AGENDA

City of Beaufort

DESIGN REVIEW BOARD

Thursday, July 9, 2020 2:00 p.m.

~~**City Hall, Planning Conference Room – 1911 Boundary Street, Beaufort SC**~~

Please click the link below to join the webinar:
https://us02web.zoom.us/j/84897450470?pwd=MWppWWcvYk9vTU0xNnpZaGY0bWRzQT09
Password: 702061 Meeting ID: 848 9745 0470 Call in Phone# 1+929 205 6099

STATEMENT OF MEDIA NOTIFICATION:
"In accordance with South Carolina Code of Laws, 1976, Section 30-4-80(d), as amended, all local media were duly notified of the time, date, place and agenda of this meeting."

I. Call to Order

II. Review of Minutes:

A. Minutes of March 12, 2019 Meeting

III. Old Business:

A. Harbor Freight, PIN R122 029 000 103H 0000, 142 Robert Smalls Parkway.

Applicant: Beaufort Design Build, LLC (20-08 DRB.2)

The applicant tis requesting approval to construct a 16,600 square foot retail store.

IV. New Business:

A. Desai Hotel, PIN R120 006 000 0160 0000, 12 County Shed Road.

Applicant: Thomas Michaels, SM7 Design (20-07 DRB.1)

The applicant is requesting approval to construct a 3,600 square foot hotel with 116 rooms.

V. Discussion

VI. Update of pending applications/status of approved projects.

VII. Adjournment

Note: A project will not be reviewed if the applicant or a representative is not present at the meeting.

Design Review Board
Meeting Minutes – March 12, 2020

1 CALL TO ORDER

A regular meeting of the Design Review Board was held at the City Hall Council Chambers on Thursday, March 12, 2020 at 2:03 pm.

2 ATTENDEES

Members in attendance: Rett Bullard (Chairman), Benjie Morillo (Vice-Chair), Witt Cox, and Kimberly McFann.

Staff in attendance: Jeremy Tate (Meadors Architecture), David Prichard (City of Beaufort Director of Community and Economic Development), and Heather Space (City of Beaufort Planning Tech of Community and Economic Development).

3 REVIEW OF MINUTES

Motion: Mr. Cox made a motion, to approve the February 13, 2020 minutes as submitted; seconded by Mr. Morillo. The motion passed unanimously.

4 OLD BUSINESS

A. The Issacs Group had applied for an application for new construction of a 2,500 square feet Wendy's Restaurant with a drive-thru window at 168 Sea Island Parkway, R123 015 00A 194B 0000.

   The chairman, Rett Bullard, invited the public comment.

Motion: Mr. Bullard made a motion, to grant final approval pending the stormwater being met; seconded by Ms. McFann The motion passed unanimously. [It was stated that any significant changes to site plan due to stormwater measures would require DRB approval].

Mr. Morillo asked the chair to amend his motion to adding to the motion, *planters being added; screening electrical meter box on backside with plants; and shifting trees for more shade.*

Mr. Bullard amended his motion to include planters be added; screening electrical meter box on backside with plants; and shifting trees to provide for more shade; Ms. McFann seconded the amended motion. The amended motion passed unanimously.

DRAFT

5 Discussion – Minimal Checklist

Mr. Bullard mentioned that at the Board's last meeting, we requested to have a minimum checklist be put in place so the Board would have something to go by because not having that checklist makes it difficult. Mr. Bullard said were a little heavy on conceptual requirements and when at final, no idea of stormwater is difficult. At preliminary, applicant should then submit for stormwater.

Board talked about native plants. Mr. Prichard said we need to look at our list in the Code and revise it. Mr. McFann asked isn't there a Tree Board. Mr. Prichard said yes, and they review public spaces and DRB reviews private spaces. Ms. McFann said it would be nice to coordinate with the Boards as far as "native" plants. Mr. Prichard spoke about landscape bonds and the process for them. Ms. McFann said our ecosystems are impacted.

Board talked about who controls the traffic lights and whether or not a traffic light would cure the issue at the new Wendy's.

6 Adjournment

Mr. Morillo made a motion, to adjourn the meeting; seconded by Mr. Cox. The motion passed unanimously. The meeting ended at 3:05 p.m.

Chair

Date of approval

142 Robert Smalls Parkway

PIN R122 029 000 103H 0000

Applicant: Beaufort Design Build, LLC

Design Review Board Staff Report

Department of Community and Economic Development

9 July 2020

PROVISO: THE STAFF REPORT IS SHARED IN ADVANCE OF THE MEETING TO PROVIDE BOARD MEMBERS, THE APPLICANT, AND THE PUBLIC THE STAFF'S ASSESSMENT AHEAD OF THE MEETING. THE STAFF REPORT IS SUBMITTED ONLY AFTER CONSULTATIONS HAVE BEEN COMPLETED. IT SHOULD BE UNDERSTOOD THAT ANY SUBEQUENT CHANGES TO THE APPLICATION PRIOR TO THE HRB MEETING WILL NOT HAVE THE BENEFIT OF STAFF REVIEW AND WILL ONLY BE CONSIDERED AT THE DISCRETION OF THE BOARD BY VOTE.

1 Summary of Request

The applicant, Tripp Armstrong on behalf of the owner Graham Trask, is requesting final approval to construct a 16,300 SF Harbor Freight retail store as part of a new development located on Highway 170.

2 Facts

Property Address:	**142 Robert Smalls Parkway**
Parcel ID:	**R122 029 000 103H 0000**
Applicant:	**Tripp Armstrong, Beaufort Design Build**
Type of Request:	**New Construction, retail building**
Zoning:	**T5-UC/RMX**
Use:	**Retail**

District Development Standards for RMX:

- Principal Front Setback: 10ft min – 60ft Max
- Side setback corner lot: 10ft min
- Side setback interior: 10ft min
- Rear setback: 15ft min
- Impervious surface coverage: 65% Max
- Building Height: 4 stories

District Development Standards for T5-UC:

- Principal Front Setback: 0ft min – 15ft Max
- Side setback corner lot: 0ft min – 15ftMax
- Side setback interior: 0ft min
- Rear setback: 5ft min
- Impervious surface coverage: 100% Max
- Building Height: 5 stories

Use: Sale-oriented Commercial Use Category

Background: The proposal is on an undeveloped parcel that fronts both Robert Smalls parkway. The proposed development will be constructed on the lot fronting Robert Smalls Pkwy, this parcel was recently approved as phase one of the major subdivision for Simba Farms. The project received preliminary approval from DRB on October 11, 2019.

References

City of Beaufort Strategic Plan 2019 - 2021

Civic Master Plan, adopted 2014

The Beaufort Code, rev. 2018

3 STAFF COMMENTS

1. **Colors:** Regarding the color submitted for the lower EIFS material, The Beaufort Code states, in Section 4.6.4.E.3, that "recommended colors are traditional historic colors, earth tones (greens, tans, light browns, terra cotta, grays, pale primary and secondary colors, and white and cream tones…". The applicant has submitted "Endless Sea, 9150" for the lower EIFS on the building, which is a deep primary blue, that is very similar to the blue found in Harbor Freight's signage and the blue on Harbor Freight's website. Staff would consider a paler version of this blue, as it would comply with the "pale primary and secondary colors" guideline in the Beaufort Code. The applicant should resubmit a color that is in keeping with the Code for the lower EIFS.

2. Per preliminary approval letter dated October 11, 2020, the applicant has addressed the concerns of screening the west façade from view along Robert Smalls Parkway by adding additional landscaping. However, staff still believes that the blank rear façade could be put in better scale by the introduction of horizontal EIFS banding that is consistent with lines established on other elevations. The applicant should note that landscape screening is not as permanent as the building itself. Therefore, landscape screening should be in addition to harmonious building elevation design.

3. Staff feels that the dumpster screen wall, noted at 8'-8" high and in its current location, is appropriate and serves as a garden wall with landscape vegetation in front.

4. The applicant has given detail on the coping and cornice that staff feels is appropriate. The applicant has also corrected the 3D views as noted in staff comments from June.

5. Applicant has demonstrated compliance with buffer requirements noted in staff comments from June.

6. The applicant referenced a letter from BJWSA that confirms there is no BJWSA easement on the property.

7. **Lighting:** Applicant has proposed seven, twenty-foot, pole-mounted fixtures for the surrounding parking lot and entryway to the property, and fourteen, fifteen-foot, wall-mounted fixtures on the exterior walls of the building.

a. Please note that 5.8.4.A.2.b notes that wherever possible, outdoor seating areas, building entrances, and walkways shall be illuminated using ground mounted fixtures not more than 4 feet tall. If feasible staff recommends adding ground mounted fixtures in the planting beds around the entry way.
b. Section 5.8.4.B, Light fixtures in excess of 1800 lumens shall use full cut-off lenses or hoods to prevent glare or spillover from the project site. Applicant to ensure that proper accessories are chosen with selected lighting to reduce glare. For example, for wall mount fixtures, the applicant should use available comfort lens noted in cut sheet.

4. Staff Recommendation

Final approval with comments noted above.

Complete

$ PAID 6/22/2020

DEVELOPMENT REVIEW PROCESS
DESIGN REVIEW BOARD APPLICATION
Community and Economic Development Department
1911 Boundary Street, Beaufort, South Carolina, 29902
p. (843) 525-7011 / f. (843) 986-5606
www.cityofbeaufort.org

20-08DRB-2

Application Fee:
$200/meeting
$500/special meeting

OFFICE USE ONLY: Date Filed: 6/12 Application #: 20541 Zoning District: T5-UC Arch. Survey? Y N

Schedule: The Design Review Board (DRB) typically meets the 2nd Thursday of each month at 2pm. The complete schedule, along with the list of deadlines, may be found here - http://www.cityofbeaufort.org/design-review-board.aspx

Submittal Requirements: All forms and information shall be submitted digitally. In addition to a complete application form, applicants shall submit the required items according to the checklists on the subsequent page.

Review Request: ☐ Conceptual ☐ Preliminary ☒ Final

Pursuant to Section 6-29-1145 of the South Carolina Code of Laws, is this tract or parcel restricted by any recorded covenant that is contrary to, conflicts with, or prohibits the activity described in this application? ☒ Yes ☐ No

Applicant, Property, and Project Information

Applicant Name: Beaufort Design Build, LLC. / Tripp Armstrong

Applicant Address: 2 Fire Station Lane, Seabrook, SC. 29940

Applicant E-mail: Tripp@beaufortdesignbuild.com Applicant Phone Number: 843.466.3664

Applicant Title: ☐ Homeowner ☐ Tenant ☒ Architect ☐ Engineer ☐ Developer

Owner (if other than the Applicant): Simba Farms / Graham Trask

Owner Address: 68 Fiddlers Bridge Rd, Straatsburg, NY. 12580

Project Name: Harbor Freight at Highway 170

Property Address: Highway 170 and Burton Hill Road (no address at this time

Property Identification Number *(Tax Map & Parcel Number)*: R122 029 000 103H 0000

Date Submitted: May 11, 2020

Certification of Correctness: I/we certify that the information in this application is correct.

DEVELOPMENT REVIEW PROCESS
DESIGN REVIEW BOARD APPLICATION

Community and Economic Development Department
1911 Boundary Street, Beaufort, South Carolina, 29902
p. (843) 525-7011 / f. (843) 986-5606
www.cityofbeaufort.org

Required Project Information

Project Name: Harbor Freight at Highway 170

Property Size in Acres: 1.61 Proposed Building Use: Retail

Building Square Footage (if multiple buildings, please list each one and their square footage by floor):
16,600

# of Parking Spaces Required: 42 # of Parking Spaces Provided: 48

Is this project a redevelopment project: Y N X

Are there existing buildings on the site? Y N X if yes, will they remain? Y N

Provide a brief Project Narrative and outline any specific questions you would like addressed.

New construction of a Harbor Freight store in a new development located on Highway 170. This project will focus on teh site work and construction for a new Harbor Freight building. New site work would include enterences and exits from the access road, and a parking area behind the new building. The new retail building will be located at the front of lot / parcel and front both the new access road and frontage road (Robert Smalls Parkway) The design of the site and the building will be in accordance with the requirements of the RMX Zoning Ordinance.

LETTER OF TRANSMITTAL

Beaufort Design Build, LLC
2 Fire Station Lane
Seabrook, SC 29940
Ph. 843-466-3664

Date: 06-19-2020

To: City of Beaufort
Design Review Board
1911 Boundary Street
Beaufort, South Carolina 29902

From: Tripp Armstrong
Project: Harbor Freight Beaufort
BDB Project #: 19032.00

We are sending you:

- ☒ Application
- ☐ Prints
- ☒ Plans
- ☐ Disk
- ☒ Fee
- ☒ Cut Sheets
- ☐ Samples
- ☐ Reports
- ☐ Submittals
- ☐ Specifications
- ☒ Checklists
- ☐ Other: Menu

No.	Copies	Date	Description
1	1	06-17-2020	BDB Response Letter
2	1	06-17-2020	Client previous project images
3	1	06-17-2020	Materials and Color Specifications
4	1	06-17-2020	Architectural Drawings
5	1	06-01-2020	Plumbing Drawings
6	1	06-01-2020	Mechanical Drawings
7	1	06-01-2020	Electrical Drawings
8	1	04-24-2020	Civil Drawings
9	1	01-16-2020	Existing Survey
10	1	02-06-2020	Site Lighting Photometric
11	1	10-11-2019	Approved Preliminary Submission Package

Items Transmitted:

- ☒ For approval
- ☐ Returned for corrections
- ☐ Resubmit _____ copies for approval
- ☐ For your use and/or records
- ☐ Prints returned after loan
- ☐ Submit _____ copies for distribution
- ☐ As requested
- ☐ For Bids Due _____
- ☐ For review and comment

Remarks:
Attached items of package are for the submission of the Final Review by the City of Beaufort Design Review Board.

Signed _____

City of Beaufort
Design Review Board
Staff Comments and Responses

June 15, 2020

City of Beaufort
Design Review Board
1911 Boundary Street
Beaufort, South Carolina 29902

Re: **Harbor Freight**
Robert Smalls Parkway, Beaufort, South Carolina
Final Review Staff Comments
BDB Project #: 19032.00

Please accept this letter as our formal response to Final Design Review Board and Staff review comments for the above referenced project.

Based on information we received in the June 11, 2020 Design Review Board Meeting, it is our understanding that the Design Review Board and Staff will conduct a special meeting (prior to the July 9, 2020 meeting) to review these responses and the associated Drawings. It is also our understanding that a special meeting will be held because it was determined in the June 11 Meeting that the Design Review Board had not been provided with the documents that our office had provided to Staff.

Following are our responses to Staff comments provided on June 02, 2020.

1. The applicant shall not receive final approval for this project until all required project documentation noted in the City of Beaufort Design Review Checklists has been submitted. This includes but is not limited to details, wall sections, material samples, lighting information, and a final list of materials.
   BDB Response: Requested information is provided in the attached Drawings which include Architectural, Mechanical, Electrical and Plumbing Construction Drawings dated June 15, 2020; Civil Drawings dated April 04, 2020 and a Site Lighting Study dated February 06, 2020.

2. Per section 4.6.1.G of the Beaufort Code, buildings and additional site elements shall not be painted in a color or pattern that expresses corporate identity, to the extent that the paint color or pattern is not consistent with the design standards of the district. Per Section 4.6.4.G.3 of the Beaufort Code, recommended colors are traditional historic colors, earth tones (greens, tans, light browns, terra cotta, grays, pale primary and secondary colors, and white and cream tones..." The applicant should use a neutral color palate. It is appropriate for the bays in the building to be a different color than the protruding pilasters. The split face concrete block should all be one color. The applicant should revise and submit color choices for review.
   BDB Response: Our Office was advised, in an April 28, 2020 phone conversation with the City, that the only colors that are specifically not be permitted are "Orange and Purple as well as fluorescent colors". Please note that the proposed colors are not specific branding colors for Harbor Freight. Photographs of other locations, including Savannah, Georgia, are attached. Additionally, it should be noted that a similar color is in use at 998 East Bay Street in Downtown Beaufort (see attached image). The masonry base around the perimeter will be white as indicated in General Note D on sheets A-201 and A-202.

3. The site plan is showing discrepancies regarding placement of the BJWSA Easement and Buffer Line along Robert Smalls Parkway, and the building still appears to be overlapping the easement line. Applicant should resubmit site plan with clear dimensions and notations regarding easement and buffer. Applicant should also review and show compliance with buffer requirements outlined in section 5.5.1 of The Beaufort Code.

BDB Response: Beaufort Design Build and Ward Edwards Engineering have confirmed that there are no current utility easements on the property. BJWSA has provided a letter stating the same (attached).

Drawing A2/AC-101 has been corrected to show a 15'-0" front yard setback as required by Section 2.4 of the Beaufort Code.

Proposed landscaping exceeds the T5-UC Front Buffer Planting Requirements – Three (3) broad leaf over story trees and six (6) under story trees are required. See Drawing Sheets AC-101 and AC-102.

4. The applicant needs to show that glazing conforms with requirements noted in Section 4.6.3.C.1 and Section 4.6.4.C.1 of the Beaufort Code.
   BDB Response: Dimensions have been added to the windows on sheet A-201. Please note that the windows and window sizes were approved through the Design Review Board's Preliminary Review, without comment. The sizes shown on the current Drawings are larger than those previously approved.

5. The 3D views in the application do not match the elevations, as the cornice and metal coping details are different. The applicant should clarify which details are correct and ensure compliance with Section 4.6.3.D.A of the Beaufort Code.
   BDB Response: 3D views have been updated to coordinate with the elevation drawings and details. Please see Drawings A-201 and A-202.

6. The rear elevation is a blank façade and is still visible from the street. The applicant should ensure compliance with Section 4.6.4.D.2 of the Beaufort Code, which states that "facades that are visible from streets… shall not include expanses of blank walls of 20 linear feet or greater."
   BDB Response: The Preliminary Approval letter dated October 11, 2019 states; "Consideration of placement of drainage pond on South West side to incorporate more landscaping to screen the loading zone / blank facade of the building." The building shape, size, location and rear elevation have not changed since the Project received Preliminary Approval. The Owner has therefore agreed to relocation of the storm water pond and additional landscaping (including larger trees) to screen the rear elevation.

The following comments (and responses) are from the June 11, 2020 Design Review Board Meeting.

1. Provide a tree and topo survey for review.
   BDB Response: A tree and topo survey, performed by Gasque and Associates, is attached.

2. Locate the building an additional 20'-0" from the street for the BJSWA easement.
   BDB Response: The provided letter from BJSWA states that there is no easement on the property. The building sits within the required setbacks per the requirements for T5-UC. The erroneous 50'-0" setback minimum line has been removed.

3. The 10'-0" Setback appears to be a 5'-0" setback.
   BDB Response: The setback identified as 10'-0" has been corrected. A 5'-0" is correctly noted on sheet AS-101.

4. Shift dumpster screen wall higher along the building.
   BDB Response: The location of the dumpster screen cannot be shifted based of the required space for semi-truck loading and maneuvering. The location is as shown in the drawings that received Preliminary DRB approval on September 12, 2019.

5. Relocate the dumpster location to the north of the site.
   BDB Response: The location of the dumpster screen cannot be shifted based of the required space for semi-truck loading and maneuvering. The location is as shown in the drawings that received Preliminary DRB approval on September 12, 2019.

6. Continue the cornice around the full perimeter of the building.
   BDB Response: The exterior building design, including the parapet and cornice has not changed since DRB Preliminary Approval was granted on September 12, 2019. Based on this Preliminary Approval, the design has been presented to and approved by Harbor Freight's Corporate Review Team.

7. Provide additional green screening at the front of the building.
   BDB Response: Additional screening is shown on revised Drawing Sheet AS-101.

8. Add required overstory trees at southwestern corner of the site to screen the sidewall.
   BDB Response: Requested over story trees have been added to Drawing Sheet AS-101.

9. Frontage appears to be 200'-0" requiring 6 broad leafed overstory trees (only 1 gum and 1 magnolia shown), twelve understory trees need 25% shrub in buffer area.
   BDB Response: The building length is 124'-0" and the dumpster screen wall is an additional 38'-0" totaling 162'-0" requiring 5 broad lead over story trees and 10 understory trees. A total of 6 broad leaf overstory trees with 5 new trees are shown with 10 understory trees providing a 25% building shrub buffer. Please see sheet AS-101.

We look forward to moving forward with this Project and will be happy to answer any additional questions that you might have.

Sincerely,

Beaufort Design Build, LLC

Tripp Armstrong Assoc. AIA
Project Manager

Copy: Dan Saltrick
File

City of Beaufort
Design Review Board
Staff Comments and Images

June 17, 2020

City of Beaufort
Design Review Board
1911 Boundary Street
Beaufort, South Carolina 29902

Re: **Harbor Freight**
Robert Smalls Parkway, Beaufort, South Carolina
Final Review Staff Comments
BDB Project #: 19032.00

Please accept these images as part of our formal response to Final Design Review Board and Staff review comments for the above referenced project.

A Beaufort, North Carolina store as part of a renovation.	
The Savannah, Georgia store	

Los Angeles County store	
The Carriage shop located in downtown Beaufort, South Carolina.	

We look forward to moving forward with this Project and will be happy to answer any additional questions that you might have.

Sincerely,

Beaufort Design Build, LLC

Tripp Armstrong Assoc. AIA
Project Manager

Copy: Dan Saltrick

File

Exterior Material and Color

Project: **19032**

ITEM	**MATERIAL**	**COLOR**	
Exterior Stucco	EIFS	WHITE SNOW - SW9541 ENDLESS SEA - 9150	SHERWIN WILLIAMS SHERWIN WILLIAMS
Roofing	EPDM	BLACK	T.B.D.
Coping	PRE-FORMED ALUMINUM	HIGH REFLECTIVE WHITI	SHERWIN WILLIAMS
Masonry Base	PAINTED BRICK	WHITE SNOW 94541	SHERWIN WILLIAMS
Front Door	ALUMINUM STOREFRONT	OILED BRONZE	DORMA
Overhead Doors	SOLID SECTIONAL	WHITE	CORNELL IRON
Windows	ALUMINUM STOREFRONT	OILED BRONZE	YKK

*** Attach photographs, cut sheets and samples of each item above for approval of color and texture

HARBOR FREIGHT BEAUFORT AT HIGHWAY 170

142 ROBERT SMALLS PARKWAY
BEAUFORT, SC, 29906

SCOPE OF WORK:

- CONSTRUCTION OF NEW BUILDING SHELL ON EXISTING CONCRETE PAD
- BUILDING TO CONSIST OF EIFS AND MASONRY EXTERIOR WALLS
- STRUCTURE TO BE PRE-ENGINEERED METAL BUILDING
- ROOF TO BE EPDM MEMBRANE
- INTERIOR WALLS TO BE METAL STUD WITH GYPSUM BOARD

GENERAL CONSTRUCTION NOTES:

1. ALL WORK SHALL BE CARRIED OUT ACCORDING TO GOOD CONSTRUCTION PRACTICES
2. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE FOLLOWING CODES AND STANDARDS
   - 2.1. BUILDING: 2018 INTERNATIONAL BUILDING CODE
   - 2.2. MECHANICAL: 2018 INTERNATIONAL MECHANICAL CODE
   - 2.3. ELECTRICAL: 2017 NATIONAL ELECTRICAL CODE
   - 2.4. PLUMBING: 2018 INTERNATIONAL PLUMBING CODE
   - 2.5. FIRE CODE: 2018 INTERNATIONAL FIRE CODE
   - 2.6. ENERGY CODE: 2009 INTERNATIONAL ENERGY CONSERVATION CODE
   - 2.7. NFPA 101 LIFE SAFETY CODE
   - 2.8. ICC A11.7-2017 AND THE AMERICAN WITH DISABILITIES ACT (ADA)
   - 2.9. LOCAL PLANNING AND ZONING
3. ALL WORK SHALL BE UNDERTAKEN AND MANAGED IN ACCORDANCE WITH OSHA STANDARDS FOR THE CONSTRUCTION INDUSTRY.
4. GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL LIFE SAFETY ELEMENTS INCLUDING BUT NOT LIMITED TO EXIT SIGNAGE, FIRE EXTINGUISHERS AND FIRE SPRINKLER SYSTEMS NECESSARY TO SATISFY LOCAL, STATE AND FEDERAL STANDARDS, CODES AND GUIDELINES.
5. GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND FEES.
6. GENERAL CONTRACTOR SHALL REPORT, TO THE ARCHITECT, ANY AND ALL DISCREPANCIES REGARDING EXISTING CONDITIONS OR WITHIN THE DRAWINGS AND THE SPECIFICATIONS. FAILURE TO DO SO WILL RELIEVE THE ARCHITECT OF ANY RESPONSIBILITY REGARDING ANY CONSEQUENCES THAT MIGHT RESULT FROM SUCH DISCREPANCIES.
7. GENERAL CONTRACTOR SHALL SUBMIT, FOR OWNER AND ARCHITECT APPROVAL, SAMPLES AND PRODUCT DATA FOR ANY SUBSTITUTED PRODUCTS AND / OR SYSTEMS.
8. GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR COORDINATION OF ALL DISCIPLINES AND TRADES AND THEIR POTENTIAL IMPACT ON THE PROJECT.
9. GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING , BETWEEN TRADES, ALL CUTTING AND PATCHING RESPONSIBILITIES.
10. DUE TO MANUFACTURER VARIATIONS ON TYPE AND SIZES OF EQUIPMENT, CASEWORK, FIXTURES, ETC., ALL DIMENSIONS AND CONDITIONS SHALL BE FIELD VERIFIED BY THE GENERAL CONTRACTOR AND APPROPRIATE COORDINATE WITH THE SUBCONTRACTORS AND SUPPLIERS.
11. UNLESS NOTED OTHERWISE, INSTALL CONTINUOUS TREATED, NON-COMBUSTILBLE 2X6 WOOD BLOCKING FOR ALL CASEWORK, COUNTERS, GRAB BARS, WALL MOUNTED EQUIPMENT, ACCESSORIES , FIXTURES, TELEVISIONS, ETC.
12. CONSTRUCTION DRAWINGS TAKE PRECEDENCE OVER SPECIFICATIONS, LARGE SCALE DETAILS TAKE PRECEDENCE OVER PLANS AND ELEVATIONS AND ENGINEERING DRAWINGS TAKE PRECEDENCE OVER ARCHITECTURAL GRAPHIC REPRESENTATIONS.
13. GENERAL CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL CONSTRUCTION DEBRIS AND FINAL CLEANING.
14. GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH SHOPPING CENTER / MULTI TENANT FACILITIES FOR LOCATION OF TEMPORARY RESTROOM, DUMPSTER OTHER TEMPORARY FACILITIES AND EQUIPMENT.
15. GENERAL CONTRACTOR IS RESPONSIBLE FOR KNOWING AND COMPLYING WITH ALL LOCAL ORDINANCES REGARDING NOISE, WORK HOURS, ETC.

DESIGN TEAM

ARCHITECT

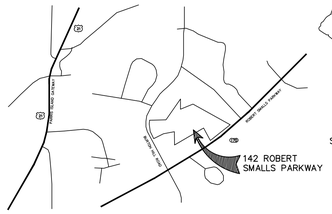
BEAUFORT DESIGN BUILD, LLC.
2 FIRE STATION LANE,
SEABROOK, SC, 29940
P. 843.466.3664

STRUCTURAL ENGINEER

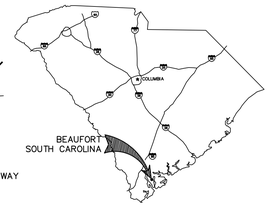
LAURENE, RICKHER & SORRELL, PC
8701 RED OAK BOULEVARD SUITE 500,
CHARLOTTE, NC, 28217
P. 704.522.0495

MEP ENGINEER

HENSLEY &GOERLING
1064 GARDNER ROAD, SUITE 116,
CHARLESTON, SC, 29407
P. 843.203.6158



LOCATION MAP N



VICINITY MAP N

ABBREVIATIONS

A/C	AIR CONDITIONER(ING)	ICC	INTERNATIONAL CODE COUNCIL
AFF	ABOVE FINISH(ED) FLOOR	LFT	LINEAR FEET
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	MFR	MANUFACTURER
BOT	BOTTOM	MIN	MINIMUM
CMU	CONCRETE MASONRY UNIT	N/A	NOT APPLICABLE
CONT.	CONTINUOUS	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
DHEC	DEPARTMENT OF HEALTH & ENVIRONMENTAL CONTROL	NO.	NUMBER
DP	DESIGN PRESSURE	OC	ON CENTER
EQUIP	EQUIPMENT	OSB	ORIENTED STRAND BOARD
EX	EXISTING OR EXTERIOR	PSF	POUNDS PER SQUARE FOOT
EXT	EXTERIOR	SF	SQUARE FEET (FOOT)
FE	FIRE EXTINGUISHER	TYP	TYPICAL
FIN	FINISH	V.I.F.	VERIFY IN FIELD
FL	FLOOR	#	NUMBER
GWB	GYPSUM WALL BOARD		
IBC	INTERNATIONAL BUILDING CODE		

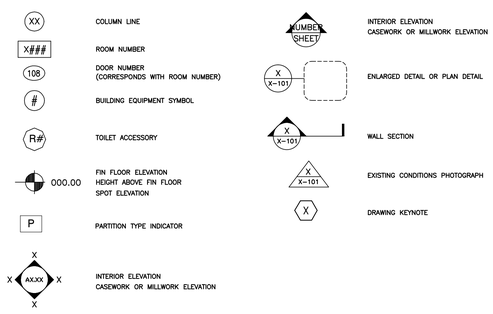


IMAGE SHOWN FOR REFERENCE ONLY

IMAGE SHOWN FOR REFERENCE ONLY

GENERAL

G-101 COVER SHEET, INDEX AND SCOPE OF WORK
G-102 2018 INTERNATIONAL BUILDING CODE SUMMARY
G-103 LIFE SAFETY PLAN
G-104 TYPICAL ACCESSIBILITY DETAILS

ARCHITECTURAL

AC-101 SITE AND LANDSCAPE PLAN
A-101 FLOOR PLAN
A-102 FIXTURE PLAN
A-103 REFLECTED CEILING PLAN
A-104 ROOF PLAN
A-201 PROPOSED ELEVATIONS
A-202 BUILDING PERSPECTIVES
A-301 BUILDING SECTIONS
A-302 TYPICAL WALL SECTIONS
A-303 WALL SECTIONS
A-501 TYPICAL DETAILS
A-601 DOOR AND WINDOW SCHEDULES AND DETAILS

MECHANICAL

M-000 GENERAL NOTES AND SCHEDULES

ELECTRICAL

E-000 GENERAL NOTES AND SCHEDULES

PLUMBING

P-000 GENERAL NOTES AND SCHEDULES

HARBOR FREIGHT VENDOR LIST

HVAC VENDOR - LENNOX INDUSTRIES

BI-PARTING DOOR VENDOR - DORMA

OVERHEAD DOOR VENDOR - CORNELL IRON

DOOR HARDWARE VENDOR - COOK AND BOARDMAN

BEAUFORT
2 Fire Station Lane
Seabrook, SC 29940

CHARLOTTE
7315 Swansea Lane
Cornelius, NC 28031

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www.beaufortdesignbuild.com

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BEAUFORT DESIGN BUILD

ARCHITECT / ENGINEER'S SEAL

HARBOR FREIGHT
QUALITY TOOLS LOWEST PRICES

HARBOR FREIGHT
BEAUFORT
AT HIGHWAY 170

142 ROBERT SMALLS
PARKWAY,
BEAUFORT, SC, 29906

NOT FOR CONSTRUCTION

REVISIONS / SUBMISSIONS

NO.	DESCRIPTION	DATE

SHEET INFORMATION

DATE	JUNE 17, 2020
JOB NUMBER	19032.00
DRAWN	---
CHECKED	---
APPROVED	DCS

COVER SHEET AND SHEET INDEX

G-101

2015 INTERNATIONAL BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

(INCLUDES: NEW CONSTRUCTION, UPFITS, RENOVATIONS, AND ADDITIONS)
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSE)

A. PROJECT INFORMATION - (REQUIRED INFORMATION FOR ALL PROJECTS)

Name of Project: HARBOR FREIGHT BEAUFORT AT HIGHWAY 170
Address: 142 ROBERT SMALLS PARKWAY, BEAUFORT, SC   Zip Code: 29906
Proposed Use: BUILDING SHELL FOR TENANT UPFIT
Owner or Authorized Agent: DANIEL C. SALTRICK, AIA   Phone #: (843) 466-3664   E-Mail DAN@BEAUFORTDESIGNBUILD.COM
Owned By: ☐ City/County ____ ☒ Private -- ☐ State ____
Code Enforcement Jurisdiction: ☒ City CITY OF BEAUFORT ☐ County -- ☐ State ____

B. PROJECT SUMMARY/ ALTERNATIVE MEANS OF COMPLIANCE

Building description: --
--
--
--
--

Scope of work details: --
--
--
--
--
--
--
--

C. DESIGN PROFESSIONAL INFORMATION

REQUIRED INFORMATION FOR ALL PROJECTS

LEAD DESIGN PROFESSIONAL: DANIEL C. SALTRICK, AIA – BEAUFORT DESIGN BUILD LLC.

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	EMAIL
Architectural:	BEAUFORT DESIGN BUILD, LLC	DANIEL C. SALTRICK	SC-7155	(843) 466-3664	DAN@BEAUFORTDESIGNBUILD.COM
Site:	N/A	N/A	N/A	N/A	N/A
Electrical:	N/A	N/A	N/A	N/A	N/A
Fire Alarm:	N/A	N/A	N/A	N/A	N/A
Plumbing:	N/A	N/A	N/A	N/A	N/A
Mechanical:	N/A	N/A	N/A	N/A	N/A
Sprinkler-Standpipe:	N/A	N/A	N/A	N/A	N/A
Structural:	N/A	N/A	N/A	N/A	N/A
Retaining Walls >5' High:	N/A	N/A	N/A	N/A	N/A
Contractor	N/A	N/A	N/A	N/A	N/A

D. TYPE OF WORK BEING PERFORMED

What type of work is being performed?

☐ New Construction:
(A project from the site work through the completion of work required for tenant occupancy) This includes Shell buildings.
☐ Addition: (An Existing Building that is adding heated or unheated space. This could be an addition to the footprint or a vertical expansion)
☐ Uplift: (First Time Interior Completion)
(Uplift - the first time interior completion of a virgin (never occupied) shell space in a newly constructed building.
The applicant must provide a copy of the approved shell)
☒ Alteration/Renovation: (Previously Occupied Space) This includes Change of Use.

E. CODE INFORMATION

Building Code: ☒ 2018 International Building Code (IBC)
☐ 2018 Chapter 34 (attach building evaluation per section 3412)
☐ Prior International Building Code (list year / version _____)

New Building: ☐ New building ☒ Shell building
☐ First time interior completion (upfit) ☐ Addition

Existing Building: ☐ Change of use / occupancy
☒ Building / tenant space interior completion (Alteration/ Renovation)

Year of construction 2020   Previous use N/A

F. REHAB CODE (NOT USED)

G. BASIC BUILDING DATA

REQUIRED INFORMATION FOR ALL PROJECTS

Construction Type: (Table 601) (Check all that apply): ☐ I-A ☐ II-A ☐ III-A ☐ IV ☐ V-A ☐ I-B ☒ II-B ☐ III-B ☐ V-B
Sprinklers: (Section 903) ☐ No ☐ Partial ☐ Yes ☒ NFPA 13-07 ☐ NFPA 13R-07 ☐ NFPA 13D-07
Standpipes: (Section 905) ☐ No ☒ Yes Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry ☐ NFPA 14-07
Fire District: ☒ No ☐ Yes
Flood Hazard Area: (Appendix G) ☒ No ☐ Yes
Building Height: (Feet) 24'-7" (Table 503) Stories: 1
Gross Building Area: 15,897 SQFT

FLOOR	EXISTING (SQFT)	NEW (SQFT)	RENOVATED (SQFT)	COMMENTS
4th Floor				
3rd Floor				
2nd Floor				
Mezzanine				
1st Floor	0	15,987	N/A	
Basement	N/A	N/A	N/A	
TOTAL	–	15,897	–	

H. ALLOWABLE AREA: OCCUPANCY CLASSIFICATION

Occupancy: (Chapter 3)
Assembly (303) ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5
Business (304) ☐ B
Educational (305) ☐ E
Factory (306) ☐ F-1 Moderate ☐ F-2 Low
Hazardous (307) ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
Institutional (308) ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4
I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Mercantile (309) ☒ M
Residential (310) ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Storage (311) ☐ S-1 Moderate ☐ S-2 Low ☐ High-piled
☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage
Utility and Miscellaneous (312) ☐ U

Accessory Occupancies:(≤10%): (508) If Applicable
Assembly (303) ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5
Business (304) ☐ B
Educational (305) ☐ E
Factory (306) ☐ F-1 Moderate ☐ F-2 Low
Hazardous (307) ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
Institutional (308) ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4
I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Mercantile (309) ☐ M
Residential (310) ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Storage (311) ☐ S-1 Moderate ☐ S-2 Low ☐ High-piled
☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage
Utility and Miscellaneous (312) ☐ U

H. ALLOWABLE AREA: OCCUPANCY CLASSIFICATION (CONT.)

Incidental Uses: If applicable - areas with additional requirements (Table 509):
☐ Furnace room where any piece of equipment is over 400,000 BTU per hour input
☐ Room with boilers where the largest piece of equipment is over 15 psi and 10 horsepower
☐ Refrigerant machine room
☐ Hydrogen cutoff rooms, not classified as Group H
☐ Incinerator rooms
☐ Paint shops, not classified as Group H, located in occupancies other than Group F
☐ Laboratories and vocational shops, not classified as Group H. Located in Group E or I-2 Occupancy
☐ Laundry rooms over 100 square feet
☐ Group I-3 cells equipped with padded surfaces
☐ Group I-2 waste and linen collection rooms
☐ Waste and linen collection room over 100 square feet
☐ Stationary storage battery systems having a liquid electrolyte capacity of more than 50 gallons, or a lithium-ion capacity of 1,000 pounds used for facility standby power, emergency power or uninterrupted power supplies.
☐ Room containing fire pumps ☐ Room containing Life-Safetygenerator ☐ Room containing primary transformers
☐ Group I-2 storage room over 100 square feet
☐ Group I-2 commercial kitchens
☐ Group I-2 laundries equal to or less than 100 square feet
☐ Group I-2 rooms or spaces that contain fuel-fired heating equipment

Special Uses: If Applicable
☐ 402 ☐ 403 ☐ 404 ☐ 405 ☐ 406 ☐ 407 ☐ 408 ☐ 409 ☐ 410 ☐ 411 ☐ 412 ☐ 413 ☐ 414 ☐ 415 ☐ 416
☐ 417 ☐ 418 ☐ 419 ☐ 420 ☐ 421 ☐ 422 ☐ 423 ☐ 424 ☐ 425 ☐ 426

Special Provisions: If Applicable
☐ 510.2 ☐ 510.3 ☐ 510.4 ☐ 510.5 ☐ 510.6 ☐ 510.7 ☐ 510.8 ☐ 510.9

Mixed Occupancy/Use: (508) If Applicable
☒ No ☐ Yes Separation: ________ Hr. Exception: ____________
☐ Incidental Use Separation (509)
This separation is not exempt as a Non-Seperated Use (see exceptions).
☒ Non-Separated Use (508.3)
The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.
☐ Separated Use (508.4) - See below for area calculations
For each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1. If Applicable to this project please provide a key plan with all occupancies identified with square footage.

$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} + \frac{...}{...} \leq 1.00$

N/A + N/A = ____ ≤ 1.00

STORY	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) NS / S1 / SM FIRE SPRINKLER TABLE 506.2	(C) TABLE 506.2[4] AREA PER STORY	(D) AREA FOR FRONTAGE INCREASE[1]	(E) ALLOWABLE AREA PER STORY OR UNLIMITED[2]	(F) MAXIMUM BUILDING AREA[3]
1	SHELL SPACE	15,897	74,000 SF	–	–	–	-- SF

[1] Frontage area increases from Section 506.3 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = N/A (F)
b. Total Building Perimeter (P) = N/A (P)
c. Ratio (F/P) = N/A (F/P)
d. Minimum width of public way (W) = N/A (W)
e. Percent of frontage increase I_f = 100 [F/P - 0.25] x W/30 = N/A (%)

[2] The sprinkler increase per Section 506.3 is as follows:
a. Multi-story building I_s = 200 percent
b. Single-story building I_s = 300 percent

[3] Unlimited area applicable under conditions of Sections 507.
[4] Maximum Building Area = total number of stories in the building x E (506.4.1).
[5] The maximum area of open parking garage must comply with Table 406.5.4. The maximum area of air traffic control towers must comply with Table 412.3.1.

I. ALLOWABLE HEIGHT (CHAPTER 5)

REQUIRED FOR ADDITIONS, NEW CONSTRUCTION

	ALLOWABLE (TABLE 504.3 AND 504.4)	SHOWN ON PLANS	CODE REFERENCE
Type of Construction	Type: II B	Type: IIB	504
Building Height in Feet	Feet: 24'-7"	Feet: 55	504
Building Height in Stories	Stories: 4	Stories: 1	504

J. FIRE PROTECTION REQUIREMENTS (CHAPTERS 6 AND 7)

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING** REQUIRED	RATING** PROVIDED (W/_____* REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural Frame including columns, girders, trusses	N/A	N/A	N/A	–	–	–	–
Bearing Walls (See Section 601-602 if rated)							
Exterior							
North	N/A	N/A	N/A	–	–	–	–
East	N/A	N/A	N/A	–	–	–	–
West	N/A	N/A	N/A	–	–	–	–
South	N/A	N/A	N/A	–	–	–	–
Interior	N/A	N/A	N/A	–	–	–	–
Nonbearing Walls and Partitions (See Section 601-602 if rated)							
Exterior							
North	N/A	N/A	N/A				
East	N/A	N/A	N/A				
West	N/A	N/A	N/A				
South	N/A	N/A	N/A				
Interior	N/A	N/A	N/A				
Floor Construction including supporting beams and joists	N/A	N/A	N/A				
Roof Construction including supporting beams and joists	N/A	N/A	N/A				
Shaft Enclosures - Exit	N/A	N/A	N/A				
Shaft Enclosures - Other	N/A	N/A	N/A				
Corridor Separation	N/A	N/A	N/A				
Occupancy Separation	N/A	N/A	N/A				
Party/Fire Wall Separation	N/A	N/A	N/A				
Smoke Barrier Separation	N/A	N/A	N/A				
Tenant Separation	N/A	N/A	N/A				
Incidental Separation	N/A	N/A	N/A				

* Indicate section number permitting reduction

K. PERCENTAGE OF WALL OPENING CALCULATIONS

NEW CONSTRUCTION, ADDITION AND CHANGE OF USE (Table 705.8)

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENING PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)	COMMENTS
EAST				
NORTH				
SOUTH				
WEST				

I. WALL LEGENDS

REQUIRED FOR ALL PROJECTS

CHECK THE FOLLOWING ARE PRESENT AND INDICATED BY A WALL LEGEND ON ALL PLANS
☐ Fire Walls 706 ☐ Fire Barriers 707 ☐ Fire Partitions 708 ☐ Smoke Barriers 709 ☐ Smoke Partitions 710
☐ Floor and Roof Assemblies 711 ☐ Vertical Openings 712 ☐ Shaft Enclosures 713 ☐ No rated walls are present

M. LIFE SAFETY SYSTEMS (EXISTING OR NEW SYSTEMS)

REQUIRED FOR ALL PROJECTS

Emergency Lighting: (1008) ☐ No ☒ Yes
Exit Signs: (1013) ☐ No ☒ Yes
Fire Alarm: (907, NFPA 72-07) ☒ No ☐ Yes
Smoke Detection Systems: 907 ☒ No ☐ Yes ☐ Partial_______
Panic Hardware: 1010.1.10 ☐ No ☒ Yes
Life Safety systems generator : 2702.2 ☒ No ☐ Yes

N. LIFE SAFETY PLAN CHECK LIST FOR COMPLIANCE

REQUIRED FOR ALL PROJECTS - CHECK ITEMS THAT ARE APPLICABLE TO YOUR PROJECT

☐ Fire and /or smoke rated wall locations (Chapter 7)
☐ Assumed and real property line locations
☐ Exterior wall opening area with respect to distance to assumed property lines (705.8)
☐ Existing structures within 30' of the proposed building
☐ Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.2)
☒ Occupant load for each area
☒ Exit access travel distances (1016)
☒ Common path of travel distances (1006.2.1, 1018.4 & 1029.8)
☒ Dead end lengths (1020.4 & 1029.9.5)
☒ Clear exit widths for each exit door
☒ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.1)
☒ Actual occupant load for each exit door
☐ A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purpose of occupancy separation
☐ Location of doors with panic hardware (1008.1.10)
☐ Location of doors with delayed egress locks and the amount of delay (1008.1.9.7)
☐ Location of doors with electromagnetic egress locks (1008.1.9.8)
☐ Location of doors equipped with hold-open devices
☐ Location of emergency escape windows (1029)
☐ The square footage of each fire area (902)
☐ The square footage of each smoke compartment (407.4)
☐ Note any code exceptions or table notes that may have been utilized regarding the items above

O. EXIT REQUIREMENTS

REQUIRED FOR ALL PROJECTS

NUMBER AND ARRANGEMENT OF EXITS (TABLE 1006.3.1)

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM[2] NUMBER OF EXITS: REQ'D T1006.3.1.1 (Single exit 1006.3.2(2))	MINIMUM[2] NUMBER OF EXITS: SHOWN ON PLANS	TRAVEL DISTANCE: ALLOWABLE TRAVEL DISTANCE (Table 1017.2)	TRAVEL DISTANCE: ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	ARRANGEMENT MEANS OF EGRESS[1,3] (SECTION 1007.1.1): REQ'D DISTANCE BETWEEN EXIT DOORS	ARRANGEMENT MEANS OF EGRESS: ACTUAL DISTANCE SHOWN ON PLANS
–	–	–	200'	–	–	–

[1] Corridor dead ends (Section 1020.4)
[2] Buildings with Single Exits (Table 1006.3.2(2)), Spaces with one means of egress (Table 1006.2.1)
[3] Common Path of Travel (Section 1006.2.1)

OCCUPANT LOAD AND EXIT WIDTH (TABLE 1004.1.2)

USE GROUP OR SPACE DESCRIPTION	(a) AREA[1] sq. ft.	(b) AREA PER OCCUPANT	(1004.1.2) CALCULATED OCCUPANT LOAD (a/b)	(c) EGRESS WIDTH PER OCCUPANT (1005.1) STAIR	(c) LEVEL	EXIT WIDTH (in)[2,3,4,5,6] REQUIRED WIDTH (SECTION 1005.1) (a÷b) x c STAIR	REQUIRED WIDTH LEVEL	ACTUAL WIDTH SHOWN ON PLANS STAIR	ACTUAL WIDTH SHOWN ON PLANS LEVEL
–	–	– SF NET	–	N/A	.2	N/A	–"	N/A	–

[1] See Table 1004.1.2 to determine whether net or gross area is applicable.
See definition "Area, Gross" and "Area, Net" (Section 1002)
[2] Minimum stairway width (Section 1009.1); min. corridor width (Section 1018.2); min. door width (Section 1008.1.1)
[3] Minimum width of exit passageway (Section 1023.2)
[4] See Section 1004.5 for converging exits.
[5] The loss of one means of egress shall not reduce the available capacity to less than 50 percent of the total required (Section 1005.1)
[6] Assembly occupancies (Section 1028)
[7] Spaces within occupancies or use groups shall be calculated independently. (Ex. Lobbies, lounges, break rooms, conference rooms.)

P. ACCESSIBLE DWELLING UNITS AND SLEEPING UNITS

ONLY FOR R-1, R-2 OCCUPANCY

ACCESSIBLE DWELLING UNITS (1107)

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Q. ACCESSIBLE PARKING

PROJECTS THAT ARE NEW CONSTRUCTION, ADDITION, CHANGE OF USE

ACCESSIBLE PARKING (1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES: REQUIRED	TOTAL # OF PARKING SPACES: PROVIDED	# OF ACCESSIBLE SPACES PROVIDED: REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 132" ACCESS AISLE	VAN SPACES WITH 8' ACCESS AISLE	TOTAL # ACCESSIBLE PROVIDED	COMMENTS
TOTAL	N/A	N/A	N/A	N/A	N/A	N/A	

R. STRUCTURAL DESIGN

PRIMARY FOR NEW CONSTRUCTION, ADDITIONS AND CHANGE OF USE

Located on Structural Sheet Number N/A

DESIGN LOADS:
Importance Factors: (ASCE/SEI 7-05-11.5) Wind N/A
Snow N/A
Seismic N/A
Live Loads: Roof: (1603.1.2, 1607.11, 1611) N/A psf
Floor: (1603.1.1, 1607.10, T1607.10) N/A psf
Live load reductions: (1603.1.1, 1607.9) N/A psf
Ground Snow Load: (1608.2)
Wind Load: Basic Wind Speed: (1609.3) (V_ultimate) N/A mph (ASCE-7)
Exposure Category (1609.4) N/A
Wind Base Shears (for MWFRS) (Engineer Cal's) (Ult. level) Vx= N/A Vy= ______
SEISMIC DESIGN CATEGORY: (1613.1, 1613.5.6)
Provide the following Seismic Design Parameters: ☐ A ☐ B ☐ C ☐ D
Occupancy Category: (Table 1604.5) ☐ I ☐ II ☐ III ☐ IV
Spectral Response Acceleration: (Engineer cal's) Ss N/A %g S1 N/A %g
Site Classification (Table 1613.5.2) ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F
Data Source: ☐ Field Test ☐ Presumptive ☐ Historical Data
Basic Structural System (Check one) ☐ Bearing Wall ☐ Dual w/ Special Moment Frame
Ground Snow Load: ☐ Building Frame ☐ Dual w/ Intermediate R/C or Special Steel
Wind Load: ☐ Moment Frame ☐ Inverted Pendulum
Seismic base sheer: (Engineer Cal's) Vx= N/A Vy= N/A
Analysis Procedure: ☐ Simplified ☐ Equivalent Lateral Force ☐ Dynamic
Architectural, Mechanical, Components anchored? ☐ Yes ☐ No Anchorage of components as required per ASCE chapter 13
LATERAL DESIGN CONTROL: ☐ Earthquake ☐ Wind (Varies)
SOIL BEARING CAPACITIES:
Field Test (provided copy of test report as a reference document) N/A
Presumptive Bearing Capacity N/A
Pile sizes, type, and capacity N/A
SPECIAL INSPECTIONS REQUIRED: ☐ Yes ☒ No

S. SPECIAL INSPECTIONS:

SCHEDULE OF SPECIAL INSPECTIONS ☒ No special inspections required for this project
☐ Special inspections required

The following sheets comprise the required schedule of Special Inspections for this project. The construction divisions which require special inspections for this project are as follows:
☐ IT-1 Verifications of Soils ☐ IT-10 Inspection of Structural Steel Fabricators
☐ IT-2 Excavation and Fill ☐ IT-11 Structural Masonry
☐ IT-3 Piling and Drilling Piers ☐ IT-12 Masonry
☐ IT-4 Modular Retaining Walls ☐ IT-13 High Strength Bolts & Steel Framing Insp.
☐ IT-5 Reinforced Concrete ☐ IT-14 Sprayed Fire Resistance Materials
☐ IT-6 Post Tension Slab ☐ IT-15 Exterior Insulation and Finish System
☐ IT-7 Pre-cast Concrete Erection ☐ IT-16 Seismic Resistance
☐ IT-8 Pre-stressed Concrete ☐ IT-17 Smoke Control
☐ IT-9 Inspection of Pre-cast Fabricators ☐ IT-18 Detention Basin
☐ IT-19 Special Cases

Check the above boxes for the special inspection required for this project and list below specific special inspections required under Chapter 17. For questions regarding Special Inspections contact your local jurisdiction

T. PLUMBING FIXTURES REQUIREMENTS

NEW CONSTRUCTION, ADDITIONS, UPFITS, ALTERATIONS AND CHANGE OF USE OR IF INCREASING OCCUPANT LOAD

TABLE 2902.1

OCCUPANCY: USE GROUP AND/OR SPACE DESIGNATION	WATERCLOSETS: MALE	WATERCLOSETS: FEMALE	URINALS	LAVATORIES: MALE	LAVATORIES: FEMALE	SHOWERS/ TUBS	WATER FOUNTAINS: FOUNTAINS	OTHER: SERVICE SINK
–	–	–	–	–	–	–	–	–
TOTAL REQUIRED	–	–	–	–	–	–		–
TOTAL PROVIDED	–	–	–	–	–	–		–

U. SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, ICC, etc., describe below)
N/A

V. ENERGY SUMMARY

BUILDING ENVELOPE:
ENERGY REQUIREMENTS:
The following data shall be considered minimum and any special attribute required to meet the South Carolina Energy Conservation Code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs. annual energy cost for the proposed design.

Climate Zone: ☐ 1 ☐ 2 ☒ 3 ☐ 4 ☐ 5 ☐ 6
Method of Compliance:
☐ Prescriptive (IECC) ☐ Performance (IECC or Com Check) Report must be reproduced on drawings
☐ Prescriptive (ASHRAE 90.1-2010 with addenda 2013 supplement) ☐ Performance (ASHRAE 90.1-2010)

THERMAL ENVELOPE: (IECC Chapter 4 and or 5)
Roof/Ceiling Assembly (each assembly)
Description of assembly: N/A
U-Value of total assembly: N/A
R-Value of insulation: N/A
Skylights in each assembly N/A
U-Value of skylight: N/A
Total square footage of skylight in each assembly N/A
Exterior Walls (each assembly)
Description of assembly: N/A
U-Value of total assembly: N/A
R-Value of insulation: N/A
Openings (windows or doors with glazing) N/A % of above grade walls
U-Value of assembly: N/A
Solar hear gain coefficient: N/A
Projection Factor: N/A
Door R-values: N/A
Walls below grade (each assembly)
Description of assembly: N/A
U-Value of total assembly: N/A
R-Value of insulation: N/A
Floors over unconditioned space (each assembly)
Description of assembly: N/A
U-Value of total assembly: N/A
R-Value of insulation: N/A
Floors slab on grade
Description of assembly: N/A
U-Value of total assembly: N/A
R-Value of insulation: N/A
Horizontal/vertical requirement: N/A
Slab heated: N/A

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT
MECHANICAL SUMMARY (IECC 503) This information may be located on the mechanical sheet. The mechanical sheet must be in the same format as noted in this section. If it is on the mechanical sheets, please indicate here.
(Located on Mechanical Sheet number N/A
Thermal Zone N/A
Winter dry bulb: N/A
Summer dry bulb: N/A
Interior design conditions
Winter dry bulb: N/A
Summer dry bulb: N/A
Relative humidity: N/A
Building heating load: N/A
Building cooling load: N/A
Mechanical Spacing Conditioning System
Unitary
Description of unit: N/A
Heating efficiency: N/A
Cooling efficiency: N/A
Size category of unit: N/A
Boiler
Size category. If oversized, state reason: N/A
Chiller
Size category. If oversized, state reason: N/A
List equipment efficiencies: N/A

ELECTRICAL SYSTEM AND EQUIPMENT
ELECTRICAL SUMMARY (IECC 505) This information may be located on the electrical sheets. The Electrical sheet must be in the same format as noted in this section. If it is on the electrical sheets, please indicate here.
(Located on Electrical Sheet number N/A
METHOD OF COMPLIANCE
Energy Code: ☐ Prescriptive ☐ Performance
ASHRAE 90.1: ☐ Prescriptive ☐ Performance
Lighting Schedule (each fixture type)
Lamp type required in fixture N/A
Number of lamps in fixture N/A
Ballast type used in the fixture N/A
Number of ballasts in fixture N/A
Total wattage per fixture N/A
Total interior wattage specified vs. allowed (whole building or space by space) N/A
Total exterior wattage specified vs. allowed N/A
Additional Prescriptive Compliance
☐ 506.2.1 More Efficient Mechanical Equipment
☐ 506.2.2 Reduced Lighting Power Density
☐ 506.2.3 Energy Recovery Ventilation Systems
☐ 506.2.4 Higher Efficiency Service Water Heating
☐ 506.2.5 On-Site Supply Renewable Energy
☐ 506.2.6 Automatic Daylighting Control Systems

BEAUFORT
2 Fire Station Lane
Seabrook, SC 29940

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ARCHITECT / ENGINEER'S SEAL

HARBOR FREIGHT
QUALITY TOOLS LOWEST PRICES

HARBOR FREIGHT BEAUFORT AT HIGHWAY 170

142 ROBERT SMALLS PARKWAY, BEAUFORT, SC, 29906

NOT FOR CONSTRUCTION

REVISIONS / SUBMISSIONS

NO.	DESCRIPTION	DATE

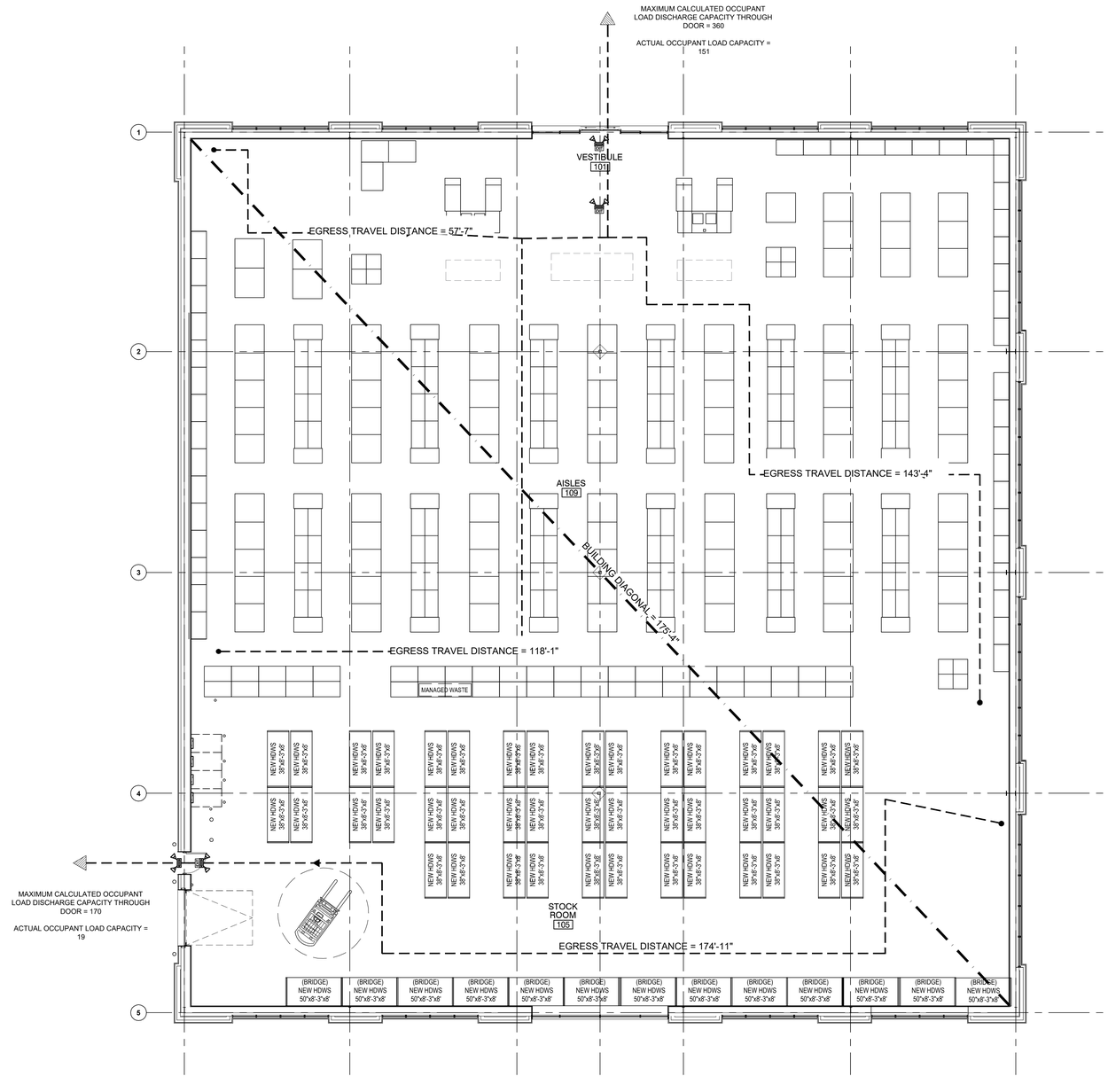
SHEET INFORMATION

DATE	JUNE 17, 2020
JOB NUMBER	19032.00
DRAWN	TWA
CHECKED	TWA
APPROVED	DCS

2018 INTERNATIONAL BUILDING CODE SUMMARY

G-102

FIXTURE PLAN AND INTERIOR PLAN SHOWN FOR REFERENCE ONLY. TO BE CONSTRUCTED UNDER A SEPARATE PERMIT AND CONTRACT



A2 LIFE SAFETY PLAN

1/8" = 1'-0"

0 4' 8' 16'

GENERAL NOTES:

A. ALL EXIT DOORS SHALL BE EQUIPPED WITH EXIT SIGNS AND EMERGENCY EGRESS LIGHT.

B. COORDINATE FIRE EXTINGUISHER TYPES AND LOCATIONS WITH FIRE MARSHALL PRIOR TO INSTALLING.

SHEET KEY NOTES: (X)

1. EGRESS TRAVEL DISTANCE MEASURED TO PUBLIC WAY
2. KNOX BOX - COORDINATE REQUIREMENT AND INSTALLATION LOCATION WITH FIRE MARSHAL

2018 IBC EGRESS REQUIREMENTS:

OCCUPANT LOAD:	170 PEOPLE
BUILDING IS FIRE SPRINKLERED	Y (FUTURE UPFIT)
OCCUPANCY TYPE:	MERCANTILE (FUTURE)
MAXIMUM TRAVEL DISTANCE :	143'-4"
MAXIMUM DEAD END CORRIDOR:	20'-0" ALLOWED (NON SHOWN)
MINIMUM NUMBER OF EXITS:	2 (OCCUPANT LOAD IS GREATER THAN 50)
MINIMUM CORRIDOR WIDTH:	40"

EGRESS NOTES:

1. BUILDING DIAGONAL IS = 175'-4"
2. REQUIRED DISTANCE BETWEEN EXIT DOORS IS ##-##" (1/ OF DIAGONAL). ACTUAL DISTANCE IS ##-#"
3. ALL EGRESS DOORS ARE ##" WIDE AND PROVIDE A MINIMUM 34" CLEAR OPENING

FIRE DEPARTMENT NOTES:

1. COORDINATE WITH FIRE MARSHALL FOR LOCATION OF KNOX BOX.
2. COORDINATE WITH FIRE MARSHALL FOR LOCATION OF FIRE EXTINGUISHERS.

LEGEND:

BUILDING DIAGONAL

EXIT ACCESS TRAVEL DISTANCE

START OF TRAVEL DISTANCE / COMMON PATH OF EGRESS TRAVEL

END OF COMMON PATH OF EGRESS TRAVEL POINT AT WHICH TWO EXIT PATHS ARE AVAILABLE

EXIT DISCHARGE
- SINGLE OR DOUBLE DOOR WITH A MINIMUM 34" CLEAR OPENING
- CEILING MOUNTED ILLUMINATED EXIT SIGN
- ILLUMINATED EXIT SIGN AND EMERGENCY EXIT LIGHT COMBO ON INSIDE AND EMERGENCY LIGHT ON OUTSIDE. 90 MINUTE BATTERY BACKUP ON ALL

ROOM TAG
- ROOM NAME
- ROOM NUMBER
- ROOM SQ FT / GROSS OR NET PER NUMBER OF OCCUPANTS

SF / GROSS-NET @ ### SF PER = ## PERSONS

EXIT

INTERIOR EMERGENCY EGRESS LIGHT AND EXIT SIGN WITH 90 MIN. EMERGENCY BATTERY BACKUP.

EXTERIOR EMERGENCY EGRESS LIGHT WITH 90 MIN EMERGENCY BATTERY BACKUP

EXIT

LED EXIT SIGN WITH LED EMERGENCY "LIGHT PIPE"

PROVIDE WITH 90 MINUTE BATTERY BACKUP AND PUSH TO TEST SWITCH. ARROW INDICATES DIRECTION OF EGRESS TRAVEL

FEC

PORTABLE HAND HELD TYPE ABC FIRE EXTINGUISHER IN NON-LOCKING SEMI-RECESSED CABINET

FE

PORTABLE HAND HELD TYPE K FIRE EXTINGUISHER MOUNTED TO WALL IN MANUFACTURER PROVIDED BRACKET.

NOTE: PROVIDE BLOCKING IN WALL AND MOUNT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS/ MOUNTED WITH TOP NO MORE THAN 5'-0" AFF. REVIEW EXTINGUISHER TYPES AND LOCATIONS WITH LOCAL FIRE MARSHALL PRIOR TO INSTALLING BLOCKING. EXTINGUISHER AND INSTALLATION PER NFPA 10

PROPOSED BUILDING IS TO BE PROVIDED WITH STANDPIPE. FUTURE UPFIT TO BE FULLY FIRE SPRINKLERED

BEAUFORT
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HARBOR FREIGHT BEAUFORT AT HIGHWAY 170

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REVISIONS / SUBMISSIONS

NO.	DESCRIPTION	DATE

SHEET INFORMATION

DATE	JUNE 17, 2020
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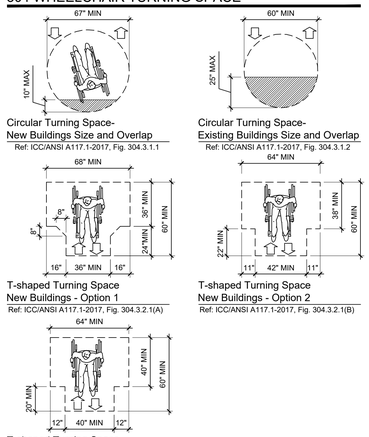
DRAWN	TWA
CHECKED	TWA
APPROVED	DCS

LIFE SAFETY PLAN

G-103

304 WHEELCHAIR TURNING SPACE



Circular Turning Space- New Buildings Size and Overlap
Ref: ICC/ANSI A117.1-2017, Fig. 304.3.1.1

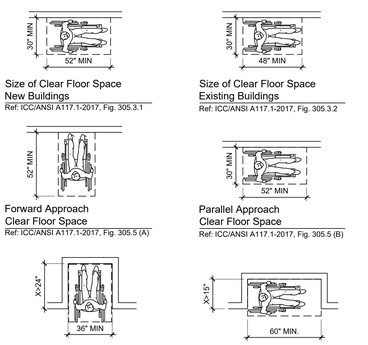
Circular Turning Space- Existing Buildings Size and Overlap
Ref: ICC/ANSI A117.1-2017, Fig. 304.3.1.2

T-shaped Turning Space New Buildings - Option 1
Ref: ICC/ANSI A117.1-2017, Fig. 304.3.2.1(A)

T-shaped Turning Space New Buildings - Option 2
Ref: ICC/ANSI A117.1-2017, Fig. 304.3.2.1(B)

T-shaped Turning Space New Buildings - Option 3
Ref: ICC/ANSI A117.1-2017, Fig. 304.3.2.1(C)

305 CLEAR FLOOR SPACE



Size of Clear Floor Space New Buildings
Ref: ICC/ANSI A117.1-2017, Fig. 305.3.1

Size of Clear Floor Space Existing Buildings
Ref: ICC/ANSI A117.1-2017, Fig. 305.3.2

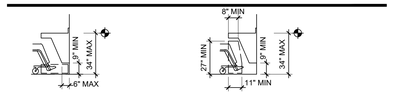
Forward Approach Clear Floor Space
Ref: ICC/ANSI A117.1-2017, Fig. 305.5 (A)

Parallel Approach Clear Floor Space
Ref: ICC/ANSI A117.1-2017, Fig. 305.5 (B)

Maneuvering Clearance for a Forward Approach to an Alcove
Ref: ICC/ANSI A117.1-2017, Fig. 305.7.2

Maneuvering Clearance for a Parallel Approach to an Alcove
Ref: ICC/ANSI A117.1-2017 Fig. 305.7.1

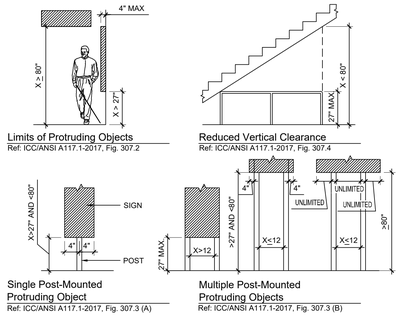
306 KNEE & TOE CLEARANCE; 606 LAVATORIES & SINKS; 902 SEATING AT TABLES, COUNTERS, & WORK SURFACES



Toe Clearance - Elevation
Ref: ICC/ANSI A117.1-2017, Fig. 306.2(A) & 606.3

Knee Clearance
Ref: ICC/ANSI A117.1-2017, Fig. 306.3(A) & 606.3

307 PROTRUDING OBJECTS



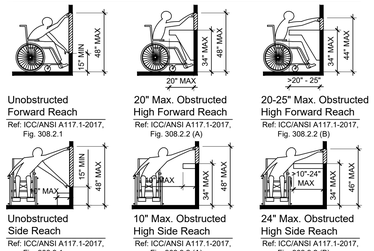
Limits of Protruding Objects
Ref: ICC/ANSI A117.1-2017, Fig. 307.2

Reduced Vertical Clearance
Ref: ICC/ANSI A117.1-2017, Fig. 307.4

Single Post-Mounted Protruding Object
Ref: ICC/ANSI A117.1-2017, Fig. 307.3 (A)

Multiple Post-Mounted Protruding Objects
Ref: ICC/ANSI A117.1-2017, Fig. 307.3 (B)

308 REACHING RANGES



Unobstructed Forward Reach
Ref: ICC/ANSI A117.1-2017, Fig. 308.2.1

20" Max. Obstructed High Forward Reach
Ref: ICC/ANSI A117.1-2017, Fig. 308.2.2 (A)

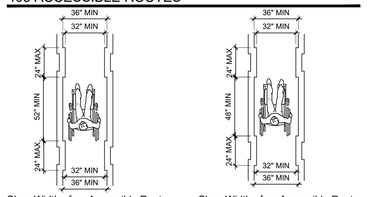
20-25" Max. Obstructed High Forward Reach
Ref: ICC/ANSI A117.1-2017, Fig. 308.2.2 (B)

Unobstructed Side Reach
Ref: ICC/ANSI A117.1-2017, Fig. 308.3.1

10" Max. Obstructed High Side Reach
Ref: ICC/ANSI A117.1-2017, Fig. 308.3.2 (A)

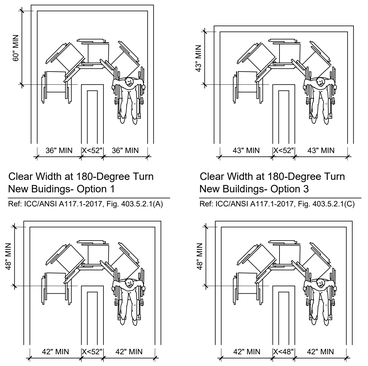
24" Max. Obstructed High Side Reach
Ref: ICC/ANSI A117.1-2017, Fig. 308.3.2 (B)

403 ACCESSIBLE ROUTES



Clear Width of an Accessible Route New Buildings- Interior
Ref: ICC/ANSI A117.1-2017, Fig. 403.5.1(A)

Clear Width of an Accessible Route Existing Buildings- Interior
Ref: ICC/ANSI A117.1-2017, Fig. 403.5.1(C)

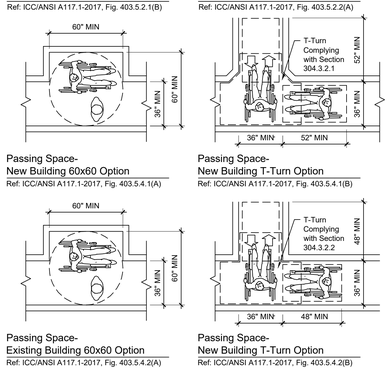


Clear Width at 180-Degree Turn New Buildings- Option 1
Ref: ICC/ANSI A117.1-2017, Fig. 403.5.2.1(A)

Clear Width at 180-Degree Turn New Buildings- Option 3
Ref: ICC/ANSI A117.1-2017, Fig. 403.5.2.1(C)

Clear Width at 180-Degree Turn New Buildings- Option 2
Ref: ICC/ANSI A117.1-2017, Fig. 403.5.2.1(B)

Clear Width at 180-Degree Turn Existing Buildings
Ref: ICC/ANSI A117.1-2017, Fig. 403.5.2.2(A)



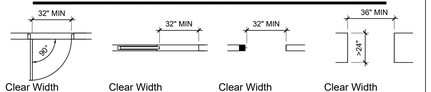
Passing Space- New Building 60x60 Option
Ref: ICC/ANSI A117.1-2017, Fig. 403.5.4.1(A)

Passing Space- New Building T-Turn Option
Ref: ICC/ANSI A117.1-2017, Fig. 403.5.4.1(B)

Passing Space- Existing Building 60x60 Option
Ref: ICC/ANSI A117.1-2017, Fig. 403.5.4.2(A)

Passing Space- New Building T-Turn Option
Ref: ICC/ANSI A117.1-2017, Fig. 403.5.4.2(B)

404 DOORS AND DOORWAYS

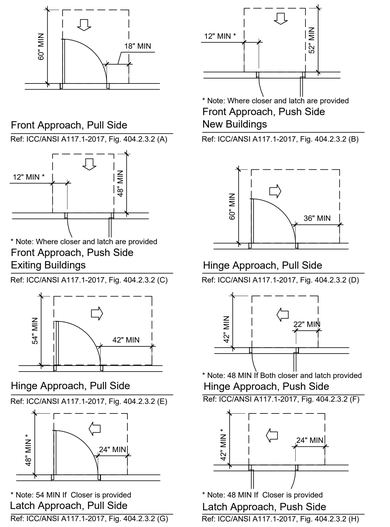


Clear Width of Hinged Door
Ref: ICC/ANSI A117.1-2017 Fig. 404.2.2 (A)

Clear Width of Sliding Door
Ref: ICC/ANSI A117.1-2017 Fig. 404.2.2 (B)

Clear Width of Folding Door
Ref: ICC/ANSI A117.1-2017 Fig. 404.2.2 (C)

Clear Width Within Doors
Ref: ICC/ANSI A117.1-2017 Fig. 404.2.2 (D)



Front Approach, Pull Side
Ref: ICC/ANSI A117.1-2017, Fig. 404.2.3.2 (A)

* Note: Where closer and latch are provided
Front Approach, Push Side New Buildings
Ref: ICC/ANSI A117.1-2017, Fig. 404.2.3.2 (B)

* Note: Where closer and latch are provided
Front Approach, Push Side Exiting Buildings
Ref: ICC/ANSI A117.1-2017, Fig. 404.2.3.2 (C)

Hinge Approach, Pull Side
Ref: ICC/ANSI A117.1-2017, Fig. 404.2.3.2 (D)

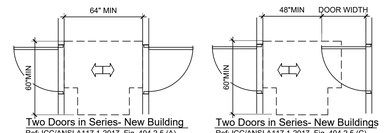
Hinge Approach, Pull Side
Ref: ICC/ANSI A117.1-2017, Fig. 404.2.3.2 (E)

* Note: 48 MIN If Both closer and latch provided
Hinge Approach, Push Side
Ref: ICC/ANSI A117.1-2017, Fig. 404.2.3.2 (F)

* Note: 54 MIN If Closer is provided
Latch Approach, Pull Side
Ref: ICC/ANSI A117.1-2017, Fig. 404.2.3.2 (G)

* Note: 48 MIN If Closer is provided
Latch Approach, Push Side
Ref: ICC/ANSI A117.1-2017, Fig. 404.2.3.2 (H)

404 DOORS AND DOORWAYS (CONTINUED)

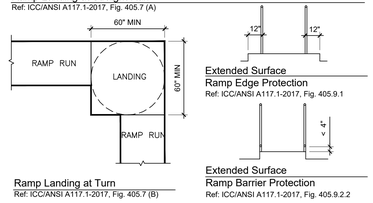


Two Doors in Series- New Building
Ref: ICC/ANSI A117.1-2017, Fig. 404.2.5 (A)

Two Doors in Series- New Buildings
Ref: ICC/ANSI A117.1-2017, Fig. 404.2.5 (C)

405 RAMPS

Ramp Landing at Straight Run
Ref: ICC/ANSI A117.1-2017, Fig. 405.7 (A)

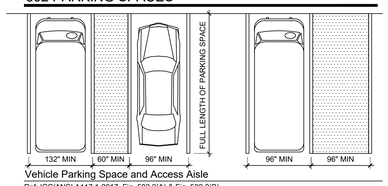


Ramp Landing at Turn
Ref: ICC/ANSI A117.1-2017, Fig. 405.7 (B)

Extended Surface Ramp Edge Protection
Ref: ICC/ANSI A117.1-2017, Fig. 405.9.1

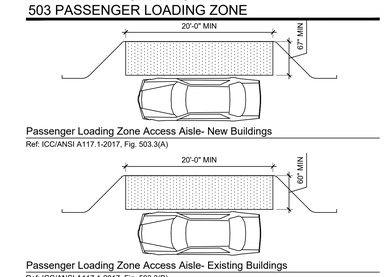
Extended Surface Ramp Barrier Protection
Ref: ICC/ANSI A117.1-2017, Fig. 405.9.2.2

502 PARKING SPACES



Vehicle Parking Space and Access Aisle
Ref: ICC/ANSI A117.1-2017, Fig. 502.2(A) & Fig. 502.2(B)

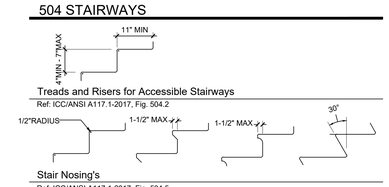
503 PASSENGER LOADING ZONE



Passenger Loading Zone Access Aisle- New Buildings
Ref: ICC/ANSI A117.1-2017, Fig. 503.3(A)

Passenger Loading Zone Access Aisle- Existing Buildings
Ref: ICC/ANSI A117.1-2017, Fig. 503.3(B)

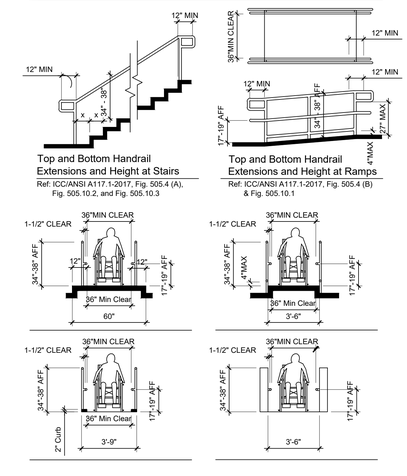
504 STAIRWAYS



Treads and Risers for Accessible Stairways
Ref: ICC/ANSI A117.1-2017, Fig. 504.2

Stair Nosing's
Ref: ICC/ANSI A117.1-2017, Fig. 504.5

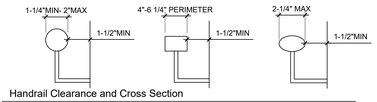
505 HANDRAILS



Top and Bottom Handrail Extensions and Height at Stairs
Ref: ICC/ANSI A117.1-2017, Fig. 505.4 (A), Fig. 505.10.2, and Fig. 505.10.3

Top and Bottom Handrail Extensions and Height at Ramps
Ref: ICC/ANSI A117.1-2017, Fig. 505.4 (B) & Fig. 505.10.1

505 HANDRAILS (CONTINUED)



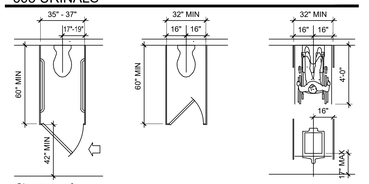
Handrail Clearance and Cross Section
Ref: ICC/ANSI A117.1-2017, Fig. 505.5 & Fig. 505.7 (A-C)

602 DRINKING FOUNTAINS AND WATER COOLERS

Clear Floor Space at Wheelchair Drinking-Fountains Location: Forward Approach
Ref: ICC/ANSI A117.1-2017, Fig. 602.2.1(A) & Fig. 305.5 (A)

Primarily for Children's Use Exception Location: Parallel Approach
Ref: ICC/ANSI A117.1-2017, Fig. 602.2.1 (B) & Fig. 305.5 (B)

604 WATER CLOSETS,TOILET COMPARTMENTS, & 605 URINALS

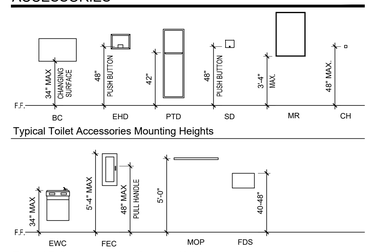


Clearances for Ambulatory Accessible Water Closet
Ref: ICC/ANSI A117.1-2017, Fig. 604.10.1

Clearances for Standard Water Closet

Clearances for Accessible Urinals

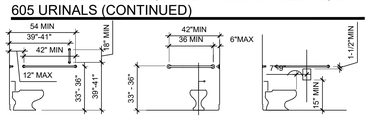
ACCESSORIES



Typical Toilet Accessories Mounting Heights

Typical Toilet Accessories Mounting Heights

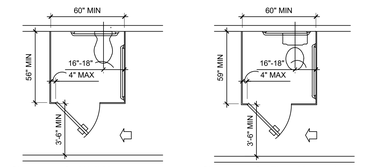
604 WATER CLOSETS,TOILET COMPARTMENTS, & 605 URINALS (CONTINUED)



Side Wall Grab Bar for Water Closet
Ref: ICC/ANSI A117.1-2017, Fig. 604.5.1

Rear Wall Grab Bar for Water Closet
Ref: ICC/ANSI A117.1-2017, Fig. 604.5.2

Dispenser Outlet Below Grab Bar
Ref: ICC/ANSI A117.1-2017, Fig. 604.7.1 (A)



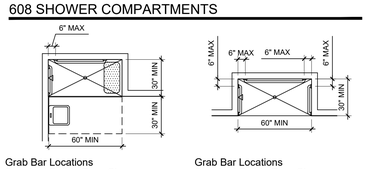
Clearances for Wall-Hung Wheelchair Accessible Water Closet
Ref: ICC/ANSI A117.1-2017, Fig. 604.9.2(A)

Clearances for Floor-Mounted Wheelchair Accessible Water Closet
Ref: ICC/ANSI A117.1-2017, Fig. 604.9.2(B)

606 LAVATORIES & SINKS

Height of Lavatory & Sink
Ref: ICC/ANSI A117.1-2017, Fig. 606.3; Note 606.6

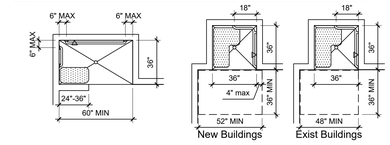
608 SHOWER COMPARTMENTS



Grab Bar Locations Standard Roll-In-Type Shower Compartment Clearances With Seat
Ref: ICC/ANSI A117.1-2017, Fig. 608.2.2.2 & Fig. 608.3.2 (B)

Grab Bar Locations Standard Roll-In Type Shower Compartment Clearances Without Seat
Ref: ICC/ANSI A117.1-2017, Fig. 608.3.3 (A)

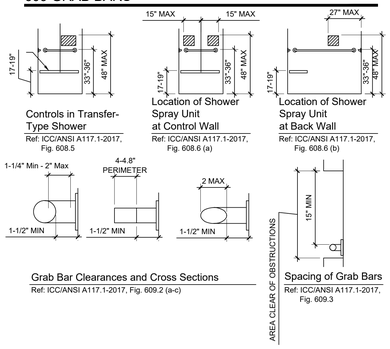
608 SHOWER COMPARTMENTS (CONTINUED)



Alternate Roll-In-Type Shower Compartment Clearances & Grab Bar Locations
Ref: ICC/ANSI A117.1-2017, Fig. 608.2.3.1 & Fig. 608.3.3 (B)

Transfer-Type Shower Compartment Clearances & Grab Bar Locations
Ref: ICC/ANSI A117.1-2017, Fig. 608.2.1.2(B) & Fig. 608.3.1(B)

609 GRAB BARS



Controls in Transfer-Type Shower
Ref: ICC/ANSI A117.1-2017, Fig. 608.5

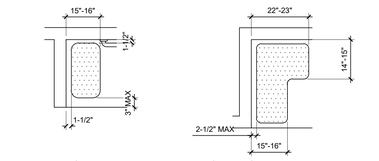
Location of Shower Spray Unit at Control Wall
Ref: ICC/ANSI A117.1-2017, Fig. 608.6 (a)

Location of Shower Spray Unit at Back Wall
Ref: ICC/ANSI A117.1-2017, Fig. 608.6 (b)

Grab Bar Clearances and Cross Sections
Ref: ICC/ANSI A117.1-2017, Fig. 609.2 (a-c)

Spacing of Grab Bars
Ref: ICC/ANSI A117.1-2017, Fig. 609.3

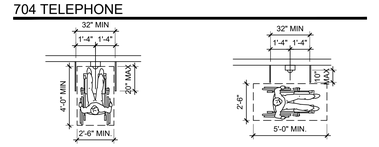
610 SEATS



Rectangular Shower Compartment Seat
Ref: ICC/ANSI A117.1-2017, Fig. 610.3.1

L-Shaped Shower Compartment Seat
Ref: ICC/ANSI A117.1-2017, Fig. 610.3.2

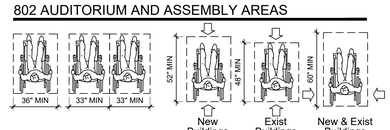
704 TELEPHONE



Forward Position of Clear Floor Space
Ref: ICC/ANSI A117.1-2017, 704.2.1.1, Fig. 305.5 (a)

Parallel Position of Clear Floor Space
Ref: ICC/ANSI A117.1-2017, 704.2.1.1, Fig. 305.5 (b)

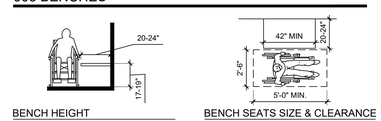
802 AUDITORIUM AND ASSEMBLY AREAS



Width of a Wheelchair Space in Auditorium & Assembly Areas
Ref: ICC/ANSI A117.1-2017, Fig. 802.3 (A-B)

Depth of a Wheelchair Space in Auditorium and Assembly Areas
Ref: ICC/ANSI A117.1-2017, Fig. 802.4 (A-C)

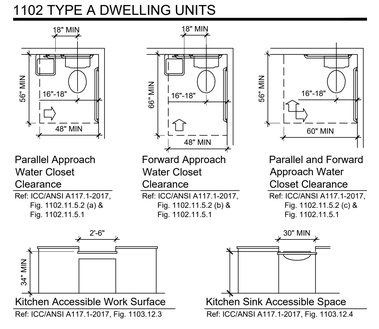
903 BENCHES



BENCH HEIGHT

BENCH SEATS SIZE & CLEARANCE

1102 TYPE A DWELLING UNITS



Parallel Approach Water Closet Clearance
Ref: ICC/ANSI A117.1-2017, Fig. 1102.11.5.2 (a) & Fig. 1102.11.5.1

Forward Approach Water Closet Clearance
Ref: ICC/ANSI A117.1-2017, Fig. 1102.11.5.2 (b) & Fig. 1102.11.5.1

Parallel and Forward Approach Water Closet Clearance
Ref: ICC/ANSI A117.1-2017, Fig. 1102.11.5.2 (c) & Fig. 1102.11.5.1

Kitchen Accessible Work Surface
Ref: ICC/ANSI A117.1-2017, Fig. 1103.12.3

Kitchen Sink Accessible Space
Ref: ICC/ANSI A117.1-2017, Fig. 1103.12.4

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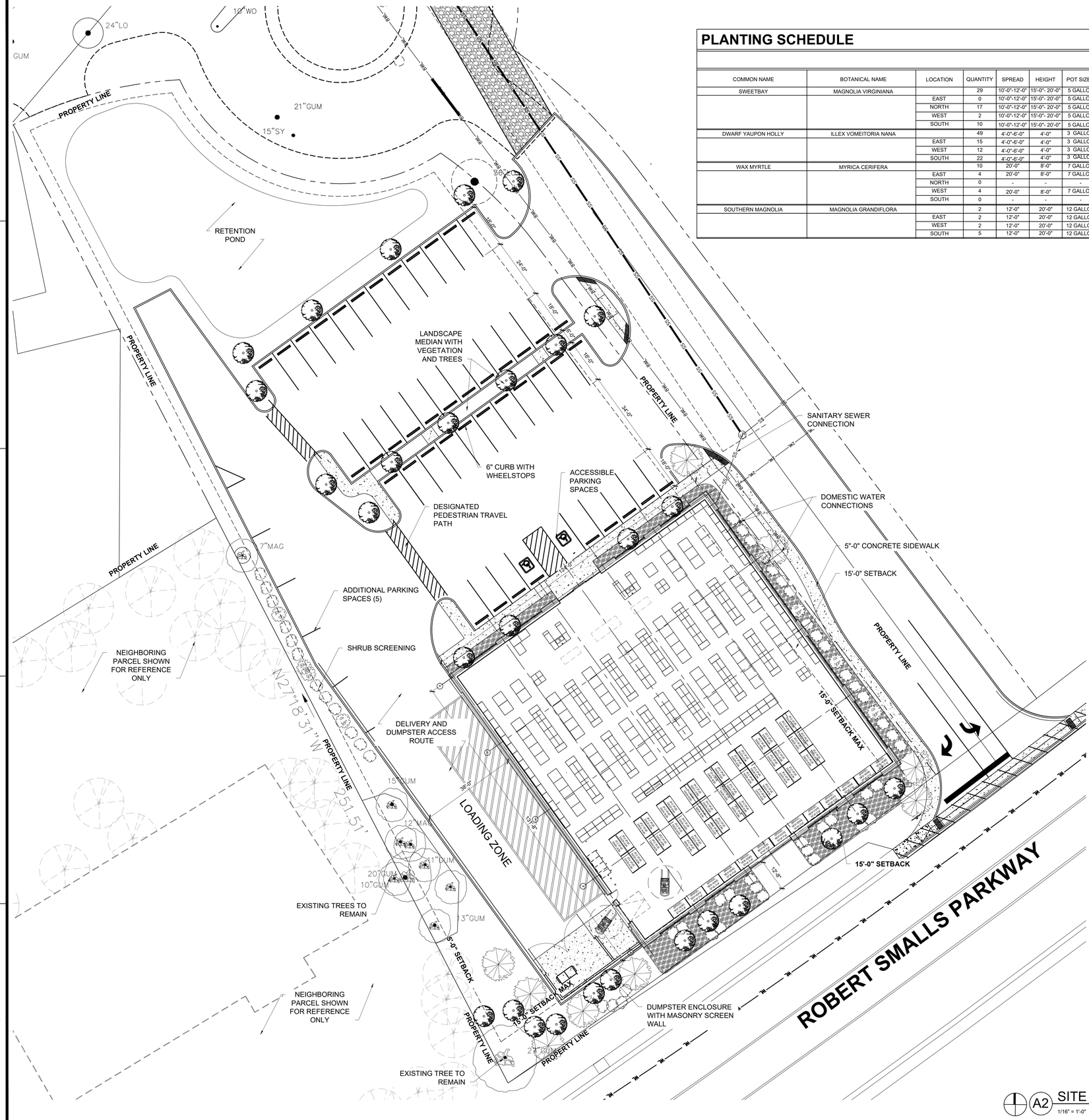
TYPICAL ACCESSIBILITY DETAILS

G-104



A2 SITE PLAN
1/16" = 1'-0"
0 6' 12' 24'

PLANTING SCHEDULE

COMMON NAME	BOTANICAL NAME	LOCATION	QUANTITY	SPREAD	HEIGHT	POT SIZE	REMARKS
SWEETBAY	MAGNOLIA VIRGINIANA		29	10'-0"-12'-0"	15'-0"- 20'-0"	5 GALLON	-
		EAST	0	10'-0"-12'-0"	15'-0"- 20'-0"	5 GALLON	-
		NORTH	17	10'-0"-12'-0"	15'-0"- 20'-0"	5 GALLON	-
		WEST	2	10'-0"-12'-0"	15'-0"- 20'-0"	5 GALLON	-
		SOUTH	10	10'-0"-12'-0"	15'-0"- 20'-0"	5 GALLON	-
DWARF YAUPON HOLLY	ILLEX VOMEITORIA NANA		49	4'-0"-6'-0"	4'-0"	3 GALLON	-
		EAST	15	4'-0"-6'-0"	4'-0"	3 GALLON	-
		WEST	12	4'-0"-6'-0"	4'-0"	3 GALLON	-
		SOUTH	22	4'-0"-6'-0"	4'-0"	3 GALLON	-
WAX MYRTLE	MYRICA CERIFERA		10	20'-0"	8'-0"	7 GALLON	-
		EAST	4	20'-0"	8'-0"	7 GALLON	-
		NORTH	0	-	-	-	-
		WEST	4	20'-0"	8'-0"	7 GALLON	-
		SOUTH	0	-	-	-	-
SOUTHERN MAGNOLIA	MAGNOLIA GRANDIFLORA		2	12'-0"	20'-0"	12 GALLON	-
		EAST	2	12'-0"	20'-0"	12 GALLON	-
		WEST	2	12'-0"	20'-0"	12 GALLON	-
		SOUTH	5	12'-0"	20'-0"	12 GALLON	-

GENERAL NOTES:

A. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS

B. UNLESS NOTED OTHERWISE ALL DIMENSIONS ARE "CLEAR" - AT FACE OF FINISHED SURFACE

C. NO OTHER LANDSCAPING WORK IS TO TAKE PLACE OUTSIDE OF THE AREAS OF DISTURBANCE. ALL REMAINING TREES, GROUNDCOVER AND PLANTS ARE TO REMAIN

D. LANDSCAPE CONTRACTOR TO POSITION AND INSTALL NEW PLANTS AT PROPER SPACING AS REQUIRED FOR ALL SURROUNDING VEGETATION AND GROWTH

E.

