TOWN OF BLUFFTON SOUTH CAROLINA EST. 1825

Planning Commission

Wednesday, November 15, 2023 at 5:00 PM

Theodore D. Washington Municipal Building, 20 Bridge Street, Henry “Emmett” McCracken Jr. Council Chambers

AGENDA

This meeting can be viewed live on Beaufort County Channel, on Hargray Channel 9 and 113 or on Spectrum Channel 1304.

I. CALL TO ORDER

II. ROLL CALL

III. NOTICE REGARDING ADJOURNMENT

The Planning Commission will not hear new items after 9:30 p.m. unless authorized by a majority vote of the Commission Members present. Items which have not been heard before 9:30 p.m. may be continued to the next regular meeting or a special meeting date as determined by the Commission Members.

IV. NOTICE REGARDING PUBLIC COMMENTS*

Every member of the public who is recognized to speak shall address the Chairman and in speaking, avoid disrespect to Commission, Staff, or other members of the Meeting. State your name and address when speaking for the record. COMMENTS ARE LIMITED TO THREE (3) MINUTES.

V. ADOPTION OF THE AGENDA

VI. ADOPTION OF MINUTES

1. October 25, 2023 Minutes

VII. PUBLIC COMMENTS FOR ITEMS NOT ON THE AGENDA*

VIII. OLD BUSINESS

1. **Big Blue Marble Academy (Certificate of Appropriateness- Highway Corridor Overlay):** A request by Samantha Kozlowski, Development Manager, on behalf of the parcel owners EIG14T BBMA SC BLUFFFTON, LLC, for approval of a Certificate of Appropriates – Highway Corridor Overlay. The project consists of the landscape, lighting and architecture for Big Blue Marble Academy, a 11,293 SF one-story square foot childcare facility including an outdoor child play area and associated parking, located at the intersection of Mill Creek Boulevard and

Okatie Highway (SC HWY 170) off Slater Street in the Jones Estate PUD, within the Cypress Ridge Master Plan. (COFA-03-23-017836) (Staff - Katie Peterson)

IX. NEW BUSINESS

1. **Adoption of 2024 Planning Commission Meeting Dates**: (Staff - Katie Peterson)
2. **Adoption of 2024 Development Review Committee Meeting Dates**: (Staff - Katie Peterson)

X. DISCUSSION

XI. ADJOURNMENT

"FOIA Compliance – Public notification of this meeting has been published and posted in compliance with the Freedom of Information Act and the Town of Bluffton policies."

In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990 ("ADA"), the Town of Bluffton will not discriminate against qualified individuals with disabilities on the basis of disability in its services, programs, or activities. The Town of Bluffton Council Chambers are ADA compatible. Auditory accommodations are available. Any person requiring further accommodation should contact the Town of Bluffton ADA Coordinator at 843.706.4500 or adacoordinator@townofbluffton.com as soon as possible but no later than 48 hours before the scheduled event.

**Please note that each member of the public may speak at one public comment session and a form must be filled out and given to the Town Clerk. Public comment is limited to 3 minutes per speaker.*

Executive Session - The public body may vote to go into executive session for any item identified for action on the agenda.

Planning Commission

Wednesday, October 25, 2023 at 6:00 PM

MINUTES

I. CALL TO ORDER

Chairwoman Denmark called the meeting to order at 6pm.

II. ROLL CALL

PRESENT
Chairwoman Amanda Jackson Denmark
Vice Chairman Charlie Wetmore
Commissioner Michael Brock
Commissioner Rich Delcore
Commissioner Lydia DePauw
Commissioner Jason Stewart

ABSENT
Commissioner Jim Flynn

III. ADOPTION OF THE AGENDA

Vice Chairman Wetmore made a motion to adopt the agenda.

Seconded by Commissioner Delcore.
Voting Yea: Chairwoman Jackson Denmark, Vice Chairman Wetmore, Commissioner Brock, Commissioner Delcore, Commissioner DePauw, Commissioner Stewart

All were in favor and the motion passed.

IV. ADOPTION OF MINUTES

1. September 27, 2023 Minutes

   Commissioner Delcore made a motion to approve the minutes as written.

   Seconded by Commissioner Stewart.
   Voting Yea: Chairwoman Jackson Denmark, Vice Chairman Wetmore, Commissioner Brock, Commissioner Delcore, Commissioner DePauw, Commissioner Stewart

   All were in favor and the motion passed.

V. PUBLIC COMMENTS FOR ITEMS NOT ON THE AGENDA*

VI. OLD BUSINESS

1. **Big Blue Marble Academy (Certificate of Appropriateness- Highway Corridor Overlay):** A request by Samantha Kozlowski, Development Manager, on behalf of the parcel owners EIG14T BBMA SC BLUFFFTON, LLC, for approval of a Certificate of Appropriates – Highway Corridor Overlay. The project consists of the landscape, lighting and architecture for Big Blue Marble Academy, a 11,293 SF one-story square foot childcare facility including an outdoor child play area and associated parking, located at the intersection of Mill Creek Boulevard and

Okatie Highway (SC HWY 170) off Slater Street in the Jones Estate PUD, within the Cypress Ridge Master Plan. (COFA-03-23-017836) (Staff - Katie Peterson)

Staff presented. The applicant was in attendance. The updated changes were reviewed. Commissioners discussed their concerns with the applicant and staff.

The applicant requested to table the application. There were no votes or action taken on the item.

VII. NEW BUSINESS

VIII. DISCUSSION

IX. ADJOURNMENT

Commissioner Stewart made a motion to adjourn.

Seconded by Commissioner Brock.
Voting Yea: Chairwoman Jackson Denmark, Vice Chairman Wetmore, Commissioner Brock, Commissioner Delcore, Commissioner DePauw, Commissioner Stewart

All were in favor and the motion passed.

The meeting was adjourned at 6:47pm.

MEMORANDUM

TO: Planning Commissioners
FROM: Katie Peterson, AICP, Senior Planner
RE: Review of Revised Plans to COFA-03-23-017836
DATE: 10/25/2023
CC: Kevin Icard, AICP, Director of Growth Management

BACKGROUND - On June 28, 2023, the Town of Bluffton Planning Commission tabled COFA-03-23-017836, a Certificate of Appropriateness to permit the landscape, lighting and architecture for Big Blue Marble Academy, an 11,293 SF one-story childcare facility including an outdoor child play area and associated parking, located at the intersection of Mill Creek Boulevard and Okatie Highway (SC HWY 170) off Slater Street in the Jones Estate PUD, within the Cypress Ridge Master Plan.

In response to the Planning Commission's request, the Applicant provided revised drawings which were reviewed by the Planning Commission at the October 25, 2023 meeting. The Planning Commission tabled the item, as the review criteria had not yet been addressed fully and changes to meet the requirements would significantly alter the design from what was presented.

In response to the Planning Commission's request, the Applicant provided revised drawings. Upon review of the resubmitted documents, Town Staff has identified in underlined red the items which either administratively should carry forward (Items 3,5,6) with an approval or have not yet been completed/addressed (Item 7 determination on which option).

1. Per Section 4.16.2.A. all roof mechanicals are shown on the front elevation, facing Highway 170, and must be revised. While the hood system was shown as screened on the front elevation, building code requires the exhaust to be no less than 10 feet horizontally from parts of the same building, and the intake, if vented at an angle away from the wall(s). It could be 5 feet of clearance from the wall(s) if angled away, but still requires 10 feet of clearance from the intake. It was not able to be met in the space provided and needed to be redesigned.
2. Pull the fence away from the columns on the front elevation.
3. Per Section 4.23.3.C.2.a.2. of the ZDSO, the Planning Commission must determine the appropriateness of the use of LEDs as a substitute lighting type for those listed in the Ordinance.
4. Per Section 4.23.3.C.2.a.2.1. of the ZDSO, additional information is required to ensure all fixtures will be cutoff luminaires.
5. All comments must be addressed, and a Final Development Plan must be approved prior to issuance of the Certificate of Appropriateness – HCO.
6. Signage Permits must be submitted to the Town of Bluffton for review and approval for the signage proposed at each site in the proposed development.

7. The shed roofs on the dormers were proposed at 3:12, which are required to be no less than 4:12. Options 2 and 3 address the roof pitches. Option one does not meet this requirement.
8. The columns, rather than the capitals, need to be aligned with the beam.
9. The intake on the front elevation must be below the roofline, including curbing and mechanicals, or moved to the side or rear elevation as it will not be approved should be visible from the front elevation once installed.
10. Consider increasing the height of the mechanical yards to ensure HVAC is concealed and electric meters are more concealed.
11. Move the three ridge vents on the roof to the rear elevation as they are not permitted on the front (HWY 170) elevation.

PLANNING COMMISSION ACTIONS: As granted by the powers and duties set forth in Section 2.2.6.C.6. of the Unified Development Ordinance (UDO), the Planning Commission has the authority to take the following actions with respect to this application:

1. Approve the application as submitted by the Applicant;
2. Approve the application with conditions; or
3. Deny the application as submitted by the Applicant.

STAFF RECOMMENDATION: It is the charge of the Planning Commission to assess and interpret the standards and guidelines set forth in the UDO as they pertain to applications using the review criteria established in the UDO and to take appropriate action as granted by the powers and duties set forth in Section 2.2.6.C.

Town Staff requests that the Planning Commission consider the requirements of Section 3.17.3. of the Unified Development Ordinance as they review the application.

ATTACHMENTS:

1. Resubmitted Narrative
2. Resubmitted Landscape Plan
3. Resubmitted Lighting Plans
4. Resubmitted Elevations, Roof Plans, and Mechanical Details

EIGHT DEVELOPMENT

1695 Twelve Mile Road, Suite 100

Berkley, Michigan 48072

O: 248-817-1691

samantha@814cre.com

Monday, October 30th, 2023

Town of Bluffton
Planning Department
ATTN: Katie Peterson, AICP
Senior Planner
20 Bridge Street
P.O. Box 386
Bluffton, SC 29910

RE: Big Blue Marble Cypress Ridge – Planning Commission Comment Responses

Dear Katie,

Thank you for the conversation at the most recent Planning Commission meeting on Wednesday 10/25/2023. Please see our plan revisions/responses below (in Blue):

1. **Architecture**
   a. Per Section 4.16.2.A. all roof mechanicals are shown on the front elevation, facing Highway 170, and must be revised.
      - The kitchen exhaust vent has been rerouted to outlet out the sidewell of the building, on the east elevation.
      - The rooftop mechanical unit has been inset into the roof line to provide screening from Highway 170. The specification sheet for the make-up air unit has been provided with this resubmittal.

   b. Pull the fence away from the columns on the front elevation
      - The fence location has been updated on the civil plans.

   c. The shed roofs on the dormers should be increased to pitch 4:12.
      - Two (2) versions of the updated elevations have been provided with our resubmittal to allow the Planning Commissioners to select their preferred elevation.
      - One version depicts the 12:6 roof and 12:4 pitch of the dormers.
      - One version depicts the 12:5 roof and 12:3 pitch of the dormers.

   d. Columns must be aligned with the beams.
      - Columns have been revised.

   e. The fence screening the mechanical units should be increased.
      - The fence screening has been increased to 4’ in height. Our previous submittal included a fence screen height of 3’-4”. The developer will comply with any additional requirements for mechanical fencing required by SCDHEC child care plan reviewer, if necessary.

EIGHT DEVELOPMENT

1695 Twelve Mile Road, Suite 100

Berkley, Michigan 48072

O: 248-817-1691

samantha@814cre.com

f. Move the three (3) roof ridge vents to the other side of the ridge.
  - The roof ridge vents have been relocated to the other side of the ridge.

g. Revise the roof gable bracket detail/vent on west & east elevation.
  - The roof gable bracket has been increased in size to fit the size of the roof gable. The vents located below the roof bracket detail has been removed.

2. Landscape

a. Change the overstory tree on the landscape peninsulas from Laurel Oak to Pin Oak.
  - Updated on sheet C700 of the civil sheets.

b. Move overstory tree on landscape peninsula next to the dumpster closer to the main sidewalk so it does interfere with the dumpster services.
  - The tree has been moved.

3. Lighting

a. Per Section 4.23.3.C.2.a.2. of the ZDSO, the Planning Commission must determine the appropriateness of the use of LEDs as a substitute lighting type for those listed in the Ordinance.
  - Noted.

b. Per Section 4.23.3.C.2.a.2.1. of the ZDSO, additional information is required to ensure all fixtures will be cutoff luminaires. With fully concealed light source.
  - Revised photometric plan provided with additional information on fixtures.
  - Noted and revised on the photometric plan.

4. Other (Administrative)

a. All comments must be addressed, and a Final Development Plan must be approved prior to issuance of the Certificate of Appropriateness – HCO.
  - Noted.

b. Signage Permits must be submitted to the Town of Bluffton for review and approval for the signage proposed at each site in the proposed development.
  - Noted. All Signage Permits will be submitted to the Town of Bluffton for review prior to installation. The Sign Permit application will be submitted by the individual sign contractor.

Thank you for your time reviewing our response letter and resubmittal materials. We are looking forward to reviewing this project with the Town of Bluffton's Planning Commission again soon. Please contact me at (734) 260-6820 or via email at samantha@814cre.com with any questions.

Thank you,

Samantha Kozlowski
Development Manager
814 SERVICES, LLC

PERMIT PLANS FOR

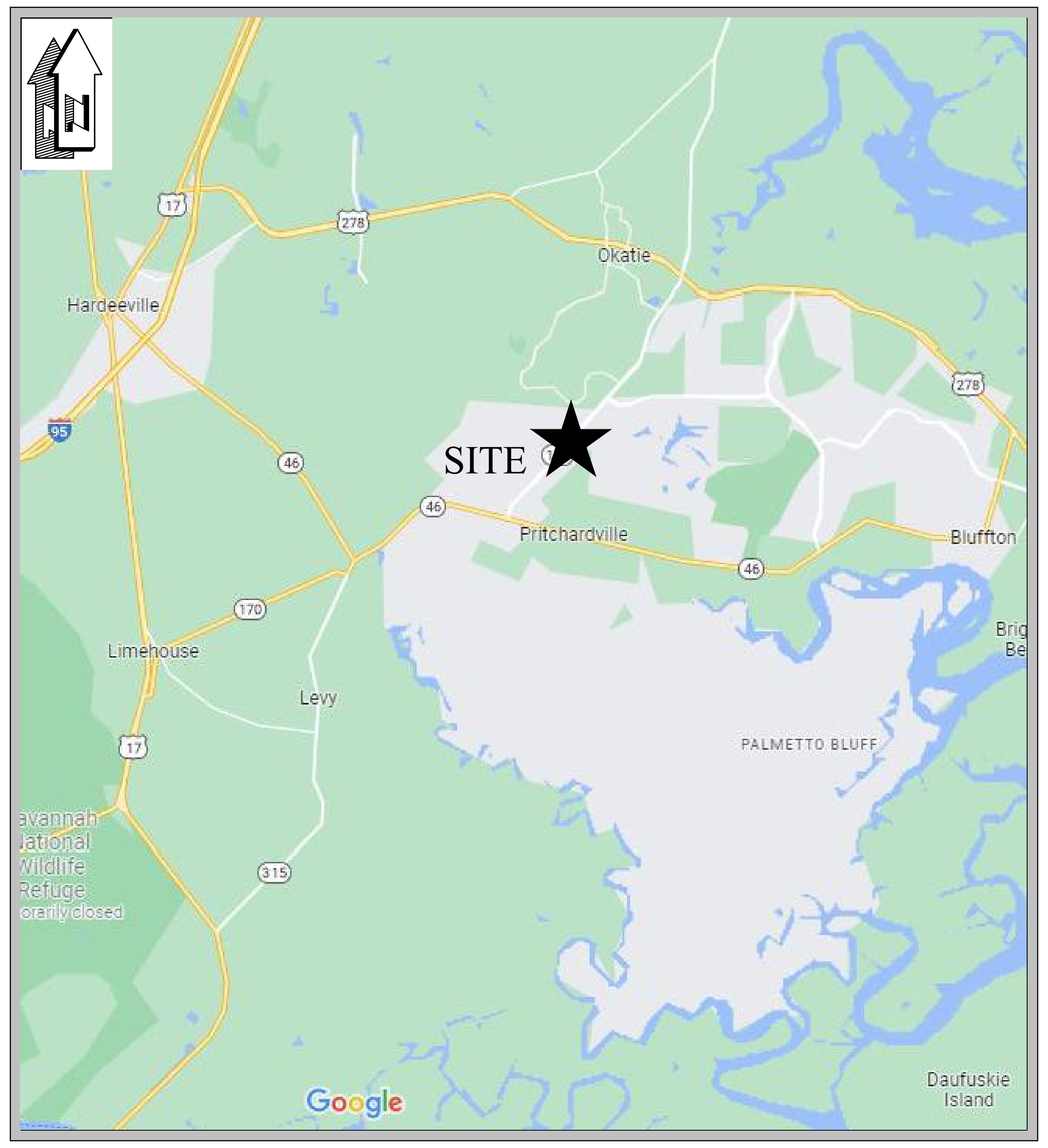
BIG BLUE MARBLE ACADEMY

SLATER STREET
BLUFFTON, SC 29909

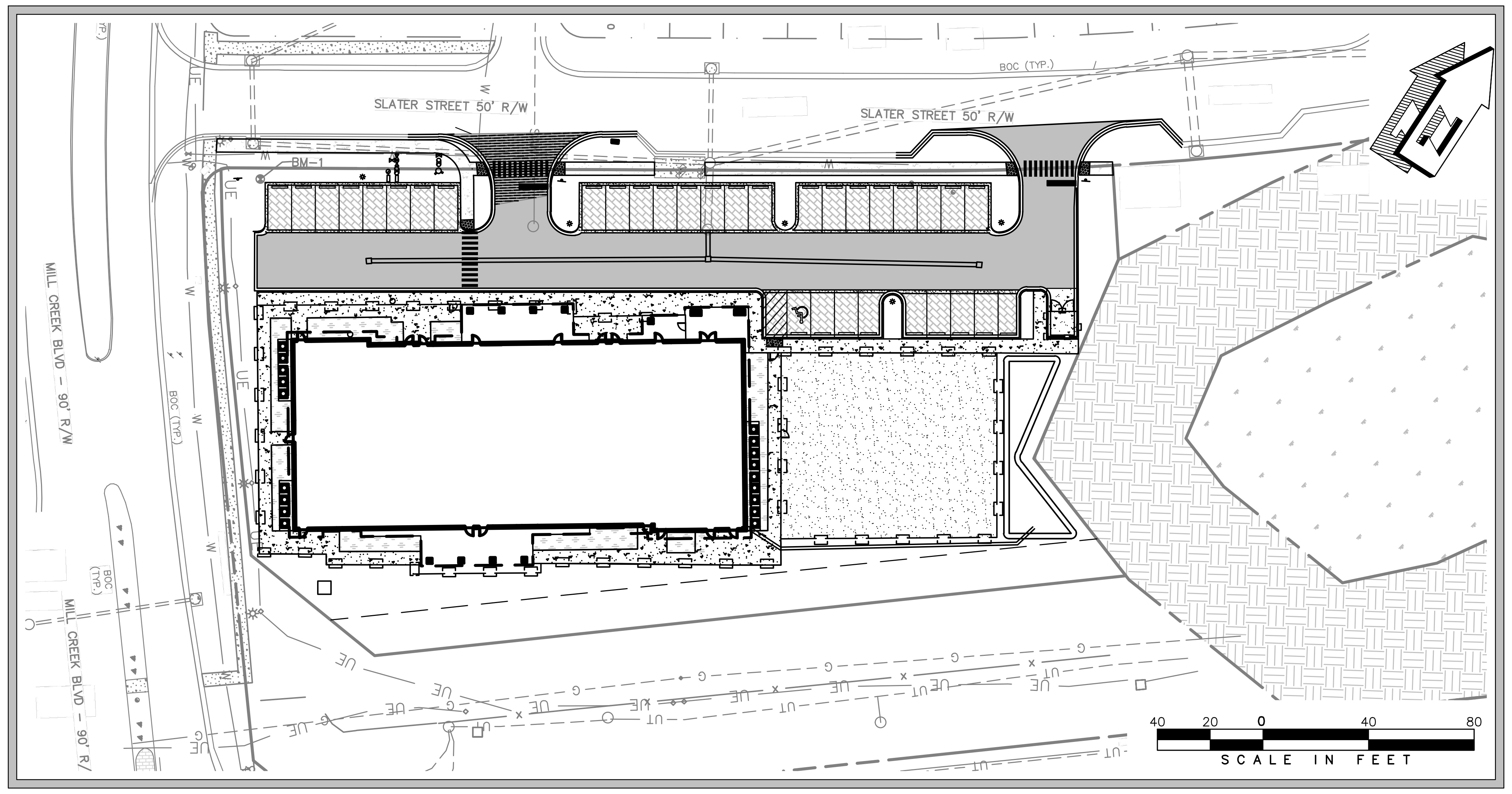
PREPARED FOR

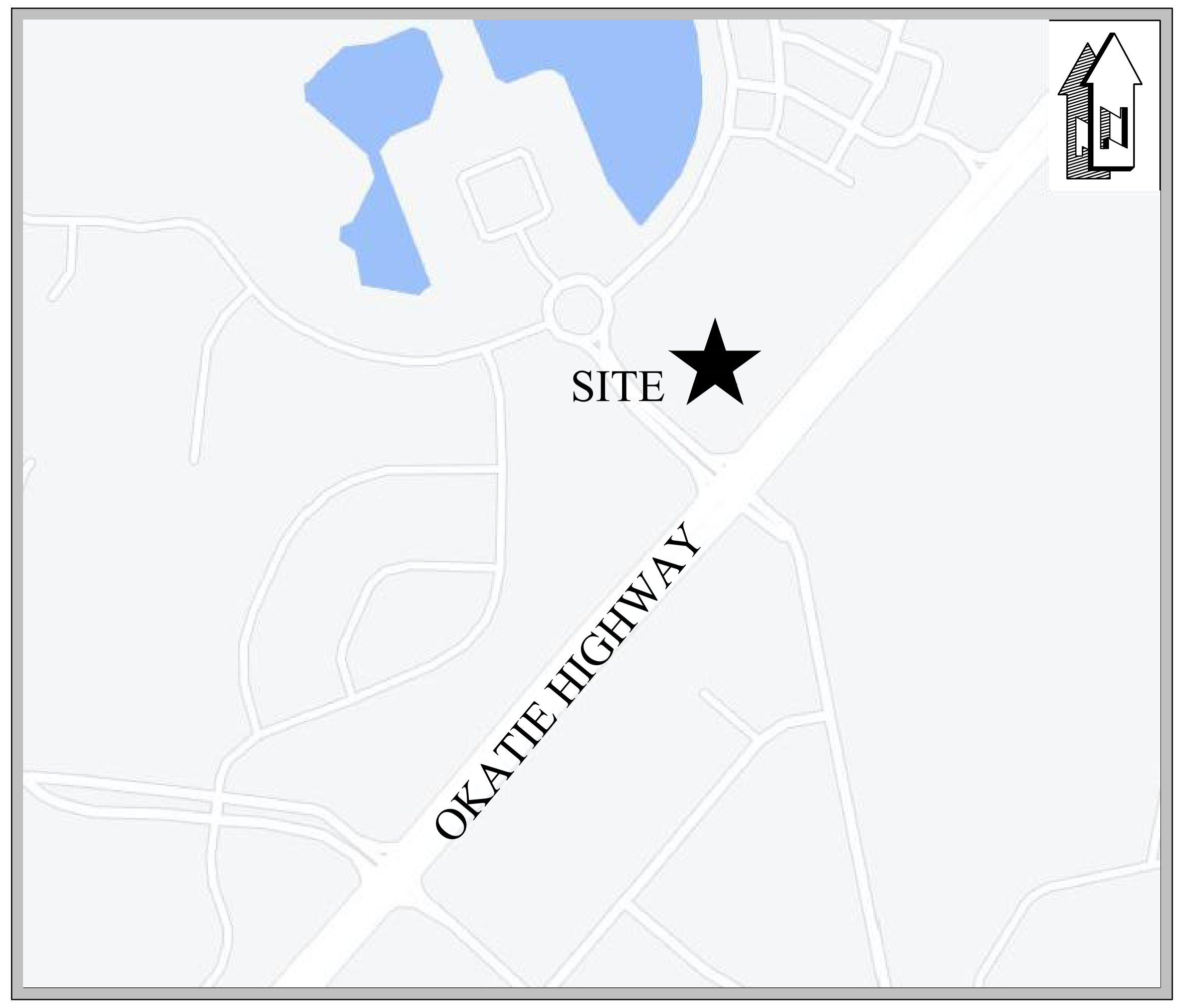
EIG14T DEVELOPMENT

1695 TWELVE MILE ROAD
BERKELE, MI 48072



VICINITY MAP
N.T.S.





LOCATION MAP
N.T.S.

