MONTGOMERY COUNTY HISTORIC PRESERVATION COMMISSION
STAFF REPORT

Address:	23312 Frederick Road, Clarksburg	**Meeting Date:**	12/20/2023
Resource:	Contributing Resource **Clarksburg Historic District**	**Report Date:**	12/13/2023
		Public Notice:	11/1/2023
Applicant:	JAISAI Properties (Ben Dorsey, Architect)	**Tax Credit:**	No
Review:	HAWP	**Staff:**	John Liebertz

Permit Number: 1048193

PROPOSAL: Demolition of outbuildings and construction of new daycare center, including tree removals, grading, new hardscape and other site alterations.

STAFF RECOMMENDATION

Staff recommends that the Historic Preservation Commission (HPC) **approve with two (2) conditions** the HAWP application with final review and approval of all details delegated to staff:

1. The applicant shall submit drawings and specifications for the "waste and recycling enclosure" and "pad mounted transformer" noted on Site Plan C2.01.
2. The applicant shall setup a pre-construction meeting with Historic Preservation staff to review material sample boards and discuss any modifications to the approved plans. This meeting shall occur prior to approval of the building permit.

ARCHITECTURAL DESCRIPTION

SIGNIFICANCE: Contributing Resource within the Historic District
STYLE: Queen Anne
DATE: Ca. 1891-1910

Figure 1: The subject property (noted with the yellow star) is located near the northwest corner of the intersection of Frederick Road and Stringtown Road. The red outline is the boundary of the Clarksburg Historic District.

PROPOSAL

The applicants propose to demolish a non-historic outbuilding and construct a new, one-story, 13,500 sq. ft. daycare/preschool center, playground, pedestrian access from Stringtown Road, and parking lot within the environmental setting of the Clarksburg Historic District. Minimal grading would occur to accommodate the new building, playgrounds, pedestrian ramps, circulation networks, and storm-water management.

APPLICABLE GUIDELINES

The Historic Preservation Office and Historic Preservation Commission (HPC) consult several documents when reviewing alterations and new construction within the Clarksburg Historic District. These documents include the historic preservation review guidelines in the approved and adopted amendment for the *Vision of Clarksburg: A Long-Range Preservation Plan (Vision)*, *Montgomery County Code Chapter 24A (Chapter 24A*), and *the Secretary of the Interior's Standards for Rehabilitation (Standards)*. The pertinent information is outlined below.

Montgomery County Code, Chapter 24A-8

The following guidance which pertains to this project are as follows:

(b) The commission shall instruct the director to issue a permit, or issue a permit subject to such conditions as are found to be necessary to ensure conformity with the purposes and requirements of this chapter, if it finds that:

(1) The proposal will not substantially alter the exterior features of an historic site or historic resource within an historic district; or

(2) The proposal is compatible in character and nature with the historical, archeological, architectural or cultural features of the historic site or the historic district in which an historic resource is located and would not be detrimental thereto or to the achievement of the purposes of this chapter;

(3) The proposal would enhance or aid in the protection, preservation and public or private utilization of the historic site or historic resource located within an historic district in a manner compatible with the historical, archeological, architectural or cultural value of the historic site or historic district in which an historic resource is located; or

(4) The proposal is necessary in order that unsafe conditions or health hazards be remedied; or

(5) The proposal is necessary in order that the owner of the subject property not be deprived of reasonable use of the property or suffer undue hardship; or

(6) In balancing the interests of the public in preserving the historic site or historic resource located within an historic district, with the interests of the public from the use and benefit of the alternative proposal, the general public welfare is better served by granting the permit.

(c) It is not the intent of this chapter to limit new construction, alteration or repairs to any 1 period or architectural style.

(d) In the case of an application for work on an historic resource located within an historic district, the commission shall be lenient in its judgment of plans for structures of little historical or design significance or for plans involving new construction, unless such plans would seriously impair the historic or architectural value of surrounding historic resources or would impair the character of the historic district. (Ord. No. 9-4, § 1; Ord. No. 11-59.)

Secretary of the Interior's Standards for Rehabilitation

The Secretary of the Interior defines rehabilitation as "the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features, which convey its historical, cultural, or architectural values." The applicable *Standards* are as follows:

2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.

5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

STAFF DISCUSSION

Property History

The subject property is a c. 1891-1900 Queen Anne-style Contributing Resource within the Clarksburg Historic District. The house was built by Clarksburg physician Dr. James Deetz and his wife Sarah. The property is known as Hammer Hill, which was the tract name given to the land in 1752. The property is located on the west side of Frederick Road (MD 355) at the southern end of the Clarksburg Historic District, where Frederick Road (MD 355) intersects with Stringtown Road. The house is located on top of a knoll with a deep setback from Frederick Road, and it is accessed via a long driveway. The existing driveway is paved and is at least 20' wide, making it compliant with current fire department requirements. There is an existing, non-original outbuilding with red siding located to the north (right side) of the historic house. The owner of Hammer Hill recently undertook comprehensive rehabilitation and restoration of the house, and it is utilized as a doctor's office. The owner is the applicant for the newly proposed daycare center.

Preliminary Consultation #1 – January 6, 2021

The applicants applied for a Preliminary Consultation with the Historic Preservation Commission (HPC) in January 2021. The commission was generally supportive of the applicants' project, but they provided recommendations to improve the compatibility of the proposal with the subject property and surrounding historic district. The HPC supported the: 1) building, playground, and parking lot locations; 2) size and massing of the proposed building; 3) "concept two" that framed the historic house; and 4) use of

traditional or substitute materials. The board requested further study of and simplification to the overall design of the daycare center and fence.[1]

Preliminary Consultation #2 – June 8, 2022

The applicant returned for a second Preliminary Consultation with the HPC in June 2022. The majority of the commission were supportive of the revised application as it responded to the commission's comments from the previous preliminary review. At the hearing, several commissioners advocated for minimizing the proposed retaining walls and ramps at the southern extent of the property but recognized the need for pedestrian access from Stringtown Road. The commissioners indicated support for the proposal with or without the retaining walls as shown.[2]

Proposal – Demolition of a Non-Contributing Resource

Staff finds that the demolition of a non-contributing outbuilding meets the applicable guidelines and recommends approval. Historic Preservation staff inspected the subject outbuilding and determined that its date of construction fell outside the period of significance for the house and historic district. Therefore, its removal would have no adverse effect.

Proposal – Location of New Daycare Center

Staff finds that the location of the proposed building meets the applicable guidelines and recommends approval. Planning and Historic Preservation staff recommended the proposed location as its consistent with the setback of most buildings within the historic district and existing development on Stringtown Road. The building could not be located entirely in the undeveloped lot to the west due to impervious surface limitations. The proposal maintains the character defining building pattern of the streetscape and historic district. While the new center would serve as a backdrop to the historic house when viewed from Frederick Road, the form, scale, and design of the proposed center allows the historic building to retain its primacy within the environmental setting.

Proposal – Massing, Scale, and Form

Staff finds that the proposed massing, scale, and form of the building meets the applicable guidelines and recommends approval. The proposed one-story is compatible in scale and proportion to the historic house and surrounding historic district. The new, low-scale building appears secondary to the historic house since its ridge remains lower than the ridge of the historic house. In addition, the three-part form (two gable roof sections flanking a central flat roof section) permits visibility of and frames the historic house when looking east towards Frederick Road. Therefore, the massing, scale, and form of the proposal successfully mitigates adverse effects to the individual resource and the surrounding streetscape.

Proposal – Design and Materials

Staff finds that the design of the proposed building meets the applicable guidelines and recommends approval. The contemporary style references nineteenth century agricultural outbuildings and coalesces with the character defining features of the historic district. The screen wall—a major component of the design—increases the building's opacity and diminishes the building's impact to the surrounding

[1] For more information, see the staff report and the audio/video for the hearing: https://montgomeryplanning.org/wp-content/uploads/2020/12/II.B-23310-Frederick-Road-Clarksburg.pdf and http://mncppc.granicus.com/MediaPlayer.php?publish_id=e8fc4fde-5106-11eb-920e-0050569183fa.
[2] For more information, see the staff report and audio/video for the hearing: https://montgomeryplanning.org/wp-content/uploads/2022/06/II.C-23310-Frederick-Road-Clarksburg-2nd-Preliminary-Consultation.pdf and http://mncppc.granicus.com/MediaPlayer.php?publish_id=ae30da48-e7fa-11ec-9ad4-0050569183fa.

landscape. The architect's integration of the mechanical equipment within the building envelope further limits the adverse effect associated with rooftop mechanical in rural historic districts. The units would be set within the western slopes of the gable roofs, screened with aluminum louvers, and visible only from the west on Stringtown Road.

Staff finds that the materials of the proposed building meets the applicable guidelines and recommends approval. The compatibility of the proposed building is augmented by the use of traditional building materials (wood siding, wood-clad frame and screening, and standing seam metal roof) and contemporary materials utilized in traditional ways. The HPC regularly approves the use of substitute materials on non-historic resources within the Clarksburg Historic District. This includes painted cementitious fiberboard siding, painted cementitious fiberboard trim, painted polyvinyl chloride trim, composite windows, aluminum-clad doors, and TPO roofing systems.

Proposal – Site Elements (Playgrounds, Retaining Walls, Hardscape, Stormwater Management Facilities, and Other Features)

Staff finds that the proposed playgrounds meet the applicable guidelines and recommends approval. The HPC limited their review of the playgrounds to their location and fencing. The playground (and its associated equipment) would be located to the west of the new building and be obscured from Frederick Road. Therefore, there would be negligible adverse effects to the individual resource or the surrounding historic district.

Staff finds the proposed fencing to meet the applicable guidelines and recommends approval with conditions. The applicant selected a compatible flat-top, metal fence with a simple profile. The fence would be 6' tall around the playgrounds and the perimeter of the building, and 3.5' tall along the retaining wall/ramp.

Staff finds that the proposed retaining walls and switchbacks meet the applicable guidelines and recommends approval. At the previous preliminary consultation, the HPC requested that the applicant minimize the retaining walls and switchbacks on the southern extent of the property to the greatest possible extant. The commission, however, recognized the accessibility requirements from Stringtown Road and supported the proposal as submitted. The switchbacks would be constructed with a series of high-aggregate concrete retaining walls that range from 3' to 5' tall. The material of the walls and recessed wall lights are compatible with the individual resource and the surrounding district.

Staff finds that the proposed driveways, parking lots, and sidewalk/pathways meet the applicable guidelines and recommends approval. The applicant proposes to install an asphalt paved driveway and three asphalt paved parking lots. A 5'-wide concrete sidewalk encompasses the new building, provides access to the parking lots, and connects the property to the Clarksburg Elementary School to the west. Towards the eastern extent of the property, a 6'-wide concrete sidewalk runs generally parallel to Frederick Road. These walkways would not adversely affect the historic resource or the surrounding district.

Staff finds that the proposed stormwater management facilities meet the applicable guidelines and recommends approval. The four micro-bioretention facilities and their associated plantings would have no adverse effect to the historic resource or the surrounding historic district.

Staff requests additional information on the "waste and recycling enclosure" and "pad mounted transformer" noted on Site Plan C2.01. The applicant shall submit drawings and specifications for these elements which will be reviewed and approved by staff.

Proposal – Site Lighting

Staff finds that the proposed lighting meets the applicable guidelines and recommends approval. The applicant proposes to install: 1) six (6) freestanding streetlights with luminaries mounted on 20'tall poles above the parking areas; 2) five (5) freestanding streetlights with luminaries mounted on 20'tall poles above the playground areas; and 3) twenty-one (21) wall mounted luminaries mounted on the proposed building. The design and material of these light fixtures would have negligible adverse effect to the historic house and surrounding historic district.

Proposal – Removal of Trees

Staff finds that the removal of the trees meets the applicable guidelines and recommends approval. The applicant proposes to remove 14 trees in the Clarksburg Historic District of the following species: Chinese Elm, Ailanthus, Hickory, Walnut, White Pine, Crape Myrtle, Golden Rain Tree, White Mulberry, Black Locust, Mulberry, and Sweet Cherry. The trees are of varying health from dead to good condition, but none of the trees are designated as specimen trees. The applicant proposes to plant 18 trees for mitigation of the following species: Common Hackberry, White Oak, American Beech, Tupelo and Red Oak.

After full and fair consideration of the applicant's submission, staff finds the proposal, as modified by the condition, consistent with the Criteria for Issuance in Chapter 24A-8(b), (1), (2), (c), and (d), having found the proposal is consistent with *the Secretary of the Interior's Standards for Rehabilitation #2, #5, #9,* and *#10*, and the *Vision of Clarksburg: A Long-Range Preservation Plan (Vision)*, as outlined above.

STAFF RECOMMENDATION

Staff recommends that the Commission **approve with two (2) conditions** the HAWP application with final approval delegated to staff:

1. The applicant shall submit drawing and specifications for the "waste and recycling enclosure" and "pad mounted transformer" noted on Site Plan C2.01.
2. The applicant shall setup a pre-construction meeting with Historic Preservation staff to review material sample boards and discuss any modifications to the approved plans. This meeting shall occur prior to approval of the building permit.

under the Criteria for Issuance in Chapter 24A-8(b), (1), (2), (c), and (d), having found that the proposal, as modified by the condition, is consistent with *Vision of Clarksburg: A Long-Range Preservation Plan (Vision)*, and therefore will not substantially alter the exterior features of the historic resource and is compatible in character with the district and the purposes of Chapter 24A;

and with the *Secretary of the Interior's Standards for Rehabilitation #2, #5, #9,* and *#10.*

and with the general condition that the applicant shall present an electronic set of drawings, if applicable, to Historic Preservation Commission (HPC) staff for review and stamping prior to submission for the Montgomery County Department of Permitting Services (DPS) building permits;

and with the general condition that final project design details, not specifically delineated by the Commission, shall be approved by HPC staff or brought back to the Commission as a revised HAWP application at staff's discretion;

and with the general condition that the applicant shall notify the Historic Preservation Staff if they propose to make any alterations to the approved plans. Once the work is completed the applicant will contact the staff person assigned to this application at 301-563-3400 or john.liebertz@montgomeryplanning.org to schedule a follow-up site visit.

FOR STAFF ONLY:
HAWP# 1048193
DATE ASSIGNED_____

APPLICATION FOR HISTORIC AREA WORK PERMIT

HISTORIC PRESERVATION COMMISSION
301.563.3400

APPLICANT:

Name: JAISAI Properties E-mail: pbolarum@gmail.com

Address: 4007 Broadstone Street City: Frederick Zip: 21704

Daytime Phone: 240-423-3615 Tax Account No.: 02-00021673

AGENT/CONTACT (if applicable):

Name: Ben Dorsey/SKA Studio E-mail: bdorsey@skastudio.com

Address: 47 Randall Street Suite 2 City: Annapolis Zip: 21401

Daytime Phone: 443-569-6203 Contractor Registration No.: _____

LOCATION OF BUILDING/PREMISE: MIHP # of Historic Property 13-10-11

Is the Property Located within an Historic District? __Yes/District Name Clarksburg
__No/Individual Site Name_____

Is there an Historic Preservation/Land Trust/Environmental Easement on the Property? If YES, include a map of the easement, and documentation from the Easement Holder supporting this application.

Are other Planning and/or Hearing Examiner Approvals /Reviews Required as part of this Application? (Conditional Use, Variance, Record Plat, etc.?) If YES, include information on these reviews as supplemental information.

Building Number: 23312 Street: Frederick Road

Town/City: Clarksburg Nearest Cross Street: Stringtown Road

Lot: _____ Block: _____ Subdivision: Clarksburg Highlands Parcel: 311

TYPE OF WORK PROPOSED: See the checklist on Page 4 to verify that all supporting items for proposed work are submitted with this application. Incomplete Applications will not be accepted for review. Check all that apply:

- [x] New Construction
- [ ] Addition
- [x] Demolition
- [x] Grading/Excavation
- [ ] Deck/Porch
- [x] Fence
- [x] Hardscape/Landscape
- [ ] Roof
- [ ] Shed/Garage/Accessory Structure
- [ ] Solar
- [x] Tree removal/planting
- [ ] Window/Door
- [ ] Other:_____

I hereby certify that I have the authority to make the foregoing application, that the application is correct and accurate and that the construction will comply with plans reviewed and approved by all necessary agencies and hereby acknowledge and accept this to be a condition for the issuance of this permit.

_____ 10.25.2023

Signature of owner or authorized agent Date

Adjacent and Confronting Properties:

Clarksburg, MD 20871

23310 Frederick Road

23314 Frederick Road

23311 Frederick Road

23315 Frederick Road

23200 Stringtown Road

23100 Stringtown Road

23330 Frederick Road

23321 Frederick Road

Description of Property: Please describe the building and surrounding environment. Include information on significant structures, landscape features, or other significant features of the property:

The project site spans two lots, one protected by the East Environmental Overlay Zone, and the other the site of Hammer Hill, a contributing resource of the Clarksburg Historic District. Hammer Hill stands prominently on a knoll facing Frederick Road where the existing drive leads up to the historic building. While built as a private residence, it currently serves as a medical office. Just beyond the existing parking lot, stands a small outbuilding clad in red siding. The site has large areas of open space, but there are some mature trees scattered around the existing buildings. Hammer Hill is significant to the Clarksburg Historic District because it departs from the earlier vernacular traditions of the town, leading to the belief that it was professionally designed. Its prominence on the site, particular in its relationship to Frederick Road is important in retaining the historic character of the site and of the district.

Description of Work Proposed: Please give an overview of the work to be undertaken:

Following favorable feedback during the second HPC preliminary hearing on 06.08.2022, the Applicant is issuing the HAWP for a new daycare/preschool center to be located to the rear of Hammer Hill, a contributing element to the Clarksburg Historic District. The daycare/preschool center will be oriented towards Stringtown Road in a nonhistorical area. No work is proposed to the Hammer Hill House and within the primary viewshed from the historic house to the historic district. Contemporary design is proposed for the daycare/preschool center that will be compatible in scale, proportion and materials with the main house and with the architectural character of the historic district. Factors considered in the development of the proposed design scenarios submitted for discussion include the character defining features of the historic site, HPC design guidelines, and the standardized architectural program developed by The Learning Experience (Daycare Operator).

The work proposed for the site includes all steps necessary to construct a new daycare/preschool center with adequate parking accessible from the existing Hammer Hill driveway, pedestrian access from Stringtown Rd., and a secure playground. The proposed plan will require the demolition of an existing outbuilding and the removal of several trees. Minimal grading of the site will occur for the new pedestrian ramp from
Stringtown Road, parking areas and pedestrian circulation, storm-water management, the building footprint and adjacent playground area.

The design scenario for the one-story, 13,500 sf, daycare/preschool center has been developed to reference, but not duplicate, the designs of secondary, functional support buildings typical of the period of significance of the Clarksburg Historic District. Design strategies incorporated into the scenario include low scale, staggered massing, integration of mechanicals within the building envelope, use of screen walls, and use of materials.

The site constraints limit the location of the daycare/preschool building to the west of the historic house. As such, the daycare/preschool building becomes a back drop to the Hammer Hill house when viewed from Frederick Rd. The proposed scenario for the daycare/preschool building design is intended to: 1. visually limit overall scale and massing; 2. not introduce roof forms and architectural elements that will visually compete with the architectural elements of the historic building; 3) be of an informal architecture that will read as secondary to the architecture of the historic building.

Work Item 1: Demolition

Description of Current Condition:	Proposed Work:
Small outbuilding clad in red siding, white trim, and a standing seam metal roof. Mature growth deciduous trees around the existing parking lot.	Demolish the existing outbuilding to provide space for the new daycare center. Remove two (2) trees from the proposed parking footprint.

Work Item 2: Grading and Sitework

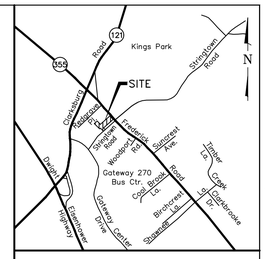
Description of Current Condition:	Proposed Work:
The affected area of the site has a steep grade coming up from Stringtown Road that then flattens to a level, mildly sloping open space, where the parking and daycare center will be constructed.	Grading of the topography to create a new pedestrian ramp from Stringtown Road, adequate parking, and storm-water management systems. Also, grading for the building slab and playground equipment area.

Work Item 3: New Construction

Description of Current Condition:	Proposed Work:
Hammer Hill stands on a knoll facing northeast, with prominent views from Frederick Road, where the existing drive leads up to the Queen Anne Style building, a six (6) space parking area and outbuilding beyond. The site has large areas of open space, with a number of mature trees scattered around the existing buildings.	Construction of the new daycare facility, playground area with perimeter fencing, parking, and pedestrian ramp and pathways: Refer to Description of Work Proposed above for additional information.

HISTORIC AREA WORK PERMIT
CHECKLIST OF
APPLICATION REQUIREMENTS

	Required Attachments						
Proposed Work	I. Written Description	2. Site Plan	3. Plans/ Elevations	4. Material Specifications	5. Photographs	6. Tree Survey	7. Property Owner Addresses
New Construction	*	*	*	*	*	*	*
Additions/ Alterations	*	*	*	*	*	*	*
Demolition	*	*	*		*		*
Deck/Porch	*	*	*	*	*	*	*
Fence/Wall	*	*	*	*	*	*	*
Driveway/ Parking Area	*	*		*	*	*	*
Grading/Excavation/Landscaing	*	*		*	*	*	*
Tree Removal	*	*		*	*	*	*
Siding/ Roof Changes	*	*	*	*	*		*
Window/ Door Changes	*	*	*	*	*		*
Masonry Repair/ Repoint	*	*	*	*	*		*
Signs	*	*	*	*	*		*



VICINITY MAP
SCALE 1" = 2,000'

Abbreviation:

AC	=	Air Conditioner
BIT.	=	Bituminous
BLDG	=	Building
CPM	=	Cable Paint Mark (Miss Utility)
CLF	=	Chain Link Fence
CO	=	Cleanout
CC	=	Concrete Curb
CC&G	=	Concrete Curb & Gutter
EP	=	Edge of Pavement
EMH	=	Electric Man Hole
EPM	=	Electric Paint Mark (Miss Utility)
FEN	=	Fence
FF	=	Finished Floor
FH	=	Fire Hydrant
GM	=	Gas Meter
GPM	=	Gas Paint Mark (Miss Utility)
GRAV	=	Gravel
GW	=	Guy Wire
IPC	=	Iron Pipe with Cap
IPF	=	Iron Pipe Found
LP	=	Light Pole
MH	=	Manhole (unidentified)
(M)	=	Measured
OPF	=	Open Pipe Found
PVM	=	Pavement
PCM	=	Painted Centerline Markings
PEM	=	Painted Edge Markings
PPF	=	Pinched Pipe Found
R/C	=	Rebar with Cap Found
(R)	=	Record
RCP	=	Reinforced Concrete Pipe
SD	=	Storm Drain
SDMH	=	Storm Drain Manhole
SMH	=	Sewer Manhole
TPM	=	Telephone Paint Mark (Miss Utility)
TBM	=	Temporary Bench Mark
UGE	=	Under Ground Electric
WMH	=	Water Manhole
WPM	=	Water Paint Mark (Miss Utility)

LEGEND:

Symbol:

= Bench/Seat
= Benchmark
= Bollard/Fence Post
= Cable TV Box
= Cleanout
= Communications Cable (below grade)
= Concrete
= Electric Cable (below grade)
= Electric Manhole
= Electric Meter
= Entrance
= Fence, Wire
= Fence, Wood
= Fire Department Connection
= Fire Hydrant
= Flood Light
= Gas Manhole
= Gas Meter
= Gas Pipeline
= Gas Post
= Gas Valve
= Guy Wire
= Hand Box (electric)
= Handicap Parking Space/Ramp
= HVAC Units
= Iron Pipe Found
= Light/Signal Pole
= Manhole (unidentified)
= Over Head Wire(s)
= Parking Spaces (count)
= Telephone Junction Box
= Tree/Evergreen
= Tree/Shrade
= Sewer Manhole
= Sewer Pipeline
= Sign
= Storm Drain Grate
= Storm Drain Manhole
= Storm Drain Pipeline
= Telephone Manhole
= Traffic Signal Cabinet
= Traffic Signal Pole
= Transformer
= Utility Pole
= Water Manhole
= Water Meter
= Water Pipeline
= Water Valve

MHG
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
LAND PLANNING

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EMAIL: PBOLARUM@GMAIL.COM

PROJECT TEAM

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MEP & STRUCTURAL ENGINEER:
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ROCKVILLE, MD 20850
CONTACT: NATHAN BIRES
NBIRES@GPINET.COM

REVISIONS

NO.	DESCRIPTION	DATE

TAX MAP EW31 WSSC 232NW13

2TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

HAMMER HILL, PARCEL P311

CLARKSBURG HIGHLANDS, PART OF BLOCK D

PROJ. MGR	DCM
DRAWN BY	DCM
SCALE	1" = 30'
DATE	11/12/23

EXISTING CONDITIONS PLAN

C101

PROJECT NO.	13.109.41
SHEET NO.	OF

Hammer Hill Drive

Proposed Site from Stringtown Rd.

Proposed Site

Hammer Hill with Building Site in Background

Proposed Site from Stringtown Rd.

Proposed Site

Hammer Hill with Building Site in Background

Proposed Site from Stringtown Rd.

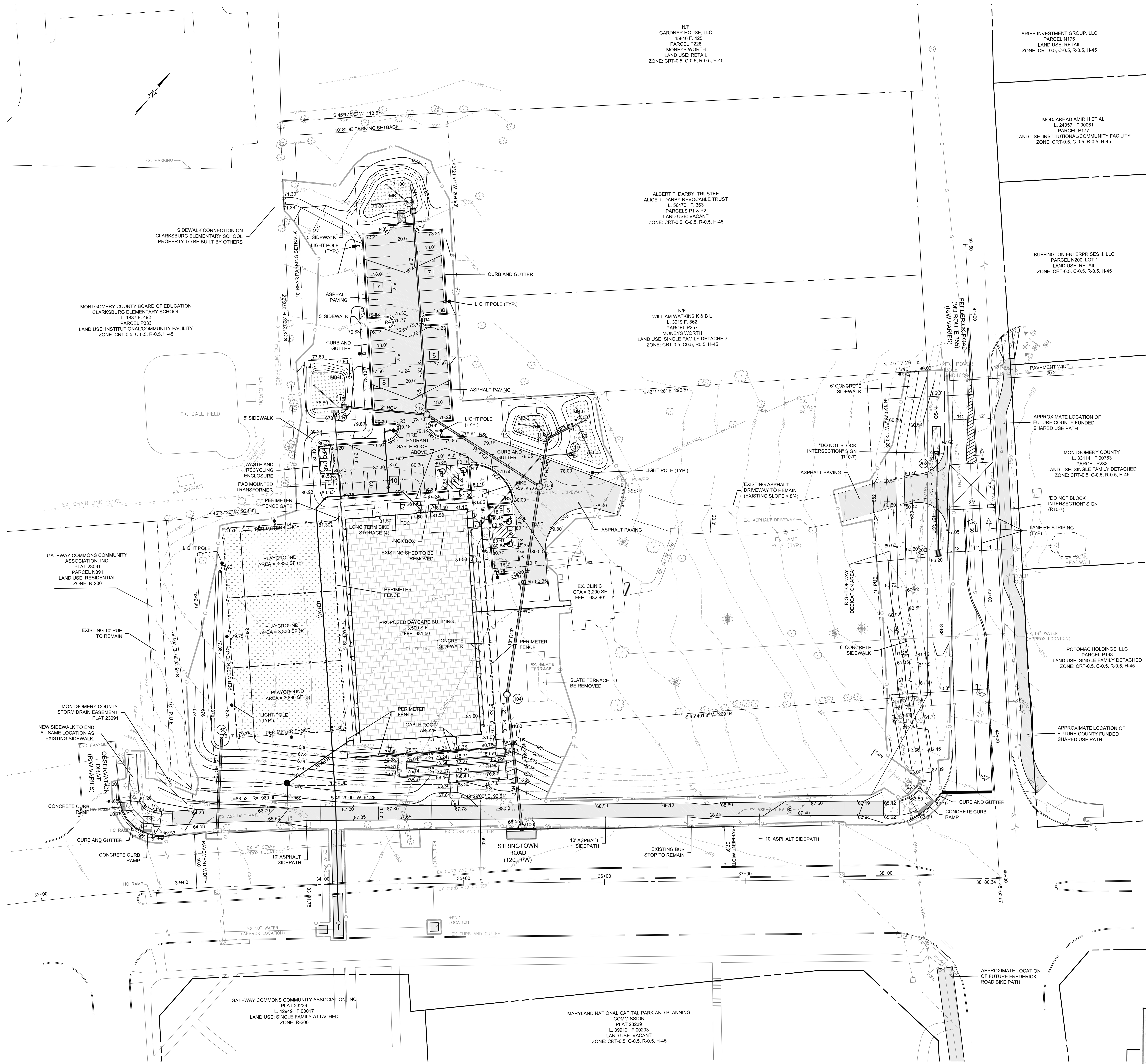
Proposed Site looking to Stringtown Rd.

SKA studio
47 Randall St., Suite 2
Annapolis, MD 21401
skastudio.com
301 858 5853

SITE PHOTOS

Clarksburg Daycare Center
23312 Stringtown Road
Clarksburg, MD
PROJECT # 10272

MONTGOMERY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
Certified Site Plan - 820210090
APPROVAL
06/02/23



GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

ABBREVIATIONS

ARCH	ARCHITECTURAL
BC	BACK OF CURB
BLDG	BUILDING
BS	BOTTOM OF STAIR
BW	BOTTOM OF WALL
CG	CURB & GUTTER\
CONC	CONCRETE
DIP	DUCTILE IRON PIPE
ELEC	ELECTRIC
EP	EDGE OF PAVING
EX	EXISTING
FC	FOREST CONSERVATION
FDC	FIRE DEPARTMENT CONNECTION
FFE	FINISHED FLOOR ELEVATION
FL	FLOW LINE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
MB	MICRO-BIORETENTION
MECH	MECHANICAL
NIC	NOT IN CONTRACT
PLUM	PLUMBING
RCP	REINFORCED CONCRETE PIPE
REM	REMOVE
R/W	RIGHT-OF-WAY
SD	STORM DRAIN
S	SANITARY SEWER
SWM	STORMWATER MANAGEMENT
S/W	SIDEWALK
TBR	TO BE REMOVED
TC	TOP OF CURB
TS	TOP OF STAIR
TW	TOP OF WALL
TYP	TYPICAL
W	WATER

LEGEND

Existing	Item	Proposed
402	CONTOUR (2FT)	402
410	CONTOUR (2FT)	410
× 403.25	SPOT ELEVATION	+ 03.25
	CURB & GUTTER	
	ASPHALT PAVING	
	CONCRETE PAVING	
	LIMITS OF DISTURBANCE	
8" W	WATER LINE	8" W
	FIRE HYDRANT	
6" S	SEWER LINE	6" S
(SIZE/MATERIAL)	STORM DRAIN	(SIZE/MATERIAL)
(SIZE/MATERIAL)	NATURAL GAS	G
E	UNDERGROUND ELECTRIC	E
C	UNDERGROUND COMMUNICATION	C
	LIGHT POLE	
	PROPERTY BOUNDARY	
	EASEMENT	

DEVELOPER'S CERTIFICATE

THE UNDERSIGNED AGREES TO EXECUTE ALL THE FEATURES OF SITE PLAN APPROVAL NO. 820210090 INCLUDING APPROVAL CONDITIONS, DEVELOPMENT PROGRAM, AND CERTIFIED SITE PLAN.

DEVELOPER: JAISAI PROPERTIES, LLC (COMPANY) — DR. PRAVEEN BOLARUM (CONTACT PERSON)

ADDRESS: 4700 BROADSTONE STREET, FREDERICK, MD 21074

PHONE: (240) 423-3615

EMAIL: PBOLARUM@GMAIL.COM

SIGNATURE:

MHG

Civil Engineers
Land Planners
Landscape Architects
Land Surveyors

9220 Wightman Road, Suite 120
Montgomery Village, MD 20886
Phone: 301.670.0840
www.mhgpa.com

STATE OF MARYLAND — STEPHEN EDWARD CRUM — No. 16905 — PROFESSIONAL ENGINEER
Stephen Crum
2023.02.28 07:06:47-05'00'

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. Lic. No. 16905 Exp. Date. 04.21.2024

JAISAI PROPERTIES, LLC
4007 BROADSTONE STREET
FREDERICK, MD 21704
PH: (240) 423-3615
EMAIL: PBOLARUM@GMAIL.COM

PROJECT TEAM

OWNER/APPLICANT:
JAISAI PROPERTIES, LLC
4007 BROADSTONE ST.
FREDERICK, MD 21704
PHONE: (240) 423-3615
CONTACT: DR. PRAVEEN BOLARUM
EMAIL: PBOLARUM@GMAIL.COM

CIVIL ENGINEER & LANDSCAPE ARCHITECT:
MACRIS, HENDRICKS & GLASCOCK, P.A.
9220 WIGHTMAN ROAD, SUITE 120
MONTGOMERY VILLAGE, MD 20886
PHONE: (301) 670-0840
CONTACT: DYLAN MACRO, CDT
EMAIL: DMACRO@MHGPA.COM

TRAFFIC ENGINEER:
WELLS + ASSOCIATES
1110 BONIFANT ST., SUITE 210
SILVER SPRING, MD 20910
PHONE: (301) 448-1335
CONTACT: WILLIAM ZEID, PE
EMAIL: WLZEID@WELLSANDASSOCIATES.COM

LAND USE ATTORNEY:
LERCH, EARLY & BREWER, CHTD.
7600 WISCONSIN AVENUE, SUITE 700
BETHESDA, MD 20814
PHONE: (301) 961-6095
CONTACT: STUART R. BARR
EMAIL: SRBARR@LERCHEARLY.COM

ARCHITECT:
SKA STUDIO
47 RANDALL ST., SUITE 2
ANNAPOLIS, MD 21401
PHONE: (301) 858-5853
CONTACT: STEVEN KAHLE, AIA, NCARB
EMAIL: SKAHLE@SKASTUDIO.COM

REVISIONS

NO.	DESCRIPTION	DATE
1	RESOLUTION APPROVAL	9/21/22

TAX MAP EW31 WSSC 232NW13

2TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

HAMMER HILL, PARCEL P311

CLARKSBURG HIGHLANDS, PART OF BLOCK D

PROJ. MGR	DCM
DRAWN BY	DCM
SCALE	1" = 30'
DATE	05.11.22

SITE PLAN

820210090

C2.01

PROJECT NO. 13.109.41

SHEET NO. 7 OF 7

APPROVED
Department of Permitting Services
Permit #: SEDIMENT CONTROL
Date

STANDARD EROSION AND SEDIMENT CONTROL NOTES

1. The permittee shall notify the Department of Permitting Services (DPS) forty-eight (48) hours before commencing any land disturbing activity and, unless waived by the Department, shall be required to hold a pre-construction meeting between them or their representative, their engineer and an authorized representative of the Department.
2. The permittee must obtain inspection and approval by DPS at the following points:
   - A. At the required pre-construction meeting.
   - B. Following installation of sediment control measures and prior to any other land disturbing activity.
   - C. During the installation of a sediment basin or stormwater management structure at the required inspection points (see Inspection Checklist on plan). Notification prior to commencing construction is mandatory.
   - D. Prior to removal or modification of any sediment control structure(s).
   - E. Prior to final acceptance.
3. The permittee shall construct all erosion and sediment control measures per the approved plan and construction sequence, shall have them inspected and approved by the Department prior to beginning any other land disturbances, shall ensure that all runoff from disturbed areas is directed to the sediment control devices, and shall not remove any erosion or sediment control measure without prior permission from the Department.
4. The permittee shall protect all points of construction ingress and egress to prevent the deposition of materials onto traversed public thoroughfare(s). All materials deposited onto public thoroughfare(s) shall be removed immediately.
5. The permittee shall inspect periodically and maintain continuously in effective operating condition, all erosion and sediment control measures until such times as they are removed with prior permission from the Department. The permittee is responsible for immediately repairing or replacing any sediment control measures which have been damaged or removed by the permittee or any other person.
6. Following initial soil disturbance or re-disturbance, permanent or temporary stabilization must be completed within:
   - a. Three (3) calendar days as to the surface of all perimeter dikes, swales, ditches, perimeter slopes and all slopes steeper than 3 horizontal to 1 vertical (3:1); and
   - b. Seven (7) calendar days as to all other disturbed or graded areas on the project site not under active grading.

   All areas disturbed outside of the perimeter sediment control system must be minimized and stabilized immediately. Maintenance must be performed as necessary to ensure continued stabilization.
7. The permittee shall apply sod, seed, and anchored straw mulch, or other approved stabilization measures to all disturbed areas within seven (7) calendar days after stripping and grading activities have ceased on that area. Maintenance shall be performed as necessary to ensure continued stabilization. Active construction areas, such as borrow or stockpile areas, roadway improvements, and areas within fifty (50) feet of a building under construction may be exempt from this requirement, provided that erosion and sediment control measures are installed and maintained to protect those areas.
8. Prior to removal of sediment control measures, the permittee shall stabilize all contributory disturbed areas with required soil amendments and topsoil, using sod or an approved permanent seed mixture and an approved anchored mulch. Wood fiber mulch may only be used in seeding season when the slope does not exceed 10% and grading has been done to promote sheet flow drainage. Areas brought to finished grade during the seeding season shall be permanently stabilized within seven (7) calendar days of establishment. When property is brought to finished grade during the months of November through February, and permanent stabilization is found to be impractical, an approved temporary seed and straw anchored mulch shall be applied to disturbed areas. The final permanent stabilization of such property shall be completed prior to the following April 15.
9. The site permit, work, materials, approved SC/SM plans, and test reports shall be available at the site for inspection by duly authorized officials of Montgomery County.
10. Surface drainage flows over unstabilized cut and fill slopes shall be controlled by either preventing drainage flows from traversing the slopes or by installing mechanical devices to lower the water down slope without causing erosion. Dikes shall be installed and maintained at the top of cut or fill slopes until the slope and drainage area to it are fully stabilized, at which time they must be removed and final grading done to promote sheet flow drainage. Mechanical devices must be provided at points of concentrated flow where erosion is likely to occur.
11. Permanent swales or other points of concentrated water flow shall be stabilized within 3 calendar days of establishment with sod or seed with an approved erosion control matting or by other approved stabilization measures.
12. Sediment control devices shall be removed, with permission of the Department, within thirty (30) calendar days following establishment of permanent stabilization in all contributory drainage areas. Stormwater management structures used temporarily for sediment control shall be converted to the permanent configuration within this time period as well.
13. No permanent cut or fill slope with a gradient steeper than 3:1 will be permitted in lawn maintenance areas or on residential lots. A slope gradient of up to 2:1 will be permitted in non-maintenance areas provided that those areas are indicated on the erosion and sediment control plan with a low-maintenance ground cover specified for permanent stabilization. Slope gradient steeper than 2:1 will not be permitted with vegetative stabilization.
14. The permittee shall install a splashblock at the bottom of each downspout unless the downspout is connected by a drain line to an acceptable outlet.
15. For finished grading, the permittee shall provide adequate gradients so as to prevent water from standing on the surface of lawns more than twenty-four (24) hours after the end of a rainfall, except in designated drainage courses and swale flow areas, which may drain as long as forty-eight (48) hours after the end of a rainfall.
16. Sediment traps or basins are not permitted within 20 feet of a building which is existing or under construction. No building may be constructed within 20 feet of a sediment trap or basin.
17. All inlets in non-sump areas shall have asphalt berms installed at the time of base paving establishment.
18. The sediment control inspector has the option of requiring sediment control measures, as deemed necessary.
19. All trap elevations are relative to the outlet elevation, which must be on existing undisturbed ground.
20. Vegetative stabilization shall be performed in accordance with the Standards and Specifications for Soil Erosion and Sediment Control.
21. Sediment trap(s)/basin(s) shall be cleaned out and restored to the original dimensions when sediment has accumulated to the point of one-half (1/2) the wet volume of the trap/basin (1/4 the wet storage depth for ST-III) or when required by the sediment control inspector.
22. Sediment removed from traps/basins shall be placed and stabilized in approved areas, but not within a floodplain.
23. All sediment basins and traps must be surrounded with a welded wire safety fence. The fence must be at least 42 inches high, have posts spaced no farther apart than 8 feet, have mesh openings no greater than the two inches in width and four inches in height, with a minimum of 14 gauge wire. Safety fence must be maintained in good condition at all times.
24. No excavation in the areas of existing utilities is permitted unless their location has been determined. Call "Miss Utility" at 1-800-587-7777, 48 hours prior to the start of work.
25. Off-site spoil or borrow areas must have prior approval by DPS.
26. Sediment trap/basin dewatering for cleanout or repair may only be done with the DPS inspector's permission. The inspector must approve the dewatering method for each application. The following methods may be considered:
   - A. pump discharge may be directed to another on-site sediment trap or basin, provided it is of sufficient volume and the pump intake is floated to prevent agitation or suction of deposited sediments; or
   - B. the pump intake may utilize a Removable Pumping Station and must discharge into an undisturbed area through a non-erosive outlet; or
   - C. the pump intake may be floated and discharge into a Dirt Bag (12 oz. non-woven fabric), or approved equivalent, located in an undisturbed buffer area.

   Remember: Dewatering operation and method must have prior approval by the DPS inspector.
27. The permittee must notify the Department of all utility construction activities within the permitted limits of disturbance prior to the commencement of those activities.
28. Topsoil must be applied to all pervious areas within the limits of disturbance prior to permanent stabilization in accordance with MDE "Standards and Specifications for Soil Preparation, Topsoiling, and Soil Amendments."

January 2017

TREE CANOPY REQUIREMENTS TABLE

To be completed by the consultant and placed on the first sheet of the Sediment Control / Stormwater Management plan set for all projects.

Exempt: Yes ☒ No ☐ If exempt under section 55-5 of the code, please check the applicable exemption category below.

Total Property Area	Total Disturbed Area
147,190 square feet	117,400 square feet

Shade Trees Required	Shade Trees Proposed to be Planted
44	0

Fee in Leiu (Tree Required - Trees Planted) x $250	$ 11,000

Required Number of Shade Trees

Area (sq. ft.) of the Limits of Disturbance FROM	TO	Number of Shade Trees Required
1	6,000	3
6,001	8,000	6
8,001	12,000	9
12,001	14,000	12
14,001	40,000	15

If the square footage of the limits of disturbance is more than 40,000, then the number of shade trees required must be calculated using the following formula:

(Number of Square Feet in Limits of Disturbance ÷ 40,000) x 15

EXEMPTION CATEGORIES

- ☒ 55-5(a) any activity that is subject to Article II of Chapter 22A;
- ☐ 55-5(b) any commercial logging or timber harvesting operation with an approved exemption from Article II of Chapter 22A;
- ☐ 55-5(f) any activity conducted by the County Parks Department;
- ☐ 55-5(g) routine or emergency maintenance of an existing stormwater management facility, including an existing access road, if the person performing the maintenance has obtained all required permits;
- ☐ 55-5(h) any stream restoration project if the person performing the work has obtained all necessary permits;
- ☐ 55-5(i) cutting or clearing any tree to comply with applicable provisions of any federal, state, or local law governing safety of dams;
- ☐ OTHER: Specify per Section 55-5 of the Code.

FOREST CONSERVATION PLAN
120210180 APPROVED ON 04/20/2023

DEPARTMENT OF PERMITTING SERVICES

Marc Elrich, County Executive — Rabbiah Sabbakhan, Director

March 16, 2023

Mr. Mark Hollida
Macris, Hendricks & Glasscock, P.A.
9220 Wightman Road, Suite 120
Montgomery Village, Maryland 20886

Re: REVISED **COMBINED PRELIMINARY AND FINAL WATER QUALITY PLAN/SITE DEVELOPMENT STORMWATER MANAGEMENT PLAN** for
Hammer Hill
Preliminary Plan #: 120210180
SM File #: 286644
Tract Size/Zone: 3.36 Ac/CRT-0.5, C-0.5, R0.5
Total Concept Area: 3.36 Ac
Lots/Block: N/A
Parcel(s): P311 and N366
Watershed: Ten Mile Creek (East) SPA

Dear Mr. Hollida:

Based on a review by the Department of Permitting Services Review Staff, the revised Preliminary/Final Water Quality Plan/Inventory for the for the above-mentioned site is **acceptable**. The revised Preliminary/Final Water Quality Plan proposes to meet required stormwater management goals via Micro Bioretention and Grassed Swale. This approval is for the elements of the revised Preliminary/Final Water Quality Plan of which DPS has the lead agency role and does not include limits on the imperviousness or buffer encroachments.

The following items will need to be addressed during the detailed sediment control/stormwater management plan stage:

1. A detailed review of the stormwater management computations will occur at the time of detailed plan review.
2. Connection to the public storm drain structure in Stringtown Road will require permits for those connections.
3. An engineered sediment control plan must be submitted for this development.
4. Please provide this revised letter and the original letter on the engineered plans.
5. All filtration media for manufactured best management practices, whether for new development or redevelopment, must consist of MDE approved material.
6. **This approval letter supersedes the previous approval letter dated April 5, 2021**.

This list may not be all-inclusive and may change based on available information at the time.

DPS Montgomery County | Department of Permitting Services
2425 Reedie Drive, 7th Floor, Wheaton, Maryland 20902 | 240-777-0311
www.montgomerycountymd.gov/permittingservices

Mr. Mark Hollida
March 16, 2023
*Page **2** of **2***

Payment of a stormwater management contribution in accordance with Section 2 of the Stormwater Management Regulation 4-90 **is not required**.

This letter must appear on the sediment control/stormwater management plan at its initial submittal. The concept approval is based on all stormwater management structures being located outside of the Public Utility Easement, the Public Improvement Easement, and the Public Right of Way unless specifically approved on the concept plan. Any divergence from the information provided to this office; or additional information received during the development process; or a change in an applicable Executive Regulation may constitute grounds to rescind or amend any approval actions taken, and to reevaluate the site for additional or amended stormwater management requirements. If there are subsequent additions or modifications to the development, a separate concept request shall be required.

If you have any questions regarding these actions, please feel free to contact Andrew Kohler at 240-777-6275.

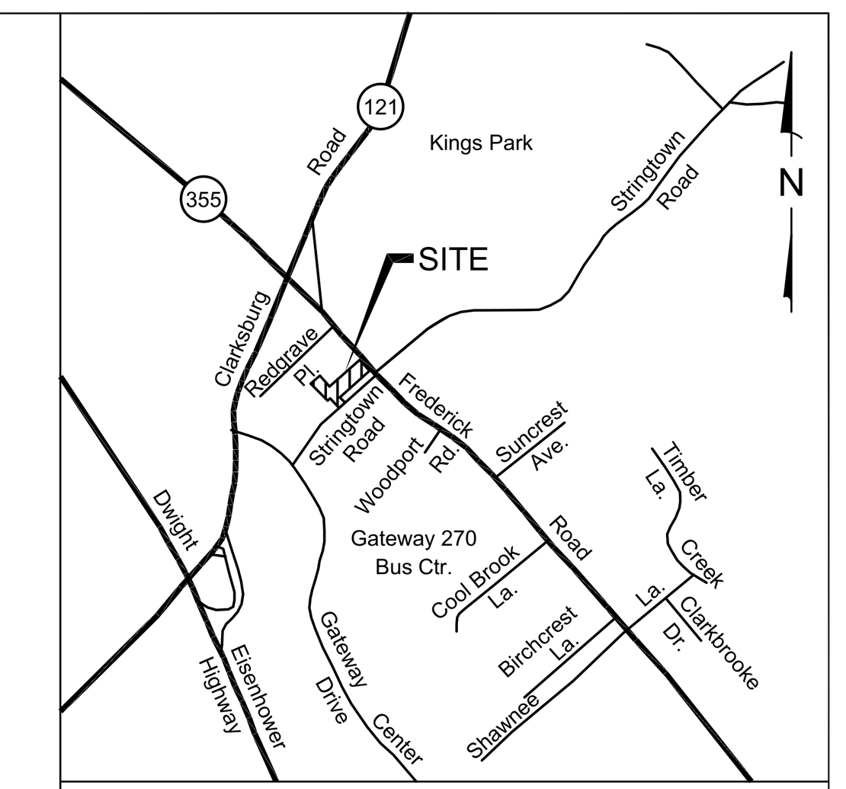
Sincerely,

Mark Etheridge
Mark C. Etheridge, Manager
Water Resources Section
Division of Land Development Services

MCE: AK

cc: N. Braunstein
SM File # 286644

ESD: Required/Provided 6862 cf / 8051 cf
PE: Target/Achieved: 1.60"/1.88"
STRUCTURAL: N/A cf
WAIVED: N /A cf.



VICINITY MAP
SCALE 1" = 2,000'

SEQUENCE OF CONSTRUCTION
(SUBJECT TO FOREST CONSERVATION LAWS)

1. PRIOR TO CLEARING TREES, INSTALLING SEDIMENT CONTROL MEASURES, OR GRADING, A PRECONSTRUCTION MEETING MUST BE CONDUCTED ON-SITE WITH THE MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES (MCDPS) SEDIMENT CONTROL INSPECTOR 240.777.0311 (48 HOURS NOTICE) AND THE MNCPPC, PLANNING DEPARTMENT, PLANS ENFORCEMENT INSPECTOR 301.495.4550 (48 HOURS NOTICE), THE OWNERS REPRESENTATIVE, AND THE SITE ENGINEER. IN ORDER FOR THE MEETING TO OCCUR, THE APPLICANT MUST PROVIDE ONE SET OF APPROVED SEDIMENT CONTROL PLANS TO THE MCDPS SEDIMENT CONTROL INSPECTOR AT THE PRECONSTRUCTION MEETING. IF NO PLANS ARE PROVIDED, THE MEETING SHALL NOT OCCUR AND WILL NEED TO BE RESCHEDULED PRIOR TO COMMENCING ANY WORK.
2. THE LIMITS OF DISTURBANCE MUST BE FIELD MARKED PRIOR ANY WORK AND THE INSTALLATION OF SEDIMENT CONTROL MEASURES, CONSTRUCTION, OR OTHER LAND DISTURBING ACTIVITIES.
3. THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MNCPPC INSPECTOR, CERTIFYING THAT THE LIMITS OF DISTURBANCE AND TREE PROTECTION MEASURES ARE CORRECTLY MARKED AND INSTALLED PRIOR TO COMMENCING ANY CLEARING.
4. CLEAR AND GRADE FOR INSTALLATION OF PERIMETER SEDIMENT CONTROL DEVICES.
5. INSTALL STABILIZED CONSTRUCTION ENTRANCE, SUPER SILT FENCE, AND INLET PROTECTION MEASURES.
6. ONCE THE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FOR THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING.

STEPS 7 THRU 11 DO NOT NEED TO BE PERFORMED IN THIS EXACT ORDER.

7. RELOCATE/REMOVE EXISTING FEATURES WITHIN THE PROPOSED LIMITS OF DISTURBANCE.
8. EXCAVATE AND BEGIN NEW BUILDING CONSTRUCTION.
9. INSTALL NEW SITE UTILITIES AND STORM DRAIN.
10. CONSTRUCT NEW CURB AND GUTTER, ASPHALT PAVING, CONCRETE WALKS, AND SHARED USE PATHS.
11. RECONSTRUCT PEDESTRIAN RAMPS.
12. TO ENSURE CONTAMINATION DOES NOT OCCUR PROTECT SWM AREAS WITH SILT FENCE AS SHOWN ON THE DRAWINGS. ONCE TRIBUTARY DRAINAGE AREAS ARE STABILIZED, CONSTRUCT ALL NEW SWM FACILITIES.
13. WRITTEN APPROVAL IS REQUIRED FROM THE MCDPS INSPECTOR BEFORE REMOVING ANY SESC DEVICES AT THE COMPLETION OF CONSTRUCTION.
14. PERMANENTLY STABILIZE SITE IN ACCORDANCE WITH THE STABILIZATION TABLES AND MDE REQUIREMENTS AS SHOWN ON DRAWING C3.03.
15. FOR AS-BUILT PACKAGE SUBMISSION, PROVIDE ALL MATERIAL TICKETS, GEOTECHNICAL REPORTS, REPORTS, AND RECORDED SWM EASEMENT DOCUMENTS TO THE ENGINEER OF RECORD FOR AS-BUILT SUBMISSION TO DPS FOR REVIEW AND APPROVAL.

MHG
Civil Engineers
Land Planners
Landscape Architects
Land Surveyors
9220 Wightman Road, Suite 120
Montgomery Village, MD 20886
Phone: 301.670.0840
www.mhgpa.com

State of Maryland — Stephen Edward Crum — No. 16905 — Professional Engineer
Digitally signed by Stephen Crum
Date: 2023.09.21

Professional Certification
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the Laws of the State of Maryland. Lic. No. 16905 Exp. Date. 04.21.2024

PROJECT TEAM

OWNER/APPLICANT:
JAISAI PROPERTIES, LLC
4007 BROADSTONE ST.
FREDERICK, MD 21704
PHONE: (240) 423-3615
CONTACT: DR. PRAVEEN BOLARUM
EMAIL: pbolarum@gmail.com

CIVIL ENGINEER & LANDSCAPE ARCHITECT:
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SILVER SPRING, MD 20910
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CONTACT: WILLIAM ZEID, PE
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CONTACT: STEVEN KAHLE, AIA, NCARB
EMAIL: SKAHLE@SKASTUDIO.COM

SOIL EROSION, SEDIMENT CONTROL AND SWM PLAN SHEET INDEX

SHEET NUMBER	PLAN SHEET DESCRIPTIONS	EPLAN FILE NAME
1 OF 9	SESC COVER SHEET	SC001
2 OF 9	SESC PLAN	SC002
3 OF 9	SESC DETAILS	SC003
4 OF 9	SWM DRAINAGE AREA MAP	SC004
5 OF 9	SWM DETAILED PLAN	SC005
6 OF 9	SWM NOTES & DETAILS	SC006
7 OF 9	SD PROFILES, SCHEDULES, & NOTES	SC007
8 OF 9	SWM LANDSCAPE PLAN	SC008
9 OF 9	SWM LANDSCAPE NOTES & DETAILS	SC009

RECORD DRAWING CERTIFICATION

A record set of approved Sediment Control/Stormwater Management plans must be maintained on-site at all times. In addition to stormwater management items, these plans must include the number and location of all trees proposed to be planted to comply with the Tree Canopy Law. Any approved modifications or deletions of stormwater practices or tree canopy plantings or information must be shown on this record set of plans and on the Tree Canopy Requirements table. Upon completion of the project, this record set of plans, including hereon this signed Record Drawing Certification, a formal Stormwater Management As-Built submission [X] is required [ ] is not required for this project.

If this project is subject to a Stormwater Management Right of Entry and Maintenance Agreement, that document is recorded in Montgomery County Land Records at:

Liber N/A Folio N/A . This Record Drawing will serve as referenced in the recorded document.

"This record drawing accurately and completely represents the stormwater management practices and tree canopy plantings as they were constructed or planted. All stormwater management practices were constructed per the approved Sediment Control / Stormwater Management plans or subsequent approved revisions."

N/A
Owner/Developer Signature — Date

FILED CHECK OF RECORD DRAWING BY MCDPS INSPECTOR: INITIALS:_________ DATE:_______

ATTENTION

THIS SITE IS WITHIN THE ENVIRONMENTALLY SENSITIVE

CLARKSBURG SPECIAL PROTECTION AREA AND TEN MILE CREEK SPECIAL PROTECTION AREA

TO HELP PROTECT THE DELICATE AQUATIC HABITAT FROM THE IMPACTS OF LAND DEVELOPMENT THESE PLANS MUST BE STRICTLY ADHERED TO

IF THERE IS A PROBLEM, CALL

PRAVEEN BOLARUM 240 423 3615

AND THE MCDPS STAFF MEMBER WILL ASSIST YOU IN DEVELOPING A SOLUTION BEFORE STREAM IMPACTS OCCUR

(MENTION THAT THE SITE IS WITHIN A SPECIAL PROTECTION AREA WHEN YOU CALL)

"LET'S WORK TOGETHER TO KEEP IT CLEAN"

ACKNOWLEDGED ____________
OWNER/DEVELOPER

DEPARTMENT OF GENERAL SERVICES

Marc Elrich, *County Executive* — David Dise, *Director*

September 15, 2023

LETTER OF PERMISSION

This document shall serve as an agreement between Jaisai Properties, LLC, owner of Parcel P311 and Parcel P366, with tax ID numbers 02-00021673 and Montgomery County Maryland, owner of adjacent property, Clarksburg Heights, Parcel 340, with tax ID number 02-00021695.

Jaisai Properties, LLC requests permission to install temporary sediment control devices, and conduct grading, in an area approximately 1,500 square feet along the western edge of parcel P340, as indicated on the attached Soil Erosion and Sediment Control plan, dated September 14, 2023.

It is further agreed by both parties, referenced herein, that any costs associated with this temporary construction, grading, and restoration of the approximately 1,500 square foot area along the western edge of parcel P340, shall be incurred by Jaisai Properties, LLC. Montgomery County Maryland shall be released from any liabilities in the course of the grading and restoration of this area.

Acknowledged and Accepted:

Jaisai Properties, LLC - Dr. Praveen Bolarum — 9/15/23 Date
Owner – Hammer Hill Daycare Facility, Lot 1

Thomas A. Williamson
Montgomery County, Maryland – Thomas A. Williamson — 9/15/23 Date
Owner – Clarksburg Heights, Parcel P340

Office of the Director
101 Monroe Street, 9th Floor • Rockville, Maryland 20850
www.montgomerycountymd.gov

RELATED REQUIRED PERMITS

To be completed by the consultant and placed on the first sheet of the Sediment Control / Stormwater Management plan set for all projects.

IT IS THE RESPONSIBILITY OF PERMITTEE/OWNER OF THIS SITE TO OBTAIN ALL REQUIRED PERMITS PRIOR TO ISSUANCE OF THE SEDIMENT CONTROL PERMIT

TYPE OF PERMIT	REQD	NOT REQD	PERMIT #	EXPIRATION DATE	WORK RESTRICTION DATES
MCDPS Floodplain District		✓			
WATERWAYS/WETLAND(S):					
a. Corps of Engineers		✓			
b. MDE		✓			
c. MDE Water Quality Certification		✓			
MDE Dam Safety		✓			
* DPS Roadside Tree Protection Plan	✓		390056	Approval Date 08/18/2023	[redacted]
** N.P.D.E.S. NOTICE OF INTENT	✓		[redacted]		
FEMA LOMR (Required Post Construction)		✓			
MCDPS ROW Plan	✓		390056		
MDOT SHA Acces Plan	✓		21APMO018XX		

* A copy of the approved Roadside Trees Protection Plan must be delivered to the sediment control inspector at the preconstruction meeting.

** When a Notice of Intent is required, the sediment control permit may not be issued until confirmation of authorization under the MDE's 20-CP permit has been submitted to DPS

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

FOR UTILITY LOCATIONS
CONTACT "ONE CALL" AT 811
AT LEAST 48 HOURS
PRIOR TO CONSTRUCTION

DESIGN CERTIFICATION

I hereby certify that this plan has been prepared in accordance with the "2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control", Montgomery County Department of Permitting Services Executive Regulations 5-90, 7-02AM and 36-90 and Montgomery County Department of Transportation "Storm Drain Design Criteria" dated June 10, 2014.

Design Engineer Signature — 09-21-2023 Date
Stephen E. Crum, P.E. — 16905
Printed Name — Registration Number

CERTIFICATION OF THE QUANTITIES

I hereby certify that the estimated total amount of excavation and fill as shown on these plans has been computed to be 1402 cubic yards of excavation, 1435 cubic yards of fill and the total area to be disturbed, as shown on these plans, has been determined to be 117400 square feet.

Signature — 09-21-2023 Date
Stephen E. Crum, P.E. — 16905
Printed Name and Title — Registration Number

Note: The earthwork cut and fill quantities and the area of disturbance indicated in this certificate are calculated for the purpose of plan approval and shall not be used for contractual obligations.

MAINTENANCE CERTIFICATION ON PRIVATE LANDS

I/We hereby certify that I/We assume maintenance responsibilities for all stormwater management structures shown hereon. If maintenance responsibility is legally transferred, I/We agree to supply the Montgomery County Department of Environmental Protection with a copy of the document (signed by both parties) transferring said maintenance responsibility at that time.

Signature — 3/20/23 Date

OWNER'S/DEVELOPER'S CERTIFICATION

I/We hereby certify that all clearing, grading, construction and/or development will be done pursuant to this plan and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources approved training program for the control of sediment and erosion before beginning the project.

Signature — 3/20/23 Date
PRAVEEN BOLARUM
Printed Name and Title

DRAINAGE STATEMENT

I understand that DPS approval of this sediment control/stormwater management plan is for demonstrated compliance with required environmental runoff treatment standards. This DPS sediment control/stormwater management plan approval does not relieve me of professional responsibility. I have analyzed the proposed design for sediment control permit no. 288588 and hereby state that, based upon my background, training and experience, I have determined that the proposed improvements shown on this plan meet relevant laws and regulations. I further acknowledge that I have analyzed the post development drainage patterns for this project from the standpoint of my responsibilities under current Maryland Law and have determined that if permission is required from adjacent property owners, it has been obtained and copies of those permissions have been made available to DPS.

Engineer Signature — 09-21-2023 Date
Stephen E. Crum, P.E. — 16905
Printed Name — Registration Number

CLARKSBURG EAST ENVIRONMENTAL OVERLAY ZONE
PERCENTAGE IMPERVIOUS CAP: 15%
PROPOSED IMPERVIOUS PERCENTAGE: 13.9%

10 MILE CREEK SPECIAL PROTECTION AREA
DISTURBED AREA FOR BMP MONITORING: 81,420 SF
PERCENTAGE IMPERVIOUS CAP: EXEMPT
PROPOSED IMPERVIOUS PERCENTAGE: 55.3%

CLARKSBURG SPECIAL PROTECTION AREA
DISTURBED AREA FOR BMP MONITORING: 35,980 SF
PERCENTAGE IMPERVIOUS CAP: EXEMPT
PROPOSED IMPERVIOUS PERCENTAGE: 21.5%

SUMMARY TABLE	DATE: 05.15.2023
GENERAL PROPERTY INFORMATION:	
SM# 286644 SC# 288588	
PROPERTY ADDRESS: 23310 FREDERICK ROAD CLARKSBURG, MD 20871	
LEGAL DESCRIPTION: HAMMER HILL	
PROPERTY SIZE (AC/SF): 3.38 AC / 147,190 SF	
TOTAL LIMITS OF DISTURBANCE (AC/SF): 2.70 AC / 117,400 SF	
CLARKSBURG SPA LOD (AC/SF): 0.83 AC / 35,980 SF	
TEN MILE CREEK SPA LOD (AC/SF): 1.87 AC / 81,420 SF	
ZONING: CRT-0.5, C-0.5, R-0.5, & H-45	
WATERSHED & STREAM CLASS: SENECA CREEK CLASS IV-P	
SPECIAL PROTECTION AREA: YES / CLARKSBURG & TEN MILE CREEK	
EX. % IMPERVIOUS / REDEVELOPMENT OR NEW DEVELOPMENT: 9% / NEW DEVELOP.	

THIS PLAN IS FOR SOIL EROSION, SEDIMENT CONTROL AND SWM ONLY

TECHNICAL REVIEW OF SEDIMENT CONTROL	ADMINISTRATIVE REVIEW
Joel Karpas 10/9/2023 REVIEWED DATE	Joel Karpas 10/9/2023 REVIEWED DATE
TECHNICAL REVIEW OF STORMWATER MANAGEMENT	**SMALL LOT DRAINAGE APPROVAL**
Joel Karpas 10/9/2023 REVIEWED DATE	N/A: ☒ OR REVIEWED DATE
MCDPS APPROVAL OF THIS PLAN WILL EXPIRE TWO YEARS FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED.	

DPS approval of a sediment control or stormwater manage plan is for demonstrated compliance with minimum environmental runoff treatment standards and does not create or imply any right to divert or concentrate runoff onto any adjacent property without that property owner's permission. It does not relieve the design engineer or other responsible person of professional liability or ethical responsibility for the adequacy of the drainage design as it affects uphill or downhill properties.

288588
SEDIMENT CONTROL PERMIT NO.
286644
SM. FILE NO.
STORMWATER MANAGEMENT:
ESD to the MEP Full On-site

REVISIONS		
NO.	DESCRIPTION	DATE

TAX MAP EW31 — WSSC 232NW13

2TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

HAMMER HILL, PARCEL P311 CLARKSBURG HIGHLANDS, PART OF BLOCK D

23310 FREDERICK ROAD

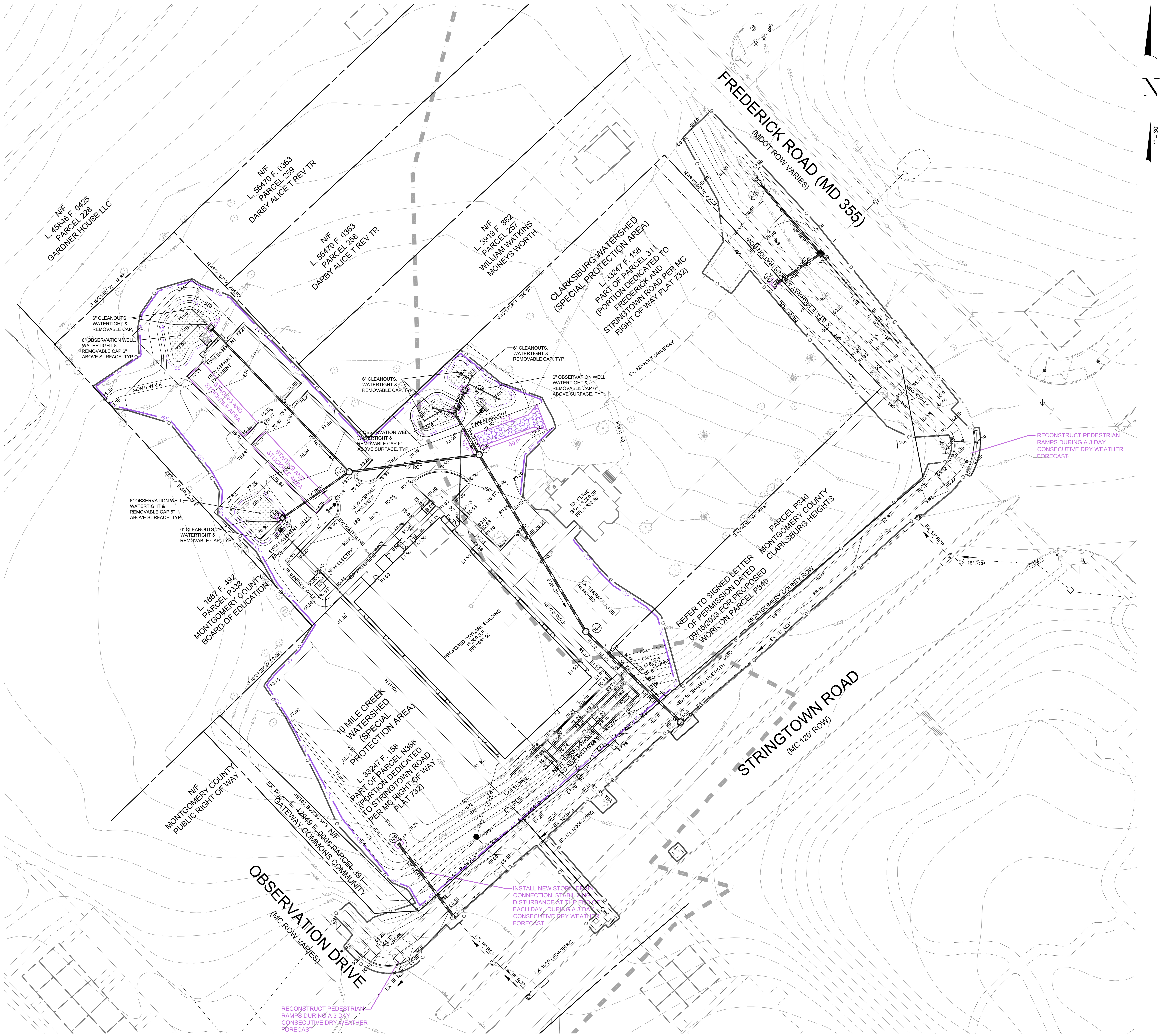
PROJ. MGR	DCM
DRAWN BY	MSH
SCALE	NONE
DATE	06.19.2023

FINAL SESC/SWM PLAN

SESC COVER SHEET

C3.01

PROJECT NO. 2013.109.41
SHEET NO. 1 OF 9



LEGEND

NOT TO SCALE

- LIMITS OF DISTURBANCE
- ROW LINE
- EX. CONTOUR
- EX. CURB & GUTTER
- EX. STORM DRAIN (EX. 15" RCP)
- EX. WALK
- EX. OHW
- EX. SEWER
- EX. WATER
- EX. TREE
- NEW CONTOUR
- NEW WATER
- NEW SEWER
- NEW STORM DRAIN
- NEW CURB & GUTTER
- NEW WALK
- NEW WALL
- NEW CONTOUR
- INLET PROTECTION (SIP)
- STABILIZED CONSTRUCTION ENTRANCE
- SUPER SILT FENCE (SSF)
- SILT FENCE ON PAVEMENT (SFOP)

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30ft.

