

# Beaufort County Historic Preservation Review Board Meeting

### Chairman

**Natalie Harvey** 

# **Vice Chairman**

Katrina Epps

## **Board Members**

Kathryn Mixon Sally Murphy Cheryl Steele Katherine Pringle Aileen LeBlanc

# **County Administrator**

JOHN ROBINSON

# **Staff Support**

ROBERT MERCHANT KRISTEN FORBUS

## **Administration Building**

Beaufort County Government Robert Smalls Complex 100 Ribaut Road

# Contact

Post Office Drawer 1228
Beaufort, South Carolina 29901-1228
(843) 255-2147
www.beaufortcountysc.gov

# Historic Preservation Review Board Agenda

Thursday, March 21, 2024 at 1:00 PM

Executive Conference Room, Administration Building Robert Smalls Complex, 100 Ribaut Road, Beaufort

- 1. CALL TO ORDER
- PLEDGE OF ALLEGIANCE
- 3. FOIA PUBLIC NOTIFICATION OF THIS MEETING HAS BEEN PUBLISHED, POSTED, AND DISTRIBUTED IN COMPLIANCE WITH THE SOUTH CAROLINA FREEDOM OF INFORMATION ACT4.
- 4. APPROVAL OF MINUTES January 18, 2024
- 5. CITIZEN COMMENTS (Comments are limited to 3 minutes.)

# **ACTION ITEMS**

- 6. CONSIDERATION OF CASTLE HILL PLANTATION ALTERATIONS
- 7. ABOVE-GROUND SURVEY UPDATE PRESENTATION
- 8. ADJOURNMENT

## Minutes

# Historic Preservation Review Board January 18, 2023, 1:00 p.m.

# **Executive Conference Room, Administration Building**

# **CALL TO ORDER:**

Ms. Natalie Harvey, Chairman, called the meeting to order at 1:02 p.m.

### **MEMBERS PRESENT:**

Natalie Harvey, Chairman Kathryn Mixon Sally Murphy Katherine Pringle Cheryl Steele

## **MEMBERS ABSENT:**

Katrina Epps, Vice Chairman Aileen LeBlanc Cheryl Steele

# **STAFF PRESENT:**

Kristen Forbus, Beaufort County Planning and Zoning Long Range Planner

# **PUBLIC COMMENT (non-agenda items):**

None.

# **MINUTES:**

Ms. Katheryn Mixon asked to have the October 19, 2023 meeting minutes approved, Ms. Sally Murphy seconded. The Board members unanimously approved the minutes as submitted.

# **Consideration of Castle Hill Plantation Alterations**

Mr. Michael Frederick presented the Castle Hill Plantation's history regarding the additions in the 1990s and the house fire that has occurred. He then presented the proposed work of adding a new porch, outdoor living space, pavilion with an open ground floor, new bathrooms, and limestone on terrace.

Ms. Murphy brought up the discussion of the pavilion being out of place. There was unanimous agreement among the board members that the pavilion was out of character for the structure. Ms. Pringle then discussed the size of the columns. Mr. Frederick assured her the size was historically accurate. Ms. Mixon and Ms. Murphy then had a discussion regarding the proposed

outdoor living space. Ms. Mixon stated that it provides an appropriate area to sit outside. Ms. Murphy suggested it be reduced to not jut out as much.

Ms. Murphy motioned a deferral to the next meeting with new plans that reconsider the pavilion and reduce the outdoor living space. Ms. Pringle seconded the motion. The motion passed unanimously.

Ms. Mixon motioned to adjourn. Ms. Murphy seconded the motion. The motion passed unanimously. Ms. Natalie Harvey adjourned the meeting at 1:34 PM.



# CERTIFICATE OF APPROPRIATENESS APPLICATION

Beaufort County Planning and Zoning Multi Government Center 100 Ribaut Road, Beaufort, South Carolina, 29902 OFFICE (843) 255-2147

	Staff Review
	Board Review
Ou	tcome:

OFFICE USE ONLY:	Date Filed:	Application #:	Zoning District:		
BCAGHR Survey:	□ Yes □ No	SHC Survey:	□ Yes □ No		
		, ,,,,	ically meets the 3 <sup>rd</sup> Thursday of each month at rtcountysc.gov/historic-preservation-board/		
Submittal Require	ements: All forms	and information shall be s	submitted digitally. In addition to a complete application		
form, applicants shall	l submit the required	d items according to the cl	checklists on the subsequent page.		
Nature of the Rec	quest: 🛛 Alter	ation/Addition	☐ New Construction		
	□ Dem	olition/Relocation	☐ Change after Certification		
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  If yes, please attach a copy of the covenants and restrictions to this application.					
Applicant, Proper	ty, and Project Ir	nformation			
Applicant Name: N	lichael Frederich	k, Frederick + Freder	rick Architects		
Applicant Address:	38 Meridian R	oad, Beaufort, SC 29	9907		
Applicant E-mail: r	nichael@f-farchi	tects.com Ap	oplicant Phone Number: 843-522-8422		
Applicant Title:	☐ Homeowner	□ Tenant	□ Engineer □ Developer		
Owner (if other than t	he Applicant): Liv	ia Basso			
Owner Address: 331 Castle Hall Road, Yemassee, SC					
Project Name: Cast	tle Hill Plantation	1			
Property Address:	331 Castle Hall	Road, Yemassee, SC	C		
Property Identification	n Number (Tax Map &	& Parcel Number): R700	0 006 000 0001 0000		
Date Submitted: 1/3	3/2024				
Certification of Co	orrectness: I/we	ertify that the informati	ion in this application is correct.		
Applicant's Signature	1 HZ	•	Date: 01/03/2024		
Owner's Signature:	Lui Do	250	Date: 01/03/2024		
The owner's signatu	te is required if the	applicant is not the owner	-\		



# CERTIFICATE OF APPROPRIATENESS APPLICATION

Beaufort County Planning and Zoning Multi Government Center 100 Ribaut Road, Beaufort, South Carolina, 29902 OFFICE (843) 255-2147

☐ Staff Review
☐ Board Review
Outcome:

Project Name: Castle Hill Plantation		
Property Size in Acres: 1784.00	Proposed Building Use:	Single family home
Nature of Work (check all that apply):		
☐ New Construction	☑ Repair / Restoration	☑ Alterations / Additions
☐ Demolition	☐ Relocation	☐ Site Work
Building Square Footage (if multiple build 6,825	ings, please list each one and	their square footage by floor):
Is this project an adaptive reuse project:	<b>≓</b> ≌	5.10.80 for more information)
Are there existing buildings on the site?	✓Y  N if yes, will th	ney remain?
Please see attached sheets for	project description.	
> <u> </u>		

# **CONTACT INFORMATION**

Attention: Rob Merchant, Planning & Zoning Director

Beaufort County Planning & Zoning Department 100 Ribaut Road, Beaufort, South Carolina 29902

E-Mail: robm@bcgov.net | Phone: (843) 255-2148 | Fax: (843) 255-9432

# **REVISED SEPTEMBER 2, 2022**

# HISTORIC PRESERVATION REVIEW BOARD CERTIFICATE OF APPROPRIATENESS

# **Application Requirements**

The Beaufort County Community Development Code applies to all projects. Division 5.10 details information about historic preservation standards in Beaufort County. Section 7.2.120 outlines the process for applying for a Certificate of Appropriateness.

Please use the checklist below to submit a complete application packet. Application packets are due by noon 20 business days prior to the scheduled meeting date. The Beaufort County Historic Preservation Review Board meets every third Thursday of the month.

NOTE 1: Applications will not be considered complete until all the required items have been submitted. Incomplete applications will not be placed on the agenda. Applications must be submitted by noon 20 business days prior to the scheduled meeting date.

NOTE 2: If a New Construction project also requires major demolition a separate application is required. (Refer to the Checklist for Demolition on last page).

NOTE 3: Applications are to be compiled in the order in which the applicant plans to present the application to the Board during the meeting.

# Submission Requirements for New Construction and Alterations or Additions

Please submit DIGITAL FILES ONLY via email to: robm@bcgov.net

\*Submittals should show existing and proposed conditions. Architectural drawings should show and clearly label existing conditions and the current proposed plans.

\*This Application Requirements Checklist MUST be included in applications, with submitted items checked.

V	Existing Context: Color photographs of the existing structure and the adjacent structures.
	Plat: A plat indicating the tax map and parcel number, existing structure(s), setbacks, existing trees, and proposed
	construction footprint.
V	Site Plan: A site plan, to scale, indicating the location of the existing structure on the lot, proposed new
	structure, any site modifications (parking, paths, landscaping, tree removal, etc), any new or existing
	mechanical equipment and screening area, and percentage of the total impervious paving. The plan should also
	include any connections to the public right of way (street and/or sidewalk), and grade elevations of the street
	and/or sidewalk and the proposed construction at the first floor.
$\checkmark$	Design: One or more drawings that convey the intent of the proposal. This may include floor plans, elevations,
	and building sections. They should display massing and scale of new construction and how it relates to the
	existing structure or surrounding context. For new construction and additions, this drawing should include a
	street elevation and/or a street section showing height and width relationships to existing adjacent buildings.
	<b>3-D Rendering:</b> A 3-D rendering, or physical scale model, showing the height, mass and scale of the
	proposed building in its context is required for all structures except single-family and 2-3 unit residential
	buildings.
	Pre-Application Conference: A Pre-application conference is required for all commercial new construction
	and substantial commercial renovation projects. The requirement for an Archeological Impact Assessment will
<b>□</b> Λ	be determined at this meeting
√2	Elevations: Elevation drawings of all sides of the building, including heights – height above grade, floor-to-
	floor heights, eave height and ridge height (if applicable). For Alterations or Additions, existing conditions
⊏ <b>A</b>	drawings of all four elevations are also required.
<b>Z</b>	Color Rendering: A colored version of at least one elevation, noting proposed materials and colors.
	Additional on-site representation, such as a height story pole, and corner staking of the foundation, may be required.
	A Certified Arborist report may be required if specimen or grand trees are affected by the project.
<b>Z</b>	Details: A typical wall section(s), window details, door details, eave details, porch details, and any other
_	details characteristic to the building are required.
V	Material Samples and Cut Sheets: Applicant to submit cut sheets for all exterior building materials, to include
	roof and typical roof details, doors, windows, dryer vents, exterior lighting, etc. Samples of windows, lighting and
	building materials may be required at Staff's discretion.
Ø	Final Materials List: A final list, including colors, is required.