PROJECT DATA:

1. ACREAGE OF PROPERTY: 1.276 ACRES
2. ACREAGE OF DEVELOPMENT: 1.276 ACRES
3. OWNER/DEVELOPER:
   EIG14T DEVELOPMENT
   1695 TWELVE MILE ROAD
   BERKELEY, MI 48702
   PHONE: (248) 817-1691
   24 HOUR CONTACT:
   NAME: MARK KELLENBERGER
   PHONE: (248) 921-3733
4. TAX MAP & PARCEL NUMBERS: R614 028 000 5285 0000
5. ZONING: PUD
6. IMPERVIOUS AREA:
   EXISTING: 0.00 ACRES
   PROPOSED: 0.442 ACRES
7. PERVIOUS AREA:
   EXISTING: 1.276 ACRES
   PROPOSED: 0.833 ACRES
8. RECEIVING STREAM: RECEIVING STREAM
9. ULTIMATE STREAM: ULTIMATE STREAM
10. EXISTING LAND USE: UNDEVELOPED
11. PROPOSED LAND USE: DAY CARE
12. PARKING REQUIRED: 25
13. PARKING PROVIDED: 33

SHEET LIST TABLE	
Sheet Number	SHEET TITLE
C100	COVER SHEET
C101	GENERAL NOTES & LEGEND
C200	EXISTING CONDITIONS-SURVEY
C300	EXISTING CONDITIONS & DEMO
C301	SWPPP DETAILS
C302	SWPPP DETAILS
C303	SWPPP DETAILS
C400	SITE PLAN
C500	UTILITY PLAN
C501	UTILITY DETAILS
C502	UTILITY DETAILS
C600	GRADING, DRAINAGE AND PAVING PLAN
C700	LANDSCAPE PLAN
C800	DETAILS SHEET
C801	DETAILS SHEET

PREPARED BY

CRANSTON

9/25/2023

Cranston Engineering Group
NO. C00575

NO. 38607
MEGAN E. SMITH

BENCHMARK DATA					
NAME	DESCRIPTION	PT #	NORTHING	EASTING	ELEVATION
BM-1	Nail in Tree	-	154033.26	2009756.94	37.11

South Carolina 811
Call 811 Before You Dig

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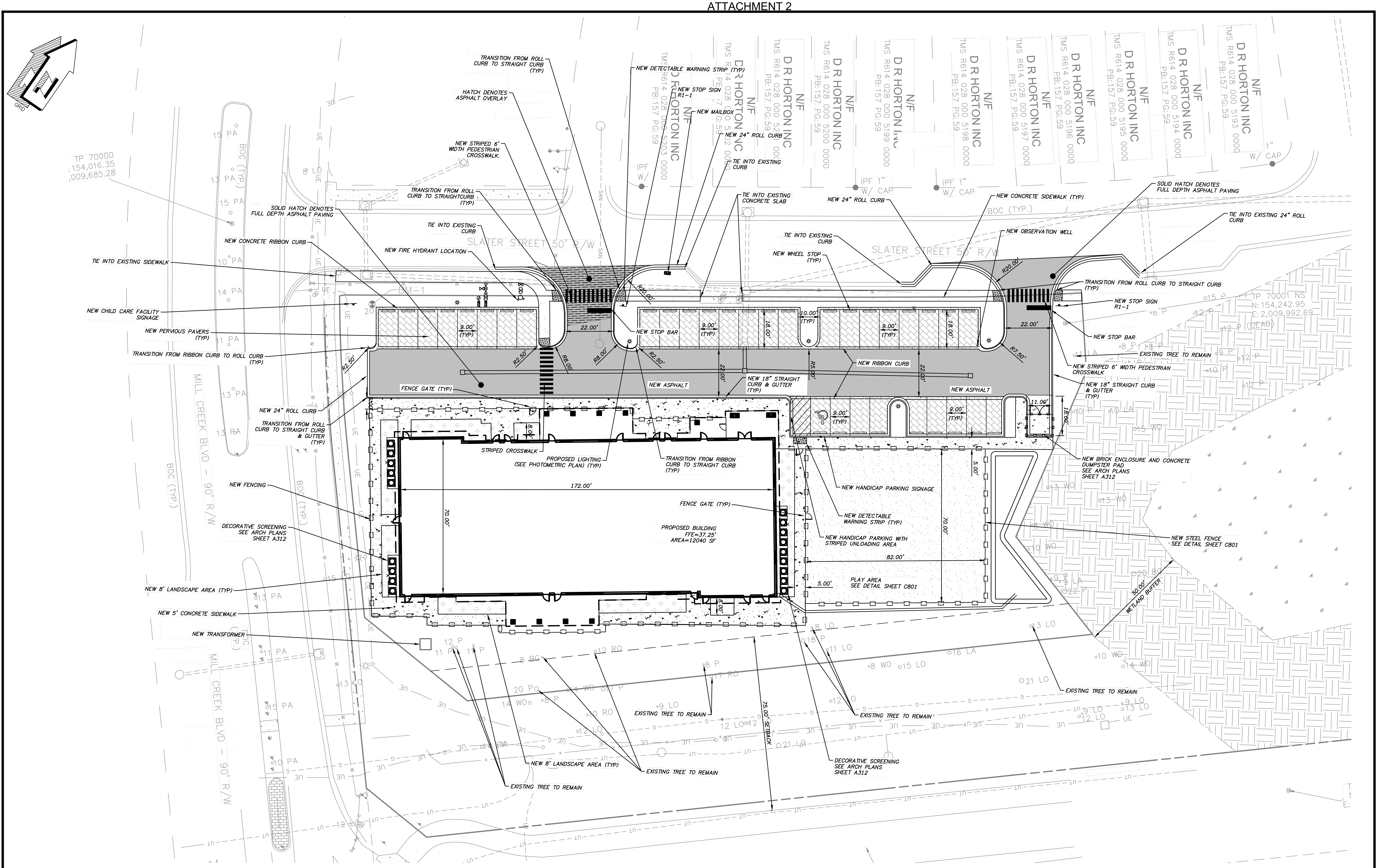
2022-0214
C100

ATTACHMENT 2



LEGEND

▨ LANDSCAPE AREA

▦ PERVIOUS PAVING

☐ CONCRETE

■ ASPHALT

South Carolina 811
Call 811 Before You Dig

CRANSTON

SOUTH CAROLINA
Cranston Engineering Group
NO. C00575
CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER
NO.38607
MEGAN E. SMITH
9/21/23

REV #	DATE	DESCRIPTION

BIG BLUE MARBLE ACADEMY

SITE PLAN

DRAWN BY:	AWD
CHECKED BY:	MES
APPROVED BY:	MES
DATE:	9/25/2023
SCALE:	1" = 20'
JOB No.	2022–0214
DRAWING No.	C400

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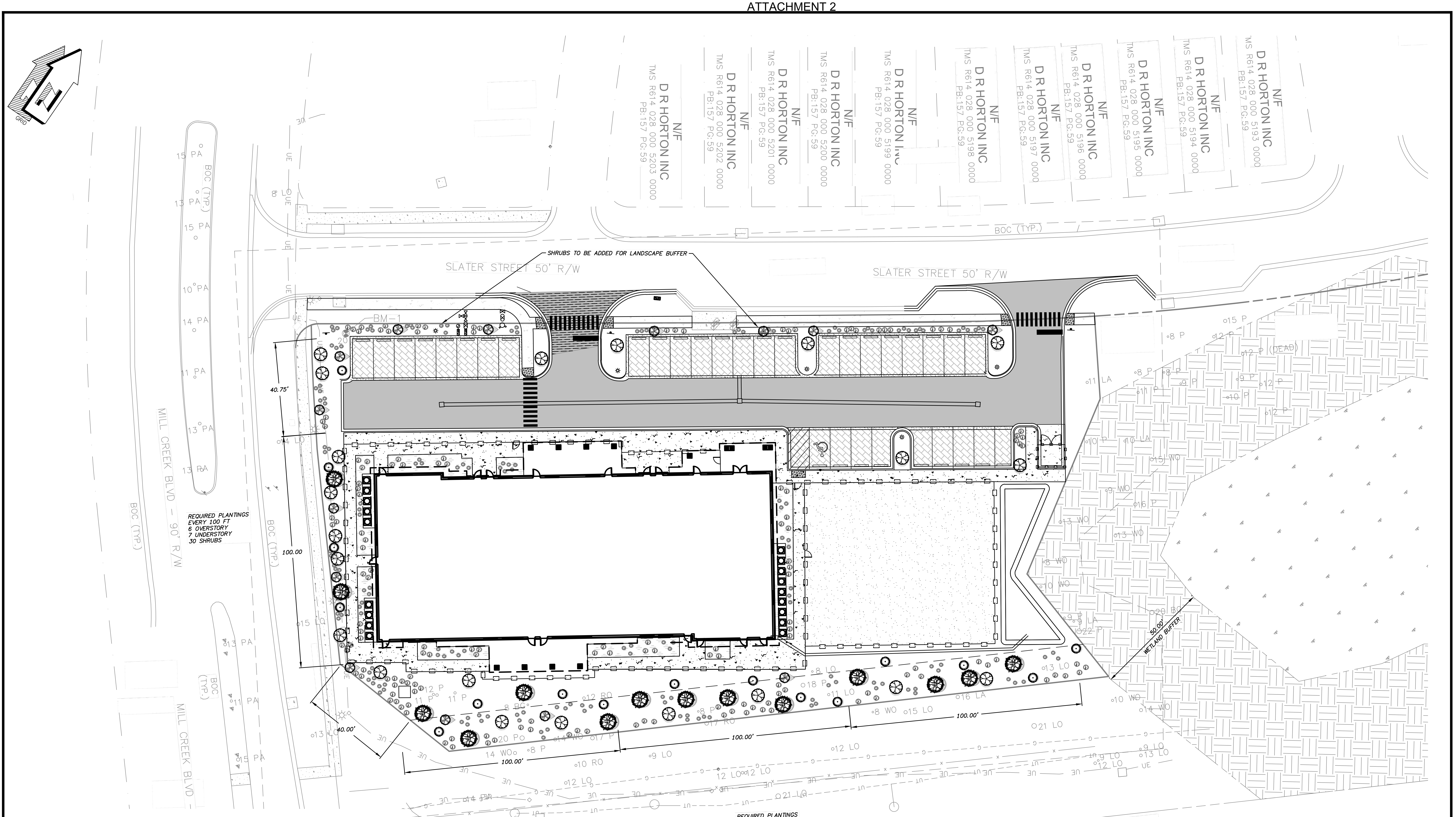
ATTACHMENT 2



PLAN
HORIZONTAL SCALE 1"=20'

20 10 0 20 40
SCALE IN FEET

PLANT_SCHEDULE

LARGE CANOPY TREES	BOTANICAL / COMMON NAME	SIZE		QTY
	Quercus Virginiana Live Oak	2.5" CAL 12' HIGH		16
	Quercus Palustris Pin Oak	2.5" CAL 12' HIGH		22
UNDERSTORY TREES	**BOTANICAL / COMMON NAME**	**SIZE**		**QTY**
	lagerstroemia indica Crepe Myrtle	2" CAL 10' HIGH		40
	Halesia Carolina Carolina Silverbell	2" CAL 6' HIGH		37
SHRUBS	**BOTANICAL / COMMON NAME**	**GAL**	**SPACING**	**QTY**
	Podocarpus Podocarpus	5	18" o.c. 4' HIGH	261
	Callistemon cirtinus Crimson Bottlebrush	5	18" o.c. 4' HIGH	217

South Carolina 811
Call 811 Before You Dig

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CRANSTON

Cranston Engineering Group
NO. C00575

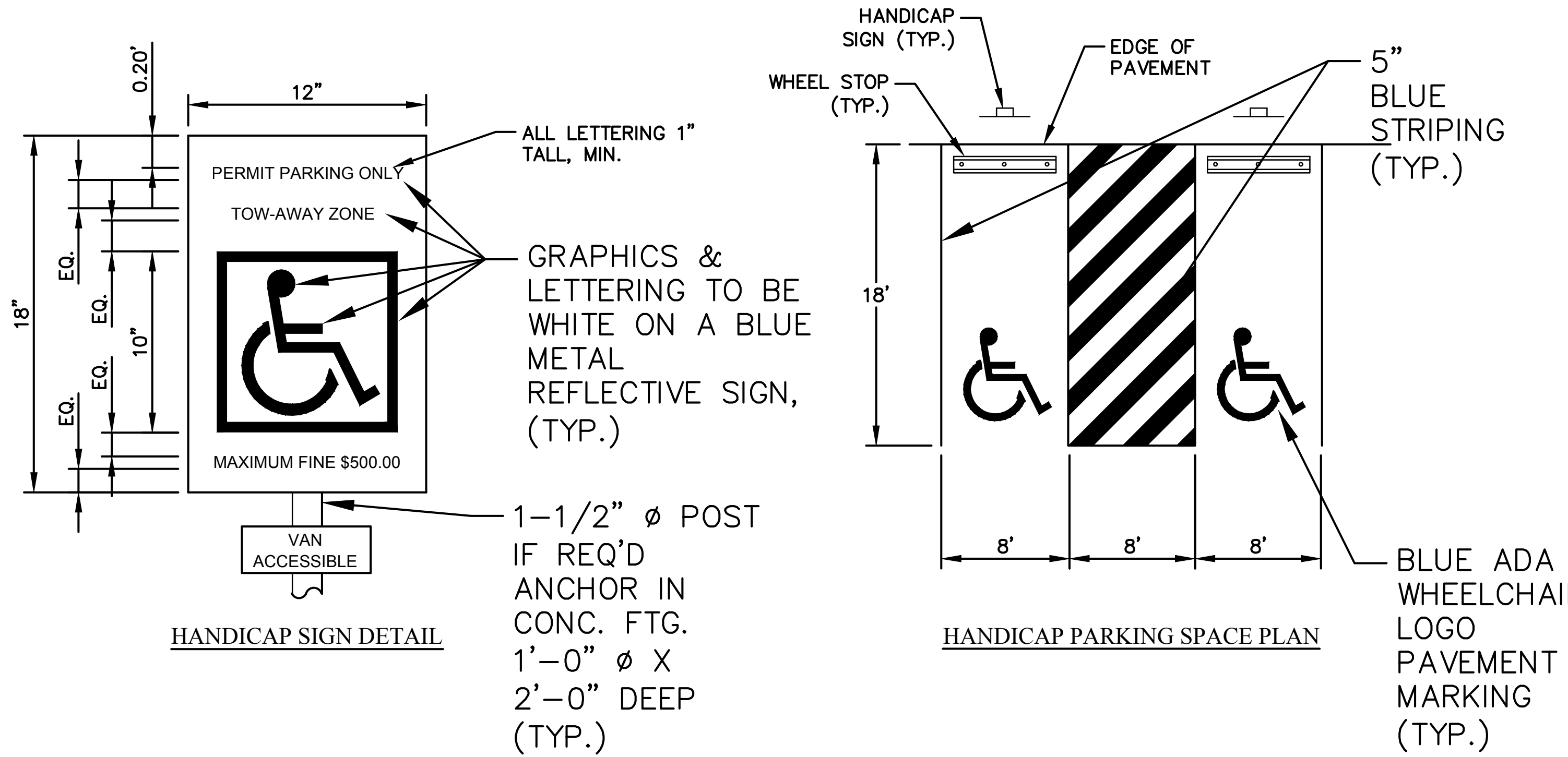
NO.38607
MEGAN E. SMITH
9/21/23

REV #	DATE	DESCRIPTION

BIG BLUE MARBLE ACADEMY

LANDSCAPE PLAN

DRAWN BY: AWD
CHECKED BY: MES
APPROVED BY: MES
DATE: 9/25/2023
SCALE: 1" = 40'
JOB No. 2022-0214
DRAWING No. C700



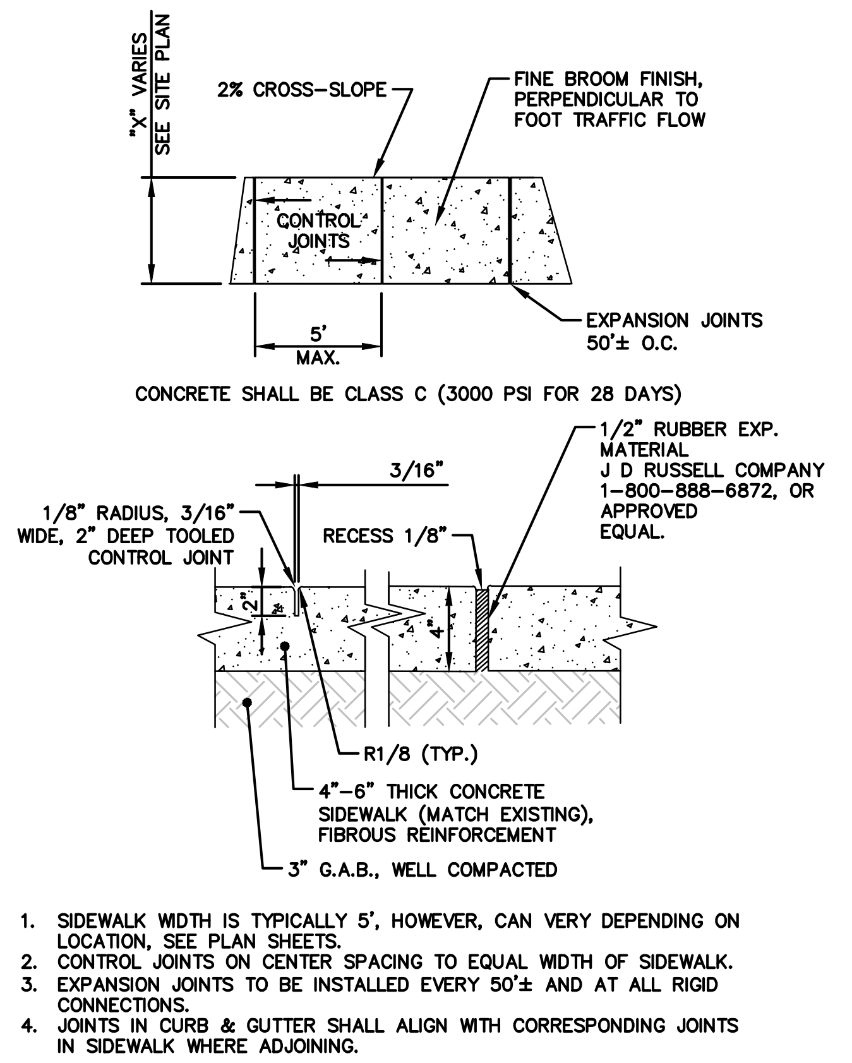
HANDICAP SIGN DETAIL

HANDICAP PARKING SPACE PLAN

HANDICAP PARKING

N.T.S.

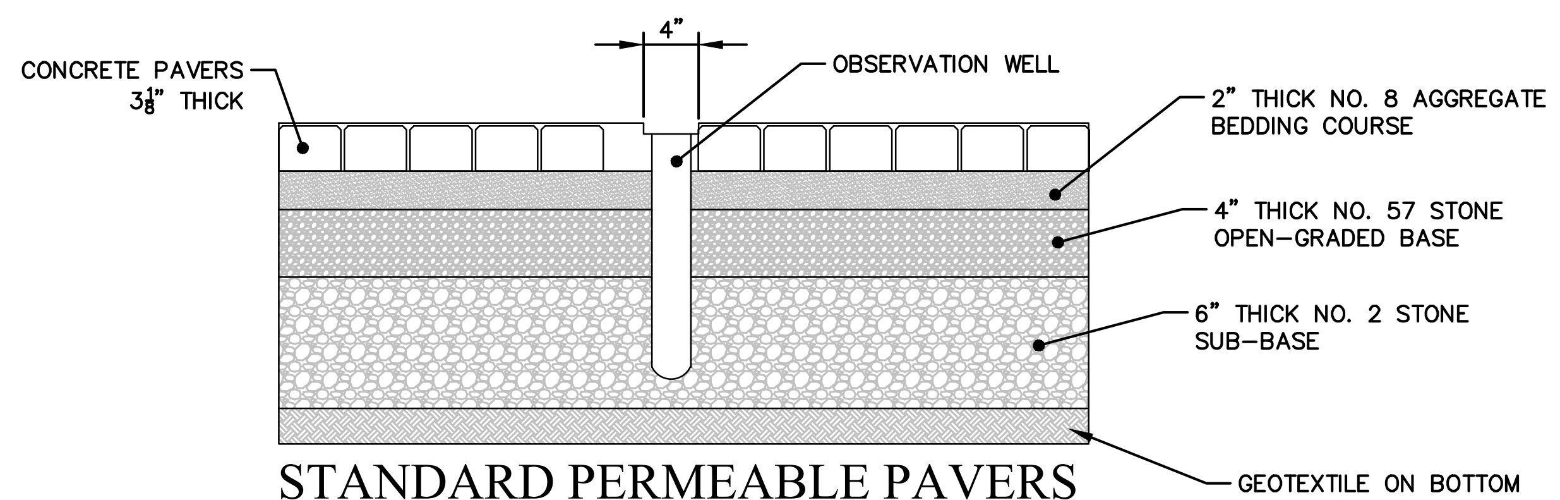
NOTE:
1. EACH PARKING SPACE DESIGNATED AS ACCESSIBLE FOR THE DIABLED MUST BE MARKED WITH AN APPROPRIATE SIGN, MOUNTED IN CLEAR VIEW FOR MOTORISTS. A HEIGHT OF AT LEAST 60 INCHES, MEASURED FROM THE GROUND TO THE BOTTOM EDGE OF THE SIGN, IS RECOMMENDED.



1. SIDEWALK WIDTH IS TYPICALLY 5', HOWEVER, CAN VERY DEPENDING ON LOCATION, SEE PLAN SHEETS.
2. CONTROL JOINTS ON CENTER SPACING TO EQUAL WIDTH OF SIDEWALK.
3. EXPANSION JOINTS TO BE INSTALLED EVERY 50'± AND AT ALL RIGID CONNECTIONS.
4. JOINTS IN CURB & GUTTER SHALL ALIGN WITH CORRESPONDING JOINTS IN SIDEWALK WHERE ADJOINING.

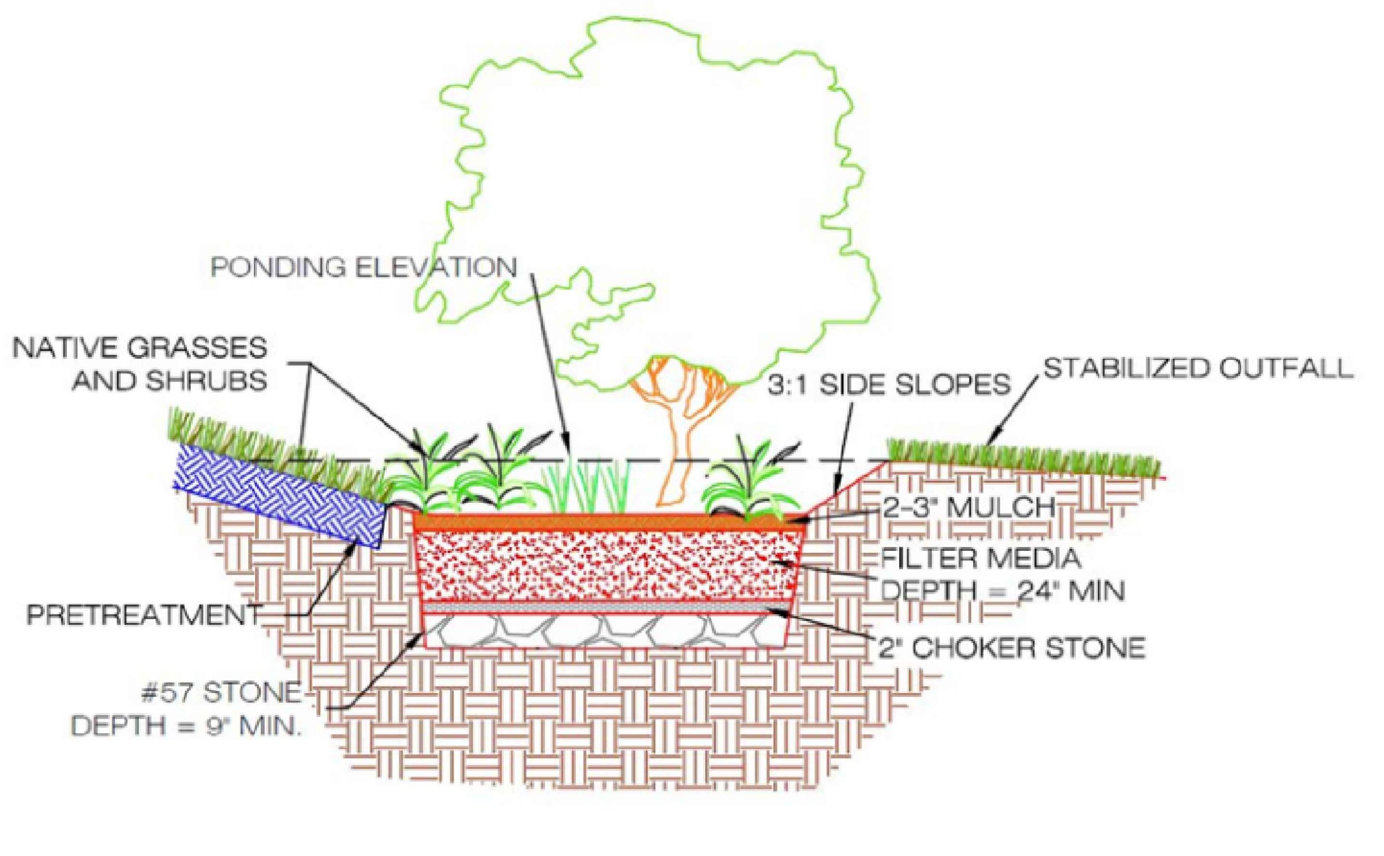
SIDEWALK - TYPICAL SECTION

N.T.S.



STANDARD PERMEABLE PAVERS
OBERSVATION WELL

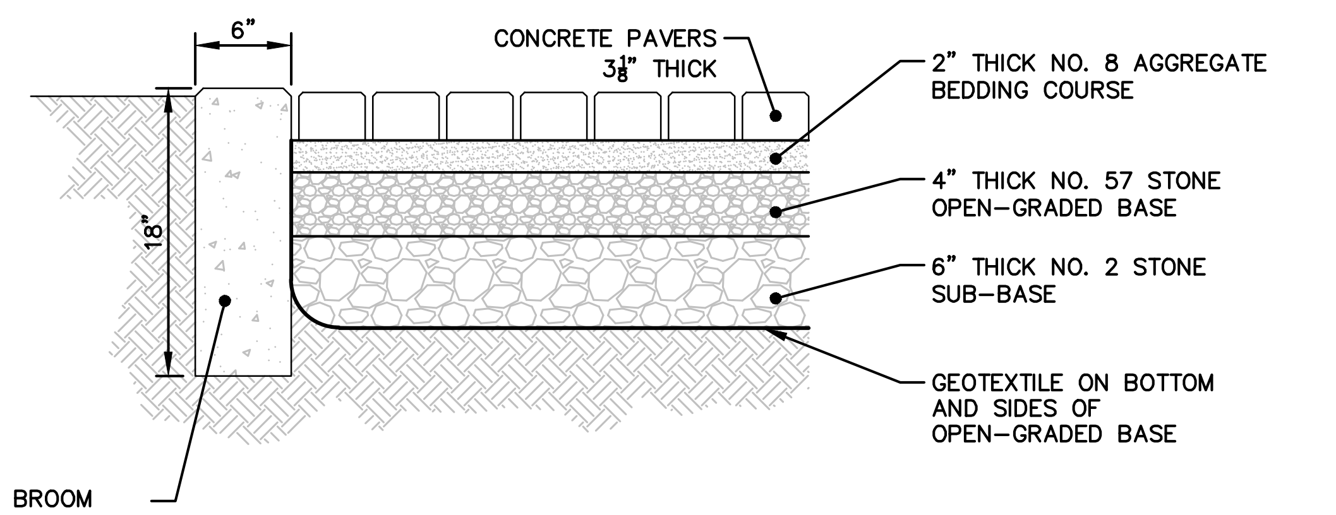
N.T.S.



BIORETENTION WITHOUT UNDERDRAIN SECTION DETAIL

N.T.S.