FOR UTILITY LOCATIONS
CONTACT "ONE CALL" AT 811
AT LEAST 48 HOURS
PRIOR TO CONSTRUCTION

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

THIS PLAN IS FOR SOIL EROSION, SEDIMENT CONTROL AND SWM ONLY

SC PERMIT NO. - 288588

MHG

Civil Engineers
Land Planners
Landscape Architects
Land Surveyors

9220 Wightman Road, Suite 120
Montgomery Village, MD 20886
Phone: 301.670.0840
www.mhgpa.com

STATE OF MARYLAND
STEPHEN EDWARD CRUM
No. 16905
PROFESSIONAL ENGINEER
Digitally signed by Stephen Crum
Date: 2023.09.21 06:54:21-04'00'

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. Lic. No. 16905 Exp. Date. 04.21.2024

PROJECT TEAM

OWNER/APPLICANT:
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ANNAPOLIS, MD 21401
PHONE: (301) 858-5853
CONTACT: STEVEN KAHLE, AIA, NCARB
EMAIL: SKAHLE@SKASTUDIO.COM

REVISIONS

NO.	DESCRIPTION	DATE

TAX MAP EW31 WSSC 232NW13

2TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

**HAMMER HILL, PARCEL P311
CLARKSBURG HIGHLANDS,
PART OF BLOCK D**

23310 FREDERICK ROAD

PROJ. MGR	DCM
DRAWN BY	MSH
SCALE	1"=30'
DATE	09.14.2023

FINAL SESC/SWM PLAN

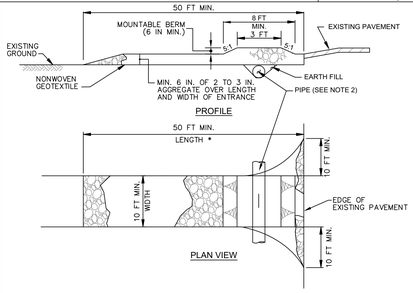
SESC PLAN

C3.02

PROJECT NO.	2013.109.41
SHEET NO.	2 OF 9

DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE

STANDARD SYMBOL: SCE



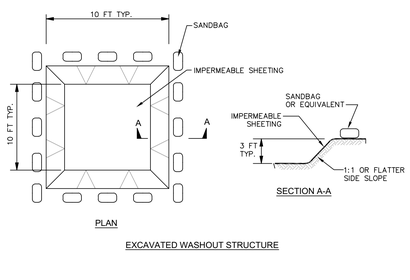
CONSTRUCTION SPECIFICATIONS

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 (*50 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.

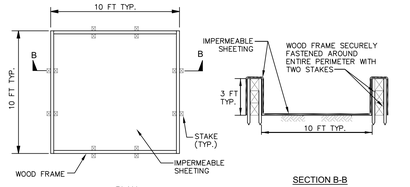
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL H-6 ONSITE CONCRETE WASHOUT STRUCTURE

STANDARD SYMBOL: CWS



EXCAVATED WASHOUT STRUCTURE



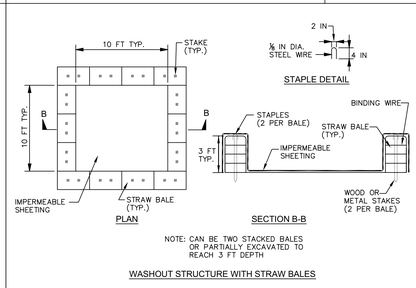
WASHOUT STRUCTURE WITH WOOD PLANKS

1 OF 2

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 H-6 ONSITE CONCRETE WASHOUT STRUCTURE

STANDARD SYMBOL: CWS



NOTE: CAN BE TWO STACKED BALES OR PARTIALLY EXCAVATED TO REACH 3 FT DEPTH

STAPLE DETAIL

WASHOUT STRUCTURE WITH STRAW BALES

CONSTRUCTION SPECIFICATIONS

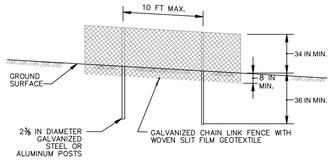
1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
2. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
3. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
4. PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
5. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET-VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.

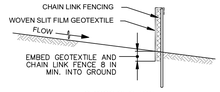
2 OF 2

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-3 SUPER SILT FENCE

STANDARD SYMBOL: SSF





CONSTRUCTION SPECIFICATIONS

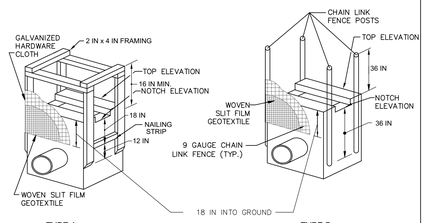
1. INSTALL 2⅜ INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
2. FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2¼ INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.
3. FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.
4. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.
5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
6. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
7. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

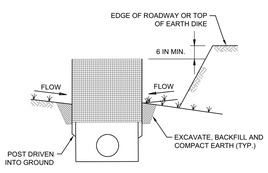
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-9-1 STANDARD INLET PROTECTION

STANDARD SYMBOL: SIP

TYPE A MAXIMUM DRAINAGE AREA = ¾ ACRE
TYPE B MAXIMUM DRAINAGE AREA = 1 ACRE





1 OF 2

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.

2 OF 2

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

Refer to the U.S.D.A. Plant Hardiness Zones Map (Figure B.3) on page B.19 of the MDE 2011 Stds & Specs manual and modify the zone and seeding dates as necessary.

Permanent Seeding Summary

Hardiness Zone (from Figure B.3): 6b Seed Mixture (from Table B.3): #5 or #9					Fertilizer Rate (10-20-20)			Lime Rate
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	N	P_2O_5	K_2O	
9	Tall Fescue (Lolium arundinaceum)	60	Mar 1 - May 15 Aug 15 - Oct 15	1/4-1/2 in	45 lb/ac (1 lb/ 1000 sf)	90 lb/ac (2 lb/ 1000 sf)	90 lb/ac (2 lb/ 1000 sf)	2 tons/ac (90 lb/ 1000 sf)
	OR							
	Hard Fescue (Festuca trachyphylla)	40						
	AND ADD							
	Kentucky Bluegrass (Poa pratensis)	40						
	Perennial Ryegrass (Lolium perenne)	20						
8	Tall Fescue (Lolium arundinaceum)	100	Mar 1 - May 15 Aug 15 - Oct 15	1/4-1/2 in				

NOTE: These seed mixtures are recommended for lawns, athletic fields, recreation areas and some borders, buffers & waterways. For other types of uses or special conditions, the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control should be referred to.
If this project includes a Landscape Plan, use the specifications on the Landscape Plan if they conflict with this seeding summary.

FOR SPECIFIC CULTIVARS AND ADDITIONAL INFORMATION, REFER TO THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SESC.

Table B.1: Temporary Seeding for Site Stabilization

Plant Species	Seeding Rate 1) lb/ac	Seeding Rate 1) lb/1000 ft²	Seeding Depth 2) (inches)	Recommended Seeding Dates by Plant Hardiness Zone 3): 5b and 6a	6b	7a and 7b
Annual Ryegrass (Lolium perenne ssp. multiflorum)	40	1.0	0.5	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30
Barley (Hordeum vulgare)	96	2.2	1.0	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30
Oats (Avena sativa)	72	1.7	1.0	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30
Wheat (Triticum aestivum)	120	2.8	1.0	Mar 15 to May 31; Aug 1 to Sep 30	Mar 1 to May 15; Aug 1 to Oct 15	Feb 15 to Apr 30; Aug 15 to Nov 30
Cereal Rye (Secale cereale)	112	2.8	1.0	Mar 15 to May 31; Aug 1 to Oct 31	Mar 1 to May 15; Aug 1 to Nov 15	Feb 15 to Apr 30; Aug 15 to Dec 15
Foxtail Millet (Setaria italica)	30	0.7	0.5	Jun 1 to Jul 31	May 16 to Jul 31	May 1 to Aug 14
Pearl Millet (Pennisetum glaucum)	20	0.5	0.5	Jun 1 to Jul 31	May 16 to Jul 31	May 1 to Aug 14

Notes:
1) Seeding rates for the warm-season grasses are in pounds of Pure Live Seed (PLS). Actual planting rates shall be adjusted to reflect percent seed germination and purity, as tested. Adjustments are usually not needed for the cool-season grasses.

   Seeding rates listed above are for temporary seedings, when planted alone. When planted as a nurse crop with permanent seed mixes, use 1/3 of the seeding rate listed above for barley, oats, and wheat. For smaller-seeded grasses (annual ryegrass, pearl millet, foxtail millet), do not exceed more than 5% (by weight) of the overall permanent seeding mix. Cereal rye generally should not be used as a nurse crop, unless planting will occur in very late fall beyond the seeding dates for other temporary seedings. Cereal rye has allelopathic properties that inhibit the germination and growth of other plants. If it must be used as a nurse crop, seed at 1/3 of the rate listed above.

   Oats are the recommended nurse crop for warm-season grasses.

2) For sandy soils, plant seeds at twice the depth listed above.

3) The planting dates listed are averages for each zone and may require adjustment to reflect local conditions, especially near the boundaries of the zone.

Fertilizer Rate (10-20-20): 436 lb / ac (10 lb / 1000 sf)
Lime Rate: 2 tons / ac (90 lb / 1000 sf)

THIS PLAN IS FOR SOIL EROSION, SEDIMENT CONTROL AND SWM ONLY | SC PERMIT NO. - 288588

MHG
Civil Engineers
Land Planners
Landscape Architects
Land Surveyors

9220 Wightman Road, Suite 120
Montgomery Village, MD 20886
Phone: 301.670.0840
www.mhgpa.com

STATE OF MARYLAND STEVEN EDWARD KAHLE No. 16905 PROFESSIONAL ENGINEER
Digitally signed by Steven Crum
Date: 2023.09.11 08:15:04-04'00'

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, Lic. No. 16905 Exp. Date. 04.21.2024

PROJECT TEAM

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CONTACT: DR. PRAVEEN BOLARUM
EMAIL: pbolarum@gmail.com

CIVIL ENGINEER & LANDSCAPE ARCHITECT:
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CONTACT: DYLAN MACRO, CDT
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SILVER SPRING, MD 20910
PHONE: (301) 448-1335
CONTACT: WILLIAM ZEID, PE
EMAIL: WLZEID@WELLSANDASSOCIATES.COM

LAND USE ATTORNEY:
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REVISIONS

NO.	DESCRIPTION	DATE

TAX MAP EW31 WSSC 232NW13

2TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

HAMMER HILL, PARCEL P311
CLARKSBURG HIGHLANDS, PART OF BLOCK D

23310 FREDERICK ROAD

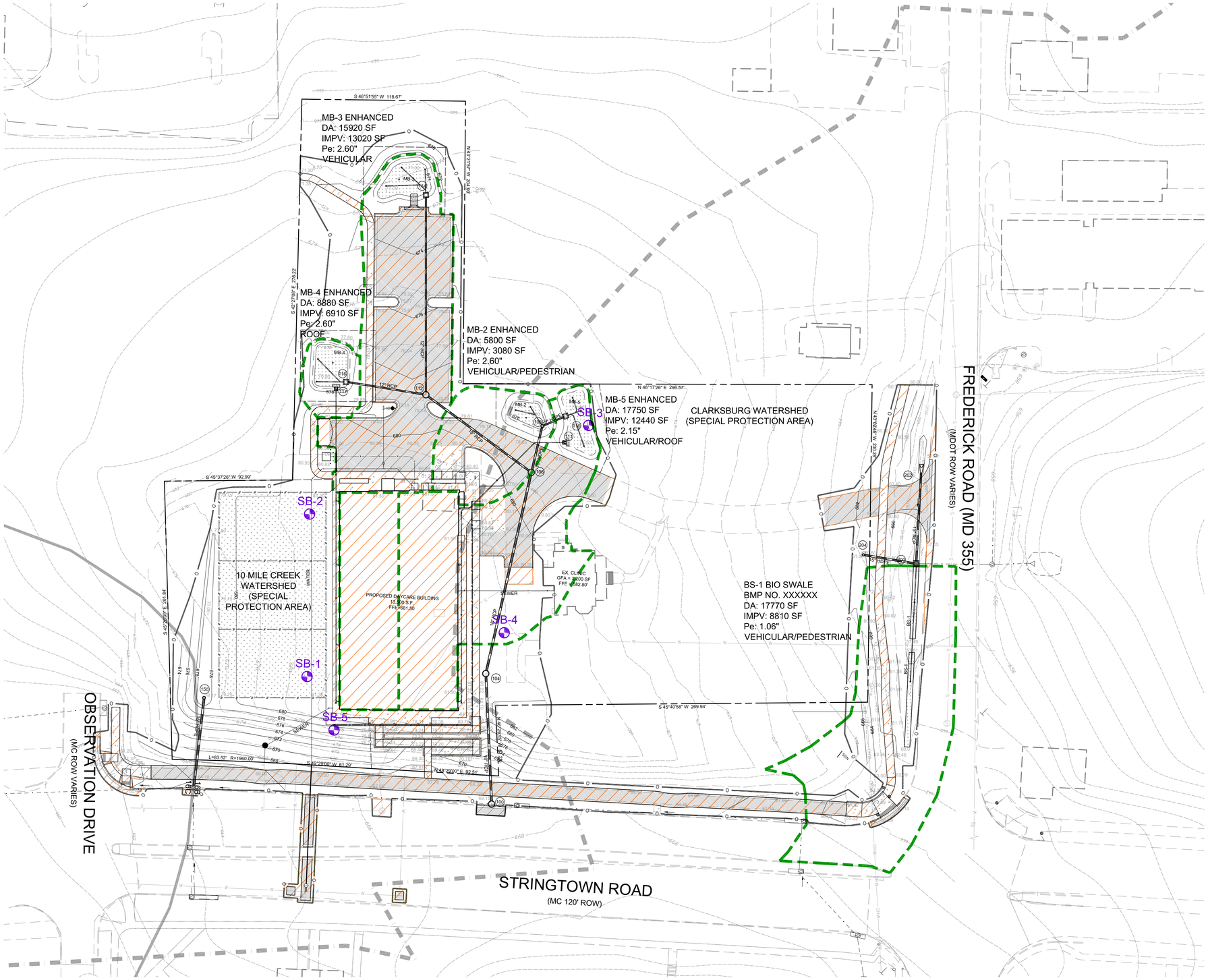
PROJ. MGR	DCM
DRAWN BY	MSH
SCALE	NONE
DATE	05.15.2023

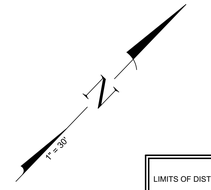
FINAL SESC/SWM PLAN

STANDARD SESC DETAILS

C3.03

PROJECT NO.	2013.109.41
SHEET NO.	3 OF 9





LEGEND
NOT TO SCALE

LIMITS OF DISTURBANCE	
SOIL MAP UNIT BOUNDARY	16B / 16C
ROW LINE	
EX. CONTOUR	320
EX. CURB & GUTTER	
EX. STORM DRAIN	EX. 15" RCP
EX. WALK	
EX. GAS	
EX. SEWER	
EX. WATER	
EX. TREE	
NEW CONTOUR	320
NEW WATER	
NEW SEWER	
NEW STORM DRAIN	
NEW CURB & GUTTER	
NEW WALK	
NEW WALL	
NEW CONTOUR	320
SWM EASEMENTS	
SPA DIVIDE	
NEW DRAINAGE DIVIDES	
SOIL BORING LOCATION	SB-11
IMPERVIOUS SURFACE WITHIN THE LOD	

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30ft.

FOR UTILITY LOCATIONS
CONTACT "ONE CALL" AT 811
AT LEAST 48 HOURS
PRIOR TO CONSTRUCTION

Know what's below. Call before you dig.

(SEE http://websoilsurvey.nrcs.usda.gov/app/)

SOIL BOUNDARIES HAVE BEEN GRAPHICALLY REPRODUCED FROM MONTGOMERY COUNTY SOILS MAP, FROM THE WEB SOIL SURVEY INTERNET SITE, DATED 2020-08-28.

MAP UNIT SYMBOL	MAP UNIT NAME	HSG RATING
16B	Brinklow-Blocktown Channery Silt Loam, 3 to 8 percent slopes.	C

THIS PLAN IS FOR SOIL EROSION, SEDIMENT CONTROL AND SWM ONLY | SC PERMIT NO. - 288588

MHG
Civil Engineers
Land Planners
Landscape Architects
Land Surveyors

9220 Wightman Road, Suite 120
Montgomery Village, MD 20886
Phone: 301.670.0840
www.mhgpa.com

STATE OF MARYLAND
STEPHEN EDWARD CRUM
No. 16905
PROFESSIONAL ENGINEER
Digitally signed by Stephen Edward Crum
Date: 2023.09.11 08:13:04 -04'00'

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, Lic. No. 16905 Exp. Date. 04.21.2024

PROJECT TEAM

OWNER/APPLICANT:
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NO.	DESCRIPTION	DATE

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MONTGOMERY COUNTY
MARYLAND

HAMMER HILL, PARCEL P311
CLARKSBURG HIGHLANDS, PART OF BLOCK D

23310 FREDERICK ROAD

PROJ. MGR	DCM
DRAWN BY	MSH
SCALE	1"=30'
DATE	09.13.2023

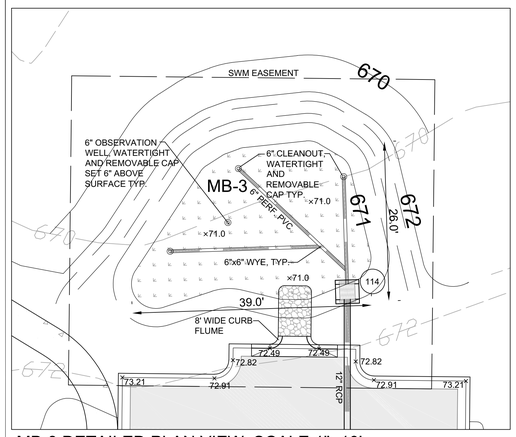
FINAL SESC/SWM PLAN

SWM DRAINAGE AREA MAP AND IMPERVIOUS PLAN EXHIBIT

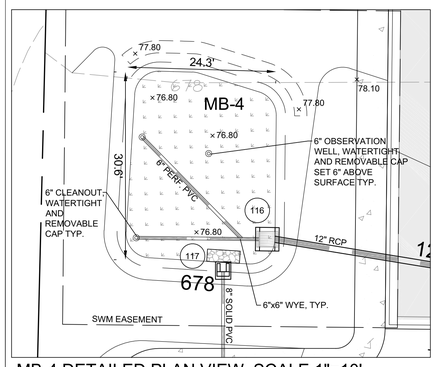
C4.01

PROJECT NO. 2013.109.41
SHEET NO. 4 OF 9

SHEET C4.03 MICRO BIORETENTION STANDARD NOTES AND DETAILS

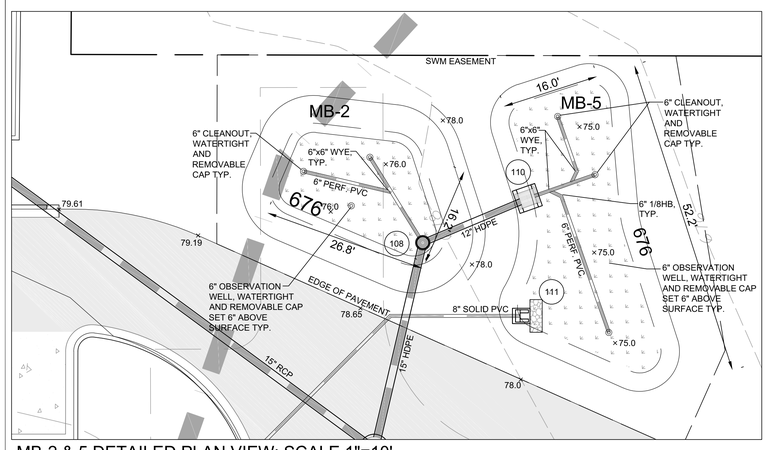


MB-3 DETAILED PLAN VIEW: SCALE 1"=10'



MB-4 DETAILED PLAN VIEW: SCALE 1"=10'

NOTE: ALL SPOT ELEVATIONS WITH THE PROPOSED STORMWATER MANAGEMENT FACILITIES REPRESENT THE TOP OF SETTLED PLANTING MEDIA. 3" OF MULCH TO BE APPLIED ONTO THE TOP OF SETTLED PLANTING MEDIA

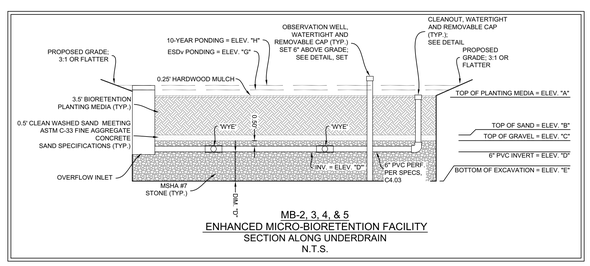


MB-2 & 5 DETAILED PLAN VIEW: SCALE 1"=10'

GRAPHIC SCALE

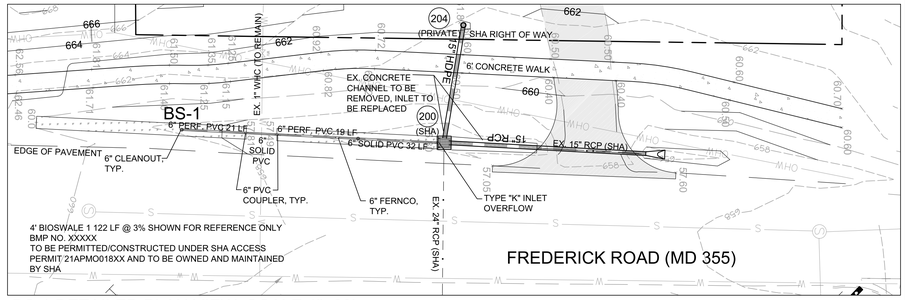
10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.



MB-2, 3, 4, & 5
ENHANCED MICRO-BIORETENTION FACILITY
SECTION ALONG UNDERDRAIN
N.T.S.

Micro-Bioretention Facility Design Information						05.15.2023
ID	Descriptor		Facility MB-2	Facility MB-3	Facility MB-4	Facility MB-5
Elev. "A"	Top of Planting Media	Design	676.00'	671.00'	676.80'	675.00'
		As-Built				
Elev. "B"	Top of Sand	Design	672.50'	667.50'	673.30'	671.50'
		As-Built				
Elev. "C"	Top of Gravel	Design	672.00'	667.00'	672.80'	671.00'
		As-Built				
Elev. "D"	PVC Underdrain Invert	Design	671.00'	666.00'	671.80'	670.00'
		As-Built				
Elev. "E"	Bottom of Excavation	Design	669.75'	664.00'	670.55'	668.75'
		As-Built				
Elev. "F"	Overflow Elevation	Design	676.50'	672.00'	677.30'	676.00'
		As-Built				
Elev. "G"	ESDv Ponding Elev.	Design	676.50'	672.00'	677.30'	676.00'
		As-Built				
Elev. "H"	10-Year Ponding Elev.	Design	676.63'	672.27'	677.48'	676.19'
		As-Built				
Elev. "I"	Min. Top of Berm	Design	677.00'	672.50'	677.80'	676.50'
		As-Built				
Dim. "A"	Maximun Bed Width	Design	16.2'	39.0'	24.3'	16.0'
		As-Built				
Dim. "B"	Maximum Bed Length	Design	26.8'	26.0'	30.6'	52.2'
		As-Built				
Dim. "C"	Planting Media Thickness	Design	3.50'	3.50'	3.50'	3.50'
		As-Built				
Dim. "D"	Aggregate Below Underdrain	Design	1.25'	2.00'	1.25'	1.25'
		As-Built				
	Bed Area	Design	347 sq. ft.	751 sq. ft.	692 sq. ft.	719 sq. ft.
		As-Built				
	ESDv Provided	Design	663 cu. ft.	2,257 cu. ft.	1,407 cu. ft.	2,198 cu. ft.
		As-Built				
"AA"	Receiving Storm Drain Str.		108	114	116	110
* See Detailed Plan Views and Details for additional dimensions.						



BS-1 DETAILED PLAN VIEW: SCALE 1"=20'

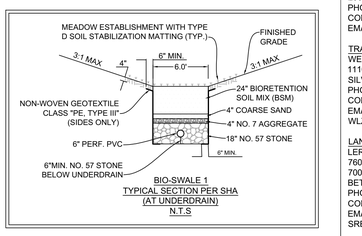
NOTE: ALL SPOT ELEVATIONS WITH THE PROPOSED STORMWATER MANAGEMENT FACILITIES REPRESENT THE TOP OF SETTLED PLANTING MEDIA. 3" OF MULCH TO BE APPLIED ONTO THE TOP OF SETTLED PLANTING MEDIA

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20ft.

BIO SWALE FACILITY MAINTENANCE SCHEDULE	
TASK	RECOMMENDED INTERVAL
INSPECT AND REPAIR SOIL EROSION	MONTHLY AND AFTER HEAVY RAINS
REMOVE LEAVES, DEBRIS, TRASH, SILT, ETC. & REPLACE MULCH LAYER	MINIMUM 2 TIMES PER YEAR (SPRING AND FALL)
INSPECT PLANTS FOR DAMAGE & DISEASE/PEST PROBLEMS PRUNE AND TREAT PLANTS AS NEEDED & AS APPROPRIATE PER SPECIES. REMOVE AND REPLACE DEAD AND DISEASED PLANTS CONSIDERED BEYOND TREATMENT	MINIMUM 2 TIMES PER YEAR (3/15-4/30 and 10/1-11/30)



BIO-SWALE 1
TYPICAL SECTION PER SHA (AT UNDERDRAIN)
N.T.S

CONSTRUCTION INSPECTION
CHECK-OFF LIST FOR BIORETENTION SWALE — BS 1

DESIGN ENGINEER SWM CONSTRUCTION OBSERVATION REQUIREMENTS

THE CONTRACTOR IS REQUIRED TO CONTACT THE DESIGN ENGINEER AT 301.670.0840 WITH AT LEAST 24 HOURS ADVANCE NOTICE AT THE FOLLOWING STAGES OF THE BIO SWALE (BS) FACILITIES CONSTRUCTION:

- AGGREGATE INSTALLATION
- UNDERDRAIN LAYOUT AND INSTALLATION
- SAND LAYER INSTALLATION
- PLANTING MEDIA INSTALLATION
- SWM PLANTINGS AND LANDSCAPING INSTALLATION

FAILURE TO NOTIFY THE DESIGN ENGINEER MAY NECESSITATE SWM FACILITY RECONSTRUCTION.

STAGE	MCDPS INSPECTOR	OWNER/ DEVELOPER
MANDATORY NOTIFICATION: Inspection and approval of each practice is required at these points prior to proceeding with construction. The permittee is required to give the MCDPS Inspector twenty-four (24) hours notice (DPS telephone 311). The DPS inspector may waive an inspection and allow the owner/developer to make the required inspection per a prior scheduled arrangement which has been confirmed with the DPS inspector in writing. Work completed without MCDPS approval may result in the permittee having to remove and reconstruct the unapproved work. **Upon completion of the project, a formal Stormwater Management As-Built must be submitted to MCDPS unless a Record Drawing Certification has been allowed instead.** Each of the steps listed below must be verified by either the MCDPS Inspector OR the Owner/Developer.	INITIALS/DATE	INITIALS/DATE
1. Excavation for Bioswale facility conforms to approved plans		
2. Placement of stone backfill and underdrain system conforms to approved plans		
3. Placement of filter media conforms to approved plans		
4. Connecting pipes and/or grading conveyance to the facility constructed per the approved plans		
5. Final grading and permanent stabilization conforms to approved plans		

BIORETENTION FACILITY MAINTENANCE SCHEDULE	
TASK	RECOMMENDED INTERVAL
INSPECT AND REPAIR SOIL EROSION	MONTHLY AND AFTER HEAVY RAINS
REMOVE LEAVES, DEBRIS, TRASH, SILT, ETC. & REPLACE MULCH LAYER	MINIMUM 2 TIMES PER YEAR (SPRING AND FALL)
INSPECT PLANTS FOR DAMAGE & DISEASE/PEST PROBLEMS PRUNE AND TREAT PLANTS AS NEEDED & AS APPROPRIATE PER SPECIES. REMOVE AND REPLACE DEAD AND DISEASED PLANTS CONSIDERED BEYOND TREATMENT	MINIMUM 2 TIMES PER YEAR (3/15-4/30 and 10/1-11/30)

NOTE: CONTRACTOR SHALL CONFIRM THAT BIORETENTION FACILITIES DIMENSIONS, ROOF LEADER LOCATIONS AND OTHER DESIGN ELEMENTS ARE COORDINATED WITH ARCHITECTURAL AND OTHER TRADE PLANS. IF ANY DISCREPANCIES ARE FOUND, THE CONTRACTOR IS TO CONTACT THE DESIGN ENGINEER AND ARCHITECT. SITE UTILITIES ARE TO BE CONSTRUCTED IN LOCATIONS SHOWN. IF A UTILITY LOCATION IS CHANGED AND IS FOUND TO CONFLICT WITH A SWM FACILITY, THE FACILITY MUST BE REVIEWED AND APPROVED BY THE COUNTY. DESIGN ENGINEER, ARCHITECT AND APPROPRIATE TRADE PRIOR TO UTILITY CONSTRUCTION. MODIFICATIONS TO THE STORMWATER MANAGEMENT PLAN WILL REQUIRE A FORMAL REVISION TO THE PLAN WITH THE MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES, WHICH WILL INCLUDE APPLICABLE PLAN REVISION FEES.

DESIGN ENGINEER SWM CONSTRUCTION OBSERVATION REQUIREMENTS

THE CONTRACTOR IS REQUIRED TO CONTACT THE DESIGN ENGINEER AT 301.670.0840 WITH AT LEAST 24 HOURS ADVANCE NOTICE AT THE FOLLOWING STAGES OF THE TWO BIORETENTION FACILITIES CONSTRUCTION:

- AGGREGATE INSTALLATION
- UNDERDRAIN LAYOUT AND INSTALLATION
- SAND LAYER INSTALLATION
- PLANTING MEDIA INSTALLATION
- SWM PLANTINGS AND LANDSCAPING INSTALLATION

FAILURE TO NOTIFY THE DESIGN ENGINEER MAY NECESSITATE SWM FACILITY RECONSTRUCTION.

INSPECTION CHECKLIST

STAGE	MB 2 MCDPS INSPECTOR	MB 2 OWNER/ DEVELOPER	MB 3 MCDPS INSPECTOR	MB 3 OWNER/ DEVELOPER	MB 4 MCDPS INSPECTOR	MB 4 OWNER/ DEVELOPER	MB 5 MCDPS INSPECTOR	MB 5 OWNER/ DEVELOPER
MANDATORY NOTIFICATION: Inspection and approval of each practice is required at these points prior to proceeding with construction. The permittee is required to give the MCDPS Inspector twenty-four (24) hours notice (DPS telephone 311). The DPS inspector may waive an inspection and allow the owner/developer to make the required inspection per a prior scheduled arrangement which has been confirmed with the DPS inspector in writing. Work completed without MCDPS approval may result in the permittee having to remove and reconstruct the unapproved work. **Upon completion of the project, a formal Stormwater Management As-Built must be submitted to MCDPS unless a Record Drawing Certification has been allowed instead.** Each of the steps listed below must be verified by either the MCDPS Inspector OR the Owner/Developer.	INITIALS/DATE	INITIALS/DATE	INITIALS/DATE	INITIALS/DATE	INITIALS/DATE	INITIALS/DATE	INITIALS/DATE	INITIALS/DATE
1. Excavation for Micro Bioretention facility conforms to approved plans								
2. Placement of stone backfill and underdrain system conforms to approved plans								
3. Placement of filter media conforms to approved plans								
4. Connecting pipes and/or grading conveyance to the facility constructed per the approved plans								
5. Final grading and permanent stabilization conforms to approved plans								

Know what's below. Call before you dig.

FOR UTILITY LOCATIONS CONTACT "ONE CALL" AT 811 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION

THIS PLAN IS FOR SOIL EROSION, SEDIMENT CONTROL AND SWM ONLY | SC PERMIT NO. - 288588

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Civil Engineers
Land Planners
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STATE OF MARYLAND · STEVEN EDWARD KAHLE · No. 16905 · PROFESSIONAL ENGINEER
Digitally signed by Steven Edward Kahle Date: 2023.09.14 09:19:28 -04'00'

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, Lic. No. 16905 Exp. Date. 04.21.2024

PROJECT TEAM

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REVISIONS

NO.	DESCRIPTION	DATE

TAX MAP EW31 WSSC 232NW13

2TH ELECTION DISTRICT
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HAMMER HILL, PARCEL P311
CLARKSBURG HIGHLANDS, PART OF BLOCK D

23310 FREDERICK ROAD

PROJ. MGR	DCM
DRAWN BY	MSH
SCALE	AS NOTED
DATE	09.13.2023

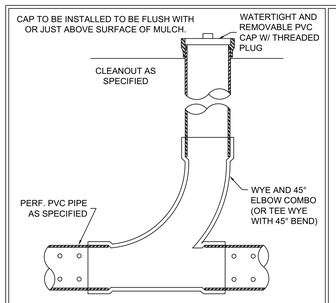
FINAL SESC/SWM PLAN

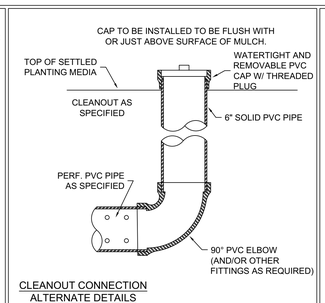
SWM DETAILED PLAN

C4.02

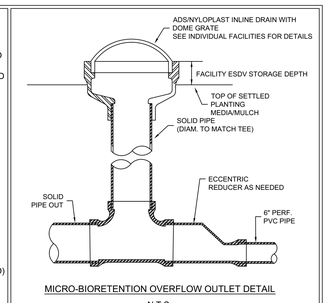
PROJECT NO. 2013.109.41

SHEET NO. 5 OF 9





CLEANOUT CONNECTION ALTERNATE DETAILS
N.T.S.



MICRO-BIORETENTION OVERFLOW OUTLET DETAIL
N.T.S.

PERFORATION REQUIREMENTS

PIPE DIAMETER	PERFORATION or SLOT DIM.	HOLES PER LINEAR FOOT	HOLE CONFIGURATION
6"	0.375" (⅜") Dia.	12	4 @ 90°o/c
6"	0.125"W x 1.9"L	12	4 @ 90°o/c

THE UNDERDRAIN PIPE CONSISTS OF 6-INCH DIAMETER SCHEDULE 40 OR STRONGER PERFORATED PVC PIPES AT 0.00%. PERFORATIONS MUST BE ½" INCH IN DIAMETER AND MUST BE LOCATED 4 INCHES ON CENTER, EVERY 90 DEGREES AROUND THE PIPE. AN ACCEPTABLE ALTERNATIVE TO PERFORATIONS IS SLOTS AT ⅛" WIDE BY A MINIMUM 1.9" LONG. SLOTS SHOULD ALSO BE PLACED IN FOUR ROWS PER LINEAR FOOT WITH FOUR SLOTS PER ROW.

ACCESS FOR CLEANING ALL UNDERDRAIN PIPING IS NEEDED. CLEANOUTS FOR EACH PIPE SHOULD EXTEND AT LEAST 6 INCHES ABOVE THE TOP OF THE UPPER FILTER SURFACE (I.E. THE TOP LAYER OF THE UPPER GRAVEL) AND HAVE A REMOVABLE WATERPROOF CAP.

REQUIRED AGGREGATE GRADATION (SHA TABLE 901A)

SEIVE		MASS PERCENT PASSING	
		UNDERDRAIN	FILTER AGGREGATE
mm	U.S. STD.	M.S.H.A. COARSE AGGREGATE NO. 7	ASTM C-33 CONCRETE SAND
25.0	1 inch	-	-
19.0	¾ inch	100	-
12.5	½ inch	90 - 100	-
9.5	⅜ inch	40 - 70	100
4.75	NO. 4	0 - 15	95 - 100
2.36	NO. 8	0 - 5	80 - 100
1.18	NO. 16	-	50 - 85
0.60	NO. 30	-	25 - 60
0.30	NO. 50	-	5 - 30
0.15	NO. 100	-	0 - 10
0.075	NO. 200	-	0 - 5

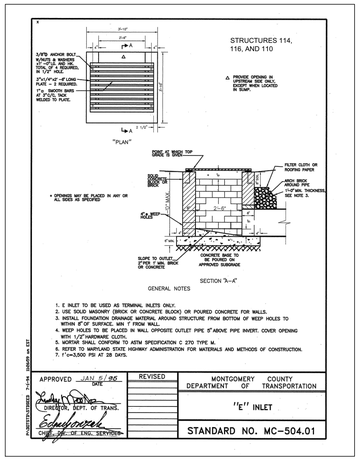
BIORETENTION AREA PLANTING SOIL DOCUMENTATION REQUIREMENTS:

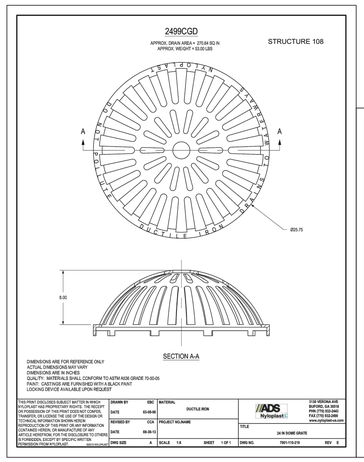
IF THE BIORETENTION AREA PLANTING SOIL IS PROVIDED BY A SUPPLIER, THE CONTRACTOR IS REQUIRED TO PROVIDE THE DESIGN ENGINEER WITH A CERTIFICATION FROM THE SUPPLIER VERIFYING THAT THE MATERIAL MEETS THE REQUIREMENTS AND SPECIFICATIONS SHOWN HEREON. IF THE BIORETENTION AREA PLANTING SOIL IS MIXED BY THE CONTRACTOR, THE CONTRACTOR IS REQUIRED TO NOTIFY THE DESIGN ENGINEER PRIOR TO ORDERING THE MATERIALS. PRIOR TO MIXING, THE CONTRACTOR SHALL PROVIDE A CERTIFICATION WITH ASSOCIATED TEST RESULTS THAT THE TOPSOIL, COMPOST AND PERLITE MEET THE RESPECTIVE SPECIFICATIONS AS OUTLINED HEREON. THE CONTRACTOR SHALL ALSO PROVIDE CERTIFICATION THAT THE MIXED PLANTING SOIL MEETS THE SPECIFICATIONS.

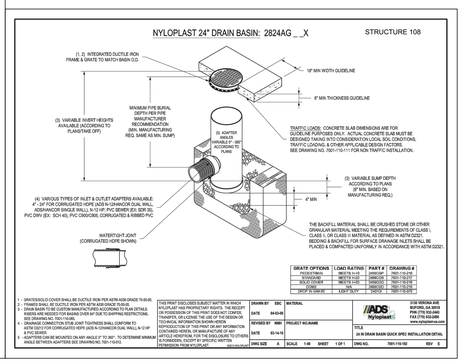
SAND SPECIFICATIONS:

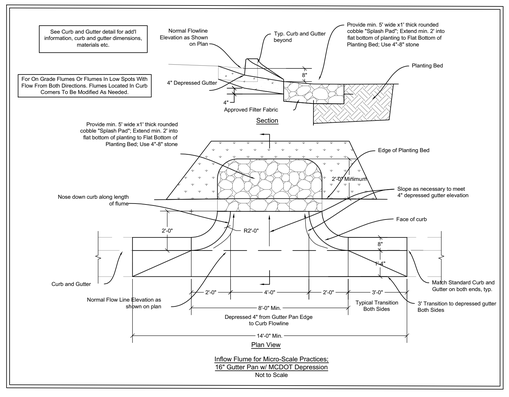
WASHED NATURAL SAND MEETING THE GRADATION REQUIREMENTS OF ASTM C33 FINE AGGREGATE CONCRETE SAND IS UTILIZED FOR STORMWATER MANAGEMENT APPLICATIONS. IN ADDITION TO THE ASTM C33 SPECIFICATION, SAND MUST MEET ALL OF THE FOLLOWING CONDITIONS:

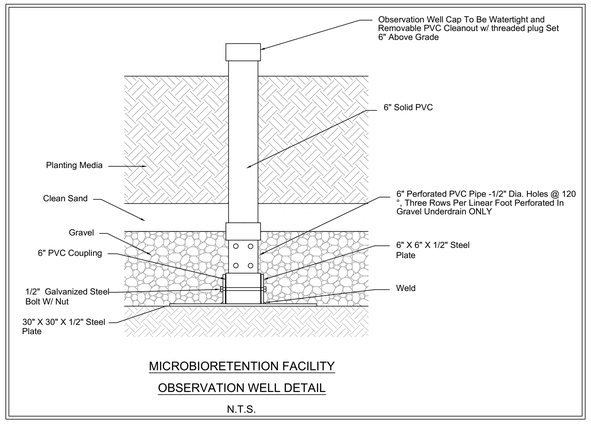
1. SAND MUST MEET GRADATION REQUIREMENTS FOR ASTM C-33 FINE AGGREGATE CONCRETE SAND. AASHTO M-6 GRADATION IS ALSO ACCEPTABLE.
2. SAND MUST BE SILICA BASED; NO LIMESTONE BASED PRODUCTS MAY BE USED. IF THE MATERIAL IS WHITE OR GRAY IN COLOR, IT IS PROBABLY NOT ACCEPTABLE.
3. SAND MUST BE CLEAN. NATURAL, UNWASHED SAND DEPOSITS MAY BE USED. LIKEWISE, SAND THAT HAS BECOME CONTAMINATED BY IMPROPER STORAGE OR INSTALLATION PRACTICES WILL BE REJECTED.
4. MANUFACTURED SAND OR STONE DUST IS NOT ACCEPTABLE UNDER ANY CIRCUMSTANCE.











MICROBIORETENTION FACILITY
OBSERVATION WELL DETAIL
N.T.S.

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

FOR UTILITY LOCATIONS CONTACT "ONE CALL" AT 811 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION

MICRO-BIORETENTION AREA SPECIFICATIONS:

A. PLANTING MEDIA

THE PLANTING MEDIA SHALL CONSIST OF 1/3 PERLITE OR SOLITE, 1/3 COMPOST AND 1/3 TOPSOIL. THE PERLITE SHALL BE COARSE GRADE HORTICULTURAL PERLITE. THE COMPOST SHALL BE HIGH GRADE, SEASONED COMPOST FREE OF STONES AND PARTIALLY COMPOSTED WOODY MATERIAL. THE TOPSOIL SHALL MEET THE FOLLOWING MINIMUM CRITERIA: CONTAIN 0 - 10% CLAY, 10 - 25% SILT AND 60 - 75% SAND AND MEET OTHER REQUIREMENTS AS OUTLINED IN THE 2000 MARYLAND STORMWATER DESIGN MANUAL APPENDIX B.3.B.2. THE TOPSOIL SHALL BE FREE OF STONES, STUMPS, ROOTS OR OTHER MATERIAL LARGER THAN 2" IN ANY DIMENSION, AND FREE OF ANY SUBSTANCE THAT MAY BE HARMFUL TO PLANT GROWTH OR A HINDRANCE TO PLANTING OR MAINTENANCE OPERATIONS. THE PLANTING MEDIA SHALL BE FREE OF PLANTS OR PLANT PARTS OF BERMUDA GRASS, QUACK GRASS, JOHNSON GRASS, MUGWORT, NUTSEDGE, POISON IVY, CANADIAN THISTLE, OR OTHER NOXIOUS WEEDS AS SPECIFIED UNDER COMAR 15.08.01.05. IT SHALL NOT CONTAIN TOXIC SUBSTANCES HARMFUL TO PLANT GROWTH.

B. MULCH LAYER SPECIFICATIONS

A 3" MULCH LAYER SHALL BE PROVIDED ON TOP OF THE PLANTING MEDIA. THE MULCH SHALL BE DOUBLE-SHREDDED, AGED HARDWOOD. PINE BARK MULCH IS NOT ACCEPTABLE. THE MULCH MUST BE WELL AGED, UNIFORM IN COLOR, AND FREE OF FOREIGN MATERIAL INCLUDING PLANT MATERIAL.

C. SAND BED SPECIFICATIONS

A MINIMUM 6-INCH FINE AGGREGATE SAND LAYER SHALL BE PROVIDED, AND SHALL MEET THE REQUIREMENTS OF ASTM C-33 OR AASHTO M6 FINE AGGREGATE CONCRETE SAND. THE SAND SHALL BE FREE OF DELETERIOUS MATERIAL. SAND MUST BE SILICA-BASED; NO LIMESTONE OR DOLOMITE BASED PRODUCTS MAY BE USED. IF THE MATERIAL IS GRAY IN COLOR, IT IS PROBABLY NOT ACCEPTABLE. SAND MUST BE CLEAN; SAND THAT HAS BECOME CONTAMINATED BY IMPROPER STORAGE OR INSTALLATION PRACTICES WILL BE REJECTED. MANUFACTURED SAND OR STONE DUST IS NOT ACCEPTABLE.

D. GRAVEL (AGGREGATE) BED SPECIFICATIONS

THE GRAVEL LAYER SURROUNDING THE UNDERDRAIN PIPE(S) MUST MEET MSHA SIZE NO. 7 (TABLE 901A), AND MUST PROVIDE A MINIMUM OF 6 INCHES COVER OVER THE PIPE(S) AND A MINIMUM OF 3 INCHES UNDER THE PIPE(S) UNLESS OTHERWISE SPECIFIED. NO GEOTEXTILE OR FILTER FABRIC IS ALLOWED TO BE PLACED HORIZONTALLY ANYWHERE WITHIN THE FILTER MEDIA. THE GRAVEL MUST BE CLEAN AND MUST BE STORED AND INSTALLED IN SUCH A MANNER THAT IT DOES NOT BECOME CONTAMINATED WITH SEDIMENT BEFORE OR AFTER INSTALLATION.

E. EXCAVATION, MATERIAL PLACEMENT AND COMPACTION

ALL EXCAVATION, MATERIAL PLACEMENT AND COMPACTION SHALL BE IN CONFORMANCE WITH THE 2000 MARYLAND STORMWATER DESIGN MANUAL, APPENDIX B.3.

BIOSWALE FACILITIES SHOULD BE EXCAVATED BY HOE, IF POSSIBLE. IF EXCAVATION IS DONE USING A LOADER, WIDE TRACK OR MARSH TRACK EQUIPMENT SHOULD BE USED. IF NARROW TRACK EQUIPMENT IS USED IN THE FACILITY FOR EXCAVATION, THE BOTTOM OF THE EXCAVATION SHALL BE TILLED 12" DEEP WITH A CHISEL PLOW, RIPPER OR SUBSOILER.

GRADE MICRO-BIORETENTION MATERIALS WITH LIGHT EQUIPMENT SUCH AS A COMPACT LOADER OR A DOZER/LOADER WITH MARSH TRACKS. DO NOT USE HEAVY EQUIPMENT WITHIN THE MICRO-BIORETENTION BASIN. HEAVY EQUIPMENT CAN BE USED AROUND THE PERIMETER OF THE BASIN TO SUPPLY PLANTING MEDIA, SAND AND AGGREGATE.

THE SAND LAYER SHALL BE PLACED DAMP AND LIGHTLY COMPACTED SO AS TO ENSURE THE FULL 6" THICKNESS.

PLACE PLANTING MEDIA IN LIFTS OF 12" TO 18". PLANTING MEDIA SHALL BE LIGHTLY COMPACTED BY HAND TAMPING OR OTHER APPROVED METHODS. THE PLANTING MEDIA SHALL BE FLOODED (PUDDLED) AFTER PLACEMENT. ANY SETTLEMENT THAT OCCURS SHALL BE FILLED BACK TO THE DESIGN ELEVATION WITH PLANTING MEDIA.

BIOSWALE AREA SPECIFICATIONS — DEC. 2017

NOTE: REFER TO PLAN DETAILS FOR DESIGN DIMENSIONS

A. PLANTING MEDIA

THE PLANTING MEDIUM SHALL BE 24"-48" THICK AND SHALL CONSIST OF 1/3 PERLITE OR SOLITE, 1/3 COMPOST AND 1/3 TOPSOIL. THE PERLITE SHALL BE COARSE GRADE HORTICULTURAL PERLITE. THE COMPOST SHALL BE HIGH GRADE COMPOST FREE OF STONES AND PARTIALLY COMPOSTED WOODY MATERIAL. THE TOPSOIL COMPONENT SHALL MEET THE FOLLOWING CRITERIA: CONTAIN NO MORE THAN 10% CLAY, 10-25% SILT AND 60-75% SAND AND BE FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN 2 INCHES.

THE FIRST LAYER OF THE PLANTING MEDIUM SHALL BE LIGHTLY TILLED TO MIX IT INTO THE 6-INCH SAND LAYER, SO AS NOT TO CREATE A DEFINITIVE BOUNDARY. THE PLANTING BED SHALL BE FLOODED AFTER PLACEMENT. ANY SETTLEMENT THAT OCCURS SHALL BE FILLED BACK TO THE DESIGN ELEVATION.

THE PLANTING MEDIA SHALL MEET OTHER REQUIREMENTS AS OUTLINED IN THE 2000 MARYLAND STORMWATER DESIGN MANUAL APPENDIX B.3.B.2. THE TOPSOIL SHALL BE FREE OF ANY SUBSTANCE THAT MAY BE HARMFUL TO PLANT GROWTH OR A HINDRANCE TO PLANTING OR MAINTENANCE OPERATIONS. THE PLANTING MEDIA SHALL BE FREE OF PLANTS OR PLANT PARTS OF BERMUDA GRASS, QUACK GRASS, JOHNSON GRASS, MUGWORT, NUTSEDGE, POISON IVY, CANADIAN THISTLE, OR OTHER NOXIOUS WEEDS AS SPECIFIED UNDER COMAR 15.08.01.05. IT SHALL NOT CONTAIN TOXIC SUBSTANCES HARMFUL TO PLANT GROWTH.

B. MULCH LAYER SPECIFICATIONS

THE MULCH LAYER IS AN IMPORTANT PART OF THE BIOSWALE DEVICES. MUCH OF THE POLLUTANT REMOVAL CAPACITY OF THE BIOSWALE SYSTEM IS WITHIN THE MULCH LAYER. THE SURFACE MULCH LAYER WILL CONSIST OF STANDARD DOUBLE SHREDDED AGED HARDWOOD MULCH. THE MULCH SHOULD BE APPLIED UNIFORMLY TO A DEPTH OF 3 INCHES. YEARLY REPLENISHING MAY BE NECESSARY. PINE BARK IS NOT ACCEPTABLE.

THE MULCH MUST BE WELL AGED, UNIFORM IN COLOR, AND FREE OF FOREIGN MATERIAL INCLUDING PLANT MATERIAL.

C. SAND BED SPECIFICATIONS

A MINIMUM 6-INCH FINE AGGREGATE SAND LAYER SHALL BE PROVIDED BELOW THE PLANTING MEDIUM. ASTM C33 OR AASHTO M6 FINE AGGREGATE CONCRETE SAND IS REQUIRED PER MONTGOMERY COUNTY SAND SPECIFICATIONS.

THE SAND SHALL BE FREE OF DELETERIOUS MATERIAL. SAND MUST BE SILICA-BASED; NO LIMESTONE OR DOLOMITE BASED PRODUCTS MAY BE USED. IF THE MATERIAL IS GRAY IN COLOR, IT IS PROBABLY NOT ACCEPTABLE. SAND MUST BE CLEAN; SAND THAT HAS BECOME CONTAMINATED BY IMPROPER STORAGE OR INSTALLATION PRACTICES WILL BE REJECTED. MANUFACTURED SAND OR STONE DUST IS NOT ACCEPTABLE.

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MHG
Civil Engineers
Land Planners
Landscape Architects
Land Surveyors

9220 Wightman Road, Suite 120
Montgomery Village, MD 20886
Phone: 301.670.0840
www.mhgpa.com

STATE OF MARYLAND — STEPHEN EDWARD GRUNDAHL — No. 16905 — PROFESSIONAL ENGINEER
Digitally signed by Stephen Edward Crum
Date: 2023.09.11 07:10:04-04'00'

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, Lic. No. 16905 Exp. Date. 04.21.2024

PROJECT TEAM

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EMAIL: pbolarum@gmail.com

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LAND USE ATTORNEY:
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ARCHITECT:
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ANNAPOLIS, MD 21401
PHONE: (301) 858-5853
CONTACT: STEVEN KAHLE, AIA, NCARB
EMAIL: SKAHLE@SKASTUDIO.COM

REVISIONS

NO.	DESCRIPTION	DATE

TAX MAP EW31 — WSSC 232NW13

2TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

HAMMER HILL, PARCEL P311
CLARKSBURG HIGHLANDS, PART OF BLOCK D

23310 FREDERICK ROAD

PROJ. MGR	DCM
DRAWN BY	MSH
SCALE	NONE
DATE	09.14.2023

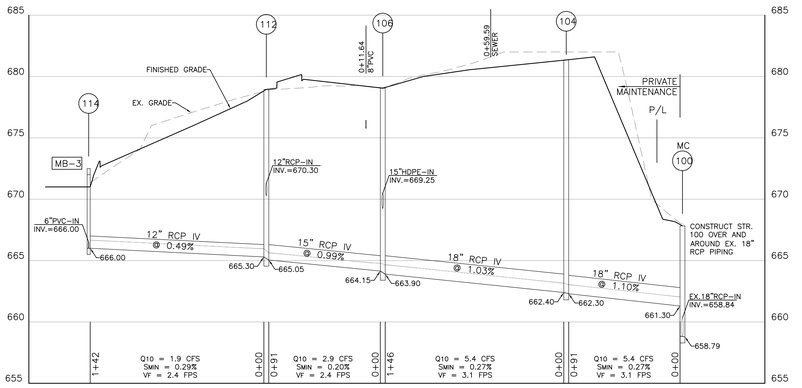
FINAL SESC/SWM PLAN

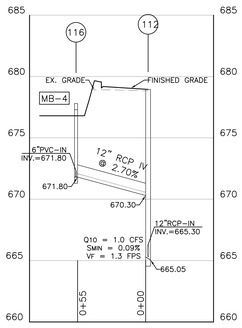
STANDARD SWM DETAILS AND NOTES

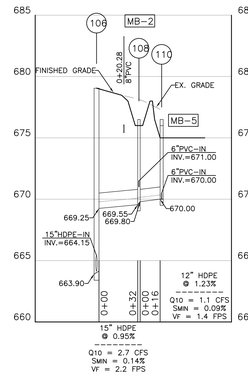
C4.03

PROJECT NO.	2013.109.41
SHEET NO.	6 OF 9

THIS PLAN IS FOR SOIL EROSION, SEDIMENT CONTROL AND SWM ONLY | SC PERMIT NO. - 288588

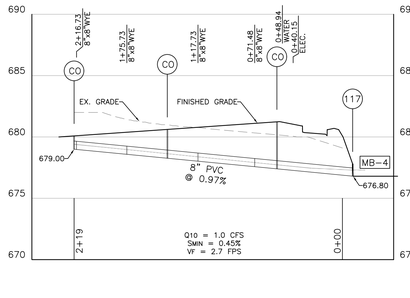


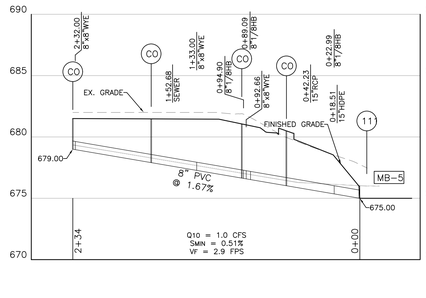


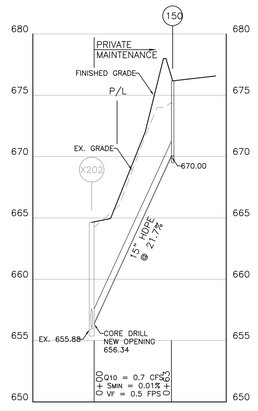


SD PROFILES:
HORZ. SCALE: 1"=50'
VERT. SCALE: 1"=5'

UNLESS OTHERWISE NOTED, ALL PROPOSED STORM DRAIN IS TO BE PRIVATELY MAINTAINED

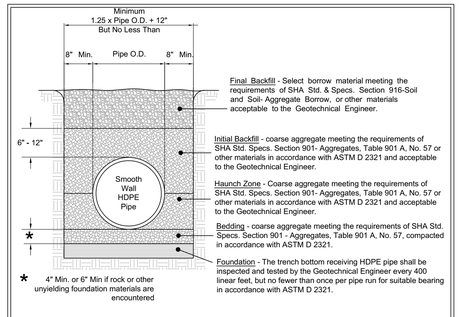






PRIVATE STRUCTURE SCHEDULE - MISCELLANEOUS STRUCTURES - TO BE MAINTAINED BY JAISAI PROPERTIES, LLC				
No.	**Type & Standard**	**Inside Dimensions or Diameter**	**Elev.**	**Notes**
204	18" Nyloplast Drain Basin	18" Dia.	Rim = 661.80	18" Dome Grate Assembly
114	Precast "E" Inlet per MC - 504.01	2.5' x 2.5'	Slots = 672.00	------
116	Precast "E" Inlet per MC - 504.01	2.5' x 2.5'	Slots = 677.30	------
117	Precast "G" Endwall per MD-368.01	8" Dia.	------	Modifiy for 8" Pipe Opening
112	Precast 48" Diameter Manhole per MD - 384.01	48" MH Base	Top of MH = 678.95	------
111	Precast "G" Endwall per MD-368.01	8" Dia.	------	Modifiy for 8" Pipe Opening
110	Precast "E" Inlet per MC - 504.01	2.5' x 2.5'	Slots = 676.00	------
108	24" Nyloplast Drain Basin	24" Dia.	Rim = 676.50	24" Dome Grate Assembly
106	Precast 48" Diameter Manhole per MD - 384.01	48" MH Base	Top of MH = 679.05	------
104	Precast 48" Diameter Manhole per MD - 384.01	48" MH Base	Top of MH = 681.35	------
150	24" Nyloplast Drain Basin	24" Dia.	Rim = 676.17	24" Dome Grate Assembly
Precaster and Contractor must refer to the Approved Soil Erosion, Sediment Control and SWM Plans for any Temporary SESC Pipes and/or SWM Pipes and structures.				
MANHOLE COVER NOTE: All manhole covers for all inlets and manholes are to be per Montgomery County Standards per MC-501.01 and MC-510.01				

PRIVATE MAINTENANCE PIPE SCHEDULE - TO BE MAINTAINED BY JAISAI PROPERTIES, LLC		
SIZE	**TYPE**	**LENGTH (ft)**
6"	Perforated PVC Schedule 40	205
8"	PVC Schedule 40	485
12"	HDPE, N12 ST IB	16
15"	HDPE, N12 ST IB	95
12"	RCP, Class IV	197
15"	RCP, Class IV	91
18"	RCP, Class IV	237



HDPE PIPE BEDDING DETAIL FOR PRIVATE STORM DRAINAGE SYSTEMS
NO SCALE

Know what's below. Call before you dig.

FOR UTILITY LOCATIONS CONTACT "ONE CALL" AT 811 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION

GENERAL NOTES FOR SMOOTH WALL HDPE STORM DRAIN

1. THE PIPE SHALL BE ADVANCE DRAINAGE SYSTEMS, INC. N12 PIPE OR HANCOR HI-Q OR HANCOR HI-Q SURE-LOK PIPE AND SHALL BE SOLID PIPE MEETING THE REQUIREMENTS OF AASHTO M 252, TYPE S AND AASHTO M 294, TYPE S. THE JOINTS SHALL BE SOIL TIGHT UNLESS RUBBER GASKETED JOINTS ARE SPECIFIED, THEN HDPE MUST HAVE WATER TIGHT GASKETED JOINTS. THE CONTRACTOR SHALL PROVIDE CERTIFICATION FOR THE HDPE PIPE IN ACCORDANCE WITH THE MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION (SHA) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS (STD. SPECS.), SECTION 905.01.

2. THE HDPE PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D 2321 AND SHA STD. SPECS. SECTION 303-PIPE CULVERTS, EXCEPTING ANY REFERENCE TO MEASUREMENT AND PAYMENT.

3. THE TRENCH BOTTOM RECEIVING HDPE PIPE SHALL BE INSPECTED AND TESTED BY THE GEOTECHNICAL ENGINEER EVERY 400 LINEAR FEET, BUT NO FEWER THAN ONCE PER PIPE RUN FOR SUITABLE BEARING.

4. THE HDPE PIPE SHALL BE BEDDED ON A MINIMUM 4" LAYER OF COARSE AGGREGATE MEETING THE REQUIREMENTS OF SHA STD. SPECS. SECTION 901- AGGREGATES, TABLE 901 A, NO. 57, COMPACTED IN ACCORDANCE WITH ASTM D 2321.

5. THE HDPE PIPE HAUNCH ZONE AND INITIAL BACKFILL ZONE SHALL BE BACKFILLED WITH COARSE AGGREGATE MEETING THE REQUIREMENTS OF SHA STD. SPECS. SECTION 901-AGGREGATES, TABLE 901 A, NO. 57 OR OTHER MATERIALS IN ACCORDANCE WITH ASTM D 2321 AND ACCEPTABLE TO THE GEOTECHNICAL ENGINEER. THE COMPACTION SHALL BE IN ACCORDANCE WITH ASTM D 2321 AND SHALL BE MONITORED BY THE GEOTECHNICAL ENGINEER.

6. THE TRENCH RECEIVING HDPE PIPE SHALL BE BACKFILLED WITH SELECT BORROW MATERIAL MEETING THE REQUIREMENTS OF SHA STD. SPECS. SECTION 916-SOIL AND SOIL-AGGREGATE BORROW OR OTHER MATERIALS ACCEPTABLE TO THE GEOTECHNICAL ENGINEER. THE BACKFILL SHALL BE COMPACTED IN ACCORDANCE WITH SHA STD. SPECS. SECTION 210-TAMPED FILL. THE COMPACTION SHALL BE IN ACCORDANCE WITH ASTM D 2321 AND SHALL BE MONITORED BY THE GEOTECHNICAL ENGINEER.

7. THE HDPE PIPE DEFLECTION SHALL BE MEASURED NO SOONER THAN THIRTY (30) DAYS AFTER INSTALLATION USING A NINE (9) POINT MANDREL. REMOVE, REPLACE AND RETEST ANY PIPE WITH A DEFLECTION GREATER THAN 5%.

GENERAL NOTES FOR STORM DRAIN AND PAVING CONSTRUCTION: MONTGOMERY COUNTY DPS

1. ALL STORM DRAIN AND PAVING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF MONTGOMERY COUNTY STANDARDS AND SPECIFICATIONS, AND THE STANDARD SPECIFICATIONS OF THE MARYLAND STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS AND DETAILS, LATEST EDITION, AND ALL ADDENDA THERETO.

2. TYPE OF STRUCTURE OR DETAIL REFERS TO THE LATEST DESIGN STANDARDS OF THE BOOK OF STANDARDS OF MONTGOMERY COUNTY DOT, STANDARD DETAILS OF THE WSSC, AND THE BOOK OF STANDARDS OF THE MARYLAND STATE HIGHWAY ADMINISTRATION, UNLESS OTHERWISE NOTED.

3. WHERE THE DROP ON THE MAIN LINE THROUGH A STRUCTURE CAN BE ACCOMMODATED BY AN INVERT SLOPE OF 1.5 TO 1 OR FLATTER, A ROUNDED CHANNEL LINED WITH SEWER BRICK ON EDGE SHALL BE BUILT TO THE CROWN OF THE PIPES.

4. INFORMATION CONCERNING EXISTING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF THE UTILITIES BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS, WELL IN ADVANCE OF TRENCHING. IF CLEARANCES ARE LESS THAN SPECIFIED OR LESS THAN 12" WHEN NOT SPECIFIED, CONTACT THE DESIGN ENGINEER. THE APPROPRIATE UTILITY OWNER BEFORE PROCEEDING WITH CONSTRUCTION, AND THE MCDPS ROW INPSECTOR. ANY UTILITY (WHETHER SHOWN OR NOT) DAMAGED DUE TO CONSTRUCTION SHALL BE REPAIRED IMMEDIATELY.

5. CONTRACTOR SHALL TEST PIT IN THE AREA OF KNOWN UTILITIES TO VERIFY THE SIZE, LOCATION AND TYPE OF UTILITY PRIOR TO PERFORMING ANY WORK. ALL UTILITY RELOCATIONS, WHETHER SHOWN ON THESE PLANS OR DISCOVERED IN THE FIELD, ARE THE RESPONSIBILITY OF THE OWNER. PRIOR TO PERFORMING ANY WORK, THE OWNER AND THE CONTRACTOR SHALL NEGOTIATE A COST FOR ANY DISCOVERED UTILITY WORK.

6. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF EXCESS EARTH, DEMOLISHED CONCRETE, BITUMINOUS MATERIAL, RUBBISH, TRASH, FALLEN TREES, AND DEBRIS OFF SITE. BORROW FOR THE SITE SHALL BE OBTAINED IN A MANNER WHICH CONFORMS WITH NATURAL RESOURCES CONSERVATION SERVICE.

7. WHERE ANY PART OF THE STORM DRAIN SYSTEM IS LOCATED IN A FILL SECTION, PROVIDE SELECT FILL MATERIAL COMPACTED TO 95% AASHTO T-99 DENSITY FROM APPROVED SUBGRADE TO THE STRUCTURE BOTTOM SLABS AND/OR THE PIPE BEDDING.

8. ALL STORM DRAIN PIPES SHALL BE INSTALLED WITH CLASS "C" BEDDING, AS SHOWN ON MCDOT, "RCP SUPPORTING STRENGTH" LOADING CHARTS IN APPENDIX C..

9. ALL ROADWAY PAVEMENT AFFECTED BY UTILITY TRENCHING OPERATIONS SHALL BE REPAIRED PER STANDARD MC-801.02.

10. CALL "MISS UTILITY" AT 811 AT LEAST 48 HOURS PRIOR TO BEGINNING EXCAVATION TO DETERMINE THE LOCATION OF EXISTING UTILITIES.

11. ALL STANDARD STORM DRAIN STRUCTURES ARE SUBJECT TO MODIFICATIONS BY THE DESIGN ENGINEER TO MEET FIELD CONDITIONS HOWEVER, IF THIS IS A PUBLIC STRUCTURE, IT NEEDS COUNTY'S APPROVAL.

12. ALL PRECAST STRUCTURES AND SUPPLIERS OF "ALTERNATE EQUAL STRUCTURES" ARE TO BE PREVIOUSLY APPROVED BY MCDOT.

13. ALL INLETS SHALL BE PROVIDED WITH WEEP HOLES AND FOUNDATION DRAINAGE MATERIALS PER MC STANDARDS.

14. ALL WORK WITHIN THE PUBLIC RIGHTS-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION'S STANDARDS AND SPECIFICATIONS AND THE MONTGOMERY COUNTY ROAD CODE AND THE STATE HIGHWAY ADMINISTRATION STANDARDS AND SPECIFICATIONS AND DETAILS, LATEST EDITIONS.

15. CONTRACTOR SHALL NOTIFY W.S.S.C. CUSTOMER CARE SECTION HEAD AT 301-206-8043 FORTY-EIGHT HOURS (48) IN ADVANCE OF BEGINNING ANY WORK IN THE VICINITY OF W.S.S.C. UTILITIES TO ARRANGE FOR INSPECTION AND, IF DESIRED, PROCUREMENT OF REQUIRED MATERIALS FROM W.S.S.C.

16. ALL PAVEMENT MARKING AND SIGNING SHALL BE DONE PER THE SEPARATE FINAL APPROVED AND PERMITTED PAVEMENT MARKING AND SIGNING PLAN.

17. ALL PUBLIC STREET TREE REMOVALS AND/OR PLANTINGS SHALL BE DONE PER THE LATEST SEPARATE APPROVED RIGHT OF WAY - TREE PROTECTION PLAN.

18. ALL ESD WORK IN THE PUBLIC RIGHT OF WAY SHALL BE PER THE LATEST SEPARATE APPROVED AND PERMITTED SOIL EROSION, SEDIMENT CONTROL AND SWM PLAN.

19. ALL SIDEWALK RAMPS ARE TO BE BUILT IN ACCORDANCE WITH MSHA STDS NO. MD 655.11, MD 655.12, OR MD 655.13. ALL SIDEWALK RAMPS IN RIGHT OF WAY TO HAVE DETECTABLE WARNING SURFACES (MD 655.40).

20. CUT AND PATCH WORK IS TO VERIFY THAT ALL UTILITIES, I.E. WATER, SEWER, GAS, ELECTRIC, ETC., ARE IN PLACE PRIOR TO CONSTRUCTION OF SUB-BASE AND/OR PAVING.

