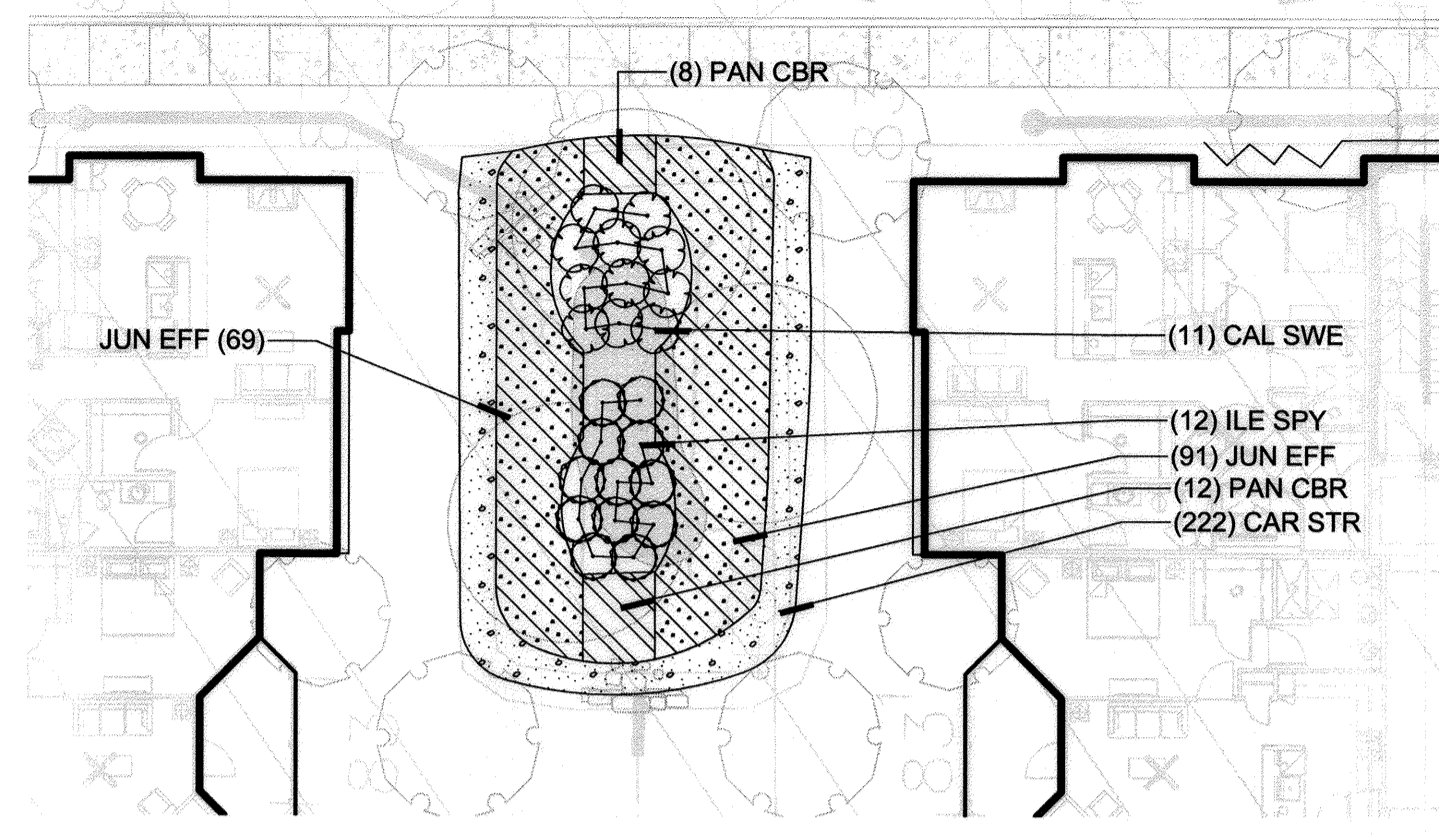
**SITE DEVELOPMENT PLAN LANDSCAPE PLAN AND NOTES**  
 DATE: SEPTEMBER 2018 BEI PROJECT NO. 2695  
 DESIGN: BR DRAFT: MM SCALE: 1" = 30' SHEET 15 OF 39

CONSTRUCTION SET - REF. L300B

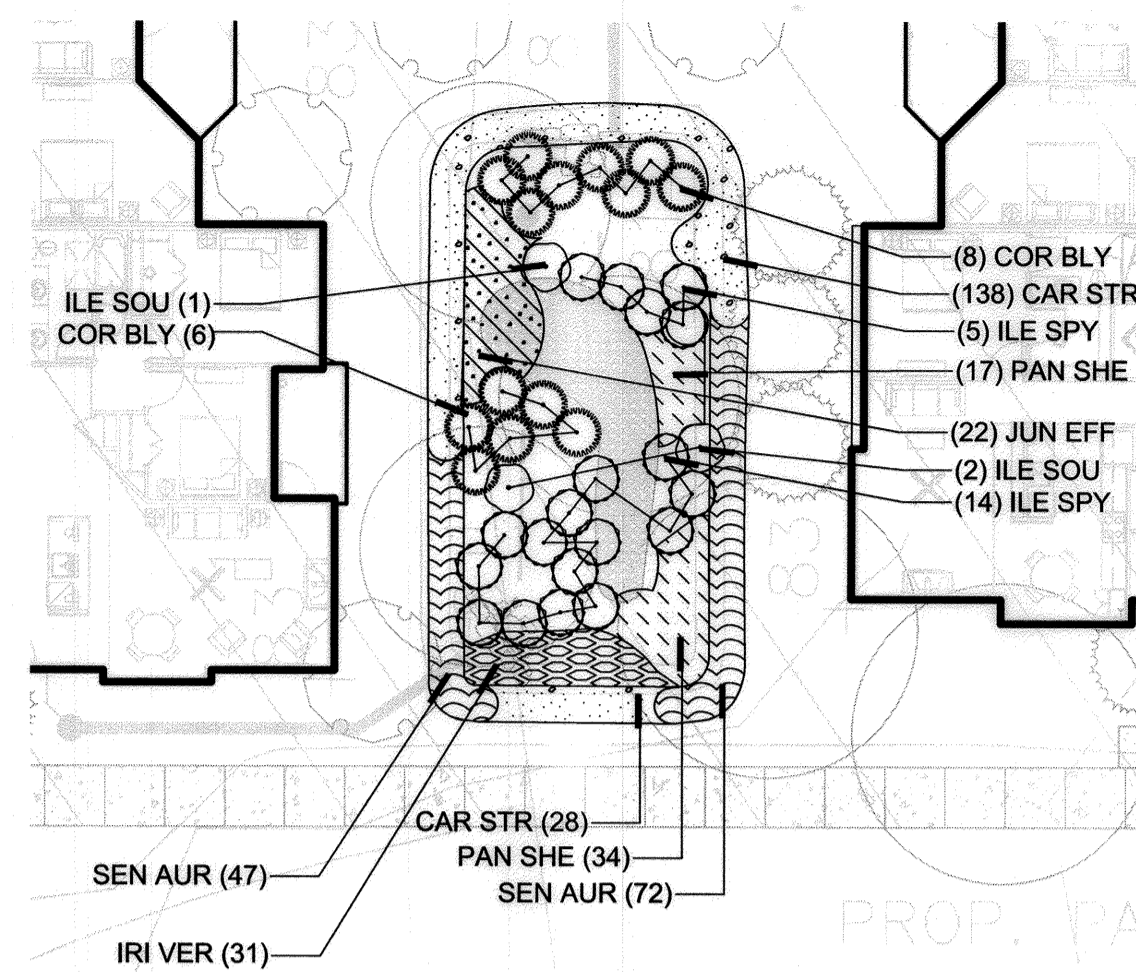
AS-BUILT SDD-18-002



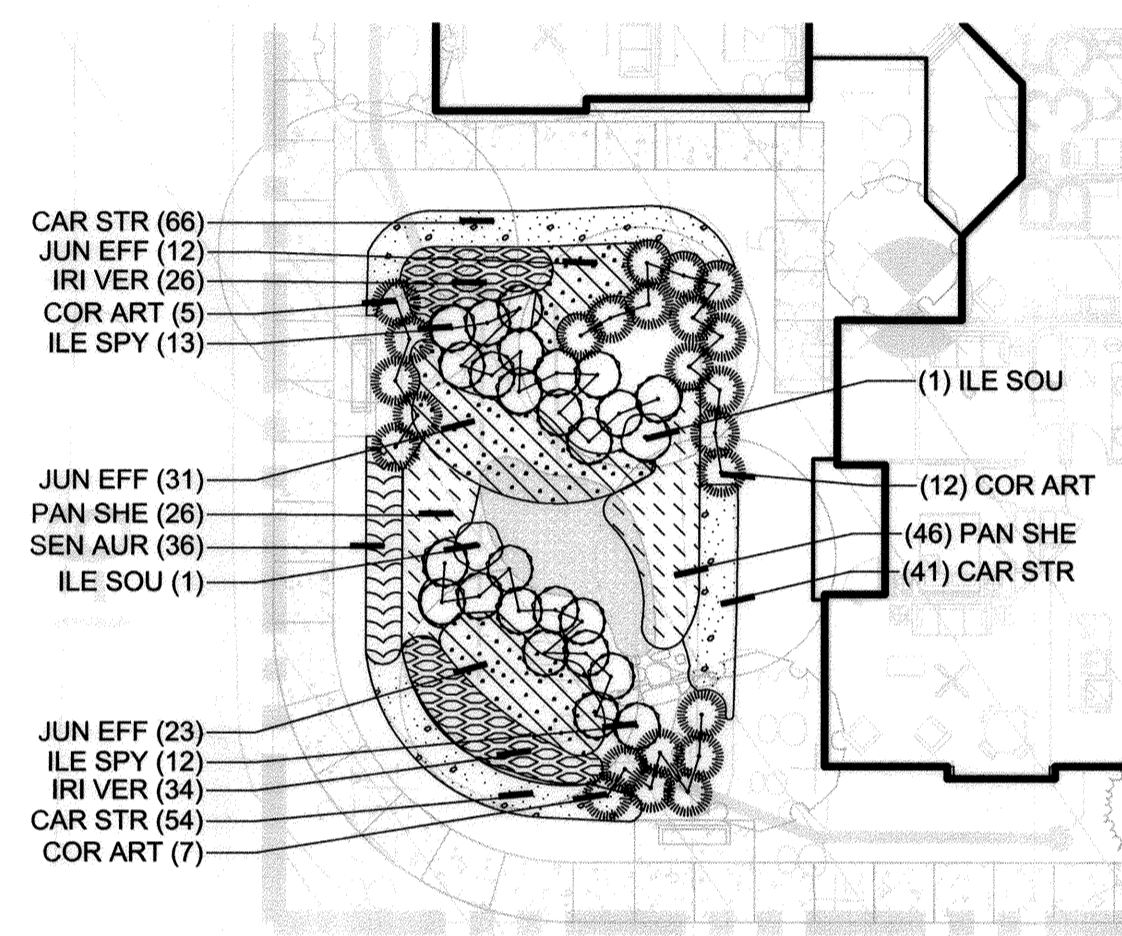
**1 MICROBIORETENTION UNIT 1**  
1/16" = 1'-0"



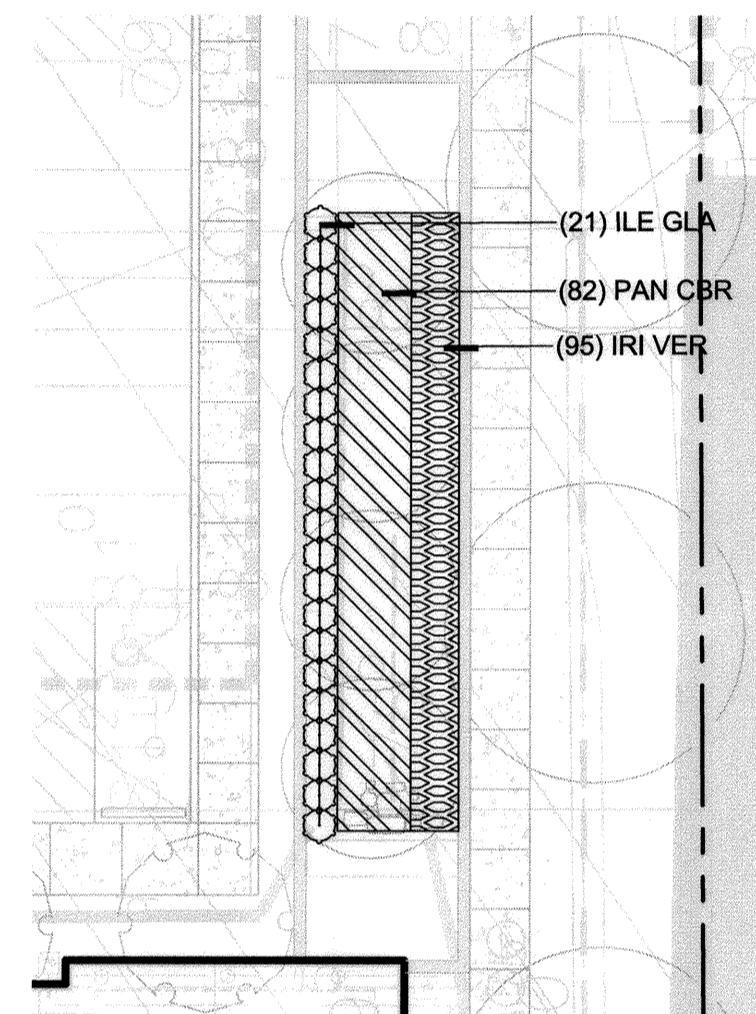
**2 MICROBIORETENTION UNIT 2**  
1/16" = 1'-0"



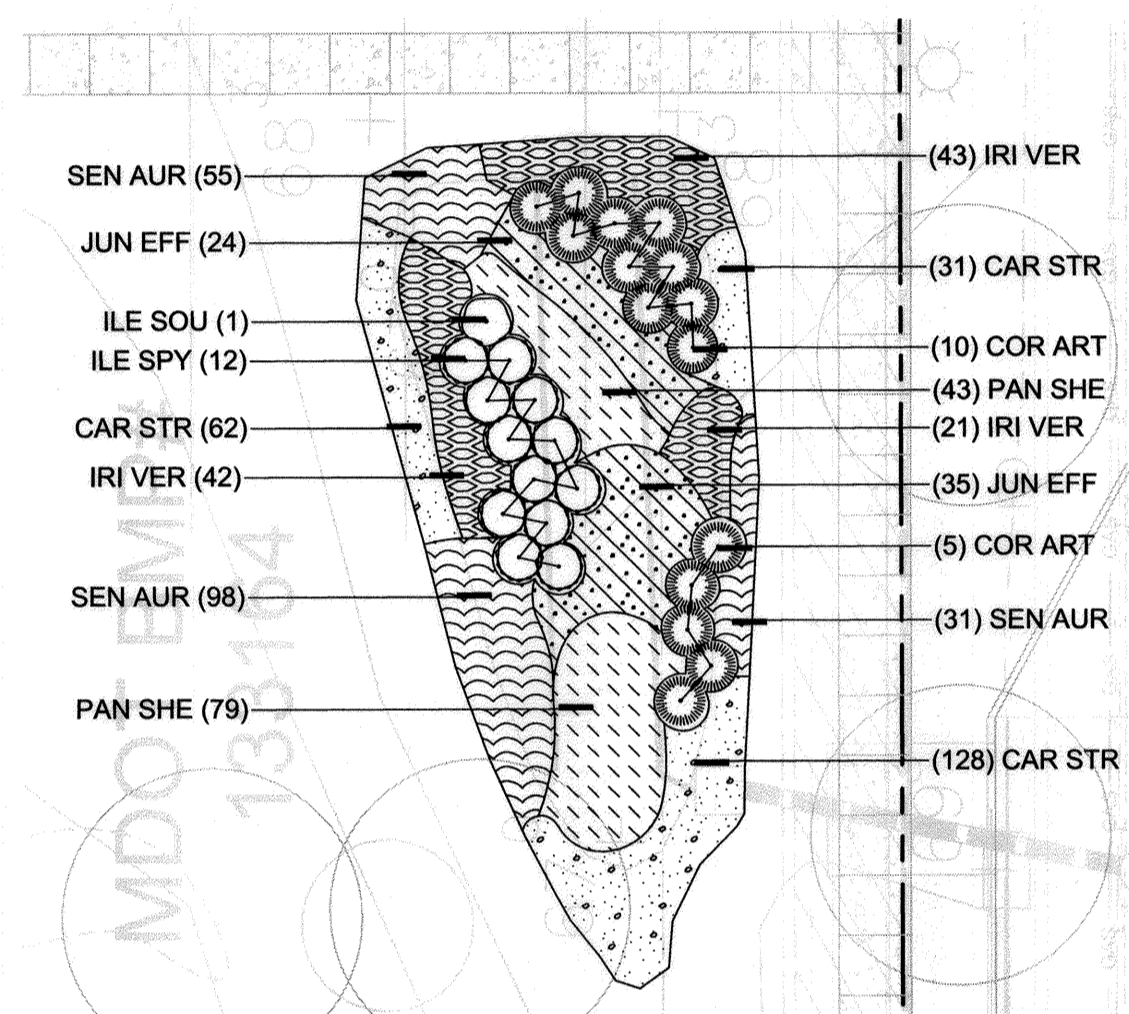
**3 MICROBIORETENTION UNIT 3**  
1/16" = 1'-0"



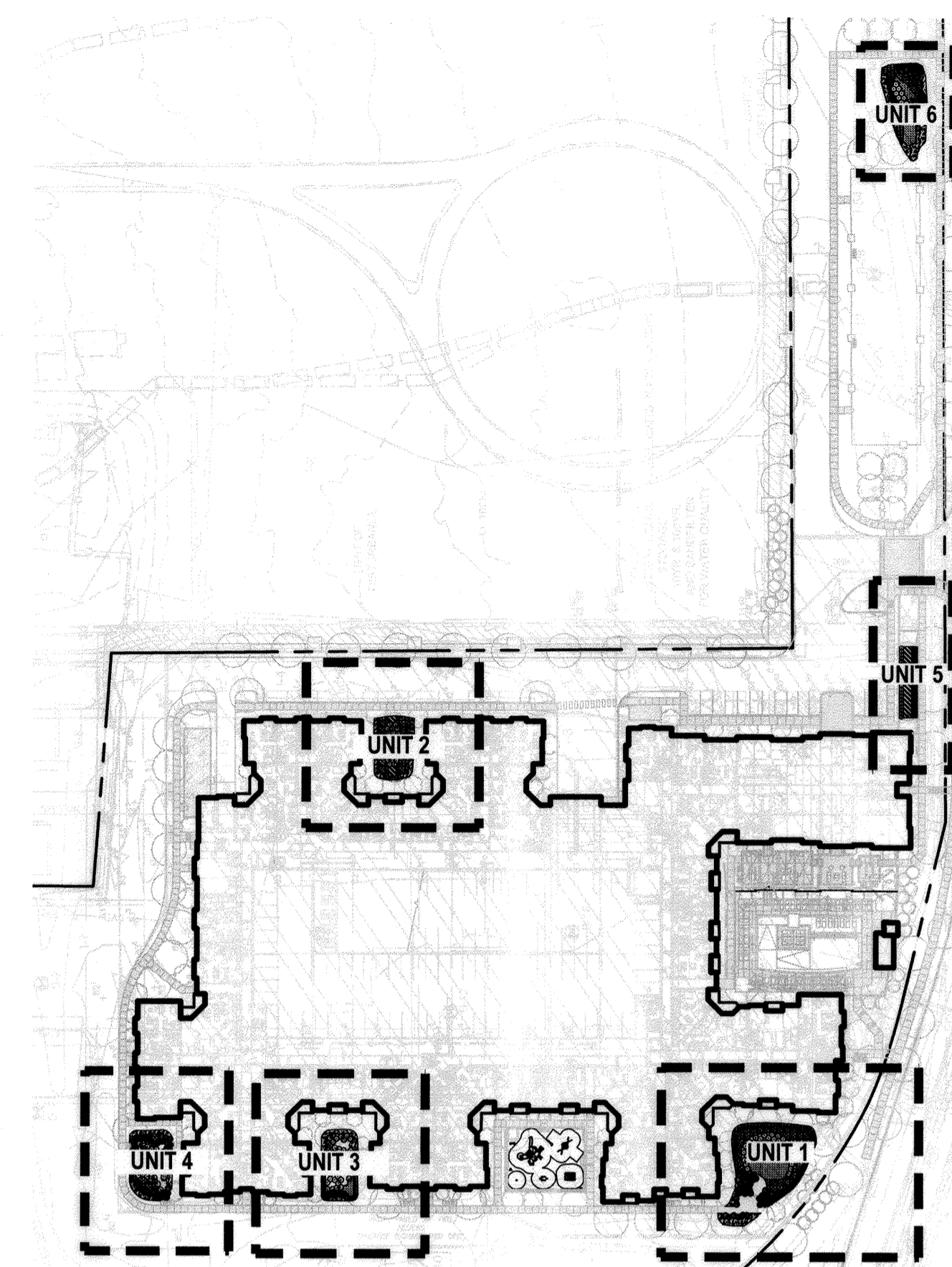
**4 MICROBIORETENTION UNIT 4**  
1/16" = 1'-0"



**5 MICROBIORETENTION UNIT 5**  
1/16" = 1'-0"



**6 MICROBIORETENTION UNIT 6**  
1/16" = 1'-0"



**KEY PLAN**

**PLANT SCHEDULE MBR 1**

SHRUBS	QTY	BOTANICAL NAME	SIZE	REMARKS	
COR ART	36	Cornus sericea 'Arctic Fire'	7 gal	42" ht.	
ILE SPY	28	Artic Fire Dogwood Ilex verticillata 'Sparkleberry' Winterberry	7 gal		
GROUND COVERS	QTY	BOTANICAL NAME	CONT	SPACING	REMARKS
CAR STR	132	Carex stricta Tussock Sedge	plug	15" o.c.	
JUN EFF	215	Juncus effusus Soft Rush	plug	24" o.c.	Overseed w/ Mix. See Below (MBR Units 1 & 2 Only)
PAN SHE	314	Panicum virgatum 'Shenandoah' Switch Grass	plug	18" o.c.	Overseed w/ Mix. See Below (MBR Units 1 & 2 Only)
SEN AUR	357	Senecio aureus Golden Ragwort	plug	15" o.c.	
SEED MIX					
XERCES MID-ATLANTIC POLLINATOR MIX	SF: 2,200				
ERNST SEED					
**TO BE MIXED WITH JUN EFF					
CONSERVATION MIX - TYPE TBD	SF: 1,760				
ERNST SEED					
**TO BE MIXED WITH PAN SHE					

**PLANT SCHEDULE MBR 3**

SHRUBS	QTY	BOTANICAL NAME	SIZE	REMARKS	
COR BLY	14	Cornus sericea 'Bailey'	7 gal	42" ht.	
ILE SOU	3	Red Twig Dogwood	7 gal		
ILE SPY	19	Ilex verticillata 'Southern Gentleman' Southern Gentleman Winterberry Holly Ilex verticillata 'Sparkleberry' Winterberry	7 gal		
GROUND COVERS	QTY	BOTANICAL NAME	CONT	SPACING	REMARKS
CAR STR	166	Carex stricta Tussock Sedge	plug	15" o.c.	
IRI VER	31	Irish vesicolor Blue Flag	1 qt	18" o.c.	
JUN EFF	22	Juncus effusus Soft Rush	plug	24" o.c.	Overseed w/ Mix. See Below (MBR Units 1 & 2 Only)
PAN SHE	51	Panicum virgatum 'Shenandoah' Switch Grass	plug	18" o.c.	Overseed w/ Mix. See Below (MBR Units 1 & 2 Only)
SEN AUR	119	Senecio aureus Golden Ragwort	plug	15" o.c.	

**PLANT SCHEDULE MBR 5**

SHRUBS	QTY	BOTANICAL NAME	SIZE	REMARKS	
ILE GLA	21	Ilex glabra Inkberry Holly	7 gal		
GROUND COVERS	QTY	BOTANICAL NAME	CONT	SPACING	REMARKS
IRI VER	95	Irish vesicolor Blue Flag	1 qt	18" o.c.	
PAN CBR	82	Panicum virgatum 'Cape Breeze' Switch Grass	1 qt	24" o.c.	

**PLANT SCHEDULE MBR 6**

SHRUBS	QTY	BOTANICAL NAME	SIZE	REMARKS	
COR ART	15	Cornus sericea 'Arctic Fire'	7 gal	42" ht.	
ILE SOU	1	Artic Fire Dogwood	7 gal		
ILE SPY	12	Ilex verticillata 'Southern Gentleman' Southern Gentleman Winterberry Holly Ilex verticillata 'Sparkleberry' Winterberry	7 gal		
GROUND COVERS	QTY	BOTANICAL NAME	CONT	SPACING	REMARKS
CAR STR	221	Carex stricta Tussock Sedge	plug	15" o.c.	
IRI VER	106	Irish vesicolor Blue Flag	1 qt	18" o.c.	
JUN EFF	59	Juncus effusus Soft Rush	plug	24" o.c.	Overseed w/ Mix. See Below (MBR Units 1 & 2 Only)
PAN SHE	122	Panicum virgatum 'Shenandoah' Switch Grass	plug	18" o.c.	Overseed w/ Mix. See Below (MBR Units 1 & 2 Only)
SEN AUR	184	Senecio aureus Golden Ragwort	plug	15" o.c.	

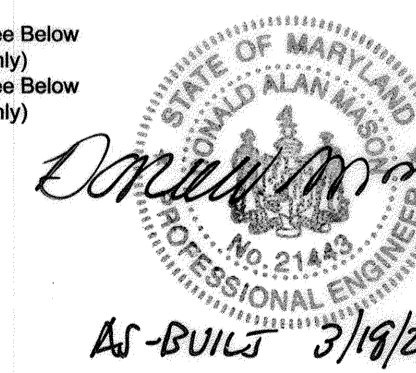
**PLANT SCHEDULE MBR 2**

SHRUBS	QTY	BOTANICAL NAME	SIZE	REMARKS	
CAL SWE	11	Calycanthus floridus Sweet Shrub	7 gal	42" ht.	
ILE SPY	12	Ilex verticillata 'Sparkleberry' Winterberry	7 gal		
GROUND COVERS	QTY	BOTANICAL NAME	CONT	SPACING	REMARKS
CAR STR	222	Carex stricta Tussock Sedge	plug	15" o.c.	
JUN EFF	160	Juncus effusus Soft Rush	plug	24" o.c.	Overseed w/ Mix. See Below (MBR Units 1 & 2 Only)
PAN CBR	20	Panicum virgatum 'Cape Breeze' Switch Grass	1 qt	24" o.c.	
SEED MIX					
CONSERVATION MIX - TYPE TBD	SF: 2,270				
ERNST SEED					
**TO BE MIXED WITH JUN EFF					

**PLANT SCHEDULE MBR 4**

SHRUBS	QTY	BOTANICAL NAME	SIZE	REMARKS	
COR ART	24	Cornus sericea 'Arctic Fire'	7 gal	42" ht.	
ILE SOU	2	Artic Fire Dogwood	7 gal		
ILE SPY	25	Ilex verticillata 'Southern Gentleman' Southern Gentleman Winterberry Holly Ilex verticillata 'Sparkleberry' Winterberry	7 gal		
GROUND COVERS	QTY	BOTANICAL NAME	CONT	SPACING	REMARKS
CAR STR	161	Carex stricta Tussock Sedge	plug	15" o.c.	
IRI VER	60	Irish vesicolor Blue Flag	1 qt	18" o.c.	
JUN EFF	66	Juncus effusus Soft Rush	plug	24" o.c.	Overseed w/ Mix. See Below (MBR Units 1 & 2 Only)
PAN SHE	72	Panicum virgatum 'Shenandoah' Switch Grass	plug	18" o.c.	Overseed w/ Mix. See Below (MBR Units 1 & 2 Only)
SEN AUR	36	Senecio aureus Golden Ragwort	plug	15" o.c.	

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21443, Expiration Date: 12-31-22

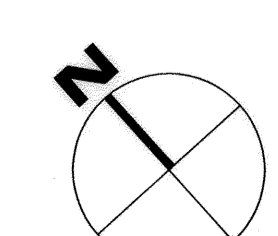
AS-BUILT 3/19/21



PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 1039, EXPIRATION DATE: 6/12/2020

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 Chief, Development Engineering Division: *Chad Clarke* 10-12-18  
 Chief, Division of Land Development: *Keith Shalwood* 10-18-18  
 Director: *N. Albin* 10-18-18

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 CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION OF 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.  
 Developer/Owner: *[Signature]* 9/28/18



CONSTRUCTION SET - REF. L317

**BENCHMARK ENGINEERING, INC.**  
 ARCHITECTURE PLANNING INTERIORS  
 8480 NATIONAL PIKE # SUITE 315 • ELICOTT CITY, MARYLAND 21043  
 TEL 410.685.6655 FAX 410.539.6042  
 WWW.BEI-CIVILENGINEERING.COM

**DESIGN COLLECTIVE**  
 ARCHITECTURE PLANNING INTERIORS  
 WWW.DESIGNCOLLECTIVE.COM

OWNER: CORRIDOR SQUARE LLC  
 6800 DEERPATH ROAD  
 ELKCRIDGE, MD 21075  
 410.579.2442

DEVELOPER: MURN DEVELOPMENT  
 6800 DEERPATH ROAD  
 ELKCRIDGE, MD 21075  
 410.579.2442

**CORRIDOR SQUARE PARCELS A & C**  
 RESIDENTIAL APARTMENT BUILDING

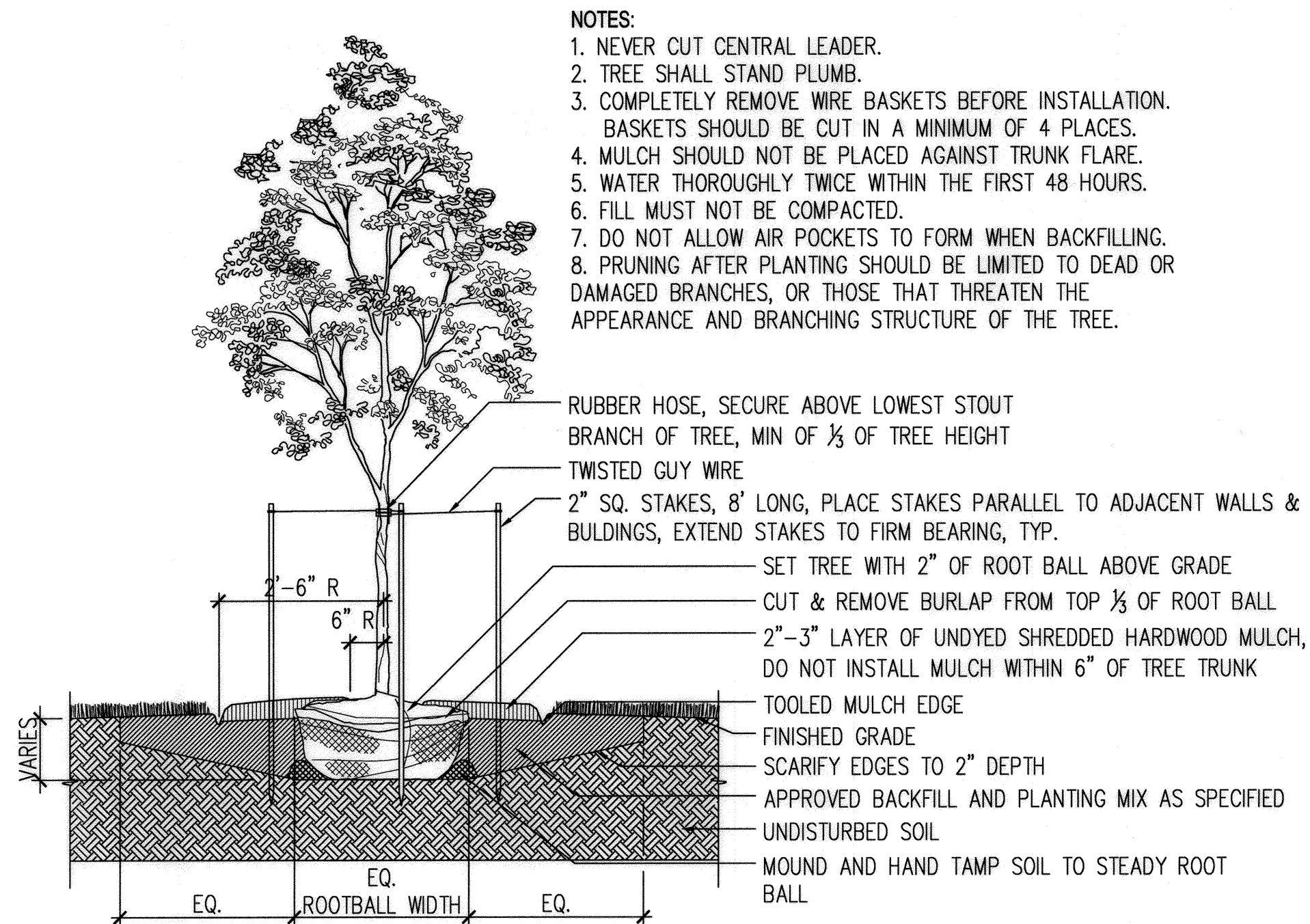
TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65)  
 TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79  
 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND

**SITE DEVELOPMENT PLAN**  
**STORMWATER MANAGEMENT PLANTING PLANS**

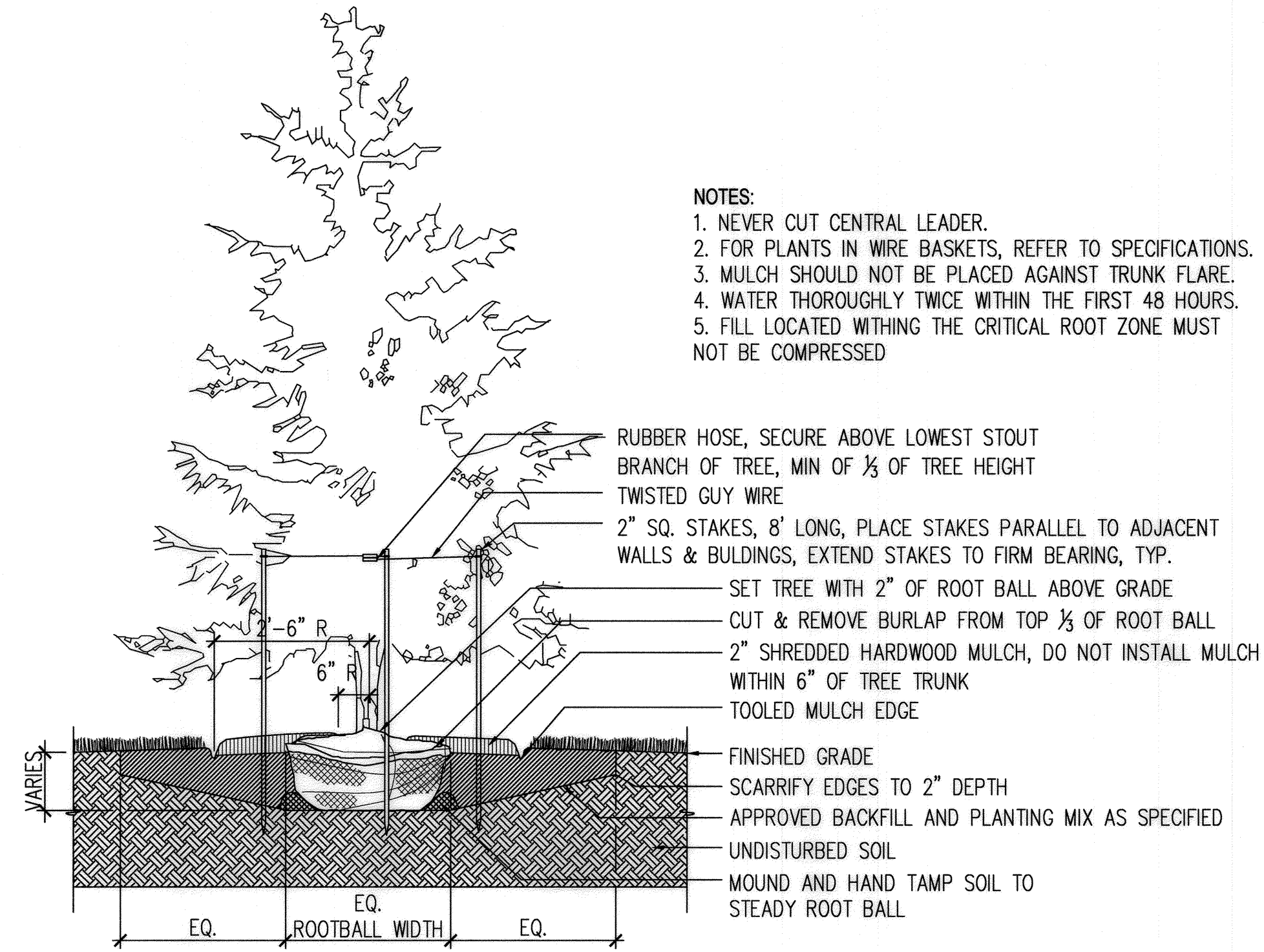
DATE: SEPTEMBER 2018 BEI PROJECT NO. 2695  
 SCALE: 1" = 30' SHEET 16 OF 39  
 DESIGN: BR DRAFT: MM

AS-BUILT

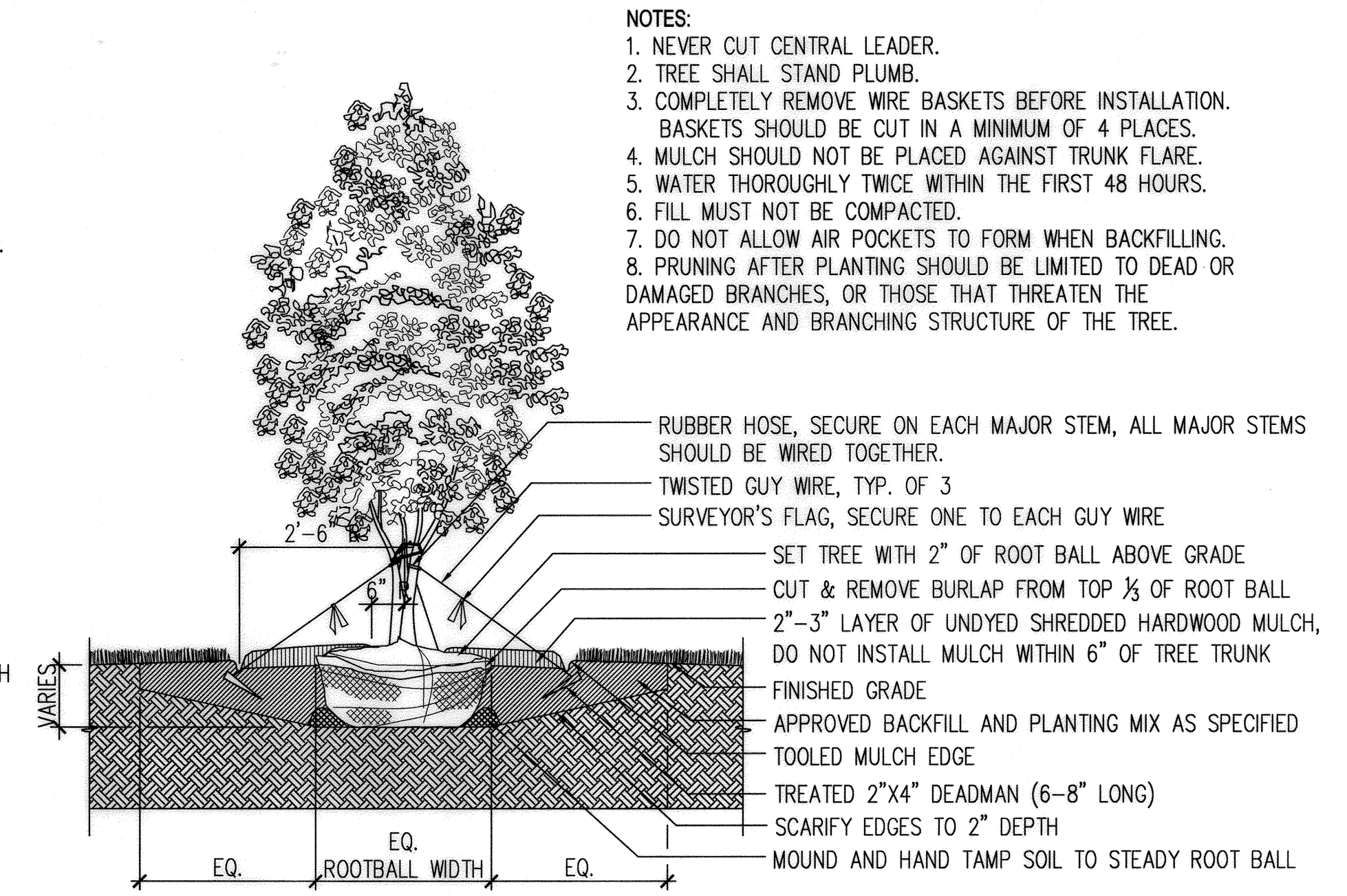




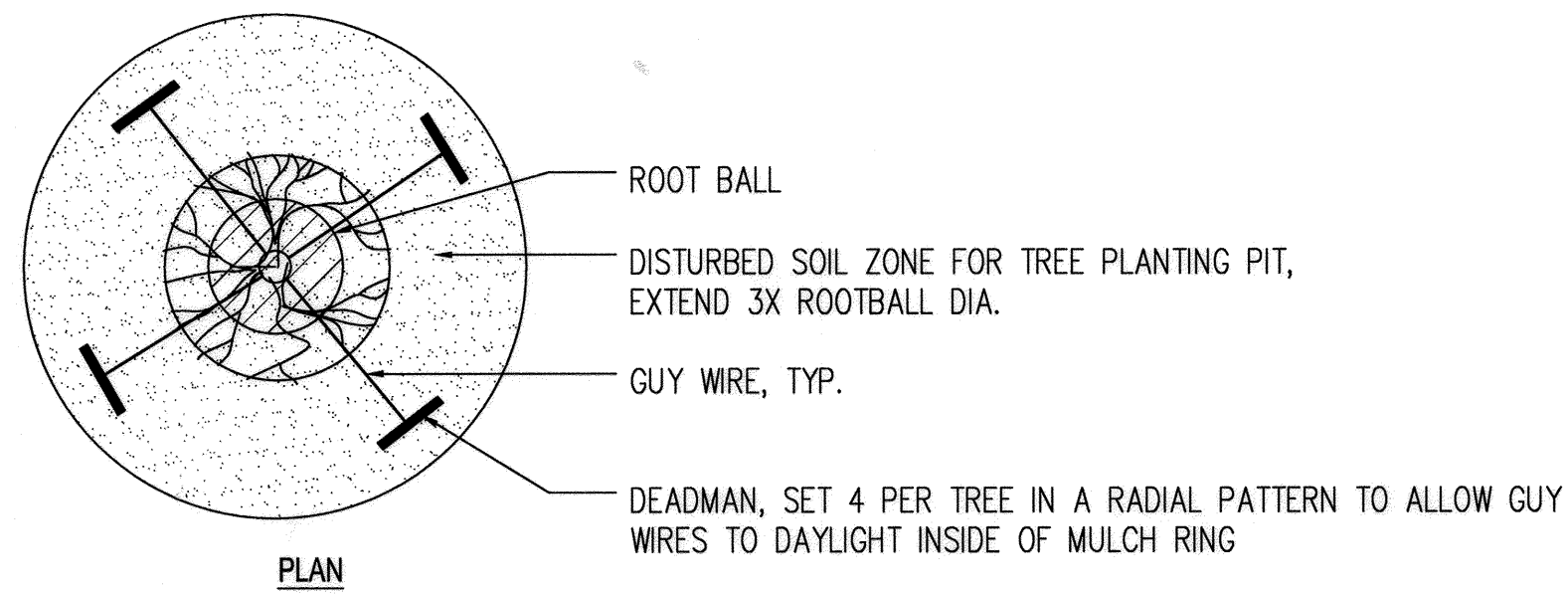
**1 DECIDUOUS TREE PLANTING**  
 1/2" = 1'-0"