LEGEND:

EVERGREEN BUSH - YAUPON HOLLY

WAX MYRTLE

SOUTHERN MAGNOLIA

SWEETBAY

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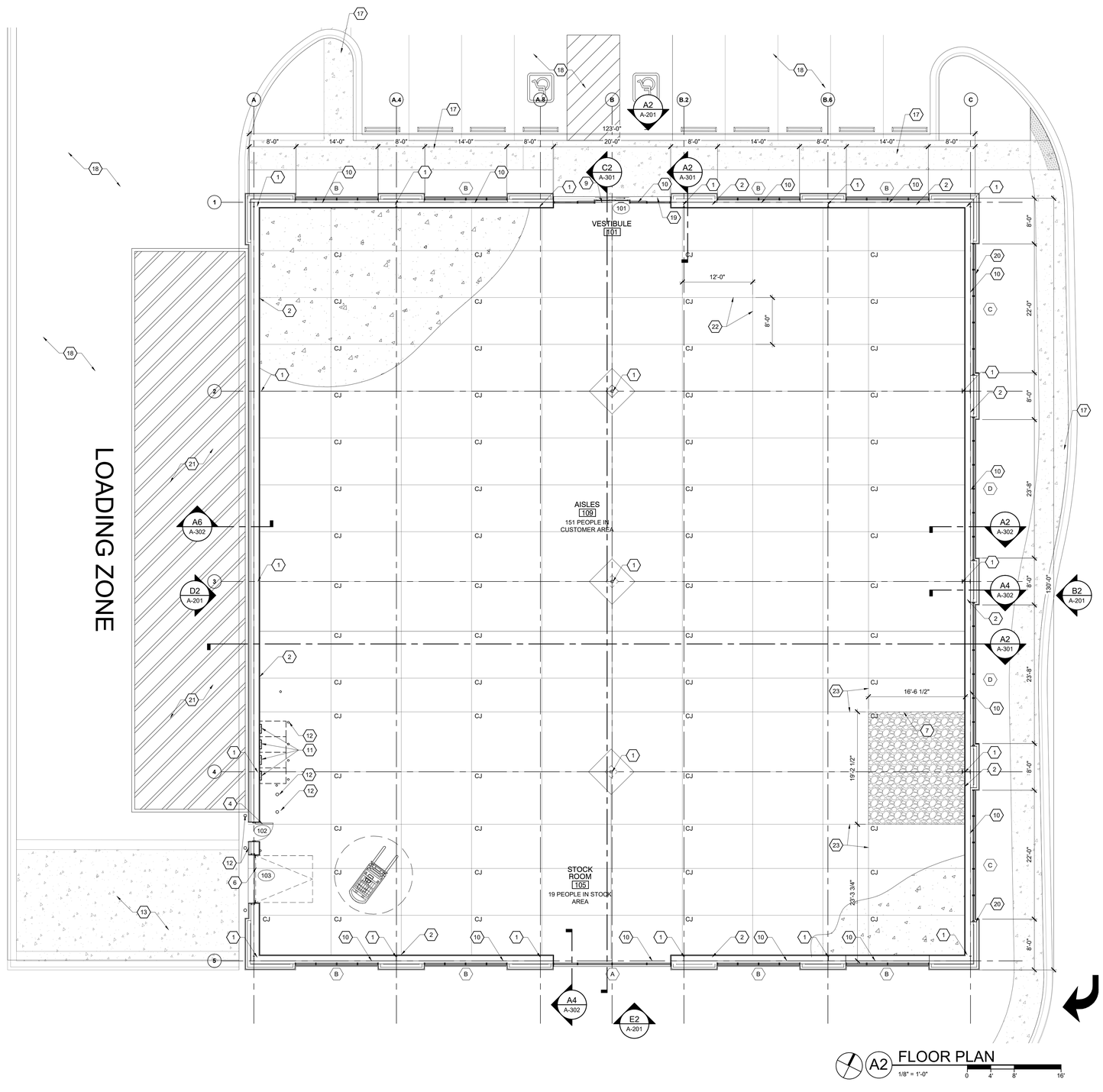
SITE AND LANDSCAPE PLAN

AC-101



A2 FLOOR PLAN
1/8" = 1'-0"
0 4' 8' 16'

GENERAL NOTES:

A. ALL FIXTURES AND MILLWORK BY OWNER
B. MECHANICAL, ELECTRICAL, AND PLUMBING TO BE PROVIDED LATER
C. EXTERIOR ENVELOPE OF BUILDING TO BE SPLIT FACE CMU BLOCK AND EIFS OVER R-19 BATT INSULATION

SHEET KEY NOTES: (X)

1. STEEL COLUMN TO BE COORDINATED BY PEMB CONTRACTOR AND STRUCTURAL ENGINEER
2. STEEL STUDS AT 16" OC WITH R-19 NYLON FACED BATT INSULATION AND 5/8" TYPE X GYP BD
3. 6" METAL STUDS WITH PAINTED 5/8" TYPE X GYPSUM BOARD AND BATT INSULATION FOR SOUND DEADENING
4. INSULATED METAL DOOR IN METAL FRAME
5. HOLLOW METAL DOOR IN METAL FRAME
6. OVERHEAD METAL PANEL DOOR
7. CONCRETE SLAB EDGE AND OPENING FOR FUTURE PLUMBING UPFIT
8. HIGH AND LOW WATER FOUNTAIN
9. ALUMINUM AND GLASS SLIP TRACK DOOR
10. ALUMINUM STOREFRONT
11. ELECTRICAL PANELS PER FUTURE UPFIT
12. CONCRETE FILLED STEEL PIPE BOLLARD
13. DUMPSTER ENCLOSURE
14. FIXTURES SHOWN FOR REFERENCE ONLY. FIXTURES TO BE PROVIDED BY OWNER
15. PARAPET LOW WALL
16. PARAPET HIGH WALL AT COLUMN PROTRUSION
17. CONCRETE SIDEWALK PERMITTED UNDER A SEPARATE CONTRACT
18. PARKING AREA AND ACCESSIBLE SPACES CONSTRUCTED AND PERMITTED UNDER A SEPARATE CONTRACT
19. EDGE OF CONCRETE BUILDING SLAB TO RETURN IN AT STOREFRONT
20. EDGE OF CONCRETE BUILDING SLAB TO BE FOLLOW SHAPE OF WALL AND PILASTERS
21. THERMOPLASTIC STRIPING AT LOADING ZONE AREA PER TENANT APPROVAL
22. STANDARD SPACING OF CONCRETE CONTROL JOINTS, SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
23. CONTROL JOINTS TO ALIGN WITH SLAB EDGE AT OPENING
24. ROOF ACCESS LADDER
25. BACK OF PARAPET WALL TO BE FLUSH AND CONTINUOUS AT FULL PERIMETER
26. ROOF DRAINS AND OVERFLOW DRAINS TO BE SPACED PER DRAIN CONFIGURATION DIAGRAM

LEGEND:

CJ — CONCRETE CONTROL JOINT

CLEAN GRAVEL AT SLAB OPENING

FINISHED CONCRETE

PROPOSED BUILDING IS TO BE PROVIDED WITH STANDPIPE. FUTURE UPFIT TO BE FULLY FIRE SPRINKLERED

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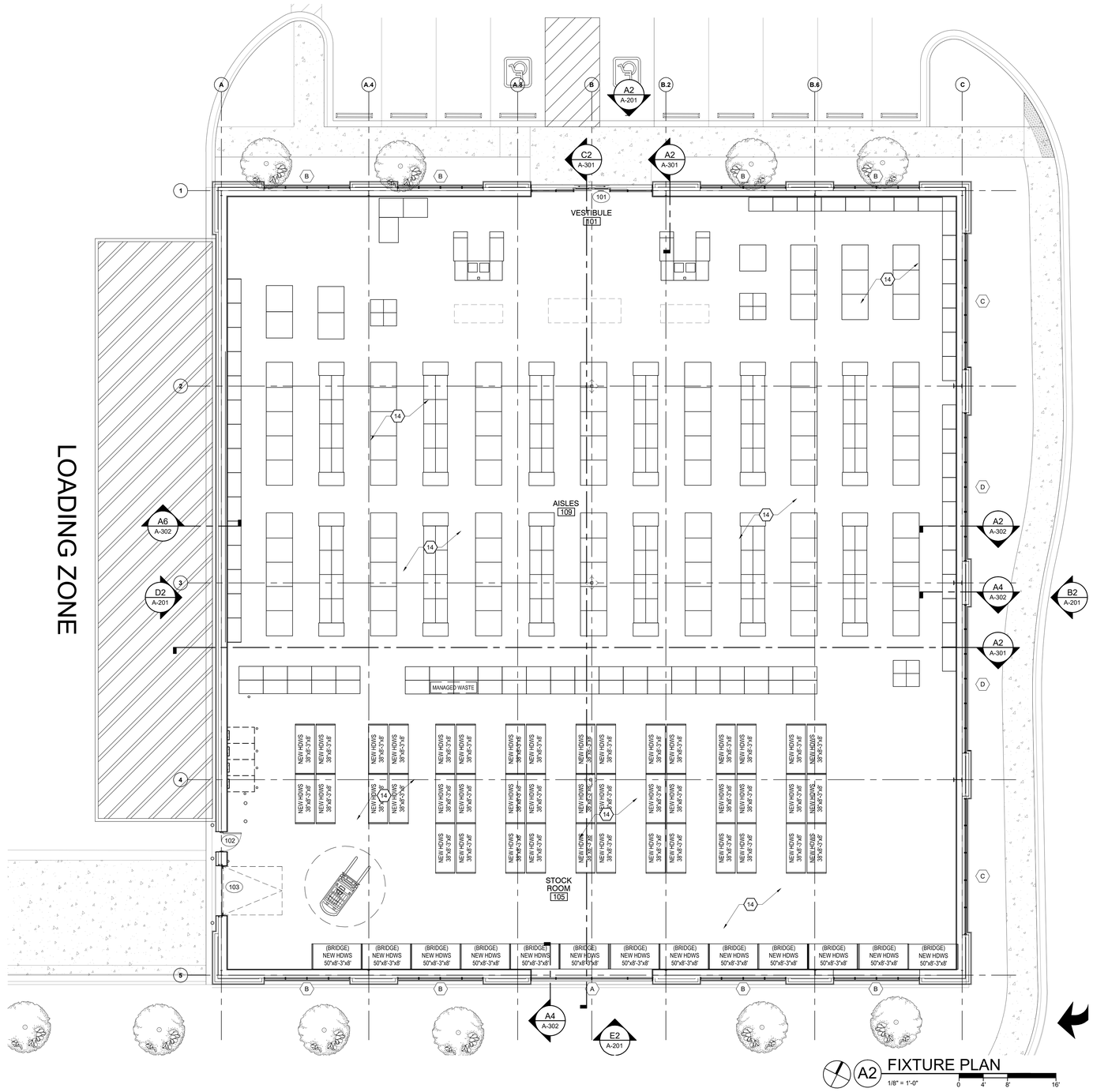
FLOOR PLAN

A-101



A2 FIXTURE PLAN
1/8" = 1'-0"
0 4' 8' 16'

GENERAL NOTES:

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17. CONCRETE SIDEWALK PERMITTED UNDER A SEPARATE CONTRACT
18. PARKING AREA AND ACCESSIBLE SPACES CONSTRUCTED AND PERMITTED UNDER A SEPARATE CONTRACT
19. EDGE OF CONCRETE BUILDING SLAB TO RETURN IN AT STOREFRONT

FIXTURE PLAN AND INTERIOR PLAN SHOWN FOR REFERENCE ONLY. TO BE CONSTRUCTED UNDER A SEPARATE PERMIT AND CONTRACT

PROPOSED BUILDING IS TO BE PROVIDED WITH STANDPIPE. FUTURE UPFIT TO BE FULLY FIRE SPRINKLERED

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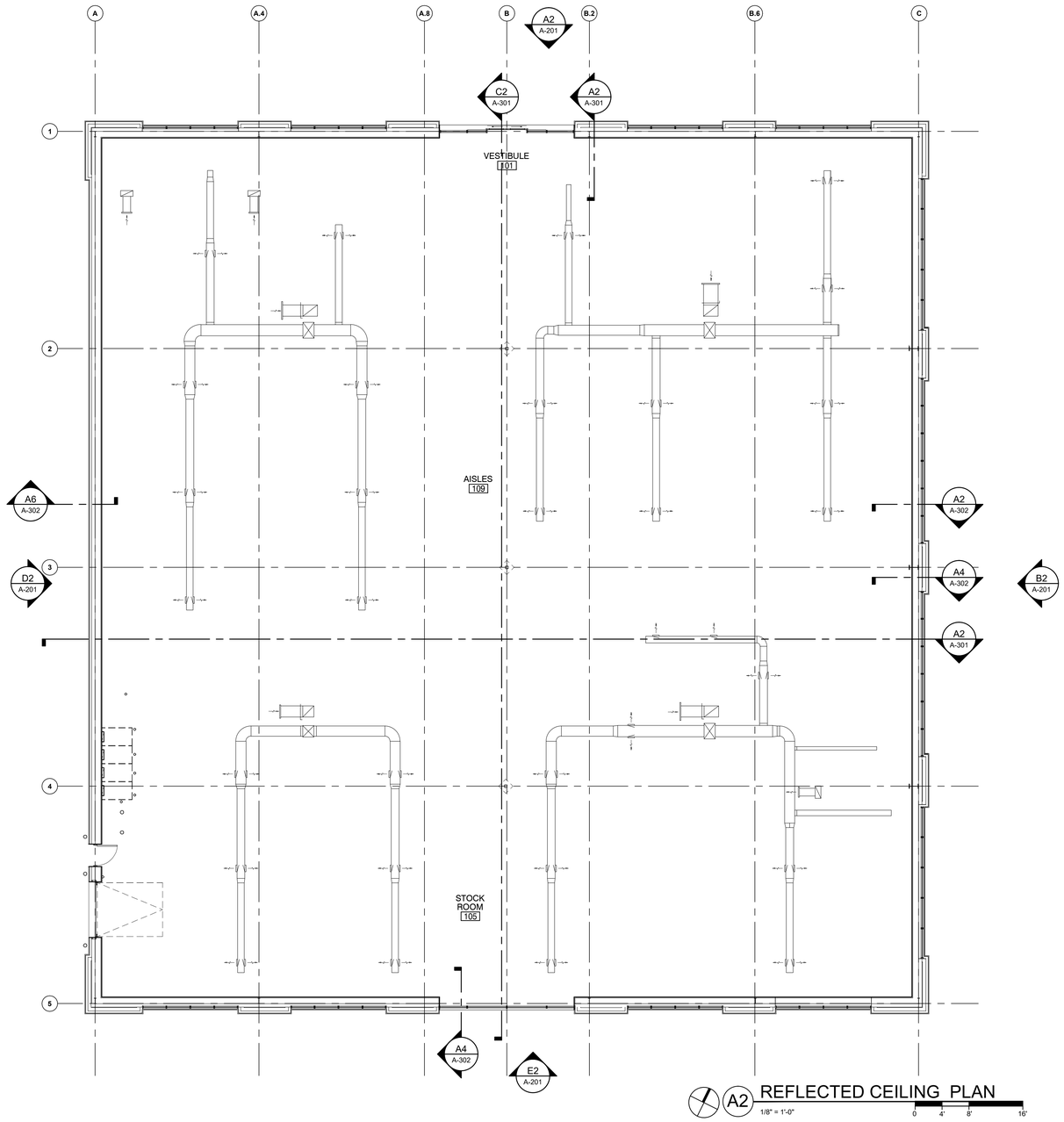
FIXTURE PLAN

A-102



A2 REFLECTED CEILING PLAN
1/8" = 1'-0"
0 4' 8' 16'

GENERAL NOTES:

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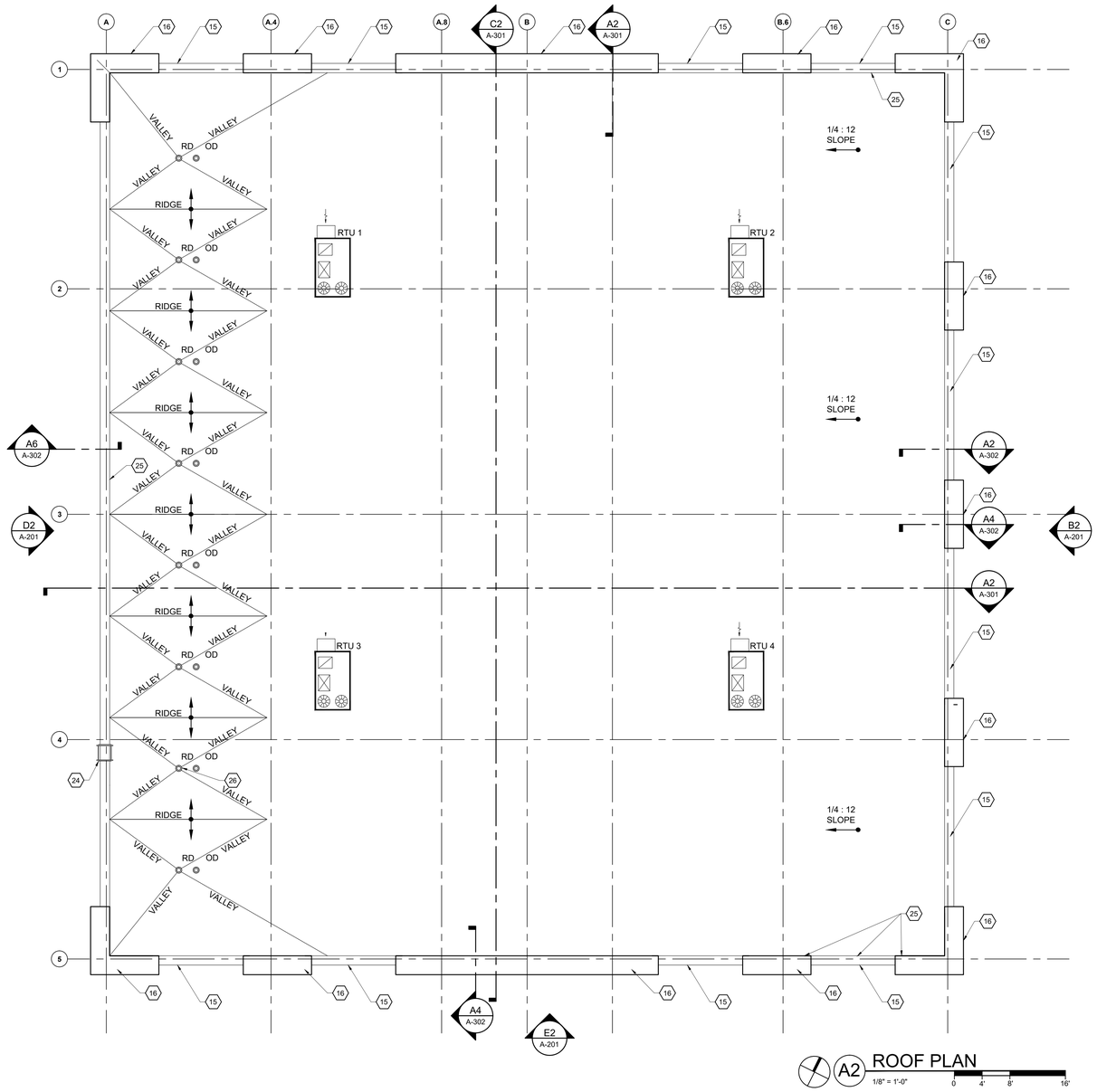
REFLECTED CEILING PLAN

A-103



A2 ROOF PLAN
1/8" = 1'-0"
0 4' 8' 16'

GENERAL NOTES:

A. ALL FIXTURES AND MILLWORK BY OWNER
B. MECHANICAL, ELECTRICAL, AND PLUMBING TO BE PROVIDED LATER
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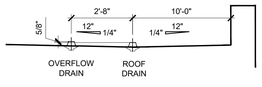
23. CONTROL JOINTS TO ALIGN WITH SLAB EDGE AT OPENING
24. ROOF ACCESS LADDER
25. BACK OF PARAPET WALL TO BE FLUSH AND CONTINUOUS AT FULL PERIMETER

LEGEND:

- ROOF DRAIN
- OVERFLOW DRAIN
- DIRECTION OF 1/4" : 1'-0" ROOF SLOPE
- EXHAUST FAN, REFER TO MECHANICAL DRAWING

ROOF DRAIN CONFIGURATION:



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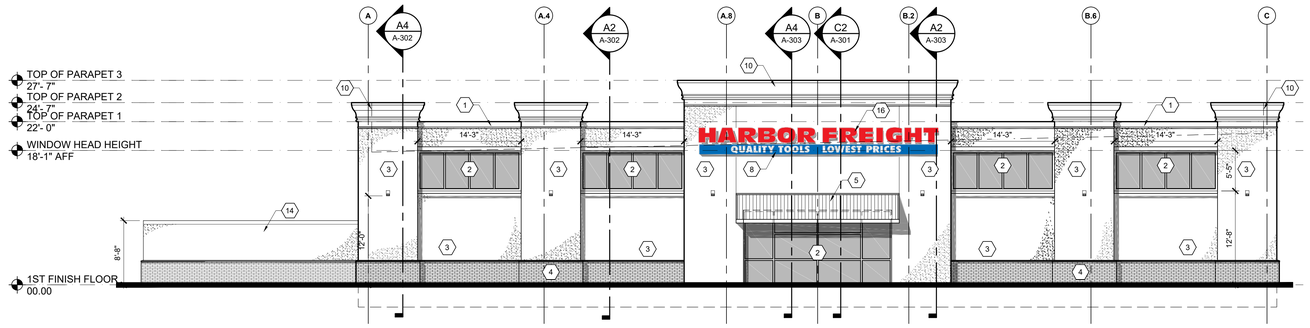
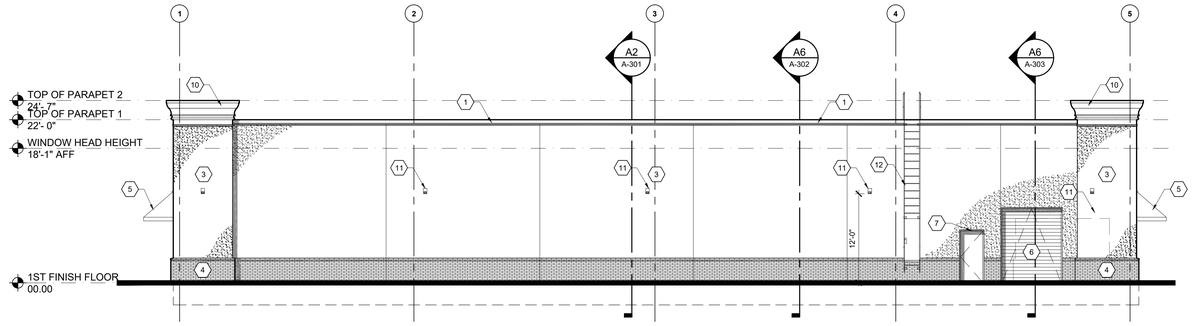
ROOF PLAN

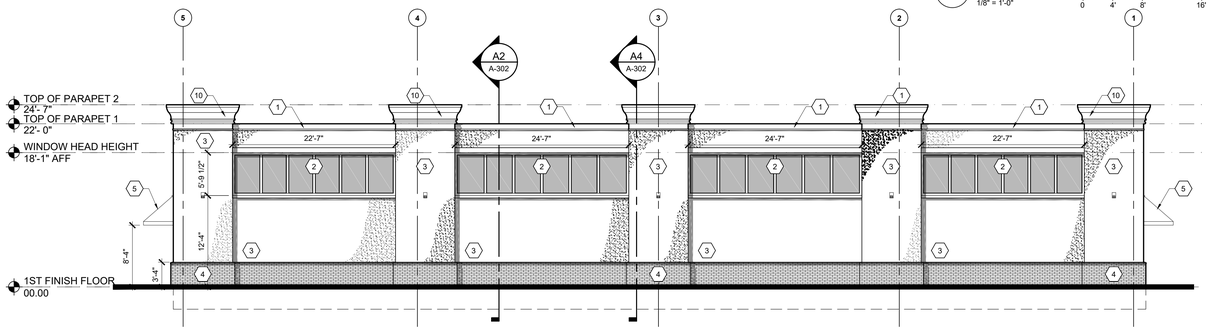
A-104



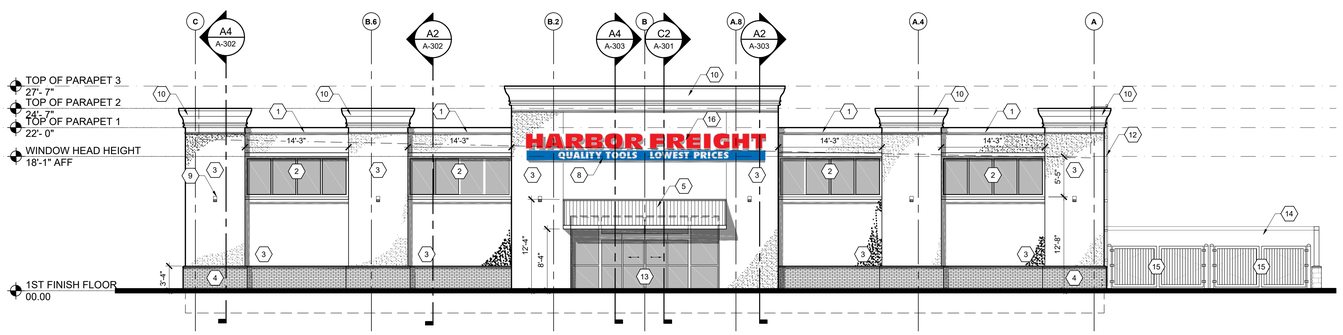
E2 ROBERT SMALLS ELEVATION
1/8" = 1'-0"



D2 REAR ELEVATION
1/8" = 1'-0"



B2 ACCESS ROAD ELEVATION
1/8" = 1'-0"



A2 ENTRANCE ELEVATION
1/8" = 1'-0"

GENERAL NOTES:

A. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO FIELD VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS
B. UNLESS NOTED OTHERWISE ALL DIMENSIONS ARE "CLEAR" - AT FACE OF FINISHED SURFACE
C. SEE SHEET A-202 FOR PAINT COLOR PATTERN
D. EIFS TO BE PAINTED SHERWIN WILLIAMS SW9150 ENDLESS SEA
E. PAINTED BRICK TO BE PRIMED WITH PORE BLOCK AND PAINTED WITH SHERWIN WILLIAMS SW7757
F. WHITE EIFS TO BE PAINTED SHERWIN WILLIAMS COLOR SW9541 WHITE SNOW

SHEET KEY NOTES: (X)

1. 8" HEAVY GAUGE METAL COPING TO LEAD TO SLOPED EIFS TRIM
2. ALUMINUM STOREFRONT
3. EIFS FINISH
4. PAINTED BRICK
5. STANDING SEAM METAL ROOF AWNING
6. METAL OVERHEAD DOOR
7. HOLLOW METAL DOOR AND FRAME
8. OWNER PROVIDED SIGNAGE
9. EXTERIOR WALL MOUNT LIGHT FIXTURE TO BE APPROVED BY TENANT. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
10. SHAPED EIFS CORNICE
11. EXTERIOR WALL MOUNT LIGHT FIXTURE AT 30'-0" OC. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION
12. WALL MOUNTED ROOF ACCESS LADDER WITH ACCESS DOOR. SEE DETAILS ON SHEET A-XXX
13. SLIDING AUTOMATIC ALUMINUM AND GLASS DOOR APPROVED BY TENANT. DOORS TO BE BREAK AWAY
14. EIFS AND MASONRY DUMPSTER ENCLOSURE TO MATCH BUILDING
15. PAINTED METAL DUMPSTER ENCLOSURE DOORS
16. TENANT SIGNAGE SHOWN FOR REFERENCE ONLY. SIGN TO BE PERMITTED AND INSTALLED UNDER A SEPARATE PERMIT. POWER TO BE PROVIDED AT PARAPET WALL. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION

BEAUFORT
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HARBOR FREIGHT BEAUFORT AT HIGHWAY 170

142 ROBERT SMALLS PARKWAY, BEAUFORT, SC, 29906

NOT FOR CONSTRUCTION

REVISIONS / SUBMISSIONS

NO.	DESCRIPTION	DATE

SHEET INFORMATION

DATE	JUNE 17, 2020
JOB NUMBER	19032.00
DRAWN	TWA
CHECKED	TWA
APPROVED	DCS

PROPOSED ELEVATIONS

A-201

D2 ROBERT SMALLS PERSPECTIVE
NOT TO SCALE

A2 ROBERT SMALLS PERSPECTIVE
NOT TO SCALE

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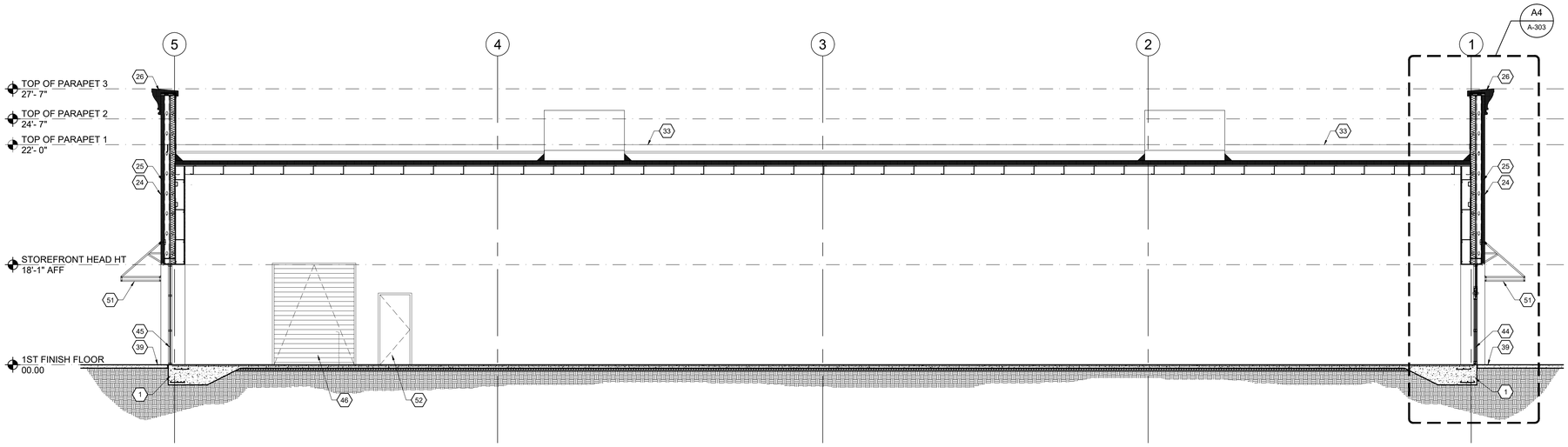
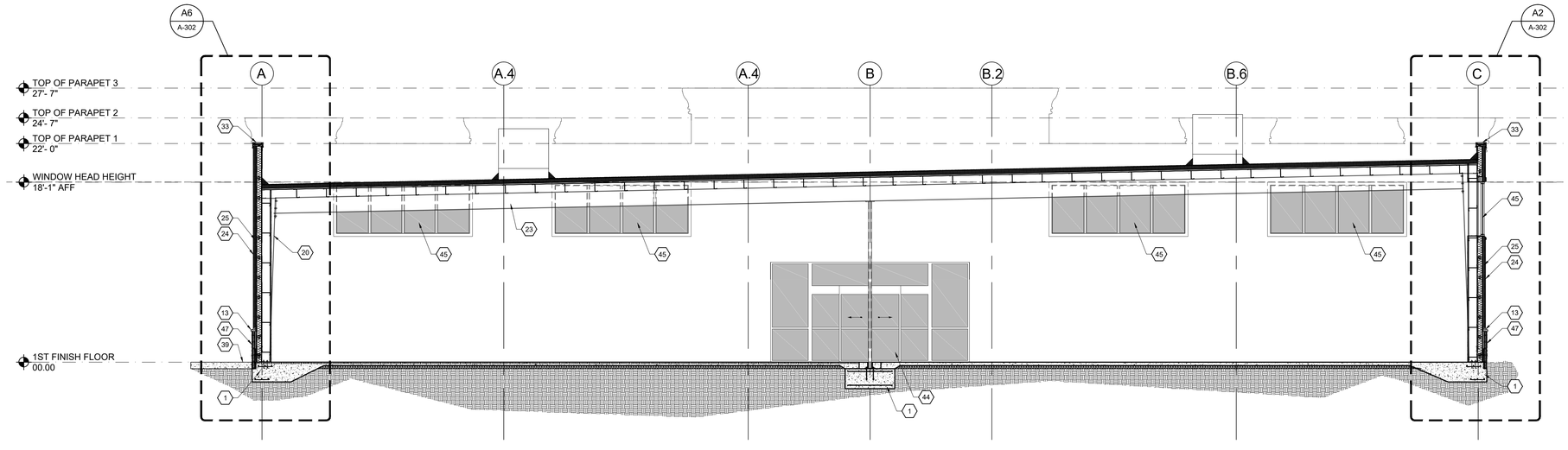
BUILING PERSPECTIVES

A-202



C2 BUILDING CROSS SECTION
3/16" = 1'-0"



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3/16" = 1'-0"

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2. WELDED WIRE MESH SEE STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION
3. #4 BAR AT 8" OC 4" BELOW SLAB FACE
4. SEE STRUCTURAL DRAWINGS FOR ANCHOR BOLTS
5. FULL MORTAR AT BACK OF BLOCK
6. HEAVY GAUGE METAL FLASHING RUNNING 6" MIN UP PLYWOOD
7. SYNTHETIC WEEP
8. MORTAR NET TO RUN AT LEAST 8" UP
9. 3/4" EXTERIOR GRADE PLYWOOD
10. 6 MILL VAPOR BARRIER OR ASPHALT IMPREGNATED FELT
11. 1" AIR GAP
12. GALVANIZED METAL MASONRY HANGER
13. PRE-MANUFACTURED MASONRY WATER TABLE
14. HEAVY GAUGE METAL FLASHING SET IN BED OF FULL SEALANT
15. EPS FOAM TO TERMINATE AT WEEP SCREED
16. FLUID APPLIED WATERPROOFING TO BE APPLIED 3'-0" ABOVE MASONRY
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18. 10" METAL Z-GURTS AT 36" OC PER PEMB SPECIFICATIONS
19. 6" METAL STUD AT 16" OC PROVIDE CHANNEL BLOCKING AT 42" OC
20. STEEL COLUMN BEYOND
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22. STEEL TUBE WELDED TO COLUMN
23. STEEL ROOF BEAM BOLTED TO STEEL COLUMN PER PEMB SPECIFICATIONS
24. EIFS LAMINA FINISH
25. 2-1/2" EPS FOAM
26. EIFS CORNICE TO SLOPE 1:12 MIN
27. EIFS CORNICE TO WRAP OVER COLUMN PARAPET CONTINUOUS
28. 2X STUD AND BLOCKING UNDER (2) LAYERS OF 3/4" PLYWOOD SHEATHING
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30. MEMBRANE TO WRAP OVER PARAPET
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32. MEMBRANE ROOF TO RUN UP PARAPET EDGE OR 1'-0"
33. HEAVY GAUGE METAL COPING
34. HEAVY GAUGE METAL COPING CLEAT
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36. 1/2" HARD BOARD OVER INSULATION AND FULLY ADHERED TO INSULATION AND MEMBRANE
37. R-38 RIGID INSULATION BOARD
38. 5/8" TYPE X GYP BD
39. 4" CONCRETE SIDEWALK WITH ISOLATION JOINT, REFER TO STRUCTURAL DRAWINGS
40. R-19 BATT INSULATION AT EXTERIOR WALLS
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43. HEAVY GAUGE METAL FLASHING OVER SEALANT AND SHIM PACK
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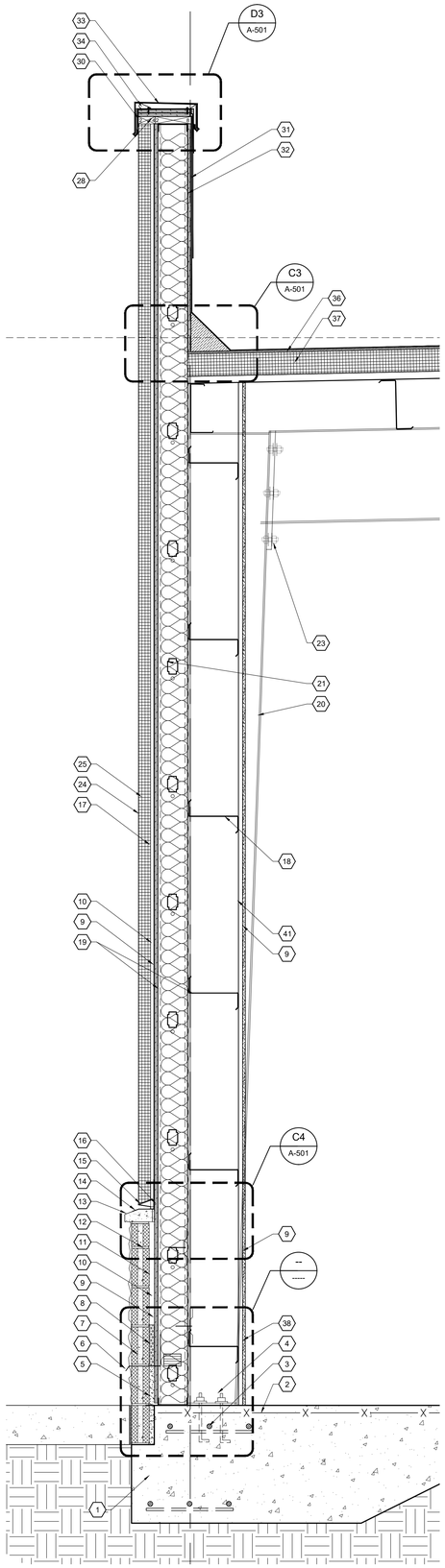
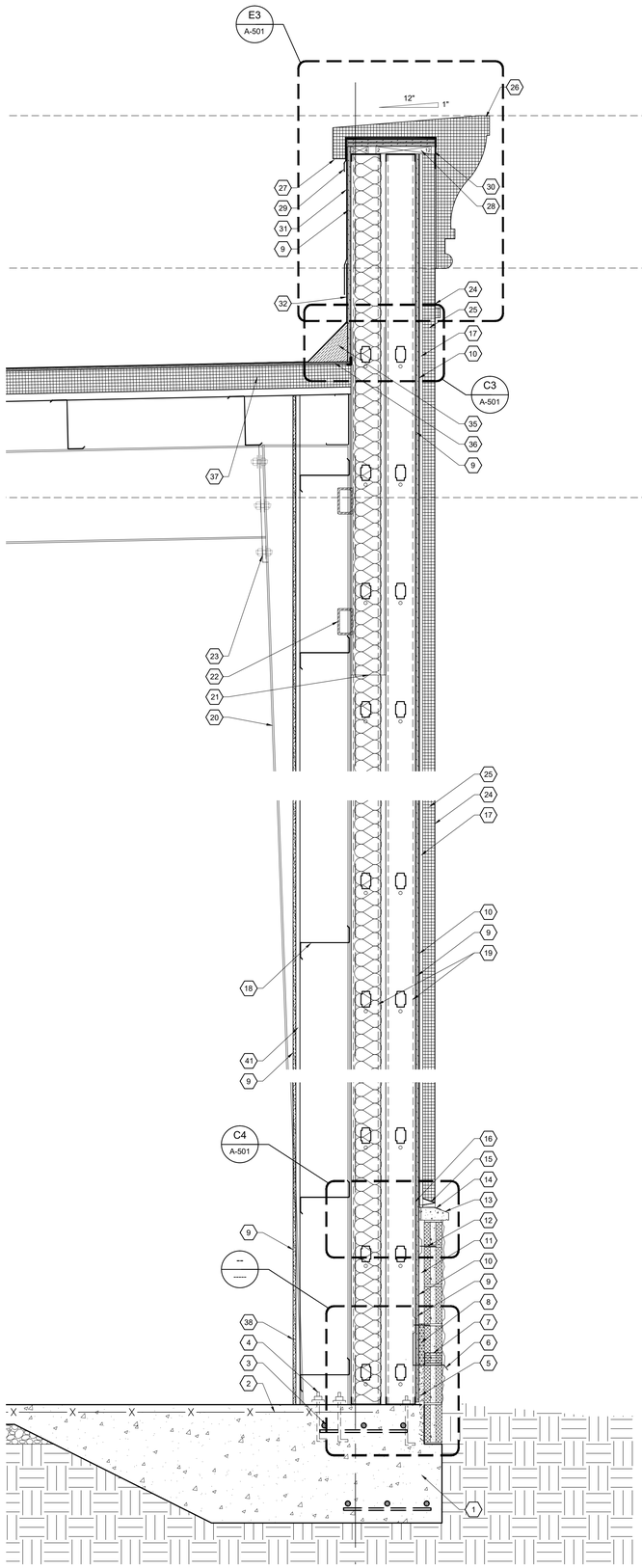
BUILDING SECTION

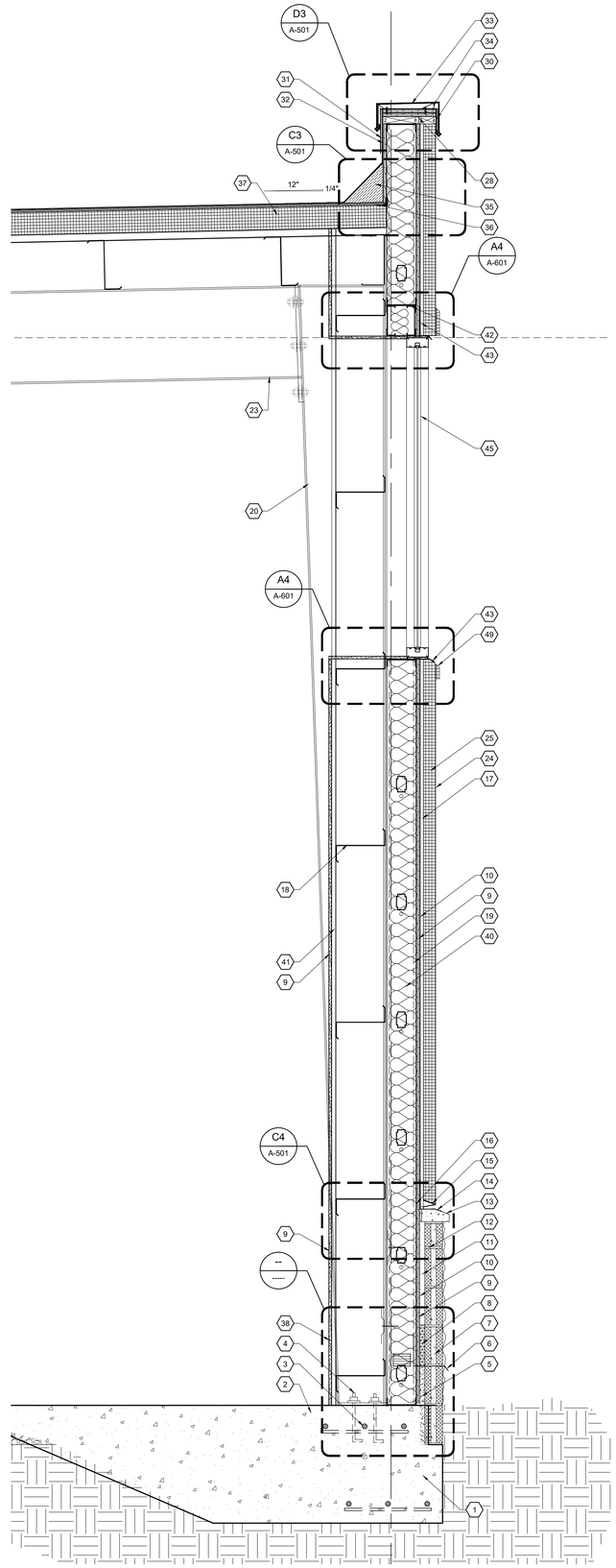
A-301



A6 REAR WALL SECTION
1" = 1'-0"



A4 PILASTER WALL SECTION
1" = 1'-0"



A2 TYPICAL STOREFRONT WALL SECTION
1" = 1'-0"

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24. EIFS LAMINA FINISH
25. 2-1/2" EPS FOAM
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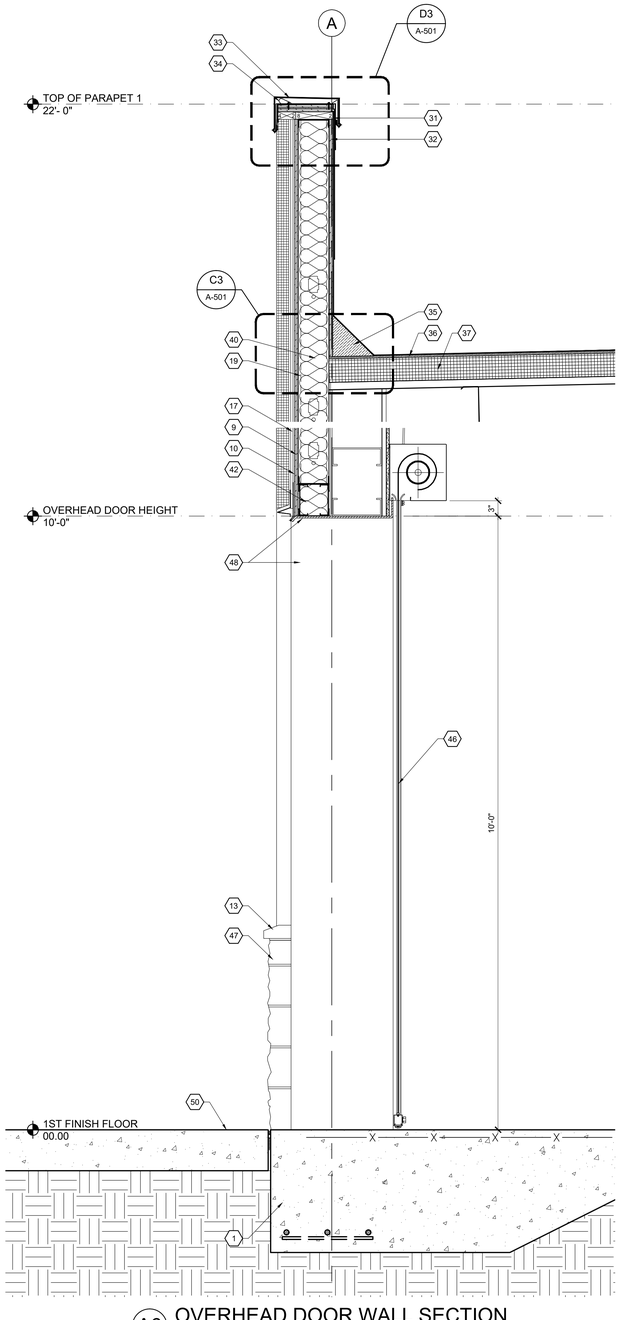
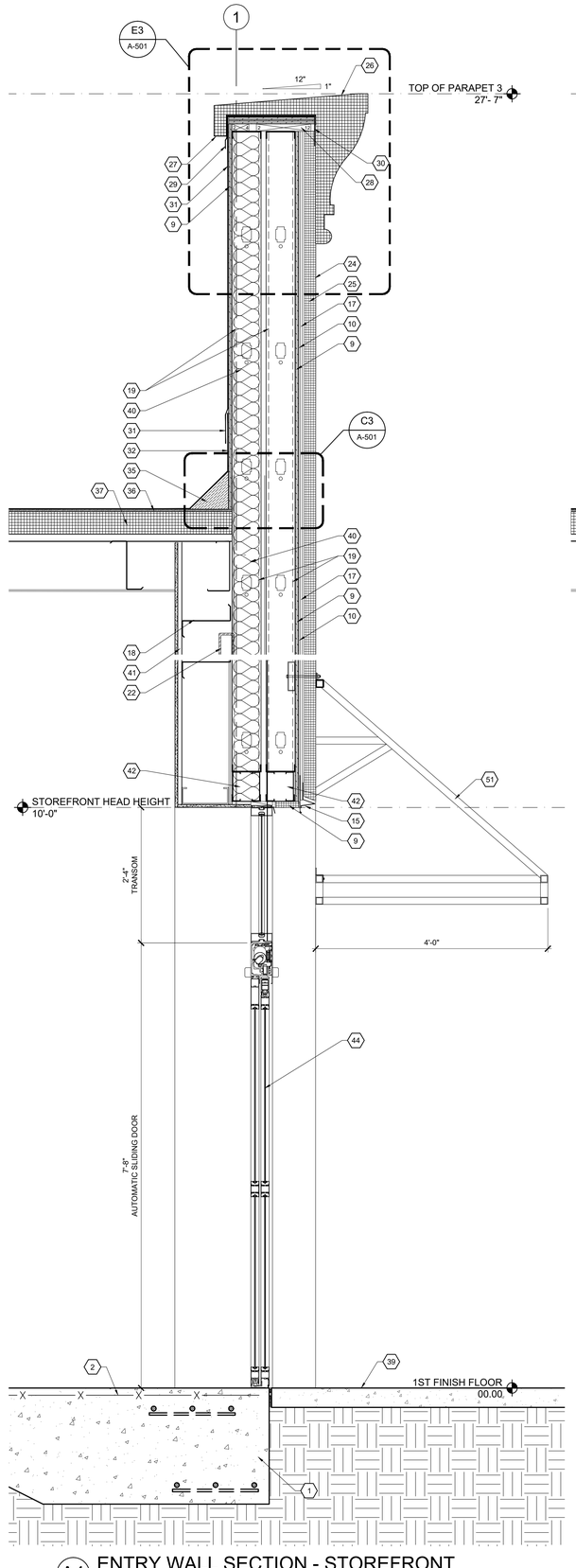
APPROVED	DCS

TYPICAL WALL SECTIONS

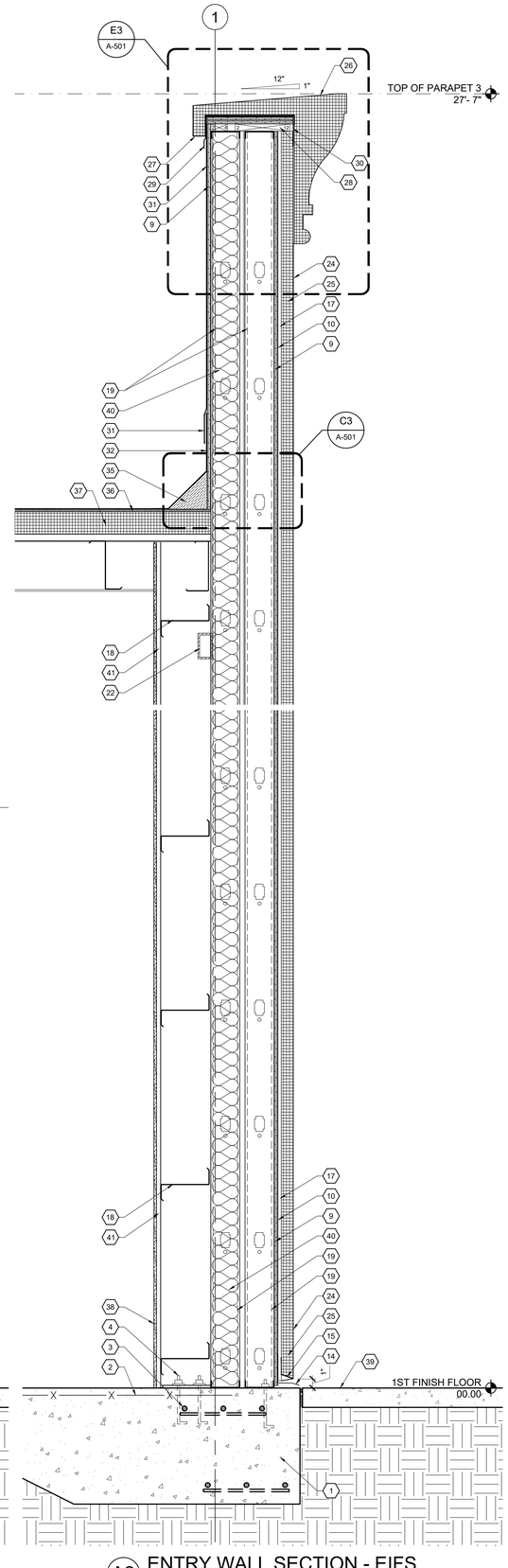
A-302



A6 OVERHEAD DOOR WALL SECTION
1" = 1'-0"



A4 ENTRY WALL SECTION - STOREFRONT
1" = 1'-0"



A2 ENTRY WALL SECTION - EIFS
1" = 1'-0"

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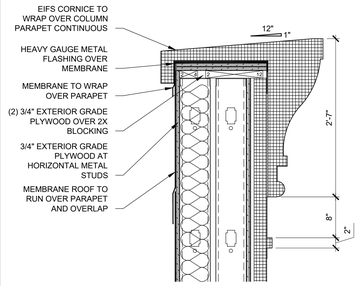
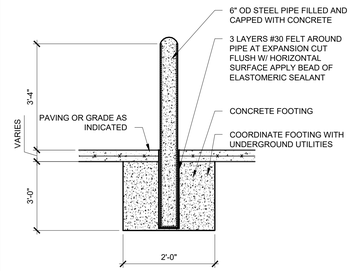
TYPICAL WALL SECTIONS

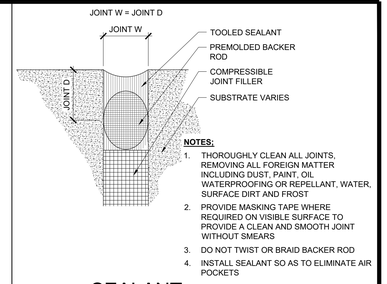
A-303



E3 CORNICE DETAIL
1" = 1'-0"



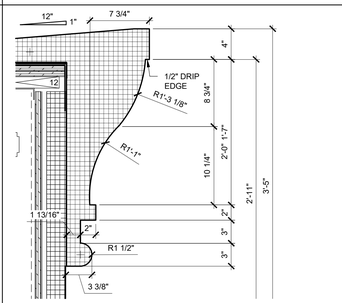
E2 PIPE BOLLARD DETAIL
3/4" = 1'-0"



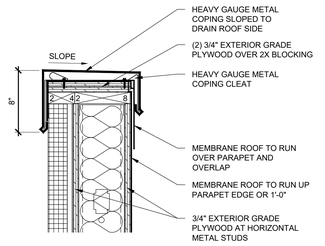
NOTES:

1. THOROUGHLY CLEAN ALL JOINTS, REMOVING ALL FOREIGN MATTER INCLUDING DUST, PAINT, OIL WATERPROOFING OR REPELLANT, WATER, SURFACE DIRT AND FROST
2. PROVIDE MASKING TAPE WHERE REQUIRED ON VISIBLE SURFACE TO PROVIDE A CLEAN AND SMOOTH JOINT WITHOUT SMEARS
3. DO NOT TWIST OR BRAID BACKER ROD
4. INSTALL SEALANT SO AS TO ELIMINATE AIR POCKETS

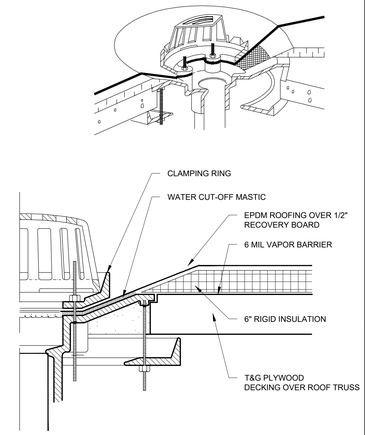
E1 SEALANT JOINT GEOMETRY DETAIL
1-1/2" = 1'-0"



D4 CORNICE SHAPE DETAIL
1-1/2" = 1'-0"



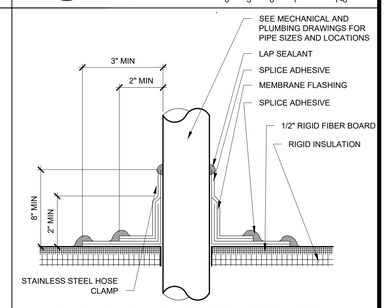
D3 COPING DETAIL
1-1/2" = 1'-0"



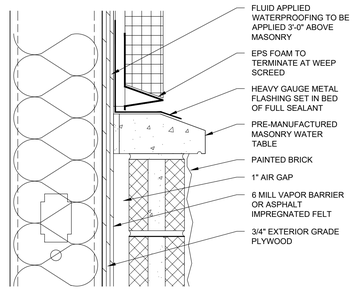
NOTES:

1. REMOVE ALL LEAD AND OTHER FLASHING
2. ALL BOLTS AND CLAMPS MUST BE IN PLACE TO PROVIDE CONSTANT COMPRESSION ON WATER CUT-OFF MASTIC
3. CUT MEMBRANE SO IT EXTENDS A MINIMUM OF 1/2" (13 mm) FROM THE ATTACHMENT POINTS OF THE DRAIN CLAMPING RING
4. DRAIN SUMPS SLOPE SHALL NOT EXCEED 3" (75 mm) IN 12"
5. LOCATE SPLICES AT LEAST 6" (150 mm) OUTSIDE DRAIN SUMP. IF SPLICES EXTEND UNDER CLAMPING RING, ENTIRE SPLICE OVERLAP MUST BE HOT AIR WELDED

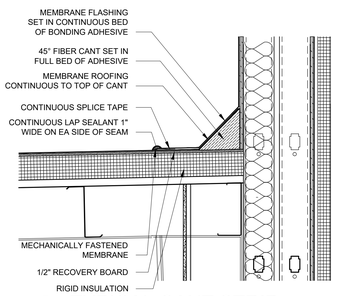
C2 ROOF DRAIN DETAILTEXT
1" = 1'-0"



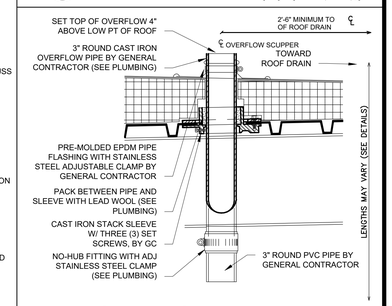
D1 ROOF VENT PENETRATION
1" = 1'-0"



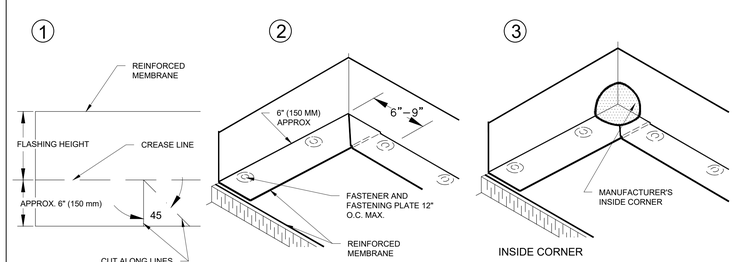
C4 WATER TABLE DETAIL
3" = 1'-0"

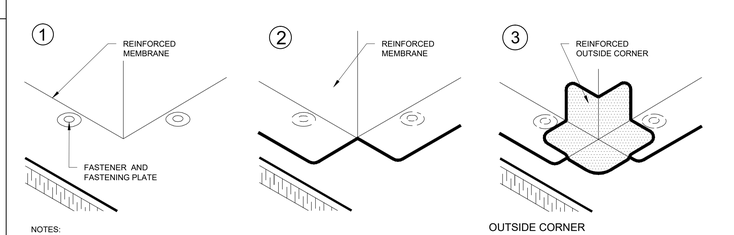


C3 TYPICAL CANT STRIP
1" = 1'-0"



C1 OVERFLOW DRAIN
1" = 1'-0"

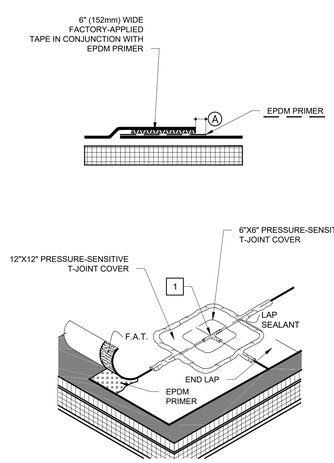




NOTES:

1. BEGIN INSTALLATION OF FASTENING PLATES 6" TO 9" (150 TO 230 mm) FROM THE CORNER
2. POSITION FASTENING PLATES 1/2" TO 1" (13 mm to 25 mm) FROM EDGE OF MEMBRANE
3. PROVIDE MINIMUM 1/8" (3 mm) DIAMETER BEAD OF CUT-EDGE SEALANT AT CUT EDGES REINFORCED MEMBRANE
4. FASTENERS AND PLATES AS RECOMMENDED BY ROOFING MANUFACTURER

ENLARGED CORNERS DETAIL
A4
1-1/2" = 1'-0"

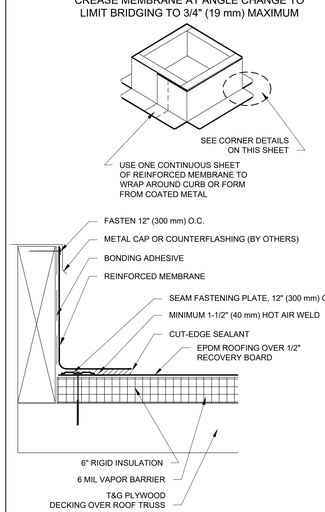


NOTES:

1. APPLY LAP SEALANT ALONG THE LEADING EDGE OF THE MEMBRANE SPLICE COVERING 1/2" (13mm) IN ALL DIRECTIONS FROM THE SPLICE INTERSECTION AND OVERLAY WITH A 6"X6" (152X152mm) T-JOINT COVER. A SECOND LAYER OF 12"X12" (305X305mm) PRESSURE-SENSITIVE T-JOINT COVER IS REQUIRED.

SEAM DETAILS
A3
1" = 1'-0"

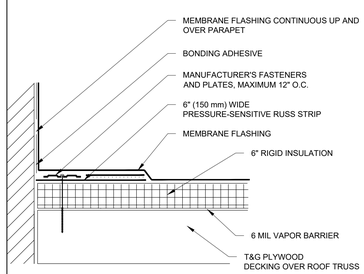
CREASE MEMBRANE AT ANGLE CHANGE TO LIMIT BRIDGING TO 3/4" (19 mm) MAXIMUM



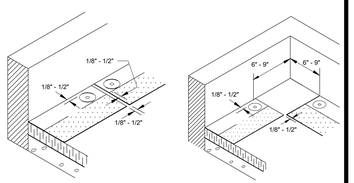
NOTES:

1. FLASHING MEMBRANE TO BE FASTENED APPROXIMATELY 12" ON CENTER. IF FASTENER PENETRATES METAL COUNTERFLASHING, USE NEOPRENE WASHER OR APPLY WATER CUT-OFF MASTIC UNDER COUNTERFLASHING OR CAULK FASTENER HEAD
2. APPROXIMATELY 1/8" (3 mm) BEAD OF CUT-EDGE SEALANT IS REQUIRED ON CUT EDGES OF REINFORCED MEMBRANE
3. FASTENERS AND PLATES TO BE AS RECOMMENDED BY ROOFING MANUFACTURER

CURB DETAILS
A2
1" = 1'-0"



PRIMER MUST BE APPLIED TO BACK SIDE OF MEMBRANE PRIOR TO ADHERING MEMBRANE TO PRESSURE-SENSITIVE RUSS STRIP



DECK TO WALL FLASHING
A1
1" = 1'-0"

BEAUFORT
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Seabrook, SC 29940

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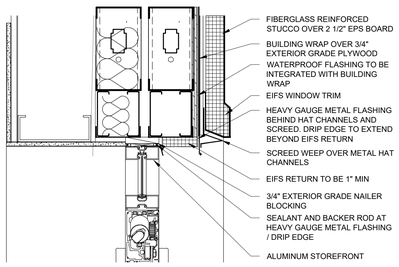
NO.	DESCRIPTION	DATE

SHEET INFORMATION

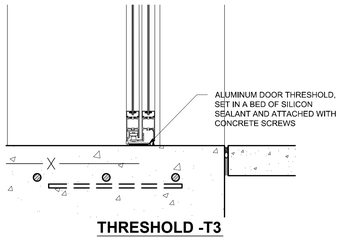
DATE	JUNE 17, 2020
JOB NUMBER	19032.00
DRAWN	TWA
CHECKED	TWA
APPROVED	DCS

DETAILS

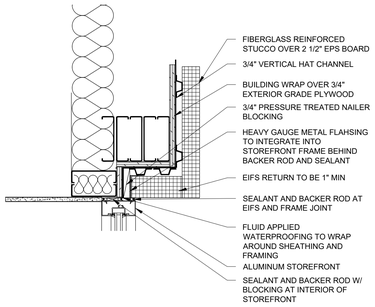
A-501



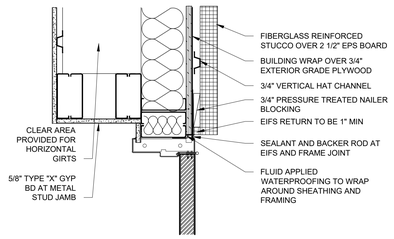
HEAD - H3



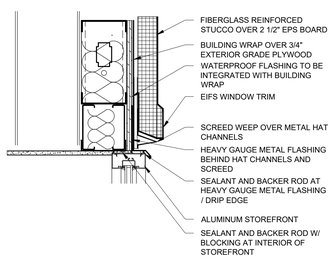
THRESHOLD -T3



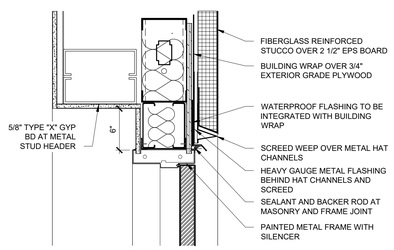
JAMB - J2



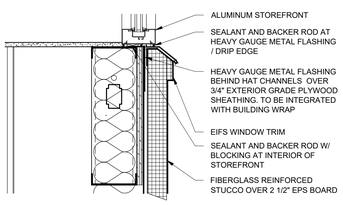
JAMB - J1



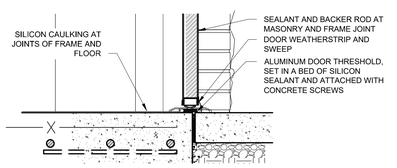
HEAD -H2



HEAD -H1



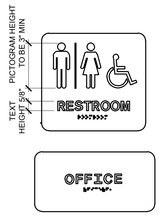
SILL - S2



THRESHOLD -T1

HEAD, JAMB, SILL AND THRESHOLD DETAILS

B4 NOT TO SCALE

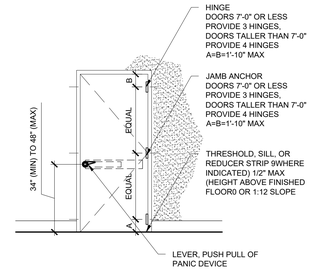


SIGN SPECIFICATIONS:

1. SIGNS SHALL COMPLY WITH THE INTERNATIONAL BUILDING CODE CHAPTER 11 - ACCESSIBILITY AND THE INTERNATIONAL CODE COUNCIL A117.1-2009 - ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES
2. TEXT/COPY SHALL BE SansSerif, RAISED 1/32" AND SHALL BE 5/8" HIGH, UPPER CASE
3. PICTOGRAMS SHALL BE RAISED 1/3" AND SHALL BE 3" HIGH UNLESS SHOWN OR NOTED OTHERWISE
4. EACH SIGN SHALL BE PROVIDED WITH GRADE 2 BRAILLE
5. SIGNS SHALL BE 1/8" THICK MELAMINE PLASTIC, SINGLE PIECE CONSTRUCTION (APPLIED CHARACTERS WILL NOT BE ACCEPTED)
6. TEXT AND PICTOGRAM SHALL BE WHITE. BACKGROUND SHALL BE SELECTED FROM MANUFACTURER'S STANDARD CONTRASTING COLORS
7. SIGNS SHALL BE MOUNTED WITH MANUFACTURER'S STANDARD VINYL FOAM TAPE
8. SIGN IMAGES SHOW TO THE LEFT ARE EXAMPLES. SIGN TEXT TO BE PROVIDED BY TENANT. PICTOGRAM TO MATCH TEXT

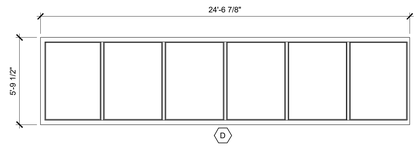
E2 RESTROOM AND OFFICE SIGNAGE

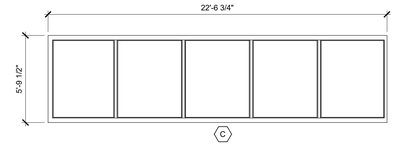
NOT TO SCALE

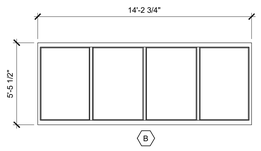


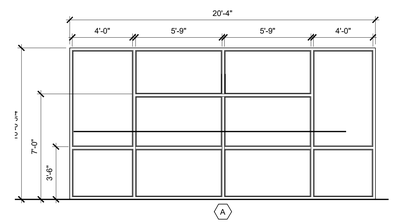
E1 DOOR AND HARDWARE MOUNTING

NOT TO SCALE



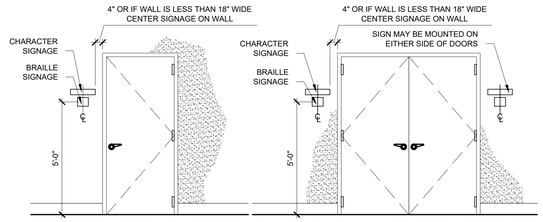






B3 WINDOW TYPES

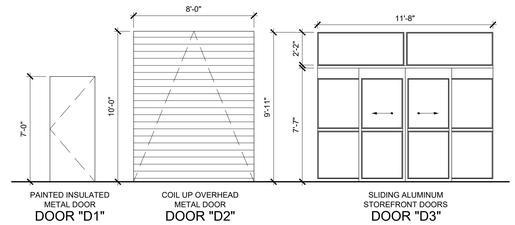
NOT TO SCALE

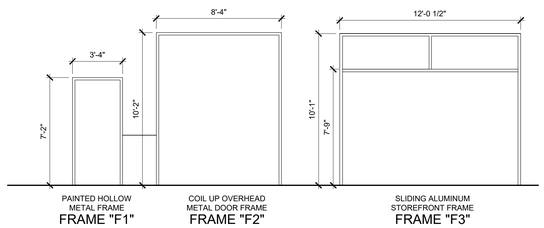


1. SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE OF THE DOOR, INCLUDING DOUBLE LEAF DOORS, SIGNS SHALL BE INSTALLED ON THE NEAREST ADJACENT WALL
2. MOUNTING HEIGHT SHALL BE 60" (5'-0") ABOVE FINISH FLOOR TO THE CENTERLINE OF THE SIGN
3. MOUNTING LOCATION SHALL BE SUCH THAT A PERSON MAY APPROACH WITHIN 3" OF THE SIGN WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF THE DOOR

D1 DOOR SIGN MOUNTING

NOT TO SCALE





B1 DOOR AND FRAME TYPES

NOT TO SCALE

DOOR AND FRAME SCHEDULE

DOORS						FRAME								
ROOM NUMBER	FIRE RATING	SIZE	TYPE	MATERIAL	FINISH	TYPE	MATERIAL	FINISH	HEAD DETAIL	JAMB DETAIL	THRESHOLD DETAIL	TRANSITION DETAIL	HARDWARE SETS	REMARKS
101	N/A	7'-7" X 11'-8"	D3	ALUM/GL	MFG	F3	ALUM	MFG	H3	J2	T3	-	-	-
102	N/A	3'-0" X 7'-0"	D1	SM	PT	F1	METAL	PT	H1	J1	T1	-	-	-
103	N/A	8'-0" X 10'-0"	D2	SM	PT	F2	METAL	PT	H4	J4	T4	-	-	-

ABBREVIATIONS:

ALUM	ALUMINUM
EXIST	EXISTING
GL	TEMPERED GLASS
HM	HOLLOW METAL
SM	INSULATED METAL
MFR	MANUFACTURER
SCW	SOLID CORE WOOD
HCW	HOLLOW CORE WOOD
HCW-L	HOLLOW CORE WOOD LOUVERED

NOTES:

1. TEXT

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NO.	DESCRIPTION	DATE

SHEET INFORMATION

DATE	JUNE 17, 2020
JOB NUMBER	19032.00
DRAWN	TWA
CHECKED	TWA
APPROVED	DCS

DOOR, AND WINDOW SCHEDULES AND DETAILS

A-601

FOR REFERENCE ONLY

PLUMBING FIXTURE SCHEDULE

MARK	DESCRIPTION	CW	HW	SAN	VENT	BASIS OF DESIGN
P-1	WATER CLOSET (ADA)	3/4"	-	3"	2"	TOTO DRAKE, TANK TYPE, ADA COMPLIANT,1.6 GPF, ELONGATED BOWL, MODEL CST744SLB,
P-2	LAVATORY (ADA)	1/2"	1/2"	1-1/4"	1-1/4"	TOTO COMMERCIAL, ADA COMPLIANT WALL HUNG LAVATORY, MODEL LT307, FAUCET: TOTO KEANE, SINGLE HANDLE ADA COMPLIANT, MODEL TL211SD
P-3	BREAK RM SINK	1/2"	1/2"	1-1/2"	1-1/2"	AMERICAN STANDARD COLONY, STAINLESS STEEL, SINGLE BOWL SINK, MODEL 22SB.6252283S.075, AMERICAN STANDARD COLONY PRO, TWO HANDL FAUCET, MODEL 7074.400
P-4	BI-LEVEL WATER COOLER	1/2"	-	1-1/4"	1-1/4"	ELKAY SWIRLFLO WALL MOUNTED, ADA COMPLIANT WATER COOLER, MODEL ERPBM28K
P-5	REFRIGERATOR ICE BOX	1/2"	-	-	-	OATEY I2K, WITH WATER HAMMER ARRESTOR

NOTES:

1. PROVIDE ANGLE STOP VALVES, SUPPLY TUBING, P-TRAPS, ESCUTCHEON PLATES, CARRIERS, ETC., FOR COMPLETE INSTALLATION.
2. ALL SUPPLY AND WASTE LINES SHALL BE CONCEALED IN ADJACENT WALL, FLOOR AND CEILING, UNLESS NOTED OTHERWISE.