21. ALL UTILITIES ARE TO BE ADJUSTED TO GRADE AS NECESSARY BY THE CONTRACTOR.

22. FILLET PAVING AT INTERSECTIONS SHALL BE WARPED TO ASSURE POSITIVE DRAINAGE. ALL GUTTERS AND PAVING SHALL BE CONSTRUCTED TO HAVE POSITIVE DRAINAGE IN ALL AREAS.

23. JOINTS BETWEEN EXISTING BITUMINOUS PAVEMENT OR CONCRETE TO REMAIN AND PROPOSED PAVEMENT SHALL BE CLEAN, SMOOTH, UNBROKEN SAW CUT. SAW CUT JOINT SHALL BE TACKED PRIOR TO PLACEMENT OF NEW PAVEMENT AND FINAL JOINT SEALED.

24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE AVOIDANCE OF AND THE CLEAN UP OF DUST, DIRT, DEBRIS AND MUD ON ALL ROADS DUE TO VEHICLES ARRIVING AND LEAVING PROJECT SITES.

25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING SILT AND DEBRIS OUT OF THE EXISTING STORM DRAINAGE SYSTEM DURING CONSTRUCTION, AND SHALL CLEAN OUT THE STORM DRAINAGE SYSTEM THOROUGHLY PRIOR TO FINAL ACCEPTANCE BY THE MONTGOMERY COUNTY AND MARYLAND SHA.

26. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS IN ACCORDANCE WITH THE LATEST EDITIONS OF THE MARYLAND SHA STANDARD SPECIFICATIONS AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. REFER TO SEPARATE TEMPORARY MAINTENANCE OF TRAFFIC PLANS.

27. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL WORK CORRECTLY, IN CONFORMANCE WITH ALL CODE REQUIREMENTS.

28. PROPOSED PAVING, SIDEWALK AND C&G TO MEET EXISTING; TRANSITION TO BE MADE IN LINE AND ON GRADE OR AS DIRECTED BY THE DPS PERMIT INSPECTOR AND THE SHA PERMIT INSPECTOR.

29. MACRIS, HENDRICKS AND GLASCOCK, P.A. MAKES NO GUARANTEE OR WARRANTY EITHER ASSUMED OR IMPLIED AS TO THE SUITABILITY OF THE PAVING SECTIONS SHOWN AND ASSUMES NO LIABILITY IN PROVIDING THE PAVING SECTIONS ON OUR DRAWINGS.

30. ALL DISTURBED AREAS (DUE TO CONTRACTOR'S ACTIVITIES) NOT UNDER PROPOSED PAVEMENTS SHALL BE STABILIZED BY PLACEMENT OR EXISTENCE OR MINIMUM OF 4 INCH DEPTH NATIVE TOPSOIL AND SEEDING AND MULCHING, PER THE SHA SPECIFICATIONS.

31. NO PIPE SHALL BE CONSTRUCTED INTO THE CORNER OF A SQUARE OR RECTANGULAR STORM DRAIN STRUCTURE. A MINIMUM CLEARANCE OF 6 (SIX) INCHES MUST BE PROVIDED BETWEEN ANY INSIDE CORNER OF A STRUCTURE AND THE OUTSIDE DIAMETER OF THE PIPE. THIS REQUIREMENT APPLIES TO ALL STORM DRAIN STRUCTURES - WHETHER PRECAST, CAST IN PLACE, OR CONSTRUCTED OF BRICK.

32. SHOULD THE CONTRACTOR DISCOVER DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS, THE ENGINEER IS TO BE CONTACTED IMMEDIATELY TO RESOLVE THE DISCREPANCY. SHOULD THE CONTRACTOR MAKE FIELD CORRECTIONS OR ADJUSTMENTS WITHOUT NOTIFYING THE ENGINEER, THEN THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR THOSE CHANGES.

33. ALL UNPAVED AREAS WITHIN THE LIMITS OF DISTURBANCE SHALL BE SEEDED OR SODDED AS DIRECTED.

34. CONTRACTOR SHALL REPAIR ALL DAMAGED IMPROVEMENTS AFFECTED BY ROADWAY WORK WITHIN THE RIGHT-OF-WAY. REPAIR WORK INCLUDES, BUT MAY NOT BE LIMITED TO, CURBS, PAVEMENT, SIDEWALKS, LANDSCAPING, ETC. ALL REPAIR WORK SHALL MEET CURRENT MONTGOMERY COUNTY SPECIFICATIONS.

35. ALL SIDEWALK AND HANDICAP RAMPS TO BE ADA COMPLIANT AND BE FREE OF ALL NON-ADA SURFACE FEATURES.

36. PRIVATE STORM DRAIN SYSTEMS SHOWN ON THIS PLAN HAVE NOT BEEN REVIEWED BY THE COUNTY. THE ENGINEER SHALL BE RESPONSIBLE TO ENSURE THAT ALL PRIVATE STORM DRAIN FACILITIES MEET COUNTY STANDARDS AND SPECIFICATIONS.

37. IT IS THE ENGINEER'S RESPONSIBILITY TO ENSURE ALL ELEVATION INFORMATION PROVIDED AGREES WITH APPROVED PLANS, GRADE ESTABLISHMENT PLAN, ROAD SECTIONS AND COUNTY REQUIREMENTS.

38. ALL STORM DRAIN CONSTRUCTION ON THE PLAN, EXCEPT DRIVEWAY CULVERTS, TO BE MAINTAINED BY MCDOT UNLESS OTHERWISE NOTED ON THE PLANS.

39. ALL FIELD MODIFICATIONS ARE SUBJECT TO MCDPS FIELD INSPECTOR APPROVAL.

MHG
Civil Engineers
Land Planners
Landscape Architects
Land Surveyors

9220 Wightman Road, Suite 120
Montgomery Village, MD 20886
Phone: 301.670.0840
www.mhgpa.com

STATE OF MARYLAND
STEVEN EDWARD CRUM
No. 16905
PROFESSIONAL ENGINEER
Digitally signed by Steven Crum
Date: 2023.07.20 12:41:23-04'00'

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. Lic. No. 16905 Exp. Date. 04.21.2024

PROJECT TEAM

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REVISIONS

NO.	DESCRIPTION	DATE

TAX MAP EW31 WSSC 232NW13

2TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

HAMMER HILL, PARCEL P311

CLARKSBURG HIGHLANDS, PART OF BLOCK D

PROJ. MGR	DCM
DRAWN BY	MSH
SCALE	AS NOTED
DATE	03.20.2023

FINAL SESC/SWM PLAN

STORM DRAIN PROFILES, SCHEDULES, DETAILS, AND NOTES

C4.04

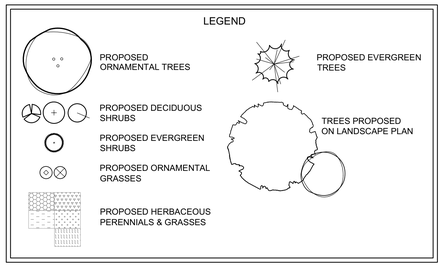
PROJECT NO.	2013.109.41
SHEET NO.	7 OF 9

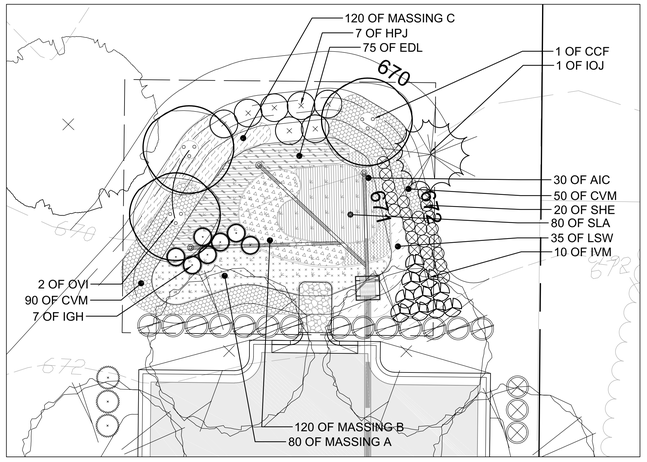
THIS PLAN IS FOR SOIL EROSION, SEDIMENT CONTROL AND SWM ONLY | SC PERMIT NO. - 288588

STORMWATER PLANT LIST

KEY	QTY	BOTANICAL NAME	COMMON NAME	HYDROLOGY	INDICATOR STATUS	ROOT/ INSTALL SIZE	SPACING	NOTES
EVERGREEN AND ORNAMENTAL TREES								
AAR	2	Amelanchier arborea	Downy Serviceberry	Regular Inundation	FAC-	B&B/ 8-10' ht.	AS SHOWN	Mulit-stem
CCF	1	Cercis canadensis 'Forest Pansy'	Forest Pansy Eastern Redbud	Upland	UPL/FACU	B&B/ 6-8' ht.	AS SHOWN	Multi-stem
IOK	1	Ilex opaca 'Jersey Knight'	Jersey Knight American Holly	Irregular to Seasonal Inundation	FAC	B&B/ 8-9' ht.	AS SHOWN	
IOJ	4	Ilex opaca 'Jersey Princess'	Jersey Princess American Holly	Regular to Seasonal Inundation	FAC	B&B/ 8-9' ht.	AS SHOWN	
OVI	3	Oxydendrum arboreum	Sourwood	Upland	UPL	B&B/ 8-10' ht.	AS SHOWN	
EVERGREEN AND DECIDUOUS SHRUBS								
CAS	18	Clethra alnifolia 'Ruby Spice'	Ruby Spice Summersweet	Seasonal to Regular Inundation	FAC+	#3 Cont./ 24-30" ht.	3' o.c.	
HPJ	21	Hydrangea paniculata 'Jane'	Little Lime Hydrangea	Irregular Inundation	FAC	#3 Cont./ 24-30" ht.	4' o.c.	
IGH	15	Ilex glabra 'Chamzin'	Nordic Inkberry	Seasonal Inundation	FACW-	#3 Cont./ 24-30" ht.	3' o.c.	
IVM	21	Ilex virginica 'Merlot'	Merlot Virginia Sweetspire	Seaonal to Regular Inundation	OBL	#3 Cont./ 24-30" ht.	3' o.c.	
HERBACEOUS PERENNIALS AND ORNAMENTAL GRASSES								
AIC	205	Asclepias incarnata 'Cinderella'	Cinderella Swamp Milkweed	Seasonal Inundation	OBL	#SP4 Pot	18" o.c.	
MASSING A	91	Carex stricta	Tussock Sedge	Regular Inundation 0-3"	OBL	#1 Cont.	18" o.c.	Alternate plants per planting area outlined, 50/50 split
	91	Chelone glabra	White Turtlehead	Regular Inundation	OBL	#1 Cont.	18" o.c.	
BAU	65	Baptisia australis	Blue False Indigo	Irregular and Upland	UPL	#1 Cont.	24" o.c.	
CVM	305	Coreopsis verticillata 'Moonbeam'	Moonbeam Whorled Tickseed	Regular Inundation	FACW	#1 Cont.	18" o.c.	
EDL	175	Eupatorium dubium 'Little Joe'	Little Joe Joe-Pye Weed	Irregular Inundation	FACW	#1 Cont.	18" o.c.	
MASSING B	255	Carex scoparia	Pointed Broom Sedge	Regular Inundation 0-3"	FACW	#1 Cont.	12" o.c.	Alternate plants per planting area outlined, 50/50 split
	255	Iris versicolor	Blue Flag Iris	Regular Inundation 0-6"	OBL	#SP4 Pot	12" o.c.	
LSW	285	Liatris spicata 'Floristan White'	Floristan White Blazing Star	Irregular Inundation and Upland	FAC+	#1 Cont.	18" o.c.	
MASSING C	240	Sisyrinchium angustifolium	Blue-eyed Grass	Irregular Inundation and Upland	FACW-	#SP4 Pot	12" o.c.	Alternate plants per planting area outlined, 50/50 split
	240	Salvia lyrata	Lyreleaf Sage	Upland	FACU/UPL	#SP4 Pot	18" o.c.	
SHE	75	Sporobolus heterolepis	Prairie Dropseed	Upland	UPL	#1 Cont.	18" o.c.	
SNS	38	Sorghastrum nutans 'Sioux Blue'	Blue Indian Grass	Upland	FACW/ UPL	#1 Cont.	24" o.c.	

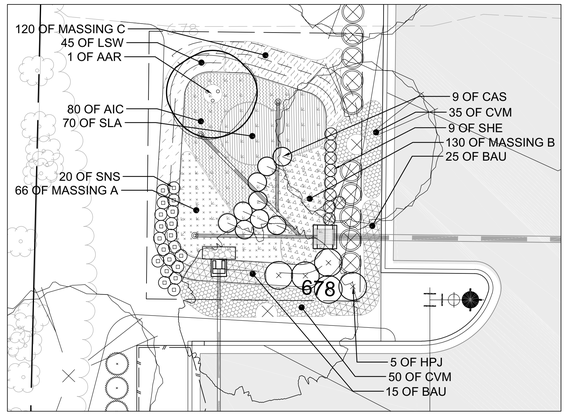
Note: Plant counts are provided for the convenience of the contractor. The plan dominates on any discrepancies between the table and the plan. Contractor is responsible for verifying the counts and bringing any discrepancies to the attention of the landscape architect and client before proceeding.Plant species are selected and located based in part on their tolerance of inundation. The planting plan must be carefully followed to ensure good plant survival and acceptance of landscaping upon completion of the project. Failure to install the specified plants in the specified locations will result in the rejection of the entire facility plantings, and the contractor will be required to reinstall the plantings as shown on the plans at their own expense. Substitutions are not allowed without prior approval of the landscape architect. See note #22 of the Planting Notes regarding appropriate planting seasons for species within the stormwater facilities.





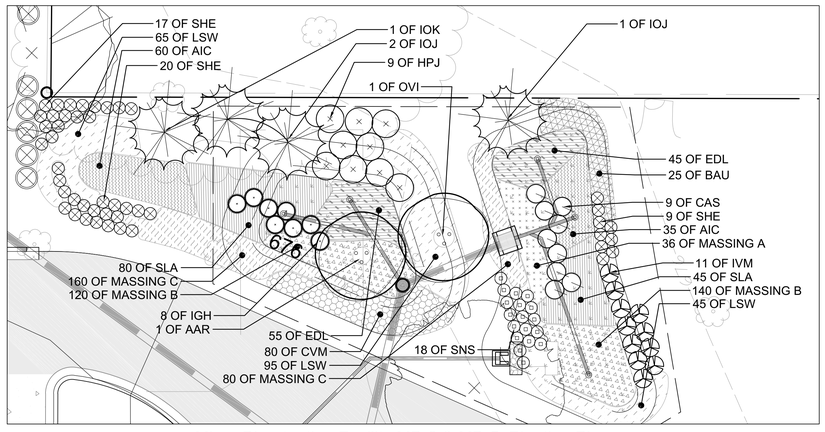
Micro-Bioretention Facility MB-3: Planting Plan

SCALE: 1" = 10'



Micro-Bioretention Facility MB-4: Planting Plan

SCALE: 1" = 10'



Micro-Bioretention Facility MB-2 & MB-5: Planting Plan

SCALE: 1" = 10'

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

THIS PLAN IS FOR SOIL EROSION, SEDIMENT CONTROL AND SWM ONLY | SC PERMIT NO. - 288588

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STATE OF MARYLAND · DAVID C. MACRIS · 615 · LANDSCAPE ARCHITECT
2023.07.19 08:23:31 -04'00'

Professional Certification

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Landscape Architect under the Laws of the State of Maryland. Lic. No. 615 Exp. Date. 09.10.2023

PROJECT TEAM

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REVISIONS

NO.	DESCRIPTION	DATE

TAX MAP EW31 WSSC 232NW13

2TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

HAMMER HILL, PARCEL P311

CLARKSBURG HIGHLANDS, PART OF BLOCK D

PROJ. MGR	DCM
DRAWN BY	CEB
SCALE	AS NOTED
DATE	08.11.2022

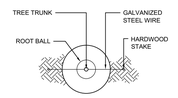
FINAL SESC/SWM PLAN

PLANTING PLAN

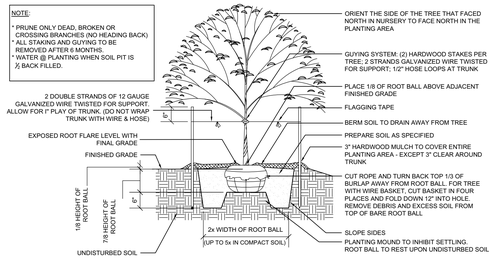
C4.05

PROJECT NO. 2013.109.41

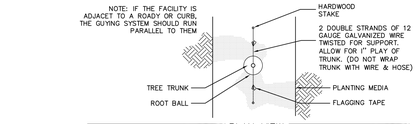
SHEET NO. 8 OF 9



PLAN VIEW
NOT TO SCALE



DECIDUOUS TREE PLANTING AT FACILITY PERIMETER
NOT TO SCALE



PLAN VIEW
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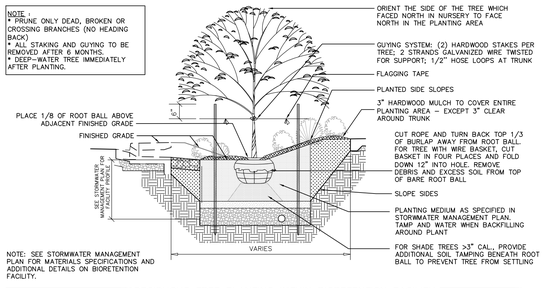
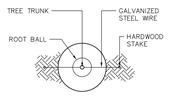
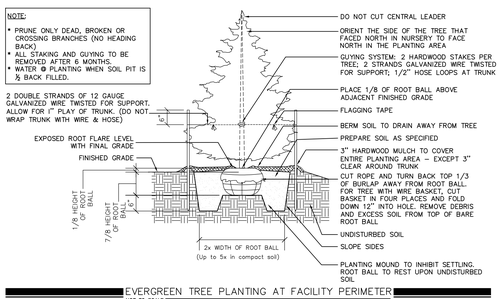


NOTE: SEE STORMWATER MANAGEMENT PLAN FOR MATERIALS SPECIFICATIONS AND ADDITIONAL DETAILS ON BIORETENTION FACILITY.

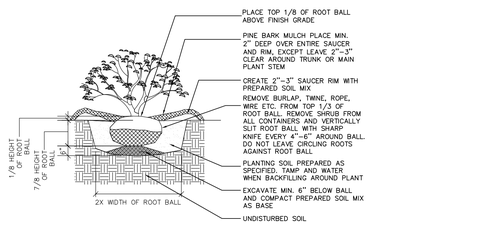
DECIDUOUS TREE PLANTING WITHIN BIORETENTION FACILITY
NOT TO SCALE

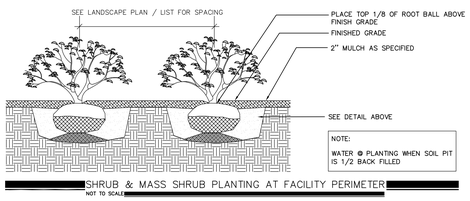


PLAN VIEW
NOT TO SCALE

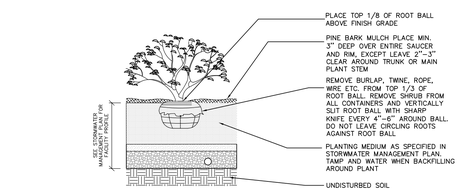


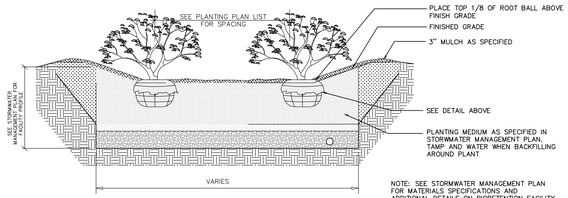
EVERGREEN TREE PLANTING AT FACILITY PERIMETER
NOT TO SCALE





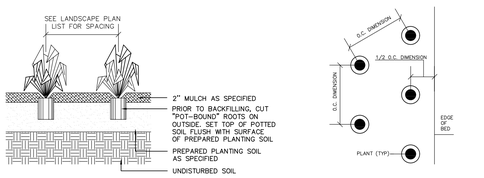
SHRUB & MASS SHRUB PLANTING AT FACILITY PERIMETER
NOT TO SCALE





NOTE: SEE STORMWATER MANAGEMENT PLAN FOR MATERIALS SPECIFICATIONS AND ADDITIONAL DETAILS ON BIORETENTION FACILITY.

SHRUB & MASS SHRUB PLANTING WITHIN BIORETENTION FACILITY
NOT TO SCALE



HERBACEOUS PLANTING & TRIANGULAR PLAN SPACING
NOT TO SCALE

BIORETENTION FACILITY LANDSCAPE MAINTENANCE GUIDELINES

Bioretention landscaping initially requires intensive maintenance, including weeding, supplemental watering, re-planting, re-mulching, and monitoring of plant health and growth. Maintenance needs become lower over time.

General Maintenance Issues

Plant Coverage:
At the end of the first year, herbaceous plants should cover at least 50% of the originally proposed planted area. If less than 50% is covered, the facility should be replanted to a density as proposed on the Stormwater Management Landscape Plan. After 3 full years, the entire area should be covered with healthy growth at a density at least as great as proposed on the Stormwater Management Landscape Plan.

Fertilizer:
Do not apply fertilizer unless soil tests indicate a deficiency.

Pesticide:
Do not apply on a scheduled basis. Apply ONLY after non-chemical methods (biological, physical, cultural) have been attempted and do not keep pests under control. Use the least toxic and least persistent pesticide that can provide adequate control. Apply only when the pesticide is least likely to enter runoff; do not apply if rain is expected.

Herbicide:
Spot treat with an herbicide approved for aquatic use.

Mowing:
Do not mow within the facility except where turf grasses are present. When mowing turf grasses, clippings should remain on the turf. Do not allow clippings to fall in the facility where plants other than turf grasses exist.

PLANT MAINTENANCE SCHEDULE

MATERIAL	TASK	FREQUENCY	NOTES
TREES AND SHRUBS	Watering (First 2 months after planting)	Deep watering once every 3 days	Adjust frequency to accommodate rainfall amounts and high summer temperatures.
	Watering (Remainder of first growing season and all of second growing season)	Deep watering once per week unless ½" rain is received or more frequently as needed during drought	
	Watering (After first 2 growing seasons)	As needed during drought	
	Pruning diseased or damaged growth	When it is found	DO NOT SHEAR PLANTS. Preferred pruning times and methods may vary by species. The Maryland Cooperative Extension, the Maryland Department of Natural Resources, and the USDA Forest Service, among other organizations, offer additional information.
	Pruning excess growth	Generally, from trees in late winter, and from shrubs soon after flowering is complete	
	Remove diseased or dead plants	Once in Spring and once in Fall, minimum	Replace with new material.
HERBACEOUS PLANTS	Watering (First 2 months after planting)	Deep watering once every 3 days	Adjust frequency to accommodate rainfall amounts and high summer temperatures.
	Watering (Remainder of first growing season and all of second growing season)	Deep watering once per week unless ½" rain is received or more frequently as needed during drought	
	Watering (After first 2 growing seasons)	As needed during drought	
	Remove diseased or dead plants	Once in Spring and once in Fall, minimum	Replace with new material if total coverage of facility falls below 50%.

GENERAL MAINTENANCE SCHEDULE

TASK	FREQUENCY	NOTES
Plant Inspection	Once every 2 weeks in Spring and Summer, monthly in Fall	Visually inspect plants for disease or pest problems.
Remove Litter and Debris	Whenever found	Includes animal waste, fallen twigs and branches and past seasons' decaying herbaceous material.
Mulch Inspection and Maintenance	Monthly	Replace or re-spread mulch as needed to maintain appropriate depth per specifications. However, do not allow accumulated organic matter to exceed specified mulch depth.
Weeding (First 2 growing seasons)	Every 2 weeks from April through October	Hand-pull weeds or use hand-held tools such as hoes. Do not use herbicides or mechanical cultivators. Immediately remove all exotic/invasive species that appear. Remove woody plant seedlings that have self-propagated. If desired, native non-invasive herbaceous species may be left to provide additional diversity.
Weeding (After first 2 growing seasons)	Once a month from April through October, or as needed	
Spring Clean-Up	Annually February through March	Remove dead foliage from perennials and ornamental grasses. Remove fallen twigs, branches and leaf debris.

PLANTING NOTES

GENERAL

1. THIS PLAN IS FOR PLANTING PURPOSES ONLY.
2. THE SPECIFICATIONS FOR ALL WORK INCLUDED IN THIS CONTRACT SHALL BE FROM THE LANDSCAPE SPECIFICATION GUIDELINES BY THE LANDSCAPE CONTRACTORS ASSOCIATION MD-DC-VA (LCA), CURRENT EDITION, UNLESS OTHERWISE NOTED ON THESE PLANS.
3. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING MISS UTILITY PRIOR TO BEGINNING CONSTRUCTION FOR LOCATION OF ALL UTILITY LINES. TREES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM SEWER/WATER CONNECTIONS. THE CONTRACTOR SHALL BE LIABLE FOR DAMAGE TO ANY AND ALL PUBLIC OR PRIVATE UTILITIES.
4. THE CONTRACTOR SHALL LAY OUT AND CLEARLY STAKE ALL PROPOSED IMPROVEMENTS INCLUDED ON THIS PLAN.
5. THE CONTRACTOR IS RESPONSIBLE FOR SOIL TESTING AND PREPARATION AS OUTLINED IN THE CURRENT EDITION OF THE LANDSCAPE SPECIFICATION GUIDELINES OF THE LANDSCAPE CONTRACTORS ASSOCIATION OF MD-DC-VA (LCA). PREPARATION SHALL INCLUDE, BUT NOT NECESSARILY BE LIMITED TO, THE ADDITION OF SOIL AMENDMENTS, FERTILIZERS AND SUPPLEMENTAL TOPSOIL AS INDICATED BY TESTING; AND SUBGRADE, FINAL GRADE AND FINISH GRADE SOIL PREPARATION.
6. QUANTITIES AS SHOWN ON THE PLAN SHALL GOVERN OVER PLANT LIST QUANTITIES. THE CONTRACTOR SHALL VERIFY PLANT LIST TOTALS WITH QUANTITIES SHOWN ON PLAN. THE LANDSCAPE ARCHITECT SHALL BE ALERTED BY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO FINAL BID NEGOTIATION. UNIT PRICES FOR ALL MATERIAL SHALL BE SUPPLIED TO THE OWNER AT BIDDING TIME.
7. NO EXISTING TREES SHALL BE REMOVED WITHOUT WRITTEN AUTHORIZATION FROM THE OWNER EXCEPT WHERE NOTED ON PLANS. NO GRUBBING SHALL OCCUR WITHIN EXISTING TREE AREAS.
8. ALL CONTRACTORS SHALL BE REQUIRED TO COMPLETELY REMOVE ALL TRASH, DEBRIS AND EXCESS MATERIALS FROM THE WORK AREA AND THE PROPERTY (ESPECIALLY AT ALL CURB, GUTTERS AND SIDEWALKS) DAILY DURING INSTALLATION.
9. ROOT STOCK OF THE PLANT MATERIAL SHALL BE KEPT MOIST DURING TRANSPORT FROM THE SOURCE TO THE JOB SITE AND UNTIL PLANTED.

PLANT SELECTION

10. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT. THE OWNER SHALL RECEIVE A TAG FROM EACH PLANT SPECIES AND A LIST OF PLANT SUPPLIERS. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL MEET THE NORMAL REQUIREMENTS FOR THE VARIETY PER THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, PUBLISHED BY AMERICANHORT. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.
11. ALL SUBSTITUTIONS OF PLANT MATERIAL ARE TO BE REQUESTED IN WRITING TO THE LANDSCAPE ARCHITECT AND APPROVED IN WRITING BY THE OWNER AND M-NCPPC. FAILURE TO OBTAIN SUBSTITUTION APPROVAL IN WRITING MAY RESULT IN LIABILITY TO THE CONTRACTOR.
12. ALL PLANTS SHALL BE FRESHLY DUG, SOUND, HEALTHY, VIGOROUS, WELL-BRANCHED, FREE OF DISEASE, INSECT EGGS, AND LARVAE, AND SHALL HAVE ADEQUATE ROOT SYSTEMS. IN ADDITION, ALL CONTAINER-GROWN MATERIAL SHALL BE WELL-ROOTED AND ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION
13. PLANTING STOCK, SIZES, AND DENSITY SHALL BE CONSISTENT WITH THE APPROVED LANDSCAPING PLAN. SIZES SPECIFIED IN THE PLANT LIST ARE MINIMUM SIZES TO WHICH THE PLANTS ARE TO BE JUDGED. FAILURE TO MEET MINIMUM SIZE ON ANY PLANT WILL RESULT IN REJECTION OF THAT PLANT.
14. SHADE TREES: HEIGHT SHALL BE MEASURED FROM THE CROWN OF THE ROOT FLARE TO THE TOP OF MATURE GROWTH. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE CROWN FROM THE CENTER OF THE TRUNK. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH. SINGLE TRUNK TREES SHALL BE FREE OF "V" CROTCHES THAT COULD BE POINTS OF WEAK LIMB STRUCTURE OR DISEASE INFESTATION.
15. WHERE TREES ARE TO BE PLANTED IN ROWS, THEY SHALL BE UNIFORM IN SIZE AND SHAPE.
16. SHRUBS: HEIGHT SHALL BE MEASURED FROM THE GROUND TO THE AVERAGE HEIGHT OF THE TOP OF THE PLANT. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE SHRUB MASS. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH.

BED PREPARATION

18. NO PLANTING MATERIAL SHALL BE INSTALLED UNTIL THE MICRO-BIORETENTION FACILITY HAS BEEN FLOODED (PUDDLED) AND RESTORED TO THE PROPER DESIGN ELEVATION.
19. ALL TREE PITS, SHRUB BEDS AND PREPARED PLANTING BEDS ARE TO BE EXCAVATED IN ACCORDANCE WITH THE PLANTING DETAILS.
20. THE DIAMETER OF THE PLANTING PIT MUST BE A MINIMUM OF TWO TIMES THE DIAMETER OF THE ROOT BALL OF THE TREE.
21. THE PLANTING PIT SHALL BE DEEP ENOUGH TO ALLOW BETWEEN 2" - 3" OF THE EXPOSED ROOT FLARE TO BE ABOVE THE EXISTING GRADE AFTER SETTLING. LOOSE SOIL AT THE BOTTOM OF THE PIT SHALL BE TAMPED BY HAND.

PLANT INSTALLATION

22. FOR INFORMATION REGARDING APPROPRIATE PLANTING PERIOD FOR DIFFERENT SPECIES, SEE THE LATEST EDITION OF THE LANDSCAPE SPECIFICATION GUIDELINES FROM THE LANDSCAPE CONTRACTORS ASSOCIATION, SECTION 1.12 (A-G).
23. GROUPS OF SHRUBS SHALL BE PLACED IN A CONTINUOUS MULCH BED WITH SMOOTH CONTINUOUS LINES. ALL MULCHED BED EDGES SHALL BE CURVILINEAR IN SHAPE FOLLOWING THE CONTOUR OF THE PLANT MASS UNLESS OTHERWISE NOTED. TREES LOCATED WITHIN FOUR FEET OF SHRUB BEDS SHALL SHARE SAME MULCH BED.
24. ALL TREES ARE TO BE LOCATED A MINIMUM DISTANCE OF 5' FROM ALL UTILITY BOXES, 5' FROM A STORM DRAIN INLET OR MANHOLE, 10' FROM A FIRE HYDRANT, 15' FROM ANY PUBLIC STREET LIGHT, 5' FROM ANY DRIVEWAY APRONS, 20' FROM ANY TRAFFIC CONTROL SIGN, AND AT LEAST 30' FROM ANY INTERSECTION.
25. TREES SHALL BE LOCATED A MINIMUM OF 3 FEET FROM WALLS AND WALKS WITHIN THE PROJECT. IF CONFLICTS ARISE BETWEEN ACTUAL SIZE OF AREA AND PLANS, THE CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT FOR RESOLUTION. FAILURE TO MAKE SUCH CONFLICTS KNOWN TO THE OWNER OR LANDSCAPE ARCHITECT WILL RESULT IN THE CONTRACTOR'S LIABILITY TO RELOCATE MATERIALS.
26. LARGE GROWING PLANTS ARE NOT TO BE PLANTED IN FRONT OF WINDOWS, UNDER BUILDING OVERHANGS, OR IN DRAINAGE SWALES. SHRUBS PLANTED NEAR HVAC UNITS TO BE LOCATED SO THAT SHRUBS AT MATURITY WILL MAINTAIN 1-FOOT AIRSPACE BETWEEN UNIT AND PLANT.
27. THE CONTRACTOR MAY SLIGHTLY ADJUST PLANT LOCATIONS IN THE FIELD AS NECESSARY TO BE CLEAR OF DRAINAGE SWALES AND UTILITIES. FINISHED PLANTING BEDS SHALL BE GRADED SO AS NOT TO IMPEDE DRAINAGE AWAY FROM BUILDINGS.
28. ANY PLANTING WHICH IS SHOWN ADJACENT TO CONDENSER UNITS SHALL BE PLANTED AS REQUIRED TO SCREEN THE UNITS. SHOULD THE CONDENSER UNITS BE INSTALLED IN LOCATIONS DIFFERENT FROM THOSE SHOWN ON THE PLAN IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO INSTALL THE MATERIALS AROUND THE CONDENSERS AND TO ADJUST OTHER ADJACENT PLANTING ACCORDINGLY.
29. SHRUBS SHALL BE TRIANGULARLY SPACED AT SPACING SHOWN ON PLANTING PLANS WHERE MASSING IS INDICATED
30. THE PLANT SHALL BE REMOVED FROM THE CONTAINER AND PLACED IN THE PLANTING PIT BY LIFTING AND CARRYING THE PLANT BY ITS ROOT BALL (NEVER LIFT BY BRANCHES OR TRUNK). TAGS AND TWINE ARE TO BE REMOVED AND BURLAP IS TO BE ROLLED BACK ONE-HALF ON ALL B&B PLANT MATERIAL.
31. SET THE PLANT STRAIGHT AND IN THE CENTER OF THE PIT SO THAT THE EXPOSED ROOT FLARE IS APPROXIMATELY 2" - 3" ABOVE THE FINAL GRADE.
32. BACKFILL PLANTING PIT WITH PLANTING MEDIA.
33. MAKE SURE THE PLANT REMAINS STRAIGHT DURING BACKFILLING PROCEDURE.
34. NEVER COVER THE TOP OF THE ROOT BALL WITH SOIL. SOIL SHALL TAPER FROM THE TOP EDGE OF THE ROOT BALL TO THE PROPOSED GRADE. WHERE THE ROOT BALL MEETS THE PROPOSED GRADE, MOUND SOIL IN A 3"-HIGH RING AROUND THE EXPOSED ROOT BALL. CROWN OF ROOT FLARE SHALL BE 1/2" - 3" HIGHER (AFTER SETTLING) THAN ADJACENT SOIL.
35. TREE STAKING AND GUYING SHALL BE DONE PER DETAILS, OR, IF CONDITIONS REQUIRE IT, TREES MAY BE BRACED BY USING ONE OF THE METHODS FOUND IN THE MOST RECENT EDITION OF THE LANDSCAPE SPECIFICATION GUIDELINES BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF MD-DC-VA, SECTION 5.0 BRACING PROCEDURES. TREES THAT MUST BE BRACED SHALL INCLUDE BUT NOT BE LIMITED TO THOSE PLANTED IN THE ENGINEERED SOIL MEDIA IN THE BOTTOM OF A STORMWATER MANAGEMENT FACILITY AND THOSE PLANTED ON SIDE SLOPES OF A FACILITY. ALL OTHER TREES SHALL BE EVALUATED FOR BRACING ON AN INDIVIDUAL BASIS. AFTER ONE YEAR, IT IS THE OWNER'S RESPONSIBILITY TO REMOVE ALL BRACING MATERIALS UNLESS A TREE'S GROWING CONDITIONS WARRANT OTHERWISE
36. SPREAD MULCH. THE MULCH SHALL BE DOUBLE SHREDDED HARDWOOD BARK FOR TREES AND SHRUBS.

PLANTING NON-GRASS GROUNDCOVER

37. THE GROUNDCOVER PLANTING HOLES SHALL BE DUG THROUGH THE MULCH WITH ONE OF THE FOLLOWING: HAND TROWEL, SHOVEL, BULB PLANTER, OR HOE (THIS DOES NOT APPLY TO GRASSES OR LEGUMES).
38. BEFORE PLANTING, BIODEGRADABLE POTS SHALL BE SPLIT AND NON-BIODEGRADABLE POTS SHALL BE REMOVED. ROOT SYSTEMS OF ALL POTTED PLANTS SHALL BE SPLIT OR CRUMBLED.
39. THE GROUNDCOVER SHALL BE PLANTED SO THAT THE ROOTS ARE SURROUNDED BY THE SOIL BELOW THE MULCH. POTTED PLANTS SHALL BE SET SO THAT THE TOP OF THE POT IS EVEN WITH THE EXISTING GRADE. THE ROOTS OF BARE ROOT PLANTS SHALL BE COVERED TO THE CROWN.
40. THE ENTIRE GROUNDCOVER BED SHALL BE THOROUGHLY WATERED.

PLANTING GRASS GROUND COVER

41. GRASSES AND LEGUME SEED SHALL BE TILLED INTO THE SOIL TO A DEPTH OF AT LEAST L/2 INCH BY EITHER HARROWING OR DISCING. GRASS AND LEGUME PLUGS SHALL BE PLANTED FOLLOWING THE NON-GRASS GROUND COVER PLANTING TECHNIQUES ABOVE.
42. THE CONTRACTOR SHALL BE RESPONSIBLE TO REGRADE, HYDRO-SEED, STRAW MULCH, AND TACK ALL LAWN AREAS DISTURBED AS THE RESULT OF HIS WORK.

CLEAN UP

43. FINAL CLEAN UP SHALL BE THE RESPONSIBILITY OF THE INSTALLER AND CONSIST OF REMOVING ALL TRASH AND MATERIALS INCIDENTAL TO THE PROJECT AND PROPERLY DISPOSING OF THEM OFF SITE. IN ADDITION THE CONSTRUCTION PROCEDURE SHALL NOT DAMAGE ANY AREAS OF EXISTING PLANTS WHICH ARE TO REMAIN
44. THERE SHALL BE NO OPEN BURNING ON-SITE.
45. THE CONTRACTOR SHALL REPLACE OR REPAIR AT NO COST TO THE OWNER, ALL SITE AREAS OR SURROUNDING ITEMS DAMAGED BY WORK OF HIS CONTRACTS.
46. DURING LANDSCAPE WORK, STORE MATERIALS AND EQUIPMENT WHERE DIRECTED. KEEP PAVEMENT CLEAN AND WORK AREAS IN AN ORDERLY CONDITION.

POST PLANTING

47. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL PLANT MAINTENANCE, INCLUDING SHRUBS AND GROUNDCOVER, AND SHALL MAINTAIN AREA IN A WEED AND DEBRIS FREE CONDITION, THROUGHOUT THE ONE YEAR GUARANTEE PERIOD.
48. THE CONTRACTOR SHALL ENSURE THAT TREES REMAIN VERTICAL AND UPRIGHT FOR THE DURATION OF THE GUARANTEE PERIOD.
49. DEAD PLANTS ARE TO BE REMOVED FROM THE JOB BY THE CONTRACTOR ON A MONTHLY BASIS. THE CONTRACTOR SHALL MAINTAIN AN UPDATED, COMPREHENSIVE LIST OF ALL DEAD MATERIALS REMOVED AND PRESENT A COPY OF THE LIST TO THE OWNER AT THE END OF EVERY MONTH DURING THE CONTRACT PERIOD.
50. THE CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE IMPROVEMENTS, INCLUDING SEEDING, FOR ONE FULL YEAR AS REQUIRED BY THE SPECIFICATIONS. THE CONTRACTOR MUST CONTACT THE OWNER AT LEAST 10 WORKING DAYS IN ADVANCE TO SCHEDULE ACCEPTANCE INSPECTION(S). THE CONTRACTOR MUST REPLACE ALL DEAD OR UNACCEPTABLE PLANTS DURING THE FOLLOWING RECOMMENDED PLANTING SEASON.

THIS PLAN IS FOR SOIL EROSION, SEDIMENT CONTROL AND SWM ONLY | SC PERMIT NO. - 288588

MHG
Civil Engineers
Land Planners
Landscape Architects
Land Surveyors

9220 Wightman Road, Suite 120
Montgomery Village, MD 20886
Phone: 301.670.0840
www.mhgpa.com

STATE OF MARYLAND — STEVEN KAHLE — 615 — LANDSCAPE ARCHITECT — 2023.09.15 10:00:00 -04'00'

Professional Certification
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Landscape Architect under the Laws of the State of Maryland. Lic. No. 615 Exp. Date. 09.10.2025

PROJECT TEAM

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CONTACT: DR. PRAVEEN BOLARUM
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LAND USE ATTORNEY:
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ARCHITECT:
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ANNAPOLIS, MD 21401
PHONE: (301) 858-5853
CONTACT: STEVEN KAHLE, AIA, NCARB
EMAIL: SKAHLE@SKASTUDIO.COM

REVISIONS

NO.	DESCRIPTION	DATE

TAX MAP EW31 WSSC 232NW13

2TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

HAMMER HILL, PARCEL P311

CLARKSBURG HIGHLANDS, PART OF BLOCK D

PROJ. MGR	DCM
DRAWN BY	CEB
SCALE	AS NOTED
DATE	08.11.2022

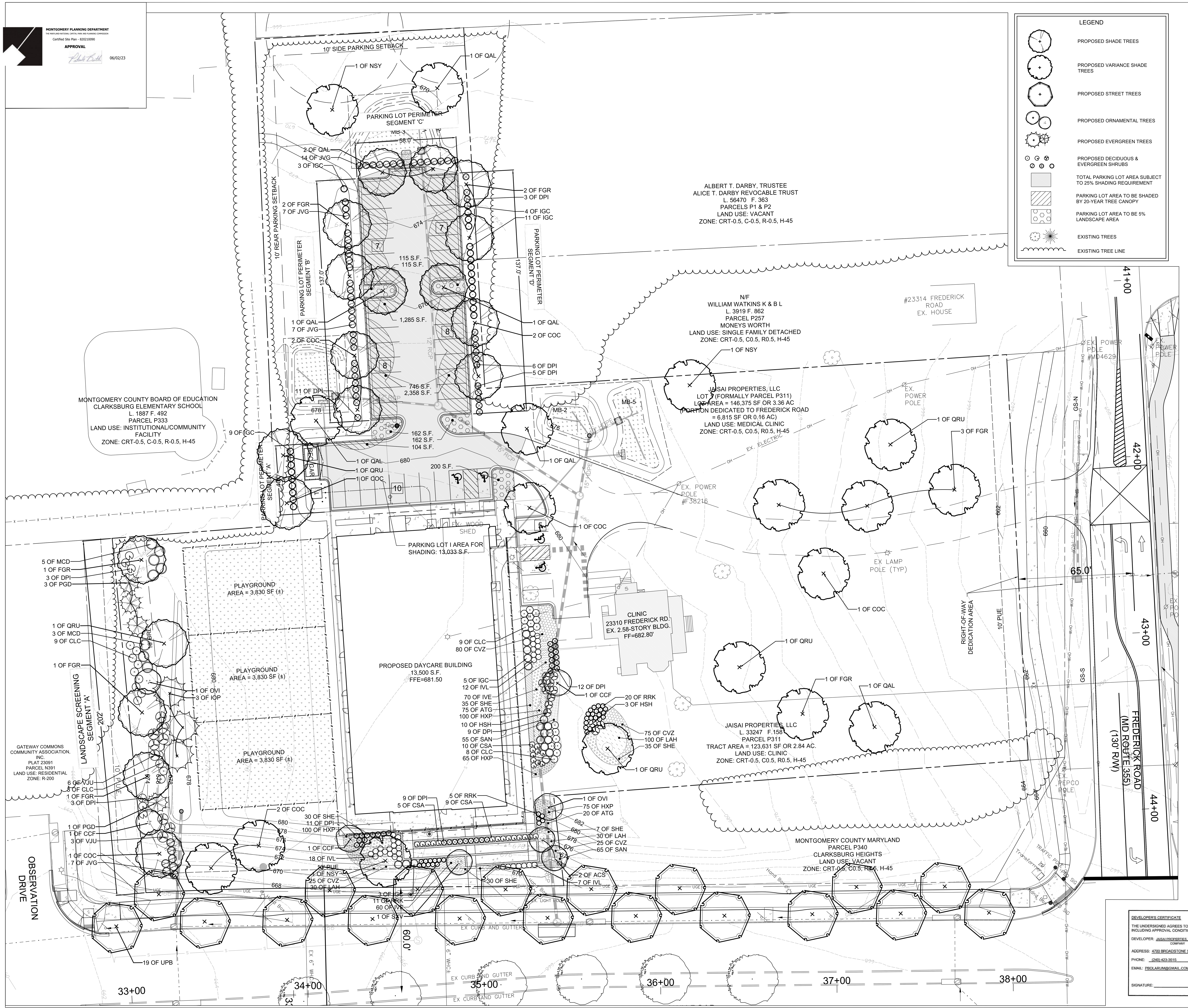
FINAL SESC/SWM PLAN

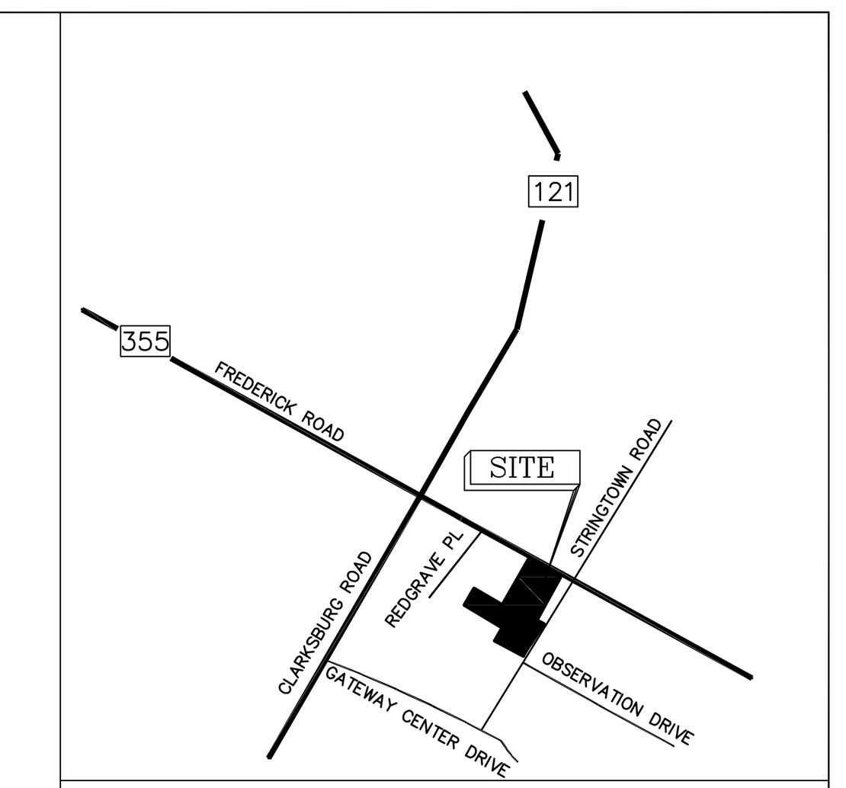
PLANTING PLAN

C4.06

PROJECT NO.	2013.109.41
SHEET NO.	9 OF 9

MONTGOMERY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
Certified Site Plan - 820210090
APPROVAL
06/02/23





VICINITY MAP
SCALE 1" = 2,000'

MHG
Civil Engineers
Land Planners
Landscape Architects
Land Surveyors

9220 Wightman Road, Suite 120
Montgomery Village, MD 20886
Phone: 301.670.0840
www.mhgpa.com

STATE OF MARYLAND · DAVID B. POST · LANDSCAPE ARCHITECT · 615
2022.12.16 16:00:28-05'00'

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly Licensed Landscape Architect under the laws of the State of Maryland, license number 615, Expiration Date: 09-10-2023.

JAISAI PROPERTIES, LLC
4007 BROADSTONE STREET
FREDERICK, MD 21704
PH: (240) 423-3615
EMAIL: PBOLARUM@GMAIL.COM

REVISIONS

NO.	DESCRIPTION	DATE

TAX MAP EW31 WSSC 232NW13

2TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

PARCELS 311 & N366
HAMMER HILL

PROJ. MGR	DCM
DRAWN BY	CEB
SCALE	1" = 20'
DATE	1.12.2021

HAMMER HILL DAYCARE LANDSCAPE PLANTING PLAN

L2.01

PROJECT NO.	13.109.41
SHEET NO.	1 OF 2

DEVELOPER'S CERTIFICATE

THE UNDERSIGNED AGREES TO EXECUTE ALL THE FEATURES OF SITE PLAN APPROVAL NO. 820210090 INCLUDING APPROVAL CONDITIONS, DEVELOPMENT PROGRAM, AND CERTIFIED SITE PLAN.

DEVELOPER: JAISAI PROPERTIES, LLC (COMPANY) DR. PRAVEEN BOLARUM (CONTACT PERSON)

ADDRESS: 4700 BROADSTONE STREET, FREDERICK, MD 21074

PHONE: (240) 423-3615

EMAIL: PBOLARUM@GMAIL.COM

SIGNATURE:

MONTGOMERY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Certified Site Plan - 820210090

APPROVAL

06/02/23

PARKING LOT REQUIREMENTS FOR 10 OR MORE SPACES
2014 MONTGOMERY COUNTY ZONING ORDINANCE

Section 6.2.9.C.1. Landscaped Area

Minimum Landscaped Island Area Required	=100 s.f.
Minimum Landscaped Island Area Provided	= 115 s.f.
Parking Lot Pavement Area	= 13,033 s.f.
Landscape Area required (5% of Total Pavement Area)	= 652 s.f.
Total Landscape Area provided	= 756 s.f. or 5.8%

SCREENING REQUIREMENTS 2014 MONTGOMERY COUNTY ZONING ORDINANCE SECTION 6.5.2.C		
	REQUIRED/ PERMITTED	PROVIDED
7. General Building with a Non-Industrial Use	**SCREENING A (202.0' SEGMENT) - OPTION B**	
Minimum Landscape Dimensions (depth)	12'	122'
Canopy Trees	2 per 100' = 5 trees	5 trees
Understory or Evergreen Trees	4 per 100' = 9 trees	9 trees
Large Shrubs	8 per 100' = 17 shrubs	17 shrubs
Medium Shrubs	12 per 100' = 25 shrubs	25 shrubs
Small Shrubs	N/A	N/A

SHADING FOR PARKING LOT PAVEMENT
Section 6.2.9.C.2. Tree Canopy

PARKING LOT SHADE TREE LIST		
BOTANICAL NAME	COMMON NAME	20 YEAR CANOPY (DIA. IN FEET)*
Celtis occidentalis	Common Hackberry	45
Fagus grandifolia	American Beech	46
Quercus alba	White Oak	26
Quercus rubra	Red Oak	35

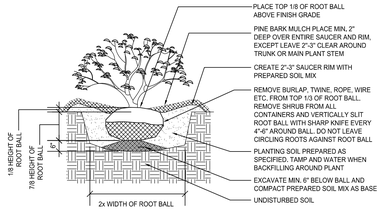
*20-year canopy diameters are calculated as shown in the Montgomery County Trees Technical Manual (September 1992), Appendix C, 'Plant Species Information: Montgomery County Maryland Landscape Tree Evaluation Criteria'.

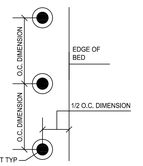
Parking Lot Pavement Area	= 12,990 s.f.
Shaded Area required (25% of Total Pavement Area)	= 3,248 s.f.
Total Shaded Area provided	= 4,495 s.f. or 34%

PARKING LOT PERIMETER LANDSCAPING REQUIREMENTS SECTION 6.2.9.C.3.		
	REQUIRED/ PERMITTED	PROVIDED
1. Perimeter planting area for a property that abuts any other zone (C.R.T.)	**PERIMETER SCREEN A - 40 L.F.**	
i. Minimum width	6'	25'
ii. Minimum hedge height	3'	3'
iii. Canopy trees	30' o.c. 40 linear feet = 2 trees	2 trees
2. Perimeter planting area for a property that abuts any other zone (C.R.T.)	**PERIMETER SCREEN B - 137 L.F.**	
i. Minimum width	6'	54'
ii. Minimum hedge height	3'	3'
iii. Canopy trees	30' o.c. 163 linear feet = 5 trees	5 trees
3. Perimeter planting area for a property that abuts any other zone (C.R.T.)	**PERIMETER SCREEN C - 58 L.F.**	
i. Minimum width	6'	56'
ii. Minimum hedge height	3'	3'
iii. Canopy trees	30' o.c. 58 linear feet = 2 trees	2 trees
4. Perimeter planting area for a property that abuts any other zone (C.R.T.)	**PERIMETER SCREEN D - 137 L.F.**	
i. Minimum width	6'	8'
ii. Minimum hedge height	3'	3'
iii. Canopy trees	30' o.c. 163 linear feet = 5 trees	5 trees

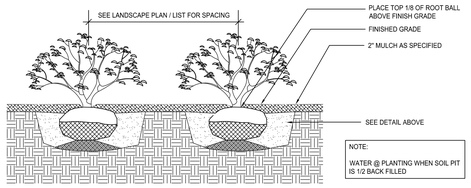
VARIANCE MITIGATION TREE LIST							
KEY	QTY	BOTANICAL NAME	COMMON NAME	CAL	HGT	ROOT	SPACING
SHADE TREES							
COC*	4	Celtis occidentalis	Common Hackberry	3" Cal.		B&B	AS SHOWN
FGR*	4	Fagus grandifolia	American Beech	3" Cal.		B&B	AS SHOWN
NSY*	3	Nyssa sylvatica	Tupelo	3" Cal.		B&B	AS SHOWN
QAL*	4	Quercus alba	White Oak	3" Cal.		B&B	AS SHOWN
QRU*	3	Quercus rubra	Red Oak	3" Cal.		B&B	AS SHOWN

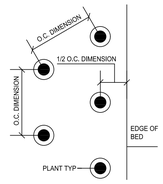
Note: Plant counts are provided for the convenience of the contractor. The plan dominates on any discrepancies between the table and the plan. Contractor is responsible for verifying the counts and bringing any discrepancies to the attention of the landscape architect and client before proceeding.
*Native





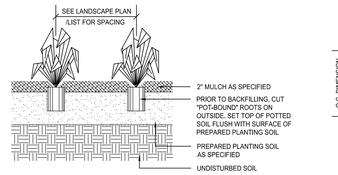
PLAN - LINEAR SPACING
NOT TO SCALE

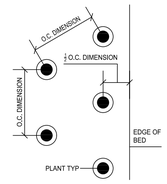




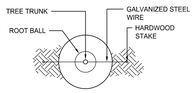
PLAN -TRIANGULAR SPACING
NOT TO SCALE

SHRUB & MASS SHRUB PLANTING
NOT TO SCALE





HERBACEOUS PLANTING & TRIANGULAR PLAN SPACING
NOT TO SCALE



PLAN VIEW
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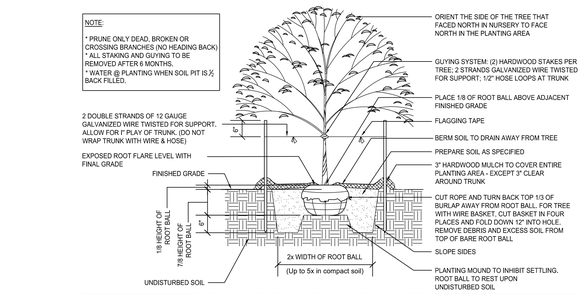
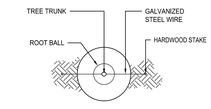
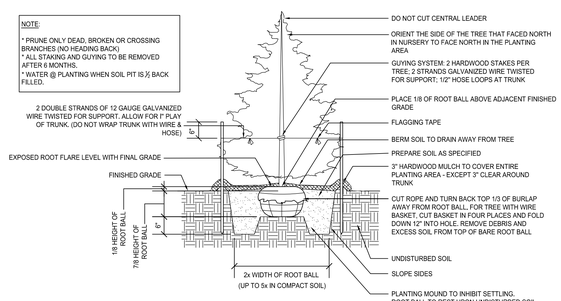


DECIDUOUS TREE PLANTING - UNDER 3" CALIPER
NOT TO SCALE



PLAN VIEW
NOT TO SCALE



EVERGREEN TREE PLANTING - UNDER 3" CALIPER
NOT TO SCALE

PLANTING NOTES

1. THIS PLAN IS FOR PLANTING PURPOSES ONLY.

2. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL PLANT MAINTENANCE, INCLUDING SHRUBS AND GROUNDCOVER, AND SHALL MAINTAIN AREA IN A WEED AND DEBRIS FREE CONDITION, THROUGHOUT THE ONE YEAR GUARANTEE PERIOD.

3. CONTRACTOR SHALL LAY OUT AND CLEARLY STAKE ALL PROPOSED IMPROVEMENTS INCLUDED ON THIS PLAN.

4. CONTRACTOR IS RESPONSIBLE FOR CONTACTING MISS UTILITY PRIOR TO BEGINNING CONSTRUCTION FOR LOCATION OF ALL UTILITY LINES. TREES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM SEWER/WATER CONNECTIONS. CONTRACTOR SHALL BE LIABLE FOR DAMAGE TO ANY AND ALL PUBLIC OR PRIVATE UTILITIES.

5. QUANTITIES AS SHOWN ON THE PLAN SHALL GOVERN OVER PLANT LIST QUANTITIES. CONTRACTOR TO VERIFY PLANT LIST TOTALS WITH QUANTITIES SHOWN ON PLAN. LANDSCAPE ARCHITECT SHALL BE ALERTED BY CONTRACTOR OF ANY DISCREPANCIES PRIOR TO FINAL BID NEGOTIATION. UNIT PRICES FOR ALL MATERIAL SHALL BE SUPPLIED TO THE OWNER AT BIDDING TIME.

6. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT. OWNER SHALL RECEIVE TAG FROM EACH PLANT SPECIES AND A LIST OF PLANT SUPPLIERS. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL MEET THE NORMAL REQUIREMENTS FOR THE VARIETY PER THE AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, PUBLISHED BY AMERICANHORT. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.

7. CONTRACTOR IS RESPONSIBLE FOR SOIL TESTING AND PREPARATION AS OUTLINED IN THE CURRENT EDITION OF THE LANDSCAPE SPECIFICATION GUIDELINES OF THE LANDSCAPE CONTRACTORS ASSOCIATION OF MD-DC-VA (LCA). PREPARATION SHALL INCLUDE, BUT NOT NECESSARILY BE LIMITED TO, THE ADDITION OF SOIL AMENDMENTS, FERTILIZERS AND SUPPLEMENTAL TOPSOIL AS INDICATED BY TESTING; AND SUBGRADE, FINAL GRADE AND FINISH GRADE SOIL PREPARATION.

8. WHERE TREES ARE PLANTED IN ROWS, THEY SHALL BE UNIFORM IN SIZE AND SHAPE.

9. SIZES SPECIFIED IN THE PLANT LIST ARE MINIMUM SIZES TO WHICH THE PLANTS ARE TO BE JUDGED. FAILURE TO MEET MINIMUM SIZE ON ANY PLANT WILL RESULT IN REJECTION OF THAT PLANT.

10. ALL PLANTS SHALL BE FRESHLY DUG, SOUND, HEALTHY, VIGOROUS, WELL BRANCHED, FREE OF DISEASE, INSECT EGGS, AND LARVAE, AND SHALL HAVE ADEQUATE ROOT SYSTEMS.

11. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS AND ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION.

12. GROUPS OF SHRUBS SHALL BE PLACED IN A CONTINUOUS MULCH BED WITH SMOOTH CONTINUOUS LINES. ALL MULCHED BED EDGES SHALL BE CURVILINEAR IN SHAPE FOLLOWING THE CONTOUR OF THE PLANT MASS UNLESS OTHERWISE NOTED. TREES LOCATED WITHIN FOUR FEET OF SHRUB BEDS SHALL SHARE SAME MULCH BED.

13. NO EXISTING TREES SHALL BE REMOVED WITHOUT WRITTEN AUTHORIZATION FROM THE OWNER EXCEPT WHERE NOTED ON PLANS. NO GRUBBING SHALL OCCUR WITHIN EXISTING TREE AREAS.

14. TREES SHALL BE LOCATED A MINIMUM OF 3 FEET FROM WALLS AND WALKS WITHIN THE PROJECT. IF CONFLICTS ARISE BETWEEN ACTUAL SIZE OF AREA AND PLANS, CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT FOR RESOLUTION. FAILURE TO MAKE SUCH CONFLICTS KNOWN TO THE OWNER OR LANDSCAPE ARCHITECT WILL RESULT IN CONTRACTOR'S LIABILITY TO RELOCATE MATERIALS.

15. LARGE GROWING PLANTS ARE NOT TO BE PLANTED IN FRONT OF WINDOWS, UNDER BUILDING OVERHANGS, OR IN DRAINAGE SWALES. SHRUBS PLANTED NEAR HVAC UNITS TO BE LOCATED SO THAT SHRUBS AT MATURITY WILL MAINTAIN 1-FOOT AIRSPACE BETWEEN UNIT AND PLANT.

16. CONTRACTOR TO SLIGHTLY ADJUST PLANT LOCATIONS IN THE FIELD AS NECESSARY TO BE CLEAR OF DRAINAGE SWALES AND UTILITIES. FINISHED PLANTING BEDS SHALL BE GRADED SO AS NOT TO IMPEDE DRAINAGE AWAY FROM BUILDINGS.

17. TREE STAKING AND GUYING SHALL BE DONE PER DETAILS. CONTRACTOR SHALL ENSURE THAT TREES REMAIN VERTICAL AND UPRIGHT FOR THE DURATION OF THE GUARANTEE PERIOD.

18. ALL TREE PITS, SHRUB BEDS AND PREPARED PLANTING BEDS ARE TO BE COMPLETELY EXCAVATED IN ACCORDANCE WITH THE PLANTING DETAILS.

19. MULCH IS TO BE DOUBLE SHREDDED HARDWOOD BARK FOR TREES AND SHRUBS.

20. CROWN OF ROOT FLARE SHALL BE 1/2" - 3" HIGHER (AFTER SETTLING) THAN ADJACENT SOIL.

21. TAGS AND TWINE ARE TO BE REMOVED AND BURLAP IS TO BE ROLLED BACK ONE-HALF ON ALL B&B PLANT MATERIAL.

22. SHRUBS SHALL BE TRIANGULARLY SPACED AT SPACING SHOWN ON PLANTING PLANS WHERE MASSING IS INDICATED.

23. SHADE TREES: HEIGHT SHALL BE MEASURED FROM THE CROWN OF THE ROOT FLARE TO THE TOP OF MATURE GROWTH. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE CROWN FROM THE CENTER OF THE TRUNK. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH. SINGLE TRUNK TREES SHALL BE FREE OF "V" CROTCHES THAT COULD BE POINTS OF WEAK LIMB STRUCTURE OR DISEASE INFESTATION.

SHRUBS: HEIGHT SHALL BE MEASURED FROM THE GROUND TO THE AVERAGE HEIGHT OF THE TOP OF THE PLANT. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE SHRUB MASS. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH.

24. ALL SUBSTITUTIONS OF PLANT MATERIAL ARE TO BE REQUESTED IN WRITING TO THE LANDSCAPE ARCHITECT AND APPROVED IN WRITING BY THE OWNER AND M-NCPPC. FAILURE TO OBTAIN SUBSTITUTION APPROVAL IN WRITING MAY RESULT IN LIABILITY TO THE CONTRACTOR.

25. ALL CONTRACTORS SHALL BE REQUIRED TO COMPLETELY REMOVE ALL TRASH, DEBRIS AND EXCESS MATERIALS FROM THE WORK AREA AND THE PROPERTY (ESPECIALLY AT ALL CURB, GUTTERS AND SIDEWALKS) DAILY DURING INSTALLATION.

26. DEAD PLANTS ARE TO BE REMOVED FROM THE JOB BY THE CONTRACTOR ON A MONTHLY BASIS. CONTRACTOR SHALL MAINTAIN AN UPDATED, COMPREHENSIVE LIST OF ALL DEAD MATERIALS REMOVED AND PRESENT A COPY OF THE LIST TO THE OWNER AT THE END OF EVERY MONTH DURING THE CONTRACT PERIOD.

27. CONTRACTOR SHALL BE RESPONSIBLE TO REGRADE, HYDRO-SEED, STRAW MULCH, AND TACK ALL LAWN AREAS DISTURBED AS THE RESULT OF HIS WORK.

28. CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE IMPROVEMENTS, INCLUDING SEEDING, FOR ONE FULL YEAR AS REQUIRED BY THE SPECIFICATIONS. CONTRACTOR MUST CONTACT THE OWNER AT LEAST 10 WORKING DAYS IN ADVANCE TO SCHEDULE ACCEPTANCE INSPECTION(S). CONTRACTOR MUST REPLACE ALL DEAD OR UNACCEPTABLE PLANTS DURING THE FOLLOWING RECOMMENDED PLANTING SEASON.

29. THE SPECIFICATIONS FOR ALL WORK INCLUDED IN THIS CONTRACT SHALL BE FROM THE LANDSCAPE SPECIFICATION GUIDELINES BY THE LANDSCAPE CONTRACTORS ASSOCIATION MD-DC-VA (LCA), CURRENT EDITION, UNLESS OTHERWISE NOTED ON THESE PLANS.

30. ANY PLANTING WHICH IS SHOWN ADJACENT TO CONDENSER UNITS SHALL BE PLANTED AS REQUIRED TO SCREEN THE UNITS. SHOULD THE CONDENSER UNITS BE INSTALLED IN LOCATIONS DIFFERENT FROM THOSE SHOWN ON THE PLAN IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO INSTALL THE MATERIALS AROUND THE CONDENSERS AND TO ADJUST OTHER ADJACENT PLANTING ACCORDINGLY.

31. FOR INFORMATION REGARDING APPROPRIATE PLANTING PERIODS FOR DIFFERENT SPECIES, SEE THE LATEST EDITION OF THE LANDSCAPE SPECIFICATION GUIDELINES FROM THE LANDSCAPE CONTRACTORS ASSOCIATION OF MD-DC-VA PART 1-EXTERIOR LANDSCAPE INSTALLATION, SECTION 1.12 (A-G) AT WWW.LCAMDDCVA.ORG.

LANDSCAPE PLANT LIST							
KEY	QTY	BOTANICAL NAME	COMMON NAME	CAL	HGT	ROOT	SPACING
SHADE TREES							
COC*	6	Celtis occidentalis	Common Hackberry	2- 2 ½" Cal.		B&B	AS SHOWN
FGR*	7	Fagus grandifolia	American Beech	2- 2 ½" Cal.		B&B	AS SHOWN
QAL*	4	Quercus alba	White Oak	2- 2 ½" Cal.		B&B	AS SHOWN
QRU*	2	Quercus rubra	Red Oak	2- 2 ½" Cal.		B&B	AS SHOWN
UPB	19	Ulmus parvifolia 'Bosque'	Bosque Lacebark Chinese Elm	2-2 ½" Cal.		B&B	50' o.c.
ORNAMENTAL & EVERGREEN TREES							
ACS*	2	Amelanchier canadensis 'Sprizam'	Spring Glory Serviceberry		6-7' ht.	B&B	AS SHOWN
CCF*	4	Cercis canadensis 'Forest Pansy'	Forest Pansy Eastern Redbud		6-7' ht.	B&B	AS SHOWN
IOP*	3	Ilex opaca	American Holly		7-8' ht.	B&B	AS SHOWN
PGD*	4	Picea glauca 'Densata'	Black Hills Spruce		8-10' ht.	B&B	AS SHOWN
SYV	1	Syringa vulgaris	Common Purple Lilac		6-7'	B&B	AS SHOWN
DECIDUOUS & EVERGREEN SHRUBS							
CLC*	29	Clethra alnifolia 'Caleb'	Vanilla Spice Summersweet		24-30"	#3 Cont.	3' o.c.
CSA*	24	Cornus stolonifera 'Arctic Fire'	Arctic Fire Red-Osier Dogwood		24-30"	#3 Cont.	42" o.c.
DPI	64	Distylium 'PIIDIST-I'	Emerald Heights Evergreen Distylium		24-30"	#3 Cont.	3' o.c.
IGC*	35	Ilex glabra 'Compacta'	Compact Inkberry		24-30"	#3 Cont.	3' o.c.
HSH*	13	Hydrangea arborescens '	Invincebelle Spirit Hydrangea		24-30"	#3 Cont.	4' o.c.
IVL*	35	Itea virginica 'Sprich'	Little Henry Virginia Sweetspire		24-30"	#3 Cont.	3' o.c.
JVG*	36	Juniperus virginiana 'Grey Owl'	Grey Owl Juniper		24-30"	#3 Cont.	3' o.c.
MCD*	8	Morella cerifera 'Don's Dwarf'	Don's Dwarf Wax Myrtle		30-36"	#3 Cont.	4' o.c.
RRK	36	Rosa x 'Radcor'	Rainbow Knockout Rose		24-30"	#3 Cont.	3' o.c.
VJU	12	Viburnum x juddii	Judd Viburnum		30-36"	#3 Cont.	5' o.c.
HERBACEOUS PERENNIALS AND GRASSES							
ATG*	95	Asclepias tuberosa 'Gay Butterflies'	Gay Butterflies Butterfly Weed			#1 Cont.	18" o.c.
CVZ*	205	Coreopsis verticillata 'Zagreb'	Zagreb Whorled Tickseed			#1 Cont.	12" o.c.
HXP	340	Hemerocallis x 'Pretty in Pink'	Pretty in Pink Daylily			#1 Cont.	12" o.c.
IVE*	130	Iris versicolor	Blue Flag Iris			#1 Cont.	12" o.c.
LAH	160	Lavandula angustifolia 'Hidcote'	Hidcote Lavender			#1 Cont.	18" o.c.
SAN*	120	Sisyrinchium angustifolium	Blue-eyed Grass			#1 Cont.	12" o.c.
SHE*	137	Sporobolus heterolepis	Prairie Dropseed			#1 Cont.	24" o.c.