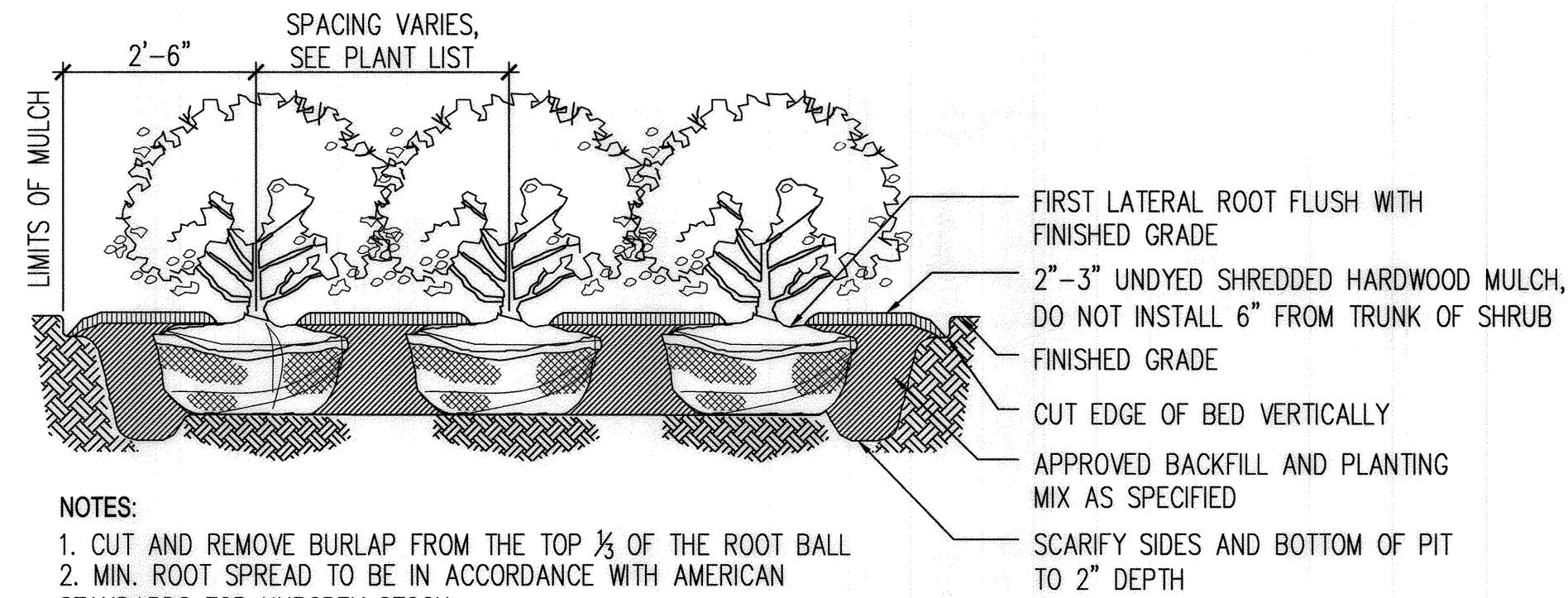
**2 EVERGREEN TREE PLANTING**  
 1/2" = 1'-0"



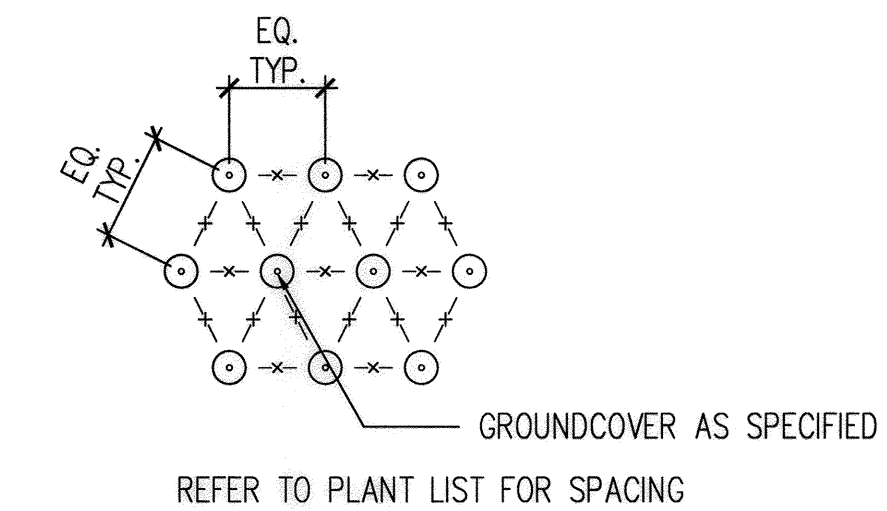
**3 MULTI-STEM TREE PLANTING**  
 1/2" = 1'-0"



**4 STAKED PLAN ENLARGEMENT**  
 1/2" = 1'-0"



**5 SHRUB PLANTING**  
 1/2" = 1'-0"



**6 PLANT SPACING DIAGRAM**  
 1/2" = 1'-0"

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*Chad Church* 10-12-18  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

*Walt Shee* 10-18-18  
 CHIEF, DIVISION OF LAND DEVELOPMENT

*Natalia Glee* 10-18-18  
 DIRECTOR

*Professional Certification*  
 AS BUILT 3/18/21

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 21443, Expiration Date: 12-21-22

**BENCHMARK ENGINEERING, INC.**  
 ENGINEERS • LAND SURVEYORS • PLANNERS  
 8480 BALTIMORE NATIONAL PIKE SUITE 315 • ELICOTT CITY, MARYLAND 21043  
 (P) 410-465-8105 (F) 410-465-6644  
 WWW.BE-CIVILENGINEERING.COM

**DESIGN COLLECTIVE**  
 ARCHITECTURE PLANNING INTERIORS  
 WWW.DESIGNCOLLECTIVE.COM  
 603 EAST PRATT STREET, SUITE 300  
 BALTIMORE, MARYLAND 21202  
 TEL: 410-685-5655 FAX: 410-539-6422  
 OFFICES IN BALTIMORE & RUBEN

**CORRIDOR SQUARE PARCELS A & C**  
 RESIDENTIAL APARTMENT BUILDING

**SITE DEVELOPMENT PLAN DETAILS - PLANTING**

OWNER: CORRIDOR SQUARE, LLC  
 6800 DEERPATH ROAD  
 ELKCRIDGE, MD 21075  
 410.579.2442

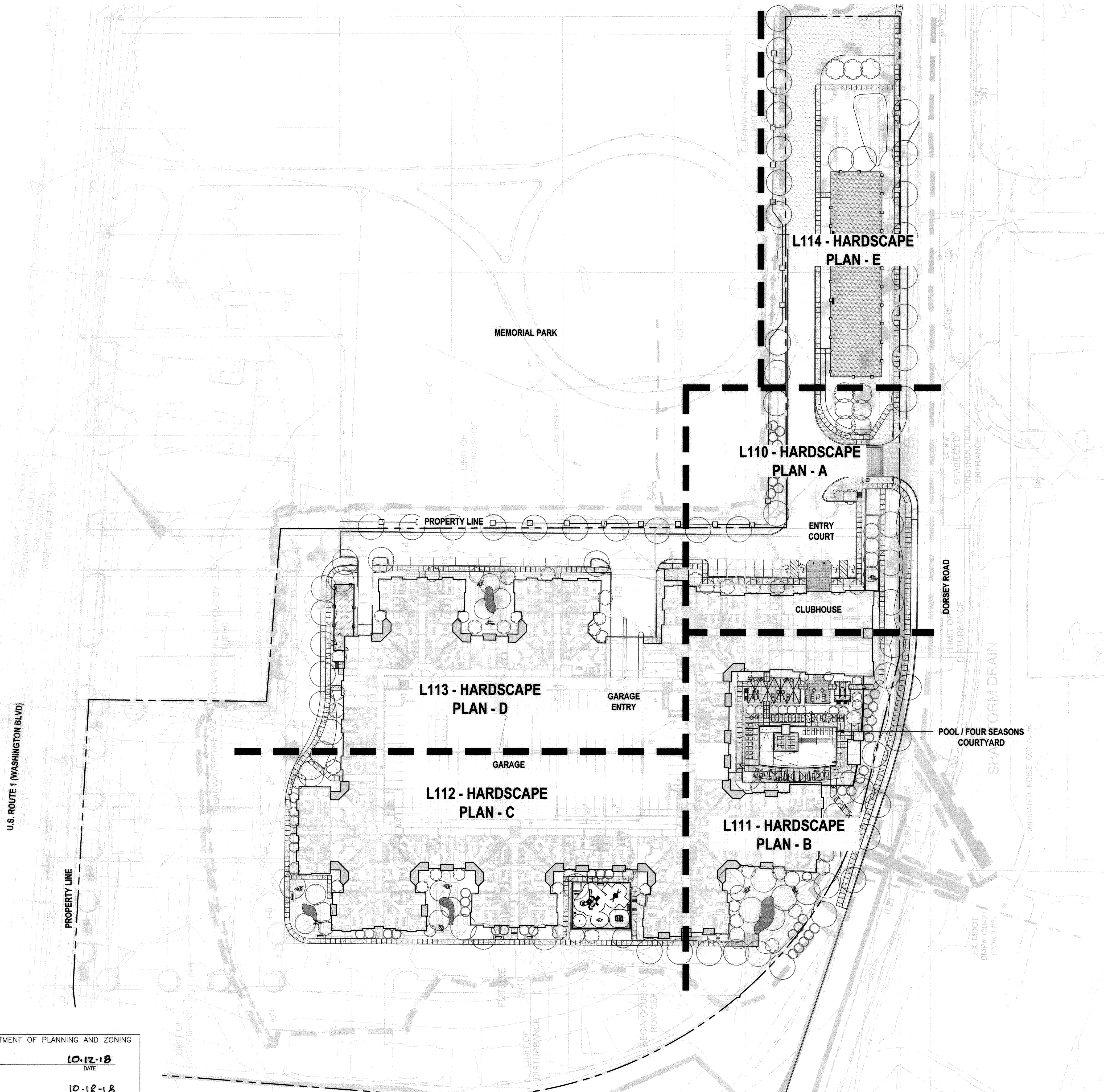
DEVELOPER: MURN DEVELOPMENT  
 6800 DEERPATH ROAD  
 ELKCRIDGE, MD 21075  
 410.579.2442

DATE: SEPTEMBER 2018 | BEI PROJECT NO. 2695  
 SCALE: SEE DETAIL | SHEET 17 OF 39

CONSTRUCTION SET - REF. L320

AS-BUILT

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 1039, EXPIRATION DATE: 6/12/2020



U.S. ROUTE 1 (WASHINGTON BLVD)

MEMORIAL PARK

L114 - HARDSCAPE  
PLAN - E

L110 - HARDSCAPE  
PLAN - A

L113 - HARDSCAPE  
PLAN - D

L112 - HARDSCAPE  
PLAN - C

L111 - HARDSCAPE  
PLAN - B

CLUBHOUSE

POOL / FOUR SEASONS  
COURTYARD

GARAGE  
ENTRY

ENTRY  
COURT

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*Chad Clark* 10-12-18  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION JP DATE  
*Robert DeLeon* 10-18-18  
 CHIEF, DIVISION OF LAND DEVELOPMENT W DATE  
*William Taylor* 10-18-18  
 DIRECTOR DATE

"NO AS-BUILT INFORMATION IS"  
PROVIDED ON THIS SHEET

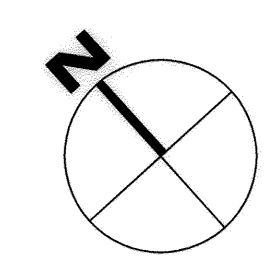
*Doreen M...*  
 AS-BUILT 3/18/21

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 21243 Expiration Date: 12/31/22

STATE OF MARYLAND  
 PROFESSIONAL LANDSCAPE ARCHITECT  
 LICENSE NO. 1039, EXPIRATION DATE: 6/12/2020

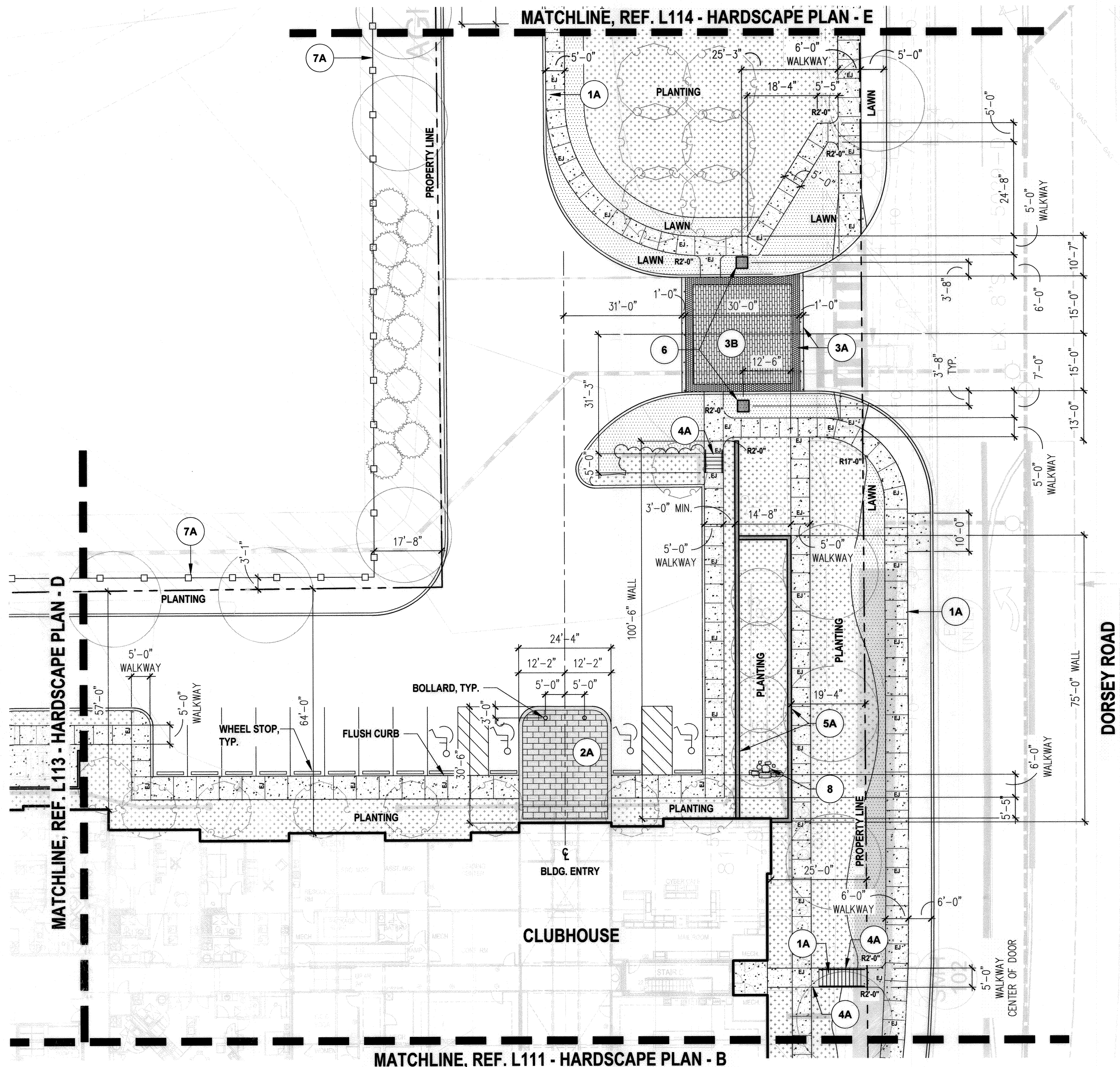
<b>BENCHMARK</b> ENGINEERS & LAND SURVEYORS & PLANNERS <b>ENGINEERING, INC.</b> 8480 BALTIMORE NATIONAL PIKE & SUITE 315 • ELLICOTT CITY, MARYLAND 21103 (P) 410-465-6105 (F) 410-465-6644 WWW.BE-CIVILENGINEERING.COM	<b>DESIGNCOLLECTIVE</b> ARCHITECTURE PLANNING INTERIORS WWW.DESIGNCOLLECTIVE.COM 601 EAST PRATT STREET, SUITE 300 BALTIMORE, MARYLAND 21202 TEL 410-685-6655 FAX 410-539-9242 OFFICES IN BALTIMORE & DURHAM
	<b>CORRIDOR SQUARE</b> PARCELS A & C RESIDENTIAL APARTMENT BUILDING TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65) ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND

OWNER: CORRIDOR SQUARE, LLC 6800 DEERPATH ROAD ELK RIDGE, MD 21075 410.579.2442	DEVELOPER: MURN DEVELOPMENT 6800 DEERPATH ROAD ELK RIDGE, MD 21075 410.579.2442	DATE: SEPTEMBER 2018 SCALE: 1/16"=1'-0" DESIGN: BR DRAFT: MM	BEI PROJECT NO. 2695 SHEET 18 OF 39
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CONSTRUCTION SET - REF. L100

AS-BUILT SDP-18-002



**MATERIALS LEGEND**

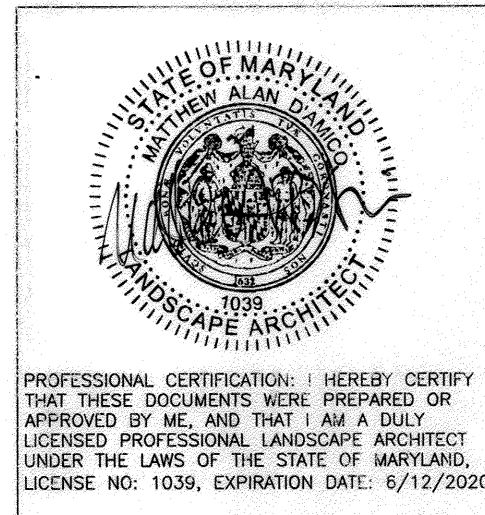
1A	1	CONCRETE - PEDESTRIAN
	L200	COLOR: STANDARD GRAY FINISH: MEDIUM BROOM FINISH, PERP. TO DIRECTION OF TRAFFIC SCORING PATTERN: 5' TYPICAL OR AS SPECIFIED PER PLAN
1B	1	CONCRETE - PEDESTRIAN
	L200	COLOR: DARK GRAY FINISH: MEDIUM BROOM FINISH, PERP. TO DIRECTION OF TRAFFIC SCORING PATTERN: 5' TYPICAL OR AS SPECIFIED PER PLAN
2A	4	PORCELAIN TILE
	L200	MANUFACTURER: MIRAGE MODEL: ENO ZIE QUARTZITL 2.0 SIZE: 18"x36" COLOR: WATERFALL (FIELD), MANTLE (BORDER)
3A	5	COBBLE STONE BAND - VEHICULAR
	L200	MANUFACTURER: HANOVER ARCHITECTURAL PAVERS MATERIAL: PRE-ASSEMBLED GRANITE COBBLES SIZE: 24"x24"x3" PATTERN: RUNNING BOND COLOR / FINISH: GETTYSBURG MIST / SPLIT FINISH
3B	6	CONCRETE UNIT PAVEMENT - VEHICULAR
	L200	MANUFACTURER: HANOVER ARCHITECTURAL PAVERS MATERIAL: TUMBLE PREST BRICK SIZE: MIX OF APPIAN RANDOM AND APPIAN 6"x6" COLOR / FINISH: SOUTH MOUNTAIN SAND
4A	1	STAIR - CONCRETE
	L201	
5A	1	RETAINING WALL - ENTRY COURT
	L202	
5B	3	RETAINING WALL - POOL COURTYARD
	L204	
5C	4	RETAINING WALL - PLAYGROUND
	L205	
6	1	PIER
	L203	
7A	2	FENCE - PADDOCK
	L203	MATERIAL: PRESSURE TREATED WOOD
7B	1	FENCE - POOL
	L209	
7C	3	FENCE - DOG PARK
	L211	
7D	3	FENCE - PLAYGROUND
	L211	
8	7	RIVER ROCK CHANNEL
	L200	RIVER ROCK MIX: 50% - 2" RIVER ROCK, 50% - 4"-6" RIVER ROCK GREY
9		BENCH
		MANUFACTURER: LANDSCAPE FORMS PRODUCT: HARPO (BACKED) SIZE: 60"
10	2	SYNTHETIC TURF
	L211	
11	1	POURED IN PLACE RUBBER SAFETY SURFACE
	L211	
12	4	PLAY EQUIPMENT
	L211	MANUFACTURER: LITTLE TIKES COMMERCIAL PRODUCT LINES: MAX PLAY TRADITIONAL PLAY KID BUILDERS

NOTE:  
SCORING: 5'-0" TYP.  
EJ: EXPANSION JOINT (20'-0" TYP., 30'-0" MAX.)

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

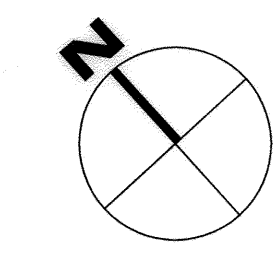


Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21443, Expiration Date: 12-21-22



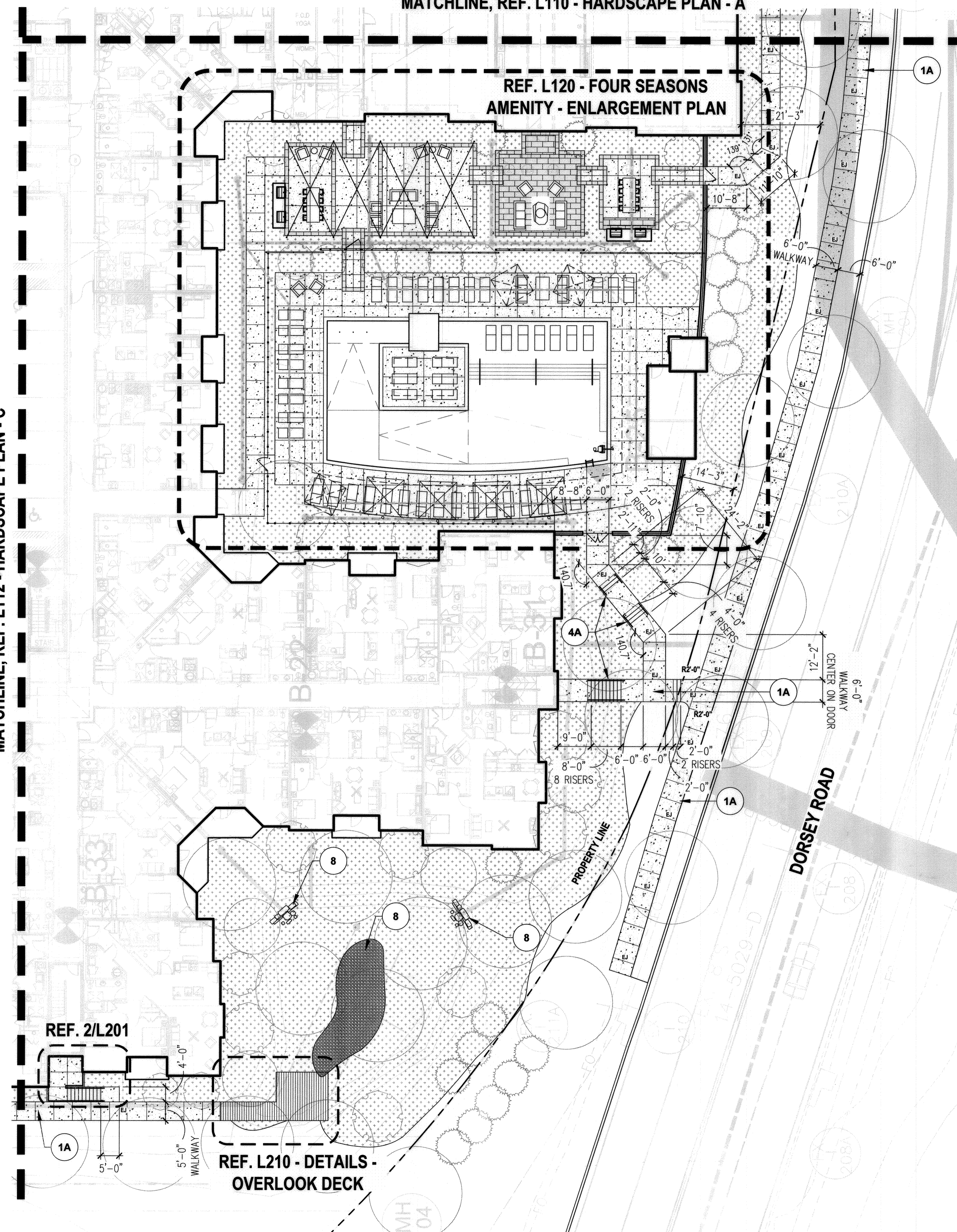
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 Chief, Development Engineering Division: *Chad Edmund*, 10-12-18  
 Chief, Division of Land Development: *Kevin Johnson*, 10-12-18  
 Director: *Natalie Zolner*, 10-18-18

<b>BENCHMARK ENGINEERING, INC.</b> 8480 BALTIMORE NATIONAL PIKE & SUITE 315 A ELICOTT CITY, MARYLAND 21043 (P) 410-465-8105 (F) 410-465-8844 WWW.BE-CIVLENGINEERING.COM		<b>DESIGN COLLECTIVE</b> ARCHITECTURE PLANNING INTERIORS WWW.DESIGNCOLLECTIVE.COM 002 EAST PRATT STREET, SUITE 300 BALTIMORE, MARYLAND 21202 TEL 410-685-6655 FAX 410-539-8242 OFFICE IN BALTIMORE & DUMFRIES	
OWNER: CORRIDOR SQUARE, LLC 6800 DEERPATH ROAD ELK RIDGE, MD 21075 410.579.2442		<b>CORRIDOR SQUARE PARCELS A &amp; C</b> RESIDENTIAL APARTMENT BUILDING TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65) TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND	
DEVELOPER: MURN DEVELOPMENT 6800 DEERPATH ROAD ELK RIDGE, MD 21075 410.579.2442		<b>SITE DEVELOPMENT PLAN HARDSCAPE PLAN - A</b> DATE: SEPTEMBER 2018 BEI PROJECT NO. 2695 SCALE: 1/16"=1'-0" SHEET 19 OF 39	
DESIGN: BR	DRAFT: MM	CONSTRUCTION SET - REF. L110	



MATCHLINE, REF. L110 - HARDSCAPE PLAN - A

MATCHLINE, REF. L112 - HARDSCAPE PLAN - C



**MATERIALS LEGEND**

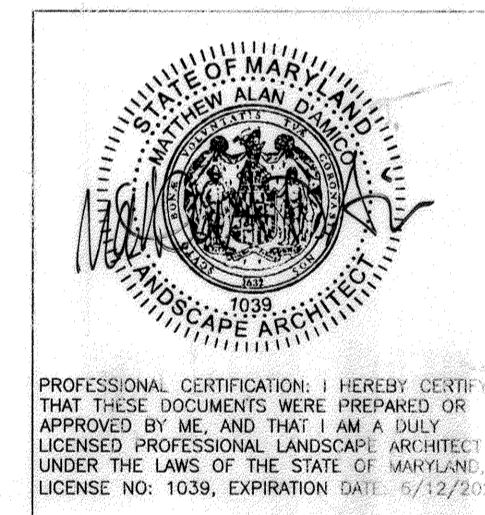
1A	1	CONCRETE - PEDESTRIAN COLOR: STANDARD GRAY FINISH: MEDIUM BROOM FINISH, PERP. TO DIRECTION OF TRAFFIC SCORING PATTERN: 5" TYPICAL OR AS SPECIFIED PER PLAN
1B	1	CONCRETE - PEDESTRIAN COLOR: DARK GRAY FINISH: MEDIUM BROOM FINISH, PERP. TO DIRECTION OF TRAFFIC SCORING PATTERN: 5" TYPICAL OR AS SPECIFIED PER PLAN
2A	4	PORCELAIN TILE MANUFACTURER: MIRAGE MODEL: EVO_2/E QUARTZITI_2.0 SIZE: 18"x36" COLOR: WATERFALL (FIELD), MANTLE (BORDER)
3A	5	COBBLE STONE BAND - VEHICULAR MANUFACTURER: HANOVER ARCHITECTURAL PAVERS MATERIAL: PRE-ASSEMBLED GRANITE COBBLES SIZE: 24"x24"x3" PATTERN: RUNNING BOND COLOR / FINISH: GETTYSBURG MIST / SPLIT FINISH
3B	6	CONCRETE UNIT PAVER - VEHICULAR MANUFACTURER: HANOVER ARCHITECTURAL PAVERS MATERIAL: TUMBLED PREST BRICK SIZE: MIX OF APPIAN RANDOM AND APPIAN 6"x6" COLOR / FINISH: SOUTH MOUNTAIN SAND
4A	1	STAIR - CONCRETE
5A	1	RETAINING WALL - ENTRY COURT
5B	3	RETAINING WALL - POOL COURTYARD
5C	4	RETAINING WALL - PLAYGROUND
6	1	PIER
7A	2	FENCE - Paddock MATERIAL: PRESSURE TREATED WOOD
7B	1	FENCE - POOL
7C	3	FENCE - DOG PARK
7D	3	FENCE - PLAYGROUND
8	7	RIVER ROCK CHANNEL RIVER ROCK MIX: 50% - 2" RIVER ROCK, 50% - 4"-6" RIVER ROCK GREY
9		BENCH MANUFACTURER: LANDSCAPE FORMS PRODUCT: HARPO (BACKED) SIZE: 60"
10	2	SYNTHETIC TURF
11	1	POURED IN PLACE RUBBER SAFETY SURFACE
12	4	PLAY EQUIPMENT MANUFACTURER: LITTLE TIKES COMMERCIAL PRODUCT LINES: MAX PLAY TRADITIONAL PLAY KID BUILDERS

NOTE:  
SCORING: 5'-0" TYP.  
E.J.: EXPANSION JOINT (20'-0" TYP., 30'-0" MAX.)

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

AS-BUILT 8/18/21

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21447, Expiration Date: 12-21-22



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 10-12-18 DATE  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION JP  
 [Signature] 10-18-18 DATE  
 CHIEF, DIVISION OF LAND DEVELOPMENT JT  
 [Signature] 10-18-18 DATE  
 DIRECTOR

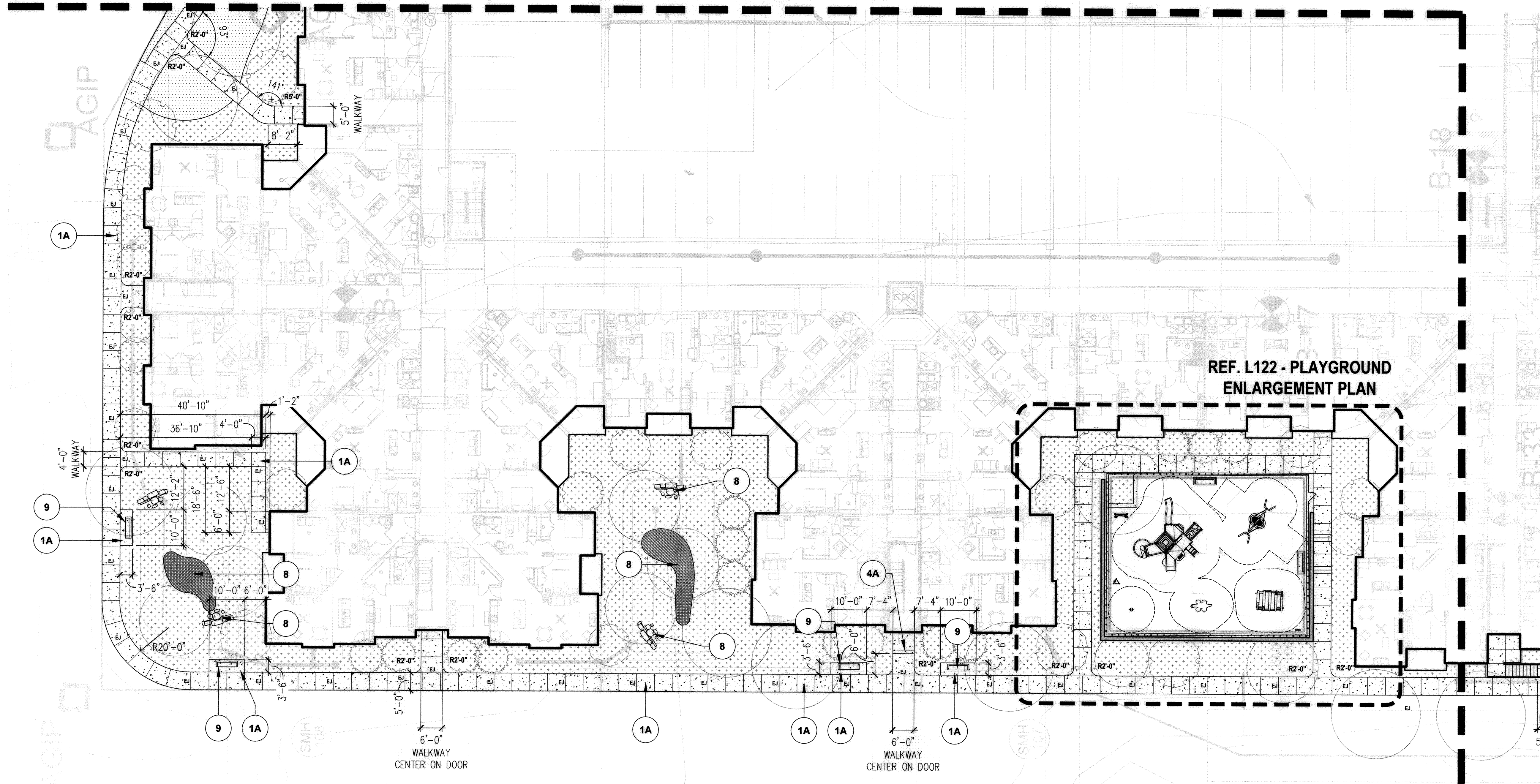
<p><b>BENCHMARK ENGINEERING, INC.</b>                  ENGINEERS &amp; LAND SURVEYORS • PLANNERS                  8480 BALTIMORE NATIONAL PIKE • SUITE 315 • ELLICOTT CITY, MARYLAND 21043                  (P) 410-465-6105 (F) 410-465-6644                  WWW.BEI-CVLENGINEERING.COM</p>		<p><b>DESIGN COLLECTIVE</b>                  ARCHITECTURE PLANNING INTERIORS                  WWW.DESIGNCOLLECTIVE.COM                  603 EAST PRATT STREET, SUITE 300                  BALTIMORE, MARYLAND 21202                  TEL. 410-585-6655 FAX 410-535-8244                  OFFICES IN BALTIMORE &amp; DURHAM</p>	
<p>OWNER:                  CORRIDOR SQUARE, LLC                  6800 DEERPATH ROAD                  ELKRIDGE, MD 21075                  410.579.2442</p>		<p><b>CORRIDOR SQUARE PARCELS A &amp; C</b>                  RESIDENTIAL APARTMENT BUILDING                  TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 &amp; 65)                  TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79                  ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND</p>	
<p>DEVELOPER:                  MURN DEVELOPMENT                  6800 DEERPATH ROAD                  ELKRIDGE, MD 21075                  410.579.2442</p>		<p><b>SITE DEVELOPMENT PLAN HARDSCAPE PLAN - B</b>                  DATE: SEPTEMBER 2018 BEI PROJECT NO.: 2695                  DESIGN: BR DRAFT: MM SCALE: 1/16"=1'-0" SHEET 20 OF 39</p>	

CONSTRUCTION SET - REF. L111

AS-BUILT

SDP-18-002

MATCHLINE, REF. L113 - HARDSCAPE PLAN - D



REF. L122 - PLAYGROUND ENLARGEMENT PLAN

MATCHLINE, REF. L111 - HARDSCAPE PLAN - B

**MATERIALS LEGEND**

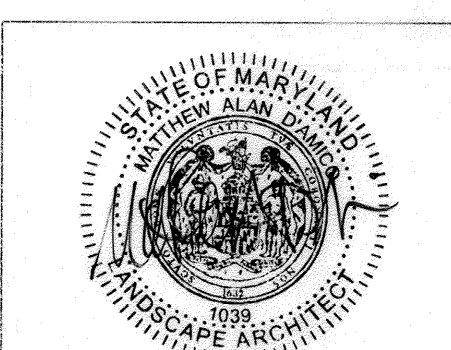
- |    |   |   |
|----|---|---|
| 1A | 1 | CONCRETE - PEDESTRIAN<br>COLOR: STANDARD GRAY<br>FINISH: MEDIUM BROOM FINISH, PERP. TO DIRECTION OF TRAFFIC<br>SCORING PATTERN: 5' TYPICAL OR AS SPECIFIED PER PLAN   |
| 1B | 1 | CONCRETE - PEDESTRIAN<br>COLOR: DARK GRAY<br>FINISH: MEDIUM BROOM FINISH, PERP. TO DIRECTION OF TRAFFIC<br>SCORING PATTERN: 5' TYPICAL OR AS SPECIFIED PER PLAN   |
| 2A | 4 | PORCELAIN TILE<br>MANUFACTURER: MIRAGE<br>MODEL: EVO 2/E QUARTZITI 2.0 SIZE: 18"x36"<br>COLOR: WATERFALL (FIELD), MANTLE (BORDER)   |
| 3A | 5 | COBBLE STONE BAND - VEHICULAR<br>MANUFACTURER: HANOVER ARCHITECTURAL PAVERS<br>MATERIAL: PRE-ASSEMBLED GRANITE COBBLES<br>SIZE: 24"x24"x3"<br>PATTERN: RUNNING BOND<br>COLOR / FINISH: GETTYSBURG MIST / SPLIT FINISH |
| 3B | 6 | CONCRETE UNIT PAVES - VEHICULAR<br>MANUFACTURER: HANOVER ARCHITECTURAL PAVERS<br>MATERIAL: TUMBLED PREST BRICK<br>SIZE: MIX OF APPIAN RANDOM AND APPIAN 6"x6"<br>COLOR / FINISH: SOUTH MOUNTAIN SAND                  |
| 4A | 1 | STAIR - CONCRETE  |
| 5A | 1 | RETAINING WALL - ENTRY COURT  |
| 5B | 3 | RETAINING WALL - POOL COURTYARD   |
| 5C | 4 | RETAINING WALL - PLAYGROUND   |
| 6  | 1 | PIER  |
| 7A | 2 | FENCE - PADDOCK<br>MATERIAL: PRESSURE TREATED WOOD  |
| 7B | 1 | FENCE - POOL  |
| 7C | 3 | FENCE - DOG PARK  |
| 7D | 3 | FENCE - PLAYGROUND  |
| 8  | 7 | RIVER ROCK CHANNEL<br>RIVER ROCK MIX:<br>50% - 2" RIVER ROCK, 50% - 4"-6" RIVER ROCK GREY   |
| 9  |   | BENCH<br>MANUFACTURER: LANDSCAPE FORMS<br>PRODUCT: HARPO (BACKED) SIZE: 69"   |
| 10 | 2 | SYNTHETIC TURF  |
| 11 | 1 | POURED IN PLACE RUBBER SAFETY SURFACE   |
| 12 | 4 | PLAY EQUIPMENT<br>MANUFACTURER: LITTLE TIKES COMMERCIAL<br>PRODUCT LINES:<br>MAX PLAY<br>TRADITIONAL PLAY<br>KID BUILDERS   |

NOTE:  
SCORING: 5'-0" TYP.  
EJ: EXPANSION JOINT (20'-0" TYP., 30'-0" MAX.)

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

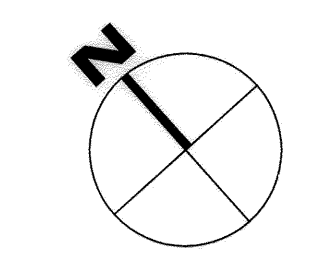


Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21443 Expiration Date: 12-21-22



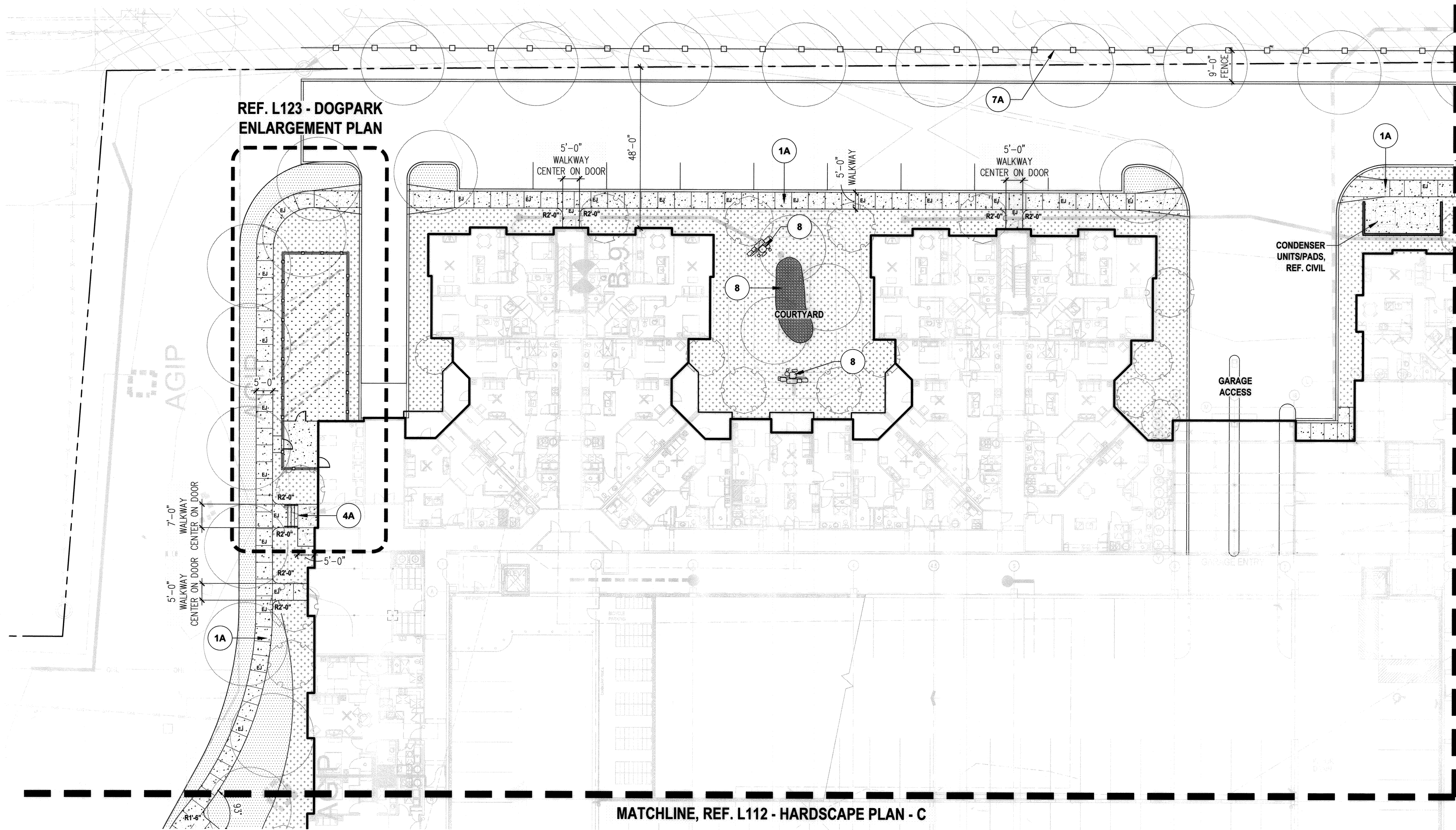
PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO: 1039, EXPIRATION DATE: 6/12/2020

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*Chief Engineer* 10-12-18  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
*Chief of Land Development* 10-18-18  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
*Director* 10-18-18  
 DIRECTOR

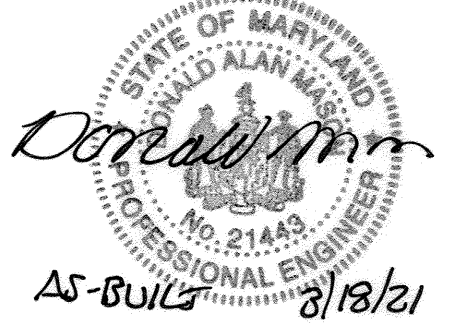


CONSTRUCTION SET - REF. L112

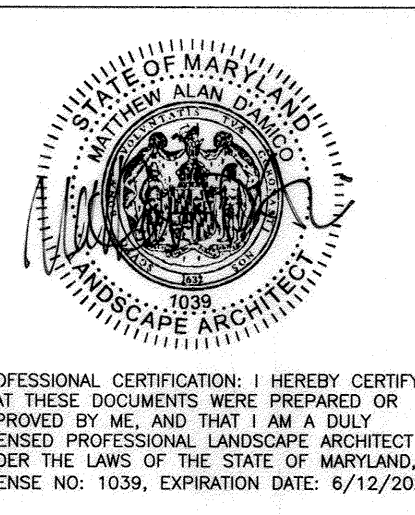
<p><b>BENCHMARK</b> ENGINEERS &amp; LAND SURVEYORS &amp; PLANNERS <b>ENGINEERING, INC.</b> 8490 BALTIMORE NATIONAL PIKE &amp; SUITE 315 • ELKROFT CITY, MARYLAND 21043 (7) 410-485-8102 (F) 410-485-8644 WWW.BEI-CIVILENGINEERING.COM</p>		<p><b>DESIGN COLLECTIVE</b> ARCHITECTURE PLANNING INTERIORS WWW.DESIGNCOLLECTIVE.COM 603 EAST PRATT STREET, SUITE 300 BALTIMORE, MARYLAND 21202 TEL. 410.585.9555 FAX 410.535.6242 OFFICES IN BALTIMORE &amp; DURHAM</p>	
<p>OWNER: CORRIDOR SQUARE, LLC 6800 DEERPATH ROAD ELKRIDGE, MD 21075 410.579.2442</p>		<p><b>CORRIDOR SQUARE</b> PARCELS A &amp; C RESIDENTIAL APARTMENT BUILDING</p>	
<p>DEVELOPER: MURN DEVELOPMENT 6800 DEERPATH ROAD ELKRIDGE, MD 21075 410.579.2442</p>		<p>TAX MAP 4.3 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND</p>	
<p>DESIGN: BR DRAFT: MM</p>		<p><b>SITE DEVELOPMENT PLAN</b> <b>HARDSCAPE PLAN - C</b></p>	
<p>DATE: SEPTEMBER 2018</p>		<p>BEI PROJECT NO. 2695</p>	
<p>SCALE: 1/16" = 1'-0"</p>		<p>SHEET 21 OF 39</p>	
<p>AS-BUILT</p>			



"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"



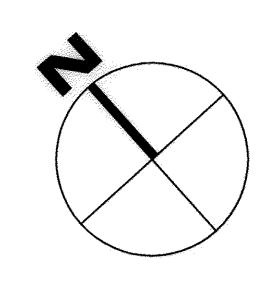
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 21443 Expiration Date: 12-21-22



**MATERIALS LEGEND**

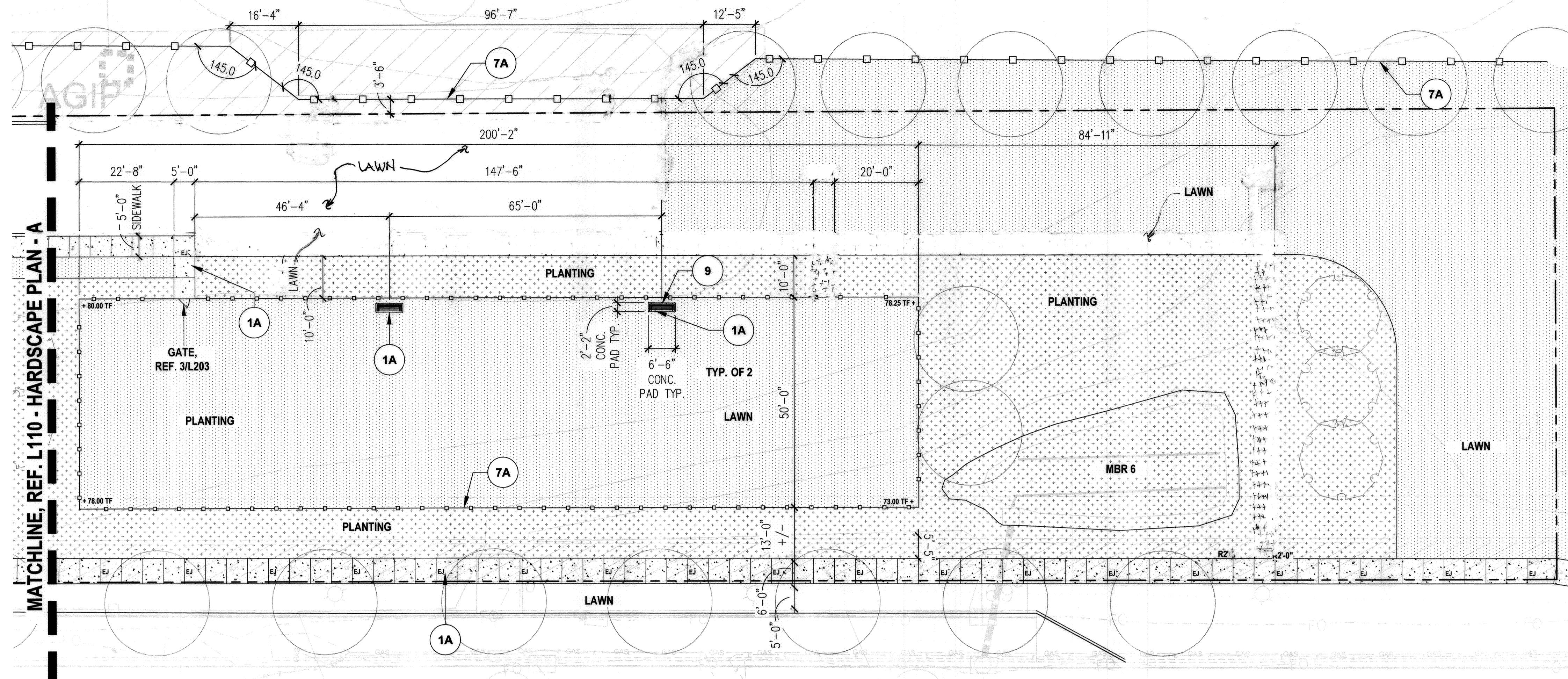
- |    |   |   |    |   |  |    |   |  |
|----|---|---|----|---|--|----|---|--|
| 1A | 1 | CONCRETE - PEDESTRIAN<br>COLOR: STANDARD GRAY<br>FINISH: MEDIUM BROOM FINISH, PERP. TO DIRECTION OF TRAFFIC<br>SCORING PATTERN: 5" TYPICAL OR AS SPECIFIED PER PLAN   | 4A | 1 | STAIR - CONCRETE                                   | 7C | 3 | FENCE - DOG PARK   |
| 1B | 1 | CONCRETE - PEDESTRIAN<br>COLOR: DARK GRAY<br>FINISH: MEDIUM BROOM FINISH, PERP. TO DIRECTION OF TRAFFIC<br>SCORING PATTERN: 5" TYPICAL OR AS SPECIFIED PER PLAN   | 5A | 1 | RETAINING WALL - ENTRY COURTYARD                   | 7D | 3 | FENCE - PLAYGROUND   |
| 2A | 4 | PORCELAIN TILE<br>MANUFACTURER: MIRAGE<br>MODEL: EVO_2IE QUARTZITL 2.0 SIZE: 18"x36"<br>COLOR: WATERFALL (FIELD), MANTLE (BORDER)   | 5B | 3 | RETAINING WALL - POOL COURTYARD                    | 8  | 7 | RIVER ROCK CHANNEL<br>RIVER ROCK MIX:<br>50% - 2" RIVER ROCK, 50% - 4"-6" RIVER ROCK GREY                        |
| 3A | 5 | COBBLE STONE BAND - VEHICULAR<br>MANUFACTURER: HANOVER ARCHITECTURAL PAVERS<br>MATERIAL: PRE-ASSEMBLED GRANITE COBBLES<br>SIZE: 24"x24"x3"<br>PATTERN: RUNNING BOND<br>COLOR / FINISH: GETTYSBURG MIST / SPLIT FINISH | 5C | 4 | RETAINING WALL - PLAYGROUND                        | 9  |   | BENCH<br>MANUFACTURER: LANDSCAPE FORMS<br>PRODUCT: HARPO (BACKED) SIZE: 69"                                      |
| 3B | 6 | CONCRETE UNIT PAVER - VEHICULAR<br>MANUFACTURER: HANOVER ARCHITECTURAL PAVERS<br>MATERIAL: TUMBLED PREST BRICK<br>SIZE: MIX OF APPIAN RANDOM AND APPIAN 6"x6"<br>COLOR / FINISH: SOUTH MOUNTAIN SAND                  | 6  | 1 | PIER   | 10 | 2 | SYNTHETIC TURF   |
|    |   |   | 7A | 2 | FENCE - PADDOCK<br>MATERIAL: PRESSURE TREATED WOOD | 11 | 1 | POURED IN PLACE RUBBER SAFETY SURFACE  |
|    |   |   | 7B | 1 | FENCE - POOL                                       | 12 | 4 | PLAY EQUIPMENT<br>MANUFACTURER: LITTLE TIKES COMMERCIAL<br>PRODUCT LINES: MAX PLAY TRADITIONAL PLAY KID BUILDERS |

NOTE:  
SCORING: 5'-0" TYP.  
EJ: EXPANSION JOINT (20'-0" TYP., 30'-0" MAX.)