# Submission Requirements for Change After Certification

Please submit DIGITAL FILES ONLY via email to: robm@bcgov.net

# **Change After Certification**

Copy of Certificate of Appropriateness received with previous approval.
Previously Approved Drawings: Applicant to submit complete set of previously approved documents. Current
proposed documents to be interlaced between previously approved documents and must be formatted to match
previously approved. For example, previously approved elevations should be followed by current proposed.
Drawings to be clearly noted as "Previously Approved" or "Current Proposed", and all proposed revisions in the
current proposed drawings must be clouded and noted.

# Submission Requirements for Demolition or Relocation

Please submit DIGITAL FILES ONLY via email to: robm@bcgov.net

ш	A written statement describing the history of the architectural significance of the structure to be
	demolished, the structural or physical condition of the structure, and the proposed use of the site
	after demolition or relocation. The statement should also include any recent attempt(s) to sell the
	property or move the structure. A recent appraisal with comparisons is strongly encouraged. You
	may refer to The Beaufort County Above Ground Resources Survey of 1997 or consult county staff or
	historic foundations for verification of the date of construction and historic information.
	Tax map or plat showing the location of the property
	Color photographs of all sides of the structure.
	Color photographs of adjoining properties.
	A written report by an engineer, regarding the structural condition of the building, is required if
	the reason for demolition is related to the structural integrity of the building.

# **Castle Hill Plantation**



# **Presentation to**

The Historic Preservation Review Board

Beaufort County Planning and Zoning Commission

January 3, 2024

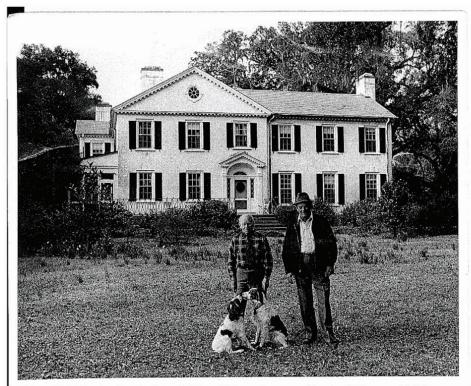
# **Historical Context and Architectural History**

Castle Hill Plantation was established by Dr. James Cuthbert sometime after his immigration to the Carolinas in 1737. The Cuthbert family retained ownership of the property until around 1838, when it was sold to Nathaniel Heyward. The plantation was sold again in 1849 to Colonel John Screven, who died in 1903. The house of these 19th Century inhabitants was lost to fire in the early 1900's and the design of that original building is unknown. (Cuthbert & Hoffius, 2009)

The property consists of 1,784 acres and is located in Yemassee, SC. There is a large pond, wetlands and old rice fields, and many native plants and animals.

The property was purchased in 1929 by Blair S. Williams, a New York stock broker. Mr. Williams hired architect, Willis Irvin, and the house was built in 1935. (Cuthbert & Hoffius, 2009)

Willis Irvin, of Augusta, Georgia designed upscale residences throughout the lowcountry from the late 1910's through 1940's. A promotional catalog for his work espoused his goal of creating "residential work in that style characteristic of the Old South." His colonial revival style included "monumental porticos, an extensive vocabulary of classical ornamentation, and sumptuous interiors...a mythical conception of the southern plantation that was grander and more lavish than anything in the 'Old South." (SCIWAY, 2019) The Williams, as wealthy northerners building the house at Castle Hill as a winter residence, were typical of Irvin's clientele. (SCIWAY, 2019). The house, however, was less typical of Irvin, as it is lacks the traditional columned, double porch at the entryway and the classical ornamentation is more minimal.

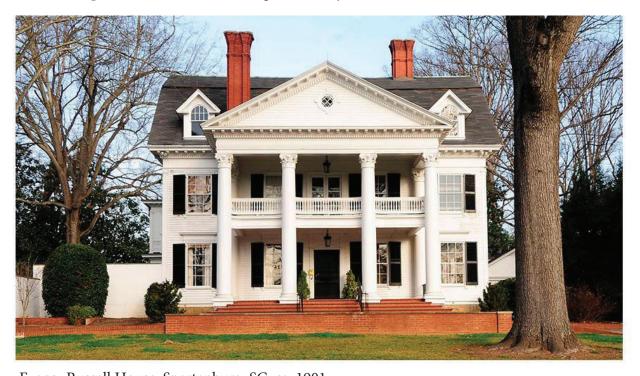


Castle Hill Plantation house and owner Joseph T. Wearn, with superintendent Dave Gamble. Wearn bought the property in the 1950's or 60's and owned it until his death in 1984.

Most of Irvin's colonial revivalist residences featured large porticos and ornate details such as featured in these examples of his work.



C.K. Dunlap House, Hartsville, Darlington County SC, 1934.



Evans- Russell House, Spartanburg, SC, ca. 1901

# Sources:

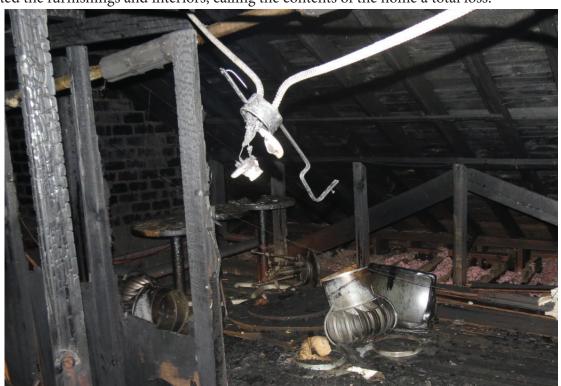
Cuthbert, Robert B. & Hoffius, Stephen G. (Eds.). (2009). *Northern Money, Southern Land: The Lowcountry Plantation Sketches of Chlotilde R. Martin.* The University of South

Carolina Press.

SCIWAY. (2019). Castle Hill Plantation – Beaufort County. South Carolina Plantations. https://south-carolina-plantations.com/beaufort/castle-hill.html

Vivian, Daniel J. (2016). Irvin, Willis. South Carolina Encyclopedia. The University of South Carolina Press.

Raymond and Livia Basso acquired Castle Hill Plantation in 1985. They constructed a kitchen addition in 1996. In 2019, a fire started by a power washing equipment engulfed the house and required more than 2 dozen firefighter to extinguish. The damage to the house, from the fire, smoke, water damage, mold & mildew, was extensive. The roof was covered by tarps to patch the network of holes, the framing was charred and destroyed in many places, the HVAC, plumbing & electrical systems were destroyed, the plaster was waterlogged and full of mold. Appraiser Ann Valverde inspected the furnishings and interiors, calling the contents of the home a total loss.







# Existing Context Photographs:









# **21st Century Renovations**

Frederick and Frederick Architects drew plans for the initial phase of Ms. Basso's project, which was a full rehabilitation of the house to its pre-fire condition. To date, the damaged materials have been removed from the house, and the structural framing and roof have been replaced. The house, in it's stripped-down state, sits ready for Ms. Basso's thoughtful renovation plans.

The renovation seeks to honor the long history of the house and its architectural integrity. The proposed porches are reminiscent of the grand porticos typical of Willis Irvin's style. The exterior changes to the 1996 kitchen addition will contextualize this portion of the house in a way that ties it to the original structure. The covered outdoor living room will enhance Ms. Basso's enjoyment of the pond view and the great natural beauty of the place. The pond and surrounding wetlands are overgrown and choking with invasive plants, Ms. Basso plans to clean it all up and restore the pond environment. A new brick, wrought iron, and wood gate will provide a marked entrance to the property, the design is shown in the attached set of drawings.