Note: Plant counts are provided for the convenience of the contractor. The plan dominates on any discrepancies between the table and the plan. Contractor is responsible for verifying the counts and bringing any discrepancies to the attention of the landscape architect and client before proceeding.
*Native

DEVELOPER'S CERTIFICATE

THE UNDERSIGNED AGREES TO EXECUTE ALL THE FEATURES OF SITE PLAN APPROVAL NO. 820210090 INCLUDING APPROVAL CONDITIONS, DEVELOPMENT PROGRAM, AND CERTIFIED SITE PLAN.

DEVELOPER: JAISAI PROPERTIES, LLC (COMPANY) DR. PRAVEEN BOLARUM (CONTACT PERSON)

ADDRESS: 4700 BROADSTONE STREET, FREDERICK, MD 21074

PHONE: (240) 423-3615

EMAIL: PBOLARUM@GMAIL.COM

SIGNATURE:

MHG
Civil Engineers
Land Planners
Landscape Architects
Land Surveyors

9220 Wightman Road, Suite 120
Montgomery Village, MD 20886
Phone: 301.670.0840
www.mhgpa.com

STATE OF MARYLAND — CHRIS B. CUMBA — 615 — LANDSCAPE ARCHITECT
2022.12.16 16:06:51 -05'00'

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly Licensed Landscape Architect under the laws of the State of Maryland, license number 615, Expiration Date: 09-10-2023.

JAISAI PROPERTIES, LLC
4007 BROADSTONE STREET
FREDERICK, MD 21704
PH: (240) 423-3615
EMAIL: PBOLARUM@GMAIL.COM

REVISIONS

NO.	DESCRIPTION	DATE

TAX MAP EW31 WSSC 232NW13

2TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

PARCELS 311 & N366
HAMMER HILL

PROJ. MGR	DCM
DRAWN BY	CEB
SCALE	NTS
DATE	1.12.2021

HAMMER HILL DAYCARE
LANDSCAPE PLANTING NOTES & DETAILS

L2.02

PROJECT NO. 13.109.41

SHEET NO. 2 OF 2

MONTGOMERY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Certified Site Plan - 820210090

APPROVAL

06/02/23

FOREST CONSERVATION WORKSHEET
HAMMER HILL

NET TRACT AREA:

A.	Total tract area ...	3.52
B.	Additions to tract area (Off-Site Work, etc.; construction required by this plan)...	0.50
C.	Land dedication acres (parks, county facility, etc.) ...	0.00
D.	Land dedication for roads or utilities (construction not required by this plan) ...	0.00
E.	Area to remain in commercial agricultural production/use ...	0.00
F.	Other deductions (specify)	0.00
G.	Net Tract Area ..... =	4.02

LAND USE CATEGORY: (from Chapter 22A-3. Definitions)
Input the number "1" under the appropriate land use, limit to only one entry.

ARA	MDR	IDA	HDR	MPD	CIA
0	0	0	0	1	0

G.	Afforestation Threshold ...	15%	x G = 0.60
H.	Conservation Threshold ...	20%	x G = 0.80

EXISTING FOREST COVER:

I.	Existing forest cover ..... =	0.00
J.	Area of forest above afforestation threshold ..... =	0.00
K.	Area of forest above conservation threshold ..... =	0.00

BREAK EVEN POINT:

L.	Forest retention above threshold with no mitigation ... =	0.00
M.	Clearing permitted without mitigation ..... =	0.00

PROPOSED FOREST CLEARING:

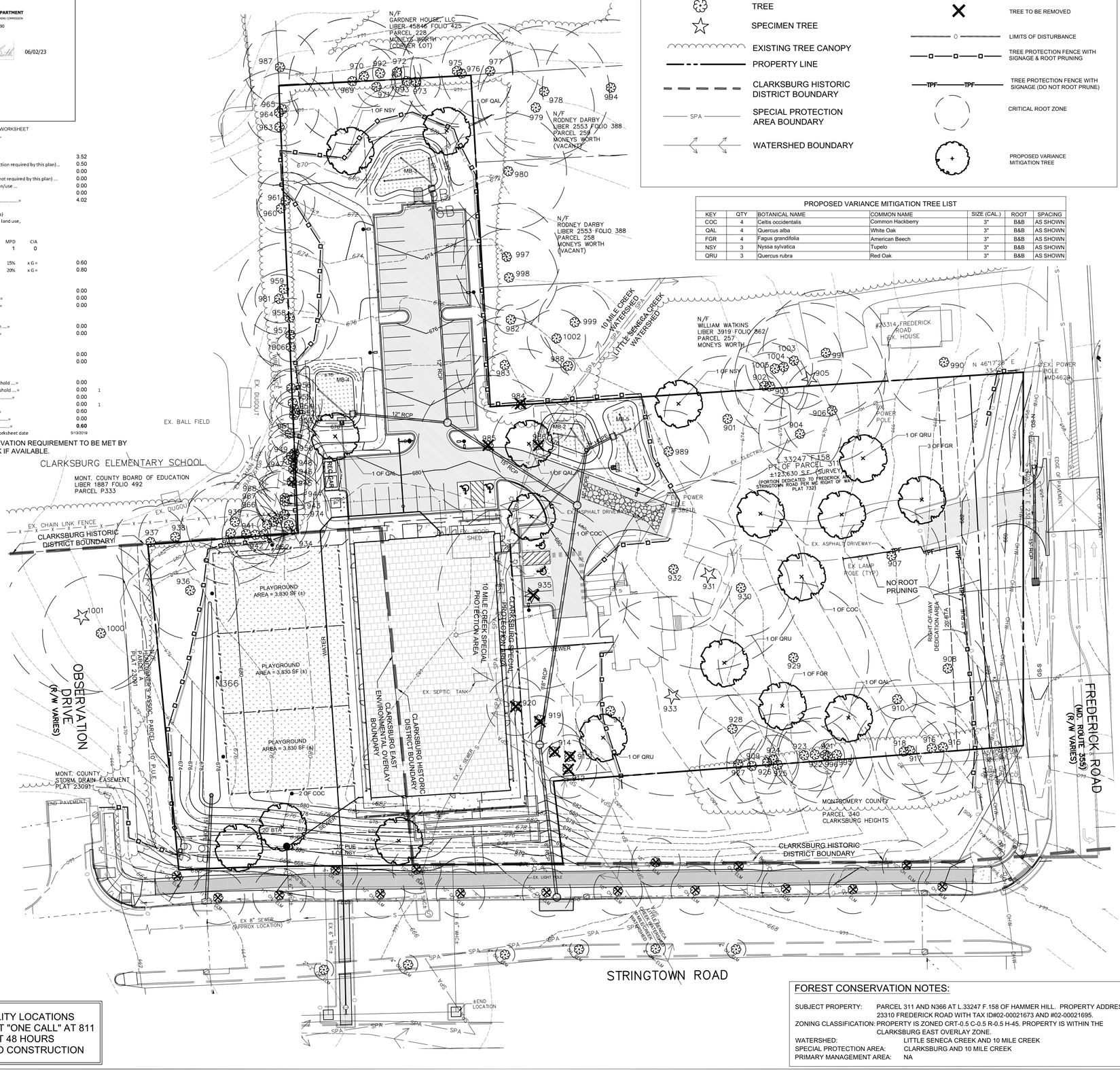
N.	Total area of forest to be cleared ..... =	0.00
O.	Total area of forest to be retained ..... =	0.00

PLANTING REQUIREMENTS:

P.	Reforestation for clearing above conservation threshold ... =	0.00	
Q.	Reforestation for clearing below conservation threshold ... =	0.00	1
R.	Credit for retention above conservation threshold ..... =	0.00	
S.	Total reforestation required ..... =	0.00	1
T.	Total afforestation required ..... =	0.60	
U.	Credit for landscaping (may not exceed 20% of "S") ..... =	0.00	
V.	Total reforestation and afforestation required ..... =	**0.60**	

worksheet date 5/13/2019

THE 0.60 ACRES FOREST CONSERVATION REQUIREMENT TO BE MET BY FEE IN LIEU OR IN A FOREST BANK IF AVAILABLE.

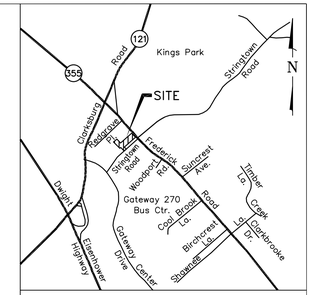


PROPOSED VARIANCE MITIGATION TREE LIST						
KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE (CAL.)	ROOT	SPACING
COC	4	Celtis occidentalis	Common Hackberry	3"	B&B	AS SHOWN
QAL	4	Quercus alba	White Oak	3"	B&B	AS SHOWN
FGR	4	Fagus grandifolia	American Beech	3"	B&B	AS SHOWN
NSY	3	Nyssa sylvatica	Tupelo	3"	B&B	AS SHOWN
QRU	3	Quercus rubra	Red Oak	3"	B&B	AS SHOWN

TREE LIST

ID #	Common Name	Botanical Name	DBH	CRZ (r.f.)	CRZ (radius)	Conditions/Remarks
901	Red Maple	Acer rubrum	26	4778		39 Poor- rot, epicormic growth, deadwood, large cavities
902	Tree of Heaven	Ailanthus altissima	18	2289		27 Fair- deadwood, vines, offsite
903	Red Maple	Acer rubrum	14	1385		21 Fair - cavity at base, offsite
904	Black Locust	Robinia pseudoacacia	17	2042		25.5 Fair- scar, deadwood
*905	Silver Maple	Acer saccharinum	31	6789		46.5 Poor- heavy vines, dieback, offsite
906	Norway Maple	Acer platanoides	23	3116		31.5 Poor- two large cavity, deadwood
907	Eastern Hemlock	Tsuga canadensis	20	2826		30 Fair - deadwood
908	Blue Spruce	Picea pungens	16	1809		24 Fair - heavy vines, deadwood
909	Sugar Maple	Acer saccharum	7	346		10.5 Fair - vines, dw cavity/wound closure
910	Saucer Magnolia	Magnolia x soulangeana	7 - 8	452		12 Fair- sapsucker damage, deadwood
911	Japanese Lilac	Syringa reticulata	6	254		9 Good - Ivy
912	White Pine	Pinus strobus Torulosa	12	1017		18 Good
913	Crepe Myrtle	Lagerstroemia indica	9	572		13.5 Good - deadwood (9 stems 3" dbh)
914	White Mulberry	Morus alba	12 - 9	1017		18 Fair - deadwood, black ocore
915	Norway Maple	Acer platanoides	11 -	855		16.5 Poor - almost dead, large cavity, vines, rot
916	Norway Maple	Acer platanoides	19 - 8	2550		28.5 Poor- rot, vines
917	Norway Maple	Acer platanoides	14	1385		21 Fair - vines
918	Norway Maple	Acer platanoides	20 - 5	2826		30 Fair- vines, deadwood, small cracks in trunk
919	White Mulberry	Morus alba	10 - 7.5.4	707		15 Poor - baserot, cavities, deadwood, damage to branches
920	Goldenrain Tree	Koelreuteria paniculata	12	1017		18 Good
921	Tree of Heaven	Ailanthus altissima	20	2826		30 Fair- deadwood
922	Norway Maple	Acer platanoides	15	1590		22.5 Fair- deadwood, curved trunk
923	Black Cherry	Prunus serotina	14	1385		21 Poor - deadwood, rot
924	Sugar Maple	Acer saccharum	10	707		15 Fair - deadwood, vines, on roots of #926
925	Black Cherry	Prunus serotina	21	3136		31.5 Fair- vines, deadwood
926	Norway Maple	Acer platanoides	13	1194		19.5 Fair- deadwood
927	Norway Maple	Acer platanoides	15 - 9	1809		24 Fair/Poor - vines, crack in trunk; included bark, basserot, scar, deadwood
928	Douglas Fir	Pseudotsuga menziesii	14	1385		21 Poor - topped
*929	Norway Spruce	Picea abies	31	6789		46.5 Good
930	Horse Chestnut	Aesculus hippocastanum	20	2826		30 Fair - deadwood, two small cavity, epicormic growth, leaves browning
*931	American Basswood	Tilia americana	39	10756		58.5 Fair- deadwood, epicormic growth
932	Norway Spruce	Picea abies	25	4456		37.5 Fair- deadwood, dead limbs, 1 sided canopy
*933	Sugar Maple	Acer saccharum	41	11876		61.5 Poor- deadwood but canopy ok, lots of rot in trunk at base
934	Catalpa sp	Malus spp	3	64		4.5 Good
*935	Black Walnut	Juglans nigra	39	10756		58.5 Fair- deadwood, cracks healed over
936	Norway Maple	Acer platanoides	20	2826		30 Fair
937	Black Cherry	Prunus serotina	15	1590		22.5 Fair - deadwood, offsite
938	Tree of Heaven	Ailanthus altissima	15	1590		22.5 Fair - deadwood, offsite
939	Black Locust	Robinia pseudoacacia	20	2826		30 dead - offsite
940	Tree of Heaven	Ailanthus altissima	21	3136		31.5 Fair, heavy vines, offsite
941	Sweet Cherry	Prunus avium	10	707		15 Poor- deadwood, vines, offsite
942	Tree of Heaven	Ailanthus altissima	12	1017		18 Fair, deadwood, offsite
943	Sweet Cherry	Prunus avium	12	1017		18 Poor- deadwood, vines, offsite
944	Black Locust	Robinia pseudoacacia	12	1017		18 Poor - main trunk dead, fungus, offsite
945	Tree of Heaven	Ailanthus altissima	12	1017		18 Poor - vines, deadwood, offsite
946	White Mulberry	Morus alba	15	1590		22.5 Fair - vines, offsite
947	Tree of Heaven	Ailanthus altissima	15	1590		22.5 Poor - vines, deadwood, offsite
948	Sweet Cherry	Prunus avium	10	707		15 Poor, vines, deadwood, offsite
949	Tree of Heaven	Ailanthus altissima	6	254		9 Fair - vines, offsite
950	Black Locust	Robinia pseudoacacia	12	1017		18 Dead, vines, offsite
951	Tree of Heaven	Ailanthus altissima	8	452		12 Fair - vines, offsite
952	Tree of Heaven	Ailanthus altissima	10	707		15 Fair - vines
953	Tree of Heaven	Ailanthus altissima	8	452		12 Fair - vines
954	Tree of Heaven	Ailanthus altissima	8	452		12 Fair - vines
955	Tree of Heaven	Ailanthus altissima	12	1017		18 Fair - vines
956	Tree of Heaven	Ailanthus altissima	8	452		12 Fair - vines, offsite
957	Tree of Heaven	Ailanthus altissima	15	1590		22.5 Fair - vines
958	Silver Maple	Acer saccharinum	20	2826		30 Fair - deadwood, vines
959	Black Locust	Robinia pseudoacacia	19	2550		28.5 Poor - deadwood, vines, offsite
960	Tree of Heaven	Ailanthus altissima	10	707		15 Poor - leans, vines, offsite
961	Black Cherry	Prunus serotina	12	1017		18 Poor - leans, vines
962	Tree of Heaven	Ailanthus altissima	8 - 6	452		12 Poor - vines, split
963	Black Cherry	Prunus serotina	24	4069		36 Fair - deadwood, cavity, wound closure in branches, offsite
964	Norway Maple	Acer platanoides	8	452		12 Fair - deadwood, offsite
965	Tree of Heaven	Ailanthus altissima	15	1590		22.5 Fair - deadwood, vines
966	Tree of Heaven	Ailanthus altissima	4 - 2	113		6 Good - offsite
967	Tree of Heaven	Ailanthus altissima	14	1385		21 Poor - vines, deadwood, offsite
968	Black Locust	Robinia pseudoacacia	22	3419		33 Poor - deadwood, heavy vines, offsite
969	Silver Maple	Acer saccharinum	26 - 12	4776		39 Fair- fence wire in trunk, deadwood, vines, offsite
970	Silver Maple	Acer saccharinum	13	1194		19.5 Good - offsite
971	Tree of Heaven	Ailanthus altissima	8	452		12 Good
972	Black Locust	Robinia pseudoacacia	10	707		15 Fair - vines, offsite
973	Tree of Heaven	Ailanthus altissima	10	707		15 Good
974	White Mulberry	Morus alba	18	2289		27 Poor - deadwood, vines, offsite
975	Red Maple	Acer rubrum	23	3737		34.5 Good - offsite
976	Sweet Cherry	Prunus avium	21	3136		31.5 Fair- fence wire in trunk, black ocore, deadwood, offsite
977	Silver Maple	Acer saccharinum	20	2826		30 Good - leans, grape ivy, offsite
978	Silver Maple	Acer saccharum	27	5150		40.5 Good, offsite
979	Red Maple	Acer rubrum	24	4069		36 dead
980	Silver Maple	Acer saccharinum	24	4069		36 Fair - deadwood, damaged branch
981	Tree of Heaven	Ailanthus altissima	10	707		15 Good
982	American Elm	Ulmus americana	6	254		9 Good, offsite
983	Red Maple	Acer rubrum	20	2826		30 Fair- cavity, root damage, hole at base in soil/stability concern, offsite
984	Tree of Heaven	Ailanthus altissima	23	3737		34.5 Fair - deadwood
985	Silver Maple	Acer saccharinum	29	5942		43.5 Poor - large cavity with rot, root scarring, canopy ok
986	Bitternut Hickory	Carya cordiformis	19	2550		28.5 Fair- deadwood, crack with ooze
987	Silver Maple	Acer saccharinum	15	1590		22.5 Good - offsite
988	Silver Maple	Acer saccharinum	3	64		4.5 Good
989	Bitternut Hickory	Carya cordiformis	17	2042		25.5 Fair- deadwood
990	Norway Maple	Acer platanoides	24 - 20	4069		36 Fair- cavities, deadwood, offsite
991	Silver Maple	Acer saccharinum	26	4778		39 Poor - heavy vines, dieback
992	Silver Maple	Acer saccharum	10	707		15 Good
993	Black Locust	Robinia pseudoacacia	6	254		9 Good
994	Silver Maple	Acer saccharinum	28	5539		42 Good - size approximate, offsite
995	Tree of Heaven	Ailanthus altissima	7	346		10.5 Fair- deadwood
996	Sugar Maple	Acer saccharum	7	346		10.5 Fair- deadwood, cavity
997	American Elm	Ulmus americana	22	3419		33 Fair - vines
998	Silver Maple	Acer saccharinum	20	2826		30 Good - vines
999	Silver Maple	Acer saccharinum	15	1590		22.5 Fair - heavy vines, offsite
1000	Black Cherry	Prunus serotina	24	4069		36 Poor- deadwood, cavities, vines, dieback, partially topped, offsite
*1001	Tulip Poplar	Liriodendron tulipifera	32	7235		48 Good - deadwood, vines, offsite
1002	Black Cherry	Prunus serotina	12	1017		18 Fair - heavy vines, deadwood, offsite
1003	Dead tree		20	2826		30 dead - offsite, approximate size
1004	Dead tree		12	1017		18 dead - vines, offsite, approximate size
1005	Tree of Heaven	Ailanthus altissima	4	113		6 Good
1006	Tree of Heaven	Ailanthus altissima	6 - 6	254		9 Good

Notes: Diameters are given for each trunk of multiple bole trees when division occurs below 4.5 feet. If major division occurs above 4.5 feet only the trunk diameter at 4.5 feet is given. Tree ID Numbers correspond to those assigned on the Natural Resource Inventory/Forest Stand Delineation Map.
* Specimen tree



VICINITY MAP
SCALE 1" = 2,000'

GRAPHIC SCALE
(IN FEET)
1 inch = 30 ft.
30 0 15 30 60
9.14 0 4.57 9.14 18.28
(IN METERS)
1 inch = 9.14 m.

DEVELOPER'S CERTIFICATE

The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. 820210090, including financial bonding, forest planting, maintenance and all other applicable agreements.

Developer's Name: Jaisai Properties, LLC (Company) Dr. Praveen Bolarum (Contact Person)

Address: 4007 Broadstone St Frederick, MD 21704

Phone: 240-423-3615

Email: PBOLARUM@GMAIL.COM

Signature:

FOREST CONSERVATION NOTES:

SUBJECT PROPERTY: PARCEL 311 AND N366 AT L.33247 F.158 OF HAMMER HILL. PROPERTY ADDRESS IS 23310 FREDERICK ROAD WITH TAX ID#02-00021673 AND #02-00021695.

ZONING CLASSIFICATION: PROPERTY IS ZONED CRT-0.5 C-0.5 R-0.5 H-45. PROPERTY IS WITHIN THE CLARKSBURG EAST OVERLAY ZONE.

WATERSHED: LITTLE SENECA CREEK AND 10 MILE CREEK

SPECIAL PROTECTION AREA: CLARKSBURG AND 10 MILE CREEK

PRIMARY MANAGEMENT AREA: NA

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

FOR UTILITY LOCATIONS CONTACT "ONE CALL" AT 811 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION

MHG
Civil Engineers
Land Planners
Landscape Architects
Land Surveyors

9220 Wightman Road, Suite 120
Montgomery Village, MD 20886
Phone: 301.670.0840
www.mhgpa.com

FRANK C. JOHNSON
02/28/2023
DATE
RECOGNIZED AS QUALIFIED PROFESSIONAL BY MD DEPT. OF NATURAL RESOURCES
COMAR 08.19.06.01

Qualified Professional Certification

I hereby certify that the information shown hereon is correct and that this plan has been prepared in accordance with the requirements of the existing state and county forest conservation legislation.

JAISAI PROPERTIES, LLC
4007 BROADSTONE STREET
FREDERICK, MD 21704
DR. PRAVEEN BOLARUM
PH: 240-423-3615
EMAIL: PBOLARUM@GMAIL.COM

REVISIONS

NO.	DESCRIPTION	DATE

TAX MAP EW341 WSSC 232NW13

L.33247 F.158

2ND ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

P311 & N366
HAMMER HILL SCHOOL

PROJ. MGR	DCM
DRAWN BY	FCJ
SCALE	1"= 30'
DATE	02.10.2021

FINAL FOREST CONSERVATION PLAN
MNCPPC #820210090

L8.01

PROJECT NO.	13.109.41
SHEET NO.	1 OF 2

MONTGOMERY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Certified Site Plan - 820210090

APPROVAL

06/02/23

Temp. Signage

NOTE:

1. Attachment of signs to trees is prohibited.
2. Signs should be properly maintained.
3. Avoid injury to roots when placing posts for the signs.
4. Signs should be posted to be visible to all construction personnel from all directions.

VARIANCE TREE IMPACT TABLE

Tree ID#	DBH	Species	% Impacted	Condition	Mitigation
911	6	Japanese Lilac	11%	Good	stress reduction measures
933	41	Sugar Maple	11%	Poor	stress reduction measures
932	25	Norway Sprunce	10%	Fair	stress reduction measures
931	39	Am. Basswood	6%	Fair	stress reduction measures
989	17	Hickory	28%	Fair	stress reduction measures
983	20	Red Maple	27%	Fair	stress reduction measures
997	22	Am. Elm	17%	Fair	stress reduction measures
998	20	Silver maple	14%	Good	stress reduction measures
980	24	Silver Maple	11%	Fair	stress reduction measures
974	18	White Mulberry	43%	Poor	stress reduction measures
959	19	Black Locust	4%	Poor	stress reduction measures
958	20	Silver Maple	16%	Fair	stress reduction measures
957	15	Ailanthus	13%	Fair	stress reduction measures
955	12	Ailanthus	31%	Fair	stress reduction measures
954	8	Ailanthus	25%	Fair	stress reduction measures
953	8	Ailanthus	23%	Fair	stress reduction measures
952	10	Ailanthus	32%	Fair	stress reduction measures
951	8	Ailanthus	14%	Fair	stress reduction measures
947	15	Ailanthus	33%	Poor	stress reduction measures
949	6	Ailanthus	23%	Fair	stress reduction measures
956	8	Ailanthus	22%	Fair	stress reduction measures
960	10	Ailanthus	13%	Poor	stress reduction measures
961	12	Black Cherry	33%	Poor	stress reduction measures
963	24	Black Cherry	9%	Fair	stress reduction measures
968	22	Black Locust	46%	Poor	stress reduction measures
967	14	Ailanthus	25%	Poor	stress reduction measures
962	8-6	Ailanthus	25%	Poor	stress reduction measures
944	12	Black Locust	25%	Poor	stress reduction measures
943	12	Sweet Cherry	24%	Poor	stress reduction measures
942	12	Ailanthus	31%	Fair	stress reduction measures
941	10	Sweet Cherry	24%	Poor	stress reduction measures
940	21	Ailanthus	28%	Fair	stress reduction measures
990	24-20	Norway Maple	0.4%	Fair	stress reduction measures
907	20	Eastern Hemlock	5.5%	Fair	stress reduction measures
908	16	Blue Spruce	12%	Fair	stress reduction measures

VARIANCE TREE REMOVAL TABLE

Tree ID#	DBH	Species	Condition	Mitigation
984	23	Ailanthus	Fair	23"
985	29	Silver Maple	Poor	29"
986	19	Hickory	Fair	19"
935	39	Walnut	Fair	39"
912	12	White Pine	Good	12"
913	9	Crepe Myrtle	Good	9"
914	12-9	White Mulberry	Fair	12"
919	10	White Mulberry	Poor	10"
920	12	Goldenrain Tree	Good	12"
*NA	10	Chinese Elm	Good	10"
950	12	Black Locust	Dead	0"
946	15	Mulberry	Fair	15"
945	12	Ailanthus	Poor	12"
948	10	Cherry	Poor	10"
			Total:	212"

212" removed/4 = 53" to be met via 18 trees at 3"dbh
*Note: Chinese Elm was planted along right of way but planted in adjacent property which is part of Historic District therefore the tree is included in variance.

Sequence of Events for Properties Required To Comply With Forest Conservation Plans, Exemptions from Submitting Forest Conservation Plans, and Tree Save Plans

The property owner is responsible for ensuring all tree protection measures are performed in accordance with the approved final forest conservation plan or tree save plan, and as modified in the field by a Planning Department Forest Conservation Inspector. The measures must meet or exceed the most recent standards published by the American National Standards Institute (ANSI A300).

Pre-Construction

1. An on-site pre-construction meeting is required after the limits of disturbance have been staked and flagged and before any land disturbance.

2. The property owner must arrange for the meeting and the following people must participate at the preconstruction meeting: the property owner or their representative, construction superintendent, International Society of Arboriculture (ISA) certified arborist/MD Licensed Tree Expert (representing owner) that will implement the tree protection measures, The Planning Department Forest Conservation Inspector, and Montgomery County Department of Permitting Services (DPS) Sediment Control Inspector. The purpose of this meeting is verify the limits of disturbance and discuss specific tree protection and tree care measures shown on the approved plan. No land disturbance shall begin before tree protection and stress-reduction measures have been implemented and approved by the Planning Department's Forest Conservation Inspector.
   a. Typical tree protection devices include:
   i. Chain link fence (four feet high)
   ii. Super silt fence with wire strung between the support poles (minimum 4 feet high) with high visibility flagging.
   iii. 14 gauge 2 inch x 4 inch welded wire fencing supported by steel T-bar posts (minimum 4 feet high) with high visibility flagging.
   b. Typical stress reduction measures may include, but are not limited to:
   i. Root pruning with a root cutter or vibratory plow designed for that purpose. Trenchers are not allowed, unless approved by the Forest Conservation Inspector
   ii. Crown Reduction or pruning
   iii. Watering
   iv. Fertilizing
   v. Vertical mulching
   vi. Root aeration systems
   Measures not specified on the Forest Conservation Plan may be required as determined by the Forest Conservation Inspector in coordination with the property owner's arborist.

3. A Maryland Licensed Tree expert must perform, or directly supervise, the implementation of all stress reduction mesasures. Documentation of the process (including photograhs)

may be required by the Forest Conservation Inspector, and will be determined at the preconstruction meeting.

4. Temporary protection devices must be installed per the approved Forest Conservation Plan, Exemption Plan, or Tree Save Plan and prior to any land disturbance. The Forest Conservation Inspector, in coordination with the DPS Sediment Control Inspector, may make field adjustments to increase the survivability of trees and forest shown as saved on the approved plan.

5. Tree protection fencing must be installed and maintained by the property owner for the duration of construction project and must not be altered without prior approval from the Forest Conservation Inspector. All construction activity within protected tree and forest areas is prohibited. This includes the following activities:
   a. Parking or driving equipment, machinery, or vehicles of any type.
   b. Storage of any construction materials, equipment, stockpiling, fill, debris, etc.
   c. Dumping or any chemicals (i.e., paint thinner), mortar or concrete remainder, trash, garbage, or debris of any kind.
   d. Felling of trees into a protected area.
   e. Trenching or grading for utilities, irrigation, drainage, etc.

6. Forest and tree protection signs must be installed as required by the Forest Conservation Inspector. The signs must be waterproof and wording provided in both English and Spanish.

During Construction

7. Periodic inspections will be made by the Forest Conservation Inspector. Corrections and repairs to all tree protection devices must be completed within the timeframe given by the Inspector.

8. The property owner must immediately notify the Forest Conservation Inspector of any damage to trees, forests, understory, ground cover, and any other undisturbed areas shown on the approved plan. Remedial actions, and the relative timeframes to restore these areas, will be determined by the Forest Conservation Inspector.

Post-Construction

9. After construction is completed, but before tree protection devices have been removed, the property owner must request a final inspection with the Forest Conservation Inspector. At the final inspection, the Forest Conservation Inspector may require additional corrective measures, which may include:
   a. Removal, and possible replacement, of dead, dying, or hazardous trees
   b. Pruning of dead or declining limbs
   c. Soil aeration
   d. Fertilization
   e. Watering

   f. Wound repair
   g. Clean up of retention areas, including trash removal

10. After the final inspection and completion of all corrective measures the Forest Conservation Inspector will request all temporary tree and forest protection devices be removed from the site. Removal of tree protection devices that also operate for erosion and sediment control must be coordinated with both DPS and the Forest Conservation Inspector. No additional grading, sodding, or burial may take place after the tree protection fencing is removed.

11. Long-term protection measures, including permanent signage, must be installed per the approved plan. Installation will occur at the appropriate time during the construction project. Refer to the approved plan drawing for the long-term protection measures to be installed.

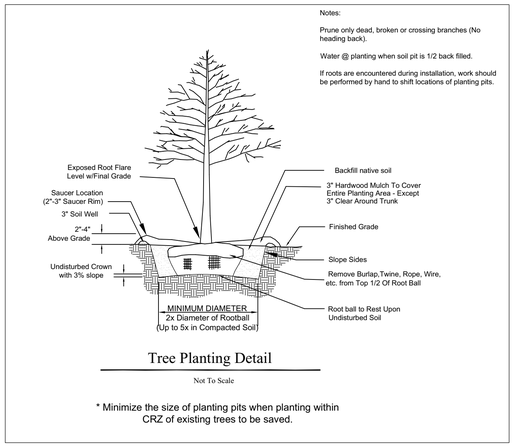
INSPECTIONS

All field inspections must be requested by the applicant.

Field Inspections must be conducted as follows:

Plans without Planting Requirements
1. After the limits of disturbance have been staked and flagged, but before any clearing or grading begins.
2. After necessary stress reduction measures have been completed and protection measures have been installed, but before any clearing and grading begin and before release of the building permit.
3. After completion of all construction activities, but before removal of tree protection fencing, to determine the level of compliance with the provision of the forest conservation.

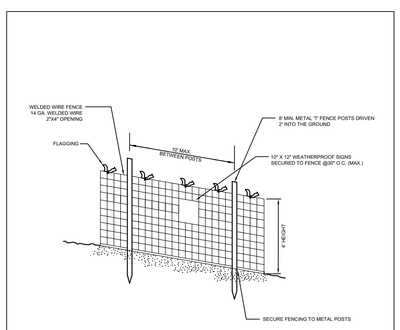
Additional Requirements for Plans with Planting Requirements
4. Before the start of any required reforestation and afforestation planting.
5. After the required reforestation and afforestation planting has been completed to verify that the planting is acceptable and prior to the start the maintenance period.
6. 2 years after reforestation and afforestation have been completed, to determine survival and assess necessary maintenance activities for the remaining duration of the maintenance and management period.
7. At the end of the maintenance period to determine the level of compliance with the provisions of the planting plan, and if appropriate, release of the performance bond.



Tree Planting Detail

Not To Scale

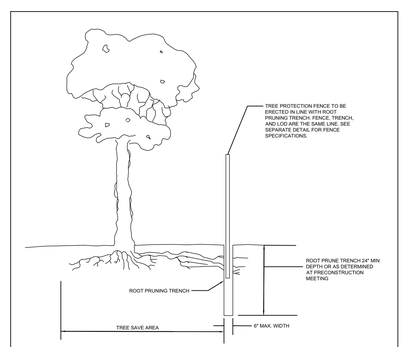
* Minimize the size of planting pits when planting within CRZ of existing trees to be saved.



NOTES:
1. PRACTICE MAY BE COMBINED WITH SEDIMENT CONTROL FENCING.
2. LOCATION AND LIMITS OF FENCING SHALL BE COORDINATED IN FIELD WITH ARBORIST.
3. BOUNDARIES OF PROTECTION AREA SHOULD BE STAKED PRIOR TO INSTALLING PROTECTIVE DEVICE.
4. ROOT PRUNING SHOULD BE AVOIDED.
5. PROTECTIVE DEVICE SHALL BE MAINTAINED.
6. FENCING SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

TREE PROTECTION FENCE DETAIL

NTS



NOTES:
1. RETENTION AREAS WILL BE SET AS PART OF THE REVIEW PROCESS AND PRECONSTRUCTION MEETING.
2. BOUNDARIES OF RETENTION AREAS MUST BE STAKED AT THE PRECONSTRUCTION MEETING AND FLAGGED BEFORE CLEARING.
3. EXACT LOCATION OF TRENCH SHALL BE DETERMINED IN THE FIELD IN COORDINATION WITH THE FOREST CONSERVATION (FC) INSPECTOR.
4. TRENCH SHOULD BE IMMEDIATELY BACKFILLED WITH EXCAVATED SOIL OR OTHER ORGANIC SOIL AS SPECIFIED PER PLAN OR BY THE FC INSPECTOR.
5. ROOTS SHALL BE CLEANLY CUT USING VIBRATORY KNIFE OR OTHER ACCEPTABLE EQUIPMENT.
6. ALL PRUNING MUST BE EXECUTE WITH LOD SHOWN ON PLANS OR AS AUTHORIZED IN WRITING BY THE FC INSPECTOR.

ROOT PRUNING DETAIL

NTS

FOREST CONSERVATION DATA TABLE

DESCRIPTION	SIZE
Property Area	3.52 Acres
Off-site Disturbance	0.50 Acres
Total Tract Area	4.02 Acres
Tract remaining in Ag use	0.00 Acres
Road & Utility ROW (Unimproved)	0.00 Acres
Existing Forest	0.00 Acres
Total Forest Retention	0.00 Acres
Total Forest Cleared	0.00 Acres
Land Use Category	MPD
Afforestation Threshold	15%
Reforestation Threshold	20%
Stream(s) Length: NA	Average Buffer Width: NA

Acres of Forest in:	Retained	Cleared	Planted
Wetlands	0.00	0.00	0.00
100yr Floodplain	0.00	0.00	0.00
Stream Buffers	0.00	0.00	0.00
Other Priority Areas	0.00	0.00	0.00

DEVELOPER'S CERTIFICATE

The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. 820210090, including financial bonding, forest planting, maintenance and all other applicable agreements.

Developer's Name: Jaisai Properties, LLC Company — Dr. Praveen Bolarum Contact Person

Address: 4007 Broadstone St Frederick, MD 21704

Phone: 240-423-3615

Email: PBOLARUM@GMAIL.COM

Signature:

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

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Land Planners
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FRANK C. JOHNSON
03/06/2023
DATE
RECOGNIZED AS QUALIFIED PROFESSIONAL BY MD DEPT. OF NATURAL RESOURCES
COMAR 08.19.06.01

Qualified Professional Certification
I hereby certify that the information shown hereon is correct and that this plan has been prepared in accordance with the requirements of the existing state and county forest conservation legislation.

JAISAI PROPERTIES, LLC
4007 BROADSTONE STREET
FREDERICK, MD 21704
DR. PRAVEEN BOLARUM
PH: 240-423-3615
EMAIL: PBOLARUM@GMAIL.COM

REVISIONS

NO.	DESCRIPTION	DATE

TAX MAP EW341 WSSC 232NW13

L.33247 F.158

2ND ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

P311 & N366
HAMMER HILL SCHOOL

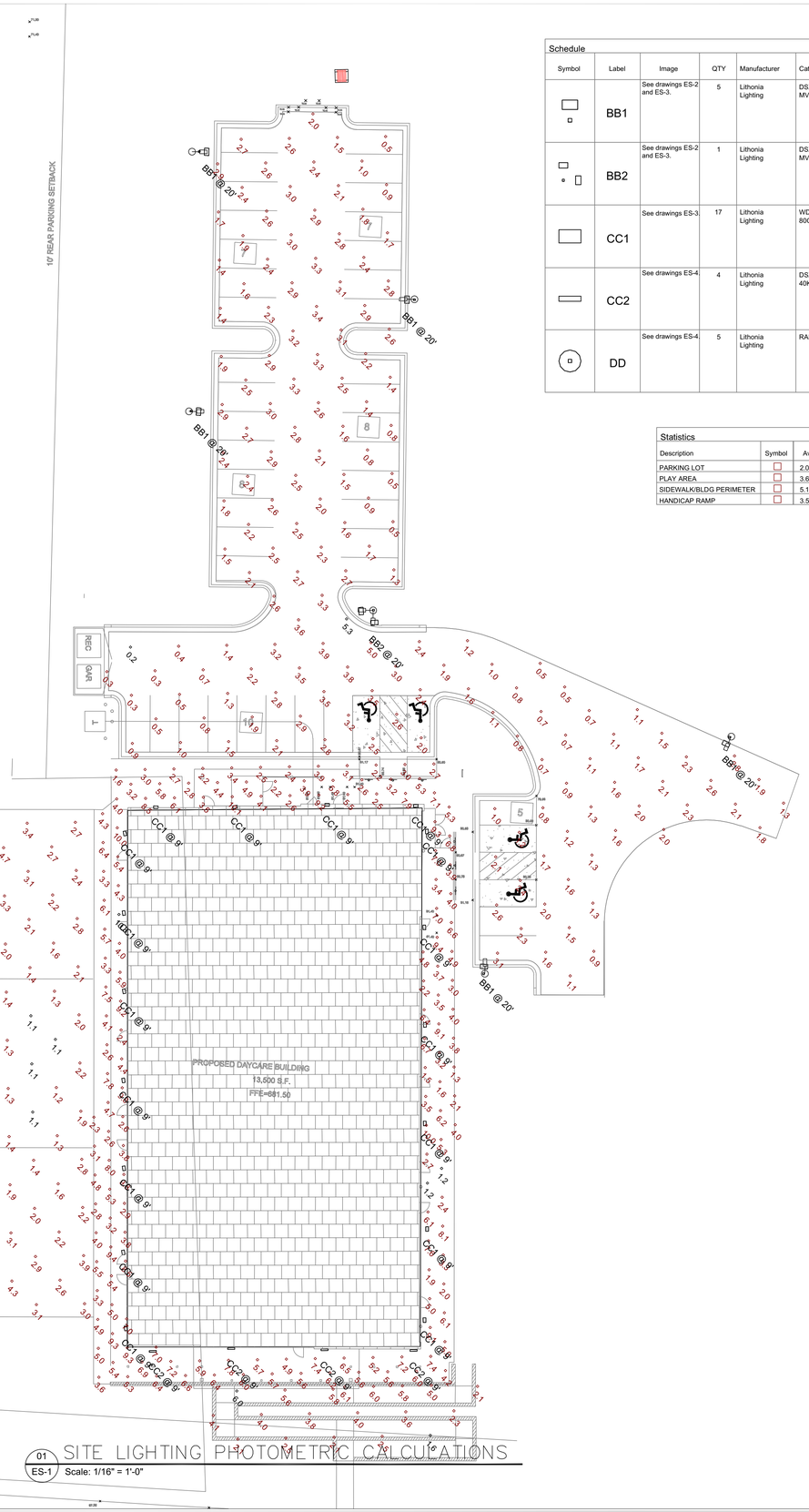
PROJ. MGR	DCM
DRAWN BY	FCJ
SCALE	1"= 30'
DATE	02.10.2021

FINAL FOREST CONSERVATION PLAN MNCPPC #820210090

L8.02

PROJECT NO.	13.109.41
SHEET NO.	2 OF 2

MONTGOMERY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
Certified Site Plan - 820210090
APPROVAL
06/02/23



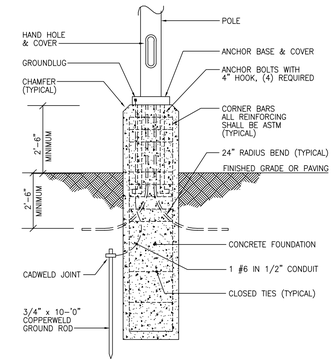
01 ES-1 SITE LIGHTING PHOTOMETRIC CALCULATIONS
Scale: 1/16" = 1'-0"

Schedule

Symbol	Label	Image	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens per Lamp	Lumen Multiplier	LLF	Wattage	Efficiency	Distribution	Polar Plot	Notes
	BB1	See drawings ES-2 and ES-3.	5	Lithonia Lighting	DSX0 LED P4 40K TFTM MVOLT HS	DSX0 LED P4 40K TFTM MVOLT with houseside shield	LED	1	DSX0_LED_P4_40K_TFTM_MVOLT_HS.ies	8243	1	0.9	92	100%	TYPE III, VERY SHORT, BUG RATING: B1 - U0 - G2		
	BB2	See drawings ES-2 and ES-3.	1	Lithonia Lighting	DSX0 LED P4 40K TFTM MVOLT HS	DSX0 LED P4 40K TFTM MVOLT with houseside shield	LED	1	DSX0_LED_P4_40K_TFTM_MVOLT_HS.ies	8243	1	0.9	184	100%	TYPE III, VERY SHORT, BUG RATING: B1 - U0 - G2		
	CC1	See drawings ES-3	17	Lithonia Lighting	WDGE2 LED P2 40K 80CRI VF	WDGE2 LED WITH P2 - PERFORMANCE PACKAGE, 4000K, 80CRI, VISUAL COMFORT FORWARD OPTIC		1	WDGE2_LED_P2_40K_80CRI_VF.ies	2023	1	0.9	14.53	100%	TYPE III, VERY SHORT, BUG RATING: B1 - U0 - G0		
	CC2	See drawings ES-4	4	Lithonia Lighting	DSXW1 LED 20C 700 40K TFTM MVOLT	DSXW1 LED WITH (2) 10 LED LIGHT ENGINES, TYPE TFTM OPTIC, 4000K, @ 700mA.	LED	1	DSXW1_LED_20C_700_40K_TFTM_MVOLT.ies	5554	1	0.9	45.7	100%	TYPE IV, SHORT, BUG RATING: B1 - U0 - G2		
	DD	See drawings ES-4	5	Lithonia Lighting	RADPT P5 40K ASY	RADEAN Post-Top with P5 4000K Asymmetric distribution		1	RADPT_P5_40K_ASY.ies	15436	1	0.9	122.5564	100%	TYPE IV, VERY SHORT, BUG RATING: B3 - U2 - G3		

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
PARKING LOT		2.0 fc	5.3 fc	0.2 fc	26.5:1	10.0:1
PLAY AREA		3.6 fc	6.3 fc	1.1 fc	5.7:1	3.3:1
SIDEWALK/BLDG PERIMETER		5.1 fc	10.8 fc	1.2 fc	9.0:1	4.3:1
HANDICAP RAMP		3.5 fc	6.0 fc	1.6 fc	3.8:1	2.2:1



Note: REFER TO CIVIL ENGINEERS SITE DRAWINGS FOR CONSTRUCTION LOCATION, QUANTITY, & INSTALLATION OF POLE BASES.

02 ES-1 POLE BASE DETAIL
Not to Scale

DEVELOPER'S CERTIFICATE

THE UNDERSIGNED AGREES TO EXECUTE ALL THE FEATURES OF SITE PLAN APPROVAL NO. 820210090 INCLUDING APPROVAL CONDITIONS, DEVELOPMENT PROGRAM, AND CERTIFIED SITE PLAN.

DEVELOPER: JAISAI PROPERTIES, LLC (COMPANY) DR. PRAVEEN BOLARUM (CONTACT PERSON)
ADDRESS: 4700 BROADSTONE STREET, FREDERICK, MD 21074
PHONE: (240) 423-3615
EMAIL: PBOLARUM@GMAIL.COM
SIGNATURE:

MHG
Civil Engineers
Land Planners
Landscape Architects
Land Surveyors

9220 Wightman Road, Suite 120
Montgomery Village, MD 20886
Phone: 301.670.0840
www.mhgpa.com

STATE OF MARYLAND
MARIANO SHAW JR.
NO. 30849
REGISTERED
PROFESSIONAL ENGINEER

I certify that these documents were prepared by me and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No. 30849 expiration date is 7/11/24

JAISAI PROPERTIES, LLC
4007 BROADSTONE STREET
FREDERICK, MD 21704
PH: (240) 423-3615
EMAIL: PBOLARUM@GMAIL.COM

PROJECT TEAM
OWNER/APPLICANT:
JAISAI PROPERTIES, LLC
4007 BROADSTONE ST.
FREDERICK, MD 21704
PHONE: (240) 423-3615
CONTACT: DR. PRAVEEN BOLARUM
EMAIL: PBOLARUM@GMAIL.COM

CIVIL ENGINEER & LANDSCAPE ARCHITECT:
MACRIS, HENDRICKS & GLASCOCK, P.A.
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PHONE: (301) 670-0840
CONTACT: DYLAN MACRO, CDT
EMAIL: DMACRO@MHGPA.COM

TRAFFIC ENGINEER:
WELLS + ASSOCIATES
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SILVER SPRING, MD 20910
PHONE: (301) 448-1335
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EMAIL: WLZEID@WELLSANDASSOCIATES.CC

LAND USE ATTORNEY:
LERCH, EARLY & BREWER, CHTD.
7600 WISCONSIN AVENUE, SUITE 700
BETHESDA, MD 20814
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ARCHITECT:
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ANNAPOLIS, MD 21401
PHONE: (301) 858-5853
CONTACT: STEVEN KAHLE, AIA, NCARB
EMAIL: SKAHLE@SKASTUDIO.COM

REVISIONS

NO.	DESCRIPTION	DATE

TAX MAP EW31 WSSC 232NW13

2TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

HAMMER HILL, PARCEL P3

CLARKSBURG HIGHLANDS
PART OF BLOCK D

PROJ. MGR	ST
DRAWN BY	JW
SCALE	AS SHOWN
DATE	09.29.2020

SHEET NAME
PHOTOMETRIC CALCULATIONS AND DETAILS - ELECTRICAL

ES-1

PROJECT NO.	13.109.41
SHEET NO.	1 OF 4

MONTGOMERY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
Certified Site Plan - 820210090
APPROVAL
06/02/23

BB1/BB2

D-Series Size 0
LED Area Luminaire

Catalog Number

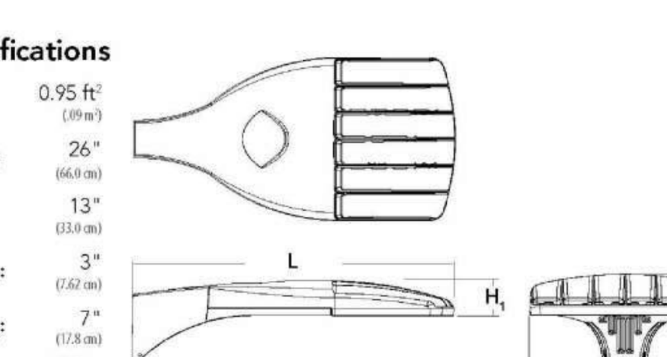
Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA: 0.95 ft² (.09 m²)
Length: 26" (66.0 cm)
Width: 13" (33.0 cm)
Height₁: 3" (7.62 cm)
Height₂: 7" (17.8 cm)
Weight (max): 16 lbs (7.25 kg)



Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 400W metal halide with typical energy savings of 70% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX0 LED P6 40K T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX0 LED

Series	LEDs	Color temperature	Distribution		Voltage	Mounting
DSX0 LED	**Forward optics** P1, P2, P3, P4[1], P5, P6, P7[1]; **Rotated optics** P10[2], P11[2], P12[2], P13[1,2]	30K 3000 K; 40K 4000 K; 50K 5000 K	T1S Type I short (Automotive); T2S Type II short; T2M Type II medium; T3S Type III short; T3M Type III medium; T4M Type IV medium; TFTM Forward throw medium; T5VS Type V very short[3]	T5S Type V short[3]; T5M Type V medium[3]; T5W Type V wide[3]; BLC Backlight control[4]; LCCO Left corner cutoff[4]; RCCO Right corner cutoff[4]	MVOLT (120V-277V)[5,6]; XVOLT (277V-480V)[7,8,9]; 120[6]; 208[6]; 240[6]; 277[6]; 347[6]; 480[6]	**Shipped included** SPA Square pole mounting; RPA Round pole mounting[10]; WBA Wall bracket[3]; SPUMBA Square pole universal mounting adaptor[11]; RPUMBA Round pole universal mounting adaptor[11]; **Shipped separately** KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish)[12]

Control options		Other options	Finish (required)
Shipped installed NLTAIR2 nLight AIR generation 2 enabled[13,14]; PIRHN Network, high/low motion/ambient sensor[15]; PER NEMA twist-lock receptacle only (control ordered separate)[16]; PERS Five-pin receptacle only (control ordered separate)[16,17]; PER7 Seven-pin receptacle only (leads exit fixture) (control ordered separate)[16,17]; DMG 0-10V dimming extend out back of housing for external control (control ordered separate)[18]	PIR High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc[19,20]; PIRH High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc[19,20]; PIR1FC3V High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[19,20]; PIRH1FC3V High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[19,20]; FAO Field adjustable output[21]	**Shipped installed** HS House-side shield[22]; SF Single fuse (120, 277, 347V)[6]; DF Double fuse (208, 240, 480V)[6]; L90 Left rotated optics[2]; R90 Right rotated optics[2]; DDL Diffused drop lens[22]; HA 50°C ambient operations[1]; **Shipped separately** BS Bird spikes[23]; EGS External glare shield	DDBXD Dark bronze; DBLXD Black; DNAXD Natural aluminum; DWHXD White; DDBTXD Textured dark bronze; DBLBXD Textured black; DNATXD Textured natural aluminum; DWHGXD Textured white

BB1/BB2

Ordering Information

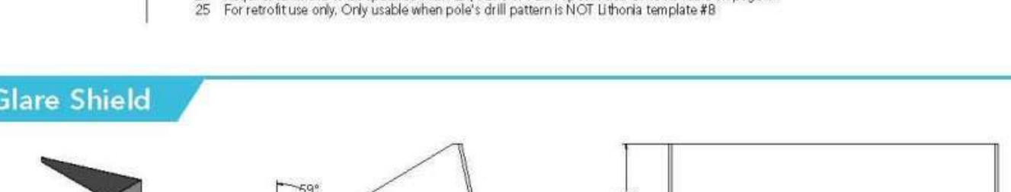
Accessories
Ordered and shipped separately.

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V)[24]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V)[24]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V)[24]
DSHORT SBK U	Shorting cap[24]
DSX0HS 20C U	House-side shield for P1,P2,P3 and P4[22]
DSX0HS 30C U	House-side shield for P10,P11,P12 and P13[22]
DSX0HS 40C U	House-side shield for P5,P6 and P7[22]
DSX0DDL U	Diffused drop lens (polycarbonate)[22]
PUMBA DDBXD U*	Square and round pole universal mounting bracket adaptor (specify finish)[25]
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish)[12]
DSX0EGS (FINISH) U	External glare shield

For more control options, visit DTL and ROAM online. Link to nLight Air 2

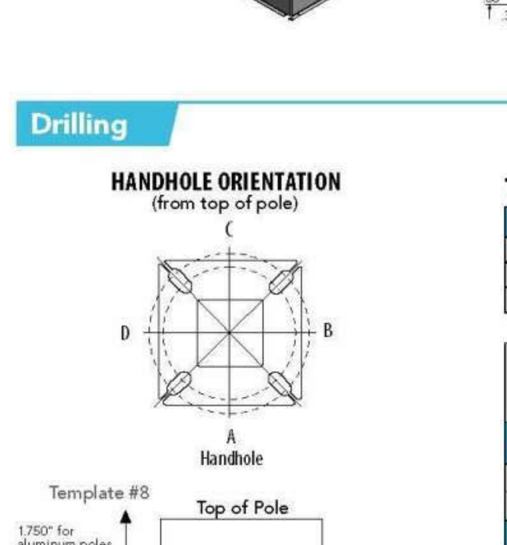
NOTES
1 HA not available with P4, P7, and P13.
2 P10, P11, P12 and P13 and rotated options (L90 or R90) only available together.
3 Any Type 5 distribution with photocell, is not available with WBA.
4 Not available with HS or DDL.
5 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
6 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF).
7 XVOLT only suitable for use with P4, P7 and P13.
8 XVOLT operates with any voltage between 277V and 480V.
9 XVOLT not available with fusing (SF or DF) and not available with PIR, PIRH, PIR1FC3V, PIRH1FC3V.
10 Suitable for mounting to round poles between 3.5" and 12" diameter.
11 Universal mounting brackets intended for retrofit on existing pre-drilled poles only. 1.5 G vibration load rating per ANCI C136.31. Only usable when pole's drill pattern is NOT Lithonia template #8.
12 Must order fixture with SPA mounting. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" diameter mast arm (not included).
13 Must be ordered with PIRHN.
14 Sensor cover available only in dark bronze, black, white and natural aluminum colors.
15 Must be ordered with NLTAIR2. For more information on nLight Air 2 visit this link
16 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
17 If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Shorting Cap included.
18 DMG not available with PIRHN, PERS, PER7, PIR, PIRH, PIR1FC3V or PIRH1FC3V, FAO.
19 Reference Controls Options table on page 4.
20 Reference Motion Sensor Default Table on page 4 to see functionality.
21 Not available with other dimming controls options.
22 Not available with BLC, LCCO and RCCO distribution.
23 Must be ordered with fixture for factory pre-drilling.
24 Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.
25 For retrofit use only. Only usable when pole's drill pattern is NOT Lithonia template #8

EGS – External Glare Shield



Drilling

HANDHOLE ORIENTATION
(from top of pole)



Tenon Mounting Slipfitter

Tenon O.D.	Mounting	Single Unit	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
2-3/8"	RPA	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 390	AS3-5 320	AS3-5 490
2-7/8"	RPA	AST25-190	AST25-280	AST25-290	AST25-390	AST25-320	AST25-490
4"	RPA	AST35-190	AST35-280	AST35-290	AST35-390	AST35-320	AST35-490

Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side B	Side B & D	Side B & C	Side B, C & D	Round Pole Only	Side A, B, C & D
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM32AS	DM49AS
Minimum Acceptable Outside Pole Dimension							
SPA	#8	2-7/8"	2-7/8"	3.5"	3.5"		3.5"
RPA	#8	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
SPUMBA	#5	2-7/8"	3"	4"	4"		4"
RPUMBA	#5	2-7/8"	3.5"	5"	5"	3.5"	5"

DSX0 Area Luminaire - EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

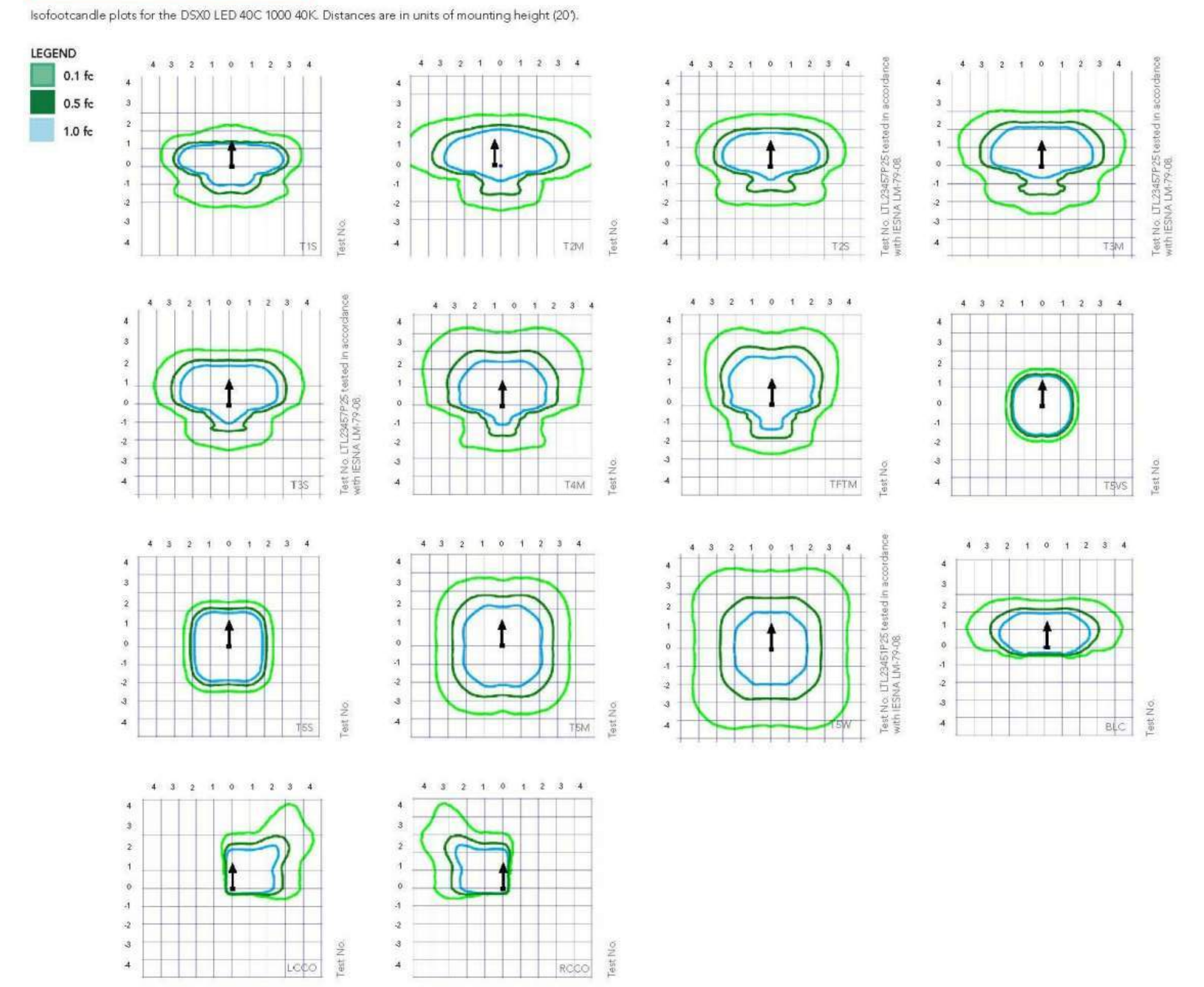
Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type						
DSX0 LED	0.950	1.900	1.830	2.850	2.850	3.544

BB1/BB2

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Area Size 0 homepage.

Isofootcandle plots for the DSX0 LED 40C 1000 40K. Distances are in units of mounting height (20').



BB1/BB2

Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	50°F	1.02
20°C	68°F	1.01
25°C	**77°C**	**1.00**
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

Electrical Load

	Performance Package	LED Count	Drive Current	Wattage	Current (A) 120	208	240	277	347	480
Forward Optics (Non-Rotated)	P1	20	530	38	0.32	0.18	0.15	0.15	0.10	0.08
	P2	20	700	49	0.41	0.23	0.20	0.19	0.14	0.11
	P3	20	1050	71	0.60	0.37	0.32	0.27	0.21	0.15
	P4	20	1400	92	0.77	0.45	0.39	0.35	0.28	0.20
	P5	40	700	89	0.74	0.43	0.38	0.34	0.26	0.20
	P6	40	1050	134	1.13	0.65	0.55	0.48	0.39	0.29
	P7	40	1300	166	1.38	0.80	0.69	0.60	0.50	0.37
Rotated Optics (Requires L90 or R90)	P10	30	530	53	0.45	0.26	0.23	0.21	0.16	0.12
	P11	30	700	72	0.60	0.35	0.30	0.27	0.20	0.16
	P12	30	1050	104	0.88	0.50	0.44	0.39	0.31	0.23
	P13	30	1300	128	1.08	0.62	0.54	0.48	0.37	0.27

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	Lumen Maintenance Factor
25,000	0.96
50,000	0.92
100,000	0.85

Motion Sensor Default Settings						
Option	Dimmed State	High Level (when triggered)	Photocell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min

*for use when motion sensor is used as dusk to dawn control.

Controls Options

Nomenclature	Description	Functionality	Primary control device	Notes
FAO	Field adjustable output device installed inside the luminaire; wired to the driver dimming leads.	Allows the luminaire to be manually dimmed, effectively trimming the light output.	FAO device	Cannot be used with other controls options that need the 0-10V leads
DS	Drivers wired independently for 50/50 luminaire operation	The luminaire is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two separately switched circuits. Consider nLight AIR as a more cost effective alternative.
PER5 or PER7	Twist-lock photocell receptacle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as ROAM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire
PIR or PIRH	Motion sensors with integral photocell. PIR for 8-15' mounting; PIRH for 15-30' mounting	Luminaires dim when no occupancy is detected.	Acuity Controls SBGR	Also available with PIRH1FC3V when the sensor photocell is used for dusk-to-dawn operation.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Eclypse.	nLight Air rSDGR	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app.