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 10-12-18 DATE  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 [Signature] 10-18-18 DATE  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 [Signature] 10-18-18 DATE  
 DIRECTOR

 ENGINEERS & LAND SURVEYORS & PLANNERS 8480 BALTIMORE NATIONAL PIKE & SUITE 315 • ELLECCOTT CITY, MARYLAND 21043 (P) 410-585-6105 (F) 410-465-9644 WWW.BEI-CIVILENGINEERING.COM		<b>DESIGN COLLECTIVE</b> ARCHITECTURE PLANNING INTERIORS WWW.DESIGNCOLLECTIVE.COM 603 EAST PRATT STREET, SUITE 300 BALTIMORE, MARYLAND 21202 TEL: 410-585-6555 FAX: 410-539-6642 OFFICES IN BALTIMORE & DURHAM	
OWNER: CORRIDOR SQUARE, LLC 6800 DEERPATH ROAD ELKRDGE, MD 21075 410.579.2442		<b>CORRIDOR SQUARE PARCELS A &amp; C</b> RESIDENTIAL APARTMENT BUILDING TAX MAP 43 - GRID 5 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65) TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND	
DEVELOPER: MURN DEVELOPMENT 6800 DEERPATH ROAD ELKRDGE, MD 21075 410.579.2442		<b>SITE DEVELOPMENT PLAN HARDSCAPE PLAN - D</b> DATE: SEPTEMBER 2018 BEI PROJECT NO. 2695 SCALE: 1/16" = 1'-0" SHEET 22 OF 39	
DESIGN: BR	DRAFT: MM	CONSTRUCTION SET - REF. L113 AS-BUILT SDP-18-002	



**MATERIALS LEGEND**

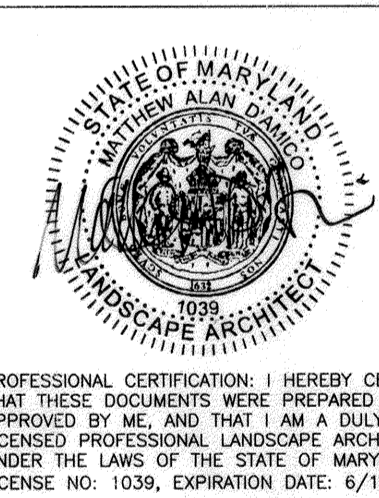
1A	1	CONCRETE - PEDESTRIAN COLOR: STANDARD GRAY FINISH: MEDIUM BROOM FINISH, PERP. TO DIRECTION OF TRAFFIC SCORING PATTERN: 5" TYPICAL OR AS SPECIFIED PER PLAN
1B	1	CONCRETE - PEDESTRIAN COLOR: DARK GRAY FINISH: MEDIUM BROOM FINISH, PERP. TO DIRECTION OF TRAFFIC SCORING PATTERN: 5" TYPICAL OR AS SPECIFIED PER PLAN
2A	4	PORCELAIN TILE MANUFACTURER: MIRAGE MODEL: EVO_ZIE QUARTZIT 2.0 SIZE: 18"x36" COLOR: WATERFALL (FIELD), MANTLE (BORDER)
3A	5	COBBLE STONE BAND - VEHICULAR MANUFACTURER: HANOVER ARCHITECTURAL PAVERS MATERIAL: PRE-ASSEMBLED GRANITE COBBLES SIZE: 24"x24"x3" PATTERN: RUNNING BOND COLOR / FINISH: GETTYSBURG MIST / SPLIT FINISH
3B	6	CONCRETE UNIT PAVER - VEHICULAR MANUFACTURER: HANOVER ARCHITECTURAL PAVERS MATERIAL: TUMBLER PREST BRICK SIZE: MIX OF APPIAN RANDOM AND APPIAN 6"X6" COLOR / FINISH: SOUTH MOUNTAIN SAND
4A	1	STAIR - CONCRETE
5A	1	RETAINING WALL - ENTRY COURT
5B	3	RETAINING WALL - POOL COURTYARD
5C	4	RETAINING WALL - PLAYGROUND
6	1	PIER
7A	2	FENCE - PADDOCK MATERIAL: PRESSURE TREATED WOOD
7B	1	FENCE - POOL
7C	3	FENCE - DOG PARK
7D	3	FENCE - PLAYGROUND
8	7	RIVER ROCK CHANNEL RIVER ROCK MIX: 50% - 2" RIVER ROCK, 50% - 4"-6" RIVER ROCK GREY
9		BENCH MANUFACTURER: LANDSCAPE FORMS PRODUCT: HARPO (BACKED) SIZE: 69"
10	2	SYNTHETIC TURF
11	1	POURED IN PLACE RUBBER SAFETY SURFACE
12	4	PLAY EQUIPMENT MANUFACTURER: LITTLE TIKES COMMERCIAL PRODUCT LINES: MAX PLAY TRADITIONAL PLAY KID BUILDERS

NOTE:  
SCORING: 5'-0" TYP.  
EJ: EXPANSION JOINT (20'-0" TYP., 30'-0" MAX.)

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"



Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21443, Expiration Date: 12-21-22

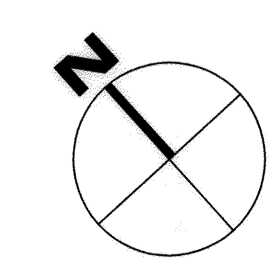


PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 1039, EXPIRATION DATE: 6/12/2020

1	12.15.20	REMOVE ACCESS DRIVE ALONG PARCEL - A PORTION OF S DEWALK
---	----------	--

**BENCHMARK ENGINEERING, INC.**  
ARCHITECTURE PLANNING INTERIORS  
DESIGN COLLECTIVE

OWNER: CORRIDOR SQUARE, LLC 6800 DEERPATH ROAD ELKRIDGE, MD 21075 410.579.2442	DEVELOPER: MURN DEVELOPMENT 6800 DEERPATH ROAD ELKRIDGE, MD 21075 410.579.2442	<b>CORRIDOR SQUARE PARCELS A &amp; C</b> RESIDENTIAL APARTMENT BUILDING	TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65) TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND
DATE: SEPTEMBER 2018		BEI PROJECT NO. 2695	
DESIGN: BR	DRAFT: MM	SCALE: 1/16"=1'-0"	SHEET 23 OF 39



CONSTRUCTION SET - REF. L114

AS-BUILT

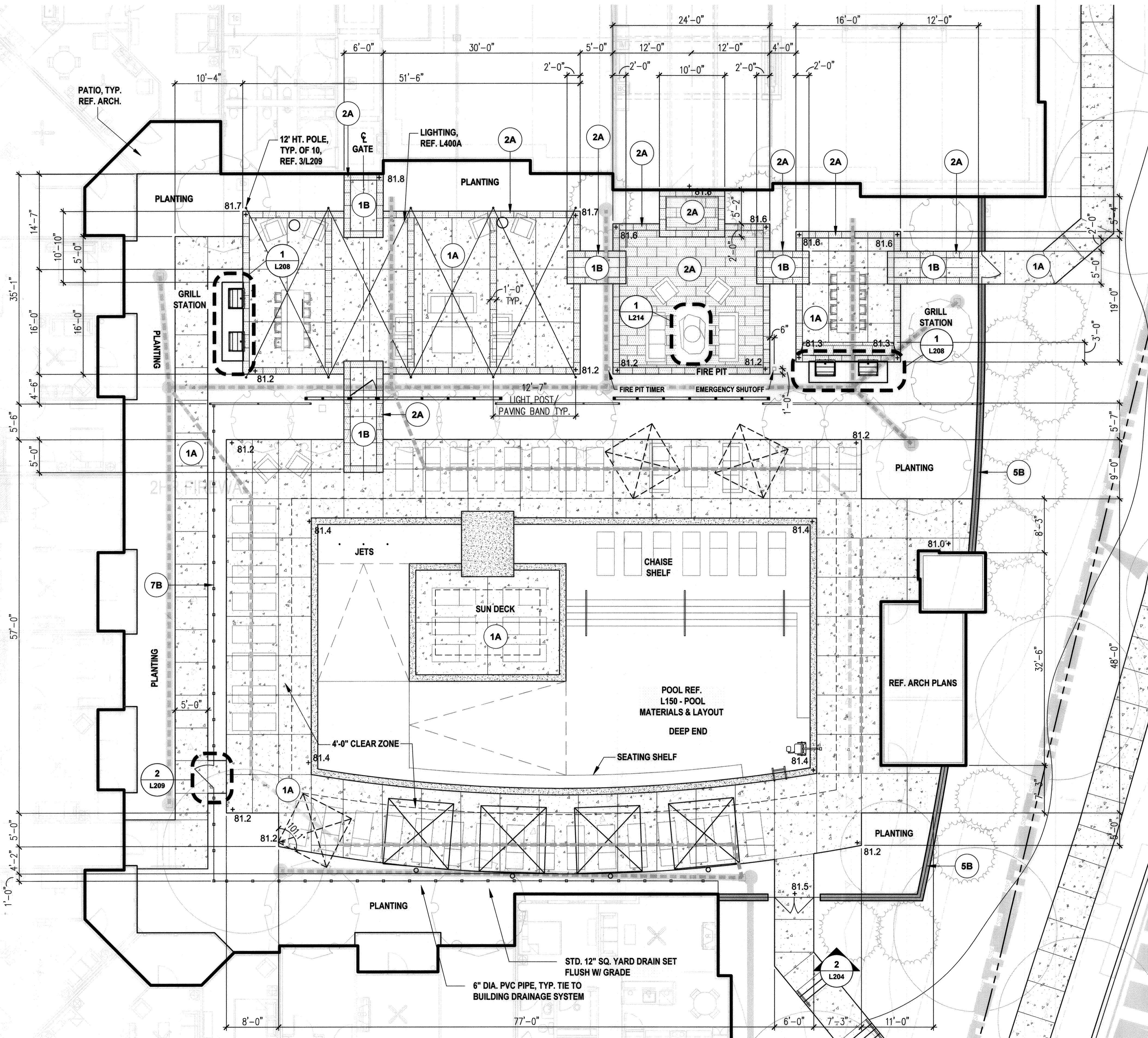
SDP-18-002

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*Chad Chubb* 10-12-18  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

*Veronica Jones* 10-18-18  
CHIEF, DIVISION OF LAND DEVELOPMENT

*Natalie Zofia* 10-18-18  
DIRECTOR



**MATERIALS LEGEND**

- 1A (1 L200) CONCRETE - PEDESTRIAN  
COLOR: STANDARD GRAY  
FINISH: MEDIUM BROOM FINISH, PERP. TO DIRECTION OF TRAFFIC  
SCORING PATTERN: 5" TYPICAL OR AS SPECIFIED PER PLAN
- 1B (1 L200) CONCRETE - PEDESTRIAN  
COLOR: DARK GRAY  
FINISH: MEDIUM BROOM FINISH, PERP. TO DIRECTION OF TRAFFIC  
SCORING PATTERN: 5" TYPICAL OR AS SPECIFIED PER PLAN
- 2A (4 L200) PORCELAIN TILE  
MANUFACTURER: MIRAGE  
MODEL: EVO\_2/E QUARTZITL\_2.0 SIZE: 18"x36"  
COLOR: WATERFALL (FIELD), MANTLE (BORDER)
- 3A (5 L200) COBBLE STONE BAND - VEHICULAR  
MANUFACTURER: HANOVER ARCHITECTURAL PAVERS  
MATERIAL: PRE-ASSEMBLED GRANITE COBBLES  
SIZE: 24"x24"x3"  
PATTERN: RUNNING BOND  
COLOR / FINISH: GETTYSBURG MIST / SPLIT FINISH
- 3B (6 L200) CONCRETE UNIT PAVEMENT - VEHICULAR  
MANUFACTURER: HANOVER ARCHITECTURAL PAVERS  
MATERIAL: TUMBLED PREST BRICK  
SIZE: MIX OF APPIAN RANDOM AND APPIAN 6"x6"  
COLOR / FINISH: SOUTH MOUNTAIN SAND
- 4A (1 L201) STAIR - CONCRETE
- 5A (1 L202) RETAINING WALL - ENTRY COURT
- 5B (3 L204) RETAINING WALL - POOL COURTYARD
- 5C (4 L205) RETAINING WALL - PLAYGROUND
- 6 (1 L203) PIER
- 7A (2 L203) FENCE - PADDOCK  
MATERIAL: PRESSURE TREATED WOOD
- 7B (1 L209) FENCE - POOL
- 7C (3 L211) FENCE - DOG PARK
- 7D (3 L211) FENCE - PLAYGROUND
- 8 (7 L200) RIVER ROCK CHANNEL  
RIVER ROCK MIX:  
50% - 2" RIVER ROCK, 50% - 4"-6" RIVER ROCK GREY
- 9 BENCH  
MANUFACTURER: LANDSCAPE FORMS  
PRODUCT: HARPO (BACKED) SIZE: 60"
- 10 (2 L211) SYNTHETIC TURF
- 11 (1 L211) POURED IN PLACE RUBBER SAFETY SURFACE
- 12 (4 L211) PLAY EQUIPMENT  
MANUFACTURER: LITTLE TIKES COMMERCIAL  
MAX PLAY  
TRADITIONAL PLAY  
KID BUILDERS

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

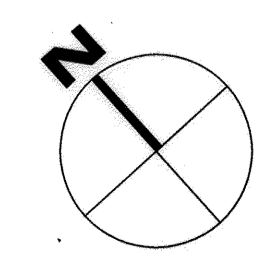
*Donnell M. ...*  
AS-BUILT 3/18/21

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21443, Expiration Date: 12-31-22



PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 10306, EXPIRATION DATE: 6/12/2020

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*Chad Plummer* 10-12-18  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
*Karl Se...* 10-18-18  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
*Nick...* 10-18-18  
 DIRECTOR



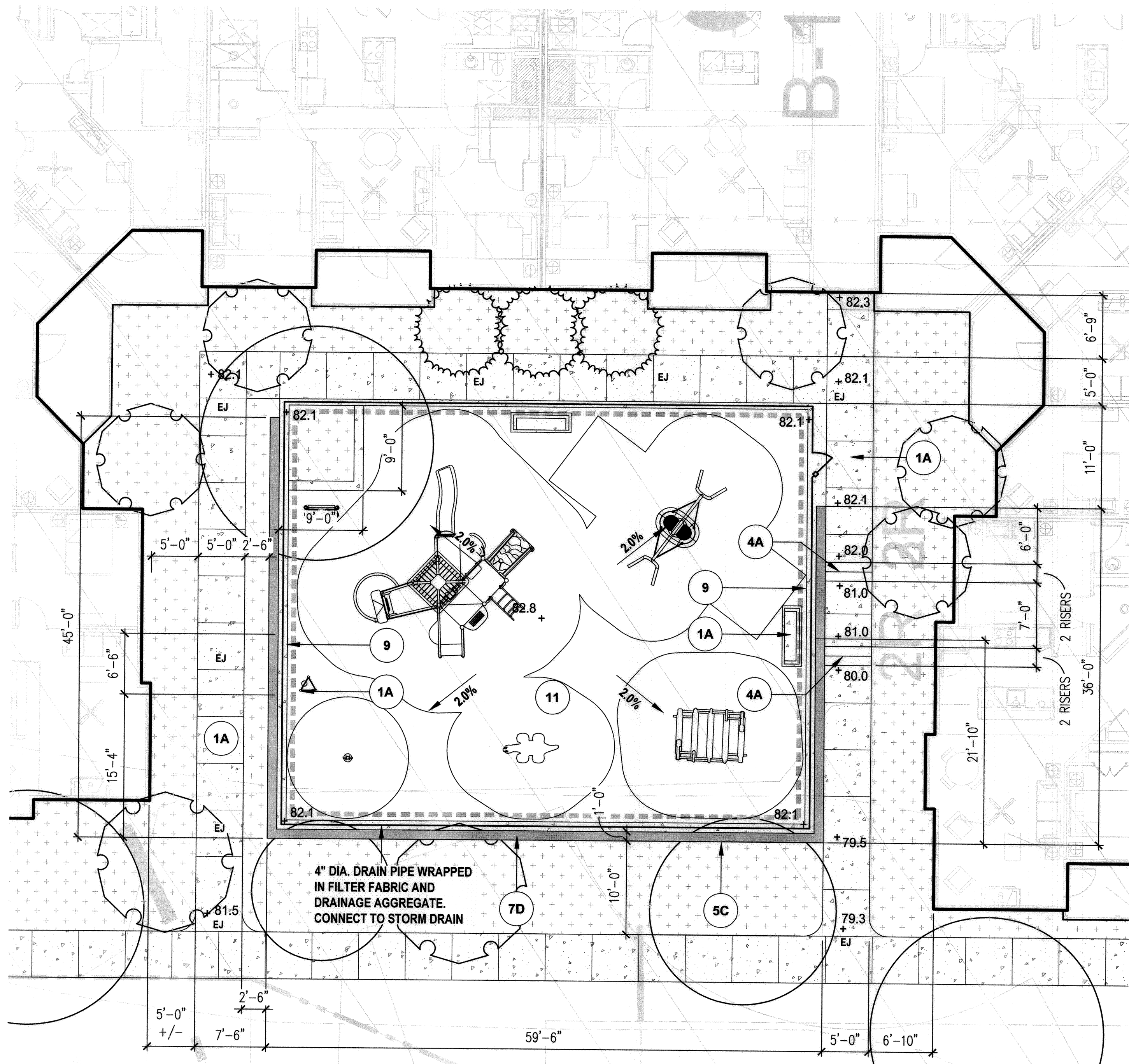
CONSTRUCTION SET - REF. L120

<p><b>BENCHMARK ENGINEERING, INC.</b>        ENGINEERS &amp; LAND SURVEYORS &amp; PLANNERS        8400 BALTIMORE NATIONAL PIKE &amp; SUITE 315 ELKCRIDGE CITY, MARYLAND 21043        (P) 410-685-6105 (F) 410-685-6644        WWW.BE-CIVILENGINEERING.COM</p>		<p><b>DESIGNCOLLECTIVE</b>        ARCHITECTURE PLANNING INTERIORS        WWW.DESIGNCOLLECTIVE.COM        603 EAST PRATT STREET, SUITE 300        BALTIMORE, MARYLAND 21202        TEL 410-685-6655 FAX 410-535-6242        OFFICES IN BALTIMORE &amp; DURHAM</p>	
<p>OWNER:        CORRIDOR SQUARE, LLC        6800 DEERPATH ROAD        ELKCRIDGE, MD 21075        410.579.2442</p>		<p><b>CORRIDOR SQUARE PARCELS A &amp; C</b>        RESIDENTIAL APARTMENT BUILDING</p>	
<p>DEVELOPER:        MURN DEVELOPMENT        6800 DEERPATH ROAD        ELKCRIDGE, MD 21075        410.579.2442</p>		<p>TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 &amp; 65)        TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79        ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND</p>	
<p>SITE DEVELOPMENT PLAN        FOUR SEASONS AMENITY - ENLARGEMENT PLAN</p>		<p>DATE: SEPTEMBER 2018 BEI PROJECT NO. 2695        SCALE: 1/8"=1'-0" SHEET 24 OF 39</p>	

AS-BUILT

SDP-18-002



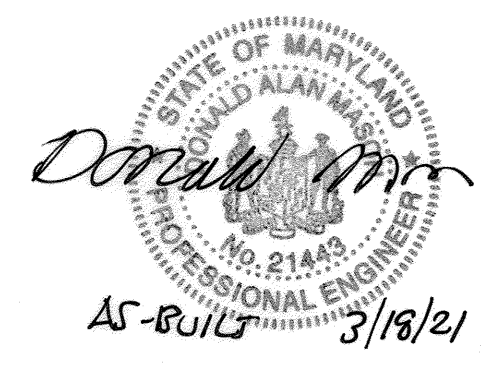


**1 PLAYGROUND ENLARGEMENT PLAN**  
1/8"=1'-0"

**MATERIALS LEGEND**

- 1A (1) CONCRETE - PEDESTRIAN  
L200 COLOR: STANDARD GRAY  
FINISH: MEDIUM BROOM FINISH, PERP. TO DIRECTION OF TRAFFIC  
SCORING PATTERN: 5' TYPICAL OR AS SPECIFIED PER PLAN
- 1B (1) CONCRETE - PEDESTRIAN  
L200 COLOR: DARK GRAY  
FINISH: MEDIUM BROOM FINISH, PERP. TO DIRECTION OF TRAFFIC  
SCORING PATTERN: 5' TYPICAL OR AS SPECIFIED PER PLAN
- 2A (4) PORCELAIN TILE  
L200 MANUFACTURER: MIRAGE  
MODEL: EVO 2/E QUARTZITL 2.0 SIZE: 18"x36"  
COLOR: WATERFALL (FIELD), MANTLE (BORDER)
- 3A (5) COBBLE STONE BAND - VEHICULAR  
L200 MANUFACTURER: HANOVER ARCHITECTURAL PAVERS  
MATERIAL: PRE-ASSEMBLED GRANITE COBBLES  
SIZE: 24"x24"x3"  
PATTERN: RUNNING BOND  
COLOR / FINISH: GETTYSBURG MIST / SPLIT FINISH
- 3B (6) CONCRETE UNIT PAVER - VEHICULAR  
L200 MANUFACTURER: HANOVER ARCHITECTURAL PAVERS  
MATERIAL: TUMBLED PREST BRICK  
SIZE: MIX OF APPIAN RANDOM AND APPIAN 6"x6"  
COLOR / FINISH: SOUTH MOUNTAIN SAND
- 4A (1) STAIR - CONCRETE  
L201
- 5A (1) RETAINING WALL - ENTRY COURT  
L202
- 5B (3) RETAINING WALL - POOL COURTYARD  
L204
- 5C (4) RETAINING WALL - PLAYGROUND  
L205
- 6 (1) PIER  
L203
- 7A (2) FENCE - PADDOCK  
L203 MATERIAL: PRESSURE TREATED WOOD
- 7B (1) FENCE - POOL  
L209
- 7C (3) FENCE - DOG PARK  
L211
- 7D (3) FENCE - PLAYGROUND  
L211
- 8 (7) RIVER ROCK CHANNEL  
L200 RIVER ROCK MIX:  
50% - 2" RIVER ROCK, 50% - 4"-6" RIVER ROCK GREY
- 9 BENCH  
MANUFACTURER: LANDSCAPE FORMS  
PRODUCT: HARPO (BACKED) SIZE: 69"
- 10 (2) SYNTHETIC TURF  
L211
- 11 (1) POURED IN PLACE RUBBER SAFETY SURFACE  
L211
- 12 (4) PLAY EQUIPMENT  
L211 MANUFACTURER: LITTLE TIKES COMMERCIAL  
PRODUCT LINES: MAX PLAY  
TRADITIONAL PLAY  
KID BUILDERS

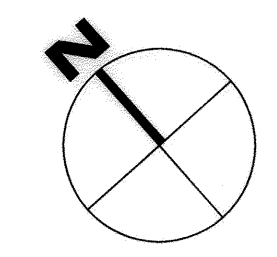
"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"



Professional Certification, I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21443, Expiration Date: 12-21-22



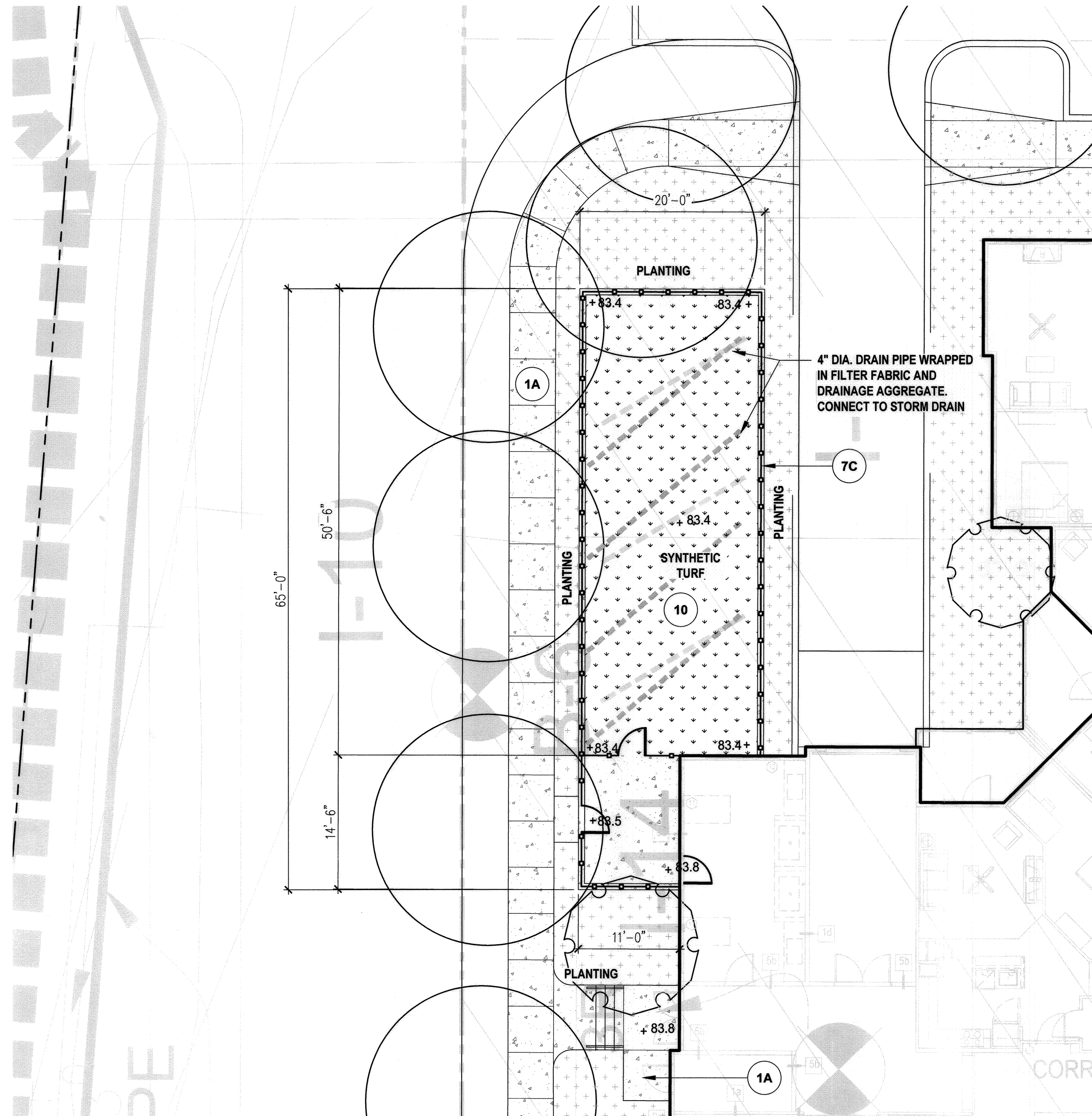
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 10-12-18  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION JR  
 [Signature] 10-18-18  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 [Signature] 10-18-18  
 DIRECTOR



CONSTRUCTION SET - REF. L122

<p><b>BENCHMARK ENGINEERING, INC.</b> ENGINEERS • LAND SURVEYORS • PLANNERS 8480 BALTIMORE NATIONAL PIKE &amp; SUITE 315 ELKDRIFT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6444 WWW.BEI-CIVILENGINEERING.COM</p>		<p><b>DESIGNCOLLECTIVE</b> ARCHITECTURE PLANNING INTERIORS WWW.DESIGNCOLLECTIVE.COM 503 EAST PRATT STREET, SUITE 300 BALTIMORE, MARYLAND 21202 TEL 410-685-6655 FAX 410-539-6242 OFFICES IN BALTIMORE &amp; DURHAM</p>	
<p>OWNER: CORRIDOR SQUARE, LLC 6800 DEERPATH ROAD ELKDRIDGE, MD 21075 410.579.2442</p>		<p><b>CORRIDOR SQUARE PARCELS A &amp; C</b> RESIDENTIAL APARTMENT BUILDING TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND</p>	
<p>DEVELOPER: MURN DEVELOPMENT 6800 DEERPATH ROAD ELKDRIDGE, MD 21075 410.579.2442</p>		<p><b>SITE DEVELOPMENT PLAN</b> PLAYGROUND ENLARGEMENT PLAN DATE: SEPTEMBER 2018 BEI PROJECT NO. 2695 SCALE: 1/8"=1'-0" SHEET 25 OF 39</p>	
DESIGN: BR	DRAFT: MM	SCALE: 1/8"=1'-0"	SHEET 25 OF 39

AS-BUILT SDP-18-002

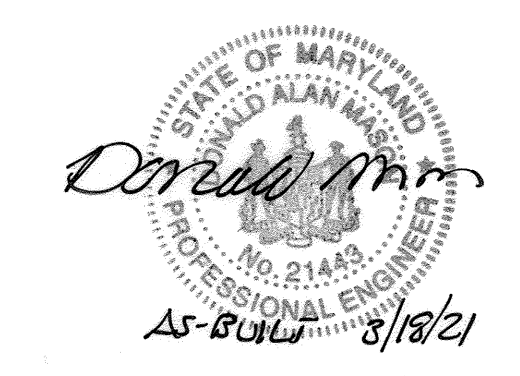


**1 DOGPARK ENLARGEMENT PLAN**  
1/8"=1'-0"

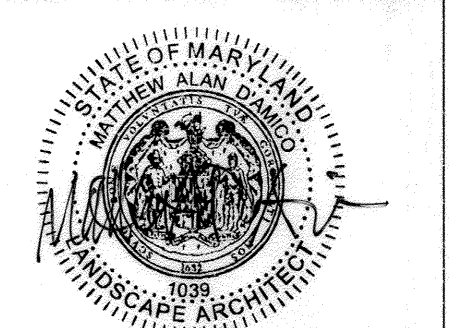
**MATERIALS LEGEND**

- 1A **1**  
L200 CONCRETE - PEDESTRIAN  
COLOR: STANDARD GRAY  
FINISH: MEDIUM BROOM FINISH, PERP. TO DIRECTION OF TRAFFIC  
SCORING PATTERN: 5' TYPICAL OR AS SPECIFIED PER PLAN
- 1B **1**  
L200 CONCRETE - PEDESTRIAN  
COLOR: DARK GRAY  
FINISH: MEDIUM BROOM FINISH, PERP. TO DIRECTION OF TRAFFIC  
SCORING PATTERN: 5' TYPICAL OR AS SPECIFIED PER PLAN
- 2A **4**  
L200 PORCELAIN TILE  
MANUFACTURER: MIRAGE  
MODEL: EVO\_2/E QUARTZITL 2.0 SIZE: 15"x36"  
COLOR: WATERFALL (FIELD), MANTLE (BORDER)
- 3A **5**  
L200 COBBLE STONE BAND - VEHICULAR  
MANUFACTURER: HANOVER ARCHITECTURAL PAVERS  
MATERIAL: PRE-ASSEMBLED GRANITE COBBLES  
SIZE: 24"x24"x3"  
PATTERN: RUNNING BOND  
COLOR / FINISH: GETTYSBURG MIST / SPLIT FINISH
- 3B **6**  
L200 CONCRETE UNIT PAVER - VEHICULAR  
MANUFACTURER: HANOVER ARCHITECTURAL PAVERS  
MATERIAL: TUMBLED PREST BRICK  
SIZE: MIX OF APPIAN RANDOM AND APPIAN 6"x6"  
COLOR / FINISH: SOUTH MOUNTAIN SAND
- 4A **1**  
L201 STAIR - CONCRETE
- 5A **1**  
L202 RETAINING WALL - ENTRY COURT
- 5B **3**  
L204 RETAINING WALL - POOL COURTYARD
- 5C **4**  
L205 RETAINING WALL - PLAYGROUND
- 6 **1**  
L203 PIER
- 7A **2**  
L203 FENCE - PADDOCK  
MATERIAL: PRESSURE TREATED WOOD
- 7B **1**  
L209 FENCE - POOL
- 7C **3**  
L211 FENCE - DOG PARK
- 7D **3**  
L211 FENCE - PLAYGROUND
- 8 **7**  
L200 RIVER ROCK CHANNEL  
RIVER ROCK MIX:  
50% - 2" RIVER ROCK, 50% - 4"-6" RIVER ROCK GREY
- 9 BENCH  
MANUFACTURER: LANDSCAPE FORMS  
PRODUCT: HARPO (BACKED) SIZE: 69"
- 10 **2**  
L211 SYNTHETIC TURF
- 11 **1**  
L211 POURED IN PLACE RUBBER SAFETY SURFACE
- 12 **4**  
L211 PLAY EQUIPMENT  
MANUFACTURER: LITTLE TIKES COMMERCIAL  
PRODUCT LINES: MAX PLAY  
TRADITIONAL PLAY  
KID BUILDERS

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

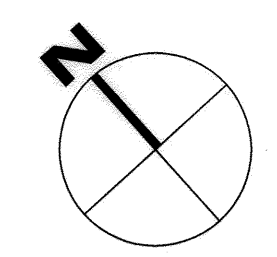


Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21443, Expiration Date: 12/21/22



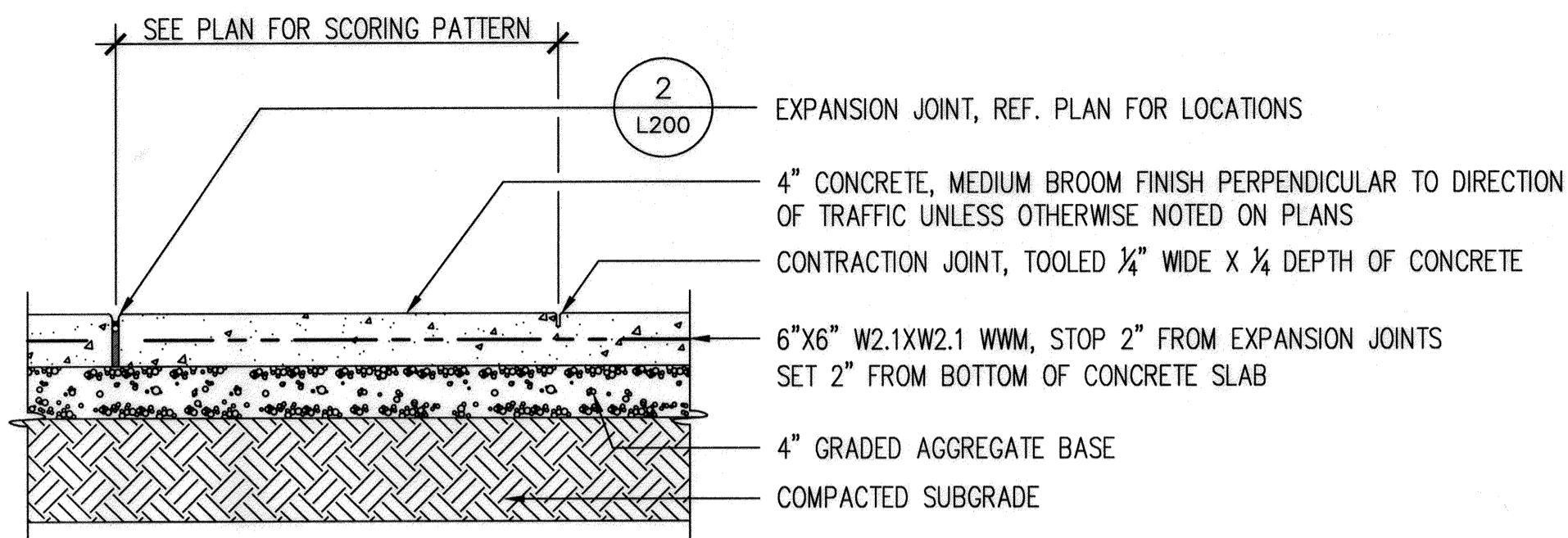
PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 1039, EXPIRATION DATE: 6/12/2020