DETAIL FROM SOUTHERN LOWCOUNTRY STORMWATER DESIGN MANUAL



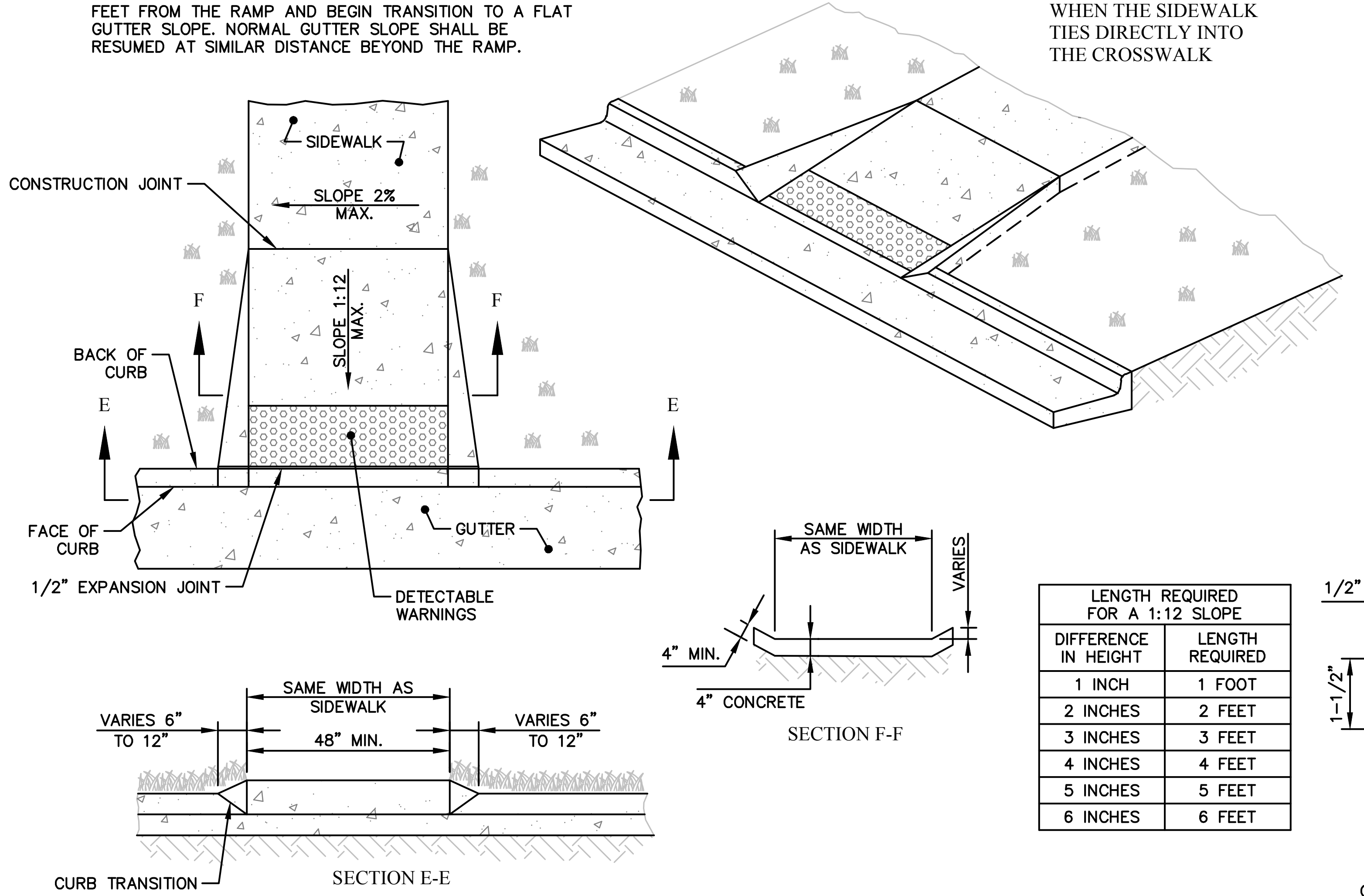
CONCRETE RIBBON CURB WITH BROOM FINISH. 4000 PSI @ 28 DAYS. (CONTROL JOINTS @ 6' O.C. & EXPANSION JOINTS @ 48' O.C.)

PERVIOUS CONCRETE PAVERS DETAIL

N.T.S.

IN AREAS WHERE THE GUTTER HAS A SLOPE OF 1" IN 1', END NORMAL GUTTER SLOPE AT DISTANCE TO 6 TO 10 FEET FROM THE RAMP AND BEGIN TRANSITION TO A FLAT GUTTER SLOPE. NORMAL GUTTER SLOPE SHALL BE RESUMED AT SIMILAR DISTANCE BEYOND THE RAMP.

NORMALLY USED WHEN THE SIDEWALK TIES DIRECTLY INTO THE CROSSWALK



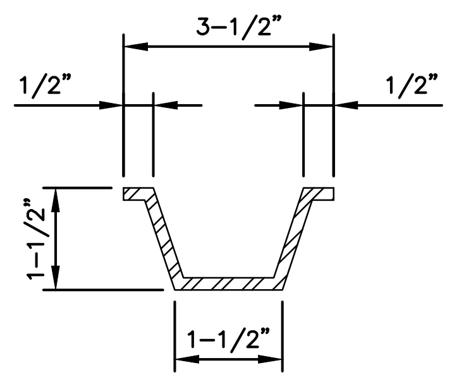
SECTION F-F

SECTION E-E

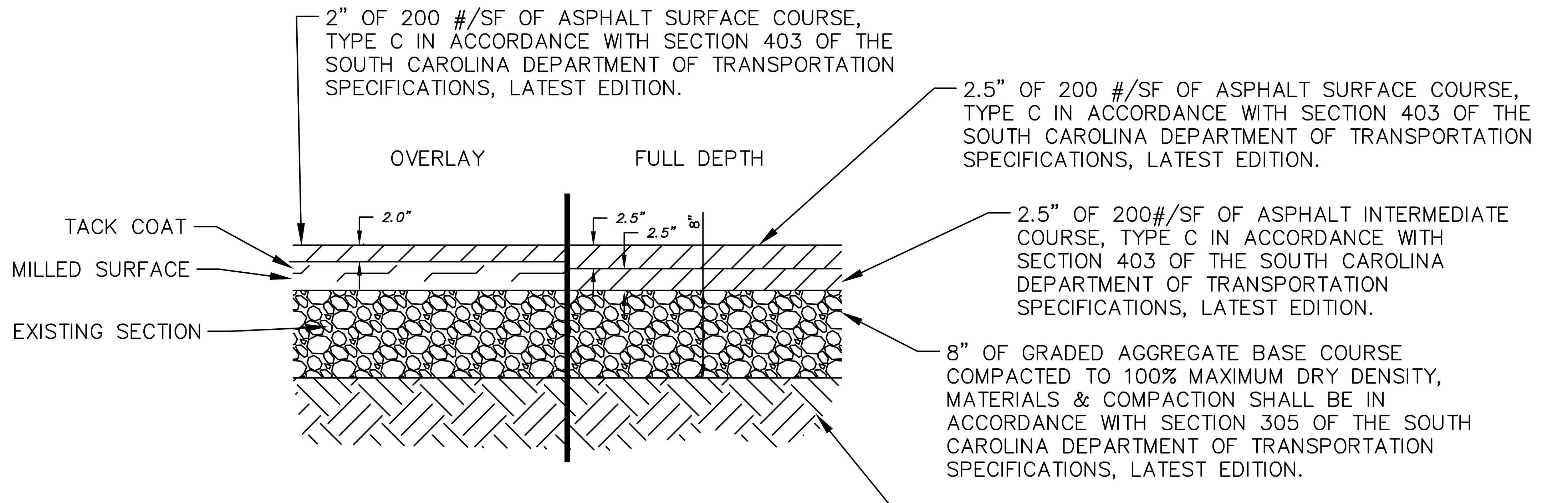
LENGTH REQUIRED FOR A 1:12 SLOPE	
DIFFERENCE IN HEIGHT	LENGTH REQUIRED
1 INCH	1 FOOT
2 INCHES	2 FEET
3 INCHES	3 FEET
4 INCHES	4 FEET
5 INCHES	5 FEET
6 INCHES	6 FEET

TYPE D ADA RAMP DETAIL

N.T.S.



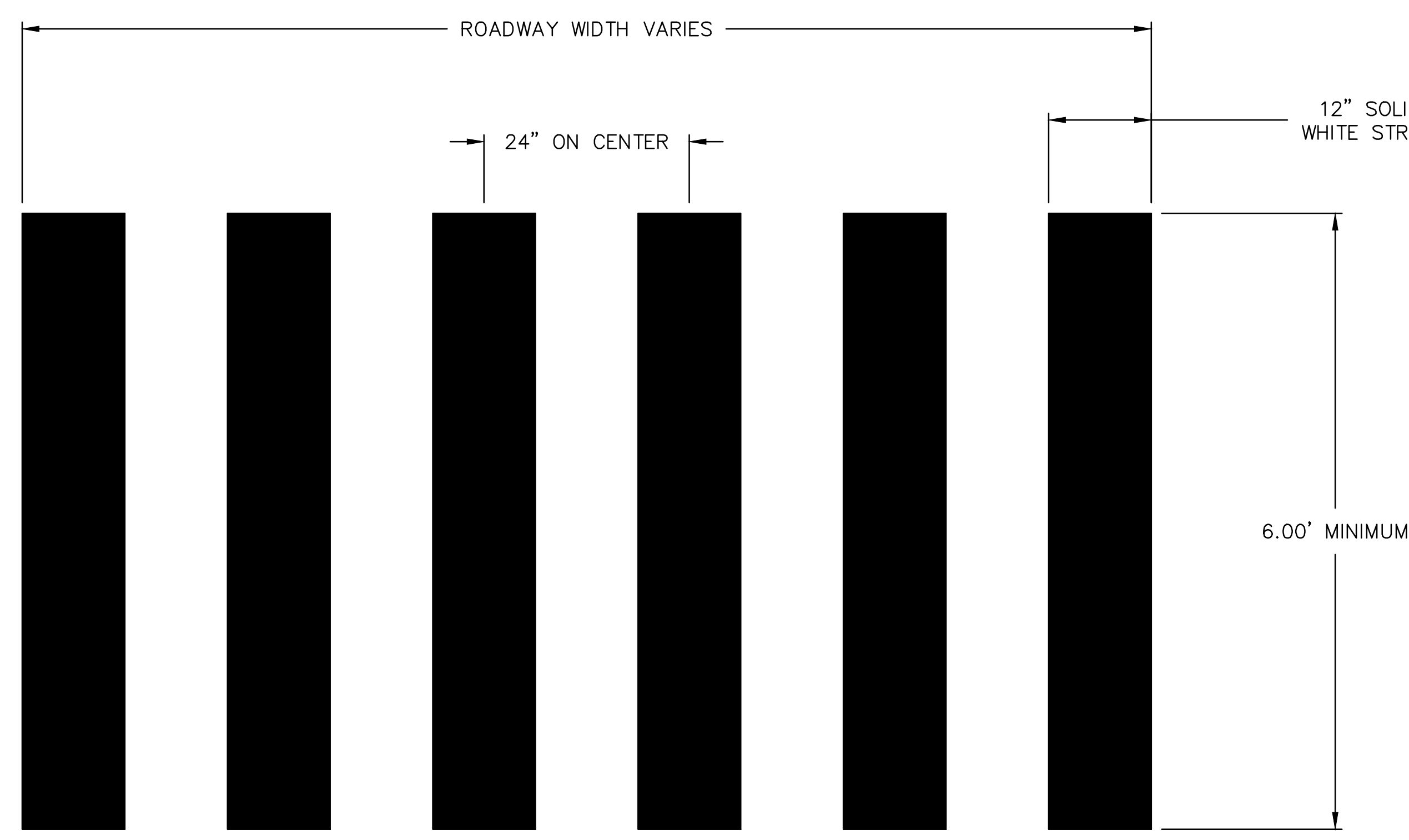
METAL SIGN POST



SUBGRADE COMPACTED TO 100% MAXIMUM DRY DENSITY, MATERIALS & COMPACTION SHALL BE IN ACCORDANCE WITH SECTION 208 OF THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, LATEST EDITION.

ASPHALT PAVING DETAIL OVERLAY
OVERLAY & FULL DEPTH

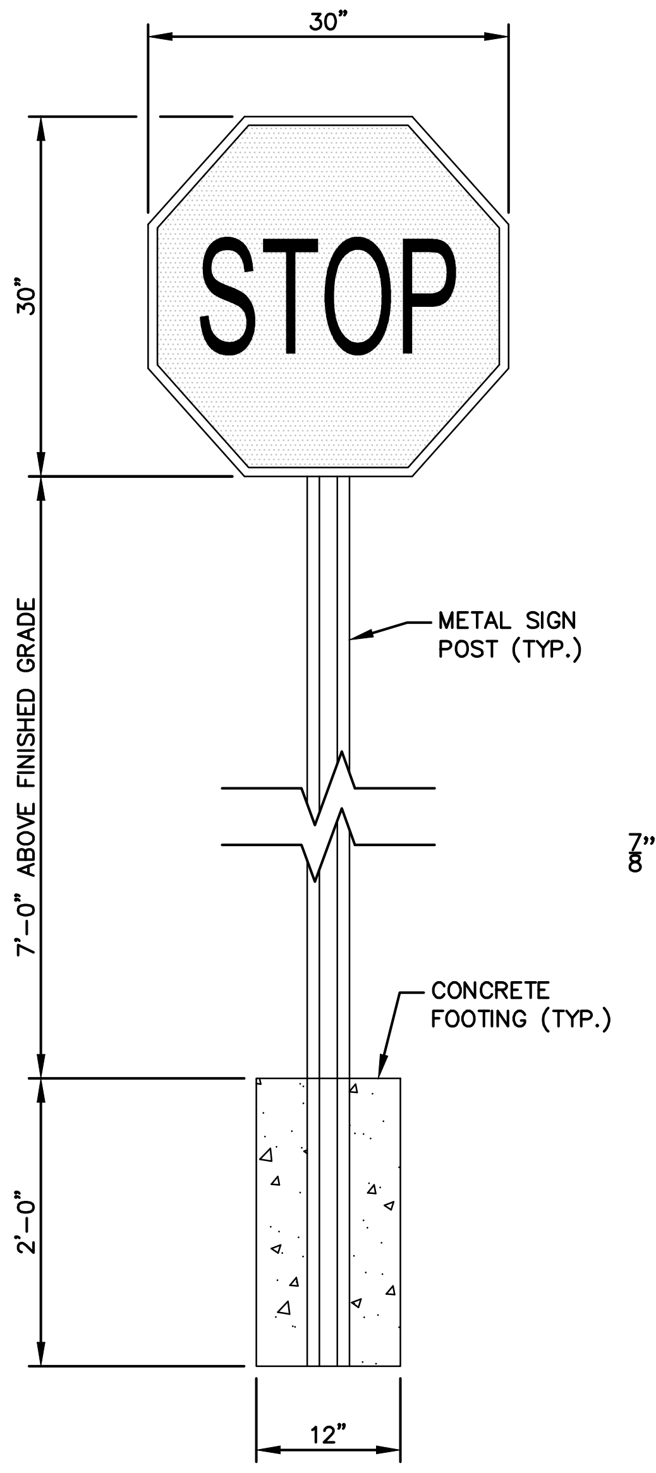
N.T.S.



TOWN OF BLUFFTON
CROSSWALK STRIPING DETAIL

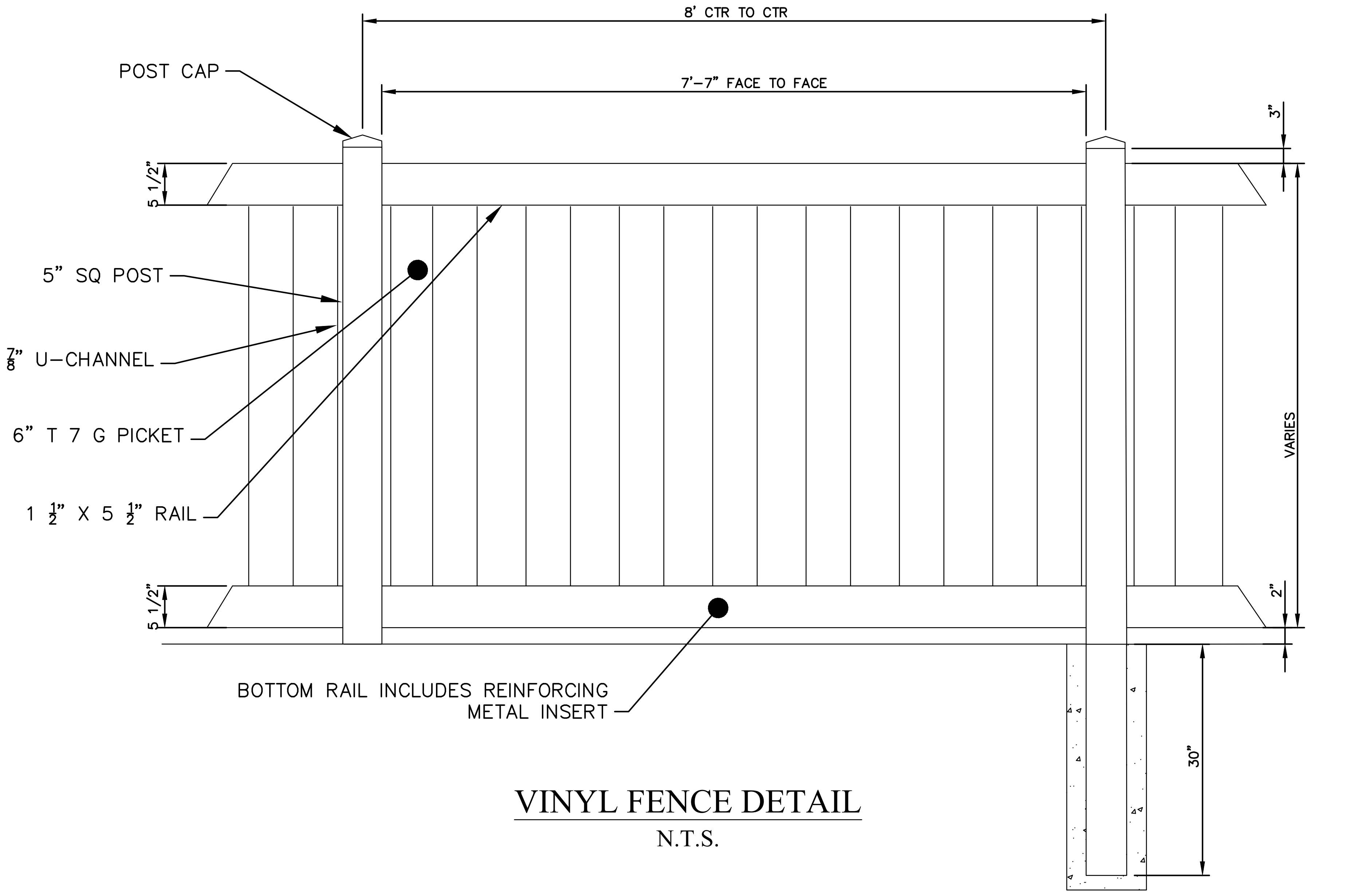
N.T.S.

COLORS:
BACKGROUND – RED
LETTERING – WHITE
BORDER – WHITE



STOP SIGN

N.T.S.



VINYL FENCE DETAIL

N.T.S.

South Carolina 811
Call 811 Before You Dig

CRANSTON

Cranston Engineering Group
NO. C00575

MEGAN E. SMITH
NO.38607
9/21/23

REV #	DATE	DESCRIPTION

BIG BLUE MARBLE ACADEMY

DETAILS SHEET

DRAWN BY: AWD
CHECKED BY: MES
APPROVED BY: MES
DATE: 9/25/2023
SCALE: NO SCALE
JOB No. 2022–0214
DRAWING No. C800

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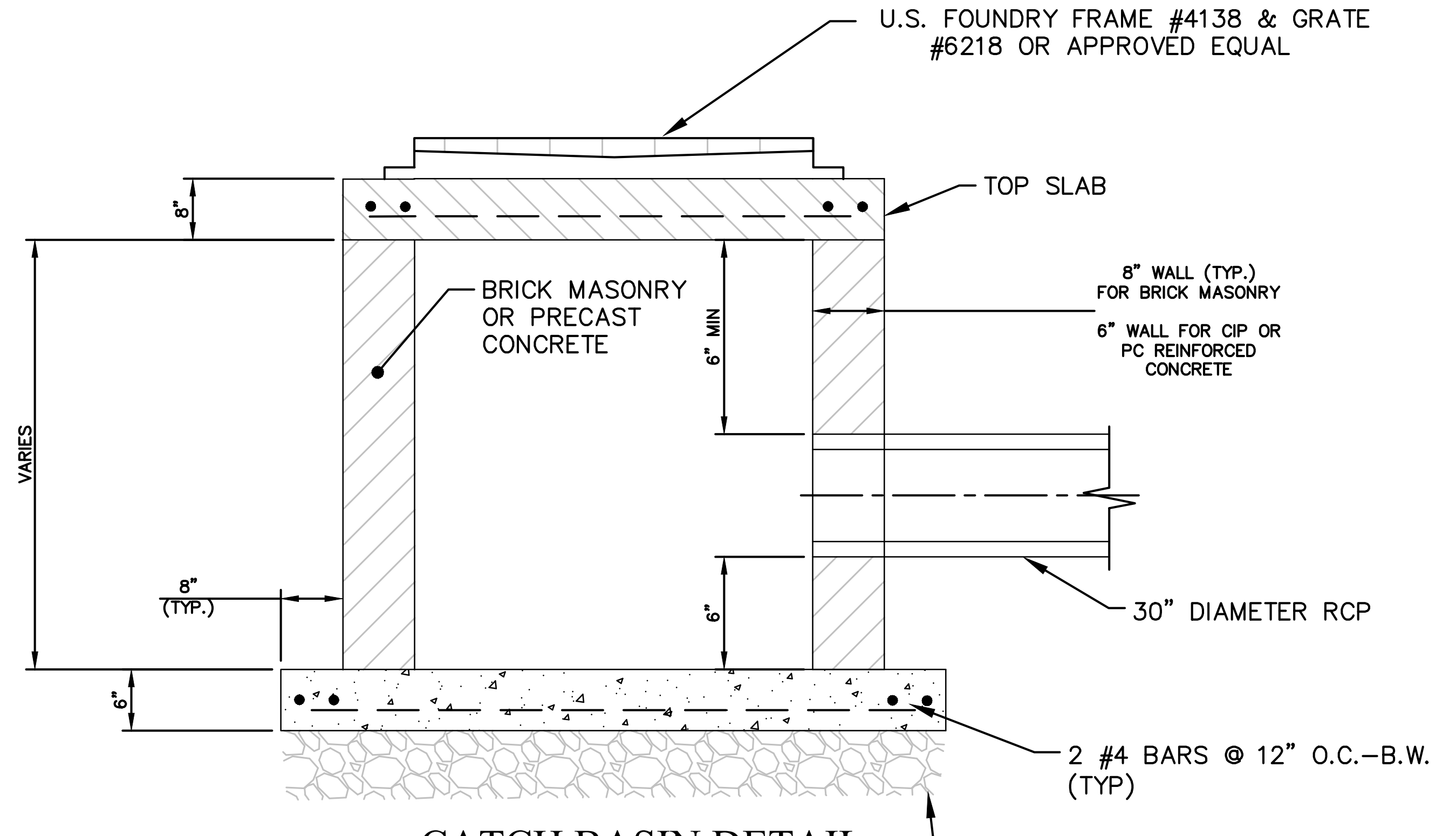


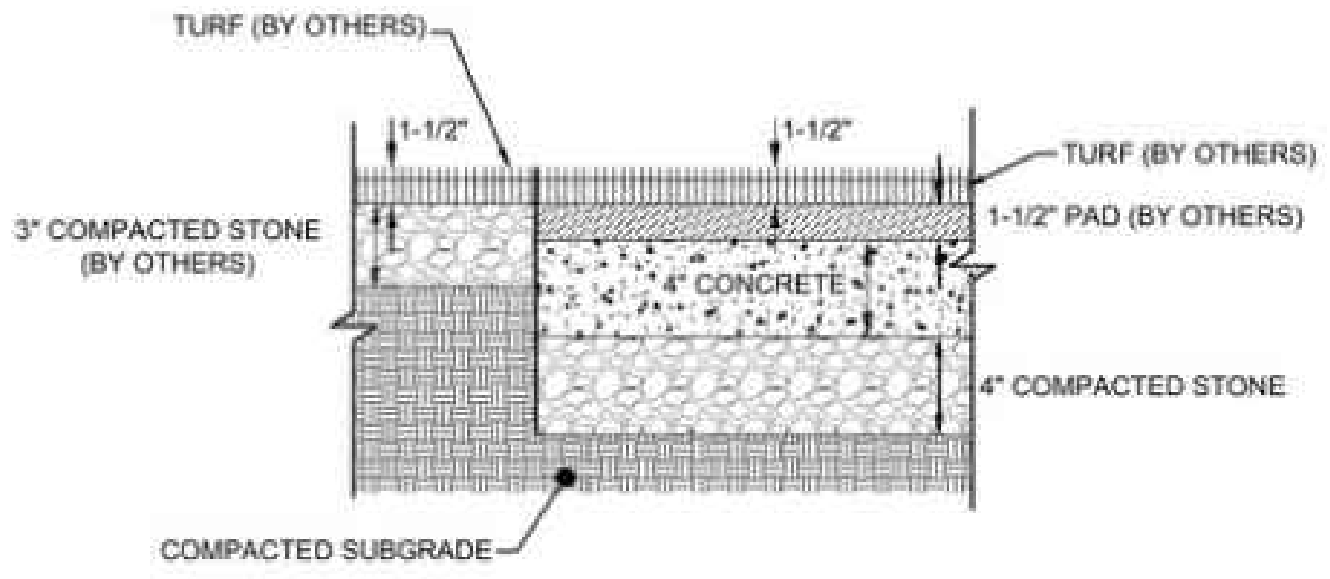
CATCH BASIN DETAIL

N.T.S.