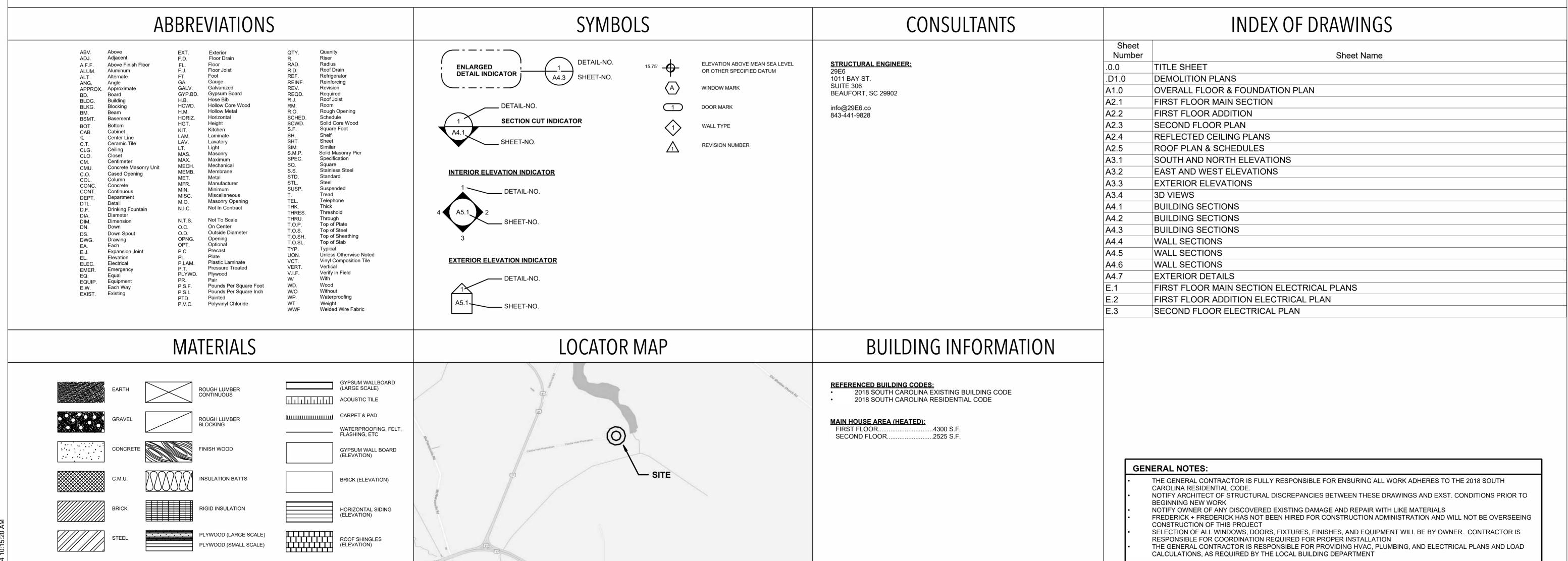
New bathrooms and the new kitchen will be updated to the 21st century standards. The HVAC system will be energy efficient. All new windows (Andersen A-series traditional double-hung) will also be energy efficient and visually appropriate. These upgrades will contribute to Ms. Basso's comfort and safety as a full time resident of the house.

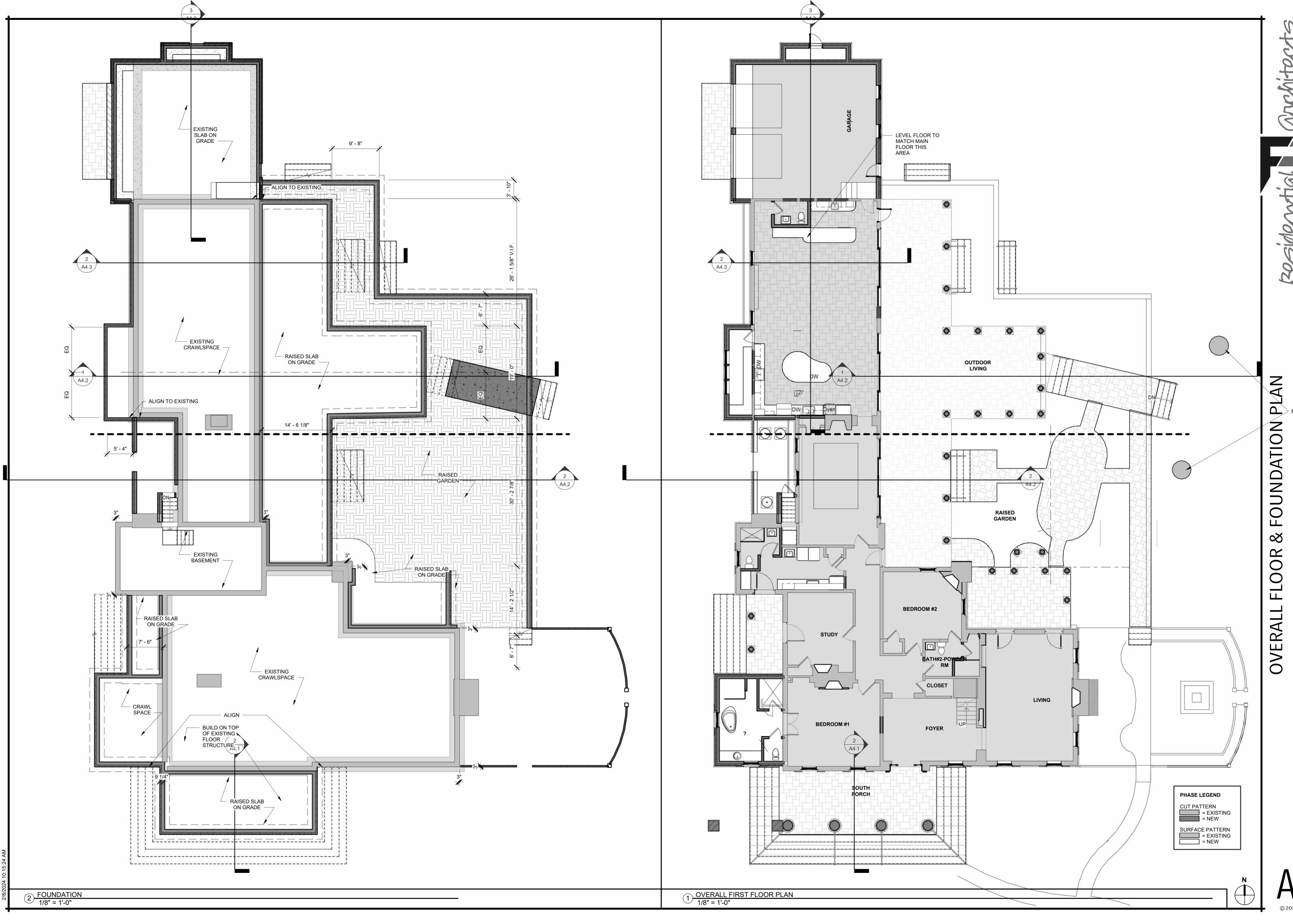
The following watercolor drawings are provided to convey the design intent, and more detailed hardline drawings are attached with this submittal, as well. The improvements to the amenities and aesthetics will enable the house at Castle Hill to be preserved for generations to come.