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
  
 10-12-18 DATE  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
  
 10-18-18 DATE  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
  
 10-18-18 DATE  
 DIRECTOR

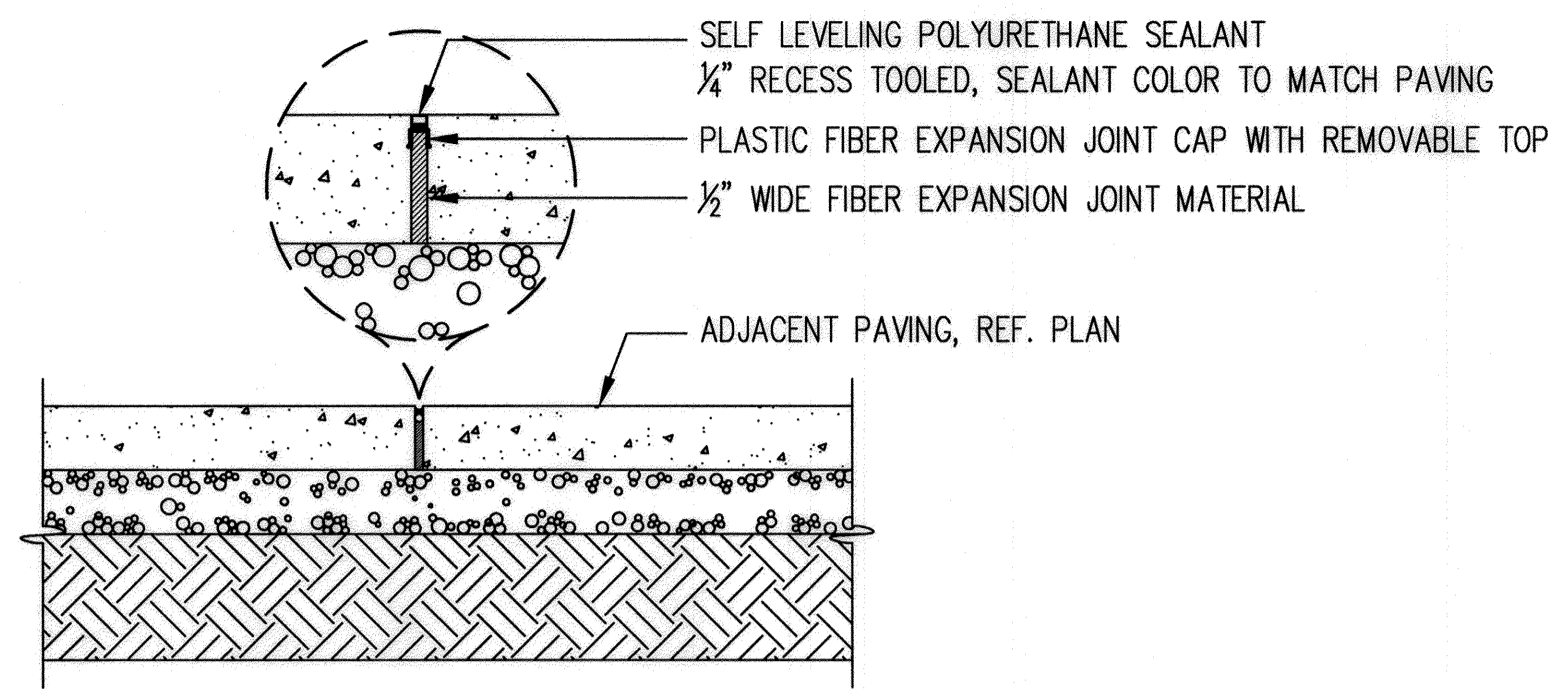


CONSTRUCTION SET - REF. L123

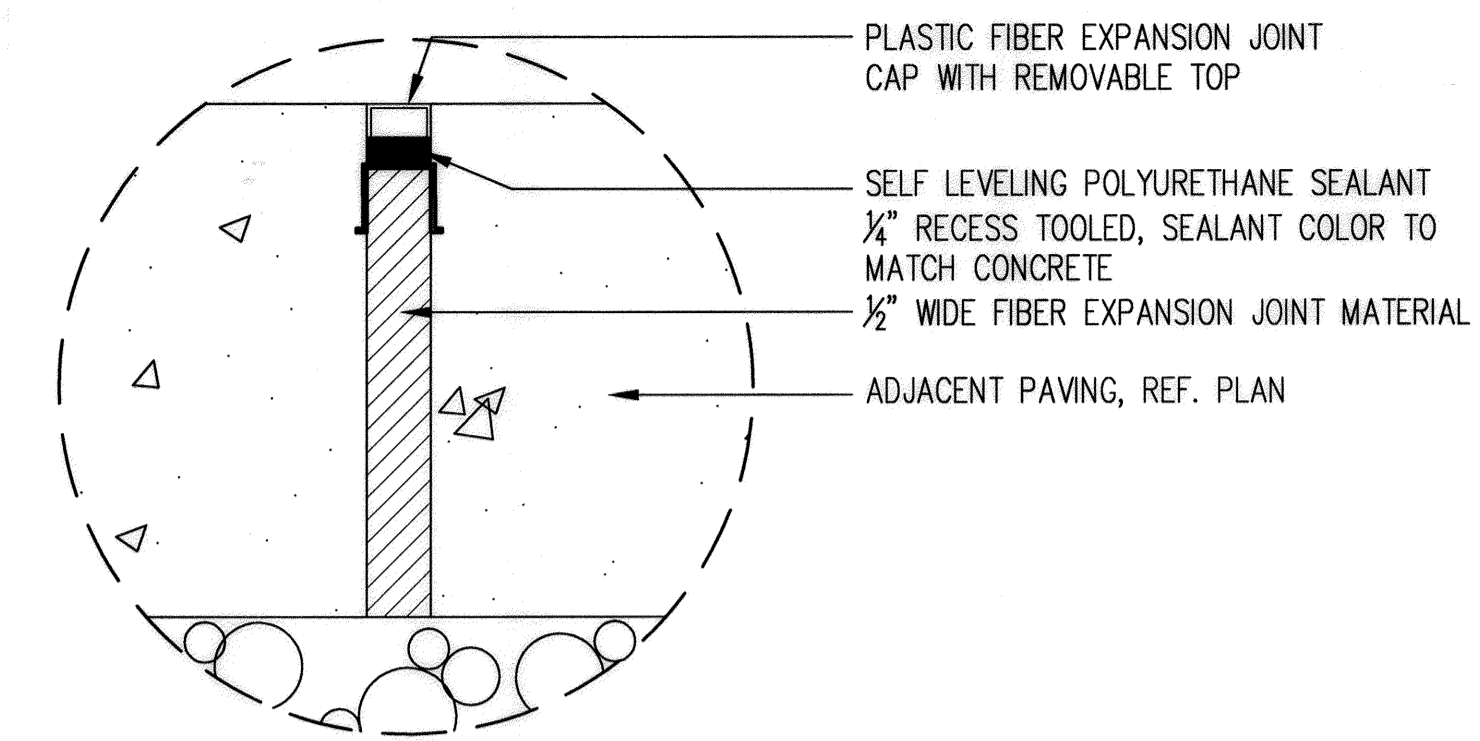
 <b>BENCHMARK ENGINEERING, INC.</b> <small>ENGINEERS • LAND SURVEYORS • PLANNERS</small> 8480 BALTIMORE NATIONAL PIKE • SUITE 315 • ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BE-CIVILENGINEERING.COM		<b>DESIGN COLLECTIVE</b> <small>ARCHITECTURE PLANNING INTERIORS</small> WWW.DESIGNCOLLECTIVE.COM 603 EAST PRATT STREET, SUITE 300 BALTIMORE, MARYLAND 21202 TEL 410.665.6655 FAX 410.539.0843 OFFICES IN BALTIMORE & DURHAM	
OWNER: CORRIDOR SQUARE, LLC 6800 DEERPATH ROAD ELKCRIDGE, MD 21075 410.579.2442		<b>CORRIDOR SQUARE PARCELS A &amp; C</b> RESIDENTIAL APARTMENT BUILDING TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65) TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND	
DEVELOPER: MURN DEVELOPMENT 6800 DEERPATH ROAD ELKCRIDGE, MD 21075 410.579.2442		<b>SITE DEVELOPMENT PLAN DOGPARK ENLARGEMENT PLAN</b> DATE: SEPTEMBER 2018 BEI PROJECT NO. 2695 SCALE: 1/8"=1'-0" SHEET 26 OF 39	
DESIGN: BR	DRAFT: MM	AS-BUILT <span style="float: right;">SDP-18-002</span>	



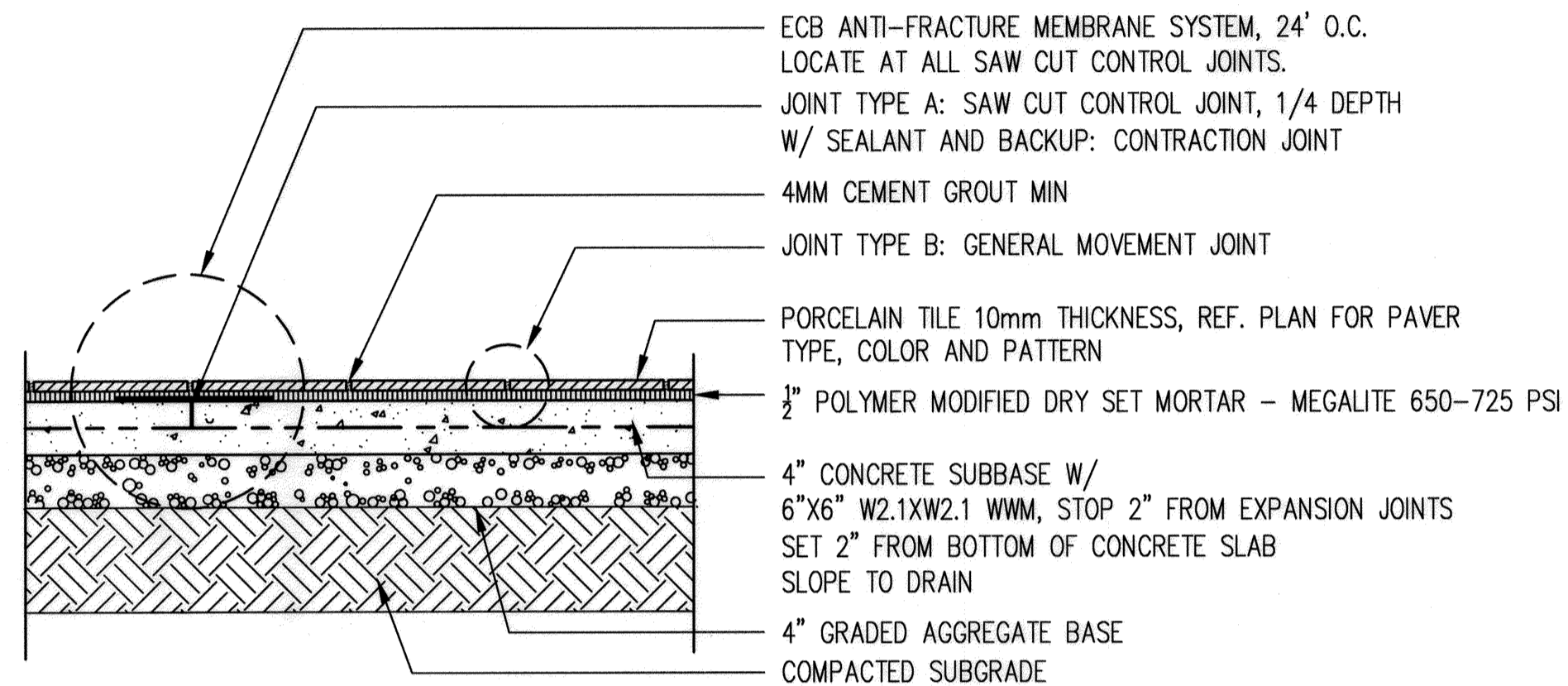
**1 CONCRETE PAVING - PED. SECTION**  
1" = 1'-0"



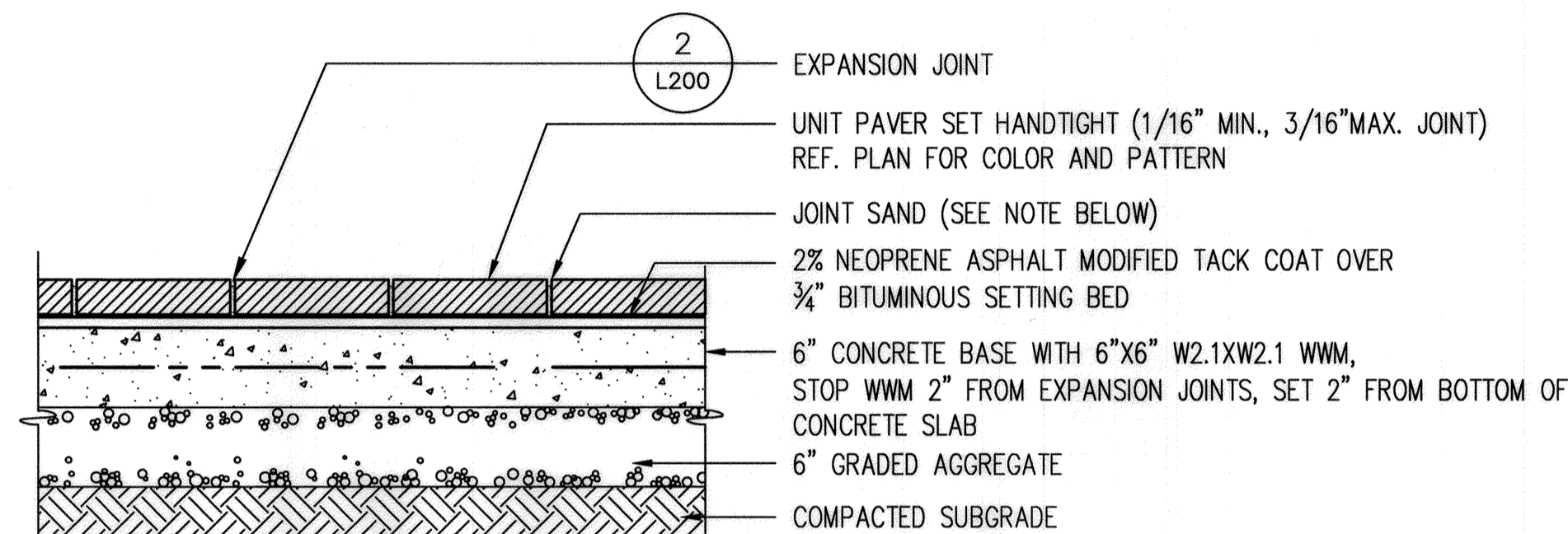
**2 EXPANSION JOINT**  
1" = 1'-0"



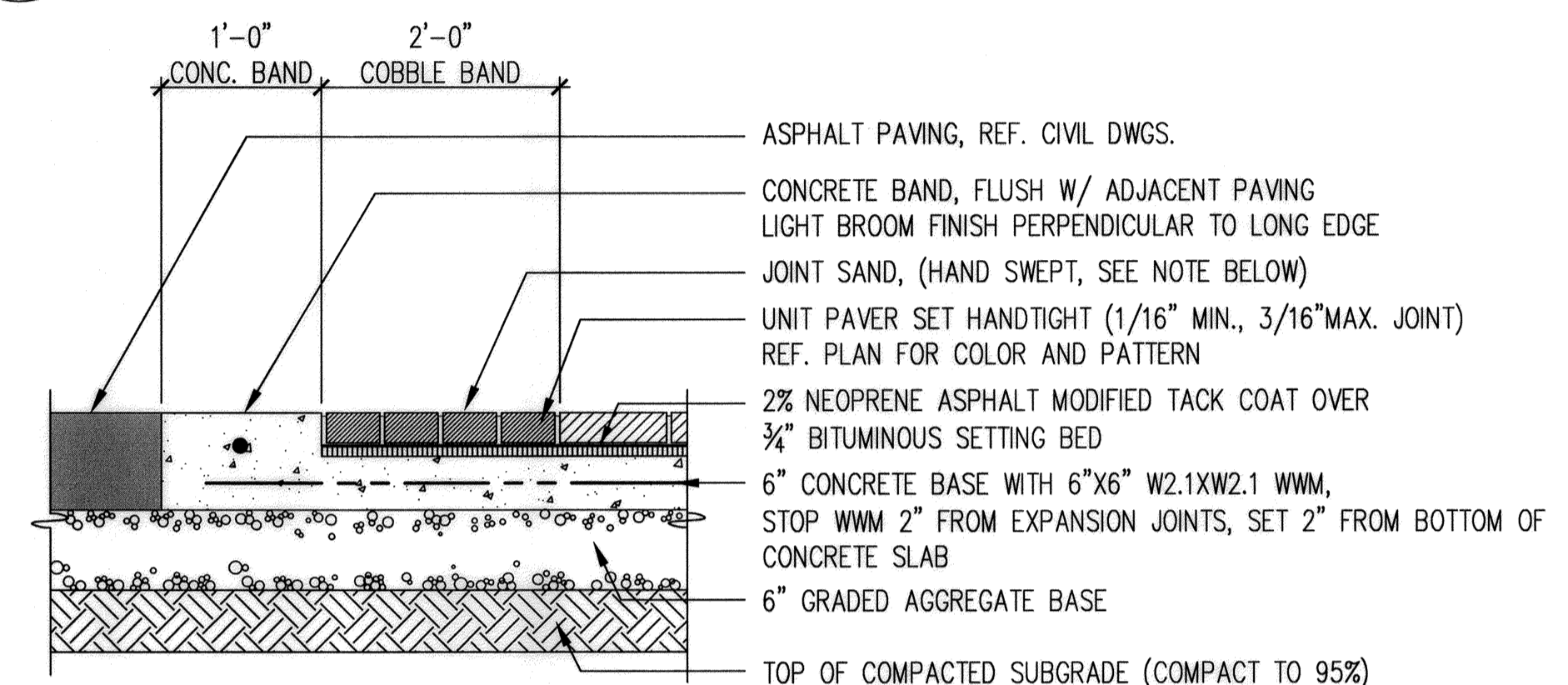
**3 EXPANSION JOINT - ENLARGEMENT**  
1" = 1'-0"



**4 TILE PAVING - PED. SECTION**  
1" = 1'-0"



**5 CONCRETE UNIT PAVER - VEH. SECTION**  
1" = 1'-0"

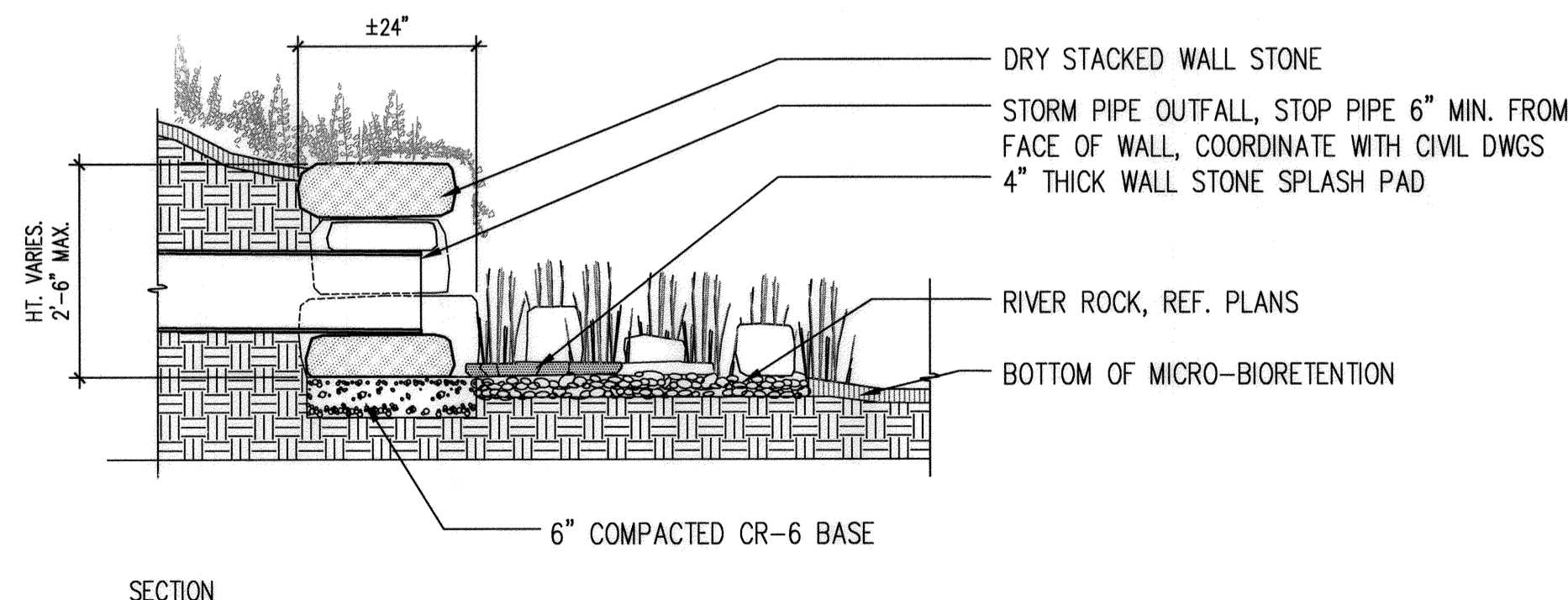
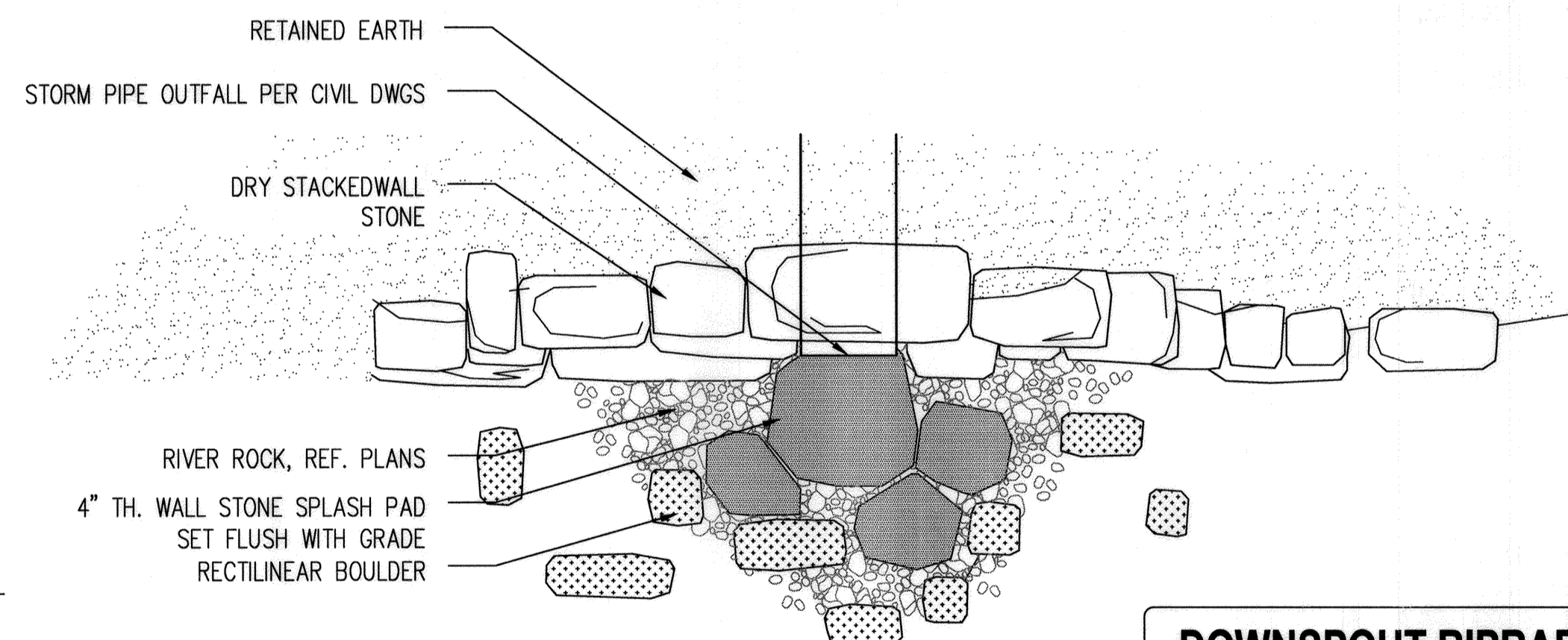


**6 COBBLE BAND - VEH. SECTION**  
1" = 1'-0"

NOTE:  
\* TILE ASSEMBLY REQUIRES MOVEMENT JOINTS 12' MAX. O.C. IN EITHER DIRECTION.  
\* REF. PLAN FOR PAVING SIZE AND PATTERN.

NOTE:  
\* SLOPE PAVERS 1/4" PER FOOT MIN. FOR DRAINAGE  
\* EXTEND BASE 4" BEYOND LIMITS OF PAVERS  
\* JOINT SAND: APPLY SAND, SWEEP JOINTS, REMOVE LARGE SAND PARTICLES FROM SURFACE, REPEAT PROCESS 3 TIMES MIN.

NOTE:  
\* SLOPE PAVERS 1/4" PER FOOT MIN. FOR DRAINAGE  
\* JOINT SAND: APPLY SAND, SWEEP JOINTS, REMOVE LARGE SAND PARTICLES FROM SURFACE, REPEAT PROCESS 3 TIMES MIN.  
\* F'C=4000 PSI



**DOWNSPOUT RIPRAP LEGEND:**

**FINISH:** DRY STACKED, ROUGH CUT, DIMENSIONAL OF VARYING SIZES MIN: 6"x12"x12", MAX. 12"x24"x36"  
**JOINTS:** 1/2" MORTAR JOINTS FLUSH IN FIELD.  
**DIMENSIONS:** MIN: 6"x12"x12", MAX. 12"x24"x36"  
**NOTES:**  
A) LANDSCAPE ARCHITECT TO APPROVE SHOP DRAWINGS  
B) LANDSCAPE ARCHITECT TO RECEIVE AND APPROVE STONE SAMPLES

**7 RIVER ROCK - MBR**  
1/2" = 1'-0"

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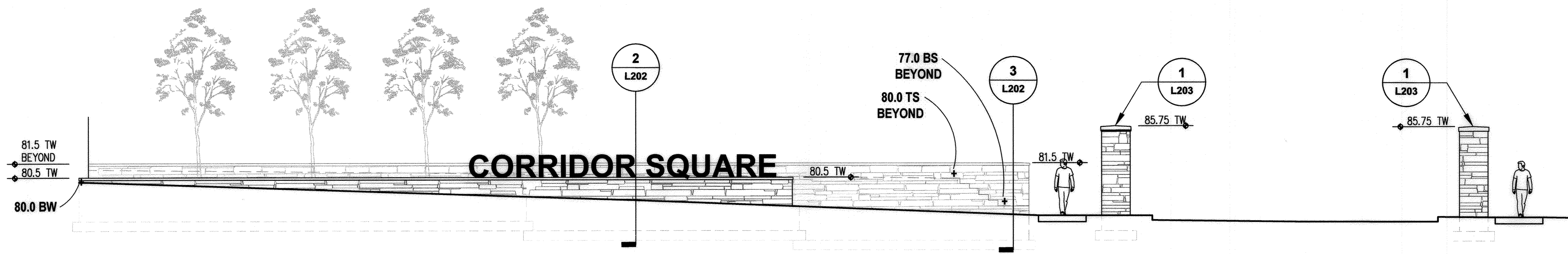
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21442, Expiration Date: 12/2/22



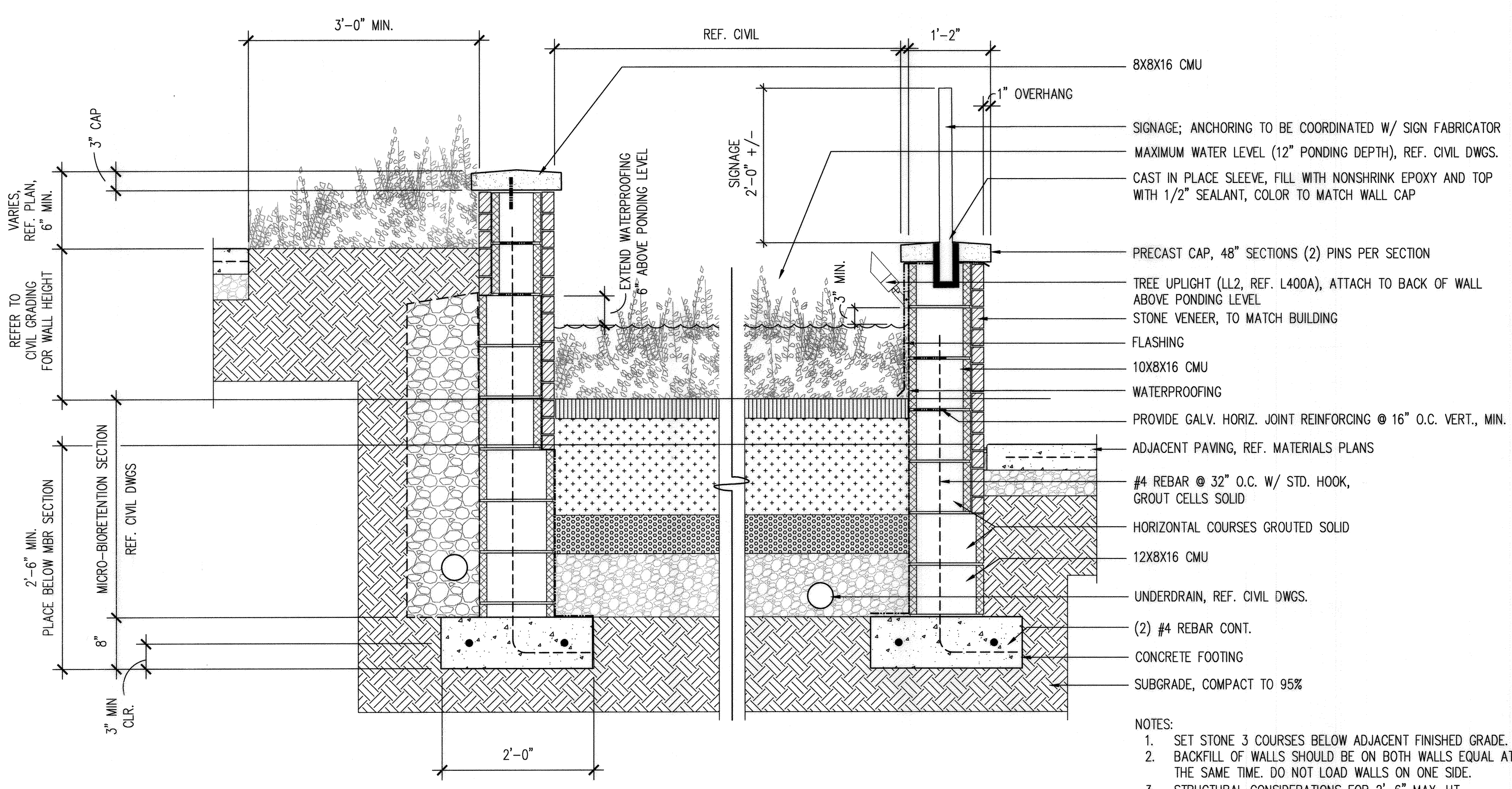
PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO: 1039, EXPIRATION DATE: 6/12/2020

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 10-12-18 DATE  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 [Signature] 10-18-18 DATE  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 [Signature] 10-18-18 DATE  
 DIRECTOR

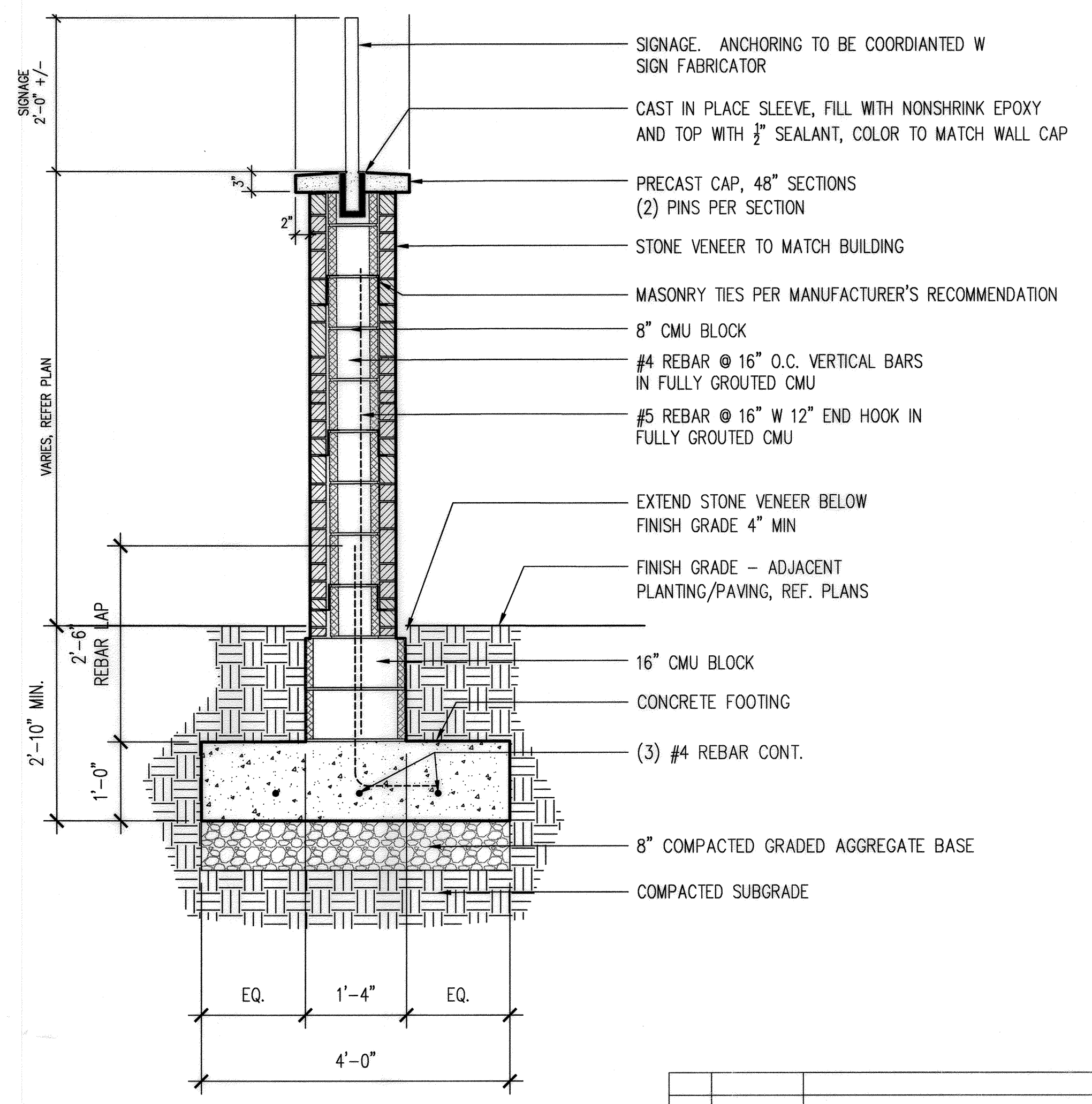
 ENGINEERS • LAND SURVEYORS • PLANNERS 8460 BALTIMORE NATIONAL PIKE SUITE 315 ELKLOTT CITY, MARYLAND 21043 (P) 410-685-6105 (F) 410-685-6644 WWW.BE-CIVILENGINEERING.COM		 ARCHITECTURE PLANNING INTERIORS WWW.DESIGNCOLLECTIVE.COM 602 EAST PRATT STREET, SUITE 300 BALTIMORE, MARYLAND 21202 TEL 410-685-9655 FAX 410-539-6242 OFFICES IN BALTIMORE & DURHAM	
OWNER: CORRIDOR SQUARE, LLC 6800 DEERPATH ROAD ELK RIDGE, MD 21075 410.579.2442		<b>CORRIDOR SQUARE PARCELS A &amp; C</b> RESIDENTIAL APARTMENT BUILDING TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65) TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND	
DEVELOPER: MURN DEVELOPMENT 6800 DEERPATH ROAD ELK RIDGE, MD 21075 410.579.2442		<b>SITE DEVELOPMENT PLAN DETAILS - PAVING</b> DATE: SEPTEMBER 2018 BEI PROJECT NO. 2695 SCALE: 1/8"=1'-0" SHEET 27 OF 39	
DESIGN: BR DRAFT: MM		CONSTRUCTION SET - REF. L200	



**1 ENTRY COURT WALL - ELEVATION - FRONT**  
1/8" = 1'-0"

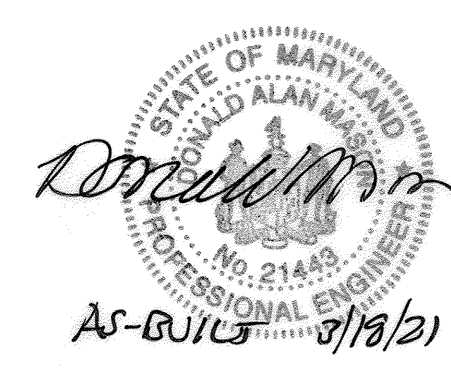


- NOTES:
1. SET STONE 3 COURSES BELOW ADJACENT FINISHED GRADE.
  2. BACKFILL OF WALLS SHOULD BE ON BOTH WALLS EQUAL AT THE SAME TIME. DO NOT LOAD WALLS ON ONE SIDE.
  3. STRUCTURAL CONSIDERATIONS FOR 2'-6" MAX. HT

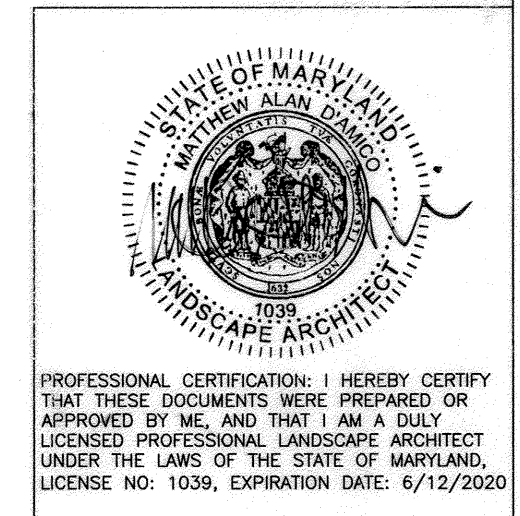


**3 FREESTANDING WALL**  
3/4" = 1'-0"

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License No. 21423 Expiration Date: 12-21-22



**2 RETAINING WALL - MICRO-BIORETENTION & ENTRY SIGN**  
1" = 1'-0"

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division: *Chad ...* 10-12-18 DATE

Chief, Division of Land Development: *Keith ...* 10-18-18 DATE

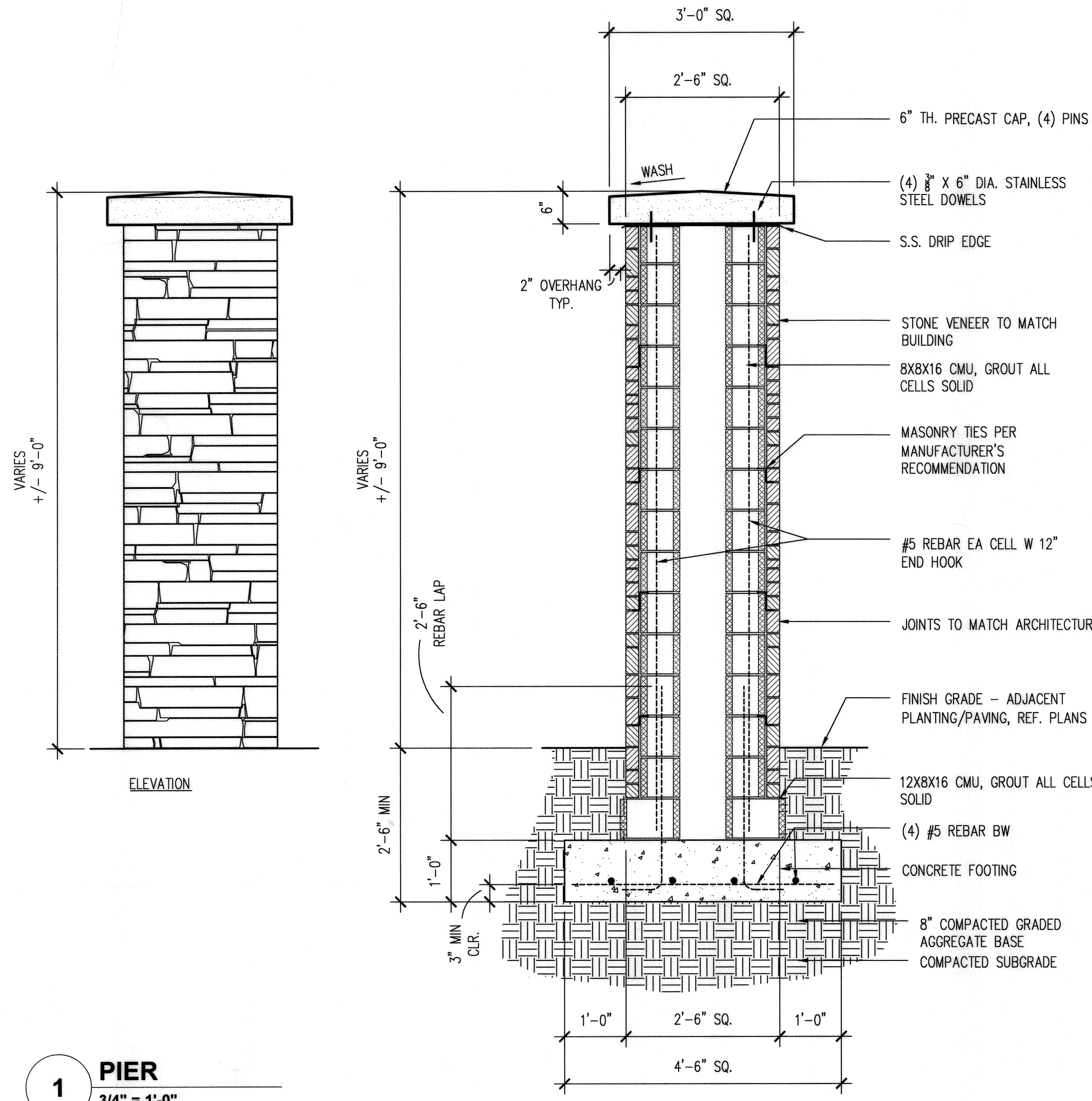
Director: *Nancy ...* 10-18-18 DATE

<p><b>BENCHMARK ENGINEERING, INC.</b> ENGINEERS • LAND SURVEYORS • PLANNERS 8400 BALTIMORE NATIONAL PIKE SUITE 315 ELLICOTT CITY, MARYLAND 21043 (P) 410-685-6105 (F) 410-685-6644 WWW.BE-CIVILENGINEERING.COM</p>		<p><b>DESIGN COLLECTIVE</b> ARCHITECTURE PLANNING INTERIORS WWW.DESIGNCOLLECTIVE.COM 601 EAST PRATT STREET, SUITE 300 BALTIMORE, MARYLAND 21202 TEL 410-685-6655 FAX 410-539-6202 OFFICES IN BALTIMORE &amp; DURHAM</p>	
<p>OWNER: CORRIDOR SQUARE, LLC 6800 DEERPATH ROAD ELKRIDGE, MD 21075 410.579.2442</p>		<p><b>CORRIDOR SQUARE PARCELS A &amp; C</b> RESIDENTIAL APARTMENT BUILDING</p>	
<p>DEVELOPER: MURN DEVELOPMENT 6800 DEERPATH ROAD ELKRIDGE, MD 21075 410.579.2442</p>		<p>TAX MAP 43 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 &amp; 65) TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND</p>	
<p>DATE: SEPTEMBER 2018</p>		<p>BEI PROJECT NO. 2695</p>	
<p>DESIGN: BR DRAFT: MM</p>		<p>SCALE: SEE DETAIL SHEET 28 OF 39</p>	