OTHER DRAINAGE AND FIXTURE SPECIALTIES

UNLESS OTHERWISE INDICATED NUMBERS ARE JAY R. SMITH. EQUAL PRODUCTS: WATTS, ZURN, JOSAM AND WADE.

CO - FINISHED FLOORS:
JAY R. SMITH FIG. 4031 C.I. CLEANOUT WITH GASKET SEAL THREADED PLUG FOR EASY REMOVAL, ADJUSTABLE ROUND EXTRA HEAVY DUTY NICKEL BRONZE TOP, FLASHING FLANGE, SPEEDI-SET OUTLET CONNECTION.

CO - TILE FLOORS:
JAY R. SMITH FIG. 4151 C.I. CLEANOUT WITH GASKET SEAL THREADED PLUG FOR EASY REMOVAL, ADJUSTABLE ROUND NICKEL BRONZE TOP RECESSED FOR TILE WITH SECURING SCREW, SPEEDI-SET OUTLET CONNECTION.

WCO - WALL CLEANOUT
JAY R. SMITH FIG. 9776 THREADED WALL CLEANOUT WITH 6" LONG, VANDAL PROOF CENTER SCREW. POLISHED STAINLESS STEEL COVER PLATE.

WATER HAMMER ARRESTORS:
JAY R. SMITH 5000 SERIES ALL STAINLESS STEEL "HYDROTROLS". INSTALL IN AN UPRIGHT POSITION AT ALL FLUSH VALVES, AND OTHER QUICK CLOSING VALVES. LOCATE AND SIZE AS INDICATED ON DRAWINGS OR IN ACCORDANCE WITH PDI STANDARD WH-201. MINIMUM OF 1 PER END OF EACH CW/HW BRANCH PIPING.

HB - HOSE BIBB
JAY R. SMITH HOSE BIBB, FIG. 5509QT OR APPROVED EQUAL. 1/4 TURN, NON-FREEZE HYDRANT WITH INTEGRAL VACUUM BRAKER AND STAINLESS STEEL BOX WITH LOCKING COVER. PROVIDE 3/4" WATER SUPPLY WITH SHUT-OFF VALVE.

FD - FLOOR DRAINS-GENERAL/RESTROOMS:
JAY R. SMITH FIG.9600 FLOOR DRAIN WITH 5" DIAMETER OR 6"x6" NICKEL BRONZE STRAINER, 3" NO-HUB OUTLET CONNECTION AND TRAP PRIMER CONNECTION.

FOR REFERENCE ONLY

ELECTRIC WATER HEATER SCHEDULE

MARK	STORAGE CAP (GAL)	RECOVERY @ 80°F	ELECTRICAL (V/PH/HZ)	ELECTRICAL		BASIS OF DESIGN	NOTES
				NO. @ WATTS	OPERATION		
EWH-1	15	8	120/1/60	1@1500	NON-SIMILTANEOUS	AO SMITH DEL-15	SEE BELOW

NOTES:

1. PROVIDE 2.0 GALLON EXPANSION TANK, MODEL AMTROL ST-5 OR APPROVED EQUAL.
2. PROVIDE FULL-PORT BALL VALVES ON HOT AND COLD PIPING TO WATER HEATER.
3. PROVIDE SEISMIC RATED EQUIPMENT SUPPORTS.
4. PROVIDE WITH EMERGENCY DRAIN PAN.

PLUMBING LEGEND

	PIPE DROP
	PIPE RISE
	PIPE CAP
	BRANCH TAKE OFF
	PIPE DROP TEE
	PIPE RISE TEE
	CHECK VALVE
	UNION
	PIPE FLANGE
	CONCENTRIC REDUCER
	FLOW ARROW
	SHUTOFF VALVE (GATE VALVE)
	SANITARY PIPING (SAN)
	EXISTING SANITARY PIPING (SAN (E))
	SANITARY VENT PIPING (V)
	EXISTING SANITARY VENT PIPING (E)
	DOMESTIC COLD WATER PIPING (CW)
	EXISTING DOMESTIC COLD WATER (CW (E))
	DOMESTIC HOT WATER PIPING (HW)
NG	NATURAL GAS PIPING
FD	FLOOR DRAIN
FS	FLOOR SINK
	SANITARY VENT THROUGH ROOF(VTR)
CO	CLEAN OUT
GCO	GRADE CLEAN OUT
WCO	WALL CLEAN OUT
HB	HOSE BIBB

PLUMBING ABBREVIATIONS

EWH-X	ELECTRIC WATER HEATER DESIGNATION
P-X	PLUMBING FIXTURE DESIGNATION
AD	ACCESS DOOR
AHJ	AUTHORITY HAVING JURISDICTION
AP	ACCESS PANEL
AFF	ABOVE FINISHED FLOOR
DN	DOWN
(E)	EXISTING
FC	FLEXIBLE CONNECTION
GC	GENERAL CONTRACTOR
INV ELEV	INVERT ELEVATION
WPD	WATER PRESSURE DROP
TYP	TYPICAL

PLUMBING GENERAL NOTES AND SPECIFICATIONS

A. ALL PLUMBING WORK SHALL BE IN ACCORDANCE WITH INTERNATIONAL PLUMBING CODE (IPC) CURRENTLY ADOPTED BY THE AUTHORITY HAVING JURISDICTION.

B. PLUMBING SANITARY AND VENT PIPING SHOWN IS ONLY FOR DIAGRAMMATIC PURPOSES. COORDINATE VENT THROUGH ROOF LOCATION WITH HVAC AIR INTAKES. MAINTAIN MINIMUM CODE REQUIRED CLEARANCE TO INTAKES AND BUILDING OPENINGS.

C. PROVIDE CLEANOUTS AT THE BASE OF EACH SANITARY WASTE STACK IF TWO OR MORE LEVELS. CLEANOUTS SHALL BE SIZED TO MATCH THE PIPING BEING SERVED. FLOOR CLEANOUTS SHALL BE SPACED PER IPC AND ALL LOCAL CODES. ALSO PROVIDE CLEANOUTS IN HORIZONTAL CHANGE OF DIRECTIONS >45°.

D. THE MANUFACTURERS OF ALL EQUIPMENT SHOWN ARE THE BASIS OF DESIGN. CONTRACTOR SHALL PROVIDE EQUIPMENT OF EQUAL SPECIFICATIONS AND PERFORMANCE.

E. COORDINATE UNDERGROUND PIPING INVERT ELEVATIONS WITH STRUCTURAL FOOTING ELEVATIONS AND CIVIL INVERT CONNECTIONS PRIOR TO ANY UNDERGROUND PIPING INSTALLATIONS.

F. VALVES AND FITTINGS SHALL BE THE SAME SIZE AS THE PIPING WHERE THEY ARE LOCATED UNLESS NOTED OTHERWISE.

G. THE CONTRACTOR SHALL ROUGH-IN ALL WASTE AND WATER SUPPLIES FOR FIXTURES AND PERFORM FINAL CONNECTIONS AS NEEDED.

H. ALL FLOOR DRAINS SHALL BE PROVIDED WITH TRAP PRIMER CONNECTIONS. UNLESS NOTED OTHERWISE.

I. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND ELEVATIONS OF ALL PLUMBING FIXTURES.

J. HOT, COLD & RECIRCULATING WATER PIPING 1" AND SMALLER SHALL BE PEX PIPING ACCORDING TO ASTM F 876 WITH ASTM F 1807 METAL INSERT AND COPPER CRIMP RING FITTINGS. WITH APPROPRIATE FITTINGS AND CONNECTIONS. NO "SHARK BITE" FITTINGS WILL BE ALLOWED.

K. INSTALL HANGERS FOR PEX TUBING EVERY 32".

L. HOT, COLD & RECIRCULATING WATER PIPING 1-1/4" AND LARGER SHALL BE PVC PIPE (MEETING ASTM D 1785), SCHEDULE 40 WITH PVC SOCKET FITTINGS (ASTM D 2466) OR COPPER TUBING CONFORMING TO ASTM B-88 WITH SWEAT JOINTS AND CAST OR WROUGHT FITTINGS. JOINTS SHALL BE MADE WITH LEAD FREE SOLDER, J.W. HARRIS "BRIDGIT" OR EQUAL.

M. ALL SANITARY, WASTE AND VENT PIPING SERVING SHALL BE SCHEDULE 40 PVC-DWV PIPE AND FITTINGS WITH SOLVENT CEMENT JOINTS, PER ASTM D-1785 AND D-2665. ALL PIPE AND FITTINGS SHALL BE MANUFACTURED IN THE UNITED STATES AND CONFORM TO NSF-14. PVC PIPING SHALL NOT BE LOCATED IN RETURN AIR PLENUM SPACES. CELLULAR-CORE PVC SHALL BE PERMITTED UPON OWNER/ENGINEER APPROVAL.

N. ALL PIPING ABOVE GRADE SHALL BE PROPERLY SUPPORTED BY THE BUILDING STRUCTURE AND SHALL NOT REST ON CEILING TILES OR CEILING STRUCTURE. WATER PIPING SHALL BE HUNG USING COPPER LOOP HANGERS WITH INSULATION AND PIPE SADDLES OVER COPPER PIPING. SANITARY AND VENT PIPING SHALL BE HUNG USING GALVANIZED LOOP HANGERS FOR CAST IRON OR PVC PIPING.

O. WATER PIPING ROUTED IN EXTERIOR WALLS SHALL BE ROUTED ON THE HEATED SIDE (INSIDE) OF WALL INSULATION.

P. SANITARY AND DRAINAGE PIPING 2" AND SMALLER SHALL BE SLOPED AT 1/4" PER FOOT MINIMUM, PIPING 3" AND LARGER SHALL BE SLOPED AT 1/8" PER FOOT MINIMUM, UNLESS SHOWN OTHERWISE ON THE PLANS.

Q. TOPS OF ALL FLOOR DRAINS AND CLEAN OUTS SHALL BE SET FLUSH WITH FINISHED FLOOR.

R. LOCATE ALL SECTIONAL OR MAIN CONTROL VALVES WITHIN 1'-0" FROM ACCESS PANELS, CEILING TILES, OR OTHER POINT OF ACCESS.

S. ALL COLD WATER, HOT WATER AND DRAIN PIPING AT HANDICAPPED FIXTURES SHALL BE INSULATED WITH HANDI-LAV GUARD MODELS 102 AND 105 INSULATION KITS.

T. ALL EXPOSED PIPING PENETRATING CEILINGS AND WALLS SHALL BE INSTALLED WITH CHROME-PLATED ESCUTCHEONS AT THE PENETRATION. ALL PIPING PENETRATING EXTERIOR WALLS AND ROOFS SHALL BE FLASHED IN AN APPROVED MANNER AND SHALL BE PROTECTED AS REQUIRED BY LOCAL CODE AUTHORITY.

U. PROVIDE WATER HAMMER ARRESTORS SIZED PER PDI SPECIFICATIONS ON ALL DOMESTIC WATER LINES AND/OR WHERE NOTED ON THE DRAWINGS.

V. SHOP DRAWINGS SHALL BE SUBMITTED TO AND REVIEWED BY THE ARCHITECT/OWNER PRIOR TO ORDERING, PURCHASING, OR FABRICATING ANY EQUIPMENT OR SYSTEMS. SHOP DRAWINGS SHALL INCLUDE: ALL EQUIPMENT SCHEDULED ON THE DRAWINGS; PLUMBING FIXTURES AND TRIM; WATER HEATERS AND ACCESSORIES.

W. CONTRACTOR SHALL COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL PLUMBING EQUIPMENT WITH THE ELECTRICAL DRAWINGS, AND SHALL FURNISH EQUIPMENT WIRED FOR THE VOLTAGES SHOWN THEREIN.

X. ALL PIPE PENETRATIONS OF FIRE AND/OR SMOKE-RATED ASSEMBLIES SHALL BE FIRE-STOPPED AS REQUIRED TO RESTORE ASSEMBLY TO ORIGINAL INTEGRITY. FIRE BARRIER PRODUCTS SHALL BE AS MANUFACTURED BY 3M COMPANY, CP25 CAULK, CS195 COMPOSITE PANEL, FS195 WRAP/STRIP, OR PSS 7900 SERIES SYSTEMS AS RECOMMENDED BY MANUFACTURER FOR PARTICULAR APPLICATION, OR EQUIVALENT SYSTEM AS APPROVED BY LOCAL CODE OFFICIALS.

Y. PERFORM CORING, CUTTING , FITTING REPAIRING AND FINISHING OF THE WORK NECESSARY FOR THE INSTALLATION OF THE EQUIPMENT ON THIS PROJECT. HOWEVER, NO CUTTING OF THE WORK OF OTHER TRADES OR OF ANY STRUCTURAL MEMBER SHALL BE DONE WITHOUT THE CONSENT OF THE ARCHITECT AND PROPERTY MANAGER. PROPERLY FILL, SEAL, FIREPROOF AND WATERPROOF ALL OPENINGS, SLEEVES, AND HOLES IN SLABS. FURNISH AND INSTALL ALL REQUIRED SLEEVES AND INSERTS.

Z. ALL FLOOR PENETRATIONS THROUGH CONCRETE SLABS MUST BE CORE-BORED OR SAWCUT, SLEEVED, SEALED, FIRESTOPPED AND WATERPROOFED. ALL PIPING SLEEVES SHALL EXTEND A MINIMUM OF 4" ABOVE FINISHED FLOOR.

AA. TESTING OF ALL WATER PIPING AND DRAINAGE PIPING SHALL FOLLOW THE LATEST ADOPTED EDITION OF THE INTERNATIONAL PLUMBING CODE AND ALL STATE AMENDMENTS.

AB. PROTECTION OF THE WATER SUPPLY SYSTEM FOR THIS FACILITY SHALL MEET THE BACKFLOW PREVENTION DEVICE REQUIREMENTS OF THE IPC (CURRENTLY ADOPTED), SECTION 608.

AC. THE SANITARY AND WASTE INVERT ELEVATIONS PROVIDED ARE FOR REFERENCE ONLY. EXISTING PLANS DO NOT INDICATE PIPE INVERT ELEVATIONS FOR EXISTING SANITARY AND WASTE PIPING SYSTEMS. THE CONTRACTOR SHALL VERIFY EXISTING PIPE INVERT ELEVATIONS WITH CIVIL SITE DRAWINGS AND PROVIDE A SHOP DRAWING INDICATING SITE CONDITIONS PRIOR TO CONSTRUCTION.

AD. ALL MATERIALS LOCATED WITHIN THE CEILING RETURN AIR PLENUM SHALL BE NONCOMBUSTIBLE AND SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84.

AE. NATURAL GAS OR LP GAS PIPING:

AE.A. BALL VALVE: BRONZE BODY, RATED FOR 150 PSI AT 365°F, 250 PSI AT 250°F, REINFORCED TFE SEAT, STEM SEAL AND THRUST WASHER; END ENTRY, THREADED ENDS, UL-LISTED FOR NATURAL OR LP GAS SHUT OFF SERVICE WHEN USED ON THOSE SERVICES.

AE.B. FLEXIBLE CONNECTORS WITH TEFLON CORE, INTERLOCKED GALVANIZED STEEL PROTECTIVE CASING, AGA CERTIFIED DESIGN.

AE.C. TEST SHALL BE MADE IN ACCORDANCE WITH SECTION 406 OF THE INTERNATIONAL FUEL GAS CODE. THE SYSTEM SHALL BE TESTED AT A MINIMUM OF 1.5 TIMES MAXIMUM WORKING PRESSURE, BUT NOT LESS THAN 3 PSIG.

AE.D. PIPING INSTALLED OUTDOORS SHALL BE ELEVATED NOT LESS THAN 3-1/2 INCHES ABOVE GROUND AND WHERE INSTALLED ACROSS ROOF SURFACES, SHALL BE ELEVATED NOT LESS THAN 3-1/2 INCHES ABOVE THE ROOF SURFACE. PIPING INSTALLED ABOVE GROUND, OUTDOORS, AND INSTALLED ACROSS THE SURFACE OF ROOFS SHALL BE SECURELY SUPPORTED AND LOCATED WHERE IT WILL BE PROTECTED FROM PHYSICAL DAMAGE. WHERE PASSING THROUGH AN OUTSIDE WALL, THE PIPING SHALL BE PROTECTED AGAINST CORROSION BY COATING OR WRAPPING WITH AN INERT MATERIAL. WHERE PIPING IS ENCASED IN A PROTECTIVE PIPE SLEEVE, THE ANNULAR SPACE BETWEEN THE PIPING AND THE SLEEVE SHALL BE SEALED.

AF. PER THE INTERNATIONAL BUILDING CODE (IBC), PLUMBING EQUIPMENT AND COMPONENTS, INCLUDING SUPPORTS AND ATTACHMENTS, SHALL BE DESIGNED FOR SEISMIC FORCES IN ACCORDANCE WITH CHAPTER 13 OF ASCE 7-10. WHERE DESIGN FOR SEISMIC AND WIND LOADS ARE REQUIRED, THE MORE DEMANDING FORCE MUST BE USED. FOR ALL COMPONENTS REQUIRING SEISMIC RESTRAINT, THE COMPONENT SUPPORTS AND ATTACHMENTS SHALL BE DESIGNED BY A REGISTERED DESIGN PROFESSIONAL OR BE ACCOMPANIED BY THE APPROPRIATE ICC/ES EVALUATION REPORT. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT SUCH DESIGN AND INSTALLATION ARE IN ACCORDANCE WITH THE IBC REQUIREMENTS.

AG. ALL PLUMBING EQUIPMENT AND SYSTEMS SHALL BE GUARANTEED FOR A MINIMUM PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE.

SCALE: 1/2" = 1'-0"
SCALE: 3/8" = 1'-0"
SCALE: 1/4" = 1'-0"
SCALE: 3/16" = 1'-0"
SCALE: 1/8" = 1'-0"
SCALE: 1/16" = 1'-0"

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PROJECT TITLE: HARBOR FREIGHT BEAUFORT

LOCATION: BEAUFORT, SC

SHEET NAME: PLUMBING LEGEND, ABBREVIATIONS, NOTES & SPECIFICATIONS

REVISION	DATE

DRAWN BY:	ANA
CHECKED BY:	JDG
DATE:	June 1, 2020
PROJECT # :	19-257
P000 SHEET NO.	

100% DESIGN DEVELOPMENT

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

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

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

SCALE: 3/16" = 1'-0"

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

SCALE: 1/16" = 1'-0"

GENERAL DRAWING NOTES

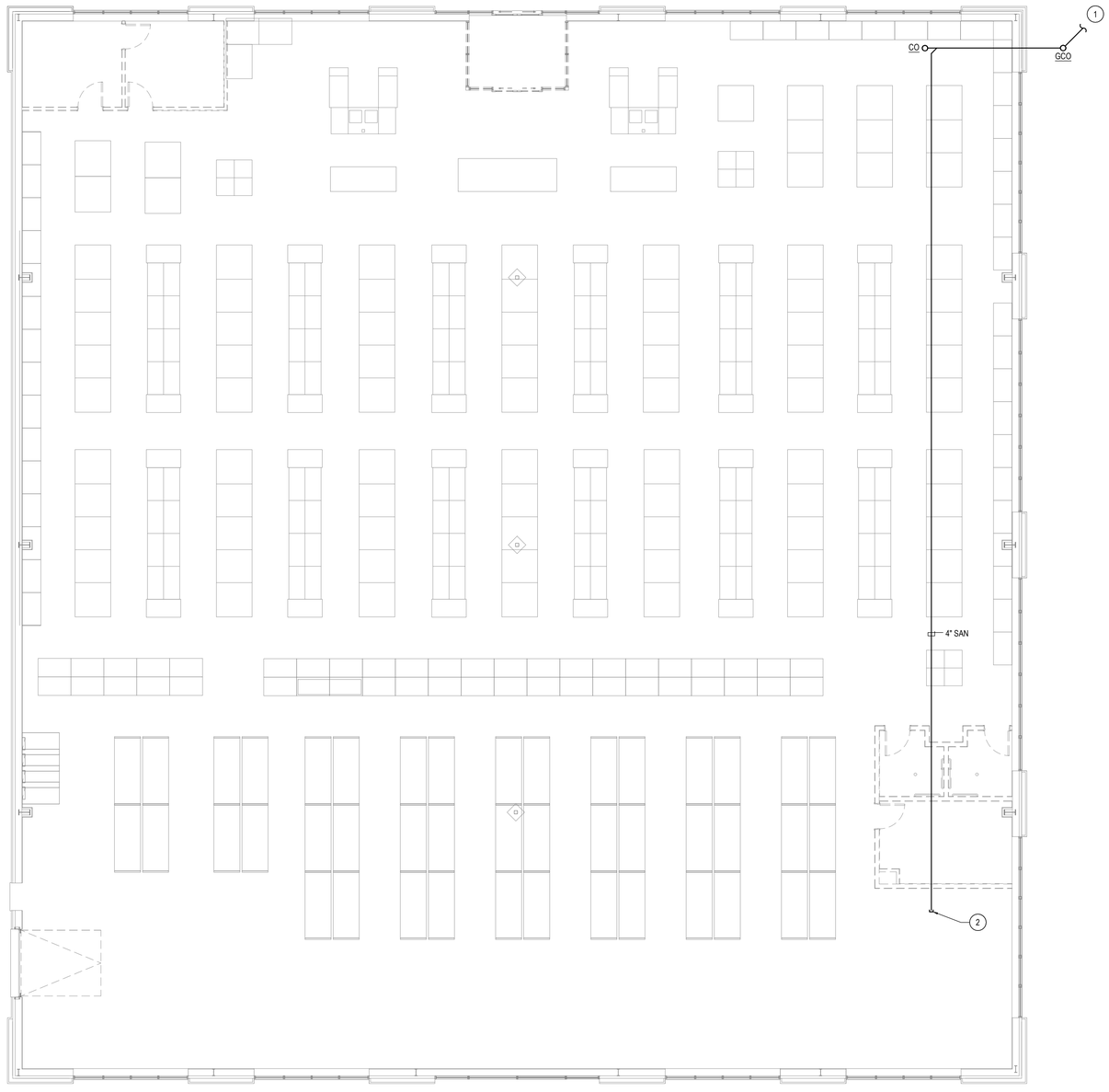
A. PIPE INVERT ELEVATIONS PROVIDED ON PLANS ARE FOR REFERENCE ONLY.

B. REFER TO PLUMBING FIXTURE SCHEDULE FOR FIXTURE DOMESTIC WATER, SANITARY AND VENT PIPING CONNECTION SIZES.

DRAWING NOTES (#)

1. CONNECT 4" SAN TO EXISTING 6" SAN. MIN -2' 10" INV. ELEV, COORDINATE WITH CIVIL SITE DRAWINGS.

2. 4" SAN STUB UP FOR FUTURE CONNECTION.



1 SANITARY AND VENT PIPING PLAN
1/8" = 1'-0"

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PROJECT TITLE:
HARBOR FREIGHT BEAUFORT

LOCATION:
BEAUFORT, SC

SHEET NAME:
PLUMBING - SANITARY AND VENT PLAN

REVISION		DATE

DRAWN BY:	ANA
CHECKED BY:	JDG
DATE:	June 1, 2020
PROJECT # :	19-257

P101
SHEET NO.

100% DESIGN DEVELOPMENT

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

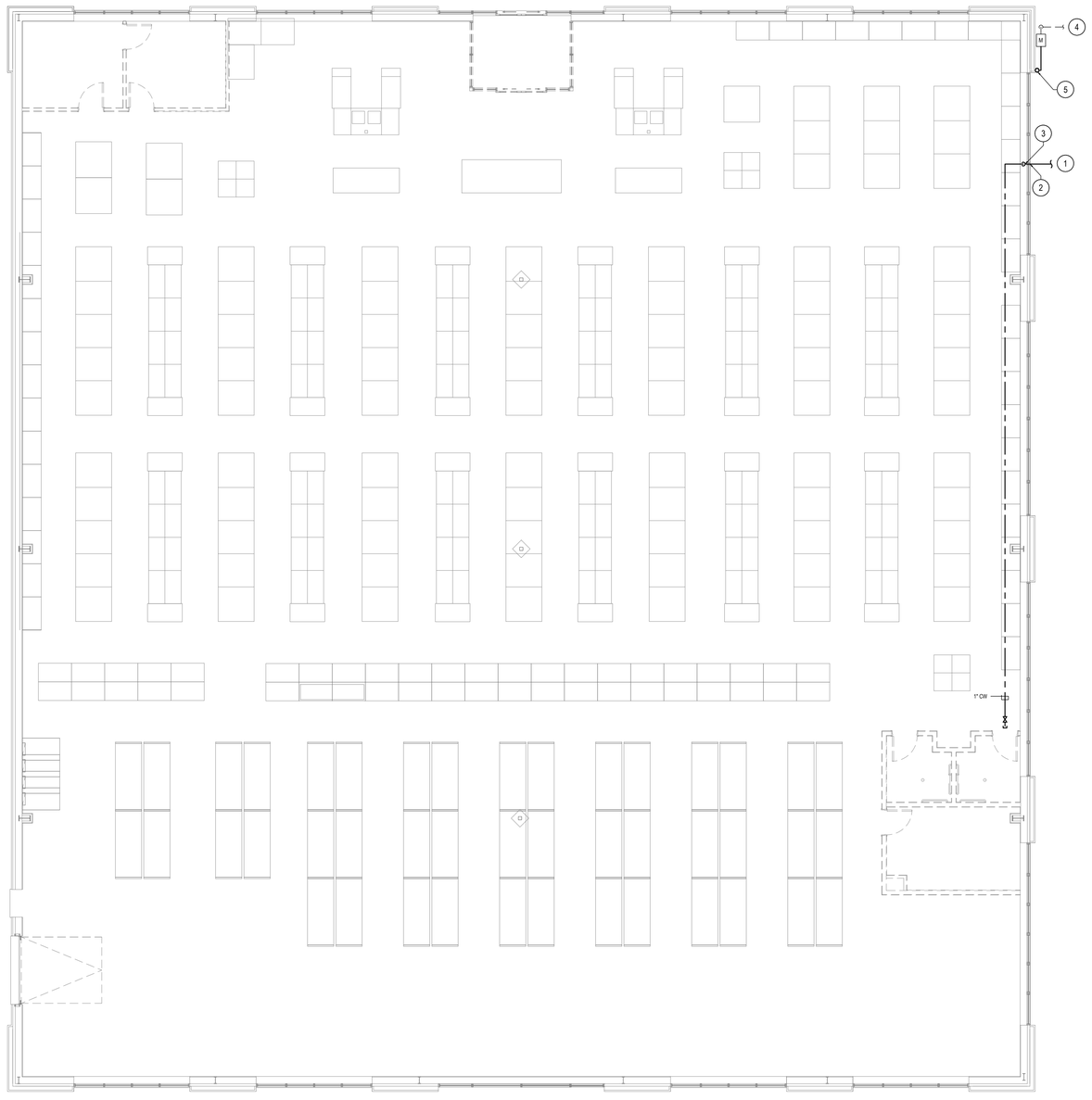
SCALE: 3/8" = 1'-0"

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

SCALE: 3/16" = 1'-0"

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

SCALE: 1/16" = 1'-0"



1 DOMESTIC WATER AND GAS PIPING PLAN - FIRST FLOOR
1/8" = 1'-0"

GENERAL DRAWING NOTES

A. PIPE INVERT ELEVATIONS PROVIDED ON PLANS ARE FOR REFERENCE ONLY.

B. REFER TO PLUMBING FIXTURE SCHEDULE FOR FIXTURE DOMESTIC WATER, SANITARY AND VENT PIPING CONNECTION SIZES.

C. COLD WATER PIPING TO BE INSULATED WITH 1" RIGID FIBERGLASS WITH VAPOR BARRIER UNIV. JACKET PASTED WITH VAPOR BARRIER CEMENT.

DRAWING NOTES (#)

1. 1" CW TO UTILITY AND SITE BACKFLOW/METER. COORDINATE WITH UTILITY, TYP.

2. PROVIDE WATER TIGHT PIPE SLEEVES AT ALL EXTERIOR WALL PENETRATIONS, TYPICAL.

3. 1" CW DN WALL TO BELOW GRADE, TYP. PROVIDE SHUT-OFF VALVE AND ACCESS DOOR (BY ARCH.)

4. INCOMING NATURAL GAS SERVICE AND METER PROVIDED BY UTILITY.
CONNECTED LOAD = 720 CFH
PIPING SIZED @ LESS THAN 2 PSI, SG=0.6, PER IFGC 2018 TABLE 402.4(2)

6. 2" NATURAL GAS TIGHT AGAINST WALL TO ROOF. SEE P202 FOR CONTINUATION.

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PROJECT TITLE:
HARBOR FREIGHT BEAUFORT

LOCATION:
BEAUFORT, SC

SHEET NAME:
PLUMBING - DOMESTIC WATER AND GAS PLAN - FIRST FLOOR

REVISION		DATE

DRAWN BY:	ANA
CHECKED BY:	JDG
DATE:	June 1, 2020
PROJECT # :	19-257

P201
SHEET NO.

100% DESIGN DEVELOPMENT

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

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

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

SCALE: 3/16" = 1'-0"

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

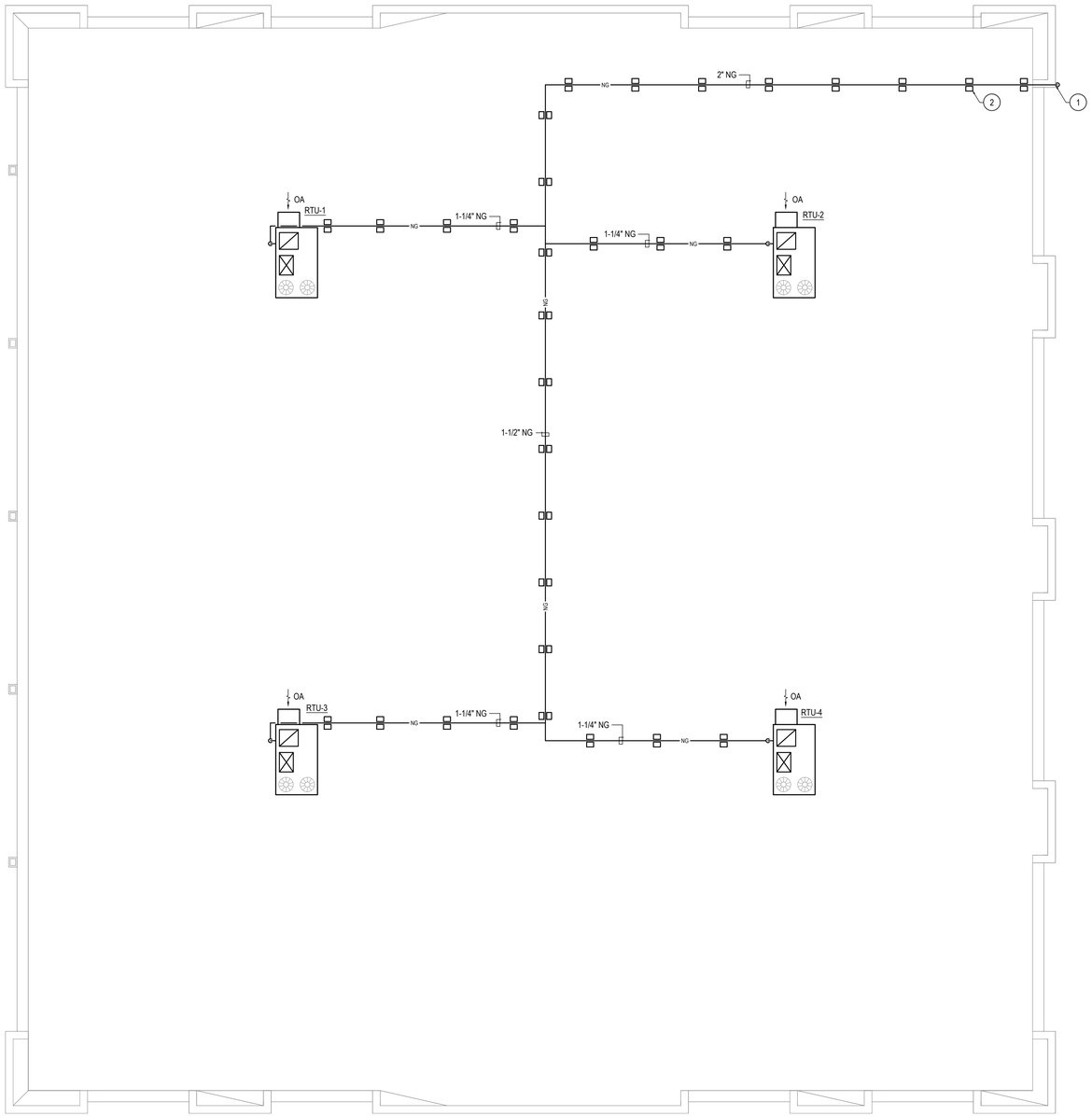
SCALE: 1/16" = 1'-0"

GENERAL DRAWING NOTES

A. COORDINATE INSTALLATION OF NATURAL GAS PIPING WITH MECHANICAL AND ROOFING CONTRACTOR.

DRAWING NOTES

1. 2" NATURAL GAS DN TO METER.
2. SEISMIC-RATED ROOF SUPPORT, 8FT. ON CENTER MIINIMUM. MIFAB CE-12 OR APPROVED EQUAL.COORDINATE WITH ARCHITECT, TYP.



1 DOMESTIC WATER AND GAS PIPING PLAN - ROOF
1/8" = 1'-0"

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PROJECT TITLE:
HARBOR FREIGHT BEAUFORT

LOCATION:
BEAUFORT, SC

SHEET NAME:
PLUMBING - DOMESTIC WATER AND GAS PLAN - ROOF

REVISION	DATE
1	

DRAWN BY:	ANA
CHECKED BY:	JDG
DATE:	June 1, 2020
PROJECT # :	19-257

P202
SHEET NO.

100% DESIGN DEVELOPMENT

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

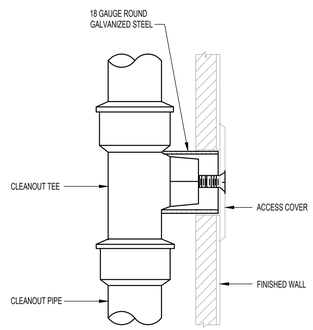
SCALE: 3/8" = 1'-0"

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

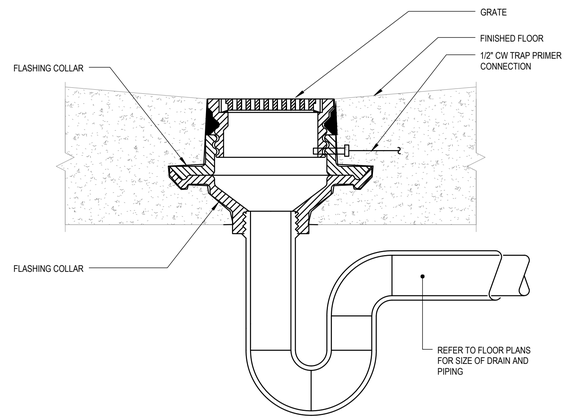
SCALE: 3/16" = 1'-0"

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

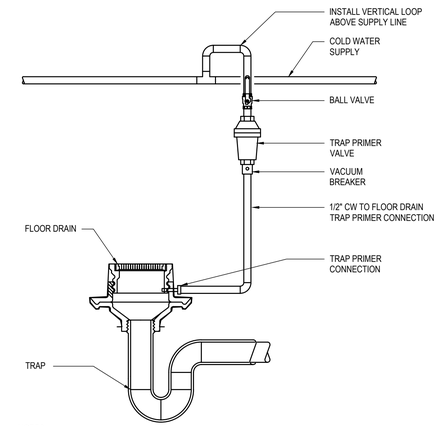
SCALE: 1/16" = 1'-0"



1 DETAIL - TYPICAL WALL CLEANOUT
NTS

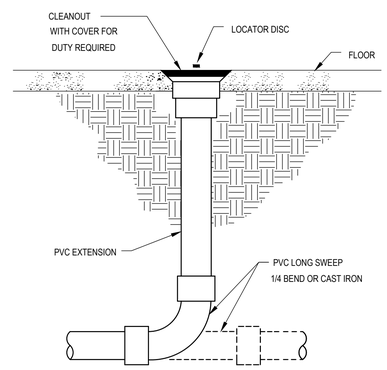


2 DETAIL - TYPICAL FLOOR DRAIN
NTS



NOTES:
1. TRAP PRIMER VALVE, SIOUX CHIEF 695 SERIES OR APPROVED EQUAL.
2. PROVIDE TRAP PRIMER VAVLE AT EACH FLOOR DRAIN LOCATION. REFER TO PLANS.

3 DETAIL - TYPICAL TRAP PRIMER VALVE AT FLOOR DRAIN
NTS



4 DETAIL - TYPICAL FLOOR CLEANOUT
NTS

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PROJECT TITLE:
HARBOR FREIGHT BEAUFORT

LOCATION:
BEAUFORT, SC

SHEET NAME:
MECHANICAL DETAILS

REVISION		DATE

DRAWN BY:	ANA
CHECKED BY:	JDG
DATE:	June 1, 2020
PROJECT # :	19-257

M501
SHEET NO.

100% DESIGN DEVELOPMENT

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

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

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

SCALE: 3/16" = 1'-0"

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

SCALE: 1/16" = 1'-0"

MECHANICAL LEGEND

CD	CONDENSATE PIPING
RL/RS	REFRIGERANT PIPING
	PIPE DROP
	PIPE RISE
	PIPE CAP
	BRANCH TAKE OFF
	PIPE DROP TEE
	PIPE RISE TEE
	SHUTOFF VALVE
	SUPPLY AIR DEVICE
	RETURN AIR DEVICE
	EXHAUST AIR DEVICE
	EXHAUST FAN
VD	ROUND SPIN-IN TAKE-OFF FITTING (SINGLE LINE)
VD	ROUND SPIN-IN TAKE-OFF FITTING
8"Ø OR 10x8	DUCT (INSIDE DIMENSIONS: DIAMETER OR WIDTH x DEPTH)
D	SMOOTH RADIUS ELBOW(D=1)
	METERED ELBOW W/TURNING VANES
	SQUARE TO ROUND TRANSITION
M	MOTOR OPERATED DAMPER
VD	VOLUME DAMPER(STAND OFF BRACKET AS REQUIRED).
	AIR FLOW ARROW
X CFM SIZE	AIR DEVICE TAG
T XXX.X	THERMOSTAT DEVICE
	3/4" DOOR UNDERCUT
	FLEXIBLE DUCTWORK (MAX 6' LENGTH)

MECHANICAL ABBREVIATIONS

RTU-X	ROOFTOP AIR HANDLING UNIT DESIGNATION
EF-X	EXHAUST FAN UNIT DESIGNATION
AD	ACCESS DOOR
AP	ACCESS PANEL
ADP	AIR PRESSURE DROP
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
BD	BACKDRAFT DAMPER
BOD	BOTTOM OF DUCT
CD	CONDENSATE PIPING
DG	DOOR GRILLE
DB	DRY BULB
DN	DOWN
EA	EXHAUST AIR
(E)	EXISTING
EAT	ENTERING AIR TEMPERATURE
EWT	ENTERING WATER TEMPERATURE
FD	FIRE DAMPER
FSD	FIRE/SMOKE DAMPER
FC	FLEXIBLE CONNECTION
GC	GENERAL CONTRACTOR
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
NIS	NOT IN SCOPE
OA	OUTSIDE AIR
RA	RETURN AIR
RG	RETURN GRILLE
RL/RS	REFRIGERANT LIQUID AND SUCTION PIPING
SA	SUPPLY AIR
TOD	TOP OF DUCT
WPD	WATER PRESSURE DROP

MECHANICAL GENERAL NOTES AND SPECIFICATIONS

A. GENERAL DESIGN CRITERIA:

1. THE HVAC SHALL BE DESIGNED IN ACCORDANCE WITH THE FOLLOWING CODES AND STANDARDS, LATEST EDITION:
   a. ASHRAE 90.1-2007 "ENERGY STANDARD FOR BUILDINGS EXCEPT LOW-RISE RESIDENTIAL BUILDINGS"
   b. ASHRAE 62.1-2010 "VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY"
   c. NFPA 101 SMACNA, "HVAC DUCT CONSTRUCTION STANDARDS- METAL AND FLEXIBLE"
   d. THE INTERNATIONAL MECHANICAL CODE (IMC)
2. OUTDOOR DESIGN CONDITIONS (BEAUFORT, SC - ASHRAE 0.4% DATA)
   a. SUMMER DESIGN DATA:
      - COOLING DRY BULB/WET BULB 94.9°F/ 78.2°F
   b. WINTER DESIGN DATA: (ASHRAE 99.6% DATA)
      - HEATING DRY BULB 28.1°F
3. SPACE TEMPERATURE AND HUMIDITY
   a. COOLING LOADS CALCULATED TO MAINTAIN 75°F/50% RH AND THE HEATING LOAD WILL BE CALCULATED TO MAINTAIN 70°F.
4. VENTILATION REQUIREMENTS
   a. MINIMUM OUTDOOR AIR REQUIREMENTS WILL BE PROVIDED AS PRESCRIBED BY ASHRAE 62.1 AND THE INTERNATIONAL MECHANICAL CODE (IMC), AS ADOPTED BY THE AUTHORITY HAVING JURISDICTION.

B. COMPLY WITH ALL APPLICABLE INTERNATIONAL BUILDING CODES IN THIS JURISDICTION FOR ALL WORK UNDER THIS CONTRACT.

1. INTERNATIONAL BUILDING CODE WITH AMENDMENTS.
2. INTERNATIONAL MECHANICAL CODE WITH AMENDMENTS.
3. NATIONAL FIRE PROTECTION AGENCY (NFPA)
4. AMERICAN SOCIETY OF HEATING AND REFRIGERATION ENGINEERS (ASHRAE)

F. FABRICATE ALL DUCTWORK IN ACCORDANCE WITH SMACNA STANDARDS. ALL DUCTWORK SHALL BE A MINIMUM OF 26 GAUGE.

G. PROVIDE ACCESS DOORS IN INACCESSIBLE CEILINGS TO ACCESS MEP DEVICES ABOVE CEILINGS NOT OTHERWISE ACCESSIBLE.

H. INSTALL FLEXIBLE DUCTS IN ACCORDANCE WITH SMACNA STANDARDS AND PROJECT SPECIFICATIONS.

I. MAXIMUM ALLOWED FLEXIBLE DUCT LENGTH SHALL NOT EXCEED SIX (6) FEET.

J. PROVIDE MANUAL VOLUME DAMPERS AT EACH DUCT BRANCH LEADING TO AN OUTLET/INLET OPENING. INSTALL DAMPERS AT MAIN DUCT CONNECTIONS. BALANCE, LOCK, AND TAG HANDLE WITH ORANGE RIBBON OR SOME SORT OF VISIBLE TAGGING TAPE.

K. DUCT PRESSURE CLASSIFICATION SHALL BE AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS. IF NOT INDICATED, IT SHALL BE AS FOLLOWS:

1. SUPPLY DUCTS : 2" POSITIVE
2. RETURN DUCTS: 2" NEGATIVE
3. EXHAUST DUCTS: 2" NEGATIVE

L. SEAL WITH GRAY WATER BASED DUCT SEALANT.

M. REFER TO AIR DEVICE SCHEDULE FOR INLET DUCT SIZES UNLESS OTHERWISE INDICATED.

N. VERIFY ARCHITECTURAL REFLECTED CEILING PLANS IN THE FIELD FOR EXACT LAYOUT LOCATION OF ALL CEILING GRILLES & DIFFUSERS, COORDINATE WITH ALL OTHER TRADES FOR THEIR LAYOUTS.

O. COORDINATE FINAL EQUIPMENT/FIXTURE LOCATIONS WITH THE GENERAL CONTRACTOR. THE LOCATION AS INDICATED ON THE DRAWING IS APPROXIMATE. INSTALL ALL MECHANICAL EQUIPMENT SUCH THAT MANUFACTURER'S MAINTENANCE AREA IS CLEAR, AND EASILY ACCESSIBLE.

P. COORDINATE ALL ROOF PENETRATION SIZES AND LOCATIONS WITH APPROVED EQUIPMENT SHOP DRAWINGS. ROOF REPAIR/FLASHING BY OTHERS.

Q. ALL ROOFTOP EQUIPMENT SHALL BE INSTALLED A MINIMUM OF 10'-0" FROM THE INSIDE OF PARAPET WALL IN ACCORDANCE WITH THE APPLICABLE MECHANICAL CODE.

R. COORDINATE ALL MECHANICAL, PLUMBING AND ELECTRICAL WORK & EQUIPMENT WITH STRUCTURAL MEMBERS, ELECTRICAL WORK, FIXTURES AND ALL OTHER TRADES.

S. DO NOT ROUTE ANY WET PIPING THROUGH ELECTRICAL, COMMUNICATION OR ELEVATOR EQUIPMENT ROOMS.

T. RUN ALL PIPING CONCEALED ABOVE CEILING EXCEPT WHERE INDICATED.

U. PROVIDE INSULATED TRAPPED CONDENSATION DRAIN PIPING, WITH AIR GAPS, FROM COOLING COIL DRAIN PANS TO NEAREST STORM DRAIN OR TO OUTSIDE AS INSTRUCTED BY THE ENGINEER, AND/OR AS SHOWN ON THE PLANS.

V. PROVIDE FLEXIBLE DUCT FLEXIBLE CONNECTION BETWEEN EACH DUCT FAN CONNECTION, MINIMUM 6".

W. PROVIDE VFD'S, STARTERS AND DISCONNECT SWITCHES FOR ALL MECHANICAL EQUIPMENT WHICH COMPLY WITH SPECIFICATIONS FOR MANUFACTURER, QUALITY, CONFORMANCE AND OPTIONS.

X. PROVIDE FIRE/SMOKE DAMPERS AT ALL DUCT PENETRATIONS OF ALL FIRE/SMOKE RATED ASSEMBLIES, TO MAINTAIN THE INTEGRITY OF THE ASSOCIATED FIRE/SMOKE ASSEMBLY.

Y. FIRESTOP/SMOKESTOP AND SLEEVE ALL PENETRATIONS THROUGH FIRE/SMOKE RATED ASSEMBLIES. REFER TO LIFE SAFETY PLANS FOR RATED ASSEMBLIES AND LOCATIONS.

Z. PROVIDE ALL CONCEALED SUPPLY AND RETURN DUCTWORK WITH 2" FOIL FACED FIBERGLASS WRAP INSULATION, FSK TAPE ALL SEAMS AND SEAL WITH GRAY WATER BASED DUCT SEALANT.

AA. ALL EXPOSED DUCTWORK SHALL BE DOUBLE WALL SPIRAL DUCTWORK WITH PAINT GRIP FINISH.

AB. PROTECT ALL OPENINGS IN DUCTWORK DURING CONSTRUCTION.

AC. REFER TO ELECTRICAL DRAWINGS FOR ALL ELECTRICAL REQUIREMENTS FOR EQUIPMENT.

AD. THE MECHANICAL CONTRACTOR IS TO COORDINATE WITH THE GENERAL CONTRACTOR AND OTHER TRADES REQUIRED OPENINGS IN WALLS, FOUNDATIONS, FLOORS, AND ROOFS.

AE. OUTSIDE AIR INLETS TO BE LOCATED A MINIMUM OF 10 FT FROM ANY EXHAUST AIR OUTLET OR PLUMBING VENT STACK. COORDINATE WITH THE PLUMBING AND THE GENERAL CONTRACTORS IN THE FIELD. OUTSIDE AIR INTAKES AND EXHAUST DISCHARGE FOR BUILDING VENTILATION WILL BE LOCATED A MINIMUM OF 10 FT ABOVE GRADE.

AF. THE MECHANICAL CONTRACTOR TO VERIFY MECHANICAL EQUIPMENT LOCATIONS AND BE RESPONSIBLE FOR ALL RELATED CLEARANCES IN THE FIELD AND PER IMC 2018, SECTION 306. PROVIDE ADEQUATE MAINTENANCE CLEARANCE AROUND EACH PIECE OF EQUIPMENT PER THE MANUFACTURER'S RECOMMENDATIONS. PROVIDE CLEARANCE IN FRONT OF ELECTRICAL PANELS AND OTHER ELECTRICAL EQUIPMENT PER THE NATIONAL ELECTRICAL CODE REQUIREMENTS. COORDINATE WITH THE ELECTRICAL AND GENERAL CONTRACTORS IN THE FIELD.

AG. PROVIDE WATER PROOF SEALING OF PIPE AND DUCT PENETRATIONS OF EXTERIOR WALLS, FLOORS, AND/OR ROOF.

AH. ALL DUCTWORK AND PIPING PENETRATING THROUGH RATED WALLS TO BE FIRE STOPPED.

AI. PENETRATIONS THROUGH FIRE RATED FLOORS AND WALLS ARE TO BE FIRE SEALED SO AS TO MAINTAIN FLOOR OR WALL INTEGRITY IN THE EVENT OF A FIRE.

AJ. VERIFY COLLAR SIZES ON ALL EQUIPMENT INLETS AND OUTLETS. TRANSITION DUCTWORK AS NECESSARY. EXTERNALLY INSULATE ALL TRANSITIONS AT EQUIPMENT CONNECTIONS.

AK. PROVIDE FLEXIBLE DUCT, PIPE CONNECTIONS, AND VIBRATION ISOLATORS FOR INTERNALLY ISOLATED UNITS.

AL. DO NOT MOUNT DISCONNECT SWITCHES ON HVAC EQUIPMENT EXCEPT AS RECOMMENDED BY MANUFACTURER.

AM. AVOID ROUTING DUCTWORK OVER LIGHTS WHEREVER POSSIBLE. MAINTAIN MINIMUM 6" CLEARANCE BETWEEN DUCT INSULATION TO TOP OF LIGHTS.

AN. KEEP MECHANICAL SYSTEMS TIGHT TO STRUCTURE AT ALL TIMES, MAINTAINING ACCESSIBILITY.

AO. ALL 90 AND 45 DEGREE ELBOWS SHALL HAVE TURNING VANES (DO NOT INCLUDE AT RADIUS TURNS OFF THE DISCHARGE OF AIR HANDLING UNITS).

AP. PRIOR TO STARTUP OF AIR HANDLING SYSTEMS, INSTALL AND MAINTAIN TEMPORARY FILTERS OVER ALL RETURN, EXHAUST AND RELIEF GRILLES AND OPENINGS. FILTRATION MEDIUM SHALL HAVE A RATING OF MERV 8 OR BETTER.

AQ. INSTALL DIELECTRIC UNIONS AT CONNECTIONS OF DISSIMILAR METALS.

AR. PROVIDE 3/4" ELASTOMERIC INSULATION FOR ALL CONDENSATE AND REFRIGERANT PIPING OR APPROVED EQUAL. TAPE AND SEAL ALL SEAMS AND EDGES WITH THE MANUFACTURER'S RECOMMENDED MATERIALS.

AS. HVAC PIPING

1. ALL REFRIGERANT PIPING SHALL BE COPPER TUBE, TYPE ACR ASTM B280 WITH WROUGHT COPPER FITTINGS (ASME B16.22). ALL PIPING SHALL BE RATED FOR 380 PSI TESTING PRESSURE.
2. SOLDER FILLER METALS SHALL BE ASTM B32, 95-5 TIN ANTIMONY OR ALLOY HB SOLDER TO JOIN COPPER FITTINGS. BRAZING FILLER METALS SHALL BE AWS A5.8/A5.8M.
3. PROVIDE 1" ELASTOMERIC INSULATION ON SUCTION PIPING AND FITTINGS, ARMAFLEX OR EQUAL. SEAL WITH APPROPRIATE PRODUCT SEALANT FOR ALL SEAMS AND JOINTS. INSULATION SHALL BE PROVIDED ON LIQUID LINE PIPING WHEN USING VARIABLE REFRIGERANT FLOW SYSTEMS, PER MANUFACTURER'S WRITTEN GUIDELINES.

AT. TESTING AND BALANCING (TAB)

1. PROVIDE TESTING AND BALANCING ON EACH SYSTEM IN ACCORDANCE WITH AABC, ASHRAE 111, NEBB AND SMACNA'S HVAC SYSTEMS - TESTING, ADJUSTING, AND BALANCING.
2. CONTRACTOR SHALL EXAMINE ALL CONTRACT DOCUMENTS AND BECOME FAMILIAR WITH PROJECT CONDITIONS REQUIREMENTS AND ANY OTHER RELATED EXISTING CONDITIONS. EXAMINE EQUIPMENT AND MATERIAL SUBMITTALS, DESIGN DATA AND PERFORMANCE CRITERIA.
3. CONTRACTOR SHALL REPORT DEFICIENCIES DISCOVERED BEFORE AND DURING PERFORMANCE TAB PROCEDURES.
4. CONTRACTOR SHALL PREPARE A TAB PLAN INCLUDING EQUIPMENT AND SYSTEMS TO BE TESTED, STRATEGIES, INSTRUMENTS, AND SAMPLES.
5. IF INITIAL TAB PROCEDURES WERE NOT PERFORMED DURING PEAK SUMMER AND WINTER CONDITIONS, PERFORM ADDITIONAL TAB DURING NEAR-PEAK SUMMER AND WINTER CONDITIONS.

AU. CONDENSATE PIPING

1. ALL PIPING SHALL BE SCHEDULE 40 PVC-DWV PIPE AND FITTINGS WITH SOLVENT CEMENT JOINTS, PER ASTM D-1785 AND D-2665. ALL PIPE AND FITTINGS SHALL BE MANUFACTURED IN THE USA TO CONFORM TO NSF-14.
2. PROVIDE 1" ELASTOMERIC INSULATION, ARMAFLEX OR EQUAL. SEAL WITH APPROPRIATE PRODUCT SEALANT FOR ALL SEAMS AND JOINTS.

AV. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO ANY BID SUBMISSION TO FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS. THE CONTRACTOR SHALL MAKE ADJUSTMENTS IN ROUTING AND LOCATION AND, IF NECESSARY, IN SIZE, IN ORDER TO ACHIEVE THE SPECIFIED PERFORMANCE WITHOUT INCURRING ADDITIONS TO THE CONTRACT. WHERE EXISTING CONDITIONS DIFFER SIGNIFICANTLY ENOUGH TO AFFECT PRICING, THE CONTRACTOR SHALL NOTIFY THE BUILDING OWNER/MANAGER PRIOR TO BID SUBMISSION FOR A RESOLUTION. NO ALLOWANCE WILL BE MADE FOR LACK OF KNOWLEDGE OF EXISTING CONDITIONS.

AW. PER THE INTERNATIONAL BUILDING CODE (IBC), MECHANICAL EQUIPMENT AND COMPONENTS, INCLUDING SUPPORTS AND ATTACHMENTS, SHALL BE DESIGNED FOR SEISMIC FORCES IN ACCORDANCE WITH CHAPTER 13 OF ASCE 7-10. WHERE DESIGN FOR SEISMIC AND WIND LOADS ARE REQUIRED, THE MORE DEMANDING FORCE MUST BE USED. FOR ALL COMPONENTS REQUIRING SEISMIC RESTRAINT, THE COMPONENT SUPPORTS AND ATTACHMENTS SHALL BE DESIGNED BY A REGISTERED DESIGN PROFESSIONAL OR BE ACCOMPANIED BY THE APPROPRIATE ICC/ES EVALUATION REPORT. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT SUCH DESIGN AND INSTALLATION ARE IN ACCORDANCE WITH THE IBC REQUIREMENTS.

AX. ALL MECHANICAL EQUIPMENT AND SYSTEMS SHALL BE GUARANTEED FOR A MINIMUM PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE.

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Project #19-257 843-203-6158 - OFFICE

SOUTH CAROLINA HENSLEY AND GOERLING CONSULTING ENGINEERS, LLC No. 5229 CERTIFICATE OF AUTHORIZATION

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PROJECT TITLE:
HARBOR FREIGHT BEAUFORT

LOCATION:
BEAUFORT, SC

SHEET NAME:
MECHANICAL LEGEND, ABBREVIATIONS, NOTES & SPECIFICATIONS

REVISION		DATE
	A	

DRAWN BY:	ANA
CHECKED BY:	JDG
DATE:	June 1, 2020
PROJECT # :	19-257

M000 SHEET NO.

100% DESIGN DEVELOPMENT

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

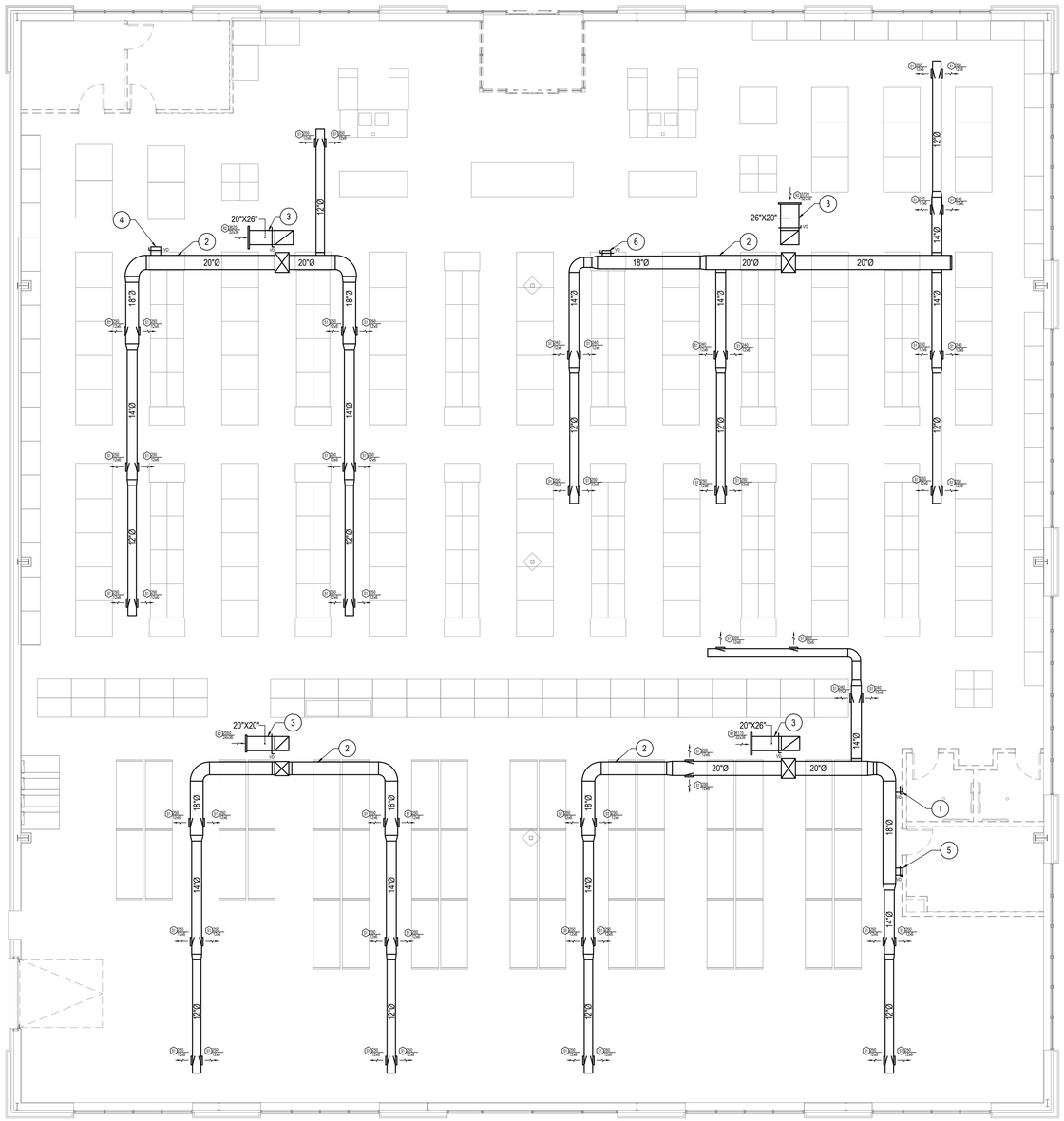
SCALE: 3/8" = 1'-0"

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

SCALE: 3/16" = 1'-0"

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

SCALE: 1/16" = 1'-0"



1 HVAC PLAN
1/8" = 1'-0"

GENERAL DRAWING NOTES

A. CONTRACTOR SHALL COORDINATE DUCTWORK ROUTING WITH LIGHTING, PIPING, AND STRUCTURAL PLANS. FIELD ADJUST ROUTING AS REQUIRED TO AVOID CONFLICTS.

B. ALL EXPOSED DUCT TO BE GALVANIZED SPIRAL, ALL OTHER TO BE LONGITUDINAL SEAM

DRAWING NOTES (#)

1. 6"Ø SA DUCT OPEN TO SPACE WITH VD FOR FUTURE UPFIT, BALANCED TO 100 CFM.
2. SA DUCTWORK TO BE 2" W.C. GALVANIZED STEEL, ACOUSTICALLY-LINED WITH 1" INTERNAL LINER EQAUL OR EQUIVALENT TO JOHNS MANVILLE PERMACOTE LINACOUSTIC.
3. OPEN ENDED RETURN DUCT WITH 1/2"x1/2" BIRD SCREEN, TYPICAL. RA DUCT TO BE 1" W.C. GALVANIZED STEEL WITH 1" BOARD INSULATION, 6 PSF AND PLAIN FACING.
4. 14"Ø SA DUCT OPEN TO SPACE WITH VD FOR FUTURE UPFIT, BALANCED TO 1000 CFM.
5. 10"Ø SA DUCT OPEN TO SPACE WITH VD FOR FUTURE UPFIT, BALANCED TO 400 CFM.
6. 12"Ø SA DUCT OPEN TO SPACE WITH VD FOR FUTURE UPFIT, BALANCED TO 480 CFM.

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PROJECT TITLE:
HARBOR FREIGHT BEAUFORT

LOCATION:
BEAUFORT, SC

SHEET NAME:
MECHANICAL PLAN

REVISION	DATE
A	

DRAWN BY:	ANA
CHECKED BY:	JDG
DATE:	June 1, 2020
PROJECT # :	19-257

M101
SHEET NO.

100% DESIGN DEVELOPMENT

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

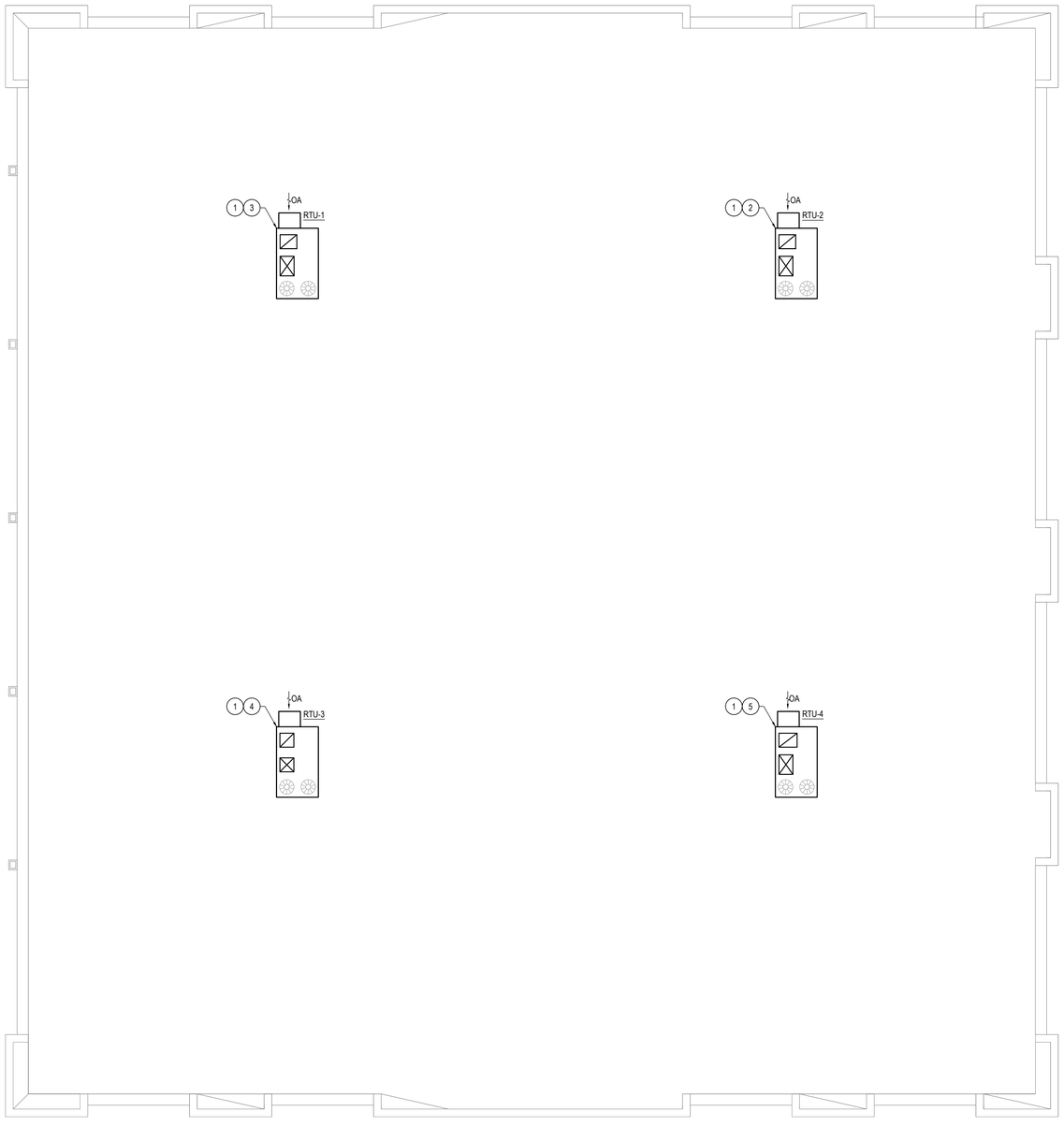
SCALE: 3/8" = 1'-0"

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

SCALE: 3/16" = 1'-0"

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

SCALE: 1/16" = 1'-0"



1 HVAC ROOF PLAN
1/8" = 1'-0"

GENERAL DRAWING NOTES

A. CONTRACTOR SHALL COORDINATE DUCTWORK ROUTING WITH LIGHTING, PIPING, AND STRUCTURAL PLANS. FIELD ADJUST ROUTING AS REQUIRED TO AVOID CONFLICTS.

DRAWING NOTES

1. PROVIDE SEISMIC ROOF CURB, TYP. UNIT MOUNTED TO STRUCTURAL PLATFORM (COORDINATE WITH ARCH.)
2. 28"X20" SA AND 20"X26" RA DN THRU ROOF.
3. 28X20" SA AND 20"X26" RA DN THRU ROOF.
4. 20"X20" SA AND 20"X20" RA DN THRU ROOF.
5. 28"X20" SA AND 26"X20" RA DN THRU ROOF.

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PROJECT TITLE:
HARBOR FREIGHT BEAUFORT

LOCATION:
BEAUFORT, SC

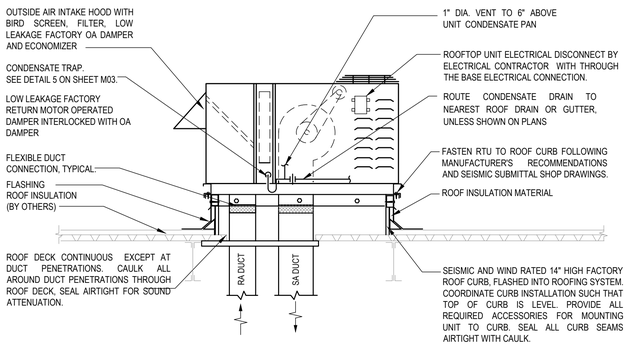
SHEET NAME:
MECHANICAL ROOF PLAN

REVISION	DATE

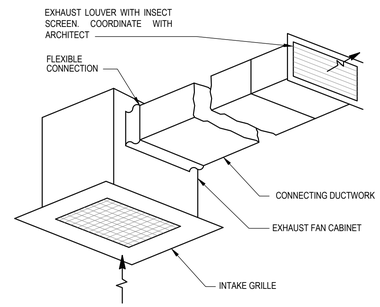
DRAWN BY:	ANA
CHECKED BY:	JDG
DATE:	June 1, 2020
PROJECT # :	19-257

M102
SHEET NO.

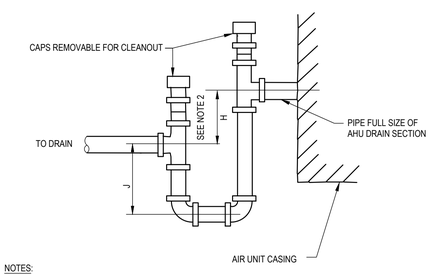
100% DESIGN DEVELOPMENT



1 DETAIL - TYPICAL ROOF TOP PACKAGE UNIT
NTS



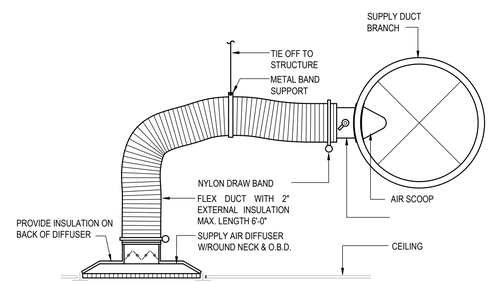
2 DETAIL - TYPICAL CEILING EXHAUST FAN
NTS



NOTES:

1. LOCATE TRAPS SO AS TO BE ACCESSIBLE FOR CLEANING.
2. HEIGHT SHALL BE EQUAL TO AIR UNIT TOTAL STATIC PRESSURE. PLUS ONE.
3. J=H/2
4. CONDENSATE PIPING SHALL BE SCH 40 PVC WITH DWV FITTINGS, AT FULL SIZE OF UNIT CONNECTION, BUT IN NO CASE SMALLER THAN 3/4".

3 DETAIL - TYPICAL CONDENSATE DRAIN TRAP
NTS



4 DETAIL - TYPICAL SUPPLY AIR TAKE-OFF
NTS

SCALE: 1/2" = 1'-0"
SCALE: 3/8" = 1'-0"
SCALE: 1/4" = 1'-0"
SCALE: 3/16" = 1'-0"
SCALE: 1/8" = 1'-0"
SCALE: 1/16" = 1'-0"

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PROJECT TITLE:
HARBOR FREIGHT BEAUFORT

LOCATION:
BEAUFORT, SC

SHEET NAME:
MECHANICAL DETAILS

REVISION		DATE

DRAWN BY:	ANA
CHECKED BY:	JDG
DATE:	June 1, 2020
PROJECT # :	19-257

M501
SHEET NO.

100% DESIGN DEVELOPMENT

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

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

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

SCALE: 3/16" = 1'-0"

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

SCALE: 1/16" = 1'-0"

ROOF TOP DX PACKAGE GAS-FIRED HEAT PUMP UNIT SCHEDULE

MARK	SERVICE	SUPPLY FAN DATA				COOLING COIL DATA							HEATING COIL DATA			REFRIGERANT	NO OF COMP.	ELECTRICAL			EER RATING	APPROX WEIGHT (LBS)	BASIS OF DESIGN	NOTES
		CFM	OA CFM	ESP (IN W.C.)	BHP	TOTAL (MBH)	SENS (MBH)	EAT (°F)		LAT (°F)		MAX FACE VELOCITY (FPM)	INPUT (MBH)	OUTPUT (MBH)	AFUE (%)			V/PH/HZ	MCA (A)	MOCP (A)				
								DB	WB	DB	WB													
RTU-1	SALES EAST	4600	920	0.5	5	149.1	113.5	78.8	65.6	56	55	500	180.0	144.0	80	R-410A	2	208/3/60	71	90	10.8	1400	LENNOX LGH150H4M	SEE BELOW
RTU-2	SALES WEST	4400	785	0.5	5	141.1	106.6	78.4	65.3	56	55	500	180.0	144.0	80	R-410A	2	208/3/60	71	90	10.8	1400	LENNOX LGH150H4M	SEE BELOW
RTU-3	RECEIVING	3000	380	0.5	3	85.9	69.4	77.4	64.5	56	55	500	180.0	144.0	80	R-410A	2	208/3/60	45	50	12.5	1300	LENNOX LGH092H4M	SEE BELOW
RTU-4	STOCK AREA	4300	515	0.5	3	121.6	98.9	77.3	64.4	56	55	500	180.0	144.0	80	R-410A	2	208/3/60	52	60	12.0	1340	LENNOX LGH120H4M	SEE BELOW

NOTES:

1. PRE-FAB INSULATED ROOF CURB BY PEMB VENDOR OR MECHANICAL CONTRACTOR
2. HIGH PERFORMANCE ECONOMIZER
3. DIRTY FILTER SWITCH, 2" MERV 8 FILTERS
4. BURGLAR BARS BY MECHANICAL CONTRACTOR
5. MSAV (MULTI-STAGE AIR VOLUME) SUPPLY AIR BLOWER WITH PHASE/VOLTAGE DETECTION
6. FACTORY INSTALLED UNIT NON-FUSED DISCONNECT - WEATHERPROOF
7. COMBINATION COIL/HAIL GUARDS
8. HINGED ACCESS PANELS
9. HIGH AND LOW PRESSURE SWITCHES
10. FREEZE STAT
11. SERVICE VALVES
12. BAROMETRIC RELIEF DAMPERS
13. CYCLE PROTECTION
14. 5-YEAR COMPRESSOR WARRANTY
15. GFCI - FACTORY INSTALLED/FIELD WIRED BY ELECTRICIAN
16. CURBS PLUS, INC. DROP DIFFUSER SYSTEM VFPD 2410-12.5; VFPD 2410-10; VFPD 24-10-7.5
17. ROOFTOP UNIT'S REMOTE SPACE TEMP SENSORS AND CARBON DIOXIDE SENSORS. REFER TO THE SIEMENS EMS DRAWINGS SET (EMS-1 AND EMS-2) FOR MORE INFORMATION.
18. SMOKE DETECTOR IN THE SA AND RA SECTIONS
19. DRAIN PAN OVERFLOW SWITCH

AIR DEVICE SCHEDULE

TAG	TYPE	FACE SIZE NOMINAL	NECK SIZE NOMINAL	FLOW RANGE (CFM)	BLOW	MOUNTING	BASIS OF DESIGN	NOTES
A1	CEILING SUPPLY DIFFUSER	12"x12"	6"Ø	0-100	4-WAY	LAY-IN CEILING	METALAIRE 5700	SEE BELOW
A2	CEILING SUPPLY DIFFUSER	12"x12"	8"Ø	101-200	4-WAY	LAY-IN CEILING	METALAIRE 5700	SEE BELOW
A3	CEILING SUPPLY DIFFUSER	24"x24"	8"Ø	101-200	4-WAY	LAY-IN CEILING	METALAIRE 5700	SEE BELOW
A4	CEILING SUPPLY DIFFUSER	24"x24"	10"Ø	201-350	4-WAY	LAY-IN CEILING	METALAIRE 5700	SEE BELOW
R1	CEILING RETURN DIFFUSER	SEE PLANS	SEE PLANS	0-900	TRANSFER	LAY-IN CEILING	METALAIRE CC45	SEE BELOW
R2	FILTER RETURN AIR GRILLE	SEE PLANS	-	0-4500	45° DEFL	SURFACE	METALAIRE RHF-1	SEE BELOW
S1	SIDEWALL DIFFUSER	SEE PLANS	-	0-250	DBL DEFL	SIDEWALL	METALAIRE 4004SP	SEE BELOW
S2	SIDEWALL TRANSFER GRILLE	SEE PLANS	SEE PLANS	0-900	TRANSFER	SURFACE	METALAIRE DGSF	SEE BELOW

NOTES:

1. ALL STANDARD DIFFUSERS, REGISTERS AND GRILLES SHALL BE CONSTRUCTED OF ALUMINUM , FINISH COLOR BY ARCHITECT.
2. DAMPERS SHALL BE FURNISHED WITH ALL DIFFUSERS, REGISTERS AND GRILLES.
3. ALL REGISTERS SHALL HAVE DOUBLE DEFLECTION BLADES.
4. ALL BORDERS SHALL BE SUITABLE FOR CEILING TYPE. COORDINATE CEILING TYPE.
5. ALL DIFFUSERS SHALL BE FURNISHED WITH EXTERNAL FOIL BACK INSULATION.
6. PROVIDE ALL DUCT TRANSITIONS, ADAPTORS AND CONNECTORS TO CONNECT DUCTWORK TO NEW DIFFUSERS, REGISTERS AND GRILLES.
7. EQUIPMENT MANUFACTURER AND MODEL NO. LISTED AS BASIS OF DESIGN ONLY.

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PROJECT TITLE: HARBOR FREIGHT BEAUFORT

LOCATION: BEAUFORT, SC

SHEET NAME: MECHANICAL SCHEDULES

REVISION | DATE

DRAWN BY:	ANA
CHECKED BY:	JDG
DATE:	June 1, 2020
PROJECT # :	19-257

M601 SHEET NO.

100% DESIGN DEVELOPMENT

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

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

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

SCALE: 3/16" = 1'-0"

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

SCALE: 1/16" = 1'-0"

ELECTRICAL LEGEND

	WALL MTD FIXTURE
	POLE MOUNTED FIXTURE
	8' STRIP FIXTURE
	CEILING MTD EXIT SIGN W/ ARROWS AS INDICATED (80" AFF TO BOTTOM)
	WALL MTD EXIT SIGN W/ ARROWS AS INDICATED (90" AFF)
	WALL MTD EXIT SIGN/BATTERY PACK COMBO W/ ARROWS AS INDICATED (90" AFF)
	BATTERY PACK W/ NO. OF HEADS AS SHOWN.
$ $2 $3 $4	SINGLE-POLE DOUBLE-POLE 3-WAY AND 4-WAY SWITCHES (48" AFF)
$OS	WALL MOUNTED OCCUPANCY SENSOR WITH MANUAL OVERRIDE
$D	SINGLE-POLE DIMMER SWITCH
OS	CEILING MOUNT OCCUPANCY SENSOR
$M	SINGLE-POLE MOTOR RATED SWITCH
	NEW TELECOMMUNICATIONS OUTLET. PROVIDE 3/4" CONDUIT WITH PULLSTRING TO ACCESSIBLE CEILING.
SS-X	DISCONNECT SWITCH - NON-FUSED SEE DISCONNECT SWITCH SCHEDULE FOR DISCONNECT SWITCH DETAILS
J	JUNCTION BOX OR PULL BOX
J	WALL MOUNTED JUNCTION BOX OR PULL BOX
	DUPLEX RECEPTACLE. "G" INDICATES GROUND FAULT RECEPTACLE. "WP" INDICATES WEATHERPROOF RECEPTACLE. "AC" INDICATES MOUNTED ABOVE COUNTER
	DOUBLE DUPLEX (QUAD) RECEPTACLE. "G" INDICATES GROUND FAULT RECEPTACLE. "WP" INDICATES WEATHERPROOF RECEPTACLE.
	DUPLEX RECEPTACLE MOUNTED 48"AFF. "G" INDICATES GROUND FAULT RECEPTACLE. "WP" INDICATES WEATHERPROOF RECEPTACLE.
4#12,1#12G,1"CND	TYPICAL WIRE AND CONDUIT CALLOUT. G-GROUND
30A,600V,3P,NEMA1	TYPICAL DISCONNECT CALLOUT.
A-A-2-a	TYPICAL LIGHTING FIXTURE CALL OUT. (FIXTURE-PANEL-CIRCUIT-SWITCHLEG)
$a	TYPICAL LIGHTING SWITCH CALL OUT. (LOWERCASE LETTER IS SWITCHLEG)
D	120V DUCT MOUNTED SMOKE DETECTOR DEVICE (PHOTOELECTRIC)

ELECTRICAL ABBREVIATIONS

1PH	SINGLE-PHASE
3PH	THREE-PHASE
A	AMP
AFC	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLER UNIT
BFC	BELOW FINISHED CEILING
BFF	BELOW FINISHED FLOOR
CATV	COMMUNITY ANTENNA TELEVISION
CLG	CEILING MOUNTED
CND	CONDUIT
ECB	ENCLOSED CIRCUIT BREAKER
(E)	EXISTING
FACP	FIRE ALARM CONTROL PANEL
GC	GENERAL CONTRACTOR
G	GROUND FAULT CIRCUIT INTERRUPTER
HP	HEAT PUMP
IWH	INSTANTANEOUS WATER HEATER
J-BOX	JUNCTION BOX
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUGS ONLY
MTD	MOUNTED
NEMA	NATIONAL ELECTRICAL MANUFACTURER ASSOCIATION
NFDS	NON-FUSED DISCONNECT SWITCH
NTS	NOT TO SCALE
P	POLE
PH	PHASE
PNL	PANEL
PWR	POWER
RTU	ROOF TOP UNIT
SCCR	SHORT CIRCUIT CURRENT RATING
SD	SMOKE DETECTOR
UNO	UNLESS NOTED OTHERWISE
VFD	VARIABLE FREQUENCY DRIVE
WH	WATER HEATER
XFMR	TRANSFORMER

ELECTRICAL GENERAL NOTES AND SPECIFICATIONS

A. ALL RECEPTACLE OUTLETS SHALL BE 20 AMP, COMMERCIAL GRADE, 125 VAC, 2-POLES, 3-WIRE, DUPLEX, NEMA 5-20R TYPE, TAMPER PROOF AS PER NEC CODE, COLOR SELECTED BY ARCHITECT.