1. INSTALLATION OF CATCH BASIN TO FOLLOW SCDOT DETAILS

GENERAL DRAINAGE NOTES:

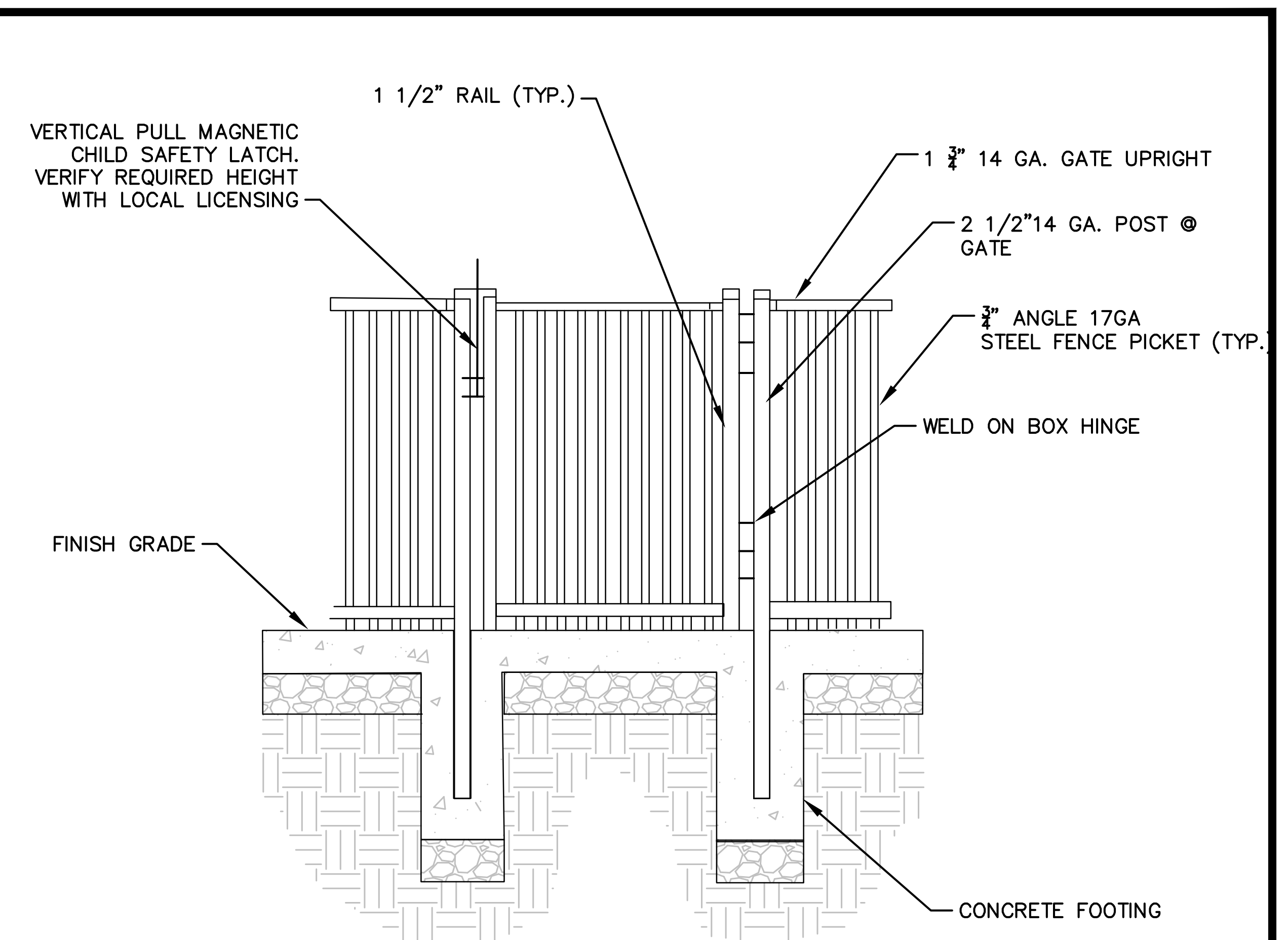
1. ALL EXISTING WATER, SANITARY, GAS, OR OTHER UNDERGROUND UTILITIES, BOTH MAINS AND HOUSE CONNECTIONS, THAT ARE IMPACTED BY OR CROSS THE PROPOSED STORM DRAIN SHALL BE TEST PITTED. ALL TEST PIT INFORMATION SHALL BE SUBMITTED TO THE ENGINEER THREE WEEKS PRIOR TO CONSTRUCTION OF THE PIPE WORK. THE ENGINEER WILL HAVE TWO WEEKS TO REVIEW THE TEST PIT INFORMATION AND RESOLVE ANY CONFLICTS. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE SERVICE DURING CONSTRUCTION AND TEST PITTING ACTIVITIES. IN THE CASE OF GAS LINE CONFLICTS, THE CONTRACTOR SHALL NOTIFY DOMINION ENERGY TO RELOCATE AS NECESSARY.
2. CONTRACTOR SHALL PROVIDE AND INSTALL DEWATERING EQUIPMENT SUCH AS SUMP PITS, PUMPS, PIPING, DIVERSIONS, ETC. AND PERFORM DEWATERING AS NECESSARY TO PROVIDE SUITABLE CONDITIONS TO PERFORM AND COMPLETE THE PROJECT WORK.
3. CONTRACTOR IS RESPONSIBLE FOR RESTORING, REPAIRING, OR RECONSTRUCTING EXISTING SITE FEATURES (I.E. SIDEWALKS, CURB/GUTTER, FENCING, PAVING, LIGHTING, UTILITIES, ETC.) THAT ARE DAMAGED AS A RESULT OF THE PROJECT WORK.
4. ALL AGGREGATES ASSOCIATED WITH BMP'S SHALL BE WASHED STONE, CLEAN AND FREE OF FINE SEDIMENTS.
5. CONTRACTOR SHALL ENSURE SEDIMENT AND EROSION CONTROL MEASURES ARE IN PLACE AND UTILIZED DURING CONSTRUCTION AND IMMEDIATELY THEREAFTER TO PREVENT SEDIMENT CONTAMINATION OF BMP INFILTRATION AREA.



NOTES:
1. CONTRACTOR TO INSTALL CONCRETE SLAB AND STONE IN LOCATIONS SHOWN ON THE PLAN.
2. ALL TURF AND PAD IS BY OTHERS.
3. THE COMPACTED STONE BELOW THE TURF AREA IS BY OTHERS. CONTRACTOR TO PREPARE SUBGRADE TO BOTTOM OF STONE ELEVATION.

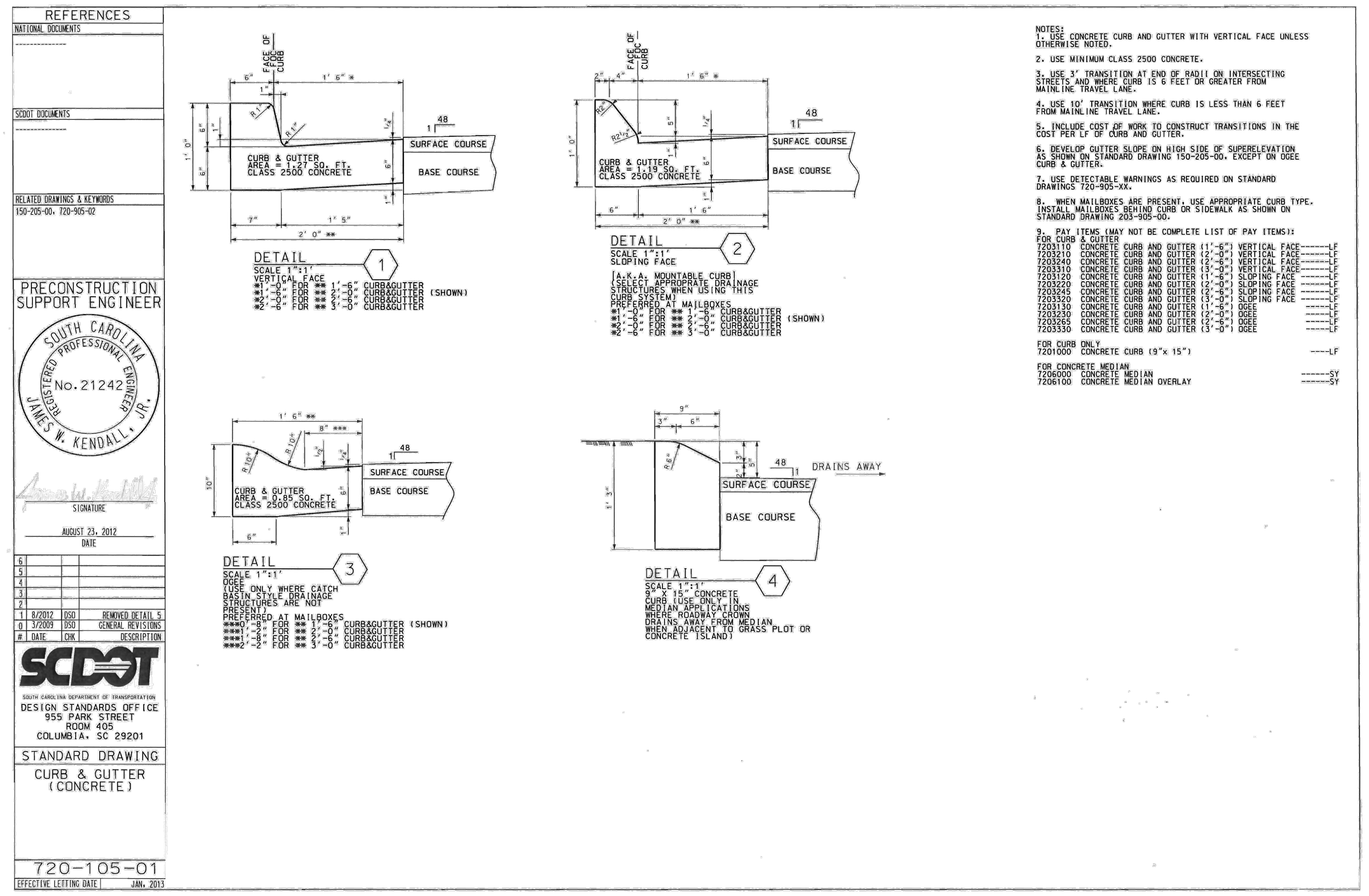
PLAY AREA SECTION

(N.T.S.)



STEEL FENCE DETAIL

N.T.S.


REFERENCES

NATIONAL DOCUMENTS

SCDOT DOCUMENTS

RELATED DRAWINGS & KEYWORDS

150-205-00, 720-905-02

PRECONSTRUCTION SUPPORT ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21242 JAMES W. KENDALL, JR.

James W. Kendall

SIGNATURE

AUGUST 23, 2012

DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1	8/2012	DSO	REMOVED DETAIL 5
0	3/2009	DSO	GENERAL REVISIONS

SCDOT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

CURB & GUTTER (CONCRETE)

720-105-01

EFFECTIVE LETTING DATE JAN. 2013

DETAIL ①
SCALE 1":1'
VERTICAL FACE
*1'-0" FOR ** 1'-6" CURB&GUTTER
*1'-6" FOR ** 2'-0" CURB&GUTTER (SHOWN)
*2'-0" FOR ** 2'-6" CURB&GUTTER
*2'-6" FOR ** 3'-0" CURB&GUTTER

DETAIL ②
SCALE 1":1'
SLOPING FACE
[A.K.A. MOUNTABLE CURB]
(SELECT APPROPRATE DRAINAGE STRUCTURES WHEN USING THIS CURB SYSTEM)
PREFERRED AT MAILBOXES
*1'-0" FOR ** 1'-6" CURB&GUTTER
*1'-6" FOR ** 2'-0" CURB&GUTTER (SHOWN)
*2'-0" FOR ** 2'-6" CURB&GUTTER
*2'-6" FOR ** 3'-0" CURB&GUTTER

DETAIL ③
SCALE 1":1'
OGEE
(USE ONLY WHERE CATCH BASIN STYLE DRAINAGE STRUCTURES ARE NOT PRESENT)
PREFERRED AT MAILBOXES
***0'-8" FOR ** 1'-6" CURB&GUTTER (SHOWN)
***1'-2" FOR ** 2'-0" CURB&GUTTER
***1'-8" FOR ** 2'-6" CURB&GUTTER
***2'-2" FOR ** 3'-0" CURB&GUTTER

DETAIL ④
SCALE 1":1'
9" X 15" CONCRETE CURB (USE ONLY IN MEDIAN APPLICATIONS WHERE ROADWAY CROWN DRAINS AWAY FROM MEDIAN WHEN ADJACENT TO GRASS PLOT OR CONCRETE ISLAND)

NOTES:
1. USE CONCRETE CURB AND GUTTER WITH VERTICAL FACE UNLESS OTHERWISE NOTED.

2. USE MINIMUM CLASS 2500 CONCRETE.

3. USE 3' TRANSITION AT END OF RADII ON INTERSECTING STREETS AND WHERE CURB IS 6 FEET OR GREATER FROM MAINLINE TRAVEL LANE.

4. USE 10' TRANSITION WHERE CURB IS LESS THAN 6 FEET FROM MAINLINE TRAVEL LANE.

5. INCLUDE COST OF WORK TO CONSTRUCT TRANSITIONS IN THE COST PER LF OF CURB AND GUTTER.

6. DEVELOP GUTTER SLOPE ON HIGH SIDE OF SUPERELEVATION AS SHOWN ON STANDARD DRAWING 150-205-00. EXCEPT ON OGEE CURB & GUTTER.

7. USE DETECTABLE WARNINGS AS REQUIRED ON STANDARD DRAWINGS 720-905-XX.

8. WHEN MAILBOXES ARE PRESENT, USE APPROPRIATE CURB TYPE. INSTALL MAILBOXES BEHIND CURB OR SIDEWALK AS SHOWN ON STANDARD DRAWING 203-905-00.

9. PAY ITEMS (MAY NOT BE COMPLETE LIST OF PAY ITEMS):

FOR CURB & GUTTER

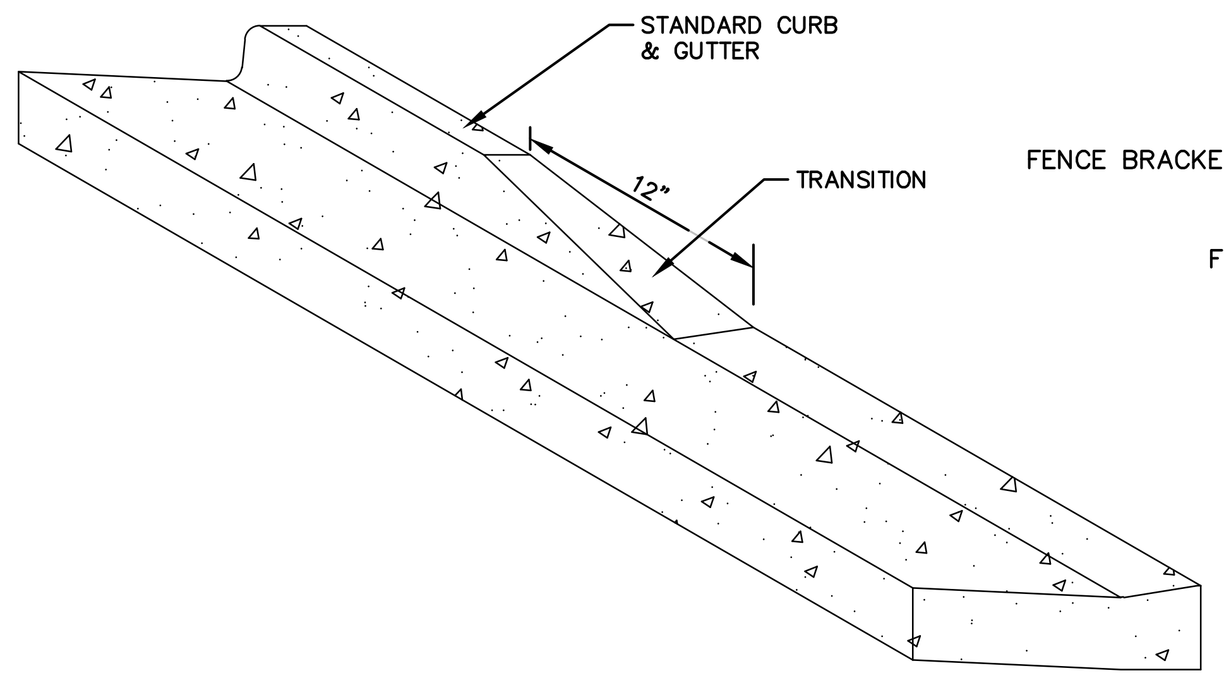
7203110	CONCRETE CURB AND GUTTER (1'-6") VERTICAL FACE	------LF
7203210	CONCRETE CURB AND GUTTER (2'-0") VERTICAL FACE	------LF
7203240	CONCRETE CURB AND GUTTER (2'-6") VERTICAL FACE	------LF
7203310	CONCRETE CURB AND GUTTER (3'-0") VERTICAL FACE	------LF
7203120	CONCRETE CURB AND GUTTER (1'-6") SLOPING FACE	------LF
7203220	CONCRETE CURB AND GUTTER (2'-0") SLOPING FACE	------LF
7203245	CONCRETE CURB AND GUTTER (2'-6") SLOPING FACE	------LF
7203320	CONCRETE CURB AND GUTTER (3'-0") SLOPING FACE	------LF
7203130	CONCRETE CURB AND GUTTER (1'-6") OGEE	-----LF
7203230	CONCRETE CURB AND GUTTER (2'-0") OGEE	-----LF
7203265	CONCRETE CURB AND GUTTER (2'-6") OGEE	-----LF
7203330	CONCRETE CURB AND GUTTER (3'-0") OGEE	-----LF

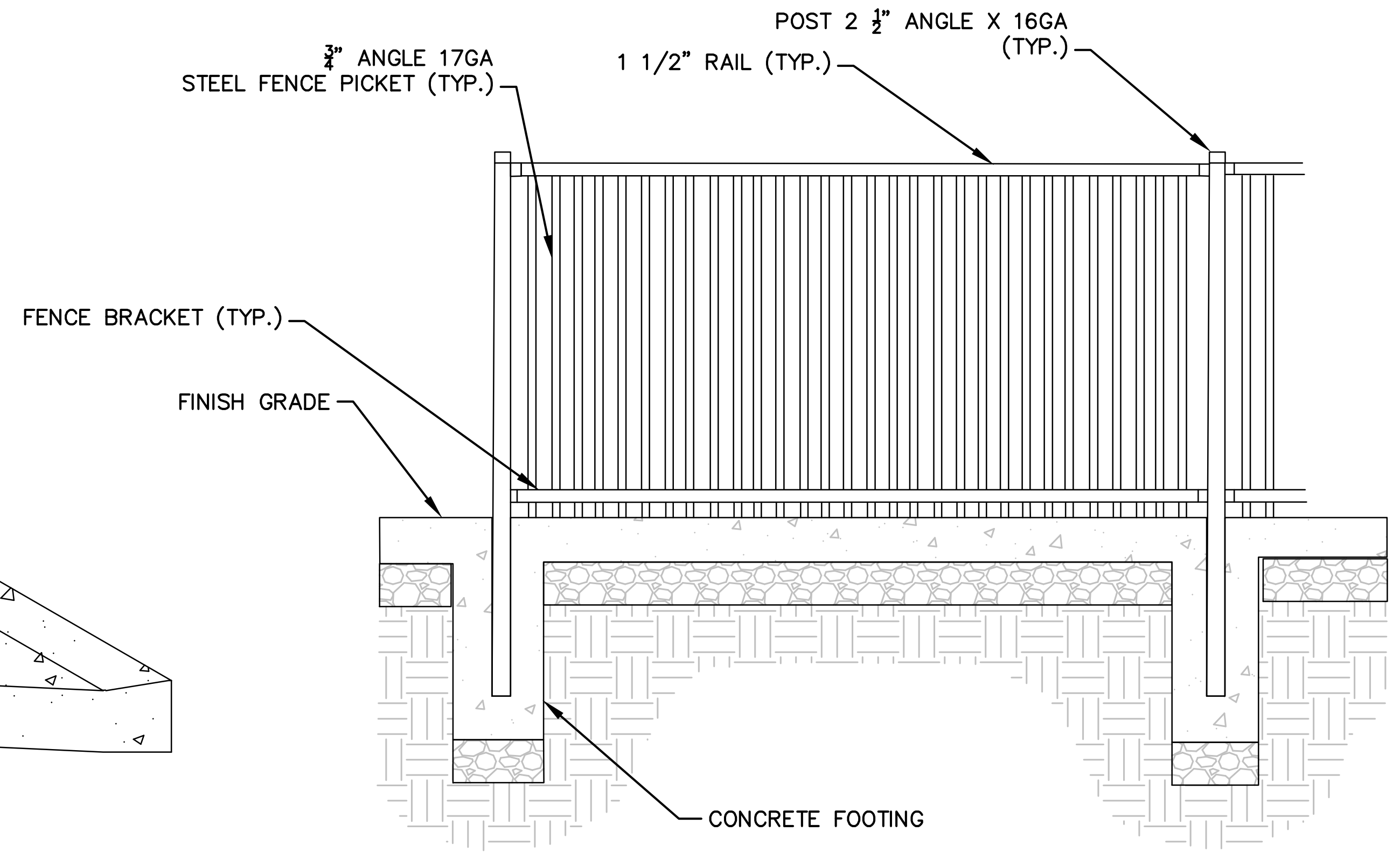
FOR CURB ONLY

7201000	CONCRETE CURB (9"x 15")	----LF

FOR CONCRETE MEDIAN

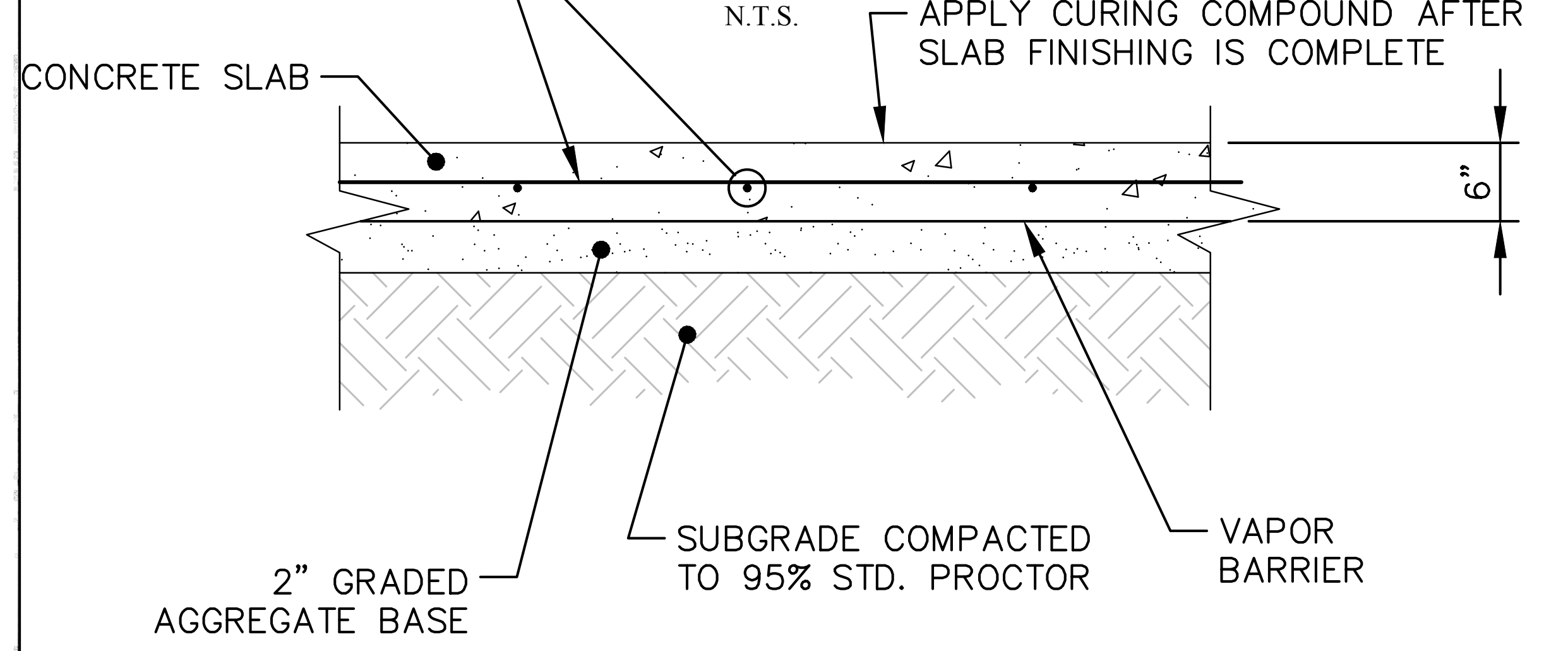
7206000	CONCRETE MEDIAN	------SY
7206100	CONCRETE MEDIAN OVERLAY	------SY





CURB TRANSITION DETAIL

N.T.S.



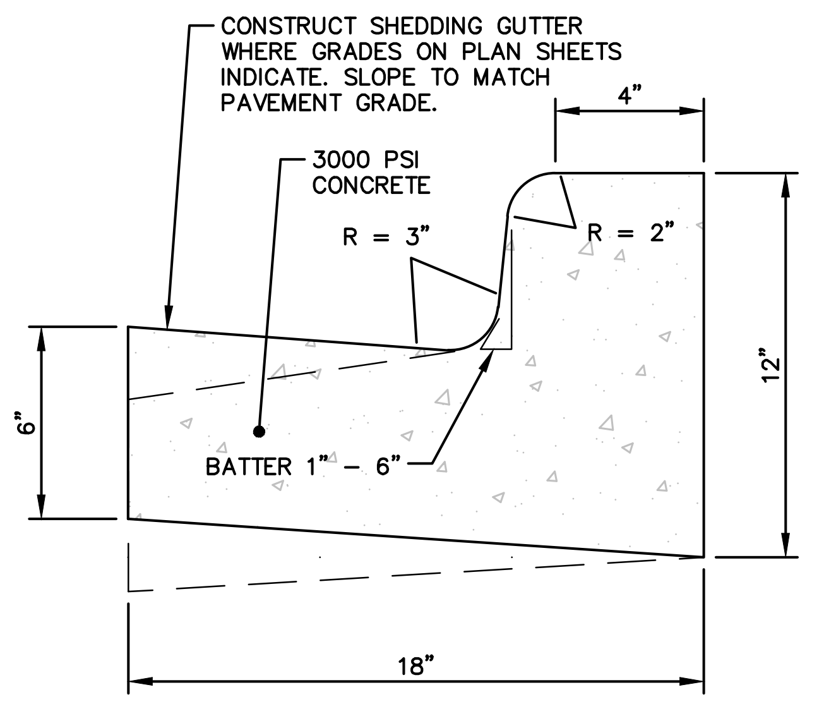
DUMPSTER PAD DETAIL

N.T.S

STEEL FENCE DETAIL

N.T.S.