# CASTLE HILL PLANTATION RENOVATION

331 CASTLE HALL RD, YEMASSEE, SC



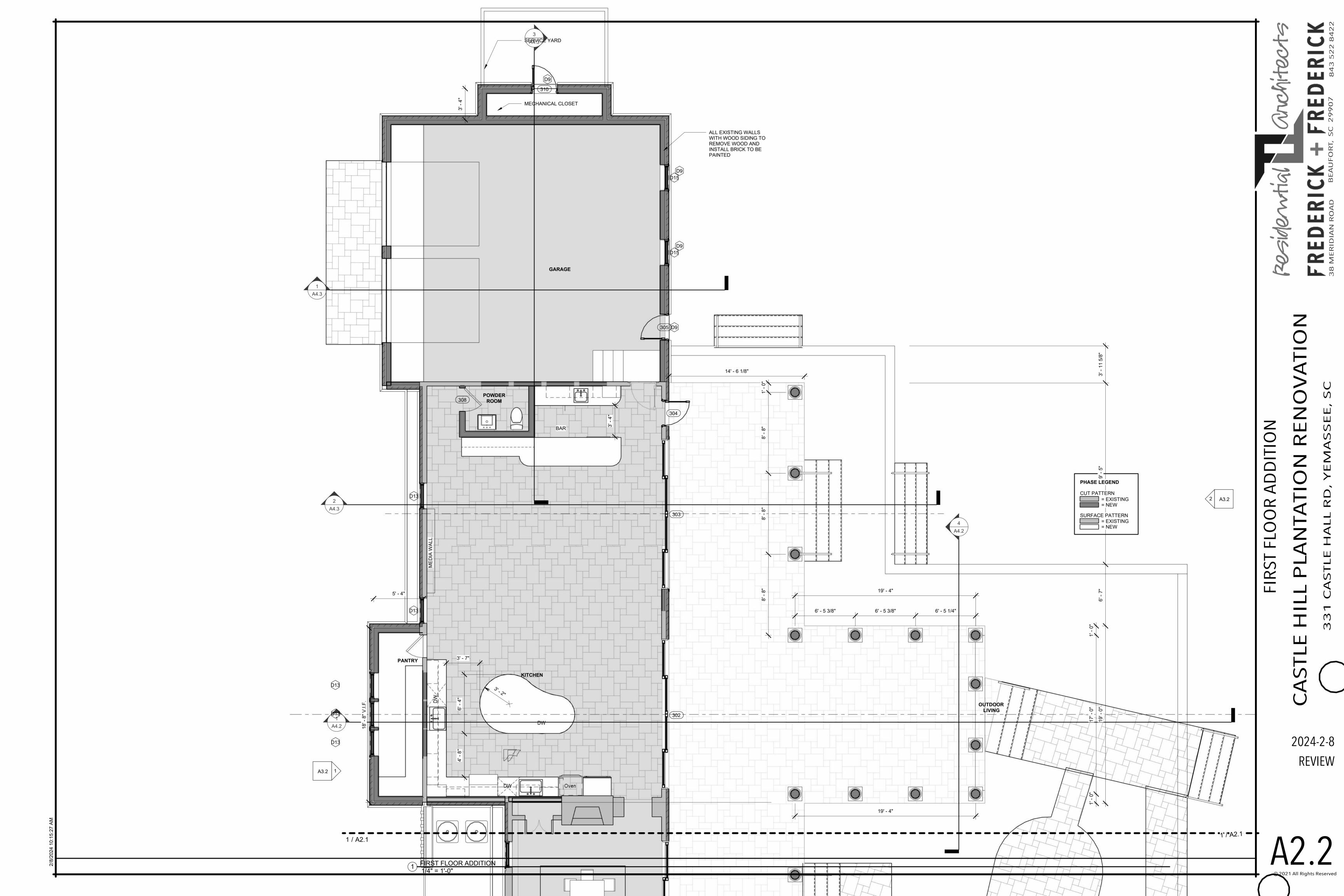


FREDERICK
38 MERIDIAN ROAD BEAL

# FREDERICK 38 MERIDIAN ROAD BEAL

2024-2-8

REVIEW



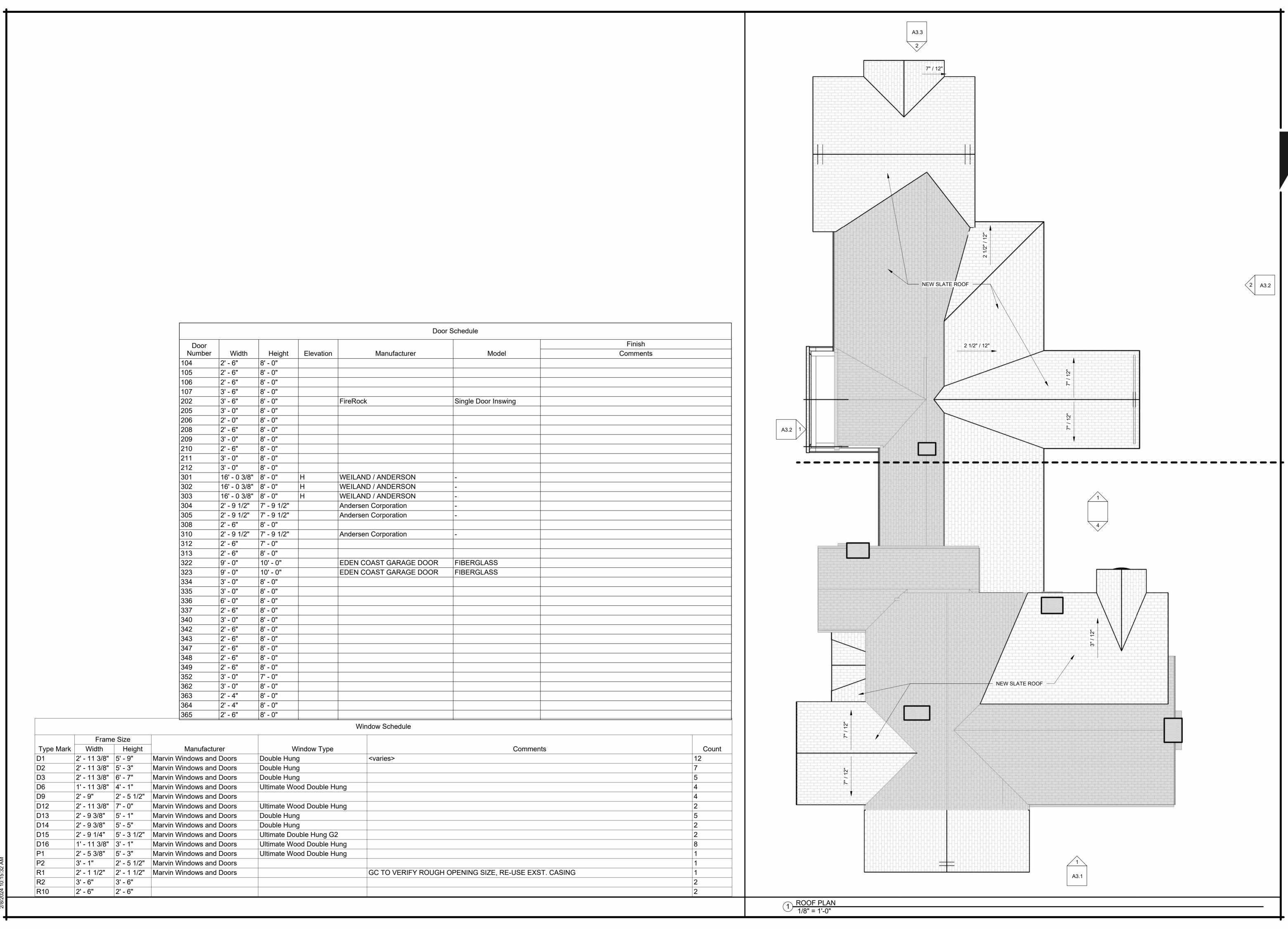
2024-2-8

REVIEW

# FREDERICK + 38 MERIDIAN ROAD BEAUFORT,

2024-2-8 REVIEW

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FREDERICK
38 MERIDIAN ROAD BEAL