B. THE CONTRACTOR SHALL COORDINATE ALL REQUIRED SHUTDOWNS ON EXISTING UTILITIES WITH UTILITY COMPANY.

C. ALL WORK SHALL COMPLY WITH THE LATEST ADOPTED EDITION OF THE NEC, NFPA, IBC, AND ANY APPLICABLE LOCAL ORDINANCE.

D. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL SYSTEM GROUNDING AND BONDING AS REQUIRED BY NEC AND LOCAL ORDINANCES.

E. ALL WIRING SHALL BE IN CONDUIT. MINIMUM CONDUIT SIZE SHALL BE 3/4". MINIMUM CONDUCTOR SIZE SHALL BE #12 AWG. ALL CIRCUITS SHALL BE PROVIDED WITH AN INDIVIDUAL NEUTRAL AND GROUNDING CONDUCTOR WITH THE PHASE CONDUCTOR. 1/2" CONDUIT IS ACCEPTABLE IF APPROVED BY AHJ.

F. THE ELECTRICAL DRAWINGS ARE SCHEMATIC IN NATURE. BEFORE STARTING THE WORK THE CONTRACTOR SHALL REVIEW ALL OTHER DISCIPLINE DRAWINGS AND VERIFY FIELD CONDITIONS AND SHALL MAKE ANY REQUIRED MINOR ADJUSTMENTS. ANY MAJOR DISCREPANCIES FOUND SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR.

G. ALL CONDUITS USED FOR POWER AND TELECOMMUNICATION SYSTEMS SHALL BE EMT WITH COMPRESSION TYPE FITTINGS AND BODIES. SUPPORT ALL CONDUITS WITH ZINC COATED CONDUIT STRAPS AND P-1000 UNISTRUT CHANNELS.

H. ALL CONDUCTORS #10 AND SMALLER SHALL BE SOLID COPPER AND CONDUCTORS #8 AND LARGER SHALL BE STRANDED COPPER. UNLESS NOTED OTHERWISE, CONDUCTORS SHALL BE COPPER AND INSULATION SHALL BE DUAL RATED AT THHN/THWN.

I. ALL DEVICES, EQUIPMENT MATERIAL AND LABOR SHALL BE PROVIDED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.

J. ALL ELECTRICAL EQUIPMENT AND DEVICES SHALL BE MOUNTED AS PER EQUIPMENT AND DEVICE MANUFACTURER RECOMMENDATIONS.

K. CONTRACTOR SHALL PROVIDE SUBMITTALS TO GC/ARCHITECT FOR REVIEW AND APPROVAL OF ALL ELECTRICAL EQUIPMENT AND DEVICES DESCRIBED IN THE DRAWINGS. SUBMITTALS SHALL INCLUDE CUT SHEETS, DIMENSIONS, WIRING DIAGRAMS, ACCESSORIES, OPERATION MANUALS, AND ALL NECESSARY INFORMATION FOR REVIEWER TO MAKE A SOUND EVALUATION.

L. PROVIDE STARTUP OF ALL ELECTRICAL SYSTEMS AND COORDINATE WITH CONTRACTOR STARTUP WITNESSING.

M. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A COMPLETE SET OF RECORD DRAWINGS TO THE OWNER AT THE END OF THE CONSTRUCTION.

N. ALL MATERIALS AND EQUIPMENT TO BE INSTALLED SHALL BE NEW AND FREE OF DEFECTS. ALL ELECTRICAL EQUIPMENT SHALL COMPLY WITH NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA) STANDARDS AND SHALL BE UL LABELED. ALL ELECTRICAL EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN A WORKMANLIKE MANNER.

O. COORDINATE ALL REQUIRED FINAL CONNECTIONS TO MECHANICAL HVAC, APPLIANCES, AND EQUIPMENT WITH VENDOR SHOP DRAWINGS.

P. ALL TELECOMMUNICATIONS OUTLETS SHALL HAVE 3/4"CONDUIT WITH PULLSTRING STUBBED UP TO ACCESSIBLE CEILING.

Q. COORDINATE COLOR AND FINISHES WITH OWNER/CONTRACTOR/ARCHITECT.

R. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION FIXTURES.

S. COORDINATE FINAL EQUIPMENT/FIXTURE LOCATIONS WITH THE GENERAL CONTRACTOR. THE LOCATION AS INDICATED ON THE DRAWING IS APPROXIMATE. INSTALL ALL MECHANICAL EQUIPMENT SUCH THAT MANUFACTURER'S MAINTENANCE AREA IS CLEAR.

T. COORDINATE ALL MECHANICAL, PLUMBING AND ELECTRICAL WORK & EQUIPMENT WITH STRUCTURAL MEMBERS, ELECTRICAL WORK, FIXTURES AND ALL OTHER TRADES.

U. THIS FACILITY SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES.

V. ALL EQUIPMENT, DEVICES AND FIXTURES SPECIFIED ARE PERFORMANCE BASED. EQUALS ARE ALLOWED AS LONG AS THEY MEET THE PERFORMANCE REQUIREMENTS OF THE SPECIFIED EQUIPMENT, DEVICES AND FIXTURES.

W. AIC RATING OF ALL EQUIPMENT SHALL MEET OR EXCEED THE UTILITY AVAILABLE FAULT CURRENT (AIC RATING). IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH UTILITY AND PROVIDE EQUIPMENT AS NECESSARY AT NO COST TO THE OWNER.

X. ELECTRICAL SINGLE LINE DIAGRAM IS TO SHOW GENERAL INTENT. CONTRACTOR TO COORDINATE EXACT REQUIREMENTS WITH UTILITY.

Y. CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING TO THOROUGHLY UNDERSTAND EXISTING SITE CONDITIONS, SO THAT ANY DEVIATIONS TO THE PLANS AND SPECIFICATIONS ARE AT NO COST TO THE OWNER.

Z. EMERGENCY EGRESS LIGHTING SHOWN IS SCHEMATIC IN NATURE. MINOR ADJUSTMENTS MAY BE NEEDED IN THE FIELD AS DEEMED BY THE AHJ. CONTRACTOR SHALL PERFORM WORK NEEDED AT NO ADDITIONAL COST TO THE OWNER.

AA. CONTRACTOR TO VERIFY AVAILABLE AIC RATING FROM UTILITY AND PROVIDE NEXT HIGHER STANDARD RATING. ALL ELECTRICAL EQUIPMENT SHALL BE FULLY RATED. SERIES RATING IS NOT ACCEPTABLE. CONTRACTOR SHALL PROVIDE LABEL STATING AVAILABLE AIC RATING ON SERVICE ENTRANCE EQUIPMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH UTILITY AND PROVIDE EQUIPMENT AS NECESSARY AT NO COST TO THE OWNER.

AB. RECEPTACLES LOCATED WITHIN 6' OF WATER SOURCE SHALL BE GFCI TYPE.

AC. CONTRACTOR SHALL BALANCE ALL PANEL PHASES TO WITHIN 10%.

AD. PER THE INTERNATIONAL BUILDING CODE (IBC), ELECTRICAL EQUIPMENT AND COMPONENTS, INCLUDING SUPPORTS AND ATTACHMENTS, SHALL BE DESIGNED FOR SEISMIC FORCES IN ACCORDANCE WITH CHAPTER 13 OF ASCE 7-10. WHERE DESIGN FOR SEISMIC AND WIND LOADS ARE REQUIRED, THE MORE DEMANDING FORCE MUST BE USED. FOR ALL COMPONENTS REQUIRING SEISMIC RESTRAINT, THE COMPONENT SUPPORTS AND ATTACHMENTS SHALL BE DESIGNED BY A REGISTERED DESIGN PROFESSIONAL OR BE ACCOMPANIED BY THE APPROPRIATE ICC/ES EVALUATION REPORT. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT SUCH DESIGN AND INSTALLATION ARE IN ACCORDANCE WITH THE IBC REQUIREMENTS.

AE. ALL ELECTRICAL EQUIPMENT, SYSTEMS AND WORKMANSHIP SHALL BE GUARANTEED FOR A MINIMUM PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE.

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No. 5229
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PROJECT TITLE: HARBOR FREIGHT BEAUFORT

LOCATION: BEAUFORT, SC

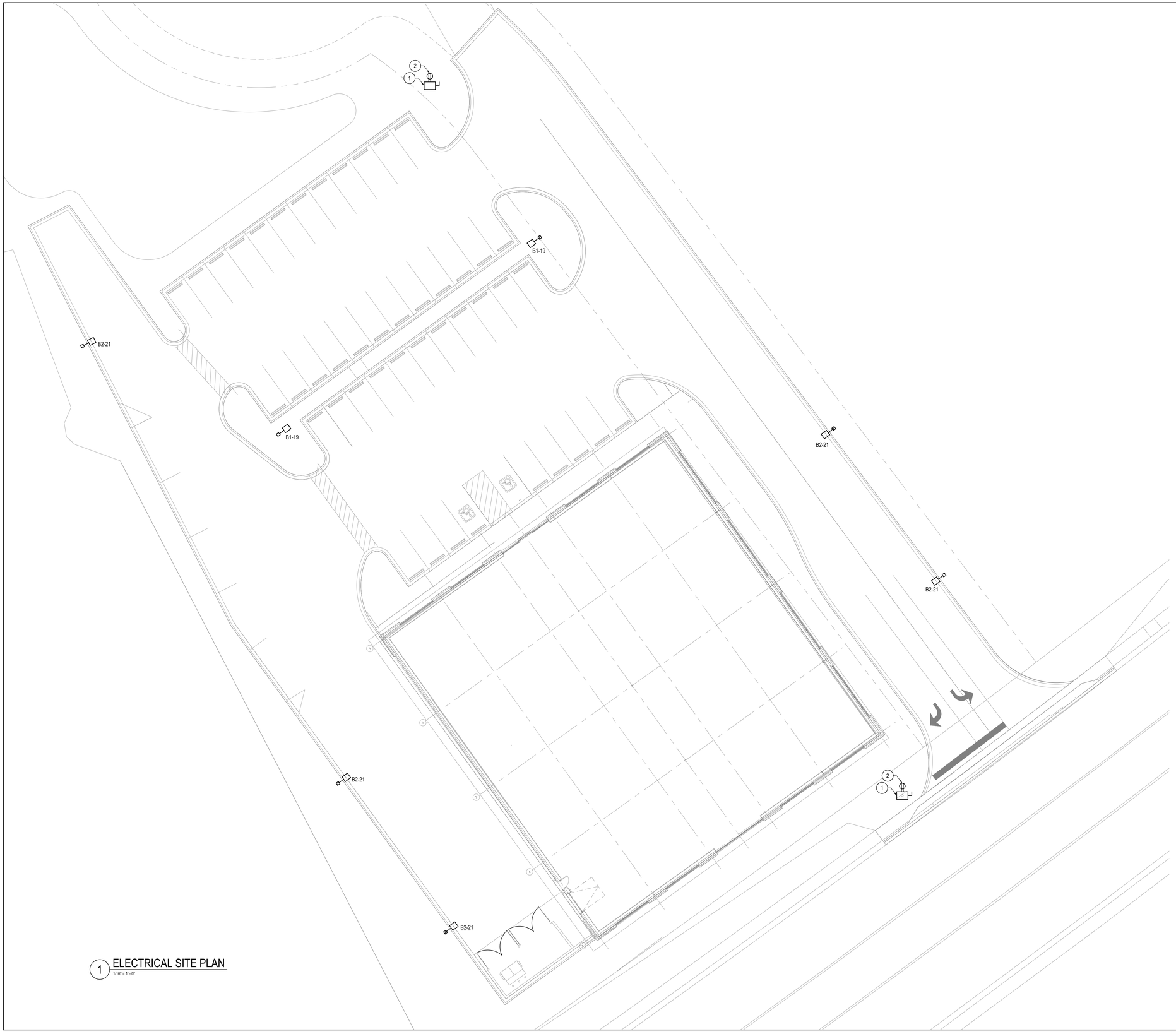
SHEET NAME: ELECTRICAL LEGEND, ABBREVIATIONS, NOTES & SPECIFICATIONS

REVISION	DATE

DRAWN BY:	WWG
CHECKED BY:	DWH
DATE:	June 1, 2020
PROJECT # :	19-257

E000 SHEET NO.

100% DESIGN DEVELOPMENT



1 ELECTRICAL SITE PLAN
1/16" = 1' - 0"

SCALE: 1/2" = 1'-0" (0, 1', 2', 4')

SCALE: 3/8" = 1'-0" (0, 1'-4", 2'-8", 5'-4")

SCALE: 1/4" = 1'-0" (0, 2', 4', 8')

SCALE: 3/16" = 1'-0" (0, 2'-8", 5'-4", 10'-8")

SCALE: 1/8" = 1'-0" (0, 4', 8', 16')

SCALE: 1/16" = 1'-0" (0, 8', 16', 32')

GENERAL DRAWING NOTES

A. CONTRACTOR TO COORDINATE EXACT LOCATIONS OF LIGHT FIXTURES AND WIRING DEVICES WITH ARCHITECT/OWNER PRIOR TO INSTALLATION.

B. ALL CIRCUITS SHALL BE CONNECTED TO PANEL M.

C. EXTERIOR LIGHTING SHALL BE CONNECTED AND CONTROLLED THROUGH PHOTOCELL/TIMECLOCK THROUGH LIGHTING CONTACTORS. COORDINATE FINAL LOCATION AND EXACT REQUIREMENTS WITH ARCHITECT/OWNER PRIOR TO INSTALLATION.

D. MINIMUM SIZE CONDUIT AND CONDUCTORS BETWEEN LIGHT FIXTURES ARE 2#8,1#8G,1" CND UNLESS NOTED OTHERWISE .

E. ALL HOMERUNS SHALL BE 2#6,1#6G,1" CND UNLESS NOTED OTHERWISE.

DRAWING NOTES (#)

1. PROVIDE 2#6,1#6G,1" CND AND 30A,2P,250V,NEMA 3R DISCONNECT SWITCH WITH CONNECTION TO PROPOSED LOCATION OF PYLON SIGN. HOMERUN CIRCUIT TO A 6"X6" JUNCTION BOX LOCATED IN JOIST SPACE ABOVE PANEL M. LABEL "PYLON SIGN". HFT CONTRACTOR SHALL EXTEND CIRCUIT TO PANEL. COORDINATE FINAL LOCATION AND EXACT REQUIREMENTS WITH SIGN CONTRACTOR AND ARCHITECT/OWNER PRIOR TO INSTALLATION.

2. PROVIDE 2#4,1#8G,1-1/4" CND AND 20A GFCI DUPLEX RECEPTACLE TO PROPOSED LOCATION OF PYLON SIGN. HOMERUN CIRCUIT TO A 6"X6" JUNCTION BOX LOCATED IN JOIST SPACE ABOVE PANEL M. LABEL "PYLON SIGN SERVICE RECEPTACLE". HFT CONTRACTOR SHALL EXTEND CIRCUIT TO PANEL. COORDINATE FINAL LOCATION AND EXACT REQUIREMENTS WITH SIGN CONTRACTOR AND ARCHITECT/OWNER PRIOR TO INSTALLATION.

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PROJECT TITLE:
HARBOR FREIGHT BEAUFORT

LOCATION:
BEAUFORT, SC

SHEET NAME:
ELECTRICAL SITE PLAN

REVISION	DATE
A	

DRAWN BY:	WWG
CHECKED BY:	DWH
DATE:	June 1, 2020
PROJECT # :	19-257

E050
SHEET NO.

100% DESIGN DEVELOPMENT

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

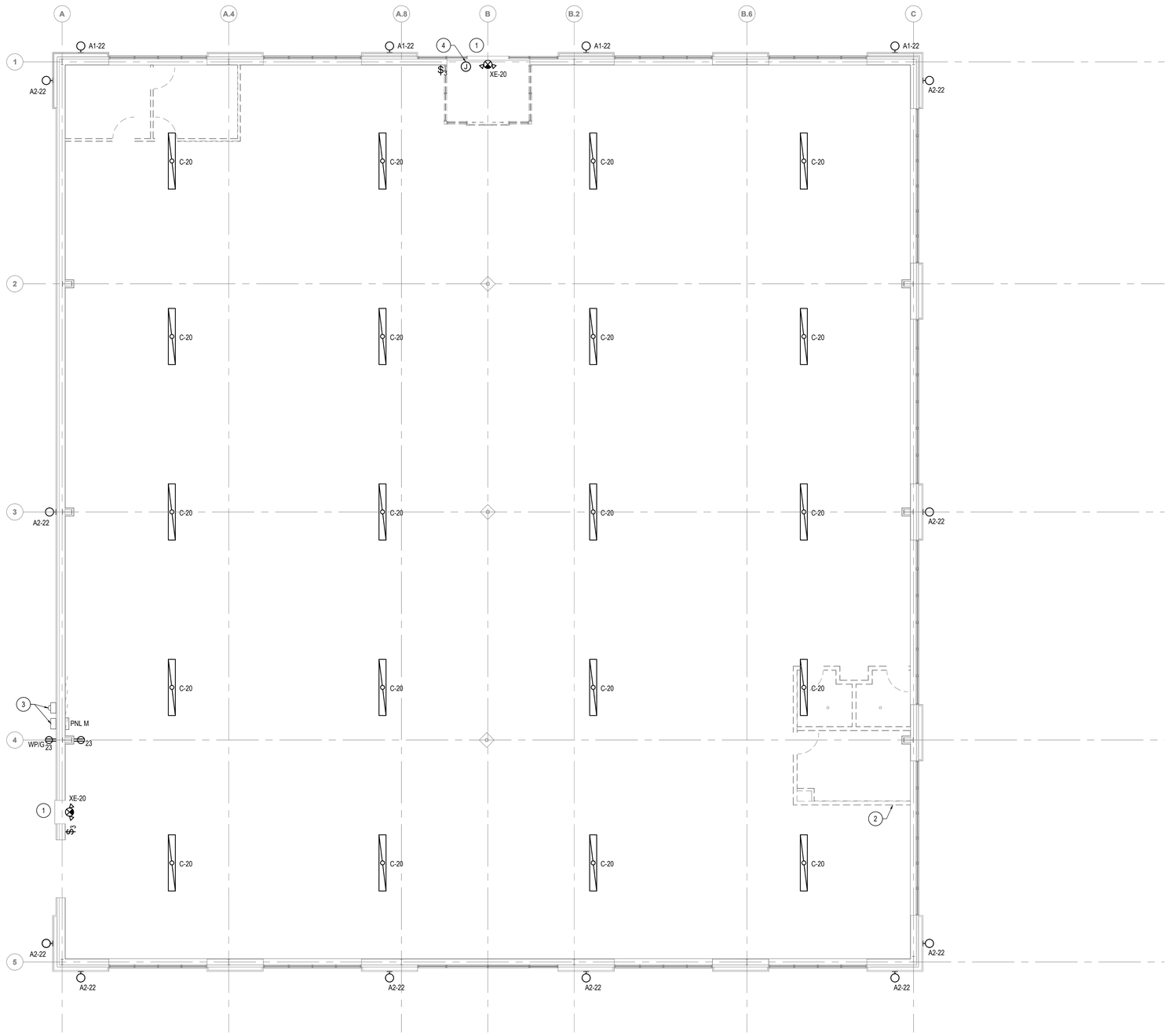
SCALE: 3/8" = 1'-0"

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

SCALE: 3/16" = 1'-0"

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

SCALE: 1/16" = 1'-0"



1 ELECTRICAL PLAN
1/8" = 1'-0"

GENERAL DRAWING NOTES

A. CONTRACTOR TO COORDINATE MOUNTING HEIGHTS AND EXACT LOCATIONS OF LIGHT FIXTURES AND WIRING DEVICES WITH ARCHITECT/OWNER PRIOR TO INSTALLATION.

B. EXTERIOR LIGHTING SHALL BE CONNECTED AND CONTROLLED THROUGH PHOTOCELL/TIMECLOCK THROUGH LIGHTING CONTACTORS. COORDINATE FINAL LOCATION AND EXACT REQUIREMENTS WITH ARCHITECT/OWNER PRIOR TO INSTALLATION.

C. ALL CIRCUITS SHALL BE CONNECTED TO PANEL M UNLESS NOTED OTHERWISE.

DRAWING NOTES

1. PROVIDE DUAL LAMP OUTDOOR REMOTE EMERGENCY EGRESS LIGHTING FIXTURE. FIXTURE STYLE TO BE APPROVED BY OWNER/ARCHITECT PRIOR TO INSTALLATION.

2. PROPOSED LOCATION OF TELECOMMUNICATIONS ENTRANCE. PROVIDE 2 SETS OF 4" CONDUIT WITH PULL STRING TO TELECOMMUNICATIONS PROVIDER'S SERVICE POINT. COORDINATE FINAL LOCATION AND EXACT REQUIREMENTS WITH OWNER'S TELECOMMUNICATION PROVIDER AND WITH ARCHITECT/OWNER PRIOR TO INSTALLATION.

3. PROPOSED LOCATION OF THE ELECTRICAL SERVICE ENTRANCE. SEE SINGLE LINE DIAGRAM ON SHEET E601 FOR MORE INFORMATION. COORDINATE FINAL LOCATION AND EXACT REQUIREMENTS WITH UTILITY COMPANY AND ARCHITECT/OWNER PRIOR TO INSTALLATION.

4. WIRE POWERED DOORS WITH 2#8,1#10G,1" CND TO A 4"X4" JUNCTION BOX LOCATED IN JOIST SPACE ABOVE PANEL M. LABEL "POWER DOOR". HFT CONTRACTOR SHALL EXTEND CIRCUIT TO POWER PANEL.

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PROJECT TITLE: HARBOR FREIGHT BEAUFORT

LOCATION: BEAUFORT, SC

SHEET NAME: ELECTRICAL PLAN

REVISION	DATE

DRAWN BY:	WWG
CHECKED BY:	DWH
DATE:	June 1, 2020
PROJECT # :	19-257

E101
SHEET NO.

100% DESIGN DEVELOPMENT

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

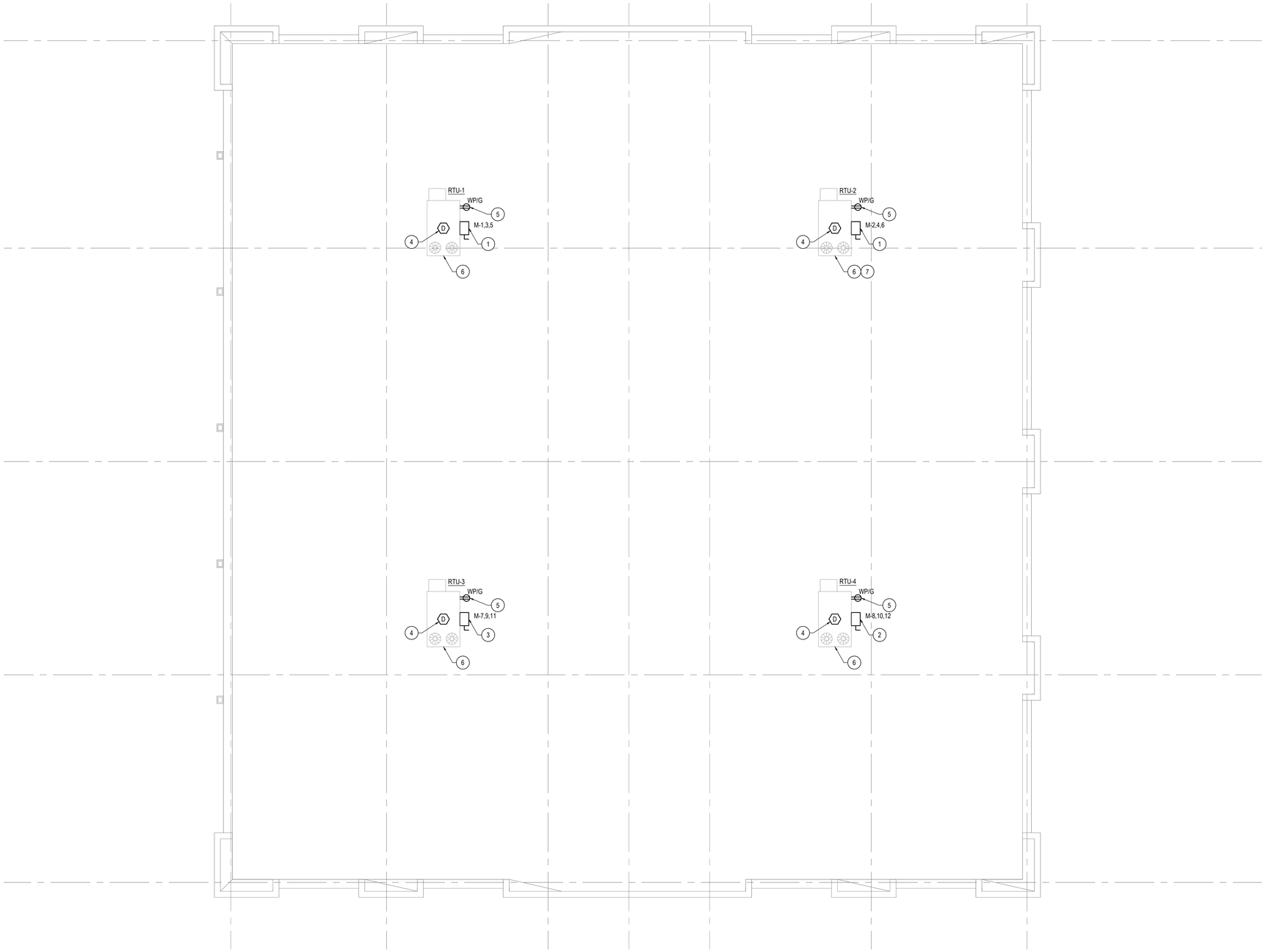
SCALE: 3/8" = 1'-0"

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

SCALE: 3/16" = 1'-0"

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

SCALE: 1/16" = 1'-0"



1 ELECTRICAL PLAN - ROOF
1/8" = 1'-0"

GENERAL DRAWING NOTES

A. CONTRACTOR TO COORDINATE FINAL LOCATIONS OF WIRING DEVICES AND ELECTRICAL EQUIPMENT WITH ARCHITECT/OWNER PRIOR TO INSTALLATION.

B. ALL CIRCUITS SHALL BE CONNECTED TO PANEL M UNLESS NOTED OTHERWISE.

DRAWING NOTES (#)

1. PROVIDE 3#3,1#8G,1-1/4" CND AND 100A,3P,250V,NEMA 3R DISCONNECT SWITCH WITH CONNECTION TO RTU-1 & RTU-2. COORDINATE EXACT REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
2. PROVIDE 3#6,1#10G,1" CND AND 60A,3P,250V,NEMA 3R DISCONNECT SWITCH WITH CONNECTION TO RTU-4. COORDINATE EXACT REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
3. PROVIDE 3#8,1#10G,1" CND AND 60A,3P,250V,NEMA 3R DISCONNECT SWITCH WITH CONNECTION TO RTU-3. COORDINATE EXACT REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
4. WIRE DUCT MOUNTED DETECTOR SMOKE DETECTOR WITH 2#10,1#10G,3/4" CND TO A 4"X4" JUNCTION BOX LOCATED IN JOIST SPACE ABOVE PANEL M. LABEL "DUCT SMOKE DETECTOR". HFT CONTRACTOR SHALL EXTEND CIRCUIT TO POWER PANEL.
5. WIRE INTEGRAL GFCI RTU SERVICE RECEPTACLE WITH 2#10,1#10G,3/4" CND TO A 4"X4" JUNCTION BOX LOCATED IN JOIST SPACE ABOVE PANEL M. LABEL "RTU RECEPTACLE". HFT CONTRACTOR SHALL EXTEND CIRCUIT TO POWER PANEL.
6. STUB 3/4" CND WITH PULL STRING FROM RTU CONTROL CABINET TO JOIST SPACE. HFT CONTRACTOR SHALL WIRE RTU TO EMS PANEL.
7. INSTALL CAST WP "V2" JUNCTION BOX ON TOP RTU AND STUB 1/2" CND TO JOIST SPACE FOR EMS SYSTEM USE. BOX SHALL HAVE 1/2" HUB ON TOP FOR EXTENSION OF CONDUIT ABOVE UNIT. MOUNT ON RTU UNIT OPPOSITE OF CONDENSER FANS.

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PROJECT TITLE: HARBOR FREIGHT BEAUFORT

LOCATION: BEAUFORT, SC

SHEET NAME: ELECTRICAL PLAN - ROOF

REVISION		DATE

DRAWN BY:	WWG
CHECKED BY:	DWH
DATE:	June 1, 2020
PROJECT # :	19-257

E102 SHEET NO.

100% DESIGN DEVELOPMENT

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

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

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

SCALE: 3/16" = 1'-0"

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

SCALE: 1/16" = 1'-0"

LIGHT FIXTURE SCHEDULE

TYPE	LAMP TYPE	NO. OF LAMPS	MOUNTING	LAMP WATTAGE	VOLTAGE	FIXTURE TYPE	REMARKS	DESCRIPTION
A1	LED	-	WALL @15' AFF	51	UNV	HUBBELL: 2G2-50-4K7-FT-UNV-BLT		WALL PACK
A2	LED	-	WALL @15' AFF	51	UNV	HUBBELL: 2G2-50-4K7-FT-UNV-BLT	PROVIDE W/ VISOR	WALL PACK
B1	LED	-	POLE @ 20' AFF	391	UNV	EATON: GLEON-AF-07-LED-E1-5WQ-BK	PROIVDE 20' STEEL SQUARE POLE	POLE LIGHT
B2	LED	-	POLE @ 20' AFF	279	UNV	EATON: GLEON-AF-05-LED-E1-T2R-BK-LS/HSS	PROVIDE 20' STEEL SQUARE POLE	POLE LIGHT
C	LED	-	SURFACE	84	UNV	COLUMBIA: LCL-8-40K-ML-E-U		8' STRIP
XE	LED	-	WALL/CEILING AS SHOWN	5	UNV	DUAL-LITE: HCX-U-R-W-03L	CONNECT TO CLOSEST UNSWITCHED LIGHTING CIRCUIT SERVING THE AREA	2-HEAD/EXIT COMBO

PANELBOARD: M

LOCATION: **STOCK ROOM** | L-L VOLTS: **208** | AIC RATING: **SEE NOTES**

SUPPLY FROM: **UTILTY** | L-G VOLTS: **120** | MAIN CB RATING: **600A/3P**

MOUNTING: **SURFACE** | PHASES: **3** | MAIN BUS RATING: **600 AMPS**

ENCLOSURE: **NEMA 1** | WIRES: **4**

NOTES: CONTRACTOR TO COORDINATE AIC RATING WITH UTILITY COMPANY AND PROVIDE THE NEXT HIGHER STANDARD AIC RATING.

CKT	LOAD NAME	TRIP	POLES	A B C	POLES	TRIP	LOAD NAME	CKT
1	RTU-1	90	3	A	-	90	RTU-2	2
3	-	-	-	B	-	-	-	4
5	-	-	-	C	-	-	-	6
7	RTU-3	50	3	A	3	60	RTU-4	8
9	-	-	-	B	-	-	-	10
11	-	-	-	C	-	-	-	12
13	PANEL L - FUTURE	200	3	A	3	200	PANEL P - FUTURE	14
15	-	-	-	B	-	-	-	16
17	-	-	-	C	-	-	-	18
19	SITE LIGHTING	20	1	A	1	20	BUILDING LIGHTING	20
21	SITE LIGHTNG	20	1	B	1	20	EXTERIOR LIGHTING	22
23	RECEPTACLES	20	1	C	1	20	SPARE	24
25	SPARE	20	1	A	1	20	SPARE	26
27	SPARE	20	1	B	1	20	SPARE	28
29	SPARE	20	1	C	1	20	SPARE	30
31	SPACE	-		A		-	SPACE	32
33	SPACE	-		B		-	SPACE	34
35	SPACE	-		C		-	SPACE	36
37	SPACE	-		A		-	SPACE	38
39	SPACE	-		B		-	SPACE	40
41	SPACE	-		C		-	SPACE	42

GENERAL SINGLE LINE DRAWING NOTES

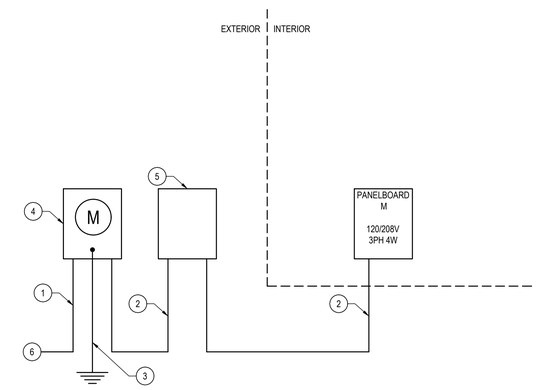
A. SINGLE LINE DIAGRAM IS GENERAL INTENTION OF ELECTRICAL SERVICE. CONTRACTOR TO COORDINATE EXACT REQUIREMENTS WITH UTILITY.

B. UPSIZE FEEDER CONDUCTORS AND CONDUIT SIZES AS REQUIRED FOR VOLTAGE DROPS.

C. CONDUITS FROM GRADE TO ELECTRICAL EQUIPMENT SHALL BE RIGID GALVANIZED CONDUIT (GRC).

SINGLE LINE DRAWING NOTES

1. PROVIDE 2 SETS OF 4#350MCM,4" CND AND 1 - 4" CND AS SPARE.
2. PROVIDE SETS OF 4#350MCM,1#2/0G,4" CND ABD 1 - 4" CND AS SPARE.
3. PROVIDE 1#3/0 TO THREE 3/4"X10' COPPER CLAD GROUND RODS IN DELTA FORMATION FOR SERVICE GROUND
4. PROVIDE 600A,120/208V,3PH,4W, NEMA 3R METER BASE, COORDINATE EXACT REQUIREMENTS WITH UTILITY COMPANY PRIOR TO INSTALLATION.
5. PROVIDE 600A,120/208V,NEMA 3R SERVICE ENTRANCED RATED ENCLOSED CIRCUIT BREAKER WITH NEUTRAL AND GROUND BARS.
6. TO UTILITY. CONTRACTOR SHALL COORDINATE EXACT REQUIREMENTS WITH UTILITY.



1 ELECTRICAL SINGLE LINE DIAGRAM
N.T.S.

HENSLEY & GOERLING
CONSULTING ENGINEERS, LLC
1064 Gardner Rd. Suite 116
HGCEng.com
Project #19-257
843-696-2869 - JDG
843-473-1396 - DWH
843-203-6158 - OFFICE

SOUTH CAROLINA
HENSLEY AND GOERLING CONSULTING ENGINEERS, LLC
No. 5229
CERTIFICATE OF AUTHORIZATION

NOT FOR CONSTRUCTION

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PROJECT TITLE: HARBOR FREIGHT BEAUFORT

LOCATION: BEAUFORT, SC

SHEET NAME: ELECTRICAL SINGLE LINE DIAGRAM & SCHEDULES

REVISION	DATE

DRAWN BY:	WG
CHECKED BY:	DWH
DATE:	June 1, 2020
PROJECT # :	19-257

E601 SHEET NO.

100% DESIGN DEVELOPMENT

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SITE DEVELOPMENT PLANS

FOR

HARBOR FREIGHT

CITY OF BEAUFORT, SOUTH CAROLINA

GENERAL NOTES:

1. BOUNDARY INFORMATION PROVIDED BY TOPOGRAPHIC SURVEY R122 029 000 103H 000, DATED 1/16/20, BY GASQUE & ASSOC INC.
2. TOPOGRAPHIC DATA PROVIDED BY GASQUE & ASSOC INC, DATED 1/16/20.
3. APPROXIMATE LOCATION OF CERTAIN EXISTING UNDERGROUND UTILITY LINES AND STRUCTURES ARE SHOWN ON THE PLANS FOR INFORMATION ONLY ADDITIONAL UNDERGROUND LINES OR STRUCTURES MAY EXIST THAT ARE NOT SHOWN. CALL SOUTH CAROLINA 811 AT 811 OR 1-888-721-7877 BETWEEN THE HOURS OF 7:00 AM AND 7:00 PM MONDAY THRU FRIDAY AT LEAST THREE WORKING DAYS BEFORE COMMENCING CONSTRUCTION. REQUEST UNDERGROUND UTILITIES TO BE LOCATED AND MARKED WITHIN AND NEAR THE CONSTRUCTION SITE.
4. COMPLY WITH "SOUTH CAROLINA UNDERGROUND FACILITY DAMAGE PREVENTION ACT (EFFECTIVE JUNE 7, 2012). NOTIFICATION OF INTENT TO EXCAVATE MAY BE GIVEN BY CALLING THE TOLL FREE NUMBER: 1-800-922-0983.
5. PROTECT BENCH MARKS AND PROPERTY MONUMENTS FROM DAMAGE DURING CONSTRUCTION OPERATIONS. REPLACE ANY BENCH MARKS OR MONUMENTS DAMAGED OR DESTROYED AS A RESULT OF CONTRACTOR'S OPERATIONS, AT NO COST TO THE OWNER, BY A LICENSED SURVEYOR IN THE STATE OF SOUTH CAROLINA.
6. OFF-STREET PARKING FOR THE CONTRACTOR'S EMPLOYEES AND AUTHORIZED VISITORS TO THE SITE MUST BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION.
7. THE CONTRACTOR IS RESPONSIBLE FOR ADHERING TO WEIGHT LIMITS PRESCRIBED FOR ALL PUBLIC ROADS WHEN HAULING EQUIPMENT AND MATERIALS TO AND FROM THE PROJECT SITE. DAMAGES TO EXISTING PAVEMENT DUE TO THE CONTRACTOR'S CONSTRUCTION OPERATIONS OR IMPROPER TRANSPORTATION OF MATERIALS AND EQUIPMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
8. AT LEAST ONE DRIVING LANE ON PUBLIC ROADS SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES. TRAFFIC LANES WILL ONLY BE CLOSED WITH THE EXPRESS WRITTEN CONSENT OF THE AGENCY HAVING JURISDICTION OVER THE ROADWAY. NOTIFY AGENCY HAVING JURISDICTION AT LEAST 5 DAYS BEFORE CLOSING ANY DRIVING LANES TO TRAFFIC. PROVIDE TRAFFIC CONTROL DEVICES, SIGNS AND FLAGMEN AS REQUIRED TO ENSURE PUBLIC SAFETY.
9. CONTRACTOR SHALL COORDINATE DEMOLITION, CLEARING AND CONSTRUCTION OF IMPROVEMENTS TO MINIMIZE INTERFERENCE WITH VEHICULAR AND PEDESTRIAN TRAFFIC AND WITH OPERATIONS OF EXISTING FACILITIES.

WATER AND SEWER LINE CONSTRUCTION:

1. ALL WATER AND SEWER LINE CONSTRUCTION SHALL CONFORM TO APPLICABLE STATE AND BEAUFORT JASPER WATER SEWER AUTHORITY (BJWSA) REQUIREMENTS, STANDARDS AND SPECIFICATIONS.
2. BJWSA WILL BE RESPONSIBLE FOR INSPECTION AND APPROVAL OF ALL WATER AND SEWER SYSTEM CONSTRUCTION AND FOR ACCEPTANCE FOR OPERATION AND MAINTENANCE.
3. ALL UTILITIES SHOWN ARE APPROXIMATE LOCATIONS. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFICATION OF ALL UTILITY OWNERS AND FOR FIELD VERIFICATION OF BOTH HORIZONTAL AND VERTICAL LOCATIONS PRIOR TO COMMENCING CONSTRUCTION. ANY DAMAGES TO EXISTING UTILITIES DUE TO THIS CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
4. NOTIFY THE PROJECT ENGINEER, IF CONFLICTS WITH EXISTING STRUCTURES REQUIRE THAT PROPOSED UTILITIES BE RELOCATED.
5. THE CONTRACTOR MUST NOTIFY BJWSA FORTY-EIGHT (48) HOURS PRIOR TO ANY CONSTRUCTION, INSPECTION OR TESTING OF THE WATER DISTRIBUTION SYSTEM.
6. PIPE, FITTINGS, VALVES AND APPURTENANCES FOR WATER AND SEWER LINES SHALL ALL BE IN ACCORDANCE WITH THE REQUIREMENTS CONTAINED IN THE BJWSA TECHNICAL SPECIFICATIONS.
7. INSTALLATION OF WATER AND SEWER LINES AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE BJWSA STANDARD CONSTRUCTION DETAILS AND SPECIFICATIONS.
8. CONTRACTOR SHALL INSTALL MECHANICAL RESTRAINTS ON ALL BENDS, PLUGS AND TEES, 2" OR LARGER, ON WATERLINES AND SANITARY SEWER FORCE MAINS.
9. ALL WATER MAINS SHALL BE STERILIZED AND PRESSURE TESTED IN ACCORDANCE WITH BJWSA SPECIFICATIONS.
10. SEPARATION OF WATER MAINS AND SEWERS:
    A. PARALLEL INSTALLATION: UNLESS OTHERWISE SPECIFICALLY SHOWN IN A SPECIAL DETAIL ON THE PLANS, INSTALL WATER MAINS AT LEAST 10-FT. HORIZONTALLY FROM ANY EXISTING OR PROPOSED SANITARY SEWER OR SANITARY SEWER FORCE MAIN, THE DISTANCE BEING MEASURED IN A HORIZONTAL PLANE BETWEEN THE OUTSIDE SURFACES OF THE PIPES.
    B. CROSSINGS: UNLESS OTHERWISE SPECIFICALLY SHOWN IN A SPECIAL DETAIL ON THE PLANS, INSTALL WATER LINES CROSSING SANITARY SEWERS OR SANITARY SEWER FORCE MAINS TO PROVIDE A MINIMUM VERTICAL SEPARATION OF 18-INCHES BETWEEN THE OUTSIDE SURFACES OF THE PIPES. THIS SHALL BE THE CASE WHETHER THE WATER LINE IS ABOVE OR BELOW THE SANITARY SEWER LINE. WHENEVER POSSIBLE LOCATE THE WATER LINE ABOVE THE SEWER LINE. WHERE A NEW WATER LINE CROSSES A NEW SEWER LINE, PLACE A FULL LENGTH OF DUCTILE IRON PIPE FOR WATER LINE AT THE CROSSING WITH PIPE POSITIONED SO THAT THE JOINTS ARE AS FAR AS POSSIBLE FROM THE POINT OF CROSSING. WHERE A NEW WATER LINE CROSSES AN EXISTING SEWER LINE, PLACE ONE FULL LENGTH OF DUCTILE IRON PIPE WATER LINE SO THAT THE JOINTS ARE AS FAR FROM THE POINT OF CROSSING AS POSSIBLE.
11. THE CONTRACTOR SHALL CUT AND PATCH EXISTING PAVEMENT AS REQUIRED FOR THE INSTALLATION OF UTILITY LINES.
12. SANITARY MANHOLE RIM GRADES SHOWN ARE APPROXIMATE. ADJUST RIM ELEVATIONS TO BE FLUSH WITH FINISHED GRADE.
13. THE CONTRACTOR UNDER THIS CONTRACT SHALL NOT MAKE ANY CONNECTIONS TO THE EXISTING WATER OR SANITARY SEWER SYSTEMS UNLESS EXPRESSLY AUTHORIZED TO DO SO BY THE BJWSA. ALL WATER AND SEWER IMPROVEMENTS UNDER THIS CONTRACT MUST BE CONSTRUCTED COMPLETE, TESTED, INSPECTED AND APPROVED BY THE BJWSA BEFORE ANY AUTHORIZATION TO CONNECT WILL BE GIVEN. COORDINATION OF TESTING, INSPECTION AND CONNECTIONS WITH THE BJWSA IS THE RESPONSIBILITY OF THE CONTRACTOR UNDER THIS CONTRACT.
14. ALL WATER MAINS SHALL BE INSTALLED WITH THIRTY-SIX INCHES (36") MINIMUM COVER (FROM FINISHED GRADE). MAXIMUM DEPTH SHALL BE FIVE FEET (5'). WHERE WATER MAINS MAY CONFLICT WITH OTHER UTILITIES, THE WATER MAIN CROSSING SHALL BE CONSTRUCTED WITH DUCTILE IRON PIPE, MECHANICAL JOINT 45-DEG. BENDS AND MECHANICAL RESTRAINTS.

WORK ON SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY:

1. CONTRACTOR SHALL REVIEW AND COMPLY WITH ALL CONDITIONS AND SPECIAL PROVISIONS CONTAINED IN THE SCDOT ENCROACHMENT PERMIT(S) ISSUED FOR THIS PROJECT.
2. CONTRACTOR IS RESPONSIBLE FOR SUBMITTING CONSTRUCTION NOTIFICATION FORM (48 HOUR MINIMUM) AND COORDINATION OF ALL WORK WITHIN SCDOT RIGHTS-OF-WAY WITH THE LOCAL AND/OR DISTRICT SCDOT ENGINEERING REPRESENTATIVE.
3. CONTRACTOR IS RESPONSIBLE FOR PREPARING AND SUBMITTING A TRAFFIC CONTROL PLAN TO SCDOT FOR APPROVAL MINIMUM 48 HOURS PRIOR TO CONDUCTING WORK IN THE RIGHT-OF-WAY. ALL TRAFFIC CONTROL PLANS SHALL CONFORM TO CURRENT MUTCD AND CURRENT SCDOT GUIDELINES AND SPECIFICATIONS.
4. ALL SIGNAGE, PAVEMENT MARKINGS, AND MARKERS SHALL CONFORM TO CURRENT MUTCD GUIDELINES AND CURRENT SCDOT STANDARD SPECIFICATIONS AND DRAWINGS.
5. ALL PAVING AND DRAINAGE CONSTRUCTION SHALL CONFORM TO CURRENT SCDOT STANDARD SPECIFICATIONS AND DRAWINGS.
6. ALL PAVEMENT MARKINGS IN SCDOT RIGHT-OF-WAY SHALL BE THERMOPLASTIC AND CONFORM TO CURRENT MUTCD GUIDELINES AND CURRENT SCDOT STANDARD SPECIFICATIONS AND DRAWINGS.
7. REMOVAL OF PAVEMENT MARKINGS SHALL CONFORM TO CURRENT SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION SECTION 609.4.1.2.

TREE PROTECTION-BEAUFORT

1. ALL TREES HAVING A TRUNK DIAMETER OF 8-INCHES (dbh) OR LARGER, AND SPECIMEN TREES MUST BE PRESERVED UNLESS SPECIFICALLY APPROVED FOR REMOVAL IN ACCORDANCE WITH THE CITY OF BEAUFORT ZONING AND DEVELOPMENT STANDARDS ORDINANCE AND INDICATED ON THE PLANS TO BE REMOVED.
2. PRIOR TO COMMENCING ANY CLEARING OR CONSTRUCTION OPERATIONS ON THE SITE, THE CONTRACTOR SHALL ERECT TREE PROTECTION BARRIERS AROUND EACH TREE OR GROUP OF TREES DESIGNATED FOR PRESERVATION IN ACCORDANCE WITH THE DETAILS ON THE PLANS AND THE REQUIREMENTS CONTAINED IN ARTICLE 7, SECTION 7.3, PAR. D.3 OF THE CITY OF BEAUFORT, SOUTH CAROLINA UNIFIED DEVELOPMENT ORDINANCE.
3. A TREE PROTECTION ZONE SHALL BE ESTABLISHED IN ACCORDANCE WITH THE PROVISIONS CONTAINED IN ARTICLE 5, SECTION 5.3.3 OF THE CITY OF BEAUFORT, SOUTH CAROLINA UNIFIED DEVELOPMENT ORDINANCE FOR EACH EXISTING TREE OR GROUPING OF TREES DESIGNATED FOR PRESERVATION. THE MINIMUM TREE PROTECTION ZONE AS DEFINED IN THE ORDINANCE IS A CIRCULAR AREA MEASURED FROM THE LEADING EDGE OF THE ROOT FLARE AND HAVING A RADIUS OF THE GREATER OF 5-FT. OR ONE-HALF FOOT PER INCH dbh (DIAMETER AT BREAST HEIGHT). THE SIZE OR CONFIGURATION OF THE TREE PROTECTION ZONE MAY BE ADJUSTED AT THE DISCRETION OF THE CITY'S ADMINISTRATOR OF THE ORDINANCE.
    A. PLACEMENT OR STORAGE OF ANY SOIL, DEBRIS, OILS, FUEL, PAINTS, BUILDING MATERIALS OR ANY OTHER MATERIALS.
    B. BURNING
    C. VEHICLE PARKING
    D. PAVING
    E. TRENCHING FOR UTILITIES
4. WHERE UTILITY LINES MUST PASS THRU THE TREE PROTECTION ZONE, THEY SHALL BE INSTALLED BY HORIZONTAL BORING BENEATH THE ROOTS OF THE TREE.
5. WHERE IT IS NECESSARY FOR MACHINERY AND EQUIPMENT TO PASS WITHIN THE TREE PROTECTION ZONE, APPROVAL MUST BE OBTAINED FROM THE ZONING AND DEVELOPMENT ADMINISTRATOR. SPECIAL MEASURES WILL BE REQUIRED TO PROTECT THE ROOTS FROM EXCESSIVE COMPACTION.
6. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL TREE REMOVAL PERMITS AND FOR COORDINATING ALL INSPECTIONS REQUIRED BY BEAUFORT COUNTY IN CONNECTION WITH TREE PRESERVATION AND REMOVAL ACTIVITIES. DURING CONSTRUCTION.

HARBOR FREIGHT
BJWSA PROJECT #: 2020-082

SITE GRADING AND DRAINAGE:

1. ALL UTILITIES SHOWN ARE APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING 72-HOUR NOTICE TO ALL RESPECTIVE UTILITY COMPANIES FOR FIELD VERIFICATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. ANY DAMAGES TO EXISTING UTILITIES DUE TO THIS CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. TEMPORARY CONTROL OF STORM WATER DRAINAGE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SEQUENCING AND CONSTRUCTION TECHNIQUES SHALL PREVENT OBSTRUCTION OF STORM SEWERS, PONDING IN TRAFFIC AREAS OR RISING OF WATER LEVELS WHICH WOULD ENTER ADJACENT BUILDINGS OR STRUCTURES.
3. FULL WIDTH OF STREET AND ROAD RIGHTS-OF-WAY MUST BE CLEARED AND GRADED AS SHOWN IN THE DETAILS ON THE DRAWINGS
4. SUBGRADE PREPARATION: TOP SOIL SHALL BE REMOVED FROM PAVED AREAS TO A MINIMUM DEPTH AS RECOMMENDED IN THE PROJECT'S GEOTECHNICAL REPORT. ALL EXCAVATION SHALL BE TO SUBGRADE LIMITS.
5. ALL UTILITY PIPE LINES, CONDUITS AND SLEEVES UNDER PAVED AREAS MUST BE IN PLACE PRIOR TO COMPLETION OF THE ROADWAY SUBGRADE COMPACTION.
6. FINISH GRADING SHALL INCLUDE THE PLACEMENT OF TOPSOIL OVER ALL UNPAVED AREAS NOT OCCUPIED BY BUILDINGS OR STRUCTURES AND FINE GRADING AROUND BUILDINGS, ADJACENT TO WALKS, CURBS, GUTTERS AND STRUCTURES TO ASSURE POSITIVE DRAINAGE.

SCDHEC/OCRM SEDIMENT AND EROSION CONTROL STANDARD NOTES (REVISED DEC-2012):

1. IF NECESSARY, SLOPES, WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.
2. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW.
    A. WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
    B. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
3. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY, OR INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
4. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE SEDIMENT BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.
5. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
6. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
7. RESIDENTIAL SUBDIVISIONS REQUIRE EROSION CONTROL FEATURES FOR INFRASTRUCTURE AS WELL AS FOR INDIVIDUAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THESE PLANS DURING CONSTRUCTION OR OBTAIN APPROVAL OF AN INDIVIDUAL PLAN IN ACCORDANCE WITH S.C REG. 72-300 ET SEQ. AND SCR100000.
8. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
9. ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN'T BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS.
10. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
11. A COPY OF THE SWPPP, INSPECTIONS RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.
12. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.
13. MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.
14. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE.
15. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPS (SEDIMENT BASIN, FILTER BAG, ETC.).
16. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
    A. WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL.
    B. WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS.
    C. FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE.
    D. SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.
18. IF EXISTING BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC'S WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPS MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.
19. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE.

DRY UTILITY CONDUITS FOR ELECTRIC, TELEPHONE AND CABLE TV:

1. ALL DRY UTILITY CONDUIT ENDS SHALL BE CAPPED AND MARKED WITH A STEEL REBAR STAKE IMBEDDED ONE (1) FOOT BELOW GROUND SURFACE.
2. 48" MINIMUM BURY DEPTH FOR ALL ELECTRICAL CONDUITS.
3. MAINTAIN MINIMUM 12" VERTICAL CLEARANCE WHEN CROSSING WATER, SEWER, AND STORM DRAIN LINES.
4. MAINTAIN MINIMUM 18" HORIZONTAL CLEARANCE WHEN PARALLELING WATER, SEWER AND STORM DRAIN LINES.
5. EXTEND CONDUIT BEYOND PAVEMENT, CURB, AND SIDEWALKS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF THE INSTALLATION OF ALL UTILITY SERVICE CONNECTIONS. REFER TO APPROVED BUILDING PLANS FOR THE EXACT LOCATION OF ALL SERVICE CONNECTIONS. THE CONTRACTOR MUST INSTALL ALL CONDUITS, AS SHOWN ON THE PLANS OR AS REQUIRED BY RESPECTIVE UTILITY COMPANIES. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE STRICT COMPLIANCE WITH ALL APPLICABLE CODES AND REGULATIONS WITH REGARDS TO THE INSTALLATION OF UTILITIES AND CONDUIT.
7. LOCATIONS SHOWN ON THE PLANS FOR PROPOSED DRY UTILITY CONDUITS ARE APPROXIMATE ONLY. ALL DIMENSIONING AND STAKING SHOULD BE BASED ON ECONOMICAL AND PRACTICAL CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE RESPECTIVE UTILITY REPRESENTATIVES, PRIOR TO ANY CONDUIT INSTALLATION.
8. TRANSFORMER PADS SHALL BE LOCATED AS DIRECTED BY THE RESPECTIVE UTILITY REPRESENTATIVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH APPLICABLE CODE REQUIREMENTS.
9. NOTIFY THE ENGINEER IF CONFLICTS WITH EXISTING OR PROPOSED STRUCTURES REQUIRE PROPOSED UTILITIES BE RELOCATED.

SITE CLEARING AND DEMOLITION:

1. NO CLEARING SHALL OCCUR WITHIN DESIGNATED BUFFER ZONES, TREE PROTECTION ZONES, OUTSIDE OF THE PROPERTY LINES OR BEYOND THE CLEARING LIMITS UNLESS OTHERWISE SPECIFICALLY SHOWN ON THE PLANS.
2. ONLY THOSE TREES DESIGNATED ON THE DRAWINGS FOR REMOVAL ARE TO BE REMOVED AS PART OF THE SITE CLEARING OPERATIONS.
3. THE CONTRACTOR SHALL INSTALL A CONTINUOUS LINE OF FLAGGING OR FENCING ALONG THE LIMITS OF CLEARING PRIOR TO COMMENCING ANY CLEARING, DEMOLITION, OR CONSTRUCTION WORK ON THE PROJECT.
4. EXERCISE CAUTION DURING CLEARING OPERATIONS TO AVOID FELLING TREES INTO DESIGNATED TREE PROTECTION ZONES.
5. NO BURNING WILL BE ALLOWED WITHIN 50 FEET OF A TREE PROTECTION ZONE OR TREE DRIP LINE. CONTRACTOR SHALL COORDINATE ANY BURNING OPERATIONS WITH LOCAL JURISDICTION AND FIRE DEPARTMENTS.
6. SELECTIVE CLEARING AREAS SHALL BE CLEARED OF ALL BRUSH AND UNDERSTORY GROWTH.

UTILITY CONTACTS:

PALMETTO ELECTRIC	843-208-5512	1 COOPERATIVE WAY, HARDEEVILLE, SC 29927
DOMINION ENGERY	843-525-7700	108 ROBERT SMALLS PKWY, BEAUFORT, SC 29906
BJWSA	843-987-9292	6 SNAKE ROAD, OKATIE, SC 29909
HARGRAY COMMUNICATIONS	843-815-1675	PO BOX 3380, BLUFFTON, SC 29910
TIME WARNER CABLE	843-913-7940	11 OFFICE PARK ROAD, HILTON HEAD, SC 29928
CENTURY LINK	843-525-0044	2127 BOUNDARY ST #16, BEAUFORT, SC 29902
SANTEE COOPER	843-761-8000	1 RIVERWOOD DRIVE, MONCKS CORNER, SC 29461

CONTRACTOR NOTE:

CONTRACTOR TO OBTAIN AND BECOME FAMILIAR WITH GEOTECHNICAL REPORT #__________PREPARED BY__________.

ALL WORK MUST CONFORM TO PROJECT TECHNICAL SPECIFICATIONS FOR (PROJECT NAME) PREPARED BY WARD EDWARDS ENGINEERING. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A COPY OF THE TECHNICAL SPECIFICATIONS IF NOT PROVIDED WITH THE DRAWINGS.

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

PROJECT INFORMATION

DEVELOPER:
RICK STEELE / STEELE GROUP
BEAUFORT HFT DEVELOPMENT, LLC
1145 MOUNTAIN IVY DRIVE
ROSWELL, GA 30075
404.906.7968
RSTEELE@EIGFW.COM

PROPERTY OWNER:
GRAHAM B. TRASK
SIMBA FARM LP
68 FIDDLERS BRIDGE ROAD
STAATSBURG, NY 12580
845-704-7290
GRAHAMTRASK@GMAIL.COM

SOURCE OF TITLE:
BEAUFORT COUNTY REGISTER OF DEEDS,
DEED BOOK 2497 PAGE 1669

PROJECT STREET ADDRESS:
142 ROBERT SMALLS PKWY (SC HWY 170)

LATITUDE / LONGITUDE:
N 32° 25' 57"
W 80° 42' 52"

PROPERTY IDENTIFICATION NO.:
County I.D. #:R122 029 000 103H 0000

DEVELOPMENT PERMIT JURISDICTION:
CITY OF BEAUFORT

FLOOD ZONE:
C & A8 (BASE FLOOD ELEV:13)

PROPERTY ZONING:
T5-UC / RMX

SITE AREA:
TOTAL: 12.7 ACRES
DISTURBED: 4.8 ACRES

VERTICAL CONTROL DATUM:
NGVD29

BUILDING HEIGHT:
MAXIMUM: 3 STORIES
PROPOSED: 1 STORY

USE:
EXISTING: UNDEVELOPED
PROPOSED: COMMERICAL
1 BUILDINGS
15,990 SQ FT

REQUIRED BUFFERS: (BASED ON T5-UC)
FRONT: 0 FEET
REAR: 5 FEET
SIDE: 5 FEET
STREET: 0 FEET

REQUIRED SETBACKS: (BASED ON T5-UC)
FRONT: 15 FEET MAX
REAR: 5 FEET
SIDE: 0 FEET
STREET: 15 FEET

SURFACE COVERAGE: (BASED ON T5-UC)
MAX IMPERVIOUS ALLOWED: 100 %
MIN OPEN SPACE REQUIRED: N/A
EXISTING IMPERVIOUS: 0 SQ. FT. (0 %)
PROPOSED IMPERVIOUS: 53,927 SQ. FT. (26 %)

PARKING SUMMARY:
PARKING USE TYPES - RETAIL
USE TYPE = 1 SPACE/400 SQ. FT.
PARKING REQUIRED:
USE TYPE = 40 SPACES
PARKING PROVIDED:
TOTAL = 50 SPACES
ACCESSIBLE PARKING REQUIRED: 2 SPACES
ACCESSIBLE PARKING PROVIDED: 2 SPACES

DESIGN TEAM

LAND SURVEYOR:
GASQUE & ASSOC INC.
843.522.1798

GEOTECHNICAL ENGINEER:
GHD
843.815.5120

ARCHITECT:
BEAUFORT DESIGN BUILD
843.466.3664

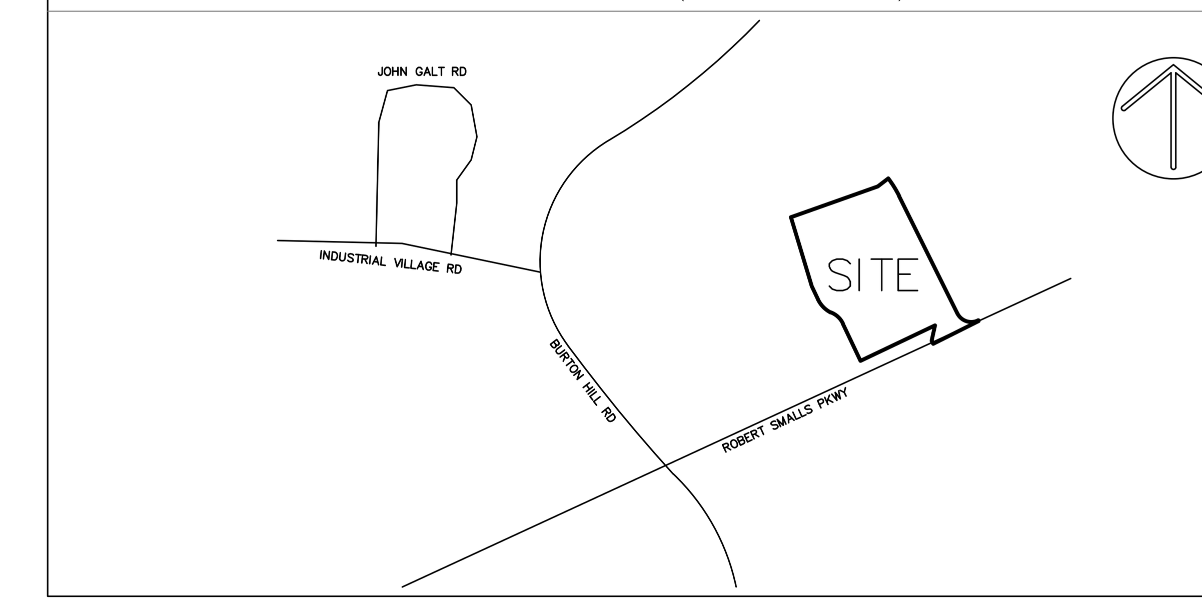
WETLAND CONSULTANT:
NEWKIRK ENV. INC.
843.470.1031

LANDSCAPE ARCHITECT:
COMPANY
PHONE

PERMITS

PERMIT	PERMIT #	ISSUED	EXPIRES
BJWSA			
FIRE MARSHAL			
SCDHEC/MS4 STORMWATER			
SCDHEC WATER			
SCDHEC WASTEWATER			
SCDOT ENCROACHMENT UTILITY			
SCDOT ENCROACHMENT DRIVEWAY			
MUNICIPALITY DEVELOPMENT			
USACE DETERMINATION			
USACE PERMIT			

VICINITY MAP (NOT TO SCALE)



SCHEDULE OF DRAWINGS

SHEET NO.	DESCRIPTION
C001	COVER SHEET & CONSTRUCTION NOTES
C002	OVERALL SITE PLAN
C101	EXISTING CONDITIONS PLANS
C201	INITIAL EROSION CONTROL PLANS AND DETAILS
C301	CLEARING & DEMOLITION PLANS AND DETAILS
C401	SITE LAYOUT PLANS
C501	GRADING PLANS AND DETAILS
C601	DRAINAGE PLANS AND DETAILS
C700	OVERALL UTILITY PLAN
C701	UTILITY PLANS, PROFILES AND DETAILS
C801	INTERMEDIATE EROSION CONTROL PLANS AND DETAILS
C901	PAVING PLANS, ROAD PROFILES AND DETAILS
C1001	TRAFFIC CONTROL, SIGNAGE & PAVEMENT MARKING PLANS AND DETAILS
C1101	FINAL EROSION CONTROL PLANS AND DETAILS
C1201-C1202	SCDOT SIGHT DISTANCE EXHIBIT AND SCDOT DETAILS

RELEASE SCHEDULE

RELEASE NO.	DESCRIPTION	DATE
A.	RELEASED FOR PERMITTING	02-02-2020
B.	RELEASED FOR PERMITTING	02-21-2020
C.	RELEASED FOR PERMITTING	02-26-2020
D.	RELEASED FOR PERMITTING	03-13-2020
E.	RELEASED FOR PERMITTING	03-20-2020
F.	RELEASED FOR BIDDING	04-01-2020
G.	RELEASED FOR PERMITTING	04-24-2020

SEQUENCE OF CONSTRUCTION ACTIVITIES

ESTIMATED START DATE: 07/01/2020 ESTIMATED COMPLETION DATE: 02/01/2021
ITEMS MUST OCCUR IN THE ORDER LISTED; ITEMS CANNOT OCCUR CONCURRENTLY UNLESS SPECIFICALLY NOTED.

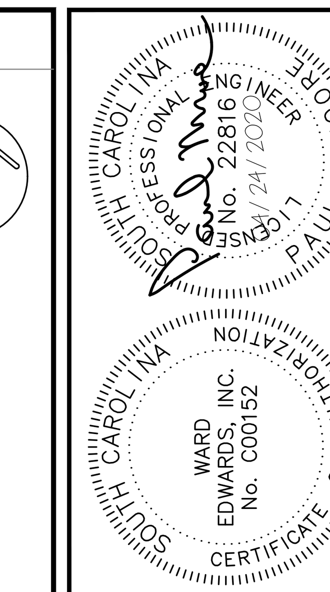
PHASE 1: (INITIAL)
1. RECEIVE NPDES COVERAGE FROM DHEC.
2. HOLD PRE-CONSTRUCTION MEETING.
3. NOTIFY DHEC EQC REGIONAL OFFICE OR OCRM OFFICE 48 HOURS PRIOR TO BEGINNING LAND-DISTURBING ACTIVITIES.
4. INSTALLATION OF CONSTRUCTION ENTRANCE.
5. CLEARING & GRUBBING ONLY AS NECESSARY FOR INSTALLATION OF PERIMETER CONTROLS.
6. INSTALLATION OF PERIMETER CONTROLS (E.G. SILT FENCE).
7. INSTALL TREE PROTECTION.
8. INSTALL INLET PROTECTION.
9. INSTALL SEDIMENT TUBES.
10. CLEARING & GRUBBING ONLY IN AREAS OF BASIN.

PHASES 2 & 3: (INTERMEDIATE & FINAL)
11. INSTALLATION OF BASIN AND INSTALLATION OF DIVERSIONS TO THOSE STRUCTURES (OUTLET STRUCTURES MUST BE COMPLETELY INSTALLED AS SHOWN ON THE DETAILS BEFORE PROCEEDING TO NEXT STEP; AREAS DRAINING TO THESE STRUCTURES CANNOT BE DISTURBED UNTIL THE STRUCTURES & DIVERSIONS TO THE STRUCTURES ARE COMPLETELY INSTALLED). INSTALL SURFACE DEWATERING SKIMMER PRIOR TO MOVING TO NEXT STEP.
12. CLEARING & GRUBBING OF SITE OR DEMOLITION (SEDIMENT & EROSION CONTROL MEASURES FOR THESE AREAS MUST ALREADY BE INSTALLED).
13. ROUGH GRADING.
14. INSTALLATION OF STORM DRAIN SYSTEM AND PLACEMENT OF INLET PROTECTION AS EACH INLET IS INSTALLED.
15. INSTALL ALL REQUIRED UTILITIES AND CURBING.
16. FINE GRADING, PAVING, ETC.
17. PLACE TOPSOIL & ESTABLISH FINISH GRADES.
18. PERMEABLE PAVERS SHALL BE LAID WHEN ALL HEAVY CONSTRUCTION IS COMPLETED.
19. CLEAN-OUT OF DETENTION BASINS THAT WERE USED AS SEDIMENT CONTROL STRUCTURES AND RE-GRADING OF DETENTION POND BOTTOMS; IF NECESSARY, MODIFICATION OF SEDIMENT BASIN RISER TO CONVERT TO DETENTION BASIN OUTLET STRUCTURE.
20. INSTALL PERMANENT SEEDING.
21. FLUSH ANY SEDIMENT FROM STORM SEWER PIPES AND INLETS.
22. REMOVAL OF TEMPORARY SEDIMENT & EROSION CONTROL MEASURES (INCLUDING SKIMMER) AFTER ENTIRE AREA DRAINING TO THE STRUCTURE IS FINALLY STABILIZED (THE DEPARTMENT RECOMMENDS THAT THE PROJECT OWNER / OPERATOR HAVE THE SWPPP PREPARER OR REGISTRATION EQUIVALENT APPROVE THE REMOVAL OF TEMPORARY STRUCTURES).
23. PERFORM AS-BUILT SURVEYS OF ALL DETENTION STRUCTURES AND SUBMIT TO DHEC OR MS4 FOR ACCEPTANCE.
24. SUBMIT NOTICE OF TERMINATION (NOT) TO DHEC AS APPROPRIATE.

- NOTE: PERFORM WEEKLY SITE INSPECTIONS DURING LAND DISTURBING ACTIVITIES AND MAKE RECOMMENDATIONS FOR ADDITIONAL BMPs OR MAINTENANCE OF EXISTING BMPs
- NOTE: ALL PUMPED DEWATERING SHALL BE PERFORMED USING AN APPROPRIATELY SIZED PUMPED WATER FILTER BAG.

SCDHEC-OCRM CERTIFICATION:

"I HAVE PLACED MY SIGNATURE AND SEAL ON THE DESIGN DOCUMENTS SUBMITTED SIGNIFYING THAT I ACCEPT RESPONSIBILITY FOR THE DESIGN OF THE SYSTEM. FURTHER, I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THE DESIGN IS CONSISTENT WITH THE REQUIREMENTS OF TITLE 48, CHAPTER 14 OF THE CODE OF LAWS OF SC, 1976 AS AMENDED, PURSUANT TO REGULATION 72-300 ET SEQ. (IF APPLICABLE), AND IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF SCR100000."



NOT FOR CONSTRUCTION

PLAN REVISIONS

NO.	DESCRIPTION	DATE
1		
2		
3		
4		
5		
6		
7		

Ward Edwards ENGINEERING
P.O. BOX 381, BLUFFTON, SOUTH CAROLINA 29910
PH (843) 837-5250 / FAX (843) 837-2558
WWW.WARDEDWARDS.COM

HARBOR FREIGHT
CITY OF BEAUFORT, SOUTH CAROLINA
BEAUFORT HFT DEVELOPMENT , LLC
ROSWELL, GA

COVER SHEET & CONSTRUCTION NOTES

VERTICAL DATUM:
NGVD29

PROJECT #:	170225A
DATE:	04/24/2020
DESIGNED BY:	BCB
CHECKED BY:	PRM

SHEET
C001

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David E. Gasque, R.L.S.
S.C. Registration Number 10506

GASQUE & ASSOCIATES INC.

LAND SURVEYORS · PLANNERS

28 PROFESSIONAL VILLAGE CIRCLE, BEAUFORT, S.C.
P.O. BOX 1363, BEAUFORT, S.C.
(843) 522-1798

SOUTH CAROLINA PROFESSIONAL ENGINEER LICENSE No. 22816 PAUL R. MOORE 24th 2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION WARD EDWARDS, INC. No. C00152

NOT FOR CONSTRUCTION

NO.	DESCRIPTION	DATE
1	PLAN REVISIONS	
2		
3		
4		
5		
6		
7		

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P.O. BOX 381, BLUFFTON, SOUTH CAROLINA 29910
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WWW.WARDEDWARDS.COM

HARBOR FREIGHT
CITY OF BEAUFORT, SOUTH CAROLINA
BEAUFORT HFT DEVELOPMENT , LLC
ROSWELL, GA

EXISTING CONDITIONS PLAN

VERTICAL DATUM: NGVD29

PROJECT #:	170225A
DATE:	04/24/2020
DESIGNED BY:	BCB
CHECKED BY:	PRM

SHEET
C101

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LIMITS OF DISTURBANCE:	NPDES

EROSION PREVENTION

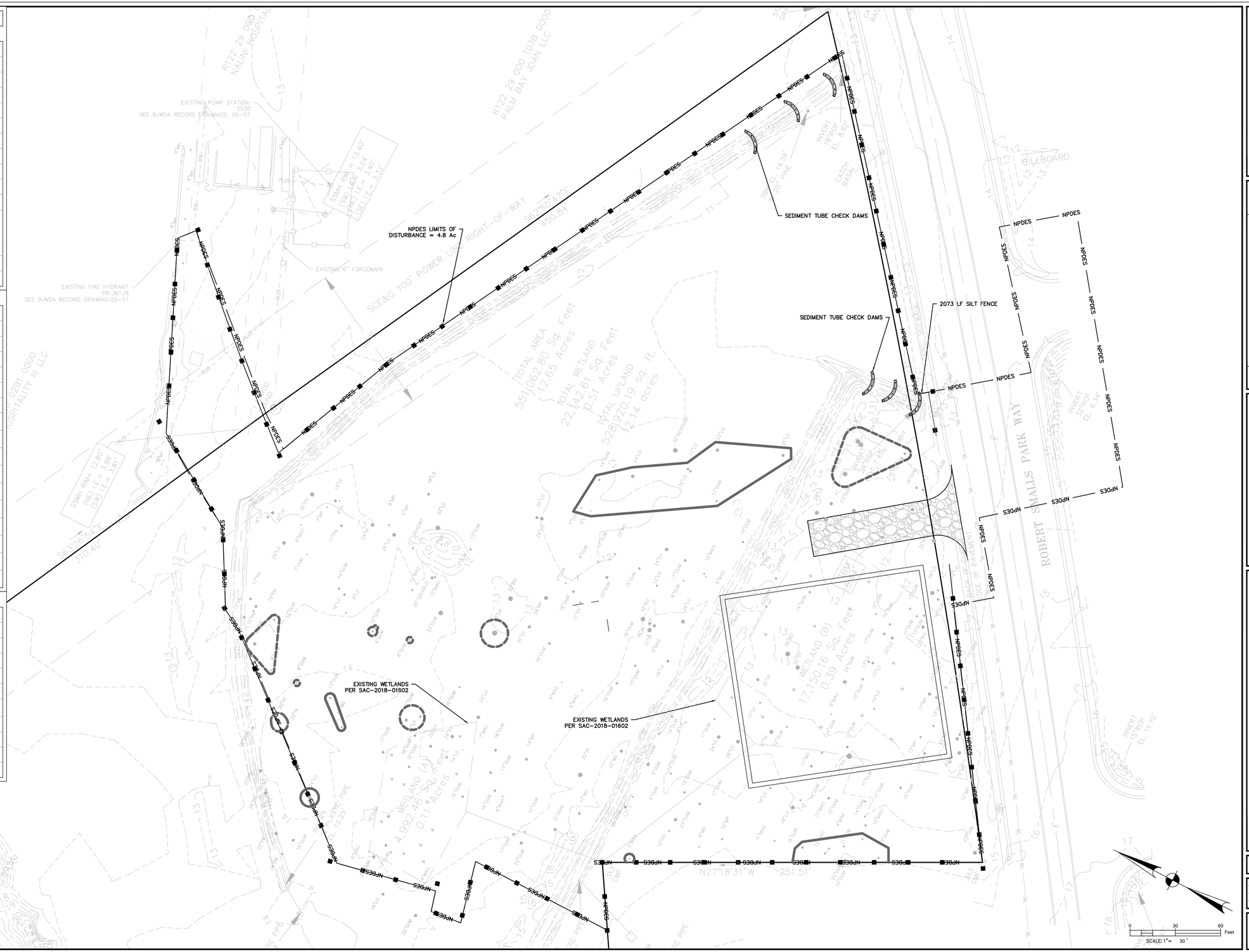
LAND GRADING:	LG OR
SURFACE ROUGHENING:	
TOPSOILING:	
TEMPORARY SEEDING:	TS
MULCHING:	M
ECB OR TRM:	
FGM:	FGM
BFM:	BFM
PERMANENT SEEDING:	PS
SODDING:	SO
RIPRAP:	
OUTLET PROTECTION:	RIPRAP ECB or TRM
DUST CONTROL:	DC
POLYACRYLAMIDE (PAM):	PAM

SEDIMENT CONTROL

SEDIMENT BASIN:	
TEMPORARY SEDIMENT TRAP:	
ROCK SEDIMENT DIKE:	
ROCK CHECK DAM:	OR
SEDIMENT TUBE:	
SILT FENCE:	
REINFORCED SILT FENCE:	
TYPE A–FABRIC INLET PROTECTION:	A
TYPE A–SEDIMENT TUBE INLET PROTECTION:	A
TYPE B – WIRE MESH AND STONE DROP INLET PROTECTION:	B
TYPE C – BLOCK AND GRAVEL INLET PROTECTION:	C
TYPE D – RIGID INLET FILTERS:	D
TYPE E – SURFACE COURSE CURB INLET FILTER:	E
TYPE F – INLET TUBE:	F
TYPE FC – FILTER BAG CURB INLET PROTECTION:	FC
TYPE FB – FILTER BAG CURB INLET PROTECTION:	FB
CONCRETE WASHOUT	CWS

RUNOFF CONVEYANCE MEASURES

VEGETATED CHANNELS:	
RIPRAP–LINED CHANNELS:	
ECB OR TRM–LINED CHANNELS:	
PAVED CHANNELS:	PC PC PC
PIPE SLOPE DRAINS:	
TEMPORARY STREAM CROSSING:	
TEMPORARY DIVERSION DITCH OR SWALE:	TD TD
PERMANENT DIVERSION DITCH:	PD PD
DIVERSION DIKE OR BERM:	DD DB
LEVEL SPREADER:	
SUBSURFACE DRAIN:	SSD SSD



NOT FOR CONSTRUCTION

SOUTH CAROLINA PROFESSIONAL ENGINEER LICENSE No. 22816 PAUL R. MOORE 24 APRIL 2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION WARD EDWARDS, INC. No. C00152

NO.	DESCRIPTION	DATE
1	PLAN REVISIONS	
2		
3		
4		
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HARBOR FREIGHT
CITY OF BEAUFORT, SOUTH CAROLINA
BEAUFORT HFT DEVELOPMENT , LLC
ROSWELL, GA

INITIAL EROSION CONTROL PLAN

VERTICAL DATUM: NGVD29

PROJECT #:	170225A
DATE:	04/24/2020
DESIGNED BY:	BCB
CHECKED BY:	PRM

SHEET C201

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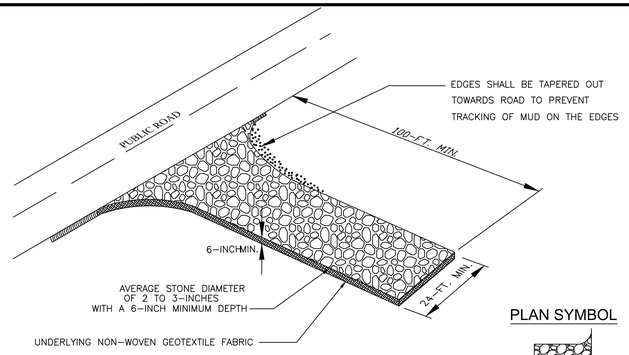


PLAN SYMBOL

SPECIFICATION	SIZE
ROCK PAD THICKNESS	6 INCHES
ROCK PAD WIDTH	24 FEET
ROCK PAD LENGTH	100 FEET
ROCK PAD STONE SIZE	D = 2-3 INCHES

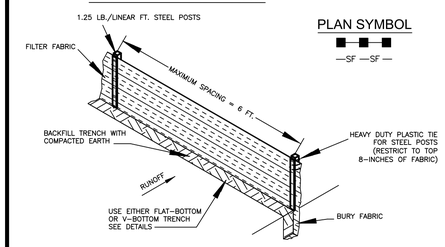
South Carolina Department of Health and Environmental Control

CONSTRUCTION ENTRANCE

STANDARD DRAWING NO. SC-06 PAGE 1 of 2

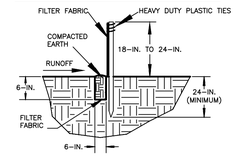
NOT TO SCALE — FEBRUARY 2014 DATE

SILT FENCE INSTALLATION

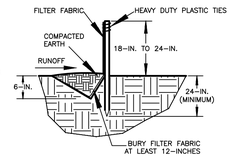


PLAN SYMBOL

FLAT-BOTTOM TRENCH DETAIL



V-SHAPED TRENCH DETAIL



SILT FENCE – GENERAL NOTES

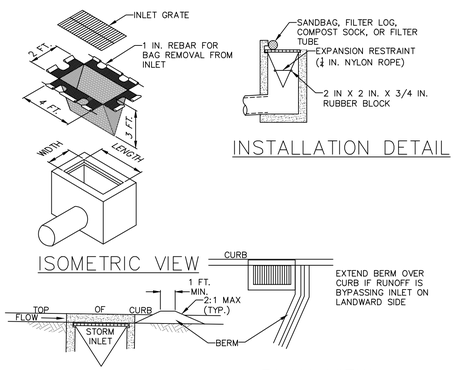
1. Do not place silt fence across channels or in other areas subject to concentrated flows. Silt fence should not be used as a velocity control BMP. Concentrated flows are any flows greater than 0.5 cfs.
2. Maximum sheet or overland flow path length to the silt fence shall be 100-feet.
3. Maximum slope steepness (normal [perpendicular] to the fence line) shall be 2:1.
4. Silt fence joints, when necessary, shall be completed by one of the following options:
   - Wrap each fabric together at a support post with both ends fastened to the post, with a 1-foot minimum overlap;
   - Overlap silt fence by installing 3-feet passed the support post to which the new silt fence roll is attached. Attach old roll to new roll with heavy-duty plastic ties; or,
   - Overlap entire width of each silt fence roll from one support post to the next support post.
5. Attach filter fabric to the steel posts using heavy-duty plastic ties that are evenly spaced within the top 8-inches of the fabric.
6. Install the silt fence perpendicular to the direction of the stormwater flow and place the silt fence the proper distance from the toe of steep slopes to provide sediment storage and access for maintenance and cleanout.
7. Install Silt Fence Checks (Tie-Backs) every 50-100 feet, dependent on slope, along silt fence that is installed with slope and where concentrated flows are expected or are documented along the proposed/installed silt fence.