BB1/BB2

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Forward Optics

Power Package	LED Count	Drive Current	System Watts	Dist. Type	30K (3000 K, 70 CRI) Lumens	B	U	G	LPW	40K (4000 K, 70 CRI) Lumens	B	U	G	LPW	50K (5000 K, 70 CRI) Lumens	B	U	G	LPW
P1	20	530	38W	T1S	4,369	1	0	1	115	4,706	1	0	1	124	4,766	1	0	1	125
				T2S	4,364	1	0	1	115	4,701	1	0	1	124	4,761	1	0	1	125
				T2M	4,387	1	0	1	115	4,726	1	0	1	124	4,785	1	0	1	126
				T3S	4,248	1	0	1	112	4,577	1	0	1	120	4,634	1	0	1	122
				T3M	4,376	1	0	1	115	4,714	1	0	1	124	4,774	1	0	1	126
				T4M	4,281	1	0	1	113	4,612	1	0	2	121	4,670	1	0	2	123
				TFTM	4,373	1	0	1	115	4,711	1	0	2	124	4,771	1	0	2	126
				T5VS	4,548	2	0	0	120	4,900	2	0	0	129	4,962	2	0	0	131
				T5S	4,552	2	0	0	120	4,904	2	0	0	129	4,966	2	0	0	131
				T5M	4,541	3	0	1	120	4,891	3	0	1	129	4,953	3	0	1	130
				T5W	4,576	3	0	2	120	4,929	3	0	2	130	4,992	3	0	2	131
				BLC	3,586	1	0	1	94	3,863	1	0	1	102	3,912	1	0	1	103
				LCCO	2,668	1	0	1	70	2,874	1	0	2	76	2,911	1	0	2	77
				RCCO	2,668	1	0	1	70	2,874	1	0	2	76	2,911	1	0	2	77
P2	20	700	49W	T1S	5,570	1	0	1	114	6,001	1	0	1	122	6,077	2	0	2	124
				T2S	5,564	1	0	2	114	5,994	1	0	2	122	6,070	2	0	2	124
				T2M	5,593	1	0	1	114	6,025	1	0	1	123	6,102	1	0	1	125
				T3S	5,417	1	0	2	111	5,835	1	0	2	119	5,909	2	0	2	121
				T3M	5,580	1	0	2	114	6,011	1	0	2	123	6,087	1	0	2	124
				T4M	5,458	1	0	2	111	5,880	1	0	2	120	5,955	1	0	2	122
				TFTM	5,576	1	0	2	114	6,007	1	0	2	123	6,083	1	0	2	124
				T5VS	5,799	2	0	0	118	6,247	2	0	0	127	6,327	2	0	0	129
				T5S	5,804	2	0	0	118	6,252	2	0	0	128	6,332	2	0	1	129
				T5M	5,789	3	0	1	118	6,237	3	0	1	127	6,316	3	0	1	129
				T5W	5,834	3	0	2	119	6,285	3	0	2	128	6,364	3	0	2	130
				BLC	4,572	1	0	1	93	4,925	1	0	1	101	4,987	1	0	1	102
				LCCO	3,402	1	0	2	69	3,665	1	0	2	75	3,711	1	0	2	76
				RCCO	3,402	1	0	2	69	3,665	1	0	2	75	3,711	1	0	2	76
P3	20	1050	71W	T1S	7,833	2	0	2	110	8,438	2	0	2	119	8,545	2	0	2	120
				T2S	7,825	2	0	2	110	8,429	2	0	2	119	8,536	2	0	2	120
				T2M	7,865	2	0	2	111	8,473	2	0	2	119	8,580	2	0	2	121
				T3S	7,617	2	0	2	107	8,205	2	0	2	116	8,309	2	0	2	117
				T3M	7,846	2	0	2	111	8,452	2	0	2	119	8,559	2	0	2	121
				T4M	7,675	2	0	2	108	8,269	2	0	2	116	8,373	2	0	2	118
				TFTM	7,841	2	0	2	110	8,447	2	0	2	119	8,554	2	0	2	120
				T5VS	8,155	3	0	0	115	8,785	3	0	0	124	8,896	3	0	0	125
				T5S	8,162	3	0	1	115	8,792	3	0	1	124	8,904	3	0	1	125
				T5M	8,141	3	0	2	115	8,770	3	0	2	124	8,881	3	0	2	125
				T5W	8,204	3	0	2	116	8,838	4	0	2	124	8,950	4	0	2	126
				BLC	6,429	1	0	2	91	6,926	1	0	2	98	7,013	1	0	2	99
				LCCO	4,784	1	0	2	67	5,153	1	0	2	73	5,218	1	0	2	73
				RCCO	4,784	1	0	2	67	5,153	1	0	2	73	5,218	1	0	2	73
P4	20	1400	92W	T1S	9,791	2	0	2	106	10,547	2	0	2	115	10,681	2	0	2	116
				T2S	9,780	2	0	2	106	10,536	2	0	2	115	10,669	2	0	2	116
				T2M	9,831	2	0	2	107	10,590	2	0	2	115	10,724	2	0	2	117
				T3S	9,521	2	0	2	103	10,256	2	0	2	111	10,386	2	0	2	113
				T3M	9,807	2	0	2	107	10,565	2	0	2	115	10,698	2	0	2	116
				T4M	9,594	2	0	2	104	10,335	2	0	3	112	10,466	2	0	3	114
				TFTM	9,801	2	0	2	107	10,558	2	0	2	115	10,692	2	0	2	116
				T5VS	10,193	3	0	1	111	10,981	3	0	1	119	11,120	3	0	1	121
				T5S	10,201	3	0	1	111	10,990	3	0	1	119	11,129	3	0	1	121
				T5M	10,176	4	0	2	111	10,962	4	0	2	119	11,101	4	0	2	121
				T5W	10,254	4	0	3	111	11,047	4	0	3	120	11,186	4	0	3	122
				BLC	8,036	1	0	2	87	8,656	1	0	2	94	8,766	1	0	2	95
				LCCO	5,979	1	0	2	65	6,441	1	0	2	70	6,523	1	0	3	71
				RCCO	5,979	1	0	2	65	6,441	1	0	2	70	6,523	1	0	3	71

BB1/BB2

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Forward Optics

Power Package	LED Count	Drive Current	System Watts	Dist. Type	30K (3000 K, 70 CRI) Lumens	B	U	G	LPW	40K (4000 K, 70 CRI) Lumens	B	U	G	LPW	50K (5000 K, 70 CRI) Lumens	B	U	G	LPW
P5	40	700	89W	T1S	10,831	2	0	2	122	11,668	2	0	2	131	11,816	2	0	2	133
				T2S	10,820	2	0	2	122	11,656	2	0	2	131	11,803	2	0	2	133
				T2M	10,876	2	0	2	122	11,716	2	0	2	132	11,864	2	0	2	133
				T3S	10,532	2	0	2	118	11,346	2	0	2	127	11,490	2	0	2	129
				T3M	10,849	2	0	2	122	11,687	2	0	2	131	11,835	2	0	2	133
				T4M	10,613	2	0	3	119	11,434	2	0	3	128	11,578	2	0	3	130
				TFTM	10,842	2	0	2	122	11,680	2	0	2	131	11,828	2	0	2	133
				T5VS	11,276	3	0	1	127	12,148	3	0	1	136	12,302	3	0	1	138
				T5S	11,286	3	0	1	127	12,158	3	0	1	137	12,312	3	0	1	138
				T5M	11,257	4	0	2	126	12,127	4	0	2	136	12,280	4	0	2	138
				T5W	11,344	4	0	3	127	12,221	4	0	3	137	12,375	4	0	3	139
				BLC	8,890	1	0	2	100	9,576	1	0	2	108	9,698	1	0	2	109
				LCCO	6,615	1	0	3	74	7,126	1	0	3	80	7,216	1	0	3	81
				RCCO	6,615	1	0	3	74	7,126	1	0	3	80	7,216	1	0	3	81
P6	40	1050	134W	T1S	14,805	3	0	3	110	15,949	3	0	3	119	16,151	3	0	3	121
				T2S	14,789	3	0	3	110	15,932	3	0	3	119	16,134	3	0	3	120
				T2M	14,865	3	0	3	111	16,014	3	0	3	120	16,217	3	0	3	121
				T3S	14,396	3	0	3	107	15,509	3	0	3	116	15,705	3	0	3	117
				T3M	14,829	2	0	3	111	15,975	3	0	3	119	16,177	3	0	3	121
				T4M	14,507	2	0	3	108	15,628	3	0	3	117	15,826	3	0	3	118
				TFTM	14,820	2	0	3	111	15,965	3	0	3	119	16,167	3	0	3	121
				T5VS	15,413	4	0	1	115	16,604	4	0	1	124	16,815	4	0	1	125
				T5S	15,426	3	0	1	115	16,618	4	0	1	124	16,828	4	0	1	126
				T5M	15,387	4	0	2	115	16,576	4	0	2	124	16,786	4	0	2	125
				T5W	15,506	4	0	3	116	16,704	4	0	3	125	16,915	4	0	3	126
				BLC	12,151	1	0	2	91	13,090	1	0	2	98	13,255	1	0	2	99
				LCCO	9,041	1	0	3	67	9,740	1	0	3	73	9,863	1	0	3	74
				RCCO	9,041	1	0	3	67	9,740	1	0	3	73	9,863	1	0	3	74
P7	40	1300	166W	T1S	17,023	3	0	3	103	18,338	3	0	3	110	18,570	3	0	3	112
				T2S	17,005	3	0	3	102	18,319	3	0	3	110	18,551	3	0	3	112
				T2M	17,092	3	0	3	103	18,413	3	0	3	111	18,646	3	0	3	112
				T3S	16,553	3	0	3	100	17,832	3	0	3	107	18,058	3	0	3	109
				T3M	17,051	3	0	3	103	18,369	3	0	3	111	18,601	3	0	3	112
				T4M	16,681	3	0	3	100	17,969	3	0	3	108	18,197	3	0	3	110
				TFTM	17,040	3	0	3	103	18,357	3	0	4	111	18,590	3	0	4	112
				T5VS	17,723	4	0	1	107	19,092	4	0	1	115	19,334	4	0	1	116
				T5S	17,737	4	0	2	107	19,108	4	0	2	115	19,349	4	0	2	117
				T5M	17,692	4	0	2	107	19,059	4	0	2	115	19,301	4	0	2	116
				T5W	17,829	5	0	3	107	19,207	5	0	3	116	19,450	5	0	3	117
				BLC	13,971	2	0	2	84	15,051	2	0	2	91	15,241	2	0	2	92
				LCCO	10,396	1	0	3	63	11,199	1	0	3	67	11,341	1	0	3	68
				RCCO	10,396	1	0	3	63	11,199	1	0	3	67	11,341	1	0	3	68

BB1/BB2

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Rotated Optics

Power Package	LED Count	Drive Current	System Watts	Dist. Type	30K (3000 K, 70 CRI) Lumens	B	U	G	LPW	40K (4000 K, 70 CRI) Lumens	B	U	G	LPW	50K (5000 K, 70 CRI) Lumens	B	U	G	LPW
P10	30	530	53W	T1S	6,727	2	0	2	127	7,247	3	0	3	137	7,339	3	0	3	138
				T2S	6,689	3	0	3	126	7,205	3	0	3	136	7,297	3	0	3	138
				T2M	6,809	3	0	3	128	7,336	3	0	3	138	7,428	3	0	3	140
				T3S	6,585	3	0	3	124	7,094	3	0	3	134	7,183	3	0	3	136
				T3M	6,805	3	0	3	128	7,331	3	0	3	138	7,424	3	0	3	140
				T4M	6,677	3	0	3	126	7,193	3	0	3	136	7,284	3	0	3	137
				TFTM	6,850	3	0	3	129	7,379	3	0	3	139	7,472	3	0	3	141
				T5VS	6,898	3	0	0	130	7,431	3	0	0	140	7,525	3	0	0	142
				T5S	6,840	2	0	1	129	7,368	2	0	1	139	7,461	2	0	1	141
				T5M	6,838	3	0	1	129	7,366	3	0	2	139	7,460	3	0	2	141
				T5W	6,777	3	0	2	128	7,300	3	0	2	138	7,393	3	0	2	139
				BLC	5,626	2	0	2	106	6,060	2	0	2	114	6,137	2	0	2	116
				LCCO	4,018	1	0	2	76	4,328	1	0	2	82	4,383	1	0	2	83
				RCCO	4,013	3	0	3	76	4,323	3	0	3	82	4,377	3	0	3	83
P11	30	700	72W	T1S	8,594	3	0	3	119	9,258	3	0	3	129	9,376	3	0	3	130
				T2S	8,545	3	0	3	119	9,205	3	0	3	128	9,322	3	0	3	129
				T2M	8,699	3	0	3	121	9,371	3	0	3	130	9,490	3	0	3	132
				T3S	8,412	3	0	3	117	9,062	3	0	3	126	9,177	3	0	3	127
				T3M	8,694	3	0	3	121	9,366	3	0	3	130	9,484	3	0	3	132
				T4M	8,530	3	0	3	118	9,189	3	0	3	128	9,305	3	0	3	129
				TFTM	8,750	3	0	3	122	9,427	3	0	3	131	9,546	3	0	3	133
				T5VS	8,812	3	0	0	122	9,493	3	0	0	132	9,613	3	0	0	134
				T5S	8,738	3	0	1	121	9,413	3	0	1	131	9,532	3	0	1	132
				T5M	8,736	3	0	2	121	9,411	3	0	2	131	9,530	3	0	2	132
				T5W	8,657	4	0	2	120	9,326	4	0	2	130	9,444	4	0	2	131
				BLC	7,187	3	0	3	100	7,742	3	0	3	108	7,840	3	0	3	109
				LCCO	5,133	1	0	2	71	5,529	1	0	2	77	5,599	1	0	2	78
				RCCO	5,126	3	0	3	71	5,522	3	0	3	77	5,592	3	0	3	78
P12	30	1050	104W	T1S	12,149	3	0	3	117	13,088	3	0	3	126	13,253	3	0	3	127
				T2S	12,079	4	0	4	116	13,012	4	0	4	125	13,177	4	0	4	127
				T2M	12,297	3	0	3	118	13,247	3	0	3	127	13,415	3	0	3	129
				T3S	11,891	4	0	4	114	12,810	4	0	4	123	12,972	4	0	4	125
				T3M	12,290	3	0	3	118	13,239	4	0	4	127	13,407	4	0	4	129
				T4M	12,058	4	0	4	116	12,990	4	0	4	125	13,154	4	0	4	126
				TFTM	12,369	4	0	4	119	13,325	4	0	4	128	13,494	4	0	4	130
				T5VS	12,456	3	0	1	120	13,419	3	0	1	129	13,589	4	0	1	131
				T5S	12,351	3	0	1	119	13,306	3	0	1	128	13,474	3	0	1	130
				T5M	12,349	4	0	2	119	13,303	4	0	2	128	13,471	4	0	2	130
				T5W	12,238	4	0	3	118	13,183	4	0	3	127	13,350	4	0	3	128
				BLC	10,159	3	0	3	98	10,944	3	0	3	105	11,083	3	0	3	107
				LCCO	7,256	1	0	3	70	7,816	1	0	3	75	7,915	1	0	3	76
				RCCO	7,246	4	0	4	70	7,806	4	0	4	75	7,905	4	0	4	76
P13	30	1300	128W	T1S	14,438	3	0	3	113	15,554	3	0	3	122	15,751	3	0	3	123
				T2S	14,355	4	0	4	112	15,465	4	0	4	121	15,660	4	0	4	122
				T2M	14,614	3	0	3	114	15,744	4	0	4	123	15,943	4	0	4	125
				T3S	14,132	4	0	4	110	15,224	4	0	4	119	15,417	4	0	4	120
				T3M	14,606	4	0	4	114	15,735	4	0	4	123	15,934	4	0	4	124
				T4M	14,330	4	0	4	112	15,438	4	0	4	121	15,633	4	0	4	122
				TFTM	14,701	4	0	4	115	15,836	4	0	4	124	16,037	4	0	4	125
				T5VS	14,804	4	0	1	116	15,948	4	0	1	125	16,150	4	0	1	126
				T5S	14,679	3	0	1	115	15,814	3	0	1	124	16,014	3	0	1	125
				T5M	14,676	4	0	2	115	15,810	4	0	2	124	16,010	4	0	2	125
				T5W	14,544	4	0	3	114	15,668	4	0	3	122	15,866	4	0	3	124
				BLC	7919	3	0	3	62	8531	3	0	3	67	8639	3	0	3	67
				LCCO	5145	1	0	2	40	5543	1	0	2	43	5613	1	0	2	44
				RCCO	5139	3	0	3	40	5536	3	0	3	43	5606	3	0	3	44

DEVELOPER'S CERTIFICATE

THE UNDERSIGNED AGREES TO EXECUTE ALL THE FEATURES OF SITE PLAN APPROVAL NO. 820210090 INCLUDING APPROVAL CONDITIONS, DEVELOPMENT PROGRAM, AND CERTIFIED SITE PLAN.

DEVELOPER: JAISAI PROPERTIES, LLC (COMPANY) DR. PRAVEEN BOLARUM (CONTACT PERSON)

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PHONE: (240) 423-3615

EMAIL: PBOLARUM@GMAIL.COM

SIGNATURE:

MHG
Civil Engineers
Land Planners
Landscape Architects
Land Surveyors

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STATE OF MARYLAND
MUHAMMAD SHARIF TARAR
NO. 30849
REGISTERED PROFESSIONAL ENGINEER

I certify that these documents were prepared by me and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No. 30849 expiration date is 7/11/24

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EMAIL: PBOLARUM@GMAIL.COM

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REVISIONS

NO.	DESCRIPTION	DATE

TAX MAP EW31 WSSC 232NW13

2TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

HAMMER HILL, PARCEL P311

CLARKSBURG HIGHLANDS, PART OF BLOCK D

PROJ. MGR	NTS ST
DRAWN BY	JW
SCALE	AS SHOWN
DATE	09.29.2020

SHEET NAME
PHOTOMETRIC CALCULATIONS

ES-2

PROJECT NO. 13.109.41
SHEET NO. 2 OF 4

MONTGOMERY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
Certified Site Plan - 820210090
APPROVAL
06/02/23

BB1/BB2

FEATURES & SPECIFICATIONS

INTENDED USE
The sleek design of the D-Series Size 0 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and pedestrian areas.

CONSTRUCTION
Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED driver is mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants (IP65). Low EPA (0.95 ft²) for optimized pole wind loading.

FINISH
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

OPTICS
Precision-molded proprietary acrylic lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in 3000 K, 4000 K or 5000 K (70 CRI) configurations. The D-Series Size 0 has zero-uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL
Light engine(s) configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L85/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

STANDARD CONTROLS
The D240 LED area luminaire has a number of control options. DSX Size 0, comes standard with 0-10V dimming driver. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. Integrated motion sensors with on-board photocells feature field-adjustable programing and are suitable for mounting heights up to 30 feet.

nLIGHT AIR CONTROLS
The D240 LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR-equipped luminaires can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor dusk-to-dawn can be achieved when used with the nLight Eclipse. Additional information about nLight Air can be found here.

INSTALLATION
Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 0 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 0 utilizes the AERIS™ series pole drilling pattern (template #8). Optional terminal block and NEMA photocontrol receptacle are also available.

LISTINGS
UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40°C to 50°C ambient with HA option. U.S. Patent No. D672,492 S.

Designlights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

WARRANTY
5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25 °C.
Specifications subject to change without notice.

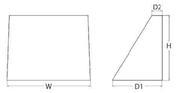
WDGE2 LED
Architectural Wall Sconce

Catalog Number
Notes
Type

Specifications subject to change without notice.

Specifications

Depth (D1): 7"
Depth (D2): 1.5"
Height: 9"
Width: 11.5"
Weight: (without options) 13.5 lbs



Introduction

The WDGE LED family is designed to meet speciﬁer's every wall-mounted lighting need in a universally accepted shape that blends with any architecture. The clean rectilinear cesign comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WDGE family provides additional energy savings and code compliance.

WDGE2 delivers up to 6,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. When combined with multiple integrated emergency battery backup options, including an 18W cold temperature option, the WDGE2 becomes the ideal wall-mounted lighting solution for pedestrian scale applications in any environment.

WDGE LED Family Overview

Luminaire	Standard EM, 0°C	Cold EM, -20°C	Sensor	Lumens (4000K) P1	P2	P3	P4	P5	P6
WDGE1 LED	4W	–	–	1,200	2,000	–	–	–	–
WDGE2 LED	10W	18W	Standalone / nLight	3,200	2,000	3,000	4,500	6,000	–
WDGE3 LED	15W	18W	Standalone / nLight	7,500	8,500	10,000	12,000	–	–
WDGE4 LED	–	–	Standalone / nLight	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information

EXAMPLE: WDGE2 LED P3 40K 80CRI VF MVOLT SRM DDBXD

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting	
WDGE2 LED	P1* P15 P2* P25W P3* P35W P4* P45W P5*	27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K† 5000K	80CRI 90CRI	VF Visual comfort forward throw VW Visual comfort wide	MVOLT 347* 480*	**Shipped included** SRM Surface mounting bracket ICW Indirect Ceiling/Ceiling Washer bracket (only) (for use in indirect applications)*	**Shipped separately** AWS 3/8inch Architectural wall spacer PBBW Surface-mounted back box (top, left, right conduit entry). Use when there is no junction box available.

Options		Finish	
E4WH	Emergency battery backup, Certified in CA Title 20 MAEDBS (4W, 0°C min)	**Standalone Sensors/Controls** (only available with P1SW, P2SW & P3SW)	DDBXD Dark bronze
E10WH	Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, 0°C min)	PIR 8-level (360/240) motion sensor, for 8-15' mounting heights. Intended for ease of switched circuits with external dusk to dawn switching.	DBLXD Black
E20WC	Emergency battery backup, Certified in CA Title 20 MAEDBS (20W, -20°C min)	PIRH 8-level (360/240) motion sensor, for 15-30' mounting heights. Intended for use on switched circuits with external dusk to dawn switching.	DNAXD Natural aluminum
PE*	Photocell, Button Type	PIR1FC3V 8-level (360/240) motion sensor for 8-15' mounting heights with photocell pre-programmed for dusk to dawn operation.	DWHXD White
DS*	Dual switching (comes with 2 drivers and 2 light engines, see page 3 for details)	PIRH1FC3V 8-level (360/240) motion sensor for 15-30' mounting heights with photocell pre-programmed for dusk to dawn operation.	DSSXD Sandstone
DMG*	0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)	**Networked Sensors/Controls** (only available with P1SW, P2SW & P3SW)	DDBTXD Textured dark bronze
BCE	Bottom conduit entry for back box (PBBW). Total of 4 entry points.	NLTAIR2 PIR nLight AIR wireless enabled 8-level motion/ambient sensor for 8-15' mounting height.	DBLBXD Textured black
		NLTAIR2 PIRH nLight AIR wireless enabled 8-level motion/ambient sensor for 15-30' mounting heights. See page 4 for nLight AIR functionality	DNATXD Textured natural aluminum
			DWHGXD Textured white
			DSSTXD Textured sandstone

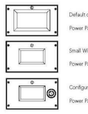
CC1

Accessories

Ordered and shipped separately.

WDGAWC DDBXD U — WDGE 3/8inch Architectural Wall Spacer (specify finish)
WDG2PBBW DDBXD U — WDGE2 surface-mounted back box (specify finish)

NOTES
1. P1-P5 not available with sensors/controls. Sensors/controls only available with P1SW, P2SW and P3SW.
2. 50K not available in 90CRI.
3. 347V and 480V not available with E4WH, E10WH, E20WC or DS.
4. PE not available in 480V or with sensors/controls.
5. DS option not available with E4WH, E10WH, E20WC or sensors/controls.
6. DMG option not available with sensors/controls.
7. Not qualified for DLC. Not available with emergency battery backup or sensors/controls.



Default configuration with no sensors/controls.
Power Packages: P1, P2, P3, P4, P5

Small Window (SW) configuration
Power Packages: P1SW, P2SW, P3SW

Configuration with sensors/controls
Power Packages: P1SW, P2SW, P3SW

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Performance Package	System Watts	Dist. Type	27K (2700K, 80 CRI) Lumens	LPW	B	U	G	30K (3000K, 80 CRI) Lumens	LPW	B	U	G	35K (3500K, 80 CRI) Lumens	LPW	B	U	G	40K (4000K, 80 CRI) Lumens	LPW	B	U	G	50K (5000K, 80 CRI) Lumens	LPW	B	U	G
P1 / P1SW	10W	VF	1,166	119	0	0	0	1,209	123	0	0	0	1,253	128	0	0	0	1,256	128	0	0	0	1,254	128	0	0	0
		VW	1,197	122	0	0	0	1,241	126	0	0	0	1,284	131	0	0	0	1,289	131	0	0	0	1,286	131	0	0	0
P2 / P2SW	15W	VF	1,818	129	1	0	0	1,967	134	1	0	0	2,015	139	1	0	0	2,023	139	1	0	0	2,019	139	1	0	0
		VW	1,927	132	1	0	0	1,997	137	1	0	0	2,067	142	1	0	0	2,075	143	1	0	0	2,071	143	1	0	0
P3 / P3SW	23W	VF	2,908	129	1	0	0	3,015	134	1	0	0	3,119	138	1	0	0	3,132	139	1	0	0	3,126	139	1	0	0
		VW	2,983	132	1	0	0	3,093	137	1	0	0	3,200	142	1	0	0	3,213	143	1	0	0	3,206	142	1	0	0
P4	35W	VF	4,096	117	1	0	1	4,247	121	1	0	1	4,394	126	1	0	1	4,412	126	1	0	1	4,403	126	1	0	1
		VW	4,202	120	1	0	1	4,357	125	1	0	1	4,508	129	1	0	1	4,526	129	1	0	1	4,517	129	1	0	1
P5	40W	VF	5,562	115	1	0	1	5,772	119	1	0	1	5,972	122	1	0	1	5,996	124	1	0	1	5,984	124	1	0	1
		VW	5,711	118	1	0	1	5,931	122	1	0	1	6,127	126	1	0	1	6,151	127	1	0	1	6,139	127	1	0	1

Electrical Load

Performance Package	System Watts	Current (A) 120V	208V	240V	277V	347V	480V
P1 / P1SW	10W	0.082	0.049	0.041	0.038	–	–
	13W	–	–	–	–	0.046	0.033
P2 / P2SW	15W	0.132	0.083	0.072	0.064	–	–
	18W	–	–	–	–	0.056	0.043
P3 / P3SW	23W	0.195	0.114	0.100	0.088	–	–
	26W	–	–	–	–	0.079	0.058
P4	35W	0.302	0.175	0.152	0.134	–	–
	38W	–	–	–	–	0.115	0.086
P5	40W	0.414	0.243	0.211	0.184	–	–
	52W	–	–	–	–	0.157	0.119

Lumen Multiplier for 90CRI

CCT	Multiplier
27K	0.845
30K	0.867
35K	0.845
40K	0.885
50K	0.898

Lumen Output in Emergency Mode (4000K, 80 CRI)

Option	Dist. Type	Lumens
E4WH	VF	646
	VW	647
E10WH	VF	1,658
	VW	1,701
E20WC	VF	2,840
	VW	2,913

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient	Lumen Multiplier
0°C / 32°F	1.03
10°C / 50°F	1.02
20°C / 68°F	1.01
25°C / 77°F	1.00
30°C / 86°F	0.99
40°C / 104°F	0.98

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).
To calculate L17, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

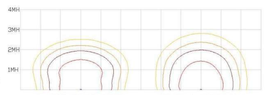
Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	>0.96	>0.95	>0.91

CC1

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting WDGE LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards.

LEGEND
0.25 fc
0.5 fc
1.0 fc
3.0 fc
Min = 10ft
Grid = 10ft x 10ft



WDGE2 LED P2 40K 80CRI VW — WDGE2 LED P3 40K 80CRI VF

Emergency Egress Options

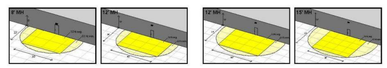
Emergency Battery Backup

The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product. All emergency battery backup configurations include an independent secondary driver with an integral relay to immediately detect loss of normal power and automatically energize the luminaire. The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time normal power is lost and maintain a minimum of 60% of the light output at the end of 90minutes.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9

The examples below show illuminance of 1 fc average and 0.1 fc minimum in emergency mode with E10WH or E20WC and VF distribution.

Grid = 10ft x 10ft

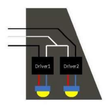


WDGE2 LED xx 40K 80CRI VF MVOLT E10WH — WDGE2 LED xx 40K 80CRI VF MVOLT E20WC

Dual Switching (DS) Option

The dual switching option offers operational redundancy that certain codes require. With this option the luminaire comes integrated with two drivers and two light engines. These work completely independent to each other so that a failure of any individual component does not cause the whole luminaire to go dark. This option is typically used with a back generator or inverter providing emergency power.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9



CC1

Control / Sensor Options

Motion/Ambient Sensor (PIR , PIRH)

Motion/Ambient sensor (Sensor Switch MSO1) is integrated into the the luminaire. The sensor provides both Motion and Daylight based dimming of the luminaire. For motion detection, the sensor utilizes 100% Digital Passive Infrared (PIR) technology that is tuned for walking size motion while preventing false tripping from the environment. The integrated photocell enables additional energy savings during daytime periods when there is sufficient daylight. Optimize sensor coverage by either selecting PIR or PIRH option. PIR option comes with a sensor lens that is optimized to provide maximum coverage for mounting heights between 8-15ft, while PIRH is optimized for 15-40ft mounting height.

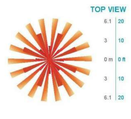
Networked Control (NLTAIR2)

nLight® AIR is a wireless lighting controls platform that allows for seamless integration of both indoor and outdoor luminaires. Five-tier security architecture, 900 MHz wireless communication and app (CLAIRITY™ Pro) based configurability combined together make nLight® AIR a secure, reliable and easy to use platform.

PIR
HIGH VIEW

PIRH
SIDE VIEW

TOP VIEW



Option	Base Level	High Level (when triggered)	Photocell Operation	Motion Time Delay	Ramp-down Rate	Ramp-up Rate
PIR or PIRH	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 5fc	5 min	5 min	Motion - 3 sec Photocell - 45 sec
PIR1FC3V, PIRH1FC3V	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 3fc	5 min	5 min	Motion - 3 sec Photocell - 45 sec
NLTAIR2 PIR, NLTAIR2 PIRH (out of box)	Motion - 3V (37% of full output) Photocell - 0V (turned off)	10V (100% output)	Enabled @ 5fc	7.5 min	5 min	Motion - 3 sec Photocell - 45 sec

CC1

Mounting, Options & Accessories

NLTAIR2 PIR – nLight AIR Motion/Ambient Sensor
D = 7"
H = 11"
W = 11.5"

PBBW – Surface-Mounted Back Box Use when there is no junction box available.
D = 1.75"
H = 9"
W = 11.5"

AWS – 3/8inch Architectural Wall Spacer
D = 0.38"
H = 4.4"
W = 7.5"

FEATURES & SPECIFICATIONS

INTENDED USE
Common architectural look, with clean rectilinear shape, of the WDGE LED ran designed to blend with any type of construction, whether it be tilt-up, frame or brick. Applications include commercial offices, warehouses, hospitals, schools, malls, restaurants, and other commercial buildings.

CONSTRUCTION
The unique patent die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP66 rating for the luminaire.

FINISH
Exterior painted parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum, sandstone and white. Available in textured and non-textured finishes.

OPTICS
Well crafted reflector optics allow the light engine to be recessed within the luminaire, providing visual comfort, superior distribution, uniformity, and spacing in wall mount applications. The WDGE LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL
Light engine consists of high-efficacy LEDs mounted to metal core circuit boards to maximize heat dissipation and promote long life (up to L85/100,000 hours at 25°C). The electronic driver has a power factor of >90%, THD <20%. Luminaire comes with built in 6kV surge protection, which meets a minimum Category C low exposure (per ANSI/IEEE C62.41.2).

INSTALLATION
A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections. The 3/8" Architectural Wall Spacer (AWS) can be used to create a floating appearance or to accommodate small imperfections in the wall surface. The ICW option can be used to mount the luminaire inverted for indirect lighting in dry and damp locations. Design can withstand up to a 3 G vibration load rating per ANSI C136.31.

LISTINGS
CSA certified to U.S. and Canadian standards. Luminaire is IP66 rated. PBB options are rated for wet location. Rated for -40°C minimum ambient. Designlights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified. International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 2700K and 3000K color temperature only and SRM mounting only.

WARRANTY
5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

DEVELOPER'S CERTIFICATE

THE UNDERSIGNED AGREES TO EXECUTE ALL THE FEATURES OF SITE PLAN APPROVAL NO. 820210090 INCLUDING APPROVAL CONDITIONS, DEVELOPMENT PROGRAM, AND CERTIFIED SITE PLAN.

DEVELOPER: JAISAI PROPERTIES, LLC (COMPANY) — DR. PRAVEEN BOLARUM (CONTACT PERSON)
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SIGNATURE:

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Landscape Architects
Land Surveyors
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Phone: 301.670.0840
www.mhgpa.com

STATE OF MARYLAND — STEVEN SHANE HAHN — NO. 30849 — REGISTERED PROFESSIONAL ENGINEER

I certify that these documents were prepared by me and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No. 30849 expiration date is 7/11/24.

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EMAIL: SKAHLE@BKASTUDIO.COM

REVISIONS

NO.	DESCRIPTION	DATE

TAX MAP EW31 — WSSC 232NW13

2TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

HAMMER HILL, PARCEL P311

CLARKSBURG HIGHLANDS, PART OF BLOCK D

PROJ. MGR	ST
DRAWN BY	JW
SCALE	AS SHOWN
DATE	09.29.2020

SHEET NAME
LIGHTING FIXTURES CUT SHEETS

ES-3

PROJECT NO. 13.109.41

SHEET NO. 3 OF 4

MONTGOMERY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
Certified Site Plan - 820210090
APPROVAL
06/02/23

CC2

D-Series Size 1
LED Wall Luminaire

Catalog Number
Notes
Type
Hit the Tab key or mouse over the page to see all interactive elements.

d"series

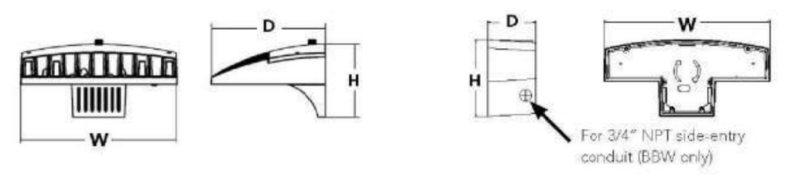
Specifications

Luminaire

Width:	13-3/4" (34.9 cm)	**Weight:**	12 lbs (5.4 kg)
Depth:	10" (25.4 cm)		
Height:	6-3/8" (16.2 cm)		

Back Box (BBW, ELCW)

Width:	13-3/4" (34.9 cm)	**BBW Weight:**	5 lbs (2.3 kg)
Depth:	4" (10.2 cm)	**ELCW Weight:**	10 lbs (4.5 kg)
Height:	6-3/8" (16.2 cm)		



Introduction

The D-Series Wall luminaire is a stylish, fully integrated LED solution for building-mount applications. It features a sleek, modern design and is carefully engineered to provide long-lasting, energy-efficient lighting with a variety of optical and control options for customized performance.

With an expected service life of over 20 years of nighttime use and up to 74% in energy savings over comparable 250W metal halide luminaires, the D-Series Wall is a reliable, low-maintenance lighting solution that produces sites that are exceptionally illuminated.

Ordering Information

EXAMPLE: DSXW1 LED 20C 1000 40K T3M MVOLT DDBTXD

DSXW1 LED

Series	LEDs	Drive Current	Color temperature	Distribution	Voltage	Mounting	Control Options
DSXW1 LED	10C 10 LEDs (one engine) 20C 20 LEDs (two engines)[1]	350 350 mA 530 530 mA 700 700 mA 1000 1000 mA (1 A)[1]	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted	T2S Type II Short T2M Type II Medium T3S Type III Short T3M Type III Medium T4M Type IV Medium TFTM Forward Throw Medium	MVOLT[2] 120[3] 208[3] 240[3] 277[3] 347[3,4] 480[3,4]	Shipped included (blank) Surface mounting bracket BBW Surface-mounted back box (for conduit entry)[5]	Shipped installed PE Photoelectric cell, button type[6] DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) PIR 180° motion/ambient light sensor, <15' mtg ht[1,7] PIRH 180° motion/ambient light sensor, 15-30' mtg ht[1,7] PIR1FC3V Motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[1,7] PIRH1FC3V Motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[1,7] ELCW Emergency battery backup (includes external component enclosure), CA Title 20 Noncompliant[8,9]

Other Options	Finish (required)
Shipped installed SF Single fuse (120, 277 or 347V)[3,10] DF Double fuse (208, 240 or 480V)[3,10] HS House-side shield[11] SPD Separate surge protection[12] Shipped separately[11] BSW Bird-deterrent spikes VG Vandal guard DDL Diffused drop lens	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DSSXD Sandstone DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white DSSTXD Textured sandstone

Accessories
Ordered and shipped separately.

DSXWHS U	House-side shield (one per light engine)
DSXWBSW U	Bird-deterrent spikes
DSXWVG U	Vandal guard accessory

NOTES
1 20C 1000 is not available with PIR, PIRH, PIR1FC3V or PIRH1FC3V.
2 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
3 Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
4 Only available with 20C, 700mA or 1000mA. Not available with PIR or PIRH.
5 Back box ships installed on fixture. Cannot be field installed. Cannot be ordered as an accessory.
6 Photocontrol (PE) requires 120, 208, 240, 277 or 347 voltage option. Not available with motion/ambient light sensors (PIR or PIRH).
7 Reference Motion Sensor table on page 3.
8 Cold weather (-20C) rated. Not compatible with conduit entry applications. Not available with BBW mounting option. Not available with fusing. Not available with 347 or 480 voltage options. Emergency components located in back box housing. Emergency mode IES files located on product page at www.lithonia.com
9 Not available with SPD.
10 Not available with ELCW.
11 Also available as a separate accessory; see Accessories information.
12 Not available with ELCW.

CC2

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Contact factory for performance data on any configurations not shown here.

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70CRI) Lumens	B	U	G	LPW	40K (4000 K, 70CRI) Lumens	B	U	G	LPW	50K (5000 K, 70CRI) Lumens	B	U	G	LPW	AMBPC (Amber Phosphor Converted) Lumens	B	U	G	LPW
10C (10 LEDs)	350mA	13W	T2S	1,415	0	0	1	109	1,520	0	0	1	117	1,530	0	0	1	118	894	0	0	1	69
			T2M	1,349	0	0	1	104	1,448	0	0	1	111	1,458	0	0	1	112	852	0	0	1	66
			T3S	1,399	0	0	1	108	1,503	0	0	1	116	1,512	0	0	1	116	884	0	0	1	68
			T3M	1,385	0	0	1	107	1,488	0	0	1	114	1,497	0	0	1	115	876	0	0	1	67
			T4M	1,357	0	0	1	104	1,458	0	0	1	112	1,467	0	0	1	113	858	0	0	1	66
			TFTM	1,411	0	0	1	109	1,515	0	0	1	117	1,525	0	0	1	117	892	0	0	1	69
	530 mA	19W	T2S	2,053	1	0	1	108	2,205	1	0	1	116	2,220	1	0	1	117	1,264	0	0	1	67
			T2M	1,957	1	0	1	103	2,102	1	0	1	111	2,115	1	0	1	111	1,205	0	0	1	63
			T3S	2,031	1	0	1	107	2,181	1	0	1	115	2,194	1	0	1	115	1,250	0	0	1	66
			T3M	2,010	1	0	1	106	2,159	1	0	1	114	2,172	1	0	1	114	1,237	0	0	1	65
			T4M	1,970	1	0	1	104	2,115	1	0	1	111	2,129	1	0	1	112	1,212	0	0	1	64
			TFTM	2,047	0	0	1	108	2,198	1	0	1	116	2,212	1	0	1	116	1,260	0	0	1	66
	700 mA	26W	T2S	2,623	1	0	1	101	2,816	1	0	1	108	2,834	1	0	1	109	1,544	0	0	1	59
			T2M	2,499	1	0	1	96	2,684	1	0	1	103	2,701	1	0	1	104	1,472	0	0	1	57
			T3S	2,593	1	0	1	100	2,785	1	0	1	107	2,802	1	0	1	108	1,527	0	0	1	59
			T3M	2,567	1	0	1	99	2,757	1	0	1	106	2,774	1	0	1	107	1,512	0	0	1	58
			T4M	2,515	1	0	1	97	2,701	1	0	1	104	2,718	1	0	1	105	1,481	0	0	1	57
			TFTM	2,614	1	0	1	101	2,808	1	0	1	108	2,825	1	0	1	109	1,539	0	0	1	59
	1000 mA	39W	T2S	3,685	1	0	1	94	3,957	1	0	1	101	3,982	1	0	1	102	2,235	1	0	1	57
			T2M	3,512	1	0	1	90	3,771	1	0	1	97	3,794	1	0	1	97	2,130	1	0	1	55
			T3S	3,644	1	0	1	93	3,913	1	0	1	100	3,938	1	0	1	101	2,210	1	0	1	57
			T3M	3,607	1	0	1	92	3,873	1	0	1	99	3,898	1	0	1	100	2,187	1	0	1	56
			T4M	3,534	1	0	2	91	3,796	1	0	2	97	3,819	1	0	2	98	2,143	1	0	1	55
			TFTM	3,673	1	0	1	94	3,945	1	0	1	101	3,969	1	0	1	102	2,228	1	0	1	57
20C (20 LEDs)	350mA	23W	T2S	2,820	1	0	1	123	3,028	1	0	1	132	3,047	1	0	1	132	1,777	1	0	1	77
			T2M	2,688	1	0	1	117	2,886	1	0	1	125	2,904	1	0	1	126	1,693	1	0	1	74
			T3S	2,789	1	0	1	121	2,994	1	0	1	130	3,014	1	0	1	131	1,757	0	0	1	76
			T3M	2,760	1	0	1	120	2,965	1	0	1	129	2,983	1	0	1	130	1,739	1	0	1	76
			T4M	2,704	1	0	1	118	2,905	1	0	1	126	2,922	1	0	1	127	1,704	1	0	1	74
			TFTM	2,811	1	0	1	122	3,019	1	0	1	131	3,038	1	0	1	132	1,771	0	0	1	77
	530 mA	35W	T2S	4,079	1	0	1	117	4,380	1	0	1	125	4,407	1	0	1	126	2,504	1	0	1	72
			T2M	3,887	1	0	1	111	4,174	1	0	1	119	4,201	1	0	1	120	2,387	1	0	1	68
			T3S	4,033	1	0	1	115	4,331	1	0	1	124	4,359	1	0	1	125	2,477	1	0	1	71
			T3M	3,993	1	0	2	114	4,288	1	0	2	123	4,315	1	0	2	123	2,451	1	0	1	70
			T4M	3,912	1	0	2	112	4,201	1	0	2	120	4,227	1	0	2	121	2,402	1	0	1	69
			TFTM	4,066	1	0	2	116	4,366	1	0	2	125	4,394	1	0	2	126	2,496	1	0	1	71
	700 mA	46W	T2S	5,188	1	0	1	113	5,572	1	0	1	121	5,607	1	0	1	122	3,065	1	0	1	67
			T2M	4,945	1	0	2	108	5,309	1	0	2	115	5,343	1	0	2	116	2,921	1	0	1	64
			T3S	5,131	1	0	2	112	5,510	1	0	2	120	5,544	1	0	2	121	3,031	1	0	1	66
			T3M	5,078	1	0	2	110	5,454	1	0	2	119	5,487	1	0	2	119	3,000	1	0	1	65
			T4M	4,975	1	0	2	108	5,343	1	0	2	116	5,376	1	0	2	117	2,939	1	0	1	64
			TFTM	5,172	1	0	2	112	5,554	1	0	2	121	5,589	1	0	2	122	3,055	1	0	1	66
	1000 mA	73W	T2S	7,204	1	0	2	99	7,736	2	0	2	106	7,784	2	0	2	107	4,429	1	0	1	61
			T2M	6,865	1	0	2	94	7,373	2	0	2	101	7,419	2	0	2	102	4,221	1	0	1	58
			T3S	7,125	1	0	2	98	7,651	1	0	2	105	7,698	1	0	2	105	4,380	1	0	1	60
			T3M	7,052	1	0	2	97	7,573	2	0	2	104	7,620	2	0	2	104	4,335	1	0	2	59
			T4M	6,909	1	0	2	95	7,420	1	0	2	102	7,466	1	0	2	102	4,248	1	0	2	58
			TFTM	7,182	1	0	2	98	7,712	1	0	2	106	7,761	1	0	2	106	4,415	1	0	2	60

CC2

Performance Data

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	**77°F**	**1.00**
30°C	86°F	1.00
40°C	104°F	0.98

Electrical Load

LEDs	Drive Current (mA)	System Watts	Current (A) 120V	208V	240V	277V	347V	480V
10C	350	14 W	0.13	0.07	0.06	0.06	-	-
	530	20 W	0.19	0.11	0.09	0.08	-	-
	700	27 W	0.25	0.14	0.13	0.11	-	-
	1000	40 W	0.37	0.21	0.19	0.16	-	-
20C	350	24 W	0.23	0.13	0.12	0.10	-	-
	530	36 W	0.33	0.19	0.17	0.14	-	-
	700	47 W	0.44	0.25	0.22	0.19	0.15	0.11
	1000	74 W	0.69	0.40	0.35	0.30	0.23	0.17

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the **DSXW1 LED 20C 1000** platform in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	0.95	0.93	0.88

Motion Sensor Default Settings

Option	Dimmed State	High Level (when triggered)	Photocell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
*PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min

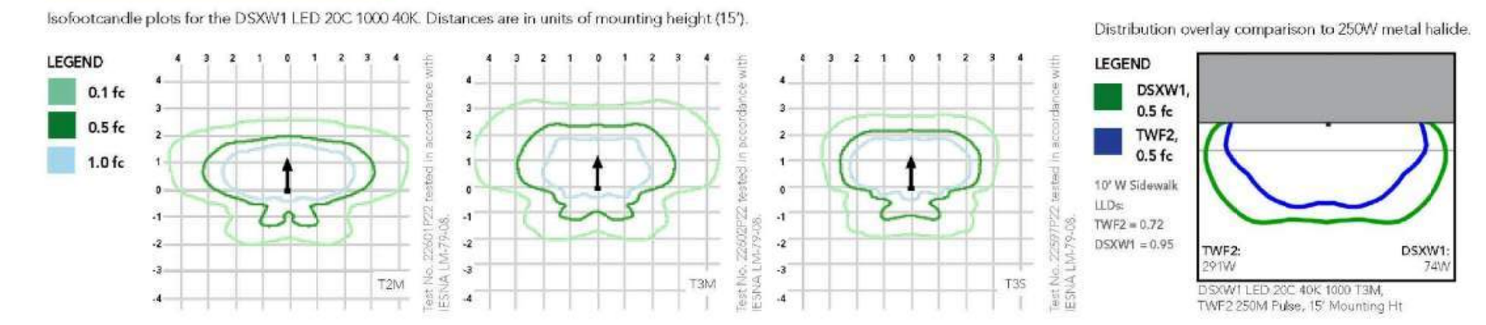
*for use when motion sensor is used as dusk to dawn control.

Photometric Diagrams

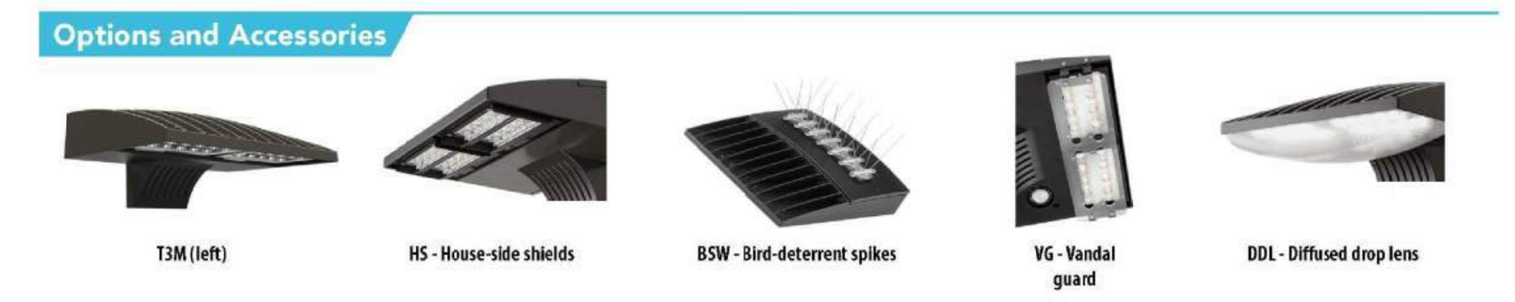
To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Wall Size 1 homepage.

Isofootcandle plots for the DSXW1 LED 20C 1000 40K. Distances are in units of mounting height (15').

Distribution overlay comparison to 250W metal halide.



Options and Accessories



FEATURES & SPECIFICATIONS

INTENDED USE
The energy savings, long life and easy-to-install design of the D-Series Wall Size 1 make it the smart choice for building-mounted doorway and pathway illumination for nearly any facility.

CONSTRUCTION
Two-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance. The LED driver is mounted to the door to thermally isolate it from the light engines for low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants (IP65).

FINISH
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in textured and non-textured finishes.

OPTICS
Precision-molded proprietary acrylic lenses provide multiple photometric distributions tailored specifically to building mounted applications. Light engines are available in 3000 K (70 min. CRI), 4000 K (70 min. CRI) or 5000 K (70 min. CRI) configurations.

ELECTRICAL
Light engine(s) consist of 10 high-efficacy LEDs mounted to a metal-core circuit board to maximize heat dissipation and promote long life (L88/100,000 hrs at 25°C). Class 1 electronic drivers have a power factor >90%, THD <20%, and a minimum 2.5KV surge rating. When ordering the SPD option, a separate surge protection device is installed within the luminaire which meets a minimum Category C Low (per ANSI/IEEE C62.41.2).

INSTALLATION
Included universal mounting bracket attaches securely to any 4" round or square outlet box for quick and easy installation. Luminaire has a slotted gasket wireway and attaches to the mounting bracket via corrosion-resistant screws.

LISTINGS
CSA certified to U.S. and Canadian standards. Rated for -40°C minimum ambient.

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

WARRANTY
Five-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

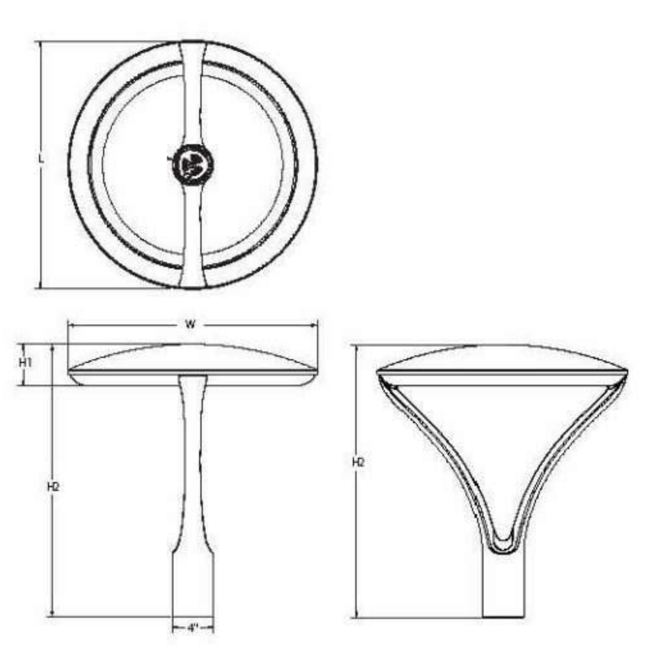
DD

Radean Post Top
LED Area Luminaire

Catalog Number
Notes
Type
Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA:	1.02 ft² (0.105 m²)
Length:	24" (61cm)
Width:	24" (61cm)
H1 Luminaire Height:	4" (10.16cm)
H2 Luminaire Height:	26" (66.04cm)
Weight:	38lbs (17.24Kg)



Introduction

The architecturally-inspired shape of the RADEAN™ post top area luminaire embodies the grace and strength of the RADEAN family. The twin copper-core cast aluminum arms support the slender superstructure, creating a beautiful sculpture by day transforming into a beacon of comfort by night. Triangular arms redirect reflection maintaining its visually quiet appearance. With sleek lines and simple silhouettes, these LED luminaires use specialized lighting and visual comfort to transform common areas like courtyards, outdoor retail locations, universities and corporate campuses into pedestrian-friendly nighttime environments.

Ordering Information

EXAMPLE: RADPT LED P3 30K SYM MVOLT PT4 PIR DNAXD

RADPT LED

Series	Performance package	Color temperature	Distribution	Voltage	Mounting (required)
RADPT LED	P1 3,000 Lumens P2 5,000 Lumens P3 7,000 Lumens P4 10,000 Lumens P5 15,000 Lumens	27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K	SYM Symmetric type V ASY Asymmetric type IV PATH Pathway Type III	MVOLT[1] 120[1] 208[1] 240[1] 277[1] 347 480	PT4[2] Slips inside a 4" OD round metal pole RADPT20 Slips over a 2 3/8" diameter tenon RADPT25 Slips over a 2 7/8" diameter tenon

Control options	Other options	Finish (required)
Shipped installed NLTAIR2 nLight AIR 2.0 enabled[3] PIR Bi-level motion/sensor (100% to 30%)[4,5,6,7] PE Button photocell[6] FAO Field adjustable output[4,8]	SF Single Fuse[1] DF Double Fuse[1] R90 Rotated optics[9] Shipped installed HS Houseside shield[10]	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

DD

Ordering Information

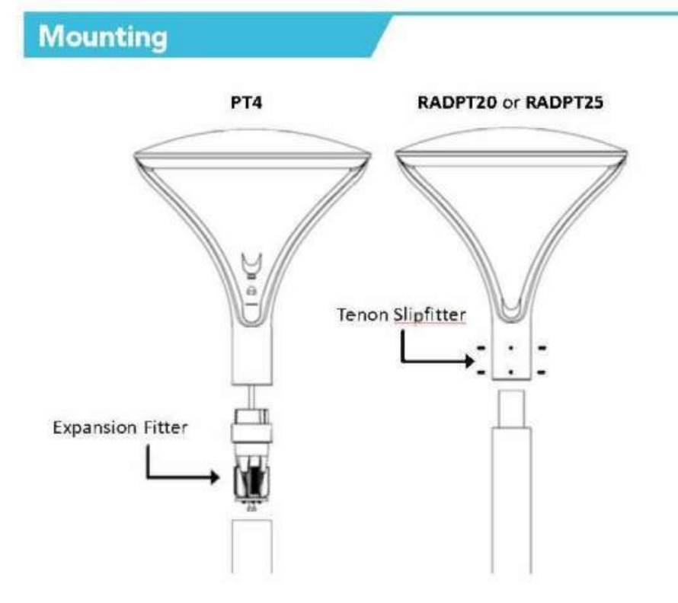
Accessories
Ordered and shipped separately.

RADHS	Houseside shield (shield is white)
RADCS DDBXD U	Decorative clamshell base for 4" RSS pole (specify finish)
RADFBC DDBXD U	Full base cover for 4" RSS pole (specify finish)

For more control options, visit DTL and ROAM online.

NOTES
1 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
2 Required nominal 4" round straight metal pole.
3 NLTAIR2 not available with PIR, PE or FAO. Must link to external nLight Air network.
4 PIR will work with FAO, if adjustable low-end trim is required.
5 PIR must specify 120V, 277V, 347V or 480V. Not available in MVOLT, 208V or 240V.
6 PE and PIR are available together.
7 PIR for use only on luminaires mounted under 15'.
8 Field adjustable high-end trim.
9 For left rotation, select R90 and rotate luminaire 180° on pole.
10 Also available as a separate accessory; see Accessories information at left. HS not available with R90. Shield is field rotatable shield in 180° increments.

Mounting

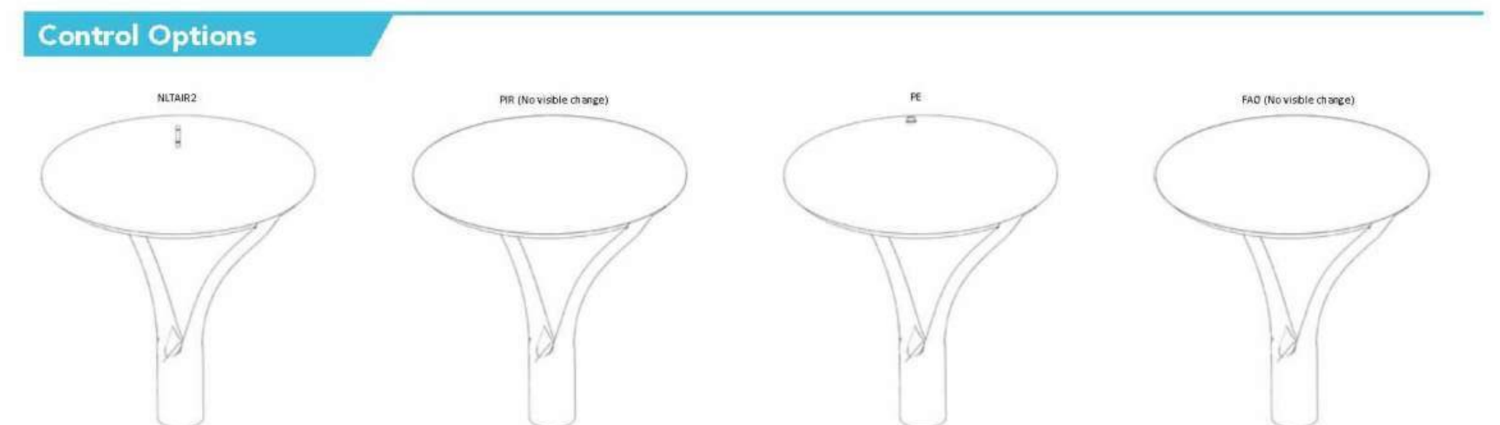


Recommended Poles for use with RADEAN RADPT LED Luminaires.

Acuity Part Number	Description	For luminaires	Used with Mounting
RSS 10 4B PT DDBXD	10' Round Straight Steel - 4" O.D. - Open Top	RADPT LED	PT4
RSS 12 4B PT DDBXD	12' Round Straight Steel - 4" O.D. - Open Top	RADPT LED	PT4
RSS 14 4B PT DDBXD	14' Round Straight Steel - 4" O.D. - Open Top	RADPT LED	PT4
RSS 16 4B PT DDBXD	16' Round Straight Steel - 4" O.D. - Open Top	RADPT LED	PT4
RSS 18 4B PT DDBXD	18' Round Straight Steel - 4" O.D. - Open Top	RADPT LED	PT4
RSS 20 4B PT DDBXD	20' Round Straight Steel - 4" O.D. - Open Top	RADPT LED	PT4
RSS 25 4B PT DDBXD	25' Round Straight Steel - 4" O.D. - Open Top	RADPT LED	PT4
RSS 10 4B T20 DDBXD	10' Round Straight Steel - 4" O.D. - Tenon Top	RADPT LED	RADPT20
RSS 12 4B T20 DDBXD	12' Round Straight Steel - 4" O.D. - Tenon Top	RADPT LED	RADPT20
RSS 14 4B T20 DDBXD	14' Round Straight Steel - 4" O.D. - Tenon Top	RADPT LED	RADPT20
RSS 16 4B T20 DDBXD	16' Round Straight Steel - 4" O.D. - Tenon Top	RADPT LED	RADPT20
RSS 18 4B T20 DDBXD	18' Round Straight Steel - 4" O.D. - Tenon Top	RADPT LED	RADPT20
RSS 20 4B T20 DDBXD	20' Round Straight Steel - 4" O.D. - Tenon Top	RADPT LED	RADPT20
RSS 25 4B T20 DDBXD	25' Round Straight Steel - 4" O.D. - Tenon Top	RADPT LED	RADPT20

* Customer must verify pole loading per required design criteria and specified wind speed. Consult pole specification sheet for additional details.

Control Options



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Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Contact factory for performance data on any configurations not shown here.

Performance Package	Input Wattage	Distribution	2700K Lumens	B	U	G	LPW	3000K Lumens	B	U	G	LPW	3500K Lumens	B	U	G	LPW	4000K Lumens	B	U	G	LPW	5000K Lumens	B	U	G	LPW
P1	25	ASY	2,924	2	1	2	115	3,022	2	2	2	119	3,095	2	2	2	122	3,168	2	2	2	125	3,168	2	2	2	125
		PATH	2,529	2	1	2	100	2,613	2	2	2	103	2,676	2	2	2	105	2,739	2	2	2	108	2,739	2	2	2	108
		SYM	3,086	2	1	1	121	3,189	2	1	1	126	3,266	2	1	1	129	3,344	2	1	1	132	3,344	2	1	1	132
P2	38	ASY	4,521	3	2	3	119	4,672	3	2	3	123	4,785	3	2	3	126	4,898	3	2	3	129	4,898	3	2	3	129
		PATH	3,909	2	2	2	103	4,040	2	2	2	106	4,137	2	2	2	109	4,235	3	2	3	111	4,235	3	2	3	111
		SYM	4,772	2	2	1	126	4,931	3	2	1	130	5,050	3	2	1	133	5,169	3	2	1	136	5,169	3	2	1	136
P3	54	ASY	6,387	3	2	3	119	6,600	3	2	3	123	6,760	3	2	3	126	6,919	3	2	3	129	6,919	3	2	3	129
		PATH	5,523	3	2	3	103	5,707	3	2	3	106	5,845	3	2	3	109	5,983	3	2	3	112	5,983	3	2	3	112
		SYM	6,741	3	2	2	126	6,966	3	2	2	130	7,135	3	2	2	133	7,303	3	2	2	136	7,303	3	2	2	136
P4	86	ASY	10,150	4	2	4	118	10,489	4	2	4	122	10,742	4	2	4	125	10,996	4	2	4	128	10,996	4	2	4	128
		PATH	8,777	3	2	3	102	9,070	3	2	3	106	9,289	3	2	3	108	9,509	3	2	3	111	9,509	3	2	3	111
		SYM	10,713	3	2	2	125	11,071	3	2	2	129	11,338	3	2	2	132	11,606	3	2	2	135	11,606	3	2	2	135
P5	123	ASY	14,250	4	2	4	116	14,724	4	2	4	120	15,081	4	3	4	123	15,437	4	3	4	126	15,437	4	3	4	126
		PATH	12,322	4	2	4	101	12,733	4	3	4	104	13,041	4	3	4	106	13,349	4	3	4	109	13,349	4	3	4	109
		SYM	15,040	4	2	3	123	15,541	4	2	3	127	15,917	4	2	3	130	16,293	4	2	3	133	16,293	4	2	3	133

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		LAT Factor
0°C	32°F	1.06
5°C	41°F	1.05
10°C	50°F	1.04
15°C	59°F	1.02
20°C	68°F	1.01
25°C	**77°F**	**1.00**
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.96

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the **RADPT LED** platform in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Projected LED Lumen Maintenance

	0	25,000	50,000	100,000
P1	1.00	0.96	0.91	0.82
P2	1.00	0.96	0.91	0.82
P3	1.00	0.96	0.91	0.82
P4	1.00	0.96	0.91	0.82
P5	1.00	0.95	0.89	0.78

Electrical Load

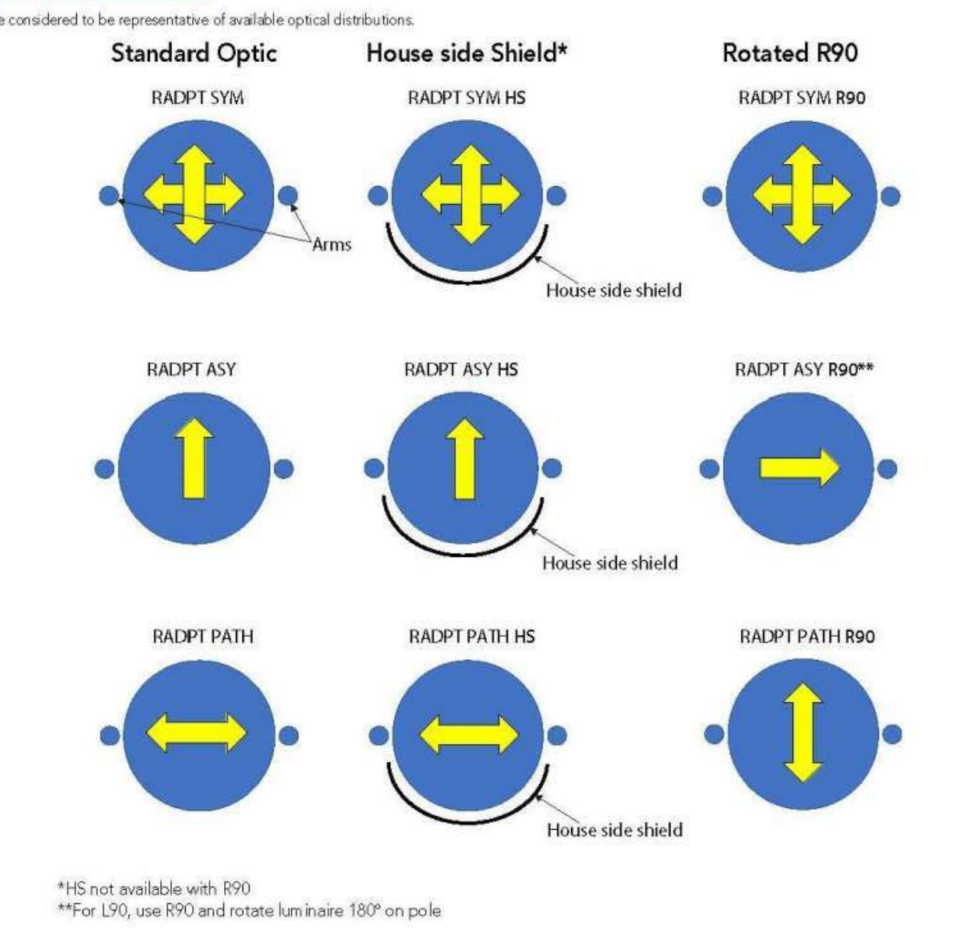
Lumen Package	LED Drive Current	Voltage	Wattage		Current (A) 120	208	240	277	347	480
P1	500	42.8	21.4	Input Current	0.22	0.13	0.11	0.1	0.08	0.06
				System Watts	26	26	26	27	25	26
P2	770	43	33.1	Input Current	0.33	0.19	0.16	0.14	0.11	0.08
				System Watts	39	39	39	39	38	38
P3	1100	43.2	47.5	Input Current	0.46	0.26	0.23	0.2	0.16	0.12
				System Watts	55	54	54	54	54	54
P4	900	87.3	78.6	Input Current	0.73	0.42	0.36	0.32	0.25	0.18
				System Watts	87	86	86	86	86	86
P5	1250	88.2	110.2	Input Current	1	0.58	0.5	0.44	0.35	0.25
				System Watts	120	119	119	119	120	120

DD

Orientation Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's RADPT LED homepage.

Isofootcandle plots are considered to be representative of available optical distributions.



*HS not available with R90
**For L90, use R90 and rotate luminaire 180° on pole

FEATURES & SPECIFICATIONS

INTENDED USE
Pedestrian areas such as parks, campuses, pathways, courtyards and pedestrians malls.

CONSTRUCTION
Single-piece die-cast aluminum housing with nominal wall thickness of 0.125" on a 6mm thick acrylic waveguide is fully gasketd with a single piece tubular silicone gasket.

FINISH
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum and white. Available in textured and non-textured finishes.

OPTICS
6MM thick acrylic waveguide with 360° flexible LED board. Available in 2700K, 3000K, 3500K, 4000K and 5000K (70CRI) CCT configurations.

ELECTRICAL
Light engine consists of 96 high-efficacy LEDs mounted to a flexible circuit board and aluminum heat sink, ensuring optimal thermal management and long life. Class 1 electronic driver has a power factor >90%, THD <20%, and has an expected life of 100,000 hours with <1% failure rate. Easily-serviceable 10kV surge protection device meets a minimum Category C Low for operation (per ANSI/IEEE C62.41.2).

INSTALLATION
Standard post-top mounting configuration fits into a 4" OD open pole top (round pole only). Alternate tenon (2-3/8" or 2-7/8") mounting also available.

LISTINGS
CSA certified to U.S. and Canadian standards. Luminaire is IP65 rated. Rated for -40°C minimum ambient.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color or less.

WARRANTY
5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

DEVELOPER'S CERTIFICATE

THE UNDERSIGNED AGREES TO EXECUTE ALL THE FEATURES OF SITE PLAN APPROVAL NO. 820210090 INCLUDING APPROVAL CONDITIONS, DEVELOPMENT PROGRAM, AND CERTIFIED SITE PLAN.

DEVELOPER: JAISAI PROPERTIES, LLC (COMPANY) DR. PRAVEEN BOLARUM (CONTACT PERSON)
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PHONE: (240) 423-3615
EMAIL: PBOLARUM@GMAIL.COM
SIGNATURE:

MHG
Civil Engineers
Land Planners
Landscape Architects
Land Surveyors
9220 Wightman Road, Suite 120
Montgomery Village, MD 20886
Phone: 301.670.0840
www.mhgpa.com

I certify that these documents were prepared by me and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No. 30849 expiration date is 7/11/24

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REVISIONS

NO.	DESCRIPTION	DATE

TAX MAP EW31 | WSSC 232NW13

2TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

HAMMER HILL, PARCEL P311

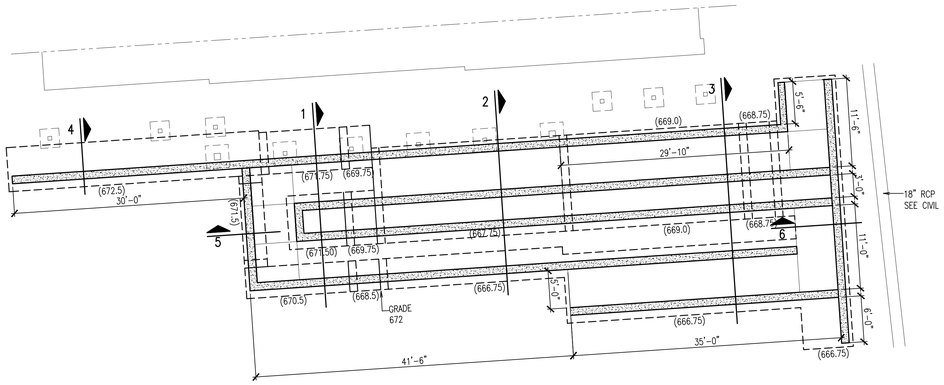
CLARKSBURG HIGHLANDS, PART OF BLOCK D

PROJ. MGR NTS	ST
DRAWN BY	JW
SCALE	AS SHOWN
DATE	09.29.2020

SHEET NAME
PHOTOMETRIC CALCULATIONS

ES-4

PROJECT NO.	13.109.41
SHEET NO.	4 OF 4



FOUNDATION PLAN

1/8" = 1'-0"

FOUNDATION NOTES:

1. SLAB ON GRADE SHALL BE 4" NORMAL WEIGHT CONCRETE (F'C=4500 PSI AE, 145 PCF) WITH 6"X6"-W2.9XW2.9 WELDED WIRE FABRIC OVER VAPOR BARRIER OVER 4" OF COMPACTED WASHED GRAVEL.

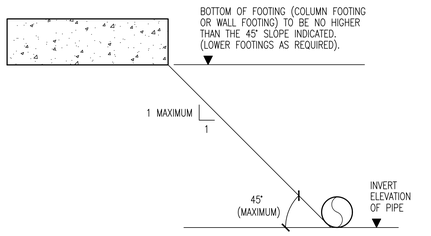
2. (–0'–0") DENOTES TOP OF FOOTING ELEVATION. FOOTING ELEVATIONS ARE FOR BIDDING PURPOSES ONLY AND MAY HAVE TO BE ADJUSTED BASED ON FIELD CONDITIONS ENCOUNTERED DURING EXCAVATION.

3. ALL FOOTINGS SHALL BE LOWERED TO BEAR BELOW ANY UTILITIES. SEE TYPICAL DETAIL. CONTRACTOR FIELD LOCATE ALL FINAL UTILITY LOCATIONS AND COORDINATE INVERT ELEVATIONS WITH FOOTINGS. ADD ADDITIONAL FOOTING STEPS AS NEEDED AT ALL UTILITIES.

4. ALL SUBGRADE PREPARATION FOR THE SLAB ON GRADE, FOOTINGS, INSTALLATION OF CONTROLLED FILL, ETC SHALL BE IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

5. REFER TO THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND CIVIL DRAWINGS FOR BELOW GRADE UTILITIES, BELOW GRADE CONDUITS, SLAB DEPRESSIONS, SLAB SLOPES, ETC.

6. PROVIDE SLAB AND WALL CONTRACTION JOINTS, SPACING PER TYPICAL DETAIL.



TYPICAL PIPE INVERT AND FOOTING RELATIONSHIP

N.T.S.

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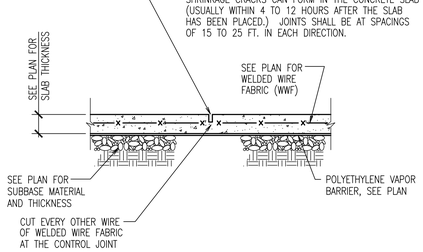
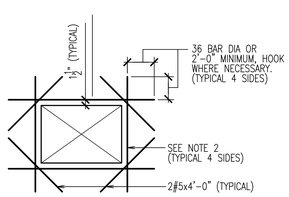


TYPICAL CONTRACTION JOINT – SAW CUT

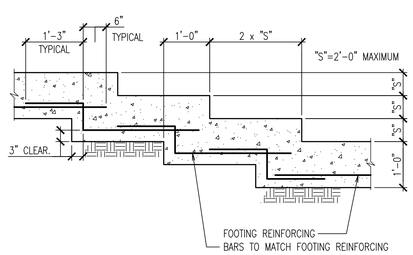
T3300.05



NOTES:
1. HOOK ALL INTERRUPTED BARS.
2. 1/2 REINF BAR AREA INTERRUPTED BY OPENINGS SHALL BE PROVIDED EACH SIDE OF OPENING IN SAME FACE MIN 2#5 EACH SIDE EACH FACE.
3. REINF. FOR CIRCULAR OPENINGS SIMILAR

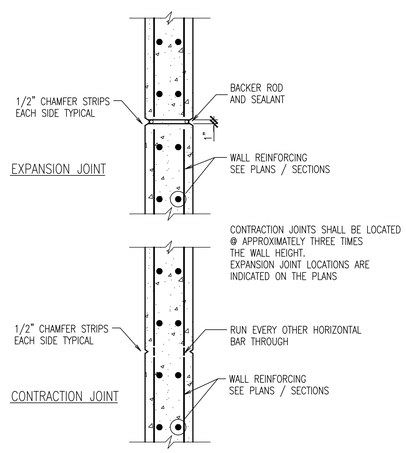
TYPICAL REINFORCING AT WALL OPENING DETAIL

T3300.37



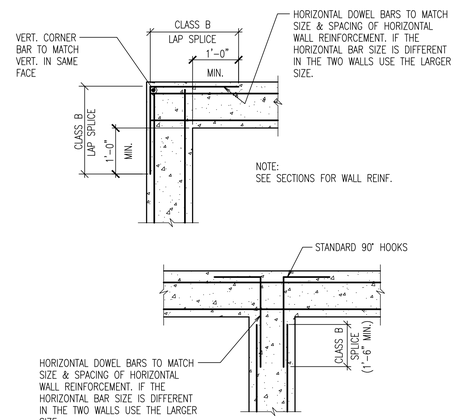
TYPICAL STEPPED FOOTING

T3300.39



TYPICAL CONCRETE WALL CONTRACTION JOINT AND WALL EXPANSION JOINT PLAN DETAILS

T3300.85



TYPICAL REINFORCING DETAIL AT WALL INTERSECTION

T3300.91

DIVISION 1 – GENERAL REQUIREMENTS

GENERAL CODES AND STANDARDS

BUILDING CODES: 2018 INTERNATIONAL BUILDING CODE

RISK CATEGORY: II

WIND CRITERIA

Vbasic= 115 MPH

Vasd = 89 MPH

EXPOSURE CATEGORY = B

APPLICABLE INTERNAL PRESSURE COEFFICIENTS = +/– .18

COMPONENTS AND CLADDING = (EWA = 10 SQFT)

ZONE 4 = 21.16 PSF (DESIGN WIND PRESSURE – UNFACTORED)

ZONE 5 = 26.16 PSF (DESIGN WIND PRESSURE – UNFACTORED)

SEISMIC CRITERIA

I_E = 1.0

SITE CLASS = D

S_S = .135

S_1 = .043

S_{DS} = .144

S_{D1} = .069

R = 4.0

C_S = .036

SEISMIC DESIGN CATEGORY = B

ANALYSIS PROCEDURE – EQUIVALENT LATERAL FORCE PROCEDURE

SNOW LOADS

Pg = 30 PSF

Is = 1.0

C_E = 1.0

C_T = 1.0

P_f = 21 PSF

RETAINING WALL DESIGN LOADS

ACTIVE FLUID PRESSURE = 40 PSF/FT

SOIL UNIT WEIGHT = 120PCF

SLIDING FRICTION = .35

LOADS GREATER THAN THE DESIGN LOADS STATED ABOVE SHALL NOT BE PLACED ON THE STRUCTURE DURING OR AFTER CONSTRUCTION.