2024-2-8

REVIEW



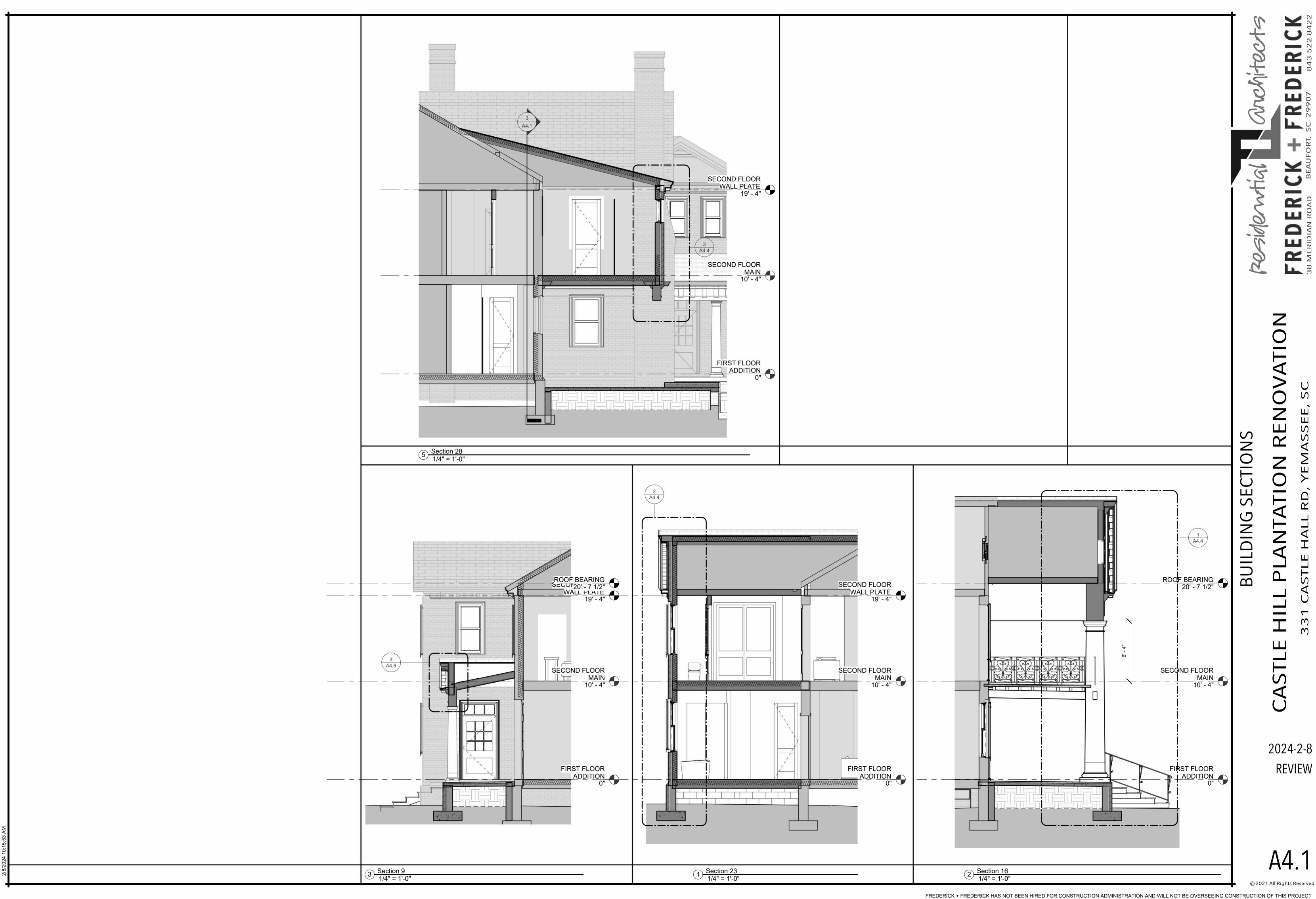
# EXTERIOR ELEVATIONS

CASTLE HILL PLANTATION F

2024-2-8 REVIEW

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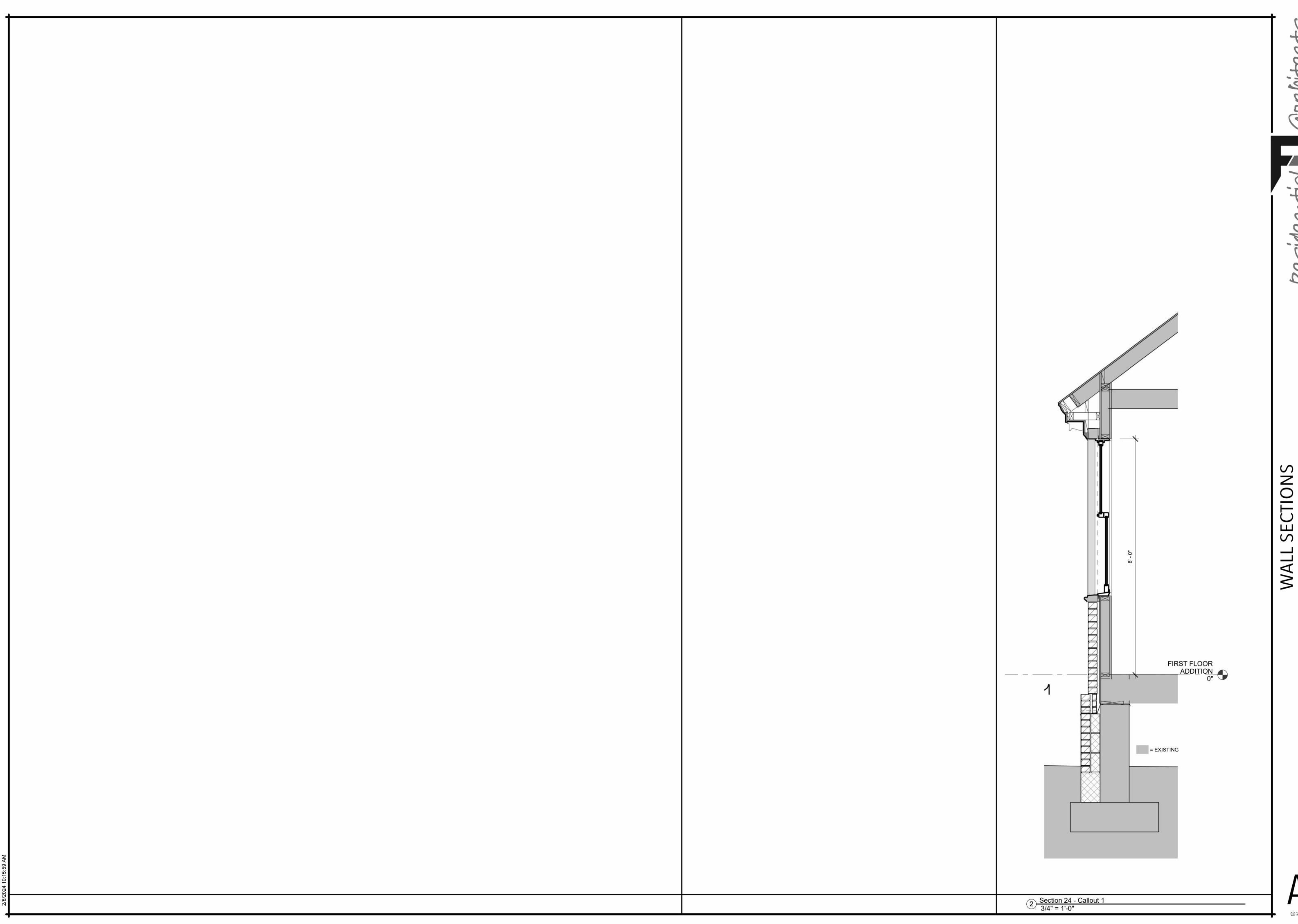


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38 MERIDIAN ROAD BEAU

# FREDERICK + 38 MERIDIAN ROAD BEAUFORT

**7** 38 ME



# PREDERICK + FREDERICK 38 MERIDIAN ROAD BEAUFORT, SC 29907 843 522 8422

# TLE HILL PLANTATION RENOVATION 331 CASTLE HALL RD, YEMASSEE, SC

2024-2-8 REVIEW

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2024-2-8 REVIEW

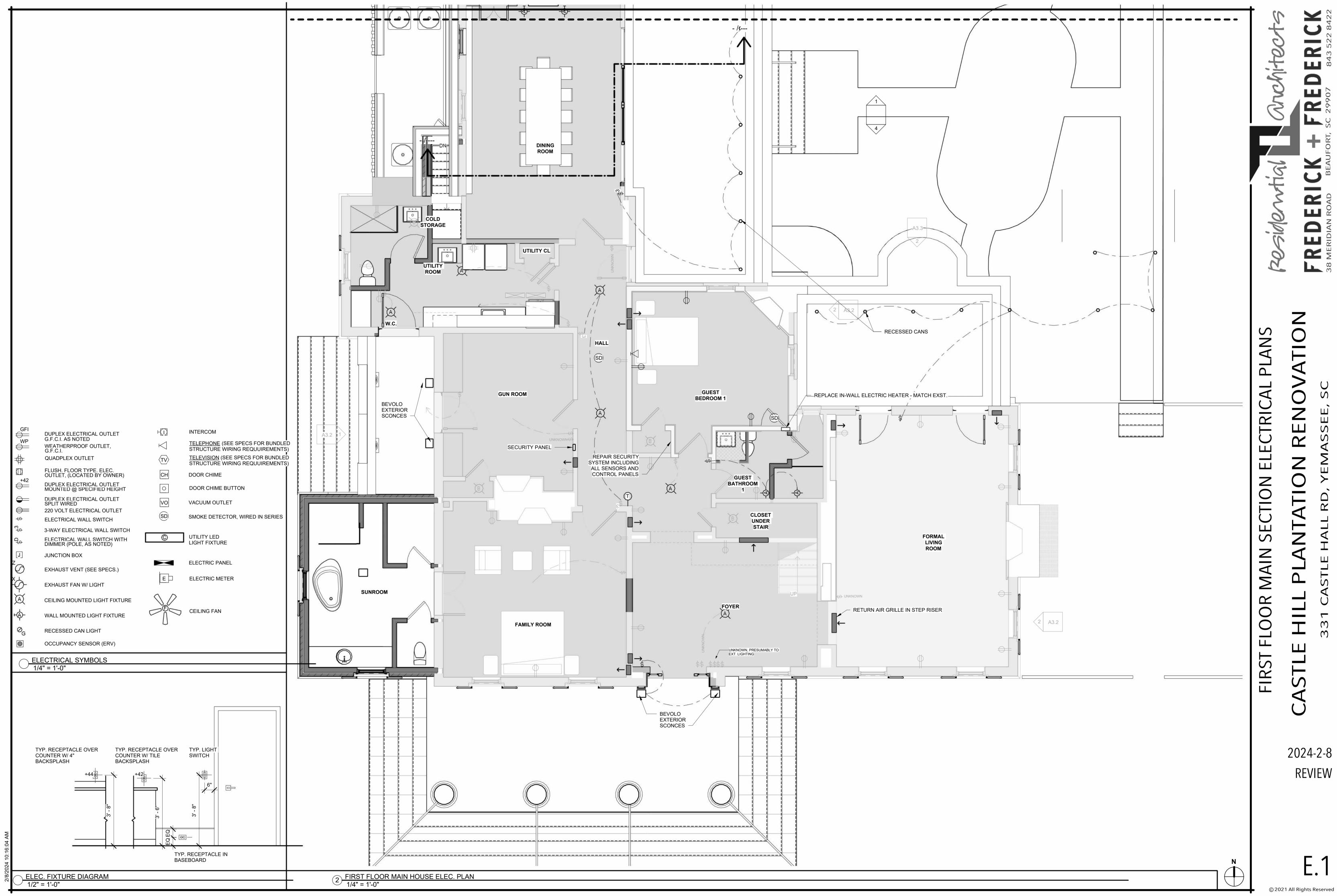
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EXTERIOR DETAILS

