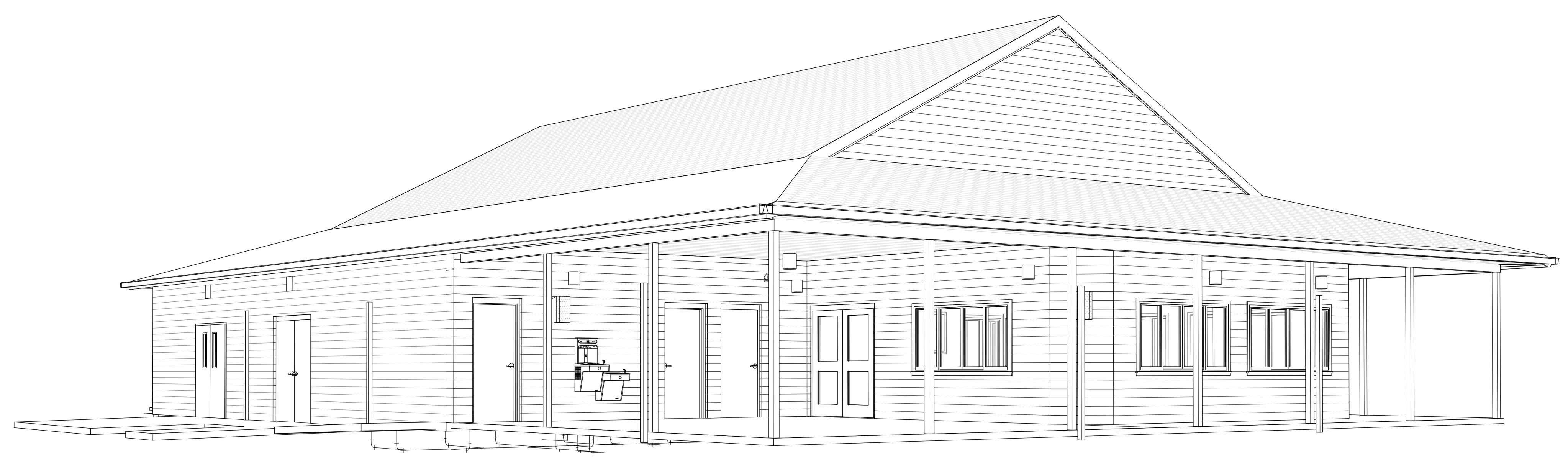
GRADING PERMIT NUMBER: G02019770
BUILDING PERMIT NUMBER: B02420979

PROJECT NUMBER: P584700
CONTRACT NUMBER: P584702

Mayo Beach Park Day Camp Building

4150 Honeysuckle Dr Edgewater, MD 21037

BID DOCUMENTS



GENERAL BUILDING STATISTICS

BUILDING CODES
ANNE ARUNDEL COUNTY BUILDING CODES
2021 INTERNATIONAL BUILDING CODE (IBC)
2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
2021 INTERNATIONAL MECHANICAL CODE (IMC)
2021 INTERNATIONAL PLUMBING CODE (IPC)
1993 AA COUNTY PLUMBING CODE - CHAPTERS 16 & 17
2021 FIRE CODE (NFPA 1)
2021 STANDARD FOR PORTABLE FIRE EXTINGUISHERS (NFPA 10)
2017 NATIONAL ELECTRIC CODE (NFPA 70)
2021 LIFE SAFETY CODE (NFPA 101)
2017 Standard on Water Supplies for Suburban & Rural Firefighting (NFPA 1142)
2009 ICC/ANSI A117.1 ACCESSIBLE & USEABLE BUILDINGS & FACILITIES
2010 AMERICAN WITH DISABILITIES ACT (ADA STANDARDS)

PROJECT DESCRIPTION
THIS PROJECT INCLUDES A MIXED OCCUPANCY BUILDING: ASSEMBLY (A-3), BUSINESS (B) AND STORAGE (S-1).

CONSTRUCTION TYPE
THE CONSTRUCTION TYPE SHALL BE VB (5B), NON-PROTECTED (TABLE 602).

FIRE PROTECTION

NOT PROVIDED IN ACCORDANCE WITH IBC SECTION 903.2.1.3 and 903.2.9 BUT A FIRE SUPPRESSION TANK SHALL.
CALCULATION OF FIRE SUPPRESSION TANK PER NFPA 1142 SECTION 4.3.1
WS = VS/OHC (CC)X1.5 = 55,660 CU FT / 6 (1.5) X 1.5 = 20,872 GAL

A 25,000 GAL FIRE SUPPRESSION TANK SHALL BE PROVIDED.

FIRE ALARM SYSTEM

NOT REQUIRED BUT AN ADDRESSABLE FIRE ALARM SYSTEM WITH STROBE/HORN NOTIFICATION WILL BE PROVIDED.

MINIMUM FIRE RESISTIVE RATINGS (IN HOURS)

IBC- VB CONSTRUCTION (TABLE 601)

EXTERIOR WALLS, LOAD BEARING -	0
INTERIOR LOAD BEARING-	0
EXTERIOR WALLS, NONLOAD BEARING-	
* NO ADJACENT BUILDINGS -	0
STRUCTURAL MEMBERS SUPPORTING WALLS-	0
FLOOR CONSTRUCTION-	0
ROOF CONSTRUCTION-	0
CORRIDOR FIRE RESISTIVE RATING-	0

MINIMUM PLUMBING FACILITIES

Occupants	Required	Provided
A - 109	4WC/2Lav	5WC/5Lav
B/S-1 – 8	1WC/1Lav	1WC/1Lav/1Urinal
Total = 88	5WC/3Lav	6WC/6Lav/1Urinal

2 SERVICE SINKS & (2) 5 GAL WATER COOLER STATIONS
1 MOP SINK
1 UTILITY SINK W/ EYE WASH STATION

MIXED-OCCUPANCY, ONE-STORY, UNSEPARATED
S1 - STORAGE
B - BUSINESS
A-3 ASSEMBLY

HEIGHT
ALLOWABLE : 40 FT AND 1 STORY
ACTUAL: 24 FT AND 1 STORY

AREA
506.2 - ALLOWABLE AREA (PER EQUATION 5-1)

OCCUPANCY	Aa	At	NS	If
B - BUSINESS	15,750 SF =	9,000 +	(9,000 x	.75)
A-3 ASSEMBLY	10,500 SF =	6,000 +	(6,000 x	.75)
S-1 - STORAGE	15,750 SF =	9,000 +	(9,000 x	.75)
ACTUAL AREA:	4,750 SF			

OCCUPANT LOAD - IBC TABLE 1004.5, NFPA TABLE 7.3.1.2

STORAGE	500 SF GR	1,189 SF/500 =	3 OCC
BUSINESS	150 SF GR	660 SF/150=	5 OCC
ASSEMBLY	15 SF NET	839 SF/15 =	56 OCC
ASSEMBLY EXT	15 SF NET	789 SF/15=	53 OCC
TOTAL:			117 OCC

MEANS OF EGRESS
MINIMUM NUMBER OF EXITS - 2
EXITS PROVIDED - 6

EGRESS CAPACITY (IBC 1005.1, 1008.1.1; NFPA 7.2.1.2.3.2, 7.3.3.1)

DOORS (SECTION 1010)
32" MIN PER EXIT
OCCUPANTS X .2" = " REQUIRED
24" REQUIRED
192" PROVIDED

TRAVEL DISTANCE (IBC TABLE 1017.2):
A/B/S-1 - 200' MAX
**THE MAXIMUM DISTANCE FROM ANY POINT TO AN EXIT IS +/- 34'

COMMON PATH OF TRAVEL (IBC TABLE 1006.2.1):
A/B/S-1 - 75'
**THE MAXIMUM COMMON PATH OF TRAVEL DISTANCE IS 52'

SHEET LIST

Sheet order	SHEET NO.	SHEET NAME
GENERAL		
	CS	COVER SHEET
CIVIL		
	C1	COVER PLAN
	C2	PROJECT NOTES PLAN
	C3	EXISTING CONDITIONS PLAN
	C4	DEMOLITION PLAN
	C5	SITE PLAN
	C6	GRADING PLAN
	C7	SITE DETAILS
	C8	SEDIMENT EROSION CONTROL PLAN - PHASE 1
	C9	SEDIMENT EROSION CONTROL PLAN - PHASE 2
	C10	SEDIMENT EROSION CONTROL PLAN - PHASE 3
	C11	SEDIMENT EROSION CONTROL DETAILS
	C12	MICRO BIORETENTION DETAILS & NOTES
	C13	PROFILES
	C14	PROFILES AND S.W.M. BORINGS
	C15	OUTFALL ANALYSIS PLAN
	C16	PRE-DEVELOPMENT S.W.M. DRAINAGE AREA PLAN
	C17	POST-DEELOPMENT S.W.M. DRAINAGE AREA PLAN
	C18	ESD DRAINAGE AREA PLAN
	C19	STORM DRAIN DRAINAGE AREA PLAN
	L1	LANDSCAPE PLAN
	L2	LANDSCAPE NOTES & DEAILS
ARCHITECTURE		
	A100	GENERAL INFORMATION
	A101	FLOOR & ROOF PLAN
	A110	RCP
	A201	ELEVATIONS
	A301	SECTIONS
	A401	ENLARGED PLANS
	A501	WALL SECTIONS
	A502	DETAILS
	A560	CASEWORK DETAILS
	A601	SCHEDULES
STRUCTURE		
	S100	STRUCTURAL NOTES
	S101	FOUNDATION PLAN
	S102	ROOF FRAMING PLAN
	S201	TYPICAL SECTIONS & DETAILS
MECHANICAL		
	M001	MECHANICAL COVER SHEET
	M101	FLOOR PLAN - MECHANICAL
	M201	MECHANICAL DETAILS
	M301	MECHANICAL SCHEDULES
PLUMBING		
	P001	PLUMBING COVER SHEET
	P101	FLOOR PLAN - PLUMBING
	P201	PLUMBING DETAILS
	P301	PLUMBING RISER
ELECTRICAL		
	E001	ELECTRICAL COVER SHEET
	E201	FIRST FLOOR PLAN - LIGHTING
	E301	FIRST FLOOR PLAN - POWER
	E501	ELECTRICAL DETAILS
	E601	POWER RISER DIAGRAM
	E801	ELECTRICAL SCHEDULES

ABBREVIATIONS

ACT	ACOUSTICAL CEILING TILE
ADA	AMERICANS W/DISABILITIES ACT
ADJ.	ADJUSTABLE
A.F.F.	ABOVE FINISHED FLOOR
ALUM.	ALUMINUM
BD.	BOARD
BLKHD.	BULKHEAD
BTW	BETWEEN
CAB.	CABINET
C.G.	CORNER GUARD
CLG.	CEILING
C.T.	CERAMIC TILE
C.M.U.	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONT.	CONTINUOUS
C.J.	CONTROL JOINT IN BRICK
C.R.	CHAIR RAIL
CORR.	CORRIDOR
CPT.	CARPET
D	DEEP
D.J.	DOOR JAMB
DS	DOWNSPOUT
DWGS	DRAWINGS
ELEC	ELECTRICAL
ELEV	ELEVATION
E.P.	ELECTRIC PANEL
EQ.	EQUAL
EXG	EXISTING
FD	FLOOR DRAIN
F.C.	FIRE CODE
FEC	FIRE EXTINUISHER CABINET
FG	FIBERGLASS
FIN.	FINISH
GC	GENERAL CONTRACTOR
GYP	GYPSUM
GWB	GYSUM WALL BOARD
H	HIGH
H.C.	HANDICAPPED
HM	HOLLOW METAL
HORIZ.	HORIZONTAL
HR.	HOUR
HRL	HANDRAIL
INS	INSULATION
MECH.	MECHANICAL
MET./MTL.	METAL
MFR.	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
NIC	NOT IN CONTRACT
OC	ON CENTER
PTD	PAINTED
PART.	PARTIAL
PGB	PAINTED GYPSUM BOARD
PLAM	PLASTIC LAMINATE
PLYWD	PLYWOOD
PR.	PAIR
P.T.	PRESSURE TREATED
REF.	REFRIGERATOR
REQ'D	REQUIRED
SCHED.	SCHEDULE
SIM.	SIMILAR
SPECS.	SPECIFICATIONS
SM	SHEET METAL
S.S.	STAINLESS STEEL
STL.	STEEL
STR	STRUCTURE
TEMP.	TEMPERED
THK.	THICK
TOB	TOP OF BEARING
TOM	TOP OF MASONRY
TOS	TOP OF STRUCTURE
TYP.	TYPICAL
UL	UNDERWRITER'S LABORATORY
UNO	UNLESS NOTED OTHERWISE
VB	VINYL BASE
VCT	VINYL COMPOSITION TILE
VER.	VERIFY
VERT.	VERTICAL
V.I.F.	VERIFY IN FIELD
W	WIDE
W/	WITH
W.C.	WHEELCHAIR
WD.	WOOD
&	AND
@	AT
Ø	DIAMETER

Architects/Interiors/Prime Consultant
Wheeler Goodman Masek & Associates, Inc.
165 Log Canoe Circle, Suite B1
Stevensville, MD 21666

Site Engineers/Environmental
Bay Engineering, Inc.
2661 Riva Road, Building 800
Annapolis, MD 21401

M/E/P Engineers
Kibart, a Bowman Company
300 East Joppa Road, Suite 501
Towson, MD 21286

Structural Engineers
Baker Ingram & Associates
326 First Street, Suite 201
Annapolis, MD 21403

Construction Cost Estimating
CostCon Construction Services, Inc.
1502 Wild Cranberry Drive
Crownsville, MD 21032

No.	Description	Date		
NO	REVISION DESCRIPTION		BY	DATE

WHEELER GOODMAN MASEK
165 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
410.263.6787 www.wgm-arch.com

CERTIFICATION:
I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Mayland, license number 15453, expiration date 06-25-2024.

BID DOCUMENTS | CS

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

MAY 2024
202214.1

REVISED DATE	BY	APPROVED	DATE	APPROVED	DATE
		CHIEF ENGINEER		PROJECT MANAGER	
		APPROVED	DATE	APPROVED	DATE
		ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT OF WAY	

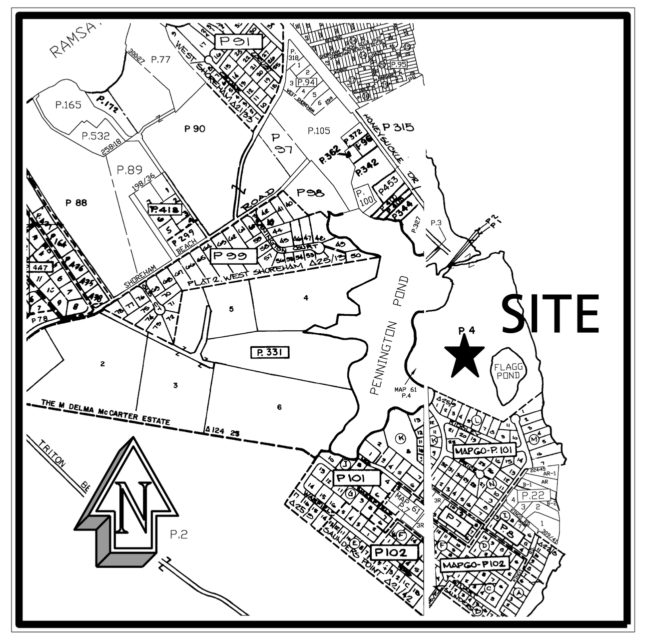
SCALE: AS NOTED
DRAWN BY:
CHECKED BY:
SHEET: OF
PROJECT #: P584700
CONTRACT #: P584702

COVER SHEET

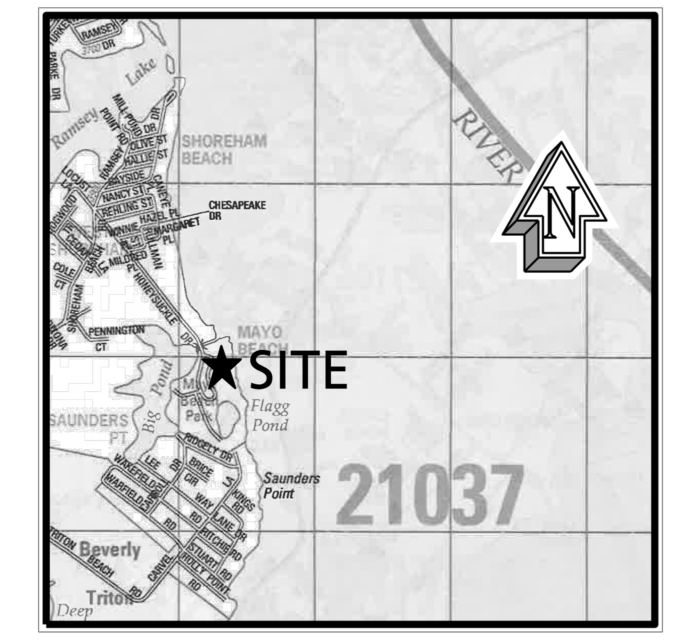
Mayo Beach Park Day Camp Building
4150 Honeysuckle Dr
Edgewater, MD 21037

GRADING AND BUILDING PLANS
FOR A
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
AT THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS

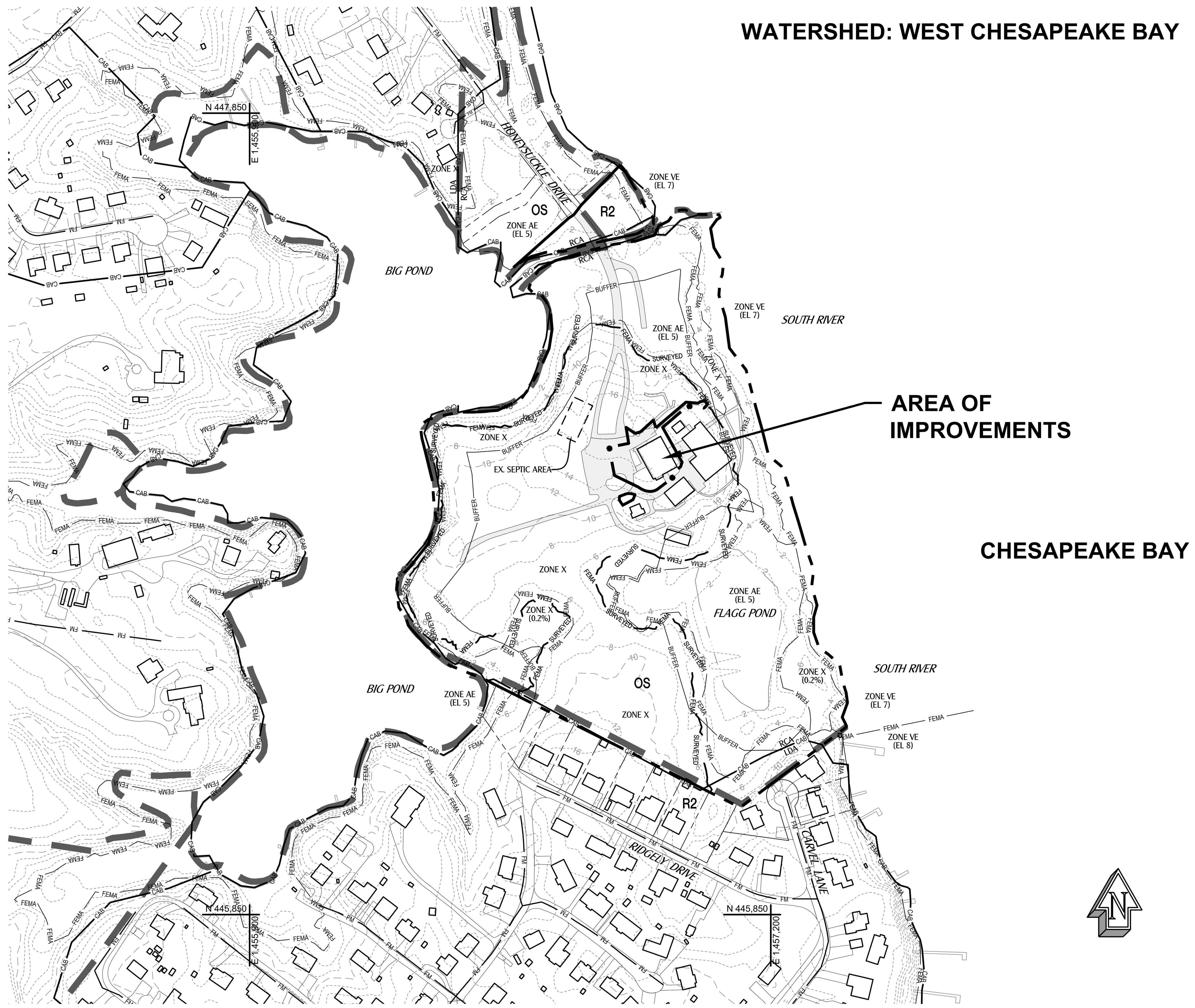
TAX MAP 61, GRID 19, PARCEL 4
4150 HONEYSUCKLE DRIVE
MAYO, MARYLAND 21106
FIRST DISTRICT ANNE ARUNDEL COUNTY ZONED R2 & OS



TAX MAP
SCALE: 1"=1,000'



VICINITY MAP
SCALE: 1"=2,000'



LOCATION MAP
SCALE: 1"=200'

SEQUENCE OF CONSTRUCTION

1. THE DEVELOPER / CONTRACTOR IS TO CONTACT ANNE ARUNDEL COUNTY DEPARTMENT OF INSPECTION AND PERMITS (GRADING INSPECTORS) AT (410) 222-7780 48 HOURS PRIOR TO THE START OF CONSTRUCTION FOR A PRE-CONSTRUCTION MEETING. WORK MAY NOT COMMENCE UNTIL THE PERMITTEE OR THE RESPONSIBLE PERSONNEL HAVE MET ONSITE WITH THE SEDIMENT EROSION CONTROL INSPECTOR TO REVIEW THE APPROVED PLANS. THE DEVELOPER/CONTRACTOR SHALL ALSO NOTIFY THE ANNE ARUNDEL COUNTY OFFICE OF PLANNING ZONING, CULTURAL RESOURCES DIVISION AT 410-222-7486, 48 HOURS PRIOR TO CONSTRUCTION. STAFF WILL BE AVAILABLE WITHIN 48 HOURS OF NOTIFICATION TO CONDUCT A SITE VISIT AND MONITOR EXCAVATIONS AND EARTHMOVING AND DOCUMENT ANY DISCOVERIES. **..... 2 DAYS**

NOTE:
1. THE PERMITTEE OR CONTRACTOR SHALL NOT COMMENCE WITH CLEARING OR ANY EARTH DISTURBANCE ACTIVITIES ON THE SITE DURING OR BEFORE PREDICTED WET WEATHER EVENTS. ONCE SITE WORK BEGINS, CLEARING AND GRUBBING ACTIVITIES SHALL BE FOR THE INSTALLATION AND STABILIZATION OF THE PERIMETER EROSION CONTROL MEASURES ONLY.
2. IF THE LOD SHOULD CHANGE OR EXPAND, THE CULTURAL RESOURCES SECTION WILL NEED FURTHER REVIEW.

PHASE 1 (REFER TO SHEET C8)

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE PLANS. UTILIZE EXISTING DRIVEWAYS IF APPROVED BY INSPECTOR AT PRE-CONSTRUCTION MEETING. **..... 1 DAY**
2. CLEAR MINIMAL AREAS TO INSTALL, REINFORCED SILT FENCING, SILT FENCING ON PAVEMENT, INLET PROTECTION, AND ESTABLISH STAGING AND STOCKPILE AREA. **..... 2 WEEKS**

   NOTE: ALL PERIMETER SEDIMENT CONTROLS ARE TO BE MAINTAINED AT THE END OF EACH WORKING DAY TO ENSURE THEY ARE INSTALLED AND FUNCTIONING EFFECTIVELY.
3. OBTAIN PHASE I APPROVAL OF THE SEDIMENT EROSION CONTROL INSTALLATION. INSPECTIONS AND PERMITS MAY REQUIRE THAT AN INSPECTION AND CERTIFICATION OF THE INSTALLATION OF SEDIMENT CONTROL AS PERFORMED BY A DESIGN PROFESSIONAL BE PROVIDED PRIOR TO CONSTRUCTION COMMENCING. **..... 2 DAYS**
4. UPON THE INSPECTOR'S APPROVAL, THE EXISTING BUILDING IS TO BE DEMOLISHED.

PHASE 2 (REFER TO SHEET C9)

5. UPON THE INSPECTOR'S APPROVAL BEGIN CLEARING, DEMOLITION OF PAVEMENT, EXISTING IMPROVEMENTS, AND HAULING ALL DEBRIS TO AN APPROVED SITE OR LANDFILL, CLEARING AND GRUBBING OF THE SITE AREA TO BE DISTURBED. **..... 2 WEEKS**
6. CLEAR, GRUB,ROUGH GRADE SITE, AND ESTABLISH BUILDING PAD. **..... 2 WEEKS**
7. BEGIN MASS GRADING. INSTALL UTILITIES, INCLUDING SEPTIC TRENCH, AND FIRE SUPPRESSION TANK. INSTALL INLET PROTECTION AS STORM DRAIN AS INSTALLED. **..... 2 WEEKS**
8. CONTINUE CONSTRUCTING PROPOSED FOUNDATION AND ASSOCIATED IMPROVEMENTS. CONSTRUCTION OF THE FIRST FLOOR WALLS OF ANY BUILDING OR STRUCTURE MAY NOT PROCEED UNTIL THE FOUNDATION HAS BEEN BACKFILLED AND ALL DISTURBED AREAS WITHIN THE LIMITS OF DISTURBANCE HAVE BEEN PERMANENTLY OR TEMPORARILY STABILIZED. A CERTIFICATE IS TO BE PROVIDED BY THE ENGINEER TO THE INSPECTOR VERIFYING THE GRADES AND DRAINAGE PATTERNS SHOWN ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN HAVE BEEN OBTAINED. **..... 5 WEEKS**
9. ONCE THE DISTURBED AREAS ARE STABILIZED AND WITH THE GRADING INSPECTOR'S APPROVAL, THE CONTRACTOR MAY BEGIN VERTICAL CONSTRUCTION OF THE BUILDING PAST THE GROUND FLOOR. THE CONTRACTOR MAY CONTINUE WORKING THE SITE DURING THIS PHASE IF NOT COMPLETE, BUT WILL HAVE TO STABILIZE ANY DISTURBANCES PER THE VEGETATIVE ESTABLISHMENT SPECIFICATIONS. THESE ITEMS INCLUDE UTILITIES, STORM DRAINAGE, INLETS, CURB AND GUTTER, AND OTHER BUILDING DEPENDANT ACTIVITIES. **..... 20 WEEKS**

PHASE 3 (REFER TO SHEET C10)

10. STORMWATER MANAGEMENT FACILITIES CANNOT BE INSTALLED UNTIL THE CONTRIBUTING DRAINAGE AREA TO THE FACILITY HAS 95% STABILIZATION. WHEN THIS CONDITION IS MET WITH THE INSPECTOR'S APPROVAL, CONSTRUCT STORMWATER MANAGEMENT FACILITIES (MICRO-BIORETENTION AREA #1-#5) AS SHOWN ON THE PLANS. REFER TO NOTES 'A', 'C', AND 'D' BELOW AND S.W.M. FACILITY NOTE THIS CONTACT OWNER, INSPECTION AGENCY TO CERTIFY CONSTRUCTION OF THE FACILITIES. CONTACT ANNE ARUNDEL COUNTY DEPARTMENT OF INSPECTION & PERMITS (410-222-7780) AT LEAST 48 HOURS PRIOR TO EXCAVATION. **..... 1 WEEK**
11. CONTINUE INSTALLATION OF FINAL PAVEMENT AND SIDEWALKS. **..... 1 WEEK**
12. FINE GRADE AND INSTALL SEEDING, SOD (SIDE SLOPES OF MICRO-BIO AREAS), AND LANDSCAPING. **..... 1 WEEK**
13. AFTER THE SITE IS 95% STABILIZED EITHER VEGETATIVELY OR MECHANICALLY AND SUBJECT TO SEDIMENT CONTROL INSPECTOR'S APPROVAL, REMOVE ANY REMAINING SEDIMENT CONTROL MEASURES. PERFORM A FINAL CLEANUP AND MAINTENANCE OF VEGETATION AS NECESSARY TO ENSURE ESTABLISHED GROWTH OF ALL SEEDED AREAS. **..... 12 WEEKS**

NOTES :

A. IT IS THE RESPONSIBILITY OF THE CONTRACTOR / DEVELOPER TO NOTIFY THE ANNE ARUNDEL COUNTY INSPECTION AND PERMITS AND THE OWNERS TESTING AND INSPECTION AGENCY AT LEAST 48 HOURS PRIOR TO CONSTRUCTION OF ANY PART OF THE STORMWATER MANAGEMENT FACILITIES. IT IS ALSO THE RESPONSIBILITY OF THE CONTRACTOR TO SUBMIT AS-BUILT DRAWINGS TO ANNE ARUNDEL COUNTY CERTIFYING THAT THE STORMWATER MANAGEMENT FACILITIES WERE INSTALLED PER THE APPROVED PLANS. CERTIFICATION PACKAGE MUST BE SIGNED AND SEALED BY A MARYLAND PROFESSIONAL ENGINEER AND MUST INCLUDE AS-BUILT SURVEY, MATERIAL TICKETS, PHOTOS AND A COMPLETED ANNE ARUNDEL COUNTY CERTIFICATION FOR EACH INDIVIDUAL STORMWATER MANAGEMENT DEVICE.

B. ALL PROPOSED INLETS SHALL BE COVERED TO PREVENT SEDIMENT INFLOW UNTIL FINAL STABILIZATION. UTILIZE INLET PROTECTION DETAILS AS SHOWN ON SEDIMENT EROSION CONTROL DETAIL SHEETS.

C. THE COMPLETED MICRO-BIORETENTION AREA SHALL RECEIVE NO DIRECT RUNOFF UNTIL ALL AREAS DRAINING TO IT ARE 95% STABILIZED AND WITH INSPECTOR'S APPROVAL. THE MICRO-BIORETENTION AREA SHALL BE WRAPPED IN REINFORCED SILT FENCE.

D. IN CONSTRUCTION OF THE STORMWATER MANAGEMENT FACILITIES, THE CONTRACTOR IS TO FOLLOW THE CONSTRUCTION SPECIFICATIONS AS SHOWN ON THESE INSPECTIONS BY THE OWNERS INSPECTION AND TESTING AGENCY AND THE ANNE ARUNDEL COUNTY S.W.M. INSPECTOR ARE REQUIRED AT THE FOLLOWING MINIMAL STAGES OF THE FACILITIES CONSTRUCTION:

- ON SUBGRADE APPROVAL FOR COMPACTION AND GRADE (SURVEY BY CONTRACTOR).
- AT THE COMPLETION OF EACH LAYER OF THE COMPONENTS (I.E. SAND, STONE, PIPE, ETC.).
- AT THE COMPLETION OF FINAL GRADING AND PLANTING OF THE MICRO-BIORETENTION AREAS.
- THE CONTRACTOR SHALL PROVIDE TO THE BOARD OF EDUCATION/ OWNER A SIGNED AND SEALED COMPLETED A.A. CO. SWM FACILITY CERTIFICATION FORM FOR EACH DEVICE PRIOR TO CLOSEOUT OF THE PROJECT.

SURVEY CONTROL NOTE

THE COORDINATES AND ELEVATIONS SHOWN HEREON ARE BASED ON RTK (REAL TIME KINEMATIC) OBSERVATIONS UTILIZING KEYNETGPS NETWORK. THE HORIZONTAL DATUM IS REFERENCED TO MARYLAND STATE PLANE (NAD 83/2011) AND THE VERTICAL DATUM IS REFERENCED TO NAVD 88.

OUTFALL STATEMENT

THIS PROJECT PROPOSES A REPLACEMENT OF THE DAY CAMP AND OPERATIONS BUILDING AT MAYO BEACH PARK. THE MAJORITY OF THE WORK AREA WITHIN THE LIMIT OF DISTURBANCE DISCHARGES TO THE EAST AND THEN ONTO BIG POND WHICH CONNECTS TO THE SOUTH RIVER. THE REMAINING AREA WITHIN THE LOD DRAINS TO ONSITE FLAGG POND PRIOR TO FLOWING INTO THE SOUTH RIVER OR DIRECTLY INTO THE SOUTH RIVER. IT IS IMPORTANT TO NOTE THAT THE SITE IS LOCATED WHERE THE SOUTH RIVER ENTERS THE CHESAPEAKE BAY AND THE SITE IS CONSIDERED TO HAVE DIRECT DISCHARGE INTO TIDAL WATERS. THE PROPOSED DEVELOPMENT WILL NOT HAVE AN ADVERSE IMPACT ON RECEIVING STORM DRAIN OR WATERWAYS.

UTILITY INFORMATION

GAS - BGE, PO BOX 1475, BALTIMORE, MD 21203, (410) 265-4100
TELEPHONE - VERIZON, 1E PRATT STREET, BALTIMORE, MD 21202, (410) 954-6260
ELECTRIC - BGE, PO BOX 1475, BALTIMORE, MD 21203, (410) 265-4100
STATE HIGHWAY - MARYLAND STATE HIGHWAY COMMISSION, 707 NORTH CALVERT STREET, BALTIMORE, MD 21202, (410) 545-5582
SEWER / WATER - ANNE ARUNDEL COUNTY DEPARTMENT OF HEALTH, 3 HARRY S. TRUMAN PARKWAY,ANNAPOLIS, MD 21401, (410) 222-7193

ADA COMPLIANCE NOTE

IN ORDER TO MEET THE ADOPTED 2010 ADA MINIMUM REQUIREMENTS AND IN ACCORDANCE WITH THE PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG) PUBLISHED BY THE U.S. ACCESS BOARD IN 2011, ALL PUBLIC AND PRIVATE PEDESTRIAN ACCESS ROUTES, SIDEWALKS, CURB AND GUTTER, CURB RAMPS, AND TRAFFIC CONTROL DEVICES SHALL BE DESIGNED IN ACCORDANCE WITH THE ANNE ARUNDEL COUNTY PEDESTRIAN FACILITY STANDARDS PF1-PF29.

PERMIT NUMBERS

GRADING PERMIT	#G02019770
AASCD	
BUILDING ERMIT	

DRAWING INDEX

SHEET NO	SHEET TITLE
C1 OF 19	..... COVER PLAN
C2 OF 19	.... PROJECT NOTES PLAN
C3 OF 19	..... EXISTING CONDITIONS PLAN
C4 OF 19	..... DEMOLITION PLAN
C5 OF 19	..... **SITE PLAN**
C6 OF 19	..... GRADING PLAN
C7 OF 19	..... SITE DETAILS
C8 OF 19	..... SEDIMENT AND EROSION CONTROL PLAN - PHASE 1
C9 OF 19	..... SEDIMENT AND EROSION CONTROL PLAN - PHASE 2
C10 OF 19	..... **SEDIMENT AND EROSION CONTROL PLAN - PHASE 3**
C11 OF 19	..... SEDIMENT AND EROSION CONTROL DETAILS
C12 OF 19	..... MICRO-BIORETENTION DETAILS AND NOTES
C13 OF 19	..... PROFILES
C14 OF 19	.... PROFILES AND S.W.M. BORINGS
C15 OF 19	..... **OUTFALL ANALYSIS PLAN**
C16 OF 19	..... PRE-DEVELOPMENT S.W.M. DRAINAGE AREA PLAN
C17 OF 19	..... POST-DEVELOPMENT S.W.M. DRAINAGE AREA PLAN
C18 OF 19	..... ESD DRAINAGE AREA PLAN
C19 OF 19	..... STORM DRAIN DRAINAGE AREA PLAN
L1 OF 2	..... LANDSCAPE PLAN
L2 OF 2	..... LANDSCAPE NOTES AND DETAILS

BID DOCUMENTS

CALL BEFORE YOU DIG!
MARYLAND LAW REQUIRES 48 HOURS NOTICE
BEFORE PLANNED WORK TO MARK UNDERGROUND
UTILITIES PRIOR TO EXCAVATION
MISS UTILITY: 1-800-257-7777

#	REVISION DESCRIPTION	BY	DATE

ATWELL
866.850.4200 www.atwell-group.com
2661 RIVA ROAD, BUILDING 800
ANNAPOLIS, MARYLAND 21401
410.897.9290

WGM ARCHITECTURE + INTERIORS
WHEELER GOODMAN MASEK
16 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
V. 410.263.6787
www.wgm-arch.com

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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.
STATE OF MARYLAND TERRY L SCHUMAN 19593 PROFESSIONAL ENGINEER
Terry Schuman 4/3/24 Date
19593 3/31/26
License No. Expiration Date

ANNE ARUNDEL COUNTY			MAY 2024
DEPARTMENT OF PUBLIC WORKS			202214.1

REVISED DATE	BY	APPROVED DATE	APPROVED DATE	
		CHIEF ENGINEER	PROJECT MANAGER	SCALE: AS SHOWN
				DRAWN BY: AMD
				CHECKED BY: TS
		APPROVED DATE	APPROVED DATE	SHEET: C1 OF 19
				PROJECT NO.: P584700
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	CONTRACT NO.: P584702

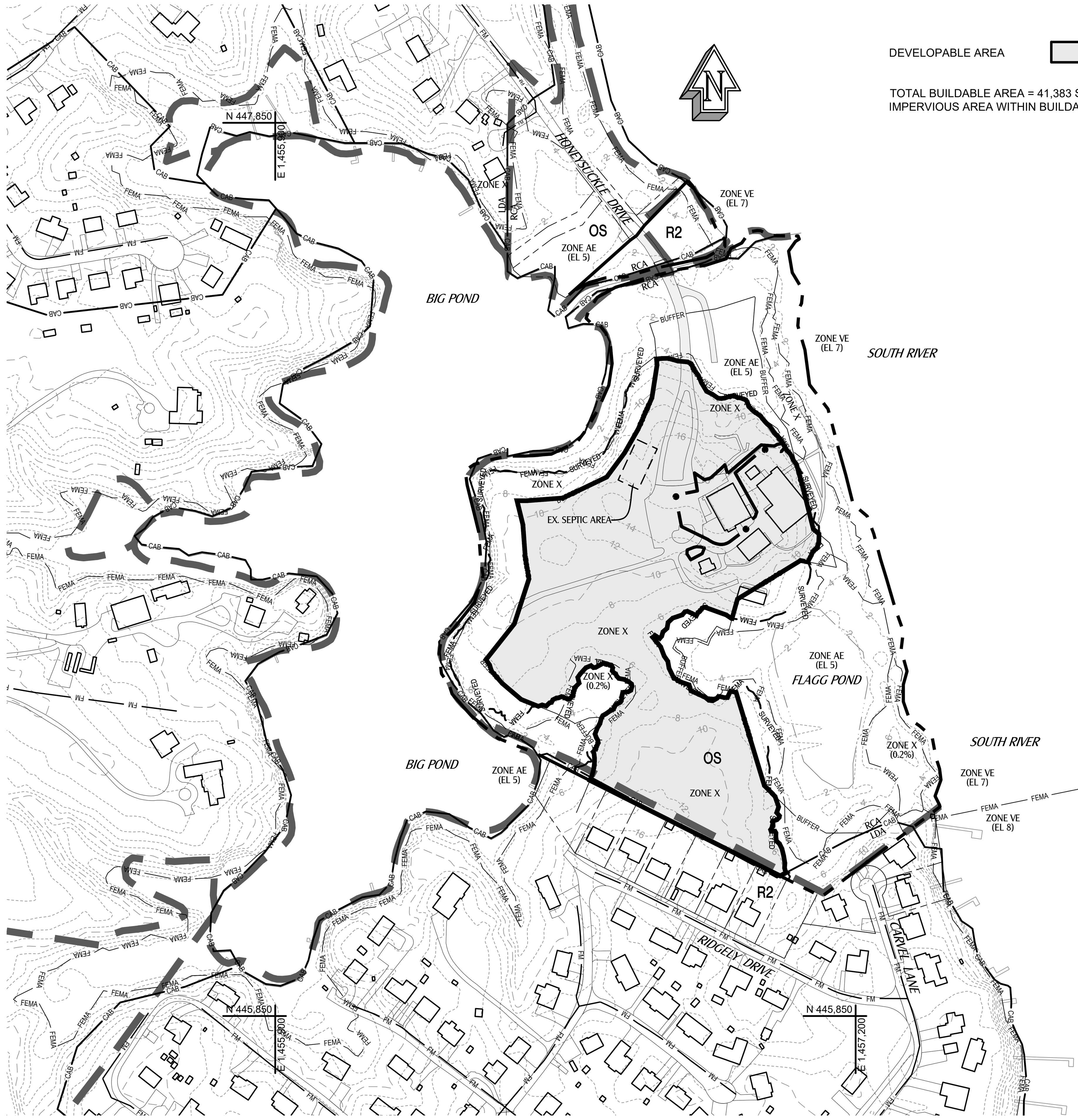
COVER PLAN
FOR THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
4150 HONEYSUCKLE DRIVE
MAYO, MARYLAND 21106
TAX ID: 01-000-03599460
TAX MAP 61, GRD 19, PARCEL 4
DISTRICT 1 ~ ANNE ARUNDEL COUNTY ~ ZONED OS & R2

PLOTTED: Apr 04 , 2024 - 10:50am

P:\21-7930 WGM - Mayo Beach Park - 4150 Honeysuckle Drive\Drawing Files\Grading Plans\21-7930 GRADING PLANS.dwg

DEVELOPABLE AREA

TOTAL BUILDABLE AREA = 41,383 SQ. FT. OR 9.50 ACRES
IMPERVIOUS AREA WITHIN BUILDABLE AREA = 69,300 SQ. FT. OR 1.59 ACRES = 16.7% OF BUILDABLE AREA



DEVELOPABLE AREA MAP

SCALE: 1"=200'

GENERAL NOTES

1. OWNER :
ANNE ARUNDEL RECREATION AND PARKS
P.O BOX 1831
ANNAPOLIS, MARYLAND 21401
C/O LISA DEANES, PM-DPW
443-336-8100
lisa.deanes@aacounty.org

2. ARCHITECT :
WHEELER GOODMAN MASEK
16 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
ATTN: EDWARD MASEK, 410-263-6787

ENGINEER :
ATWELL
2661 RIVA ROAD, BUILDING 800
ANNAPOLIS, MARYLAND 21401
ATTN: TERRY SCHUMAN, 410.897.9290
tschuman@atwell-group.com

3. THE PROPERTY IS SHOWN ON TAX MAP 61, GRID 19, PARCEL 4, PER DEED L.2904 F. 098.

4. THE TAX ACCOUNT INFORMATION IS 01-000-03599460.

5. THE EXISTING ZONING OF THE SITE IS OS (OPEN SPACE) & R2 (RESIDENTIAL DISTRICT). THE ZONING IS TO REMAIN THE SAME.

6. THE SITE ADDRESS IS 4150 HONEYSUCKLE DRIVE, MAYO, MARYLAND 21106.

7. THE TOTAL SITE AREA IS 25.22 ACRES ±. THE EXISTING USE OF THE SITE IS COUNTY PARK.

8. THE SITE **IS** WITHIN THE CHESAPEAKE BAY CRITICAL AREA: RCA (RESOURCE CONSERVATION AREA).

9. THE EXISTING TOPOGRAPHY AND ON-SITE UTILITY INFORMATION FOR THE PROPOSED WORK AREA WAS TAKEN FROM A TOPOGRAPHIC SURVEY PREPARED BY BAY ENGINEERING, INC. DATED SEPTEMBER, 2022.

10. THE PROPERTY DESCRIBED HEREON IS LOCATED IN THE FLOOD HAZARD ZONE "X" (AREA OUTSIDE THE 500 YEAR FLOOD, LESS THAN 0.2% CHANCE TO FLOOD ANNUALLY), ZONE AE (ELEV. 5), ZONE VE (ELEV. 7), AND ZONE "X" (AREA OF 0.2% ANNUAL CHANCE FLOOD, AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREA LESS THAN 1 SQUARE MILE, AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD) AS DELINEATED ON THE FIRM FLOOD INSURANCE MAP #24003C0263F DATED FEBRUARY 18, 2015 FOR SAID COUNTY AND DISTRIBUTED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

11. SITE UTILITIES ARE WATER (PRIVATE WELL) AND SEPTIC (PRIVATE) AND STORM DRAIN (PRIVATE).

12. THE CONTRACTOR SHALL COMPLETE AN AACPS DIGGING PERMIT AND CALL "MISS UTILITY" @ 1-800-257-7777, AND ESTABLISH JOB NUMBER, A MINIMUM OF 48 HOURS IN ADVANCE OF ANY EXCAVATION, BORING, PILE DRIVING, AND/OR DIGGING FOR THE LOCATION OF GAS, ELECTRIC, WATER, SEWER AND TELEPHONE LINES.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY FENCE, DRIVEWAYS, ETC. DAMAGED OR REMOVED BY HIM DURING CONSTRUCTION. ALL DISTURBED AREAS OUTSIDE OF THE RIGHT-OF-WAY LINES SHALL BE RETURNED TO THEIR ORIGINAL CONDITION UNLESS OTHERWISE INDICATED OR SPECIFIED.

14. ALL CONSTRUCTION METHODS AND MATERIAL SHALL BE IN ACCORDANCE WITH THE LATEST STATE OF MARYLAND DETAILS AND SPECIFICATIONS FOR CONSTRUCTION OF STORM DRAINS, WATER, SEWER, AND ROADS.

15. IT SHALL BE DISTINCTLY UNDERSTOOD THAT FAILURE TO MENTION SPECIFICALLY ANY WORK THAT WOULD NATURALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM SUCH WORK.

16. THESE DRAWINGS DO NOT INCLUDE THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE MOST CURRENT VERSION OF OSHA STANDARDS AND / OR REGULATIONS.

17. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER OF ANY DEVIATION TO THIS PLAN PRIOR TO ANY CHANGE BEING MADE. ANY CHANGE IN THIS PLAN WITHOUT THE WRITTEN AUTHORIZATION FOR SAID CHANGE FROM THE ENGINEER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUB-CONTRACTOR. SAID CHANGES MAY WARRANT MDE, ANNE ARUNDEL COUNTY, AND /OR SHA REVIEW AND APPROVAL.

18. THE CONTRACTOR SHALL NOTE THAT IN THE CASE OF A DISCREPANCY BETWEEN THE SCALED AND THE FIGURED DIMENSIONS SHOWN ON THESE PLANS, THE FIGURED DIMENSION SHALL GOVERN.

19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF HIS CONSTRUCTION WITH THE CONSTRUCTION BY OTHER CONTRACTORS.

20. ALL UTILITY POLES SHALL BE BRACED WHEN NECESSARY AT THE CONTRACTOR'S EXPENSE. THE UTILITY POLES SHALL BE RELOCATED AT THE OWNERS EXPENSE ONLY IN CASES WHERE THEY WILL INTERFERE WITH CONSTRUCTION.

21. THE PERMITTEE (OR HIS REPRESENTATIVE) SHALL NOTIFY THE ANNE ARUNDEL COUNTY INSPECTIONS AND PERMITS @410.222.7780 AND THE ANNE ARUNDEL COUNTY OFFICE OF PLANNING AND ZONING @ 410-222-7537AT LEAST SEVEN (7) DAYS BEFORE COMMENCING ANY LAND DISTURBING ACTIVITY AND SHALL BE REQUIRED TO HOLD A PRE-CONSTRUCTION MEETING BETWEEN PROJECT REPRESENTATIVES AND A REPRESENTATIVE OF ANNE ARUNDEL COUNTY.

22. ALL WATER AND SEWER UTILITIES SHALL BE SEPARATED BY A MINIMUM OF 10 FEET OR AS DIRECTED BY THE ENGINEER.

23. ROOF DRAINS / LEADERS / DOWNSPOUTS ARE TO DISCHARGE DIRECTLY TO THE STORM DRAINAGE SYSTEM THROUGH UNDERGROUND CONNECTIONS AND / OR ONTO A STABILIZED SURFACE FOR OVERLAND SHEET FLOW AS SHOWN ON THESE DRAWINGS.

24. THE CONTRACTOR SHALL NOTIFY BGE @ 410-234-5691, FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.

25. THE CONTRACTOR SHALL NOTIFY THE VERIZON TELEPHONE COMPANY @ 301-393-3648, FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.

26. PIPE ELEVATIONS REFER TO INVERTS UNLESS OTHERWISE SPECIFIED.

27. ALL STORM DRAIN PIPES ARE REINFORCED CONCRETE PIPE (RCP CL IV) UNLESS OTHERWISE NOTED.

28. THE CONTRACTOR SHALL SAWCUT ALL JOINTS WHERE THE PROPOSED PAVEMENT MEETS THE EXISTING PAVEMENT.

29. IN PREPARATION OF THESE PLANS THE BEST AVAILABLE RECORDS, DEEDS, MAPS, SURVEYS AND AERIAL TOPOGRAPHY WERE USED.

30. REFER TO THE GEO-TECHNICAL REPORT PREPARED BY FROEHLING & ROBERTSON, INC AND DATED MAY, 2023. THE CONTRACTOR SHALL REVIEW AND FULLY UNDERSTAND THE CONTENTS OF THE REPORTS PRIOR TO BEGINNING CONSTRUCTION AND SHALL COMPLY WITH THE RECOMMENDATIONS CONTAINED THEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ANY SUB-SURFACE SOIL CONDITIONS AS PER REPORT. IF ANY CONFLICT EXISTS BETWEEN THE GEO-TECHNICAL REPORT RECOMMENDATIONS AND RECOMMENDATION ELSEWHERE IN THE CONTRACT DOCUMENTS, THE MORE STRINGENT REQUIREMENT WILL APPLY.

31. THE CLIENT/CONTRACTOR ACKNOWLEDGES THAT THE REQUIREMENTS OF THE ADA WILL BE SUBJECT TO VARIOUS AND POSSIBLY CONTRADICTORY INTERPRETATIONS BY BAY ENGINEERING, INC., THEREFORE, WILL USE ITS REASONABLE PROFESSIONAL EFFORTS TO INTERPRET APPLICABLE ADA REQUIREMENTS AND OTHER FEDERAL, STATE AND LOCAL LAWS, RULES, CODES, ORDINANCES AND REGULATIONS AS THEY APPLY TO THE PROJECT. BAY ENGINEERING, HOWEVER, CANNOT AND DOES NOT WARRANT OR GUARANTEE THAT THE CLIENT'S PROJECT WILL COMPLY WITH INTERPRETATIONS OF ADA REQUIREMENTS AND/OR REQUIREMENTS OF OTHER FEDERAL, STATE AND LOCAL LAWS, RULES, CODES, ORDINANCES AND REGULATIONS AS THEY APPLY TO THE PROPERTY.

32. THE DEVELOPER/CONTRACTOR SHALL ALSO NOTIFY THE ANNE ARUNDEL COUNTY OFFICE OF PLANNING ZONING, CULTURAL RESOURCES DIVISION AT 410-222-7486, 48 HOURS PRIOR TO CONSTRUCTION. STAFF WILL BE AVAILABLE WITHIN 48 HOURS OF NOTIFICATION TO CONDUCT A SITE VISIT AND MONITOR EXCAVATIONS AND EARTHMOVING AND DOCUMENT ANY DISCOVERIES.

POST DEVELOPMENT OWNER / DEVELOPER'S STABILIZATION CERTIFICATION

"ALL GRADING, DRAINAGE STRUCTURES AND EROSION AND SEDIMENT CONTROL PRACTICES INCLUDING FACILITIES AND VEGETATIVE MEASURES HAVE BEEN COMPLETED IN CONFORMANCE WITH THE APPROVED PLANS".

OWNER / DEVELOPER DATE

S.W.M. RECORD DRAWING CERTIFICATION

THIS CERTIFIES TO THE BEST OF MY PROFESSIONAL BELIEF AND KNOWLEDGE, THE APPROVED S.W.M. SYSTEM(S) AS SHOWN HEREON HAVE BEEN CONSTRUCTED IN SUCH A MANNER THAT WOULD BE CONSISTENT WITH THE APPROVED PLANS. ANY CHANGES/MODIFICATIONS ARE SHOWN IN RED.

19593 SEAL
TERRY SCHUMAN, P.E. LICENSE # DATE

SITE LEGEND

PROPERTY LINE
EXISTING CONTOUR (142)
EXISTING WOODS
EXISTING LIGHT POLE
EXISTING SEWER (SS)
EXISTING STORM DRAIN (SD)
EXISTING WATER LINE (W)
EXISTING TELEPHONE (T)
EXISTING ELECTRIC (E)
EXISTING OVERHEAD WIRES & UTILITY POLE (OH)
EXISTING FEMA BOUNDARY PER A.A. COUNTY GIS DATA (FEMA)
EXISTING FEMA FLOODPLAIN BOUNDARY PER UPDATED TOPO FROM FIELD RUN AND A.A. COUNTY TOPO (FEMA SURVEYED)
EXISTING MEAN HIGH WATER (MHW)
EXISTING ZONING BOUNDARY
EXISTING ZONING DESIGNATION (OS)
EXISTING WELL (W)
EXISTING TREE
EXISTING CONCRETE
PROPOSED CONCRETE
PROPOSED CONTOUR (17)
PROPOSED SPOT ELEVATION (+ 100.0)
PROPOSED MICRO-BIORETENTION AREA
PROPOSED LIMIT OF DISTURBANCE
PROPOSED REINFORCED SILT FENCE (RSF)
PROPOSED SILT FENCE ON PAVING (SFOP)
PROPOSED STABILIZED CONSTRUCTION ENTRANCE
PROPOSED AREAS TO BE REMOVED (TBR)
PROPOSED INLET PROTECTION (AGIP)

DOWNSTREAM ANALYSIS DATA

	SITE OUTFALL 1A	SITE OUTFALL 1B	SITE OUTFALL 1C	RATIO TO POI
DRAINAGE AREA (ACRES)	10.14	10.19	4.89	*
RCN	73	77	78	-
Tc (MIN)	9.7	9.3	6.0	-
RUNOFF (INCHES)	2.44	2.79	2.88	-
Q10 (CFS)	38.6	44.9	25.0	-

**** THE SITE DRAINS TO WHERE THE SOUTH RIVER ENTERS THE CHESAPEAKE BAY WHICH IS IDENTIFIED AS THE POI. THE ENTIRE DRAINAGE AREA TO THE POI HAS NOT BEEN DELINEATED BECAUSE IS CLEAR THAT THE TOTAL FLOW TO THE POI IS LESS THAN 10% OF THE FLOW TO THE SOUTH RIVER AT THE CHESAPEAKE BAY.***

BID DOCUMENTS

#	REVISION DESCRIPTION	BY	DATE

ATWELL
866.850.4200 www.atwell-group.com
2661 RIVA ROAD, BUILDING 800
ANNAPOLIS, MARYLAND 21401
410.897.9290

WGM ARCHITECTURE + INTERIORS
WHEELER GOODMAN MASEK
16 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
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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.
STATE OF MARYLAND TERRY L SCHUMAN 19593 PROFESSIONAL ENGINEER
Terry Schuman 4/3/24 Date
19593 License No. 3/31/26 Expiration Date

ANNE ARUNDEL COUNTY — MAY 2024
DEPARTMENT OF PUBLIC WORKS — 202214.1

REVISED		APPROVED DATE	APPROVED DATE	
DATE	BY	CHIEF ENGINEER	PROJECT MANAGER	SCALE: AS SHOWN
				DRAWN BY: AMD
				CHECKED BY: TS
		APPROVED DATE	APPROVED DATE	SHEET: C2 OF 19
				PROJECT NO.: P584700
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	CONTRACT NO.: P584702

PROJECT NOTES PLAN
FOR THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
4150 HONEYSUCKLE DRIVE
MAYO, MARYLAND 21106
TAX ID: 01-000-03599460
TAX MAP 61, GRD 19, PARCEL 4
DISTRICT 1 ~ ANNE ARUNDEL COUNTY ~ ZONED OS & R2

PLOTTED: Apr 04 , 2024 - 10:50am

P:\21-7930 WGM - Mayo Beach Park - 4150 Honeysuckle Drive\Drawing Files\Grading Plans\21-7930 GRADING PLANS.dwg

REMOVAL OF THIS TREE WAS APPROVED WITH VMP 2023-287

SOIL TYPES (TOTAL SITE)

SYMBOL	DESCRIPTION	SOIL GROUP	HYDRIC
AsC	ANNAPOLIS FINE SANDY LOAM, 2 TO 5% SLOPES	C	NO
CnB	COLEMANTOWN -URBAN LAND COMPLEX, 0 TO 5% SLOPES	C/D	YES
DuB	DONLONTON-URBAN LAND COMPLEX, 0 TO 5% SLOPES	D	YES
MZA	MISPILLION AND TRANSQUAKING SLOPES, 0 TO 1% SLOPES; TIDALLY FLOODED	A/D	YES
UxB	UDORTHENTS, LOAMY, SULFIDIC SUBSTRATUM, 0 TO 5% SLOPES	C	NO

SOIL TYPES (AREA OF IMPROVEMENT)

SYMBOL	DESCRIPTION	SOIL GROUP	HYDRIC
UxB	UDORTHENTS, LOAMY, SULFIDIC SUBSTRATUM, 0 TO 5% SLOPES	C	NO

RESOURCE MAP CERTIFICATION

BAY ENGINEERING INC. HEREBY CERTIFIES THAT THE LOCATION OF FEATURES AS SHOWN HEREON HAVE BEEN FIELD VERIFIED.

TERRY SCHUMAN, P.E. 19593 — 1/17/24 DATE

STATE OF MARYLAND — TERRY L. SCHUMAN — 19593 — PROFESSIONAL ENGINEER

NOTE: THE DEVELOPER / CONTRACTOR SHALL ALSO NOTIFY THE ANNE ARUNDEL COUNTY OFFICE OF PLANNING ZONING, CULTURAL RESOURCES DIVISION AT 410-222-7486, 48 HOURS PRIOR TO CONSTRUCTION. STAFF WILL BE AVAILABLE WITHIN 48 HOURS OF NOTIFICATION TO CONDUCT A SITE VISIT AND MONITOR EXCAVATIONS AND EARTHMOVING AND DOCUMENT ANY DISCOVERIES.

TOTAL LOD AREA= 22,212 SQ. FT. (0.51 ACRES)
EXISTING IMPERVIOUS AREA WITHIN LOD= 14,225 SQ. FT. (0.33 ACRES)
EXISTING LOD IS 64.0% IMPERVIOUS

NOTE: REFER TO SHEET C2 FOR SITE LEGEND

BID DOCUMENTS

GRAPHIC SCALE
1 INCH = 20 FEET

#	REVISION DESCRIPTION	BY	DATE

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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.

STATE OF MARYLAND — TERRY L. SCHUMAN — 19593 — PROFESSIONAL ENGINEER

Terry Schuman — 4/3/24 Date
19593 — License No. — 3/31/26 Expiration Date

ANNE ARUNDEL COUNTY — MAY 2024
DEPARTMENT OF PUBLIC WORKS — 202214.1

REVISED DATE	BY	APPROVED DATE	APPROVED DATE
		CHIEF ENGINEER	PROJECT MANAGER
		APPROVED DATE	APPROVED DATE
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY

SCALE: 1"=20'
DRAWN BY: AMD
CHECKED BY: TS
SHEET: C3 OF 19
PROJECT NO.: P584700
CONTRACT NO.: P584702

EXISTING CONDITIONS PLAN
FOR THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
4150 HONEYSUCKLE DRIVE
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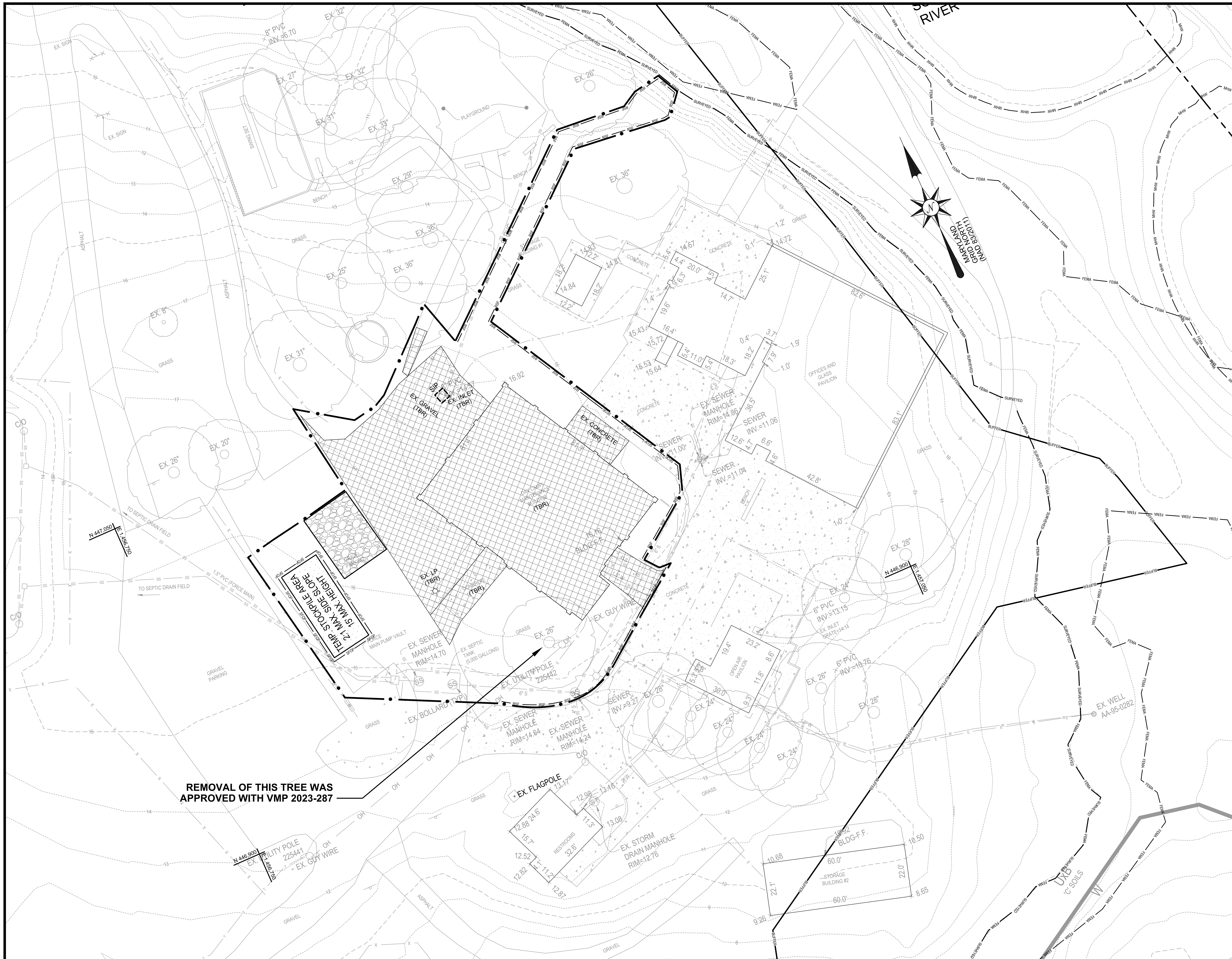

DEMOLITION LEGEND

(hatch)	EXISTING STRUCTURE AND ASSOCIATED ITEMS TO BE REMOVED
X	EXISTING SPECIMEN TREE TO BE REMOVED
TBR	"TO BE REMOVED"

DEMOLITION NOTES

1. ALL DEMOLITION ACTIVITIES ARE TO BE PERFORMED IN STRICT ADHERENCE TO ALL FEDERAL, STATE AND LOCAL REGULATIONS.
2. DEMOLISH CONCRETE AND MASONRY IN SMALL SECTIONS.
3. BREAK UP CONCRETE SLABS-ON-GRADE, UNLESS OTHERWISE DIRECTED BY THE CLIENT.
4. CONDUCT DEMOLITION SERVICES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS AND OTHER OCCUPIED FACILITIES WITHOUT PRIOR WRITTEN PERMISSION OF THE CLIENT AND ANY APPLICABLE GOVERNMENTAL AUTHORITIES. PROVIDE ALTERNATE ROUTES AROUND CLOSED OR OBSTRUCTED TRAFFIC WAYS, IF REQUIRED BY APPLICABLE GOVERNMENTAL REGULATION.
5. USE WATERING, TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS, AS NECESSARY TO LIMIT THE AMOUNT OF DUST AND DIRT RISING AND SCATTERING IN THE AIR. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. RETURN ALL ADJACENT AREAS TO THE CONDITIONS EXISTING PRIOR TO THE START OF WORK.
6. ACCOMPLISH AND PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE UNAUTHORIZED ENTRY OF PERSONS AT ANY TIME.
7. COMPLETELY FILL BELOW GRADE AREAS AND VOIDS RESULTING FROM THE DEMOLITION OF STRUCTURES AND FOUNDATIONS WITH SOIL MATERIALS CONSISTING OF STONE, GRAVEL, AND SAND, FREE FROM DEBRIS, TRASH, FROZEN MATERIALS, ROOTS AND OTHER ORGANIC MATTER. STONES USED WILL NOT BE LARGER THAN 6 INCHES IN DIMENSION. MATERIAL FROM DEMOLITION MAY NOT BE USED AS FILL. PRIOR TO PLACEMENT OF FILL MATERIALS, UNDERTAKE ALL NECESSARY ACTION IN ORDER TO INSURE THAT AREAS TO BE FILLED ARE FREE OF STANDING WATER, FROST, AND FROZEN MATERIAL, TRASH DEBRIS. PLACE FILL MATERIALS IN HORIZONTAL LAYERS NOT EXCEEDING 6 INCHES IN LOOSE DEPTH AND COMPACT EACH LAYER AT PLACEMENT TO 95% OPTIMUM DENSITY. GRADE THE SURFACE TO MEET ADJACENT CONTOURS AND TO PROVIDE SURFACE DRAINAGE.
8. REMOVE FROM THE DESIGNATED SITE, AT THE EARLIEST POSSIBLE TIME, ALL DEBRIS, RUBBISH, SALVAGEABLE ITEMS, HAZARDOUS AND COMBUSTIBLE SERVICES. REMOVE MATERIALS MAY NOT BE STORED, SOLD OR BURNED ON THE SITE. REMOVAL OF HAZARDOUS AND COMBUSTIBLE MATERIALS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE PROCEDURES AS AUTHORIZED BY THE FIRE DEPARTMENT OR OTHER APPROPRIATE REGULATORY AGENCIES AND AUTHORITIES.
9. MARK FOR POSITION ALL UTILITY DRAINAGE AND SANITARY LINES AND PROTECT ALL ACTIVE LINES. CLEARLY IDENTIFY, BEFORE THE COMMENCEMENT OF DEMOLITION, SERVICES THAT REQUIRE INTERRUPTION OF ACTIVE SYSTEMS THAT MAY AFFECT OTHER PARTIES, AND NOTIFY ALL APPLICABLE UTILITY COMPANIES TO INSURE THE CONTINUATION OF SERVICE. DISCONNECT SHUT OFF AND SEAL IN CONCRETE ALL UTILITIES SERVING THE STRUCTURES TO BE DEMOLISHED BEFORE THE COMMENCEMENT OF THE DESIGNATED DEMOLITION.
10. PRIOR TO THE ONSET OF DEMOLITION, THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES ON SITE AND COORDINATE REMOVAL AND/ OR PROTECTION OF SAID UTILITIES WITH THE RESPECTIVE UTILITY COMPANY.
11. PRIOR TO THE ONSET OF DEMOLITION THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND / OR PERMISSION AS REQUIRED BY LOCAL AGENCIES, THE STATE OF MARYLAND AND ANY APPLICABLE FEDERAL AGENCIES.
12. ANY OTHER FEATURES NOT SHOWN ON THIS SURVEY, BUT NOT SITE SPECIFIC TO THE CLIENT ARE TO BE REMOVED, INCLUDING BUT NOT LIMITED TO LIGHT POLES, FENCES, AND SIGNS.
13. THE CONTRACTOR IS RESPONSIBLE FOR SAFETY ON THE SITE AT ALL TIMES DURING THE DEMOLITION PROCESS.
14. LOCATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE. ALL LOCATIONS ARE SIZED AND BASED ON UTILITY MARK-OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE AND ACCESSIBLE IN THE FIELD, AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE AS-BUILTS PLANS AND UTILITY MARKOUTS DO NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. BEFORE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANY.
15. SEE SHEET C2 FOR EXISTING SITE LEGEND.
16. SEE SHEET C2 FOR PROPERTY BOUNDARY BEARINGS AND DISTANCES.
17. THE CONTRACTOR SHALL COORDINATE WITH MISS UTILITY TO LOCATE ALL EXISTING UTILITIES PRIOR TO ANY EXCAVATION AND COORDINATE WITH ALL THE UTILITY COMPANIES PRIOR TO ANY EXCAVATION.
18. THE DEVELOPER / CONTRACTOR SHALL ALSO NOTIFY THE ANNE ARUNDEL COUNTY OFFICE OF PLANNING ZONING, CULTURAL RESOURCES DIVISION AT 410-222-7486, 48 HOURS PRIOR TO CONSTRUCTION. STAFF WILL BE AVAILABLE WITHIN 48 HOURS OF NOTIFICATION TO CONDUCT A SITE VISIT AND MONITOR EXCAVATIONS AND EARTHMOVING AND DOCUMENT ANY DISCOVERIES.

EXISTING IMPERVIOUS AREA BREAKDOWN TO BE REMOVED

TYPE	PROPOSED REMOVAL (SQ.FT.)
BUILDING	4,921 SQ.FT.
CONCRETE	1,293 SQ.FT.
GRAVEL	3,767 SQ.FT.
ASPHALT	106 SQ.FT.
TOTAL	10,087 SQ.FT.

NOTE: REFER TO SHEET C2 FOR SITE LEGEND.

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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.
STATE OF MARYLAND
TERRY L SCHUMAN
19593
PROFESSIONAL ENGINEER
Terry Schuman — Date: 4/3/24
License No.: 19593 — Expiration Date: 3/31/26

ANNE ARUNDEL COUNTY — MAY 2024
DEPARTMENT OF PUBLIC WORKS — 202214.1

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		CHIEF ENGINEER	PROJECT MANAGER	SCALE: 1"=20'
				DRAWN BY: AMD
				CHECKED BY: TS
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	SHEET: C4 OF 19
				PROJECT NO.: P584700
				CONTRACT NO.: P584702

DEMOLITION PLAN
FOR THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
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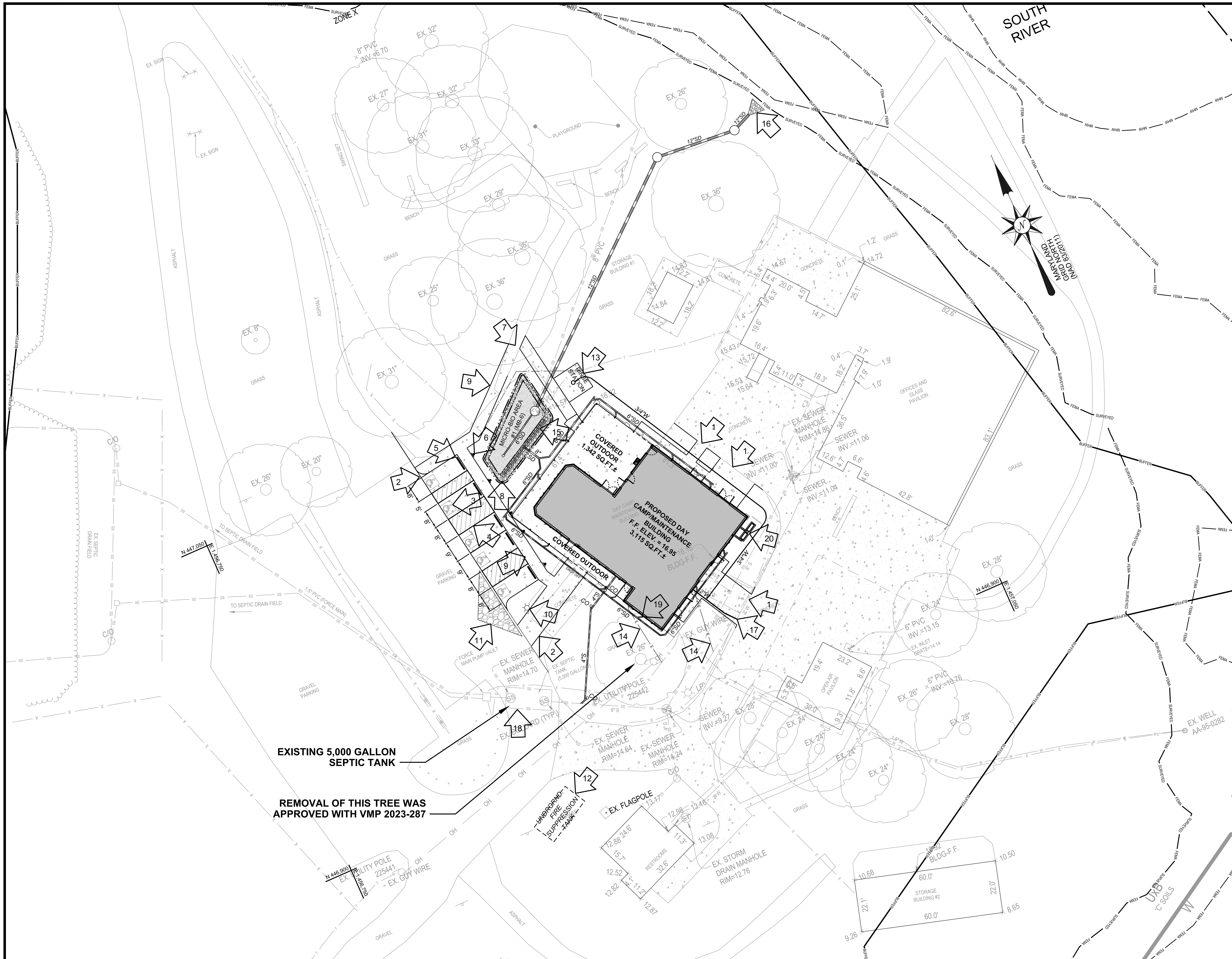

BUFFER ESTABLISHMENT NOTE

TO DEVELOP THIS SITE THE APPLICANT WILL NEED TO ESTABLISH THE BUFFER BASED ON NET SQUARE FOOTAGE INCREASE IN LOT COVERAGE OUTSIDE THE BUFFER (COMAR 27.01.09.01-1).
THIS SITE IS CONSIDERED "*ADDITION*" PER COMAR 27.01.09.01-1(C) SINCE THE PROPOSED FOOTPRINT IS LESS THAN 50% INCREASE FROM THE EXISTING BUILDING FOOTPRINT. BUILDING FOOTPRINTS INCLUDE THE EXISTING OFFICES, PAVILIONS, RESTROOMS AND STORAGE BUILDING TO REMAIN, PROPOSED CAMP AND MAINTENANCE BUILDING.
EXISTING FOOTPRINT = 4,921 SQ.FT.
PROPOSED FOOTPRINT = 4,753 SQ.FT.
PERCENT INCREASE = (4,753 SQ.FT. - 4,921 SQ.FT.)/4,753 SQ.FT. = -3.5% (NO INCREASE)
THE APPLICANT PROPOSES NO INCREASE OF LOT COVERAGE OUTSIDE THE 100' BUFFER; THEREFORE, **NO** MITIGATION IS REQUIRED.