South Carolina Department of Health and Environmental Control

SILT FENCE

STANDARD DRAWING NO. SC-03 Page 1 of 2

NOT TO SCALE — DATE



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

FILTER BAG CURB INLET PROTECTION

NO SCALE

CONSTRUCTION ENTRANCE – GENERAL NOTES

1. Stabilized construction entrances should be used at all points where traffic will egress/ingress a construction site onto a public road or any impervious surfaces, such as parking lots.
2. Install a non-woven geotextile fabric prior to placing any stone.
3. Install a culvert pipe across the entrance when needed to provide positive drainage.
4. The entrance shall consist of 2-inch to 3-inch D50 stone placed at a minimum depth of 6-inches.
5. Minimum dimensions of the entrance shall be 24-feet wide by 100-feet long, and may be modified as necessary to accommodate site constraints.
6. The edges of the entrance shall be tapered out towards the road to prevent tracking at the edge of the entrance.
7. Divert all surface runoff and drainage from the stone pad to a sediment trap or basin or other sediment trapping structure.
8. Limestone may not be used for the stone pad.

CONSTR. ENTRANCE – INSPECTION & MAINTENANCE

1. The key to functional construction entrances is weekly inspections, routine maintenance, and regular sediment removal.
2. Regular inspections of construction entrances shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of precipitation.
3. During regular inspections, check for mud and sediment buildup and pad integrity. Inspection frequencies may need to be more frequent during long periods of wet weather.
4. Reshape the stone pad as necessary for drainage and runoff control.
5. Wash or replace stones as needed and as directed by site inspector. The stone in the entrance should be washed or replaced whenever the entrance fails to reduce the amount of mud being carried off-site by vehicles. Frequent washing will extend the useful life of stone pad.
6. Immediately remove mud and sediment tracked or washed onto adjacent impervious surfaces by brushing or sweeping. Flushing should only be used when the water can be discharged to a sediment trap or basin.
7. During maintenance activities, any broken pavement should be repaired immediately.
8. Construction entrances should be removed after the site has reached final stabilization. Permanent vegetation should replace areas from which construction entrances have been removed, unless area will be converted to an impervious surface to serve post-construction.

South Carolina Department of Health and Environmental Control

CONSTRUCTION ENTRANCE

STANDARD DRAWING NO. SC-06 PAGE 2 of 2

GENERAL NOTES — FEBRUARY 2014 DATE

SILT FENCE – POST REQUIREMENTS

1. Silt Fence posts must be 48-inch long steel posts that meet, at a minimum, the following physical characteristics.
   - Composed of a high strength steel with a minimum yield strength of 50,000 psi.
   - Include a standard "T" section with a nominal face width of 1.38-inches and a nominal "T" length of 1.48-inches.
   - Weigh 1.25 pounds per foot (± 8%)
2. Posts shall be equipped with projections to aid in fastening of filter fabric.
3. Steel posts may need to have a metal soil stabilization plate welded near the bottom when installed along steep slopes or installed in loose soils. The plate should have a minimum cross section of 17-square inches and be composed of 15 gauge steel, at a minimum. The metal soil stabilization plate should be completely buried.
4. Install posts to a minimum of 24-inches. A minimum height of 1- to 2-inches above the fabric shall be maintained, and a maximum height of 3 feet shall be maintained above the ground.
5. Post spacing shall be at a maximum of 6-feet on center.

SILT FENCE – FABRIC REQUIREMENTS

1. Silt fence must be composed of woven geotextile filter fabric that consists of the following requirements:
   - Composed of fibers consisting of long chain synthetic polymers of at least 85% by weight of polyolefins, polyesters, or polyamides that are formed into a network such that the filaments or yarns retain dimensional stability relative to each other;
   - Free of any treatment or coating which might adversely alter its physical properties after installation;
   - Free of any defects or flaws that significantly affect its physical and/or filtering properties; and,
   - Have a minimum width of 36-inches.
2. Use only fabric appearing on SC DOT's Qualified Products Listing (QPL), Approval Sheet #34, meeting the requirements of the most current edition of the SC DOT Standard Specifications for Highway Construction.
3. 12-inches of the fabric should be placed within excavated trench and toed in when the trench is backfilled.
4. Filter Fabric shall be purchased in continuous rolls and cut to the length of the barrier to avoid joints.
5. Filter Fabric shall be installed at a minimum of 24-inches above the ground.

SILT FENCE – INSPECTION & MAINTENANCE

1. The key to functional silt fence is weekly inspections, routine maintenance, and regular sediment removal.
2. Regular inspections of silt fence shall be conducted once every calendar week and, as recommended, within 24-hours after each rainfall even that produces 1/2-inch or more of precipitation.
3. Attention to sediment accumulations along the silt fence is extremely important. Accumulated sediment should be continually monitored and removed when necessary.
4. Remove accumulated sediment when it reaches 1/3 the height of the silt fence.
5. Removed sediment shall be placed in stockpile storage areas or spread thinly across disturbed area. Stabilize the removed sediment after it is relocated.
6. Check for areas where stormwater runoff has eroded a channel beneath the silt fence, or where the fence has sagged or collapsed due to runoff overtopping the silt fence. Install checks/tie-backs and/or reinstall silt fence, as necessary.
7. Check for tears within the silt fence, areas where silt fence has begun to decompose, and for any other circumstance that may render the silt fence ineffective. Removed damaged silt fence and reinstall new silt fence immediately.
8. Silt fence should be removed within 30 days after final stabilization is achieved and once it is removed, the resulting disturbed area shall be permanently stabilized.

South Carolina Department of Health and Environmental Control

SILT FENCE

STANDARD DRAWING NO. SC-03 PAGE 2 of 2

GENERAL NOTES — FEBRUARY 2014 DATE

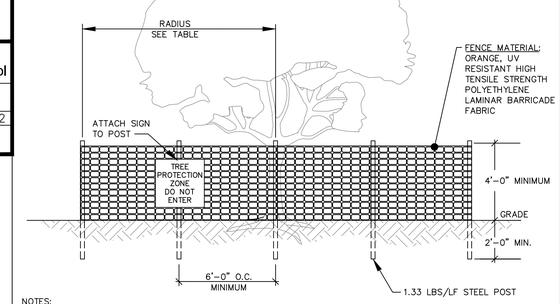
ADHESIVE	WATER DILUTION	NOZZLE TYPE	APPLICATION (GAL./ACRE)
ANIONIC ASPHALT EMULSION	7:1*	COARSE SPRAY	1,200
LATEX EMULSION	12.5:1*	FINE SPRAY	235
RESIN-IN-WATER EMULSION	4:1*	FINE SPRAY	300

*USE MANUFACTURER'S RECOMMENDATIONS WHEN AVAILABLE.

MAINTENANCE:
- PROHIBIT TRAFFIC ON SURFACE AFTER SPRAYING.
- SUPPLEMENT SURFACE COVERING AS NEEDED.

INSTALLATION:
- APPLY ACCORDING TO APPROVED PLAN.
- MULCH DISTURBED AREAS AMD TACKIFY WITH RESINS SUCH AS ASPHALT, CURASOL OR TERRATACK ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- STABILIZE DISTURBED AREAS WITH TEMPORARY OR PERMANENT VEGETATION.
- IRRIGATE DISTURBED AREAS UNTIL SURFACE IS WET.
- COVER SURFACES WITH CRUSHED STONE OR GRAVEL.
- APPLY CALCIUM CHLORIDE AT A RATE TO KEEP SURFACES MOIST.
- APPLY SPRAY-ON ADHESIVES TO MINERAL SOILS (NOT MUCK SOILS) AS DESCRIBED IN TABLE 1.

(DC) DUST CONTROL ON DISTURBED AREAS



NOTES:
1. ALL TREES DESIGNATED TO BE SAVED SHALL BE PROTECTED BY FENCING.
2. INSTALL TREE PROTECTION FENCE TO RADIUS INDICATED IN TABLE UNLESS OTHERWISE INDICATED ON PLANS.
3. WARNING SIGNS TO BE MADE OF DURABLE WATERPROOF MATERIAL.
4. ALL WARNING SIGN LETTERS TO BE AT LEAST 3 INCHES HIGH, CLEARLY LEGIBLE AND SPACED A MINIMUM OF ONE EVERY 40 FT. FOR PROTECTION AREAS LESS THAN 40 FT IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER SIDE.
5. THE SIZE OF EACH WARNING SIGN MUST BE A MINIMUM OF 2' x 2' AND BE VISIBLE FROM BOTH SIDES OF THE FENCE.
6. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC.
7. THERE SHALL BE NO STORAGE OF MATERIAL WITHIN THE BOUNDARIES OF THE TREE PROTECTION FENCING.
8. TREE PROTECTION FENCING SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. FENCING MUST REMAIN UPRIGHT AND SLACK FREE.

TABLE – RADIUS OF TREE PROTECTION ZONE (TPZ)

JURISDICTION	RADIUS OF CIRCULAR TPZ
BEAUFORT COUNTY BEAUFORT CO. DEV. CODE 5.11.100	1 FOOT PER INCH OF TRUNK DBH
TOWN OF BLUFFTON UDO 5.3.3	1.5 FEET PER INCH OF TRUNK DBH OR 10 FEET WHICHEVER IS GREATER
TOWN OF HILTON HEAD LMO 16-6-104, J-3A	FENCING AT DRIP LINE FOR ALL TREES TO BE RETAINED
CITY OF BEAUFORT BEAUFORT CODE 5.3.3	0.5 FOOT PER INCH OF TRUNK DBH
JASPER COUNTY ZONING ORD. ART. 13.5	FENCING AT DRIP LINE FOR ALL TREES TO BE RETAINED
TOWN OF PORT ROYAL PORT ROYAL CODE 5.7.70	1.5 FEET PER INCH OF TRUNK DBH OR 5 FEET WHICHEVER IS GREATER
CITY OF HARDEEVILLE MZ&DO 4.8, F-3	FENCING AT DRIP LINE FOR ALL TREES TO BE RETAINED

DBH = TRUNK DIAMETER AT BREAST HEIGHT

TREE PROTECTION FENCE

DETAIL #02915-008

NOT FOR CONSTRUCTION

NO.	DESCRIPTION	DATE
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HARBOR FREIGHT
CITY OF BEAUFORT, SOUTH CAROLINA
BEAUFORT HFT DEVELOPMENT , LLC
ROSWELL, GA

INITIAL EROSION CONTROL DETAILS

VERTICAL DATUM: NGVD29

PROJECT #:	170225A
DATE:	04/24/2020
DESIGNED BY:	BCB
CHECKED BY:	PRM

SHEET C202

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CLEARING / DEMOLITION LEGEND

DEMOLITION	
MILLING	
TREE TO BE REMOVED	
TREE PROTECTION	

SOUTH CAROLINA PROFESSIONAL ENGINEER LICENSE No. 22816 PAUL R. MOORE 24 APR 2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION WARD EDWARDS, INC. No. C00152

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HARBOR FREIGHT
CITY OF BEAUFORT, SOUTH CAROLINA
BEAUFORT HFT DEVELOPMENT , LLC
ROSWELL, GA

CLEARING & DEMOLITION PLAN

VERTICAL DATUM: NGVD29

PROJECT #:	170225A
DATE:	04/24/2020
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SHEET
C301

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HARBOR FREIGHT
CITY OF BEAUFORT, SOUTH CAROLINA
BEAUFORT HFT DEVELOPMENT , LLC
ROSWELL, GA

SITE LAYOUT PLAN

VERTICAL DATUM: NGVD29

PROJECT #:	170225A
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SHEET
C401

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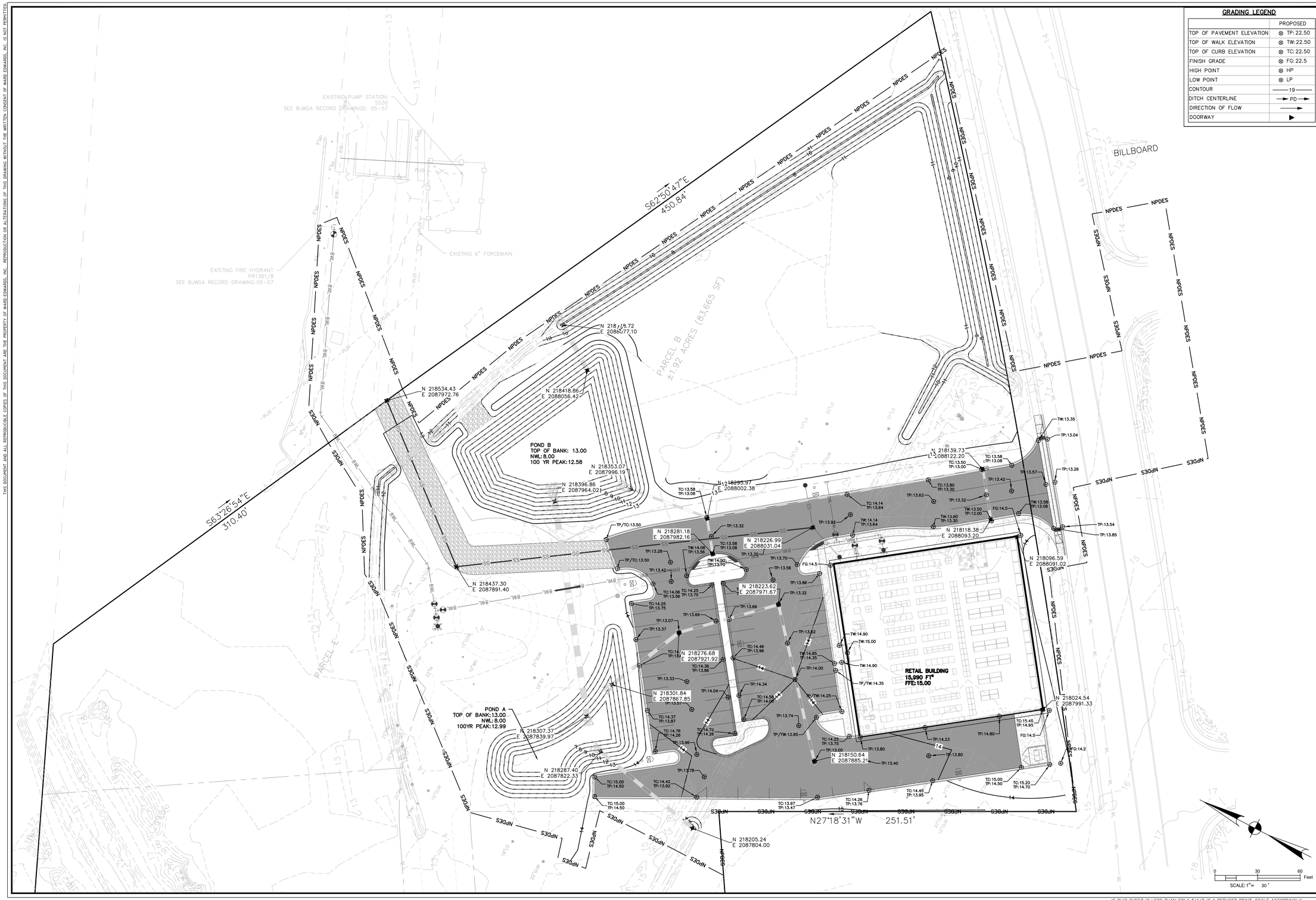

GRADING LEGEND

	PROPOSED
TOP OF PAVEMENT ELEVATION	⊗ TP: 22.50
TOP OF WALK ELEVATION	⊗ TW: 22.50
TOP OF CURB ELEVATION	⊗ TC: 22.50
FINISH GRADE	⊗ FG: 22.5
HIGH POINT	⊗ HP
LOW POINT	⊗ LP
CONTOUR	—— 19 ——
DITCH CENTERLINE	→ PD →
DIRECTION OF FLOW	→
DOORWAY	▶

SOUTH CAROLINA PROFESSIONAL ENGINEER LICENSE No. 22810 PAUL R. MOORE
24th April 2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION WARD EDWARDS, INC. No. C00152

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HARBOR FREIGHT
CITY OF BEAUFORT, SOUTH CAROLINA
BEAUFORT HFT DEVELOPMENT , LLC
ROSWELL, GA

GRADING PLAN

VERTICAL DATUM: NGVD29

PROJECT #:	170225A
DATE:	04/24/2020
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SHEET
C501

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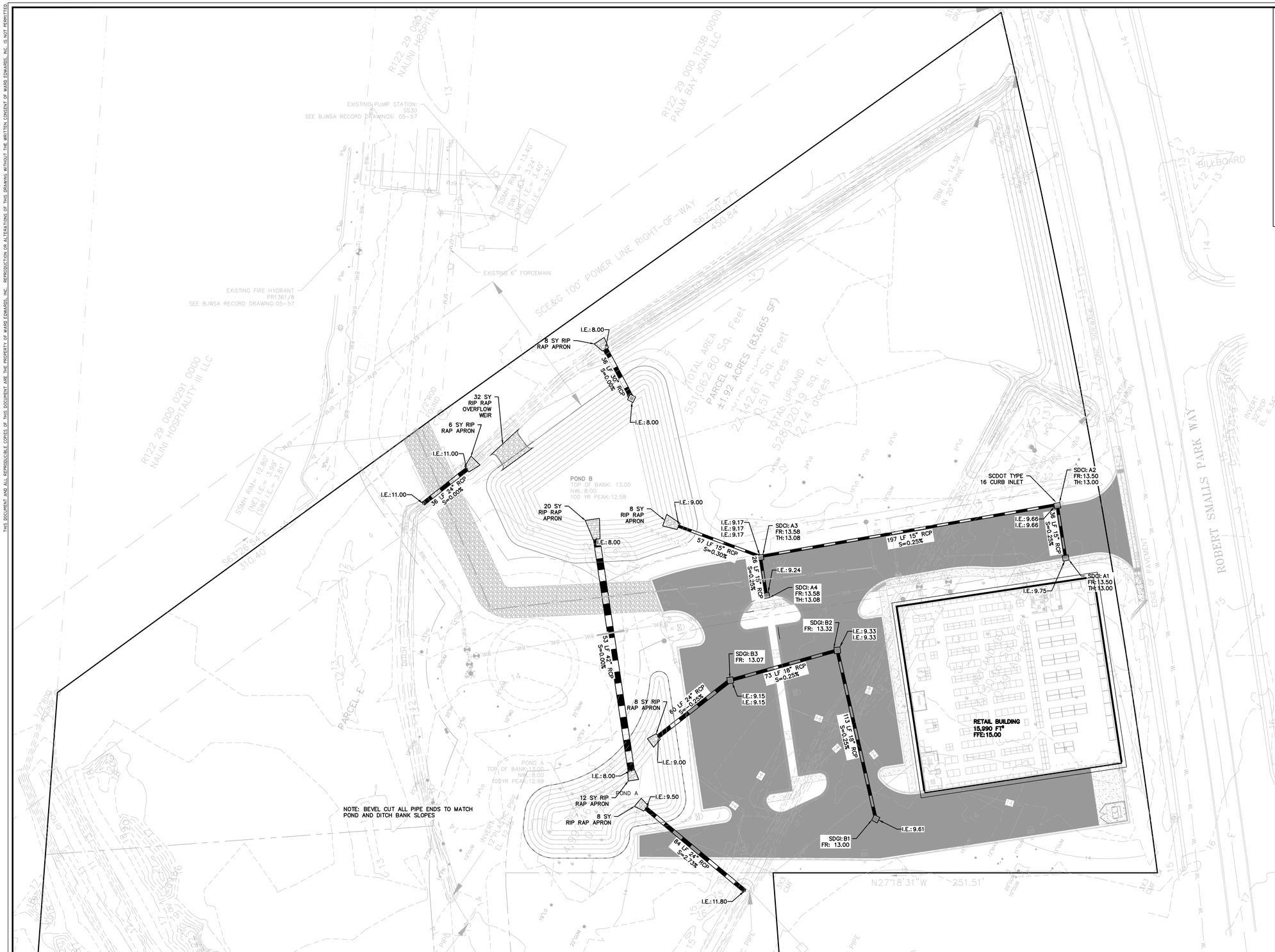

STORM SEWER/DRAINAGE LEGEND

	PROPOSED
DROP INLET	DI: A1
CURB INLET (WITH GRATE)	CI: A1
TYPE 16 CURB INLET	CI: A1
VALLEY GUTTER INLET	VI: A1
TRENCH DRAIN	TD: A1
WEIR INLET	WI: A1
YARD INLET	YI: A1
JUNCTION BOX	JB: A1
CLEANOUT	CO
DOWNSPOUT	
STORM DRAIN	
UNDERDRAIN	
ROOF DRAIN COLLECTOR	
FLARED END SECTION	
HEADWALL	
HEADWALL WITH WINGS	
OUTLET CONTROL STRUCTURE	
DITCH CENTERLINE	PD
DIRECTION OF FLOW	

SOUTH CAROLINA PROFESSIONAL ENGINEER LICENSE No. 22810 PAUL R. MOORE 2/24/2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION WARD EDWARDS, INC. No. C00152

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CITY OF BEAUFORT, SOUTH CAROLINA
BEAUFORT HFT DEVELOPMENT , LLC
ROSWELL, GA

DRAINAGE PLAN

VERTICAL DATUM: NGVD29

PROJECT #:	170225A
DATE:	04/24/2020
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SHEET C601

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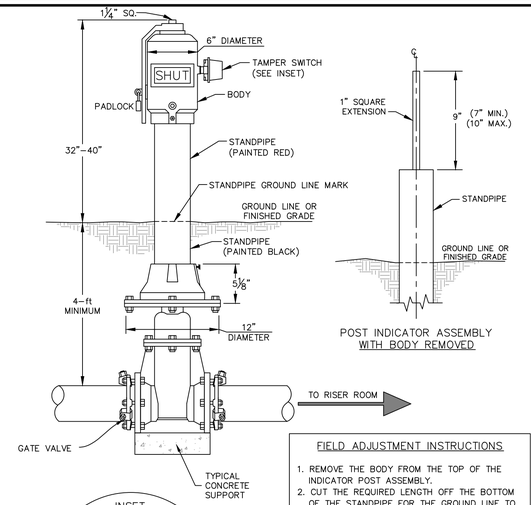
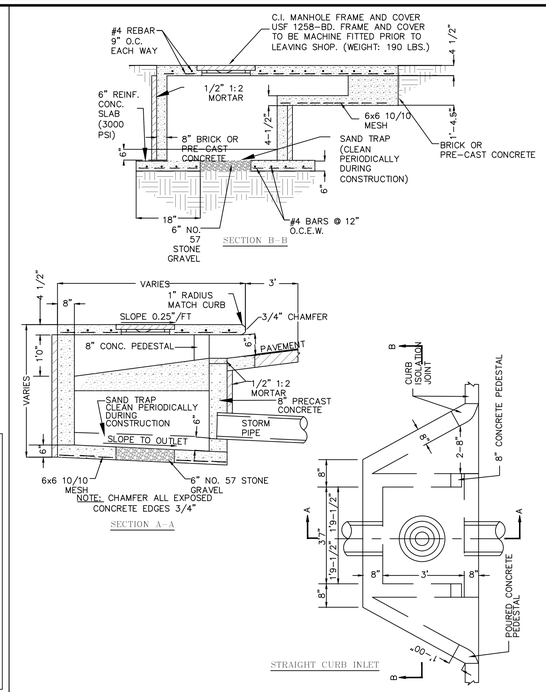


FIELD ADJUSTMENT INSTRUCTIONS

1. REMOVE THE BODY FROM THE TOP OF THE INDICATOR POST ASSEMBLY.
2. CUT THE REQUIRED LENGTH OFF THE BOTTOM OF THE STANDPIPE FOR THE GROUND LINE TO MATCH UP WITH STANDPIPE GROUND LINE MARK.
3. CUT THE 1" SQ. EXTENSION AT A DISTANCE OF 9" ABOVE THE TOP OF THE STANDPIPE.
4. SET THE "OPEN" AND "SHUT" TARGETS FOR THE APPROPRIATE VALVE SIZE.
5. RE–ATTACH THE BODY TO THE TOP OF THE INDICATOR POST ASSEMBLY.
6. ALL POST INDICATOR VALVES SHALL BE INSTALLED WITH AN ELECTRONIC UL LISTED TAMPER SWITCH.
7. THERE SHALL BE 36" OF UNOBSTRUCTED CLEARANCE AROUND THE PERIMETER OF ALL POST INDICATOR VALVES.
8. POST INDICATOR VALVE SHALL BE LOCATED AT A MINIMUM 40–FT FROM BUILDING.

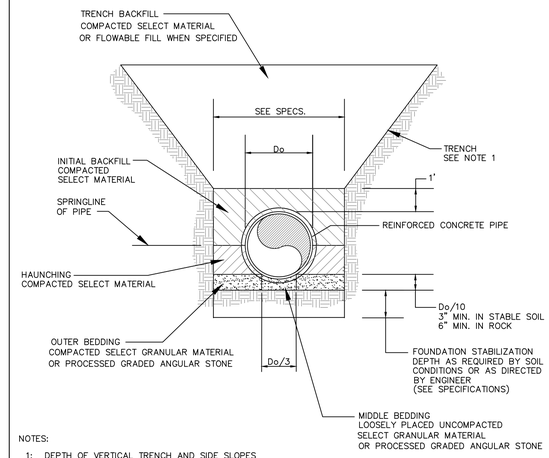
STANDARD POST INDICATOR VALVE

DETAIL 02510-032A



CURB INLET

DETAIL 02630-009

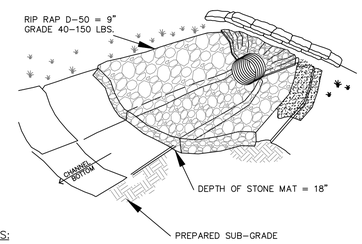


NOTES:

1: DEPTH OF VERTICAL TRENCH AND SIDE SLOPES OF TRENCH MAY VARY DEPENDING ON DEPTH OF EXCAVATION AND TRENCH PROTECTION SYSTEM USED. COMPLY WITH OSHA REGULATIONS (STANDARDS – 29 CFR) PART 1956 SUBPART P, EXCAVATIONS.

2. WHEN PROCESSED ANGULAR STONE IS USED FOR MIDDLE AND OUTER BEDDING, THE STONE SHALL BE COMPLETELY WRAPPED IN FILTER FABRIC TO PREVENT MIGRATION OF SURROUNDING SOILS.

EMBEDMENT DETAIL FOR REINFORCED CONCRETE PIPE

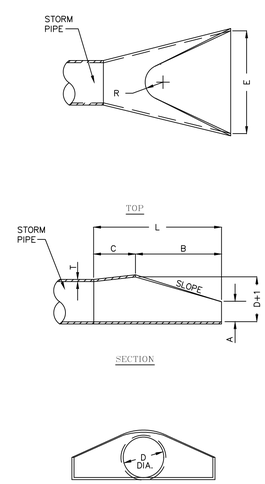


NOTES:

1. PLACE ALL RIP RAP ON 8 OUNCE NON–WOVEN FILTER CLOTH.
2. STAKING OF FILTER CLOTH PER MANUFACTURER'S SPECIFICATIONS.
3. LENGTH OF OUTLET STABILIZATION = 8 TIMES PIPE DIA. TOP WIDTH OF OUTLET STABILIZATION = 3 TIMES PIPE DIA. BOTTOM WIDTH OF OUTLET STABILIZATION = 6 TIMES PIPE DIA.

RIP RAP OUTLET STABILIZATION DETAIL

DETAIL #02370-009

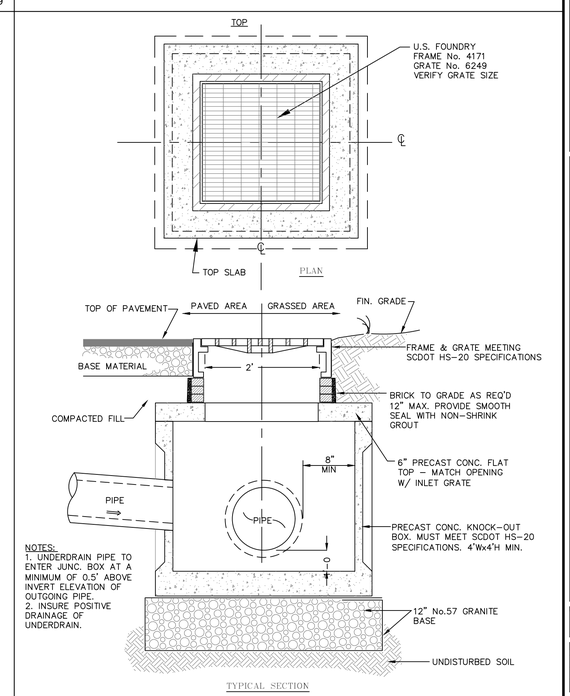


DIMENSIONS (IN INCHES)							
PIPE DIA.	SLOPE	A	B	C	L	E	R
12"	2.2:1	4"	2'–0"	4'–1"	6'–1"	2'–0"	9"
15"	2.2:1	6"	2'–3"	3'–10"	6'–1"	2'–6"	11"
18"	2.2:1	9"	2'–3"	3'–10"	6'–1"	3'–0"	1'–0"
24"	2.4:1	10"	3'–8"	2'–6"	6'–2"	4'–0"	1'–2"
30"	2.4:1	12"	4'–6"	1'–8"	6'–2"	5'–0"	1'–3"
36"	2.4:1	15"	5'–3"	2'–11"	8'–2"	6'–0"	1'–8"
42"	2.4:1	21"	5'–3"	2'–11"	8'–2"	6'–6"	1'–10"

T = PIPE WALL THICKNESS (0.0833D+1 TYPICAL)

CONCRETE FLARED END SECTION

DETAIL 02630-005



NOTES:
1. UNDERDRAIN PIPE TO ENTER JUNC. BOX AT A MINIMUM OF 0.5' ABOVE INVERT ELEVATION OF OUTGOING PIPE.
2. INSURE POSITIVE DRAINAGE OF UNDERDRAIN.

GRATE INLET

DETAIL 02630-027

NOT FOR CONSTRUCTION

SOUTH CAROLINA PROFESSIONAL ENGINEER LICENSE No. 22816 PAUL R. MOORE 24 APR 2020

SOUTH CAROLINA NOTIFICATION OF AUTHORIZATION CERTIFICATE WARD EDWARDS, INC. No. C00152

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HARBOR FREIGHT
CITY OF BEAUFORT, SOUTH CAROLINA
BEAUFORT HFT DEVELOPMENT , LLC
ROSWELL, GA

DRAINAGE DETAILS

VERTICAL DATUM: NGVD29

PROJECT #:	170225A
DATE:	04/24/2020
DESIGNED BY:	BCB
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SHEET C602

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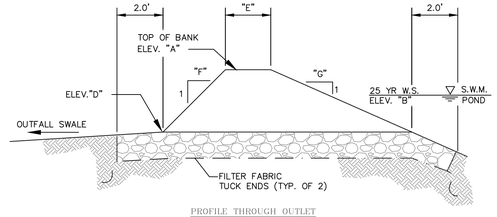
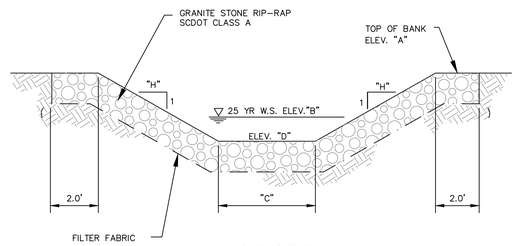
DIMENSION DATA

a	*.**'	top of bank
b	*.**'	25–yr. peak
c	*.**'	width of outlet weir
d	*.**'	Outlet weir elevation
e	*.**'	top width
f	*.**'	slope
g	*.**'	slope
H	*.**'	Slope



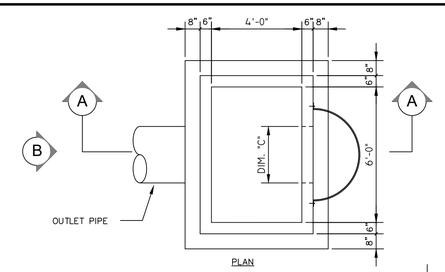
PROFILE THROUGH OUTLET



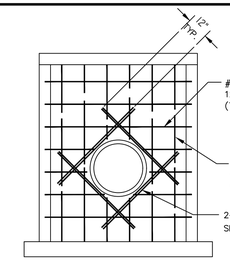
CROSS SECTION

POND SPILLWAY DETAILS

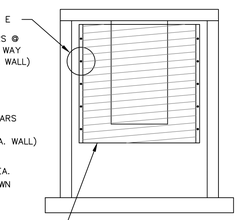
DETAIL 02660-003



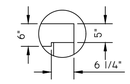
PLAN



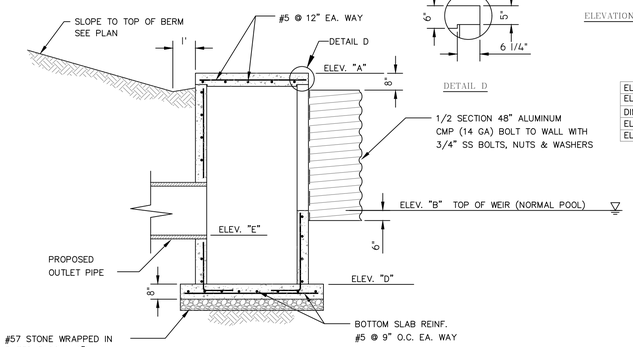
ELEVATION B



ELEVATION C



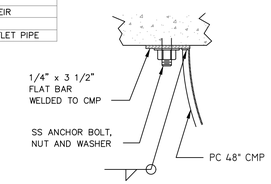
DETAIL D



SECTION A–A

DIMENSION DATA

ELEV. "A"	*.**'	TOP OF SLAB
ELEV. "B"	*.**'	TOP OF WEIR
DIM. "C"	*.**'	LENGTH OF WEIR
ELEV. "D"	*.**'	BOTTOM SLAB
ELEV. "E"	*.**'	INVERT OF OUTLET PIPE



DETAIL E

NOTES:

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.
2. WHERE UNSTABLE FOUNDATION SOILS ARE ENCOUNTERED, EXCAVATE TO DEPTH AS DIRECTED BY THE ENGINEER AND BACK FILL WITH ACCEPTABLE SOIL MATERIAL OR STONE.

POND OUTLET STRUCTURE

DETAIL 02660-001

NOT FOR CONSTRUCTION

SOUTH CAROLINA PROFESSIONAL ENGINEER
PAUL R. MOORE
LICENSE No. 22810
24 APRIL 2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION
WARD EDWARDS, INC.
No. C00152

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HARBOR FREIGHT
CITY OF BEAUFORT, SOUTH CAROLINA
BEAUFORT HFT DEVELOPMENT , LLC
ROSWELL, GA

DRAINAGE DETAILS

VERTICAL DATUM:
NGVD29

PROJECT #:	170225A
DATE:	04/24/2020
DESIGNED BY:	BCB
CHECKED BY:	PRM

SHEET
C602

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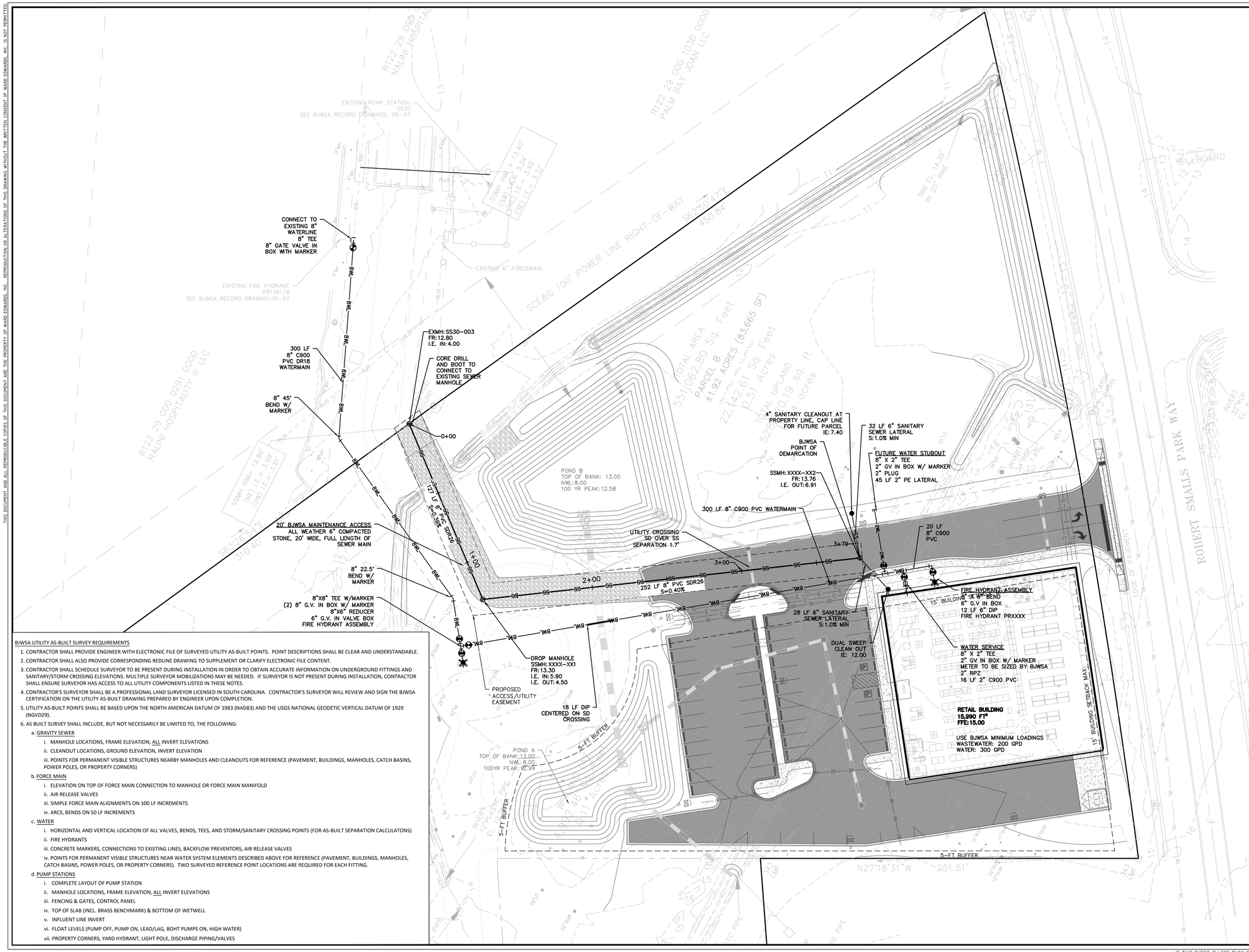

BJWSA UTILITY AS-BUILT SURVEY REQUIREMENTS

1. CONTRACTOR SHALL PROVIDE ENGINEER WITH ELECTRONIC FILE OF SURVEYED UTILITY AS-BUILT POINTS. POINT DESCRIPTIONS SHALL BE CLEAR AND UNDERSTANDABLE.
2. CONTRACTOR SHALL ALSO PROVIDE CORRESPONDING REDLINE DRAWING TO SUPPLEMENT OR CLARIFY ELECTRONIC FILE CONTENT.
3. CONTRACTOR SHALL SCHEDULE SURVEYOR TO BE PRESENT DURING INSTALLATION IN ORDER TO OBTAIN ACCURATE INFORMATION ON UNDERGROUND FITTINGS AND SANITARY/STORM CROSSING ELEVATIONS. MULTIPLE SURVEYOR MOBILIZATIONS MAY BE NEEDED. IF SURVEYOR IS NOT PRESENT DURING INSTALLATION, CONTRACTOR SHALL ENSURE SURVEYOR HAS ACCESS TO ALL UTILITY COMPONENTS LISTED IN THESE NOTES.
4. CONTRACTOR'S SURVEYOR SHALL BE A PROFESSIONAL LAND SURVEYOR LICENSED IN SOUTH CAROLINA. CONTRACTOR'S SURVEYOR WILL REVIEW AND SIGN THE BJWSA CERTIFICATION ON THE UTILITY AS-BUILT DRAWING PREPARED BY ENGINEER UPON COMPLETION.
5. UTILITY AS-BUILT POINTS SHALL BE BASED UPON THE NORTH AMERICAN DATUM OF 1983 (NAD83) AND THE USGS NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29).
6. AS BUILT SURVEY SHALL INCLUDE, BUT NOT NECESSARILY BE LIMITED TO, THE FOLLOWING:
   a. GRAVITY SEWER
      i. MANHOLE LOCATIONS, FRAME ELEVATION, ALL INVERT ELEVATIONS
      ii. CLEANOUT LOCATIONS, GROUND ELEVATION, INVERT ELEVATION
      iii. POINTS FOR PERMANENT VISIBLE STRUCTURES NEARBY MANHOLES AND CLEANOUTS FOR REFERENCE (PAVEMENT, BUILDINGS, MANHOLES, CATCH BASINS, POWER POLES, OR PROPERTY CORNERS)
   b. FORCE MAIN
      i. ELEVATION ON TOP OF FORCE MAIN CONNECTION TO MANHOLE OR FORCE MAIN MANIFOLD
      ii. AIR RELEASE VALVES
      iii. SIMPLE FORCE MAIN ALIGNMENTS ON 100 LF INCREMENTS
      iv. ARCS, BENDS ON 50 LF INCREMENTS
   c. WATER
      i. HORIZONTAL AND VERTICAL LOCATION OF ALL VALVES, BENDS, TEES, AND STORM/SANITARY CROSSING POINTS (FOR AS-BUILT SEPARATION CALCULATONS)
      ii. FIRE HYDRANTS
      iii. CONCRETE MARKERS, CONNECTIONS TO EXISTING LINES, BACKFLOW PREVENTORS, AIR RELEASE VALVES
      iv. POINTS FOR PERMANENT VISIBLE STRUCTURES NEAR WATER SYSTEM ELEMENTS DESCRIBED ABOVE FOR REFERENCE (PAVEMENT, BUILDINGS, MANHOLES, CATCH BASINS, POWER POLES, OR PROPERTY CORNERS). TWO SURVEYED REFERENCE POINT LOCATIONS ARE REQUIRED FOR EACH FITTING.
   d. PUMP STATIONS
      i. COMPLETE LAYOUT OF PUMP STATION
      ii. MANHOLE LOCATIONS, FRAME ELEVATION, ALL INVERT ELEVATIONS
      iii. FENCING & GATES, CONTROL PANEL
      iv. TOP OF SLAB (INCL. BRASS BENCHMARK) & BOTTOM OF WETWELL
      v. INFLUENT LINE INVERT
      vi. FLOAT LEVELS (PUMP OFF, PUMP ON, LEAD/LAG, BOHT PUMPS ON, HIGH WATER)
      vii. PROPERTY CORNERS, YARD HYDRANT, LIGHT POLE, DISCHARGE PIPING/VALVES

WATER SYSTEM LEGEND

	PROPOSED
WATER METER	
WATER VALVE	
REDUCER	
POST INDICATOR VALVE	
FIRE HYDRANT	
BLOWOFF HYDRANT	
YARD HYDRANT	
FIRE DEPART. CONN. (FDC)	
CAP	
PLUG	
BACKFLOW PREVENTOR	
BUTTERFLY VALVE	
FITTINGS	
WATER LINE	WL
SERVICE LATERAL	

SANITARY SEWER LEGEND

	PROPOSED
SANITARY SEWER MANHOLE	MH: A1
SANITARY SEWER CLEANOUT	CO
SANITARY SEWER WYE	
CHECK VALVE IN MANHOLE	
PLUG VALVE	
AIR RELEASE VALVE	
SEWER LINE	SS
FORCE MAIN	FM
SERVICE LATERAL	

SOUTH CAROLINA PROFESSIONAL ENGINEER LICENSE No. 22810 PAUL R. MOORE 24 APR 2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION WARD EDWARDS, INC. No. C00152

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NO.	DESCRIPTION	DATE
1	PLAN REVISIONS	
2		
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Ward Edwards ENGINEERING
P.O. BOX 381 , BLUFFTON, SOUTH CAROLINA 29910
PH (843) 837-5250 / FAX (843) 837-2558
WWW.WARDEDWARDS.COM

HARBOR FREIGHT
CITY OF BEAUFORT, SOUTH CAROLINA
BEAUFORT HFT DEVELOPMENT , LLC
ROSWELL, GA

UTILITY PLAN

VERTICAL DATUM: NGVD29

PROJECT #:	170225A
DATE:	04/24/2020
DESIGNED BY:	BCB
CHECKED BY:	PRM

SHEET C701

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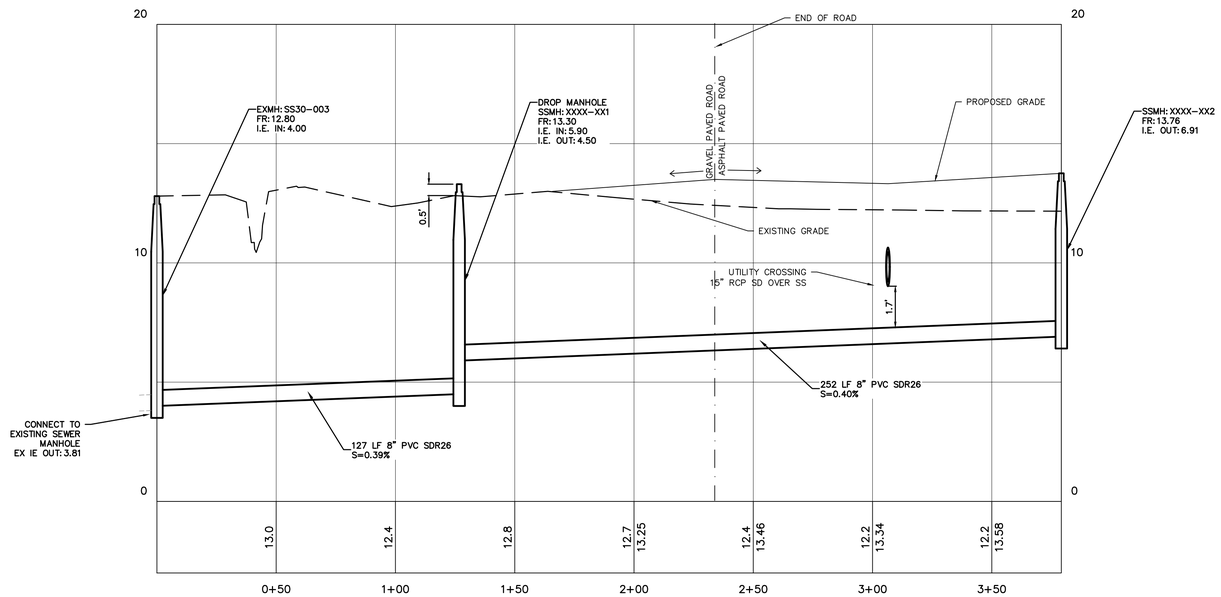

SANITARY SEWER PROFILE 'A'

SCALE: 1" = 30' HORIZ
1" = 3' VERT

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NO.	DESCRIPTION	DATE
1	PLAN REVISIONS	
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HARBOR FREIGHT
CITY OF BEAUFORT, SOUTH CAROLINA
BEAUFORT HFT DEVELOPMENT , LLC
ROSWELL, GA

SANITARY SEWER PROFILES

VERTICAL DATUM:
NGVD29

PROJECT #:	170225A
DATE:	04/24/2020
DESIGNED BY:	BCB
CHECKED BY:	PRM

SHEET
C702

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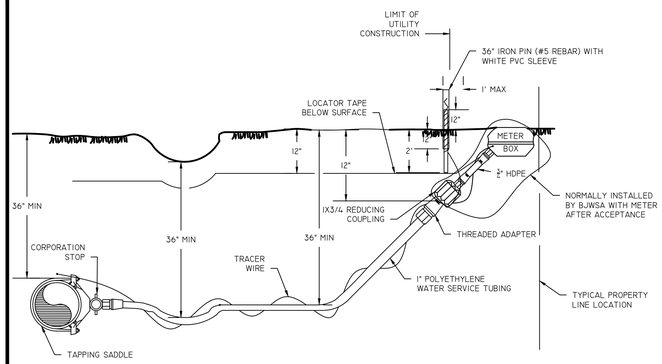
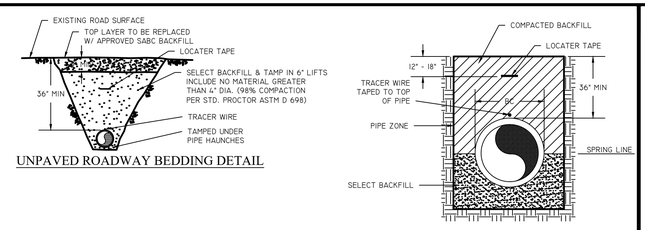
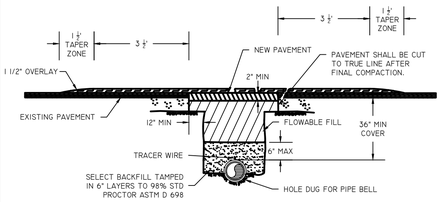


BEAUFORT–JASPER WATER & SEWER AUTHORITY		
WATER SERVICE PROFILE		
DATE 07/01/09	DRAWN BY BMC	DRAWING #
SCALE N.T.S	APPROVED BY ERS	W–09



UNPAVED ROADWAY BEDDING DETAIL

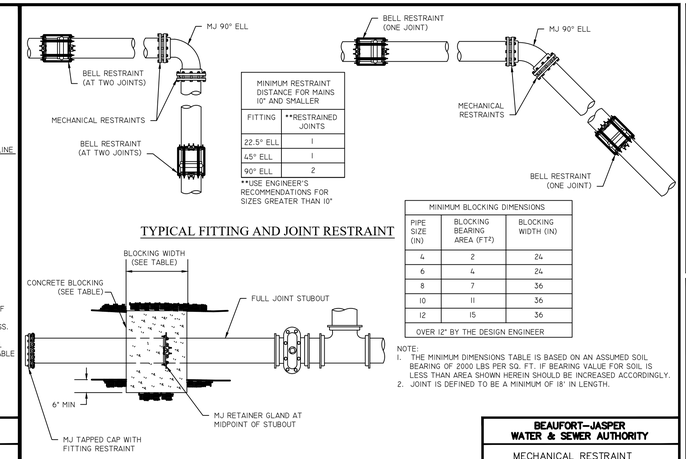
TYPICAL BEDDING DETAIL



PAVED AREA DETAIL

NOTES:
1. PAVEMENT CUT TO EXTEND 12" BEYOND EDGES OF TRENCH AS SHOWN.
2. MATCH EXISTING PAVEMENT TYPE AND THICKNESS. MINIMUM THICKNESS OVER TRENCH IS 2".
3. ALL INSTALLATIONS IN PUBLIC ROADWAYS SHALL COMPLY WITH CONDITIONS OUTLINED ON APPLICABLE ENCROACHMENT PERMIT.

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
BEDDING PRESSURE PIPE DETAIL		
DATE 07/01/09	DRAWN BY BMC	DRAWING #
SCALE N.T.S	APPROVED BY ERS	G–02



MINIMUM RESTRAINT DISTANCE FOR MAINS 10" AND SMALLER	
FITTING	**RESTRAINED JOINTS
22.5° ELL	1
45° ELL	1
90° ELL	2

**USE ENGINEER'S RECOMMENDATIONS FOR SIZES GREATER THAN 10"

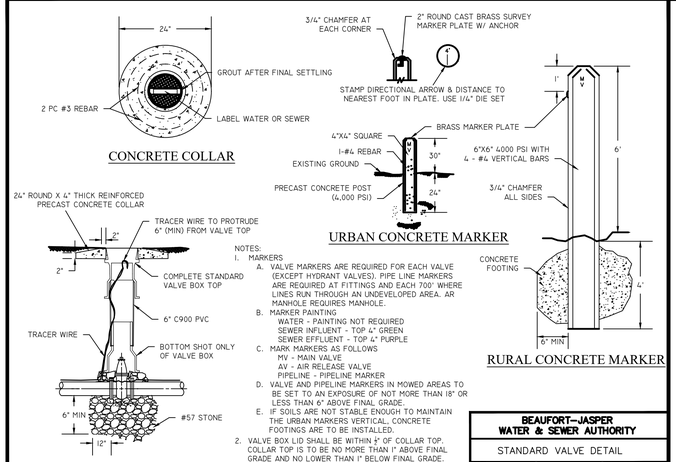
TYPICAL FITTING AND JOINT RESTRAINT

MINIMUM BLOCKING DIMENSIONS		
PIPE SIZE (IN)	BLOCKING BEARING AREA (FT²)	BLOCKING WIDTH (IN)
4	2	24
6	4	24
8	7	36
10	11	36
12	15	36
OVER 12" BY THE DESIGN ENGINEER		

NOTE:
1. THE MINIMUM DIMENSIONS TABLE IS BASED ON AN ASSUMED SOIL BEARING OF 2000 LBS PER SQ. FT. IF BEARING VALUE FOR SOIL IS LESS THAN AREA SHOWN HEREIN SHOULD BE INCREASED ACCORDINGLY.
2. JOINT IS DEFINED TO BE A MINIMUM OF 18" IN LENGTH.

TYPICAL FUTURE STUBOUT

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
MECHANICAL RESTRAINT		
DATE 07/01/09	DRAWN BY BMC	DRAWING #
SCALE N.T.S	APPROVED BY ERS	G–08



CONCRETE COLLAR

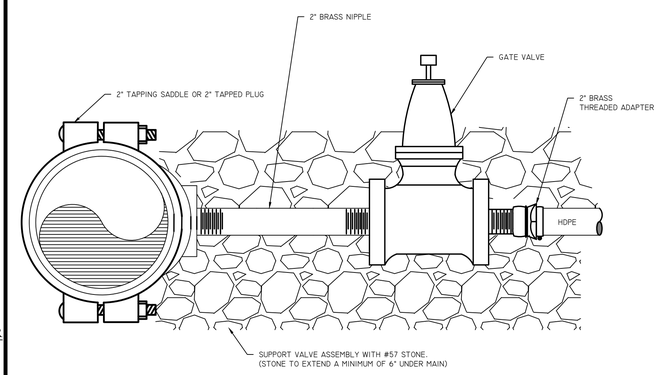
URBAN CONCRETE MARKER

RURAL CONCRETE MARKER

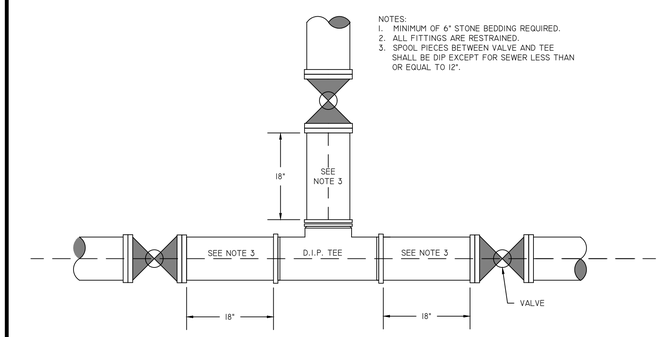
NOTES:
1. MARKERS
   A. VALVE MARKERS ARE REQUIRED FOR EACH VALVE (EXCEPT HYDRANT VALVES). PIPE LINE MARKERS ARE REQUIRED AT FITTINGS AND EACH 700' WHERE LINES RUN THROUGH AN UNDEVELOPED AREA. AR MANHOLE REQUIRES MANHOLE.
   B. MARKER PAINTING
      WATER - PAINTING NOT REQUIRED
      SEWER INFLUENT - TOP 4" GREEN
      SEWER EFFLUENT - TOP 4" PURPLE
   C. MARK MARKERS AS FOLLOWS
      MV - MAIN VALVE
      AV - AIR RELEASE VALVE
      PIPELINE - PIPELINE MARKER
   D. VALVE AND PIPELINE MARKERS IN MOWED AREAS TO BE SET TO AN EXPOSURE OF NOT MORE THAN 18" OR LESS THAN 6" ABOVE FINAL GRADE.
   E. IF SOILS ARE NOT STABLE ENOUGH TO MAINTAIN THE URBAN MARKERS VERTICAL, CONCRETE FOOTINGS ARE TO BE INSTALLED.
2. VALVE BOX LID SHALL BE WITHIN 3" OF COLLAR TOP. COLLAR TOP IS TO BE NO MORE THAN 1" ABOVE FINAL GRADE AND NO LOWER THAN 1" BELOW FINAL GRADE.
3. CONCRETE COLLAR NOT REQUIRED IN PAVEMENT. VALVE BOX TOP IS TO BE TRAFFIC RATED.

VALVE AND VALVE BOX

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
STANDARD VALVE DETAIL		
DATE 07/01/09	DRAWN BY BMC	DRAWING #
SCALE N.T.S	APPROVED BY ERS	G–12

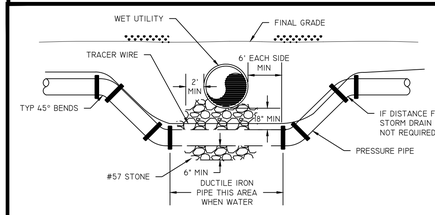


BEAUFORT–JASPER WATER & SEWER AUTHORITY		
2" CONNECTION		
DATE 07/01/09	DRAWN BY BMC	DRAWING #
SCALE N.T.S	APPROVED BY ERS	G–14



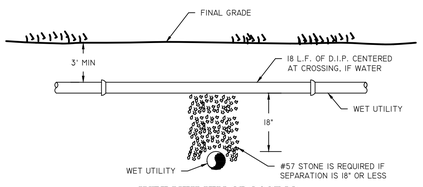
NOTES:
1. MINIMUM OF 6" STONE BEDDING REQUIRED.
2. ALL FITTINGS ARE RESTRAINED.
3. SPOOL PIECES BETWEEN VALVE AND TEE SHALL BE DIP EXCEPT FOR SEWER LESS THAN OR EQUAL TO 12".

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
TEE AND VALVES		
DATE 07/01/09	DRAWN BY BMC	DRAWING #
SCALE N.T.S	APPROVED BY ERS	G–15



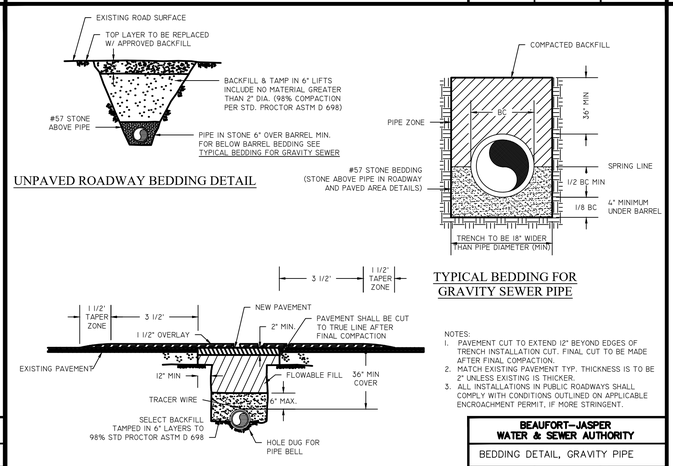
NOTES:
1. WRITTEN AUTHORIZATION FROM BJWSA IS REQUIRED FOR LESS THAN 18" SEPARATION.
2. NORMAL JOINT RESTRAINT IS REQUIRED.

PRESSURE PIPE UNDER WET UTILITY FOR FINAL DEPTH 5' OR GREATER



WET UTILITY CROSSING

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
WET UTILITY CROSSING		
DATE 07/01/09	DRAWN BY BMC	DRAWING #
SCALE N.T.S	APPROVED BY ERS	G–16



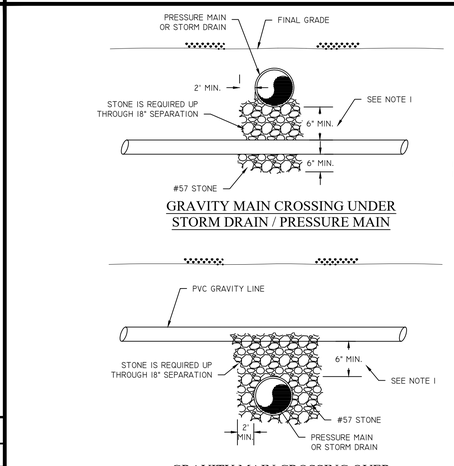
UNPAVED ROADWAY BEDDING DETAIL

TYPICAL BEDDING FOR GRAVITY SEWER PIPE

NOTES:
1. PAVEMENT CUT TO EXTEND 12" BEYOND EDGES OF TRENCH INSTALLATION CUT. FINAL CUT TO BE MADE AFTER FINAL COMPACTION.
2. MATCH EXISTING PAVEMENT TYP. THICKNESS IS TO BE 2" UNLESS EXISTING IS THICKER.
3. ALL INSTALLATIONS IN PUBLIC ROADWAYS SHALL COMPLY WITH CONDITIONS OUTLINED ON APPLICABLE ENCROACHMENT PERMIT, IF MORE STRINGENT.

PAVED AREA DETAIL

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
BEDDING DETAIL, GRAVITY PIPE		
DATE 07/01/09	DRAWN BY BMC	DRAWING #
SCALE N.T.S	APPROVED BY ERS	S–01



GRAVITY MAIN CROSSING UNDER STORM DRAIN / PRESSURE MAIN

GRAVITY MAIN CROSSING OVER STORM DRAIN / PRESSURE MAIN

NOTE:
1. SYSTEMS SHOULD NOT BE DESIGNED WITH LESS THAN 12" SEPARATION. IF LESS SEPARATION IS UNAVOIDABLE, WRITTEN AUTHORIZATION FROM BJWSA IS REQUIRED.

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
GRAVITY MAIN CROSSING		
DATE 07/01/09	DRAWN BY BMC	DRAWING #
SCALE N.T.S	APPROVED BY ERS	S–03

NOT FOR CONSTRUCTION

SOUTH CAROLINA PROFESSIONAL ENGINEER LICENSE No. 22816 PAUL R. MOORE 24 APRIL 2020

SOUTH CAROLINA AUTHORIZATION CERTIFICATE OF WARD EDWARDS, INC. No. C00152

NO.	DESCRIPTION	DATE
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P.O. BOX 381 - BLUFFTON, SOUTH CAROLINA 29910
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HARBOR FREIGHT
CITY OF BEAUFORT, SOUTH CAROLINA
BEAUFORT HFT DEVELOPMENT , LLC
ROSWELL, GA

UTILITY DETAILS

VERTICAL DATUM:	NGVD29
PROJECT #:	170225A
DATE:	04/24/2020
DESIGNED BY:	BCB
CHECKED BY:	PRM

SHEET
C703

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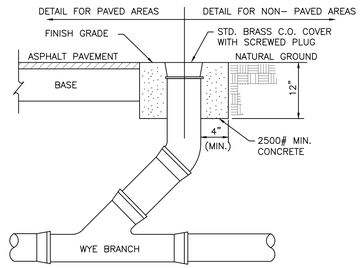
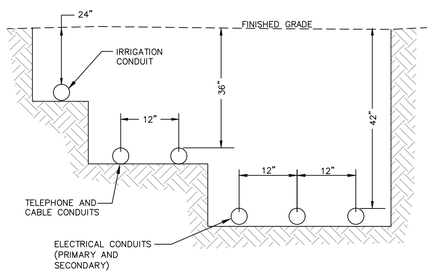
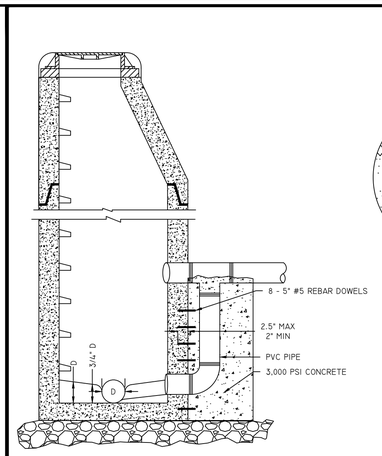


NOTE: USE EXPANSION JOINT MAT'L AROUND PAD IN CONCRETE PAVED AREAS.

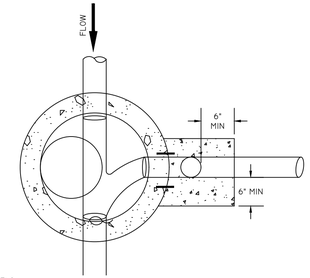
CLEANOUT DETAIL



UTILITY CONDUIT TRENCH DETAIL

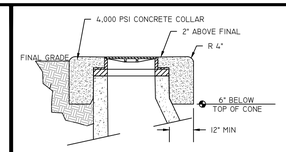


SECTION VIEW



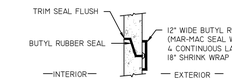
PLAN VIEW

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
DROP MANHOLE		
DATE 07/01/09	DRAWN BY: BMC	DRAWING #
SCALE: N.T.S	APPROVED BY: ERS	S–06

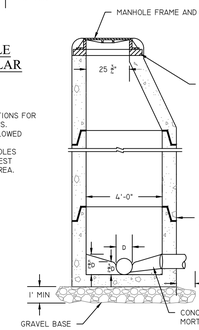


RURAL MANHOLE PROTECTIVE COLLAR

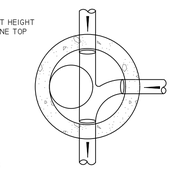
NOTES:
1. REFER TO STANDARD SPECIFICATIONS FOR INTERIOR COATING REQUIREMENTS.
2. CONCRETE GROUTING IS NOT ALLOWED INSIDE MANHOLES.
3. RIM ELEVATION ON RURAL MANHOLES SHALL BE 6" HIGHER THAN NEAREST MANHOLE OUTSIDE THE RURAL AREA.



JOINT DETAIL

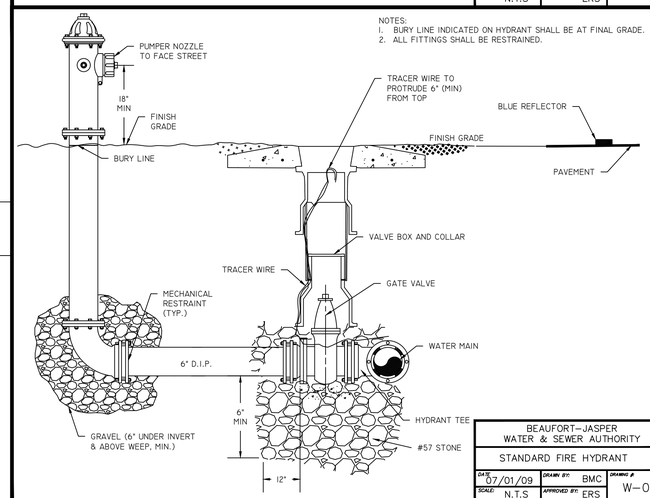


SECTION VIEW



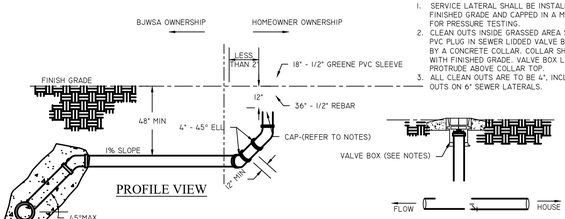
PLAN VIEW

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
STANDARD MANHOLE		
DATE 07/01/09	DRAWN BY: BMC	DRAWING #
SCALE: N.T.S	APPROVED BY: ERS	S–09



NOTES:
1. BURY LINE INDICATED ON HYDRANT SHALL BE AT FINAL GRADE.
2. ALL FITTINGS SHALL BE RESTRAINED.

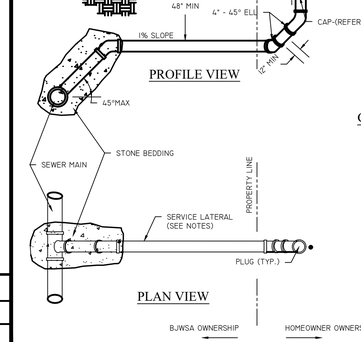
BEAUFORT–JASPER WATER & SEWER AUTHORITY		
STANDARD FIRE HYDRANT		
DATE 07/01/09	DRAWN BY: BMC	DRAWING #
SCALE: N.T.S	APPROVED BY: ERS	W–03



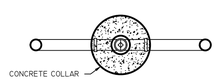
PROFILE VIEW

CLEAN OUT INSTALLATION - PROFILE VIEW

NOTES:
1. SERVICE LATERAL SHALL BE INSTALLED 12" BELOW FINISHED GRADE AND CAPPED IN A MANNER SUITABLE FOR PRESSURE TESTING.
2. CLEAN OUTS INSIDE GRASSED AREA SHALL CONSIST OF PVC PLUG IN SEWER LIDDED VALVE BOX SURROUNDED BY A CONCRETE COLLAR. COLLAR SHALL BE FLUSH WITH FINISHED GRADE. VALVE BOX LID SHALL NOT PROTRUDE ABOVE COLLAR TOP.
3. ALL CLEAN OUTS ARE TO BE 4", INCLUDING CLEAN OUTS ON 6" SEWER LATERALS.



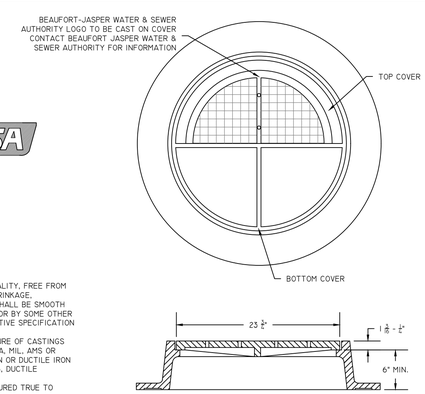
PLAN VIEW



CLEAN OUT - PLAN VIEW

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
SEWER SERVICE, SINGLE		
DATE 07/01/09	DRAWN BY: BMC	DRAWING #
SCALE: N.T.S	APPROVED BY: ERS	S–11

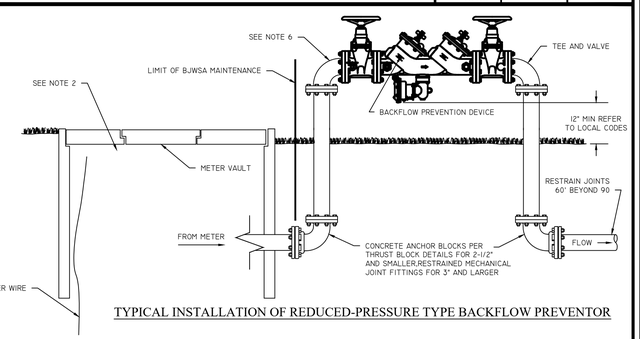
LOGO



NOTES:

1. CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE, DISTORTION OR OTHER DEFECTS. THEY SHALL BE SMOOTH AND WELL CLEANED BY SHOT BLASTING OR BY SOME OTHER APPROVED METHOD UNLESS AN ALTERNATIVE SPECIFICATION IS MADE.
2. MATERIALS USED IN THE MANUFACTURE OF CASTINGS SHOULD CONFORM TO ASTM, AASHTO, ASA, MIL, AMS OR FEDERAL SPECIFICATIONS FOR GRAY IRON OR DUCTILE IRON AS FOLLOWS: GRAY IRON-ASTM CLASS 35, DUCTILE IRON-GRADE 60-40-18.
3. ALL CASTINGS SHALL BE MANUFACTURED TRUE TO PATTERN

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
MANHOLE, COVER AND FRAME		
DATE 07/01/09	DRAWN BY: BMC	DRAWING #
SCALE: N.T.S	APPROVED BY: ERS	S–05



TYPICAL INSTALLATION OF REDUCED-PRESSURE TYPE BACKFLOW PREVENTOR

NOTES:
1. REDUCED-PRESSURE BACKFLOW PREVENTION DEVICES SHALL BE REQUIRED FOR ANY SERVICE WHERE TOXIC MATERIALS ARE USED OR WHERE POSITIVE PROTECTION FOR THE PUBLIC WATER SUPPLY IS REQUIRED. TYPICAL APPLICATIONS INCLUDE: HOSPITALS, MEDICAL & DENTAL LABS, MORTUARIES, INDUSTRIAL PLANTS, DRY CLEANERS, IRRIGATION SYSTEMS, OR AS DETERMINED BY BJWSA.
2. SEE SPECIFIC METER DETAIL FOR MORE INFORMAION.
3. BACKFLOW PREVENTION DEVICES SHALL BE INSTALLED ADJACENT TO AND ON PROPERTY SIDE OF SIDEWALK WHERE APPLICABLE. WHERE NO SIDEWALKS EXISTS, THE ASSEMBLY SHALL BE INSTALLED BEFORE ANY BRANCH AND AS CLOSE AS POSSIBLE TO THE WATER METER LOCATION. FINAL LOCATION TO BE APPROVED BY BJWSA PRIOR TO INSTALLATION.
4. SCREENING AND LANDSCAPING PLACES AROUND DEVICE SHALL ALLOW FOR ACCESS BY BJWSA PERSONNEL.
5. FREEZE PROTECTION IS THE OWNERS RESPOSIBILTY.
6. PIPING AND FITTINGS THROUGH 2 1/2" SHALL BE SCHD 40 GALVANIZED STEEL. PIPING AND FITTINGS 3" AND LARGER SHALL BE FLANGED DUCTILE IRON.
7. REFER TO SCDHEC APPROVED LIST OF BACKFLOW PREVENTION DEVICES.
8. DUAL CHECK VALVES MAY BE INSTALLED IN UNDERGROUND VAULT (PRIOR APPROVAL BY BJWSA REQUIRED).

BEAUFORT–JASPER WATER & SEWER AUTHORITY		
BACKFLOW PREVENTION DETAIL		
DATE 07/01/09	DRAWN BY: BMC	DRAWING #
SCALE: N.T.S	APPROVED BY: ERS	W–01

SOUTH CAROLINA PROFESSIONAL ENGINEER LICENSE No. 22816 PAUL R. MOORE 24 APRIL 2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION WARD EDWARDS, INC. No. C00152

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NO.	DESCRIPTION	DATE
1	PLAN REVISIONS	
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PH (843) 837-5250 / FAX (843) 837-2558
WWW.WARDEDWARDS.COM

HARBOR FREIGHT
CITY OF BEAUFORT, SOUTH CAROLINA
BEAUFORT HFT DEVELOPMENT , LLC
ROSWELL, GA

UTILITY DETAILS

VERTICAL DATUM: NGVD29

PROJECT #:	170225A
DATE:	04/24/2020
DESIGNED BY:	BCB
CHECKED BY:	PRM

SHEET C704

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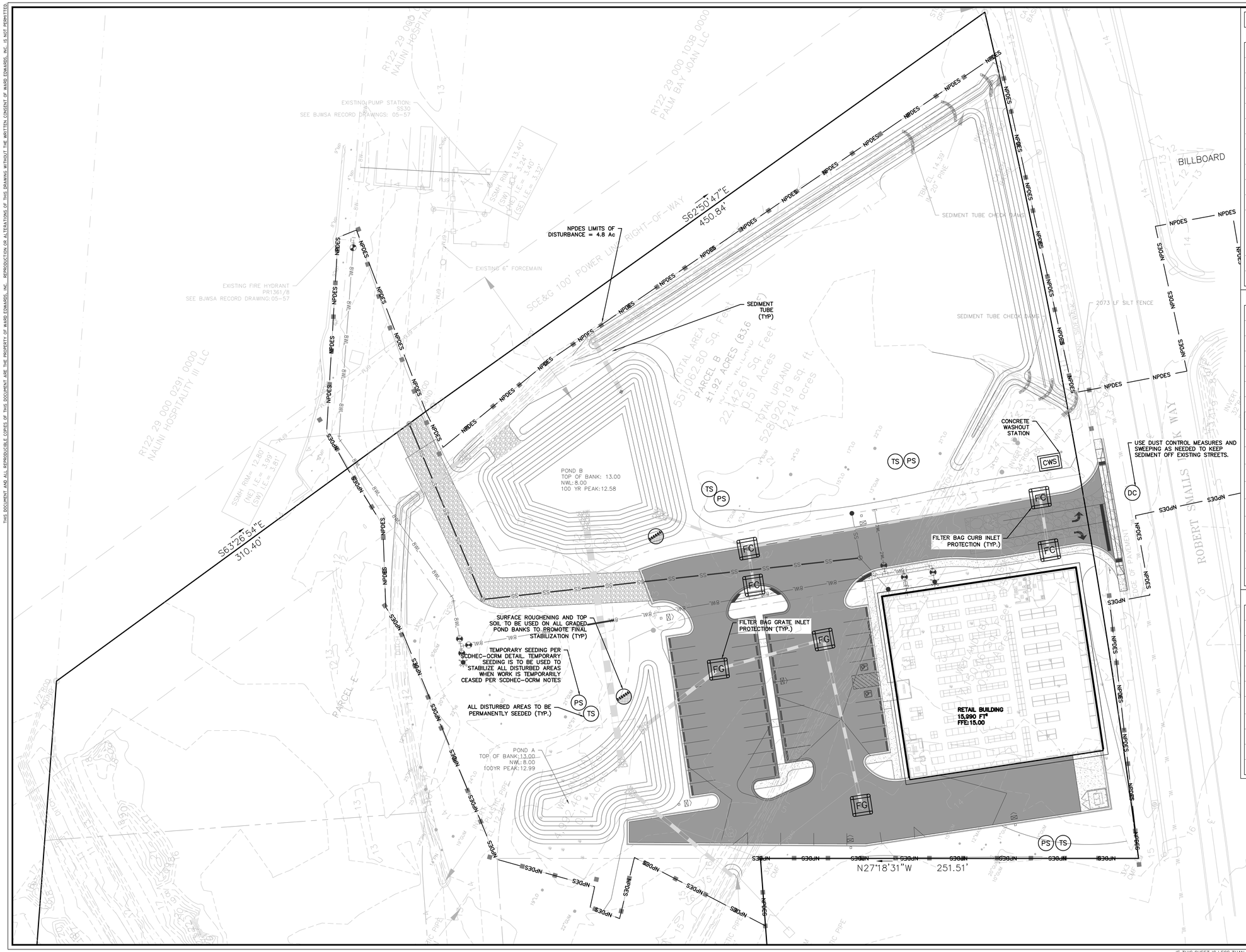

LIMITS OF DISTURBANCE:	NPDES

EROSION PREVENTION

LAND GRADING:	LG OR
SURFACE ROUGHENING:	
TOPSOILING:	
TEMPORARY SEEDING:	TS
MULCHING:	M
ECB OR TRM:	
FGM:	FGM
BFM:	BFM
PERMANENT SEEDING:	PS
SODDING:	SO
RIPRAP:	
OUTLET PROTECTION:	RIPRAP / ECB or TRM
DUST CONTROL:	DC
POLYACRYLAMIDE (PAM):	PAM

SEDIMENT CONTROL

SEDIMENT BASIN:	
TEMPORARY SEDIMENT TRAP:	
ROCK SEDIMENT DIKE:	
ROCK CHECK DAM:	OR
SEDIMENT TUBE:	
SILT FENCE:	
REINFORCED SILT FENCE:	
TYPE A-FABRIC INLET PROTECTION:	A
TYPE A-SEDIMENT TUBE INLET PROTECTION:	A
TYPE B – WIRE MESH AND STONE DROP INLET PROTECTION:	B
TYPE C – BLOCK AND GRAVEL INLET PROTECTION:	C
TYPE D – RIGID INLET FILTERS:	D
TYPE E – SURFACE COURSE CURB INLET FILTER:	E
TYPE F – INLET TUBE:	F
TYPE FC – FILTER BAG CURB INLET PROTECTION:	FC
TYPE FB – FILTER BAG CURB INLET PROTECTION:	FB
CONCRETE WASHOUT	CWS

RUNOFF CONVEYANCE MEASURES

VEGETATED CHANNELS:	VC
RIPRAP-LINED CHANNELS:	RC
ECB OR TRM-LINED CHANNELS:	
PAVED CHANNELS:	PC PC PC
PIPE SLOPE DRAINS:	
TEMPORARY STREAM CROSSING:	
TEMPORARY DIVERSION DITCH OR SWALE:	TD TD
PERMANENT DIVERSION DITCH:	PD PD
DIVERSION DIKE OR BERM:	DD DB
LEVEL SPREADER:	
SUBSURFACE DRAIN:	SSD SSD

SOUTH CAROLINA PROFESSIONAL ENGINEER LICENSE No. 22810 PAUL R. MOORE 24 APR 2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION WARD EDWARDS, INC. No. C00152

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HARBOR FREIGHT
CITY OF BEAUFORT, SOUTH CAROLINA
BEAUFORT HFT DEVELOPMENT , LLC
ROSWELL, GA

INTERMEDIATE & FINAL EROSION CONTROL PLAN

VERTICAL DATUM: NGVD29

PROJECT #:	170225A
DATE:	04/24/2020
DESIGNED BY:	BCB
CHECKED BY:	PRM

SHEET
C801

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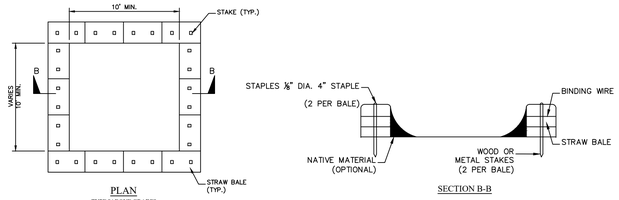
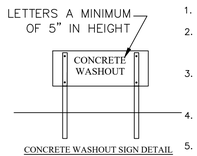
STRAW BALE BARRIER CONCRETE WASHOUT



PLAN
TYPE "ABOVE GRADE" WITH STRAW BALES

SECTION B-B



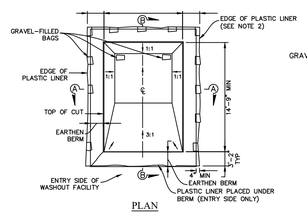
CONCRETE WASHOUT SIGN DETAIL

NOTES:

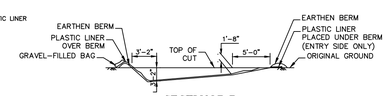
1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. INSTALL CONCRETE WASHOUT SIGN (24"X24", MINIMUM) WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. TEMPORARY WASHOUT AREA MUST BE AT LEAST 50' FROM A STORM DRAIN, CREEK BANK OR PERIMETER CONTROL.
4. CLEAN OUT CONCRETE WASHOUT AREA WHEN 50% FULL.
5. THE KEY TO FUNCTIONAL CONCRETE WASHOUTS IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR CLEAN OUT.
6. SILT FENCE SHALL BE INSTALLED AROUND PERIMETER OF CONCRETE WASHOUT AREA EXCEPT FOR THE SIDE UTILIZED FOR ACCESSING THE WASHOUT.
7. A ROCK CONSTRUCTION ENTRANCE MAY BE NECESSARY ALONG ONE SIDE OF THE WASHOUT TO PROVIDE VEHICLE ACCESS.