CONTRACTOR SHALL PROVIDE ALL TEMPORARY BRACING IN ORDER TO CONSTRUCT THE BUILDING. CONTRACTOR SHALL HAVE ALL TEMPORARY BRACING, SHEETING, SHORING, FORMWORK, UNDERPINNING, ETC DESIGNED BY AN ENGINEER REGISTERED IN THE LOCAL JURISDICTION. ONE SET OF SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED TO COMPREHENSIVE STRUCTURAL SOLUTIONS FOR RECORD PURPOSES. COMPREHENSIVE STRUCTURAL SOLUTIONS IS NOT RESPONSIBLE FOR ANY TEMPORARY SHORING.

CONTRACTOR SHALL SUPPORT AND PROTECT ALL ADJACENT UTILITIES, STRUCTURES, EXCAVATIONS, ETC. AS REQUIRED TO INSTALL THE STRUCTURAL ELEMENTS AS CONTAINED WITHIN THIS SET OF DOCUMENTS.

NO MODIFICATION IN SIZE, DIMENSION, POSITION, OR PENETRATION THROUGH ANY STRUCTURAL ELEMENT SHALL BE MADE WITHOUT PRIOR APPROVAL FROM THE ENGINEER OF RECORD.

REFER TO OTHER DISCIPLINE DRAWINGS FOR LOCATIONS OF SLAB PENETRATIONS, DIMENSIONS OF CHASES, INSERTS, OPENINGS, SLEEVES, REVEALS, DEPRESSIONS, AND OTHER SUCH ELEMENTS NOT DETAILED ON THE STRUCTURAL DRAWINGS. STRUCTURAL DRAWINGS SHOW BASIC STRUCTURAL CONDITIONS. THE STRUCTURAL DRAWINGS MUST BE USED IN CONJUNCTION WITH OTHER DISCIPLINE DRAWINGS CONTAINED IN THIS SET AND MUST BE COORDINATED AS A WHOLE ELEMENT. DIMENSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE OBTAINED FROM THE ARCHITECTURAL PLANS. DISCREPANCIES BETWEEN THESE NOTES, THE STRUCTURAL PLANS, THE PROJECT SPECIFICATIONS, AND/OR THE DRAWINGS OF OTHER DISCIPLINES SHALL BE DETERMINED BY THE ARCHITECT/ENGINEER. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO PROCEEDING WITH WORK.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOWN IN THE CONTRACT DOCUMENTS. IF THE STRUCTURAL DRAWINGS ARE REPLICATED FOR SHOP DRAWING USE BY THE CONTRACTOR, THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ALL INFORMATION SHOWN ON THE SHOP DRAWING. ANY DEVIATIONS FROM THE CONTRACT AS DETAILED ON THE SHOP DRAWINGS SHALL BE HIGHLIGHTED BY THE CONTRACTOR FOR REVIEW BY THE ENGINEER OF RECORD. THE CONTRACTOR SHALL ALLOW A MINIMUM OF 10 WORKING DAYS FOR SHOP DRAWING REVIEW.

ALL WORK SHALL BE INSPECTED IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE – SPECIAL INSPECTIONS. ALL INSPECTIONS SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER REGISTERED IN THE LOCAL JURISDICTION, HIRED BY THE PROJECT OWNER. ALL INSPECTIONS SHALL BE IN COMPLIANCE WITH LOCAL CODE AMENDMENTS, SPECIAL INSPECTOR SHALL COORDINATE ALL REQUIREMENTS. COMPREHENSIVE STRUCTURAL SOLUTIONS WILL NOT PERFORM CODE REQUIRED INSPECTIONS.

DIVISION 2 – SITE WORK

REFER TO THE GEOTECHNICAL REPORT PREPARED BY ECS MID–ATLANTIC DATED 11–18–2020.

FOOTINGS ARE DESIGNED FOR AN ASSUMED BEARING CAPACITY OF 3000 PSF AND SHALL BEAR ON NATURAL UNDISTURBED SOIL OR CONTROLLED ENGINEERED FILL IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. FOOTINGS SHALL BE LOCATED AT A MINIMUM OF 2 1/2 FEET BELOW EXTERIOR GRADE ELEVATION FOR FROST PROTECTION. SOIL BEARING PRESSURE MUST BE VERIFIED BY A QUALIFIED INSPECTOR. IF FIELD CONDITIONS VARY FROM CONDITIONS NOTED IN THE GEOTECHNICAL REPORT, THE GEOTECHNICAL ENGINEER MUST BE NOTIFIED. IF BEARING CAPACITY IS LESS THAN NOTED ABOVE, THE FOUNDATIONS SHALL BE REDESIGNED.

CONTRACTOR MUST PROVIDE FROST PROTECTION FOR ALL FOOTINGS AND SUBGRADES DURING CONSTRUCTION. NO FOOTINGS SHALL BE CAST ON FROZEN MATERIAL.

ALL FILL UNDER SLABS ON GRADE MUST BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. ALL SLABS SHALL HAVE CONTRACTION JOINTS AS LOCATED PER THE PLANS AND TYPICAL DETAILS, BUT IN NO CASE SHALL BE GREATER THAN 15' ON CENTER SPACING.

DO NOT BACKFILL AGAINST FOUNDATION WALLS UNTIL CONCRETE HAS REACHED 100% DESIGN STRENGTH. TEMPORARY BRACING, DESIGNED BY AN ENGINEER REGISTERED IN THE LOCAL JURISDICTION, MAY BE UTILIZED TO FACILITATE ACCELERATED PLACEMENT OF BACKFILL.

DIVISION 3 – CONCRETE

ALL CONCRETE SHALL BE NORMAL WEIGHT CONCRETE UNLESS OTHERWISE SPECIFIED.

FOR ALL CONCRETE NOT EXPOSED TO WEATHER: F'C=4500 PSI MINIMUM AT 28 DAYS UNLESS NOTED OTHERWISE.

FOR ALL CONCRETE EXPOSED TO WEATHER: F'C=4500 PSI MINIMUM AIR–ENTRAINED CONCRETE AT 28 DAYS UNLESS NOTED OTHERWISE. EXPOSED CONCRETE SHALL HAVE A MAXIMUM WATER–CEMENT RATIO OF 0.45

THE CONTRACTOR MUST SUBMIT A CONCRETE MIX DESIGN IN ACCORDANCE WITH ACI–318 (LATEST LOCAL APPROVED EDITION). THE ADDITION OF WATER AT THE PLANT OR IN THE FIELD GREATER THAN 1% IS STRICTLY PROHIBITED.

WELDED WIRE FABRIC SHALL BE SUPPORTED BY CHAIRS AND SHALL HAVE ENDS LAPPED AND WIRE TIED ONE FULL MESH AND SHALL EXTEND INTO SUPPORTING WALLS AND/OR BEAMS EXCEPT AT SLAB ON GRADE CONDITIONS.

REINFORCING STEEL, INCLUDING TIES AND STIRRUPS, SHALL BE DEFORMED HIGH STRENGTH BILLET STEEL AND SHALL CONFORM TO ASTM A–615 (LATEST LOCAL APPROVED EDITION) GRADE 60. ALL REINFORCING SHALL BE DETAILED, FABRICATED, AND CONSTRUCTED IN ACCORDANCE WITH THE ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING CONCRETE STRUCTURES" (ACI–315, LATEST LOCAL APPROVED EDITION).

ALL REINFORCING BARS SHALL BE SUPPORTED BY CHAIRS. REBAR STAKES ARE NOT PERMITTED. WET STICKING OF REBAR DOWELS IS NOT PERMITTED.

ALL REINFORCING SPLICES SHALL BE CLASS "B" SPLICES IN ACCORDANCE WITH ACI–318 (LATEST LOCAL APPROVED EDITION) UNLESS OTHERWISE NOTED. UNLESS NOTED OTHERWISE, HORIZONTAL WALL REINFORCING SHALL BE BENT AROUND CORNERS AND EXTEND 1'–0" MINIMUM INTO ADJACENT CONSTRUCTION. PROVIDE 4'–0" LONG CORNER BARS TO MATCH HORIZONTAL REINFORCING.

UNLESS OTHERWISE SPECIFIED, PROVIDE THE FOLLOWING MINIMUM CONCRETE PROTECTION:

CAST AGAINST EARTH	3"
EXPOSED TO EARTH OR WEATHER	
#5 AND SMALLER BARS	1 ½"
#6 AND LARGER BARS	2"
NOT EXPOSED TO EARTH OR WEATHER	
SLABS, WALLS, JOISTS	¾"
BEAMS, GIRDERS, COLUMNS	1 ½" TO TIES, STIRRUPS, OR SPIRALS

ALL FORMWORK SHALL BE IN ACCORDANCE WITH THE ACI "FORMWORK FOR CONCRETE" (SPECIAL PUBLICATION #4) AND ACI "STANDARD RECOMMENDED PRACTICE FOR CONCRETE FORMWORK" (ACI–347, LATEST LOCAL APPROVED EDITION).

ALL CAST IN PLACE CONCRETE SLABS AND WALLS SHALL HAVE CONTROL JOINTS PER THE TYPICAL DETAILS.

ALL CONCRETE WORK SHALL CONFORM TO THE LATEST CODE APPROVED EDITIONS OF THE ACI AND ASTM SPECIFICATIONS.

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Land Surveyors

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www.mhgpa.com

Professional Certification
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the Laws of the State of Maryland. Lic. No. 32926 Exp. Date: 05.28.2024

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REVISIONS

NO.	DESCRIPTION	DATE
1	RESOLUTION APPROVAL	9/21/22

TAX MAP EW31 WSSC 232NW13

2TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

HAMMER HILL, PARCEL P311

CLARKSBURG HIGHLANDS, PART OF BLOCK D

PROJ. MGR

DRAWN BY

SCALE AS SHOWN

DATE 04.12.22

FOUNDATION PLAN, SECTIONS & NOTES

S1.01

PROJECT NO. 13.109.41

SHEET NO. 1 OF 1

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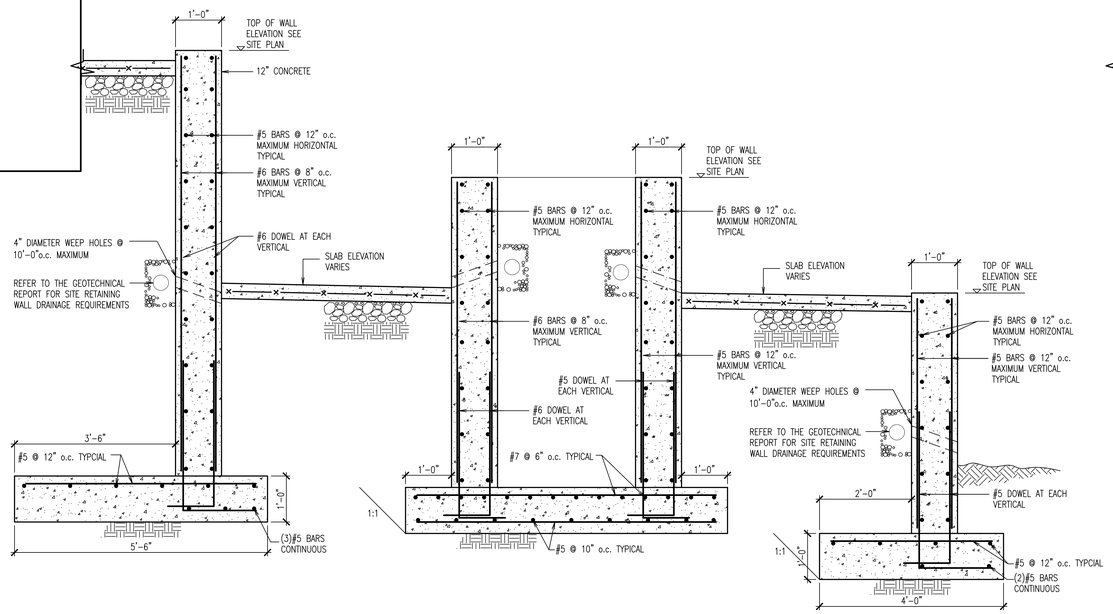
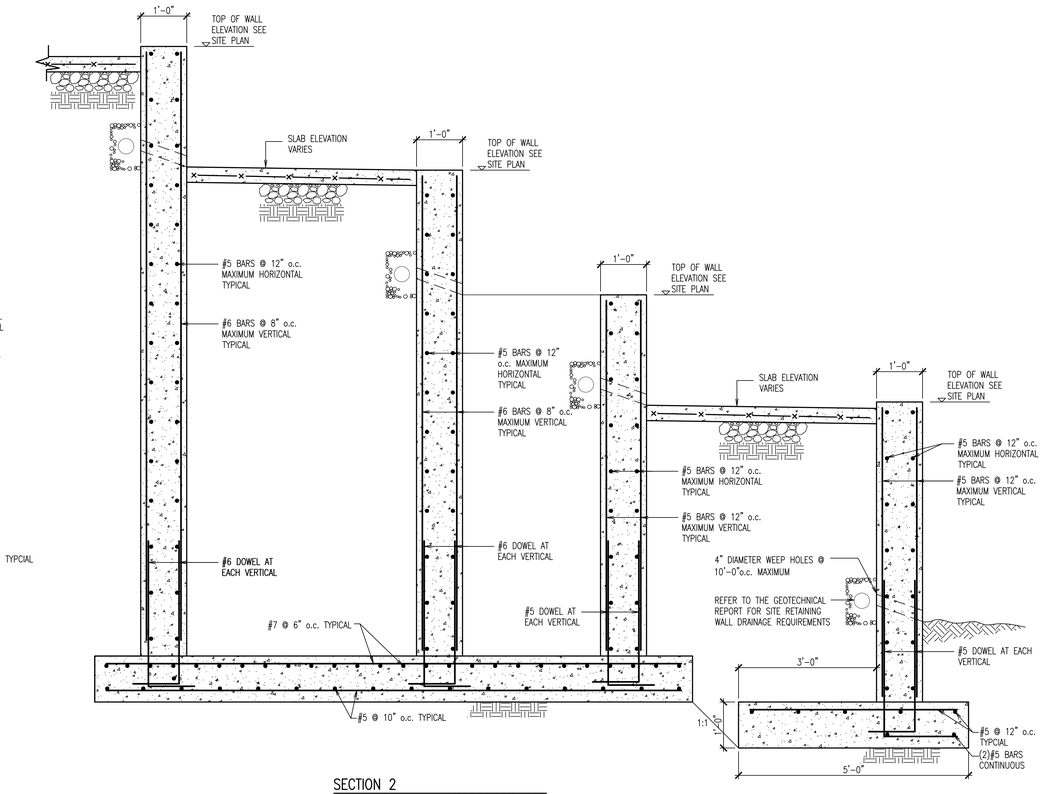


SECTION 1
3/4" = 1'-0"
SEE TYPICAL DETAILS FOR INFORMATION NOT SHOWN



SECTION 2
3/4" = 1'-0"
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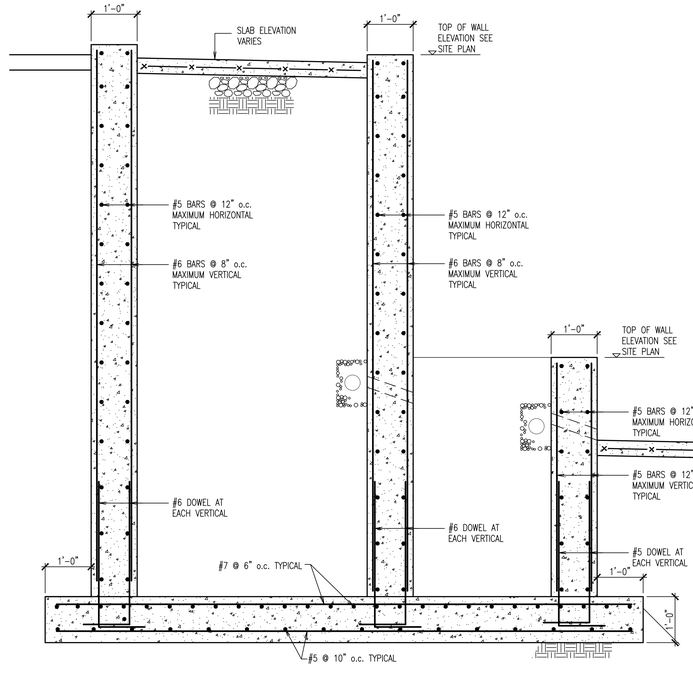

SECTION 3
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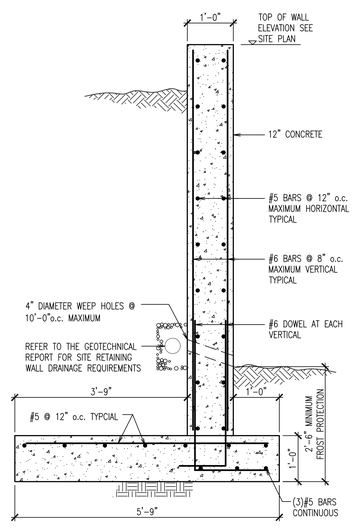

SECTION 4
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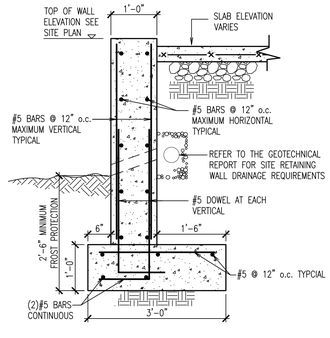

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REVISIONS

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TAX MAP EW31 WSSC 232NW13

2TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

HAMMER HILL, PARCEL P311

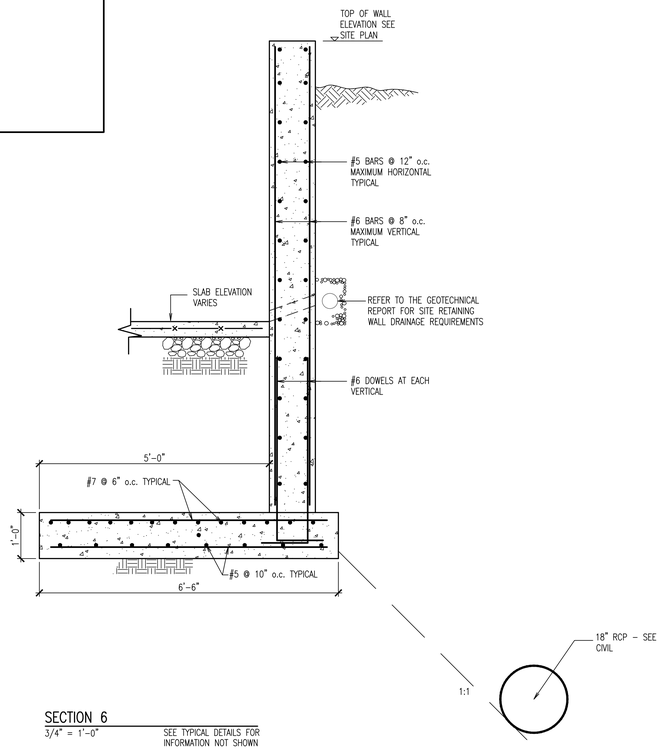
CLARKSBURG HIGHLANDS, PART OF BLOCK D

PROJ. MGR	
DRAWN BY	
SCALE	AS SHOWN
DATE	04.12.22

FOUNDATION PLAN, SECTIONS & NOTES

S1.02

PROJECT NO.	13.109.41
SHEET NO.	1 OF 1



SECTION 6

3/4" = 1'-0"

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REVISIONS

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1	RESOLUTION APPROVAL	9/21/22

TAX MAP EW31 WSSC 232NW13

2TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

HAMMER HILL, PARCEL P311

CLARKSBURG HIGHLANDS, PART OF BLOCK D

PROJ. MGR

DRAWN BY

SCALE AS SHOWN

DATE 04.12.22

FOUNDATION PLAN, SECTIONS & NOTES

S1.03

PROJECT NO. 13.109.41

SHEET NO. 1 OF 1

Black metal handrail

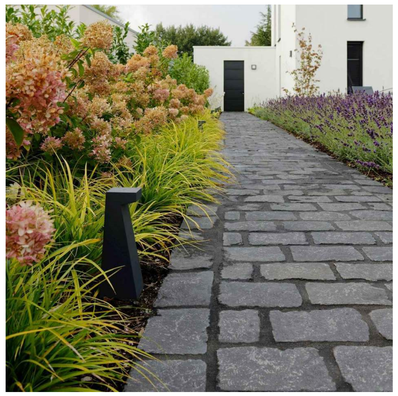
Site Fence

Retaining wall with exposed aggregate finish

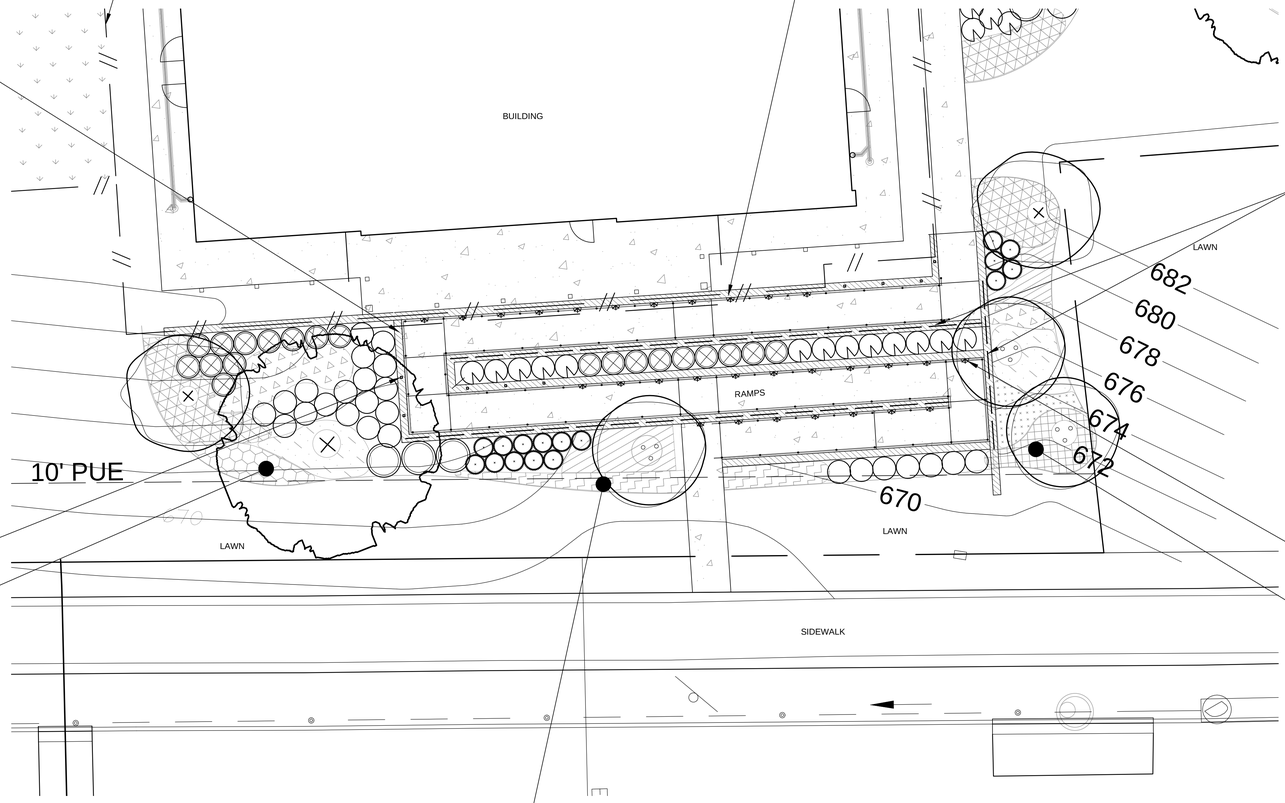
GRAPHIC SCALE
(IN FEET)
1/8" inch = 1 ft.
0 4 8 16

LEGEND

- PROPOSED VARIANCE SHADE TREES
- PROPOSED STREET TREES
- PROPOSED ORNAMENTAL TREES
- PROPOSED DECIDUOUS & EVERGREEN SHRUBS
- HERBACEOUS PERENNIALS
- CONCRETE PAVEMENT
- FENCE PER ARCHITECTURAL PLAN
- GUARD RAIL
- HAND RAIL

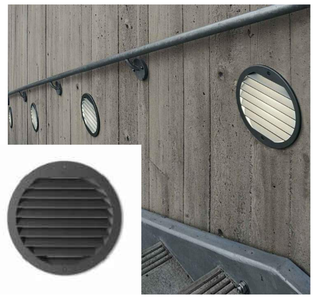


Garden Bollard



Planting bed

Guardrail



Louvered Recessed Wall Light

Planting bed

Forest Pansy Eastern Redbud

Tupelo

Planting bed

Spring Glory Serviceberry

Hidcote English Lavender

Prairie Dropseed

Hidcote English Lavender

Pretty in Pink Daylily

Lilac

Rainbow Knockout Rose

Blue Flag Iris

Zagreb Threadleaf Coreopsis

Pretty in Pink Daylily

Emerald Heights Distylium

Little Henry Virginia Sweetspire

Zagreb Threadleaf Coreopsis

Prairie Dropseed

Compact Inkberry

Gay Butterflies Butterfly Weed

American Hophornbeam

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REVISIONS

NO.	DESCRIPTION	DATE

TAX MAP EW31 WSSC 232NW13

2TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

PARCELS 311 & N366
HAMMER HILL

PROJ. MGR	DCM
DRAWN BY	CEB & PHR
SCALE	1/8" = 1' - 0"
DATE	10.24.2023

HAMMER HILL DAYCARE

LANDSCAPE DESIGN ADA RAMP PRECEDENT

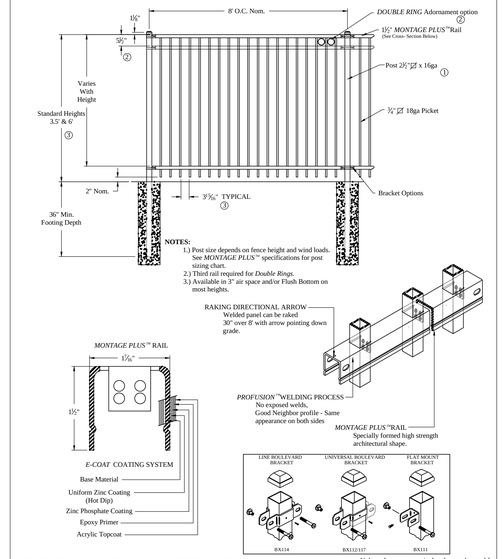
L2.01

PROJECT NO. 13.109.41

SHEET NO. 1 OF 2

MANUFACTURER: PERPETUA IRON LLC
WEBSITE: PERPETUAIRON.COM
PRODUCT NAME: 1 ¼" SQUARE TUBULAR RAILING, ROUNDED EDGES (ALTERTED RAILING 146.1)
COLOR/MATERIAL: BLACK POWDERCOAT FINISH
QUANTITY: 376 L.F.
NOTES: ALL HANDRAILS MUST MEET ADA REQUIREMENTS.

A HANDRAIL
NOT TO SCALE



COMMERCIAL STRENGTH WELDED STEEL PANEL
PRE-ASSEMBLED

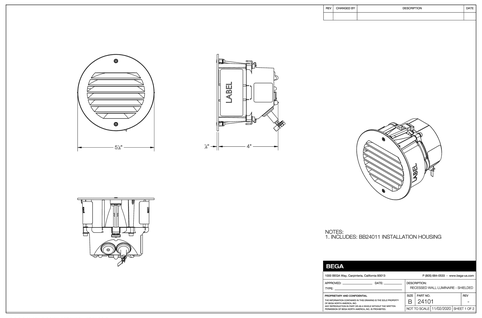
Values shown are nominal and not to be used for installation purposes. See product specification for installation requirements.

MONTAGE PLUS MAJESTIC 2/3-RAIL			
DR: NJB	SH . 1of 1	SCALE: DO NOT SCALE	
CK: BS	Date 09/21/11	REV: e	

AMERISTAR®
1555 N. Mingo
Tulsa, OK 74116
1-888-333-3422
www.ameristarfence.com

MANUFACTURER: AMERISTAR
WEBSITE: AMERISTARPERIMETER.COM
PRODUCT NAME: MONTAGE PLUS, MAJESTIC STYLE, 3.5' HEIGHT GUARDRAIL & 6' SITE FENCE
COLOR/MATERIAL: BLACK FINISH STEEL
QUANTITY: 183 L.F. GUARDRAIL, SITE FENCE 915 L.F.
NOTES: INSTALL PER MANUFACTURER'S INSTRUCTIONS.

RAMP GUARDRAIL & SITE FENCE
NOT TO SCALE

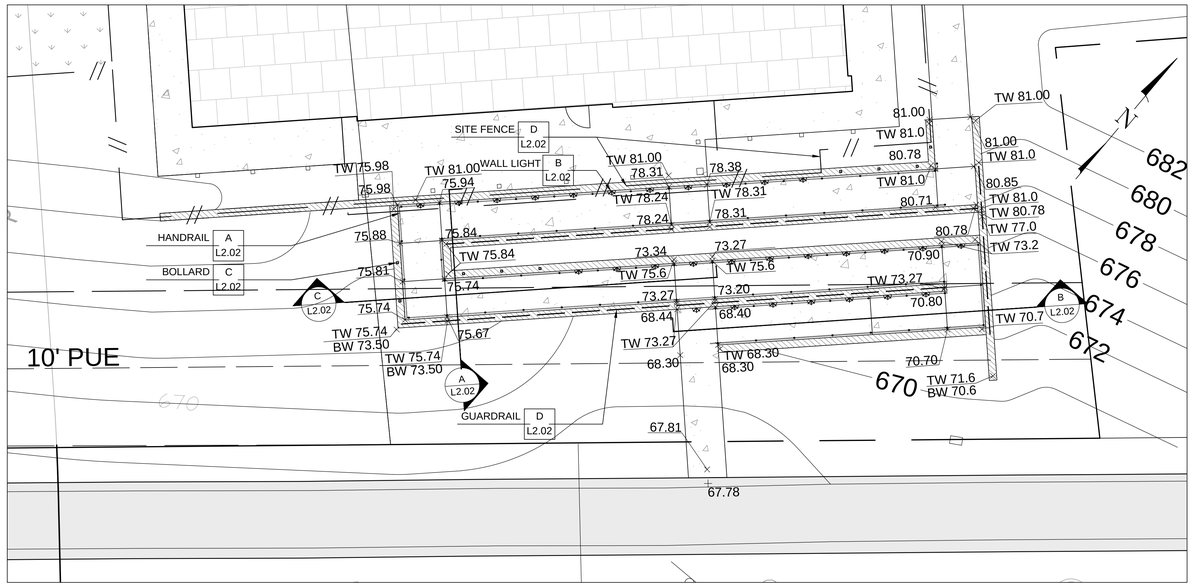


MANUFACTURER: BEGA
WEBSITE: BEGA-US.COM
PRODUCT NAME: 24101, RECESSED WALL LIGHT
COLOR/MATERIAL: BLACK FINISH
QUANTITY: 29
NOTES: INSTALL AT 9" HEIGHT, 5' ON CENTER, PER MANUFACTURER'S INSTRUCTION.

B WALL LIGHT
NOT TO SCALE

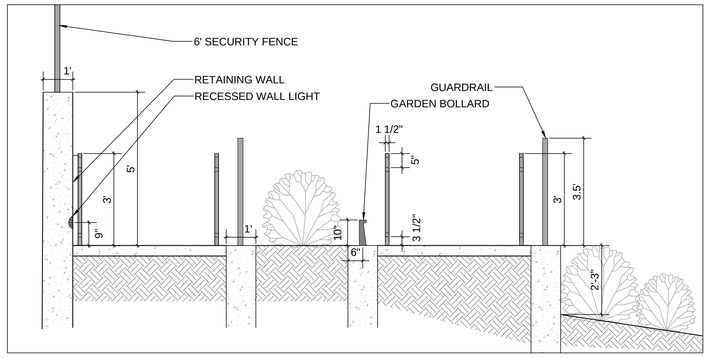
MANUFACTURER: BEGA
WEBSITE: BEGA-US.COM
PRODUCT NAME: 77277, GARDEN BOLLARD
COLOR/MATERIAL: BLACK FINISH
QUANTITY: 9
NOTES: INSTALL WITH HARDSCAPE BASE, 5' ON CENTER, PER MANUFACTURER'S INSTRUCTION.

C GARDEN BOLLARD
NOT TO SCALE

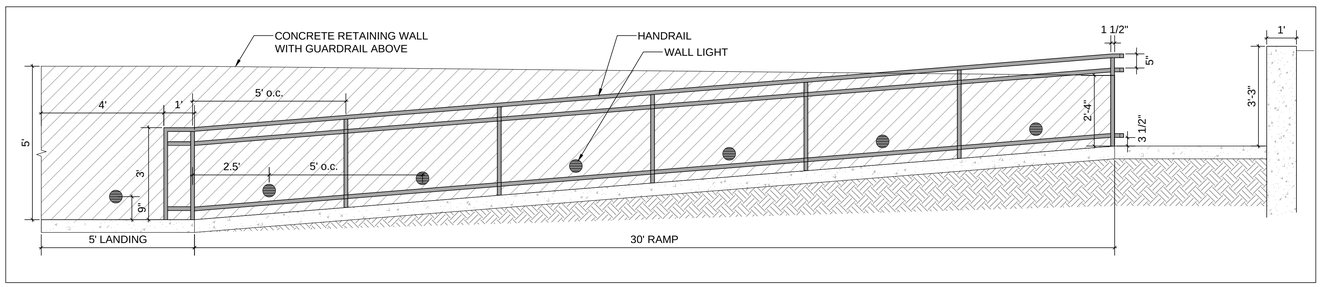


PLAN VIEW - ADA RAMP
SCALE: 1" = 1'

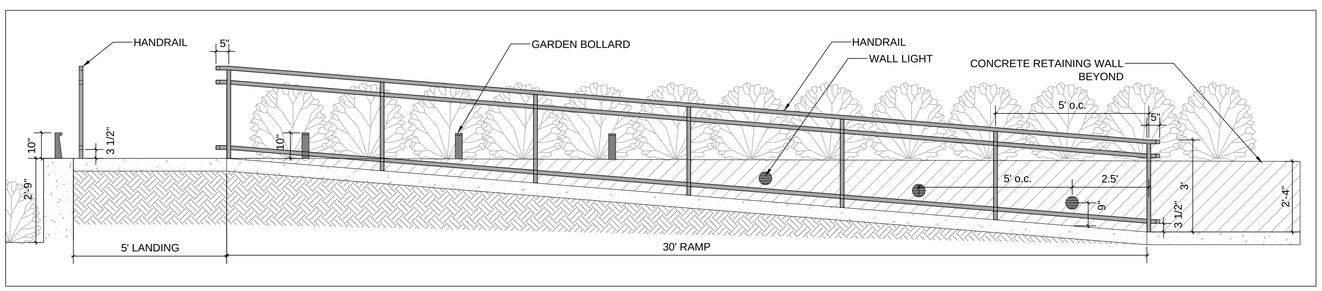
GRAPHIC SCALE
(IN FEET)
1/8" inch = 1 ft.
8 0 4 8 16



SECTION VIEW A
SCALE: 1" = 2'



SECTION VIEW B
SCALE: 1" = 2'



SECTION VIEW C
SCALE: 1" = 2'

MHG
Civil Engineers
Land Planners
Landscape Architects
Land Surveyors
9220 Wightman Road, Suite 120
Montgomery Village, MD 20886
Phone: 301.670.0840
www.mhgpa.com

Professional Certification
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Landscape Architect under the Laws of the State of Maryland. Lic. No. 615
Exp. Date. 09.10.2025

JAISAI PROPERTIES, LLC
4007 BROADSTONE STREET
FREDERICK, MD 21704
PH: (240) 423-3615
EMAIL: PBOLARUM@GMAIL.COM

REVISIONS

NO.	DESCRIPTION	DATE

TAX MAP EW31 WSSC 232NW13

2TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

PARCELS 311 & N366
HAMMER HILL

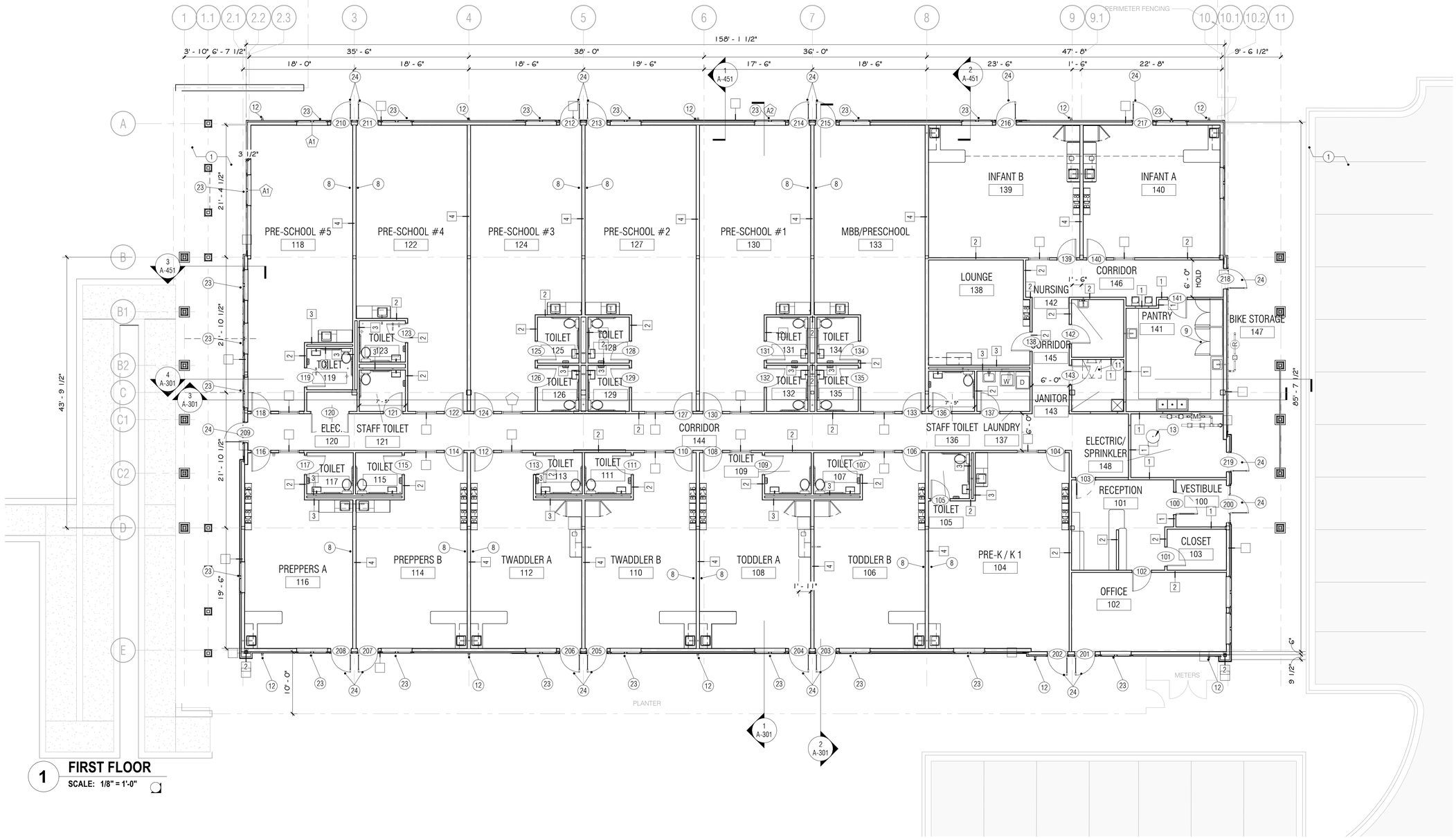
PROJ. MGR	DCM
DRAWN BY	CEB & PHR
SCALE	AS SHOWN
DATE	10.24.2023

HAMMER HILL DAYCARE

LANDSCAPE DESIGN ADA RAMP CONSTRUCTION DETAILS

L2.02

PROJECT NO.	13.109.41
SHEET NO.	2 OF 2



1 FIRST FLOOR

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

GENERAL NOTES

1. REFER TO STRUCTURAL DRAWINGS FOR ALL STRUCTURAL INFORMATION.
2. TLE LOGO ARTWORK PROVIDED BY TLE(CONTACT TLE).
3. ALL ANGLED PARTITIONS, IF SHOWN ON FLOOR PLAN, SHALL BE 45° UNLESS NOTED OTHERWISE.
4. ALL OUTSIDE CORNERS WITHIN ALL ROOMS SHALL HAVE 34" RADIUS PVC CORNER BEADS AT ALL CORNERS, GYPSUM BOARD WINDOW RETURNS AND COLUMNS -SEE DETAILS 2 & 3 /A-091
5. FOR PARTITION DESIGNATIONS REFER TO DRAWING A-012 AND DRAWING A-091 FOR PARTITION TYPE DETAILS.
6. MAKE BELIEVE BLVD. VINYL GRAPHICS TO BE PROVIDED WM PRINTING (REQUIRED). DEVELOPER/GC TO COORDINATE VINYL GRAPHIC DETAILS WITH TLE CONSTRUCTION MANAGER. MBB GRAPHICS ARE PART OF A TLE BRANDED GRAPHICS PACKAGE, WHICH INCLUDES GRAPHICS IN MBB, RECEPTION, CLASSROOMS, LOUNGE & HALLWAYS, ALL OF WHICH ARE THE RESPONSIBILITY OF THE DEVELOPER.
7. REFER TO DRAWING A-111 FOR ENLARGED TOILET ROOM PLANS AND DRINKING FOUNTAIN DETAILS. REFER TO DRAWING P- 100 FOR SPECIFICATIONS.
8. THE FURNITURE AND MILLWORK PLAN WILL BE PROVIDED SEPARATELY FROM THE PERMIT DRAWING SET.
9. ALL MILLWORK ELEVATIONS & DETAILS - SEE DRAWINGS A-131, A-132, A-133, A-134, AND A- 135.
10. FOR PANTRY SEE DRAWING A-134
11. FOR RECEPTION AREA ENLARGED PLANS -SEE DRAWING A-135
12. OUTSIDE PLAYGROUND PLANS AND DETAILS - SEE DRAWINGS A-151 AND A-152
13. REFER TO DRAWING T-200 FOR LIST OF REQUIRED AND APPROVED VENDORS.
14. REFER TO SPECIFICATION DRAWINGS FOR INSTALLATION INFORMATION.
15. REFER TO SPECIFICATION DRAWINGS FOR ALL APPLIANCE, LOW VOLTAGE COMPONENT, AND PLAYGROUND EQUIPMENT SPECIFICATIONS.
16. DRYWALL CONTROL JOINTS TO BE FAS-093X BY CLARK DIETRICH (OR APPROVED EQUAL) AND SHALL BE ALIGNED WITH DOOR OR WINDOW JAMB (LEFT OR RIGHT) AT MAXIMUM INTERVALS OF 30'-0". ALSO REFER TO DETAIL 2 ON DRAWING A-042.
17. THE ENTIRE BUILDING SHALL BE THOROUGHLY CLEANED AT THE COMPLETION OF CONSTRUCTION.
18. PROVIDE EMERGENCY LOCKDOWN DEVICE AS SPECIFIED ON SHEET A-122 AND T-201.
19. SECURITY ALARM CONTACTS TO BE INSTALLED AT ALL EXTERIOR DOORS.
20. GENERAL CONTRACTOR TO REFER MILLWORK DRAWINGS AND TO CROSS REFERENCE WITH PLUMBING, ELECTRICAL AND STRUCTURAL.
21. FIRE EXTINGUISHERS NOT TO BE PLACED ON RECEPTION WALL DUE TO WALL GRAPHICS. VINYL GRAPHICS TO BE PROVIDED BY FAST SIGNS (REQUIRED)

PLAN SHEET NOTES

1. CONCRETE SIDEWALK. REFER TO APPROVED SITE PLANS FOR FINISHES AND DETAILS. ENSURE SIDEWALKS ARE CLEAR OF OBSTRUCTIONS. PROVIDE FENCING AROUND ANY POTENTIAL SAFETY HAZARDS TO PREVENT ACCESS BY CHILDREN
2. PROVIDE CONCRETE PAD AND CANVAS AWNING. PROVIDE PICNIC TABLES AS SHOWN. REFER TO DRAWINGS A-151 & A-152 FOR ADDITIONAL INFORMATION
3. 4 FT. TALL SOLID VINYL PRIVACY FENCE AND GATE. SEE DRAWING A-151 FOR MORE INFORMATION
4. 6 FT. TALL SOLID VINYL PRIVACY FENCE AND GATE. SEE DRAWING A-151 FOR MORE INFORMATION
5. PITTCON 6" RADIUS SO-LRT OUTSIDE CORNER WITH TANGENT FINS BY SOFTFORMS. REFER TO DETAIL 4 ON DRAWING A-091
6. 55" TV TO BE MOUNTED VERTICALLY AT 60" AFF TO C.L. (39" AFF TO BOTTOM, 88" AFF TO TOP) WITH FLUSH-MOUNT, NON-TILT BRACKET APPROVED FOR MOUNTING IN VERTICAL ORIENTATION. PROVIDE (1) DUPLEX RECEPTACLE AND (1) DATA RECEPTACLE AT 72" AFF TO C.L. PROVIDE 2x10 BLOCKING (32" WIDE) BEHIND TV, FLUSH WITH BOTTOM OF OUTLET, AND CENTERED ON OUTLET. REFER TO DRAWING SPECIFICATIONS FOR FURTHER INFORMATION.
7. PROVIDE DVR SHELF AND (2) MONITORS; TO BE MOUNTED ON (2) WALL-MOUNTED BRACKETS WITH 2X10" BLOCKING (32" WIDE) FLUSH WITH BOTTOM OF OUTLET AND CENTERED ON OUTLET. REFER TO DETAILS 1 & 2 ON DRAWING A-134. DVR SHOULD HAVE NO HARD DRIVE AND CANNOT RECORD
8. SMART BOARD PROVIDED BY FRANCHISEE AND TO BE INSTALLED BY OTHERS - REFER TO DETAILS ON DRAWING A-082
9. G.C. TO PROVIDE AND INSTALL (1) WIRE SHELF 16" DEEP MOUNTED AT 6'-0" A.F.F.; FASTENED DIRECTLY TO STUDS. PROVIDE 2x10 BLOCKING. REFER TO DETAIL 7 ON SHEET A-131.

LAUNDRY: WALL TO WALL SHELF, ABOVE WASHER/DRYER
JAN. CL.: 3'-0" WIDE, ABOVE UTILITY SINK

10. PROVIDE (5) 16" DEEP WIRE SHELVES IN THE CLOSET, WALL TO WALL. FIRST SHELF AT 20" A.F.F., THEN 34", 48", 62", & 76" A.F.F. (5 SHELVES TOTAL). PROVIDE 2x10" BLOCKING. REFER TO DETAIL 7 ON DRAWING A-131
11. 36"x36" ROOF ACCESS HATCH AND LADDER SHALL BE KEPT CLEAR OF ALL DUCTS, WIRE, CONDUITS, OR OTHER FIXED ITEMS. SEE DETAILS ON DRAWING A-032
12. GUTTER DOWNSPOUT TO GRADE. CONNECT TO UNDERGROUND STORM SYSTEM. (TYP.) REFER TO DRAWING A-031, A-032 AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
13. WATER HEATER; REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION
14. INSTALL 1/2" THICK (MIN.), 2 1/2" TALL PRIMED WOOD CHAIR RAIL (EXAMPLE: DYKES LUMBER PROFILE #552) AT 36" A.F.F. OVER CARPETED SECTION OF ROOM IN INFANT ROOM(S) ONLY. PAINTED 'W' PER DRAWING A-042.
15. REFER TO TYPICAL MECHANICAL ROOM LAYOUT ON DRAWING E-201.
16. BLOCKING FOR STANDING SEAM METAL AWNING REFER TO STRUCTURAL DWGS
17. STAFF LOCKERS. REFER TO DETAIL 1 ON A-131.
18. KEY FOB. REFER TO ELECTRICAL DRAWINGS.
19. CALL BOX. REFER TO ELECTRICAL DRAWINGS.
20. BURGLAR ALARM KEYPAD. REFER TO ELECTRICAL DRAWINGS.
21. FIRE ALARM CONTROL PANEL. REFER TO ELECTRICAL DRAWINGS.
22. DOOR RELEASE BUTTONS BY SECURITY VENDOR. REFER TO A-134 FOR DETAILS.
23. PROVIDE OPAQUE FILM ON INTERIOR FACE OF GLASS 3M NIGHT VISION 15 OR APPROVED EQUAL. REFER TO DETAIL 4/A-082
24. SECURITY ALARM CONTRACTS TO BE INSTALLED AT ALL EXTERIOR CLASSROOM DOOR & 6' PLAYGROUND GATES (REFER TO ELECTRICAL AS WELL FOR MORE DETAILS
25. DF-2 (REFER TO SPEC ON PLUMBING SHEETS)

LEGEND

- NEW WALL
- EXISTING WALL
- MILLWORK BY G.C.
- AREA NOT IN SCOPE

SKA STUDIO

47 Randall St.
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301 858 5853

ISSUE RECORD		DATE
1	HAWP APPLICATION SUBMISSION	11/29/23

PROJECT

HAMMER HILL DAYCARE CENTER

23312 FREDERICK RD
CLARKSBURG, MD 20871
PROJECT # 10272

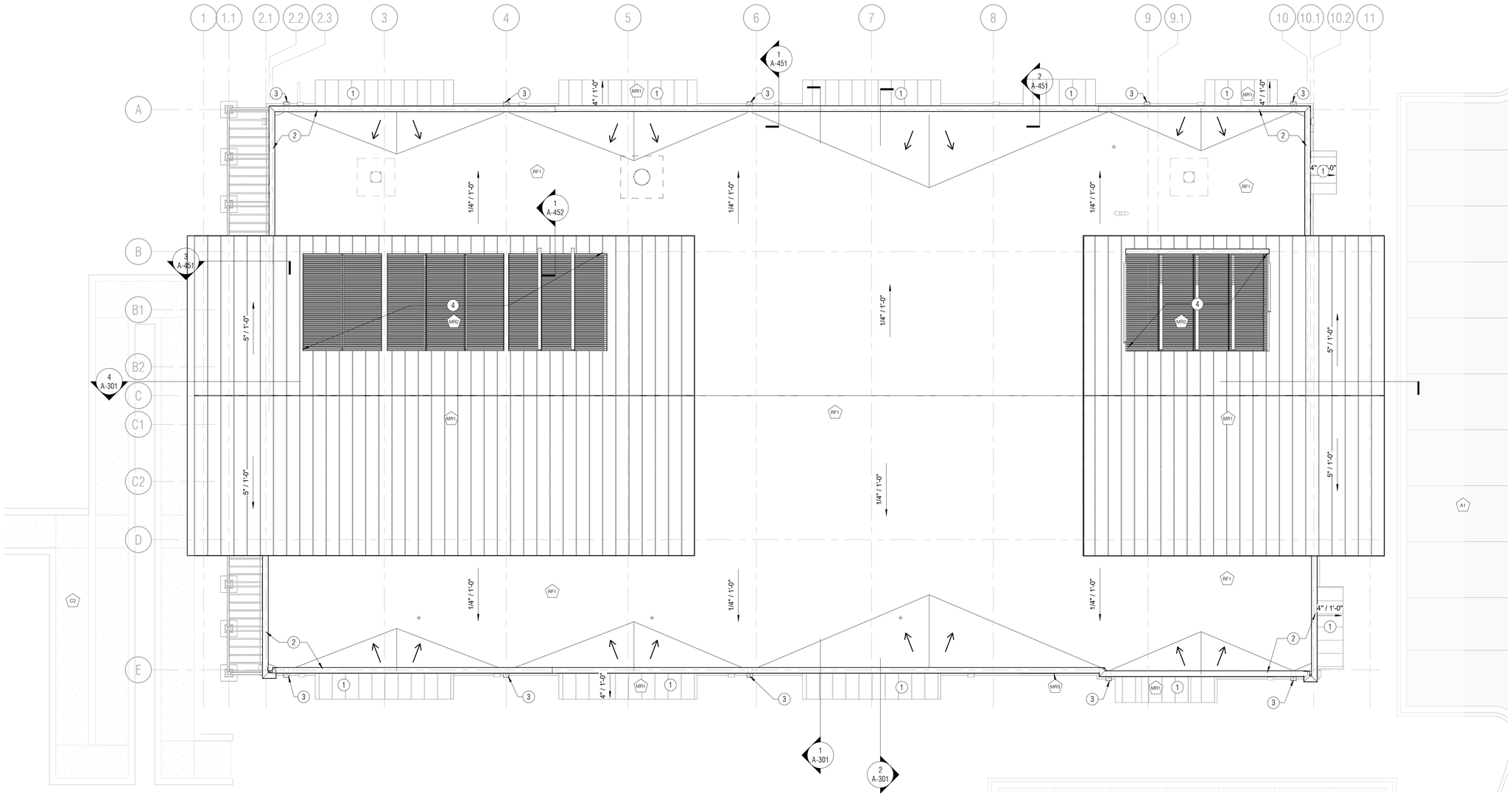
DRAWING INFORMATION

STAMP

SHEET

FLOOR PLAN

A-101



1 ROOF PLAN

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

GENERAL NOTES

1. GENERAL CONTRACTOR (GC) SHOULD FIELD VERIFY CONDITIONS AND NOTIFY ARCHITECT IN WRITING OF ANY QUESTIONS.
2. REFER TO SPECIFICATIONS DRAWINGS FOR ADDITONAL INFORMATION FOR ROOFING, FLASHING REQUIREMENTS, AND MATERIALS.
3. ALL ROOF PENETRATIONS SHALL BE LOCATED 3'-0" OR MORE FROM DRAINAGE FLOW LINES.
4. VERIFY & COORDINATE DUCT CURB AND ROOF PENETRATION LOCATIONS; REFER TO THE MECHANICAL, ELECTRICAL, PLUMBING AND STRUCTURAL DRAWINGS FOR ADDITONAL REQUIREMENTS AND COORDINATION.
5. PLUMBING VENTS OR EXHAUST UNITS ARE NOT ALLOWED WITHIN 10'-0" OF AIR METAL INTAKES OR 5'-0" OF EXTERIOR WALLS - REFER TO MECHANICAL DWGS.
6. ALL SHEET METAL FLASHING TO COMPLY WITH THE "ARCHITECTURAL SHEET METAL MANUAL", LATEST EDITION AS PUBLISHED BY THE SHEET METAL AND AIR CONDITONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA)
7. ALL SHEET METAL FLASHING EXPOSED TO THE PUBLIC SHALL BE PAINTED OR PREFINISHED TO MATCH ROOFING COLOR. SEE BUILDING ELEVATIONS FOR COLOR SPECIFICATIONS. ALL OTHER NON-EXPOSED FLASHING TO BE GALVANIZED.
8. UPON COMPLETION OF CONSTRUCTION AND PRIOR TO TENANT OCCUPANCY, G.C. SHALLL ENSURE THAT THE ENTIRE ROOF, ROOF SCUPPERS/DOWNSPOUTS, AND OVERFLOW SCUPPERS ARE COMPLETELY CLEAR OF ANY AND ALL DEBRIS (CONSTRUCTION, NATURAL, OR OTHERWISE).
9. PRIMARY ROOF DRAIN LEADERS AND GUTTER DOWNSPOUTS MUST CONNECT TO UNDERGROUND STORM SYSTEM, REFER TO KN 12 ON A-011 AND DETAIL 3 ON P-500. GUTTER DOWNSPOUTS SHALL DROP THROUGH SIDEWALK TO CONNECT TO UNDEGROUND SYSTEM (REFER TO DETAIL 7/A-032). OVERFLOW DRAINS TO BE INSTALLED AS REQUIRED BY CODE.

PLAN SHEET NOTES

1. METAL AWNING BELOW, REFER TO EXTERIOR ELEVATIONS FOR COLOR.
2. METAL PARAPET COPING, REFER TO EXTERIOR ELEVATIONS FOR COLOR.
3. METAL SCUPPER BOX AND DOWNSPOUT.
4. LOUVERED VENTS FOR MECHANICAL EQUIPMENT. SLOPE WITH ROOF.

ROOF PLAN LEGEND

FOUNDATION WALLS AND ROOFING		PAVING	
FW1 CONCRETE FOUNDATION WALL		A1 ASPHALT PAVING	
MR1 STANDING SEAM METAL ROOF		C1 BUILDING CONCRETE FOUNDATION SLAB	
MR2 ALUMINUM LOUVER SCREEN		C2 CONCRETE RAMP	
MR3 METAL COPING WITH DRIP EDGE			

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PROJECT

HAMMER HILL DAYCARE CENTER

23312 FREDERICK RD
CLARKSBURG, MD 20871
PROJECT # 10272

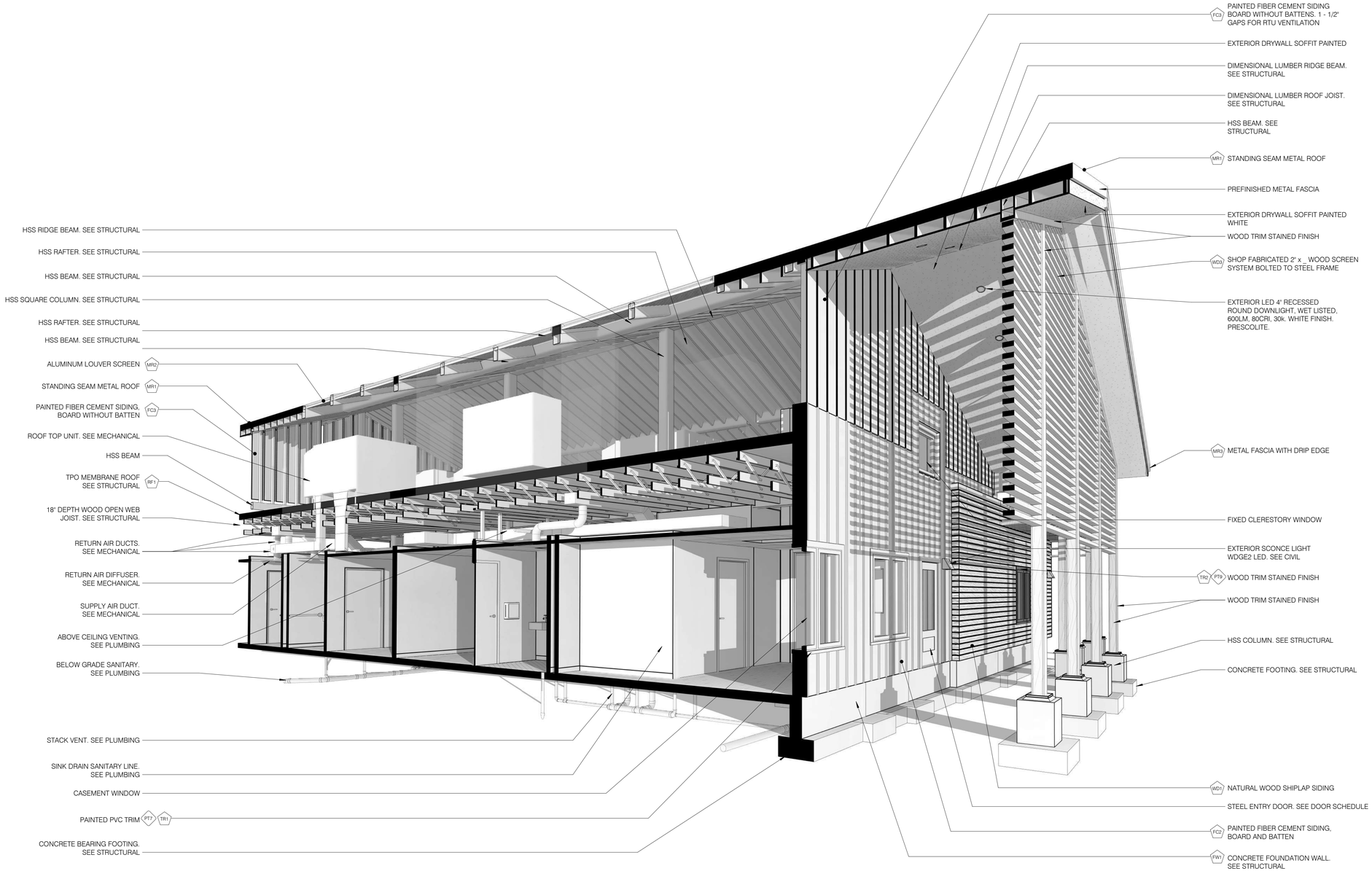
DRAWING INFORMATION

STAMP

SHEET

ROOF PLAN

A-102



GENERAL NOTES

1. REFER TO A-500 DETAILS & A-605 EXTERIOR FINISH SCHEDULE FOR FINISH DESIGNATIONS, PRODUCT INFO, AND SIZING.
2. REFER TO A-603 EXTERIOR FENESTRATIONS SCHEDULE FOR MATERIAL IDENTIFICATION, PRODUCT INFO, AND SIZING
3. REFER TO A-250 ENLARGED ELVATIONS FOR EXPANDED MATERIAL IDENTIFICATION, SIZING SELECTIONS AND DIMENSIONS
4. REFER TO A-900 ARCHITECTURAL SPECIFICATIONS FOR DETAILED PRODUCT INFO

EXTERIOR FINISH LEGEND

FOUNDATION WALLS AND ROOFING

- FW1 CONCRETE FOUNDATION WALL
- MR1 STANDING SEAM METAL ROOF
- MR2 ALUMINUM LOUVER SCREEN
- MR3 METAL COPING WITH DRIP EDGE

SIDING AND TRIM

- FC1 PAINTED FIBER CEMENT SIDING, SQUARE CHANNEL
- FC2 PAINTED FIBER CEMENT SIDING, BOARD AND BATTEN
- FC3 PAINTED FIBER CEMENT SIDING, BOARD WITHOUT BATTEN
- TR1 PAINTED PVC TRIM
- WD1 NATURAL WOOD SHIPLAP SIDING
- WD2 NATURAL WOOD TRIM
- WD3 SHOP FABRICATED 2" x __ WOOD SCREEN SYSTEM
- PTX PAINT TAG. SEE A-605 FOR EXTERIOR PAINT SCHEDULE

HEIGHT
5' - 0"

PAVING

- A1 ASPHALT PAVING
- C1 BUILDING CONCRETE FOUNDATION SLAB
- C2 CONCRETE RAMP

EXTERIOR FENESTRATIONS LEGEND

WINDOWS

- A1 CASEMENT WINDOW. SEE EXTERIOR FENESTRATIONS SCHEDULE A-603
- A2 CASEMENT WINDOW PAINTED FINISH PT9. SEE EXTERIOR FENESTRATIONS SCHEDULE A-603
- B FIXED CLERESTORY WINDOW. SEE EXTERIOR FENESTRATIONS SCHEDULE

DOORS - SEE EXTERIOR EXTERIOR FENESTRATIONS SCHEDULE

- E1 EXTERIOR DOOR
- E2 EXTERIOR DOOR PAINTED FINISH PT9
- F EXTERIOR ENTRY DOOR WITH SIDELITES
- G EXTERIOR DOOR SPRINKLER ROOM

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PROJECT **HAMMER HILL DAYCARE CENTER**

23312 FREDERICK RD
CLARKSBURG, MD 20871
PROJECT # 10272

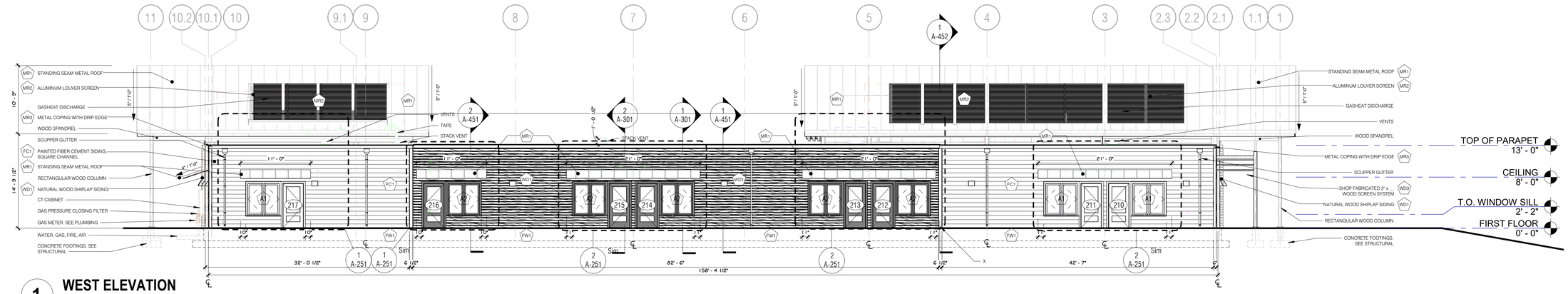
DRAWING INFORMATION

STAMP

SHEET

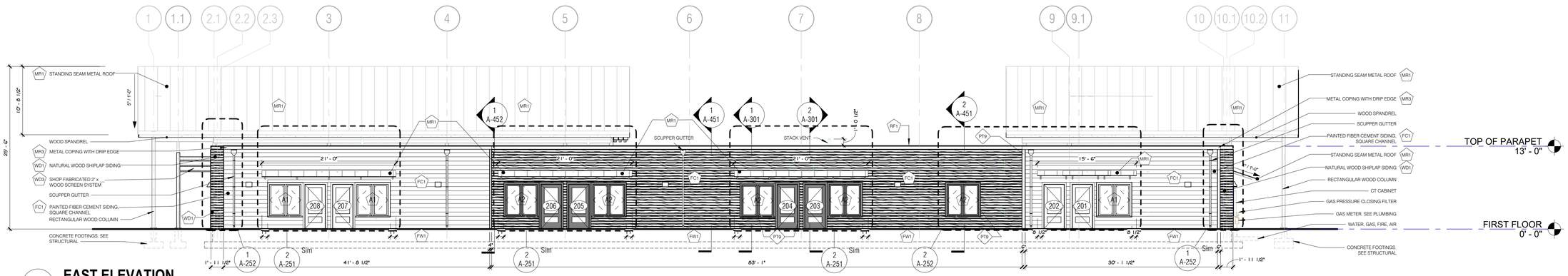
EXTERIOR FINISH DIAGRAM

A-200



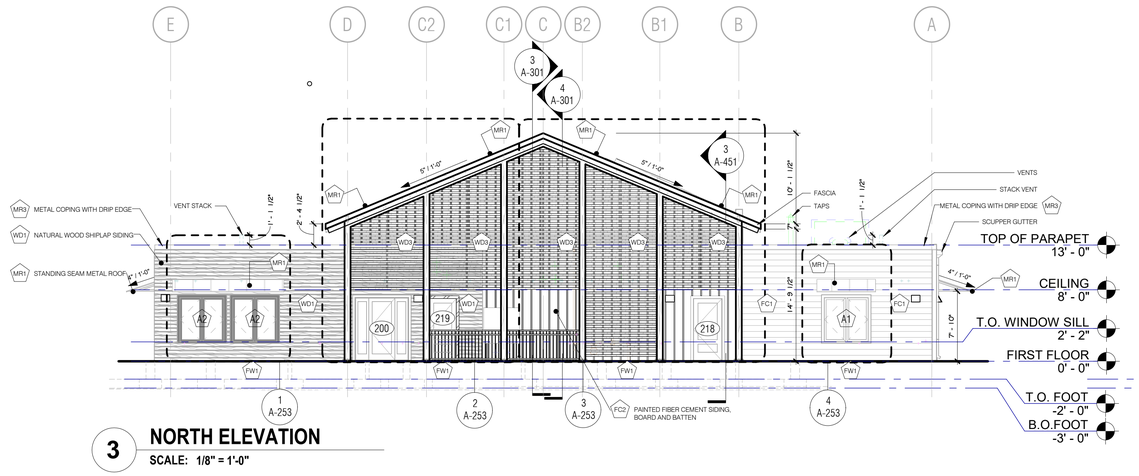
1 WEST ELEVATION

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



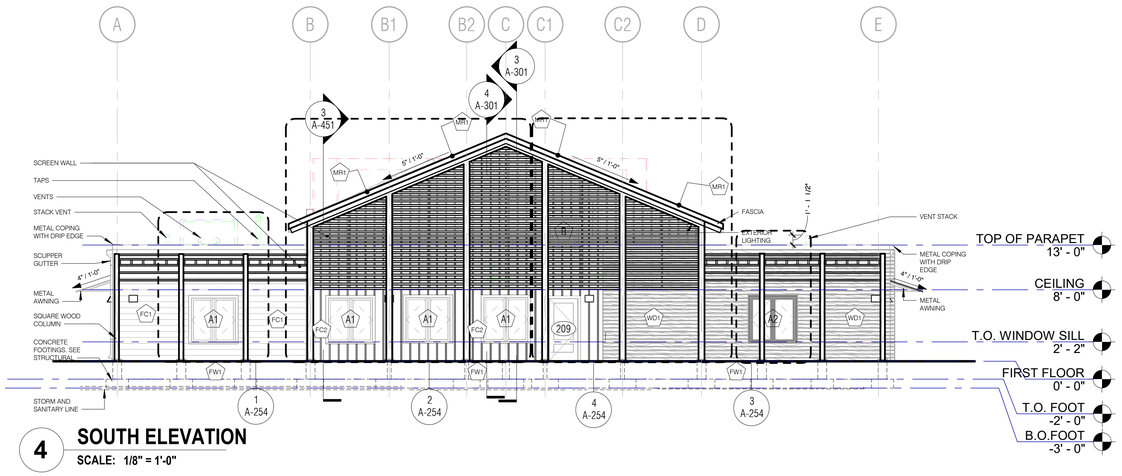
2 EAST ELEVATION

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



3 NORTH ELEVATION

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



4 SOUTH ELEVATION

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

GENERAL NOTES

1. REFER TO A-500 DETAILS & A-605 EXTERIOR FINISH SCHEDULE FOR FINISH DESIGNATIONS, PRODUCT INFO, AND SIZING.
2. REFER TO A-603 EXTERIOR FENESTRATIONS SCHEDULE FOR MATERIAL IDENTIFICATION, PRODUCT INFO, AND SIZING
3. REFER TO A-250 ENLARGED ELVATIONS FOR EXPANDED MATERIAL IDENTIFICATION, SIZING SELECTIONS AND DIMENSIONS
4. REFER TO A-900 ARCHITECTURAL SPECIFICATIONS FOR DETAILED PRODUCT INFO