KEYED NOTES

1. MATCH EXISTING CONCRETE PAVEMENT FOR LINE AND GRADE.
2. PROPOSED CONCRETE PAVEMENT. REFER TO DETAIL ON SHEET 7.
3. PROPOSED HANDICAP PAVEMENT MARKING (TYPICAL). REFER TO DETAIL ON SHEET 7.
4. PROPOSED PAINTED STRIPED AREA.
5. PROPOSED WHEEL STOP (TYP. OF 5).
6. PROPOSED HANDICAP SIGN.
7. MATCH EXISTING WALKWAY FOR LINE AND GRADE.
8. PROPOSED MICRO-BIORETENTION AREA. REFER TO DETAILS AND NOTES ON SHEET.
9. PROPOSED CONCRETE SIDEWALK PER ANNE ARUNDEL COUNTY STANDARD DETAIL I/14. ALL SIDEWALKS SHALL BE 5' WIDE.
10. EXISTING LIGHT POLE TO BE REMOVED.
11. TRANSITION TO EXISTING GRAVEL GRADE.
12. PROPOSED 25,000 GALLON UNDERGROUND FIRE TANK. REFER TO DETAIL ON SHEET 7.
13. PROPOSED RINSE STATION. REFER TO DETAIL ON SHEET 7.
14. PROPOSED 4" PVC CONDUIT. REFER TO ELECTRICAL PLANS.
15. PROPOSED CURTAIN DRAIN. REFER TO DETAIL ON SHEET 12.
16. PROPOSED RIP RAP OUTFALL. REFER TO DETAIL ON SHEET 13.
17. UTILIZE EXISTING WATERLINE CONNECTION.
18. EXISTING 5,000 GALLON SEPTIC TANK TO REMAIN.
19. PROPOSED ROOF DRAIN OVERFLOW/DOWNSPOUT FILTER AT AT EACH DOWNSPOUT LOCATION TO BE AMERIMAX FLEX GRATE VINYL DOWNSPOUT FILTER OR APPROVED EQUAL (TYP OF 10). COLOR TO BE APPROVED BY OWNER.
20. PROPOSED CONCRETE PAD FOR CONDENSER UNITS. REFER TO ARCHITECTURAL AND MECHANICAL PLANS.

SITE AREA SUMMARY

TOTAL SITE AREA =	25.22 ACRES
EXISTING IMPERVIOUS SITE AREA =	1.87 ACRES (7.4% OF TOTAL SITE AREA)
POST - DEVELOPMENT SITE IMPERVIOUS AREA =	1.83 ACRES (7.2% OF TOTAL SITE AREA)
SOILS BREAKDOWN FOR SITE AREA:	
AREA OF SOILS OF HSG A =	0 ACRES
AREA OF SOILS OF HSG B =	0 ACRES
AREA OF SOILS OF HSG C =	20.4 ACRES
AREA OF SOILS OF HSG D =	3.07 ACRES
AREA OF WATER =	1.75 ACRES
TOTAL L.O.D. AREA =	0.51 ACRES
FOR ESD COMPUTATIONS, THE COMPUTATIONS WERE BASED ON THE FOLLOWING AREAS:	
TOTAL AREA USED FOR ESD COMPUTATIONS =	0.41 ACRES *
SOILS BREAKDOWN FOR ESD COMPUTATIONS:	
AREA OF SOILS OF HSG A =	0 ACRES
AREA OF SOILS OF HSG B =	0 ACRES
AREA OF SOILS OF HSG C =	0.41 ACRES
AREA OF SOILS OF HSG D =	0 ACRES

* NET AREA BASED ON REMOVAL OF EXISTING IMPERVIOUS AREA THAT WILL NOT BE DISTURBED. REFER TO BREAKDOWN ON SHEET 18.

PROPOSED IMPERVIOUS AREA BREAKDOWN WITHIN LOD

TYPE	PROPOSED NEW IMPERVIOUS AREA (SQ.FT.)
BUILDING	4,753 SQ.FT.
CONCRETE	3,466 SQ.FT.
TOTAL	8,219 SQ.FT. (REDUCTION OF 1,978 SQ.FT. FROM EXISTING CONDITIONS)

ADA COMPLIANCE NOTE

IN ORDER TO MEET THE ADOPTED 2010 ADA MINIMUM REQUIREMENTS AND IN ACCORDANCE WITH THE PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG) PUBLISHED BY THE U.S. ACCESS BOARD IN 2011, ALL PUBLIC AND PRIVATE PEDESTRIAN ACCESS ROUTES, SIDEWALKS, CURB AND GUTTER, CURB RAMPS, AND TRAFFIC CONTROL DEVICES SHALL BE DESIGNED IN ACCORDANCE WITH THE ANNE ARUNDEL COUNTY PEDESTRIAN FACILITY STANDARDS PF1-PF29.

NOTE: REFER TO SHEET C2 FOR SITE LEGEND.

BID DOCUMENTS

GRAPHIC SCALE
1 INCH = 20 FEET

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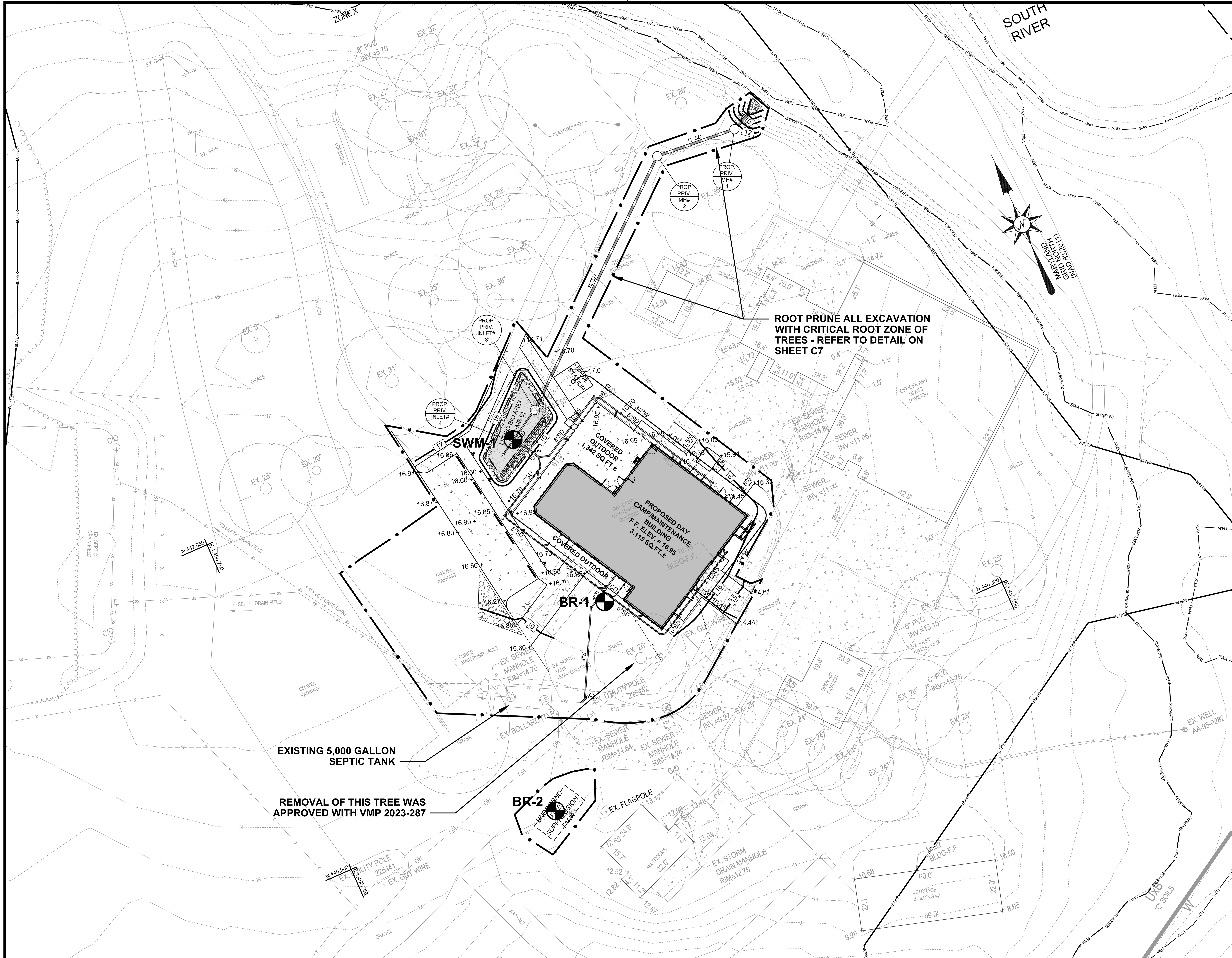
STATE OF MARYLAND TERRY L SCHUMAN 19593 PROFESSIONAL ENGINEER
Terry Schuman — Date 4/3/24
License No. 19593 — Expiration Date 3/31/26

ANNE ARUNDEL COUNTY — MAY 2024
DEPARTMENT OF PUBLIC WORKS — 202214.1

REVISED DATE	BY	APPROVED / DATE	APPROVED / DATE	
		CHIEF ENGINEER	PROJECT MANAGER	SCALE: 1"=20'
				DRAWN BY: AMD
				CHECKED BY: TS
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	SHEET: C5 OF 19
				PROJECT NO.: P584700
				CONTRACT NO.: P584702

SITE PLAN
FOR THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
4150 HONEYSUCKLE DRIVE
MAYO, MARYLAND 21106
TAX ID: 01-000-03599460
TAX MAP 61, GRD 19, PARCEL 4
DISTRICT 1 ~ ANNE ARUNDEL COUNTY ~ ZONED OS & R2

PLOTTED: Apr 04 , 2024 - 10:50am
P:\21-7930 WGM - Mayo Beach Park - 4150 Honeysuckle Drive\Drawing Files\Grading Plans\21-7930 GRADING PLANS.dwg



NOTE: REFER TO SHEET C2 FOR SITE LEGEND.

BID DOCUMENTS

GRAPHIC SCALE
1 INCH = 20 FEET

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STATE OF MARYLAND — TERRY L SCHUMAN — 19593 — PROFESSIONAL ENGINEER

Terry Schuman — Date: 4/3/24
License No.: 19593 — Expiration Date: 3/31/26

ANNE ARUNDEL COUNTY — MAY 2024
DEPARTMENT OF PUBLIC WORKS — 202214.1

REVISED DATE	BY	APPROVED / DATE	APPROVED / DATE	
		CHIEF ENGINEER	PROJECT MANAGER	SCALE: 1"=20'
				DRAWN BY: AMD
				CHECKED BY: TS
				SHEET: C6 OF 19
				PROJECT NO.: P584700
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	CONTRACT NO.: P584702

GRADING PLAN

FOR THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
4150 HONEYSUCKLE DRIVE
MAYO, MARYLAND 21106
TAX ID: 01-000-03599460
TAX MAP 61, GRD 19, PARCEL 4
DISTRICT 1 ~ ANNE ARUNDEL COUNTY ~ ZONED OS & R2

PLOTTED: Apr 04, 2024 - 10:50am

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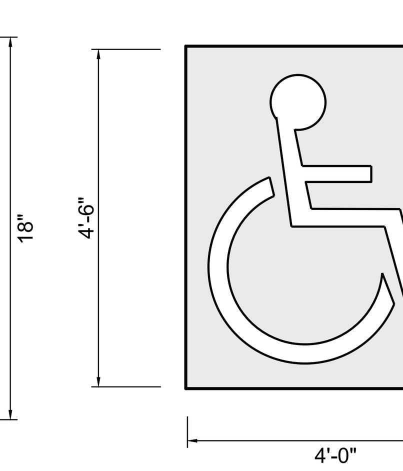
HANDICAP PARKING SYMBOL - 4" LINES PAINTED WHITE ON SAFETY BLUE BACKGROUND PER. STATE & LOCAL CODES OR FEDERAL CODES

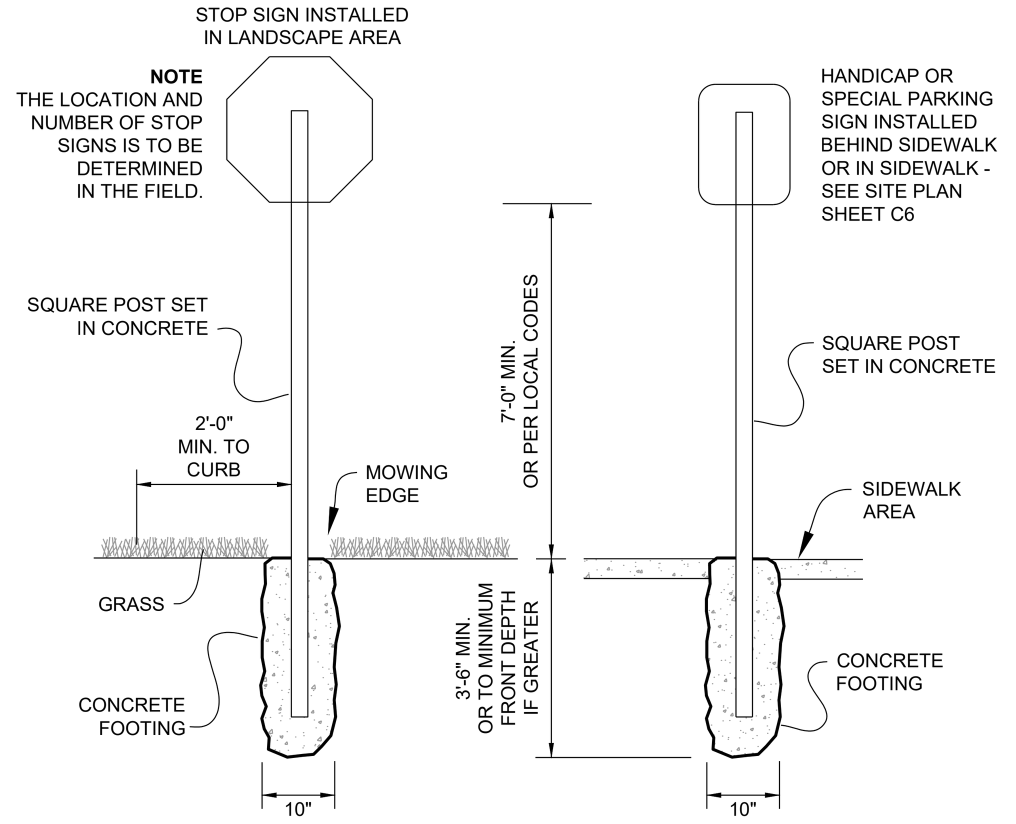


HANDICAP SIGNAGE NOTES

1. ALL LETTERS ARE 1" SERIES 'C'.
2. TOP PORTION TO BE REFLECTORIZED BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
3. BOTTOM PORTION TO BE REFLECTORIZED WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
4. SIGN TO BE MTD. ON GALV. STEEL POST SET IN CONCRETE - VERIFY WITH LOCAL BUILDING OFFICIALS AS TO REQUIRED HEIGHT. IF LOCAL REQUIREMENTS DO NOT STIPULATE HEIGHT, MOUNT SIGNAGE AT BOTTOM OF "VAN ACCESSIBLE" SIGN @ 7'-0" ABOVE FINISH GRADE.

HANDICAP SIGNAGE DETAIL

SCALE: NONE

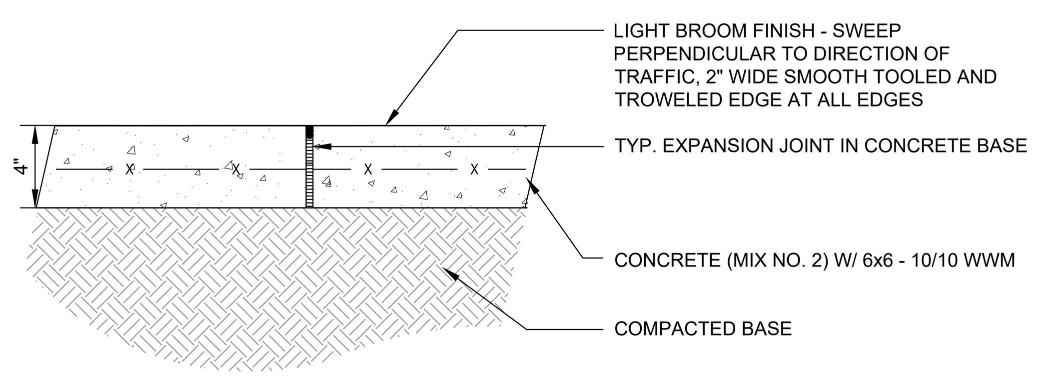


TRAFFIC SIGNAGE DETAIL

SCALE: NONE

SIDEWALK PAVEMENT NOTES

1. INSTALL PREFORMED ELASTOMERIC JOINT COMPRESSION MATERIAL AT ALL MEETINGS OF PROPOSED CONCRETE PAVING AND EX. CONCRETE PAVING, EX. CONCRETE CURB AND GUTTER AND BUILDING WALLS.
2. SIDEWALK EXPANSION JOINTS PER ANNE ARUNDEL COUNTY DETAIL I/16.

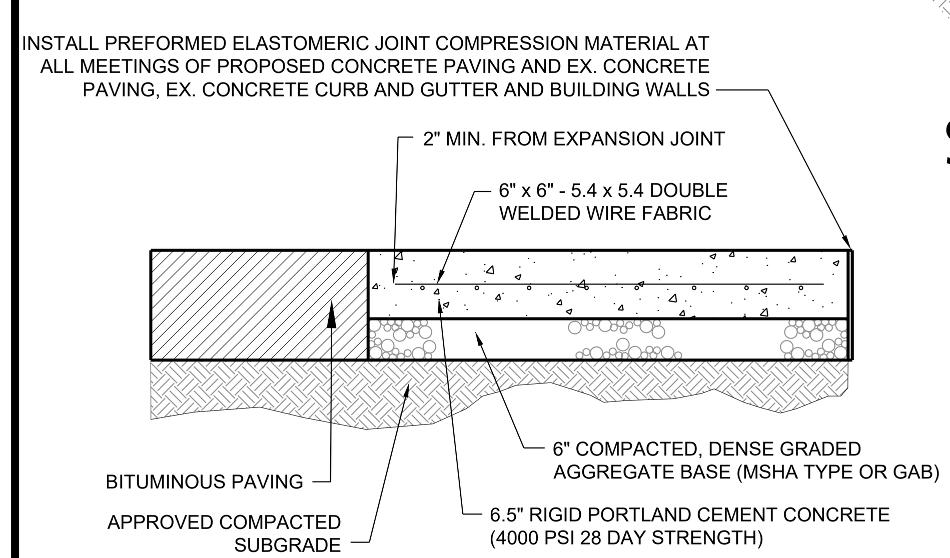


SIDEWALK PAVEMENT DETAIL

SCALE: NONE

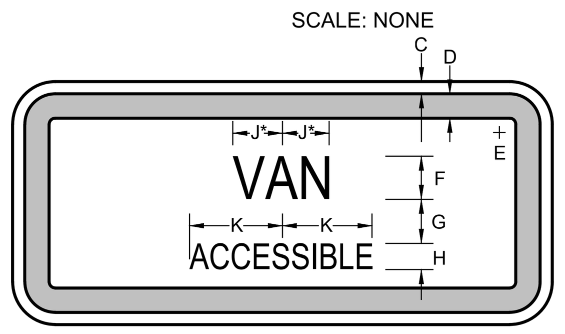
CONCRETE LOADING PAD NOTES

1. THE CONTRACTOR SHALL REFER TO THE PAVEMENT DESIGN SECTION OF THE GEOTECHNICAL REPORT FOR GLEN BURNIE CROSS LOT 5RRR DATED JUNE 3, 2022 AND PREPARED BY SPECIALIZED ENGINEERING FOR SUBGRADE PREPARATION AND CONCRETE DESIGN / INSTALLATION.
2. A CONSTRUCTION JOINT SHALL BE PLACED EVERY 15'. AT ALL CONSTRUCTION JOINTS, UNDEFORMED 3/4" DOWELS MUST BE USED @ 12" O.C. FOR LOAD TRANSFER ACROSS THE JOINTS. THE DOWELS MUST BE MIN. 14" IN LENGTH AND EMBEDDED A MIN. OF 6" W/ ONE END REMAINING UNBONDED.
3. CONCRETE PAD TO HAVE SEALED SURFACE TREATMENT.



CONCRETE PAVEMENT DETAIL

SCALE: NONE

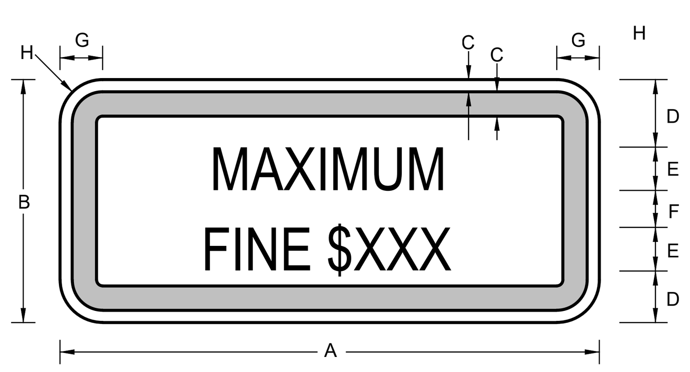


* INCREASE SPACING 50%

SIGN	DIMENSIONS (INCHES)									
	A	B	C	D	E	F	G	H	J	K
MIN.	12	6	3/8	3/8	1 1/2	1/2D	1/2	1D	2 1/2	4
STD.	18	9	3/8	5/8	2 1/2	2 D	1	1 1/2D	2 3/4	7

HANDICAP SIGNAGE DETAIL

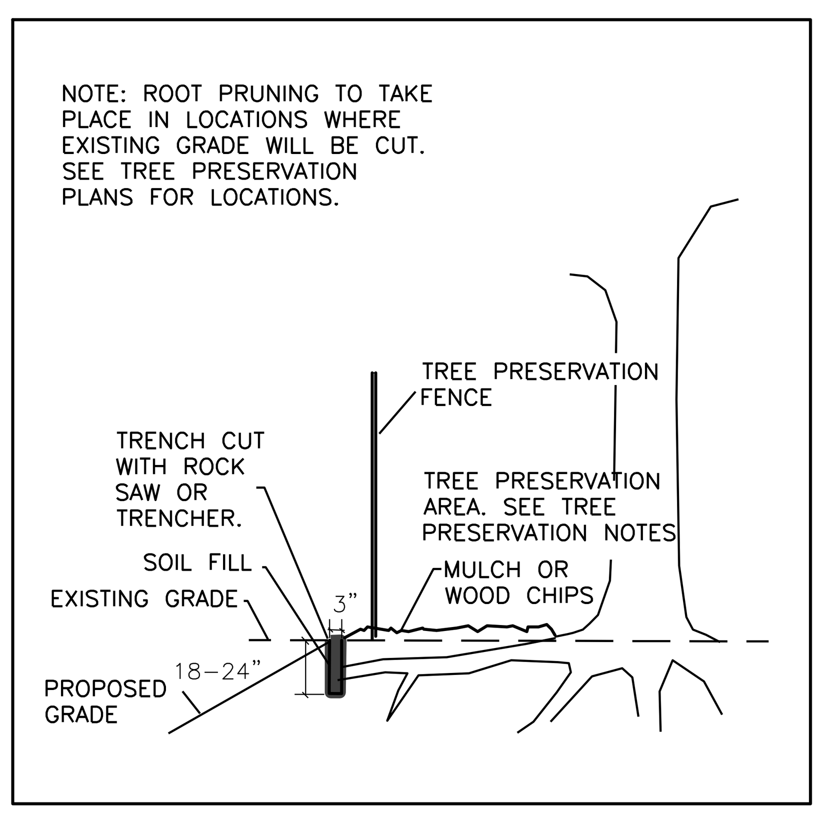
SCALE: NONE



SIGN SIZE	DIMENSIONS (INCHES)							
	A	B	C	D	E	F	G	H
STD.	12	9	3/8	1 3/4	2	1 1/2	1 1/4	1 1/2

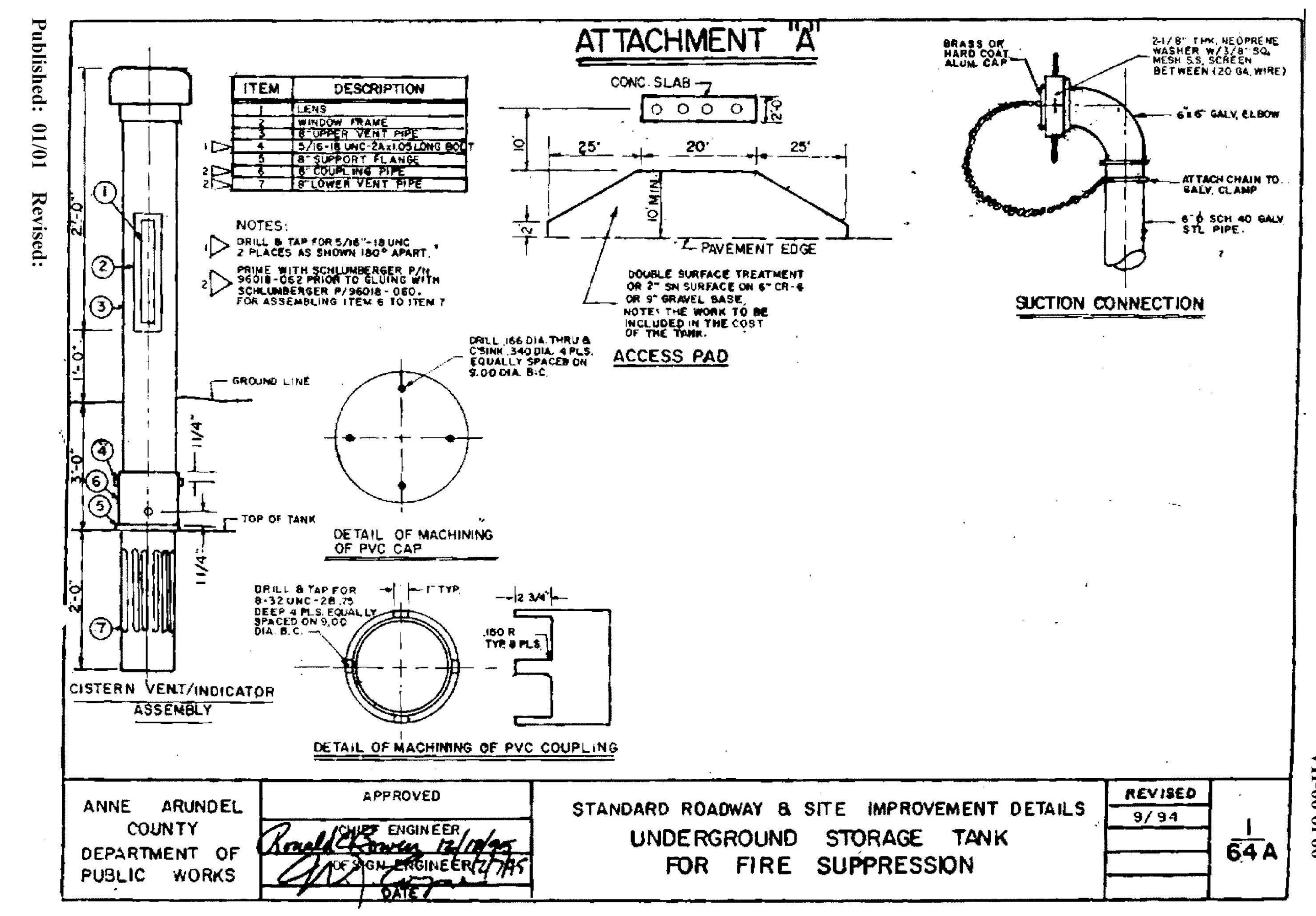
HANDICAP SIGNAGE DETAIL

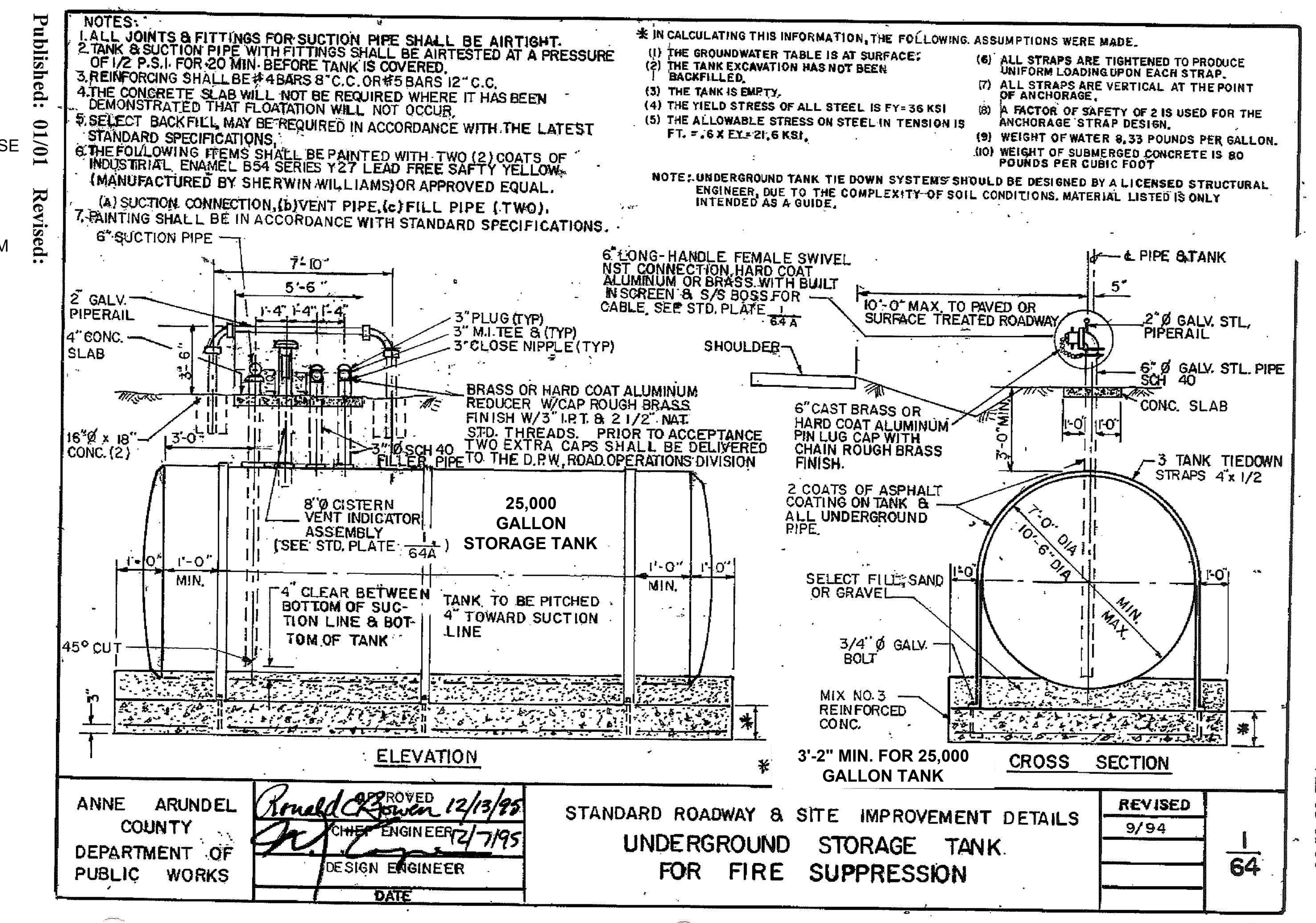
SCALE: NONE

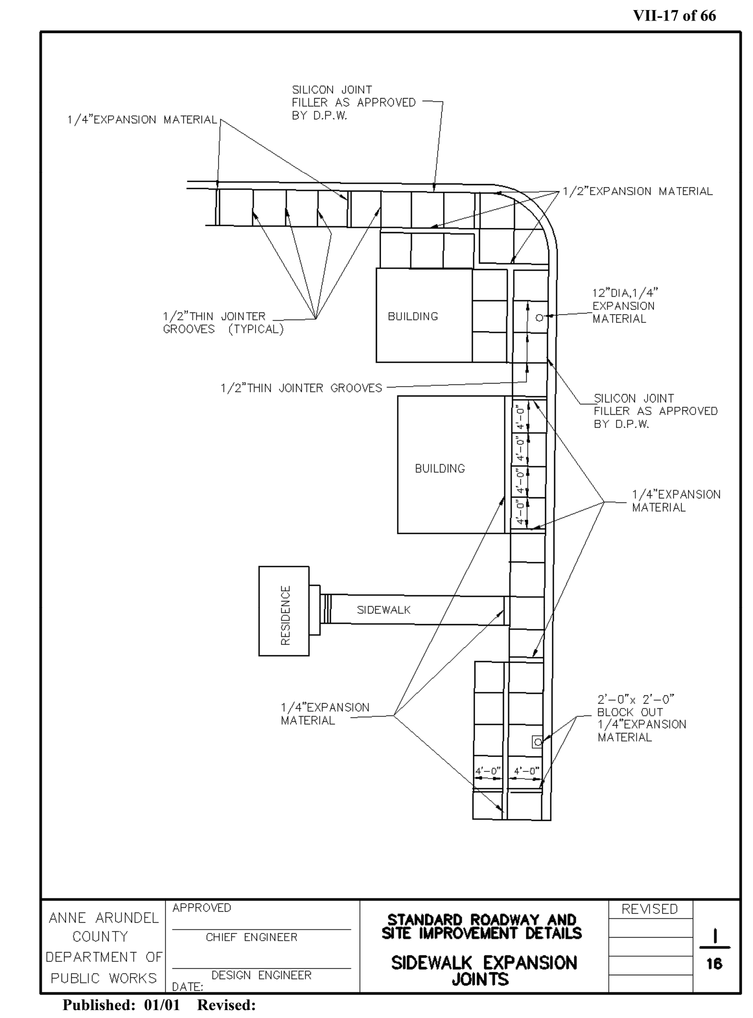


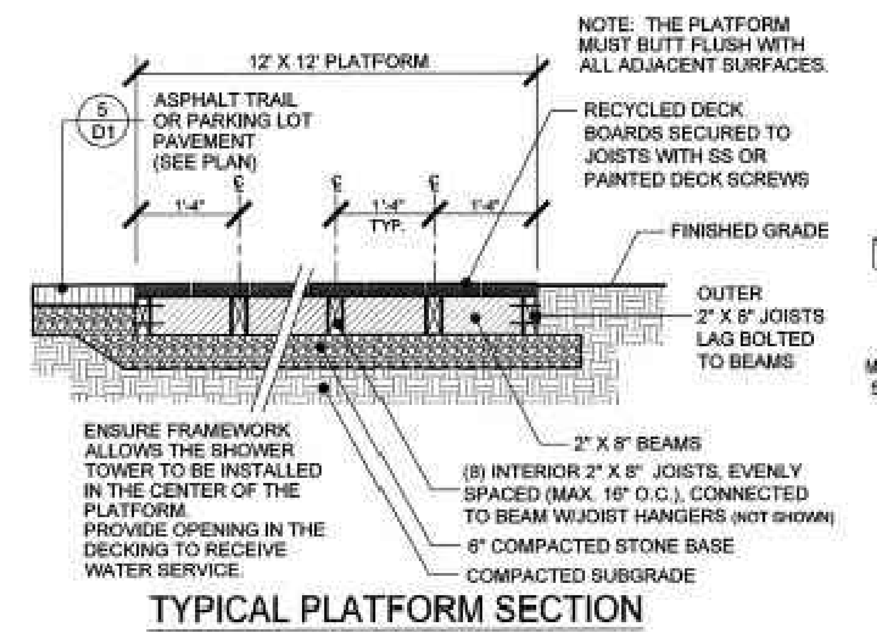
ROOT PRUNE DETAIL

SCALE: NONE



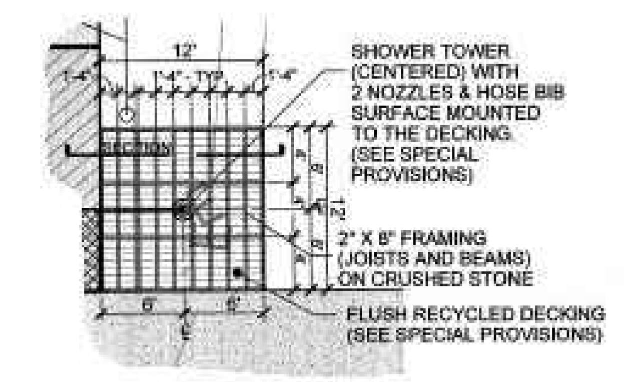


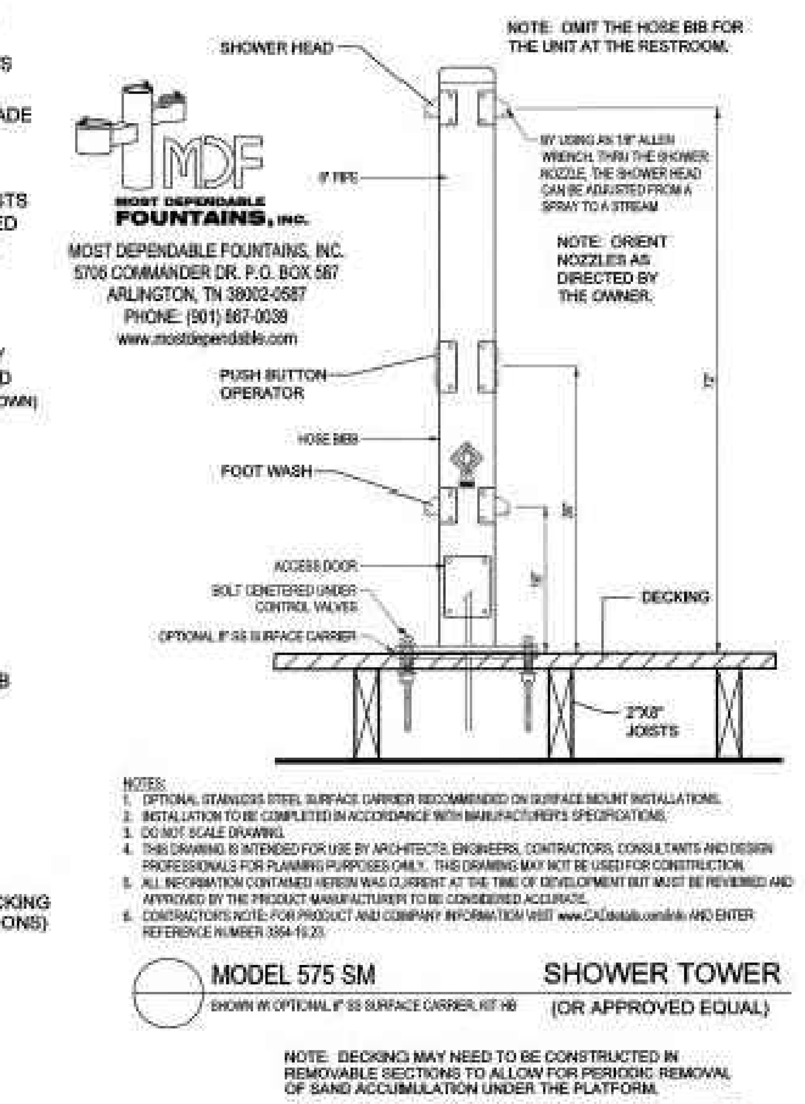


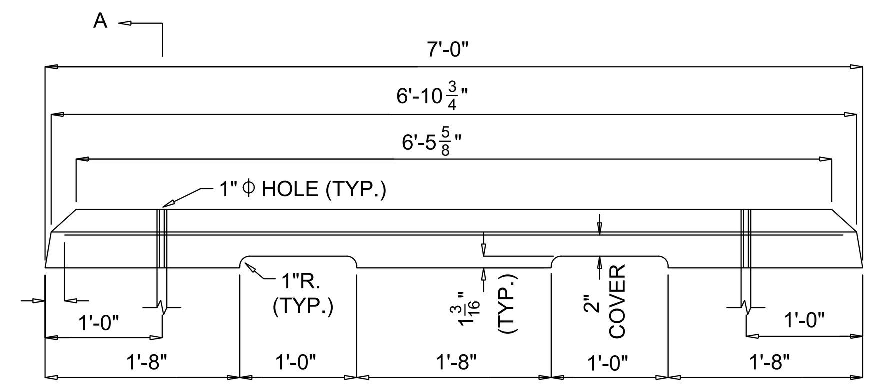


TYPICAL PLATFORM SECTION

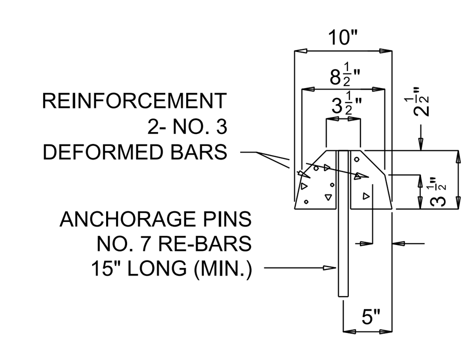
NOT TO SCALE







ELEVATION



SECTION A-A

PRE-CAST CONCRETE WHEEL STOP DETAIL

SCALE: NONE

ADA COMPLIANCE NOTE

IN ORDER TO MEET THE ADOPTED 2010 ADA MINIMUM REQUIREMENTS AND IN ACCORDANCE WITH THE PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG) PUBLISHED BY THE U.S. ACCESS BOARD IN 2011, ALL PUBLIC AND PRIVATE PEDESTRIAN ACCESS ROUTES, SIDEWALKS, CURB AND GUTTER, CURB RAMPS, AND TRAFFIC CONTROL DEVICES SHALL BE DESIGNED IN ACCORDANCE WITH THE ANNE ARUNDEL COUNTY PEDESTRIAN FACILITY STANDARDS PF1-PF29.

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STATE OF MARYLAND — TERRY L SCHUMAN — 19593 — PROFESSIONAL ENGINEER

Terry Schuman — 4/3/24 — Date
19593 — License No. — 3/31/26 — Expiration Date

ANNE ARUNDEL COUNTY			MAY 2024
DEPARTMENT OF PUBLIC WORKS			202214.1
REVISED (DATE / BY)	APPROVED ___ DATE — CHIEF ENGINEER	APPROVED ___ DATE — PROJECT MANAGER	SCALE: AS SHOWN
			DRAWN BY: AMD
			CHECKED BY: TS
	APPROVED ___ DATE — ASSISTANT CHIEF ENGINEER	APPROVED ___ DATE — CHIEF, RIGHT OF WAY	SHEET: C7 OF 19
			PROJECT NO.: P584700
			CONTRACT NO.: P584702

SITE DETAILS
FOR THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
4150 HONEYSUCKLE DRIVE
MAYO, MARYLAND 21106
TAX ID: 01-000-03599460
TAX MAP 61, GRD 19, PARCEL 4
DISTRICT 1 ~ ANNE ARUNDEL COUNTY ~ ZONED OS & R2

PLOTTED: Apr 04 , 2024 - 10:50am
P:\21-7930 WGM - Mayo Beach Park - 4150 Honeysuckle Drive\Drawing Files\Grading Plans\21-7930 GRADING PLANS.dwg

TEMPORARY S.W.M. NOTE

PLEASE NOTE THAT THERE IS A DECREASE IN IMPERVIOUS AREA WITHIN THE LOD. THEREFORE, THE OVERALL POST-DEVELOPMENT INTERIM 1-YR FLOW DOES NOT EXCEED THE PRE-DEVELOPMENT 1-YR FLOW. THEREFORE, TEMPORARY S.W.M. IS PROVIDED. A SUMMARY OF THE FLOWS IS AS FOLLOWS :

OUTFALL	PRE-DEV 1 YR. FLOW	POST-DEV 1 YR. FLOW
1A	10.8 CFS	10.8 CFS
1B	15.7 CFS	15.6 CFS
1C	8.0 CFS	8.0 CFS

SEC PUMPING NOTE

THE CONTRACTOR IS REQUIRED TO PUMP ALL STANDING WATER THROUGH A FILTERING DEVICE TO A CLEAR WATER OUTFALL WITHIN 24 HOURS OF A RAINFALL EVENT.

STABILIZATION NOTE

ALL STAGING AREAS, HAUL ROADS AND OTHER HEAVY USE AREAS ARE TO BE MECHANICALLY STABILIZED AT ALL TIMES TO THE LIMITS AS SHOWN.

NOTE: REFER TO SHEET C2 FOR SITE LEGEND.

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Terry L. Schuman	4/3/24
	Date
19593	3/31/26
License No.	Expiration Date

ANNE ARUNDEL COUNTY — MAY 2024

DEPARTMENT OF PUBLIC WORKS — 202214.1

REVISED DATE	BY	APPROVED DATE	APPROVED DATE
		CHIEF ENGINEER	PROJECT MANAGER
		APPROVED DATE	APPROVED DATE
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY

SCALE: 1"=20'
DRAWN BY: AMD
CHECKED BY: TS
SHEET: C8 OF 19
PROJECT NO.: P584700
CONTRACT NO.: P584702

SEDIMENT EROSION CONTROL PLAN - PHASE 1

FOR THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
4150 HONEYSUCKLE DRIVE
MAYO, MARYLAND 21106
TAX ID: 01-000-03599460
TAX MAP 61, GRD 19, PARCEL 4
DISTRICT 1 ~ ANNE ARUNDEL COUNTY ~ ZONED OS & R2

PLOTTED: Apr 04 , 2024 - 10:50am

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NOTE: REFER TO SHEET C2 FOR SITE LEGEND.

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Terry Schuman — Date 4/3/24
License No. 19593 — Expiration Date 3/31/26

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

MAY 2024
202214.1

REVISED		APPROVED DATE	APPROVED DATE
DATE	BY	CHIEF ENGINEER	PROJECT MANAGER
		APPROVED DATE	APPROVED DATE
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY

SCALE: 1"=20'
DRAWN BY: AMD
CHECKED BY: TS
SHEET: C9 OF 19
PROJECT NO.: P584700
CONTRACT NO.: P584702

SEDIMENT EROSION CONTROL PLAN - PHASE 2

FOR THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
4150 HONEYSUCKLE DRIVE
MAYO, MARYLAND 21106
TAX ID: 01-000-03599460
TAX MAP 61, GRD 19, PARCEL 4
DISTRICT 1 ~ ANNE ARUNDEL COUNTY ~ ZONED OS & R2

PLOTTED: Apr 04 , 2024 - 10:50am

P:\21-7930 WGM - Mayo Beach Park - 4150 Honeysuckle Drive\Drawing Files\Grading Plans\21-7930 GRADING PLANS.dwg

TEMPORARY S.W.M. NOTE

PLEASE NOTE THAT THERE IS A DECREASE IN IMPERVIOUS AREA WITHIN THE LOD. THEREFORE, THE OVERALL POST-DEVELOPMENT INTERIM 1-YR FLOW DOES NOT EXCEED THE PRE-DEVELOPMENT 1-YR FLOW. THEREFORE, TEMPORARY S.W.M. IS PROVIDED. A SUMMARY OF THE FLOWS IS AS FOLLOWS :

OUTFALL	PRE-DEV 1 YR. FLOW	POST-DEV 1 YR. FLOW
1A	10.8 CFS	10.8 CFS
1B	15.7 CFS	15.6 CFS
1C	8.0 CFS	8.0 CFS

SEC PUMPING NOTE

THE CONTRACTOR IS REQUIRED TO PUMP ALL STANDING WATER THROUGH A FILTERING DEVICE TO A CLEAR WATER OUTFALL WITHIN 24 HOURS OF A RAINFALL EVENT.

STABILIZATION NOTE

ALL STAGING AREAS, HAUL ROADS AND OTHER HEAVY USE AREAS ARE TO BE MECHANICALLY STABILIZED AT ALL TIMES TO THE LIMITS AS SHOWN.

NOTE: REFER TO SHEET C2 FOR SITE LEGEND.

BID DOCUMENTS

#	REVISION DESCRIPTION	BY	DATE

ATWELL
866.850.4200 www.atwell-group.com
2661 RIVA ROAD, BUILDING 800
ANNAPOLIS, MARYLAND 21401
410.897.9290

WGM ARCHITECTURE + INTERIORS
WHEELER GOODMAN MASEK
16 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
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www.wgm-arch.com

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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.

STATE OF MARYLAND — TERRY L. SCHULAK — 19593 — PROFESSIONAL ENGINEER

Terry L. Schulak 4/3/24
Date
19593 3/31/26
License No. Expiration Date

ANNE ARUNDEL COUNTY — MAY 2024

DEPARTMENT OF PUBLIC WORKS — 202214.1

REVISED DATE	BY	APPROVED DATE	APPROVED DATE
		CHIEF ENGINEER	PROJECT MANAGER
		APPROVED DATE	APPROVED DATE
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY

SCALE: 1"=20'
DRAWN BY: AMD
CHECKED BY: TS
SHEET: C10 OF 19
PROJECT NO.: P584700
CONTRACT NO.: P584702

SEDIMENT EROSION CONTROL PLAN - PHASE 3

FOR THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
4150 HONEYSUCKLE DRIVE
MAYO, MARYLAND 21106
TAX ID: 01-000-03599460
TAX MAP 61, GRD 19, PARCEL 4
DISTRICT 1 ~ ANNE ARUNDEL COUNTY ~ ZONED OS & R2

PLOTTED: Apr 04, 2024 - 10:50am

P:\21-7930 WGM - Mayo Beach Park - 4150 Honeysuckle Drive\Drawing Files\Grading Plans\21-7930 GRADING PLANS.dwg

INFORMATION STATEMENT

1. OWNER / APPLICANT:
ANNE ARUNDEL RECREATION AND PARKS
P.O BOX 1831
ANNAPOLIS, MARYLAND 21401
C/O LISA DEANS, PM -DPW
443-336-8100
lisa.deanes@aacounty.org

CONSULTANT:
ATWELL
2661 RIVA ROAD, BUILDING 800
ANNAPOLIS, MARYLAND 21401
ATTN: TERRY SCHUMAN, 410.897.9290
tschuman@atwell-group.com

2. GENERAL DESCRIPTION OF PREDOMINATE SOIL TYPE PER TABLE SHOWN ON SHEET 4.

3. EXISTING ZONING IS **OS - OPEN SPACE** AND **R2 - RESIDENTIAL** DISTRICT. THE ZONING IS TO REMAIN THE SAME.

4. TOTAL AREA OF SITE IS **25.22** ACRES ± OR **1,098,553** SQUARE FEET ±.
TOTAL AREA DISTURBED IS **0.51** ACRES ± OR **22,212** SQUARE FEET ±.
TOTAL AREA VEGETATIVELY STABILIZED IS **0.18** ACRES ± OR **8,050** SQUARE FEET ±.
TOTAL AREA STRUCTURALLY STABILIZED IS **0.33** ACRES ± OR **14,162** SQUARE FEET ±.

5. TOTAL CUT ON SITE IS **200** CUBIC YARDS ±.
TOTAL FILL ON SITE IS **200** CUBIC YARDS ±.
TOTAL SPOIL TO BE REMOVED FROM THE SITE IS **0** CUBIC YARDS ±.
TOTAL BORROW TO BE BROUGHT TO THE SITE IS **0** CUBIC YARDS ±.

NOTE: CUT AND FILL QUANTITIES PROVIDED DO NOT REPRESENT BID QUANTITIES. THESE QUANTITIES DO NOT DISTINGUISH BETWEEN TOPSOIL, STRUCTURAL FILL OR EMBANKMENT MATERIAL, NOR DO THEY REFLECT CONSIDERATION OF UNDERCUTTING OR REMOVAL OF UNSUITABLE MATERIAL. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH SITE CONDITIONS WHICH MAY AFFECT THE WORK.

6. ALL UNPAVED ROAD R/W AREAS TO BE SEEDED OR SODDED. ALL OTHER DISTURBED AREAS TO BE PERMANENTLY SEEDED UNLESS OTHER METHODS (SODDING, RIP RAP, ETC.) ARE SPECIFIED ON THE PLAN.

STANDARD RESPONSIBILITY NOTES

1. I (WE) CERTIFY THAT:

A. ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE IN ACCORDANCE WITH THIS SEDIMENT AND EROSION CONTROL PLAN, AND FURTHER, AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY THE ANNE ARUNDEL SOIL CONSERVATION (AASCD) BOARD OF SUPERVISORS OR THEIR AUTHORIZED AGENTS.

B. ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE FROM THE MARYLAND DEPARTMENT OF THE ENVIRONMENT'S APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

RESPONSIBLE PERSONNEL ON SITE : TO BE DETERMINED AT PERMIT ISSUANCE

C. IF APPLICABLE, THE APPROPRIATE ENCLOSURE WILL BE CONSTRUCTED AND MAINTAINED ON SEDIMENT BASIN(S) INCLUDED IN THIS PLAN. SUCH STRUCTURE(S) WILL BE IN COMPLIANCE WITH THE ANNE ARUNDEL COUNTY CODE.

2. THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORM WATER MANAGEMENT PRACTICES AND THE DISCHARGE OF STORM WATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THE PLAN.

3. FOR INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT AND/OR TEMPORARY STABILIZATION PER THE AASCD VEGETATIVE ESTABLISHMENT SHALL BE COMPLETED WITHIN THREE CALENDAR DAYS FOR THE SURFACE OF ALL CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND SEVEN DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON PROJECT SITE.

4. THE GRADING AND SEDIMENT CONTROL APPROVAL ON THIS PLAN EXTENDS ONLY TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE.

5. THE APPROVAL OF THIS PLAN FOR SEDIMENT AND EROSION CONTROL DOES NOT RELIEVE THE DEVELOPER/CONSULTANT FROM COMPLYING WITH FEDERAL, STATE OR COUNTY REQUIREMENTS PERTAINING TO ENVIRONMENTAL ISSUES.

6. THE DEVELOPER MUST REQUEST THAT THE SEDIMENT AND EROSION CONTROL INSPECTOR APPROVE WORK COMPLETED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN, THE GRADING OR BUILDING PERMIT, AND THE ORDINANCE.

7. ALL MATERIAL SHALL BE TAKEN TO A SITE WITH AN APPROVED SEDIMENT AND EROSION CONTROL PLAN.

8. FIRST PHASE INSPECTION AND APPROVAL OF THE SEDIMENT AND EROSION CONTROL INSPECTOR SHALL BE REQUIRED UPON COMPLETION OF THE INSTALLATION OF EROSION AND SEDIMENT CONTROLS PRIOR TO PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THE INITIAL APPROVAL BY THE SEDIMENT AND EROSION CONTROL INSPECTOR IS GIVEN. INSPECTIONS AND PERMITS MAY ALSO REQUIRE THAT AN INSPECTION AND CERTIFICATION OF THE INSTALLATION OF SEDIMENT CONTROL ALSO BE PERFORMED BY A DESIGN PROFESSIONAL PRIOR TO CONSTRUCTION COMMENCING.

9. APPROVAL FROM THE INSPECTOR MUST BE REQUESTED ON FINAL STABILIZATION OF ALL SITES PRIOR TO REMOVAL OF SEDIMENT AND EROSION CONTROLS.

10. EXISTING TOPOGRAPHY MUST BE FIELD VERIFIED BY RESPONSIBLE PERSONNEL TO THE SATISFACTION OF THE SEDIMENT CONTROL INSPECTOR PRIOR TO COMMENCING WORK.

SIGNATURE OF DEVELOPER / OWNER — DATE

NAME: **ANNE ARUNDEL COUNTY DEPT OF PUBLIC WORKS** C/O: **LISA DEANES**
TITLE: **PROJECT MANAGER**
ADDRESS: **2664 RIVA ROAD**
ANNAPOLIS, MD 21401
PHONE: **443-336-8100**

CONSULTANT'S CERTIFICATION

"THE DEVELOPER'S PLANS TO CONTROL SILT AND EROSION IS ADEQUATE TO CONTAIN THE SILT AND EROSION ON THE PROPERTY COVERED BY THE PLAN. I CERTIFY THAT THIS PLAN OF EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THIS SITE, AND WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE ANNE ARUNDEL SOIL CONSERVATION DISTRICT PLAN SUBMITTAL GUIDELINES AND THE CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SEDIMENT AND EROSION CONTROL. I HAVE REVIEWED THIS EROSION AND SEDIMENT CONTROL PLAN WITH THE OWNER / DEVELOPER."

SIGNATURE
MARYLAND P.E. LICENSE #: 19593

FIRM NAME: **ATWELL**
2661 RIVA ROAD, BUILDING 800
ANNAPOLIS, MARYLAND 21401
410.897.9290
C/O TERRY SCHUMAN, P.E.

STATE OF MARYLAND — TERRY L SCHUMAN — 19593 — PROFESSIONAL ENGINEER

DETAILS & SPECIFICATIONS FOR VEGETATIVE ESTABLISHMENT

FOLLOWING INITIAL SOIL DISTURBANCES OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN THREE CALENDAR DAYS FOR THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND SEVEN DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

1. PERMANENT SEEDING:

A. SOIL TESTS: LIME AND FERTILIZER WILL BE APPLIED PER SOIL TESTS RESULTS FOR SITES GREATER THAN 5 ACRES. SOIL TESTS WILL BE DONE AT COMPLETION OF INITIAL ROUGH GRADING OR AS RECOMMENDED BY THE SEDIMENT CONTROL INSPECTOR. RATES AND ANALYSES WILL BE PROVIDED TO THE GRADING INSPECTOR AS WELL AS THE CONTRACTOR.

OCCURRENCE OF ACID SULFATE SOILS (GRAYISH BLACK COLOR) WILL REQUIRE COVERING WITH A MINIMUM OF 12 INCHES OF CLEAN SOIL WITH 6 INCHES MINIMUM CAPPING OF TOP SOIL. NO STOCKPILING OF MATERIAL IS ALLOWED. IF NEEDED, SOIL TESTS SHOULD BE DONE BEFORE AND AFTER A 6-WEEK INCUBATION PERIOD TO ALLOW OXIDATION OF SULFATES.

THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:

a. SOIL pH SHALL BE BETWEEN 6.0 AND 7.0.
b. SOLUBLE SALTS SHALL BE LESS THAN 500 PARTS PER MILLION (PPM).
c. THE SOIL SHALL CONTAIN LESS THAN 40% CLAY BUT ENOUGH FINE GRAINED MATERIAL (> 30% SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION IS IF LOVEGRASS OR SERECIA LESPEDEZA IS TO BE PLANTED, THEN A SANDY SOIL (< 30% SILT PLUS CLAY) WOULD BE ACCEPTABLE.
d. SOIL SHALL CONTAIN 1.5% MINIMUM ORGANIC MATTER BY WEIGHT.
e. SOIL MUST CONTAIN SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.
f. IF THESE CONDITIONS CANNOT BE MET BY SOILS ON SITE, ADDING TOPSOIL IS REQUIRED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS FROM THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL OR AMENDMENTS MADE AS RECOMMENDED BY A CERTIFIED AGRONOMIST.

B. SEEDBED PREPARATION: AREA TO BE SEEDED SHALL BE LOOSE AND FRIABLE TO A DEPTH OF AT LEAST 3-5 INCHES. THE TOP LAYER SHALL BE LOOSENED BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING OCCURS. FOR SITES LESS THAN 5 ACRES, APPLY 100 POUNDS DOLOMITIC LIMESTONE AND 21 POUNDS OF 10-10-10 FERTILIZER PER 1,000 SQUARE FEET. HARROW OR DISK LIME AND FERTILIZER INTO THE SOIL TO A DEPTH OF AT LEAST 3-5 INCHES ON SLOPES FLATTER THAN 3:1.

C. SEEDING: APPLY 5-6 POUNDS PER 1,000 SQUARE FEET OF TALL FESCUE BETWEEN FEBRUARY 1 AND APRIL 30 OR BETWEEN AUGUST 15 AND OCTOBER 31. APPLY SEED UNIFORMLY ON A MOIST FIRM SEEDBED WITH A CYCLONE SEEDER, CULTIPACKER SEEDER OR HYDROSEEDER (SLURRY INCLUDES SEEDS AND FERTILIZER, RECOMMENDED ON STEEP SLOPES ONLY). MAXIMUM SEED DEPTH SHOULD BE ¼ INCH IN CLAYEY SOILS AND ½ INCH IN SANDY SOILS WHEN USING OTHER THAN THE HYDROSEEDER METHOD. IRRIGATE WHERE NECESSARY TO SUPPORT ADEQUATE GROWTH UNTIL VEGETATION IS FIRMLY ESTABLISHED. IF OTHER SEED MIXES ARE TO BE USED, SELECT FROM TABLE B3 AND B5 OF THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

D. MULCHING: MULCH SHALL BE APPLIED TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING. DURING THE TIME PERIODS WHEN SEEDING IS NOT PERMITTED, MULCH SHALL BE APPLIED IMMEDIATELY AFTER GRADING. MULCH SHALL BE UNROTTED, UNCHOPPED, SMALL GRAIN STRAW APPLIED AT A RATE OF 2 TONS PER ACRE OR 90 POUNDS PER 1,000 SQUARE FEET (2 BALES). IF A MULCH-ANCHORING TOOL IS USED, APPLY 2.5 TONS PER ACRE. MULCH MATERIALS SHALL BE RELATIVELY FREE OF ALL KINDS OF WEEDS AND SHALL BE COMPLETELY FREE OF PROHIBITED NOXIOUS WEEDS. SPREAD MULCH UNIFORMLY, MECHANICALLY OR BY HAND, TO A DEPTH OF 1-2 INCHES.

E. SECURING STRAW MULCH: STRAW MULCH SHALL BE SECURED IMMEDIATELY FOLLOWING MULCH APPLICATION TO MINIMIZE MOVEMENT BY WIND OR WATER. THE FOLLOWING METHODS ARE PERMITTED:

(i) USE A MULCH-ANCHORING TOOL WHICH IS DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE TO A MINIMUM DEPTH OF 2 INCHES. THIS IS THE MOST EFFECTIVE METHOD FOR SECURING MULCH, HOWEVER, IT IS LIMITED TO RELATIVELY FLAT AREAS WHERE EQUIPMENT CAN OPERATE SAFELY.

(ii) WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. IF MIXED WITH WATER, USE 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.

(iii) LIQUID BINDERS MAY BE USED. APPLY AT HIGHER RATES AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF SLOPES. THE REMAINDER OF THE AREA SHOULD APPEAR UNIFORM AFTER BINDER APPLICATION. BINDERS LISTED IN THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL OR APPROVED EQUAL SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURERS.

(iv) LIGHTWEIGHT PLASTIC NETTING MAY BE USED TO SECURE MULCH. THE NETTING WILL BE STAPLED TO THE GROUND ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

2. TEMPORARY SEEDING:
LIME: 100 POUNDS OF DOLOMITIC LIMESTONE PER 1,000 SQUARE FEET.
FERTILIZER: 15 POUNDS OF 10-10-10 PER 1,000 SQUARE FEET.
SEED: PERENNIAL RYE - 0.92 POUNDS PER 1,000 SQUARE FEET (FEBRUARY 1 THROUGH APRIL 30 OR AUGUST 15 THROUGH NOVEMBER 1). MILLET - 0.92 POUNDS PER 1,000 SQUARE FEET (MAY 1 THROUGH AUGUST 15).
MULCH: SAME AS 1 D AND E ABOVE.

3. NO FILLS MAY BE PLACED ON FROZEN GROUND. ALL FILL IS TO BE PLACED IN APPROXIMATELY HORIZONTAL LAYERS, EACH LAYER HAVING A LOOSE THICKNESS OF NOT MORE THAN 8 INCHES. ALL COMPACTION REQUIREMENTS ARE IN ACCORDANCE TO ANNE ARUNDEL COUNTY STANDARD SPECIFICATIONS FOR CONSTRUCTION AS WELL AS THE AA COUNTY DESIGN MANUAL AND STANDARD DETAILS. FILLS FOR POND EMBANKMENTS SHALL BE COMPACTED AS PER MD-378 CONSTRUCTION SPECIFICATIONS. ALL OTHER FILLS SHALL BE COMPACTED SUFFICIENTLY SO AS TO BE STABLE AND PREVENT EROSION AND SLIPPAGE.

4. PERMANENT SOD:
INSTALLATION OF SOD SHOULD FOLLOW PERMANENT SEEDING DATES. SEEDBED PREPARATION FOR SOD SHALL BE AS NOTED IN SECTION (B) ABOVE. PERMANENT SOD IS TO BE TALL FESCUE, STATE APPROVED SOD; LIME AND FERTILIZER PER PERMANENT SEEDING SPECIFICATIONS AND LIGHTLY IRRIGATE SOIL PRIOR TO LAYING SOD. SOD IS TO BE LAID ON THE CONTOUR WITH ALL ENDS TIGHTLY ABUTTING. JOINTS ARE TO BE STAGGERED BETWEEN ROWS. WATER AND ROLL OR TAMP SOD TO INSURE POSITIVE ROOT CONTACT WITH THE SOIL. ALL SLOPES STEEPER THAN 3:1, AS SHOWN, ARE TO BE PERMANENTLY SODDED OR PROTECTED WITH AN APPROVED EROSION CONTROL NETTING. ADDITIONAL WATERING FOR ESTABLISHMENT MAY BE REQUIRED. SOD IS NOT TO BE INSTALLED ON FROZEN GROUND. SOD SHALL NOT BE TRANSPLANTED WHEN MOISTURE CONTENT (DRY OR WET) AND/OR EXTREME TEMPERATURE MAY ADVERSELY AFFECT ITS SURVIVAL. IN THE ABSENCE OF ADEQUATE RAINFALL, IRRIGATION SHOULD BE PERFORMED TO ENSURE ESTABLISHMENT OF SOD.

5. MINING OPERATIONS:
SEDIMENT CONTROL PLANS FOR MINING OPERATIONS MUST INCLUDE THE FOLLOWING SEEDING DATES AND MIXTURES:
FOR SEEDING DATES OF FEBRUARY 1 THROUGH APRIL 30 AND AUGUST 15 THROUGH OCTOBER 31, USE SEED MIXTURE OF TALL FESCUE AT THE RATE OF 2 POUNDS PER 1,000 SQUARE FEET AND SERICEA LESPEDEZA AT THE MINIMUM RATE OF 0.5 POUNDS PER 1,000 SQUARE FEET.

TOPSOIL SHALL BE APPLIED AS PER THE STANDARD AND SPECIFICATION FOR SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS FROM THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

B-4-2 STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

DEFINITION
THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION.

PURPOSE
TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH.

CONDITIONS
WHERE PRACTICE APPLIES WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED.

CRITERIA
A. SOIL PREPARATION

1. TEMPORARY STABILIZATION

A. SEEDBED PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSENED, IT MUST NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE TRACKED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.
B. APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.
C. INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.

2. PERMANENT STABILIZATION

A. SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:
I. SOIL PH BETWEEN 6.0 AND 7.0.
II. SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM).
III. SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL (GREATER THAN 30 PERCENT SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION: IF LOVEGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD BE ACCEPTABLE.
IV. SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT.
V. SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.
B. APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE CONDITIONS.
C. GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES.
D. APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST.
E. MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. RAKE LAWN AREAS TO SMOOTH THE SURFACE, REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRIABLE. SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.

B. TOPSOILING

1. TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

2. TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-NRCS.

3. TOPSOILING IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:

A. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.
B. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.
C. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.
D. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.

4. AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN.

5. TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING CRITERIA:

A. TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. TOPSOIL MUST NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND MUST CONTAIN LESS THAN 5 PERCENT BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1½ INCHES IN DIAMETER.
B. TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACK GRASS, JOHNSON GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
C. TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.

6. TOPSOIL APPLICATION

A. EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING TOPSOIL.
B. UNIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT TO A MINIMUM THICKNESS OF 4 INCHES. SPREADING IS TO BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
C. TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

C. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)

1. SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSIS MAY BE PERFORMED BY A RECOGNIZED PRIVATE OR COMMERCIAL LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSES.
2. FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIATE EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY. FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE NAME, TRADE NAME OR TRADEMARK AND WARRANTY OF THE PRODUCER.
3. LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED EXCEPT WHEN HYDROSEEDING) WHICH CONTAINS AT LEAST 50 PERCENT TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE MUST BE GROUND TO SUCH FINENESS THAT AT LEAST 50 PERCENT WILL PASS THROUGH A #100 MESH SIEVE AND 98 TO 100 PERCENT WILL PASS THROUGH A #20 MESH SIEVE.
4. LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
5. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, SPREAD GROUND LIMESTONE AT THE RATE OF 4 TO 8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL.

H-1 STANDARDS AND SPECIFICATIONS FOR MATERIALS
TABLE H.1: GEOTEXTILE FABRICS

TEMPORARY SEDIMENT CONTROLS ONLY

		WOVEN SLIT FILM GEOTEXTILE		WOVEN MONOFILAMENT GEOTEXTILE		NONWOVEN GEOTEXTILE	
		MINIMUM AVERAGE ROLL VALUE [1]					
PROPERTY	TEST METHOD	MD	CD	MD	CD	MD	CD
GRAB TENSILE STRENGTH	ASTM D-4632	200 LB	200 LB	370 LB	250 LB	200 LB	200 LB
GRAB TENSILE ELONGATION	ASTM D-4632	15%	10%	15%	15%	50%	50%
TRAPEZOIDAL TEAR STRENGTH	ASTM D-4533	75 LB	75 LB	100 LB	60 LB	80 LB	80 LB
PUNCTURE STRENGTH	ASTM D-6241	450 LB		900 LB		450 LB	
APPARENT OPENING SIZE [2]	ASTM D-4751	U.S. SIEVE 30 (0.59 mm)		U.S. SIEVE 70 (0.21 mm)		U.S. SIEVE 70 (0.21 mm)	
PERMITTIVITY	ASTM D-4491	0.05 PER SEC		0.28 PER SEC		1.1 PER SEC	
ULTRAVIOLET RESISTENCE RETAINED AT 500 HOURS	ASTM D-4355	70% STRENGTH		70% STRENGTH		70% STRENGTH	

1 ALL NUMERIC VALUES EXCEPT APPARENT OPENING SIZE (AOS) REPRESENT MINIMUM AVERAGE ROLL VALUES (MARV). MARV IS CALCULATED AS THE TYPICAL MINUS TWO STANDARD DEVIATIONS. MD IS MACHINE DIRECTION; CD IS CROSS DIRECTIONS.

2 VALUES FOR AOS REPRESENT THE AVERAGE MAXIMUM OPENING.

GEOTEXTILES MUST BE EVALUATED BY THE NATIONAL TRANSPORTATION PRODUCT EVALUATION PROGRAM (NTPEP) AND CONFORM TO THE VALUES IN TABLE H.1.

THE GEOTEXTILE MUST BE INERT TO COMMONLY ENCOUNTERED CHEMICALS AND HYDROCARBONS AND MUST BE ROT AND MILDEW RESISTANT. THE GEOTEXTILE MUST BE MANUFACTURED FROM FIBERS CONSISTING OF LONG CHAIN SYNTHETIC POLYMERS AND COMPOSED OF A MINIMUM OF 95 PERCENT BY WEIGHT OF POLYOLEFINS OR POLYESTERS, AND FORMED INTO STABLE NETWORK SO THE FILAMENTS OR YARNS RETAIN THEIR DIMENSIONAL STABILITY RELATIVE TO EACH OTHER, INCLUDING SELVAGES.

WHEN MORE THAN ONE GEOTEXTILE IS NECESSARY, OVERLAP THE SECTIONS BY AT LEAST ONE FOOT. THE GEOTEXTILE MUST BE PULLED TAUT OVER THE APPLIED SURFACE. EQUIPMENT MUST NOT RUN OVER EXPOSED FABRIC. WHEN PLACING RIPRAP ON GEOTEXTILE, DO NOT EXCEED A ONE FOOT DROP HEIGHT.

TABLE H.2: STONE SIZE

TEMPORARY SEDIMENT CONTROLS ONLY

TYPE	SIZE RANGE	D_{50}	D_{50}	AASHTO	MIDSIZE WEIGHT [3]
NO. 57 [1]	3/8" - 1 1/2"	1/2"	1 1/2"	M-43	N/A
NO. 1	2" - 3"	2 1/2"	3"	M-43	N/A
RIPRAP [2] (CLASS 0)	4" - 7"	5 1/2"	7"	N/A	N/A
CLASS I	N/A	9 1/2"	15"	N/A	40 LB
CLASS II	N/A	16"	24"	N/A	200 LB
CLASS III	N/A	23"	34"	N/A	600 LB

1 THIS CLASSIFICATION IS TO BE USED ON THE UPSTREAM FACE OF STONE OUTLETS AND CHECK DAMS.

2 THIS CLASSIFICATION IS TO BE USED FOR GABIONS.

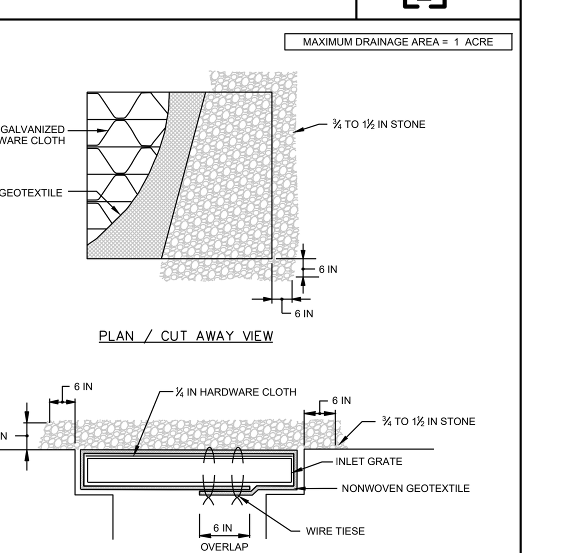
3 OPTIMUM GRADATION IS FIFTY (50) PERCENT OF THE STONE ABOVE AND 50 PERCENT OF THE STONE BELOW THE MIDSIZE.