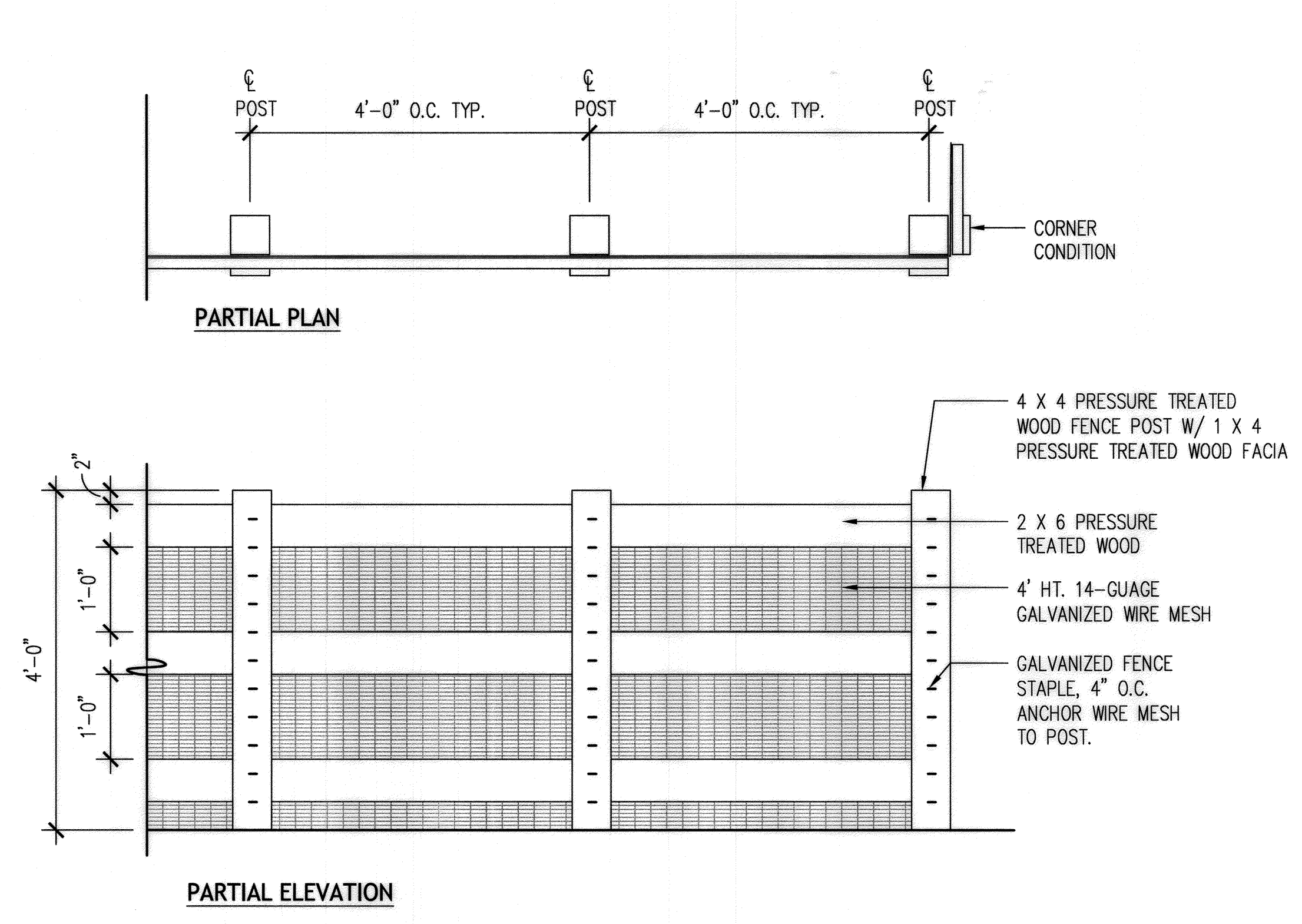
CONSTRUCTION SET - REF. L202

AS-BUILT

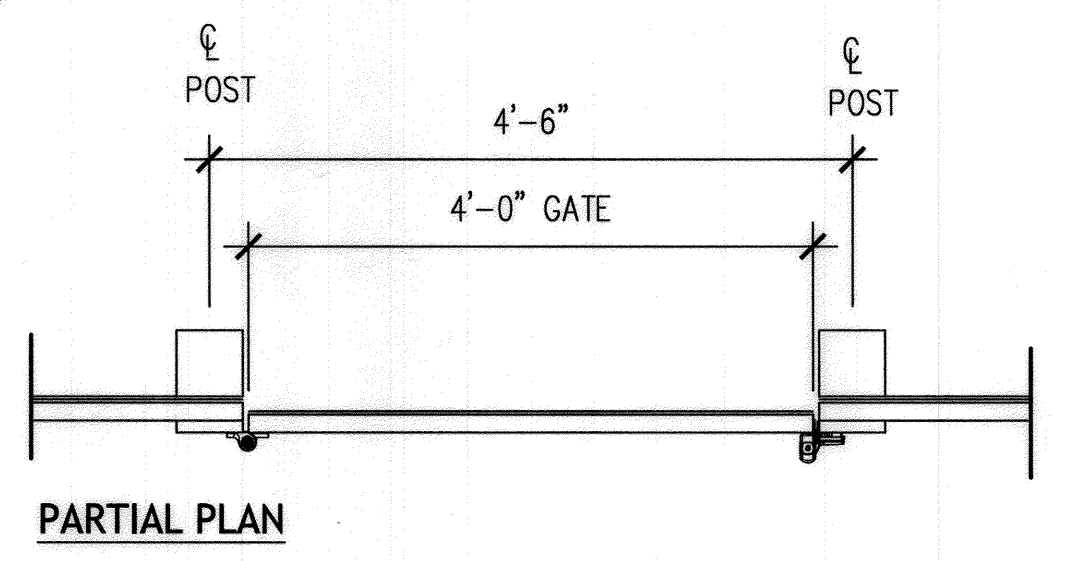
SDP 18-002



**1 PIER**  
3/4" = 1'-0"

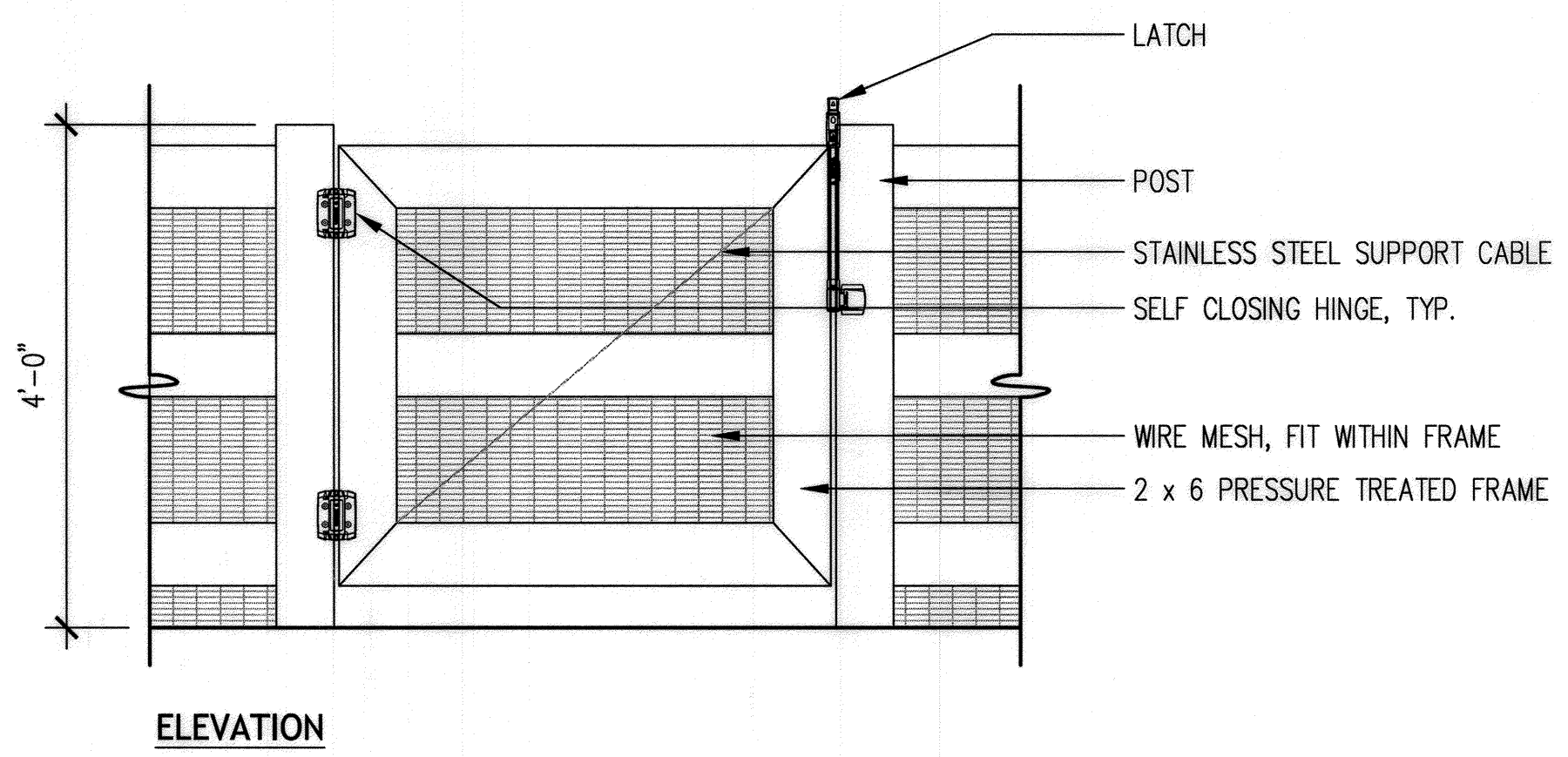


**2 PADDOCK FENCE**  
3/4" = 1'-0"



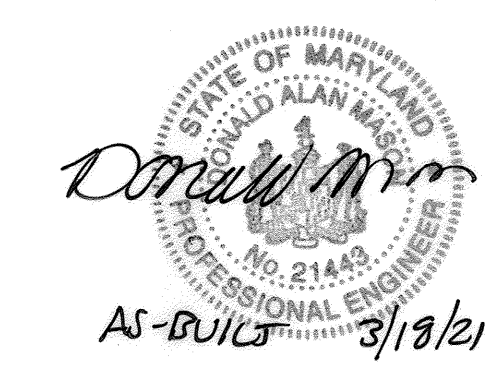
**HINGES**  
MANUFACTURER: D AND D TECHNOLOGIES  
PRODUCT: TRUCLOSE HEAVY DUTY - STANDARD  
COLOR: BLACK  
NOTES: SELF-CLOSING

**LATCH**  
MANUFACTURER: D AND D TECHNOLOGIES  
PRODUCT: MAGNALATCH SERIES 3 TOP PULL  
FINISH/COLOR: BLACK



**3 PADDOCK FENCE - GATE**  
3/4" = 1'-0"

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License No. 21443, Expiration Date: 12-21-22



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

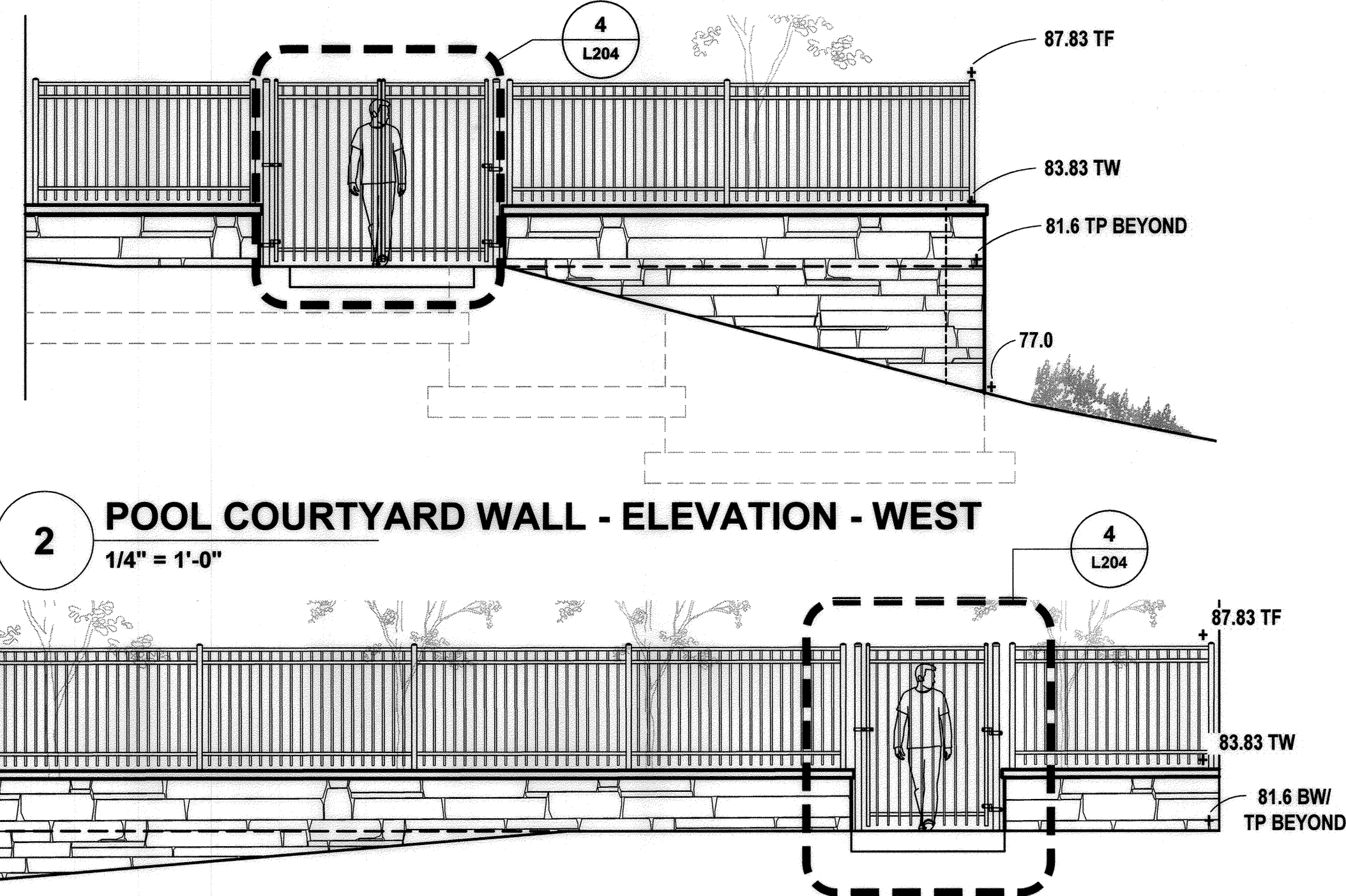
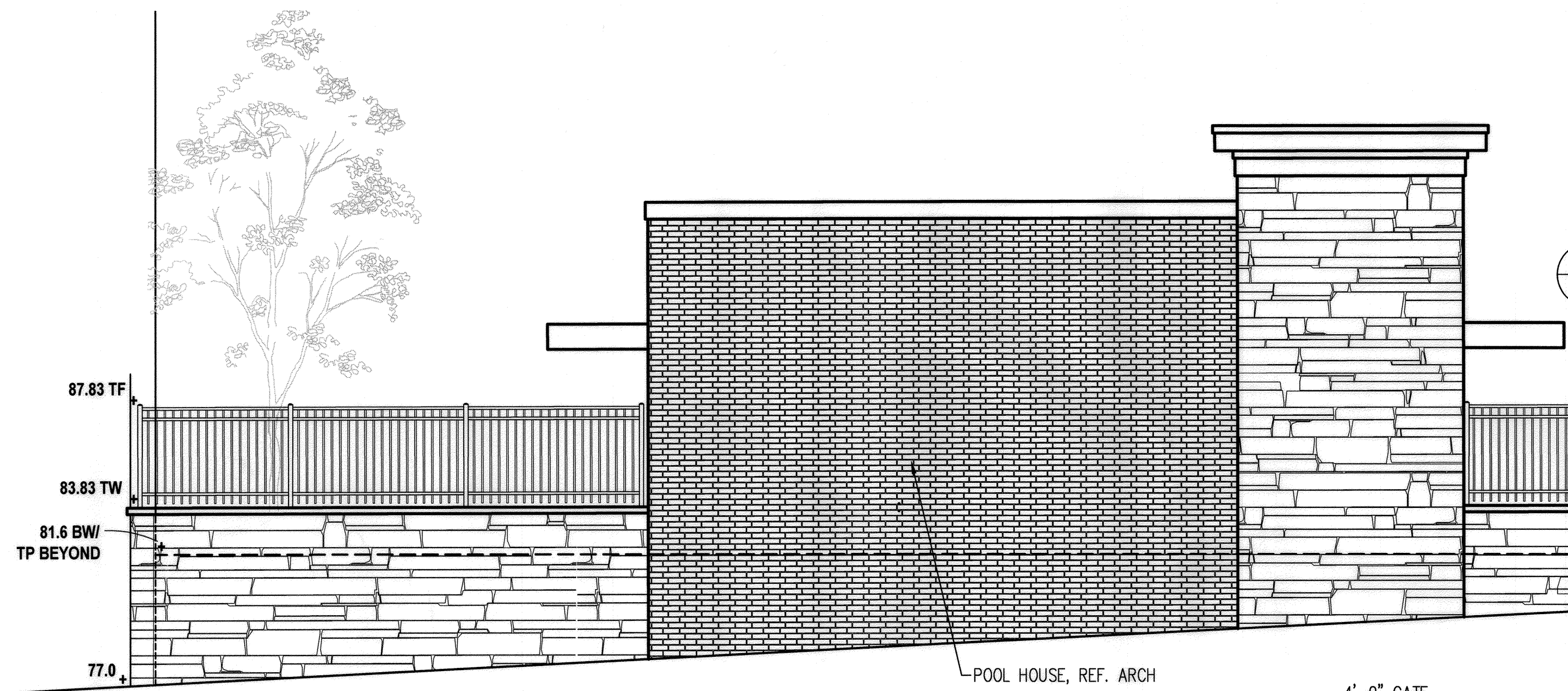
*Chad [Signature]* 10-12-18  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

*Keith [Signature]* 10-18-18  
CHIEF, DIVISION OF LAND DEVELOPMENT

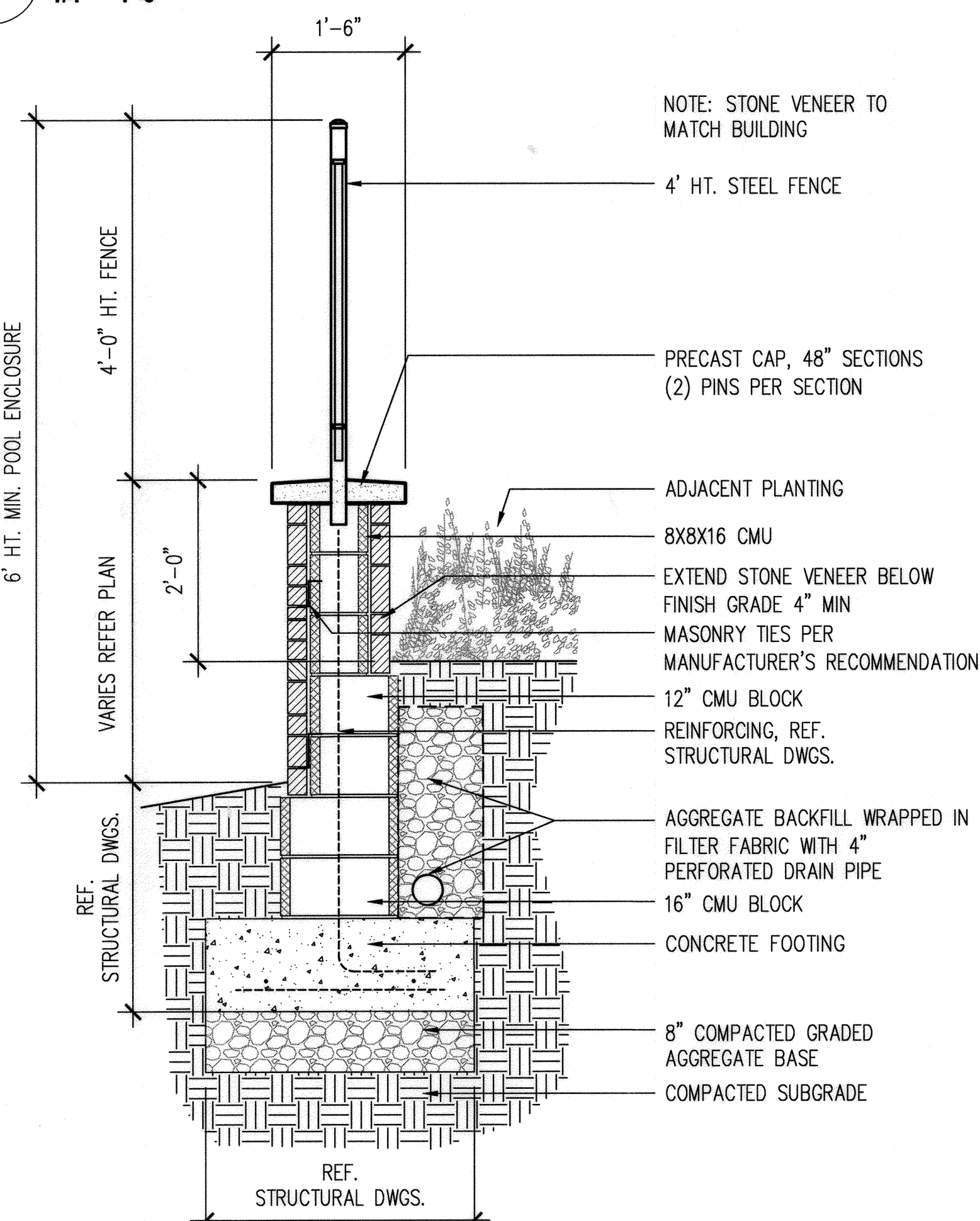
*Nadine [Signature]* 10-18-18  
DIRECTOR

<p><b>BENCHMARK ENGINEERS, INC.</b> ENGINEERS • LAND SURVEYORS • PLANNERS 8480 BALTIMORE NATIONAL PIKE &amp; SUITE 215A ELK RIDGE CITY, MARYLAND 21043 (P) 410-665-8100 (F) 410-665-6644 WWW.BE-CVLENGINEERING.COM</p>		<p><b>DESIGNCOLLECTIVE</b> ARCHITECTURE PLANNING INTERIORS WWW.DESIGNCOLLECTIVE.COM 603 EAST PRATT STREET, SUITE 300 BALTIMORE, MARYLAND 21202 TEL 410-685-6655 FAX 410-539-6242 OFFICES IN BALTIMORE &amp; DURHAM</p>	
<p>OWNER: CORRIDOR SQUARE, LLC 6800 DEERPATH ROAD ELK RIDGE, MD 21075 410.579.2442</p>		<p><b>CORRIDOR SQUARE PARCELS A &amp; C</b> RESIDENTIAL APARTMENT BUILDING</p>	
<p>DEVELOPER: MURN DEVELOPMENT 6800 DEERPATH ROAD ELK RIDGE, MD 21075 410.579.2442</p>		<p>TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 &amp; 65) TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND</p>	
<p><b>SITE DEVELOPMENT PLAN DETAILS - PIER &amp; PADDOCK FENCE</b></p>			
DATE: SEPTEMBER 2018	BEI PROJECT NO. 2695	DESIGN: BR	DRAFT: MM
SCALE: SEE DETAIL	SHEET 29 OF 39		

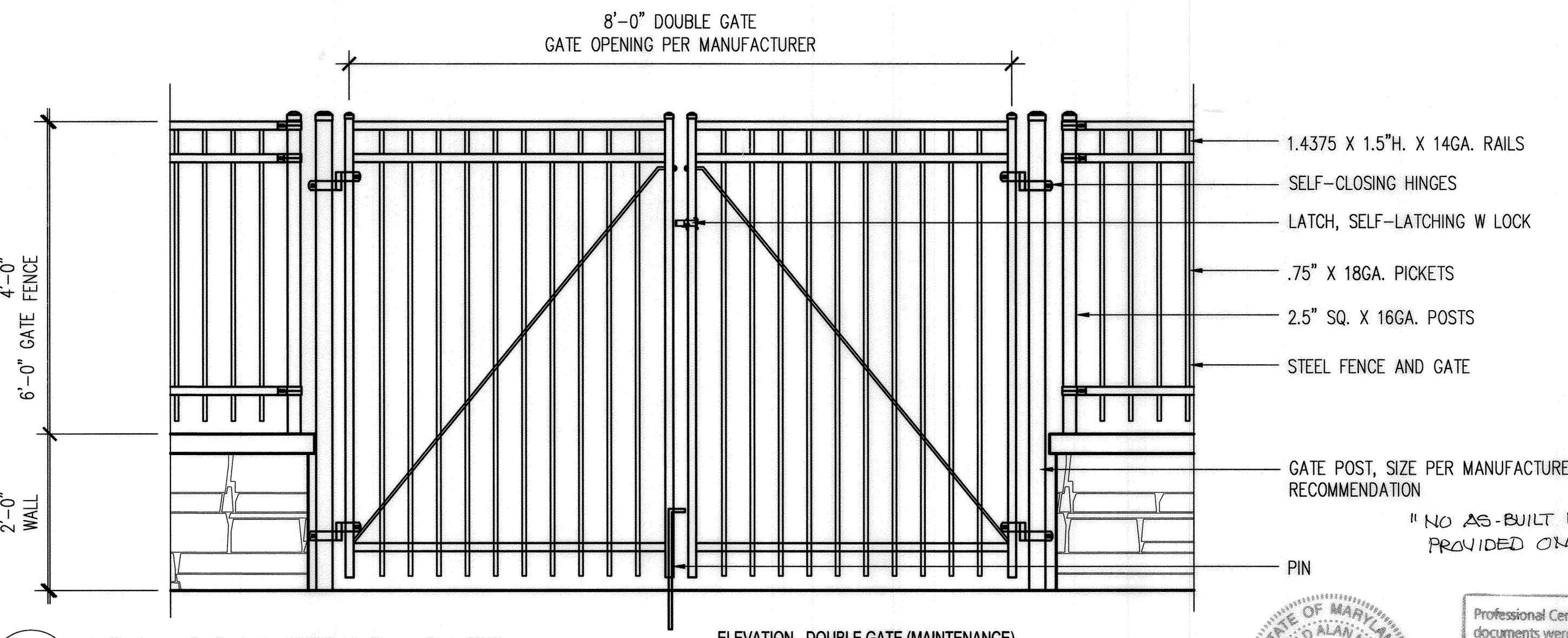
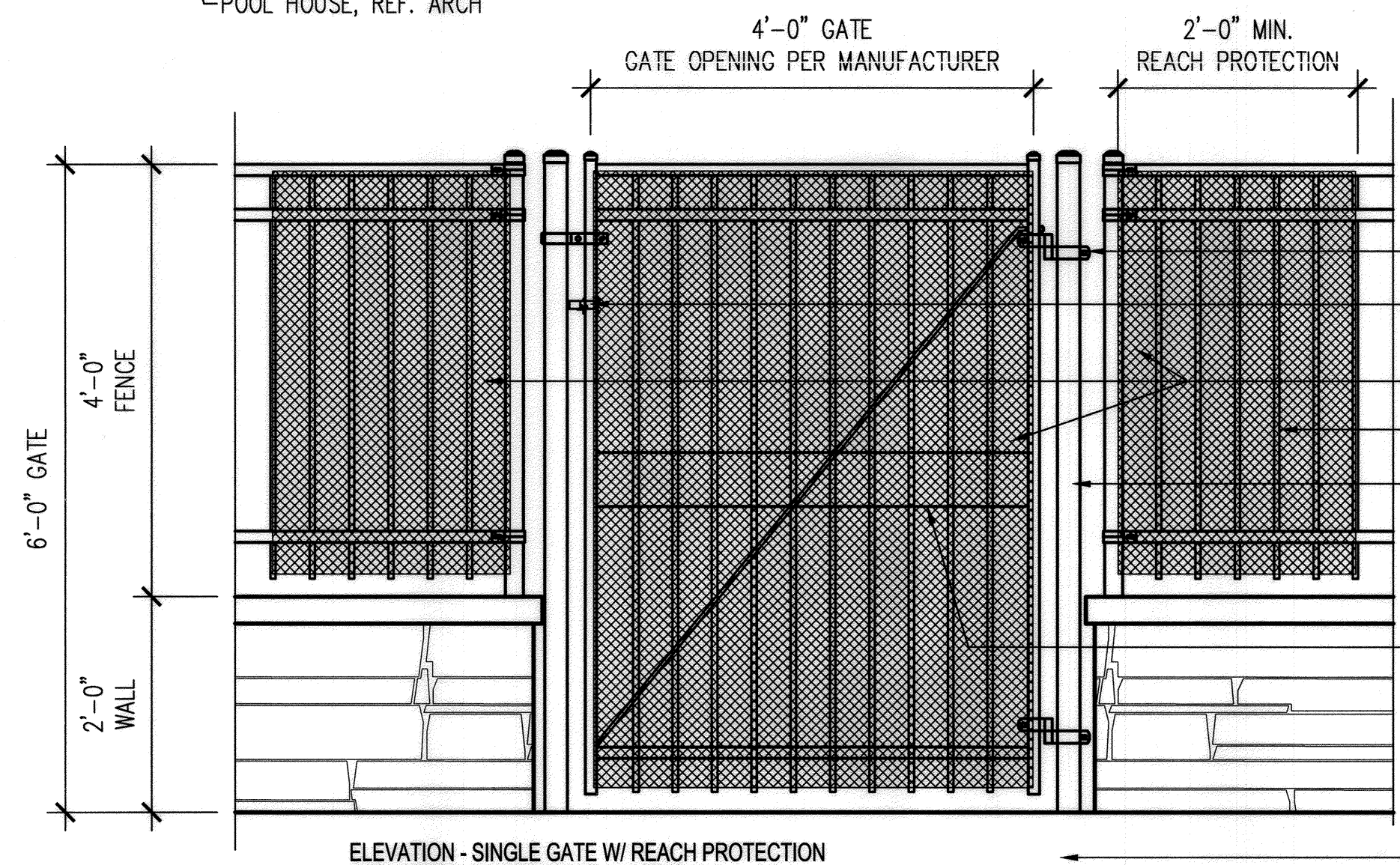
CONSTRUCTION SET - REF. L203



**1 POOL COURTYARD WALL - ELEVATION - SOUTH**  
1/4" = 1'-0"



**3 POOL COURTYARD WALL - SECTION**  
3/4" = 1'-0"



**4 POOL COURTYARD - GATE**  
3/4" = 1'-0"

**FENCE/GATE**  
MANUFACTURER: AMERISTAR  
PRODUCT: MONTAGE PLUS (STEEL) FENCE W SWING GATE  
STYLE: MAJESTIC THREE RAIL PANEL  
SPACING: 4" PICKETS (POOL/PLAYGROUND) 3" PICKETS (DOG PARK)  
HEIGHT: VARIES, REF. DETAIL  
FINISH: ECOAT  
COLOR: BLACK  
NOTES: STANDARD FLAT CAP  
EXTENDED PICKET AT BOTTOM RAIL  
SEE PRODUCT MANUFACTURER'S SPECIFICATIONS FOR INSTALLATION. GATE HARDWARE TO BE COORDINATED W FENCE. PROVIDE SHOP DRAWINGS OF FENCE, GATES AND HARDWARE FOR APPROVAL.

**REACH PROTECTION**  
PRODUCT: EXPANDED METAL  
PATTERN: 1/2" DIAMOND PATTERN (STEEL)  
STYLE: POWDERCOAT  
COLOR: BLACK  
NOTES: ATTACH W TECH SCREW AND WASHER (BLACK TO MATCH) APPLIED IN FIELD. MIN. 24" EITHER SIDE OF GATE.

**HINGES**  
MANUFACTURER: D AND D TECHNOLOGIES  
PRODUCT: SURECLOSE READY FIT CLOSER AND HINGE EXTERNAL MOUNT  
COLOR: BLACK  
NOTES: SELF-CLOSING, GATE AND HARDWARE TO MEET LOCAL POOL CODE REQUIREMENTS.

**LATCH**  
MANUFACTURER: DAC INDUSTRIES  
PRODUCT: 6100 - OUTSIDE LEVER STYLE HANDLE  
STOREROOM FUNCTION - OUTSIDE LEVER ALWAYS NEEDS KEY TO UNLOCK  
FINISH/COLOR: BLACK  
NOTES: LATCH TO BE COMPATIBLE W PANIC HARDWARE

**PANIC HARDWARE**  
MANUFACTURER: DAK INDUSTRIES  
PRODUCT: 6004 - 48" DETEK SURFACE MOUNT EXIT BAR (WEATHER RESISTANT) W MOUNTING PLATE  
FINISH/COLOR: POWDERCOAT, BLACK  
NOTES: PROVIDE COMPATIBLE LATCH HARDWARE

ADA NOTE:  
GATE CONTROLS TO BE OPERABLE WITH ONE HAND USING 5 LBF. MAX PRESSURE WITHOUT TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST

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License No. 21119, Expiration Date: 12-21-22



PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 1039, EXPIRATION DATE: 6/12/2020

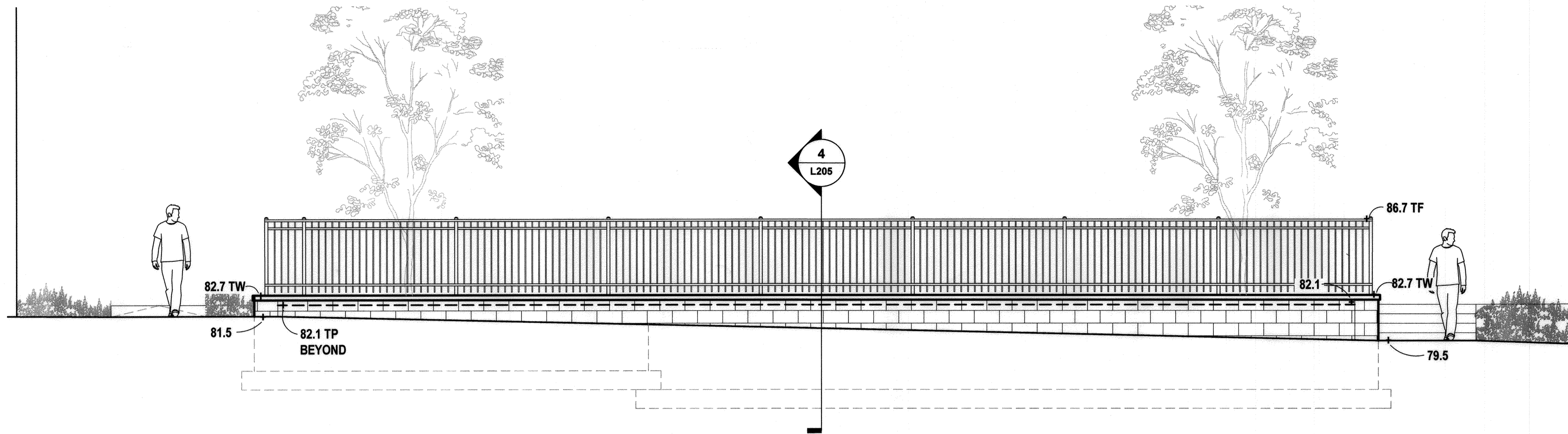
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE: 10-12-18  
  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE: 10-18-18  
  
 DIRECTOR  
 DATE: 10-18-18

 <b>BENCHMARK ENGINEERING, INC.</b> ENGINEERS • LAND SURVEYORS • PLANNERS 6480 BALTIMORE NATIONAL PIKE SUITE 315 • ELLICOTT CITY, MARYLAND 21043 (P) 410-685-6105 (F) 410-685-6644 WWW.BEI-CIVILENGINEERING.COM		DESIGN COLLECTIVE ARCHITECTURE PLANNING INTERIORS WWW.DESIGNCOLLECTIVE.COM 603 EAST PRATT STREET, SUITE 300 BALTIMORE, MARYLAND 21202 TEL 410-685-6655 FAX 410-539-6042 OFFICES IN BALTIMORE & DURHAM	
OWNER: CORRIDOR SQUARE, LLC 6800 DEERPATH ROAD ELKRIDGE, MD 21075 410.579.2442		CORRIDOR SQUARE PARCELS A & C RESIDENTIAL APARTMENT BUILDING TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65) TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND	
DEVELOPER: MURN DEVELOPMENT 6800 DEERPATH ROAD ELKRIDGE, MD 21075 410.579.2442		SITE DEVELOPMENT PLAN DETAILS - POOL COURTYARD WALL	
DESIGN: BR DRAFT: MM		DATE: SEPTEMBER 2018 SCALE: SEE DETAIL	BEI PROJECT NO. 2695 SHEET 30 OF 39

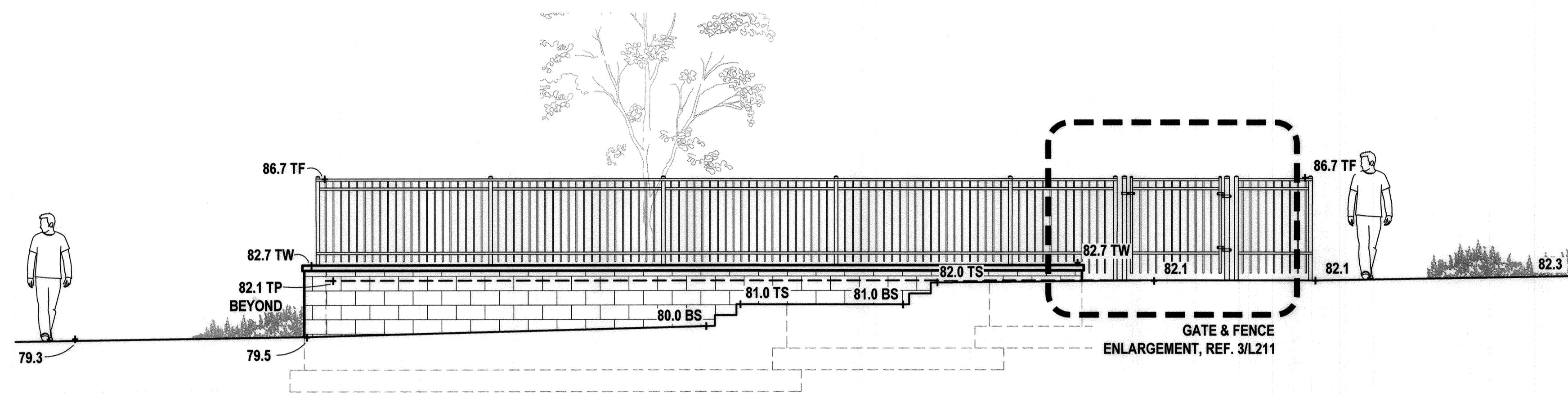
CONSTRUCTION SET - REF. L204

AS-BUILT

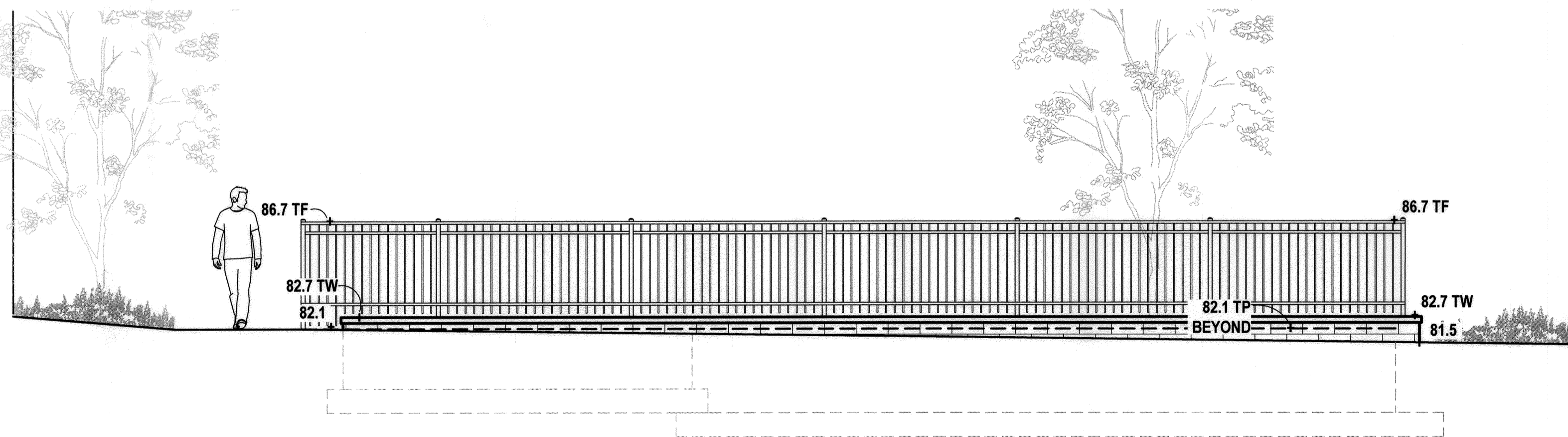
SDP-18-002



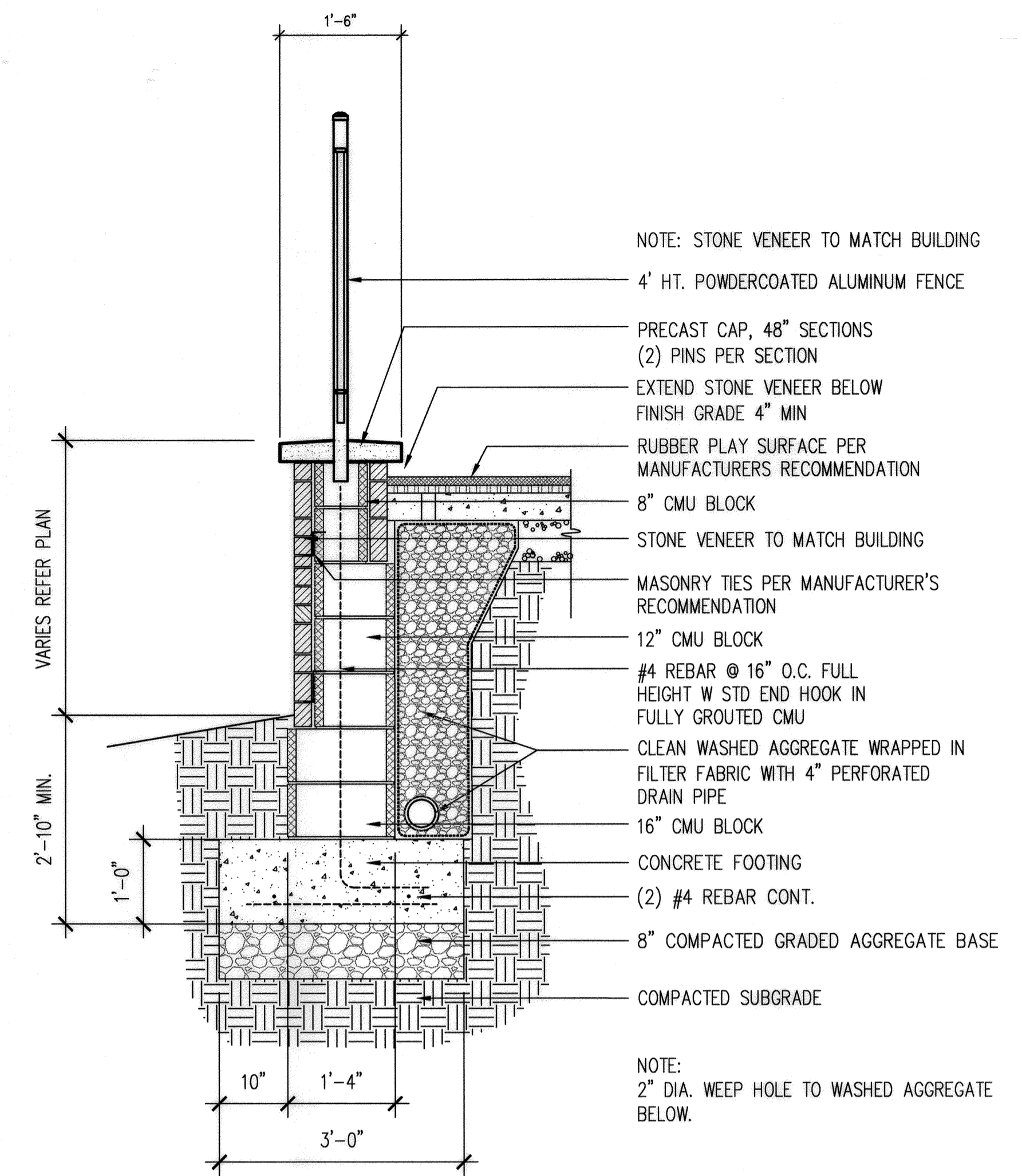
**1 PLAY WALL - ELEVATION - FRONT**  
1/4" = 1'-0"



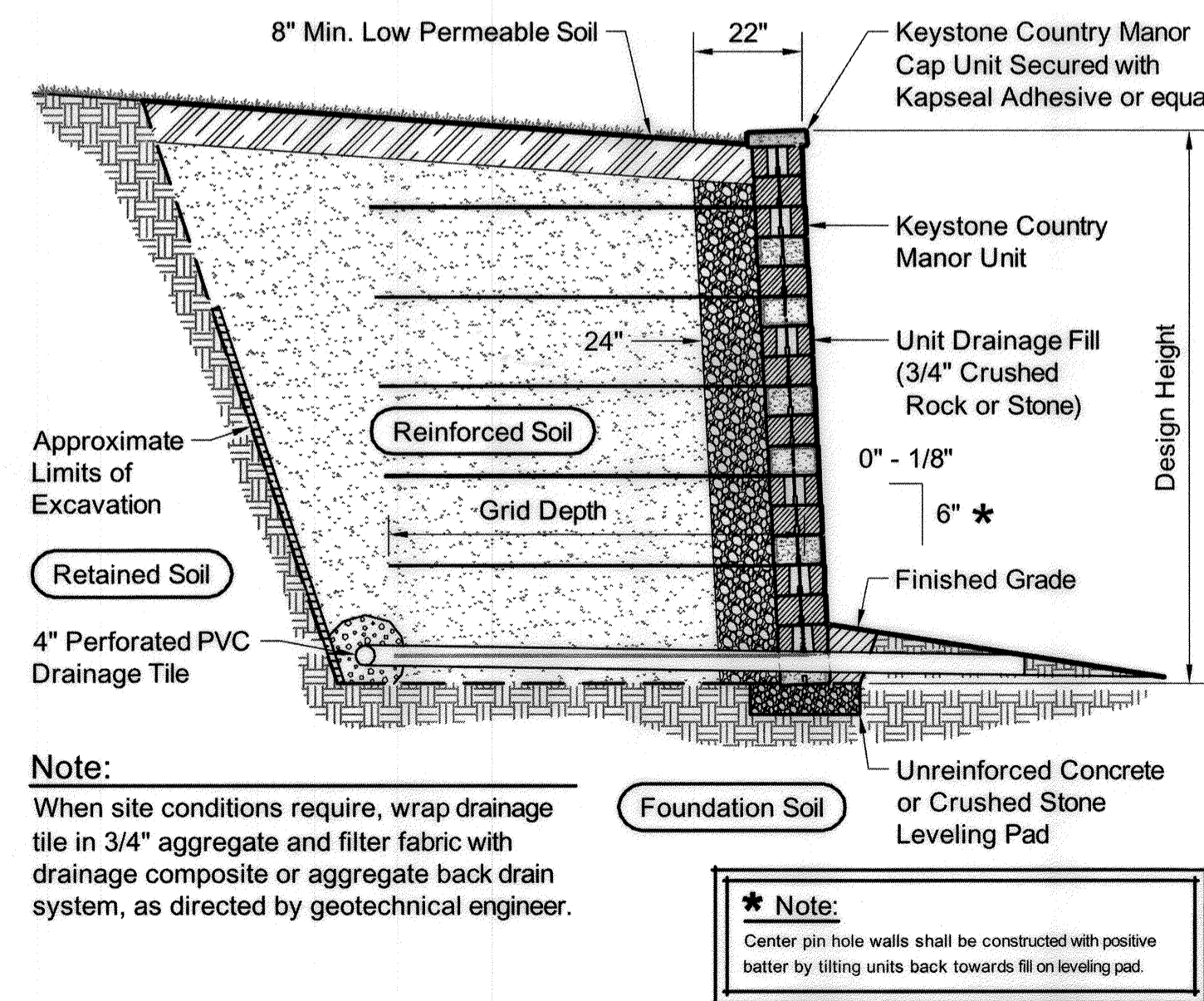
**2 PLAY WALL - ELEVATION - STAIR**  
1/4" = 1'-0"



**3 PLAY WALL - ELEVATION - RAMP**  
1/4" = 1'-0"



**4 RETAINING WALL - PLAYGROUND**  
3/4" = 1'-0"



**Typical Reinforced Wall Section**  
Country Manor Unit - Near Vertical Setback

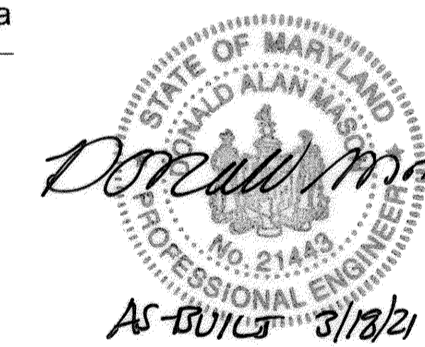
**5 RETAINING WALL - PLAYGROUND**  
NTS

NOTE: STONE VENEER TO MATCH BUILDING

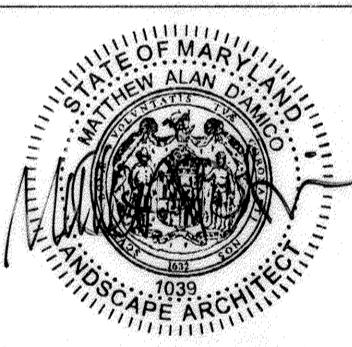
- 4' HT. POWDERCOATED ALUMINUM FENCE
- PRECAST CAP, 48" SECTIONS (2) PINS PER SECTION
- EXTEND STONE VENEER BELOW FINISH GRADE 4" MIN
- RUBBER PLAY SURFACE PER MANUFACTURERS RECOMMENDATION
- 8" CMU BLOCK
- STONE VENEER TO MATCH BUILDING
- MASONRY TIES PER MANUFACTURER'S RECOMMENDATION
- 12" CMU BLOCK
- #4 REBAR @ 16" O.C. FULL HEIGHT W STD END HOOK IN FULLY GROUTED CMU
- CLEAN WASHED AGGREGATE WRAPPED IN FILTER FABRIC WITH 4" PERFORATED DRAIN PIPE
- 16" CMU BLOCK
- CONCRETE FOOTING
- (2) #4 REBAR CONT.
- 8" COMPACTED GRADED AGGREGATE BASE
- COMPACTED SUBGRADE

NOTE:  
2" DIA. WEEP HOLE TO WASHED AGGREGATE BELOW.