South Carolina Department of Health and Environmental Control
CONCRETE WASHOUT
STRAW BALES OR ABOVE GROUND
STANDARD DRAWING NO. RC-07 PAGE 1 of 1
NOT TO SCALE — FEBRUARY 2014 DATE
CWS

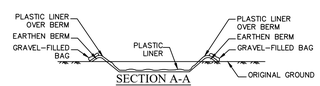
EXCAVATED PIT CONCRETE WASHOUT



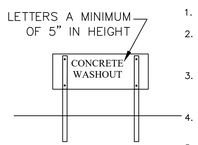
PLAN
TYPE "EXCAVATED PIT"



SECTION B-B
NOT TO SCALE



SECTION A-A
NOT TO SCALE

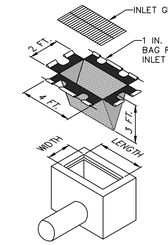


CONCRETE WASHOUT SIGN DETAIL

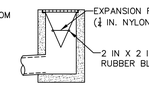
NOTES:

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. INSTALL CONCRETE WASHOUT SIGN (24"X24", MINIMUM) WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. TEMPORARY WASHOUT AREA MUST BE AT LEAST 50' FROM A STORM DRAIN, CREEK BANK OR PERIMETER CONTROL.
4. CLEAN OUT CONCRETE WASHOUT AREA WHEN 50% FULL.
5. THE KEY TO FUNCTIONAL CONCRETE WASHOUTS IS WEEKLY INSPECTIONS, ROUTINE MAINTENANCE, AND REGULAR CLEAN OUT.
6. SILT FENCE SHALL BE INSTALLED AROUND PERIMETER OF CONCRETE WASHOUT AREA EXCEPT FOR THE SIDE UTILIZED FOR ACCESSING THE WASHOUT.
7. A ROCK CONSTRUCTION ENTRANCE MAY BE NECESSARY ALONG ONE SIDE OF THE WASHOUT TO PROVIDE VEHICLE ACCESS.

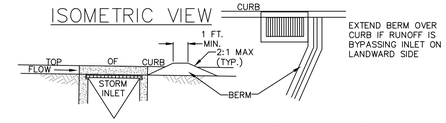
South Carolina Department of Health and Environmental Control
CONCRETE WASHOUT
EXCAVATED PIT
STANDARD DRAWING NO. RC-08 PAGE 1 of 1
NOT TO SCALE — FEBRUARY 2014 DATE
CWS



ISOMETRIC VIEW



INSTALLATION DETAIL



SECTION VIEW — PLAN VIEW

NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

FILTER BAG GRATE INLET PROTECTION

NO SCALE

ADHESIVE	WATER DILUTION	NOZZLE TYPE	APPLICATION (GAL./ACRE)
ANIONIC ASPHALT EMULSION	7:1*	COARSE SPRAY	1,200
LATEX EMULSION	12.5:1*	FINE SPRAY	235
RESIN-IN-WATER EMULSION	4:1*	FINE SPRAY	300

*USE MANUFACTURER'S RECOMMENDATIONS WHEN AVAILABLE.

MAINTENANCE:
- PROHIBIT TRAFFIC ON SURFACE AFTER SPRAYING.
- SUPPLEMENT SURFACE COVERING AS NEEDED.

INSTALLATION:
- APPLY ACCORDING TO APPROVED PLAN.
- MULCH DISTURBED AREAS AMD TACKIFY WITH RESINS SUCH AS ASPHALT, CURASOL OR TERRATACK ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- STABILIZE DISTURBED AREAS WITH TEMPORARY OR PERMANENT VEGETATION.
- IRRIGATE DISTURBED AREAS UNTIL SURFACE IS WET.
- COVER SURFACES WITH CRUSHED STONE OR GRAVEL.
- APPLY CALCIUM CHLORIDE AT A RATE TO KEEP SURFACES MOIST.
- APPLY SPRAY-ON ADHESIVES TO MINERAL SOILS (NOT MUCK SOILS) AS DESCRIBED IN TABLE 1.

(DC) DUST CONTROL ON DISTURBED AREAS

PERMANENT SEEDING – COASTAL

SPECIES	LBS/AC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SANDY, DROUGHTY SITES													
BROWNTOP MILLET BAHIAGRASS	10 LBS/AC 40 LBS/AC												
BROWNTOP MILLET BAHIAGRASS SERICEA LESPEDEZA	10 LBS/AC 30 LBS/AC 40 LBS/AC												
BROWNTOP MILLET ATLANTIC COASTAL PANICGRASS	10 LBS/AC 15 LBS/AC PLS												
BROWNTOP MILLET SWITCHGRASS (ALAMO) LITTLE BLUESTEM SERICEA LESPEDEZA	10 LBS/AC 8 LBS/AC PLS 4 LBS/AC 20 LBS/AC												
BROWNTOP MILLET WEEPING LOVEGRASS	10 LBS/AC 8 LBS/AC												
WELL DRAINED, CLAYEY/LOAMEY SITES													
BROWNTOP MILLET BAHIAGRASS	10 LBS/AC 40 LBS/AC												
RYE, GRAIN BAHIAGRASS CLOVER, CRIMSON (ANNUAL)	10 LBS/AC 40 LBS/AC 5 LBS/AC												
BROWNTOP MILLET BAHIAGRASS SERICEA LESPEDEZA	10 LBS/AC 30 LBS/AC 40 LBS/AC												
BROWNTOP MILLET BERMUDA, COMMON SERICEA LESPEDEZA	10 LBS/AC 10 LBS/AC 40 LBS/AC												
BROWNTOP MILLET BERMUDA, COMMON KOBE LESPEDEZA (ANNUAL)	10 LBS/AC 12 LBS/AC 10 LBS/AC												
BROWNTOP MILLET BAHIAGRASS BERMUDA, COMMON SERICEA LESPEDEZA	10 LBS/AC 20 LBS/AC 6 LBS/AC 40 LBS/AC												
BROWNTOP MILLET SWITCHGRASS LITTLE BLUESTEM INDIANGRASS	10 LBS/AC 8 LBS/AC PLS 3 LBS/AC PLS 3 LBS/AC PLS												

(PS) PERMANENT SEEDING - COASTAL

DETAIL 02370-010

TEMPORARY SEEDING – COASTAL

SPECIES	LBS/AC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SANDY, DROUGHTY SITES													
BROWNTOP MILLET	40 LBS/AC												
RYE, GRAIN	56 LBS/AC												
RYEGRASS	50 LBS/AC												
WELL DRAINED, CLAYEY/LOAMEY SITES													
BROWNTOP MILLET OR JAPANESE MILLET	40 LBS/AC												
RYE, GRAIN OR OATS	56 LBS/AC 75 LBS/AC												
RYEGRASS	50 LBS/AC												

(TS) TEMPORARY SEEDING - COASTAL

DETAIL 02370-011

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PLAN REVISIONS

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CITY OF BEAUFORT, SOUTH CAROLINA
BEAUFORT HFT DEVELOPMENT , LLC
ROSWELL, GA

INTERMEDIATE EROSION CONTROL DETAILS

VERTICAL DATUM: NGVD29

PROJECT #:	170225A
DATE:	04/24/2020
DESIGNED BY:	BCB
CHECKED BY:	PRM

SHEET
C802

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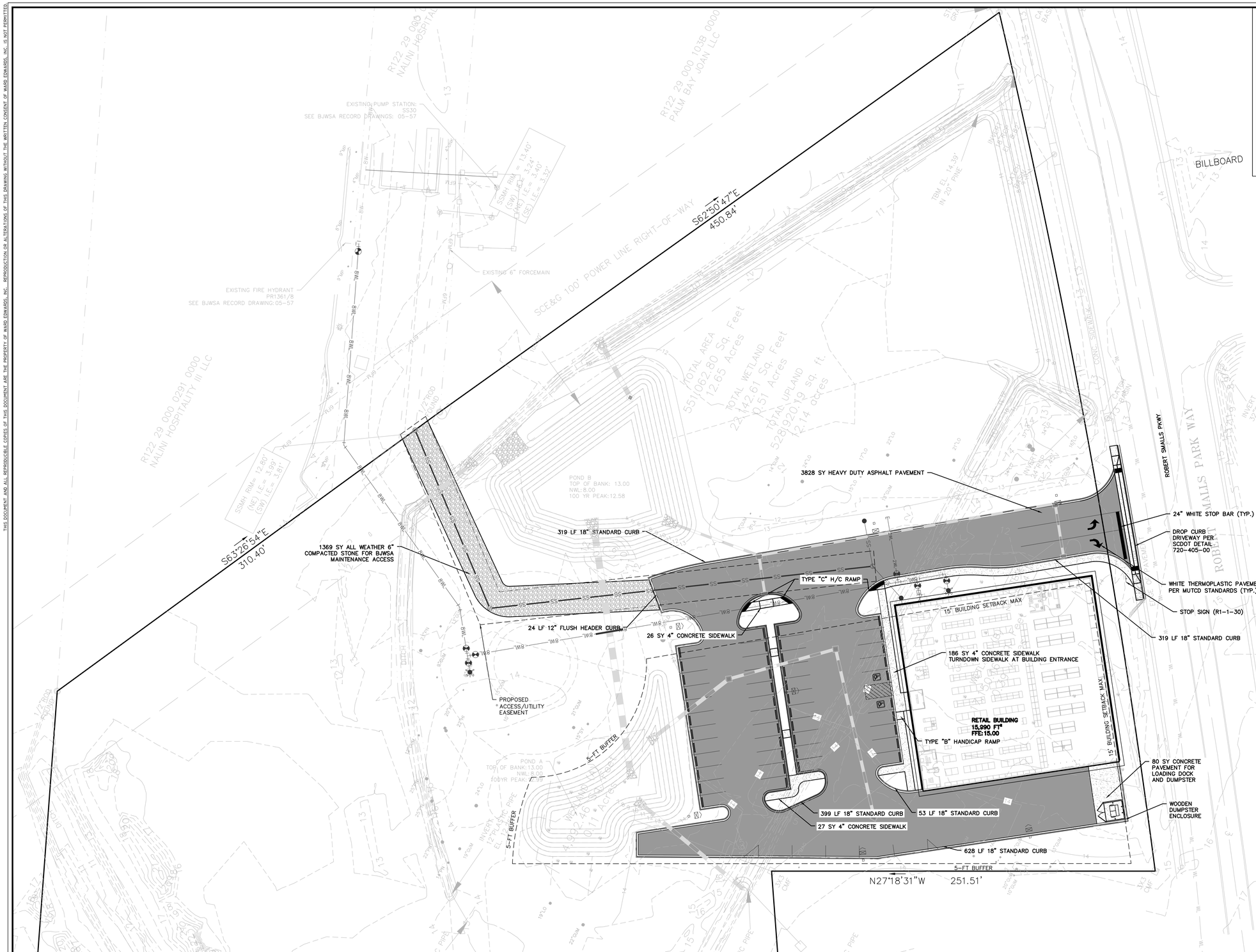

PAVING HATCH LEGEND

PROPOSED CONCRETE PAVING	
PROPOSED SIDEWALK/ CONCRETE	
REINFORCED GRASS FIRE LANE	
PROPOSED AGGREGATE/ STONES	
PROPOSED ASPHALT (NORMAL DUTY)	
PROPOSED ASPHALT (HEAVY DUTY)	
MILL & OVERLAY ASPHALT	
PROPOSED CONCRETE PAVERS	

SOUTH CAROLINA PROFESSIONAL ENGINEER LICENSE No. 22810 PAUL R. MOORE 24 APR 2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION WARD EDWARDS, INC. No. C00152

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CITY OF BEAUFORT, SOUTH CAROLINA
BEAUFORT HFT DEVELOPMENT , LLC
ROSWELL, GA

PAVING PLAN

VERTICAL DATUM: NGVD29

PROJECT #:	170225A
DATE:	04/24/2020
DESIGNED BY:	BCB
CHECKED BY:	PRM

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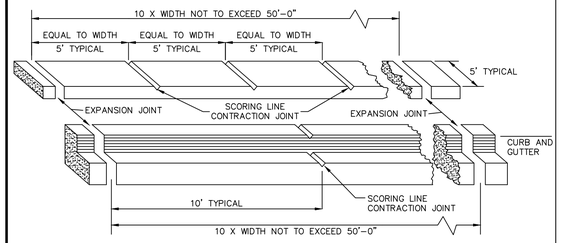

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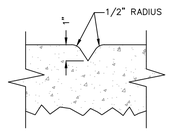
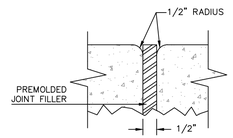


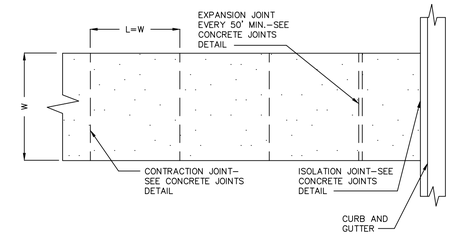
CONTRACTION JOINT
SCORING LINE

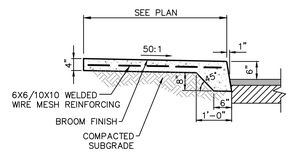


EXPANSION JOINT

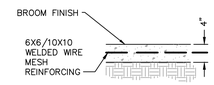
NOTES:
1. EXPANSION JOINTS, 1/2 INCH THICK, SHALL BE PLACED IN THE SIDEWALK AND CURBING AT THE POINT OF CURVATURE (PC) AND POINT OF TANGENCY (PT) OF ALL CURVES, AT THE OUTER EDGES OF DRIVEWAYS, AND AT UNIFORM INTERVALS AS SHOWN. EXPANSION JOINTS SHALL MEET SCDOT SPECIFICATION SECTION 702.2.2.1.
2. TRANSVERSE SCORING LINES (CONTRACTION JOINTS) IN THE SIDEWALK SHALL BE PLACED BETWEEN EXPANSION JOINTS AT UNIFORM INTERVALS EQUAL TO THE WIDTH OF THE WALK AS SHOWN.
3. LONGITUDINAL SCORING LINES WILL BE REQUIRED IN WALKS WIDER THAN 5 FEET OR AS DIRECTED BY THE ENGINEER.
4. TRANSVERSE CONTRACTION JOINTS IN THE CURBING SHALL BE PLACED BETWEEN EXPANSION JOINTS AT UNIFORM 10' INTERVALS.
5. TRANSVERSE AND LONGITUDINAL SCORING LINES SHALL BE A DEPTH OF 1" AND NOT LESS THAN 1/4 INCH OR MORE THAN 1/2 INCH IN WIDTH. THE CORNERS OF THE SCORING LINES SHALL HAVE A 1/2 INCH MINIMUM RADII.
6. JOINTS IN THE CURB AND GUTTER SHALL ALIGN WITH CORRESPONDING JOINTS IN THE SIDEWALK.

EXPANSION JOINTS AND SCORING LINES
DETAIL 03300-007A





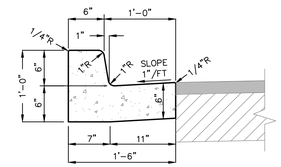
TURNED DOWN SIDEWALK



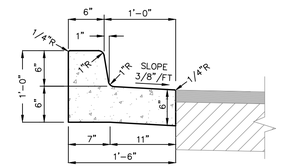
REINFORCED SIDEWALK

NOTES:
1. W = VARIES, REFER TO STAKING PLAN FILL IN BASED ON SITE PLAN
2. L = WIDTH OF PAVING UNLESS OTHERWISE INDICATED ON PLAN.
3. SLOPE = AS INDICATED ON GRADING PLAN, NOT TO EXCEED 2% CROSS OF 8.33% LONGITUDINAL
4. ALL CONCRETE SHALL BE CLASS A 3000 PSI
5. FINISH BROOM WITH HAND TOOLED JOINTS AND EDGES.

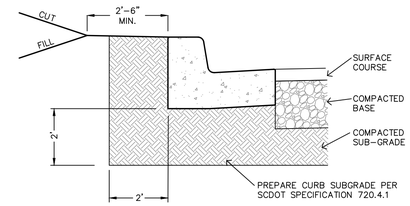
CONCRETE SIDEWALK
DETAIL 03300-006



NORMAL GUTTER

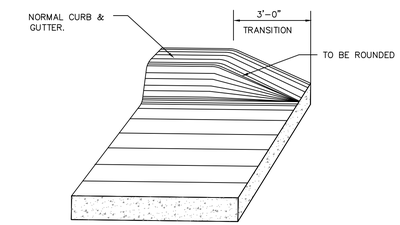


PITCHED GUTTER

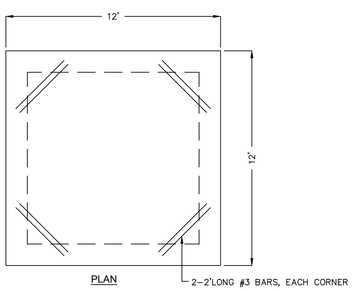


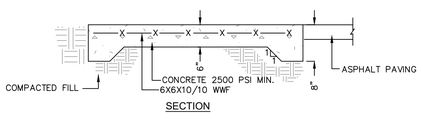
NOTES:
1. USE NORMAL OR PITCHED GUTTER AS REQUIRED TO MATCH PAVING SLOPE.
2. ALL CONCRETE SHALL BE 3,000 PSI.
3. PROVIDE CONTRACTION JOINTS EVERY TEN FEET (10').
4. PROVIDE EXPANSION JOINTS EVERY FIFTY (50') FEET AND AT ALL TANGENT POINTS.
5. PROVIDE EXPANSION JOINTS WHERE CURB ABUTS SIDEWALKS OR OTHER RIGID STRUCTURES.
6. EXPANSION JOINTS SHALL BE 1/2" WITH PRE-MOLDED JOINT FILLER.
7. TOOL ALL EXPOSED EDGES & JOINTS TO 1/4" RADIUS.
8. PROVIDE LIGHT BROOM FINISH.

18" CURB AND GUTTER
DETAIL 03300-004A



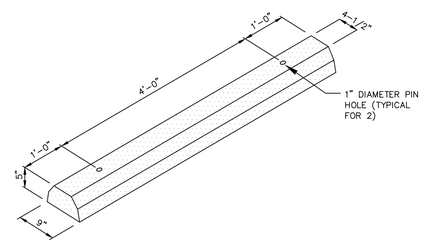
CURB AND GUTTER TRANSITION DETAIL
DETAIL 03300-020



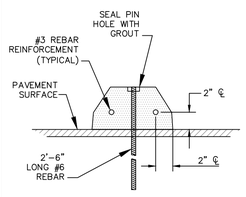


SECTION

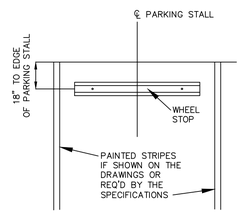
HEAVY DUTY CONCRETE DUMPSTER PAD
DETAIL 03300-017



ISOMETRIC



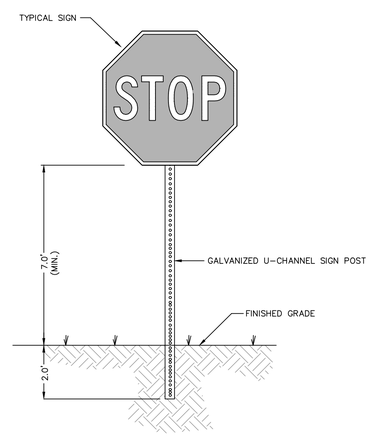
SECTION



INSTALLATION PLAN

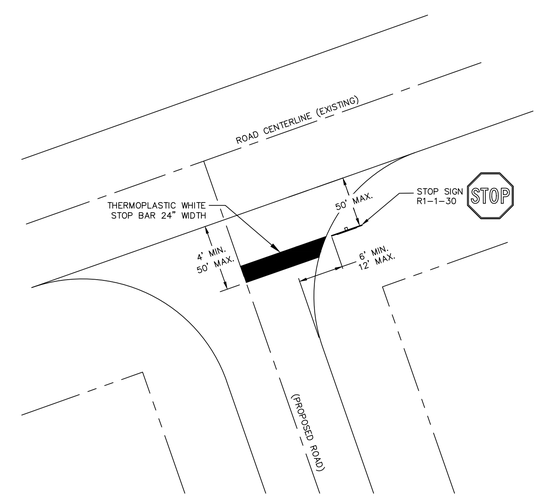
NOTES:
1. WHEEL STOPS SHALL BE STEEL REINFORCED PRECAST UNITS CONSISTING OF SCDOT CLASS 3000 CONCRETE, MINIMUM. ALTERNATE MATERIAL COMPOSITION MUST BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
2. WHEEL STOPS SHALL BE INSTALLED PERPENDICULAR TO PARKING STALL AND SHALL BE PLACED A MINIMUM OF 18" FROM END OF PARKING STALL OR OBSTRUCTION.
3. ANCHORING PINS SHALL BE DRIVEN FLUSH TO THE TOP OF THE WHEEL STOP AND PIN HOLES SHALL BE GROUTED UPON INSTALLATION.

PRECAST CONCRETE WHEEL STOP



NOTE:
ALL SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (LATEST EDITION) AND THE DEPARTMENT OF TRANSPORTATION STANDARDS AT THE LOCATIONS SHOWN ON THE PLANS.

TYPICAL SIGNAGE
DETAIL #02890-002A



TYPICAL STOP SIGN & STOP BAR STRIPING AT INTERSECTION
DETAIL #02740-018

NOT FOR CONSTRUCTION

SOUTH CAROLINA PROFESSIONAL ENGINEER LICENSE No. 22816 PAUL R. MOORE 24 APRIL 2020

SOUTH CAROLINA AUTHORIZATION OF CERTIFICATE WARD EDWARDS, INC. No. C00152

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HARBOR FREIGHT
CITY OF BEAUFORT, SOUTH CAROLINA
BEAUFORT HFT DEVELOPMENT , LLC
ROSWELL, GA

PAVING DETAILS

VERTICAL DATUM: NGVD29

PROJECT #:	170225A
DATE:	04/24/2020
DESIGNED BY:	BCB
CHECKED BY:	PRM

SHEET
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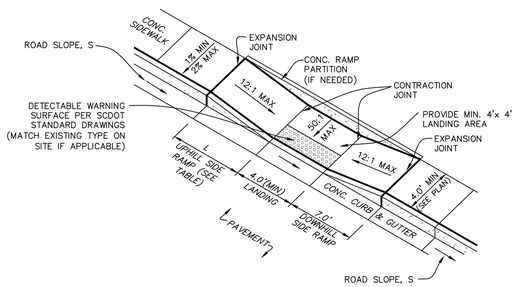
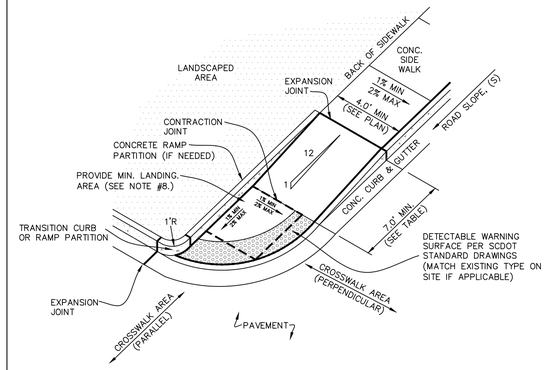


ROAD SLOPE, S (%)	L, (UPHILL SIDE RAMP), [FT]
S ≤ 1%	7'–0"
1% < S ≤ 3%	10'–0"
S > 3%	15'–0"

NOTES:
1. ALL CONCRETE SHALL BE CLASS A, 3,000 PSI.
2. REFER TO STANDARD DETAILS FOR SIDEWALKS, CURB & GUTTER, AND CONCRETE JOINTS.
3. CURB RAMP SHALL BE BROOM–FINISHED TO PROVIDE A ROUGH, SKID–RESISTANT SURFACE. ALL JOINTS AND EDGES SHALL BE HAND TOOLED.
4. GUTTER FLOW LINE AND PLAN PROFILE SHALL BE MAINTAINED THROUGH THE RAMP AREA. THE SURFACE OF THE RAMP SHALL BE FLUSH WITH THE FLOWLINE OF THE CURB AND GUTTER.
5. PLACE DETECTABLE WARNING IN LINE AND FLUSH WITH BACK OF "DROPPED CURB".
6. SIDE SLOPES OF THE RAMP ARE NOT TO EXCEED 12:1 (8.33%) AT ANY LOCATION WHERE PEDESTRIAN TRAFFIC CROSSES THE RAMP.
7. CROSS SLOPES OF SIDEWALK, RAMP, AND LANDING TO BE BETWEEN 100:1 (1%) AND 50:1 (2%).

CONCRETE CURB RAMP TYPE-B

DETAIL 03300-029A



ROAD SLOPE, S (%)	L, (UPHILL SIDE RAMP), [FT]
S ≤ 1%	7'–0"
1% < S ≤ 3%	10'–0"
S > 3%	15'–0"

NOTES:
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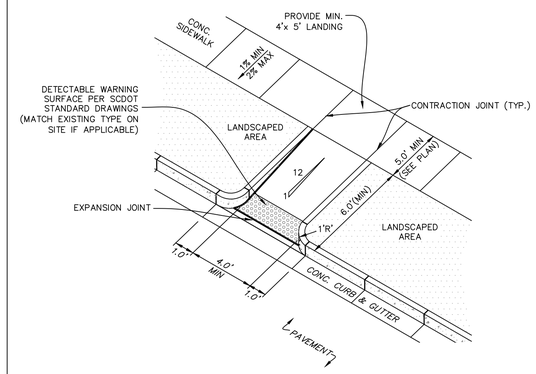
2. REFER TO STANDARD DETAILS FOR SIDEWALKS, CURB & GUTTER, AND CONCRETE JOINTS.
3. CURB RAMP SHALL BE BROOM–FINISHED TO PROVIDE A ROUGH, SKID–RESISTANT SURFACE. ALL JOINTS AND EDGES SHALL BE HAND TOOLED.
4. GUTTER FLOW LINE AND PLAN PROFILE SHALL BE MAINTAINED THROUGH THE RAMP AREA. THE SURFACE OF THE RAMP SHALL BE FLUSH WITH THE FLOWLINE OF THE CURB AND GUTTER.
5. PLACE DETECTABLE WARNING IN LINE AND FLUSH WITH BACK OF "DROPPED CURB".
6. SIDE SLOPES OF THE RAMP ARE NOT TO EXCEED 12:1 (8.33%) AT ANY LOCATION WHERE PEDESTRIAN TRAFFIC CROSSES THE RAMP.
7. CROSS SLOPES OF SIDEWALK, RAMP, AND LANDING TO BE BETWEEN 100:1 (1%) AND 50:1 (2%).
8. IF CROSSWALK IS PARALLEL WITH WALK, A MIN. LANDING OF 4'x 4' MUST BE PROVIDED. HOWEVER, IF THE CROSSWALK IS PERPENDICULAR TO THE WALK, A MIN. LANDING OF 5'x 5' MUST BE PROVIDED

CONCRETE CURB RAMP TYPE-C

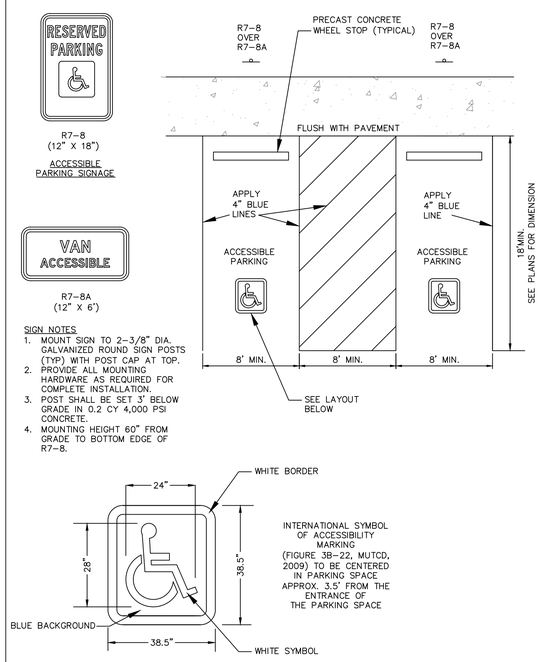
DETAIL 03300-031



NOTES:
1. ALL CONCRETE SHALL BE CLASS A, 3,000 PSI.
2. REFER TO STANDARD DETAILS FOR SIDEWALKS, CURB & GUTTER, AND CONCRETE JOINTS.
3. CURB RAMP SHALL BE BROOM–FINISHED TO PROVIDE A ROUGH, SKID–RESISTANT SURFACE. ALL JOINTS AND EDGES SHALL BE HAND TOOLED.
4. GUTTER FLOW LINE AND PLAN PROFILE SHALL BE MAINTAINED THROUGH THE RAMP AREA. THE SURFACE OF THE RAMP SHALL BE FLUSH WITH THE FLOWLINE OF THE CURB AND GUTTER.
5. PLACE DETECTABLE WARNING IN LINE AND FLUSH WITH BACK OF "DROPPED CURB".
6. SIDE SLOPES OF THE RAMP ARE NOT TO EXCEED 12:1 (8.33%) AT ANY LOCATION WHERE PEDESTRIAN TRAFFIC CROSSES THE RAMP.
7. CROSS SLOPES OF SIDEWALK, RAMP, AND LANDING TO BE BETWEEN 100:1 (1%) AND 50:1 (2%).

CONCRETE CURB RAMP- TYPE D

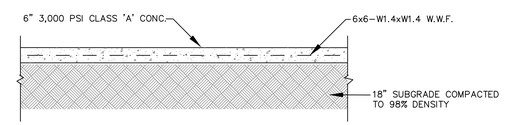
DETAIL 03300-033



SIGN NOTES
1. MOUNT SIGN TO 2–3/8" DIA. GALVANIZED ROUND SIGN POSTS (TYP) WITH POST CAP AT TOP.
2. PROVIDE ALL MOUNTING HARDWARE AS REQUIRED FOR COMPLETE INSTALLATION.
3. POST SHALL BE SET 3' BELOW GRADE IN 0.2 CY 4,000 PSI CONCRETE.
4. MOUNTING HEIGHT 60" FROM GRADE TO BOTTOM EDGE OF R7–8.

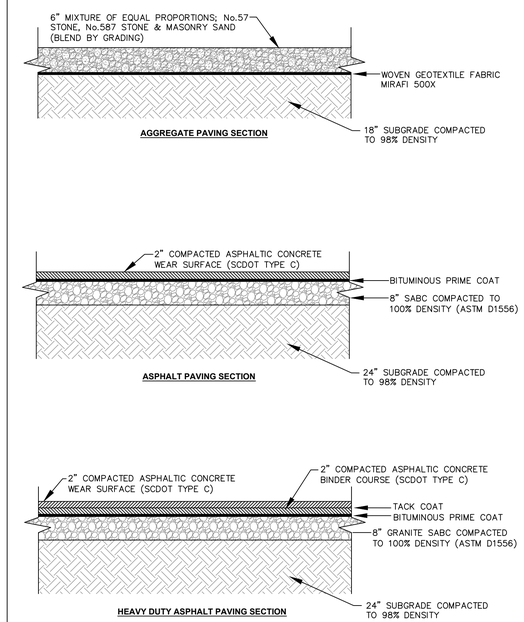
INTERNATIONAL SYMBOL OF ACCESSIBILITY MARKING (FIGURE 3B–22, MUTCD, 2009) TO BE CENTERED IN PARKING SPACE APPROX. 3.5' FROM THE ENTRANCE OF THE PARKING SPACE

ACCESSIBLE PARKING DETAIL



CONCRETE PAVING SECTION

DETAIL #03300-034



TYPICAL PAVING SECTIONS

DETAIL 02740-016

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ROSWELL, GA

PAVING DETAILS

VERTICAL DATUM: NGVD29

PROJECT #:	170225A
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CHECKED BY:	PRM

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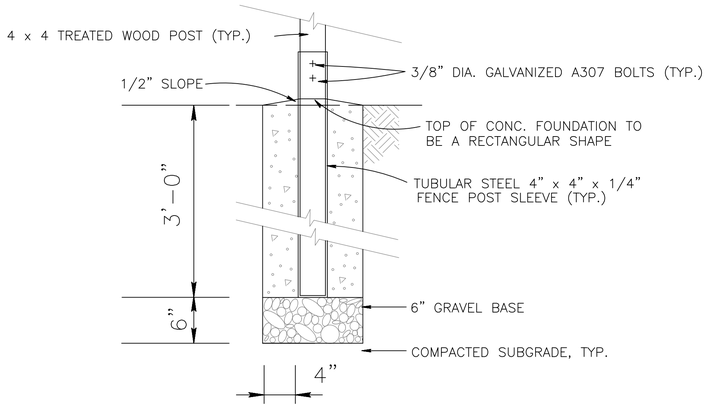
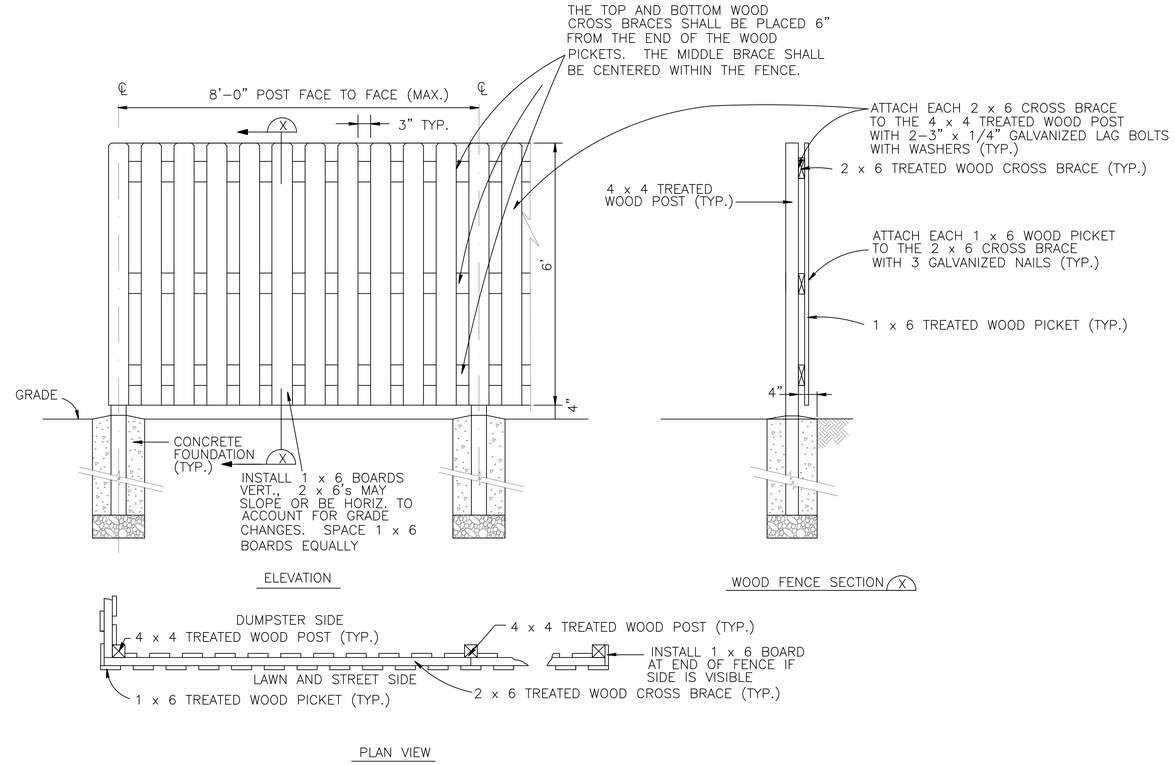


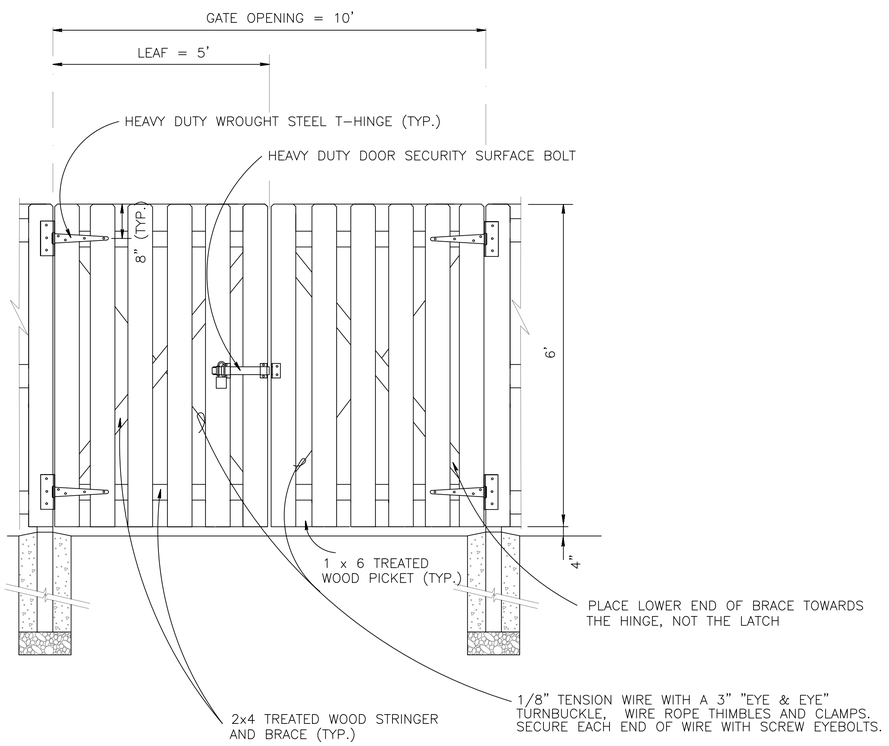
WOOD POST DETAILS

N.T.S.



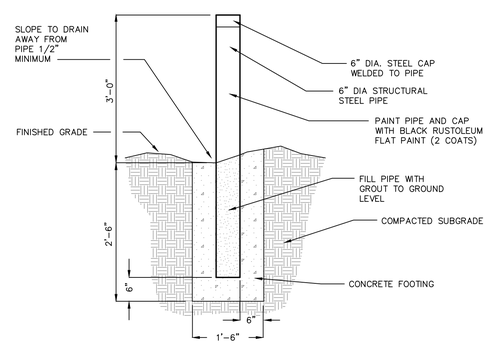
WOOD FENCE DETAILS

N.T.S.



WOOD FENCE GATE DETAILS

N.T.S.



STEEL BOLLARD DETAIL

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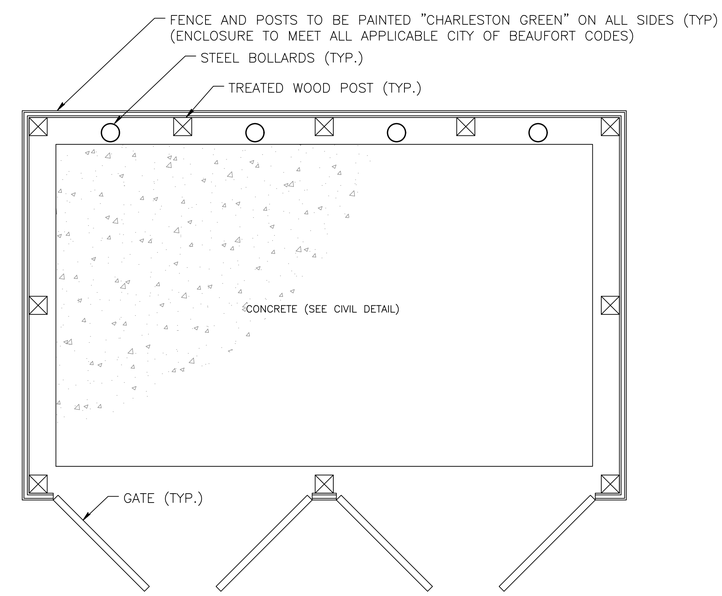

ENCLOSURE PLAN VIEW

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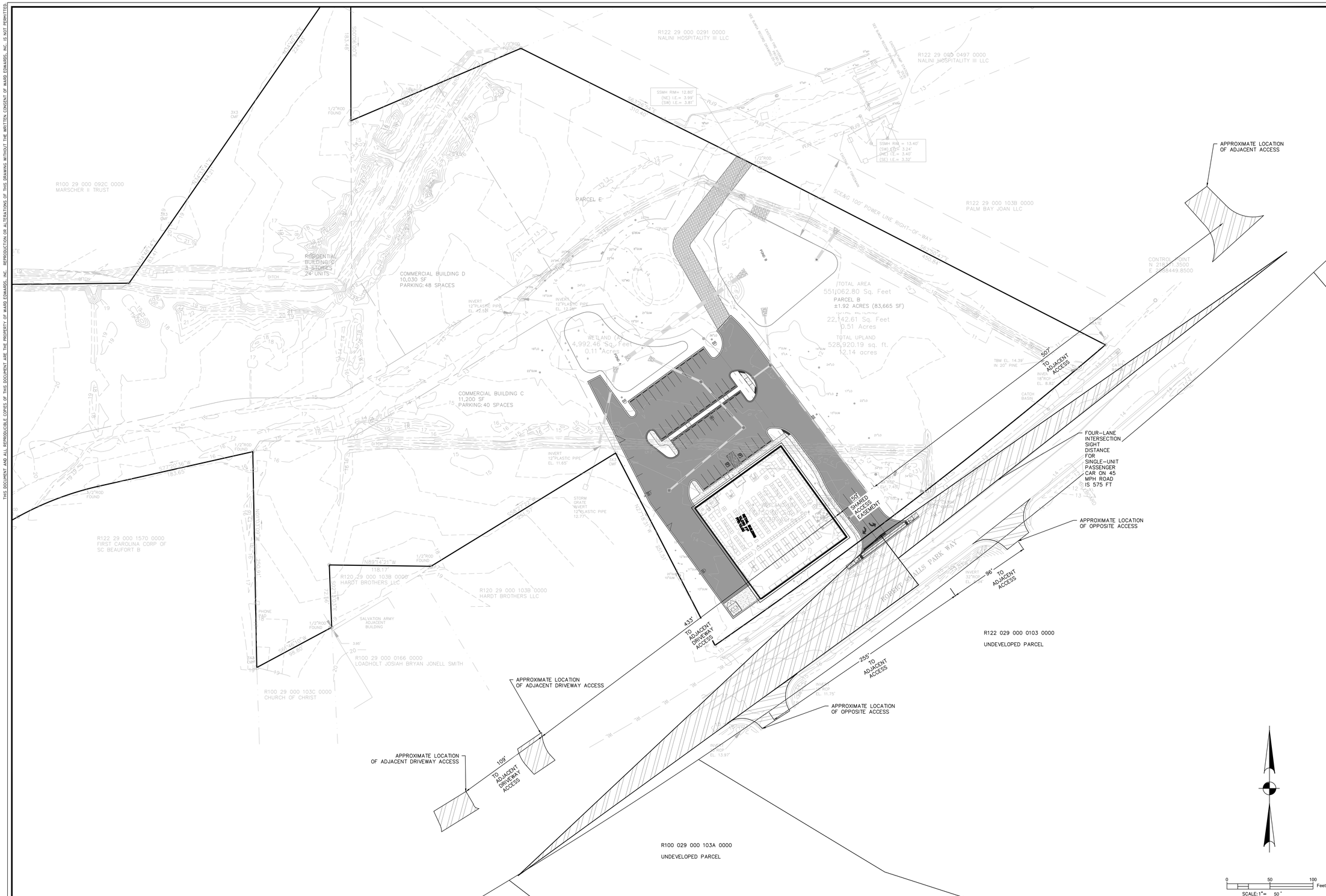

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SOUTH CAROLINA PROFESSIONAL ENGINEER No. 22816 PAUL R. MOORE 24 APRIL 2020

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION WARD EDWARDS, INC. No. C00152

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BEAUFORT HFT DEVELOPMENT , LLC
ROSWELL, GA

SCDOT SIGHT DISTANCE EXHIBIT

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REFERENCES

FLAGGING OPERATIONS GENERAL NOTES

(ALL NOTES, SPECIFICATIONS AND REQUIREMENTS ON THIS STANDARD DRAWING APPLY TO ALL SUBSEQUENT STANDARD DRAWINGS REGARDING FLAGGING OPERATIONS UNLESS OTHERWISE NOTED)

FLAGGING OPERATIONS -

1. KEY FEATURES RELEVANT TO FLAGGING OPERATIONS:

APPROACH TAPER - THIS IS A ONE-LANE TWO-WAY TAPER PLACED IN THE TRAVEL LANE WHERE THE WORK ACTIVITY TAKES PLACE. THIS TAPER PRECEDES THE BUFFER SPACE AND THE WORK ACTIVITY AREA. THE LENGTH OF THIS TAPER MAY VARY FROM 50 FEET TO 100 FEET. INSTALL AND MAINTAIN NO LESS THAN FIVE (5) TRAFFIC CONTROL DEVICES EQUALLY SPACED AT 10' TO 20' INTERVALS AS NECESSARY TO CORRESPOND WITH THE LENGTH OF THE TAPER.

DOWNSTREAM TAPER - THIS TAPER, PLACED IN THE TRAVEL LANE WHERE THE WORK ACTIVITY TAKES PLACE, FOLLOWS THE WORK ACTIVITY AREA AND SERVES AS THE TERMINATION AREA FOR THE CLOSURE OF THE TRAVEL LANE. THE LENGTH OF THIS TAPER MAY VARY FROM 50 FEET TO 100 FEET. INSTALL AND MAINTAIN NO LESS THAN FIVE (5) TRAFFIC CONTROL DEVICES IN THIS TAPER.

FLAGGER STATION - THIS IS THE SPECIFIC LOCATION OF THE FLAGGER.

CLOSED LANE FLAGGER - THIS FLAGGER IS STATIONED ADJACENT TO THE FIRST TRAFFIC CONTROL DEVICE IN THE APPROACH TAPER WHO CONTROLS THE TRAFFIC THAT REQUIRES RELOCATION FROM THE TRAVEL LANE BEING CLOSED TO TRAFFIC.

OPEN LANE FLAGGER - THIS FLAGGER IS STATIONED 100 FEET BEYOND THE LAST TRAFFIC CONTROL DEVICE IN THE DOWNSTREAM TAPER WHO CONTROLS THE TRAFFIC OPERATING IN THE TRAVEL LANE REMAINING OPEN TO TRAFFIC.

BUFFER SPACE - THIS AREA IS LOCATED BETWEEN THE DOWNSTREAM END OF THE APPROACH TAPER AND THE NEAREST LIMITS OF THE WORK ACTIVITY AREA AND MAY PROVIDE SOME RECOVERY SPACE FOR ERRANT VEHICLES. NO STORAGE OF PERSONNEL, TOOLS, MATERIALS, EQUIPMENT, WORK VEHICLES, ETC. WITHIN THE LIMITS OF THE BUFFER SPACE IS PROHIBITED. HOWEVER, WHEN THE MINIMUM DISTANCE REQUIREMENTS FOR THE BUFFER SPACE ARE UNAVAILABLE, A TRUCK MOUNTED ATTENUATOR MAY TEMPORARILY ENCROACH UPON THE BUFFER SPACE IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED IN THE SECTION BELOW ENTITLED, "BUFFER SPACE", WHEN APPROVED BY THE ENGINEER.

WORK ACTIVITY AREA - PERSONNEL, MATERIALS, EQUIPMENT, WORK VEHICLES, ETC. ARE PRESENT WITHIN THIS AREA TO CONDUCT THE WORK.

LIMITS of the WORK ACTIVITY AREA - THIS IS THE BOUNDARY OF THE WORK ACTIVITY AREA FIRST ENCOUNTERED, FROM EITHER DIRECTION, BY MOTORISTS PASSING BY THE WORK ACTIVITY AREA IN THE ADJACENT TRAVEL LANE OPEN TO TRAFFIC AND CONTROLLED BY THE FLAGGERS.

APPROACH LANE - TRAFFIC APPROACHES AN INTERSECTION OR A SPECIFIC LOCATION IN THIS TRAVEL LANE.

DEPARTURE LANE - TRAFFIC DEPARTS FROM AN INTERSECTION OR A SPECIFIC LOCATION IN THIS TRAVEL LANE.

MAINLINE APPROACH - THIS IS AN APPROACH TO THE WORK ACTIVITY AREA ON THE ROADWAY WHERE THE WORK ACTIVITY AREA IS LOCATED.

SIDE ROADS - THESE ROADS INTERSECT THE ROADWAY ON WHICH THE WORK ACTIVITY AREA IS LOCATED.

LIMITS of the INTERSECTION - THE LIMITS OF OR THE PHYSICAL AREA WITHIN AN INTERSECTION IS DEFINED BY THE LOCATION OF STOP BARS WHEN PRESENT. WHEN STOP BARS ARE ABSENT, THE LIMITS OF OR THE PHYSICAL AREA WITHIN AN INTERSECTION IS DEFINED BY THE LOCATION OF CROSSWALK LINES WHEN PRESENT. WHEN CROSSWALK LINES ARE ABSENT, THE LIMITS OF OR THE PHYSICAL AREA WITHIN AN INTERSECTION IS DEFINED BY THE LOCATION OF THE EDGE OF PAVEMENT ON THE EDGE OF TRAVEL LANE ADJACENT TO THE EDGE OF PAVEMENT OF EACH ROADWAY.

2. INSTALL, CONDUCT AND MAINTAIN FLAGGING OPERATIONS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, THE STANDARD DRAWINGS, THE MUTCD AND THE "SOUTH CAROLINA FLAGGER'S HANDBOOK" UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT. INSTALL ADDITIONAL SIGNS OR DEVICES IF FLAGGING OPERATION PRIOR TO INITIATION OF THE OPERATION AND REMOVE OR COVER ALL SIGNS IMMEDIATELY UPON TERMINATION OF THE OPERATION. COVER EACH FLAGGER WITH A 24" x 24" STOP/SLOW PADDLE MOUNTED ON A ROUND HANDLE WITH A MINIMUM LENGTH OF 7 FEET. THE DEPARTMENT PROHIBITS THE USE OF FLAGS EXCEPT DURING EMERGENCY SITUATIONS.

3. LANE CLOSURES FOR FLAGGING OPERATIONS ARE RESTRICTED TO A MAXIMUM DISTANCE OF 2 MILES UNLESS OTHERWISE APPROVED BY THE ENGINEER. THE WORK LIMITS WILL COMPLY WITH THE CONTRACT AND SHALL REQUIRE THE ENGINEERS APPROVAL PRIOR TO BEGINNING THE WORK.

4. INSTALL AND MAINTAIN THE PROPER ARRAY OF ADVANCE WARNING SIGNS FOR EACH "MAINLINE APPROACH" WHEN A FLAGGING OPERATION IS IN PLACE AND ACTIVE. WHEN NECESSARY TO RELOCATE THE "FLAGGER STATION" WHILE ACTIVELY MAINTAINING THE FLAGGING OPERATION, INSTALL AN ADDITIONAL ARRAY OF ADVANCE WARNING SIGNS AHEAD OF THE LOCATION RELATIVE TO THE NEW "FLAGGER STATION" AND REMOVE THE ORIGINAL ARRAY OF ADVANCE WARNING SIGNS IMMEDIATELY UPON COMPLETION OF THE RELOCATION OF THE FLAGGER TO THE NEW "FLAGGER STATION".

5. INSTALL ALL ADVANCE WARNING SIGNS IMMEDIATELY PRIOR TO INITIATING A FLAGGING OPERATION AND REMOVE OR COVER ALL SIGNS IMMEDIATELY UPON TERMINATION OF THE OPERATION.

6. MAINTAIN TWO-WAY RADIO COMMUNICATIONS BETWEEN ALL FLAGGERS.

NIGHTTIME FLAGGING OPERATIONS -

1. EACH FLAGGER SHALL WEAR SAFETY APPAREL IN COMPLIANCE WITH THE REQUIREMENTS OF ANSI/ ISEA 107 STANDARD PERFORMANCE FOR CLASS 3 RISK EXPOSURE, LATEST REVISION, WHEN CONDUCTING NIGHTTIME FLAGGING OPERATIONS.

2. ILLUMINATE EACH "FLAGGER STATION" WITH ANY COMBINATION OF PORTABLE LIGHTS, STANDARD ELECTRIC LIGHTS, EXISTING STREET LIGHTS, ETC. THAT WILL PROVIDE A MINIMUM ILLUMINATION LEVEL OF 108 Lx OR 10 fc WHEN CONDUCTING NIGHTTIME FLAGGING OPERATIONS.

3. SUPPLEMENT EACH ARRAY OF ADVANCE WARNING SIGNS ON EACH "MAINLINE APPROACH" WITH A TRAILER MOUNTED CHANGEABLE MESSAGE SIGN. THESE CHANGEABLE MESSAGE SIGNS ARE NOT REQUIRED ON THE "SIDE ROADS" INTERSECTING THE ROADWAY WHERE THE "WORK ACTIVITY AREA" IS LOCATED. INSTALL THE CHANGEABLE MESSAGE SIGN IN ADVANCE OF THE ADVANCE WARNING SIGN ARRAYS. THE MESSAGES SHOULD BE "PREPARE TO STOP", "FLAGGER AHEAD". A TRUCK MOUNTED CHANGEABLE MESSAGE SIGN IS NOT AN ACCEPTABLE ALTERNATIVE TO A TRAILER MOUNTED CHANGEABLE MESSAGE SIGN DURING NIGHTTIME FLAGGING OPERATIONS.

4. UTILIZE PORTABLE PLASTIC DRUMS OR 42" OVERSIZED TRAFFIC CONES IN PLACE OF 36" STANDARD TRAFFIC CONES DURING NIGHTTIME FLAGGING OPERATIONS.

BUFFER SPACE -

1. THE MINIMUM DISTANCE REQUIREMENTS FOR THE "BUFFER SPACE" ARE BASED UPON THE LEGAL POSTED REGULATORY SPEED LIMIT OF THE ROADWAY PRIOR TO BEGINNING THE WORK.

	SPEED LIMIT	DISTANCES
	LOW SPEED ≤ 35 MPH	200 FEET
	INTERMEDIATE SPEED 40 - 50 MPH	300 FEET
	HIGH SPEED ≥ 55 MPH	400 FEET

2. THE PRESENCE OF PERSONNEL, TOOLS, MATERIALS, EQUIPMENT, WORK VEHICLES, ETC. WITHIN THE LIMITS OF THE "BUFFER SPACE" IS PROHIBITED. A TRUCK MOUNTED ATTENUATOR IS THE ONLY WORK VEHICLE THAT MAY TEMPORARILY ENCROACH UPON THE "BUFFER SPACE" IN ACCORDANCE WITH THE CONDITIONS SPECIFIED IN THE FOLLOWING NOTE WHEN APPROVED BY THE ENGINEER. SEE NOTE NO. 3

3. WHEN THE MINIMUM DISTANCE REQUIREMENTS FOR THE "BUFFER SPACE" ARE UNAVAILABLE DUE TO FIELD CONDITIONS, IT MAY BE NECESSARY FOR A TRUCK MOUNTED ATTENUATOR TO TEMPORARILY ENCROACH UPON THE "BUFFER SPACE". WHEN APPROVED BY THE ENGINEER, A TRUCK MOUNTED ATTENUATOR IS THE ONLY VEHICLE PERMITTED TO TEMPORARILY ENCROACH UPON THE "BUFFER SPACE" AND THIS ENCROACHMENT IS ONLY PERMITTED WHEN ALL REASONABLE OPTIONS TO AVOID DOING SO HAVE BEEN EXHAUSTED. WHEN ENCROACHMENT INTO THE "BUFFER SPACE" IS APPROVED BY THE ENGINEER, MINIMIZE THE TIME DURATION OF THE ENCROACHMENT BY REMOVAL OF THE TRUCK MOUNTED ATTENUATOR FROM THE "BUFFER SPACE" AT THE FIRST OPPORTUNITY THE MINIMUM DISTANCE REQUIREMENTS FOR THE "BUFFER SPACE" BECOME AVAILABLE.

SIGNS AND TRAFFIC CONTROL DEVICES -

1. MEASURE THE ADVANCE WARNING SIGN LOCATIONS FOR EACH APPROACH FROM THE "FLAGGER STATION" LOCATED ON THAT APPROACH.

2. INSTALL THE ADVANCE WARNING SIGNS AS SPACING INTERVALS BASED UPON THE POSTED REGULATORY SPEED LIMIT OF THE ROADWAY PRIOR TO BEGINNING ANY WORK. THE ADVANCE WARNING SIGN SPACING INTERVALS INDICATED ARE FOR NORMAL CONDITIONS. ADJUSTMENTS TO THESE DISTANCES MAY BE NECESSARY DUE TO EXISTING SIGNS, INTERSECTING ROADWAYS, HORIZONTAL AND/OR VERTICAL ALIGNMENTS OR OTHER SIGHT DISTANCE RESTRICTIONS. SEE TABLE A.

3. INSTALL ADVANCE WARNING SIGNS MOUNTED ON PORTABLE SIGN SUPPORTS NO LESS THAN 4 FEET FROM THE NEAR EDGE OF THE SIGN TO THE NEAR EDGE OF AN ADJACENT TRAVEL LANE ON ROADWAYS WITH EARTH SHOULDERS AND NO LESS THAN 6 FEET FROM THE NEAR EDGE OF THE SIGN TO THE NEAR EDGE OF AN ADJACENT TRAVEL LANE ON ROADWAYS WITH PAVED SHOULDERS. WHEN CURB & GUTTER IS PRESENT, INSTALL THE SIGN NO LESS THAN 2 FEET FROM THE NEAR EDGE OF THE SIGN TO THE FACE OF THE CURB.

4. ALL SIGNS MOUNTED ON PORTABLE SIGN SUPPORTS SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 5 FEET FROM THE GROUND TO THE BOTTOM OF THE SIGN. ALL SIGNS MOUNTED ON GROUND MOUNTED U-CHANNEL OR SQUARE STEEL TUBE POSTS SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 7 FEET FROM THE GROUND TO THE BOTTOM OF THE SIGN UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT. MOUNT ALL SIGNS STRAIGHT AND LEVEL AND WITH THE FACE OF THE SIGN PERPENDICULAR TO THE SURFACE OF THE ROADWAY.

5. REFLECTORIZE ORANGE ADVANCE WARNING SIGNS AND ANY ORANGE AREAS OF A MULTI-COLORED ADVANCE WARNING SIGN WITH A FLUORESCENT ORANGE COLORED PRISMATIC RETROREFLECTIVE SHEETING. REFLECTORIZE WHITE REGULATORY SIGNS AND ANY WHITE AREAS OF A MULTI-COLORED ADVANCE WARNING SIGN WITH A WHITE COLORED PRISMATIC RETROREFLECTIVE SHEETING.

6. ALL TRAFFIC CONTROL DEVICES SHALL COMPLY WITH THE REQUIREMENTS OF NCHRP REPORT 350 OR THE AASHTO MANUAL FOR ASSESSING SAFETY HARDWARE (MASH). ONLY THOSE TRAFFIC CONTROL DEVICES THAT THE DEPARTMENT'S "APPROVED PRODUCTS LIST FOR TRAFFIC CONTROL DEVICES IN WORK ZONES" ARE CONSIDERED ACCEPTABLE FOR USE. THIS LIST MAY BE ACCESSED ON THE DEPARTMENT'S WEB SITE AT: www.scdot.org

7. REFLECTORIZATION OF 36" TRAFFIC CONES USED DURING DAYLIGHT HOURS IS NOT REQUIRED. IN THE EVENT A DAYTIME FLAGGING OPERATION EXTENDS INTO THE NIGHTTIME HOURS, REPLACE ALL 36" TRAFFIC CONES WITH EITHER PORTABLE PLASTIC DRUMS OR 42" OVERSIZED TRAFFIC CONES. REFLECTORIZE ALL PORTABLE PLASTIC DRUMS AND 42" OVERSIZED TRAFFIC CONES WITH TYPE III OR GREATER FLEXIBLE WIDEPRISMATIC RETROREFLECTIVE SHEETING UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT.

8. DELINEATE THE TANGENT AREA OF THE LANE CLOSURE WITH THE NECESSARY TRAFFIC CONTROL DEVICES TO MINIMIZE ENCROACHMENT BY MOTORISTS INTO THE CLOSED TRAVEL LANE UNLESS OTHERWISE DIRECTED BY THE ENGINEER. ON ROADWAYS WITH POSTED REGULATORY SPEED LIMITS OF 35 MPH OR LESS, INSTALL THE TRAFFIC CONTROL DEVICES AT SPACING INTERVALS OF 25 FEET. ON ROADWAYS WITH POSTED REGULATORY SPEED LIMITS OF 40 MPH OR GREATER, INSTALL THE TRAFFIC CONTROL DEVICES AT SPACING INTERVALS OF 50 FEET. SEE TABLE B.

ADVANCE WARNING ARROW PANEL -

1. DURING FLAGGING OPERATIONS, AN ADVANCE WARNING ARROW PANEL SHALL OPERATE IN THE "FOUR CORNERS" CAUTION MODE WHEN LOCATED WITHIN OR IN BETWEEN THE LIMITS OF THE ADVANCE WARNING SIGN ARRAYS SPECIFIC TO A FLAGGING OPERATION. OPERATION OF AN ADVANCE WARNING ARROW PANEL IN ANY OTHER MODE, CHEVRON OR ANY OTHER TYPE OF CAUTION MODE OTHER THAN THE "FOUR CORNERS" CAUTION MODE WHEN LOCATED WITHIN OR IN BETWEEN THE LIMITS OF THE ADVANCE WARNING SIGN ARRAYS AS SPECIFIED HEREINBEFORE IS PROHIBITED.

2. ALL ADVANCE WARNING ARROW PANELS SHALL COMPLY WITH THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION. THE SPECIFIC LOCATION OF ANY ADVANCE WARNING ARROW PANEL MAY REQUIRE ADJUSTMENTS DUE TO HORIZONTAL AND/OR VERTICAL ALIGNMENT OR OTHER SIGHT DISTANCE RESTRICTIONS.

TRUCK MOUNTED ATTENUATOR -

1. A TRUCK MOUNTED ATTENUATOR IS OPTIONAL. UTILIZATION OF A TRUCK MOUNTED ATTENUATOR SHOULD BE CONSIDERED WHEN THE MINIMUM DISTANCE REQUIREMENTS FOR THE "BUFFER SPACE" ARE UNAVAILABLE DUE TO FIELD CONDITIONS. HOWEVER, WHEN A TRUCK MOUNTED ADVANCE WARNING ARROW PANEL MAY BE UTILIZED IN PLACE OF A TRUCK MOUNTED ATTENUATOR DURING TRAFFIC CONTROL SETUPS FOR WORK ACTIVITIES SUCH AS ASPHALT CONCRETE PLACEMENT OPERATIONS WHEN APPROVED BY THE ENGINEER.

2. WHEN UTILIZED, A TRUCK MOUNTED ATTENUATOR, ENSURE THE TRUCK AND THE CORRECT GROSS VEHICULAR WEIGHT (GVW) REQUIRED FOR THE TYPE OF TRUCK MOUNTED ATTENUATOR BEING UTILIZED. A DIRECT TRUCK MOUNTED TRUCK MOUNTED ATTENUATOR, A TRAILER TYPE UNIT TOWED FROM THE BRACKETS OR SIMILAR DEVICES CONNECTED TO THE FRAME OF THE TRUCK, REQUIRES A TRUCK WITH A MINIMUM GVW OF 15,000 POUNDS (ACTUAL WEIGHT) UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT. A TRAILER TOWED TRUCK MOUNTED ATTENUATOR, A TRAILER TYPE UNIT TOWED FROM BEHIND AND ATTACHED TO THE REAR AXLE OF THE TRUCK VIA A PIN AND HOOK / HITCH, REQUIRES A TRUCK WITH A MINIMUM GVW OF 10,000 POUNDS (ACTUAL WEIGHT) UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT. IF THE ADDITION OF SUPPLEMENTAL WEIGHT TO THE VEHICLE AS BALLAST IS NECESSARY, CONTAIN THE MATERIAL WITHIN A STRUCTURE CONSTRUCTED OF STEEL. CONSTRUCT THIS STEEL STRUCTURE TO HAVE A MINIMUM OF FOUR (4) SIDES AND A BOTTOM. A TOP IS OPTIONAL. BOLT THIS STRUCTURE TO THE FRAME OF THE TRUCK. UTILIZE A SUFFICIENT NUMBER OF FASTENERS FOR ATTACHMENT OF THE STEEL STRUCTURE TO THE FRAME OF THE TRUCK TO ENSURE THE STRUCTURE WILL NOT SEPARATE FROM THE FRAME OF THE TRUCK DURING AN IMPACT WITH THE ATTENUATOR. UTILIZE EITHER DRY LOOSE SAND OR STEEL REINFORCED CONCRETE FOR BALLAST MATERIAL WITHIN THE STEEL STRUCTURE TO ACHIEVE THE NECESSARY WEIGHT. THE BALLAST MATERIAL SHALL REMAIN CONTAINED WITHIN THE CONFINES OF THE STEEL STRUCTURE AND SHALL NOT PROTRUDE FROM THE STEEL STRUCTURE IN ANY MANNER.

3. LOCATE THE TRUCK MOUNTED ATTENUATOR APPROXIMATELY 100 FEET IN ADVANCE OF THE "WORK ACTIVITY AREA" UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

4. PROVIDE, INSTALL AND MAINTAIN THE TRUCK MOUNTED ATTENUATOR AS SPECIFIED BY THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.

GENERAL -

1. CONDUCT THE WORK IN SUCH A MANNER SO AS NOT TO ENCROACH ONTO THE ADJACENT TRAVEL LANE OPEN TO TRAFFIC. INSTALL, MAINTAIN AND ADJUST THE TRAFFIC CONTROL DEVICES AS NECESSARY TO ENSURE PROPER DELINEATION OF THE WORK AREA.

2. IF WORK IS BEING CONDUCTED AT TWO DIFFERENT LOCATIONS AT THE SAME TIME, SEPARATE THE TWO LANE CLOSURES BY NO LESS THAN 2 MILES FROM THE LAST TRAFFIC CONTROL DEVICE IN THE "DOWNSTREAM TAPER" OF THE FIRST LANE CLOSURE TO THE FIRST TRAFFIC CONTROL DEVICE IN THE "APPROACH TAPER" OF THE SECOND LANE CLOSURE ENCOUNTERED BY A MOTORIST UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

3. THE DEPARTMENT RESERVES THE RIGHT TO RESTRICT WORK OPERATIONS AND/OR WITHHOLD THE MONTHLY ESTIMATE IF THE TRAFFIC CONTROL IS NOT PROPERLY INSTALLED AND MAINTAINED AS DIRECTED BY THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, THE STANDARD DRAWINGS, THE PLANS AND/OR THE ENGINEER.

TABLE A

TABLE B

SIGN PLACEMENT INTERVALS	
SPEED LIMIT	*
* ≤ 35 MPH LOW SPEED	200
* 40 - 50 MPH INTERMEDIATE SPEED	350
* 55 MPH HIGH SPEED	500

* REGULATORY POSTED SPEED LIMIT PRIOR TO BEGINNING WORK

TRAFFIC CONTROL DEVICE SPACING INTERVALS WORK ACTIVITY / BUFFER SPACE AREAS	
SPEED LIMIT	SPACING INTERVALS
≤ 35 MPH	25 FEET
40 - 55 MPH	50 FEET

WORK ZONE TRAFFIC CONTROL ENGINEER

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER NO. 24242 WILLIE E. McCONNELL, JR.

SIGNATURE 7/27/15 DATE

#	DATE	CHK	DESCRIPTION
0	1-14-15	JCS	NEW DRAWING

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

STANDARD DRAWING

FLAGGING OPERATIONS TWO-LANE TWO-WAY PRIMARY & SECONDARY ROUTES

610-005-00

EFFECTIVE LETTING DATE JAN 2016

THIS DRAWING IS NOT TO SCALE

REFERENCES

DRAWING 610-005-10 NOTES

1. SEE STANDARD DRAWING NO. 610-005-00 FOR ALL GENERAL NOTES AND REQUIREMENTS.

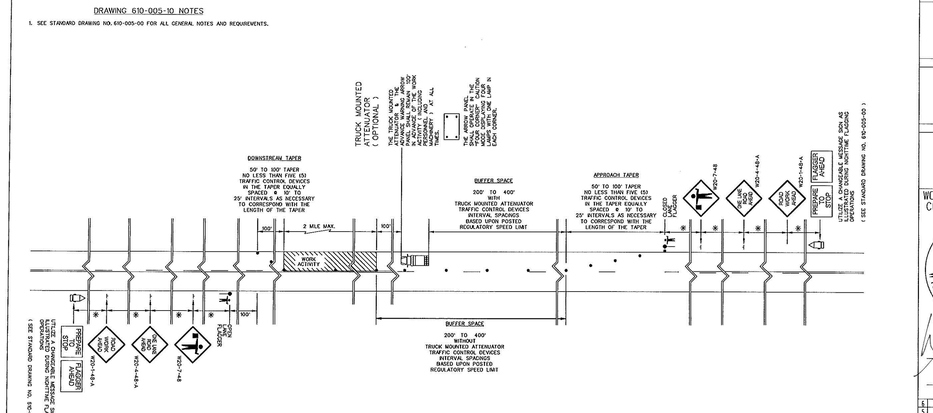


TABLE A

SIGN PLACEMENT INTERVALS	
SPEED LIMIT	*
* ≤ 35 MPH LOW SPEED	200
* 40 - 50 MPH INTERMEDIATE SPEED	350
* 55 MPH HIGH SPEED	500

* REGULATORY POSTED SPEED LIMIT PRIOR TO BEGINNING WORK

TABLE B

TRAFFIC CONTROL DEVICE SPACING INTERVALS WORK ACTIVITY / BUFFER SPACE AREAS	
SPEED LIMIT	SPACING INTERVALS
≤ 35 MPH	25 FEET
40 - 55 MPH	50 FEET

WORK ZONE TRAFFIC CONTROL ENGINEER

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER NO. 24242 WILLIE E. McCONNELL, JR.

SIGNATURE 7/27/15 DATE

#	DATE	CHK	DESCRIPTION
0	1-15-15	JCS	NEW DRAWING

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

STANDARD DRAWING

FLAGGING OPERATIONS TWO-LANE TWO-WAY ROADWAYS WITHOUT INTERSECTIONS

610-005-10

EFFECTIVE LETTING DATE JAN 2016

THIS DRAWING IS NOT TO SCALE

SOUTH CAROLINA PROFESSIONAL ENGINEER PAUL R. MOORE LICENSE NO. 22816 — 24 APRIL 2020

SOUTH CAROLINA AUTHORIZATION OF WARD EDWARDS, INC. NO. COO152 — CERTIFICATE OF AUTHORIZATION

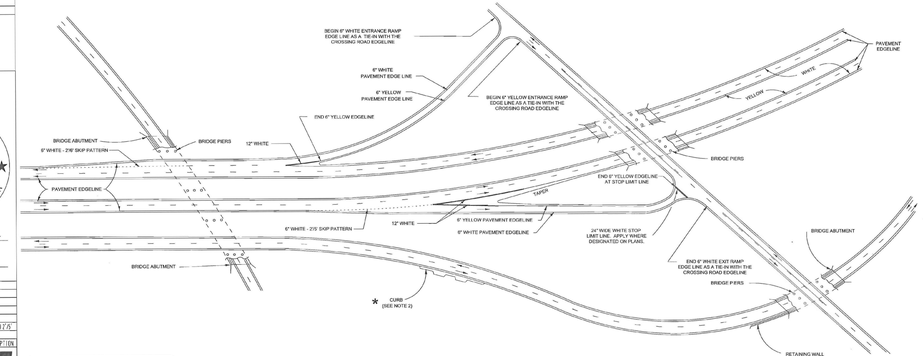
NOT FOR CONSTRUCTION

NO.	DESCRIPTION	DATE
1	PLAN REVISIONS	

REFERENCES

STANDARD PAVEMENT MARKINGS

PAVEMENT EDGE MARKING AND STOP LIMITS



STATE TRAFFIC OPERATIONS ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 17609 JOHN N. BOOZER

SIGNATURE 8-29-2012 DATE

#	DATE	CHK	DESCRIPTION
1	10-AUG-12	GLW	CHANGE 2'6" PATTERN TO 2'10"

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

STANDARD DRAWING

PAVEMENT EDGE MARKING AND STOP LIMITS

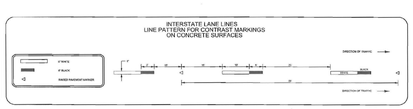
625-105-00

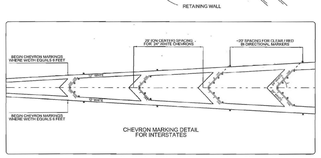
EFFECTIVE LETTING DATE JANUARY 2013

THIS DRAWING IS NOT TO SCALE

NOTES

1. All pavement edge line markings are to be continuous 6" wide reflectorized lines applied with outside edge approximately 2 inches inside the normal edge of pavement.
2. Apply pavement edge line markings on medians and outside edge of travel way throughout interstate mainline.
3. Apply pavement edge line markings on each side of ramps. Line concerned interchange or rest area plus street.
4. Pavement edge line markings are continuous across bridges.
5. Left mainline pavement edge lines (next to median) are 6 inch wide reflectorized yellow.
6. Right mainline pavement edge lines are 6 inches wide reflectorized white.
7. On roads where the mainline traveway is asphalt, bridge pavement decks shall be marked using pre-formed tape.





NO.	DESCRIPTION	DATE
7		
6		
5		
4		
3		
2		
1		

Ward Edwards ENGINEERING
P.O. BOX 381, BLUFFTON, SOUTH CAROLINA 29910
PH (843) 837-5250 / FAX (843) 837-2558
WWW.WARDEDWARDS.COM

HARBOR FREIGHT
CITY OF BEAUFORT, SOUTH CAROLINA
BEAUFORT HFT DEVELOPMENT , LLC
ROSWELL, GA

SCDOT DETAILS

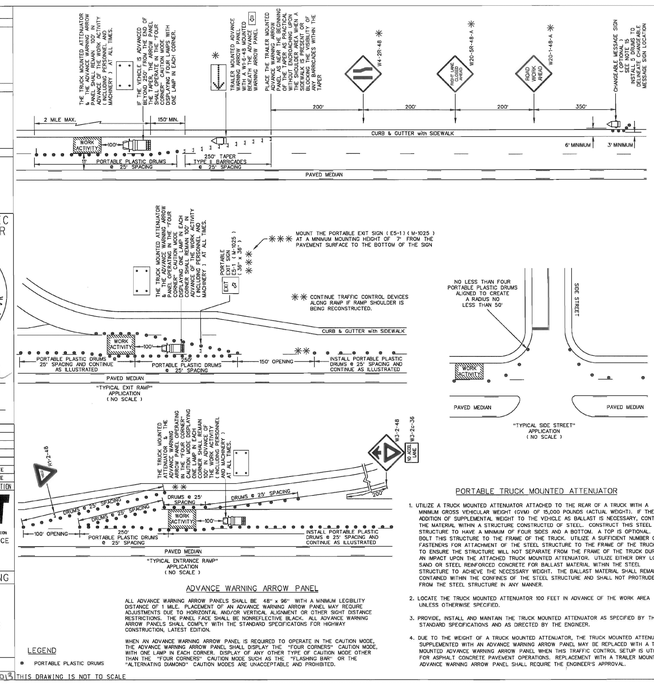
VERTICAL DATUM: NGVD29

PROJECT #:	170225A
DATE:	04/24/2020
DESIGNED BY:	BCB
CHECKED BY:	PRM

SHEET C1002

IF THIS SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT, SCALE ACCORDINGLY

REFERENCES



PORTABL

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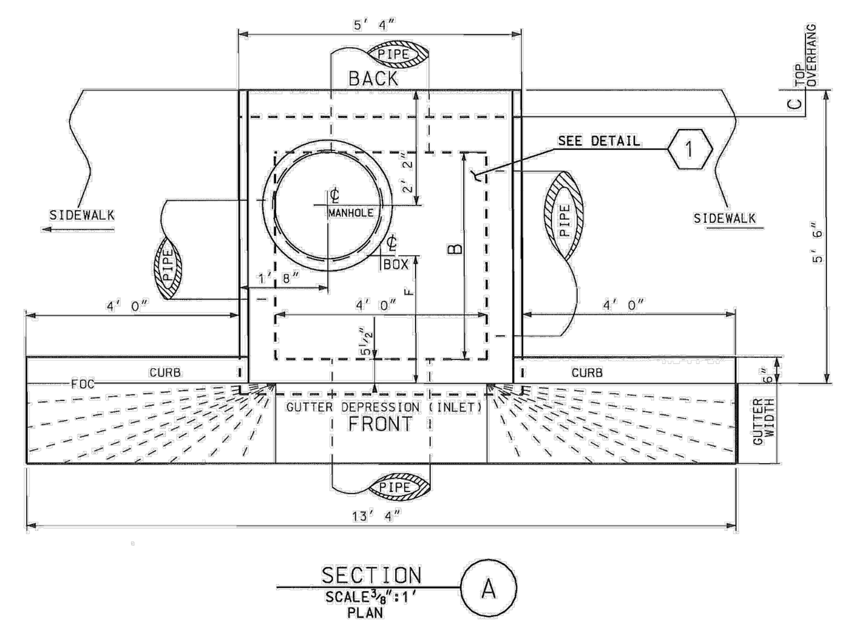
STANDARD DRAWING 719-016-01 — CATCH BASIN TYPE 16

REFERENCES
NATIONAL DOCUMENTS: AASHTO M235
SCDOT DOCUMENTS: QUALIFIED PRODUCT LIST 14
RELATED DRAWINGS & KEYWORD: 719-305-00, 719-310-00, 719-016-02



SECTION (A)
SCALE 3/8":1'
PLAN

DIMENSION LABEL	BUILT IN PLACE CONSTRUCTION	PRECAST CONSTRUCTION
A	8"	6"
B	3'-10½"	4'-0"
C	6"	6½"
D	1'-0"	1'-1½"
E	¾"	SEE 4x4 PC BOX
F	2'-4¾"	2'-5½"

TABLE 719-016A

SEE SHEET 719-016-02 FOR DETAILS AND NOTES

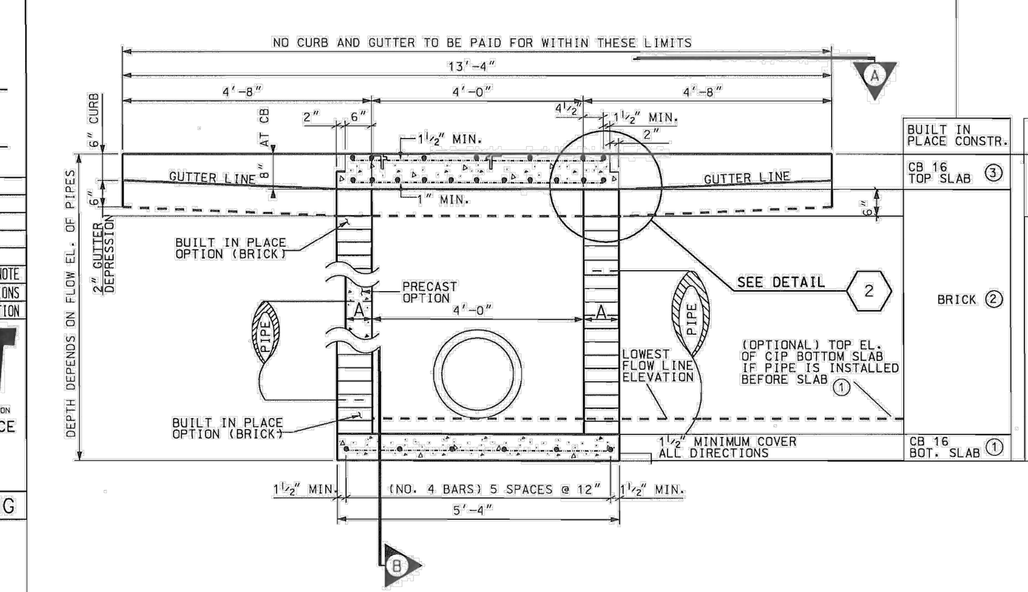
DESCRIPTION	ADA	NON ADA BICYCLE	VEHICLE
CB TYPE 16	YES	YES	YES-GUTTER LINE

USE WITH SIDEWALK/CURB & GUTTER

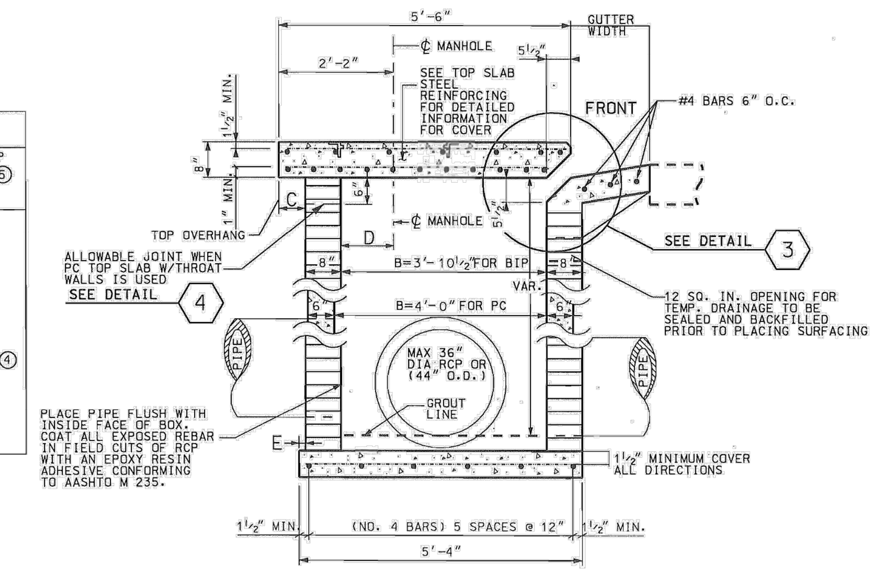
CONTRACTOR MAY USE A COMBINATION OF BUILT IN PLACE AND PRECAST COMPONENTS AS APPROVED BY THE RESIDENT

SEE QUALIFIED PRODUCT LIST 14 FOR MANUFACTURERS OF PRECAST ITEMS.