STONE MUST BE COMPOSED OF A WELL GRADED MIXTURE OF STONE SIZED SO THAT FIFTY (50) PERCENT OF THE PIECES BY WEIGHT ARE LARGER THAN THE SIZE DETERMINED BY USING THE CHARTS. A WELL GRADED MIXTURE, AS USED HEREIN, IS DEFINED AS A MIXTURE COMPOSED PRIMARILY OF LARGER STONE SIZES BUT WITH SUFFICIENT MIXTURE OF OTHER SIZES TO FILL THE SMALLER VOIDS BETWEEN THE STONES. THE DIAMETER OF THE LARGEST STONE IN SUCH MIXTURE MUST NOT EXCEED THE RESPECTIVE D_{100} SELECTED FROM TABLE H.2. THE D_{50} REFERS TO THE MEDIAN DIAMETER OF THE STONE. THIS IS THE SIZE FOR WHICH 50 PERCENT, BY WEIGHT WILL BE SMALLER AND 50 PERCENT WILL BE LARGER.

NOTE: RECYCLED CONCRETE EQUIVALENT MAY BE SUBSTITUTED FOR ALL STONE CLASSIFICATIONS FOR TEMPORARY CONTROL MEASURES ONLY. RECYCLED CONCRETE BROKEN INTO THE SIZES MEETING THE APPROPRIATE CLASSIFICATION, CONTAINING NO STEEL REINFORCEMENT OR OTHER FOREIGN CONTAMINANTS, AND HAVING A MINIMUM DENSITY OF 150 POUNDS PER CUBIC FOOT MAY BE USED AS AN EQUIVALENT.

DETAIL E-9-2 AT-GRADE INLET PROTECTION

STANDARD SYMBOL



CONSTRUCTION SPECIFICATIONS

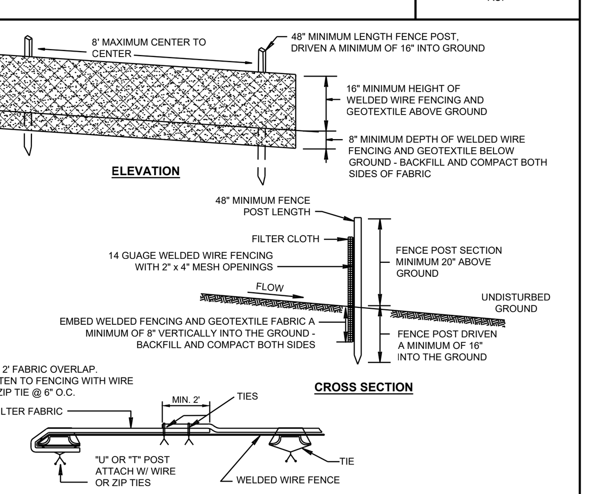
1. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
2. LIFT GRATE AND WRAP WITH NONWOVEN GEOTEXTILE TO COMPLETELY COVER ALL OPENINGS. SECURE WITH WIRE TIES AND SET GRATE BACK IN PLACE.
3. PLACE CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE 6 INCHES THICK ON THE GRATE.
4. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL REINFORCED SILT FENCE

STANDARD SYMBOL — RSF —



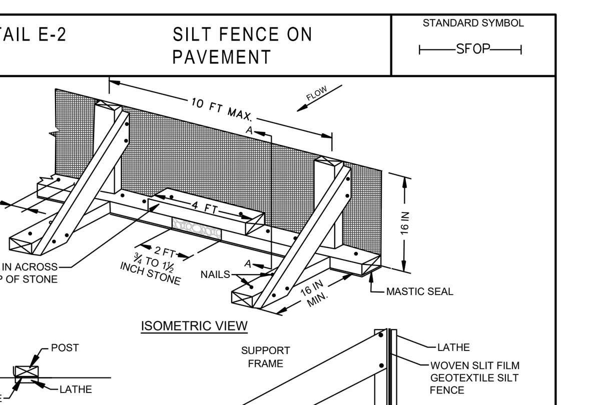
CONSTRUCTION SPECIFICATIONS

1. METAL FENCE POST SHALL BE A MINIMUM OF 48" LONG, DRIVEN 16" MINIMUM INTO THE GROUND AND NO MORE THAN 8' APART. POST SHALL BE STANDARD T OR U SECTION WEIGHING NOT LESS THAN 1.00 POUND PER LINEAR FOOT. REINFORCEMENT SHALL BE 14 GUAGE WELDED WIRE FENCING WITH 2" x 4" MESH OPENINGS.
2. GEO-TEXTILE SHALL BE FASTENED SECURELY TO EACH FENCE POST WITH WIRE TIES OR ZIP TIES AT TOP AND MID SECTION. WHERE ENDS OF GEO-TEXTILE FABRIC COME TOGETHER, THEY SHALL BE OVERLAPPED, FOLDED AND WIRE TIED OR ZIP TIED TO POST TO PREVENT SEDIMENT BYPASS.
3. USE A WOVEN GEO-TEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, AND FASTEN TO THE UPSLOPE SIDE OF THE FENCE POSTS WITH WIRE OR ZIP TIES AT TOP AND MID-SECTION. THE MANUFACTURER'S CERTIFICATION THAT THE FABRIC MEETS THE REQUIREMENTS IN SECTION H-1 MUST BE MADE AVAILABLE TO THE INSPECTION / ENFORCEMENT AUTHORITY.
4. EXTEND BOTH ENDS OF REINFORCED SILT FENCE A MINIMUM OF FIVE (5) HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS.
5. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN THE REINFORCED SILT FENCE FABRIC OR WHEN SEDIMENT REACHES 25% OF THE FENCE HEIGHT. REPLACE GEO-TEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2015	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-2 SILT FENCE ON PAVEMENT

STANDARD SYMBOL —SFOP—



CONSTRUCTION SPECIFICATIONS

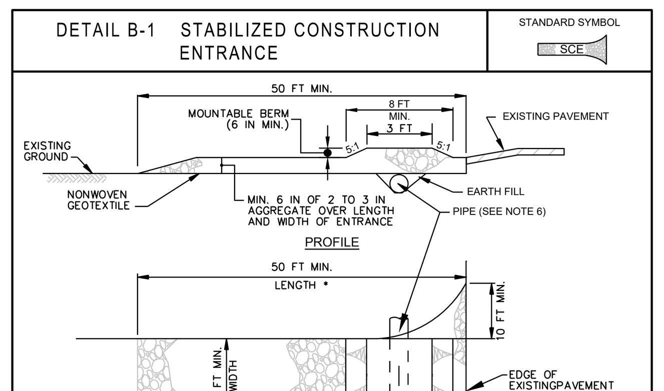
1. USE NOMINAL 2 INCH X 4 INCH LUMBER.
2. USE WOVEN SLIT FILM GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
3. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
4. SPACE UPRIGHT SUPPORTS NO MORE THAN 10 FEET APART.
5. PROVIDE A TWO FOOT OPENING BETWEEN EVERY SET OF SUPPORTS AND PLACE STONE IN THE OPENING OVER GEOTEXTILE.
6. KEEP SILT FENCE TAUT AND SECURELY STAPLE TO THE UPSLOPE SIDE OF UPRIGHT SUPPORTS. EXTEND GEOTEXTILE UNDER 2x4.
7. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, FOLD, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL. ATTACH LATHE.
8. PROVIDE A MASTIC SEAL BETWEEN PAVEMENT, GEOTEXTILE, AND 2x4 TO PREVENT SEDIMENT-LADEN WATER FROM ESCAPING BENEATH SILT FENCE INSTALLATION.
9. SECURE BOARDS TO PAVEMENT WITH 40D 5 INCH MINIMUM LENGTH NAILS.
10. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. MAINTAIN WATER TIGHT SEAL ALONG BOTTOM. REPLACE STONE IF DISPLACED.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE

STANDARD SYMBOL SCE



CONSTRUCTION SPECIFICATIONS

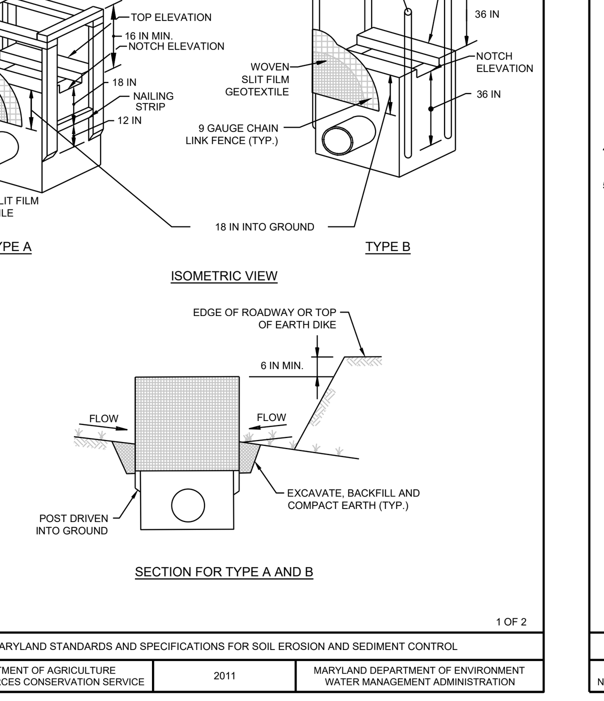
1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-9-1 STANDARD INLET PROTECTION

STANDARD SYMBOL SIP



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MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-9-1 STANDARD INLET PROTECTION

STANDARD SYMBOL SIP

CONSTRUCTION SPECIFICATIONS

1. USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
2. EXCAVATE COMPLETELY AROUND THE INLET TO A DEPTH OF 18 INCHES BELOW THE NOTCH ELEVATION.
3. FOR TYPE A, USE NOMINAL 2 INCH X 4 INCH CONSTRUCTION GRADE LUMBER POSTS, DRIVEN 1 FOOT INTO THE GROUND AT EACH CORNER OF THE INLET. PLACE NAIL STRIPS BETWEEN THE POSTS ON THE ENDS OF THE INLET. ASSEMBLE THE TOP PORTION OF THE 2X4 FRAME AS SHOWN. STRETCH ½ INCH GALVANIZED HARDWARE CLOTH TIGHTLY AROUND THE FRAME AND FASTEN SECURELY. FASTEN GEOTEXTILE SECURELY TO THE HARDWARE CLOTH WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND HARDWARE CLOTH A MINIMUM OF 18 INCHES BELOW THE WEIR CREST. THE ENDS OF THE GEOTEXTILE MUST MEET AT A POST, BE OVERLAPPED AND FOLDED, THEN FASTENED TO THE POST.

FOR TYPE B, USE 2⅜ INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND 6 FOOT LENGTH, DRIVEN A MINIMUM OF 36 INCHES BELOW THE WEIR CREST AT EACH CORNER OF THE STRUCTURE. FASTEN 9 GAUGE OR HEAVIER CHAIN LINK FENCE, 42 INCHES IN HEIGHT, SECURELY TO THE FENCE POSTS WITH WIRE TIES. FASTEN GEOTEXTILE SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 18 INCHES BELOW THE WEIR CREST.
4. BACKFILL AROUND THE INLET IN LOOSE 4 INCH LIFTS AND COMPACT UNTIL SOIL IS LEVEL WITH THE NOTCH ELEVATION ON THE ENDS AND TOP ELEVATION ON THE SIDES.
5. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

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MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

BID DOCUMENTS

#	REVISION DESCRIPTION	BY	DATE

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Terry Schuman — 4/3/24 Date
19593 License No. — 3/31/26 Expiration Date

ANNE ARUNDEL COUNTY — MAY 2024
DEPARTMENT OF PUBLIC WORKS — 202214.1

REVISED		APPROVED	DATE	APPROVED	DATE	
DATE	BY	CHIEF ENGINEER		PROJECT MANAGER		
		APPROVED	DATE	APPROVED	DATE	
		ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT OF WAY		

SCALE: AS SHOWN
DRAWN BY: AMD
CHECKED BY: TS
SHEET: C11 OF 19
PROJECT NO.: P584700
CONTRACT NO.: P584702

SEDIMENT EROSION CONTROL DETAILS

FOR THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
4150 HONEYSUCKLE DRIVE
MAYO, MARYLAND 21106
TAX ID: 01-000-03599460
TAX MAP 61, GRD 19, PARCEL 4
DISTRICT 1 ~ ANNE ARUNDEL COUNTY ~ ZONED OS & R2

PLOTTED: Apr 04 , 2024 - 10:51am

P:\21-7930 WGM - Mayo Beach Park - 4150 Honeysuckle Drive\Drawing Files\Grading Plans\21-7930 GRADING PLANS.dwg

B.4.C SPECIFICATIONS FOR MICRO-BIORETENTION AREAS

1. MATERIAL SPECIFICATIONS

THE ALLOWABLE MATERIALS TO BE USED IN THESE PRACTICES ARE DETAILED IN TABLE B.4.1.

2. FILTERING MEDIA OR PLANTING SOIL

THE SOIL SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES. NO OTHER MATERIALS OR SUBSTANCES SHALL BE MIXED OR DUMPED WITHIN THE MICRO-BIORETENTION PRACTICE THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS. THE PLANTING SOIL SHALL BE FREE OF BERMUDA GRASS, QUACKGRASS, JOHNSON GRASS, OR OTHER NOXIOUS WEEDS AS SPECIFIED UNDER COMAR 15.08.01.05.

THE PLANTING SOIL SHALL BE TESTED AND SHALL MEET THE FOLLOWING CRITERIA:

- SOIL COMPONENT - LOAMY SAND OR SANDY LOAM (USDA SOIL TEXTURAL CLASSIFICATION)
- ORGANIC CONTENT - MINIMUM 10% BY DRY WEIGHT (ASTM D 2974). IN GENERAL, THIS CAN BE MET WITH A MIXTURE OF LOAMY SAND (60%-65%) AND COMPOST (35% TO 40%) OR SANDY LOAM (30%), COARSE SAND (30%), AND COMPOST (40%).
- CLAY CONTENT - MEDIA SHALL HAVE A CLAY CONTENT OF LESS THAN 5%.
- PH RANGE -- SHOULD BE BETWEEN 5.5 - 7.0. AMENDMENTS (E.G., LIME, IRON SULFATE PLUS SULFUR) MAY BE MIXED INTO THE SOIL TO INCREASE OR DECREASE PH.

THERE SHALL BE AT LEAST ONE SOIL TEST PER PROJECT. EACH TEST SHALL CONSIST OF BOTH THE STANDARD SOIL TEST FOR PH, AND ADDITIONAL TESTS OF ORGANIC MATTER, AND SOLUBLE SALTS. A TEXTURAL ANALYSIS IS REQUIRED FROM THE SITE STOCKPILED TOPSOIL. IF TOPSOIL IS IMPORTED, THEN A TEXTURE ANALYSIS SHALL BE PERFORMED FOR EACH LOCATION WHERE THE TOPSOIL WAS EXCAVATED.

3. COMPACTION

IT IS VERY IMPORTANT TO MINIMIZE COMPACTION OF BOTH THE BASE OF BIORETENTION PRACTICES AND THE REQUIRED BACKFILL. WHEN POSSIBLE, USE EXCAVATION HOES TO REMOVE ORIGINAL SOIL. IF PRACTICES ARE EXCAVATED USING A LOADER, THE CONTRACTOR SHOULD USE WIDE TRACK OR MARSH TRACK EQUIPMENT, OR LIGHT EQUIPMENT WITH TURF TYPE TIRES. USE OF EQUIPMENT WITH NARROW TRACKS OR NARROW TIRES, RUBBER TIRES WITH LARGE LUGS, OR HIGH-PRESSURE TIRES WILL CAUSE EXCESSIVE COMPACTION RESULTING IN REDUCED INFILTRATION RATES AND IS NOT ACCEPTABLE. COMPACTION WILL SIGNIFICANTLY CONTRIBUTE TO DESIGN FAILURE.

COMPACTION CAN BE ALLEVIATED AT THE BASE OF THE BIORETENTION FACILITY BY USING A PRIMARY TILLING OPERATION SUCH AS A CHISEL PLOW, RIPPER, OR SUBSOILER. THESE TILLING OPERATIONS ARE TO REFRACTURE THE SOIL PROFILE THROUGH THE 12 INCH COMPACTION ZONE. SUBSTITUTE METHODS MUST BE APPROVED BY THE ENGINEER. ROTOTILLERS TYPICALLY DO NOT TILL DEEP ENOUGH TO REDUCE THE EFFECTS OF COMPACTION FROM HEAVY EQUIPMENT.

ROTOTILL 2 TO 3 INCHES OF SAND INTO THE BASE OF THE BIORETENTION FACILITY BEFORE BACKFILLING THE OPTIONAL SAND LAYER. PUMP ANY PONDED WATER BEFORE PREPARING (ROTOTILLING) BASE.

WHEN BACKFILLING THE TOPSOIL OVER THE SAND LAYER, FIRST PLACE 3 TO 4 INCHES OF TOPSOIL OVER THE SAND, THEN ROTOTILL THE SAND/TOPSOIL TO CREATE A GRADATION ZONE. BACKFILL THE REMAINDER OF THE TOPSOIL TO FINAL GRADE.

WHEN BACKFILLING THE BIORETENTION FACILITY, PLACE SOIL IN LIFTS 12" TO 18". DO NOT USE HEAVY EQUIPMENT WITHIN THE BIORETENTION BASIN. HEAVY EQUIPMENT CAN BE USED AROUND THE PERIMETER OF THE BASIN TO SUPPLY SOILS AND SAND. GRADE BIORETENTION MATERIALS WITH LIGHT EQUIPMENT SUCH AS A COMPACT LOADER OR A DOZER/LOADER WITH MARSH TRACKS.

4. PLANT MATERIAL

RECOMMENDED PLANT MATERIAL FOR MICRO-BIORETENTION PRACTICES CAN BE FOUND IN APPENDIX A, SECTION A.2.3. SEE LANDSCAPE PLANS.

5. PLANT INSTALLATION

COMPOST IS A BETTER ORGANIC MATERIAL SOURCE, IS LESS LIKELY TO FLOAT, AND SHOULD BE PLACED IN THE INVERT AND OTHER LOW AREAS. MULCH SHOULD BE PLACED IN SURROUNDING TO A UNIFORM THICKNESS OF 2" TO 3". SHREDDED OR CHIPPED HARDWOOD MULCH IS THE ONLY ACCEPTED MULCH. PINE MULCH AND WOOD CHIPS WILL FLOAT AND MOVE TO THE PERIMETER OF THE BIORETENTION AREA DURING A STORM EVENT AND ARE NOT ACCEPTABLE. SHREDDED MULCH MUST BE WELL AGED (6 TO 12 MONTHS) FOR ACCEPTANCE.

ROOTSTOCK OF THE PLANT MATERIAL SHALL BE KEPT MOIST DURING TRANSPORT AND ON-SITE STORAGE. THE PLANT ROOT BALL SHOULD BE PLANTED SO 1/8TI OF THE BALL IS ABOVE FINAL GRADE SURFACE. THE DIAMETER OF THE PLANTING PIT SHALL BE AT LEAST SIX INCHES LARGER THAN THE DIAMETER OF THE PLANTING BALL. SET AND MAINTAIN THE PLANT STRAIGHT DURING THE ENTIRE PLANTING PROCESS. THOROUGHLY WATER GROUND BED COVER AFTER INSTALLATION.

TREES SHALL BE BRACED USING 2" BY 2" STAKES ONLY AS NECESSARY AND FOR THE FIRST GROWING SEASON ONLY. STAKES ARE TO BE EQUALLY SPACED ON THE OUTSIDE OF THE TREE BALL.

GRASSES AND LEGUME SEED SHOULD BE DRILLED INTO THE SOIL TO A DEPTH OF AT LEAST ONE INCH. GRASS AND LEGUME PLUGS SHALL BE PLANTED FOLLOWING THE NON-GRASS GROUND COVER PLANTING SPECIFICATIONS.

THE TOPSOIL SPECIFICATIONS PROVIDE ENOUGH ORGANIC MATERIAL TO ADEQUATELY SUPPLY NUTRIENTS FROM NATURAL CYCLING. THE PRIMARY FUNCTION OF THE BIORETENTION STRUCTURE IS TO IMPROVE WATER QUALITY. ADDING FERTILIZERS DEFEATS, OR AT A MINIMUM, IMPEDES THIS GOAL. ONLY ADD FERTILIZER IF WOOD CHIPS OR MULCH ARE USED TO AMEND THE SOIL. ROTOTILL UREA FERTILIZER AT A RATE OF 2 POUNDS PER 1000 SQUARE FEET.

6. UNDERDRAINS (N/A FOR SUBMERGED GRAVEL WETLANDS)

UNDERDRAINS SHOULD MEET THE FOLLOWING CRITERIA:

- PIPE - SHOULD BE 4" TO 6" DIAMETER, SLOTTED OR PERFORATED RIGID PLASTIC PIPE (ASTMF 758, TYPE PS 28, OR AASHTO-M-278) IN A GRAVEL LAYER. THE PREFERRED MATERIAL IS SLOTTED, 4" RIGID PIPE (E.G., PVC OR HDPE).
- PERFORATIONS - IF PERFORATED PIPE IS USED, PERFORATIONS SHOULD BE W' DIAMETER LOCATED 6" ON CENTER WITH A MINIMUM OF FOUR HOLES PER ROW. PIPE SHALL BE WRAPPED WITH A ¼" (NO. 4 OR 4X4) GALVANIZED HARDWARE CLOTH.
- GRAVEL - THE GRAVEL LAYER (NO. 57 STONE PREFERRED) SHALL BE AT LEAST 3" THICK ABOVE AND BELOW THE UNDERDRAIN.
- THE MAIN COLLECTOR PIPE SHALL BE AT A MINIMUM 0.5% SLOPE.
- A RIGID, NON-PERFORATED OBSERVATION WELL MUST BE PROVIDED (ONE PER EVERY 1,0000 SQUARE FEET) TO PROVIDE A CLEAN-OUT PORT AND MONITOR PERFORMANCE OF THE FILTER.
- A 4" LAYER OF PEA GRAVEL (¼" TO /8" STONE) SHALL BE LOCATED BETWEEN THE FILTER MEDIA AND UNDERDRAIN TO PREVENT MIGRATION OF FINES INTO THE UNDERDRAIN. THIS LAYER MAY BE CONSIDERED PART OF THE FILTER BED WHEN BED THICKNESS EXCEEDS 24".

THE MAIN COLLECTOR PIPE FOR UNDERDRAIN SYSTEMS SHALL BE CONSTRUCTED AT A MINIMUM SLOPE OF 0.5%. OBSERVATION WELLS AND/OR CLEAN-OUT PIPES MUST BE PROVIDED (ONE MINIMUM PER EVERY 1000 SQUARE FEET OF SURFACE AREA).

7. MISCELLANEOUS

THESE PRACTICES MAY NOT BE CONSTRUCTED UNTIL ALL CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.

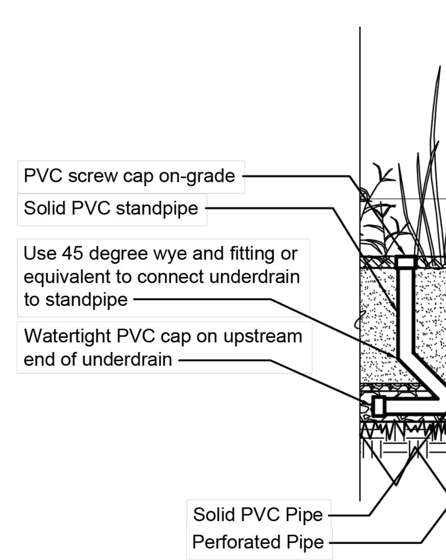
MATERIAL SPECIFICATIONS FOR MICRO-BIORETENTION AREAS

MATERIAL	SPECIFICATION	SIZE	NOTES
PLANTINGS	SEE LANDSCAPE PLANS FOR PLANTINGS IN MICRO-BIO AREA	N/A	PLANTINGS ARE SITE SPECIFIC; REFER TO LANDSCAPE PLANS
SHA BSM PLANTING SOIL (2' TO 4' DEEP)		N/A	PER MARYLAND DEPT. OF TRANSPORTATION SPECIFICATIONS SECTION 920.01.05
ORGANIC CONTENT	MIN. 10% BY DRY WEIGHT (ASTM D 2974)		
MULCH	SHREDDED HARDWOOD		AGED 6 MONTHS, MINIMUM; NO PINE OR WOOD CHIPS
* PEA GRAVEL DIAPHRAGM	PEA GRAVEL: ASTM D-448	NO. 8 OR NO. 9 (1/8" TO 3/8")	
CURTAIN DRAIN	ORNAMENTAL STONE: WASHED COBBLES	STONE: 2" TO 5"	
GEOTEXTILE		N/A	PE TYPE 1 NONWOVEN
*GRAVEL (UNDERDRAINS AND INFILTRATION BERMS)	AASHTO M-43	NO. 57 OR NO. 6 AGGREGATE (3/8" TO 3/4")	
UNDERDRAIN PIPING	F 758, TYPE PS 28 OR AASHTO M-278	4" TO 6" RIGID SCHEDULE 40 PVC OR SDR35 (SEE PLAN VIEW)	SLOTTED OR PERFORATED PIPE; 3/8" PERF. @ 6" ON CENTER, 4 HOLES PER ROW; MINIMUM OF 3" OF GRAVEL OVER PIPES; NOT NECESSARY UNDERNEATH PIPES. PERFORATED PIPE SHALL BE WRAPPED WITH 1/4-INCH GALVANIZED HARDWARE CLOTH
* POURED IN PLACE CONCRETE (IF REQUIRED)	MSHA MIX NO. 3; f'c = 3500 PSI @ 28 DAYS, NORMAL WEIGHT, AIR-ENTRAINED; REINFORCING TO MEET ASTM-615-60	N/A	ON-SITE TESTING OF POURED-IN-PLACE CONCRETE REQUIRED: 28 DAY STRENGTH AND SLUMP TEST; ALL CONCRETE DESIGN (CAST-IN-PLACE OR PRE-CAST) NOT USING PREVIOUSLY APPROVED STATE OR LOCAL STANDARDS REQUIRES DESIGN DRAWINGS SEALED AND APPROVED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF MARYLAND - DESIGN TO INCLUDE MEETING ACI CODE 350.R/89; VERTICAL LOADING [H-10 OR H-20]; ALLOWABLE HORIZONTAL LOADING (BASED ON SOIL PRESSURES); AND ANALYSIS OF POTENTIAL CRACKING
* SAND	AASHTO-M-6 OR ASTM-C-33	0.02" TO 0.04"	SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE (AASHTO) #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATED OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO "ROCK DUST" CAN BE USED FOR SAND.

**** NOT APPLICABLE THIS PROJECT***

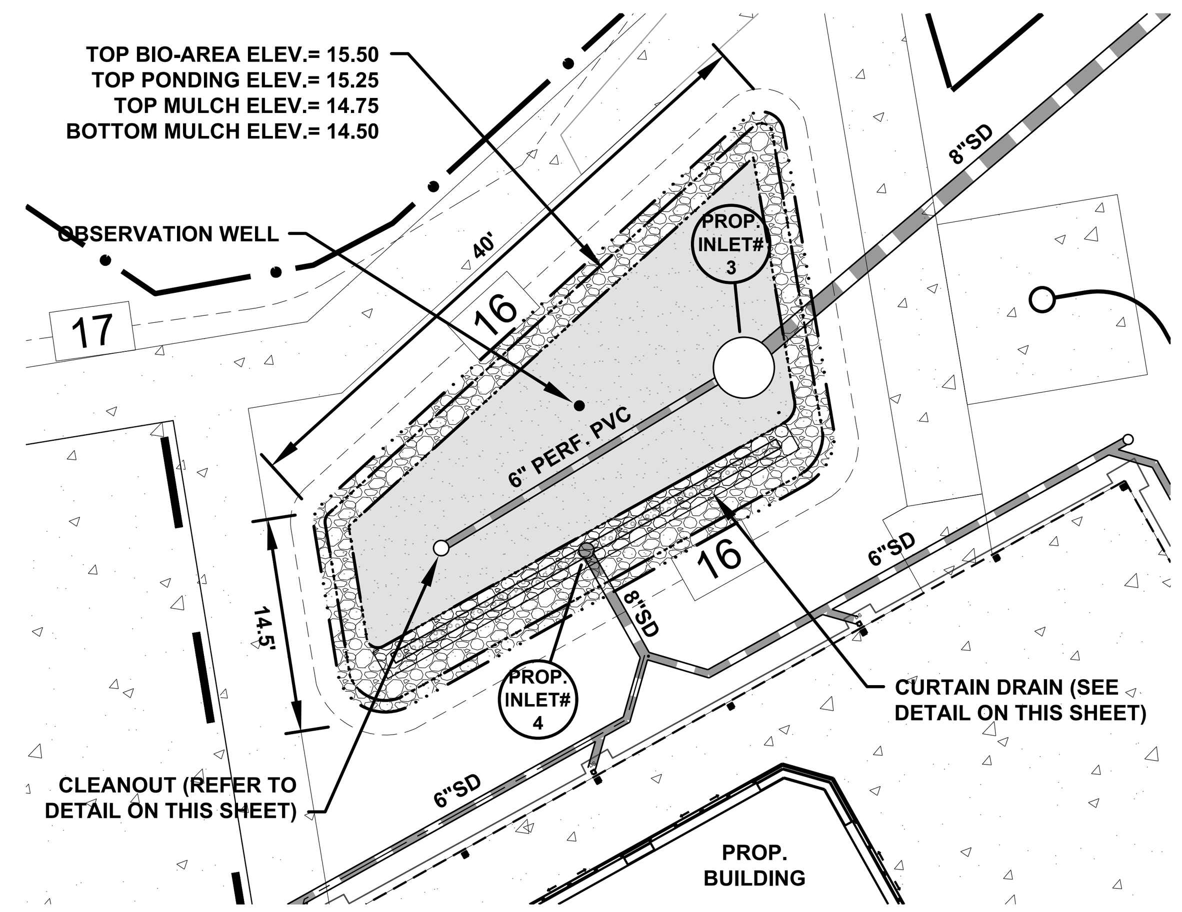
MICRO-BIORETENTION FACILITY MAINTENANCE SCHEDULE

DESCRIPTION	METHOD	FREQUENCY	TIME OF YEAR
SOIL			
INSPECT AND REPAIR EROSION	VISUAL	MONTHLY	MONTHLY
ORGANIC LAYER			
REMULCH ANY VOID AREAS	BY HAND	WHENEVER NEEDED	WHENEVER NEEDED
REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER (OPTIONAL)	BY HAND	ONCE EVERY TWO TO THREE YEARS	SPRING
ANY ADDITIONAL MULCH ADDED (OPTIONAL)	BY HAND	ONCE A YEAR	SPRING
PLANTS			
REMOVAL AND REPLACEMENT OF ALL DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT	SEE PLANTING SPECIFICATIONS	TWICE A YEAR	3/15 TO 4/30 AND 10/1 TO 11/30
TREAT ALL DISEASED TREES AND SHRUBS	MECHANICAL OR BY HAND	N/A	VARIES, DEPENDS ON INSECT OR DISEASE INFESTATION
WATERING OF PLANT MATERIAL SHALL TAKE PLACE AT THE END OF EACH DAY FOR FOURTEEN CONSECUTIVE DAYS AFTER PLANTING HAS BEEN COMPLETED	BY HAND	IMMEDIATELY AFTER COMPLETION OF PROJECT	N/A
REPLACE STAKES AFTER ONE YEAR	BY HAND	ONCE A YEAR	ONLY REMOVE STAKES IN THE SPRING
REPLACE ANY DEFICIENT STAKES OR WIRES	BY HAND	N/A	WHENEVER NEEDED
INFRASTRUCTURE			
CHECK OVERLOW INLET, PIPING, CURTAIN DRAIN FOR BREAKAGE AND BLOCKAGE. REPAIR AS NEEDED AND CLEAR OUT BLOCKAGES.	VISUAL	ONCE A YEAR	SPRING



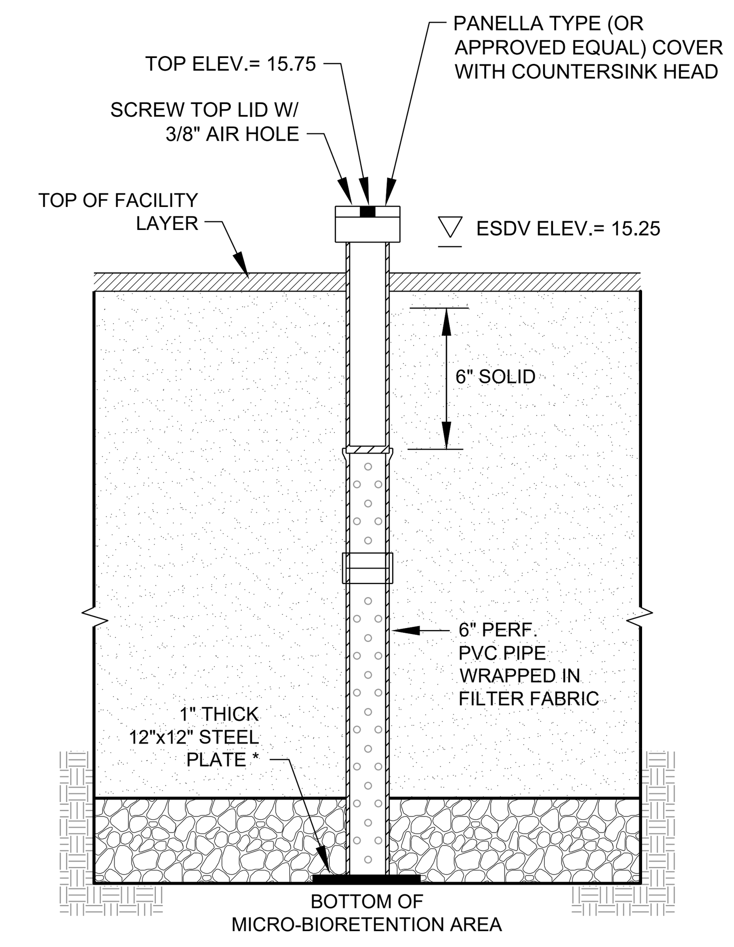
CLEANOUT DETAIL

SCALE: NONE



DETAILED MICRO-BIORETENTION AREA MB-1 PLAN

SCALE: 1"=10'



* CONNECT PIPE TO PLATE W/ METAL FLANGE

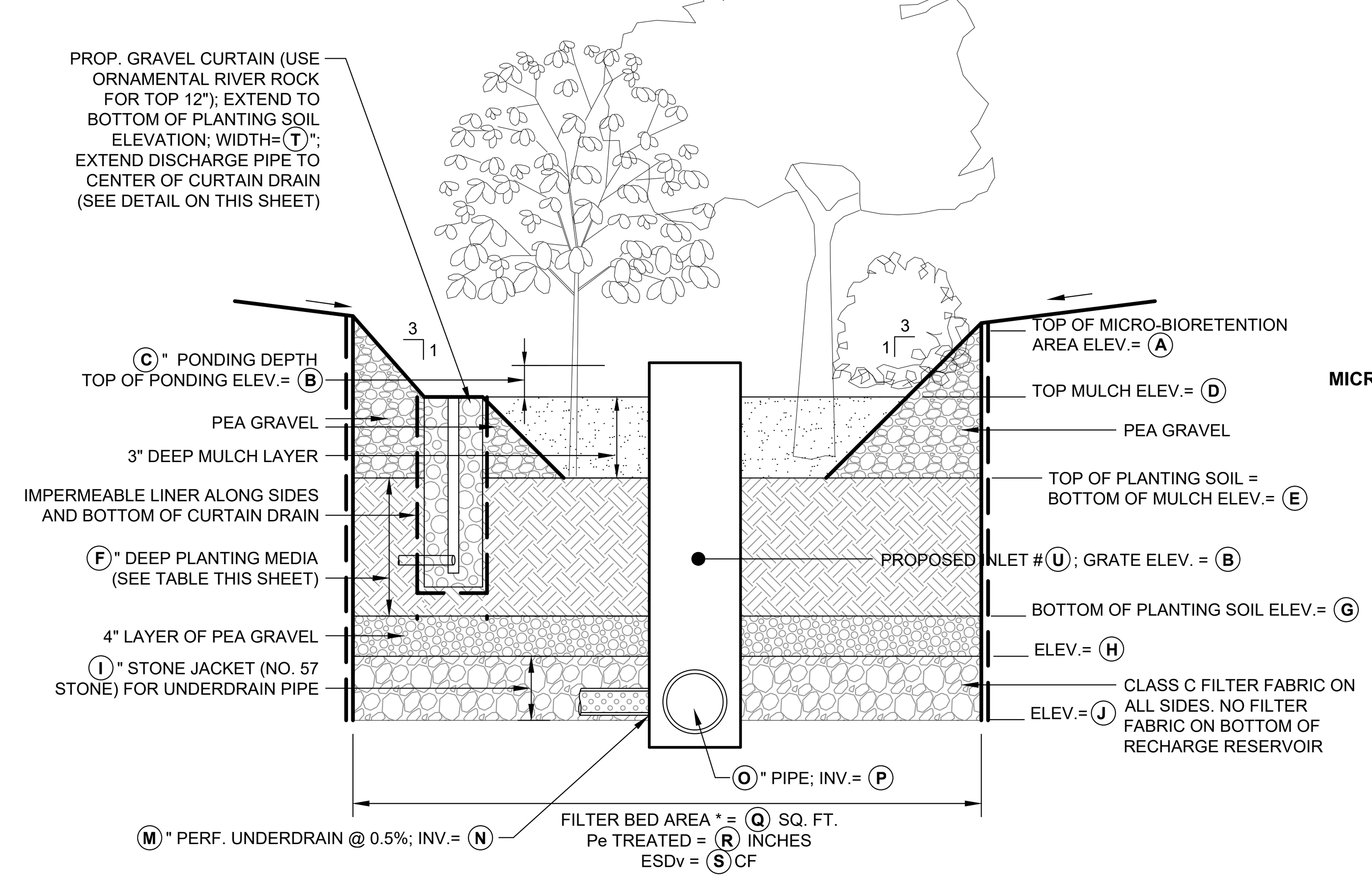
STANDARD S.W.M. MICRO-BIORETENTION / OBSERVATION WELL DETAIL

SCALE: NONE

S.W.M. FILTERING SYSTEM NOTES (MICRO-BIORETENTION)

SURFACE FILTERING SYSTEMS

1. FILTERING SYSTEMS MUST BE INSPECTED REGULARLY. WHEN PONDING IS EVIDENT ON THE SURFACE OF THE FILTER BED FOR MORE THAN 48 HOURS, THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REMOVED AND REPLACED WITH FRESH MATERIAL AND DISPOSED OF PROPERLY.
2. SILT/SEDIMENT REMOVAL SHALL BE PERFORMED WHEN SEDIMENT ACCUMULATES A DEPTH THAT EXCEEDS ONE INCH.
3. DEAD OR DISEASED PLANT MATERIAL SHALL BE REPLACED. THE TOP 2" - 3" OF MULCH SHOULD BE REPLACED ON AN ANNUAL BASIS FOR MICRO-BIORETENTION AND RAIN GARDENS ONLY.
4. DIRECT MAINTENANCE ACCESS TO THE PRE-TREATMENT AREA AND FILTER BED SHALL BE MAINTAINED.
5. VIGOROUS AND DENSE GROWTH SHOULD BE MAINTAINED. ANY BARE SPOTS, BURNED OUT AREAS, OR ERODED AREAS MUST BE RE-SEEDED OR RE-SODDED IMMEDIATELY. WATERING AND/OR FERTILIZATION SHOULD BE PROVIDED DURING THE FIRST FEW MONTHS AFTER STRIP IS ESTABLISHED AND MAY PERIODICALLY BE NEEDED DURING PERIODS OF DROUGHT.



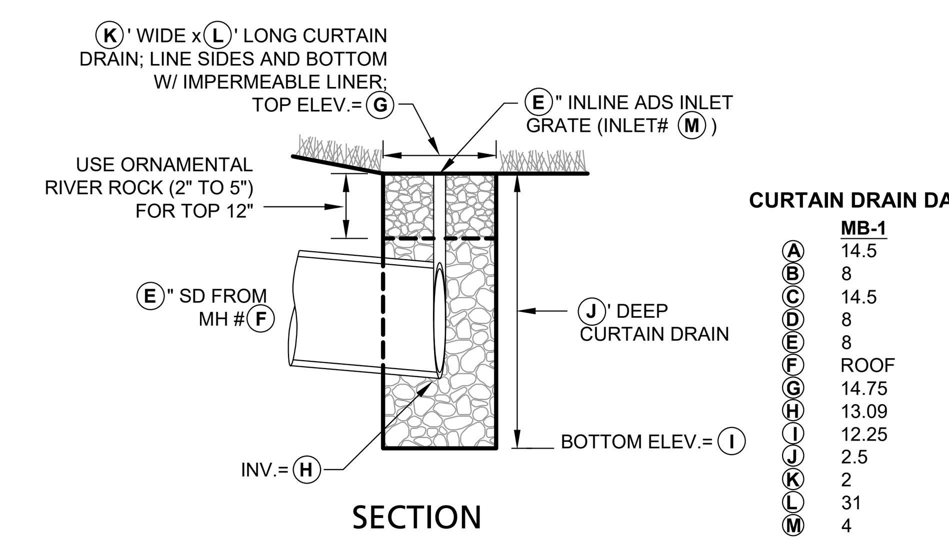
MICRO-BIORETENTION AREA DATA	MB-1
(A)	15.50
(B)	15.25
(C)	6"
(D)	14.75
(E)	14.50
(F)	48"
(G)	10.50
(H)	10.17
(I)	15"
(J)	8.92
(K)	N/A
(L)	N/A
(M)	6"
(N)	9.25
(O)	12"
(P)	8.75
(Q)	575
(R)	2.62
(S)	1280
(T)	24
(U)	3

* THE FILTER BED AREA REPRESENTS THE LIMITS OF THE CONSTRUCTED MICRO-BIO AREA. HOWEVER, THE DETERMINATION OF THE PROVIDED ESD VOLUME IS BASED ON THE AREA ASSOCIATED WITH THE LIMITS OF THE PONDING AREA.

PLEASE NOTE THAT THIS IS A TYPICAL DETAIL. PLEASE REFER TO PLAN VIEW FOR LOCATION OF CLEANOUT, OBSERVATION WELL, CURTAIN DRAIN, UNDERDRAIN PIPE AND OUTLET PIPE.

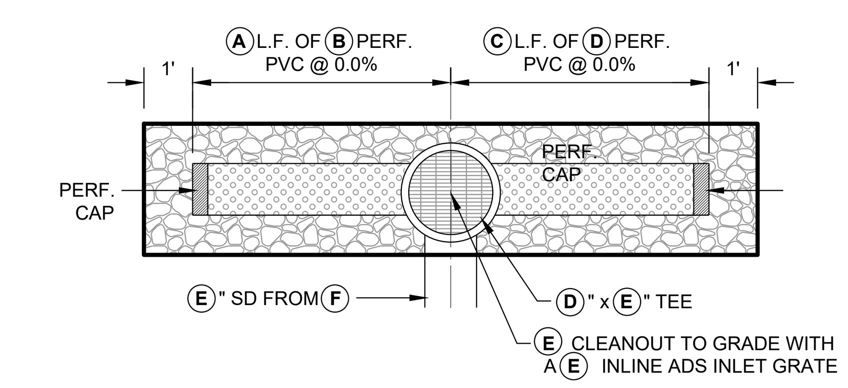
MICRO-BIORETENTION AREA TYPICAL DETAIL (M-6)

SCALE: NONE



SECTION

CURTAIN DRAIN DATA	MB-1
(A)	14.5
(B)	8
(C)	14.5
(D)	8
(E)	8
(F)	ROOF
(G)	14.75
(H)	13.09
(I)	12.25
(J)	2.5
(K)	2
(L)	31
(M)	4



PLAN

MICRO-BIORETENTION AREA CURTAIN DRAIN DISTRIBUTION PIPE DETAIL

SCALE: NONE

BID DOCUMENTS

#	REVISION DESCRIPTION	BY	DATE

ATWELL
866.850.4200 www.atwell-group.com
2661 RIVA ROAD, BUILDING 800
ANNAPOLIS, MARYLAND 21401
410.897.9290

WGM ARCHITECTURE + INTERIORS
WHEELER GOODMAN MASEK
16 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
V. 410.263.6787
www.wgm-arch.com

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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.

STATE OF MARYLAND · TERRY L SCHUMAN · 19593 · PROFESSIONAL ENGINEER

Terry Schuman — 4/3/24 (Date)
19593 (License No.) — 3/31/26 (Expiration Date)

ANNE ARUNDEL COUNTY — MAY 2024
DEPARTMENT OF PUBLIC WORKS — 202214.1

REVISED DATE	BY	APPROVED / DATE	APPROVED / DATE	
		CHIEF ENGINEER	PROJECT MANAGER	SCALE: AS SHOWN; DRAWN BY: AMD; CHECKED BY: TS
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	SHEET: C12 OF 19; PROJECT NO.: P584700; CONTRACT NO.: P584702

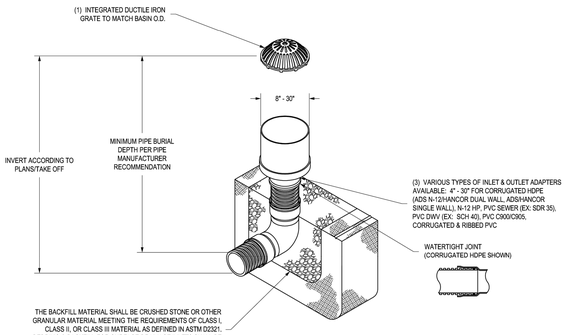
MICRO-BIORETENTION DETAILS AND NOTES

FOR THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
4150 HONEYSUCKLE DRIVE
MAYO, MARYLAND 21106
TAX ID: 01-000-03599460
TAX MAP 61, GRD 19, PARCEL 4
DISTRICT 1 ~ ANNE ARUNDEL COUNTY ~ ZONED OS & R2

PLOTTED: Apr 04 , 2024 - 10:51am

P:\21-7930 WGM - Mayo Beach Park - 4150 Honeysuckle Drive\Drawing Files\Grading Plans\21-7930 GRADING PLANS.dwg

NYLOPLAST INLINE DRAIN WITH DOME GRATE



1 - 8" - 30" DOME GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER (4" - 24").
3 - 8" - 30" DOME GRATES HAVE NO LOAD RATING

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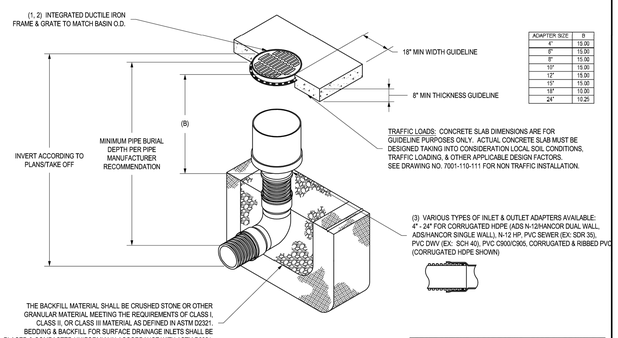
DRAWN BY	EBC	MATERIAL	
DATE	03-25-10		
REVISED BY	NMH	PROJECT NO.:NAME	
DATE	03-15-16		
DWG SIZE	A	SCALE 1:40	SHEET 1 OF 1

ADS Nyloplast — 3130 VERONA AVE, BUFORD, GA 30518, PHN (770) 932-2443, FAX (770) 932-2490, www.nyloplast-us.com

TITLE: INLINE DRAIN WITH DOME GRATE QUICK SPEC INSTALLATION DETAIL

DWG NO. 7003-110-057 REV D

NYLOPLAST 24 " INLINE DRAIN: 2724AG _ _ X



ADAPTER SIZE	B
4"	15.00
6"	15.00
8"	15.00
10"	15.00
12"	15.00
15"	15.00
18"	10.00
24"	10.25

GRATE OPTIONS	LOAD RATING	PART #	DRAWING #
PEDESTRIAN	MEETS H-10	2489CGP	7001-110-216
STANDARD	MEETS H-20	2489CGS	7001-110-217
SOLID COVER	MEETS H-20	2489CGC	7001-110-218
DOME	N/A	2489CGD	7001-110-219
DROP IN GRATE	LIGHT DUTY	2401DI	7001-110-075

1 - GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
3 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER.
4 - DIMENSIONS ARE FOR REFERENCE ONLY. ACTUAL DIMENSIONS MAY VARY.
5 - DIMENSIONS ARE IN INCHES
6 - SEE DRAWING NO. 7001-110-275 FOR ADS N-12 & HANCOR DUAL WALL BELL INFORMATION & DRAWING NO. 7001-110-364 FOR N-12 HP BELL INFORMATION.

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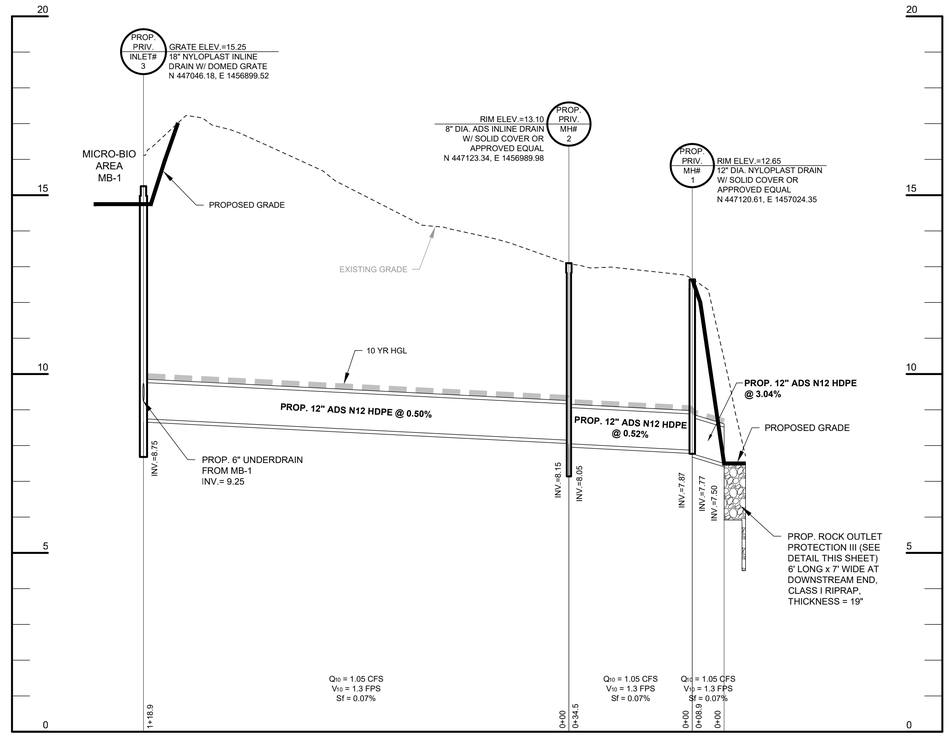
DRAWN BY	EBC	MATERIAL	
DATE	04-03-06		
REVISED BY	NMH	PROJECT NO.:NAME	
DATE	03-15-16		
DWG SIZE	A	SCALE 1:40	SHEET 1 OF 1

ADS Nyloplast — 3130 VERONA AVE, BUFORD, GA 30518, PHN (770) 932-2443, FAX (770) 932-2490, www.nyloplast-us.com

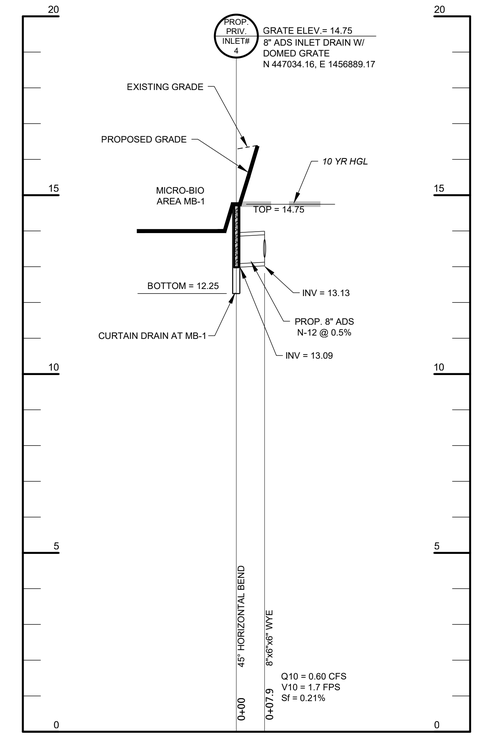
TITLE: 24 IN INLINE DRAIN QUICK SPEC INSTALLATION DETAIL

DWG NO. 7003-110-028 REV E



STORM DRAIN PROFILE

SCALE: 1"=2' VERTICAL; 1"=20' HORIZONTAL



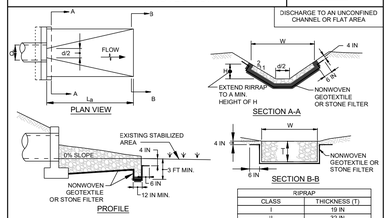
CURTAIN DRAIN PROFILE

SCALE: 1"=2' VERTICAL; 1"=20' HORIZONTAL

DETAIL D-4-1-C ROCK OUTLET PROTECTION III

STANDARD SYMBOL: ROPIII

DISCHARGE TO AN UNCONFINED CHANNEL OR FLAT AREA



RIPRAP	
CLASS	THICKNESS (T)
I	19 IN
II	32 IN
III	46 IN

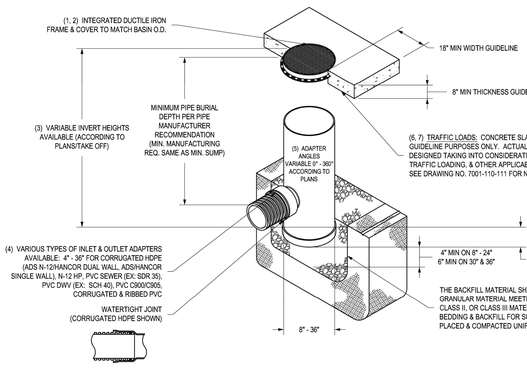
CONSTRUCTION SPECIFICATIONS

1. RIPRAP AND STONE MUST CONFORM TO THE SPECIFIED CLASS.
2. USE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, AND PROTECT FROM PUNCTURING, CUTTING, OR TEARING. REPAIR ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. PROVIDE A MINIMUM OF ONE FOOT OVERLAP FOR ALL REPAIRS AND FOR JOINING TWO PIECES OF GEOTEXTILE TOGETHER.
3. PREPARE THE SUBGRADE FOR GEOTEXTILE OR STONE FILTER (½ TO 1½ INCH MINIMUM STONE FOR 6 INCH MINIMUM DEPTH) AND RIPRAP TO THE REQUIRED LINES AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
4. EXTEND GEOTEXTILE AT LEAST 6 INCHES BEYOND EDGES OF RIPRAP AND EMBED AT LEAST 4 INCHES AT SIDES OF RIPRAP.
5. CONSTRUCT RIPRAP OUTLET TO FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. PLACE STONE FOR RIPRAP OUTLET IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. PLACE RIPRAP IN A MANNER TO PREVENT DAMAGE TO THE FILTER BLANKET OR GEOTEXTILE. HAND PLACE TO THE EXTENT NECESSARY.
6. WHERE NO ENDWALL IS USED, CONSTRUCT THE UPSTREAM END OF THE APRON SO THAT THE WIDTH IS TWO TIMES THE DIAMETER OF THE OUTLET PIPE, AND EXTEND THE STONE UNDER THE OUTLET BY A MINIMUM OF 18 INCHES.
7. CONSTRUCT APRON WITH 0% SLOPE ALONG ITS LENGTH AND WITHOUT OBSTRUCTIONS. PLACE STONE SO THAT IT BLENDS IN WITH EXISTING GROUND.
8. MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. AFTER HIGH FLOWS INSPECT FOR SCOUR AND RIPRAP DISLODGED RIPRAP. MAKE NECESSARY REPAIRS IMMEDIATELY.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

NYLOPLAST DRAIN BASIN WITH SOLID COVER



1 - 8" - 30" SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - 12" - 30" FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05. 6" & 10" SOLID COVERS FIT DIRECTLY ONTO DRAIN BASING WITH THE USE OF A PVC BODY TOP. SEE DRAWING NO. 7001-110-045.
3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065.
4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER (4" - 36").
5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.
6 - 12" - 30" SOLID COVERS SHALL MEET H-20 LOAD RATING.
7 - 8" & 10" SOLID COVERS ARE RATED FOR LIGHT DUTY APPLICATIONS ONLY; NO CONCRETE COLLAR NEEDED FOR LIGHT DUTY RATING.

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DRAWN BY	EBC	MATERIAL	
DATE	09-14-07		
REVISED BY	NMH	PROJECT NO.:NAME	
DATE	06-12-18		
DWG SIZE	A	SCALE 1:40	SHEET 1 OF 1

ADS Nyloplast — 3130 VERONA AVE, BUFORD, GA 30518, PHN (770) 932-2443, FAX (770) 932-2490, www.nyloplast-us.com

TITLE: DRAIN BASIN WITH SOLID COVER QUICK SPEC INSTALLATION DETAIL

DWG NO. 7001-110-298 REV E

POST-DEVELOPMENT STORM DRAIN FLOW TABULATIONS

DEVELOPMENT	MAYO BEACH CLUB	DATE	2/19/2024
LOCATION	ANNE ARUNDEL COUNTY	SHEET	1 OF 1
STORM FREQUENCIES:	10 YEAR / 20 YEAR (ALL SUMPS)	COMPUTED BY	JC
JOB NO.:	21-7930	CHECKED BY	

LOCATION FROM	LOCATION TO	AREA	ACRES SUB	ACRES TOTAL	COEF. "C"	CA	SUM CA	TIME CONC. MIN INLET	DRAIN	TOTAL	INTEN. "I"	Q=CIA C.F.S.	PIPE SIZE	Type	N	SLOPE	VEL.	LEN.	DT	REMARKS
ROOF	WYE	RD1		0.05	0.90		0.05	5.00	0.00	5.00	7.00	0.32	6	ADS	0.012	0.27	1.6	157.90	1.64	
ROOF	WYE	RD2		0.05	0.90		0.05	5.00	0.00	5.00	7.00	0.32	6	ADS	0.012	0.27	1.6	98.10	1.02	
																				SUMP
WYE	MB-1	RD1, RD2		0.10			0.09	5.00	1.02	6.02	6.80	0.61	8	ADS	0.012	0.22	1.8	7.90	0.08	
Surface	I-3	3	0.07		0.81	0.06 / 0.06		5.00	0.00	5.00	7.00 / 8.00	0.45								SUMP
I-3	MH-2	RD1,RD2,3		0.17	0.90		0.15	6.02	0.08	6.09	6.80	1.05	12	ADS	0.012	0.07	1.3	118.90	1.48	
MH-2	MH-1	RD1,RD2,3					0.15	6.09	1.48	7.57	6.50	1.05	12	ADS	0.012	0.07	1.3	36.90	0.46	
MH-1	OUTFALL	RD1,RD2,3					0.15	7.57	0.46	8.03	6.45	1.05	12	ADS	0.012	0.07	1.3	8.90	0.11	

#	REVISION DESCRIPTION	BY	DATE

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ANNAPOLIS, MARYLAND 21401
410.897.9290

WGM ARCHITECTURE + INTERIORS
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16 LOG CANOE CIRCLE - SUITE B1
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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.

STATE OF MARYLAND — TERRY SCHUMAN — 19593 — PROFESSIONAL ENGINEER

4/3/24
Terry Schuman — Date
19593 — License No. — 3/31/26 — Expiration Date

REVISED DATE	BY	APPROVED DATE	APPROVED DATE
		CHIEF ENGINEER	PROJECT MANAGER
		APPROVED DATE	APPROVED DATE
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

MAY 2024
202214.1

SCALE: AS SHOWN
DRAWN BY: AMD
CHECKED BY: TS
SHEET: C13 OF 19
PROJECT NO.: P584700
CONTRACT NO.: P584702

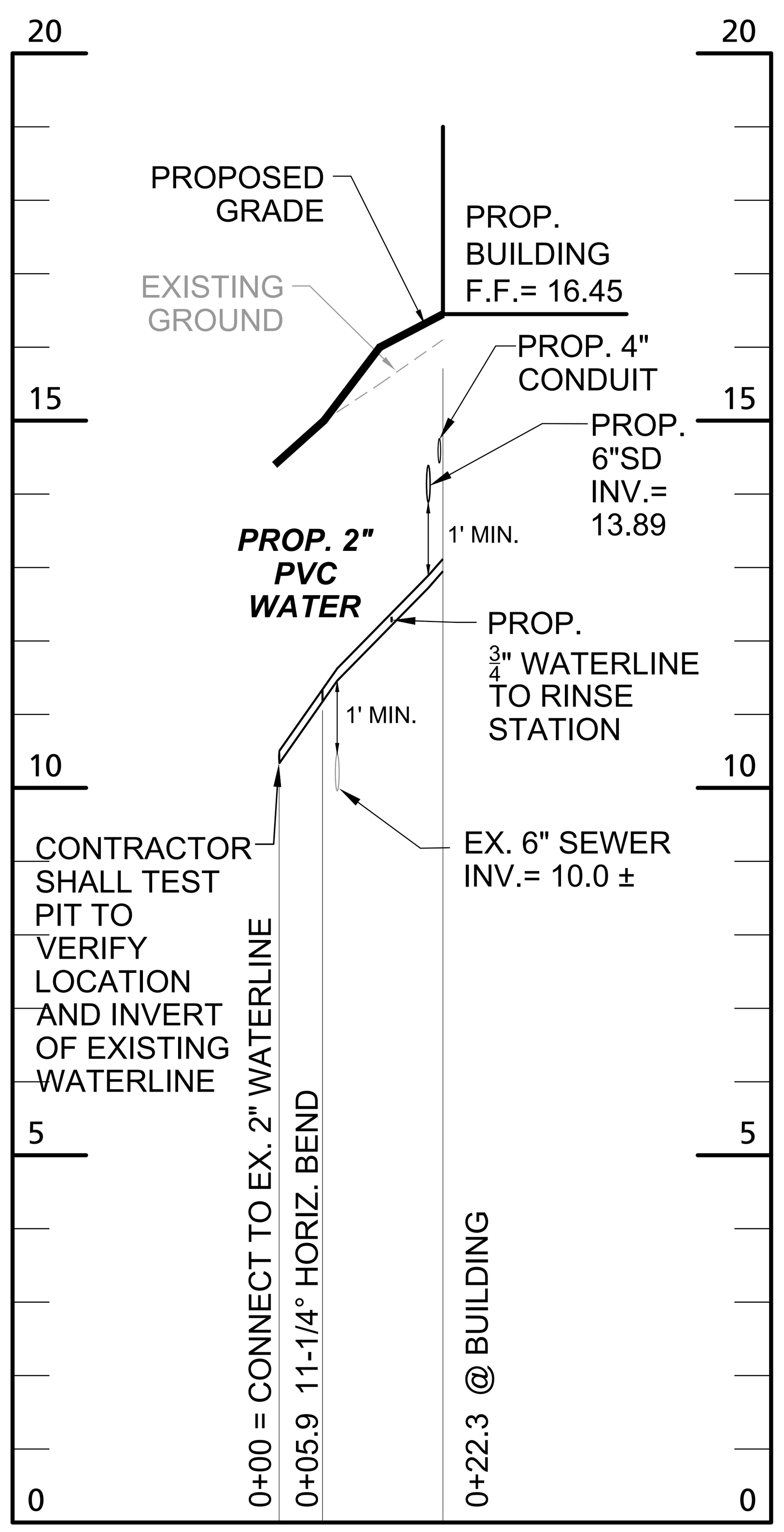
BID DOCUMENTS

PROFILES

FOR THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
4150 HONEYSUCKLE DRIVE
MAYO, MARYLAND 21106
TAX ID: 01-000-03599460
TAX MAP 61, GRID 19, PARCEL 4
DISTRICT 1 ~ ANNE ARUNDEL COUNTY ~ ZONED OS & R2

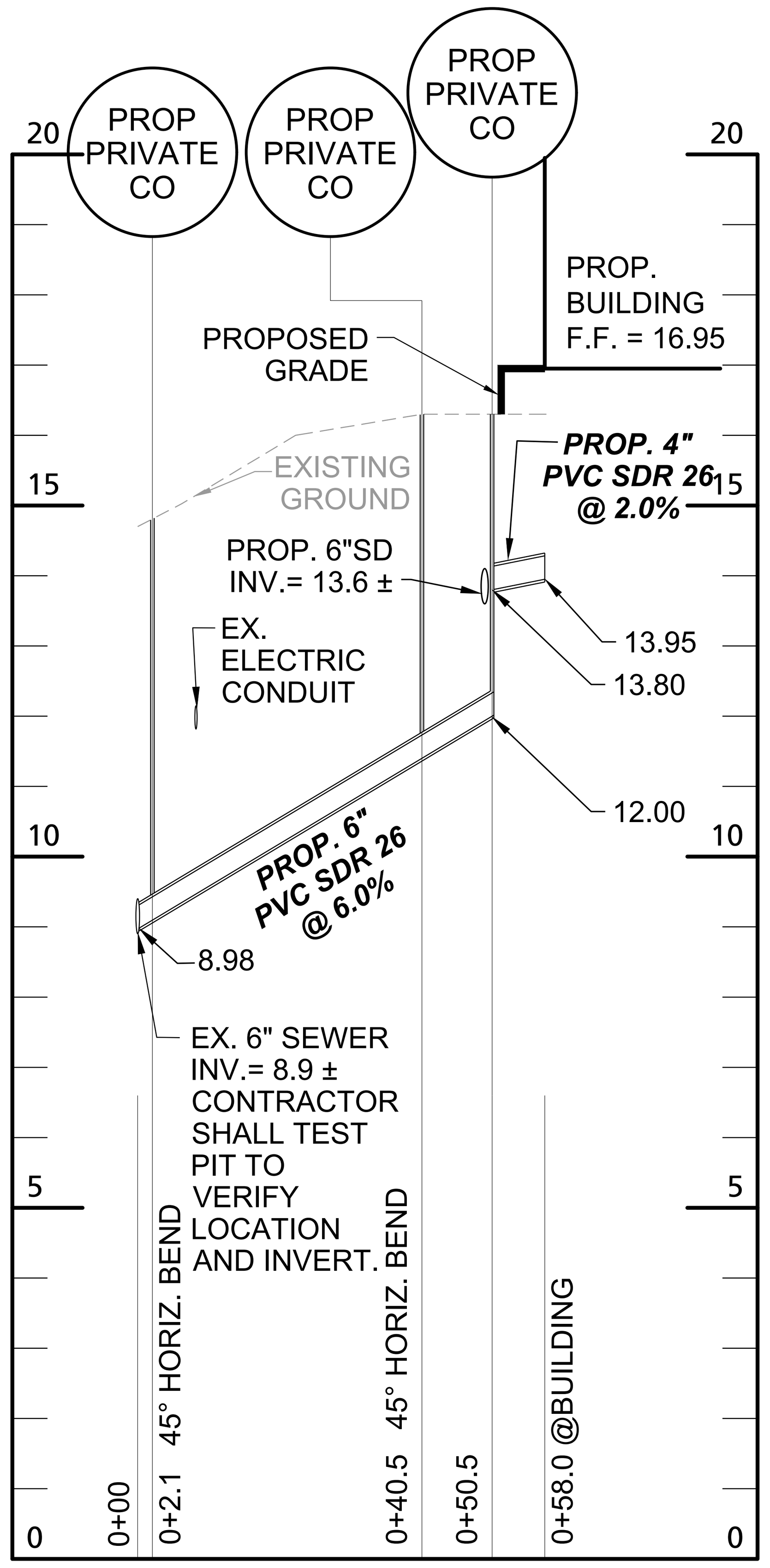
PLOTTED: Apr 04 , 2024 - 10:51am

P:\21-7930 WGM - Mayo Beach Park - 4150 Honeysuckle Drive\Drawing Files\Grading Plans\21-7930 GRADING PLANS.dwg



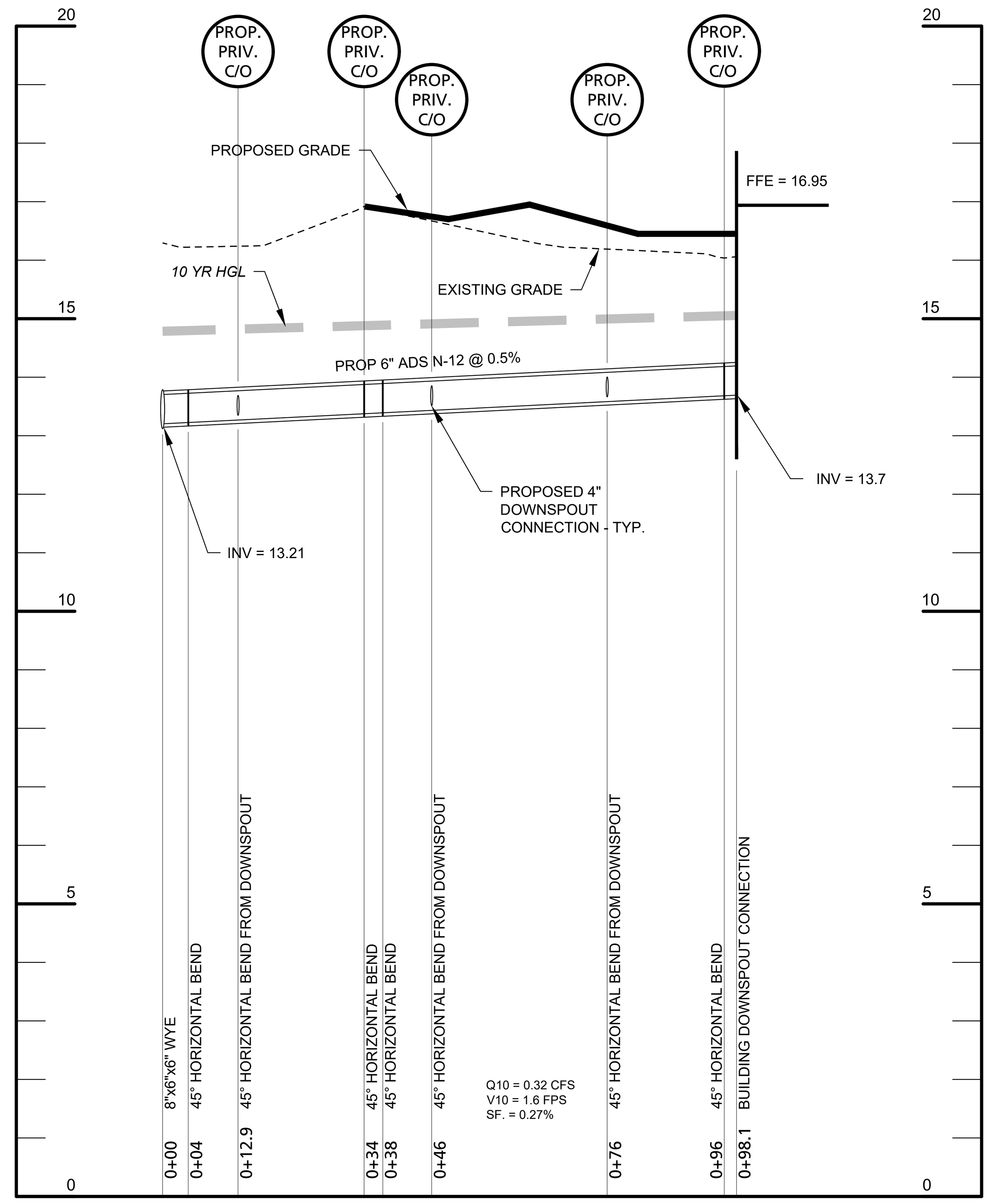
WATERLINE PROFILE

SCALE: 1" = 2' VERTICAL; 1" = 20' HORIZONTAL



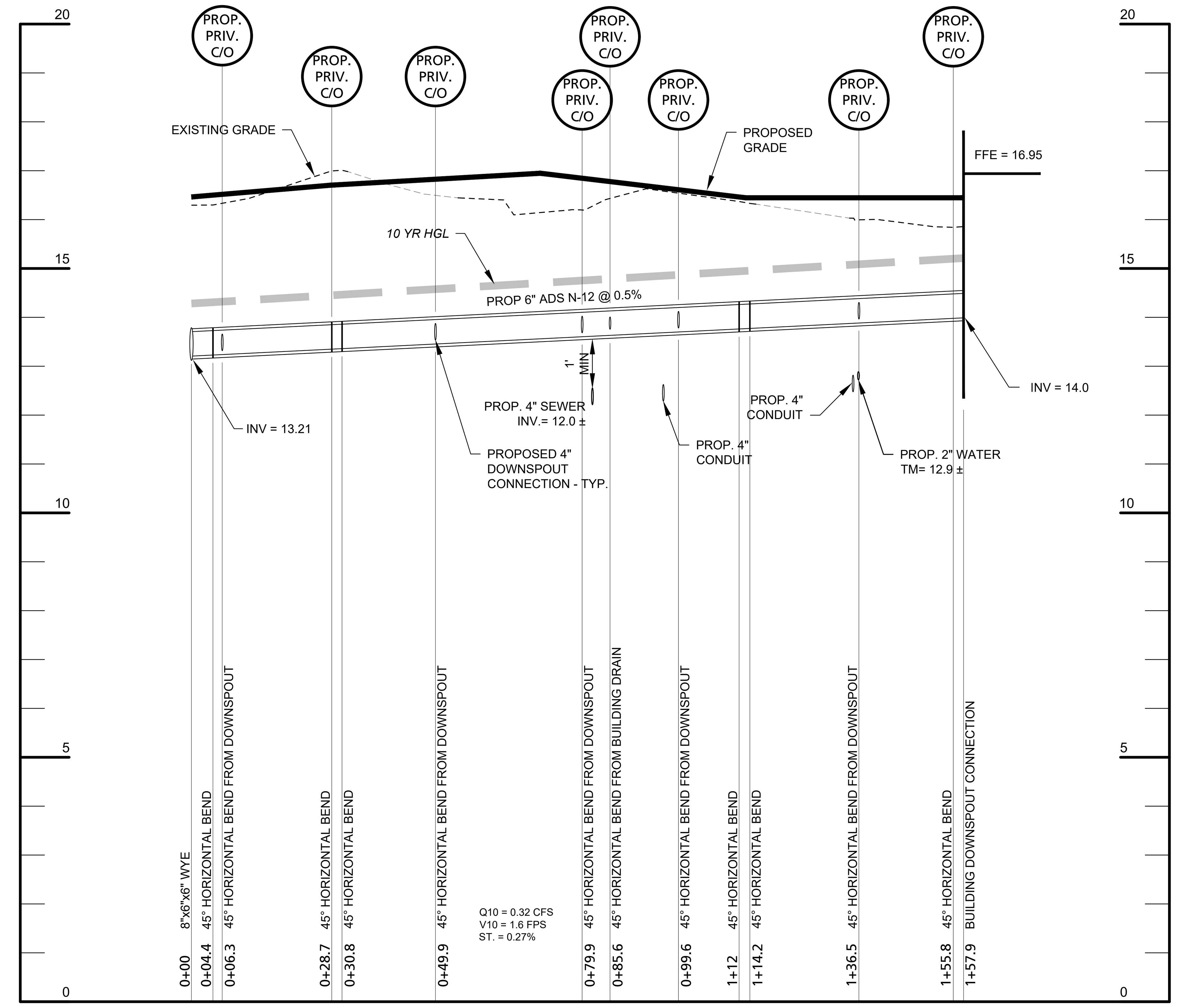
SEWER PROFILE

SCALE: 1" = 2' VERTICAL, 1" = 20' HORIZONTAL



ROOF DRAIN - EAST SIDE OF BUILDING

SCALE: 1"=2' VERTICAL; 1"=20' HORIZONTAL



ROOF DRAIN - WEST SIDE OF BUILDING

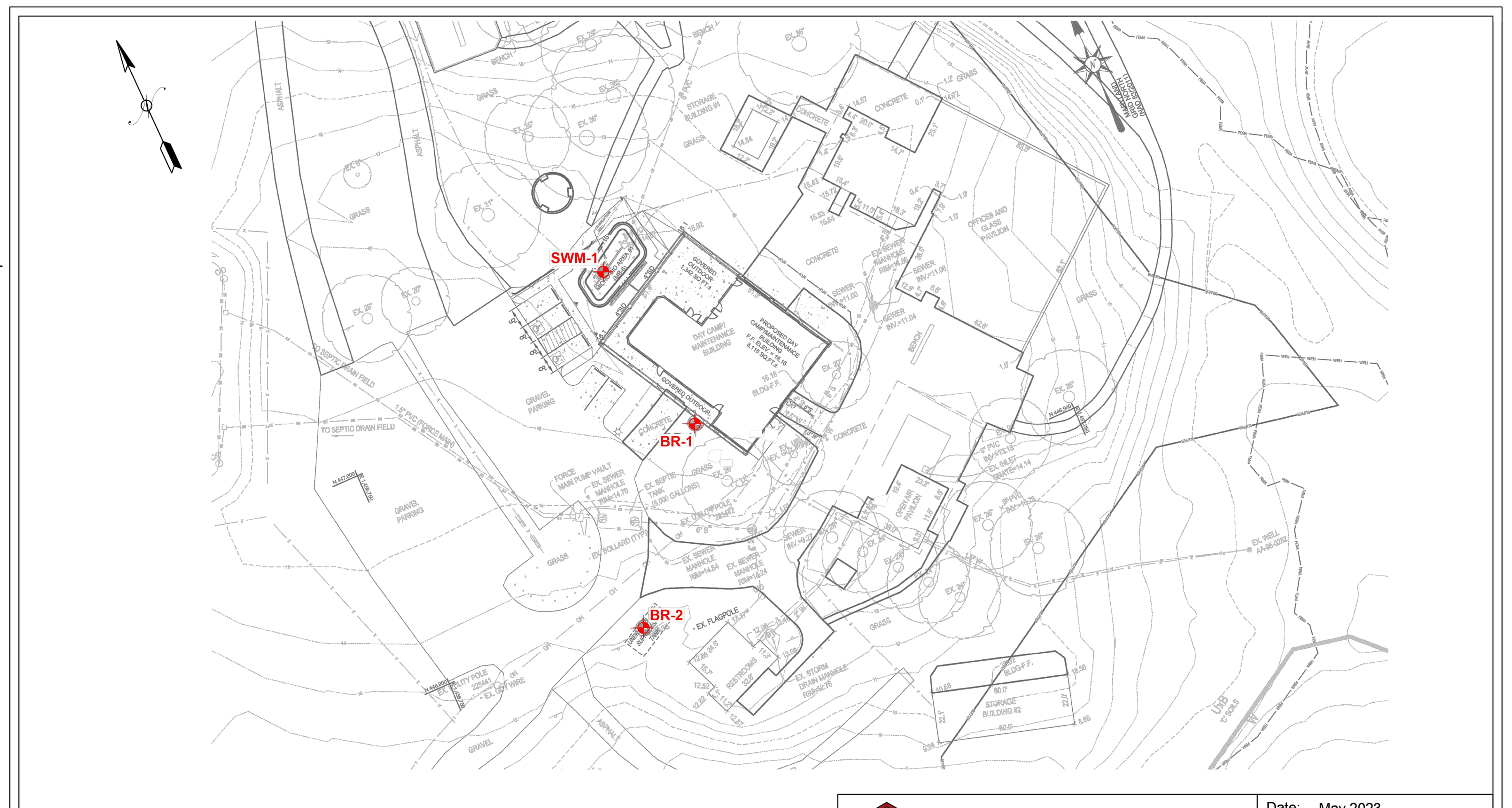
SCALE: 1"=2' VERTICAL; 1"=20' HORIZONTAL

ONSITE WATER NOTES

1. UNLESS OTHERWISE NOTED, ALL WATERLINE PIPE SHALL BE ONE OF THE FOLLOWING :
   - POLYVINYL CHLORIDE (PVC) PIPE AND COUPLINGS SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA C900 WITH DIP OUTSIDE DIAMETER, TABLE 2 DIMENSIONS, AND 20 FOOT LENGTH AS MODIFIED HEREIN. PIPE SHALL HAVE A DIMENSION RATIO (DR) OF 14, PRESSURE CLASS OF 200 PSI, AND SHALL BE FURNISHED WITH RUBBER GASKETED JOINTS OF EITHER THE INTEGRAL THICKENED BELL OR TWIN GASKETED COUPLING TYPE. PIPE, GASKETS, AND GASKET LUBRICANT SHALL BE SUITABLE FOR POTABLE WATER SYSTEMS. PIPE AND COUPLINGS SHALL BE MARKED AND FACTORY TESTED IN ACCORDANCE WITH AWWA C900.