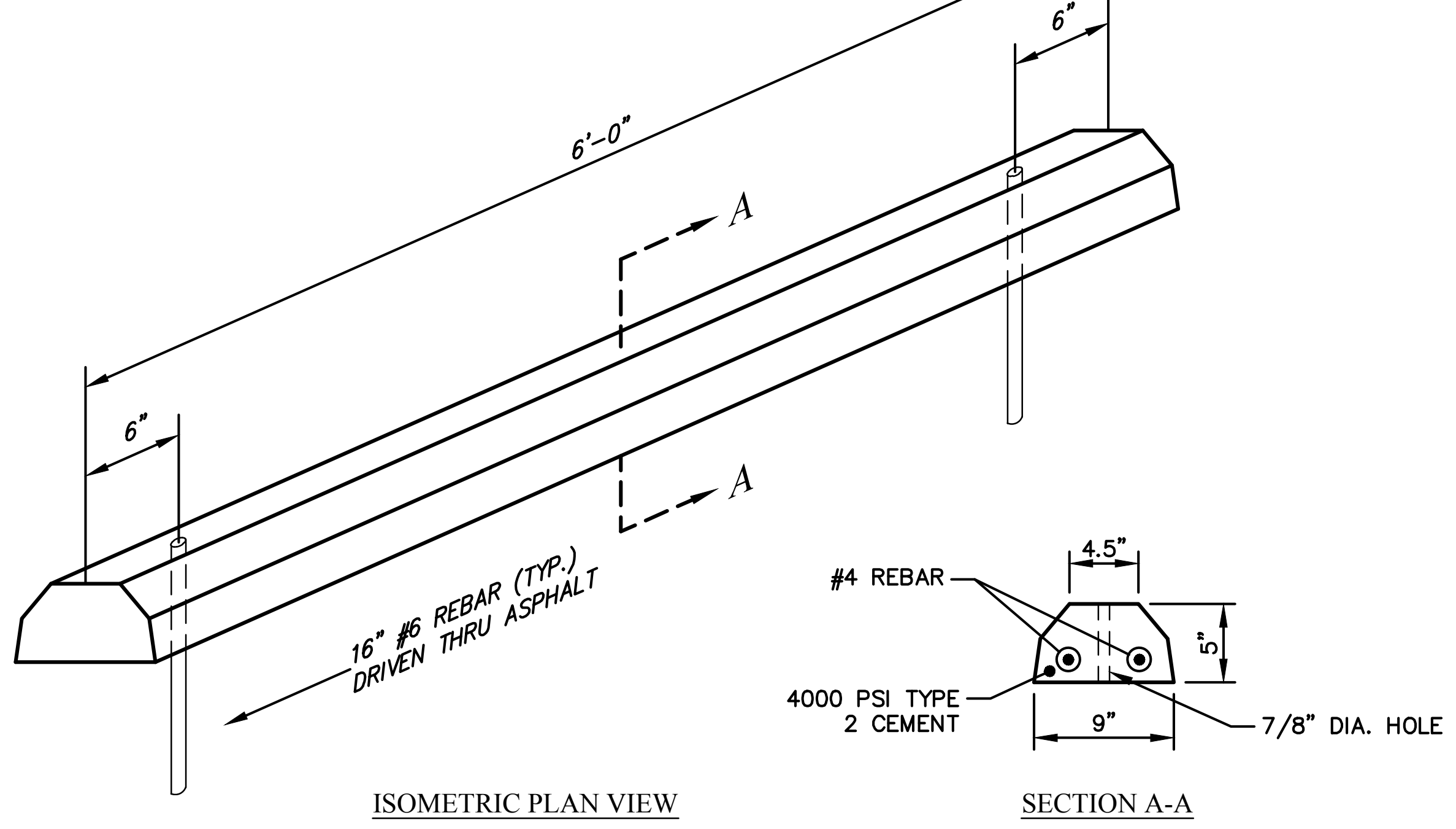
NOTES:
1. STYLE TO BE MONTAGE PLUS ATF WELDED ORNAMENTAL STEEL MAJESTIC FENCING. SEE MANUFACTURES SPECIFICATIONS FOR ADDITIONAL INFORMATION AND DETAILS



1. CONTROL JOINTS TO BE SCORED EVERY 10' MAX.
2. EXPANSION JOINTS TO BE INSTALLED EVERY 50'± AND AT ALL RIGID CONNECTIONS.
3. JOINTS IN CURB & GUTTER SHALL ALIGN WITH CORRESPONDING JOINTS IN SIDEWALK WHERE ADJOINING.

18" CURBING DETAIL

N.T.S



WHEEL STOP

N.T.S.

South Carolina 811
Call 811 Before You Dig

CRANSTON

SOUTH CAROLINA Cranston Engineering Group NO. C00575 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER NO. 38607 MEGAN E. SMITH

9/21/23

REV #	DATE	DESCRIPTION

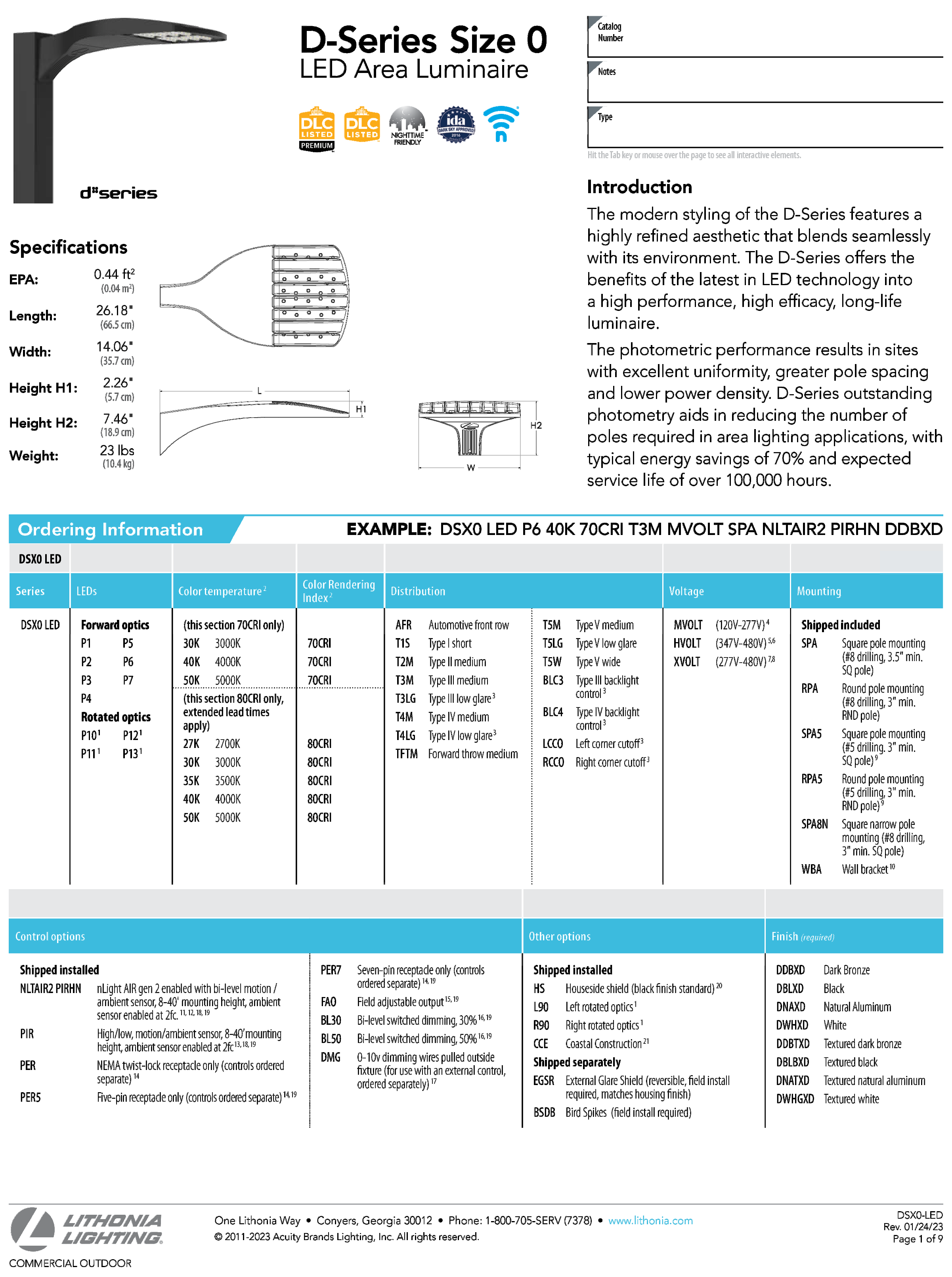
BIG BLUE MARBLE ACADEMY

DETAILS SHEET

DRAWN BY:	AWD
CHECKED BY:	MES
APPROVED BY:	MES
DATE:	9/25/2023
SCALE:	NO SCALE
JOB No.	2022–0214
DRAWING No.	C801

G:\PROJECTS\2022\2022–0214_BIG BLUE MARBLE ACADEMY – BLUFFTON, SC\AC–DRAWINGS\CIVIL\2022–0214 OV – UPDATE.DWG 10/27/2023 1:33 PM

ATTACHMENT 3



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:	0.44 ft² (0.04 m²)
Length:	26.18" (66.5 cm)
Width:	14.06" (35.7 cm)
Height H1:	2.26" (5.7 cm)
Height H2:	7.46" (18.9 cm)
Weight:	23 lbs (10.4 kg)

Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications, with typical energy savings of 70% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX0 LED P6 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX0 LED							
Series	LEDs	Color temperature[2]	Color Rendering Index[2]	Distribution		Voltage	Mounting
DSX0 LED	**Forward optics** P1 P5 P2 P6 P3 P7 P4 **Rotated optics** P10[1] P12[1] P11[1] P13[1]	(this section 70CRI only) 30K 3000K 40K 4000K 50K 5000K (this section 80CRI only, extended lead times apply) 27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K	 70CRI 70CRI 70CRI 80CRI 80CRI 80CRI 80CRI 80CRI	AFR Automotive front row T1S Type I short T2M Type II medium T3M Type III medium T3LG Type III low glare[3] T4M Type IV medium T4LG Type IV low glare[3] TFTM Forward throw medium	T5M Type V medium T5LG Type V low glare T5W Type V wide BLC3 Type III backlight control[3] BLC4 Type IV backlight control[3] LCCO Left corner cutoff[3] RCCO Right corner cutoff[3]	MVOLT (120V-277V)[4] HVOLT (347V-480V)[5,6] XVOLT (277V-480V)[7,8]	**Shipped included** SPA Square pole mounting (#8 drilling, 3.5" min. SQ pole) RPA Round pole mounting (#8 drilling, 3" min. RND pole) SPA5 Square pole mounting (#5 drilling, 3" min. SQ pole)[9] RPA5 Round pole mounting (#5 drilling, 3" min. RND pole)[9] SPA8N Square narrow pole mounting (#8 drilling, 3" min. SQ pole) WBA Wall bracket[10]

Control options		Other options	Finish *(required)*
Shipped installed NLTAIR2 PIRHN nLight AIR gen 2 enabled with bi-level motion / ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc.[11, 12, 18, 19] PIR High/low, motion/ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc[13, 18, 19] PER NEMA twist-lock receptacle only (controls ordered separate)[14] PER5 Five-pin receptacle only (controls ordered separate)[14, 19]	PER7 Seven-pin receptacle only (controls ordered separate)[14, 19] FAO Field adjustable output[15, 19] BL30 Bi-level switched dimming, 30%[16, 19] BL50 Bi-level switched dimming, 50%[16, 19] DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)[17]	**Shipped installed** HS Houseside shield (black finish standard)[20] L90 Left rotated optics[1] R90 Right rotated optics[1] CCE Coastal Construction[21] **Shipped separately** EGSR External Glare Shield (reversible, field install required, matches housing finish) BSDB Bird Spikes (field install required)	DDBXD Dark Bronze DBLXD Black DNAXD Natural Aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

LITHONIA LIGHTING
COMMERCIAL OUTDOOR

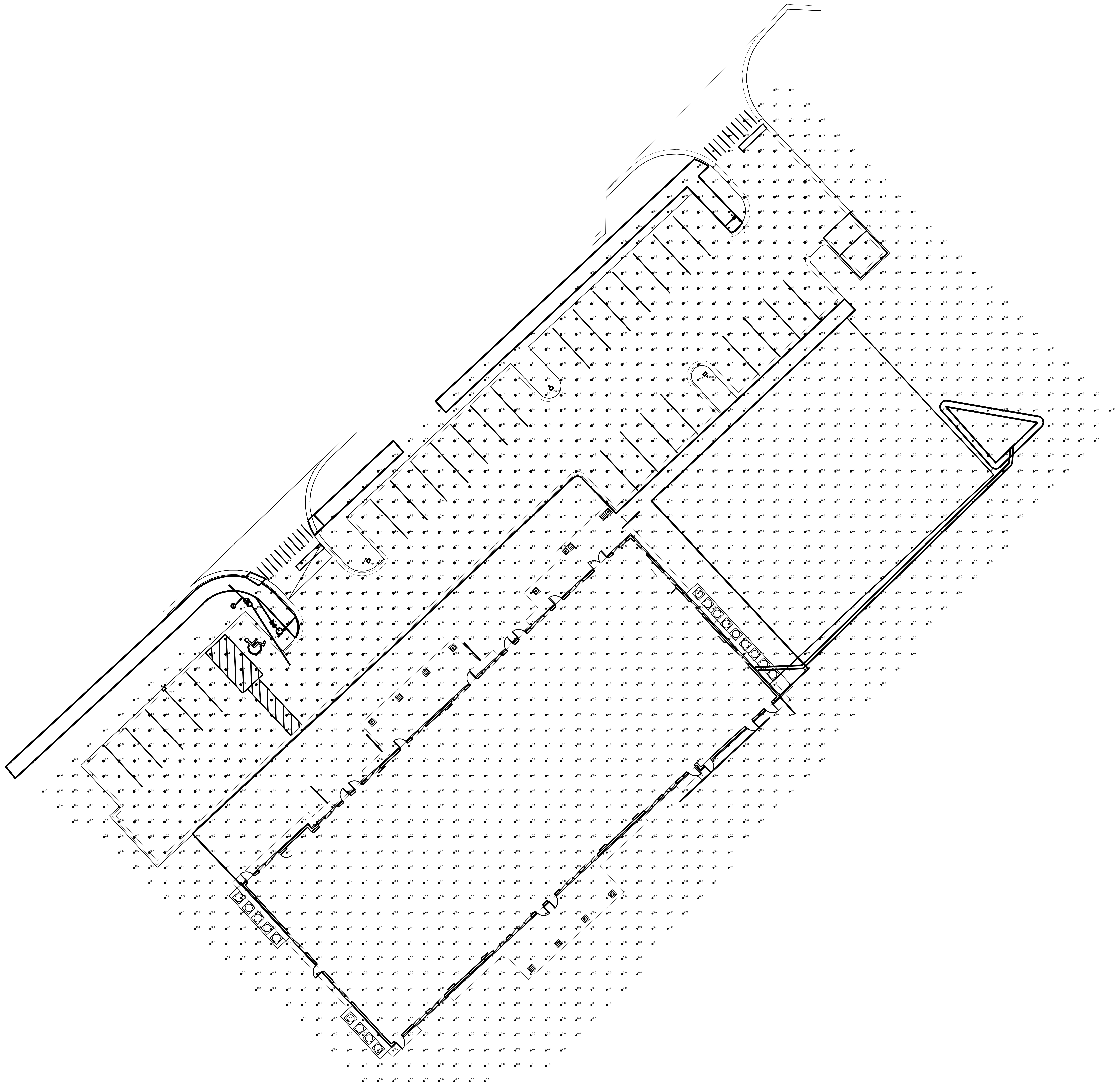
One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com

DSX0-LED
Rev. 01/24/23
Page 1 of 9

FIXTURE TYPE 2: DSX0LED-P4-40K-70CRI-T2M
COUNT: 4 FIXTURES

FIXTURE TYPE FT: DSX0LED-P4-70CRI-TFTM
COUNT: 1 FIXTURE

ALL FIXTURES ARE POLE MOUNTED AT 20'-0" ABOVE GRADE



SITE PLAN - PHOTOMETRICS

SCALE: 1" = 20'-0"

N

STATISTICS						
DESCRIPTION	SYMBOL	AVG	MAX	MIN	MAX/MIN	AVG/MIN
PARKING	·	2.4 FC	5.2 FC	0.5 FC	10.4:1	4.8:1
SITE	·	0.8 FC	5.2 FC	0.0 FC	N/A	N/A

DO NOT SCALE PRINTS. USE FIGURED DI

Project:

Big Blue Marble Academy

Cypress Ridge
Mill Creek Blvd.
Bluffton, South Carolina

Issued for:
COFA Submittal 02/16/2023

Subject:
SITE PLAN - PHOTOMETRICS

Project Owner:

EIG14T

814 Services, LLC
1695 Twelve Mile Road
Suite 100
Berkley, MI 48072

Project Consultants:

FormSurfaces Design Group
10913 Marcello Lane
Whitmore Lake, MI 48189

AE STRUCTURES
Architecturally Engineered Structures, PLLC
Structural Engineering Consultants
www.AEStructures.com
1118 Joshua Drive
Troy, Michigan 48098-6507
Telephone: 248.250.6166
AEStructures@AEStructures.com

CLARK TROMBLEY RANDERS
504 S. Creyts Road, Suite B
Lansing, MI 48917

Job No.
20211019

Sheet No.
SP 100

ATTACHMENT 3

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:	0.44 ft² (0.04 m²)
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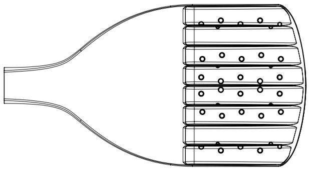

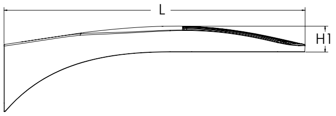

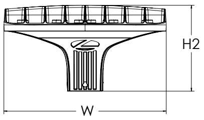

Introduction

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Ordering Information

EXAMPLE: DSX0 LED P6 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX0 LED				T2M for Type 2 TFTM for Type FT			
Series	**LEDs**	**Color temperature**[2]	**Color Rendering Index**[2]	**Distribution**		**Voltage**	**Mounting**
DSX0 LED	**Forward optics**	(this section 70CRI only)		AFR Automotive front row	T5M Type V medium	MVOLT (120V-277V)[4]	**Shipped included**
	P1 P5	30K 3000K	70CRI	T1S Type I short	T5LG Type V low glare	HVOLT (347V-480V)[5,6]	SPA Square pole mounting (#8 drilling, 3.5" min. SQ pole)
	P2 P6	40K 4000K	70CRI	T2M Type II medium	T5W Type V wide	XVOLT (277V-480V)[7,8]	
	P3 P7	50K 5000K	70CRI	T3M Type III medium	BLC3 Type III backlight control[3]		RPA Round pole mounting (#8 drilling, 3" min. RND pole)
	P4	(this section 80CRI only, extended lead times apply)		T3LG Type III low glare[3]	BLC4 Type IV backlight control[3]		
	Rotated optics			T4M Type IV medium			SPA5 Square pole mounting (#5 drilling, 3" min. SQ pole)[9]
	P10[1] P12[1]	27K 2700K	80CRI	T4LG Type IV low glare[3]	LCCO Left corner cutoff[3]		
	P11[1] P13[1]	30K 3000K	80CRI	TFTM Forward throw medium	RCCO Right corner cutoff[3]		RPA5 Round pole mounting (#5 drilling, 3" min. RND pole)[9]
		35K 3500K	80CRI				
		40K 4000K	80CRI				SPA8N Square narrow pole mounting (#8 drilling, 3" min. SQ pole)
		50K 5000K	80CRI				WBA Wall bracket[10]

Control options

Shipped installed

NLTAIR2 PIRHN	nLight AIR gen 2 enabled with bi-level motion / ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc.[11,12,18,19]
PIR	High/low, motion/ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc[13,18,19]
PER	NEMA twist-lock receptacle only (controls ordered separate)[14]
PER5	Five-pin receptacle only (controls ordered separate)[14,19]
PER7	Seven-pin receptacle only (controls ordered separate)[14,19]
FAO	Field adjustable output[15,19]
BL30	Bi-level switched dimming, 30%[16,19]
BL50	Bi-level switched dimming, 50%[16,19]
DMG	0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)[17]

Other options

Shipped installed

HS	Houseside shield (black finish standard)[20]
L90	Left rotated optics[1]
R90	Right rotated optics[1]
CCE	Coastal Construction[21]

Shipped separately

EGSR	External Glare Shield (reversible, field install required, matches housing finish)
BSDB	Bird Spikes (field install required)

Finish *(required)*

DDBXD	Dark Bronze
DBLXD	Black
DNAXD	Natural Aluminum
DWHXD	White
DDBTXD	Textured dark bronze
DBLBXD	Textured black
DNATXD	Textured natural aluminum
DWHGXD	Textured white

COMMERCIAL OUTDOOR

Ordering Information

Accessories

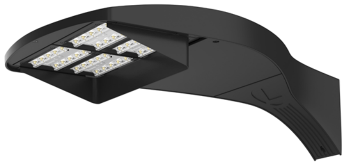
Ordered and shipped separately.

DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [22]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [22]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [22]
DSHORT SBK	Shorting cap [22]
DSX0HS P#	House-side shield (enter P1-7, P10-13 in place of #)
DSXRPA (FINISH)	Round pole adapter (#8 drilling, specify finish)
DSXRPA5 (FINISH)	Round pole adapter #5 drilling (specify finish)
DSXSPA5 (FINISH)	Square pole adapter #5 drilling (specify finish)
DSX0EGSR (FINISH)	External glare shield

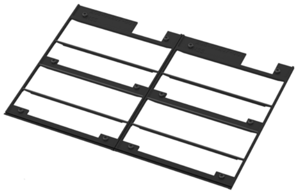
NOTES

1 Rotated optics available with packages P10, P11, P12 and P13. Must be combined with option L90 or R90.
2 30K, 40K, and 50K available in 70CRI and 80CRI. 27K and 35K only available with 80CRI. Contact Technical Support for other possible combinations.
3 T3LG, T4LG, BLC3, BLC4, LCCO, RCCO not available with option HS.
4 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
5 HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
6 HVOLT not available with package P1, P2 and P10 when combined with option NLTAIR2 PIRHN or option PIR.
7 XVOLT operates with any voltage between 277V and 480V (50/60 Hz).
8 XVOLT not available in packages P1, P2 or P10.
9 SPA5 and RPA5 for use with #5 drilling only (Not for use with #8 drilling).
10 WBA cannot be combined with Type 5 distributions plus photocell (PER).
11 NLTAIR2 and PIRHN must be ordered together. For more information on nLight Air 2.
12 NLTAIR2 PIRHN not available with other controls including PIR, PER, PER5, PER7, FAO, BL30, BL50 and DMG. NLTAIR2 PIRHN not available with P1, P2 and P10 using HVOLT. NLTAIR2 PIRHN not available with P1, P2 and P10 using XVOLT.
13 PIR not available with NLTAIR2, PER, PER5, PER7, FAO BL30, BL50 and DMG. PIR not available with P1, P2 and P10 using HVOLT. PIR not available with P1, P2 and P10 using XVOLT.
14 PER/PER5/PER7 not available with NLTAIR2, PIR, BL30, BL50. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
15 FAO not available with other dimming control options NLTAIR2 PIRHN, PIR, PER5, PER7, BL30, BL50, or DMG.
16 BL30 and BL50 are not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, FAO and DMG.
17 DMG not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50 and FAO.
18 Reference Motion Sensor Default Settings table on page 4 to see functionality.
19 Reference Controls Options table on page 4.
20 Option HS not available with T3LG, T4LG, BLC3, BLC4, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
21 CCE option not available with option BS and EGS. Contact Technical Support for availability.
22 Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.

Shield Accessories



External Glare Shield (EGS)

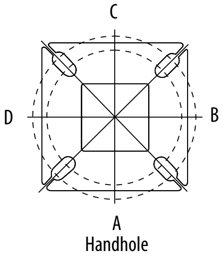


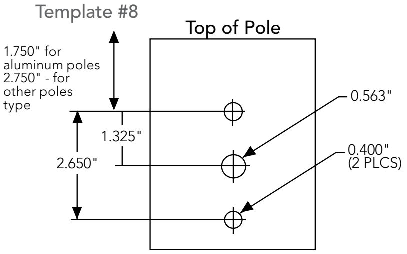
House Side Shield (HS)

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	3.5"	3.5"	3.5"	3.5"		3.5"
RPA	#8	3"	3"	3"	3"	3"	3"
SPA5	#5	3"	3"	3"	3"		3"
RPA5	#5	3"	3"	3"	3"	3"	3"
SPA8N	#8	3"	3"	3"	3"		3"

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 with SPA	0.44	0.88	0.96	1.18	---	1.16
DSX0 with SPA5, SPA8N	0.51	1.02	1.06	1.26	---	1.29
DSX0 with RPA, RPA5	0.51	1.02	1.06	1.26	1.24	1.29
DSX0 with MA	0.64	1.28	1.24	1.67	1.70	1.93

ATTACHMENT 3

Section VIII. Item #1.

Photometric Diagrams

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

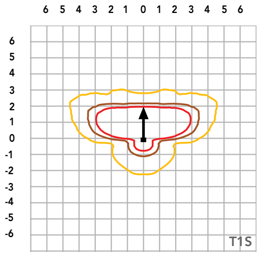
Isofootcandle plots for the DSX0 LED P7 40K 70CRI. Distances are in units of mounting height (20').