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"



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License No. 21443, Expiration Date: 12-21-21



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APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*Chad Chubb* 10-12-18  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Veronica Cook* 10-18-18  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

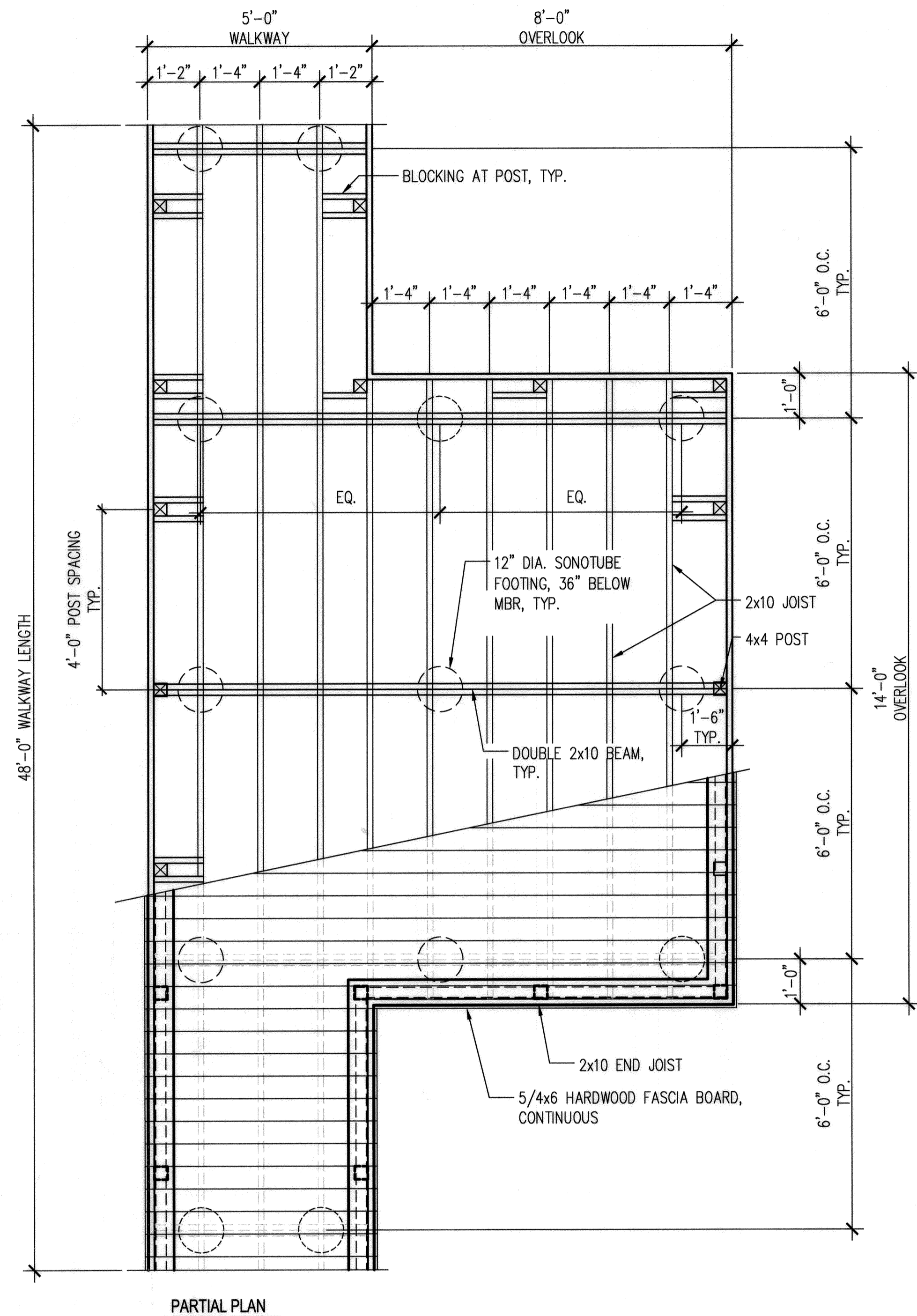
*Nadine Griffin* 10-18-18  
DIRECTOR DATE

<p><b>BENCHMARK ENGINEERING, INC.</b> ENGINEERS &amp; LAND SURVEYORS &amp; PLANNERS 6480 BALTIMORE NATIONAL PIKE SUITE 315 ELKCRIDGE CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BEI-CIVILENGINEERING.COM</p>		<p><b>DESIGN COLLECTIVE</b> ARCHITECTURE PLANNING INTERIORS WWW.DESIGNCOLLECTIVE.COM 601 EAST PRATT STREET, SUITE 300 BALTIMORE, MARYLAND 21202 TEL 410-685-6555 FAX 410-539-6242 OFFICES IN BALTIMORE &amp; DURHAM</p>	
<p>OWNER: CORRIDOR SQUARE, LLC 6800 DEERPATH ROAD ELKCRIDGE, MD 21075 410.579.2442</p>		<p><b>CORRIDOR SQUARE PARCELS A &amp; C</b> RESIDENTIAL APARTMENT BUILDING</p>	
<p>DEVELOPER: MURN DEVELOPMENT 6800 DEERPATH ROAD ELKCRIDGE, MD 21075 410.579.2442</p>		<p>TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 &amp; 65) TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND</p>	
<p>DESIGN: BR DRAFT: MM</p>		<p><b>SITE DEVELOPMENT PLAN DETAILS - PLAY WALL</b></p>	
<p>DATE: SEPTEMBER 2018 BEI PROJECT NO. 2695</p>		<p>SCALE: SEE DETAIL SHEET 31 OF 39</p>	

CONSTRUCTION SET - REF. L205

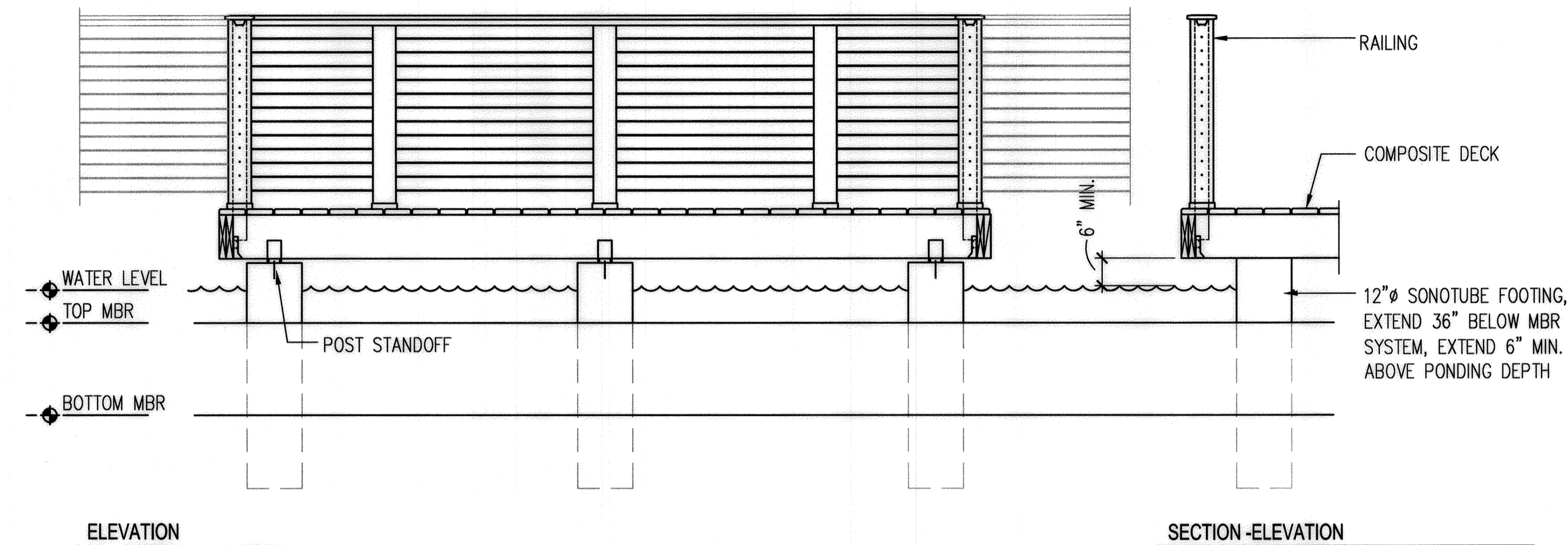
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SDP-18-002

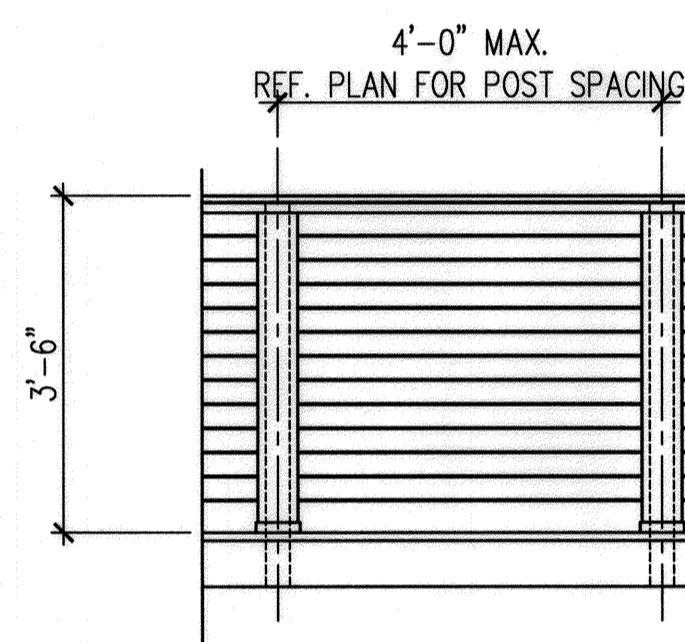


PARTIAL PLAN

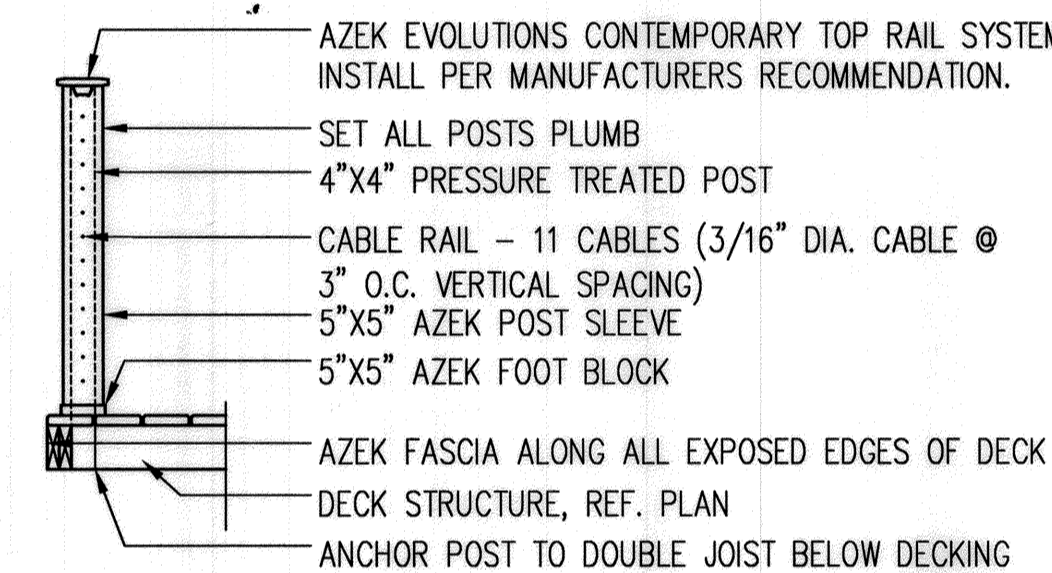
**1 DECK - OVERLOOK**  
1/2" = 1'-0"



SECTION-ELEVATION



ELEVATION



**WOOD DECK NOTES**

- FRAMING** PRESSURE TREATED, SIZES PER PLAN
- DECK MANUFACTURER:** AZEK DECKING - COLOR: DARK HICKORY FULL LENGTH BOARDS
- DECK FASTENERS MANUFACTURER:** CONCEALOC HIDDEN FASTENER SYSTEM FOLLOW MANUFACTURER'S INSTRUCTIONS FOR TYPICAL INSTALL.
- RAILING MANUFACTURER:** AZEK COLOR: DARK HICKORY EVOLUTIONS RAIL CONTEMPORARY TOP RAIL
- STYLE:** 4\"/>

**NOTES:** 4\"/>

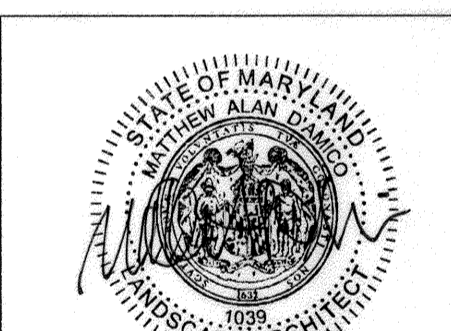
**CABLE RAIL MANUFACTURER:** FEENEY FOLLOW MANUFACTURER'S INSTRUCTIONS FOR TYPICAL INSTALL.

**STANDOFF POST BASE MANUFACTURER:** SIMPSON "STRONG-TIE"

**JOIST HANGERS MANUFACTURER:** SIMPSON "STRONG-TIE"

**GENERAL NOTES** DECKING AND JOIST SPANNING CAPABILITIES VARY. DECK PLAN IS CONCEPTUAL AND NEEDS TO BE VERIFIED FOR LOCAL CODES AND FINAL MATERIAL SELECTION.

**SHOP DRAWINGS** LANDSCAPE ARCHITECT TO APPROVE DECK AND SEATWALL SHOP DRAWINGS. CONTRACTOR TO PROVIDE PARTIAL MOCK-UP OF FASCIA, DECKING, AND FASTENING METHODS. PARTIAL MOCK-UP MAY BE BUILT-IN-PLACE OVER PRESSURE TREATED FRAMING ON SITE. CONTRACTOR TO PROVIDE LANDSCAPE ARCHITECT WITH CUT SHEET OF ALL FINAL PRODUCT SELECTIONS FOR APPROVAL.



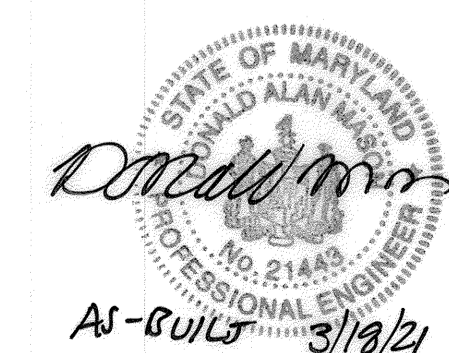
PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 1039, EXPIRATION DATE: 6/12/2020

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*Chad Blumberg* 10-12-18  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Kent LaDach* 10-18-18  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*Nathan J. J. J.* 10-18-18  
DIRECTOR DATE



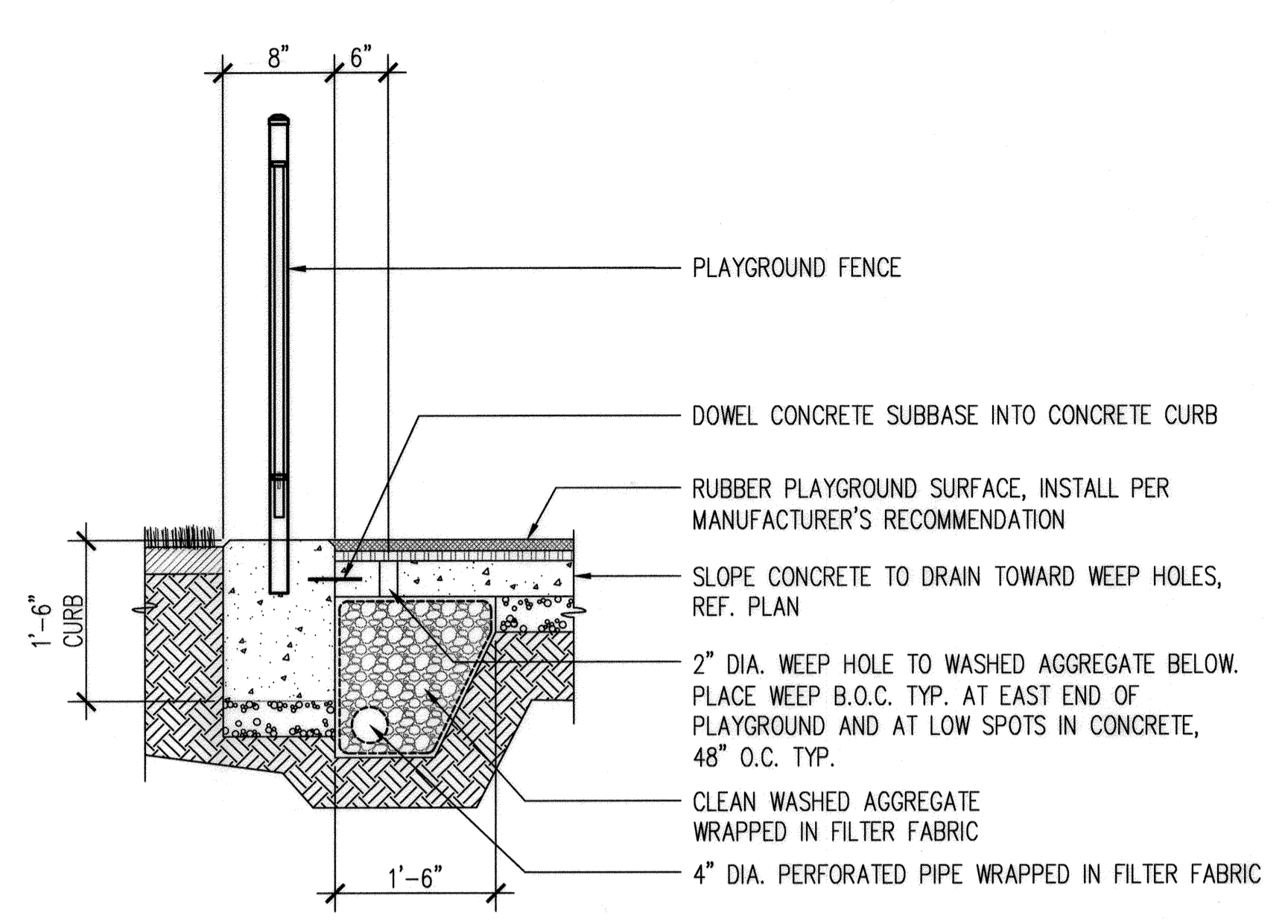
"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21443, Expiration Date: 12-21-22

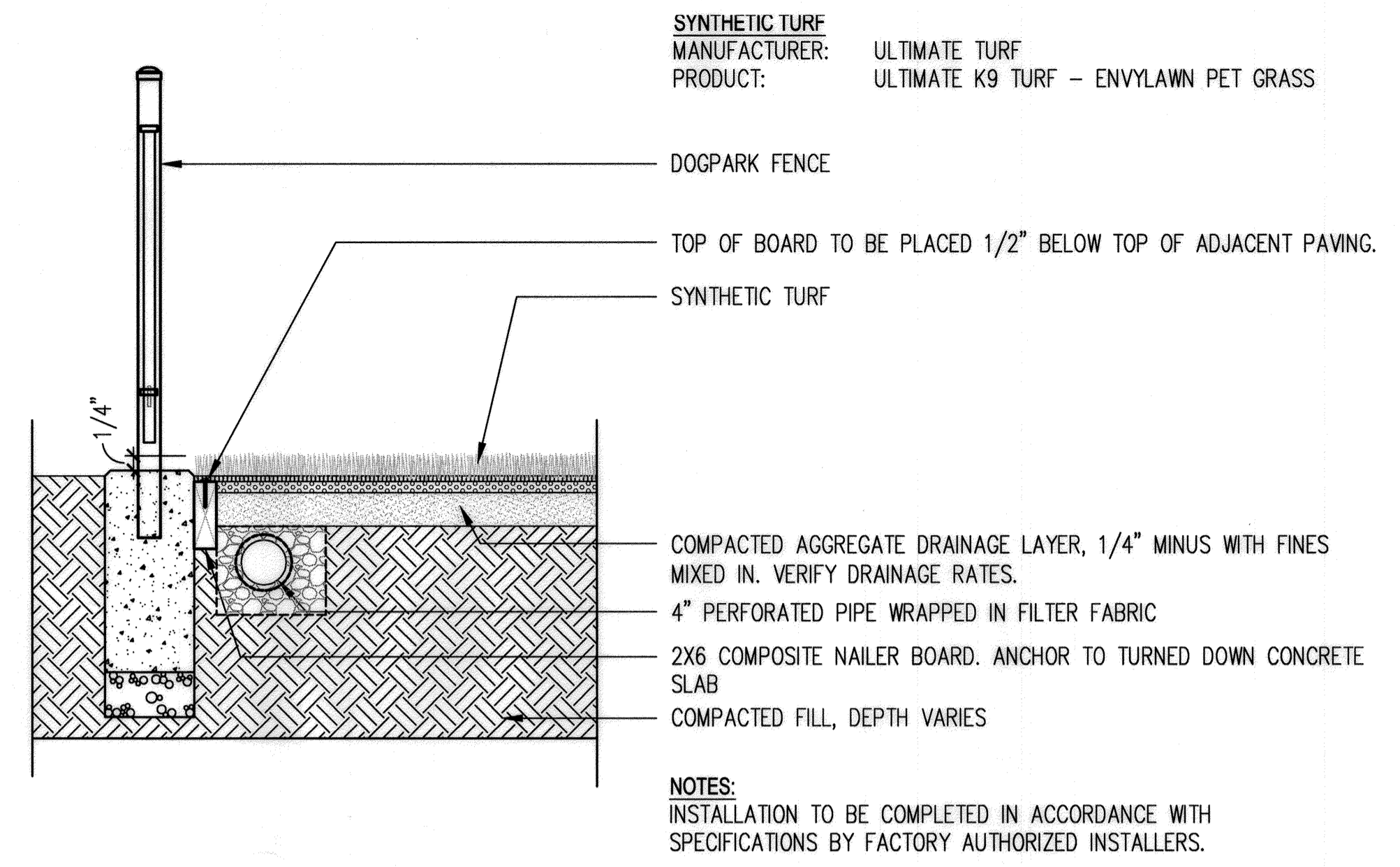
<p><b>BENCHMARK ENGINEERS, INC.</b> ENGINEERS • LAND SURVEYORS • PLANNERS 8480 BALTIMORE NATIONAL PIKE SUITE 315 • ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BEI-CIVILENGINEERING.COM</p>		<p><b>DESIGN COLLECTIVE</b> ARCHITECTURE PLANNING INTERIORS WWW.DESIGNCOLLECTIVE.COM 601 EAST PRATT STREET, SUITE 300 BALTIMORE, MARYLAND 21202 TEL 410-585-6655 FAX 410-539-6042 OFFICES IN BALTIMORE &amp; DURHAM</p>	
<p><b>OWNER:</b> CORRIDOR SQUARE, LLC 6800 DEERPATH ROAD ELKRIDGE, MD 21075 410.579.2442</p>		<p><b>CORRIDOR SQUARE PARCELS A &amp; C</b> RESIDENTIAL APARTMENT BUILDING</p>	
<p><b>DEVELOPER:</b> MURN DEVELOPMENT 6800 DEERPATH ROAD ELKRIDGE, MD 21075 410.579.2442</p>		<p>TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 &amp; 65) TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND</p>	
<p><b>DESIGN:</b> BR</p>		<p><b>DRAFT:</b> MM</p>	
<p><b>DATE:</b> SEPTEMBER 2018</p>		<p><b>BEI PROJECT NO.:</b> 2695</p>	
<p><b>SCALE:</b> SEE DETAIL</p>		<p><b>SHEET:</b> 32 OF 39</p>	

CONSTRUCTION SET - REF. L210

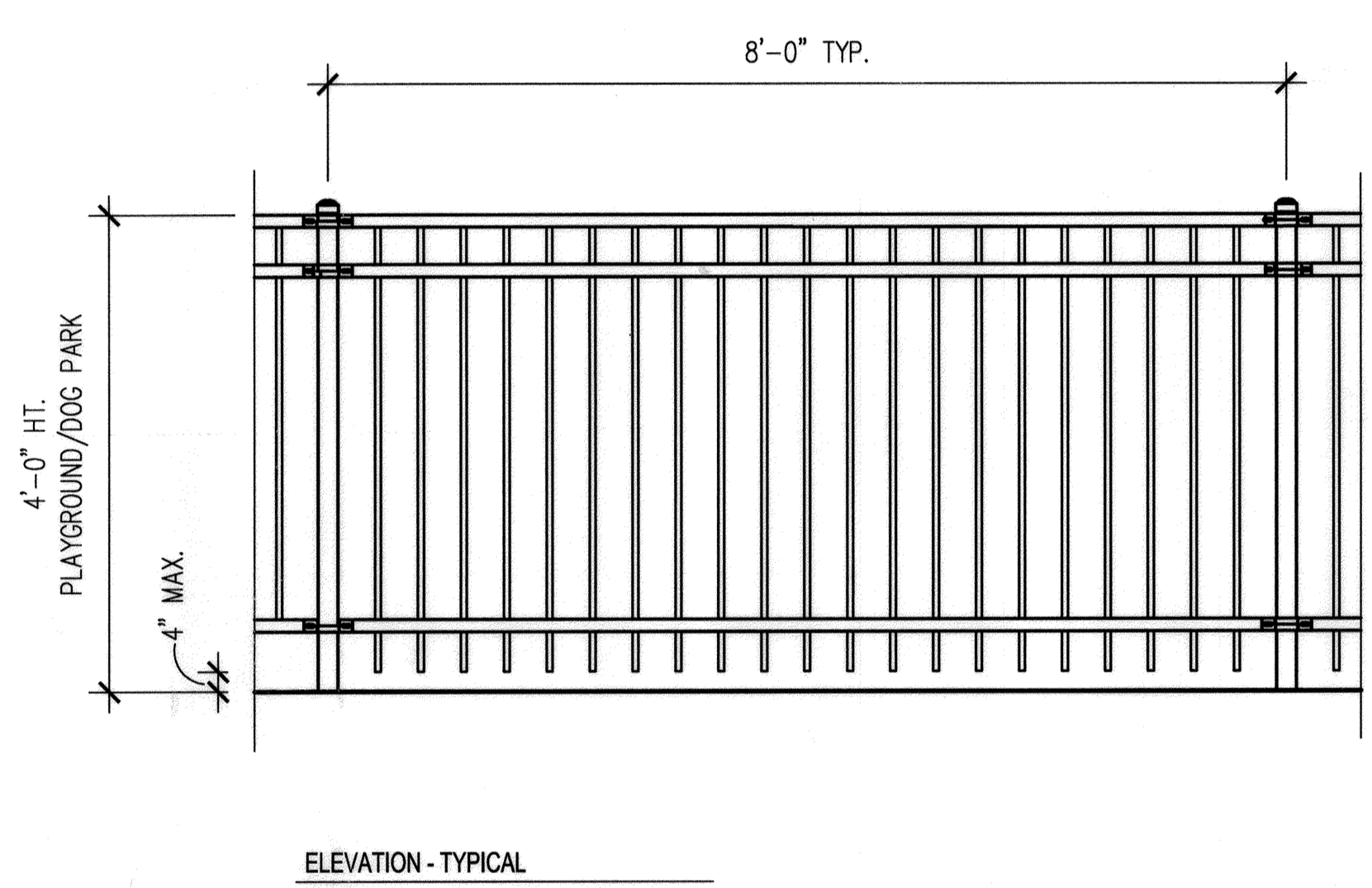




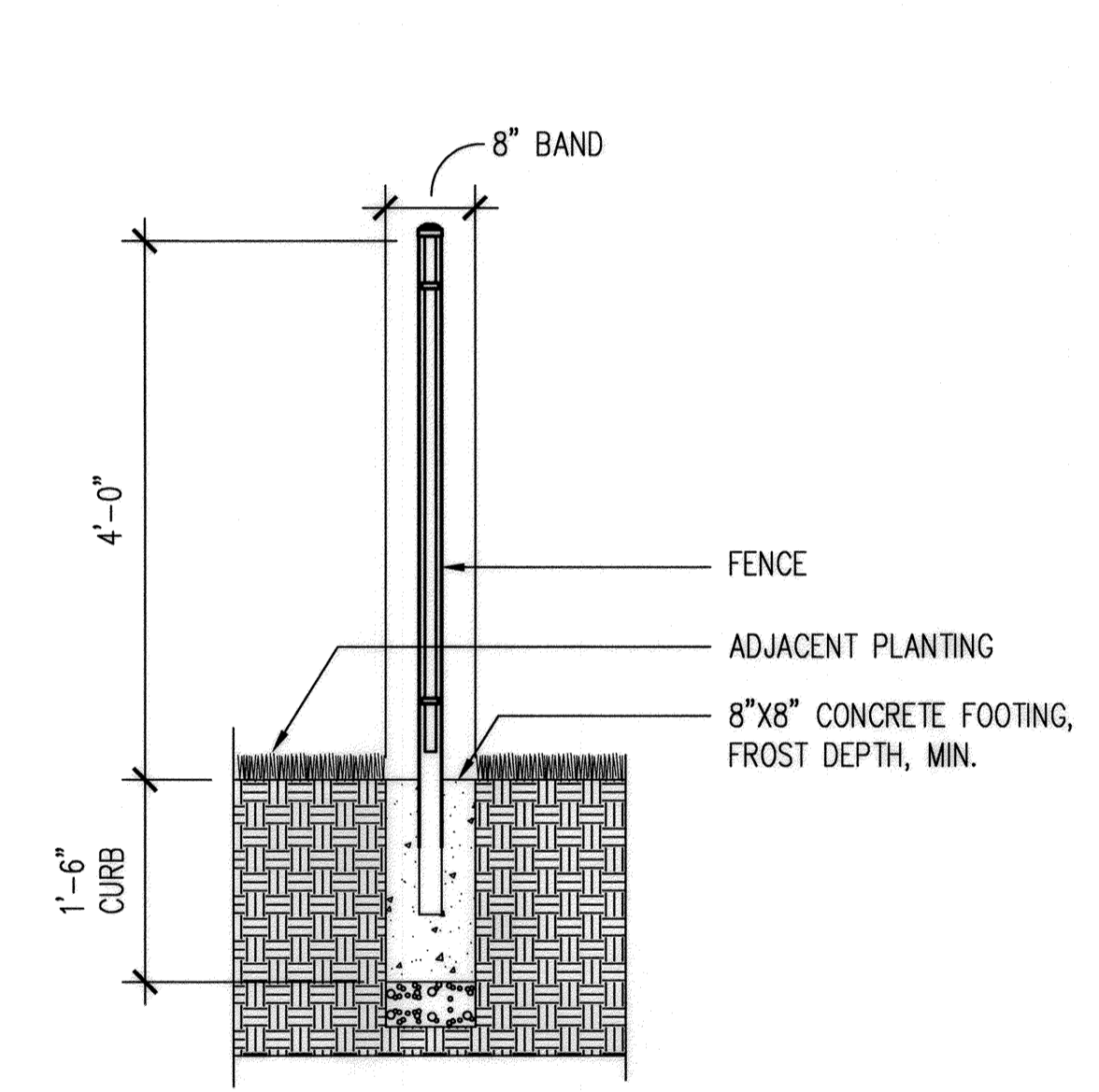
**1 PLAYGROUND SURFACE**  
3/4" = 1'-0"



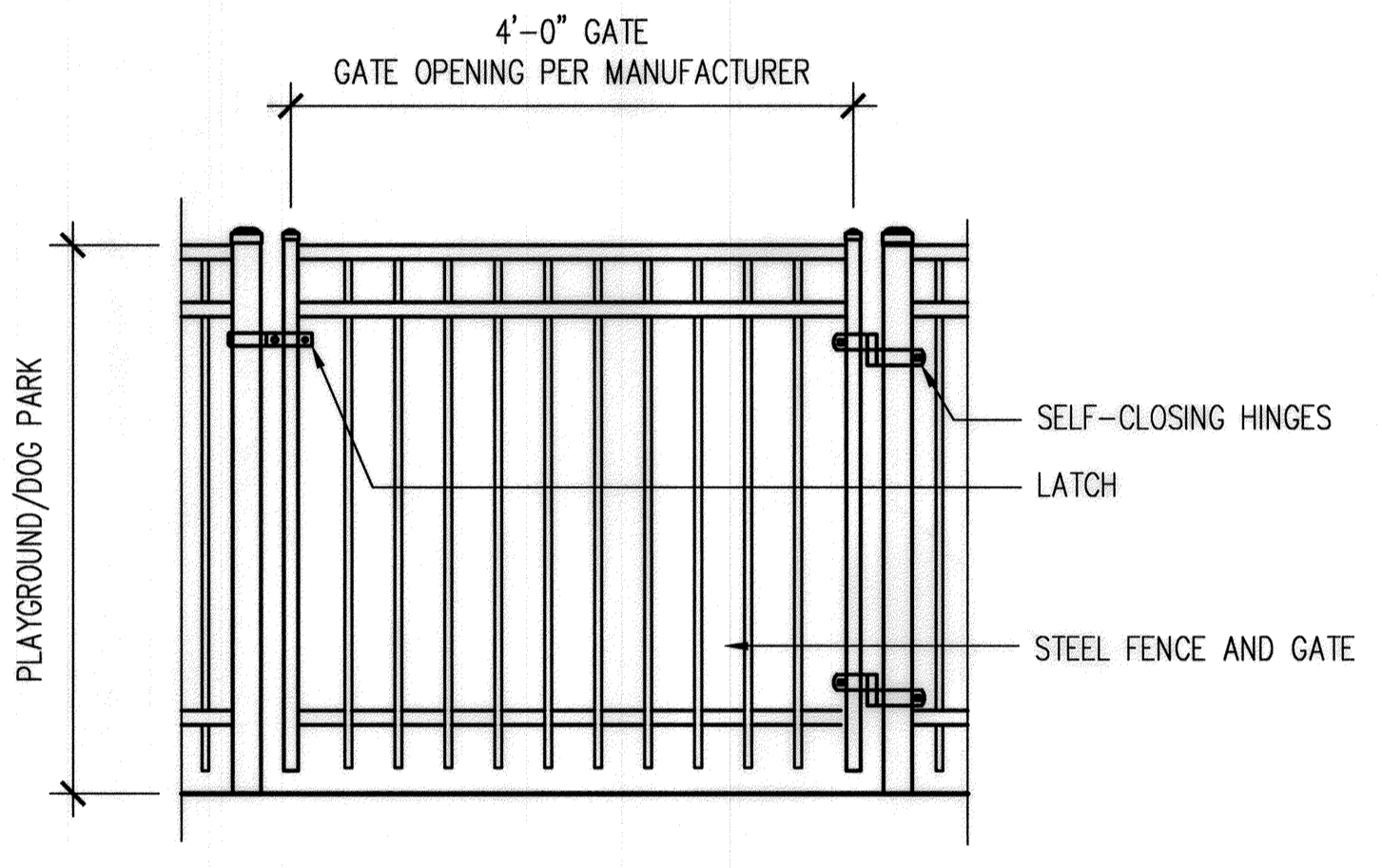
**2 SYNTHETIC TURF**  
1" = 1'-0"



ELEVATION - TYPICAL



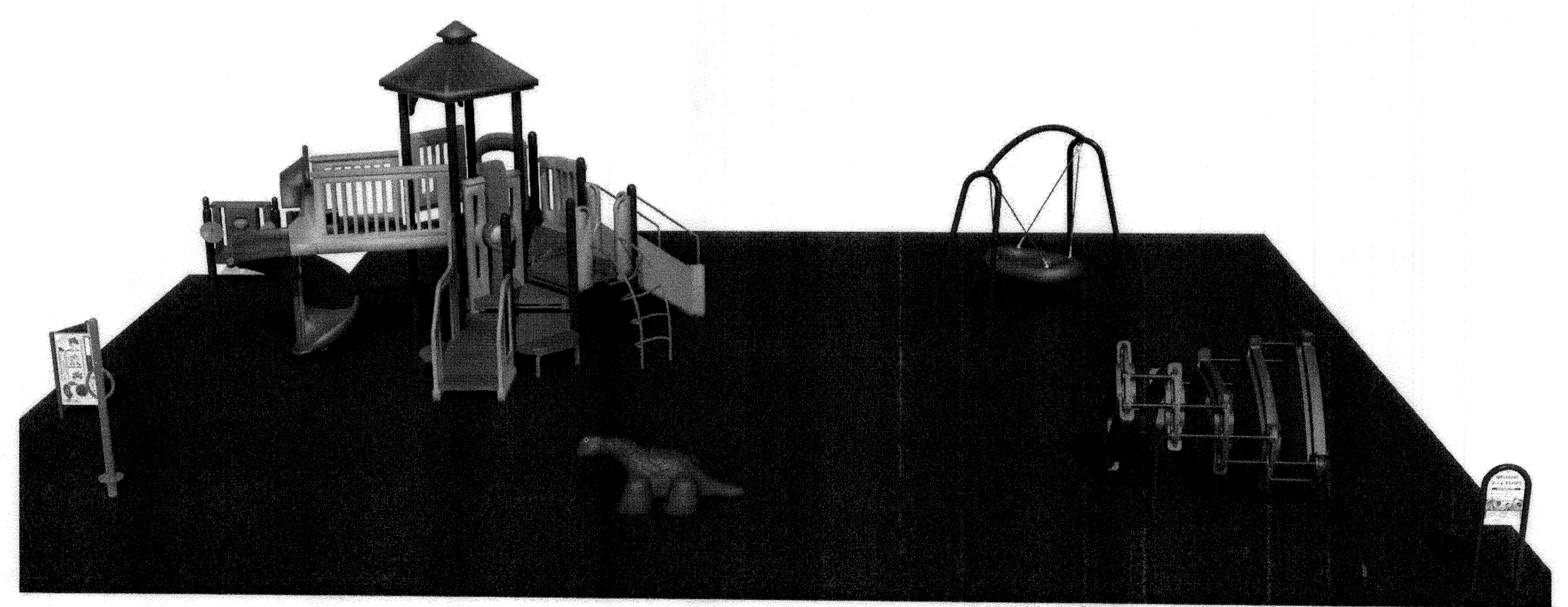
SECTION



ELEVATION - GATE

NOTES:  
REF. L204 FOR FENCE MATERIALS & INFORMATION

**3 PLAYGROUND & DOGPARK FENCE**  
3/4" = 1'-0"



**4 PLAYGROUND EQUIPMENT**  
NTS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*Paul Edman* 10.12.18  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
*Karl Salovey* 10.18.18  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
*William J. J. J.* 10.18.18  
 DIRECTOR

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 21243, Expiration Date: 12-21-22  
 AS-BUILT 3/19/21

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 1038, EXPIRATION DATE: 6/12/2020

<b>BENCHMARK ENGINEERING, INC.</b> ENGINEERS • LAND SURVEYORS • PLANNERS 8480 BALTIMORE NATIONAL PIKE & SUITE 315 • ELK RIDGE CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BEI-CIVILENGINEERING.COM		<b>DESIGN COLLECTIVE</b> ARCHITECTURE PLANNING INTERIORS WWW.DESIGNCOLLECTIVE.COM 601 EAST PRATT STREET, SUITE 300 BALTIMORE, MARYLAND 21202 TEL 410.685.6655 FAX 410.539.9242 OFFICES IN BALTIMORE & DURHAM	
OWNER: CORRIDOR SQUARE, LLC 6800 DEERPATH ROAD ELK RIDGE, MD 21075 410.579.2442		<b>CORRIDOR SQUARE PARCELS A &amp; C</b> RESIDENTIAL APARTMENT BUILDING TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65) TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND	
DEVELOPER: MURN DEVELOPMENT 6800 DEERPATH ROAD ELK RIDGE, MD 21075 410.579.2442		<b>SITE DEVELOPMENT PLAN</b> <b>DETAILS - PLAYGROUND &amp; DOGPARK</b>	
DATE: SEPTEMBER 2018	BEI PROJECT NO. 2695	DESIGN: BR	DRAFT: MM
SCALE: SEE DETAIL	SHEET 33 OF 39		

CONSTRUCTION SET - REF. L211

AS-BUILT

SDP-18-002

**STRUCTURAL NOTES**  
 DESIGN LOADS & VALUES BASED ON GEOTECHNICAL ENGINEERING REPORT PREPARED BY HILLIS-CARNES ENGINEERING ASSOCIATES, INC. DATED AUGUST 28, 2017.  
 ALLOWABLE SAFE SOIL BEARING PRESSURE = 3,000 PSF  
 ACTIVE EQUIVALENT FLUID PRESSURE = 40 PSF/FT  
 PASSIVE EQUIVALENT FLUID PRESSURE = 360 PSF/FT  
 SOIL WEIGHT = 120 PSF  
 COEFFICIENT OF FRICTION = 0.4  
 MINIMUM FACTOR OF SAFETY AGAINST SLIDING = 1.5  
 MINIMUM FACTOR OF SAFETY AGAINST OVERTURNING = 1.5

**1. GENERAL**  
 A. ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE PROVISIONS OF THE 2015 IBC, STATE AND LOCAL COUNTY REQUIREMENTS, AND THE FOLLOWING CRITERIA:

**2. FOUNDATIONS**  
 A. THE ASSUMED ALLOWABLE SAFE BEARING PRESSURE IS 3,000 PSF. TO BE VERIFIED BY AN ON-SITE GEOTECHNICAL ENGINEER OR BUILDING OFFICIAL. ALL FOOTINGS SHALL PROJECT AT LEAST 1'-0" INTO UNDISTURBED NATURAL SOIL OR COMPACTED STRUCTURAL FILL.  
 B. BOTTOMS OF FOOTINGS TO BE AT LEAST 24" BELOW FINISHED GRADE OR TO FROST LINE DETERMINED BY BUILDING OFFICIAL. BEARING STRATA SHALL BE ADEQUATELY DRAINED BEFORE PLACING CONCRETE. NO EXCAVATION SHALL BE CLOSER THAN AT LEAST A SLOPE OF TWO HORIZONTAL TO ONE VERTICAL (2 HORIZ:1 VERT) TO UNDERSIDE EDGE OF ANY EXISTING FOOTINGS WITHOUT THE WRITTEN AND CERTIFIED PERMISSION OF A GEOTECHNICAL ENGINEER. STEP FOOTINGS WITH A RATIO OF TWO HORIZ: TO ONE VERTICAL.  
 C. PROVIDE SHORING AND PROTECTION FOR EXCAVATION BANKS AS NECESSARY TO PREVENT CAVING AND COMPLY WITH ALL APPLICABLE OSHA RULES AND REGULATIONS.

**3. CONCRETE**  
 A. CONCRETE MATERIAL, QUALITY CONTROL, DESIGN AND CONSTRUCTION SHALL CONFIRM WITH REQUIREMENTS OF CHAPTER 19, INTERNATIONAL BUILDING CODE (IBC), AND WITH BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI-318).  
 B. MINIMUM SPECIFIED 28 DAYS CONCRETE DESIGN STRENGTH SHALL BE AS SHOWN ON THE CONCRETE STRENGTH AND DURABILITY REQUIREMENTS TABLE LOCATED BELOW UNLESS A HIGHER STRENGTH IS SHOWN ON THE CONSTRUCTION DRAWINGS. EXPOSURE CATEGORIES ARE PER ACI-318, CHAPTER 4. CEMENTITIOUS MATERIALS CONTENT SHALL BE LIMITED AS PER ACI-318, TABLE 4.2.2. ALL CEMENTITIOUS MATERIALS SHALL BE INCLUDED IN CALCULATING WATER/CEMENT RATIO.  
 C. MIXING, TRANSPORTING, AND PLACEMENT OF CONCRETE SHALL CONFORM TO ACI 301.  
 D. HIGH STRENGTH GROUT SHALL BE NON-SHRINK, NON-METALLIC CONFORMING TO ASTM C 827 AND SHALL HAVE A COMPRESSIVE STRENGTH OF 5000 PSI AT 28 DAYS.  
 E. ALL REINFORCING STEEL SHALL BE HIGH STRENGTH NEW BILLET STEEL CONFORMING TO ASTM A-615, GRADE 60 (80,000 PSI). WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A-185. ALL REINFORCING SHALL BE DETAILED, FABRICATED, AND PLACED IN ACCORDANCE WITH THE ACI'S "MANUAL OF STANDARD PRACTICE FOR DETAILING CONCRETE STRUCTURES" (ACI-315). DETAILS OF REINFORCEMENT SHALL CONFORM TO ACI 318-LATEST EDITION, ACI 315 AND CRSI STANDARDS.  
 F. CONCRETE PROTECTION FOR REINFORCEMENT: PROVIDE THE MINIMUM CLEARANCES (COVER) FOR REINFORCEMENT AS FOLLOWS:  
 FOOTINGS AND OTHER CONCRETE POURED AGAINST EARTH 3"  
 FORMED CONCRETE EXPOSED TO EARTH 2"  
 SLABS ON GROUND, UNLESS OTHERWISE NOTED MID-DEPTH

G. PROVIDE CORNER AND "T" BARS TO MATCH ALL HORIZONTAL REINFORCING IN WALLS AND FOOTINGS. ALL LAPS SHALL BE A MINIMUM OF 30 BAR DIAMETERS. PROVIDE DOWELS BETWEEN ALL FOOTINGS, WALLS AND PIERS TO MATCH SIZE AND SPACING OF VERTICAL REINFORCING.  
 H. WALL TO HAVE VERTICAL CONTROL JOINTS SPACED AT NO MORE THAN 25'-0" HORIZONTALLY AS REQUIRED AND EXPANSION JOINTS AT 75'-0" O.C. OR WHERE SHOWN ON PLAN.  
 I. CHAMFER ALL EXPOSED CONCRETE CORNERS, 3/4"x3/4" UNLESS NOTED OTHERWISE ON ARCHITECTURAL DRAWINGS.  
 J. MAXIMUM PERMISSIBLE WATER/CEMENTITIOUS MATERIALS RATIOS FOR CONCRETE WHEN STRENGTH DATA FROM FIELD EXPERIENCE OR TRIAL MIXTURES ARE NOT AVAILABLE SHALL BE IN ACCORDANCE WITH ACI 318.  
 K. PLACE CONCRETE FOR FOUNDATIONS ON THE SAME DAY SUBGRADE APPROVAL IS GIVEN BY THE GEOTECHNICAL ENGINEER.  
 L. PROTECT CONCRETE FROM FREEZING DURING PLACING AND FOR A PERIOD OF NOT LESS THAN FIVE DAYS AFTERWARD.  
 M. CAST IN PLACE ALL SLEEVES AND INSERTS.