ONSITE SEWER NOTES

1. UNLESS OTHERWISE NOTED, ALL GRAVITY SANITARY SEWER MAIN PIPE SHALL BE AS FOLLOWS :
   GRAVITY SEWER - PVC POLYVINYL CHLORIDE SDR-35 CONFORMING TO ASTM 3034, TYPE PSM. FITTINGS SHALL
   BE BELL AND SPIGOT IN CONFORMANCE WITH ASTM D3212.
   A. CLEANOUTS TO BE STANDARD ANNE ARUNDEL COUNTY DETAIL S/9 AND S/10 (AS APPROPRIATE).



FROEHLING & ROBERTSON
Engineering Stability Since 1881

Date: May 2023	
Scale: As Shown	
Drawn: DMA	75B0044
Mayo Beach Park Phase 2 Improvements Mayo, Maryland Bay Engineering, Inc.	Boring Location Plan Drawing No. 2

Froehling & Robertson, Inc. — BORING LOG

Boring: BR-1 (1 of 1)

Project No: 75B-0044 | Elevation: 16 ± | Drilling Method: 2.25" I.D. HSA
Client: Bay Engineering, Inc. | Total Depth: 20.0' | Hammer Type: Automatic
Project: Mayo Beach Park Phase 2 Improvements | Boring Location: See Location Plan | Date Drilled: 4/3/23
City/State: Mayo, Maryland | Driller: Wilhelm

Elevation	Depth	Description of Materials (Classification)	* Sample Blows	Sample Depth (feet)	N-Value (blows/ft)	Remarks
15.5	0.5	6" of Surface Soil	2-2-2 REC=56%	0.0 / 1.5	4	**Subsurface Water Data** Water at 18.5 feet while drilling. Water at 15.8 feet at completion. Cave in at 17.5 feet upon completion.
14.0	2.0	Brown, moist, very loose, Silty Fine to medium SAND, trace organic matter (SM)	2-3-5 REC=100%	2.0 / 3.5	8	
		Brown, moist, firm, Fine Sandy CLAY with silt (CL-SC)	3-4-4 REC=100%	3.5 / 5.0	8	
			2-3-3 REC=100%	6.5 / 8.0	6	
7.5	8.5	Brown, moist, medium dense, Silty Fine to Medium SAND (SM)	3-6-8 REC=100%	8.5 / 10.0	14	
4.0	12.0	Brown and gray, moist, firm, Silty CLAY (CL)	2-3-4 REC=100%	13.5 / 15.0	7	
-1.0	17.0	Brown and gray, wet, loose, Clayey Fine SAND (SC)	2-3-4 REC=100%	18.5 / 20.0	7	
-4.0	20.0	Boring terminated at 20 feet.				

*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the second and third increments of penetration is termed the standard penetration resistance, N-Value.

Froehling & Robertson, Inc. — BORING LOG

Boring: BR-2 (1 of 1)

Project No: 75B-0044 | Elevation: 13 ± | Drilling Method: 2.25" I.D. HSA
Client: Bay Engineering, Inc. | Total Depth: 20.0' | Hammer Type: Automatic
Project: Mayo Beach Park Phase 2 Improvements | Boring Location: See Location Plan | Date Drilled: 4/3/23
City/State: Mayo, Maryland | Driller: Wilhelm

Elevation	Depth	Description of Materials (Classification)	* Sample Blows	Sample Depth (feet)	N-Value (blows/ft)	Remarks
12.5	0.5	6" of Surface Soil	3-4-10 REC=56%	0.0 / 1.5	14	**Subsurface Water Data** Water at 18.5 feet while drilling. Water at 12 feet at completion. Cave in at 17.5 feet upon completion.
11.0	2.0	Brown, moist, stiff, Silty Sandy CLAY, trace gravel (CL-Possible Fill)	3-4-4 REC=100%	2.0 / 3.5	8	
		Brown, moist, firm, Fine Sandy CLAY with silt (CL-SC)	2-3-3 REC=100%	3.5 / 5.0	6	
7.5	5.5	Brown, moist, medium dense, Silty Fine to Medium SAND (SM)	3-5-8 REC=100%	6.5 / 8.0	13	
			5-7-8 REC=100%	8.5 / 10.0	15	
1.0	12.0	Brown and gray, moist, firm, Silty CLAY (CL)	2-3-3 REC=100%	13.5 / 15.0	6	
			2-3-3 REC=100%	18.5 / 20.0	6	
-7.0	20.0	Boring terminated at 20 feet.				

*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the second and third increments of penetration is termed the standard penetration resistance, N-Value.

Froehling & Robertson, Inc. — BORING LOG

Boring: SWM-1 (1 of 1)

Project No: 75B-0044 | Elevation: 15 ± | Drilling Method: 2.25" I.D. HSA
Client: Bay Engineering, Inc. | Total Depth: 10.0' | Hammer Type: Automatic
Project: Mayo Beach Park Phase 2 Improvements | Boring Location: See Location Plan | Date Drilled: 4/3/23
City/State: Mayo, Maryland | Driller: Wilhelm

Elevation	Depth	Description of Materials (Classification)	* Sample Blows	Sample Depth (feet)	N-Value (blows/ft)	Remarks
14.5	0.5	6" of Gravel Pavement	6-5-5 REC=67%	0.0 / 1.5	10	**Subsurface Water Data** Boring dry while drilling and at completion. Cave in at 7.5 feet upon completion
13.0	2.0	Brown, moist, loose, Silty Fine to medium SAND, trace organic matter (SM)	3-3-3 REC=100%	2.0 / 3.5	6	
		Brown, moist, firm, Clayey SILT (ML)	4-5-7 REC=100%	3.5 / 5.0	12	
			3-4-4 REC=100%	5.0 / 6.5	8	
8.5	6.5	Brown, moist, very loose to medium dense, Silty Fine to Medium SAND (SM)	2-2-2 REC=100%	6.5 / 8.0	4	
			3-4-7 REC=100%	8.5 / 10.0	11	
5.0	10.0	Boring terminated at 10 feet. Infiltration pipe set at a depth of 5 feet.				

*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the second and third increments of penetration is termed the standard penetration resistance, N-Value.

BID DOCUMENTS

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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.
STATE OF MARYLAND — TERRY L SCHUMAN — 19593 — PROFESSIONAL ENGINEER
Terry Schuman | Date 4/3/24
19593 | 3/31/26
License No. | Expiration Date

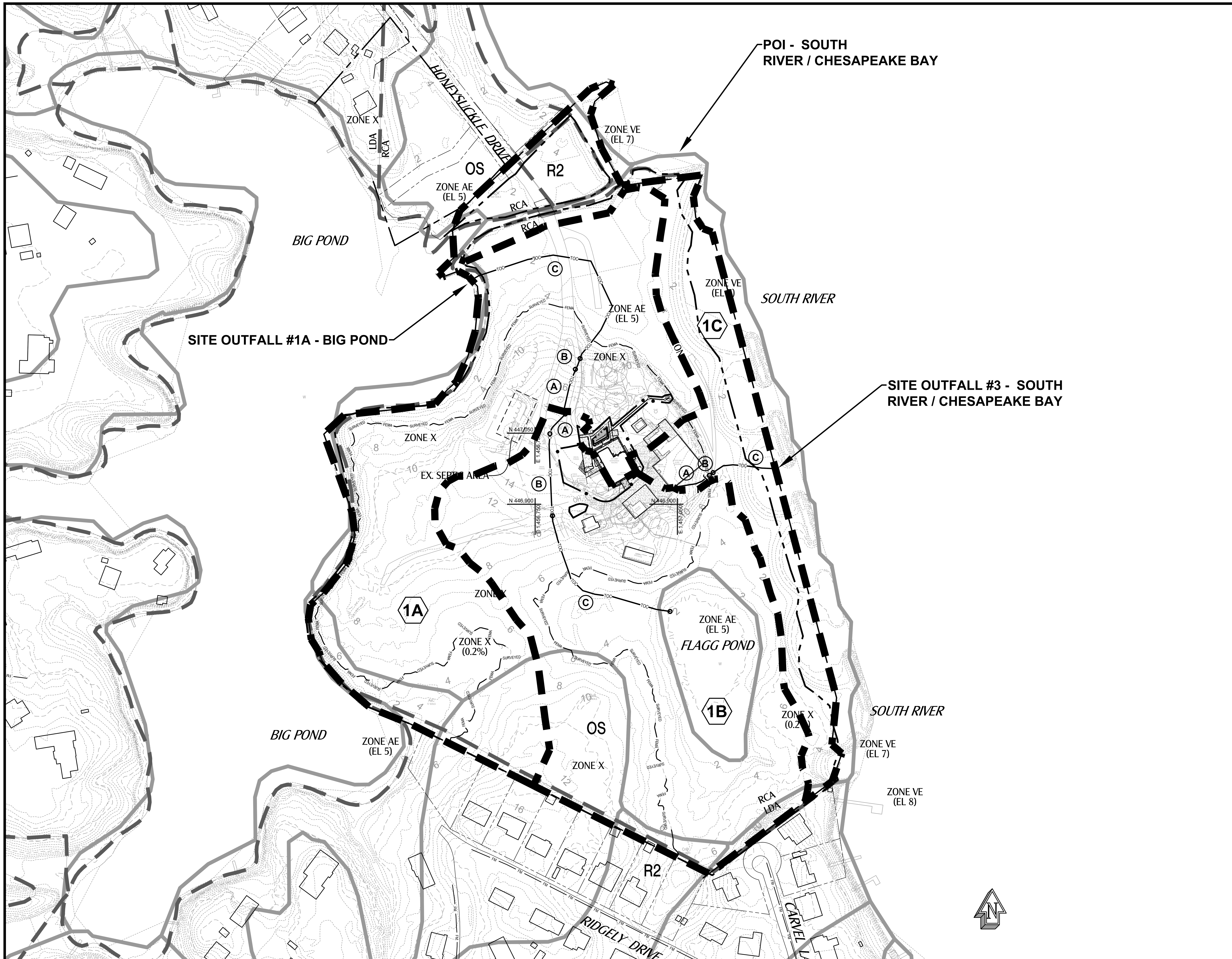
ANNE ARUNDEL COUNTY | MAY 2024
DEPARTMENT OF PUBLIC WORKS | 202214.1

REVISED DATE	BY	APPROVED / DATE	APPROVED / DATE	
		CHIEF ENGINEER	PROJECT MANAGER	SCALE: AS SHOWN
				DRAWN BY: AMD
				CHECKED BY: TS
		APPROVED / DATE	APPROVED / DATE	SHEET: C14 OF 19
				PROJECT NO.: P584700
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	CONTRACT NO.: P584702

PROFILES AND S.W.M. BORINGS
FOR THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
4150 HONEYSUCKLE DRIVE
MAYO, MARYLAND 21106
TAX ID: 01-000-03599460
TAX MAP 61, GRD 19, PARCEL 4
DISTRICT 1 ~ ANNE ARUNDEL COUNTY ~ ZONED OS & R2

PLOTTED: Apr 04 , 2024 - 10:51am

P:\21-7930 WGM - Mayo Beach Park - 4150 Honeysuckle Drive\Drawing Files\Grading Plans\21-7930 GRADING PLANS.dwg



DOWNSTREAM NOTE

IN ACCORDANCE WITH THE ANNE ARUNDEL COUNTY STORMWATER MANAGEMENT PRACTICES AND PROCEDURES MANUAL SECTION 7.2.1, A DOWNSTREAM ANALYSIS HAS BEEN PERFORMED FOR THE MAYO BEACH PARK IMPROVEMENTS TO ESTABLISH THE SITE OUTFALL(S) AND A POINT OF INVESTIGATION. THE PURPOSE OF THE DOWNSTREAM ANALYSIS IS TO SHOW THAT THE DEVELOPED SITE AND THE RESULTING FLOWS TO THE PROPOSED SITE OUTFALLS CAN BE ADEQUATELY CONVEYED TO THE POI LOCATION.

- SITE OUTFALL - THE POINT AT WHICH THE PROPOSED STORMWATER CONVEYANCE SYSTEM CARRYING STORMWATER RUNOFF FROM A SITE DISCHARGES INTO AN EXISTING MAN-MADE OR NATURAL STORMWATER CONVEYANCE SYSTEM. SITE OUTFALL #1A IS WHERE THE SITE DISCHARGES INTO BIG POND. PLEASE NOTE THAT BIG POND CONNECTS TO THE SOUTH RIVER. SITE OUTFALL #2A IS WHERE THE SITE ENTERS FLAGG POND. PLEASE NOTE THAT FLAGG POND CONNECTS TO THE SOUTH RIVER. SITE OUTFALL #3A IS WHERE THE SITE DISCHARGES DIRECTLY TO THE SOUTH RIVER.
- POINT OF INVESTIGATION - POINT LOCATED DOWNSTREAM OF THE SITE WHERE THE MAXIMUM POST DEVELOPMENT RUNOFF (BASED ON ZONING) FROM THE SITE IS LESS THAN OR EQUAL TO 10% OF THE TOTAL RUNOFF TO THAT POINT. THE POINT OF INVESTIGATION FOR THE SITE IS THE SOUTH RIVER/CHESAPEAKE BAY.

DRAINAGE AREA LEGEND

PROPERTY LINE / RIGHT-OF-WAY

PROPOSED DRAINAGE AREA BOUNDARY LINE

PROPOSED DRAINAGE AREA DESIGNATION #

PROPOSED TIME OF CONCENTRATION LINE TOC TOC

POI DRAINAGE AREA SUMMARY TABLE

ID	AREA (AC)	RCN	TC (MINS)	Q10 (CFS)
SITE OUTFALL 1A	10.14	73	9.7	38.6
SITE OUTFALL 1B	10.19	77	9.3	44.9
SITE OUTFALL 1C	4.89	78	6.0	25.00
POI FOR OUTFALL	*	*	*	*

**** THE SITE DRAINS TO WHERE THE SOUTH RIVER ENTERS THE CHESAPEAKE BAY WHICH IS IDENTIFIED AS THE POI. THE ENTIRE DRAINAGE AREA TO THE POI HAS NOT BEEN DELINEATED BECAUSE IT IS CLEAR THAT THE TOTAL FLOW TO THE POI IS LESS THAN 10% OF THE FLOW TO THE SOUTH RIVER AT THE CHESAPEAKE BAY.***

OUTFALL TIME OF CONCENTRATION BREAKDOWN

FLOW ID	DRAINAGE AREA #1A
(A)	95' SHEET FLOW @ 6%; GRASS; N= 0.15; 6.0 MINS.
(B)	26' SHALLOW CONCENTRATED FLOW @ 6.1%; PAVED; 0.1 MINS.
(C)	492' SHALLOW CONCENTRATED FLOW @ 2.0%; UNPAVED; 3.6 MINS.
TOTAL FLOW TIME (MINS)	**9.7 MINS.**

FLOW ID	DRAINAGE AREA #1B
(A)	58' SHEET FLOW @ 1.9%; GRASS; N= 0.15; 6.4 MINS.
(B)	174' SHALLOW CONCENTRATED FLOW @ 2.5%; PAVED; 0.9 MINS.
(C)	359' SHALLOW CONCENTRATED FLOW @ 3.3%; UNPAVED; 2.0 MINS.
TOTAL FLOW TIME (MINS)	**9.3 MINS.**

FLOW ID	DRAINAGE AREA #1C
(A)	75' SHEET FLOW @ 9.3%; GRASS; N= 0.15; 4.1 MINS.
(B)	10' SHALLOW CONCENTRATED FLOW @ 8.0%; PAVED; 0 MINS.
(C)	134' SHALLOW CONCENTRATED FLOW @ 4.0%; UNPAVED; 0.7 MINS.
TOTAL FLOW TIME (MINS)	**4.8 MINS. (USE MIN. OF 6.0 MINS.)**

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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.

STATE OF MARYLAND TERRY L SCHUMAN 19593 PROFESSIONAL ENGINEER

Terry Schuman 4/3/24 Date
19593 License No. 3/31/26 Expiration Date

ANNE ARUNDEL COUNTY — MAY 2024
DEPARTMENT OF PUBLIC WORKS — 202214.1

REVISED DATE	BY	APPROVED / DATE	APPROVED / DATE
		CHIEF ENGINEER	PROJECT MANAGER
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY

SCALE: 1"=100'
DRAWN BY: AMD
CHECKED BY: TS
SHEET: C15 OF 19
PROJECT NO.: P584700
CONTRACT NO.: P584702

OUTFALL ANALYSIS PLAN
FOR THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
4150 HONEYSUCKLE DRIVE
MAYO, MARYLAND 21106
TAX ID: 01-000-03599460
TAX MAP 61, GRD 19, PARCEL 4
DISTRICT 1 ~ ANNE ARUNDEL COUNTY ~ ZONED OS & R2

PLOTTED: Apr 04 , 2024 - 10:51am
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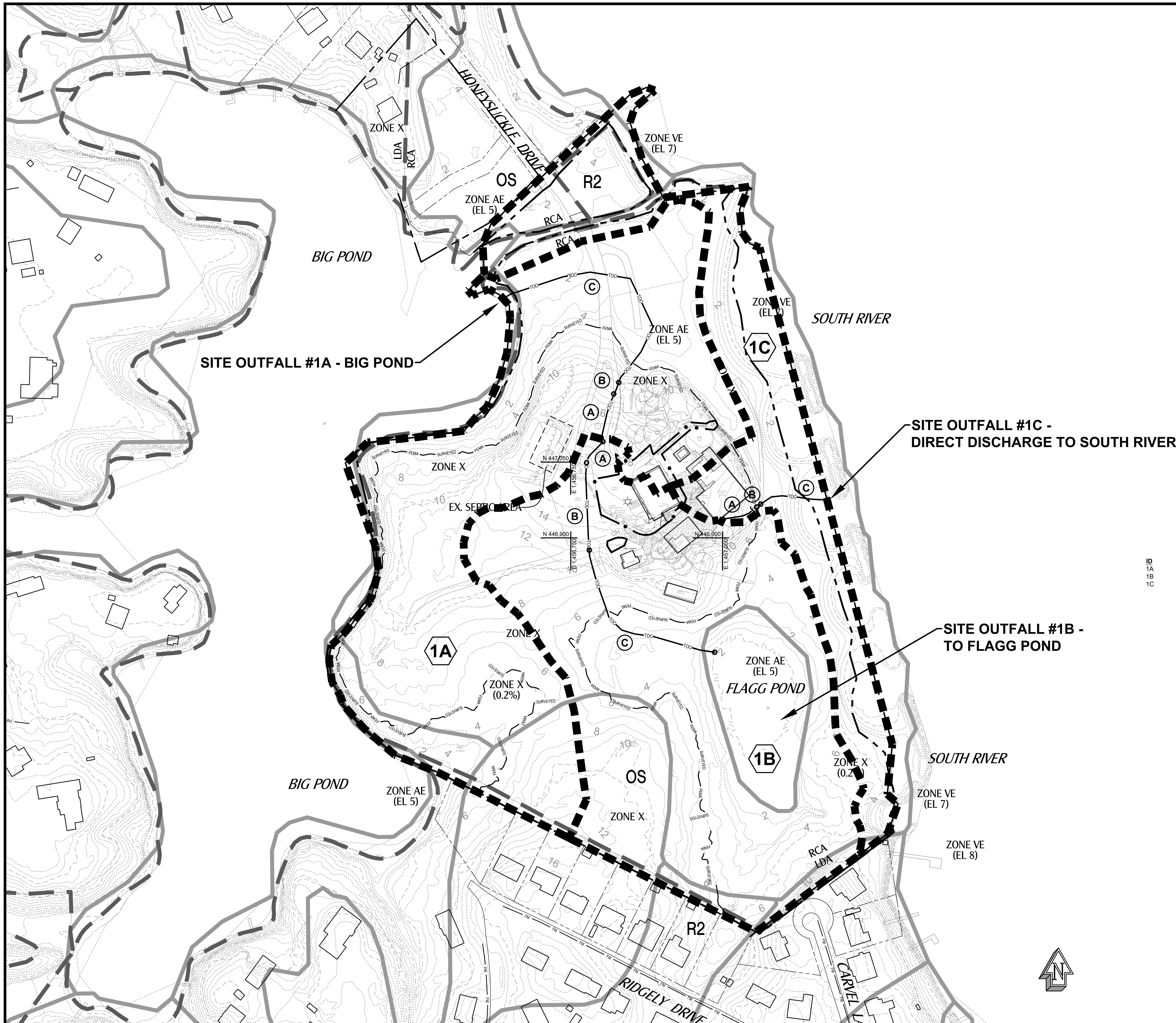

DRAINAGE AREA LEGEND

PROPERTY LINE / RIGHT-OF-WAY	
EXISTING DRAINAGE AREA BOUNDARY LINE	
EXISTING DRAINAGE AREA DESIGNATION	#
EXISTING TIME OF CONCENTRATION LINE	TOC

SITE OUTFALL PRE-DEVELOPMENT S.W.M. DRAINAGE AREA SUMMARY TABLE

ID	AREA (AC)	RCN	TC (MINS)	Q10 (CFS)
1A	10.06	74	9.7	39.6
1B	10.27	79	9.3	48.0
1C	4.89	78	6.0	25.0

TOTAL FLOW FROM SITE TO SOUTH RIVER / CHESAPEAKE BAY= 110.2 CFS

SITE OUTFALL PRE-DEVELOPMENT S.W.M. TIME OF CONCENTRATION BREAKDOWN

FLOW ID	DRAINAGE AREA #1A
(A)	95' SHEET FLOW @ 6%; GRASS; N= 0.15; 6.0 MINS.
(B)	26' SHALLOW CONCENTRATED FLOW @ 6.1%; PAVED; 0.1 MINS.
(C)	492' SHALLOW CONCENTRATED FLOW @ 2.0%; UNPAVED; 3.6 MINS.
TOTAL FLOW TIME (MINS)	**9.7 MINS.**

FLOW ID	DRAINAGE AREA #1B
(A)	58' SHEET FLOW @ 1.9%; GRASS; N= 0.15; 6.4 MINS.
(B)	174' SHALLOW CONCENTRATED FLOW @ 2.5%; PAVED; 0.9 MINS.
(C)	359' SHALLOW CONCENTRATED FLOW @ 3.3%; UNPAVED; 2.0 MINS.
TOTAL FLOW TIME (MINS)	**9.3 MINS.**

FLOW ID	DRAINAGE AREA #1C
(A)	75' SHEET FLOW @ 9.3%; GRASS; N= 0.15; 4.1 MINS.
(B)	10' SHALLOW CONCENTRATED FLOW @ 8.0%; PAVED; 0 MINS.
(C)	134' SHALLOW CONCENTRATED FLOW @ 4.0%; UNPAVED; 0.7 MINS.
TOTAL FLOW TIME (MINS)	**4.8 MINS. (USE MIN. OF 6.0 MINS.)**

SITE OUTFALL PRE-DEVELOPMENT RcN BREAKDOWN TABLE

ID	IMPERV AREA (AC) RcN = 98	AREA OF GRASS 'C' SOILS (AC) RcN = 74	AREA OF GRASS 'D' SOILS (AC) RcN = 80	AREA OF WOODS 'C' SOILS (AC) RcN = 70	AREA OF WOODS 'D' SOILS (AC) RcN = 77	WATER RcN = 98	TOTAL (AC)	WEIGHTED RcN
1A	0.54	5.57	0.24	3.11	0.60	-	10.06	74
1B	0.91	4.93	1.25	1.78	0.04	1.36	10.27	79
1C	0.42	4.01	-	0.07	-	0.39	4.89	78

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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.

STATE OF MARYLAND
TERRY L SCHUMAN
19593
PROFESSIONAL ENGINEER

Terry Schuman — Date: 4/3/24
License No.: 19593 — Expiration Date: 3/31/26

ANNE ARUNDEL COUNTY

DEPARTMENT OF PUBLIC WORKS

MAY 2024

202214.1

REVISED DATE	BY	APPROVED / DATE	APPROVED / DATE
		CHIEF ENGINEER	PROJECT MANAGER
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY

SCALE: 1"=100'
DRAWN BY: AMD
CHECKED BY: TS
SHEET: C16 OF 19
PROJECT NO.: P584700
CONTRACT NO.: P584702

PRE-DEVELOPMENT S.W.M. DRAINAGE AREA PLAN

FOR THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
4150 HONEYSUCKLE DRIVE
MAYO, MARYLAND 21106
TAX ID: 01-000-03599460
TAX MAP 61, GRD 19, PARCEL 4
DISTRICT 1 ~ ANNE ARUNDEL COUNTY ~ ZONED OS & R2

PLOTTED: Apr 04 , 2024 - 10:51am

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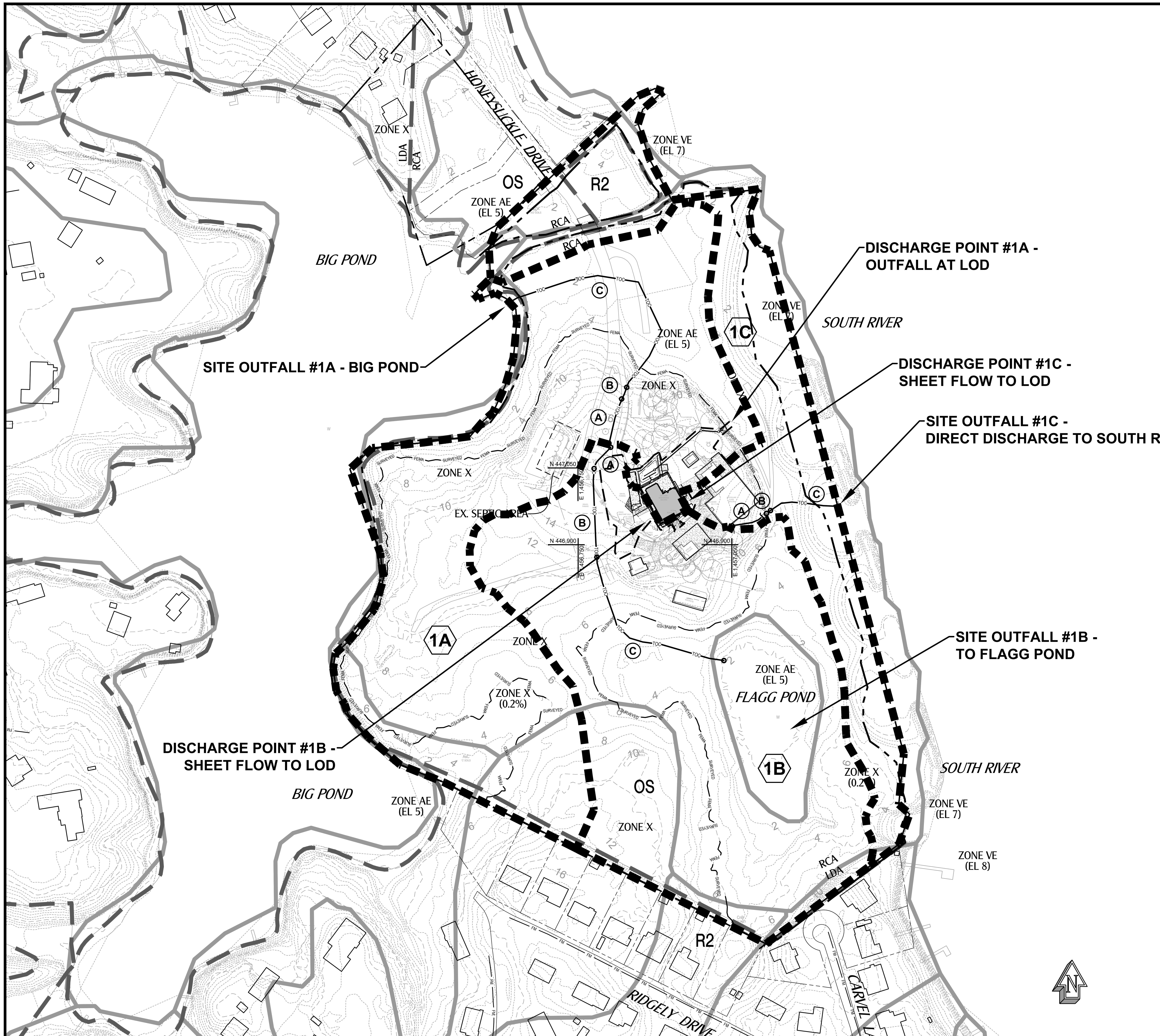

DRAINAGE AREA LEGEND

PROPERTY LINE / RIGHT-OF-WAY	
PROPOSED DRAINAGE AREA BOUNDARY LINE	
PROPOSED DRAINAGE AREA DESIGNATION	#
PROPOSED TIME OF CONCENTRATION LINE	TOC

SITE OUTFALL POST-DEVELOPMENT S.W.M. DRAINAGE AREA SUMMARY TABLE

ID	AREA (AC)	RCN	TC (MINS)	Q10 (CFS)
1A	10.14	74 / 74 *	9.7	39.9
1B	10.19	79	9.3	47.6
1C	4.89	78	6.0	25.0

TOTAL FLOW FROM SITE TO SOUTH RIVER / CHESAPEAKE BAY= 110.1 CFS

SITE OUTFALL POST-DEVELOPMENT S.W.M. TIME OF CONCENTRATION BREAKDOWN

FLOW ID	DRAINAGE AREA #1A
(A)	95' SHEET FLOW @ 6%; GRASS; N= 0.15; 6.0 MINS.
(B)	26' SHALLOW CONCENTRATED FLOW @ 6.1%; PAVED; 0.1 MINS.
(C)	492' SHALLOW CONCENTRATED FLOW @ 2.0%; UNPAVED; 3.6 MINS.
TOTAL FLOW TIME (MINS)	**9.7 MINS.**

FLOW ID	DRAINAGE AREA #1B
(A)	58' SHEET FLOW @ 1.9%; GRASS; N= 0.15; 6.4 MINS.
(B)	174' SHALLOW CONCENTRATED FLOW @ 2.5%; PAVED; 0.9 MINS.
(C)	359' SHALLOW CONCENTRATED FLOW @ 3.3%; UNPAVED; 2.0 MINS.
TOTAL FLOW TIME (MINS)	**9.3 MINS.**

FLOW ID	DRAINAGE AREA #1C
(A)	75' SHEET FLOW @ 9.3%; GRASS; N= 0.15; 4.1 MINS.
(B)	10' SHALLOW CONCENTRATED FLOW @ 8.0%; PAVED; 0 MINS.
(C)	134' SHALLOW CONCENTRATED FLOW @ 4.0%; UNPAVED; 0.7 MINS.
TOTAL FLOW TIME (MINS)	**4.8 MINS. (USE MIN. OF 6.0 MINS.)**

SITE OUTFALL POST-DEVELOPMENT RcN BREAKDOWN TABLE

ID	IMPERV AREA (AC) RcN = 98	AREA OF GRASS 'C' SOILS (AC) RcN = 74	AREA OF GRASS 'D' SOILS (AC) RcN = 80	AREA OF WOODS 'C' SOILS (AC) RcN = 70	AREA OF WOODS 'D' SOILS (AC) RcN = 77	WATER RcN = 98	TOTAL (AC)	WEIGHTED RcN
1A	0.59	5.60	0.24	3.11	0.60	-	10.14	74
1B	0.82	4.94	1.25	1.78	0.04	1.36	10.19	79
1C	0.42	4.01	-	0.07	-	0.39	4.89	78

DISCHARGE POINTS SUMMARY

DISCHARGE POINTS	DP1A	DP1B	DP
TOTAL DRAINAGE AREA (AC.)	0.41	0.28	0.02
Q10 MAX (CFS)	2.6	0.19	0.12

BID DOCUMENTS

#	REVISION DESCRIPTION	BY	DATE

ATWELL
866.850.4200 www.atwell-group.com
2661 RIVA ROAD, BUILDING 800
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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.

STATE OF MARYLAND · TERRY L SCHUMAN · 19593 · PROFESSIONAL ENGINEER

Terry Schuman — Date: 4/3/24
19593 — License No. — Expiration Date: 3/31/26

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

MAY 2024
202214.1

REVISED		APPROVED	DATE	APPROVED	DATE
DATE	BY	CHIEF ENGINEER		PROJECT MANAGER	
		APPROVED	DATE	APPROVED	DATE
		ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT OF WAY	

SCALE: 1"=100'
DRAWN BY: AMD
CHECKED BY: TS
SHEET: C17 OF 19
PROJECT NO.: P584700
CONTRACT NO.: P584702

POST-DEVELOPMENT SWM DRAINAGE AREA PLAN
FOR THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
4150 HONEYSUCKLE DRIVE
MAYO, MARYLAND 21106
TAX ID: 01-000-03599460
TAX MAP 61, GRD 19, PARCEL 4
DISTRICT 1 ~ ANNE ARUNDEL COUNTY ~ ZONED OS & R2

PLOTTED: Apr 04 , 2024 - 10:51am
P:\21-7930 WGM - Mayo Beach Park - 4150 Honeysuckle Drive\Drawing Files\Grading Plans\21-7930 GRADING PLANS.dwg

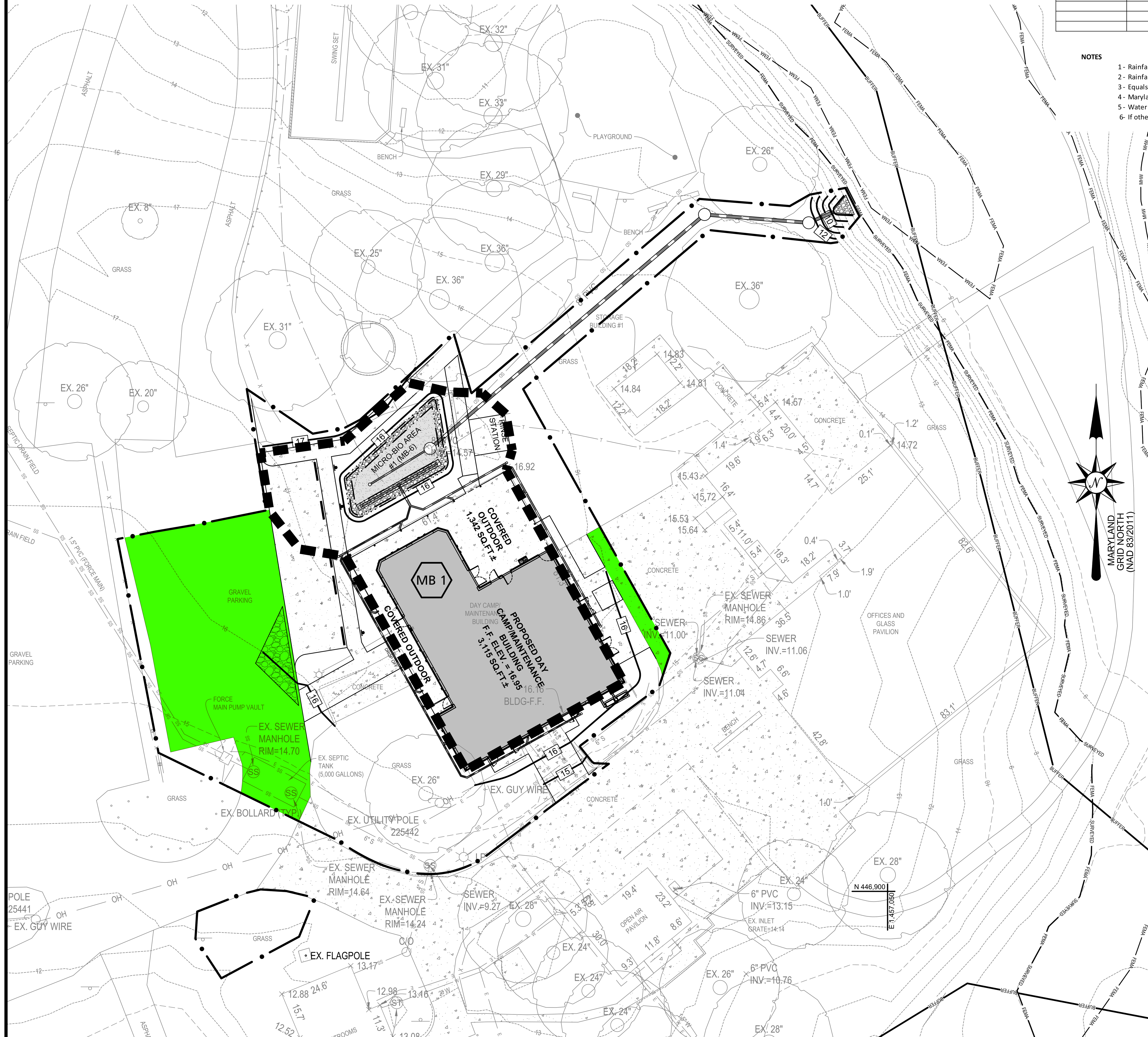
TOTAL LOD AREA = 22,212 SF (0.51 ACRES)

TOTAL IMPERVIOUS AREA WITHIN LOD = 12,373 SF (0.28 ACRES)

IMPERVIOUS AREA EXCLUDED FROM ESD COMPUTATIONS = 4,120 SF (0.10 ACRES)

TOTAL NET AREA USED FOR ESD COMPUTATIONS = 18,092 SF (0.41 ACRES)

TOTAL NET IMPERVIOUS AREA USED FOR ESD COMPUTATIONS = 8,253 SF (0.19 ACRES)



S.W.M. DATA

For Each Practice in the Drainage Area

STORM_ID	STRU_NAME	MDE BMP CLASS (E, S, or A)	MDE BMP TYPE	CONSTRUCTION PURPOSE (New development (NEWD), Redvelopment (REDE), or Restoration (REST))	ON or OFF SITE	LAND USE (MDP Code)	DEVICE DRAINAGE AREA (acres)	IMPERVIOUS AREA DRAINING TO DEVICE (Square feet)	IMPERVIOUS ACRES RESTORED (See Note 3)	MD NORTH COORD (NAD83 - FT)	MD EAST COORD (NAD83 - FT)	WQ_V (ft3) (See Note 5)	New Maintenance Responsibility	New Comments
Blank - County Use	Micro-Bioretention Area 1 (MB-1)	E	MMBR	REDE	ON	18	0.18	6094	N/A	447044	1456889	0.03	County	

NOTES

1 - Rainfall target (from Table 5.3, Design Manual pp.5.21-22) used to determine ESD goals and size practices (for new development or redevelopment). If practice is for restoration, then PE_REQ is 1inch.
2 - Rainfall addressed (using both ESD techniques and practices, and structural practices) by the BMPs within the drainage area
3 - Equals Impervious Area Draining to Device when PE_ADR = 1 inch (for restoration only)
4 - Maryland 8-Digit HUC (Hydrologic Unit Code) can be found by using the map at: https://mde.state.md.us/programs/Water/TMDL/DataCenter/Pages/8DigitWatershed.aspx
5 - Water Quality volume, the smaller of the volume of the actual storage volume in the device or the volume from the 1-year 24-hour storm for the drainage area to the device ((2.7" x Rv x A)/12)
6 - If other is selected for maintenance responsibility, please explain the comments column.

S.W.M. DATA

Project Table for Each Drainage Area

Permit Number	G02019770
Project Number	
Project Name	MAYO BEACH PARK
StructureAddress	4150 HONEYSUCKLE DRIVE
Structure City	MAYO
State	MARYLAND
Structure Zip	21106
Total Drainage Area (Acres)	25.22
RCN - Pre Construction	77
RCN - Post Construction	77
RCN - Woods	70
Total Number of BMPs	1
PE Required (see Note 1)	1.8
PE Addressed (see Note 2)	1.9
MD 8-Digit HUC (see Note 4)	2131003
USGS 12-Digit HUC	**Blank - County Use**

S.W.M. SUMMARY TABLE

Criteria	Required	Provided	Practice
ESD_v	ESD_v = 1251 cf	ESD_v = 1320 cf	Provided in proposed micro-bioretention area.
Cp_v	N/A	N/A	Not required because ESDv was met.
Qp_{10}	N/A	N/A	Direct discharge to tidal waters and post development flow does not increase over pre-development flow.
Q_{f100}	N/A	N/A	Direct discharge to tidal waters.

S.W.M. STRUCTURE SUMMARY TABLE

STORMWATER MANAGEMENT STRUCTURE AND STREAM RESTORATION SUMMARY SHEET

Project Name and Number Mayo Beach Park
Design Professional Bay Engineering, Inc.
Date 2/20/2024

Overall Drainage Area	Practice	Structure #	Type	Location (NAD Grid Coordinates)	Drainage Area Treated (Ac.)	Runoff from 1 yr 24 hr storm (cf)	Water Quality Volume (cf)	Actual Device Volume (cf)	PE Provided (in)
	ESD Practices								
	Micro-Bioretention Area MB-1	MB-1	M-6	N447044, E1456889	0.18	1320	1320	1360	2.70

Total ESD Required for site = 1,251 cf
Total ESD Provided for site = 1,320 cf

S.W.M. SUMMARY NOTE

STORMWATER MANAGEMENT FOR THIS SITE IS PROVIDED IN ACCORDANCE WITH THE ANNE ARUNDEL COUNTY STORMWATER MANAGEMENT PRACTICES AND PROCEDURES MANUAL AND THE CURRENT MDE STORMWATER MANAGEMENT GUIDELINES. STORMWATER MANAGEMENT IS PROVIDED FOR THE SITE AS FOLLOWS:

1. ESD - THE SITE IS CONSIDERED A "NEW DEVELOPMENT" PROJECT. BASED ON THE SITE AREA/LIMIT OF DISTURBANCE, THE TARGET PE IS 1.8 INCHES AND THE REQUIRED ESD VOLUME IS 1,251 CF. THROUGH THE USE OF ESD PRACTICES (MICRO-BIORETENTION AREA), 2.70 INCHES OF RUNOFF IS TREATED, EQUIVALENT TO 1,320 CF OF ESD VOLUME.
2. CPV - CHANNEL PROTECTION VOLUME IS NOT REQUIRED BASED ON THE RUNOFF THAT IS CAPTURED IN THE ESD DEVICES.
3. OVERBANK FLOOD PROTECTION IS NOT REQUIRED BECAUSE THE POST DEVELOPMENT FLOW FROM THE SITE DOES NOT EXCEED THE PRE-DEVELOPMENT FLOW AND THE SITE HAS DIRECT DISCHARGE TO TIDAL WATERS.
4. EXTREME FLOOD VOLUME IS NOT REQUIRED.

ESD DRAINAGE AREA SUMMARY TABLE

ID	TOTAL AREA (S.F.)	IMPERVIOUS AREA (S.F.)	NOTES
MB-1	7,642	6,094	DRAINAGE AREA TO MICRO-BIORETENTION AREA MB-1

DRAINAGE AREA LEGEND

DRAINAGE AREA BOUNDARY
DRAINAGE AREA DESIGNATION #

BID DOCUMENTS

#	REVISION DESCRIPTION	BY	DATE

ATWELL
866.850.4200 www.atwell-group.com
2661 RIVA ROAD, BUILDING 800
ANNAPOLIS, MARYLAND 21401
410.897.9290

WGM ARCHITECTURE + INTERIORS
WHEELER GOODMAN MASEK
16 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
V. 410.263.6787
www.wgm-arch.com

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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.
STATE OF MARYLAND — TERRY L SCHUMAN — 19593 — PROFESSIONAL ENGINEER
Terry Schuman 4/3/24 Date
19593 License No. 3/31/26 Expiration Date

ANNE ARUNDEL COUNTY — MAY 2024
DEPARTMENT OF PUBLIC WORKS — 202214.1

REVISED DATE	BY	APPROVED / DATE	APPROVED / DATE	
		CHIEF ENGINEER	PROJECT MANAGER	SCALE: 1"=20'
				DRAWN BY: AMD
				CHECKED BY: TS
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	SHEET: C18 OF 19
				PROJECT NO.: P584700
				CONTRACT NO.: P584702

ESD DRAINAGE AREA PLAN
FOR THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
4150 HONEYSUCKLE DRIVE
MAYO, MARYLAND 21106
TAX ID: 01-000-03599460
TAX MAP 61, GRD 19, PARCEL 4
DISTRICT 1 ~ ANNE ARUNDEL COUNTY ~ ZONED OS & R2

PLOTTED: Apr 04, 2024 - 10:51am

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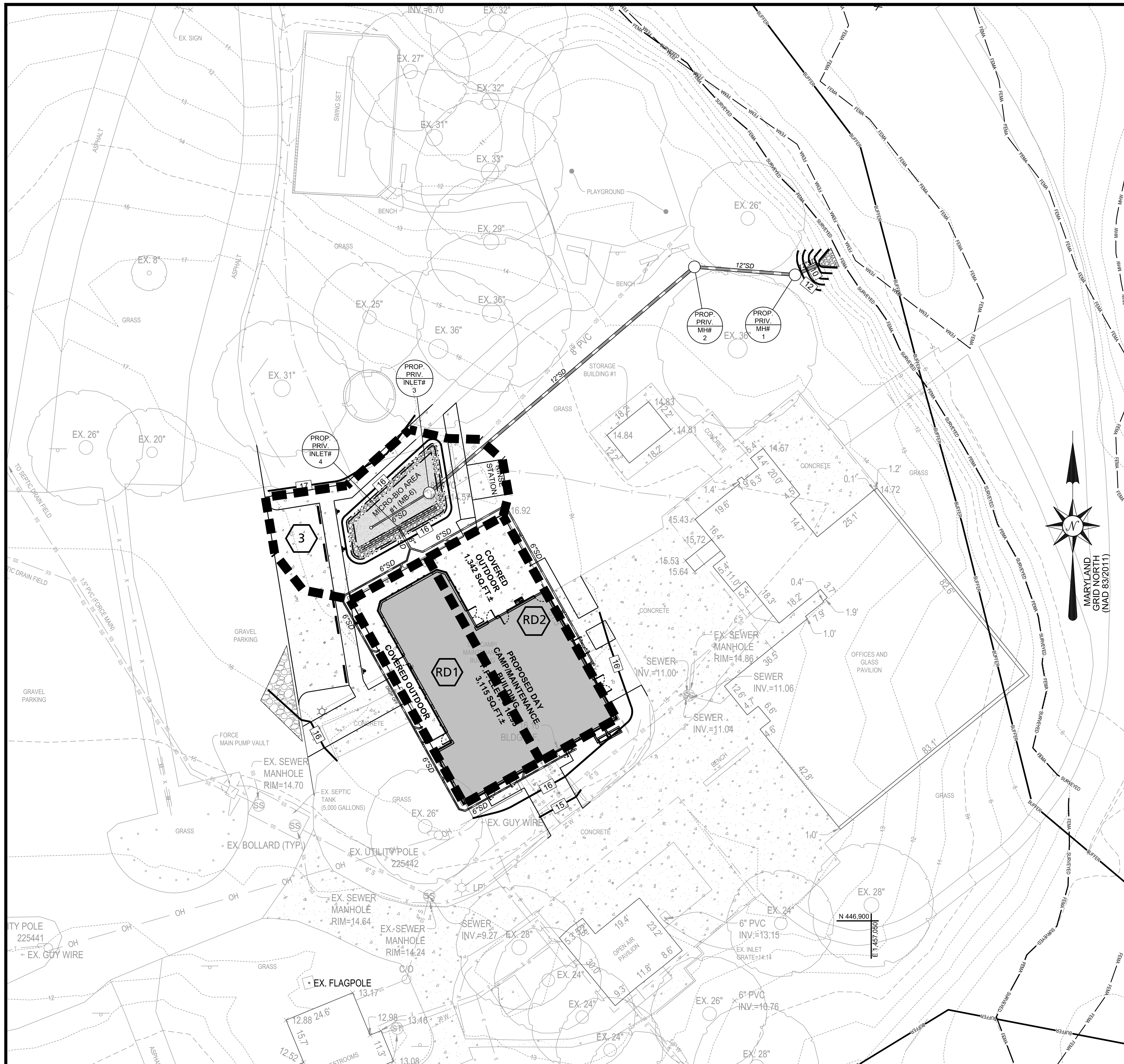

STORM DRAIN DRAINAGE AREA TABLE

ID	AREA (ACRES)	C FACTOR	TIME OF CONC. (MIN)
3	0.07	0.81	5.0
RD 1	0.05	0.90	5.0
RD 2	0.05	0.90	5.0

NOTE: 'C' VALUES TAKEN ROM ANNE ARUNDEL COUNTY SD-2.01

DRAINAGE AREA LEGEND

PROPERTY LINE / RIGHT-OF-WAY	——— — — ———
PROPOSED DRAINAGE AREA BOUNDARY LINE	▬ ▬ ▬ ▬ ▬
PROPOSED DRAINAGE AREA DESIGNATION	⬡ #

BID DOCUMENTS

#	REVISION DESCRIPTION	BY	DATE

ATWELL
866.850.4200 www.atwell-group.com
2661 RIVA ROAD, BUILDING 800
ANNAPOLIS, MARYLAND 21401
410.897.9290

WGM ARCHITECTURE + INTERIORS
WHEELER GOODMAN MASEK
16 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
V. 410.263.6787
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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.

STATE OF MARYLAND
TERRY L SCHUMAN
19593
PROFESSIONAL ENGINEER

Terry Schuman — 4/3/24 Date
19593 License No. — 3/31/26 Expiration Date

ANNE ARUNDEL COUNTY — MAY 2024
DEPARTMENT OF PUBLIC WORKS — 202214.1

REVISED		APPROVED	DATE	APPROVED	DATE	
DATE	BY	CHIEF ENGINEER		PROJECT MANAGER		SCALE: 1"=20'
						DRAWN BY: AMD
						CHECKED BY: TS
		APPROVED	DATE	APPROVED	DATE	SHEET: C19 OF 19
						PROJECT NO.: P584700
		ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT OF WAY		CONTRACT NO.: P584702

STORM DRAIN DRAINAGE AREA PLAN

FOR THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
4150 HONEYSUCKLE DRIVE
MAYO, MARYLAND 21106
TAX ID: 01-000-03599460
TAX MAP 61, GRD 19, PARCEL 4
DISTRICT 1 ~ ANNE ARUNDEL COUNTY ~ ZONED OS & R2

PLOTTED: Apr 04 , 2024 - 10:51am

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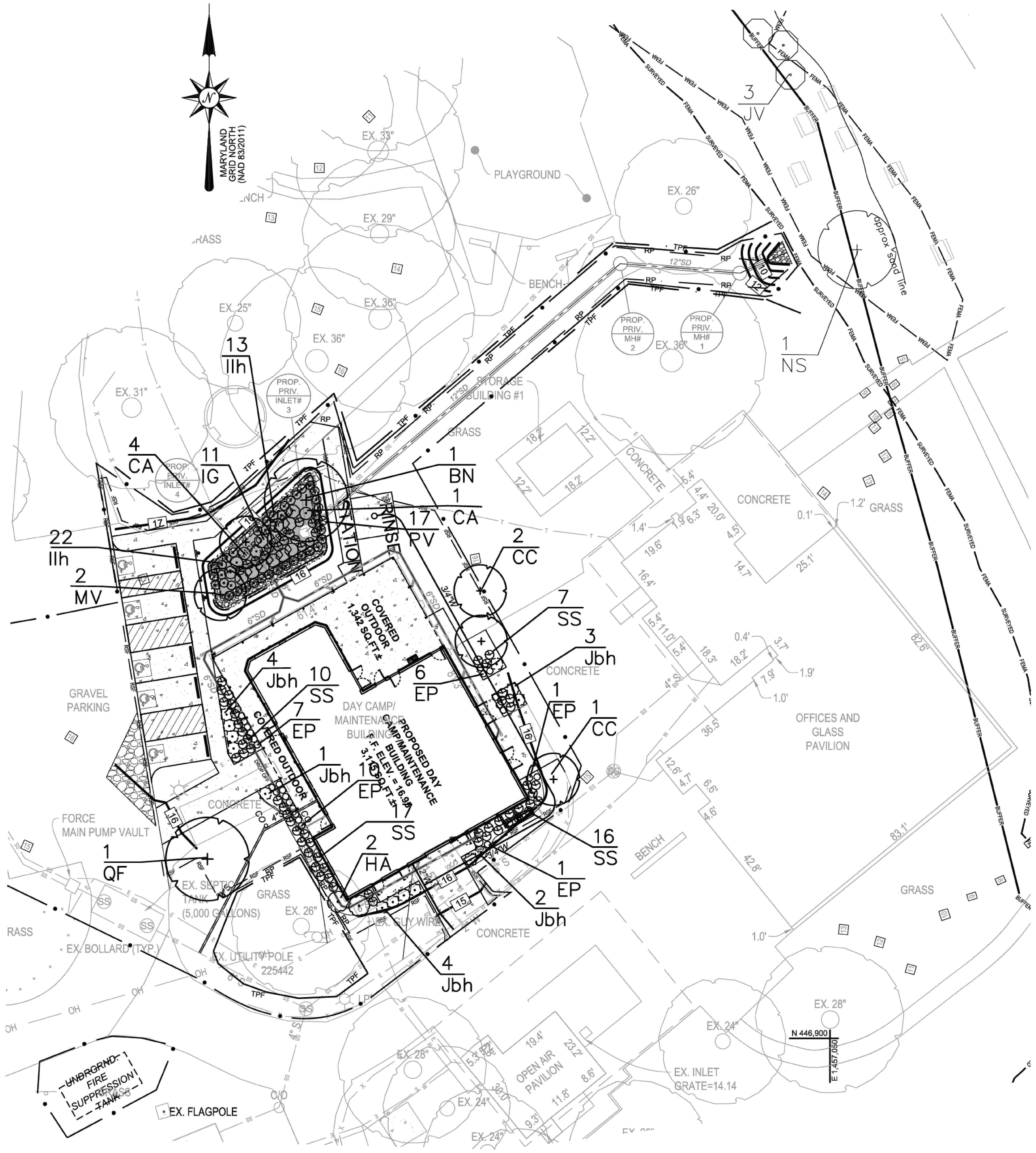
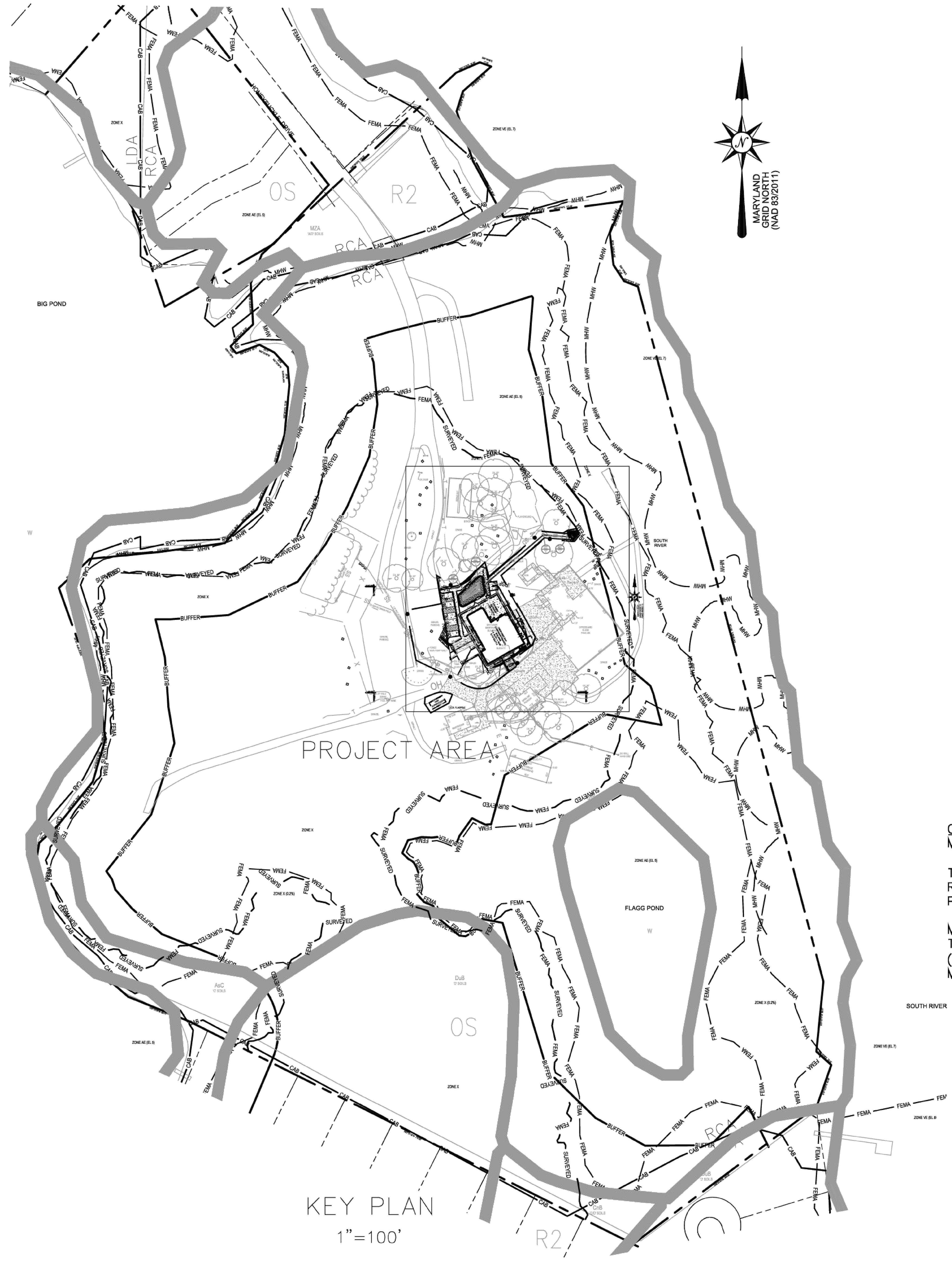
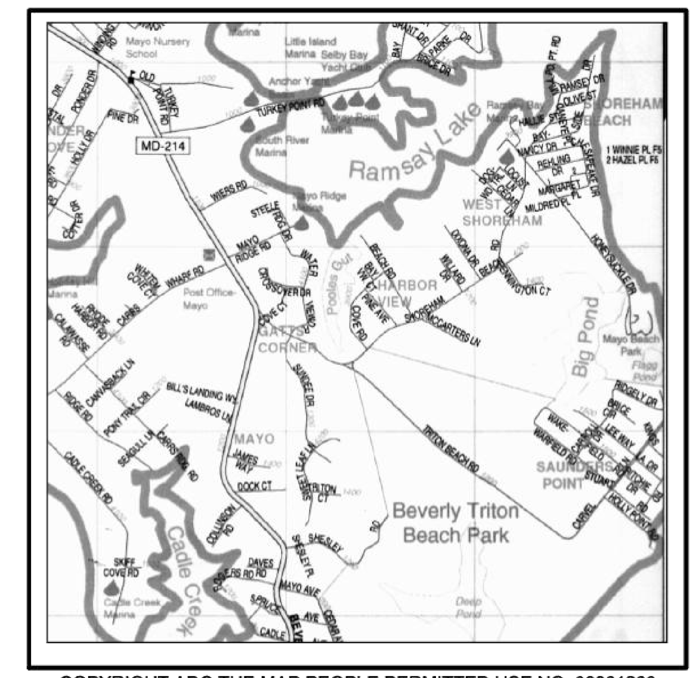


LANDSCAPE PLAN
1"=30'



KEY PLAN
1"=100'



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VICINITY MAP
1"= 2000'

SITE LEGEND

- PROP. LINE
- EX. CONTOUR
- EX. WOODS LINE
- EX. UTILITY POLE W/ OVERHEAD WIRE
- EX. SEWER
- EX. ELECTRIC
- EX. STORM DRAIN
- EX. WATER
- EX. GAS
- EX. FLOOD PLANE BOUNDRY
- PROP. WATER
- PROP. STORM DRAIN
- PROP. CONCRETE
- PROP. CONTOUR
- PROP. TREE PRESERVATION FENCE — TPF
- PROP. ROOT PRUNE LINE — RP

CRITIAL AREA BUFFER REQUIREMENTS
MITIGATION REQUIREMENTS

TREE REMOVAL (PER VMP 20230287)
REQUIRED: 4 TREES
PROVIDED: 4 TREES

MITIGATION PER PROPOSED CANOPY REMOVAL IN THE BUFFER: 0
(26" Tree near swm outfall to remain)
MITIGATION REQUIRED: 0

GENERAL NOTES:

1. Check location of all underground utilities. Call "MISS UTILITY" at 1-800-257-7777 at least 5 days prior to any excavation.
2. Contractor is required to carry any/all Workman's Compensation and other liability insurances as required by the General Contractor / Owner.
3. Contractor is required to comply with any/all codes, regulations and ordinances that apply to the work performed on this project.
4. Contractor shall co-ordinate the execution of all work performed with the General Contractor / Owner and shall complete all work in a timely fashion.
5. General Contractor / Owner is responsible for obtaining site permits and paying applicable fees unless otherwise specified.
6. All clearing, grubbing, rough and fine grading, installation and maintenance of erosion control devices, sodding and seeding are separate operations and not included in this Landscape Plan. Except as specifically stated or in areas to be landscaped, all disturbed areas shall be sodded or seeded per Grading or Erosion Control Plan by others.
7. These plans are to be used for landscape purposes only.
8. If stockpile areas are required on-site, locations will be designated by the General Contractor / Owner.

PLAN NOTES:

1. This plan is to be used for Landscaping purposes only.
2. SEE TREE PRESERVATION NOTES AND DETAILS, SHEET L2
3. The site is not within the MAA airport flight zone.
4. All known utilities have been shown.
5. There are no known historic features on site.
6. For further site information, see plans by Bay Engineering, Inc.

BID DOCUMENTS

#	REVISION DESCRIPTION	BY	DATE

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WGM ARCHITECTURE + INTERIORS
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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.
STATE OF MARYLAND — DEBORAH MARGARET SCHWAB — REGISTERED LANDSCAPE ARCHITECT — NO. 759
Deborah Schwab — Date: 2/21/24
License No.: 0759 — Expiration Date: 12/25

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS
MAY 2024
202214.1

REVISED DATE	BY	APPROVED	DATE	APPROVED	DATE
		CHIEF ENGINEER		PROJECT MANAGER	
		ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT OF WAY	

SCALE: SHOWN
DRAWN BY: ds/Lmm
CHECKED BY: DS
SHEET: L1 OF 2
PROJECT NO.: P584700
CONTRACT NO.: P584702

LANDSCAPE PLAN
FOR THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
4150 HONEYSUCKLE DRIVE
MAYO, MARYLAND 21106
TAX ID: 01-000-03599460
TAX MAP 61, GRD 19, PARCEL 4
DISTRICT 1 ~ ANNE ARUNDEL COUNTY ~ ZONED OS & R2

PLANTING NOTES:

GENERAL

1. All planting shall conform to currently approved horticultural practice. See PLANTING DETAILS. Planting shall take place between March 15 – June 1 or September 15 – November 15.
2. All plants shall conform to current standards as defined by the American Nurseryman's Association and each shall be clearly tagged with its botanical name. No substitutions shall be permitted after bid is accepted. No plants shall be pruned other than to remove a damaged branch. No plant with a dead, damaged or pruned out central leader will be accepted.
3. All plants shall be certified by the Contractor to be free of pests, fungi and diseases and/or deformities or damage.
I4. If any conflicts are found between the information on the Landscpae PLan and that shown on the plant lists, notify the landsape architect prior tp submission of bid.
5.Landscape architect shall be notified in writing five work days in advance for inspection and approval of all plants prior to any installation

PLANTING

6. Planting beds and pits shall be rendered free of all rocks over 2" and any debris found during the tilling and preparation process. All plants spaced at 6' on center (o.c.) or less shall be planted in hand–edged planting beds.
7. Planting beds shall be tilled to a minimum depth of 8". If any unsuitable conditions, such as extreme compaction or high water table are encountered, the Landscape Architect shall be notified immediately.
8. A minimum of 2" depth 'Leaf–Gro' or equivalent and 2" clean loamy topsoil shall be spread evenly over all planting beds and incorporated by tilling. In compacted or clay conditions, a minimum of 1" depth of sand shall also be incorporated.
9. A suitable slow–release fertilizer shall be used in accordance with the manufacturer's recommendations and based on soil samples taken on–site after grading has been completed. Submit fertilizer information to the Landscape Architect for approval prior to commencing planting operations. Composted cow manure may be substituted for slow–released fertilizer, applied at a minimum depth of 1/2" and tilled in with other soil amendments.
10. Soil mix for planting pits shall consist of 3 parts by volume of existing on–site soil, one part 'Leaf Gro', or equivalent and slow–release fertilizer combined per manufacturer's recommendations. This mix shall be prepared prior to use as backfill Planting Mix. PLace 'Deep Roots' or equivalent mycrorhyzal amendment in each tree pit per manufacturer's recommendations.
11. If any underground obstructions or other site conditions are encountered that conflict with the planned plantings, notify the Landscape Architect immediately.
12. All planting beds shall be neatly hand edged unless otherwise specified.
13. All planting beds and pits shall be provided with a 2" minimum, 3"maximum depth of composted, aged, shredded bark mulch, spread evenly, unless otherwise specified. In addition, planting pits shall have a 6" high rim or 'saucer' provided. No mulch shall be placed on the crown of a plant or on the root flare or trunk of a tree or shrub.
14. Any plantings to occur in formerly paved or compacted areas shall be in conformance with planting detail entitled Landscape Island Planting Bed".

WATERING

15. A water source for planting and maintenance operations will be provided by the Owner / Client. If a source is not available on–site, Contractor will include a water supply cost in his / her bid. 'Gator–bags' or equivalent slow drip watering devices are recommended for trees in times of low rainfall. Also, install soaker hose with connections left uncovered for ease or watering plant beds. Loop hose around any trees that do not have watering bags installed. A minimum of 1" depth of water shall be applied any week where that amount of rainfall has not occurred after a 2 month period of installation. During the first two months all plants shall be watered daily for two weeks, 3 times a week for 4 weeks and 2 times a week for 2 weeks.

CONTRACTOR / WARRANTY REQUIREMENTS

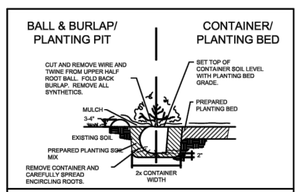
16. Any lawn, paving or other surfaces damaged by the Contractor's operations shall be repaired in kind before the project will be accepted for final approval and payment.
17. The Owner's property and any affected abutting property shall be left clean and free of any debris or excess materials resulting from any phase of the landscape operations.
18. The Contractor is responsible for repairing or replacing as necessary, any property of the Owner / Client or any affected abutting property that is damaged by the Contractor's operations, equipment or crew. Any such repair or replacement shall take place in a timely fashion and in a manner that meets with the approval of the Owner / Client.
19. Contractor shall notify the Landscape Architect or Owner / Client at the completion of landscape installation for a project acceptance inspection. All plants must be in accordance with specifications and be in healthy, vigorous condition.
s for acceptance.
20. All plant material shall be warranted for one year starting form the date of installation acceptance. This shall include one replacement to match the original. If the Contractor is of the opinion that a specified plant will not survive its planned location, the Landscape Architect shall be notified prior to bid. A tree shall be replaced if the main leader has died back or if the canopy is 25% or greater dead. A shrub shall be replaced if the crown is 25% or greater dead.
21. Contractor is responsible for all maintenance for a three month period following project acceptance. Maintenance shall include but not be limited to watering, herbicide, pesticide, fungicide or fertilizer applications, patching or reapplying mulch to maintain depth, pruning, adjusting stakes, weeding and repairing bed edges. This shall be included as a separate bid item. During the entire warranty period, the Contractor is responsible for checking the project and making maintenance suggestions to the Owner / Client.