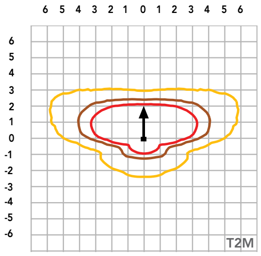
LEGEND

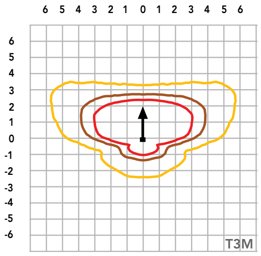
🟨 0.1 fc

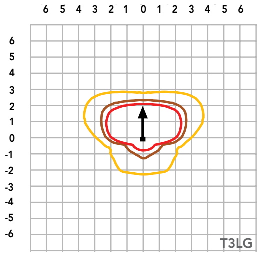
🟫 0.5 fc

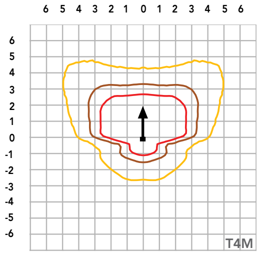
🟥 1.0 fc

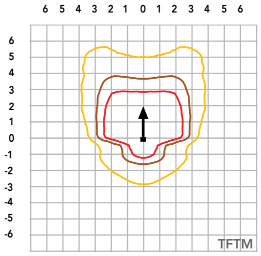


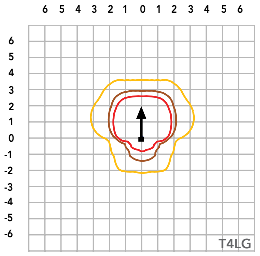


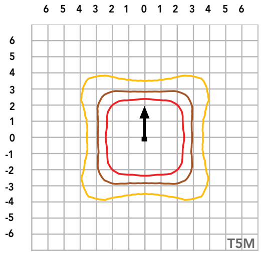


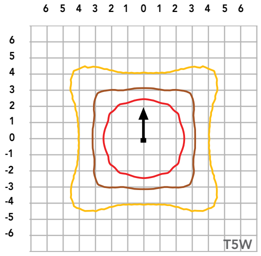


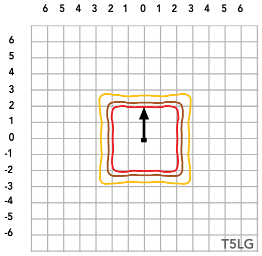


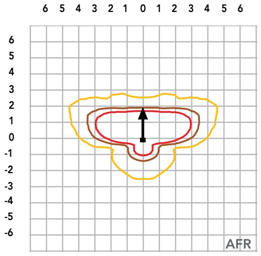


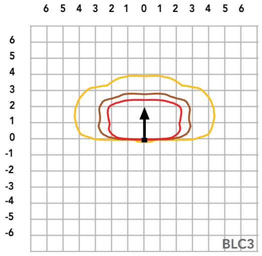


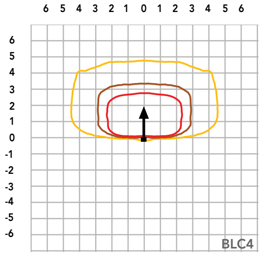


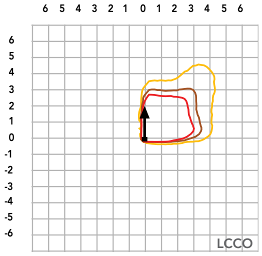


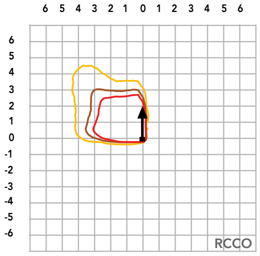












Lumen Ambient Temperature (LAT) Multipliers

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

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
0	1.00
25,000	0.94
50,000	0.89
100,000	0.80

FAO Dimming Settings

FAO Position	% Wattage	% Lumen Output
8	100%	100%
7	93%	95%
6	80%	85%
5	66%	73%
4	54%	61%
3	41%	49%
2	29%	36%
1	15%	20%

*Note: Calculated values are based on original performance package data. When calculating new values for given FAO position, use published values for each package based on input watts and lumens by optic type.

Electrical Load

					Current (A)					
	Performance Package	LED Count	Drive Current (mA)	Wattage	120V	208V	240V	277V	347V	480V
Forward Optics (Non-Rotated)	P1	20	530	34	0.28	0.16	0.14	0.12	0.10	0.07
	P2	20	700	45	0.38	0.22	0.19	0.16	0.13	0.09
	P3	20	1050	69	0.57	0.33	0.29	0.25	0.20	0.14
	P4	20	1400	94	0.78	0.45	0.39	0.34	0.27	0.19
	P5	40	700	89	0.75	0.43	0.38	0.33	0.26	0.19
	P6	40	1050	136	1.14	0.66	0.57	0.49	0.39	0.29
	P7	40	1300	170	1.42	0.82	0.71	0.62	0.49	0.36
Rotated Optics (Requires L90 or R90)	P10	30	530	51	0.42	0.24	0.21	0.18	0.15	0.11
	P11	30	700	67	0.57	0.33	0.28	0.25	0.20	0.14
	P12	30	1050	103	0.86	0.50	0.43	0.37	0.30	0.22
	P13	30	1300	129	1.07	0.62	0.54	0.46	0.37	0.27

LED Color Temperature / Color Rendering Multipliers

	70 CRI		80CRI		90CRI	
	Lumen Multiplier	Availability	Lumen Multiplier	Availability	Lumen Multiplier	Availability
5000K	102%	Standard	92%	Extended lead-time	71%	(see note)
4000K	100%	Standard	92%	Extended lead-time	67%	(see note)
3500K	100%	(see note)	90%	Extended lead-time	63%	(see note)
3000K	96%	Standard	87%	Extended lead-time	61%	(see note)
2700K	94%	(see note)	85%	Extended lead-time	57%	(see note)

Note: Some LED types are available as per special request. Contact Technical Support for more information.

Motion Sensor Default Settings

Option	Unoccupied Dimmed Level	High Level (when occupied)	Photocell Operation	Dwell Time	Ramp-up Time	Dimming Fade Rate
PIR	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min
NLTAIR2 PIRHN	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min

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 (not available on DSX0)	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. Cannot be used with other controls options that need the 0-10V leads.
PIR	Motion sensor with integral photocell. Sensor suitable for 8' to 40' mounting height.	Luminaires dim when no occupancy is detected.	Acuity Controls rSBG	Cannot be used with other controls options that need the 0-10V leads.
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 rSBG	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app. Cannot be used with other controls options that need the 0-10V leads.
BL30 or BL50	Integrated bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output	BLC device provides input to 0-10V dimming leads on all drivers providing either 100% or dimmed (30% or 50%) control by a secondary circuit	BLC UVOLT1	BLC device is powered off the 0-10V dimming leads, thus can be used with any input voltage from 120 to 480V

ATTACHMENT 3

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 configurations shown within the tolerances described within LM-79.
Contact factory for performance data on any configurations not shown here.

Forward Optics

LED Count	Drive Current (mA)	Performance Package	System Watts	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
20	530	**P1**	33W	T1S	4,906	1	0	1	148	5,113	1	0	1	154	5,213	1	0	1	157
				T2M	4,545	1	0	2	137	4,736	1	0	2	143	4,829	1	0	2	145
				T3M	4,597	1	0	2	138	4,791	1	0	2	144	4,885	1	0	2	147
				T3LG	4,107	1	0	1	124	4,280	1	0	1	129	4,363	1	0	1	131
				T4M	4,666	1	0	2	141	4,863	1	0	2	146	4,957	1	0	2	149
				T4LG	4,244	1	0	1	128	4,423	1	0	1	133	4,509	1	0	1	136
				TFTM	4,698	1	0	2	141	4,896	1	0	2	147	4,992	1	0	2	150
				T5M	4,801	3	0	1	145	5,003	3	0	1	151	5,101	3	0	1	154
				T5W	4,878	3	0	1	147	5,084	3	0	2	153	5,183	3	0	2	156
				T5LG	4,814	2	0	1	145	5,018	2	0	1	151	5,115	2	0	1	154
				BLC3	3,344	0	0	1	101	3,485	0	0	1	105	3,553	0	0	1	107
				BLC4	3,454	0	0	2	104	3,599	0	0	2	108	3,670	0	0	2	111
				RCCO	3,374	0	0	1	102	3,517	0	0	1	106	3,585	0	0	1	108
				LCCO	3,374	0	0	1	102	3,517	0	0	1	106	3,585	0	0	1	108
				AFR	4,906	1	0	1	148	5,113	1	0	1	154	5,213	1	0	1	157
20	700	**P2**	45W	T1S	6,328	1	0	1	140	6,595	1	0	1	146	6,724	1	0	1	149
				T2M	5,862	1	0	2	130	6,109	1	0	2	135	6,228	1	0	2	138
				T3M	5,930	1	0	3	131	6,180	1	0	3	137	6,301	1	0	3	140
				T3LG	5,297	1	0	1	117	5,521	1	0	1	122	5,628	1	0	1	125
				T4M	6,018	1	0	3	133	6,272	1	0	3	139	6,395	1	0	3	142
				T4LG	5,474	1	0	1	121	5,705	1	0	1	126	5,816	1	0	1	129
				TFTM	6,060	1	0	3	134	6,316	1	0	3	140	6,439	1	0	3	143
				T5M	6,192	3	0	1	137	6,453	3	0	2	143	6,579	3	0	2	146
				T5W	6,293	3	0	2	139	6,558	3	0	2	145	6,686	3	0	2	148
				T5LG	6,210	2	0	1	138	6,472	3	0	1	143	6,598	3	0	1	146
				BLC3	4,313	0	0	2	96	4,495	0	0	2	100	4,583	0	0	2	102
				BLC4	4,455	0	0	2	99	4,643	0	0	2	103	4,733	0	0	2	105
				RCCO	4,352	0	0	2	96	4,536	0	0	2	100	4,624	0	0	2	102
				LCCO	4,352	0	0	2	96	4,536	0	0	2	100	4,624	0	0	2	102
				AFR	6,328	1	0	1	140	6,595	1	0	1	146	6,724	1	0	1	149
20	1050	**P3**	69W	T1S	9,006	1	0	2	131	9,386	1	0	2	136	9,569	1	0	2	139
				T2M	8,343	2	0	3	121	8,694	2	0	3	126	8,864	2	0	3	129
				T3M	8,439	2	0	3	122	8,795	2	0	3	128	8,967	2	0	3	130
				T3LG	7,539	1	0	2	109	7,857	1	0	2	114	8,010	1	0	2	116
				T4M	8,565	2	0	3	124	8,926	2	0	3	129	9,100	2	0	3	132
				T4LG	7,790	1	0	2	113	8,119	1	0	2	118	8,277	1	0	2	120
				TFTM	8,624	1	0	3	125	8,988	1	0	3	130	9,163	2	0	3	133
				T5M	8,812	3	0	2	128	9,184	4	0	2	133	9,363	4	0	2	136
				T5W	8,955	4	0	2	130	9,333	4	0	2	135	9,515	4	0	2	138
				T5LG	8,838	3	0	1	128	9,211	3	0	1	134	9,390	3	0	1	136
				BLC3	6,139	0	0	2	89	6,398	0	0	2	93	6,522	0	0	2	95
				BLC4	6,340	0	0	3	92	6,607	0	0	3	96	6,736	0	0	3	98
				RCCO	6,194	1	0	2	90	6,455	1	0	2	94	6,581	1	0	2	95
				LCCO	6,194	1	0	2	90	6,455	1	0	2	94	6,581	1	0	2	95
				AFR	9,006	1	0	2	131	9,386	1	0	2	136	9,569	1	0	2	139
20	1400	**P4**	93W	T1S	11,396	1	0	2	122	11,877	1	0	2	128	12,109	2	0	2	130
				T2M	10,557	2	0	3	113	11,003	2	0	3	118	11,217	2	0	3	121
				T3M	10,680	2	0	3	115	11,130	2	0	3	120	11,347	2	0	3	122
				T3LG	9,540	1	0	2	103	9,942	1	0	2	107	10,136	1	0	2	109
				T4M	10,839	2	0	3	117	11,296	2	0	3	121	11,516	2	0	4	124
				T4LG	9,858	1	0	2	106	10,274	1	0	2	110	10,474	1	0	2	113
				TFTM	10,914	2	0	3	117	11,374	2	0	3	122	11,596	2	0	3	125
				T5M	11,152	4	0	2	120	11,622	4	0	2	125	11,849	4	0	2	127
				T5W	11,332	4	0	3	122	11,811	4	0	3	127	12,041	4	0	3	129
				T5LG	11,184	3	0	1	120	11,656	3	0	2	125	11,883	3	0	2	128
				BLC3	7,768	0	0	2	83	8,096	0	0	2	87	8,254	0	0	2	89
				BLC4	8,023	0	0	3	86	8,362	0	0	3	90	8,524	0	0	3	92
				RCCO	7,838	1	0	2	84	8,169	1	0	2	88	8,328	1	0	2	90
				LCCO	7,838	1	0	2	84	8,169	1	0	2	88	8,328	1	0	2	90
				AFR	11,396	1	0	2	122	11,877	1	0	2	128	12,109	2	0	2	130

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 configurations shown within the tolerances described within LM-79.
Contact factory for performance data on any configurations not shown here.

Forward Optics

LED Count	Drive Current (mA)	Performance Package	System Watts	Distribution Type	30K					40K					50K				
					(3000K, 70 CRI)					(4000K, 70 CRI)					(5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
40	700	**P5**	90W	T1S	12,380	2	0	2	137	12,902	2	0	2	143	13,154	2	0	2	146
				T2M	11,468	2	0	3	127	11,952	2	0	3	133	12,185	2	0	3	135
				T3M	11,601	2	0	3	129	12,091	2	0	3	134	12,326	2	0	4	137
				T3LG	10,363	2	0	2	115	10,800	2	0	2	120	11,011	2	0	2	122
				T4M	11,774	2	0	4	131	12,271	2	0	4	136	12,510	2	0	4	139
				T4LG	10,709	1	0	2	119	11,160	2	0	2	124	11,378	2	0	2	126
				TFTM	11,856	2	0	3	132	12,356	2	0	4	137	12,596	2	0	4	140
				T5M	12,114	4	0	2	134	12,625	4	0	2	140	12,871	4	0	2	143
				T5W	12,310	4	0	3	137	12,830	4	0	3	142	13,080	4	0	3	145
				T5LG	12,149	3	0	2	135	12,662	3	0	2	141	12,908	3	0	2	143
				BLC3	8,438	0	0	2	94	8,794	0	0	2	98	8,966	0	0	2	99
				BLC4	8,715	0	0	3	97	9,083	0	0	3	101	9,260	0	0	3	103
				RCCO	8,515	1	0	2	94	8,874	1	0	2	98	9,047	1	0	2	100
				LCCO	8,515	1	0	2	94	8,874	1	0	2	98	9,047	1	0	2	100
				AFR	12,380	2	0	2	137	12,902	2	0	2	143	13,154	2	0	2	146
40	1050	**P6**	137W	T1S	17,545	2	0	3	128	18,285	2	0	3	133	18,642	2	0	3	136
				T2M	16,253	3	0	4	119	16,939	3	0	4	124	17,269	3	0	4	126
				T3M	16,442	2	0	4	120	17,135	3	0	4	125	17,469	3	0	4	128
				T3LG	14,687	2	0	2	107	15,306	2	0	2	112	15,605	2	0	2	114
				T4M	16,687	2	0	4	122	17,391	3	0	5	127	17,730	3	0	5	129
				T4LG	15,177	2	0	2	111	15,817	2	0	2	115	16,125	2	0	2	118
				TFTM	16,802	2	0	4	123	17,511	2	0	4	128	17,852	2	0	5	130
				T5M	17,168	4	0	2	125	17,893	5	0	3	131	18,241	5	0	3	133
				T5W	17,447	5	0	3	127	18,183	5	0	3	133	18,537	5	0	3	135
				T5LG	17,218	4	0	2	126	17,944	4	0	2	131	18,294	4	0	2	134
				BLC3	11,959	0	0	3	87	12,464	0	0	3	91	12,707	0	0	3	93
				BLC4	12,352	0	0	4	90	12,873	0	0	4	94	13,124	0	0	4	96
				RCCO	12,067	1	0	3	88	12,576	1	0	3	92	12,821	1	0	3	94
				LCCO	12,067	1	0	3	88	12,576	1	0	3	92	12,821	1	0	3	94
				AFR	17,545	2	0	3	128	18,285	2	0	3	133	18,642	2	0	3	136
40	1300	**P7**	171W	T1S	20,806	2	0	3	122	21,683	2	0	3	127	22,106	2	0	3	129
				T2M	19,273	3	0	4	113	20,086	3	0	4	118	20,478	3	0	4	120
				T3M	19,497	3	0	5	114	20,319	3	0	5	119	20,715	3	0	5	121
				T3LG	17,416	2	0	2	102	18,151	2	0	2	106	18,504	2	0	2	108
				T4M	19,787	3	0	5	116	20,622	3	0	5	121	21,024	3	0	5	123
				T4LG	17,997	2	0	2	105	18,756	2	0	2	110	19,121	2	0	2	112
				TFTM	19,924	3	0	5	117	20,765	3	0	5	122	21,170	3	0	5	124
				T5M	20,359	5	0	3	119	21,217	5	0	3	124	21,631	5	0	3	127
				T5W	20,689	5	0	3	121	21,561	5	0	3	126	21,982	5	0	3	129
				T5LG	20,418	4	0	2	120	21,279	4	0	2	125	21,694	4	0	2	127
				BLC3	14,182	0	0	3	83	14,780	0	0	3	87	15,068	0	0	3	88
				BLC4	14,647	0	0	4	86	15,265	0	0	4	89	15,562	0	0	4	91
				RCCO	14,309	1	0	3	84	14,913	1	0	3	87	15,204	1	0	3	89
				LCCO	14,309	1	0	3	84	14,913	1	0	3	87	15,204	1	0	3	89
				AFR	20,806	2	0	3	122	21,683	2	0	3	127	22,106	2	0	3	129

ATTACHMENT 3

Section VIII. Item #1.

Performance Data

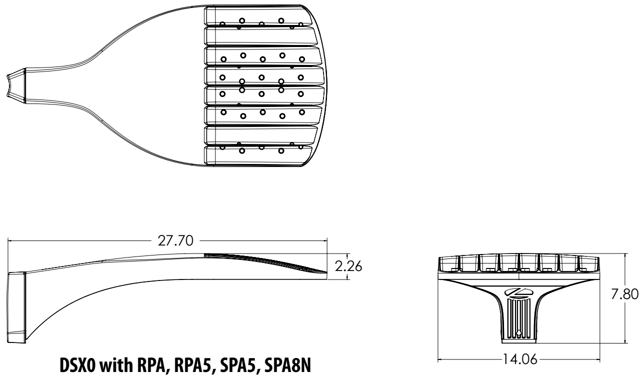
Lumen Output

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

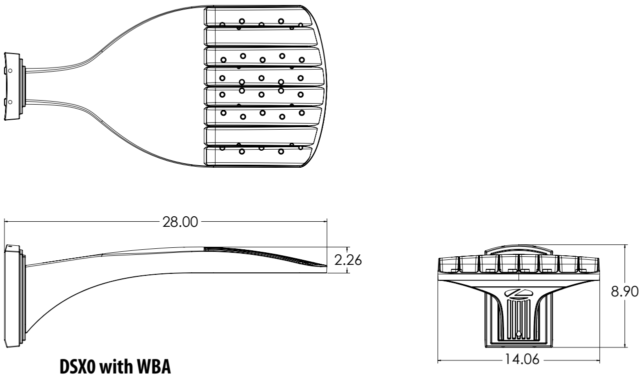
Rotated Optics

LED Count	Drive Current (mA)	Performance Package	System Watts	Distribution Type	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
30	530	**P10**	51W	T1S	7,399	3	0	3	145	7,711	3	0	3	151	7,862	3	0	3	154
				T2M	6,854	3	0	3	135	7,144	3	0	3	140	7,283	3	0	3	143
				T3M	6,933	3	0	3	136	7,225	3	0	3	142	7,366	3	0	3	145
				T3LG	6,194	2	0	2	122	6,455	2	0	2	127	6,581	2	0	2	129
				T4M	7,036	3	0	3	138	7,333	3	0	3	144	7,476	3	0	3	147
				T4LG	6,399	2	0	2	126	6,669	2	0	2	131	6,799	2	0	2	134
				TFTM	7,086	3	0	3	139	7,385	3	0	3	145	7,529	3	0	3	148
				T5M	7,239	3	0	2	142	7,545	3	0	2	148	7,692	3	0	2	151
				T5W	7,357	3	0	2	145	7,667	3	0	2	151	7,816	4	0	2	154
				T5LG	7,260	3	0	1	143	7,567	3	0	1	149	7,714	3	0	1	152
				BLC3	5,043	3	0	3	99	5,256	3	0	3	103	5,358	3	0	3	105
				BLC4	5,208	3	0	3	102	5,428	3	0	3	107	5,534	3	0	3	109
				RCCO	5,089	0	0	2	100	5,303	0	0	2	104	5,407	0	0	2	106
				LCCO	5,089	0	0	2	100	5,303	0	0	2	104	5,407	0	0	2	106
				AFR	7,399	3	0	3	145	7,711	3	0	3	151	7,862	3	0	3	154
30	700	**P11**	68W	T1S	9,358	3	0	3	138	9,753	3	0	3	143	9,943	3	0	3	146
				T2M	8,669	3	0	3	127	9,034	3	0	3	133	9,211	3	0	3	135
				T3M	8,768	3	0	3	129	9,138	3	0	3	134	9,316	3	0	3	137
				T3LG	7,833	3	0	3	115	8,164	3	0	3	120	8,323	3	0	3	122
				T4M	8,899	3	0	3	131	9,274	3	0	3	136	9,455	3	0	3	139
				T4LG	8,093	3	0	3	119	8,435	3	0	3	124	8,599	3	0	3	126
				TFTM	8,962	3	0	3	132	9,340	3	0	3	137	9,522	3	0	3	140
				T5M	9,156	4	0	2	135	9,542	4	0	2	140	9,728	4	0	2	143
				T5W	9,304	4	0	2	137	9,696	4	0	2	143	9,885	4	0	2	145
				T5LG	9,182	3	0	1	135	9,569	3	0	1	141	9,756	3	0	1	143
				BLC3	6,378	3	0	3	94	6,647	3	0	3	98	6,777	3	0	3	100
				BLC4	6,587	3	0	3	97	6,865	3	0	3	101	6,999	3	0	3	103
				RCCO	6,436	0	0	2	95	6,707	0	0	2	99	6,838	0	0	2	101
				LCCO	6,436	0	0	2	95	6,707	0	0	2	99	6,838	0	0	2	101
				AFR	9,358	3	0	3	138	9,753	3	0	3	143	9,943	3	0	3	146
30	1050	**P12**	103W	T1S	13,247	3	0	3	128	13,806	3	0	3	134	14,075	3	0	3	136
				T2M	12,271	4	0	4	119	12,789	4	0	4	124	13,038	4	0	4	126
				T3M	12,412	4	0	4	120	12,935	4	0	4	125	13,187	4	0	4	128
				T3LG	11,089	3	0	3	107	11,556	3	0	3	112	11,782	3	0	3	114
				T4M	12,597	4	0	4	122	13,128	4	0	4	127	13,384	4	0	4	129
				T4LG	11,457	3	0	3	111	11,940	3	0	3	116	12,173	3	0	3	118
				TFTM	12,686	4	0	4	123	13,221	4	0	4	128	13,479	4	0	4	130
				T5M	12,960	4	0	2	125	13,507	4	0	2	131	13,770	4	0	2	133
				T5W	13,170	4	0	3	127	13,726	4	0	3	133	13,994	4	0	3	135
				T5LG	12,998	3	0	2	126	13,546	3	0	2	131	13,810	3	0	2	134
				BLC3	9,029	3	0	3	87	9,409	3	0	3	91	9,593	3	0	3	93
				BLC4	9,324	4	0	4	90	9,718	4	0	4	94	9,907	4	0	4	96
				RCCO	9,110	1	0	2	88	9,495	1	0	2	92	9,680	1	0	2	94
				LCCO	9,110	1	0	2	88	9,494	1	0	2	92	9,680	1	0	2	94
				AFR	13,247	3	0	3	128	13,806	3	0	3	134	14,075	3	0	3	136
30	1300	**P13**	129W	T1S	15,704	3	0	3	122	16,366	3	0	3	127	16,685	4	0	4	130
				T2M	14,547	4	0	4	113	15,161	4	0	4	118	15,457	4	0	4	120
				T3M	14,714	4	0	4	114	15,335	4	0	4	119	15,634	4	0	4	121
				T3LG	13,145	3	0	3	102	13,700	3	0	3	106	13,967	3	0	3	108
				T4M	14,933	4	0	4	116	15,563	4	0	4	121	15,867	4	0	4	123
				T4LG	13,582	3	0	3	105	14,155	3	0	3	110	14,431	3	0	3	112
				TFTM	15,039	4	0	4	117	15,673	4	0	4	122	15,979	4	0	4	124
				T5M	15,364	4	0	2	119	16,013	4	0	2	124	16,325	4	0	2	127
				T5W	15,613	5	0	3	121	16,272	5	0	3	126	16,589	5	0	3	129
				T5LG	15,409	3	0	2	120	16,059	3	0	2	125	16,372	4	0	2	127
				BLC3	10,703	4	0	4	83	11,155	4	0	4	87	11,372	4	0	4	88
				BLC4	11,054	4	0	4	86	11,520	4	0	4	89	11,745	4	0	4	91
				RCCO	10,800	1	0	2	84	11,256	1	0	2	87	11,475	1	0	3	89
				LCCO	10,800	1	0	2	84	11,255	1	0	2	87	11,475	1	0	3	89
				AFR	15,704	3	0	3	122	16,366	3	0	3	127	16,685	4	0	4	130

Dimensions

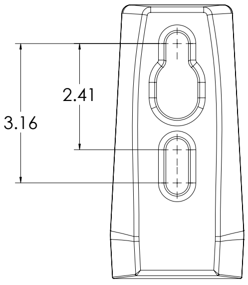


DSX0 with RPA, RPA5, SPA5, SPA8N

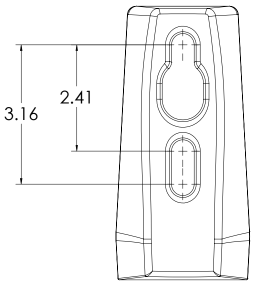


DSX0 with WBA

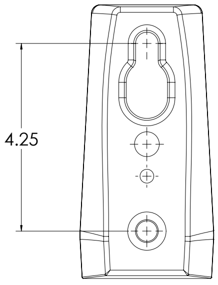
SPA8N



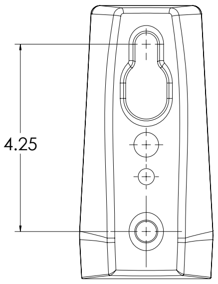
RPA



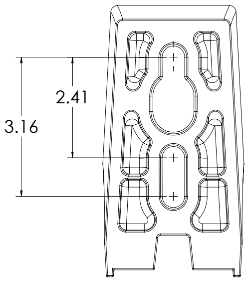
SPA5



RPA5



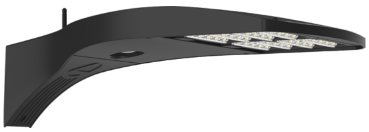
BASE FIXURE

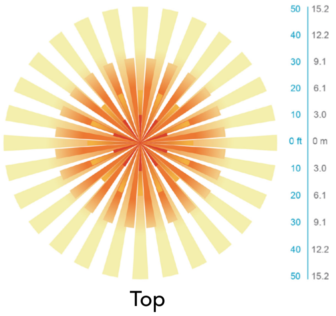


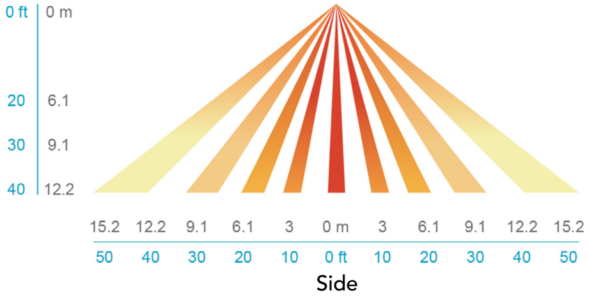
nLight Control - Sensor Coverage and Settings

nLight Sensor Coverage Pattern

NLTAIR2 PIRHN







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 driver compartment is completely sealed against moisture and environmental contaminants (IP66). Vibration rated per ANSI C136.31 for 1.5G. Low EPA (0.44 ft^2) 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.