LE HILL PLANTATION RENOVATION

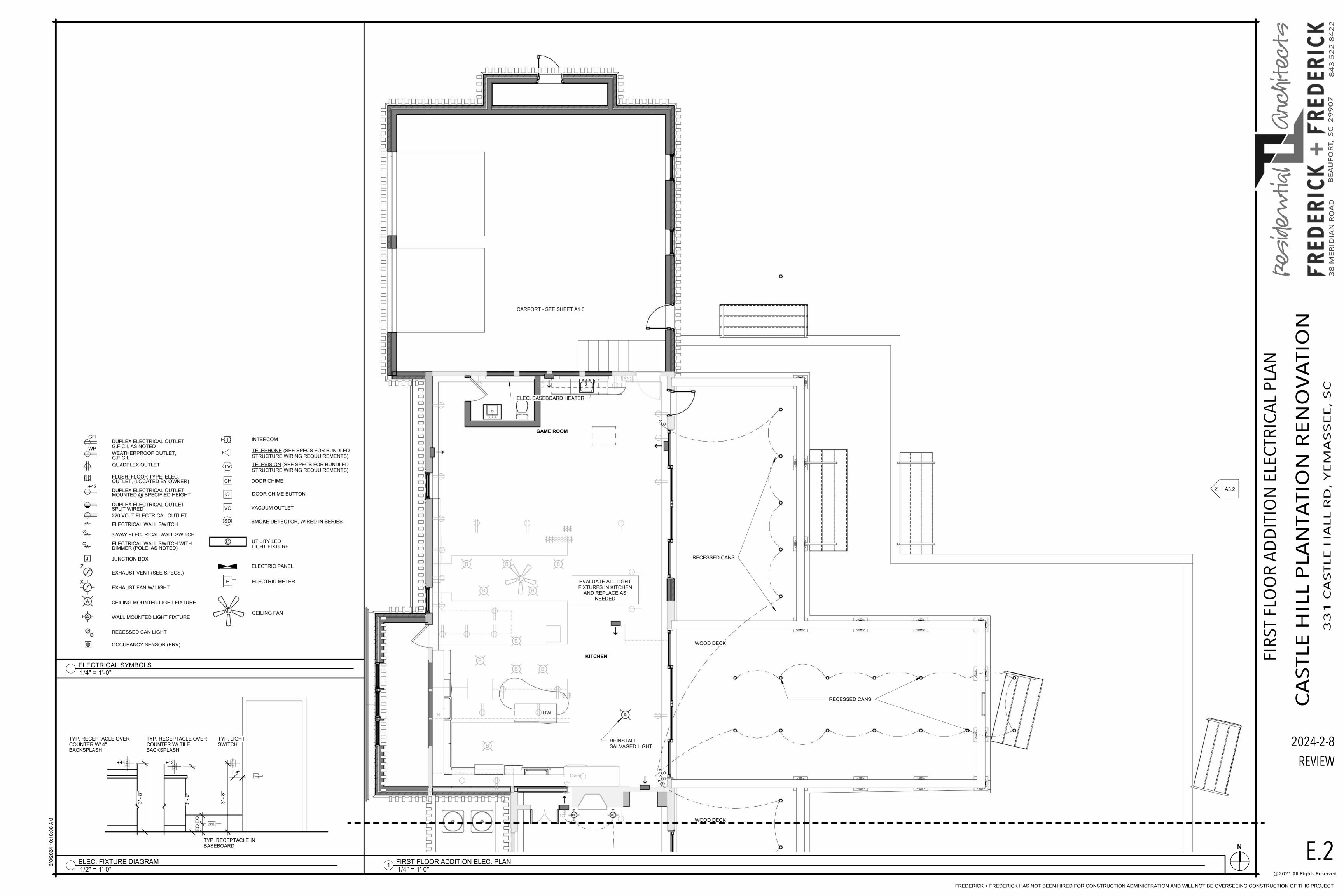
2024-2-8 REVIEW

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FREDERICK
38 MERIDIAN ROAD BEAL

FREDERICK + FREDERICK HAS NOT BEEN HIRED FOR CONSTRUCTION ADMINISTRATION AND WILL NOT BE OVERSEEING CONSTRUCTION OF THIS PROJECT



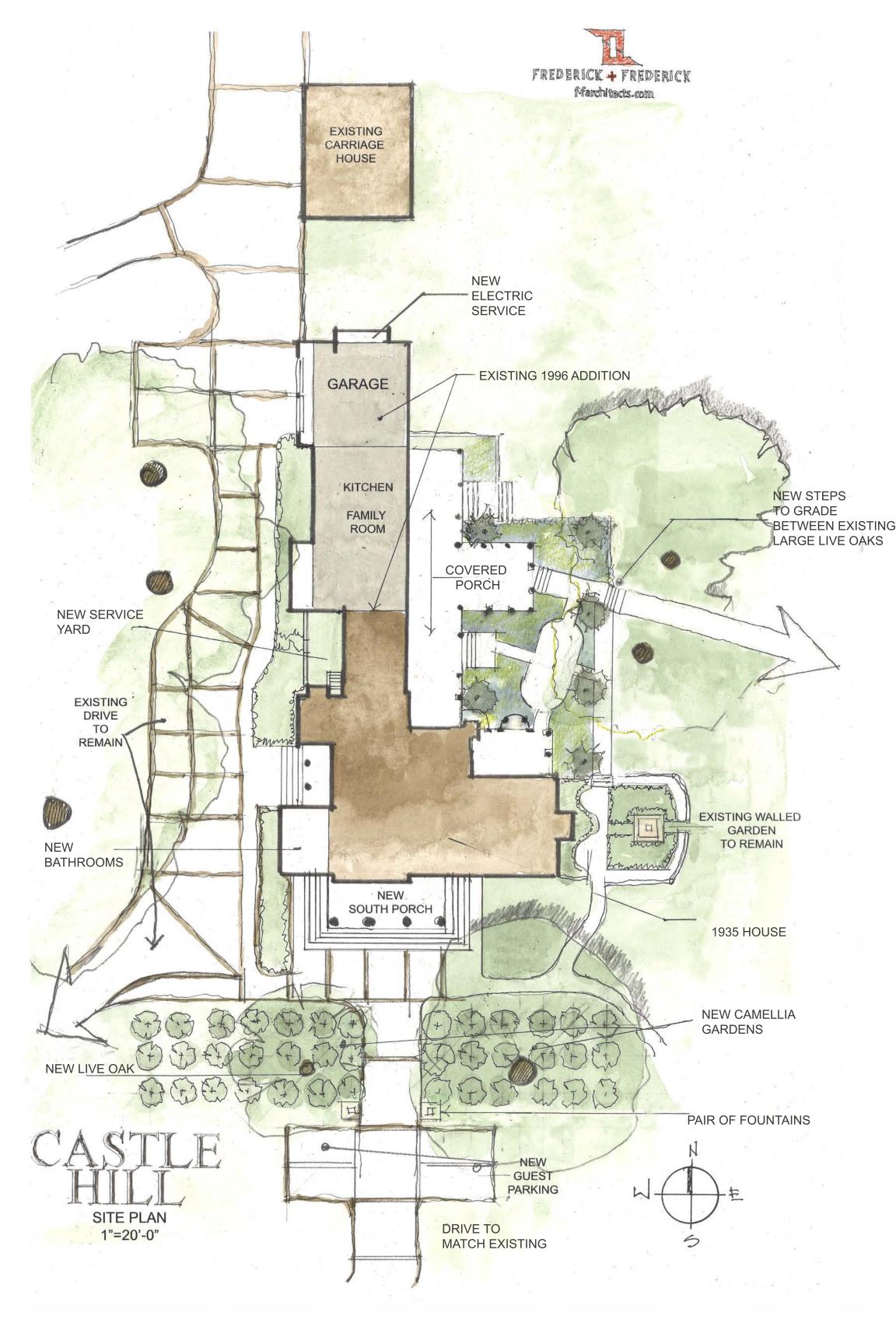
# Residential Anchitects FREDERICK + FREDERICK 38 MERIDIAN ROAD BEAUFORT, SC 29907 843 522 8422

STLE HILL PLANTATION RENOVATION

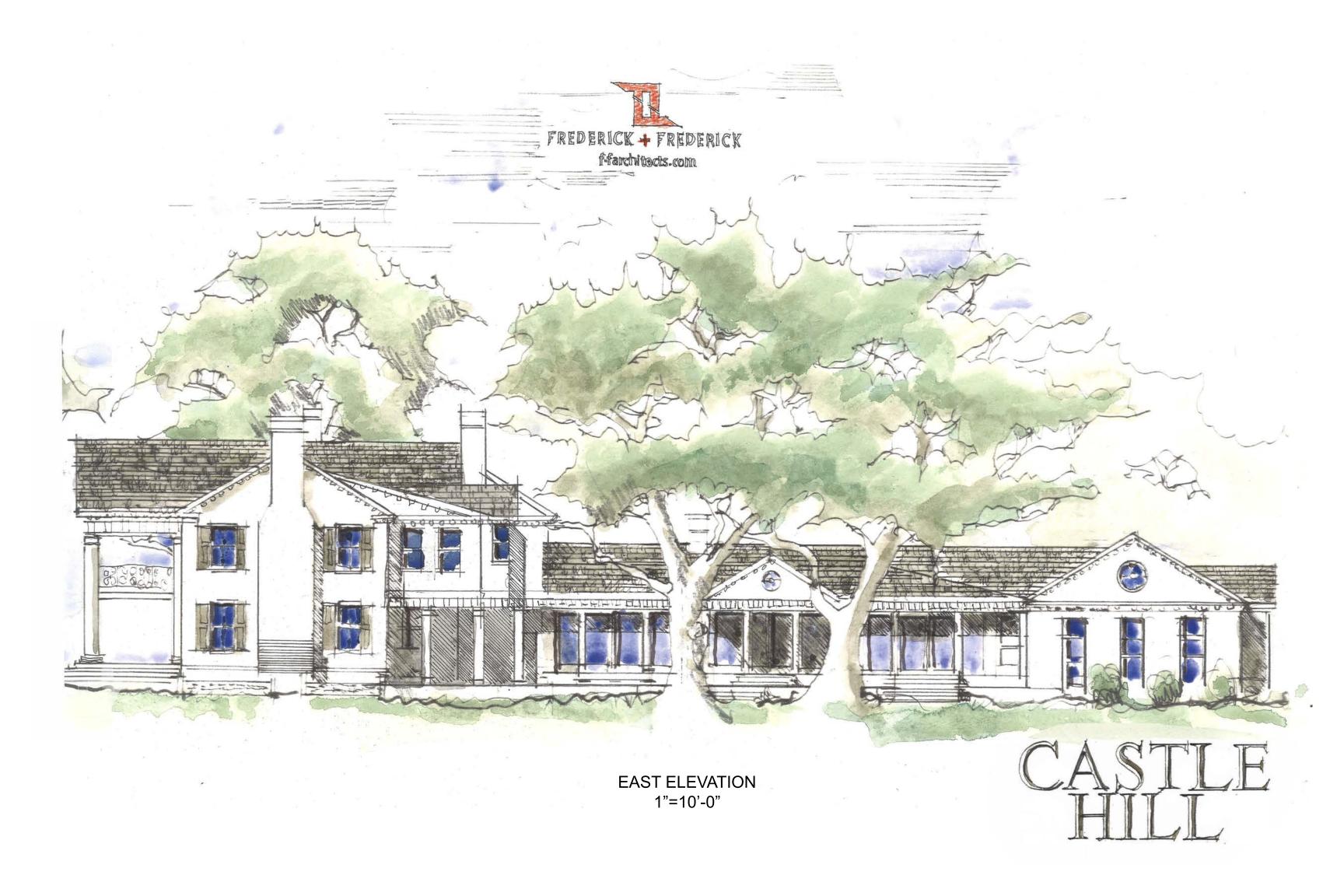
2024-2-8 REVIEW

E.3

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WEST ELEVATION 1"=10'-0" CASTLE
HILL

# Savannah Fountain by Campania International



Color: Aged Limestone

# Specifications:

Our cast stone products are made with a high proportion of limestone, making these handmade products dense and durable enough to last for decades.