STORMWATER MANAGEMENT PLANTING

22.Stormwater management plans shall be built in accordance with plans by others. A soil sample with lab results shall be submitted to the landscape architect prior to installation. No planting shall be done until the site has been stabilized. The landscape architect shall be notified one week prior to installation to inspect the plantings for approval. New plantings shall be protected form flooding conditions for two weeks minimum for establishment. Within two days after the first rain event, the plantings shall be inspected by the contractor. Any dislodged plants shall be replanted. Any silt, sediment or debris which may have entered the stormwater planting area shall be removed. Re–distribute mulch, if needed.

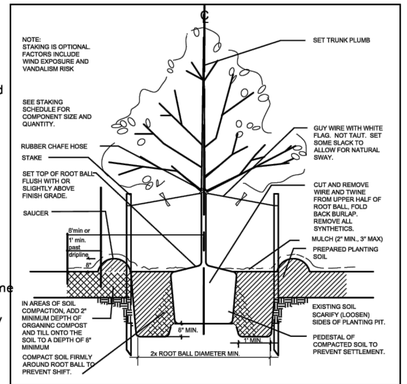
WATER: Water after installation, daily or as not based on climatic conditions until sod roots have grown into soil and sod can not be lifted from soil surface.

MAINTENANCE AND WARRANTY: Any noxious weeds that occur shall be removed with approved methods prior to them becoming established. The first mowing shall occur after the sod is firmly rooted in and no more than ⅓ of the grass blade shall be removed, per mowing. Warranty period is through first three mowings. Any areas that are not thriving shall be lifted, soil conditions repaired as necessary and a sod patch, of matching type, no less than 2' x 2' be installed.



DETAIL – SHRUB PLANTING

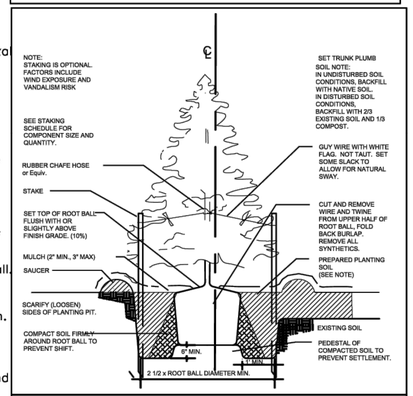
NOT TO SCALE



DETAIL - DECIDUOUS TREE PLANTING - TO 3 1/2" CALIPER

PLANTING PIT - SINGLE PLANTING PIT - PLANTING BED

NOT TO SCALE



DETAIL – EVERGREEN TREE PLANTING – REFORESTATION

PLANTING PIT

NOT TO SCALE

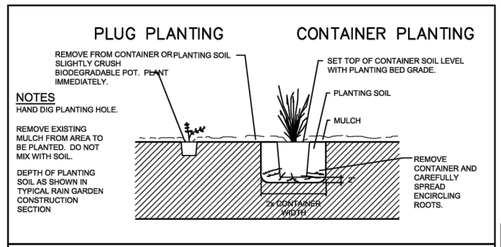
D. SCHWAB

Tree Size	Stake Q'ty	Stake Size	Wire Size
6 - 10' or 1 - 2" caliper	2	2" x 2" x 6' min.	14 gauge
10 - 12' or 2-2½" caliper	2	2" x 2" x 8' min.	14 gauge
12 - 16' or 2½"-4" caliper	3 deadmen	24" min.	12 gauge
16 - 20' or 4 - 6" caliper	3 deadmen	30" min.	14 gauge
over 20' or over 6" caliper	3 deadmen		¾" with turnbuckles

TREE STAKING SCHEDULE

TREE STAKING NOTES:

Tree staking shall be installed in areas of high wind, slopes and potential vandalism. Staking shall be monitored and reset and repaired to prevent damage to tree trunks and branches. All tree stakes shall be removed at end of warranty period.



NOTES

HAND DIG PLANTING HOLE.

REMOVE EXISTING MULCH FROM AREA TO BE PLANTED. DO NOT MIX WITH SOIL.

DEPTH OF PLANTING SOIL AS SHOWN IN TYPICAL RAIN GARDEN CONSTRUCTION SECTION

DETAIL - RAIN GARDEN PLANTING DETAIL

NOT TO SCALE

TREE REMOVAL AND PRESERVATION NOTES

GENERAL NOTES:

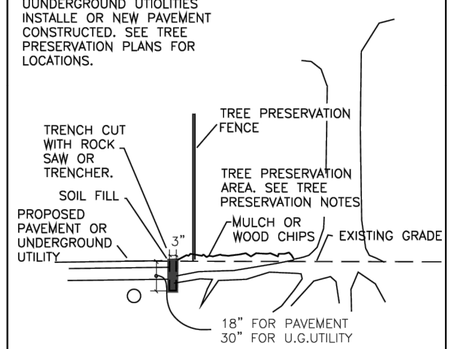
1. A pre–dconstruction meeting shall be arranged on site with contractors and county inspection official prior to tree removal, demolition or construciton.
2. All trees on site not designated to be removed (X) shall be protected prior to any site demolition, excavation and grading operations. Install designated type of tree protection fence. Fertilize all protected trees with "IronRoots" fertilizer (0–2–4 with 4.0% chelated iron) manufactured by Lebanon Seaboard Corporation or equivalent, as per manufacturer's instructions. Tree Preservation Fence shall remain in place throughout project until date of completion and acceptance, except for final landscape operations.
3. Coordinate installation of erosion control measures with Anne Arundel County as necessary to prevent the flow and deposition of silt over the tree protection area.
4. No grading, trenching, equipment or portiable toilet storage shall occur within any tree preservation area.
5. Any branches that provide a hazardous condition shall be pruned by a Licensed Tree Care Expert.
6. Watering shall continue throughout construction operations during drought periods to provide the equivalent of 1" depth rainfall per week during the active growing season and 1" depth per month during the dormant season if soil is not frozen.
4. See this sheet for tree preservation details.
5. TREE PROTECTION AREA– Any area within the confines of the tree preservation fence. No equipment or construction materials may be stored or stockpiled within tree protection areas.
6. Provide temporary water source such as a tank truck, on site, as needed.

SEQUENCE OF TREE PRESERVATION AND PROTECTION:

Root Pruning

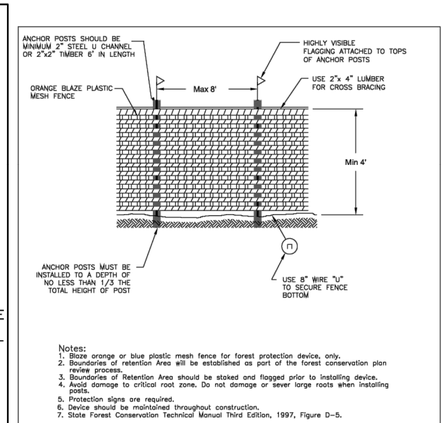
1. No Root Pruning shall occur until All tree protection measures are in place.
2. Root prunging shall occur prior to installation of reinforced silt fence or any underground utilities
2. Root prune to depth of 24" following line of Root Pruning as indicated on plan. See detail this sheet.
3. Cover any exposed root ends immediately with wet burlap and keep moist until grading operations have covered these root ends.
4. See Root Pruning Detail

NOTE: ROOT PRUNING TO TAKE PLACE IN LOCATIONS WHERE EXISTING GRADE WILL BE CUT, UUNDERGROUND UTIOLITIES INSTALLE OR NEW PAVEMENT CONSTRUCTED. SEE TREE PRESERVATION PLANS FOR LOCATIONS.



DETAIL – ROOT PRUNE

NOT TO SCALE



Notes:
1. Blaze orange or blue plastic mesh fence for forest protection device, only.
2. Boundaries of retention Area will be established as part of the forest conservation plan review process.
3. Boundaries of Retention Area should be staked and flagged prior to installing device.
4. Avoid damage to critical root zone. Do not damage or sever large roots when installing posts.
5. Protection signs are required.
6. Device should be maintained throughout construction.
7. State Forest Conservation Technical Manual Third Edition, 1997, Figure D–5.

DETAIL - TREE PRESERVATION FENCE

NOT TO SCALE

PLANT LIST - LANDSCAPE

KEY	Q'TY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	SPC'G
CC	3	Cercis canadensis	Eastern Redbud	1 ½-1 ¾" cal	Cont.	Shown
EP	25	Echinaceae purpurea	Purple Coneflower	1 gal	Cont.	18"o.c.
HA	2	Hydrangea arborescens	Smooth Hydrangea	24-30"	Cont.	5'o.c.
Jbh	14	Juniperus 'Bar Harbor'	Bar Harbor Juniper	18-21"	Cont.	36"o.c.
QF	1	Quercus falcata	Southern Red Maple	2-2 ½"cal	B & B	Shown
SS	50	Schizachyrium scoparium 'Standing Ovation'	Standing Ovation Little Blue Stem	1 gal	Cont.	24"o.c.

PLANT LIST – STORMWATER MANAGEMENT

KEY	Q'TY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	SPC'G
BN	1	Betula nigra	River Birch	10-12'ht.	Cont.	Shown
CA	5	Clethra alnifolia	Summersweet	18-24", 3gal	Cont.	4'o.c.
IG	11	Ilex glabra 'Shamrock'	Shamrock Inkberry	18-24", 3gal	Cont.	4'o.c.
Ilh	35	Itea virginca 'Little Henry'	Little Henry Itea	18-21", 3 gal	Cont.	36"o.c.
MV	2	Magnolia virginiana	Sweet Bay Magnolia	6-8'ht.	Cont.	Shown
PV	17	Panicum virgatum 'Shenandoah'	Shenandoah Switch Grass	1 gal	Cont.	30"o.c.

PLANT LIST – CRITICAL AREA MITIGATION

KEY	Q'TY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	SPC'G
JV	3	Juniperus virginiana	Eastern Redcedar	**1 ½ - 2" cal**	B & B	10'
NS	1	Nyssa sylvatica	Black Gum	**1 ½ - 2" cal**	B & B	Shown
Total	4					

BID DOCUMENTS

#	REVISION DESCRIPTION	BY	DATE

Bay Engineering Inc.
Engineers, Planners and Surveyors
2661 Riva Road, Building 800
Annapolis, Maryland 21401
410.897.9290
410.897.9295 fax
email: info@bayengineering.com
www.bayengineering.com

DEBORAH SCHWAB
LANDSCAPE ARCHITECTURE
408 Washington Street
Annapolis, MD 21403
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WGM ARCHITECTURE + INTERIORS
WHEELER GOODMAN MASEK
16 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
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www.wgm-arch.com

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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.

STATE OF MARYLAND — DEBORAH SHARON SCHWAB — NO. 759 — REGISTERED LANDSCAPE ARCHITECT

Deborah Schwab 02/21/24
Deborah Schwab Date

0759 12/25
License No. Expiration Date

ANNE ARUNDEL COUNTY — MAY 2024

DEPARTMENT OF PUBLIC WORKS — 202214.1

REVISED DATE	BY	APPROVED DATE	APPROVED DATE
		CHIEF ENGINEER	PROJECT MANAGER
		APPROVED DATE	APPROVED DATE
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY

SCALE:SHOWN
DRAWN BY: Lmm
CHECKED BY: DS
SHEET: L2 OF 2
PROJECT NO.:P584700
CONTRACT NO.: IP584702

LANDSCAPE NOTES & DETAILS

FOR THE
MAYO BEACH PARK
PHASE 2 IMPROVEMENTS
PROPOSED DAY CAMP AND MAINTENANCE BUILDING
4150 HONEYSUCKLE DRIVE
MAYO, MARYLAND 21106
TAX ID: 01-000-03599460
TAX MAP 61, GRID 19, PARCEL 4
DISTRICT 1 – ANNE ARUNDEL COUNTY – ZONED OS & R2

GENERAL NOTES

1. WHEN INTERPRETING THESE DRAWINGS, PREFERENCE SHALL BE GIVEN IN ALL CASES TO NUMERICAL DIMENSION OVER MEASUREMENTS BY SCALE, AND TO DETAIL DRAWINGS OVER THOSE DRAWINGS OF A SMALLER SCALE.

2. DETAIL DRAWINGS AND SCHEDULES DESCRIBE CONSTRUCTION AT GIVEN AREAS. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL UTILIZE EQUIVALENT CONSTRUCTION METHODS IN ALL AREAS NOT DETAILED.

3. ALL NOTES ON THE DRAWINGS SHALL BE ASSUMED AS TYPICAL UNLESS OTHERWISE SHOWN OR NOTED ON THE DRAWINGS.

4. ALL FINISHED DIMENSIONS, UNLESS NOTED OTHERWISE, ARE TO FACE OF FINISHED DRYWALL, FACE OF MASONRY, FACE OF CONCRETE OR CENTERLINE OF STRUCTURAL STEEL COLUMNS, BEAMS, ETC.).

5. IT SHALL BE THE DUTY OF THE CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS GIVEN ON THE DRAWINGS FOR CONSISTENCY WITH THE ACTUAL CIRCUMSTANCES IN THE FIELD BEFORE COMMENCING WORK.

6. THE CONTRACTOR SHALL BEAR ALL RESPONSIBILITY FOR CORRECTIVE ACTION DUE TO THE CONTRACTORS FAILURE TO COORDINATE THE WORK.

7. THE CONTRACTOR SHALL COMPLY WITH THE CURRENT APPLICABLE CODES, ORDINANCES, LAWS AND OTHER LEGAL REQUIREMENTS OF THE PUBLIC AUTHORITIES HAVING JURISDICTION.

8. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL ITEMS REQUIRED TO PROVIDE A COMPLETE AND USABLE FACILITY.

9. ALL BIDDERS: ALL CONTRACTORS AND MAJOR SUBCONTRACTORS SHALL VISIT THE SITE TO FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED.

10. DRAWINGS, AS INSTRUMENTS OF SERVICE, ARE AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THEY ARE NOT TO BE USED ON ANY OTHER PROJECTS OR EXTENSIONS TO THIS PROJECT EXCEPT BY WRITTEN AGREEMENT WITH THE ARCHITECT.

11. IN THE CASE OF INCONSISTENCY BETWEEN DRAWINGS, DRAWINGS & SPECIFICATIONS, OR SPECIFICATIONS NOT CLARIFIED BY ADDENDUM, THE BETTER QUALITY OR GREATER QUANTITY OF WORK SHALL BE PROVIDED IN ACCORDANCE WITH THE ARCHITECT'S INTERPRETATION.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING FLOOR FINISH MATERIALS TO ENSURE THAT TRANSITIONS BETWEEN FLOORING MATERIALS WILL BE SMOOTH AND IN ACCORDANCE WITH THE DRAWINGS.

13. UNLESS OTHERWISE STATED, CHANGES IN FLOORING MATERIAL SHALL OCCUR AT THE CENTERLINE OF DOORS.

14. IT IS IN THE BEST INTEREST OF ALL PARTIES TO AVOID THE DISRUPTION OF THE FACILITIES' NORMAL OPERATION. IF DURING THE EXECUTION OF THE SCOPE OF WORK OR DURING THE EXPLORATION, INVESTIGATION AND SURVEY OF THE FACILITIES, ANY SERVICES, SYSTEMS, STRUCTURE, SUBSTRUCTURE, FINISHES, FURNISHINGS, FIXTURES AND EQUIPMENT ARE DISTURBED/DAMAGED, THE CONTRACTOR MUST MAKE THE REPAIRS OR RESTORATION IMMEDIATELY WITHIN 24 HOURS OR SOONER, IN ORDER TO RETURN THE DISTURBED/DAMAGED ITEM(S) TO ITS INTENDED USE. ACCEPTANCE OF THE REPAIR/RESTORATION IS SUBJECT TO THE OWNER'S SATISFACTION/APPROVAL AND SHALL BE EXECUTED AT NO ADDITIONAL COST THE OWNER.

15. WHEN THERE IS A DISCREPANCY BETWEEN APPROVED SUBMITTALS AND CONTRACT DRAWINGS, PREFERENCE WILL ALWAYS BE GIVEN TO CONTRACT DOCUMENTS. PRIME CONTRACTOR TO COMPLY WITH THE INTENT OF THE DRAWINGS UNLESS OTHERWISE SPECIFIED DURING THE COURSE OF CONSTRUCTION.

DOOR HARDWARE SETS:

SET 01: (1) CONTINUOUS HINGE
(1) EXIT DEVICE W/ LEVER TRIM & CLASSROOM LOCK FUNCTION
(1) CYLINDER (COMPATIBLE W/ EXIT DEVICE)
(1) CLOSER
(1) KICKPLATE
(1) ADA COMPLIANT HD THRESHOLD W/ BUMPER SEAL
(1) DOOR SWEEP
WEATHERSTRIPPING

SET 02: (2) CONTINUOUS HINGE
(2) EXIT DEVICE W/ LEVER TRIM & CLASSROOM LOCK FUNCTION
(2) CYLINDER (COMPATABLE W/ EXIT DEVICE)
(1) REMOVABLE MULLION
(1) CLYINDER (COMPATABLE W/ REMOVABLE MULLION)
(2) CLOSER
(2) KICKPLATE
(1) ADA COMPLIANT HD THRESHOLD W/ BUMPER SEAL
(2) DOOR SWEEP
WEATHERSTRIPPING

SET 03: (1) CONTINUOUS HINGE
(1) LEVER W/ STOREROOM LOCK FUNCTION
(1) CLOSER
(1) KICKPLATE
(1) ADA COMPLIANT HD THRESHOLD W/ BUMPER SEAL\
(1) DOOR SWEEP
WEATHERSTRIPPING

SET 04: (1) CONTINUOUS HINGE
(1) DEADLOCK
(1) CLOSER
(1) PUSH PLATE
(1) PULL PLATE
(1) KICKPLATE
(1) ADA COMPLIANT HD THRESHOLD W/ BUMPER SEAL
(1) DOOR SWEEP
WEATHERSTRIPPING

SET 05: (2) CONTINUOUS HINGE
(1) STOREROOM LOCKSET
(2) CLOSER W/ 90° HOLD OPEN DEVICE
(2) FLUSH BOLTS
(2) DUSTPROOF STRIKE
(2) KICKPLATE
(1) ADA COMPLIANT HD THRESHOLD W/ BUMPER SEAL
(2) DOOR SWEEP
(1) ASTRAGAL
WEATHERSTRIPPING

SET 06: (1) CONTINUOUS HINGE
(1) STOREROOM LOCKSET
(1) CLOSER
(1) KICKPLATE
(1) ADA COMPLIANT HD THRESHOLD W/ BUMPER SEAL
(1) DOOR SWEEP
WEATHERSTRIPPING

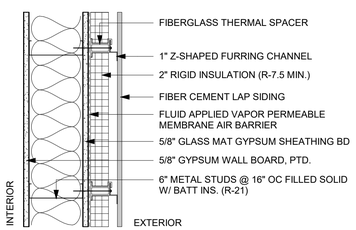
SET 07: (3) HINGE
(1) OFFICE LOCKSET
(1) KICKPLATE
(3) DOOR SILENCER
(1) WALL STOP

SET 08: (1) HINGE
(2) SPRING HINGE
(1) STOREROOM LOCKSET
(1) KICKPLATE
(3) DOOR SILENCER
(1) WALL STOP

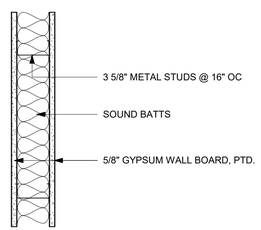
SET 09: (1) HINGE
(2) SPRING HINGE
(1) PRIVACY LOCKSET
(1) KICKPLATE
(3) DOOR SILENCER
(1) WALL STOP

SET 10: (1) HINGE
(2) SPRING HINGE
(1) PASSAGE LOCKSET
(1) KICKPLATE
(3) DOOR SILENCER
(1) WALL STOP

SET 11: (6) HINGE
(1) PASSAGE LOCKSET
(2) FLUSH BOLTS
(2) DUSTPROOF STRIKE
(2) KICKPLATE
(1) ASTRAGAL



WA-1



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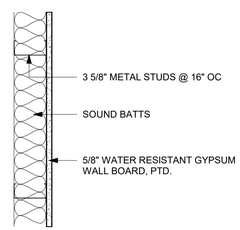


P-2

GENERAL PARTITION NOTES

1. EXTEND ALL PARTITIONS FROM FLOOR SLAB TO TRUSS BEARING UNLESS NOTED OTHERWISE.
2. TYPICAL PARTITION - PARTITION TYPES NOT INDICATED SHALL BE TYPE P1 UNLESS DESCRIBED OTHERWISE IN NOTES BELOW.
3. PARTITION CONTINUITY - PARTITIONS NOT DEFINED SHALL BE SAME TYPE AS ADJACENT PARTITIONS OF SIMILAR FUNCTION, INCLUDING ACROSS ALL DOOR OPENINGS.
4. ALL EXTERIOR WALLS ARE PARTITION TYPE WA-1, UNLESS OTHERWISE NOTED..

PARTITION SUFFIX NOTES

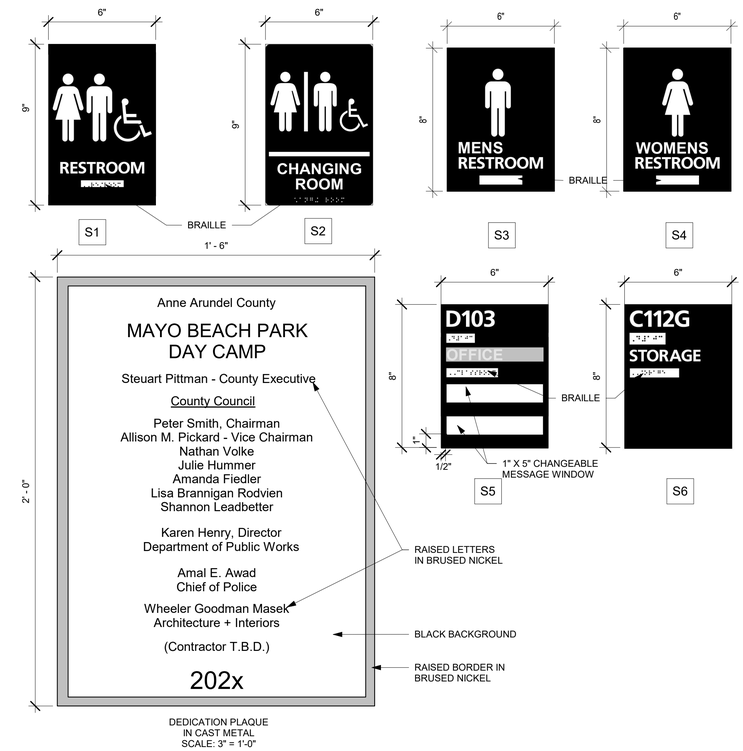
WHERE SUFFIX NOTES SUPPLEMENT DETAILED PARTITION TYPES MODIFY PARTITION MATERIALS AS NOTED.

A. AT SUFFIX "A" TERMINATE WALL AT ROOF SHEATHING ABOVE.
B. AT SUFFIX "B" PROVIDE 5/8" TYPE "X" GWB, PTD.
C. AT SUFFIX "C" PROVIDE 5/8" WATER RESISTANT GWB ON WET WALL
D. AT SUFFIX "D" DELETE SOUND BATTS.
E. AT SUFFIX "E" PROVIDE 1" MARINE PLYWOOD OVER 5/8" GWB.
F. AT SUFFIX "F" PROVIDE FIBERGLASS REINFORCED PANELS (FRP) OVER GWB.

B1 PARTITION TYPES
1 1/2" = 1'-0"

GENERAL INTERIOR SIGNAGE NOTES:

1. IN ACCORDANCE WITH ADA GUIDELINES 703.4.2 WHERE A TACTILE SIGN IS PROVIDED AT A DOOR, THE SIGN SHALL BE LOCATED ALONGSIDE THE DOOR AT THE LATCH SIDE. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAFS, THE SIGN SHALL BE LOCATED TO THE RIGHT OF THE RIGHT HAND DOOR. WHERE THERE IS NO WALL SPACE AT THE LATCH SIDE OF A SIGNLE DOOR OR AT THE RIGHT SIDE OF DOUBLE DOORS, SIGNS SHALL BE LOCATED ON THE NEAREST ADJACENT WALL. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18 INCHES MINIMUM BY 18 INCHES MINIMUM, CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION.
2. ALL SIGNS SHALL BE PHENOLIC PLASTIC LAMINATE
3. ALL SIGNS SHALL BE MECHANICALLY MOUNTED.
4. ALL SIGNS SHALL HAVE RADIUS CORNERS.
5. VERIFY ALL NAMES AND ROOM NUMBERS WITH OWNER BEFORE FABRICATION
6. TEXT AND BRAILLE SIZE AND LOCATION ON SIGN TO MEET ADA.
7. REFER TO A101 FOR SIGNAGE LOCATIONS.



NO.	SIGNAGE SCHEDULE DESCRIPTION	MOUNTING HEIGHT FROM FINISH FLR TO TOP OF SIGN	PICTOGRAM	MATERIAL
S1	RESTROOM	5'-0"	●	PLASTIC
S2	CHANGING ROOM	5'-0"	●	PLASTIC
S3	MEN'S RESTROOM	5'-0"	●	PLASTIC
S4	WOMEN'S RESTROOM	5'-0"	●	PLASTIC
S5	OFFICE	5'-0"		PLASTIC
S6	UTILITIES	5'-0"		PLASTIC
S7	DEDICATION PLAQUE	5'-0"		METAL

B7 SIGNAGE
3" = 1'-0"

No.	Description		Date
NO	REVISION DESCRIPTION	BY	DATE

WHEELER GOODMAN MASEK
165 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
410.263.6787 www.wgm-arch.com

CERTIFICATION:
I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Maryland, license number 15433, expiration date 06-30-2024.

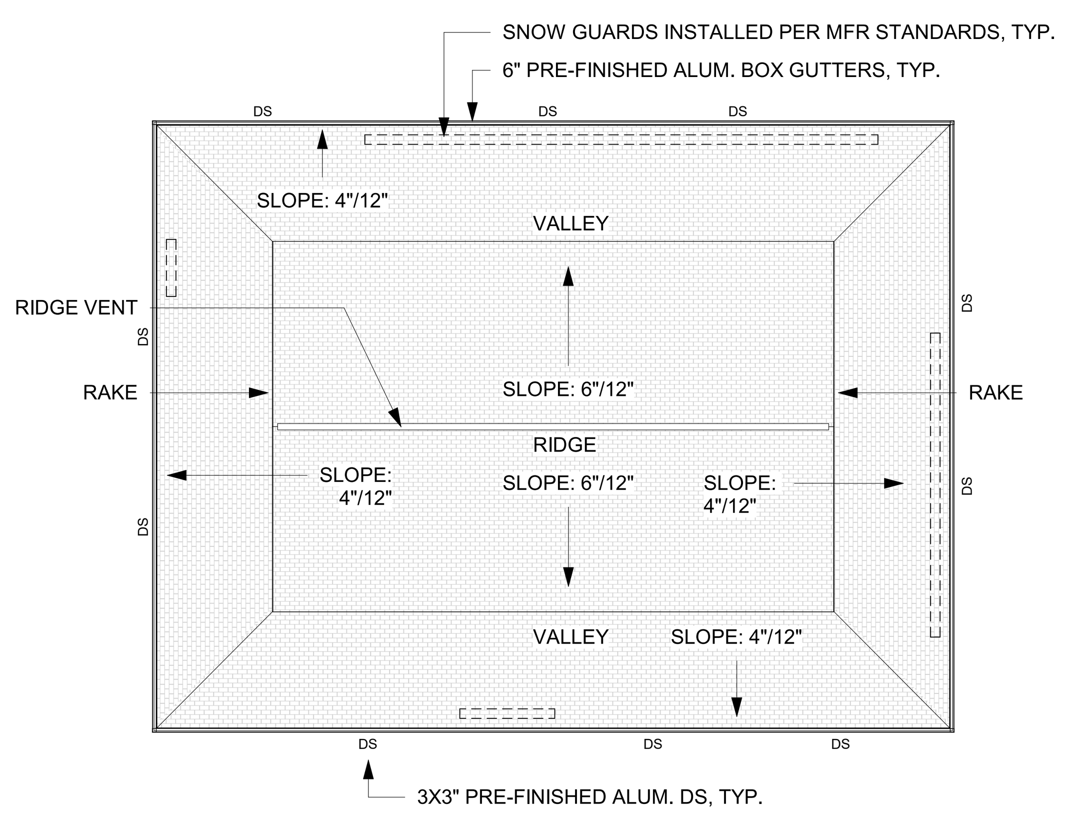
ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

REVISED DATE | BY
APPROVED DATE — CHIEF ENGINEER
APPROVED DATE — ASSISTANT CHIEF ENGINEER
APPROVED DATE — PROJECT MANAGER
APPROVED DATE — CHIEF, RIGHT OF WAY

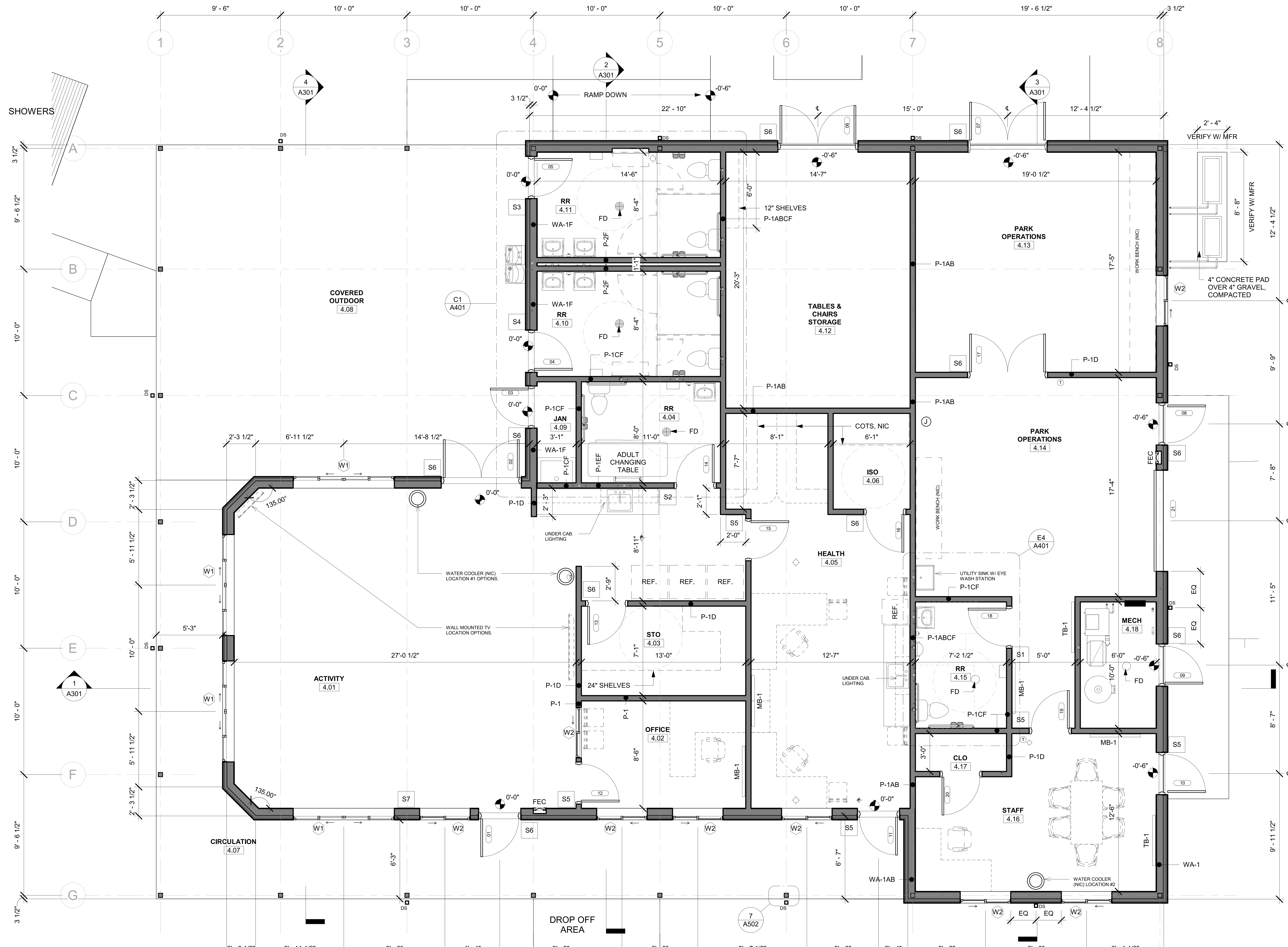
BID DOCUMENTS | A100
MAY 2024
202214.1
SCALE: AS NOTED
DRAWN BY:
CHECKED BY:
SHEET: OF
PROJECT #: P584700
CONTRACT #: P584702

GENERAL INFORMATION

Mayo Beach Park Day Camp Building
4150 Honeysuckle Dr
Edgewater, MD 21037



2 ROOF
1/16" = 1'-0"



1 BUILDING 4 - FLOOR PLAN
1/4" = 1'-0"

No.	Description		Date
NO	REVISION DESCRIPTION	BY	DATE

WGM ARCHITECTURE + INTERIORS

WHEELER GOODMAN MASEK
165 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
410.263.6787 www.wgm-arch.com

CERTIFICATION: I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Maryland, license number 15453, expiration date 06-25-2024.

BID DOCUMENTS

A101

MAY 2024

202214.1

ANNE ARUNDEL COUNTY

DEPARTMENT OF PUBLIC WORKS

REVISED DATE	BY	APPROVED	DATE	APPROVED	DATE	
		CHIEF ENGINEER		PROJECT MANAGER		SCALE: AS NOTED
		APPROVED	DATE	APPROVED	DATE	DRAWN BY:
		ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT OF WAY		CHECKED BY:

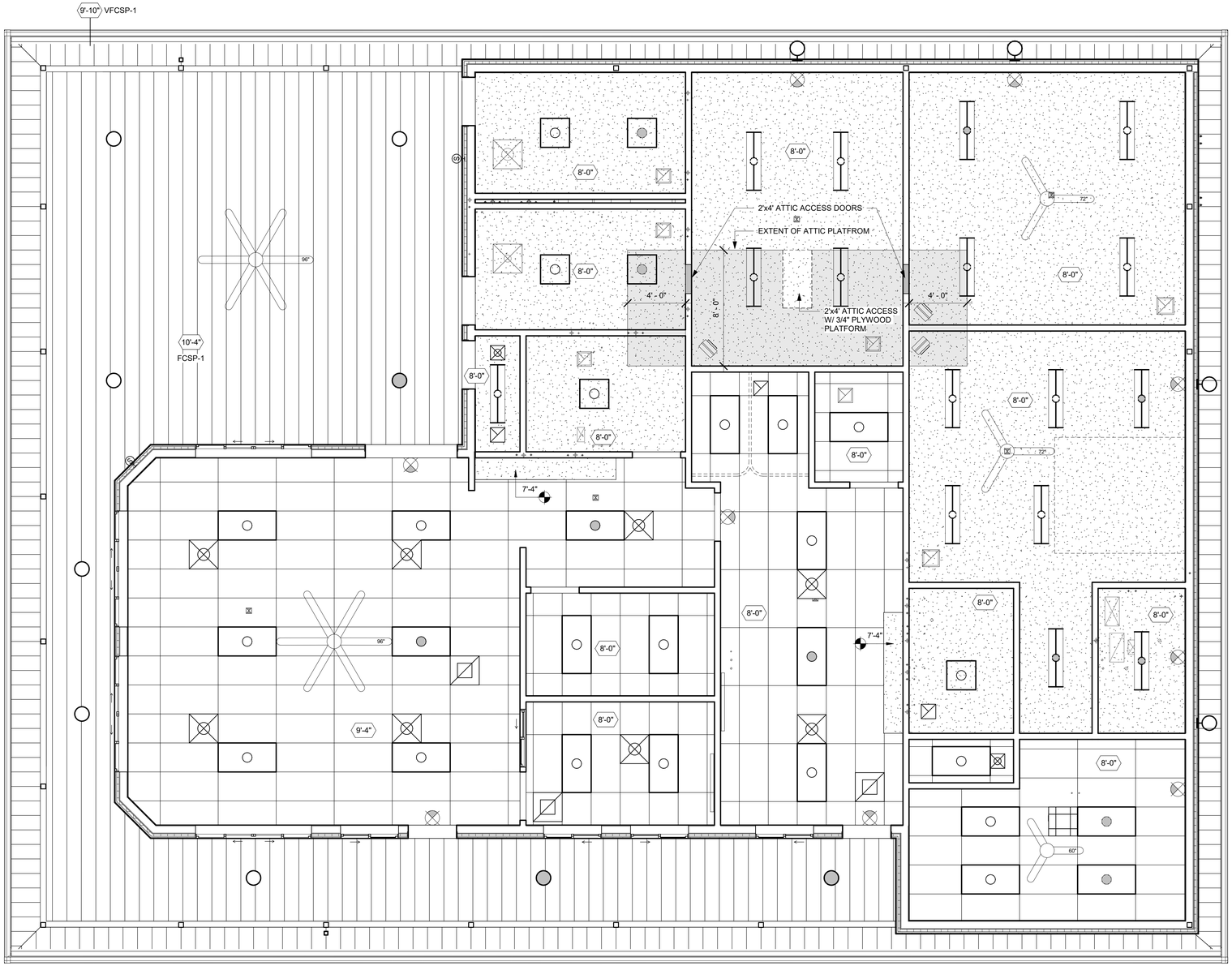
SHEET: OF

PROJECT #: P584700

CONTRACT #: P584702

FLOOR & ROOF PLAN

Mayo Beach Park Day Camp Building
4150 Honeysuckle Dr
Edgewater, MD 21037



2 RCP - FIRST FLOOR
1/4" = 1'-0"

REFLECTED CEILING PLAN SYMBOLS KEY	
	2' X 4' ACOUSTICAL CEILING TILE PER DRAWING. ALL CEILING GRIDS ARE CENTERED IN ROOM UNLESS OTHERWISE DIMENSIONED.
	2'x2' ACOUSTICAL CEILING TILE PER DRAWING. ALL CEILING GRIDS ARE CENTERED IN ROOM UNLESS OTHERWISE DIMENSIONED.
	GYPSUM WALLBOARD CEILING PER DRAWING - ALIGN WITH ADJACENT PARTITION UNLESS OTHERWISE DIRECTED IN PLAN
	2' X 2' / 2'x4' LED LIGHT FIXTURE
	2' X 2' / 2'x4' EMERGENCY LIGHT FIXTURE
	1' X 4' / 1' X 8' LIGHT FIXTURE - SURFACE MNTD.
	1' X 4' / 1' X 8' EMERGENCY LIGHT FIXTURE - SURFACE MNTD.
	RECESSED DOWNLIGHT FIXTURE
	EMERGENCY RECESSED DOWNLIGHT FIXTURE
	WALL MOUNTED LIGHT FIXTURE
W	WIRELESS ROUTER
	EXIT SIGN
	SUPPLY DIFFUSER
	RETURN REGISTER
	VRF SPLIT SYSTEM HVAC UNIT SEE MEP DWGS
	EXHUAST REGISTER
S	SPEAKER, CEILING MTD.
	CEILING MOUNTED PROJECTOR
	SPRINKLER HEAD
OS	CEILING OCCUPANCY SENSORS
	EMERGENCY WALL LIGHT

NOTE: NOT ALL PLAN SYMBOLS ARE USED

No.	Description		Date
NO	REVISION DESCRIPTION	BY	DATE

WHEELER GOODMAN MASEK
165 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
410.263.6787 www.wgm-arch.com

CERTIFICATION:
I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Maryland, license number 15433, expiration date 06-25-2024.

REVISED DATE	BY	APPROVED DATE	APPROVED DATE
		CHIEF ENGINEER	PROJECT MANAGER
		APPROVED DATE	APPROVED DATE
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

SCALE: AS NOTED
DRAWN BY:
CHECKED BY:
SHEET: OF
PROJECT #: P584700
CONTRACT #: P584702

RCP

Mayo Beach Park Day Camp Building
4150 Honeysuckle Dr
Edgewater, MD 21037

BID DOCUMENTS

A110

MAY 2024

202214.1

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

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

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

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

0 4' 8' 16'

No.	Description		Date
NO	REVISION DESCRIPTION	BY	DATE

WHEELER GOODMAN MASEK
165 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
410.263.6787 www.wgm-arch.com

CERTIFICATION:
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ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

REVISED DATE	BY	APPROVED DATE	APPROVED DATE
		CHIEF ENGINEER	PROJECT MANAGER
		APPROVED DATE	APPROVED DATE
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY

BID DOCUMENTS

A201

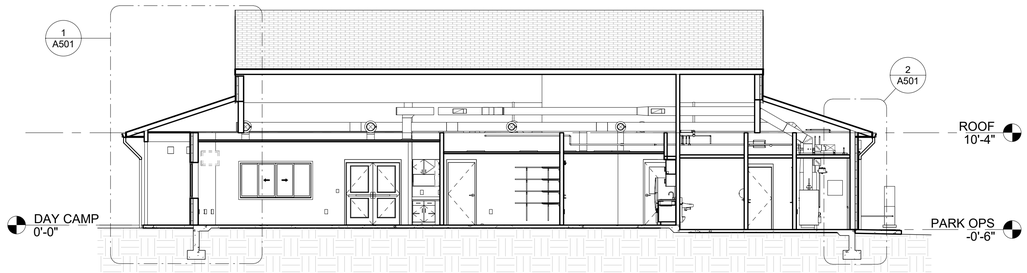
MAY 2024

202214.1

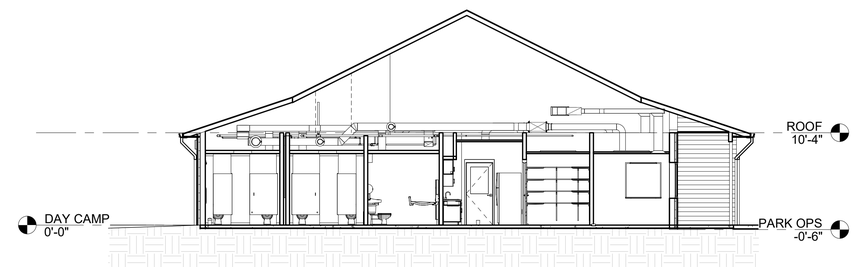
SCALE: AS NOTED
DRAWN BY:
CHECKED BY:
SHEET: OF
PROJECT #: P584700
CONTRACT #: P584702

ELEVATIONS

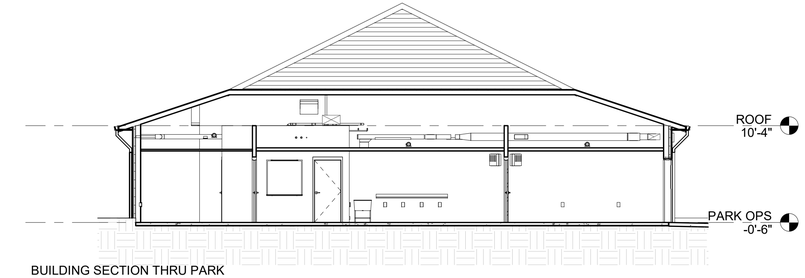
Mayo Beach Park Day Camp Building
4150 Honeysuckle Dr
Edgewater, MD 21037



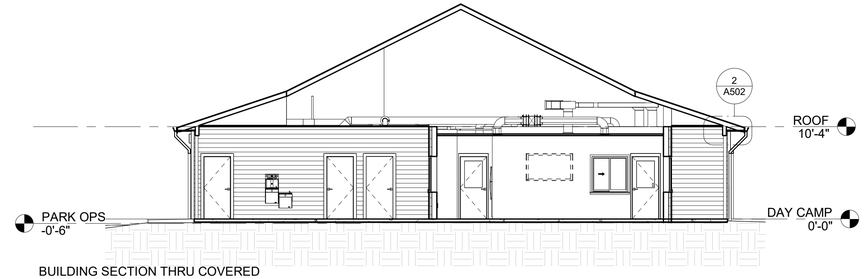
1 BUILDING SECTION THRU ACTIVITY
1/8" = 1'-0"



2 BUILDING SECTION THRU RESTROOMS
1/8" = 1'-0"



3 BUILDING SECTION THRU PARK OPERATIONS
1/8" = 1'-0"



4 BUILDING SECTION THRU COVERED OUTDOOR AREA
1/8" = 1'-0"

No.	Description		Date
NO	REVISION DESCRIPTION	BY	DATE

WHEELER GOODMAN MASEK
165 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
410.263.6787 www.wgm-arch.com

CERTIFICATION:
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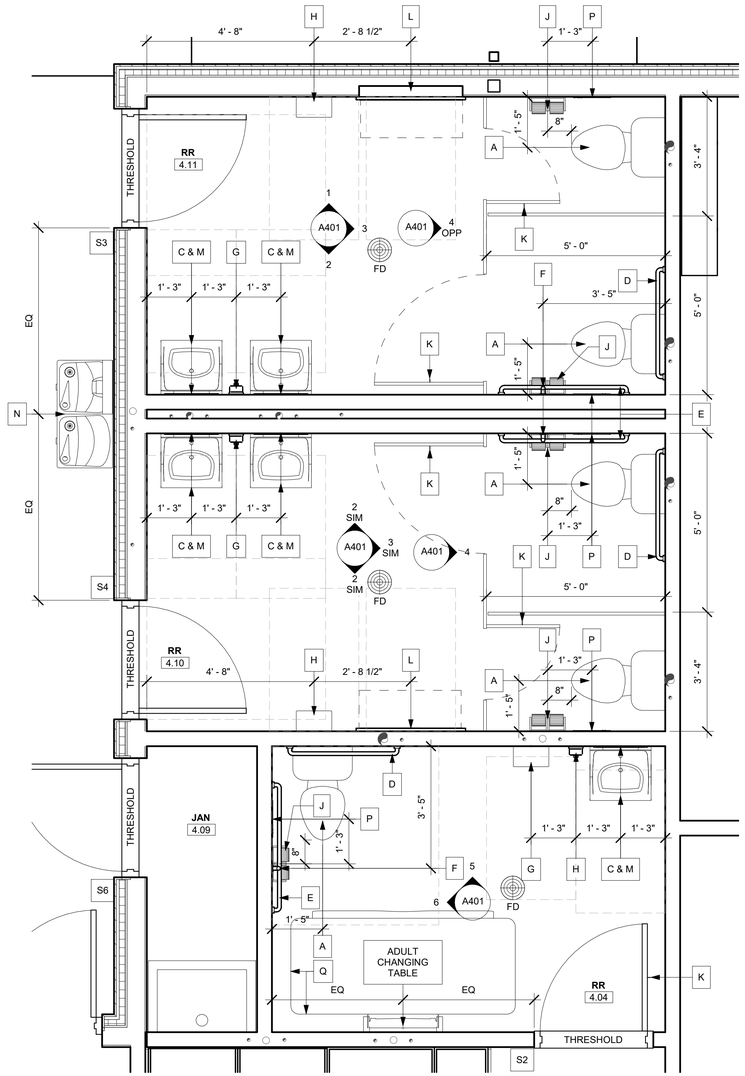
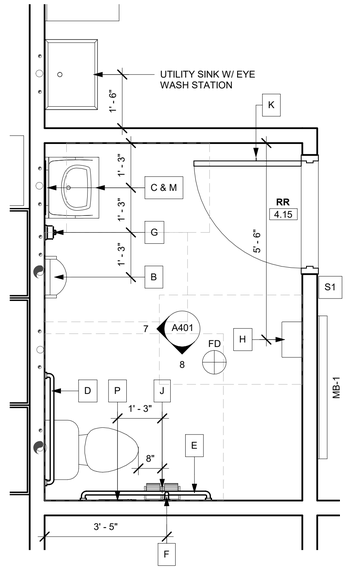
BID DOCUMENTS			A301
ANNE ARUNDEL COUNTY			MAY 2024
DEPARTMENT OF PUBLIC WORKS			202214.1
REVISED DATE / BY	APPROVED DATE	APPROVED DATE	SCALE: AS NOTED
			DRAWN BY:
	CHIEF ENGINEER	PROJECT MANAGER	CHECKED BY:
	APPROVED DATE	APPROVED DATE	SHEET: OF
			PROJECT #: P584700
	ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	CONTRACT #: P584702

SECTIONS

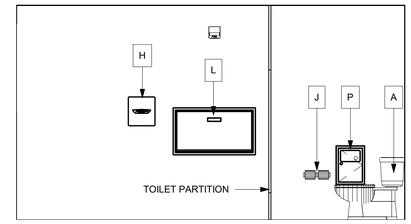
Mayo Beach Park Day Camp Building
4150 Honeysuckle Dr
Edgewater, MD 21037



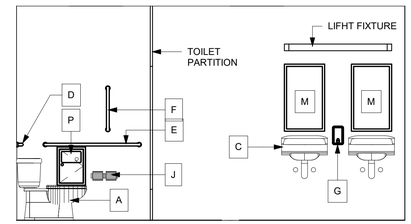
C1 DAY CAMP - ENLARGED RR PLAN
1/2" = 1'-0"



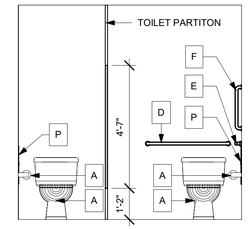
E4 PARK OPS - ENLARGED RR PLAN
1/2" = 1'-0"



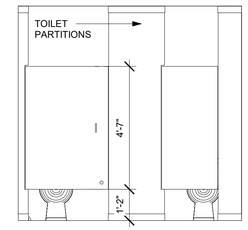
1 TYPICAL RESTROOM ELEVATION 1
3/8" = 1'-0"



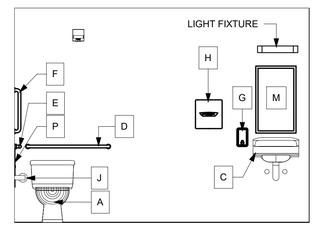
2 TYPICAL RESTROOM ELEVATION 2
3/8" = 1'-0"



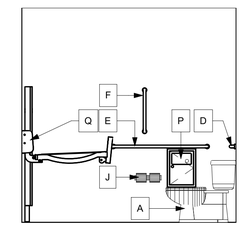
3 TYPICAL RESTROOM ELEVATION 3
3/8" = 1'-0"



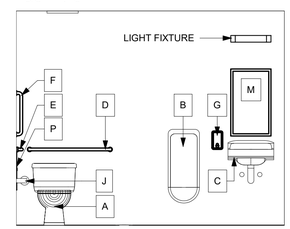
4 TYPICAL RESTROOM ELEVATION 4
3/8" = 1'-0"



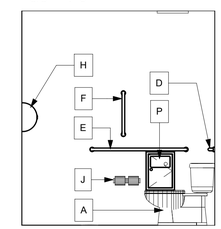
5 DAY CAMP RR ELEVATION 1
3/8" = 1'-0"



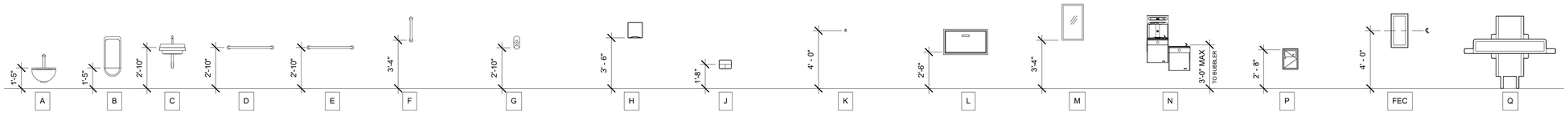
6 DAY CAMP RR ELEVATION 2
3/8" = 1'-0"



7 PARK OPS RR ELEVATION 1
3/8" = 1'-0"



8 PARK OPS RR ELEVATION 2
3/8" = 1'-0"



TOILET ACCESSORY SCHEDULE
1/4" = 1'-0"

No.	Description		Date
NO	REVISION DESCRIPTION	BY	DATE

WHEELER GOODMAN MASEK
165 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
410.263.6787 www.wgm-arch.com

CERTIFICATION:
I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Maryland, license number 16453, expiration date 06-25-2024.

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

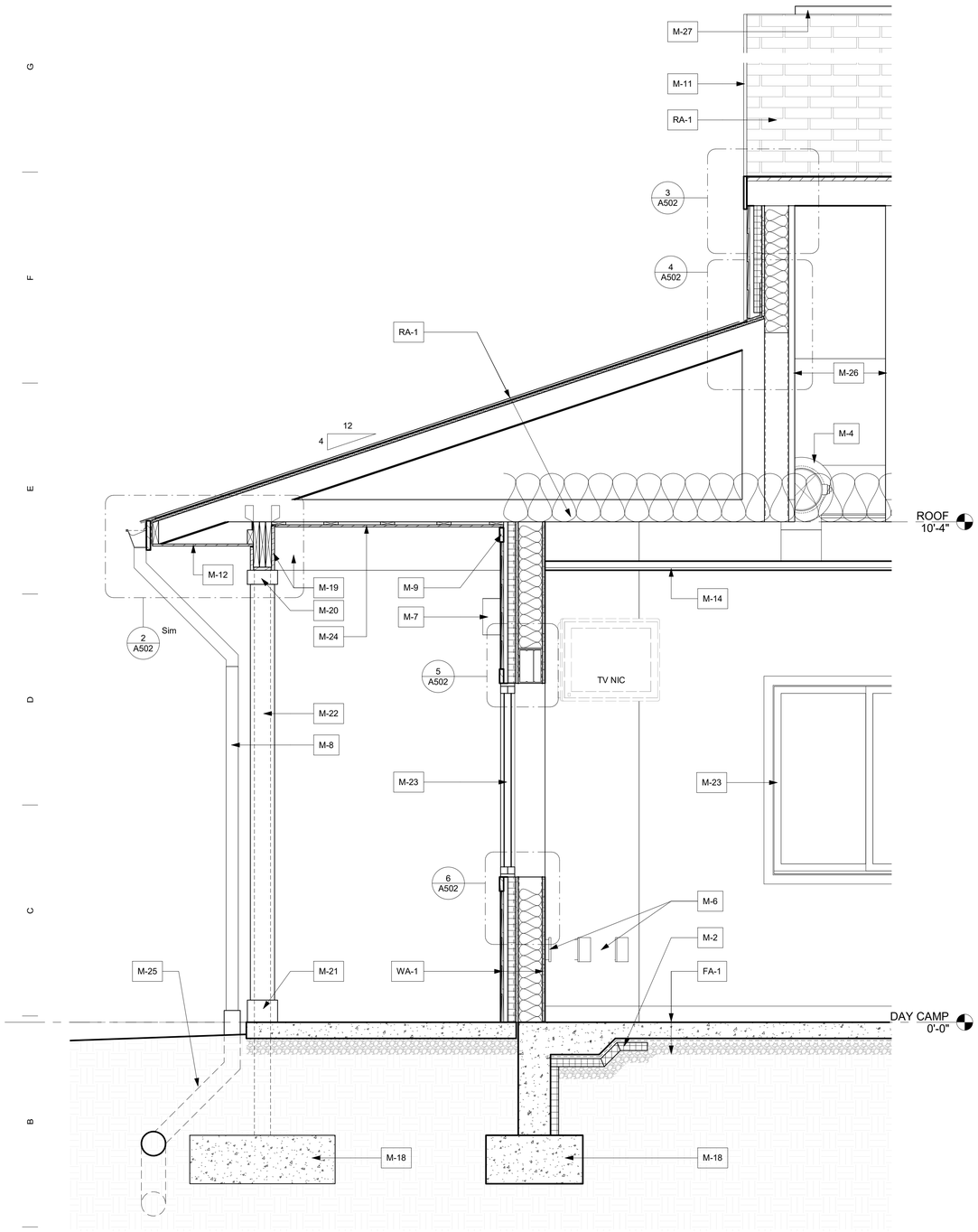
REVISED DATE	BY	APPROVED DATE	APPROVED DATE
		CHIEF ENGINEER	PROJECT MANAGER
		APPROVED DATE	APPROVED DATE
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY

BID DOCUMENTS | A401
MAY 2024
202214.1

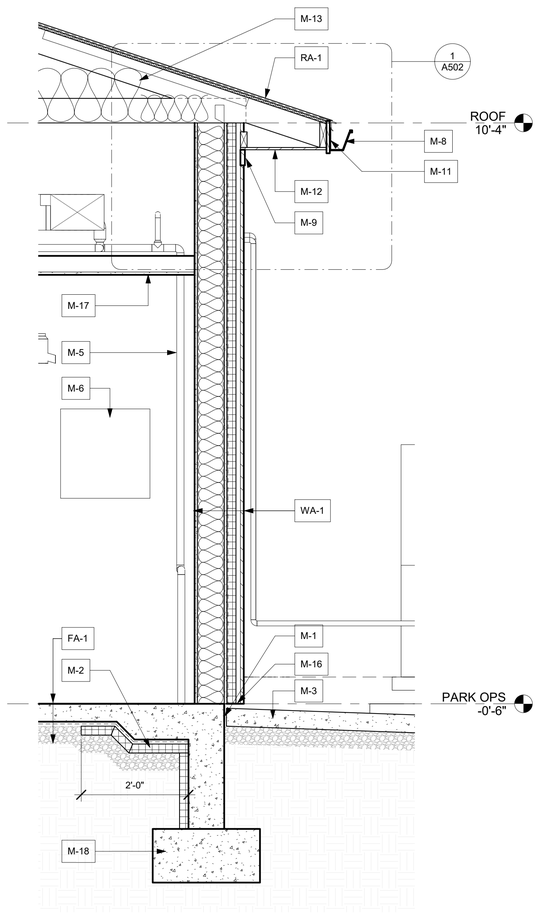
SCALE: AS NOTED
DRAWN BY:
CHECKED BY:
SHEET: OF
PROJECT #: P584700
CONTRACT #: P584702

ENLARGED PLANS

Mayo Beach Park Day Camp Building
4150 Honeysuckle Dr
Edgewater, MD 21037



1 TYPICAL WALL SECTION AT ACTIVITY
3/4" = 1'-0"



2 TYPICAL WALL SECTION AT PARK OPERATIONS
3/4" = 1'-0"

WALL SECTION NOTES

WALL ASSEMBLIES (WA - #)
(EXTERIOR TO INTERIOR)

WA-1: FIBER CEMENT LAP SIDING
ON FIBERGLASS THERMAL SPACER W/ 1" Z-SHAPED FURRING CHANNEL
ON 2" RIGID INSULATION (R-7.5 MIN.)
ON FLUID APPLIED VAPOR PERMEABLE MEMBRANE AIR BARRIER
ON 5/8" GLASS MAT GYPSUM SHEATHING BOARD
ON 6" METAL STUDS @ 16" O.C. FILLED SOLID W/ BATT INS. (R-21)
ON 5/8" GYPSUM WALL BOARD, PTD.

ROOF ASSEMBLIES (RA - #)

RA-1: FIBERGLASS ASPHALT SINGLES
ON ICE & WATER SHIELD
ON 5/8" APA PLYWOOD SHEATHING W/ CLIPS PER STR DWGS.
ON PRE-ENGINEERED ROOF TRUSSES PER STR DWGS.
W/ R-38 FOIL FACED BATT INS

FLOOR ASSEMBLIES (FA - #)

FA-1: TYPICAL FLOOR: FLOOR FINISH MATERIAL
ON 4" CONCRETE SLAB WITH WELDED WIRE FABRIC PER STR DWGS
ON CONTINUOUS VAPOR RETARDER
ON 4" THICK WASHED GRAVEL
ON COMPACTED FILL, PER STRUCTURAL DRAWINGS

MISCELLANEOUS MATERIALS (M - #)

M-1: 1/2" EXPANSION FILLER MATERIAL
M-2: FOUNDATION INSULATION: 2" RIGID INSULATION; 24" MIN. BOTH WAYS
M-3: CONCRETE SIDEWALK SLOPED AWAY FROM BUILDING PER CIVIL DWGS
M-4: DUCTWORK PER MECH DWGS
M-5: PIPING PER PLUMBING DWGS
M-6: ELECTRICAL EQUIPMENT PER ELEC. DWGS
M-7: LIGHTING FIXTURE PER ELEC. DWGS.
M-8: 6x6 PRE-FINISHED ALUM. GUTTER W/ 3x3 PRE-FINISHED DS W/ PAINTED PVC RECEPTOR DS BOOT AT GRADE. REFER TO CIVIL DWGS FOR STORMWATER DRAIN CONNECTIONS.
M-9: 5/4x4 FIBER CEMENT TRIM BOARD, PTD, TYP.
M-10: 5/4x6 FIBER CEMENT TRIM BOARD, PTD, TYP.
M-11: 5/4x8 FIBER CEMENT TRIM BOARD, PTD, TYP.
M-12: VENTED FIBER CEMENT SOFFIT PANELS, PTD, TYP.
M-13: R-38 FOIL FACED BATT INSULATION, TYP.
M-14: ACT LAY-IN CEILING W/ GRID SYSTEM, TYP.
M-15: PRE-FINISHED SM FLASHING, TYP.
M-16: CONT. BUG SCREEN, TYP.
M-17: PTD GWB CEILING W/ GRID SYSTEM, TYP.
M-18: REINFORCED CONCRETE FOOTING, PER STR DWGS, TYP.
M-19: 1x12 FIBER CEMENT TRIM BOARD, PTD, TYP.
M-20: 1x4 FIBER CEMENT TRIM BOARD, PTD, TYP.
M-21: 1x6 FIBER CEMENT TRIM BOARD, PTD, TYP.
M-22: 1x FIBER CEMENT COLUMN WRAP, TYP.
M-23: FIBERGLASS WINDOW PER SCHEDULE, TYP.
M-24: FIBER CEMENT SOFFIT PANELS, PTD, TYP.
M-25: STORMWATER MANAGEMENT PER CIVIL DWGS, TYP.
M-26: PRE-ENGINEERED ROOF TRUSSES PER STR DWGS.
M-27: CONT. RIDGE VENT, TYP.

No.	Description		Date
NO	REVISION DESCRIPTION	BY	DATE

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165 LOG CANOE CIRCLE - SUITE B1
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STATE OF MARYLAND — JEFFREY D. KUNZ — 15453 — ARCHITECT

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

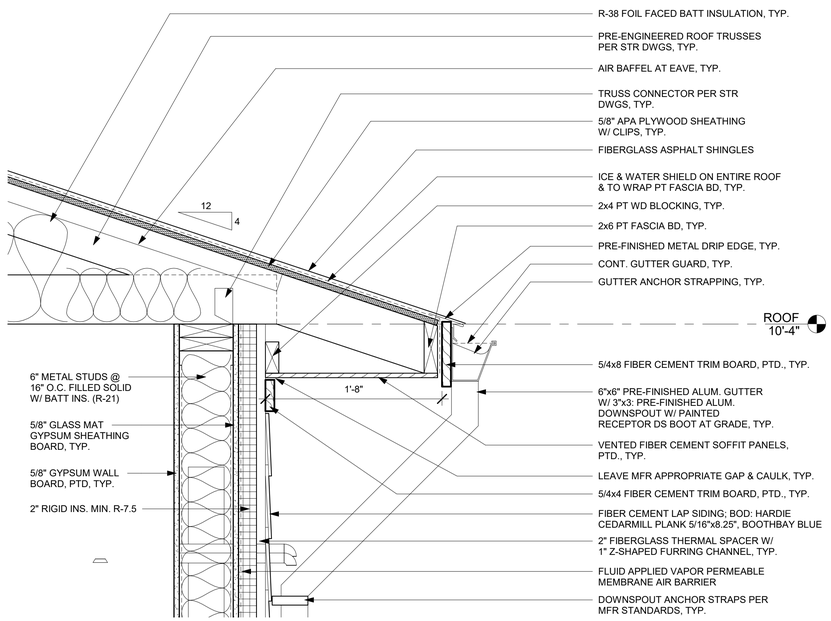
REVISED DATE	BY	APPROVED DATE	APPROVED DATE
		CHIEF ENGINEER	PROJECT MANAGER
		APPROVED DATE	APPROVED DATE
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY

BID DOCUMENTS | A501
MAY 2024
202214.1

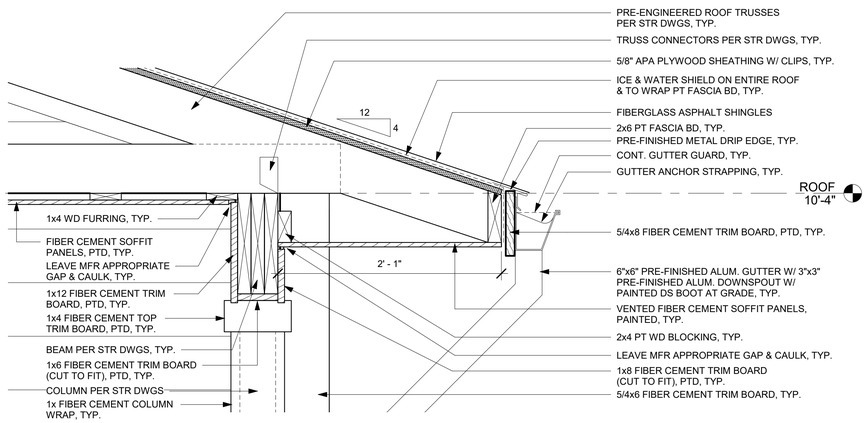
SCALE: AS NOTED
DRAWN BY:
CHECKED BY:
SHEET: OF
PROJECT #: P584700
CONTRACT #: P584702

WALL SECTIONS

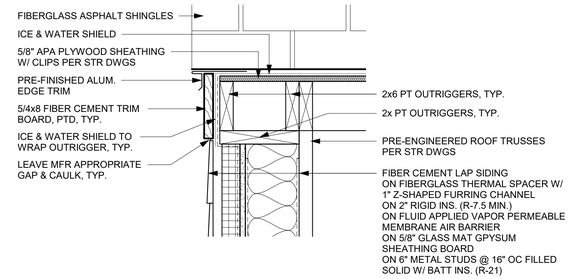
Mayo Beach Park Day Camp Building
4150 Honeysuckle Dr
Edgewater, MD 21037



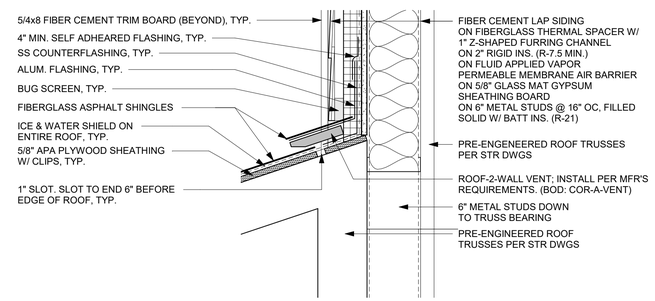
1 TYPICAL EAVE DETAIL
1 1/2" = 1'-0"



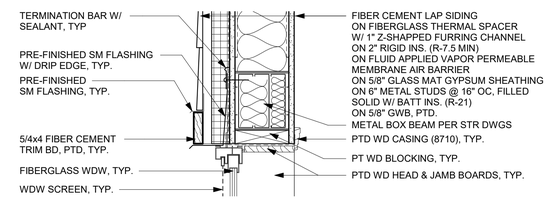
2 TYPICAL BEAM/EAVE DETAIL
1 1/2" = 1'-0"



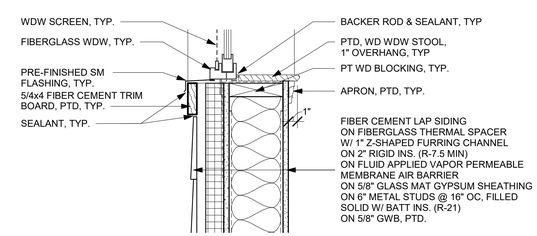
3 TYPICAL GABLE END RAKE DETAIL
1 1/2" = 1'-0"



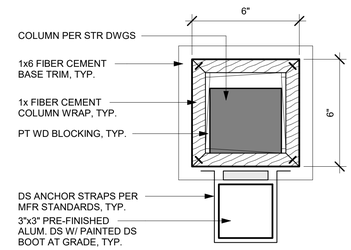
4 TYPICAL HEADWALL FLASHING DETAIL
1 1/2" = 1'-0"



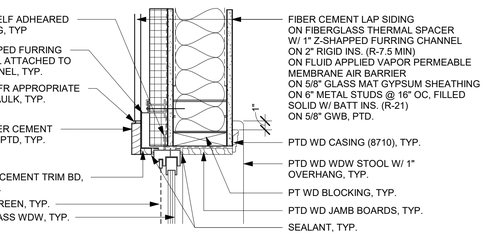
5 TYPICAL WDW HEAD DETAIL
1 1/2" = 1'-0"



6 TYPICAL WDW SILL DETAIL
1 1/2" = 1'-0"



7 TYPICAL COLUMN WRAP DETAIL
3" = 1'-0"



8 TYPICAL WDW JAMB
1 1/2" = 1'-0"

No.	Description		Date
NO	REVISION DESCRIPTION	BY	DATE

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165 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
410.263.6787
www.wgm-arch.com

CERTIFICATION:
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BID DOCUMENTS

A502

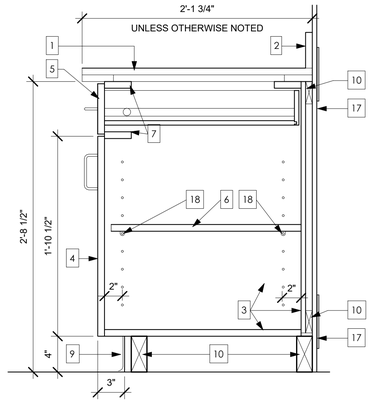
ANNE ARUNDEL COUNTY

MAY 2024

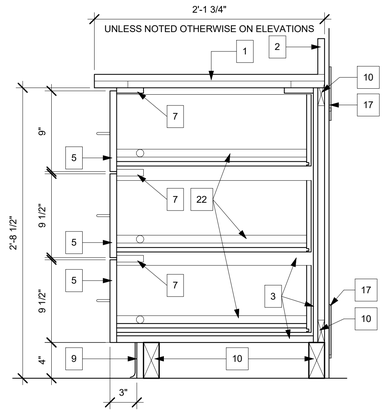
DEPARTMENT OF PUBLIC WORKS

202214.1

REVISED DATE	BY	APPROVED DATE	APPROVED DATE	SCALE: AS NOTED	DETAILS
				DRAWN BY:	
		CHIEF ENGINEER	PROJECT MANAGER	CHECKED BY:	Mayo Beach Park Day Camp Building 4150 Honeysuckle Dr Edgewater, MD 21037
		APPROVED DATE	APPROVED DATE	SHEET: OF	
				PROJECT #: P584700	
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	CONTRACT #: P584702	



3 BC-1 & 2
1 1/2" = 1'-0"



4 BC-3
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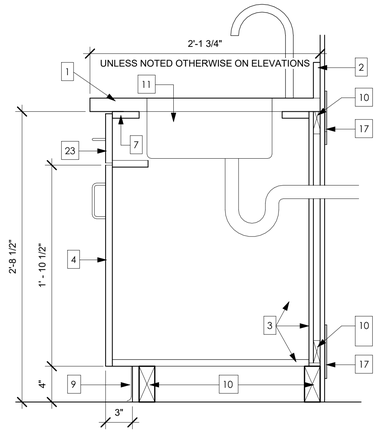
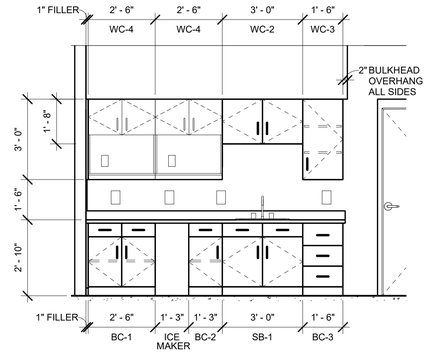
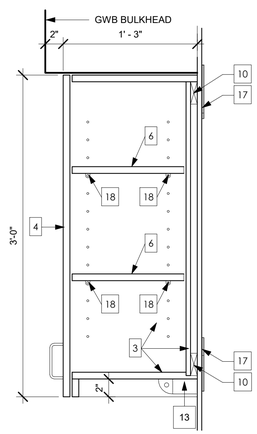


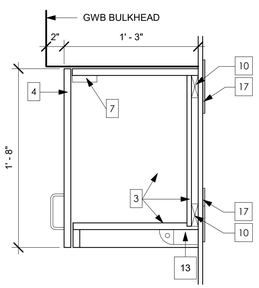
5 SB-1
1 1/2" = 1'-0"



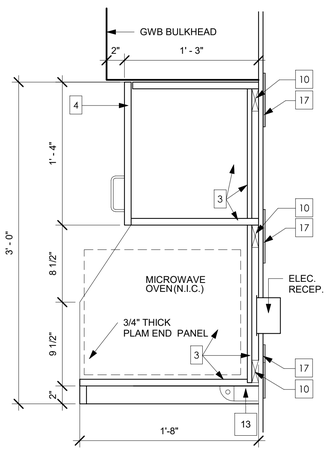
1 KITCHENETTE CASEWORK
3/8" = 1'-0"



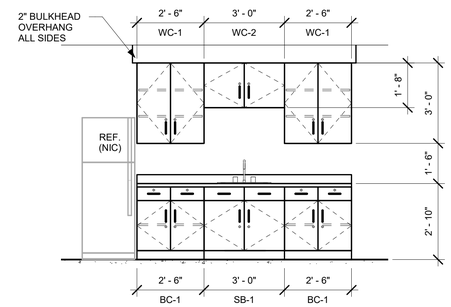
6 WC-1 & 3
1 1/2" = 1'-0"



7 WC-2
1 1/2" = 1'-0"



8 WC-4
1 1/2" = 1'-0"



NOTE: ALL HEALTH ROOM CASEWORK TO BE LOCKED.