**4A. MASONRY**  
 A. ALL MASONRY CONSTRUCTION TO BE IN ACCORDANCE WITH THE NATIONAL CONCRETE MASONRY ASSOCIATION'S STANDARD PRACTICES AND SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF LOAD-BEARING CONCRETE MASONRY OR ACI 530 BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES. ALL MASONRY TO CONFORM TO THE FOLLOWING SPECIFICATION:  
 LOAD-BEARING C.M.U. ASTM C90  
 MORTAR ASTM C270, TYPE S EXTERIOR BELOW GRADE  
 ASTM C270, TYPE N EXTERIOR ABOVE GRADE  
 ASTM C270, TYPE N INTERIOR LOAD-BEARING  
 ASTM C270, TYPE O INTERIOR NON-LOAD BEARING

B. CMU UNITS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF FM = 1500 PSI. CONTRACTOR SHALL PROVIDE SPECIAL TEST AND INSPECTION FOR THE LOCATION OF THE REINFORCEMENT AND DURING CONSTRUCTION OF CMU WALL.

C. JOINT REINFORCING: PROVIDE LADDER TYPE ZINC COATED, COLD DRAWN STEEL WIRE CONFORMING TO ASTM A82 DUROWALL OR EQUIVALENT AT EVERY OTHER BLOCK COURSE ABOVE GRADE. REINFORCEMENT SHOULD CONSIST OF TWO OR MORE LONGITUDINAL WIRES, NO. 9 GAUGE OR LARGER, WELD CONNECTED WITH NO. 12 GAUGE OR LARGER CROSS WIRES.

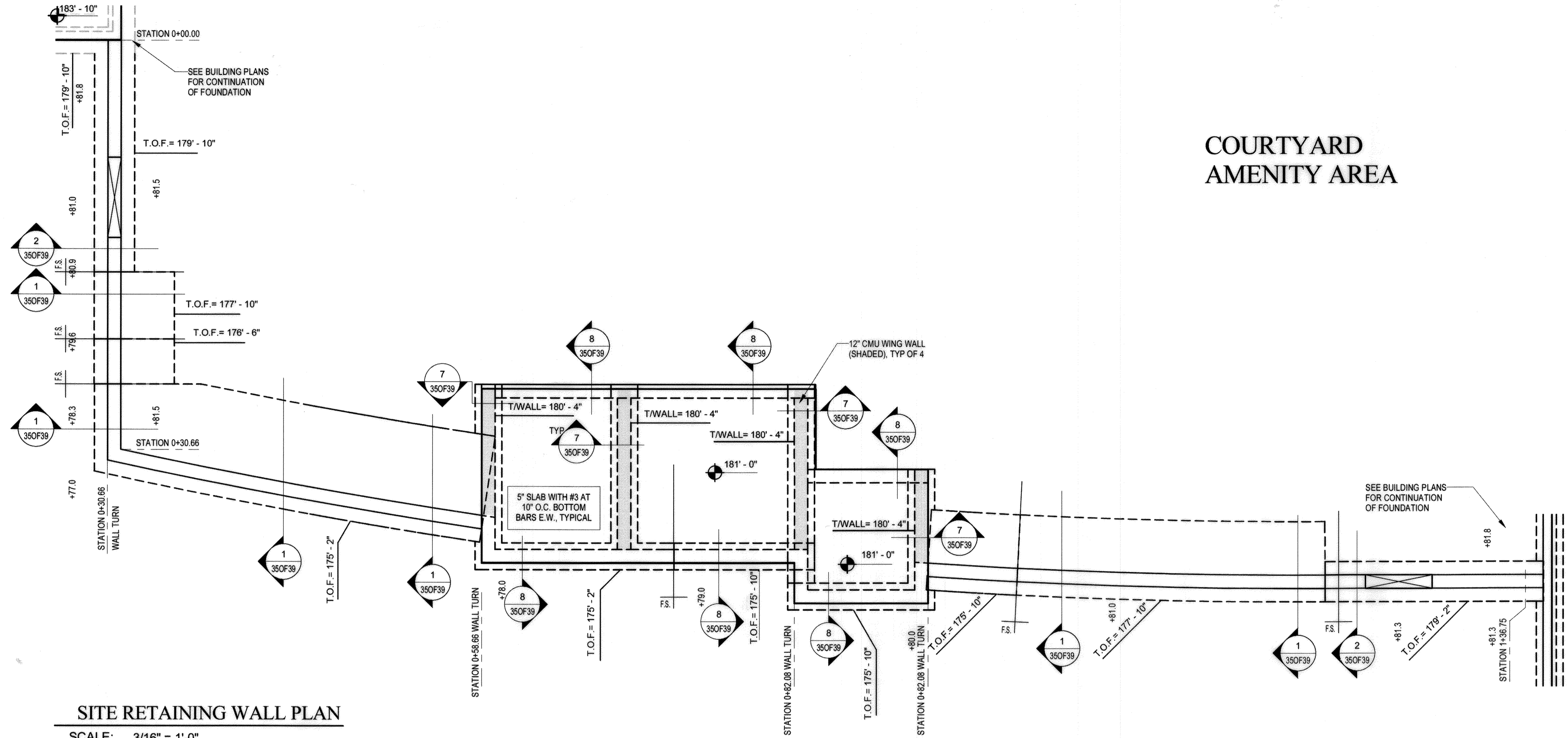
D. GROUT OR PEA GRAVEL CONCRETE USED FOR FILLING UNIT CELLS OF MASONRY SHALL CONFORM TO ASTM C476 AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI ON THE NET AREA AT 28 DAYS.

E. REINFORCED MASONRY SHALL BE BUILT SO THAT ALL CELLS LINE UP. WEBS OF UNITS TO BE REINFORCED SHALL BE FILLED WITH GROUT OR PEA GRAVEL AND SHALL HAVE FULL MORTAR COVERAGE.

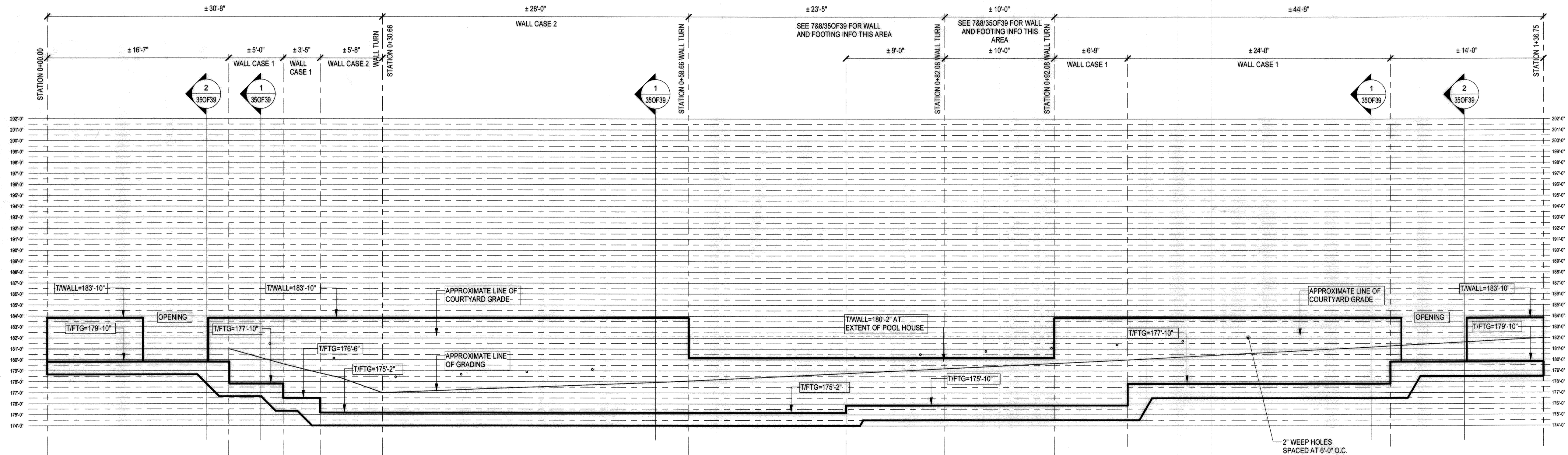
F. FOR LOW LIFT GROUTING (5'-0" OR LESS), PROVIDE A LAP AT THE SPLICE OF 48 BAR DIAMETERS. FOR HIGH LIFT GROUTING, PROVIDE "CLEAN OUT" AT BOTTOM OF ALL BLOCK COURSES.

**5. CONSTRUCTION OBSERVATION AND TESTING**  
 A. THE REQUIRED FOOTING SUBGRADE BEARING CAPACITY SHALL BE CERTIFIED BY A MARYLAND LICENSED PROFESSIONAL ENGINEER (TESTING AGENCY) PRIOR TO LEVELING PAD PLACEMENT.  
 B. CONSTRUCTION OF RETAINING WALL SHALL BE PERFORMED UNDER THE OBSERVATION OF A MARYLAND LICENSED PROFESSIONAL ENGINEER (TESTING AGENCY). UPON COMPLETION OF THE WORK, TESTING AGENCY SHALL SUBMIT TO THE CITY OF GAITHERSBURG DEPARTMENT OF PUBLIC WORKS A SIGNED AND SEALED REPORT STATING THAT THE RETAINING WALL WAS CONSTRUCTED IN ACCORDANCE WITH PLANS, SPECIFICATIONS AND ACCEPTED MODIFICATIONS (IF APPLICABLE), AND THAT THE RETAINING WALL AS-BUILT IS ADEQUATE TO WITHSTAND DESIGN SERVICE LOADS AND PRESSURES TO WHICH IT MAY BE SUBJECTED.  
 C. THIS WALL IS LOCATED ENTIRELY ON PRIVATE PROPERTY AND SHALL BE PRIVATELY MAINTAINED BY THE PROPERTY OWNER.

# COURTYARD AMENITY AREA



**SITE RETAINING WALL PLAN**  
 SCALE: 3/16" = 1'-0"



**SITE RETAINING WALL ELEVATION**  
 SCALE: 3/16" = 1'-0"

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 Chief, Development Engineering Division: *Howard* 10-12-18  
 Chief, Division of Land Development: *Walt* 10-18-18  
 Director: *Nick* 10-18-18

**"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"**  
 Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. *2148* Expiration Date: *12-31-21*  
 AS-BUILT 3/18/21

 13575 Heathcote Blvd, Suite 170 Gainesville, VA 20155 Tel: 571.261.9280 Fax: 571.261.9286 www.cateseng.com	REVISION NO. DATE
	 PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 16270 EXPIRATION DATE: 11/26/18
OWNER: CORRIDOR SQUARE, LLC 6800 DEERPATH ROAD ELKDRIDGE, MD 21075 410.579.2442	<b>CORRIDOR SQUARE PARCELS A &amp; C</b> RESIDENTIAL APARTMENT BUILDING 164 MAP 37 - GRID: 33 - PARCELS 272 & P/O 107(LOTS 64 & 65) ELECTION DISTRICT NO. 1 HOWARD COUNTY, MARYLAND
DEVELOPER: MURN DEVELOPMENT 6800 DEERPATH ROAD ELKDRIDGE, MD 21075 410.579.2442	<b>SITE RETAINING WALL PLANS/ELEVATIONS</b> DATE: SEPTEMBER 2018 PROJECT NO.: 876-013-16 SCALE: As indicated SHEET NO.: 340F39 DESIGN: MRP DRAFT: VTF

MASONRY LEVEL B SPECIAL INSPECTION ACI 530-11 (TABLE 1.19.2)						
INSPECTION TASKS	C	P	REFERENCE FOR CRITERIA		PERIODIC STAGES	REQ. ON PROJECT
			IBC SECTION	ACI 530.1 ASCE 5 TMS 402		
1. VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS		X				Y
2. AS MASONRY CONSTRUCTION BEGINS, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:						
a. PROPORTIONS OF SITE PREPARED MORTAR	X			ART. 2.1, 2.6A		Y
b. CONSTRUCTION OF MORTAR JOINTS	X			ART. 3.3B		Y
c. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGE	X			ART. 2.4B, 2.4H	INSPECTIONS NOT LESS THAN ONCE EVERY 5,000 SQ. FEET OF WALL, DISTRIBUTED EVENLY THROUGHOUT MASONRY CONSTRUCTION	N
d. LOCATION OF REINFORCEMENT CONNECTORS AND PRESTRESSING TENDONS AND ANCHORAGES	X			ART. 3.4, 3.6A		N
e. PRESTRESSING TECHNIQUE	X			ART. 3.6B		N
f. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY	X	X		ART. 2.1C		N
3. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:						
a. GROUT SPACE	X			ART. 3.2D, 3.2F		Y
b. GRADE, TYPE AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS, AND PRESTRESSING TENDONS AND ANCHORAGES	X			ART. 1.16, 1.17		Y
c. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES	X			ART. 1.16, 3.2E, 3.4 AND 3.6A	PRIOR TO EACH GROUT POUR	Y
d. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS	X			ART. 2.6E, 2.4 AND 3.6A		Y
e. CONSTRUCTION OF MORTAR JOINTS	X			ART. 3.3B		Y
4. VERIFY DURING CONSTRUCTION						
a. SIZE AND LOCATION OF STRUCTURAL ELEMENTS	X			ART. 3.3F		Y
b. TYPE, SIZE AND LOCATIONS OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES OR OTHER CONSTRUCTION	X			ART. 1.16.4.3, 1.17.1	INSPECTIONS NOT LESS THAN ONCE EVERY 5,000 SQ. FEET OF WALL, DISTRIBUTED EVENLY THROUGHOUT MASONRY CONSTRUCTION WHEN TEMP. IS BELOW 40°F, OR ABOVE 90°F. UNANNOUNCED INSPECTIONS SHALL OCCUR AT LEAST EVERY OTHER DAY OF MASONRY CONSTRUCTION	Y
c. WELDING OF REINFORCEMENT	X			ART. 2.17.7.2, 3.3.4c, 8.3.3.4b		N
d. PREPARATION, CONSTRUCTION AND PROTECTION OF MASONRY DURING COLD WEATHER (<40°F) OF HOT WEATHER (>90°F)	X			ART. 1.9C, 1.0, 13.1.3.7		Y
e. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE	X			ART. 3.6B		N
f. PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS IS IN COMPLIANCE	X			ART. 3.5, 3.6C		N
g. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS	X	X		ART. 3.3, 8.8		N
5. OBSERVATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS	X			ART. 1.4 B.2.a.3, 1.4 B.2.c.3, 1.4 B.3, 1.4 B.4		Y
C = CONTINUOUS P = PERIODIC						

CONCRETE STRENGTH AND DURABILITY REQUIREMENTS				
LOC.	STRUCTURAL MEMBERS	EXPOSURE CLASS (1)	MINIMUM 28 DAY COMPRESSIVE STRENGTH (PSI) (2)	RECOMMENDED MINIMUM SLUMP (INCHES) (4)
FOOTINGS				
	WITH BOTTOM OF FOOTING POURED AT REQUIRED FROST DEPTH	F2	4500	0.45
SLABS ON GRADE AND SOIL SUPPORTED STAIRS				
	EXTERIOR IN DIRECT CONTACT WITH SOIL EXPOSED TO DE-ICING CHEMICALS	F3/C2	5000	0.40

- EXPOSURE CLASS DESCRIPTIONS:  
F2: CONCRETE EXPOSED TO FREEZING AND THAWING CYCLES AND IN CONTINUOUS CONTACT WITH MOISTURE.  
F3: CONCRETE EXPOSED TO FREEZING AND THAWING CYCLES AND IN CONTINUOUS CONTACT WITH MOISTURE AND EXPOSED TO DEICING CHEMICALS.  
C2: CONCRETE EXPOSED TO MOISTURE AND DEICING CHEMICALS.
- CONCRETE WHICH CAN BE EXPOSED TO CYCLES OF FREEZING-AND-THAWING DURING CONSTRUCTION SHALL BE AIR-ENTRAINED IN ACCORDANCE WITH THE TABLE BELOW WITH THE SAME AIR CONTENT AS FOR EXPOSURE CLASS F1.
- THE CONCRETE STRENGTHS SPECIFIED ARE THE CODE REQUIRED MINIMUM. SEE THE PLANS AND DETAILS FOR HIGHER CONCRETE STRENGTH REQUIREMENTS.
- RECOMMENDED SLUMP APPLY WHEN VIBRATION IS USED TO CONSOLIDATE THE CONCRETE AND MAY BE INCREASED BY 1" FOR OTHER CONSOLIDATION METHODS. SLUMP MAY BE INCREASED WHEN CHEMICAL ADMIXTURES ARE USED, PROVIDED THAT THE ADMIXTURE TREATED CONCRETE HAS THE SAME OR LOWER WATER/CEMENT RATIO AND DOES NOT SHOW SEGREGATION POTENTIAL OR EXCESSIVE BLEEDING. CONCRETE SLUMP SHALL NOT BE LESS THAN 1 INCH. MEASURED SLUMP TOLERANCE SHALL BE +/- 1.5 MAXIMUM.

TOTAL AIR CONTENT FOR CONCRETE EXPOSED TO CYCLES OF FREEZING-AND-THAWING			
NOMINAL MAXIMUM AGGREGATE SIZE (INCHES)	AIR CONTENT, PERCENT		
	EXPOSURE CLASS, F1	EXPOSURE CLASSES, F2 AND F3	
3/8	6.0%	7.5%	
1/2	5.5%	7.0%	
3/4	5.0%	6.0%	
1	4.5%	6.0%	

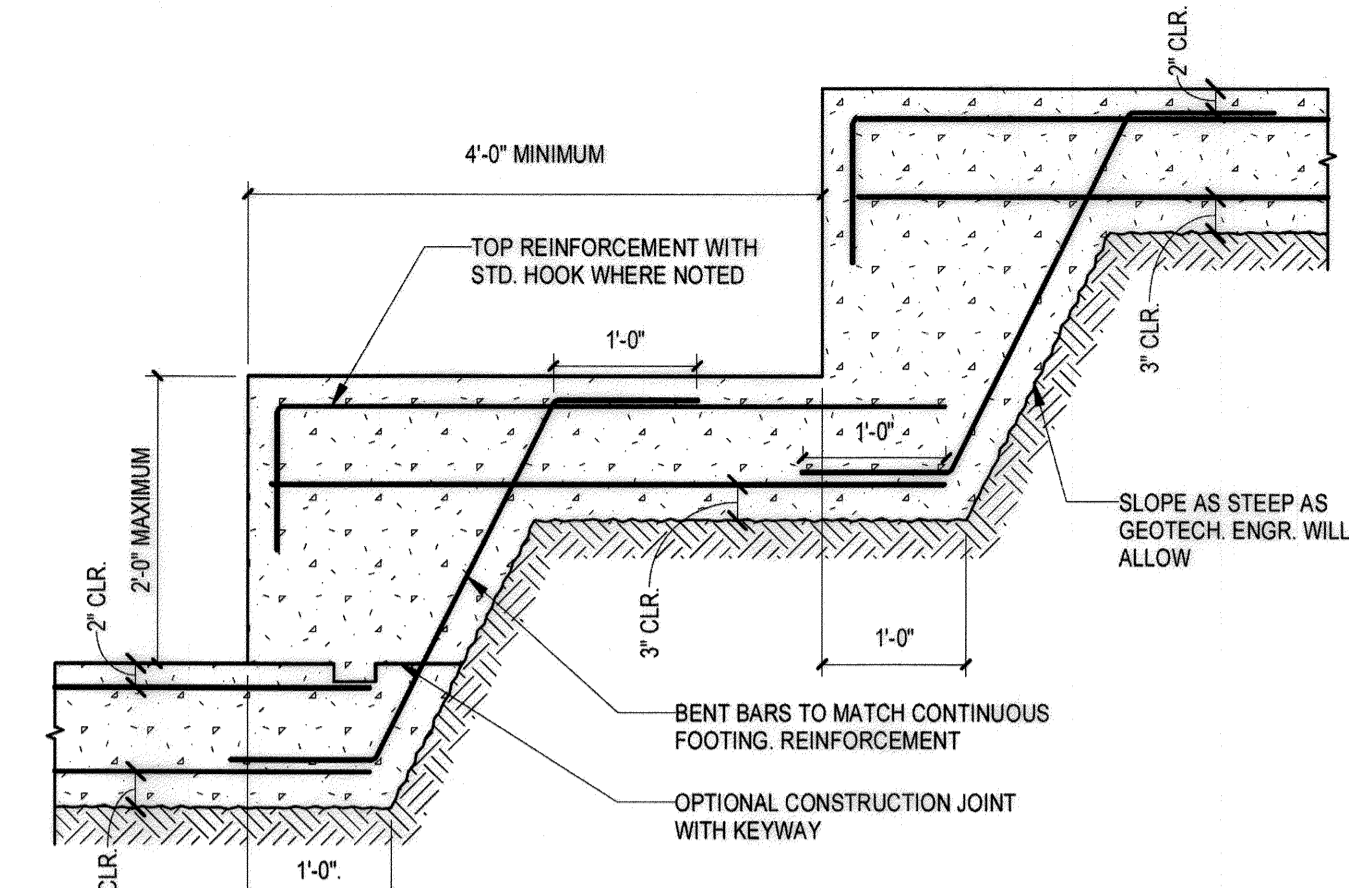
AGGREGATE SHALL CONFORM TO ASTM C33 AND MAY RANGE FROM 3/8" TO 3/4" IN SIZE. CONCRETE IN EXPOSURE CLASSES F1, F2, OR F3 SHALL BE AIR ENTRAINED ACCORDING TO TABLE 4.4.1, ACI-318. THIS TABLE SHOWN IS FOR USUL. MAXIMUM AGGREGATE SIZES USED IN STRUCTURAL CONCRETE. MEASURED AIR CONTENT TOLERANCE SHALL BE +/- 1.5 MAXIMUM.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

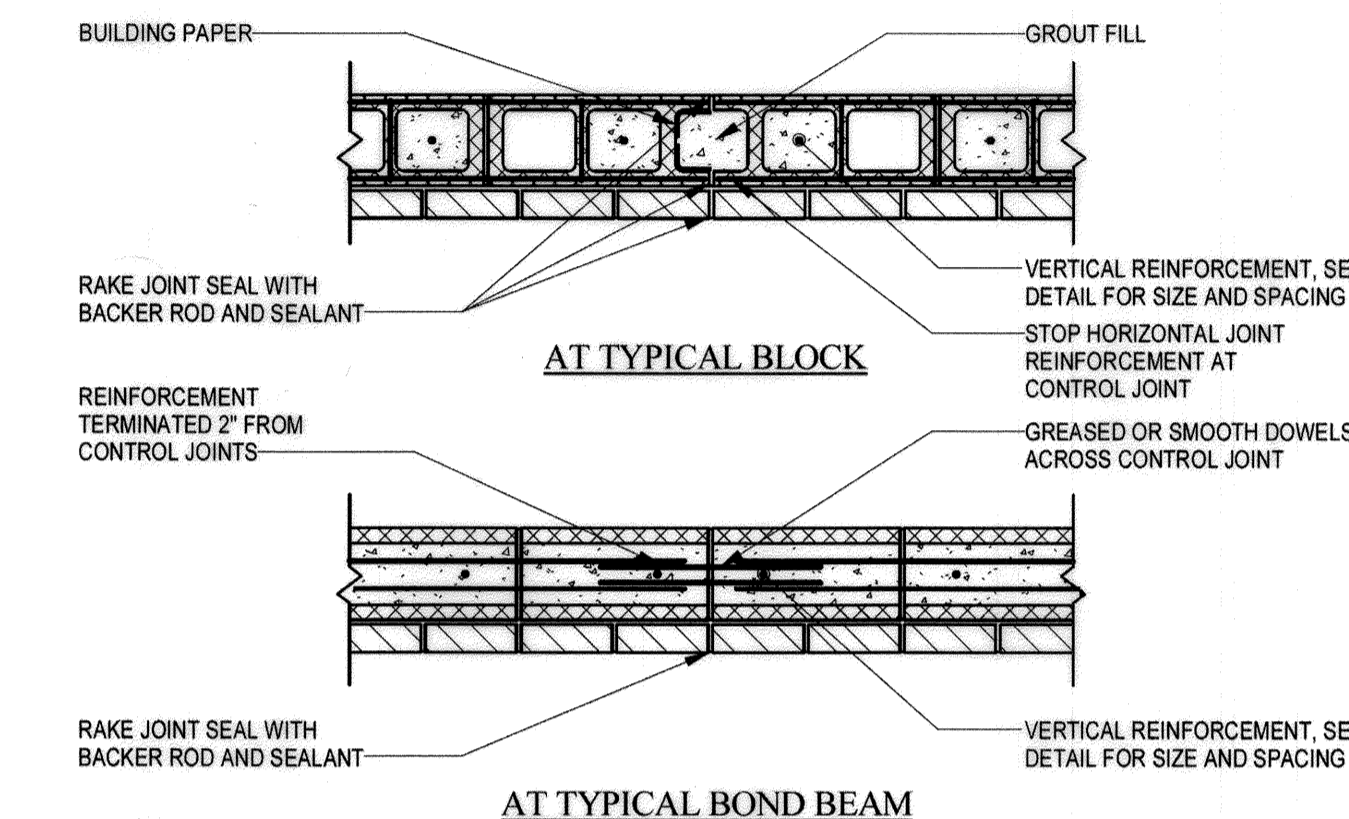
*Chad Clark* 10-12-18  
CHIEF, DEVELOPMENT ENGINEERING DIVISION JR DATE

*Kent LaVelle* 10-18-18  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

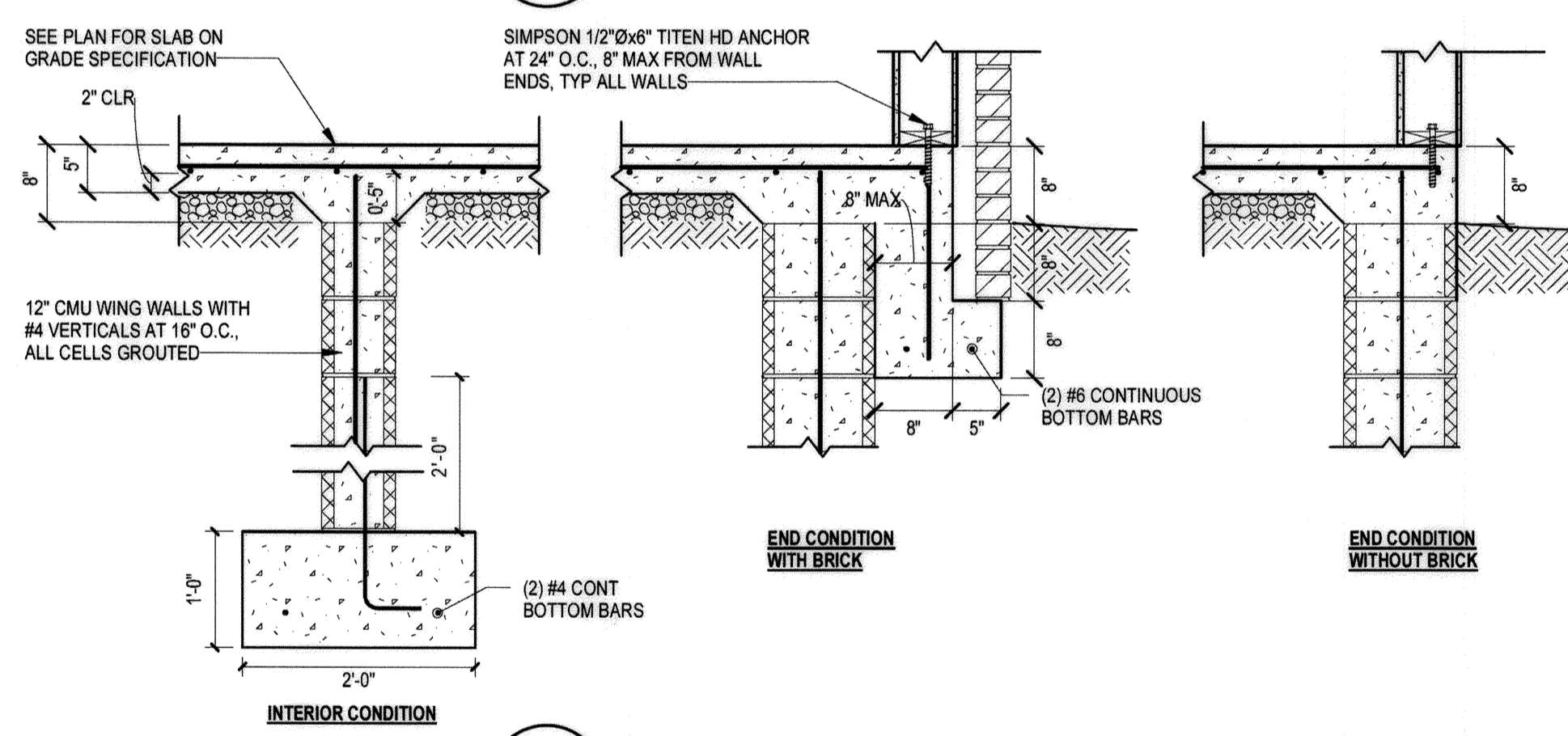
*Walter J. J...* 10-18-18  
DIRECTOR DATE



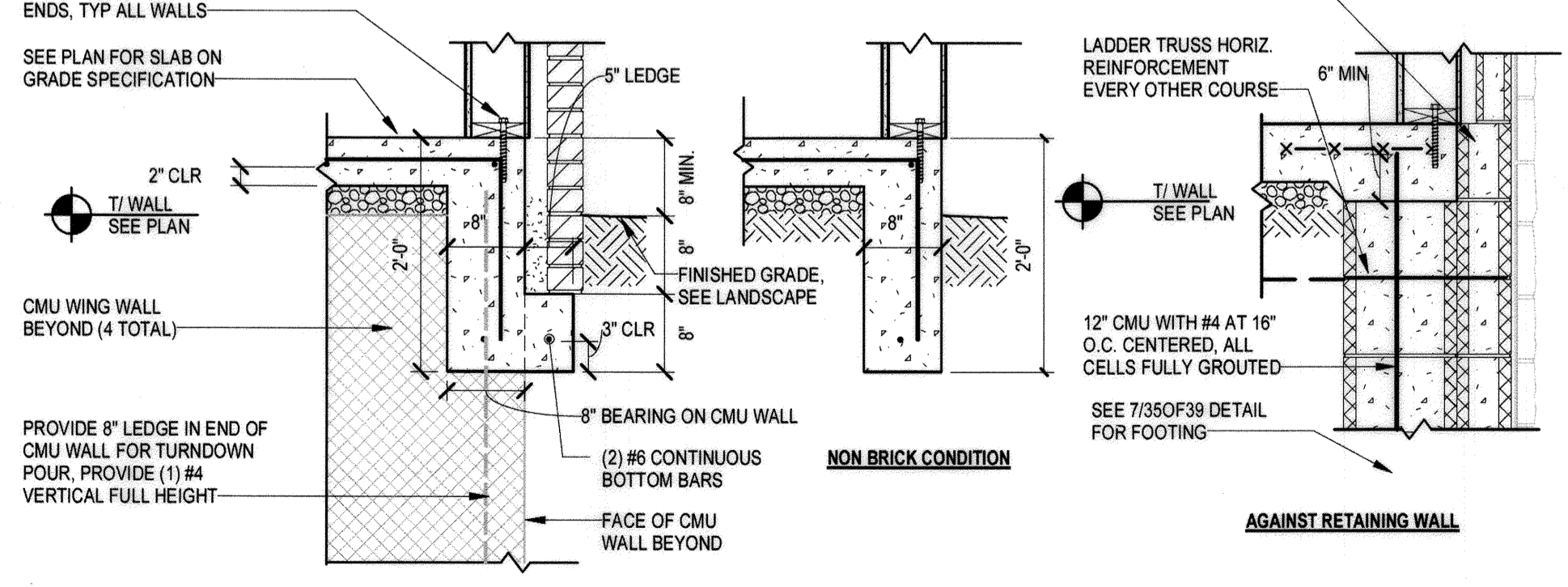
5 STEPPED FOOTING DETAIL  
350F39 SCALE: N.T.S.



6 CMU WALL CONTROL JOINT  
350F39 SCALE: N.T.S.

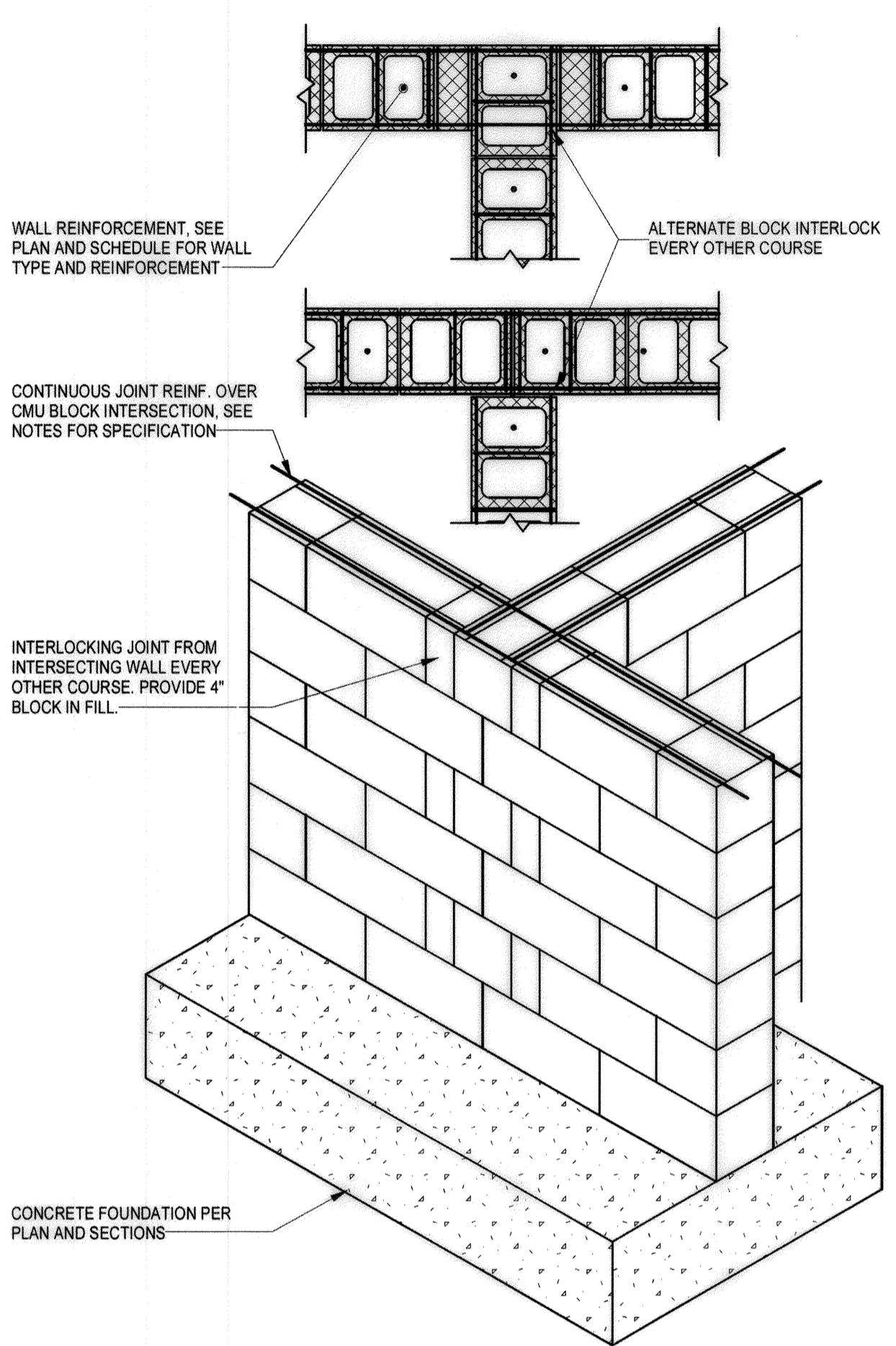


7 SLAB ON GRADE AT CMU WALL AT POOL HOUSE  
350F39 SCALE: N.T.S.

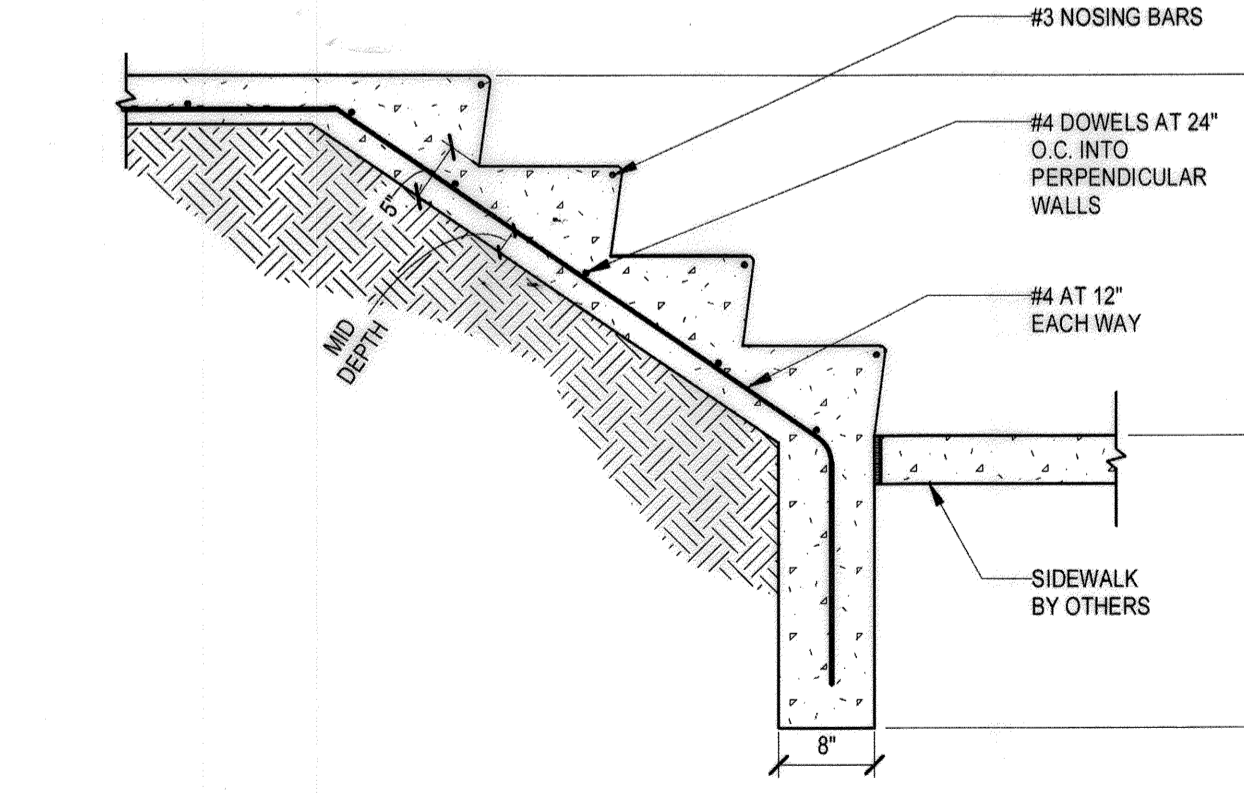


8 GRADE BEAM AT POOL HOUSE PERIMETER  
350F39 SCALE: N.T.S.

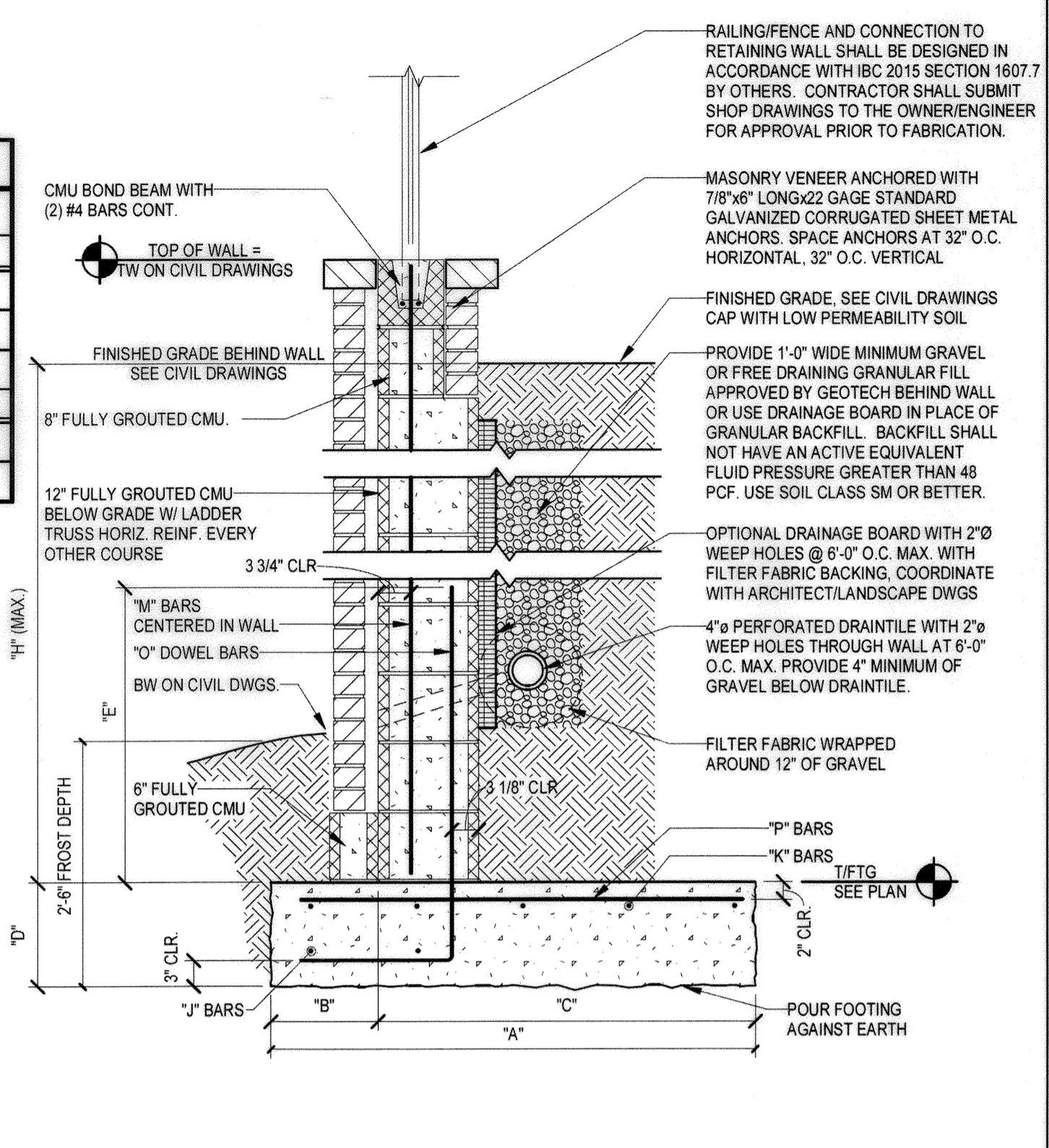
CMU RETAINING WALL - (ACTIVE PRESSURE = 48 PCF)					
WALL HEIGHT	DIMENSIONS				
	H	A	B	C	D
CASE 1 4'-1\"/>					



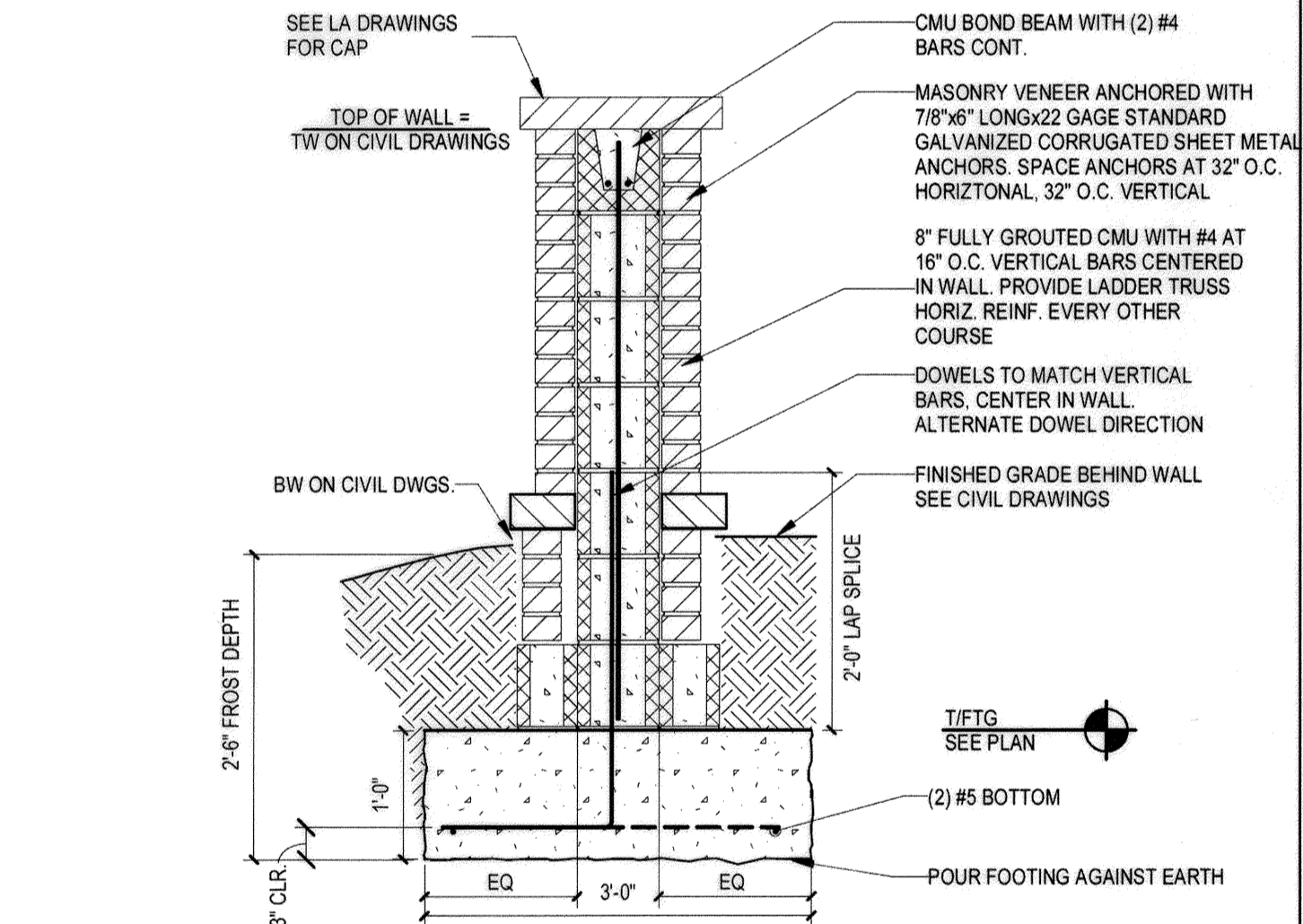
3 TYPICAL REINFORCING AT CMU WALL CORNERS  
350F39 SCALE: N.T.S.