BUILT IN PLACE	① CB 16 BOTTOM SLAB (PC OR CIP CONCRETE 64"X64"X6") AND ② BRICK WALLS (8") (MAXIMUM 12' DEPTH) AND ③ PC CB 16 TOP SLAB (66"X64"X8")
PRECAST	④ PC DRAINAGE BOX CONFORMING TO 719-305-00 OR 719-310-00 (4'X4'X__) (MAX 12' DEPTH) AND ⑤ CB 16 TOP SLAB WITH THROAT WALLS (66"X64"X14")



SECTION (B)
SCALE 3/8":1'
FRONT ELEVATION
CATCH BASIN TYPE 17



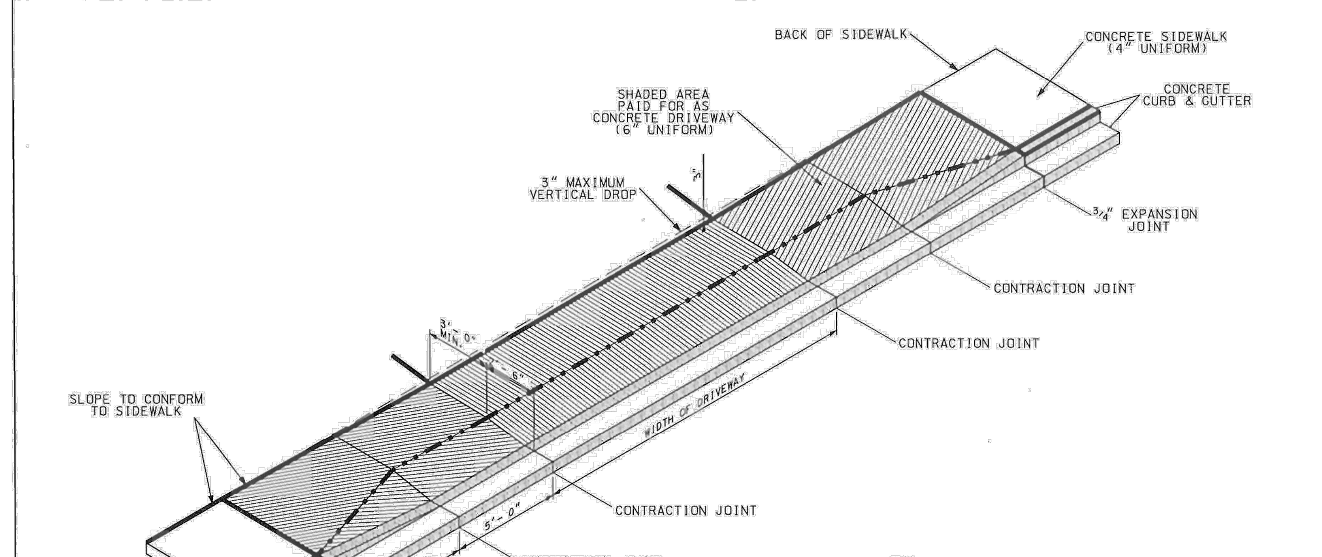
SECTION (C)
SCALE 3/8":1'
SIDE ELEV.

PRECONSTRUCTION SUPPORT ENGINEER
(Seal: SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 8858 EDWIN SYLVESTER EARGLE, II)
SIGNATURE
MARCH 2, 2009
DATE

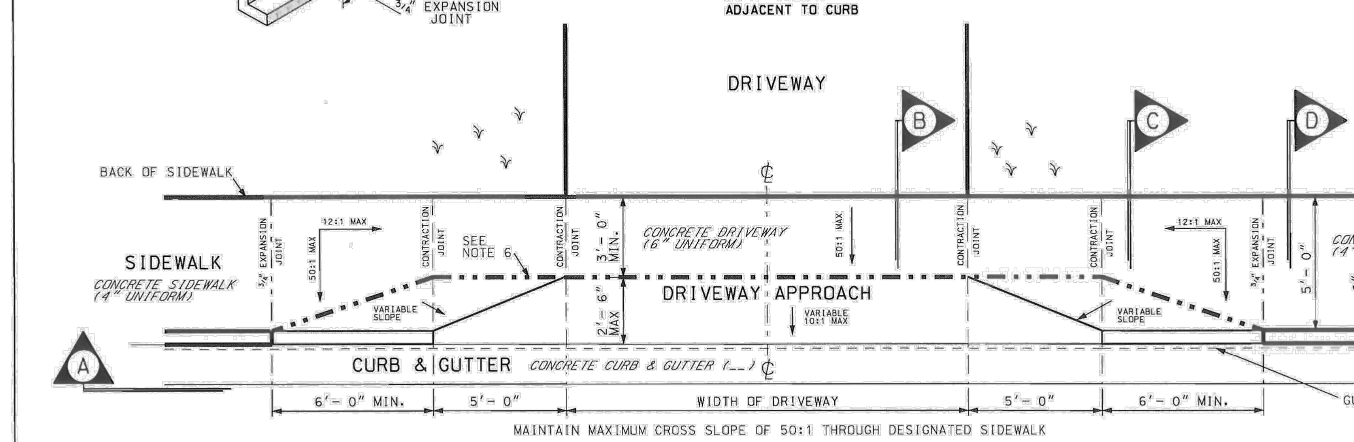
#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1	3/2009	SDM	TEMP OPENING NOTE
0	3/2008	DSO	GENERAL REVISIONS

SCDOT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201
STANDARD DRAWING
CATCH BASIN TYPE 16
719-016-01
EFFECTIVE LETTING DATE MARCH, 2009

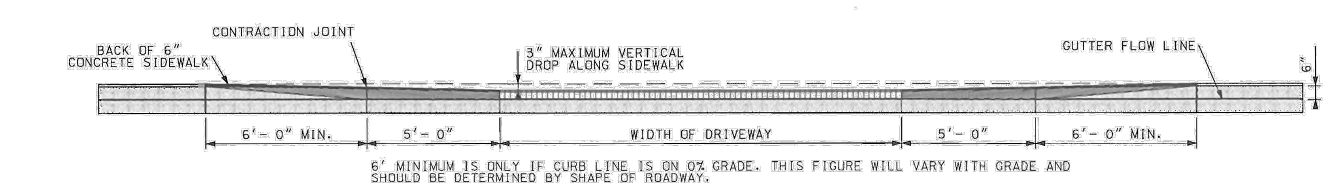
STANDARD DRAWING 720-405-00 — DRIVEWAY WITH SIDEWALK ADJACENT TO CURB



DETAIL (1)
DROP CURB DRIVEWAY WITH SIDEWALK ADJACENT TO CURB



DETAIL (2)
SCALE 3/16":1'
DRIVEWAY PLAN

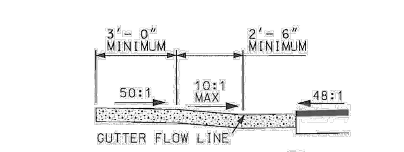


6' MINIMUM IS ONLY IF CURB LINE IS ON 0% GRADE. THIS FIGURE WILL VARY WITH GRADE AND SHOULD BE DETERMINED BY SHAPE OF ROADWAY.

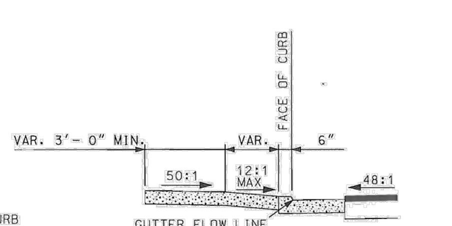
SECTION (A)
SCALE 3/16":1'
DRIVEWAY ELEVATION

NOTES:

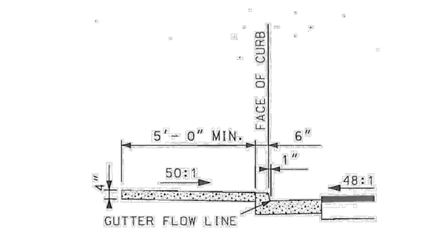
1. PROVIDE ADDITIONAL CONTRACTION JOINTS WITHIN DRIVEWAY WIDTH AS SPECIFIED IN SCDOT STANDARD SPECIFICATIONS, SECTION 720.
2. DRIVEWAYS TO BE CONSTRUCTED WHERE DESIGNATED BY THE RESIDENT CONSTRUCTION ENGINEER.
3. CONCRETE CURB THROUGH DRIVEWAY TO BE MEASURED AND PAID FOR AS CURB & GUTTER EVEN WHEN CURB IS DROPPED.
4. ALL SIDEWALKS ARE TO BE CONSTRUCTED ON A 50:1 MAX. CROSS SLOPE. ALL OTHER SLOPES OF RAMPS AND DRIVEWAYS ARE TO BE A 12:1 MAX UNLESS NOTED OTHERWISE.
5. SIDEWALK SHALL BE BUILT IN ACCORDANCE WITH THE REVISED DRAFT GUIDELINES FOR ACCESSIBLE PUBLIC RIGHTS-OF-WAY (NOVEMBER 23, 2005).
6. METAL KEYWAY STYLE JOINTS MAY BE INSTALLED BETWEEN DRIVEWAY APPROACH AND SIDEWALK TO ACHIEVE LINE AND GRADE. KEEP METAL JOINT MATERIAL FLUSH WITH OR BELOW ELEVATION OF CONCRETE.
7. FOR CURB OR INTEGRAL CURB DETAILS SEE STANDARD DRAWING NO. 720-105-00.
8. THE PAY ITEMS SHALL BE:
7205000 CONCRETE DRIVEWAY (6"UNIFORM) _____SY
7203XXX CONCRETE CURB & GUTTER ( )_______LF
7204100 CONCRETE SIDEWALK (4"UNIFORM)______SY



SECTION (B)
SCALE 3/16":1'



SECTION (C)
SCALE 3/16":1'



SECTION (D)
SCALE 3/16":1'

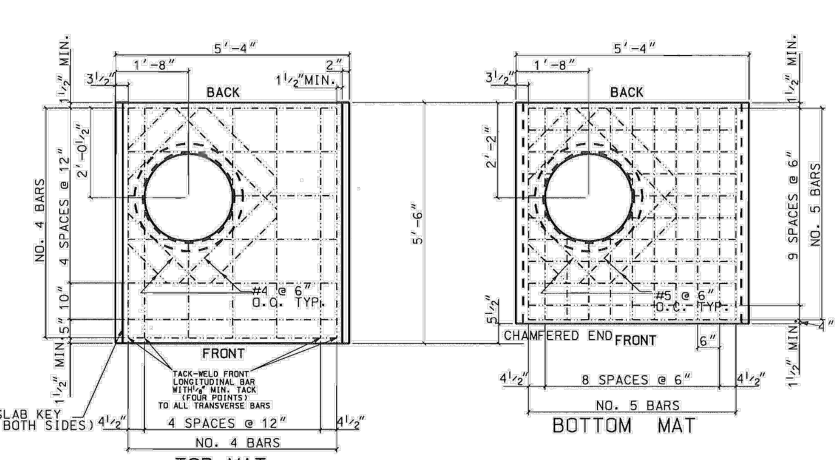
REFERENCES
NATIONAL DOCUMENTS: REVISED DRAFT GUIDELINES FOR ACCESSIBLE PUBLIC RIGHTS-OF-WAY (NOVEMBER 23, 2005)
SCDOT DOCUMENTS: --------------
RELATED DRAWINGS & KEYWORDS: --------------

PRECONSTRUCTION SUPPORT ENGINEER
(Seal: SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 8858 EDWIN SYLVESTER EARGLE, II)
SIGNATURE
MARCH 24, 2009
DATE

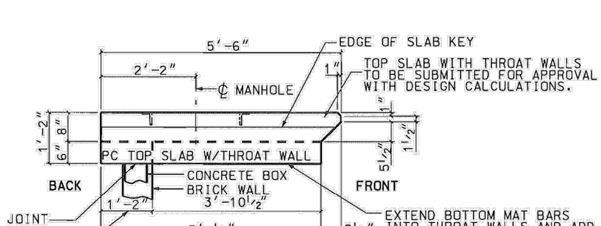
#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1			
0	3/2009	DSO	GENERAL REVISIONS

SCDOT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201
STANDARD DRAWING
DRIVEWAY WITH SIDEWALK ADJACENT TO CURB
720-405-00
EFFECTIVE LETTING DATE MAY, 2009

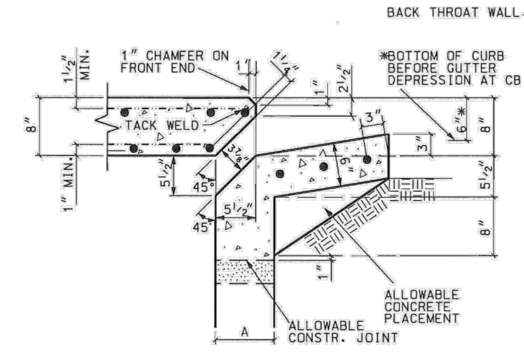
STANDARD DRAWING 719-016-02 — CATCH BASIN TYPE 16



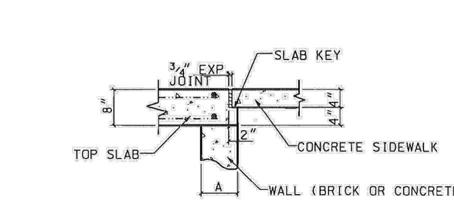
DETAIL (1)
TOP SLAB STEEL REINFORCING



DETAIL (4)
PC TOP SLAB W/ THROAT WALLS



DETAIL (3)
CB INLET



DETAIL (2)
SLAB KEY

USE SHEETS 719-016-01 THROUGH 719-016-02 FOR THIS ITEM.

THIS DRAWING IS NOT TO SCALE

GENERAL NOTES:

1. FOR BUILT IN PLACE CONSTRUCTION OF THE CATCH BASIN, EITHER BRICK MASONRY (WALLS ONLY) OR CIP CLASS 3000 CONCRETE MAY BE USED. FOR PRECAST CONSTRUCTION, A MINIMUM OF CLASS 4000P CONCRETE SHALL BE USED.
2. CONCRETE WALLS ARE TO BE 6" THICK WITH A MINIMUM REINFORCING STEEL AREA OF 0.20 SQUARE INCHES PER FOOT UNLESS NOTED. FOR BRICK, THE WALLS ARE TO BE 8" THICK. CONCRETE BRICK AND SIMILAR SOLID UNITS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C 55, GRADE S-II. THE INTERIOR DIMENSIONS ARE TO REMAIN AS SHOWN FOR EITHER TYPE OF CONSTRUCTION.
3. THE BOTTOM SLAB OF THE BOX SHALL BE A MINIMUM OF 6" THICK REINFORCED CONCRETE (CLASS 3000 OR 4000P) WITH A REINFORCING STEEL AREA OF 0.20 SQUARE INCHES PER FOOT. WIRE MESH MAY BE USED IN LIEU OF STEEL BARS PROVIDED A MINIMUM OF 0.20 SQUARE INCHES PER FOOT IS MET.
4. MORTAR SHALL BE TYPE S OR M.
5. REINFORCING STEEL SHALL BE ASTM A-706, LOW-ALLOY STEEL DEFORMED BARS FOR CONCRETE REINFORCEMENT, GRADE 60. WIRE MESH SHALL CONFORM TO AASHTO M 55 AND M 221.
6. SEE STANDARD DRAWING 719-550-00 FOR STEPS, WHICH ARE REQUIRED WHEN STRUCTURE DEPTH EXCEEDS 4'-6".
7. SEE STANDARD DRAWINGS 719-420-00 AND 719-425-00 FOR DEPTHS GREATER THAN 12'. PRECAST CONCRETE CIRCULAR DRAINAGE STRUCTURES ARE REQUIRED WHEN THE DEPTH FROM THE TOP OF THE DRAINAGE BOX BOTTOM SLAB TO THE TOP OF THE GROUND EXCEEDS 12'-0".
8. SEE STANDARD DRAWING 719-510-00 FOR DETAIL OF MANHOLE CASTING AND COVER. MANHOLE SHALL BE LINED UP WITH THE INTERIOR OF THE BOX AS SHOWN.
9. LOCATION AND SIZE OF PIPES ARE SITE SPECIFIC. (SEE DRAINAGE PLANS). THE BOTTOM OF THE CATCH BASIN IS TO BE GROUTED TO THE LOWEST FLOW LINE ELEVATION OF ALL PIPES. IF BOTTOM SLAB IS CAST IN PLACE WITH PIPES INSTALLED, BOTTOM SLAB THICKNESS MUST BE ACHIEVED BEYOND PIPE OUTSIDE DIAMETER.
10. THE CONTRACT UNIT PRICE FOR CATCH BASINS SHALL INCLUDE THE COST OF FURNISHING ALL MATERIALS, (BUILT IN PLACE OR PRECAST), AND WORK INCIDENTAL TO THE CONSTRUCTION OF THE STRUCTURE COMPLETE IN PLACE AS SHOWN, INCLUDING THE CURB AND GUTTER, IN ACCORDANCE WITH THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION).
11. SPECIAL ATTENTION SHOULD BE GIVEN TO THE COMPACTION OF THE SOIL UNDER THE 6" OR 6½" COVER OVERHANG ON THE BACK OF THE CATCH BASIN, AND UNDER ANY OPTIONAL PRECAST ITEMS USED.
12. THE SLOPE ON TOP OF CATCH BASIN IS TO MATCH ADJACENT SIDEWALK OR 50:1 TOWARD ROADWAY WHERE NO SIDEWALK IS PRESENT.
13. WHEN IT IS NECESSARY TO PLACE A CATCH BASIN IN A RADIUS, THE FACE OF THE CATCH BASIN TOP SHALL CONFORM TO THE HORIZONTAL CURVATURE OF THE ADJACENT CURB WHEN THE RADIUS IS 100 FEET OR LESS. OTHERWISE, THE TOP SHALL BE RECTANGULAR WITH SQUARE CORNERS. IN ALL CASES, THE BACK OF THE CATCH BASIN TOP SHOULD FOLLOW THE SAME ALIGNMENT A ITS FACE.
14. SEE STANDARD DRAWING 719-310-00 OR 719-305-00 FOR MAXIMUM PIPE DIAMETERS. THE PIPE SIZES SHOWN ARE MAXIMUM FOR BRICK AND PRECAST BOXES WHEN PIPE ENTERS PERPENDICULAR AND AT THE CENTER OF THE BOX WALL. CONTRACTOR SHOULD CONFIRM THAT PIPE USED FITS APPROPRIATELY INTO BOX.

PRECAST NOTES:

15. SUPPLY PRECAST CONCRETE COMPONENTS FOR DRAINAGE ITEMS AT EACH LOCATION FROM A SINGLE SOURCE PRECAST MANUFACTURER THAT HAS BEEN INSPECTED AND APPROVED BY THE MATERIALS AND RESEARCH ENGINEER. SUPPLY ALL INTERCHANGEABLE PRECAST PARTS ON ENTIRE PROJECT FROM A SINGLE SOURCE MANUFACTURER LISTED ON QUALIFIED PRODUCT LIST 14 UNLESS APPROVED BY RCE. ITEMS FROM MULTIPLE MANUFACTURERS SHOULD NOT BE INSTALLED IN INDIVIDUAL LOCATIONS.
16. THE USE OF PRECAST UNITS WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF OBTAINING SATISFACTORY INSTALLATIONS. SEE STANDARD DRAWINGS FOR PRECAST CONCRETE DRAINAGE BOX OR STRUCTURE FOR ADDITIONAL DETAILS AND SPECIFICATIONS.
17. LIFT HOLES AND/OR DEVICES MAY BE PLACED AS NECESSARY. ALL LIFT HOLES SHALL BE GROUTED SHUT PRIOR TO COMPLETION OF THE INSTALLATION. ALL LIFTING METHODS MUST MEET OSHA REGULATIONS.
18. PRECAST TOP SLAB TO BE MANUFACTURED WITH 1" CHAMFER OR RADIUS ON TOP OF FRONT END IN ORDER TO MORE CLOSELY MATCH TOP OF CURB RADIUS.
19. IF PRECAST THROAT IS USED, THE THROAT OPENING SHALL NOT OBSTRUCT THE MANHOLE OPENING.
20. THE CONTRACTOR SHALL USE A SINGLE SOURCE MANUFACTURER CHOSEN FROM THE LIST ON QUALIFIED PRODUCT LIST 14 FOR PRECAST ITEMS ON THIS DRAWING.
21. PRECAST MANUFACTURER SHALL FOLLOW QUALIFIED PRODUCT POLICY 14 BEFORE SUPPLYING THIS ITEM ON SCDOT PROJECTS.
22. CONTRACTOR MAY SUBMIT DESIGN DRAWINGS AND CALCULATIONS FOR MODIFICATIONS TO THIS ITEM ON A PROJECT BY PROJECT BASIS. MODIFICATIONS TO THESE ITEMS WILL NOT BE LISTED ON ANY QUALIFIED PRODUCT LIST. SUBMIT ALL PROPOSALS FOR PROJECT SPECIFIC MODIFICATIONS TO THE RESIDENT ENGINEER FOR REVIEW BY THE ENGINEER OF RECORD.
23. JOINTS BETWEEN INSTALLED PIECES AND PRECAST ITEMS TO BE PLACED SHALL BE SEALED WITH A ½" GROUT LIFT OR AN APPROPRIATE PLASTIC PREFORMED GASKET (FROM QUALIFIED PRODUCT LIST 14.)
24. TOP SLAB MUST BE IN LINE WITH BOTH THE ROAD SLOPE (SHOW ON ROAD PLANS)AND THE SIDEWALK SLOPE(TYPICALLY 50:1).
25. PRECAST CONCRETE CIRCULAR STRUCTURES (AS SHOWN ON 719-420-00) ARE REQUIRED FOR THE FOLLOWING APPLICATIONS UNLESS PROHIBITED BY THE PLANS OR SPECIAL PROVISIONS.

(a) ON DRAINAGE STRUCTURES WITH A DEPTH EQUAL TO OR GREATER THAN 12 FEET.
(b) ON DRAINAGE STRUCTURES WHERE THE FLOW LINE ELEVATION OF THE INLET PIPE IS EQUAL TO OR HIGHER THAN THE INSIDE TOP (SOFFIT) OF THE OUTLET PIPE.
(c) AS REQUIRED BY THE PROJECT PLANS.

TABLE 719-016B

STANDARD PC ITEMS CB 16
CB 16 BOTTOM SLAB (64" X 64" X 6")
CB 16 TOP SLAB (66" X 64" X 8")
CB 16 TOP SLAB WITH THROAT WALLS (66" X 64" X 14")
SEE ALSO 719-305-00 AND 719-310-00

REFERENCES
NATIONAL DOCUMENTS: ASTM C55, ASTM A706, AASHTO M55, AASHTO M221
SCDOT DOCUMENTS: QUALIFIED PRODUCT LIST 14
RELATED DRAWINGS & KEYWORDS: 719-016-01 TO 719-016-02, 719-550-00, 719-420-00, 719-425-00, 719-510-00, 719-310-00, 719-305-00

PRECONSTRUCTION SUPPORT ENGINEER
(Seal: SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 8858 EDWIN SYLVESTER EARGLE, II)
SIGNATURE
MARCH 3, 2008
DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1			
0	3/2008	DSO	GENERAL REVISIONS

SCDOT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201
STANDARD DRAWING
CATCH BASIN TYPE 16
719-016-02
EFFECTIVE LETTING DATE MAY 2008

STANDARD DRAWING 719-016-03 — CATCH BASIN TYPE 16B 6X6 BOX TOP SLAB

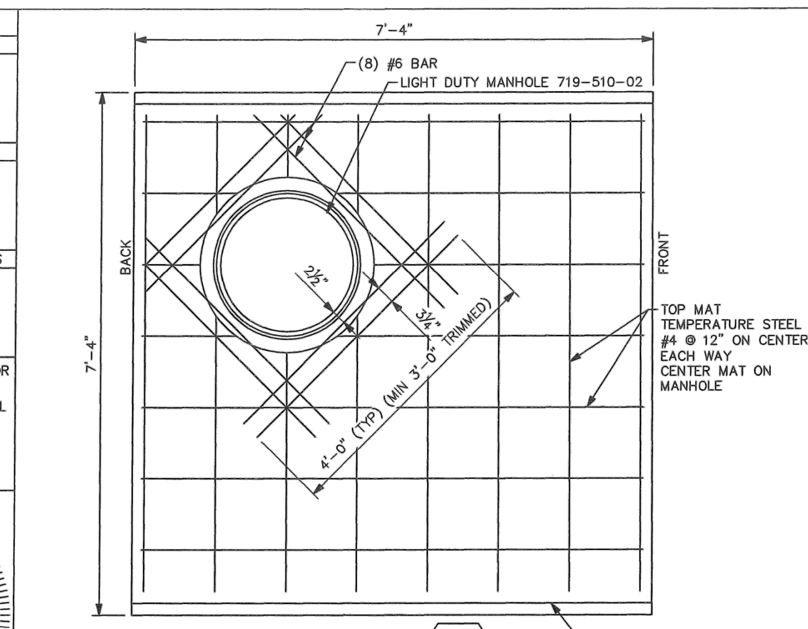
REFERENCES
NATIONAL DOCUMENTS: ---
SCDOT DOCUMENTS: ---
RELATED DRAWINGS & KEYWORDS: ---

THIS DRAWING IS ONLY VALID FOR CONSTRUCTION WHEN SEALED AND SIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF SOUTH CAROLINA. CHECK WWW.SCDOT.ORG FOR LATEST UPDATE.

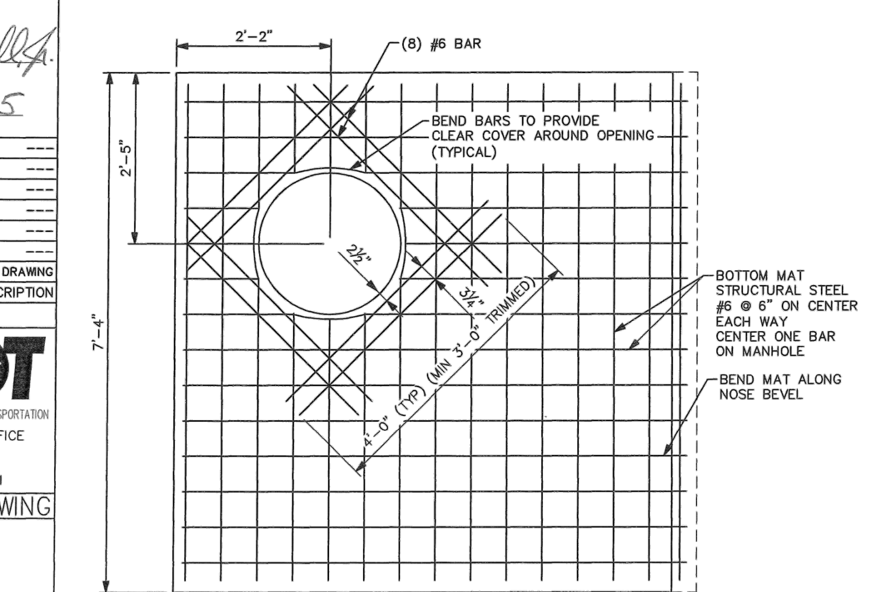
(Seal: SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 21242 JAMES W. KENDALL, JR.)
SIGNATURE
7/29/2015
DATE

#	DATE	CHK	DESCRIPTION
6	---	---	---
5	---	---	---
4	---	---	---
3	---	---	---
2	---	---	---
1	---	---	---
0	1/16	DSO	NEW DRAWING

SCDOT
SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201
STANDARD DRAWING
CATCH BASIN TYPE 16B 6X6 BOX TOP SLAB
719-016-03
EFFECTIVE LETTING DATE JANUARY 2016



DETAIL (1)
SCALE: 1/2"=1'-0"
CB16 6X6
TOP MAT
TEMPERATURE STEEL

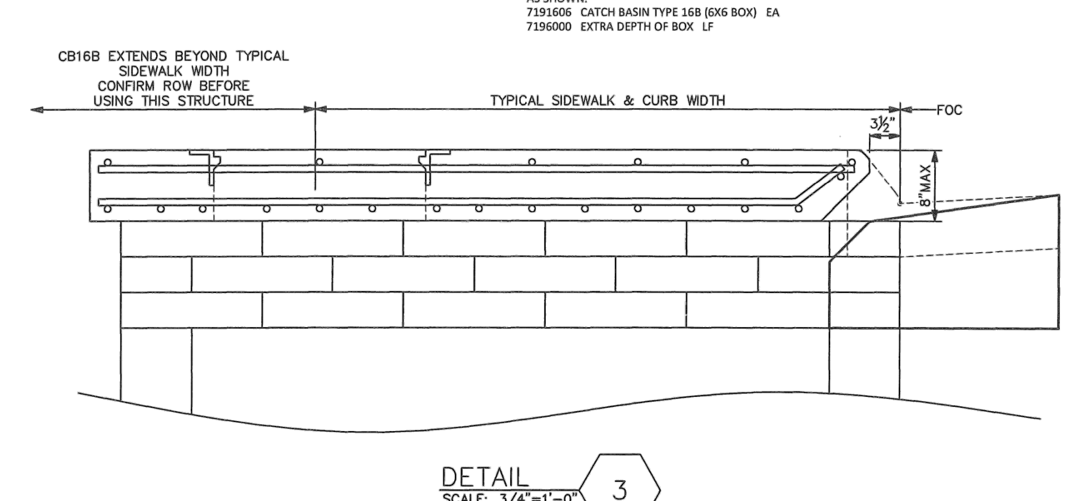


DETAIL (2)
SCALE: 1/2"=1'-0"
CB16 6X6
BOTTOM MAT
MAIN REINFORCEMENT

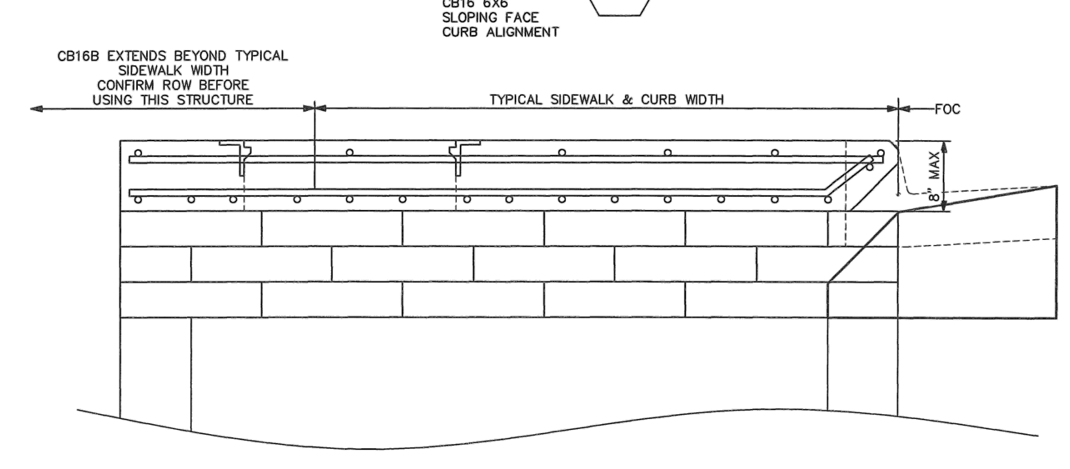
NOTES:
1.1 SEE SHEET 719-000-XX FOR GENERAL NOTES.
1.2 WORK SHEETS 719-016-XX TOGETHER FOR CATCH BASIN 16B.
1.3 CONSTRUCT 6' THROAT FOR CATCH BASIN 16B USING METHODS COMPARABLE TO CATCH BASIN 16.

5 FABRICATION:
5.1 USE CONCRETE CLASS 6000 WITH A MIX DESIGN COMPATIBLE WITH PRECAST COMPONENT.
5.2 USE ASTM A 706 GRADE 60 REINFORCEMENT.
5.3 VARY BAR SPACING AND EDGE DISTANCE AS NEEDED TO FIT REINFORCEMENT AROUND HOLES.
5.4 CLEAR COVER TO FACE OF SLAB: MINIMUM = 1", MAXIMUM = 1.5" BOTTOM MAT, MAXIMUM 1.25" TOP MAT.
5.5 EDGE DISTANCE: MINIMUM = 1.75", MAXIMUM = 2.75"
5.6 FABRICATION TOLERANCE ON DIMENSIONS IS ± ⅛" UNLESS NOTED OTHERWISE IN TABLE.
5.7 PLACE A 1" CHAMFER ON THE FRONT/TOP EDGE OF THE PRECAST SLAB.

10 PAYMENT
10.1 PAYMENT FOR CATCH BASIN 16B INCLUDES ALL MATERIALS AND LABOR TO COMPLETE INSTALLATION AS SHOWN.
7191606 CATCH BASIN TYPE 16B (6X6 BOX) EA
7196000 EXTRA DEPTH OF BOX LF



DETAIL (3)
SCALE: 3/4"=1'-0"
CB16 6X6
SLOPING FACE
CURB ALIGNMENT



DETAIL (4)
SCALE: 3/4"=1'-0"
CB16 6X6
VERTICAL FACE
CURB ALIGNMENT

(Seal: STATE OF SOUTH CAROLINA PROFESSIONAL ENGINEER No. 22816 PAUL R. MOORE, LICENSED 4/24/2020)
(Seal: SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION WARD EDWARDS, INC. No. C00152)

NOT FOR CONSTRUCTION

NO.	DESCRIPTION	DATE
	PLAN REVISIONS	
1		
2		
3		
4		
5		
6		
7		

Ward Edwards
ENGINEERING
P.O. BOX 381, BLUFFTON, SOUTH CAROLINA 29910
PH (843) 837-5250 / FAX (843) 837-2558
WWW.WARDEDWARDS.COM

HARBOR FREIGHT
CITY OF BEAUFORT, SOUTH CAROLINA
BEAUFORT HFT DEVELOPMENT , LLC
ROSWELL, GA

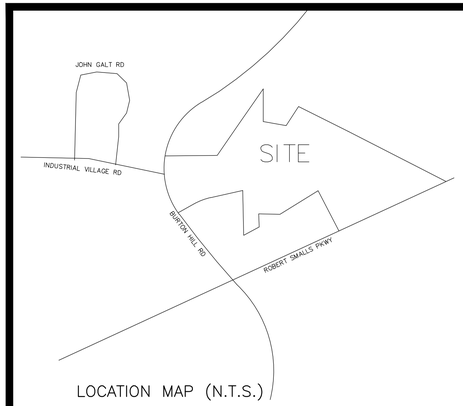
SCDOT DETAILS

VERTICAL DATUM:
NGVD29

PROJECT #:	I70225A
DATE:	04/24/2020
DESIGNED BY:	BCB
CHECKED BY:	PRM

SHEET
C1003

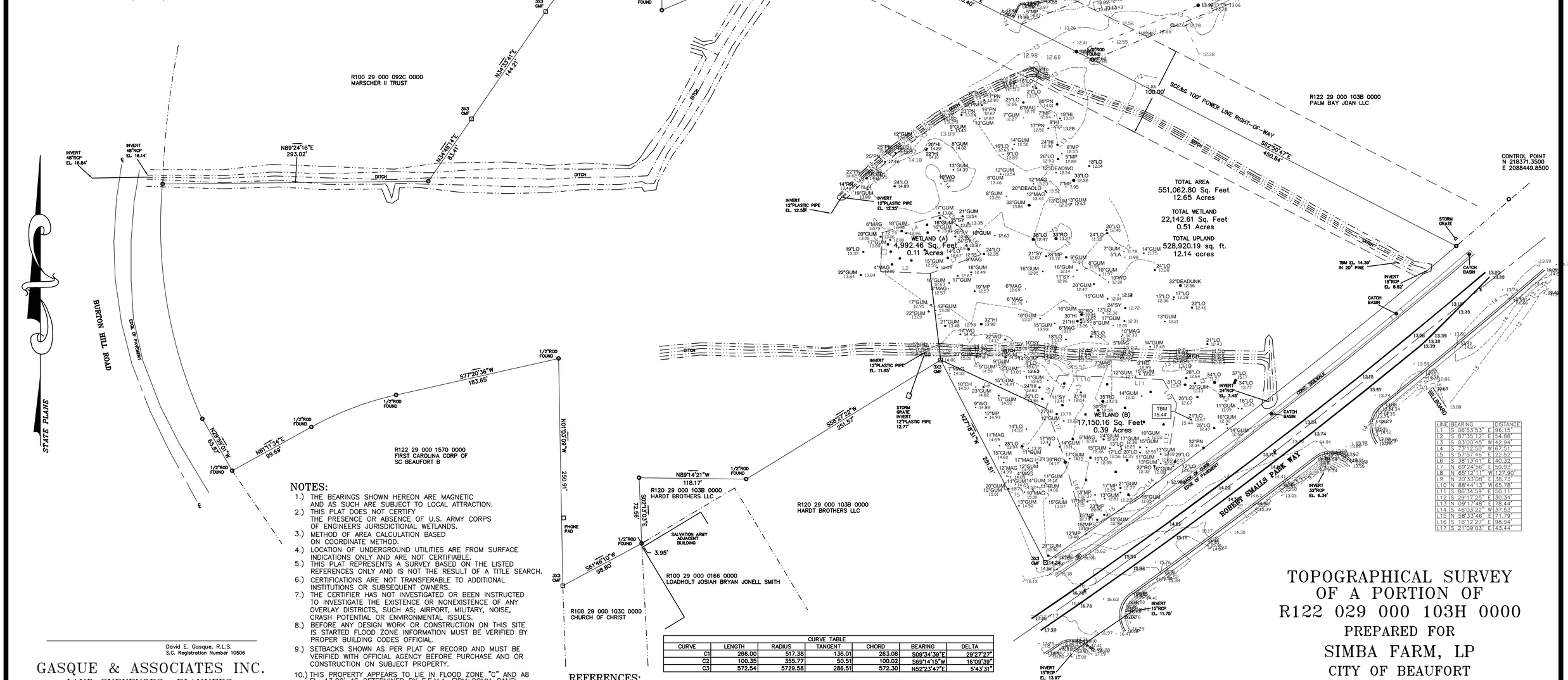
IF THIS SHEET IS LESS THAN 22" X 34" IT IS A REDUCED PRINT, SCALE ACCORDINGLY



LOCATION MAP (N.T.S.)

LEGEND OF SYMBOLS & ABBREVIATIONS

- FIRE HYDRANT
- CO — CLEAN OUT
- PP — POWER POLE
- TP — TELEPHONE PEDESTAL
- FO — FIBER OPTIC STUB
- WV — WATER VALVE
- GV — GAS VALVE
- WATER METER
- 1/2"ROD SET
- TREE SIZE & TYPE
- ELEVATION
- MVM — MAIN VALVE MONUMENT
- MH — MANHOLE
- GW — GUY WIRE
- CB — CABLE BOX
- OE — OVERHEAD POWERLINE
- EDGE OF PAVEMENT
- BACK OF CURB
- LIGHTPOLE
- GAS LINE
- CENTER LINE
- CONTOUR LINE



LINE	BEARING	DISTANCE
L1	S 06°53'53" E	96.15'
L2	S 87°35'12" E	54.88'
L3	S 03°00'45" W	42.94'
L4	S 73°12'50" W	67.51'
L5	S 57°57'46" E	22.52'
L6	S 38°13'41" E	40.32'
L7	N 69°24'56" E	59.93'
L8	N 65°12'11" W	127.90'
L9	N 20°33'08" E	38.73'
L10	N 88°44'13" W	65.78'
L11	S 86°34'59" E	50.11'
L12	S 29°17'25" E	30.34'
L13	N 09°17'48" E	78.44'
L14	S 46°03'22" W	37.53'
L15	N 58°33'46" E	71.79'
L16	S 16°12'27" E	98.94'
L17	S 21°09'03" E	43.44'

CURVE TABLE						
CURVE	LENGTH	RADIUS	TANGENT	CHORD	BEARING	DELTA
C1	266.00	517.38	136.01	263.08	S09°34'39"E	29°27'27"
C2	100.35	355.77	50.51	100.02	S69°14'15"W	16°09'39"
C3	572.54	5729.58	286.51	572.30	N52°23'47"E	5°43'31"

NOTES:

1.) THE BEARINGS SHOWN HEREON ARE MAGNETIC AND AS SUCH ARE SUBJECT TO LOCAL ATTRACTION.
2.) THIS PLAT DOES NOT CERTIFY THE PRESENCE OR ABSENCE OF U.S. ARMY CORPS OF ENGINEERS JURISDICTIONAL WETLANDS.
3.) METHOD OF AREA CALCULATION BASED ON COORDINATE METHOD.
4.) LOCATION OF UNDERGROUND UTILITIES ARE FROM SURFACE INDICATIONS ONLY AND ARE NOT CERTIFIABLE.
5.) THIS PLAT REPRESENTS A SURVEY BASED ON THE LISTED REFERENCES ONLY AND IS NOT THE RESULT OF A TITLE SEARCH.
6.) CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.
7.) THE CERTIFIER HAS NOT INVESTIGATED OR BEEN INSTRUCTED TO INVESTIGATE THE EXISTENCE OR NONEXISTENCE OF ANY OVERLAY DISTRICTS, SUCH AS; AIRPORT, MILITARY, NOISE, CRASH POTENTIAL OR ENVIRONMENTAL ISSUES.
8.) BEFORE ANY DESIGN WORK OR CONSTRUCTION ON THIS SITE IS STARTED FLOOD ZONE INFORMATION MUST BE VERIFIED BY PROPER BUILDING CODES OFFICIAL.
9.) SETBACKS SHOWN AS PER PLAT OF RECORD AND MUST BE VERIFIED WITH OFFICIAL AGENCY BEFORE PURCHASE AND OR CONSTRUCTION ON SUBJECT PROPERTY.
10.) THIS PROPERTY APPEARS TO LIE IN FLOOD ZONE "C" AND A8 EL. 13.00' AS DETERMINED BY F.E.M.A. FIRM COMM-PANEL NUMBER 450025 0065 D. DATED 09/29/86 (INDEX DATE 11/04/92)
11.) CONTOUR INTERVAL IS 1'.
12.) VERTICAL DATUM IS 1929 NGVD.

REFERENCES:

1.) T.M.S. R122 029 000 103H 0000
2.) PLAT BY R.D. TROGDON JR DATED MAY 23, 1988 DEED BOOK 508, PAGE 452 BEAUFORT COUNTY R.M.C. OFFICE

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

David E. Gasque, R.L.S.
S.C. Registration Number 10506

GASQUE & ASSOCIATES INC.
LAND SURVEYORS · PLANNERS
28 PROFESSIONAL VILLAGE CIRCLE, BEAUFORT, S.C.
P.O. BOX 1363, BEAUFORT, S.C.
(843) 522-1798

THIS PLAT IS COPYRIGHTED AND IS ONLY INTENDED FOR THE USE OF THE ENTITY OR PERSON(S) SHOWN HERE ON.

SOUTH CAROLINA
GASQUE & ASSOCIATES, INC.
No. C00192
CERTIFICATE OF AUTHORIZATION

TOPOGRAPHICAL SURVEY OF A PORTION OF R122 029 000 103H 0000

PREPARED FOR

SIMBA FARM, LP

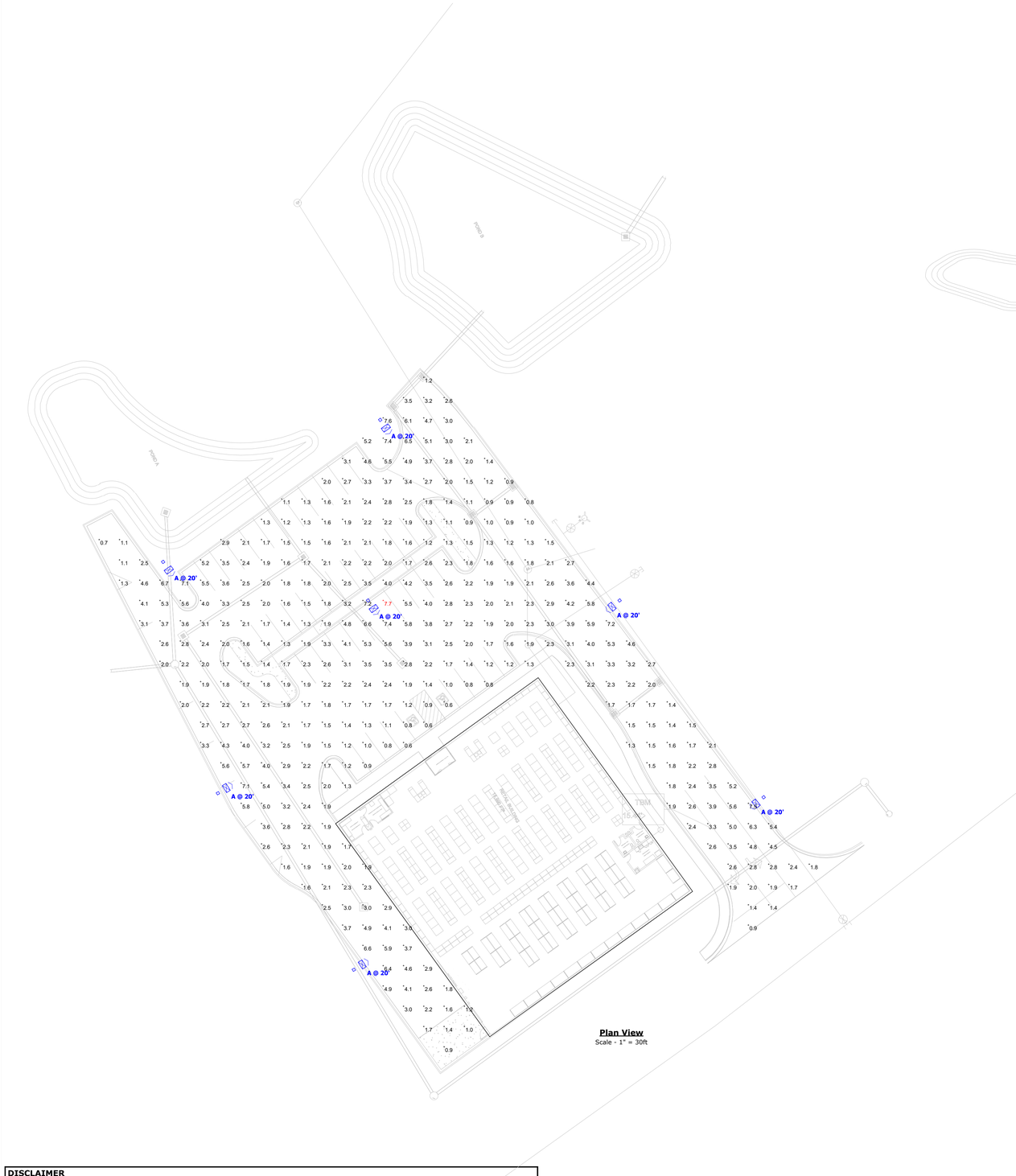
CITY OF BEAUFORT

BEAUFORT COUNTY-SOUTH CAROLINA

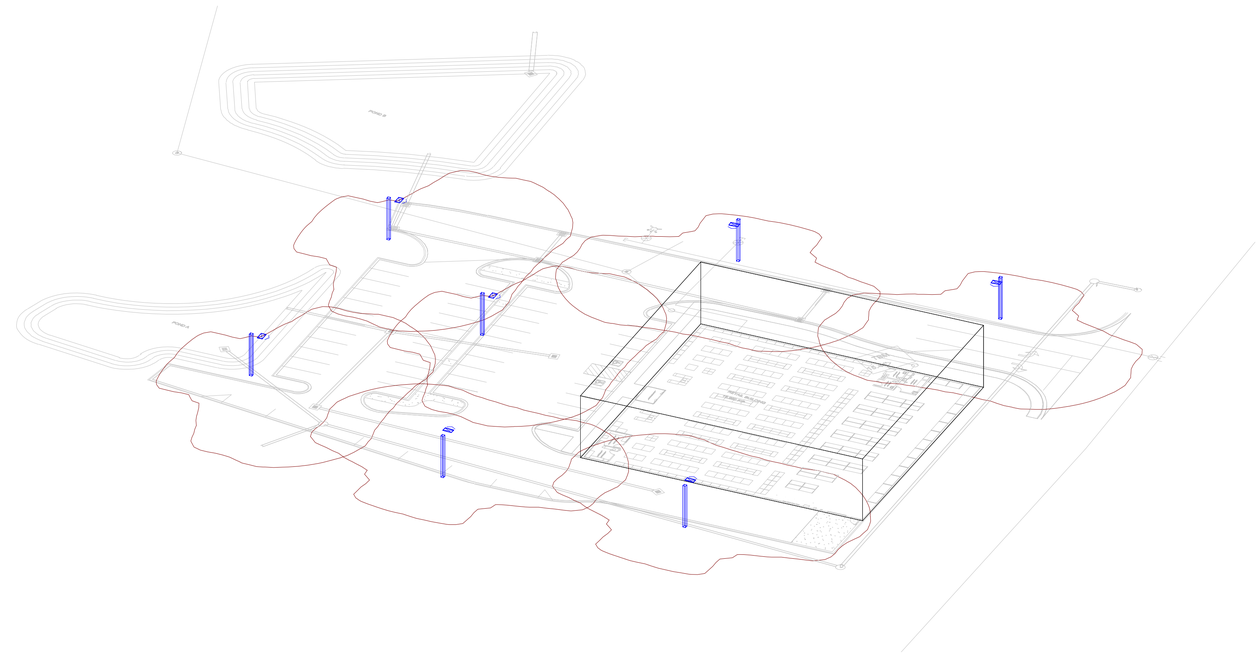
DATE 1/16/2020

SCALE 1"=50'

JOB#51768 F.B.#1026/TT DRAWN BY: DSGN5



Plan View
Scale - 1" = 30ft



South West View

Luminaire Locations

No.	Label	Location X	Location Y	Location Z	MH	Orientation	Tilt
1	A	2088126.00	218143.00	20.00	20.00	230.65	0.00
2	A	2088055.00	218240.00	20.00	20.00	230.65	0.00
3	A	2087924.00	218058.00	20.00	20.00	58.24	0.00
4	A	2087857.00	218145.00	20.00	20.00	58.24	0.00
5	A	2087931.00	218240.00	20.00	20.00	144.62	0.00
6	A	2087830.00	218259.00	20.00	20.00	144.62	0.00
7	A	2087937.00	218329.00	20.00	20.00	144.62	0.00

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	+	2.6 fc	7.7 fc	0.6 fc	12.8:1	4.3:1

Holophane - Exteriors

1. Readings shown are based on a total LLF of as shown at grade. Data references the extrapolated performance projections in a 25c ambient based on 10,000 hrs of LED testing (per IESNA LM-80-08 and projected per IESNA TM-21-11).
2. Please refer to the "luminaire locations" for mounting heights.
3. Product information can be obtained at www.Holophane.com or through your local agency.

Schedule

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
	A	7	American Electric Lighting	ATB2 60BLEDE10 XXXXX R4 4K/5K	ATB2 SERIES LED 1000MA TYPE 4 4000K/5000K CCT	LED Array	1	ATB2_60BLEDE10_XXXXX_R4_4K_5K.ies	25422	0.91	204
	B	0	American Electric Lighting	ATB2 60BLEDE10 XXXXX R4 4K/5K	ATB2 SERIES LED 1000MA TYPE 4 4000K/5000K CCT	LED Array	1	ATB2_60BLEDE10_XXXXX_R4_4K_5K.ies	25422	0.91	408

DISCLAIMER

This architectural lighting submittal is provided only for informational purposes and to the help the customer or end-user (as applicable) understand how various sections of linear fixtures connect to each other and how they mount to the ceiling. This lighting submittal is strictly based on the information provided to Acuity Brands, and is provided without warranty as to accuracy, completeness, reliability or otherwise. If the information (including but not limited to floor-plans, reflected ceiling plans, electrical plans and specifications) provided to Acuity Brands is incomplete or not current (i.e., newer versions exist), the accuracy of proposed design may be adversely affected. Once this lighting submittal is received by the customer or end-user (as applicable), it is the obligation of the customer or end-user (as applicable) to consult with a professional engineering advisor to determine whether the proposed design meets the applicable project requirements for lighting system performance, code compliance, safety, suitability, and effectiveness for use in a particular application. In no event will Acuity Brands be responsible for any loss resulting from any use of any information contained in this lighting submittal.

ACUITY DESIGN SERVICES
LIBRARY@DESIGNSERVICES@ACUITYBRANDS.COM

Dominion SC - Harbor Freight

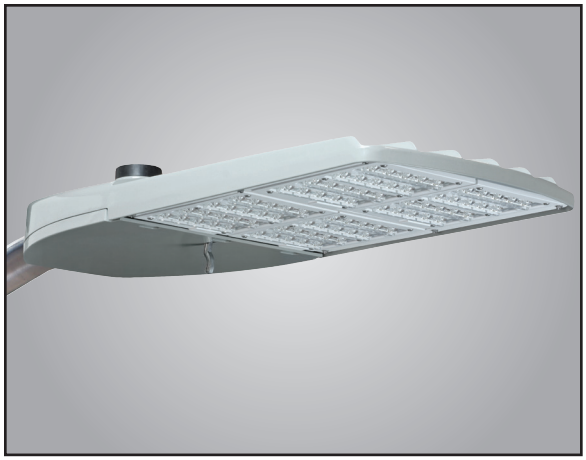
Designer
Arnel Uy
Date
2/6/2020
Scale
As Shown
Drawing No.
129264-0 A1

Autobahn Series ATB2

Roadway Lighting

Consistent with LEED® goals & Green Globes™ criteria for light pollution reduction

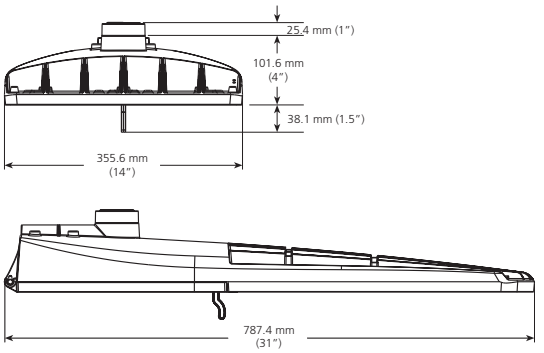
PRODUCT OVERVIEW



Applications:

Roadways
Off ramps
Residential streets
Parking lots

DIMENSIONS



Effective Projected Area (EPA)
The EPA for the ATB2 is 0.78 sq. ft.,
Approx. Wt. = 21 lbs. (9.53 kg)

Features:

OPTICAL

Same Light: Performance is comparable to 250-400W HPS roadway luminaires.

White Light: Correlated color temperature - standard 4000K, 70 CRI minimum or optional 5000K, 70 CRI minimum.

Unique IP66 rated LED light engines provided 0% uplight and restrict backlight to within sidewalk depth, providing optimal application coverage and optimal pole spacing.

Available in Type II, III, IV, & V roadway distributions.

ELECTRICAL

Expected Life: LED light engines are rated >100,000 hours at 25°C, L70. Electronic driver has an expected life of 100,000 hours at a 25°C ambient.

Lower Energy: Saves an average of 40-60% over comparable HPS platforms.

Robust Surge Protection: Three different surge protection options provide a minimum of IEEE/ANSI C62.41 Category C (10kV/5kA) protection.

MECHANICAL

Easy to Maintain: Includes standard AEL lineman-friendly features such as tool-less entry, 3 station terminal block and quick disconnects. Bubble level located inside the electrical compartment for easy leveling at installation.

Rugged die-cast aluminum housing is polyester powder-coated for durability and corrosion resistance. Rigorous five-stage pre-treating and painting process yields a finish that achieves a scribe creepage rating of 8 (per ASTM D1654) after over 1000 hours exposure to salt fog chamber (operated per ASTM B117) Optional Enhanced Corrosion Resistant finish (CR) increases the salt spray exposure to 5000 hours.

Four-bolt mast arm mount is adjustable for arms from 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter and provides a 3G vibration rating per ANSI C136.

Wildlife shield is cast into the housing (not a separate piece).

CONTROLS

NEMA 3 Pin photocontrol receptacle is standard, with the Acuity designed ANSI 5 Pin and 7 Pin receptacles optionally available.

Premium solid state locking sale photocontrol - PCSS (10 year rated life). Extreme long life sold state locking style photocontrol - PCLL (20 year rated life).

Mulit-level dimming available to provide scheduled dimming as specified by the customer.

Optional onboard Adjustable Output module allows the light output and input wattage to be modified to meet site specific requirements, and can also allow a single fixture to be flexibly applied in many different applications.

WARRANTY & STANDARDS

5 year limited warranty. Full warranty terms located at http://www.acuitybrands.com/Libraries/Terms_and_Conds/ABL_LED_Commerical_Outdoor.sflb.ashx

Rated for -40°C to 40°C ambient.

CSA Certified to U.S. and Canadian standards

Complies with ANSI: C136.2, C136.10, C136.14, C136.31, C136.15, C136.37

Note: Specifications subject to change without notice. Actual performance may differ as a result of end-user environment and application.

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American Electric Lighting

ORDERING INFORMATION

Example: ATB2 40LEDE70 MVOLT R2

Series

ATB2	Autobahn LED Roadway & Security

Performance Packages

40BLEDE70	40B Chips, 700mA Driver
40BLEDE10	40B Chips, 1050mA Driver
40BLEDE13	40B Chips, 1300mA Driver
60BLEDE70	60B Chips, 700mA Driver
60BLEDE85	60B Chips, 850mA Driver
60BLEDE10	60B Chips, 1050mA Driver
60BLEDE13	60B Chips, 1300mA Driver
80LEDE70	80B Chips, 700mA Driver
80LEDE85	80B Chips, 850mA Driver
80LEDE10	80B Chips, 1050mA Driver

Voltage

MVOLT	Multi-volt, 120-277V
347	347V
480	480V

Optics

R2	Roadway Type II
R3	Roadway Type III
R4	Roadway Type IV
R5	Roadway Type V

Options

Color Temperature (CCT)

(Blank)	4000K CCT, 70 CRI Min. (Standard)
5K	5000K CCT, 70 CRI Min.

Paint

(Blank)	Gray (Standard)
BK	Black
BZ	Bronze
DDB	Dark Bronze
GI	Graphite
WH	White

Surge Protection

Blank	Acuity SPD with inductive filter (Standard)
MP[1]	MOV Pack
IL[1]	SPD with Indicator Light

Terminal Block

(Blank)	Terminal Block (Standard)
T2	Wired to L1 & L2 Positions

Misc.

BL	External Bubble Level
CR	Enhanced Corrosion Resistant Finish
HS	House-Side Shield
NL	Nema Label
XL	Not CSA Certified

Controls

(Blank)	3 Pin NEMA Photocontrol Receptacle (Standard)
P5	5 Pin Photocontrol Receptacle (Dimmable Driver Included)
P7	7 Pin Photocontrol Receptacle (Dimmable Driver Included)
NR	No Photocontrol Receptacle
AO[2]	Field Adjustable Output
DM	0V-10V Dimmable Driver (Controls by others)
ML[3,4]	Multi-Level Dimming
PCSS[1]	Solid State Lighting Photocontrol (120-277V)
PCLL	Solid State Long Life Photocontrol
SH	Shorting Cap

Packaging

(Blank)	Single Unit (Standard)
JP	Job Pack (24/Pallet)

Notes

1. Not available in 347 or 480V.
2. Not available with DM or ML options.
3. Not available with AO, DM, P5 or P7 options.
4. Dimming schedule and light level information required from the customer in order to configure product. Contact Infrastructure Technical Support to proceed.

Note: Specifications subject to change without notice. Actual performance may differ as a result of end-user environment and application.

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Warranty Five-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx
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.

Please contact your sales representative for the latest product information.

PERFORMANCE PACKAGE

Performance Package	Drive Current (mA)	Input Watts	Optic	4000K CCT		LLD @ 25°C	
				Delivered Lumens	Efficacy (LPW)	50k Hours	100k Hours
40B	700	91	R2	11266	124	0.98	0.96
	1000	138		15685	114	0.95	0.90
	1300	177		18277	103	0.94	0.88
	700	91	R3	11160	123	0.98	0.96
	1000	138		15520	112	0.95	0.90
	1300	177		18050	102	0.94	0.88
	700	91	R4	10775	118	0.98	0.96
	1000	138		15015	109	0.95	0.90
	1300	177		17341	98	0.94	0.88
	700	91	R5	12097	133	0.98	0.96
	1000	138		16729	121	0.95	0.90
	1300	177		19564	111	0.94	0.88
60B	700	133	R2	16986	128	0.98	0.96
	850	173		19966	115	0.95	0.90
	1000	208		23710	114	0.95	0.90
	1300	260		27308	105	0.94	0.88
	700	133	R3	17128	129	0.98	0.96
	850	173		20105	116	0.95	0.90
	1000	208		23250	112	0.95	0.90
	1300	260		27477	106	0.94	0.88
	700	133	R4	16516	124	0.98	0.96
	850	173		19429	112	0.95	0.90
	1000	208		22718	109	0.95	0.90
	1300	260		26400	102	0.94	0.88
	700	133	R5	17882	134	0.98	0.96
	850	173		21000	121	0.95	0.90
	1000	208		24673	119	0.95	0.90
	1300	260		28838	111	0.94	0.88
80B	700	180	R2	22528	125	0.98	0.96
	850	224		26394	118	0.95	0.90
	1000	274		30998	113	0.95	0.90
	700	180	R3	22127	123	0.98	0.96
	850	224		25955	116	0.95	0.90
	1000	274		30491	111	0.95	0.90
	700	180	R4	21701	121	0.98	0.96
	850	224		25350	113	0.95	0.90
	1000	274		29567	108	0.95	0.90
	700	180	R5	23799	132	0.98	0.96
	850	224		27851	124	0.95	0.90
	1000	274		32391	118	0.95	0.90

Note: Information shown above is based on nominal system data. Individual fixture performance may vary. Specifications subject to change without notice.

ATB2 LLD Multiplier	15°C	20°C	25°C	30°C	35°C	40°C
	1.02	1.01	1	0.99	0.97	0.96

To calculate the LLD for a temperature other than 25°C, multiply the LLD @ 25°C (shown in the performance package table) by the LLD multiplier for the selected temperature.

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HUBBELL Outdoor Lighting

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

SLING Series

SLENDER WALLPACK

tradeSELECT®

FEATURES

- Two sizes for a variety of applications
- Ranges from 21W to 80W with up to 8000 lumens
- SG1 Series replaces from 100W-150W HID; SG2 Series replaces from 150W-250W HID
- Comfort lens available as an option or accessory provides glare control and enhanced uniformity
- Knuckle and trunnion accessory mounting kits available for flood applications
- IP65 and certified to UL 1598 for use in wet locations up to 40°C ambient
- DLC (DesignLights Consortium Qualified - see www.designlights.org

C US

*3000K and warmer CCTs only

RELATED PRODUCTS

LNC Litepak | LNC2 Litepak | LNC3 Litepak
LNC4 Litepak | GeoPak | GeoPak2

PHOTOMETRY
INSTRUCTION SHEET
SG1 PSG PAGE
SG2 PSG PAGE
SLING BROCHURE

SPECIFICATIONS

HOUSING

- Rugged die-cast aluminum housing with corrosion resistant powder coat finish
- Heating dissipating fins provide superior thermal performance extending the life of the electronic components
- Impact resistant tempered glass offers zero uplight
- Comfort lens available as an option or accessory to reduce glare (7-10% lumen reduction) and provide better uniformity

OPTICS

- 3000K, 4000K and 5000K CCT nominal with 70 CRI
- Smaller SG1 housing has 2 LEDs, larger SG2 housing has 3 LEDs

INSTALLATION

- Side hinge allows for easy installation and wiring
- Side movement avoids damage to the lens and helps prevent injury common in drop down hinge designs
- Mounts to 4" junction box and includes a gasket to help seal electrical connections
- Four 1/2" threaded conduits hubs for surface conduit provided

ELECTRICAL

- 120-277V, 50/60Hz electronic drivers
- 347V and 480V available in large SG2 housing
- 10KA surge protection included

OPTIONS/CONTROLS

- Button photocontrol for dusk to dawn energy savings. Stock versions include 120V-277V PC with a cover which provides a choice to engage photocontrol or not. PC is installed in top hub
- Occupancy sensor available for on/off and dimming control in larger SG2 housing
- SiteSync™ wireless lighting control delivers flexible control strategies for reducing power consumption and minimizing maintenance costs while delivering the right light levels with a simple and affordable wireless solution. See ordering information or visit www.hubbelllighting.com/sitesync for more details
- Battery backup options available in larger SG2 housing rated for either 0° C or -30° C. Performance exceeds NEC requirement providing 1 fc minimum over 10'x10' at 11' mounting height

CERTIFICATIONS

- DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org
- Listed to UL1598 for use in wet location, listed for -40°C to 40°C applications
- IDA approved with zero uplight for 3000K and warmer CCTs
- IP65

WARRANTY

- 5 year limited warranty
- See HLI Standard Warranty for additional information

KEY DATA	
Lumen Range	2263-8079
Wattage Range	21-80
Efficacy Range (LPW)	101-113
Fixture Projected Life (Hours)	L70>50K
Weights lbs. (kg)	4.3-11 (2.0-5.0)

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HUBBELL Lighting

HUBBELL Outdoor Lighting

DATE: LOCATION:

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CATALOG #:

SLING SERIES

SLENDER WALLPACK

ORDERING GUIDE

Example: SG1-20-3K7-FT-UNV-DBT-PCU-CS

CATALOG #

ORDERING INFORMATION

Housing		CCT/CRI		Distribution		Voltage		Color/Finish		Control Options		Options	
SG1-10	Size 1, 10W	**3K7**	3000K, 70 CRI	**FT**	Fwd Throw	**UNV**	120V-277V	**BLT**	Black Matte Textured	**PCU**	Universal Button Photocontrol (120-277V)	**CS**	Comfort Lens
SG1-20	Size 1, 20W	**4K7**	4000K, 70 CRI			**120**	120V	**BLS**	Black Gloss Smooth	**SCP**[1,2,3]	Occupancy Sensor Programmable (Dim)	**E**[1,2]	Battery 0°C
SG1-30	Size 1, 30W	**5K7**	5000K, 70 CRI			**277**	277V	**DBT**	Dark Bronze Matte Textured	**SWP**[1,2]	SiteSync Pre-commission	**EH**[1,2]	Battery w/ heater -20°
SG1-40	Size 1, 40W					**UHV**	347V-480V	**DBS**	Dark Brone Gloss Smooth	**SWPM**[1,2]	SiteSync Pre-commission w/ Sensor		
SG2-50	Size 2, 50W							**GTT**	Graphite Matte Textured	**Specify MTG HT for SCO/SCP & SWPM**			
SG2-80	Size 2, 80W							**LGS**	Light Grey Gloss Smooth	**8F**	Up to 8'		
								PSS	Platinum Silver Smooth	**20F**	Up to 20'		
								WHT	White Matte Textured				
								WHS	White Gloss Smooth				
								VGT	Verde Green Textured				
								Color Option					
								CC	Custom Color				

Notes:

1 Available in SG2 only, UHV available in SG2-50 only

2 Sensor controls & battery backup can not be used with flood accessory or kit or for inverted/up mounting, 120-227V only for SCO/SCP, 120 or 277 only for SWP, SWPM, E & EH

3 Must order minimum of one remote control to program dimming setttings, 0-10V fully adjustable dimming with automatic daylight calibration and different time delay settings, 120-277V only

STOCK ORDERING INFORMATION

Catalog Number	CCT/CRI	Wattage	Mounting Height	Color	Color	Delivered Lumens	LPW	Weight lbs. (kg)
SG1-10-PCU	5000K/70	11W	8–12ft	120–277V	Dark Bronze	1349	122	4.3 (2.0)
SG1-10-4K-PCU	4000K/70	11W	8–12ft	120–277V	Dark Bronze	1424	129	4.3 (2.0)
SG1-20-PCU	5000K/70	21W	8–12ft	120–277V	Dark Bronze	2263	108	4.3 (2.0)
SG1-20-4K-PCU	4000K/70	21W	8–12ft	120–277V	Dark Bronze	2310	110	4.3 (2.0)
SG1-30-PCU	5000K/70	29W	10–15ft	120–277V	Dark Bronze	3270	113	4.3 (2.0)
SG1-30-4K-PCU	4000K/70	29W	10–15ft	120–277V	Dark Bronze	3060	105	4.3 (2.0)
SG1-40-PCU	5000K/70	38W	10–15ft	120–277V	Dark Bronze	4008	105	4.3 (2.0)
SG1-40-4K-PCU	4000K/70	38W	10–15ft	120–277V	Dark Bronze	4070	106	4.3 (2.0)
SG2-50-PCU	5000K/70	51W	12–18ft	120–277V	Dark Bronze	5548	110	11 (5.0)
SG2-50-4K-PCU	4000K/70	51W	12–18ft	120–277V	Dark Bronze	5526	109	11 (5.0)
SG2-80-PCU	5000K/70	80W	15–25ft	120–277V	Dark Bronze	8061	101	11 (5.0)
SG2-80-4K-PCU	4000K/70	80W	15–25ft	120–277V	Dark Bronze	8079	101	11 (5.0)

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HUBBELL Lighting

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

SLING SERIES

SLENDER WALLPACK

ORDERING GUIDE

OPTIONS AND ACCESSORIES

	Catalog Number	Description	Weight lbs. (kg)
☐	**SG1-CS**	Acrylic comfort lens for SG1	1 (.45)
☐	**SG2-CS**	Acrylic comfort lens for SG2	1 (.45)
☐	**SG1-YOKE**	SG1 Series Yoke/Floodlight mount kit, includes visor	2.0 (1.0)
☐	**SG1-KNUCKLE**	SG1 Series Knuckle/Floodlight mount kit, includes visor	2.0 (1.0)
☐	**SG2-YOKE**	SG2 Series Yoke/Floodlight mount kit, includes visor	2.0 (1.0)
☐	**SG2-KNUCKLE**	SG2 Series Knuckle/Floodlight mount kit, includes visor	2.0 (1.0)
☐	**SCP-REMOTE***	Remote control for SCP option. Order at least one per project to program and control fixtures	1 (.45)
☐	**SG2-PMA-3-XX**	3" Pole Mount adapter for SG2, both square and round, XX= finish	7 (3.5)
☐	**SG2-PMA-4-XX**	4" Pole Mount adapter for SG2, both square and round, XX= finish	7 (3.5)
☐	**SG2-PMA-5-XX**	5" Pole Mount adapter for SG2, both square and round, XX= finish	7 (3.5)
☐	**SG2-PMA-6-XX**	6" Pole Mount adapter for SG2, both square and round, XX= finish	7 (3.5)
☐	**SG1-SPC**	Vandal Resistant Lens (shield polycarbonate), SG1	3 (1.5)
☐	**SG2-SPC**	Vandal Resistant Lens (shield polycarbonate), SG2	3 (1.5)
☐	**SG1-WCP**	Universal Wall Cover Plate, Dark Bronze, SG1	10 (5)
☐	**SG2-WCP-H**	Horizontal Mount Wall Cover Plate, Dark Bronze, SG2	10 (5)
☐	**SG2-WCP-V**	Vertical Mount Wall Cover Plate, Dark Bronze, SG2	10 (5)
☐	**SG2XL-WCP-H**	Horizontal Mount Wall Cover Plate, DB, SG2 with battery or sensor	10 (5)
☐	**SG2XL-WCP-V**	Vertical Mount Wall Cover Plate, DB, SG2 with battery or sensor	10 (5)

ACCESSORIES AND SERVICES (ORDERED SEPARATELY)

Control Options	
SWUSB[1]	SiteSync™ interface software loaded on USB flash drive for use with owner supplied PC (Windows based only). Includes SiteSync™ license, software and USB radio bridge node.
SWTAB[1]	Windows tablet and SiteSync™ interface software. Includes tablet with preloaded software, SiteSync™ license and USB radio bridge node.
SWBRG[2]	SiteSync™ USB radio bridge node only. Order if a replacement is required or if an extra bridge node is requested.

Notes:

1 When ordering SiteSync™ at least one of these two interface options must be ordered per project.

2 If needed, an additional Bridge Node can be ordered.

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DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

SLING SERIES

SLENDER WALLPACK

PERFORMANCE DATA

Description	# of LEDs	Drive Current	System Watts	5K (5000K NOMINAL 70 CRI)					4K (4000K NOMINAL 70 CRI)					3K (3000K NOMINAL 80 CRI)				
				Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
SG1-10	2	140mA	11	1349	122	1	0	0	1424	129	1	0	0	1003	91	1	0	0
SG1-20	2	250mA	21	2449	115	1	0	0	2310	110	1	0	0	2054	95	1	0	0
SG1-30	2	350mA	29	3332	117	2	0	0	3060	106	1	0	0	2913	100	1	0	0
SG-40	2	450mA	38	4008	105	2	0	0	4070	106	2	0	0	3845	100	2	0	0
SG2-50-UHV	3	350mA	44	4633	106	2	0	0	4609	105	2	0	0	3895	90	2	0	0
SG2-50	3	415mA	51	5548	109	2	0	0	5526	107	2	0	0	4700	92	2	0	0
SG2-80	3	650mA	80	7851	98	2	0	1	8079	103	2	0	1	6721	86	2	0	1

*347 and 480 VAC input Lumen values are from photometric test performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment application and inherent performance balances of the electrical components.

ELECTRICAL DATA

Catalog number	# of Drivers	Input Voltage	Current (AMPS)	System Power
SG1-10	1	120	0.09	11.0
	1	277	0.04	11.0
SG1-20	1	120	0.18	21.0
	1	277	0.08	21.0
SG1-30	1	120	0.24	28.9
	1	277	0.10	28.9
SG2-40	1	120	0.32	38.3
	1	277	0.14	38.3
SG-50-UHV	1	347	0.13	43.5
	1	480	0.18	43.5
SG2-50	1	120	0.42	50.6
	1	277	0.18	50.6
SG2-80	1	120	0.68	79.8
	1	277	0.29	79.8

PROJECTED LUMEN MAINTENANCE

Ambient Temperature	OPERATING HOURS					
	0	25,000	50,000	TM-21-11[1] L96 60,000	100,000	L70 (Hours)
25°C / 77°F	1.00	0.98	0.97	0.96	0.95	>791,000
40°C / 104°F	0.99	0.98	0.96	0.96	0.94	>635,000

1. Projected per IESNA TM-21-11 * (Nichia 219B, 700mA, 85°C Ts, 10,000hrs) Data references the extrapolated performance projections for the base model in a 40°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08

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DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

SLING SERIES

SLENDER WALLPACK

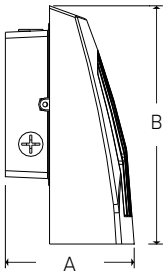
LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

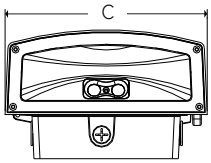
Ambient Temperature		Lumen Multiplier
0˚ C	32˚ F	1.02
10˚ C	50˚ F	1.01
20˚ C	68˚ F	1.00
25˚ C	77˚ F	1.00
30˚ C	86˚ F	1.00
40˚ C	104˚ F	0.99
50˚ C	122˚ F	0.96

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

DIMENSIONS

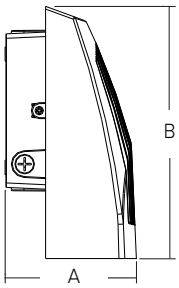
SG1

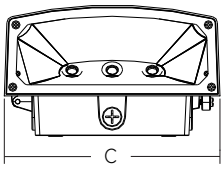




A	B	C	Weight
4.19" (107mm)	7.80" (198mm)	6.61" (168mm)	4.4lbs (2kg)

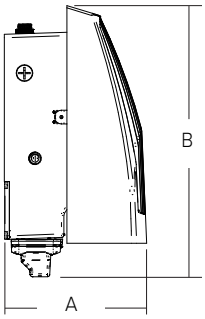
SG2

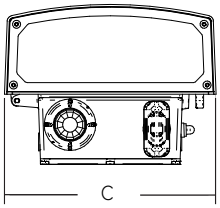




A	B	C	Weight
5.80" (147mm)	11.14" (283mm)	9.52" (242mm)	11lbs (5kg)

SG2 with occupancy sensor and battery options





A	B	C	Weight
7.26" (184mm)	13.84" (352mm)	9.52" (242mm)	11lbs (5kg)

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DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

SLING SERIES

SLENDER WALLPACK

PHOTOMETRY

SG1-10-4K7

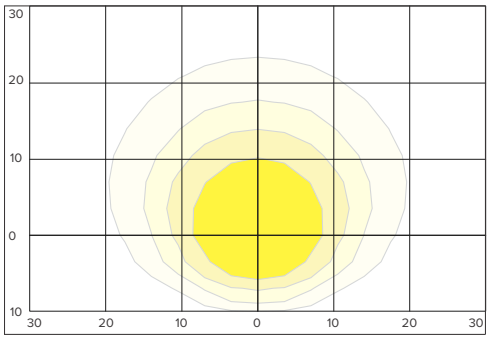
LUMINAIRE DATA

Description	**4000 Kelvin, 70 CRI**
Distribution Type	**Forward Throw**
Delivered Lumens	**1424**
Watts	**11.4**
Efficacy	**125**
Mounting	**Wall**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	996.6	70.0
Downward House Side	427.8	30.0
Downward Total	1424.4	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	1424.4	100.0

ISOMETRIC FOOTCANDLE



10' Mounting Height
5.0 FC
2.0 FC
1.0 FC
0.5 FC

SG1-20-4K7

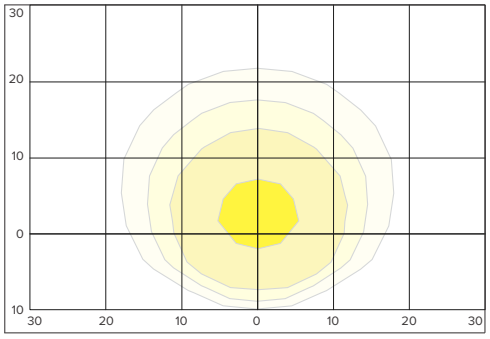
LUMINAIRE DATA

Description	**4000 Kelvin, 70 CRI**
Distribution Type	**Foward Throw**
Delivered Lumens	**2310**
Watts	**20.9**
Efficacy	**111**
Mounting	**Wall**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	1618	70.0
Downward House Side	692.1	30
Downward Total	2310	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	2310.3	100.0

ISOMETRIC FOOTCANDLE



10' Mounting Height
5.0 FC
2.0 FC
1.0 FC
0.5 FC

SG1-30

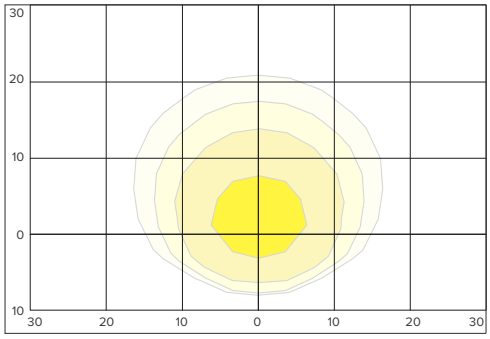
LUMINAIRE DATA

Description	**4000 Kelvin, 70 CRI**
Distribution Type	**Forward Throw**
Delivered Lumens	**3060**
Watts	**29.1**
Efficacy	**105**
Mounting	**Wall**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	2619.4	70.9
Downward House Side	890.4	29.1
Downward Total	3059.8	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	3059.8	100.0

ISOMETRIC FOOTCANDLE



10' Mounting Height
5.0 FC
2.0 FC
1.0 FC
0.5 FC

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DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

SLING SERIES

SLENDER WALLPACK

PHOTOMETRY

SG1-40-4K7

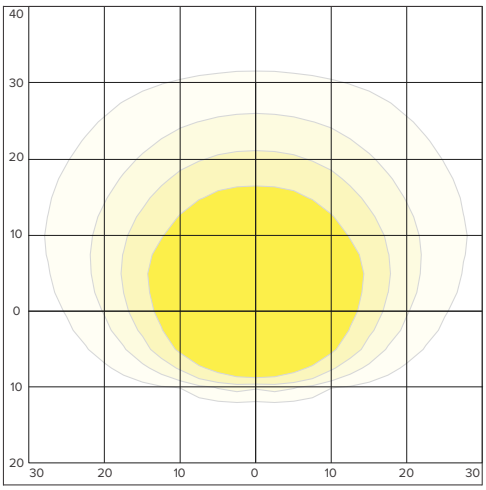
LUMINAIRE DATA

Description	**4000 Kelvin, 70 CRI**
Distribution Type	**Foward Throw**
Delivered Lumens	**4070**
Watts	**38.1**
Efficacy	**107**
Mounting	**Wall**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	2857.7	70.2
Downward House Side	1215.5	29.8
Downward Total	4070.2	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	4070.2	100.0

ISOMETRIC FOOTCANDLE



10' Mounting Height — 5.0 FC, 2.0 FC, 1.0 FC, 0.5 FC

SG2-50-4K7

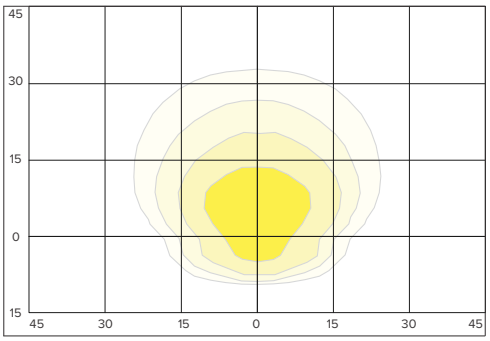
LUMINAIRE DATA

Description	**4000 Kelvin, 70 CRI**
Distribution Type	**Foward Throw**
Delivered Lumens	**5525.7**
Watts	**51.7**
Efficacy	**107**
Mounting	**Wall**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	4611.8	83.5
Downward House Side	913.9	16.5
Downward Total	5525.7	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	5525.7	100.0

ISOMETRIC FOOTCANDLE



15' Mounting Height — 5.0 FC, 2.0 FC, 1.0 FC, 0.5 FC

SG2-80-4K7

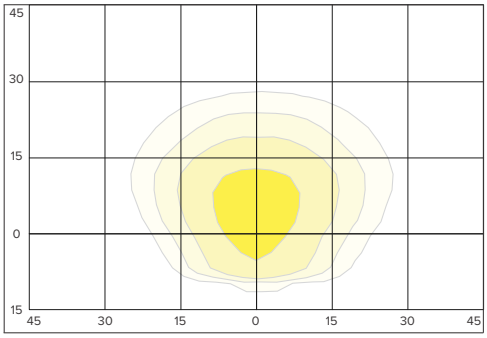
LUMINAIRE DATA

Description	**4000 Kelvin, 70 CRI**
Distribution Type	**Foward Throw**
Delivered Lumens	**8453**
Watts	**78.5**
Efficacy	**108**
Mounting	**Wall**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
Downward Street Side	6677.7	79.0
Downward House Side	1775.5	21.0
Downward Total	8453.2	100.0
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	8453.2	100.0

ISOMETRIC FOOTCANDLE



15' Mounting Height — 5.0 FC, 2.0 FC, 1.0 FC, 0.5 FC

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SLING SERIES

SLENDER WALLPACK

ADDITIONAL INFORMATION

Shipping Information

Catalog Number	G.W(kg)/ CTN	Carton Dimensions			Carton Qty. per Master Pack	Pallet Qty.
		Length Inch (cm)	Width Inch (cm)	Height Inch (cm)		
SG1	4.35lbs (2kg)	9.5 (24)	8.25 (21)	5.25 (13)	6	98
SG2	11lbs (5kg)	14 (36)	11.5 (29)	8 (20)	2	64

Accessories and Services

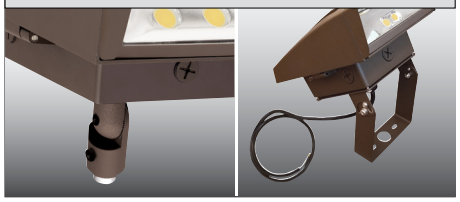
Comfort Lens

Acrylic comfort lens provides glare control, improved visual comfort and better uniformity

Visor

Visor accessory included with mounting accessory kits

Mounting Options

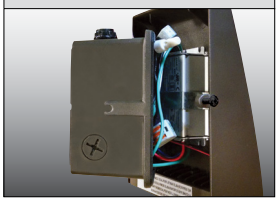


Flood mounting accessories - 1/2" threaded knuckle or yoke (includes grommet and 3' SO cord)

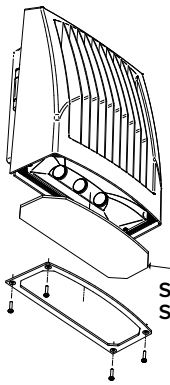
Photocontrol

Photocontrol option available for energy-saving dusk-to-dawn operation

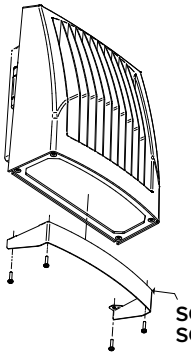
Hinged Housing Door



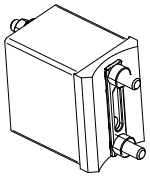
Side hinged for easy installation and wiring access, single screw secures housing closure



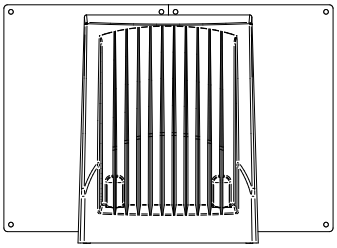
SG(X)-CS
SG(X)-SPC



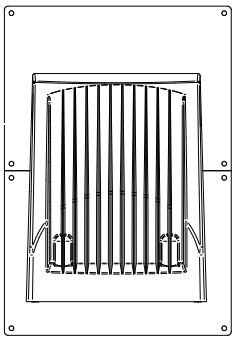
SG(X)-YOKE
SG(X)-KNUCKLE



SG(X)-PMA-(X)-XX



SG(X)-WCP-H



SG(X)-WCP-V

Features

Emergency Mode (EH)

Battery back up feature with side indicator.