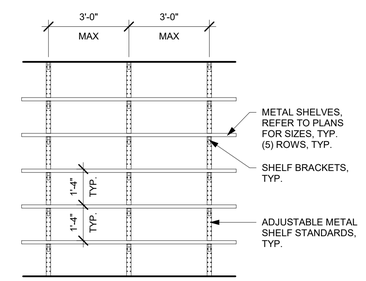
2 HEALTH ROOM CASEWORK
3/8" = 1'-0"

INTERIOR ARCHITECTURAL WOODWORK
CABINET CONSTRUCTION NOTES

1. COUNTERTOP- SEE FINISH ELEVATIONS AND FINISH SCHEDULE FOR MATERIAL TYPE AND COLOR. COUNTERTOP TO OVERHANG THE FRONT OF CASEWORK BY 1-3/4".
2. BACKSPLASH - 3/4" PROVIDE RETURNS WHERE COUNTER END MEETS WALLS. PROVIDE PER CABINETRY ELEVATIONS. AT ALL SINK LOCATIONS, BACKSPLASH TO BE INSTALLED ON ALL 3 SIDES.
3. CABINET CASE - TOP, BOTTOM AND SIDES TO BE 3/4" THICK PLYWOOD W/ 1/2" PLYWOOD AT BACK PANEL. CLOSED CABINETS: WHITE MELAMINE ALL CABINET INTERIOR SURFACES. PLASTIC LAMINATE ON EXPOSED BOTTOM SURFACES OF WALL CABINETS.
4. CABINET DOOR - 3/4" THICK PLYWOOD W/ PLASTIC LAMINATE ALL FACES. INSTALL 4" BRUSHED CHROME WIRE PULLS.
5. CABINET DRAWER - FRONT PANEL TO BE 3/4" THICK PLYWOOD, DRAWER BOX SIDES AND BACK 1/2" THICK WHITE MELAMINE. PLASTIC LAMINATE ALL FACES OF FRONT PANEL. SEE CABINET HARDWARE SCHEDULE. DOORS, DRAWERS, AND FALSE FRONTS SHALL RUN AND MATCH VERTICALLY WITHIN EACH CABINET UNIT.
6. ADJUSTABLE SHELF - 3/4" THICK WHITE MELAMINE ALL FACES. DRILL TWO VERTICAL ROWS OF HOLES 2" APART FOR METAL SHELF CLIPS.
7. CLOSURE TRIMS - 3/4" THICK X 3" WIDE PLYWOOD W/ PLASTIC LAMINATE AT EXPOSED EDGE.
8. FIXED SHELF - 3/4" THICK WHITE MELAMINE ALL FACES.
9. BASE TRIM - INSTALL BASE PER ROOM FINISH SCHEDULE OVER 3/4" THICK B/C GRADE PLYWOOD. INSTALL OVER CABINET TOE WHERE APPLICABLE.
10. BLOCKING - PROVIDE WOOD BLOCKING, NOM. 3/4" X 2-1/2" ON FACE OF WALL FINISH ANCHORED TO METAL GROUNDS INSTALLED WITHIN WALL FRAMING.
11. STAINLESS STEEL UNDERMOUNT SINK - PROVIDE 34" THICK X 3" WIDE AC GRADE PLYWOOD REINFORCING ALL SIDES OF SINKS CUT INTO COUNTERTOP.
12. .030 PVC EDGE.
13. LIGHT VALANCE - 3/4" PLYWOOD WITH PLASTIC LAMINATE ALL SURFACES. PROVIDE ON LIGHT VALANCE STRIP PER RUN OF WALL CABINETS TO BE INSTALLED AFTER WALL CABINETS HAVE BEEN INSTALLED. INSTALL WHERE INDICATED ON ELEVATIONS. RETURN LIGHT VALANCE STRIP TO THE WALL AT EXPOSED ENDS.
14. NO LOCKS ON ANY CASEWORK, UNLESS NOTED ON ELEVATIONS.
15. 2" DIA. GROMMET & COVER TYP.
16. PLAM WIRE TROUGH GUTTER. LEAVE A 3" WIDE OPENING AT BOTH ENDS OF TROUGH FOR ACCESS.
17. METAL STRAPPING
18. SHELF CLIP
19. DESK BRACKETS/SUPPORTS: (2) 22" FLOATING WALL MOUNT BY CENTERLINE BRACKETS PER DESK. PROVIDE FRT WOOD STUDS AT BRACKET LOCATIONS. BRACKETS TO BE SPACED EQUALLY ACROSS DESK.
20. METAL VENT LOUVERS.
21. BASE IS INTEGRAL WITH CABINET DOORS TO ALLOW WHEELCHAIR ACCESS WHEN DOORS OPEN.
22. HEAVY DUTY DRAWER SLIDE
23. FAUX DRAWER FACE.

GENERAL NOTES:

A: PROVIDE FIVE KNUCKLE HINGES FOR ALL CABINETS.
B: ALL IN-WALL BLOCKING TO BE FRT (FIRE RETARDANT TREATED) WOOD.
C: PLAM COUNTERTOPS AND BACKSPLASH TO BE A/C GRADE 1 1/2" THICK X 3" WIDE AT FRONT, BACK AND SIDE EDGES. 3/4" THICK MIN. ELSEWHERE. PLASTIC LAMINATE ON ALL EXPOSED FACES.
D: ALL CASEWORK SHALL COMPLY WITH AWI STANDARDS.
E: ALL CASEWORK TO BE REVEAL OVERLAY FRAMELESS CONSTRUCTION WHERE THE DISTANCE BETWEEN ANY DOOR AND DRAWER IS 1/8" (WITH UNIFORM VARIANCE OF +/- 1/16"), EXCLUDING THE HINGE SIDE REVEAL NOT TO EXCEED 1/8" BETWEEN DRAWER AND/OR DRAWER/DOOR FRONT PANELS
F: THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING AND INSTALLING STRUCTURAL MEMBERS, GROUNDS, IN WALL BLOCKING, BACKING, FURRING, BRACKETS, OR OTHER ANCHORAGE REQUIRED FOR ARCHITECTURAL WOODWORK INSTALLATION THAT BECOMES AN INTEGRAL PART OF WALLS, FLOORS, OR CEILINGS TO WHICH ARCHITECTURAL WOOD WORK SHALL BE INSTALLED.
G: ALL PLAM CASEWORK TO BE 3/4" THICK UNLESS OTHERWISE NOTED.
H. PROVIDE 4" BRUSHED CHROME WIRE PULLS FOR ALL CABINETS.



ADJUSTABLE SHELVING
3/8" = 1'-0"

No.	Description		Date
NO	REVISION DESCRIPTION	BY	DATE

WHEELER GOODMAN MASEK
165 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
410.263.6787 www.wgm-arch.com

CERTIFICATION:
I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Maryland, license number 16453, expiration date 06-25-2024.

BID DOCUMENTS				A560
ANNE ARUNDEL COUNTY				MAY 2024
DEPARTMENT OF PUBLIC WORKS				202214.1
REVISED DATE / BY	APPROVED DATE	APPROVED DATE	SCALE: AS NOTED	CASEWORK DETAILS
			DRAWN BY:	
	CHIEF ENGINEER	PROJECT MANAGER	CHECKED BY:	Mayo Beach Park Day Camp Building 4150 Honeysuckle Dr Edgewater, MD 21037
	APPROVED DATE	APPROVED DATE	SHEET: OF	
			PROJECT #: P584700	
	ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	CONTRACT #: P584702	

FINISH SCHEDULE

Number	ROOM NAME	FLOOR	WALL BASE	WALL	CEILING	MILLWORK	NOTES
4.01	ACTIVITY	LIN-1/LIN-2/LIN-3	RB-1	P-1/P-2	ACT-1	SS-1/PLAM-1	
4.02	OFFICE	LIN-1	RB-1	P-1/P-2	ACT-1		
4.03	STO	LIN-1	RB-1	P-1	ACT-1		
4.04	RR	LIN-1	CB-1	FRP-1	PGB-1		
4.05	HEALTH	LIN-1	RB-1	P-1/P-2	ACT-1	SS-1/PLAM-1	
4.06	ISO	LIN-1	RB-1	P-1/P-2	ACT-1		
4.07	CIRCULATION	C-1			FCSP-1		
4.08	COVERED OUTDOOR	C-1			FCSP-1		
4.09	JAN	RES-1	CB-1	FRP-1	PGB-1		
4.10	RR	RES-1	CB-1	FRP-1	PGB-1		
4.11	RR	RES-1	CB-1	FRP-1	PGB-1		
4.12	TABLES & CHAIRS STORAGE	SC-1	RB-1	P-1	PGB-1		
4.13	PARK OPERATIONS	SC-1	RB-1	P-1	PGB-1	SS-1/PLAM-1	
4.14	PARK OPERATIONS	SC-1	RB-1	P-1	PGB-1	SS-1/PLAM-1	
4.15	RR	VCT-1	RB-1	FRP-1	PGB-1		
4.16	STAFF	VCT-1	RB-1	P-1/P-2	ACT-1		
4.17	CLO	VCT-1	RB-1	P-1	ACT-1		
4.18	MECH	SC-1	RB-1	P-1	PGB-1		

FLOORING

CODE	MATERIAL	MANUFACTURER	STYLE/PATTERN	COLOR	NOTES
C-1	CONCRETE				
LIN-1	LINOLEUM - FIELD	FORBO	MARMOLEUM REAL SHEET, 32M x 200CM, FIELD		
LIN-2	LINOLEUM - ACCENT 1	FORBO	MARMOLEUM REAL SHEET, 32M x 200CM, ACCENT		
LIN-3	LINOLEUM - ACCENT 2	FORBO	MARMOLEUM REAL SHEET, 32M x 200CM, ACCENT		
RES-1	RESINOUS COATING	DURAFLEX	DUR-A-GARD	MEDIUM GREY	
SC-1	SEALED CONCRETE	TBD	TBD		
VCT-1	VINYL COMPOSITION TILE	ARMSTRONG	STANDARD EXCELON / IMPERIAL TEXTURE		

BASE

CODE	MATERIAL	MANUFACTURER	STYLE/PATTERN	COLOR	NOTES
CB-1	INTEGRAL 6" COVE BASE	TBD			TO MATCH RES-1
RB-1	RUBBER BASE	JOHNSONITE	4"		

WALLS

CODE	MATERIAL	MANURFACTURER	STYLE/PATTERN	COLOR	NOTES
FRP-1	FIBERGLASS REINFORCED PANEL				
P-1	WALL PAINT - FIELD	SHERWIN WILLIAMS	SEMI-GLOSS		
P-2	WALL PAINT - ACCENT	SHERWIN WILLIAMS	SEMI-GLOSS		
TP-1	TRIM PAINT	SHERWIN WILLIAMS	SEMI-GLOSS		

CEILING

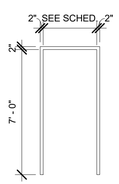
CODE	MATERIAL	MANUFACTURER	STYLE/PATTERN	COLOR	NOTES
PGB-1	PAINTED GYPSUM BOARD				
ACT-1	ACOUSTICAL CEILING TILES				
FCSP-1	FIBER CEMENT SOFFIT PANELS				
VFCSP-1	VENTED FIBER CEMENT SOFFIT PANELS				

MILLWORK

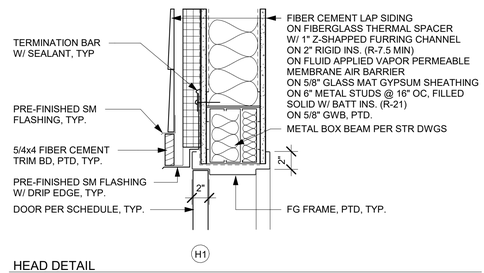
CODE	MATERIAL	MANUFACTURER	STYLE/PATTERN	COLOR	NOTES
SS-1	SOLID SURFACE	CORIAN	-		
PLAM-1	PLASTIC LAMINATE	WILSONART	-		

MISCELLANEOUS

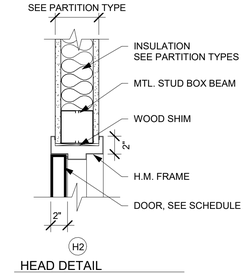
CODE	MATERIAL	MANUFACTURER	STYLE/PATTERN	COLOR	NOTES
HL	HORIZONTAL LOUVER BLINDS				
MB-1	MARKER BOARD (4'X4')				
TB-1	TACK BOARD (4'X4')				
TS	TACK STRIPS				



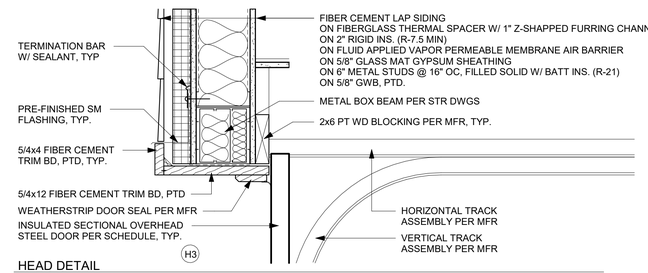
FRAMES - HOLLOW METAL & FIBERGLASS
2 1/4" = 1'-0"



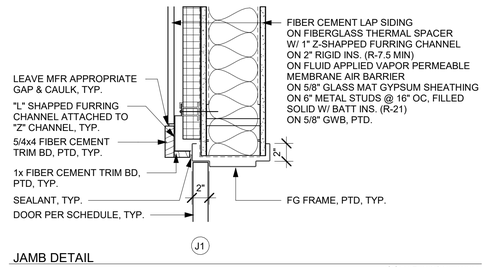
HEAD DETAIL
SCALE: 1 1/2" = 1'-0"



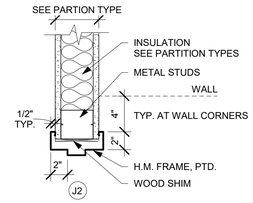
HEAD DETAIL
SCALE: 1 1/2" = 1'-0"



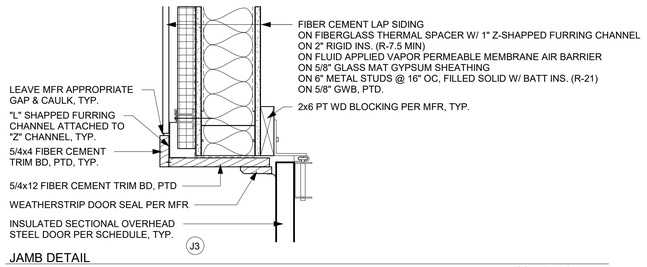
HEAD DETAIL
SCALE: 1 1/2" = 1'-0"



JAMB DETAIL
SCALE: 1 1/2" = 1'-0"

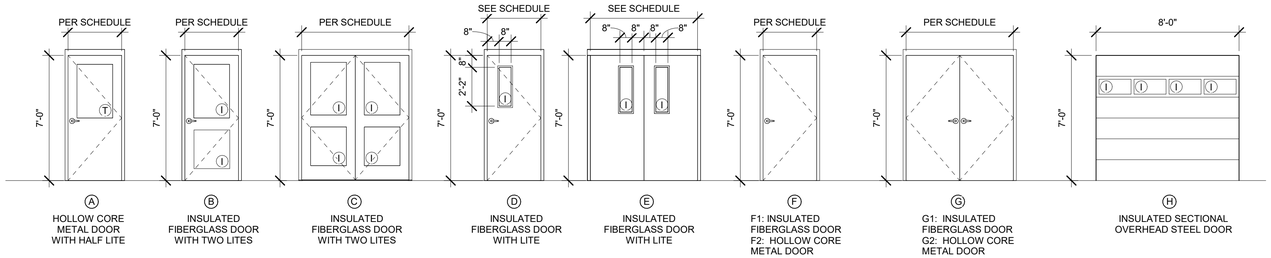


JAMB DETAIL
SCALE: 1 1/2" = 1'-0"



JAMB DETAIL
SCALE: 1 1/2" = 1'-0"

1 HEAD & JAMB DETAILS
1 1/2" = 1'-0"

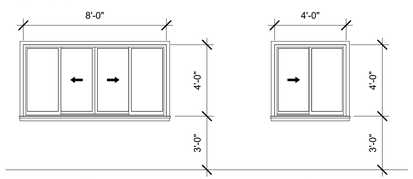


GLAZING KEY:

T = 1/4" TEMPERED GLASS

I = 1" INSULATED GLASS

DOOR ELEVATIONS
1/4" = 1'-0"



WINDOW ELEVATIONS
1/4" = 1'-0"

DOOR SCHEDULE

Opening Number	Door Elevation	Material	Height	Width	Thickness	Frame Elevation	Frame Material	Fire Rating	Head	Jamb	Sill	Hardware Set No.	Remarks
01	B	FG	7'-0"	3'-0"	1 3/4"	FG-1	FG		H1	J1		01	
02	C	FG	7'-0"	6'-0"	1 3/4"	FG-1	FG		H1	J1		02	
03	F1	FG	7'-0"	3'-0"	1 3/4"	FG-1	FG	-	H1	J1		03	
04	F1	FG	7'-0"	3'-0"	1 3/4"	FG-1	FG	-	H1	J1		04	
05	F1	FG	7'-0"	3'-0"	1 3/4"	FG-1	FG	-	H1	J1		04	
06	G1	FG	7'-0"	3'-0"	1 3/4"	FG-1	FG	-	H1	J1		05	
07	E	FG	7'-0"	6'-0"	1 3/4"	FG-1	FG	-	H1	J1		05	
08	D	FG	7'-0"	3'-0"	1 3/4"	FG-1	FG	-	H1	J1		06	
09	F1	FG	7'-0"	3'-0"	1 3/4"	FG-1	FG	-	H1	J1		03	
10	D	FG	7'-0"	3'-0"	1 3/4"	FG-1	FG	-	H1	J1		06	
11	F1	FG	7'-0"	3'-0"	1 3/4"	FG-1	FG	-	H1	J1		06	
12	A	HM	7'-0"	3'-0"	1 3/4"	HM-1	HM		H2	J2		07	
13	F2	HM	7'-0"	3'-0"	1 3/4"	HM-1	HM	-	H2	J2		08	
14	F2	HM	7'-0"	3'-0"	1 3/4"	HM-1	HM	-	H2	J2		09	
15	A	HM	7'-0"	3'-0"	1 3/4"	HM-1	HM		H2	J2		07	
16	A	HM	7'-0"	3'-0"	1 3/4"	HM-1	HM		H2	J2		10	
17	G2	HM	7'-0"	3'-0"	1 3/4"	HM-1	HM	-	H2	J2		11	
18	F2	HM	7'-0"	3'-0"	1 3/4"	HM-1	HM	-	H2	J2		09	
19	A	HM	7'-0"	3'-0"	1 3/4"	HM-1	HM		H2	J2		07	
20	F2	HM	7'-0"	3'-0"	1 3/4"	HM-1	HM	-	H2	J2		08	
21	H	STEEL	7'-0"	8'-0"	2"		STEEL		H3	J3			

NOTE: REFER TO A100 FOR DOOR HARDWARE SETS

No.	Description		Date
NO	REVISION DESCRIPTION	BY	DATE

WGM ARCHITECTURE + INTERIORS
WHEELER GOODMAN MASEK
165 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
410.263.6787 www.wgm-arch.com

CERTIFICATION:
I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Maryland, license number 15453, expiration date 06-25-2024.

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

REVISED DATE	BY	APPROVED DATE	APPROVED DATE	
		CHIEF ENGINEER	PROJECT MANAGER	
		APPROVED DATE	APPROVED DATE	
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	

BID DOCUMENTS | A601

MAY 2024

202214.1

SCALE: AS NOTED
DRAWN BY:
CHECKED BY:
SHEET: OF
PROJECT #: P584700
CONTRACT #: P584702

SCHEDULES

Mayo Beach Park Day Camp Building
4150 Honeysuckle Dr
Edgewater, MD 21037

GENERAL NOTES

1. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR LOCATIONS AND DIMENSIONS OF OPENINGS, CHASES, INSERTS, REGLETS, SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS. ALL DIMENSIONS AND CONDITIONS MUST BE VERIFIED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK.

2. THE STRUCTURE IS DESIGNED TO BE SELF SUPPORTING AND STABLE AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO INSURE THE SAFETY OF THE BUILDING AND ITS COMPONENTS DURING ERECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF NECESSARY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS. PROVIDE ALL SHORING AND BRACING REQUIRED TO STABILIZE AND PROTECT EXISITING AND ADJACENT STRUCTURES AND SYSTEMS DURING COURSE OF DEMOLITION AND CONTRACTOR AFTER COMPLETION OF THE PROJECT.

3. SECTIONS AND DETAILS SHOWN ON ANY STRUCTURAL DRAWINGS SHALL BE CONSIDERED TYPICAL FOR SIMILAR CONDITIONS.

4. ALL APPLICABLE FEDERAL, STATE AND MUNICIPAL REGULATING SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.

5. ANY AND ALL MODIFICATIONS TO THE STRUCTURAL ELEMENTS INDICATED ON THESE DRAWINGS MUST BE APPROVED BY BAKER, INGRAM & ASSOCIATES.

DESIGN LOADS

1. BUILDING CODE: INTERNATIONAL BUILDING CODE (2018 EDITION).

2. DESIGN LIVE LOADS:

ROOF	30 PSF MIN. + DRIFT
FLOOR	100 PSF

3. SNOW LOADING IS BASED ON THE FOLLOWING. DRIFTING OR SLIDING SNOW LOADS HAVE BEEN CONSIDERED WHERE APPROPRIATE.

GROUND SNOW LEVEL	20 PSF
FLAT-ROOF SNOW LOAD (Pf)	14 PSF
SNOW EXPOSURE FACTOR (Ce)	1.0
SNOW LOAD IMPORTANCE FACTOR	1.0
SNOW THERMAL FACTOR (Ct)	1.0

4. DESIGN EARTHQUAKE LOADS ARE BASED ON THE FOLLOWING:

SEISMIC RISK CATEGORY	II
SEISMIC IMPORTANCE FACTOR	1.0
SPECTRAL RESPONSE ACCEL. (SS)	0.157g
SPECTRAL RESPONSE ACCEL. (S1)	0.055g
SITE CLASS	D
SPECTRAL RESPONSE COEFF. (SDS)	0.167g
SPECTRAL RESPONSE DOEFF. (SD1)	0.088g
SEISMIC DESIGN CATEGORY	B
SEISMIC RESISTING SYSTEM	STRUCTURAL STEEL SYSTEM NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE
DESIGN BASE SHEAR	0.056W KIPS
SEISMIC RESPONSE COEFFICIENT (CS)	0.056
RESPONSE MODIFICATION FACTOR (R)	3.0
ANALYSIS PROCEDURE USED	EQUIVALENT LATERAL-FORCE

5. WIND LOADING IS BASED ON THE FOLLOWING:

ULTIMATE DESIGN WIND SPEED (Vult)	110 MPH
NOMINAL DESIGN WIND SPEED (Vasd)	90 MPH
RISK CATEGORY	II
EXPOSURE CATEGORY	B
INTERNAL PRESSURE COEFF.	+/- 0.18
BUILDING CATEGORY	SIMPLE DIAPHRAM, LOW-RISE, ENCLOSED RIGID STRUCTURE

FOUNDATION

1. FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEERS REPORT PREPARED BY FROEHLING & ROBERTSON, INC. DATED MAY 12, 2023.

2. PRESUMPTIVE BEARING CAPACITY: 2000 PSF

3. FOUNDATION DESIGN IS BASED ON SHALLOW SPREAD FOOTINGS BEARING ON SUITABLE NATURAL SOILS AND/OR NEW COMPACTED STRUCTURAL FILL.

4. ALL ORGANIC MATERIALS, EXCESSIVELY SOFT OR LOOSE SOILS, TREES, ASPHALT, CONCRETE, DEBRIS AND OTHER DELETERIOUS MATERIALS SHOULD BE REMOVED WITHIN AND AT LEAST 5 FEET BEYOND THE BUILDING LIMIT. THE EXISTING ORGANIC SOIL SHOULD BE STRIPPED AND CAN BE STOCKPILED FOR REUSE IN LANDSCAPE AREAS. PROOF ROLL ALL SUBGRADES, UNDER THE OBSERVATION OF THE GEOTECHNICAL ENGINEER. UNSUITABLE AREAS SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE GEOTECHNICAL ENGINEER. NO FILL FOR BUILDING SUPPORT SHALL BE PLACED UNTIL SUBGRADES AND FILL MATERIAL HAVE BEEN OBSERVED AND APPROVED BY THE GEOTECHNICAL ENGINEER.

5. AREAS REQUIRING UNDERCUT AND FILL MATERIAL DUE TO THE PRESENCE OF UNSUITABLE MATERIAL SHALL BE BACKFILLED TO THE DESIGN FOOTING SUBGRADE WITH NEW COMPACTED STRUCTURAL FILL.

6. COMPACTED STRUCTURAL FILL FOR BUILDING AND SLAB SUPPORT APPROVED FOR USE INCLUDE:

   GRANULAR SOILS INCLUDING GW, GP, GM, SW, SP AND SM CLASSIFIED IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS). FURTHERMORE, THE MATERIAL TO BE UTILIZED AS STRUCTURAL FILL SHOULD HAVE A PLASTICITY INDEX (PI) LESS THAN 20.

   A MATERIAL UTILIZED FOR STRUCTURAL FILL MUST BE APPROVED BY THE GEOTECHNICAL ENGINEER. IF THERE IS NOT SUFFICIENT FILL MATERIAL ON SITE, CONTRACTOR SHALL TRANSPORT APPROVED BORROW MATERIAL FROM AN OFF SITE SOURCE.

7. SLABS ON GRADE MAY BE SUPPORTED ON FIRM SUITABLE NATURAL SOILS, OR ON COMPACTED STRUCTURAL FILL FOLLOWING STRIPPING OF TOPSOIL, VEGETATION, ASPHALT AND ANY SOFT OR DISTURBED SOILS WITHIN THE BUILDING AREA. A MINIMUM 4 INCH WASHED GRAVEL OR CRUSHED STONE LAYER CORRESPONDING TO AASHTO SIZE NO. 57 AGGREGATE SHOULD BE USED BENEATH ALL FLOOR SLABS ON GRADE. (REF. DWGS. FOR AREAS OF THICKER STONE BASE). ALL INTERIOR SLABS SHALL HAVE A 10 mil VAPOR BARRIER LOCATED BELOW THE SLAB AND ABOVE THE CRUSHED STONE, UNLESS NOTED OTHERWISE.

8. COMPACTED STRUCTURAL FILL BENEATH ALL FOUNDATIONS, SLABS ON GRADE AND ADJACENT TO FOUNDATION WALLS SHALL BE PLACED IN LIFTS NOT EXCEEDING 8 INCHES (4 INCHES FOR HAND COMPACTORS) IN LOOSE THICKNESS AND BE COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY PER ASTM D-1557, MODIFIED PROCTOR TEST.

9. THE EXCAVATION FOR PLACEMENT OF COMPACTED STRUCTURAL FILL SHOULD EXTEND BEYOND THE EDGE OF FOOTINGS A MINIMUM DISTANCE EQUAL TO THE DEPTH OF FILL.

10. EXTEND BOTTOM OF EXTERIOR FOOTINGS AT LEAST 2'-8" BELOW THE EXTERIOR FINISH GRADE FOR PROTECTION AGAINST FROST.

11. ALL SUBGRADES AND UNDERCUTS SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER. SOILS EXPOSED AT THE BASES OF ALL APPROVED FOUNDATION EXCAVATIONS SHOULD BE PROTECTED AGAINST ANY DETRIMENTAL CHANGE IN CONDITION, SUCH AS DISTURBANCE FROM RAIN OR FROST. SURFACE RUNOFF SHOULD BE DRAINED AWAY FROM THE EXCAVATIONS AND NOT BE ALLOWED TO POND. FOUNDATION EXCAVATIONS SHOULD BE PROTECTED FROM RAINFALL OR FREEZING CONDITIONS. SLOPE FOOTING EXCAVATIONS AS REQUIRED FOR STABILITY AND SAFETY OR PROVIDE SHEETING OR SHORING IN ACCORDANCE WITH OSHA REQUIREMENTS. IN THE EVENT THAT THE CONTRACTOR DETERMINES THAT SHEETING AND SHORING IS REQUIRED FOR EXCAVATION, THE CONTRACTOR SHALL RETAIN THE SERVICES OF A REGISTERED PROFESSIONAL STRUCTURAL ENGINEER FOR DESIGN AND DOCUMENTATION OF ALL SHEETING AND SHORING REQUIRED FOR THE WORK.

CONCRETE

1. ALL CONCRETE WORK SHALL CONFORM TO ACI 318 (LATEST EDITION).

2. CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE:

FOOTINGS:	3000 PSI
INTERIOR SLABS:	4000 PSI
WALLS:	4000 PSI
PIERS:	4000 PSI
EXTERIOR SLABS:	5000 PSI

   ALL CONC. TO BE NORMAL WEIGHT UNLESS NOTED OTHERWISE.

   ALL EXTERIOR CONCRETE SHALL BE AIR-ENTRAINED (6 +/-1)% PER ASTM C260.

   MAXIMUM WATER/CEMENT RATIO =
   - 0.50 FOR 3000 PSI CONC.
   - 0.45 FOR 4000 PSI CONC.
   - 0.40 FOR 5000 PSI CONC.

3. CONCRETE REINFORCING SHALL CONFORM TO THE FOLLOWING DESIGNATIONS:

DEFORMED BARS	ASTM A615, GRADE 60
DEFORMED BARS (WELDABLE)	ASTM A706
DEFORMED BARS (GALVANIZED)	ASTM A767 & A615, GRADE 60
DEFORMED BARS (EPOXY-COATED)	ASTM A775 OR A934, & A615, GR. 60
WELDED WIRE FABRIC	ASTM A185

4. LAP DEFORMED BARS 40 DIA., UNO. HOOKS SHALL BE STANDARD HOOKS, UNO. LAP WELDED WIRE FABRIC SUCH THAT THE OVERLAP OF THE OUTERMOST CROSS WIRES FOR EACH ADJOINING SHEET IS NOT LESS THAN THE SPACING OF THE CROSS WIRES PLUS TWO IN., UNO.

5. CONCRETE PROTECTION FOR REINFORCEMENT (UNLESS NOTED OTHERWISE):

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:	3 IN.
CONCRETE EXPOSED TO EARTH OR WEATHER:	
NO. 6 THROUGH NO. 18 BARS:	2 IN.
NO. 5 BAR AND SMALLER:	1 1/2 IN.
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:	
SLABS, WALLS, JOISTS:	
NO. 14 AND NO. 18 BARS	1 1/2 IN.
NO. 11 BAR AND SMALLER:	3/4 IN.
BEAMS, COLUMNS:	1 1/2 IN.

6. REINFORCING FOR SLABS ON GRADE, WHERE NOT OTHERWISE SPECIFIED, SHALL BE AS FOLLOWS:

   REINFORCING BARS: SEE FOUNDATION AND TYPICAL DETAILS.
   WIRE MESH: 6x6-W2.1 x W2.1 WWF. REINFORCING SHALL BE SUPPORTED AT MID-DEPTH OF SLAB.

7. WELDING OF REINFORCEMENT IS NOT PERMITTED UNLESS SPECIFICALLY INDICATED ON DRAWINGS. WELDING, WELDING ELECTRODES AND FLUXES SHALL CONFORM TO AWS D1.4-92, "STRUCTURAL WELDING CODE – REINFORCED STEEL". ELECTRODES SHALL HAVE A MINIMUM TENSILE STRENGTH OF 70 KSI. ASTM A706 BARS SHALL BE USED IN ALL WELDED APPLICATIONS.

8. COMPLETE SHOP DRAWINGS AND SCHEDULES OF ALL REINFORCING STEEL SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR REVIEW. REFER TO SPECIFICATIONS.

9. CONCRETE SHALL NOT BE PLACED IN WATER OR ON FROZEN GROUND.

10. PROVIDE SLEEVES WHERE PIPES PASS THROUGH WALLS, BEAMS OR SLABS. REF. MEP DRAWINGS.

11. JOINTS IN SLABS ON GRADE:
    - a) CONTROL JOINTS SHALL BE LOCATED AS SHOWN ON FOUNDATION PLAN. IF NOT SHOWN, PROVIDE JOINTS IN A RECTANGULAR CONFIGURATION, WITH THE LONGER SIDE NO MORE THAN ONE-AND ONE-HALF TIMES THE LENGTH OF THE SHORTER SIDE. SPACE CONTROL JOINTS NO MORE THAN 20 FEET APART. DISCONTINUE WELDED WIRE FABRIC AT CONTROL JOINTS.
    - b) CONTROL JOINTS SHALL BE SAW CUT OR FORMED 1/4" WIDE x (1/3 SLAB THICKNESS) DEEP AND FILLED WITH JOINT SEALER. CUT JOINTS AS SOON AS POSSIBLE WITHOUT FRAYING THE CONCRETE SURFACE.
    - c) CONSTRUCTION JOINTS SHALL INCLUDE A 1"x2" SHEAR KEY AT MID-HEIGHT OF SLAB.
    - d) ISOL. JT.: PRE-MOLDED JOINT FILLER. USE AROUND ALL PILING, PIERS AND AT FOUNDATION WALLS.

12. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 GRADE 36 UNLESS NOTED OTHERWISE.

13. CURING REQUIREMENTS:
    - a) SLABS TO BE COVERED WITH A FINISH MATERIAL MAY BE SPRAYED WITH A CURING COMPOUND OR WET CURED AT CONTRACTOR'S OPTION. CONTRACTOR TO VERIFY COMPATIBILITY OF CURING COMPOUND WITH FINISH MATERIAL.
    - b) ALL SLABS AND WALLS EXPOSED TO VIEW SHALL BE WET CURED FOR A MINIMUM OF 7 DAYS.

14. VAPOR RETARDER (VAPOR BARRIER): UNLESS NOTED OTHERWISE PROVIDE 10 MIL VAPOR BARRIER COMPLYING DIRECTLY UNDER SLAB COMPLYING WITH ASTM E-1745 CLASS A PLACED OVER MINIMUM 4" THICK CONSOLIDATED LAYER OF GRANULAR FILL (#57 STONE UNLESS NOTED OTHERWISE). PLACE PROTECT AND REPAIR SHEET VAPOR RETARDER ACCORDING TO ASTM E-1643 AND MANUFACTURER'S WRITTEN INSTRUCTIONS. LAP JOINTS 6" AND SEAL WITH MANUFACTURER'S RECOMMENDED TAPE.

MASONRY

1. ALL MASONRY CONSTRUCTION SHALL CONFORM TO ACI 530.1 (LATEST EDITION).

2. ALL CONCRETE MASONRY UNITS SHALL BE ASTM C90, GRADE N, TYPE 1 STANDARD WEIGHT BLOCKS INCLUDING STRETCHERS AND CORNER BLOCKS. MINIMUM PRISM STRENGTH OF BLOCK SHALL BE f'm = 1500 PSI IN 28 DAYS. MORTAR SHALL CONFORM TO ASTM SPECIFICATION C270, TYPE M OR S.

3. CONCRETE MASONRY UNITS SHALL BE LAID IN RUNNING BOND UNLESS NOTED OTHERWISE ON THE ARCHITECTURAL DRAWINGS.

4. LOCATION OF LINTELS AT MASONRY OPENINGS SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS.

5. MASONRY WALLS WHICH SUPPORT STRUCTURAL MEMBERS SHALL HAVE CELLS GROUTED SOLID 3 COURSES MINIMUM UNDER BEARING.

6. HORIZONTAL WALL REINFORCING SHALL BE DUR-O-WAL TRUSS DESIGN WITH 3/16" SIDE RODS AND 8 GAUGE CROSS TIES. REINFORCING SHALL BE PLACED IN MASONRY WALLS AT 16" MAXIMUM. SPACE HORIZONTAL JOINT REINFORCEMENT AT 8" ON CENTER IN ALL PARAPETS. USE SHOP FABRICATED SPECIAL PIECES AT ALL CORNERS AND TEES. FOR BRICK VENEER USE DUR-O-EYE TRUSS TYPE.

7. BRICK VENEER ANCHORS FOR STUD BACKUP SHALL HAVE 3/16" ROUND HOT DIPPED GALVANIZED STEEL TIES FOR USE WITH DW-10 ANCHORS BY HOHMAN & BARNARD. LOCATE 16" O.C. VERTICALLY 32" O.C. HORIZONTALLY AND 8" O.C. AROUND OPENINGS.

8. SEE ARCHITECTURAL DRAWINGS FOR CONTROL JOINTS.

9. STANDARD LAP LENGTH OF GRADE 60 MASONRY REINFORCING BARS SHALL BE 48 BAR DIAMETERS.

10. ALL LOAD BEARING CMU WALLS SHALL CONTAIN JOINTS WHICH ARE FULLY BEDDED.

11. UNLESS OTHERWISE NOTED, PROVIDE THE FOLLOWING LINTELS FOR EACH 4 INCH THICKNESS OF MASONRY WALL WITH 8 INCHES OF BEARING AT EACH END. FOR UNEQUAL LEG ANGLES, ORIENT THE LONG LEGS VERTICAL: GALVANIZE ALL LINTELS EXPOSED TO THE WEATHER.

OPENINGS UP TO 4'-0"	L3 1/2" x 3 1/2" x 5/16"
OPENINGS 4'-6'	L4" x 3 1/2" x 5/16"
OPENINGS 6'-8'	L5" x 3 1/2" x 5/16"
OPENINGS 8'-10'	L6" x 3 1/2" x 3/8"

12. FILL ALL BOND BEAMS WITH 2500 PSI CONCRETE USING 3/8" MAXIMUM AGGREGATE SIZE.

13. WHERE INDICATED, GROUT CORES SOLID WITH A HIGH SLUMP MIX IN ACCORDANCE WITH ASTM SPECIFICATION C476 HAVING A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.

WOOD FRAMING

1. COMPLY WITH THE NATIONAL FOREST PRODUCTS ASSOCIATION (NFPA) "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" (LATEST EDITION).

2. WOOD FRAMING: #2 S-P-F OR BETTER

3. PLYWOOD: GROUP 1 APA RATED SHEATHING, MINIMUM SPAN RATING OF 32/16, MINIMUM 4 PLY, EXPOSURE 1. USE 3/4" NOMINAL THICKNESS FOR FLOOR, 5/8" FOR ROOFS, AND 1/2" FOR WALLS, UNLESS OTHERWISE NOTED. FOR FLOORS, USE TONGUE AND GROOVE PLYWOOD GLUED AND NAILED. FOR ROOFS, USE PLYWOOD CLIPS AT ALL UNSUPPORTED BUTT JOINTS.

4. WOOD EXPOSED TO THE ENVIRONMENT, WOOD BOLTED TO CONCRETE OR MASONRY AND WOOD DESIGNATED "TRTD" SHALL BE #2 SOUTHERN PINE OR BETTER. PRESSURE IMPREGNATED WITH AMMONIACAL COPPER QUATERNARY AMMONIUM (ACQ) IN ACCORDANCE WITH AMERICAN WOOD PRESERVERS ASSOCIATION (AWPA) STANDARD C2, WITH A MINIMUM RETENTION OF 0.40 LBS PER CUBIC FOOT OF WOOD. THE MINIMUM DEPTH OF PENETRATION SHALL BE 2.5" OR 85% OF THE SAPWOOD.

WOOD TRUSSES

1. COMPLY WITH TRUSS PLATE INSTITUTE (TPI) "DESIGN SPECIFICATIONS FOR METAL PLATE CONNECTED WOOD TRUSSES" (LATEST EDITION).

2. ROOF TRUSS LAYOUT SHOWN IS CONCEPTUAL AND MUST BE VERIFIED BY THE TRUSS MANUFACTURER AND SHOWN ON SHOP DRAWINGS FOR APPROVAL. ANY REVISIONS TO THE TRUSS LAYOUT MAY AFFECT OTHER FRAMING AND THEREFORE MUST BE APPROVED BY BAKER, INGRAM & ASSOCIATES.

3. CONNECTOR PLATES: ASTM A446, GRADE A, GALVANIZE PER ASTM A525 G60.

4. ALL TRUSSES SHALL BE ERECTED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND AS RECOMMENDED BY "HIB-91: HANDLING, INSTALLING AND BRACING METAL PLATE CONNECTED WOOD TRUSSES" BY TPI.

5. CONTRACTOR TO SUBMIT SEALED SHOP DRAWINGS FOR ALL TRUSS TYPES FOR ENGINEER'S APPROVAL PRIOR TO MANUFACTURING.

6. INSTALL ROOF SHEATHING ON ALL TRUSSES PRIOR TO INSTALLATION OF OVERFRAMING.

7. EACH END OF EACH TRUSS SHALL BE ATTACHED TO SUPPORTING MEMBER WITH (4) 12d TOE NAILS PLUS A GALVANIZED STEEL HURRICANE ANCHORS (SIMPSON TS-18 OR EQUIVALENT). USE TWO AT EACH END OF ALL GIRDER TRUSSES.

8. PROVIDE MINIMUM OF (3) STUDS UNDER EACH END OF EACH GIRDER TRUSS UNLESS OTHERWISE NOTED.

9. TRUSS MANUFACTURER TO PROVIDE ALL TRUSS TO TRUSS CONNECTORS.

10. ALL VERTICAL WEBS OF GABLE END TRUSSES TO BE BRACED TO FLOOR OR ROOF SO THAT THE MAXIMUM VERTICAL UNBRACED HEIGHT OF EACH WEB IS 4'-0".

11. ROOF TRUSS MINIMUM DESIGN REQMTS:

TOP CHORD LIVE LOAD	30 PSF
TOP CHORD DEAD LOAD	10 PSF
BOTTOM CHORD LIVE LOAD	0 PSF
BOTTOM CHORD DEAD LOAD	10 PSF
MAX. TOTAL LOAD DEFLECTION:	L/240
MAX. LIVE LOAD DEFLECTION:	L/360

   FLOOR TRUSS MINIMUM DESIGN REQMTS:

TOP CHORD LIVE LOAD	40 PSF
TOP CHORD DEAD LOAD	10 PSF
BOTTOM CHORD LIVE LOAD	0 PSF
BOTTOM CHORD DEAD LOAD	10 PSF
MAX. TOTAL LOAD DEFLECTION:	L/360
MAX. LIVE LOAD DEFLECTION:	L/480

12. GENERAL CONTRACTOR TO COORDINATE MECHANICAL EQUIPMENT LOADS AND LOCATIONS WITH THE TRUSS MANUFACTURER AS REQUIRED.

COLD FORMED STEEL FRAMING

1. THE EXTENT OF THE WORK FOR THE EXTERIOR METAL STUD WALL SYSTEM IS DETAILED ON THE ARCHITECTURAL DRAWINGS. THESE NOTES SHALL BE WORKED IN CONJUNCTION WITH THOSE DRAWINGS AND THE SPECIFICATIONS. INCONSISTENCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.

2. ALL STUDS, JOISTS AND ACCESSORIES SHALL BE OF THE TYPE, SIZE, STEEL THICKNESS AND SPACING SHOWN ON THE PLANS, AS MANUFACTURED BY MARINO INDUSTRIES. EQUIVALENT PRODUCTS BY OTHER MANUFACTURERS MAY BE SUBMITTED WITH ENGINEER'S PRIOR APPROVAL. SUBSTITUTIONS MUST MEET OR EXCEED MARINO PROPERTIES. PRODUCTS FAILING TO MEET THESE MINIMUM PROPERTIES WILL BE REJECTED. ALL STUDS TO BE MARINO TYPE SW (1 5/8" FLANGE WIDTH) OR GREATER U.N.O.

3. STUDS, TRACK AND BRACING SHALL BE MANUFACTURED PER ASTM SPECIFICATION C-955.

4. ALL GALVANIZED STUDS, JOISTS AND ACCESSORIES 12, 14 AND 16 GAUGE SHALL BE FORMED FROM STEEL THAT CONFORMS TO THE REQUIREMENTS OF ASTM A446, GRADE D, WITH A MINIMUM SPECIFIED YIELD STRENGTH OF 50,000 PSI.

5. ALL GALVANIZED STUDS, JOISTS AND ACCESSORIES, 18 GAUGE OR LIGHTER, SHALL BE FORMED FROM STEEL THAT CONFORMS TO THE REQUIREMENTS OF ASTM A446, GRADE A, WITH A MINIMUM SPECIFIED YIELD STRENGTH OF 33,000 PSI.

6. ALL MEMBERS AND ACCESSORIES SHALL BE HOT DIPPED GALVANIZED PER ASTM A525 AND SHALL HAVE A MINIMUM G-60 COATING.

7. ALL LIGHT GAUGE MEMBERS ARE DESIGNED IN ACCORDANCE WITH AISI, "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS", LATEST EDITION.

8. PROVIDE CHANNEL SHAPED STUDS, RUNNERS, TRACKS, BLOCKING, CLIP ANGLES, SHOES, REINFORCEMENTS, FASTENERS AND OTHER ACCESSORIES RECOMMENDED BY THE MANUFACTURER FOR A COMPLETE FRAMING SYSTEM.

9. FRAME ALL OPENINGS LARGER THAN 2' WITH A MINIMUM OF DOUBLE STUDS EACH SIDE OR AS SHOWN ON THE DESIGN DRAWINGS.

10. TRACK SHALL BE ATTACHED TO FOUNDATIONS, WOOD PLATES AND OTHER STRUCTURAL COMPONENTS AS SHOWN ON DRAWINGS. SECURELY ANCHOR STUDS IN TRACK TO FLOOR CONSTRUCTION AND OVERHEAD STRUCTURE. PROVIDE SLIP JOINTS WHERE NON-BEARING VERTICAL STUDS MEET FLOOR OR ROOF STRUCTURAL MEMBER. ALLOW 3/4" OF VERTICAL DEFLECTION AT SLIP JOINTS.

11. ALL COLD FORM TO COLD FORM STEEL CONNECTIONS SHALL BE MADE WITH NO. 10 TEKS/3 SCREWS OF APPROPRIATE LENGTH UNLESS OTHERWISE SHOWN ON THE PLANS. PENETRATION OF JOINED MATERIAL SHALL NOT BE LESS THAN 3 EXPOSED THREADS.

12. ATTACH SHEATHING AND GYPSUM WALLBOARD TO STUDS AND JOISTS PER MANUFACTURER'S RECOMMENDATIONS UNLESS OTHERWISE SHOWN ON THE PLAN.

13. AXIALLY LOADED STUDS SHALL BE SEATED SQUARELY AGAINST THE WEB OF THE TOP AND BOTTOM TRACK. STUDS SHALL BE PLUMB AND SECURELY ATTACHED TO FLANGES OF THE TOP AND BOTTOM TRACK. TRACK SHALL NOT BE USED TO SUPPORT ANY LOADS UNLESS SPECIFICALLY DESIGNED FOR THE PURPOSE.

14. SPLICES IN AXIALLY LOADED STUDS SHALL NOT BE PERMITTED.

15. ALL AXIALLY LOADED MEMBERS SHALL BE ALIGNED VERTICALLY TO ALLOW FOR FULL TRANSFER OF LOAD TO THE FOUNDATION.

16. INSTALL BUILT-UP HEADERS IN ALL OPENINGS LARGER THAN STUD SPACING.

17. ALL BUILT-UP HEADERS SHALL HAVE WEB STIFFENERS AT BEARING POINTS AND INTERMEDIATE WEB STIFFENERS AT POINTS OF CONCENTRATED LOADS.

18. JOISTS SHALL BE LOCATED DIRECTLY OVER BEARING STUDS AND HAVE THEIR WEB AREA PERPENDICULAR TO THE BEARING SURFACE.

19. HORIZONTAL STUD BRACING SHALL BE 18 GAUGE x 2" WIDE STEEL STRAPS OR MANUFACTURER'S STANDARD BRIDGING CHANNELS. BRACING SHALL BE CONTINUOUS AND LOCATED AT 4'-0" O.C. MAX. FOR THE FULL HEIGHT OF ALL LOAD BEARING WALLS. SIMILARLY, PROVIDE BRACING FOR NON-LOAD BEARING WALLS UNTIL PERMANENT FACING MATERIAL (GYPSUM SHEATHING OR PLYWOOD) IS INSTALLED. ALL STRAPS SHALL BE SECURELY ANCHORED TO A STRUCTURAL MEMBER AT EACH END CAPABLE OF RESISTING ALL TEMPORARY BRACING FORCES. BRACES ARE TO BE INSTALLED ON BOTH SIDES OF THE WALL UNLESS NOTED OTHERWISE AND ATTACHED TO ALL LOAD BEARING STUDS.

20. AT TRACK BUTT JOINTS, TRACK MUST BE ANCHORED TO A COMMON STRUCTURAL ELEMENT.

21. ALL PERMANENT AND TEMPORARY BRACING, BLOCKING, STRAPPING AND WEB REINFORCEMENT SHALL BE INSTALLED PRIOR TO LOADING OF ANY STRUCTURAL MEMBER.

22. STUD FRAMING SUBCONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS MEETING THE PROJECT SPECIFICATIONS AND THE REQUIREMENTS OF THE DESIGN DOCUMENTS. SHOP DRAWINGS SHALL ILLUSTRATE THE DESIGN OF THE STEEL STUD EXTERIOR WALL FRAMING AND SHOW ALL STEEL STUD WALL FRAMING CONNECTIONS, SHEATHING ATTACHMENTS, STIFFENERS, ALL WALL OPENINGS, BUILT-UP HEADER AND POST LOCATIONS, AS WELL AS ALL PERMANENT AND TEMPORARY WALL BRACING AND THEIR LOCATIONS.

23. THE EXTERIOR WALL SYSTEM SHALL BE DESIGNED FOR A MAXIMUM ALLOWABLE HORIZONTAL DEFLECTION OF L/600 OF THE SPAN MEASURED FROM POINT OF ATTACHMENT TO STRUCTURAL STEEL OR CONCRETE, INCLUDING EFFECTIVE STUDS ONLY. THE DESIGN WIND PRESSURE SHALL BE A MINIMUM 36 POUNDS PER SQUARE FOOT.

24. PERFORM WELDING OF ALL LIGHT GAUGE STEEL FRAMING IN ACCORDANCE WITH AWS D1.3 (SPECIFICATION FOR WELDING SHEET STEEL IN STRUCTURES).

25. CUT ALL LIGHT GAUGE STEEL FRAMING MEMBERS WITH SAWS OR SHEARS. FLAME CUTTING IS NOT PERMITTED.

26. THE LIGHT GAUGE STEEL FRAMING SUPPLIER AND ERECTOR SHALL HAVE A MINIMUM 5 YEARS EXPERIENCE IN THE FABRICATION AND ERECTION OF LIGHT GAUGE STEEL FRAMING SYSTEMS.

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. 30283, EXPIRATION DATE 5/18/2024.

BAKER, INGRAM, & ASSOCIATES
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No.	Description		Date
NO	REVISION DESCRIPTION	BY	DATE

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CERTIFICATION:
I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Maryland, license number 13853, expiration date 08-29-2022.

BID DOCUMENTS			S100
ANNE ARUNDEL COUNTY			MAY 2024
DEPARTMENT OF PUBLIC WORKS			202214.1
REVISED DATE / BY	APPROVED DATE	APPROVED DATE	SCALE: AS NOTED
			DRAWN BY: AJC
	CHIEF ENGINEER	PROJECT MANAGER	CHECKED BY: JKW
	APPROVED DATE	APPROVED DATE	SHEET: OF
			PROJECT #: P584700
	ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	CONTRACT #: P584701

STRUCTURAL NOTES

Project P584701 - Mayo Beach Park Repairs Project
4150 Honeysuckle Dr
Edgewater, MD 21037

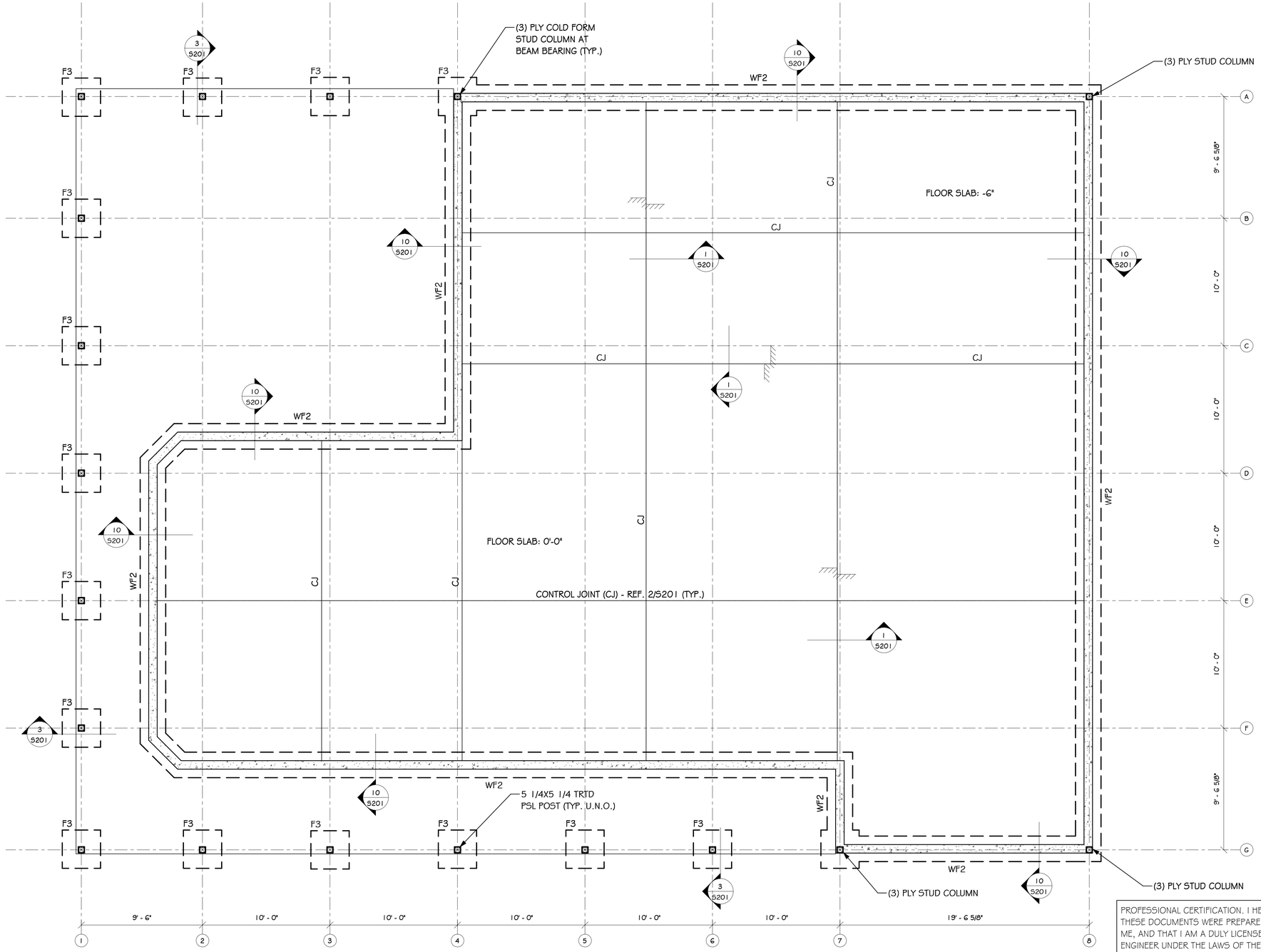
FOUNDATION & FIRST FLOOR PLAN NOTES:

1. FIRST FLOOR REFERENCE ELEVATION = 0'-0". (REF. SITE PLAN 50.0')
2. ELEVATIONS ARE NOTED FROM REF. EL. 0'-0" AS FOLLOWS:
   - (-#'-#") INDICATES TOP OF PIER
   - [-#'-#"] INDICATES TOP OF FOOTING
3. FOUNDATION MEMBERS SHALL BE AT THE FOLLOWING ELEVATIONS, U.N.O.:
   - PIERS T/PIER (-0'-8") U.N.O.
   - FLOOR SLAB T/SLAB (0'-0") - U.N.O.
   - EXTERIOR FTGS T/FTG [-2'-0"] U.N.O.
     - STEP FTGS AS REQ'D TO PROVIDE MIN. 2'-8" FROM FIN. GRADE TO BOTT. OF FTG. COORD. W/ CIVIL.
   - INTERIOR FTGS T/FTG [-0'-8"] U.N.O.
4. FOUNDATION MEMBERS ARE DESIGNATED AS FOLLOWS:
   - F#.# FOOTING MARK - SEE SCHEDULE
   - F# PIER MARK - SEE FOUNDATION SECTIONS. ALL PIERS ARE P1 U.N.O.
5. PROVIDE THICKENED SLAB UNDER INTERIOR NON-STRUCTURAL CMU WALLS AS REQUIRED, SEE TYPICAL DETAILS AND ARCH DRAWINGS.
6. COORDINATE WITH ARCH., MECH., ELEC. AND PLMB DRAWINGS FOR FLOOR SLOPES, DRAINS, OPENINGS, DEPRESSIONS, ETC.
7. REF. TO ARCH. DRAWINGS FOR DIMENSIONS NOT SHOWN.
8. REF. TO STRUCTURAL NOTES DRAWINGS S-100.
9. REF. TO TYPICAL DETAILS ON DRAWING S-301.
10. TYPICAL SLAB ON GRADE CONST.: 4" SLAB W/ 4" STONE LAYER. REINF. W/ WWF 6x6-W2.1xW2.1 U.N.O. PROVIDE CJ @ COLUMNS & 17'-0" MAX. SPACING. REF. TYPICAL DETAILS.

FOOTING SCHEDULE

MARK	SIZE	THICK.	REINFORCING
F3	3'-0" x 3'-0"	1'-0"	4 #4 E.W. BOTT.
WF2	2'-0" x CONT.	1'-0"	3 #5 LONGIT #4 @ 48" TRANSV.

NOTE:
ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF, TO BE VERIFIED IN FIELD BY A GEOTECHNICAL ENGINEER PRIOR TO CASTING FOOTING CONCRETE.



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P1 / S101 FOUNDATION PLAN
1/4" = 1'-0"

BID DOCUMENTS | S101

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No.	Description		Date
NO	REVISION DESCRIPTION	BY	DATE

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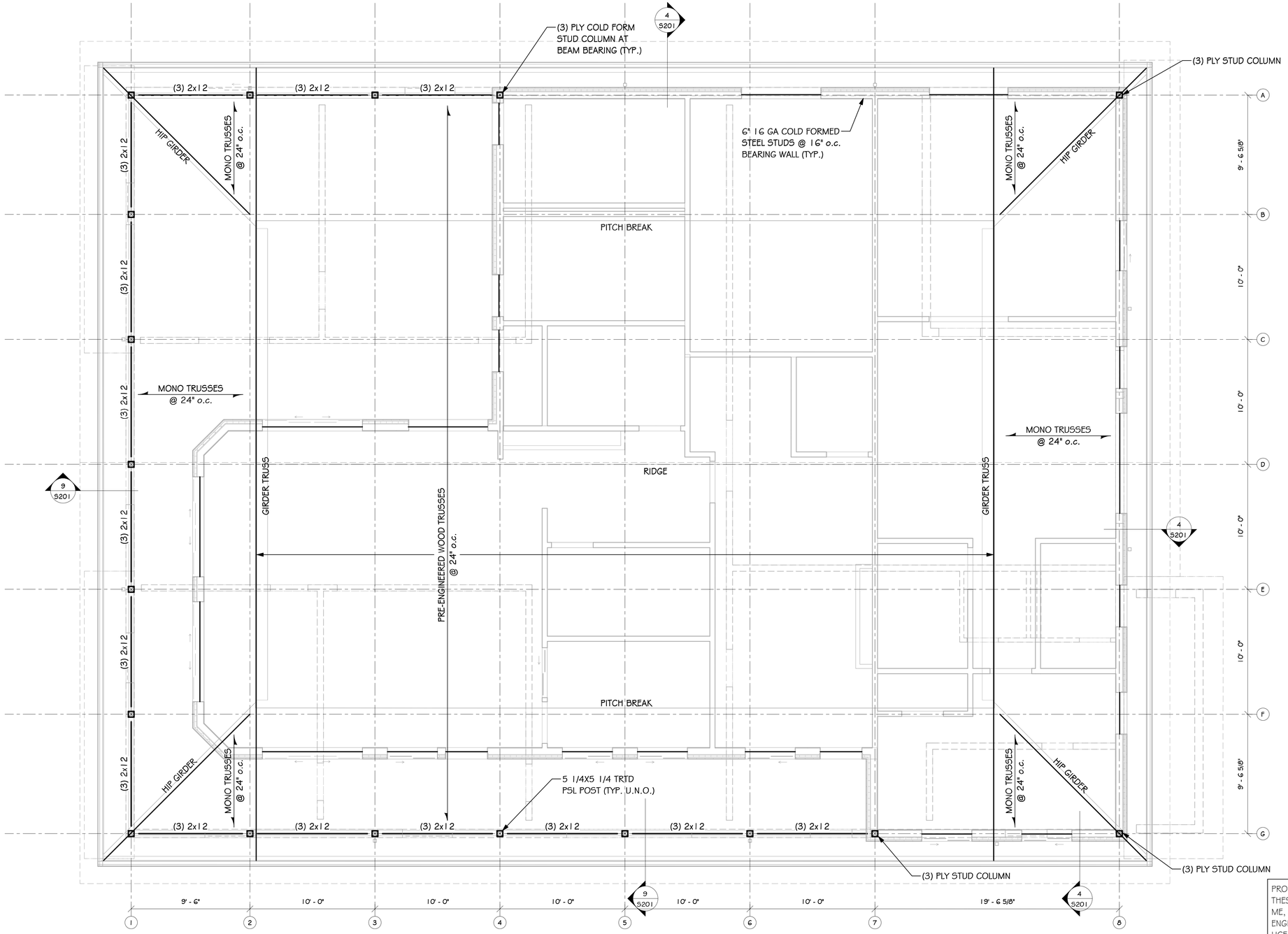
CERTIFICATION:
I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Maryland, license number 12853, expiration date 08-28-2022.

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

REVISED DATE	BY	APPROVED DATE	APPROVED DATE		
		CHIEF ENGINEER	PROJECT MANAGER	SCALE: AS NOTED	FOUNDATION PLAN
		APPROVED DATE	APPROVED DATE	DRAWN BY: AJC	
				CHECKED BY: JKW	Project P584701 - Mayo Beach Park Repairs Project
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	SHEET: OF	
				PROJECT #: P584700	4150 Honeysuckle Dr Edgewater, MD 21037
				CONTRACT #: P584701	

MAY 2024
202214.1



P1 S102

ROOF FRAMING PLAN

1/4" = 1'-0"

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. 30283, EXPIRATION DATE 5/18/2024.

BID DOCUMENTS | S102

BAKER, INGRAM, & ASSOCIATES
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No.	Description		Date
NO	REVISION DESCRIPTION	BY	DATE

WGM ARCHITECTURE + INTERIORS
WHEELER GOODMAN MASEK
165 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
410.263.6787 www.wgm-arch.com

CERTIFICATION:
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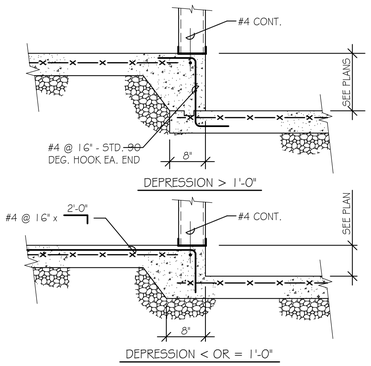
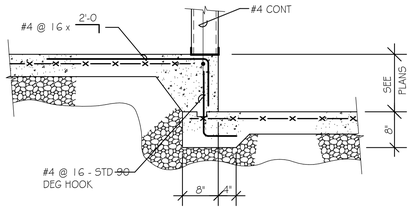
ANNE ARUNDEL COUNTY — MAY 2024
DEPARTMENT OF PUBLIC WORKS — 202214.1

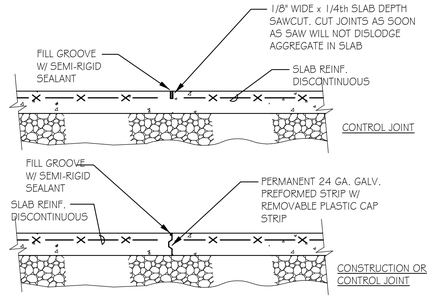
REVISED DATE	BY	APPROVED DATE	APPROVED DATE		
				SCALE: AS NOTED	ROOF FRAMING PLAN
				DRAWN BY: AJC	
		CHIEF ENGINEER	PROJECT MANAGER	CHECKED BY: JKW	Project P584701 - Mayo Beach Park Repairs Project 4150 Honeysuckle Dr Edgewater, MD 21037
		APPROVED DATE	APPROVED DATE	SHEET: OF	
				PROJECT #: P584700	
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	CONTRACT #: P584701	



1 / S201 SLAB DEPRESSION DETAILS
3/4" = 1'-0"

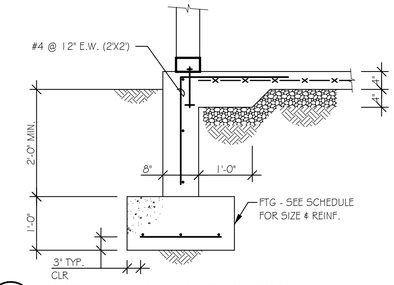


1 / S201 SLAB DEPRESSION DETAIL
3/4" = 1'-0"

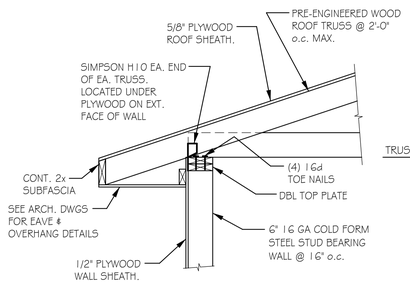


NOTE:
1. PROVIDE CONTROL JOINTS @ 20'-0 o.c. EA. WAY MAX. - U.N.O.
2. CONTROL JOINTS MAY BE SAWCUT OR FORMED AS INDICATED ABOVE.
3. CONTRACTOR TO ADEQUATELY BRACE AND MAINTAIN GALV. STRIP TO MAINTAIN STRAIGHT ALIGNMENT OF SCREED.

2 / S201 SLAB CONST/CONTROL JOINT
3/4" = 1'-0"

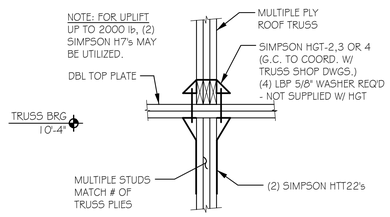


3 / S201 SECTION - COLUMN BASE DETAIL
3/4" = 1'-0"



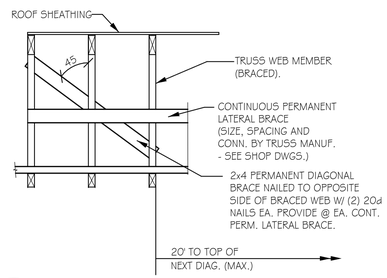
(FOR UPLIFT UP TO 1000 lb)

4 / S201 TYPICAL TRUSS WALL BEARING
3/4" = 1'-0"

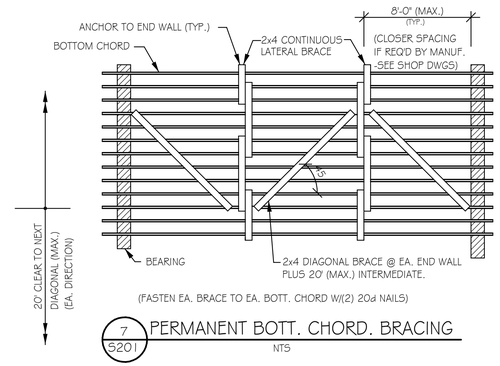


(FOR UPLIFT UP TO 9000 lb)

5 / S201 GIRDER TRUSS WALL BEARING
3/4" = 1'-0"

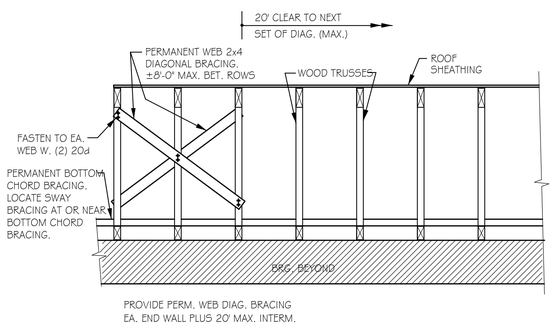


6 / S201 PERM. DIAG. BRACE @ CONT. PERM. LAT. BRACE



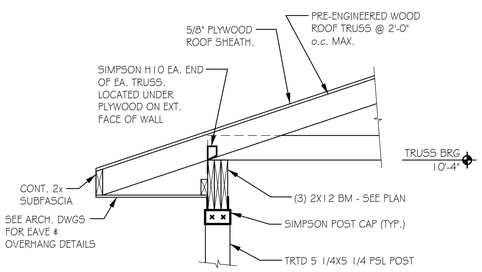
(FASTEN EA. BRACE TO EA. BOTT. CHORD W/(2) 20d NAILS)

7 / S201 PERMANENT BOTT. CHORD. BRACING
NTS

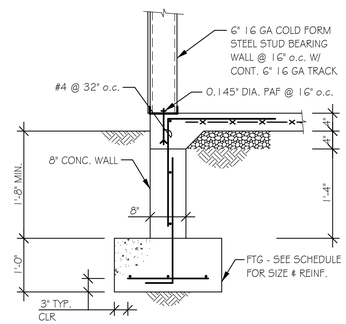


PROVIDE PERM. WEB DIAG. BRACING EA. END WALL PLUS 20' MAX. INTERM.

8 / S201 PERM. SWAY BRACING
NTS



9 / S201 TYPICAL TRUSS BEAM BEARING
3/4" = 1'-0"



10 / S201 TYPICAL FOUNDATION WALL
3/4" = 1'-0"

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. 30283, EXPIRATION DATE 5/18/2024.

BID DOCUMENTS | S201

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STEVENSVILLE, MARYLAND 21666
410.263.6787 www.wgm-arch.com

CERTIFICATION:
I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Mayland, license number 13853, expiration date 08-29-2022.