4 TYPICAL SOIL SUPPORTED STAIR  
350F39 SCALE: N.T.S.



1 CMU CANTILEVERED SITE RETAINING WALL  
350F39 SCALE: N.T.S.



2 CMU CANTILEVERED SOUND WALL  
350F39 SCALE: N.T.S.

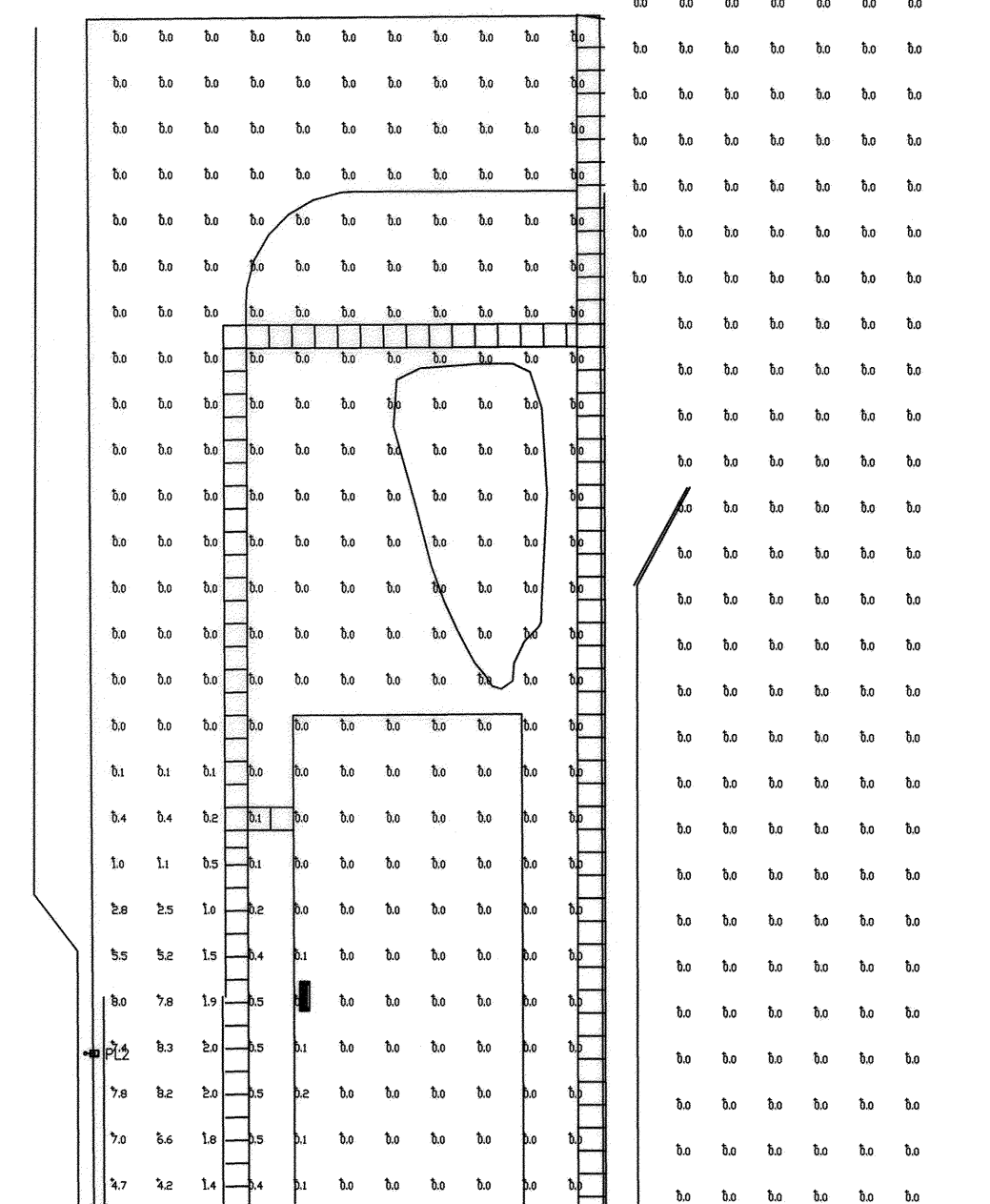
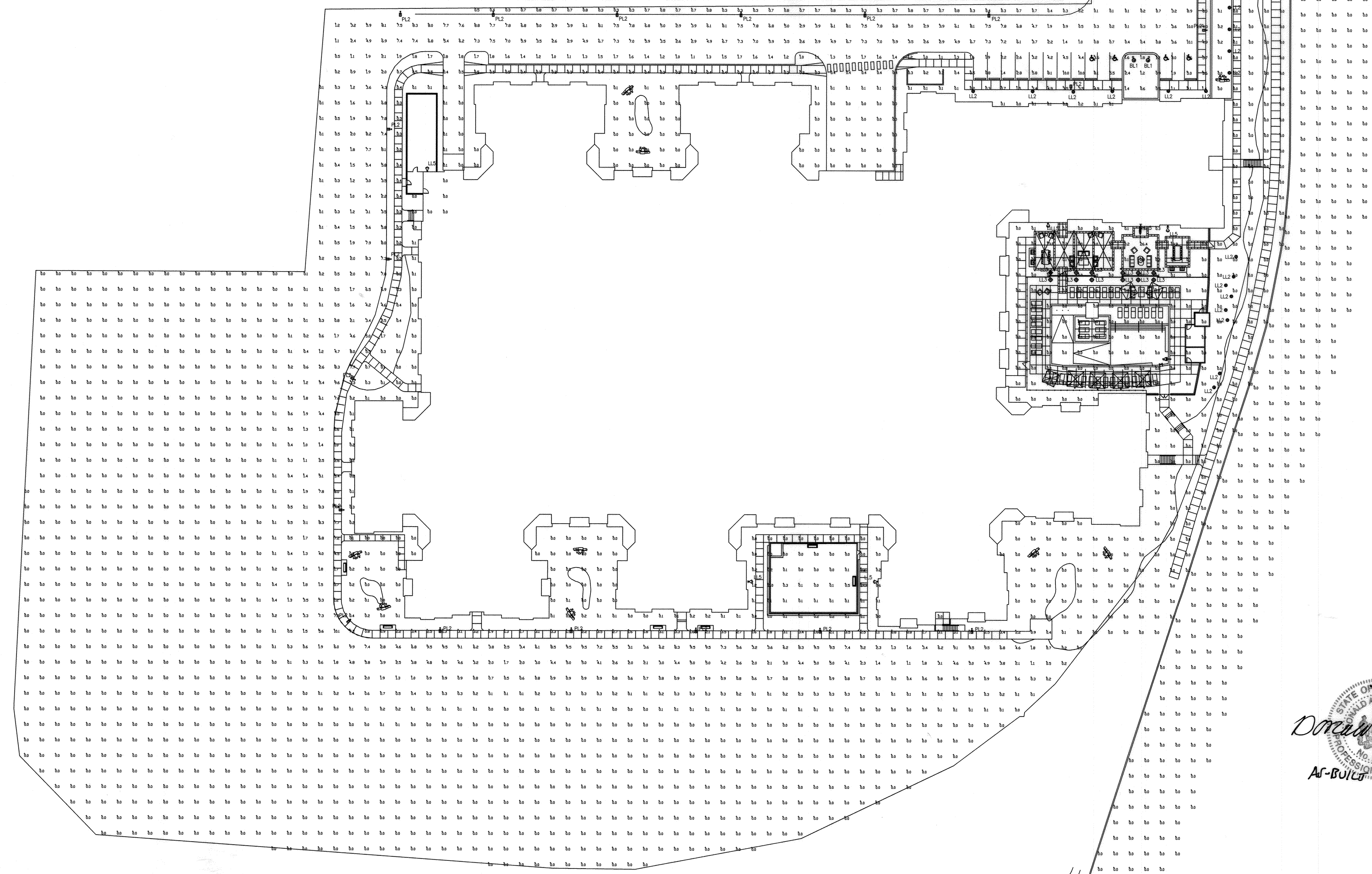
 13375 Heathcote Blvd. Suite 170 Gainesville, VA 20155 Tel: 571.261.9280 Fax: 571.261.9286 www.cateseng.com	 PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 16218 EXPIRATION DATE: 11/28/18
CORRIDOR SQUARE, LLC 6800 DETRUPATH ROAD ELK RIDGE, MD 21074 410.579.2442	<b>CORRIDOR SQUARE PARCELS A &amp; C</b> RE-DEVELOP APARTMENT BUILDING 164 MANO ST - GRIFFIN - 1890-112 272 & P/O 1071-075 64 & 130 ELK RIDGE DISTRICT NO. 1 HOWARD COUNTY, MARYLAND
DEVELOPER: MURN DEVELOPMENT 6800 DETRUPATH ROAD ELK RIDGE, MD 21075 410.579.2442	<b>SITE RETAINING WALL DETAILS</b> DATE: SEPTEMBER 2018 PROJECT NO.: 876-013-16 DESIGN: MRP DRAFT: VTF SCALE: As indicated SHEET NO.: 350F39

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

Professional Certification, I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 21163 Expiration Date: 12-21-22  
*Donald W. J...*  
 AS-BUILT 2/18/21

Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description
□	24	PL2	SINGLE	12605	0.900	RZR-PL2-II-FR-80LED-525mA-NW-HS
□	5	ML1	SINGLE	2458	0.900	UBE-20001-W30
○	2	BL1	SINGLE	1642	0.800	UBE-10011-W30
●	20	LL2	SINGLE	211	0.900	ASPEN 3LED16 30K FL
◆	13	LL3	SINGLE	1644	0.900	SL43BZFLW120700, INGROUND
→	6	LL5	SINGLE	1553	0.900	TPS1 18LED WHT30K MFL

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Dorsey Road Spillover	Illuminance	Fc	0.00	0.0	0.0	N.A.	N.A.
Zone 1	Illuminance	Fc	0.85	26.4	0.0	N.A.	N.A.



POLE LENGTH	FOOTING DEPTH BELOW GRADE	FOOTING DIAMETER	REBAR REINFORCEMENT
20'-0" TO 25'-0"	5'-0"	2'-0"	8 #6

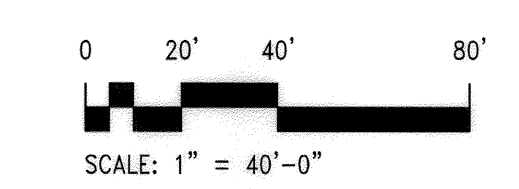
NOTES:  
 PROVIDE INDIVIDUAL BALLAST FUSING FOR EACH FIXTURE IN POLE BASE (HANDHOLE).

DETAIL - SITE LIGHTING POLE BASE  
 NOT TO SCALE

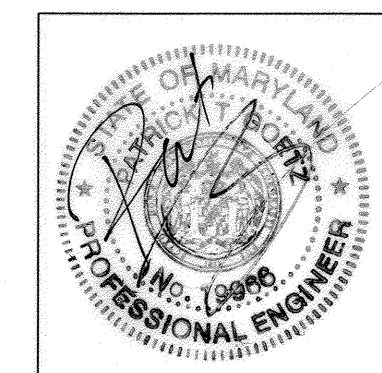
"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 21227, Expiration Date: 12-21-22



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 10-12-18  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION JR  
 [Signature] 10-12-18  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 [Signature] 10-18-18  
 DIRECTOR



**JENNERIK ENGINEERING, INC.**  
 8440 Belair Road, Nottingham, Maryland 21066  
 PH: 410-870-1300, email: info@jennerik.com  
 \*PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 13998, EXPIRATION DATE 03/04/2019. \* PATRICK TIMOTHY GOETZ

NO.	DATE	REVISION

**BENCHMARK ENGINEERING, INC.**  
 ENGINEERS & LAND SURVEYORS & PLANNERS  
 8480 BALTIMORE NATIONAL PIKE & SUITE 315 • ELLICOTT CITY, MARYLAND 21043  
 (P) 410-465-6105 (F) 410-465-6644  
 WWW.BE-CIVILENGINEERING.COM

OWNER:  
 CORRIDOR SQUARE, LLC  
 6800 DEERPATH ROAD  
 ELKCRIDGE, MD 21075  
 410.579.2442

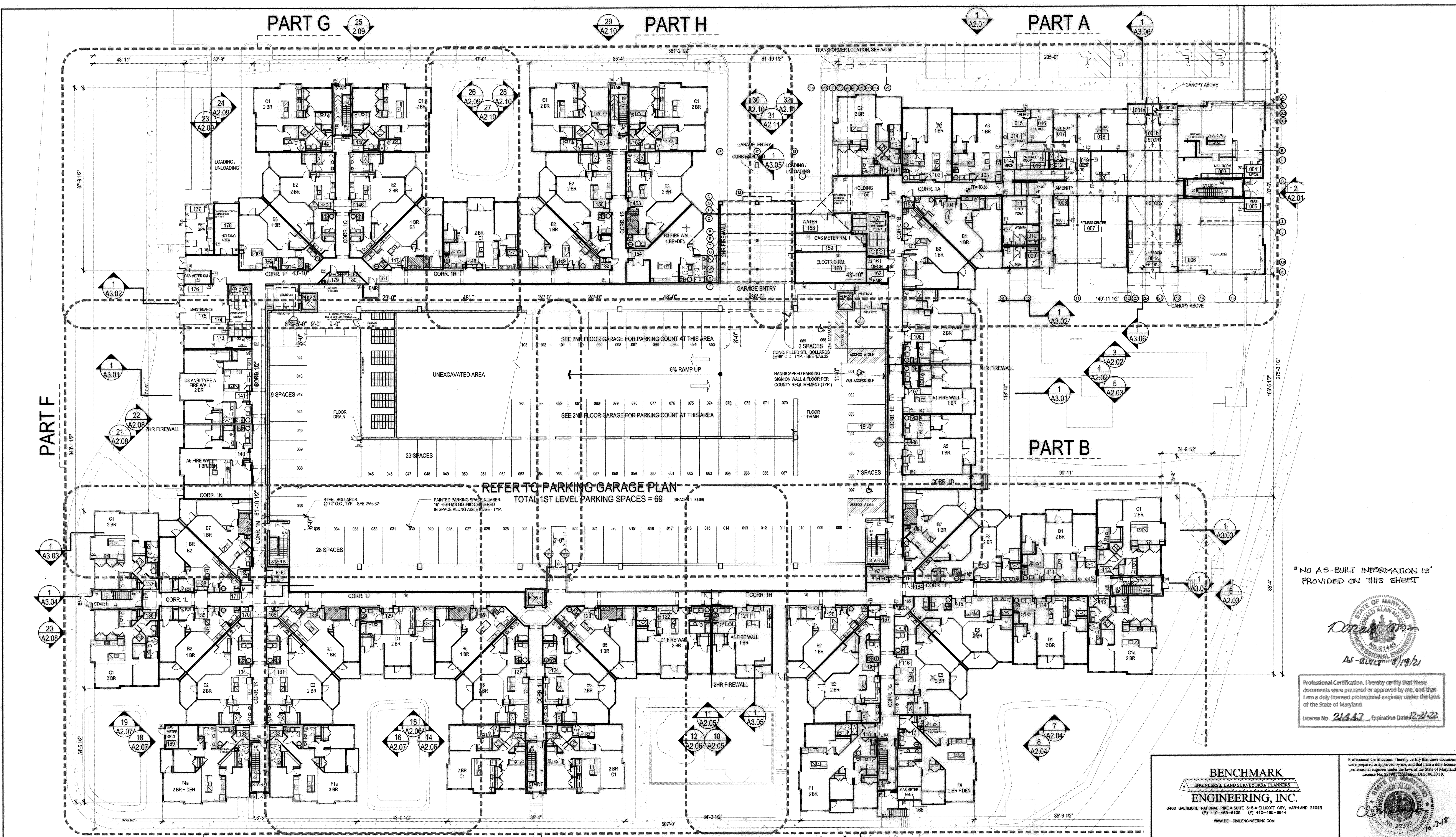
DEVELOPER:  
 MURN DEVELOPMENT  
 6800 DEERPATH ROAD  
 ELKCRIDGE, MD 21075  
 410.579.2442

DESIGN: JCO DRAFT: JCO

**CORRIDOR SQUARE PARCELS A & C**  
 RESIDENTIAL APARTMENT BUILDING  
 TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65)  
 TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79  
 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND

**SITE DEVELOPMENT PLAN PHOTOMETRIC PLAN**

DATE: SEPTEMBER 2018 BEI PROJECT NO. 2695  
 SCALE: AS NOTED SHEET 36 OF 39



"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

Professional Engineer  
 State of Maryland  
 No. 21443  
 08/19/21  
 45-8012

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 21443, Expiration Date: 12-21-22

**BENCHMARK**  
**ENGINEERING, INC.**  
 6800 DEERPATH ROAD  
 ELKCRIDGE, MD 21075  
 (P) 410-465-8105 (F) 410-465-8644  
 WWW.BE-CIVLENGINEERING.COM

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 23390, Expiration Date: 06.30.19

OWNER:  
 CORRIDOR SQUARE, LLC  
 6800 DEERPATH ROAD  
 ELKCRIDGE, MD 21075  
 410.579.2442

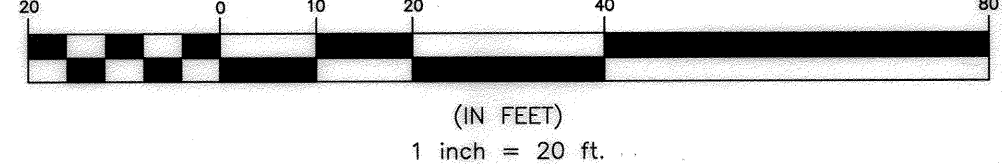
**CORRIDOR SQUARE**  
**PARCELS A & C**  
 RESIDENTIAL APARTMENT BUILDING  
 TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65)  
 TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79  
 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND

DEVELOPER:  
 MURN DEVELOPMENT  
 6800 DEERPATH ROAD  
 ELKCRIDGE, MD 21075  
 410.579.2442

**SITE DEVELOPMENT PLAN**  
**BUILDING ELEVATION PLAN**  
 DATE: SEPTEMBER 2018 BEI PROJECT NO. 2695  
 DESIGN: JCO DRAFT: JCO SCALE: 1"=30' SHEET 37 OF 39

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 10-12-18 DATE  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 [Signature] 10-18-18 DATE  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 [Signature] 10-18-18 DATE  
 DIRECTOR

NO.	DATE	REVISION





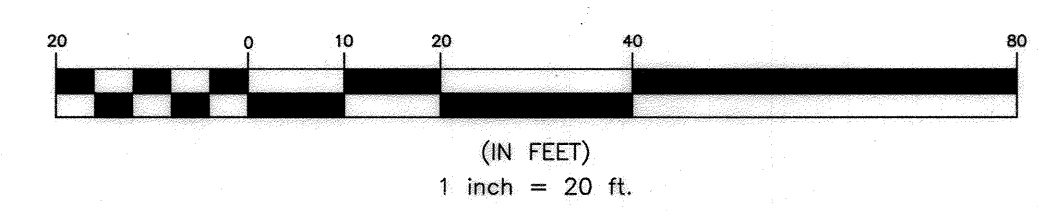
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 10-21-18  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE

*[Signature]* 10-18-18  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE

*[Signature]* 10-18-18  
 DIRECTOR  
 DATE

THE BUILDING WILL NOT EXCEED THE 60-FOOT MAXIMUM HEIGHT PERMITTED WITHIN THE T.O.D. ZONING DISTRICT.



NO.	DATE	REVISION

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

*[Signature]*  
 AS-BUILT 2/18/21

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 21467 Expiration Date: 12-31-22

**BENCHMARK**  
 ENGINEERS, LAND SURVEYORS, PLANNERS  
**ENGINEERING, INC.**  
 6480 BALTIMORE NATIONAL PIKE & SUITE 315 • ELLICOTT CITY, MARYLAND 21043  
 (P) 410-465-6105 (F) 410-465-6644  
 WWW.BEI-CIVLENGINEERING.COM

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 22390, Expiration Date: 06.30.19.

**OWNER:**  
 CORRIDOR SQUARE, LLC  
 6800 DEERPATH ROAD  
 ELKCRIDGE, MD 21075  
 410.579.2442

**DEVELOPER:**  
 MURN DEVELOPMENT  
 6800 DEERPATH ROAD  
 ELKCRIDGE, MD 21075  
 410.579.2442

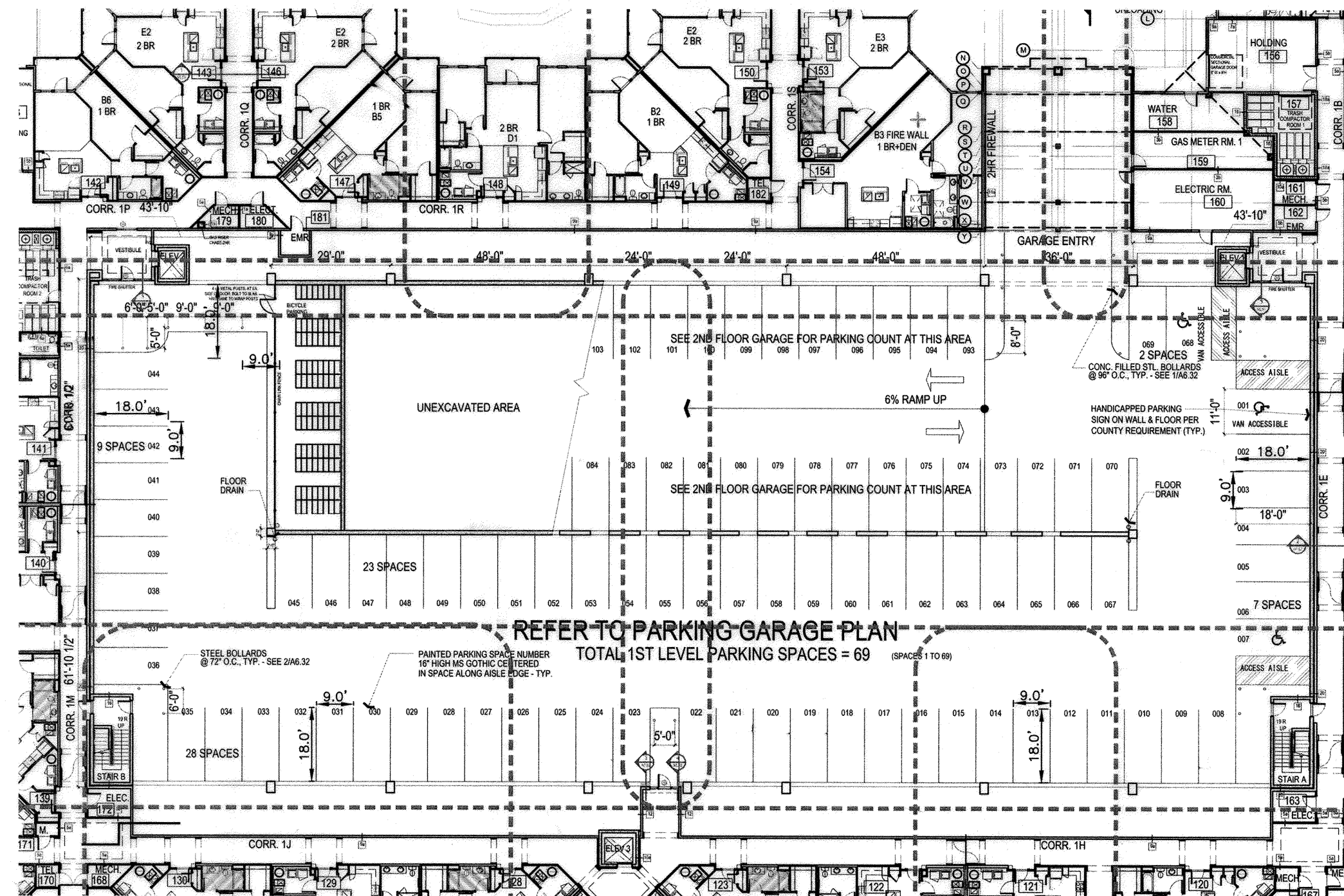
**DESIGN:** JCO **DRAFT:** JCO

**CORRIDOR SQUARE**  
 PARCELS A & C  
 RESIDENTIAL APARTMENT BUILDING

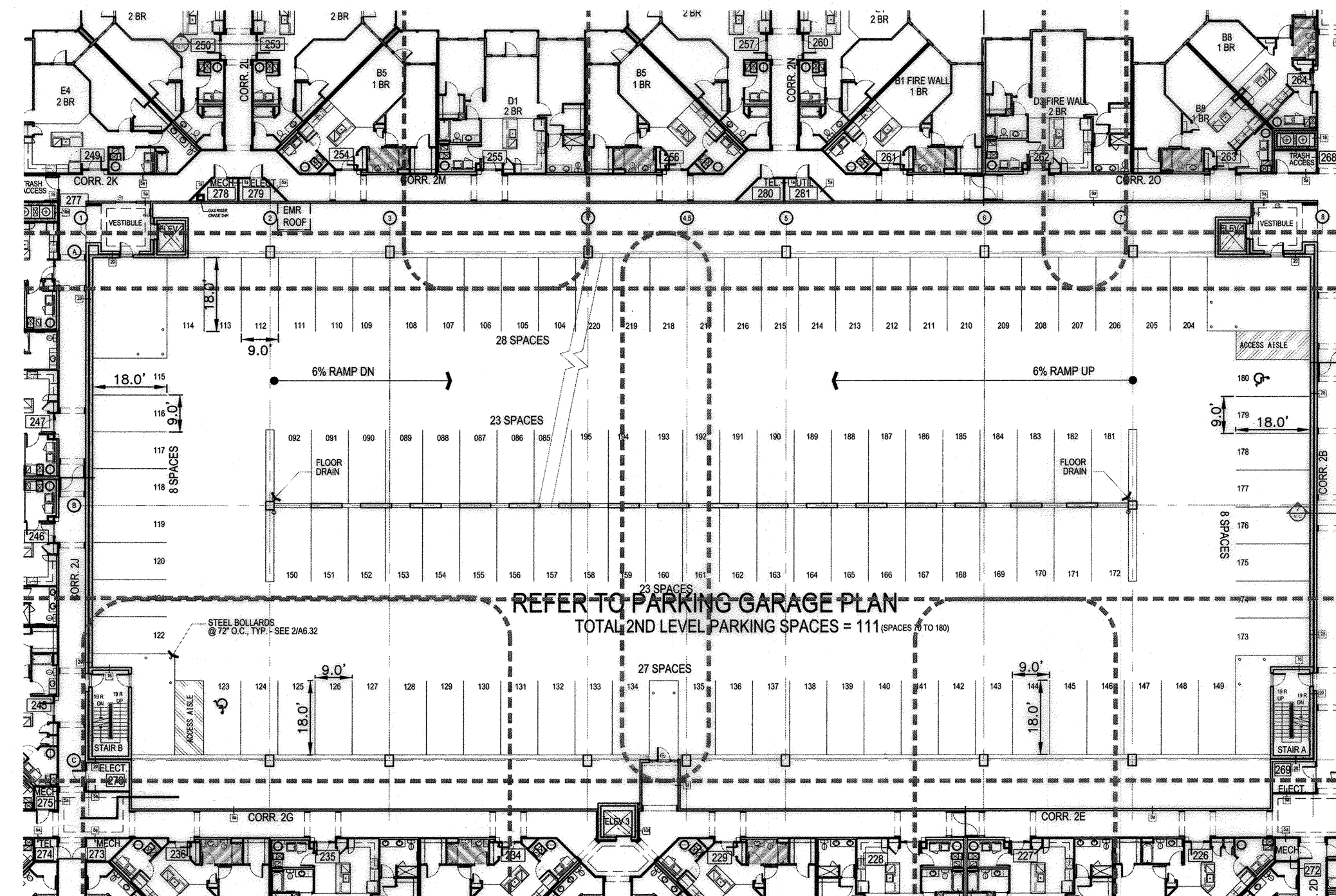
TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 & 65)  
 TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79  
 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND

**SITE DEVELOPMENT PLAN**  
**BUILDING ELEVATION PLAN**

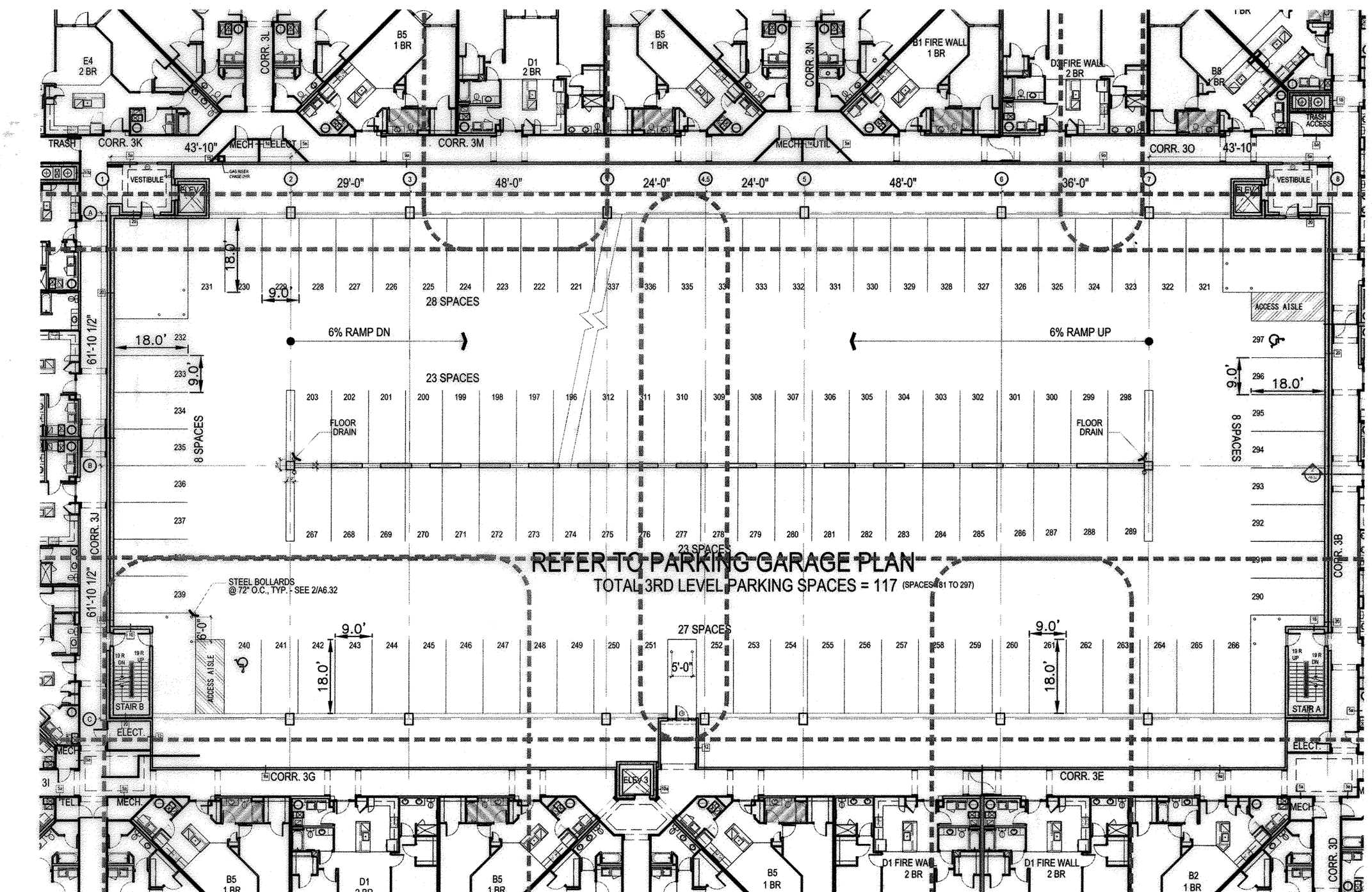
DATE: SEPTEMBER 2018 BEI PROJECT NO. 2695  
 SCALE: 1"=20' SHEET 38 OF 39



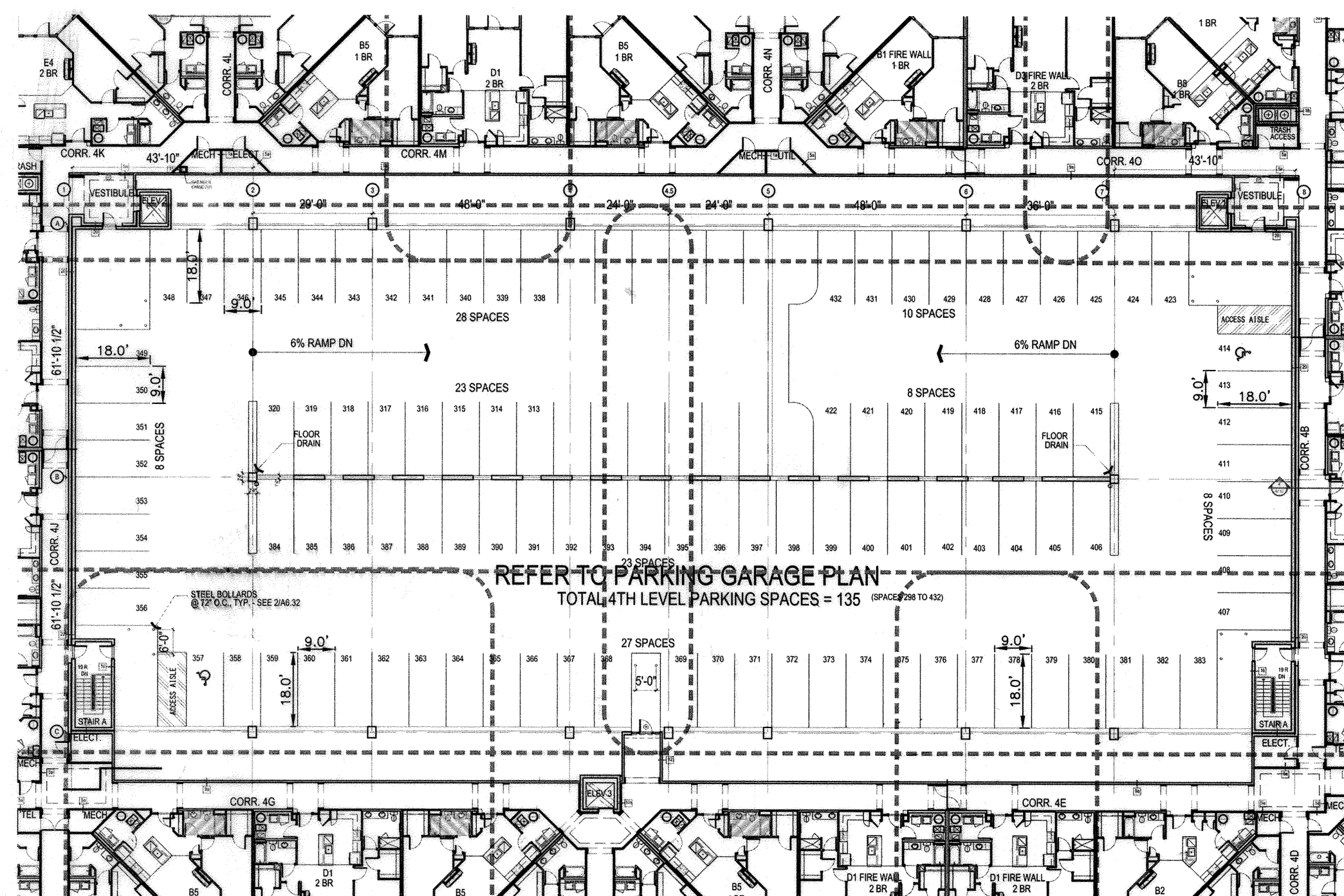
PARKING DECK LEVEL 1  
SCALE: 1"=30'



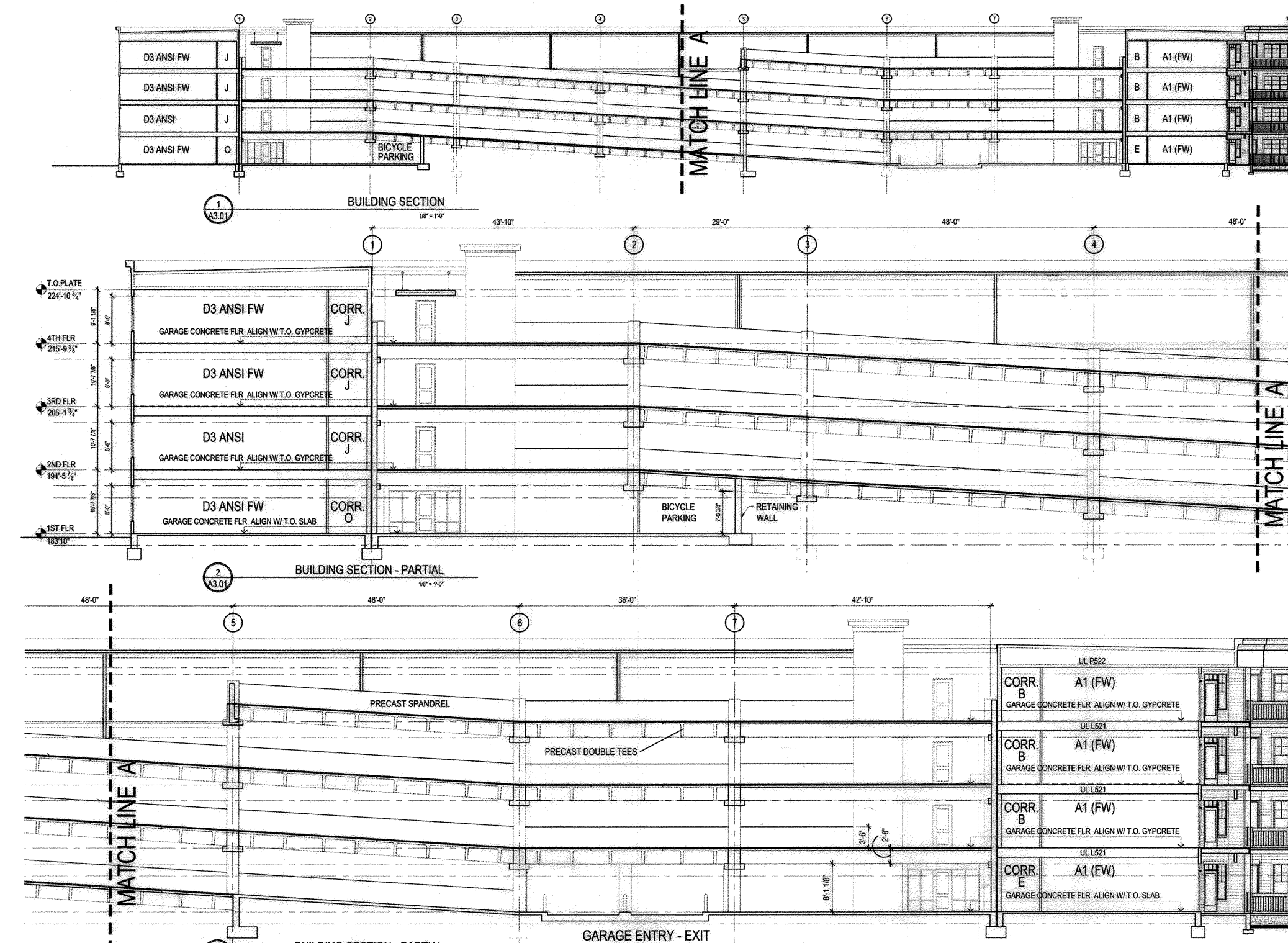
PARKING DECK LEVEL 2  
SCALE: 1"=30'



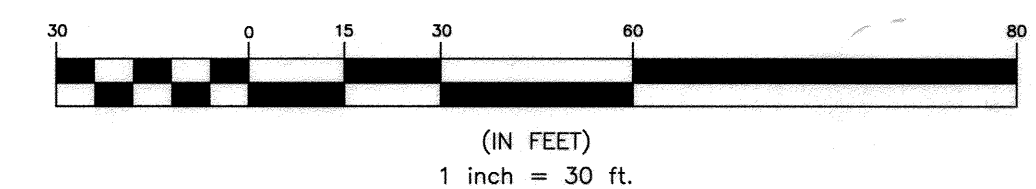
PARKING DECK LEVEL 3  
SCALE: 1"=30'



PARKING DECK LEVEL 4  
SCALE: 1"=30'

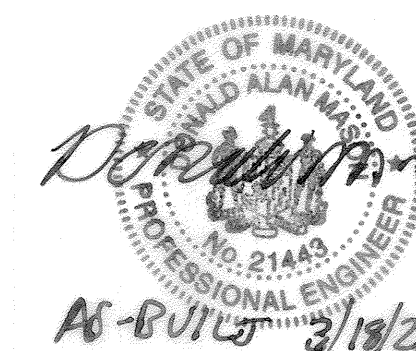


PARKING DECK SECTION  
SCALE: 1"=20'



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	
<i>Howard County Seal</i>	10-18-18
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>Chief Development Engineering Division</i>	
CHIEF, DIVISION OF LAND DEVELOPMENT	10-18-18
DATE	
<i>Director</i>	10-18-18
DIRECTOR	DATE

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Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 21443, Expiration Date: 12-31-21

NO. DATE REVISION	
<p><b>BENCHMARK</b> ENGINEERS &amp; LAND SURVEYORS &amp; PLANNERS <b>ENGINEERING, INC.</b> 8480 BALTIMORE NATIONAL PIKE &amp; SUITE 315 • ELLOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6444 WWW.BE-CIVILENGINEERING.COM</p>	
<p>OWNER: CORRIDOR SQUARE, LLC 6800 DEERPATH ROAD ELKBRIDGE, MD 21075 410.579.2442</p>	<p><b>CORRIDOR SQUARE</b> PARCELS A &amp; C RESIDENTIAL APARTMENT BUILDING</p>
<p>DEVELOPER: MURN DEVELOPMENT 6800 DEERPATH ROAD ELKBRIDGE, MD 21075 410.579.2442</p>	<p>TAX MAP 37 - GRID 24 - PARCELS 265, 272, 273, 107 (LOTS 64 &amp; 65) TAX MAP 43 - GRID 5 - PARCELS 73, 74, 75, 76, 77, 78, 79 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND</p>
<p><b>SITE DEVELOPMENT PLAN</b> <b>PARKING DECK PLAN AND DETAILS</b></p>	
DATE: SEPTEMBER 2018	BEI PROJECT NO. 2695
DESIGN: JCO	DRAFT: JCO
SCALE: AS SHOWN	SHEET 39 OF 39