Exceeds Life Safety Code average illuminance of 1.0 fc. at 12' mounting height. Assumes open space with no obstructions. Battery backup units consume 6W when charging a dead battery and 2W during maintenance charging. EH (units with a heater) consume up to an additional 8W when charging if the battery temp is lower than 10°C

Diagrams for illustration purposes only, please consult factory for application layout.

Wireless and Occupancy Controls

SiteSync™ Lighting Control delivers flexible control strategies for reducing power consumption and minimizing maintenance costs while delivering the right light levels with a simple and affordable wireless solution.

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Previous Submittal Info

142 Robert Smalls Parkway
PIN R122 029 000 103H 0000
New Construction – Harbor Freight
Applicant: Beaufort Design Build (19-05 DRB.1)

Approved Preliminary Submission

$ $ PAID 9/13/19 CC

DEVELOPMENT REVIEW PROCESS
DESIGN REVIEW BOARD APPLICATION
Community and Economic Development Department
1911 Boundary Street, Beaufort, South Carolina, 29902
p. (843) 525-7011 / f. (843) 986-5606
www.cityofbeaufort.org

Application Fee:
$200/meeting
$500/special meeting

OFFICE USE ONLY: **Date Filed:** 9/13 **Application #:** 18829 **Zoning District:** T5UC RMX **Arch. Survey?** Y (N)

Schedule: The Design Review Board (DRB) typically meets the 2nd Thursday of each month at 2pm. The complete schedule, along with the list of deadlines, may be found here - http://www.cityofbeaufort.org/design-review-board.aspx

Submittal Requirements: All forms and information shall be submitted digitally. In addition to a complete application form, applicants shall submit the required items according to the checklists on the subsequent page.

Review Request: ☐ Conceptual ■ Preliminary ☐ Final

Pursuant to Section 6-29-1145 of the South Carolina Code of Laws, is this tract or parcel restricted by any recorded covenant that is contrary to, conflicts with, or prohibits the activity described in this application? ☐ **Yes** ☐ **No**

Applicant, Property, and Project Information

Applicant Name: Beaufort Design Build, LLC. / Adam Biery

Applicant Address: 2 Fire Station Lane, Seabrook, SC. 29940

Applicant E-mail: adam@beaufortdesignbuild.com Applicant Phone Number: 843.263.4344

Applicant Title: ☐ Homeowner ☐ Tenant ■ Architect ☐ Engineer ☐ Developer

Owner (if other than the Applicant): Simba Farms / Graham Trask

Owner Address: 68 Fiddlers Bridge Rd, Straatsburg, NY. 12580

Project Name: Harbor Freight at Highway 170

Property Address: Highway 170 and Burton Hill Road (no address at this time

Property Identification Number *(Tax Map & Parcel Number)*: R122 029 000 103H 0000

Date Submitted: September 13, 2019

Certification of Correctness: I/we certify that the information in this application is correct.

Applicant's Signature: Date:

Owner's Signature: Date:

(The owner's signature is required if the applicant is not the owner.)

Approved Preliminary Submission

DEVELOPMENT REVIEW PROCESS
DESIGN REVIEW BOARD APPLICATION
Community and Economic Development Department
1911 Boundary Street, Beaufort, South Carolina, 29902
p. (843) 525-7011 / f. (843) 986-5606
www.cityofbeaufort.org

Required Project Information

Project Name: Harbor Freight at Highway 170

Property Size in Acres: 1.61 Proposed Building Use: Retail

Building Square Footage (if multiple buildings, please list each one and their square footage by floor):
16,600

# of Parking Spaces Required: 42 # of Parking Spaces Provided: 48

Is this project a redevelopment project: Y N x

Are there existing buildings on the site? Y N x if yes, will they remain? Y N

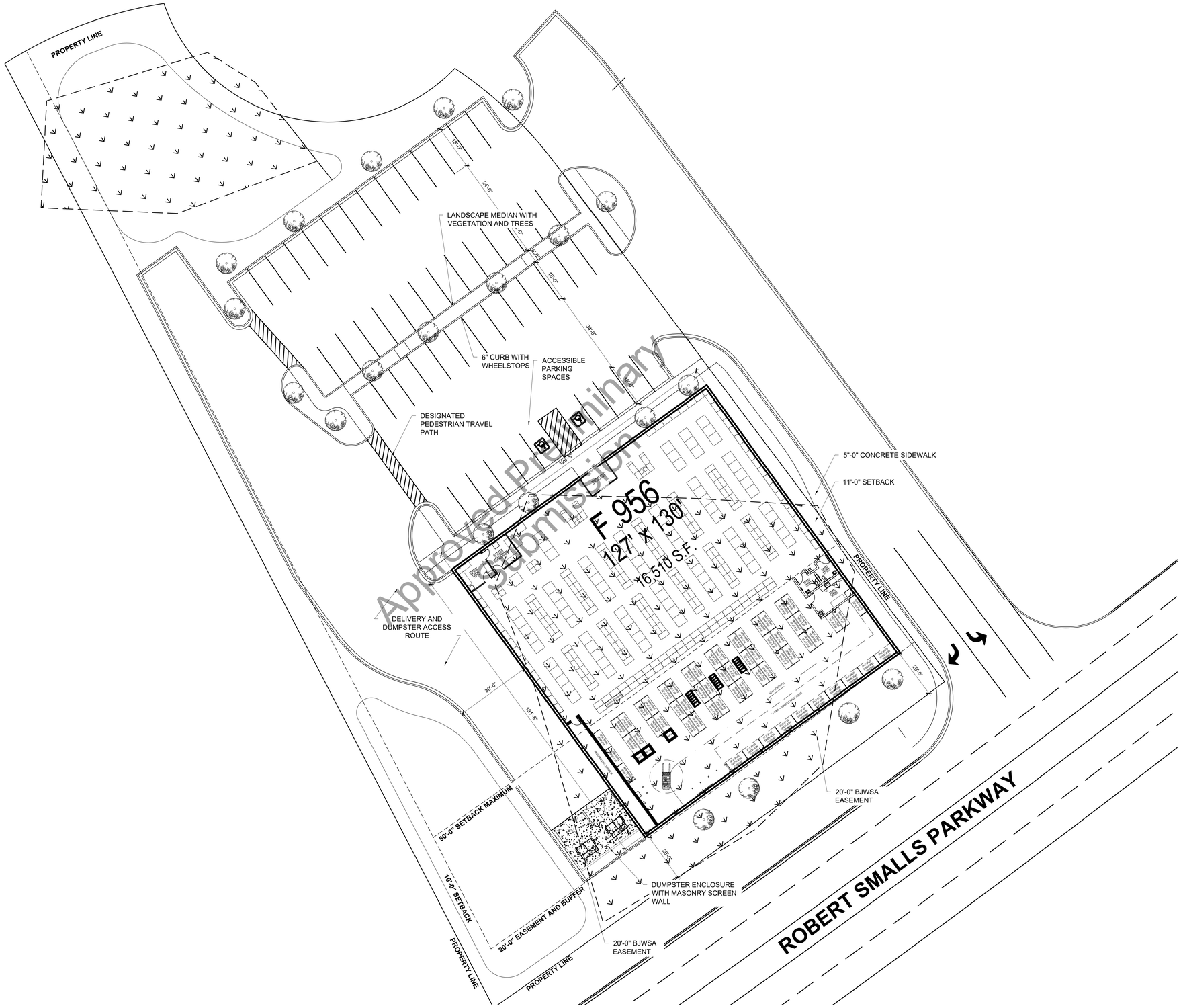
Provide a brief Project Narrative and outline any specific questions you would like addressed.

New construction of a Harbor Freight store in a new development located on Highway 170. This project will focus on teh site work and construction for a new Harbor Freight building. New site work would include enterences and exits from the access road, and a parking area behind the new building. The new retail building will be located at the front of lot / parcel and front both the new access road and frontage road (Robert Smalls Parkway) The design of the site and the building will be in accordance with the requirements of the RMX Zoning Ordinance.

Approved Preliminary Submission

CONTACT INFORMATION –

Attention: Julie A. Bachety, Administrative Assistant II
City of Beaufort Department of Planning & Development Services
1911 Boundary Street, Beaufort, South Carolina 29902
E-Mail: jbachety@cityofbeaufort.org: | Phone: (843) 525-7011 | Fax: (843) 986-5606



A2 SITE PLAN
1/16" = 1'-0"
0 6' 12' 24'

BEAUFORT
2 Fire Station Lane
Seabrook, SC 29940

CHARLOTTE
7315 Swansea Lane
Cornelius, NC 28031

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www.beaufortdesignbuild.com

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BEAUFORT DESIGN BUILD

ARCHITECT / ENGINEER'S SEAL

HARBOR FREIGHT
QUALITY TOOLS LOWEST PRICES

HARBOR FREIGHT AT HIGHWAY 170

HIGHWAY 170

NOT FOR CONSTRUCTION

REVISIONS / SUBMISSIONS

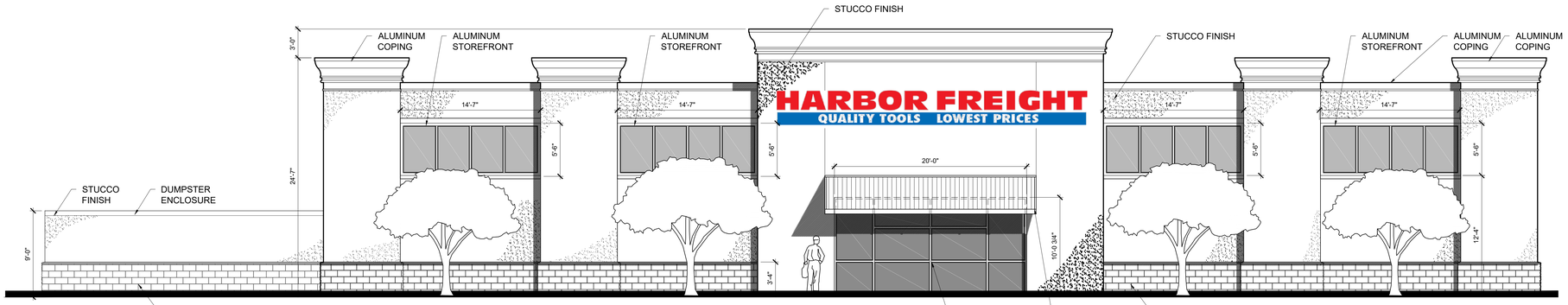
NO.	DESCRIPTION	DATE

SHEET INFORMATION

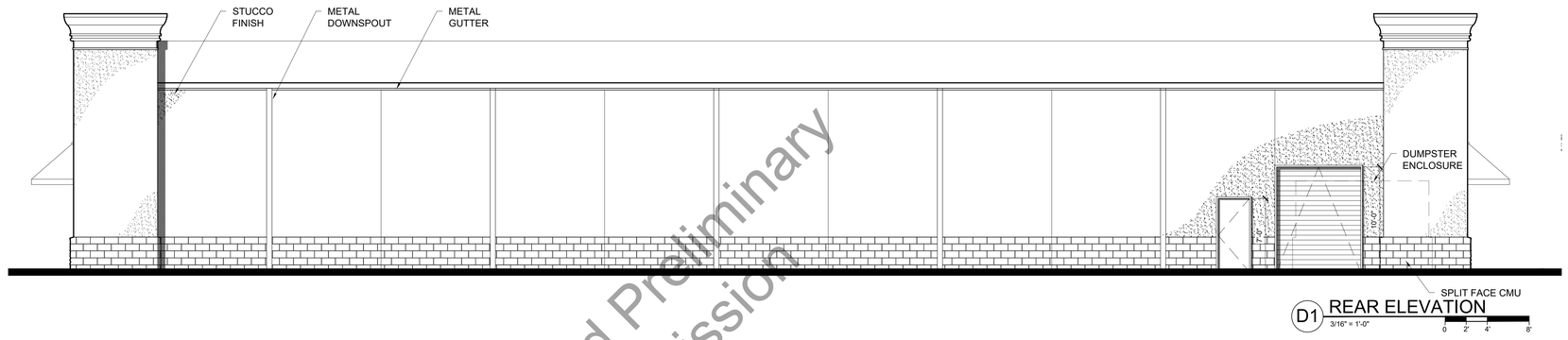
DATE	OCTOBER 09, 2019
JOB NUMBER	19032.00
DRAWN	TWA
CHECKED	TWA
APPROVED	DCS

SITE PLAN

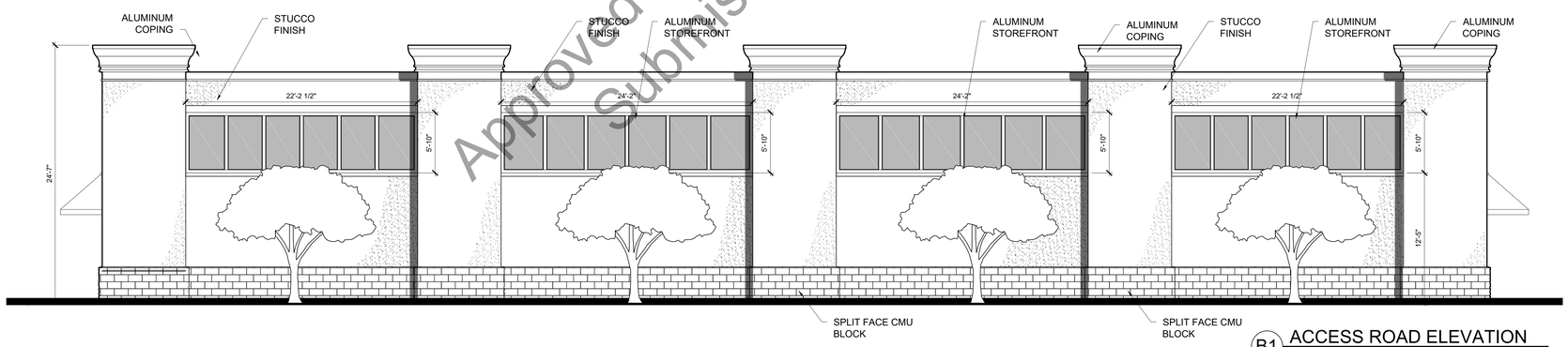
A-100



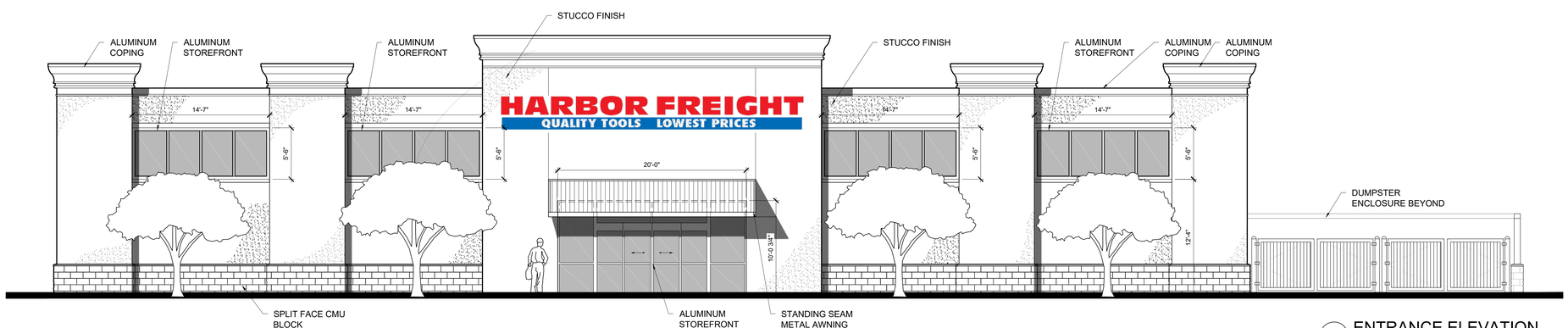
E1 ROBERT SMALLS ELEVATION
3/16" = 1'-0"
0 2' 4' 8'



D1 REAR ELEVATION
3/16" = 1'-0"
0 2' 4' 8'



B1 ACCESS ROAD ELEVATION
3/16" = 1'-0"
0 2' 4' 8'



A1 ENTRANCE ELEVATION
3/16" = 1'-0"
0 2' 4' 8'

Approved Preliminary Submission

BEAUFORT
2 Fire Station Lane
Seabrook, SC 29940

CHARLOTTE
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Cornelius, NC 28031

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BEAUFORT DESIGN BUILD

ARCHITECT / ENGINEER'S SEAL

HARBOR FREIGHT
QUALITY TOOLS LOWEST PRICES

HARBOR FREIGHT AT HIGHWAY 170

HIGHWAY 170

NOT FOR CONSTRUCTION

REVISIONS / SUBMISSIONS

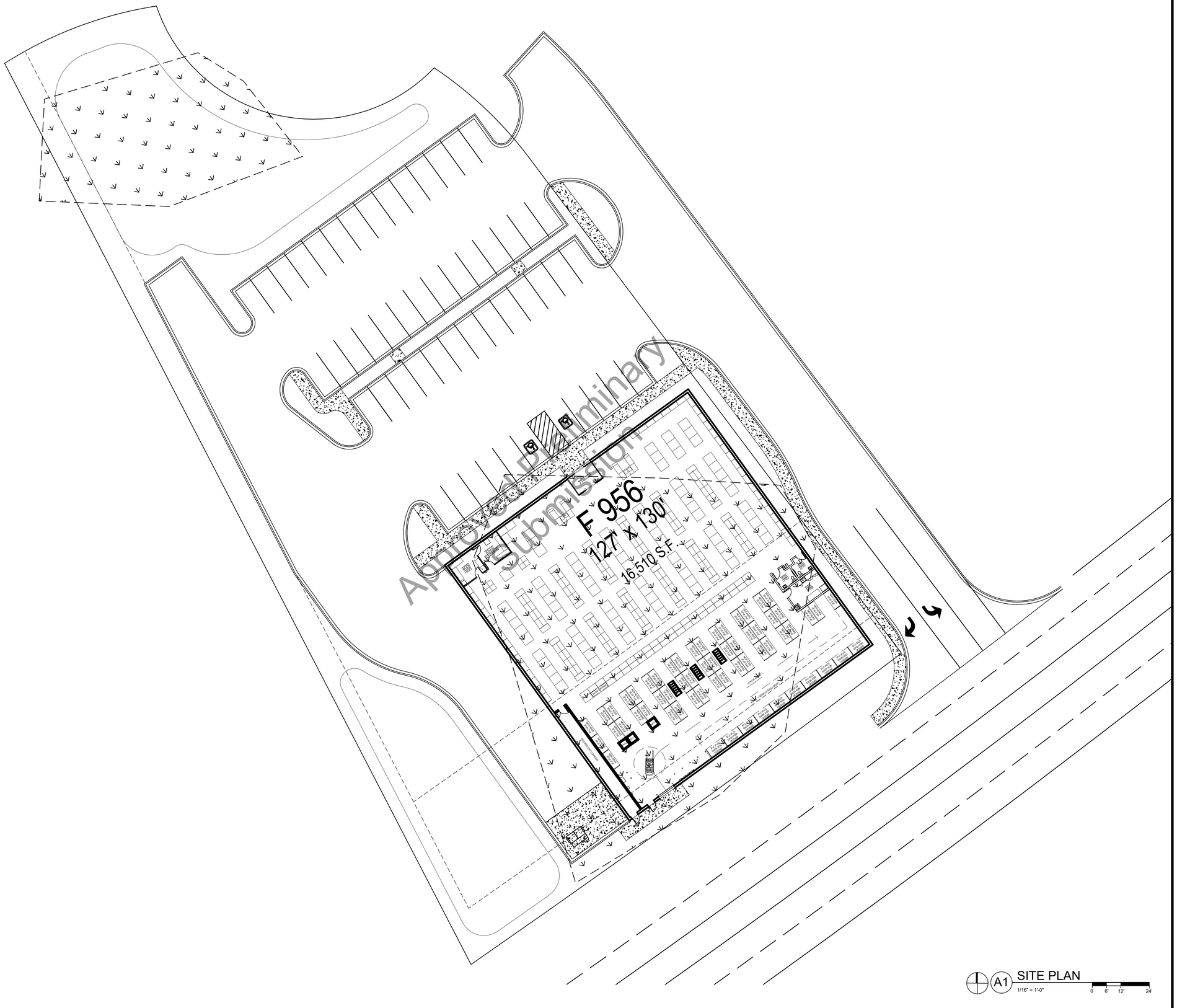
NO.	DESCRIPTION	DATE

SHEET INFORMATION

DATE	OCTOBER 09, 2019
JOB NUMBER	19032.00
DRAWN	TWA
CHECKED	TWA
APPROVED	DCS

PROPOSED ELEVATIONS

A-201



A1 SITE PLAN
1/16" = 1'-0"
0 6' 12' 24'

BEAUFORT
2 Fire Station Lane
Seabrook, SC 29940

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Cornelius, NC 28031

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BEAUFORT DESIGN BUILD

ARCHITECT / ENGINEER'S SEAL

HARBOR FREIGHT
QUALITY TOOLS LOWEST PRICES

HARBOR FREIGHT AT HIGHWAY 170

HIGHWAY 170

NOT FOR CONSTRUCTION

REVISIONS / SUBMISSIONS

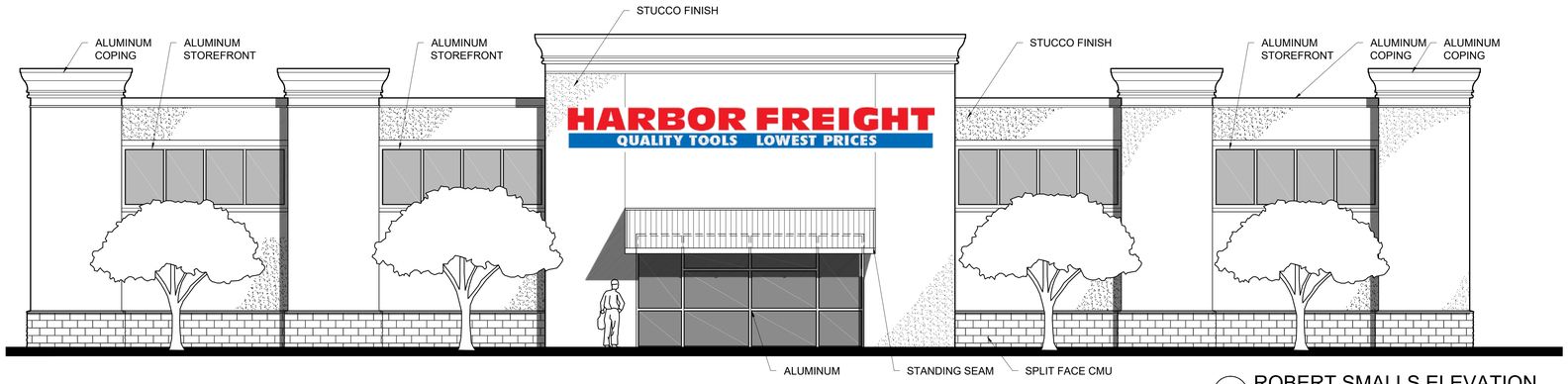
NO.	DESCRIPTION	DATE

SHEET INFORMATION

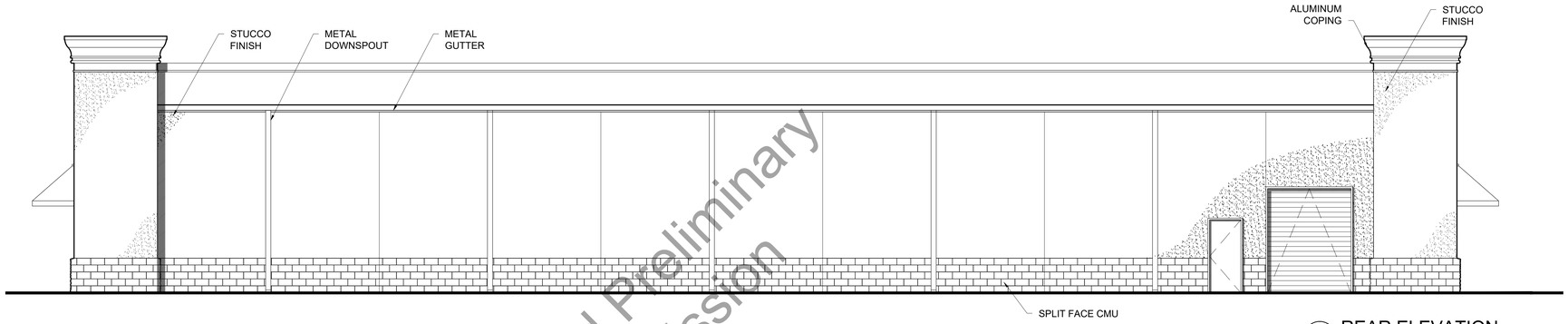
DATE	SEPTEMBER 13, 2019
JOB NUMBER	19032.00
DRAWN	TWA
CHECKED	TWA
APPROVED	DCS

PROPOSED SITE PLAN

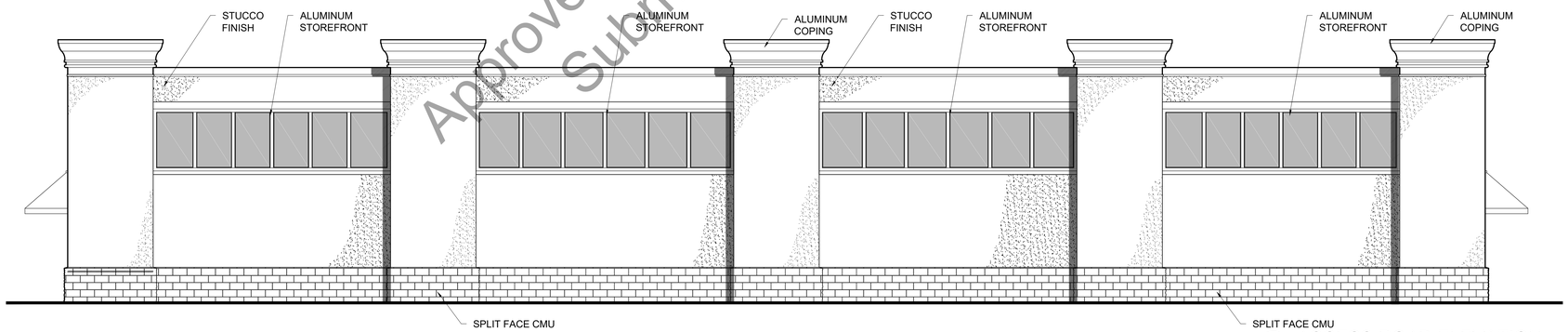
A-101



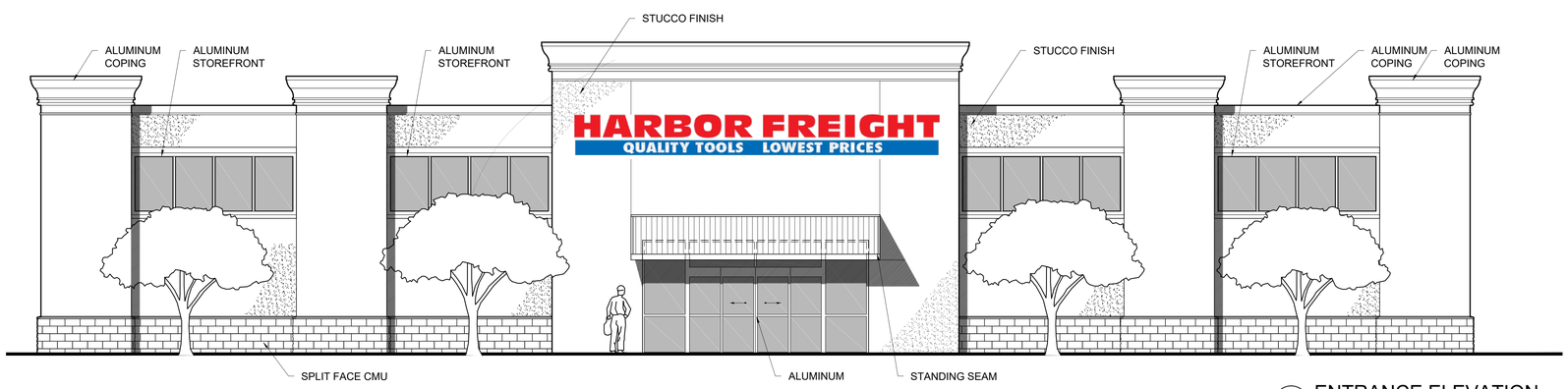
E1 ROBERT SMALLS ELEVATION
3/16" = 1'-0"



D1 REAR ELEVATION
3/16" = 1'-0"



B1 ACCESS ROAD ELEVATION
3/16" = 1'-0"



A1 ENTRANCE ELEVATION
3/16" = 1'-0"

Approved Preliminary Submission

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BEAUFORT DESIGN BUILD

ARCHITECT / ENGINEER'S SEAL

HARBOR FREIGHT
QUALITY TOOLS LOWEST PRICES

HARBOR FREIGHT A
HIGHWAY 170

HIGHWAY 170

NOT FOR CONSTRUCTIO

REVISIONS / SUBMISSIONS

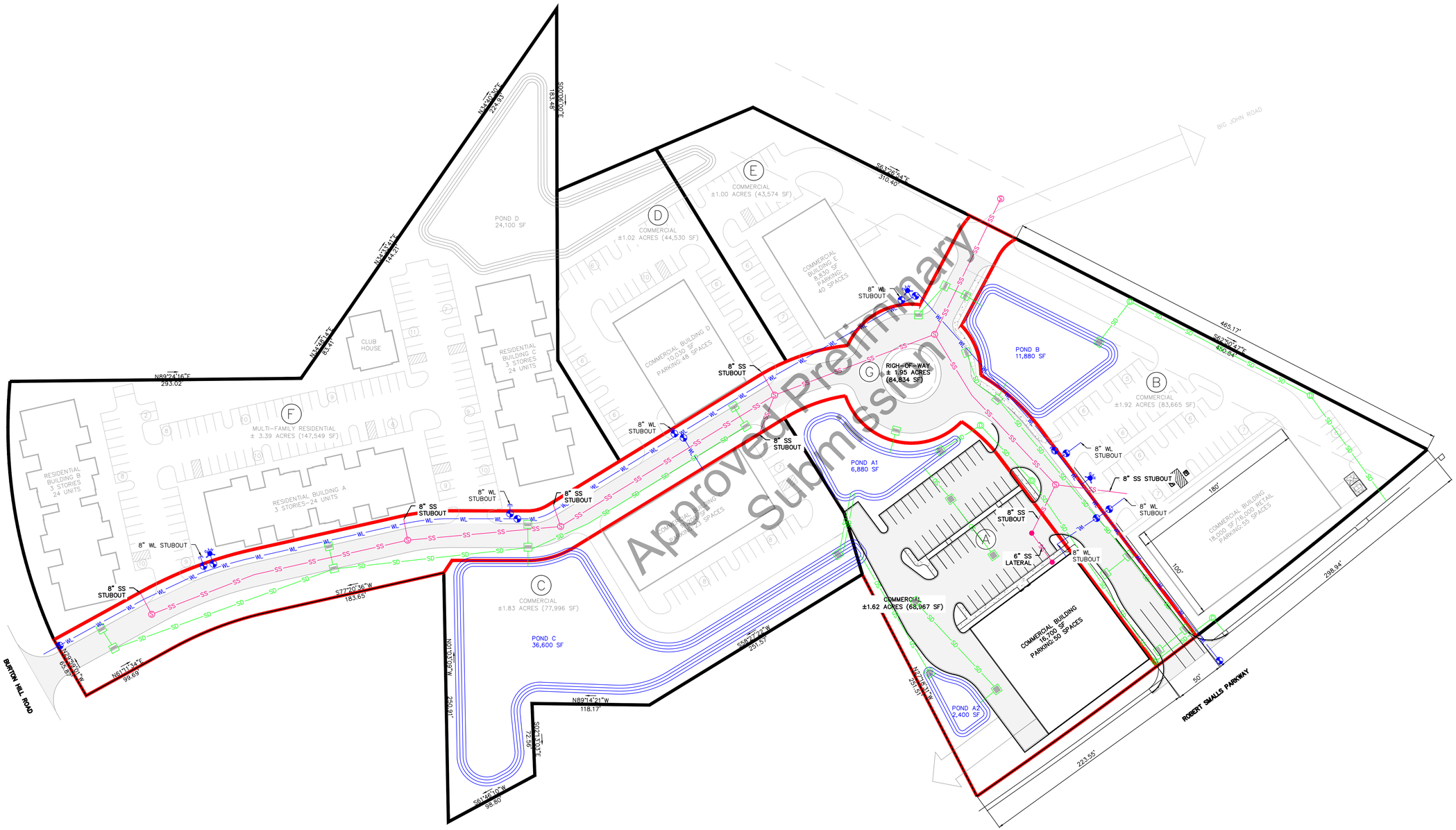
NO.	DESCRIPTION	DATE

SHEET INFORMAT

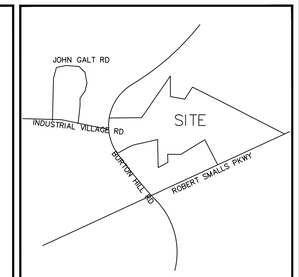
DATE	SEPTEMBER 13,
JOB NUMBER	190
DRAWN	
CHECKED	
APPROVED	

PROPOSED ELEVATIONS

A-201



CURVE TABLE						
CURVE	LENGTH	RADIUS	TANGENT	CHORD	BEARING	DELTA
C1	266.00	517.38	136.01	263.08	S09°34'39"E	29°27'27"
C2	100.35	355.77	50.51	100.02	S69°14'15"W	16°09'39"
C3	572.54	5729.58	286.51	572.30	N52°23'47"E	5°43'31"



VICINITY MAP
Not To Scale

CONCEPTUAL SITE PLAN

SIMBA FARMS

BEAUFORT, SOUTH CAROLINA

PREPARED FOR:

SIMBA FARMS, LP

DOCUMENT IS CONCEPTUAL AND SUBJECT TO CHANGE. WARD EDWARDS INC. ASSUMES NO LIABILITY FOR ACCURACY OR DECISIONS MADE BY THE USER BASED UPON INFORMATION CONTAINED HEREIN.

N
W E
S

0 50 100 Feet

SCALE: 1"= 50 '

Ward Edwards
ENGINEERING
P.O. BOX 381, BLUFFTON, SOUTH CAROLINA 29910
PH (843) 837-5250 / FAX (843) 837-2558
WWW.WARDEDWARDS.COM

PROJECT #:	170225
DATE:	04/04/19
PREPARED BY:	GAB
SHEET NUMBER:	1 OF 1

CITY OF BEAUFORT
DESIGN REVIEW BOARD
1911 BOUNDARY STREET
BEAUFORT, SOUTH CAROLINA 29902
(843) 525-7011

PRELIMINARY APPROVAL

October 11, 2019

Adam Biery
Beaufort Design Build, LLC
2 Fire House Lane
Seabrook, SC. 29940

Email: adam@beaufortdesignbuild.com

RE: Harbor Freight - 142 Robert Smalls Parkway

Dear Mr. Biery:

On October 10, 2019, the City of Beaufort Design Review Board (DRB) reviewed the application for the Harbor Freight to be located at 142 Robert Smalls Parkway. The Board voted to grant preliminary approval of the project. Some items the board asked to be addressed at final design submittal were:

- 3D camera view of West elevation with trees
- Complete landscape plan
    - Trees around the pond located South West of the building to better screen the building
- Consideration of placement of the drainage pond on the South West side to incorporate more landscaping to screen the loading zone/blank façade of the building.

Be advised that this approval will expire two years from the date of this letter as per Section 9.1.4 of the *Beaufort Code*, unless a complete building permit application is on file with the City Building Codes Office.

Please contact the Planning Department at (843) 525-7011 with any question you may have.

Sincerely,

Benjie Morillo
Acting Chairman

Approved Preliminary Submission

BJWSA
BEAUFORT - JASPER WATER & SEWER AUTHORITY

6 SNAKE ROAD, OKATIE, SC 29909-3937
Phone 843.987.8100 | Fax 843.548.0096
Customer Service 843.987.9200
Operations & Maintenance 843.987.8046
Engineering 843.987.8065
www.bjwsa.org

Our mission: Inspire trust and enhance public health

JOE MANTUA, PE, GENERAL MANAGER
843.987.8044 (o) | 843.540.4002 (c)

June 8, 2020

Mr. Tripp Armstrong, Assoc. AIA
Project Manager
Beaufort Design Build, LLC
2 Fire Station Road
Seabrook, SC 29940

Re: R122 029 000 103H 0000

Dear Mr. Armstrong:

Please be advised that based on my research, I could find no existing water and/or wastewater easements on the above referenced parcel. I also researched our current customer system and the most recent past system and could not find that water and/or wastewater service has ever been provided to the parcel.

Please let me know if you have additional questions.

Sincerely,

Dawn P. Bates
Administrative Coordinator, Technical Services.

MICHAEL L. BELL, CHAIR
JAMES E. BAKER, JR, VICE CHAIR
GREGORY A. PADGETT, SECRETARY/TREASURER
DONNA L. ALTMAN, IMMEDIATE PAST CHAIR
LORRAINE W. BOND
R. THAYER RIVERS, JR
BRANDY M. GRAY
GERALD H. SCHULZE
ANDERSON M. KINGHORN, JR
WILLIAM SINGLETON, Ed.D
DONALD A. MANSON

12 County Shed Road

PIN R120 006 000 0160 0000

Applicant: Thomas Michaels, SM7 Design

Design Review Board Staff Report

Department of Community and Economic Development

9 July 2020

PROVISO: THE STAFF REPORT IS SHARED IN ADVANCE OF THE MEETING TO PROVIDE BOARD MEMBERS, THE APPLICANT, AND THE PUBLIC THE STAFF'S ASSESSMENT AHEAD OF THE MEETING. THE STAFF REPORT IS SUBMITTED ONLY AFTER CONSULTATIONS HAVE BEEN COMPLETED. IT SHOULD BE UNDERSTOOD THAT ANY SUBEQUENT CHANGES TO THE APPLICATION PRIOR TO THE HRB MEETING WILL NOT HAVE THE BENEFIT OF STAFF REVIEW AND WILL ONLY BE CONSIDERED AT THE DISCRETION OF THE BOARD BY VOTE.

1 Summary of Request

The applicant, Thomas Michaels from SM7 Design, on behalf of the owner HD Companies, is requesting Conceptual Approval to construct a new 116 room, 5-story hotel structure on County Shed Road in the T5-UC/ RMX Zoning District. A future 3600 sf commercial building will be added in front of the hotel along Trask Parkway.

2 Facts

Property Address:	**12 County Shed Road**
Parcel ID:	**R120 026 000 0160 0000**
Applicant:	**Thomas Michaels, SM7 Design**
Type of Request:	**New Construction, hotel building**
Zoning:	**T5-UC/RMX**
Use:	**Commercial – Overnight Guest Accommodations – Inn/Motel/Hotel**

District Development Standards for RMX:

- Principal Front Setback: 10ft min – 60ft Max
- Side setback corner lot: 10ft min
- Side setback interior: 10ft min
- Rear setback: 15ft min
- Impervious surface coverage: 65% Max
- Building Height: 4 stories

District Development Standards for T5-UC:

- Principal Front Setback: 0ft min – 15ft Max
- Side setback corner lot: 0ft min – 15ftMax
- Side setback interior: 0ft min
- Rear setback: 5ft min
- Impervious surface coverage: 100% Max
- Building Height: 5 stories
- Frontage Buildout: 60%

Use: Hotel

References

City of Beaufort Strategic Plan 2019 - 2021

Civic Master Plan, adopted 2014

The Beaufort Code, rev. 2018

3 STAFF COMMENTS

1. The front elevation has a nice balance of solid and void. The push and pull of the façade elements and banding create nice shadow lines across the façade.

2. Staff recommends a restudy of the rear elevation to achieve a better balance of solid and void at the base level and/or recreating banding and shadow lines similar to the front façade.

3. Applicant should reference section 4.6.3.C.1 for guidelines regarding fenestration in the T5-UC zoning district or Section 4.6.4.C.1 for guidelines regarding fenestration in the RMX zoning district.

4. Staff recommends consideration of adding windows on the north and south edges of the front and rear facades. This would help break up the otherwise blank walls in those areas.
   It appears that several trees currently exist in the footprint of the proposed hotel. Will these trees be removed? If so, applicant must note trees to be removed per DRB checklist requirements moving forward.

5. Please note that per Section 5.7.3 of the Beaufort Code, bicycle parking is required within this project because it is a new development. Please note that if this property is following guidelines of the T5-UC district, the administrator does have the authority to waive this requirement.

6. Parking:
   a. Per Section 5.7.4.D.4, the applicant must provide a written parking agreement that reflects the shared parking arrangement with the adjacent site.
   b. The applicant should review parking requirements per Section 5.7.6.A and note the required Shared Parking Factor for Two Uses in reference to calculation of required parking for Hotel and Commercial.
   c. Applicant to ensure and demonstrate compliance with Section 5.7.7 and 5.7.8 of the Beaufort Code with special attention to Parking Lot Screening requirements.

4 STAFF RECOMMENDATION

Conceptual approval with noted comments.

DEVELOPMENT REVIEW PROCESS
DESIGN REVIEW BOARD APPLICATION
Community and Economic Development Department
1911 Boundary Street, Beaufort, South Carolina, 29902
p. (843) 525-7011 / f. (843) 986-5606
www.cityofbeaufort.org

Application Fee:
$200/meeting
$500/special meeting

20-07 DRB.1
Application was complete when paid 5/12/2020

OFFICE USE ONLY: **Date Filed:** 5/7/2020 **Application #:** 20497 **Zoning District:** _____ **Arch. Survey? Y N**

Schedule: The Design Review Board (DRB) typically meets the 2nd Thursday of each month at 2pm. The complete schedule, along with the list of deadlines, may be found here - http://www.cityofbeaufort.org/design-review-board.aspx

Submittal Requirements: All forms and information shall be submitted digitally. In addition to a complete application form, applicants shall submit the required items according to the checklists on the subsequent page.

Review Request: ☒ Conceptual ☐ Preliminary ☐ Final

Pursuant to Section 6-29-1145 of the South Carolina Code of Laws, is this tract or parcel restricted by any recorded covenant that is contrary to, conflicts with, or prohibits the activity described in this application? ☐ **Yes** ☐ **No**

Applicant, Property, and Project Information

Applicant Name: SMT DESIGN LLC - THOMAS MICHAELS

Applicant Address: 1011 BAY ST SUITE 314

Applicant E-mail: THOMAS@SMTDESIGN.COM Applicant Phone Number: 843.252.2454

Applicant Title: ☐ Homeowner ☐ Tenant ☒ Architect ☐ Engineer ☐ Developer

Owner (if other than the Applicant): _____

Owner Address: _____

Project Name: DESAI HOTEL

Property Address: 12 COUNTY SHED ROAD

Property Identification Number *(Tax Map & Parcel Number)*: R120 026 000 0160 000

Date Submitted: 5/7/20

Certification of Correctness: I/we certify that the information in this application is correct.

Applicant's Signature: [signature] Date: 5.7.20

Owner's Signature: _____ Date: _____

(The owner's signature is required if the applicant is not the owner.)

DEVELOPMENT REVIEW PROCESS
DESIGN REVIEW BOARD APPLICATION
Community and Economic Development Department
1911 Boundary Street, Beaufort, South Carolina, 29902
p. (843) 525-7011 / f. (843) 986-5606
www.cityofbeaufort.org

Required Project Information

Project Name: DESAI HOTEL

Property Size in Acres: _____ Proposed Building Use: HOTEL / COMMERCIAL

Building Square Footage (if multiple buildings, please list each one and their square footage by floor):
116 ROOM HOTEL / 3600 SF COMMERCIAL

# of Parking Spaces Required: SEE SITE # of Parking Spaces Provided: SEE SITE

Is this project a redevelopment project: Y N

Are there existing buildings on the site? Y N if yes, will they remain? Y N

Provide a brief Project Narrative and outline any specific questions you would like addressed.

SEE ATTACHED

CONTACT INFORMATION –

Attention: Julie A. Bachety, Administrative Assistant II

City of Beaufort Department of Planning & Development Services

1911 Boundary Street, Beaufort, South Carolina 29902

E-Mail: ibachety@cityofbeaufort.org: | Phone: (843) 525-7011 | Fax: (843) 986-5606

SM7 Design LLC
1011 Bay Street
Beaufort, SC 29902
843.900.1841

May 5, 2020

Project Narrative

New Commercial Development – The Desai Hotel
12 County Shed Road
Beaufort, South Carolina

The project will consist of a new 116 room hotel on the site. The following is a brief narrative of the project:

Property Information
PIN: R120 026 000 0160 000
Address: 12 County Shed Road

Vicinity Map:

Zoning District
HC – Highway Commercial

Site Design:
The site location is part of the hotel development which includes the Home 2 Suites and the Tru Hotel which is under construction. The hotel is located along a planned and permitted secondary road parallel with the Tru hotel. The site configuration includes a new parking court and drop-off. Along the continued access road along the North of the property, a new 3,600 commercial building will be located and face Trask Parkway and include parking locations for food trucks.

The main vehicular access will be from Trask parkway along the access road which provide access to the parking court and the drop-off area. The parking area for the new development provides an additional 88 parking spaces. This provides an excess of 26 spaces of parking between the three hotels and commercial buildings. Additional parking information is illustrated on the submitted site plan. The site will also include bike racks for the hotel and commercial building. The dumpster location is at the rear of the property along Ice House Road similar to the other hotel buildings.

Building Design
The new building is a five-story wood structure. The first floor will contain meeting rooms, lobby and hotel check-in, fitness center and hotel back of house services. Floors two through five will contain a mix of double and king suites. The building will be constructed with a fire suppression system and provide a location for installation of a mobile emergency generator.

Tree Preservation
The development of the site has been previously cleared of trees and no other tree removal in anticipated.

Wetlands
The proposed parcel does not contain any wetlands.

Fire Protection & Emergency Access
Access to the new building via vehicle is provided for 100% of the building sides from the parking lot and existing adjacent roads. The new building will be sprinkled. The site will be served by proposed fire hydrants connected to the BJWSA water system. A new fire department connection will be provided for the building.

Utilities
Existing offsite water and sewer, owned and maintained by BJSWA, will be confirmed and utilized for the subject property development. The new water line will contain domestic service for the new building, fire service for the new building, a new hydrant, and irrigation services for the lot. The new sewer main will provide services to the new building along with a service for the grease interceptor.

Electrical service will be provided by South Carolina Electric and Gas. A new transformer will likely be required onsite to serve the subject property.

Telephone and Cable services will be provided by Hargray Communications.

Stormwater Drainage
The subject property is a portion of a larger planned tract. The subject parcel will drain to this treatment area designed to meet or exceed SCDHEC/OCRM and City of Beaufort standards. On-site runoff will be collected in a series of grate inlets and bioretention and conveyed directly into the master drainage pipe/ditch conveyance network located internal to the property.

Maintenance Responsibilities

The owner will be responsible for maintaining the development in accordance with all City requirements and guidelines.

Dedicated Improvements

All proposed improvements, outside of water and sewer services, will be owned and maintained as described above.

2 FRONT ELEVATION
SCALE: 1/8" = 1'-0"

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

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architecture + planning

SM7 DESIGN LLC
1011 BAY STREET, STE 314
BEAUFORT SC 29002

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DRAWN BY:
REVIEWED BY:
PROJECT ID: PROJECT ID
SHEET TITLE:

ELEVATIONS

A301

ORIGINAL SHEET SIZE: 30x42 0 1 2 IN

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

2 SIDE ELEVATION
SCALE: 1/8" = 1'-0"

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

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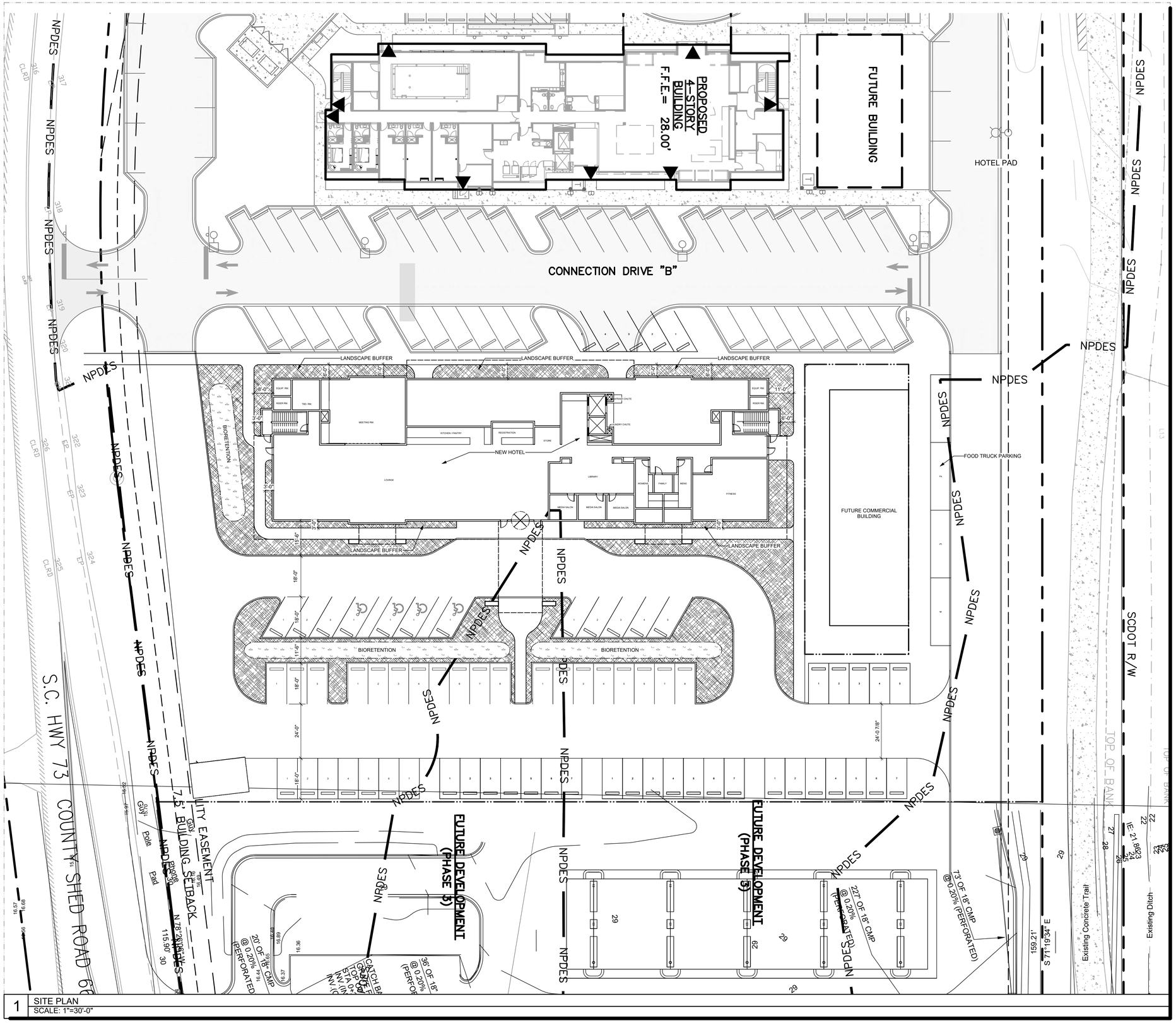
DRAWN BY:
REVIEWED BY:
PROJECT ID: PROJECT ID
SHEET TITLE:

ELEVATIONS

A302

ORIGINAL SHEET SIZE: 30x42 0 1 2 IN



1 SITE PLAN
SCALE: 1"=30'-0"

PARKING INFORMATION

EXISTING HOTEL DEVELOPMENT

PARKING REQUIRED	
HOTELS (1 PER ROOM AT 191 ROOMS)	191
COMMERCIAL (1 PER 400 GROSS AT 1,500)	4
20% REDUCTION	(39)
PARKING PROVIDED	194
EXCESS PARIKING	38

NEW DEVELOPMENT

REQUIRED PARKING	
HOTEL (1 PER ROOM AT 116 ROOMS)	116
COMMERCIAL (1 PER 400 GROSS AT 3,600)	9
20% REDUCTION	(25)
TOTAL PARKING REQUIRED	100
PARKING PROVIDED	88
PARKING DEFICIENCY	(12)
EXCESS FROM HOTELS	38
TOTAL PARKING EXCESS	26

NOTE: PARKING CALCULATINOS DO NOT INCLUDE SSPACES DESIGNATED FOR FOOD TRUCK PARKING

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BEAUFORT SC 29002

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PROJECT:

THE DESAI HOTEL

ADDRESS:

BEAUFORT, SC

ISSUE / REVISION:

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DRAWN BY:	T. MICHAELS
REVIEWED BY:	D. SKLAR
PROJECT ID:	20-012

SHEET TITLE:

OVERALL SITE PLAN

N

A001

Meredith Jacobs

From: Heather Spade <hspade@cityofbeaufort.org>
Sent: Thursday, June 25, 2020 2:03 PM
To: Meredith Jacobs
Cc: Jeremy Tate
Subject: FW: Desai Hotel Beaufort
Attachments: 20-0074_Site Plan_6-24-2020.pdf; Desai Hotel Site Plan.pdf; PLANS AND STREETSCAPE.pdf

City of Beaufort buildings are open to the public, however due to the increasing numbers of COVID-19 cases, we encourage the continued use of the City's online services and scheduling of appointments. Please call or visit us online at cityofbeaufort.org to contact our departments for questions and appointments.
ALL VISITORS ARE REQUIRED TO WEAR A FACE MASK WHEN ENTERING CITY BUILDINGS.

From: Mariana Potter <Mari@SM7Design.com>
Sent: Thursday, June 25, 2020 1:57 PM
To: Heather Spade <hspade@cityofbeaufort.org>
Subject: Desai Hotel Beaufort

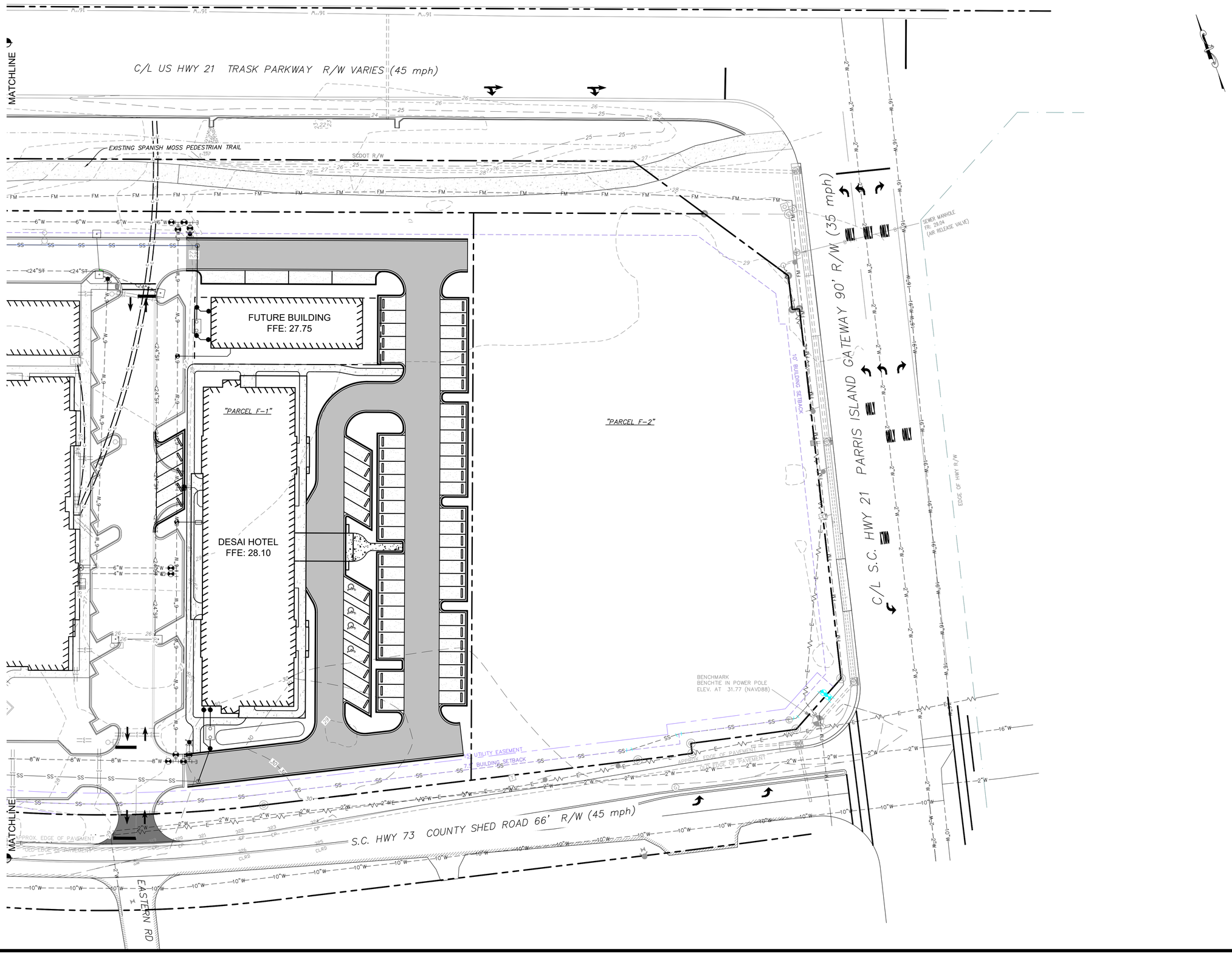
CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Heather, here are some documents that address the issues listed on your previous email.
Here is the Dropbox link to the pictures taken today:
https://www.dropbox.com/sh/1oiaifvjf1gcbci/AAAVKhh4nYw56BApChm60UXYa?dl=0

Thank you.

Mariana Potter
Operations Manager

SM7 DESIGN™
Mariana Potter
Operations Manager
SM7 Design LLC
1011 Bay St. Ste. 314
Beaufort, SC 29902
843.900.1841



NO.	REVISION DESCRIPTION	DATE
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SOUTH CAROLINA
EMC ENGINEERING SERVICES, INC
No. 000723
CERTIFICATION OF AUTHORIZATION

SOUTH CAROLINA
LICENSED PROFESSIONAL ENGINEER
No. 20294
BENJAMIN W. LOCKHART

30' 15' 0' 30'
GRAPHIC SCALE: 1" = 30'

EMC ENGINEERING SERVICES, INC.
10 Chatham Center South, Suite 100
Savannah, GA 31405
Ph: (912) 232-6533
Fax: (912) 233-4580
savannah@emc-eng.com
www.emc-eng.com
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SAVANNAH • STATESBORO • THOMASTON • VALDOSTA • WARNER ROBINS

STAKING PLAN

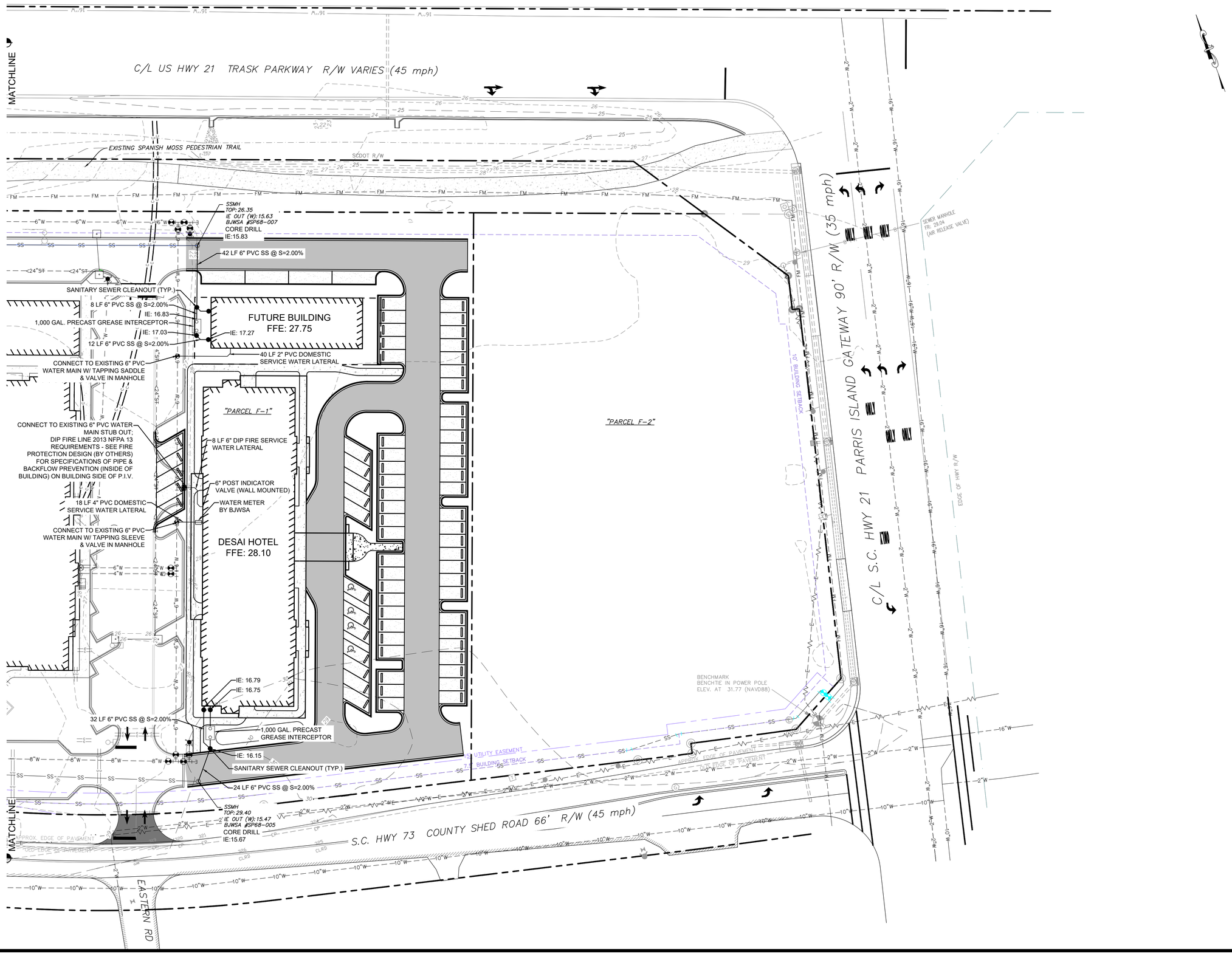
DESAI HOTEL

12 COUNTY SHED ROAD
BEAUFORT, SOUTH CAROLINA
Prepared for:
HD COMPANIES

PROJECT NO.:	20-0074
DRAWN BY:	CPR
DESIGNED BY:	CPR
SURVEYED BY:	WARD EDWARDS
SURVEY DATE:	2016
CHECKED BY:	BWL
SCALE:	1" = 30'
DATE:	JUNE 2020

SHEET
5
OF X

O:\2020\20-0074 DESAI HOTEL BEAUFORT SC\DWG\20-0074C_B01.DWG 6/24/2020 4:31 PM



NO.	REVISION DESCRIPTION	DATE
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No. 000723
CERTIFICATION OF AUTHORIZATION

SOUTH CAROLINA
LICENSED PROFESSIONAL ENGINEER
No. 20294
BENJAMIN W. LOCKHART

30' 15' 0' 30'
GRAPHIC SCALE: 1" = 30'

EMC ENGINEERING SERVICES, INC.
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Savannah, GA 31405
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20-0074C_B01 - STAKING 1

DESAI HOTEL
12 COUNTY SHED ROAD
BEAUFORT, SOUTH CAROLINA
Prepared for:
HD COMPANIES

PROJECT NO.:	20-0074
DRAWN BY:	CPR
DESIGNED BY:	CPR
SURVEYED BY:	WARD EDWARDS
SURVEY DATE:	2016
CHECKED BY:	BWL
SCALE:	1" = 30'
DATE:	JUNE 2020

SHEET

OF X

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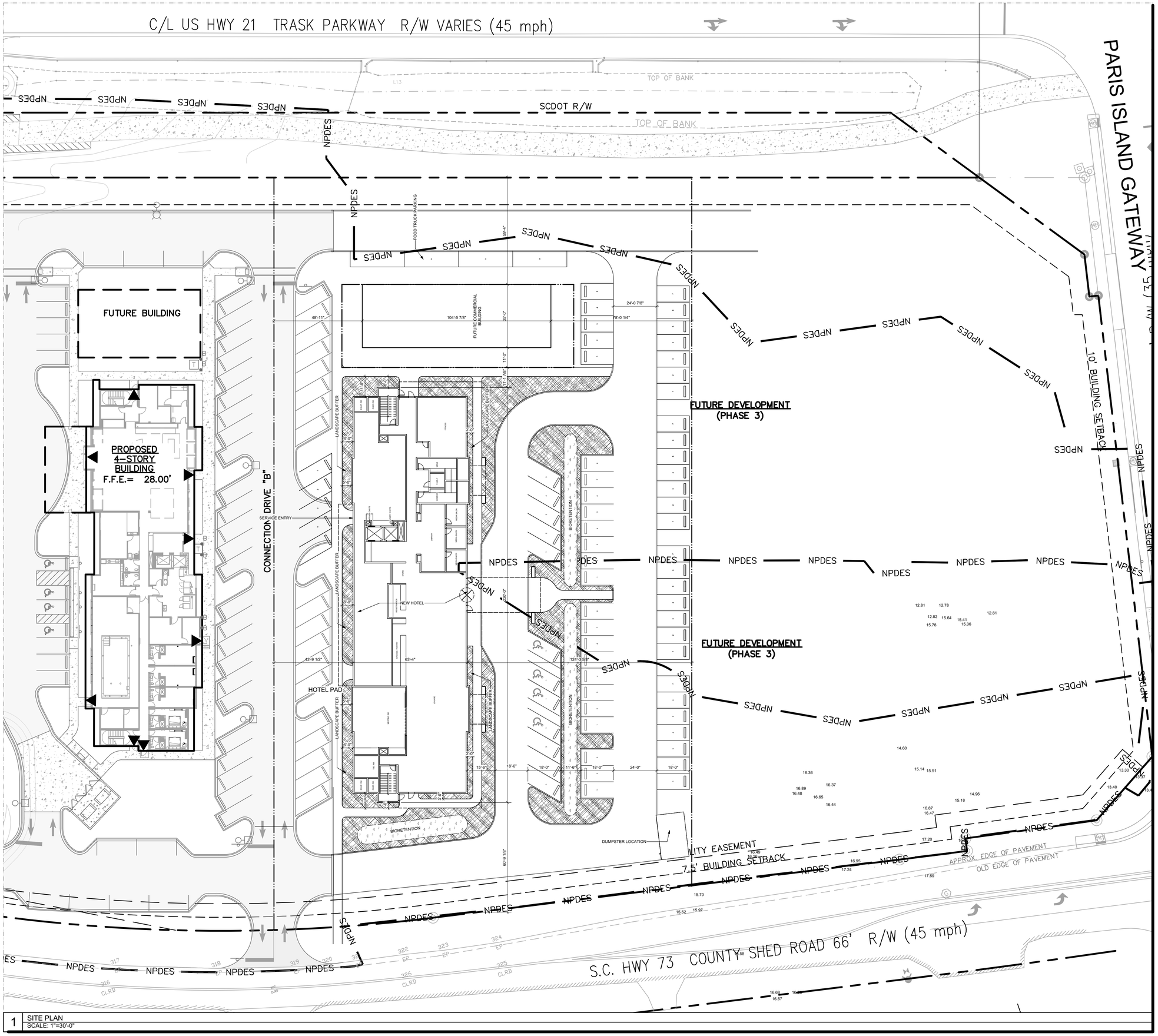

1 SITE PLAN
SCALE: 1"=30'-0"

PARKING INFORMATION

EXISTING HOTEL DEVELOPMENT

PARKING REQUIRED	
HOTELS (1 PER ROOM AT 191 ROOMS)	191
COMMERCIAL (1 PER 400 GROSS AT 1,500)	4
20% REDUCTION	(39)
PARKING PROVIDED	194
EXCESS PARIKING	38

NEW DEVELOPMENT

REQUIRED PARKING	
HOTEL (1 PER ROOM AT 116 ROOMS)	116
COMMERCIAL (1 PER 400 GROSS AT 3,600)	9
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TOTAL PARKING REQUIRED	100
PARKING PROVIDED	88
PARKING DEFICIENCY	(12)
EXCESS FROM HOTELS	38
TOTAL PARKING EXCESS	26

NOTE: PARKING CALCULATINOS DO NOT INCLUDE SSPACES DESIGNATED FOR FOOD TRUCK PARKING

IMPERVIOUS AREA

SITE: 4.04 ACRES

IMPERVIOUS: 1.08 ACRES - 27%

SM7 DESIGN

architecture + planning

SM7 DESIGN LLC
1011 BAY STREET, STE 314
BEAUFORT SC 29002

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PROJECT:
THE DESAI HOTEL

ADDRESS:
BEAUFORT, SC

ISSUE / REVISION:

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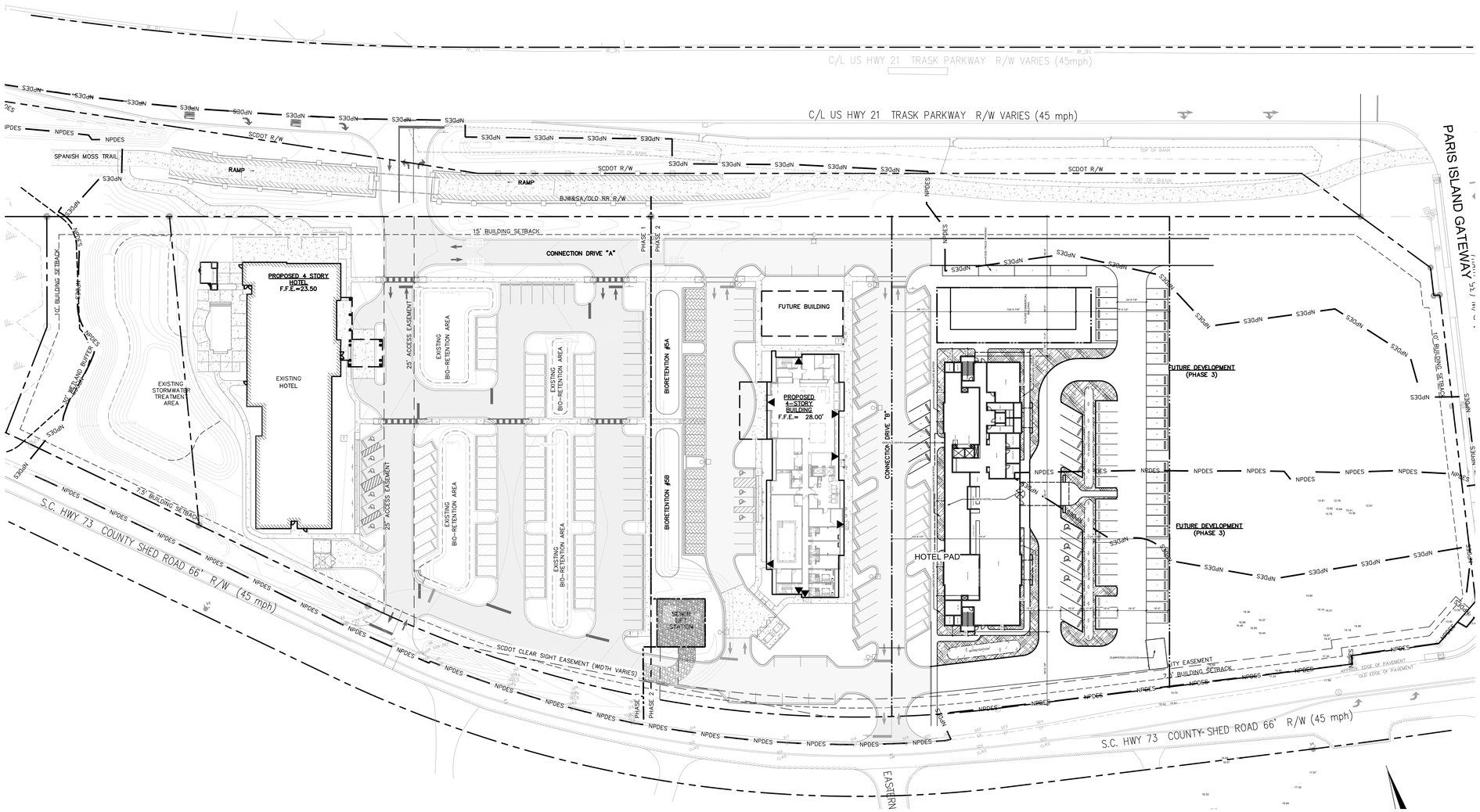
DRAWN BY:	T. MICHAELS
REVIEWED BY:	D. SKLAR
PROJECT ID:	20-012

SHEET TITLE:

OVERALL SITE PLAN

N

A001



1 SITE PLAN
SCALE: 1"=30'-0"

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THE DESAI HOTEL

ADDRESS:

BEAUFORT, SC

ISSUE / REVISION:

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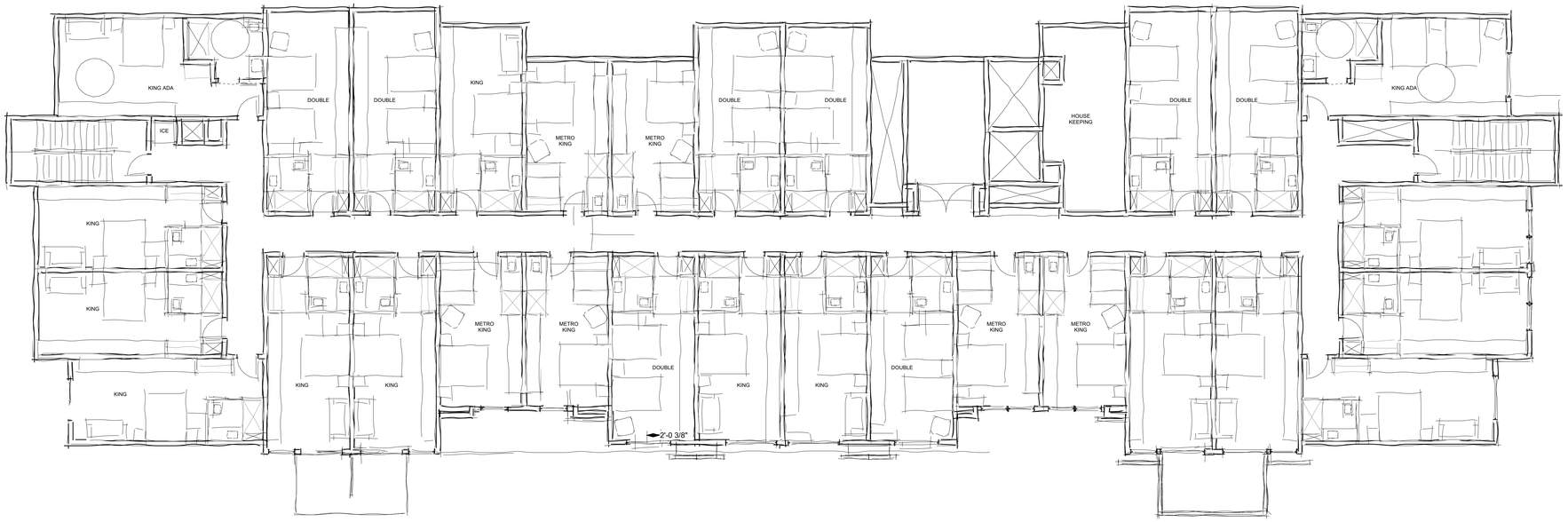
REVIEWED BY:	D. SKLAR
PROJECT ID:	20-012

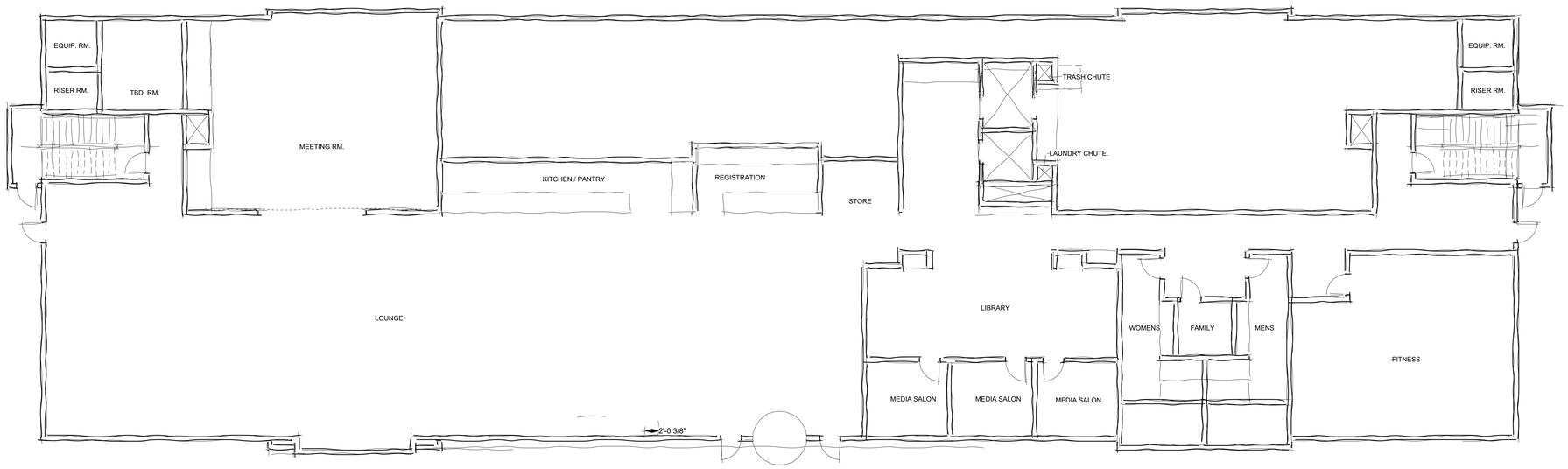
SHEET TITLE:

MASTER SITE PLAN

A002



2 TYPICAL FLOOR (2-5)
SCALE: 1/8" = 1'-0"



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

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architecture + planning

SM7 DESIGN LLC
1011 BAY STREET, STE 314
BEAUFORT SC 29002

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TEST PROJECT TITLE

ADDRESS:
TEST PROJECT ADDRESS

ISSUE / REVISION:

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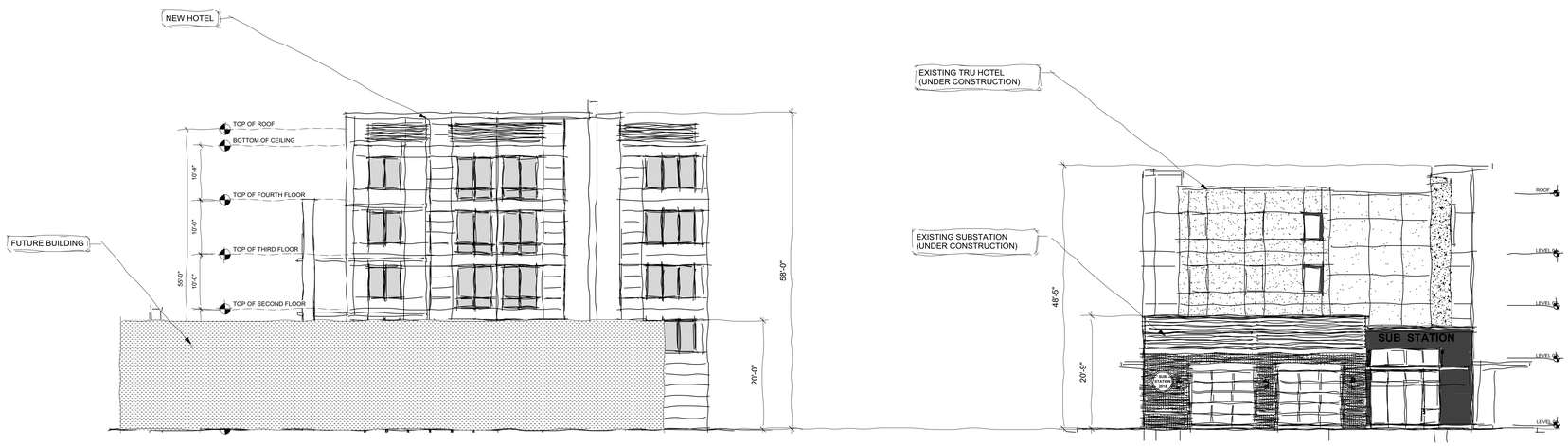
DRAWN BY:
REVIEWED BY:
PROJECT ID: PROJECT ID
SHEET TITLE:

PLANS

A201

ORIGINAL SHEET SIZE: 30x42 0 1 2 IN



1 PARTIAL STREETSCAPE
SCALE: 3/32" = 1'-0"

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architecture + planning

SM7 DESIGN LLC
1011 BAY STREET, STE 314
BEAUFORT SC 29002

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TEST PROJECT TITLE

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PARTIAL STREETSCAPE

A303

ORIGINAL SHEET SIZE: 30x42 0 1 2 IN

3658

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