EXTERIOR FINISH LEGEND

FOUNDATION WALLS AND ROOFING

- FW1 CONCRETE FOUNDATION WALL
- MR1 STANDING SEAM METAL ROOF
- MR2 ALUMINUM LOUVER SCREEN
- MR3 METAL COPING WITH DRIP EDGE

SIDING AND TRIM

- FC1 PAINTED FIBER CEMENT SIDING, SQUARE CHANNEL
- FC2 PAINTED FIBER CEMENT SIDING, BOARD AND BATTEN
- FC3 PAINTED FIBER CEMENT SIDING, BOARD WITHOUT BATTEN
- TR1 PAINTED PVC TRIM
- WD1 NATURAL WOOD SHIPLAP SIDING
- WD2 NATURAL WOOD TRIM
- WD3 SHOP FABRICATED 2" x WOOD SCREEN SYSTEM
- PTX PAINT TAG. SEE A-605 FOR EXTERIOR PAINT SCHEDULE

PAVING

- A1 ASPHALT PAVING
- C1 BUILDING CONCRETE FOUNDATION SLAB
- C2 CONCRETE RAMP

EXTERIOR FENESTRATIONS LEGEND

WINDOWS

- A1 CASEMENT WINDOW. SEE EXTERIOR FENESTRATIONS SCHEDULE A-603
- A2 CASEMENT WINDOW PAINTED FINISH PT9. SEE EXTERIOR FENESTRATIONS SCHEDULE A-603
- B FIXED CLERESTORY WINDOW. SEE EXTERIOR FENESTRATIONS SCHEDULE

DOORS - SEE EXTERIOR EXTERIOR FENESTRATIONS SCHEDULE

- E1 EXTERIOR DOOR
- E2 EXTERIOR DOOR. PAINTED FINISH PT9
- F EXTERIOR ENTRY DOOR WITH SIDELITES
- G EXTERIOR DOOR. SPRINKLER ROOM

SKA STUDIO

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ISSUE RECORD		DATE
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PROJECT

HAMMER HILL DAYCARE CENTER

23312 FREDERICK RD
CLARKSBURG, MD 20871
PROJECT # 10272

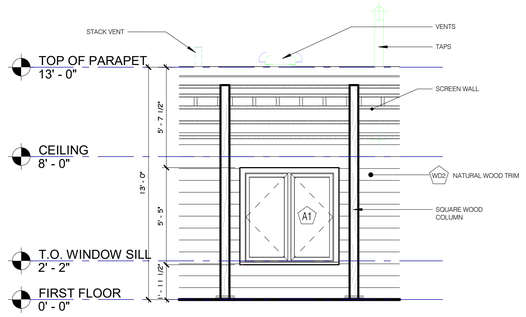
DRAWING INFORMATION

STAMP

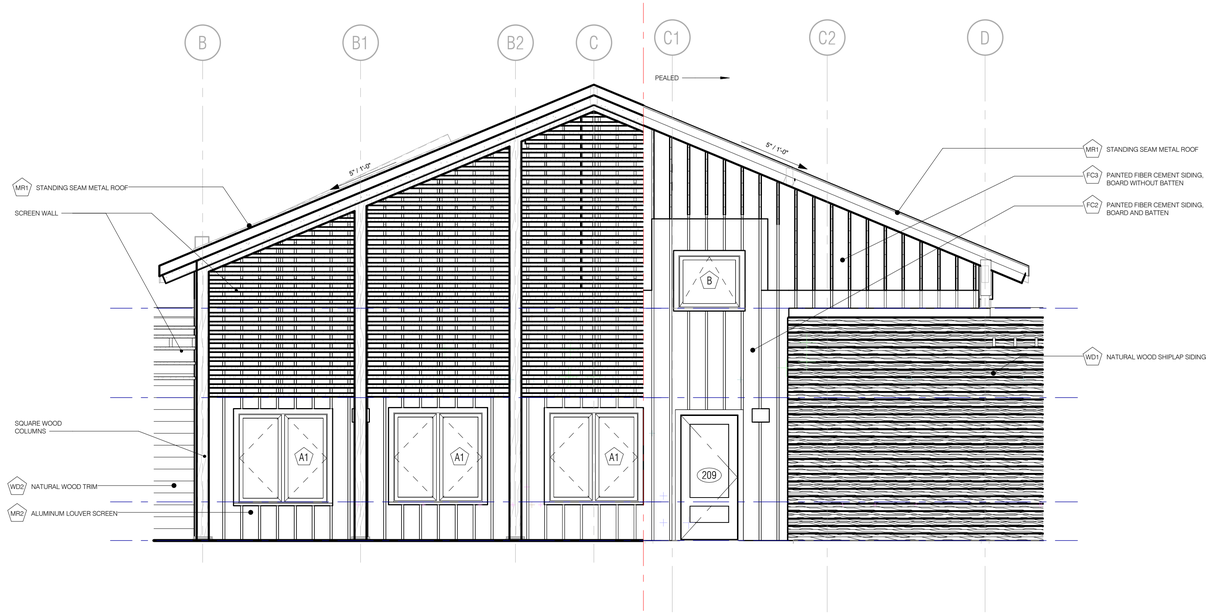
SHEET

BUILDING ELEVATIONS

A-201

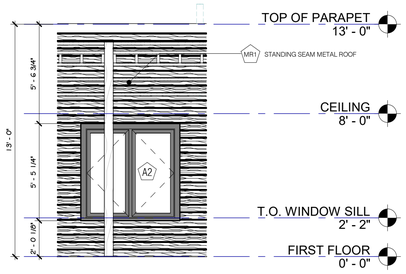


1 SOUTH ELEVATION - TYPE 1
1/4" = 1'-0"

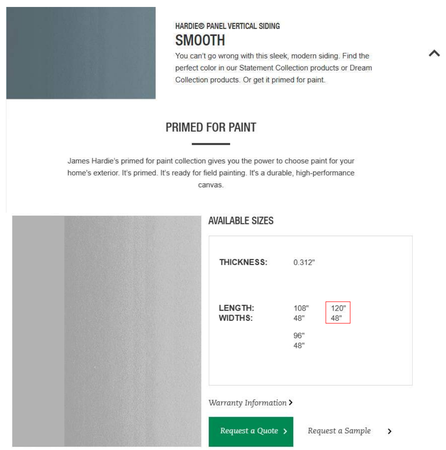


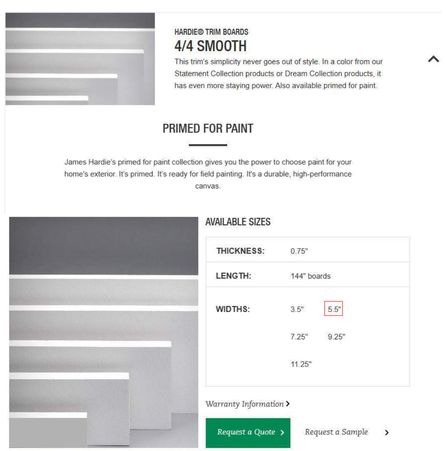
2 SOUTH ELEVATION - TYPE 2
1/4" = 1'-0"

4 SOUTH ELEVATION - TYPE 3 (PEALED)
1/4" = 1'-0"



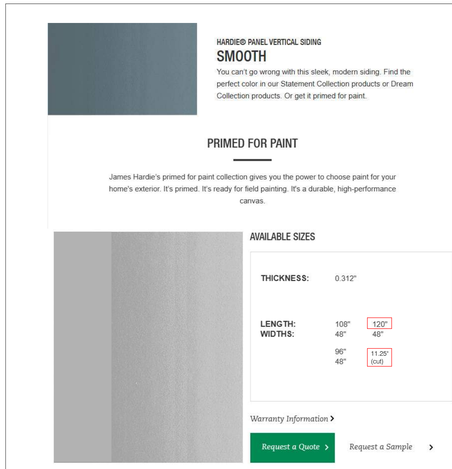
3 SOUTH ELEVATION - TYPE 4 (PEALED)
1/4" = 1'-0"



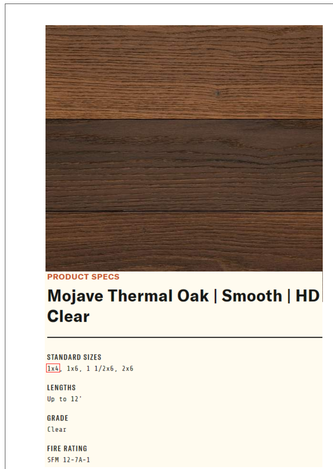


FC2 PAINTED FIBER CEMENT SIDING, BOARD AND BATTEN
PT6 PAINT - BLUE

PT6 PAINT - BLUE



FC3 PAINTED FIBER CEMENT SIDING, BOARD WITHOUT BATTEN
PT6 PAINT - BLUE



WD2 NATURAL WOOD TRIM

WOOD SCREEN WALL
SPEC PLACEHOLDER

WD3 SHOP FABRICATED 2" x __
WOOD SCREEN SYSTEM

GENERAL NOTES

1. REFER TO A-500 DETAILS & A-605 EXTERIOR FINISH SCHEDULE FOR FINISH DESIGNATIONS, PRODUCT INFO, AND SIZING.
2. REFER TO A-603 EXTERIOR FENESTRATIONS SCHEDULE FOR MATERIAL IDENTIFICATION, PRODUCT INFO, AND SIZING
3. REFER TO A-250 ENLARGED ELVATIONS FOR EXPANDED MATERIAL IDENTIFICATION, SIZING SELECTIONS AND DIMENSIONS
4. REFER TO A-900 ARCHITECTURAL SPECIFICATIONS FOR DETAILED PRODUCT INFO

EXTERIOR FINISH LEGEND

FOUNDATION WALLS AND ROOFING

- FW1 CONCRETE FOUNDATION WALL
- MR1 STANDING SEAM METAL ROOF
- MR2 ALUMINUM LOUVER SCREEN
- MR3 METAL COPING WITH DRIP EDGE

SIDING AND TRIM

- FC1 PAINTED FIBER CEMENT SIDING, SQUARE CHANNEL
- FC2 PAINTED FIBER CEMENT SIDING, BOARD AND BATTEN
- FC3 PAINTED FIBER CEMENT SIDING, BOARD WITHOUT BATTEN
- TR1 PAINTED PVC TRIM
- WD1 NATURAL WOOD SHIPLAP SIDING
- WD2 NATURAL WOOD TRIM
- WD3 SHOP FABRICATED 2" x __ WOOD SCREEN SYSTEM
- PTX PAINT TAG. SEE A-605 FOR EXTERIOR PAINT SCHEDULE

4" HEIGHT
5' - 0"

PAVING

- A1 ASPHALT PAVING
- C1 BUILDING CONCRETE FOUNDATION SLAB
- C2 CONCRETE RAMP

EXTERIOR FENESTRATIONS LEGEND

WINDOWS

- A1 CASEMENT WINDOW. SEE EXTERIOR FENESTRATIONS SCHEDULE A-603
- A2 CASEMENT WINDOW PAINTED FINISH PT9. SEE EXTERIOR FENESTRATIONS SCHEDULE A-603
- B FIXED CLERESTORY WINDOW. SEE EXTERIOR FENESTRATIONS SCHEDULE

DOORS - SEE EXTERIOR EXTERIOR FENESTRATIONS SCHEDULE

- E1 EXTERIOR DOOR
- E2 EXTERIOR DOOR. PAINTED FINISH PT9
- F EXTERIOR ENTRY DOOR WITH SIDELITES
- G EXTERIOR DOOR. SPRINKLER ROOM

Scale : As indicated

SKA STUDIO
47 Randall St.
Suite 2
Annapolis, MD 21401
skastudio.com
301 858 5853

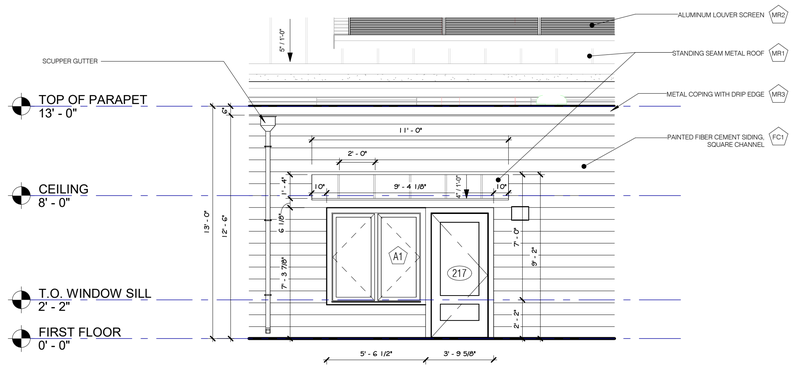
ISSUE RECORD | DATE
1 HAWP APPLICATION SUBMISSION | 11/29/23

PROJECT **HAMMER HILL DAYCARE CENTER**
23312 FREDERICK RD
CLARKSBURG, MD 20871
PROJECT # 10272

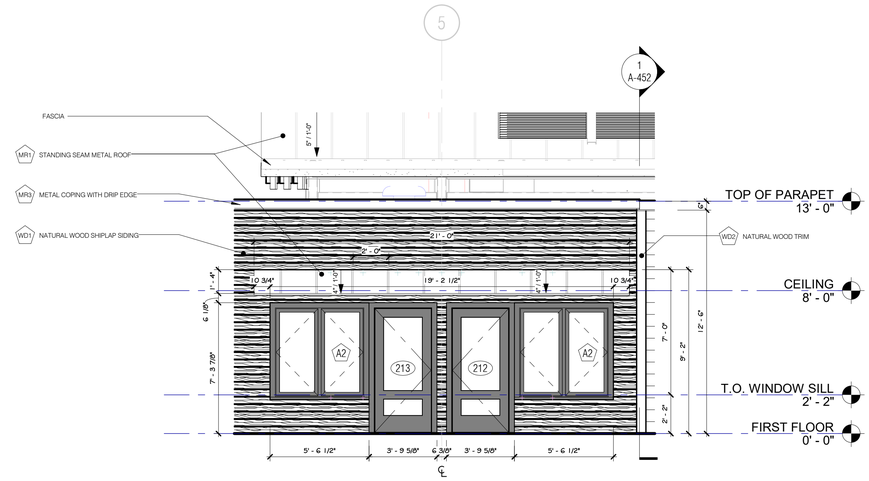
DRAWING INFORMATION

STAMP

SHEET
ENLARGED ELEVATIONS - SOUTH
A-254



1 WEST ELEVATION - TYPE 1 TYPICAL
1/4" = 1'-0"



2 WEST ELEVATION - TYPE 2 TYPICAL
1/4" = 1'-0"

HARDIE® ARTISAN SIDING

ARTISAN SQUARE CHANNEL SIDING

Artisan Square Channel's precise, right-angle cuts create wideset channels that complement traditional and modern styles.

PRIMED FOR PAINT

James Hardie's primed for paint collection gives you the power to choose paint for your home's exterior. It's primed. It's ready for field painting. It's a durable, high-performance canvas.

AVAILABLE SIZES

THICKNESS:	0.625"
LENGTH:	144" boards
WIDTHS:	10.25"
EXPOSURES:	9"

Request a Sample ›

FC1 PAINTED FIBER CEMENT SIDING, SQUARE CHANNEL

PT8 PAINT - GRAY

PRODUCT SPECS

Mojave Thermal Oak | Smooth | HD Clear

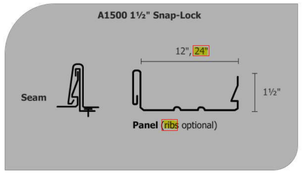
STANDARD SIZES
1x4, 1x6, 1 1/2x6, 2x6

LENGTHS
Up to 12'

GRADE
Clear

FIRE RATING
SFM 12-7A-1

WD1 NATURAL WOOD SHIPLAP SIDING

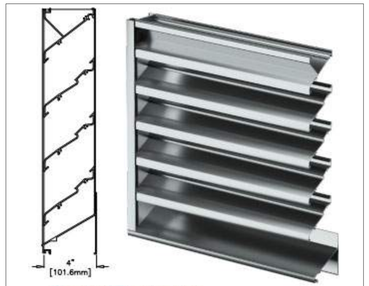


A1500 Metal Roof System

The A1500 metal roof panel is a 1 ½" high integral snap-lock architectural metal roofing system consisting of an integral narrow batten seam that snaps over a rigid, continuous interlock leg to create a rugged, yet aesthetically pleasing, architectural metal roof panel system.

The A1500 integral snap lock architectural metal roof system combines architectural versatility, with cleanly detailed, continuous seam transitions from roof to mansard, fascia, or soffit, and comes in a wide variety of coatings and colors.

MR1 STANDING SEAM METAL ROOF



Standard Construction

Frame	Heavy gauge extruded 6063-T5 aluminum, 4 in. (102 mm) x 0.081 in. (2 mm) nominal wall thickness
Blades	K style, heavy gauge extruded 6063-T5 aluminum, 0.081 in. (2 mm) nominal wall thickness, positioned 37° and 45° on approximately 4 in. (102 mm) centers
Louver Depth	4 in. (102 mm)
Construction	Mechanically fastened
Finish	Mill
Minimum Size	12 in. W x 12 in. H (305 mm W x 305 mm H)
Maximum Single Section Size	120 in. W or 120 in. H (limited to 70 sq. ft.) (3048 mm W or 3048 mm H) (limited to 6.5 sq. m)
Wind Load	25 PSF (1.2 kPa)

MR2 ALUMINUM LOUVER SCREEN — TWO 96" x 64" x 4's PER ROW

PVC SHEET WITH PAINTPRO® TECHNOLOGY

Actual	8'	10'	12'
¾" x 4"	X	X	-
½" x 4"	X	X	X

TR1 PAINTED PVC TRIM

GENERAL NOTES

1. REFER TO A-500 DETAILS & A-605 EXTERIOR FINISH SCHEDULE FOR FINISH DESIGNATIONS, PRODUCT INFO, AND SIZING.
2. REFER TO A-603 EXTERIOR FENESTRATIONS SCHEDULE FOR MATERIAL IDENTIFICATION, PRODUCT INFO, AND SIZING
3. REFER TO A-250 ENLARGED ELVATIONS FOR EXPANDED MATERIAL IDENTIFICATION, SIZING SELECTIONS AND DIMENSIONS
4. REFER TO A-900 ARCHITECTURAL SPECIFICATIONS FOR DETAILED PRODUCT INFO

EXTERIOR FINISH LEGEND

FOUNDATION WALLS AND ROOFING

- PW1 CONCRETE FOUNDATION WALL
- MR1 STANDING SEAM METAL ROOF
- MR2 ALUMINUM LOUVER SCREEN
- MR3 METAL COPING WITH DRIP EDGE

SIDING AND TRIM

- FC1 PAINTED FIBER CEMENT SIDING, SQUARE CHANNEL
- FC2 PAINTED FIBER CEMENT SIDING, BOARD AND BATTEN
- FC3 PAINTED FIBER CEMENT SIDING, BOARD WITHOUT BATTEN
- TR1 PAINTED PVC TRIM
- WD1 NATURAL WOOD SHIPLAP SIDING
- WD2 NATURAL WOOD TRIM
- WD3 SHOP FABRICATED 2" x __ WOOD SCREEN SYSTEM
- PTX PAINT TAG. SEE A-605 FOR EXTERIOR PAINT SCHEDULE

4" HEIGHT
5' - 0"

PAVING

- A1 ASPHALT PAVING
- C1 BUILDING CONCRETE FOUNDATION SLAB
- C2 CONCRETE RAMP

EXTERIOR FENESTRATIONS LEGEND

WINDOWS

- A1 CASEMENT WINDOW. SEE EXTERIOR FENESTRATIONS SCHEDULE A-603
- A2 CASEMENT WINDOW PAINTED FINISH PT9. SEE EXTERIOR FENESTRATIONS SCHEDULE A-603
- B FIXED CLERESTORY WINDOW. SEE EXTERIOR FENESTRATIONS SCHEDULE

DOORS - SEE EXTERIOR EXTERIOR FENESTRATIONS SCHEDULE

- E1 EXTERIOR DOOR
- E2 EXTERIOR DOOR. PAINTED FINISH PT9
- F EXTERIOR ENTRY DOOR WITH SIDELITES
- G EXTERIOR DOOR. SPRINKLER ROOM

Scale : As indicated

SKA STUDIO

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skastudio.com
301 858 5853

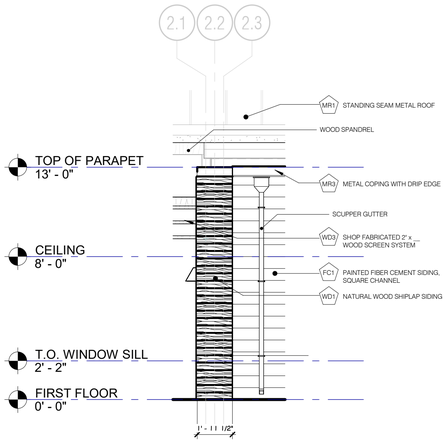
ISSUE RECORD		DATE
1	HAWP APPLICATION SUBMISSION	11/29/23

PROJECT **HAMMER HILL DAYCARE CENTER**
23312 FREDERICK RD
CLARKSBURG, MD 20871
PROJECT # 10272

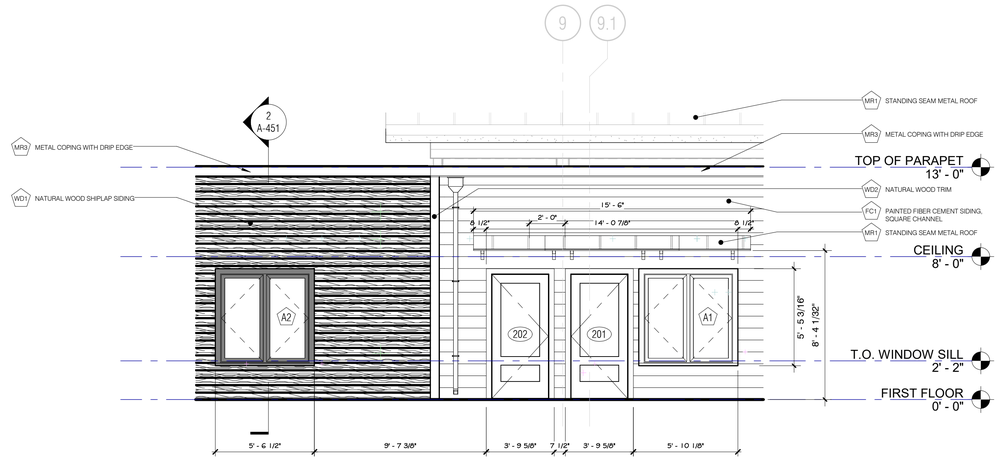
DRAWING INFORMATION

STAMP

SHEET
ENLARGED ELEVATIONS - WEST TYPICALS
A-251



1 EAST ELEVATION - TYPE 1
1/4" = 1'-0"



2 EAST ELEVATION - TYPE 2
1/4" = 1'-0"

HARDIE® ARTISAN SIDING

ARTISAN SQUARE CHANNEL SIDING

Artisan Square Channel's precise, right-angle cuts create wideset channels that complement traditional and modern styles.

PRIMED FOR PAINT

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AVAILABLE SIZES

THICKNESS:	0.625"
LENGTH:	144" boards
WIDTHS:	10.25"
EXPOSURES:	9"

Request a Sample ›

FC1 PAINTED FIBER CEMENT SIDING, SQUARE CHANNEL

PT8 PAINT - GRAY

PRODUCT SPECS

Mojave Thermal Oak | Smooth | HD Clear

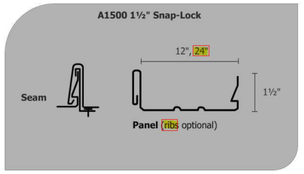
STANDARD SIZES
1x4, 1x6, 1 1/2x6, 2x6

LENGTHS
Up to 12'

GRADE
Clear

FIRE RATING
SFM 12-7A-1

WD1 NATURAL WOOD SHIPLAP SIDING



A1500 Metal Roof System

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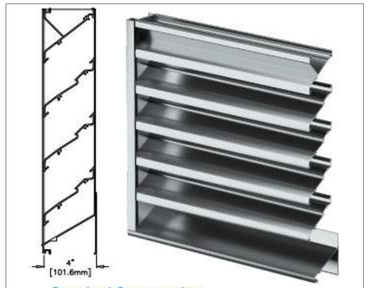
The A1500 integral snap lock architectural metal roof system combines architectural versatility, with cleanly detailed, continuous seam transitions from roof to mansard, fascia, or soffit, and comes in a wide variety of coatings and colors.

MR1 STANDING SEAM METAL ROOF



Standard Construction

Frame	Heavy gauge extruded 6063-T5 aluminum, 4 in. (102 mm) x 0.081 in. (2 mm) nominal wall thickness
Blades	K style, heavy gauge extruded 6063-T5 aluminum, 0.081 in. (2 mm) nominal wall thickness, positioned 37° and 45° on approximately 4 in. (102 mm) centers
Louver Depth	4 in. (102 mm)
Construction	Mechanically fastened
Finish	Mill
Minimum Size	12 in. W x 12 in. H (305 mm W x 305 mm H)
Maximum Single Section Size	120 in. W or 120 in. H (limited to 70 sq. ft.) (3048 mm W or 3048 mm H) (limited to 6.5 sq. m)
Wind Load	25 PSF (1.2 kPa)

MR2 ALUMINUM LOUVER SCREEN

TWO 96" x 64" x 4"s PER ROW

PVC SHEET WITH PAINTPRO® TECHNOLOGY			
Actual	8'	10'	12'
¾" x 4"	X	X	-
½" x 4"	X	X	X

TR1 PAINTED PVC TRIM

GENERAL NOTES

1. REFER TO A-500 DETAILS & A-605 EXTERIOR FINISH SCHEDULE FOR FINISH DESIGNATIONS, PRODUCT INFO, AND SIZING.
2. REFER TO A-603 EXTERIOR FENESTRATIONS SCHEDULE FOR MATERIAL IDENTIFICATION, PRODUCT INFO, AND SIZING
3. REFER TO A-250 ENLARGED ELVATIONS FOR EXPANDED MATERIAL IDENTIFICATION, SIZING SELECTIONS AND DIMENSIONS
4. REFER TO A-900 ARCHITECTURAL SPECIFICATIONS FOR DETAILED PRODUCT INFO

EXTERIOR FINISH LEGEND

FOUNDATION WALLS AND ROOFING

- PW1 CONCRETE FOUNDATION WALL
- MR1 STANDING SEAM METAL ROOF
- MR2 ALUMINUM LOUVER SCREEN
- MR3 METAL COPING WITH DRIP EDGE

SIDING AND TRIM

- FC1 PAINTED FIBER CEMENT SIDING, SQUARE CHANNEL
- FC2 PAINTED FIBER CEMENT SIDING, BOARD AND BATTEN
- FC3 PAINTED FIBER CEMENT SIDING, BOARD WITHOUT BATTEN
- TR1 PAINTED PVC TRIM
- WD1 NATURAL WOOD SHIPLAP SIDING
- WD2 NATURAL WOOD TRIM
- WD3 SHOP FABRICATED 2" x __ WOOD SCREEN SYSTEM
- PTX PAINT TAG. SEE A-605 FOR EXTERIOR PAINT SCHEDULE

4" REVEAL
5' - 0"

PAVING

- A1 ASPHALT PAVING
- C1 BUILDING CONCRETE FOUNDATION SLAB
- C2 CONCRETE RAMP

EXTERIOR FENESTRATIONS LEGEND

WINDOWS

- A1 CASEMENT WINDOW. SEE EXTERIOR FENESTRATIONS SCHEDULE A-603
- A2 CASEMENT WINDOW PAINTED FINISH PT9. SEE EXTERIOR FENESTRATIONS SCHEDULE A-603
- B FIXED CLERESTORY WINDOW. SEE EXTERIOR FENESTRATIONS SCHEDULE

DOORS - SEE EXTERIOR EXTERIOR FENESTRATIONS SCHEDULE

- E1 EXTERIOR DOOR.
- E2 EXTERIOR DOOR. PAINTED FINISH PT9
- F EXTERIOR ENTRY DOOR WITH SIDELITES
- G EXTERIOR DOOR. SPRINKLER ROOM

SKA STUDIO

47 Randall St.
Suite 2
Annapolis, MD 21401
skastudio.com
301 858 5853

ISSUE RECORD | DATE

1 HAWP APPLICATION SUBMISSION 11/29/23

PROJECT **HAMMER HILL DAYCARE CENTER**

23312 FREDERICK RD
CLARKSBURG, MD 20871
PROJECT # 10272

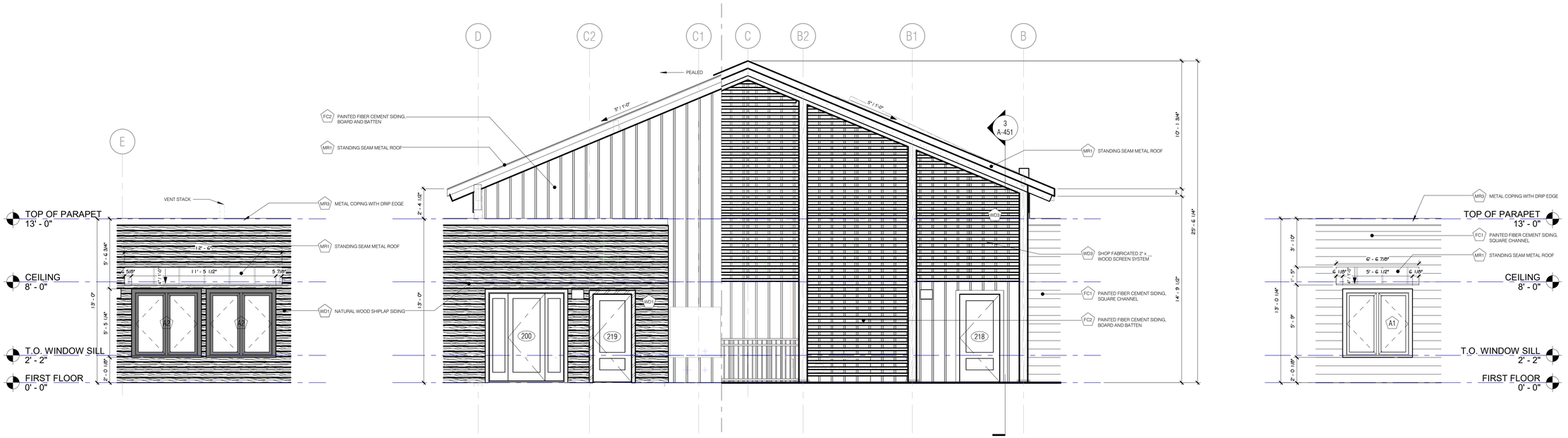
DRAWING INFORMATION

STAMP

SHEET

ENLARGED ELEVATIONS - EAST

A-252



1 NORTH ELEVATION - TYPE 1
1/4" = 1'-0"

2 NORTH ELEVATION - TYPE 2 (PEALED)
1/4" = 1'-0"

3 NORTH ELEVATION - TYPE 3
1/4" = 1'-0"

4 NORTH ELEVATION - TYPE 4
1/4" = 1'-0"

SKA STUDIO

47 Randall St.
Suite 2
Annapolis, MD 21401
skastudio.com
301 858 5853

ISSUE RECORD		DATE
1	HAWP APPLICATION SUBMISSION	11/29/23

PROJECT **HAMMER HILL DAYCARE CENTER**
23312 FREDERICK RD
CLARKSBURG, MD 20871
PROJECT # 10272

DRAWING INFORMATION

STAMP

SHEET
ENLARGED ELEVATIONS - NORTH
A-253

Scale : As indicated

HARDIE® PANEL VERTICAL SIDING
SMOOTH
You can't go wrong with this sleek, modern siding. Find the perfect color in our Statement Collection products or Dream Collection products. Or get it primed for paint.

PRIMED FOR PAINT

James Hardie's primed for paint collection gives you the power to choose paint for your home's exterior. It's primed. It's ready for field painting. It's a durable, high-performance canvas.

AVAILABLE SIZES

THICKNESS:	0.312"	
LENGTH: / WIDTHS:	108" 48"	120" 48"
	96" 48"	

Warranty Information ›
Request a Quote › *Request a Sample* ›

FC2 PAINTED FIBER CEMENT SIDING, BOARD AND BATTEN
PT6 PAINT - BLUE

HARDIE® TRIM BOARDS
4/4 SMOOTH
This trim's simplicity never goes out of style. In a color from our Statement Collection products or Dream Collection products, it has even more staying power. Also available primed for paint.

PRIMED FOR PAINT

James Hardie's primed for paint collection gives you the power to choose paint for your home's exterior. It's primed. It's ready for field painting. It's a durable, high-performance canvas.

AVAILABLE SIZES

THICKNESS:	0.75"	
LENGTH:	144" boards	
WIDTHS:	3.5"	5.5"
	7.25"	9.25"
	11.25"	

Warranty Information ›
Request a Quote › *Request a Sample* ›

PT6 PAINT - BLUE

HARDIE® PANEL VERTICAL SIDING
SMOOTH
You can't go wrong with this sleek, modern siding. Find the perfect color in our Statement Collection products or Dream Collection products. Or get it primed for paint.

PRIMED FOR PAINT

James Hardie's primed for paint collection gives you the power to choose paint for your home's exterior. It's primed. It's ready for field painting. It's a durable, high-performance canvas.

AVAILABLE SIZES

THICKNESS:	0.312"	
LENGTH: / WIDTHS:	108" 48"	120" 48"
	96" 48"	11.25" (cut)

Warranty Information ›
Request a Quote › *Request a Sample* ›

FC3 PAINTED FIBER CEMENT SIDING, BOARD WITHOUT BATTEN
PT6 PAINT - BLUE

PRODUCT SPECS
Mojave Thermal Oak | Smooth | HD | Clear

STANDARD SIZES
1x4, 1x6, 1 1/2x6, 2x6

LENGTHS
Up to 12'

GRADE
Clear

FIRE RATING
SFM 12-7A-1

WD2 NATURAL WOOD TRIM

WOOD SCREEN WALL
SPEC PLACEHOLDER

WD3 SHOP FABRICATED 2" x __ WOOD SCREEN SYSTEM

GENERAL NOTES

1. REFER TO A-500 DETAILS & A-605 EXTERIOR FINISH SCHEDULE FOR FINISH DESIGNATIONS, PRODUCT INFO, AND SIZING.
2. REFER TO A-603 EXTERIOR FENESTRATIONS SCHEDULE FOR MATERIAL IDENTIFICATION, PRODUCT INFO, AND SIZING
3. REFER TO A-250 ENLARGED ELVATIONS FOR EXPANDED MATERIAL IDENTIFICATION, SIZING SELECTIONS AND DIMENSIONS
4. REFER TO A-900 ARCHITECTURAL SPECIFICATIONS FOR DETAILED PRODUCT INFO

EXTERIOR FINISH LEGEND

FOUNDATION WALLS AND ROOFING

- FW1 CONCRETE FOUNDATION WALL
- MR1 STANDING SEAM METAL ROOF
- MR2 ALUMINUM LOUVER SCREEN
- MR3 METAL COPING WITH DRIP EDGE

SIDING AND TRIM

- FC1 PAINTED FIBER CEMENT SIDING, SQUARE CHANNEL
- FC2 PAINTED FIBER CEMENT SIDING, BOARD AND BATTEN
- FC3 PAINTED FIBER CEMENT SIDING, BOARD WITHOUT BATTEN
- TR1 PAINTED PVC TRIM
- WD1 NATURAL WOOD SHIPLAP SIDING
- WD2 NATURAL WOOD TRIM
- WD3 SHOP FABRICATED 2" x __ WOOD SCREEN SYSTEM
- PTX PAINT TAG. SEE A-605 FOR EXTERIOR PAINT SCHEDULE

4" HEIGHT
5' - 0"

PAVING

- A1 ASPHALT PAVING
- C1 BUILDING CONCRETE FOUNDATION SLAB
- C2 CONCRETE RAMP

EXTERIOR FENESTRATIONS LEGEND

WINDOWS

- A1 CASEMENT WINDOW. SEE EXTERIOR FENESTRATIONS SCHEDULE A-603
- A2 CASEMENT WINDOW PAINTED FINISH PT9. SEE EXTERIOR FENESTRATIONS SCHEDULE A-603
- B FIXED CLERESTORY WINDOW. SEE EXTERIOR FENESTRATIONS SCHEDULE

DOORS - SEE EXTERIOR EXTERIOR FENESTRATIONS SCHEDULE

- E1 EXTERIOR DOOR
- E2 EXTERIOR DOOR. PAINTED FINISH PT9
- F EXTERIOR ENTRY DOOR WITH SIDELITES
- G EXTERIOR DOOR. SPRINKLER ROOM

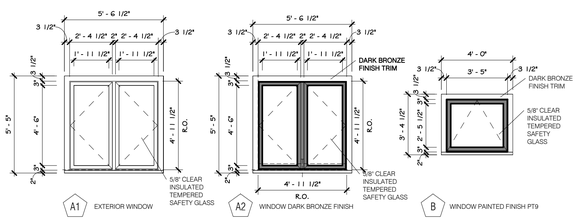
EXTERIOR DOOR SCHEDULE

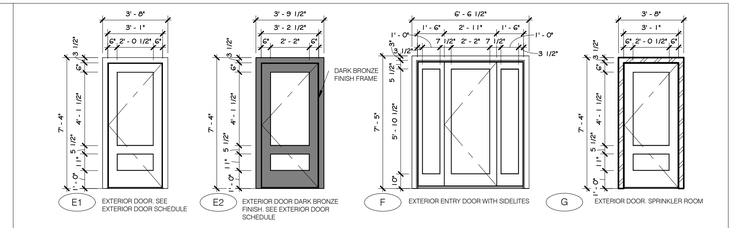
INDEX	MANUFACTURER	TYPE	DOOR TYPE	MODEL	HARDWARE	WIDTH	HEIGHT	THICKNESS	DOOR FINISH	FRAME FINISH	FIRE RATING	COMMENTS
E1												
201	MARVIN	E1	ULTIMATE COMMERCIAL DOOR	UCD3684/UCDDGTR3612		3' - 4"	7' - 1 1/16"	0' - 1 3/4"	_ / PT7	_ / PT7		INTERIOR PAINT / EXTERIOR PAINT
202	MARVIN	E1	ULTIMATE COMMERCIAL DOOR	UCD3684/UCDDGTR3612		3' - 4"	7' - 1 1/16"	0' - 1 3/4"	_ / PT7	_ / PT7		INTERIOR PAINT / EXTERIOR PAINT
207	MARVIN	E1	ULTIMATE COMMERCIAL DOOR	UCD3684/UCDDGTR3612		3' - 4"	7' - 1 1/16"	0' - 1 3/4"	PT6 / PT7	PT6 / PT7		INTERIOR PAINT / EXTERIOR PAINT
208	MARVIN	E1	ULTIMATE COMMERCIAL DOOR	UCD3684/UCDDGTR3612		3' - 4"	7' - 1 1/16"	0' - 1 3/4"	PT6 / PT7	PT6 / PT7		INTERIOR PAINT / EXTERIOR PAINT
209	MARVIN	E1	ULTIMATE COMMERCIAL DOOR	UCD3684/UCDDGTR3612		3' - 4"	7' - 1 1/16"	0' - 1 3/4"	PT4 / PT7	PT4 / PT7		INTERIOR PAINT / EXTERIOR PAINT
210	MARVIN	E1	ULTIMATE COMMERCIAL DOOR	UCD3684/UCDDGTR3612		3' - 4"	7' - 1 1/16"	0' - 1 3/4"	PT6 / PT7	PT6 / PT7		INTERIOR PAINT / EXTERIOR PAINT
211	MARVIN	E1	ULTIMATE COMMERCIAL DOOR	UCD3684/UCDDGTR3612		3' - 4"	7' - 1 1/16"	0' - 1 3/4"	PT3 / PT7	PT3 / PT7		INTERIOR PAINT / EXTERIOR PAINT
217	MARVIN	E1	ULTIMATE COMMERCIAL DOOR	UCD3684/UCDDGTR3612		3' - 4"	7' - 1 1/16"	0' - 1 3/4"	PT6 / PT7	PT6 / PT7		INTERIOR PAINT / EXTERIOR PAINT
218	MARVIN	E1	ULTIMATE COMMERCIAL DOOR	UCD3684/UCDDGTR3612		3' - 4"	7' - 1 1/16"	0' - 1 3/4"	PT6 / PT7	PT6 / PT7		INTERIOR PAINT / EXTERIOR PAINT
E2												
203	MARVIN	E2	ULTIMATE COMMERCIAL DOOR	UCD3684/UCDDGTR3612		3' - 4"	7' - 1 1/16"	0' - 1 3/4"	PT2 / PT9	PT2 / PT9		INTERIOR PAINT / EXTERIOR PAINT
204	MARVIN	E2	ULTIMATE COMMERCIAL DOOR	UCD3684/UCDDGTR3612		3' - 4"	7' - 1 1/16"	0' - 1 3/4"	PT2 / PT9	PT2 / PT9		INTERIOR PAINT / EXTERIOR PAINT
205	MARVIN	E2	ULTIMATE COMMERCIAL DOOR	UCD3684/UCDDGTR3612		3' - 4"	7' - 1 1/16"	0' - 1 3/4"	PT4 / PT9	PT4 / PT9		INTERIOR PAINT / EXTERIOR PAINT
206	MARVIN	E2	ULTIMATE COMMERCIAL DOOR	UCD3684/UCDDGTR3612		3' - 4"	7' - 1 1/16"	0' - 1 3/4"	PT4 / PT9	PT4 / PT9		INTERIOR PAINT / EXTERIOR PAINT
212	MARVIN	E2	ULTIMATE COMMERCIAL DOOR	UCD3684/UCDDGTR3612		3' - 4"	7' - 1 1/16"	0' - 1 3/4"	PT4 / PT9	PT4 / PT9		INTERIOR PAINT / EXTERIOR PAINT
213	MARVIN	E2	ULTIMATE COMMERCIAL DOOR	UCD3684/UCDDGTR3612		3' - 4"	7' - 1 1/16"	0' - 1 3/4"	PT6 / PT9	PT6 / PT9		INTERIOR PAINT / EXTERIOR PAINT
214	MARVIN	E2	ULTIMATE COMMERCIAL DOOR	UCD3684/UCDDGTR3612		3' - 4"	7' - 1 1/16"	0' - 1 3/4"	PT3 / PT9	PT3 / PT9		INTERIOR PAINT / EXTERIOR PAINT
215	MARVIN	E2	ULTIMATE COMMERCIAL DOOR	UCD3684/UCDDGTR3612		3' - 4"	7' - 1 1/16"	0' - 1 3/4"	PT2 / PT9	PT2 / PT9		INTERIOR PAINT / EXTERIOR PAINT
216	MARVIN	E2	ULTIMATE COMMERCIAL DOOR	UCD3684/UCDDGTR3612		3' - 4"	7' - 1 1/16"	0' - 1 3/4"	PT3 / PT9	PT3 / PT9		INTERIOR PAINT / EXTERIOR PAINT
F												
200	MARVIN	F	ULTIMATE OUTSWING FRENCH DOOR ENTRANCE SYSTEM	UOFDG2 6280 SLXSL		6' - 0 5/8"	7' - 2"	0' - 1 3/4"				
G												
219	MARVIN	G	ULTIMATE COMMERCIAL DOOR	UCD3684		3' - 2 3/16"	7' - 1 1/16"	0' - 1 3/4"				FLAT PANEL DOOR WITH 10 13/16" VISIBLE PANEL HEIGHT

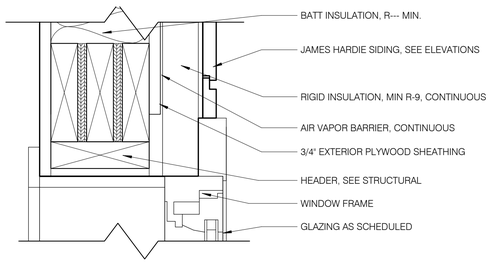
EXTERIOR WINDOW SCHEDULE

TYPE	MANUFACTURER	MODEL	WINDOW TYPE	WIDTH	Height	FRAME FINISH	SHGC	Comments
A1	Andersen Corporation	2650-2	100 SERIES CASEMENT WINDOWS	5' - 0"	5' - 0"	WHITE		Meets or exceed clear opening area of 5.7 sq. ft. or 0.53 m2, clear opening width of 20" (508) and clear opening height of 24" (610)
A2	Andersen Corporation	2650-2	100 SERIES CASEMENT WINDOWS	5' - 0"	5' - 0"	DARK BRONZE		Meets or exceed clear opening area of 5.7 sq. ft. or 0.53 m2, clear opening width of 20" (508) and clear opening height of 24" (610)
B	Andersen Corporation	100AS4030	Fibrex awning window	3' - 5 1/2"	2' - 11 1/2"			

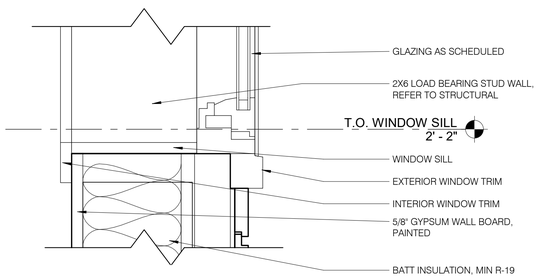
EXTERIOR WINDOW AND DOOR ELEVATIONS



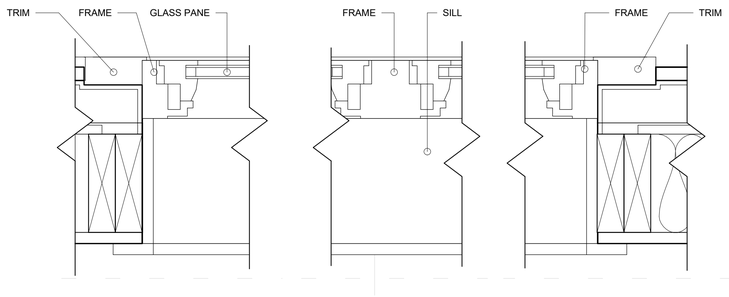




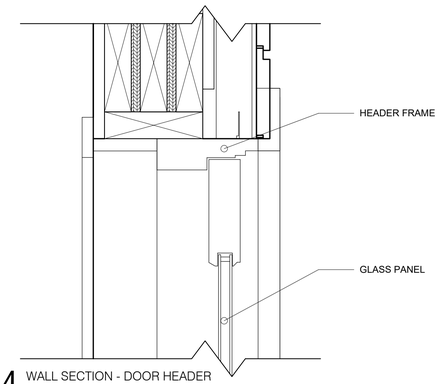
1 WALL SECTION - WINDOW HEADER
3" = 1'-0"



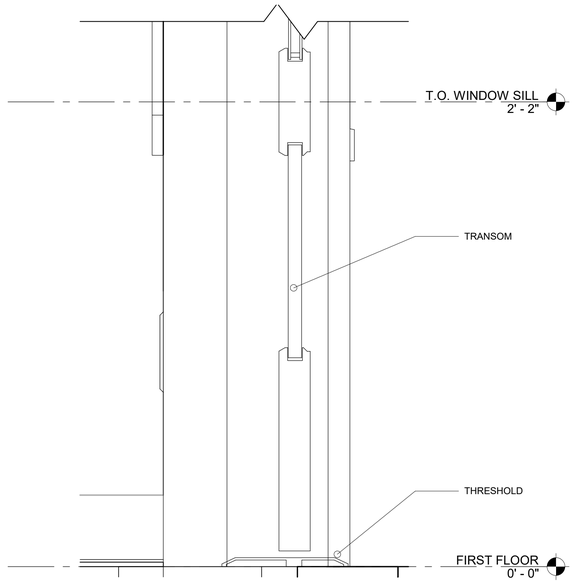
2 WALL SECTION - WINDOW SILL
3" = 1'-0"



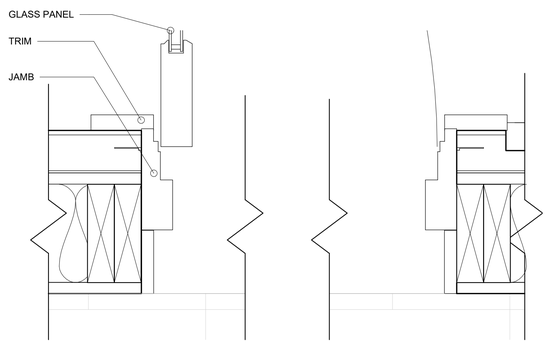
3 PLAN SECTION - WINDOW JAMB
3" = 1'-0"



4 WALL SECTION - DOOR HEADER
3" = 1'-0"



5 BUILDING SECTION - DOOR SILL
3" = 1'-0"



6 PLAN SECTION - DOOR JAMB
3" = 1'-0"

Scale : As indicated

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ISSUE RECORD		DATE
1	HAWP APPLICATION SUBMISSION	11/29/23

PROJECT **HAMMER HILL DAYCARE CENTER**
23312 FREDERICK RD
CLARKSBURG, MD 20871
PROJECT # 10272

DRAWING INFORMATION

STAMP

SHEET
EXTERIOR FENESTRATIONS SCHEDULE

A-603

EXTERIOR FINISH SCHEDULE

MARK	SURFACE	MANUFACTURER	TYPE	PRODUCT	COLOR	FINISH	SIZE	REMARKS	LOCATION
FENCING									
F1	STEEL PERIMETER FENCING	AMERISTAR	MAJESTIC	MONTAGE PLUS	BLACK	STEEL	6' HIGH. 4" AIR GAPS	3 RAIL PANELS. STANDARD BOTTOM RAIL	BUILDING AND PLAYGROUND PERIMETER
FOUNDATION WALLS									
FW1	CONCRETE FOUNDATION WALL	-	-	-	GREY	SMOOTH	SEE X	-	EXTERIOR FOUNDATION WALL FOR BUILDING
FW2	HIGH-AGGREGATE CONCRETE	-	-	-	-	HIGH-AGGREGATE	SEE X	-	RAMP WALLS AND RETAINING WALLS. SEE X
PAVING									
A1	ASPHALT PAVING	-	-	-	-	-	-	-	PARKING LOT. SEE X
C1	BUILDING CONCRETE FOUNDATION SLAB	-	-	-	-	-	-	-	BUILDING FOUNDATION, PERIMETER AND ENTRANCES. SEE X
C2	CONCRETE RAMP	-	-	-	-	-	-	-	SOUTH ENTRANCE FROM SPRINGTOWN ROAD. SEE X
ROOFING									
EG1	EXTERIOR GYPSUM SHEATHING	-	-	-	-	-	-	-	SOFFIT FINISH AT EXTERIOR RAFTERS
MR1	STANDING SEAM METAL ROOF	ENGLERT	INTEGRAL SNAP-LOCK	A1500 METAL ROOF SYSTEM	CHARCOAL GREY	GALVALUME	24" x 1.5" x __ "	WITH RIBS TO PREVENT OIL CANNING	BUILDING ROOF AND DOOR AWNINGS
MR2	ALUMINUM LOUVER SCREEN	GREENHECK	NON-DRAINABLE BLADE LOUVER	ESK-402	-	ALUMINUM MILL	TWO 96" x 64" x 4'h PER ROW	STRUCTURAL REINFORCING MEMBERS REQUIRED FOR LARGE OPENINGS	LOUVERS ON EAST ROOF THAT SCREEN MECHANICAL. SEE X
MR3	METAL COPING WITH DRIP EDGE	-	-	-	MATCH CHARCOAL GREY	-	-	SELECTED BY CONTRACTOR TO MATCH MR1 STANDING SEAM METAL ROOF COLOR/FINISH	TOP OF PARAPET AT ALL FLAT ROOVES
RF1	TPO ROOFING SYSTEM	JOHNS MANVILLE	TPO ROOFING SYSTEM	-	LIGHT GRAY	ULTRAVIOLET-RESISTANT THERMOPLASTIC POLYOLEFIN	-	SEE STRUCTURAL	FLAT ROOF
SIDING									
WD1	NATURAL WOOD SHIPLAP SIDING	DELTA MILLWORKS	MOJAVE THERMAL OAK	SMOOTH	NATURAL (BROWN)	HD CLEAR	1" x 6" x 144"	FIRE RATING: SFM 12-7A-1	TYPICAL EXTERIOR HORIZONTAL WOOD SIDING
WD2	NATURAL WOOD TRIM	DELTA MILLWORKS	MOJAVE THERMAL OAK	SMOOTH	NATURAL (BROWN)	HD CLEAR	VARIES	FIRE RATING: SFM 12-7A-1	TYPICAL EXTERIOR WOOD TRIM AT STRUCTURAL MEMBERS
WD3	SHOP FABRICATED 2" x __ WOOD SCREEN SYSTEM	-	-	-	-	-	48' x 98" x 3"	BOLTED TO CANOPY'S HSS COLUMNS. SEE STRUCTURAL	SCREEN WALL BETWEEN CANOPY'S STEEL COLUMNS ON EAST AND WEST FACADES
FC1	PAINTED FIBER CEMENT SIDING, SQUARE CHANNEL	JAMES HARDIE	HARDIE ARTISAN SIDING	SQUARE CHANNEL SIDING	PT8 PAINT - GRAY	PRIMED FOR PAINT	144" x 10.25" x .625"	-	TYPICAL EXTERIOR HORIZONTAL FIBER CEMENT SIDING
FC2	PAINTED FIBER CEMENT SIDING, BOARD AND BATTEN	JAMES HARDIE	HARDIE PANEL VERTICAL SIDING	SMOOTH	PT8 PAINT - GRAY	PRIMED FOR PAINT	120" x 48" x 0.312"	SPACE VERTICAL BATTENS 12" ON CENTER. FULL PAINT COVERAGE; APPLY MIN TWO (2) COATS	EXTERIOR VERTICAL SIDING UNDER ROOF CANOPIES LEVEL ON EAST AND WEST FACADES AT GROUND LEVEL
			HARDIE TRIM BOARDS	SMOOTH	PT8 PAINT - GRAY	PRIMED FOR PAINT	144" x 5.5" x 0.75"		
FC3	PAINTED FIBER CEMENT SIDING, BOARD WITHOUT BATTEN	JAMES HARDIE	HARDIE PANEL VERTICAL SIDING	SMOOTH	PT8 PAINT - GRAY	PRIMED FOR PAINT	120" x 11.25" (cut) x 0.312"	SPACE GAPS BETWEEN BOARDS 12" ON CENTER. GAPS TO ALIGN WITH AND MATCH FC2 BATTEN WIDTH FULL PAINT COVERAGE; APPLY MIN TWO (2) COATS	EXTERIOR VERTICAL SIDING UNDER ROOF CANOPIES ON EAST AND WEST FACADES AT PARAPET LEVEL FOR RTU VENTING
STRUCTURAL FRAMING									
WD-4	WOOD COLUMNS AND BEAMS	-	-	-	-	-	SEE STRUCTURAL	-	EXTERIOR WOOD COLUMNS AT EAST AND WEST FACADES SCREEN WALL STRUCTURE
TRIM									
TR1	PAINTED PVC TRIM	AZEK EXTERIORS	PVC SHEET	PAINTPRO TECHNOLOGY	PT7 PAINT - WHITE	-	VARIES	-	TYPICAL SIDING TRANSITIONS ; WINDOWS AND DOORS
TR2	PAINTED PVC TRIM AT WOOD	AZEK EXTERIORS	PVC SHEET	PAINTPRO TECHNOLOGY	PT9 PAINT - DARK GRAY	-	VARIES	-	SIDING TRANSITIONS BETWEEN WD1 AND FC1

EXTERIOR PAINT SCHEDULE

MARK	SURFACE	MANUFACTURER	TYPE	PRODUCT	COLOR	FINISH	SIZE	REMARKS	LOCATION
PAINT									
PT7	PAINT - WHITE	SHERWIN WILLIAMS	-	-	GREEK VILLA SW 7551	-	-	-	TYPICAL SIDING TRANSITIONS UNLESS OTHERWISE NOTED, WINDOW/DOOR/TRIM PAINT
PT8	PAINT - GRAY	SHERWIN WILLIAMS	-	-	USEFUL GRAY SW 7050	-	-	-	SIDING PAINT AT FC1
PT9	PAINT - DARK GRAY	SHERWIN WILLIAMS	-	-	PEPPERCORN SW 7674	-	-	-	SIDING TRANSITIONS BETWEEN WD1 AND FC1, WINDOW/DOOR/TRIM PAINT AT WD1 ONLY

Scale : 12" = 1'-0"

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ISSUE RECORD | DATE

1 HAWP APPLICATION SUBMISSION 11/29/23

PROJECT **HAMMER HILL DAYCARE CENTER**

23312 FREDERICK RD
CLARKSBURG, MD 20871
PROJECT # 10272

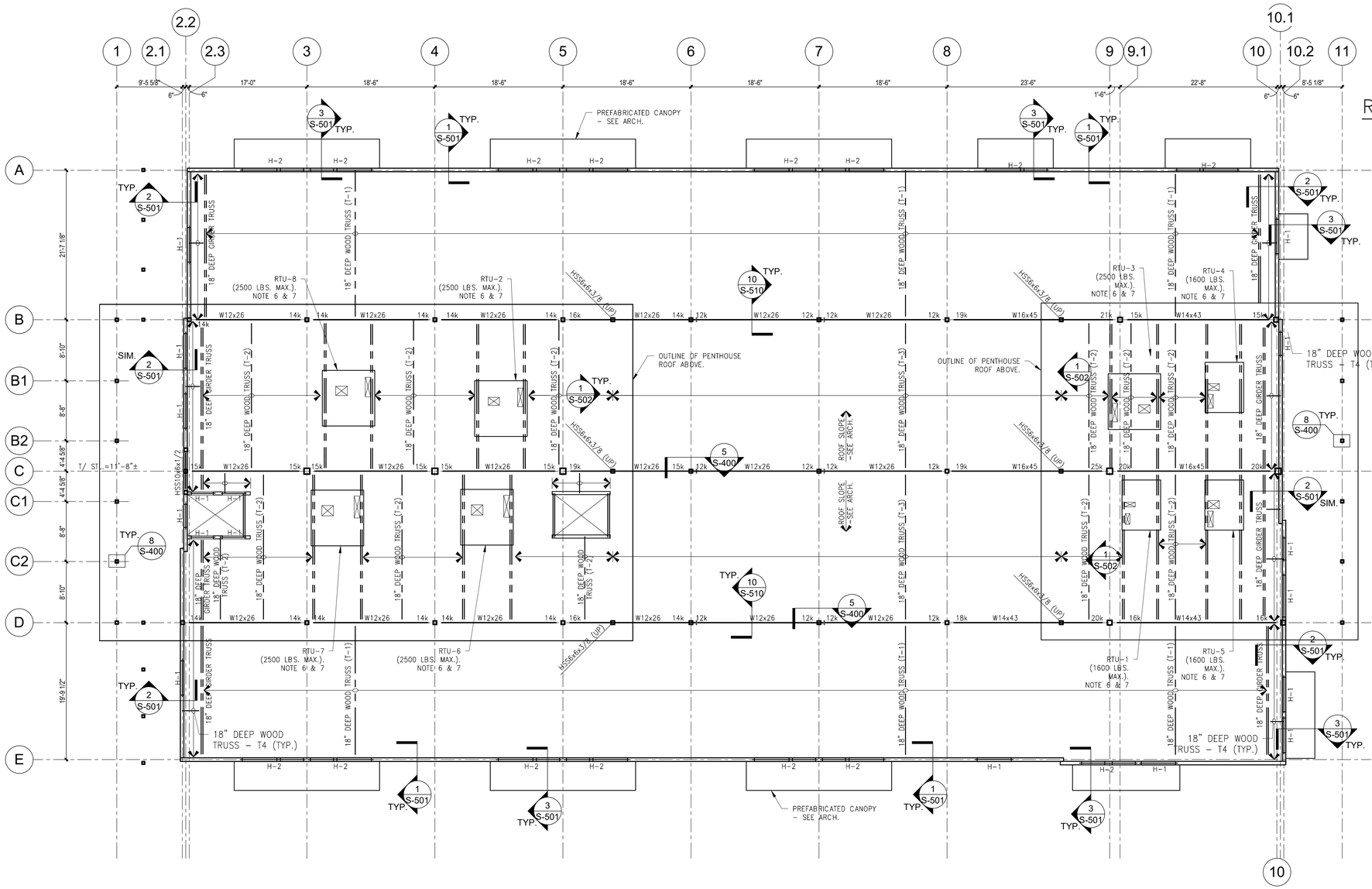
DRAWING INFORMATION

STAMP

SHEET

EXTERIOR FINISH SCHEDULE

A-605

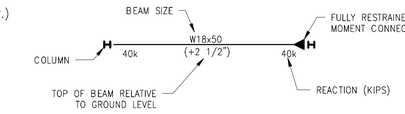


ROOF FRAMING PLAN

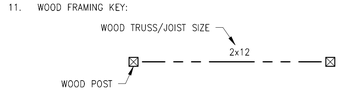
1/8" = 1'-0"

PLAN NOTES - ROOF

1. TOP OF STRUCTURAL STEEL ELEVATION = VARIES – SEE PLAN
2. TOP OF STEEL ELEVATION OF BEAMS PARALLEL TO TRUSSES IS TO MATCH ELEVATION AND SLOPE OF JOISTS BETWEEN SUPPORTING GIRDERS U.N.O.
3. 19/32" APA RATED ROOF SHEATHING – SEE 7/S-500 FOR ATTACHMENT DETAILS
4. ALL TRUSSES ARE SPACED EVENLY BETWEEN COLUMN LINES U.N.O.
5. COORDINATE SIZE AND LOCATION OF ALL OPENINGS WITH ARCHITECTURAL AND M/E/P DRAWINGS.
6. WEIGHTS OF MECHANICAL EQUIPMENT NOTED ARE AS PROVIDED BY GPI MECHANICAL. G.C. SHALL VERIFY THAT THE TOTAL OPERATING WEIGHT OF THE ACTUAL EQUIPMENT PURCHASED (INCLUDING ALL ASSCESORIES, CURB, ETC.) DO NOT EXCEED THE VALUE NOTED IN THE PLAN. WEIGHTS IN EXCESS OF THOSE LISTED MAY REQUIRE SUPPLEMENTAL SUPPORT/REINFORCING. CONTRACTOR TO COORDINATE FINAL EQUIPMENT WEIGHT WITH WOOD TRUSS DESIGNER PRIOR TO SUBMISSION OF TRUSS SHOP DRAWINGS.
7. PROVIDE CONTINUOUS DOUBLE BLOCKING BENEATH ALL UNIT CURBS.
8. SEE S-001 & S-002 FOR GENERAL NOTES.
9. SEE S-400's & S-500's FOR TYPICAL DETAILS.
10. STEEL FRAMING KEY:



11. WOOD FRAMING KEY:



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GPI
Greenman-Pedersen, Inc.
Engineering and Construction Services
530 Gaither Road, Suite 100, Rockville, MD 20850
240-399-1800 www.gpinet.com
Project #: 2300171.00
PM: NLM M: HTL E: MAN P: NDD S:NAB

ISSUE RECORD	DATE
PROGRESS SET	11/22/2023

PROJECT **CLARKSBURG DAYCARE CENTER**
23100 STRINGTOWN RD
CLARKSBURG, MD 20871
2300171.00

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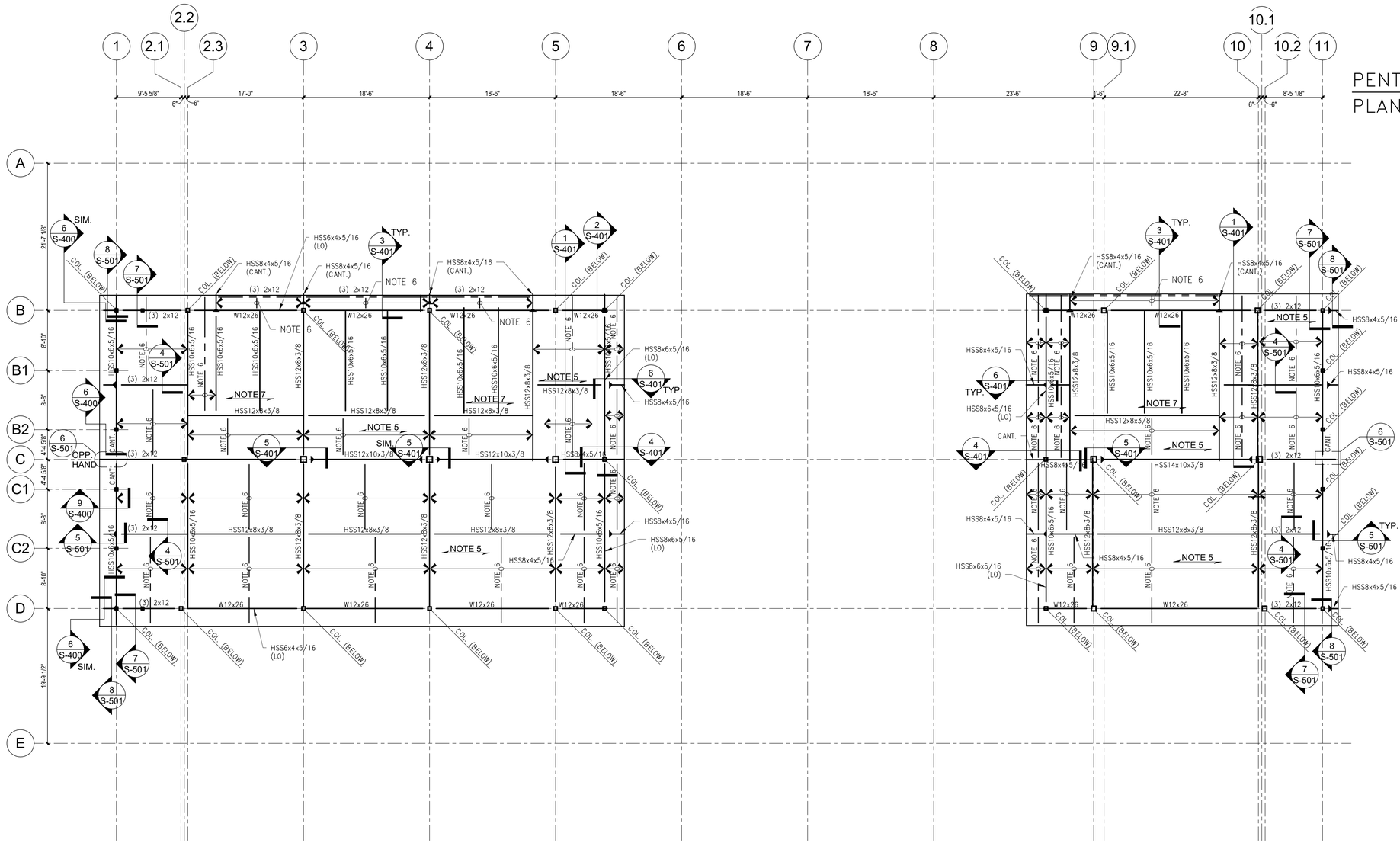
SHEET

ROOF FRAMING PLAN

S-101

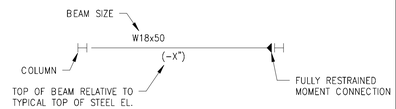


PENTHOUSE ROOF FRAMING PLAN

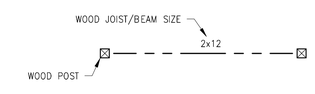
1/8" = 1'-0"

PLAN NOTES

1. ARCHITECTURAL INFORMATION IS SHOWN FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR INFORMATION REGARDING, FINISHES, SLOPES, ETC.
2. SEE DETAILS AND ARCHITECT FOR TOP OF ROOF FRAMING ELEVATIONS.
3. ALL JOISTS ARE ENVENLY SPACED U.N.O. – SEE PLAN FOR SPACING.
4. COORDINATE SIZE AND LOCATION OF ALL OPENINGS WITH ARCHITECTURAL DRAWINGS.
5. 19/32" APA MARINE RATED ROOF SHEATHING – SEE 7/S-500 FOR ATTACHMENT DETAILS
6. 2x12 PRESSURE TREATED RAFTER AT 16" O.C. MAX.
7. PREMANUFACTURERED METAL LOUVER – DESIGN AND ANCHORAGE TO STRUCUTRE BY MANUFACUTURER/SUPPLIER.
8. ALL PENTHOUSE STEEL AND EXPOSED STEEL TO BE HOT-DIPPED GALVANIZED FINISHED. REPAIR ALL WELDING TO GALVANIZED FINISHES PER ASTM A780.
9. SEE S-001 & S-002 FOR GENERAL NOTES
10. SEE S-400's & S-500's FOR TYPICAL DETAILS.
11. STEEL FRAMING KEY:



10. WOOD FRAMING KEY:



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Project #: 2300171.00
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ISSUE RECORD	DATE
PROGRESS SET	11/22/2023

PROJECT **CLARKSBURG DAYCARE CENTER**

23100 STRINGTOWN RD
CLARKSBURG, MD 20871
2300171.00

DRAWING INFORMATION

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PENTHOUSE ROOF FRAMING PLAN

S-102

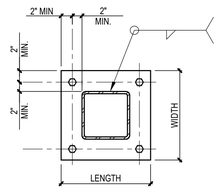
COLUMN BASE PLATE SCHEDULE							
MARK	BASE PLATE SIZE			ANCHOR BOLT			REMARKS
	WIDTH	LENGTH	THICKNESS	NO.	SIZE	*LENGTH	
BP-1	13"	13"	3/4"	4	3/4"ø	8"	NOTE 1
BP-2	14"	14"	3/4"	4	3/4"ø	8"	----
BP-3	16"	16"	3/4"	4	3/4"ø	8"	----
BP-4	18"	18"	1"	4	3/4"ø	8"	----

* LENGTH INDICATED IS MINIMUM EMBEDMENT.