Weight: 681 lbs

Dimensions: 46"W x 68"H

Base: 20.5"

Weight with water: 1,115 lbs

Water volume: 25 gallons Shown in Aged Limestone

See all the color options here

Buy the fountain cover here

Pump kit included

Download assembly and installation instructions here

Made in the USA by Campania International

### New Materials List:

### Roof:

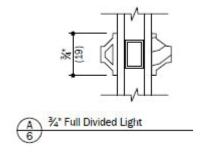
The roof has been re-built using salvaged and new color matched slate shingles over a new wood I framed roof structure, 1X6 sheathing, 30# roofing felt, and copper flashings

### Doors:

Andersen A Series Weiland Lift & Slide doors Finish color: White

### Windows:

Andersen A Series, double hung, traditional, with 3/4" full divided light Finish color: white



# Paving:

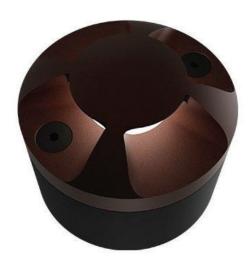
Carmel Travertine, Ashlar pattern, 12x12, 16x16, 12x24



# New Exterior Light Fixures:



Bevolo Williamsburg Original Bracket Lantern  $22" \times 10.3" \times 9"$ 



B-K Lighting Mini Drivestar Flush recessed in-grade LED, Old Copper finish



Nora Lighting, 4" Recessed LED, Bronze finish





# WILLIAMSBURG

### ORIGINAL BRACKET

The Williamsburg fixture was originally produced from a colonial design. We often use this fixture in both primary and secondary areas. The Williamsburg naturally complements the French Quarter lantern and is often paired with this fixture. The Williamsburg can be purchased with or without the stack (pictured without stack). The bracket mount Williamsburg is available in natural gas, liquid propane, and electric. \*10" & 12" are not available in gas.

Standard Lantern Sizes		
Height	Width	Depth
10.0"	7.3"	6.0"
12.0"	8.8"	7.5"
14.0"	10.3"	9.0"
15.0"	7.3"	6.0"
16.0"	10.3"	9.0"
18.0"	8.8"	7.5"
22.0"	10.3"	9.0"

### NLCBC-469

4" Cobalt LED Adjustable Retrofit

Source: 12W LED Up to 1000lm

### Type Project Catalog No. Notes

### PRODUCT DESCRIPTION

Cobalt retrofit series is cULus classified for use in existing IC or Non-IC housings manufactured by Nora and others. Patented adjustable mechanism rotates and adjusts while never exposing an opening or breaking the ceiling plane. Retrofit luminaires deliver up to 1000 lumens in various color temperature options. Cobalt series integrates the latest COB LED technology, giving bright spectacular light output and low power consumption.

### **FEATURES**

- Retrofit existing 4" recessed housings
- Field adjustable beam spreads (flood installed, spot and narrow flood included)
- Up to 1000 lumen output
- 2700K, 3000K, 3500K or 4000K @ 90+ CRI
- COB LED Technology
- Integral dimmable driver
- Includes medium base socket adapter
- **ENERGY STAR certified**

### **SPECIFICATION**

Trim: Aluminum spun reflector with deep set diffused lens for excellent visual comfort while providing high lumen output. Adjustable design rotates and adjusts while never exposing an opening or breaking the ceiling plane. Reflector places the LED optics deeper than the standard increasing the visual comfort. Additionally the deep cones reduces board images when off.

Adjustability: 358° rotate and 30° tilt

Optics: Spot (included), Medium (included) and Flood optic (installed)

Lens: Frosted Lens (installed) and Semi-Frosted Lens (included)

### **ELECTRICAL**

Input Voltage: 120V

Lumens / Wattage: Up to 1000lm / 12W

(Delivered lumens will vary depending on CCT, optic & finish)

Color Temperature: 2700K, 3000K, 3500K or 4000K

Color Rendering Index: 90+ CRI

**Beam Spread:** 48° Spot, 69° Narrow Flood, 99° Flood Operating Temperature: 0°C to 25°C

Life Expectancy: 54,000 Hours @ L70 Dimming: Triac, ELV or 0-10V (must specify) Click Here or check complete dimmer list at

www.NoraLighting.com in the "Compatibility" page under

"Resources" tab

### COMPATIBLE HOUSINGS

Cobalt retrofit reflectors are compatible with most 4" IC and Non-IC housings by Nora and others.

### Fire Box

NFBIC-4LMRATA\* ICAT Dedicated LED NFBIC-4LMRATA/4W ICAT Dedicated LED for LE4 NFBIC-4INCATA ICAT Line Voltage

### **New Construction**

NHIC-4LMRAT\* ICAT Dedicated LFD NHIC-4LMRAT/4W\* ICAT Dedicated LED for LE4 NHIC-4LMRAT/EM\* ICAT Dedicated LED for EM NHIC-4LMRAT/6WEM\* ICAT Dedicated LED for EM+LE4 NHIC-4LMRAT/277\* ICAT Dedicated LED, 277V

(includes step-down transformer)

NHICCP-4LMRAT\* Chicago Plenum Dedicated LED NSIC-401QAT ICAT Line Voltage AT Line Voltage NS-4010AT ICAT GU24 NHIC-4G24AT

### Remodel

NHRIC-4LMRAT\* ICAT Dedicated LED NSRIC-404QAT ICAT Line Voltage NSR-4040AT AT Line Voltage NHRIC-4G24AT ICAT GU24

\* Nora Dedicated LED housings are cULus listed for use only with Nora LED Retrofits.

Retrofit: Cobalt retrofit series includes medium base screw-socket adapter (NRA-211SM) for retrofitting into existing medium base downlight housings. GU24 socket adapter is available for use with GU24 housings, must specify NRA-212SM.

### **ACCESSORIES**

NLCBC-469TIR: Premium TIR optics optics are available in 25° or 45°, must specify ring finish.

### LABELS AND LISTINGS

- cULus classified for Damp Location when used with compatible housing
- Suitable for Type IC and Non-IC
- Certified to the high efficacy requirements of California Title 24 JA8-2022
- ENERGY STAR certified (not BB or BZBZ finish)
- RoHs Compliant
- 5-Year Limited Warranty















Performance Data			
Part Number	Lumens	CCT	
NLCBC-46927XWW	881lm	2700K	
NLCBC-46930XWW	970lm	3000K	
NLCBC-46935XWW	972lm	3500K	
NLCBC-46940XWW	1011lm	4000K	

Delivered lumens will vary depending on CCT, optic and finish

### **PRODUCT IMAGES & DIMENSIONS**



RR Black Reflector Black Flange



H7N Haze Reflector Natural Metal Flange



MPW Matte Powder White Reflector Matte Powder White Flange

**Optional Accessories** 



R7R7

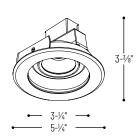
Bronze Reflector

PATENT No.:

HZW Haze Reflector White Flange



White Reflector White Flange



### 4" Cobalt LED Adjustable Retrofit

Color Temperature	Reflector Finish / Flange Finish	Dimming & Emergency	Description	Optic	Ring Finish
NLCBC-46927X = 2700K NLCBC-46930X = 3000K NLCBC-46935X = 3500K NLCBC-46940X = 4000K	BB = Black Reflector / Black Flange BZBZ = Bronze Reflector/ Bronze Flange HZN = Haze Reflector/ Natural Metal Flange HZW = Haze Reflector / White Flange MPW = Matte Powder White Reflector /	(blank) = 120V Triac/ELV  EM = Remote Emergency (requires Nora EM housing)	NLCBC-469TIR = TIR optic	<b>25</b> = 25° <b>45</b> = 45°	B = Black BZ = Bronze HZ = Haze MPW = Matte Powder White WW = White / White
NLCBC-46930X = 3000K NLCBC-46935X = 3500K	Matte Powder White Flange  WW = White Reflector / White Flange  HZW = Haze Reflector / White  WW = White Reflector / White	LE4 = 120V 0-10V/Triac/ELV 277V 0-10V (requires Nora 4W housing) LE4EM = LE4 w/ Remote Emergency (requires Nora 6WEM housing)	NRA-211SM = Medium ba: NRA-212SM = Socket ada		· ·

Example: NLCBC-46935XWW = 4" Cobalt LED Adjustable Retrofit, 3500K, White Reflector / White Flange, 120V input; Triac / ELV dimming



### **PHOTOMETRICS**

4" Cobalt LED Adjustable Retrofit

Type

Project

Catalog No.