ANNE ARUNDEL COUNTY — MAY 2024
DEPARTMENT OF PUBLIC WORKS — 202214.1

REVISED DATE	BY	APPROVED DATE	APPROVED DATE	SCALE: AS NOTED	TYPICAL SECTIONS & DETAILS
				DRAWN BY: AJC	
		CHIEF ENGINEER	PROJECT MANAGER	CHECKED BY: JKW	Project P584701 - Mayo Beach Park Repairs Project
		APPROVED DATE	APPROVED DATE	SHEET: OF	4150 Honeysuckle Dr
				PROJECT #: P584700	Edgewater, MD 21037
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	CONTRACT #: P584701	

GENERAL MECHANICAL PROJECT NOTES

1. ALL DUCTWORK SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS.
2. COORDINATE THE LOCATION OF ALL AIR DEVICES WITH LIGHT FIXTURES AND THE ARCHITECT'S REFLECTED CEILING PLANS, AND DOCUMENTS.
3. COORDINATE DUCT ROUTING WITH APPROVED TRUSS/STEEL SHOP DRAWINGS.
4. COORDINATE MOTORS AND OTHER ELECTRICAL EQUIPMENT FURNISHED UNDER MECHANICAL DIVISIONS WITH ELECTRICAL DIVISION. PROVIDE EQUIPMENT COORDINATION TABLE AS A SHOP DRAWING FOR REVIEW. TABLE SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING INFORMATION:
   a. EQUIPMENT POWER REQUIREMENTS INCLUDING AMPS AND VOLTAGES.
   b. DISCONNECTING MEANS AND OVER CURRENT PROTECTION REQUIREMENTS.
   c. CONTROL REQUIREMENTS.
7. COORDINATE THE INSTALLATION OF LIGHTING FIXTURES WITH PIPING, DUCTWORK, AIR DEVICES, SPRINKLERS, AND EQUIPMENT BEING INSTALLED IN THE FACILITY SUCH THAT PIPING, DUCTWORK, AIR DEVICES, AND EQUIPMENT DO NOT BLOCK OR IMPEDE LIGHTING.
8. INSTALL DUCTWORK SO THAT VOLUME DAMPERS, FANS, ETC., ARE ACCESSIBLE. PROVIDE ACCESS PANELS PER SPECIFICATION REQUIREMENTS.
9. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF AND CEILING CONSTRUCTION TYPES AND DETAILS. REFER TO STRUCTURAL DRAWINGS FOR TRUSS SIZES AND LOCATIONS.
10. LOCATE ALL EQUIPMENT WHICH MUST BE SERVICED, OPERATED, AND MAINTAINED IN A FULLY ACCESSIBLE POSITION. EQUIPMENT SHALL INCLUDE, BUT NOT BE LIMITED TO VALVES, TRAPS, MOTORS, CONTROLLERS, DRAIN POINTS, ETC. IF REQUIRED FOR ACCESSIBILITY, FURNISH ACCESS DOORS FOR THIS PURPOSE. COORDINATE LOCATION OF ACCESS DOORS WITH ARCHITECT. MINOR DEVIATIONS FROM DRAWINGS MAY BE MADE TO ALLOW FOR BETTER ACCESSIBILITY.
11. COORDINATE MOUNTING HEIGHTS AND LOCATIONS OF THERMOSTATS SERVING EQUIPMENT WITH THE OWNER(S) AND/OR ARCHITECT.
12. FIRE STOP ALL PIPING AND DUCT PENETRATIONS THRU FIRE WALLS, PARTITIONS, AND FLOORS. PROVIDE LISTED FIRE DAMPERS IN ALL DUCTS THAT PASS THROUGH FIRE BARRIERS AND PARTITIONS. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE RATED WALL, FLOOR, PARTITION AND BARRIER LOCATIONS.
13. REPLACE FILTERS SERVING AIR HANDLING UNIT EQUIPMENT PRIOR TO FINAL BALANCING OF AIR DISTRIBUTION SYSTEMS.
14. PREPARE COORDINATION DRAWINGS FOR ALL INTERIOR BUILDING SYSTEMS. DRAWINGS SHALL BE ¼" = 1" - 0" SCALE. SHOW THE RELATIONSHIP OF COMPONENTS SHOWN ON SEPARATE SHOP DRAWINGS. INDICATE REQUIRED INSTALLATION SEQUENCES. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
15. PROVIDE FLEXIBLE DUCT CONNECTIONS AT ALL DUCTED ROOFTOP TOP UNITS, AIR HANDLING UNITS, FAN COIL UNITS, HEAT PUMPS, AND EXHAUST FAN INLET AND OUTLET CONNECTIONS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
16. PROVIDE WEATHER TIGHT WALL AND ROOF DUCT AND PIPING PENETRATIONS. ALL SEALING MATERIALS TO BE APPROVED BY ARCHITECT.
17. ROUTE DOMESTIC WATER PIPING, SPRINKLER PIPING, HVAC PIPING, GAS PIPING, ETC., IN PIPE CHASES, IN FURRED OUT WALLS AND ABOVE CEILINGS, NO PIPING SHALL BE EXPOSED UNLESS APPROVED BY THE ARCHITECT OR OWNER(S).
18. PROVIDE A BALANCING DAMPER ON ALL BRANCH DUCTS SERVING SUPPLY AIR DEVICES AND RETURN AIR DEVICES WHETHER SHOWN ON PLANS OR NOT. BRANCH DUCTWORK IN APARTMENT SHALL NOT GET BALANCING DAMPERS.
19. THE DRAWINGS ARE DIAGRAMMATIC AND DO NOT INDICATE EVERY COMPONENT AND/OR ACCESSORY REQUIRED FOR A COMPLETE INSTALLATION. PROVIDE NECESSARY AND REQUIRED COMPONENTS AND ACCESSORIES TO ENSURE THAT THE ENTIRE SYSTEM IS FUNCTIONAL AND INCOMPLIANCE WITH APPLICABLE CODES, ACCEPTED INDUSTRY STANDARDS, AND MANUFACTURER'S INSTALLATION REQUIREMENTS/RECOMMENDATIONS UPON COMPLETION OF WORK.
20. ALL DUCTWORK AND PIPING SHALL RUN AS HIGH AS POSSIBLE AND ABOVE FINISHED CEILINGS UNLESS OTHERWISE NOTED.
21. ALL OUTSIDE AIR LOUVERS (INTAKE, EXHAUST, OR RELIEF) SHALL BE FITTED WITH ½" MESH BIRD SCREENS MOUNTED BEHIND LOUVERS. ALL UNUSED PORTIONS OF OUTSIDE AIR LOUVERS (INTAKE, EXHAUST, OR RELIEF) SHALL BE BLANKED OFF AIRTIGHT WITH 22-GAUGE GALVANIZED SHEET METAL AND 2 INCH RIGID INSULATION. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
22. INSTALL VALVES AND COIL ASSEMBLIES IN ACCESSIBLE LOCATIONS. PROVIDE ACCESS PANELS PER SPECIFICATIONS.
23. DO NOT RELEASE ANY CFC OR HCFC BASED REGRIGERANT INTO THE ATMOSPHERE DURING INSTALLATION, START-UP, OR SEVICING OF NEW OR EXISTING HVAC EQUIPMENT EITHER DIRECTLY OR INDIRECTLY. UTILIZE AN APPROPRIATE REFRIGERANT PURIFICATION/RECLAMATION SYSTEM THAT IS CAPABLE OF SEPARATION AND REMOVAL OF OIL AND RESIDUAL MOISTURE, AND DOT-APPROVED CONTAINMENT OF RECOVERED REFRIGERANT.
24. ALL REFRIGERANT PIPING SHALL BE SIZED AND SUPPORTED/INSTALLED IN ACCORDANCE WITH APPLICABLE CODES. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

MECHANICAL LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
10x8		RECTANGULAR DUCT
10"⌀		ROUND DUCT
10"/10"⌀		OVAL DUCT
R		DUCT RISING UP
D		DUCT DROPPING DOWN
		FLEXIBLE CONNECTION DUCTWORK
	S.L.D.	DUCTWORK WITH SOUND LINING
		DUCTWORK WITH 2 HOUR FIRE RATED ENCLOSURE
		TURNING VANES
	S.O.	SCREENED OPENING
		SIDE WALL REGISTER
	SA	SUPPLY AIR DUCT; UP, DOWN
	RA	RETURN AIR DUCT; UP, DOWN
	EA	EXHAUST AIR DUCT; UP, DOWN
		SUPPLY AIR DIFFUSER
		RETURN AIR REGISTER OR GRILLE
		EXHAUST AIR REGISTER OR GRILLE
	BDD	BACK DRAFT DAMPER - GRAVITY
M	MOD	MOTOR OPERATED DAMPER
	VD	VOLUME DAMPER
	UH	UNIT HEATER
UC		UNDER CUT DOOR
	A.P., AD	ACCESS PANEL, ACCESS DOOR
H		HUMIDITY SENSOR - UNIT NO. CONTROLLED
T		TEMPERATURE SENSOR - UNIT NO. CONTROLLED
⌀	DIA.	DIAMETER
#	NO.	NUMBER
℄	CFM	CUBIC FEET PER MINUTE

MECHANICAL LEGEND

SYMBOL — DESCRIPTION

A / 150 — AIR DEVICE REFERENCE SYMBOL; SIZE; CFM

A / X — SECTION MARKER; SECTION LETTER; SHEET WHERE SECTION IS SHOWN

XX — DRAWING NOTE REFERENCE SYMBOL

XX — REVISION REFERENCE SYMBOL

MECHANICAL LEGEND

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
ADJ.	ADJUSTABLE	LSD	LINEAR SLOT DIFFUSER
ACV	AUTOMATIC CONTROL VALVE	LF	LINEAR FEET
AFF	ABOVE FINISHED FLOOR	LAT	LEAVING AIR TEMPERATURE
AFG	ABOVE FINISHED GRADE	LWT	LEAVING WATER TEMPERATURE
APD	AIR PRESSURE DROP	MFGR.	MANUFACTURER
AHU	AIR HANDLING UNIT	MBH	ONE THOUSAND BTU PER HOUR
BAS	BUILDING AUTOMATION SYSTEM	MAX.	MAXIMUM
BFF	BELOW FINISHED FLOOR	MIN.	MINIMUM
BFG	BELOW FINISHED GRADE	MT'D	MOUNTED
BLDG.	BUILDING	NO	NORMALLY OPENED
BS	BIRD SCREEN	NC	NORMALLY CLOSED
CONT.	CONTINUATION	NIC	NOT IN CONTRACT
CG	CEILING GRILLE	NTS	NOT TO SCALE
CU	CONDENSING UNIT	OC	ON CENTER
CONN.	CONNECTION	OED	OPEN END DUCT
CFH	CUBIC FEET PER HOUR	OA	OUTSIDE AIR
CLG.	CEILING	PD	PUMP DISCHARGE
CUH	CABINET UNIT HEATER	PSIG	POUNDS PER SQUARE INCH GAUGE
DTL.	DETAIL	RA	RETURN AIR
DB	DRY BULB	RAG	RETURN AIR GRILLE
DWG.	DRAWING	RAR	RETURN AIR REGISTER
DN.	DOWN	RM.	ROOM
EA	EXHAUST AIR	REQ'D	REQUIRED
EAG	EXHAUST AIR GRILLE	SA	SUPPLY AIR
EAR	EXHAUST AIR REGISTER	SAD	SUPPLY AIR DIFFUSER
ESP	EXTERNAL STATIC PRESSURE	SF	SQUARE FEET
EXH.	EXHAUST	SHT.	SHEET
EAT	ENTERING AIR TEMPERATURE	SPEC.	SPECIFICATIONS
EWT	ENTERING WATER TEMPERATURE	SLP	SLOPE
EMD	END OF MAIN DRIP	TYP.	TYPICAL
EMER.	EMERGENCY	TAG	TRANSFER AIR GRILLE
ET	EXPANSION TANK	TRAN.	TRANSITION
ELEV.	ELEVATION	UNO	UNLESS NOTED OTHERWISE
FFE	FINISHED FLOOR ELEVATION	V/Ø/HZ	VOLTS/PHASE/HERTZ
FLR.	FLOOR	VERT.	VERTICAL
FBO	FURNISHED BY OTHERS	VFD	VARIABLE FREQUENCY DRIVE
GPH	GALLONS PER HOUR	W/	WITH
GPM	GALLONS PER MINUTE	WPD	WATER PRESSURE DROP
HP	HORSE POWER	WB	WET BULB

MECHANICAL LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
RL	RL	REFRIGERANT LINE
RS	RS	REFRIGERANT SUCTION

MECHANICAL LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
	DP, DN	ELBOW DOWN OR DROP
	UP	ELBOW UP OR RISE
		PIPE CONTINUES
		FLOW IN DIRECTION OF ARROW
		RISE OR DROP IN PIPE
		SIDE PIPE CONNECTION
		BOTTOM PIPE CONNECTION
		TOP PIPE CONNECTION
		CAPPED OUTLET
		CAPPED PIPE
		UNION
		BALL VALVE

MECHANICAL DRAWING INDEX

Sheet Number	Sheet Name
M001	MECHANICAL COVER SHEET
M101	FLOOR PLAN - MECHANICAL
M201	MECHANICAL DETAILS
M301	MECHANICAL SCHEDULES

BID DOCUMENTS | M001

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300 East Joppa Road, Suite 501
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No.	Description		Date
NO	REVISION DESCRIPTION	BY	DATE

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410.263.6787 www.wgm-arch.com

CERTIFICATION:
I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Maryland, license number, expiration date

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

MAY 2024
280112-01-001

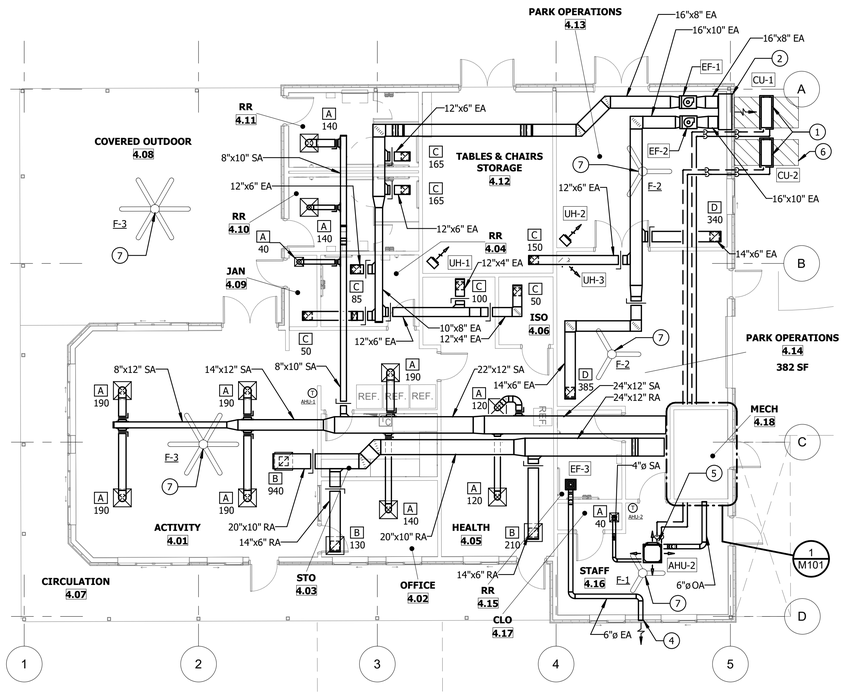
REVISED: DATE | BY

APPROVED DATE — CHIEF ENGINEER
APPROVED DATE — ASSISTANT CHIEF ENGINEER
APPROVED DATE — PROJECT MANAGER
APPROVED DATE — CHIEF, RIGHT OF WAY

SCALE: AS NOTED
DRAWN BY: SRB
CHECKED BY: JDM
SHEET: OF
PROJECT #: P584700
CONTRACT #: P584702

MECHANICAL COVER SHEET

Mayo Beach Park Day Camp Building
4150 Honeysuckle Dr
Edgewater, MD 21037

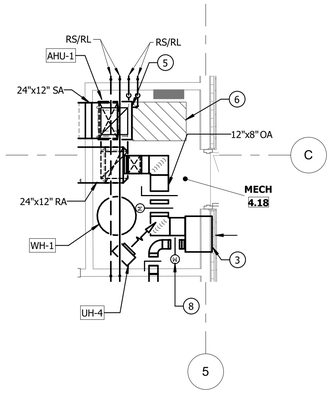


FLOOR PLAN - MECHANICAL

SCALE: 1/8" = 1'-0"

DRAWING NOTES:

1. MOUNT CONDENSING UNIT ON CONCRETE PAD. CONDENSING UNIT SHALL BE 8" ABOVE PAD. ROUTE RS/RL FROM CU TO AHU. SIZE AND ROUTE RS/RL PIPING BASED ON MANUFACTURE SPECIFICATION. RS/RL EXTERIOR JACKET COLOR SHALL MATCH EXTERIOR WALL SIDING. COORDINATE FINAL COLOR WITH ARCHITECT.
2. 4'-0"X1'-0" EXHAUST AIR DISCHARGE LOUVER WITH BIRD SCREEN. PROVIDE 4'-0"X1'-0"X1'-0" EXHAUST AIR PLENUM.
3. 2'-0"X1'-0" OUTSIDE AIR INTAKE LOUVER WITH BIRD SCREEN. PROVIDE 2'-0"X1'-0"X1'-0" OUTSIDE AIR PLENUM.
4. 6" DISCHARGE VENT THROUGH EXTERIOR WALL.
5. ROUTE RS/RL FROM AHU TO CU. SIZE AND ROUTE RS/RL PIPING BASED ON MANUFACTURE SPECIFICATION.
6. UNIT CLEARANCE. (TYP.)
7. CEILING FAN. COORDINATE FINAL LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS.
8. INTERLOCK MOTOR OPERATED DAMPER WITH AHU. (TYP OF 2)



1 M101 **MECH ROOM PART PLAN - MECHANICAL**

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

OUTSIDE AIR CALCULATION

Room Names	Occupancy Category2	Occupant Density #/1000 FT2	Occupant # per code3	CFM/ Person1	Sq. Ft. 2	CFM/Sq. Ft.1	OA cfm	Ez	OA CFM Total required	min. CFM supplied	% OA
activity	multi purpose		24	5	795	0.06	168	0.8	209.6	950	22.1%
health	office		4	5	356	0.06	41	0.8	51.7	240	21.5%
ISO	storage		0	0	46	0	0	0.8	0.0	0	0.0%
JAN	storage		0	0	39	0	0	0.8	0.0	70	0.0%
office	office		1	5	111	0.06	12	0.8	14.6	140	10.4%
RR1	restroom		0	0	121	0	0	0.8	0.0	130	0.0%
RR2	restroom		0	0	121	0	0	0.8	0.0	120	0.0%
RR3	restroom		0	0	74	0	0	0.8	0.0	0	0.0%
sto	storage		0	0	92	0	0	0.8	0.0	0	0.0%
AHU-1							Subtotal		275.9	1650.0	
							Actual		370.0	1650	22.4%
staff	office	0	8	5	220	0.06	53	0.8	66.5	360	18.5%
AHU-2							Subtotal		66.5	360.0	
							Actual		70.0	360	19.4%

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

4 0 4 8

SCALE: 1/8" = 1'-0"

8 0 8 16

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bowman.com

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No.	Description		Date
NO	REVISION DESCRIPTION	BY	DATE

WGM ARCHITECTURE + INTERIORS
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165 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
410.263.6787 www.wgm-arch.com

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ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

REVISED DATE	BY	APPROVED DATE	APPROVED DATE
		CHIEF ENGINEER	PROJECT MANAGER
		APPROVED DATE	APPROVED DATE
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY

BID DOCUMENTS — M101

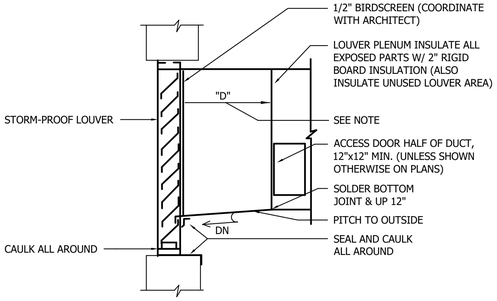
MAY 2024

280112-01-001

SCALE: AS NOTED
DRAWN BY: SRB
CHECKED BY: JDM
SHEET: OF
PROJECT #: P584700
CONTRACT #: P584702

FLOOR PLAN - MECHANICAL

Mayo Beach Park Day Camp Building
4150 Honeysuckle Dr
Edgewater, MD 21037

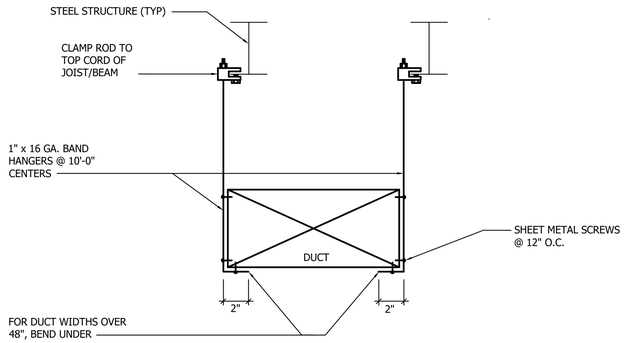


NOTE:

1. WHEN "D" IS OVER 24" PROVIDE 3/4" DRAIN AT 5'-0" CENTERS (IF DEPTH INTO PAPER IS GREATER THAN 5'-0"), 6" FROM LOUVER WITH TRAP.

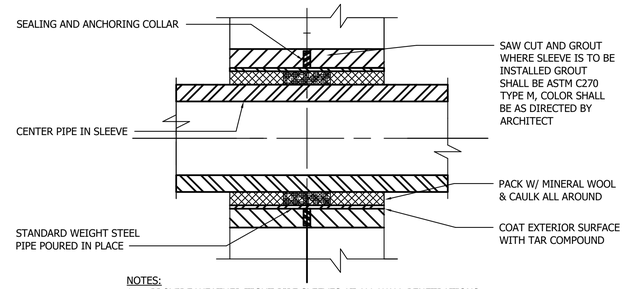
1 DETAIL - TYPICAL LOUVER CONNECTION

SCALE: NONE



2 DETAIL - TYPICAL DUCT HANGING SUPPORT

SCALE: NONE

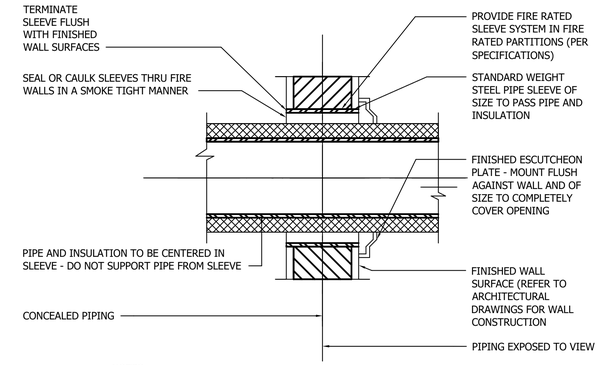


NOTES:

1. PROVIDE WEATHER TIGHT PIPE SLEEVES AT ALL WALL PENETRATIONS.
2. REFER TO ARCHITECTURAL DRAWINGS FOR WALL CONSTRUCTIONS.

3 DETAIL - TYPICAL PIPE SLEEVE THRU EXTERIOR WALL

SCALE: NONE

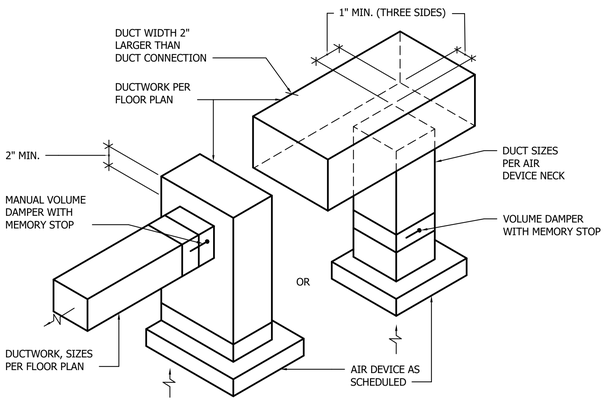


NOTES:

1. PROVIDE PIPE SLEEVES AT ALL WALL PENETRATIONS.
2. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT WALL CONSTRUCTIONS.

4 DETAIL - TYPICAL PIPE SLEEVE THRU INTERIOR WALL

SCALE: NONE

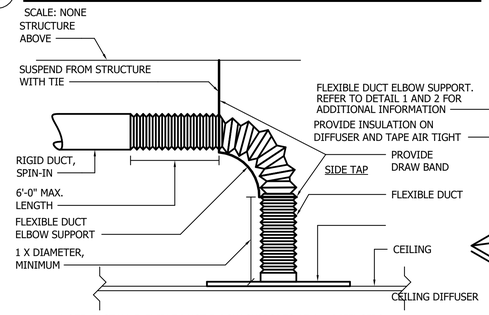


NOTE:

1. RETURN DUCT PERTINENT TO DUCTED RETURN SYSTEM(S) ONLY.

5 DETAIL - TYPICAL RETURN / EXHAUST AIR DUCT DEVICE CONNECTION

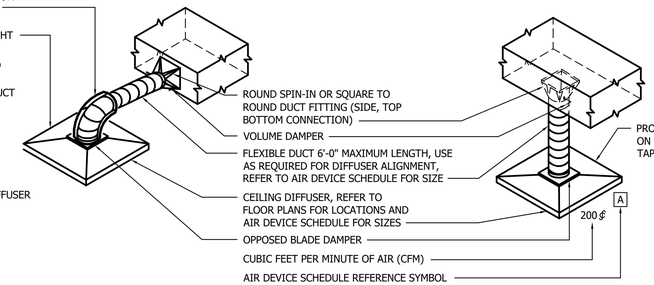
SCALE: NONE



NOTE: INSTALL FLEXIBLE DUCT ELBOW SUPPORTS AT ALL DIFFUSERS.

1 CEILING DIFFUSER CONNECTION

SCALE: NONE

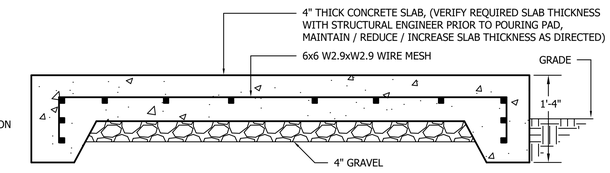


NOTES:

1. REFER TO AIR DEVICE SCHEDULE FOR TYPE OF DISCHARGES.
2. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES.
3. WHEN BRANCH DUCT LENGTHS EXCEED 6'-0", UTILIZE HARD DUCT,SAME SIZE AS FLEXIBLE DUCT OR AS INDICATED ON PLANS.
4. MAXIMUM FLEXIBLE DUCT SAG SHALL NOT EXCEED 1/2" PER LINEAR FOOT.
5. FLEXIBLE DUCT ELBOW SUPPORTS SHALL BE ATTACHED TO FLEXIBLE DUCTS UTILIZING MANUFACTURER RECOMMENDED DRAW BANDS.

6 DETAIL - TYPICAL CEILING DIFFUSER / FLEXIBLE DUCT CONNECTIONS

SCALE: NONE

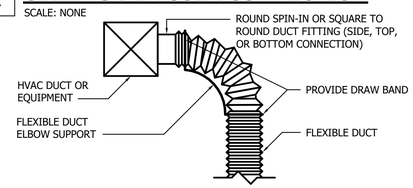


NOTES:

1. EXTEND PAD 4" BEYOND AIR COOLED CONDENSING UNIT / HEAT PUMP ON ALL 4 SIDES.
2. PROVIDE REBAR IN SIZES, QUANTITIES AND CONFIGURATION(S) AS RECOMMENDED BY THE STRUCTURAL ENGINEER.
3. SECURE CONDENSING UNIT / HEAT PUMP TO PAD PER MANUFACTURER'S RECOMMENDATIONS.

7 DETAIL - TYPICAL CONCRETE PAD FOR OUTDOOR CONDENSING UNIT / HEAT PUMP ON GRADE

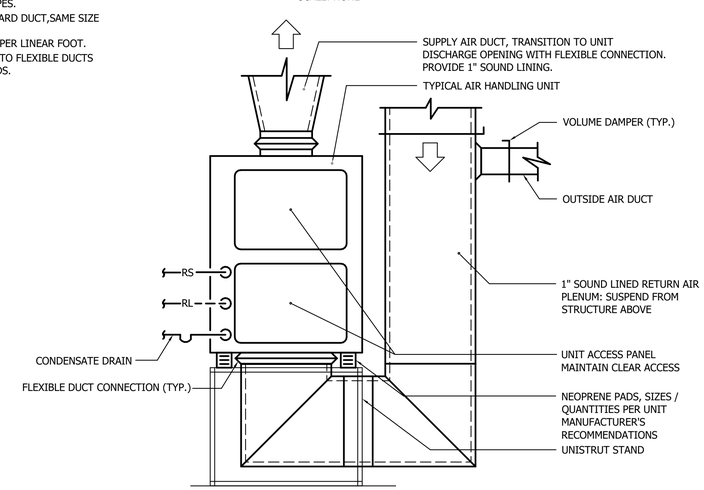
SCALE: NONE



NOTE: INSTALL FLEXIBLE DUCT ELBOW SUPPORTS AT ALL FLEXIBLE DUCT 90° BENDS.

2 FLEXIBLE DUCT CONNECTION TO DUCT BRANCH

SCALE: NONE

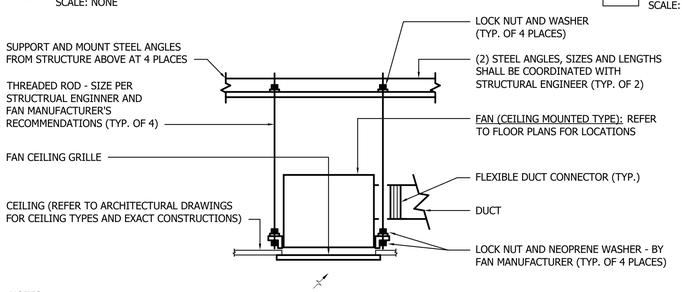


NOTES:

1. REFER TO AHU SCHEDULE OR FLOOR PLANS FOR BRANCH PIPE SIZES.

1 DETAIL - TYPICAL VERTICAL AIR HANDLING UNIT PIPING DIAGRAM

SCALE: NONE

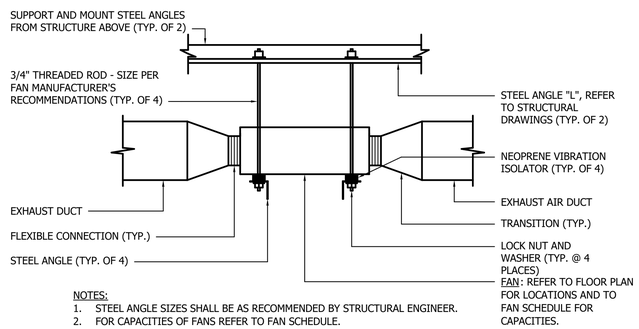


NOTES:

1. ALL FAN COMPONENTS - MOTOR, ELECTRICAL, ETC.. SHALL BE SERVICEABLE THROUGH REMOVABLE UNIT MOUNTED CEILING GRILLE.
2. COORDINATE FINAL SIZE OF STEEL ANGLES, ALL THREAD RODS, AND HARDWARE WITH FAN MANUFACTURER PRIOR TO FABRICATING.
3. FOR CAPACITIES OF FANS REFER TO FAN SCHEDULE.

8 DETAIL - TYPICAL CEILING MOUNTED EXHAUST FAN MOUNTING

SCALE: NONE



NOTES:

1. STEEL ANGLE SIZES SHALL BE AS RECOMMENDED BY STRUCTURAL ENGINEER.
2. FOR CAPACITIES OF FANS REFER TO FAN SCHEDULE.

9 DETAIL - TYPICAL IN-LINE FAN MOUNTING

SCALE: NONE

BID DOCUMENTS			M201
ANNE ARUNDEL COUNTY			MAY 2024
DEPARTMENT OF PUBLIC WORKS			280112-01-001
REVISED DATE / BY	APPROVED DATE	APPROVED DATE	SCALE: AS NOTED
			DRAWN BY: SRB
	CHIEF ENGINEER	PROJECT MANAGER	CHECKED BY: JDM
	APPROVED DATE	APPROVED DATE	SHEET: OF
			PROJECT #: P584700
	ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	CONTRACT #: P584702

MECHANICAL DETAILS

Mayo Beach Park Day Camp Building
4150 Honeysuckle Dr
Edgewater, MD 21037

Bowman
300 East Joppa Road, Suite 501
Towson, MD 21286
410.494.1111
bowman.com

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No.	Description		Date
NO	REVISION DESCRIPTION	BY	DATE

WGM ARCHITECTURE + INTERIORS
WHEELER GOODMAN MASEK
165 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
410.263.6787 www.wgm-arch.com

CERTIFICATION:
I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Mayland, license number, expiration date

EXHAUST FAN SCHEDULE

FAN DESIGNATION	AREA SERVED	CFM	ESP (IN H_2O)	DRIVE	FAN TYPE	HP (WATTS)	MOTOR RPM	SOUND LEVEL (SONES)	ELEC. CHAR. (V/ϕ/HZ)	BASIS OF DESIGN		ACCESSORIES	NOTES
				BELT (BD) / DIRECT (DD)						MFGR.	MODEL		
EF-1	BATHROOM	615	0.5	DD	I.L.	1/6	1725	9.8	120/1/60	GREENHECK	SQ-120-A	A,B,C,G,J	1
EF-2	PARK OPERATIONS	875	0.5	DD	I.L.	1/4	1725	8.1	120/1/60	GREENHECK	SQ-100-A	A,B,C,G,I	1
EF-3	RESTROOM	80	0.3	DD	CEIL	(80)	675	1.6	120/1/60	GREENHECK	BP-B70	A,B,C,D,E,F,G,H	1

ACCESSORIES:

A: DISCONNECT SWITCH AND THERMAL OVERLOAD PROTECTION	E: BIRDSCREEN		I: WALL SWITCH
B: BACKDRAFT DAMPER	F: EXHAUST GRILLE		J: CEILING MOUNTED MOTION SENSOR
C: HANGING BRACKET WITH VIBRATION ISOLATOR	G: MOTOR SIDE FAN GUARD		
D: LIGHT SWITCH	H: WL WALL LOUVER DISCHARGE		
FAN TYPES:			
I.L. - INLINE	CEIL = CEILING FAN		

NOTES:

1: REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION, AND ACCESSORIES ASSOCIATED WITH FAN.

CEILING FAN SCHEDULE

FAN DESIGNATION	FAN WIDTH (INCH)	WATTS	RPM	ELEC. CHAR. (V/ϕ/HZ)	BASIS OF DESIGN		NOTES
					MFGR.	MODEL	
F-1	60"	100	235	120/1/60	GLOBAL INDUSTRIAL	293104	1,2
F-2	72"	47.5	145	120/1/60	GLOBAL INDUSTRIAL	293047	1,2
F-3	96"	47.5	92	120/1/60	GLOBAL INDUSTRIAL	293048	1,2

NOTES:

1: REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION, AND ACCESSORIES ASSOCIATED WITH FAN.

2: PROVIDE OFF/LOW/MEDIUM/HIGH SPEED CONTROL.

AIR DEVICE SCHEDULE

TYPE	DUTY	CFM RANGE		INLET NECK SIZE	FACE SIZE	MAX N.C.	MAX NECK VELOCITY (FPM)	THROW (FT)	BASIS OF DESIGN		NOTES
		MIN	MAX						MFGR.	MODEL	
A	SUPPLY	0	40	6"	12"x12"	-	-	-	TITUS	TDC	1,2,4,5
		41	100	6"	24"x24"	-	-	-	TITUS	TDC	1,2,4,5
		101	180	8"	24"x24"	11	-	-	TITUS	TDC	1,2,4,5
		181	300	10"	24"x24"	18	-	-	TITUS	TDC	1,2,4,5
B	RETURN	0	280	10"x10"	24"x24"	11	400	-	TITUS	PAR	1,2,3,5
		281	530	12"x12"	24"x24"	21	600	-	TITUS	PAR	1,2,3,5
		531	1100	18"X18"	24"x24"	22	600	-	TITUS	PAR	1,2,3,5
C	EXHAUST	0	280	10"x10"	11-3/4"X11-3/4"	11	400	-	TITUS	350	1,2,3,5
D	EXHAUST	0	400	12"X12"	13-3/4"X13-3/4"	21	600	-	TITUS	350	1,2,3,5

NOTES:

1: REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND ACCESSORIES ASSOCIATED WITH AIR DEVICE.

2: REFER TO ARCHITECTURAL DRAWINGS FOR EXACT CEILING TYPES.

3: ALL RETURN, EXHAUST, TRANSFER, AND RELIEF GRILLES SHALL BE CENTERED IN THE CEILING TILE CLOSEST TO THE LOCATION INDICATED ON THE PLANS.

4: ALL SUPPLY AIR DIFFUSERS ARE 4-WAY BLOW UNLESS OTHERWISE NOTED.

5: AIR DEVICE SHALL BE OF ALUMINUM CONSTRUCTION IN SHOWER / LOCKER ROOM AREAS.

ELECTRIC UNIT HEATER SCHEDULE

UNIT HEATER DESIGNATION	AREA SERVED	DISCHARGE TYPE	FAN			CAPACITY (BTUH)	ELECTRICAL CHARACTERISTICS		THERMOSTAT TYPE	BASIS OF DESIGN		NOTES
		VERTICAL / HORIZONAL	CFM	HP	MOTOR RPM		HEATER KW	V/ϕ/HZ	INTEGRAL / REMOTE	MFGR.	MODEL	
UH-1	STORAGE	VERTICAL	350	0.1	1600	10,200	3	208/1/60	I	BERKO	HUHAA320	1,2,3,4,5,6
UH-2	PARK OPERATION	VERTICAL	350	0.1	1600	10,200	3	208/1/60	I	BERKO	HUHAA320	1,2,3,4,5,6
UH-3	PARK OPERATION	VERTICAL	350	0.1	1600	10,200	3	208/1/60	I	BERKO	HUHAA320	1,2,3,4,5,6
UH-4	MECH	VERTICAL	350	0.1	1600	10,200	3	208/1/60	I	BERKO	HUHAA320	1,2,3,4,5,6

NOTES:

1: REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND ACCESSORIES FOR ELECTRIC UNIT HEATER.

2: PROVIDE WITH THERMOSTAT, TYPE AS INDICATED ON SCHEDULE ABOVE.

3: PROVIDE DISCHARGE AS INDICATED ON SCHEDULE ABOVE.

4: SUPPORT UNIT HEATER FROM CEILING OR WALL STRUCTURE UTILIZING UNIT HEATER MANUFACTURER'S RECOMMENDED SUPPORT METHODS & HARDWARE.

5: UNIT SHALL BE PROVIDED WITH THERMAL OVERLOAD PROTECTION.

6: PROVIDE INTEGRAL DISCONNECT SWITCH.

THERMOSTAT TYPE:

I = INTEGRAL

R = REMOTE

SPLIT SYSTEM AHU SCHEDULE (w/ DX COOLING & HEAT PUMP)

INDOOR UNIT																										OUTDOOR UNIT										NOTES
UNIT DESIGNATION	UNIT LOCATION	AREA SERVED	UNIT ARRANGEMENT	SUPPLY FAN				RETURN AIR (CFM)	OUTSIDE AIR (CFM)	DX COOLING COIL						HEAT			TOTAL INDOOR UNIT ELECTRICAL INCLUDING ELECTRIC HEAT				FILTER MERV	BASIS OF DESIGN		UNIT DESIGNATION	LOCATION	UNIT EER	DESIGN AMB. TEMP (°F)	TOTAL OUTDOOR UNIT ELECTRICAL			WEIGHT (LBS)	BASIS OF DESIGN		
				DESIGN CFM	ESP (IN H_2O)	MOTOR HP (WATTS)	MOTOR RPM			TOTAL MBH	SENSIBLE MBH	EAT		LAT		MBH	EAT DB (°F)	LAT DB (°F)	MCA	MOCP	FLA	V/ϕ/HZ		MFGR.	MODEL					MCA	MOCP	V/ϕ/HZ		MFGR.	MODEL	
				MAX								DB (°F)	WB (°F)	DB (°F)	WB (°F)																					
AHU-1	MECH	ACTIVITY AREA	VERTICAL	1650	0.5	0.42	-	1280	370	52.6	36.2	78.6	66	55	54	64.6	59.7	92.6	5.63	15		208/1/60	11	TRANE/MITSUBISHI	TPVFYP054AM141A	CU-1	GROUND	12.2	95 / 5	36	40	208/1/60	310	TRANE/MITSUBISHI	NTXMSM60A182AA	2,3
AHU-2	STAFF	STAFF	CASSETTE	360	0.1	(30)	-	290	70	11.9	10.5	78.5	65.9	55	54	14.4	59.9	96.9	POWERED BY OUTDOOR UNIT			208/1/60	7	TRANE/MITSUBISHI	TPLA0A0121EA70B	CU-2	GROUND	16.4	95 / -4	11	15	208/1/60	110	TRANE/MITSUBISHI	TPUZA012NKA7	1,2,3,4

NOTES:

1: PROVIDE PROVIDE INTEGRAL CONDENSATE DISCHARGE PUMP.

2: PROVIDE AUXILIARY DRAIN PAN WITH LIQUID DETECTOR FOR UNIT SHUT DOWN FOR HORIZONTAL ABOVE CEILING MOUNTED UNITS.

3: REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION, AND ACCESSORIES ASSOCIATED WITH UNIT.

4: PROVIDE CONDENSING UNIT WITH LOW AMBIENT KIT WITH HEATING DOWN TO -4°F.

UNIT TYPE:

CAV = CONSTANT AIR VOLUME

Bowman
300 East Joppa Road, Suite 501
Towson, MD 21286
410.494.1111
bowman.com

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No.	Description		Date
NO	REVISION DESCRIPTION	BY	DATE

WHEELER GOODMAN MASEK
165 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
410.263.6787 www.wgm-arch.com

CERTIFICATION:
I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Maryland, license number, expiration date

REVISED DATE	BY

APPROVED DATE — CHIEF ENGINEER
APPROVED DATE — ASSISTANT CHIEF ENGINEER
APPROVED DATE — PROJECT MANAGER
APPROVED DATE — CHIEF, RIGHT OF WAY

BID DOCUMENTS | M301

ANNE ARUNDEL COUNTY | MAY 2024

DEPARTMENT OF PUBLIC WORKS | 280112-01-001

SCALE: AS NOTED
DRAWN BY: SRB
CHECKED BY: JDM
SHEET: OF
PROJECT #: P584700
CONTRACT #: P584702

MECHANICAL SCHEDULES

Mayo Beach Park Day Camp Building
4150 Honeysuckle Dr
Edgewater, MD 21037

GENERAL PLUMBING PROJECT NOTES

1. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF ALL PLUMBING FIXTURES. DO NOT DIMENSION LOCATIONS FROM THESE DRAWINGS.
2. COORDINATE ALL RISER LOCATIONS WITH STRUCTURAL BUILDING COMPONENTS.
3. SANITARY PIPING SHALL RUN AT A 2% SLOPE MINIMUM UNLESS NOTED OTHERWISE.
4. CONDENSATE AND STORM WATER DRAIN PIPING SHALL RUN AT A 1% SLOPE MINIMUM UNLESS NOTED OTHERWISE.
5. LOCATIONS OF DRAINS AND CONNECTIONS TO FIXTURES AND EQUIPMENT SHALL BE COORDINATED WITH THE FIXTURE PLAN, EQUIPMENT CUTS AND ARCHITECTURAL / MECHANICAL / ELECTRICAL PLANS. NO WORK SHALL BE INSTALLED UNTIL THE FIXTURE LOCATIONS HAVE BEEN VERIFIED.
6. PLUMBING FIXTURES SHALL BE CAULKED TO THE ADJOINING FLOOR OR WALL SURFACE WITH CAULK COLOR AS SELECTED BY THE ARCHITECT.
7. CLEANOUTS SHALL BE PROVIDE AT THE BASE OF EACH SANITARY RISER.
8. COORDINATE MOTORS AND OTHER ELECTRICAL EQUIPMENT FURNISHED UNDER MECHANICAL DIVISIONS WITH ELECTRICAL DIVISIONS. PROVIDE EQUIPMENT COORDINATION TABLE AS A SHOP DRAWING FOR REVIEW. TABLE SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING INFORMATION:
   a) EQUIPMENT POWER REQUIREMENTS INCLUDING AMPS AND VOLTAGES.
   b) DISCONNECTING MEANS AND OVER CURRENT PROTECTION REQUIREMENTS.
   c) CONTROL REQUIREMENTS.
11. UNLESS OTHERWISE INDICATED, PIPING SHALL BE SUPPORTED FROM THE STRUCTURE ABOVE. INTERMEDIATE STRUCTURAL SUPPORTS SHALL BE PROVIDED IN AN APPROVED MANNER AS REQUIRED TO MEET MINIMUM SUPPORT SPACING REQUIRED BY THE SPECIFICATIONS.
12. COORDINATE THE INSTALLATION OF LIGHTING FIXTURES WITH PLUMBING PIPING AND EQUIPMENT BEING INSTALLED IN THE FACILITY, SUCH THAT PIPING AND EQUIPMENT DO NOT BLOCK OR IMPEDE LIGHTING.
13. PROVIDE PIPE HANGERS, ANCHORS, AND SUPPORTS PER SUPPORT MANUFACTURER'S RECOMMENDATIONS.
14. INSTALL PIPING SO THAT ALL VALVES AND ACCESSORIES ARE ACCESSIBLE. PROVIDE ACCESS PANELS PER SPECIFICATIONS.
15. ROUTE DOMESTIC WATER PIPING, SPRINKLER PIPING, STORM WATER PIPING, SANITARY PIPING, VENT PIPING, CONDENSATE DRAINS, ETC., IN PIPE CHASES, FURRED OUT WALLS, AND ABOVE CEILINGS. NO PIPING SHALL BE EXPOSED UNLESS APPROVED BY THE ARCHITECT OR OWNER(S).
16. REFER TO ARCHITECTURAL DRAWINGS FOR ROOF AND CEILING CONSTRUCTION TYPES AND DETAILS. REFER TO STRUCTURAL DRAWINGS FOR TRUSS SIZES AND LOCATIONS.
17. INSTALL EQUIPMENT IN SUCH A MANNER AS TO PROVIDE ADEQUATE SPACE FOR PROPER MAINTENANCE AND EQUIPMENT ACCESS.
18. PROVIDE PIPE SLEEVES AT WALL, FLOOR, AND ROOF PENETRATIONS. ALL EXTERIOR ROOF AND WALL PIPING PENETRATIONS SHALL BE MADE WEATHER TIGHT.
19. FIRE STOP ALL PLUMBING, STORM WATER, SANITARY, VENT, AND CONDENSATE PIPING PENETRATIONS THRU FIRE RATED WALLS, PARTITIONS, AND FLOORS. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE RATED WALL LOCATIONS.
20. PLUMBING FIXTURES- REFER TO PLUMBING FIXTURE CONNECTION SCHEDULE, KITCHEN EQUIPMENT CONNECTION SCHEDULE, AND PLUMBING FIXTURE SCHEDULE - BASIS OF DESIGN PRODUCTS SHOWN ON DRAWING FOR ADDITIONAL INFORMATION.
21. PIPING ABOVE HUNG CEILING - ALL HORIZONTAL PIPING INDICATED SHALL BE RUN WITHIN OPEN WEB OF JOIST, UNLESS OTHERWISE NOTED.
22. COORDINATION - COORDINATE ROUTE OF ALL HORIZONTAL PIPING WITH ALL DUCTWORK & RECESSED LIGHTING. REFER TO MECHANICAL & ELECTRICAL PART PLANS.
23. PROVIDE CLEANOUTS AT BASE OF ALL SANITARY RISERS, ON FIRST FLOOR ONLY.
24. COORDINATE PIPE LOCATIONS TO AVOID POTENTIAL INTERFERENCE WITH ELECTRIC BOXES.
25. LOCATE SHUT-OFF VALVES IN ACCESSIBLE LOCATION BELOW KITCHEN SINK/COUNTER AND WITHIN CABINET SPACE.
26. THE DRAWINGS ARE DIAGRAMMATIC AND DO NOT INDICATE EVERY COMPONENT AND/OR ACCESSORY REQUIRED FOR A COMPLETE INSTALLATION. PROVIDE NECESSARY AND REQUIRED COMPONENTS AND ACCESSORIES TO ENSURE THAT THE ENTIRE SYSTEM IS FUNCTIONAL AND INCOMPLIANCE WITH APPLICABLE CODES, ACCEPTED INDUSTRY STANDARDS, AND MANUFACTURER'S INSTALLATION REQUIREMENTS/RECOMMENDATIONS UPON COMPLETION OF WORK.

PLUMBING LEGEND

SYMBOL	DESCRIPTION
A / X	SECTION MARKER SECTION LETTER SHEET WHERE SECTION IS SHOWN
XX	DRAWING NOTE REFERENCE SYMBOL
XX	REVISION REFERENCE SYMBOL
P-X	PLUMBING FIXTURE DESIGNATION
XX / X	PART PLAN REFERNCE

PLUMBING LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
	CW	COLD WATER
	HW	HOT WATER
	HWR	HOT WATER RECIRCULATING
SAN	SAN	SANITARY
V	V	VENT PIPE
SW	SW	STORM WATER
,	CO	CLEAN OUT: LINE, FLUSH
CD	CD	CONDENSATE DRAIN

PLUMBING LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
	DP, DN	ELBOW DOWN OR DROP
	UP	ELBOW UP OR RISE
		PIPE CONTINUES
		FLOW IN DIRECTION OF ARROW
		RISE OR DROP IN PIPE
		SIDE PIPE CONNECTION
		BOTTOM PIPE CONNECTION
		TOP PIPE CONNECTION
		CAPPED OUTLET
		CAPPED PIPE
		UNION
	VTR	VENT THRU ROOF
		BALL VALVE
		CHECK VALVE
		PLUG VALVE
		COMBINATION BALANCING & SHUT-OFF VALVE
		DIRECTION OF PIPE PITCH (DOWN)
		TRAP PRIMING VALVE
		PIPE REDUCER - CONCENTRIC
		PIPE REDUCER - ECCENTRIC STRAIGHT CROWN
		PIPE REDUCER - ECCENTRIC STRAIGHT INVERT
	BWV	BACK WATER VALVE
	OS & Y	OUTSIDE STEM & YOKE VALVE
	T & P	TEMPERATURE & PRESSURE RELIEF VALVE
	SA	SHOCK ABSORBER
	CP	IN-LINE CIRCULATING PUMP
	F.DR.	FLOOR DRAIN
		PUMP
		BUTTERFLY VALVE
	PRV	PRESSURE REDUCING (REGULATING) VALVE
	RV	RELIEF VALVE (TYPE AS NOTED)
		STRAINER (Y OR BASKET) W/ HOSE END DRAIN VALVE
		PRESSURE GAUGE W/ NEEDLE VALVE
		THERMOMETER
		THERMAL WELL
A.A.V.	AAV	AUTOMATIC AIR VENT
	MAV	MANUAL AIR VENT
P.T.	FMF - P.T.	FLOW METER FITTING - PITOT TUBE
	P/T	PRESSURE AND TEMPERATURE PLUG
	FC	FLEXIBLE CONNECTION - PIPING
	HB	HOSE BIB
	BFP	BACKFLOW PREVENTOR

PLUMBING LEGEND

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
ADJ.	ADJUSTABLE	INV. ELEV.	INVERT ELEVATION
AFF	ABOVE FINISHED FLOOR	LF	LINEAR FEET
AFG	ABOVE FINISHED GRADE	LAT	LEAVING AIR TEMPERATURE
APD	AIR PRESSURE DROP	LWT	LEAVING WATER TEMPERATURE
AHU	AIR HANDLING UNIT	MFGR.	MANUFACTURER
BFF	BELOW FINISHED FLOOR	MBH	ONE THOUSAND BTU PER HOUR
BFG	BELOW FINISHED GRADE	MAX.	MAXIMUM
BLDG.	BUILDING	MIN.	MINIMUM
CONT.	CONTINUATION	MT'D	MOUNTED
CU	CONDENSING UNIT	NO	NORMALLY OPENED
CONN.	CONNECTION	NC	NORMALLY CLOSED
CFH	CUBIC FEET PER HOUR	NIC	NOT IN CONTRACT
CLG.	CEILING	NTS	NOT TO SCALE
DTL.	DETAIL	OC	ON CENTER
DFU	DRAINAGE FIXTURE UNIT	PD	PUMP DISCHARGE
DWG.	DRAWING	RM.	ROOM
DN.	DOWN	REQ'D	REQUIRED
EJ	EXPANSION JOINT	SF	SQUARE FEET
ESP	EXTERNAL STATIC PRESSURE	SHT.	SHEET
EWT	ENTERING WATER TEMPERATURE	SPEC.	SPECIFICATIONS
EMD	END OF MAIN DRIP	SLP	SLOPE
EX.	EXISTING	TYP.	TYPICAL
ET	EXPANSION TANK	TRAN.	TRANSITION
ELEV.	ELEVATION	TPV	TRAP PRIMING VALVE
FFE	FINISHED FLOOR ELEVATION	UNO	UNLESS NOTED OTHERWISE
FLR.	FLOOR	V/Ø/HZ	VOLTS/PHASE/HERTZ
FBO	FURNISHED BY OTHERS	VERT.	VERTICAL
GPH	GALLONS PER HOUR	W/	WITH
GPM	GALLONS PER MINUTE	WPD	WATER PRESSURE DROP
HP	HORSE POWER		

PLUMBING DRAWING INDEX

Sheet Number	Sheet Name
P001	PLUMBING COVER SHEET
P101	FLOOR PLAN - PLUMBING
P201	PLUMBING DETAILS
P301	PLUMBING RISER

PLUMBING FIXTURE CONNECTION SCHEDULE

PLUMBING FIXTURE	TYPE / MOUNTING	SYMBOL (P-#)	PIPE CONNECTION SIZES (IN)				FLOW RATE	FIXTURE		FAUCET / FLUSH VALVE		NOTES
			SANITARY	VENT	COLD WATER	HOT WATER		MFGR.	MODEL	MFGR.	MODEL	
WATER CLOSET	TANK / FLOOR	P-1	3"	2"	3/4"	-	1.28	AMERICAN STANDARD	215AA.104	-	-	1
URINAL	F.V. / WALL	P-2	2"	2"	3/4"	-	0.5	AMERICAN STANDARD	6590.001	AMERICAN STANDARD	6063.051.002	-
LAVATORY	WALL	P-3	1-1/2"	1-1/2"	1/2"	1/2"	0.5	AMERICAN STANDARD	0194.043	MOEN	CA8302	4
SINK	UNDERMOUNT	P-4	1-1/2"	1-1/2"	1/2"	1/2"	1.5	AMERICAN STANDARD	18SB.9301800T.075	MOEN	7594	4
MOP SINK	-	P-5	3"	2"	1/2"	1/2"	2.2	FIAT	TSB 3010	SPEAKMAN	TSC-5811	-
TUB SINK	-	P-6	2"	1-1/2"	1/2"	1/2"	2.2	AMERICAN STANDARD	7695.008	CHICAGO FAUCET	305-VBRCF	2
WATER FOUNTAIN	-	P-7	1-1/2"	1-1/2"	1/2"	1/2"	-	ELKAY	LVRCGRNTL8WSK	-	-	-
FLOOR DRAIN	-	P-8	3"	-	-	-	-	JAY R SMITH	2005Y	-	-	-
HOSE BIB	-	P-9	-	-	3/4"	-	-	WOODFORD	MODEL 17	-	-	-
EYE WASH	COUNTER	P-10	-	-	1/2"	1/2"	-	HAWS	7610	-	-	3

NOTES:

1: PROVIDE BEMIS MODEL 1600E4 TOILET SEAT.

2: PROVIDE AMERICAN STANDARD MODEL 7798.030 CAST IRON TRAP

3: THERMOSTATIC MIXING VALVE: MODEL 9201EFE

4: HOT WATER SIDE MIXING VALVE, WATTS MODEL USG-B-M2 (ASSE 1070). MIXING VALVE SHALL DELIVER 110°F TEMPERED WATER.

DEFINITIONS:

F.V. = FLUSH VALVE

PUMP SCHEDULE

PUMP DESIGNATION	SERVICE	GPM	FT. OF HEAD	PUMP TYPE	PUMP MOTOR		ELECTRICAL CHARACTERISTICS	BASIS OF DESIGN		NOTES
					WATTS	RPM	V/PH/HZ	MFGR.	MODEL	
RCP-1	HOT WATER RECIRC	2	8	INLINE	45	900	120/1/60	GRUNDFOS	UP-15 ALPHA 2	1,2

NOTES:

1: REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND ACCESSORIES ASSOCIATED WITH PUMP.

2: PROVIDE PREMIUM EFFICIENCY MOTORS.

DOMESTIC ELECTRIC WATER HEATER SCHEDULE

UNIT DESIGNATION	LOCATION	TANK			HEATER							EXPANSION TANK				WATER HEATER BASIS OF DESIGN		NOTES
					WATER SIDE					ELECTRICAL CHARACTERISTICS								
		STORAGE (GALLONS)	DIAMETER x HEIGHT (IN x IN)	MAX PRESS. (PSI)	EWT (°F)	LWT (°F)	RECOVERY RATE (GPH) @ 90 (°F)	PIPE CONNECTIONS		KW	(V/PH/HZ)	TANK VOLUME (GALLONS)		MFGR.	MODEL	MFGR.	MODEL	
								CW INLET (IN)	HW OUTLET (IN)			TOTAL CAPACITY	ACCEPTANCE					
WH-1	MECH	65	26X46.25	125	40	140	62	3/4"	3/4"	15	208/3/60	6.4	0.41	AMTROL	ST-12-C	HUBBELL	SE	1

NOTES:

1: REFER TO SPECIFICATIONS FOR ACCESSORIES AND ADDITIONAL INFORMATION ASSOCIATED WITH WATER HEATER.

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REVISED DATE	BY

APPROVED DATE — CHIEF ENGINEER
APPROVED DATE — ASSISTANT CHIEF ENGINEER
APPROVED DATE — PROJECT MANAGER
APPROVED DATE — CHIEF, RIGHT OF WAY

BID DOCUMENTS | P001

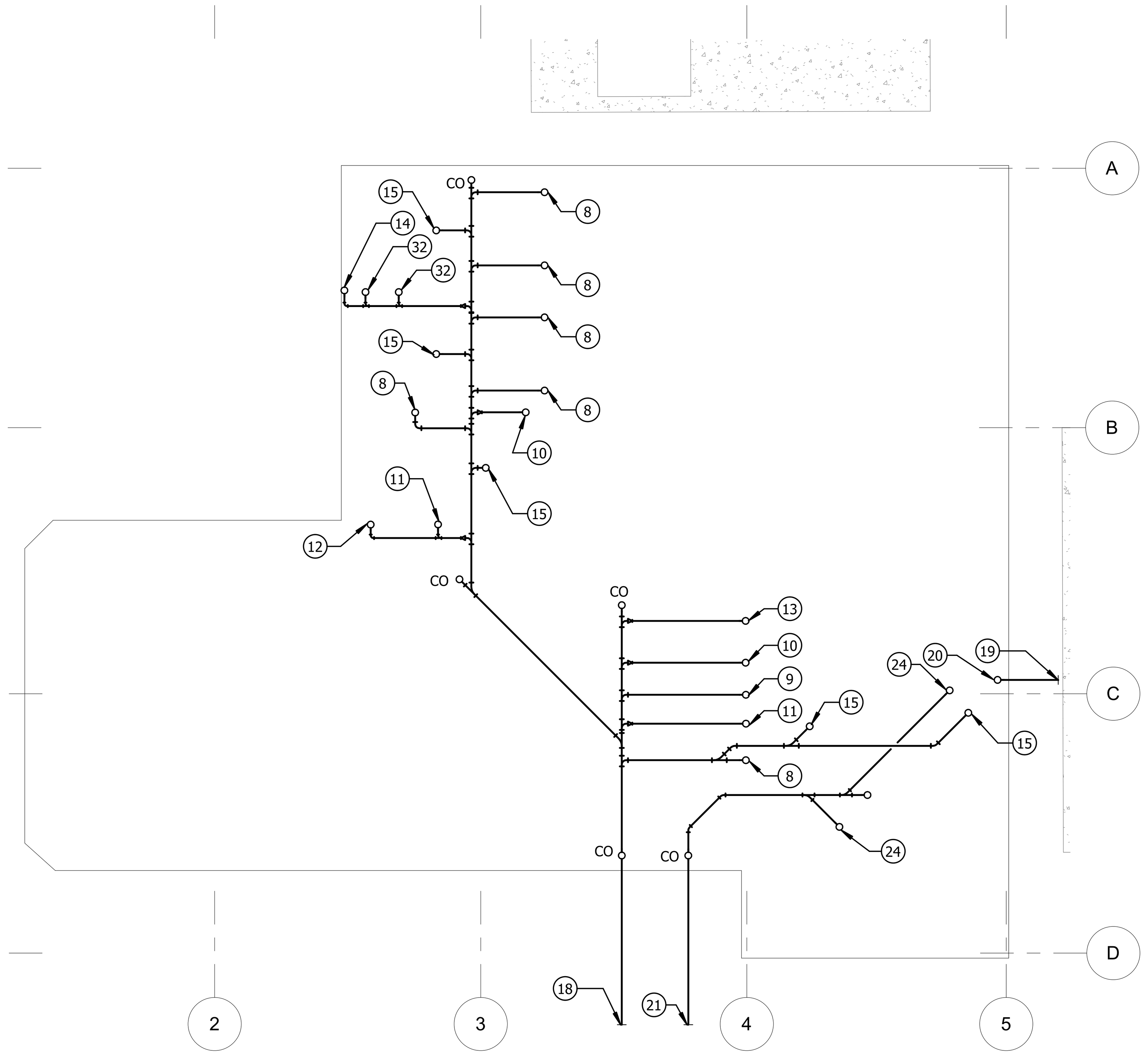
ANNE ARUNDEL COUNTY | MAY 2024

DEPARTMENT OF PUBLIC WORKS | 280112-01-001

SCALE: AS NOTED
DRAWN BY: SRB
CHECKED BY: JDM
SHEET: OF
PROJECT #: P584700
CONTRACT #: P584702

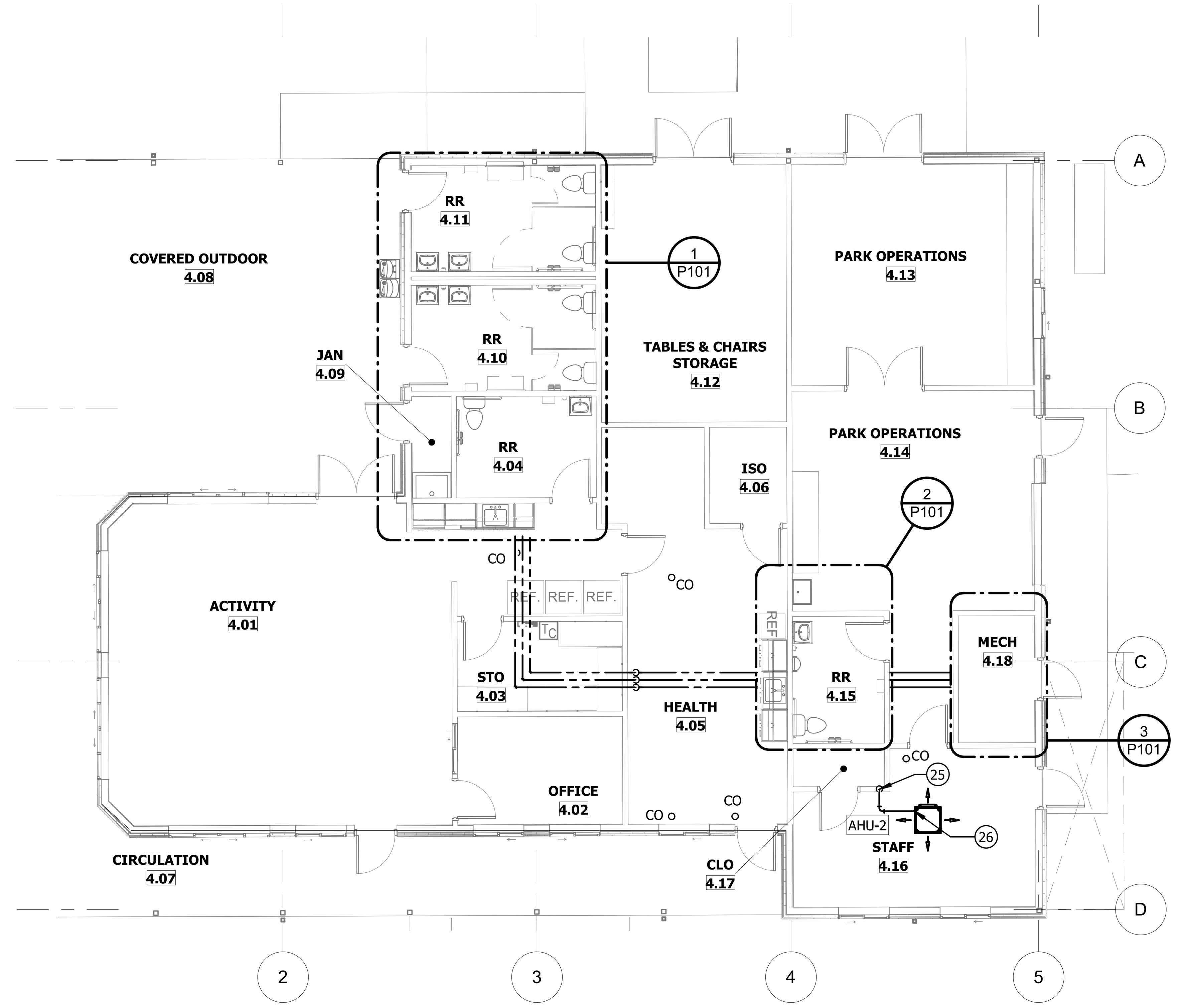
PLUMBING COVER SHEET

Mayo Beach Park Day Camp Building
4150 Honeysuckle Dr
Edgewater, MD 21037



SUB SLAB PLAN - PLUMBING

SCALE: 1/8" = 1'-0"



FLOOR PLAN - PLUMBING

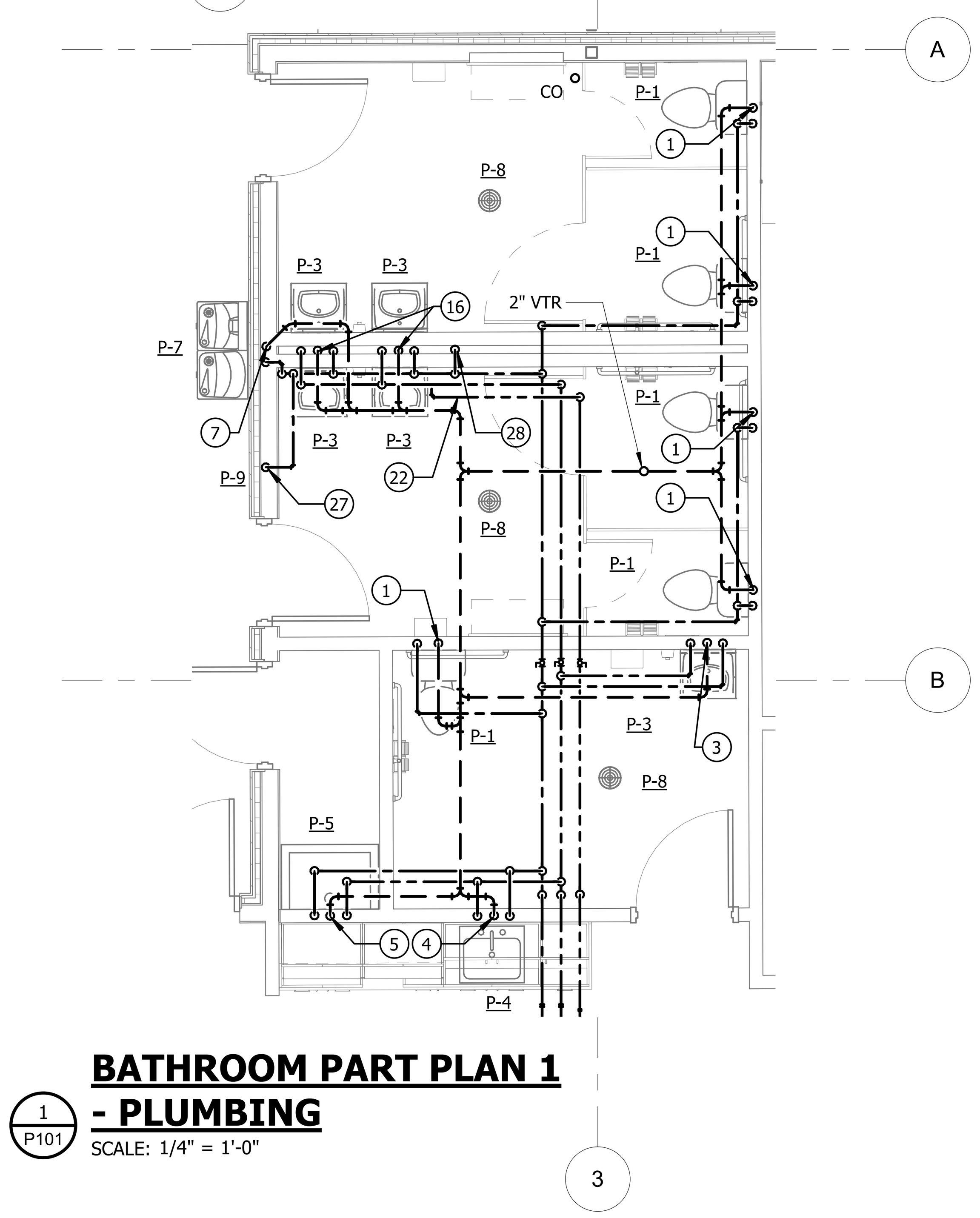
SCALE: 1/8" = 1'-0"

GENERAL NOTES:

1. FINSIH FLOOR ELEVATION = 16.95'

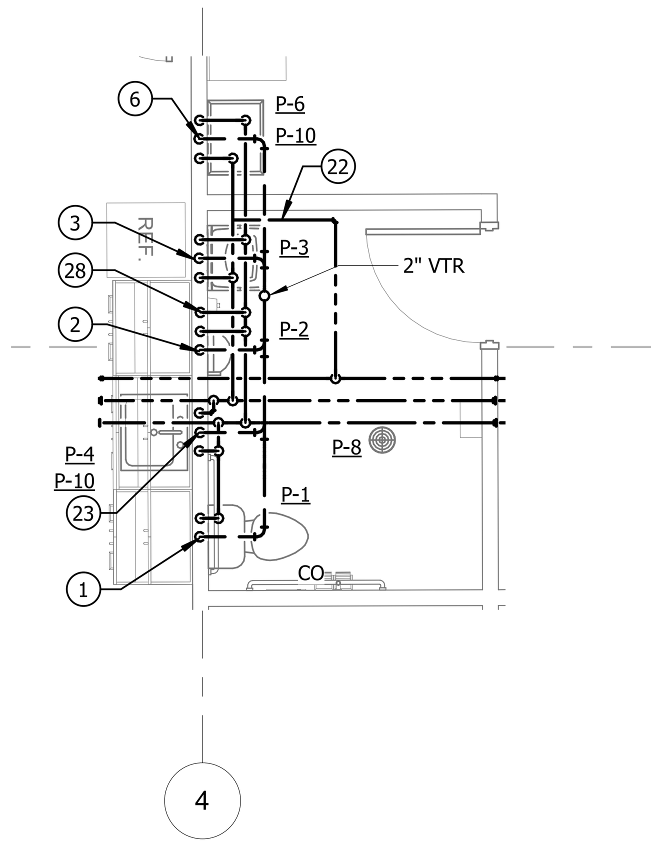
DRAWING NOTES:

1. 3/4" CW AND 2" VENT DOWN TO P-1.
2. 3/4" CW AND 2" VENT DOWN TO P-2.
3. 1/2" CW, 1/2" HW AND 1-1/2" VENT DOWN TO P-3.
4. 1/2" CW, 1/2" HW AND 1-1/2" VENT DOWN TO P-4.
5. 1/2" CW, 1/2" HW AND 1-1/2" VENT DOWN TO P-5.
6. 1/2" CW, 1/2" HW AND 1-1/2" VENT DOWN TO P-6. PROVIDE 1/2" CW AND 1/2" HW TO P-10.
7. 1/2" CW, AND 1-1/2" VENT DOWN TO P-7.
8. 3" SAN UP TO P-1.
9. 2" SAN UP TO P-2.
10. 2" SAN UP TO P-3.
11. 2" SAN UP TO P-4.
12. 3" SAN UP TO P-5.
13. 2" SAN UP TO P-6.
14. 2" SAN UP TO P-7.
15. 3" SAN UP TO P-8.
16. 1/2" CW, 1/2" HW AND 1-1/2" VENT DOWN TO (2) P-3.
17. 2" SAN UP TO (2) P-3.
18. 4" SAN INCOMING SERVICE. INV. ELEV. 13.95. REFER TO CIVIL DRAWING FOR CONTINUATION.
19. 2" CW INCOMING SERVICE. INV. ELEV. 12.95. REFER TO CIVIL DRAWING FOR CONTINUATION.
20. 2" CW UP.
21. 3" SW INCOMING SERVICE. INV. ELEV. 13.95. REFER TO CIVIL DRAWING FOR CONTINUATION.
22. 3/4" HWR CIRCUIT SETTER.
23. 1/2" CW, 1/2" HW AND 1-1/2" VENT DOWN TO P-4.PROVIDE 1/2" CW AND 1/2" HW TO P-10.
24. 2" CD UP TO FIRST FLOOR.
25. 2" CD DOWN TO SUB SLAB.
26. 3/4" CD TO AHU.
27. 1/2" CW DOWN TO P-9.
28. 1/2" CW TO TRAP PRIMING VALVE.
29. 2" CW DOWN TO SUB SLAB.
30. INCOMING DOMESTIC WATER VALVING. REFER TO DETAIL 4 ON DRAWING P201 FOR MORE INFORMATION.
31. 1-1/2" CW, 1-1/2" HW, AND 3/4" HWR TO WATER HEATER. REFER TO DETAIL 11 ON DRAWING P201 FOR MORE INFORMATION.
32. 2" SAN UP TO (2) P-3.



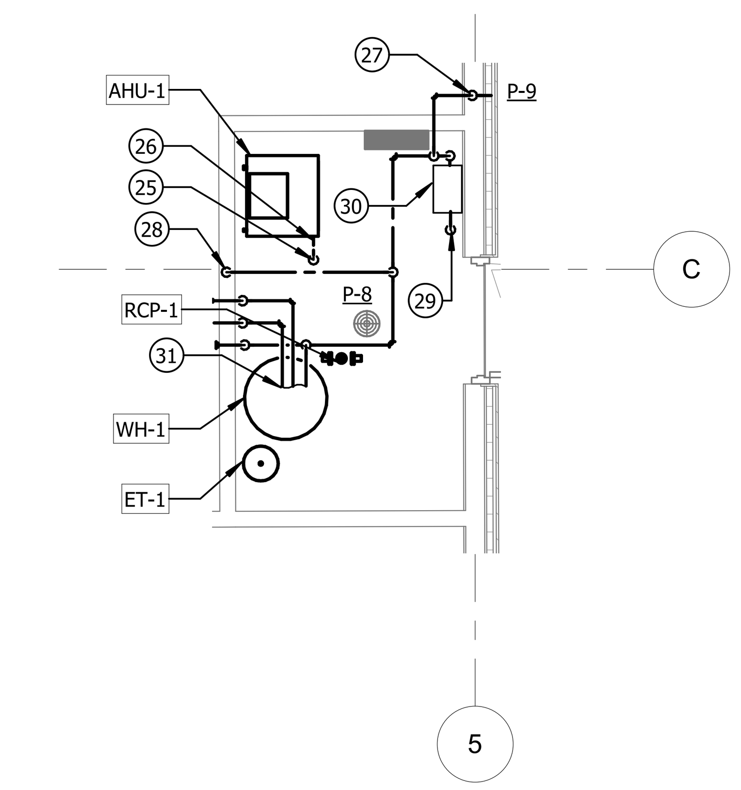
BATHROOM PART PLAN 1 - PLUMBING

1 P101 SCALE: 1/4" = 1'-0"



BATHROOM PART PLAN 2 - PLUMBING

2 P101 SCALE: 1/4" = 1'-0"



MECH ROOM PART PLAN - PLUMBING

3 P101 SCALE: 1/4" = 1'-0"

SCALE: 1/4" = 1'-0"   SCALE: 1/8" = 1'-0"

BID DOCUMENTS — P101

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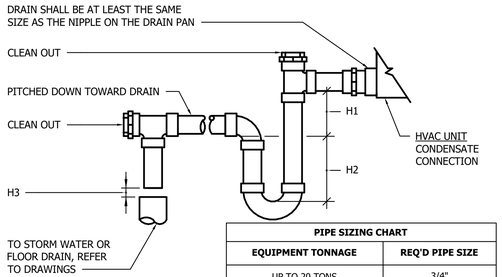
ANNE ARUNDEL COUNTY — MAY 2024
DEPARTMENT OF PUBLIC WORKS — 280112-01-001

REVISED DATE	BY	APPROVED	DATE	APPROVED	DATE		
		CHIEF ENGINEER		PROJECT MANAGER		SCALE: AS NOTED	FLOOR PLAN - PLUMBING
		APPROVED	DATE	APPROVED	DATE	DRAWN BY: SRB	
		ASSISTANT CHIEF ENGINEER		CHIEF, RIGHT OF WAY		CHECKED BY: JDM	Mayo Beach Park Day Camp Building
						SHEET: OF	4150 Honeysuckle Dr
						PROJECT #: P584700	Edgewater, MD 21037
						CONTRACT #: P584702	

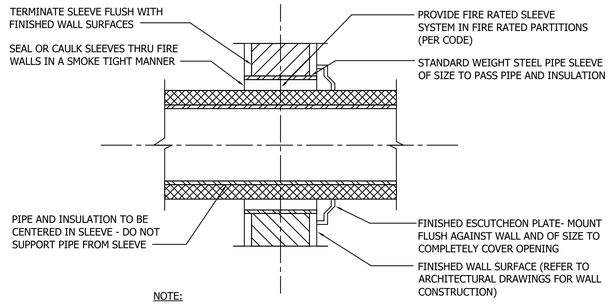


PIPE SIZING CHART	
EQUIPMENT TONNAGE	REQ'D PIPE SIZE
UP TO 20 TONS	3/4"

1 DETAIL - TYPICAL CONDENSATE DRAIN TRAP

SCALE: NONE

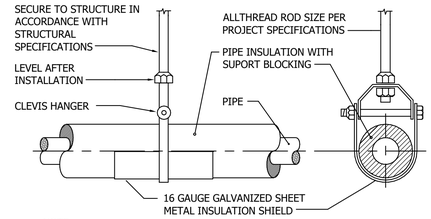
NOTES:
1. FOR DRAW THRU TRAPS: "H1" = FAN INLET PRESSURE PLUS 1 INCH, "H2" = H1/2.
2. FOR BLOW THRU TRAPS: "H1" = 1 INCH, "H2" = FAN OUTLET PRESSURE PLUS 1/2 INCH.
3. H3 EQUAL TO 1 INCH.