1. PROVIDE PLATE WASHERS IF USING OVERSIZE HOLES.

1 COLUMN BASE PLATE SCHEDULE

N.T.S.

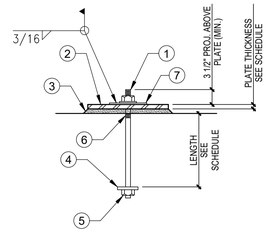


SQUARE

1. SEE SCHEDULE FOR PLATE & ANCHOR ROD SIZES.
2. BASE PLATE HOLE DIAMETER SHALL NOT EXCEED MAXIMUM PER AISC MANUAL TABLE 14-2.
3. PROVIDE TEMPLATES FOR FIELD USE TO SET ANCHOR RODS IN FOUNDATION.

2 COLUMN BASE PLATE DETAIL

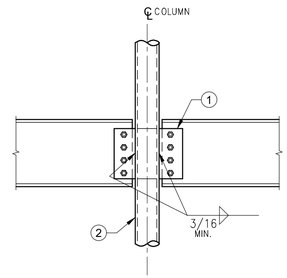
N.T.S.



1. SEE SCHEDULE FOR ANCHOR ROD SIZE. PROVIDE HEAVY HEX NUT AND HARDENED WASHER (WASHER TO MEET MINIMUM SIZE PER AISC MANUAL TABLE 14-2 FOR ROD AND MAX. HOLE SIZE SHOWN).
2. BASE PLATE PER SCHEDULE (LEVELING PLATE -NOT SHOWN- MAY BE USED AT CONTRACTORS OPTION WITH ENGINEERS APPROVAL).
3. 1 1/2" NON-SHRINK GROUT.
4. HEAVY HEX NUT AND HARDENED WASHER.
5. TACK WELD NUT TO WASHER (FY = 36 KSI RODS ONLY). FILE THREADS OR USE DOUBLE NUT TO PREVENT NUT BACKOFF.
6. PROVIDE 6" (MINIMUM) OF THREADING AT END OF ROD.
7. PL3x3x5/16 PLATE WASHER.

3 BASE PLATE SETTING DETAIL

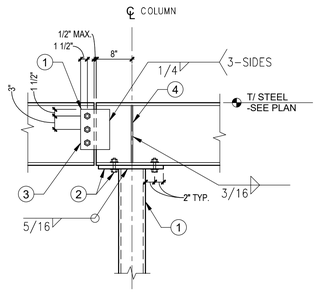
N.T.S.



1. SINGLE PLATE CONN. FOR REACTION SHOWN ON PLANS (5/16" MIN.).
2. HSS COLUMN - SEE PLAN.

4 BEAM TO COLUMN CONNECTION

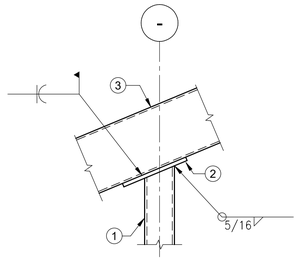
N.T.S.



1. HSS COLUMN - SEE PLAN.
2. PL 3/4"x7"x1'-2" WITH (4) 3/4"Ø ASTM A325-N BOLTS.
3. PL 5/16"x6 1/2"x9". WITH (3) 3/4"Ø ASTM A325-N BOLTS.
4. 3/8" STIFFENER PLATE EACH SIDE OF COLUMN WEB.

5 BEAM OVER COLUMN CONNECTION

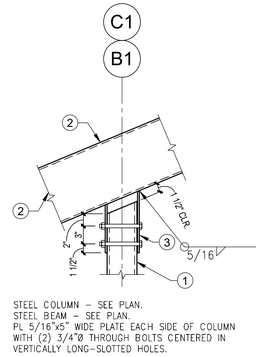
3/4" = 1'-0"



1. STEEL COLUMN - SEE PLAN.
2. PL5/8"x7"x0'-10" COLUMN CAP PLATE.
3. STEEL BEAM - SEE PLAN.

6 STEEL BEAM TO COL CONNECTION

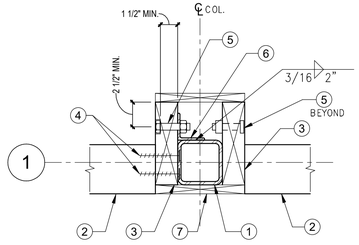
1" = 1'-0"



1. STEEL COLUMN - SEE PLAN.
2. STEEL BEAM - SEE PLAN.
3. PL 5/16"x5" WIDE PLATE EACH SIDE OF COLUMN WITH (2) 3/4"Ø THROUGH BOLTS CENTERED IN VERTICALLY LONG-SLOTTED HOLES.

7 STEEL POST TOP CONNECTION

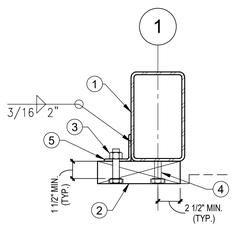
1" = 1'-0"



1. STEEL COLUMN - SEE PLAN.
2. ASH HORIZONTAL SLATS (3x6 MINIMUM SIZE) - SEE ARCH. FOR ACTUAL SIZE, SPACING, AND ADDITIONAL INFORMATION.
3. ASH CONTINUOUS VERTICAL MEMBER (3x10 MINIMUM SIZE) - SEE ARCH. FOR ACTUAL SIZE AND ADDITIONAL INFORMATION.
4. 2#12 SCREWS BETWEEN VERTICAL MEMBER AND EACH HORIZTONAL SLAT.
5. 5/8"Ø THROUGH BOLT AT 4'-0" O.C. MAX. COUNTER SINK HEAD OF BOLT AS INDICATED. SEE ARCH. FOR PATCHING/COVERAGE REQUIREMENTS.
6. L3x3x1/4x0'-4" AT EACH THROUGH BOLT.
7. ASH COVER MEMBER -SEE ARCH. FACE NAIL TO 3x10 AS REQUIRED.

8 SCREENWALL COLUMN WRAP DETAIL

1 1/2" = 1'-0"



1. SLOPED STEEL BEAM - SEE PLAN.
2. ASH CONTINUOUS PERIMETER MEMBER (3x10 MINIMUM SIZE) - SEE ARCH. FOR ACTUAL SIZE AND ADDITIONAL INFORMATION.
3. 5/8"Ø THROUGH BOLT AT 4'-0" O.C. MAX. COUNTER SINK HEAD OF BOLT AS INDICATED. SEE ARCH. FOR PATCHING/COVERAGE REQUIREMENTS.
4. 5/8"Ø NELSON D2L WELDABLE THREADED ROD AT 4' O.C. (STAGGER WITH THREADED ROD PER NOTE 3)
5. L3x3x1/4x0'-4" AT EACH THROUGH BOLT.

9 SCREENWALL ANCHORAGE TO STEEL BEAM

1 1/2" = 1'-0"

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ISSUE RECORD	DATE
PROGRESS SET	11/22/2023

PROJECT **CLARKSBURG DAYCARE CENTER**
23100 STRINGTOWN RD
CLARKSBURG, MD 20871
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DRAWING INFORMATION

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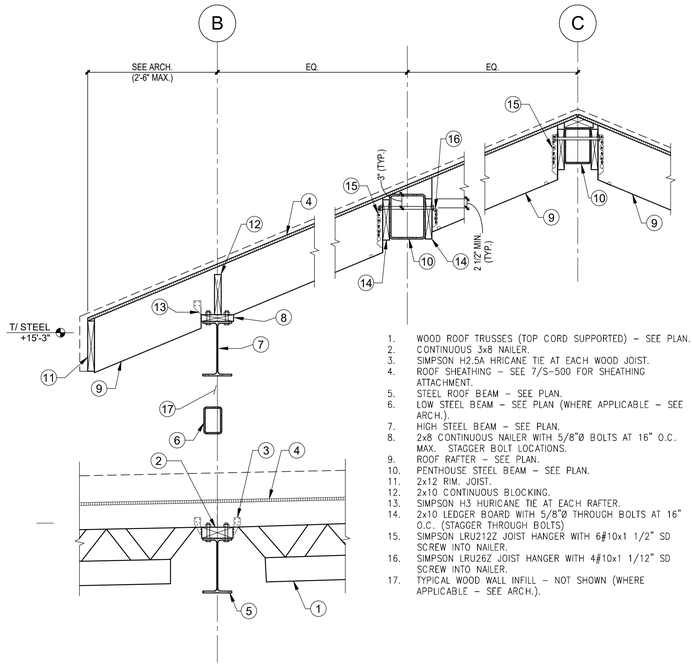
SHEET

TYPICAL STEEL FRAMING DETAILS

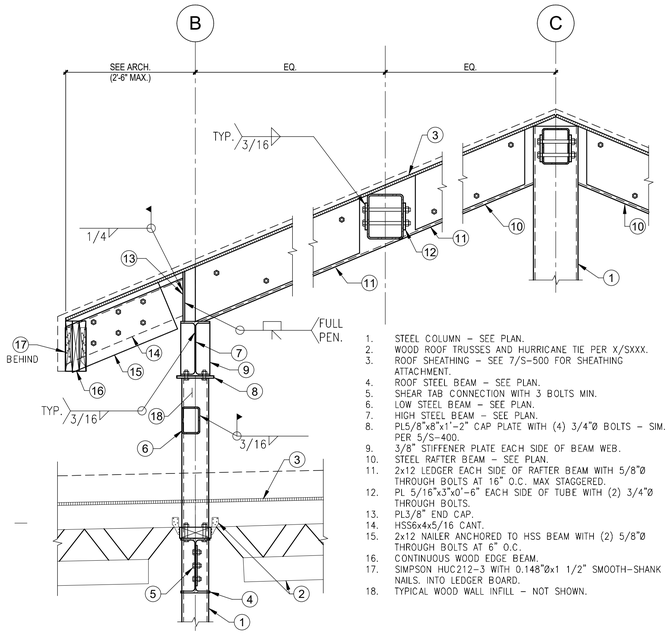
S-400



1. WOOD ROOF TRUSSES (TOP CORD SUPPORTED) – SEE PLAN.
2. CONTINUOUS 3x8 NAILER.
3. SIMPSON H2.5A HRICANE TIE AT EACH WOOD JOIST.
4. ROOF SHEATHING – SEE 7/S-500 FOR SHEATHING ATTACHMENT.
5. STEEL ROOF BEAM – SEE PLAN.
6. LOW STEEL BEAM – SEE PLAN (WHERE APPLICABLE – SEE ARCH.).
7. HIGH STEEL BEAM – SEE PLAN.
8. 2x8 CONTINUOUS NAILER WITH 5/8"Ø BOLTS AT 16" O.C. MAX. STAGGER BOLT LOCATIONS.
9. ROOF RAFTER – SEE PLAN.
10. PENTHOUSE STEEL BEAM – SEE PLAN.
11. 2x12 RIM. JOIST.
12. 2x10 CONTINUOUS BLOCKING.
13. SIMPSON H3 HURICANE TIE AT EACH RAFTER.
14. 2x10 LEDGER BOARD WITH 5/8"Ø THROUGH BOLTS AT 16" O.C. (STAGGER THROUGH BOLTS)
15. SIMPSON LRU212Z JOIST HANGER WITH 6#10x1 1/2" SD SCREW INTO NAILER.
16. SIMPSON LRU26Z JOIST HANGER WITH 4#10x1 1/12" SD SCREW INTO NAILER.
17. TYPICAL WOOD WALL INFILL – NOT SHOWN (WHERE APPLICABLE – SEE ARCH.).

1 PENTHOUSE STRUCTURE SECTION

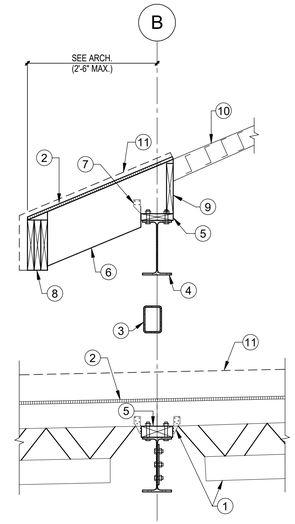
3/4" = 1'-0"



1. STEEL COLUMN – SEE PLAN.
2. WOOD ROOF TRUSSES AND HURRICANE TIE PER X/SXXX.
3. ROOF SHEATHING – SEE 7/S-500 FOR SHEATHING ATTACHMENT.
4. ROOF STEEL BEAM – SEE PLAN.
5. SHEAR TAB CONNECTION WITH 3 BOLTS MIN.
6. LOW STEEL BEAM – SEE PLAN.
7. HIGH STEEL BEAM – SEE PLAN.
8. PL5/8"x8"x1'-2" CAP PLATE WITH (4) 3/4"Ø BOLTS – SIM. PER 5/S-400.
9. 3/8" STIFFENER PLATE EACH SIDE OF BEAM WEB.
10. STEEL RAFTER BEAM – SEE PLAN.
11. 2x12 LEDGER EACH SIDE OF RAFTER BEAM WITH 5/8"Ø THROUGH BOLTS AT 16" O.C. MAX STAGGERED.
12. PL 5/16"x3"x0'-6" EACH SIDE OF TUBE WITH (2) 3/4"Ø THROUGH BOLTS.
13. PL3/8" END CAP.
14. HSS6x4x5/16 CANT.
15. 2x12 NAILER ANCHORED TO HSS BEAM WITH (2) 5/8"Ø THROUGH BOLTS AT 6" O.C.
16. CONTINUOUS WOOD EDGE BEAM.
17. SIMPSON HUC212-3 WITH 0.148"Ø x1 1/2" SMOOTH-SHANK NAILS. INTO LEDGER BOARD.
18. TYPICAL WOOD WALL INFILL – NOT SHOWN.

2 PENTHOUSE STRUCTURE SECTION

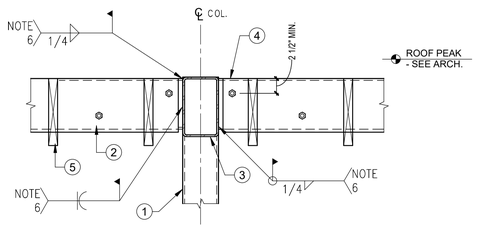
3/4" = 1'-0"



1. WOOD ROOF TRUSSES AND HURRICANE TIES PER 1/S-401.
2. ROOF SHEATHING – SEE 7/S-500 FOR SHEATHING ATTACHMENT.
3. LOW STEEL BEAM – SEE PLAN (WHERE APPLICABLE – SEE ARCH.).
4. HIGH STEEL BEAM – SEE PLAN.
5. CONTINUOUS NAILER PER 1/S-401.
6. WOOD RAFTER – SEE PLAN.
7. HURRICANE TIE PER 1/S-401.
8. BUILT UP WOOD BEAM – SEE PLAN.
9. CONTINUOUS 2x12 BLOCKING.
10. LOUVER SYSTEM – SEE ARCH AND MECHANICAL FOR ADDITIONAL INFORMATION. ANCHORAGE TO BASE STRUCTURE BY SUPPLIER/MANUFACTURER.
11. ROOF FINISHES – SEE ARCH.

3 PENTHOUSE AT LOUVER

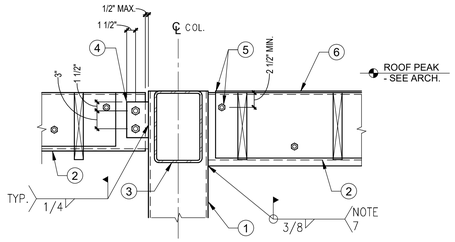
3/4" = 1'-0"



1. STEEL COLUMN – SEE PLAN.
2. STEEL BEAM – SEE PLAN.
3. STEEL RAFTER BEAM – SEE PLAN.
4. 2x12 NAILER ANCHORED TO HSS BEAM WITH 5/8"Ø THROUGH BOLTS AT 16" O.C. (STAGGERED).
5. ROOF RAFTERS – SEE PLAN AND DETAILS FOR ADDITIONAL INFORMATION.
6. REPAIR GALVANIZING FINISH PER ASTM A780

4 CANTILEVERED RIDGE BEAM DETAIL

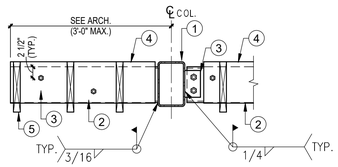
1" = 1'-0"



1. STEEL COLUMN – SEE PLAN.
2. STEEL BEAM – SEE PLAN.
3. STEEL RAFTER BEAM – SEE PLAN.
4. PL 5/16"x3 1/2"x 0'-6" WITH (2) 3/4"Ø THROUGH BOLTS.
5. 2x12 NAILER ANCHORED TO HSS BEAM WITH 5/8"Ø THROUGH BOLTS AT 16" O.C. (STAGGERED).
6. ROOF RAFTERS – SEE PLAN AND DETAILS FOR ADDITIONAL INFORMATION.
7. REPAIR GALVANIZING FINISH PER ASTM A780

5 RIDGE MOMENT FRAME DETAIL

1" = 1'-0"



1. STEEL RAFTER BEAM – SEE PLAN.
2. STEEL BEAM – SEE PLAN.
3. PL 5/16"x3 1/2"x 0'-6" WITH (2) 3/4"Ø THROUGH BOLTS.
4. 2x12 NAILER ANCHORED TO HSS BEAM WITH 5/8"Ø THROUGH BOLTS AT 16" O.C. (STAGGERED).
5. ROOF RAFTERS – SEE PLAN AND DETAILS FOR ADDITIONAL INFORMATION.
6. REPAIR GALVANIZING FINISH PER ASTM A780 – TYP.

6 PENTHOUSE OUTRIGGER DETAIL

3/4" = 1'-0"

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PROJECT **CLARKSBURG DAYCARE CENTER**

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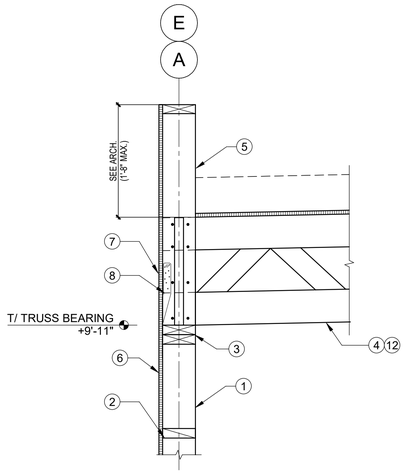
STEEL FRAMING DETAILS

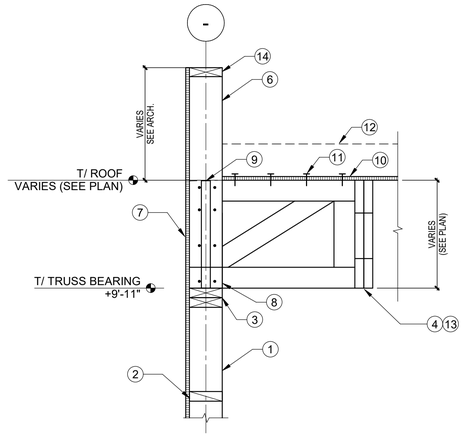
S-401



1. 2x6 STUD WALL CONTINUOUS TO UNDERSIDE OF ROOF TRUSSES. LOCATE STUDS DIRECTLY BENEATH ROOF TRUSSES – SEE PLANS AND DETAILS FOR ADDITIONAL INFROMATION.
2. 2x6 CONTINUOUS SOLID BLOCKING AT 4'–0" O.C. MAX. VERTICALLY.
3. DOUBLE 2x6 TOP PLATE.
4. PREMANUFACTURERED ROOF TRUSSES AT 24" O.C. TO BE LOCATED ABOVE 2x STUDS BELOW – SEE SHEET S510 FOR TRUSS LOADING REQUIREMENTS. TRUSS END VERTICAL TO BE 2x6 MINIMUM.
5. 2x6 PARAPET WALL LAPPED WITH TRUSS END VERTICAL. PROVIDE (2) 16d NAILS AT 6" O.C. ALONG LENGTH OF TRUSS END VERTICAL. AT CONTRACTOR'S OPTION PARAPET WALL CAN BE BUILT INTEGRAL WITH TRUSS END VERTICAL.
6. 5/8" NOMINAL PLY SHEATHING. SEE TYPICAL DETAILS FOR NAILING REQUIREMENTS AND GENERAL NOTES FOR GRADE. PLY SHEETS TO BE CONTINUOUS OVER FACE OF WOOD STUDS AND PARAPET WALL ABOVE.
7. SIMPSON HTS16 HURICANE TIE AT EACH TRUSS. ATTACH DIRECTLY TO TRUSS.
8. TRUSS HEEL BLOCKING – PER DETAIL 9/S–510.
9. ROOF SHEATHING – SEE 7/S–500 FOR SHEATHING ATTACHMENT.
10. ROOF FINISHES – SEE ARCH.
11. SEE 5/S–510 FOR BOTTOM CORD BRACING REQUIREMENTS.

1 EXTERIOR WALL DETAIL (TRUSS PERPENDICULAR)

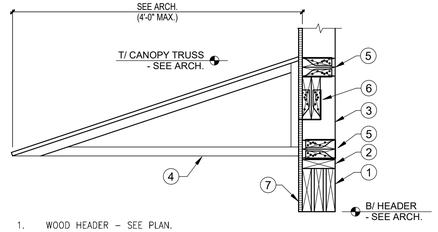
1" = 1'–0"



1. 2x6 STUD WALL CONTINUOUS TO UNDERSIDE OF ROOF TRUSSES. LOCATE STUDS DIRECTLY BEANTH ROOF TRUSSES – SEE PLANS AND DETAILS FOR ADDITIONAL INFROMATION.
2. 2x6 CONTINUOUS SOLID BLOCKING AT 4'–0" O.C. MAX. VERTICALLY.
3. DOUBLE 2x6 TOP PLATE.
4. PREMANUFACTURERED ROOF TRUSSES AT 24" O.C. TO BE LOCATED ABOVE 2x STUDS BELOW – SEE SHEET S–510 FOR TRUSS LOADING REQUIREMENTS. TRUSS END VERTICAL TO BE 2x6 MINIMUM.
5. ROOF GIRDER TRUSS AT FIRST INTERIOR TRUSS PARALLEL TO EXTERIOR WALL.
6. 2x6 PARAPET WALL LAPPED WITH TRUSS END VERTICAL. PROVIDE (2) 16d NAILS AT 6" O.C. ALONG LENGTH OF TRUSS END VERTICAL. AT CONTRACTOR'S OPTION PARAPET WALL CAN BE BUILT INTEGRAL WITH TRUSS END VERTICAL.
7. 5/8" NOMINAL PLY SHEATHING. SEE TYPICAL DETAILS FOR NAILING REQUIREMENTS AND GENERAL NOTES FOR GRADE. PLY SHEETS TO BE CONTINUOUS OVER FACE OF WOOD STUDS AND PARAPET WALL ABOVE.
8. SIMPSON H3 HURICANE TIE AT EACH TRUSS. ATTACH DIRECTLY TO TRUSS.
9. TRUSS HEEL BLOCKING – PER DETAIL 9/S–510.
10. ROOF SHEATHING – SEE 7/S–500 FOR SHEATHING ATTACHMENT.
11. 16d NAILS AT 6" O.C. ADDITIONAL ALONG LENGTH OF SHORT ROOF TRUSSES.
12. ROOF FINISHES – SEE ARCH.
13. SEE 5/S–510 FOR BOTTOM CORD BRACING REQUIREMENTS.
14. CONTINUOUS 2x6 TOP PLATE.

2 EXTERIOR WALL DETAIL (TRUSS PARALLEL)

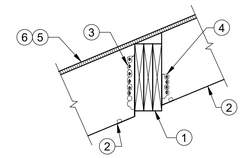
1" = 1'–0"



1. WOOD HEADER – SEE PLAN.
2. 2x6 BOTTOM PLATE.
3. TRIPLE 2x6 EXTERIOR STUD WALL AT CANOPY FRAMING.
4. PREFABRICATED METAL FRAMED CANOPY WITH SUPPORT FRAMES AT 4'–0" O.C. ANCHORAGE OF CANOPY FRAME TO WOOD BLOCKING BY MANUFACTURER/OTHERS.
5. (2) 2x6 HORIZONTAL BLOCKING BETWEEN WOOD STUDS SIMPSON HUC26–2 JOIST HANGER EACH END. ORIENT JOIST HANGER AS SHOWN.
6. (2) 2x6 VERTICAL BLOCKING BETWEEN WOOD STUDS SIMPSON HUC26–2 JOIST HANGER EACH END.
7. EXTERIOR SHEATHING–SEE PLANS & DETAILS

3 CANOPY SUPPORT DETAIL

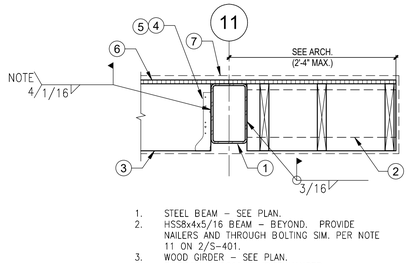
1" = 1'–0"



1. WOOD GIRDER – SEE PLAN.
2. ROOF RAFTER – SEE PLAN.
3. SIMPSON LRU212Z JOIST HANGER.
4. SIMPSON LRU26Z JOIST HANGER.
5. ROOF SHEATHING – SEE 7/S–500 FOR SHEATHING ATTACHMENT.
6. ROOF FINISH – SEE ARCH.

4 INTERMEDIATE SUPPORT DETAIL

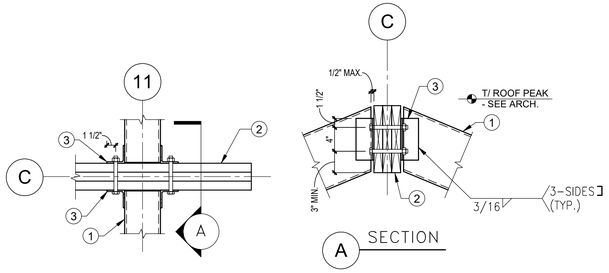
1" = 1'–0"



1. STEEL BEAM – SEE PLAN.
2. HSS8x4x5/16 BEAM – BEYOND. PROVIDE NAILERS AND THROUGH BOLTING SIM. PER NOTE 11 ON 2/S–401.
3. WOOD GIRDER – SEE PLAN.
4. SIMPSON HUC212–3 JOIST HANGER.
5. WELD JOIST HANGER TO STEEL BEAM WITH (4) 1" SEGMENTS PER MANUFACTURER REQUIREMENTS.
6. ROOF SHEATHING – SEE 7/S–500 FOR SHEATHING ATTACHMENT.
7. ROOF FINISH – SEE ARCH.

5 GIRDER SUPPORT DETAIL

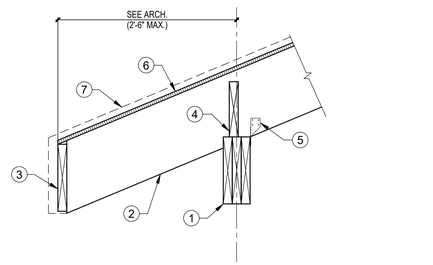
1" = 1'–0"



1. STEEL BEAM – SEE PLAN.
2. WOOD GIRDER – SEE PLAN.
3. L3x3x1/4 EACH SIDE OF STEEL BEAM WITH (2) 5/8"Ø THROUGH–BOLTS.

6 RIDGE BEAM SUPPORT DETAIL

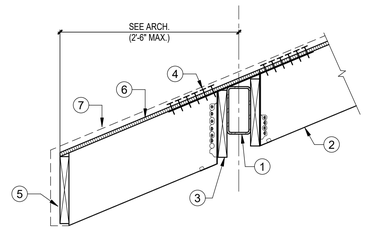
1" = 1'–0"



1. WOOD GIRDER – SEE PLAN.
2. BIRD MOUTHED ROOF RAFTER – SEE PLAN.
3. 2x12 RIM JOIST.
4. 2x10 CONTINUOUS BLOCKING.
5. SIMPSON H3 HURRICANE TIE AT EACH JOIST.
6. ROOF SHEATHING – SEE 7/S–500 FOR SHEATHING ATTACHMENT.
7. ROOF FINISH – SEE ARCH.

7 CANTILEVERED WOOD FRAMING DETAIL

1" = 1'–0"



1. STEEL BEAM – SEE PLAN.
2. ROOF RAFTER – SEE PLAN.
3. LEDGERS, THROUGH BOLTING, JOIST SEATS, PER SIM. PER 1/S–401.
4. CS20 COIL STRAP WITH 6 10d NAILS INTO EACH END OF JOIST.
5. 2x12 RIM JOIST.
6. ROOF SHEATHING – SEE 7/S–500 FOR SHEATHING ATTACHMENT.
7. ROOF FINISH – SEE ARCH.

8 CANTILEVERD WOOD FRAMING DETAIL

1" = 1'–0"

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PROJECT **CLARKSBURG DAYCARE CENTER**
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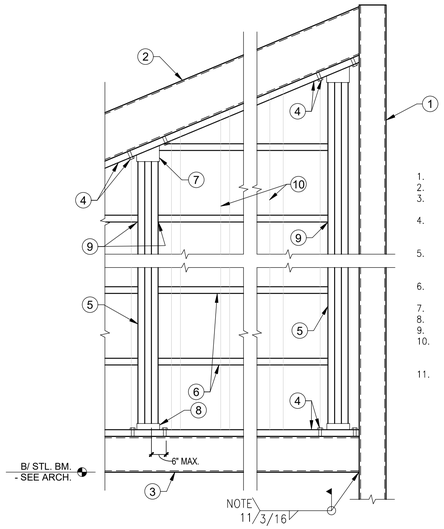
WOOD FRAMING DETAILS

S-501



1. STEEL COLUMN – SEE PLAN.
2. STEEL RAFTER BEAM – SEE PLAN.
3. LOW STEEL WALL SUPPORT BEAM – SEE PLAN.
4. CONTINUOUS 2x6 NAILER WITH WELDED 5/8" ANCHOR BOLT EACH SIDE OF BUILT UP STUD PACK.
5. (3) 2x6 STUD PACK AT 8'-0" O.C MAX. COORDINATE WITH ARCH FACADE SPACING REQUIREMENTS.
6. 2x6 HORIZONTAL "STUDS" AT 16" O.C. VERTICALLY.
7. SIMPSON HU26-3X SKL23 JOIST HANGER.
8. SIMPSON LUS26-3 JOIST HANGER.
9. SIMPSON LU26 JOIST HANGER.
10. ARCHITECTURAL BATTON SIDING RUNNING VERTICALLY- SEE ARCH. FOR ADDITIONAL INFROMATION.
11. REPAIR GALVANIZING AT WELD PER ASTM A780.

1 WOOD SCREENWALL ELEVATION

3/4" = 1'-0"

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ISSUE RECORD	DATE
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PROJECT **CLARKSBURG DAYCARE CENTER**

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CLARKSBURG, MD 20871
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WOOD FRAMING DETAILS

S-502

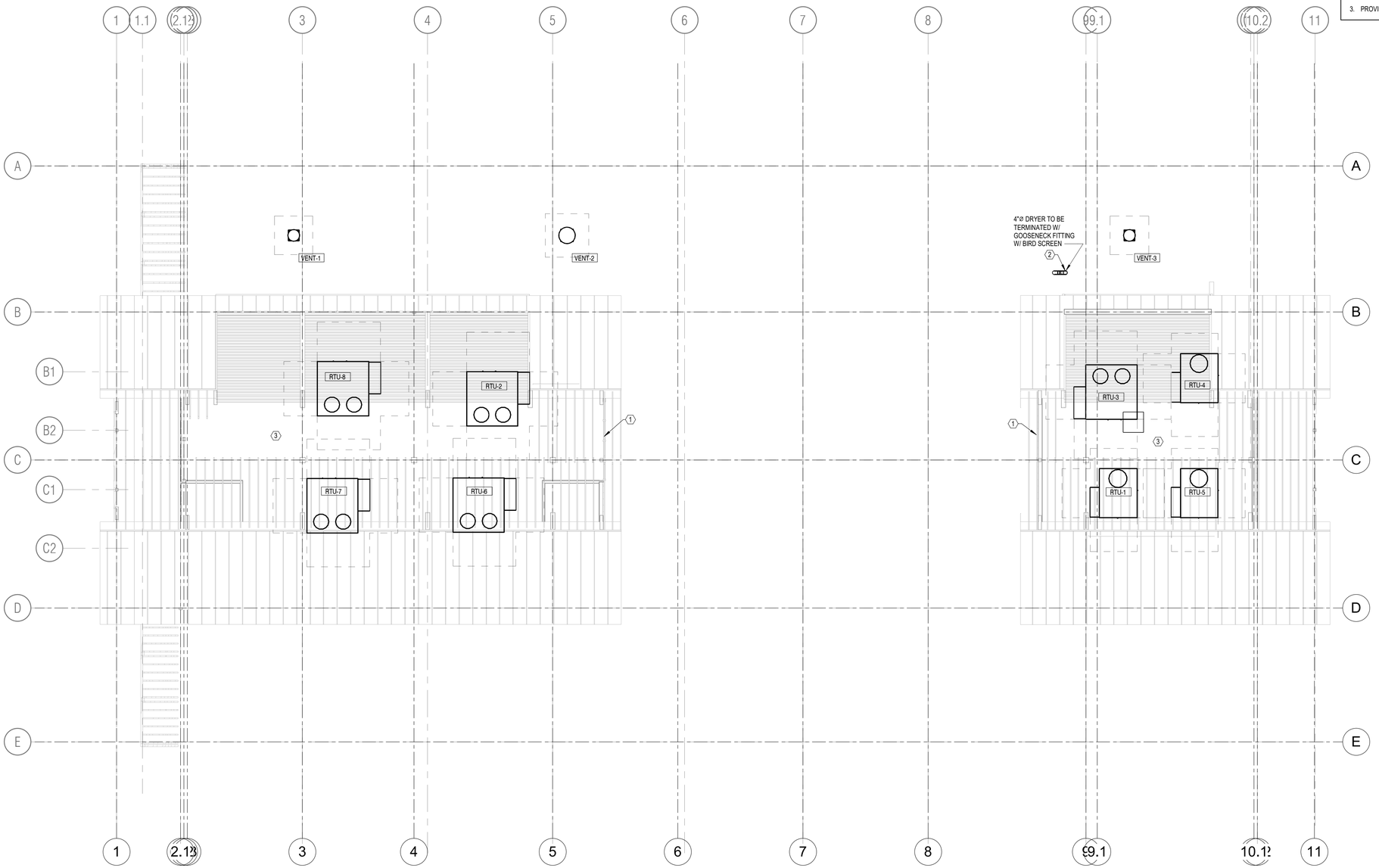
GENERAL NOTES

A. SEE MECHANICAL SPECIFICATIONS SECTION "230713 - DUCT INSULATION" FOR DUCTWORK INSULATION REQUIREMENTS.

B. FLOOR AND ROOF PENETRATIONS SHALL BE SLEEVED AND FIRE STOPPED. FIRE STOPPING ASSEMBLY SHALL BE UL APPROVED.

KEYED NOTES - NEW WORK

1. PROVIDE LOUVER, SEE ARCHITECTURAL DRAWING FOR DETAIL.
2. DRYER EXHAUST GOOSENECK TERMINATION MINIMUM 24" AFF.
3. PROVIDE (4) OUTDOOR 18" CIRCULATION FAN (TORNADO #HI-FAN-18HVWM-WR-1P).



PENTHOUSE LEVEL - NEW WORK PLAN

1/8" = 1'-0"

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ISSUE RECORD	DATE
REVIEW	10/25/2023

PROJECT **HAMMER HILL DAYCARE CENTER**
23312 FREDERICK RD
CLARKSBURG, MD 20871
PROJECT # 10272

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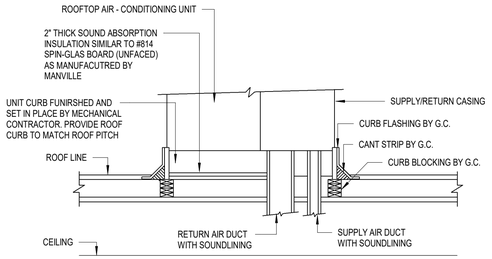
PENTHOUSE LEVEL - NEW WORK PLAN

M-201

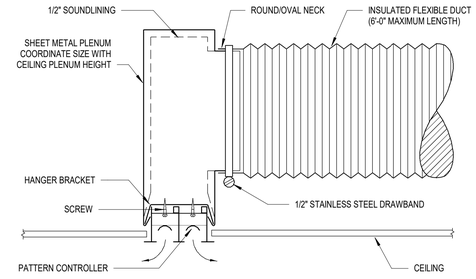


NOTE:

1. PROVIDE A SPRING ISOLATOR CURB FOR UNITS THAT ARE NOT INTERNALLY SPRING ISOLATED. THIS INCLUDES UNITS WITH INTEGRAL RUBBER IN SHEAR.

ROOFTOP UNIT DETAIL

SCALE: NOT TO SCALE

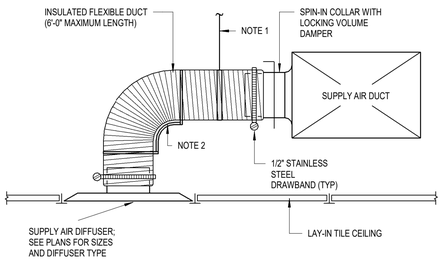


NOTES

1. ADJUST VOLUME DAMPERS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS FOR SPECIFIED AIR FLOW.
2. REFER TO DIFFUSER SCHEDULE FOR QUANTITY AND SIZES OF SLOTS.
3. INSTALLED AIR DEVICES WITH ADJUSTABLE DEFLECTORS SHALL NOT DIRECT AIR ONTO THE OCCUPANTS OF THE SPACE. ADJUST AIR DEFLECTORS AS FOLLOWS:
   -THE SLOT CLOSEST TO THE EXTERIOR SHALL DIRECT AIR TO TOWARD THE EXTERIOR WALL (IF APPLICABLE).
   - ALL INTERIOR SLOTS SHALL DIRECT AIR ACROSS THE CEILING.

LINEAR SLOT DIFFUSER INSTALLATION DETAIL

SCALE: NOT TO SCALE

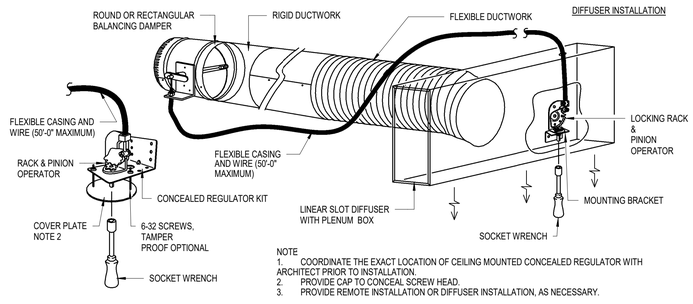


NOTE:

1. FLEXIBLE DUCT SHALL BE SUPPORTED FROM STRUCTURE ABOVE TO PREVENT SAGGING.
2. INSTALL DURABLE ELBOW SUPPORT (FLEX RIGHT OR APPROVED EQUAL) TO ENSURE BENDS ARE NOT MADE WITH LESS THAN ONE DUCT DIAMETER (CENTERLINE RADIUS). REFER TO MANUFACTURER INSTALLATION DETAILS FOR ADDITIONAL INFORMATION.

SUPPLY AIR DIFFUSER DUCT CONNECTION DETAIL

SCALE: NOT TO SCALE

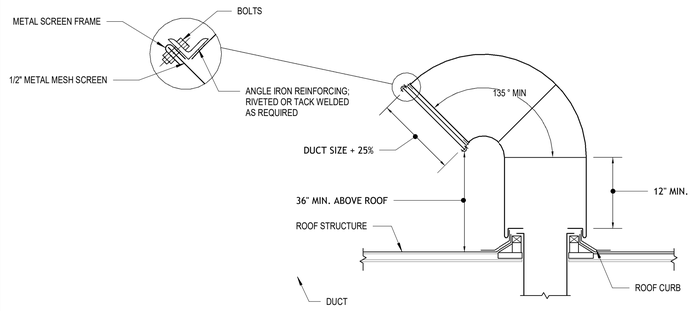


NOTE
1. COORDINATE THE EXACT LOCATION OF CEILING MOUNTED CONCEALED REGULATOR WITH ARCHITECT PRIOR TO INSTALLATION.
2. PROVIDE CAP TO CONCEAL SCREW HEAD.
3. PROVIDE REMOTE INSTALLATION OR DIFFUSER INSTALLATION, AS NECESSARY.

REMOTE INSTALLATION

CABLE CONTROL SYSTEM - LINEAR DIFFUSER

SCALE: NOT TO SCALE

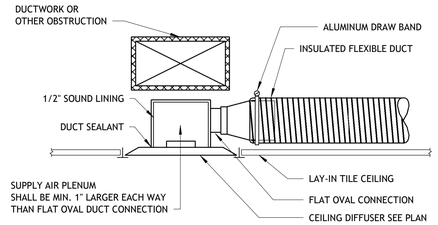


NOTES:

1. INSIDE RADIUS OF GOOSENECK SHALL BE EQUAL TO ONE HALF OF THE DUCT WIDTH.
2. ALL SEAMS AND JOINTS SHALL BE WATERPROOFED.

GOOSENECK DETAIL

SCALE: NOT TO SCALE



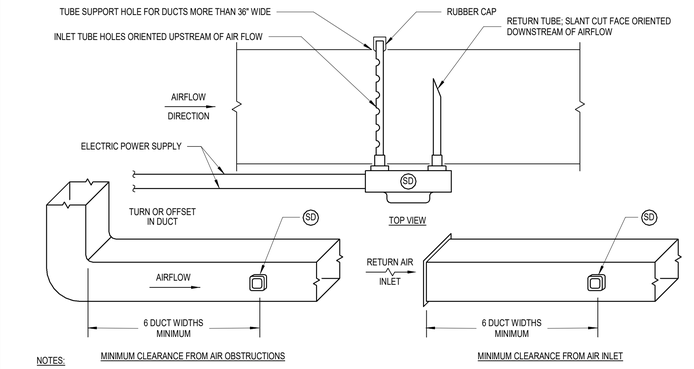
NOTES:

1. THE FOLLOWING SCHEDULE SHALL BE USED BY THE CONTRACTOR FOR ROUND TO FLAT OVAL DUCTWORK SIZE.

ROUND FLEX DUXT SIZE (IN.)	FLAT OVAL REQ'D SIZE (IN.)
6" RD	4"x7"
8" RD	4"x10", 6"x9"
10" RD	6"x12", 8"x11"
12" RD	6"x15", 8"x14", 10"x13"
14" RD	8"x17", 10"x16", 12"x15"

CEILING DIFFUSER CONNECTION ALTERNATE DETAIL

SCALE: NOT TO SCALE

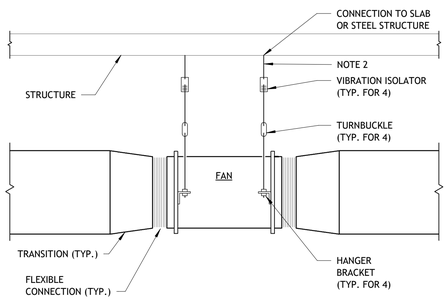


NOTES:

1. INLET TUBE LENGTH SHALL BE EQUAL TO FULL WIDTH OF DUCT.
2. RETURN TUBE SHALL BE AS RECOMMENDED BY THE DETECTOR'S MANUFACTURER.
3. CLEARANCES FROM OBSTRUCTION, INLETS AND PROPER LOCATION IN THE SYSTEM SHALL BE IN ACCORDANCE WITH NEMA: "GUIDE FOR PROPER USE OF SMOKE DETECTORS IN DUCT APPLICATIONS", NFPA 90A, U.L. STANDARD 268A AND NFPA 72E.

DUCT SMOKE DETECTOR DETAIL

SCALE: NOT TO SCALE



NOTES:

1. VIBRATION ISOLATOR SHALL BE SIMILAR TO MASON INDUSTRIES, TYPE 30N HANGER.
2. SUPPORT FAN WITH THREAD ROD & VIBRATION ISOLATION IN CONJUNCTION WITH HANGER BRACKETS PROVIDED ON THE EQUIPMENT. ATTACHMENT TO BUILDING STRUCTURE SHALL BE COORDINATED WITH THE BUILDING ENGINEER.
3. CONTRACTOR TO COORDINATE FAN ORIENTATION TO ALLOW FOR SERVICE CLEARANCE AND CEILING INSTALLATION.

IN-LINE FAN DETAIL

SCALE: NOT TO SCALE

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240-396-1830 www.gpinet.com
Project #: 2300171.00
PM: NLM M: HTL E: MAN P: NDD

ISSUE RECORD | DATE

REVIEW | 10/25/2023

PROJECT **HAMMER HILL DAYCARE CENTER**
23312 FREDERICK RD
CLARKSBURG, MD 20871
PROJECT # 10272

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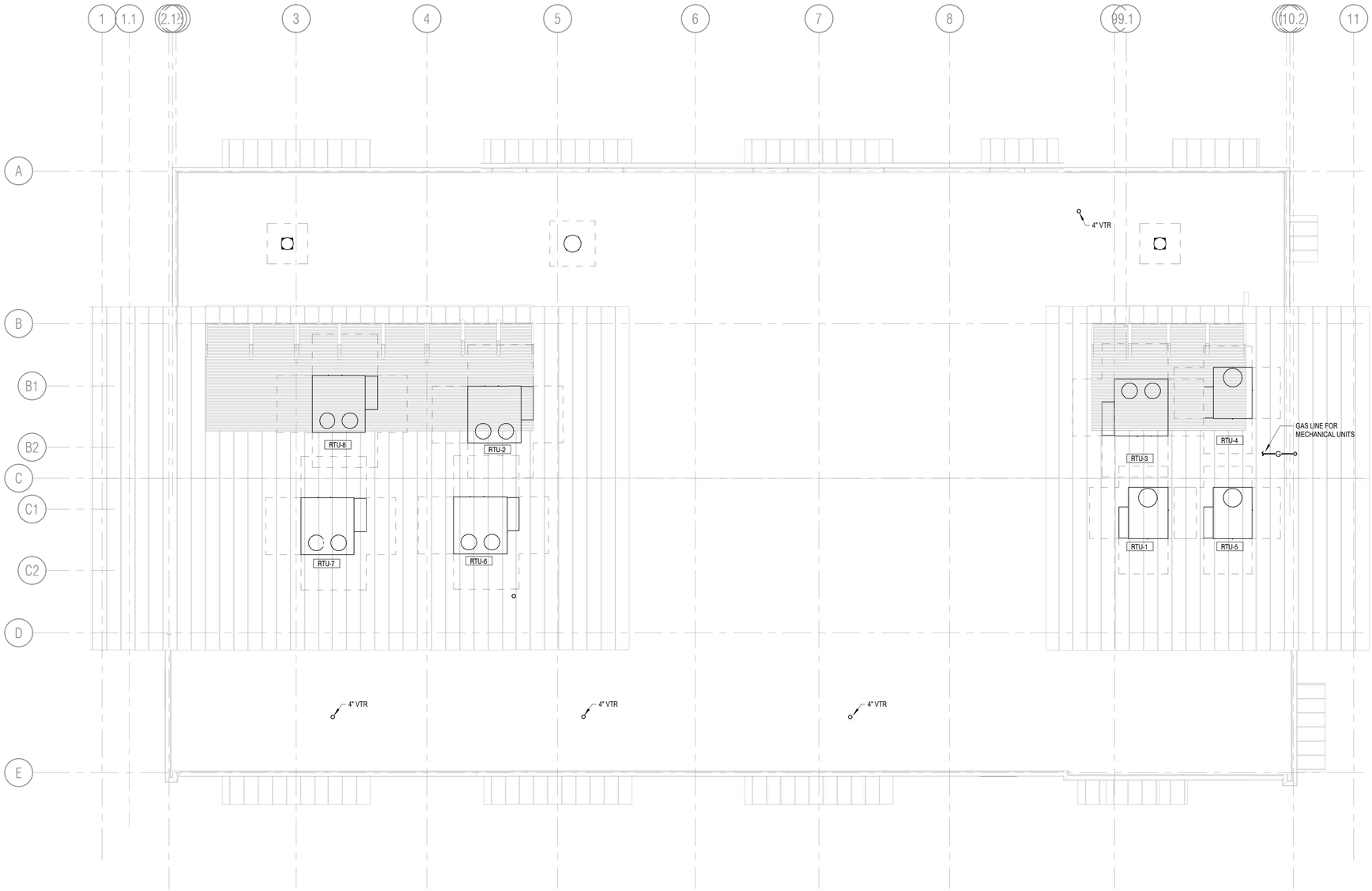
SHEET

DETAILS

M-300



ROOF PLAN

1/8" = 1'-0"

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ROOF PLAN

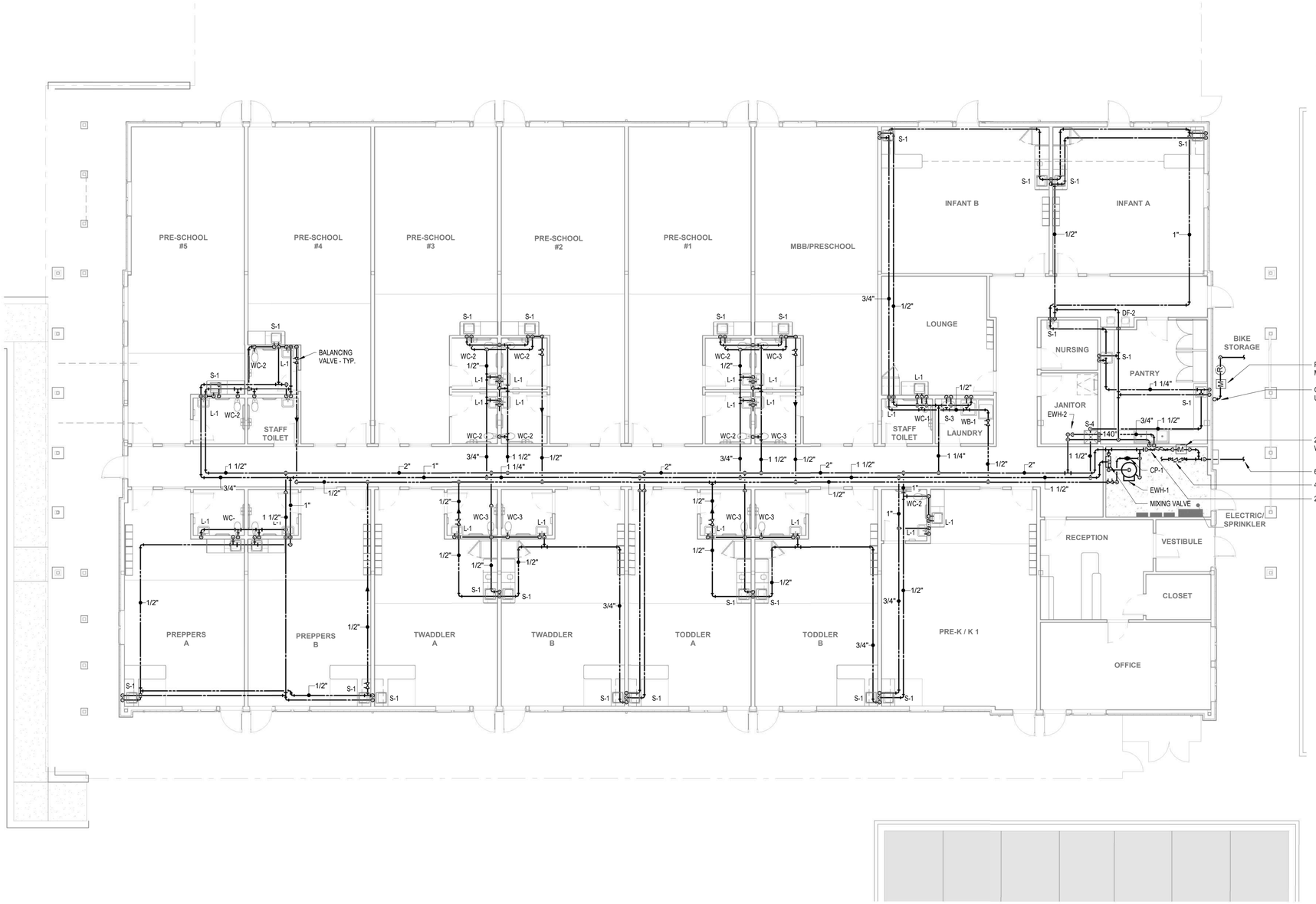
P-102

GENERAL NOTES

1. CONTRACTOR TO PROVIDE MIXING VALVES AT EACH LAVATORY AND SINK. COORDINATE WITH AUTHORITY HAVING JURISDICTION.
2. REFER TO COUNTER HEIGHTS IN ARCHITECTURAL MILLWORK DETAILS FOR COUNTER-MOUNTED SINK ROUGH-INS
3. FOR DETAILED INFORMATION OF SPACE ALLOCATION IN MECHANICAL ROOM SEE ELECTRICAL DRAWING E-201.
4. PROVIDE MIXING VALVES AT ALL LAVATORIES/SINKS SET TO 105 DEGREES FAHRENHEIT . COORDINATE TEMPERATURE IN PANTRY WITH LOCAL HEALTH DEPARTMENT.
5. WATER PIPES SERVING EXTERIOR FIXTURES (DRINKING FOUNTAINS AND HOSE BIBBS) SHALL BE INSULATED TO PREVENT FREEZING.
6. PROVIDE INDIVIDUAL SHUTOFF VALVES FOR EACH FIXTURE. SEE DIAGRAM 12 ON DRAWING P-601.

KEYED NOTES

1. -



1ST FLOOR PLAN - WATER & GAS

1/8" = 1'-0"

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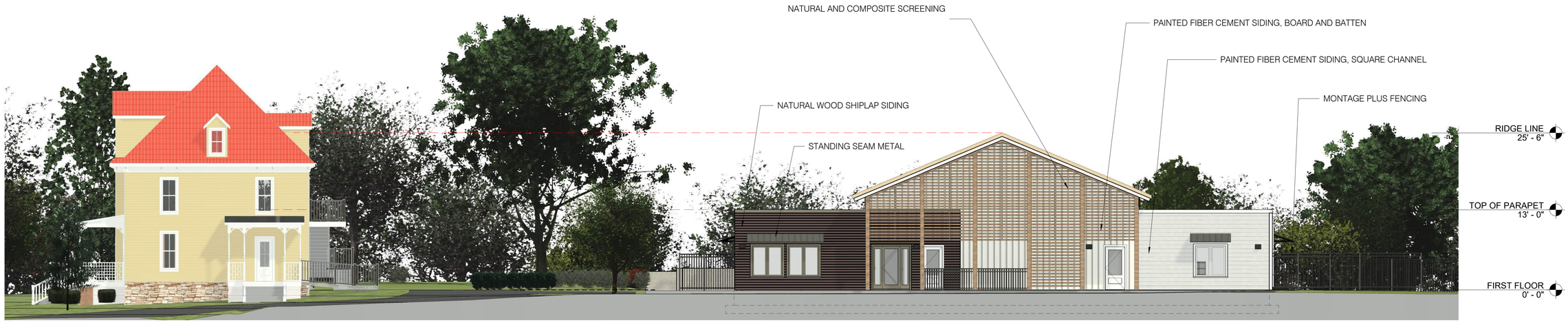
1ST FLOOR PLAN - WATER & GAS

P-201



1 North Elevation A
1/8" = 1'-0"

2 South Elevation A
1/8" = 1'-0"

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BUILDING ELEVATIONS

A-201

1 East Elevation A
1/8" = 1'-0"

2 West Elevation A
1/8" = 1'-0"

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BUILDING ELEVATIONS

A-202

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3D VIEWS

A-801

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3D VIEWS

A-802

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3D VIEWS

A-803

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3D VIEWS

A-804

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3D VIEWS

A-805

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3D VIEWS

A-806

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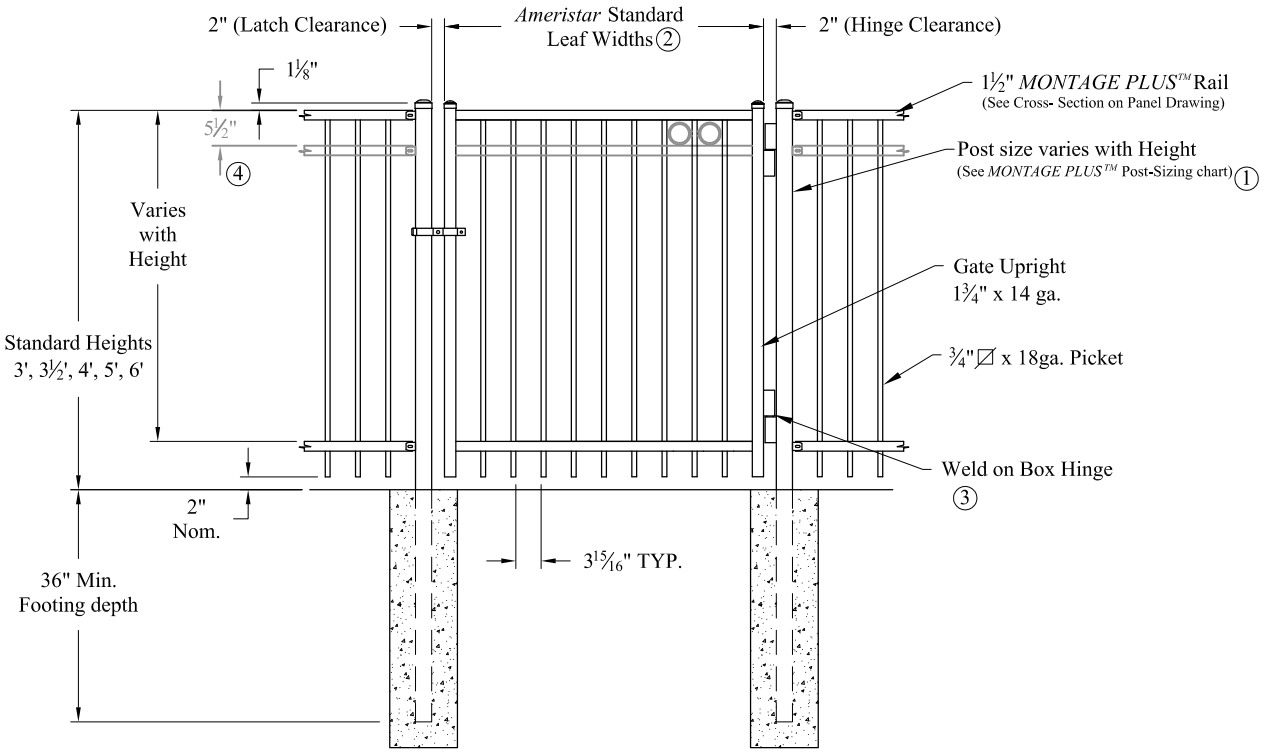
3D VIEWS

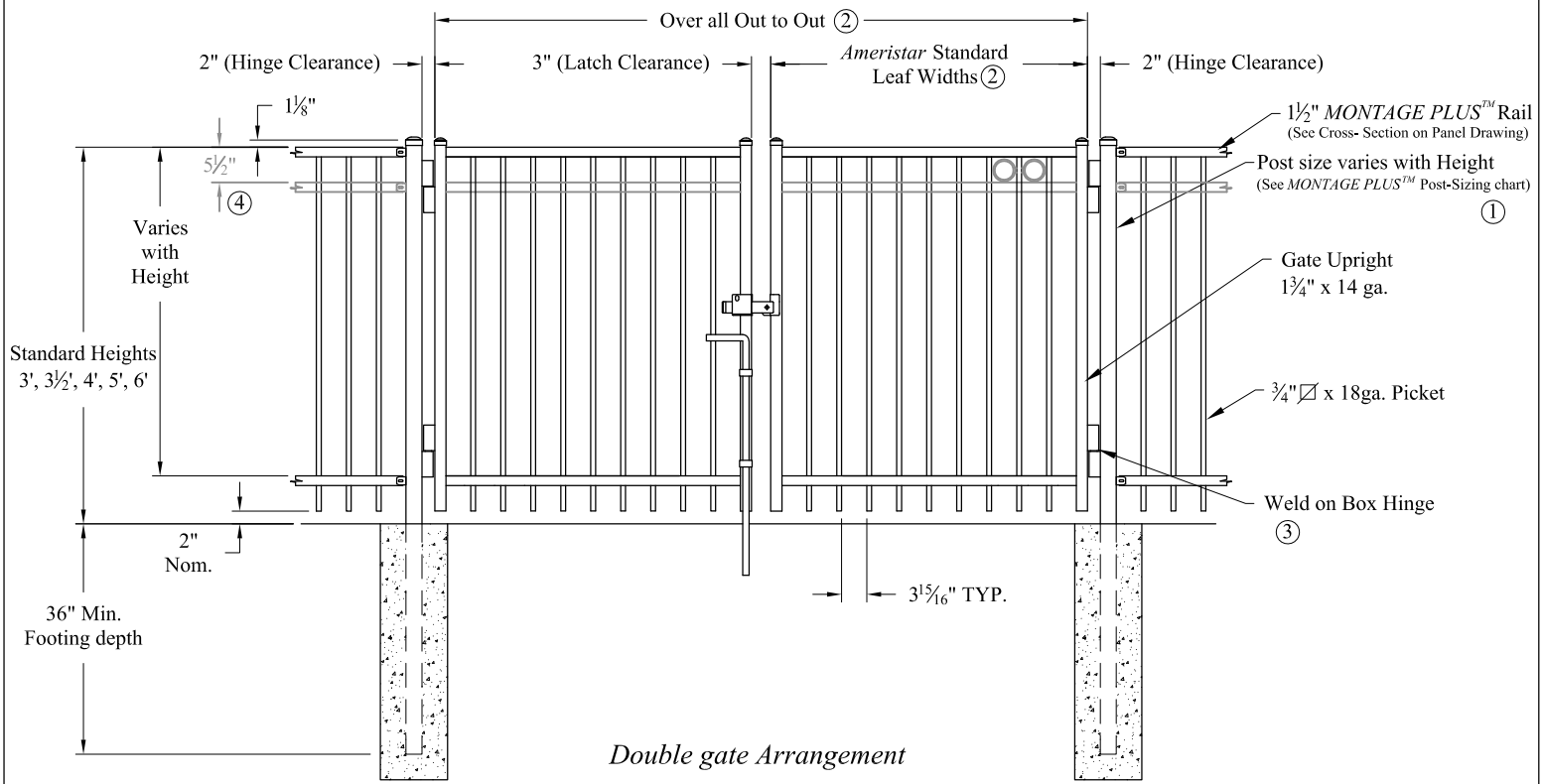
A-807



Single gate Arrangement

NOTES:

1.) Post size depends on fence height, weight and wind loads. See *MONTAGE PLUS™* specifiations for post sizing chart.
2.) See *Ameristar* gate table for standard out to outs. Custom gate openings available for special out to out/leaf widths.
3.) Additional styles of gate hardware are available on request. This could change the Latch & Hinge Clearance.
4.) Third rail required for *Double Rings*.



Double gate Arrangement

Values shown are nominal and not to be used for installation purposes. See product specification for installation requirements.

1RMISOG

COMMERCIAL STRENGTH WELDED STEEL GATES

Title: MONTAGE PLUS MAJESTIC 2/3-RAIL SGL & DBL GATE			
DR: CI	SH . 1of 1	SCALE: DO NOT SCALE	
CK: ME	Date 6/28/10		REV: e

AMERISTAR®
1555 N. Mingo
Tulsa, OK 74116
1-888-333-3422
www.ameristarfence.com

RE: HAWP Permit No. 1048193 - Hammer Hill Daycare Center - HAWP Application Submission - Rev1

BD Ben Dorsey <BDorsey@skastudio.com>
To Liebertz, John

You replied to this message on 12/7/2023 9:10 AM.

Montage Plus Majestic Gate.pdf
311 KB

From: Liebertz, John <John.Liebertz@montgomeryplanning.org>
Sent: Tuesday, December 5, 2023 2:28 PM
To: Ben Dorsey <BDorsey@skastudio.com>
Subject: RE: HAWP Permit No. 1048193 - Hammer Hill Daycare Center - HAWP Application Submission - Rev1

Hey Ben,

A couple of quick questions.

1. All of the Marvin Ultimate Commercial Doors are aluminum-clad wood doors, right? I didn't see it specified and I believe that line can be either wood or aluminum-clad exteriors.
   Response: Correct, the Marvin Ultimate doors will be aluminum-clad wood doors.
2. There is a discrepancy with the fence. Let me know if I am misinterpreting this.
   a. Sheet A101, Notes 3 and 4 state, "4' or 6' solid vinyl privacy fence."
   Response: Sheet Note 3 on A-101 is incorrect and will be updated to 6' steel fence.
   b. The spec on L.202 shows the proposed steel fence at 3.5' to 6' tall (which I believe is correct).
   Response: That is correct. Railings needed at the retaining wall / ramp will be 3.5'. All building perimeter fence will be 6'.
3. I may be missing this in the plan, but does a site plan show the height of the fence at certain locations? Also, we will need a specification sheet for the design of any gates (if its not included).
   Response: All building perimeter fencing (south/east/west) and playground surrounds will be 6'.
   Response: Gate specification attached. 'Ameristar Montage Plus Majestic' (to match the fencing)

These are all minor. If any are missing, I will just condition the approval that the applicant submits revisions to staff for approval.