COASTAL CONSTRUCTION (CCE)

Optional corrosion resistant construction is engineered with added corrosion protection in materials and/or pre-treatment of base material under super durable paint. Provides additional corrosion protection for applications near coastal areas. Finish is salt spray tested to over 5,000 hours per ASTM B117 with scribe rating of 10. Additional lead-times may apply.

OPTICS

Precision-molded proprietary silicone 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. 80CRI configurations are also available. 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 L80/100,000 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 DSX0 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. PIR integrated motion sensor with on-board photocell feature field-adjustable programing and are suitable for mounting heights up to 40 feet. Control option BL features a bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output.

nLIGHT AIR CONTROLS

The DSX0 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 luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

INSTALLATION

Integral mounting arm allows for fast mounting using Lithonia standard #8 drilling and accommodates pole drilling's from 2.41 to 3.12" on center. The standard "SPA" option for square poles and the "RPA" option for round poles use the #8 drilling. For #5 pole drillings, use SPA5 or RPA5. Additional mountings are available including a wall bracket (WBA) and mast arm (MA) option that allows luminaire attachment to a 2 3/8" horizontal mast arm.

LISTINGS

UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP66 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 temperature only.

WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. 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.

ATTACHMENT 3

CHERRY CREE

1274VK-LED

MEDIUM WALL MOUNT LANTERN

Cherry Creek's modern take on the popular Arts & Crafts style has a timeless appeal. The cast aluminum construction is enhanced by the warmth of the finish and the vintage-looking white linen glass.

DETAILS	
FINISH:	Vintage Black
MATERIAL:	Aluminum
GLASS:	White Linen
DIMMABLE:	YES - CL TYPE DIMMER (SSL7A)

DIMENSIONS	
WIDTH:	8.5"
HEIGHT:	15.3"
WEIGHT:	7lb
BACK PLATE:	4.5"W X 10"H
EXTENSION:	9.3”
TOP TO OUTLET:	5"

LIGHT SOURCE	
LIGHT SOURCE:	Integrated LED
LED NAME:	LESM-100-3
WATTAGE:	14w LED *Included
VOLTAGE:	120v
COLOR TEMP:	3000
LUMENS:	900
CRI:	92
INCANDESCENT EQUIVALENCY:	1 x 75w
DIMMABLE:	YES - CL TYPE DIMMER (SSL7A)

SHIPPING	
CARTON LENGTH:	11
CARTON WIDTH:	12
CARTON HEIGHT:	19
CARTON WEIGHT:	9

PRODUCT DETAILS:

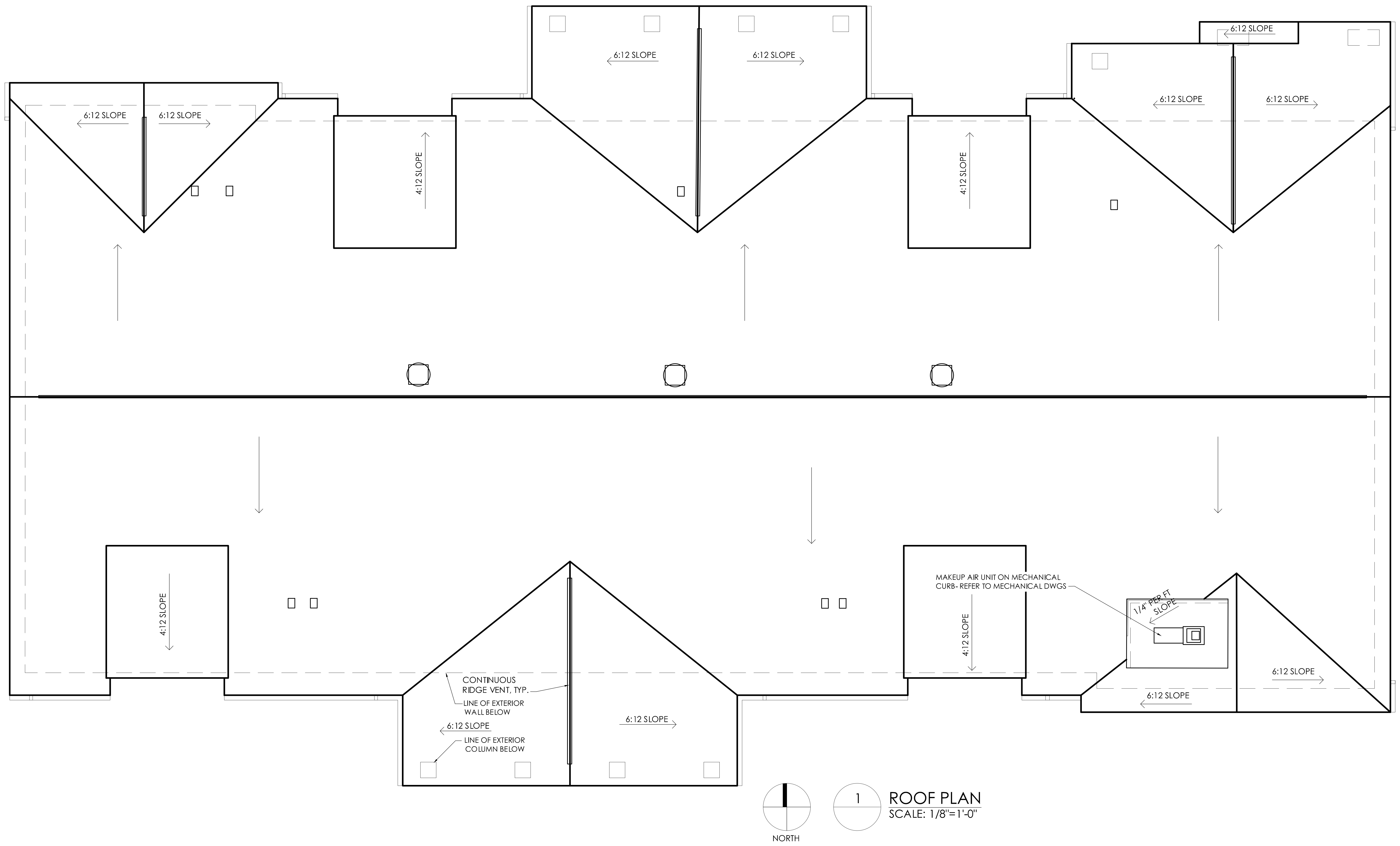
- Suitable for use in wet (outdoor direct rain) locations as defined by NEC and CEC. Meets United States UL Underwriters Laboratories & CSA Canadian Standards Association Product Safety Standards
- 2-year finish warranty
- LED components carry a 5-year limited warranty
- Streamlined forms, robust finishes and symmetrical details complement Craftsman facades

ATTACHMENT 4

DO NOT SCALE PRINTS. USE FIGURED DI

Section VIII. Item #1.

Roof Plan marches
Option 2



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

NOT FOR CONSTRUCTION

Project:

Big Blue Marble
Academy

Cypress Ridge
Mill Creek Blvd.
Bluffton, South Carolina

Issued for:

Site Plan Review	03/29/2023
Site Plan Review	05/12/2023
Site Plan Review	07/24/2023
Site Plan Review	10/25/2023
Site Plan Review	10/30/2023

Subject:

ROOF PLANS

Project Owner:

EIGHT

814 Services, LLC
1695 Twelve Mile Road
Suite 100
Berkley, MI 48072

Project Consultants:

FormSurfaces
Design Group
10913 Marcello Lane
Whitmore Lake, MI 48189

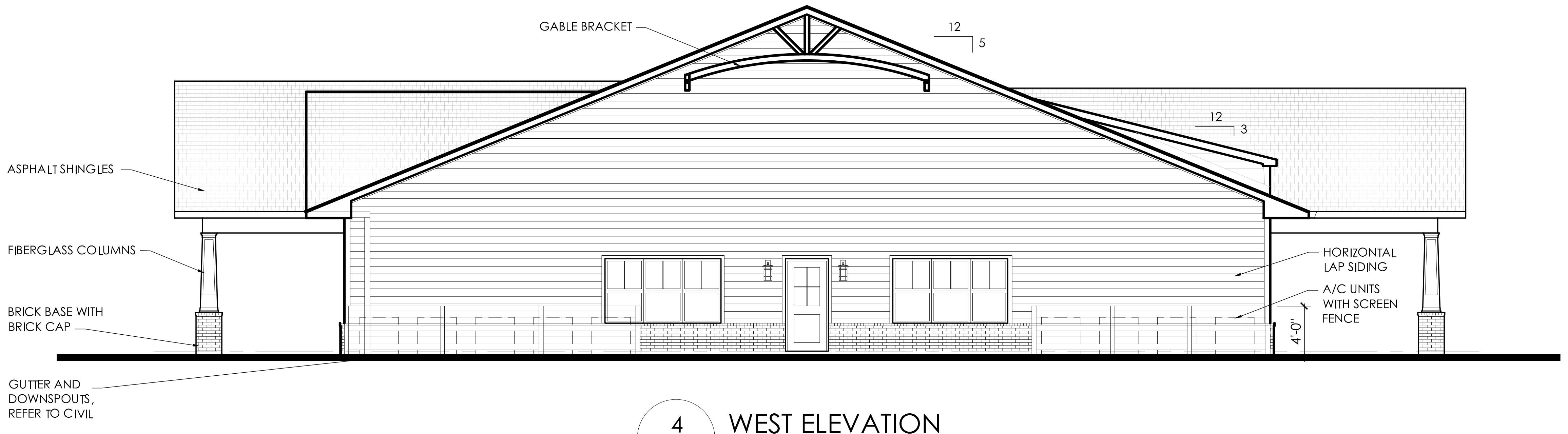
conn engineering
consultants, inc.
commercial+industrial+institutional+residential
structural engineering
107 n. bridge
linden, mi 48451
p. 810.458.4350
www.connengineering.com

Clark
Trombley
Randers
504 S. Creyts Road, Suite B
Lansing, MI 48917

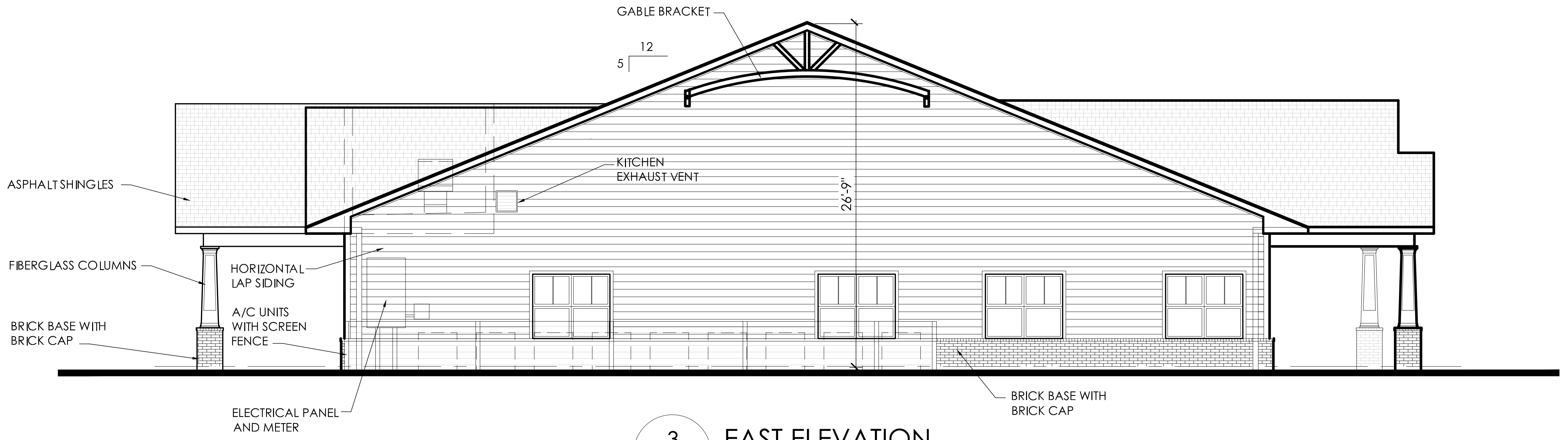
Job No.
20211019

Sheet No.
A 104

ATTACHMENT 4

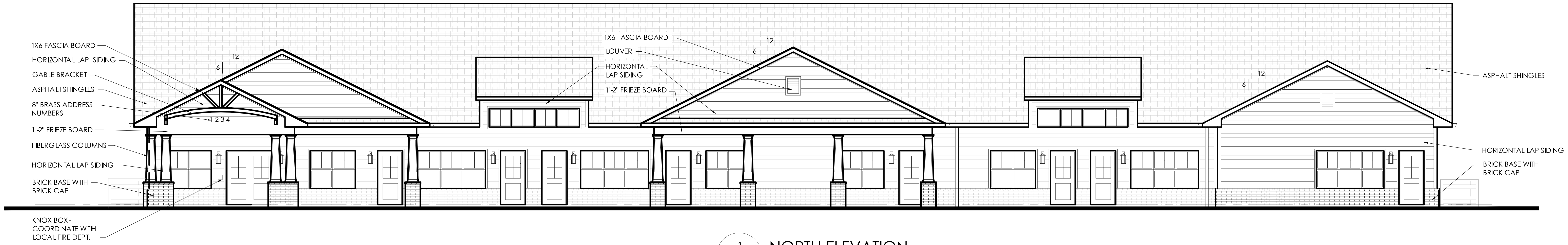


4
A 101
WEST ELEVATION
SCALE: 1/8"=1'-0"



3
A 101
EAST ELEVATION
SCALE: 1/8"=1'-0"

2
A 101
SOUTH ELEVATION
SCALE: 1/8"=1'-0"



1
A 101
NORTH ELEVATION
SCALE: 1/8"=1'-0"

EXTERIOR FINISH LEGEND

MATERIAL	MANUFACTURER	DESCRIPTION AND COLOR
ROOF		
ASPHALT SHINGLES	GAF	STYLE: TIMBERLINE HDZ COLOR: OYSTER GREY
SOFFIT PANELS	JAMES HARDIE	STYLE: HARDIESOFFIT PANELS, VENTED CEDARMILL COLOR: WHITE
WALL		
HORIZONTAL LAP SIDING	JAMES HARDIE	STYLE: HARDIEPLANK LAP SIDING, CEDARMILL COLOR: MONTEREY TAUPE
SIDING TRIM	JAMES HARDIE	STYLE: SMOOTH COLOR: WHITE WINDOWS AND DOOR SURROUNDS, SOFFIT
BRICK	GENERAL SHALE	STYLE: MODULAR BRICK, RUNNING BOND COLOR: SAVANNAH GREY
FIBERGLASS COLUMNS	ENDURA-CRAFT	STYLE: CRAFTSMAN STYLE, TAPERED, RECESSED PANEL COLOR: WHITE
LOUVER	FYPON	STYLE: 33" ROUND, POLYURETHANE COLOR: WHITE
SCREEN WALL A/C UNITS AT GRADE		STYLE: VINYL COLOR: BEIGE, HEIGHT: 3'-2" (MIN)

Option 1

DO NOT SCALE PRINTS. USE FIGURED DI

Project:

Big Blue Marble Academy

Cypress Ridge
Mill Creek Blvd.
Bluffton, South Carolina

Issued for:

Site Plan Review	02/17/2023
Site Plan Review	03/29/2023
Site Plan Review	05/12/2023
Site Plan Review	07/24/2023
Site Plan Review	09/25/2023
Site Plan Review	10/25/2023
Site Plan Review	10/29/2023

Subject:
ELEVATIONS

Project Owner:

EIGHT

814 Services, LLC
1695 Twelve Mile Road
Suite 100
Berkley, MI 48072

Project Consultants:

FormSurfaces
Design Group
10913 Marcello Lane
Whitmore Lake, MI 48189

conn engineering
consultants, inc.
commercial+industrial+institutional+residential
structural engineering
107 n. bridge
linden, mi 48451
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www.connengineering.com

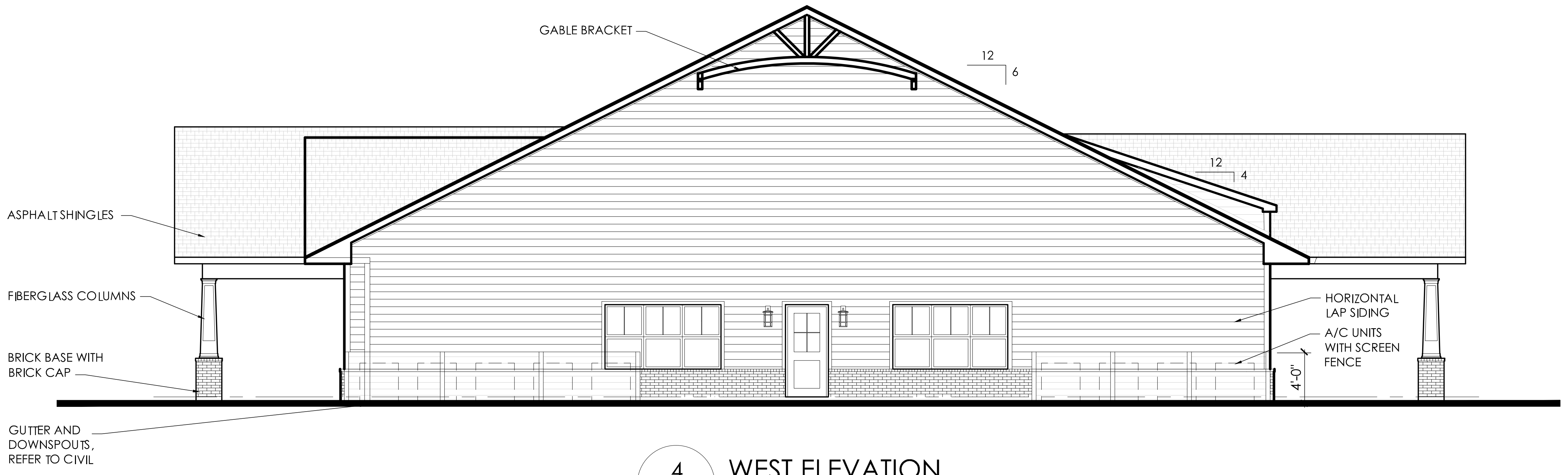
CLARK
TROMBLEY
RANDERS
504 S. Creyts Road, Suite B
Lansing, MI 48917

NOT FOR CONSTRUCTION

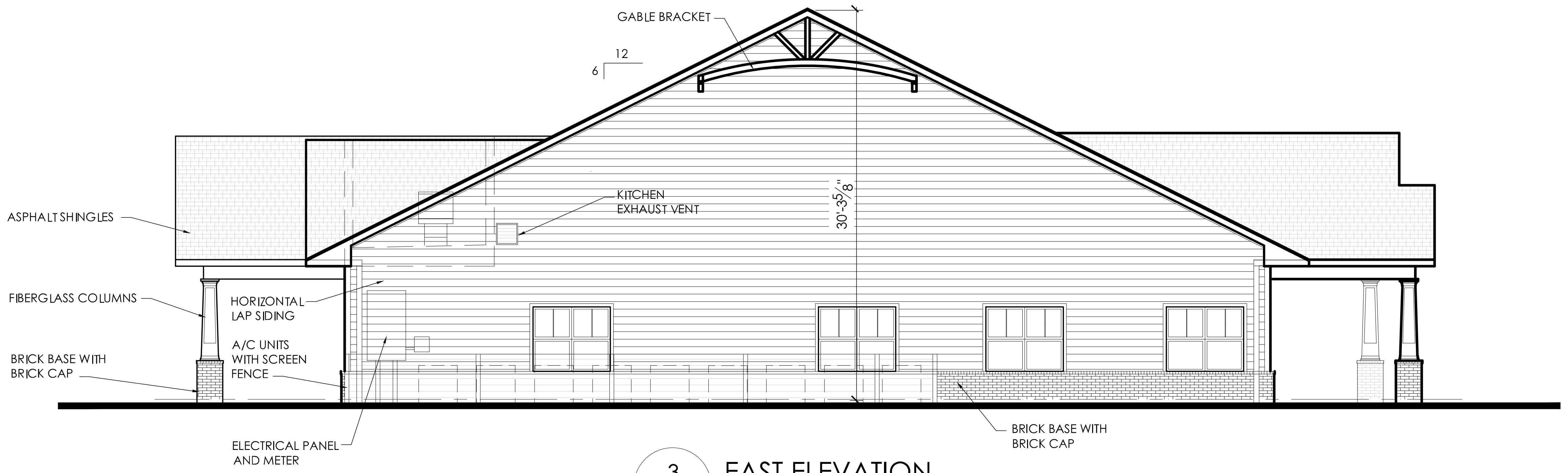
Job No.
20211019

Sheet No.
A 201

ATTACHMENT 4

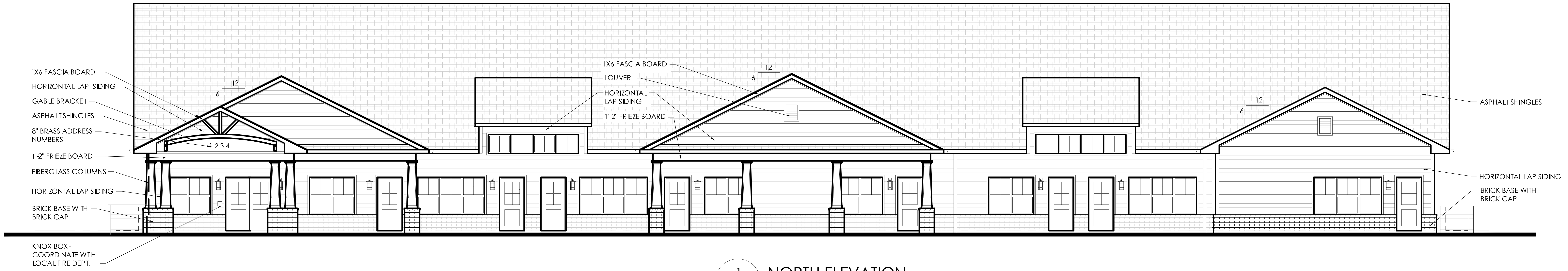


4
A 101
WEST ELEVATION
SCALE: 1/8"=1'-0"



3
A 101
EAST ELEVATION
SCALE: 1/8"=1'-0"

2
A 101
SOUTH ELEVATION
SCALE: 1/8"=1'-0"



1
A 101
NORTH ELEVATION
SCALE: 1/8"=1'-0"

EXTERIOR FINISH LEGEND

MATERIAL	MANUFACTURER	DESCRIPTION AND COLOR
ROOF		
ASPHALT SHINGLES	GAF	STYLE: TIMBERLINE HDZ COLOR: OYSTER GREY
SOFFIT PANELS	JAMES HARDIE	STYLE: HARDIESOFFIT PANELS, VENTED CEDARMILL COLOR: WHITE
WALL		
HORIZONTAL LAP SIDING	JAMES HARDIE	STYLE: HARDIEPLANK LAP SIDING, CEDARMILL COLOR: MONTEREY TAUPE
SIDING TRIM	JAMES HARDIE	STYLE: SMOOTH COLOR: WHITE WINDOWS AND DOOR SURROUNDS, SOFFIT
BRICK	GENERAL SHALE	STYLE: MODULAR BRICK, RUNNING BOND COLOR: SAVANNAH GREY
FIBERGLASS COLUMNS	ENDURA-CRAFT	STYLE: CRAFTSMAN STYLE, TAPERED, RECESSED PANEL COLOR: WHITE
LOUVER	FYPON	STYLE: 33" ROUND, POLYURETHANE COLOR: WHITE
SCREEN WALL A/C UNITS AT GRADE		STYLE: VINYL COLOR: BEIGE, HEIGHT: 3'-2" (MIN)

Option 2

Project:

Big Blue Marble Academy

Cypress Ridge
Mill Creek Blvd.
Bluffton, South Carolina

Issued for:

Site Plan Review 10/29/2023

Subject:

ELEVATIONS

Project Owner:

EIGHT

814 Services, LLC
1695 Twelve Mile Road
Suite 100
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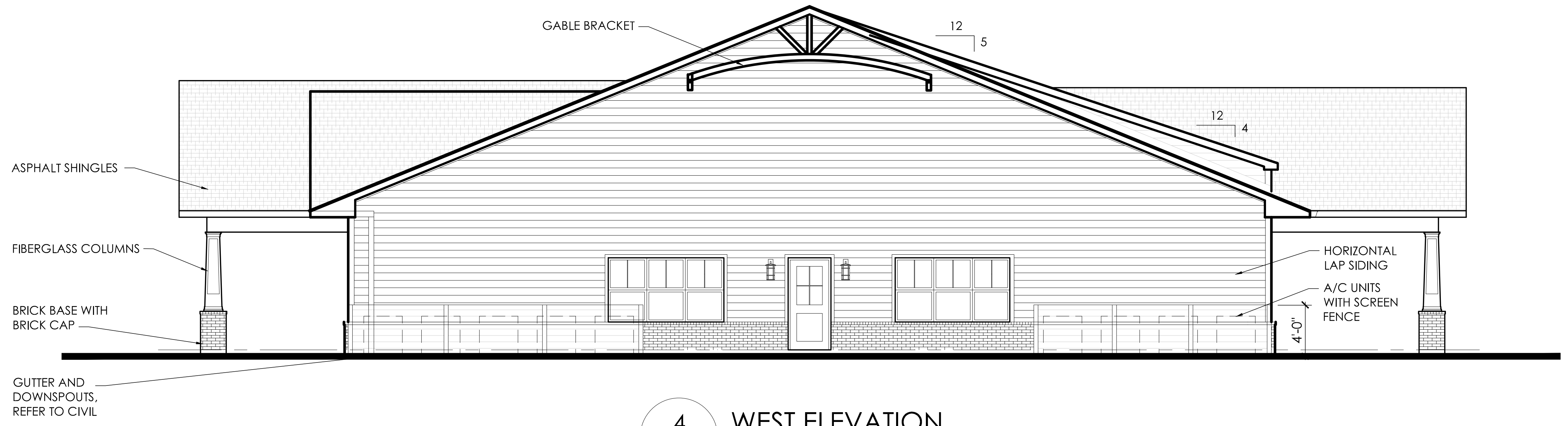