NOTE:
1. PROVIDE PIPE SLEEVES @ ALL WALL PENETRATIONS.

2 DETAIL - TYPICAL PIPE SLEEVE THRU INTERIOR WALL

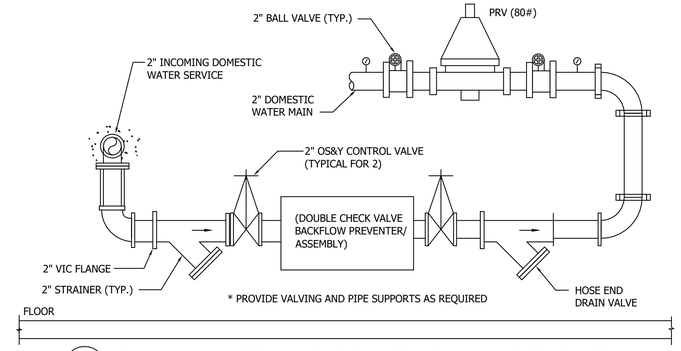
SCALE: NONE



NOTE:
1. REFER TO SPECIFICATIONS FOR ADDITIONAL PIPE SUPPORT TYPES AND REQUIREMENT.
2. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL PIPE SUPPORT DETAILS, INSTALLATION, AND REQUIREMENTS.
3. HIGH TEMPERATURE PIPING: DOMESTIC HOT WATER.
4. LOW TEMPERATURE PIPING: DOMESTIC COLD WATER, SANITARY, STORM, AND VENT PIPING.
5. COORDINATE POINT LOADS WITH PROJECT STRUCTURAL ENGINEER.

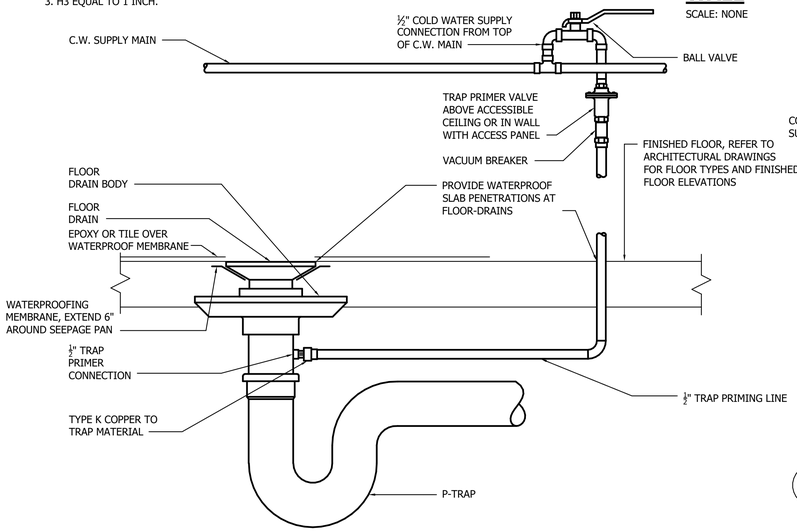
3 DETAIL - TYPICAL PIPE HANGER SUPPORT

SCALE: NONE



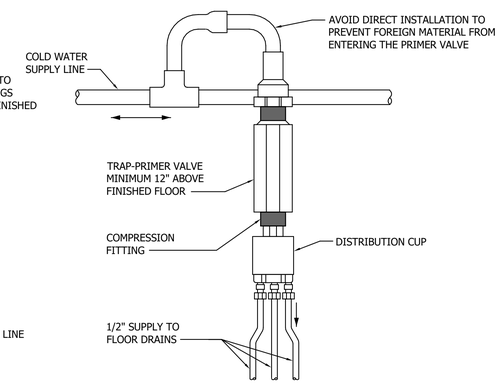
4 DETAIL - INCOMING DOMESTIC WATER SERVICE

SCALE: NONE



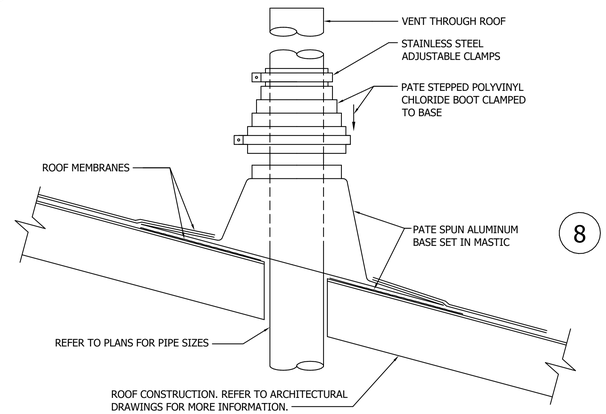
5 DETAIL - TYPICAL FLOOR DRAIN WITH TRAP PRIMING VALVE

SCALE: NONE



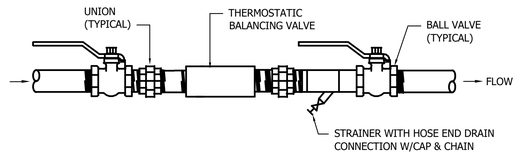
6 DETAIL - TYPICAL TRAP PRIMER PIPING

SCALE: NONE



7 DETAIL - TYPICAL VENT PIPE THROUGH ROOF

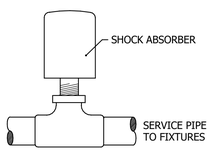
SCALE: NONE



8 DETAIL - TYPICAL DOMESTIC HOT WATER RETURN BALANCING VALVE

SCALE: NONE

NOTES:
1. VALVE SHUTOFF TEMPERATURE SHALL BE 120°F.



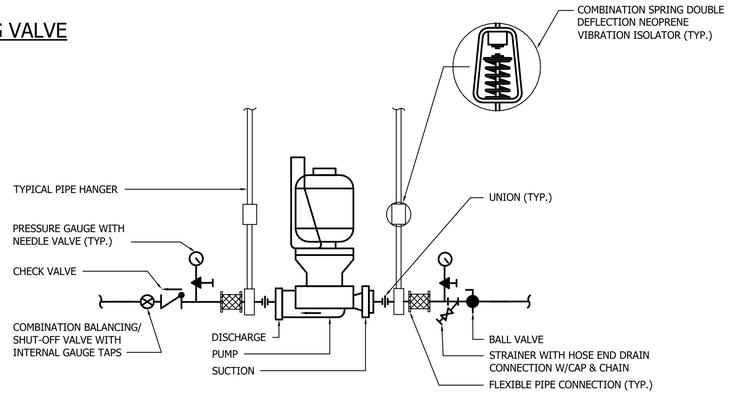
*DESIGNATION	A	B	C	D	E	REMARKS
PIPE SIZE	1/2"-3/4"	1"	1 1/4"-1 1/2"	2"	2 1/2"	-

* DESIGNATION IS ESTABLISHED BY THE PLUMBING AND DRAINAGE INSTITUTE STANDARD P.D.I. WH 201 FOR SHOCK ABSORBERS.

NOTES:
1. SHOCK ABSORBERS SHALL BE INSTALLED ON ALL BRANCH PIPING SERVICING PLUMBING FIXTURES, WALL HYDRANTS AND HOSE BIBBS.
2. BRANCH PIPES WITH A DEVELOPED LENGTH OF 25' OR LESS ABSORBERS MAY BE REDUCED ONE SIZE
3. BRANCH PIPES WITH A DEVELOPED LENGTH OF 75' OR GREATER ABSORBERS MAY BE INCREASED ONE SIZE
4. SHOCK ABSORBER SHALL BE CERTIFIED BY THE PLUMBING DRAINAGE INSTITUTE

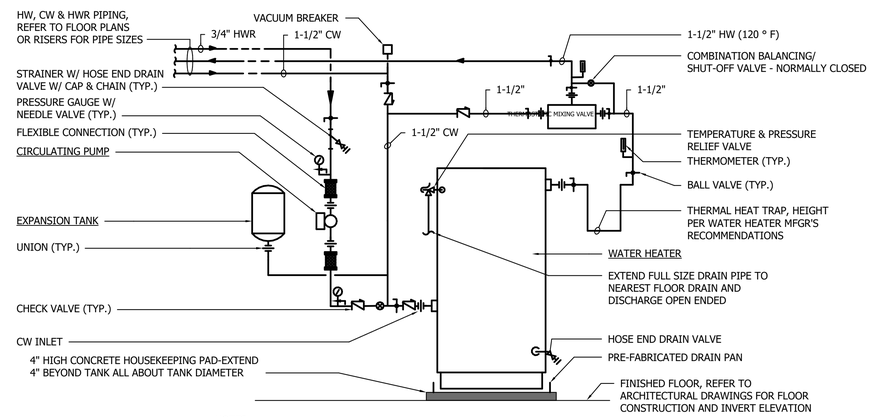
9 DETAIL - TYPICAL SHOCK ABSORBER INSTALLATION

SCALE: NONE



10 DETAIL - TYPICAL INLINE DOMESTIC RECIRC. PUMP PIPING / VALVING DIAGRAM

SCALE: NONE



NOTES:
1. REFER TO WATER HEATER SCHEDULE FOR UNIT CAPACITIES AND ADDITIONAL INFORMATION.

11 DETAIL - TYPICAL ELECTRIC DOMESTIC WATER HEATER PIPING/VALVING DIAGRAM (WITH HOT WATER RECIRC)

SCALE:NONE

BID DOCUMENTS | P201

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ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

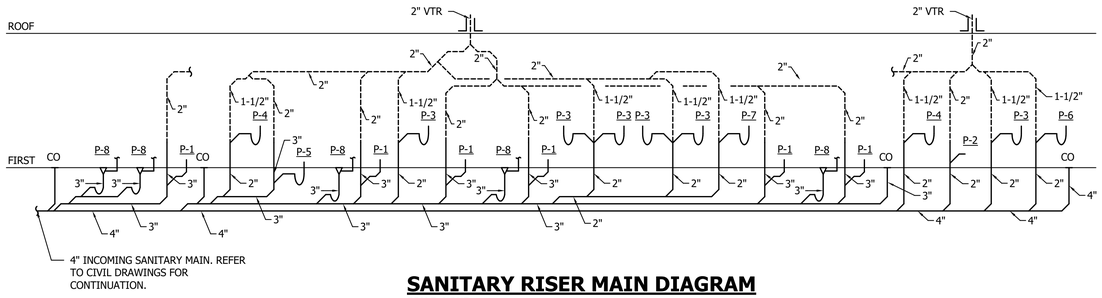
REVISED DATE	BY	APPROVED DATE	APPROVED DATE
		CHIEF ENGINEER	PROJECT MANAGER
		APPROVED DATE	APPROVED DATE
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY

MAY 2024
280112-01-001

SCALE: AS NOTED
DRAWN BY: SRB
CHECKED BY: JDM
SHEET: OF
PROJECT #: P584700
CONTRACT #: P584702

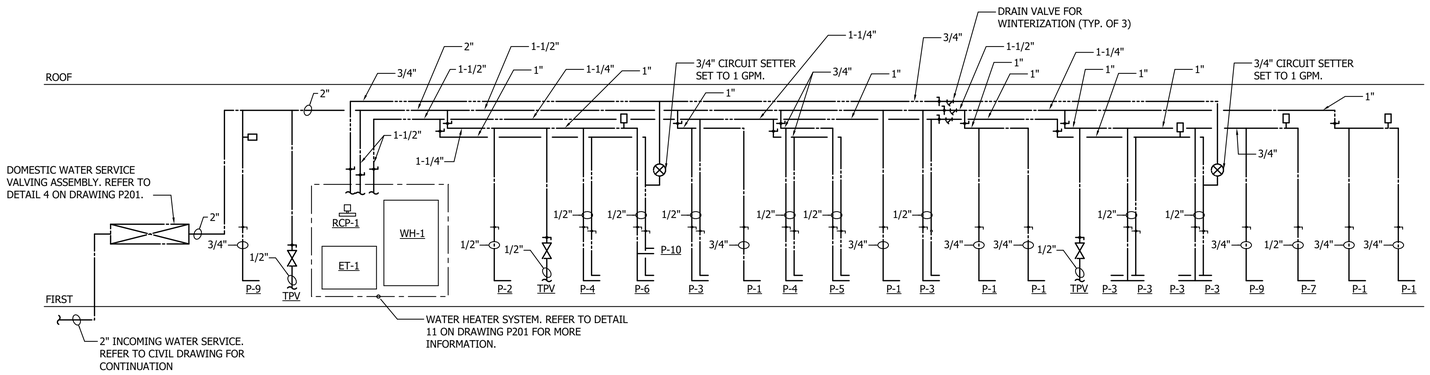
PLUMBING DETAILS

Mayo Beach Park Day Camp Building
4150 Honeysuckle Dr
Edgewater, MD 21037



SANITARY RISER MAIN DIAGRAM

SCALE: NONE



DOMESTIC WATER RISER MAIN DIAGRAM

SCALE: NONE

No.	Description		Date
NO	REVISION DESCRIPTION	BY	DATE

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		CHIEF ENGINEER	PROJECT MANAGER
		APPROVED DATE	APPROVED DATE
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY

BID DOCUMENTS | P301

ANNE ARUNDEL COUNTY | MAY 2024

DEPARTMENT OF PUBLIC WORKS | 280112-01-001

SCALE: AS NOTED
DRAWN BY: SRB
CHECKED BY: JDM
SHEET: OF
PROJECT #: P584700
CONTRACT #: P584702

PLUMBING RISER

Mayo Beach Park Day Camp Building
4150 Honeysuckle Dr
Edgewater, MD 21037

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
#	DRAWING NOTE
#	HVAC EQUIPMENT CONNECTION SCHEDULE REFERENCE
#	ELECTRICAL FEEDER SCHEDULE REFERENCE
	EXISTING OR FUTURE EQUIPMENT, AS NOTED THIN/SOLID
	NEW EQUIPMENT, AS NOTED HEAVY/SOLID
A a 1	LIGHT FIXTURE, CAPITAL LETTER INDICATES FIXTURE TYPE, LOWER CASE INDICATES SWITCHING, NUMBER (WHERE SHOWN) INDICATES CIRCUIT
	SURFACE OR RECESSED MOUNTED LIGHT FIXTURE
	WALL MOUNTED LIGHT FIXTURE
	STRIP OR INDUSTRIAL FIXTURE, CEILING MOUNTED; WALL MOUNTED
	EMERGENCY OR NITE-LITE FIXTURE, AS NOTED
	DIRECT/ INDIRECT LIGHT FIXTURE
	CEILING FAN, TYPE AS NOTED
	JUNCTION BOX
	EXIT SIGN, CEILING OR WALL MOUNTED - DARKENED PORTION INDICATES THE FACE OF EXIT SIGN AND THE ARROW INDICATES DIRECTIONAL FACE
	WALL MOUNTED EMERGENCY BATTERY PACK; REMOTE HEAD
a 3 4	20 AMP SWITCH - LINE VOLTAGE, SINGLE POLE; 3-WAY; 4-WAY. SUBSCRIPT IDENTIFIES FIXTURE CONTROLLED
LD	DIGITAL SWITCH, DIMMING, FOR USE WITH DIGITAL OCCUPANCY SENSORS. M.H. 48" AFF
LD a,b,c,d	DIGITAL 5 BUTTON DIMMER SWITCH; M.H. 48" AFF, SUBSCRIPTS IDENTIFY LIGHT FIXTURES CONTROLLED
L	DIGITAL SWITCH (ON-OFF) FOR USE WITH DIGITAL OCCUPANCY SENSORS. M.H. 48" AFF
U,IR,DT,CU a U,IR,DT,CU	DIGITAL OCCUPANCY SENSOR, CEILING MOUNTED; WALL MOUNTED (U = ULTRASONIC, IR = INFRARED, DT = DUAL TECHNOLOGY, CU = CORRIDOR LONG RANGE ULTRASONIC); SUBSCRIPT INDICATES FIXTURE CONTROLLED
WU,WDT,WIR	WALL SWITCH LINE VOLTAGE OCCUPANCY SENSOR; M.H. 48" AFF (WU = ULTRASONIC, WDT = DUAL TECHNOLOGY, WIR = INFRARED)
WIR2	WALL SWITCH LINE VOLTAGE OCCUPANCY SENSOR, DUAL RELAY, INFRARED; M.H. 48" AFF
WIRD	WALL SWITCH LINE VOLTAGE OCCUPANCY SENSOR, INFRARED, 0-10V DIMMING, M.H. 48" AFF
	NEMA 5-20R RECEPTACLE; M.H. 18"; M.H. COUNTERTOP OUTLET 6" ABOVE COUNTER HEIGHT TO BOTTOM OF OUTLET
	DOUBLE DUPLEX NEMA 5-20R RECEPTACLE. M.H. 18"
GFI	GFI TYPE RECEPTACLE; GFI ONLY WHERE NOTED MAY BE PROTECTED BY UPSTREAM GFI PROTECTION. MH 18" AFF
USB	DUPLEX NEMA 5-20R WITH 2 USB PORTS. MH 18" AFF
IG	ISOLATED GROUND RECEPTACLE. MH 18" AFF
6-30R	SPECIAL RECEPTACLE; NEMA TYPE AS NOTED. M.H. 18" UNLESS NOTED
	CEILING SPEAKER; ROUGH-IN BOX W/ 3/4" C TO ACCESSIBLE CEILING
SD	SMOKE DETECTOR; PHOTOELECTRIC
F	FIRE ALARM MANUAL PULL STATION; M.H. 48" TO CENTER
# H	FIRE ALARM COMBINATION HORN AND STROBE, # INDICATES MINIMUM CANDELA RATING; M.H. 80" AFF, WALL MOUNTED; CEILING MOUNTED
# H C	FIRE ALARM STROBE, # INDICATES MINIMUM CANDELA RATING; M.H. 80" AFF, WALL MOUNTED; CEILING MOUNTED
H	FIRE ALARM HORN; M.H. 80" AFF TO CENTER
	CONTROL PANEL; TYPE AS INDICATED
R	FIRE ALARM CONTROL RELAY
M	FIRE ALARM MONITORING MODULE
	IT OUTLET EMPTY BACKBOX WITH 1" EMT TO ACCESS CEILING SPACE M.H. 18" AFF
	PLYWOOD EQUIPMENT BACKBOARD. DIMENSIONS AS NOTED, FIRE RETARDANT
TMGB TGB	GROUND BUS BAR; TELEPHONE MAIN GROUNDING BUS; TELEPHONE GROUNDING BUS
K	CONTACTOR, TYPE AS NOTED
TC	TIME CLOCK
	BRANCH CIRCUIT PANELBOARD; SURFACE MOUNTED, FLUSH MOUNTED
	CIRCUIT BREAKER (MOLDED CASE)
SPD	SURGE PROTECTIVE DEVICE; TYPE PER SPEC
	DISCONNECT SWITCH - 3P-30A UNLESS OTHERWISE NOTED; FUSED, NON-FUSED

ELECTRICAL LEGEND (CONTINUATION)

	PLYWOOD EQUIPMENT BACKBOARD. DIMENSIONS AS NOTED, FIRE RETARDANT
TMGB TGB	GROUND BUS BAR; TELEPHONE MAIN GROUNDING BUS; TELEPHONE GROUNDING BUS
K	CONTACTOR, TYPE AS NOTED
TC	TIME CLOCK
	BRANCH CIRCUIT PANELBOARD; SURFACE MOUNTED, FLUSH MOUNTED
	CIRCUIT BREAKER (MOLDED CASE)
SPD	SURGE PROTECTIVE DEVICE; TYPE PER SPEC
	DISCONNECT SWITCH - 3P-30A UNLESS OTHERWISE NOTED; FUSED, NON-FUSED
T	THERMAL MANUAL MOTOR STARTER SWITCH
	MOTOR - HP AS NOTED
	GROUND ROD
	GROUND CONNECTION
	DUCTBANK - CONCRETE ENCASED RACEWAYS
HH	HANDHOLE, SIZE AS NOTED
	CONDUIT OR CONDUIT AND WIRE ROUTED IN GRADE OR BELOW SLAB
DB	DIRECT BURIED UNDERGROUND CABLE OR CONDUIT AS NOTED
	CONDUIT AND WIRE OR CABLE ROUTED WITHIN WALLS OR CEILING SPACE OR ROUTED EXPOSED ON WALLS OR CEILINGS. CROSSLINES INDICATE THE NUMBER OF CONDUCTORS IF MORE THAN TWO (NOT INCLUDING GROUND)
	HOMERUN TO PANELBOARD. NUMBER OF ARROWS INDICATES THE NUMBER OF CIRCUITS

ELECTRICAL ABBREVIATIONS

A	AMPERE	KW	KILOWATT
ACU	AIR CONDITIONING UNIT	LV	LOW VOLTAGE
AF	AMPERE FRAME	MAX	MAXIMUM
AFF	ABOVE FINISHED FLOOR	MCA	MINIMUM CIRCUIT AMPS
AFG	ABOVE FINISHED GRADE	MCB	MAIN CIRCUIT BREAKER
AHU	AIR HANDLING UNIT	MFG	MANUFACTURER
AIC	AMPS INTERRUPTING CURRENT	M.H.	MOUNTING HEIGHT
AT	AMPERE TRIP	MIN	MINIMUM
AWG	AMERICAN WIRE GAUGE	MLO	MAIN LUGS ONLY
BLDG	BUILDING	MOD	MOTOR OPERATED DAMPER
C	CONDUIT	MTD	MOUNTED
CB	CIRCUIT BREAKER	NAC	NOTIFICATION APPLIANCE CIRCUIT
CKT	CIRCUIT	N.C.	NORMALLY CLOSED
CLG	CEILING	NFSS	NON-FUSED SAFETY SWITCH
CONC	CONCRETE	No.	NUMBER
CR	CONTROL RELAY	N.O.	NORMALLY OPEN
DWG	DRAWING	P	POLE
EF	EXHAUST FAN	PNL	PANEL
EMT	ELECTRICAL METALLIC TUBING	PRI	PRIMARY
ENCL	ENCLOSURE	PVC	POLYVINYL CHLORIDE (SCHEDULE 40)
EWC	ELECTRIC WATER COOLER	QTY	QUANTITY
EX	EXISTING	RGS	RIGID GALVANIZED STEEL
FAAP	FIRE ALARM ANNUNCIATOR PANEL	RM	ROOM
FACP	FIRE ALARM CONTROL PANEL	RR	REMOVE & REINSTALL IN PLACE
FLEX	FLEXIBLE	RX	REMOVE EXISTING
FSS	FUSED SAFETY SWITCH	SW	SWITCH
GA	GAUGE	SWBD	SWITCHBOARD
GFI	GROUND FAULT INTERRUPTING	TEMP	TEMPERATURE
GND	GROUND	TYP	TYPICAL
HOA	HAND-OFF-AUTOMATIC (SWITCH)	UG	UNDERGROUND
HP	HORSEPOWER	UH	UNIT HEATER
HTR	HEATER	UTP	UNSHIELDED TWISTED PAIR
HWH	HOT WATER HEATER	V	VOLTS
IDC	INITIATING DEVICE CIRCUIT	VAC	VOLTS - ALTERNATING CURRENT
IMC	INTERMEDIATE METAL CONDUIT	W	WIRE
KV	KILOVOLTS	WP	WEATHERPROOF
KVA	KILOVOLT-AMPERE	ϕ	PHASE

GENERAL PROJECT NOTES:

1. DRAWINGS ARE DIAGRAMMATIC AND GENERALLY REPRESENTATIVE OF THE WORK REQUIRED. VERIFY ALL WORK ON SITE AND REPORT ANY CONFLICTS TO THE ENGINEER FOR REVIEW PRIOR TO PROCEEDING WITH WORK OR CHANGES.
2. REFER TO ARCHITECTURAL OR PHASING DRAWINGS FOR OVERALL PROJECT PHASING. PLAN AND COORDINATE THE WORK, AS REQUIRED.
3. PROVIDE NEW TYPED CIRCUIT DIRECTORIES FOR ALL NEW PANELBOARDS.
4. ALL PANELBOARD SCHEDULES ARE BASED ON COPPER CONDUCTORS. WHERE ALUMINUM CONDUCTORS ARE PERMITTED BY SPECIFICATIONS, CONTRACTOR SHALL ADJUST CONDUCTOR AND CONDUIT SIZES TO MAINTAIN SAME AMPACITY RATINGS AS THE SPECIFIED COPPER CONDUCTORS PER 75 DEGREE COLUMN IN NEC TABLES.
5. ALL CONDUIT, BOXES, CABLE TRAY, ETC. SHALL GENERALLY BE INSTALLED A MINIMUM OF 12" ABOVE CEILINGS. COORDINATE WITH OTHER TRADES PRIOR TO INSTALLATION.
6. ALL CEILING MOUNTED DEVICES, INCLUDING FIRE STROBES, SMOKE DETECTORS, SPEAKERS, OCCUPANCY SENSORS, ETC. SHALL BE CENTERED IN 2X2 CEILING TILES, OR IN HALF OF 2X4 TILES, AS APPLICABLE.
7. WHERE AREAS HAVE NO FINISHED CEILINGS, INSTALL FIRE STROBES, EXIT LIGHTS, OCCUPANCY SENSORS, ETC. AT A HEIGHT EQUAL TO THE BOTTOM OF TH E GENERAL LIGHTING FIXTURES, OR DUCTWORK, AS APPLICABLE SO THAT SUCH DEVICES ARE VISIBLE TO OCCUPANTS AND NOT BLOCKED BY OTHER EQUIPMENT.
8. ALL PROJECT CONDUIT AND CABLING SHALL BE INSTALLED ABOVE FINISHED CEILINGS, WHERE POSSIBLE TO MINIMIZE VISIBILITY OF SUCH ITEMS IN AREAS WITH EXPOSED STRUCTURE. ALL CABLING INSTALLED IN EXPOSED STRUCTURE AREAS, SHALL BE IN EMT CONDUIT INSTALLED TIGHT TO DECK ABOVE, EXCEPT FOR SHORT FINAL CONNECTIONS TO FIRE ALARM DEVICES, LIGHT FIXTURES, ETC. MC CABLE SHALL BE PERMITTED WHERE INSTALLED ABOVE FINISHED CEILINGS OR CONCEALED IN PARTITION WALLS.
9. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES, FINISHES, ETC. COORDINATE ALL LIGHT FIXTURE MOUNTING, FRAME KITS, ETC. AS REQUIRED.
10. MAKE MINOR ADJUSTMENTS TO LIGHT FIXTURE LOCATIONS AND/OR ELEVATIONS IN UTILITY ROOMS, TO COORDINATE WITH FINAL INSTALLED PIPING, CONDUITS, AND LARGE EQUIPMENT. DO NOT INSTALL LIGHTS ABOVE PIPING OR EQUIPMENT.
11. ALL LOW VOLTAGE CABLING INSTALLED ABOVE CEILINGS AND NOT IN RACEWAYS SHALL BE PLENUM RATED.
12. ALL BRANCH CIRCUITS SHALL UTILIZE INDIVIDUAL NEUTRAL CONDUCTORS. SHARED NEUTRALS AND MULTI-WIRE CIRCUITS ARE NOT PERMITTED.
13. ALL BRANCH CIRCUITS AND FEEDERS SHALL INCLUDE AN EQUIPMENT GROUNDING CONDUCTOR. CONDUIT IS NOT PERMITTED AS THE SOLE GROUND PATH.
14. ALL BATTERY POWERED EMERGENCY AND EGRESS LIGHTING FIXTURES SHALL BE CONNECTED TO BRANCH CIRCUITS AHEAD OF ALL SWITCHING, UNLESS INDICATED OTHERWISE.
15. WHERE EMERGENCY LIGHTING IS SWITCHED, UL-924 LISTED COMPONENTS IN CONJUCTION WITH THE LIGHTING CONTROLS SHALL BE PROVIDED TO BRING LIGHTING TO FULL BRIGHTNESS UNDER EMERGENCY/LOSS OF POWER CONDITION.
16. LIGHTING CONTROLS SHOWN ON PLAN ARE LIMITED TO PLACEMENT AND QUANTITY OF SWITCHING AND OCCUPANCY SENSORS. ADDITIONAL COMPONENTS CONTAINING BUT NOT LIMITED TO CONTROLLERS, RELAYS AND LOW VOLTAGE CABLING, ETC. ARE REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM. REFER TO SPECIFICAITIONS FOR ADDITIONAL INFORMATION.
17. PROVIDE ACCESS PANELS FOR ALL JUNCTION BOXES, AND OTHER EQUIPMENT REQUIRING ACCESS OR ADJUSTMENT, AND LOCATED ABOVE HARD CEILINGS OR BEHIND WALL PARTITIONS, IN CHASES, ETC.
18. UNLESS LARGER GAUGE IS INDICATED ON PANEL SCHEDULES, BRANCH CIRCUIT WIRING SHALL COMPENSATE FOR VOLTAGE DROP, AS FOLLOWS:
    a. 120V, 0-90LF: #12AWG
    b. 120V, 91-140LF: #10 AWG
    c. 120V, >140LF: #8 AWG
19. UNLESS NOTED OTHERWISE, ALL WIRING & CONDUIT/CABLING SHOWN ON FLOOR PLANS IS FOR DIAGRAMMATIC PURPOSES ONLY. COORDINATE EXACT INSTALLATION REQUIREMENTS WITH FIELD CONDITIONS AND INSTALL PER SPECIFICATIONS.
20. MINIMUM INTERIOR RIGID CONDUIT SIZE SHALL BE ¾" UNLESS NOTED OTHERWISE.
21. ALL RECEPTACLES INSTALLED IN FOOD SERVICE AREAS, KITCHENS, BREAK ROOMS AND WITHIN 6 FT OF SINKS, ETC. SHALL HAVE GFI PROTECTION PER NEC. DO NOT INSTALL GFCI OUTLETS BEHIND RANGES, REFRIGS, FREEZERS, DISHWASHERS , BUILT-IN MICROWAVES, AND SIMILAR INACCESSIBLE LOCATIONS. SUCH CIRCUITS SHALL USE GFCI BREAKERS.
22. PROVIDE RECEPTACLES AND LOW-VOLTAGE CONNECTION BOXES BEHIND ALL WALL-MOUNTED VIDEO MONITORS, FLAT SCREEN TV'S, ETC. LOW VOLTAGE SHALL INCLUDE A MINIMUM OF 2-GANG BOX WITH EMPTY 1-1/4" EMT CONDUIT TO CEILING CAVITY, UNLESS NOTED OTHERWISE. MOUNT RECEPTACLE AND LV BOX SIDE BY SIDE AT SAME ELEVATION, CONCEALED BEHIND THE TV OR MONITOR. COORDINATE OUTLET LOCATIONS WITH ARCH DETAILS AND MOUNTING HARDWARE/SUPPORT BRACKET FOR TV.
23. ALL ELECTRIC WATER COOLERS SHALL BE PROVIDED WITH GFCI PROTECTION PER NEC. WHERE RECEPTACLES INSTALLED FOR CORD/PLUG CONNECTED WATER COOLERS ARE CONCEALED BEHIND ACCESS PANEL OR SIMILAR INACCESSIBLE LOCATION, USE STANDARD OUTLET AND PROVIDE GFCI BRANCH BREAKER FOR PROTECTION.
24. REFRIGERATOR & FREEZER RECEPTACLES SHALL BE MOUNTED AT 42" AFF AND 6" FROM ADJACENT COUNTER, WHERE APPLICABLE.
25. MULTIPLE SWITCHES IN THE SAME LOCATION SHALL USE A SINGLE MULTI-GANG DEVICE BOX AND COVER PLATE.
26. INDEPENDENT COMMISSIONING (2018 IECC):
    a. COMMISSIONING: THIS PROJECT SHALL REQUIRE COMMISSIONING OF SELECTED MECHANICAL AND ELECTRICAL SYSTEMS PER INTERNATIONAL ENERGY CONSERVATION CODE PER IECC 408. THE CONTRACTOR SHALL PROVIDE FOR INDEPENDENT COMMISSIONING OF THE LIGHTING & LIGHTING CONTROL SYSTEM(S) IN ACCORDANCE WITH IECC, SECTION 408.3. PROVIDE WRITTEN REPORT OF ALL FUCNTIONAL PERFORMANCE TESTING DOCUMENTING THE LIGHTING AND CONTROLS ARE ALL INSTALLED, ADJUSTED AND OPEARABLE PER THE DESIGN INTENT.

GENERAL PROJECT NOTES (CONTINUED):

27. NOTIFY MISS UTILITY OR NATIONAL "811" MINIMUM OF 48 HOURS PRIOR TO DIGGING. ON SITES WHERE SUCH SERVICES ARE NOT APPLICABLE, PROVIDE SERVICES OF AN UNDERGROUND UTILTY LOCATING CONTRACTOR TO LOCATE AND MARK ALL BURIED UTILITIES IN THE REGION WHERE EXCAVATION IS TO OCCUR.
28. EXISTING PUBLIC AND PRIVATE UTILITIES SHOWN HEREIN REFLECT AVAILABLE DATA, AND MAY NOT REPRESENT AS-BUILT CONDITIONS. LOCATE AND PROTECT ALL UTILITIES WHICH ARE TO REMAIN IN USE, WHETHER SHOWN OR NOT. PROVIDE AMPLE COVER AND PROTECTION OF ALL INSTALLED UTILITIES DURING THE CONSTRUCTION OF THIS PROJECT.
29. CONFORM TO ALL FEDERAL, STATE AND LOCAL REQUIREMENTS FOR STORM WATER AND SEDIMENT & EROSION CONTROL, AS APPLICABLE TO THE SITE WORK OF THIS CONTRACT, INCLUDING ALL EXCAVATION AND TRENCHING.
30. ALL DEBRIS CREATED AS A RESULT OF TRENCHING OR SITE UTILITY INSTALLATION SHALL BE LEGALLY DISPOSED OF OFF-SITE.
31. TRENCHING WORK SHALL BE LIMITED TO A MAXIMUM OF 100LF OF OPEN TRENCH AT ANY TIME. EXCEPTIONS CAN ONLY BE APPROVED BY THE STATE'S DEPARTMENT OF THE ENVIRONMENT UPON SUBMISSION OF A SEDIMENT AND EROSION CONTROL PLAN.
32. ALL UNDERGROUND CONDUITS SHALL BE SCHEDULE 40 PVC, DIRECT BURIED OR CONCRETE ENCASED, AS INDICATED. MINIMUM BURIAL DEPTHS SHALL BE PER NEC.
33. ALL BURIED CABLES/CONDUIT/DUCTBANKS, HANDHOLES, MANHOLES, EQUIPMENT PADS, LIGHT POLE FOUNDATIONS, ETC. SHALL BE COORDINATED WITH FINAL GRADES PRIOR TO INSTALLATION.

GENERAL FIRE ALARM NOTES:

1. PROVIDE A COMPLETE, NEW FIRE DETECTION AND ALARM SYSTEM, PER DRAWINGS & SPECIFICATIONS.
2. SURFACE RACEWAY AND SURFACE MOUNTING BOXES SHALL ONLY BE PERMITTED ON MASONRY WALLS, WHERE CONCEALMENT IS NOT POSSIBLE.
3. ALL FIRE ALARM WIRING SHALL BE INSTALLED IN CONCEALED METALLIC RACEWAYS (EMT, MC CABLE, ETC. PER SPECS) UNLESS SPECIFICALLY PERMITTED OTHERWISE IN SPECIFICATIONS.
4. PROVIDE ALL REQUIRED SUBMITTALS TO FIRE MARSHAL AND/OR AHJ FOR FIRE ALARM SYSTEM WORK PROMPTLY UPON AWARD OF PROJECT.

BID DOCUMENTS | E001

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No.	Description		Date
NO	REVISION DESCRIPTION	BY	DATE

WGM ARCHITECTURE + INTERIORS
WHEELER GOODMAN MASEK
165 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
410.263.6787 www.wgm-arch.com

CERTIFICATION:
I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Maryland, license number, expiration date

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

REVISED DATE	BY	APPROVED DATE	APPROVED DATE
		CHIEF ENGINEER	PROJECT MANAGER
		APPROVED DATE	APPROVED DATE
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY

MAY 2024
280112-01-001

SCALE: AS NOTED
DRAWN BY: HFJ
CHECKED BY: NVK
SHEET: OF
PROJECT #: P584700
CONTRACT #: P584702

ELECTRICAL COVERSHEET

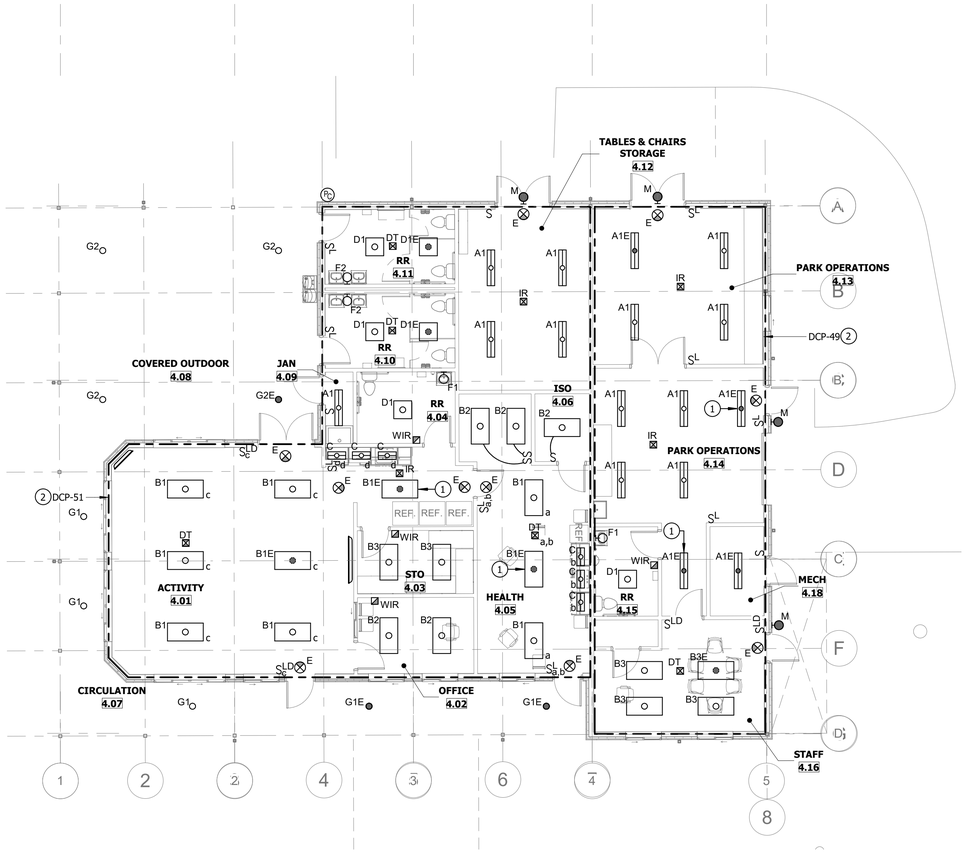
Mayo Beach Park Day Camp Building
4150 Honeysuckle Dr
Edgewater, MD 21037

GENERAL NOTES

1. UNLESS NOTED OTHERWISE, ALL EMERGENCY (SHADED) LIGHTING FIXTURES SHALL BE SWITCHED WITH LOCAL SPACE LIGHTING CONTROLS.
2. UNLESS NOTED OTHERWISE, ALL EXTERIOR LIGHTING SHALL BE CONNECTED TO CIRCUIT# DCP-53 THRU TIME CLOCK.

DRAWING NOTES

1. THIS LIGHT FIXTURE SHALL BE ON 24/7 AS A NIGHT LIGHT.
2. UNLESS NOTED OTHERWISE, ALL LIGHTING FIXTURES WITHIN THIS AREA SHALL BE CONNECTED TO THE NOTED CIRCUIT. EXIT SIGNS SHALL BE CONNECTED AHEAD OF ALL SWITCHING.



FIRST FLOOR PLAN - LIGHTING

SCALE: 1/8" = 1'-0"

SCALE: 1/8" = 1'-0"

8 0 8 16

BID DOCUMENTS	E201
ANNE ARUNDEL COUNTY	MAY 2024
DEPARTMENT OF PUBLIC WORKS	280112-01-001

REVISED DATE	BY	APPROVED DATE	APPROVED DATE	SCALE: AS NOTED	FIRST FLOOR PLAN - LIGHTING
				DRAWN BY: HFJ	
		CHIEF ENGINEER	PROJECT MANAGER	CHECKED BY: NVK	
		APPROVED DATE	APPROVED DATE	SHEET: OF	Mayo Beach Park Day Camp Building 4150 Honeysuckle Dr Edgewater, MD 21037
				PROJECT #: P584700	
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	CONTRACT #: P584702	

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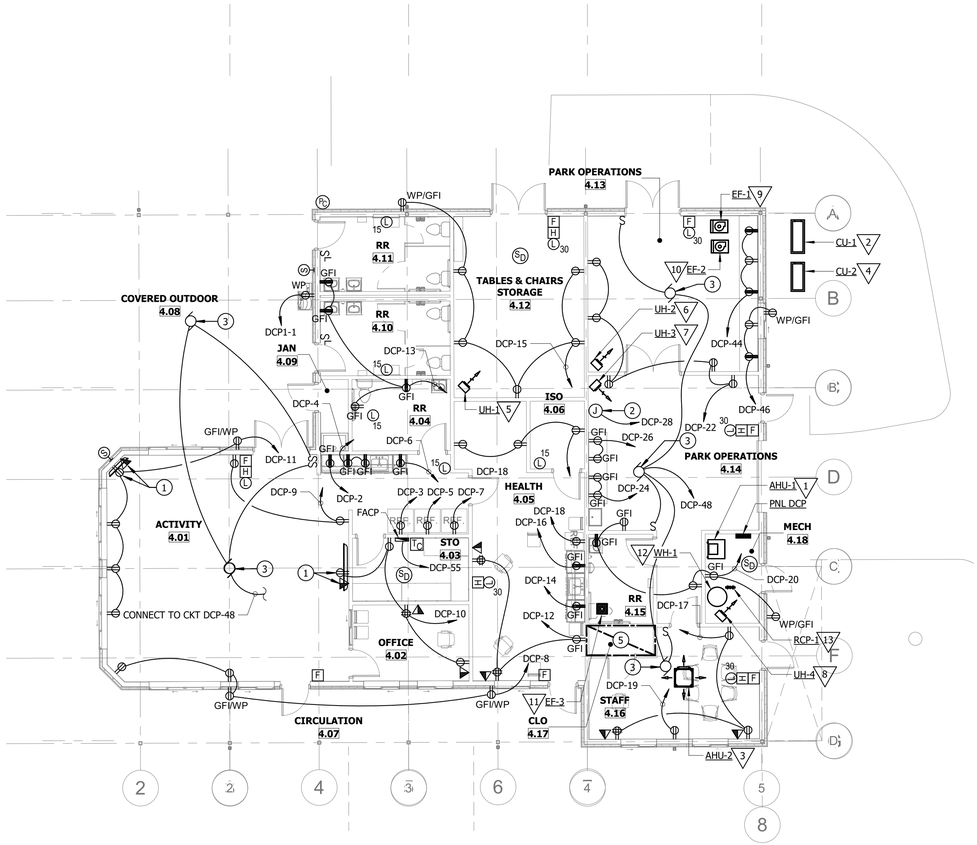
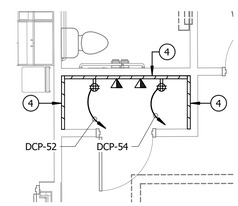
DRAWING NOTES

1. RECEPTACLE AND DATA OUTLET FOR TV. COORDINATE MOUNTING HEIGHT WITH ARCHITECT AND USER.
2. JUNCTION BOX FOR CONNECTION TO AIR COMPRESSOR. COORDINATE CONNECTION WITH MANUFACTURER AND PROVIDE APPROPRIATE CONNECTION COMPONENTS AS NEEDED.
3. CEILING FAN - REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF FAN.
4. 3/4" DEEP X 8' HIGH PLYWOOD BACKBOARD FOR TELECOMMUNICATIONS.
5. FOR ELECTRICAL WORK IN THIS ROOM, REFER TO PART PLAN - TELECOMM ROOM - POWER ON THIS DRAWING
6. PROVIDE UNDERGROUND 4" PVC CONDUIT AND CONNECT TO EXISTING 4" PVC CONDUIT PROVIDED UNDER PHASE 1 - ELECTRICAL SERVICE DRAWINGS. COORDINATE FINAL LOCATION IN FIELD WITH EXISTING SITE CONDITIONS. REFER TO POWER RISER DIAGRAM ON DRAWING E601 FOR ADDITIONAL INFORMATION.



FIRST FLOOR PLAN - POWER

SCALE: 1/8" = 1'-0"



PART PLAN - TELECOMM ROOM - POWER

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

SCALE: 1/8" = 1'-0"

8 0 8 16

BID DOCUMENTS	E301
ANNE ARUNDEL COUNTY	MAY 2024
DEPARTMENT OF PUBLIC WORKS	280112-01-001

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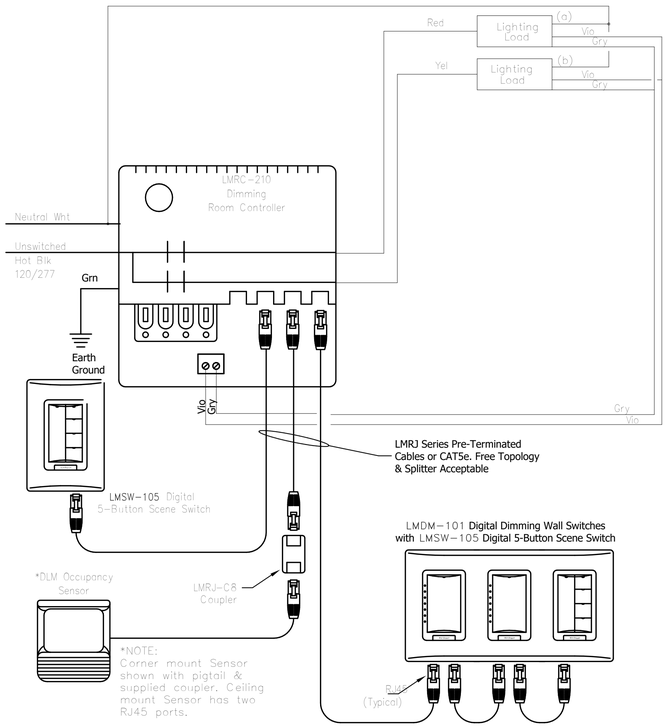
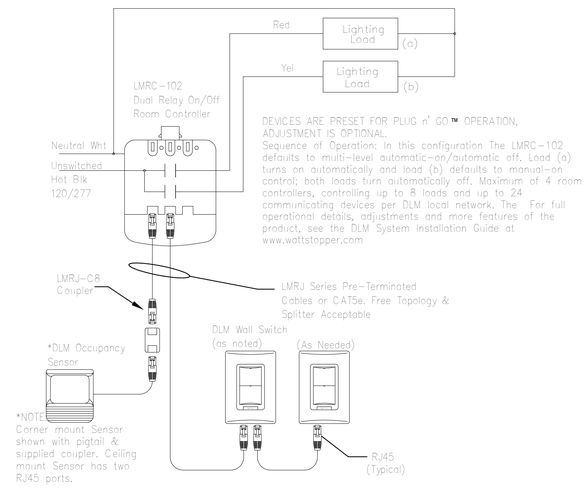
REVISED DATE	BY	APPROVED DATE	APPROVED DATE	SCALE: AS NOTED	FIRST FLOOR PLAN - POWER
				DRAWN BY: HFJ	
		CHIEF ENGINEER	PROJECT MANAGER	CHECKED BY: NVK	Mayo Beach Park Day Camp Building 4150 Honeysuckle Dr Edgewater, MD 21037
		APPROVED DATE	APPROVED DATE	SHEET: OF	
				PROJECT #: P584700	
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	CONTRACT #: P584702	



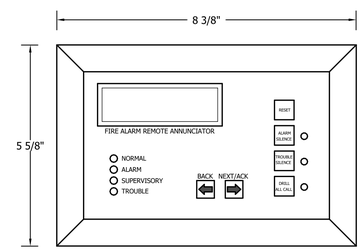
DETAIL - DLM DIGITAL (1, 2, OR 3 RELAY) OCCUPANCY SENSOR WITH 0-10V DIMMING

SCALE: NONE



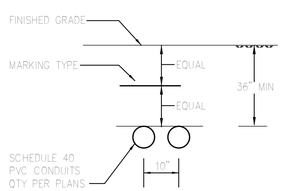
DETAIL - DLM DIGITAL (1, 2, OR 3 RELAY) OCCUPANCY SENSOR

SCALE: NONE



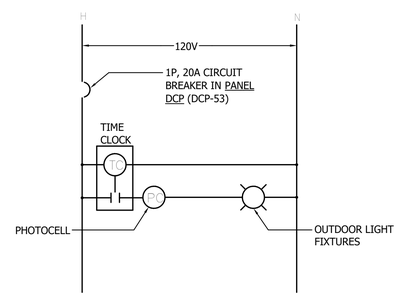
DETAIL - FIRE ALARM LCD ANNUNCIATOR

NO SCALE



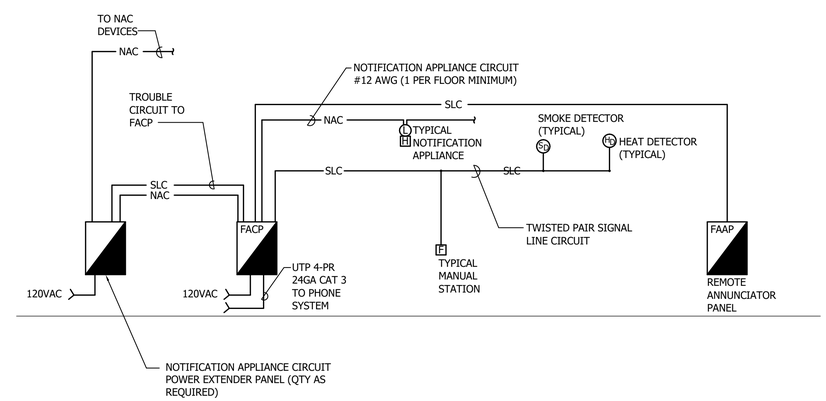
DETAIL - DIRECT BURIED CONDUIT

SCALE: NONE



DETAIL - OUTDOOR LIGHTING CONTROL

NO SCALE



NOTE: SYSTEM IS FULLY ADDRESSABLE TYPE; NOT ALL DEVICES INDICATED ON RISER.
REFER TO PLANS FOR LOCATIONS & DEVICE TYPES/RATINGS.

DETAIL - PARTIAL FIRE ALARM

NO SCALE

BID DOCUMENTS	E501

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No.	Description		Date
NO	REVISION DESCRIPTION	BY	DATE

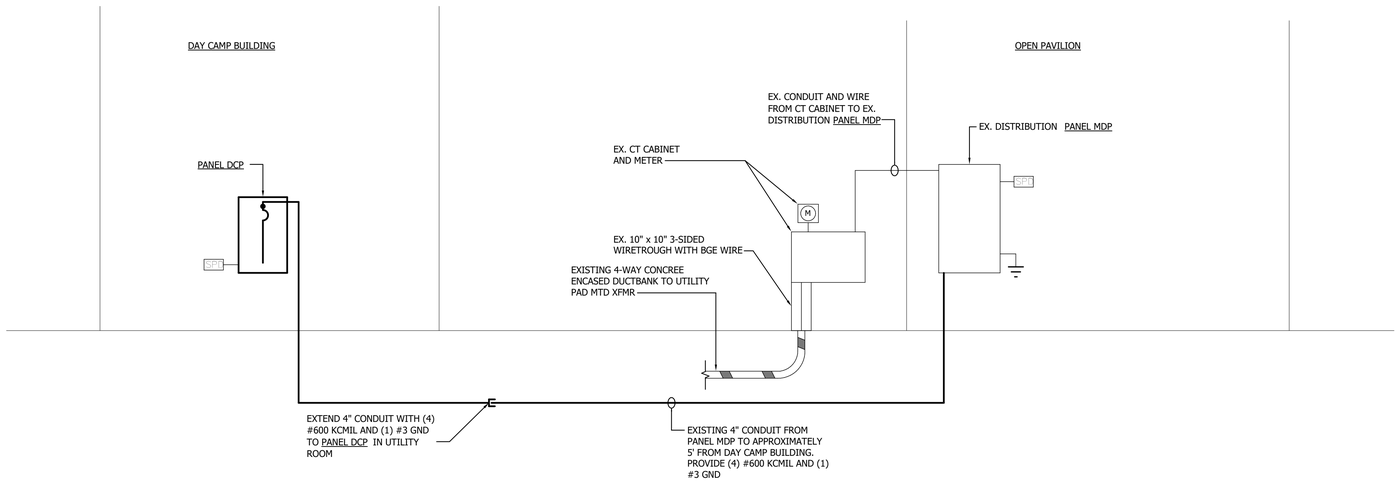
WGM ARCHITECTURE + INTERIORS
WHEELER GOODMAN MASEK
165 LOG CANOE CIRCLE - SUITE B1
STEVENSVILLE, MARYLAND 21666
410.263.6787 www.wgm-arch.com

CERTIFICATION:
I certify that these documents were prepared or approved by me, and that I am a duly licensed architect under the laws of the State of Maryland, license number, expiration date

ANNE ARUNDEL COUNTY
DEPARTMENT OF PUBLIC WORKS

REVISED DATE	BY	APPROVED DATE	APPROVED DATE	SCALE: AS NOTED	ELECTRICAL DETAILS
				DRAWN BY: HFJ	
		CHIEF ENGINEER	PROJECT MANAGER	CHECKED BY: NVK	Mayo Beach Park Day Camp Building
		APPROVED DATE	APPROVED DATE	SHEET: OF	4150 Honeysuckle Dr
				PROJECT #: P584700	Edgewater, MD 21037
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	CONTRACT #: P584702	

MAY 2024
280112-01-001



POWER RISER DIAGRAM

SCALE: NONE

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BID DOCUMENTS | E601

ANNE ARUNDEL COUNTY | MAY 2024

DEPARTMENT OF PUBLIC WORKS | 280112-01-001

REVISED DATE	BY			
		APPROVED DATE	APPROVED DATE	SCALE: AS NOTED
				DRAWN BY: HFJ
		CHIEF ENGINEER	PROJECT MANAGER	CHECKED BY: NVK
		APPROVED DATE	APPROVED DATE	SHEET: OF
				PROJECT #: P584700
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY	CONTRACT #: P584702

POWER RISER DIAGRAM

Mayo Beach Park Day Camp Building
4150 Honeysuckle Dr
Edgewater, MD 21037

LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION	VOLT	MOUNTING	LAMPS	TOTAL INPUT WATTS	MANUFACTURER/MODEL #
A1	4' LONG LED STRIP LIGHTS WITH STEEL HOUSING, IMPACT MODIFIED LINEAR FACETED REFRACTOR, WHITE FINISH, AND 0 - 10 VOLT DIMMING DRIVER	120	CEILING SURFACE	LED 4000 LUMENS 3500K	39.5	LITHONIA WL4-40L-EZ1-LP835
A1E	4' LONG LED STRIP LIGHTS WITH STEEL HOUSING, IMPACT MODIFIED LINEAR FACETED REFRACTOR, WHITE FINISH, 0 - 10 VOLT DIMMING DRIVER, AND EMERGENCY BATTERY PACK	120	CEILING SURFACE	LED 4000 LUMENS 3500K	39.5	LITHONIA WL4-40L-EZ1-LP835-EL14L
B1	VOLIMETRIC 2X4 LED TROFFER LIGHTS WITH COLD ROLLED STEEL HOUSING, IMPACT MODIFIED ACRYLIC DIFFUSER, WHITE FINISH AND 0 - 10 VOLT DIMMING DRIVER	120	RECESSED	LED 4800 LUMENS 3500K	38.4	LITHONIA 2VTL4-48L-ADP-EZ1-LP835
B1E	VOLIMETRIC 2X4 LED TROFFER LIGHTS WITH COLD ROLLED STEEL HOUSING, IMPACT MODIFIED ACRYLIC DIFFUSER, WHITE FINISH, 0 - 10 VOLT DIMMING DRIVER, AND EMERGENCY BATTERY PACK	120	RECESSED	LED 4800 LUMENS 3500K	38.4	LITHONIA 2VTL4-48L-ADP-EZ1-LP835-EL14L
B2	VOLIMETRIC 2X4 LED TROFFER LIGHTS WITH COLD ROLLED STEEL HOUSING, IMPACT MODIFIED ACRYLIC DIFFUSER, WHITE FINISH, AND 0 - 10 VOLT DIMMING DRIVER	120	RECESSED	LED 4000 LUMENS 3500K	31.4	LITHONIA 2VTL4-40L-ADP-EZ1-LP835
B3	VOLIMETRIC 2X4 LED TROFFER LIGHTS WITH COLD ROLLED STEEL HOUSING, IMPACT MODIFIED ACRYLIC DIFFUSER, WHITE FINISH, AND 0 - 10 VOLT DIMMING DRIVER	120	RECESSED	LED 3000 LUMENS 3500K	23.2	LITHONIA 2VTL4-30L-ADP-EZ1-LP83
B3E	VOLIMETRIC 2X4 LED TROFFER LIGHTS WITH COLD ROLLED STEEL HOUSING, IMPACT MODIFIED ACRYLIC DIFFUSER, WHITE FINISH, 0 - 10 VOLT DIMMING DRIVER, AND EMERGENCY BATTERY PACK	120	RECESSED	LED 3000 LUMENS 3500K	23.2	LITHONIA 2VTL4-30L-ADP-EZ1-LP83-EL14L
D1	VOLIMETRIC 2X2 LED TROFFER LIGHTS WITH COLD ROLLED STEEL HOUSING, IMPACT MODIFIED ACRYLIC DIFFUSER, WHITE FINISH, 0 - 10 VOLT DIMMING DRIVER, AND DRYWALL ADAPTER KIT	120	RECESSED	LED 2000 LUMENS 3500K	15.9	LITHONIA 2VTL2-20L-ADP-EZ1-LP835-DGA22FS/VT
D1E	VOLIMETRIC 2X2 LED TROFFER LIGHTS WITH COLD ROLLED STEEL HOUSING, IMPACT MODIFIED ACRYLIC DIFFUSER, WHITE FINISH, 0 - 10 VOLT DIMMING DRIVER, AND DRYWALL ADAPTER KIT	120	RECESSED	LED 2000 LUMENS 3500K	15.9	LITHONIA 2VTL2-20L-ADP-EZ1-LP835-DGA22FS/VT-EL7L
E	LED EXIT SIGN WITH WHITE IMPACT RESISTANT THERMOPLASTIC HOUSING, RED LETTERS, NICKEL CADMIUM BATTERY, AND UNIVERSAL MOUNTING	120	SURFACE WALL/CEILING	LED	1.0	LITHONIA LQM-S-W-3-R-120/277-M6
F1	2' LONG WALL MOUNTED LED FIXTURE WITH STEEL HOUSING, TRANSLUCENT UV STABILIZED DIFFUSER, AND BRUSHED NICKEL FINISH	120	WALL MOUNT 6" ABOVE MIRROR	LED 1660 LUMENS 3500K	16	BROWNLEE LIGHTING 5176-24-BN-H16-35K
F2	4' LONG WALL MOUNTED LED FIXTURE WITH STEEL HOUSING, TRANSLUCENT UV STABILIZED DIFFUSER, AND BRUSHED NICKEL FINISH	120	WALL MOUNT 6" ABOVE MIRROR	LED 3924 LUMENS 3500K	32	BROWNLEE LIGHTING 5176-48-BN-H32-35K
G1	6" APERTURE LED LENSED DOWNLIGHT WITH CLEAR SEMI-SPECULAR REFLECTOR, WIDE DISTRIBUTION, GLASS CONVEX LENS, TEXTURED WHITE FLANGE, AND UL LISTED FOR WET LOCATIONS	120	RECESSED	LED 1000 LUMENS 3500K	9.6	GOTHAM LIGHTING EVO6VR-35/10-AR-LSS-WD-CVX-MVOLT-GZ10-DWHG
G1E	6" APERTURE LED LENSED DOWNLIGHT WITH CLEAR SEMI-SPECULAR REFLECTOR, WIDE DISTRIBUTION, GLASS CONVEX LENS, TEXTURED WHITE FLANGE, UL LISTED FOR WET LOCATIONS, AND EMERGENCY BATTERY PACK	120	RECESSED	LED 1000 LUMENS 3500K	9.6	GOTHAM LIGHTING EVO6VR-35/10-AR-LSS-WD-CVX-MVOLT-GZ10-DWHG-ELR
G2	6" APERTURE LED LENSED DOWNLIGHT WITH CLEAR SEMI-SPECULAR REFLECTOR, WIDE DISTRIBUTION, GLASS CONVEX LENS, TEXTURED WHITE FLANGE, AND UL LISTED FOR WET LOCATIONS	120	RECESSED	LED 2000 LUMENS 3500K	19.7	GOTHAM LIGHTING EVO6VR-35/20-AR-LSS-WD-CVX-MVOLT-GZ10-DWHG
G2E	6" APERTURE LED LENSED DOWNLIGHT WITH CLEAR SEMI-SPECULAR REFLECTOR, WIDE DISTRIBUTION, GLASS CONVEX LENS, TEXTURED WHITE FLANGE, UL LISTED FOR WET LOCATIONS, AND EMERGENCY BATTERY PACK	120	RECESSED	LED 2000 LUMENS 3500K	19.7	GOTHAM LIGHTING EVO6VR-35/20-AR-LSS-WD-CVX-MVOLT-GZ10-DWHG-ELR
M	WALL MOUNTED LED WEDGE WITH DIE-CAST ALUMINUM HOUSING, IP66 RATED, ZERO UPLIGHT, VISUAL COMFORT FORWARD THROW LIGHT DISTRIBUTION, EMERGENCY BATTERY BACKUP, AND WHITE FINISH	120	WALL MOUNT @ 9'-0" AFF	LED 2000 LUMENS 4000K	19	LITHONIA LIGHTING WDGE2-LED-P2-40K-80CRI-T3M-MVOLT-SRM-E10WH-DWHXD

NOTES:
1. ALL INTERIOR LED LIGHT FIXTURES SHALL BE 3500K UNLESS OTHERWISE NOTED.

HVAC ELECTRICAL CONNECTION SCHEDULE

#	DESCRIPTION	SIZE	VOLT/ø	STARTER SIZE	STARTER HOA	STARTER AUX. CONT.	STARTER COMB. FUSED SW.	SEPARATE DISC. SWITCH NON FUSED	SEPARATE DISC. SWITCH FUSED	FUSE SIZE	THERMAL SWITCH	NEMA ENCL.	CIRCUIT #	COMMENTS	DWG. NO.
1	AHU-1	5.63 MCA	208/1	-	-	-	-	2P-30A	-	-	-	1	DCP-21		
2	AHU-2	1.0 MCA	208/1	-	-	-	-	-	-	-	X	1	DCP-43	INDOOR UNIT SHALL BE CONNECTED THROUGH OUTDOOR UNIT	
3	CU-1	36.0 MCA	208/1	-	-	-	-	2P-60A	-	-	-	3R	DCP-25		
4	CU-2	11.0 MCA	208/1	-	-	-	-	2P-30A	-	-	-	3R	DCP-43		
5	UH-1	3.0 KW	208/1	-	-	-	-	-	-	-	-	-	DCP-29	UNIT EQUIPPED WITH INTEGRAL DISCONNECT SWITCH	
6	UH-2	3.0 KW	208/1	-	-	-	-	-	-	-	-	-	DCP-30	UNIT EQUIPPED WITH INTEGRAL DISCONNECT SWITCH	
7	UH-3	3.0 KW	208/1	-	-	-	-	-	-	-	-	-	DCP-33	UNIT EQUIPPED WITH INTEGRAL DISCONNECT SWITCH	
8	UH-4	3.0 KW	208/1	-	-	-	-	-	-	-	-	-	DCP-34	UNIT EQUIPPED WITH INTEGRAL DISCONNECT SWITCH	
9	EF-1	1/6 HP	120/1	-	-	-	-	-	-	-	X	1	DCP-38	EXHAUST FAN TO BE CONTROLLED BY RR CEILING OS	
10	EF-2	1/4 HP	120/1	-	-	-	-	-	-	-	X	1	DCP-40	EXHAUST FAN TO BE CONTROLLED BY LOCAL SWITCH	
11	EF-3	80 W	120/1	-	-	-	-	-	-	-	X	1	DCP-49	CONTROL EXHAUST FAN USING WALL OS THAT CONTROL LIGHTS	
12	WH-1	15 KW	208/3	-	-	-	-	3P-60A	-	-	-	1	DCP-37		
13	RCP-1	45 W	120/1	-	-	-	-	-	-	-	X	1	DCP-42		

JOB: MAYO BAECH PARK DAY CAMP BUILDING PANEL : DCP 18-Aug-23 03:36 PM

CKT QTY		DEMAND	NON/ CONT	PNL KVA	SUBPNL KVA	DEMAND KVA	TOTAL KVA
3	Lighting [L]	1	C	2.7		2.7	3.4
17	Receptacles [R] *	0.5	N	12.0		11.0	11.0
8	Motors [M]	1	<M/H>	7.4		7.4	7.4
	Motors (alternate) [M2]	1	<M/H>				
	Multimotor/Combination [MM]	1	<M/H>				
4	Heating [H] **	1	<M/H>	12.0		12.0	12.0
	Air Conditioning [A] **	1	<M/H>			**	**
14	Other (appliances, etc.) [O]	1	N	25.8		25.8	25.8
	Auxiliary [X]	1	C				
	Kitchen [K]	0.65	N				
46	CIRCUITS						

PANEL CONNECTED LOAD	59.9 KVA	@ 400 AMPS
PANEL DEMAND LOAD	58.9 KVA	144.1 CB MAX KVA
TOTAL PANEL LOAD	59.5 KVA	
	165.2 AMPS	
SPARE CAPACITY =	84.6 KVA	
(BASED ON CB)	234.8 AMPS	
	58.7 %	

FOR CONT. LOADS (C), TOTAL KVA=DEMAND KVA*1.25; FOR NONCONT. (N) & MOTOR/HEATING <M/H> LOADS, TOTAL KVA=DEMAND KVA
* IF RECEPTACLE LOAD IS >10KVA, RECEPTACLE DEMAND LOAD IS (CONNECTED LOAD - 10KVA) * .5 + 10KVA
** INDICATES GREATER OF HEATING OR COOLING. GREATEST SEASONAL LOAD = HEATING

SINGLE WIDTH PANELBOARD. (GFI) INDICATES GFCI CIRCUIT BREAKER.
SURFACE MOUNTED PANEL DCP 120/208 VOLT 3 PHASE 4 WIRE 400 AMP BUS 400 AMP MAIN BREAKER 10,000 A.I.C.

CKT NO.	FOR	BRANCH BREAKERS FRAME	POLES	TRIP	# SETS	#	WIRING SIZE	GND	COND.	CKT NO.	FOR	BRANCH BREAKERS FRAME	POLES	TRIP	# SETS	#	WIRING SIZE	GND	COND.
1	WATER COOLER (GFI)	100	1	20	1	2	12	12	3/4"	2	RECEPT - APPLIANCE	100	1	20	1	2	12	12	3/4"
3	RECEPT - REFRIGERATOR (GFI)	100	1	20	1	2	12	12	3/4"	4	RECEPT - APPLIANCE	100	1	20	1	2	12	12	3/4"
5	RECEPT - REFRIGERATOR (GFI)	100	1	20	1	2	12	12	3/4"	6	RECEPT - APPLIANCE	100	1	20	1	2	12	12	3/4"
7	RECEPT - REFRIGERATOR (GFI)	100	1	20	1	2	12	12	3/4"	8	RECEPT - OUTDOOR & ACTIV.	100	1	20	1	2	12	12	3/4"
9	RECEPT - WATER COOLERS	100	1	20	1	2	12	12	3/4"	10	RECEPT - OFFICE & STORAGE	100	1	20	1	2	12	12	3/4"
11	RECEPT - OUTDOOR & ACTIV.	100	1	20	1	2	12	12	3/4"	12	RECEPT - HEALTH 105B	100	1	20	1	2	12	12	3/4"
13	RECEPT - RESTRM & JANITOR	100	1	20	1	2	12	12	3/4"	14	RECEPT - APPLIANCE HEALTH	100	1	20	1	2	12	12	3/4"
15	RECEPT - OUTDOOR & STOR.	100	1	20	1	2	12	12	3/4"	16	RECEPT - APPLIANCE HEALTH	100	1	20	1	2	12	12	3/4"
17	RECEPT - STAFF 105A	100	1	20	1	2	12	12	3/4"	18	RECEPT - REFRIG HEALTH (GFI)	100	1	20	1	2	12	12	3/4"
19	RECEPT - WATER COOLER	100	1	20	1	2	12	12	3/4"	20	RECEPT - MECH. & RESTRM	100	1	20	1	2	12	12	3/4"
21	AHU-1	100	2	15	1	2	12	12	3/4"	22	RECEPT - PARK OPERATIONS	100	1	20	1	2	12	12	3/4"
23	----------	----	----	----	----	--	----	----	----	24	RECEPT - WORK TABLE 105O	100	1	20	1	2	12	12	3/4"
25	CU-1	100	2	40	1	2	8	10	3/4"	26	RECEPT - WORK TABLE 105O	100	1	20	1	2	12	12	3/4"
27	----------	----	----	----	----	--	----	----	----	28	AIR COMPRESSOR - PARK OPER	100	1	15	1	2	12	12	3/4"
29	UH-1	100	2	20	1	2	12	12	3/4"	30	UH-2	100	2	20	1	2	12	12	3/4"
31	----------	----	----	----	----	--	----	----	----	32	----------	----	----		----	--	----	----	----
33	UH-3	100	2	20	1	2	12	12	3/4"	34	UH-4	100	2	20	1	2	12	12	3/4"
35	----------	----	----	----	----	--	----	----	----	36	----------	----	----		----	--	----	----	----
37	WH-1	100	3	60	1	3	6	10	1"	38	EF-1	100	1	15	1	2	12	12	3/4"
39	----------	----	----	----	----	--	----	----	----	40	EF-2	100	1	15	1	2	12	12	3/4"
41	----------	----	----	----	----	--	----	----	----	42	RCP-1 & CONDENSATE PUMP	100	1	20	1	2	12	12	3/4"
43	AHU-2/CU-2	100	2	15	1	2	12	12	3/4"	44	RECEPT - WORK TABLE 105G	100	1	20	1	2	12	12	3/4"
45	----------	----	----	----	----	--	----	----	----	46	RECEPT - WORK TABLE 105G	100	1	20	1	2	12	12	3/4"
47	RECEPT - HEALTH & ISO	100	1	20	1	2	12	12	3/4"	48	CEILING FANS	100	1	20	1	2	12	12	3/4"
49	LTS & EF-3	100	1	20	1	2	12	12	3/4"	50	RECEPT - TELECOMM	100	1	20	1	2	12	12	3/4"
51	LTS	100	1	20	1	2	12	12	3/4"	52	RECEPT - TELECOMM	100	1	20	1	2	12	12	3/4"
53	OUTDOOR LTS	100	1	20	1	2	12	12	3/4"	54	ADULT CHANGING STATION	100	1	20	1	2	12	12	3/4"
55	FACP	100	1	20	1	2	12	12	3/4"	56	SPARE	100	1	20	----	--	----	----	----
57	SPARE	100	1	20	----	--	----	----	----	58	SPARE	100	1	20	----	--	----	----	----
59	SPARE	100	1	20	----	--	----	----	----	60	SPARE	100	1	20	----	--	----	----	----
61	SPACE	100	1	----	----	--	----	----	----	62	SPACE	100	1	----	----	--	----	----	----
63	SPACE	100	1	----	----	--	----	----	----	64	SPACE	100	1	----	----	--	----	----	----
65	SPACE	100	1	----	----	--	----	----	----	66	SPACE	100	1	----	----	--	----	----	----
67	SPD	100	3	30	1	4	10	10	3/4"	68	SPACE	100	1	----	----	--	----	----	----
69	----------	----	----	----	----	--	----	----	----	70	SPACE	100	1	----	----	--	----	----	----
71	----------	----	----	----	----	--	----	----	----	72	SPACE	100	1	----	----	--	----	----	----

TYPE	KVA	HP
O	1.0	
O	1.0	
O	1.0	
O	1.0	
O	0.8	
R	0.9	
R	0.8	
R	1.1	
R	0.8	
R	0.6	
M	0.8	0.3
M	2.4	
H	3.0	
H	3.0	
O	15.0	
M	1.6	
R	0.6	
L	0.8	
L	0.8	
L	1.1	
O	0.4	

TYPE	KVA	HP
O	0.8	
O	0.8	
O	0.8	
R	0.8	
R	0.9	
R	0.9	
O	0.8	
O	0.8	
O	1.0	
R	0.9	
R	0.9	
R	0.4	
R	0.4	
M	0.5	0.2
H	3.0	
H	3.0	
M	0.7	0.2
M	0.7	0.3
M	0.1	
R	0.6	
R	0.6	
M	0.5	
R	0.4	
R	0.4	
O	0.6	

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		APPROVED DATE	APPROVED DATE
		ASSISTANT CHIEF ENGINEER	CHIEF, RIGHT OF WAY

BID DOCUMENTS | E801
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ELECTRICAL SCHEDULES

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