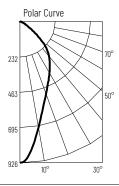
Notes

### **Test Information**

Test Number: NTR11157
Part Number: NLCBC-46940SWW

Beam Spread: Spot Lumens: 1011lm Wattage: 11.4W Efficacy: 89lpw

CCT / CRI: 4000K / 90 CRI Spacing Criteria (0°-180): 0.66 Spacing Criteria (90°-270): 0.66



### Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	57.9fc	3'-5"
6'	25.7fc	5'-1"
8'	14.5fc	6'-10"
10'	9.3fc	8'-6"
12'	6.4fc	10'-4"

### Zonal Lumen Summary

,		
Zone	Lumens	% Luminaire
0-30	446	44.1
0-40	661	65.4
0-60	842	93.2
0-90	1004	99.4
90-180	6	0.6
0-180	1011	100

### Candela Table

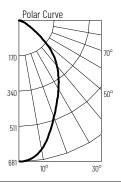
Candela Table		
Vertical Angles	Candela	
0	926	
5	850	
15	588	
25	441	
35	343	
45	246	

### **Test Information**

Test Number: NTR11156 Part Number: NLCBC-46940MWW Beam Spread: Narrow Flood

Lumens: 988lm Wattage: 11.5W Efficacy: 86lpw

CCT / CRI: 4000K / 90 CRI Spacing Criteria (0°-180): 0.9 Spacing Criteria (90°-270): 0.92



### Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	42.4fc	5'-6"
6'	18.9fc	8'-4"
8'	10.6fc	11'
10'	6.8fc	13'-10"
12'	4.7fc	16'-6"

### Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	424	42.9
0-40	634	64.2
0-60	916	92.7
0-90	981	99.2
90-180	7	0.8
0-180	988	100

### Candela Table

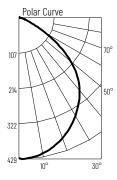
Vertical Angles	Candela
0	679
5	670
15	566
25	437
35	335
45	239

### **Test Information**

Test Number: NTR11155 Part Number: NLCBC-46940FWW

Beam Spread: Flood Lumens: 943lm Wattage: 11.5W Efficacy: 82lpw CCT / CRI: 4000K / 90 CRI

Spacing Criteria (0°-180): 1.2 Spacing Criteria (90°-270): 1.22



### Illuminance at a Distance

Distance from Luminaire	FC at Nadir	Beam Diameter
4'	26.6fc	9'-2"
6'	11.8fc	13'-10"
8'	6.7fc	18'-5"
10'	4.3fc	23'-1"
12'	3fc	27'-8"

### Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	323	34.3
0-40	520	55.2
0-60	848	89.9
0-90	935	99.2
90-180	8	0.8
0-180	943	100

### Candela Table

Vertical Angles	Candela
0	426
5	425
15	404
25	366
35	315
45	251

### Lumen Output Multipliers

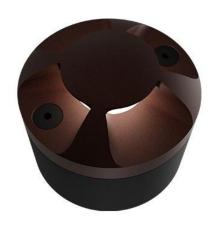
Color Temperature: 2700K (0.87), 3000K (0.96), 3500K (0.96), 4000K (1.00)

# MINI DRIVESTAR FLUSH (REMOTE TRANSFORMER)

**IP66 RATED** 

TYPE DATE:

CATALOG NUMBER LOGIC:



\*Use with remote 12VAC Magnetic Transformer.

### **CATALOG NUMBER LOGIC**

Example: MD - LED - e71 - F - SAP - 1 - A

### MATERIAL

(Blank) - Aluminum B - Brass S - Stainless Steel

### **SERIES**

MD - Mini-Micro DriveStar

### SOURCE

LED - Solid State System with Integral Non-Dimming Driver\*

### **LED TYPE**

e70 - 3W LED/2700K e85 - 3W LED/2700K 90 CRI e71 - 3W LED/3000K e86 - 3W LED/3000K 90 CRI e72 - 3W LED/4000K e87 - 3W LED/3500K 80 CRI

e73 - 3W LED/Amber

### INSTALLATION

F - Flush

### FINISH (See page 2 for full-color swatches)

Standard Finishes (BZP, BZW, BLP, BLW, WHP, WHW, SAP, VER)

Premium Finish (ABP, AMG, AQW, BCM, BGE, BPP, CAP, CMG, CRM, HUG, NBP, OCP, RMG, SDS, SMG, TXF, WCP, WIR)

Also available in RAL Finishes

Brass Finishes (MAC, POL, MIT)

Stainless Steel Finishes (MAC, POL)

### **OPTICAL OPENINGS**

1 - Single

2 - 2 @ 180°

4 - 4 @ 90°

### **FACEPLATE STYLE**

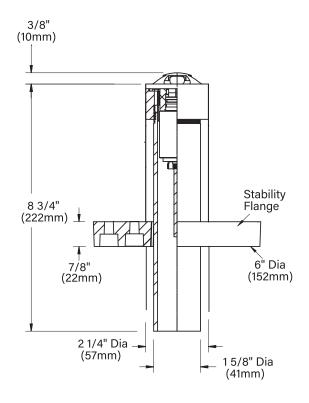
A - Solid

B - Round Accent

### **MOD OPTION**

25 - 25 Ft Leads

DATE: PROJECT: TYPE:









STYLE 'A'

2 OPENINGS

**4 OPENINGS** 



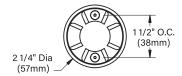
STYLE 'B'





2 OPENINGS

4 OPENINGS



SURFACE MOUNT

### STANDARD FINISHES



Click Here to view larger, full-color swatches of all available finishes on our website.

### PREMIUM FINISHES

Cascade Mtn. Granite (CMG)	Rocky Mtn. Granite (RMG)	Sierra Mtn Granite (SMG)	Aleutian Mtn Granite (AMG)	Textured Fores (TXF)
Black Chrome (BCM)	Beige (BGE)	Weathered Copper (WCP)	Old Copper (OCP)	Hunter Green (HUG)
	12400			
Antique Brass Powder (ABP)	Brown Patina Powder (BPP)	Sonoran Desert Sandstone (SDS)	Weathered Iron (WIR)	Clear Anodized Powder (CAP)
Cream (CRM)	Antique White (AQW)	Natural Brass Powder (NBP)		

**MADE IN THE USA** 

559.438.5800 | INFO@BKLIGHTING.COM | BKLIGHTING.COM

# MINI DRIVESTAR FLUSH (REMOTE TRANSFORMER)

**IP66 RATED** 

DATE: PROJECT: TYPE:

Accessories (Configure separately)

# **SPECIFICATIONS**

ELECTRICAL	WATTAGE	3W LED
	WIRING	Teflon® coated, 18AWG, 600V, 250° C rated and certified to UL 1659 standard. Anti-Siphon Valve (ASV™) prevents "wicking" through conductor insulation. Provided with 5' fixture leads.
	TRANSFORMER	For use with 12VAC remote magnetic transformers only. B-K Lighting cannot guarantee performance with third party manufacturers' transformers.
PHYSICAL	MATERIALS	Furnished in copper-free aluminum (6061-T6), brass (360) or stainless steel (304).
	BODY	Unibody design with enclosed, water-proof wireway and integral heat sink is fully machined from solid billet.
	HOUSING	Fixture provided with 1-5/8" dia., 80 PVC housing for direct burial into soil or concrete. 6" dia., molded stability flange projects into substrate to simplify installation and reinforce housing stability.
	FACEPLATE	Machined from solid, copper-free aluminum, brass or stainless steel. Available with one, two, or four optical openings. Countersunk holes provide for flush hardware mounting.
	LENS	Shock-resistant, tempered, frosted acrylic lens is factory adhered to faceplate and provides hermetically sealed optical compartment.
	LED	Integrated solid state system and modular design with electrical quick disconnects permit field upgrade and maintenance. High power, forward throw source complies with ANSI C78.377 binning requirements and exceeds ENERGY STAR* lumen maintenance requirements. LM-80 certified components. Integral, non-dim. constant current driver. 12VAC/VDC input. 50/60Hz. Proprietary input control scheme achieves power factor correction and eliminates inrush current. Output, over-voltage, open-circuit, and short circuit protected. Inrush current limited to 250mA.
	INSTALLATION	Features integral concrete pour collar (CPC). Top edge of collar to be installed flush with finished grade. Collar material and finish to match faceplate. Two (2) threaded holes for faceplate installation. Faceplate style A is suitable for walk-over and drive-over applications up to 35,000 lbs. GVW. Fully machined copper-free aluminum installation collar. Provided with hard-coat (Type III) black anodize finish for maximum corrosion resistance.
	HARDWARE	Tamper-resistant, stainless steel hardware. Faceplate screws are black oxide treated for additional corrosion resistance.
	FINISH	StarGuard, our 15-stage chromate-free process cleans and conversion coats aluminum components prior to application of Class 'A' TGIC polyester powder coating and is RoHS compliant.
	WARRANTY	5-year limited warranty.
	CERTIFICATION & LISTING	UL Listed. Certified to CAN/CSA/ANSI Standards. ADA compliant. IP68 Rated. Made in the USA with sustainable processes.
C UL US		
ເບບ LISTED RoHS∜		
MADE IN THE		



USA

**MADE IN THE USA** 

# LAMP & DRIVER DATA (e70, e71, e72, e73)

DATE: PROJECT: TYPE:

DRIVER	Input Volts	InRush Current	Operating Current	Operation Ambient Temperature
DATA	12VAC/DC 50/60Hz	<250mA (non-dimmed)	500mA	-22°F-194°F (-30°C - 90°C)

LM79 DATA			Α	L70 DATA		OPTICAL DATA			
BK No.	CCT (Typ.)	CRI (Typ.)	Input Watts (Typ.)	Minimum Rated Life (hrs.) 70% of initial lumens (L <sub>70</sub> )	No. of Windows	Beam Type	Angle	Delivered Lumens	
		80	3	50,000	1	Radial	360°h x 270°v	14	
e70	2700K				2	Radial	360°h x 270°v	23	
					4	Radial	360°h x 270°v	40	
		80	3	50,000	1	Radial	360°h x 270°v	15	
e71	3000K				2	Radial	360°h x 270°v	24	
					4	Radial	360°h x 270°v	42	
		80 3		50,000	1	Radial	360°h x 270°v	17	
e72	4000K		3		2	Radial	360°h x 270°v	27	
					4	Radial	360°h x 270°v	48	
e73	Amber (590nm)	~	3	50,000	~	Radial	360°h x 270°v	~	