4
A 101
WEST ELEVATION
SCALE: 1/8"=1'-0"

EXTERIOR FINISH LEGEND		
MATERIAL	MANUFACTURER	DESCRIPTION AND COLOR
ROOF		
ASPHALT SHINGLES	GAF	STYLE: TIMBERLINE HDZ COLOR: OYSTER GREY
SOFFIT PANELS	JAMES HARDIE	STYLE: HARDIESOFFIT PANELS, VENTED CEDARMILL COLOR: WHITE
WALL		
HORIZONTAL LAP SIDING	JAMES HARDIE	STYLE: HARDIEPLANK LAP SIDING, CEDARMILL COLOR: MONTEREY TAUPE
SIDING TRIM	JAMES HARDIE	STYLE: SMOOTH COLOR: WHITE WINDOWS AND DOOR SURROUNDS, SOFFIT
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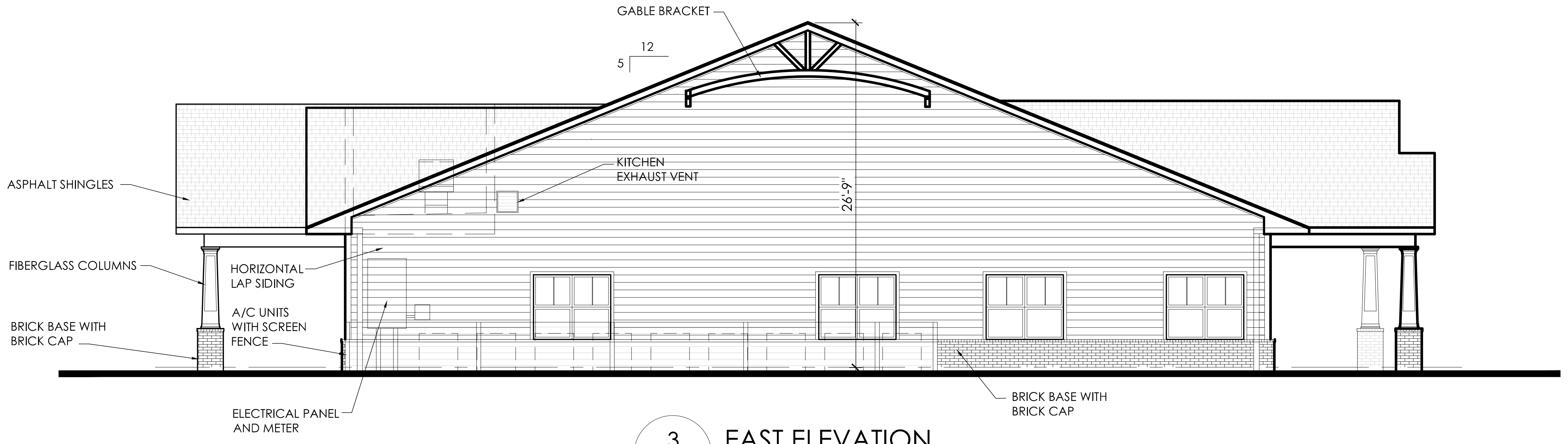
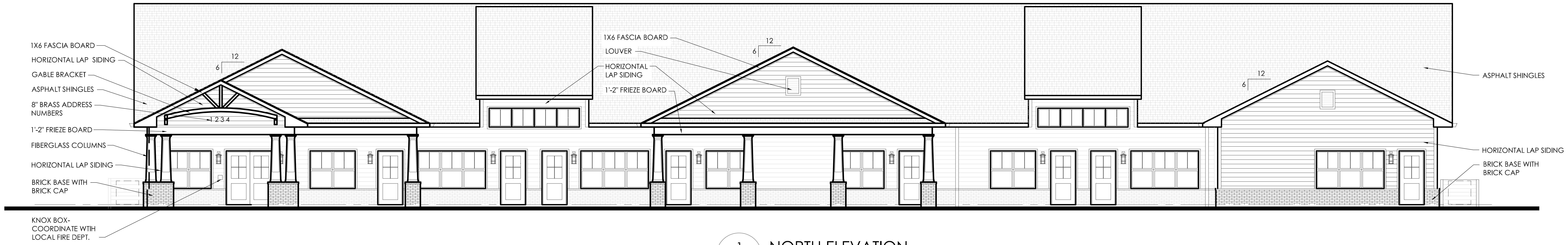
LOUVER	FYPON	STYLE: 33" ROUND, POLYURETHANE COLOR: WHITE
SCREEN WALL A/C UNITS AT GRADE		STYLE: VINYL COLOR: BEIGE, HEIGHT: 3'-2" (MIN)



3
A 101
EAST ELEVATION
SCALE: 1/8"=1'-0"

Option 3

2
A 101
SOUTH ELEVATION
SCALE: 1/8"=1'-0"



1
A 101
NORTH ELEVATION
SCALE: 1/8"=1'-0"

DO NOT SCALE PRINTS. USE FIGURED DI

Project:

Big Blue Marble
Academy

Cypress Ridge
Mill Creek Blvd.
Bluffton, South Carolina

Issued for:

Site Plan Review 11/08/2023

Subject:

ELEVATIONS

Project Owner:

EIGHT

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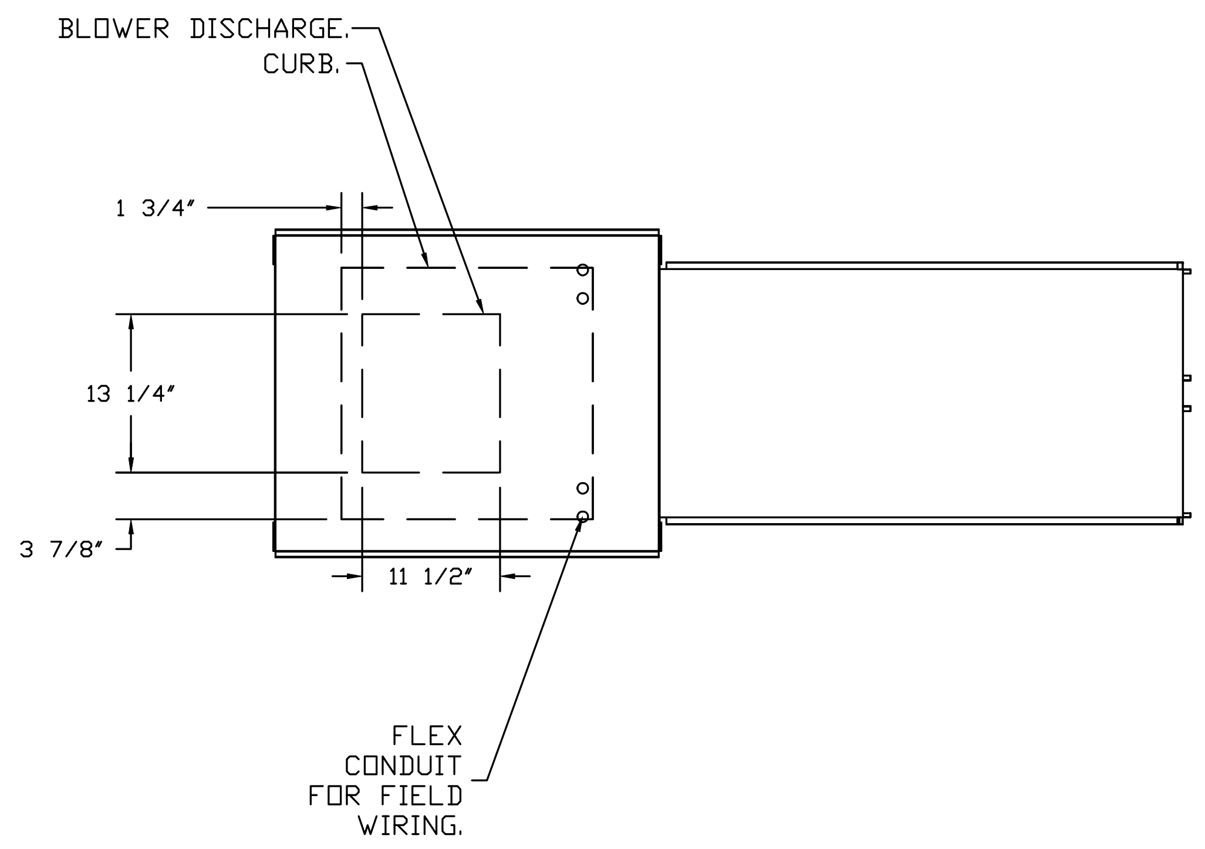
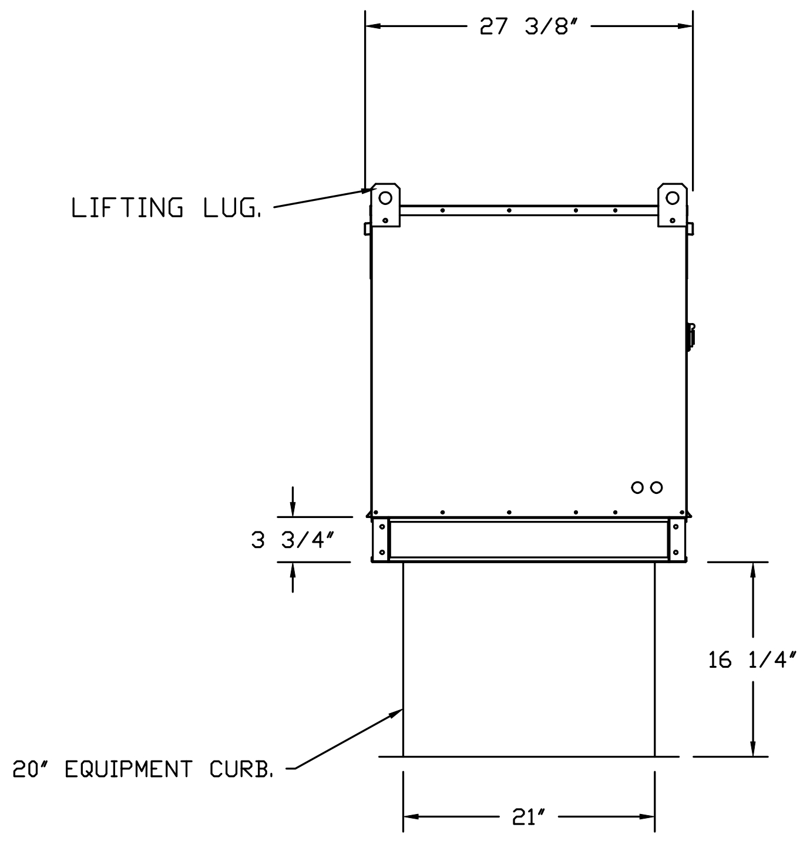
ATTACHMENT 4

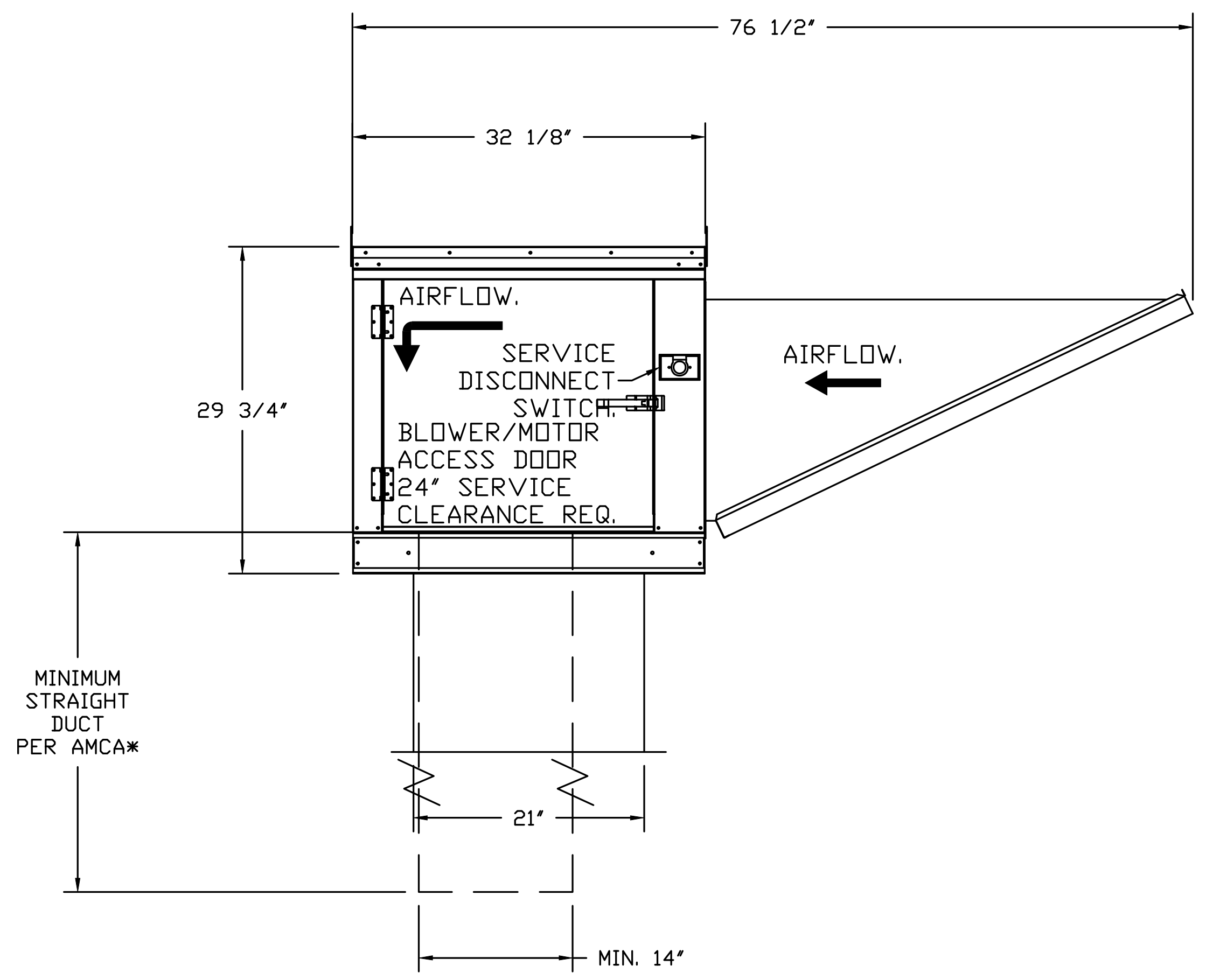
FAN #2 K-A1-G10D - SUPPLY FAN (KSF)
1. DIRECT DRIVE UNTEMPERED SUPPLY UNIT WITH 10" BLOWER IN SIZE #1 HOUSING WITH SPEED CONTROL, DISCONNECT SWITCH.
2. INTAKE HOOD WITH EZ FILTERS.
3. DOWN DISCHARGE - AIR FLOW RIGHT -> LEFT.
4. MOTORIZED BACK DRAFT DAMPER 16" X 18" FOR SIZE 1 UNTEMPERED UNITS W/EXTENDED SHAFT, STANDARD GALVANIZED CONSTRUCTION, 3/4" REAR FLANGE, LOW LEAKAGE, TFB120S ACTUATOR INCLUDED.
5. ECM WIRING PACKAGE FOR SUPPLY MOTORS WITH PWM SIGNAL FROM ECPM03 PREWIRE.
6. HINGED DOUBLE WALL INSULATED DOOR ASSEMBLY (BURNER/BLOWER SECTION).
7. 2 YEAR PARTS WARRANTY

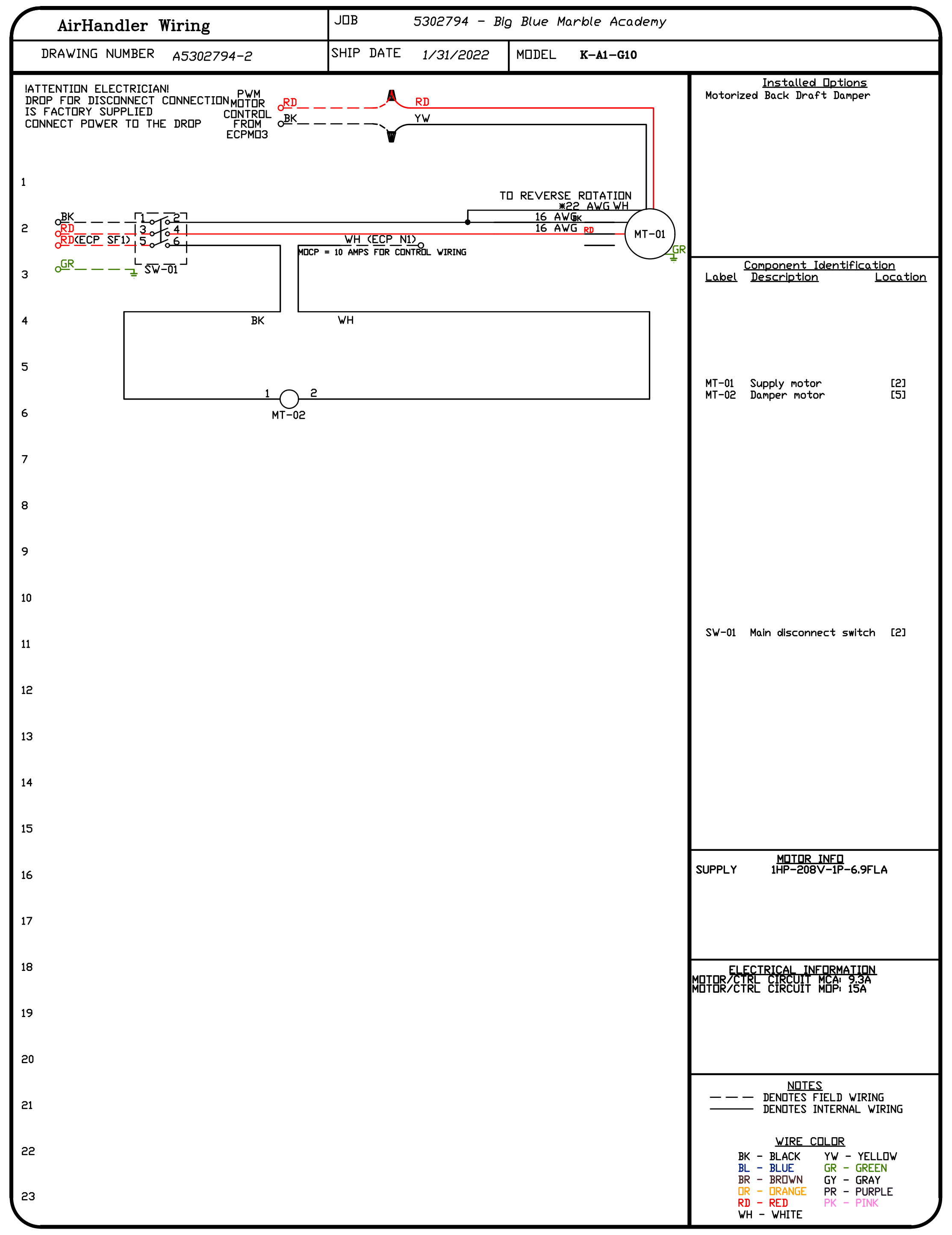
*NOTE: SUPPLY DUCT MUST BE INSTALLED TO MEET SMACNA STANDARDS. A MINIMUM STRAIGHT DUCT LENGTH MUST BE MAINTAINED DOWNSTREAM OF UNIT DISCHARGE AS OUTLINED IN AMCA PUBLICATION 201. WHEN USING RECTANGULAR DUCTWORK, ELBOWS MUST BE RADIUS THROAT, RADIUS BACK WITH TURNING VANES. FLEXIBLE DUCTWORK AND SQUARE THROAT/SQUARE BACK ELBOWS SHOULD NOT BE USED. ANY TRANSITION AND/OR TURNS IN THE DUCTWORK WILL CAUSE SYSTEM EFFECT. SYSTEM EFFECT WILL DRASTICALLY INCREASE STATIC PRESSURE AND REDUCE AIRFLOW. DO NOT RELY ON UNIT TO SUPPORT DUCT IN ANY WAY. FAILURE TO PROPERLY SIZE DUCTWORK MAY CAUSE SYSTEM EFFECTS AND REDUCE PERFORMANCE OF THE EQUIPMENT. SUGGESTED STRAIGHT DUCT SIZE IS 14" x 14".





ROOF OPENING 2" SMALLER THAN CURB DIMENSION.





AirHandler Wiring

DRAWING NUMBER A5302794-2	JOB 5302794 - Big Blue Marble Academy		
	SHIP DATE 1/31/2022	MODEL **K-A1-G10**	

!ATTENTION ELECTRICIAN!
DROP FOR DISCONNECT CONNECTION IS FACTORY SUPPLIED
CONNECT POWER TO THE DROP

Installed Options
Motorized Back Draft Damper

Component Identification

Label	Description	Location
MT-01	Supply motor	[2]
MT-02	Damper motor	[5]
SW-01	Main disconnect switch	[2]

MOTOR INFO
SUPPLY 1HP-208V-1P-6.9FLA

ELECTRICAL INFORMATION
MOTOR/CTRL CIRCUIT MCA: 9.3A
MOTOR/CTRL CIRCUIT MOP: 15A

NOTES
— — — DENOTES FIELD WIRING
——— DENOTES INTERNAL WIRING

WIRE COLOR

BK - BLACK	YW - YELLOW
BL - BLUE	GR - GREEN
BR - BROWN	GY - GRAY
OR - ORANGE	PR - PURPLE
RD - RED	PK - PINK
WH - WHITE	

RE
DESC

△		
△		
△		
△		

www.mucklerktech.com
Michigan Office
3876 East Paris Ave SE, Suite 18, Grand Rapids, MI, 49512 PHONE: (616) 942-9881 FAX: (919) 227-5984 EMAIL: reg77@ktechhoods.com

Big Blue Marble Academy
Lexington, SC, 29071

DATE: 1/31/2022

DWG.#:
5302794

DRAWN BY: RJF

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

MASTER DRAWING

SHEET NO.
6

ATTACHMENT 4

Unit Report For HP-2

Project: CTR - Big Blue Marble
Prepared By: Jason Koroniotis

01/26/2022

Outdoor Unit Parameters

Unit Model:	**25HCE**	
Unit Size:	**3 Tons (Size 36)**	
Voltage:	**208/230-3-60**	V-Ph-Hz

Indoor Coil Parameters

Unit Model:	**FV4C**	
Unit Size:	**Size 006 (30 - 60,000 Btuh)**	
Cabinet Insulation:	**Modular with 1-in. super thick insulation**	
Voltage:	**208-1-60**	V-Ph-Hz
Refrigerant Type:	**Puron**	
Heating Size:	**No Heat**	

Outdoor Unit Dimensions and Weight

Unit Length:	**31.1875**	in
Unit Width:	**31.1875**	in
Unit Height:	**28.6875**	in
Unit Shipping Weight:	**201.**	lb

Indoor Coil Dimensions and Weight

Unit Length:	**22.0625**	in
Unit Width:	**24.6875**	in
Unit Height:	**59.1875**	in
Unit Shipping Weight:	**207.**	lb

RESIDENTIAL APPLICATIONS

This warranty is to the original purchasing owner and subsequent owners only to the extent and as stated in the Warranty Conditions and below. The limited warranty period in years, depending on the part and the claimant, is as shown in the table below.

Limited Warranty (Years)		
Item	**Original Owner**	**Subsequent Owner**
Parts	10* (or 5)	5
Compressor	10* (or 5)	5

***If properly registered within 90 days of original installation, otherwise 5 years (except in California and Quebec and other jurisdictions that prohibit warranty benefits conditioned on registration). See Warranty Conditions below.**

OTHER APPLICATIONS

The warranty period is five (5) years on the compressor, and one (1) year on all other parts. The warranty is the original owner only and is not available for subsequent owners.

Ordering Information

Part Number	Description	Quantity
Outdoor Unit		
25HCE436AP05	Comfort Series Heat Pump with Puron 3 Tons Cooling	1
	14 SEER @ ARI Conditions	
	Std Offering (NO High Press Switch)	
Indoor Coil		
FV4CNB006L00	FV4C Performance Series Fan Coil with Puron 6 Tons Cooling 208/230-1-60	1
	Modular with 1-in. super thick insulation	
	Aluminum	
Accessories		
KFCEH2601C10	10 kW Electric Heater with Circuit Breaker for Indoor Unit	

TOWN OF BLUFFTON
2024 PLANNING COMMISSION
Meeting and Application Submission Schedule

MEETING DATES	APPLICATION SUBMISSION DATES
January 24, 2024	December 27, 2023
February 28, 2024	January 31, 2024
March 27, 2024	February 28, 2024
April 24, 2024	March 27, 2024
May 22, 2024	April 24, 2024
June 26, 2024	May 29, 2024
July 24, 2024	June 26, 2024
August 28, 2024	July 31, 2024
September 25, 2024	August 28, 2024
October 23, 2024	September 25, 2024
November 20, 2024**	October 23, 2024
December 18, 2024**	November 20, 2024
January 22, 2025	December 23, 2024

REGULAR MEETINGS ARE HELD THE 4th WEDNESDAY OF EACH MONTH AT 6:00 P.M.
**** The November 27, 2024 meeting will be held one week earlier due to holiday.**
****The December 25, 2024 meeting will be held one week earlier due to the holiday.**

Please Note:

1. For submission requirements and information please consult www.townofbluffton.sc.gov or phone (843) 706-4500.
2. The proper forms and filing fee must accompany all submittals. Incomplete submittals will NOT be accepted.
3. Meetings will be held on scheduled meeting dates unless otherwise advertised with FOIA compliance.
4. All new applications, required revisions and information relative to previously submitted applications must be submitted four (4) weeks prior to the meeting date in order to be placed on the agenda.

TOWN OF BLUFFTON
2024 DEVELOPMENT REVIEW COMMITTEE
Meeting and Application Submission Schedule

DRC MEETINGS ARE HELD EVERY WEDNESDAY FROM 1:00 P.M. – 3:00 P.M.
APPLICATION SUBMISSION DATES ARE TWENTY (20) BUSINESS DAYS PRIOR TO DRC MEETING DATES

Please Note:

1. For applications, submission requirements, and general information, please consult www.townofbluffton.sc.gov or call 843.706.4500.
2. No incomplete submittals will be accepted.
3. The proper forms and filing fee must accompany all submittals.
4. Meetings will be held on scheduled meeting dates unless otherwise advertised.
5. Minimum requirements for specific applications or resubmittals are listed on project applications.

Meetings are subject to change based on conflicts due to scheduling, meeting locations and observed holidays.